

港灣技研資料

TECHNICAL NOTE OF
THE PORT AND HARBOUR RESEARCH INSTITUTE
MINISTRY OF TRANSPORT, JAPAN

No. 588 June 1987

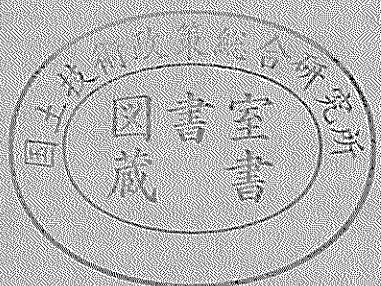
ANNUAL REPORT ON STRONG-MOTION EARTHQUAKE RECORDS
IN JAPANESE PORTS (1986)

by Eiichi KURATA, Susumu IAI, and Setsuo NODA

港灣地域強震觀測年報 (1986)

倉 田 柴 一
井 合 節 進
野 田 節 男

運輸省港灣技術研究所



ANNUAL REPORT ON STRONG-MOTION EARTHQUAKE RECORDS IN JAPANESE PORTS (1986)

Contents

Synopsis	8
1. Introduction	8
2. Network and Instruments	9
3. Accelerogram Processing	22
4. Digitization	24
5. Preliminary Analyses	35
6. Summary of Observation	43
7. Digital Strong-Motion Accelerograph using Magnetic Bubble Memory (ERS-F Accelerograph)	49

References

Observation Results and Preliminary Analyses	59
1. Strong-motion Earthquake Observation Results	61
2. Reproduced Accelerograms	91
(1) S-1910 Kashima-zokan-S February 12,1986 (AR, IR, RS, NR, FS, LO) ..	91
(2) M-1014 Hanasaki-M May 31,1986 (ditto) ..	108
(3) M-1017 Hanasaki-M June 8,1986 (ditto) ..	121
(4) M-1022 Yamashita-hen-M June 24,1986 (ditto) ..	134
(5) F-12 Hitachinaka-F September 20,1986 (ditto) ..	151
(6) S-1946 Onahama-ji-S October 14,1986 (ditto) ..	168
(7) F-15 Hitachinaka-F November 15,1986 (ditto) ..	181
(8) M-1056 Yamashita-hen-M November 15,1986 (ditto) ..	198
(9) F-19 Hitachinaka-F November 29,1986 (ditto) ..	211
(10) S-1957 Kashima-zokan-S November 29,1986 (ditto) ..	228
(11) S-1909 Urakawa-S February 1,1986 (AR)	241
(12) M-1001 Tokachi-M February 1,1986 (AR)	241
(13) S-1911 Onahama-ji-S February 12,1986 (AR)	242
(14) S-1918 Soma-S March 2,1986 (AR)	242
(15) M-1006 Sendai-M March 2,1986 (AR)	243
(16) F-3 Hitachinaka-F May 5,1986 (AR)	243
(17) F-6 Hitachinaka-F May 28,1986 (AR)	244
(18) S-1936 Yamashita-hen-S June 24,1986 (AR)	244
(19) F-7 Hitachinaka-F June 24,1986 (AR)	245
(20) S-1932 Chiba-S June 24,1986 (AR)	246
(21) S-1933 Shinagawa-S June 24,1986 (AR)	247
(22) M-1021 Kawasaki-chi-M June 24,1986 (AR)	248
(23) S-1935 Keihin-ji-S June 24,1986 (AR)	249
(24) M-1019 Koken-M June 24,1986 (AR)	250
(25) S-1931 Koken-S June 24,1986 (AR)	251
(26) S-1941 Onahama-ji-S July 10,1986 (AR)	251

(27)	F-10	Hitachinaka-F	July	10,1986	(AR)	252
(28)	S-1947	Soma-S	October	14,1986	(AR)	253
(29)	F-13	Hitachinaka-F	October	14,1986	(AR)	253
(30)	F-14	Hitachinaka-F	October	22,1986	(AR)	254
(31)	S-1953	Keihin-ji-S	November	15,1986	(AR)	254
(32)	S-1954	Yamashita-hen-S	November	15,1986	(AR)	255
(33)	S-1961	Miyako-S	December	1,1986	(AR)	255
(34)	M-1063	Kamaishi-M	December	1,1986	(AR)	256
(35)	S-1964	Ofunato-bochi-S	December	1,1986	(AR)	256

3. Digitized Records 257

(1)	S-1910	Kashima-zokan-S				257
(2)	M-1014	Hanasaki-M				275
(3)	M-1017	Hanasaki-M				281
(4)	M-1022	Yamashita-hen-M				287
(5)	F-12	Hitachinaka-F				303
(6)	S-1946	Onahama-ji-S				318
(7)	F-15	Hitachinaka-F				325
(8)	M-1056	Yamashita-hen-M				340
(9)	F-19	Hitachinaka-F				346
(10)	S-1957	Kashima-zokan-S				361

Abbreviations used above:

- AR: Analog record (computer plots of digitized records)
- IR: Integrated velocities and displacements (computer plots of digitized records)
- NR: Numerical tables of response spectra
- FS: Fourier spectra
- LO: Loci of accelerations, velocities and displacements

港湾地域強震観測年報(1986)

倉田 栄一*

井合 進**

野田 節男***

要 旨

港湾地域における強震観測は昭和37年より港湾技術研究所が中心となり、のちに示す港湾関係諸機関が協力して実施してきた。1986年12月現在、港湾地域強震観測網には80台の強震計が54港に設置されていた。このうち61台が地盤上、15台が構造物上に、4台が地中に設置されていた。使用している強震計は大別するとSMAC-B2強震計とERS強震計である。SMAC-B2型強震計は機械構造を主体としたもので強震計開発委員会で設計された強震計である。ERS強震計は港湾技術研究所、耐震構造研究室が開発した強震計である。これには動コイル型換振器の受感部にもち、電磁オシログラフでアナログ記録する方式のB、C、D型とサーボ型換振器を受感部にもち、固体メモリでデジタル記録する方式のF型がある。ERS-B型は地震動の水平2成分を記録し、ERS-C、D型は鉛直成分を含めた3成分を記録する。ERS-B、C型は地表および構造物上における観測用として、D型は地中観測用に使用される。デジタル強震計の場合は同一換振器が地中、地表、構造物のいずれを対象とした観測にも使用される。デジタル強震計による観測は昭和61年3月より函館港で、4月より常陸那珂港で開始された。

この年報は、前記観測網で1986年に得られた記録について報告する。年報は本文および観測結果からなり、観測結果は、強震観測表、記録波形、速度、変位波形、フーリエスペクトル、応答スペクトル、デジタル記録、水平面内の加速度、速度および変位軌跡からなる。

強震観測表(Strong-Motion Earthquake Observation Results)には、対象期間中に得られたすべての記録を地震ごとに分類し、地震の資料と最大成分加速度等を示した。ただし、成分の最大加速度が20ガル以下で対応する地震が確認できないものは除いてある。地震資料(Earthquake data)に示すものは、震度(Intensities)を除き、気象庁地震津波監視課発行の「地震月報」によっている。しかし、この年報を編集する時点で地震月報が刊行されていない地震については、地震津波監視課が速報的に発表する「地震火山概況」によっている。その場合には、そのことが地震資料に注記されている。記録番号は記録が港湾技術研究所に到着した順序で付され、Sで始まる番号の記録はSMAC-B2強震計、Mで始まる番号の記録はアナログ記録方式のERS強震計、Fで始まる番号の記録はデジタル記録方式のERS強震計で得られたものである。

記録波形は最大加速度が20ガル以上の記録について示した。これはデジタル記録に関連して後に説明されている手法により記録を数値化し、これを電子計算機により図化したものである。

最大加速度が約20~50ガルの範囲の記録については水平2成分の波形を、50ガル以上の記録については水平2成分と上下成分の計3成分の波形を示した。ただし、ERS-B強震計は鉛直成分を含まないため、この強震計の記録では常に水平2成分の波形のみが示される。最大加速度によって振幅の目盛の尺度を変えることがあるので注意されたい。水平成分の方向は真北を基準にして示して

* 構造部 耐震構造研究室

** 構造部 主任研究官(地震動解析担当)

*** 構造部 耐震構造研究室長

ある。これは、SMAC-B2強震計の場合、地震動の周期が地震計の振子の固有周期よりも十分に長いときに、地盤の加速度の方向を示すように定めたものである。ERS強震計の場合には、地震動の周期が強震計の振子の固有周期付近であるときに地盤の加速度の方向を示すように定めたものである。

デジタル記録は次のようにして作られたものである。SMAC-B2強震計の記録の場合には、マイラーベースの感光フィルムを用いて密着印画を作り、これを数字化装置により時間軸に対し、0.1 mm（これは時間にして0.01秒に対応するが、後記のように円弧誤差を含んでいるので厳密な0.01秒でない）ごとに振幅を読み取り数字化する。数字化装置の読取範囲の関係から、記録は30～45 cmごとに区切って数字化される。数字化された記録は読取区間ごとにゼロ線が設定され、各区間の記録が接続され一本の記録とされる。この際に、円弧誤差、記録紙送り誤差（記録開始時に記録紙の送り速度が徐々に一定値に近づく立上り誤差を含む）、記録ペンの軸が加速度ゼロのときに紙送り方向に平行になっていないことによる誤差が補正される。このような補正のために、記録の数字化においては各成分の波形の他に、2本の基線、各成分の記録の前にある点検時に記録した円弧も数字化される。また、記録ごとに記録紙の送り速度が読取られる。円弧補正後の記録の数値の時間間隔は一定値とはなっていないが、直線補間により0.01秒間隔の記録に直される。

このようにして得られたものが、この年報でSMAC-B2強震計のデジタル記録として示されている。

ERS-B,C,D強震計の記録の場合には、原記録を用いて、数字化装置により時間軸0.1mm間隔に振幅を読み取り数字化する。ERS-B強震計の記録紙の送り速度（仕様値）は2 cm/sでERS-C,D強震計のそれは4 cm/sである。したがって、読取時間間隔はそれぞれ0.005秒および0.0025秒である。数字化は約70cmの区間ごとに行われる。各成分の波形の他に基線が1本数字化される。また、記録紙の送り速度が読取られる。得られた記録に区間ごとにゼロ線の設定をおこなった後、記録の一本化、時間間隔の補正、平滑化を行い、0.01秒間隔の記録とする。このようにして得られたものが、この年報でERS-B,C,D強震計のデジタル記録として示されている。

デジタル記録の作表様式は表-7のデジタル記録の例に示されているとおりである。数値の配列順序は行の左から右へ、ページの左半分から右半分へと進む。ある数値が記録の先頭から何番目の数値であるかを知るには、その数値を含む行の左端のNo.の値と、その数値の欄の最上行にある（ ）内の数値を加えればよい。1行には10個の数値が含まれており、各データは空白を含めて6字となっている。これはデジタル記録を80欄カードにさん孔するときの便利さを考慮して定めたものである。カード1枚のうち60欄をデータに、残り20欄をカードの判別記号（地震番号、成分、カード番号等）に用いれば1行がカード1枚にさん孔できる。小数点は印字されていないが、数値の末尾にあるとすれば、数値の単位は0.1ガルとなる。

以上のようにして得られた等時間間隔のデジタル記録をフーリエ変換し、計器特性を補正する。その結果にフィルター操作を加える。フィルターは2種類のものを用いる。ひとつは、フィルターの定数が固定されているもの（以後固定フィルターと書く）で、他は、フィルターの定数が記録波形のフーリエ変換の特性により修正されているもの（以後パラメタ付フィルターと書く）である。

フィルター操作後、速度および変位に対するフーリエ変換を求め、それぞれのフーリエ逆変換を求めて、補正加速度、速度、変位の波形とした。本報告では、パラメタ付フィルターにより求めた加速度波形を補正加速度波形として示した。また、2種類のフィルターを用いて求めた速度、変位の波形も示した。両フィルターの特性等は本文または別報を参照されたい。³²⁾

2種類のフィルターを用いた結果を並列して示している理由は次の通りである。第1に、現在のところどのような特性のフィルターが最適であるかを決め難いこと、第2に、求まる速度および変位の波形はフィルターの特性に著しく依存するが、単一の方法による結果を示した場合には無批判に利用されるおそれがあること、第3に、両フィルターがそれぞれ特長を有していること、などである。

ERS強震計はSMAC-B2強震計に比し、より高い振動数まで感度が一樣になっている。そのため、両強震計の記録波形をそのまま比較することは適切でないことがある。それ故、ERS強震計の記録については、SMAC-B2強震計が同一地点にあった場合に求まるであろう波形を求め、これをSMAC-B2等価加速度波形として示してある。

本年報に示されている応答スペクトルは、パラメタ付フィルターによる操作後の補正加速度波形を用いて求めたものである。前記のように、本年報に示すデジタル記録は計器補正の前段階におけるものである。したがって、デジタル記録をそのまま用いて応答スペクトルを計算しても、本年報に示されているものと同一とはならない。また、1975年以前の年報では、ここに示す記録の補正方法と異なった処理によるデジタル記録および応答スペクトル等が示されていることに留意する必要がある。なお速度、変位波形の計算およびスペクトルの計算において、SMAC-B2強震計の記録の場合は最初の1秒間を無視した。これは、記録紙送りの立上り補正は行ってはいるが、記録の最初の部分における微小な誤差が記録の極く最初の部分の補正に与える影響が大きいことを考慮しての処置である。

本年報に示されているフーリエスペクトルは、高速フーリエ変換により加速度記録の全長に対しフーリエスペクトルを求めた後、このスペクトル値に時間長を乗じて加速度のディメンジョンとし、さらにバンド幅が1ヘルツのParzenウィンドウを用いて平滑化したものである。フーリエスペクトルも応答スペクトルと同様に、それぞれの強震計の計器特性の補正を行った加速度波形から求めたものである。

本年報に示される水平画面内の加速度、速度および変位の軌跡は、各波形の水平2成分を合成したベクトルの先端の移動軌跡を描いたものである。軌跡を描くのに用いた波形の時間長は、その全長とし、長い記録では、記録の先端部および後端部の振幅の小さい部分を除いたものとしている。用いる区間長の選定は観察によっている。軌跡を描くのに用いた加速度波形および変位波形は強震計の計器特性の補正を行ない、パラメタ付フィルターで求めたものである。図中のNは真北を示す。

1986年における港湾地域強震観測には以下の諸機関が関係した。関係機関の協力に謝意を表する。

運輸省港湾局	東京都港湾局
運輸省港湾建設局	静岡県、宮崎県港湾課
北海道開発局港湾部	大阪市港湾局
沖縄開発庁沖縄総合事務局	

本年報は強震観測担当者の努力に負うところが非常に大きく、これら担当者の努力はこの年報の著者に準ずるものである。担当者各位に敬意と謝意を表する。なお、各観測地点で強震計の点検ならびに記録の取扱いは強震観測担当者によりなされているのでこれら担当者に対し将来、記録について問い合わせたい事項等が発生した時に備えるため、全担当者を以下に示す。

昭和61年 強震観測担当者

第一港湾建設局

秋田 港工事事務所	北島誠治、高橋伸一、三浦鍊太郎
酒田 港 "	小野寺梯介、高橋幸夫
新潟 港 "	坂井秀雄、下沢 治、小林治久
伏木富山港 "	三浦 守、関口忠志
金沢 港 "	竹田信一、森丘健二、佐野利治
敦賀 港 "	波間純男、慈観 力、西田一彦、近川喜代志

第二港湾建設局

青森港工事事務所		柿崎 勉, 五十嵐忠成, 三上義雄, 及川勝朋
八戸港 "		中島正雄
宮古港 "		白浜義春
宮古港 "	釜石工場	渡辺雅男, 佐々木 等, 西沢英雄
宮古港 "	大船渡分室	児玉正俊, 奈良 智, 西谷和人
塩釜港 "		西塚 登, 氏家正次, 横山健次, 近藤隆道
		稲垣義信, 長谷川清治, 佐藤久和
小名浜港 "		黒木脩介, 浅野宣幸, 藤沢孝夫, 佐藤盛仁
小名浜港 "	相馬工場	松川文彦, 佐藤伸一, 村松佳春
鹿島港 "		伊藤晟一, 宮内由三, 平野孝雄
鹿島港 "	第一工事課	阿保克郎, 飯島嘉一郎, 沢木 進
千葉港 "		佐藤儀郎, 今野頼夫
京浜港 "		蒔田靖紀, 小笠原政之, 鈴木国政, 大村直樹, 三井道雅, 荒川 圭

第三港湾建設局

和歌山港工事事務所		大村武史, 加瀬正美
神戸港 "		小松尋美, 酒井 浩, 峰久政信, 伊東司郎
神戸港 "	尼崎工場	福本泰彦, 森 和彦,
広島港 "		高畑利信
小松島港 "		芳我耕治, 森岡清見
松山港 "		沖 孝文, 松下清幸
高知港 "		小室祥次, 宮本裕輔
境 港 "		福永幹雄, 山下 学

第四港湾建設局

別府港工事事務所		伊藤秀利
宮崎港 "		三好 隆, 松屋百合男, 浜田浩二
志布志港 "		藤本孝浩, 佐藤英治, 中島 大
鹿兒島港 "		萩 定治, 山下昭男
八代港 "	水俣分室	檜垣典弘, 大始良幸雄

第五港湾建設局

清水港工事事務所		沢山 流, 古田喜代志, 込山敏夫
清水港 "	御前崎工場	渡辺力男, 川上幸一
三河港 "	衣浦分室	加藤道康, 伊藤正人,
名古屋港 "		岡島稔彦, 朝原勇夫
四日市港 "		長瀬和則, 平出友信, 菅谷 勇, 佐野一三

北海道開発局

根室港湾建設事業所		野沢邦雄
釧路港湾建設事業所		市来 隆, 金野 勇, 伊藤文彦
十勝港湾建設事業所		井出正夫, 浜野義男, 井上芳郎
浦河港湾建設事業所		佐藤仁司, 伊藤千尋

苫小牧港湾建設事務所
室蘭港湾 “
小樽港湾 “
函館港湾 “

大沼松蔵, 小谷野喜二, 高橋重男
梶原利雄, 金子義則
竹田義則, 伊藤 晃, 佐藤利春
梅沢信敏, 高橋啓司, 窪内 篤, 桑島隆一

沖縄総合事務局

那覇港工事事務所
平良港 “
石垣港 “

田仲康時, 吉平健治, 金城信之
池原興栄, 大村 誠
朝倉裕一, 知花包信, 二瓶 章

その他

東京都港湾局
大阪市港湾局
静岡県田子ノ浦港管理事務所
宮崎県日向・延岡地区
新産業都市開発局

穴沢雄治, 出田 豊, 清水恵助, 室井孝仁
山本忠正, 廣田知夫
斎藤恭一, 渡辺尚樹
山本祐一

ANNUAL REPORT ON STRONG-MOTION EARTHQUAKE RECORDS IN JAPANESE PORTS (1986)

Eiichi KURATA*
Susumu IAI**
Setsuo NODA***

Synopsis

In the major ports in Japan, strong-motion earthquakes and earthquake responses of structures have been observed since 1962; and as of December 1986, 3037 accelerograms were accumulated and analysed at the Earthquake Resistant Structures Laboratory. The observation network consisted of 80 strong-motion accelerographs; the 61 accelerographs were on the ground, the 3 accelerographs were in the ground and the rest on the structures. Two types of accelerographs, the SMAC-B2 accelerograph and the ERS accelerograph are being used. This report presents all the records obtained in 1986, which are listed in the tables with their maximum accelerations, being classified in accordance with earthquakes. The accelerograms of ground motions with maximum accelerations exceeding 20 Gals are reproduced in form of computer plots. For the ground acceleration records with maximum accelerations greater than 50 Gals, digitized records, Fourier spectra, response spectra, integrated velocities and displacements, and loci of accelerations, velocities and displacements in horizontal plane are presented.

1. Introduction

The observation of the strong-motion earthquake in major ports was started in 1962 in Japan by the Earthquake Resistant Structures Laboratory of the Port and Harbour Research Institute. The observation network was expanded year by year; and as of December 1986, 80 accelerographs had been installed in 54 ports. Two types of accelerographs were being used, namely the SMAC-B2 accelerograph and the ERS accelerograph.

Until the end of 1986, 3037 accelerograms had been obtained in the network; 1948 accelerograms were obtained in the SMAC-B2 accelerographs and 1089 accelerograms, in the ERS accelerographs. They were collected in the Laboratory for preliminary processing and analyses which would be explained later on. The records from 1963 to 1975 had been published in the preceding annual reports which had similar format to the present one. (1~11)

In 1968, there occurred an earthquake of large magnitude, the 1968 Tokachi-Oki Earthquake, and large number of aftershocks followed. The damage took place to buildings, roads, port facilities and many other types of structures. The largest acceleration was recorded at Hachinohe Port, which was 259 Gals. Because of the large magnitude of the earthquake and the damage to structures, the records were of great interest and importance. Therefore, the authors published a report of similar format to the annual report. (21) Digitized data of

* Member of Earthquake Resistant Structures Laboratory, Structures Division

** Senior Research Engineer, Structures Division

*** Chief of Earthquake Resistant Structures Laboratory, Structures Division

vertical components were not included in those reports; however, the data were reported separately. ¹²⁾ In the annual report for the records of 1976 and 1977, a new data processing procedure was introduced, and accelerations after instrument correction, integrated velocities and displacements, and response spectra calculated with the instrument corrected accelerations were included. ¹³⁾ In 1978, Japan was hit by two great earthquakes, the 1978 Izu-Oshima-Kinkai Earthquake (Magnitude 7.0) in January and 1978 Miyagi-Ken-Okai Earthquake (Magnitude 7.4) in June. Records of these earthquakes are compiled respectively into two special reports by the new data processing of similar format to the annual report. ^{22, 23)} Port structures were damaged by the 1982 Urakawa-Okai Earthquake and records of the earthquake are also compiled into special report. ²⁴⁾ The 1983 Nipponkai-Chubu Earthquake (Magnitude 7.7) brought about serious damage to port facilities in Akita port and records of the earthquake are compiled into special report. ²⁵⁾ In 1984, an earthquake (Magnitude 7.1) occurred in Hyuga-nada; off east coast of Kyushu and brought slight damages on port facilities. Records of the earthquake are also compiled into special report. ²⁶⁾

The records and the results of the preliminary analyses in those reports have been used very effectively for analyses of the earthquake damage, for analyses of earthquake response of structures and also for designing large piers; and the usefulness of the strong-motion earthquake observation has been perfectly proved. ³⁶⁾

The present report consists of the Strong-Motion Earthquake Observation Results, reproduced accelerograms, digitized records, response spectra, Fourier spectra, integrated velocities and displacements, and loci of acceleration and displacement in horizontal plane. All the records in 1983 are listed in the Strong-Motion Earthquake Observation Results with their maximum accelerations. The computer plots of digitized records are prepared for the ground acceleration records with maximum accelerations exceeding 20 Gals, and the digitized records and the spectra are provided on records exceeding 50 Gals.

Following organizations are being cooperated with the Port and Harbour Research Institute in the strong-motion earthquake observation:

- The Bureau for Ports and Harbours of the Ministry of Transport;
- The Regional Bureaus for Port Construction of the Ministry of Transport;
- The Port and Harbour Division, Hokkaido Development Bureau of the Hokkaido Development Agency;
- The Okinawa General Office of the Okinawa Development Agency;
- The Harbour Sections of Shizuoka, and Miyazaki Prefectural Governments; and The Harbour Bureaus of Tokyo and Osaka Municipal Governments.

2. Network and Instruments

(1) Network

The network of the Port and Harbour Research Institute was covering the coast-line of Japan with 80 strong-motion accelerographs in 1986; the location of ports where the accelerographs are installed, are shown in Fig. 1. The numbers attached to the ports in Fig. 1 are corresponding to the numbers in Table 1. In Table 1, being classified in accordance with the ports, the stations are listed with the type of accelerograph, the installation condition, and the reference number. The reference number is showing the number of the Technical Note of the Port and Harbour Research Institute in which the site condition of each station is described. ^{27 ~ 31)}

The accelerographs at the 53 stations out of the 80 stations were the SMAC-B2 accelerographs and the rest, the ERS accelerographs.

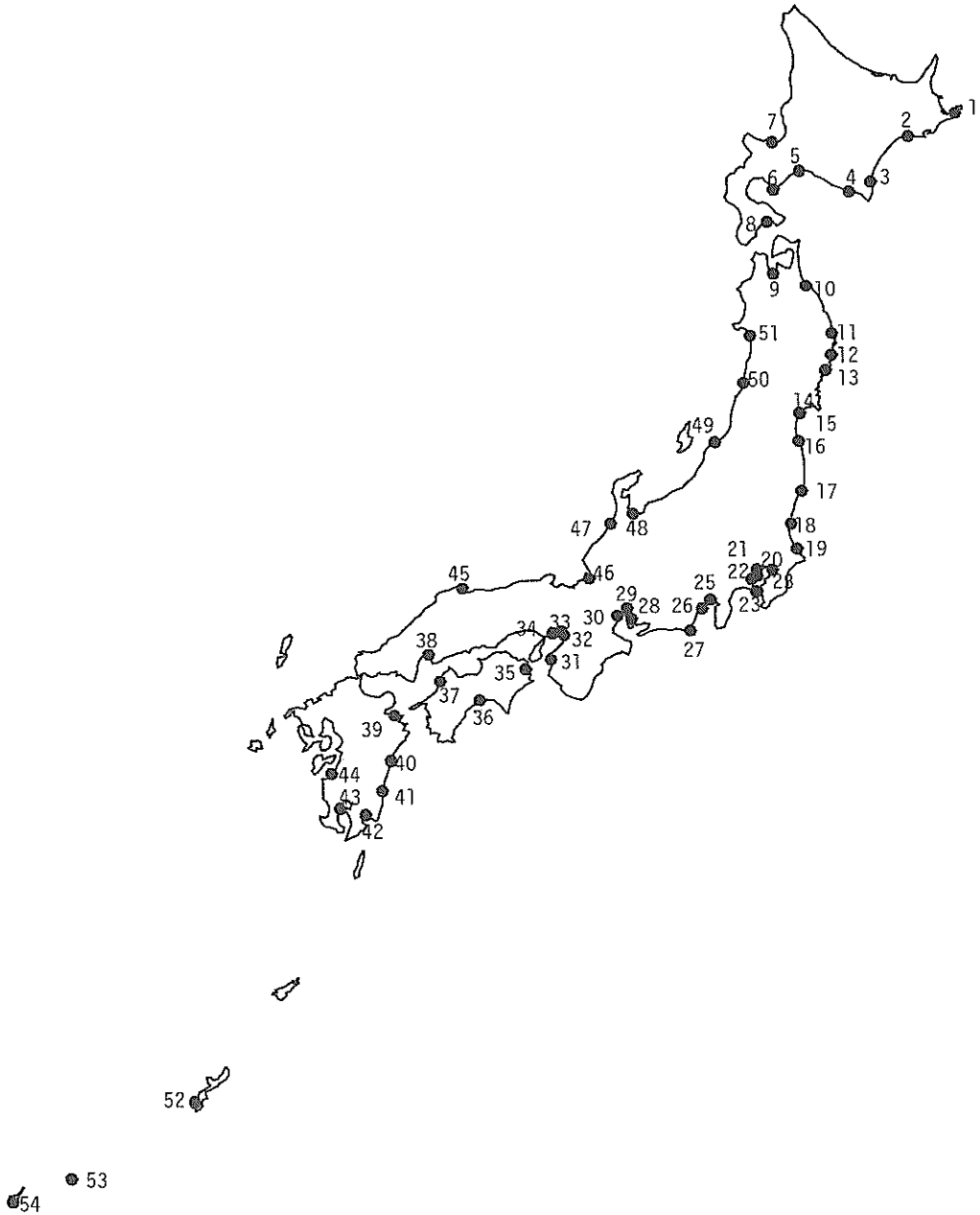


Fig. 1 Location of ports where the accelerographs are installed.
(The numbers to each port are corresponding to the numbers in Table 1)

Table 1 List of Strong-Motion Earthquake Stations of the Port and Harbour Research Institute

No. of port*	Name of port	Name of station	Type of accelerograph	Installation condition	Ref. No.**
1	Hanasaki	Hanasaki-M	ERS-C	on ground	298
2	Kushiro	Kushiro-ji-S	SMAC-B2	on ground	
3	Tokachi	Tokachi-M	ERS-C	on ground	298
4	Urakawa	Urakawa-S	SMAC-B2	on ground	
5	Tomakomai	Tomakomai-S	SMAC-B2	on ground	107
6	Muroran	Muroran-S	SMAC-B2	on ground	34,107
7	Otaru	Otaru-S	SMAC-B2	on ground	107
8	Hakodate	Hakodate-M	ERS-C	on ground	298
		Hakodate-FB	ERS-F	in ground	
		Hakodate-F	ERS-F	on ground	
		Hakodate-FR	ERS-F	on structure	
9	Aomori	Aomori-S	SMAC-B2	on ground	107,156
10	Hachinohe	Hachinohe-S	SMAC-B2	on ground	34,107
11	Miyako	Miyako-S	SMAC-B2	on ground	34,107
12	Kamaishi	Kamaishi-M	ERS-C	on ground	351
		Kamaishi-MB	ERS-D	in ground	351
13	Ofunato	Ofunato-bochi-S	SMAC-B2	on ground	34,107
		Ofunato-bo-S	SMAC-B2	on structure	34,107
		Ofunato-mound-M	ERS-C	on structure	
14	Shiogama	Shiogama-kojyo-S	SMAC-B2	on ground	34,107,156
15	Sendai	Sendai-M	ERS-C	on ground	351
		Sendai-MB	ERS-D	in ground	351
16	Soma	Soma-S	SMAC-B2	on ground	
17	Onahama	Onahama-ji-S	SMAC-B2	on ground	351
18	Hitachinaka	Hitachinaka-F	ERS-F	on ground	
19	Kashima	Kashima-zokan-S	SMAC-B2	on ground	156
20	Chiba	Chiba-S	SMAC-B2	on ground	107
21	Tokyo	Shinagawa-S	SMAC-B2	on ground	34,107
		Shinagawa-MB	ERS-D	in ground	
22	Kawasaki	Kawasaki-chi-M	ERS-B	on ground	34
23	Yokohama	Keihin-ji-S	SMAC-B2	on ground	34
		Yamashita-hen-S	SMAC-B2	on ground	34
		Yamashita-hen-M	ERS-C	on ground	298
		Yamashita-dai6-S	SMAC-B2	on structure	34
		Yamashita-dai7-M	ERS-B	on structure	34

No. of port*	Name of port	Name of station	Type of accelerometer	Installation condition	Ref. No.**
24	Yokosuka	Koken-S	SMAC-B2	on ground	34
		Koken-M	ERS-C	on ground	34
25	Tagonoura	Tagonoura-S	SMAC-B2	on ground	107
26	Shimizu	Shimizu-kojyo-S	SMAC-B2	on ground	34,156
		Okitsu-S	SMAC-B2	on ground	34,156
		Shimizu-miho-S	SMAC-B2	on ground	298
27	Omaezaki	Omaezaki-M	ERS-C	on ground	351
28	Kinuura	Kinuura-ji-S	SMAC-B2	on ground	298
29	Nagoya	Nagoya-zokan-S	SMAC-B2	on ground	34, 156
		Nagoya-inae-S	SMAC-B2	on structure	34
		Inae-sanbashi-M	ERS-B	on structure	34
		Inae-yaita-M	ERS-B	on structure	34
30	Yokkaichi	Yokka.-chitose-S	SMAC-B2	on ground	107
		Yokka.-sekita-M	ERS-B	on structure	34
		Yokka.-dai2-M	ERS-B	on structure	34
31	Wakayama	Wakayama-S	SMAC-B2	on ground	298
32	Osaka	Osaka-ji-S	SMAC-B2	on ground	34
		Osaka-chuo-S	SMAC-B2	on structure	34
33	Amagasaki	Amagasaki-S	SMAC-B2	on ground	156
34	Kobe	Kobe-ji-S	SMAC-B2	on ground	34
		Kobe-dai6-S	SMAC-B2	on structure	34
		Kobe-dai8-S	SMAC-B2	on structure	34
		Kobe-maya-M	ERS-C	on ground	298
		Maya-dai1-M	ERS-B	on structure	34
		Maya-dai2-M	ERS-B	on structure	34
35	Komatsujima	Komatsujima-S	SMAC-B2	on ground	107
36	Kochi	Kochi-ji-S	SMAC-B2	on ground	298
37	Matsuyama	Matsuyama-S	SMAC-B2	on ground	156
38	Hiroshima	Hiroshima-ji-S	SMAC-B2	on ground	
39	Oita	Oita-S	SMAC-B2	on ground	156
40	Hososhima	Hososhima-S	SMAC-B2	on ground	34
41	Miyazaki	Miyazaki-M	ERS-C	on ground	298
42	Shibushi	Shibushi-S	SMAC-B2	on ground	
43	Kagoshima	Kagoshima-S	SMAC-B2	on ground	34
44	Minamata	Minamata-M	ERS-C	on ground	351
45	Sakaiminato	Sakaiminato-ji-S	SMAC-B2	on ground	
46	Tsuruga	Tsuruga-S	SMAC-B2	on ground	34

No. of port*	Name of port	Name of station	Type of accelerograph	Installation condition	Ref. No.**
47	Kanazawa	Kanazawa-S	SMAC-B2	on ground	107
48	Toyama	Toyama-S	SMAC-B2	on ground	34
49	Niigata	Nigata-ji-S	SMAC-B2	on ground	298
50	Sakata	Sakata-S	SMAC-B2	on ground	34
51	Akita	Akita-S	SMAC-B2	on ground	34,351
52	Naha	Naha-zokan-S	SMAC-B2	on ground	298
53	Hirara	Hirara-S	SMAC-B2	on ground	298
54	Ishigaki	Ishigaki-S	SMAC-B2	on ground	298

* The number correspond to those in Fig. 1.

** The number correspond to those of the Technical Note of the Port and Harbour Research Institute, in which the site condition of the station in given.

(2) Servicing

The installation and the servicing of the instruments have been made by the port construction offices of the previously described organizations under the direction of the Earthquake Resistant Structures Laboratory. It is directed that the instrument should be checked at least twice a month and after an earthquake larger than the intensity II as soon as possible. The accelerogram is sent carefully to the Earthquake Resistant Structures Laboratory by post or in hand, without any treatment or reading in the station, to eliminate possible danger to damage the accelerogram by unaccustomed persons to handle it.

The Earthquake Resistant Structures Laboratory has been offering every year a training course of about 5 days to the persons who take care of the accelerographs at the stations. During the course, the trainees are instructed proper procedure to maintain the instruments and to handle the accelerograms, by the experts from the manufacturing companies of the accelerographs. They also attend introductory lectures to the earthquake engineering by the instructors inside and outside of the Institute.

(3) Stations

In the network, there are three kinds of stations; the first is to record acceleration of the ground surface, the second to record acceleration in the ground, and the third to record the earthquake response of structures. The station to record the earthquake response is always accompanied with another station to record the ground acceleration in its vicinity.

In the stations recording the ground acceleration independently, one of the horizontal components of the instrument is directed to the due north except a few number of instruments which have been installed in parallel with the structures. It is the reason that in the ports where the instruments are installed in parallel to the structures, there are many quay-walls or piers parallel each other, and that it is desirable to record components of the ground acceleration in parallel and perpendicular to the axes of the structures. At the stations recording structural response and the accompanying stations recording the ground acceleration, the instruments are installed parallel to the structures whose earthquake response is needed. Because two horizontal components of the accelerographs are always named NS and EW, the direction of the NS-component makes an angle to the due north direction in some of the accelerographs in the network.

Each station in the network has its own abbreviated name which implies its location, the type of its accelerograph and installation condition, on the ground or on the structure. For instance, the station in Hachinohe Port is named Hachinohe-S in which Hachinohe is the name of the place where the station is located and the capital letter S at the end of the abbreviated name is showing that the accelerograph in the station is the SMAC-B2 accelerograph. If the ERS accelerograph is being used in a station, the name of the place is followed by a capital letter M or MB. As this naming is made to distinguish the stations accurately in the network, it may be a little difficult for the people outside the network to imagine the location from its name, especially for the people who does not understand the Japanese language. The detailed publication on the network will help those people to find the location as well as other necessary data of the station.

(4) Accelerographs

i) SMAC-B2 Accelerograph

The SMAC-B2 accelerograph was developed by the Committee for the Standard Strong

Motion Accelerograph. It is a three component mechanical accelerograph which leaves records on a rolled waxed paper. The specifications, inside view and theoretical frequency characteristics are shown in Table 2 and Figs. 2 and 3 respectively.

In the network of the Port and Harbour Research Institute the SMAC-B2 accelerograph is practically one of the standard accelerographs; it is because at the earlier time of the observation the SMAC-B2 accelerograph was one of the most latest models and suitable for the observation condition in port areas. After the SMAC-B2 accelerograph, several types of accelerograph were developed by the Committee. However, it is inconvenient to use many types of accelerograph in a network from view point of instrument characteristics and maintenance; and the number of the SMAC-B2 accelerograph in the network continued to increase.

The triggering levels of the accelerographs in the network are 5 gals in places where ground noise is small and 8 gals in places where ground noise is relatively large because of heavy motor trucks for construction work or cargo transportation. Exceptionally a few number of the accelerographs located beside roads carrying very heavy traffic are triggered at 11 Gals.

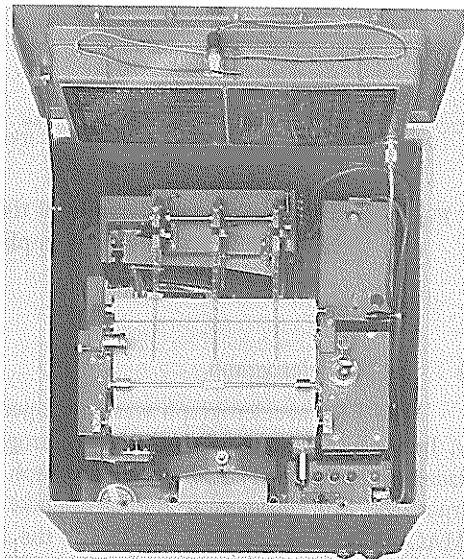


Fig. 2 Inside view of the SMAC-B2 accelerograph

Table 2 Specifications of the SMAC-B2 accelerograph

Component	2 horizontal and 1 vertical
Natural period	0.14 s.
Sensitivity	12.5 Gal/mm
Damping	Critical
Damping mechanism	Air piston
Maximum recording acceleration	500 Gal
Recording speed	10 mm/s.
Recording medium	Waxed paper
Driving mechanism for recorder	Hand-wound spring motor
Recording duration	3 min.
Recording capacity	5 earthquakes/roll
Starter	Electric contact made by vertical motion
Period of starter pendulum	0.3 s.
Starter threshold	5 Gal
Auxiliary starter	Mechanical, works at 100 gal
Time marking	1 s.
Power supply	4 dry cells
Size	54 x 54 x 37 in cm
Net weight	100 kg

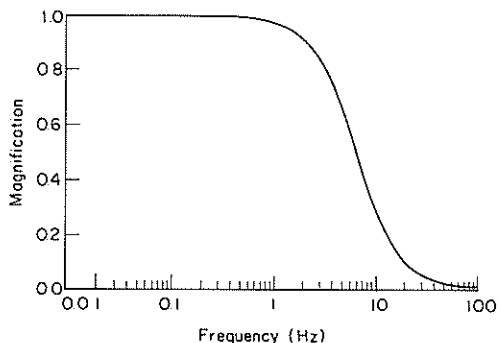


Fig. 3(a) Frequency characteristics of the SMAC-B2 accelerograph (amplitude)

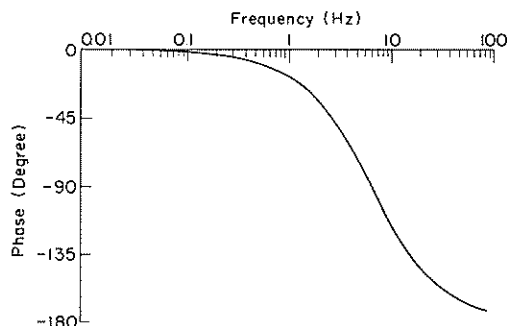


Fig. 3(b) Frequency characteristics of the SMAC-B2 accelerograph (phase)

ii) ERS Accelerograph

The ERS accelerograph was developed by the Earthquake Resistant Structures Laboratory. In the network the SMAC-B2 accelerograph is very widely used. However, there are some places where the SMAC-B2 accelerograph is not convenient to be installed, especially on structures. For instance, if the earthquake response of a pier is going to be measured with the SMAC-B2 accelerograph, a house for the instrument will be constructed on the pier where many motor trucks and cargo handling equipments are working. It is almost always difficult to find a place on a port structure for the house. Then, it is considered that transducers and a recorder are separately installed in a member of a pier and in a house which is located in the vicinity of the transducers but not disturbing the cargo handling work.

The ERS accelerograph consists of transducers of moving coil type and a recorder including power supply. Originally magnetic tape data recorders were used; this type of accelerograph is called the ERS-A accelerograph. After some period of operation the magnetic tape data recorders had been replaced by electro magnetic oscillographs. The model with an electro magnetic oscillograph was named as the ERS-B accelerograph.

A model of similar type, the ERS-C accelerograph, was developed and has been installed at eleven stations in the network. While the ERS-B accelerograph records accelerations in two horizontal components, the ERS-C accelerograph records acceleration of vertical component as well as accelerations of two horizontal ones.

A new model of similar type, the ERS-D accelerograph, was developed for recording acceleration in the ground and accelerographs of this type have been installed at two stations in the network. The transducers of the ERS-D accelerograph are installed in the bore-holes, but they are the same specifications as those of the ERS-C accelerograph.

In the ERS-B, C and D accelerograph the transducers are almost directly connected with galvanometers in the electro magnetic oscillograph; between them there exists only resistor circuits to adjust sensitivity and impedance matching. Non electronic amplifier is used to attain maximum reliability of the instrument. The overall sensitivity is more than 10 mm per Gal and it is easily adjusted by changing resistors of the circuit. Therefore, the ERS-B, C and D accelerograph has advantage to start the observation in its maximum sensitivity and after obtaining some records to readjust the sensitivity into the appropriate one for the strong-motion accelerograph. It will enable for researchers to obtain the record of sufficient amplitude

to analyze although the real acceleration amplitude is rather small and to start analyses from earlier stage of the observation.

The specifications of the ERS-B accelerograph are listed in Table 3, the transducer and the recorder are shown in Fig. 4 and 5. The corresponding information on the ERS-C accelerograph is given in Table 4 and Figs. 7 and 8. The frequency characteristics are shown in Fig. 6.

The triggering levels of the ERS accelerographs are similar to those of the SMAC-B2 accelerographs.

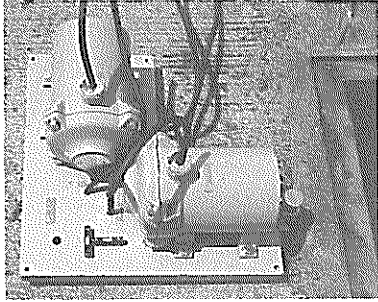


Fig. 4 Transducers of the ERS-A/B accelerograph



Fig. 5 Recorder of the ERS-B accelerograph

Table 3 Specifications of the ERS-B accelerograph

Transducer	
Type	Moving coil type
Component	2 horizontal
Natural period	0.5 s.
Damping factor	17
Damping mechanism	Electro-magnetic
Capacity	250 Gal
Coil impedance	320 ohm
Sensitivity	about 2 mv/gal (circuit open)
Water tightness	over 200 kg/cm ²
Recorder	
Type	Electro magnetic oscillograph
Natural frequency of galvanometer	100 Hz
Sensitivity	166 mm/mA
Recording paper	92 mm (width) x 30 m (length) (visible without processing)
Paper speed	2 cm/s.
Time mark	0.1 s.
Power supply	
Rechargeable battery, charged automatically when it is necessary.	

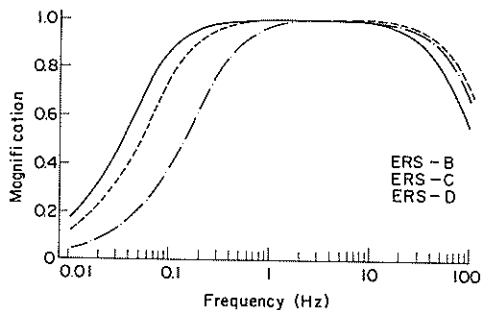


Fig. 6(a) Frequency characteristics of the ERS-B, C, D accelerograph (amplitude)

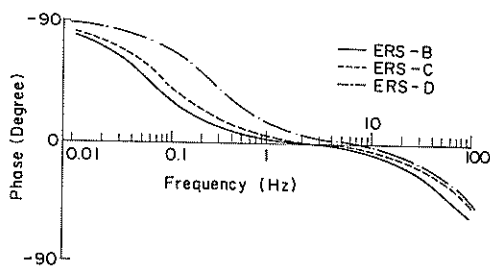


Fig. 6(b) Frequency characteristics of the ERS-B, C, D accelerograph (phase)

Table 4 Specifications of the ERS-C (D) accelerograph

Transducer	
Type	Moving coil type
Component	2 horizontal and 1 vertical
Natural frequency	3 Hz (5 Hz)
Damping factor	17 (10)
Damping mechanism	Electro-magnetic
Capacity	500 Gal
Water tightness	over 20 kg/cm ²
Recorder	
Type	Electro magnetic oscillograph
Natural frequency of galvanometer	270 Hz
Recording paper	198 mm (width) x 30 m (length) (visible without processing)
Paper speed	4 cm/s.
Time mark	0.1 s.
Sensitivity (overall)	2 Gal/mm, or 10 Gal/mm
Power supply	
Rechargeable battery, charged automatically when it is necessary.	

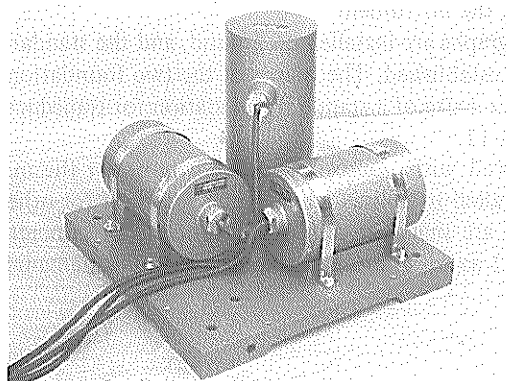


Fig. 7 Transducers of the ERS-C accelerograph

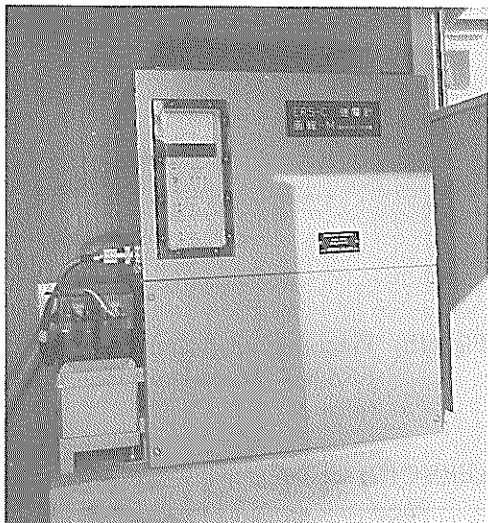


Fig. 8 Recorder of the ERS-C accelerograph

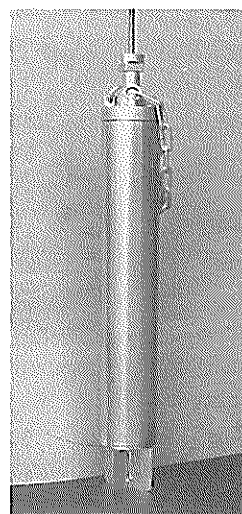


Fig. 9 Transducers of the ERS-D accelerograph

(5) Foundation and House

All the SMAC-B2 accelerographs in the network are installed on simple shallow foundations which were designed based upon the same idea. It was supposed that the shape and the dimensions of a foundation on which a seismograph is installed affects to the earthquake record obtained by it. However, as there was no convincing idea to design the most suitable foundation, the foundations of almost same size and of same shape were selected for all the accelerographs in the network. This makes it easier to compare accelerograms of an earthquake recorded at several stations. As the most of the harbour structures have shallow foundations and do not rest on bed rock, it was decided to make shallow foundations for the accelerographs, as shown in Fig. 10. The hollow space under the foundation was made to make the bulk density of the foundation equal to that of the soil, so that the disturbance to the records due to the foundation is eliminated.

Usually, no pile is used to support the accelerograph and its foundation, but in the stations on very soft soil or loose sand, concrete piles or wooden piles were used. For example, the foundations in the Hachinohe-S station and the Niigata-S station are supported by piles. The foundation is isolated from a house covering the instrument.

In the network only two ERS-B accelerographs are installed on ground, and the standard foundation for this accelerograph has not been established. The shapes of the two foundations are shown in the separate reports.^{27~31}) Shape and size of a standard foundation for transducers of the ERS-C accelerograph are illustrated in Fig. 11.

The most of the accelerographs are covered with houses which were built for the instruments. Some of the accelerographs were installed in houses which had been built for other purposes. The house built for the instruments are made of reinforced concrete or concrete blocks; some are prefabricated houses. In Fig. 12 as an example, the house of the Onahama-ji-S station is shown.

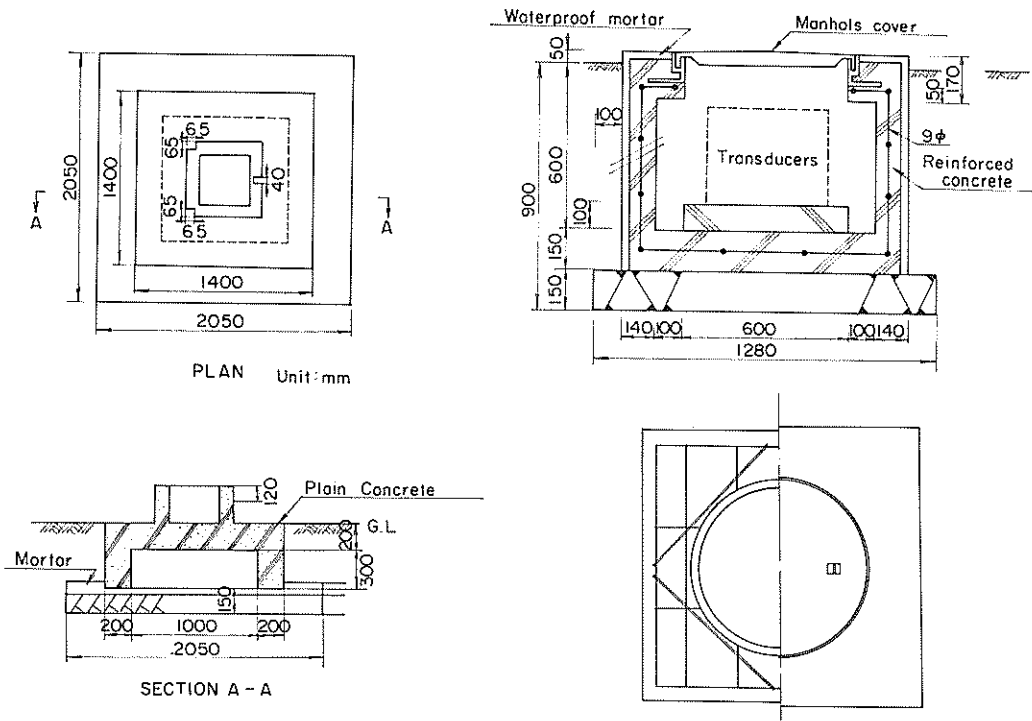


Fig. 10 Foundation for accelerograph (SMAC-B2) Fig. 11 Foundation for transducers of the ERS-C accelerograph

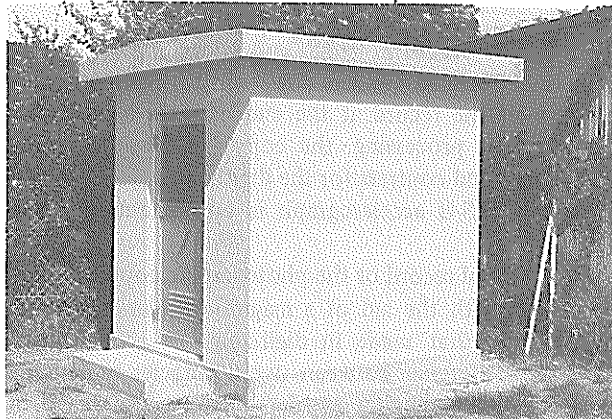


Fig. 12 House of the Onahama-ji-S station

3. Accelerogram Processing

(1) Preliminary Processing

The accelerograms collected at the Earthquake Resistant Structures Laboratory will be listed in the table "Strong-Motion Earthquake Observation Results" through the following processing.

At first, each accelerogram is given a record number according to the order of its arrival at the Laboratory. The record number for the accelerogram from the SMAC-B2 accelerograph begins with a capital letter S, and that from the ERS accelerograph, with a capital letter M.

Then, the earthquake corresponding to the accelerogram is confirmed or determined. Most of the accelerograms are sent from the stations with information on the earthquake for which the accelerograms have been obtained. A few of the accelerograms, however, are sent without such information because the accelerograms have been found in the regular servicing, and at the station it is difficult to find the corresponding earthquake. For the accelerogram without the information, the earthquake is determined considering the possible period of the recording and the earthquakes occurred in that period. The determination or the check is made based on the Seismological Bulletin of the Japan Meteorological Agency. As at the time of compilation of the annual report the Seismological Bulletins on the earthquakes in later months in a year are not available because of time lag of the publication after earthquakes, the preliminary reports (Jishin Kazan Gaikyo published by the Japan Meteorological Agency) are used to check the records in those months. Some of the accelerograms are impossible to determine their corresponding earthquakes even in the Laboratory and they are treated as earthquake unknown. It will be noted that the reliability of the earthquake determination for accelerograms of small acceleration is limited because of such procedure.

In the SMAC-B2 accelerograph, the recording is made on waxed paper which has dark red background. The recording by scratching the waxed paper with a stylus leaves the semi-translucent trace on the paper. As the waxed paper is not stable against scratchings, the original accelerogram is not appropriate to be used for the digitization. The photographic contact print is made from the original accelerogram on a special photographic sheet. The base of the sheet is made of mylar film and very stable against temperature change, humidity, and mechanical distortion.

The sizes of the sheet are 55 cm in length and 30 cm in width. If the significant portion of the record is longer than 30 ~ 45 cm, the copy will be made on two sheets or more; and a portion of about 10 cm of the record at the end of a sheet is overlappedly appearing in the successive sheet. After the processing, the copy has black traces and semi-translucent background. They are in very good contrast for the digitization.

The record from the ERS-B accelerograph is only chemically stabilized before being used for analysis.

From the stabilized original record or the photographic copy, the maximum accelerations of each component are read with the aid of a magnifying glass. In this reading the base-line setting is not so accurate as that made in digitizing the accelerogram, since this is just preliminary processing. The difference between two accuracies in base-line setting may cause a little difference between the maximum accelerations read with the magnifying glass and in the digitized record.

The accelerograms are classified in accordance with the earthquakes, and listed with their maximum accelerations in the tables "Strong-Motion Earthquake Observation Results". The items in the table will be explained in the following sub-sections. The Strong-Motion Earthquake Observation Results are compiled every two months and sent to all the stations.

The copy of the accelerogram is also sent with the necessary directions on the maintenance of the instrument to the station where the accelerogram was obtained. The Strong-Motion Earthquake Observation Results are included in the later part of this report.

(2) Earthquake Data

The earthquake data except the remarks in the Strong-Motion Earthquake Observation Results are based upon the Seismological Bulletin of the Japan Meteorological Agency. Because of the reason explained previously regarding the checking of earthquakes, the data on earthquakes in November and December are based upon the preliminary reports. Some of the remarks come from different sources.

The time in the earthquake data refers to the Japan Standard Time (JST) which is earlier than GMT by 9 hours.

The magnitude in the earthquake data is determined using Tsuboi's formula:

$$M = \frac{1}{2} \log (A^2_N + A^2_E) + 1.73 \log \Delta - 0.83 \dots \dots \dots (1)$$

where, M is the magnitude. A_N and A_E are the maximum amplitudes of N- and E-components in micron respectively, and Δ is the epicentral distance in km. Those ground amplitudes are of seismometers with periods of about 5 seconds, and of waves shorter than 5 seconds. The magnitude is the averaged value over magnitudes for every $\sqrt{A^2_N + A^2_E}$ reported by the stations of JMA.

The intensity of the shock is estimated according to the scale as shown in Table 5.

Table 5 JMA Seismic Intensity Scale (After Ref. 34)

0:	NO FEELING Shocks too weak to cause human feelings and registered only by a seismograph.
I:	SLIGHT Extremely feeble shocks only felt by persons at rest or by those who are observant to an earthquake.
II:	WEAK Shocks felt by most persons, slight shaking of doors and Japanese latticed sliding doors (shoji).
III:	RATHER STRONG Slight shaking of houses and buildings, rattling of doors and Japanese latticed sliding doors (shoji), swinging of hanging objects like electric lamps, moving of liquids in vessels.
IV:	STRONG Strong shaking of houses and buildings, overturning of unstable objects, spilling of liquids out of vessels.
V:	VERY STRONG Cracks in the walls, overturning of gravestones, stone lanterns, etc., damage to chimneys and mud-and-plaster warehouses.
VI:	DISASTROUS Demolition of houses by less than 30% in total number, landslips, fissures in the ground, etc.
VII:	VERY DISASTROUS Demolition of houses by more than 30%, intense landslips, large fissures in the ground, faults.

(3) Accelerograph Results

The items in the accelerograph results have been explained previously. The maximum accelerations are those determined by the preliminary processing.

The accelerogram whose earthquake is unknown is not listed in the table, if both of its maximum horizontal accelerations are smaller than 20 Gals. If at least one of the maximum accelerations is larger than 20 Gals, then it is listed in the table, but the earthquake data can not be given.

4. Digitization

(1) Digitizers

Two strong-motion accelerogram digitizers are being used in the Port and Harbour Research Institute; one is for digitization of records by the SMAC-B2 accelerograph and the other for digitization of records by the ERS-B, C, D accelerograph.

a. Digitizer for records by the SMAC-B2 accelerograph

The digitizer being used for the accelerograms obtained by the SMAC-B2 accelerograph is a semiautomatic instrument. The view and the specifications of the digitizer are shown in Fig. 13 and Table 6, respectively.

Table 6 Specifications of digitizer for records by the SMAC-B2 accelerograph

Digitizer Table	
Sizes of table to accommodate accelerogram	750 mm (X) x 660 mm (Y)
Effective area	430 mm (X) x 300 mm (Y)
Magnifying glass	5x, with a cross mark and illumination
Translation of magnifying glass	
Y-axis	manual by rotating a wheel
X-axis	automatic, at intervals of 0.1 mm
Analog to Digital Converter and Control	
Resolution (overall)	1000 counts per a millimeter
Indication	
Y-axis	sign and 4 digits
X-axis	4 digits

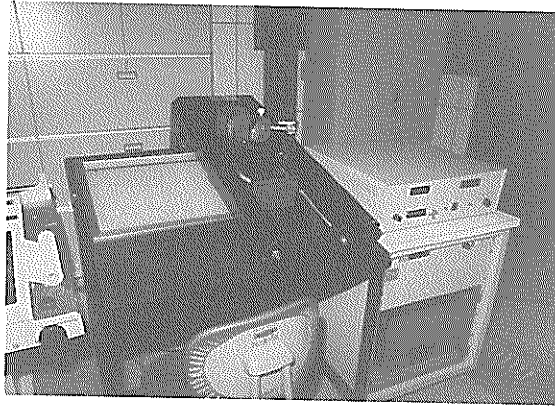


Fig. 13 Digitizer for records by the SMAC-B2 accelerograph

The digitizer works in the following way. On the digitizer table there is a magnifying glass which can be translated along the Y-axis by rotating a small wheel near the glass. A magnescale is connected to the wheel, and the electric digital output corresponding to the position of the magnifying glass is available from the magnescale. The magnifying glass has a cross mark and a lamp to illuminate the accelerogram within its range. The operator places the cross mark on the trace and pushes a push-switch; then the digital output from the magnescale is displayed on the panel and is stored in the memories of the computer. After this step, the magnifying glass is automatically shifted along the X-axis by 0.1 mm.

b. Digitizer for records by the ERS-B, C, D accelerograph

The records obtained by the ERS-B, C, D accelerograph are processed by an on-line oscillogram digitizer. The digitizer is connected to a hybrid computer which is combination of a digital and an analog computers. The digitizer and the computer are photographed in Fig. 14 and 15.

The records is placed on the table and an operator traces waves in the records with cursor of the digitizer. The travels of the cursor along X- and Y-axis are digitally counted and at each 0.1 mm increment or decrement of travel along the X-axis, the location counts of the cursor are transferred into memories of the computer. After tracing the necessary segment of the record, digitized values in the memories are processed by appropriate programs. According to the direction given to the computer through the I/O typewriter, output of the digitized records in the memories is available in forms of printed list, magnetic tape and analog reproduction.

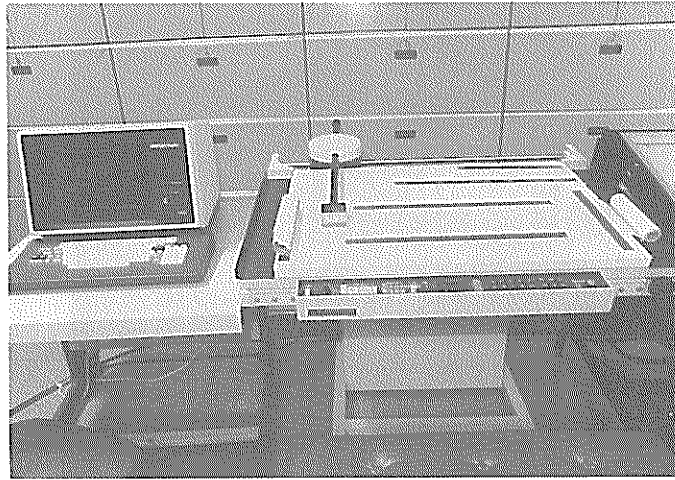


Fig. 14 Digitizer for records by the ERS-B, C, D accelerograph



Fig. 15 Hybrid computer controlling the digitizer

(2) Digitization

The digitization procedure described here is applied for records obtained since 1976.

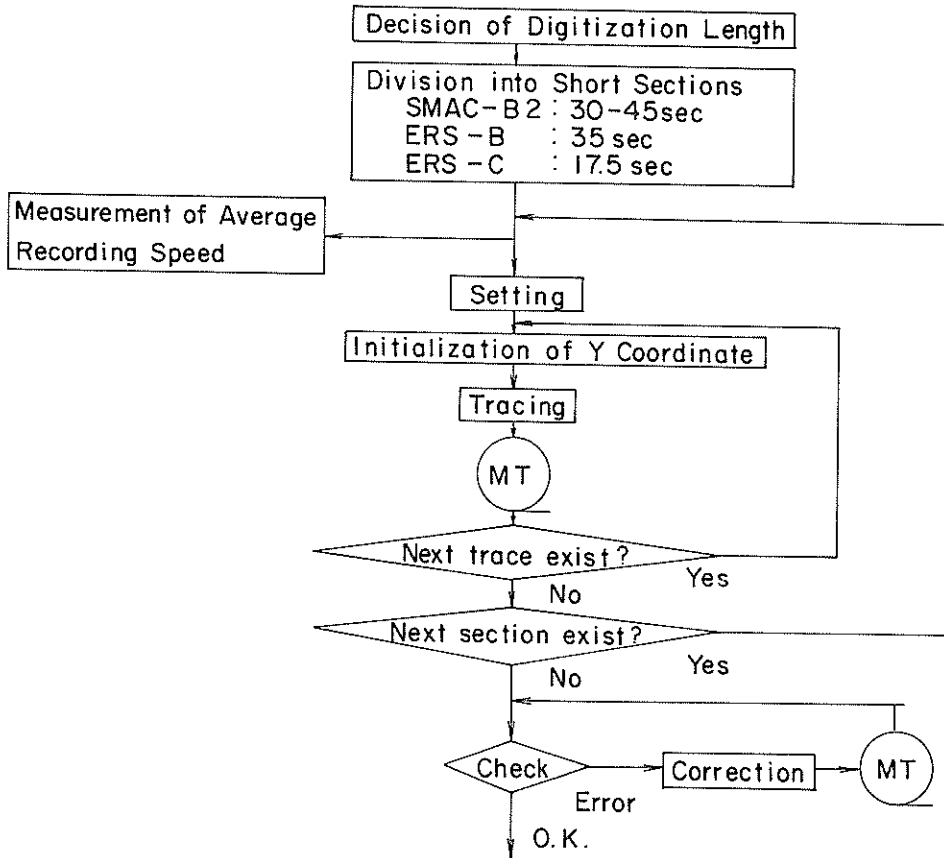


Fig. 16 Digitization procedure

i) Digitization of a record by the SMAC-B2 accelerograph

A record by the SMAC-B2 accelerograph consists of following traces;

Recorded accelerations

Fixed traces

Timing marks

Arc traces

Free vibration traces for calibration of the characteristic periods and damping factors of the accelerograph

The fixed traces are recorded by the pens fixed to the accelerograph frame. The timing marks are pulses at intervals of one second. The arc traces are recorded manually with the recording pens supported by pivots when the paper drive mechanism is stopped. They show offset of the pens from the normal position where the pens are parallel to the direction of

paper driving.

Traces to be digitized are the recorded accelerations, the fixed traces, and the arc traces. Digitized fixed traces and digitized arc traces are used for the standard data processing described later. The timing marks are used only to obtain the average recording speed because fluctuation of the timing marks are estimated as small as the digital unit of the digitizer (0.1 mm) according to the results of the tests of the SMAC-B2 accelerographs.³²⁾ The average error in the time marking is expected to be less than 1 % and the fluctuation is less than 0.5 % according to the results of the tests of the SMAC-B2 accelerographs.³²⁾ In order to obtain the average paper speed, length of intervals of 30 pulses is measured by the digitizer for a record by the ERS-B, C, D accelerograph.

A record is digitized from the starting point of recording. Portion of the record to be digitized is determined so as to include discernible acceleration on the paper. This determination is done by observation of a record to be digitized. The portion of the record to be digitized is divided into some sections because of the limitation of effective area of the digitizer table. Length of each section is about 30 cm to 45 cm which is almost equivalent to 30 second to 45 seconds. Digitization unit in the amplitude is 0.008 mm which is equivalent to 0.1 Gal. Contact prints are made for each section as described previously.

Digitization procedure is summarised as follows.

- (a) Setting of the copy: A copy of a record to be digitized is fixed with the magnets on the table of the digitizer. The table is rotated by an adjusting screw so that the fixed trace on the copy is parallel to X axis of the digitizer. Two points on the fixed trace located on the both ends of the section are used for this adjustment: Y coordinate value of the two points are made to coincide with each other.
- (b) Initialization of Y coordinate: Y coordinate is arbitrarily initialized in the digitization procedure because "Sectional Base-Line Location" described later is to be applied in the standard data processing. Y coordinate of a first point to be digitized is usually set to be zero.
- (c) Tracing: The traces are digitized by an operator in the way described in the preceding section. Three accelerations, two fixed traces, and three arc traces are digitized at intervals of 0.1 mm along X axis. The intervals are almost equivalent to 0.001 s. Accelerations are, however, recorded in a cylindrical coordinate system so that the digitized amplitude values are not corresponding to equal time intervals.
- (d) Recording of Digitized Data: Data punched on a paper tape are recorded in a magnetic tape with such data as record number, component, station, date and time of the earthquake, time intervals, etc.

ii) Digitization of a record by the ERS-B, C, D accelerograph

A record by the ERS-B, C, D accelerograph consists of recorded accelerations, fixed traces, and timing marks. The Fixed traces are recorded by light beams reflected from fixed mirrors attached to the oscillograph frame. They are parallel lines at intervals of 2 mm drawn in the whole breadth of the recording paper. The recorded accelerations and one of the fixed traces located in the center of the oscillogram are digitized.

Portion of the record to be digitized is divided into some sections because of limitation of the effective area of the digitizer table. Length of each section is about 70 cm, which corresponds to about 35 seconds on a record by the ERS-B accelerograph and about 17.5 seconds on a record by the ERS-C/D accelerograph.

Procedure of setting of a record by the ERS-B, C, D accelerograph and the initialization of Y coordinate is similar to that for a record by the SMAC-B2 accelerograph. The record is digitized by an operator in the way described in the preceding section. The accelerations are

digitized at intervals of 0.1 mm, which corresponds to 0.005 s. on a record by the ERS-B accelerograph and about 0.0025 s. on a record by the ERS-C/D accelerograph. The fixed trace is digitized at intervals of about 5 cm, which corresponds to 2.5 seconds on a record by the ERS-B accelerograph and 1.25 seconds on a record by the ERS-C/D accelerograph; then the digitized data are obtained by linear interpolation at intervals of 0.1 mm. The digital unit in the amplitude is 0.1 mm, which corresponds to about 0.1 Gal on a record by the ERS-B accelerograph and about 0.2 Gal or about 1.0 Gal on a record by the ERS-C/D accelerograph. In the case of the ERS-C/D accelerograph, sensitivities of the galvanometers are calibrated for each recording with calibration currents before resetting paper drive.

Timing marks are used only to measure the average recording speed of the record by the ERS-C/D accelerograph because fluctuation of the timing marks is expected as small as the digital unit of the digitizer (0.1 mm) according to the results of the tests of the ERS-C/D accelerographs.³⁰⁾ They are pulses of intervals of 0.1 second generated by a crystal timer. In case of a record by the ERS-B accelerograph, timing marks are not used because accuracy of the timer depends on that of the frequency of the power supply which consists of batteries and a DC-AC inverter.

(3) Standard Data Processing

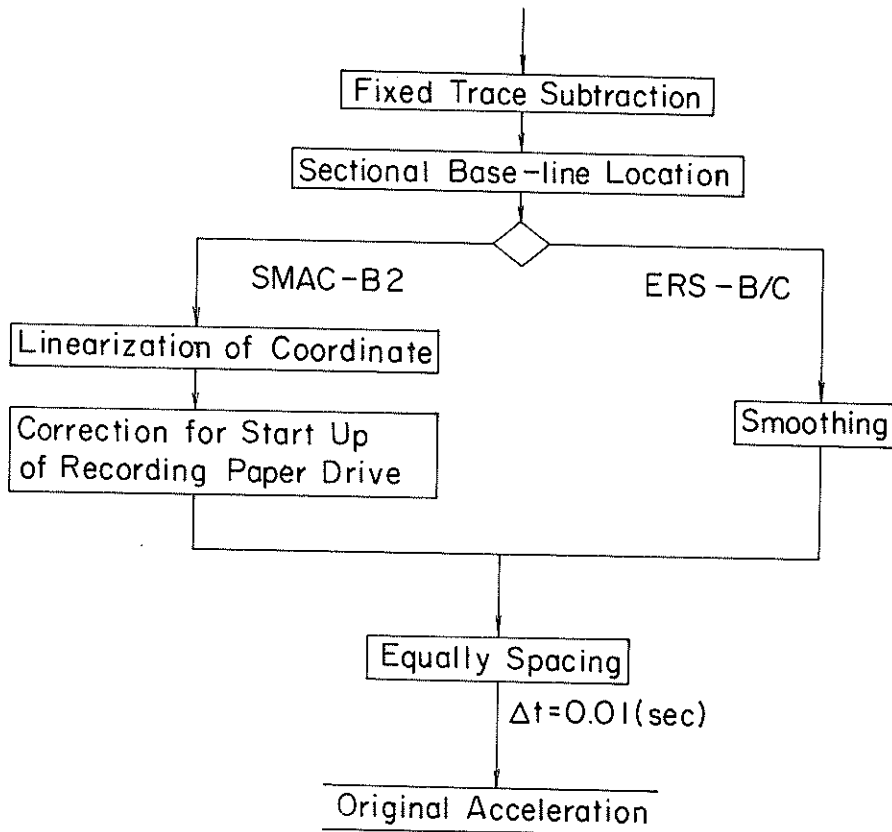


Fig. 17 Procedures of standard data processing

The procedure for the standard data processing described here is applied for records obtained since 1976, although the correction for start up of recording paper drive of the SMAC-B2 accelerograph was slightly modified for the improvement after the preceding annual report had been published. For the detailed description, see a separate report.³²⁾ The acceleration processed through the standard data processing will be called "Original Acceleration". The original acceleration is showed in a figure and listed on a table. Data numbers of junctions of sections for digitalization are listed also on the table, if any (See Table 7).

Standard data processing for a record by the SMAC-B2 accelerograph is performed under following procedures.

1. Fixed Trace Subtraction
2. Sectional Base-line Location
3. Linearization of Coordinate
4. Correction for Start up of Recording Paper Drive
5. Equally Spacing

Standard data processing for a record by the ERS-B, C, D accelerograph is performed under following procedures.

1. Fixed Trace Subtraction
2. Sectional Base-line Location
3. Smoothing
4. Equally Spacing

Each correction procedure is described briefly as follows.

i) Fixed Trace Subtraction

This correction is applied in order to eliminate the following errors.

Errors caused by the transverse motion of recording paper in the drive mechanism of the accelerograph

Systematic errors caused by an imperfect mechanical transverse mechanism of the digitizer cross-hair system

Errors of sectional rotation of the record on the table of the digitizer at the setting

The systematic errors of the digitizer cross-hair system were found to be negligible according to the tests with a straight line made of a stretched steel wire and a stretched gut.

Digitized fixed traces are smoothed by a weighted running average scheme before subtracted from the accelerogram. The weight function is defined by

$$w(t) = \begin{cases} \sqrt{\frac{\alpha}{\pi}} \exp[-\alpha t^2] & \text{if } |t| \geq t_0 \\ 0 & \text{otherwise} \end{cases} \dots\dots\dots (2)$$

where

$$\alpha = \left(\frac{\pi}{2}\right)^2$$

$$t_0 = \sqrt{\alpha / 5} = 0.7 \text{ (s.)}$$

At both ends of a section for digitization, α in the equation (2) is redefined by

$$\alpha = 5 / S^2 \dots\dots\dots (3)$$

where S is distance from the end of a section.

This weighted running average corresponds to a low pass filter of the cut off frequency of about 0.5 Hz.

The smoothed fixed traces are subtracted from the accelerogram. In the case of a record

Table 7 Example of digitized record

RECORD - S-1043
 STATION - ONAHAMA-S
 TOTAL NUMBER OF DATA - 4600
 SAMPLING INTERVAL - 0.010 (SEC)
 SIGNAL - GR. ACC.

COMPONENT - W25N
 DATE AND TIME - 1977-12-17-00-10
 UNIT - 0.1 GAL
 CORRECTION - ARC. ERR.

CONTINUED (S-1043 W25N)

No.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	15	-15	-15	-15	-14	-14	-14	-14	-14	-14
10	13	-13	-13	-13	-9	-9	-9	-9	-9	-9
20	11	-10	-10	-10	-9	-8	-8	-8	-8	-8
30	6	-6	-6	-6	-6	-6	-6	-6	-6	-6
40	9	-8	-7	-7	-8	-9	-10	-12	-14	-14
50	18	-23	-27	-28	-25	-21	-17	-13	-7	-7
60	-1	2	1	2	0	-3	-6	-8	-11	-14
70	-19	-26	-30	-30	-28	-25	-22	-18	-12	-10
80	3	6	1	7	6	3	0	2	1	8
90	-13	6	-1	8	-19	-10	-8	2	1	-1
100	5	8	6	6	7	13	13	12	8	3
110	1	8	6	2	3	1	-1	-2	2	3
120	-1	-4	-4	3	10	10	9	3	3	3
130	0	-5	4	3	2	0	-4	-6	-6	-6
140	5	-4	3	2	0	-4	-8	-6	-6	-6
150	-8	-12	-15	-15	-12	-10	-12	-14	-18	-18
160	-22	-28	-29	-29	-26	-21	-15	-8	-4	-4
170	0	6	11	15	15	13	9	9	7	4
180	0	-8	-18	-24	-23	-32	-31	-29	-14	-6
190	-7	-4	-10	-11	-9	-4	1	10	11	9
200	8	9	3	3	1	-2	18	10	-3	0
210	-3	3	1	4	1	-2	18	10	-3	0
220	0	0	1	4	1	-2	18	10	-3	0
230	4	-1	-7	-6	-6	-6	-3	0	9	9
240	9	9	8	3	-3	-14	-27	-30	-24	-16
250	-10	-6	-3	1	3	6	11	11	8	5
260	5	1	-2	-9	-6	-8	-11	-15	-21	-21
270	-16	-10	-5	-2	0	8	6	2	0	9
280	20	14	16	23	17	12	9	7	4	2
290	-1	-5	-35	-20	-18	-23	-23	-18	-12	-4
300	3	6	12	21	30	29	27	25	22	17
310	10	1	-4	-10	-19	-25	-24	-18	-11	-2
320	1	-1	0	0	0	8	12	16	17	17
330	19	27	28	24	17	14	6	1	2	-9
340	-16	-15	-15	-12	-7	0	3	1	2	-1
350	0	-1	-2	11	11	10	11	13	10	6
360	-2	-12	-22	-30	-32	-32	-30	-25	-20	-17
370	-16	-16	-17	-17	-14	-7	0	5	3	3
380	-1	-2	-4	-10	-16	-26	-26	-22	-16	-11
390	-9	-4	-1	3	6	4	2	-3	-10	-10
400	-6	-3	0	4	2	5	5	6	13	15
410	17	13	10	10	11	7	1	-4	0	3
420	9	15	16	14	13	11	11	10	7	6
430	2	-3	-10	-13	-10	-8	4	11	12	12
440	14	14	8	5	5	0	4	-3	-4	-4
450	0	5	8	13	16	17	18	14	8	5
460	4	6	5	2	1	-6	-10	-21	-30	-30
470	-29	-29	-20	-15	-9	-3	5	16	23	23
480	25	24	20	15	5	-17	-35	-32	-32	-32
490	-27	-22	-16	-12	-6	-1	10	6	8	12
500	-2	-11	-13	-10	-6	1	6	8	12	18

No.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
510	22	20	15	6	-2	-8	-6	-6	-4	-4
520	-1	1	4	6	6	8	6	7	6	4
530	5	9	15	20	16	13	6	4	2	2
540	-2	-8	-3	0	9	12	19	27	30	34
550	34	29	24	19	10	2	-4	-15	-14	-9
560	-4	0	7	2	14	22	28	27	21	16
570	-11	-10	-6	4	-13	-19	-18	-16	-18	-16
580	13	8	0	-4	25	24	21	18	14	9
590	-20	-27	-27	-21	25	24	21	18	14	9
600	6	15	22	21	25	24	21	18	14	9
610	4	6	12	19	23	20	18	16	12	8
620	5	-6	-16	-10	0	9	14	20	21	18
630	15	14	16	16	14	10	6	1	-4	-3
640	-2	-4	1	-8	1	-4	-7	-4	-3	3
650	11	11	3	-4	15	-21	-22	-22	-19	-15
660	-8	0	12	23	26	27	26	20	8	3
670	6	10	12	13	16	19	23	25	26	26
680	26	26	25	26	27	24	16	3	-16	-26
690	-40	-47	-53	-56	-49	-43	-30	-20	-27	-47
700	-65	-91	-134	-154	-292	-309	-325	-345	-345	-345
710	-358	-357	-352	-344	-335	-329	-328	-324	-320	-292
720	-258	-210	-133	-99	-48	4	59	118	175	220
730	254	277	281	322	382	439	467	507	535	533
740	522	502	483	41	462	460	465	472	482	483
750	467	441	396	31	250	143	96	70	65	64
760	62	55	46	31	5	-1	11	66	135	173
770	201	223	200	142	62	-90	-278	-393	-485	-671
780	-737	-801	-728	-605	-446	-241	-4	215	368	444
790	492	300	452	372	239	3	-102	-236	-505	-649
800	-696	-711	-700	-676	-601	-508	-397	-253	-105	31
810	135	177	184	176	130	54	-8	-75	-156	-209
820	-234	-239	-215	-168	-103	-31	33	106	177	219
830	246	257	239	202	165	135	113	102	97	120
840	138	151	152	120	65	17	-10	-58	-93	-113
850	-140	-139	-119	-58	-10	45	93	156	229	305
860	328	344	355	342	320	250	182	118	45	-10
870	-44	-70	-91	-103	-94	-63	-32	10	75	125
880	150	163	154	128	95	62	35	11	-15	-35
890	-40	-41	-53	-70	-92	-105	-122	-134	-43	-155
900	-148	-136	-123	-113	-107	-103	-103	-102	-90	-71
910	-52	-24	-4	7	9	14	18	22	31	48
920	82	122	153	176	194	206	211	196	161	123
930	87	48	9	-18	-36	-44	-34	-24	-12	6
940	7	-13	-22	-32	-40	-40	-41	-41	-34	-32
950	-34	-37	-43	-44	-47	-54	-64	-62	-58	-53
960	-48	-42	-36	-30	-20	-15	-12	-8	-19	-42
970	-23	-100	-117	-129	-137	-130	-112	-84	-78	-54
980	-23	-2	22	36	46	52	55	52	37	9
990	3	-2	24	18	4	21	35	50	53	60
1000	71	91	107	125	146	164	181	189	176	156
1010	134	106	87	70	58	61	71	96	95	96
1020	88	55	7	-37	-72	-113	-150	-176	-200	-216
1030	-226	-224	-212	-200	-188	-179	-173	-164	-153	-142
1040	-132	-120	-106	-89	-46	-16	28	70	100	119

TO BE CONTINUED

TO BE CONTINUED

by the SMAC-B2 accelerograph, subtraction is made as follows;

An upper trace is corrected with an upper fixed trace.

A lower trace is corrected with a lower fixed trace.

A center trace is corrected with an average of an upper fixed trace and lower one.

In the case of a record by the ERS-B, C, D accelerograph, one fixed trace is subtracted from all the components of accelerogram.

ii) Sectional Base-line Location

As described previously, base-line is arbitrarily inserted for each section by the initialization of Y coordinate. Sectional translation brings mainly low frequency errors into the accelerogram and produces an unnatural response of a low cut filter for integration around a point of junction of digitized sections.

Base-line is located so as to make an ideal average of acceleration over almost infinite length zero. On the sectional base-line location, the authors assume that low frequency components up to about $1/T$, where T is minimum length of sections, is almost none if calculation of spectrum is done over the infinite length for the accelerogram which have been corrected by the fixed trace subtraction and which have an ideal true base-line for each section. Based on the detailed study of the base-line location in the frequency space, the base-line is located sectionally so as to make a weighted average of each sectional acceleration zero. The weight function is defined by

$$u(t) = \sqrt{\frac{\beta}{\pi}} \exp [-\beta t^2] \dots\dots\dots (4)$$

Where $\beta = 20/T^2$, and T (s.) is length of each section.

The expected error of the location is almost proportional to the quantities of low frequency components up to about $1/T$ (Hz).

Because the authors do not have enough space to describe the detailed study, the authors introduce an example calculation to illustrate the difference between the proposed base-line location and the base-line location of least square fit scheme for each section. A sine wave generated by a computer of 100 Gals, 5 Hz, 5000 data with time intervals of 0.01 sec is divided into two sections; one section is the first 2510 data and the other is the last 2490 data, which are looked upon as a sectionally digitized accelerogram. Sectional base-lines are located by the two methods. Displacements are calculated from the two accelerations by the fixed filter method described later and a portion of the results including the junction of two sections are shown in Fig. 18(a) and (b) respectively. (10.1 sec is the junction in these figures.) These figures indicate that the proposed base-line location is much better in this case because true displacement is a sine wave.

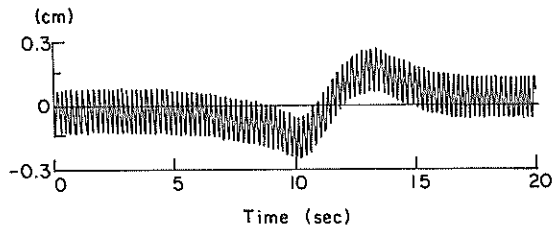


Fig. 18(a) Integrated displacement from the acceleration with sectionally located base-line by a least square fit scheme

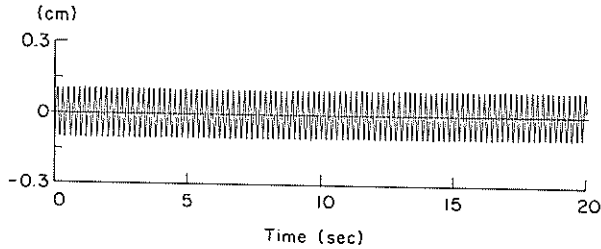


Fig. 18(b) Integrated displacement from the acceleration with sectionally located base-lines by the proposed method

iii) Linearization of Coordinate

This correction is applied to a record by the SMAC-B2 accelerograph to obtain a corrected X coordinate of each datum. Y coordinate of the pivot of the recording pen is calculated from the digitized arc trace.

Let r (mm) denote the radius of the arc (length of the arm of the recording pen), r (mm) denote Y coordinate of a point whose X coordinate is to be corrected, a (mm) denote Y coordinate of the center of the arc (the pivot of the pen) and e (mm) denote error of X coordinate of the point to be corrected then we have

$$e = r - \sqrt{r^2 - (y - a)^2} \dots \dots \dots (5)$$

Although the arc trace is digitized with arbitrarily determined base-line, the linearization of coordinate is uniformly performed because $(y - a)$ in the equation remains constant for any base-line. a (mm) in the equation will be set to be zero if arc traces are accidentally not drawn or length of the arc trace is short (if maximum difference of X coordinates of the arc trace is less than 0.5 mm.)

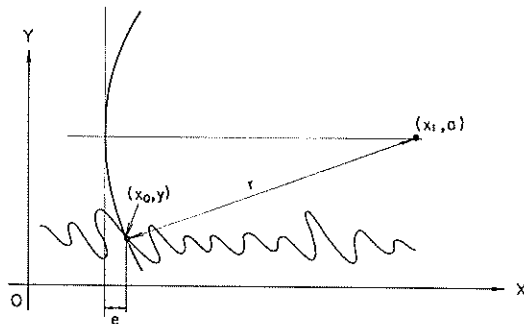


Fig. 19 Linearization of coordinate

iv) Correction for start up of recording paper drive

The variation of recording paper speed of the SMAC-B2 accelerograph is represented by the following equation which is based on the tests made by the authors.

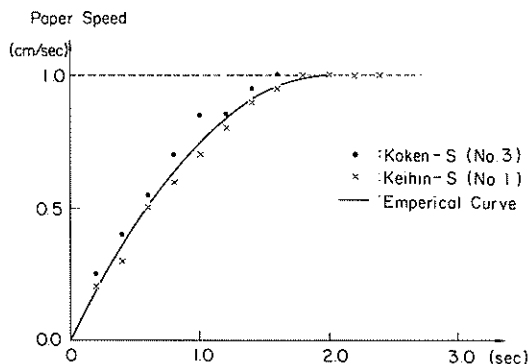


Fig. 20 Variable recording speed on start up of recording paper drive

$$v = \left[1 - \frac{1}{b^2} (t - t_0)^2 \right] \cdot v_a \quad \text{if } 0 \leq t \leq t_0 \quad \dots \dots \dots (6)$$

$$v = v_a \quad \text{if } t_0 < t \quad \dots \dots \dots (7)$$

Where; v : paper speed at time t (cm/s.)

v_a : paper speed after reaching constant speed (cm/s.)

t : time after triggering (s.)

t_0 : constant (s.)

b : constant (s.)

If t_0 and b are given, the correction for the start up of recording paper drive is simple problem.

For the correction of the digitized records in the preceding annual report, $t_0 = 2.0$ s. and $b = 2.0$ s. were used. After the annual report had been published, it was found that more appropriate correction would be possible with a slight modification of t_0 value. For the correction of the most of the digitized records in this report, $t_0 = 1.9$ s. was used.

v) Smoothing

Smoothing is applied to a record by the ERS-B, C, D accelerograph. A record by the ERS-B, C, D accelerograph is digitized at intervals of 0.1 mm which corresponds to about 0.005 s. on a record by the ERS-B accelerograph and corresponds to about 0.0025 s. on a record by the ERS-C/D accelerograph. Frequency components higher than about 50 Hz are eliminated because there are almost no significant components of seismic acceleration over 50 Hz for the most of the record of ground according to the records obtained by the ERS-B, C, D accelerograph so far.

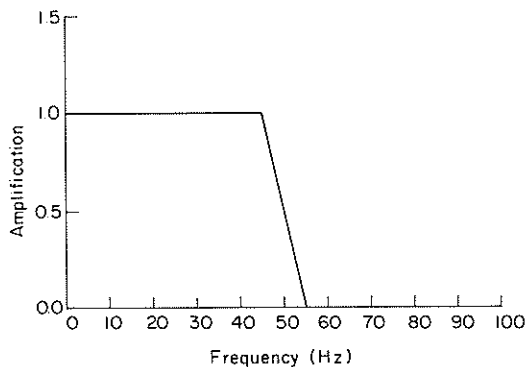


Fig. 21 Filter for the smoothing

The weight function is defined by

$$g(t) = \begin{cases} \frac{f_0 + f_1}{2} & \text{if } t = 0 \\ \frac{f_1 - f_0}{0} \left[\frac{\cos(2\pi f_0 t) - \cos(2\pi f_1 t)}{(2\pi t)^2} \right] & \text{if } 0 < |t| \leq \dots \dots (8) \\ 0 & \text{otherwise} \end{cases}$$

where $f_0 = 45$ (Hz) and $f_1 = 55$ (Hz)

The filter corresponding to this weighted running average is approximately expressed as follows. (Errors of the approximation is less than 0.3%)

$$G(f) = \begin{cases} 1 & \text{if } |f| \leq f_0 \\ \frac{f_1 - |f|}{f_1 - f_0} & \text{if } f_0 < |f| \leq f_1 \dots \dots (9) \\ 0 & \text{if } |f| > f_1 \end{cases}$$

where $f_0 = 45$ (Hz) and $f_1 = 55$ (Hz)

vi) Equally Spacing

Data are equally spaced at intervals of 0.01 s. by means of linear interpolation.

A record by the SMAC-B2 accelerograph is digitized at intervals of 0.1 mm and is processed through the linearization of coordinate. The data processed through the linearization of coordinate are unequally spaced data, whose intervals of data are longer than 0.01 s. on portions of accelerogram where absolute value of acceleration decreases and intervals of data are shorter than 0.01 s. else where.

A record by the ERS-B, C, D accelerograph is digitized at intervals of 0.1 mm, which corresponds to about 0.005 s. on a record by the ERS-B accelerograph and about 0.0025 s. on a record by the ERS-C/D accelerograph. There is no possibility of aliasing by the equally spacing at intervals of 0.01 sec because their high frequency components over 50 Hz are eliminated by the smoothing. High density of sampling at digitization enables us to separate high frequency components which are possibly contaminated by digitization errors and assures us much accuracy of the interpolation.

5. Preliminary Analyses

The Standard procedures of preliminary analyses described here is applied for records obtained since 1976. For the detailed description, see separate reports.^{32,33}) The standard procedures of preliminary analyses consist of filtering for instrument correction, filtering for correction of low or high frequency components, integration, calculation of response spectra and Fourier spectra (Fig. 22).

(1) The Method of Correction and Integration

Instrument correction, filtering, integration is applied in frequency space. FFT is applied for the accelerogram which is extended with a section of zero outside the digitized portion in order to avoid link effect. The length of section of zero L (s.) is determined so as to meet the following condition.

$$L > \max \left[\frac{2}{3} T, 10.0 \right] \dots \dots \dots (10)$$

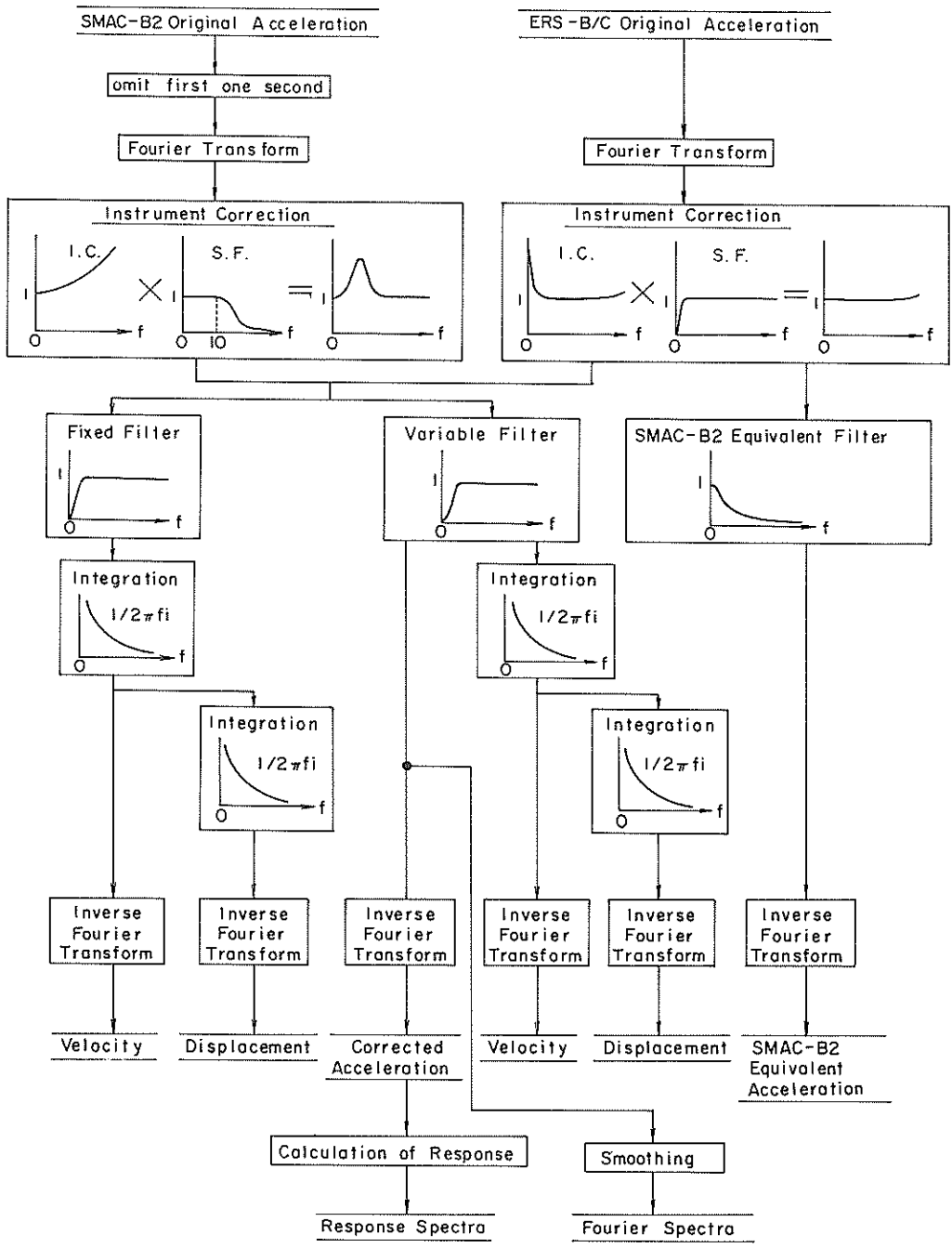


Fig. 22 Procedures of Preliminary Analyses

where T (s.) is the minimum length of sections made by the division of an accelerogram for the digitization. This condition is based on the examination of impulse responses of the high pass filters for integration to be described later. Length of the section of zero L is decided so as to make calculation time of FFT short as much as possible in the given memory size of the given computer.

i) The Filter for Instrument Correction and the Supplementary Filter

(a) Filters for a Record by the SMAC-B2 Accelerograph

The filter for instrument correction $A_S(f)$ is defined by

$$A_S(f) = 1 - \left(\frac{f}{f_s}\right)^2 + 2h_s \left(\frac{f}{f_s}\right) i \dots\dots\dots (11)$$

where $f_s = 1/0.14$ (Hz) and $h_s = 1.0$

The supplementary filter $B_S(f)$ is defined by

$$B_S(f) = \begin{cases} 1 \\ \left[1 + (|A_S(f)| - 1) \exp \left\{ -\frac{(|f| - f_0)^2}{20} \right\} \right] \frac{1}{|A_S(f)|} \end{cases} \begin{matrix} \text{if } |f| \leq f_0 \\ \text{otherwise} \end{matrix} \dots (12)$$

where $f_0 = 10$ (Hz)

The supplementary filter is designed to suppress high frequency digitization noise and at the same time preserve high frequency components of an accelerogram in order to lessen an abnormal response of the filter to discontinuities at both ends of digitized portion of the accelerogram.

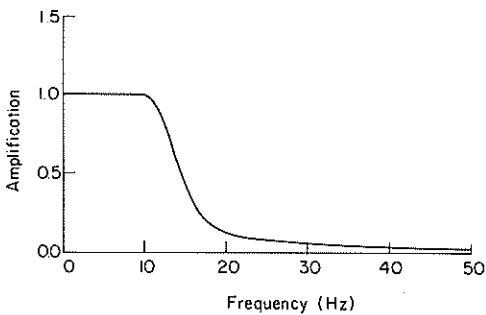


Fig. 23 The Supplementary Filter for a record by the SMAC-B2 accelerograph

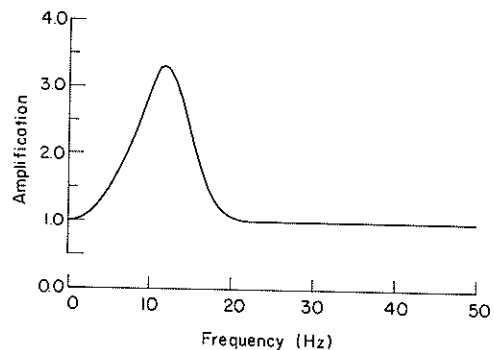


Fig. 24 Combined frequency characteristics of the filter for instrument correction and the supplementary filter for records by the SMAC-B2 accelerograph

(b) Filters for a Record by the ERS-B, C, D Accelerograph

The filter for the instrument correction $A_E(f)$ is defined by

$$A_E(f) = A_p(f) \cdot A_G(f)$$

$$A_p(f) = 1 + \frac{i}{2h_p} \left(\frac{f}{f_p} - \frac{f_p}{f} \right) \dots \dots \dots (13)$$

$$A_G(f) = 1 - \left(\frac{f}{f_G} \right)^2 + 2h_G \left(\frac{f}{f_G} \right) i$$

where for a record by the ERS-B accelerograph

$$f_p = 2.0 \text{ (Hz)}, h_p = 17, f_G = 100 \text{ (Hz)} \text{ and } h_G = 0.7$$

and for a record by the ERS-C accelerograph

$$f_p = 3.0 \text{ (Hz)}, h_p = 17, f_G = 250 \text{ (Hz)} \text{ and } h_G = 0.7$$

and for a record by the ERS-D accelerograph

$$f_p = 5.0 \text{ (Hz)}, h_p = 10, f_G = 100 \text{ (Hz)} \text{ and } h_G = 0.7$$

$1/A_p(f)$ is frequency characteristics of the pick up of the accelerograph and $1/A_G(f)$ is those of the galvanometer.

The supplementary filter $B_E(f)$ is defined by

$$B_E(f) = \begin{cases} 1 / |A_p(f)| & \text{if } |f| \leq f_p \\ 1 & \text{otherwise} \end{cases} \dots \dots \dots (14)$$

where $A_p(f)$ is the filter for the instrument correction of the pick up and f_p is the characteristic frequency of the instrument defined above for each type of accelerograph. The supplementary filter is designed to suppress low frequency digitization errors.

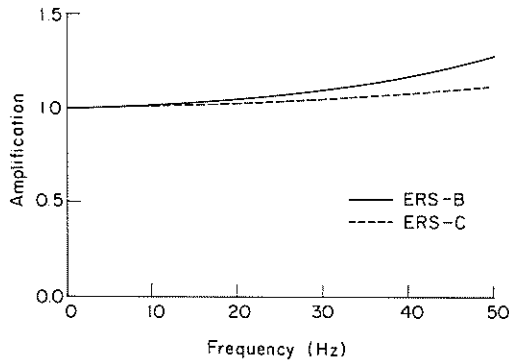


Fig. 25 The Combined Filter of Instrument Correction and Supplementary Filtering for a Record by the ERS-B, C, D Accelerograph

ii) SMAC-B2 Equivalent Filter

Frequency characteristics of SMAC-B2 accelerograph are different from that of ERS-B, C, D accelerograph. In order to make it easy to compare the accelerograms by these different types of accelerographs each other, a filter defined in the following equation is applied for a record by the ERS-B, C, D accelerograph.

$$S(f) = \frac{1}{1 - \left(\frac{f}{f_S}\right)^2 + 2h_S\left(\frac{f}{f_S}\right)i} \dots \dots \dots (15)$$

where $f_S = 1/0.14$ (Hz) and $h_S = 1.0$

The filter has the same frequency characteristics as those of the SMAC-B2 accelerograph. The filter is applied for the acceleration processed through the filter for instrument correction and the supplementary filter. Acceleration processed through this filter will be called "SMAC-B2 Equivalent Acceleration". This acceleration can be compared with the original acceleration by the SMAC-B2 accelerograph.

iii) The High Pass Filters for Integration

Processed through the preliminary correction procedure, a digitized accelerogram is expected to have only such errors as random digitization errors and errors of sectional base-line location. Errors of sectional base-line location affect mainly to frequency components lower than about $1/T$ where T is length of a section of an accelerogram divided for digitization.

As a result of the examination of random digitization errors, frequency characteristics of SN ratio calculated for each frequency are found to be similar to those of digitized acceleration. In other words, ratio of digitized acceleration to digitization errors calculated for each frequency is large if the corresponding frequency components of the digitized acceleration is large. For the frequency components higher than about $1/T$, the result of the examination of digitization errors may remain valid. The result implies that SN ratio of a frequency component varies with the frequency characteristics of accelerogram to be digitized.

The cut-off frequency of a high pass filter for integration of a digitized accelerogram should be varied in accordance with frequency characteristics of an accelerogram from such a point of view that SN ratio should be kept higher than some constant level for every frequency component and at the same time the physically real signals should be preserved as much as possible. On the other hand, cut-off frequency of the filter should be kept constant for any accelerograms from such a point of view that the preserved real seismic signals should be filtered out by the same filter for the purpose of comparison between two or more velocities or displacements even if integrated errors are more or less included in them.

In order to satisfy a wide range of applications of the strong-motion records from the various view points, the authors proposed two methods of correction of an accelerogram to obtain velocities and displacements; one is a method with a fixed filter and another is a method with a variable filter.

(a) Fixed Filter

This filter is defined by

$$H_1(f) = \frac{1}{1 - \left(\frac{f_0}{f}\right)^2 - 2h\left(\frac{f_0}{f}\right)i} \cdot \frac{1}{\sqrt{1 + \left(\frac{f_1}{f}\right)^2}} \dots \dots \dots (16)$$

where $f_0 = 1/6$ (Hz), $h = 0.552$ and $f_1 = 0.1$ (Hz)

This filter is designed to make it easy to compare the integrated displacement with records obtained by the one magnification strong-motion seismometer ($T = 6$ s. and $h =$

0.552) deployed by the Japan Meteorological Agency of Ministry of Transport. Cut-off frequency (3 dB down) of this filter is 0.154 Hz.

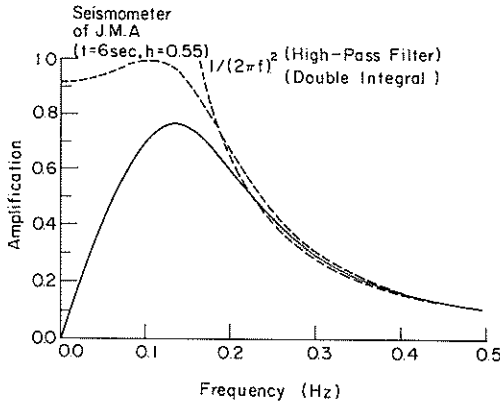


Fig. 26 Combined Frequency Characteristics of the Fixed Filter and Double Integral

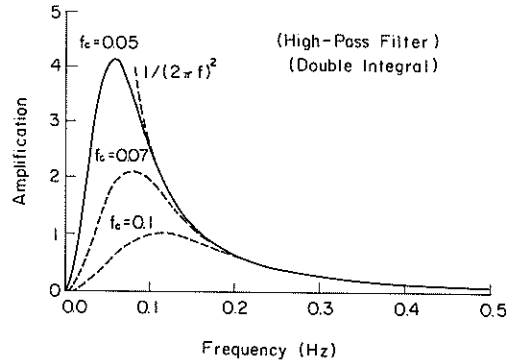


Fig. 27 Combined Frequency Characteristics of the Variable Filter and Double Integral

(b) Variable Filter

This filter is defined by

$$H_2(f) = \left[1 - \exp \left\{ - \left(\frac{f}{f_C} \right)^2 \right\} \right]^2 \dots \dots \dots (17)$$

The parameter f_C in the equation varies so as to make σ equal to E , where σ is defined by

$$\sigma^2 = \frac{1}{M} \int_{-\infty}^{\infty} |X(f)|^2 \cdot \left[1 - \exp \left\{ - (fT)^2 \right\} \right]^4 \cdot \left[1 - H_2(f) \right]^2 df \dots \dots \dots (18)$$

where M is length of whole digitized portion
 T is a minimum length of a section of accelerogram
 $X(f)$ is Fourier Transform of the original acceleration

and E is the value listed below;

- $E = 0.5$ (Gal) for a record by the SMAC-B2 accelerograph
- $E = 0.05p$ (Gal) for a record by the ERS-B, C, D accelerograph
 where p (Gal/mm) is the sensitivity of ERS-B, C, D accelerograph.

Cut-off frequency (3 dB down) of this filter is $1.36f_C$.

Decision procedure of f_C is simply illustrated in Fig. 28. f_C is fundamentally determined so as to filter out some constant amount of low frequency components of an accelerogram higher than about $1/T$. The greater low frequency components of an accelerogram are, the lower f_C should be. Because the greater low frequency components of an accelerogram are, the higher SN ratio of these components are. Low frequency components lower than about $1/T$ are eliminated for the decision procedure of f_C because they are possible to be contaminated by the errors at sectional base-line location and the relation between the SN ratio and the quantity of a frequency component of an accelerogram is afraid no longer remaining valid.

This decision procedure of f_C is, however, a compromise between such a view point as

to keep SN ratio over some constant level for every frequency component and such a view point as to keep f_C to be a constant. The reason why we proposed such a compromised method is that the compromise makes decision procedure of f_C more stable against possible fluctuation of the relation between quantity of a frequency component of an accelerogram and the SN ratio. The relation may, to some extent, depend on frequency characteristics of an accelerogram to be digitized, digitized length of an accelerogram non-stationarity of an accelerogram, etc. and the relation itself is valid only in a stochastic sense.

The reason why the authors proposed a fixed low pass supplementary filter instead of a variable one for a record by the SMAC-B2 accelerograph was that the possible fluctuation of the relation is expected to be greater for high frequency components.

Slope of both of the high pass filters proposed here are designed to be mild in order to lessen an artificial predominant frequency component around the cut-off frequency.

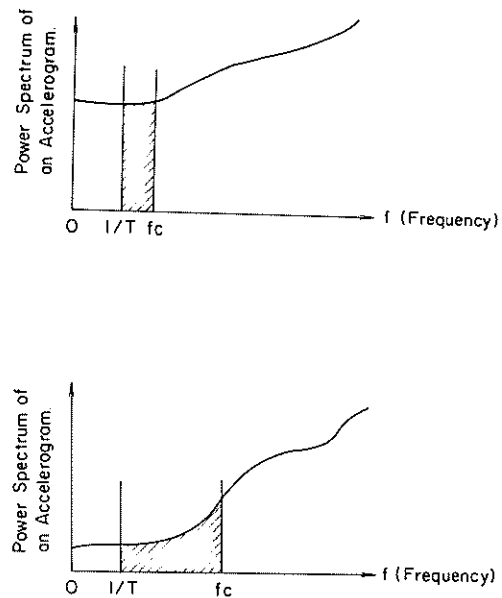


Fig. 28 Simplified illustration of decision procedure of f_C

(2) Corrected Acceleration, SMAC-B2 Equivalent Acceleration, Integrated Velocities and Integrated Displacement

A portion of first one second of the original acceleration of the SMAC-B2 accelerograph is omitted for the instrument correction and the integration because even a slight difference of start up of recording paper drive between SMAC-B2 accelerographs and even a small difference of selection of starting point of digitization may sensitively affect accuracy of the portion of first short section processed through the correction of start up of the recording paper drive. In the case of the original acceleration of the ERS-B, C, D accelerograph, no data is omitted. These accelerations are processed by the methods of correction and integration described previously. The calculated results are shown in figures and their maximum values are listed in a table.

“Corrected acceleration” denotes acceleration processed through the variable filter. “SMAC-B2 equivalent acceleration” denotes acceleration obtained by the SMAC-B2 equivalent filter. Integrated velocities and displacements are calculated with the fixed filter and the variable filter. The parameter f_C of the variable filter is also shown on the figures and the table.

The corrected acceleration of the different types of accelerographs can not necessarily be compared with each other freely because the difference of the supplementary filters produces difference mainly on the high frequency components over 10 Hz of the filtered accelerations. Instead of comparison of the corrected accelerations, “SMAC-B2 equivalent acceleration” can be freely compared with the original acceleration of the SMAC-B2 accelerograph except for the low frequency components lower than about 0.1 Hz.

(3) Response Spectra

Response spectra are calculated for the corrected acceleration, which is an acceleration processed through the variable filter as described previously.

The response spectra in the previous annual reports before 1968 were calculated from the digitized records by a digital computer using the Runge-Kuta-Gill method to integrate numerically the equation of motion of the oscillator. The response spectra in the present report were calculated with a step by step calculation of the exact solution to the governing differential equation.³¹⁾ No significant difference was seen in the results calculated by the both methods, according to the trial calculations.

The time interval of each step of the calculation is 0.01 second for the oscillators of natural periods longer than 0.2 second. For the oscillators of shorter periods, the small time intervals are selected so that one cycle of the undamped free oscillation of the oscillator is covered at least by 20 steps of the numerical calculation to maintain the necessary accuracy. In these calculation, the digitized records at smaller time intervals are made by means of the interpolation in the computer. The response spectra are provided in numerical tables as well as in the figures.

To calculate the response spectrum, entire length of the record is not necessary; the last part of the record after the maximum response have appeared is practically meaningless in the response calculation. Besides, the shorter record is more preferable from view point of the calculation time. On some long records, their beginning parts of small acceleration are not used in the calculation so far as it is thought that the neglected parts do not affect the results of the calculation. The length of the record used for the calculation and the length of the beginning part which is not used are shown in the numerical table as the time length and the skipped length respectively.

Response spectra of the period longer than about $1/f_C$ is influenced by the high pass filter ($1.36/f_C$ is the period of 3 dB down of the filter.); i.e., calculated response spectra is true if real seismic signals do not exist on the period longer than about $1/f_C$ and calculated response spectra are smaller than the true value if real seismic signals do exist. In the case of the corrected acceleration by the SMAC-B2 accelerograph, response spectra of the period shorter than about 0.1 sec is also influenced by the low pass filter. Users of the response spectra should be careful about these characteristics of the response spectra calculated for the corrected acceleration and difference between the response spectra for the corrected acceleration and those for the uncorrected acceleration which had been calculated so far.

(4) Fourier Spectrum

The Fourier spectra are calculated by the Fast Fourier Transform for whole length of the record, which are directly obtained at the filtering process with the variable filter. But, the spectra in this report are multiplied by the whole length of the record and then smoothed with the Parzen window of 1 Hz band width.

(5) Loci of Acceleration and Displacement

The loci of acceleration and displacement in horizontal plane are included in this report. The records used for calculation are acceleration without instrument correction and displacement processed by the variable filter.

6. Summary of Observation

Since 1962, 3037 records were obtained in the network of the Port and Harbour Research Institute, and most of the important records were analysed by the authors. In Table 8, a statistical summary of the observation is given. In Table 9, record numbers of accelerograms of which the digitized records and the spectra have been published are shown. The number in the parentheses behind each record number is showing the number of the Technical Note of the Port and Harbour Research Institute in which the digitized record appeared.

Table 8

Station	Total number of records	Number of records exceeding 20 Gals in max.	Number of records exceeding 50 Gals in max.
Akita-S	30	7	2
Amagasaki-S	6	1	0
Aomori-S	37	13	5
Chiba-S	75	14	3
Hachinohe-S	111	17	5
Hakodate-M	41	11	3
Hanasaki-M	26	13	6
Hirara-S	3	1	0
Hiroshima-S*	9	5	4
Hiroshima-ji-S	2	0	0
Hitachinaka-F	20	9	3
Hososhima-S	52	18	6
Ishigaki-S	4	1	0
Inae-S	15	6	0
Inae-sanbashi-M	13	6	1
Inae-yaita-M	20	10	1
Kagoshima-S	23	4	0
Kamaishi-M	20	7	0
Kamaishi-MB	10	0	0
Kanazawa-S	7	2	0
Kashima-S*	32	9	3
Kashima-ji-S*	31	6	3
Kashima-zokan-S	90	17	6
Kawasaki-chi-M	182	22	2
Kawasaki-ko-M	107	28	6
Keihin-ji-S	102	14	1
Kinuura-S*	8	4	2
Kinuura-ji-S	15	4	0
Kobe-dai6-S	10	3	0
Kobe-dai8-S	15	2	1
Kobe-ji-S	13	4	0
Kobe-maya-dai1-M	12	5	2
Kobe-maya-dai2-M	15	4	0
Kobe-maya-M	19	4	1
Kochi-S*	21	3	1
Kochi-ji-S	12	3	0
Koken-M	57	5	0
Koken-S	27	4	0
Komatsujima-S	15	2	0
Kushiro-S*	49	16	6

(to be continued)

(Table 8, continued)

Station	Total number of records	Number of records exceeding 20 Gals in max.	Number of records exceeding 50 Gals in max.
Kushiro-ji-S	1	0	0
Matsuyama-S	21	4	2
Minamata-M	2	0	0
Miyako-S	32	22	10
Miyazaki-M	29	7	3
Muroran-S	60	13	5
Nagoya-zokan-S	21	5	2
Naha-S*	1	0	0
Naha-zokan-S	1	0	0
Niigata-S*	12	1	0
Niigata-ji-S	4	1	0
Ofunato-S*	21	3	2
Ofunato-bochi-S	43	12	5
Ofunato-bo-S	79	24	14
Ofunato-mound-M	23	4	2
Oita-S	12	6	3
Okitsu-S	26	4	0
Omaezaki-M	15	1	0
Onahama-S*	68	14	5
Onahama-ji-S	17	13	5
Osaka-chuo-S	7	1	0
Osaka-ji-S	9	1	0
Otaru-S	10	0	0
Sakaiminato-S*	0	0	0
Sakaiminato-ji-S	8	2	0
Sakata-S	41	6	0
Sendai-M	48	7	1
Sendai-MB	47	0	0
Shibushi-S	16	0	0
Shimizu-kojyo-S	23	7	3
Shimizu-miho-S	24	4	1
Shimi-sekitan-M	23	11	4
Shimi-sekitan-S*	10	5	2
Shinagawa-M*	1	1	1
Shinagawa-MB	14	0	0
Shinagawa-S	54	20	4
Shiogama-S*	19	1	0
Shiogama-kojyo-S	72	10	3
Soma-S	21	5	1
Tagonoura-S	59	8	0

(to be continued)

(Table 8, continued)

Station	Total number of records	Number of records exceeding 20 Gals in max.	Number of records exceeding 50 Gals in max.
Tokachi-M	60	31	12
Tomakomai-S	20	6	3
Toyama-S	5	2	1
Tsuruga-S	28	3	1
Urakawa-S	25	2	0
Waka.-ganpeki-S*	7	2	0
Wakayama-S	27	13	3
Wakayama-ji-S*	12	5	4
Waka.-sumikin-S*	0	0	0
Yamashita-dai7-M	80	6	1
Yamashita-dai6-S	98	28	10
Yamashita-hen-M	143	13	2
Yamashita-hen-S	113	21	6
Yokka.-chitose-S	8	5	1
Yokka.-dai2-M	16	2	2
Yokka.-sekitan-M	36	7	2
Yokkaichi-ji-S*	5	2	0
Total	3037	676	200
ERS	1090	215	56
SMAC	1947	461	144

Table 9

Station	Records which have been digitized (Ref. No.)
Akita-S	S-655(160), S-1200(319), S-1567(458), S-1585(458), S-1586(458)
Aomori-S	S-235(80), S-264(80), S-304(80), S-400(80), S-670(160), S-1192(319), S-1573(458), S-1592(458)
Chiba-S	S-1195(319), S-1378(374), S-1545(487), S-1884(547)
Hachinohe-S	S-252(80), S-310(80), S-401(80), S-669(160), S-857(202), S-1202(319), S-1453(426), S-1575(458)
Hakodate-M	M-357(374), M523(442), M-630(458), M-639(458)
Hanasaki-M	M-106(287), M-262(338), M-496(426), M-887(547), M-1014(588), M-1017(588)
Hiroshima-S*	S-364(98), S-1306(338), S-1623(487)
Hitachinaka-F	F-12(588), F-15(588), F-19(588)
Hososhima-S	S-213(98), S-453(100), S-544(116), S-545(116), S-1231(338), S-1625(487), S-1729(503)
Kashima-S*	S-196(64), S-612(136), S-647(136)
Kashima-ji-S*	S-770(181), S-813(202), S-845(202), S-882(202)
Kashima-zokan-S	S-1206(319), S-1506(446), S-1678(519), S-1867(547), S-1910(588), S-1957(588)
Kawasaki-chi-M	M-186(317), M-220(319), M-406(374)
Keihin-ji-S	S-1188(319), S-1390(374)
Kinuura-S*	S-480(100), S-585(136)
Kobe-maya-M	M-704(487)
Kochi-S*	S-211(98)
Kochi-ji-S	S-1730(503)
Koken-S	S-1046(317)
Koken-M	M-170(317)
Kushiro-S*	S-98(62), S-369(98), S-634(136), S-674(160), S-733(181), S-741(181)
Matsuyama-S	S-1303(338), S-1731(503), S-1624(487)
Miyako-S	S-236(80), S-271(80), S-312(80), S-273(98), S-420(98), S-537(116), S-1204(319), S-1104(338), S-1317(338)
Miyazaki-M	M-228(338), M-877(547)
Muroran-S	S-234(80), S-241(80), S-399(80), S-1425(426), S-1474(442), S-1571(458), S-1599(458)
Nagoya-zokan-S	S-1(55), S-20(55), S-578(136)

(to be continued)

(Table 9, continued)

Niigata-S*	S-107(62)
Niigata-ji-S	S-1203(319)
Station	Records which have been digitized (Ref. No.)
Ofunato-S*	S-140(64), S-282(98), S-361(98)
Ofunato-bochi-S	S-554(116), S-786(181), S-1022(287), S-1210(319), S-1120(338)
Oita-S	S-924(236), S-1629(487), S-1734(503)
Okitsu-S	S-1071(317)
Onahama-S*	S-111(62), S-1043(287), S-1191(317)
Onahama-ji-S	S-1330(338), S-1505(446), S-1602(487), S-1633(487), S-1946(588)
Sakata-S	S-1568(458)
Shimizu-kojyo-S	S-74(62), S-1063(317), S-1064(317)
Shimizu-miho-S	S-1066(317), S-1069(317)
Shinagawa-S	S-192(64), S-340(98), S-1394(374), S-1787(519), S-1885(547)
Shiogama-S*	S-138(64)
Shiogama-kojyo-S	S-782(181), S-1118(338), S-1201(319)
Soma-S	S-1872(547)
Tagonoura-S	S-1055(317)
Tokachi-M	M-125(287), M-145(287), M-247(338), M-260(338), M-340(338), M-341(374), M-439(426), M-521(442), M-522(442), M-540(446), M-636(487), M-703(487), M-911(547), M-972(547)
Tomakomai-S	S-877(202), S-1418(426), S-1472(442)
Toyama-S	S-1892(547)
Tsuruga-S	S-1549(487)
Wakayama-S	S-945(236), S-1028(287)
Wakayama-ji-S*	S-187(64), S-265(98), S-266(98), S-788(181)
Yamashita-hen-S	S-412(98), S-658(160), S-1058(317), S-1189(319), S-1362(374), S-1386(374), S-1614(487)
Yamashita-hen-M	M-217(319), M-403(374), M-1022(588), M-1056(588)
Yokka.-chitose-S	S-577(136)

* Observation of the stations had already been stopped.

(Received on March 19, 1985)

7. A Digital Strong-Motion Accelerograph using Magnetic Bubble Memory (ERS-F Accelerograph)

(1) Introduction

The strong-motion earthquake observation network for port and harbour areas in Japan has used analogue strong-motion accelerographs; SMAC-B2 accelerographs and ERS-B/C/D accelerographs. These accelerographs have provided valuable strong-motion data. However, there is an increasing demand for the followings; (1) higher accuracy, (2) recording of the first motion of the earthquake (SMAC-B2 or ERS-B/C/D accelerographs can not record the first motion because of their triggering mechanisms for the recording), (3) reduction for the elaborate works in the routine digitization processing, (4) reduction for the maintenance work on the accelerograph and attaining the highest reliability in the performance of the accelerograph, (5) display the maximum acceleration and the arrival time of the first wave for the immediate countermeasures against the possible disaster such as one caused by tsunami. Thus, digital strong-motion accelerographs using non-volatile, solid-state magnetic bubble memories (ERS-F Accelerograph) have been developed by the Port and Harbour Research Institute and have been deployed, among the SMAC-B2 and ERS-B/C/D accelerographs, in the observation network in the port areas in Japan.

In 1986, the ERS-F Accelerographs have been deployed at Hakodate Port and Hitachinaka Port; they were installed at the ground surface, at the base of the ground at the depth of 200 meters, and at the port structure in Hakodate Port on March 12, 1986, and installed at the ground surface in Hitachinaka Port on April 6, 1986. Their performances have been satisfactory as indicated by the strong-motion records obtained by these accelerographs. Specifications of the ERS-F accelerograph and the processing of the records obtained by this accelerograph will be described in this chapter.

(2) ERS-F Accelerograph

ERS-F Accelerographs are, as mentioned previously, digital strong-motion accelerographs using non-volatile, solid state magnetic bubble memories. There are several types of the ERS-F Accelerographs: the standard type, as shown in Fig. 29 is a self-contained box type, containing the transducers and the magnetic bubble memories all in one; another has a separate transducer, as shown in Fig. 30, which will be buried in the ground and observe the motion at the base or in the ground; another has a separate transducer, as shown in Fig. 31, which will be attached to the structures.

The recording system of the ERS-F Accelerograph including the magnetic bubble memories is shown in Fig. 32 for the front view. ERS-F Accelerograph is a system shown by the block-diagram in Fig. 33, satisfies the specification shown in Table 1, and has the frequency characteristics shown in Figs. 34 and 35.

The main unit of the recording system, shown in Fig. 36, consists of four non-volatile, solid-state magnetic bubble memories and the controlling parts. This unit is contained in a case, shown in Fig. 37, of which dimensions are 240 mm x 240 mm x 35 mm, weighing about one kilogram. The capacity in the memory of the unit is 512 kilobytes. Two of the units can be installed at one recording system, but at present one unit is installed for the accelerographs at Hakodate Port and Hitachinaka Port.

Recording length of the earthquake motions is, at minimum, 65.28 seconds (6528 data/component). The recording length is extended up to 195.84 seconds (19584 data/component) by monitoring the level of the acceleration; the recording length is doubled or trippled if the level of the acceleration monitored after 45 seconds from the triggering is higher than the

trigger level of the acceleration. The main unit of the recording system can record, at the maximum, 65.28 seconds in length of three components of ten earthquake motions. If earthquakes occur successively and the earthquake motion data should overflow the recording system, records of the greatest maximum accelerations are secured. One exception to this is for the records of 195.84 seconds; these records are stored in the first-come first-serve basis.

(3) Processing of the Data Obtained by the ERS-F Accelerograph

The main unit of the recording system, which has recorded the earthquake motions, is drawn out from the box of the recording system of the ERS-F Accelerograph and replaced by the another main unit ready for recording the coming earthquakes. The drawn out unit is packed in a case, shown in Fig. 37, with a static eliminator on the connector of the unit and sent to the Earthquake Resistant Structures Laboratory in the Port and Harbour Research Institute by mail.

In the Earthquake Resistant Structures Laboratory, the unit is set on the reproducer, shown in Fig. 38, which is connected to a computer, and digital time histories of the earthquake motions are reproduced. Absolute time at the trigger of the record is also obtained from the record of the time signal.

As mentioned in Table 10, the recording system has digital delay memory for ten seconds. If the recording started well enough before the first motion of the earthquake, some of the portion of the record preceding the first motion is omitted.

Data processing and the preliminary analyses for the records by the ERS-F Accelerograph is almost the same as the standard data processing and the preliminary analyses for the record by ERS-B/C/D Accelerograph. The differences are as follows:

- i) No smoothing is applied for the data at the standard data processing.
- ii) As an instrument correction at the preliminary analyses, correction for the phase is applied but no correction is applied for the amplitude. Low pass filter with cut-off frequency of 25 Hz and roll-off frequency of 40 Hz are applied by using a digital filter of "cosine" shape in frequency domain.
- iii) As the high pass filtering at the preliminary analyses, parameter E for the Variable Filter in Eq. (18) is determined by the following equation;

$$E = (p \times 0.001) \times 0.02236 \quad (19)$$

in which p ($1000 \text{ Gal}/2^{15}$) is the sensitivity of ERS-F accelerograph.

The factors in Eq. (19) was obtained by the study on the noise level obtained by the power spectra of the noise under the conditions with connectors of signal conditioner in short circuit.

Details of the ERS-F Accelerograph and the data processing will be reported in a separate report.

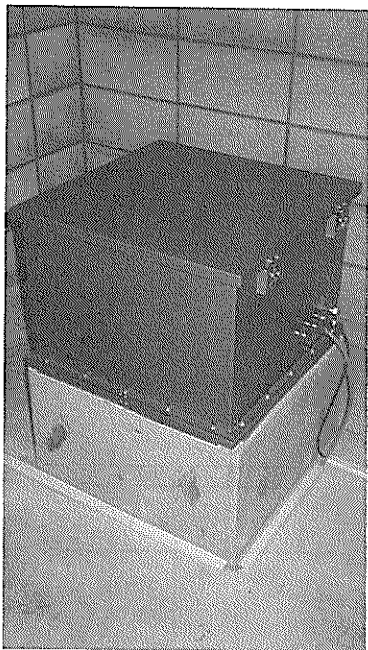


Fig. 29 The ERS-F accelerograph
(Standard Type)

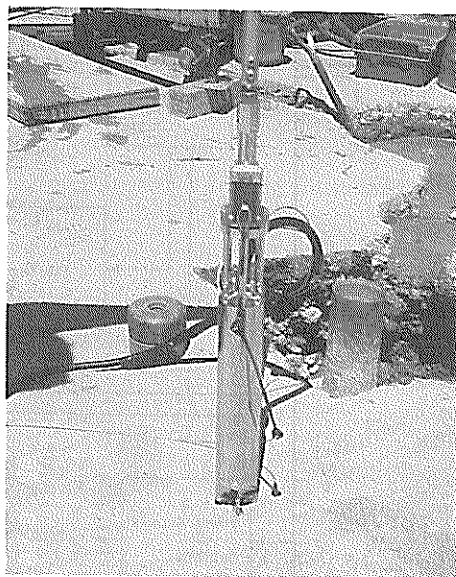


Fig. 30 Transducer installed in bore-hole
(the ERS-F accelerograph)

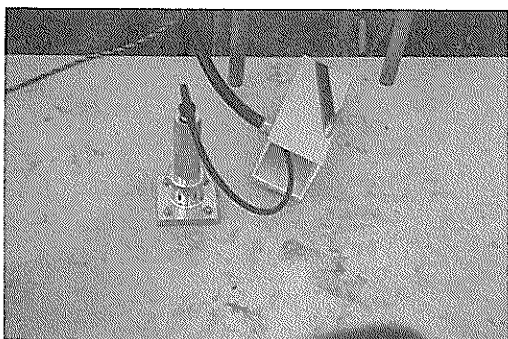


Fig. 31 Transducer attached to
structure (the ERS-F accelero-
graph)

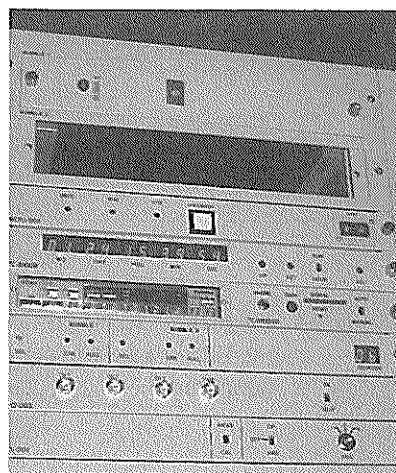


Fig. 32 Recorder of the ERS-F
accelerograph

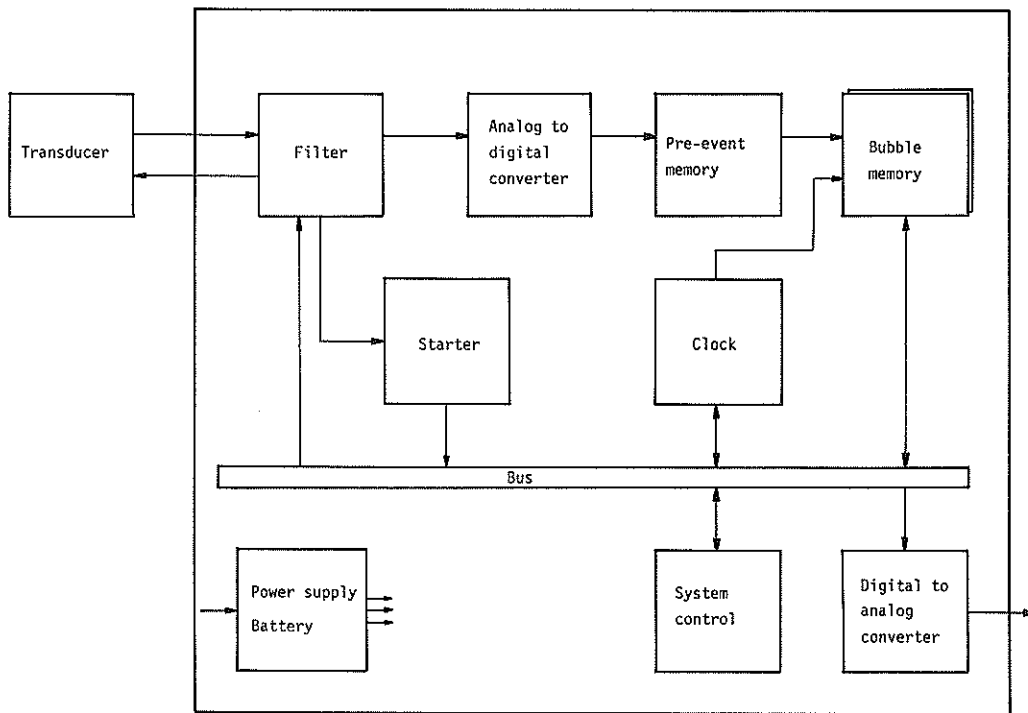


Fig. 33 Block-diagram of the ERS-F accelerometer

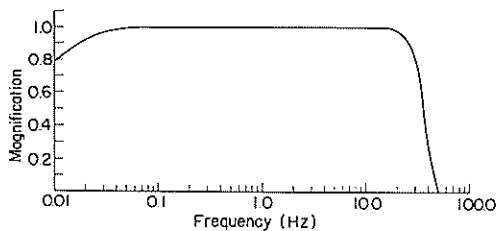


Fig. 34 Frequency characteristics of the ERS-F accelerometer (amplitude)

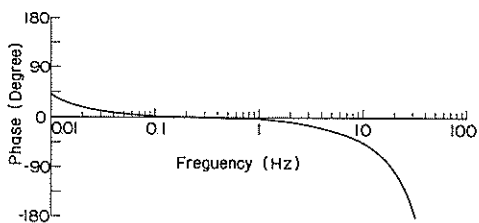


Fig. 35 Frequency characteristics of the ERS-F accelerometer (phase)

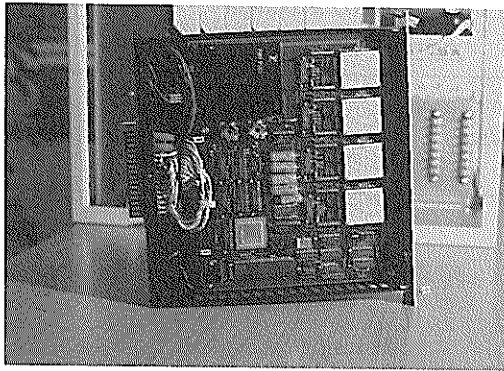


Fig. 36 Inside view of cartridge
(ERS-F accelerograph)

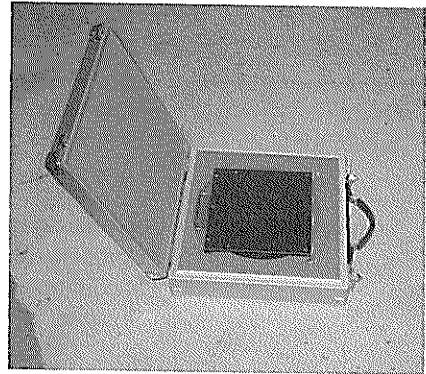


Fig. 37 A container of cartridge
(the ERS-F accelerograph)

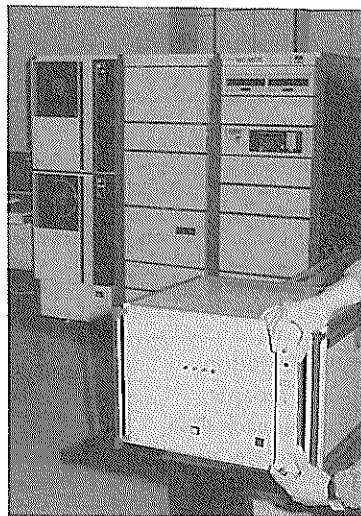


Fig. 38 Reproducer of the ERS-F
accelerograph

Table 10 Specifications of the ERS-F accelerograph

Overall capabilities	Maximum acceleration capacity	2G
	Frequency characteristics	0.01 – 35 Hz
	Dynamic range	86 dB over
Transducer	Accelerometer	
	Component	2 horizontal, 1 vertical
	Maximum capacity	2G
	Sensitivity	10^{-5}
	type	Force-balance servo
Filter	High pass	0.007 Hz –6 dB/octave
	Low pass	35 Hz –18 dB/octave
A/D conversion	Resolution	16 bits
	Conversion rate	100 Hz
Pre-event memory		10 seconds.
Clock	Accuracy of internal clock 1/100 seconds corrected every an hour by NHK time signal	
Starter	Trigger levels	0.5, 1, 2% of maximum acceleration
Recorder	No. of channel	3-9 records, 1 time signal
	Memory size	512 kwords 16 bit/word
	Record length	1, 2, 3 minutes/record
	Records of greatest maximum acceleration secured	
Related informations	Observation station, Number of records, Start time of each data, Maximum accelerations of each component	
Calibration	Overall calibration are possible	
Buckup power supply	2 hour after power stopage	
Container	Alluminum box, water-proof	
	Size	54(L), 54(W), 38(H) cm

References

- 1) Hajime Tsuchida, Teiichiro Yamada, Eiichi Kurata and Katsuko Sudo: Annual Report on Strong-Motion Earthquake Records in Japanese Ports (1963 and 1964), *Technical Note of the Port and Harbour Research Institute*, No. 55, September 1968, 86p.
- 2) Hajime Tsuchida, Teiichiro Yamada, Eiichi Kurata and Katsuko Sudo: Annual Report on Strong-Motion Earthquake Records in Japanese Ports (1965 and 1966), *Technical Note of the Port and Harbour Research Institute*, No. 62, December 1968, 145p.
- 3) Hajime Tsuchida, Eiichi Kurata and Katsuko Sudo: Annual Report on Strong-Motion Earthquake Records in Japanese Ports (1967), *Technical Note of the Port and Harbour Research Institute*, No. 64, March 1969, 182p.
- 4) Hajime Tsuchida, Eiichi Kurata and Katsuko Sudo: Annual Report on Strong-Motion Earthquake Records in Japanese Ports (1968), *Technical Note of the Port and Harbour Research Institute*, No. 98, March 1970, 342p.
- 5) Hajime Tsuchida, Eiichi Kurata and Katsuko Sudo: Annual Report on Strong-Motion Earthquake Records in Japanese Ports (1969), *Technical Note of the Port and Harbour Research Institute*, No. 100, June 1970, 86p.
- 6) Hajime Tsuchida, Eiichi Kurata and Katsuko Sudo: Annual Report on Strong-Motion Earthquake Records in Japanese Ports (1970), *Technical Note of the Port and Harbour Research Institute*, No. 116, March 1971, 171p.
- 7) Eiichi Kurata, Tokuzo Ishizaka and Hajime Tsuchida: Annual Report on Strong-Motion Earthquake Records in Japanese Ports (1971), *Technical Note of the Port and Harbour Research Institute*, No. 136, March 1972, 195p.
- 8) Eiichi Kurata, Tokuzo Ishizaka and Hajime Tsuchida: Annual Report on Strong-Motion Earthquake Records in Japanese Ports (1972), *Technical Note of the Port and Harbour Research Institute*, No. 160, March 1973, 206p.
- 9) Eiichi Kurata, Tokuzo Ishizaka and Hajime Tsuchida: Annual Report on Strong-Motion Earthquake Records in Japanese Ports (1973), *Technical Note of the Port and Harbour Research Institute*, No. 181, March 1974, 152p.
- 10) Eiichi Kurata, Tokuzo Ishizaka and Hajime Tsuchida: Annual Report on Strong-Motion Earthquake Records in Japanese Ports (1974), *Technical Note of the Port and Harbour Research Institute*, No. 202, March 1975, 124p.
- 11) Eiichi Kurata, Susumu Iai and Hajime Tsuchida: Annual Report on Strong-Motion Earthquake Records in Japanese Ports (1975), *Technical Note of the Port and Harbour Research Institute*, No. 236, March 1976, 64p.

- 12) Eiichi Kurata, Susumu Iai and Hajime Tsuchida: Annual Report on Strong-Motion Earthquake Records in Japanese Ports, Supplementary (1963 through 1975, Vertical component), *Technical Note of the Port and Harbour Research Institute*, No. 250, December 1976, 290p.
- 13) Eiichi Kurata, Susumu Iai and Hajime Tsuchida: Annual Report on Strong-Motion Earthquake Records in Japanese Ports (1976 and 1977), *Technical Note of the Port and Harbour Research Institute*, No. 287, March 1978, 194p.
- 14) Eiichi Kurata, Susumu Iai, Yoshiko Yokoyama and Hajime Tsuchida: Annual Report on Strong-Motion Earthquake Records in Japanese Ports (1978 and 1979), *Technical Note of the Port and Harbour Research Institute*, No. 338, June 1980.
- 15) Eiichi Kurata, Susumu Iai, Yoshiko Yokoyama and Setsuo Noda: Annual Report on Strong-Motion Earthquake Records in Japanese Ports (1980), *Technical Note of the Port and Harbour Research Institute*, No. 374, June 1981.
- 16) Eiichi Kurata and Setsuo Noda: Annual Report on Strong-Motion Earthquake Records in Japanese Ports (1981), *Technical Note of the Port and Harbour Research Institute*, No. 426, June 1982, 191p.
- 17) Eiichi Kurata, Tetsuo Fukuhara and Setsuo Noda: Annual Report on Strong-Motion Earthquake Records in Japanese Ports (1982), *Technical Note of the Port and Harbour Research Institute*, No. 446, June 1983, 183p.
- 18) Eiichi Kurata, Tetsuo Fukuhara and Setsuo Noda: Annual Report on Strong-Motion Earthquake Records in Japanese Ports (1983), *Technical Note of the Port and Harbour Research Institute*, No. 487, June 1984, 411p.
- 19) Eiichi Kurata, Tetsuo Fukuhara and Setsuo Noda: Annual Report on Strong-Motion Earthquake Records in Japanese Ports (1984), *Technical Note of the Port and Harbour Research Institute*, No. 519, June 1985, 154p.
- 20) Eiichi Kurata, Tetsuo Fukuhara and Setsuo Noda: Annual Report on Strong-Motion Earthquake Records in Japanese Ports (1985), *Technical Note of the Port and Harbour Research Institute*, No. 547, June 1986, 355p.
- 21) Hajime Tsuchida, Eiichi Kurata and Katsuko Sudo: Strong-Motion Earthquake Records on the 1968 Tokachi-Oki Earthquake and Its Aftershocks, *Technical Note of the Port and Harbour Research Institute*, No. 80, June 1969, 476p.
- 22) Eiichi Kurata, Susumu Iai and Hajime Tsuchida: Strong-Motion Earthquake Records on the 1978 Izu-Oshima-Kinkai Earthquake in Port Areas, *Technical Note of the Port and Harbour Research Institute*, No. 317, March 1979, 383p.
- 23) Eiichi Kurata, Susumu Iai, Yoshiko Yokoyama and Hajime Tsuchida: Strong-Motion Earthquake Records on the 1978 Miyagi-Ken-Oki Earthquake in Port Areas, *Technical Note of the Port and Harbour Research Institute*, No. 319, June 1979, 419p.

- 24) Eiichi Kurata and Setsuo Noda: Strong-Motion Earthquake Records on the 1982 Ura-kawa-Oki Earthquake in Port Areas, *Technical Note of the Port and Harbour Research Institute*, No. 442, Mar. 1983, 144p.
- 25) Eiichi Kurata, Tetsuo Fukuhara and Setsuo Noda: Strong-Motion Earthquake Records on the 1983 Nipponkai-Chubu Earthquake in Port Areas, *Technical Note of the Port and Harbour Research Institute*, No. 458, Sept. 1983, 327p.
- 26) Eiichi Kurata, Tetsuo Fukuhara and Setsuo Noda: Strong-Motion Earthquake Records on the 7 August 1984 Hyuganada Earthquake in Port Areas, *Technical Note of the Port and Harbour Research Institute*, No. 503, Dec. 1984, 113p.
- 27) Hajime Tsuchida, Teiichiro Yamada and Eiichi Kurata: Site Characteristics of Strong-Motion Earthquake Stations in Ports and Harbour in Japan (Part 1), *Technical Note of the Port and Harbour Research Institute*, No. 34, November 1967, 306p.
- 28) Eiichi Kurata, Hajime Tsuchida and Katsuko Sudo: Site Characteristics of Strong-Motion Earthquake Stations in Ports and Harbours in Japan (Part 2), *Technical Note of the Port and Harbour Research Institute*, No. 107, December 1970, 87p.
- 29) Eiichi Kurata and Tokuzo Ishizaka: Site Characteristics of Strong-Motion Earthquake Stations in Ports and Harbours in Japan (Part 3), *Technical Note of the Port and Harbour Research Institute*, No. 156, March 1973, 54p.
- 30) Yoshiko Yokoyama and Eiichi Kurata: Site Characteristics of Strong-Motion Earthquake Stations in Ports and Harbours in Japan (Part 4), *Technical Note of the Port and Harbour Research Institute*, No. 298, June 1978, 110p.
- 31) Yoshiko Yokoyama and Eiichi Kurata: Site Characteristics of Strong-Motion Earthquake Stations in Ports and Harbours in Japan (Part 5), *Technical Note of the Port and Harbour Research Institute*, No. 351, September 1980, 72p.
- 32) Susumu Iai, Eiichi Kurata and Hajime Tsuchida: Digitization and Correction of Strong-Motion Accelerograms, *Technical Note of the Port and Harbour Research Institute*, No. 286, March 1978, 286p.
- 33) Susumu Iai and Eiichi Kurata: Integration of Strong-Motion Accelerograms, *Proceedings of the 5th Japan Earthquake Engineering Symposium*, November 1978, 225–232p.
- 34) The Seismological Bulletin of the Japan Meteorological for January 1985, The Japan Meteorological Agency, 1985.
- 35) Naba C. Nigam and Paul C. Jennings: Calculation of Response Spectra from Strong-Motion Earthquake Records, *Bulletin of the Seismological Society of America*, Vol. 59, No. 2, April 1969, 909–922p.

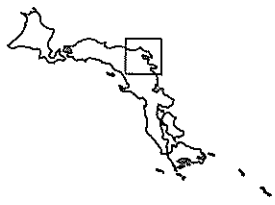
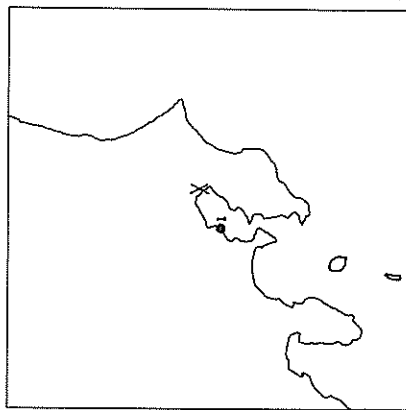
- 36) Hajime Tsuchida: Present State and Outcomes of Strong-Motion Earthquake Observation in Port Areas in Japan, *Proceedings of the Annual Research Conference of the Port and Harbour Research Institute*, December 1979, 127–195p.

**Observation Results
and
Preliminary Analyses**

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

17:28 JAN. 29, 1986
 CENTRAL CHIBA PREF
 EPICENTER : 35° 38' N 140° 8' E
 DEPTH : 72KM MAGNITUDE : 4.0

JMA INTENSITIES
 I : CHIBA, OSHIMA, AJIRO

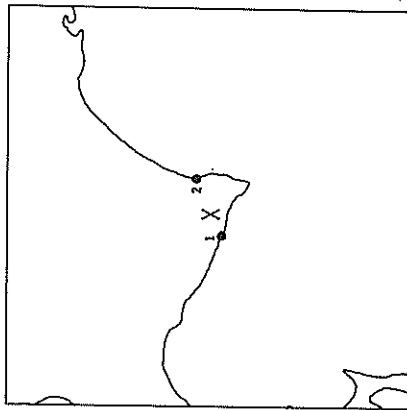


STATION	CONDITION	RECORD NUMBER	MAX. ACC. (GAL) [NS] [EW] [UD]	DIST. (KM)
1 KAWASAKI-CHI-H	ON GROUND	M-1002	1 1 1	37

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

02:48 FEB. 1, 1986
 HIDAKA MOUNTAINS REGION
 EPICENTER : 42° 13' N 143° 1' E
 DEPTH : 69KM MAGNITUDE : 4.9

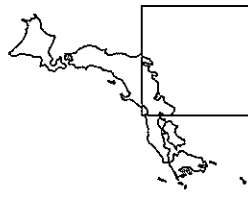
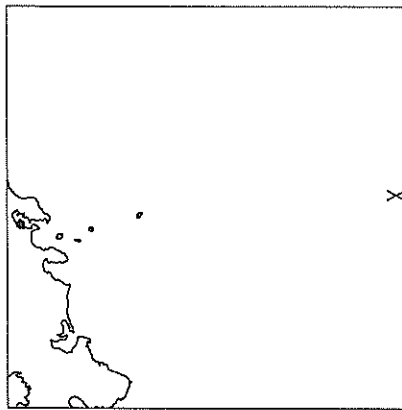
JMA INTENSITIES
 III : URAKAWA
 II : OBIHIRA, HIRAO, KUSHIRO,
 IWAHIZAWA
 I : SAPPORO, KURORAN, OTARU



STATION	CONDITION	RECORD NUMBER	MAX. ACC. (GAL) [NS] [EW] [UD]	DIST. (KM)
1 URAKAWA-S	ON GROUND	S-1909	36 19 4	21
2 TORAKI-H	ON GROUND	M-1001	26 30 14	27

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

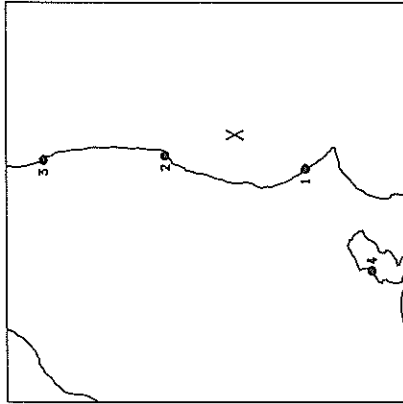
05:47 FEB. 4, 1986
 W OFF OGASAWARA
 JMA INTENSITIES
 II : CHIBA
 I : FUKUSHIMA, IZUMIYAMA,
 YOKOHAMA, TOKYO, Gifu
 EPICENTER : 27° 54' N 139° 57' E
 DEPTH : 541KM MAGNITUDE : 6.9



STATION	CONDITION	RECORD NUMBER	MAX. ACC. (GAL) (NS) [EW] (UD)	DIST. (KM)
1 KAWASAKI-CHI-M	ON GROUND	H-1003	1 1	846

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

11:59 FEB. 12, 1986
 E OFF IBARAKI PREF
 JMA INTENSITIES
 IV : HITO, CHOSHI
 III : OAHAMA, TOKYO, CHIBA,
 UTSUNOMIYA
 II : SENDAI, MORIYAMA, KOFU,
 KATSUURA
 I : URAKAWA, OFUNATO, MIYAGI,
 NIIGATA, KANAZAWA,
 YOKOHAMA



STATION	CONDITION	RECORD NUMBER	MAX. ACC. (GAL) (NS) [EW] (UD)	DIST. (KM)
1 KASHIMA-ZOKAN-S	ON GROUND	S-1910	93 43 13	64
2 OBARA-JI-S	ON GROUND	S-1911	20 21 11	60
3 SORA-S	ON GROUND	S-1912	4 6 1	157
4 KAWASAKI-CHI-M	ON GROUND	H-1004	3 3	156

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

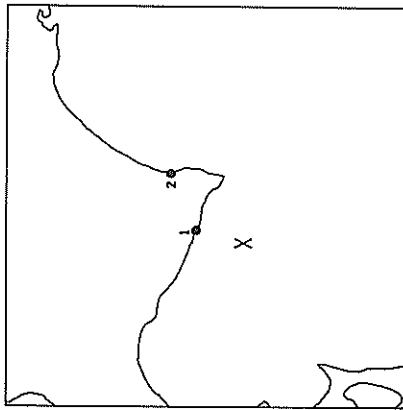
12:08 FEB. 21, 1986

S OFF URAKAWA

EPICENTER : 41° 51' N 142° 39' E
 DEPTH : 62KM MAGNITUDE : 5.4

JMA INTENSITIES

III : URAKAWA
 II : HIROO, HACHINGHE, KUSHIRO
 I : SAPPORO, MARIBKA, MURORAN



STATION	CONDITION	RECORD NUMBER	MAX. ACC. (GAL) (NS) (EW) (UD)	DIST. (KM)
1 URAKAWA-S	ON GROUND	S-1913	15 13 5	36
2 TOKACHI-M	ON GROUND	M-1005	18 20 9	74

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

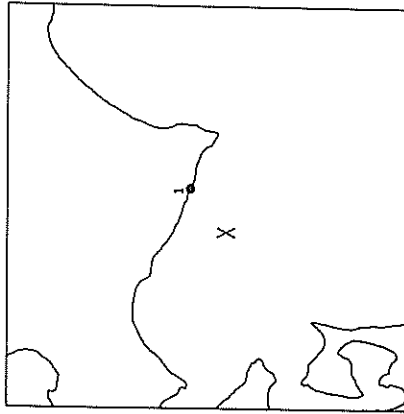
13:55 FEB. 26, 1986

S OFF URAKAWA

EPICENTER : 41° 57' N 142° 23' E
 DEPTH : 66KM MAGNITUDE : 4.8

JMA INTENSITIES

II : URAKAWA, NIYAKO,
 TOKAKOMAI, HIROO
 I : MURORAN, OBIHIRO,
 HACHINGHE, MUTSU



STATION	CONDITION	RECORD NUMBER	MAX. ACC. (GAL) (NS) (EW) (UD)	DIST. (KM)
1 URAKAWA-S	ON GROUND	S-1914	10 4 4	40

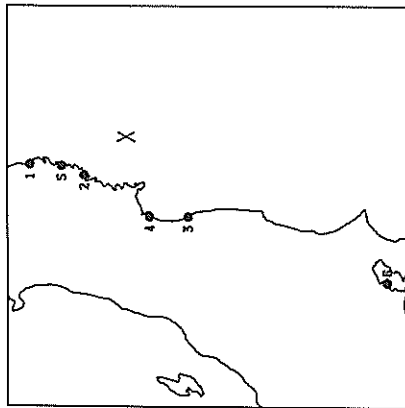
STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

16:09 MAR. 2, 1986
 E OFF MIYAGI PREF
 EPICENTER : 38°28'N 142°19'E
 DEPTH : 33KM MAGNITUDE : 6.0

JMA INTENSITIES

IV : HIYAKO, MORIOKA
 III : SENDAI, HACHINOHE,
 OFUNATO, SAKATA
 II : CHIBA, ITO, ANAHARA,
 TOKORAMA

I : TOKYO, URAKAWA, HAKODATE,
 OBIHIRO, KOFU, UTSUNOMIYA



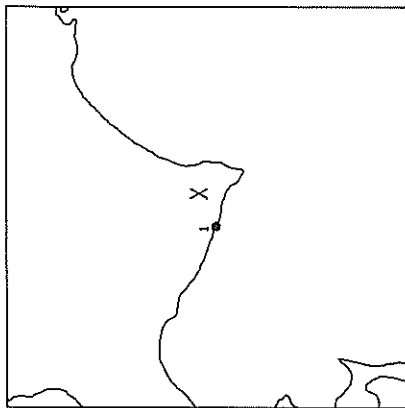
STATION	CONDITION	RECORD NUMBER	MAX. ACC. (GAL) [NS] [EW] [UD]	DIST. (KM)
1 HIYAKO-S	ON GROUND	S-1915	9 10 4	134
2 OFUNATO-BB-S	ON STRUC.	S-1916	14 42 5	79
2 OFUNATO-BECHI-S	ON GROUND	S-1917	5 11 4	79
3 SAHA-S	ON GROUND	S-1918	22 21 6	138
4 SENDAI-H	ON GROUND	M-1006	28 22 10	115
4 SENDAI-HB	IN GROUND	M-1007	8 8 4	115
5 KAWAISHI-M	ON GROUND	M-1008	17 20 14	96
5 KAWAISHI-HB	ON GROUND	M-1009	7 10 5	96
2 OFUNATO-HGUND-M	ON STRUC.	M-1010	41 26 21	79
6 KAWASAKI-CHI-M	ON GROUND	M-1011	2 2	400

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

14:59 MAR. 16, 1986
 HIDAKA MOUNTAINS REGION
 EPICENTER : 42°15'N 143°7'E
 DEPTH : 66KM MAGNITUDE : 4.4

JMA INTENSITIES

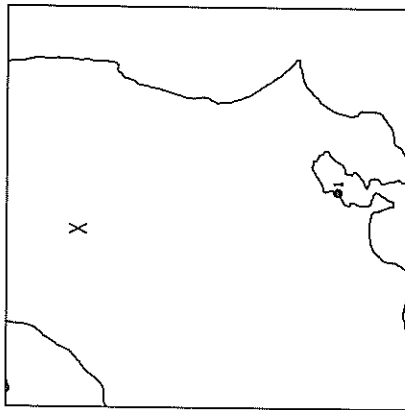
II : URAKAWA, HIRAO
 I : KUSHIRO



STATION	CONDITION	RECORD NUMBER	MAX. ACC. (GAL) [NS] [EW] [UD]	DIST. (KM)
1 URAKAWA-S	ON GROUND	S-1919	19 10 2	30

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

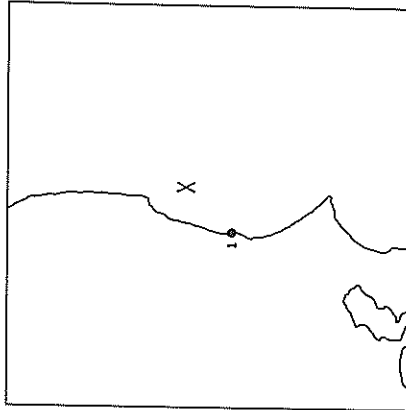
13:00 MAR. 25, 1986
 NORTHERN KANTO
 JMA INTENSITIES
 II : ONAHARA, MITO, TOKYO
 I : SENDAI, FUKUSHIMA, CHOSHI,
 YOKOHAMA, CHIBA
 EPICENTER : 37° 16' N 139° 37' E
 DEPTH : 139KM MAGNITUDE : 5.2



STATION	CONDITION	RECORD NUMBER	MAX. ACC. (GAL) [NS] [EW] [UD]	DIST. (KM)
1 KAWASAKI-CHJ-H	ON GROUND	M-1012	2 2	196

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

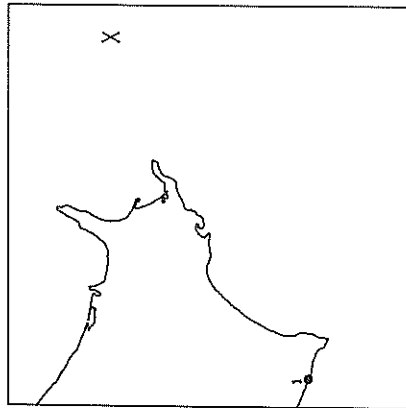
10:22 APR. 16, 1986
 E OFF IBARAKI PREF
 JMA INTENSITIES
 II : KAKIYAKA
 I : MIYO
 EPICENTER : 36° 40' N 141° 3' E
 DEPTH : 87KM MAGNITUDE : 3.9



STATION	CONDITION	RECORD NUMBER	MAX. ACC. (GAL) [NS] [EW] [UD]	DIST. (KM)
1 HITACHINAKA-F	ON GROUND	M- 1	7 8 4	50

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

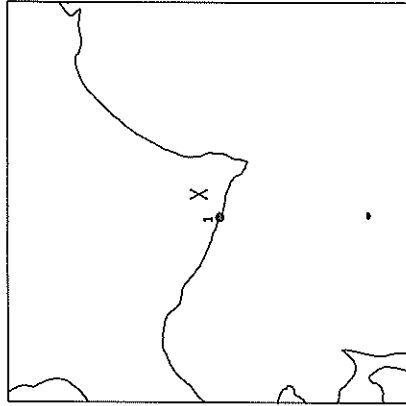
21:52 APR. 16, 1986
 E OFF HOKKAIDO
 JMA INTENSITIES
 III: NEKURO, KUSHIRO
 II: OBIHIRO, URAKAWA
 I: HIRAO, MARUYA, HACHINOHE,
 FUKUSHIMA
 EPICENTER : 43° 36' N 147° 31' E
 DEPTH : 0 KM MAGNITUDE : 6.2



STATION	CONDITION	RECORD NUMBER	MAX. ACC. (GAL) [NS] [EW] [UD]	DIST. (KM)
1 URAKAWA-S	ON GROUND	S-1920	2 1 1	418

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

01:05 APR. 18, 1986
 HIDAKA MOUNTAINS REGION
 JMA INTENSITIES
 II: URAKAWA, HIRAO
 I: KUSHIRO, MURORAN, SAPPORO,
 OBIHIRO
 EPICENTER : 42° 17' N 143° 2' E
 DEPTH : 70 KM MAGNITUDE : 4.6

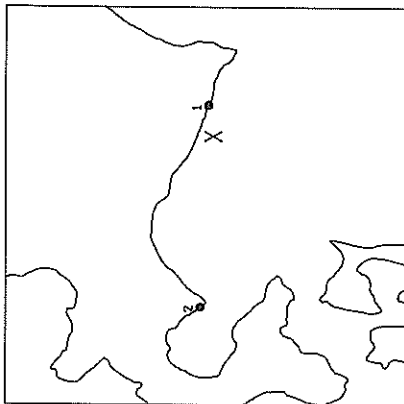


STATION	CONDITION	RECORD NUMBER	MAX. ACC. (GAL) [NS] [EW] [UD]	DIST. (KM)
1 URAKAWA-S	ON GROUND	S-1921	14 7 2	25

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

10:24 APR. 18, 1986
 S OFF URAKAWA
 EPICENTER : 42° 9' N 142° 32' E
 DEPTH : 85KM MAGNITUDE : 4.9

JMA INTENSITIES
 II : HIROO, TONAKOMBI, URAKAWA
 I : HACHINOHE, NUTSU, HAKODATE, OBIHIRO, SAPPORO, OTARU

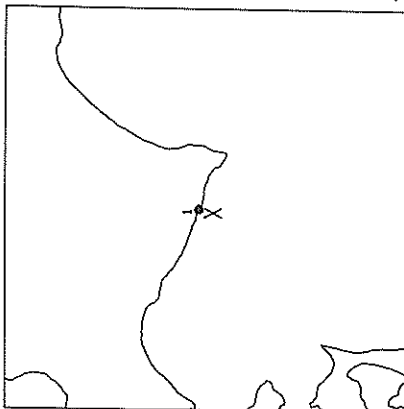


STATION	CONDITION	RECORD NUMBER	MAX. ACC. (GAL) [NS] [EW] [UD]	DIST. (KM)
1 URAKAWA-S	ON GROUND	S-1922	16 8 4	20
2 HURURAN-S	ON GROUND	S-1923	3 6 2	132

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

23:23 APR. 26, 1986
 S OFF URAKAWA
 EPICENTER : 42° 4' N 142° 46' E
 DEPTH : 63KM MAGNITUDE : 4.1

JMA INTENSITIES
 II : HIROO
 I : URAKAWA

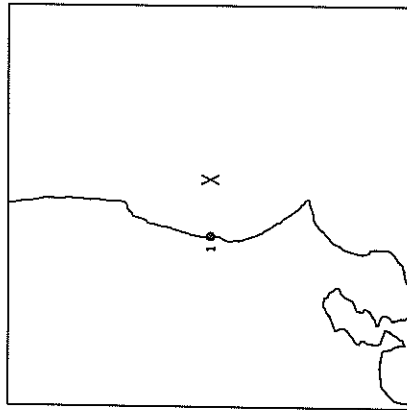


STATION	CONDITION	RECORD NUMBER	MAX. ACC. (GAL) [NS] [EW] [UD]	DIST. (KM)
1 URAKAWA-S	ON GROUND	S-1924	4 2 1	11

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

09:43 MAY 2, 1986
 E OFF IBARAKI PREF
 EPICENTER : 36° 21' N 141° 8' E
 DEPTH : 4.1KM MAGNITUDE : 4.5

JHA INTENSITIES
 II : MITO
 I : ONAHARA, CHOSHI



STATION	CONDITION	RECORD NUMBER	MAX. ACC. (GAL) [NS] [EW] [UD]	DIST. (KM)
1 HITACHINAKA-F	ON GROUND	M- 2	10 11 7	46

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

20:02 MAY 2, 1986
 TOKUSHIMA PREF
 EPICENTER : 33° 44' N 134° 13' E
 DEPTH : 46KM MAGNITUDE : 4.5

JHA INTENSITIES
 III : TOKUSHIMA
 II : KOCHI
 I : OKAYAMA, TAKAMATSU, FUKUYAMA



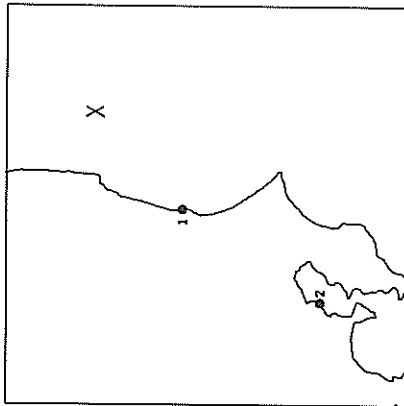
STATION	CONDITION	RECORD NUMBER	MAX. ACC. (GAL) [NS] [EW] [UD]	DIST. (KM)
1 KOCHI-JJ-S	ON GROUND	S-1925	4 2 1	65
2 KOKATSUJIMA-S	ON GROUND	S-1926	5 6 2	49

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

22:27 MAY 5, 1986
 E OFF FUKUSHIMA, PREF
 EPICENTER : 36° 55' N 141° 31' E
 DEPTH : 78KM MAGNITUDE : 4.9

JMA INTENSITIES

III : SHIRAKAWA
 II : BANAHAMA, NITTA, FUKUSHIMA,
 I : UTSUNOMIYA
 I : TOKYO, CHIBA, MIYAGO,
 CHICHIBU



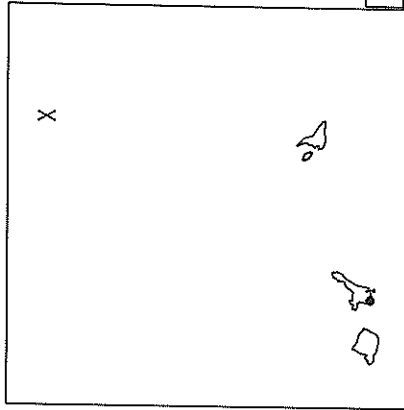
STATION	CONDITION	RECORD NUMBER	MAX. ACC. (GAL) (NS) (EW) (UD)	DIST. (KM)
1 HITACHINAKA-F	ON GROUND	M-3	21 19 9	100
2 KAWASAKI-CHI-M	ON GROUND	M-1013	2 2	222

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

10:24 MAY 11, 1986
 NW OFF MIYAKOJIMA ISLAND
 EPICENTER : 26° 39' N 125° 22' E
 DEPTH : 206KM MAGNITUDE : 6.4

JMA INTENSITIES

III : ISHIGAKI-JIMA, MIYAKOJIMA,
 IRIOMOTEJIMA, NAGO
 II : KUMEJIMA
 I : NAHA, MINARIORAIJIMA,
 OKINERABUJIMA, NAZE



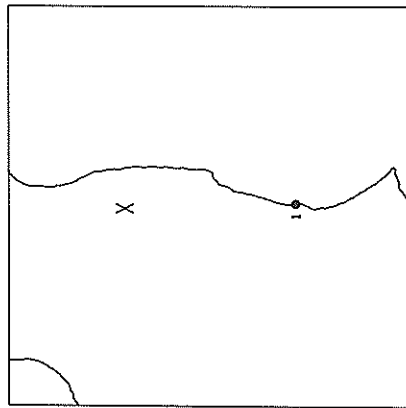
STATION	CONDITION	RECORD NUMBER	MAX. ACC. (GAL) (NS) (EW) (UD)	DIST. (KM)
1 ISHIGAKI-S	ON GROUND	S-1927	10 13 5	285

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

02:11 MAY 15, 1986
 EASTERN FUKUSHIMA PREF
 EPICENTER : 37° 32' N 140° 43' E
 DEPTH : 83KM MAGNITUDE : 4.9

JMR INTENSITIES

II : MITO, UTSUNOMIYA
 I : OFUNATO, CHIBA, MORIBKA,
 MIYAKO, SENDAI, FUKUSHIMA,
 ONAHARA



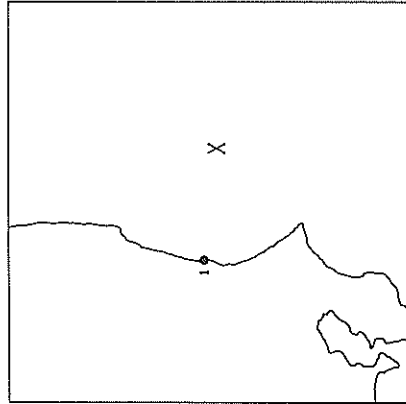
STATION	CONDITION	RECORD NUMBER	MAX. ACC. (GAL) [NS] [EW] [UD]	DIST. (KM)
1 HITACHINAKA-F	ON GROUND	M- 4	11 10 5	128

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

15:41 MAY 15, 1986
 FAR E OFF IBARAKI PREF
 EPICENTER : 36° 14' N 141° 35' E
 DEPTH : 44KM MAGNITUDE : 4.7

JMR INTENSITIES

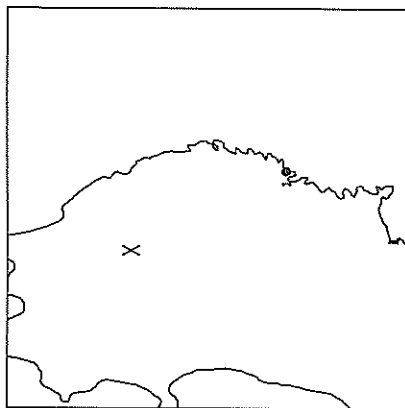
II : HITO
 I : CHOSHI, SHIRAKAWA



STATION	CONDITION	RECORD NUMBER	MAX. ACC. (GAL) [NS] [EW] [UD]	DIST. (KM)
1 HITACHINAKA-F	ON GROUND	M- 5	4 5 2	88

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

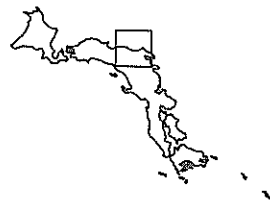
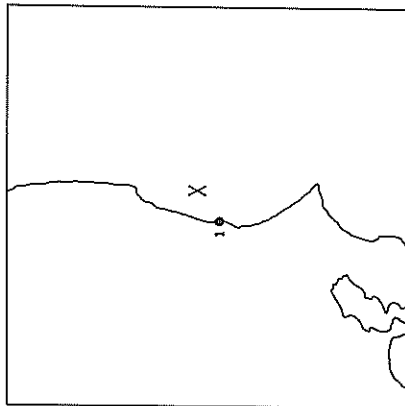
11:59 MAY 26, 1986 JMA INTENSITIES
 NORTHERN IWATE PREF III: MIYAKO
 EPICENTER : 40° 5'N 141° 12'E II: OFUNATO, MORIOKA
 DEPTH : 10KM MAGNITUDE : 4.7 I: HACHINGO



STATION	CONDITION	RECORD NUMBER	MAX. ACC. (GAL) [NS] [EW] [UD]	DIST. (KM)
1 OFUNATO-BOCHI-S	ON GROUND	S-1928	1 1 1	128
1 OFUNATO-BO-S	ON STRUC.	S-1929	1 5 1	127
1 OFUNATO-MOUND-H	ON STRUC.	N-1016	4 3 4	127

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

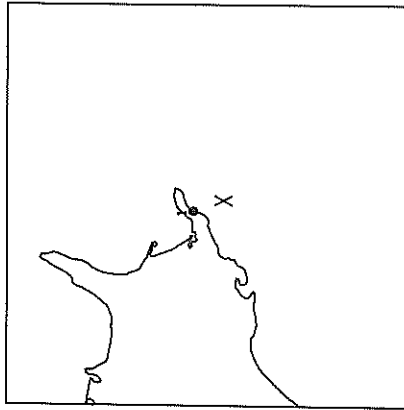
14:31 MAY 28, 1986 JMA INTENSITIES
 E OFF IBARAKI PREF I: MITO
 EPICENTER : 36° 31'N 140° 55'E
 DEPTH : 50KM MAGNITUDE : 3.7



STATION	CONDITION	RECORD NUMBER	MAX. ACC. (GAL) [NS] [EW] [UD]	DIST. (KM)
1 HITACHINAKA-F	ON GROUND	H- 6	16 29 8	50

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

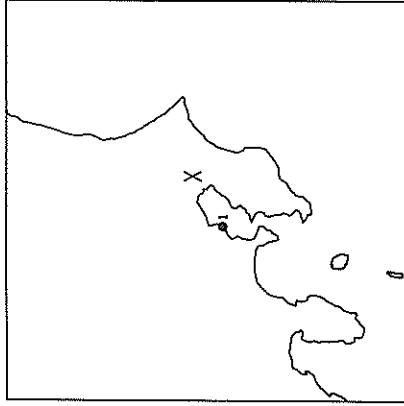
12:40 MAY 31, 1986
 OFF NEMURU PENINSULA
 JMR INTENSITIES
 III : KUSHIRO, NEMURU
 II : OBIHIRO, HIROO, HIYAKO
 I : URAKAWA, ABASHIRI
 EPICENTER : 43° 4'N 145° 41'E
 DEPTH : 86KM MAGNITUDE : 5.7



STATION	CONDITION	RECORD NUMBER	MAX. ACC. (GAL) [NS] [EW] [UD]	DIST. (KM)
1 HANASAKI-H	ON GROUND	M-1014	97 109 26	25

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

14:13 JUNE 3, 1986
 CENTRAL CHIBA PREF
 EPICENTER : 35° 41'N 140° 14'E
 DEPTH : 72KM MAGNITUDE : 5.6



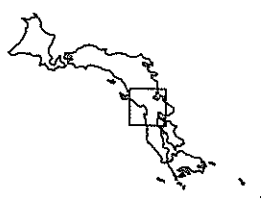
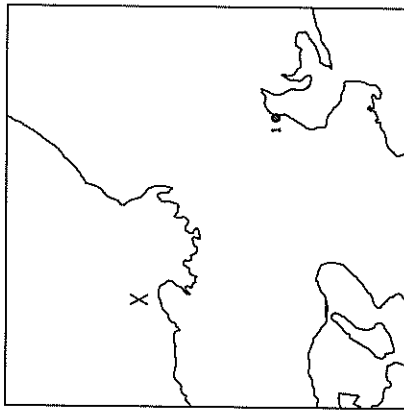
STATION	CONDITION	RECORD NUMBER	MAX. ACC. (GAL) [NS] [EW] [UD]	DIST. (KM)
1 KAWASAKI-CHI-H	ON GROUND	M-1018	1 1 1	47

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

19:11 JUNE 3, 1986
 NW OFF KINKI DISTRICT
 EPICENTER : 35° 54' N 135° 12' E
 DEPTH : 12KM MAGNITUDE : 4.7

JMA INTENSITIES

III : TOYOOKA, MAIZURU
 I : HIKONE, FUKUI, OSAKA,
 HATSUE, NARA



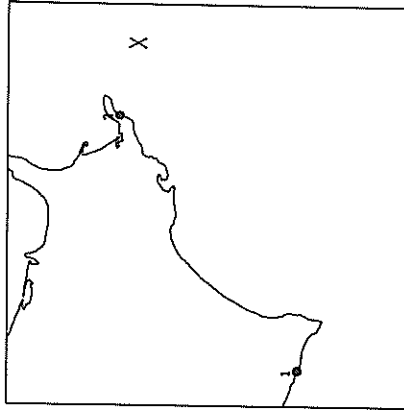
STATION	CONDITION	RECORD NUMBER	MAX. ACC. (GAL) [NS] [EW] [UD]	DIST. (KM)
1	TOYOOKA.-SEKITAN-H ON STRUC.	N-1015	5 7	168

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

20:02 JUNE 8, 1986
 OFF NEMURU PENINSULA
 EPICENTER : 43° 4' N 146° 22' E
 DEPTH : 59KM MAGNITUDE : 5.9

JMA INTENSITIES

III : KUSHIRO
 II : ABASHIRI, NIYAKO, OBIHIRO,
 HIROO, HACHINOHE
 I : URAKAWA, OFUNATO,
 FUKUSHIMA, TOHAKOMAI,
 MORIOKA

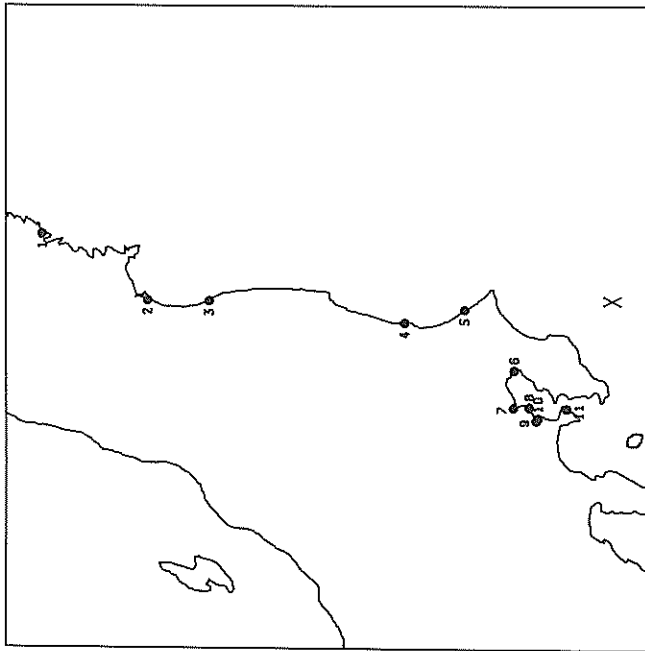


STATION	CONDITION	RECORD NUMBER	MAX. ACC. (GAL) [NS] [EW] [UD]	DIST. (KM)
1	URAKAWA-S ON GROUND	S-1990	2 2 1	311
2	HANASAKI-H ON GROUND	H-1017	64 69 22	67

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

11:53 JUNE 24, 1986
 SE OFF BOSO PENINSULA
 EPICENTER : 34° 49' N 140° 43' E
 DEPTH : 73KM MAGNITUDE : 6.5

JMA INTENSITIES
 IV : TOKYO, YOKOHAMA, CHIBA,
 CHOSHI, TATEYAMA,
 HACHIJOJIMA
 III : MITO, MAHAMA, OFUNATO,
 HIYAKO
 II : ISHINOMAKI, SENDAI,
 KUSHIRO, SRIZUKA
 I : NERURO, URAKAWA,
 HACHINOHE, TSURUGA,
 NAGANO



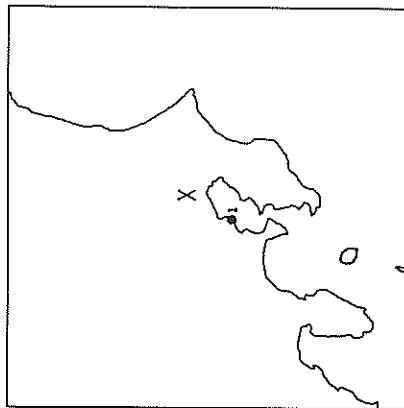
STATION	CONDITION	RECORD NUMBER	MAX. ACC. (GAL) [NS] [EW] [UD]	DIST. (KM)
1 OFUNATO-BO-S	ON STRUC.	S-1959	4 11 2	476
1 OFUNATO-BOCHI-S	ON GROUND	S-1940	2 2 1	475
1 OFUNATO-HOUND-M	ON STRUC.	M-1026	7 8 5	478
2 SENDAI-H	ON GROUND	M-1024	14 12 6	386
2 SENDAI-HB	IN GROUND	M-1025	4 4 3	386
3 SOMA-S	ON GROUND	S-1958	12 16 3	535
4 HITACHINAKA-F	ON GROUND	M- 7	27 26 14	175
5 KASHIMA-ZOKAN-S	ON GROUND	S-1934	12 11 3	124
6 CHIBA-S	ON GROUND	S-1932	25 40 9	103
7 SHINAGAWA-S	ON GROUND	S-1933	37 34 11	125
7 SHINAGAWA-MB	IN GROUND	M-1020	9 7 8	125
8 KAWASAKI-CHI-M	ON GROUND	H-1021	37 35	116
9 KEIHN-JI-S	ON GROUND	S-1955	25 27 21	122
10 YAMASHITA-HEN-S	ON GROUND	S-1956	36 31 8	119
10 YAMASHITA-DATS-S	ON STRUC.	S-1937	45 32 14	119
10 YAMASHITA-HEN-M	ON GROUND	M-1022	51 43 19	119
10 YAMASHITA-DATS-H	ON STRUC.	M-1023	20 21	118
11 KOKEN-S	ON GROUND	S-1931	21 22 12	101
11 KOKEN-M	ON GROUND	M-1019	26 32 16	101

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

10:36 JUNE 28, 1986
 NORTHERN CHIBA PREF
 EPICENTER : 35° 48' N 140° 1' E
 DEPTH : 60KM MAGNITUDE : 3.9

JMA INTENSITIES

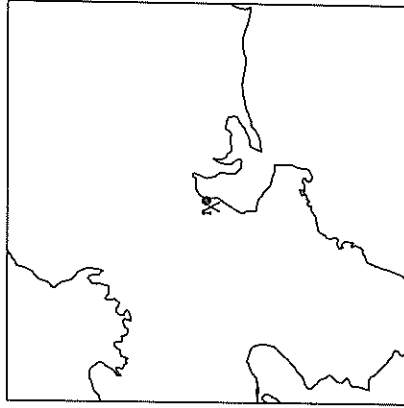
I : TOKYO, UTSUNOMIYA, AJIRO



STATION	CONDITION	RECORD NUMBER	MAX. ACC. (GAL) (NS) (EW) (UD)	DIST. (KM)
1 KAWASAKI-CHI-H <td>ON GROUND <td>M-1031 <td>1 2</td> <td>40</td> </td></td>	ON GROUND <td>M-1031 <td>1 2</td> <td>40</td> </td>	M-1031 <td>1 2</td> <td>40</td>	1 2	40

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

00:48 JULY 1, 1986
 NORTHERN MIE PREF
 EPICENTER : 34° 55' N 136° 37' E
 DEPTH : 13KM MAGNITUDE : 3.3

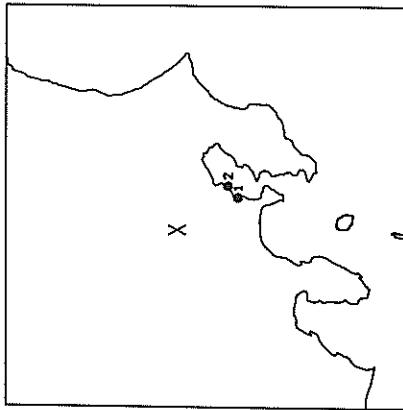


STATION	CONDITION	RECORD NUMBER	MAX. ACC. (GAL) (NS) (EW) (UD)	DIST. (KM)
1 YOKKA.-SEKITA-N	ON STRUC.	M-1027	4 3	4

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

08:28 JULY 4, 1986
 EASTERN SAITAMA PREF.
 EPICENTER : 35° 52' N 139° 27' E
 DEPTH : 150KM MAGNITUDE : 4.9

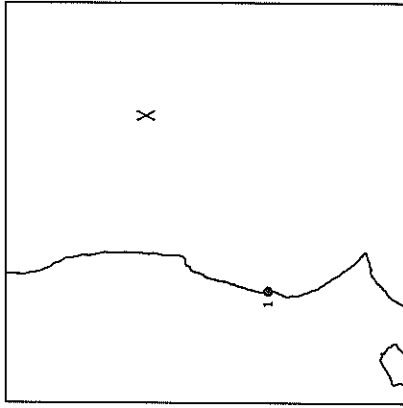
JMA INTENSITIES
 II : KUMAGAYA, UTSUNOMIYA,
 KOFU, AIRO, OSHIMA,
 KAWAGUCHINGO
 I : HITO, TOKYO, YOKOHAMA,
 TATEYAMA, CHICHIBU



STATION	CONDITION	RECORD NUMBER	MAX. ACC. (GAL) (NS) (EW) (UD)	DIST. (KM)
1 YAKASHITA-HEI-H	ON GROUND	M-1028	5 9 3	51
1 YAKASHITA-DAI7-H	ON STRUC.	M-1030	2 3 51	51
2 KAWASAKI-CHI-H	ON GROUND	M-1032	7 9 49	49

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

10:50 JULY 7, 1986
 E OFF FUKUSHIMA PREF.
 EPICENTER : 37° 6' N 142° 12' E
 DEPTH : 31KM MAGNITUDE : 4.1



STATION	CONDITION	RECORD NUMBER	MAX. ACC. (GAL) (NS) (EW) (UD)	DIST. (KM)
1 HITACHINAKA-F	ON GROUND	M- 8	14 12 10	162

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

01:18 JULY 9, 1986

HAKONE REGION

EPICENTER : 35° 14' N 139° 6' E

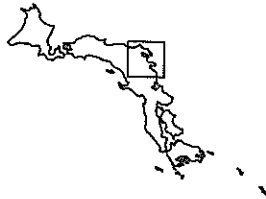
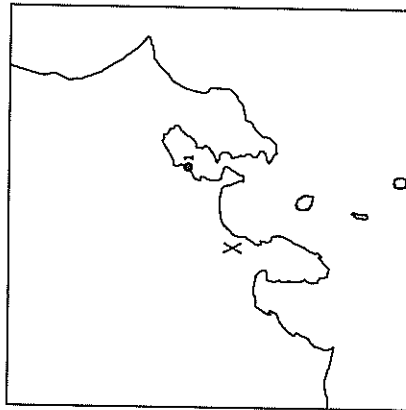
DEPTH : 15KM MAGNITUDE : 4.1

JMA INTENSITIES

II : AJIRO, TOKYO, OSHIMA

I : KOFU, YOKOHAMA, TATEYAMA,

KAWAGUCHI



STATION	CONDITION	RECORD NUMBER	MAX. ACC. (GAL) (NS) (EW) (UD)	DIST. (KM)
1 KAWASAKI-CHI-M	ON GROUND	M-1033	1 2	67

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

11:10 JULY 10, 1986

JMA INTENSITIES

NORTHERN IBARAKI PREF.

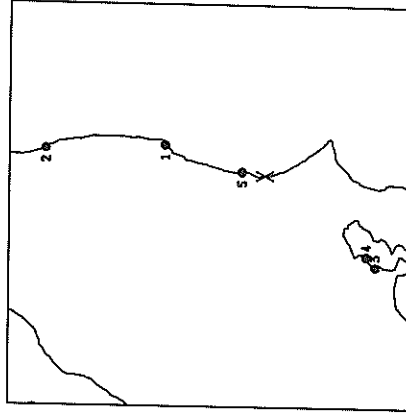
EPICENTER : 36° 13' N 140° 36' E

DEPTH : 81KM MAGNITUDE : 4.8

I : TOKYO, CHOSHI, MIYAKO,

SENDAI, YOKOHAMA,

ISHINAKI



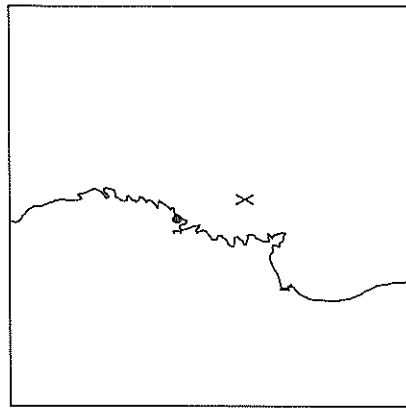
STATION	CONDITION	RECORD NUMBER	MAX. ACC. (GAL) (NS) (EW) (UD)	DIST. (KM)
1 OBARAHA-JI-S	ON GROUND	S-1941	23 32 17	85
2 SOBA-S	ON GROUND	S-1942	5 5 2	182
3 YAMASHITA-HEN-H	ON GROUND	M-1029	5 3 2	121
4 KAWASAKI-CHI-M	ON GROUND	M-1034	1 2	110
5 HITACHINAKA-F	ON GROUND	M- 10	43 47 17	19

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

15:12 JULY 22, 1986
 E OFF MIYAGI PREF.
 EPICENTER : 38° 33' N 141° 53' E
 DEPTH : 89KM MAGNITUDE : 4.4

JMA INTENSITIES

III : OFUNATO
 II : MIYAKO
 I : MORIYOKA, ISHINOHAKI



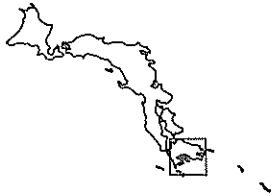
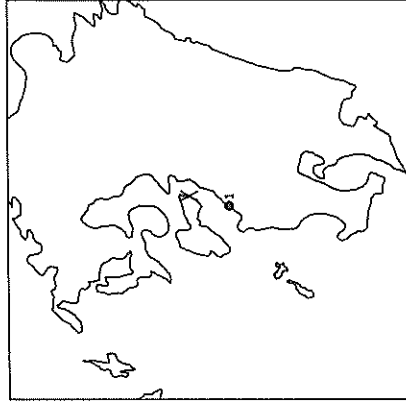
STATION	CONDITION	RECORD NUMBER	MAX. ACC. (GAL) (NS) [EV3] [UD]	DIST. (KM)
1 OFUNATO-80-S	ON STRUC.	S-1943	2 8 2	53
1 OFUNATO-HOUD-H	ON STRUC.	H-1035	3 3 3	53

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

09:43 JULY 28, 1986
 AMAKUSA REGION
 EPICENTER : 32° 28' N 130° 29' E
 DEPTH : 13KM MAGNITUDE : 5.0

JMA INTENSITIES

III : KUMAMOTO
 II : FUKUOKA, NOBEOKA, SAGA, ASOSAN, HITOTYOSHI
 I : NAGASAKI, AKUNE, HITA



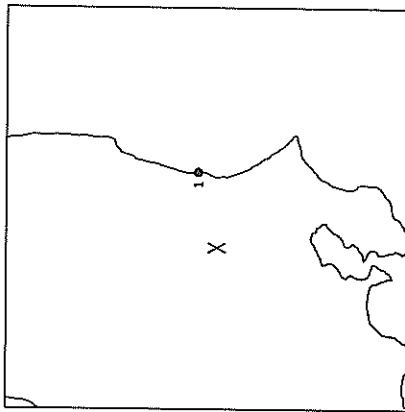
STATION	CONDITION	RECORD NUMBER	MAX. ACC. (GAL) (NS) [EV] [UD]	DIST. (KM)
1 HINAKATA-H	ON GROUND	H-1036	1 1 1	32

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

22:40 AUG. 8, 1986
 SW IBARAGI PREF.
 EPICENTER : 36° 18' N 140° 0' E
 DEPTH : 81 KM MAGNITUDE : 4.4

JMA INTENSITIES

III : UTSUNOMIYA
 II : MITO, KAKIYAKA
 I : ONAHARA, OSHIMA, KUMAGAYA,
 SHIRAKAWA, CHICHIOU



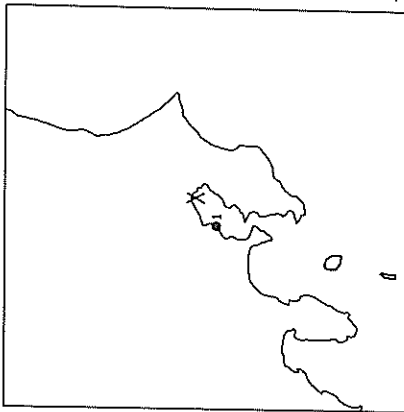
STATION	CONDITION	RECORD NUMBER	MAX. ACC. (GAL) [NS] [EW] [UD]	DIST. (KM)
1 HITTACHINAKA-F	ON GROUND	N- 11	8 13 4	56

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

07:49 AUG. 12, 1986
 CENTRAL CHIBA PREF.
 EPICENTER : 35° 38' N 140° 2' E
 DEPTH : 61 KM MAGNITUDE : 3.5

JMA INTENSITIES

I : CHIBA

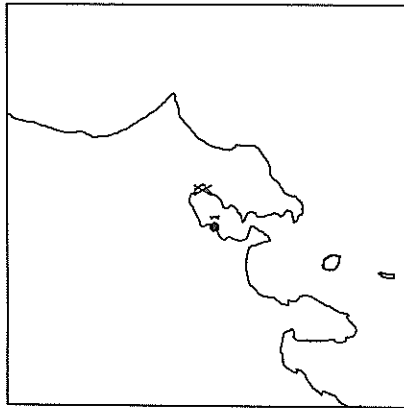


STATION	CONDITION	RECORD NUMBER	MAX. ACC. (GAL) [NS] [EW] [UD]	DIST. (KM)
1 KAWASAKI-CHI-M	ON GROUND	M-1037	1 1 1	29

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

15:18 AUG. 19, 1986
 CENTRAL CHIBA PREF.
 EPICENTER : 35° 34' N 140° 6' E
 DEPTH : 33KM MAGNITUDE : 3.7

JMA INTENSITIES
 I : CHIBA

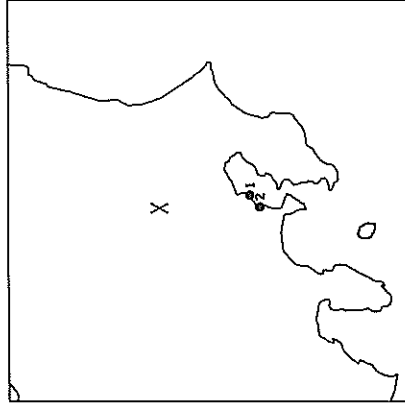


STATION	CONDITION	RECORD NUMBER	MAX. ACC. (GAL) [NS] [EW] [UD]	DIST. (KM)
1 KAWASAKI-CHI-H	ON GROUND	M-1039	4 4 4	32

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

20:16 AUG. 27, 1986
 SW IBARAKI PREF.
 EPICENTER : 36° 7' N 139° 44' E
 DEPTH : 68KM MAGNITUDE : 4.3

JMA INTENSITIES
 III : UTSUNOMIYA
 II : MITO, KAKIOKA
 I : CHIBA, TOKYO, TOKOHAMA, MABASHI

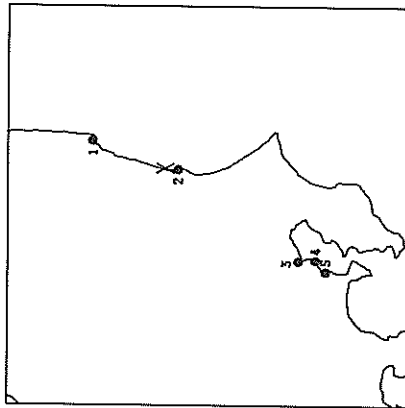


STATION	CONDITION	RECORD NUMBER	MAX. ACC. (GAL) [NS] [EW] [UD]	DIST. (KM)
1 KAWASAKI-CHI-H	ON GROUND	M-1040	2 2 2	68
2 YAMASHITA-HEN-H	ON GROUND	M-1038		75

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

12:04 SEP. 20, 1986
 NORTHERN IBARAKI PREF.
 EPICENTER : 36° 28' N 140° 40' E
 DEPTH : 56KM MAGNITUDE : 5.0

JMA INTENSITIES
 III : UTSUNOMIYA, MITO, KAKIOKA,
 SHIRAKAWA
 II : TOKYO, URAHAMA, KUNAGAYA,
 CHICHIJU
 I : CHOSHI, CHIBA, SENDAI,
 KOFU, KARUIZAWA

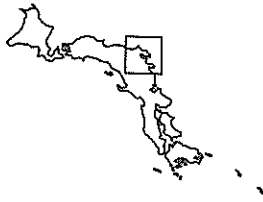
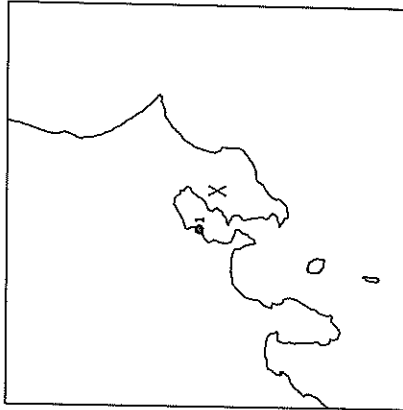


STATION	CONDITION	RECORD NUMBER	MAX. ACC. (GAL) [NS] [EW] [UD]	DIST. (KM)
1 ONAHAMA-JT-S	ON GROUND	S-1944	7 7 5	57
2 HITACHINAKA-F	ON GROUND	M- 12	83 90 44	10
3 SHINAGAWA-S	ON GROUND	S-1945	2 4 2	124
3 SHINAGAWA-NB	IN GROUND	M-1041	1 1 1	124
4 KAWASAKI-CHI-M	ON GROUND	M-1043	2 3 3	135
5 YAMASHITA-HEN-H	ON GROUND	M-1042	3 1 2	146

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

08:17 SEP. 29, 1986
 SOUTHERN BOISO PENINSULA
 EPICENTER : 35° 22' N 140° 6' E
 DEPTH : 68KM MAGNITUDE : 4.2

JMA INTENSITIES
 I : TOKYO, YOKOHAMA, TATEYAMA,
 AJIRO



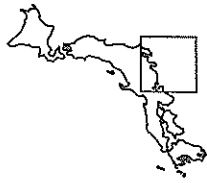
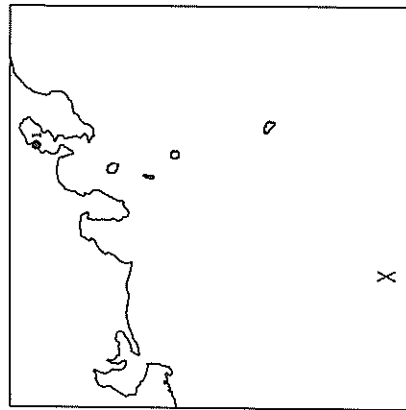
STATION	CONDITION	RECORD NUMBER	MAX. ACC. (GAL) [NS] [EW] [UD]	DIST. (KM)
1 KAWASAKI-CHI-M	ON GROUND	M-1044	3 2 2	35

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

20:40 OCT. 7, 1986
 NEAR TORISHIMA IS.
 EPICENTER : 31° 56' N 137° 57' E
 DEPTH : 412KM MAGNITUDE : 5.7

JHA INTENSITIES

I : SENDAI, ONAHARA, TOKYO,
 YOKOHAMA, KAKIOKA



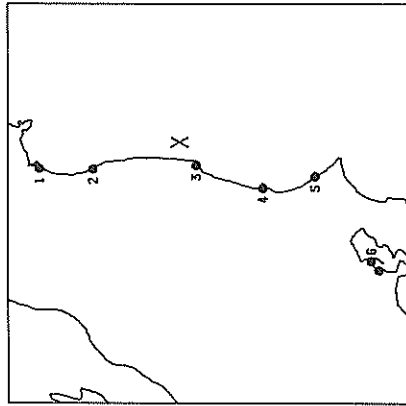
STATION	CONDITION	RECORD NUMBER	MAX. ACC. (GAL) [NS] [EW] [UD]	DIST. (KM)
1 KAWASAKI-CHI-M	ON GROUND	M-1045	1 2	428

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

06:17 OCT. 14, 1986
 E OFF FUKUSHIMA PREF.
 EPICENTER : 37° 4' N 141° 13' E
 DEPTH : 53KM MAGNITUDE : 5.7

JHA INTENSITIES

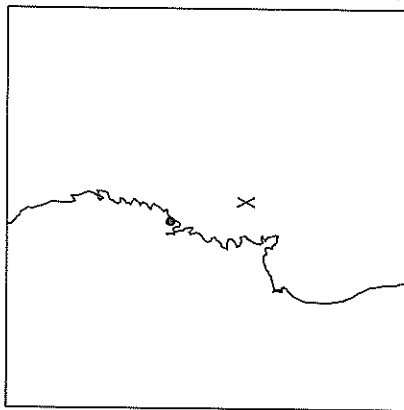
IV : ONAHARA
 III : FUKUSHIMA, MITO,
 UTSUNOMIYA, SENDAI,
 SHIRAKAWA, KAKIOKA
 II : TOKYO, YOKOHAMA,
 ISHINOMAKI, KUNAGAYA
 I : CHIBA, MARIOKA, KUSHIRO,
 HITAKO, SAKATA, AKITA



STATION	CONDITION	RECORD NUMBER	MAX. ACC. (GAL) [NS] [EW] [UD]	DIST. (KM)
1 SENDAI-M	ON GROUND	M-1049	14 11 4	156
1 SENDAI-MB	IN GROUND	M-1050	3 4 2	136
2 SOMA-S	ON GROUND	S-1947	22 18 6	88
3 ONAHARA-JI-S	ON GROUND	S-1946	61 56 17	30
4 HITACHINAKA-F	ON GROUND	M- 13	36 31 16	93
5 KASHIMA-IZOKAN-S	ON GROUND	S-1848	5 4 2	135
6 KAWASAKI-CHI-H	ON GROUND	M-1048	2 2 2	217
7 YAMASHITA-HEN-M	ON GROUND	M-1046	1 1 2	228
7 YAMASHITA-DAI7-M	ON STRUC.	M-1047	2 3	228

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

19:22 OCT. 21, 1986
 E OFF MIYAGI PREF.
 EPICENTER : 38°30'N 141°53'E
 DEPTH : 55KM MAGNITUDE : 4.6

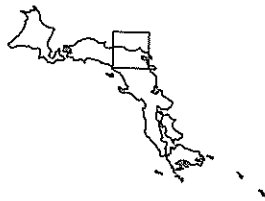
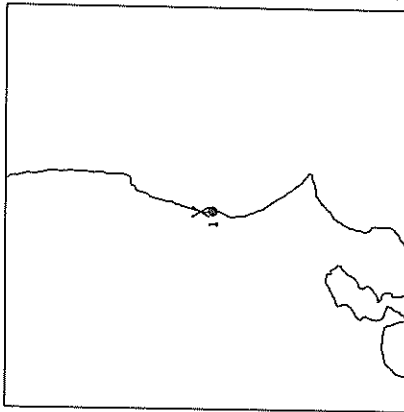


STATION	CONDITION	RECORD NUMBER	MAX. ACC. (GAL) [NS] [EW] [UD]	DIST. (KM)
1 OFUNATO-BO-S	ON STRUC.	S-1950	5 16 2	59
1 OFUNATO-HONO-H	ON STRUC.	M-1051	4 4 4	59

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

20:07 OCT. 22, 1986
 NORTHERN IBARAKI PREF.
 EPICENTER : 36°28'N 140°39'E
 DEPTH : 57KM MAGNITUDE : 4.4

JMA INTENSITIES
 III : MITO
 II : UTSUNOMIYA, SHIRAKAWA,
 KAKIOKA
 I : ONAHARA, MAEBASHI,
 FUKUSHIMA, CHICHIBU

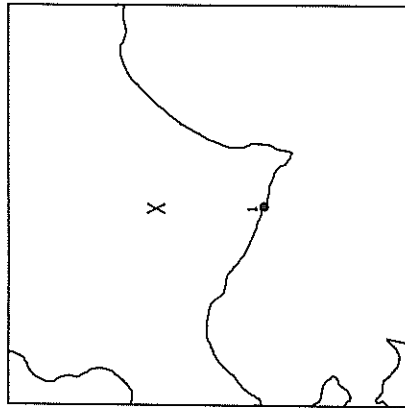


STATION	CONDITION	RECORD NUMBER	MAX. ACC. (GAL) [NS] [EW] [UD]	DIST. (KM)
1 HITACHINAKA-F	ON GROUND	H-14	17 21 13	9

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

12:09 OCT. 25, 1986
 S OFF URAKAWA
 EPICENTER : 42° 53' N 142° 53' E
 DEPTH : 60KM MAGNITUDE : 4.2

JMA INTENSITIES
 II : URAKAWA
 I : HIROO

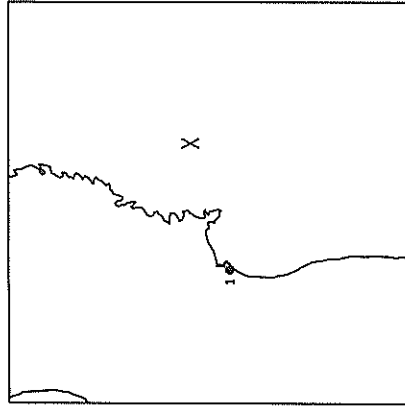


STATION	CONDITION	RECORD NUMBER	MAX. ACC. (GAL) [NS] [EW] [UD]	DIST. (KM)
1 URAKAWA-S	ON GROUND	S-1948	11 11 2	81

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

00:52 NOV. 3, 1986
 E OFF MIYAGI PREF.
 EPICENTER : 38° 28' N 142° 9' E
 DEPTH : 47KM MAGNITUDE : 4.8

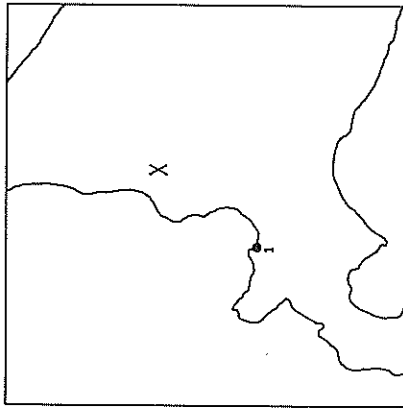
JMA INTENSITIES
 III : OFUNATO
 II : MIYAGI, SENDAI,
 ISHINOMAKI
 I : FUKUSHIMA, MORTOKA



STATION	CONDITION	RECORD NUMBER	MAX. ACC. (GAL) [NS] [EW] [UD]	DIST. (KM)
1 SENDAI-H	ON GROUND	M-1052	9 11 5	101
1 SENDAI-HB	IN GROUND	M-1053	3 3 3	101

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

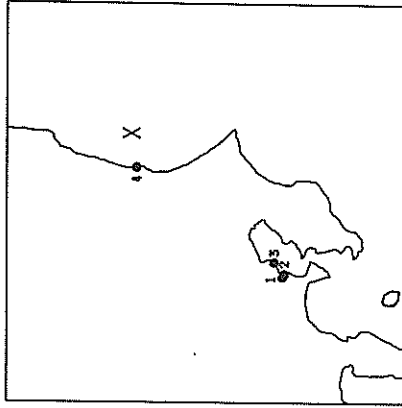
21:44 NOV. 13, 1986
 JMA INTENSITIES
 KAMIKAWA-SORACHI REGION
 III: RUMOI
 II: ASHIKAWA, SAPPORO,
 OTARU
 I: OBIHIRO
 EPICENTER : 43° 48' N 141° 51' E
 DEPTH : 11KM MAGNITUDE : 5.3



STATION	CONDITION	RECORD NUMBER	MAX. ACC. (GAL) (NS) (EW) (UD)	DIST. (KM)
1 OTARU-S	ON GROUND	S-1951	4 4 3	95

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

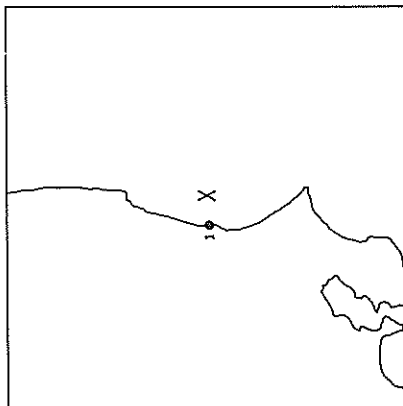
15:06 NOV. 15, 1986
 JMA INTENSITIES
 E OFF IBARAKI PREF
 III: MITO, MAEBASHI, KAKIURA,
 UTSUNOMIYA
 II: ONARAWA, FUKUSHIMA,
 CHICHIBU, SAITAKAWA
 I: CHIBA, TOKYO, YOKOHAMA,
 CHOSHI, SENDAI
 EPICENTER : 36° 24' N 140° 56' E
 DEPTH : 43KM MAGNITUDE : 5.0



STATION	CONDITION	RECORD NUMBER	MAX. ACC. (GAL) (NS) (EW) (UD)	DIST. (KM)
1 KEIHN-JI-S	ON GROUND	S-1953	14 23 8	157
2 YAMASHITA-HEN-S	ON GROUND	S-1954	35 23 5	157
2 YAMASHITA-DATG-S	ON STRUC.	S-1955	39 31 7	156
3 YAMASHITA-HEN-H	ON GROUND	M-1056	46 28 8	157
4 KAWASAKI-CHI-H	ON GROUND	M-1058	9 14 145	145
4 HITACHINAKA-F	ON GROUND	M- 15	177 168 59	28

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

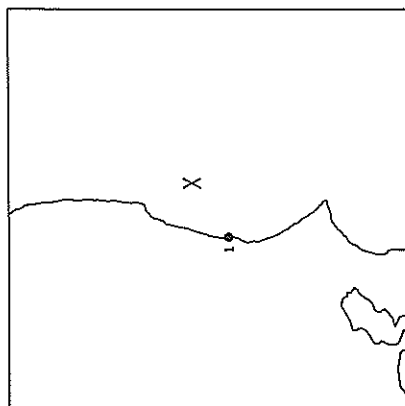
04:53 NOV. 26, 1986
 E OFF IBARAKI PREF
 EPICENTER : 36° 23' N 140° 54' E
 DEPTH : 39KM MAGNITUDE : 3.4



STATION	CONDITION	RECORD NUMBER	MAX. ACC. (GAL) [NS] [EW] [UD]	DIST. (KM)
1 HITACHINAKA-F	ON GROUND	H- 17	11 7 5	25

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

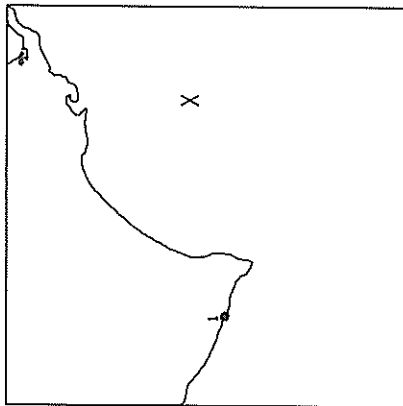
03:56 NOV. 19, 1986
 E OFF IBARAKI PREF
 EPICENTER : 36° 36' N 141° 8' E
 DEPTH : 47KM MAGNITUDE : 4.3



STATION	CONDITION	RECORD NUMBER	MAX. ACC. (GAL) [NS] [EW] [UD]	DIST. (KM)
1 HITACHINAKA-F	ON GROUND	H- 16	10 16 9	52

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

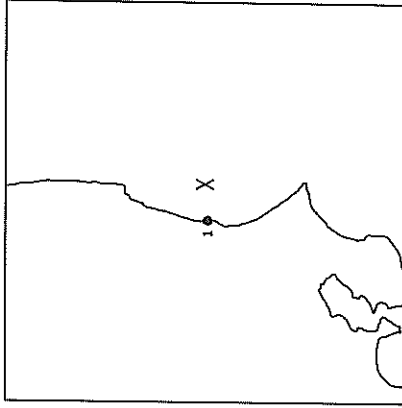
12:28 NOV. 27, 1986
 SE OFF TOKACHI
 EPICENTER : 42° 14' N 144° 47' E
 DEPTH : 44KM MAGNITUDE : 5.2



STATION	CONDITION	RECORD NUMBER	MAX. ACC. (GAL) (NS) (EW) (UD)	DIST. (KM)
1 URAKAWA-S	ON GROUND	S-1956	2 1 1	166

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

17:56 NOV. 28, 1986
 E OFF IBARAKI PREF
 EPICENTER : 36° 23' N 140° 57' E
 DEPTH : 44KM MAGNITUDE : 3.6



STATION	CONDITION	RECORD NUMBER	MAX. ACC. (GAL) (NS) (EW) (UD)	DIST. (KM)
1 HITACHINAKA-F	ON GROUND	H- 18	14 10 10	30

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

07:29 NOV. 29, 1986

E OFF IBARAKI PREF

EPICENTER : 36°24'N 141°11'E

DEPTH : 42KM MAGNITUDE : 5.8

JHA INTENSITIES

Ⅶ : ONAHARA, CHŌSHI

Ⅷ : MITŌ, UTSUNOMIYA,

TATEYAMA, KAKIYAMA,

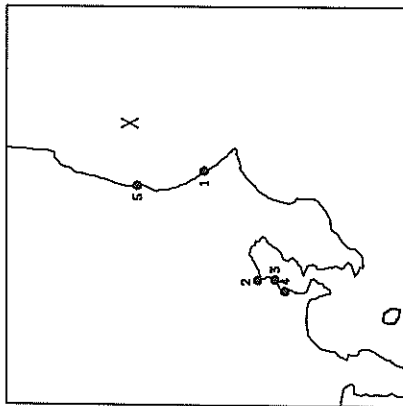
SHIRAKAWA

Ⅱ : CHIBA, FUKUSHIMA,

YOKOHAMA, SENDAI, TOKYO

Ⅰ : KŌFU, MORIOKA, HITAKA,

AJIRO, KATSUURA



STATION	CONDITION	RECORD NUMBER	MAX. ACC. (GAL) [NS] [EW] [UD]	DIST. (KM)
1 KASHIMA-ZEKKAN-S	ON GROUND	S-1957	61 44 17	68
2 SHINAGAWA-S	ON GROUND	S-1958	5 5 3	154
3 SHINAGAWA-HB	IN GROUND	M-1059	2 2 2	154
4 KAWASAKI-CHI-H	ON GROUND	M-1067	4 4 4	162
5 YAMASHITA-HEN-M	ON GROUND	M-1066	4 1 1	174
1 HITACHINAKA-F	ON GROUND	M- 19	105 117 48	51

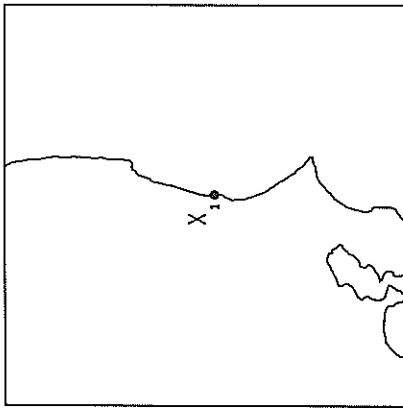
STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

22:30 NOV. 29, 1986

NORTHERN IBARAKI PREF

EPICENTER : 36°31'N 140°27'E

DEPTH : 101KM MAGNITUDE : 4.0

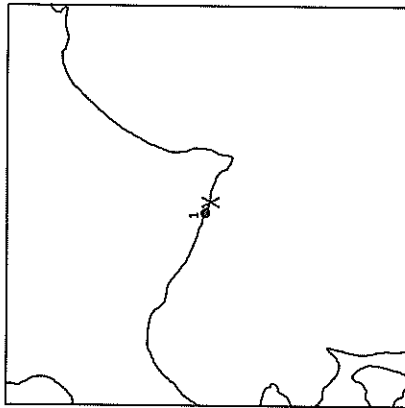


STATION	CONDITION	RECORD NUMBER	MAX. ACC. (GAL) [NS] [EW] [UD]	DIST. (KM)
1 HITACHINAKA-F	ON GROUND	M- 26	9 11 4	21

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

01:25 NOV. 30, 1986
 HIDAOKA REGION
 EPICENTER : 42° 7' N 142° 54' E
 DEPTH : 64KM MAGNITUDE : 4.5

JMA INTENSITIES
 III : URAKAWA
 II : HIRAO
 I : OBIHIRO

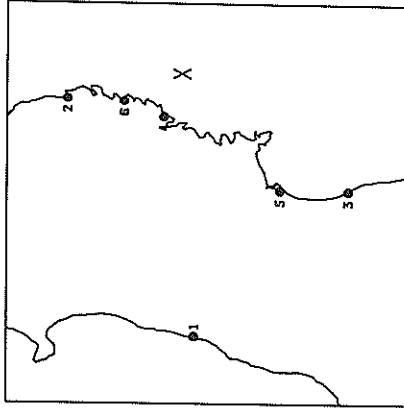


STATION	CONDITION	RECORD NUMBER	MAX. ACC. (GAL) [NS] [EW] [UD]	DIST. (KM)
1 URAKAWA-S	ON GROUND	S-1959	10 12 3	11

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

05:15 DEC. 1, 1986
 KINKAZAN REGION
 EPICENTER : 38° 52' N 142° 8' E
 DEPTH : 51KM MAGNITUDE : 6.0

JMA INTENSITIES
 IV : OFUNATO, MORIOKA,
 ISHINOHAKI
 III : MIYAKO, SAKATA, SENDAI,
 HACHINOHE
 II : FUKUSHIMA, AKITA
 I : TOKYO, KUSHIRO, MITO,
 URAKAWA, OBIHIRO,
 YAMAGATA, SHIRAKAWA

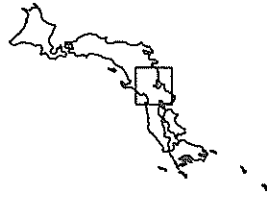
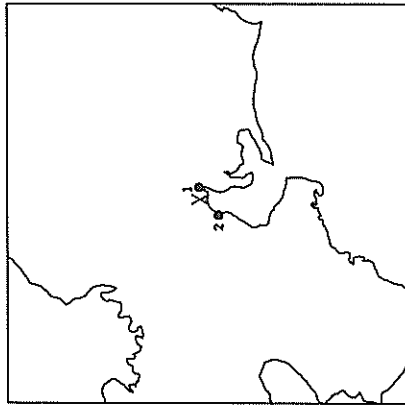


STATION	CONDITION	RECORD NUMBER	MAX. ACC. (GAL) [NS] [EW] [UD]	DIST. (KM)
1 SAKATA-S	ON GROUND	S-1960	1 1 1	200
1 SAKATA-S	ON GROUND	S-1960	1 1 1	200
2 MIYAKO-S	ON GROUND	S-1961	26 25 11	88
3 SOMA-S	ON GROUND	S-1962	8 8 2	154
4 OFUNATO-BO-S	ON STRUC.	S-1963	19 70 13	38
4 OFUNATO-BOCHI-S	ON GROUND	S-1964	33 34 11	38
5 SENDAI-M	ON GROUND	M-1060	18 13 6	117
5 SENDAI-MB	IN GROUND	S-1061	5 6 4	117
4 OFUNATO-MOUND-H	ON STRUC.	M-1062	37 38 33	38
6 KAMAISHI-M	ON GROUND	M-1063	32 24	49
6 KAMAISHI-MB	IN GROUND	M-1064	10 11 8	49

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

13:28 DEC. 11, 1986
 CENTRAL AICHI PREF
 EPICENTER : 35° 4' N 136° 48' E
 DEPTH : 15KM MAGNITUDE : 3.9

JMA INTENSITIES
 III : NAGOYA
 I : GIFU, TSU

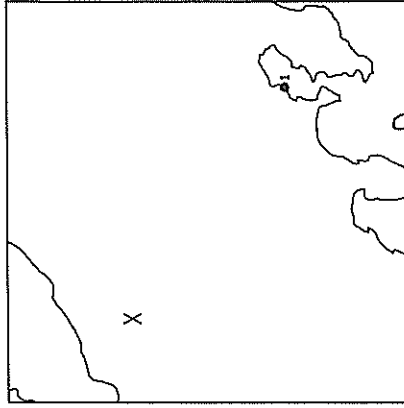


STATION	CONDITION	RECORD NUMBER	MAX. ACC. (GAL) (CMS) (EW) (UD)	DIST. (KM)
1 INAE-S	ON STRUC.	S-1965	19 31 11	6
1 NAGOYA-ZOKKAN-S	ON GROUND	S-1966	28 73 5	6
2 YOKKA.-SEKITAN-H	ON STRUC.	M-1065	4 4	20
1 INAE-SABASHI-H	ON STRUC.	S-1068	8 5	6
1 INAE-YAITA-H	ON STRUC.	S-1069	10 29	6

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

09:38 DEC. 30, 1986
 NORTHERN NAGANO PREF
 EPICENTER : 36° 38' N 137° 56' E
 DEPTH : 3KM MAGNITUDE : 5.9

JMA INTENSITIES
 IV : NAGANO
 III : MATSUSHIRO, MATSUMOTO,
 KARUIZAWA, SUWA
 II : IIDA, KOFU, TOKYO
 I : YOKOHAMA, KISHIWA,
 TOYAMA, WAJIMA, KANAZAWA,
 CHIBA, MAHARATSU,
 SHIZUOKA, NIIGATA,
 TSURUGA, OMAEZAKI



STATION	CONDITION	RECORD NUMBER	MAX. ACC. (GAL) (CMS) (EW) (UD)	DIST. (KM)
1 KAWASAKI-CHI-H	ON GROUND	M-1070	1 2	206

RECORD NUMBER S-1910
 STATION KASHIMA-ZOKAN-S

EARTHQUAKE DATA

DATA AND TIME 11:59 FEB.12,1986

LOCATION OF HYPOCENTER

EPCENTRAL REGION E OFF IBARAKI PREF

LATITUDE 36°25' N

LONGITUDE 141° 5' E

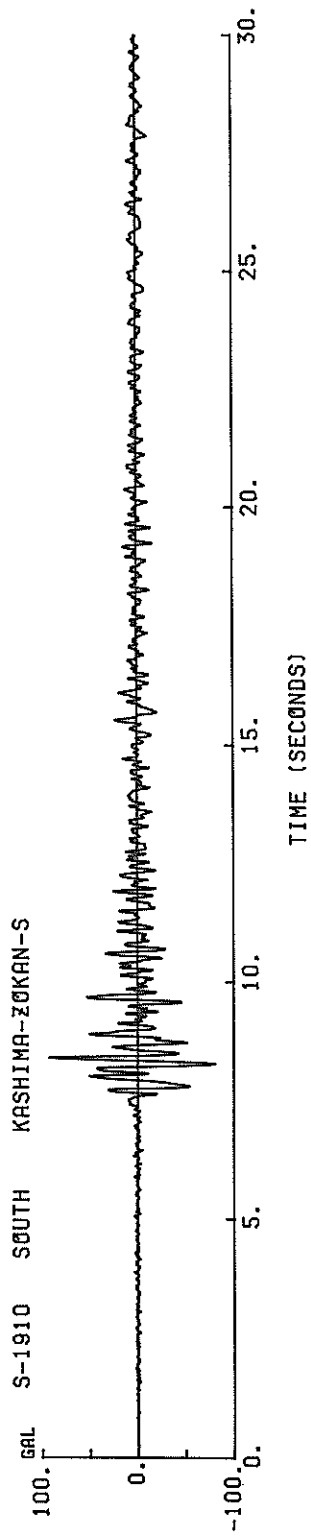
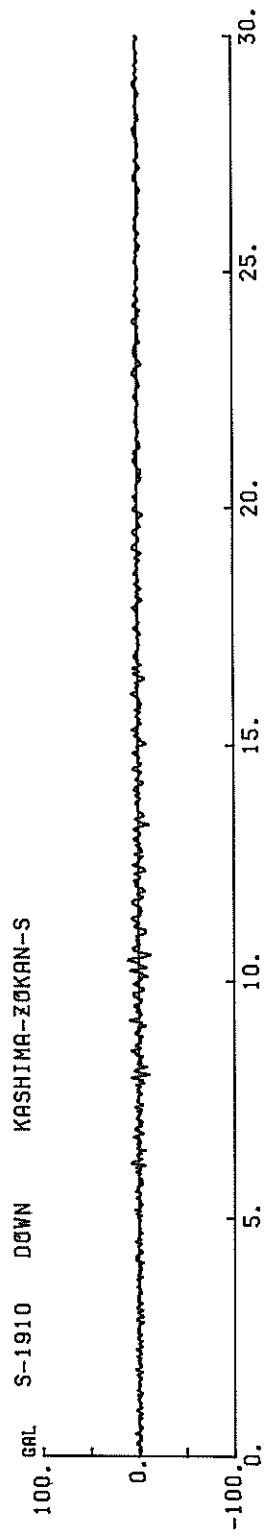
DEPTH 44KM

MAGNITUDE 6.1

PEAK VALUES OF COMPONENTS

	N S	E W	U D	HORIZONTAL*
PARAMETER OF THE VARIABLE FILTER				
FC (HZ)	0.773	0.577	1.127	
MAXIMUM ACCELERATION (GAL)				
ORIGINAL	93.0	42.9	12.7	94.9
CORRECTED	125.8	61.3	19.7	132.0
MAXIMUM VELOCITY (CM/SEC)				
FIXED FILTER	4.87	3.50	0.76	5.10
VARIABLE FILTER	4.25	3.05	0.71	4.60
MAXIMUM DISPLACEMENT (CM)				
FIXED FILTER	0.453	0.743	0.404	0.755
VARIABLE FILTER	0.280	0.284	0.034	0.383

* RESULTANT OF HORIZONTAL COMPONENTS

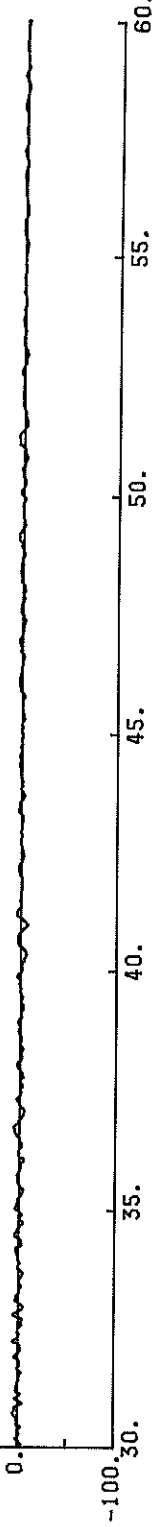


KASHIMA-ZOKAN-S

EAST

S-1910

100. GAL

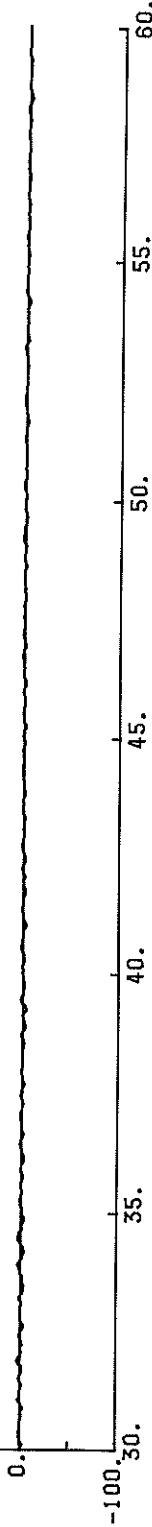


KASHIMA-ZOKAN-S

DOWN

S-1910

100. GAL

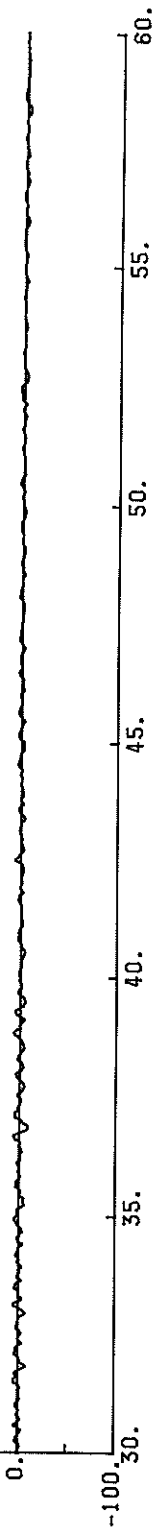


KASHIMA-ZOKAN-S

SOUTH

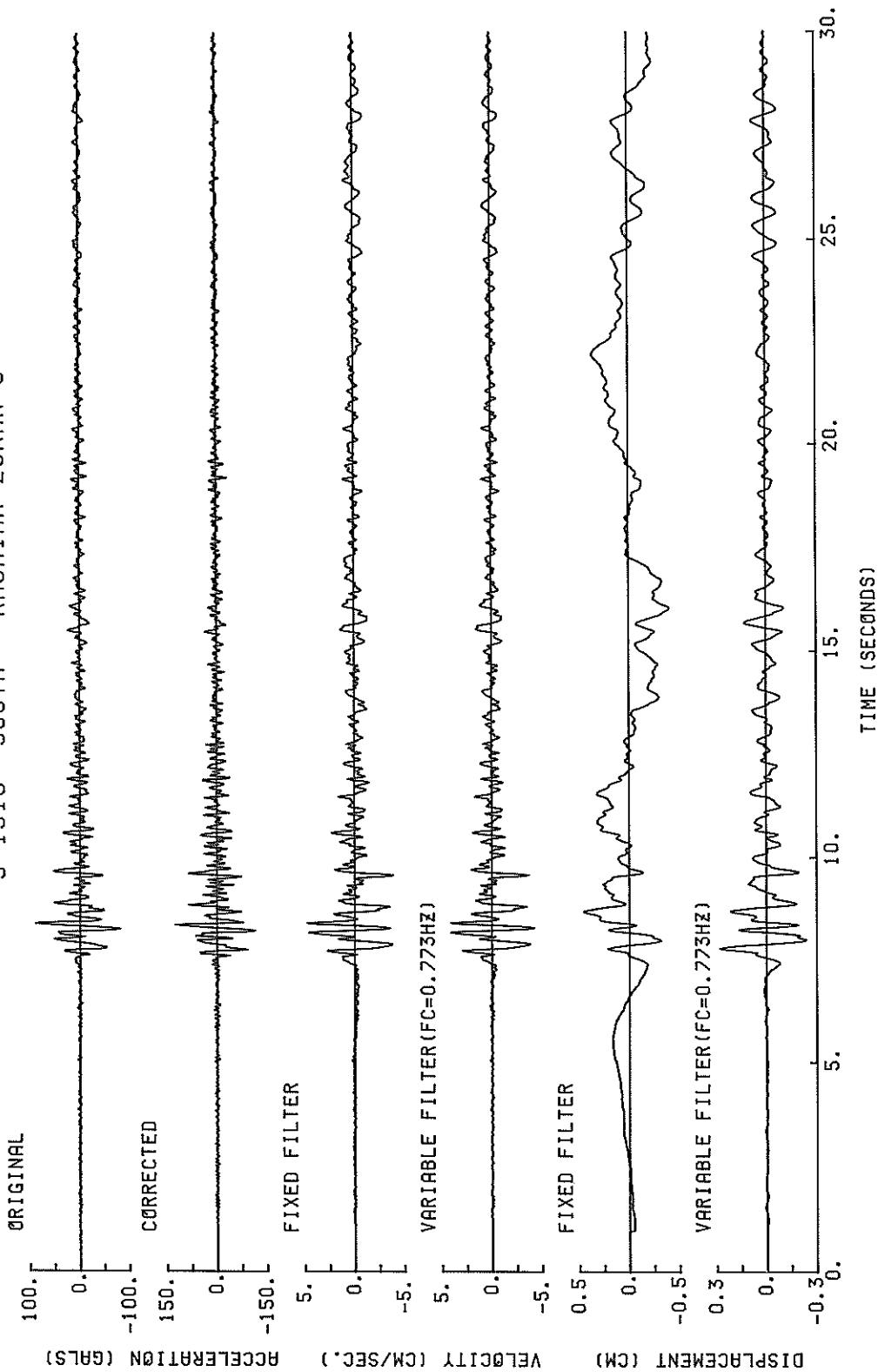
S-1910

100. GAL

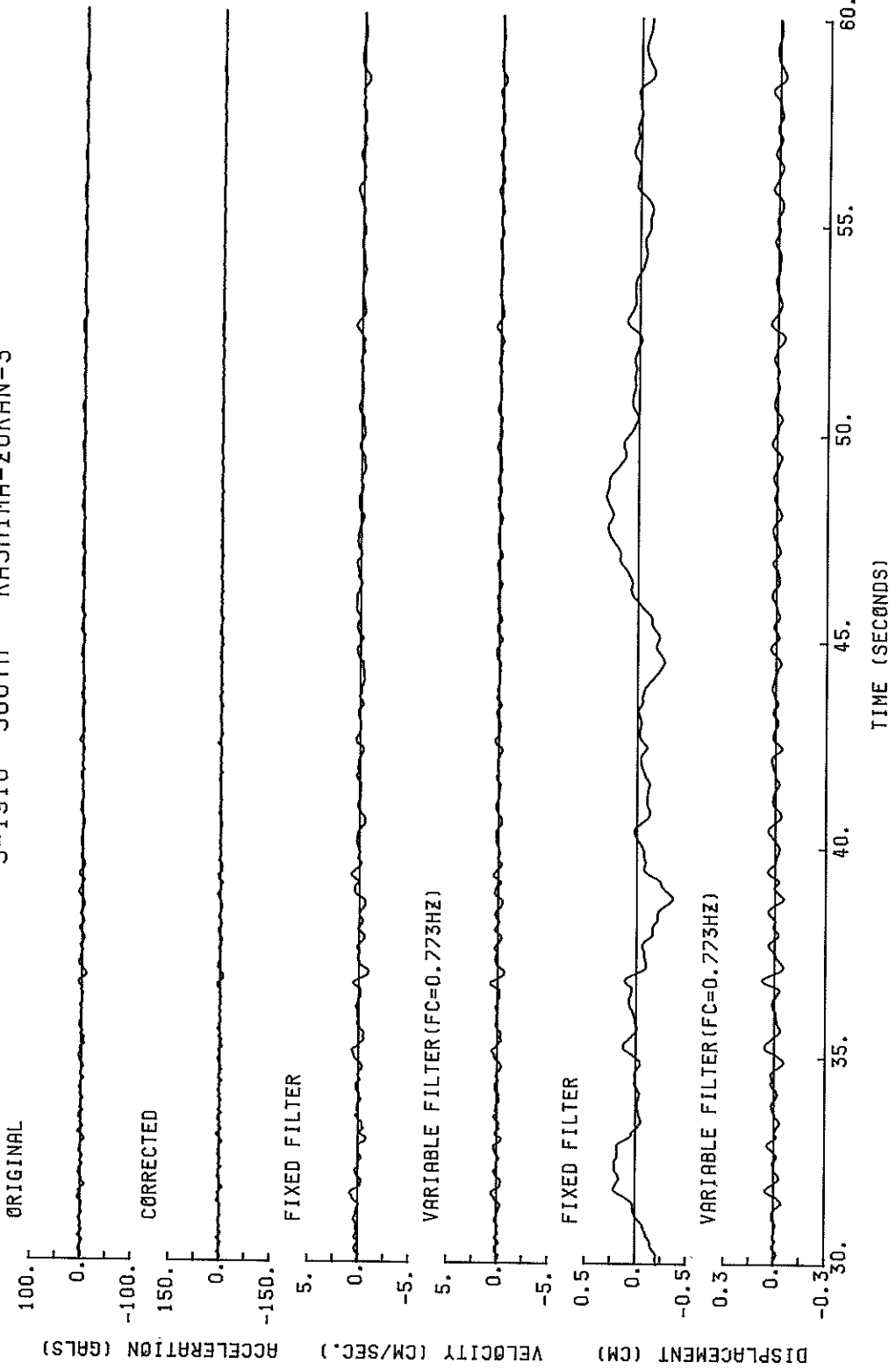


TIME (SECONDS)

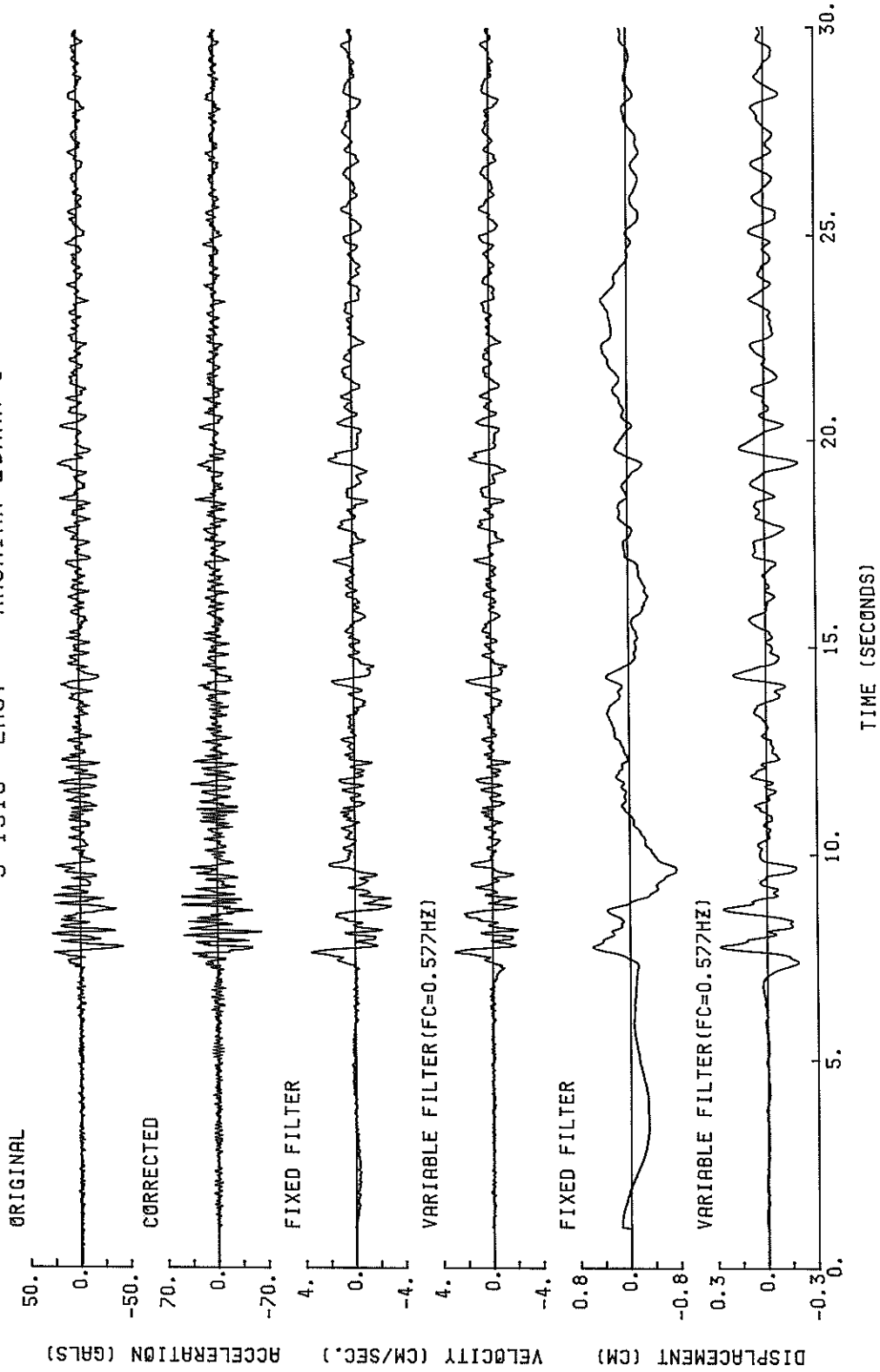
S-1910 SOUTH KASHIMA-ZOKAN-S



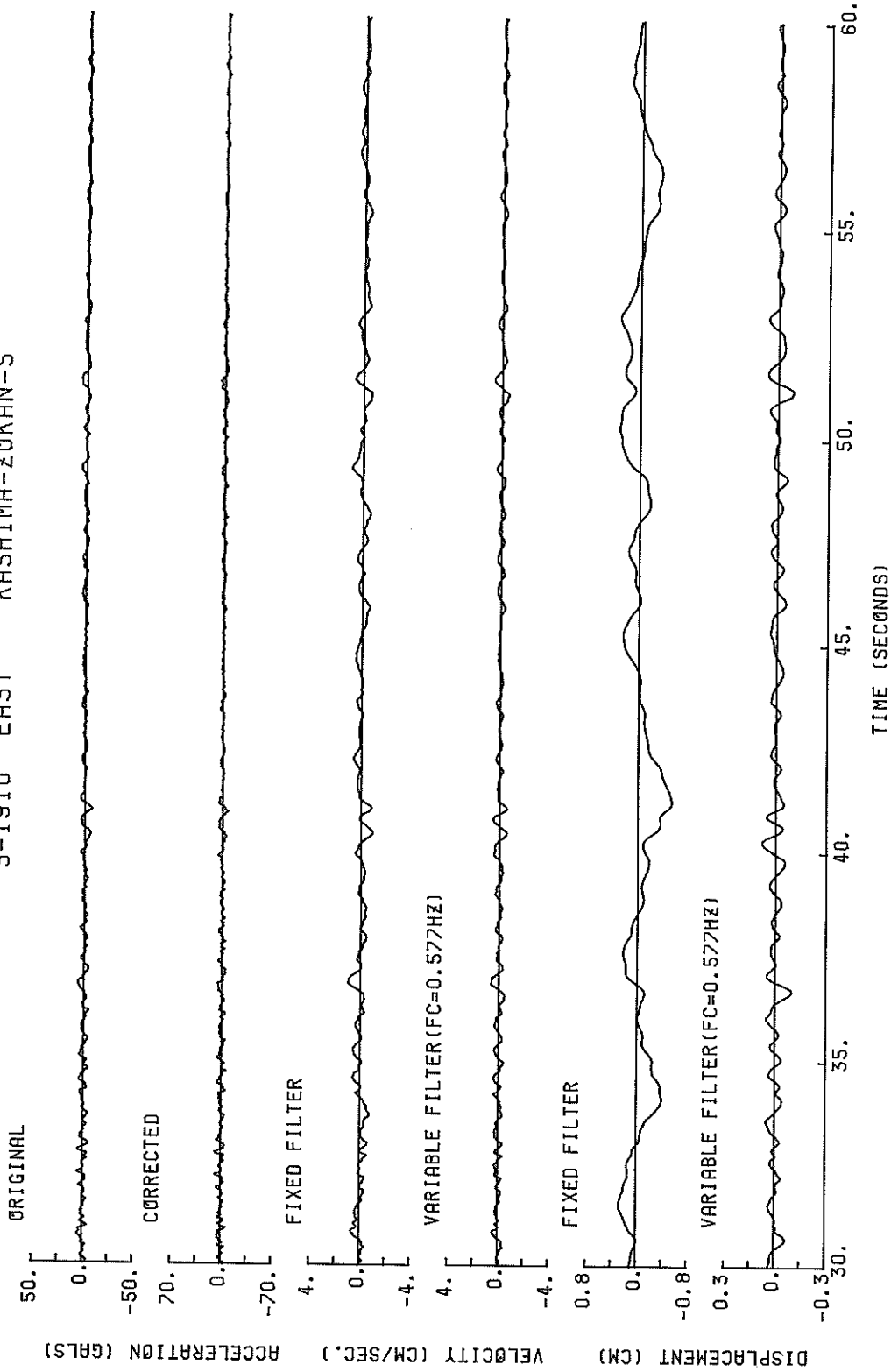
S-1910 SOUTH KASHIMA-ZOKAN-S



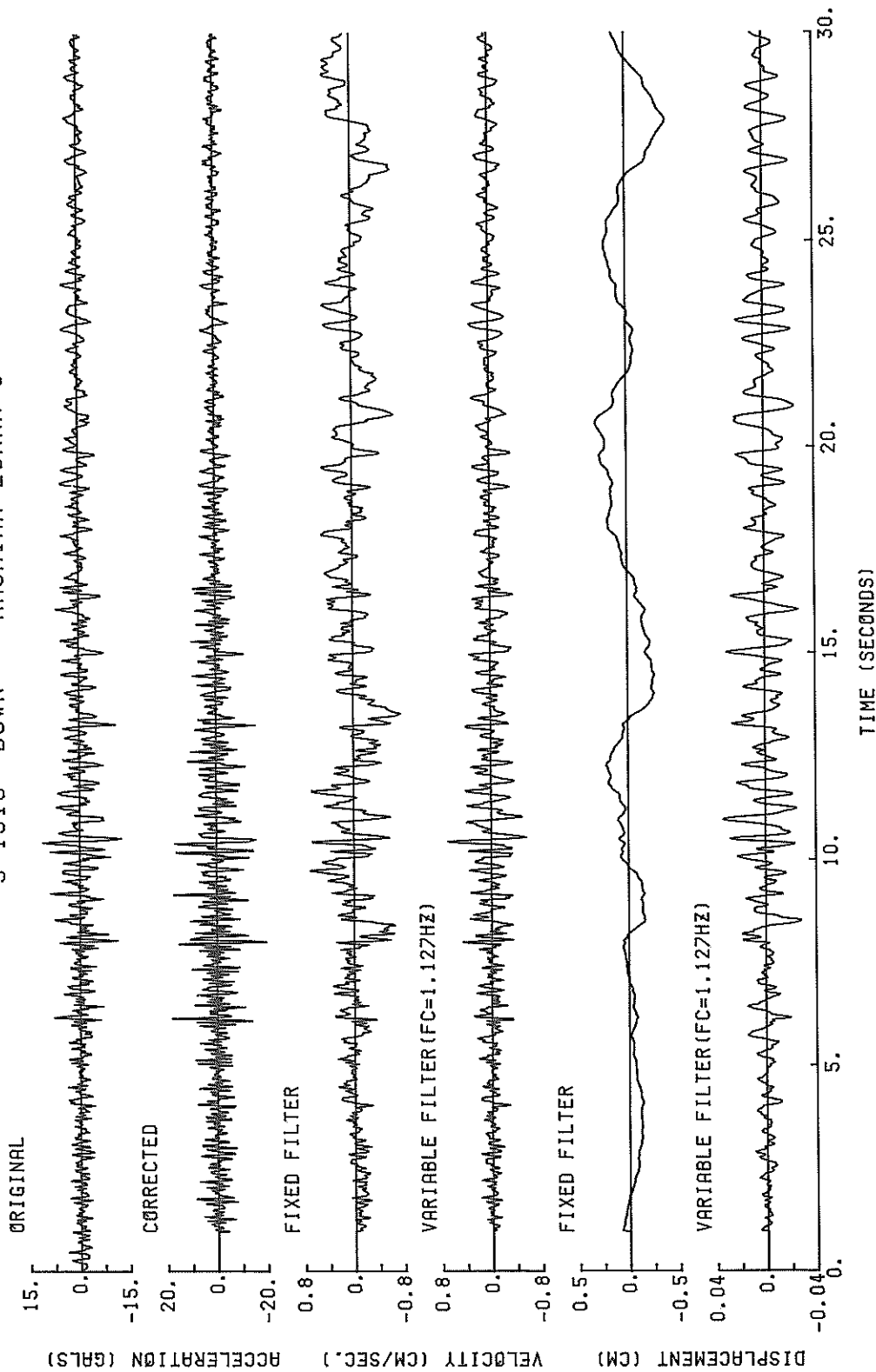
S-1910 EAST KASHIMA-ZOKKAN-S



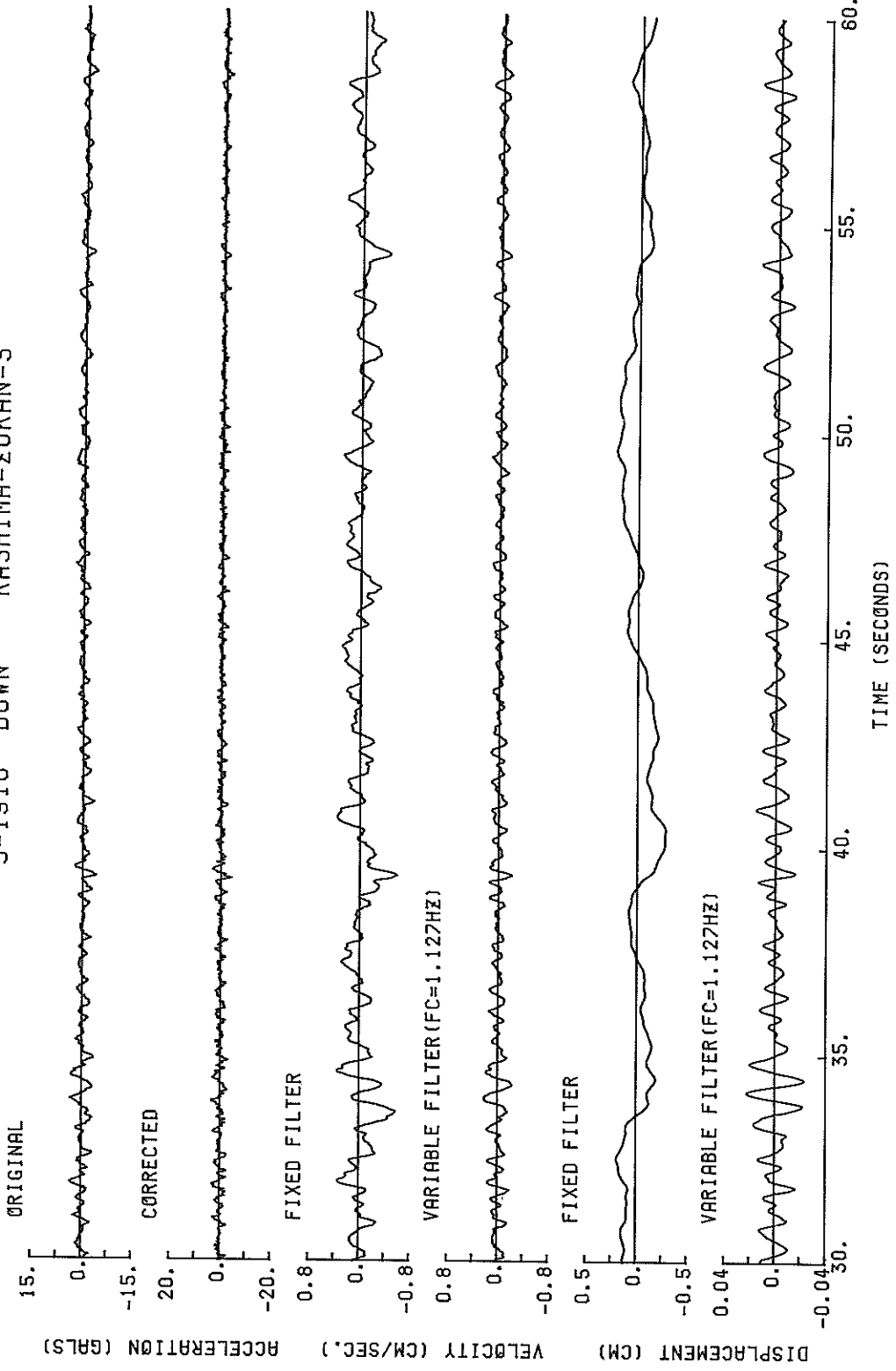
S-1910 EAST KASHIMA-ZOKAN-S



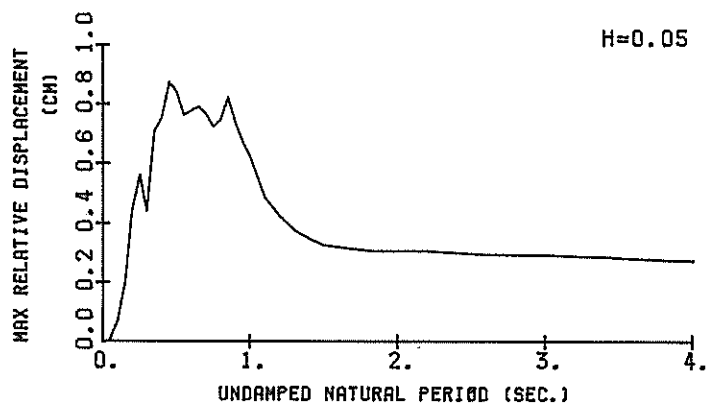
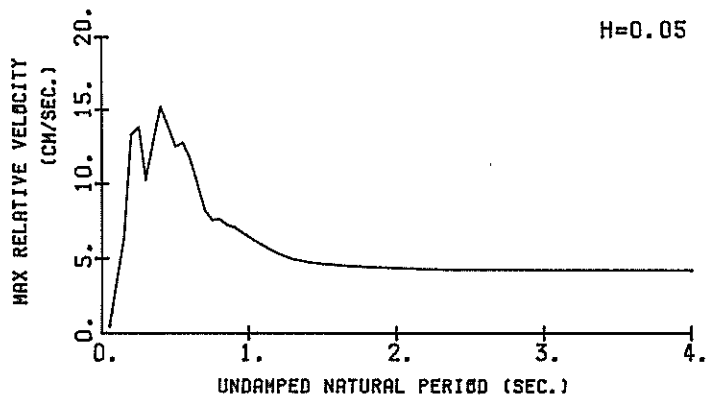
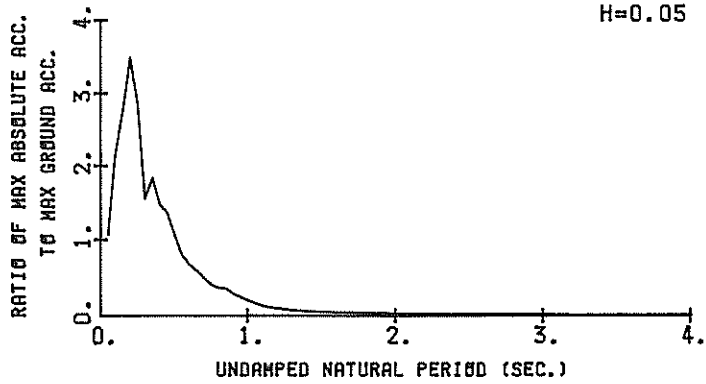
S-1910 DOWN KASHIMA-ZOKAN-S



S-1910 DOWN KASHIMA-ZOKAN-S

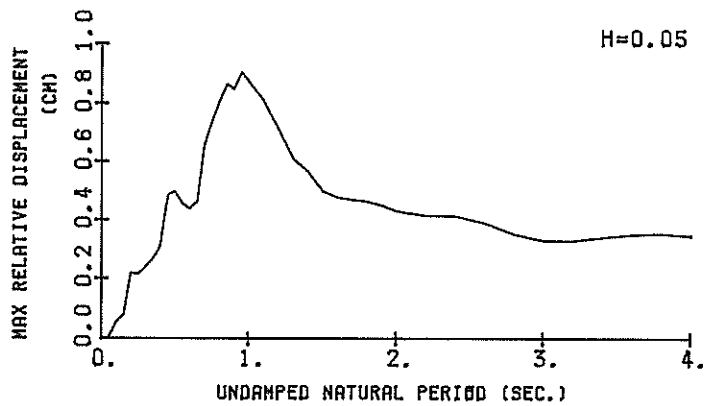
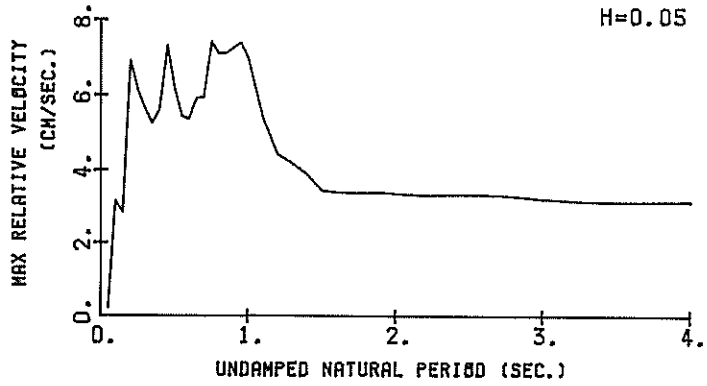
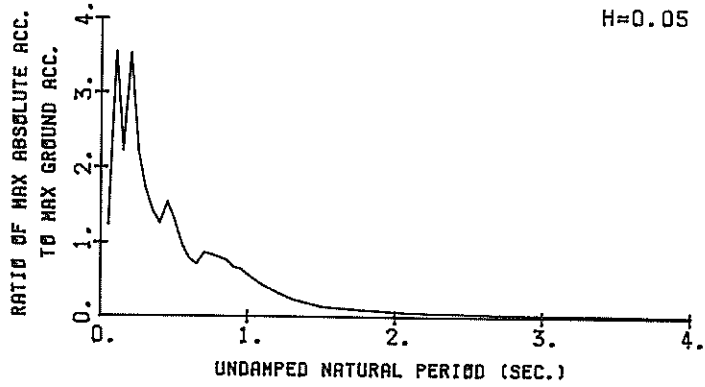


S-1910 SOUTH KASHIMA-ZOKAN-S
(1/FC=1.29 SEC.)



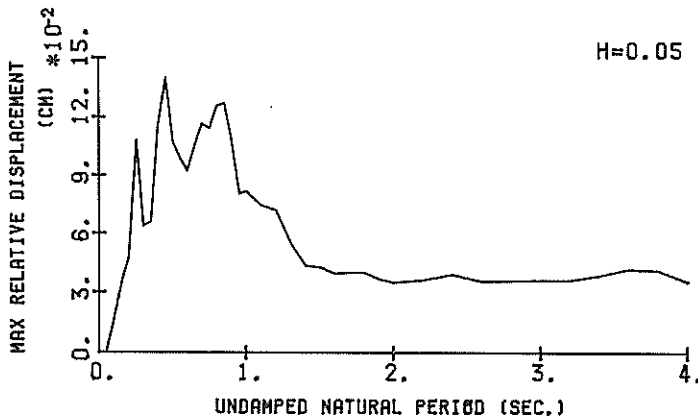
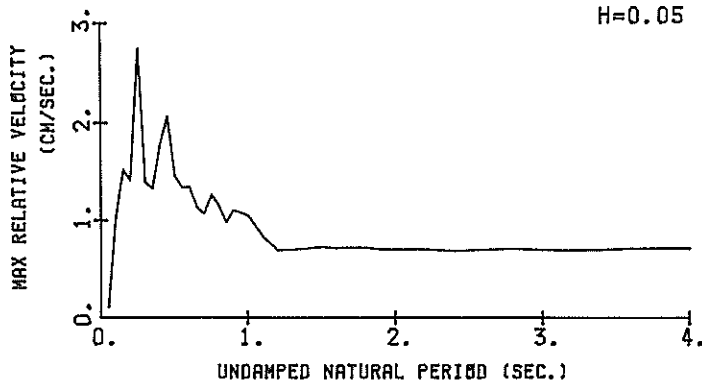
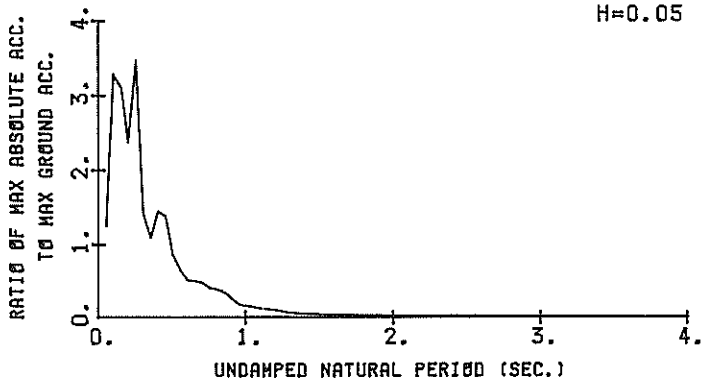
RESPONSE SPECTRA

S-1910 EAST KASHIMA-ZOKAN-S
(1/FC=1.73 SEC.)



RESPONSE SPECTRA

S-1910 DOWN KASHIMA-ZOKAN-S
(1/FC=0.89 SEC.)



RESPONSE SPECTRA

RESPONSE SPECTRUM

RECORD = S-1910 COMPONENT = SOUTH SIGNAL = GR. ACC. CORRECTION = STATION = KASHIMA-ZOKAN-S
 DATE AND TIME = 1986-2-12-11-59 SAMPLING INTERVAL = 0.0100(SEC) MAX.GROUND ACC. = 125.83 (GAL)
 TIME LENGTH = 62.49 (SEC) SKIPPED LENGTH = 0.00 (SEC)

PER	DAMPING = 0.			DAMPING = 0.025			DAMPING = 0.050			DAMPING = 0.100			DAMPING = 0.250		
	AA	RV	RD	AA	RV	RD	AA	RV	RD	AA	RV	RD	AA	RV	RD
0.05	135.8	0.67	0.009	135.4	0.45	0.009	134.8	0.44	0.009	134.7	0.42	0.009	133.9	0.39	0.008
0.10	874.0	13.79	0.221	340.8	6.44	0.086	270.3	3.37	0.068	207.3	2.46	0.052	161.8	1.69	0.039
0.15	973.4	20.15	0.355	452.8	8.56	0.247	348.6	6.42	0.199	261.3	4.36	0.146	184.6	3.12	0.099
0.20	824.9	19.15	0.633	511.4	15.75	0.515	438.4	13.27	0.444	336.0	10.46	0.338	222.0	6.05	0.206
0.25	988.6	39.19	1.565	453.8	18.49	0.716	356.2	13.77	0.561	273.6	11.14	0.425	204.5	6.83	0.282
0.30	318.0	6.30	0.180	232.6	11.41	0.530	194.5	10.26	0.442	186.1	9.27	0.413	164.9	7.11	0.320
0.35	303.5	17.68	0.942	259.5	14.81	0.803	230.4	12.89	0.708	188.8	11.19	0.570	136.0	8.21	0.348
0.40	341.3	24.23	1.383	222.8	16.56	0.901	186.1	15.20	0.750	148.8	12.85	0.589	114.0	8.85	0.395
0.45	297.8	21.43	1.528	212.8	15.54	1.089	170.7	13.81	0.871	138.5	11.81	0.687	103.3	8.42	0.441
0.50	203.0	16.11	1.285	149.5	13.36	0.947	134.6	12.50	0.843	114.8	10.95	0.702	87.4	7.84	0.444
0.55	180.9	16.35	1.386	111.4	13.70	0.850	100.4	12.71	0.762	86.2	11.11	0.628	70.1	8.09	0.411
0.60	129.5	13.12	1.181	92.4	12.38	0.839	83.8	11.66	0.775	75.0	10.38	0.662	56.8	7.91	0.445
0.65	121.2	12.57	1.297	79.9	10.25	0.851	74.8	9.90	0.791	57.0	9.23	0.686	53.5	7.54	0.473
0.70	140.2	15.60	1.740	66.4	8.38	0.820	62.4	8.23	0.767	57.5	7.93	0.675	49.3	7.01	0.482
0.75	111.9	13.62	1.594	65.5	8.78	0.933	51.4	7.58	0.721	48.1	6.73	0.642	44.4	6.45	0.476
0.80	189.1	24.23	3.065	58.1	8.89	0.940	46.4	7.66	0.745	39.5	6.46	0.595	39.5	5.92	0.460
0.85	65.3	9.37	1.194	53.8	7.66	0.982	45.5	7.26	0.822	33.6	6.52	0.609	34.9	5.47	0.437
0.90	50.2	9.01	1.031	42.0	7.49	0.860	36.5	7.11	0.737	30.2	6.47	0.572	30.8	5.10	0.415
0.95	64.0	9.75	1.463	32.3	7.57	0.736	29.9	6.77	0.672	26.8	6.50	0.565	27.2	5.02	0.413
1.00	39.2	7.45	0.993	26.7	6.84	0.675	23.2	6.44	0.624	23.4	6.09	0.542	24.2	5.03	0.409
1.10	34.6	6.09	1.060	16.6	5.94	0.507	16.3	5.86	0.489	16.7	5.66	0.455	19.4	4.96	0.395
1.20	22.4	5.37	0.815	11.9	5.35	0.432	12.0	5.33	0.425	12.6	5.27	0.415	16.6	4.84	0.379
1.30	8.6	4.99	0.368	8.9	4.94	0.375	9.2	4.96	0.378	10.1	4.96	0.380	14.4	4.72	0.362
1.40	8.1	4.84	0.402	7.1	4.80	0.349	7.4	4.76	0.351	8.3	4.76	0.353	12.6	4.61	0.357
1.50	6.0	4.71	0.340	5.9	4.68	0.331	6.1	4.66	0.323	7.0	4.61	0.332	11.2	4.52	0.353
1.60	5.5	4.55	0.342	5.2	4.54	0.351	5.4	4.55	0.325	6.1	4.53	0.315	10.1	4.45	0.321
1.70	4.4	4.45	0.325	4.5	4.47	0.321	4.8	4.48	0.316	5.5	4.48	0.306	9.2	4.42	0.311
1.80	3.8	4.44	0.311	3.9	4.43	0.311	4.2	4.44	0.309	4.9	4.43	0.303	8.4	4.40	0.303
1.90	3.4	4.40	0.310	3.5	4.40	0.309	3.8	4.40	0.307	4.5	4.40	0.301	7.8	4.38	0.296
2.00	3.1	4.34	0.315	3.2	4.35	0.312	3.5	4.36	0.308	4.2	4.36	0.301	7.3	4.36	0.290
2.20	2.6	4.25	0.318	2.7	4.27	0.313	2.9	4.29	0.308	3.6	4.31	0.300	6.5	4.33	0.281
2.40	2.1	4.24	0.307	2.2	4.25	0.304	2.5	4.26	0.302	3.1	4.28	0.296	5.9	4.30	0.280
2.60	1.7	4.23	0.298	1.9	4.24	0.297	2.1	4.24	0.296	2.4	4.26	0.293	5.4	4.28	0.279
2.80	1.5	4.21	0.297	1.6	4.22	0.295	1.8	4.23	0.294	2.2	4.24	0.290	5.0	4.27	0.279
3.00	1.3	4.21	0.298	1.4	4.21	0.295	1.6	4.21	0.293	2.2	4.23	0.289	4.6	4.25	0.279
3.20	1.1	4.21	0.296	1.2	4.21	0.293	1.5	4.21	0.291	2.0	4.21	0.287	4.3	4.24	0.278
3.40	1.0	4.20	0.290	1.1	4.21	0.289	1.3	4.21	0.287	1.8	4.21	0.284	4.0	4.23	0.277
3.60	0.9	4.20	0.283	1.0	4.20	0.283	1.2	4.20	0.282	1.7	4.21	0.281	3.8	4.23	0.277
3.80	0.8	4.19	0.277	0.9	4.20	0.278	1.1	4.20	0.278	1.5	4.21	0.278	3.6	4.22	0.275
4.00	0.7	4.20	0.273	0.8	4.20	0.275	1.0	4.21	0.276	1.4	4.21	0.277	3.4	4.22	0.275

PER = PERIOD (SEC) AA = ABSOLUTE ACC. (GAL) RV = RELATIVE VELOCITY (CM/SEC) RD = RELATIVE DISPLACEMENT (CM)

RESPONSE SPECTRUM

RECORD = S-1910 COMPONENT = EAST SIGNAL = GR. ACC. CORRECTION = MAX.GROUND ACC. = 61.29 (GAL) STATION = KASHIMA-ZOKAN-S
 DATE AND TIME = 1986-2-12-11-59 SAMPRING INTERVAL = 0.0100(SEC) MAX.GROUND ACC. = 61.29 (GAL)
 TIME LENGTH = 62.49 (SEC) SKIPPED LENGTH = 0.00 (SEC)

PER	DAMPING = 0.			DAMPING = 0.025			DAMPING = 0.050			DAMPING = 0.100			DAMPING = 0.250		
	AA	RV	RD	AA	RV	RD	AA	RV	RD	AA	RV	RD	AA	RV	RD
0.05	77.3	0.35	0.005	77.6	0.22	0.005	76.0	0.22	0.005	74.1	0.21	0.005	71.7	0.20	0.004
0.10	921.4	14.54	0.233	294.5	4.44	0.074	217.0	3.15	0.058	154.5	2.09	0.039	97.5	1.04	0.023
0.15	463.6	11.12	0.264	169.3	3.80	0.096	136.1	2.85	0.078	127.1	2.58	0.072	94.9	1.95	0.050
0.20	494.4	15.59	0.503	262.4	8.47	0.266	216.1	6.91	0.219	183.3	5.20	0.156	98.3	2.72	0.086
0.25	374.0	14.66	0.592	176.2	7.83	0.277	136.5	6.14	0.217	106.5	4.46	0.164	75.9	2.76	0.112
0.30	485.8	23.28	1.108	136.9	7.09	0.311	105.9	5.65	0.210	94.1	4.69	0.210	74.6	2.95	0.153
0.35	310.8	17.26	0.964	107.0	5.67	0.332	86.8	5.24	0.267	76.4	4.64	0.231	66.8	3.24	0.181
0.40	189.6	11.93	0.763	95.7	6.57	0.386	76.9	5.60	0.310	64.3	4.74	0.254	59.1	3.39	0.205
0.45	169.5	12.56	0.869	112.1	8.74	0.575	94.5	7.33	0.484	72.5	5.53	0.364	52.8	3.44	0.228
0.50	191.9	15.36	1.215	91.9	7.23	0.580	79.3	6.22	0.499	63.0	4.75	0.386	47.5	3.57	0.253
0.55	134.3	11.71	1.029	79.4	7.13	0.607	59.8	5.46	0.456	48.1	4.34	0.359	42.3	3.63	0.270
0.60	122.5	11.73	1.117	55.9	5.79	0.508	48.5	5.35	0.441	43.7	4.67	0.387	37.8	3.86	0.284
0.65	99.8	10.28	1.068	47.0	6.49	0.502	43.6	5.93	0.463	39.4	5.05	0.410	33.4	4.06	0.293
0.70	172.6	19.63	2.142	63.9	7.19	0.792	53.2	5.96	0.656	39.7	5.14	0.478	31.0	4.20	0.306
0.75	209.8	24.96	2.989	67.4	9.07	0.939	62.2	7.42	0.710	38.8	5.35	0.529	30.1	4.27	0.331
0.80	205.3	26.05	3.279	73.7	10.02	1.193	49.9	7.12	0.804	38.4	5.28	0.594	28.4	4.30	0.343
0.85	87.0	11.78	1.593	57.3	8.70	1.047	47.1	7.13	0.864	34.3	5.72	0.616	25.7	4.25	0.336
0.90	60.6	9.47	1.243	50.0	8.02	1.025	41.5	7.26	0.848	31.6	6.02	0.643	22.6	4.25	0.345
0.95	133.0	20.11	3.039	46.2	8.24	1.055	39.9	7.41	0.904	31.0	6.16	0.686	19.2	4.20	0.371
1.00	85.1	8.85	1.397	39.9	7.67	1.007	34.9	7.00	0.874	28.0	5.98	0.676	18.0	4.13	0.402
1.10	83.0	14.61	2.543	29.4	5.63	0.899	26.6	5.42	0.810	22.8	4.99	0.673	16.9	3.95	0.433
1.20	28.6	5.83	1.043	20.9	4.80	0.740	19.9	4.44	0.714	17.8	3.89	0.624	15.0	3.73	0.432
1.30	35.2	7.50	1.506	15.2	4.46	0.647	14.5	4.21	0.610	13.6	3.76	0.549	13.0	3.53	0.413
1.40	24.2	5.58	1.203	15.4	4.10	0.782	11.5	3.90	0.585	10.2	3.56	0.468	11.4	3.34	0.392
1.50	9.5	3.68	0.543	9.2	3.59	0.519	9.0	3.46	0.500	9.0	3.27	0.467	10.4	3.16	0.397
1.60	10.2	3.55	0.663	7.6	3.48	0.485	7.6	3.40	0.479	7.9	3.25	0.459	9.5	3.01	0.399
1.70	6.6	3.47	0.486	6.6	3.44	0.478	6.7	3.39	0.469	7.0	3.27	0.451	8.7	2.91	0.399
1.80	6.6	3.54	0.493	5.9	3.47	0.476	5.9	3.40	0.463	6.2	3.28	0.444	8.0	2.95	0.397
1.90	5.1	3.57	0.448	5.1	3.48	0.458	5.2	3.41	0.449	5.5	3.28	0.434	7.4	2.98	0.394
2.00	4.2	3.51	0.430	4.3	3.44	0.432	4.5	3.38	0.431	4.9	3.28	0.423	6.9	3.00	0.391
2.20	3.4	3.36	0.419	3.5	3.35	0.419	3.6	3.32	0.417	4.1	3.26	0.410	6.0	3.03	0.384
2.40	3.4	3.42	0.497	3.0	3.38	0.425	3.1	3.34	0.415	3.5	3.26	0.410	5.3	3.05	0.376
2.60	2.7	3.47	0.468	2.4	3.40	0.394	2.5	3.35	0.389	2.9	3.26	0.382	4.7	3.06	0.367
2.80	1.7	3.39	0.336	1.8	3.34	0.346	2.0	3.31	0.352	2.5	3.24	0.359	4.3	3.06	0.358
3.00	1.3	3.26	0.303	1.5	3.25	0.319	1.7	3.23	0.330	2.1	3.20	0.343	3.9	3.06	0.350
3.20	1.2	3.17	0.311	1.3	3.18	0.321	1.5	3.18	0.328	1.9	3.16	0.338	3.6	3.05	0.344
3.40	1.2	3.14	0.339	1.2	3.15	0.339	1.4	3.15	0.339	1.7	3.14	0.340	3.3	3.05	0.340
3.60	1.1	3.16	0.365	1.1	3.16	0.356	1.3	3.16	0.351	1.6	3.14	0.344	3.1	3.05	0.337
3.80	1.0	3.20	0.374	1.0	3.19	0.363	1.2	3.17	0.351	1.5	3.14	0.343	2.9	3.05	0.332
4.00	0.9	3.23	0.365	0.9	3.21	0.355	1.0	3.19	0.348	1.4	3.15	0.353	2.7	3.05	0.328

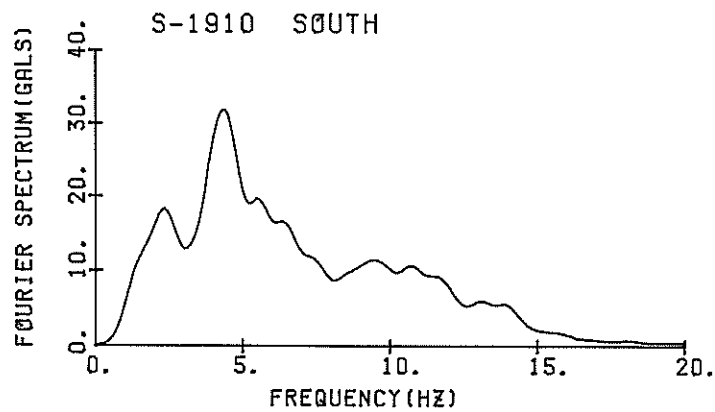
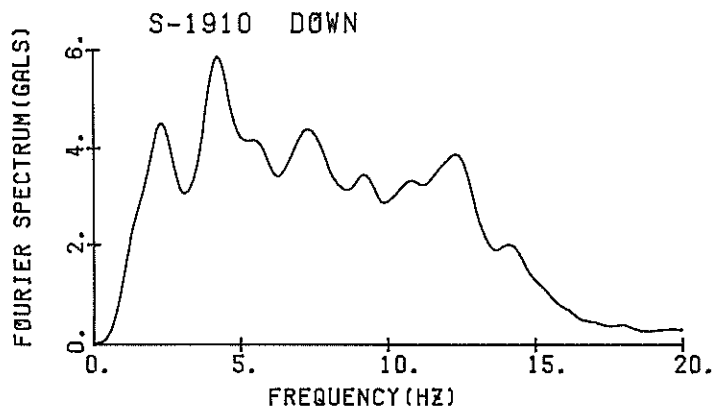
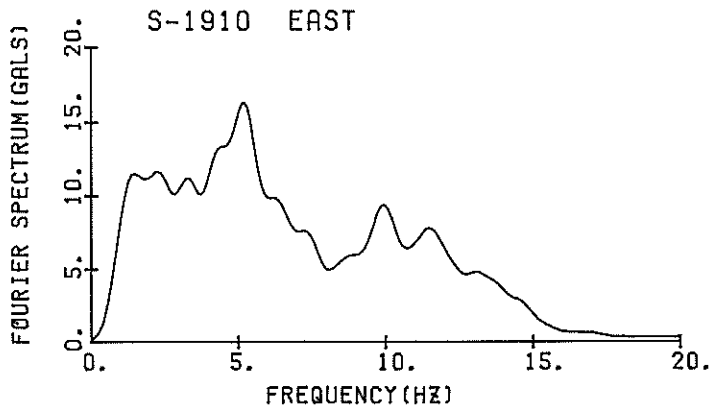
PER = PERIOD (SEC) AA = ABSOLUTE ACC. (GAL) RV = RELATIVE VELOCITY (CM/SEC) RD = RELATIVE DISPLACEMENT (CM)

RESPONSE SPECTRUM

RECORD = S-1910 COMPONENT = DOWN SIGNAL = GR. ACC. CORRECTION = STATION = KASHIMA-ZOKAN-S
 DATE AND TIME = 1986-2-12-11-59 SAMPRING INTERVAL = 0.0100(SEC) MAX.GROUND ACC. = 19.75 (GAL)
 TIME LENGTH = 62.49 (SEC) SKIPPED LENGTH = 0.00 (SEC)

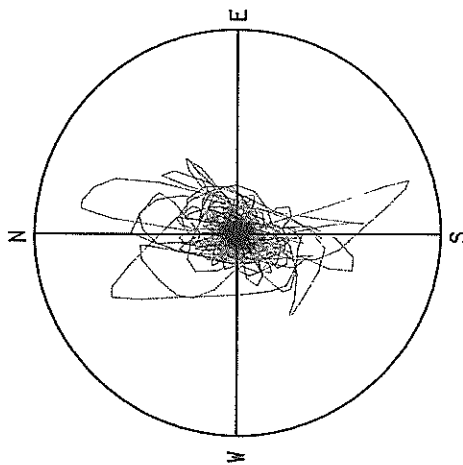
PER	DAMPING = 0.0			DAMPING = 0.025			DAMPING = 0.050			DAMPING = 0.100			DAMPING = 0.250		
	AA	RV	RD	AA	RV	RD	AA	RV	RD	AA	RV	RD	AA	RV	RD
0.05	48.7	0.33	0.003	26.7	0.13	0.002	25.0	0.11	0.002	24.7	0.11	0.002	24.3	0.10	0.001
0.10	231.7	3.64	0.059	79.7	1.23	0.020	65.0	1.00	0.016	50.3	0.72	0.013	35.3	0.42	0.008
0.15	233.5	5.47	0.133	75.5	1.91	0.043	61.5	1.53	0.035	46.5	1.09	0.026	28.9	0.61	0.015
0.20	136.2	4.32	0.138	60.9	1.94	0.062	47.0	1.41	0.048	42.5	1.26	0.042	31.0	0.76	0.029
0.25	301.0	11.96	0.477	95.7	3.77	0.151	68.0	2.75	0.108	46.8	1.78	0.072	28.9	0.95	0.040
0.30	114.2	5.47	0.260	34.7	1.67	0.079	28.0	1.40	0.064	23.2	1.20	0.052	21.2	0.94	0.041
0.35	61.3	3.41	0.190	26.1	1.53	0.081	21.5	1.32	0.066	18.4	1.14	0.056	16.4	0.94	0.043
0.40	118.1	7.50	0.478	38.5	2.49	0.156	28.7	1.77	0.116	20.1	1.19	0.079	13.2	0.98	0.044
0.45	176.1	14.58	0.903	58.9	2.84	0.199	27.4	2.07	0.140	17.6	1.42	0.088	10.9	0.98	0.048
0.50	494.5	3.92	0.313	19.9	1.63	0.126	17.1	1.46	0.107	14.0	1.14	0.086	9.7	0.96	0.050
0.55	59.2	5.23	0.454	17.0	1.51	0.130	13.0	1.34	0.099	10.0	1.09	0.075	7.9	0.94	0.047
0.60	38.6	3.73	0.352	14.2	1.73	0.129	10.2	1.35	0.092	7.8	1.08	0.067	7.1	0.90	0.047
0.65	38.5	4.04	0.412	13.2	1.36	0.141	9.9	1.14	0.106	7.1	0.97	0.074	6.4	0.85	0.047
0.70	35.6	3.99	0.441	12.2	1.34	0.151	9.4	1.07	0.116	6.6	0.94	0.080	5.6	0.79	0.047
0.75	19.6	2.49	0.280	10.8	1.54	0.154	8.1	1.68	0.114	5.5	0.96	0.075	5.0	0.80	0.045
0.80	35.5	4.49	0.575	11.9	1.68	0.193	7.9	1.15	0.125	5.3	0.87	0.084	4.5	0.80	0.048
0.85	19.3	2.68	0.353	8.1	1.24	0.149	7.0	0.98	0.127	5.2	0.88	0.092	4.1	0.81	0.050
0.90	16.4	2.44	0.336	6.7	1.26	0.137	5.3	1.11	0.108	4.3	0.96	0.085	3.7	0.82	0.051
0.95	7.0	1.05	0.159	4.2	1.11	0.095	3.6	1.08	0.081	3.4	0.98	0.074	3.3	0.82	0.050
1.00	6.6	1.28	0.167	4.2	1.12	0.106	3.3	1.05	0.082	2.8	0.96	0.067	3.0	0.82	0.047
1.10	5.2	1.02	0.159	2.8	0.81	0.087	2.5	0.83	0.075	2.2	0.84	0.065	2.4	0.80	0.046
1.20	2.5	0.67	0.090	2.3	0.64	0.083	2.0	0.59	0.072	1.7	0.75	0.060	2.1	0.77	0.044
1.30	2.0	0.70	0.087	1.5	0.69	0.084	1.3	0.70	0.055	1.2	0.72	0.049	1.8	0.75	0.041
1.40	1.3	0.68	0.065	1.0	0.70	0.047	0.9	0.71	0.043	1.0	0.72	0.041	1.7	0.73	0.039
1.50	0.9	0.76	0.051	0.8	0.74	0.045	0.8	0.73	0.042	0.9	0.72	0.040	1.6	0.73	0.038
1.60	0.8	0.69	0.055	0.7	0.71	0.041	0.7	0.72	0.039	0.8	0.72	0.039	1.4	0.72	0.037
1.70	0.6	0.74	0.043	0.6	0.73	0.041	0.6	0.72	0.040	0.7	0.72	0.039	1.4	0.72	0.037
1.80	0.6	0.74	0.049	0.5	0.73	0.042	0.5	0.72	0.040	0.6	0.72	0.038	1.3	0.72	0.036
1.90	0.4	0.68	0.040	0.4	0.70	0.037	0.4	0.70	0.036	0.6	0.71	0.036	1.2	0.71	0.035
2.00	0.4	0.70	0.039	0.3	0.70	0.034	0.4	0.70	0.035	0.5	0.71	0.035	1.2	0.71	0.035
2.20	0.3	0.72	0.040	0.3	0.71	0.037	0.3	0.70	0.036	0.4	0.70	0.035	1.0	0.71	0.034
2.40	0.3	0.65	0.049	0.3	0.67	0.042	0.3	0.68	0.039	0.4	0.69	0.036	0.9	0.70	0.033
2.60	0.2	0.71	0.043	0.2	0.70	0.036	0.3	0.70	0.035	0.4	0.70	0.034	0.9	0.70	0.033
2.80	0.2	0.73	0.042	0.2	0.71	0.038	0.2	0.71	0.036	0.3	0.70	0.034	0.8	0.70	0.033
3.00	0.2	0.69	0.047	0.2	0.69	0.039	0.2	0.70	0.036	0.3	0.70	0.033	0.7	0.70	0.033
3.20	0.2	0.67	0.042	0.2	0.68	0.038	0.2	0.69	0.036	0.3	0.70	0.033	0.7	0.70	0.033
3.40	0.2	0.69	0.046	0.2	0.69	0.042	0.2	0.70	0.038	0.3	0.70	0.035	0.7	0.70	0.033
3.60	0.2	0.72	0.052	0.2	0.71	0.046	0.2	0.71	0.042	0.3	0.70	0.037	0.6	0.70	0.034
3.80	0.1	0.73	0.050	0.1	0.72	0.045	0.2	0.72	0.041	0.2	0.71	0.037	0.6	0.70	0.034
4.00	0.1	0.72	0.042	0.1	0.72	0.036	0.1	0.71	0.036	0.2	0.71	0.035	0.6	0.70	0.034

PER = PERIOD (SEC) AA = ABSOLUTE ACC. (GAL) RV = RELATIVE VELOCITY (CM/SEC) RD = RELATIVE DISPLACEMENT (CM)



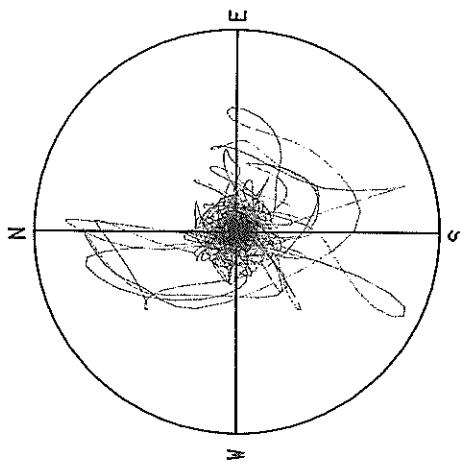
FOURIER SPECTRA

S-1910 KASHIMA-ZOKAN-S



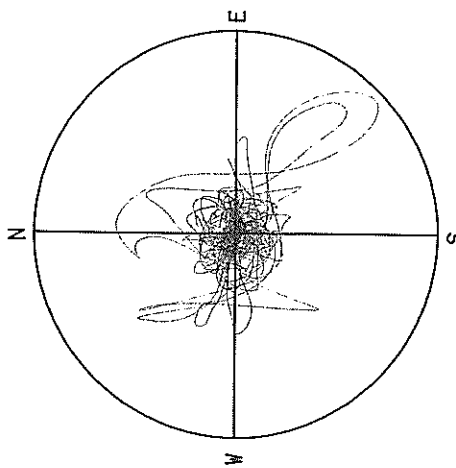
ACCELERATION
R=150.0GAL
MAX=132.0GAL

S-1910 KASHIMA-ZOKAN-S



VELOCITY
R=5.0 CM/SEC.
MAX=4.6 CM/SEC.

S-1910 KASHIMA-ZOKAN-S



DISPLACEMENT
R=0.40 CM
MAX=0.38 CM

RECORD NUMBER M-1014
 STATION HANASAKI-M

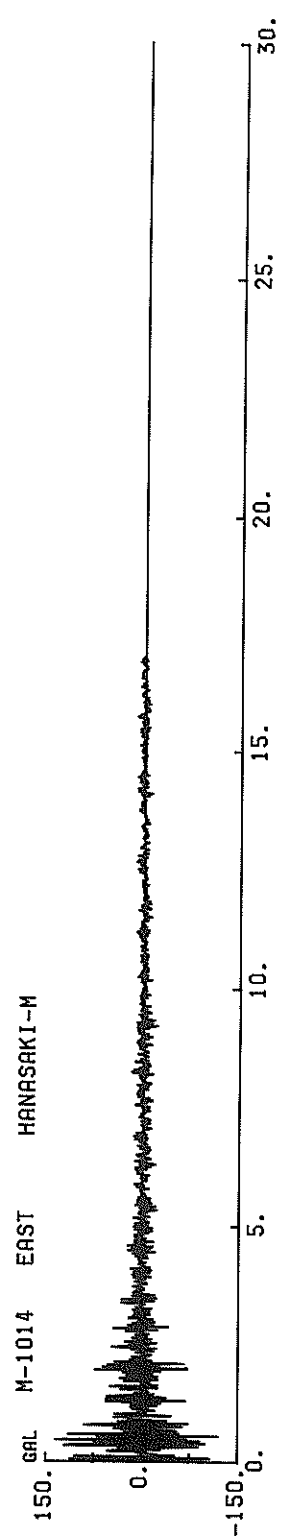
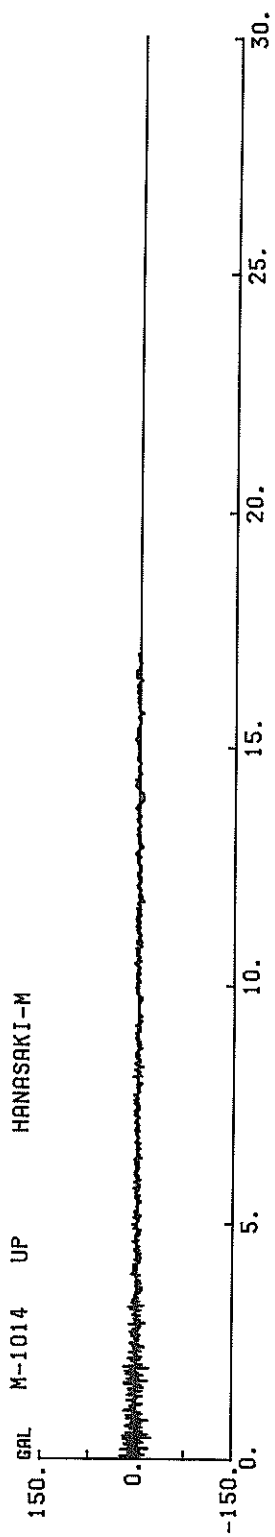
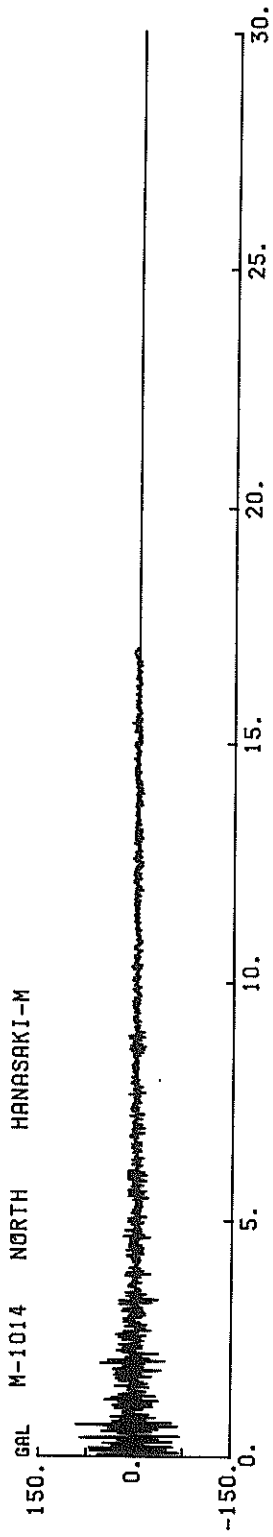
EARTHQUAKE DATA

DATA AND TIME 12:40 MAY 31, 1986
 LOCATION OF HYPOCENTER
 EPICENTRAL REGION OFF NEMURO PENINSULA
 LATITUDE 43° 4' N
 LONGITUDE 145° 41' E
 DEPTH 86KM
 MAGNITUDE 5.7

PEAK VALUES OF COMPONENTS

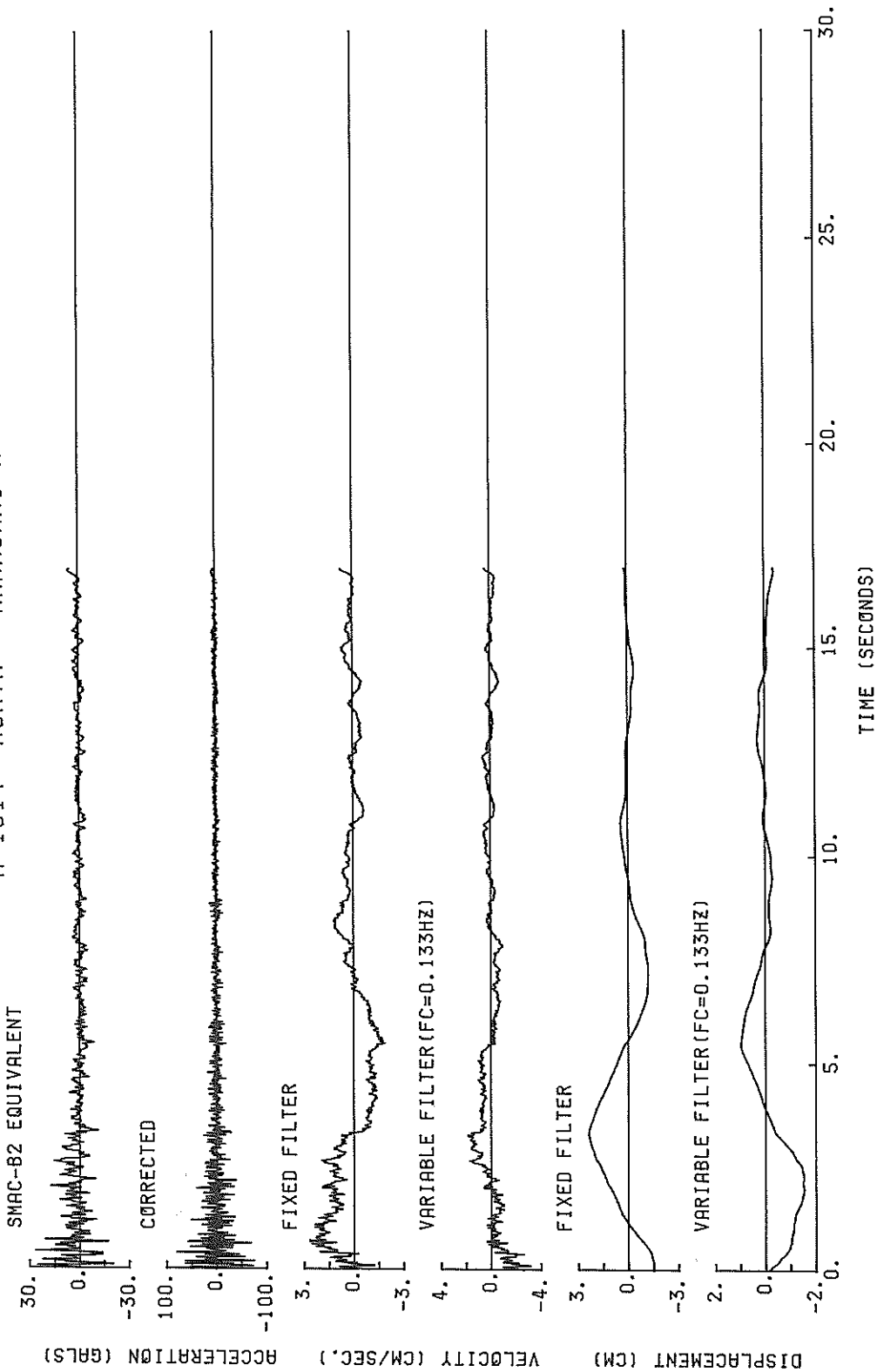
	N S	E W	U D	HORIZONTAL*
PARAMETER OF THE VARIABLE FILTER				
FC (HZ)	0.133	0.255	0.279	
MAXIMUM ACCELERATION (GAL)				
SMAC-B2 EQUIVALENT	26.4	38.8	7.9	41.7
ORIGINAL	91.4	135.2	24.9	135.2
CORRECTED	91.1	137.5	27.7	137.5
MAXIMUM VELOCITY (CM/SEC)				
FIXED FILTER	2.87	3.72	1.27	3.91
VARIABLE FILTER	3.12	3.80	0.69	4.32
MAXIMUM DISPLACEMENT (CM)				
FIXED FILTER	2.360	1.700	1.033	2.446
VARIABLE FILTER	1.531	0.671	0.212	1.534

* RESULTANT OF HORIZONTAL COMPONENTS

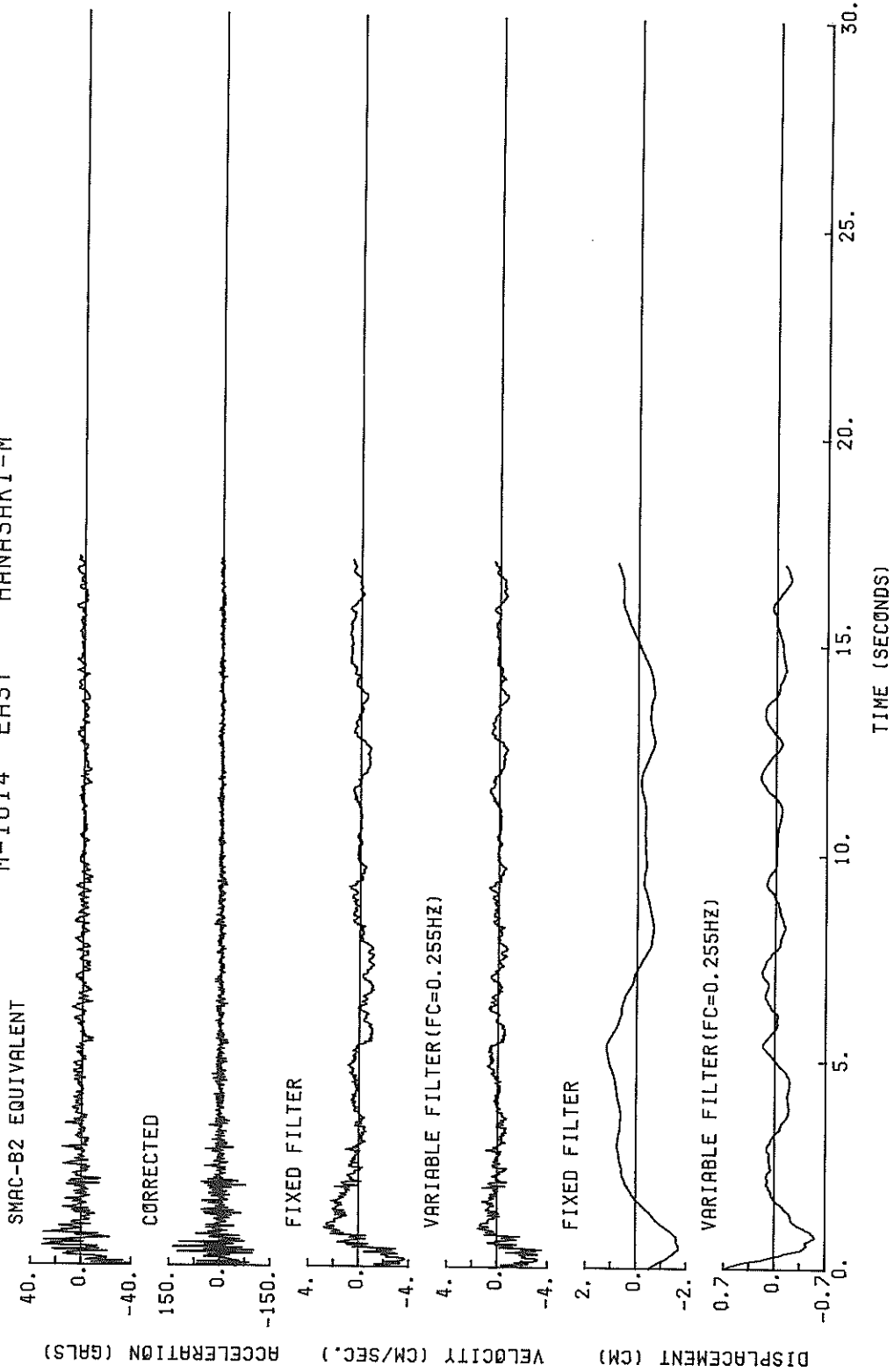


TIME (SECONDS)

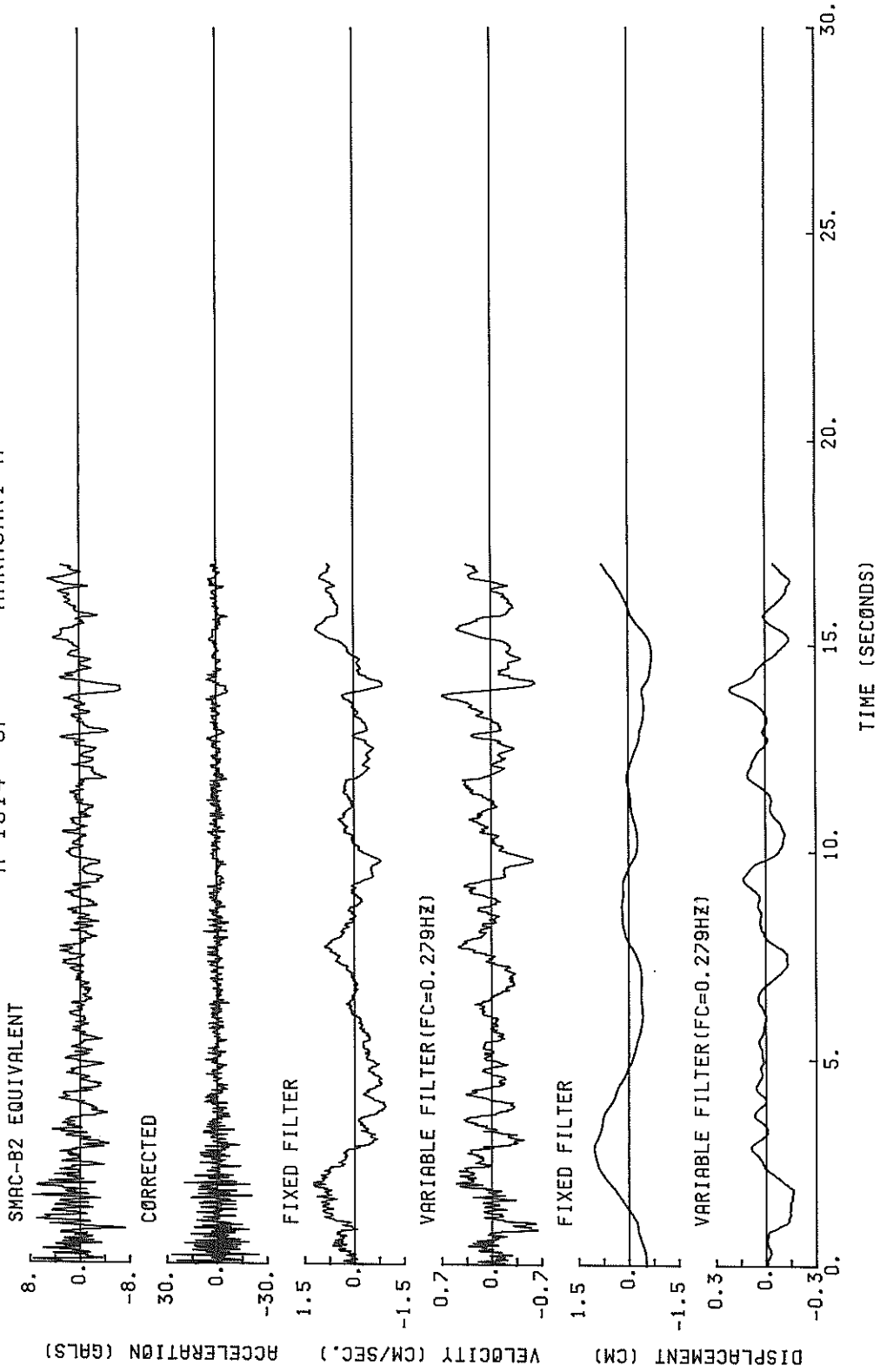
M-1014 NORTH HANASAKI-M



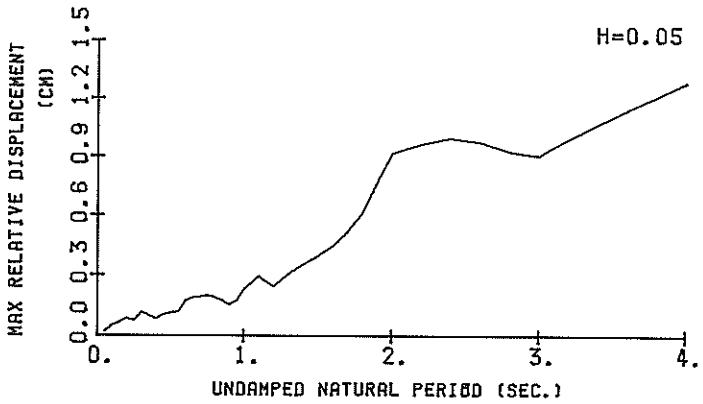
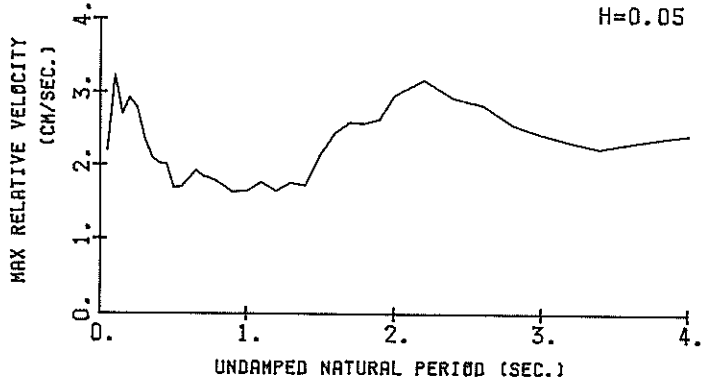
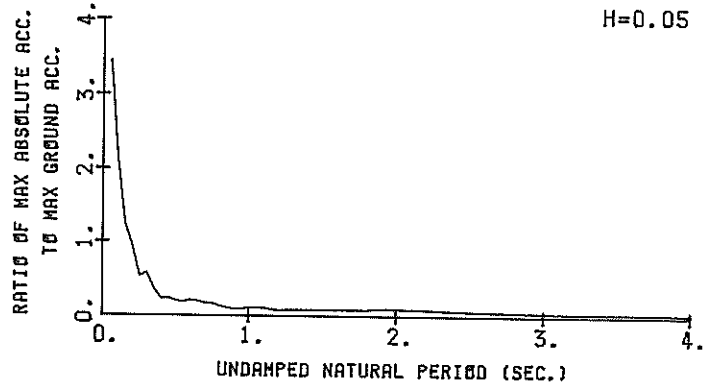
M-1014 EAST HANASAKI-M



M-1014 UP HANASAKI -M

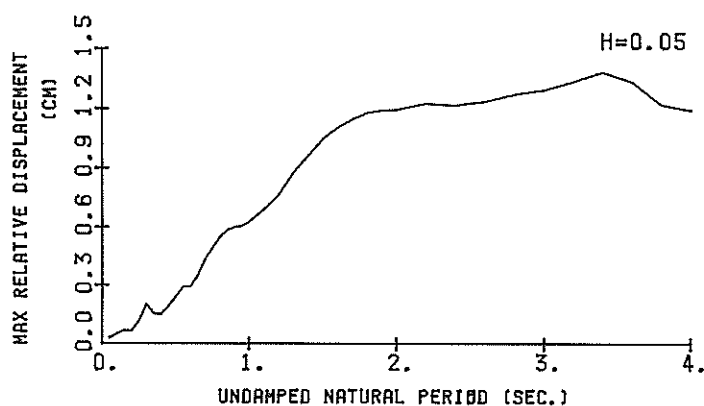
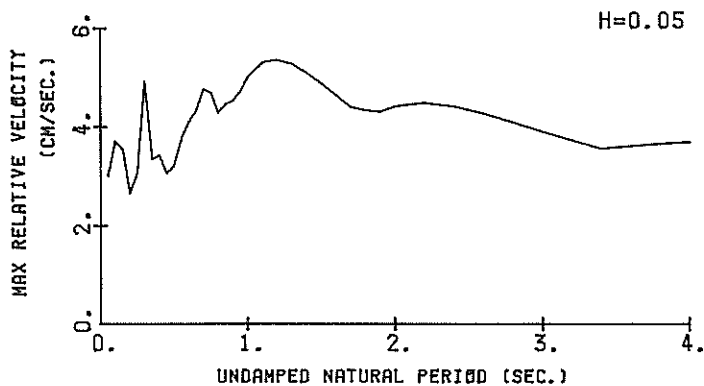
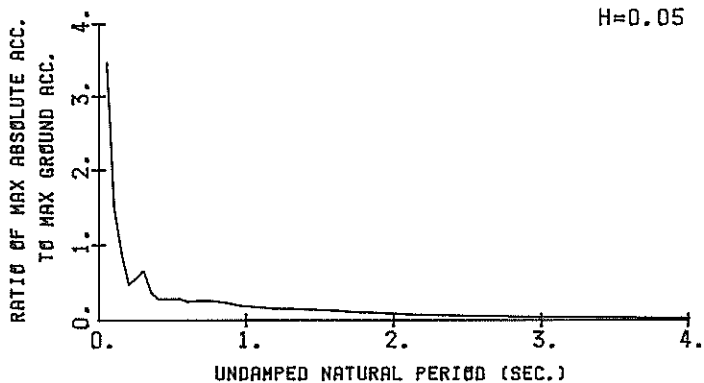


M-1014 NORTH HANASAKI-M
(1/FC=7.54 SEC.)



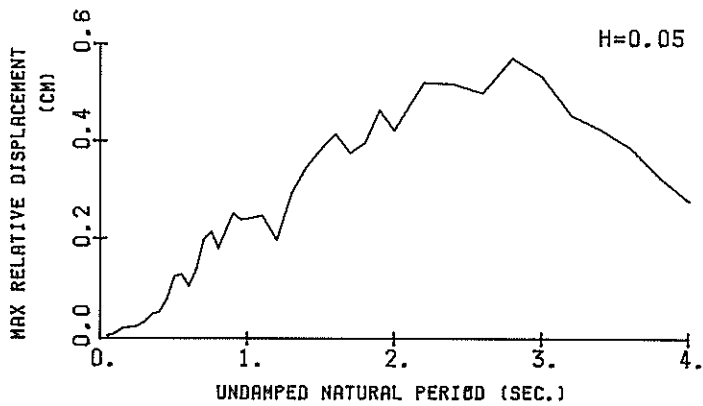
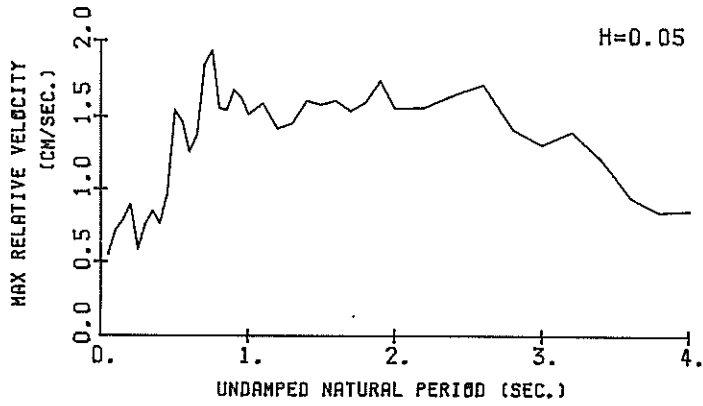
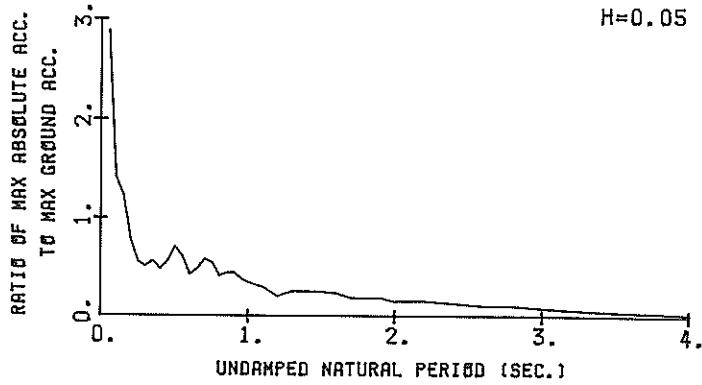
RESPONSE SPECTRA

M-1014 EAST HANASAKI-M
(1/FC=3.93 SEC.)



RESPONSE SPECTRA

M-1014 UP HANASAKI-M
(1/FC=3.58 SEC.)



RESPONSE SPECTRA

RESPONSE SPECTRUM

RECORD = M-1014
 DATE AND TIME = 1986-05-31-12-40
 TIME LENGTH = 16.99 (SEC)

COMPONENT = NORTH
 SIGNAL = GR. ACC.
 SAMPLING INTERVAL = 0.0100(SEC)
 SKIPPED LENGTH = 0.00 (SEC)

CORRECTION =
 MAX.GROUND ACC. = 91.11 (GAL)
 STATION = HANASAKI-M

PER	DAMPING = 0.			DAMPING = 0.025			DAMPING = 0.050			DAMPING = 0.100			DAMPING = 0.250		
	AA	RV	RD	AA	RV	RD	AA	RV	RD	AA	RV	RD	AA	RV	RD
0.05	529.7	4.04	0.034	399.5	2.90	0.055	312.9	2.21	0.020	212.0	1.51	0.013	149.5	0.87	0.009
0.10	247.9	3.89	0.063	219.1	3.54	0.056	195.5	3.23	0.050	162.0	2.74	0.040	114.3	1.82	0.026
0.15	14.4	3.42	0.082	127.3	2.98	0.073	113.1	2.69	0.065	95.7	2.24	0.053	72.1	1.79	0.034
0.20	155.2	4.97	0.157	100.9	3.28	0.102	86.8	2.93	0.087	67.8	2.46	0.067	50.4	1.84	0.040
0.25	124.2	4.86	0.197	61.5	2.90	0.097	47.4	2.78	0.075	60.5	2.54	0.062	32.0	1.96	0.040
0.30	115.8	5.59	0.264	71.5	3.17	0.162	51.5	2.37	0.117	35.8	1.80	0.080	26.5	1.75	0.045
0.35	61.9	3.58	0.192	41.6	2.56	0.129	32.4	2.11	0.100	24.9	1.94	0.075	22.5	1.57	0.048
0.40	33.5	2.39	0.156	22.5	2.13	0.091	20.7	2.03	0.083	19.0	1.86	0.073	19.1	1.53	0.052
0.45	47.9	3.41	0.246	22.5	2.34	0.116	20.9	2.01	0.106	18.5	1.58	0.091	16.6	1.41	0.063
0.50	46.8	3.65	0.295	22.8	1.97	0.145	18.5	1.70	0.114	16.6	1.54	0.098	14.7	1.43	0.070
0.55	27.2	2.46	0.208	20.4	1.93	0.156	15.9	1.70	0.121	13.2	1.59	0.093	13.1	1.45	0.070
0.60	42.6	3.89	0.388	24.5	2.29	0.233	19.2	1.80	0.174	14.3	1.68	0.127	11.8	1.48	0.076
0.65	4.9	4.44	0.459	24.9	2.48	0.266	17.8	1.93	0.189	13.0	1.73	0.134	10.7	1.49	0.081
0.70	51.7	5.65	0.641	22.0	2.51	0.273	15.6	1.85	0.193	11.2	1.74	0.132	9.8	1.51	0.092
0.75	21.6	2.72	0.308	17.1	2.06	0.243	14.3	1.82	0.202	10.4	1.73	0.143	9.1	1.52	0.100
0.80	28.3	4.00	0.458	15.4	1.94	0.250	11.9	1.77	0.191	9.5	1.69	0.147	8.6	1.53	0.104
0.85	12.6	1.81	0.231	10.9	1.74	0.199	9.8	1.71	0.176	8.3	1.64	0.147	8.3	1.54	0.111
0.90	13.7	1.99	0.280	8.5	1.71	0.173	7.7	1.64	0.156	7.7	1.62	0.142	8.0	1.55	0.120
0.95	19.6	2.89	0.449	10.4	1.66	0.238	7.8	1.65	0.176	7.4	1.62	0.152	7.8	1.56	0.128
1.00	15.2	2.77	0.386	10.5	1.97	0.285	9.2	1.65	0.233	7.1	1.63	0.174	7.6	1.57	0.136
1.10	29.1	5.57	0.893	14.4	2.64	0.441	9.3	1.77	0.298	6.7	1.63	0.202	7.1	1.58	0.151
1.20	9.3	1.82	0.338	7.8	1.67	0.286	6.8	1.66	0.248	6.0	1.64	0.199	6.7	1.59	0.163
1.30	18.4	3.93	0.789	9.8	2.31	0.420	7.3	1.77	0.310	6.1	1.64	0.247	6.3	1.60	0.174
1.40	8.9	2.02	0.444	8.0	1.81	0.397	7.2	1.74	0.357	6.2	1.65	0.293	5.9	1.60	0.202
1.50	9.0	2.46	0.513	8.0	2.29	0.451	7.1	2.15	0.399	5.9	1.92	0.318	5.7	1.61	0.235
1.60	14.2	3.46	0.918	8.7	2.64	0.561	7.0	2.45	0.448	5.6	2.14	0.353	5.7	1.61	0.267
1.70	9.3	3.04	0.679	8.1	2.80	0.591	7.1	2.59	0.518	5.8	2.25	0.404	5.7	1.64	0.299
1.80	17.0	5.36	1.393	10.1	3.16	0.830	7.6	2.58	0.613	6.4	2.26	0.497	5.6	1.65	0.333
1.90	21.6	6.89	1.978	12.2	3.96	1.119	8.4	2.64	0.767	6.7	2.17	0.574	5.6	1.65	0.368
2.00	15.9	5.26	1.607	11.4	3.60	1.157	9.1	2.96	0.915	6.5	2.26	0.620	5.5	1.63	0.402
2.20	13.5	5.16	1.650	10.1	3.84	1.242	7.9	3.18	0.962	5.8	2.59	0.695	5.2	1.67	0.464
2.40	14.0	5.86	2.048	8.1	3.29	1.175	6.9	2.94	0.996	5.3	2.42	0.741	5.0	1.67	0.522
2.60	7.9	3.36	1.352	6.5	3.07	1.113	5.8	2.84	0.976	4.8	2.30	0.785	4.7	1.73	0.579
2.80	5.8	2.89	1.161	5.2	2.72	1.029	4.8	2.57	0.927	4.1	2.30	0.764	4.5	1.74	0.631
3.00	4.4	2.65	1.005	4.2	2.54	0.942	4.0	2.43	0.866	3.8	2.23	0.840	4.2	1.75	0.690
3.20	4.1	2.51	1.070	4.0	2.42	1.050	3.9	2.35	0.992	3.7	2.16	0.922	4.0	1.84	0.757
3.40	3.9	2.48	1.153	3.8	2.34	1.109	3.7	2.24	1.069	3.6	2.15	0.997	3.8	1.92	0.823
3.60	3.7	2.41	1.230	3.6	2.36	1.186	3.6	2.31	1.143	3.5	2.22	1.066	3.6	1.98	0.883
3.80	3.6	2.48	1.305	3.5	2.42	1.255	3.4	2.37	1.211	3.3	2.28	1.132	3.4	2.05	0.940
4.00	3.4	2.53	1.385	3.3	2.48	1.333	3.2	2.43	1.285	3.2	2.34	1.196	3.2	2.10	0.995

PER = PERIOD (SEC) AA = ABSOLUTE ACC. (GAL) RV = RELATIVE VELOCITY (CM/SEC) RD = RELATIVE DISPLACEMENT (CM)

RESPONSE SPECTRUM

RECORD = M-1014
 DATE AND TIME = 1986-05-31-12-40
 TIME LENGTH = 16.99 (SEC)

COMPONENT = EAST
 SAMPRING INTERVAL = 0.0100(SEC)
 SKIPPED LENGTH = 0.00 (SEC)

SIGNAL = GR. ACC.
 CORRECTION = STATION = HANASAKI-M
 MAX.GROUND ACC. = 137.52 (GAL)

PER	DAMPING = 0.			DAMPING = 0.025			DAMPING = 0.050			DAMPING = 0.100			DAMPING = 0.250		
	AA	RV	RD	AA	RV	RD	AA	RV	RD	AA	RV	RD	AA	RV	RD
0.05	915.2	6.55	0.058	575.1	3.80	0.036	474.9	3.02	0.030	394.5	2.45	0.025	262.3	1.51	0.015
0.10	343.1	5.39	0.087	235.5	4.22	0.060	207.7	3.70	0.052	176.4	3.20	0.044	143.7	2.58	0.033
0.15	185.6	4.61	0.106	139.1	4.01	0.079	121.1	3.53	0.068	94.5	3.09	0.053	85.8	2.50	0.039
0.20	111.0	3.82	0.112	70.8	2.80	0.072	88.5	2.65	0.065	54.5	2.47	0.057	53.5	2.21	0.043
0.25	93.6	3.85	0.148	84.3	3.43	0.134	76.9	3.07	0.121	64.7	2.64	0.099	48.0	2.31	0.061
0.30	147.5	6.99	0.336	108.3	5.67	0.245	90.1	4.91	0.204	66.9	3.87	0.148	40.8	2.46	0.077
0.35	106.1	5.89	0.329	62.2	3.66	0.193	51.0	3.34	0.157	39.8	2.91	0.118	37.7	2.27	0.091
0.40	65.5	4.28	0.266	42.1	3.75	0.169	38.8	3.42	0.154	35.8	2.90	0.129	34.3	2.02	0.105
0.45	46.0	3.59	0.236	42.3	3.31	0.214	38.8	3.06	0.195	34.4	2.67	0.163	31.1	2.09	0.122
0.50	93.0	7.34	0.589	48.7	4.11	0.308	38.7	3.20	0.244	29.5	2.87	0.181	28.2	2.29	0.149
0.55	74.2	6.53	0.568	68.0	4.78	0.367	58.8	3.76	0.295	28.2	3.38	0.212	25.7	2.64	0.174
0.60	79.7	7.51	0.727	39.6	4.45	0.360	32.6	4.08	0.293	28.6	3.69	0.250	24.4	2.89	0.200
0.65	39.5	5.75	0.423	36.3	4.77	0.387	33.7	4.34	0.355	30.0	3.82	0.307	25.2	3.05	0.224
0.70	41.2	5.75	0.512	38.0	5.22	0.471	35.5	4.75	0.434	31.6	4.00	0.374	26.1	3.12	0.258
0.75	40.9	5.54	0.583	37.7	5.09	0.537	35.0	4.68	0.496	31.5	4.00	0.427	26.2	3.13	0.292
0.80	39.7	4.89	0.643	36.7	4.56	0.593	34.1	4.28	0.549	29.9	3.88	0.473	25.5	3.10	0.321
0.85	37.2	4.92	0.681	34.5	4.67	0.630	32.3	4.45	0.584	28.7	4.06	0.504	24.3	3.24	0.341
0.90	44.9	6.47	0.921	31.6	4.72	0.648	29.7	4.52	0.601	26.6	4.15	0.520	22.8	3.35	0.355
0.95	35.9	5.94	0.822	28.9	4.99	0.660	26.8	4.72	0.606	24.4	4.24	0.524	21.2	3.42	0.359
1.00	48.0	7.55	1.213	27.0	5.27	0.681	23.0	4.99	0.628	21.9	4.51	0.535	19.5	3.48	0.358
1.10	43.4	7.40	1.330	26.1	5.55	0.798	22.9	5.29	0.690	19.6	4.83	0.576	16.2	3.81	0.378
1.20	27.9	6.00	1.019	24.0	5.57	0.873	21.2	5.35	0.766	18.7	4.95	0.652	14.9	4.00	0.432
1.30	43.2	8.72	1.850	22.3	5.55	0.950	20.8	5.26	0.877	18.2	4.93	0.754	13.8	4.09	0.505
1.40	27.3	6.48	1.354	21.0	5.44	1.041	19.5	5.09	0.962	17.4	4.82	0.828	13.6	4.11	0.558
1.50	33.9	7.96	1.877	19.9	5.12	1.129	18.5	4.87	1.048	16.3	4.66	0.907	13.2	4.08	0.618
1.60	22.0	5.80	1.427	18.3	4.71	1.186	17.2	4.84	1.103	15.4	4.48	0.961	12.4	4.01	0.663
1.70	30.8	8.20	2.252	16.8	4.55	1.231	15.8	4.59	1.145	14.1	4.28	0.998	11.5	3.92	0.693
1.80	25.4	7.42	2.083	15.4	4.79	1.262	14.5	4.33	1.176	12.8	4.09	1.028	10.6	3.82	0.715
1.90	22.7	6.85	2.075	14.0	4.54	1.274	13.8	4.29	1.188	11.8	3.97	1.043	10.0	3.71	0.732
2.00	20.9	7.18	2.114	12.8	4.80	1.292	11.9	4.41	1.191	10.8	3.98	1.047	9.3	3.60	0.743
2.20	13.0	4.97	1.595	11.4	4.67	1.393	10.2	4.47	1.223	8.8	4.11	1.037	8.5	3.37	0.739
2.40	15.7	6.52	2.296	9.6	4.56	1.394	8.4	4.40	1.215	7.5	4.00	1.048	7.8	3.53	0.770
2.60	11.9	5.16	2.041	8.1	4.38	1.389	7.3	4.26	1.232	6.5	4.02	1.063	7.1	3.38	0.810
2.80	10.2	4.65	2.003	8.0	4.17	1.389	6.3	4.08	1.269	5.8	3.90	1.096	6.6	3.37	0.847
3.00	9.0	4.83	2.043	7.1	4.00	1.613	5.7	3.89	1.290	5.3	3.76	1.104	6.1	3.33	0.879
3.20	8.5	4.77	2.203	6.2	3.75	1.595	5.2	3.70	1.333	4.9	3.61	1.102	5.7	3.28	0.907
3.40	7.8	4.72	2.279	5.6	3.61	1.639	4.8	3.54	1.380	4.5	3.46	1.090	5.3	3.24	0.930
3.60	6.2	3.90	2.024	4.8	3.65	1.559	4.1	3.59	1.332	4.1	3.45	1.071	5.0	3.27	0.933
3.80	5.1	3.76	1.883	3.9	3.70	1.419	3.4	3.63	1.219	3.8	3.51	1.087	4.7	3.29	0.970
4.00	4.0	3.80	1.604	3.2	3.73	1.270	3.2	3.67	1.191	3.5	3.55	1.104	4.4	3.51	0.987

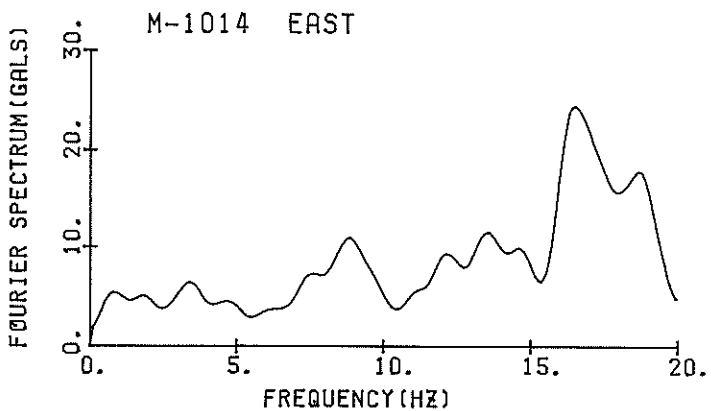
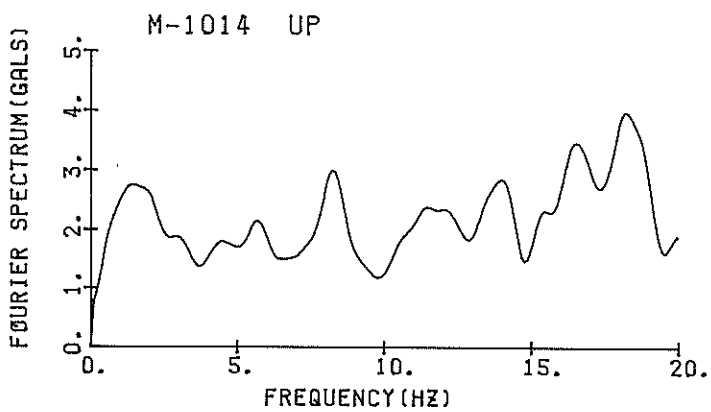
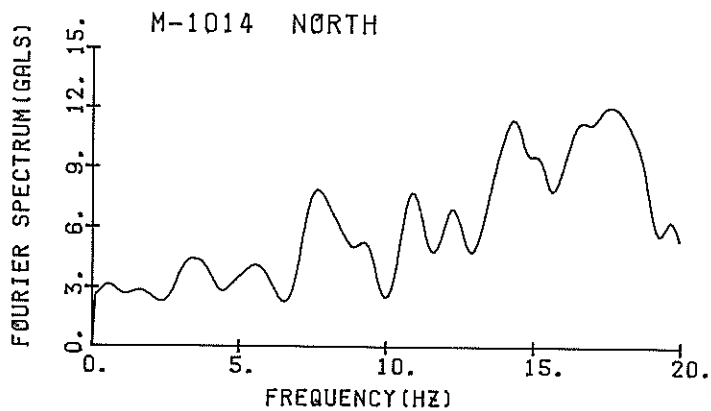
PER = PERIOD (SEC) AA = ABSOLUTE ACC. (GAL) RV = RELATIVE VELOCITY (CM/SEC) RD = RELATIVE DISPLACEMENT (CM)

RESPONSE SPECTRUM

RECORD = H-1014 COMPONENT = UP SIGNAL = GR. ACC. CORRECTION = STATION = HAWASAKI-M
 DATE AND TIME = 1986-05-31-12-40 SAMPRING INTERVAL = 0.0100(SEC) MAX.GROUND ACC. = 27.71 (GAL)
 TIME LENGTH = 16.99 (SEC) SKIPPED LENGTH = 0.00 (SEC)

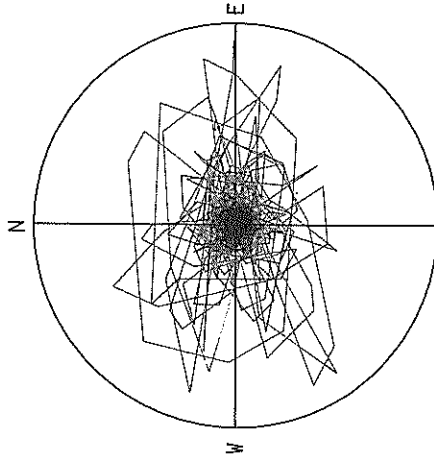
PER	DAMPING = 0.				DAMPING = 0.025				DAMPING = 0.050				DAMPING = 0.100				DAMPING = 0.250			
	AA	RV	RD	AA	RV	RD	AA	RV	RD	AA	RV	RD	AA	RV	RD	AA	RV	RD		
0.05	293.1	2.32	0.019	97.8	0.69	0.006	79.7	0.55	0.005	69.9	0.48	0.004	44.5	0.27	0.003					
0.10	79.5	1.25	0.020	51.2	0.83	0.013	39.8	0.72	0.010	35.9	0.61	0.009	28.0	0.40	0.006					
0.15	65.7	1.65	0.037	38.5	0.95	0.022	34.2	0.79	0.019	27.1	0.64	0.015	18.8	0.46	0.009					
0.20	82.3	2.62	0.083	29.0	1.16	0.059	21.6	0.89	0.022	18.8	0.66	0.018	15.5	0.45	0.014					
0.25	45.8	1.71	0.072	16.9	0.64	0.027	15.3	0.58	0.024	12.7	0.58	0.020	12.1	0.46	0.016					
0.30	32.9	1.54	0.075	17.2	0.88	0.039	14.0	0.76	0.032	12.6	0.61	0.028	10.2	0.44	0.022					
0.35	41.3	2.27	0.158	20.1	1.04	0.042	15.7	0.85	0.048	12.6	0.64	0.034	10.1	0.45	0.030					
0.40	30.4	1.88	0.123	18.6	1.10	0.075	13.1	0.77	0.053	10.9	0.56	0.049	10.1	0.42	0.039					
0.45	45.4	3.22	0.253	17.8	1.24	0.091	15.6	0.97	0.080	13.6	0.83	0.069	10.4	0.57	0.050					
0.50	39.3	3.19	0.249	21.8	1.76	0.138	19.6	1.55	0.124	14.8	1.16	0.092	10.4	0.68	0.060					
0.55	36.5	3.23	0.280	19.5	1.73	0.149	16.8	1.47	0.128	13.0	1.18	0.093	9.8	0.75	0.067					
0.60	33.9	3.23	0.309	13.9	1.51	0.127	11.6	1.26	0.105	10.0	0.98	0.090	9.0	0.77	0.073					
0.65	20.9	2.18	0.224	15.4	1.61	0.144	13.2	1.38	0.141	10.4	1.05	0.108	8.5	0.79	0.081					
0.70	36.3	4.04	0.450	20.9	2.42	0.259	16.1	1.84	0.199	11.1	1.28	0.135	8.2	0.80	0.091					
0.75	36.0	4.58	0.513	19.3	2.46	0.282	15.1	1.94	0.214	10.5	1.33	0.146	7.9	0.80	0.101					
0.80	28.1	3.65	0.456	13.4	1.90	0.217	11.2	1.56	0.181	8.7	1.21	0.138	7.6	0.84	0.110					
0.85	23.4	3.33	0.428	15.2	2.05	0.277	12.1	1.54	0.220	8.8	1.23	0.157	7.4	0.86	0.119					
0.90	17.7	2.43	0.364	15.5	2.17	0.317	12.4	1.68	0.252	8.8	1.29	0.176	7.1	0.87	0.128					
0.95	25.7	3.98	0.589	13.5	2.05	0.310	10.5	1.62	0.239	8.8	1.28	0.195	6.8	0.86	0.135					
1.00	21.3	3.51	0.538	10.4	1.73	0.264	9.5	1.52	0.240	8.4	1.25	0.205	6.5	0.90	0.140					
1.10	10.9	1.88	0.334	9.0	1.70	0.276	8.1	1.59	0.247	6.8	1.34	0.203	5.6	0.95	0.144					
1.20	9.9	2.11	0.382	6.9	1.69	0.250	5.5	1.42	0.198	4.8	1.16	0.164	4.8	0.95	0.143					
1.30	15.2	2.77	0.652	9.6	1.92	0.411	6.9	1.46	0.293	4.8	1.07	0.202	4.3	0.93	0.145					
1.40	14.7	3.60	0.731	9.1	2.27	0.433	7.0	1.61	0.345	4.6	1.09	0.226	3.9	0.93	0.152					
1.50	16.4	3.74	0.936	9.5	2.21	0.542	6.8	1.58	0.383	4.6	1.18	0.258	3.7	0.96	0.160					
1.60	9.4	2.19	0.612	7.9	1.95	0.511	6.4	1.61	0.415	4.6	1.21	0.290	3.4	0.99	0.166					
1.70	7.2	2.13	0.525	5.5	1.65	0.396	5.2	1.54	0.396	4.2	1.27	0.298	3.1	1.01	0.171					
1.80	7.9	2.29	0.646	5.8	1.73	0.475	5.0	1.59	0.396	3.8	1.30	0.308	2.9	1.03	0.190					
1.90	11.1	3.57	1.016	6.9	2.28	0.628	5.1	1.74	0.465	3.7	1.32	0.326	2.7	1.05	0.209					
2.00	5.4	1.94	0.544	4.5	1.60	0.454	4.2	1.56	0.422	3.6	1.32	0.356	2.6	1.07	0.224					
2.20	7.1	2.64	0.870	5.1	1.92	0.659	4.3	1.56	0.522	3.4	1.32	0.405	2.4	1.10	0.238					
2.40	4.2	1.96	0.610	4.0	1.83	0.520	3.6	1.65	0.520	2.9	1.42	0.406	2.0	1.10	0.232					
2.60	4.4	2.36	0.757	3.5	1.98	0.591	2.9	1.72	0.500	2.2	1.40	0.372	1.6	1.07	0.217					
2.80	4.6	2.80	0.906	3.5	1.62	0.699	2.9	1.43	0.574	2.2	1.21	0.420	1.6	1.00	0.233					
3.00	3.5	1.95	0.800	2.8	1.57	0.645	2.4	1.31	0.536	1.9	0.98	0.396	1.5	0.90	0.230					
3.20	2.6	1.93	0.877	2.1	1.63	0.546	1.8	1.40	0.454	1.4	1.09	0.348	1.3	0.82	0.211					
3.40	2.0	1.43	0.577	1.7	1.31	0.492	1.5	1.21	0.425	1.1	1.03	0.327	1.1	0.75	0.217					
3.60	1.5	1.06	0.484	1.5	0.97	0.450	1.2	0.95	0.387	1.0	0.90	0.321	1.0	0.72	0.217					
3.80	1.0	1.04	0.349	0.9	0.92	0.333	0.9	0.85	0.326	0.9	0.80	0.297	0.9	0.71	0.215					
4.00	0.6	0.92	0.252	0.7	0.89	0.267	0.7	0.86	0.279	0.8	0.80	0.276	0.8	0.72	0.215					

PER = PERIOD (SEC) AA = ABSOLUTE ACC. (GAL) RV = RELATIVE VELOCITY (CM/SEC) RD = RELATIVE DISPLACEMENT (CM)



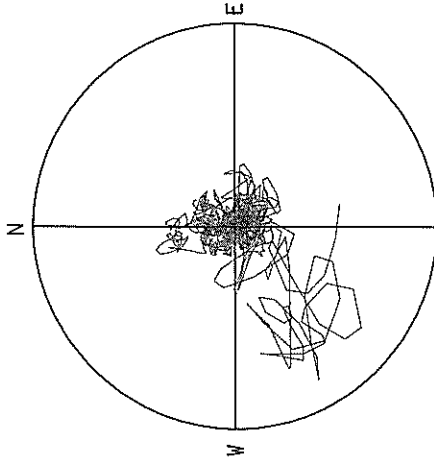
FOURIER SPECTRA

M-1014 HANASAKI-M



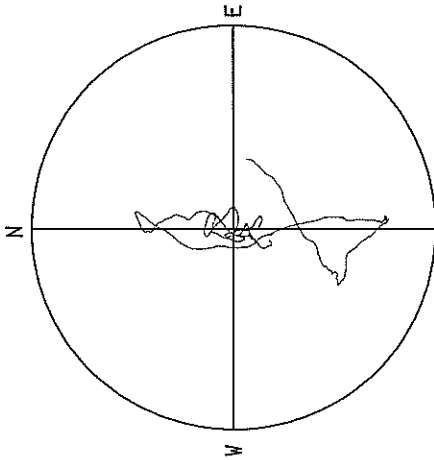
ACCELERATION
R=150.0GAL
MAX=137.5GAL

M-1014 HANASAKI-M



VELOCITY
R=5.0 CM/SEC.
MAX=4.3 CM/SEC.

M-1014 HANASAKI-M



DISPLACEMENT
R=2.00 CM
MAX=1.53 CM

RECORD NUMBER M-1017
 STATION HANASAKI-M

EARTHQUAKE DATA

DATA AND TIME 20: 2 JUNE 8, 1986

LOCATION OF HYPOCENTER

EPCENTRAL REGION OFF NEMURO PENINSULA

LATITUDE 43° 4' N

LONGITUDE 146° 22' E

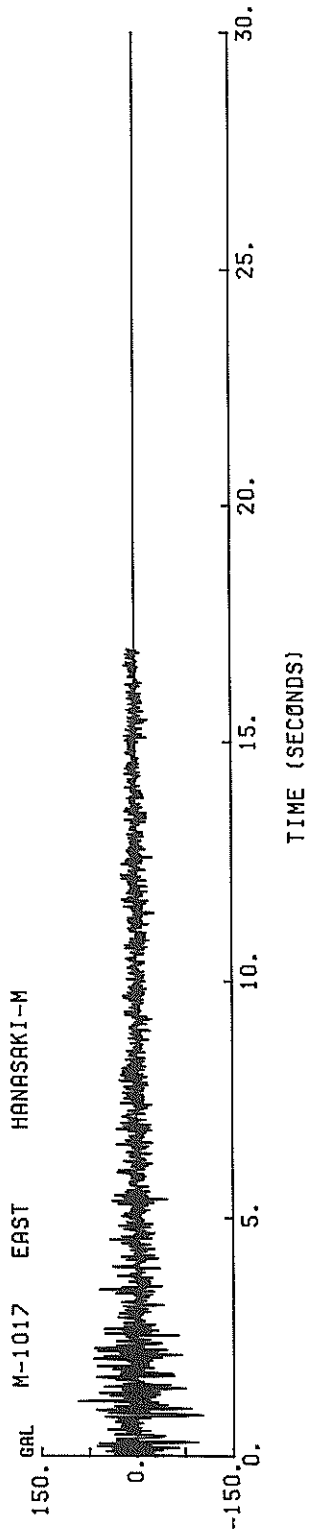
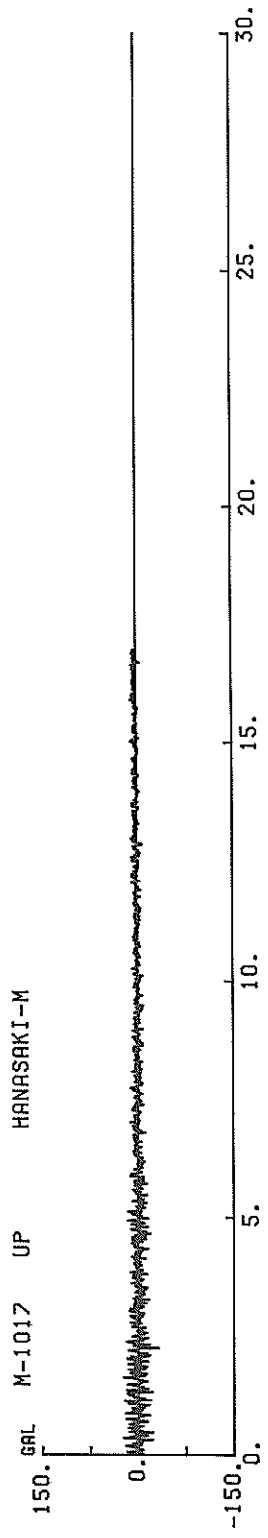
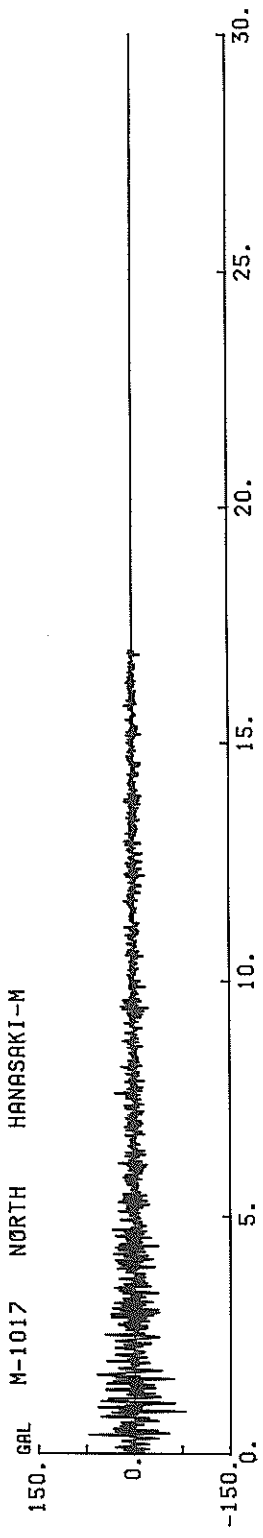
DEPTH 59KM

MAGNITUDE 5.9

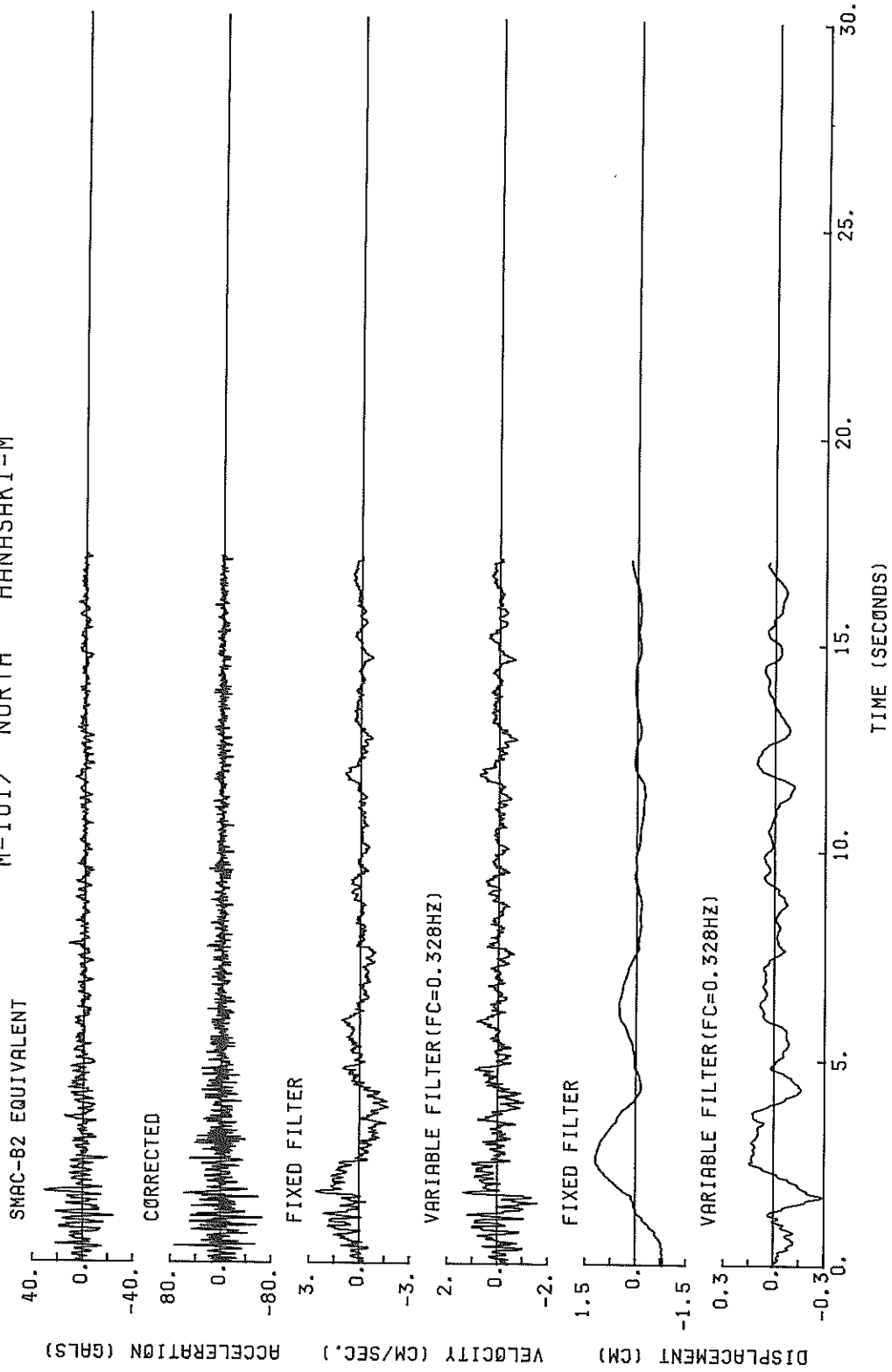
PEAK VALUES OF COMPONENTS

	N S	E W	U D	HORIZONTAL*
PARAMETER OF THE VARIABLE FILTER				
FC (HZ)	0.328	0.181	0.303	
MAXIMUM ACCELERATION (GAL)				
SMAC-B2 EQUIVALENT	32.0	54.3	11.9	54.4
ORIGINAL	79.6	101.9	31.4	107.9
CORRECTED	78.3	103.3	31.7	108.2
MAXIMUM VELOCITY (CM/SEC)				
FIXED FILTER	2.59	3.29	1.31	3.37
VARIABLE FILTER	1.59	2.74	0.97	3.01
MAXIMUM DISPLACEMENT (CM)				
FIXED FILTER	1.192	1.978	0.924	2.028
VARIABLE FILTER	0.292	1.084	0.218	1.084

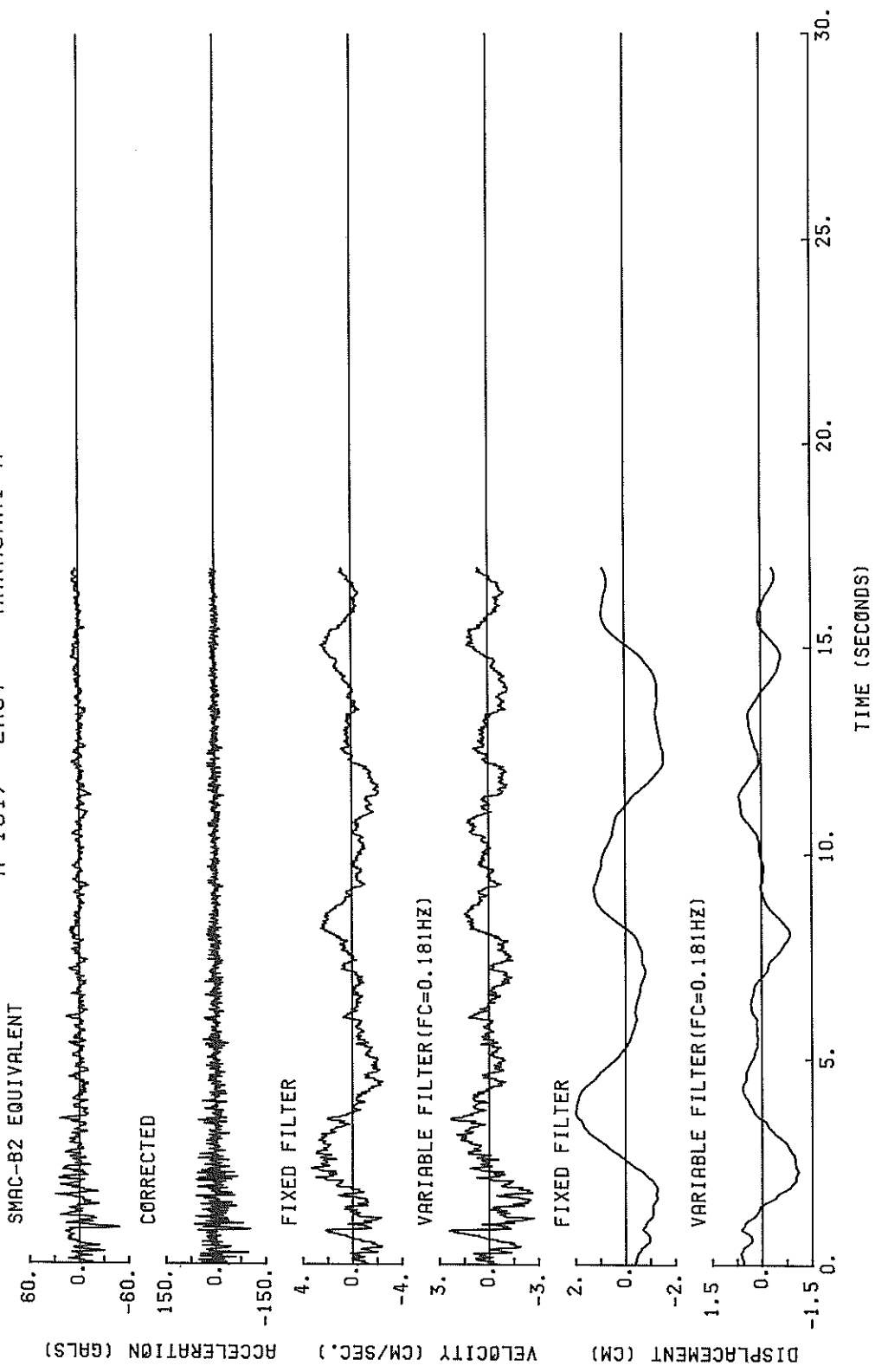
* RESULTANT OF HORIZONTAL COMPONENTS



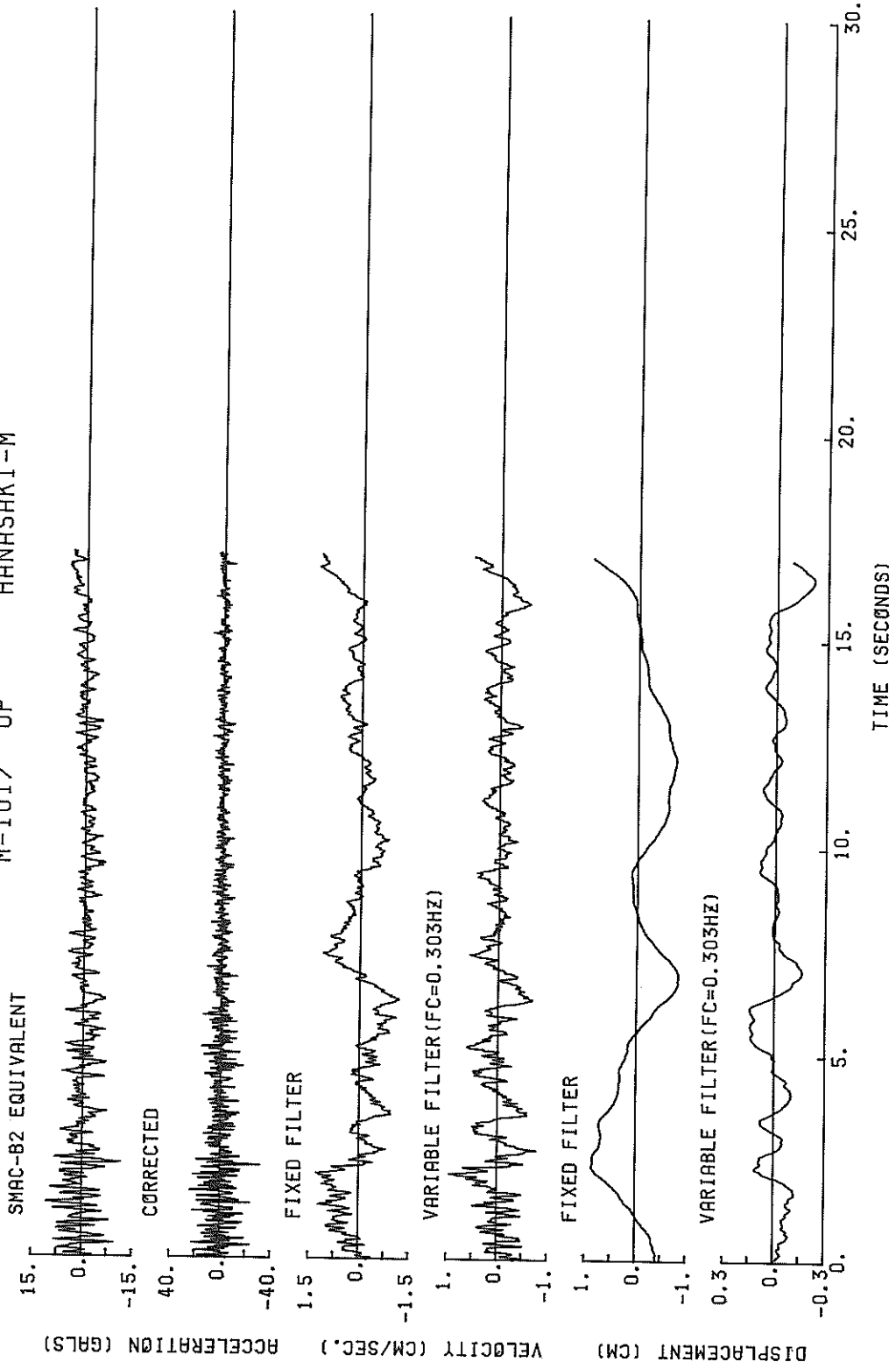
M-1017 NORTH HANASAKI-M



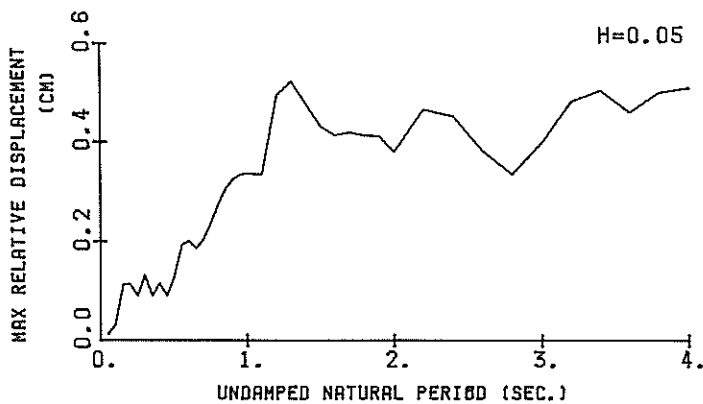
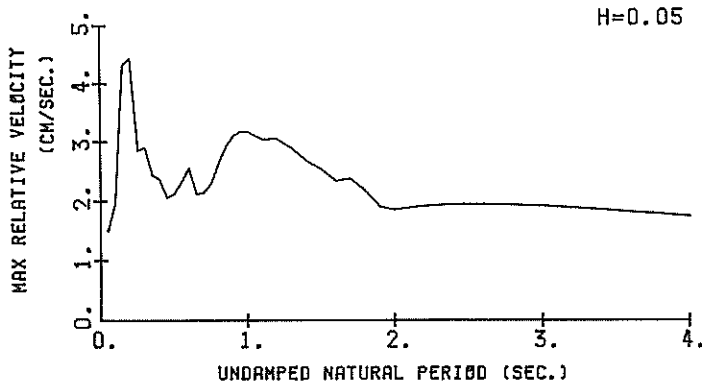
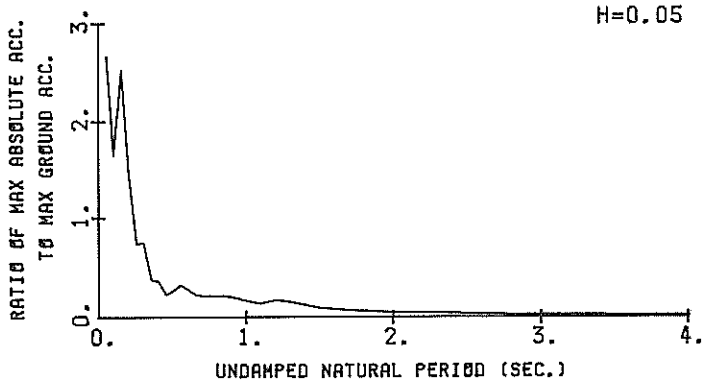
M-1017 EAST HANASAKI-M



SMAC-B2 EQUIVALENT M-1017 UP HANSAKI-M

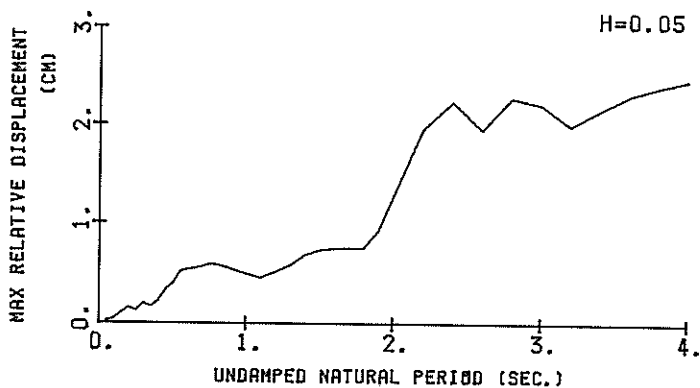
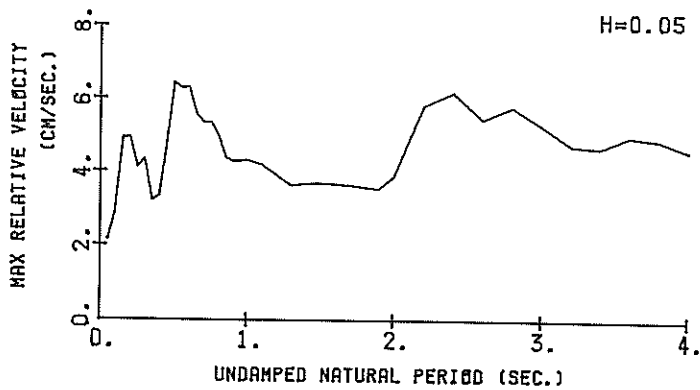
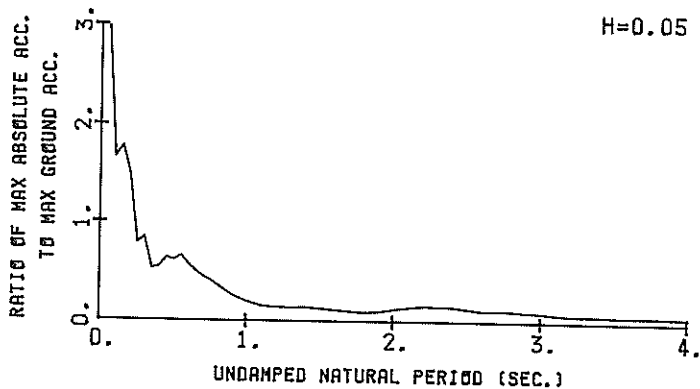


M-1017 NORTH HANASAKI-M
(1/FC=3.05 SEC.)



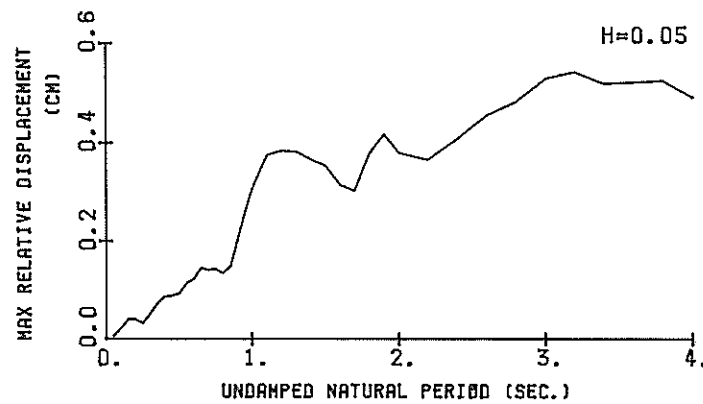
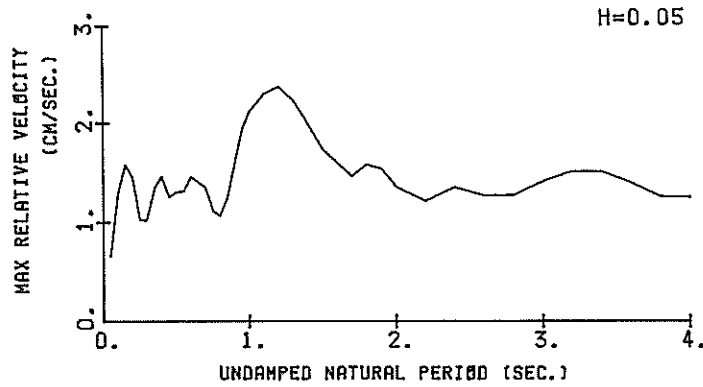
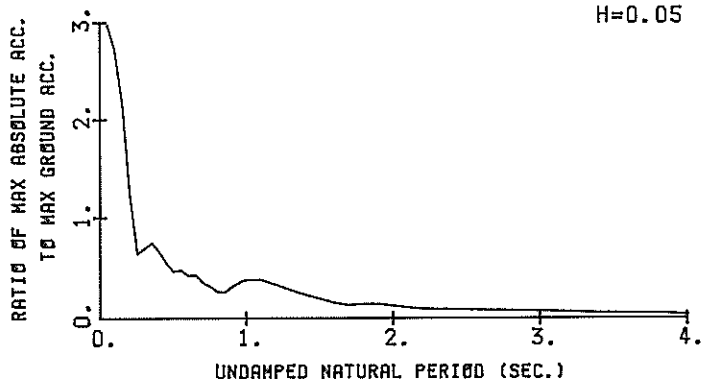
RESPONSE SPECTRA

M-1017 EAST HANASAKI-M
(1/FC=5.51 SEC.)



RESPONSE SPECTRA

M-1017 UP HANASAKI-M
(1/FC=3.30 SEC.)



RESPONSE SPECTRA

RESPONSE SPECTRUM

RECORD = M-1017 COMPONENT = NORTH SIGNAL = GR. ACC. CORRECTION = STATION = HAMASAKI-M
 DATE AND TIME = 1986-06-08-20-02 SAMPRING INTERVAL = 0.0100(SEC) MAX.GROUND ACC. = 78.27 (GAL)
 TIME LENGTH = 16.99 (SEC) SKIPPED LENGTH = 0.00 (SEC)

PER	DAMPING = 0.			DAMPING = 0.025			DAMPING = 0.050			DAMPING = 0.100			DAMPING = 0.250		
	AA	RV	RD	AA	RV	RD	AA	RV	RD	AA	RV	RD	AA	RV	RD
0.05	638.6	5.07	0.040	271.2	1.93	0.017	208.6	1.50	0.013	149.3	1.00	0.009	112.9	0.57	0.007
0.10	326.7	4.89	0.083	167.7	2.68	0.042	128.5	1.96	0.033	110.6	1.63	0.027	81.4	1.56	0.018
0.15	354.5	8.13	0.202	255.0	5.52	0.145	197.8	4.31	0.112	138.6	3.32	0.077	80.1	1.74	0.041
0.20	212.5	7.37	0.215	148.4	5.33	0.150	114.6	6.33	0.115	88.8	3.55	0.081	59.2	1.95	0.054
0.25	145.4	5.80	0.230	63.4	3.70	0.101	58.0	2.84	0.091	49.2	2.53	0.076	45.1	1.99	0.063
0.30	158.9	7.55	0.362	75.6	5.54	0.161	58.0	2.89	0.134	47.1	2.54	0.104	37.7	1.77	0.074
0.35	63.7	3.48	0.198	32.7	2.73	0.101	29.7	2.43	0.091	26.8	2.01	0.078	29.9	1.52	0.077
0.40	48.9	3.18	0.182	33.5	2.62	0.136	28.9	2.36	0.116	25.2	1.99	0.098	25.7	1.50	0.085
0.45	33.0	2.59	0.179	19.8	2.19	0.101	18.0	2.05	0.091	19.6	1.86	0.095	23.2	1.53	0.096
0.50	73.9	5.91	0.463	29.6	2.38	0.187	20.7	2.11	0.130	20.7	1.88	0.125	21.9	1.46	0.111
0.55	42.4	3.99	0.325	28.3	2.75	0.217	25.5	2.32	0.193	22.5	1.83	0.165	21.0	1.58	0.127
0.60	73.1	7.08	0.667	29.8	2.80	0.271	25.2	2.55	0.201	20.6	2.05	0.177	19.8	1.71	0.139
0.65	35.9	3.58	0.384	19.2	2.55	0.205	17.8	2.11	0.187	18.1	2.01	0.182	18.6	1.82	0.149
0.70	21.9	2.70	0.271	16.9	2.21	0.208	16.8	2.13	0.205	16.8	2.08	0.195	17.4	1.92	0.157
0.75	19.0	2.61	0.271	17.8	2.40	0.253	17.0	2.29	0.239	16.1	2.24	0.214	16.2	2.02	0.162
0.80	28.8	3.08	0.370	18.3	2.70	0.297	16.9	2.61	0.274	15.2	2.46	0.236	15.0	2.12	0.166
0.85	30.9	4.50	0.565	18.5	3.05	0.339	16.8	2.90	0.306	14.5	2.67	0.260	13.8	2.22	0.175
0.90	33.2	4.77	0.660	19.1	3.25	0.391	15.9	3.08	0.325	13.8	2.82	0.274	12.0	2.31	0.183
0.95	20.4	3.51	0.467	16.0	3.32	0.366	14.7	3.16	0.334	12.7	2.89	0.282	11.5	2.37	0.188
1.00	24.0	3.80	0.607	14.4	3.51	0.365	13.4	3.16	0.336	11.6	2.91	0.287	10.1	2.42	0.191
1.10	20.7	4.09	0.635	12.7	3.12	0.387	11.0	3.03	0.334	9.5	2.86	0.282	8.1	2.44	0.194
1.20	38.5	7.48	1.403	17.9	3.85	0.653	13.6	3.04	0.492	9.4	2.75	0.499	6.9	2.42	0.195
1.30	23.5	4.93	1.008	16.3	3.54	0.697	12.2	2.88	0.520	8.2	2.63	0.344	6.4	2.38	0.203
1.40	24.1	5.56	1.198	12.8	2.89	0.635	9.7	2.67	0.478	7.2	2.51	0.338	5.9	2.32	0.206
1.50	10.6	2.97	0.603	8.7	2.67	0.497	7.7	2.53	0.429	6.4	2.39	0.343	5.5	2.25	0.215
1.60	12.9	3.21	0.834	7.5	2.63	0.484	6.4	2.33	0.412	5.5	2.27	0.327	5.1	2.18	0.223
1.70	7.4	2.93	0.544	6.5	2.62	0.476	5.8	2.37	0.418	4.8	2.16	0.328	4.7	2.11	0.235
1.80	10.5	3.16	0.861	6.3	2.55	0.516	5.1	2.17	0.412	4.2	2.04	0.326	4.4	2.04	0.245
1.90	10.9	3.67	0.993	6.4	2.27	0.586	4.5	1.90	0.411	3.9	1.93	0.325	4.2	1.96	0.252
2.00	5.8	2.59	0.585	4.3	1.97	0.438	3.8	1.85	0.379	3.6	1.83	0.327	4.0	1.90	0.256
2.20	6.2	2.59	0.766	4.3	1.96	0.528	3.9	1.91	0.464	3.3	1.83	0.372	3.5	1.77	0.258
2.40	3.9	2.08	0.563	3.4	1.98	0.495	3.2	1.94	0.495	2.9	1.86	0.380	3.1	1.66	0.259
2.60	2.5	2.02	0.433	2.4	1.98	0.405	2.3	1.94	0.380	2.3	1.87	0.343	2.8	1.68	0.259
2.80	2.9	2.00	0.581	2.0	1.97	0.386	1.7	1.93	0.384	1.8	1.87	0.301	2.5	1.70	0.243
3.00	2.7	1.97	0.639	2.2	1.94	0.455	1.8	1.91	0.396	1.5	1.85	0.296	2.2	1.70	0.226
3.20	2.8	2.00	0.699	2.2	1.90	0.572	1.9	1.88	0.478	1.5	1.83	0.355	2.0	1.70	0.225
3.40	2.5	1.88	0.771	2.1	1.86	0.614	1.8	1.85	0.501	1.3	1.81	0.360	1.8	1.70	0.246
3.60	2.2	2.08	0.712	1.7	1.83	0.547	1.4	1.81	0.455	1.2	1.78	0.356	1.6	1.69	0.269
3.80	2.1	1.80	0.777	1.7	1.79	0.601	1.4	1.78	0.495	1.2	1.75	0.392	1.6	1.67	0.291
4.00	1.9	1.77	0.782	1.5	1.75	0.607	1.3	1.74	0.506	1.1	1.72	0.397	1.5	1.66	0.313

PER = PERIOD (SEC) AA = ABSOLUTE ACC. (GAL) RV = RELATIVE VELOCITY (CM/SEC) RD = RELATIVE DISPLACEMENT (CM)

RESPONSE SPECTRUM

RECORD = M-1017
 DATE AND TIME = 1986-06-08-20-02
 TIME LENGTH = 16.99 (SEC)

COMPONENT = EAST
 SAMPRING INTERVAL = 0.0100(SEC)
 SKIPPED LENGTH = 0.00 (SEC)

CORRECTION =
 MAX_GROUND ACC. = 103.28 (GAL)
 STATION = HANASAKI-M

DAMPING = 0.025 DAMPING = 0.050 DAMPING = 0.100 DAMPING = 0.250

PER	AA	RV	RD	AA	RV	RD	AA	RV	RD	AA	RV	RD			
0.05	1079.3	8.32	0.063	393.2	2.79	0.025	307.6	2.15	0.019	228.7	1.58	0.014	150.4	0.81	0.009
0.10	533.3	8.49	0.135	192.3	3.23	0.049	171.6	2.87	0.043	142.3	2.60	0.040	141.8	1.85	0.034
0.15	363.0	8.89	0.207	241.8	6.26	0.139	183.5	4.90	0.102	139.0	3.56	0.075	114.1	2.14	0.058
0.20	276.2	8.82	0.280	184.8	6.40	0.187	153.7	4.92	0.156	111.1	3.67	0.110	97.5	2.26	0.084
0.25	210.5	8.47	0.333	144.7	4.17	0.134	81.2	4.12	0.129	78.4	3.79	0.122	76.0	2.74	0.099
0.30	148.8	7.45	0.339	110.7	5.47	0.251	87.4	4.32	0.198	61.8	3.55	0.158	59.7	2.89	0.112
0.35	103.9	10.17	0.571	74.4	4.01	0.231	54.0	3.20	0.167	50.0	3.04	0.153	50.8	3.05	0.134
0.40	81.3	5.03	0.329	57.4	3.57	0.233	57.3	3.31	0.225	52.7	3.43	0.210	46.1	3.36	0.165
0.45	106.0	7.69	0.544	71.5	5.00	0.367	65.9	4.78	0.335	57.3	4.43	0.286	43.5	3.78	0.194
0.50	134.1	10.60	0.849	78.2	7.57	0.495	63.1	6.43	0.397	53.8	5.18	0.328	40.4	4.13	0.209
0.55	132.9	11.60	1.018	81.7	7.39	0.625	67.8	6.28	0.516	48.9	5.50	0.367	35.5	4.31	0.216
0.60	87.1	8.67	0.794	70.9	7.56	0.644	50.6	6.50	0.532	43.6	5.43	0.355	30.3	4.35	0.236
0.65	125.7	12.93	1.345	59.0	6.53	0.631	51.2	5.53	0.543	45.9	5.12	0.449	28.1	4.28	0.266
0.70	70.8	8.37	0.879	51.8	5.90	0.640	46.1	5.32	0.566	39.4	4.70	0.476	26.9	4.12	0.304
0.75	81.8	9.98	1.166	45.0	5.93	0.639	41.7	5.32	0.586	36.8	4.83	0.500	26.8	3.90	0.328
0.80	50.3	6.46	0.816	38.8	5.45	0.628	36.3	4.97	0.580	32.9	4.15	0.501	25.7	3.67	0.339
0.85	39.3	5.36	0.719	33.3	4.83	0.610	30.8	4.37	0.562	28.4	3.82	0.485	23.9	3.43	0.339
0.90	42.7	5.57	0.876	28.5	4.60	0.584	26.5	4.28	0.540	26.0	3.71	0.467	21.9	3.19	0.336
0.95	26.9	4.94	0.615	24.7	4.58	0.562	22.7	4.28	0.516	20.7	3.77	0.444	20.0	2.97	0.343
1.00	23.0	4.92	0.581	21.2	4.60	0.535	19.8	4.31	0.495	18.9	3.78	0.435	18.9	2.76	0.346
1.10	33.9	6.24	1.039	18.8	4.40	0.577	15.4	4.18	0.456	15.7	3.77	0.424	16.7	2.80	0.347
1.20	29.4	5.94	1.071	17.0	4.03	0.621	14.5	3.89	0.514	12.9	3.60	0.410	14.7	2.85	0.339
1.30	33.3	7.11	1.512	17.2	3.84	0.735	13.7	3.61	0.580	11.7	3.37	0.468	13.0	2.82	0.325
1.40	22.9	5.18	1.135	15.4	3.80	0.760	14.0	3.67	0.685	12.0	3.43	0.568	11.4	2.82	0.378
1.50	24.6	5.65	1.403	15.8	3.80	0.897	13.0	3.68	0.730	11.6	3.47	0.619	10.1	2.90	0.420
1.60	18.3	4.01	1.186	12.6	3.77	0.813	11.7	3.67	0.750	10.5	3.48	0.645	9.2	2.96	0.445
1.70	13.5	4.51	0.986	11.1	3.72	0.813	10.3	3.63	0.754	9.4	3.47	0.657	8.7	3.00	0.470
1.80	12.6	3.74	1.038	9.9	3.66	0.805	9.4	3.59	0.739	8.5	3.44	0.674	8.2	3.02	0.487
1.90	16.9	5.14	1.545	12.0	3.73	1.099	10.2	3.54	0.925	8.1	3.41	0.722	7.7	3.03	0.368
2.00	22.8	7.06	2.312	16.0	4.98	1.614	12.5	3.87	1.267	9.1	3.37	0.899	7.2	3.03	0.326
2.20	24.4	9.20	2.995	19.9	7.35	2.437	16.0	5.81	1.952	10.9	3.99	1.306	6.2	3.02	0.602
2.40	31.2	11.79	4.557	21.1	8.23	3.077	15.4	6.20	2.234	9.9	4.10	1.400	5.5	2.99	0.710
2.60	21.3	9.25	3.642	15.1	6.85	2.577	11.5	5.44	1.945	8.5	4.16	1.423	5.4	2.96	0.806
2.80	17.5	8.71	3.473	13.9	6.90	2.763	11.5	5.78	2.276	8.4	4.33	1.630	5.2	2.92	0.853
3.00	17.1	8.04	3.889	11.9	6.28	2.715	9.7	5.28	2.200	7.0	3.98	1.543	5.1	2.88	0.917
3.20	14.3	3.707	3.707	9.3	5.68	2.420	7.7	4.74	1.984	6.4	3.49	1.593	4.8	2.85	1.013
3.40	9.8	5.98	2.863	8.2	5.27	2.385	7.4	4.68	2.148	6.2	3.77	1.763	4.5	2.82	1.091
3.60	8.6	6.28	2.838	7.8	5.59	2.549	7.1	5.00	2.299	6.0	4.06	1.869	4.4	2.85	1.158
3.80	8.1	5.99	2.967	7.3	5.40	2.653	6.6	4.89	2.382	5.6	4.06	1.946	4.3	2.86	1.221
4.00	7.5	5.30	3.042	6.8	4.94	2.729	6.1	4.61	2.455	5.1	4.05	2.010	4.1	2.92	1.273

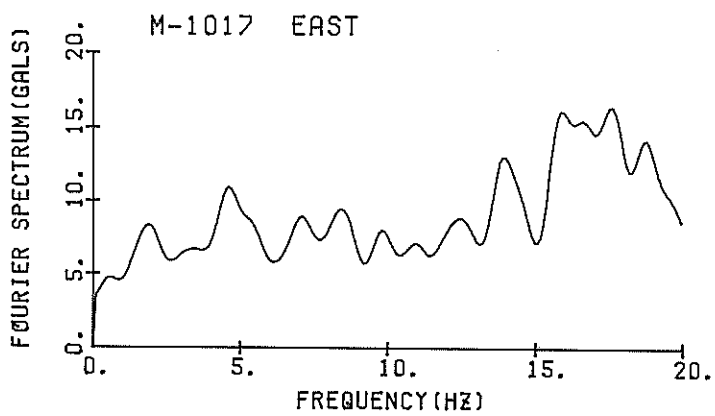
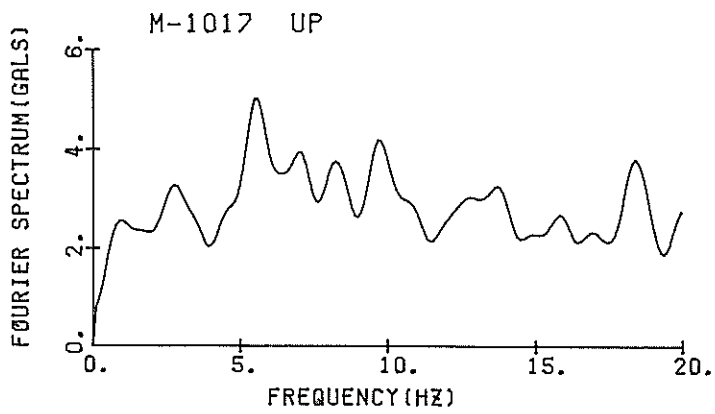
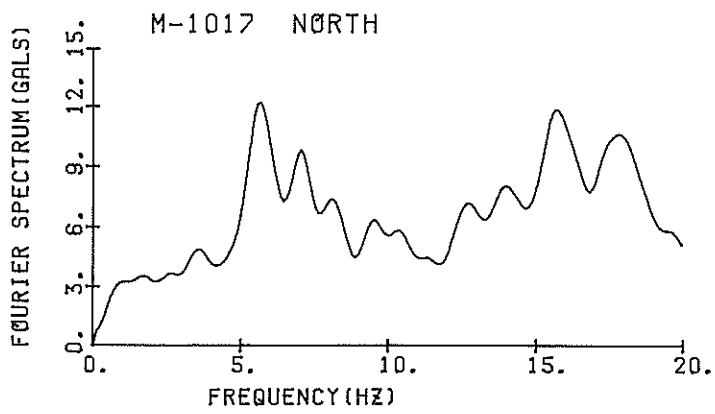
PER = PERIOD (SEC) AA = ABSOLUTE ACC. (GAL) RV = RELATIVE VELOCITY (CM/SEC) RD = RELATIVE DISPLACEMENT (CM)

RESPONSE SPECTRUM

RECORD = H-1017 COMPONENT = UP SIGNAL = GR. ACC. CORRECTION = STATION = HANASAKI-M
 DATE AND TIME = 1986-06-08-20-02 SAMPRING INTERVAL = 0.0100(SEC) MAX.GROUND ACC. = 31.74 (GAL)
 TIME LENGTH = 16.99 (SEC) SKIPPED LENGTH = 0.00 (SEC)

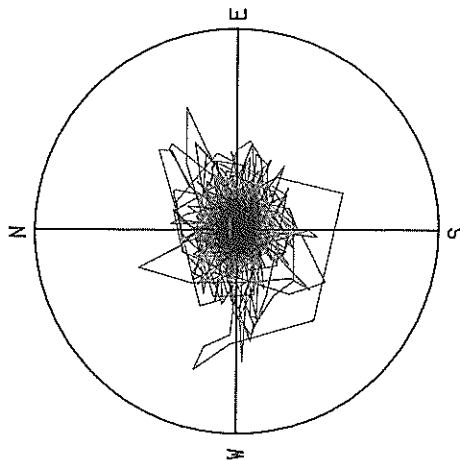
PER	DAMPING = 0.			DAMPING = 0.025			DAMPING = 0.050			DAMPING = 0.100			DAMPING = 0.250		
	AA	RV	RD	AA	RV	RD	AA	RV	RD	AA	RV	RD	AA	RV	RD
0.05	361.7	2.70	0.023	129.1	0.94	0.008	94.2	0.67	0.006	65.7	0.45	0.004	39.2	0.24	0.002
0.10	161.2	4.14	0.066	124.3	1.86	0.031	86.3	1.38	0.022	58.0	0.94	0.014	42.5	0.52	0.010
0.15	124.6	2.85	0.071	84.4	2.09	0.048	68.1	1.58	0.039	53.9	1.21	0.035	36.6	0.76	0.018
0.20	69.4	2.47	0.070	41.7	1.79	0.048	39.7	1.55	0.040	34.9	1.17	0.035	24.3	0.75	0.021
0.25	40.5	1.58	0.064	23.3	1.19	0.037	20.5	1.03	0.032	17.9	0.86	0.028	15.8	0.73	0.021
0.30	97.0	4.55	0.221	30.3	1.39	0.069	22.0	1.02	0.050	18.0	0.83	0.040	13.2	0.70	0.026
0.35	91.0	5.07	0.282	32.7	1.74	0.101	21.8	1.34	0.074	17.7	0.95	0.054	11.3	0.76	0.030
0.40	64.8	4.24	0.263	29.9	1.87	0.121	21.3	1.46	0.086	15.3	1.09	0.061	10.1	0.80	0.035
0.45	51.1	3.57	0.262	22.5	1.65	0.115	17.3	1.25	0.089	13.0	1.00	0.065	9.5	0.76	0.041
0.50	25.1	2.09	0.159	18.1	1.55	0.114	14.8	1.30	0.094	11.0	1.07	0.068	8.7	0.78	0.046
0.55	28.0	2.51	0.214	18.9	1.53	0.145	15.2	1.31	0.115	10.6	1.02	0.079	8.4	0.75	0.054
0.60	31.0	3.48	0.337	18.1	1.82	0.165	13.5	1.46	0.123	10.4	1.09	0.092	8.7	0.78	0.066
0.65	53.2	5.60	0.569	18.0	1.86	0.193	13.8	1.40	0.146	11.1	1.17	0.114	8.7	0.82	0.076
0.70	21.0	2.44	0.260	14.8	1.67	0.184	11.5	1.35	0.142	9.5	1.09	0.112	8.4	0.83	0.083
0.75	15.1	1.72	0.215	12.1	1.30	0.172	10.2	1.12	0.144	8.2	0.98	0.110	8.0	0.84	0.088
0.80	11.4	1.43	0.184	8.8	1.06	0.143	8.4	1.07	0.135	7.7	1.03	0.118	7.5	0.89	0.098
0.85	15.0	1.96	0.274	8.7	1.25	0.159	8.2	1.25	0.150	7.6	1.16	0.136	7.1	0.94	0.111
0.90	16.9	2.39	0.347	11.4	1.75	0.233	10.0	1.58	0.204	8.6	1.31	0.174	7.0	0.98	0.124
0.95	23.3	3.54	0.533	13.7	2.53	0.312	11.5	1.93	0.281	9.5	1.43	0.212	7.0	1.01	0.136
1.00	29.4	4.56	0.744	14.7	2.56	0.371	12.2	2.10	0.308	9.9	1.54	0.243	6.9	1.04	0.146
1.10	20.2	3.68	0.619	14.5	2.88	0.445	12.2	2.29	0.373	9.4	1.71	0.284	6.3	1.15	0.160
1.20	16.8	3.47	0.613	12.8	2.85	0.465	10.6	2.37	0.383	8.4	1.93	0.297	5.3	1.27	0.164
1.30	22.8	4.88	0.977	10.9	2.47	0.467	8.9	2.23	0.381	6.9	1.89	0.286	4.7	1.29	0.169
1.40	12.5	2.86	0.622	8.8	2.19	0.435	7.4	1.99	0.366	6.1	1.67	0.294	4.2	1.23	0.174
1.50	13.2	2.80	0.752	7.1	1.90	0.404	6.2	1.74	0.353	5.2	1.48	0.286	4.0	1.15	0.177
1.60	6.2	1.94	0.399	5.5	1.76	0.353	4.9	1.60	0.315	4.2	1.41	0.263	3.9	1.09	0.182
1.70	7.5	2.44	0.547	5.2	1.74	0.353	4.2	1.46	0.304	3.6	1.27	0.254	3.4	1.03	0.183
1.80	9.3	2.89	0.765	6.2	2.06	0.505	4.6	1.58	0.377	3.1	1.17	0.244	3.1	1.05	0.181
1.90	10.1	2.70	0.926	6.4	1.89	0.586	4.6	1.54	0.416	3.1	1.15	0.278	2.8	1.00	0.176
2.00	6.6	2.56	0.667	4.8	1.81	0.472	3.9	1.36	0.379	2.9	1.13	0.276	2.6	0.96	0.191
2.20	5.0	1.97	0.611	3.5	1.50	0.432	3.0	1.21	0.365	2.5	1.05	0.297	2.3	0.90	0.218
2.40	4.5	1.83	0.664	3.2	1.56	0.461	2.8	1.35	0.406	2.5	1.05	0.348	2.2	0.90	0.237
2.60	3.4	1.65	0.576	2.9	1.44	0.495	2.7	1.26	0.454	2.5	1.03	0.385	2.0	0.90	0.251
2.80	3.0	1.54	0.604	2.7	1.40	0.539	2.4	1.26	0.481	2.1	1.11	0.401	1.8	0.91	0.256
3.00	4.1	1.62	0.926	2.9	1.51	0.600	2.3	1.41	0.527	2.0	1.24	0.427	1.6	0.92	0.252
3.20	3.5	2.27	0.896	2.4	1.67	0.614	2.1	1.51	0.539	1.7	1.31	0.427	1.3	0.94	0.265
3.40	2.8	1.85	0.807	2.1	1.63	0.600	1.8	1.51	0.517	1.5	1.31	0.421	1.2	0.96	0.278
3.60	2.2	1.65	0.719	1.8	1.49	0.584	1.6	1.39	0.520	1.4	1.24	0.426	1.1	0.97	0.281
3.80	1.9	1.46	0.703	1.6	1.35	0.586	1.5	1.25	0.523	1.2	1.12	0.426	1.0	0.99	0.281
4.00	1.6	1.44	0.657	1.4	1.34	0.547	1.2	1.25	0.490	1.1	1.11	0.404	0.9	1.00	0.265

PER = PERIOD (SEC) AA = ABSOLUTE ACC. (GAL) RV = RELATIVE VELOCITY (CM/SEC) RD = RELATIVE DISPLACEMENT (CM)



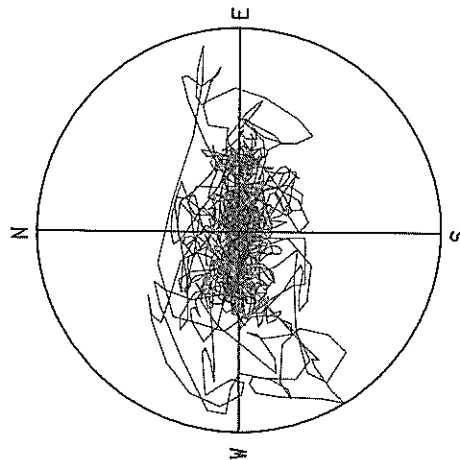
FOURIER SPECTRA

M-1017 HANASAKI-M



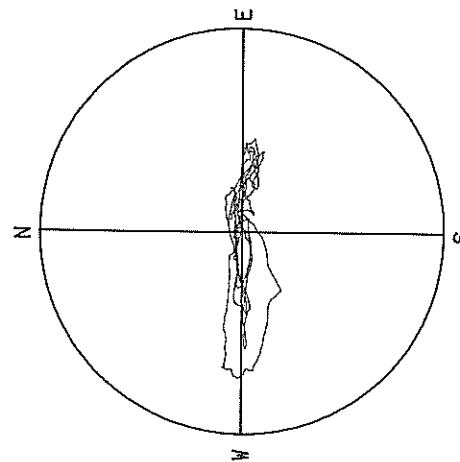
ACCELERATION
R=150.0 GAL
MAX=108.2 GAL

M-1017 HANASAKI-M



VELOCITY
R=3.0 CM/SEC.
MAX=3.0 CM/SEC.

M-1017 HANASAKI-M



DISPLACEMENT
R=1.50 CM
MAX=1.08 CM

RECORD NUMBER M-1022
 STATION YAMASHITA-HEN-M

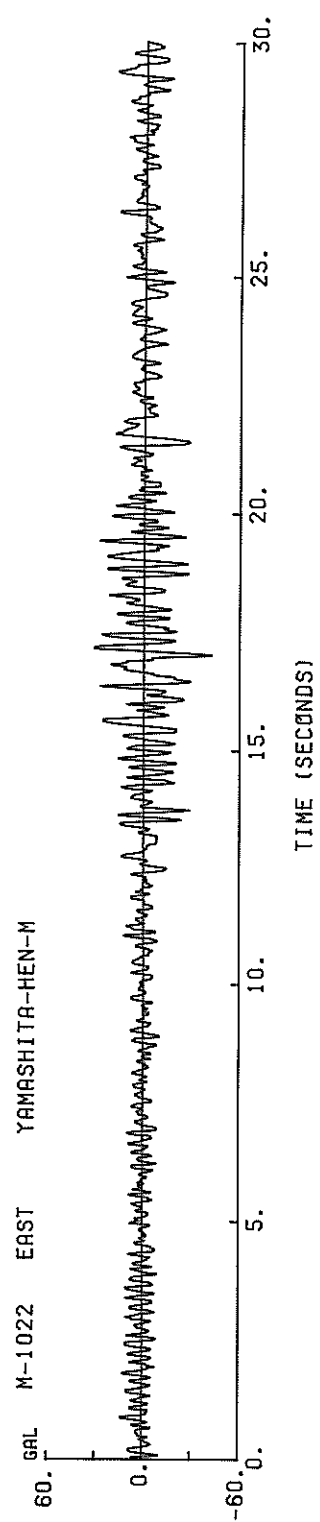
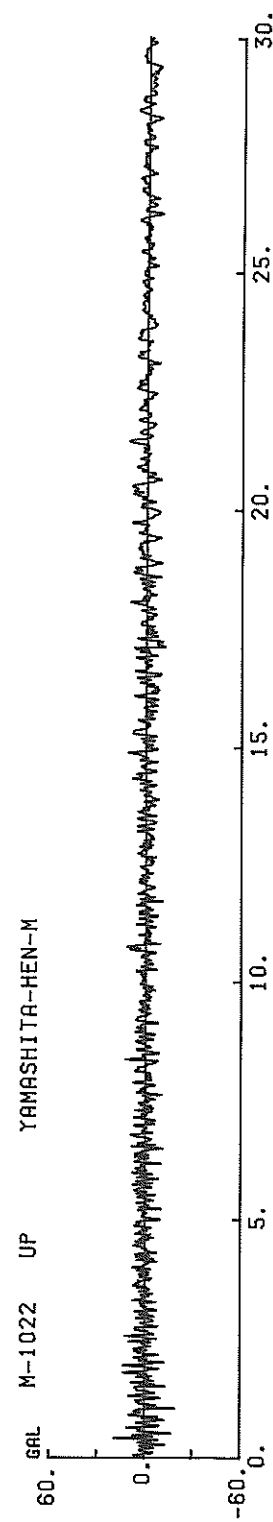
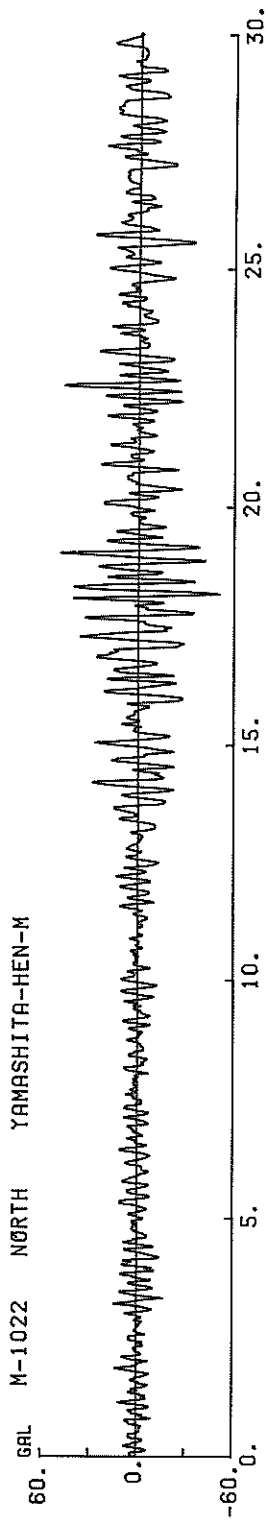
EARTHQUAKE DATA

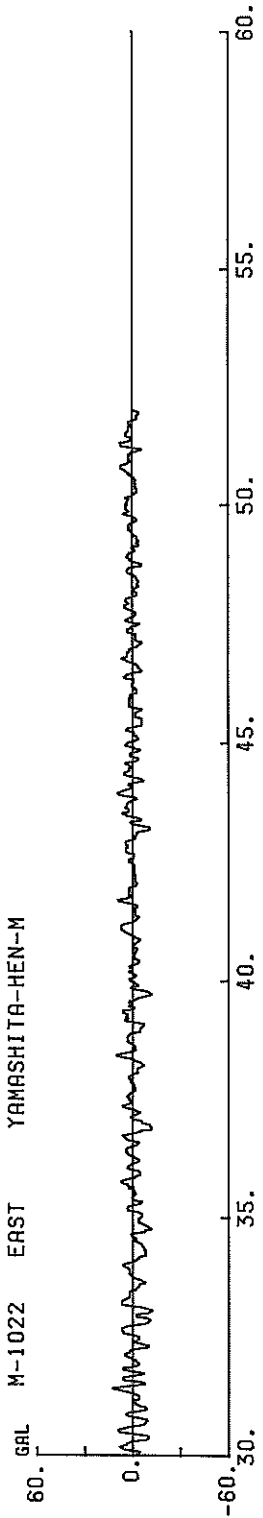
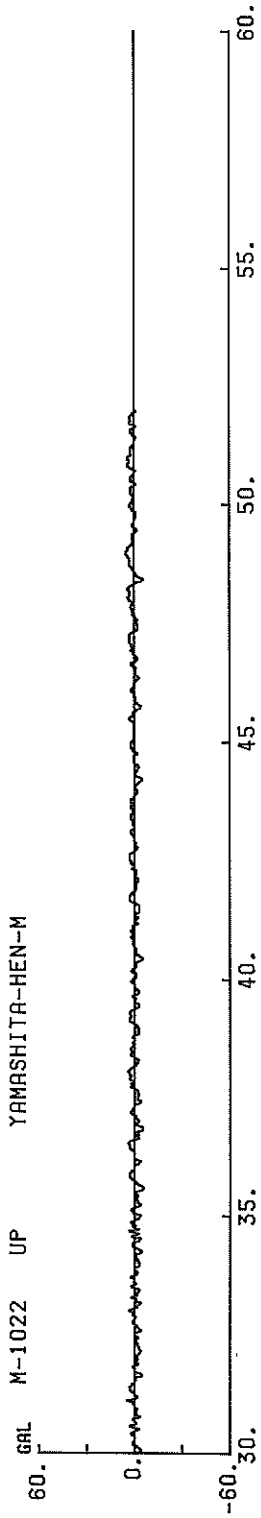
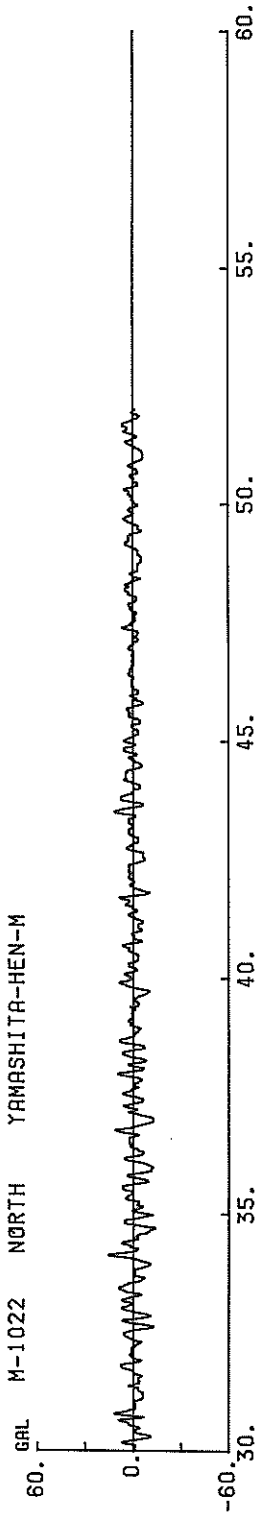
DATA AND TIME 11:53 JUNE24,1986
 LOCATION OF HYPOCENTER
 EPICENTRAL REGION SE OFF BOSO PENINSULA
 LATITUDE 34°49' N
 LONGITUDE 140°43' E
 DEPTH 73KM
 MAGNITUDE 6.5

PEAK VALUES OF COMPONENTS

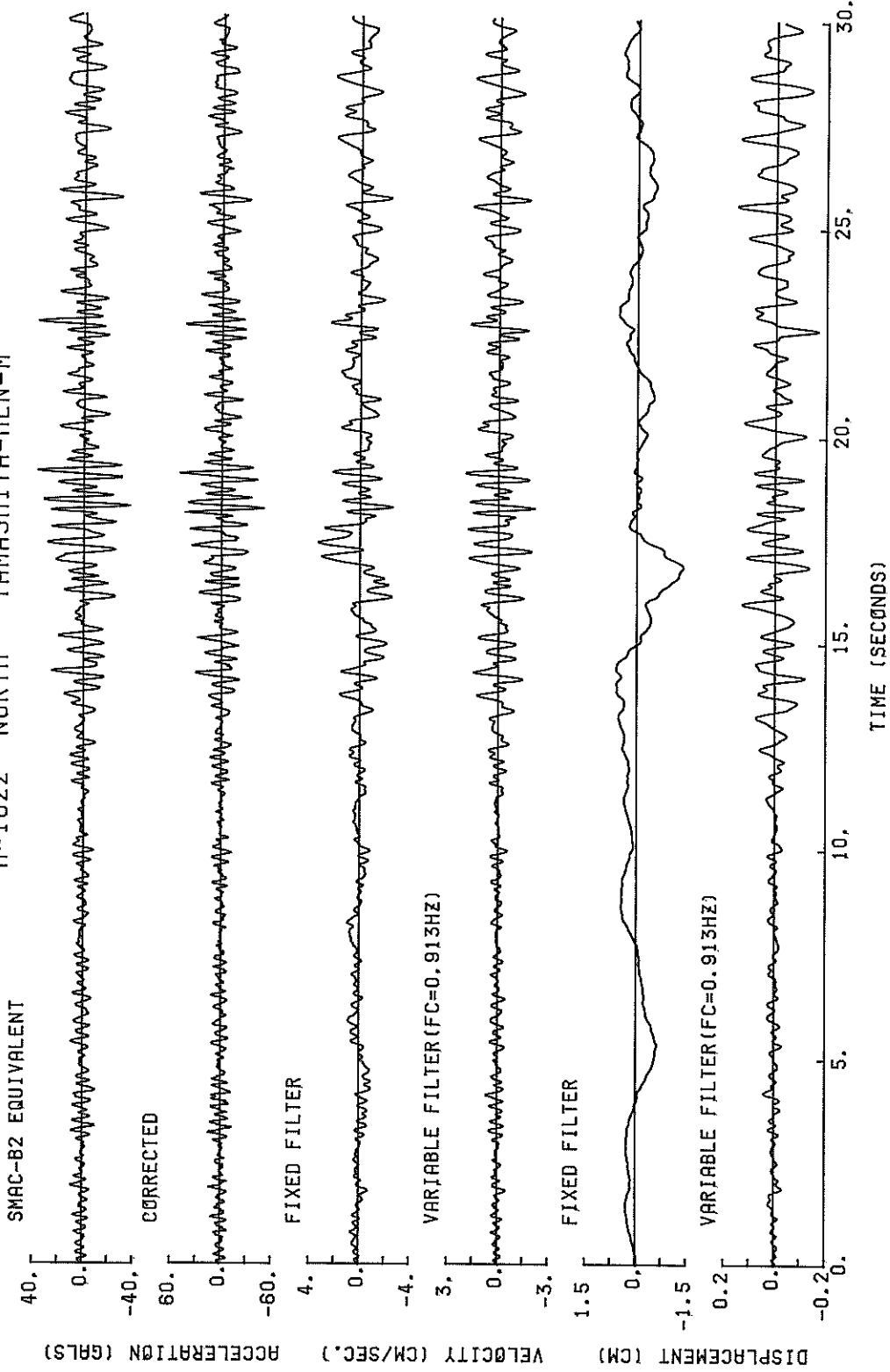
	N S	E W	U D	HORIZONTAL*
PARAMETER OF THE VARIABLE FILTER				
FC (HZ)	0.913	0.888	2.133	
MAXIMUM ACCELERATION (GAL)				
SMAC-B2 EQUIVALENT	37.0	33.5	9.7	37.3
ORIGINAL	51.1	42.7	19.1	51.1
CORRECTED	50.3	43.6	18.4	50.3
MAXIMUM VELOCITY (CM/SEC)				
FIXED FILTER	3.32	3.45	1.31	3.61
VARIABLE FILTER	2.15	2.05	0.37	2.15
MAXIMUM DISPLACEMENT (CM)				
FIXED FILTER	1.391	2.104	1.180	2.265
VARIABLE FILTER	0.166	0.171	0.015	0.178

* RESULTANT OF HORIZONTAL COMPONENTS

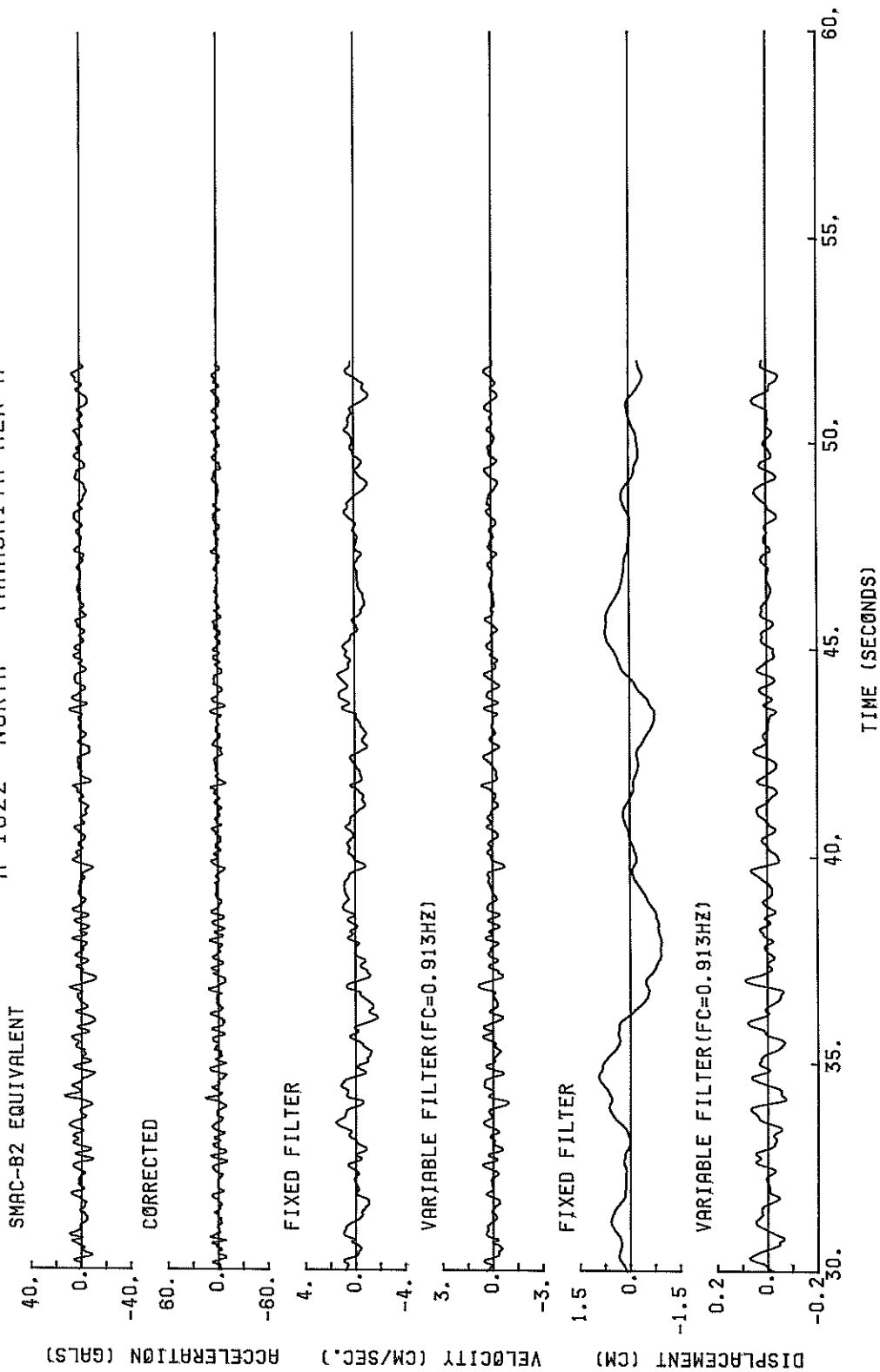




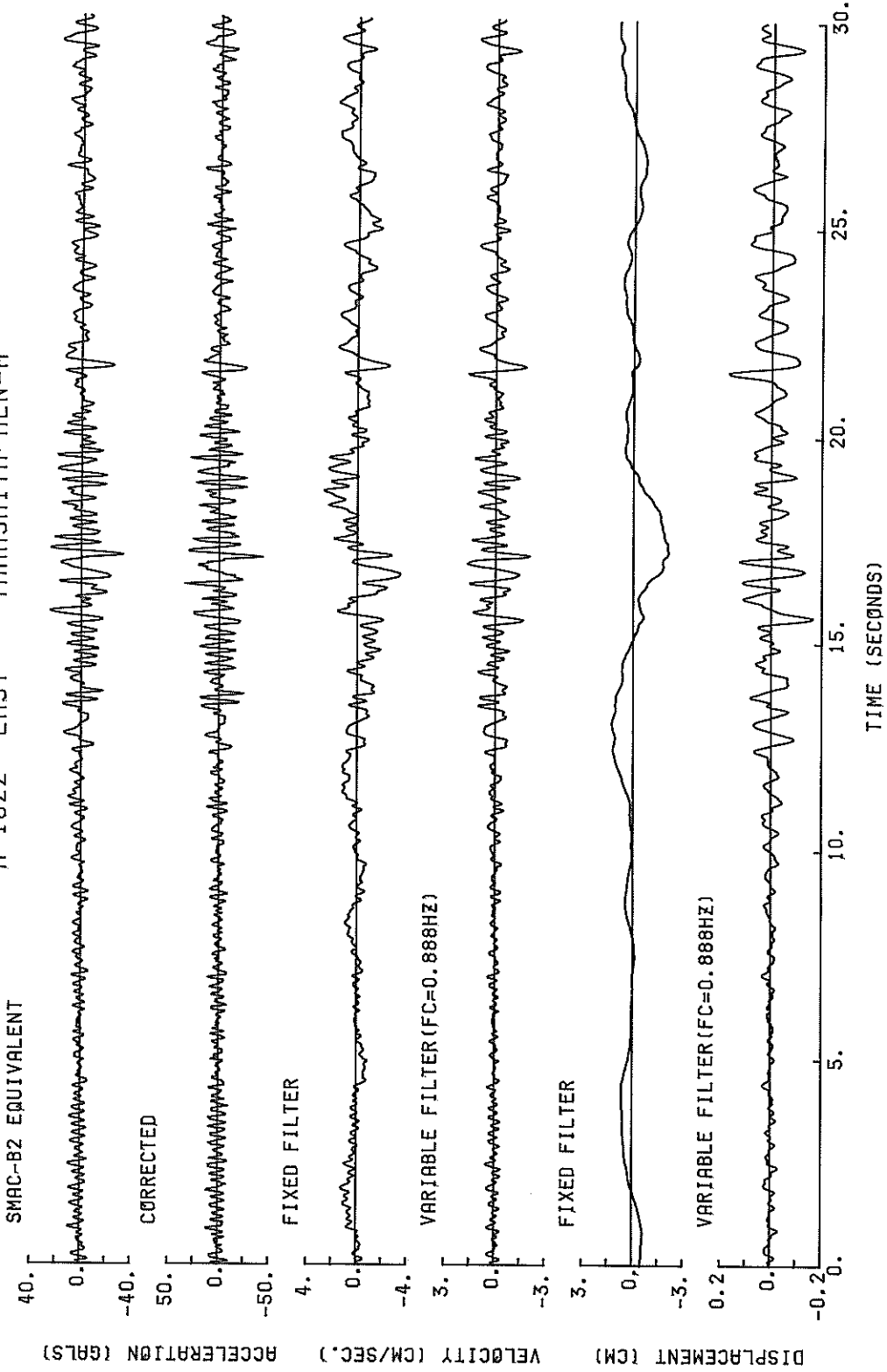
M-1022 NORTH YAMASHITA-HEN-M



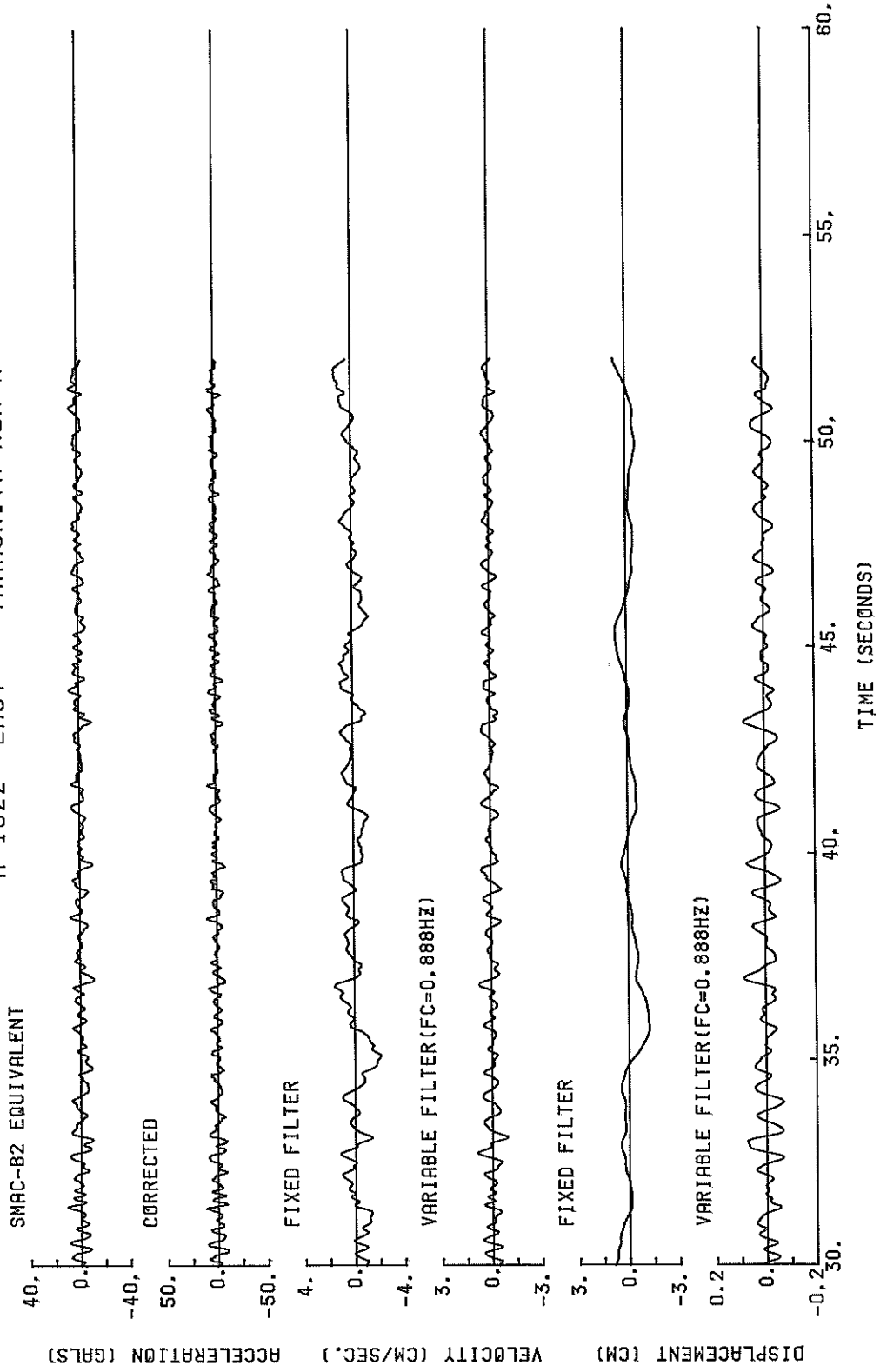
M-1022 NORTH YAMASHITA-HEN-M



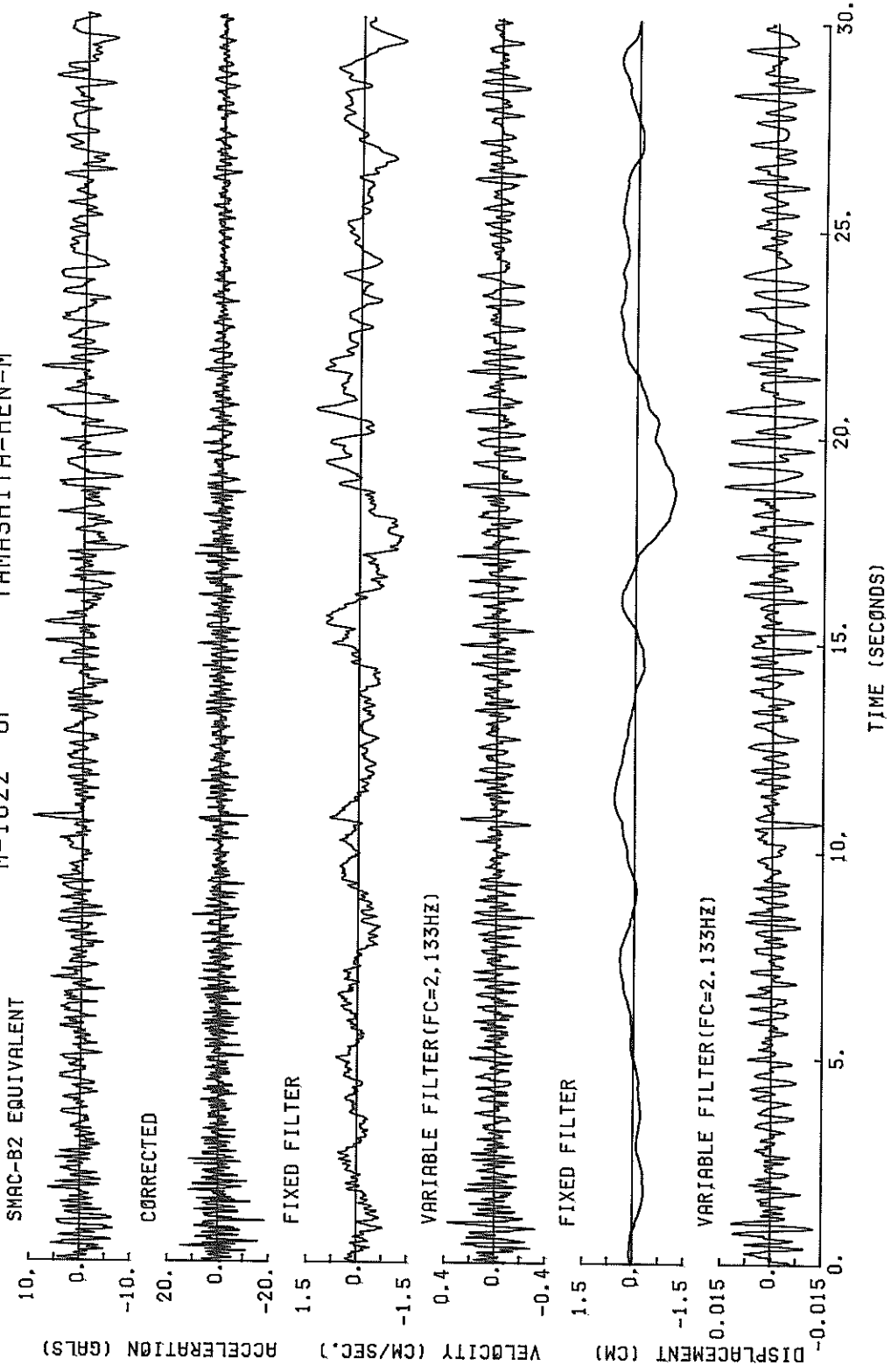
M-1022 EAST YAMASHITA-HEN-M



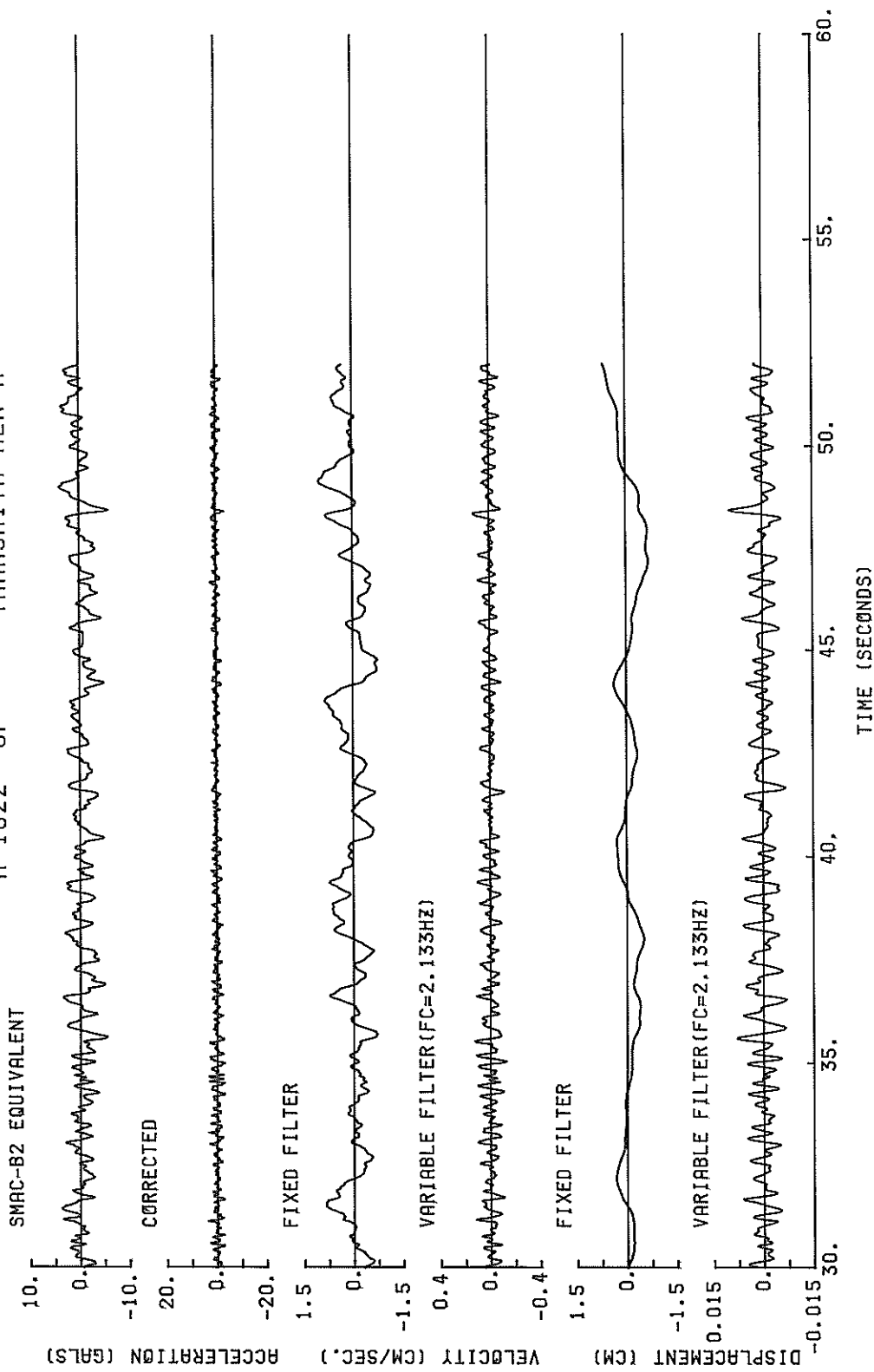
M-1022 EAST YAMASHITA-HEN-M



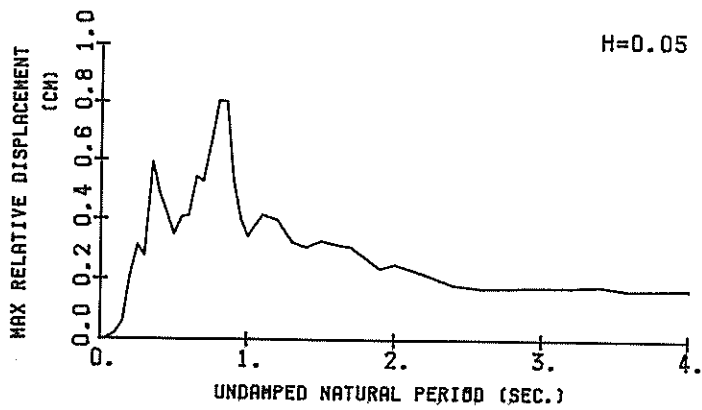
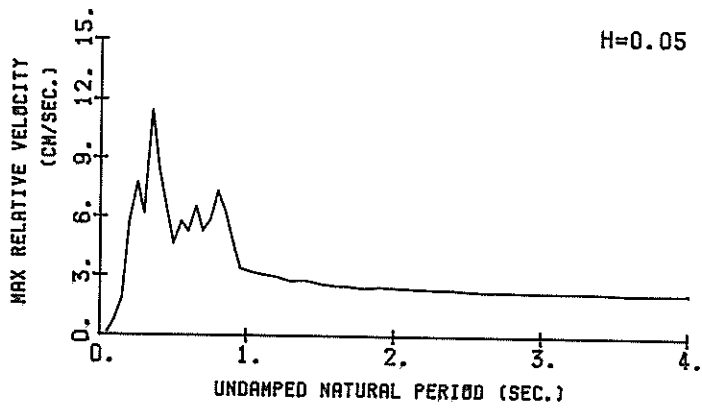
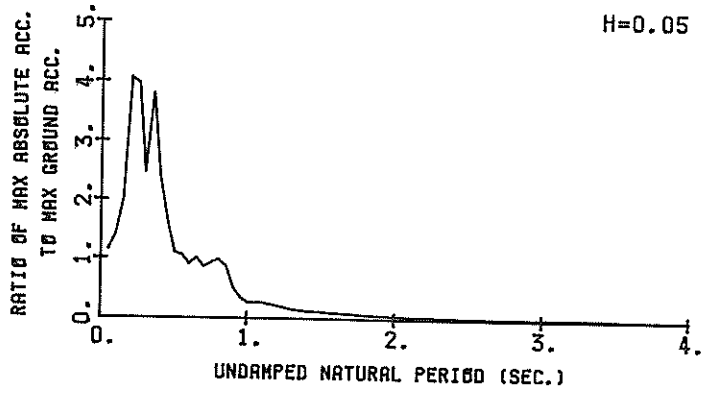
M-1022 UP YAMASHITA-HEN-M



SMAC-B2 EQUIVALENT M-1022 UP YAMASHITA-HEN-M

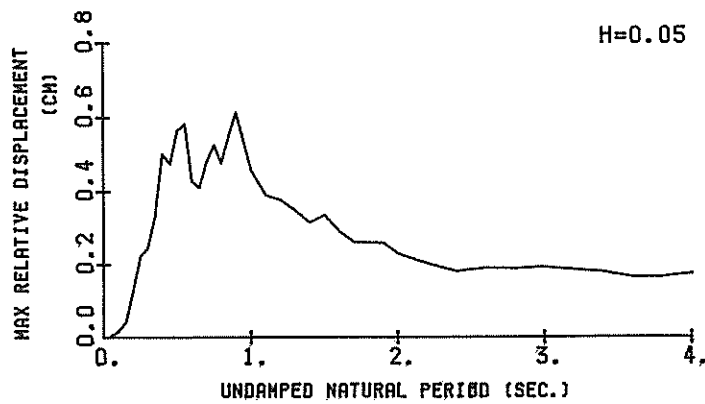
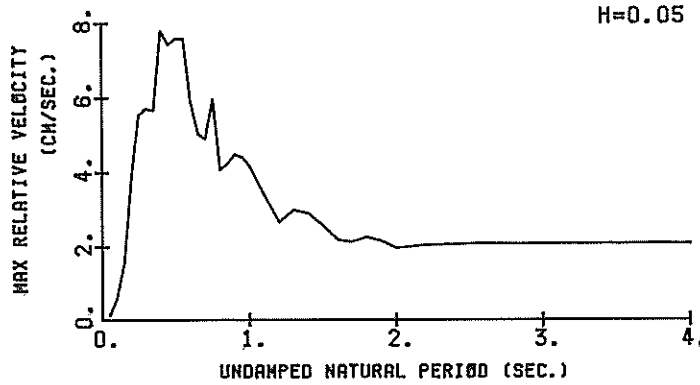
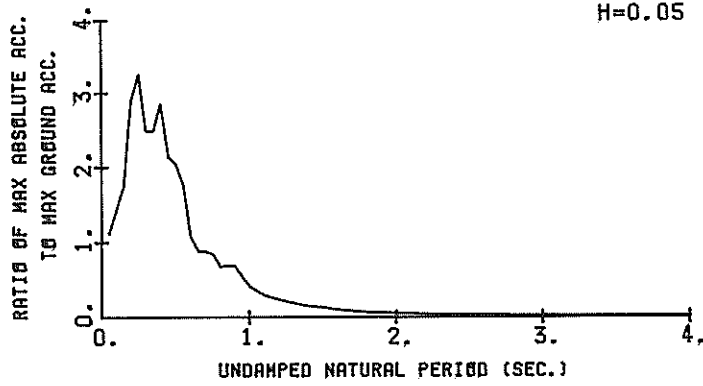


M-1022 NORTH YAMASHITA-HEN-M
(1/FC=1.10 SEC.)



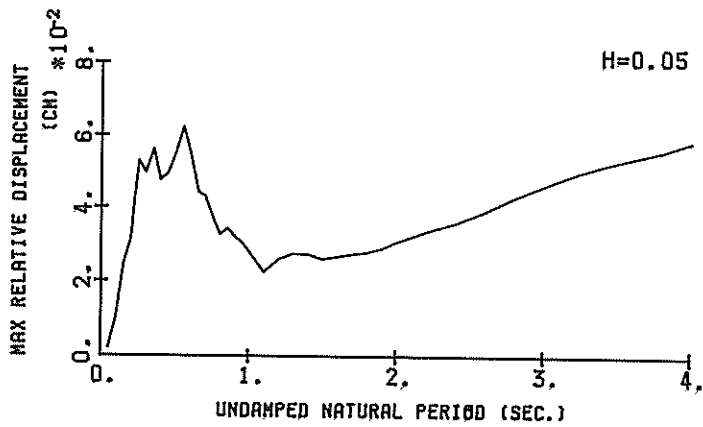
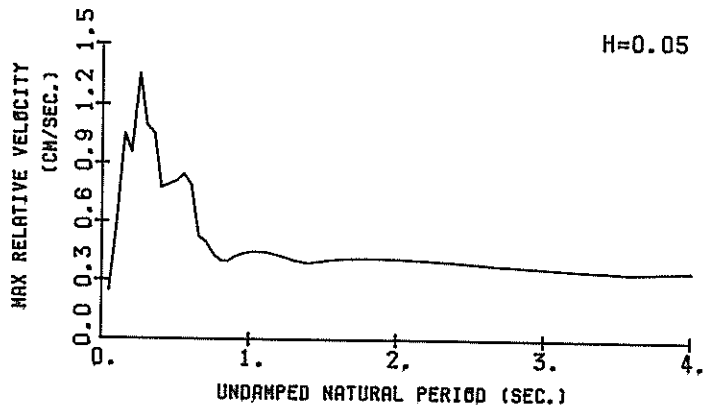
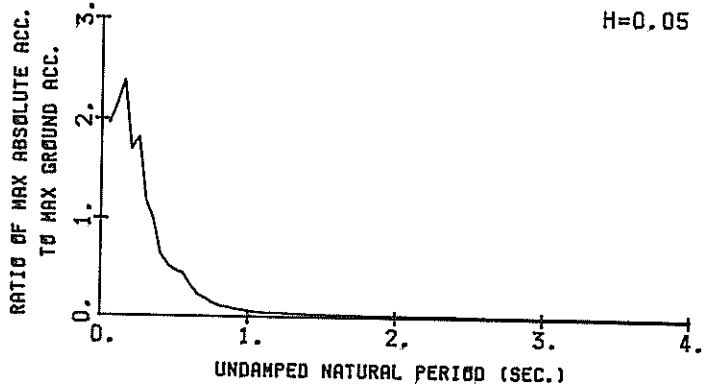
RESPONSE SPECTRA

M-1022 EAST YAMASHITA-HEN-M
(1/FC=1.13 SEC.)



RESPONSE SPECTRA

M-1022 UP YAMASHITA-HEN-M
(1/FC=0.47 SEC.)



RESPONSE SPECTRA

RESPONSE SPECTRUM

RECORD = N-1022 COMPONENT = NORTH SIGNAL = GR. ACC. CORRECTION = STATION = YAMASHITA-HEN-M
 DATE AND TIME = 1986-06-24-11-53 SAMPRING INTERVAL = 0.0100(SEC) MAX. GROUND ACC. = 50.26 (GAL)
 TIME LENGTH = 51.99 (SEC) SKIPPED LENGTH = 0.00 (SEC)

PER	DAMPING = 0.			DAMPING = 0.025			DAMPING = 0.050			DAMPING = 0.100			DAMPING = 0.250		
	AA	RV	RD	AA	RV	RD	AA	RV	RD	AA	RV	RD	AA	RV	RD
0.05	120.2	0.76	0.003	62.6	0.16	0.004	58.2	0.14	0.004	55.8	0.13	0.004	53.6	0.11	0.003
0.10	134.8	1.79	0.034	75.6	0.88	0.019	71.1	0.77	0.018	65.6	0.63	0.016	57.1	0.47	0.014
0.15	242.2	5.68	0.138	106.0	2.26	0.060	101.8	1.89	0.058	95.2	1.58	0.053	77.3	1.15	0.042
0.20	308.6	11.98	0.394	241.5	6.87	0.245	204.1	5.75	0.207	151.9	4.25	0.152	88.9	2.31	0.084
0.25	414.2	16.44	0.656	353.8	9.97	0.400	199.7	7.73	0.314	143.2	5.15	0.222	83.5	2.84	0.120
0.30	317.5	14.85	0.724	133.9	6.48	0.305	124.1	6.18	0.281	112.5	5.28	0.251	75.7	3.31	0.154
0.35	501.0	32.30	1.803	277.7	16.03	0.860	191.4	11.45	0.591	117.6	7.04	0.357	65.7	3.61	0.178
0.40	558.0	34.17	2.190	152.6	10.39	0.616	120.3	8.44	0.486	91.7	6.21	0.363	56.6	3.42	0.202
0.45	223.0	16.01	1.144	103.8	7.91	0.531	82.3	6.39	0.419	65.5	5.10	0.327	47.0	3.47	0.206
0.50	113.0	9.57	0.715	71.6	5.82	0.452	55.7	4.62	0.351	47.0	4.31	0.289	40.1	3.37	0.217
0.55	122.0	10.91	0.934	68.6	6.69	0.525	53.6	5.76	0.408	43.5	4.70	0.323	35.5	3.25	0.229
0.60	97.5	9.14	0.889	60.6	5.56	0.413	45.7	5.26	0.413	40.7	4.47	0.359	31.5	3.11	0.234
0.65	274.6	28.88	2.939	73.3	8.63	0.782	51.2	6.55	0.543	34.7	4.74	0.357	26.6	3.17	0.225
0.70	152.9	17.17	1.898	58.5	6.70	0.724	43.1	5.29	0.530	32.9	4.11	0.398	22.3	3.11	0.226
0.75	90.7	11.01	1.293	59.5	6.99	0.856	47.1	5.87	0.666	33.2	4.58	0.462	20.5	2.97	0.244
0.80	104.0	13.02	1.685	44.8	9.34	1.049	50.0	7.31	0.806	33.5	4.97	0.531	18.8	2.86	0.267
0.85	117.7	16.57	2.154	63.5	9.12	1.160	44.1	6.26	0.861	29.4	4.21	0.521	17.7	2.87	0.274
0.90	64.6	9.62	1.325	35.7	5.55	0.731	26.2	4.77	0.554	21.1	3.91	0.417	15.9	2.83	0.268
0.95	39.9	6.15	0.912	18.1	3.49	0.413	17.8	3.38	0.401	15.4	3.24	0.339	14.1	2.74	0.255
1.00	29.9	4.86	0.757	15.4	3.61	0.388	13.7	3.26	0.343	12.3	2.99	0.300	12.3	2.72	0.240
1.10	42.1	7.55	1.290	19.6	3.87	0.601	13.7	3.10	0.416	9.7	2.96	0.283	9.6	2.67	0.214
1.20	35.2	6.62	1.211	15.2	3.12	0.555	11.1	2.97	0.400	7.8	2.85	0.275	8.4	2.59	0.210
1.30	13.0	3.20	0.555	8.6	2.92	0.388	7.8	2.73	0.326	7.3	2.65	0.282	7.7	2.49	0.218
1.40	10.5	3.20	0.520	7.5	3.01	0.370	6.4	2.78	0.308	6.4	2.50	0.283	7.0	2.38	0.220
1.50	11.0	3.39	0.625	7.6	2.85	0.427	6.0	2.61	0.350	5.5	2.39	0.274	6.4	2.27	0.216
1.60	7.3	3.31	0.503	6.0	2.64	0.389	5.1	2.51	0.318	4.5	2.30	0.248	5.7	2.18	0.206
1.70	6.8	2.87	0.495	5.0	2.63	0.364	4.4	2.49	0.310	4.1	2.29	0.246	5.1	2.15	0.194
1.80	4.0	2.53	0.325	3.7	2.49	0.298	3.6	2.39	0.275	3.6	2.23	0.239	4.7	2.09	0.184
1.90	4.1	2.80	0.377	3.0	2.58	0.267	2.8	2.46	0.236	3.1	2.31	0.219	4.5	2.09	0.185
2.00	2.7	2.43	0.277	2.8	2.46	0.274	2.7	2.42	0.233	2.8	2.32	0.222	4.2	2.12	0.186
2.20	1.8	2.44	0.218	1.9	2.41	0.225	2.0	2.38	0.220	2.3	2.32	0.207	3.7	2.16	0.184
2.40	1.9	2.51	0.284	1.4	2.40	0.286	1.4	2.35	0.195	1.8	2.29	0.180	3.3	2.18	0.179
2.60	1.3	2.11	0.222	1.1	2.21	0.188	1.0	2.24	0.173	1.5	2.25	0.172	2.9	2.15	0.175
2.80	1.2	2.36	0.234	1.0	2.28	0.189	0.9	2.25	0.174	1.4	2.23	0.170	2.7	2.17	0.172
3.00	0.9	2.19	0.200	0.9	2.22	0.182	0.9	2.22	0.176	1.2	2.22	0.173	2.4	2.17	0.171
3.20	0.7	2.23	0.174	0.7	2.22	0.176	0.9	2.22	0.177	1.1	2.21	0.174	2.3	2.17	0.170
3.40	0.7	2.26	0.219	0.7	2.23	0.192	0.8	2.21	0.181	1.0	2.21	0.174	2.1	2.16	0.169
3.60	0.6	2.12	0.203	0.6	2.16	0.178	0.7	2.17	0.168	0.9	2.18	0.170	2.0	2.16	0.169
3.80	0.5	2.15	0.182	0.5	2.16	0.171	0.6	2.17	0.169	0.9	2.17	0.169	1.9	2.15	0.167
4.00	0.5	2.24	0.202	0.5	2.20	0.160	0.6	2.19	0.171	0.8	2.17	0.167	1.8	2.15	0.166

PER = PERIOD (SEC) AA = ABSOLUTE ACC. (GAL) RV = RELATIVE VELOCITY (CM/SEC) RD = RELATIVE DISPLACEMENT (CM)

RESPONSE SPECTRUM

RECORD = N-1022 COMPONENT = EAST SIGNAL = GR. ALC. CORRECTION = STATION = YAMASHITA-HEN-M
 DATE AND TIME = 1936-06-24-11-53 SAMPRING INTERVAL = 0.0100(SEC) MAX. GROUND ACC. = 43.61 (GAL)
 TIME LENGTH = 51.99 (SEC) SKIPPED LENGTH = 0.00 (SEC)

PER	DAMPING = 0.025			DAMPING = 0.050			DAMPING = 0.100			DAMPING = 0.250					
	AA	RV	RD	AA	RV	RD	AA	RV	RD	AA	RV	RD			
0.05	32.2	0.56	0.005	50.1	0.13	0.003	49.1	0.12	0.003	47.8	0.11	0.003	46.7	0.09	0.003
0.10	218.4	3.62	0.055	68.1	0.74	0.017	62.3	0.59	0.016	59.5	0.49	0.015	54.5	0.33	0.013
0.15	227.4	5.03	0.130	99.4	2.17	0.057	76.7	1.58	0.043	66.2	1.14	0.037	52.4	0.76	0.028
0.20	746.1	23.66	0.756	190.5	5.82	0.193	125.9	3.81	0.120	84.8	2.86	0.085	58.1	1.34	0.055
0.25	492.5	19.79	0.780	187.3	7.73	0.297	142.1	5.53	0.224	97.5	3.89	0.152	61.3	1.89	0.059
0.30	240.4	11.79	0.548	145.7	7.43	0.333	108.2	5.71	0.245	80.3	4.14	0.179	58.5	2.34	0.120
0.35	336.3	18.71	1.044	137.0	7.24	0.424	100.3	5.67	0.335	75.4	3.98	0.230	55.1	2.80	0.151
0.40	160.7	10.61	0.651	154.6	9.87	0.626	124.0	7.79	0.500	89.1	5.71	0.354	53.2	3.41	0.194
0.45	348.7	25.07	1.789	108.8	8.44	0.557	93.0	7.43	0.474	76.6	6.09	0.385	53.3	3.66	0.240
0.50	259.2	20.72	1.641	107.0	9.11	0.676	89.5	7.58	0.564	71.5	5.89	0.442	48.5	3.52	0.261
0.55	227.0	19.71	1.740	95.1	8.96	0.726	76.6	7.58	0.583	58.4	5.93	0.433	41.0	3.73	0.258
0.60	78.4	8.45	0.975	52.8	5.97	0.480	47.4	5.91	0.459	39.3	5.26	0.350	32.8	3.68	0.236
0.65	110.2	11.56	1.179	55.0	5.66	0.587	38.7	5.04	0.412	30.1	4.37	0.312	25.9	3.49	0.210
0.70	131.6	14.74	1.634	52.5	6.69	0.689	38.8	4.89	0.478	26.9	3.56	0.321	21.1	3.26	0.207
0.75	143.1	17.46	2.059	54.8	8.06	0.780	37.1	5.96	0.527	25.1	4.14	0.348	18.8	3.14	0.219
0.80	148.8	18.10	0.758	37.4	5.18	0.605	29.5	4.09	0.476	21.7	3.61	0.342	17.7	3.09	0.231
0.85	118.0	16.17	2.159	46.0	6.27	0.841	30.4	4.26	0.552	21.5	3.69	0.383	16.6	3.09	0.242
0.90	64.7	9.85	1.323	40.8	6.21	0.836	30.1	4.49	0.613	20.7	3.73	0.414	13.6	3.06	0.249
0.95	40.2	6.00	0.920	27.2	5.09	0.620	23.5	4.41	0.583	18.2	3.56	0.404	14.2	3.01	0.249
1.00	34.0	5.58	0.861	20.2	4.52	0.511	18.2	4.18	0.457	15.0	3.55	0.369	12.8	2.94	0.243
1.10	29.3	5.95	0.898	16.7	3.87	0.512	12.8	3.38	0.390	10.9	3.10	0.313	10.3	2.75	0.240
1.20	25.9	5.10	0.946	12.8	2.70	0.466	10.5	2.68	0.378	9.3	2.56	0.311	9.0	2.54	0.236
1.30	15.3	4.02	0.656	9.9	3.32	0.421	8.4	3.01	0.349	7.6	2.69	0.291	7.7	2.35	0.223
1.40	13.4	3.66	0.667	8.2	3.07	0.405	6.5	2.92	0.315	5.7	2.65	0.263	6.5	2.24	0.202
1.50	9.4	3.16	0.535	6.7	2.63	0.382	6.0	2.57	0.335	5.2	2.66	0.278	5.5	2.17	0.197
1.60	5.8	2.65	0.378	4.6	2.12	0.300	4.7	2.20	0.291	4.4	2.24	0.266	4.7	2.12	0.202
1.70	6.5	2.25	0.487	3.6	2.19	0.262	3.7	2.14	0.263	3.8	2.09	0.252	4.3	2.09	0.203
1.80	4.0	2.62	0.326	3.3	2.40	0.270	3.3	2.27	0.261	3.3	2.14	0.244	3.9	2.06	0.201
1.90	3.9	2.35	0.360	3.1	2.22	0.280	2.9	2.16	0.259	2.9	2.10	0.235	3.7	2.04	0.197
2.00	3.3	2.13	0.332	2.4	1.98	0.241	2.4	1.97	0.231	2.4	2.03	0.218	3.4	2.02	0.193
2.20	1.8	2.08	0.224	1.8	2.07	0.213	1.8	2.06	0.203	1.9	2.03	0.189	3.0	2.03	0.182
2.40	1.5	2.06	0.215	1.4	2.06	0.183	1.4	2.06	0.181	1.6	2.06	0.183	2.8	2.05	0.173
2.60	1.3	2.17	0.222	1.2	2.12	0.200	1.2	2.10	0.190	1.5	2.07	0.183	2.5	2.06	0.171
2.80	1.0	2.05	0.200	1.0	2.07	0.193	1.1	2.08	0.188	1.3	2.07	0.184	2.4	2.07	0.172
3.00	0.9	2.08	0.214	0.9	2.08	0.199	1.0	2.08	0.192	1.2	2.07	0.184	2.2	2.07	0.172
3.20	0.7	2.09	0.185	0.8	2.08	0.186	0.8	2.08	0.185	1.1	2.07	0.181	2.1	2.07	0.172
3.40	0.7	2.05	0.195	0.7	2.07	0.184	0.7	2.07	0.179	1.0	2.07	0.176	1.9	2.07	0.170
3.60	0.5	2.10	0.158	0.5	2.09	0.161	0.6	2.09	0.166	0.9	2.08	0.169	1.8	2.07	0.169
3.80	0.5	2.15	0.170	0.5	2.11	0.161	0.6	2.09	0.165	0.8	2.08	0.168	1.7	2.07	0.167
4.00	0.5	2.09	0.185	0.5	2.09	0.178	0.5	2.08	0.175	0.7	2.08	0.171	1.6	2.07	0.167

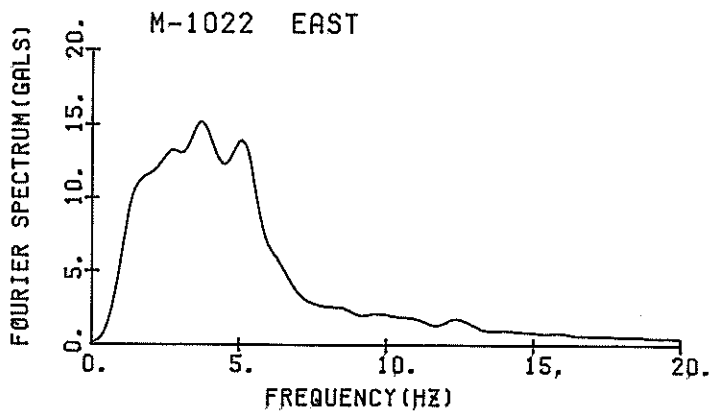
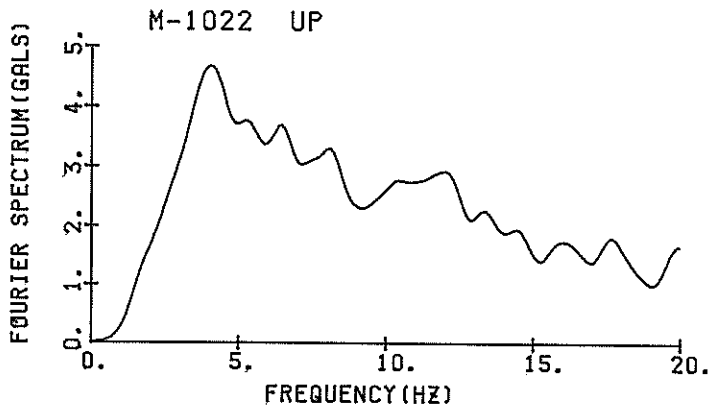
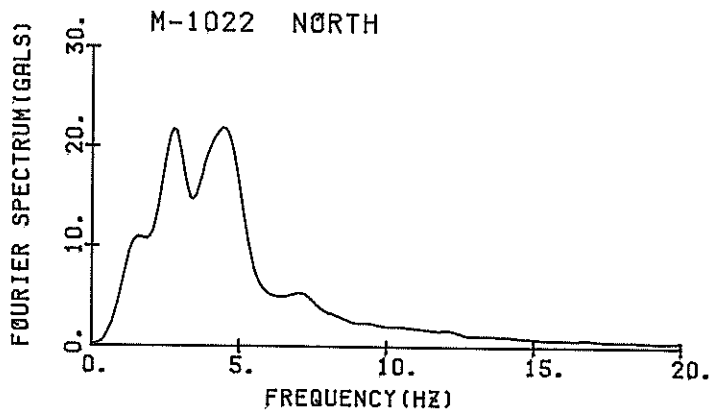
PER = PERIOD (SEC) AA = ABSOLUTE ACC. (GAL) RV = RELATIVE VELOCITY (CM/SEC) RD = RELATIVE DISPLACEMENT (CM)

RESPONSE SPECTRUM

RECORD = N-1022 COMPONENT = UP SIGNAL = GR. ACC. CORRECTION = STATION = YAMASHITA-HEN-M
 DATE AND TIME = 1986-06-24-11-53 SAMPRING INTERVAL = 0.0100(SEC) MAX.GROUND ACC. = 18.41 (GAL)
 TIME LENGTH = 51.99 (SEC) SKIPPED LENGTH = 0.00 (SEC)

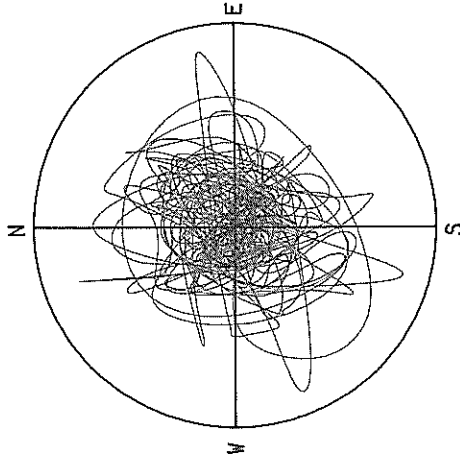
PER	DAMPING = 0.			DAMPING = 0.025			DAMPING = 0.050			DAMPING = 0.100			DAMPING = 0.250		
	AA	RV	RD	AA	RV	RD	AA	RV	RD	AA	RV	RD	AA	RV	RD
0.05	279.5	2.21	0.018	53.1	0.36	0.003	36.2	0.25	0.002	28.4	0.16	0.002	24.0	0.11	0.001
0.10	113.8	1.76	0.029	57.5	0.91	0.015	39.4	0.58	0.010	28.1	0.40	0.007	22.8	0.29	0.005
0.15	205.7	4.94	0.117	64.5	1.60	0.037	43.8	1.05	0.025	27.8	0.69	0.015	18.2	0.40	0.009
0.20	102.8	3.34	0.104	42.7	1.33	0.043	31.3	0.96	0.031	23.9	0.71	0.024	15.6	0.44	0.014
0.25	141.0	5.67	0.223	41.4	1.69	0.066	33.4	1.35	0.036	23.5	0.94	0.036	13.7	0.59	0.020
0.30	92.5	4.51	0.211	25.7	1.29	0.058	22.0	1.10	0.050	17.2	0.88	0.038	11.2	0.62	0.022
0.35	90.1	5.04	0.280	21.8	1.36	0.068	18.3	1.05	0.056	13.3	0.78	0.040	8.8	0.50	0.023
0.40	68.6	4.44	0.278	16.1	1.07	0.065	11.8	0.78	0.048	8.7	0.60	0.034	7.3	0.45	0.024
0.45	22.8	1.67	0.117	13.2	1.05	0.067	9.7	0.80	0.049	7.1	0.56	0.035	6.3	0.43	0.024
0.50	11.3	0.94	0.073	9.6	0.91	0.061	8.7	0.81	0.055	6.9	0.62	0.042	5.2	0.42	0.023
0.55	29.4	2.61	0.225	10.7	1.10	0.081	8.2	0.85	0.062	5.7	0.61	0.042	4.1	0.43	0.023
0.60	18.8	1.82	0.171	9.2	0.99	0.084	6.1	0.79	0.054	4.2	0.60	0.037	3.3	0.42	0.022
0.65	10.1	1.17	0.108	4.8	0.58	0.051	4.2	0.52	0.044	3.5	0.47	0.037	2.8	0.41	0.023
0.70	8.5	0.97	0.105	4.0	0.57	0.050	3.5	0.50	0.043	2.9	0.45	0.035	2.5	0.39	0.023
0.75	6.3	0.76	0.090	3.1	0.49	0.043	2.6	0.44	0.037	2.4	0.42	0.032	2.2	0.39	0.024
0.80	2.9	0.46	0.048	2.0	0.39	0.032	2.0	0.40	0.033	2.0	0.40	0.031	2.0	0.38	0.024
0.85	3.3	0.74	0.097	2.1	0.40	0.032	1.9	0.40	0.034	1.8	0.40	0.031	1.9	0.39	0.024
0.90	3.5	0.59	0.067	1.6	0.43	0.032	1.6	0.42	0.032	1.6	0.41	0.030	1.8	0.39	0.024
0.95	1.2	0.46	0.023	1.4	0.45	0.032	1.4	0.44	0.032	1.3	0.43	0.028	1.6	0.39	0.024
1.00	1.7	0.47	0.044	1.1	0.46	0.029	1.1	0.45	0.028	1.1	0.45	0.027	1.5	0.39	0.023
1.10	1.2	0.47	0.037	0.9	0.46	0.026	0.8	0.45	0.023	0.9	0.43	0.024	1.3	0.39	0.022
1.20	1.6	0.48	0.057	0.8	0.43	0.030	0.8	0.43	0.026	0.8	0.42	0.023	1.2	0.39	0.021
1.30	1.0	0.41	0.043	0.7	0.41	0.029	0.7	0.40	0.028	0.8	0.40	0.025	1.1	0.38	0.020
1.40	0.7	0.40	0.033	0.6	0.40	0.029	0.6	0.39	0.027	0.7	0.38	0.025	1.0	0.37	0.021
1.50	0.3	0.42	0.043	0.5	0.41	0.027	0.5	0.40	0.026	0.6	0.39	0.025	0.9	0.36	0.022
1.60	0.6	0.43	0.036	0.4	0.42	0.027	0.4	0.41	0.027	0.5	0.40	0.026	0.9	0.37	0.022
1.70	0.5	0.43	0.036	0.4	0.42	0.028	0.4	0.42	0.028	0.4	0.40	0.026	0.8	0.37	0.023
1.80	0.4	0.43	0.035	0.4	0.42	0.028	0.4	0.42	0.028	0.4	0.40	0.027	0.7	0.38	0.024
1.90	0.4	0.43	0.040	0.3	0.42	0.030	0.4	0.42	0.029	0.4	0.41	0.027	0.7	0.38	0.024
2.00	0.4	0.43	0.038	0.3	0.42	0.032	0.4	0.41	0.031	0.4	0.40	0.029	0.6	0.38	0.025
2.20	0.3	0.42	0.043	0.3	0.41	0.035	0.3	0.41	0.034	0.4	0.40	0.032	0.5	0.38	0.027
2.40	0.3	0.40	0.042	0.3	0.40	0.037	0.3	0.40	0.036	0.3	0.39	0.034	0.5	0.38	0.029
2.60	0.3	0.39	0.048	0.2	0.39	0.041	0.3	0.39	0.039	0.3	0.38	0.037	0.5	0.37	0.031
2.80	0.2	0.38	0.046	0.2	0.38	0.044	0.2	0.38	0.043	0.3	0.38	0.040	0.5	0.37	0.034
3.00	0.2	0.37	0.052	0.2	0.37	0.048	0.2	0.37	0.046	0.3	0.37	0.044	0.4	0.36	0.037
3.20	0.2	0.36	0.055	0.2	0.36	0.051	0.2	0.36	0.049	0.3	0.36	0.046	0.4	0.36	0.039
3.40	0.2	0.40	0.055	0.2	0.35	0.053	0.2	0.35	0.052	0.3	0.35	0.049	0.4	0.35	0.042
3.60	0.2	0.37	0.061	0.2	0.34	0.056	0.2	0.35	0.054	0.2	0.35	0.051	0.4	0.35	0.044
3.80	0.2	0.37	0.062	0.2	0.35	0.057	0.2	0.35	0.056	0.2	0.35	0.053	0.4	0.35	0.046
4.00	0.2	0.36	0.063	0.2	0.36	0.060	0.2	0.36	0.059	0.2	0.35	0.055	0.4	0.35	0.048

PER = PERIOD (SEC) AA = ABSOLUTE ACC. (GAL) RV = RELATIVE VELOCITY (CM/SEC) RD = RELATIVE DISPLACEMENT (CM)



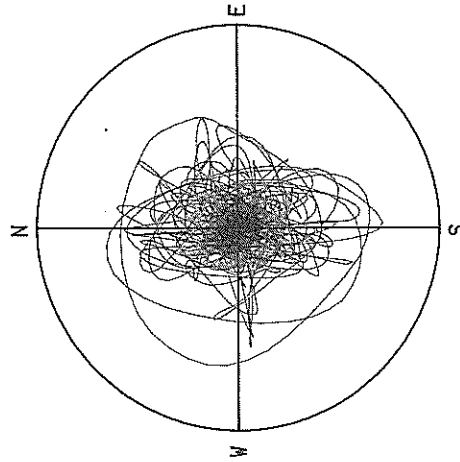
FOURIER SPECTRA

M-1022 YAMASHITA-HEN-M



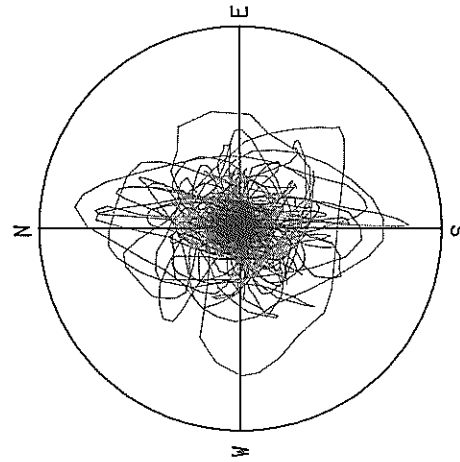
DISPLACEMENT
R=0.20 CM
MAX=0.18 CM

M-1022 YAMASHITA-HEN-M



VELOCITY
R=3.0 CM/SEC.
MAX=2.2 CM/SEC.

M-1022 YAMASHITA-HEN-M



ACCELERATION
R=60.0 GAL
MAX=50.3 GAL

RECORD NUMBER F-12
 STATION HITACHINAKA-F

EARTHQUAKE DATA

DATA AND TIME 12: 4 SEP.20,1986

LOCATION OF HYPOCENTER

EPCENTRAL REGION NORTHERN IBARAKI PREF.

LATITUDE 36°28' N

LONGITUDE 140°40' E

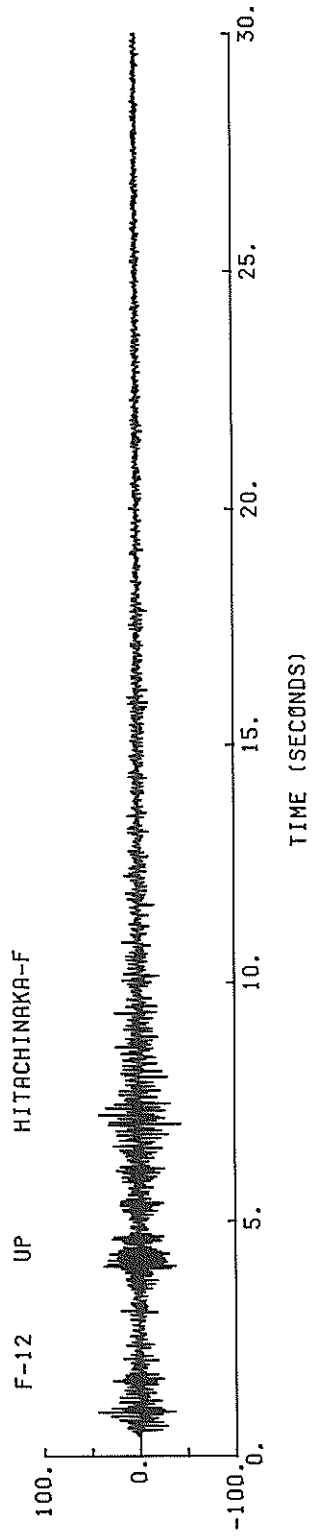
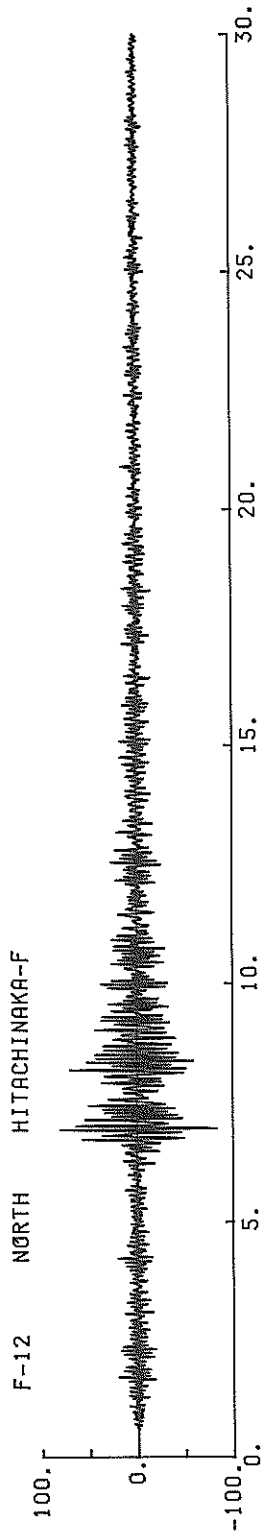
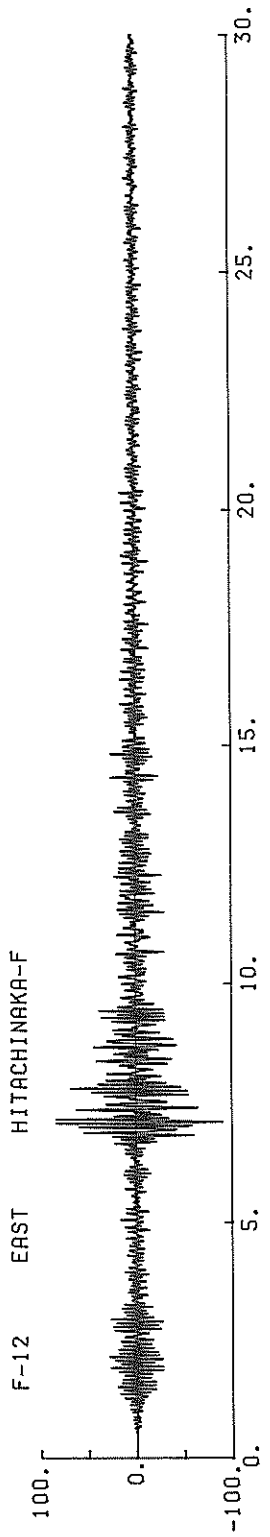
DEPTH 56KM

MAGNITUDE 5.0

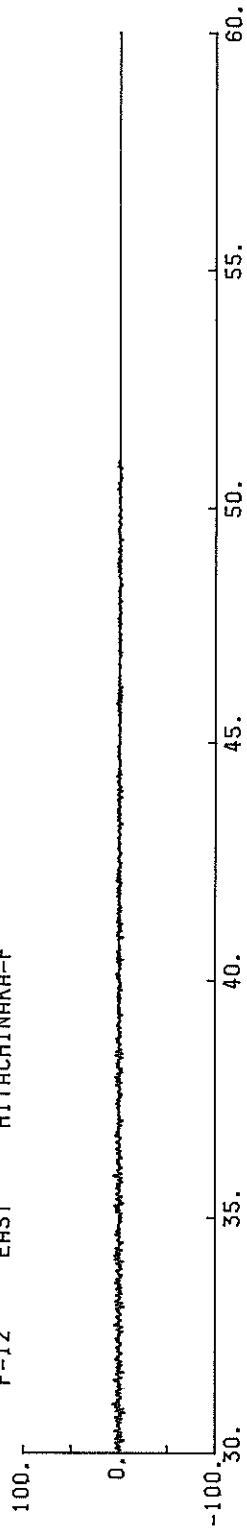
PEAK VALUES OF COMPONENTS

	N S	E W	U D	HORIZONTAL*
PARAMETER OF THE VARIABLE FILTER				
FC (HZ)	0.744	0.561	0.951	
MAXIMUM ACCELERATION (GAL)				
SMAC-82 EQUIVALENT	25.5	25.3	10.3	29.0
ORIGINAL	83.4	90.3	44.1	91.3
CORRECTED	84.7	94.5	50.1	94.6
MAXIMUM VELOCITY (CM/SEC)				
FIXED FILTER	1.46	1.50	0.62	1.55
VARIABLE FILTER	1.45	1.50	0.59	1.51
MAXIMUM DISPLACEMENT (CM)				
FIXED FILTER	0.048	0.100	0.043	0.108
VARIABLE FILTER	0.031	0.070	0.018	0.075

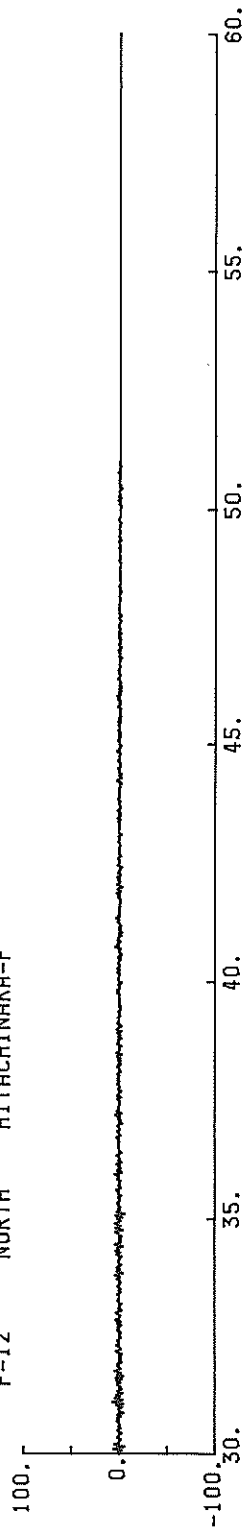
* RESULTANT OF HORIZONTAL COMPONENTS



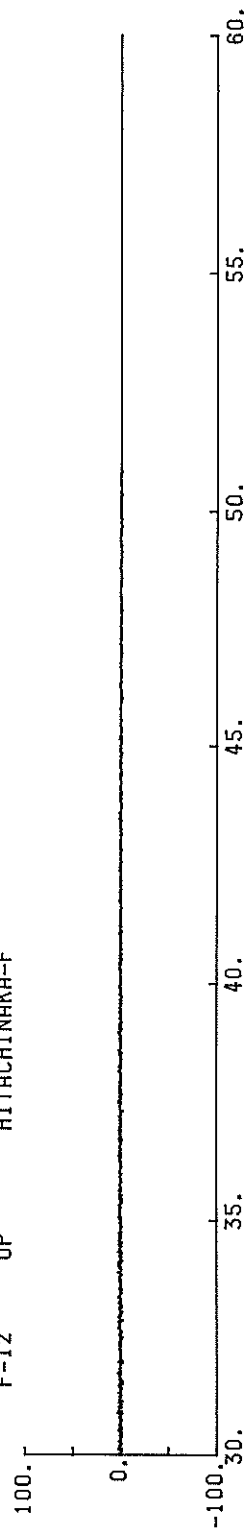
F-12 EAST HITACHINAKA-F



F-12 NORTH HITACHINAKA-F

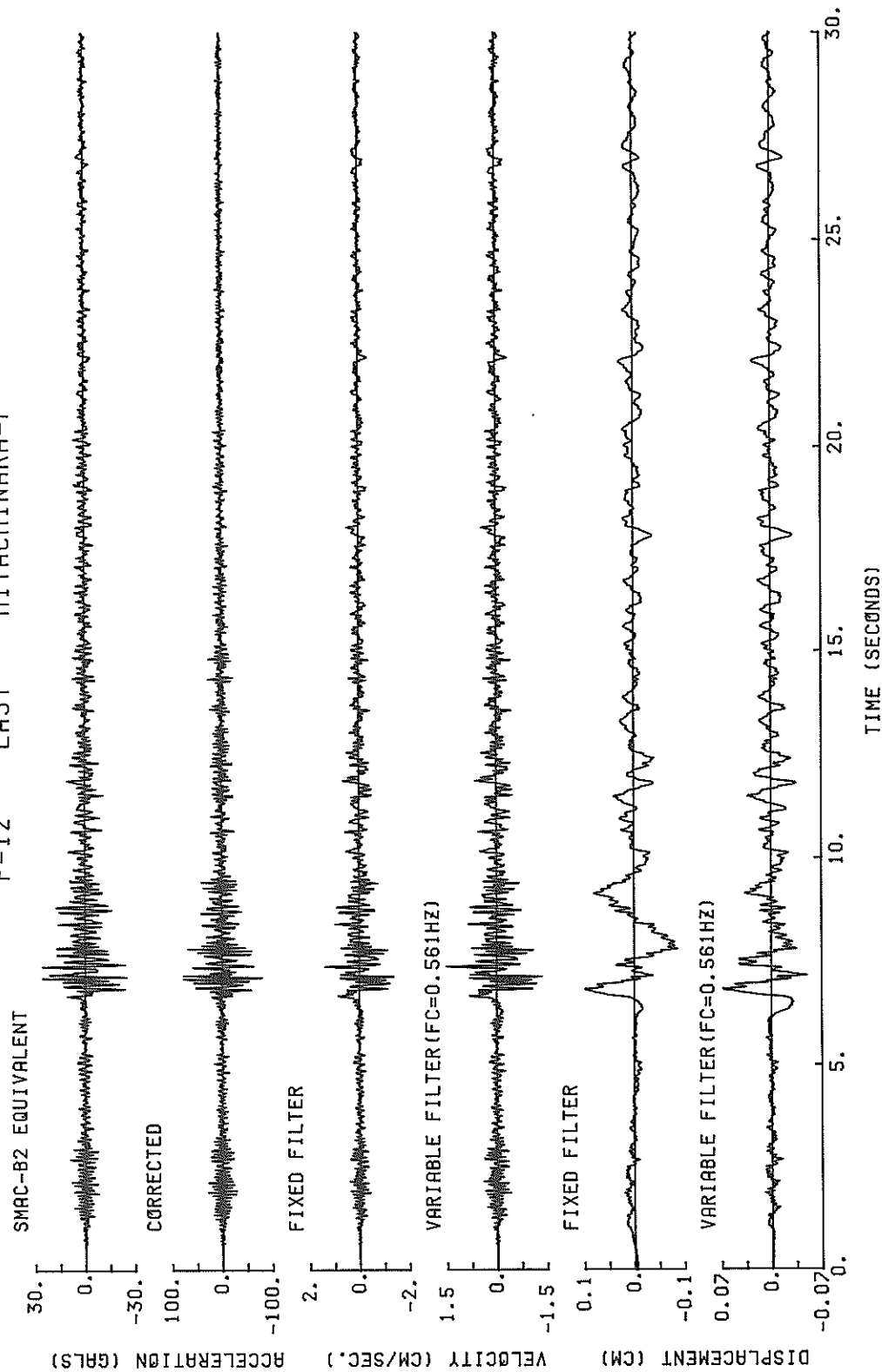


F-12 UP HITACHINAKA-F

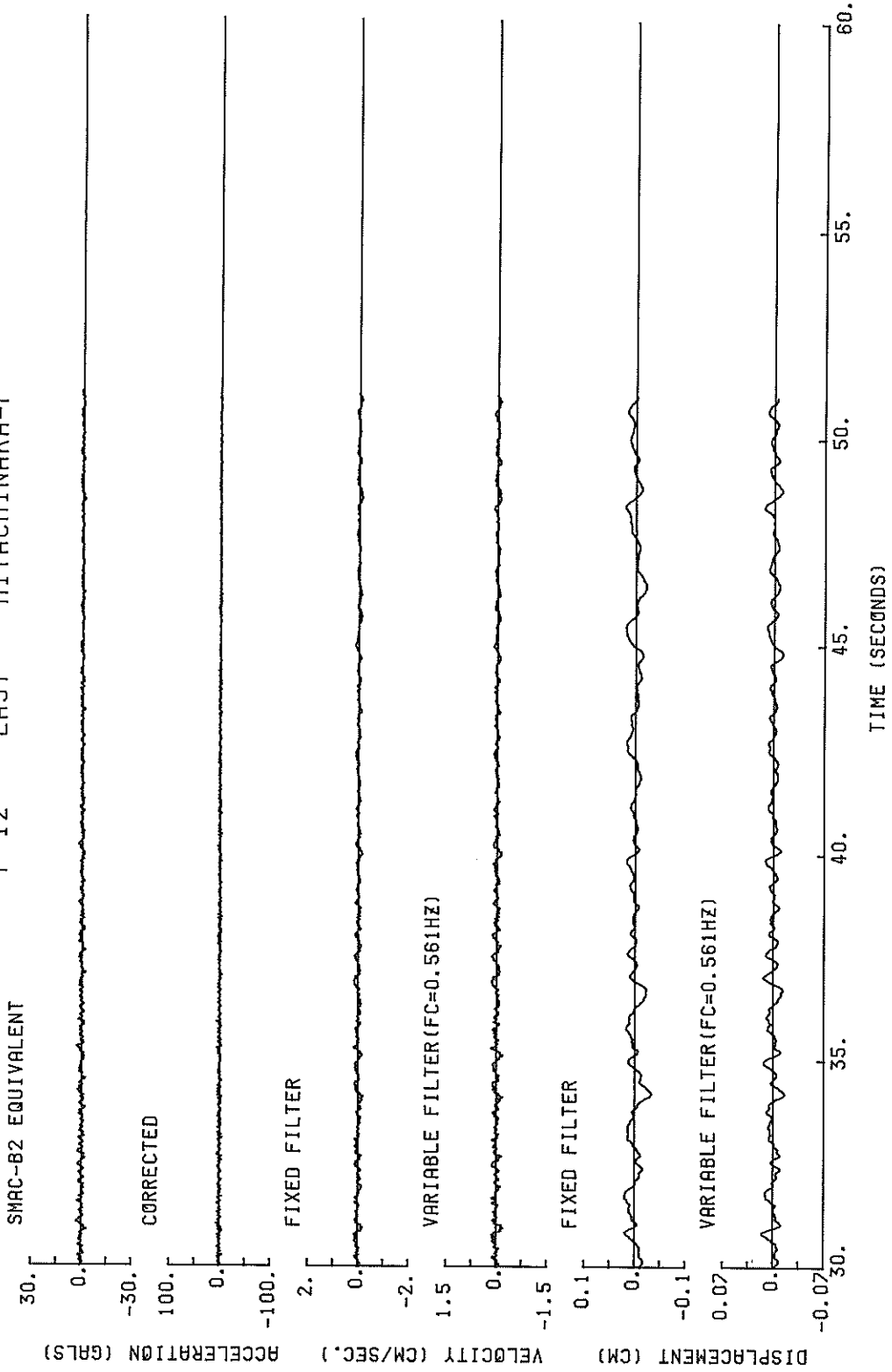


TIME (SECONDS)

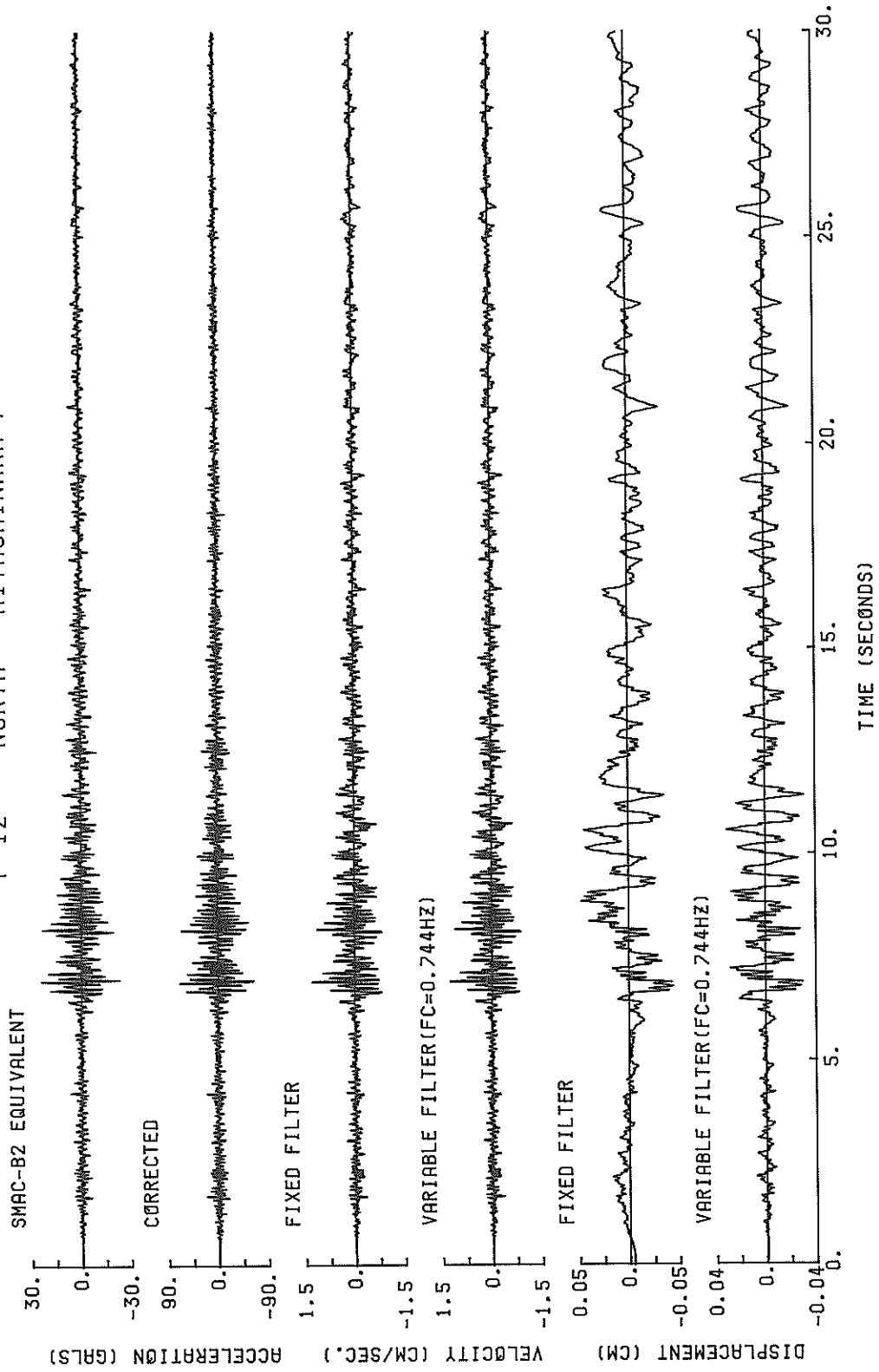
F-12 EAST HITACHINAKA-F



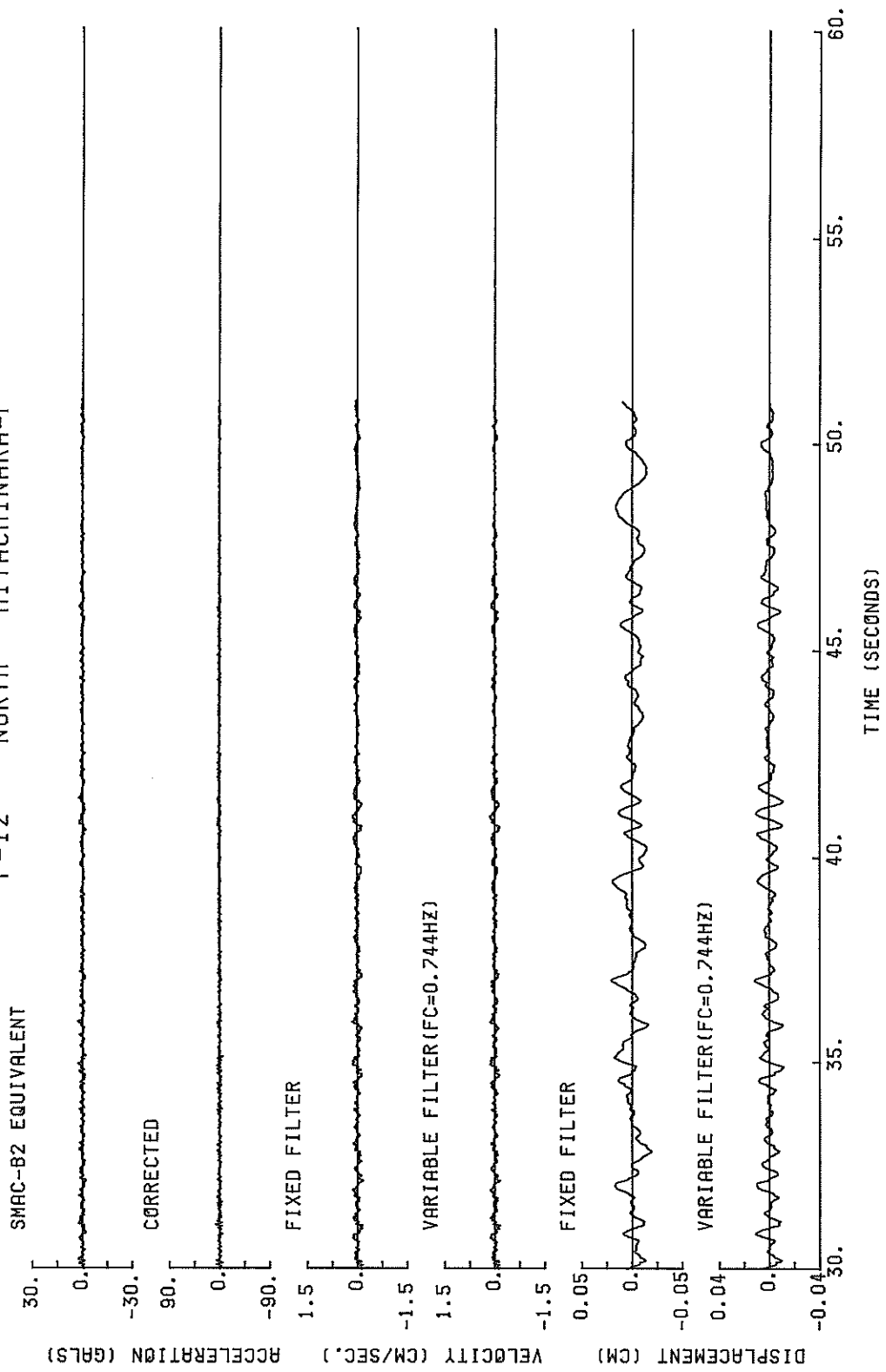
F-12 EAST HITACHINAKA-F



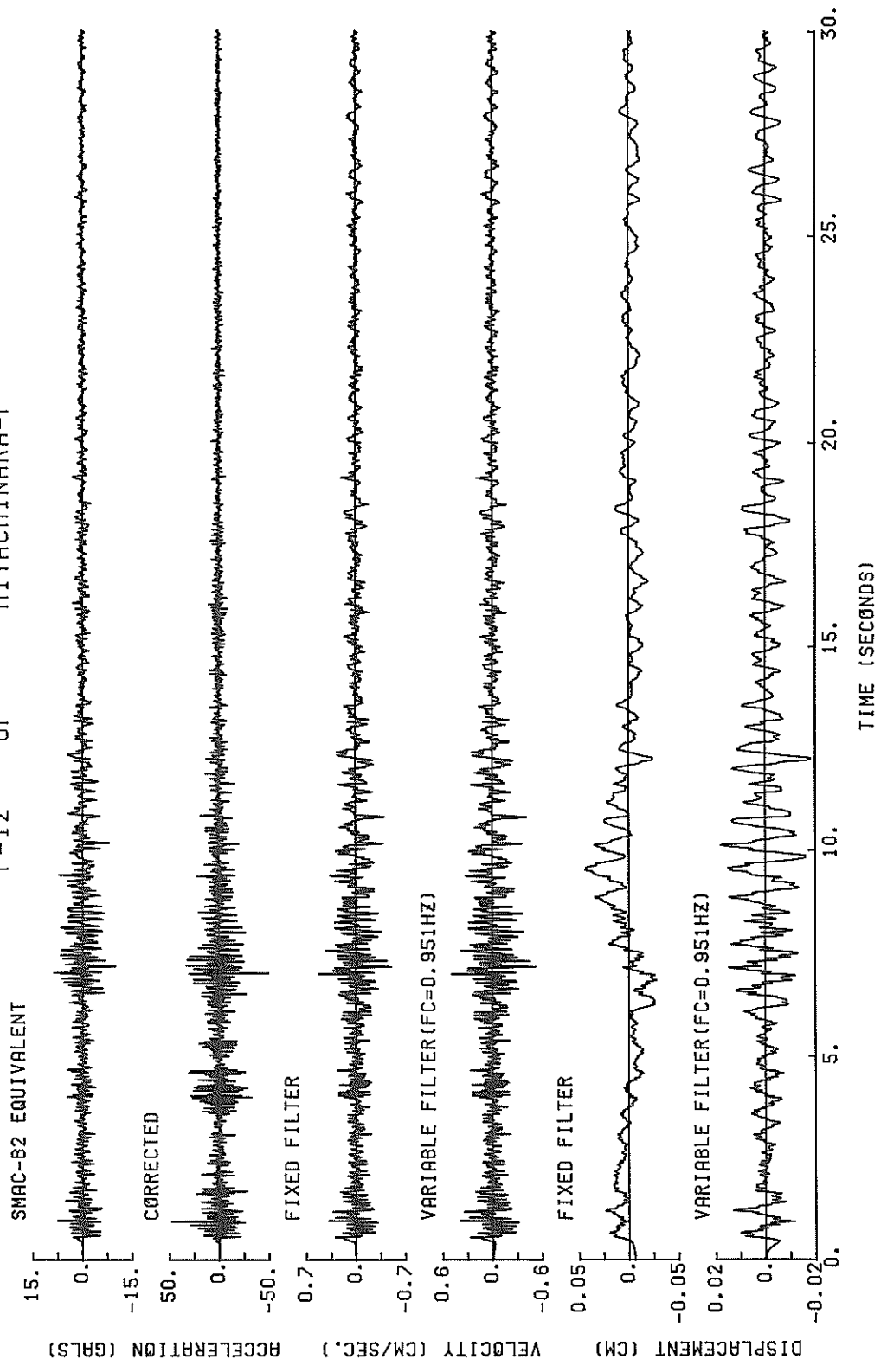
F-12 NORTH HITACHINAKA-F



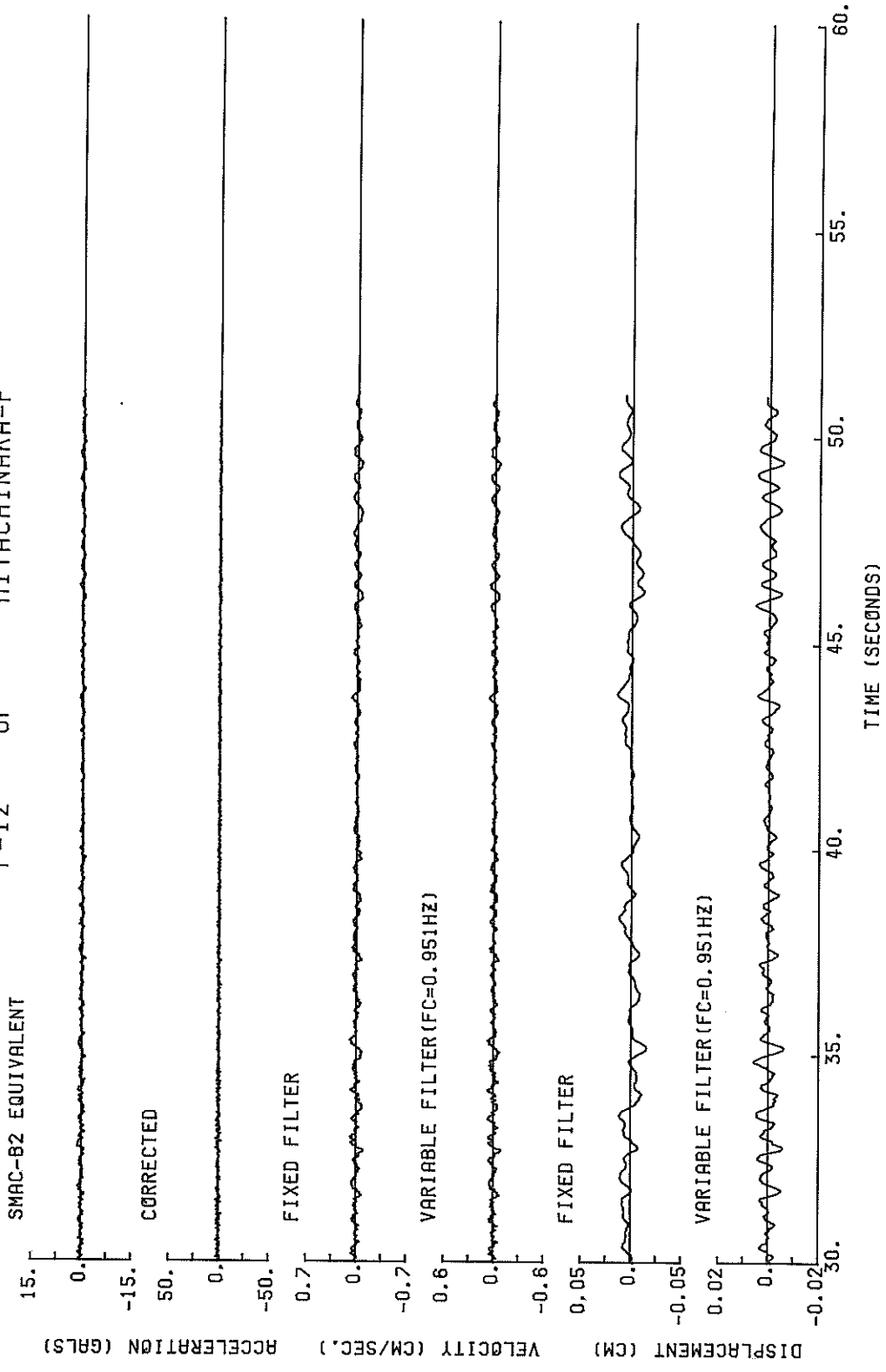
F-12 NORTH HITACHINAKA-F



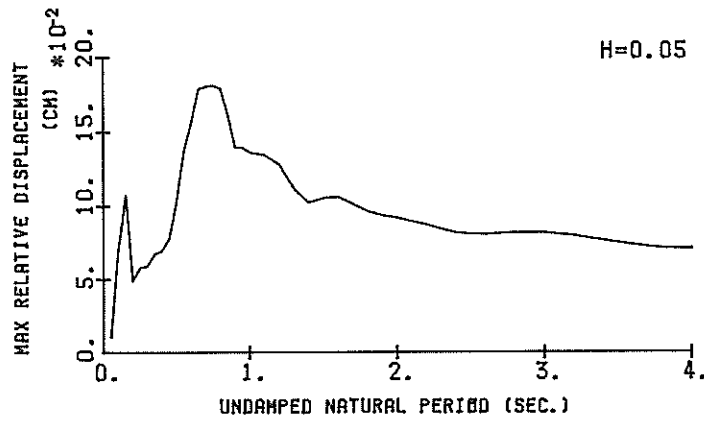
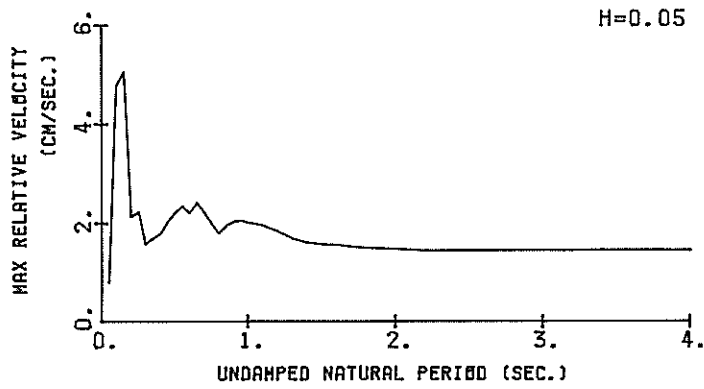
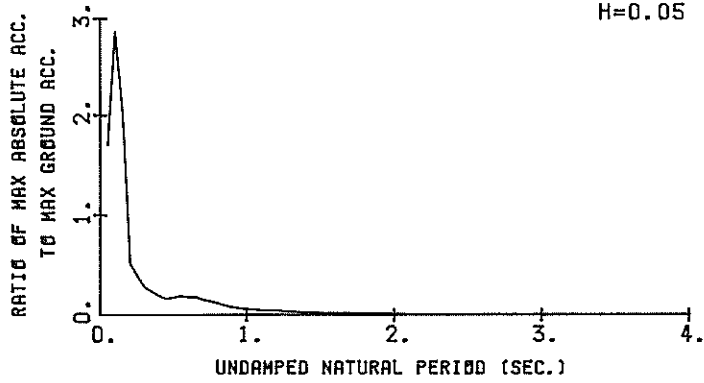
F-12 UP HITACHINAKA-F



F-12 UP HITACHINAKA-F

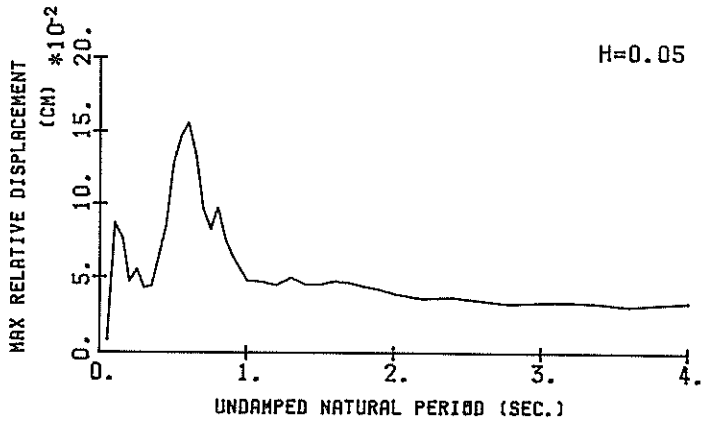
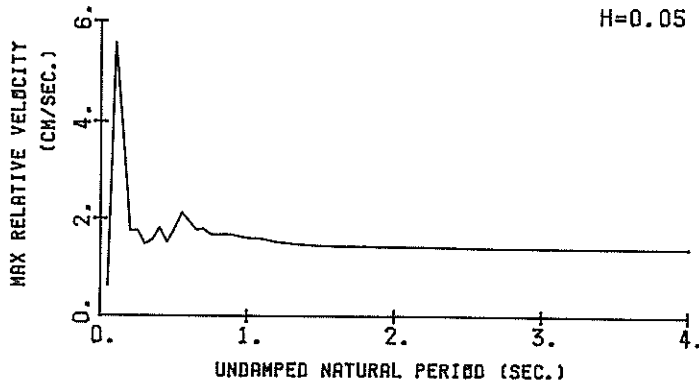
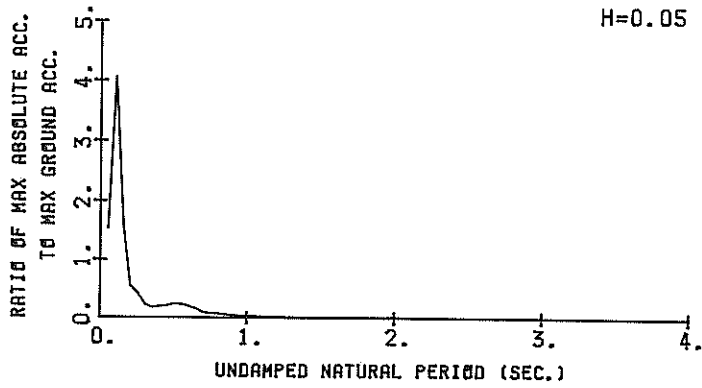


F-12 EAST HITACHINAKA-F
(1/FC=1.78 SEC.)



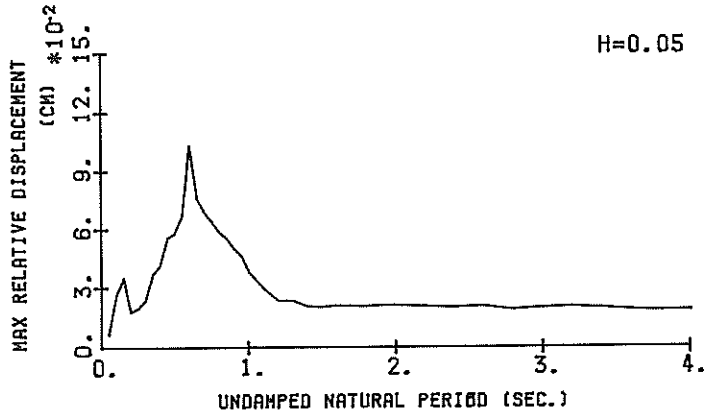
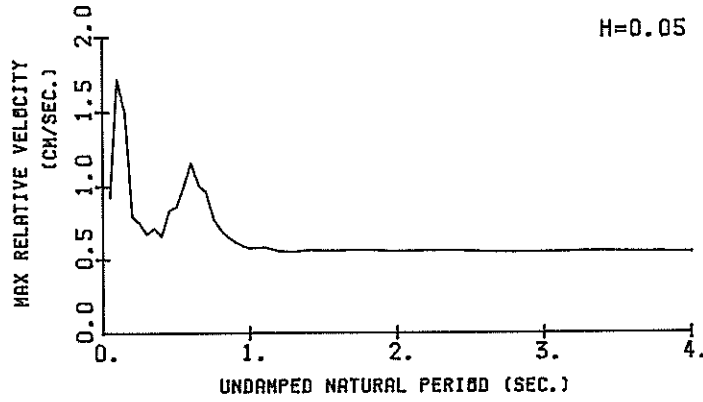
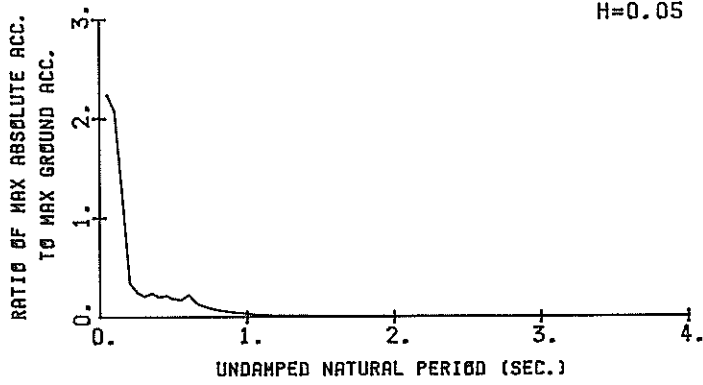
RESPONSE SPECTRA

F-12 NORTH HITACHINAKA-F
(1/FC=1.34 SEC.)



RESPONSE SPECTRA

F-12 UP HITACHINAKA-F
(1/FC=1.05 SEC.)



RESPONSE SPECTRA

RESPONSE SPECTRUM

RECORD = F-12
 DATE AND TIME = 1986- 9-20-12- 5
 TIME LENGTH = 50.99 (SEC)

COMPONENT = EAST
 SIGNAL = GR. ACC.
 SAMPRING INTERVAL = 0.0100(SEC)
 SKIPPED LENGTH = 0.00 (SEC)

STATION = HITACHINAKA-F
 MAX.GROUND ACC. = 94.53 (GAL)

PERIOD (SEC) AA RV RD AA RV RD AA RV RD AA RV RD AA RV RD

DAMPING = 0. DAMPING = 0.025 DAMPING = 0.050 DAMPING = 0.100 DAMPING = 0.250

0.05	184.0	1.01	0.012	167.6	0.88	0.011	161.6	0.81	0.010	155.6	0.75	0.010	142.4	0.67	0.009
0.10	697.1	11.22	0.177	350.1	5.74	0.088	270.8	4.76	0.069	199.4	3.57	0.050	132.3	2.11	0.039
0.15	725.4	17.35	0.413	259.0	6.73	0.148	188.6	5.05	0.107	132.4	3.24	0.074	81.8	1.91	0.041
0.20	133.4	4.25	0.135	59.6	2.26	0.060	49.3	2.14	0.049	49.1	2.12	0.043	47.4	1.74	0.038
0.25	84.1	3.59	0.133	51.1	2.51	0.080	37.1	2.23	0.058	28.4	1.92	0.042	28.9	1.55	0.034
0.30	52.5	2.58	0.120	29.2	1.72	0.066	26.6	1.58	0.052	24.5	1.49	0.052	24.4	1.41	0.041
0.35	59.4	3.29	0.184	29.6	2.80	0.092	27.0	1.71	0.067	21.3	1.57	0.062	21.8	1.39	0.048
0.40	70.3	4.48	0.285	19.3	1.85	0.077	17.9	1.79	0.069	17.0	1.70	0.063	18.3	1.54	0.052
0.45	85.3	6.12	0.437	20.6	2.09	0.105	15.4	2.04	0.107	13.4	1.93	0.083	15.2	1.68	0.053
0.50	26.7	2.50	0.169	18.3	2.32	0.115	16.3	2.22	0.102	14.5	2.08	0.089	14.1	1.77	0.061
0.55	44.8	3.93	0.343	21.5	2.60	0.164	18.1	2.36	0.137	15.0	2.14	0.110	12.2	1.81	0.071
0.60	59.1	5.80	0.539	22.8	2.35	0.207	17.2	2.22	0.156	14.2	2.06	0.126	11.3	1.80	0.075
0.65	41.4	4.37	0.443	19.5	2.78	0.208	16.9	2.43	0.179	13.5	1.96	0.138	10.8	1.75	0.077
0.70	23.5	2.91	0.291	17.8	2.48	0.221	14.6	2.23	0.180	12.1	1.89	0.139	10.6	1.68	0.088
0.75	38.2	4.15	0.487	14.2	2.51	0.202	11.4	1.99	0.181	11.7	1.78	0.150	10.5	1.59	0.096
0.80	26.9	3.43	0.437	12.7	2.08	0.206	11.1	1.80	0.179	10.5	1.73	0.151	10.1	1.56	0.099
0.85	13.0	2.29	0.233	9.5	2.11	0.172	9.2	1.96	0.161	8.9	1.74	0.141	9.4	1.55	0.098
0.90	19.0	2.80	0.390	7.5	2.16	0.154	7.1	2.04	0.139	7.4	1.84	0.126	8.6	1.53	0.097
0.95	7.6	2.33	0.174	6.7	2.18	0.151	6.5	2.07	0.140	6.4	1.89	0.123	7.9	1.53	0.096
1.00	5.9	2.16	0.149	5.8	2.10	0.143	5.8	2.03	0.136	5.9	1.89	0.123	7.2	1.57	0.095
1.10	4.9	2.10	0.150	4.7	2.03	0.142	4.7	1.96	0.135	5.0	1.86	0.123	5.9	1.60	0.094
1.20	3.9	1.91	0.144	3.8	1.88	0.135	3.9	1.84	0.129	4.3	1.78	0.118	5.3	1.60	0.093
1.30	2.6	1.69	0.110	2.7	1.71	0.112	3.0	1.71	0.112	3.5	1.69	0.108	4.8	1.58	0.091
1.40	2.3	1.64	0.116	2.2	1.63	0.105	2.4	1.63	0.103	2.9	1.62	0.099	4.3	1.55	0.087
1.50	2.0	1.67	0.115	2.0	1.60	0.110	2.0	1.59	0.106	2.5	1.55	0.098	3.9	1.53	0.083
1.60	2.9	1.64	0.190	1.8	1.60	0.111	1.8	1.57	0.106	2.1	1.52	0.099	3.5	1.50	0.083
1.70	1.6	1.57	0.121	1.5	1.55	0.104	1.5	1.54	0.102	1.8	1.50	0.097	3.2	1.49	0.084
1.80	1.6	1.53	0.129	1.2	1.52	0.097	1.3	1.51	0.097	1.4	1.49	0.094	3.0	1.47	0.084
1.90	1.8	1.51	0.161	1.1	1.51	0.095	1.2	1.50	0.094	1.6	1.48	0.092	2.8	1.46	0.084
2.00	1.5	1.50	0.150	1.0	1.49	0.094	1.0	1.48	0.093	1.3	1.47	0.090	2.6	1.46	0.083
2.20	0.9	1.46	0.110	0.8	1.46	0.088	0.8	1.45	0.087	1.1	1.45	0.086	2.3	1.45	0.082
2.40	0.5	1.46	0.079	0.6	1.45	0.081	0.7	1.45	0.082	1.0	1.45	0.083	2.0	1.45	0.080
2.60	0.5	1.45	0.079	0.5	1.45	0.080	0.6	1.45	0.081	0.9	1.45	0.081	1.9	1.44	0.079
2.80	0.4	1.44	0.084	0.5	1.45	0.083	0.5	1.45	0.082	0.8	1.45	0.081	1.7	1.44	0.079
3.00	0.4	1.45	0.085	0.4	1.45	0.083	0.5	1.45	0.082	0.7	1.45	0.081	1.6	1.44	0.078
3.20	0.3	1.46	0.082	0.4	1.46	0.081	0.4	1.45	0.080	0.6	1.45	0.079	1.5	1.45	0.077
3.40	0.3	1.47	0.077	0.5	1.46	0.077	0.4	1.46	0.077	0.6	1.46	0.077	1.4	1.45	0.076
3.60	0.2	1.47	0.072	0.3	1.47	0.073	0.3	1.47	0.074	0.5	1.46	0.075	1.3	1.45	0.076
3.80	0.2	1.47	0.069	0.2	1.47	0.070	0.3	1.47	0.072	0.5	1.46	0.073	1.3	1.45	0.074
4.00	0.2	1.47	0.068	0.2	1.47	0.070	0.3	1.46	0.071	0.5	1.46	0.073	1.2	1.45	0.075

PER = PERIOD (SEC) AA = ABSOLUTE ACC. (GAL) RV = RELATIVE VELOCITY (CM/SEC) RD = RELATIVE DISPLACEMENT (CM)

RESPONSE SPECTRUM

RECORD = F-12
 DATE AND TIME = 1986- 9-20-12- 5
 TIME LENGTH = 50.99 (SEC)
 COMPONENT = NORTH
 SAMPRING INTERVAL = 0.0100(SEC)
 SKIPPED LENGTH = 0.00 (SEC)
 SIGNAL = GR. ACC.
 CORRECTION = MAX.GROUND ACC. = 84.65 (GAL)
 STATION = HITACHINAKA-F

PER	DAMPING = 0.025				DAMPING = 0.050				DAMPING = 0.100				DAMPING = 0.250			
	AA	RV	RD	AA	RV	RD	AA	RV	RD	AA	RV	RD	AA	RV	RD	
0.05	190.1	1.43	0.012	140.9	0.72	0.009	130.1	0.64	0.008	121.0	0.57	0.008	118.5	0.53	0.007	
0.10	1290.9	20.54	0.327	475.0	7.54	0.120	343.8	5.57	0.087	259.4	4.00	0.059	143.6	2.07	0.032	
0.15	342.4	8.20	0.195	181.4	4.50	0.103	135.1	3.67	0.077	101.4	2.96	0.058	73.6	1.94	0.035	
0.20	132.7	4.30	0.134	54.3	1.94	0.055	46.7	1.75	0.047	37.9	1.73	0.037	38.1	1.54	0.031	
0.25	57.3	2.74	0.091	43.1	2.09	0.068	35.9	1.76	0.056	27.1	1.46	0.042	23.9	1.39	0.025	
0.30	33.2	1.78	0.076	29.4	1.56	0.047	19.4	1.48	0.043	18.3	1.36	0.040	17.2	1.29	0.028	
0.35	26.0	2.12	0.081	17.3	1.67	0.054	14.4	1.56	0.044	12.1	1.44	0.035	14.2	1.33	0.028	
0.40	5.1	3.39	0.215	18.1	1.95	0.073	16.2	1.81	0.084	13.6	1.62	0.052	13.8	1.38	0.034	
0.45	4.0	3.20	0.231	21.1	1.51	0.073	16.8	1.52	0.084	13.5	1.49	0.065	13.6	1.35	0.041	
0.50	72.0	5.75	0.456	27.9	2.30	0.176	20.5	1.78	0.128	13.8	1.34	0.083	12.9	1.27	0.046	
0.55	36.8	3.45	0.282	25.8	2.61	0.197	19.2	2.13	0.147	13.0	1.50	0.097	11.8	1.29	0.049	
0.60	60.9	5.88	0.556	23.1	2.53	0.210	17.3	1.96	0.156	11.3	1.46	0.100	10.7	1.35	0.050	
0.65	26.1	2.92	0.279	18.5	2.23	0.176	12.6	1.76	0.133	8.9	1.53	0.090	9.8	1.40	0.050	
0.70	20.4	2.38	0.253	9.4	1.58	0.119	8.0	1.78	0.097	6.4	1.58	0.073	8.9	1.44	0.052	
0.75	12.7	1.74	0.181	7.3	1.70	0.105	6.0	1.67	0.083	5.3	1.61	0.072	8.1	1.46	0.051	
0.80	13.1	1.75	0.212	7.5	1.69	0.122	6.1	1.67	0.098	4.8	1.62	0.074	7.4	1.68	0.050	
0.85	9.7	1.76	0.178	5.0	1.72	0.092	4.3	1.68	0.078	4.0	1.62	0.063	6.7	1.50	0.049	
0.90	4.4	1.73	0.091	3.6	1.70	0.074	3.3	1.67	0.065	3.3	1.62	0.055	6.2	1.50	0.047	
0.95	3.6	1.67	0.081	2.7	1.65	0.060	2.6	1.64	0.056	2.7	1.60	0.049	5.7	1.51	0.044	
1.00	4.2	1.61	0.107	2.2	1.61	0.055	2.1	1.61	0.048	2.4	1.59	0.046	5.3	1.50	0.042	
1.10	2.6	1.62	0.080	1.7	1.60	0.052	1.7	1.58	0.047	2.0	1.56	0.042	4.6	1.50	0.038	
1.20	1.5	1.52	0.055	1.4	1.53	0.048	1.4	1.53	0.045	1.6	1.52	0.042	4.0	1.48	0.037	
1.30	1.4	1.48	0.061	1.3	1.48	0.055	1.2	1.49	0.050	1.4	1.49	0.043	3.6	1.47	0.037	
1.40	1.8	1.46	0.092	1.1	1.46	0.053	1.0	1.47	0.045	1.2	1.47	0.041	3.5	1.46	0.037	
1.50	1.5	1.43	0.083	0.9	1.44	0.051	0.9	1.45	0.045	1.1	1.45	0.042	3.1	1.45	0.037	
1.60	1.0	1.43	0.063	0.8	1.44	0.051	0.8	1.44	0.048	1.1	1.44	0.042	2.8	1.44	0.036	
1.70	0.7	1.44	0.051	0.7	1.44	0.049	0.7	1.44	0.044	1.0	1.44	0.042	2.7	1.44	0.036	
1.80	0.9	1.44	0.046	0.6	1.43	0.045	0.6	1.43	0.044	1.0	1.43	0.041	2.5	1.43	0.035	
1.90	0.7	1.42	0.064	0.5	1.43	0.043	0.5	1.43	0.042	0.9	1.43	0.040	2.4	1.43	0.035	
2.00	0.4	1.42	0.040	0.4	1.42	0.039	0.5	1.42	0.039	0.9	1.43	0.038	2.2	1.43	0.034	
2.20	0.3	1.42	0.037	0.3	1.42	0.037	0.4	1.42	0.036	0.8	1.42	0.035	2.0	1.42	0.033	
2.40	0.3	1.42	0.041	0.3	1.42	0.038	0.4	1.42	0.037	0.7	1.42	0.035	1.8	1.42	0.032	
2.60	0.2	1.40	0.037	0.2	1.41	0.036	0.3	1.41	0.035	0.7	1.41	0.034	1.7	1.41	0.032	
2.80	0.2	1.40	0.032	0.2	1.40	0.033	0.3	1.41	0.033	0.6	1.41	0.033	1.6	1.41	0.032	
3.00	0.2	1.40	0.036	0.2	1.41	0.035	0.3	1.41	0.034	0.6	1.41	0.033	1.5	1.41	0.032	
3.20	0.1	1.41	0.037	0.2	1.41	0.035	0.3	1.41	0.034	0.5	1.41	0.033	1.4	1.41	0.032	
3.40	0.1	1.41	0.035	0.1	1.41	0.034	0.2	1.41	0.033	0.5	1.41	0.032	1.3	1.41	0.032	
3.60	0.1	1.41	0.033	0.1	1.41	0.032	0.2	1.41	0.031	0.5	1.41	0.031	1.2	1.41	0.032	
3.80	0.1	1.41	0.035	0.1	1.41	0.033	0.2	1.41	0.032	0.4	1.41	0.032	1.2	1.41	0.031	
4.00	0.1	1.40	0.036	0.1	1.40	0.034	0.2	1.40	0.033	0.4	1.40	0.032	1.1	1.40	0.032	

PER = PERIOD (SEC) AA = ABSOLUTE ACC. (GAL) RV = RELATIVE VELOCITY (CM/SEC) RD = RELATIVE DISPLACEMENT (CM)

RESPONSE SPECTRUM

RECORD = F-12
 DATE AND TIME = 1986-9-20-12-5
 TIME LENGTH = 50.99 (SEC)

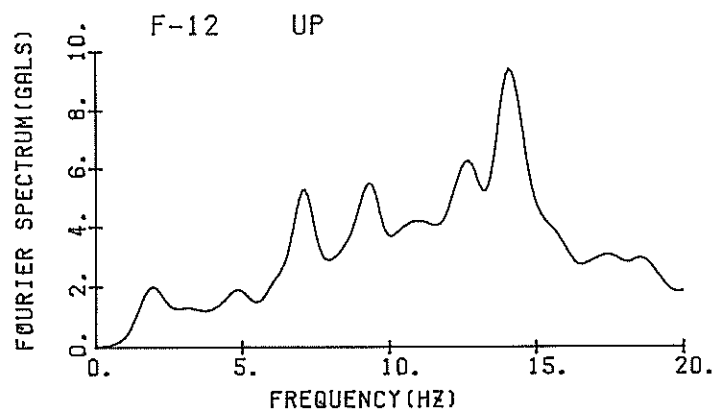
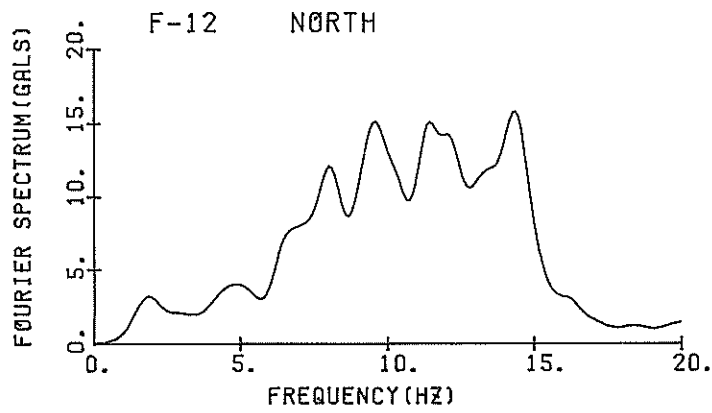
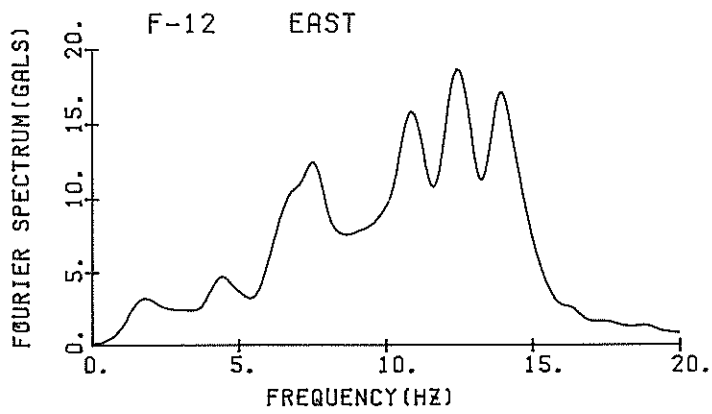
COMPONENT = UP
 SAMPRING INTERVAL = 0.0100(SEC)
 SKIPPED LENGTH = 0.00 (SEC)

SIGNAL = GR. ACC.
 CORRECTION =
 MAX. GROUND ACC. = 50.06 (GAL)

STATION = HITACHINAKA-F

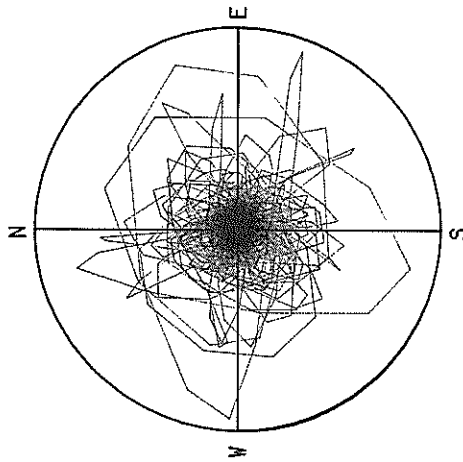
PER	DAMPING = 0.				DAMPING = 0.025				DAMPING = 0.050				DAMPING = 0.100				DAMPING = 0.250			
	AA	RV	RD	AA	RV	RD	AA	RV	RD	AA	RV	RD	AA	RV	RD	AA	RV	RD		
0.05	215.5	1.67	0.014	125.0	1.07	0.008	111.9	0.93	0.007	96.8	0.73	0.006	74.0	0.47	0.004					
0.10	252.1	4.09	0.064	145.4	2.40	0.037	103.9	1.72	0.026	69.8	1.13	0.017	45.4	0.77	0.009					
0.15	145.7	3.53	0.083	145.7	1.86	0.045	61.1	1.49	0.035	40.9	1.09	0.023	23.8	0.61	0.011					
0.20	86.5	2.77	0.088	23.5	0.97	0.024	17.5	0.79	0.018	14.7	0.63	0.014	15.4	0.51	0.012					
0.25	35.1	1.40	0.056	13.5	0.83	0.021	12.6	0.75	0.020	11.1	0.64	0.017	12.1	0.50	0.013					
0.30	41.3	2.03	0.094	12.7	0.77	0.029	10.4	0.68	0.024	9.1	0.62	0.019	10.0	0.54	0.013					
0.35	36.7	2.09	0.114	16.7	0.86	0.052	11.9	0.72	0.037	8.5	0.66	0.026	8.1	0.58	0.016					
0.40	34.3	2.59	0.147	13.0	0.81	0.053	10.3	0.66	0.041	8.1	0.60	0.032	6.9	0.59	0.021					
0.45	37.4	2.57	0.192	13.8	1.03	0.071	10.9	0.84	0.056	7.7	0.64	0.039	6.2	0.63	0.022					
0.50	45.6	3.62	0.289	13.3	1.11	0.084	9.3	0.86	0.058	6.9	0.78	0.042	5.7	0.67	0.027					
0.55	20.8	1.87	0.160	12.5	1.15	0.095	8.8	1.00	0.067	6.9	0.89	0.051	5.4	0.70	0.032					
0.60	39.9	3.81	0.364	16.1	1.62	0.147	11.4	1.16	0.103	7.8	0.88	0.067	5.2	0.70	0.035					
0.65	17.3	1.84	0.190	8.6	1.13	0.080	7.1	1.01	0.076	5.5	0.86	0.057	4.6	0.68	0.033					
0.70	8.4	1.12	0.105	6.5	1.08	0.092	5.6	0.96	0.069	4.3	0.80	0.051	3.8	0.64	0.033					
0.75	16.5	1.99	0.233	5.5	0.84	0.079	4.5	0.78	0.054	3.5	0.72	0.048	3.2	0.63	0.031					
0.80	4.1	0.73	0.067	3.9	0.70	0.063	3.7	0.71	0.059	3.1	0.69	0.048	2.8	0.63	0.028					
0.85	4.4	0.73	0.081	3.4	0.67	0.062	3.1	0.65	0.055	2.6	0.65	0.045	2.4	0.62	0.029					
0.90	3.2	0.71	0.066	2.8	0.63	0.057	2.5	0.62	0.050	2.1	0.62	0.042	2.2	0.61	0.028					
0.95	2.6	0.58	0.060	2.3	0.59	0.052	2.1	0.59	0.046	1.8	0.60	0.039	2.0	0.60	0.027					
1.00	2.7	0.60	0.068	1.6	0.56	0.040	1.5	0.58	0.038	1.5	0.59	0.035	1.8	0.59	0.026					
1.10	1.4	0.62	0.042	1.1	0.59	0.032	1.0	0.58	0.030	1.0	0.58	0.027	1.6	0.58	0.025					
1.20	1.1	0.52	0.039	0.7	0.54	0.024	0.7	0.55	0.023	0.8	0.57	0.023	1.5	0.57	0.023					
1.30	1.3	0.55	0.055	0.6	0.54	0.026	0.6	0.55	0.023	0.7	0.56	0.021	1.4	0.57	0.021					
1.40	0.5	0.59	0.025	0.4	0.57	0.021	0.5	0.57	0.020	0.6	0.56	0.020	1.3	0.56	0.020					
1.50	0.4	0.55	0.021	0.4	0.56	0.020	0.4	0.56	0.020	0.5	0.56	0.020	1.2	0.56	0.020					
1.60	0.4	0.55	0.025	0.4	0.56	0.022	0.4	0.56	0.021	0.5	0.56	0.020	1.1	0.56	0.019					
1.70	0.3	0.57	0.025	0.3	0.57	0.022	0.3	0.56	0.021	0.4	0.56	0.020	1.0	0.56	0.019					
1.80	0.3	0.57	0.023	0.3	0.57	0.021	0.3	0.56	0.020	0.4	0.56	0.020	1.0	0.56	0.019					
1.90	0.2	0.56	0.022	0.2	0.56	0.021	0.3	0.56	0.021	0.4	0.56	0.020	1.0	0.56	0.019					
2.00	0.2	0.55	0.021	0.2	0.55	0.021	0.3	0.56	0.021	0.3	0.56	0.020	0.9	0.56	0.019					
2.20	0.2	0.56	0.022	0.2	0.56	0.021	0.2	0.56	0.021	0.3	0.56	0.020	0.8	0.56	0.019					
2.40	0.2	0.56	0.023	0.2	0.56	0.021	0.2	0.56	0.020	0.3	0.56	0.019	0.7	0.56	0.019					
2.60	0.1	0.55	0.023	0.1	0.55	0.021	0.2	0.55	0.020	0.2	0.55	0.020	0.7	0.55	0.019					
2.80	0.1	0.54	0.019	0.1	0.55	0.018	0.1	0.55	0.019	0.2	0.55	0.019	0.6	0.53	0.019					
3.00	0.1	0.55	0.021	0.1	0.55	0.020	0.1	0.55	0.019	0.2	0.55	0.019	0.6	0.53	0.019					
3.20	0.1	0.55	0.023	0.1	0.55	0.021	0.1	0.55	0.020	0.2	0.55	0.019	0.5	0.55	0.019					
3.40	0.1	0.56	0.021	0.1	0.56	0.020	0.1	0.55	0.020	0.2	0.55	0.019	0.5	0.55	0.019					
3.60	0.1	0.56	0.021	0.1	0.56	0.020	0.1	0.55	0.019	0.2	0.55	0.018	0.5	0.55	0.019					
3.80	0.1	0.55	0.020	0.1	0.55	0.019	0.1	0.55	0.018	0.2	0.55	0.018	0.4	0.55	0.018					
4.00	0.1	0.55	0.020	0.1	0.55	0.019	0.1	0.55	0.018	0.2	0.55	0.018	0.4	0.55	0.018					

PER = PERIOD (SEC) AA = ABSOLUTE ACC. (GAL) RV = RELATIVE VELOCITY (CM/SEC) RD = RELATIVE DISPLACEMENT (CM)



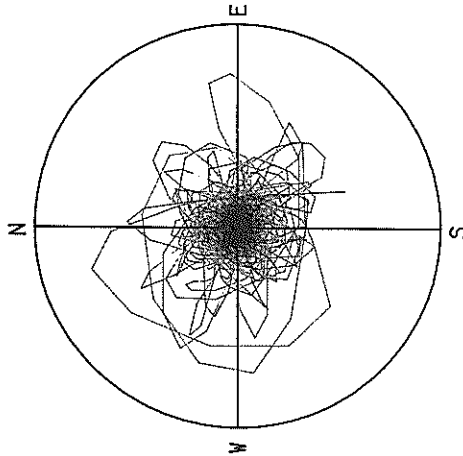
FOURIER SPECTRA

F-12 HITACHINAKA-F



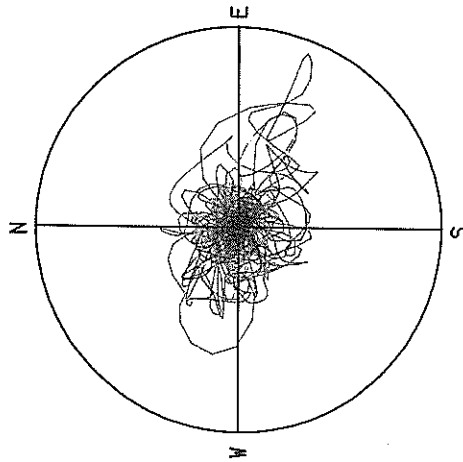
ACCELERATION
R=100.0 GAL
MAX=94.6 GAL

F-12 HITACHINAKA-F



VELOCITY
R=2.0 CM/SEC.
MAX=1.5 CM/SEC.

F-12 HITACHINAKA-F



DISPLACEMENT
R=0.08 CM
MAX=0.07 CM

RECORD NUMBER S-1946
 STATION ONAHAMA-JI-S

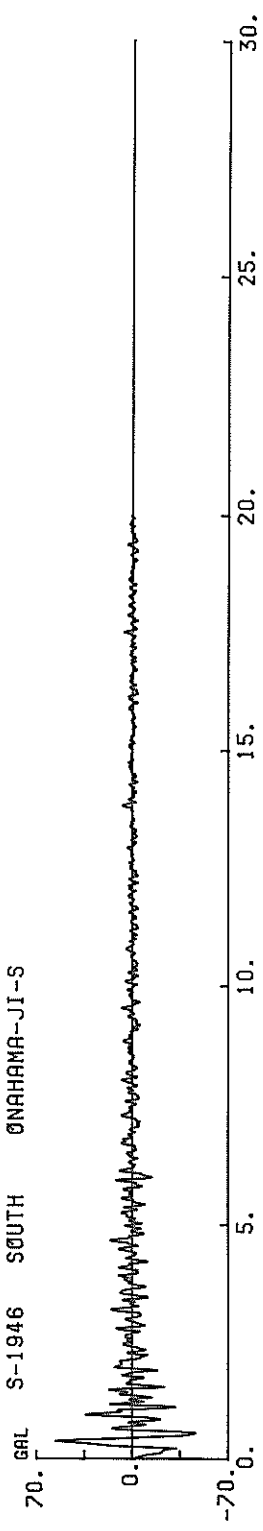
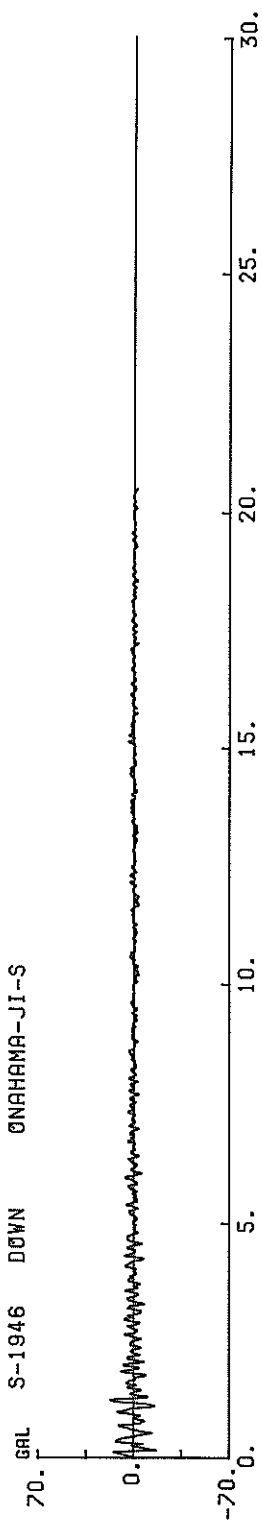
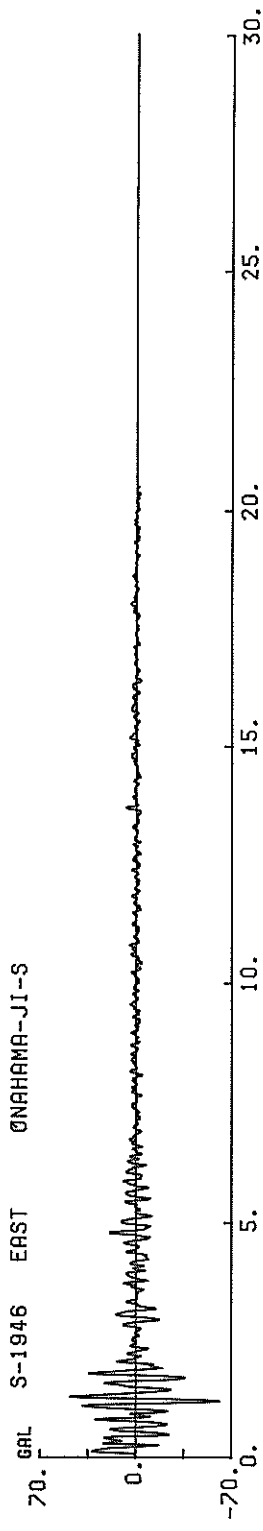
EARTHQUAKE DATA

DATA AND TIME 6:17 OCT.14,1986
 LOCATION OF HYPOCENTER
 EPICENTRAL REGION E OFF FUKUSHIMA PREF.
 LATITUDE 37° 4' N
 LONGITUDE 141° 13' E
 DEPTH 53KM
 MAGNITUDE 5.7

PEAK VALUES OF COMPONENTS

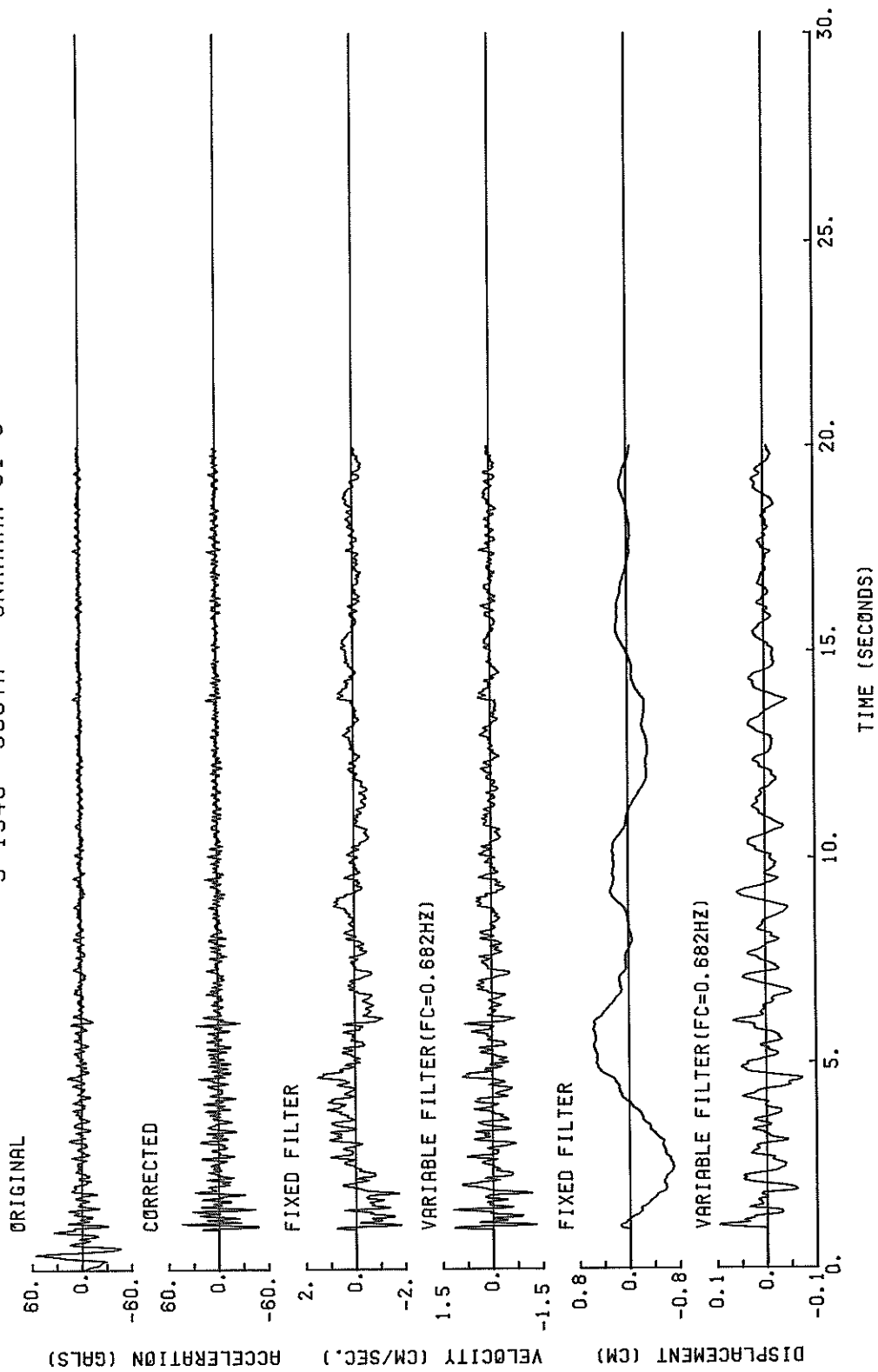
	N S	E W	U D	HORIZONTAL*
PARAMETER OF THE VARIABLE FILTER				
FC (HZ)	0.682	0.729	1.241	
MAXIMUM ACCELERATION (GAL)				
ORIGINAL	56.2	61.4	16.8	61.5
CORRECTED	52.0	90.9	24.9	91.0
MAXIMUM VELOCITY (CM/SEC)				
FIXED FILTER	1.81	3.25	1.13	3.72
VARIABLE FILTER	1.30	3.17	0.87	3.21
MAXIMUM DISPLACEMENT (CM)				
FIXED FILTER	0.705	0.431	0.361	0.706
VARIABLE FILTER	0.097	0.116	0.037	0.136

* RESULTANT OF HORIZONTAL COMPONENTS

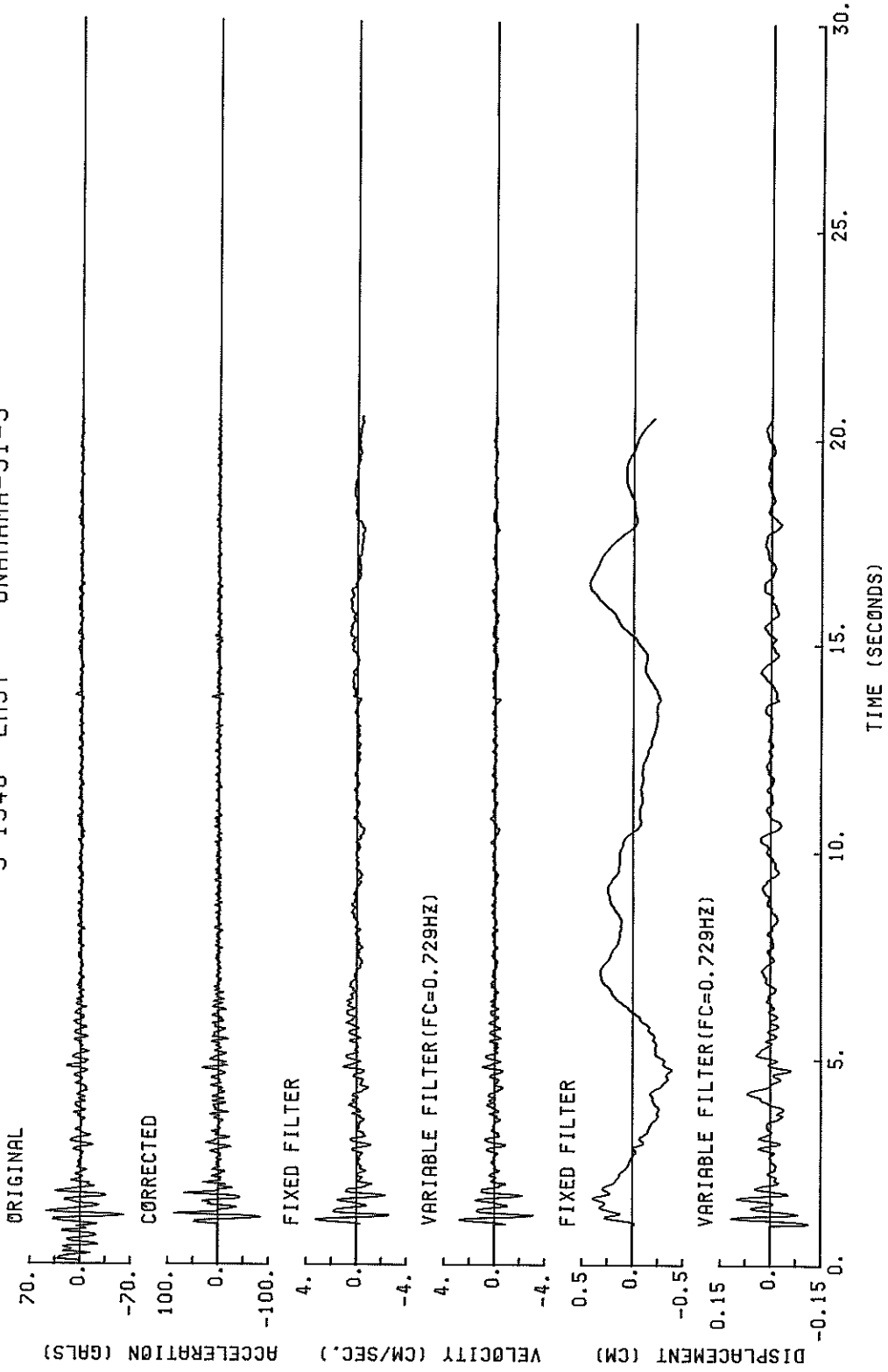


TIME (SECONDS)

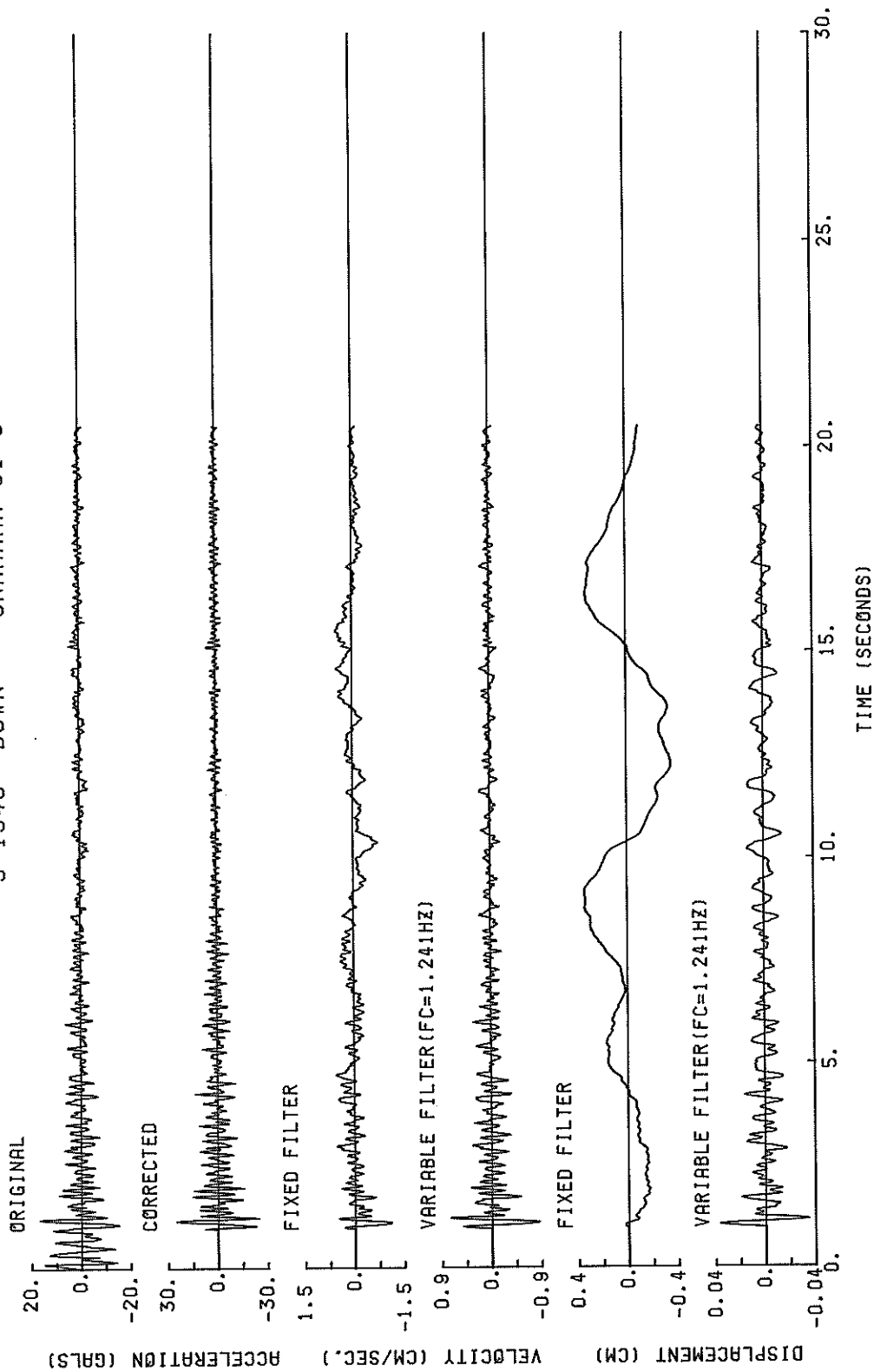
S-1946 SOUTH ONAHAMA-JI-S



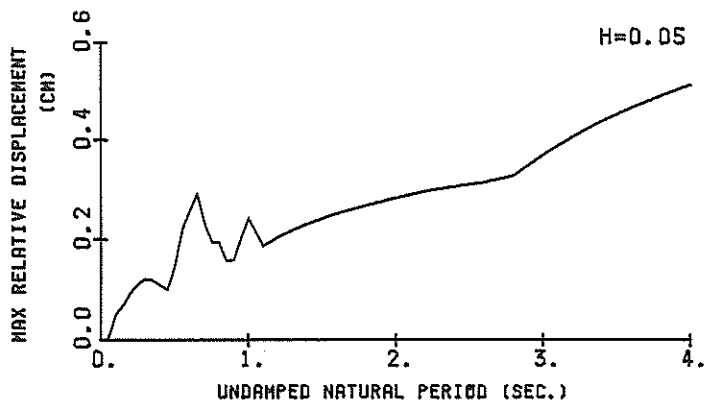
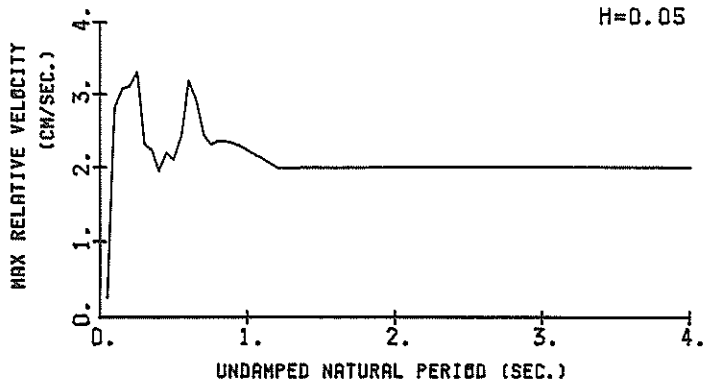
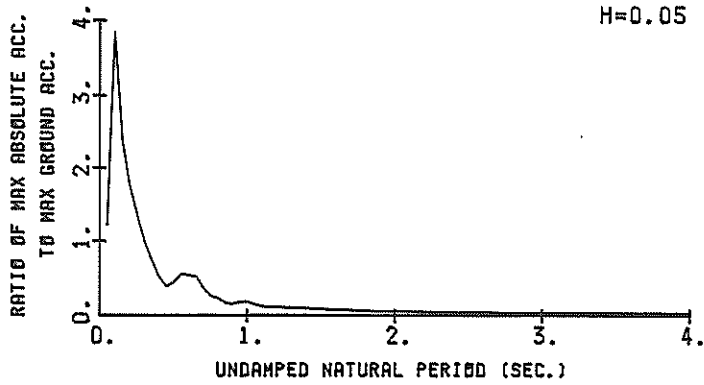
S-1946 EAST ONAHAMA-JI-S



S-1946 DOWN ONAHAMA-JI-S

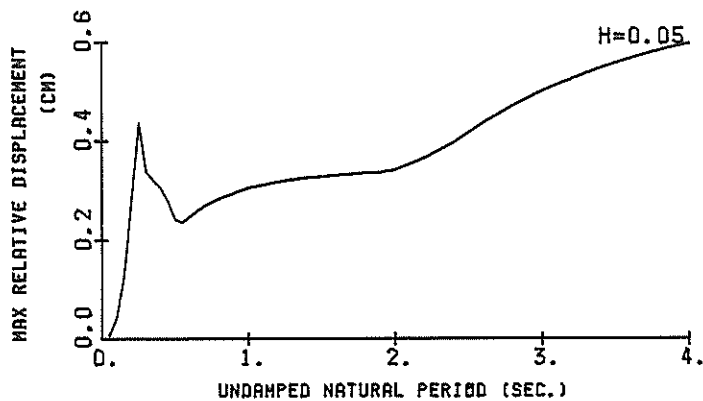
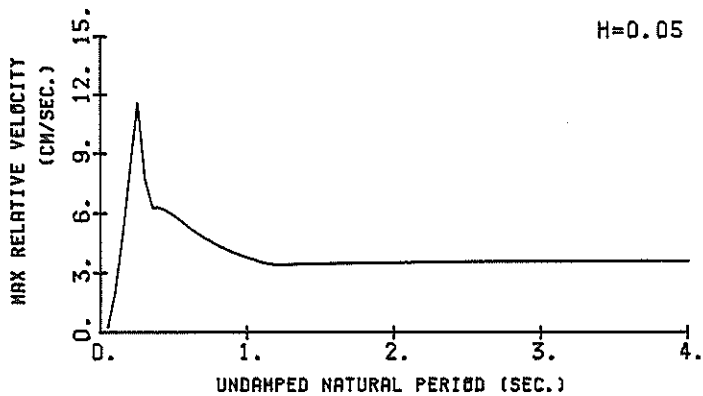
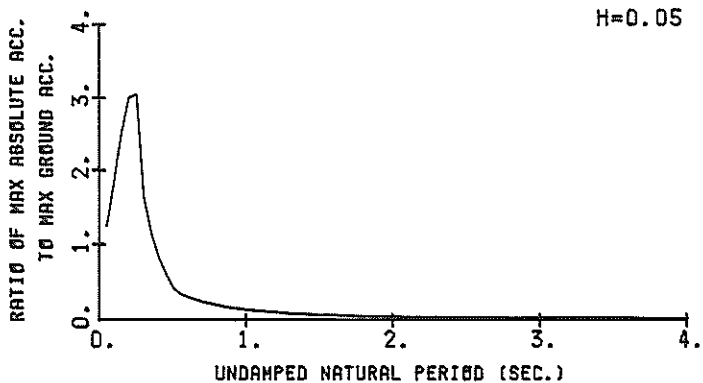


S-1946 SOUTH ONAHAMA-JI-S
(1/FC=1.47 SEC.)



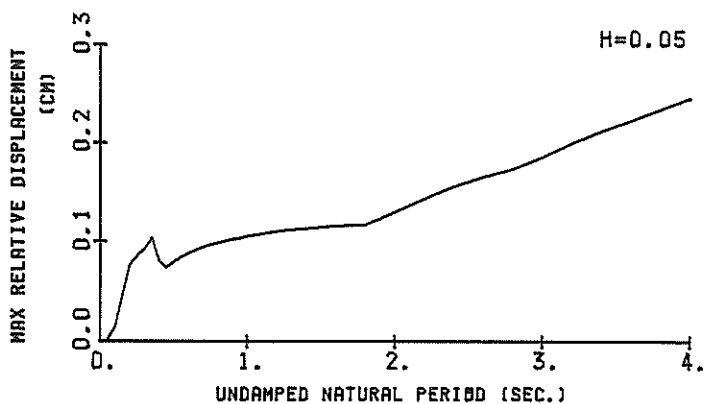
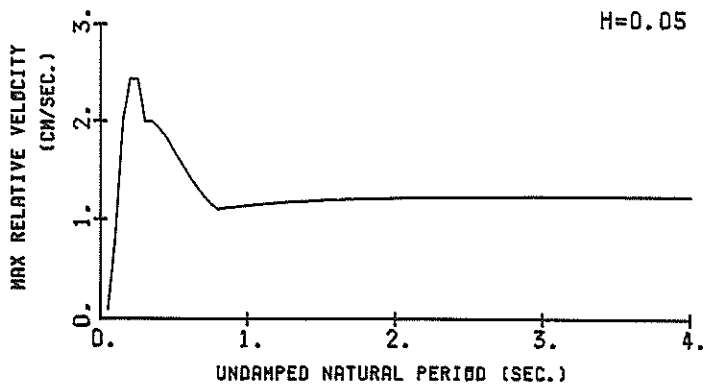
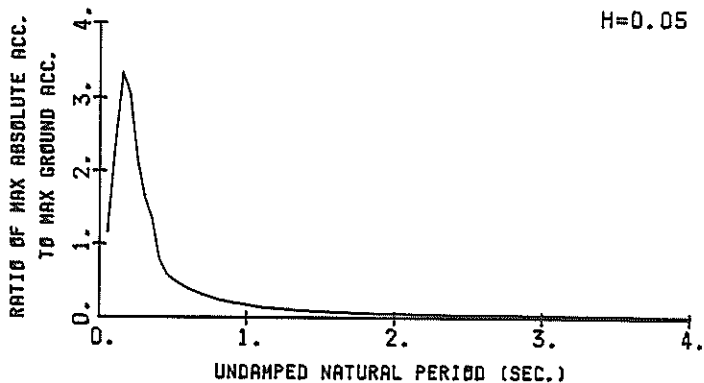
RESPONSE SPECTRA

S-1946 EAST ONAHAMA-JI-S
(1/FC=1.37 SEC.)



RESPONSE SPECTRA

S-1946 DOWN ONAHAMA-JI-S
(1/FC=0.81 SEC.)



RESPONSE SPECTRA

RESPONSE SPECTRUM

RECORD = S-1946 COMPONENT = EAST SIGNAL = GR. ACC. CORRECTION = STATION = ONAHAMA-JI-S
 DATE AND TIME = 1986-10-14-06-17 SAMPRING INTERVAL = 0.0100(SEC) MAX.GROUND ACC. = 90.92 (GAL)
 TIME LENGTH = 20.49 (SEC) SKIPPED LENGTH = 0.00 (SEC)

PER	DAMPING = 0.			DAMPING = 0.025			DAMPING = 0.050			DAMPING = 0.100			DAMPING = 0.250		
	AA	RV	RD	AA	RV	RD	AA	RV	RD	AA	RV	RD	AA	RV	RD
0.05	113.4	0.36	0.007	114.3	0.31	0.007	114.2	0.39	0.007	113.0	0.28	0.007	108.4	0.26	0.007
0.10	360.7	5.74	0.091	185.2	2.72	0.047	166.7	1.97	0.042	155.5	1.69	0.039	137.1	1.19	0.033
0.15	354.1	8.38	0.202	244.6	5.42	0.139	230.4	4.90	0.130	207.2	4.04	0.115	161.8	2.74	0.084
0.20	373.2	11.28	0.378	301.6	9.24	0.307	273.5	8.07	0.273	227.2	6.68	0.226	153.5	4.55	0.138
0.25	717.3	28.70	1.136	359.9	14.63	0.568	272.5	11.58	0.437	182.3	7.91	0.282	123.1	5.26	0.174
0.30	195.3	10.21	0.645	165.3	8.79	0.378	148.8	7.76	0.359	125.5	6.83	0.277	104.7	4.98	0.204
0.35	129.6	7.76	0.402	109.5	6.71	0.359	103.8	6.50	0.321	95.8	5.74	0.287	83.5	4.58	0.213
0.40	129.6	7.96	0.510	79.6	6.52	0.522	70.2	6.29	0.306	71.5	5.86	0.275	68.2	4.73	0.215
0.45	68.9	6.56	0.343	57.2	6.34	0.293	54.9	6.12	0.278	52.4	5.73	0.255	53.9	4.84	0.202
0.50	54.7	6.22	0.346	40.2	6.06	0.254	38.1	5.90	0.244	38.1	5.58	0.226	43.0	4.82	0.186
0.55	32.9	5.84	0.252	32.1	5.73	0.245	31.4	5.61	0.238	30.8	5.38	0.225	34.6	4.73	0.191
0.60	29.0	5.47	0.264	28.3	5.40	0.256	27.8	5.32	0.249	27.5	5.16	0.236	29.9	4.62	0.203
0.65	27.7	5.14	0.297	25.1	5.10	0.267	24.8	5.05	0.250	24.7	4.94	0.246	26.7	4.53	0.214
0.70	23.5	4.85	0.291	22.3	4.83	0.277	22.2	4.80	0.270	22.2	4.73	0.256	24.6	4.43	0.223
0.75	23.3	4.60	0.361	20.1	4.59	0.285	19.9	4.58	0.278	20.2	4.54	0.265	22.7	4.33	0.230
0.80	18.4	4.37	0.298	18.1	4.38	0.291	18.0	4.38	0.285	18.3	4.36	0.272	21.1	4.22	0.239
0.85	18.6	4.17	0.304	16.4	4.19	0.297	16.4	4.20	0.290	16.8	4.20	0.278	19.7	4.12	0.246
0.90	19.4	3.99	0.398	14.9	4.02	0.303	14.9	4.04	0.296	15.4	4.06	0.284	18.4	4.02	0.252
0.95	23.6	3.84	0.540	13.6	3.87	0.308	13.6	3.89	0.301	14.2	3.93	0.288	17.3	3.93	0.258
1.00	25.0	4.22	0.655	12.4	3.74	0.312	12.5	3.77	0.305	13.1	3.81	0.293	16.2	3.85	0.263
1.10	10.6	3.48	0.325	10.5	3.52	0.319	10.6	3.55	0.313	11.3	3.61	0.301	14.5	3.69	0.271
1.20	12.6	3.48	0.459	9.0	3.43	0.324	9.1	3.58	0.318	9.9	3.44	0.307	13.1	3.56	0.278
1.30	10.9	3.50	0.465	7.8	3.46	0.331	7.9	3.41	0.322	8.7	3.33	0.312	11.9	3.45	0.284
1.40	8.6	3.52	0.428	6.8	3.48	0.331	7.0	3.44	0.326	7.7	3.36	0.316	10.9	3.35	0.290
1.50	7.1	3.54	0.402	6.0	3.50	0.333	6.2	3.46	0.329	6.9	3.38	0.320	10.0	3.27	0.295
1.60	5.5	3.55	0.356	5.3	3.51	0.336	5.5	3.48	0.331	6.3	3.40	0.323	9.3	3.20	0.299
1.70	5.1	3.56	0.373	4.7	3.52	0.337	5.0	3.49	0.333	5.7	3.42	0.326	8.6	3.23	0.303
1.80	5.0	3.57	0.407	4.3	3.53	0.340	4.5	3.50	0.335	5.2	3.44	0.328	8.1	3.25	0.307
1.90	4.0	3.57	0.365	3.8	3.54	0.341	4.1	3.51	0.337	4.8	3.45	0.330	7.6	3.28	0.310
2.00	3.6	3.58	0.365	3.5	3.55	0.353	3.7	3.52	0.342	4.5	3.46	0.332	7.1	3.30	0.312
2.20	3.4	3.59	0.414	3.1	3.56	0.377	3.2	3.54	0.366	3.9	3.48	0.346	6.4	3.33	0.317
2.40	2.9	3.60	0.429	2.9	3.57	0.412	2.9	3.57	0.397	3.4	3.50	0.369	5.8	3.36	0.321
2.60	2.7	3.61	0.470	2.7	3.58	0.453	2.7	3.56	0.437	3.0	3.52	0.408	5.3	3.38	0.327
2.80	2.5	3.61	0.505	2.5	3.59	0.488	2.5	3.57	0.472	2.7	3.53	0.442	4.8	3.40	0.328
3.00	2.3	3.62	0.534	2.3	3.60	0.517	2.3	3.58	0.501	2.5	3.54	0.471	4.5	3.42	0.326
3.20	2.2	3.62	0.559	2.1	3.60	0.542	2.2	3.58	0.526	2.5	3.55	0.496	4.1	3.44	0.321
3.40	2.0	3.62	0.581	2.0	3.61	0.564	2.0	3.59	0.548	2.2	3.55	0.518	3.9	3.45	0.442
3.60	1.9	3.63	0.600	1.8	3.61	0.583	1.9	3.59	0.567	2.1	3.56	0.537	3.6	3.45	0.462
3.80	1.7	3.63	0.616	1.7	3.61	0.600	1.8	3.60	0.584	1.9	3.57	0.555	3.4	3.47	0.479
4.00	1.6	3.63	0.630	1.6	3.62	0.614	1.6	3.60	0.599	1.8	3.57	0.570	3.2	3.48	0.496

PER = PERIOD (SEC) AA = ABSOLUTE ACC. (GAL) RV = RELATIVE VELOCITY (CM/SEC) RD = RELATIVE DISPLACEMENT (CM)

RESPONSE SPECTRUM

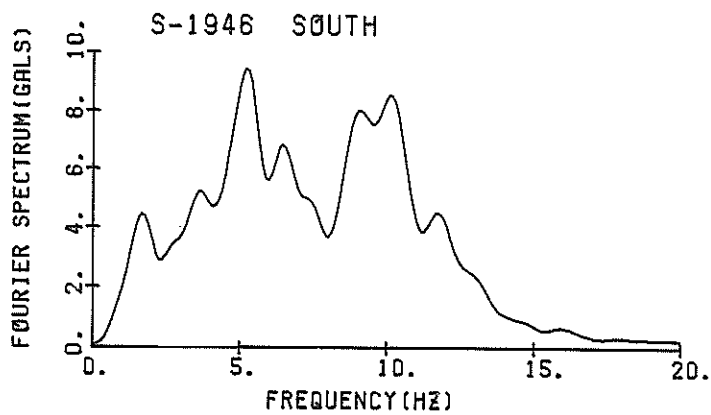
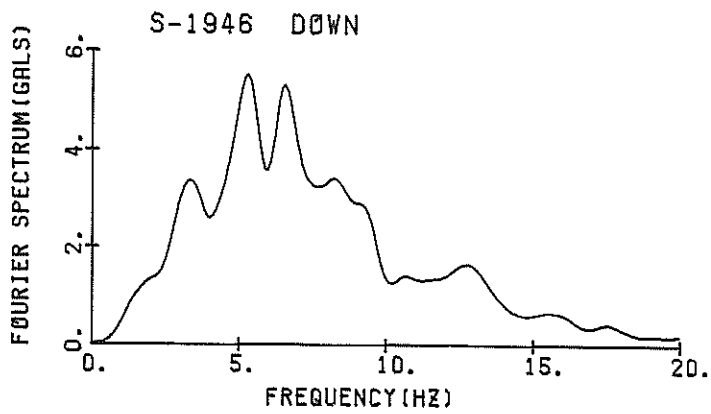
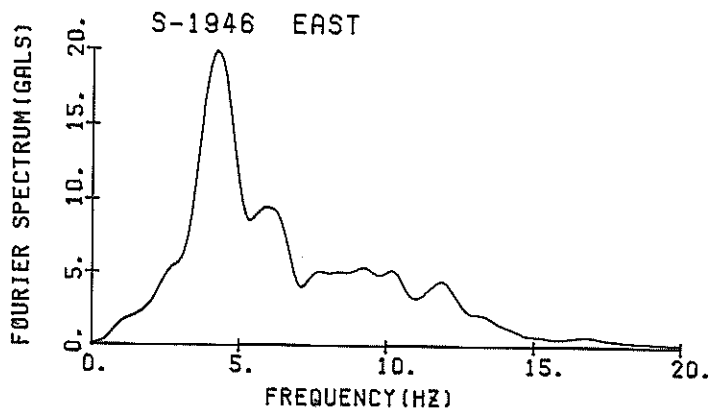
RECORD = S-1946
 DATE AND TIME = 1988-10-16-06-17
 TIME LENGTH = 20.49 (SEC)

COMPONENT = DOWN
 SIGNAL = GR. ACC.
 CORRECTION =
 SAMPLING INTERVAL = 0.0100(SEC)
 MAX. GROUND ACC. = 24.93 (GAL)

STATION = ONAHAMA-JI-S

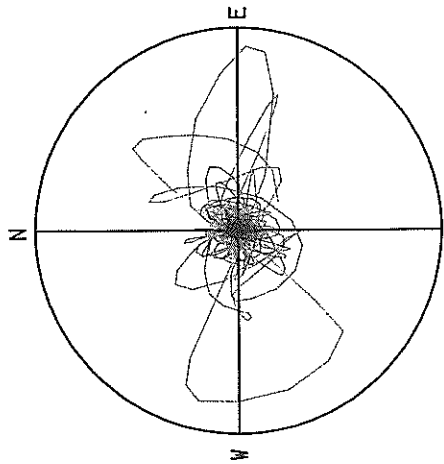
PER	DAMPING = 0.			DAMPING = 0.025			DAMPING = 0.050			DAMPING = 0.100			DAMPING = 0.250		
	AA	RV	RD	AA	RV	RD	AA	RV	RD	AA	RV	RD	AA	RV	RD
0.05	31.5	0.16	0.002	28.9	0.11	0.002	29.2	0.10	0.002	30.0	0.09	0.002	29.6	0.08	0.002
0.10	38.5	1.36	0.022	65.9	0.99	0.017	56.9	0.81	0.014	48.5	0.64	0.012	38.6	0.42	0.009
0.15	253.2	6.00	0.144	122.6	2.96	0.069	83.4	2.04	0.047	59.0	1.37	0.033	43.5	0.82	0.022
0.20	195.1	6.24	0.198	86.0	2.79	0.087	70.6	2.04	0.077	61.4	2.05	0.061	42.1	1.32	0.039
0.25	65.8	2.90	0.104	58.0	2.66	0.092	53.9	2.44	0.086	48.4	2.07	0.075	37.8	1.41	0.052
0.30	71.1	3.40	0.162	50.3	2.47	0.114	41.2	2.01	0.093	37.1	1.78	0.082	30.5	1.35	0.058
0.35	92.9	5.17	0.288	40.7	2.32	0.126	33.7	2.00	0.104	26.7	1.83	0.080	20.7	1.43	0.058
0.40	27.8	2.09	0.113	23.0	2.01	0.093	20.2	1.93	0.081	18.7	1.78	0.072	17.9	1.47	0.054
0.45	22.0	1.93	0.113	15.1	1.88	0.077	14.7	1.82	0.075	14.3	1.72	0.070	13.8	1.45	0.059
0.50	22.5	1.78	0.143	13.0	1.73	0.082	12.8	1.69	0.080	12.5	1.62	0.075	12.5	1.40	0.064
0.55	30.7	2.75	0.235	11.4	1.59	0.087	11.2	1.57	0.084	11.0	1.52	0.080	11.3	1.36	0.068
0.60	10.3	1.48	0.094	10.0	1.46	0.091	9.8	1.45	0.088	9.7	1.42	0.084	10.3	1.32	0.072
0.65	21.5	2.21	0.230	9.1	1.35	0.097	8.8	1.34	0.092	8.7	1.33	0.087	9.4	1.26	0.076
0.70	9.8	1.31	0.122	7.9	1.25	0.098	7.8	1.24	0.095	7.8	1.23	0.090	8.7	1.21	0.079
0.75	9.2	1.22	0.131	7.0	1.16	0.100	7.0	1.16	0.097	7.1	1.17	0.093	8.0	1.16	0.081
0.80	7.0	1.16	0.114	6.3	1.13	0.102	6.3	1.11	0.099	6.4	1.10	0.095	7.4	1.12	0.083
0.85	7.3	1.16	0.133	5.7	1.14	0.103	5.7	1.12	0.101	5.8	1.08	0.097	6.9	1.07	0.086
0.90	5.2	1.17	0.107	5.1	1.15	0.105	5.1	1.12	0.102	5.3	1.09	0.098	6.4	1.03	0.088
0.95	4.7	1.17	0.108	4.7	1.13	0.106	4.7	1.13	0.104	4.9	1.10	0.100	6.0	1.00	0.090
1.00	6.0	1.18	0.153	4.3	1.16	0.107	4.3	1.14	0.105	4.5	1.11	0.101	5.7	1.02	0.091
1.10	3.7	1.19	0.112	3.6	1.17	0.110	3.7	1.16	0.108	3.9	1.12	0.104	5.0	1.04	0.094
1.20	3.5	1.20	0.129	3.1	1.19	0.112	3.2	1.17	0.110	3.4	1.14	0.106	4.5	1.06	0.096
1.30	2.8	1.21	0.120	2.7	1.20	0.114	2.7	1.18	0.112	3.0	1.15	0.108	4.1	1.07	0.099
1.40	2.6	1.22	0.117	2.4	1.20	0.115	2.4	1.19	0.113	2.7	1.16	0.110	3.8	1.08	0.101
1.50	2.2	1.23	0.125	2.1	1.21	0.116	2.1	1.20	0.115	2.4	1.17	0.111	3.5	1.10	0.103
1.60	1.9	1.23	0.123	1.8	1.22	0.117	1.9	1.20	0.116	2.2	1.18	0.112	3.2	1.11	0.104
1.70	1.7	1.23	0.124	1.6	1.22	0.118	1.7	1.21	0.116	2.0	1.19	0.113	3.0	1.12	0.105
1.80	1.6	1.24	0.131	1.5	1.23	0.120	1.6	1.22	0.117	1.8	1.19	0.114	2.8	1.13	0.106
1.90	1.5	1.24	0.137	1.4	1.23	0.123	1.4	1.22	0.123	1.7	1.20	0.121	2.6	1.13	0.107
2.00	1.4	1.24	0.140	1.3	1.23	0.135	1.3	1.22	0.130	1.5	1.20	0.125	2.5	1.14	0.108
2.20	1.3	1.25	0.157	1.2	1.24	0.148	1.2	1.23	0.143	1.3	1.21	0.132	2.2	1.15	0.109
2.40	1.1	1.25	0.167	1.1	1.24	0.161	1.1	1.23	0.155	1.2	1.21	0.145	2.0	1.16	0.119
2.60	1.0	1.25	0.177	1.0	1.24	0.171	1.0	1.24	0.165	1.0	1.22	0.155	1.8	1.17	0.129
2.80	0.9	1.25	0.194	0.9	1.25	0.179	0.9	1.24	0.174	0.9	1.22	0.163	1.7	1.18	0.138
3.00	0.9	1.25	0.204	0.9	1.25	0.193	0.9	1.24	0.185	0.9	1.23	0.171	1.5	1.18	0.145
3.20	0.8	1.25	0.215	0.8	1.25	0.207	0.8	1.24	0.200	0.9	1.23	0.185	1.4	1.19	0.152
3.40	0.8	1.25	0.227	0.8	1.25	0.219	0.8	1.24	0.212	0.8	1.23	0.198	1.3	1.19	0.163
3.60	0.7	1.25	0.239	0.7	1.25	0.230	0.7	1.24	0.222	0.8	1.23	0.208	1.2	1.20	0.174
3.80	0.7	1.25	0.252	0.7	1.25	0.243	0.7	1.24	0.234	0.7	1.23	0.218	1.2	1.20	0.183
4.00	0.7	1.25	0.264	0.6	1.25	0.255	0.7	1.24	0.246	0.7	1.23	0.229	1.1	1.20	0.191

PER = PERIOD (SEC) AA = ABSOLUTE ACC. (GAL) RV = RELATIVE VELOCITY (CM/SEC) RD = RELATIVE DISPLACEMENT (CM)



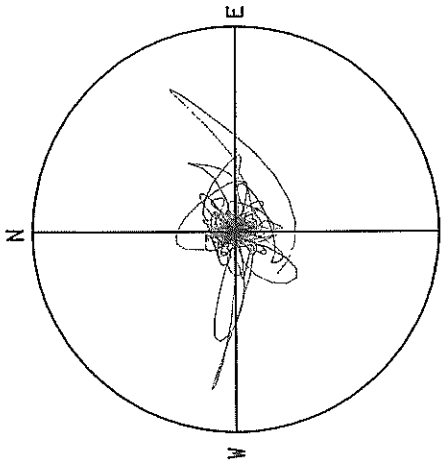
FOURIER SPECTRA

S-1946 ONAHAMA--JI-S



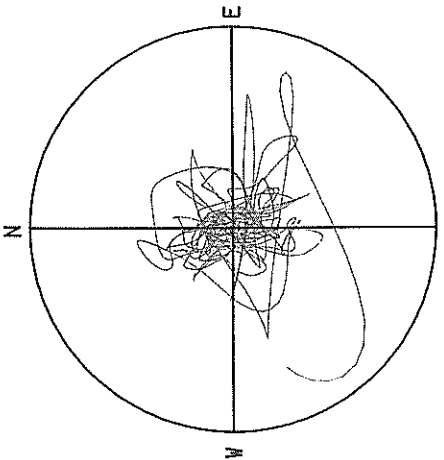
ACCELERATION
R=100.0GAL
MAX=91.0 GAL

S-1946 ONAHAMA--JI-S



VELOCITY
R=4.0 CM/SEC.
MAX=3.2 CM/SEC.

S-1946 ONAHAMA--JI-S



DISPLACEMENT
R=0.15 CM
MAX=0.14 CM

RECORD NUMBER F-15
 STATION HITACHINAKA-F

EARTHQUAKE DATA

DATA AND TIME 15: 6 NOV.15,1986

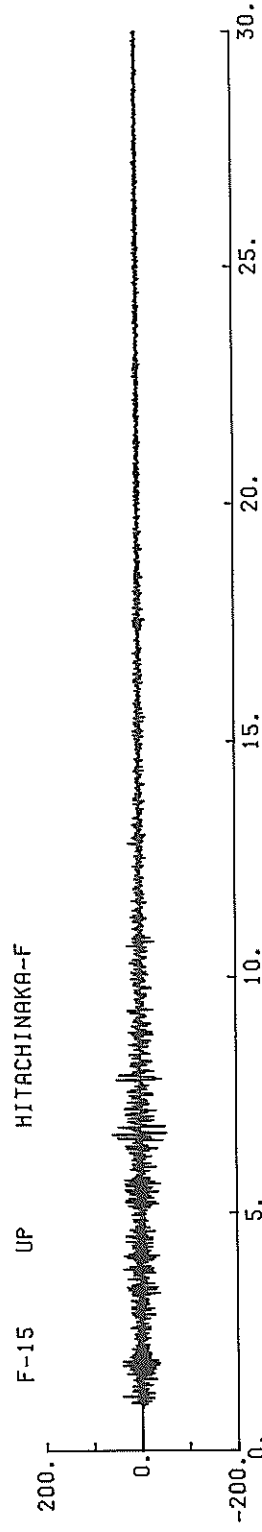
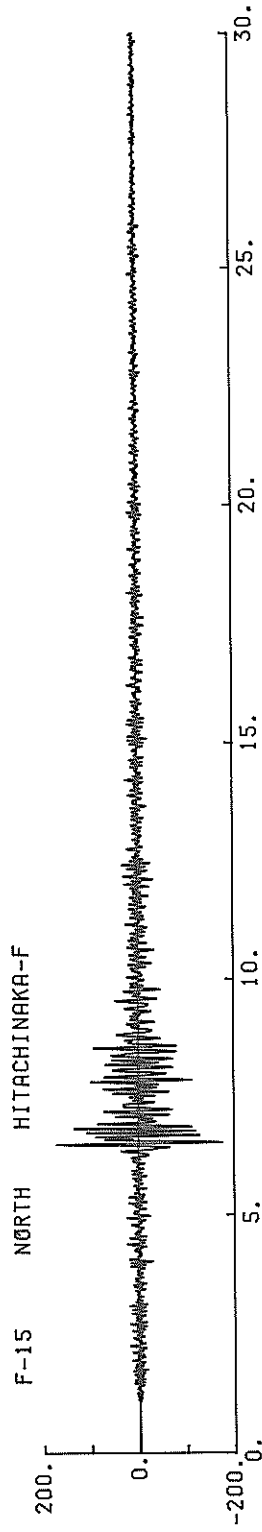
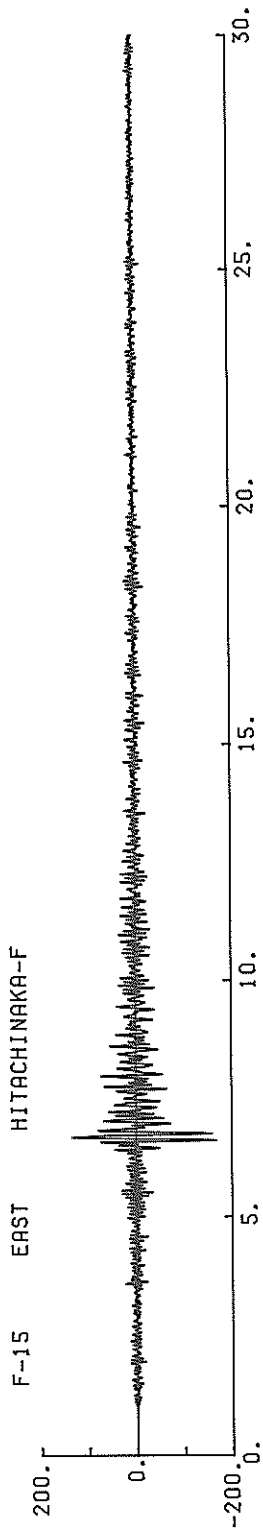
LOCATION OF HYPOCENTER

EPCENTRAL REGION E OFF IBARAKI PREF
 LATITUDE 36°24' N
 LONGITUDE 140°56' E
 DEPTH 43KM
 MAGNITUDE 5.0

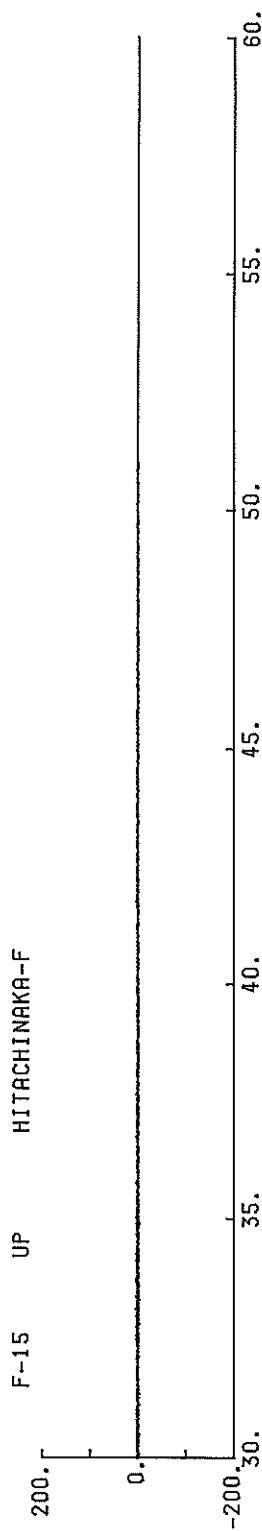
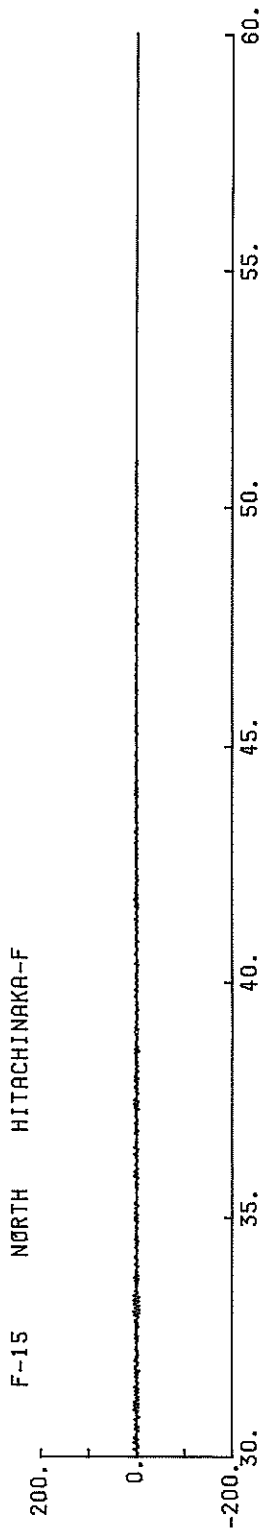
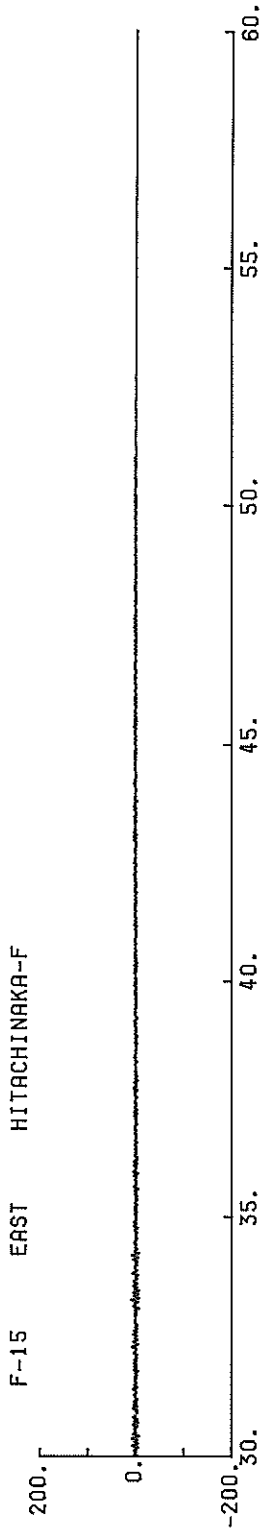
PEAK VALUES OF COMPONENTS

	N S	E W	U D	HORIZONTAL*
PARAMETER OF THE VARIABLE FILTER				
FC (HZ)	0.597	0.463	0.658	
MAXIMUM ACCELERATION (GAL)				
SMAC-B2 EQUIVALENT	76.0	77.8	19.6	82.5
ORIGINAL	176.8	168.2	58.6	176.9
CORRECTED	181.1	170.5	56.1	181.2
MAXIMUM VELOCITY (CM/SEC)				
FIXED FILTER	3.28	3.59	1.16	3.80
VARIABLE FILTER	3.28	3.71	1.15	3.96
MAXIMUM DISPLACEMENT (CM)				
FIXED FILTER	0.133	0.220	0.068	0.229
VARIABLE FILTER	0.099	0.175	0.044	0.180

* RESULTANT OF HORIZONTAL COMPONENTS

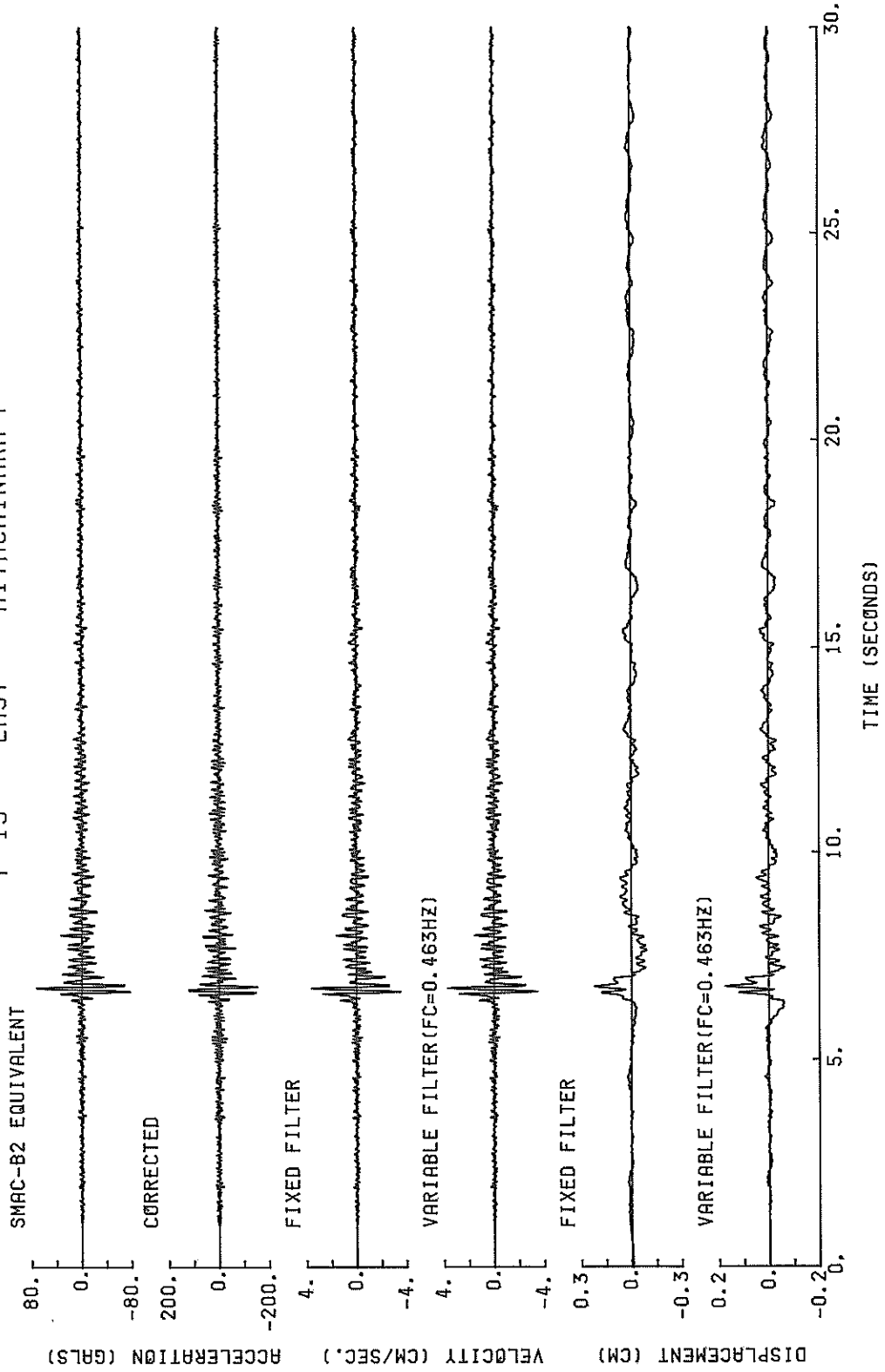


TIME (SECONDS)

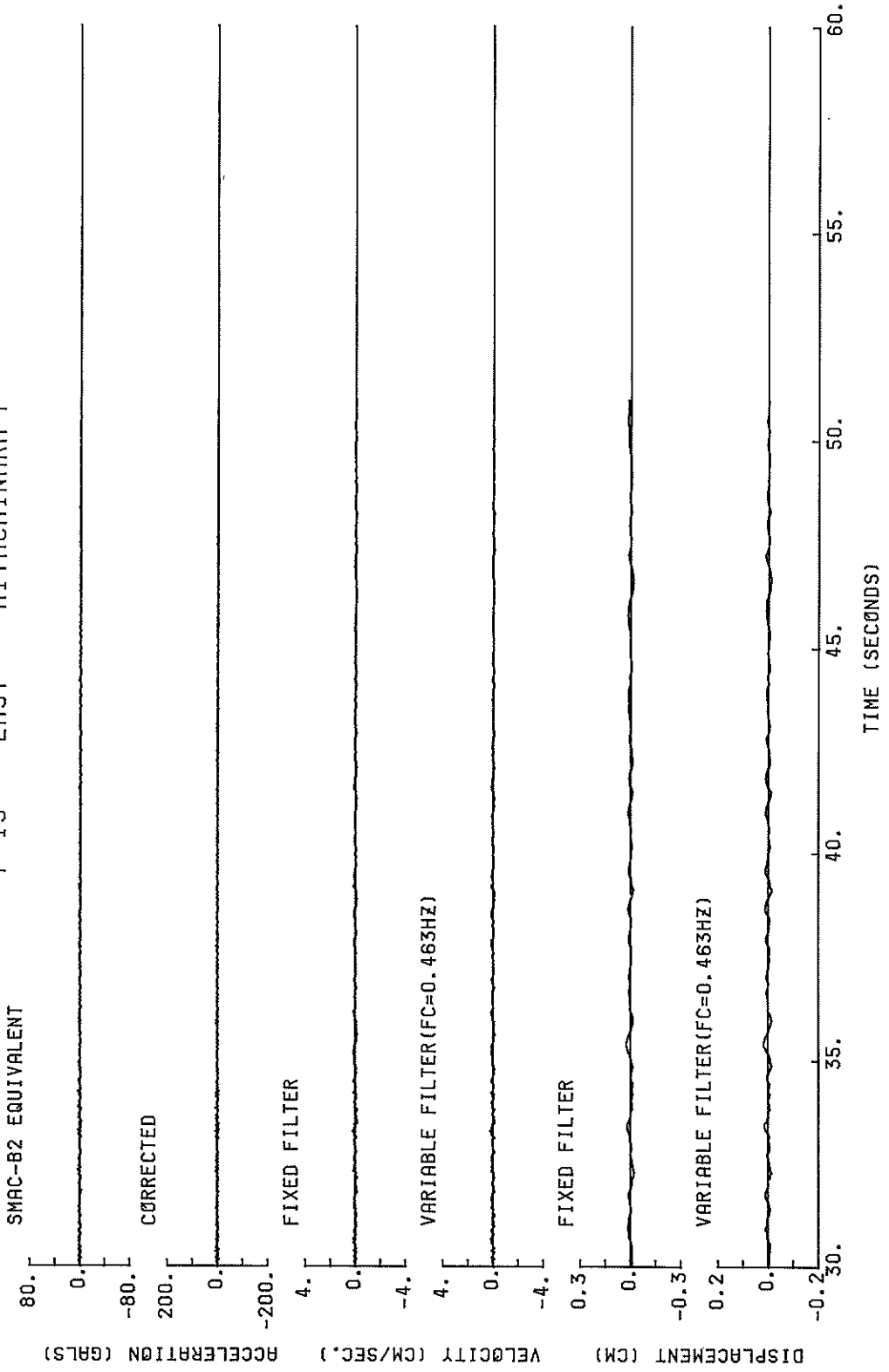


TIME (SECONDS)

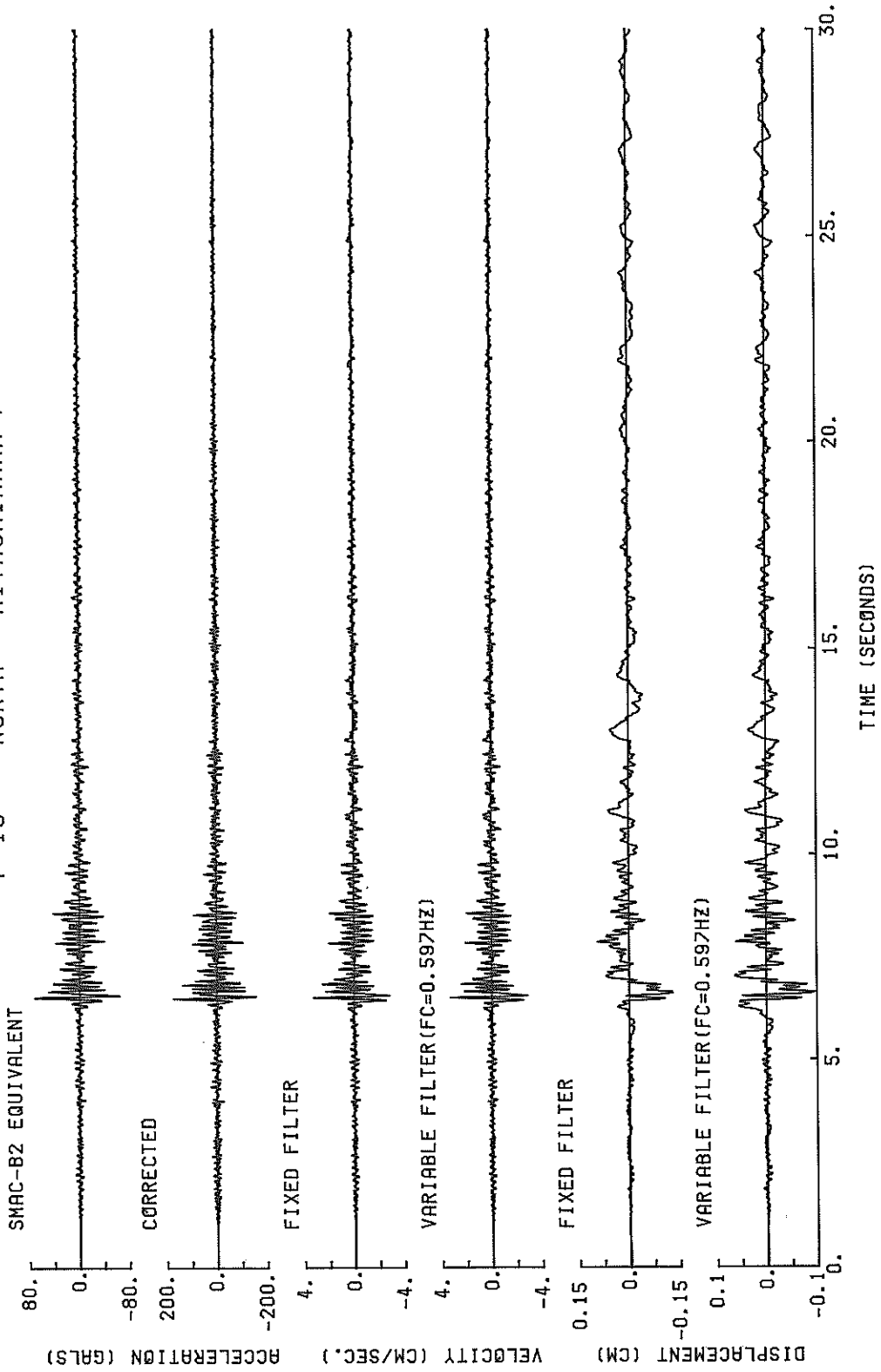
F-15 EAST HITACHINAKA-F



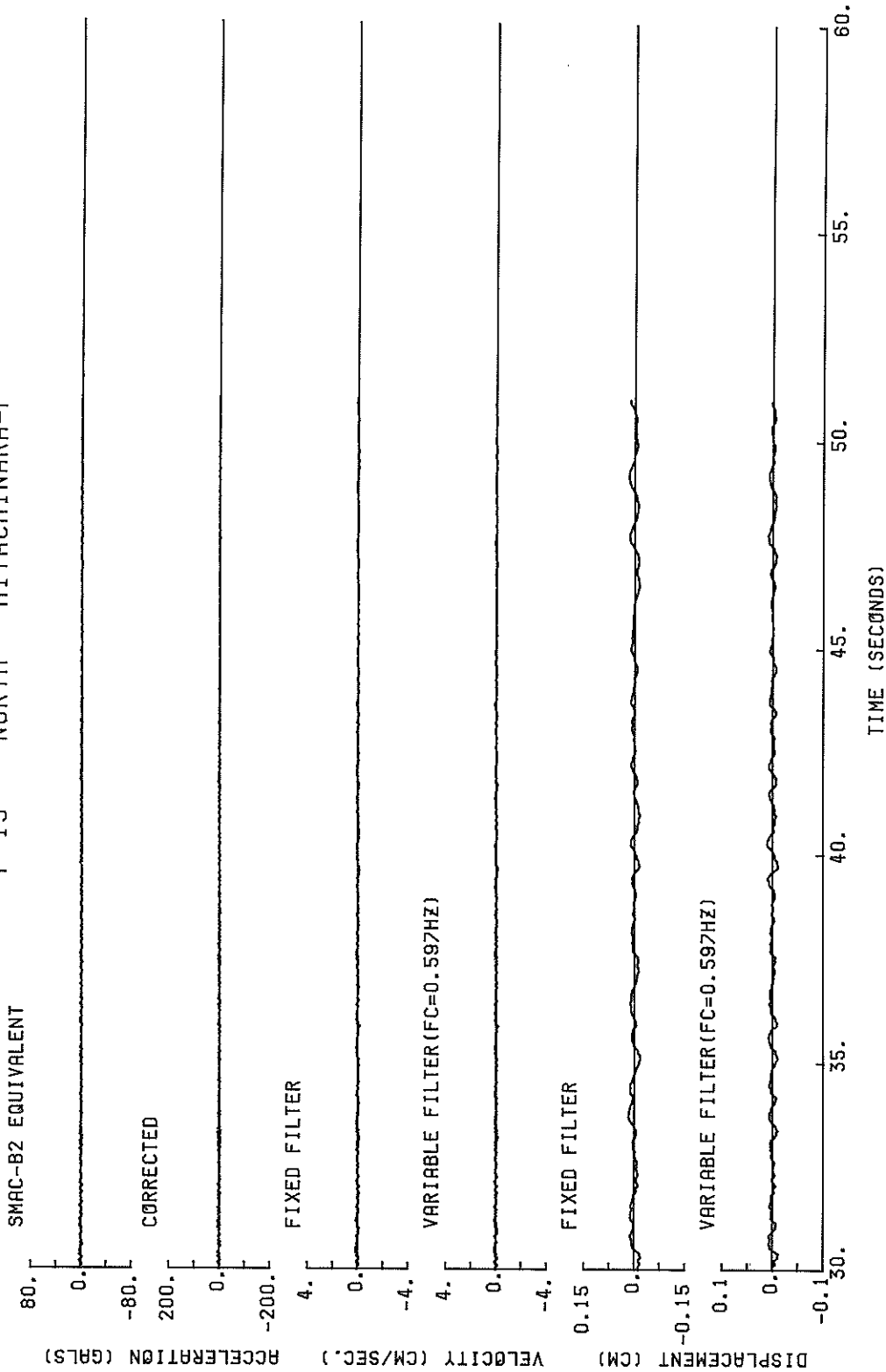
F-15 EAST HITACHINAKA-F



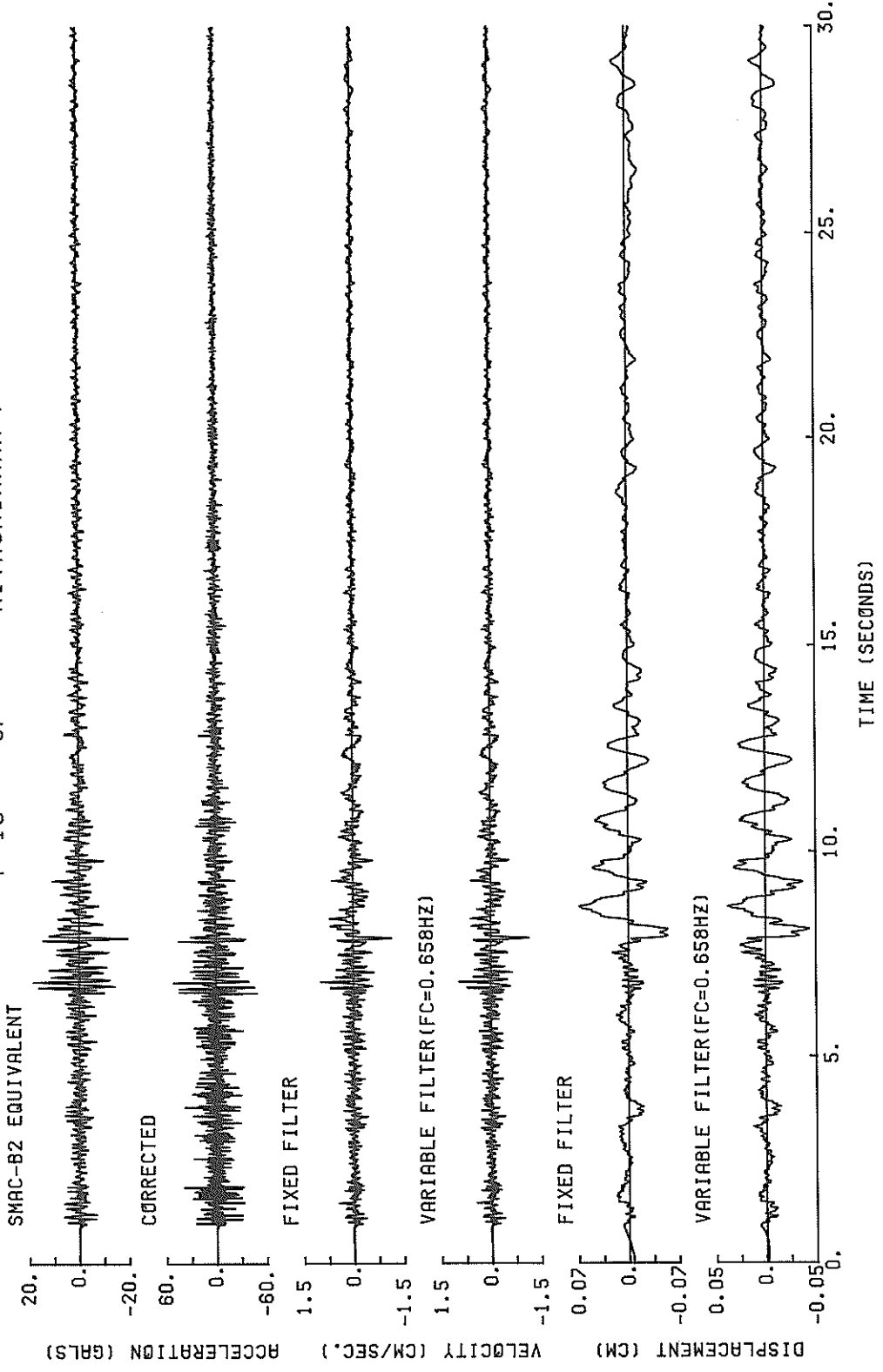
F-15 NORTH HITACHINAKA-F



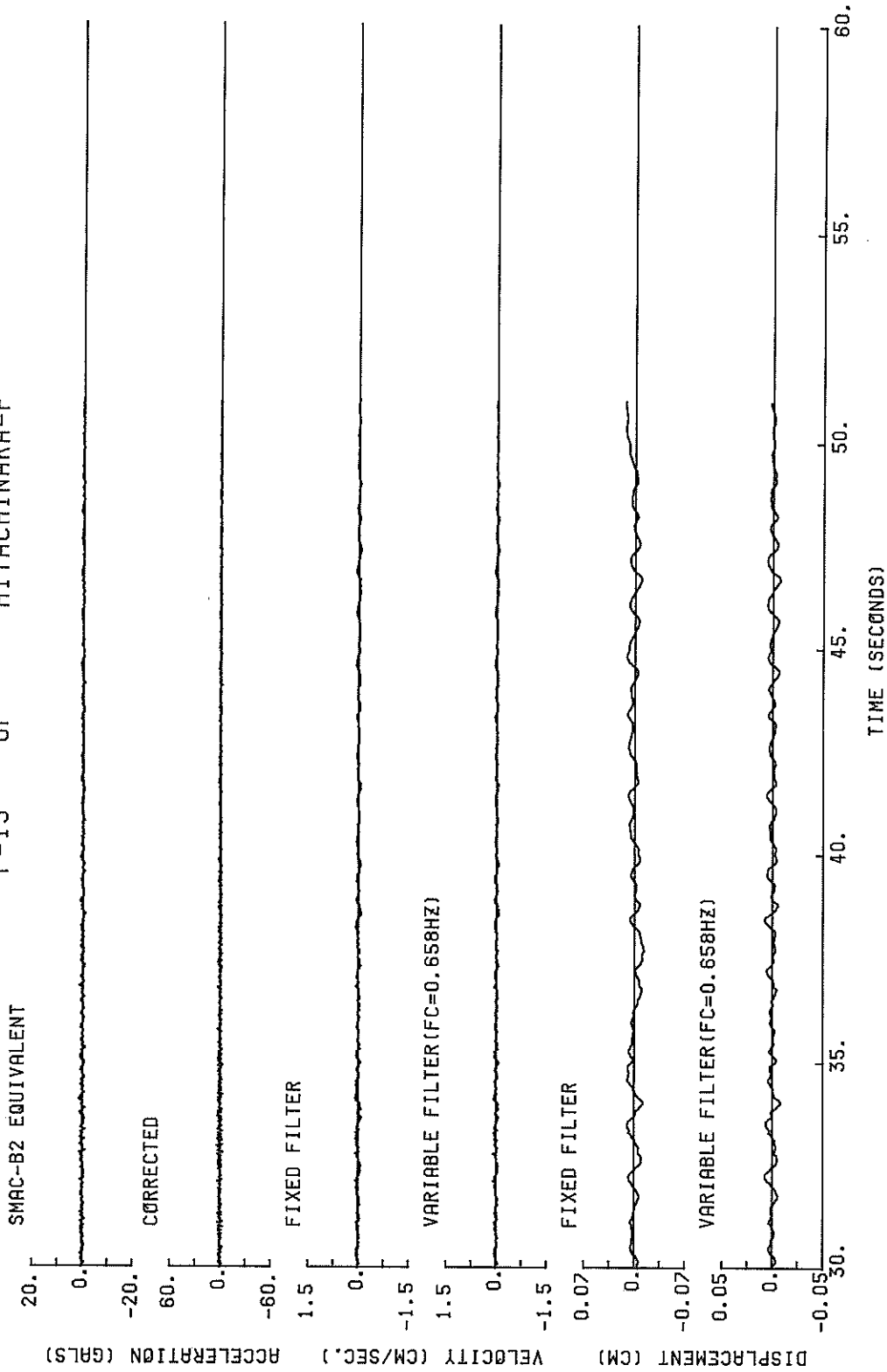
F-15 NORTH HITACHINAKA-F



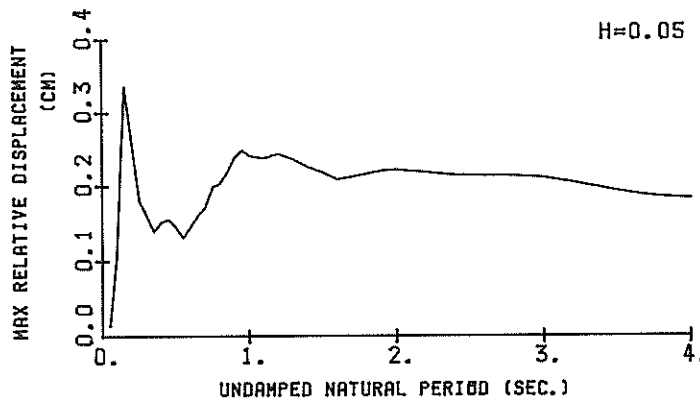
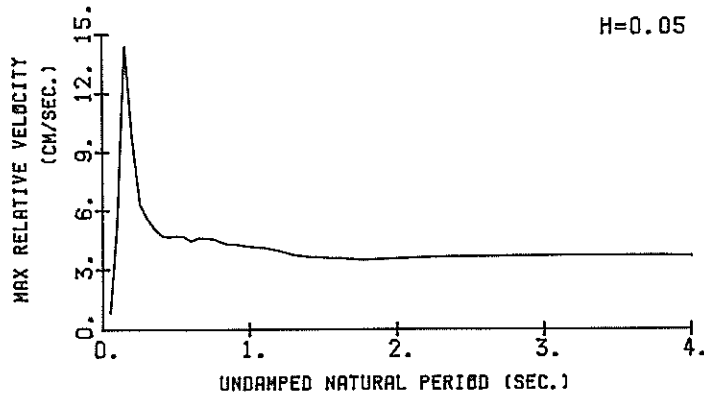
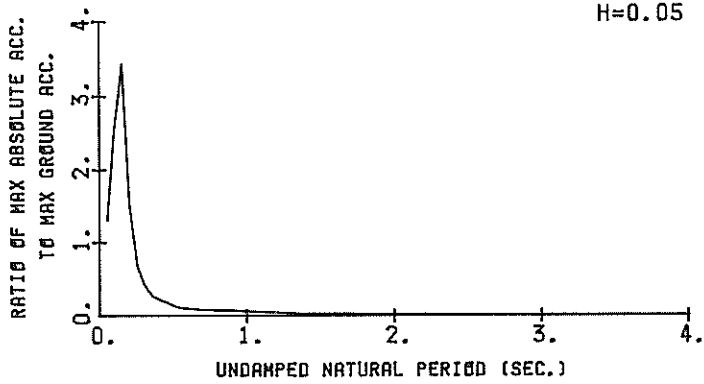
F-15 UP HITACHINAKA-F



F-15 UP HITACHINAKA-F

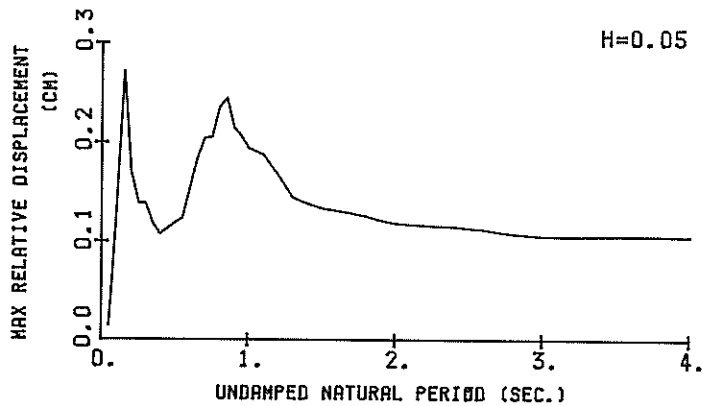
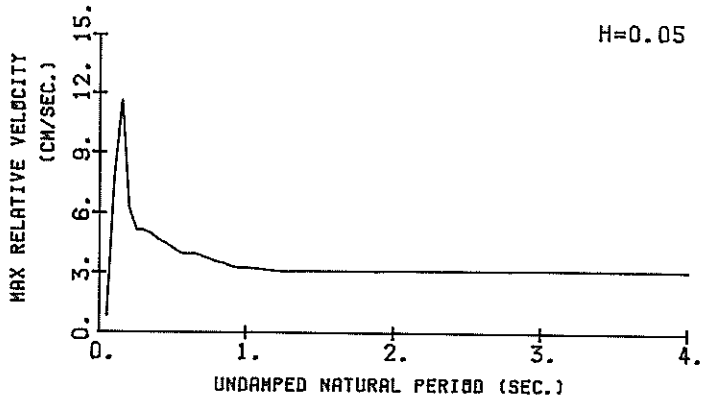
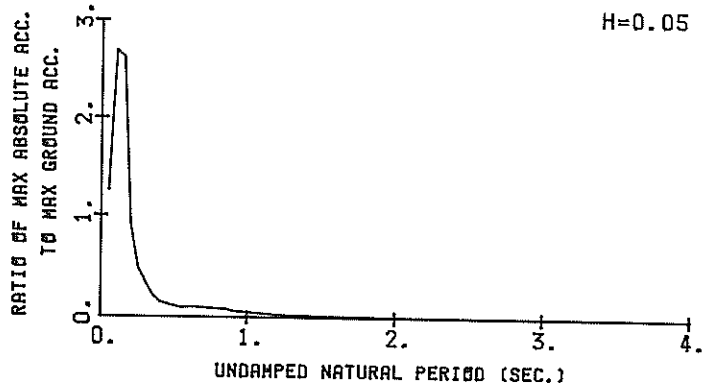


F-15 EAST HITACHINAKA-F
(1/FC=2.16 SEC.)



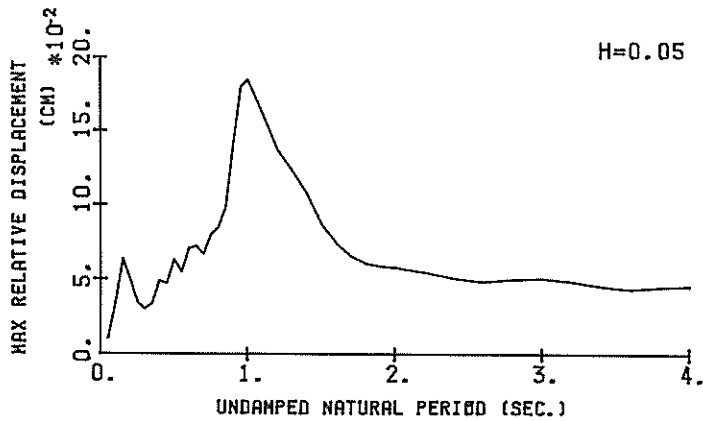
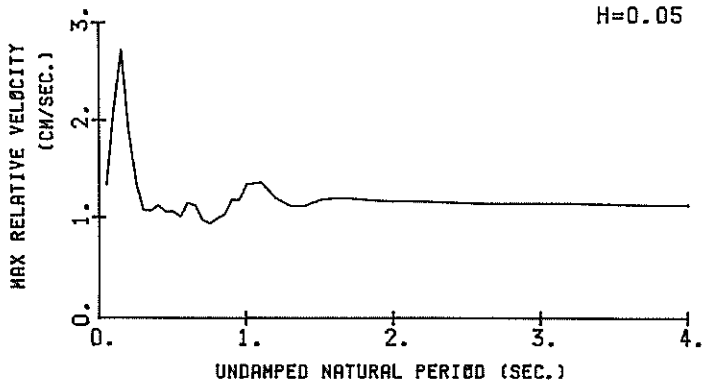
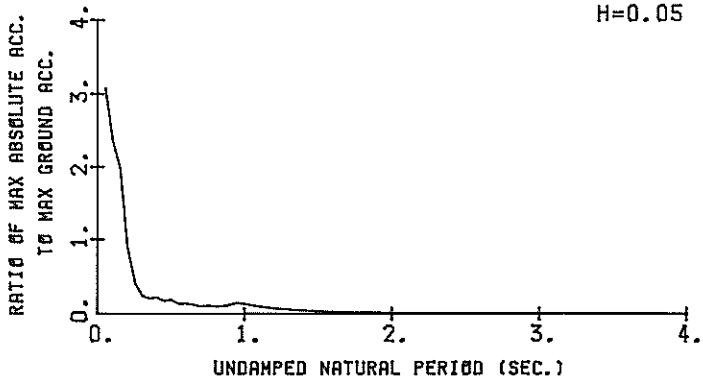
RESPONSE SPECTRA

F-15 NORTH HITACHINAKA-F
(1/FC=1.67 SEC.)



RESPONSE SPECTRA

F-15 UP HITACHINAKA-F
(1/FC=1.52 SEC.)



RESPONSE SPECTRA

RESPONSE SPECTRUM

RECORD = F-15
 DATE AND TIME = 1986-11-15-15- 6
 TIME LENGTH = 50.99 (SEC)

COMPONENT = EAST
 SIGNAL = GR. ACC.
 SAMPLING INTERVAL = 0.0100(SEC)
 SKIPPED LENGTH = 0.00 (SEC)

CORRECTION =
 MAX.GROUND ACC. = 170.46 (GAL)

STATION = HITACHINAKA-F

PER	DAMPING = 0.025			DAMPING = 0.050			DAMPING = 0.100			DAMPING = 0.250					
	AA	RV	RD	AA	RV	RD	AA	RV	RD	AA	RV	RD			
0.05	426.9	2.96	0.027	237.0	0.96	0.015	224.4	0.87	0.014	218.6	0.80	0.014	211.9	0.69	0.013
0.10	735.9	11.71	0.186	464.0	6.06	0.117	432.9	5.35	0.109	393.0	4.82	0.096	280.1	3.44	0.065
0.15	1016.5	24.58	0.379	717.2	16.94	0.409	585.8	14.40	0.336	464.2	10.79	0.255	287.7	5.95	0.145
0.20	528.8	16.85	0.336	302.0	10.36	0.307	259.4	9.71	0.259	221.4	8.68	0.221	173.4	6.17	0.148
0.25	182.1	7.31	0.288	116.3	6.52	0.183	115.5	6.32	0.180	113.6	6.07	0.173	112.3	5.28	0.140
0.30	102.5	5.90	0.234	73.4	5.75	0.168	71.9	5.58	0.162	70.8	5.26	0.151	77.2	4.54	0.130
0.35	53.2	5.11	0.165	45.6	5.09	0.139	46.1	5.04	0.139	47.6	4.89	0.137	57.3	4.30	0.123
0.40	83.1	5.26	0.337	39.0	4.77	0.157	38.5	4.71	0.151	38.8	4.58	0.142	47.6	4.15	0.125
0.45	34.4	4.74	0.176	31.6	4.68	0.163	31.2	4.62	0.155	31.4	4.49	0.145	40.2	4.15	0.124
0.50	23.1	4.76	0.146	23.5	4.73	0.148	23.8	4.67	0.146	24.9	4.54	0.139	34.3	4.20	0.121
0.55	21.9	4.99	0.168	17.7	4.77	0.134	17.8	4.65	0.131	19.6	4.51	0.128	29.5	4.23	0.116
0.60	46.6	4.37	0.425	19.3	4.31	0.175	16.2	4.41	0.145	16.1	4.44	0.121	25.7	4.24	0.111
0.65	25.8	4.97	0.276	18.2	4.70	0.195	15.3	4.58	0.160	15.8	4.46	0.122	28.6	4.24	0.105
0.70	40.4	4.53	0.502	16.9	4.58	0.210	14.0	4.56	0.171	12.5	4.47	0.147	20.0	4.23	0.104
0.75	20.4	4.79	0.291	15.5	4.63	0.221	14.2	4.39	0.198	12.3	4.43	0.165	17.8	4.22	0.108
0.80	35.8	4.54	0.581	14.7	4.41	0.238	12.8	4.39	0.203	11.2	4.35	0.167	16.0	4.19	0.118
0.85	19.5	4.10	0.357	13.0	4.21	0.237	11.2	4.26	0.218	10.5	4.27	0.182	14.4	4.16	0.130
0.90	21.3	4.35	0.447	12.8	4.28	0.261	11.8	4.25	0.237	10.4	4.22	0.197	13.1	4.13	0.130
0.95	19.4	4.28	0.444	12.2	4.24	0.277	11.2	4.21	0.248	9.9	4.18	0.205	12.0	4.10	0.149
1.00	12.5	4.09	0.317	10.5	4.13	0.263	9.8	4.14	0.241	9.3	4.13	0.203	11.4	4.06	0.155
1.10	13.1	4.14	0.403	8.3	4.09	0.254	8.1	4.07	0.237	8.2	4.04	0.211	10.8	3.99	0.162
1.20	13.1	3.92	0.479	7.4	3.92	0.288	6.9	3.92	0.245	6.9	3.92	0.206	10.2	3.92	0.160
1.30	7.7	3.60	0.329	6.0	3.67	0.236	5.6	3.72	0.236	6.1	3.79	0.204	9.6	3.85	0.162
1.40	4.9	3.55	0.243	4.8	3.60	0.235	4.7	3.64	0.225	5.6	3.70	0.203	9.1	3.79	0.165
1.50	4.8	3.56	0.275	4.1	3.58	0.228	4.2	3.60	0.218	5.2	3.64	0.199	8.5	3.74	0.167
1.60	3.5	3.52	0.228	3.4	3.54	0.218	3.8	3.56	0.209	4.8	3.60	0.196	8.1	3.69	0.167
1.70	3.2	3.49	0.233	3.1	3.50	0.218	3.5	3.52	0.212	4.5	3.56	0.202	7.1	3.66	0.175
1.80	2.8	3.42	0.227	2.9	3.51	0.222	3.2	3.49	0.216	4.2	3.53	0.206	7.2	3.63	0.180
1.90	2.5	3.56	0.232	2.6	3.54	0.226	3.0	3.52	0.220	3.9	3.50	0.209	6.8	3.60	0.183
2.00	3.1	3.60	0.316	2.4	3.58	0.228	2.8	3.55	0.222	3.7	3.52	0.211	6.5	3.57	0.186
2.20	2.0	3.65	0.250	2.0	3.63	0.223	2.3	3.60	0.219	3.2	3.56	0.211	5.9	3.54	0.190
2.40	1.5	3.66	0.218	1.7	3.64	0.217	2.0	3.62	0.215	2.9	3.59	0.210	5.3	3.51	0.192
2.60	1.3	3.66	0.219	1.4	3.65	0.216	1.8	3.64	0.214	2.6	3.61	0.209	4.9	3.53	0.193
2.80	1.1	3.68	0.222	1.3	3.67	0.218	1.6	3.65	0.214	2.3	3.62	0.208	4.5	3.53	0.193
3.00	1.0	3.70	0.219	1.1	3.69	0.215	1.4	3.67	0.211	2.1	3.64	0.208	4.2	3.56	0.193
3.20	0.8	3.72	0.209	1.0	3.70	0.210	1.3	3.68	0.205	1.9	3.65	0.201	3.9	3.58	0.192
3.40	0.7	3.72	0.193	0.8	3.70	0.198	1.1	3.68	0.197	1.8	3.66	0.196	3.6	3.59	0.190
3.60	0.6	3.71	0.188	0.7	3.70	0.190	1.0	3.68	0.191	1.6	3.66	0.192	3.4	3.59	0.190
3.80	0.5	3.70	0.181	0.7	3.69	0.184	0.9	3.68	0.184	1.5	3.66	0.188	3.2	3.60	0.186
4.00	0.4	3.68	0.179	0.6	3.68	0.182	0.9	3.67	0.184	1.4	3.65	0.186	3.1	3.60	0.186

PER = PERIOD (SEC) AA = ABSOLUTE ACC. (GAL) RV = RELATIVE VELOCITY (CM/SEC) RD = RELATIVE DISPLACEMENT (CM)

RESPONSE SPECTRUM

RECORD = F-15 COMPONENT = NORTH SIGNAL = GR. ACC. CORRECTION = STATION = HITACHINAKA-F
 DATE AND TIME = 1986-11-15-15-6 SAMPRING INTERVAL = 0.0100(SEC) MAX. GROUND ACC. = 181.09 (GAL)
 TIME LENGTH = 50.99 (SEC) SKIPPED LENGTH = 0.00 (SEC)

PER	DAMPING = 0.				DAMPING = 0.025				DAMPING = 0.050				DAMPING = 0.100				DAMPING = 0.250			
	AA	RV	RD	AA	RV	RD	AA	RV	RD	AA	RV	RD	AA	RV	RD	AA	RV	RD		
0.05	269.7	1.51	0.017	228.3	0.94	0.014	227.8	0.86	0.014	225.5	0.87	0.014	221.4	0.80	0.014	221.4	0.80	0.014		
0.10	734.5	11.61	0.186	529.6	8.11	0.135	487.1	7.61	0.123	436.9	6.47	0.108	329.8	5.92	0.076	329.8	5.92	0.076		
0.15	1303.5	31.07	0.742	564.9	13.62	0.321	474.5	11.64	0.271	344.9	8.51	0.192	233.4	5.66	0.113	233.4	5.66	0.113		
0.20	2003.6	74.89	0.203	175.2	7.06	0.180	166.5	6.28	0.170	154.5	5.88	0.148	135.4	5.07	0.110	135.4	5.07	0.110		
0.25	191.4	7.56	0.303	93.3	3.51	0.148	87.5	3.14	0.139	86.2	4.86	0.129	93.2	4.25	0.108	93.2	4.25	0.108		
0.30	58.7	5.54	0.157	62.8	5.28	0.141	65.0	5.14	0.139	61.5	4.91	0.131	69.5	4.37	0.109	69.5	4.37	0.109		
0.35	49.0	4.89	0.152	38.5	5.00	0.120	39.6	4.76	0.119	40.5	4.81	0.113	52.7	4.38	0.101	52.7	4.38	0.101		
0.40	76.4	4.82	0.310	39.0	4.74	0.158	26.9	4.69	0.108	27.4	4.60	0.099	40.9	4.32	0.090	40.9	4.32	0.090		
0.45	41.3	4.48	0.212	22.7	4.48	0.116	22.7	4.46	0.114	23.5	4.41	0.108	32.7	4.22	0.093	32.7	4.22	0.093		
0.50	40.1	4.21	0.254	21.1	4.22	0.134	19.4	4.22	0.119	20.3	4.21	0.113	26.9	4.12	0.099	26.9	4.12	0.099		
0.55	32.2	3.95	0.247	19.1	3.96	0.145	16.5	4.00	0.124	17.3	4.04	0.114	22.7	4.03	0.103	22.7	4.03	0.103		
0.60	26.7	3.88	0.244	17.7	3.91	0.180	17.2	3.93	0.133	16.5	3.96	0.138	20.1	3.95	0.107	20.1	3.95	0.107		
0.65	52.0	5.39	0.356	18.6	4.00	0.198	17.5	3.96	0.133	16.2	3.91	0.139	18.5	3.88	0.112	18.5	3.88	0.112		
0.70	24.3	3.84	0.302	18.3	3.83	0.225	16.8	3.83	0.204	15.2	3.82	0.171	17.1	3.81	0.116	17.1	3.81	0.116		
0.75	25.8	3.70	0.368	18.9	3.66	0.268	14.7	3.68	0.205	13.2	3.71	0.167	15.9	3.74	0.119	15.9	3.74	0.119		
0.80	30.4	4.13	0.493	18.2	3.55	0.293	14.9	3.57	0.234	11.9	3.61	0.179	14.8	3.67	0.121	14.8	3.67	0.121		
0.85	27.2	3.94	0.498	17.0	3.45	0.309	13.8	3.47	0.244	11.0	3.51	0.186	13.8	3.61	0.122	13.8	3.61	0.122		
0.90	17.6	3.65	0.361	12.2	3.28	0.249	10.7	3.34	0.215	9.5	3.43	0.180	12.9	3.55	0.122	12.9	3.55	0.122		
0.95	21.3	4.10	0.617	10.6	3.22	0.234	9.5	3.28	0.206	8.4	3.37	0.166	12.0	3.51	0.121	12.0	3.51	0.121		
1.00	13.9	3.25	0.353	8.7	3.26	0.218	8.2	3.28	0.194	7.7	3.33	0.166	11.3	3.46	0.123	11.3	3.46	0.123		
1.10	7.3	3.19	0.224	6.6	3.20	0.203	6.2	3.22	0.188	6.2	3.27	0.166	10.0	3.39	0.126	10.0	3.39	0.126		
1.20	5.3	3.04	0.194	4.8	3.06	0.174	4.7	3.12	0.168	5.1	3.19	0.154	8.9	3.34	0.124	8.9	3.34	0.124		
1.30	3.5	3.04	0.150	3.5	3.07	0.148	3.6	3.10	0.145	4.3	3.16	0.139	8.0	3.30	0.119	8.0	3.30	0.119		
1.40	3.4	3.06	0.167	2.9	3.09	0.141	3.0	3.11	0.139	3.7	3.15	0.134	7.3	3.27	0.118	7.3	3.27	0.118		
1.50	2.8	3.08	0.161	2.5	3.10	0.136	2.6	3.12	0.135	3.3	3.15	0.131	6.7	3.26	0.119	6.7	3.26	0.119		
1.60	2.4	3.10	0.158	2.1	3.11	0.133	2.2	3.12	0.132	3.0	3.15	0.129	6.1	3.24	0.118	6.1	3.24	0.118		
1.70	2.0	3.09	0.145	1.9	3.11	0.131	2.0	3.12	0.130	2.7	3.15	0.127	5.7	3.23	0.118	5.7	3.23	0.118		
1.80	2.2	3.09	0.180	1.6	3.11	0.128	1.7	3.12	0.127	2.5	3.15	0.124	5.3	3.22	0.117	5.3	3.22	0.117		
1.90	1.3	3.10	0.123	1.4	3.12	0.123	1.5	3.13	0.123	2.5	3.15	0.121	5.0	3.22	0.116	5.0	3.22	0.116		
2.00	1.2	3.12	0.118	1.2	3.13	0.119	1.4	3.14	0.119	2.1	3.16	0.119	4.8	3.22	0.115	4.8	3.22	0.115		
2.20	1.0	3.14	0.117	1.0	3.15	0.117	1.1	3.15	0.117	1.9	3.16	0.116	4.4	3.21	0.113	4.4	3.21	0.113		
2.40	0.8	3.14	0.118	0.9	3.15	0.117	1.0	3.15	0.116	1.7	3.17	0.115	4.0	3.21	0.112	4.0	3.21	0.112		
2.60	0.7	3.14	0.113	0.7	3.15	0.113	0.9	3.15	0.113	1.5	3.17	0.112	3.7	3.20	0.110	3.7	3.20	0.110		
2.80	0.5	3.15	0.107	0.6	3.16	0.108	0.8	3.16	0.109	1.4	3.17	0.109	3.5	3.20	0.109	3.5	3.20	0.109		
3.00	0.5	3.16	0.104	0.5	3.16	0.105	0.7	3.17	0.106	1.3	3.18	0.108	3.3	3.20	0.108	3.3	3.20	0.108		
3.20	0.4	3.17	0.104	0.5	3.17	0.105	0.7	3.18	0.106	1.2	3.18	0.107	3.1	3.20	0.108	3.1	3.20	0.108		
3.40	0.4	3.17	0.106	0.4	3.17	0.106	0.6	3.18	0.106	1.2	3.18	0.107	2.9	3.20	0.107	2.9	3.20	0.107		
3.60	0.3	3.17	0.108	0.4	3.18	0.107	0.6	3.18	0.107	1.1	3.18	0.107	2.7	3.20	0.107	2.7	3.20	0.107		
3.80	0.3	3.17	0.109	0.3	3.17	0.108	0.5	3.18	0.107	1.0	3.18	0.106	2.6	3.20	0.107	2.6	3.20	0.107		
4.00	0.3	3.17	0.108	0.3	3.17	0.107	0.5	3.18	0.106	1.0	3.18	0.106	2.5	3.20	0.105	2.5	3.20	0.105		

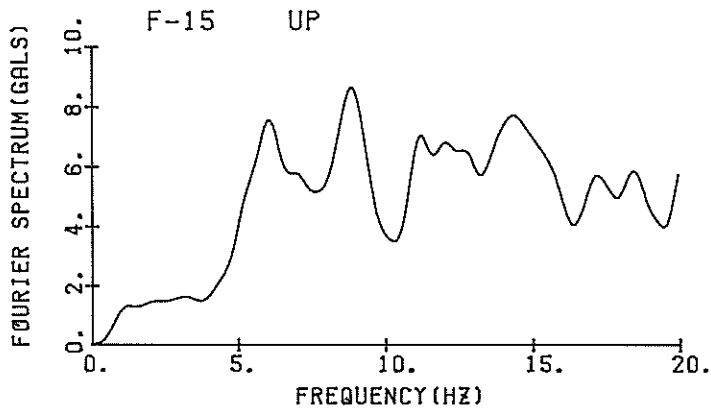
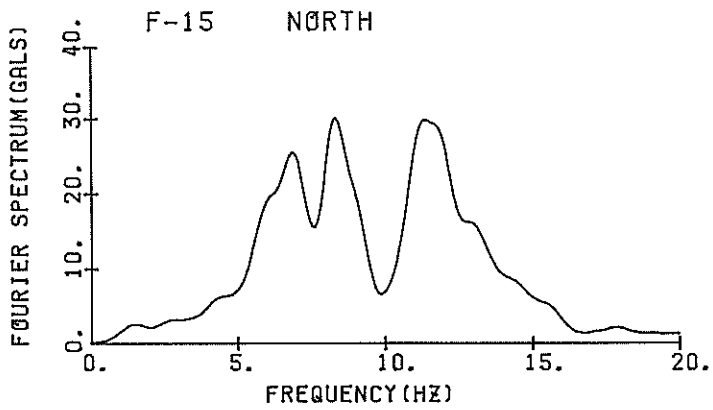
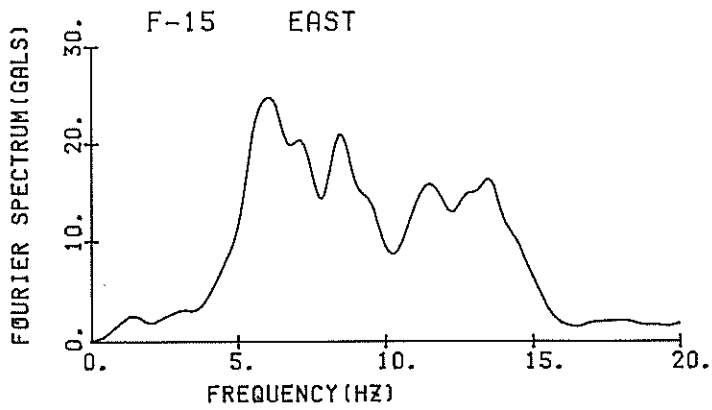
PER = PERIOD (SEC) AA = ABSOLUTE ACC. (GAL) RV = RELATIVE VELOCITY (CM/SEC) RD = RELATIVE DISPLACEMENT (CM)

RESPONSE SPECTRUM

RECORD = F-15
 DATE AND TIME = 1986-11-15-15-6
 TIME LENGTH = 50.99 (SEC)
 COMPONENT = UP
 SIGNAL = GR. ACC.
 CORRECTION = MAX-GROUND ACC. = 56.11 (GAL)
 SAMPLING INTERVAL = 0.0100(SEC)
 SKIPPED LENGTH = 0.00 (SEC)

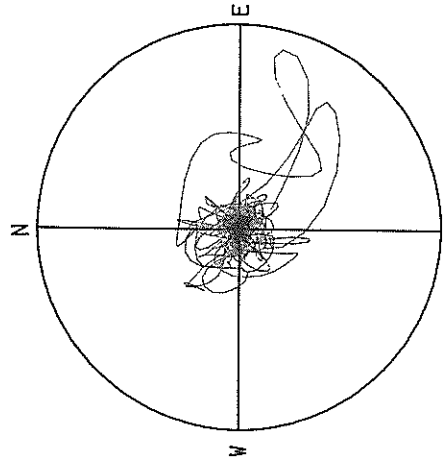
PER	DAMPING = 0.			DAMPING = 0.025			DAMPING = 0.050			DAMPING = 0.100			DAMPING = 0.250		
	AA	RV	RD	AA	RV	RD	AA	RV	RD	AA	RV	RD	AA	RV	RD
0.05	1328.3	10.53	0.084	231.4	1.67	0.015	172.4	1.34	0.071	130.1	0.98	0.003	93.5	0.51	0.006
0.10	270.3	4.71	0.068	150.5	2.41	0.039	132.9	2.10	0.033	112.0	1.74	0.023	81.6	1.19	0.018
0.15	233.4	5.47	0.133	147.5	3.58	0.084	110.7	2.72	0.064	85.3	2.04	0.047	53.1	1.30	0.027
0.20	87.1	2.95	0.088	68.4	2.40	0.069	50.1	1.88	0.050	39.1	1.68	0.039	35.8	1.16	0.028
0.25	74.2	2.88	0.117	26.2	1.51	0.041	22.2	1.35	0.035	19.4	1.21	0.030	22.5	1.06	0.024
0.30	36.2	1.79	0.083	15.3	1.12	0.035	13.6	1.07	0.030	12.6	1.05	0.027	16.0	1.00	0.022
0.35	21.7	1.26	0.067	14.3	1.06	0.044	11.0	1.07	0.034	9.6	1.04	0.026	12.8	0.98	0.024
0.40	20.1	1.39	0.081	14.7	1.16	0.060	12.2	1.12	0.049	9.5	1.06	0.037	11.3	0.96	0.027
0.45	18.1	1.36	0.093	12.5	1.11	0.060	9.4	1.05	0.048	7.7	1.01	0.037	10.1	0.95	0.029
0.50	29.9	2.45	0.190	14.0	1.09	0.089	10.1	1.06	0.064	7.4	1.01	0.045	8.9	0.95	0.035
0.55	10.6	1.09	0.082	7.9	1.01	0.061	7.3	1.01	0.055	6.9	1.01	0.049	8.0	0.96	0.041
0.60	22.2	2.24	0.203	11.3	1.21	0.103	7.9	1.14	0.071	7.0	1.06	0.060	7.3	0.96	0.046
0.65	8.8	1.48	0.094	6.9	1.21	0.073	6.9	1.12	0.072	6.6	1.05	0.065	6.8	0.96	0.049
0.70	13.5	1.49	0.168	5.3	0.98	0.064	5.6	0.98	0.067	5.8	0.93	0.066	6.4	0.96	0.052
0.75	9.4	1.13	0.134	6.5	0.89	0.092	5.8	0.93	0.080	5.4	0.97	0.070	6.0	0.98	0.053
0.80	13.1	1.65	0.212	6.4	0.99	0.103	5.3	0.99	0.083	4.9	0.99	0.071	5.7	0.99	0.053
0.85	10.3	1.67	0.188	6.9	1.09	0.156	5.5	1.02	0.099	4.6	1.04	0.080	5.4	1.01	0.055
0.90	13.4	1.96	0.274	8.5	1.33	0.173	6.9	1.18	0.139	5.3	1.09	0.103	5.1	1.02	0.060
0.95	16.5	2.59	0.377	10.7	1.59	0.243	7.9	1.18	0.179	5.3	1.11	0.114	4.8	1.03	0.062
1.00	13.5	3.02	0.470	9.8	1.77	0.247	7.3	1.33	0.184	4.7	1.09	0.115	4.5	1.04	0.062
1.10	11.0	2.09	0.337	7.2	1.55	0.220	5.3	1.36	0.161	3.7	1.12	0.107	4.1	1.06	0.061
1.20	4.4	1.37	0.162	4.2	1.24	0.151	3.8	1.19	0.137	3.2	1.12	0.111	3.7	1.07	0.065
1.30	5.0	1.15	0.213	3.2	1.10	0.137	3.0	1.12	0.123	2.6	1.12	0.103	3.4	1.08	0.066
1.40	2.9	1.08	0.166	2.5	1.10	0.122	2.2	1.12	0.103	1.9	1.12	0.089	3.1	1.09	0.063
1.50	1.9	1.23	0.106	1.7	1.20	0.097	1.6	1.17	0.087	1.7	1.15	0.079	2.9	1.10	0.058
1.60	1.2	1.23	0.080	1.2	1.21	0.078	1.2	1.19	0.075	1.5	1.16	0.068	2.7	1.11	0.056
1.70	0.9	1.22	0.069	0.9	1.21	0.067	1.0	1.19	0.067	1.3	1.17	0.061	2.5	1.12	0.053
1.80	0.7	1.20	0.061	0.8	1.19	0.061	0.8	1.18	0.061	1.2	1.16	0.058	2.3	1.12	0.051
1.90	0.7	1.17	0.062	0.7	1.17	0.060	0.7	1.17	0.059	1.1	1.16	0.056	2.2	1.13	0.048
2.00	0.6	1.16	0.063	0.6	1.16	0.060	0.6	1.16	0.058	1.0	1.16	0.055	2.0	1.13	0.047
2.20	0.5	1.18	0.060	0.5	1.17	0.057	0.5	1.16	0.055	0.9	1.15	0.052	1.8	1.13	0.046
2.40	0.3	1.16	0.050	0.4	1.16	0.051	0.4	1.15	0.051	0.8	1.15	0.050	1.6	1.13	0.046
2.60	0.3	1.14	0.051	0.3	1.14	0.049	0.4	1.14	0.049	0.7	1.14	0.049	1.5	1.13	0.045
2.80	0.3	1.14	0.052	0.3	1.14	0.051	0.4	1.14	0.050	0.6	1.14	0.049	1.4	1.13	0.045
3.00	0.2	1.15	0.055	0.2	1.14	0.052	0.3	1.14	0.051	0.5	1.14	0.049	1.3	1.12	0.045
3.20	0.2	1.15	0.050	0.2	1.14	0.049	0.3	1.14	0.049	0.5	1.13	0.047	1.2	1.12	0.045
3.40	0.2	1.14	0.045	0.2	1.14	0.045	0.2	1.14	0.046	0.5	1.13	0.046	1.1	1.12	0.045
3.60	0.1	1.13	0.045	0.1	1.13	0.044	0.2	1.13	0.044	0.4	1.13	0.045	1.0	1.12	0.045
3.80	0.1	1.12	0.048	0.1	1.12	0.046	0.2	1.12	0.045	0.4	1.13	0.045	1.0	1.12	0.044
4.00	0.1	1.12	0.048	0.1	1.12	0.046	0.2	1.12	0.045	0.4	1.12	0.046	0.9	1.12	0.045

PER = PERIOD (SEC) AA = ABSOLUTE ACC. (GAL) RV = RELATIVE VELOCITY (CM/SEC) RD = RELATIVE DISPLACEMENT (CM)



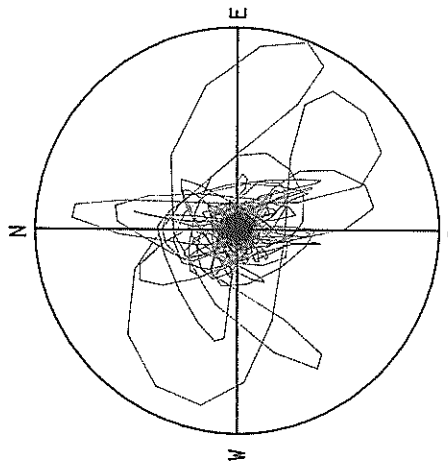
FOURIER SPECTRA

F-15 HITACHINAKA-F



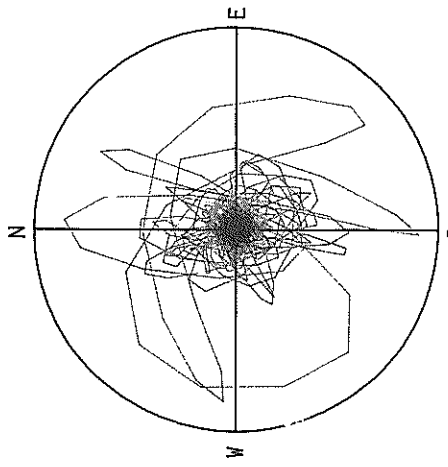
DISPLACEMENT
R=0.20 CM
MAX=0.18 CM

F-15 HITACHINAKA-F



VELOCITY
R=4.0 CM/SEC.
MAX=4.0 CM/SEC.

F-15 HITACHINAKA-F



ACCELERATION
R=200.0 GAL
MAX=181.2 GAL

RECORD NUMBER M-1056
 STATION YAMASHITA-HEN-M

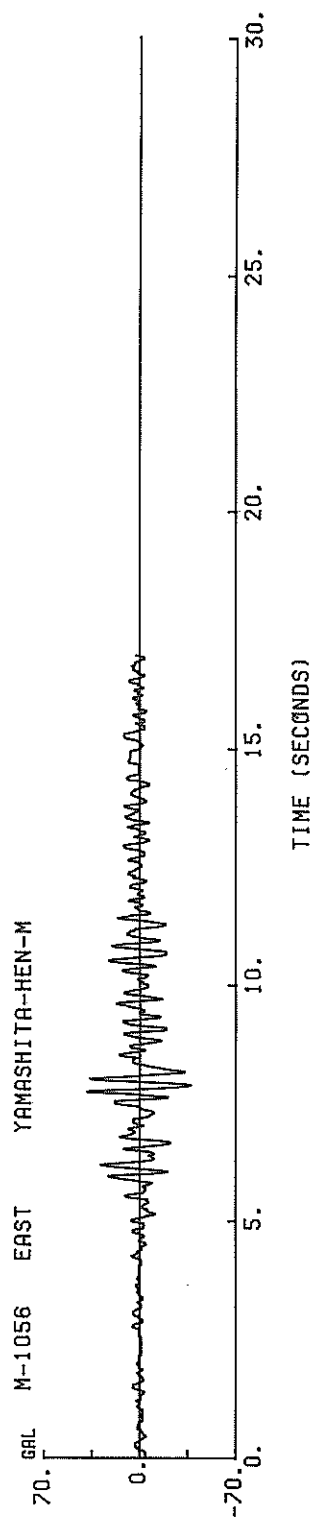
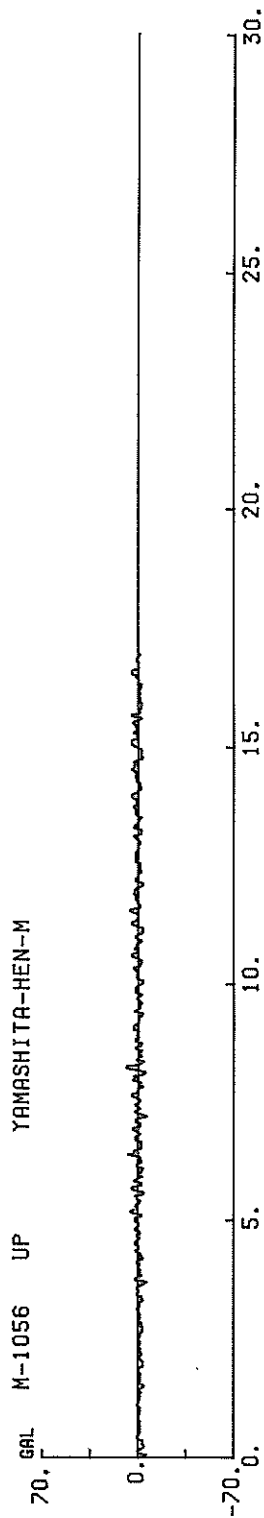
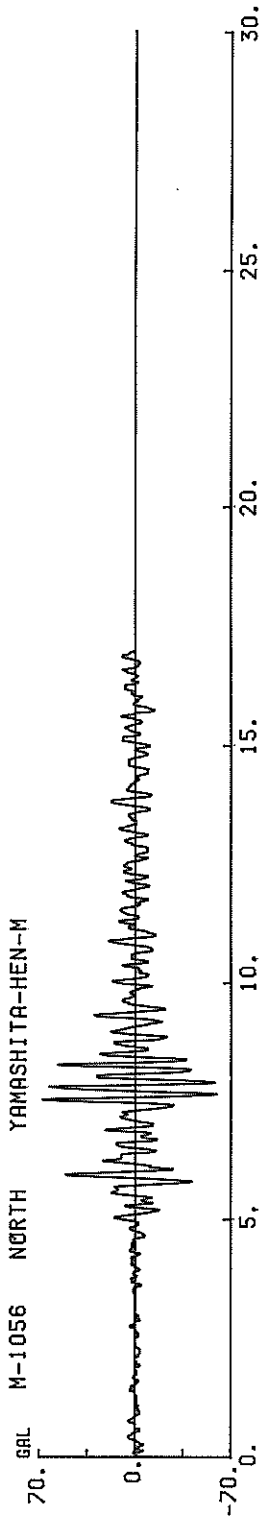
EARTHQUAKE DATA

DATA AND TIME 15: 6 NOV.15,1986
 LOCATION OF HYPOCENTER
 EPICENTRAL REGION E OFF IBARAKI PREF
 LATITUDE 36°24' N
 LONGITUDE 140°56' E
 DEPTH 43KM
 MAGNITUDE 5.0

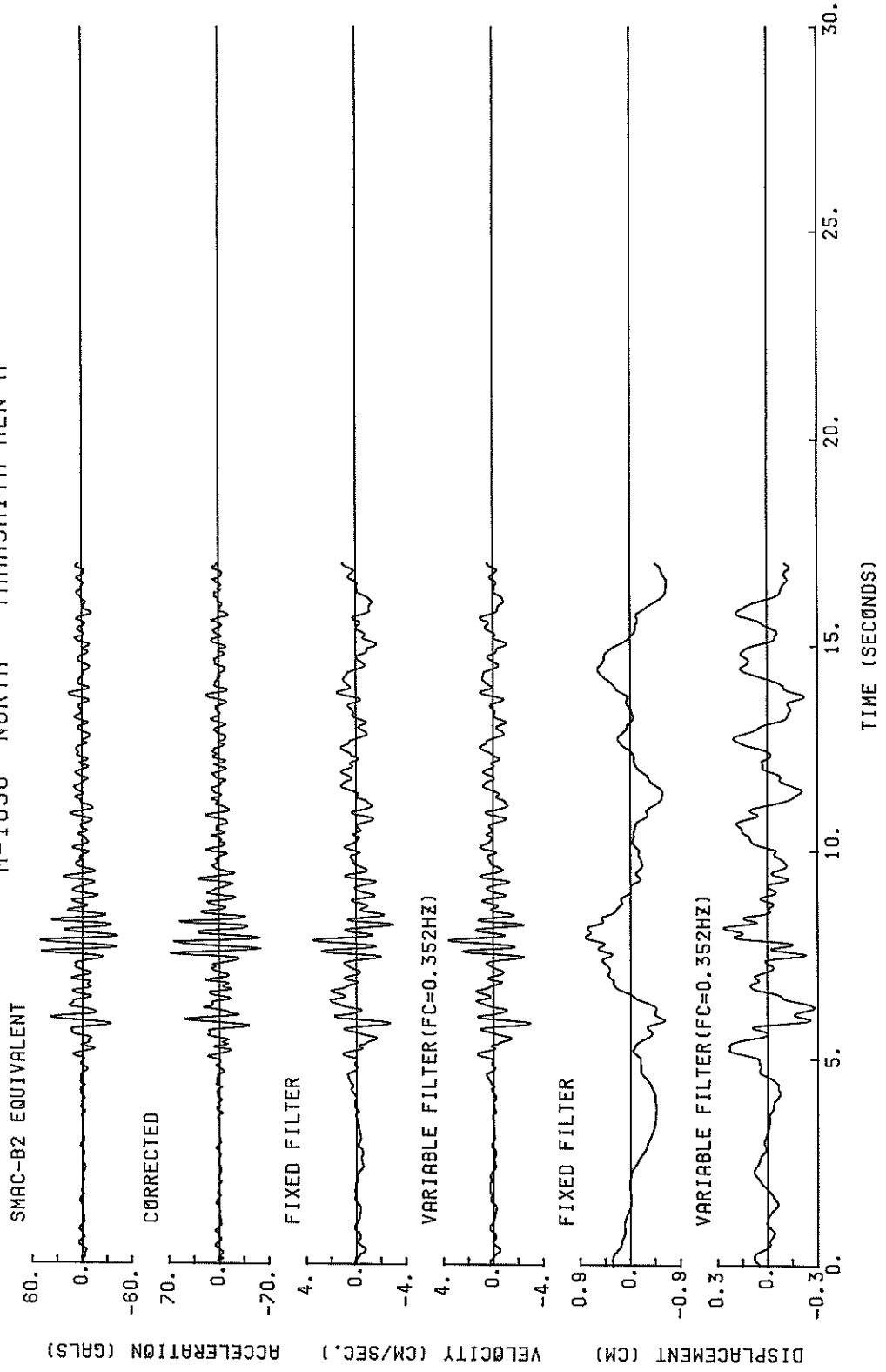
PEAK VALUES OF COMPONENTS

	N S	E W	U D	HORIZONTAL*
PARAMETER OF THE VARIABLE FILTER				
FC (HZ)	0.352	0.328	0.596	
MAXIMUM ACCELERATION (GAL)				
SMAC-B2 EQUIVALENT	50.3	31.2	6.5	52.3
ORIGINAL	68.1	38.9	8.6	70.5
CORRECTED	68.2	39.9	8.5	70.8
MAXIMUM VELOCITY (CM/SEC)				
FIXED FILTER	3.51	2.64	0.89	4.03
VARIABLE FILTER	3.59	2.52	0.44	4.07
MAXIMUM DISPLACEMENT (CM)				
FIXED FILTER	0.804	1.187	0.860	1.305
VARIABLE FILTER	0.280	0.321	0.044	0.404

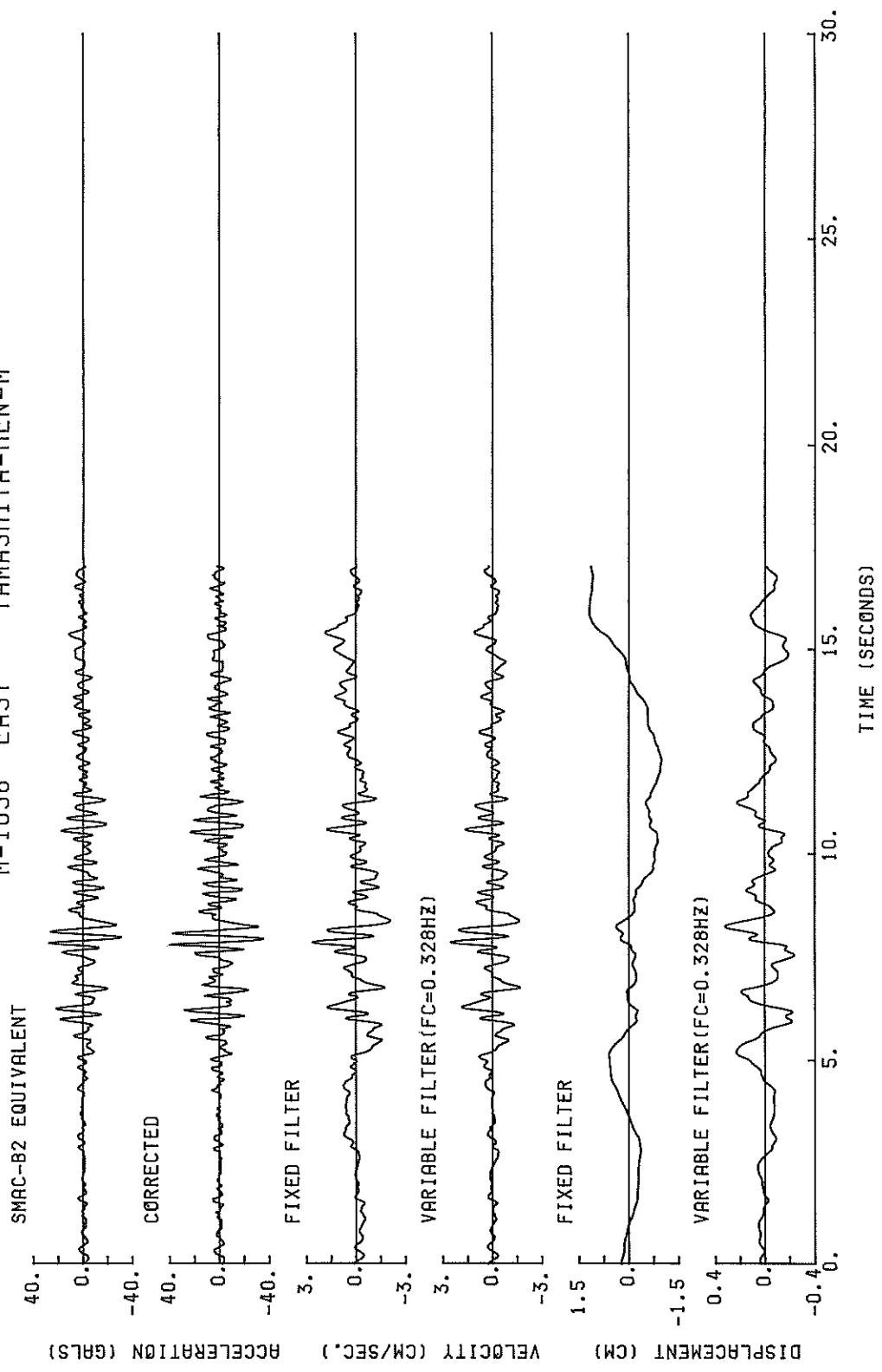
* RESULTANT OF HORIZONTAL COMPONENTS



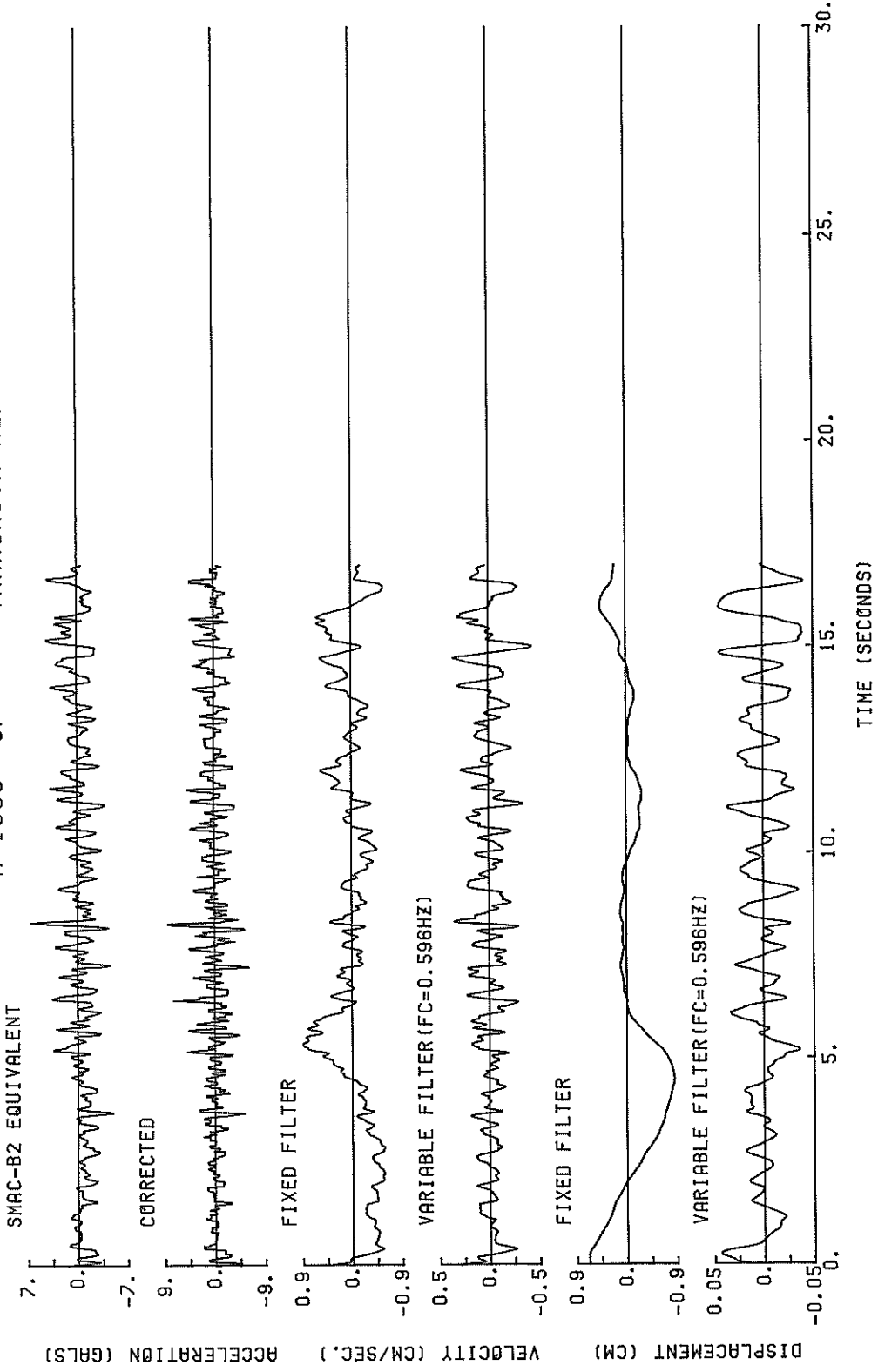
M-1056 NORTH YAMASHITA-HEN-M



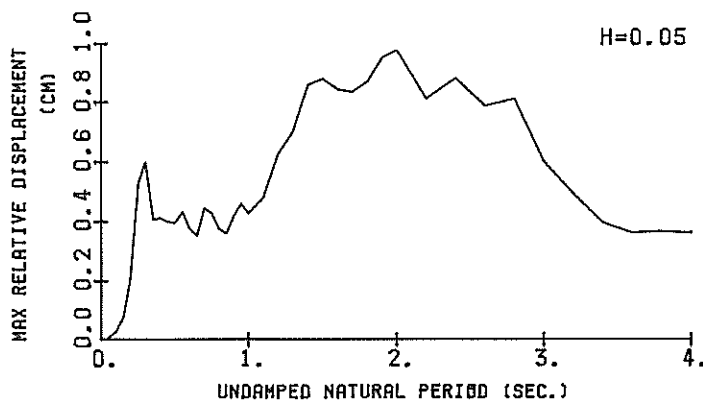
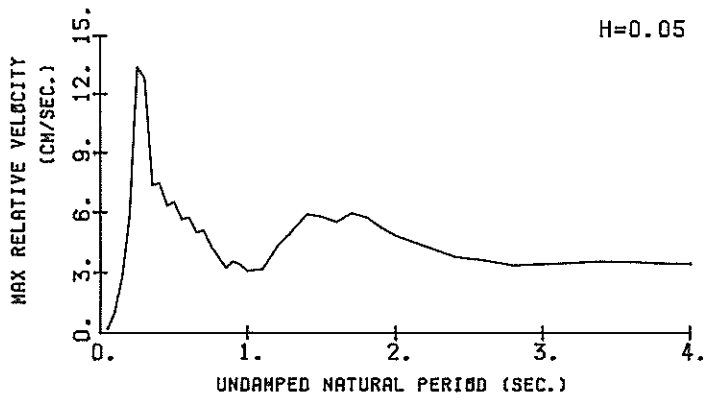
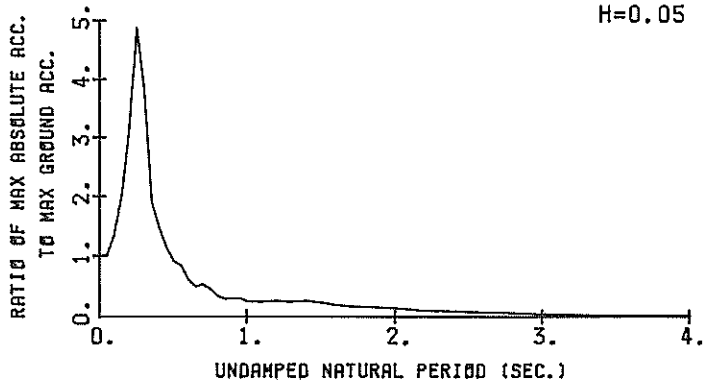
M-1056 EAST YAMASHITA-HEN-M



M-1056 UP YAMASHITA-HEN-M

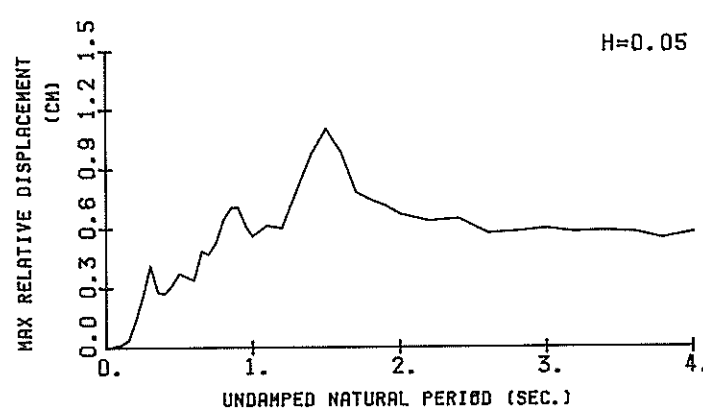
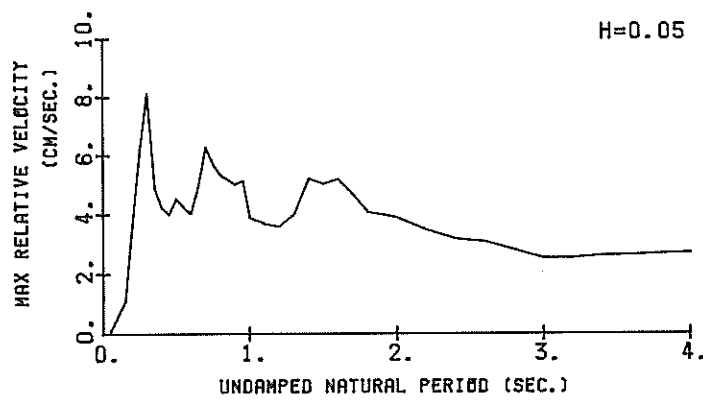
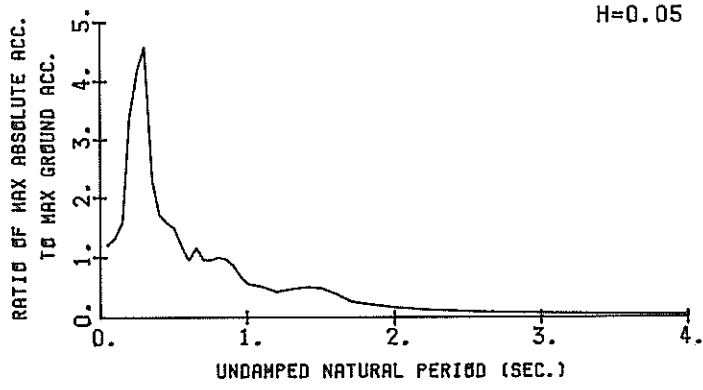


M-1056 NORTH YAMASHITA-HEN-M
(1/FC=2.84 SEC.)



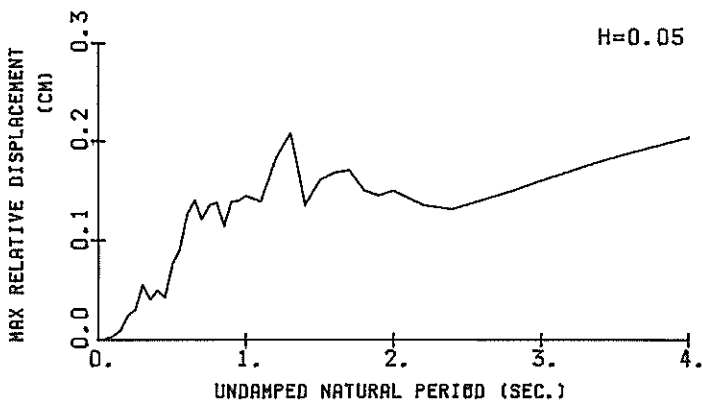
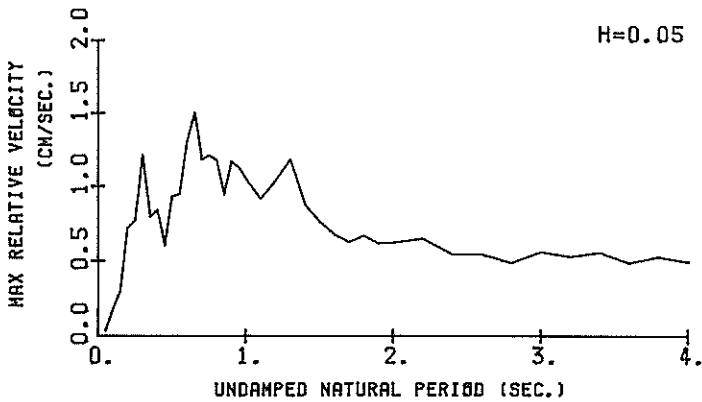
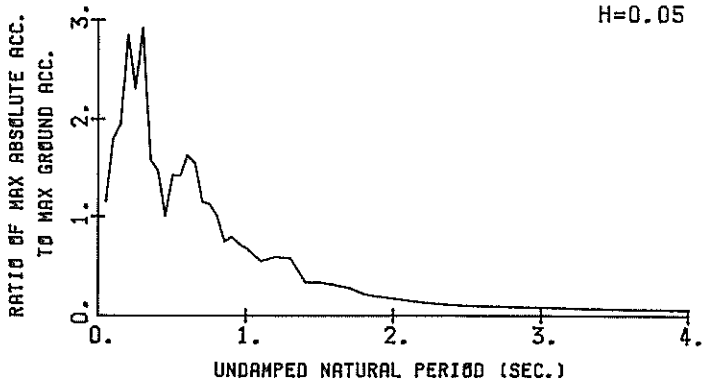
RESPONSE SPECTRA

M-1056 EAST YAMASHITA-HEN-M
(1/FC=3.05 SEC.)



RESPONSE SPECTRA

M-1056 UP YAMASHITA-HEN-M
(1/FC=1.68 SEC.)



RESPONSE SPECTRA

RESPONSE SPECTRUM

RECORD = W-1036 COMPONENT = NORTH SIGNAL = GR. ACC. CORRECTION = STATION = YAMASHITA-HEN-M
 DATE AND TIME = 1985-11-15-15-06 SAMPRING INTERVAL = 0.0100(SEC) MAX.GROUND ACC. = 68.24 (GAL)
 TIME LENGTH = 16.99 (SEC) SKIPPED LENGTH = 0.00 (SEC)

PER	AA	RV	RD	AA	RV	RD	AA	RV	RD	AA	RV	RD	AA	RV	RD
0.05	86.2	0.50	0.005	73.6	0.23	0.005	68.8	0.20	0.004	68.9	0.18	0.004	70.7	0.16	0.004
0.10	104.5	1.35	0.026	103.3	1.20	0.026	93.0	1.04	0.024	93.7	0.85	0.023	84.9	0.62	0.021
0.15	201.0	4.28	0.115	170.6	3.60	0.097	138.7	2.90	0.073	107.7	2.19	0.061	94.7	1.46	0.051
0.20	370.2	11.53	0.375	259.1	7.56	0.262	210.6	5.81	0.213	165.8	4.60	0.164	112.1	2.60	0.105
0.25	561.4	34.13	1.564	437.3	17.62	0.692	333.1	13.58	0.528	220.2	8.55	0.345	126.1	4.47	0.181
0.30	573.8	27.49	1.303	334.4	16.54	0.761	262.9	12.80	0.598	184.8	9.35	0.412	109.0	5.02	0.204
0.35	267.9	14.88	0.831	131.1	9.47	0.514	131.1	7.35	0.406	106.4	6.61	0.323	77.6	4.53	0.204
0.40	201.0	13.64	0.815	132.0	9.42	0.536	102.5	7.48	0.412	83.7	5.75	0.330	77.6	4.18	0.215
0.45	130.8	9.25	0.671	86.7	6.71	0.443	78.6	6.33	0.400	56.4	5.62	0.332	49.3	4.08	0.212
0.50	102.2	9.65	0.647	72.9	7.16	0.462	62.9	6.50	0.395	54.8	5.52	0.336	43.0	3.92	0.227
0.55	92.1	8.28	0.706	63.2	6.25	0.483	57.1	5.65	0.433	47.8	4.82	0.353	37.0	3.74	0.228
0.60	51.3	6.94	0.463	46.4	6.50	0.422	41.9	5.74	0.378	36.0	4.87	0.313	30.4	3.60	0.213
0.65	48.7	6.42	0.521	35.7	5.31	0.381	33.4	5.01	0.354	28.8	4.46	0.297	24.2	3.47	0.192
0.70	86.5	9.63	1.074	46.0	6.26	0.569	36.4	5.09	0.447	27.8	4.03	0.330	22.9	3.31	0.222
0.75	84.7	10.25	1.208	33.7	4.91	0.551	30.5	4.28	0.429	26.1	3.56	0.351	22.5	3.13	0.244
0.80	42.4	5.27	0.683	31.3	4.13	0.507	23.4	3.82	0.378	21.7	3.49	0.330	21.5	2.98	0.253
0.85	26.4	4.51	0.484	23.1	3.62	0.423	19.9	3.25	0.363	19.0	3.27	0.321	20.3	2.98	0.268
0.90	51.5	8.00	1.056	27.2	4.57	0.558	20.5	3.59	0.419	17.0	3.13	0.320	19.2	2.94	0.277
0.95	41.2	5.84	0.942	26.8	4.28	0.612	20.3	3.89	0.462	15.6	2.93	0.326	18.2	2.89	0.287
1.00	37.4	5.85	0.943	22.4	3.84	0.568	17.0	3.89	0.430	15.0	2.92	0.347	17.3	2.84	0.296
1.10	24.0	5.19	0.735	17.5	3.83	0.535	16.0	3.17	0.483	15.4	3.15	0.431	15.9	3.02	0.315
1.20	35.9	7.23	1.308	21.2	4.86	0.772	17.5	4.31	0.626	15.1	3.92	0.503	14.4	3.31	0.323
1.30	43.7	8.83	1.872	23.8	5.29	1.019	16.6	5.09	0.703	13.7	4.60	0.563	13.7	3.57	0.378
1.40	26.7	7.43	1.325	20.6	6.54	1.020	17.5	5.91	0.857	14.2	5.05	0.645	13.4	3.73	0.418
1.50	26.4	6.90	1.506	17.5	6.31	0.991	15.8	5.79	0.878	13.6	5.00	0.701	12.7	3.75	0.434
1.60	13.1	6.47	1.174	15.0	5.85	0.971	13.3	5.21	0.844	11.6	4.85	0.669	11.6	3.86	0.424
1.70	19.3	7.35	1.411	13.6	6.17	0.992	11.6	5.37	0.833	8.9	5.17	0.620	10.4	4.02	0.393
1.80	22.9	7.20	1.877	14.2	6.17	1.162	10.7	5.77	0.868	8.5	5.16	0.632	9.1	4.10	0.381
1.90	19.0	6.21	1.756	13.8	5.37	1.265	10.5	5.26	0.951	7.8	4.94	0.628	8.0	4.11	0.399
2.00	14.3	5.54	1.505	11.9	4.88	1.202	9.8	4.85	0.979	7.2	4.68	0.694	7.0	4.07	0.413
2.20	7.2	4.64	0.877	7.2	4.44	0.882	6.7	4.32	0.812	5.4	4.19	0.640	5.9	3.91	0.426
2.40	9.3	4.54	1.361	7.3	4.12	1.036	6.1	3.80	0.882	4.7	3.60	0.658	5.3	3.71	0.420
2.60	8.7	4.33	1.492	6.1	3.89	1.036	6.6	3.64	0.787	4.1	3.27	0.581	5.0	3.55	0.429
2.80	6.4	3.97	1.274	5.0	3.61	0.996	4.1	3.35	0.811	3.7	3.09	0.591	4.6	3.46	0.439
3.00	3.8	3.81	0.857	3.1	3.60	0.700	2.8	3.43	0.601	3.1	3.24	0.533	4.2	3.44	0.433
3.20	2.2	3.71	0.563	2.1	3.56	0.528	2.0	3.48	0.496	2.5	3.41	0.455	3.9	3.44	0.417
3.40	1.5	3.78	0.449	1.4	3.58	0.410	1.5	3.58	0.397	2.0	3.49	0.389	3.6	3.46	0.400
3.60	1.2	3.61	0.385	1.2	3.58	0.376	1.1	3.55	0.365	1.7	3.51	0.351	3.4	3.48	0.386
3.80	1.4	3.43	0.511	1.1	3.47	0.416	1.0	3.49	0.368	1.6	3.50	0.341	3.2	3.49	0.377
4.00	1.2	3.37	0.497	1.0	3.42	0.401	1.0	3.46	0.365	1.5	3.50	0.353	3.0	3.50	0.373

PER = PERIOD (SEC) AA = ABSOLUTE ACC. (GAL) RV = RELATIVE VELOCITY (CM/SEC) RD = RELATIVE DISPLACEMENT (CM)

RESPONSE SPECTRUM

RECORD = M-1056 COMPONENT = EAST SIGNAL = GR. ACC. CORRECTION = STATION = YAMASHITA-HEN-M
 DATE AND TIME = 1985-11-15-15-06 SAMPRING INTERVAL = 0.0100(SEC) MAX.GROUND ACC. = 39.86 (GAL)
 TIME LENGTH = 16.99 (SEC) SKIPPED LENGTH = 0.00 (SEC)

PER	DAMPING = 0.			DAMPING = 0.025			DAMPING = 0.050			DAMPING = 0.100			DAMPING = 0.250		
	AA	RV	RD	AA	RV	RD	AA	RV	RD	AA	RV	RD	AA	RV	RD
0.05	44.2	0.22	0.003	47.1	0.08	0.003	48.4	0.09	0.003	48.7	0.10	0.003	46.8	0.09	0.003
0.10	85.2	1.30	0.022	57.7	0.67	0.015	52.5	0.56	0.013	50.6	0.46	0.013	49.3	0.34	0.012
0.15	95.0	2.14	0.054	71.8	1.52	0.041	63.3	1.09	0.036	59.3	0.97	0.033	54.6	0.79	0.030
0.20	365.9	11.54	0.370	179.5	4.96	0.182	134.3	3.59	0.136	99.9	2.56	0.099	66.9	1.56	0.064
0.25	429.1	17.16	0.695	205.0	7.51	0.323	157.2	6.16	0.265	127.4	4.43	0.198	76.5	2.51	0.110
0.30	595.6	28.52	1.353	288.3	10.64	0.644	182.7	8.12	0.414	126.7	5.64	0.284	67.8	3.08	0.140
0.35	114.5	6.55	0.355	89.6	4.90	0.278	91.8	4.89	0.283	83.9	4.41	0.255	56.5	2.99	0.158
0.40	124.7	7.93	0.505	69.1	4.57	0.280	68.1	4.24	0.274	68.4	3.73	0.247	45.6	2.78	0.165
0.45	75.9	6.02	0.390	70.0	4.81	0.359	62.4	4.00	0.319	49.8	3.41	0.251	37.2	2.65	0.170
0.50	114.0	8.98	0.722	69.2	5.69	0.437	59.4	4.54	0.375	45.7	3.32	0.284	30.3	2.61	0.168
0.55	105.7	9.16	0.810	59.9	5.36	0.450	47.0	4.24	0.358	36.3	3.52	0.273	28.2	2.54	0.172
0.60	110.3	10.28	1.005	54.3	5.41	0.495	37.7	4.02	0.342	32.7	3.48	0.287	26.3	2.78	0.186
0.65	79.9	8.67	0.856	57.7	5.90	0.616	46.1	4.98	0.589	33.9	4.21	0.347	23.4	3.04	0.186
0.70	59.0	8.69	0.732	47.5	7.36	0.588	38.4	6.28	0.473	28.0	4.88	0.340	19.5	3.13	0.199
0.75	55.1	6.91	0.786	45.2	6.31	0.614	37.7	5.68	0.533	29.4	4.65	0.406	19.4	3.16	0.228
0.80	69.3	9.20	1.123	49.6	6.73	0.803	39.9	5.34	0.644	28.9	3.93	0.461	18.7	2.98	0.256
0.85	74.9	10.19	1.371	46.3	7.04	0.846	38.7	5.19	0.705	29.0	3.98	0.519	17.0	2.75	0.279
0.90	71.0	9.28	1.456	47.6	6.19	0.975	34.7	5.03	0.703	26.2	3.92	0.523	16.3	2.51	0.292
0.95	61.0	9.67	1.395	36.2	6.81	0.826	27.3	5.14	0.619	21.6	3.53	0.477	15.5	2.46	0.296
1.00	46.2	7.54	1.171	25.4	4.39	0.642	22.4	3.91	0.564	17.9	3.15	0.442	15.2	2.40	0.317
1.10	28.8	5.26	0.883	23.2	4.32	0.711	20.3	3.71	0.618	17.4	2.95	0.516	14.4	2.28	0.354
1.20	25.4	4.93	0.926	19.8	4.07	0.742	16.7	3.60	0.605	15.4	3.02	0.544	13.2	2.38	0.378
1.30	39.4	3.12	1.685	23.0	4.93	0.981	18.7	4.01	0.793	14.2	3.40	0.592	11.8	2.64	0.401
1.40	32.8	7.82	1.629	24.9	6.27	1.231	19.8	5.22	0.975	15.3	3.93	0.739	10.9	2.83	0.445
1.50	42.0	9.98	2.393	23.3	5.84	1.324	19.6	5.03	1.105	14.9	4.01	0.821	10.0	2.94	0.467
1.60	25.9	7.28	1.677	17.7	5.87	1.149	15.4	5.20	0.987	12.4	4.24	0.767	9.2	2.97	0.462
1.70	14.0	5.45	1.021	12.1	5.04	0.887	10.8	4.67	0.785	9.6	4.04	0.640	8.6	2.94	0.434
1.80	11.4	4.73	0.939	10.3	4.39	0.838	9.2	4.08	0.746	7.9	3.65	0.591	7.9	2.88	0.421
1.90	9.3	4.40	0.851	8.5	4.21	0.795	8.0	4.00	0.717	6.9	3.58	0.592	7.1	2.78	0.420
2.00	8.0	4.28	0.815	7.4	4.08	0.741	6.8	3.89	0.675	6.1	3.53	0.566	6.3	2.78	0.416
2.20	9.8	4.06	1.206	6.6	3.63	0.807	5.3	3.48	0.839	4.7	3.25	0.858	5.0	2.76	0.399
2.40	5.5	3.51	0.804	5.0	3.32	0.718	4.6	3.18	0.652	4.0	2.95	0.555	4.2	2.67	0.389
2.60	4.3	3.35	0.741	3.8	3.20	0.642	3.4	3.08	0.577	3.1	2.88	0.487	3.7	2.58	0.369
2.80	5.2	3.20	1.037	3.6	2.65	0.749	3.0	2.80	0.585	2.8	2.71	0.501	3.4	2.52	0.379
3.00	4.0	2.92	0.921	2.6	2.59	0.732	2.7	2.52	0.401	2.4	2.53	0.484	3.2	2.50	0.387
3.20	3.1	2.60	0.794	2.6	2.54	0.617	2.3	2.51	0.382	2.0	2.49	0.255	3.0	2.50	0.388
3.40	2.5	2.67	0.730	2.5	2.63	0.635	2.1	2.59	0.388	2.0	2.46	0.481	2.7	2.52	0.391
3.60	2.1	2.65	0.698	2.0	2.64	0.638	1.9	2.63	0.382	1.9	2.60	0.487	2.7	2.55	0.410
3.80	1.8	2.66	0.665	1.7	2.66	0.602	1.6	2.66	0.549	1.8	2.64	0.511	2.6	2.57	0.424
4.00	1.6	2.71	0.646	1.5	2.71	0.603	1.6	2.70	0.579	1.7	2.68	0.535	2.4	2.59	0.435

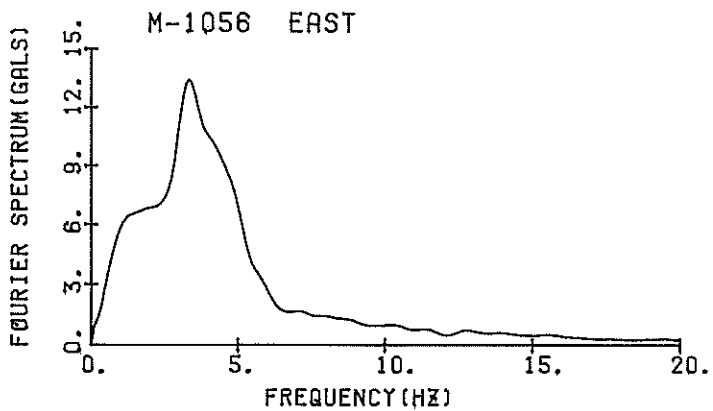
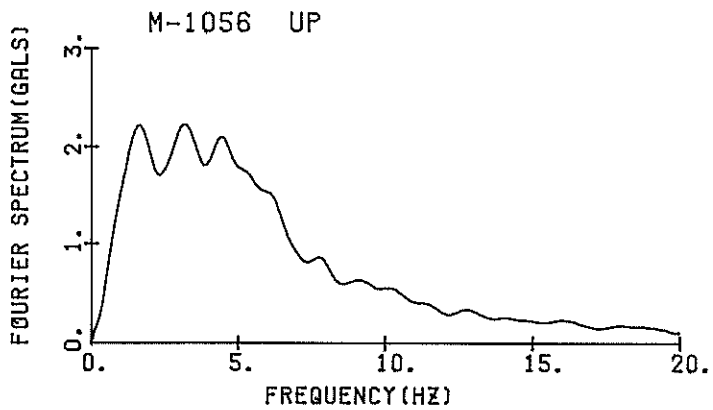
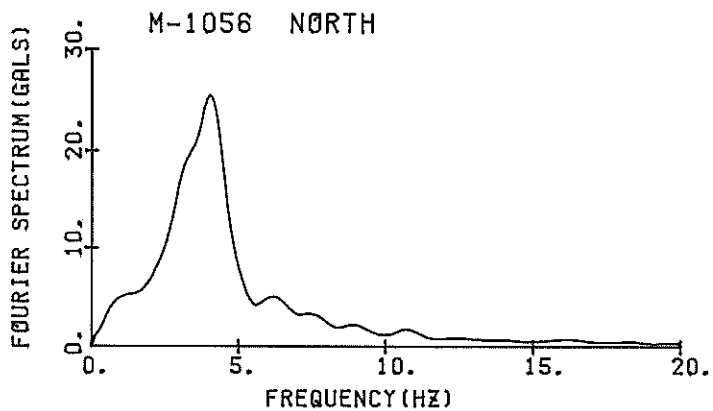
PER = PERIOD (SEC) AA = ABSOLUTE ACC. (GAL) RV = RELATIVE VELOCITY (CM/SEC) RD = RELATIVE DISPLACEMENT (CM)

RESPONSE SPECTRUM

RECORD = M-1056 COMPONENT = UP SIGNAL = GR. ACC. CORRECTION = MAX.GROUND ACC. = 8.54 (GAL)
 STATION = YAMASHITA-HEN-M
 DATE AND TIME = 1986-11-15-06 SAMPLING INTERVAL = 0.0100(SEC) MAX.GROUND ACC. = 8.54 (GAL)
 TIME LENGTH = 15.99 (SEC) SKIPPED LENGTH = 0.00 (SEC)

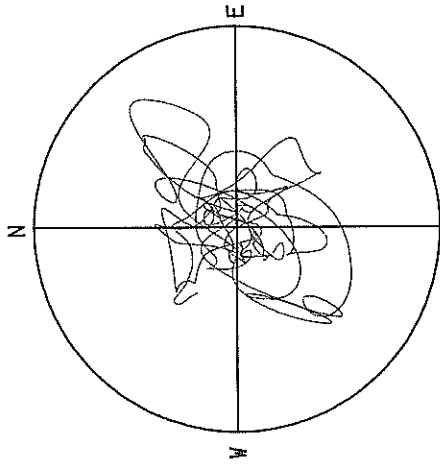
PER	DAMPING = 0.			DAMPING = 0.025			DAMPING = 0.050			DAMPING = 0.100			DAMPING = 0.250		
	AA	RV	RD	AA	RV	RD	AA	RV	RD	AA	RV	RD	AA	RV	RD
0.05	20.8	0.15	0.001	10.4	0.04	0.001	9.9	0.04	0.001	9.5	0.03	0.001	9.2	0.03	0.001
0.10	49.5	0.72	0.013	18.4	0.24	0.005	15.3	0.17	0.004	11.9	0.12	0.003	10.2	0.09	0.003
0.15	75.1	1.78	0.043	18.4	0.54	0.010	16.7	0.31	0.010	13.0	0.27	0.009	13.0	0.20	0.007
0.20	60.1	1.87	0.061	28.6	0.88	0.029	24.3	0.72	0.024	19.7	0.57	0.020	14.8	0.34	0.014
0.25	51.7	2.01	0.082	28.6	0.79	0.031	19.8	0.77	0.031	18.3	0.71	0.028	14.3	0.44	0.020
0.30	117.4	5.53	0.268	32.0	1.59	0.057	24.9	1.21	0.056	18.3	0.85	0.041	11.9	0.51	0.024
0.35	54.4	2.58	0.169	18.5	1.02	0.057	13.5	0.79	0.041	10.2	0.69	0.031	8.6	0.51	0.023
0.40	27.7	1.73	0.112	15.8	1.08	0.084	12.5	0.84	0.050	8.8	0.62	0.035	6.7	0.45	0.024
0.45	19.0	1.36	0.097	10.2	0.74	0.053	8.6	0.60	0.044	8.3	0.53	0.042	6.3	0.41	0.031
0.50	17.9	1.46	0.113	14.7	1.16	0.093	12.1	0.93	0.076	9.3	0.61	0.057	6.3	0.47	0.037
0.55	35.4	3.08	0.271	14.7	1.25	0.113	12.0	0.95	0.092	9.9	0.81	0.074	6.4	0.56	0.045
0.60	21.4	2.11	0.196	15.4	1.40	0.141	13.9	1.30	0.126	10.4	1.04	0.092	6.5	0.63	0.055
0.65	32.5	3.33	0.348	14.5	1.63	0.155	13.2	1.40	0.140	10.0	1.15	0.105	6.5	0.67	0.062
0.70	15.6	1.92	0.207	10.9	1.23	0.134	9.9	1.18	0.122	8.8	1.05	0.106	6.2	0.67	0.067
0.75	21.3	2.60	0.304	12.2	1.35	0.174	9.6	1.21	0.136	8.0	0.95	0.111	5.7	0.63	0.070
0.80	16.3	2.13	0.264	10.3	1.49	0.167	8.6	1.18	0.138	7.0	0.91	0.110	5.1	0.58	0.070
0.85	12.9	1.84	0.237	7.3	1.20	0.134	6.3	0.95	0.115	5.9	0.90	0.104	4.5	0.59	0.068
0.90	11.7	1.62	0.241	9.2	1.38	0.189	6.8	1.17	0.139	5.0	0.92	0.098	3.9	0.59	0.064
0.95	14.0	2.18	0.320	8.7	1.35	0.198	6.2	1.12	0.140	4.3	0.86	0.094	3.3	0.57	0.060
1.00	12.1	1.84	0.307	7.6	1.25	0.191	5.8	1.05	0.145	4.1	0.77	0.102	2.9	0.54	0.058
1.10	5.3	1.06	0.163	5.0	1.02	0.154	4.6	0.92	0.140	3.6	0.70	0.107	2.5	0.53	0.066
1.20	13.3	2.55	0.484	6.9	1.45	0.250	5.0	1.04	0.182	3.6	0.81	0.130	2.2	0.52	0.071
1.30	9.6	2.14	0.410	6.5	1.49	0.273	4.9	1.18	0.208	3.4	0.90	0.143	1.9	0.60	0.073
1.40	6.6	1.69	0.329	3.8	1.09	0.187	2.8	0.87	0.135	2.6	0.77	0.128	1.8	0.59	0.081
1.50	4.2	1.13	0.239	3.2	0.81	0.184	2.8	0.76	0.161	2.4	0.68	0.135	1.7	0.55	0.087
1.60	4.1	1.14	0.266	3.0	0.79	0.191	2.6	0.68	0.168	2.2	0.58	0.141	1.6	0.51	0.091
1.70	2.2	0.71	0.159	2.5	0.68	0.185	2.4	0.63	0.170	2.0	0.52	0.140	1.5	0.48	0.093
1.80	4.0	1.36	0.325	2.3	0.85	0.186	1.9	0.67	0.151	1.7	0.55	0.128	1.4	0.49	0.092
1.90	3.2	0.99	0.292	2.1	0.71	0.189	1.6	0.62	0.145	1.3	0.54	0.112	1.3	0.50	0.089
2.00	3.2	1.00	0.329	1.9	0.77	0.192	1.5	0.62	0.150	1.2	0.55	0.116	1.2	0.50	0.091
2.20	2.0	0.99	0.243	1.3	0.76	0.163	1.1	0.54	0.136	1.0	0.57	0.116	1.1	0.51	0.098
2.40	1.2	0.70	0.178	1.0	0.54	0.142	0.9	0.54	0.132	0.9	0.54	0.124	1.0	0.50	0.104
2.60	1.1	0.64	0.194	0.9	0.56	0.153	0.8	0.54	0.141	0.8	0.53	0.132	0.9	0.50	0.111
2.80	0.9	0.66	0.182	0.8	0.51	0.160	0.8	0.49	0.150	0.7	0.50	0.140	0.9	0.49	0.117
3.00	0.9	0.84	0.203	0.7	0.65	0.166	0.7	0.56	0.160	0.7	0.50	0.149	0.8	0.48	0.124
3.20	1.1	0.75	0.273	0.7	0.60	0.176	0.7	0.53	0.170	0.6	0.46	0.158	0.7	0.47	0.131
3.40	1.0	0.74	0.287	0.7	0.63	0.190	0.6	0.56	0.179	0.6	0.47	0.167	0.6	0.46	0.139
3.60	0.7	0.63	0.240	0.6	0.51	0.194	0.6	0.49	0.188	0.6	0.47	0.175	0.6	0.45	0.146
3.80	0.6	0.75	0.221	0.5	0.61	0.202	0.5	0.53	0.196	0.5	0.43	0.183	0.6	0.45	0.153
4.00	0.6	0.61	0.235	0.5	0.50	0.210	0.5	0.50	0.203	0.5	0.48	0.191	0.6	0.45	0.160

PER = PERIOD (SEC) AA = ABSOLUTE ACC. (GAL) RV = RELATIVE VELOCITY (CM/SEC) RD = RELATIVE DISPLACEMENT (CM)



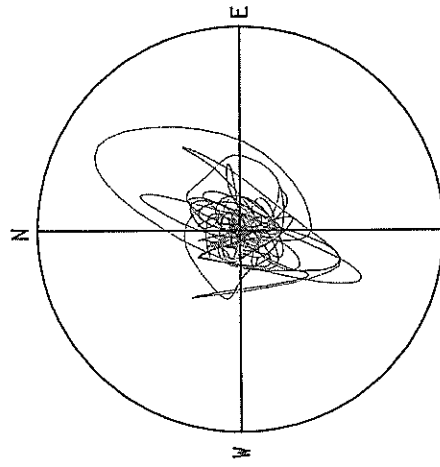
FOURIER SPECTRA

M-1056 YAMASHITA-HEN-M



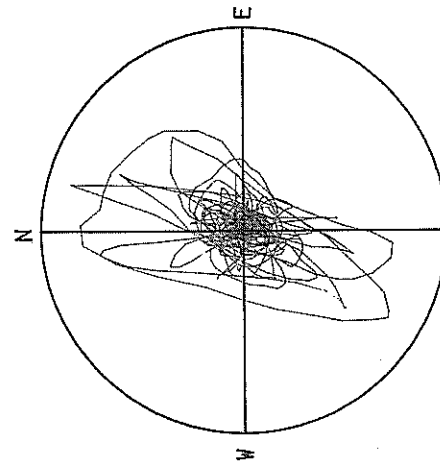
DISPLACEMENT
R=0.50 CM
MAX=0.40 CM

M-1056 YAMASHITA-HEN-M



VELOCITY
R=5.0 CM/SEC.
MAX=4.1 CM/SEC.

M-1056 YAMASHITA-HEN-M



ACCELERATION
R=80.0 GAL
MAX=70.8 GAL

RECORD NUMBER F-19
 STATION HITACHINAKA-F

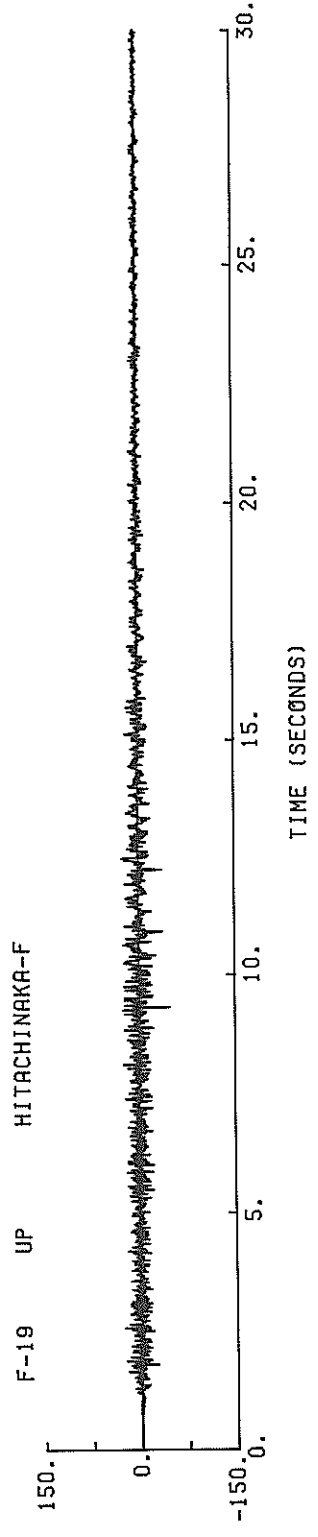
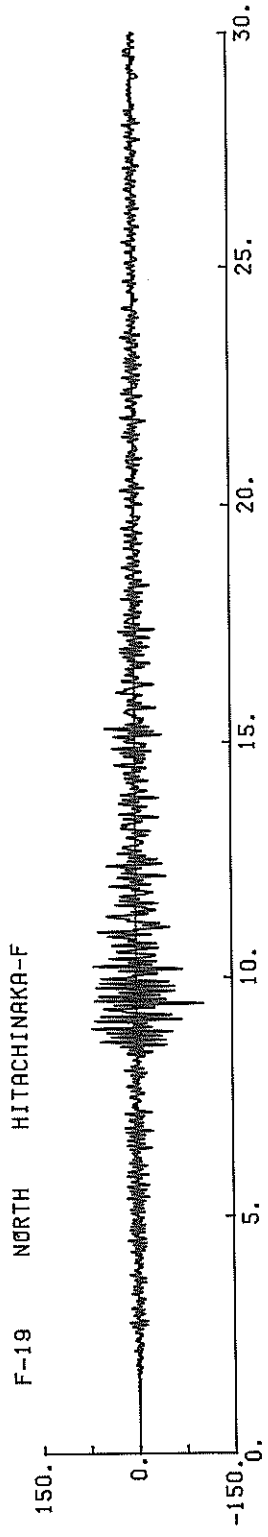
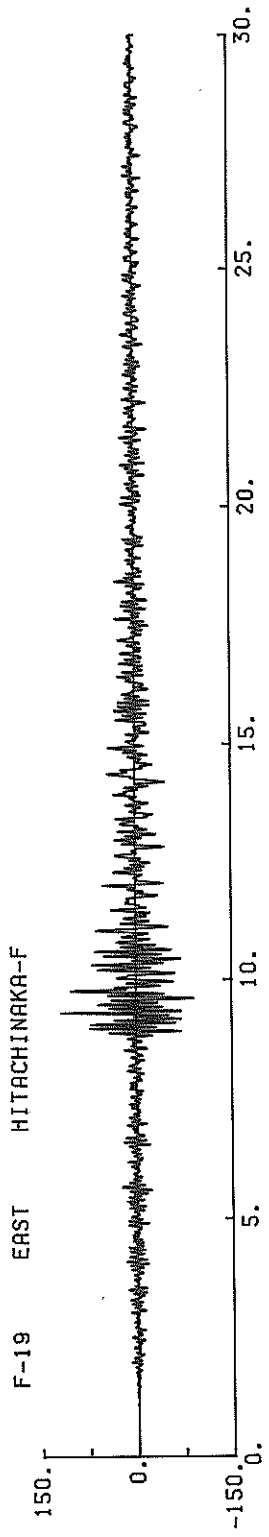
EARTHQUAKE DATA

DATA AND TIME 7:29 NOV.29,1986
 LOCATION OF HYPOCENTER
 EPICENTRAL REGION E OFF IBARAKI PREF
 LATITUDE 36°24' N
 LONGITUDE 141°11' E
 DEPTH 42KM
 MAGNITUDE 5.8

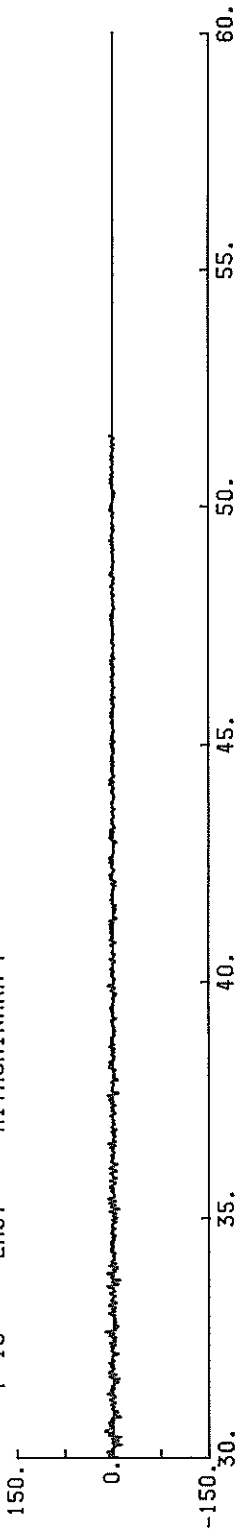
PEAK VALUES OF COMPONENTS

	N S	E W	U D	HORIZONTAL *
PARAMETER OF THE VARIABLE FILTER				
FC (HZ)	0.329	0.366	0.463	
MAXIMUM ACCELERATION (GAL)				
SMAC-B2 EQUIVALENT	47.2	53.0	17.4	55.8
ORIGINAL	105.2	116.8	48.4	119.8
CORRECTED	104.1	113.3	48.2	116.7
MAXIMUM VELOCITY (CM/SEC)				
FIXED FILTER	2.59	2.98	1.31	3.18
VARIABLE FILTER	2.54	2.97	1.25	2.99
MAXIMUM DISPLACEMENT (CM)				
FIXED FILTER	0.286	0.336	0.177	0.392
VARIABLE FILTER	0.261	0.319	0.129	0.325

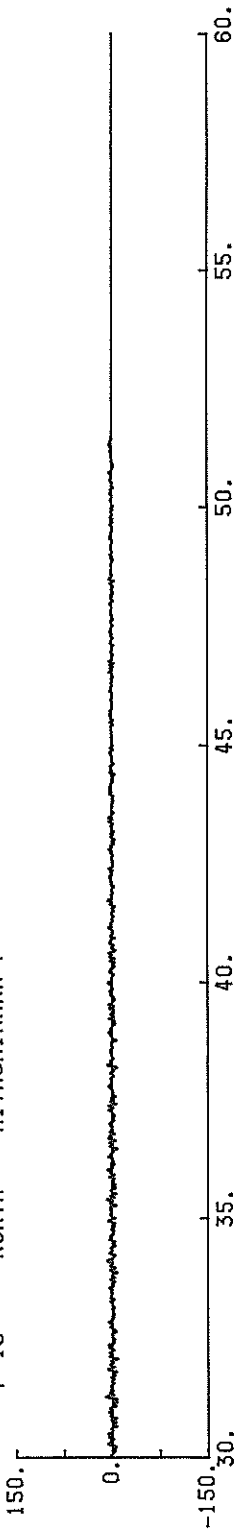
* RESULTANT OF HORIZONTAL COMPONENTS



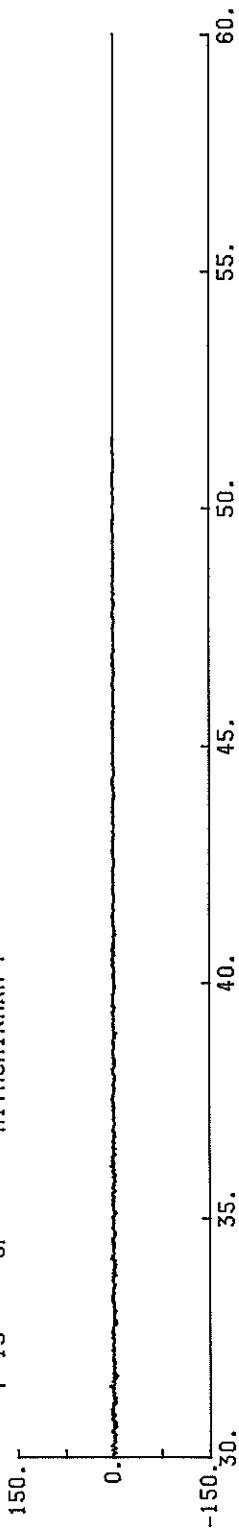
F-19 EAST HITACHINAKA-F



F-19 NORTH HITACHINAKA-F

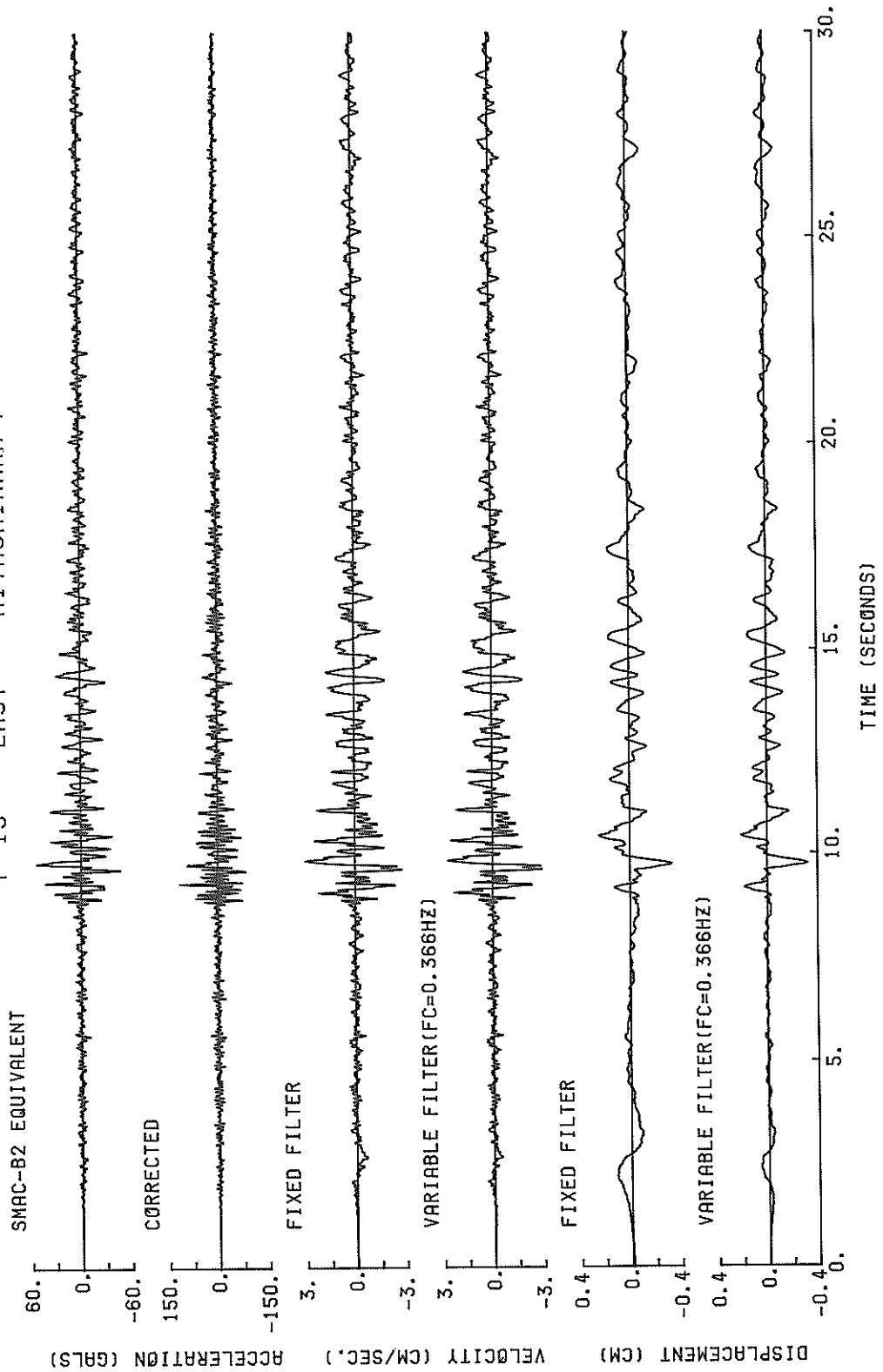


F-19 UP HITACHINAKA-F

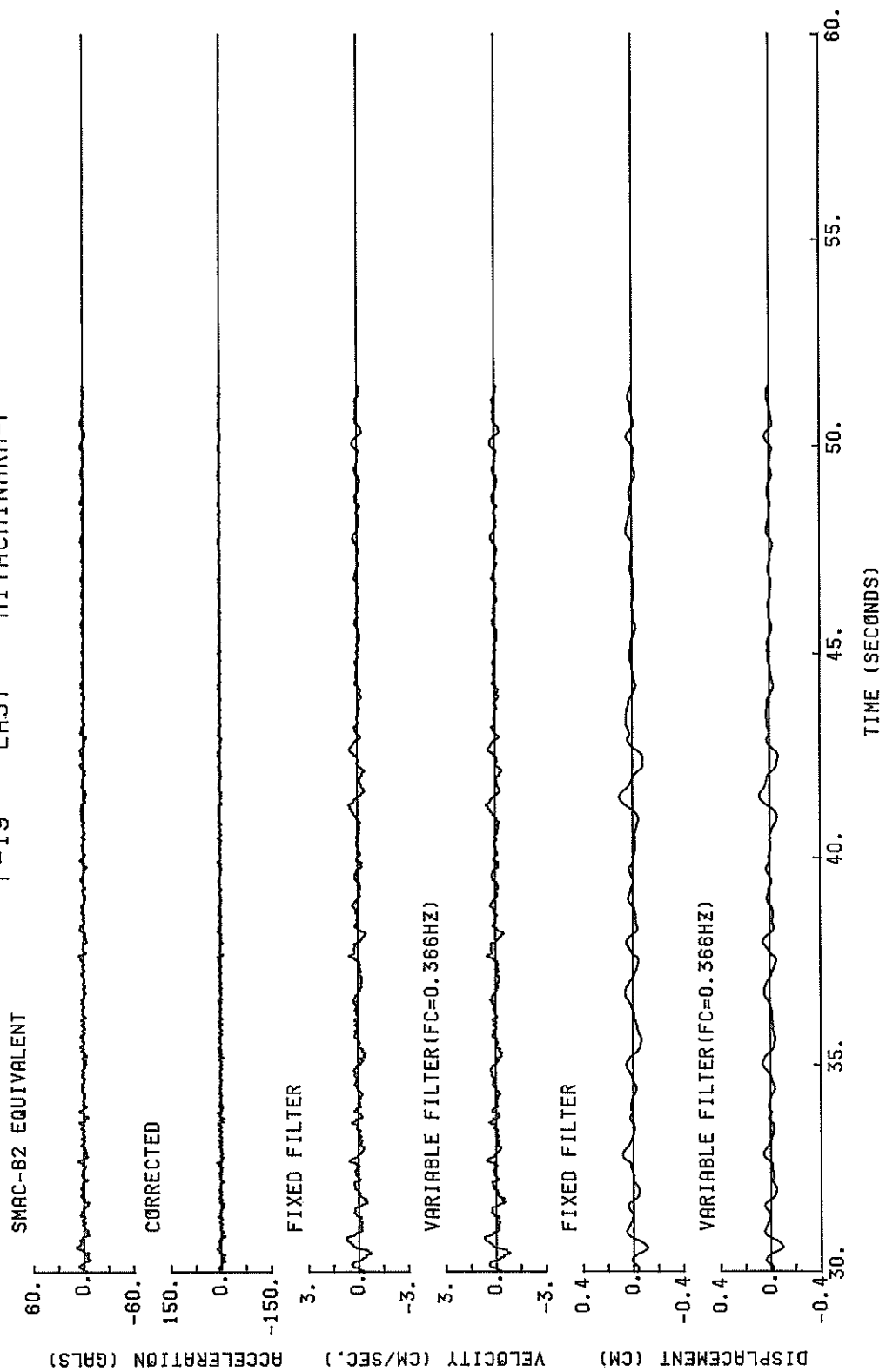


TIME (SECONDS)

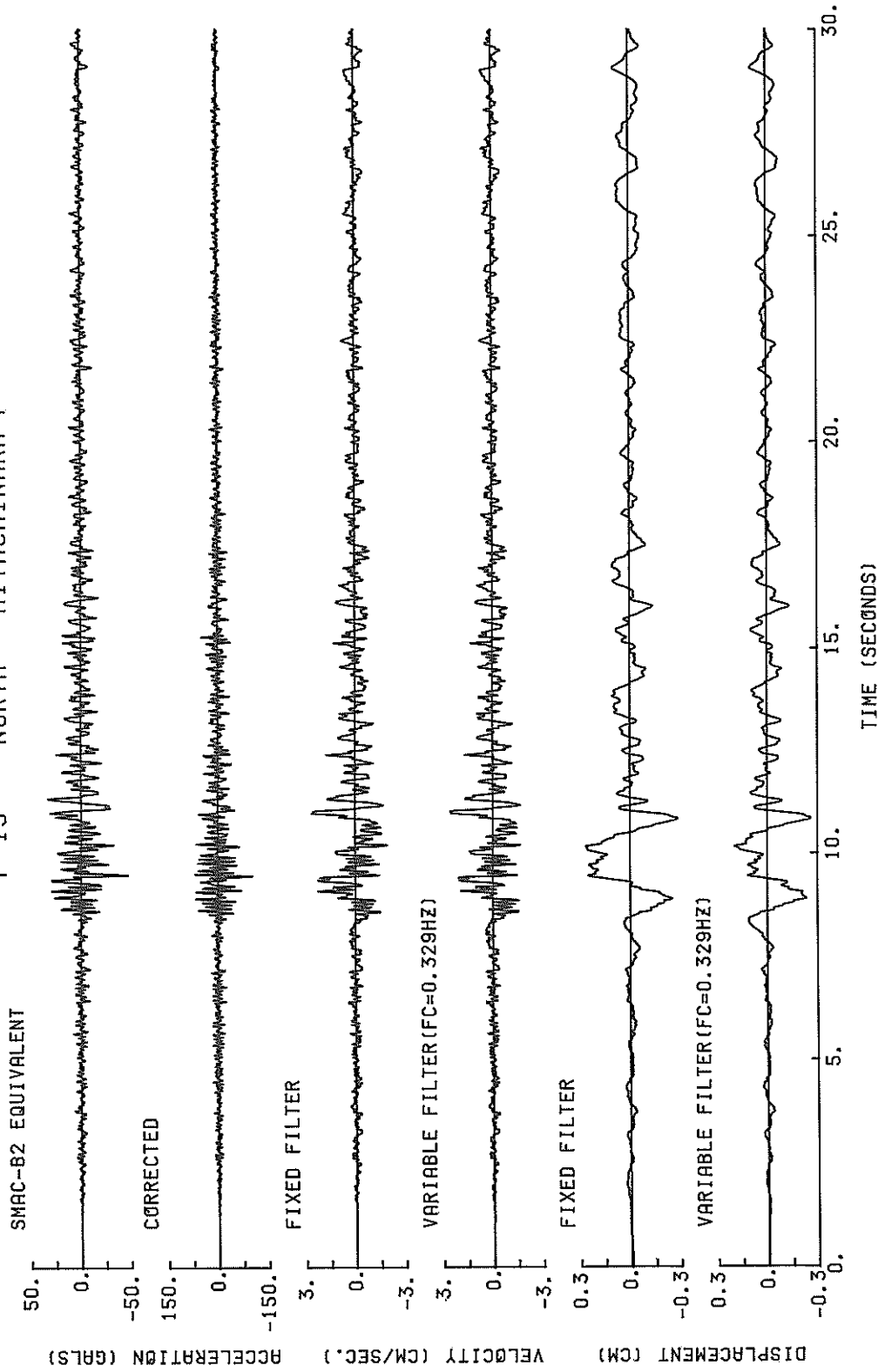
F-19 EAST HITACHINAKA-F



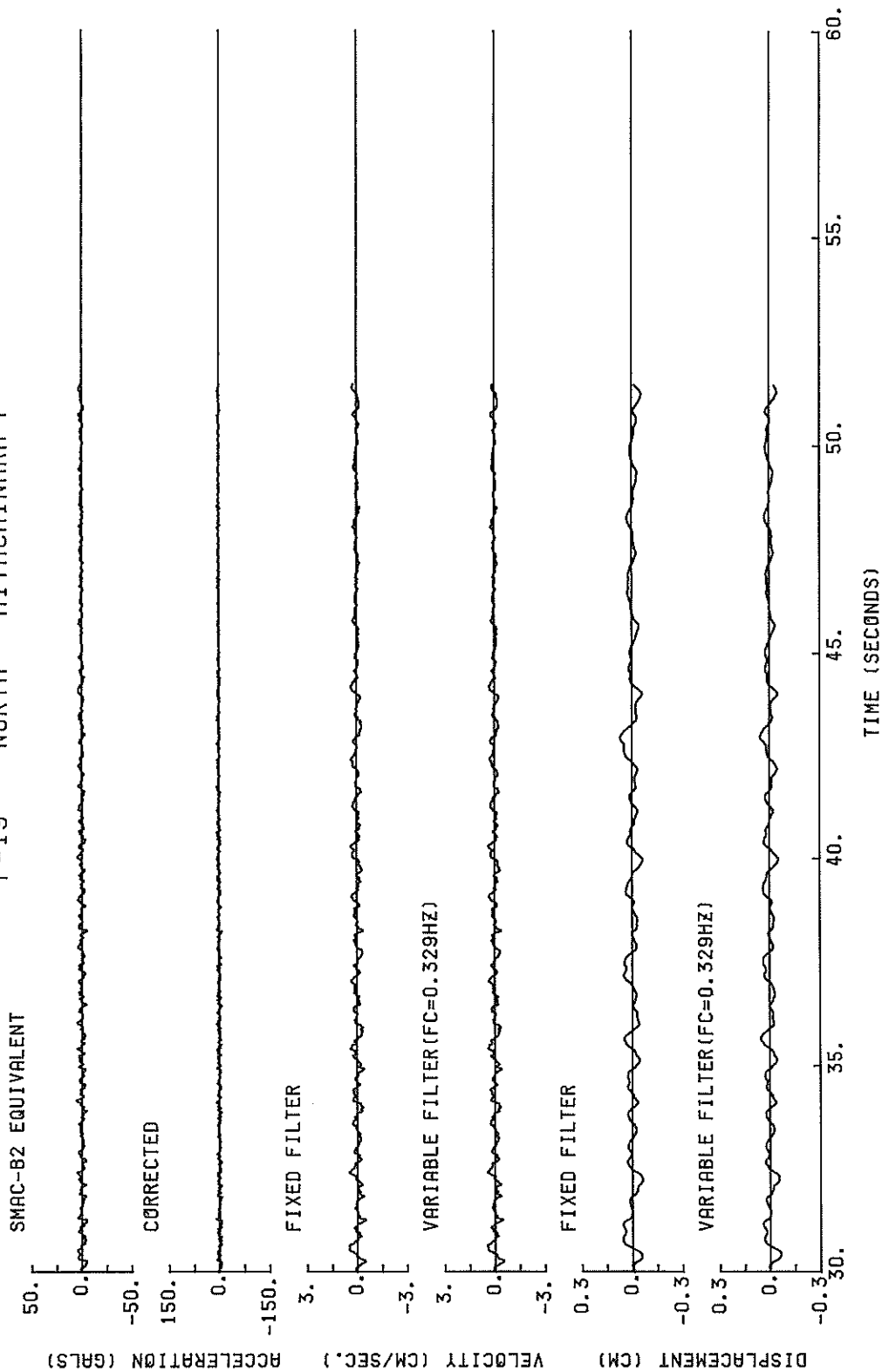
F-19 EAST HITACHINAKA-F



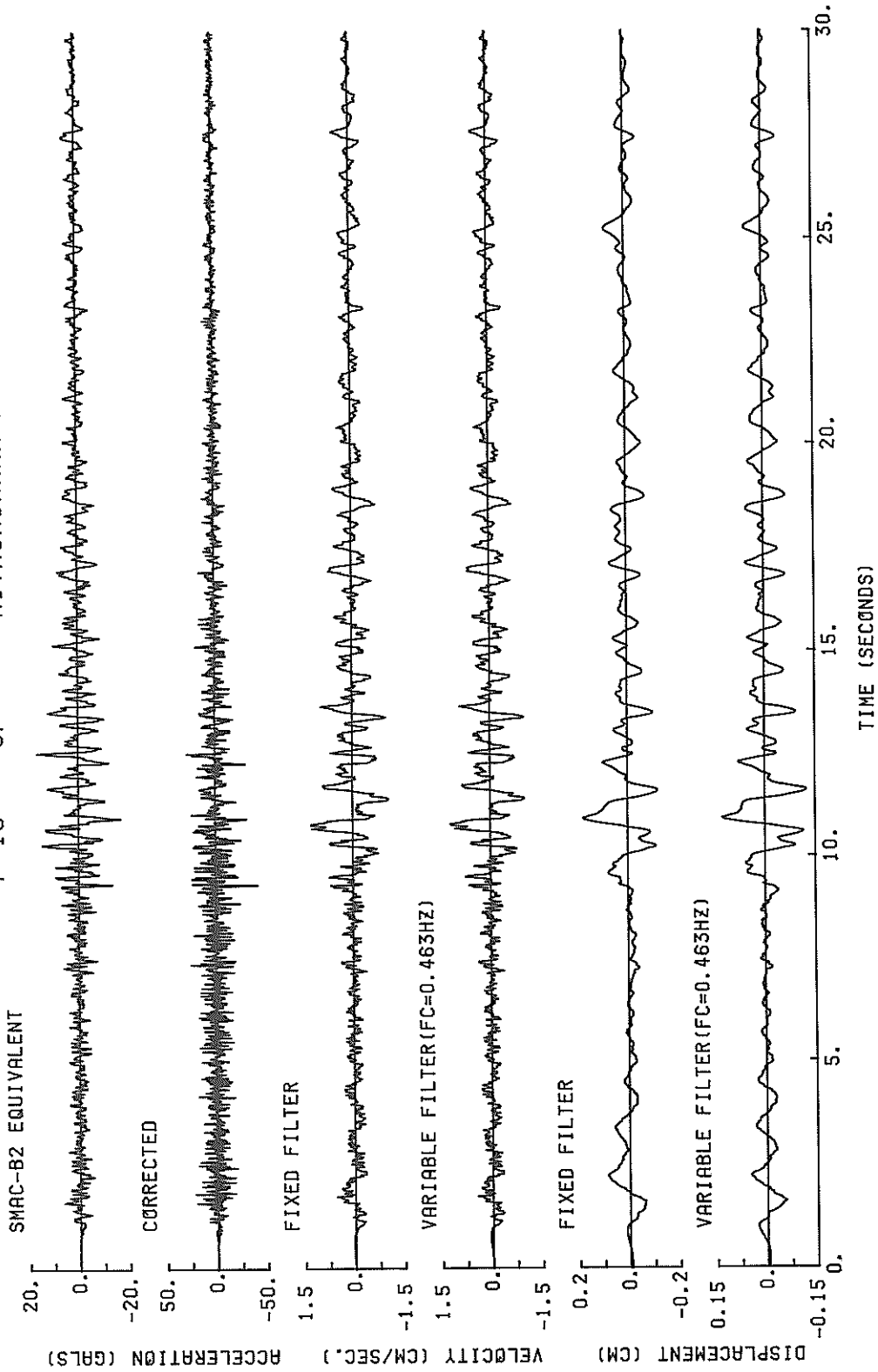
F-19 NORTH HITACHINAKA-F



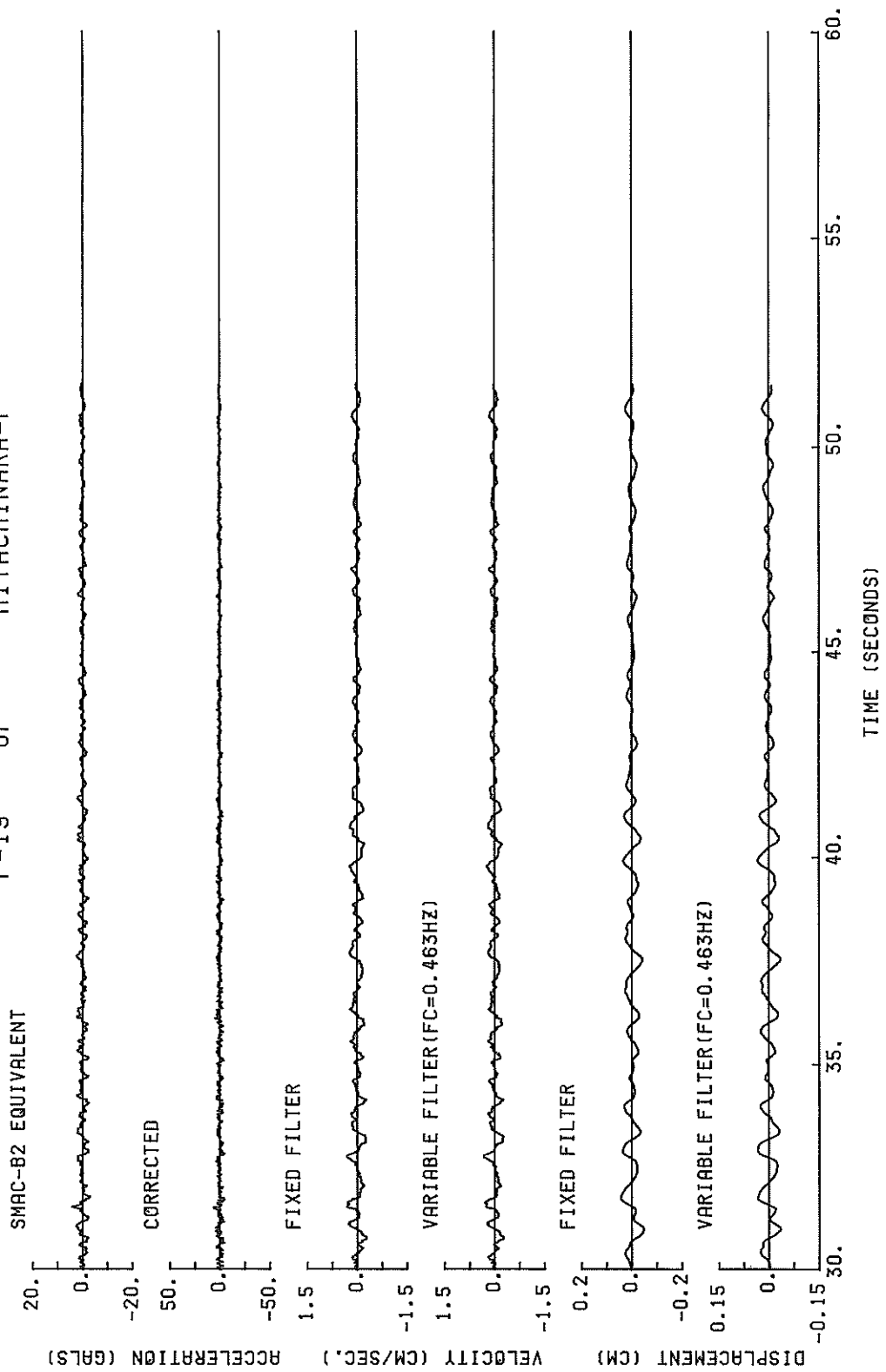
F-19 NORTH HITACHINAKA-F



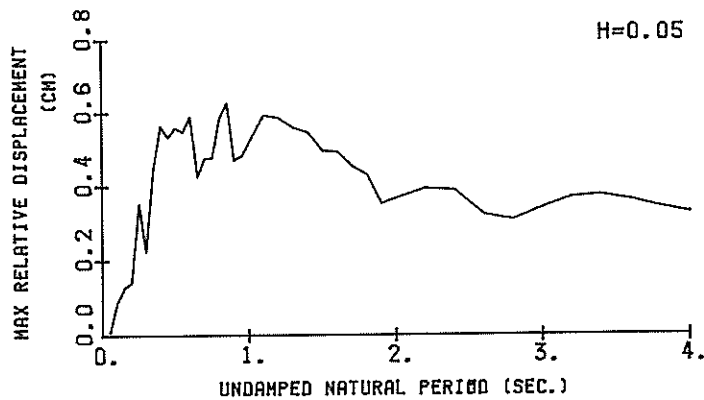
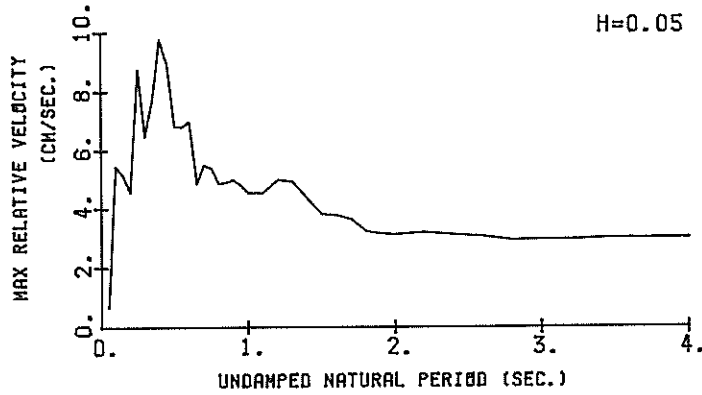
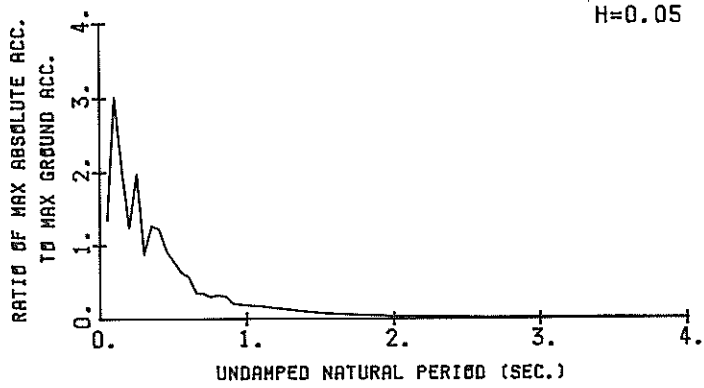
F-19 UP HITACHINAKA-F



F-19 UP HITACHINAKA-F

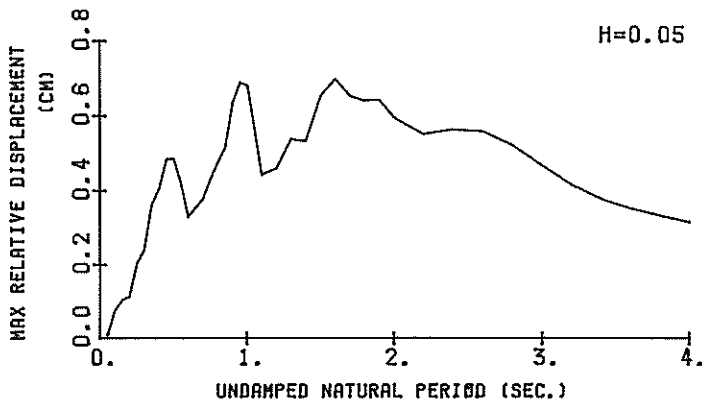
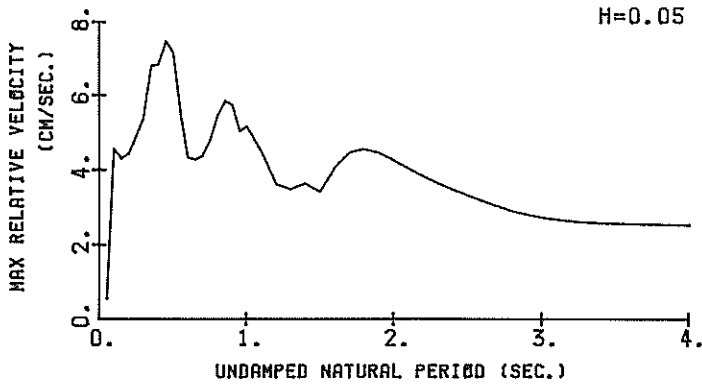
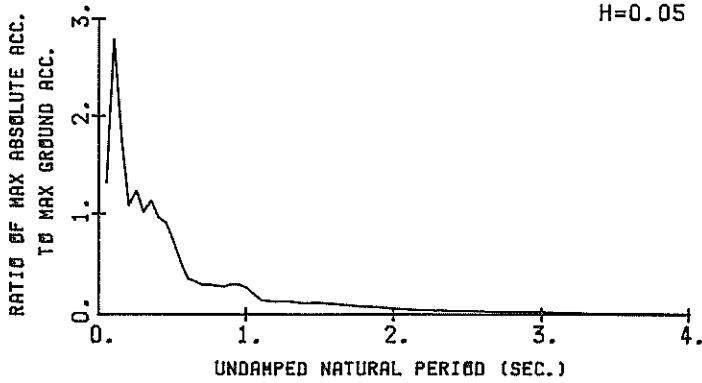


F-19 EAST HITACHINAKA-F
(1/FC=2.74 SEC.)



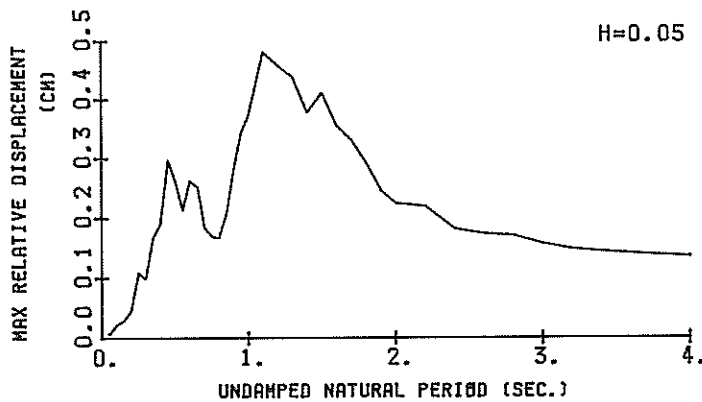
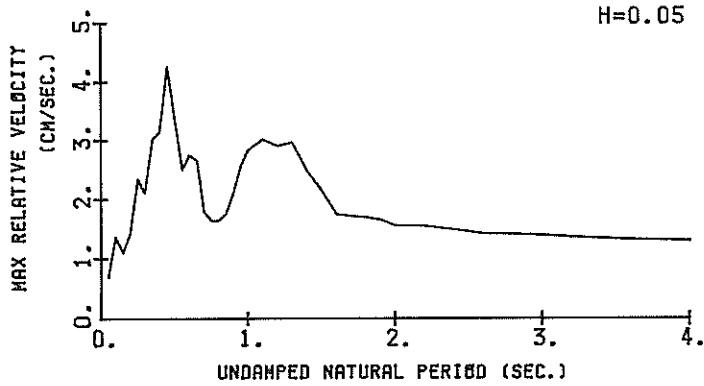
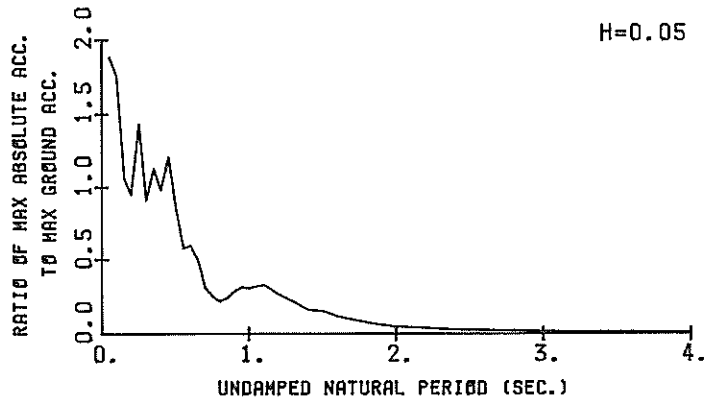
RESPONSE SPECTRA

F-19 NORTH HITACHINAKA-F
(1/FC=3.04 SEC.)



RESPONSE SPECTRA

F-19 UP HITACHINAKA-F
(1/FC=2.16 SEC.)



RESPONSE SPECTRA

RESPONSE SPECTRUM

RECORD = F-19
 DATE AND TIME = 1986-11-29- 7-30
 TIME LENGTH = 51.49 (SEC)
 COMPONENT = EAST
 SAMPRING INTERVAL = 0.0100(SEC)
 SKIPPED LENGTH = 0.00 (SEC)
 SIGNAL = GR. ACC.
 CORRECTION = MAX.GROUND ACC. = 113.27 (GAL)
 STATION = HITACHINAKA-F

PER	DAMPING = 0.			DAMPING = 0.025			DAMPING = 0.050			DAMPING = 0.100			DAMPING = 0.250		
	AA	RV	RD	AA	RV	RD	AA	RV	RD	AA	RV	RD	AA	RV	RD
0.05	122.1	1.43	0.015	156.0	0.71	0.010	154.5	0.68	0.010	153.3	0.64	0.010	147.5	0.56	0.009
0.10	2149.2	34.16	0.544	498.1	7.92	0.127	341.8	5.45	0.086	261.2	3.47	0.065	167.6	2.23	0.039
0.15	471.2	11.66	0.269	299.1	6.73	0.170	226.1	5.11	0.128	180.9	3.96	0.092	121.4	2.73	0.060
0.20	249.7	7.98	0.253	158.1	5.21	0.159	112.5	4.56	0.142	130.4	3.57	0.119	96.7	2.65	0.089
0.25	592.9	23.54	0.939	305.8	12.89	0.482	235.4	8.77	0.350	182.2	5.53	0.222	98.1	3.45	0.140
0.30	148.8	8.82	0.339	112.7	11.19	0.256	99.8	6.46	0.226	100.1	5.50	0.223	84.4	3.97	0.177
0.35	436.7	24.59	1.355	219.0	11.65	0.677	144.2	7.72	0.447	113.2	5.76	0.343	80.8	4.01	0.226
0.40	337.4	23.55	1.509	188.9	12.89	0.767	139.5	9.77	0.563	106.9	7.25	0.422	75.7	4.40	0.257
0.45	206.4	14.62	1.059	125.3	10.15	0.642	104.8	8.93	0.532	76.4	6.88	0.380	60.8	4.28	0.259
0.50	210.1	17.06	1.330	113.0	8.54	0.714	88.6	6.84	0.558	62.2	5.37	0.366	48.1	3.88	0.245
0.55	122.1	10.65	0.936	84.7	7.48	0.648	71.7	6.80	0.547	52.1	5.18	0.389	38.6	3.59	0.241
0.60	192.0	18.43	1.751	88.0	8.02	0.802	65.1	6.98	0.589	47.6	5.22	0.421	32.8	3.57	0.254
0.65	118.6	12.41	1.289	48.1	5.48	0.513	40.1	4.87	0.443	37.1	4.70	0.381	28.5	3.45	0.252
0.70	112.6	12.60	1.398	48.4	6.31	0.599	38.6	5.50	0.474	30.6	4.48	0.363	25.8	3.41	0.252
0.75	58.5	7.24	0.834	40.6	6.11	0.578	33.6	5.38	0.477	26.0	4.48	0.359	23.9	3.36	0.269
0.80	64.5	8.60	1.046	45.5	6.24	0.737	36.2	4.87	0.584	25.8	4.10	0.407	22.2	3.41	0.284
0.85	69.7	9.72	1.276	45.8	6.44	0.838	34.6	4.91	0.627	23.7	4.31	0.421	20.7	3.49	0.298
0.90	46.8	6.71	0.960	25.2	5.37	0.620	21.0	4.99	0.468	19.5	4.40	0.408	19.2	3.57	0.310
0.95	35.2	5.79	0.805	23.2	5.15	0.527	21.4	4.80	0.480	19.5	4.31	0.419	17.8	3.66	0.317
1.00	58.1	9.17	1.421	28.0	5.06	0.707	20.6	4.55	0.516	17.5	4.27	0.413	16.3	3.72	0.319
1.10	28.1	5.92	0.862	22.6	4.88	0.693	19.4	4.54	0.594	15.9	4.33	0.454	14.1	3.81	0.315
1.20	32.7	6.29	1.194	18.7	5.48	0.680	16.2	5.01	0.588	13.2	4.31	0.458	12.1	3.84	0.298
1.30	28.9	6.08	1.238	16.3	5.35	0.696	13.2	4.95	0.561	10.3	4.35	0.433	10.3	3.82	0.275
1.40	24.1	5.90	1.195	13.4	4.54	0.662	11.1	4.37	0.547	9.1	4.08	0.434	9.1	3.76	0.283
1.50	18.0	4.64	1.025	10.7	3.67	0.610	8.8	3.82	0.495	7.8	3.86	0.419	8.7	3.69	0.301
1.60	13.3	4.54	0.865	9.0	3.85	0.582	7.7	3.78	0.492	7.0	3.73	0.403	8.2	3.60	0.313
1.70	19.9	5.41	1.456	7.1	3.73	0.509	6.6	3.63	0.455	6.6	3.57	0.397	7.8	3.52	0.321
1.80	9.7	3.81	0.793	5.9	3.44	0.472	5.7	3.23	0.433	5.9	3.37	0.388	7.5	3.44	0.326
1.90	7.9	3.44	0.726	4.5	3.28	0.390	4.5	3.16	0.353	5.1	3.24	0.360	6.8	3.37	0.327
2.00	4.9	3.07	0.493	4.1	3.09	0.349	3.8	3.13	0.366	4.5	3.21	0.345	6.4	3.31	0.328
2.20	5.3	3.36	0.645	3.6	3.25	0.421	3.6	3.20	0.393	4.0	3.16	0.365	5.7	3.22	0.329
2.40	3.0	3.35	0.438	2.9	3.21	0.410	3.1	3.11	0.389	3.5	3.02	0.358	5.1	3.14	0.329
2.60	1.8	3.14	0.310	1.9	3.10	0.305	2.3	3.06	0.331	2.9	2.99	0.334	4.6	3.08	0.326
2.80	1.7	2.92	0.333	1.6	2.91	0.309	1.9	2.93	0.307	2.6	2.94	0.324	4.2	3.04	0.325
3.00	1.6	3.00	0.354	1.6	2.96	0.342	1.8	2.95	0.339	2.3	2.94	0.336	3.9	3.00	0.326
3.20	1.6	2.93	0.403	1.6	2.93	0.384	1.8	2.93	0.359	2.2	2.92	0.350	3.6	2.97	0.328
3.40	1.4	3.03	0.408	1.4	3.00	0.389	1.6	2.98	0.374	2.0	2.95	0.355	3.3	2.95	0.328
3.60	1.1	3.07	0.377	1.2	3.04	0.368	1.4	3.01	0.361	1.8	2.97	0.349	3.1	2.92	0.329
3.80	0.9	3.06	0.339	1.0	3.03	0.341	1.2	3.01	0.342	1.7	2.97	0.339	2.9	2.90	0.326
4.00	0.8	3.02	0.313	0.9	3.01	0.321	1.1	2.99	0.326	1.5	2.96	0.330	2.7	2.90	0.326

PER = PERIOD (SEC) AA = ABSOLUTE ACC. (GAL) RV = RELATIVE VELOCITY (CM/SEC) RD = RELATIVE DISPLACEMENT (CM)

RESPONSE SPECTRUM

RECORD = F-19 COMPONENT = NORTH SIGNAL = GR. ACC. CORRECTION = STATION = HITACHINAKA-F
 DATE AND TIME = 1986-11-29- 7-30 SAMPRING INTERVAL = 0.0100(SEC) MAX-GROUND ACC. = 104.14 (GAL)
 TIME LENGTH = 51.49 (SEC) SKIPPED LENGTH = 0.00 (SEC)

PER	DAMPING = 0.			DAMPING = 0.025			DAMPING = 0.050			DAMPING = 0.100			DAMPING = 0.250		
	AA	RV	RD	AA	RV	RD	AA	RV	RD	AA	RV	RD	AA	RV	RD
0.05	220.6	1.44	0.014	145.9	0.61	0.009	138.4	0.56	0.009	134.3	0.55	0.008	129.2	0.51	0.008
0.10	685.0	10.89	0.174	376.3	6.00	0.095	290.7	4.56	0.074	217.9	3.29	0.054	146.9	2.15	0.034
0.15	319.6	7.56	0.182	250.0	5.43	0.142	181.8	4.36	0.104	122.3	3.46	0.068	84.9	2.15	0.042
0.20	498.2	15.82	0.505	137.1	5.22	0.139	112.3	4.44	0.113	100.4	3.63	0.099	87.7	2.48	0.077
0.25	475.3	18.90	0.752	156.9	5.86	0.249	128.7	4.90	0.204	101.6	3.72	0.156	81.1	2.77	0.108
0.30	235.9	11.22	0.538	116.7	6.31	0.267	106.5	5.37	0.242	92.5	4.38	0.208	68.5	3.36	0.140
0.35	258.1	13.86	0.759	162.7	9.38	0.505	118.2	6.79	0.563	93.3	5.23	0.289	66.3	3.31	0.180
0.40	225.3	14.45	0.913	122.8	8.13	0.497	100.5	5.83	0.405	82.5	5.45	0.327	51.6	3.69	0.198
0.45	146.2	10.47	0.750	111.0	8.57	0.569	95.0	7.48	0.485	73.3	6.18	0.371	51.8	4.04	0.230
0.50	153.7	12.27	0.973	88.1	8.10	0.556	76.9	7.17	0.485	62.7	5.91	0.387	46.1	4.00	0.248
0.55	108.5	9.43	0.831	58.2	5.87	0.445	54.5	5.43	0.414	48.7	4.74	0.362	39.6	3.72	0.255
0.60	75.3	7.26	0.687	33.7	4.10	0.305	36.6	4.37	0.331	37.3	4.28	0.328	33.7	3.53	0.257
0.65	44.7	4.77	0.479	35.0	4.36	0.357	35.7	4.27	0.356	36.3	4.17	0.332	29.2	3.60	0.257
0.70	30.8	4.28	0.382	31.4	4.33	0.388	30.9	4.36	0.379	29.3	4.28	0.348	25.6	3.67	0.255
0.75	46.7	5.97	0.665	32.9	4.87	0.468	30.7	4.78	0.432	27.3	4.55	0.370	22.5	3.75	0.271
0.80	49.2	6.25	0.797	33.6	5.78	0.543	29.6	5.42	0.475	24.6	4.87	0.376	22.1	3.81	0.300
0.85	73.0	10.58	1.408	30.5	6.38	0.557	28.5	5.84	0.517	25.5	5.03	0.449	21.8	3.80	0.328
0.90	73.1	10.38	1.501	35.1	6.40	0.718	31.3	5.74	0.634	26.4	4.89	0.518	21.2	3.70	0.350
0.95	39.3	6.18	0.898	34.3	5.52	0.782	30.6	5.03	0.689	25.4	4.39	0.549	20.3	3.54	0.361
1.00	41.2	6.92	1.043	32.3	5.90	0.818	27.2	5.15	0.682	22.4	4.16	0.532	19.0	3.34	0.364
1.10	26.9	4.85	0.824	17.1	4.71	0.522	14.7	4.48	0.444	13.7	3.98	0.387	16.1	3.06	0.349
1.20	16.2	3.77	0.592	13.6	3.71	0.494	12.9	3.64	0.461	11.4	3.46	0.385	13.8	3.03	0.337
1.30	18.0	4.36	0.769	14.9	3.81	0.633	12.8	3.49	0.539	10.3	3.24	0.415	12.3	2.99	0.342
1.40	26.3	6.13	1.306	14.0	3.96	0.692	11.0	3.65	0.535	9.8	3.15	0.450	11.4	3.03	0.361
1.50	19.3	4.67	1.100	13.1	3.62	0.742	11.7	3.42	0.652	10.4	3.27	0.532	10.7	3.13	0.378
1.60	23.7	6.25	1.536	12.2	4.53	0.790	10.9	4.07	0.699	9.8	3.73	0.567	10.0	3.26	0.383
1.70	13.1	5.20	1.321	10.6	4.75	0.777	9.1	4.46	0.654	8.3	4.03	0.544	9.1	3.37	0.373
1.80	19.0	5.84	1.562	10.4	4.83	0.851	7.9	4.50	0.641	6.6	4.14	0.499	8.2	3.45	0.351
1.90	12.1	4.95	1.108	8.7	4.68	0.795	7.2	4.47	0.643	6.0	4.12	0.514	7.3	3.48	0.340
2.00	8.6	4.59	0.874	6.5	4.42	0.657	6.1	4.26	0.597	5.4	4.02	0.497	6.3	3.47	0.331
2.20	5.1	3.93	0.630	4.8	3.89	0.591	4.6	3.84	0.553	4.2	3.71	0.484	5.2	3.40	0.340
2.40	4.3	3.53	0.634	4.1	3.51	0.599	4.0	3.49	0.566	3.7	3.43	0.505	4.4	3.27	0.369
2.60	3.7	3.15	0.530	3.5	3.17	0.592	3.4	3.18	0.560	3.2	3.18	0.503	3.9	3.15	0.382
2.80	2.9	2.81	0.574	2.8	2.87	0.547	2.8	2.92	0.523	2.7	2.97	0.481	3.5	3.03	0.383
3.00	2.1	2.60	0.466	2.1	2.67	0.479	2.2	2.73	0.469	2.3	2.82	0.446	3.1	2.94	0.377
3.20	1.6	2.52	0.413	1.7	2.59	0.417	1.7	2.64	0.418	1.9	2.72	0.410	2.8	2.86	0.367
3.40	1.3	2.51	0.369	1.4	2.55	0.376	1.4	2.59	0.380	1.6	2.66	0.381	2.6	2.80	0.355
3.60	1.1	2.51	0.346	1.1	2.54	0.351	1.2	2.57	0.355	1.4	2.62	0.358	2.4	2.76	0.344
3.80	0.9	2.51	0.329	1.0	2.53	0.332	1.0	2.55	0.335	1.2	2.60	0.339	2.2	2.72	0.333
4.00	0.8	2.50	0.312	0.8	2.52	0.315	0.9	2.54	0.319	1.1	2.58	0.324	2.0	2.69	0.324

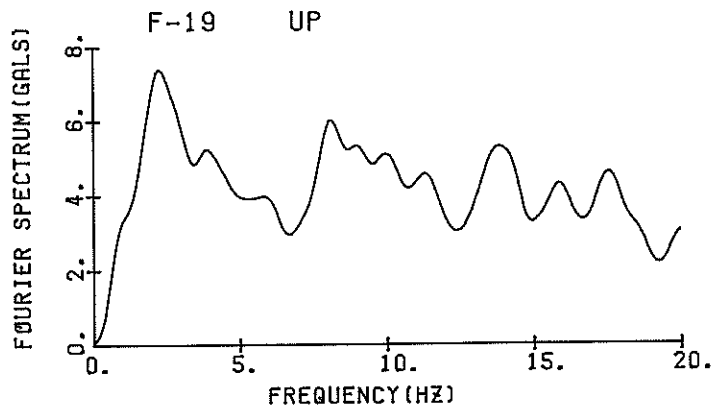
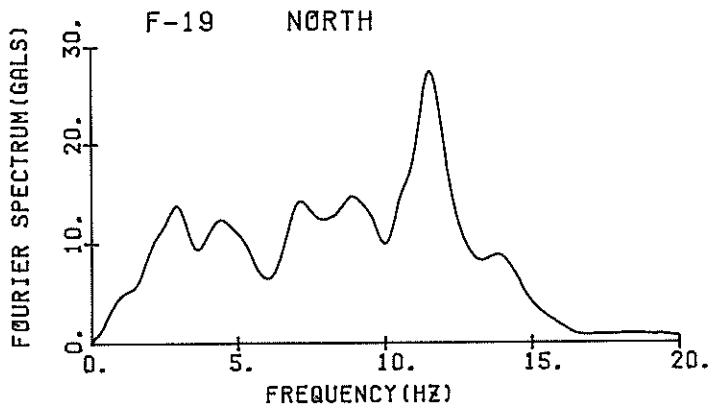
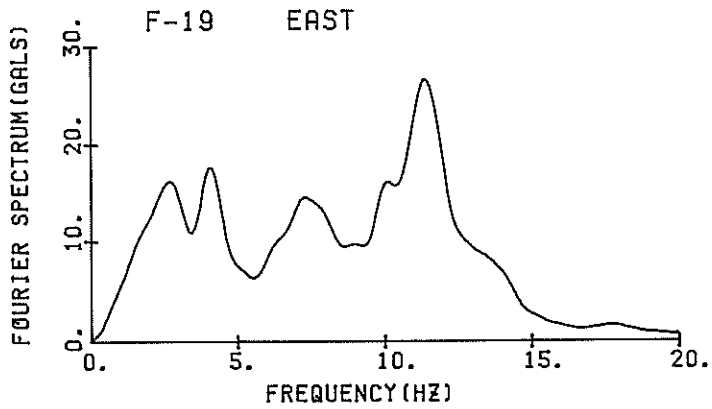
PER = PERIOD (SEC) AA = ABSOLUTE ACC. (GAL) RV = RELATIVE VELOCITY (CM/SEC) RD = RELATIVE DISPLACEMENT (CM)

RESPONSE SPECTRUM

RECORD = F-19 COMPONENT = UP SIGNAL = ER. ACC. CORRECTION = STATION = HITACHINAKA-F
 DATE AND TIME = 1986-11-29-7-30 SAMPLING INTERVAL = 0.0100(SEC) MAX.GROUND ACC. = 48.21 (GAL)
 TIME LENGTH = 51.49 (SEC) SKIPPED LENGTH = 0.00 (SEC)

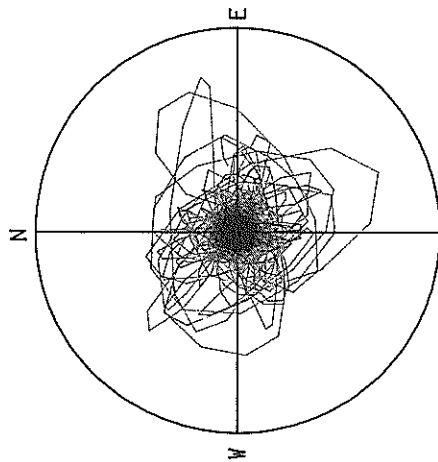
PER	DAMPING = 0.0			DAMPING = 0.025			DAMPING = 0.050			DAMPING = 0.100			DAMPING = 0.250		
	AA	RV	RD	AA	RV	RD	AA	RV	RD	AA	RV	RD	AA	RV	RD
0.05	406.4	3.15	0.026	106.0	0.84	0.007	90.7	0.70	0.006	80.7	0.56	0.005	65.1	0.40	0.004
0.10	521.5	8.26	0.132	98.3	1.62	0.025	84.6	1.36	0.021	69.7	1.15	0.017	55.3	0.74	0.012
0.15	194.4	4.80	0.110	54.6	0.81	0.031	51.2	1.10	0.029	43.7	0.98	0.032	33.2	0.78	0.017
0.20	176.7	5.36	0.179	57.2	1.17	0.058	45.9	1.42	0.046	31.9	1.41	0.032	26.4	0.80	0.023
0.25	170.8	6.66	0.270	93.4	3.35	0.148	69.1	2.34	0.109	46.4	1.50	0.072	27.5	0.91	0.040
0.30	102.6	4.88	0.234	54.4	2.56	0.124	43.8	2.10	0.099	35.3	1.66	0.079	26.1	1.03	0.054
0.35	137.4	7.61	0.426	67.4	3.77	0.209	54.4	3.02	0.168	39.0	2.10	0.119	25.7	1.17	0.071
0.40	90.7	5.89	0.367	58.2	3.80	0.238	47.3	3.14	0.190	36.4	2.32	0.144	23.9	1.27	0.083
0.45	168.2	12.01	0.863	81.6	5.86	0.419	58.2	4.27	0.297	35.9	2.74	0.181	22.6	1.31	0.105
0.50	114.9	9.08	0.723	52.1	4.31	0.328	41.7	3.58	0.262	30.4	2.45	0.187	20.9	1.58	0.117
0.55	66.6	5.80	0.510	38.0	3.42	0.291	27.9	2.50	0.213	22.6	2.27	0.167	18.3	1.68	0.119
0.60	92.4	8.83	0.842	41.3	3.89	0.376	28.9	2.75	0.262	19.8	1.96	0.175	15.9	1.68	0.116
0.65	36.9	3.92	0.395	29.9	3.33	0.319	23.6	2.66	0.252	16.1	1.85	0.169	13.7	1.65	0.114
0.70	28.6	3.49	0.355	18.0	2.07	0.223	14.9	1.79	0.184	12.9	1.74	0.153	11.9	1.61	0.116
0.75	38.1	4.56	0.542	14.7	1.86	0.209	12.0	1.64	0.170	11.6	1.63	0.157	10.7	1.58	0.123
0.80	17.9	2.65	0.290	11.6	1.84	0.187	10.5	1.64	0.168	10.5	1.57	0.164	10.2	1.55	0.133
0.85	21.8	3.13	0.418	12.3	2.03	0.262	11.5	1.75	0.208	10.9	1.60	0.190	9.9	1.54	0.147
0.90	21.3	3.44	0.636	16.7	2.49	0.342	15.8	2.09	0.280	11.4	1.85	0.224	9.8	1.54	0.160
0.95	37.3	5.60	0.852	18.8	3.19	0.451	15.1	2.87	0.343	11.2	2.02	0.248	9.5	1.55	0.172
1.00	47.2	7.51	1.195	19.6	3.51	0.495	14.7	2.84	0.371	11.1	2.21	0.272	9.2	1.56	0.182
1.10	49.8	8.78	1.525	21.7	3.86	0.664	15.8	3.02	0.480	10.9	2.20	0.326	8.3	1.63	0.191
1.20	24.1	4.54	0.878	14.3	3.43	0.518	12.7	2.91	0.458	10.0	2.44	0.345	6.9	1.75	0.187
1.30	25.2	5.34	1.080	13.0	3.42	0.557	10.3	2.97	0.438	7.7	2.45	0.319	5.7	1.78	0.194
1.40	16.5	3.88	0.819	8.3	2.57	0.410	7.6	2.49	0.377	6.9	2.26	0.356	5.4	1.72	0.209
1.50	11.4	3.07	0.650	8.5	2.27	0.481	7.3	2.15	0.411	6.1	1.99	0.334	5.0	1.63	0.217
1.60	6.2	1.94	0.405	5.6	1.86	0.365	5.5	1.75	0.355	5.2	1.68	0.316	4.6	1.52	0.221
1.70	6.2	2.11	0.451	4.9	1.80	0.359	4.6	1.72	0.331	4.3	1.53	0.293	4.1	1.42	0.218
1.80	4.4	2.06	0.358	3.8	1.84	0.312	3.6	1.70	0.292	3.5	1.55	0.267	3.8	1.33	0.215
1.90	2.4	1.82	0.217	2.7	1.73	0.259	2.8	1.66	0.246	2.9	1.54	0.243	3.4	1.33	0.211
2.00	2.3	1.49	0.229	2.2	1.55	0.226	2.3	1.56	0.225	2.5	1.51	0.228	3.1	1.32	0.206
2.20	2.1	1.67	0.252	1.9	1.59	0.231	1.9	1.55	0.220	2.0	1.48	0.211	2.6	1.32	0.197
2.40	1.1	1.52	0.165	1.2	1.51	0.173	1.4	1.49	0.182	1.6	1.45	0.190	2.3	1.32	0.187
2.60	1.0	1.41	0.171	1.0	1.42	0.172	1.1	1.42	0.174	1.3	1.41	0.178	2.0	1.32	0.179
2.80	0.9	1.44	0.173	0.9	1.42	0.173	1.0	1.41	0.171	1.1	1.39	0.170	1.8	1.31	0.172
3.00	0.7	1.42	0.150	0.7	1.40	0.155	0.8	1.39	0.157	0.9	1.37	0.161	1.6	1.30	0.166
3.20	0.5	1.36	0.139	0.6	1.36	0.143	0.7	1.36	0.148	0.8	1.35	0.154	1.5	1.30	0.161
3.40	0.5	1.34	0.139	0.5	1.34	0.142	0.6	1.34	0.144	0.7	1.33	0.149	1.3	1.29	0.157
3.60	0.4	1.33	0.138	0.5	1.33	0.142	0.5	1.32	0.141	0.6	1.32	0.145	1.2	1.28	0.154
3.80	0.4	1.32	0.132	0.4	1.31	0.135	0.5	1.31	0.138	0.6	1.31	0.143	1.2	1.28	0.151
4.00	0.3	1.30	0.135	0.4	1.30	0.137	0.4	1.30	0.136	0.5	1.29	0.141	1.1	1.27	0.149

PER = PERIOD (SEC) AA = ABSOLUTE ACC. (GAL) RV = RELATIVE VELOCITY (CM/SEC) RD = RELATIVE DISPLACEMENT (CM)



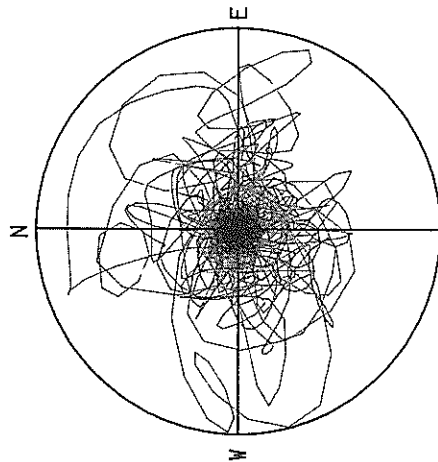
FOURIER SPECTRA

F-19 HITACHINAKA-F



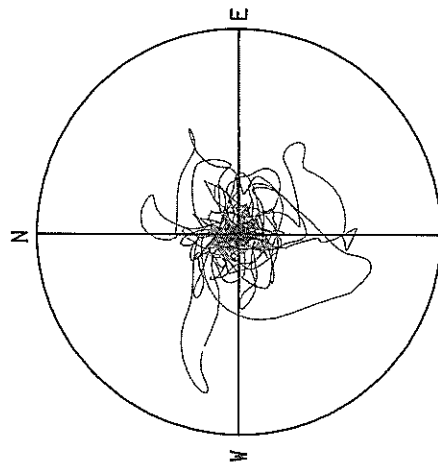
ACCELERATION
R=150.0GAL
MAX=116.7GAL

F-19 HITACHINAKA-F

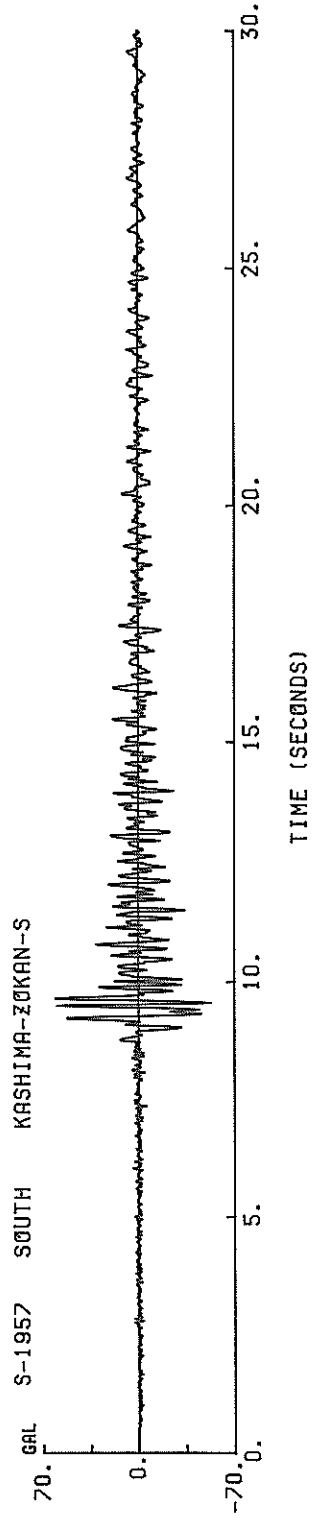
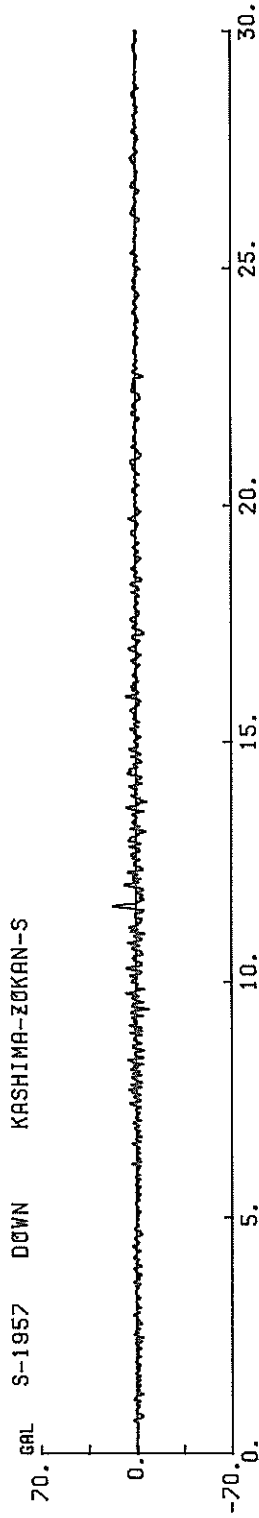
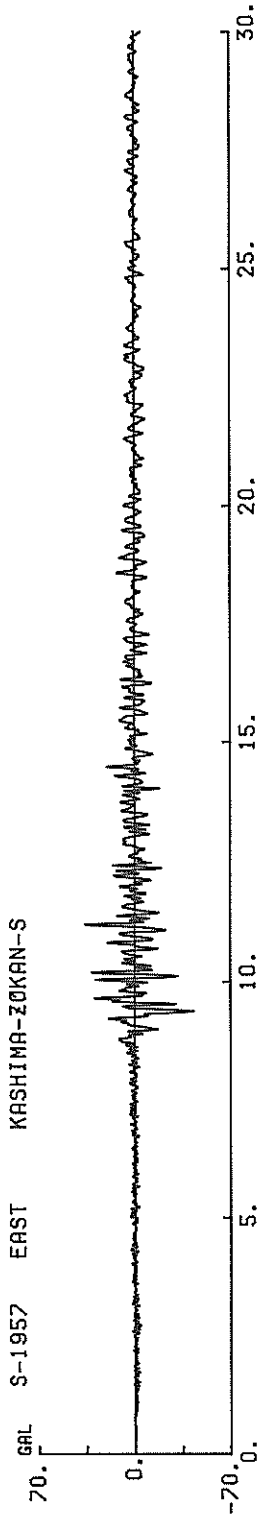


VELOCITY
R=3.0 CM/SEC.
MAX=3.0 CM/SEC.

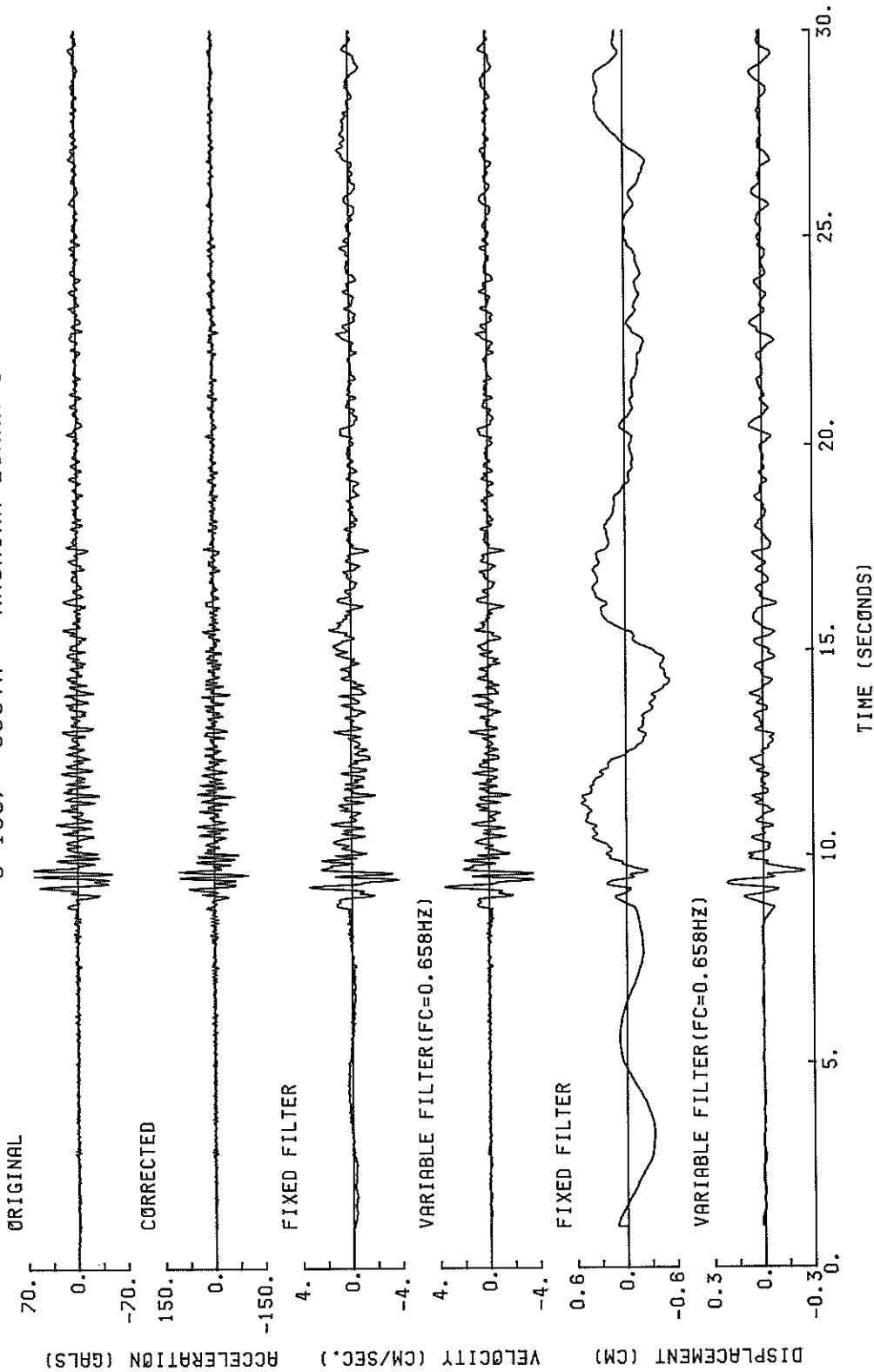
F-19 HITACHINAKA-F



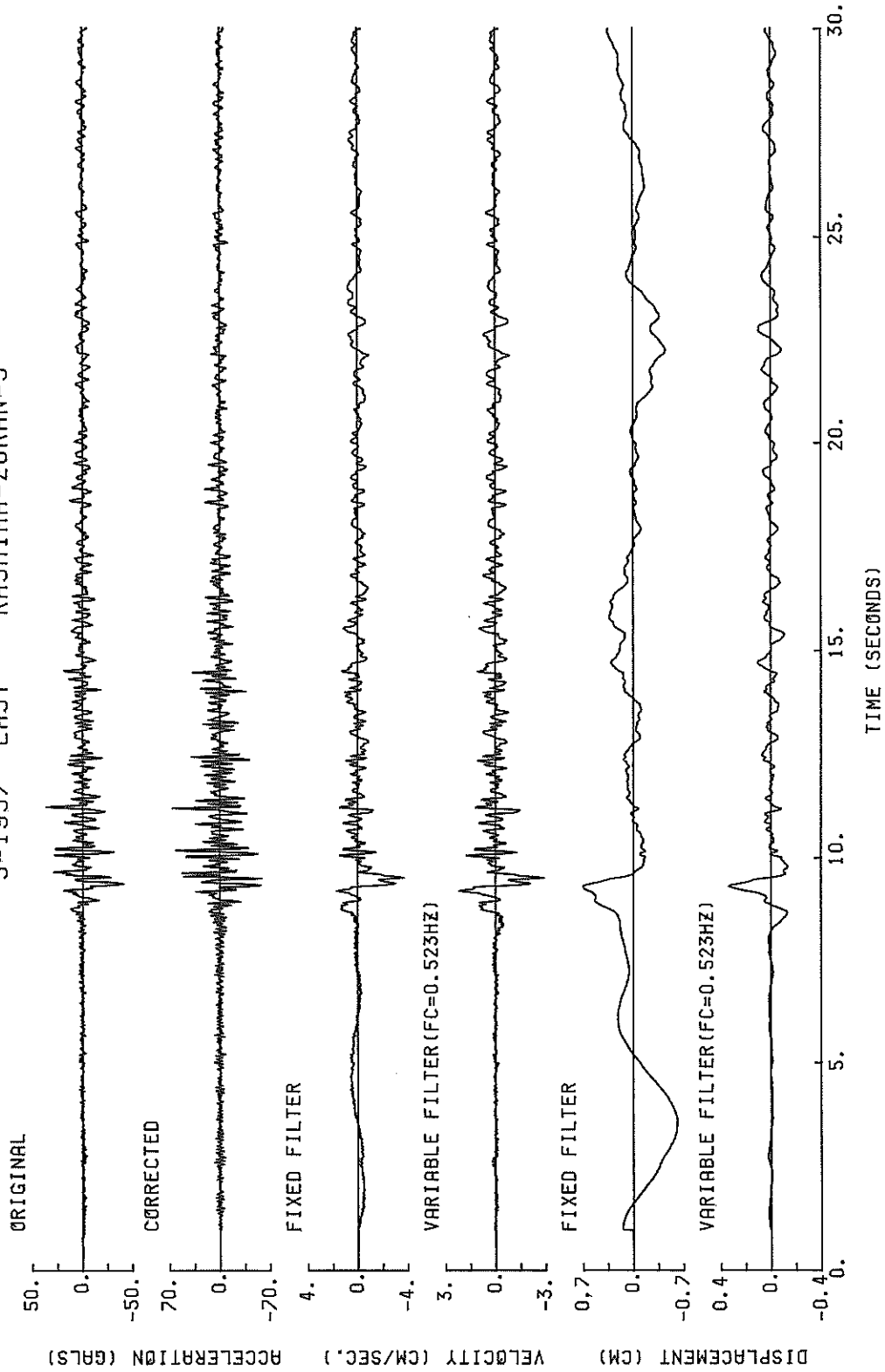
DISPLACEMENT
R=0.40 CM
MAX=0.33 CM



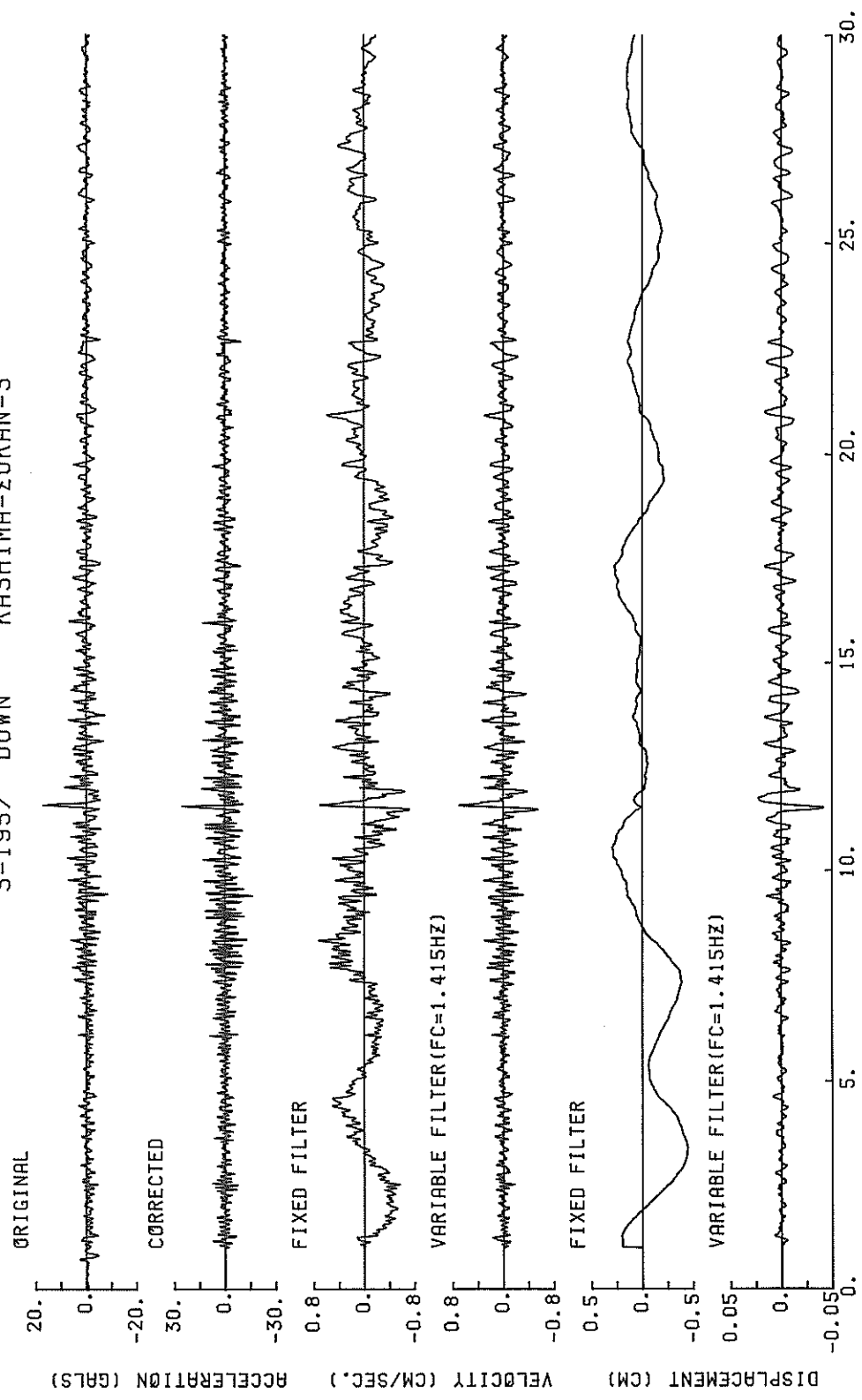
S-1957 SOUTH KASHIMA-ZOKAN-S



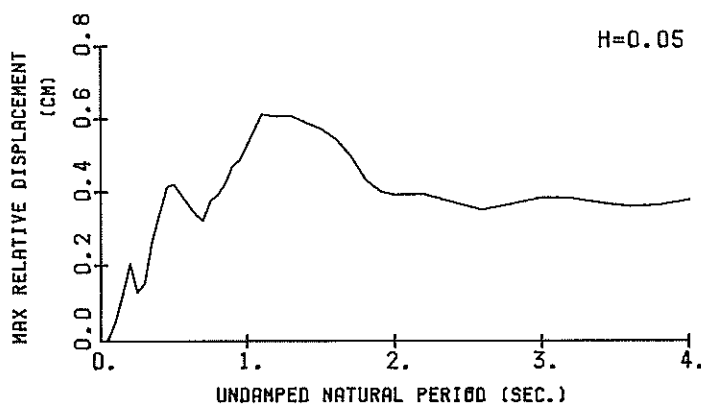
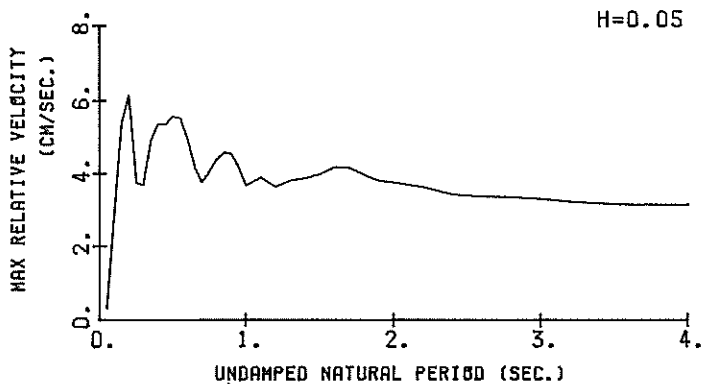
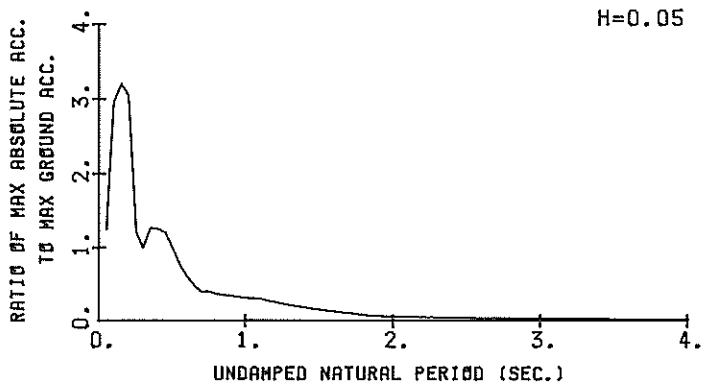
S-1957 EAST KASHIMA-ZOKAN-S



S-1957 DOWN KASHIMA-ZOKAN-S

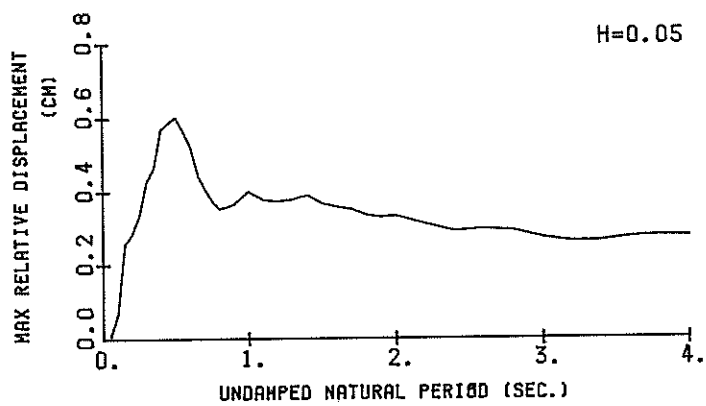
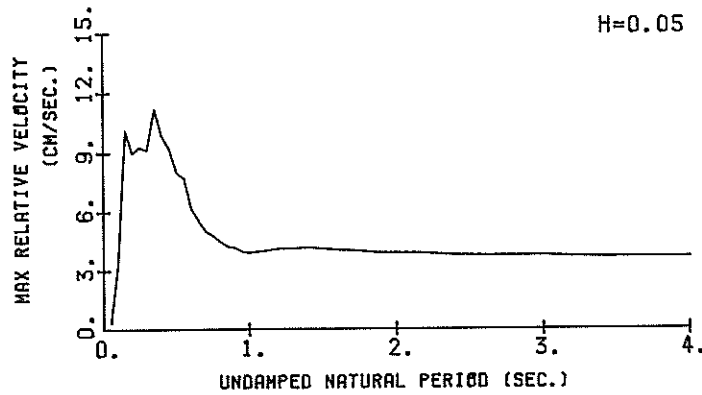
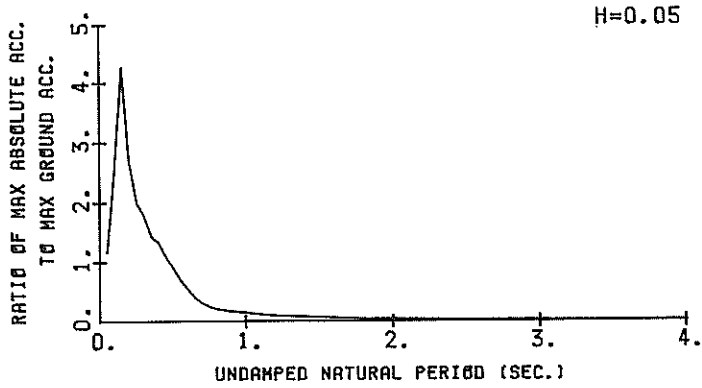


S-1957 EAST KASHIMA-ZOKAN-S
(1/FC=1.91 SEC.)



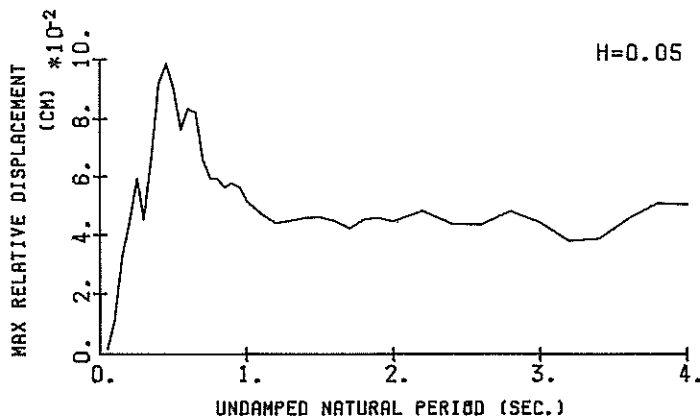
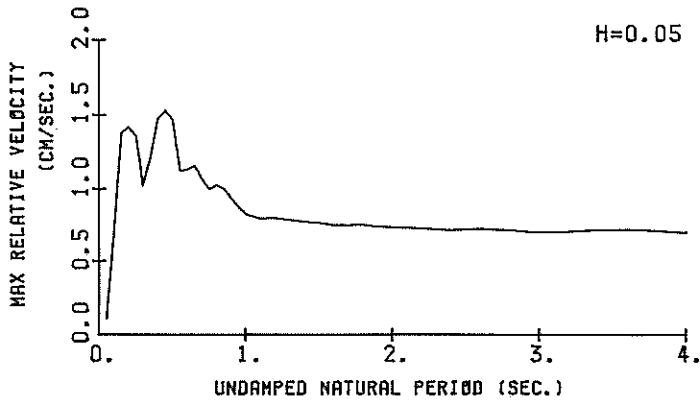
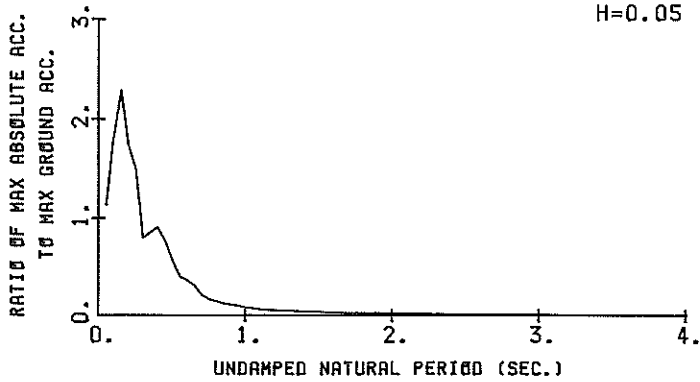
RESPONSE SPECTRA

S-1957 SOUTH KASHIMA-ZOKAN-S
(1/FC=1.52 SEC.)



RESPONSE SPECTRA

S-1957 DOWN KASHIMA-ZOKAN-S
(1/FC=0.71 SEC.)



RESPONSE SPECTRA

RESPONSE SPECTRUM

RECORD = S-1937
 DATE AND TIME = 1986-11-29-07-29
 TIME LENGTH = 29.99 (SEC)
 COMPONENT = SOUTH
 SIGNAL = GR. ACC.
 CORRECTION = MAX.GROUND ACC. = 105.69 (GAL)
 STATION = KASHIMA-ZOKAN-S
 SAMPRING INTERVAL = 0.0100(SEC)
 SKIPPED LENGTH = 0.00 (SEC)

PER	DAMPING = 0.			DAMPING = 0.025			DAMPING = 0.050			DAMPING = 0.100			DAMPING = 0.250		
	AA	RV	RD	AA	RV	RD	AA	RV	RD	AA	RV	RD	AA	RV	RD
0.05	139.7	0.75	0.009	128.7	0.35	0.008	125.1	0.36	0.008	122.0	0.36	0.008	119.0	0.33	0.007
0.10	639.8	9.82	0.161	296.3	4.47	0.075	283.3	3.32	0.067	274.6	2.76	0.056	176.3	1.83	0.042
0.15	795.9	18.61	0.454	543.2	12.75	0.303	450.8	10.13	0.257	344.2	7.28	0.192	209.0	4.08	0.108
0.20	484.6	15.20	0.491	351.2	11.01	0.356	283.8	9.00	0.283	239.2	7.34	0.236	158.2	4.77	0.143
0.25	364.2	14.12	0.577	266.4	10.70	0.420	211.6	9.29	0.335	158.7	7.75	0.243	120.1	5.13	0.163
0.30	334.5	11.69	0.535	210.5	10.37	0.476	189.3	9.15	0.426	155.2	7.74	0.343	107.0	5.39	0.197
0.35	328.7	18.82	1.014	168.8	12.44	0.521	150.7	11.21	0.465	127.5	9.33	0.389	88.8	8.88	0.254
0.40	205.0	13.82	0.831	135.4	10.80	0.631	114.6	9.89	0.570	119.9	3.41	0.474	86.7	5.95	0.319
0.45	155.4	12.80	0.797	132.7	10.57	0.678	115.0	9.22	0.587	97.3	6.98	0.481	75.4	5.07	0.319
0.50	267.2	21.26	1.692	113.8	9.38	0.678	95.9	8.03	0.604	78.6	6.75	0.475	62.1	4.54	0.307
0.55	132.2	12.43	1.013	92.7	9.58	0.709	74.1	7.74	0.565	60.1	6.45	0.451	49.5	4.70	0.279
0.60	87.0	8.44	0.794	68.5	6.48	0.625	57.9	6.21	0.523	44.8	5.82	0.396	39.7	4.60	0.275
0.65	108.5	11.42	1.161	54.5	6.06	0.582	42.0	5.54	0.446	35.7	5.21	0.373	32.5	4.47	0.264
0.70	53.5	6.44	0.689	36.1	5.09	0.447	33.2	5.05	0.408	29.1	4.90	0.350	27.3	4.31	0.253
0.75	50.0	6.80	0.713	28.3	4.86	0.402	24.6	4.79	0.374	23.9	4.64	0.329	23.6	4.20	0.243
0.80	74.7	9.73	1.212	28.8	4.80	0.434	22.0	4.51	0.354	19.9	4.39	0.310	21.1	4.09	0.234
0.85	29.7	4.73	0.543	21.9	4.93	0.400	19.7	4.27	0.338	17.5	4.14	0.305	19.2	3.98	0.226
0.90	22.2	4.69	0.455	19.5	4.42	0.400	18.2	4.20	0.367	16.8	3.93	0.326	17.3	3.91	0.226
0.95	21.4	4.29	0.489	17.9	4.16	0.407	17.2	4.00	0.386	16.0	3.88	0.342	16.7	3.88	0.226
1.00	27.2	4.67	0.690	17.5	4.05	0.440	16.2	3.93	0.402	14.9	3.92	0.350	15.7	3.87	0.232
1.10	20.4	4.18	0.627	13.1	4.01	0.397	12.7	4.02	0.379	12.3	3.99	0.340	14.3	3.88	0.270
1.20	12.0	4.42	0.439	11.1	4.24	0.399	10.8	4.15	0.375	11.0	4.06	0.345	13.3	3.90	0.287
1.30	8.9	4.05	0.382	9.2	4.13	0.386	9.3	4.13	0.379	9.9	4.09	0.357	12.3	3.92	0.299
1.40	9.5	4.44	0.473	8.5	4.29	0.417	8.4	4.20	0.392	8.8	4.10	0.362	11.3	3.93	0.307
1.50	6.4	4.19	0.367	6.7	4.17	0.374	7.0	4.14	0.370	7.8	4.08	0.355	10.4	3.92	0.310
1.60	7.2	4.06	0.466	5.8	4.07	0.367	6.0	4.07	0.360	6.9	4.04	0.347	9.6	3.92	0.310
1.70	5.2	4.15	0.378	5.1	4.09	0.363	5.3	4.05	0.354	6.1	4.01	0.341	8.9	3.90	0.309
1.80	4.0	4.01	0.327	4.2	4.00	0.336	4.6	3.99	0.337	5.5	3.97	0.333	8.3	3.89	0.307
1.90	3.6	3.89	0.326	3.7	3.92	0.331	4.1	3.94	0.331	5.0	3.94	0.327	7.7	3.88	0.305
2.00	3.5	3.94	0.357	3.5	3.94	0.343	3.3	3.93	0.334	4.6	3.92	0.334	7.2	3.86	0.302
2.20	2.6	3.97	0.313	2.7	3.93	0.313	3.0	3.91	0.313	3.8	3.88	0.310	6.4	3.84	0.297
2.40	1.9	3.77	0.273	2.1	3.80	0.285	2.4	3.81	0.291	3.5	3.82	0.287	5.7	3.81	0.291
2.60	1.8	3.77	0.310	1.9	3.78	0.302	2.2	3.79	0.298	2.9	3.79	0.294	5.2	3.79	0.286
2.80	1.5	3.83	0.306	1.6	3.81	0.295	1.9	3.79	0.293	2.6	3.78	0.283	4.7	3.77	0.282
3.00	1.2	3.79	0.265	1.3	3.78	0.271	1.6	3.77	0.274	2.3	3.78	0.278	4.3	3.75	0.278
3.20	1.0	3.70	0.251	1.1	3.71	0.254	1.4	3.72	0.262	2.0	3.73	0.270	4.0	3.74	0.275
3.40	0.8	3.66	0.254	1.0	3.68	0.260	1.3	3.69	0.264	1.9	3.71	0.269	3.7	3.72	0.271
3.60	0.8	3.66	0.279	1.0	3.67	0.275	1.2	3.68	0.273	1.7	3.69	0.272	3.5	3.71	0.272
3.80	0.8	3.69	0.294	0.9	3.67	0.285	1.1	3.69	0.278	1.6	3.69	0.273	3.3	3.70	0.268
4.00	0.7	3.72	0.291	0.8	3.71	0.282	1.0	3.70	0.277	1.5	3.69	0.271	3.1	3.70	0.266

PER = PERIOD (SEC) AA = ABSOLUTE ACC. (GAL) RV = RELATIVE VELOCITY (CM/SEC) RD = RELATIVE DISPLACEMENT (CM)

RESPONSE SPECTRUM

RECORD = S-1937
 DATE AND TIME = 1986-11-29-07-29
 TIME LENGTH = 30.49 (SEC)
 COMPONENT = EAST
 SAMPRING INTERVAL = 0.0100(SEC)
 SKIPPED LENGTH = 0.00 (SEC)
 SIGNAL = GR. ACC.
 CORRECTION = MAX.GROUND ACC. = 66.66 (GAL)
 STATION = KASHIMA-ZOKAN-S

PER	DAMPING = 0.025				DAMPING = 0.050				DAMPING = 0.100				DAMPING = 0.250			
	AA	RV	RD	AA	RV	RD	AA	RV	RD	AA	RV	RD	AA	RV	RD	
0.05	101.4	0.51	0.006	87.2	0.36	0.005	84.9	0.34	0.005	83.9	0.31	0.005	81.6	0.28	0.005	
0.10	583.5	9.26	0.149	271.3	4.04	0.069	197.2	2.78	0.050	153.7	2.02	0.040	108.0	1.24	0.025	
0.15	637.2	15.11	0.363	273.5	6.54	0.154	213.7	5.19	0.133	165.6	4.07	0.091	112.6	2.27	0.057	
0.20	566.2	18.17	0.574	283.0	8.91	0.286	203.7	6.16	0.204	137.7	4.33	0.138	85.3	2.62	0.076	
0.25	309.1	11.87	0.475	103.1	4.45	0.162	82.4	3.77	0.128	67.9	3.17	0.105	59.7	2.40	0.082	
0.30	119.3	5.76	0.272	69.0	3.82	0.157	66.0	3.70	0.150	55.0	3.16	0.146	59.4	2.40	0.082	
0.35	219.8	12.68	0.682	92.6	5.68	0.266	85.6	4.93	0.246	72.5	4.10	0.228	59.7	2.61	0.163	
0.40	153.9	10.09	0.624	91.9	6.78	0.371	84.0	5.37	0.337	72.3	3.83	0.285	55.5	2.73	0.192	
0.45	143.1	10.57	0.734	94.1	6.74	0.481	84.0	5.35	0.412	64.1	4.44	0.319	48.0	3.15	0.204	
0.50	129.5	10.17	0.820	75.9	6.22	0.480	66.9	5.58	0.421	53.8	4.57	0.334	39.5	3.32	0.202	
0.55	79.3	6.84	0.608	57.0	5.95	0.436	51.4	5.53	0.392	42.7	4.78	0.319	32.2	3.28	0.195	
0.60	58.1	5.87	0.530	45.8	5.30	0.418	40.4	4.97	0.367	32.9	4.46	0.297	26.5	3.38	0.201	
0.65	73.7	7.39	0.783	36.0	4.24	0.384	31.8	4.18	0.339	27.6	4.02	0.290	23.8	3.35	0.217	
0.70	58.1	6.00	0.696	29.1	4.05	0.361	26.1	3.77	0.323	23.8	3.69	0.291	22.5	3.27	0.230	
0.75	68.8	8.32	0.980	36.8	4.59	0.524	26.6	4.09	0.377	22.0	3.82	0.305	21.3	3.20	0.245	
0.80	92.0	11.53	1.491	36.5	5.27	0.591	24.3	4.40	0.392	21.0	3.88	0.351	20.5	3.15	0.282	
0.85	61.5	8.56	1.123	31.5	4.94	0.576	23.4	4.60	0.424	20.0	4.01	0.358	19.5	3.09	0.281	
0.90	61.7	8.63	1.266	28.1	4.99	0.576	23.0	4.56	0.468	19.3	3.96	0.389	18.9	3.02	0.300	
0.95	36.4	5.76	0.831	24.9	4.50	0.569	21.6	4.15	0.489	18.5	3.71	0.409	18.3	2.93	0.319	
1.00	32.1	5.33	0.812	22.6	4.03	0.570	21.1	3.67	0.528	18.3	3.35	0.445	17.8	2.98	0.338	
1.10	35.8	6.22	1.097	22.5	4.42	0.686	20.4	3.92	0.615	17.6	3.32	0.508	16.6	3.08	0.369	
1.20	4.79	0.764	0.764	18.4	3.71	0.667	17.0	3.65	0.608	15.1	3.50	0.515	15.4	3.17	0.392	
1.30	23.1	5.16	0.989	16.0	4.24	0.685	14.5	3.82	0.609	13.3	3.61	0.540	14.1	3.22	0.408	
1.40	21.9	5.15	1.090	12.5	4.16	0.675	12.2	3.89	0.591	11.5	3.62	0.538	12.8	3.25	0.415	
1.50	13.2	4.32	0.755	11.2	4.12	0.634	10.4	4.01	0.575	9.9	3.74	0.523	11.5	3.25	0.411	
1.60	15.3	4.69	0.990	9.3	4.40	0.600	8.7	4.19	0.546	8.4	3.86	0.493	10.3	3.22	0.401	
1.70	11.5	4.65	0.843	7.4	4.38	0.539	6.9	4.13	0.499	6.9	3.87	0.443	9.3	3.25	0.385	
1.80	7.1	4.08	0.584	5.4	4.05	0.440	5.4	3.98	0.435	5.6	3.80	0.403	8.3	3.29	0.368	
1.90	6.5	3.80	0.597	4.5	3.84	0.405	4.5	3.82	0.403	4.7	3.72	0.384	7.6	3.30	0.349	
2.00	4.3	3.87	0.440	4.1	3.82	0.412	4.0	3.77	0.394	4.0	3.67	0.367	6.9	3.31	0.332	
2.20	3.7	3.77	0.454	3.5	3.70	0.419	3.4	3.65	0.395	3.3	3.56	0.362	5.8	3.29	0.301	
2.40	2.6	3.39	0.384	2.6	3.43	0.380	2.7	3.45	0.373	2.8	3.43	0.357	5.0	3.26	0.309	
2.60	2.0	3.38	0.335	2.1	3.38	0.347	2.2	3.38	0.332	2.4	3.36	0.350	4.4	3.23	0.316	
2.80	1.9	3.44	0.380	1.9	3.40	0.373	2.0	3.37	0.357	2.1	3.32	0.357	3.9	3.20	0.322	
3.00	1.8	3.35	0.419	1.8	3.33	0.400	1.8	3.31	0.385	1.9	3.28	0.366	3.6	3.18	0.327	
3.20	1.6	3.22	0.407	1.6	3.23	0.394	1.6	3.23	0.358	1.7	3.22	0.367	3.3	3.15	0.332	
3.40	1.3	3.15	0.373	1.3	3.17	0.373	1.6	3.18	0.370	1.6	3.13	0.363	3.0	3.13	0.335	
3.60	1.1	3.14	0.352	1.1	3.15	0.359	1.2	3.16	0.362	1.4	3.16	0.361	2.8	3.11	0.332	
3.80	1.0	3.16	0.358	1.0	3.16	0.365	1.1	3.15	0.365	1.3	3.14	0.364	2.6	3.10	0.341	
4.00	0.9	3.18	0.384	1.0	3.16	0.382	1.1	3.15	0.379	1.2	3.13	0.371	2.4	3.08	0.344	

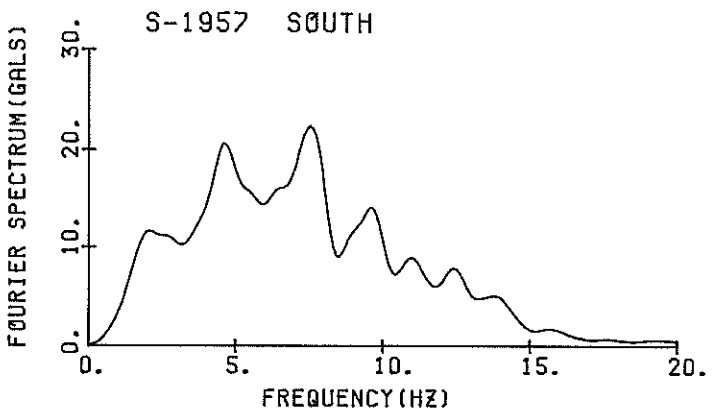
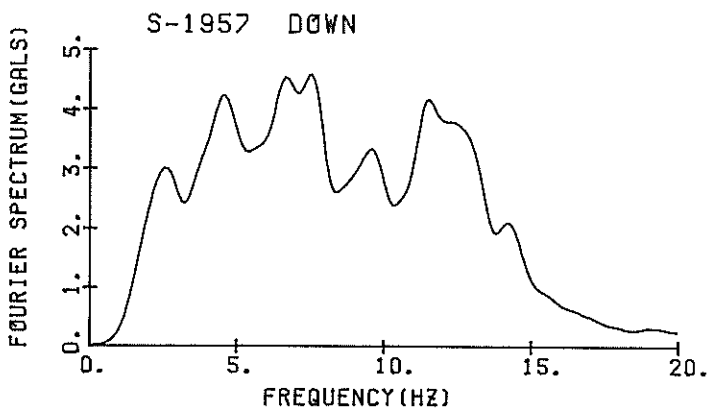
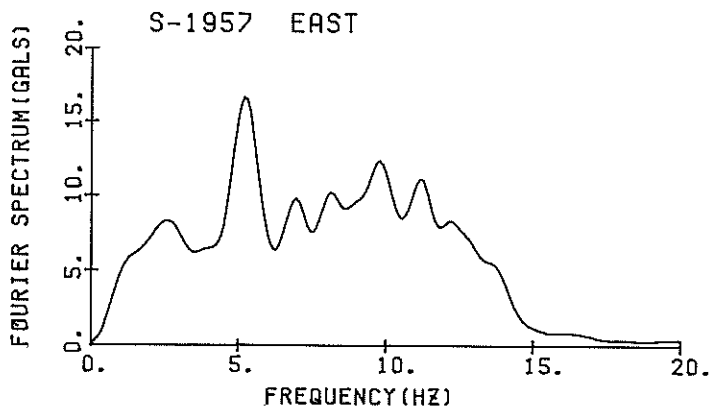
PER = PERIOD (SEC) AA = ABSOLUTE ACC. (GAL) RV = RELATIVE VELOCITY (CM/SEC) RD = RELATIVE DISPLACEMENT (CM)

RESPONSE SPECTRUM

RECORD = S-1957 COMPONENT = DOWN SIGNAL = GR. ACC. CORRECTION = STATION = KASHIMA-ZOKAN-S
 DATE AND TIME = 1986-11-29-07-29 SAMPLING INTERVAL = 0.0100 (SEC) MAX. GROUND ACC. = 25.05 (GAL)
 TIME LENGTH = 29.99 (SEC) SKIPPED LENGTH = 0.00 (SEC)

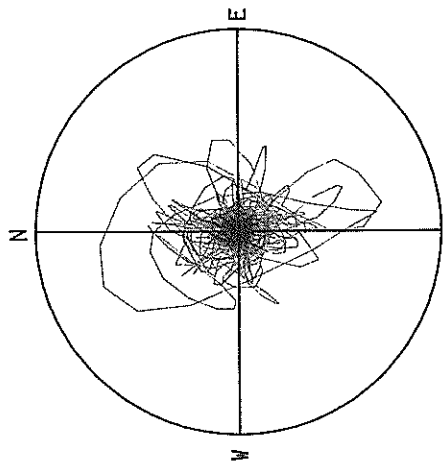
PER	DAMPING = 0.			DAMPING = 0.025			DAMPING = 0.050			DAMPING = 0.100			DAMPING = 0.250		
	AA	RV	RD	AA	RV	RD	AA	RV	RD	AA	RV	RD	AA	RV	RD
0.05	34.4	3.19	0.002	28.1	0.13	0.002	28.5	0.11	0.002	28.3	0.10	0.002	27.4	0.09	0.002
0.10	160.4	2.54	0.041	62.2	0.88	0.016	43.2	0.66	0.011	34.5	0.50	0.009	59.5	0.53	0.007
0.15	272.9	6.49	0.156	88.8	2.15	0.050	57.4	1.58	0.033	40.2	0.95	0.025	32.6	0.66	0.017
0.20	109.1	3.47	0.111	45.5	0.45	0.046	43.7	1.42	0.044	40.0	1.28	0.048	31.6	0.82	0.039
0.25	47.3	1.92	0.075	42.2	1.68	0.066	37.3	1.36	0.059	31.5	1.15	0.048	25.5	0.86	0.035
0.30	71.7	3.40	0.163	22.3	1.10	0.051	19.9	1.02	0.045	18.1	0.99	0.041	19.0	0.85	0.036
0.35	70.0	3.90	0.217	32.4	1.86	0.101	21.5	1.22	0.067	15.7	0.92	0.048	15.8	0.85	0.040
0.40	83.5	5.39	0.539	27.9	1.96	0.113	22.8	1.77	0.092	17.0	1.15	0.067	14.1	0.93	0.046
0.45	56.7	4.10	0.291	25.6	1.80	0.116	19.3	1.53	0.099	14.3	1.23	0.072	12.1	1.00	0.049
0.50	32.8	2.67	0.207	17.9	1.64	0.113	14.3	1.47	0.090	11.1	1.28	0.069	10.0	1.03	0.050
0.55	44.2	3.87	0.338	12.6	1.33	0.097	10.0	1.12	0.076	9.1	1.14	0.068	9.2	1.02	0.049
0.60	16.5	1.67	0.149	9.9	1.17	0.090	9.2	1.13	0.083	8.0	1.11	0.071	6.9	1.02	0.049
0.65	18.1	1.97	0.194	8.8	1.22	0.094	7.8	1.16	0.082	6.7	1.10	0.069	5.8	1.00	0.048
0.70	10.8	1.31	0.134	5.6	1.07	0.070	5.4	1.07	0.066	5.3	1.06	0.061	5.0	0.99	0.047
0.75	4.7	1.00	0.067	4.3	0.98	0.061	4.3	1.00	0.059	4.2	1.01	0.055	4.3	0.97	0.045
0.80	7.9	1.20	0.127	4.3	1.07	0.069	3.7	1.03	0.059	3.4	1.03	0.052	3.7	0.95	0.043
0.85	4.3	0.93	0.073	3.4	1.01	0.062	3.2	1.00	0.056	3.0	0.97	0.050	3.3	0.93	0.041
0.90	3.6	0.99	0.073	3.1	0.95	0.062	2.9	0.94	0.058	2.8	0.95	0.052	3.0	0.92	0.042
0.95	2.7	0.86	0.063	2.7	0.86	0.060	2.6	0.87	0.056	2.5	0.89	0.051	2.9	0.89	0.042
1.00	2.0	0.71	0.052	2.1	0.79	0.052	2.1	0.83	0.052	2.2	0.86	0.049	2.7	0.88	0.043
1.10	1.9	0.71	0.057	1.6	0.77	0.049	1.6	0.79	0.047	1.8	0.82	0.046	2.3	0.85	0.042
1.20	1.3	0.83	0.048	1.2	0.80	0.044	1.3	0.80	0.044	1.5	0.80	0.044	2.1	0.83	0.042
1.30	1.0	0.79	0.042	1.1	0.78	0.044	1.1	0.79	0.045	1.3	0.79	0.044	1.9	0.82	0.042
1.40	1.0	0.74	0.048	1.0	0.76	0.047	1.0	0.77	0.046	1.2	0.78	0.045	1.7	0.80	0.042
1.50	0.8	0.77	0.048	0.8	0.76	0.047	0.9	0.76	0.046	1.0	0.77	0.045	1.5	0.79	0.042
1.60	0.7	0.71	0.048	0.7	0.73	0.046	0.8	0.75	0.045	0.9	0.76	0.044	1.4	0.78	0.042
1.70	0.5	0.74	0.037	0.6	0.74	0.040	0.7	0.75	0.042	0.8	0.76	0.044	1.3	0.78	0.042
1.80	0.6	0.77	0.050	0.6	0.75	0.047	0.6	0.75	0.045	0.8	0.75	0.044	1.2	0.77	0.042
1.90	0.5	0.72	0.049	0.5	0.73	0.047	0.6	0.74	0.046	0.7	0.75	0.044	1.1	0.77	0.043
2.00	0.4	0.72	0.040	0.4	0.73	0.043	0.5	0.74	0.045	0.7	0.74	0.045	1.1	0.76	0.043
2.20	0.5	0.73	0.056	0.4	0.73	0.051	0.5	0.73	0.048	0.6	0.74	0.046	1.0	0.75	0.043
2.40	0.3	0.69	0.040	0.3	0.70	0.043	0.4	0.71	0.044	0.5	0.73	0.044	0.9	0.75	0.043
2.60	0.2	0.73	0.040	0.3	0.73	0.043	0.3	0.72	0.044	0.4	0.73	0.044	0.8	0.74	0.043
2.80	0.3	0.71	0.057	0.5	0.71	0.052	0.4	0.72	0.048	0.4	0.72	0.045	0.7	0.74	0.043
3.00	0.2	0.68	0.047	0.2	0.69	0.045	0.3	0.70	0.044	0.4	0.71	0.044	0.7	0.73	0.043
3.20	0.1	0.69	0.034	0.2	0.70	0.035	0.2	0.71	0.038	0.3	0.71	0.041	0.6	0.73	0.043
3.40	0.1	0.73	0.039	0.1	0.72	0.036	0.2	0.72	0.039	0.3	0.72	0.042	0.6	0.73	0.043
3.60	0.1	0.73	0.049	0.2	0.73	0.047	0.2	0.72	0.046	0.3	0.72	0.044	0.6	0.73	0.043
3.80	0.2	0.71	0.062	0.2	0.71	0.055	0.2	0.71	0.051	0.3	0.71	0.046	0.5	0.72	0.043
4.00	0.1	0.69	0.061	0.2	0.69	0.055	0.2	0.70	0.051	0.2	0.71	0.046	0.5	0.72	0.043

PER = PERIOD (SEC) AA = ABSOLUTE ACC. (GAL) RV = RELATIVE VELOCITY (CM/SEC) RD = RELATIVE DISPLACEMENT (CM)



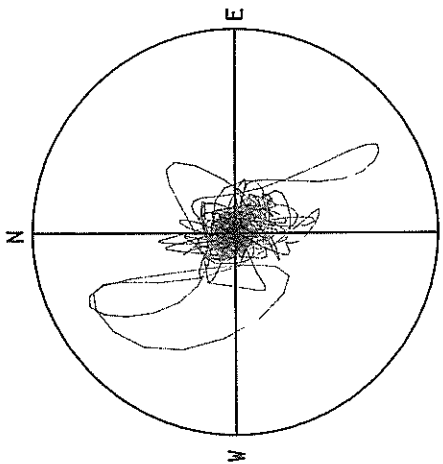
FOURIER SPECTRA

S-1957 KASHIMA-ZOKAN-S



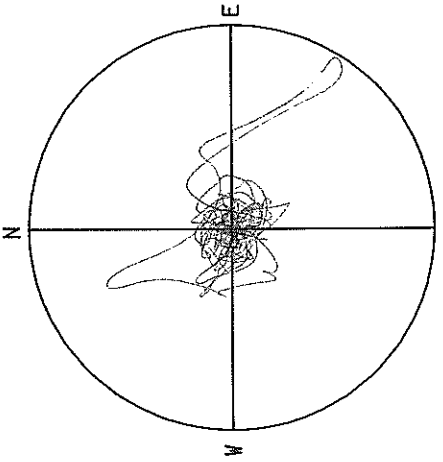
ACCELERATION
R=150.0 GAL
MAX=108.6 GAL

S-1957 KASHIMA-ZOKAN-S

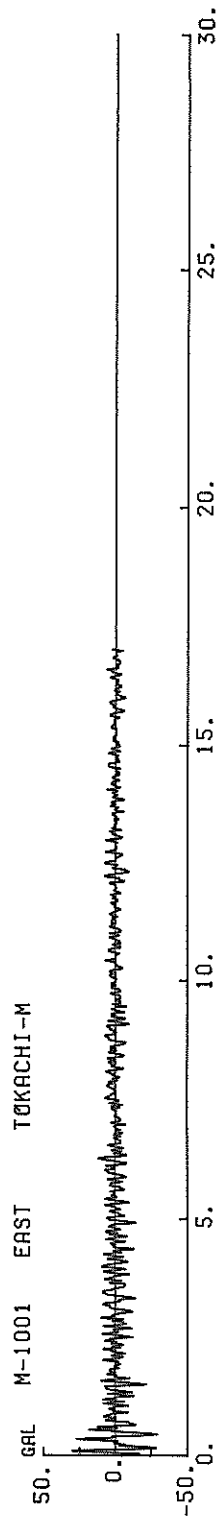
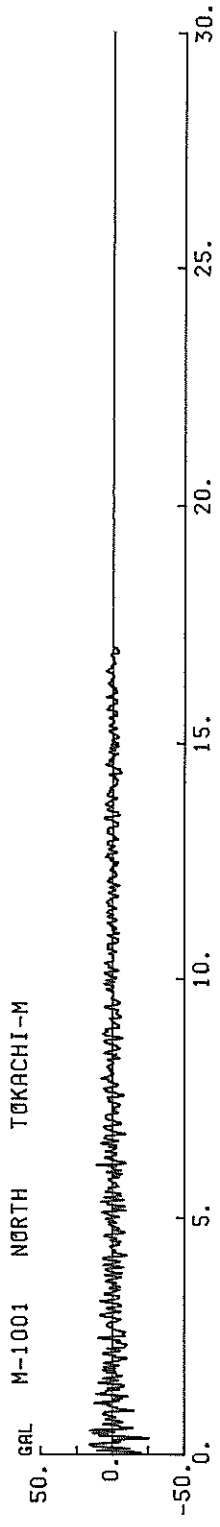
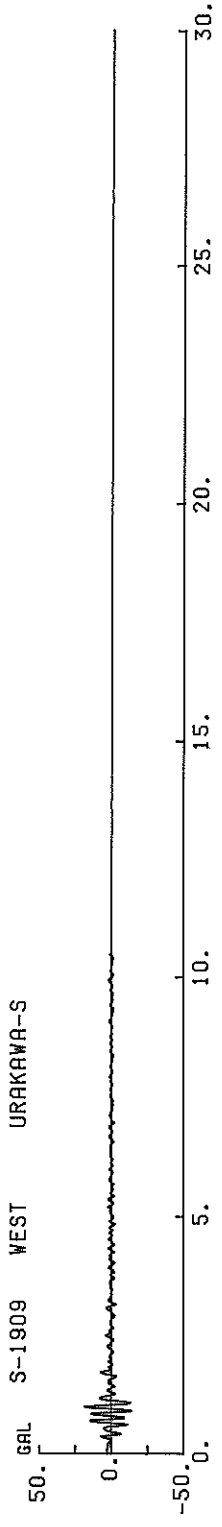
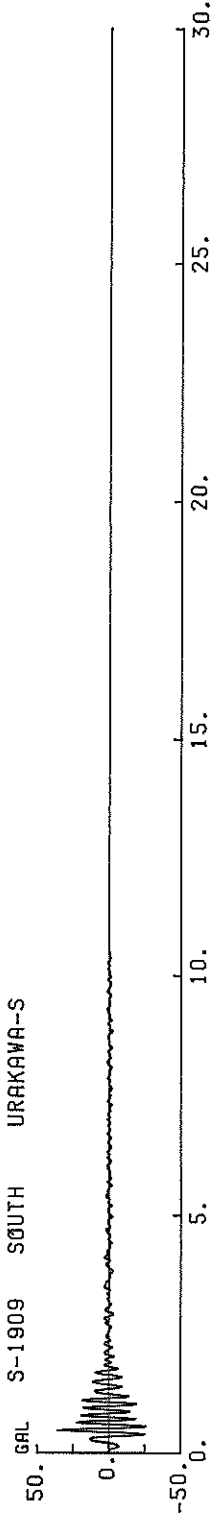


VELOCITY
R=5.0 CM/SEC.
MAX=4.1 CM/SEC.

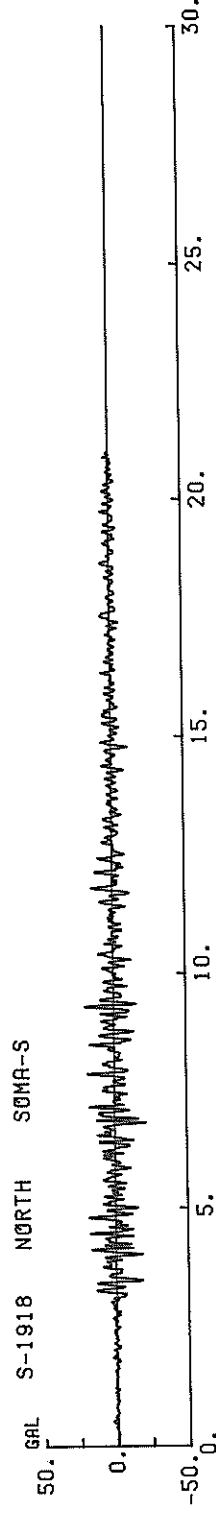
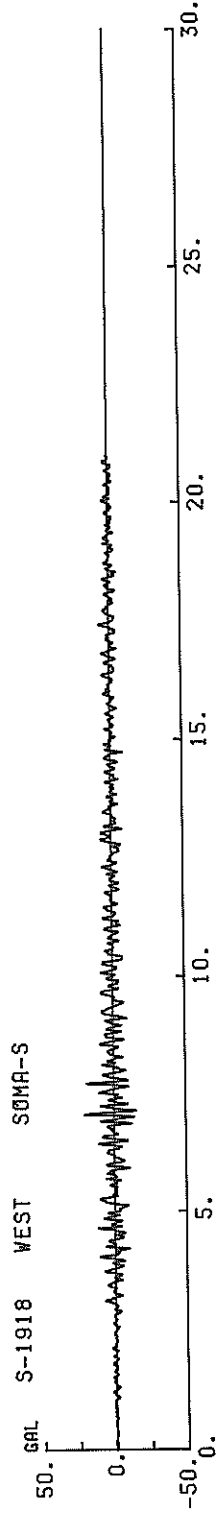
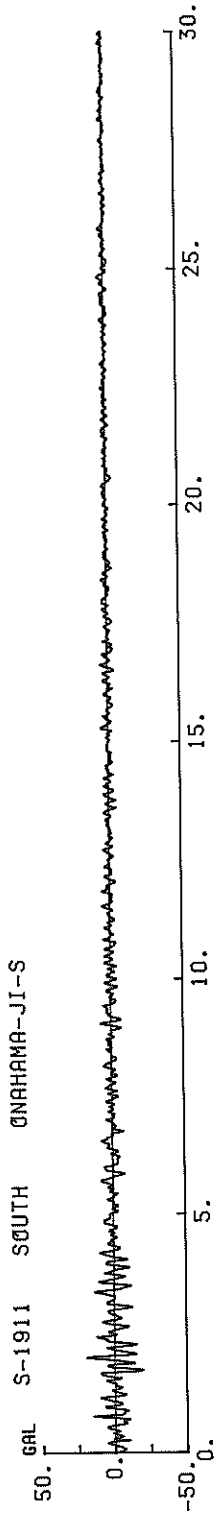
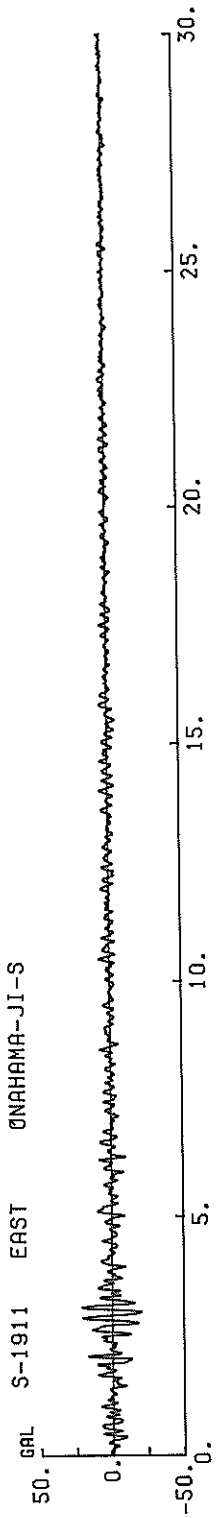
S-1957 KASHIMA-ZOKAN-S

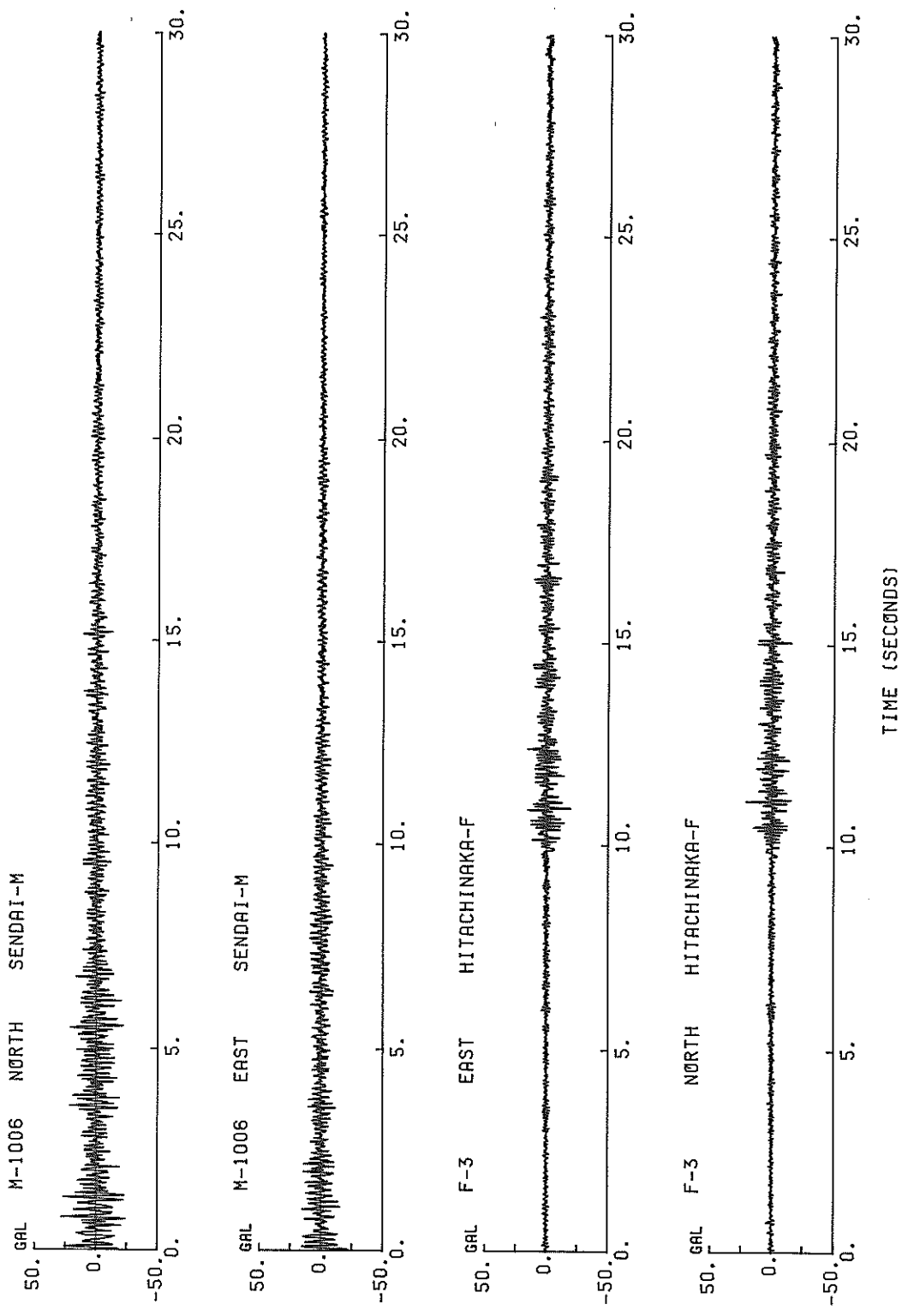


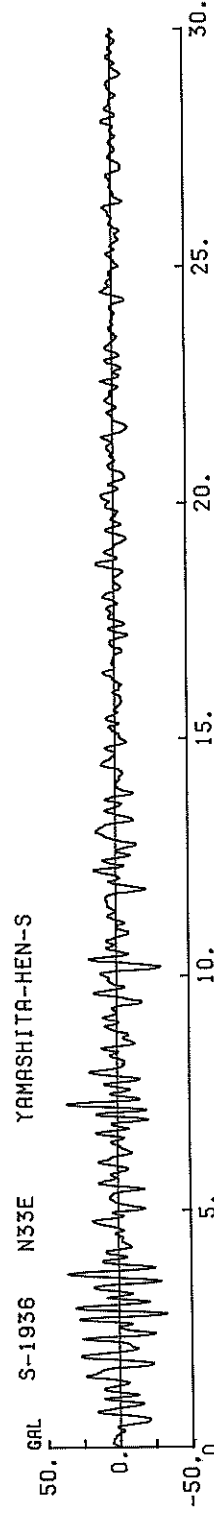
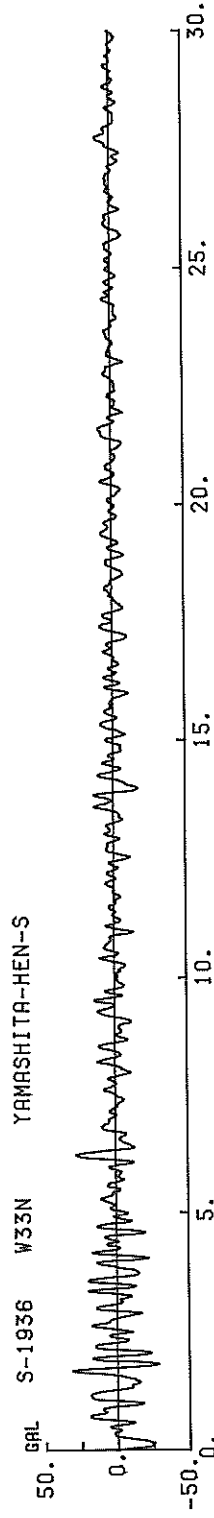
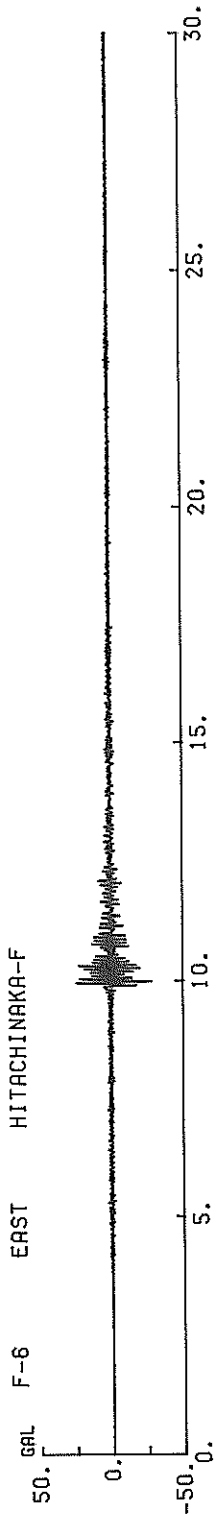
DISPLACEMENT
R=0.40 CM
MAX=0.39 CM

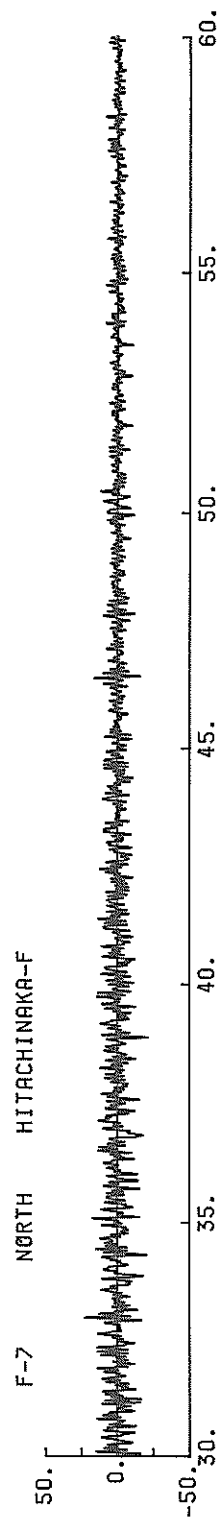
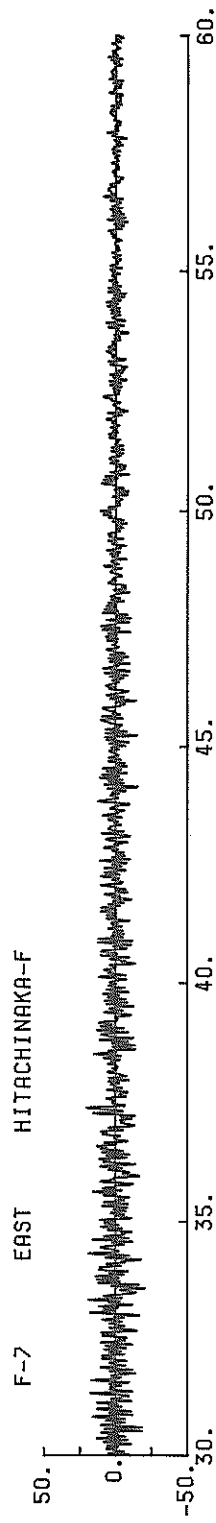
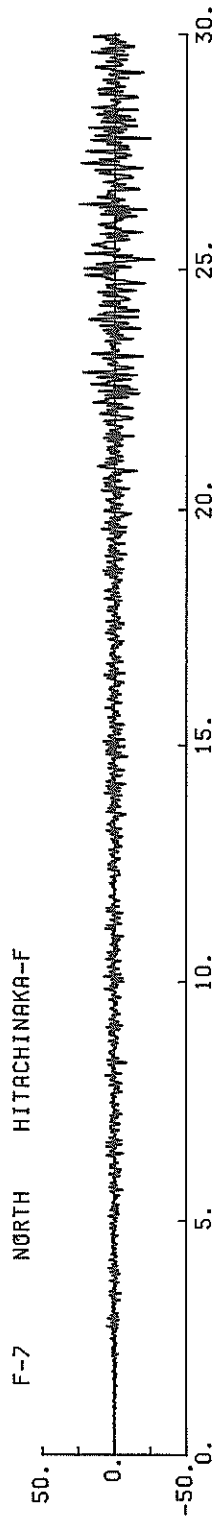


TIME (SECONDS)

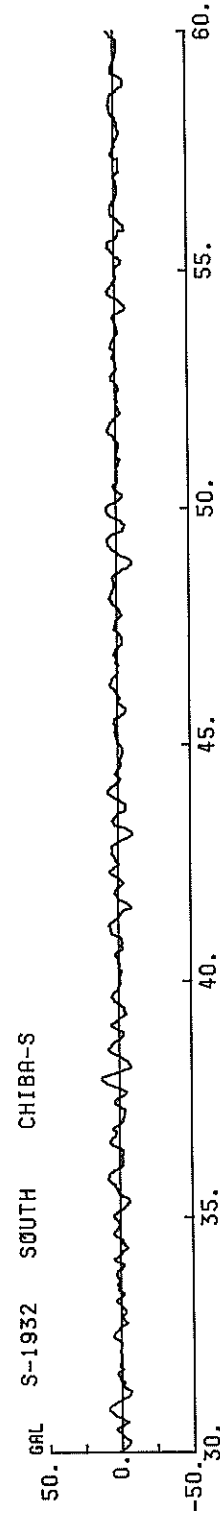
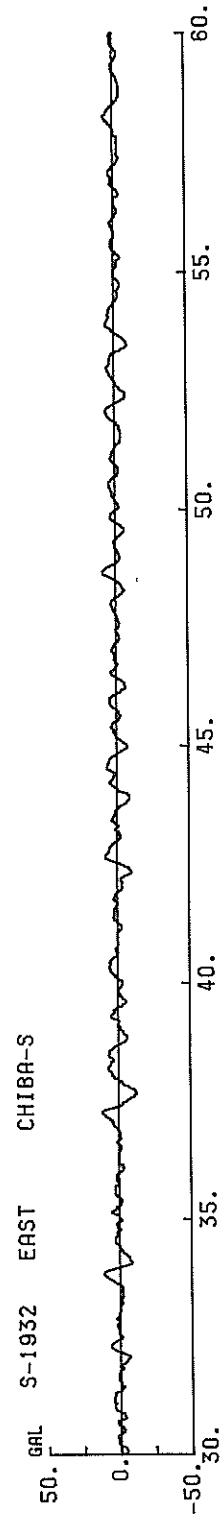
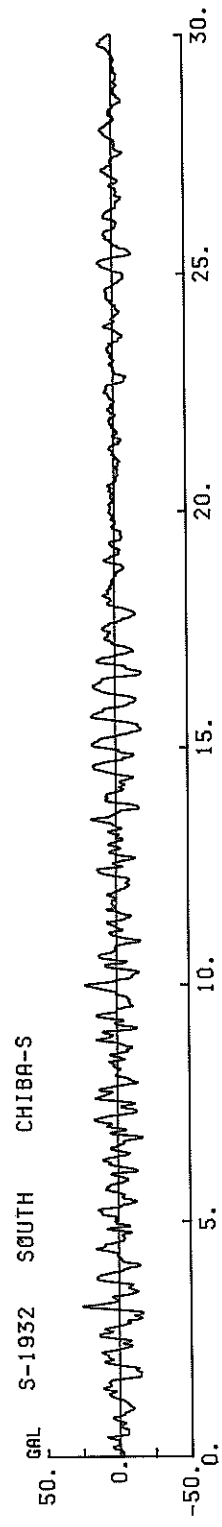
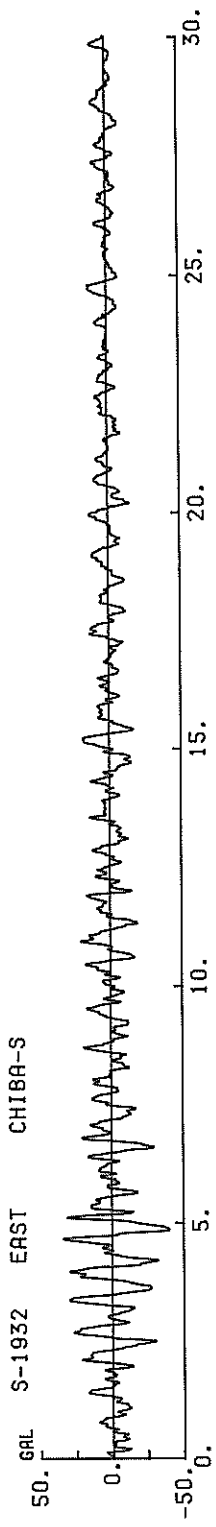




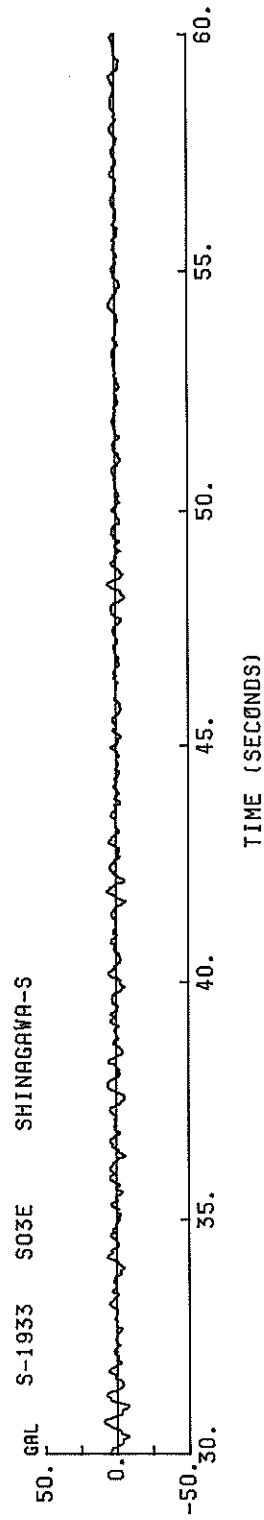
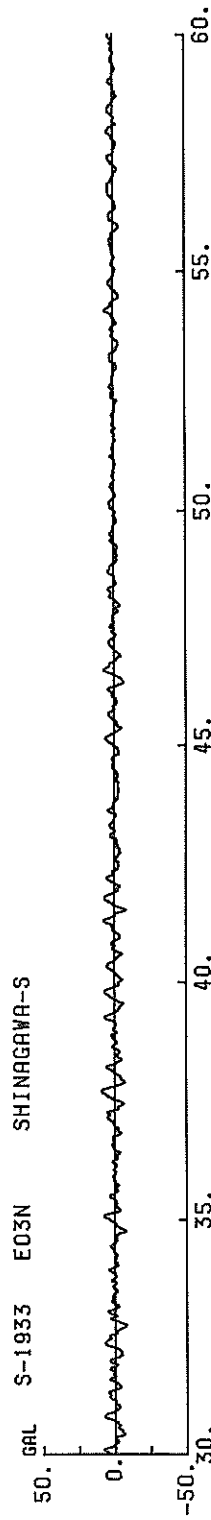
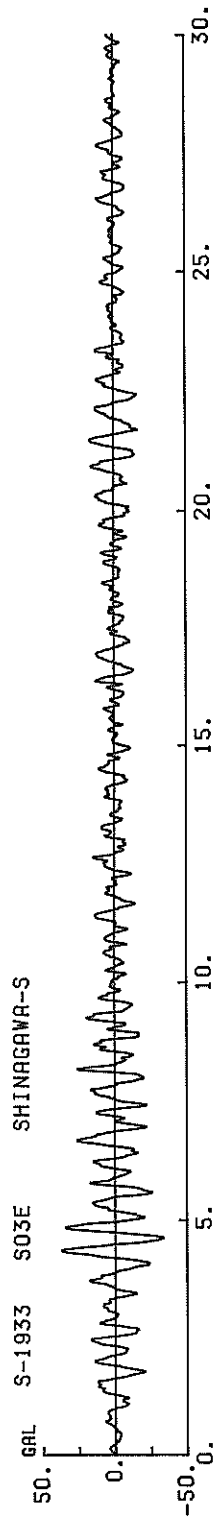
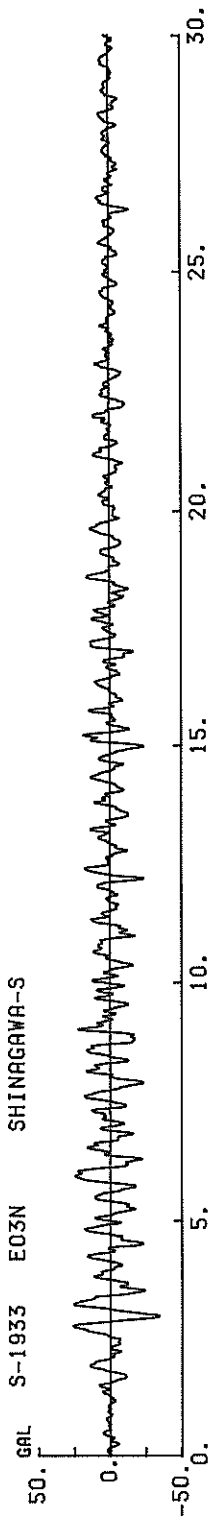


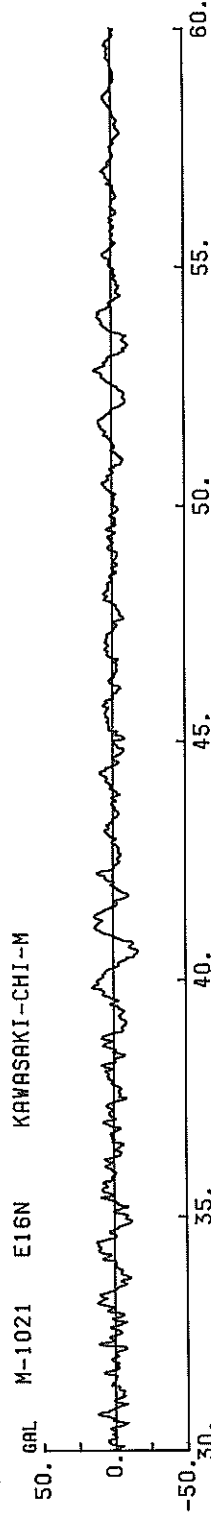
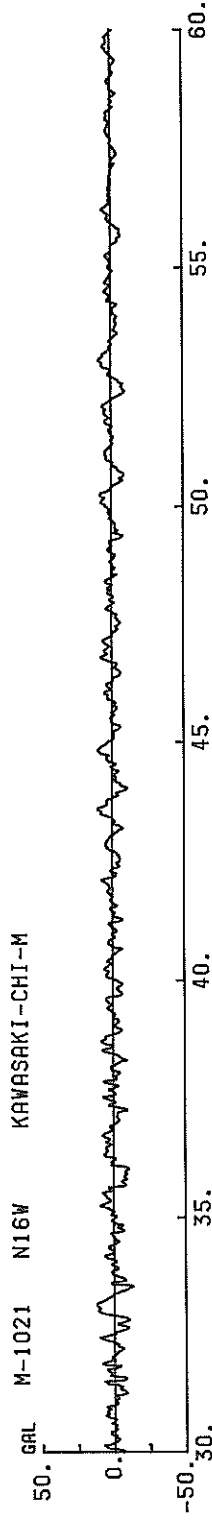
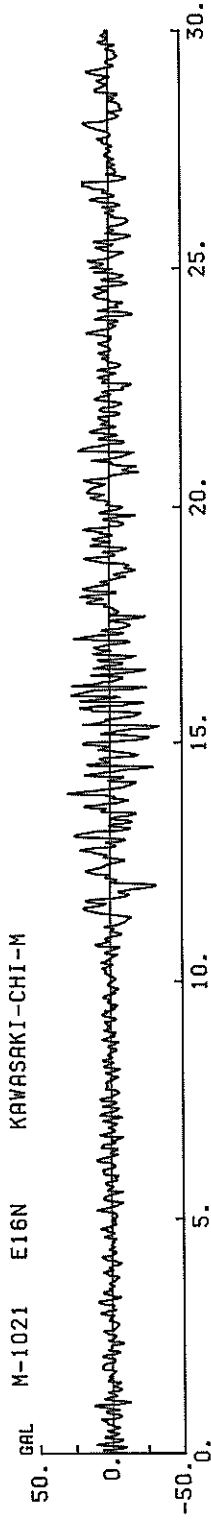
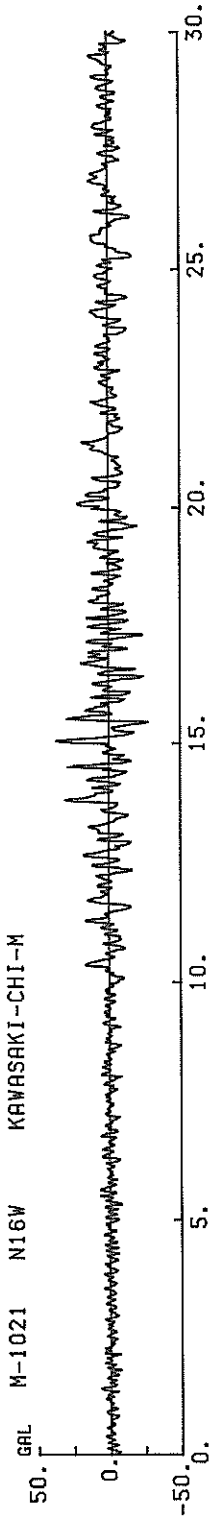


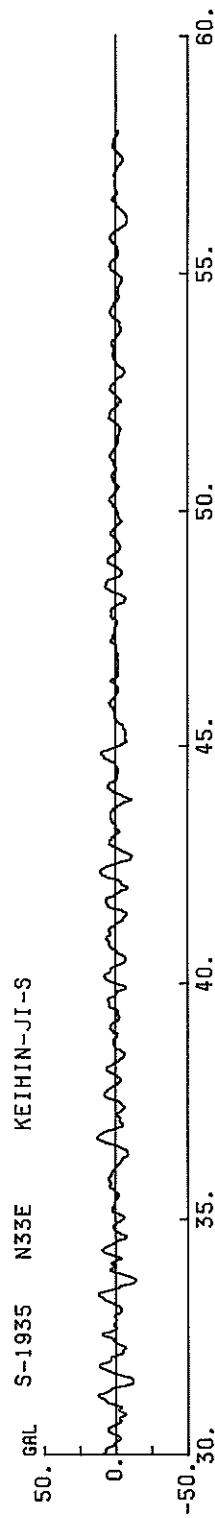
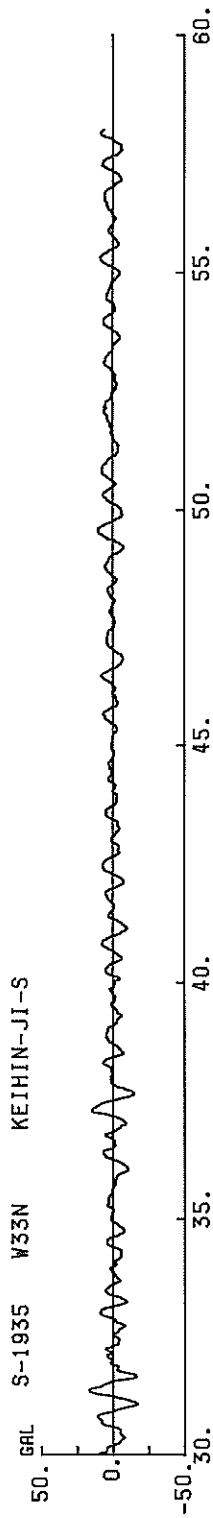
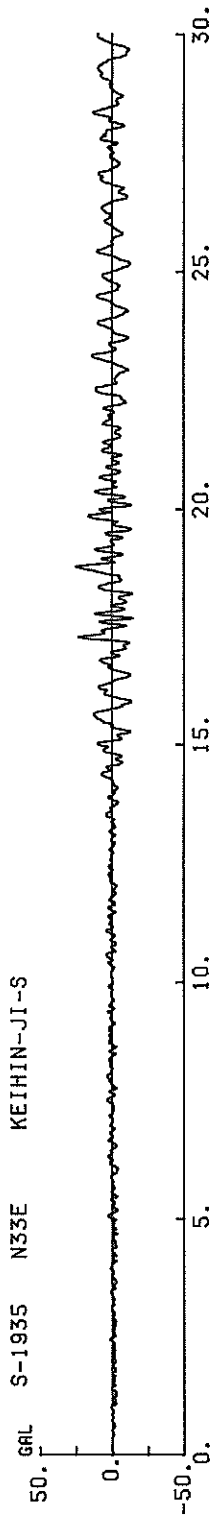
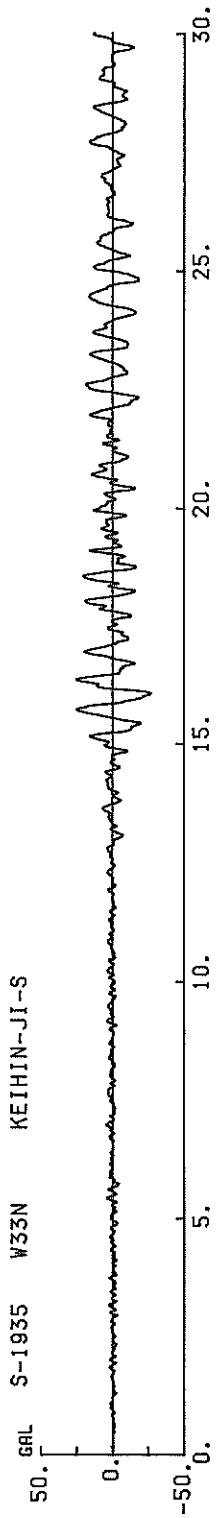
TIME (SECONDS)

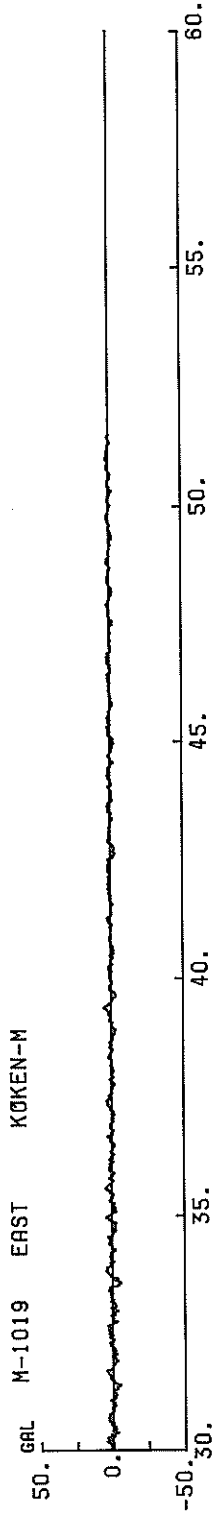
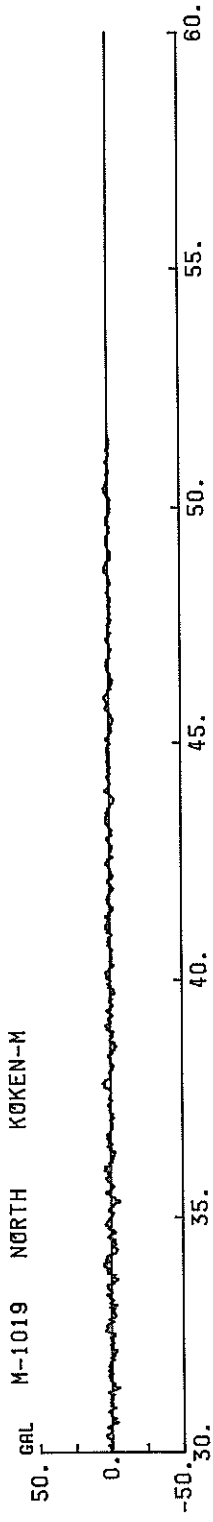
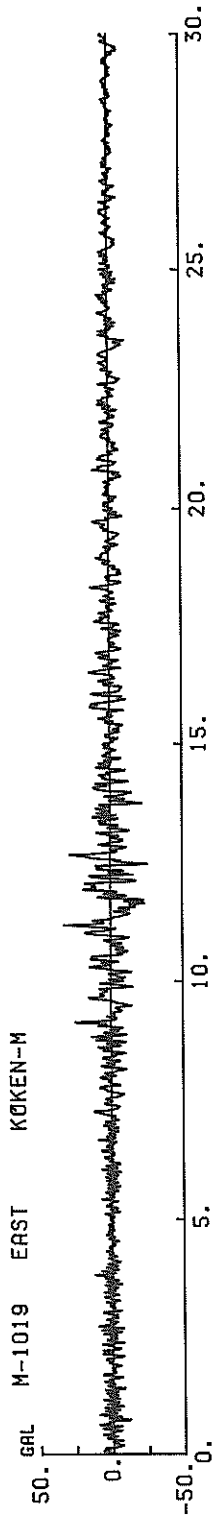
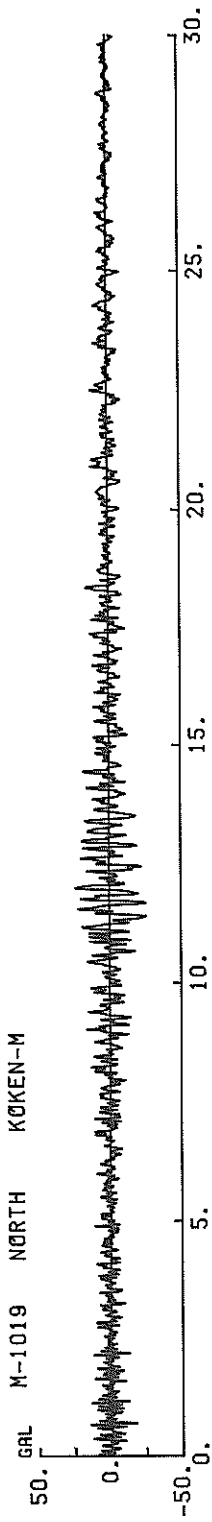


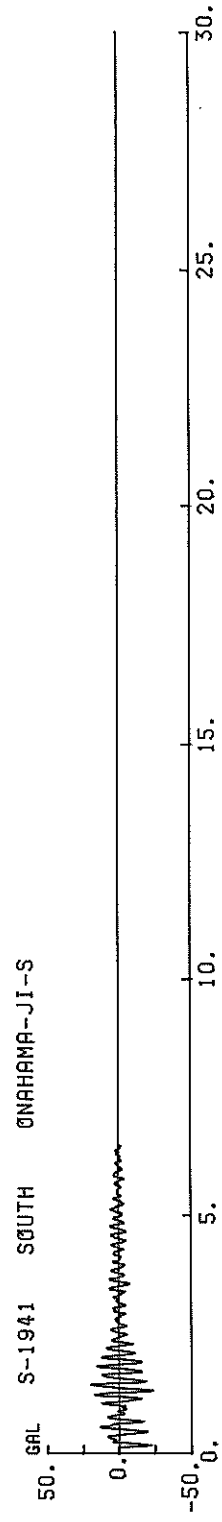
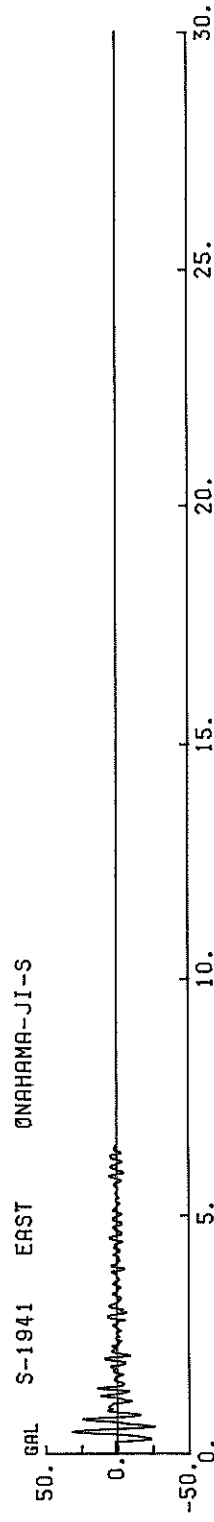
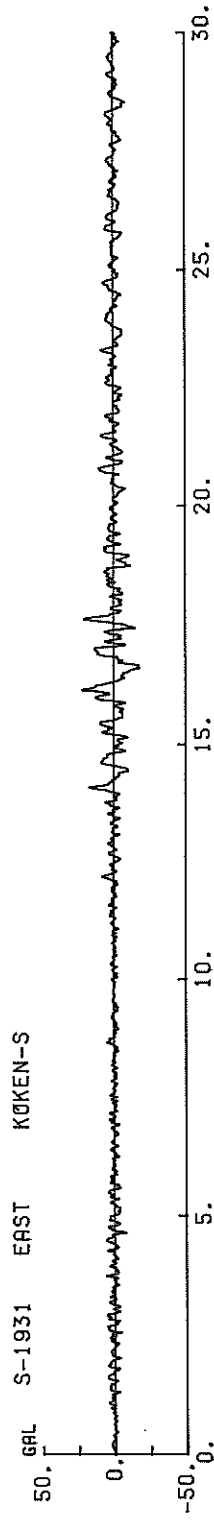
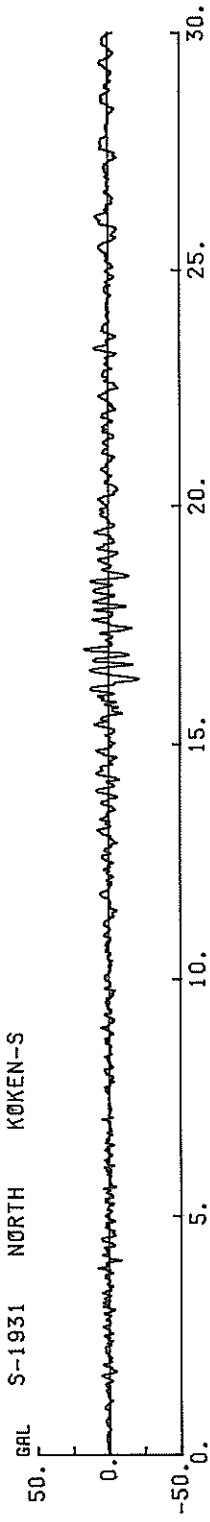
TIME (SECONDS)

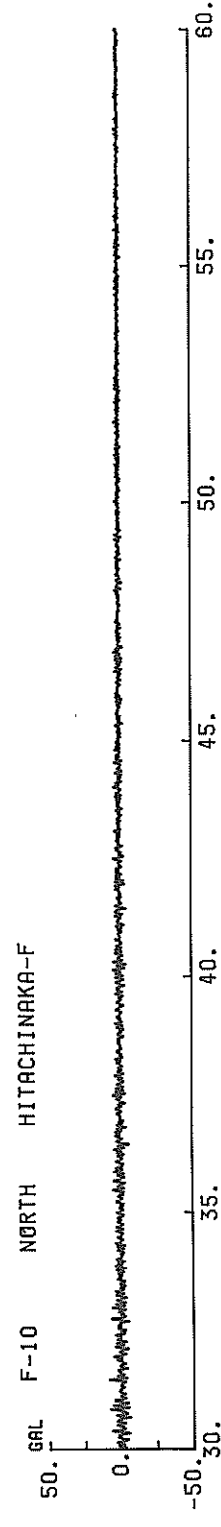
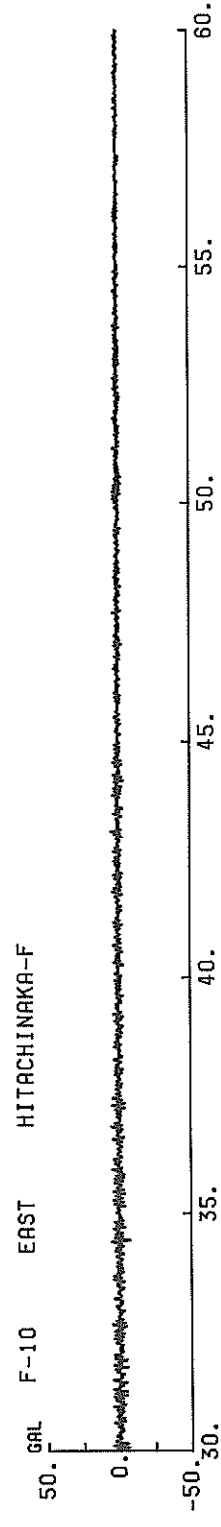
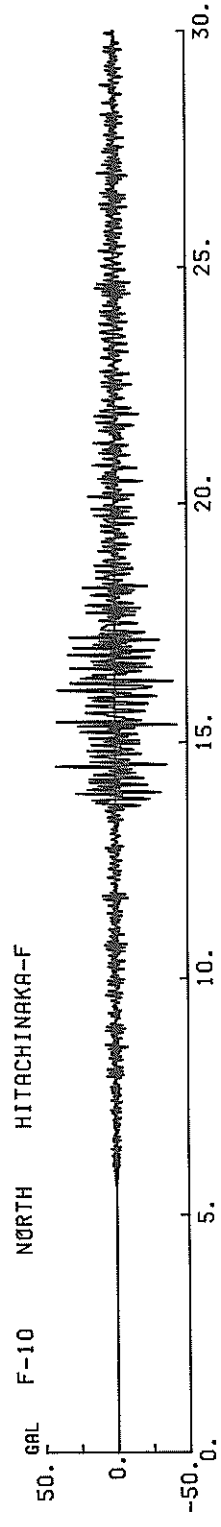
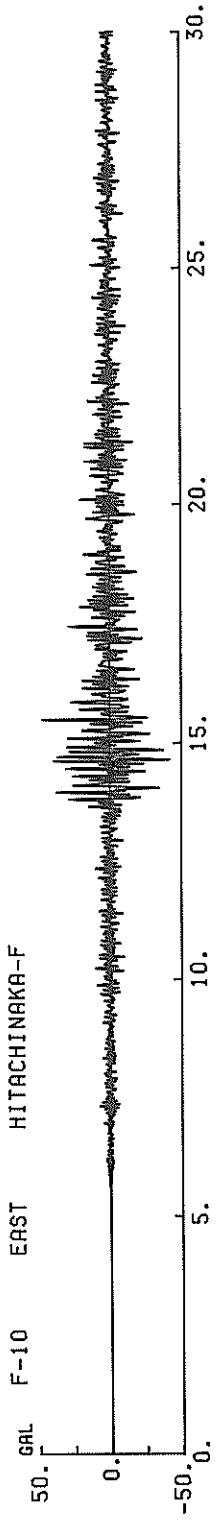


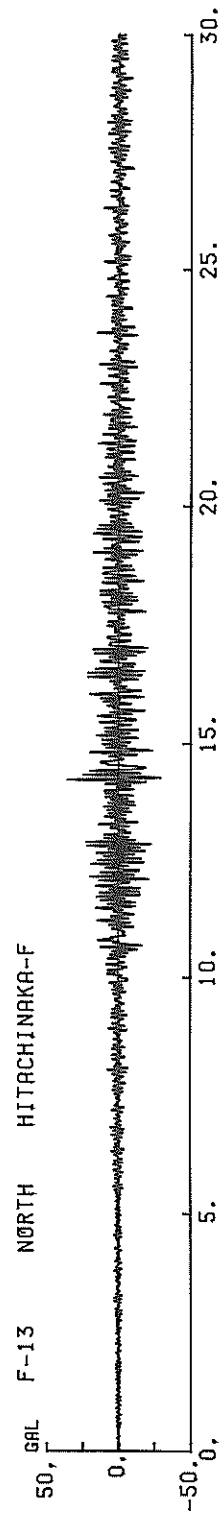
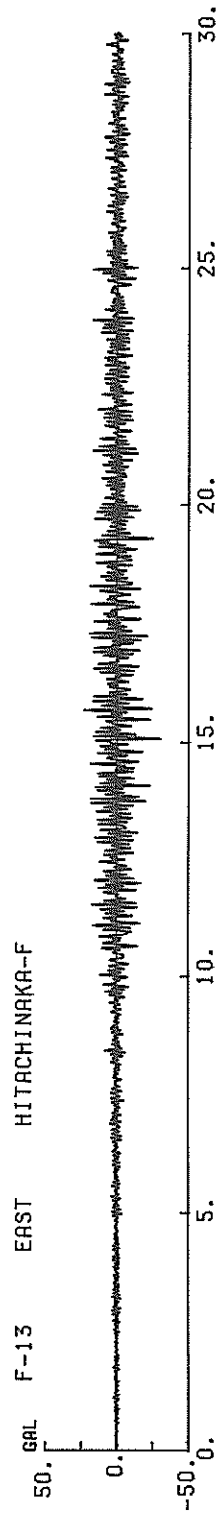
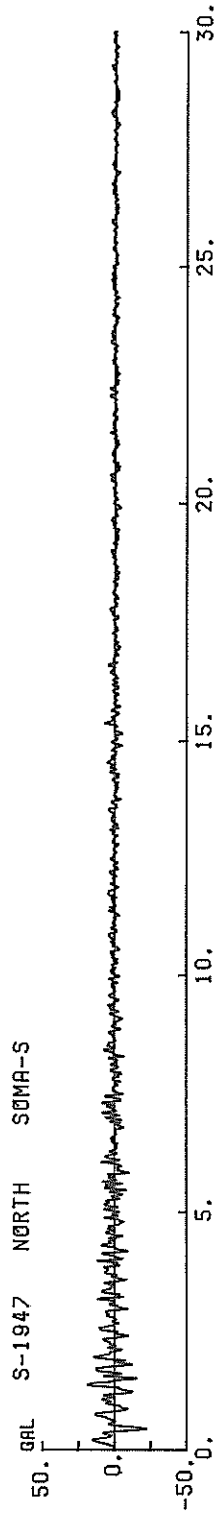
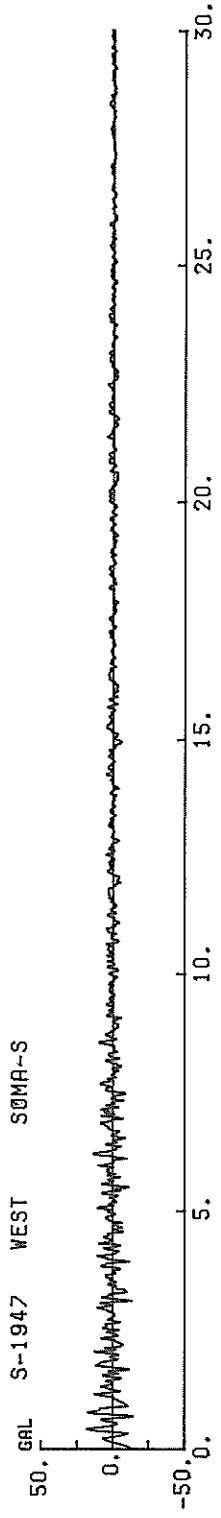


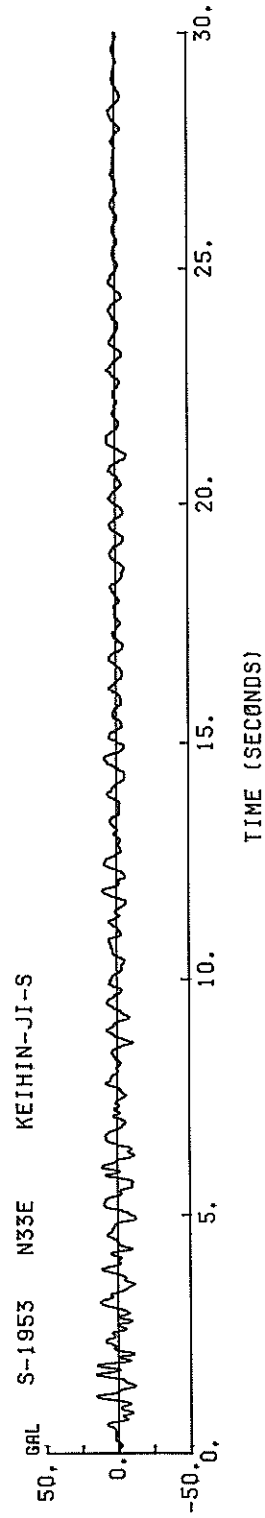
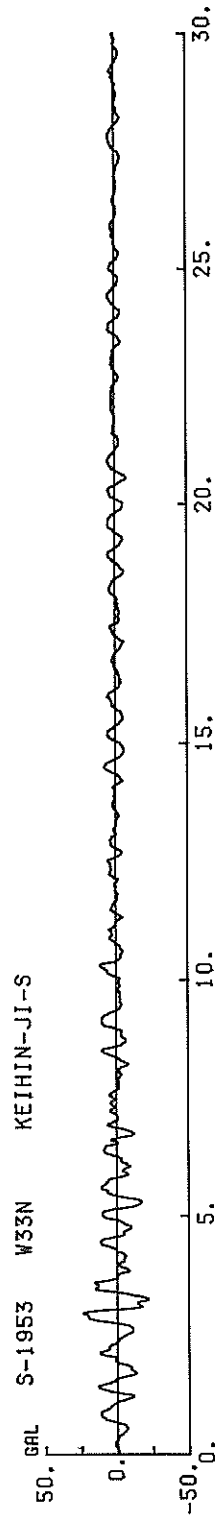
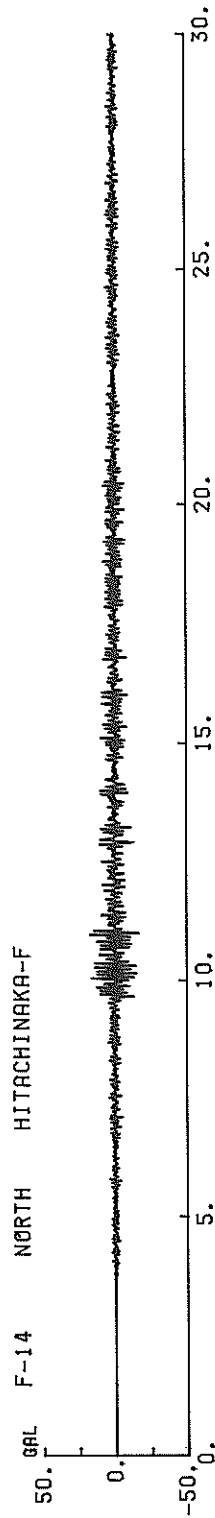
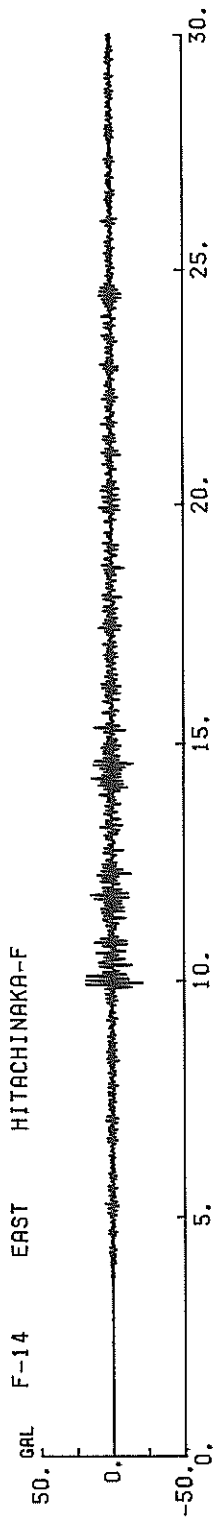




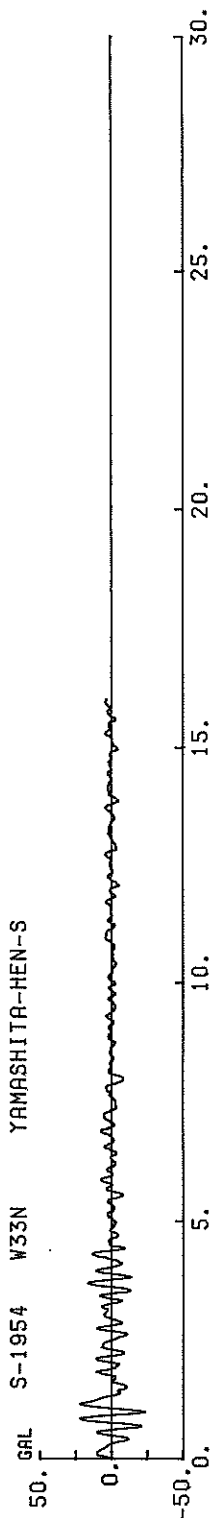




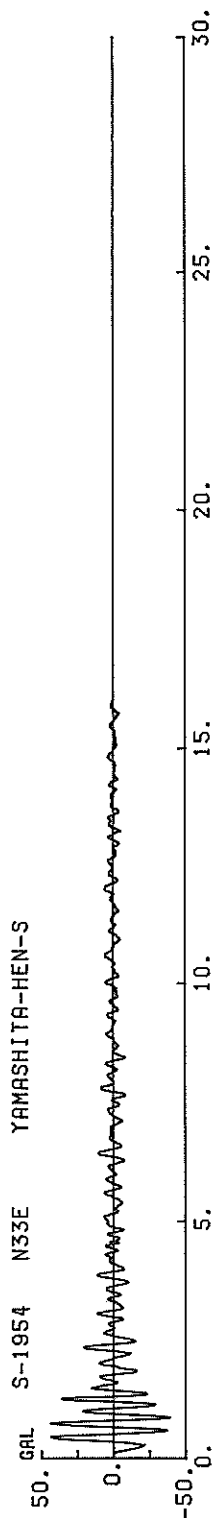




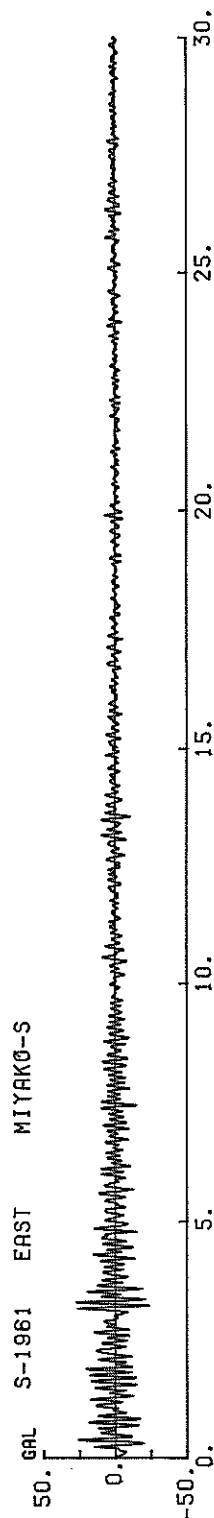
GAL S-1954 W33N YAMASHITA-HEN-S



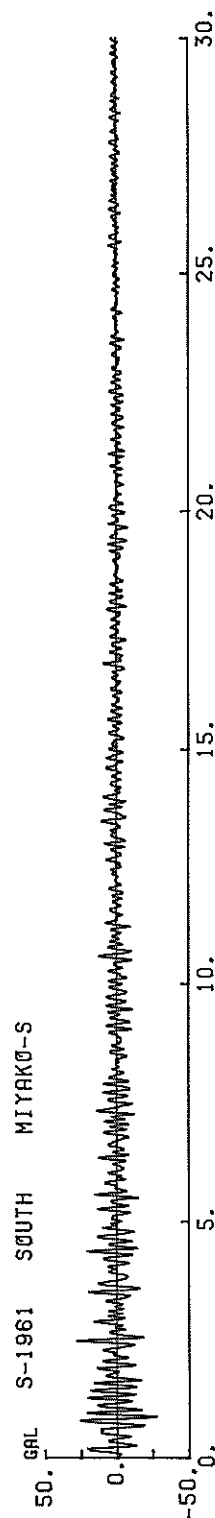
GAL S-1954 N33E YAMASHITA-HEN-S

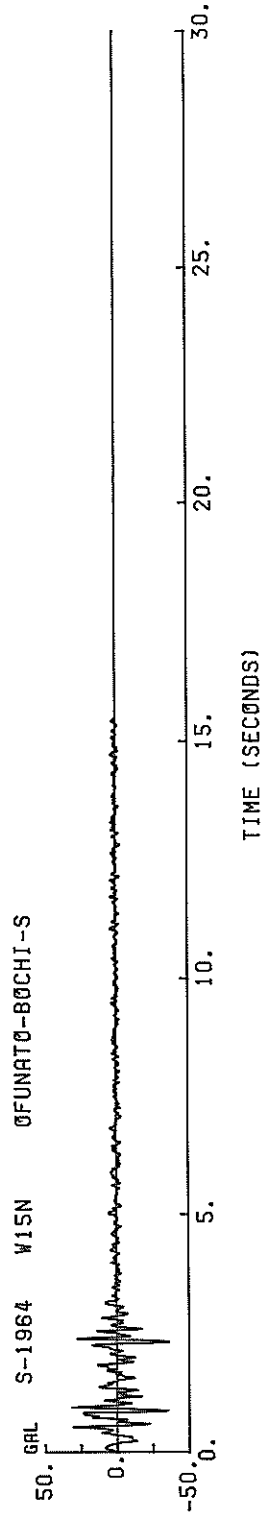
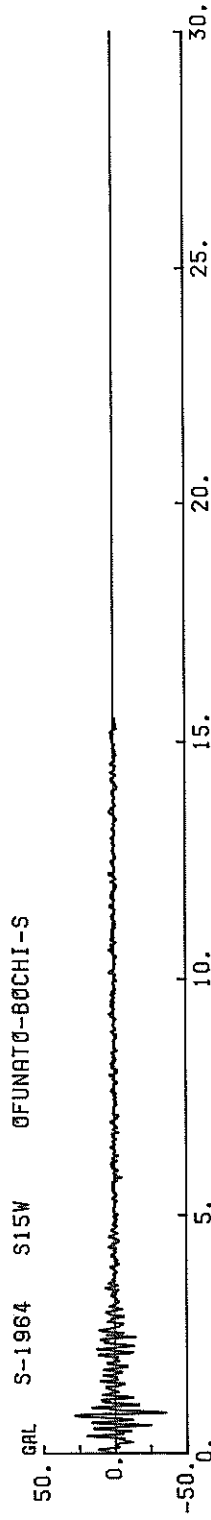
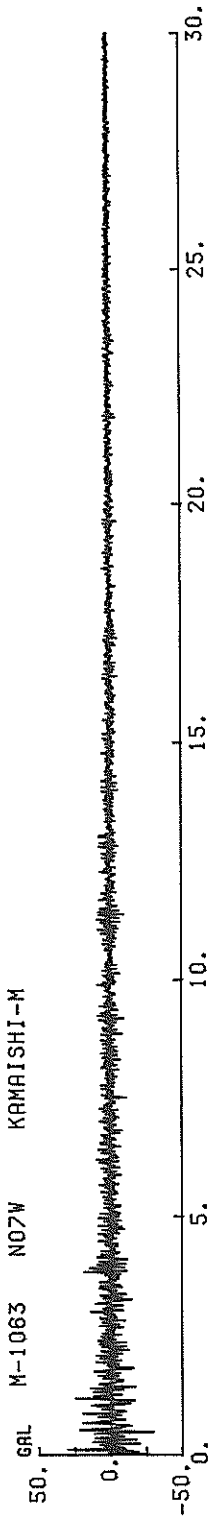


GAL S-1961 EAST MIYAKO-S



GAL S-1961 SOUTH MIYAKO-S





RECORD = S-1910 COMPONENT = SOUTH STATION = KASHIMA-ZOKAN-S
 DATE AND TIME = 1986-2-12-11-59 TOTAL NUMBER OF DATA = 6000
 SAMPLING INTERVAL = 0.010 (SEC) SCAL = 0.10000
 SIGNAL = GR. ACC.
 CONNECTION POINT IN DATA NUMBER = 3172, 6000.

NO.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	2	2	2	2	2	2	2	2	2	2
10	2	2	2	2	2	2	2	2	2	2
20	-5	-6	0	0	0	-6	-5	-3	-4	-5
30	-1	0	0	0	0	0	0	0	0	-1
40	-3	-5	-4	-4	-2	0	0	2	3	5
50	5	3	1	0	-2	-3	-4	-5	-5	-5
60	-4	-2	-1	0	0	0	0	0	-1	-3
70	-5	-6	-2	0	0	4	4	0	-2	-3
80	-3	0	3	5	9	8	4	0	-5	-6
90	-1	0	-2	-6	-9	-14	-13	-7	1	2
100	2	2	0	0	1	4	7	7	1	1
110	-1	-3	-3	-1	-2	-2	-1	0	2	5
120	7	9	8	7	5	2	0	0	0	0
130	0	0	0	3	9	13	14	11	7	2
140	2	0	0	-3	-7	-6	0	12	12	12
150	8	0	-4	-7	-6	-3	-5	-10	-14	-19
160	-25	-8	2	9	15	3	-9	-19	-13	-4
170	3	11	9	3	-6	-14	-10	0	6	13
180	16	9	0	-8	-7	7	16	22	24	19
190	8	7	6	5	5	5	8	2	-2	-2
200	-10	-12	-10	-9	-9	-14	-11	-8	-2	1
210	7	10	4	5	2	6	4	1	-4	-5
220	-1	4	5	2	-1	-5	-6	-2	5	10
230	9	0	-6	-11	-13	0	13	13	8	-4
240	-11	-7	3	13	14	11	2	0	0	5
250	9	10	8	4	0	0	5	11	13	15
260	10	-2	-14	-22	7	2	11	13	2	2
270	-2	3	14	20	20	13	12	6	1	-5
280	-8	-3	-14	-15	-9	-3	0	2	-1	-2
290	0	3	7	12	15	17	18	14	8	6
300	3	4	10	11	5	-4	-16	-28	-12	1
310	12	15	11	13	6	6	2	-2	-5	-1
320	4	11	15	13	6	0	-3	-3	-3	-4
330	-7	-9	-8	-4	3	8	10	9	5	-1
340	-9	-13	-16	-4	0	0	-10	-14	-13	-5
350	1	4	14	14	6	0	4	10	16	19
360	16	12	6	0	-3	-6	-8	-8	-8	-7
370	-5	0	4	11	17	19	14	4	8	-6
380	-6	-6	-5	0	3	0	15	25	35	35
390	20	9	-1	-3	0	4	0	-11	-16	-21
400	-18	7	3	12	15	17	13	6	0	8
410	14	12	4	-5	-11	-17	-23	-11	-12	-9
420	-3	9	12	11	-12	3	10	19	27	29
430	26	17	2	-11	-12	5	8	3	-4	-4
440	-9	0	0	11	-12	2	1	-4	-4	-4
450	0	2	6	10	16	14	16	13	12	4
460	2	6	11	13	13	8	0	-5	-6	-7

TO BE CONTINUED

CONTINUED (S-1910 SOUTH)

NO.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
470	-5	-2	0	4	4	13	18	13	5	7
480	10	7	2	1	-1	-4	-4	-3	-3	9
490	10	9	7	2	0	1	2	2	2	0
500	1	6	11	20	30	36	18	18	0	-12
510	-25	-27	-11	3	14	13	-4	-10	-13	-13
520	-2	2	3	-4	-6	-6	-2	3	6	9
530	10	11	7	3	5	8	6	6	2	1
540	-4	-2	1	-2	-9	-12	-10	-4	1	7
550	16	18	12	4	10	12	16	9	1	-6
560	-17	-22	-18	-17	-14	-12	-11	-5	0	1
570	2	2	6	9	7	0	-3	0	3	3
580	7	8	6	2	-3	-9	-14	-2	18	30
590	26	13	-3	-15	-22	-13	-2	4	-3	-3
600	-8	-11	-6	-5	-20	-15	-20	-22	-14	-1
610	8	17	22	17	0	-13	-26	-33	-26	-3
620	5	3	3	3	4	-3	6	-10	-14	-8
630	-3	6	22	37	44	25	12	0	0	1
640	23	19	8	-7	-27	-46	-48	-32	-17	-7
650	-2	-1	-1	0	4	7	11	12	13	13
660	13	13	4	-3	-12	-17	-24	-25	-22	-9
670	-1	0	6	7	3	-7	-19	-17	-7	-2
680	-2	-4	-5	-7	-9	-10	-12	-14	-15	-14
690	-10	-4	3	11	6	18	16	18	18	29
700	24	10	2	-3	-5	-6	-11	-19	-28	-25
710	-14	-4	1	5	-4	-13	-22	-15	-5	3
720	21	35	38	24	2	-5	-5	1	-6	-14
730	-23	-26	9	16	28	29	24	18	6	-1
740	-7	9	31	55	74	84	82	76	74	77
750	83	89	93	95	94	88	76	63	47	35
760	26	20	9	-20	-85	-163	-193	-200	-136	0
770	137	229	261	288	301	305	293	223	32	-201
780	-369	-491	-528	-547	-529	-488	-461	-410	-368	-333
790	-306	-273	-222	-171	-118	-78	79	168	256	305
800	368	415	454	492	505	446	329	211	7	-81
810	-104	-81	11	157	270	337	371	393	412	415
820	425	396	343	163	-74	-267	-442	-636	-721	-796
830	-811	-787	-704	-549	-384	-213	-42	155	327	488
840	641	796	890	930	806	610	399	89	-98	-201
850	-341	-405	-425	-418	-372	-312	-232	-125	-21	31
860	61	100	129	179	230	260	241	176	117	10
870	-78	-163	-295	-388	-486	-515	-469	-394	-305	-251
880	-190	-183	-114	-256	-359	-401	-449	-515	-29	353
890	439	492	507	471	377	293	245	229	204	353
900	100	19	78	142	-169	-178	-158	-143	-124	171
910	-86	-28	69	164	200	202	152	51	-19	-47
920	-35	-11	9	18	6	-13	-28	-48	-72	-87
930	-88	-56	8	70	120	121	34	-102	-196	-206
940	-167	-74	-32	-30	-57	-90	-92	-39	8	68
950	93	76	43	-7	-79	-177	-286	-422	-454	-450
960	-426	-340	-185	29	263	401	484	517	527	491
970	445	397	342	275	194	75	-37	-123	-175	-183
980	-152	-106	-47	29	80	112	96	43	-22	-65

TO BE CONTINUED

CONTINUED (S-1910 SOUTH)

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
990	-93	-86	-59	-34	-15	-11	-25	-44	-63	-83
1000	-90	-87	-77	-76	-96	-123	-145	-154	-137	-79
1010	-10	76	153	175	169	141	107	63	20	-7
1020	-25	-36	-57	-114	-145	-153	-121	-47	86	154
1030	182	168	143	100	71	112	144	170	182	162
1040	116	53	-6	-30	-37	-42	-65	-92	-118	-198
1050	-249	-231	-174	-66	68	147	214	268	321	334
1060	315	264	199	101	-14	-113	-195	-248	-378	-385
1070	-262	-215	-139	-60	41	96	117	128	126	113
1080	98	53	10	-36	-70	-117	-105	-68	-43	-46
1090	-65	-75	-75	-67	-51	-50	-65	-81	-93	-85
1100	-60	-27	19	76	150	211	207	155	61	-27
1110	-97	-143	-159	-157	-146	-122	-91	-70	-41	-9
1120	65	120	156	191	165	119	73	43	25	25
1130	12	-2	-8	-15	-15	-3	8	16	21	25
1140	24	16	12	45	105	163	186	185	149	81
1150	-11	-107	-149	-173	-179	-150	-135	-124	-120	-120
1160	-124	-124	-131	-137	-104	-72	-43	-9	40	84
1170	109	112	95	71	59	5	52	-101	-31	-151
1180	-153	-128	-97	-62	55	105	169	232	243	233
1190	171	58	-43	-118	-177	-189	-156	-84	-50	0
1200	33	55	50	32	10	-10	-5	18	29	29
1210	6	-25	-61	-107	-84	-32	17	63	103	139
1220	154	164	175	174	163	136	89	54	6	-50
1230	-85	-114	-147	-191	-184	-147	-103	-48	7	44
1240	84	72	70	57	35	18	2	-14	-65	-100
1250	-126	-121	-80	-22	40	101	101	79	62	31
1260	41	68	78	81	70	51	-22	-74	-92	-67
1270	-15	53	110	115	67	12	-2	-70	-87	-89
1280	-89	-89	-88	-85	-82	-81	-81	-80	-82	-84
1290	-56	-11	11	41	59	44	36	31	42	61
1300	76	68	48	18	-7	-30	-26	-12	-5	1
1310	7	10	15	22	33	37	39	43	50	56
1320	56	48	27	5	-36	-74	-100	-114	-111	-78
1330	-47	-9	27	61	68	68	62	54	58	74
1340	72	53	23	-11	-44	-66	-74	-67	-50	-61
1350	-41	-46	-57	-68	-80	-93	-106	-112	-132	-149
1360	-123	-97	-62	-19	-1	-6	-10	-12	23	58
1370	70	74	51	5	-39	-74	-75	-66	-13	10
1380	29	39	41	46	57	69	73	73	70	72
1390	77	82	86	87	85	71	67	61	57	57
1400	51	47	39	23	3	-14	-36	-61	-99	-126
1410	-128	-107	-75	-45	-23	-10	-18	-38	-50	-49
1420	-41	-37	-38	-41	-32	-17	5	33	51	43
1430	25	-52	-51	-55	-45	-28	-14	1	23	33
1440	45	53	49	39	39	49	55	45	45	0
1450	-44	-90	-120	-123	-95	-54	-23	-3	19	38
1460	34	21	-2	-18	-32	-38	-49	-32	7	57
1470	99	132	142	130	95	55	17	0	-3	-8
1480	-14	-15	-11	-1	9	17	19	16	4	1
1490	-5	-14	-8	0	11	32	41	44	49	51
1500	51	47	29	-10	-34	-51	-65	-64	-55	-49

TO BE CONTINUED

CONTINUED (S-1910 SOUTH)

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1510	-44	-37	-25	-9	2	5	-14	-41	-72	-101
1520	-129	-147	-150	-141	-130	-119	-103	-86	-65	-56
1530	-5	13	27	40	63	63	61	54	37	32
1540	22	-1	-18	-29	-39	-46	-29	4	67	127
1550	167	195	221	223	203	170	126	83	49	19
1560	0	-5	-2	-3	-8	-33	-82	-127	-170	-190
1570	-202	-205	-188	-175	-161	-159	-148	-132	-118	-104
1580	-87	-58	-43	-35	-35	-32	-28	-18	2	28
1590	59	84	95	91	68	38	13	-10	-34	-40
1600	-34	-14	39	61	67	70	91	117	142	142
1610	157	187	174	143	119	91	64	40	16	-8
1620	-34	-53	-53	-38	-19	-7	-6	-16	-37	-65
1630	-93	-112	-121	-116	-97	-73	-52	-39	-23	6
1640	41	67	83	72	35	-8	-56	-82	-100	-118
1650	-126	-112	-90	-65	-27	0	20	26	26	25
1660	22	23	37	48	41	27	11	58	74	86
1670	22	39	48	50	50	50	51	58	74	86
1680	87	81	61	39	7	-6	-3	-2	0	-8
1690	-32	-57	-75	-67	-40	-19	-6	-5	-15	-21
1700	-15	-63	-34	19	12	-14	0	11	29	34
1710	26	18	16	16	24	32	25	9	-1	-6
1720	15	-24	-35	-46	-55	-70	-87	-99	-107	-99
1730	-15	-56	-38	-16	-9	-1	-19	-32	-47	-52
1740	-75	-54	-38	-16	-9	-1	-19	-32	-47	-52
1750	-28	-8	5	27	44	50	44	28	18	18
1760	3	18	38	56	67	61	40	12	-16	-48
1770	-74	-85	-84	-74	-51	-21	1	24	35	34
1780	28	20	7	8	15	17	27	28	28	28
1790	28	25	16	10	5	-6	-15	-24	-35	-38
1800	-36	-39	-43	-47	-50	-51	-46	-35	-17	2
1810	21	56	34	31	41	45	50	58	77	81
1820	73	53	21	-8	-51	-82	-109	-133	-131	-117
1830	-93	-58	-19	14	41	50	50	55	52	39
1840	29	25	15	3	0	-5	-9	-4	12	23
1850	30	34	26	12	-24	-44	-59	-47	-36	-36
1860	-28	-23	-29	-27	-13	10	36	54	56	51
1870	41	33	44	44	44	33	16	1	-17	-33
1880	-41	-39	-42	-45	-55	-55	-70	-82	-93	-101
1890	-92	-81	-52	-17	17	27	33	30	18	5
1900	45	21	16	22	27	33	30	18	5	-2
1910	-3	4	21	43	66	87	112	134	131	114
1920	88	57	13	-85	-132	-167	-163	-128	-91	-42
1930	-13	6	14	34	39	48	56	60	66	64
1940	4	42	26	9	-4	-7	6	27	46	61
1950	64	61	41	6	-25	-69	-105	-143	-148	-130
1960	-87	-38	0	53	77	108	96	70	49	22
1970	-87	-38	0	53	77	108	96	70	49	22
1980	-7	-51	-33	-31	-31	-29	-27	-28	-29	-24
1990	12	10	54	52	64	69	62	48	28	15
2000	10	10	34	31	41	45	50	58	77	81
2010	-109	-116	-103	-76	-44	-16	-42	-57	-72	-89
2020	32	18	11	6	7	13	17	29	38	41

TO BE CONTINUED

CONTINUED(S-1910 SOUTH)

NO.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2030	25	35	42	62	73	87	99	108	110	102
2040	77	50	20	-21	-55	-78	-88	-78	-64	-58
2050	-52	-43	-35	-28	-24	-19	-14	-14	-11	-7
2060	-6	-11	-20	-27	-37	-50	-54	-53	-47	-35
2070	-14	5	28	44	56	64	75	77	-15	-1
2080	21	40	60	77	84	85	87	89	89	85
2090	68	41	24	1	-21	-40	-43	-29	-4	11
2100	21	11	3	-1	-9	-15	-31	-42	-50	-56
2110	-69	-87	-90	-83	-61	-30	0	27	49	62
2120	60	47	36	27	19	15	20	33	43	57
2130	66	68	66	53	23	0	-21	-34	-44	-36
2140	-49	-61	-73	-75	-75	-64	-44	-23	-7	11
2150	25	36	45	59	61	65	32	28	28	31
2160	39	39	39	39	37	31	24	16	6	2
2170	-6	-17	-31	-41	-53	-54	-59	-24	-10	0
2180	15	29	43	49	50	43	30	12	-4	-15
2190	-13	-2	11	25	38	48	47	40	31	25
2200	20	11	-2	-7	-2	9	16	20	22	23
2210	22	18	13	10	0	-8	-15	-22	-28	-36
2220	-47	-53	-58	-59	-54	-48	-42	-36	-33	-28
2230	-21	-17	-16	-18	-25	-29	-22	-14	-4	-3
2240	5	6	-4	-17	-33	-48	-54	-56	-53	-40
2250	-21	-7	9	31	39	55	25	19	9	2
2260	9	23	38	50	58	65	62	55	49	36
2270	23	7	-16	-30	-36	-40	-40	-40	-41	-41
2280	-38	-31	-26	-11	13	29	41	55	68	75
2290	70	58	41	21	1	-15	-25	-35	-42	-44
2300	-48	-50	-58	-66	-41	-17	-5	10	20	30
2310	39	42	42	42	42	44	46	46	46	46
2320	46	46	43	32	17	1	-18	-36	-53	-69
2330	-80	-85	-82	-69	-52	-32	-11	10	27	39
2340	40	55	23	15	8	18	28	35	38	45
2350	49	43	38	37	37	39	40	37	32	20
2360	7	-4	-15	-18	-13	-7	-5	-4	-8	-16
2370	-24	-33	-39	-41	-37	-38	-39	-42	-43	-43
2380	-44	-44	-43	-30	-21	-7	6	17	30	46
2390	63	66	66	66	61	56	53	51	51	47
2400	37	28	16	1	-10	-21	-29	-43	-69	-38
2410	-30	-25	-17	-16	-19	-51	-42	-45	-54	-41
2420	-28	-17	-2	15	33	36	39	45	46	45
2430	40	36	34	27	20	16	11	3	-2	-3
2440	-5	-5	-5	-5	0	6	11	18	23	27
2450	27	26	26	21	4	-15	-35	-49	-59	-69
2460	-83	-86	-86	-86	-86	-86	-86	-83	-77	-73
2470	-69	-58	-62	-30	-17	1	10	11	11	12
2480	17	30	41	47	58	65	67	60	54	44
2490	44	50	58	59	62	65	69	74	76	64
2500	48	28	9	-1	-11	-14	-10	-6	1	10
2510	11	14	2	-6	-15	-19	-29	-34	-30	-24
2520	-20	-9	-9	-9	-9	-9	-4	-8	-15	-26
2530	-31	-39	-48	-54	-58	-63	-69	-72	-75	-76
2540	-69	-56	-43	-27	-16	-17	-18	-20	-23	-23

TO BE CONTINUED

CONTINUED(S-1910 SOUTH)

NO.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2550	-22	-18	-16	-10	-7	-2	12	22	34	34
2560	44	44	59	63	67	71	78	75	59	46
2570	42	42	44	45	48	53	55	55	55	55
2580	52	39	25	18	8	-6	-9	-16	-23	-34
2590	-37	-45	-54	-54	-54	-54	-54	-54	-54	-54
2600	-54	-54	-54	-54	-54	-54	-51	-50	-50	-47
2610	-44	-43	-41	-38	-33	-25	-17	-8	0	16
2620	30	44	59	56	56	51	44	37	29	28
2630	28	31	34	29	28	30	46	64	75	88
2640	94	92	85	75	58	35	12	-13	-40	-58
2650	-69	-67	-50	-24	-10	-3	2	11	16	23
2660	27	29	36	43	50	41	22	10	4	0
2670	-14	-17	-20	-20	-22	-22	-22	-15	-9	-5
2680	6	19	27	32	37	40	40	31	17	8
2690	-1	-6	-14	-25	-19	-20	-20	-17	-17	-16
2700	-31	-35	-42	-44	-50	-54	-58	-54	-49	-47
2710	-52	-59	-57	-50	-41	-28	-19	-19	-19	-21
2720	-22	-21	-17	-12	-5	5	16	24	39	54
2730	68	72	83	79	63	49	39	29	17	10
2740	-1	-8	-17	-24	-28	-29	-29	-23	-14	-4
2750	6	16	25	28	25	17	17	15	10	13
2760	21	25	25	27	37	37	37	35	23	17
2770	6	1	0	-3	-5	-6	-6	-10	-18	-33
2780	-52	-60	-88	-109	-119	-114	-105	-96	-88	-84
2790	-75	-61	-56	-51	-42	-40	-37	-21	-11	-11
2800	-7	-4	2	13	33	42	60	78	79	75
2810	67	61	56	53	50	48	48	48	48	46
2820	44	45	46	47	43	36	35	35	26	3
2830	3	0	-10	-14	-23	-36	-43	-37	-31	-29
2840	-29	-33	-37	-45	-45	-51	-58	-72	-74	-68
2850	-61	-55	-51	-46	-41	-38	-32	-29	-23	-19
2860	-16	-11	-5	2	10	18	24	29	35	37
2870	36	34	28	7	3	-5	-11	-18	-17	-17
2880	-17	-17	-18	-16	-12	-8	-2	5	18	31
2890	39	42	42	42	42	39	29	16	9	5
2900	0	-1	-7	-13	-22	-30	-46	-56	-55	-50
2910	-65	-43	-38	-20	-25	-22	-20	-13	-10	-5
2920	2	6	11	15	21	27	33	38	39	39
2930	39	38	35	32	28	27	25	20	17	16
2940	0	-2	-2	-2	-2	-16	-17	-20	-25	-33
2950	-37	-42	-45	-47	-45	-44	-43	-40	0	9
2960	20	30	39	43	41	33	23	14	5	-4
2970	-12	-21	-29	-38	-39	-38	-35	-36	-26	-18
2980	-9	-2	3	8	16	18	8	5	7	13
2990	20	22	16	6	2	-3	-5	-6	-7	-9
3000	-9	-6	-2	0	2	3	0	-3	-5	-7
3010	-10	-14	-17	-14	-14	-14	-13	-15	-11	-6
3020	4	10	23	27	29	30	28	26	23	23
3030	22	20	17	14	11	7	3	-1	-5	-8
3040	-11	-15	-19	-20	-25	-27	-31	-34	-31	-21
3050	-13	-9	-2	6	15	25	34	38	41	33
3060	22	17	12	7	0	-5	-9	-14	-20	-25

TO BE CONTINUED

CONTINUED(S-1910 SOUTH)

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
3070	-26	-21	-15	-10	-7	-1	3	5	11	16
3080	11	4	0	6	0	-4	-4	-4	-4	-4
3090	-3	2	4	6	13	15	17	20	22	23
3100	23	23	23	20	15	12	9	4	-2	-9
3110	-14	-15	-15	-15	-14	-6	-6	-6	-6	-6
3120	-6	-6	-6	-6	-12	-11	-8	-8	-8	-8
3130	-8	-8	-10	-13	-14	-15	-15	-14	-13	-11
3140	-6	-1	4	11	21	30	38	45	48	51
3150	51	50	50	45	42	36	30	25	22	21
3160	21	23	29	29	30	32	37	35	25	14
3170	3	-5	-9	-13	-26	-40	-51	-61	-70	-74
3180	-73	-68	-66	-62	-56	-47	-37	-27	-19	-19
3190	-19	-19	-16	-13	-11	-9	-8	-7	-3	0
3200	4	8	11	17	26	34	37	37	37	36
3210	34	31	30	30	26	23	23	23	22	18
3220	18	16	10	5	0	-13	-21	-33	-35	-35
3230	-32	-24	-16	-8	-1	1	2	3	4	3
3240	0	-4	-7	-10	-13	-15	-19	-25	-29	-32
3250	-30	-25	-18	-12	-5	-2	0	10	13	18
3260	18	22	19	18	15	14	14	14	14	12
3270	11	9	6	6	6	5	4	2	1	0
3280	0	-2	-5	-11	-19	-27	-37	-49	-56	-64
3290	-67	-73	-66	-61	-58	-55	-50	-42	-35	-28
3300	-22	-16	-8	-1	13	27	36	47	56	57
3310	53	48	41	31	22	10	0	-7	-17	-24
3320	-29	-32	-32	-31	-27	-24	-15	-3	2	2
3330	4	4	4	2	1	-3	-2	0	5	7
3340	12	16	25	34	38	39	39	35	30	29
3350	31	32	30	28	24	17	6	-7	-16	-26
3360	-31	-30	-21	-19	-12	-2	8	14	14	14
3370	10	6	3	2	-1	-4	-5	-5	-8	-7
3380	-5	-3	-1	-3	-5	-8	-14	-19	-24	-27
3390	-29	-30	-29	-24	-19	-15	-10	-4	0	3
3400	13	13	12	6	0	-4	-4	-4	0	3
3410	6	11	15	19	25	29	31	30	26	21
3420	18	15	12	8	3	3	3	3	3	3
3430	2	0	0	-4	-5	-19	-25	-36	-38	-42
3440	-39	-38	-27	-13	-5	2	7	8	8	9
3450	10	12	12	12	8	1	-4	-8	-11	-8
3460	-7	-8	-12	-19	-28	-35	-39	-31	-31	-26
3470	-23	-22	-21	-20	-17	-14	-9	-3	2	7
3480	11	12	14	19	22	25	27	31	33	35
3490	39	46	51	51	50	46	45	39	32	25
3500	20	18	17	17	16	13	12	13	14	17
3510	20	22	22	22	19	15	10	0	-11	-24
3520	-34	-41	-51	-57	-56	-52	-48	-45	-44	-43
3530	-34	-40	-40	-40	-41	-42	-45	-46	-49	-46
3540	-61	-62	-62	-66	-7	0	4	0	-1	-6
3550	-12	-14	-14	-13	-10	-10	-8	-6	-2	1
3560	7	14	22	30	34	34	34	32	26	26
3570	24	24	28	28	28	26	21	18	12	6
3580	1	0	-2	-7	-8	-8	-8	-8	-8	-4

TO BE CONTINUED

TO BE CONTINUED

CONTINUED(S-1910 SOUTH)

NO.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
4110	-22	-20	-17	-14	-11	-12	-14	-15	-15	-15
4120	-14	-11	-9	-8	-7	-6	-5	-5	-3	-3
4130	-3	-4	-5	-5	-6	-6	-4	-4	-2	-2
4140	-2	-3	-7	-10	-12	-7	-5	-5	-7	-7
4150	-8	-8	-6	-3	0	1	4	9	14	17
4160	19	21	23	25	28	26	20	19	15	15
4170	13	12	14	15	7	0	-6	-17	-21	-23
4180	-21	-17	-14	-11	-8	-4	0	0	3	-3
4190	5	5	4	2	0	0	0	-3	-6	-7
4200	-9	-9	-9	-9	-9	-9	-9	-8	-5	-5
4210	-5	-3	-2	-1	-2	-5	-9	-12	-14	-15
4220	-18	-20	-20	-21	-23	-24	-25	-26	-24	-24
4230	-26	-26	-25	-21	-20	-20	-17	-15	-15	-12
4240	-10	-5	0	8	11	17	26	41	49	60
4250	61	57	52	46	37	31	27	25	23	18
4260	15	13	9	4	0	-4	-8	-12	-19	-24
4270	-27	-25	-24	-23	-27	-26	-21	-19	-18	-18
4280	-16	-15	-14	-13	-11	-9	-6	-4	-4	-4
4290	-5	-9	-12	-13	-13	-10	-6	-4	-3	-3
4300	-1	-1	0	0	0	3	5	7	9	9
4310	8	12	12	14	15	15	11	9	7	7
4320	5	5	3	2	2	1	0	0	0	0
4330	-2	-5	-8	-14	-22	-30	-34	-37	-36	-37
4340	-37	-36	-34	-31	-28	-23	-19	-11	-2	2
4350	5	8	10	13	14	16	18	20	21	21
4360	22	17	12	8	3	-2	-9	-17	-23	-23
4370	-27	-26	-21	-18	-14	-9	-4	-1	1	2
4380	2	2	-1	-6	-11	-17	-19	-23	-23	-23
4390	-24	-23	-21	-21	-18	-17	-17	-15	-16	-17
4400	-17	-17	-16	-14	-11	-8	-6	-5	-1	0
4410	0	-1	-2	-3	-4	-6	-7	-7	-5	-5
4420	-5	-5	-5	-5	-8	-11	-7	-4	0	1
4430	3	4	6	7	4	3	0	-5	-9	-10
4440	-10	-9	-8	-5	-3	0	3	10	17	22
4450	25	26	32	36	33	31	27	24	17	16
4460	16	18	17	16	14	10	8	8	8	8
4470	8	8	8	9	8	6	2	-1	-5	-8
4480	-13	-19	-20	-24	-28	-28	-27	-24	-23	-23
4490	-23	-19	-18	-20	-20	-21	-24	-28	-29	-30
4500	-27	-21	-14	-7	-1	3	8	15	19	23
4510	26	28	29	29	29	28	26	25	24	20
4520	18	17	17	17	14	11	11	11	7	5
4530	-1	-3	-3	-3	-2	-1	-8	-12	-15	-15
4540	-17	-20	-26	-29	-30	-28	-25	-19	-15	-9
4550	-3	1	4	9	11	15	21	21	22	26
4560	27	29	29	29	29	26	22	20	17	15
4570	13	13	13	11	7	6	4	1	-3	-6
4580	-4	-1	0	3	3	3	3	3	1	0
4590	-1	0	2	6	9	9	9	9	9	9
4600	9	9	6	2	1	-3	-6	-13	-19	-23
4610	-22	-19	-16	-14	-12	-10	-10	-9	-9	-9
4620	-11	-14	-14	-14	-14	-14	-13	-13	-13	-13

TO BE CONTINUED

CONTINUED(S-1910 SOUTH)

NO.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
4630	-14	-14	-14	-11	-8	-6	-2	2	10	14
4640	20	23	24	24	26	28	30	25	22	17
4650	13	9	5	1	-1	-1	3	3	4	6
4660	6	6	9	12	12	12	12	12	13	15
4670	15	14	12	11	11	11	14	14	15	15
4680	12	10	8	5	3	0	0	-3	-8	-12
4690	-16	-19	-21	-24	-27	-27	-26	-25	-20	-17
4700	14	17	20	23	24	26	26	26	12	13
4710	16	17	20	23	24	26	26	26	24	24
4720	21	19	17	16	15	11	10	10	11	15
4730	18	17	15	12	9	8	6	4	3	0
4740	0	2	4	4	4	5	7	7	8	6
4750	5	2	4	-3	-5	-5	-5	-5	-5	-5
4760	-7	-6	-4	-1	1	1	-1	-4	-6	-8
4770	-8	-3	-4	-4	-7	-10	-13	-15	-15	-14
4780	-13	-12	-10	-9	-9	-9	-10	-10	-8	-6
4790	-5	-4	-4	-4	-3	5	5	9	12	15
4800	19	22	25	26	27	27	27	31	27	25
4810	22	22	22	22	19	19	18	18	17	17
4820	16	15	13	11	10	8	5	4	3	1
4830	-2	-5	-7	-4	1	4	7	7	7	7
4840	7	7	7	7	4	4	1	-5	-13	-17
4850	-19	-20	-19	-17	-14	-12	-10	-8	-6	-4
4860	-1	0	0	0	0	-1	-1	-2	-1	0
4870	2	7	13	14	14	14	14	15	15	15
4880	13	12	11	7	3	0	-2	-2	-3	-3
4890	-4	-4	-5	-7	-8	-11	-14	-16	-17	-18
4900	-18	-19	-19	-18	-16	-16	-16	-15	-12	-14
4910	-13	-10	-9	-7	-4	-2	-1	0	1	2
4920	3	5	7	7	7	8	8	7	4	2
4930	0	1	1	0	0	1	1	1	1	1
4940	4	10	11	12	12	13	15	17	19	20
4950	20	21	21	21	21	21	21	21	21	21
4960	21	20	18	17	15	11	7	5	1	-2
4970	-7	-9	-9	-10	-11	-12	-14	-15	-16	-16
4980	-16	-20	-21	-21	-22	-22	-21	-20	-18	-17
4990	-16	-14	-13	-12	-12	-11	-10	-9	-8	-2
5000	-1	-1	-1	-1	0	2	2	2	2	3
5010	5	5	6	6	9	10	12	14	15	10
5020	2	0	-1	-1	-1	-1	-1	-2	-3	-3
5030	-3	-3	-2	0	4	5	6	8	11	13
5040	16	22	24	28	30	32	33	35	35	25
5050	22	22	22	22	22	17	13	11	10	9
5060	6	2	-1	-4	-9	-12	-14	-15	-13	-12
5070	-12	-12	-12	-12	-12	-9	-8	-9	-10	-10
5080	-10	-8	-6	-6	-6	-5	-5	-5	-3	-3
5090	-4	-4	-4	-4	-4	-5	-5	-6	-5	-3
5100	-4	-3	-3	-3	-3	-2	-2	-1	4	4
5110	4	4	4	3	3	3	3	7	11	14
5120	18	18	15	14	12	8	5	2	0	-2
5130	-4	-6	-4	-1	0	1	1	-3	-6	-6
5140	-8	-10	-10	-10	-10	-9	-7	-4	-3	-2

TO BE CONTINUED

CONTINUED (S-1910 SOUTH)

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
5150	-1	0	1	3	6	6	8	11	12	13
5160	14	16	17	15	13	13	10	9	6	3
5170	-1	-3	-3	-3	-3	-3	-4	-6	-6	-6
5180	-8	-11	-12	-13	-14	-15	-19	-21	-21	-22
5190	-17	-15	-12	-11	-6	-1	3	7	8	9
5200	9	9	9	8	6	2	-1	-3	-3	-4
5210	-5	-8	-14	-18	-18	-19	-18	-13	-6	-1
5220	4	11	16	21	23	23	23	23	22	22
5230	22	22	22	22	24	24	24	28	30	31
5240	31	31	32	32	32	34	35	35	35	32
5250	26	19	14	8	1	-3	-5	-9	-13	-19
5260	-22	-25	-27	-28	-29	-26	-30	-31	-35	-36
5270	-32	-31	-32	-32	-32	-32	-28	-25	-24	-24
5280	-22	-18	-15	-13	-11	-8	-5	-2	0	0
5290	0	2	5	4	2	2	2	3	-1	0
5300	2	4	4	6	7	8	8	6	4	2
5310	2	2	2	4	7	8	8	11	14	14
5320	14	14	14	14	11	10	7	5	5	5
5330	0	-1	-1	-2	-4	-5	-6	-3	0	0
5340	-1	-1	-1	-2	-2	-2	-2	-3	-4	-4
5350	-6	-7	-7	-6	-6	-6	-4	-1	-1	-1
5360	-1	-1	-1	-2	-4	-5	-8	-11	-11	-11
5370	-11	-14	-17	-20	-18	-18	-17	-15	-13	-13
5380	-12	-11	-8	-6	-6	-6	-4	-2	0	2
5390	3	5	6	6	5	5	2	2	2	2
5400	4	5	2	1	3	4	3	3	3	2
5410	-2	-3	-3	-3	-3	-3	-2	0	1	1
5420	1	1	1	1	1	0	0	0	4	6
5430	6	10	12	13	13	14	12	10	10	7
5440	5	3	2	0	0	0	0	1	1	0
5450	-2	-3	-4	-4	-5	-5	-5	-6	-7	-8
5460	-8	-8	-10	-13	-13	-16	-20	-22	-25	-25
5470	-25	-23	-19	-17	-14	-11	-8	-6	-5	-5
5480	-4	-1	0	1	3	4	4	4	4	4
5490	5	7	9	10	10	11	11	11	11	11
5500	10	7	5	2	1	-1	-2	-3	-3	-3
5510	-4	-4	-4	-4	-4	-5	-5	-9	-10	-10
5520	-10	-12	-13	-14	-15	-15	-12	-7	-4	-2
5530	-1	1	3	5	7	8	8	9	9	9
5540	10	10	10	11	13	13	16	13	13	13
5550	13	13	13	13	13	13	13	13	13	11
5560	9	9	10	12	14	16	16	16	16	17
5570	17	17	17	17	17	15	11	11	8	1
5580	-1	-3	-4	-7	-8	-15	-17	-20	-22	-26
5590	-27	-27	-28	-29	-29	-29	-29	-29	-27	-22
5600	-19	-18	-16	-15	-14	-13	-11	-7	-2	3
5610	4	2	2	2	2	3	3	1	0	-1
5620	-1	0	0	-2	-4	-4	-6	-8	-7	-6
5630	-6	-6	-2	1	2	2	5	7	10	12
5640	14	14	14	14	14	14	14	14	14	14
5650	14	14	14	14	14	14	12	11	9	3
5660	2	2	2	2	1	0	0	0	-4	-7

TO BE CONTINUED

CONTINUED (S-1910 SOUTH)

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
5670	-7	-9	-9	-9	-12	-17	-18	-20	-25	-26
5680	-23	-21	-21	-21	-21	-17	-14	-11	-7	-5
5690	-5	-5	-5	-5	-5	-10	-12	-11	-10	-7
5700	-4	-3	0	2	2	2	4	7	9	10
5710	10	10	10	10	10	11	11	11	11	11
5720	11	11	8	8	8	7	6	2	1	0
5730	-1	-6	-11	-14	-17	-16	-14	-14	-15	-15
5740	-15	-15	-14	-10	-11	-13	-14	-12	-9	-8
5750	-6	0	1	0	0	-5	-6	-6	-2	-1
5760	-1	-2	-1	0	0	4	6	8	10	11
5770	13	14	15	15	15	15	14	12	10	10
5780	7	5	1	1	0	0	0	-4	-7	-9
5790	8	-8	-8	-8	-9	-9	-8	-6	-5	-5
5800	-3	-2	0	2	3	4	6	8	8	8
5810	5	1	1	1	1	0	-1	-1	-3	-4
5820	-5	-6	-9	-15	-22	-29	-31	-31	-31	-31
5830	-31	-32	-34	-36	-41	-40	-36	-33	-32	-32
5840	-29	-27	-26	-25	-20	-14	-11	-6	-4	-3
5850	-3	-3	-1	8	10	13	14	17	17	17
5860	23	23	23	23	23	23	23	23	23	23
5870	21	17	16	16	14	13	13	13	13	13
5880	10	7	7	7	7	7	7	7	6	2
5890	2	1	0	0	0	-1	-1	-1	-1	-1
5900	-1	-1	-1	-1	-1	-2	-5	-7	-9	-10
5910	-10	-9	-8	-8	-8	-8	-8	-9	-7	-4
5920	-5	-6	-6	-6	-6	-6	-6	-8	-9	-11
5930	-11	-11	-14	-14	-11	-10	-10	-10	-10	-10
5940	-10	-11	-13	-13	-12	-12	-10	-9	-9	-9
5950	-8	-5	-3	-3	-3	-3	-3	-2	-2	-2
5960	-2	-1	-1	-1	-1	-1	-4	-4	-5	-1
5970	-1	0	0	0	0	0	0	0	2	4
5980	4	4	4	4	4	-1	-2	-4	-4	-5
5990	-5	-2	0	0	0	1	1	1	1	1

END

RECORD = S-1910 COMPONENT = EAST STATION = KASHIMA-ZOKAN-S
 DATE AND TIME = 1986-2-12-11-59 TOTAL NUMBER OF DATA = 6000
 SAMPLING INTERVAL = 0.010 (SEC) SIGNAL = 0.10000
 CONNECTION POINT IN DATA NUMBER = 3172, 6000,

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0	0	-1	-2	-3	-4	-5	-6	-7	-8
10	-8	-8	-9	-9	-8	-7	-6	-5	-4	-4
20	-4	-4	-6	-8	-10	-10	-7	-5	-4	-6
30	-9	-11	-12	-13	-12	-9	-7	-6	-7	-6
40	-8	-10	-9	-9	-5	-1	2	1	2	-7
50	0	-4	-12	-22	-24	-20	-15	-9	-1	6
60	1	-2	-1	-4	-6	-7	-9	-12	-6	-2
70	-13	-13	-13	-10	-6	-2	3	10	2	-6
80	-14	-11	-5	2	5	1	-8	-18	-26	-27
90	-21	-13	-7	-1	3	-2	-6	-8	-8	-2
100	2	2	-3	-11	-16	-12	-9	-5	-5	-5
110	0	0	-2	-6	-8	-10	-8	-3	-1	-5
120	-4	-7	-11	-11	-5	0	-4	-9	-16	-24
130	-18	-4	2	-2	-6	-8	-8	-6	-4	-4
140	-4	-5	-7	-10	-14	-17	-16	-2	0	-4
150	-8	-18	-27	-23	-11	0	8	9	2	-5
160	-6	0	7	6	2	0	-4	-4	-6	-8
170	-6	-2	-4	-9	-15	-21	-26	-25	-17	-11
180	-3	8	18	25	22	12	2	-5	-18	-23
190	-18	-17	-15	-14	-13	-12	-12	-12	-12	-28
200	-19	-6	3	14	8	-1	-9	-17	-59	-26
210	-13	-4	4	10	6	-2	-12	-15	-13	-10
220	-9	-12	-16	-13	-8	-6	-4	-3	-5	-9
230	-16	-25	-25	-13	-2	6	14	18	13	6
240	0	-9	-18	-21	-19	-11	-9	-9	-7	-4
250	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8
260	-1	-2	-3	-4	-2	-2	-5	-8	-8	-7
270	-5	-2	5	4	0	5	-1	0	1	-5
280	-8	-19	-28	-23	-19	-11	-1	8	10	6
290	4	1	-7	-12	-6	-1	1	0	-7	-4
300	-16	-13	0	8	8	5	-8	-21	-31	-15
310	-3	8	15	-4	-18	-23	-10	0	10	8
320	-1	-15	-25	-21	-10	-1	6	11	12	10
330	8	4	-6	-16	-21	-23	-13	-3	6	8
340	8	0	-8	-19	-9	0	4	7	4	-3
350	-13	-15	-9	-5	-2	0	0	-3	-9	-8
360	-5	-4	-6	-10	-15	-21	-22	-13	-5	-2
370	0	2	9	12	14	10	5	-6	-13	-5
380	-3	-2	-6	-14	-23	-28	-21	-15	-10	-7
390	-7	-11	-17	-18	-11	0	10	20	9	9
400	0	-9	-12	-9	-8	-10	-15	-21	-24	-13
410	-2	5	-1	-9	-8	-16	-4	7	16	24
420	26	16	4	-3	-12	-10	-4	0	1	-1
430	-7	-14	-20	-15	-2	8	12	4	-4	-8
440	-2	1	3	4	4	0	-2	-6	0	3
450	3	5	1	-9	-18	-26	-14	-6	0	2
460	-2	-9	-13	-14	-14	-3	5	4	0	1

TO BE CONTINUED

TO BE CONTINUED

CONTINUED (S-1910 EAST)										CONTINUED (S-1910 EAST)											
ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
990	-125	-111	-97	-82	-65	-51	-37	-19	-3	3	1510	36	26	6	-18	-54	-86	-104	-122	-109	-73
1000	-7	-18	-24	-29	-24	-6	9	17	0	-17	1520	-50	-39	-24	0	21	35	48	80	108	94
1010	-33	-52	-40	-9	20	56	73	76	76	66	1530	75	48	15	-2	-13	-16	-22	-22	-14	7
1020	50	28	3	-19	-48	-70	-79	-74	-64	-57	1540	32	56	76	85	49	35	17	3	3	-7
1030	-54	-52	-47	-42	-41	-39	-37	-35	-26	-3	1550	-17	-21	-24	-28	-38	-42	-39	-16	-7	-1
1040	21	50	77	97	108	93	59	32	0	-29	1560	-5	-20	-35	-44	-46	-41	-34	-31	-34	-45
1050	-12	3	5	-4	-21	-97	-38	32	-16	-5	1570	-65	-81	-87	-79	-68	-61	-61	-67	-73	-76
1060	14	29	39	55	72	80	83	81	71	42	1580	-71	-54	-33	-24	-12	-3	7	15	28	46
1070	-6	-57	-90	-105	-97	-81	-66	-63	-67	-85	1590	58	63	67	68	65	55	45	33	21	7
1080	-96	-94	-61	-8	37	86	105	108	76	56	1600	-14	-42	-56	-52	-25	-8	8	23	55	28
1090	24	-5	4	30	70	93	90	64	23	-14	1610	12	10	-13	-36	-56	-70	-54	-64	79	92
1100	-32	-15	21	51	73	74	39	-19	-72	-110	1620	10	10	9	11	20	35	49	64	79	92
1110	-125	-78	-23	37	80	90	47	-10	-67	-103	1630	96	90	80	67	47	28	15	7	-1	-19
1120	-166	-168	-143	-121	-114	-104	-99	-87	-49	0	1640	-39	-61	-101	-112	-108	-79	-50	-17	4	23
1130	56	105	124	123	106	80	64	55	46	41	1650	48	58	63	57	54	52	47	48	47	30
1140	27	-15	-58	-83	-101	-105	-88	-65	-41	-12	1660	7	-14	-37	-50	-46	-32	-13	0	6	28
1150	14	42	73	107	128	143	154	146	119	94	1670	49	57	44	22	1	-15	-27	-32	-28	-36
1160	54	10	-41	-78	-108	-130	-145	-155	-164	-161	1680	-49	-63	-68	-57	-27	-4	5	11	15	16
1170	-125	-65	2	73	142	194	206	194	182	162	1690	15	17	19	19	12	0	-13	-24	-31	-30
1180	134	112	86	55	15	-17	-75	-124	-160	-164	1700	-23	-12	6	23	34	43	57	62	67	81
1190	-168	-164	-156	-144	-128	-95	-34	17	47	44	1710	101	108	114	112	111	111	108	110	101	62
1200	16	-15	-51	-80	-80	-59	-38	-18	2	27	1720	18	-30	-71	-97	-114	-125	-123	-119	-117	-110
1210	69	110	126	129	108	61	27	0	-46	-9	1730	-97	-79	-59	-39	-24	-8	6	13	19	20
1220	-127	-148	-180	-205	-195	-140	-50	24	89	145	1740	21	21	16	8	5	0	-19	-18	-11	0
1230	170	176	168	150	133	96	61	19	-1	16	1750	6	11	15	15	7	-1	-11	-20	-45	-60
1240	46	70	86	75	59	33	5	-54	-56	-49	1760	-71	-85	-99	-110	-120	-117	-102	-83	-56	-21
1250	-43	-47	-51	-34	-6	11	34	46	35	23	1770	17	50	64	59	45	34	32	58	40	59
1260	28	32	44	39	25	9	-4	-14	-24	-27	1780	23	10	4	-8	-4	10	22	22	39	55
1270	-26	-18	-2	14	32	74	111	114	106	85	1790	70	78	93	104	111	118	121	122	115	102
1280	58	36	11	-16	-59	-98	-122	-132	-112	-82	1800	77	45	15	-11	-25	-19	-8	-1	11	15
1290	-54	-28	-15	-3	6	20	38	36	21	1	1810	19	19	8	-4	-23	-41	-59	-85	-101	-120
1300	-14	-25	-17	-1	18	37	54	64	59	39	1820	-127	-103	-82	-69	-59	-47	-34	-14	5	24
1310	11	-6	-15	-13	-11	-2	5	14	22	26	1830	37	50	49	39	26	24	33	43	47	43
1320	24	13	5	-5	0	0	-1	-5	-2	-1	1840	34	23	2	-30	26	-68	-75	-70	-45	-32
1330	7	15	24	35	44	38	7	-19	-43	-68	1850	-25	-20	-20	-20	-49	-71	-89	-109	-127	-125
1340	-85	-86	-69	-53	-37	-23	-22	-26	-31	-38	1860	-114	-100	-76	-46	-19	12	76	121	145	162
1350	-36	-20	-2	11	20	22	3	-18	-53	-87	1870	166	158	141	117	93	69	46	28	18	17
1360	-103	-88	-72	-48	-30	-10	-15	-25	-93	-48	1880	13	19	22	21	16	4	-4	-1	3	3
1370	-32	-18	-2	10	21	40	59	76	93	95	1890	-4	-7	-2	-38	-60	-68	-78	-91	-99	-120
1380	81	66	58	56	59	65	68	70	69	50	1900	-56	-55	-66	-76	-74	-61	-49	-39	-30	-25
1390	24	-6	-45	-70	-100	-120	-131	-114	-82	-65	1910	-15	-1	9	13	14	14	13	13	18	22
1400	-66	-20	6	27	53	97	110	105	89	109	1920	25	22	9	-9	-28	-42	-52	-61	-74	-81
1410	125	143	164	180	175	156	139	120	106	107	1930	-90	-94	-85	-70	-46	-19	9	32	47	57
1420	99	77	54	20	-29	-72	-118	-138	-146	-157	1940	60	60	60	63	69	76	84	101	125	148
1430	-177	-188	-196	-196	-197	-198	-190	-167	-143	-125	1950	170	183	190	183	176	163	151	146	135	114
1440	-105	-80	-61	-57	-50	-40	-32	-27	-16	-2	1960	101	76	54	11	-21	-41	-58	-55	-41	-27
1450	12	19	15	6	-11	-36	-58	-80	-88	-66	1970	-14	0	10	18	15	1	-16	-41	-67	-91
1460	-32	7	50	70	97	110	101	87	71	56	1980	-109	-115	-124	-133	-135	-135	-131	-115	-96	-81
1470	41	29	22	16	19	29	35	41	51	67	1990	-62	-55	-38	-32	-28	-21	-6	10	17	14
1480	78	78	83	83	75	58	31	-1	-58	-70	2000	3	-1	-8	-17	-14	-12	-11	-8	-7	-5
1490	-88	-101	-102	-83	-54	-25	-1	23	39	41	2010	-1	0	0	0	2	3	2	0	0	-2
1500	26	18	16	22	30	32	43	45	45	44	2020	-7	-15	-21	-26	-33	-44	-43	-38	-31	-28

TO BE CONTINUED

TO BE CONTINUED

CONTINUED(S-1910 EAST)

Nb.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2030	-21	-15	-7	6	21	44	66	94	119	142
2040	160	160	153	131	131	114	96	73	40	40
2050	-4	-4	-20	-32	-37	-40	-44	-58	-66	-67
2060	-73	-81	-93	-95	-97	-102	-90	-67	-82	-41
2070	-21	23	46	71	80	76	66	59	58	58
2080	56	57	60	61	56	44	29	13	2	-5
2090	-11	-9	-10	-16	-26	-38	-47	-56	-66	-65
2100	-12	3	15	30	48	57	81	97	102	98
2110	81	62	41	13	-7	-23	-32	-45	-63	-55
2120	-58	-56	-49	-43	-38	-39	-48	-56	-71	-83
2130	-90	-90	-82	-61	-43	-31	-24	-17	-12	-5
2140	5	24	36	48	54	59	57	52	45	45
2150	51	25	54	53	51	51	55	59	66	72
2160	68	57	43	24	12	0	9	25	39	42
2170	45	38	28	14	20	20	14	9	4	0
2180	-10	-22	-37	-48	-53	-57	-59	-57	-52	-38
2190	-25	-19	-13	-5	2	8	14	27	36	51
2200	60	64	66	65	61	50	37	25	14	10
2210	7	1	-5	-15	-24	-29	-36	-42	-39	-30
2220	-18	-4	10	19	19	10	-4	-18	-24	-26
2230	-29	-30	-32	-38	-44	-50	-59	-67	-75	-82
2240	-90	-98	-88	-78	-62	-46	-35	19	33	40
2250	44	45	45	45	44	44	44	44	47	52
2260	59	68	73	69	55	35	19	12	4	0
2270	-1	-3	-4	-4	0	5	15	23	33	43
2280	44	26	10	-6	-11	-15	-19	-16	-10	-6
2290	-1	4	12	20	26	30	33	36	37	34
2300	25	14	4	-7	-18	-28	-42	-51	-65	-33
2310	-15	3	9	18	31	49	55	62	66	66
2320	59	50	40	31	22	14	8	4	1	0
2330	4	6	3	3	7	11	17	23	21	6
2340	-4	-17	-28	-45	-60	-79	-120	-120	-103	-6
2350	-79	-66	-56	-46	-32	-16	-9	-6	-2	-3
2360	-4	0	4	9	12	6	-2	-9	-16	-22
2370	-24	-23	-18	-15	-9	0	5	7	11	15
2380	16	27	38	50	63	73	86	84	77	67
2390	53	33	17	5	0	0	-3	-7	-9	-11
2400	-12	-23	-28	-32	-37	-37	-38	-43	-48	-53
2410	-62	-65	-62	-53	-46	-36	-26	-14	0	13
2420	14	10	6	0	-5	-15	-24	-31	-42	-40
2430	-36	-34	-27	-14	6	14	23	28	33	33
2440	37	37	34	34	33	29	27	28	20	20
2450	20	20	23	26	28	28	28	38	36	36
2460	28	17	0	-16	-26	-30	-33	-39	-45	-48
2470	-52	-56	-54	-41	-31	-20	-10	-3	-32	-33
2480	-22	-4	12	31	52	75	87	98	102	95
2490	82	68	58	51	30	30	30	29	24	24
2500	17	9	-1	-12	-24	-39	-59	-75	-84	-88
2510	-80	-76	-76	-77	-77	-82	-74	-65	-57	-50
2520	-50	-44	-38	-32	-31	-26	-20	-17	-10	-10
2530	-1	7	17	25	26	23	25	24	26	26
2540	31	35	39	46	56	61	58	48	35	23

TO BE CONTINUED

CONTINUED(S-1910 EAST)

Nb.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2550	7	72	-7	-7	-7	5	19	29	41	53
2560	66	72	77	72	72	61	55	48	38	33
2570	11	3	-8	-20	-34	-48	-55	-54	-46	-36
2580	-29	-23	-19	-22	-24	-24	-25	-18	-19	-23
2590	-30	-32	-36	-52	-54	-55	-55	-60	-59	-54
2600	-48	-42	-34	-17	-3	6	16	23	26	27
2610	23	18	13	8	1	-9	-20	-25	-19	-12
2620	-6	-3	0	0	4	4	4	4	4	2
2630	3	5	7	11	16	25	27	30	32	37
2640	41	44	46	43	39	33	27	29	33	35
2650	38	39	30	22	13	6	-4	-11	-14	-14
2660	-14	-15	-17	-20	-21	-25	-29	-33	-45	-53
2670	-56	-56	-58	-58	-56	-54	-54	-57	-65	-67
2680	-64	-58	-51	-39	-27	-16	-1	10	16	17
2690	11	5	0	-9	0	7	14	23	33	40
2700	50	61	72	81	80	77	70	59	43	35
2710	26	11	3	-4	-15	-24	-32	-35	-30	-21
2720	-18	-19	-21	-28	-33	-35	-35	-37	-30	-24
2730	-15	-3	5	13	17	23	25	26	26	26
2740	30	33	37	37	44	44	46	45	42	39
2750	36	33	30	26	19	11	5	0	-5	-10
2760	-15	-16	-18	-18	-15	-13	-14	-13	-7	0
2770	1	1	1	-2	-6	-12	-17	-25	-33	-41
2780	-41	-33	-23	-18	-9	-2	2	10	19	27
2790	21	8	-1	-7	-8	-5	1	7	20	14
2800	7	0	-11	-22	-34	-42	-52	-67	-77	-80
2810	-83	-73	-61	-50	-38	-38	-45	-46	-42	-40
2820	-39	-35	-27	-22	-25	-25	-21	-10	11	11
2830	50	50	60	62	71	71	71	71	71	71
2840	71	76	76	73	65	58	48	39	29	18
2850	13	8	1	-4	-8	-9	-5	0	5	7
2860	1	-3	-9	-16	-17	-11	-9	-11	-14	-15
2870	-25	-19	-21	-14	-12	-14	-20	-28	-45	-50
2880	-52	-54	-54	-43	-38	-34	-24	-11	3	15
2890	22	21	13	4	-4	-11	-16	-15	-8	-6
2900	-2	0	4	6	8	11	14	15	15	10
2910	6	1	-7	-17	-22	-29	-34	-34	-29	-22
2920	-14	-3	6	12	18	27	31	31	31	31
2930	31	30	29	27	17	8	2	0	-1	2
2940	0	5	7	11	12	16	19	21	23	25
2950	25	28	30	32	34	36	37	39	38	34
2960	36	37	37	37	32	21	-7	-22	-33	-41
2970	-62	-68	-70	-68	-61	-54	-42	-36	-24	-14
2980	-24	-17	-12	-3	4	17	25	27	27	23
2990	20	19	19	21	22	18	11	6	1	-5
3000	-11	-17	-23	-29	-36	-39	-37	-33	-26	-21
3010	-19	-10	-11	-10	-13	-16	-18	-17	-10	10
3020	6	4	4	2	-4	-11	-16	-17	-14	-11
3030	-11	-7	-3	-3	-6	-9	-10	-11	-13	-18
3040	-23	-27	-29	-29	-26	-13	-1	10	14	12
3050	9	1	-2	0	4	12	11	8	4	9
3060	12	14	21	30	34	38	41	44	49	49

TO BE CONTINUED

CONTINUED(S-191D EAST)										CONTINUED(S-191D EAST)												
ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
3070	49	48	45	39	33	30	29	29	35	37	3590	-11	-16	-21	-21	-21	-18	-15	-12	-8	-8	
3080	37	37	34	22	16	3	-10	-19	-27	-41	3600	-14	-18	-23	-32	-35	-41	-43	-46	-50	-46	
3090	-47	-42	-38	-29	-18	-11	-6	0	7	18	3610	-41	-39	-29	-12	9	-6	9	4	3	3	
3100	30	30	18	7	0	-7	-13	-19	-21	10	3620	5	9	9	9	9	9	9	4	0	0	
3110	-22	-19	-6	2	9	15	19	19	16	10	3630	0	-1	-7	-11	-15	-21	-24	-25	-25	-25	
3120	3	2	6	12	16	16	12	6	11	8	3640	-25	-24	-20	-19	-18	-18	-18	-18	-18	-18	
3130	3	3	3	6	3	-2	-6	-10	-12	-14	3650	7	6	-3	0	4	5	8	14	19	26	
3140	-10	-6	-6	-8	-12	-15	-16	-17	-17	-14	3660	32	33	35	37	40	41	42	45	48	49	
3150	-20	-25	-27	-32	-33	-33	-26	-22	-18	-14	3670	50	51	52	55	55	56	57	57	56	49	
3160	-9	-3	2	6	4	0	-1	5	-10	-16	3680	46	41	32	18	12	10	10	10	10	4	
3170	-19	-12	-16	-20	-20	-19	-16	-14	-10	-10	3690	-3	-4	-5	-9	-12	-13	-17	-23	-26	-30	
3180	-11	-9	-4	6	15	22	30	36	35	31	3700	-35	-39	-41	-42	-42	-42	-43	-44	-45	-47	
3190	27	19	14	10	7	0	-5	-11	-17	-18	3710	-47	-42	-42	-39	-34	-27	-21	-12	-7	-7	
3200	-25	-28	-28	-25	-22	-21	-21	-21	-21	-21	3720	-6	-6	-3	0	0	0	0	6	12	20	
3210	-21	-21	-18	-12	-6	1	13	23	38	46	3730	23	23	24	27	29	29	27	14	8	4	
3220	53	51	45	35	24	17	8	3	-1	-2	3740	0	-5	-5	-5	-6	-7	-9	-15	-14	-13	
3230	-4	-6	-7	-6	-10	-10	-4	5	6	4	3750	-9	-7	-6	-6	-5	-5	-10	-16	-22	-25	
3240	4	4	5	6	6	5	0	-7	-10	-13	3760	-30	-31	-29	-22	-16	-12	-11	-11	-11	-11	
3250	-17	-24	-27	-29	-37	-36	-28	-23	-20	-21	3770	-10	-8	-7	-7	-7	-9	-9	-14	-20	-23	
3260	-28	-28	-28	-32	-32	-32	-41	-44	-34	-44	3780	-34	-29	-23	-23	-23	-23	-23	-23	-23	-18	
3270	-13	2	19	32	41	47	50	46	40	32	3790	19	22	27	27	31	32	31	27	16	19	
3280	21	10	0	-10	-19	-24	-32	-40	-43	-46	3800	-14	-11	-11	-11	-15	-15	-15	-20	-20	-20	
3290	-47	-48	-48	-48	-47	-39	-35	-27	-24	-18	3810	12	8	5	5	-3	-4	-6	-4	-6	-10	
3300	-10	-3	3	15	25	28	28	28	28	26	3820	-20	-19	-19	-22	-23	-23	-31	-31	-29	-24	
3310	23	20	20	20	20	19	15	9	4	1	3830	-15	-18	-22	-23	-28	-31	-32	-31	-29	-24	
3320	0	-4	-7	-7	-8	-8	-6	-6	-6	-6	3840	-19	-14	-10	-7	-6	-4	-4	-1	-1	-1	
3330	-7	-17	-19	-20	-26	-31	-32	-29	-27	-22	3850	-2	-5	-7	-12	-17	-17	-17	-17	-17	-11	
3340	-19	-16	-11	-8	-6	-5	-5	-5	-5	-6	3860	-17	-17	-8	-7	-6	-6	-6	-6	-6	-6	
3350	-9	-12	-16	-21	-24	-24	-28	-36	-37	-38	3870	11	11	14	16	16	16	15	12	6	10	
3360	-39	-46	-46	-46	-46	-44	-40	-38	-26	-19	3880	0	0	0	0	0	4	8	13	15	16	
3370	-13	-12	-9	-2	2	6	7	7	7	7	3890	18	18	18	18	18	18	16	12	7	2	
3380	4	0	-2	-2	-6	-11	-13	-11	-9	-5	3900	-3	-11	-14	-16	-16	-15	-12	-6	-6	-6	
3390	-2	2	6	11	11	11	11	9	9	0	3910	-6	-7	-8	-8	-9	-10	-12	-19	-22	-27	
3400	0	0	8	8	14	17	17	17	17	17	3920	-8	-6	-7	-8	-9	-10	-12	-19	-23	-27	
3410	20	26	28	28	28	28	27	28	29	24	3930	-18	-12	-10	-7	-6	-6	-9	-10	-11	-12	
3420	13	0	-12	-24	-32	-32	-32	-32	-32	-32	3940	-18	-12	-10	-7	-6	-6	-9	-10	-11	-12	
3430	-30	-26	-26	-26	-22	-16	-16	-14	-13	-5	3950	-5	-5	-2	-2	-2	-2	-2	-2	-2	-1	
3440	6	15	26	26	28	38	42	42	42	38	3960	-2	-2	-2	-2	-2	-2	-2	-2	-2	-1	
3450	33	30	25	21	11	20	19	16	11	6	3970	6	7	9	10	9	9	8	4	5	5	
3460	3	-4	-11	-11	-11	-11	-14	-16	-19	-30	3980	3	5	10	15	24	31	34	34	32	30	
3470	-41	-44	-45	-46	-45	-39	-32	-24	-21	-29	3990	27	25	21	15	4	0	-3	-7	-13	-16	
3480	-10	-9	-9	-9	-10	-12	-16	-19	-25	-29	4000	-11	-17	-18	-20	-21	-21	-21	-21	-21	-11	
3490	-30	-29	-27	-22	-16	-11	-5	0	7	14	4010	-11	-13	-15	-16	-18	-19	-21	-26	-31	-36	
3500	22	27	34	39	39	39	35	25	24	24	4020	-39	-39	-40	-41	-43	-43	-43	-49	-49	-48	
3510	24	24	24	24	19	16	16	16	16	15	4030	-32	-36	-39	-40	-42	-42	-43	-49	-57	-63	
3520	11	11	11	11	10	6	-1	-7	-11	-11	4040	-49	-58	-58	-58	-58	-58	-58	-57	-57	-47	
3530	-14	-22	-25	-26	-26	-25	-26	-30	-33	-33	4050	0	5	8	13	19	19	19	21	24	24	
3540	-37	-37	-37	-43	-42	-38	-36	-33	-24	-9	4060	30	30	30	29	22	21	22	27	27	28	
3550	-11	-9	-9	-8	-2	0	1	3	6	9	4070	24	24	24	24	21	21	21	21	21	20	
3560	12	14	15	15	15	15	15	14	10	10	4080	-3	-4	-8	-8	-8	-8	-8	-8	-8	-8	
3570	11	15	16	17	19	19	19	18	11	10	4090	-48	-54	-62	-68	-73	-73	-74	-72	-70	-65	
3580	10	8	5	-7	-7	-9	-9	-11	-11	-11	4100	-55	-53	-50	-43	-37	-35	-35	-24	-24	-17	-9

TO BE CONTINUED

TO BE CONTINUED

CONTINUED(S-1910 EAST)

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
4110	0	6	13	22	30	32	32	33	33	35
4120	36	36	36	36	36	35	31	28	25	19
4130	11	8	5	3	0	0	-2	-2	-3	-3
4140	-3	-3	3	1	3	3	4	5	5	5
4150	4	4	3	2	1	1	0	-1	-1	-1
4160	-2	-3	-4	-4	-4	-4	-4	-4	-4	-4
4170	-5	-10	-10	-10	-10	-10	-10	-10	-10	-10
4180	-7	-8	-8	-10	-12	-12	-13	-16	-17	-16
4190	-15	-14	-14	-14	-14	-15	-14	-11	-7	-4
4200	-1	3	8	11	11	11	11	13	16	16
4210	17	19	19	19	19	19	20	20	20	20
4220	20	20	18	16	14	11	8	3	1	0
4230	-5	-9	-11	-14	-14	-15	-16	-17	-19	-19
4240	-20	-23	-23	-23	-25	-25	-25	-25	-25	-25
4250	-21	-20	-20	-20	-17	-15	-14	-13	-12	-11
4260	-9	-9	-9	-8	-6	-4	0	0	0	0
4270	2	5	6	6	6	6	6	6	4	1
4280	-1	1	0	0	0	0	-8	-8	-6	-4
4290	-1	0	2	3	4	3	2	1	0	-2
4300	-6	-9	-10	-10	-10	-10	-9	-7	-5	-5
4310	-5	-6	-7	-10	-10	-10	-14	-15	-15	-15
4320	-15	-15	-15	-15	-16	-15	-14	-14	-12	-12
4330	-8	-4	0	3	8	13	14	19	25	25
4340	25	25	25	24	23	19	18	14	14	14
4350	13	13	11	5	10	12	13	12	10	10
4360	7	3	0	-5	-8	-10	-12	-13	-12	-10
4370	-28	-30	-30	-28	-26	-26	-23	-20	-13	-10
4380	-7	-7	-1	2	3	4	4	1	0	-1
4390	-8	-9	-9	-9	-6	-4	-3	-4	-5	-7
4400	-8	-8	-8	-8	-6	-4	-4	-2	1	5
4410	5	5	5	6	6	7	7	7	7	10
4420	11	11	11	11	10	6	2	2	3	5
4430	11	13	17	19	19	19	18	18	17	17
4440	15	14	13	10	9	8	8	11	13	14
4450	14	17	18	18	18	18	17	10	7	7
4460	4	3	2	2	0	-1	0	2	4	5
4470	7	8	8	8	7	5	1	-2	-6	-6
4480	-6	-6	-4	-1	-1	-1	-1	-1	-1	-5
4490	-5	-5	-4	-2	-2	-1	-1	-1	-1	-5
4500	-8	-4	-2	-2	-1	0	0	0	0	-2
4510	-5	-2	-2	-2	-1	-1	-1	-1	-1	-10
4520	2	2	1	-3	-3	-3	-3	-3	-3	0
4530	-21	-22	-22	-22	-20	-20	-20	-17	-16	-14
4540	-13	-13	-13	-13	-12	-10	-8	-5	-5	-5
4550	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5
4560	-5	-5	-5	-5	-5	-6	-6	-6	-6	-7
4570	-8	-12	-17	-19	-20	-23	-25	-25	-24	-22
4580	-21	-20	-19	-16	-12	-7	0	5	6	15
4590	16	17	17	17	17	17	17	17	20	21
4600	21	21	26	28	28	28	29	28	25	24
4610	23	23	23	23	23	22	21	20	19	16
4620	13	12	12	11	11	11	9	8	6	3

TO BE CONTINUED

CONTINUED(S-1910 EAST)

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
4630	3	3	3	3	2	3	4	5	3	0
4640	-1	-1	-5	-7	-7	-7	-8	-9	-10	-10
4650	-10	-10	-10	-10	-11	-14	-18	-19	-20	-20
4660	-20	-20	-17	-14	-13	-5	-2	0	7	13
4670	16	16	16	16	15	12	6	4	4	7
4680	8	9	13	16	16	16	18	23	26	26
4690	27	27	28	29	28	25	25	24	19	17
4700	15	9	6	5	1	0	0	0	-1	-5
4710	-6	-10	-11	-9	-7	-7	-8	-10	-11	-11
4720	-12	-14	-16	-16	-16	-13	-14	-17	-18	-19
4730	-20	-20	-24	-27	-27	-28	-28	-28	-27	-22
4740	-19	-16	-14	-13	-13	-12	-10	-9	-7	-4
4750	-2	0	3	7	11	14	14	15	16	16
4760	16	17	16	14	13	12	12	9	9	8
4770	4	3	4	5	8	11	11	11	-12	-17
4780	-20	-21	-21	-18	-14	-11	-13	-13	-13	-10
4790	-7	-4	-3	-2	-2	-5	-15	-25	-26	-26
4800	-26	-26	-26	-25	-21	-18	-18	-17	-15	-13
4810	-12	-12	-10	-7	-3	1	3	7	12	14
4820	14	11	9	9	9	9	9	9	10	11
4830	13	14	15	16	18	18	18	18	18	18
4840	18	18	18	18	18	18	15	14	13	13
4850	13	13	13	16	17	17	17	14	11	9
4860	6	4	4	4	3	3	4	6	6	5
4870	2	-3	-7	-13	-18	-18	-17	-15	-12	-11
4880	-8	-4	-3	-3	-3	-3	1	4	5	6
4890	8	10	11	13	12	10	9	9	10	10
4900	15	21	23	28	35	36	39	41	42	42
4910	42	42	42	42	42	41	37	40	41	40
4920	38	36	31	25	20	16	13	7	3	3
4930	-1	-6	-8	-10	-12	-15	-17	-17	-17	-16
4940	-12	-12	-12	-12	-7	-7	-7	-5	-5	-5
4950	-2	-2	-2	-2	2	2	2	2	2	1
4960	1	0	0	-1	-1	-1	0	1	2	2
4970	2	2	1	0	-2	-1	0	1	2	2
4980	8	7	7	6	2	0	-4	-6	-7	-7
4990	-11	-17	-18	-17	-14	-12	-9	-5	0	3
5000	7	13	17	20	23	26	26	27	27	26
5010	22	18	18	13	12	8	7	2	-3	-7
5020	-7	-10	-12	-12	-12	-12	-15	-18	-15	-13
5030	-12	-12	-12	-12	-11	-11	-7	-5	-2	0
5040	1	3	9	9	9	9	9	9	10	11
5050	11	11	12	16	16	16	16	16	13	11
5060	3	0	-4	-7	-8	-11	-11	-11	-11	-11
5070	-11	-13	-14	-17	-21	-23	-24	-25	-27	-28
5080	-28	-28	-28	-28	-28	-27	-22	-20	-20	-10
5090	-8	-7	-7	-7	-7	-7	-7	-7	-7	-7
5100	-6	-2	0	6	14	20	25	33	42	47
5110	47	47	47	47	46	44	44	44	44	44
5120	44	44	44	44	54	53	47	46	46	46
5130	45	42	38	36	31	24	18	13	7	1
5140	-3	-5	-5	-5	-9	-14	-16	-21	-27	-27

TO BE CONTINUED

CONTINUED(S-1910 EAST)										
ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
5670	12	12	12	12	12	10	8	5	3	3
5680	3	3	2	0	-5	-5	-8	-14	-16	-15
5690	-13	-16	-17	-17	-17	-17	-17	-17	-17	-12
5700	-10	-7	-5	-2	1	3	5	7	10	10
5710	10	10	10	10	8	7	8	16	16	22
5720	22	21	18	11	10	9	9	8	7	6
5730	4	4	-1	-4	-5	-6	-7	-9	-10	-11
5740	-12	-12	-12	-12	-12	-10	-6	-5	-4	-2
5750	-1	-1	-1	-1	2	2	2	3	5	6
5760	6	5	5	6	7	7	7	7	7	7
5770	7	6	3	0	0	0	0	0	-1	-2
5780	-2	-2	-2	-3	-3	-7	-7	-7	-7	-7
5790	-2	-2	-2	-2	-1	-1	-1	-1	-1	-1
5800	-2	-2	-2	-2	0	2	5	8	9	11
5810	14	16	17	19	19	19	19	19	19	19
5820	19	19	19	19	15	12	12	12	12	9
5830	8	7	7	6	2	1	1	1	1	0
5840	0	-1	-3	-4	-5	-5	-6	-6	-7	-9
5850	-10	-11	-13	-14	-16	-16	-20	-24	-27	-22
5860	-21	-17	-18	-18	-18	-18	-18	-11	-10	-8
5870	-5	-3	0	3	6	9	9	10	11	12
5880	14	15	18	20	22	22	21	17	15	13
5890	11	9	8	5	2	0	-3	-7	-13	-16
5900	-16	-16	-13	-12	-12	-12	-10	-8	-7	-5
5910	-5	0	1	0	0	-1	-2	-4	-5	-7
5920	-8	-7	-5	-5	-4	-4	-2	-1	0	0
5930	1	1	1	1	1	1	1	1	2	4
5940	5	5	5	5	5	5	5	6	6	6
5950	6	6	6	6	7	7	7	7	7	3
5960	0	0	0	0	-1	-2	-2	-2	-2	-2
5970	2	1	0	1	1	0	0	-2	-1	2
5980	2	1	1	1	1	1	0	-1	-3	-5
5990	-6	-8	-10	-10	-10	-11	-13	-15	-15	-18

END

CONTINUED(S-1910 EAST)										
ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
5150	-27	-27	-27	-27	-27	-27	-27	-27	-27	-24
5160	-23	-20	-20	-20	-17	-15	-11	-9	-9	-11
5170	-14	-16	-17	-16	-15	-15	-12	-8	-8	-7
5180	-6	-4	-1	0	0	1	4	8	11	12
5190	13	13	16	16	16	16	11	11	11	11
5200	11	11	11	11	11	14	16	17	17	17
5210	17	17	17	16	16	16	14	12	12	12
5220	12	12	12	12	12	12	12	12	12	12
5230	12	12	12	11	11	11	7	6	6	6
5240	6	5	5	6	7	7	6	4	3	4
5250	7	10	13	17	18	21	22	26	28	27
5260	27	24	20	19	19	16	10	5	5	1
5270	0	0	-4	-16	-14	-17	-17	-17	-17	-17
5280	-16	-14	-15	-17	-18	-19	-20	-20	-20	-21
5290	-23	-27	-28	-29	-30	-33	-32	-28	-28	-26
5300	-26	-26	-26	-20	-19	-14	-12	-9	-9	-7
5310	-2	0	1	5	8	8	9	10	10	10
5320	10	10	10	10	10	10	11	11	8	6
5330	6	6	6	1	1	0	0	-5	-5	-4
5340	-6	-7	-7	-8	-8	-9	-7	-2	-1	-1
5350	0	2	5	7	7	7	7	7	7	7
5360	9	9	9	10	15	15	15	15	15	14
5370	13	9	8	5	2	1	1	1	0	-1
5380	-2	-2	0	3	3	5	7	7	4	2
5390	1	0	-3	-4	-6	-9	-12	-12	-13	-13
5400	-13	-13	-13	-13	-11	-10	-7	-7	-6	-6
5410	-6	-6	-6	-6	-6	-6	-6	-4	-3	-3
5420	4	6	9	9	9	9	9	7	4	3
5430	2	1	0	-1	-1	-1	-2	-2	-2	-1
5440	-1	0	1	0	0	0	2	5	6	8
5450	8	8	8	9	10	9	7	5	3	1
5460	0	0	-2	-2	-3	-4	-7	-8	-10	-11
5470	-10	-9	-8	-9	-9	-9	-9	-9	-7	-4
5480	-2	-1	-1	-1	-1	-1	-1	-1	-1	-2
5490	-4	-4	-4	-4	-2	0	-1	-1	-1	-2
5500	-5	-4	-3	-4	-6	-7	-11	-12	-13	-13
5510	-13	-13	-14	-19	-19	-19	-20	-22	-22	-22
5520	-22	-22	-22	-20	-22	-23	-22	-21	-19	-18
5530	-18	-16	-14	-10	-8	-6	-3	-1	0	1
5540	1	2	5	6	7	8	8	10	11	11
5550	15	16	15	13	12	12	12	12	12	12
5560	12	12	12	13	15	15	15	16	16	16
5570	16	16	16	15	10	9	6	-2	-3	-3
5580	-3	-3	-9	-10	-10	-10	-17	-20	-20	-20
5590	-20	-20	-20	-20	-20	-16	-13	-11	-8	-5
5600	-15	-14	-13	-13	-14	-14	-13	-11	-8	-5
5610	-5	-5	-5	-5	-2	0	0	0	0	0
5620	0	0	0	0	0	0	0	3	5	6
5630	7	7	7	7	7	7	7	7	7	7
5640	7	7	7	7	7	7	7	9	9	9
5650	9	12	12	12	12	12	12	12	12	12
5660	12	12	12	12	12	12	12	12	12	12

TO BE CONTINUED

RECORD = S-1910 COMPONENT = DOWN STATION = KASHIMA-ZOKAN-S
 DATE AND TIME = 1986-2-12-11-59 TOTAL NUMBER OF DATA = 6000
 SAMPLING INTERVAL = 0.010 (SEC) SCAL = 0.10000
 SIGNAL = 6R ACC.
 CONNECTION POINT IN DATA NUMBER = 3173, 6000,

RD.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	4	2	0	-1	-3	-5	-7	-9	-10	-11
10	-12	-13	-14	-15	-15	-15	-15	-15	-13	-11
20	-8	-6	0	7	14	19	23	26	27	20
30	12	4	-6	-17	-21	-21	-21	-20	-19	-19
40	-21	-21	-17	-14	-12	-10	8	33	37	29
50	18	6	-2	-8	-10	-9	-10	-10	-18	-26
60	-30	-32	-26	-21	-15	-10	-4	-2	0	-17
70	1	2	9	11	8	6	3	1	0	-1
80	-24	-12	-11	-6	0	6	16	25	24	14
90	23	-17	-12	-8	0	6	16	25	24	14
100	0	-13	-25	-18	-15	-12	-9	-5	-5	-8
110	-11	-13	-13	-13	-7	-2	2	5	6	9
120	12	14	11	5	-1	-6	-14	-2	11	14
130	4	-11	-24	-31	-31	-22	-14	0	11	17
140	13	4	0	3	6	6	6	0	-3	-7
150	-8	-14	-5	0	3	4	6	7	4	-4
160	-6	-14	-15	-17	-19	-19	-12	-4	5	5
170	13	18	21	14	1	-12	-26	-36	-31	-15
180	3	21	31	34	23	5	-11	-17	-21	-25
190	-21	-19	-18	-16	-14	-10	0	6	-1	-5
200	-2	8	10	3	-8	-15	-8	-8	-2	12
210	17	11	0	-7	-16	-19	-14	-7	-2	-4
220	-13	-13	0	16	29	31	20	5	-10	-19
230	-22	-22	-22	-21	-14	-10	-7	-5	0	-4
240	-8	-22	-22	-11	0	3	7	12	15	15
250	15	11	5	-4	-13	-19	-18	-8	4	13
260	14	11	7	1	3	9	14	16	15	10
270	8	3	3	1	0	-1	-3	-10	-14	-21
280	-28	-41	-38	-21	-4	6	16	23	26	23
290	14	4	15	16	7	-10	-28	-36	-24	-11
300	-4	4	20	26	21	15	11	9	7	1
310	4	20	26	21	15	11	9	7	1	-7
320	-19	-28	-26	-18	-7	5	14	16	16	13
330	8	5	6	11	6	0	5	9	6	-2
340	-7	-14	-25	-19	-14	-15	-14	-14	-14	-14
350	-12	-8	-3	1	8	21	15	3	-2	-4
360	-4	-3	-1	0	3	5	2	-2	-4	0
370	13	22	17	5	-9	-27	-30	-14	-5	6
380	15	2	-7	-12	-13	-8	-5	-3	5	0
390	-6	-15	-24	-22	-16	-13	-13	-15	-11	-1
400	5	7	0	-12	-23	-34	-43	-35	-17	-2
410	19	32	29	27	19	23	30	36	32	27
420	22	11	9	9	3	-1	-14	-27	-34	-34
430	-29	-22	-16	-6	3	3	4	6	9	9
440	14	16	5	-2	-12	-18	-13	0	16	29
450	37	21	8	-14	-19	-13	-3	12	8	0
460	-5	-7	-4	-1	-1	-6	-11	-20	-28	-28

TO BE CONTINUED

CONTINUED (S-1910 DOWN)

RD.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
470	-22	-14	-10	-4	2	0	-5	-8	-4	-1
480	1	1	1	2	2	3	3	-3	-4	0
490	1	-2	-5	-9	-9	-12	-9	-4	0	4
500	9	11	3	-9	-22	-8	10	26	23	7
510	12	3	-7	-13	-3	13	37	25	7	23
520	-5	-9	-7	-7	-9	-9	-14	-24	-31	-32
530	-28	-19	-9	-2	-4	-9	-13	-12	-6	-1
540	1	13	26	20	10	-3	-12	-10	-6	-1
550	-2	5	-15	-11	4	20	33	25	23	15
560	9	6	5	8	11	12	5	-4	-11	-21
570	-30	-33	-33	-32	-30	-28	-28	-23	-14	-7
580	-20	-27	-32	-27	-15	-6	-2	-2	-1	-1
590	5	5	1	-6	-10	0	17	26	24	1
600	12	1	-8	-21	-18	-3	18	28	17	-5
610	-37	-63	-61	-39	10	51	77	77	64	52
620	37	21	8	-9	-22	-28	-12	1	8	7
630	-2	0	8	18	22	14	-1	-23	-24	-13
640	-6	-8	-23	-53	-70	-53	-26	0	18	15
650	1	-7	-10	-9	-5	4	10	18	-9	-16
660	-12	6	11	9	-7	-13	-9	0	3	4
670	11	25	40	52	49	21	2	-12	-26	4
680	-40	-44	-40	-31	-19	-2	14	25	27	32
690	32	32	35	30	20	10	-7	-18	-24	-26
700	-26	-5	-3	-7	-18	-31	-36	-31	-22	-12
710	1	14	19	21	20	14	6	-2	-6	0
720	2	3	1	-10	-19	-14	-7	-7	1	14
730	4	-30	-32	-25	1	21	29	33	27	15
740	-8	-30	-47	-36	-16	0	4	8	14	16
750	16	16	15	9	5	-1	-1	-1	4	9
760	8	3	-2	-11	-19	-23	-23	-9	4	14
770	3	-3	5	3	11	15	12	7	0	-8
780	-12	3	-5	29	21	0	-25	-52	-17	-21
790	6	-14	-30	-58	-40	-19	0	17	44	77
800	60	44	30	38	39	34	24	10	-4	-37
810	-15	5	20	38	39	34	24	10	-4	-27
820	-54	-77	-85	-67	-36	-12	6	8	-7	-19
830	-26	-20	-6	-4	-2	-6	-20	-22	-17	-7
840	-5	-9	-27	-39	-40	-6	13	22	27	29
850	30	32	36	49	67	77	73	58	42	18
860	-10	-19	-13	-1	13	23	27	28	26	18
870	-1	-17	-21	-21	-21	-21	-21	-12	-10	-10
880	-8	-6	-7	-16	-31	-41	-36	-18	-1	13
890	25	31	31	31	31	28	18	5	-7	-14
900	-15	5	6	6	-12	-30	-52	-67	-69	-54
910	-32	-20	-19	-25	-29	-23	4	35	71	89
920	88	69	46	25	24	-9	-10	-11	-14	-19
930	-23	-25	-25	-24	-17	7	4	2	-9	-9
940	-9	-8	5	13	21	15	8	16	35	47
950	50	38	28	18	3	-10	-20	-22	-20	-19
960	-23	-31	-29	-13	2	14	18	25	37	47
970	49	46	46	54	46	54	46	26	1	-23
980	-40	-49	-53	-54	-54	-42	-29	-11	-1	4

TO BE CONTINUED

CONTINUED(S-1910 DOWN)										CONTINUED(S-1910 DOWN)											
ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
990	5	13	26	42	48	40	32	24	13	6	1510	-27	-19	-18	-18	-18	-11	2	15	26	30
1000	1	-5	-15	-25	-28	-15	-9	-20	-33	-58	1520	31	33	31	23	17	13	7	0	0	9
1010	-93	-74	-62	-54	-28	-34	-35	-27	-11	14	1530	22	40	52	57	49	33	25	17	2	7
1020	55	83	87	75	49	11	-25	-53	-75	-80	1540	-9	3	-4	-8	-14	-25	-14	-25	-14	-8
1030	-68	-50	-35	-21	-7	0	7	7	10	21	1550	-4	-9	-12	-16	-19	-18	-32	-9	-1	-7
1040	38	54	80	110	110	106	90	70	50	0	1560	13	15	11	6	3	0	-4	-9	-16	-21
1050	-36	-60	-77	-92	-111	-126	-126	-111	-82	-54	1570	-25	24	-10	6	17	23	16	-9	-13	-22
1060	-26	-7	6	22	38	48	50	54	60	61	1580	-24	-17	-11	-5	-3	-13	-25	-33	-34	-32
1070	51	42	31	19	9	-3	-9	-7	4	12	1590	-30	-22	-15	-16	-17	-16	-14	-12	-11	-8
1080	12	13	21	25	17	3	-13	-30	-45	-59	1600	-1	4	11	18	19	27	36	44	54	63
1090	7	13	21	25	17	3	-13	-30	-45	-59	1610	65	56	42	30	20	11	9	8	-12	-6
1100	-71	-74	-61	-65	-67	-69	-70	-65	-54	-35	1620	2	7	14	17	9	0	-4	-8	-23	-46
1110	-6	12	29	40	36	32	32	28	19	13	1630	3	13	21	18	4	-2	-9	-23	-34	-7
1120	3	0	-1	7	18	31	44	51	55	62	1640	-55	-64	-66	-66	-65	-51	-38	-25	-9	7
1130	69	64	59	50	37	14	-8	-18	-20	-12	1650	23	36	42	38	24	4	-11	-16	-8	-2
1140	-4	-3	-11	-19	-30	-52	-28	-23	-17	-14	1660	6	23	33	48	51	45	30	12	-2	-11
1150	-17	-22	-22	-16	-11	-1	8	19	32	43	1670	-26	-37	-28	-18	-9	-4	5	5	5	5
1160	49	57	57	59	63	60	55	50	44	36	1680	2	-5	1	8	13	19	30	35	38	37
1170	16	10	-28	-38	-43	-43	-37	-29	-19	-10	1690	32	28	25	22	20	18	16	15	15	12
1180	2	11	15	10	-3	-21	-38	-62	-59	-59	1700	6	0	-2	-6	-6	-6	-7	-8	-11	-11
1190	-59	-52	-47	-41	-29	-15	-2	9	23	26	1710	-11	-11	-12	-13	-13	-5	0	-2	-7	-11
1200	20	19	23	29	31	22	14	19	29	37	1720	8	6	0	-4	-4	-4	-4	0	4	6
1210	45	40	24	16	24	34	28	6	-15	-35	1730	-11	-9	-8	-11	-11	-8	-4	-23	-20	-17
1220	-5	0	5	16	24	34	28	6	-15	-35	1740	-13	-9	-2	6	11	21	34	35	40	30
1230	-52	-74	-71	-63	-57	-54	-52	-46	-35	-18	1750	23	19	-2	1	2	0	2	0	-3	-12
1240	1	24	44	53	47	39	29	15	3	-3	1760	-15	-10	-5	0	1	3	5	5	5	5
1250	-4	1	3	3	0	-4	-13	-14	-19	-24	1770	5	7	9	10	10	11	12	11	8	1
1260	-29	-34	-46	-30	-4	14	31	37	29	13	1780	-2	0	8	15	17	20	20	30	35	46
1270	-4	-23	-37	-39	-33	-24	-17	-14	-17	-23	1790	49	42	36	28	21	15	10	8	6	3
1280	-24	-16	-8	-1	14	17	14	-2	-7	-15	1800	-2	-7	-12	-21	-30	-37	-43	-45	-40	-32
1290	-15	-9	-5	4	13	25	33	35	40	42	1810	-25	-17	-7	2	11	16	7	2	-2	-7
1300	33	28	22	16	7	-3	-9	-14	-20	-21	1820	-2	0	8	8	8	4	-4	-13	-21	-29
1310	-21	-20	-16	-12	-8	-2	7	23	36	42	1830	-34	-34	-28	-33	-17	-10	-1	6	-11	-10
1320	46	44	34	24	12	0	-17	-29	-54	-91	1840	23	27	25	14	3	0	-3	-3	1	7
1330	-109	-104	-87	-69	-47	-28	-12	-9	-4	2	1850	-8	-4	-1	-3	0	0	7	13	13	12
1340	12	22	28	23	10	-3	-18	-35	-49	-55	1860	16	29	33	26	20	16	14	13	12	16
1350	-53	-49	-46	-44	-40	-35	-27	-17	-4	0	1870	7	0	-3	-2	0	5	9	9	-12	-15
1360	4	4	5	5	7	7	7	1	0	-1	1880	17	16	12	7	4	0	-4	-9	-9	-10
1370	2	3	5	12	22	25	25	25	23	13	1890	-17	-14	-9	0	10	18	19	11	5	-1
1380	3	-2	-6	9	-10	-12	-16	-14	-6	1	1900	-11	-17	-23	-28	-34	-39	-36	-26	-16	-8
1390	10	17	25	26	12	5	-5	-12	-12	-2	1910	3	19	30	41	49	51	52	52	49	45
1400	11	21	27	35	38	40	41	37	32	25	1920	40	36	37	24	15	8	7	6	1	-4
1410	20	15	7	-1	-11	-25	-35	-40	-44	-48	1930	-6	-15	-15	-16	-16	-14	-12	-2	-2	0
1420	-51	-50	-45	-30	-8	7	19	25	18	3	1940	1	5	10	18	26	33	39	44	47	42
1430	-2	-7	-7	-4	-4	-4	-10	-12	-14	-14	1950	40	37	33	29	21	15	5	4	-13	-22
1440	-18	-20	-25	-30	-24	-11	8	27	41	50	1960	-28	-32	-26	-23	-19	-16	-12	-4	-8	-5
1450	50	47	42	37	27	11	-1	-13	-22	-27	1970	-2	0	0	0	-1	-1	-2	-4	-9	-15
1460	-27	-29	-27	-15	-7	0	1	-4	-6	-5	1980	-21	-29	-39	-47	-51	-51	-49	-42	-33	-21
1470	0	0	-1	-6	-9	-11	-9	-4	0	6	1990	-14	-3	10	19	30	38	39	39	38	34
1480	13	24	32	39	47	43	51	17	5	-2	2000	31	26	22	17	14	15	20	21	20	22
1490	-5	-3	2	5	6	6	10	12	1	-22	2010	5	8	11	14	14	15	15	16	8	8
1500	-32	-54	-68	-80	-74	-70	-66	-56	-44	-34	2020	24	28	30	35	33	26	20	16	8	2

TO BE CONTINUED

TO BE CONTINUED

CONTINUED (S-1910 DOWN)

NO.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2030	2	2	2	2	2	6	7	7	7	7
2040	7	10	12	11	11	11	9	4	1	1
2050	3	1	-1	-4	-10	-18	-22	-27	-30	-30
2060	-28	-28	-31	-39	-37	-32	-23	-10	-9	-15
2070	-19	-23	-32	-36	-34	-31	-32	-34	-35	-37
2080	-35	-29	-21	-12	-6	-3	0	3	5	6
2090	10	12	13	16	22	23	24	26	28	32
2100	32	35	35	27	25	21	16	15	15	15
2110	14	15	19	25	28	29	30	31	28	23
2120	18	10	3	-1	-9	-17	-22	-28	-30	-31
2130	-28	-24	-21	-21	-22	-23	-24	-24	-22	-19
2140	-13	-5	-1	1	3	4	4	4	3	-1
2150	-6	-8	-7	-4	-4	-6	-9	-11	-12	-13
2160	-14	-15	-16	-15	-11	-12	-9	-7	-3	-3
2170	-1	1	3	6	5	0	2	12	11	9
2180	9	12	17	18	18	17	15	12	11	11
2190	8	5	0	-5	-2	4	5	9	11	11
2200	12	10	9	6	2	4	4	4	4	3
2210	2	4	4	3	2	0	-3	-6	-8	-10
2220	-12	-13	-13	-11	-10	-8	-6	-5	-4	-1
2230	3	7	14	19	24	26	29	30	25	20
2240	18	13	11	5	1	-1	-5	0	3	6
2250	7	8	6	3	0	-1	-10	-15	-21	-24
2260	-25	-25	-23	-21	-21	-21	-19	-16	-13	-11
2270	-11	-11	-10	-6	-2	0	3	7	13	13
2280	18	23	26	30	40	45	46	46	44	39
2290	37	36	32	27	23	19	17	15	11	5
2300	-5	-13	-19	-30	-34	-38	-43	-39	-39	-35
2310	-32	-30	-27	-22	-15	-14	-11	-5	0	4
2320	6	8	12	16	19	20	22	25	27	28
2330	27	24	23	25	25	27	28	27	22	22
2340	22	22	21	20	19	17	12	10	1	-5
2350	-16	-26	-34	-36	-32	-26	-20	-18	-15	-10
2360	-7	-6	-6	-6	-6	-7	-8	-8	-8	-7
2370	-6	-5	-2	-2	0	1	1	2	1	0
2380	-2	-5	-7	-10	-14	-16	-11	-1	5	11
2390	16	25	31	35	38	41	44	45	44	39
2400	30	23	15	7	0	-5	-8	-13	-17	-17
2410	-16	-12	-9	-10	-11	-14	-16	-21	-26	-28
2420	-27	-23	-17	-10	-2	3	9	15	20	24
2430	27	29	27	24	19	15	7	0	-2	-7
2440	-11	-12	-12	-12	-6	-4	0	3	7	8
2450	11	15	18	18	14	11	6	5	7	8
2460	7	4	1	-3	-10	-14	-12	-8	-4	0
2470	2	2	3	3	4	6	8	10	9	8
2480	5	3	1	0	-2	-6	-10	-13	-13	-14
2490	-14	-14	-14	-13	-11	-7	-5	-4	-1	-2
2500	-5	-7	-10	-13	-14	-13	-11	-8	-5	-6
2510	-5	-6	-5	-1	1	3	4	5	8	13
2520	19	18	17	12	13	13	13	12	11	10
2530	7	5	3	1	0	0	0	0	2	4
2540	8	9	5	1	-3	-9	-14	-20	-22	-23

TO BE CONTINUED

CONTINUED (S-1910 DOWN)

NO.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2550	-24	-27	-29	-29	-29	-28	-24	-21	-18	-15
2560	-12	-8	-2	-3	6	1	9	10	9	5
2570	2	0	-3	-5	-5	-6	-9	-14	-20	-24
2580	-22	-17	-13	-12	-5	4	10	10	10	16
2590	18	20	22	22	22	20	17	14	12	11
2600	10	8	7	4	7	5	9	13	15	15
2610	15	16	15	11	2	0	-5	-9	-12	-15
2620	-19	-19	-19	-17	-14	-4	0	0	-4	-9
2630	-11	-14	-14	-18	-21	-22	-22	-18	-17	-15
2640	-14	-14	-14	-14	-14	-14	-12	-10	-11	-11
2650	-9	-9	-9	-9	-9	-9	-8	-8	-7	-6
2660	-5	-6	-10	-12	-18	-24	-25	-26	-30	-32
2670	-34	-35	-31	-29	-28	-25	-21	-17	-14	-10
2680	-8	-9	-10	-11	-11	-10	-6	-3	0	6
2690	17	21	22	24	24	23	27	31	29	28
2700	26	24	18	11	9	9	9	9	5	1
2710	-4	-9	-11	-14	-18	-24	-30	-33	-32	-30
2720	-29	-27	-25	-20	-13	-10	-7	-5	-3	0
2730	2	5	11	13	13	13	11	7	-1	-8
2740	-11	-13	-13	-13	-14	-16	-17	-17	-14	-11
2750	-11	-11	-11	-11	-11	-10	-9	-9	-9	-8
2760	-9	-5	-9	-13	-18	-21	-20	-17	-16	-13
2770	-9	-6	-7	-9	-8	-8	-7	-7	-6	-7
2780	-6	-4	-1	2	6	8	12	17	19	21
2790	22	24	24	24	24	25	28	31	33	32
2800	30	28	21	19	15	14	9	6	4	4
2810	4	1	0	0	0	0	-4	-11	-18	-22
2820	-24	-26	-23	-17	-13	-10	-9	-12	-16	-17
2830	-14	-8	-4	-4	0	0	0	0	0	-1
2840	1	1	5	5	7	10	11	11	11	11
2850	11	11	9	5	2	0	-2	-2	-2	-1
2860	0	0	1	2	2	1	-3	-3	-7	-19
2870	-17	-18	-19	-23	-24	-24	-24	-20	-17	-12
2880	-10	-7	-7	-7	-6	-2	0	2	7	14
2890	19	21	22	24	25	27	29	29	28	25
2900	22	17	13	9	5	8	9	10	10	9
2910	-3	0	2	5	7	8	9	10	10	9
2920	8	5	2	0	-1	-5	-7	-6	-4	-3
2930	0	1	3	6	9	11	12	12	9	4
2940	0	-8	-13	-14	-17	-17	-16	-11	-6	-6
2950	-4	-2	-1	-1	-1	-1	-3	-4	-7	-9
2960	-11	-12	-13	-11	-8	-6	-4	-3	-1	0
2970	3	4	6	7	7	7	9	9	9	10
2980	10	10	11	11	10	9	8	5	4	3
2990	0	-5	-10	-14	-16	-13	-8	-8	-8	-8
3000	-8	-8	-8	-10	-12	-12	-12	-14	-18	-20
3010	-23	-21	-19	-15	-9	-7	-7	-4	-2	-2
3020	-1	-1	-1	1	4	5	8	9	9	9
3030	9	9	9	10	13	15	15	14	12	9
3040	8	8	8	8	7	6	7	8	3	3
3050	3	3	4	4	3	1	0	0	0	0
3060	-1	-3	-4	-5	-6	-6	-7	-8	-8	-8

TO BE CONTINUED

CONTINUED (S-1910 DOWN)											CONTINUED (S-1910 DOWN)										
ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
3070	-8	-8	-8	-8	-8	-8	-4	-5	-8	-9	3590	5	6	6	6	6	6	5	3	1	0
3080	-12	-13	-12	-11	-8	-4	-25	-23	-20	-19	3600	0	1	1	1	0	0	-1	-7	-12	-17
3090	-16	-13	-12	-11	-8	-4	-3	1	6	8	3610	-20	-21	-24	-24	-24	-24	-7	-20	-20	-19
3100	9	13	16	19	22	21	17	14	11	8	3620	-21	-22	-16	-13	-13	-11	-21	-11	-9	-7
3110	5	4	3	3	4	5	5	5	6	6	3630	-6	-6	-6	-3	-1	1	1	4	4	4
3120	7	7	6	5	2	0	0	-1	-4	-7	3640	6	9	10	10	10	11	11	14	14	15
3130	-10	-10	-10	-9	-9	-10	-11	-10	-6	-3	3650	14	8	9	7	6	4	4	2	-1	-1
3140	0	2	4	5	8	11	11	13	13	10	3660	-6	-7	-8	-9	-12	-14	-16	-18	-18	-18
3150	8	8	8	7	6	4	1	-5	-8	-8	3670	-16	-11	-9	-8	-8	-6	-5	-2	-4	3
3160	-8	-10	-11	-12	-13	-13	-13	-14	-15	-14	3680	0	1	1	1	1	1	3	4	4	3
3170	-11	-6	0	-4	-11	-4	2	8	14	17	3690	1	0	0	0	0	0	3	6	7	6
3180	17	21	26	28	29	30	34	33	30	27	3700	7	9	9	9	8	8	7	7	7	8
3190	26	24	21	16	13	10	7	-7	2	-1	3710	4	0	4	5	5	8	8	8	8	6
3200	-6	-11	-12	-12	-9	-7	-7	-7	-3	0	3720	4	0	-2	-4	-5	-3	-3	-10	-12	-13
3210	1	2	2	1	-1	-4	-6	-10	-16	-19	3730	-14	-14	-12	-9	-8	-8	-8	-7	-5	-3
3220	-19	-17	-10	-10	-10	-10	-8	-4	-1	0	3740	-2	-2	0	1	2	2	7	12	9	8
3230	2	4	2	5	5	9	10	8	7	7	3750	0	4	0	2	-2	-5	-1	0	0	0
3240	9	10	9	8	5	5	12	-1	-5	-8	3760	5	-1	-6	-10	-10	-12	-12	-14	-19	-24
3250	-14	-18	-21	-22	-26	-30	-30	-30	-29	-29	3770	-25	-24	-22	-19	-15	-12	-13	-10	-7	-4
3260	-29	-25	-19	-16	-11	-4	-4	-4	-3	-2	3780	-2	-3	-3	-3	-3	4	5	5	2	2
3270	0	0	-1	-1	-1	-1	0	0	0	0	3790	2	2	4	4	4	4	4	2	2	2
3280	0	4	4	5	3	0	0	1	5	5	3800	1	3	3	3	-1	-2	-2	-2	-2	-4
3290	5	5	5	6	5	3	2	2	2	0	3810	-3	-1	-1	-1	-1	-2	-3	-6	-6	-3
3300	-1	-2	-2	-3	-5	-5	-5	-6	-7	-5	3820	0	-4	-4	-4	-5	-5	-5	-5	-3	-1
3310	-1	1	5	9	13	13	14	16	15	13	3830	0	1	1	1	0	-2	-2	-3	-3	-3
3320	9	7	5	0	-3	-6	-13	-16	-16	-16	3840	-3	-4	-4	-5	-8	-12	-12	-13	-14	-14
3330	-17	-18	-19	-25	-26	-26	-26	-26	-26	-26	3850	-15	-15	-16	-16	-19	-19	-19	-19	-14	-8
3340	-27	-31	-32	-30	-29	-27	-23	-20	-16	-13	3860	-8	-8	-8	-8	-4	-3	-2	3	5	7
3350	-12	-12	-14	-17	-18	-20	-20	-19	-19	-18	3870	7	10	11	10	10	9	5	2	2	0
3360	-16	-15	-17	-17	-14	-9	-5	-3	-1	1	3880	-7	-11	-16	-17	-21	-26	-27	-27	-27	-22
3370	2	3	6	3	3	5	7	9	11	13	3890	-22	-22	-22	-19	-13	-13	-13	-13	-13	-12
3380	14	16	18	19	22	26	29	32	33	31	3900	-11	-10	-10	-10	-9	-7	-4	-3	-3	-1
3390	28	24	21	18	15	9	4	4	3	1	3910	0	1	1	1	0	-3	-6	-11	-14	-20
3400	0	-2	-8	-10	-11	-14	-15	-15	-15	-17	3920	-27	-32	-38	-42	-40	-35	-33	-30	-28	-28
3410	-18	-23	-26	-28	-29	-30	-31	-30	-29	-28	3930	-28	-28	-21	-17	-12	-6	0	0	4	8
3420	-27	-25	-24	-23	-22	-20	-19	-18	-15	-13	3940	11	15	20	21	21	21	21	20	19	16
3430	-9	-5	-3	0	2	3	3	7	10	13	3950	12	7	5	2	0	-4	-7	-10	-8	-3
3440	26	23	19	18	20	22	22	18	14	11	3960	-13	-14	-18	-20	-18	-16	-8	-9	-10	-11
3450	20	23	27	28	31	30	29	29	28	27	3970	0	1	1	-1	-7	-7	-8	-9	-10	-11
3460	7	5	3	-2	-8	-11	-11	-10	-6	-2	3980	-4	-4	-8	-8	-6	-6	-7	-6	-6	-5
3470	-2	-4	-4	-4	-4	-9	-13	-15	-17	-18	3990	-4	-4	-4	-4	-2	0	-1	-1	-1	-1
3480	-20	-23	-27	-31	-34	-35	-34	-33	-31	-30	4000	1	3	3	3	1	0	-3	-3	0	1
3490	-28	-26	-25	-22	-16	-11	-7	-6	-5	-4	4010	4	7	8	7	4	3	3	5	3	0
3500	-4	-3	-2	-2	-2	-2	-3	-3	-3	-5	4020	-5	-6	-8	-9	-10	-12	-13	-15	-15	-15
3510	-6	-7	-7	-2	0	1	6	7	7	7	4030	-12	-9	-8	-9	-10	-10	-10	-10	-10	-10
3520	7	7	6	6	6	10	12	14	17	16	4040	-8	-5	-4	-3	0	0	8	12	14	14
3530	11	11	11	9	6	1	2	1	0	-2	4050	15	16	14	12	15	14	15	14	13	13
3540	-3	-5	-5	-5	-5	-4	-3	-4	-4	-6	4060	13	13	11	10	10	9	9	7	5	4
3550	-3	-2	-2	0	1	1	2	3	5	5	4070	4	4	4	4	-1	-2	-1	-2	-1	0
3560	5	5	4	1	1	1	1	0	-2	-3	4080	-6	-6	-6	-6	-6	-6	-6	-2	-2	-5
3570	-5	-11	-11	-11	-13	-13	-14	-16	-19	-19	4090	-2	-5	-6	-7	-10	-15	-18	-24	-26	-29
3580	-17	-15	-13	-6	-5	-5	-2	0	1	2	4100	-29	-31	-34	-29	-28	-28	-25	-21	-18	-18

TO BE CONTINUED

TO BE CONTINUED

CONTINUED(S-1910 DOWN)

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
4110	-16	-14	-9	-6	-3	-2	-2	-1	0	0
4120	0	0	-1	-3	-3	-2	-2	-1	0	0
4130	5	7	9	7	7	6	4	3	7	7
4140	6	5	4	3	1	-1	-2	-3	0	0
4150	0	0	0	0	0	0	0	2	2	0
4160	-1	-3	-7	-9	-12	-14	-15	-17	-20	-21
4170	-21	-21	-21	-22	-23	-23	-23	-23	-18	-16
4180	-14	-11	-9	-8	-7	-7	-7	-7	-7	-7
4190	-7	-7	-7	-7	-6	-6	-6	-6	-6	-6
4200	-1	-4	-12	-14	-17	-18	-18	-15	-14	-10
4210	-8	-8	-4	1	2	4	5	5	3	2
4220	6	7	8	8	8	9	8	5	3	2
4230	0	-3	-6	-6	-7	-8	-9	-12	-13	-15
4240	-17	-19	-21	-21	-20	-20	-20	-19	-18	-15
4250	-14	-14	-12	-9	-6	-4	-3	-3	-2	0
4260	2	5	6	7	7	6	7	9	10	10
4270	14	13	13	14	14	14	10	10	1	1
4280	1	0	0	0	0	-1	0	0	0	0
4290	-2	-4	-5	-6	-8	-11	-12	-9	-6	-6
4300	-6	-6	-4	-2	-1	-2	-2	-2	-2	0
4310	0	0	-4	-6	-6	-5	-5	-5	-1	-2
4320	-2	-1	1	0	-3	-5	-6	-8	-9	-11
4330	-12	-12	-12	-11	-10	-9	-7	-4	-2	-2
4340	0	4	5	4	0	0	-1	-1	2	4
4350	5	8	11	12	12	9	6	6	6	5
4360	2	1	0	0	0	0	2	5	6	7
4370	6	5	5	1	0	0	0	-3	-5	-8
4380	-12	-12	-13	-16	-16	-16	-16	-16	-16	-16
4390	-11	-7	-7	-7	-7	-5	-3	-2	-1	-1
4400	0	-1	-3	-5	-6	-7	-7	-7	-6	-2
4410	0	0	0	3	4	4	4	5	4	4
4420	4	6	7	9	9	9	9	9	10	7
4430	7	8	8	9	8	8	8	7	7	7
4440	7	8	7	5	3	1	0	0	0	2
4450	-2	-3	-3	-2	-1	0	1	1	2	5
4460	3	4	5	5	5	5	2	3	4	5
4470	6	6	7	8	8	7	8	9	5	3
4480	1	0	-1	-2	-3	-4	-4	-8	-8	-10
4490	-10	-10	-10	-7	-3	0	2	4	5	6
4500	-6	-5	-7	-7	-5	1	0	-1	-3	-5
4510	-4	-2	-2	-2	-1	-1	-2	-4	-7	-12
4520	-17	-18	-18	-18	-20	-17	-16	-16	-15	-12
4530	-10	-7	-2	0	0	4	7	7	5	3
4540	3	4	6	7	7	7	7	7	9	10
4550	11	11	10	8	7	3	2	2	0	0
4560	0	0	0	-1	-3	-4	-5	-5	-5	-7
4570	-10	-11	-11	-11	-11	-11	-11	-11	-11	-11
4580	-10	-11	-11	-10	-10	-9	-7	-5	-1	-1
4590	0	1	4	5	8	8	8	8	5	2
4600	1	1	1	0	-2	-4	-6	-8	-8	-8
4610	-18	-17	-16	-15	-13	-12	-12	-13	-13	-11
4620	-9	-6	-5	-5	-1	1	4	4	6	8

TO BE CONTINUED

CONTINUED(S-1910 DOWN)

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
4630	8	8	8	8	7	7	7	6	5	5
4640	3	2	2	1	0	0	1	3	5	6
4650	7	7	7	7	7	7	7	7	7	6
4660	6	6	9	12	16	17	17	18	18	19
4670	21	15	13	13	12	10	9	8	8	8
4680	17	16	6	6	0	-3	-3	-8	-11	-13
4690	-15	-14	-13	-13	-13	-12	-12	-3	-3	-3
4700	0	0	1	1	1	4	6	6	8	7
4710	7	10	11	12	12	12	11	11	13	15
4720	14	15	13	11	10	8	6	3	3	2
4730	0	0	-1	-1	-1	-2	-2	-3	-1	-2
4740	-2	-4	-4	-4	0	1	2	3	2	1
4750	4	7	4	2	0	4	6	7	6	5
4760	5	4	2	0	0	4	8	3	4	5
4770	5	5	5	5	8	8	8	8	7	5
4780	3	1	1	0	-1	-3	-3	-4	-6	-7
4790	-7	-4	-2	-4	-6	-9	-9	-7	-6	-4
4800	-3	-3	-3	-3	-2	1	1	3	6	2
4810	0	-2	-2	-2	0	1	1	1	1	1
4820	1	2	3	6	9	10	10	10	12	12
4830	11	9	7	7	7	8	8	7	7	3
4840	3	3	3	3	5	7	7	7	7	7
4850	7	7	7	5	0	-4	-9	-10	-1	0
4860	-8	-8	-7	-6	-7	-6	-2	-1	-1	0
4870	3	4	7	6	8	8	8	8	6	6
4880	6	6	6	6	5	2	0	-1	-2	-2
4890	-2	-2	-2	-2	-2	-1	-1	-1	-2	-3
4900	-5	-6	-8	-7	-6	-3	0	3	6	9
4910	12	14	19	16	13	13	14	17	20	20
4920	20	18	18	18	18	18	18	16	15	15
4930	15	15	15	14	14	14	14	14	11	9
4940	12	11	10	10	10	9	-2	-5	-7	-7
4950	-7	-7	-6	-6	-8	-8	-10	-10	-8	-8
4960	-7	-10	-13	-13	-14	-14	-11	-9	-9	-9
4970	-9	-9	-9	-9	-8	-6	-2	0	1	5
4980	6	7	8	6	6	6	7	7	7	7
4990	7	7	7	6	8	7	6	5	5	5
5000	10	7	-1	-4	-5	-8	-7	-7	-4	-4
5010	-2	-1	-1	0	0	0	2	4	5	9
5020	9	10	11	13	13	14	15	15	15	15
5030	15	15	15	15	16	17	18	18	19	15
5040	10	9	9	8	5	5	5	3	-3	-3
5050	-3	-3	-2	-2	-2	-2	-2	-2	-2	-2
5060	-2	-2	2	1	1	5	7	6	5	5
5070	2	-2	-2	-2	-2	-4	-5	-6	-4	-4
5080	-4	-3	0	0	0	0	0	0	0	0
5090	-11	-11	-11	-11	-11	-11	-11	-11	-11	-11
5100	-1	-1	-1	-1	-1	-2	-2	-2	-1	-1
5110	-2	-2	-2	-2	-2	-1	1	4	4	6
5120	6	6	6	6	8	9	10	12	12	11
5130	11	12	12	12	11	11	11	11	9	7
5140	6	4	4	4	4	4	2	2	2	2

TO BE CONTINUED

CONTINUED (S-1910 DOWN)

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
5670	-9	-9	-11	-13	-14	-15	-15	-14	-14	-12
5680	-11	-8	-8	-8	-6	-5	0	0	1	1
5690	1	3	5	6	8	9	6	5	5	5
5700	6	6	6	6	6	6	6	8	10	10
5710	10	9	9	9	9	6	3	4	4	6
5720	6	5	2	1	1	1	0	0	0	0
5730	0	-1	-2	-4	-4	-4	-3	-2	-2	-2
5740	-2	-2	-2	-2	-2	-2	-2	1	2	2
5750	-2	-2	-1	-1	-1	-2	1	5	2	2
5760	2	3	5	6	8	9	9	9	9	9
5770	10	10	9	8	7	6	5	6	7	6
5780	5	2	0	0	0	-1	-1	-2	-3	-5
5790	-7	-7	-7	-7	-7	-7	-9	-9	-9	-9
5800	-7	-3	-2	0	0	0	0	0	2	3
5810	3	3	5	7	10	10	11	13	13	13
5820	13	13	13	14	14	14	14	14	9	8
5830	6	4	1	0	-4	-7	-9	-9	-9	-11
5840	-13	-14	-14	-17	-22	-26	-27	-26	-26	-24
5850	-22	-21	-17	-17	-17	-16	-15	-12	-8	-6
5860	-6	-6	-3	-2	-2	0	2	2	3	3
5870	3	3	4	5	6	5	4	4	4	3
5880	2	2	2	2	1	-1	0	1	0	0
5890	-1	-1	-1	-2	-2	-5	-10	-10	-6	-5
5900	-4	-4	-4	-6	-5	-3	-1	0	-2	-4
5910	-4	-5	-4	-5	-6	-7	-8	-8	-8	-8
5920	-8	-9	-9	-8	-6	-6	-9	-9	-10	-12
5930	-13	-13	-13	-9	-8	-7	-6	-3	2	5
5940	3	4	5	5	6	9	12	9	6	5
5950	6	8	6	5	4	4	4	3	0	0
5960	-1	-1	-2	-2	0	0	0	-1	-2	-2
5970	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4
5980	-4	-4	-4	-4	-2	-1	-2	-2	-2	-2
5990	-1	0	0	0	0	0	-1	0	1	2

END

CONTINUED (S-1910 DOWN)

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
5150	2	2	2	1	0	0	-1	-6	-6	-10
5160	-12	-12	-12	-12	-12	-16	-17	-17	-17	-15
5170	-13	-11	-11	-11	-11	-11	-11	-10	-8	-8
5180	-5	-2	-2	-1	0	1	0	-1	-1	-1
5190	-1	1	2	3	3	3	3	3	8	10
5200	11	11	11	12	14	14	14	14	14	14
5210	14	14	14	13	12	13	15	15	15	8
5220	8	8	8	8	8	4	4	2	2	2
5230	2	2	2	2	3	3	3	3	3	2
5240	0	-2	-2	-2	-2	-2	-2	-1	1	1
5250	-2	-1	-1	0	0	0	0	-1	-3	-4
5260	-4	0	0	0	0	-4	-8	-10	-10	-10
5270	-4	-4	-4	-4	-4	-6	-6	-6	-6	-6
5280	-10	-10	-10	-10	-10	-2	-2	-2	-2	-2
5290	-6	-6	-6	2	6	7	9	10	10	11
5300	-1	1	1	1	1	1	1	1	1	18
5310	15	17	17	17	17	17	17	18	18	18
5320	18	18	16	11	9	8	5	2	2	-1
5330	-8	-6	-8	-13	-17	-13	-13	-12	-10	-10
5340	-10	-8	-3	-1	-2	1	1	1	1	1
5350	0	0	2	2	2	0	0	-2	-3	-3
5360	1	2	3	0	0	0	0	-2	-5	-5
5370	-3	-3	-3	-3	-4	-5	-5	-5	-5	-5
5380	-2	-1	-2	-2	-2	-2	-2	-2	-2	-2
5390	-2	-2	-2	-2	-2	0	0	0	0	0
5400	0	-4	-6	-7	-7	-7	-11	-12	-14	-18
5410	-20	-22	-24	-25	-26	-26	-26	-24	-23	-21
5420	-18	-15	-12	-10	-10	-12	-10	-14	-14	-14
5430	5	5	8	10	12	12	10	14	14	14
5440	14	10	9	9	8	6	6	7	7	9
5450	7	7	6	8	9	8	7	7	8	9
5460	9	9	8	7	8	8	6	6	4	2
5470	2	1	1	1	1	1	1	1	0	-1
5480	-1	-1	-1	-1	-1	3	5	5	5	5
5490	4	3	-2	-6	-6	-6	-6	-6	-4	-5
5500	-5	-10	-6	-6	-6	-5	-5	-5	-5	-4
5510	-9	-10	-10	-7	-5	-5	-5	-5	-4	-4
5520	-4	-2	0	0	2	7	7	7	6	6
5530	6	6	8	7	7	7	7	7	7	7
5540	7	7	7	7	7	7	9	11	12	13
5550	14	15	16	13	12	11	5	2	4	4
5560	3	1	10	-2	-6	-6	-6	-7	-9	-10
5570	-11	-11	-11	-11	-11	-11	-11	-11	-11	-11
5580	-9	-8	-8	-7	-7	-6	-6	-3	-2	-1
5590	-1	-1	-3	-2	-1	-1	0	1	3	4
5600	3	2	-1	-3	-3	-3	-3	-3	-3	-3
5610	-3	-3	-6	-7	-7	-7	-8	-10	-11	-11
5620	-10	-7	-7	-6	-6	-6	-6	-4	0	2
5630	2	2	2	2	2	2	3	5	5	5
5640	5	6	6	5	4	3	2	1	1	1
5650	1	0	0	0	0	0	4	4	4	3
5660	2	1	1	0	-2	-2	-3	-5	-6	-8

TO BE CONTINUED

RECORD = M-1014 COMPONENT = NORTH STATION = HANASAKI-M
 DATE AND TIME = 1986-05-31-12-40 TOTAL NUMBER OF DATA = 1700
 SAMPLING INTERVAL = 0.010 (SEC) SCAL = 0.10000
 SIGNAL = GR. ACC.
 CONNECTION POINT IN DATA NUMBER = 1700,

CONTINUED (M-1014 NORTH)

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	10	186	347	492	570	360	-210	-492	-697	-546
10	-277	446	692	534	-99	-508	166	678	708	227
20	-602	-493	192	363	141	-161	-1	336	490	15
30	-462	-583	-298	68	266	120	-337	-384	-31	577
40	857	743	198	-695	-588	30	41	42	157	253
50	235	-4	-216	9	508	421	200	-172	-368	88
60	318	412	91	-547	-666	-390	428	913	700	107
70	-235	-573	-251	196	338	204	-59	-185	109	215
80	-5	-159	-332	-98	364	244	15	-222	-214	-98
90	89	176	80	14	179	181	108	24	69	-97
100	-142	117	184	310	104	-227	-276	-72	290	337
110	209	-276	-268	-339	127	247	-79	367	-369	-15
120	462	420	-17	-123	167	355	181	-106	-353	-230
130	-58	141	249	167	69	-90	-163	-127	-183	-105
140	100	100	33	24	94	37	-47	-222	-106	152
150	309	268	70	-183	-192	56	30	-86	-144	-9
160	174	247	104	-68	-30	141	290	252	38	-171
170	-60	-69	176	312	78	-45	-128	3	195	292
180	84	-29	-247	-415	-81	339	324	187	26	-150
190	-92	117	186	69	-4	-100	-153	-22	331	535
200	307	114	-226	-472	-43	416	240	-36	-231	-189
210	140	132	-64	-115	-49	64	75	-154	-370	-175
220	112	162	193	24	-25	189	278	152	70	-28
230	-113	59	191	68	-96	-121	1	140	243	139
240	57	-86	-64	-13	-57	-141	-86	40	197	138
250	19	-96	126	256	59	-88	-175	85	224	292
260	241	153	22	-68	61	183	165	-78	-251	-163
270	-39	-28	-61	-164	-11	10	0	149	126	-159
280	-181	-46	90	62	8	-86	31	175	149	119
290	54	20	58	180	139	45	-53	-111	41	102
300	-20	-157	-94	81	65	-33	-157	-109	56	121
310	202	-27	-126	-35	42	115	176	42	-111	-59
320	-12	-43	-66	-11	71	154	250	70	-152	-258
330	-188	-45	117	252	-198	-359	-284	-143	39	73
340	-55	-119	8	137	77	-88	-170	-115	-44	46
350	151	103	26	-60	-88	-26	-19	-44	-67	13
360	31	-23	2	104	104	44	-19	-22	82	70
370	-63	-66	-10	42	27	-19	-38	-27	39	39
380	-17	-53	87	-37	31	118	156	49	-113	-231
390	-50	138	127	0	-113	-132	12	33	-17	-56
400	-81	-2	93	53	-29	-35	17	0	-34	-29
410	-14	-43	-70	-24	45	15	-70	-92	-46	6
420	58	50	-9	-76	-13	71	130	138	36	-62
430	-124	-60	34	13	-65	-123	-99	44	145	89
440	-16	-129	-125	-37	41	105	29	-70	-98	-10
450	100	91	-16	-43	25	86	83	-41	-50	-98
460	48	88	-12	-181	-222	-23	190	43	-146	43

TO BE CONTINUED

TO BE CONTINUED

CONTINUED (M-1014 NORTH)

CONTINUED (M-1014 NORTH)

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
990	-35	3	31	43	19	-5	-2	14	21	24	-34	-41	-35	-28	-28	-34	-23	-34	-18	-19
1000	23	23	27	46	64	47	1	-29	28	61	-29	-10	42	63	50	-48	-26	11	22	43
1010	28	-11	-3	-31	-3	23	24	21	14	3	42	19	-14	-39	-32	4	41	41	7	-13
1020	-10	0	9	3	-23	-27	-32	22	65	-29	43	97	65	18	-35	-8	47	39	20	-27
1030	-61	-18	23	87	71	-15	-78	-65	10	47	-48	-20	25	34	20	5	-15	-17	5	31
1040	47	12	-7	-4	11	24	22	15	-3	-20	12	-26	-41	-32	-28	-28	-29	-22	-8	7
1050	26	43	10	-43	-27	15	45	27	-17	-17	8	-4	-17	-2	27	35	29	15	17	24
1060	-21	-7	-7	-36	-38	-41	-55	-64	-65	4	32	35	32	2	-26	-30	-8	28	34	24
1070	40	45	44	36	33	35	34	32	2	-2	19	2	3	1	6	14	12	-3	-18	-30
1080	-40	-58	-43	-52	-60	-38	-5	-25	-45	-23	-18	43	45	33	16	7	-5	-4	3	2
1090	0	15	-12	-31	-28	-40	-38	-40	-39	-28	1610	-2	-15	-18	33	30	43	23	24	24
1100	3	16	-15	-27	20	22	-9	5	15	2	1620	35	20	-14	-36	-39	-40	-33	-22	-11
1110	-24	-8	-25	14	39	25	-20	-16	15	20	1630	-1	-12	-18	-6	18	45	27	-6	-19
1120	9	4	-9	0	18	24	17	-12	-27	2	1640	1	18	32	21	3	40	1	11	14
1130	41	41	15	18	31	51	19	6	-16	-12	1650	-20	-34	-12	21	23	24	23	24	23
1140	-6	11	41	45	43	12	-19	-10	16	25	1660	24	23	-2	21	23	-10	10	32	27
1150	13	13	19	34	40	27	7	-14	-20	40	1670	2	-30	-35	-4	9	20	24	20	3
1160	15	37	46	34	-9	-33	-15	24	56	39	1680	17	27	41	45	44	45	44	46	57
1170	2	-20	-25	-31	10	46	35	-10	1	47	1690	66	66	66	64	55	44	44	46	66
1180	24	0	-20	-34	-36	11	-43	40	6	-17										
1190	1	28	39	3	-41	-72	-23	23	27	-4										
1200	-31	-50	-37	-18	1	20	18	-7	-2	30										
1210	59	49	7	20	61	56	6	-35	-69	-20										
1220	32	35	-11	-39	0	46	61	26	8	-46										
1230	-14	38	54	33	3	-10	1	46	24	-8										
1240	-36	-8	32	23	-27	-69	-69	-18	-28	-28										
1250	-42	-70	-66	-9	39	32	-18	-38	10	64										
1260	68	1	-53	-62	10	36	11	-19	-29	-18										
1270	0	22	35	28	-13	-69	-34	-18	-19	-29										
1280	-28	-29	-28	-29	-29	-29	-28	-11	-8	-24										
1290	-6	35	58	36	4	-28	-38	-7	22	37										
1300	47	23	-34	-73	-30	49	38	-5	-49	-39										
1310	8	44	44	42	-9	-56	-38	26	56	-12										
1320	-59	-52	6	31	37	-9	3	37	32	23										
1330	-19	-35	2	31	35	23	-12	-11	16	19										
1340	-7	-19	0	2	4	18	17	-11	4	26										
1350	28	37	31	24	23	24	23	24	23	23										
1360	23	23	23	23	23	24	23	27	35	3										
1370	-36	-64	-56	-4	32	21	-7	-44	-66	-17										
1380	15	15	-31	-28	9	13	-7	-25	-31	-7										
1390	23	29	29	-25	-56	-81	-55	-9	13	-12										
1400	-57	-55	-23	8	-16	-38	11	32	31	32										
1410	6	-14	-31	-50	-40	10	38	22	-17	-42										
1420	-32	-9	19	42	24	5	5	31	33	-6										
1430	24	47	40	12	-17	1	51	47	12	-39										
1440	-15	45	55	38	15	27	46	43	37	26										
1450	25	40	29	23	13	-9	-19	-9	2	14										
1460	21	26	39	22	-3	20	53	67	47	16										
1470	-1	-5	10	22	24	7	-19	17	38	15										
1480	-4	-25	-29	-16	6	22	24	20	11	17										
1490	31	44	38	20	46	60	24	-27	-40	7										
1500	55	39	-1	-44	-38	-20	-8	9	13	-7										

END

TO BE CONTINUED

RECORD = M-1014 COMPONENT = EAST STATION = HANAKAKI-M
 DATE AND TIME = 1986-05-31-12-40 TOTAL NUMBER OF DATA = 1700
 SAMPLING INTERVAL = 0.010 (SEC) SIGNAL = GR. ACC.
 CONNECTION POINT IN DATA NUMBER = 1700, SCAL = 0.10000

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	-316	-988	-805	-353	372	1122	-198	-1063	-1051	-107
10	473	1048	-274	-514	-334	-223	-225	-178	31	64
20	-91	16	461	532	436	474	-501	26	354	366
30	-284	-587	-888	-190	1217	1114	924	-320	-957	-986
40	194	751	319	-829	-905	449	1351	1231	638	-713
50	-470	404	403	693	-52	-1191	-298	852	1150	756
60	-585	-525	-149	278	3	-341	-550	-498	-137	297
70	321	436	251	1666	366	362	291	-77	399	149
80	309	182	230	226	424	176	-105	-405	-662	-39
90	209	182	171	258	424	176	-105	-405	-662	-39
100	365	417	168	86	75	61	-83	-54	-144	-209
110	-117	48	158	-14	-106	0	172	27	-421	-436
120	-83	120	165	-165	-301	-230	197	472	564	-314
130	-679	-147	409	557	228	-293	-381	-281	432	540
140	313	119	-181	-185	37	5	115	25	-121	-98
150	-16	-85	-87	121	339	185	-45	-251	-141	202
160	497	323	-156	-245	-158	-30	6	-40	-114	-143
170	25	200	280	13	-247	-248	-57	145	336	137
180	-115	-227	26	241	40	72	-170	-69	191	171
190	295	107	-298	-225	135	734	547	-329	-716	-715
200	-502	286	416	251	0	-158	117	184	14	-81
210	57	95	117	147	7	-122	-139	-147	-38	-29
220	-35	55	86	18	-123	-186	-118	-4	63	164
230	-82	-222	59	329	475	227	105	-116	-98	212
240	66	-135	-212	-228	84	263	158	89	-11	-112
250	66	-135	-212	-228	84	263	158	89	-11	-112
260	-158	-25	69	166	100	-2	-100	-14	-71	43
270	99	-49	-113	-25	28	-35	6	104	253	44
280	-79	-245	-71	385	451	292	88	-230	-613	-206
290	63	220	65	-158	-197	7	145	-51	-206	-57
300	59	53	-77	-176	-129	32	213	192	-1	-68
310	59	151	98	-91	-127	-15	101	122	33	-104
320	-127	-25	-37	136	141	-2	-137	-156	-48	91
330	96	24	28	28	-8	-34	-42	-1	72	228
340	327	232	-21	-130	-194	-155	64	324	187	7
350	-16	-198	-56	-3	104	155	-62	-193	-112	2
360	54	159	55	10	93	118	6	-32	33	80
370	66	-37	-8	59	116	151	95	46	48	4
380	-75	-74	-61	-7	82	114	71	54	60	16
390	-62	-7	89	137	-10	-131	-94	20	107	159
400	143	38	-67	-119	-67	55	145	34	-92	-140
410	-32	86	178	97	-70	-117	-58	17	8	-20
420	-27	58	33	-36	-53	-9	39	48	12	7
430	40	60	39	0	-81	-58	75	114	86	-66
440	-22	47	112	157	0	-115	-191	-81	32	147
450	223	85	-110	-130	54	183	89	-155	-159	105
460	235	166	-50	-27	92	118	7	-119	-168	31

TO BE CONTINUED

TO BE CONTINUED

CONTINUED (M-1014 EAST)

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1510	-5	53	84	68	23	-13	-3	32	33	21
1520	0	8	22	23	17	-10	-27	-7	27	48
1530	60	21	-15	0	52	56	44	-11	21	80
1540	19	-19	-40	-21	45	80	50	-4	-38	-61
1550	-20	30	10	-25	-16	42	36	-17	-26	31
1560	59	52	-7	-21	47	34	-31	-51	-18	45
1570	100	109	119	39	13	45	80	75	20	-10
1580	0	21	22	-19	-56	-59	-42	2	17	-17
1590	-46	-17	21	-5	-9	16	24	-6	-43	-67
1600	-41	1	24	37	11	-26	-44	-17	-3	6
1610	0	-14	-18	-28	7	35	49	59	56	58
1620	50	29	33	34	34	30	10	-12	-26	-37
1630	-22	12	22	22	22	50	75	26	-10	-4
1640	18	37	46	26	15	2	-1	0	10	10
1650	10	9	17	29	64	67	41	44	61	60
1660	45	45	49	62	71	62	53	40	35	46
1670	46	28	-5	-13	-11	0	6	0	-8	-14
1680	-10	-2	12	35	46	34	21	27	68	83
1690	46	0	-25	-10	38	59	46	29	21	22

END

CONTINUED (M-1014 EAST)

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
990	42	47	36	-2	-37	-25	2	21	22	19
1000	-12	-32	4	1	-14	-12	-14	-1	11	3
1010	-3	1	-18	-22	55	9	-47	-99	-108	-20
1020	53	29	51	-30	69	106	52	-21	-54	44
1030	65	62	14	32	-3	-54	13	47	10	32
1040	-59	-20	25	3	-30	-48	-19	9	-7	-13
1050	24	15	-15	-36	-8	-31	-16	60	1	-8
1060	46	-11	-45	-14	27	44	27	-37	-61	-5
1070	61	55	-17	-68	-20	13	-5	-13	6	-10
1080	0	48	19	-44	-30	3	29	5	-14	21
1090	56	49	14	-15	-24	-8	-1	-14	-21	-26
1100	14	33	9	-12	29	50	35	15	-18	-9
1110	30	79	52	-2	-46	-10	71	98	31	-49
1120	-59	23	117	110	35	-58	-69	-13	39	72
1130	33	-16	-29	29	56	27	-5	-10	18	44
1140	24	22	11	25	47	11	-33	-55	4	13
1150	1	-23	-57	-79	-103	-79	-20	22	8	-16
1160	-32	-58	-18	27	17	-22	17	60	91	31
1170	-49	-96	-85	-23	28	55	15	-34	-31	54
1180	-21	-67	-91	-74	-11	-68	-80	-16	6	25
1190	9	-15	-44	-33	-4	24	3	-31	-40	-24
1200	-12	-6	-8	-16	3	24	7	-13	-25	-7
1210	11	22	11	-11	-22	9	31	32	-2	-43
1220	-49	-13	30	34	13	-12	-12	16	33	34
1230	24	-12	-32	-39	-24	-1	-10	-13	-12	-12
1240	-15	-12	-12	-13	-1	18	52	82	66	0
1250	-16	14	85	101	45	-27	-27	26	42	31
1260	12	15	49	68	68	46	46	78	118	17
1270	-7	91	94	47	30	16	-25	-36	9	51
1280	71	107	69	-4	-26	-48	-17	8	23	18
1290	2	-13	-26	-38	-49	-43	-15	19	72	60
1300	23	23	14	0	9	24	2	-25	-41	-48
1310	-27	-8	0	-1	0	0	12	17	30	-4
1320	-38	-7	15	12	-17	-45	-32	-13	-13	-13
1330	-33	-32	-2	20	23	4	-13	-24	3	24
1340	48	30	7	54	48	23	22	19	-44	-65
1350	-70	-50	-19	-12	-13	-13	-29	-36	-22	-13
1360	-6	0	-6	-13	-12	-3	10	8	0	7
1370	19	11	22	57	60	72	91	84	41	24
1380	21	23	22	40	58	51	39	45	60	56
1390	59	46	46	37	17	7	-7	-6	9	10
1400	20	23	21	17	-9	-57	-38	36	62	-20
1410	-89	-115	-11	47	84	102	46	-10	52	92
1420	111	93	15	-22	-34	-2	46	5	-16	9
1430	36	0	-34	-3	78	12	-30	40	82	53
1440	83	30	8	60	84	109	82	27	-27	-53
1450	15	67	68	-6	-11	29	34	33	35	14
1460	4	12	9	11	10	9	-1	0	12	22
1470	22	22	22	22	22	22	11	14	33	23
1480	11	-6	10	28	40	54	51	9	-24	-25
1490	-19	16	23	9	2	32	66	35	-6	0
1500	60	52	33	5	25	35	30	35	30	12

TO BE CONTINUED

RECORD = M-1014 COMPONENT = UP STATION = HANASAKI-M
 DATE AND TIME = 1986-05-31-12-40 TOTAL NUMBER OF DATA = 1700
 SAMPLING INTERVAL = 0.010 (SEC) SCAL = 0.10000
 SIGNAL = GR, ACC. CONNECTION POINT IN DATA NUMBER = 1700.

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	103	196	21	-57	24	115	249	101	-119	-143
10	-116	-76	14	117	74	-70	-63	40	-19	-10
20	232	171	-203	-179	-25	125	99	37	-47	-38
30	49	167	177	63	-94	-118	-28	44	131	84
40	-82	-77	109	195	25	-237	-177	22	176	205
50	43	-94	-188	-39	122	152	76	-17	-113	-81
60	3	8	-36	-11	75	97	-22	-105	-60	41
70	154	123	11	16	-90	34	78	-55	-99	3
80	58	-124	-186	-110	-29	37	140	72	-69	-13
90	70	130	41	152	-76	0	36	29	-73	5
100	10	53	95	186	172	29	10	42	0	78
110	63	35	93	75	4	-84	-102	-28	28	48
120	25	8	1	69	137	70	0	44	8	-29
130	22	8	-84	-96	-38	83	131	26	41	104
140	12	-1	-1	-59	-99	-14	110	99	3	48
150	110	-32	-111	14	26	-61	-62	-79	-67	87
160	178	91	94	178	73	-60	-178	-143	-14	89
170	136	36	-55	-45	48	86	36	-53	-104	-36
180	96	148	48	-42	-5	53	101	164	81	10
190	92	53	-51	-132	-202	1	191	184	100	-13
200	-96	-85	-41	13	15	5	-1	37	170	9
210	-48	-61	8	48	130	85	-60	-91	12	-32
220	-31	38	6	-14	-16	23	51	103	45	-77
230	-35	28	11	-31	17	38	-11	-60	-125	-110
240	-29	51	11	-60	-5	45	97	77	-10	-31
250	-7	5	-33	-37	27	8	-18	10	15	-47
260	52	67	-53	-63	72	74	-35	-19	2	21
270	100	32	-18	-26	-28	-22	51	27	-54	-10
280	-25	-70	-36	-58	-76	-56	32	113	-6	-85
290	-131	-112	-50	25	4	-36	-61	-32	15	35
300	6	-10	-1	-19	-47	-48	-16	61	45	25
310	35	21	25	-1	-7	-5	-52	-69	6	90
320	88	47	15	-27	41	129	52	-59	-113	-66
330	24	25	-10	59	68	1	-51	-14	23	54
340	57	22	-11	-23	-31	6	37	32	23	25
350	2	-18	11	21	-22	-56	-18	18	1	-27
360	-68	-85	-19	-11	-40	-70	-80	-43	-30	-23
370	22	-22	-33	-3	-28	-73	-44	0	19	-82
380	-63	-18	-1	-19	-3	2	-9	-9	12	11
390	21	5	-58	-33	49	80	7	0	45	54
400	60	29	14	-5	-3	50	37	-15	27	20
410	51	25	-8	33	44	5	-19	-41	-40	-41
420	-39	-22	0	27	28	-7	-56	-69	-35	-29
430	-50	-40	-30	-18	0	-48	-70	-32	-15	-28
440	-10	30	10	-48	-12	36	23	-16	-15	-7
450	-16	-38	-36	-5	13	7	-6	10	12	13
460	13	35	59	16	-29	-18	10	24	24	17

TO BE CONTINUED

TO BE CONTINUED

CONTINUED (H-1014 UP)

NO.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
990	21	19	25	22	33	31	22	30	20	1
1000	11	36	16	21	31	-5	-19	2	10	-21
1010	-15	12	5	0	26	31	18	19	24	5
1020	1	14	26	5	-19	-8	8	24	10	-7
1030	-8	10	-5	11	-15	-15	-22	-7	2	-8
1040	5	27	33	26	22	56	48	18	49	22
1050	-38	-40	-3	13	19	17	-3	-9	-19	-19
1060	-17	-7	11	36	19	1	2	11	38	19
1070	1	11	14	8	7	33	26	-9	6	43
1080	14	-17	-29	-43	-31	-19	-9	9	30	24
1090	-35	-43	1	27	41	-6	-29	-30	-14	1
1100	5	-7	-22	-15	-2	-12	-24	-33	-20	-9
1110	-13	-22	-10	12	22	17	-11	-10	31	21
1120	2	-3	-11	-5	-18	-3	46	39	-1	-11
1130	7	15	24	15	-12	15	29	3	-15	1
1140	26	22	9	42	33	0	-10	4	27	-19
1150	-32	-16	24	21	24	-22	-11	25	23	13
1160	-21	-15	-24	7	34	8	0	-8	-18	-15
1170	10	0	-7	-9	22	13	-14	-35	-61	-74
1180	-66	-41	-21	-11	-4	-26	-49	-20	7	-4
1190	-39	-29	4	-11	-25	-11	-7	-10	-18	-20
1200	-14	-8	-7	-12	-19	-20	0	22	23	24
1210	23	33	31	9	-4	-16	-16	-3	-3	-22
1220	-30	-5	-2	-33	-30	0	4	-19	-32	-12
1230	11	24	22	7	-6	-4	21	19	-7	-19
1240	-4	3	-1	-20	-28	-20	-15	-9	-20	-18
1250	-19	-18	-19	-15	-2	9	13	16	25	22
1260	24	19	11	6	11	17	23	15	0	-12
1270	-26	1	26	21	27	38	47	56	52	41
1280	27	23	15	12	4	0	-7	-11	-24	-30
1290	-32	-48	-51	-2	-45	-30	-30	-30	-27	-5
1300	12	13	11	0	-9	-6	1	8	14	3
1310	-5	5	15	1	-9	10	28	34	15	1
1320	2	1	2	1	15	25	23	24	23	23
1330	24	23	25	15	-1	-13	-19	-15	-7	-7
1340	9	1	10	17	24	24	11	0	10	30
1350	34	10	1	21	17	-7	-19	-18	-5	13
1360	24	20	-1	0	18	24	23	23	23	9
1370	25	46	56	42	9	1	5	20	30	14
1380	2	-4	-18	-28	-30	-29	-36	-52	-62	-62
1390	-62	-62	-63	-58	-50	-52	-51	-51	-51	-51
1400	-51	-51	-52	-47	-38	-19	1	2	2	-6
1410	-10	8	25	21	13	3	26	58	65	56
1420	52	44	66	41	26	8	1	5	29	45
1430	57	48	28	8	2	2	5	17	24	13
1440	1	-5	-19	-19	-19	9	13	12	13	13
1450	13	13	13	12	13	12	13	12	13	8
1460	1	-6	-9	-8	-9	-8	-9	-5	9	17
1470	25	22	30	35	34	35	34	35	27	23
1480	24	23	23	24	23	24	12	2	1	5
1490	14	12	13	12	13	12	19	24	23	24
1500	23	23	24	20	11	26	35	34	33	23

TO BE CONTINUED

CONTINUED (H-1014 UP)

NO.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1510	23	29	48	57	55	56	55	57	49	42
1520	34	34	34	34	34	34	34	34	34	34
1530	34	34	34	34	34	34	35	35	28	19
1540	5	1	1	8	16	17	8	1	2	2
1550	-6	-9	-7	-9	-2	6	14	5	-7	-9
1560	-2	23	31	17	-3	-7	2	2	12	-38
1570	-52	-50	-33	-6	9	0	7	14	12	13
1580	0	15	22	13	12	13	12	17	23	23
1590	0	6	13	15	35	28	12	22	24	23
1600	23	32	35	33	20	5	7	18	24	23
1610	23	23	23	31	47	11	9	53	25	-8
1620	15	25	13	16	30	40	41	34	33	41
1630	39	53	29	15	12	13	11	2	2	0
1640	-20	-31	-30	-19	-2	21	49	57	51	27
1650	23	26	43	57	49	35	34	40	52	56
1660	55	56	43	20	12	13	12	13	12	13
1670	11	2	2	2	2	1	-5	-15	-10	-7
1680	0	13	24	23	23	5	5	23	21	12
1690	0	-4	13	25	34	34	34	26	15	-1

END

RECORD = M-1017 COMPONENT = NORTH STATION = HANASAKI-N
 DATE AND TIME = 1986-06-08 20:20-02 TOTAL NUMBER OF DATA = 1700
 SAMPLING INTERVAL = 0.010 (SEC) SCAL = 0.10000
 SIGNAL = GR. ACC.
 CONNECTION POINT IN DATA NUMBER = 1700.

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	111	184	128	41	-151	-115	26	122	173	19
10	-221	-119	75	303	263	56	96	66	20	-146
20	-258	-141	-90	13	69	88	194	185	108	12
30	-30	-59	-252	-375	-265	-101	65	-14	78	364
40	715	507	-24	-299	-540	-228	127	308	99	-830
50	-357	173	323	322	149	-22	17	64	188	229
60	107	-129	-140	-18	194	201	101	213	54	-161
70	-370	-319	-123	-32	-91	-169	-234	-148	395	519
80	643	313	166	94	-47	-65	52	204	355	154
90	-394	-795	-387	9	239	166	-56	-105	403	567
100	319	-45	-118	54	144	-45	-236	-396	-627	-447
110	-68	352	524	320	102	115	361	409	295	27
120	-226	-406	-226	-197	-252	-153	10	117	24	-155
130	-198	44	85	7	-134	63	451	438	295	-129
140	-214	-319	-200	60	65	-44	-172	-308	-159	436
150	410	239	-30	-127	158	327	223	29	-125	-424
160	-606	-152	301	238	15	-81	301	493	588	529
170	336	149	334	135	44	-105	-237	-371	-428	-238
180	51	230	240	119	24	44	16	-44	-68	-28
190	25	54	43	-121	-238	-208	108	436	283	24
200	-62	23	106	55	-58	-189	-188	-107	-12	111
210	232	291	209	13	-125	-92	-127	-157	-141	-81
220	-20	1	2	65	197	301	155	0	-107	-116
230	-49	130	165	-18	-246	-247	-147	-64	66	175
240	292	227	94	17	-29	-97	-175	-271	-327	-386
250	-312	-160	394	454	137	-13	-154	-37	-68	-47
260	-53	-59	54	137	97	-57	-133	-193	-95	139
270	112	-76	-198	33	244	243	-91	-72	118	155
280	-67	-180	-227	-72	98	71	4	-104	-185	-14
290	358	356	52	-216	-291	-18	367	235	7	-320
300	-387	-288	141	224	112	-277	-373	-8	341	190
310	-23	-81	-119	47	200	7	-182	-158	41	310
320	229	-127	-282	-80	61	162	11	-86	104	169
330	66	-64	-169	-133	-59	63	40	-122	-30	172
340	-104	-375	-285	9	209	234	179	104	26	55
350	230	312	232	31	-116	-233	-217	28	167	65
360	-126	-60	-101	-58	33	-43	-163	-158	-57	237
370	184	33	-132	-175	-87	-149	-121	-20	0	-93
380	-163	-117	-38	43	127	90	84	102	38	-45
390	41	268	81	-185	-278	-318	-52	210	119	-93
400	-13	84	245	193	-35	239	70	239	292	61
410	-213	-283	-189	-87	23	157	85	-194	-206	31
420	277	324	204	94	-13	-85	-163	-125	34	216
430	257	150	26	-144	-45	296	236	2	-167	-375
440	-53	242	206	188	84	-79	-130	29	109	9
450	-91	-101	35	134	38	-102	-260	-83	260	291
460	182	43	-84	-151	-62	112	147	19	-140	-183

TO BE CONTINUED

TO BE CONTINUED

CONTINUED (M-1017 NORTH)										CONTINUED (M-1017 NORTH)									
ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
990	60	17	-33	-64	-24	19	52	32	-30	1510	-29	-23	6	-14	-47	23	91	20	-82
1000	-111	-44	45	52	10	-10	50	49	45	1520	-110	-41	18	82	0	-69	-2	43	24
1010	18	62	78	35	-37	-34	22	45	13	1530	-80	-69	-10	23	8	-45	-89	-51	-15
1020	-40	-17	15	74	44	-66	-73	19	31	1540	-15	-20	-9	30	27	4	6	1	34
1030	0	-16	26	47	20	-13	-40	-61	-51	1550	90	48	24	25	21	-4	14	18	-26
1040	62	24	-13	-6	30	25	-21	-56	-57	1560	-54	-50	-23	-19	-20	-29	-18	-7	1
1050	32	-64	-159	-150	-20	116	28	-74	24	1570	-10	7	50	43	19	1	12	4	28
1060	92	16	-68	-87	11	78	52	0	-18	1580	126	98	14	-47	-75	-56	-8	35	-14
1070	-13	-46	-32	15	8	-47	-35	77	90	1590	27	71	59	32	-13	-41	-8	12	29
1080	-6	39	-51	-54	-45	-15	16	25	42	1600	-1	-41	-38	0	24	-16	-47	7	40
1090	64	36	9	-27	-34	37	113	59	-56	1610	-1	-66	-61	-11	38	37	6	16	49
1100	-15	14	-28	-70	-88	-80	17	43	-12	1620	13	-29	-38	-49	16	50	-36	-25	62
1110	-16	69	134	110	52	-70	-25	-22	-47	1630	72	20	-58	-49	16	50	45	0	-30
1120	-82	-86	-88	-53	13	26	9	18	47	1640	46	52	32	-10	-40	-41	-10	32	14
1130	30	18	12	19	30	45	47	47	36	1650	-17	41	57	21	3	13	20	25	2
1140	12	36	19	-21	-41	-18	15	24	25	1660	-55	-41	2	34	30	4	-22	-42	-55
1150	-39	-52	-52	-18	31	52	45	6	-37	1670	11	31	37	26	2	-3	-14	-3	1
1160	82	82	69	35	14	71	117	138	53	1680	-8	-9	-4	5	24	24	23	5	-40
1170	-54	5	73	72	8	-22	-12	12	85	1690	-124	-93	1	53	27	-21	-39	-8	25
1180	20	0	60	13	-84	-115	-98	-42	11										
1190	20	-34	-20	23	13	42	27	-59	-113										
1200	-123	-86	-37	1	39	-68	7	103	-31										
1210	-8	17	-11	-39	-68	7	103	-31	-147										
1220	-178	-60	42	122	90	22	-37	-78	-26										
1230	56	-44	-44	-123	-128	-66	15	51	65										
1240	42	-39	-44	5	45	102	106	-34	-133										
1250	-110	-48	13	35	-20	-25	27	58	49										
1260	-16	8	2	-53	-87	-128	-140	-58	7										
1270	26	7	47	82	82	36	-6	-39	-11										
1280	50	55	40	77	113	63	-44	-126	-109										
1290	104	125	80	28	-3	-9	-5	10	29										
1300	30	-6	40	14	-46	-4	65	103	62										
1310	-56	-49	4	52	25	-57	-68	-22	21										
1320	7	-60	9	46	4	-54	-15	56	53										
1330	-11	43	52	-12	-83	-107	-60	5	61										
1340	40	-19	-63	-30	23	44	8	-44	-37										
1350	76	13	-40	-58	-41	-5	31	39	-6										
1360	-88	-4	53	11	-11	55	28	-41	-118										
1370	1	60	117	130	-35	-93	-9	75	130										
1380	-80	-107	-11	50	46	-60	-124	-68	33										
1390	36	-17	-45	-24	13	18	-40	-75	-61										
1400	47	15	-8	-26	-29	-33	6	53	21										
1410	-30	10	65	67	-7	-43	-6	26	42										
1420	4	4	24	24	25	24	29	-20	-66										
1430	-31	61	65	-9	-99	-72	-5	10	-1										
1440	-17	14	-1	-27	-11	10	14	0	-30										
1450	-98	-109	-24	48	2	-107	-118	-75	-30										
1460	57	37	36	42	73	64	15	-9	0										
1470	83	19	-17	-18	1	16	20	4	12										
1480	70	44	-11	-50	-5	20	42	22	-23										
1490	-7	-15	-26	12	41	45	14	-11	24										
1500	84	31	-12	3	15	11	32	58	37										

TO BE CONTINUED

RECORD = M-1017 COMPONENT = EAST STATION = HANASAKI-M
 DATE AND TIME = 1986-06-08-20-02 TOTAL NUMBER OF DATA = 1700
 SAMPLING INTERVAL = 0.010 (SEC) SCAL = 0.10000
 SIGNAL = GR. ACC.
 CONNECTION POINT IN DATA NUMBER = 1700

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	-276	-557	-233	23	371	291	-237	-257	84	280	470	-57	26	-63	-131	-110	43	148	203	138	20
10	497	290	-175	-388	-16	392	106	-401	-642	-179	480	-95	-202	-119	82	285	101	-61	-198	-50	50
20	356	630	65	-214	-182	-142	318	600	-122	-638	490	132	151	-17	-105	-107	-11	-109	-95	56	111
30	942	-619	114	331	157	22	229	332	178	-68	500	7	-69	9	123	230	174	49	-67	70	191
40	-246	-361	-334	-430	-430	-168	363	316	-42	-44	510	27	-108	-119	36	94	-3	-117	-184	-61	90
50	125	168	128	-283	-198	58	376	466	293	-24	520	69	-79	-106	-11	65	-25	-168	-122	140	290
60	-59	78	133	255	257	103	22	51	219	238	530	216	17	263	-66	261	386	344	-37	-480	40
70	-93	-65	133	252	67	11	159	273	308	308	540	-52	8	160	175	-18	169	297	343	323	113
80	38	-192	-42	173	502	159	-690	-824	-1018	-684	570	-61	-119	-57	82	75	16	99	62	-64	-101
90	-744	72	465	287	-10	189	-59	116	596	646	590	7	-121	-37	107	241	500	96	23	286	275
100	287	-523	-843	481	-12	302	352	46	296	-469	610	132	-30	110	-63	-110	-63	78	-36	-178	180
110	-353	-209	132	27	-273	-331	302	919	708	249	600	103	14	64	-123	-238	-173	33	40	157	205
120	-202	-50	142	223	50	-82	-274	-151	93	429	620	-22	-139	-125	83	-142	-113	-55	42	108	-5
130	361	-206	-343	-153	307	602	324	-64	-345	-160	650	630	-60	105	80	-162	-238	-105	153	143	60
140	50	322	241	-103	-490	-755	-563	103	519	202	640	-60	32	7	-94	-135	-21	68	-12	-133	8
150	92	-355	-520	-74	284	151	25	-95	-94	3	660	17	165	105	56	-85	60	95	11	-115	-108
160	7	-20	320	356	88	30	578	634	363	363	670	23	115	37	-68	-105	-20	-41	-123	-144	-77
170	-395	-567	-190	269	230	-565	-516	-377	-40	256	680	17	120	-48	-199	-232	6	318	184	-2	178
180	190	25	-110	-48	79	386	328	45	-251	-206	690	204	65	207	121	-29	-142	-142	-80	76	242
190	453	631	506	162	-174	-144	35	104	13	-132	700	154	-30	8	83	106	-60	-144	-28	133	103
200	-169	88	152	-51	-227	-193	430	688	645	274	710	-8	96	172	216	146	97	112	151	45	-125
210	-379	-208	452	528	247	-479	-686	-294	217	281	800	221	234	-18	-100	216	207	91	-22	-26	108
220	-53	-264	-322	271	623	126	459	-418	283	677	730	14	-82	-167	-163	-57	34	25	-72	-169	-241
230	482	233	-96	25	294	328	254	-64	-168	-321	780	-103	157	250	73	-114	-101	-3	83	52	-31
240	-374	-353	27	241	333	209	58	-198	-185	-29	780	-122	37	194	169	58	-97	-119	115	159	96
250	135	87	46	113	177	155	-239	-646	-850	305	760	-54	-94	31	189	213	108	9	-77	-108	-77
260	512	485	107	-192	-215	6	213	-342	-220	434	770	-33	64	159	-27	-119	-10	75	185	164	40
270	514	372	107	-200	6	207	65	-128	-237	-269	780	-124	-182	-48	47	8	-96	-161	-18	123	249
280	-87	129	213	97	-16	-95	-116	-67	46	33	790	262	8	-88	48	150	180	67	-134	-159	78
290	-73	-47	112	253	296	-46	25	113	-91	-91	800	221	234	-18	-100	216	207	91	-22	-26	108
300	-91	139	275	215	83	-115	-195	-59	139	178	800	210	168	88	-31	-117	81	220	191	88	-29
310	67	-75	-156	-83	47	150	177	208	177	208	800	-142	-124	137	114	20	-81	96	81	-3	81
320	-410	-206	-9	-80	91	257	206	49	-144	-134	830	-74	-117	-44	74	159	117	-16	-134	-108	-25
330	-16	-26	-55	-28	0	-92	-179	-182	-4	44	840	-18	9	115	95	4	1	73	97	15	-130
340	-66	-235	-134	150	333	314	111	25	-263	-207	850	-123	52	150	117	33	-27	-76	-84	-67	-37
350	228	591	586	255	-70	-124	247	583	-207	-383	860	47	25	-73	-79	10	-13	-59	-98	-51	88
360	-191	1	-44	-88	-165	-201	-110	81	128	-127	870	59	1	-35	-69	-34	-4	-121	-185	-123	37
370	-198	-123	-54	14	45	-126	-238	-172	29	179	880	110	3	-91	-97	15	31	-20	-79	-35	74
380	310	155	-33	11	106	62	-50	-114	-14	0	890	92	11	-75	32	34	61	-46	-219	-183	-33
390	-55	-26	-26	19	-102	-226	-350	-34	352	382	900	72	102	68	84	99	60	5	-33	20	57
400	155	-20	-26	44	28	-5	9	-83	-122	-122	910	-68	-160	-106	-2	22	-37	-94	-48	-9	-12
410	-124	-40	77	168	71	-144	-324	-209	97	247	920	-129	-203	-237	-141	31	60	-100	-162	-54	52
420	77	-99	-284	-233	-55	45	40	-15	-7	-61	930	169	166	6	-42	7	79	183	104	-75	-15
430	-148	-159	-21	95	45	-144	-267	-223	-110	-23	940	21	-3	-44	-48	77	102	14	-38	-61	48
440	94	120	66	-16	-132	-209	-85	196	241	132	950	-3	54	57	-24	-91	-112	-63	-58	-40	38
450	28	-45	57	63	105	429	140	-161	-228	-45	960	104	-81	-110	13	87	187	135	-15	-82	94
460	146	236	3	-160	-176	14	46	-122	-252	-270	970	209	121	-21	-118	-22	123	130	-70	-130	-71
470											980	1	76	84	-41	-137	-156	-76	27	112	54

TO BE CONTINUED

TO BE CONTINUED

CONTINUED (M-1017 EAST)

NO.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
990	-81	-97	-9	51	21	-36	-37	-67	-6	18
1000	-61	-137	-101	0	69	143	44	-78	-102	-73
1010	-25	-15	-41	-103	-129	-80	16	73	110	29
1020	-58	-117	-66	76	12	-40	-39	-11	12	126
1030	-120	-16	-13	49	73	-12	-92	-61	27	27
1040	-128	-128	-46	35	103	53	31	102	160	120
1050	53	16	1	0	40	24	-31	-74	-115	-120
1060	-19	80	-63	-46	-50	-16	-7	101	-121	36
1070	164	98	33	-167	-81	70	174	113	4	-98
1080	-134	-87	32	100	7	-74	-139	-197	-40	79
1090	-33	-111	-140	-33	-34	-101	-142	-126	-59	-23
1100	-71	-132	-158	-133	-16	82	90	52	12	19
1110	65	109	12	-92	-86	9	76	59	2	-79
1120	-164	-194	-92	106	86	-17	-102	-67	126	85
1130	12	-92	-16	113	49	-21	-84	-104	-33	14
1140	34	-36	-147	-240	-276	-229	-59	36	-40	-88
1150	-96	-31	58	-8	-101	35	181	93	-70	-114
1160	29	-14	-115	-156	-117	39	162	13	-155	-186
1170	100	212	82	-37	-39	120	86	-17	-97	-21
1180	3	-67	-101	21	135	106	8	-82	-172	-22
1190	93	5	-41	-61	4	74	61	-34	-177	-109
1200	42	93	36	-7	-21	50	96	113	83	-20
1210	-161	-119	-17	101	217	163	89	-75	-75	100
1220	214	223	106	-29	-8	68	-5	-25	6	57
1230	107	-52	-153	-103	-20	47	1	-68	-32	80
1240	45	-23	-31	105	211	157	49	-95	-39	39
1250	142	140	-101	-100	44	121	92	-71	-197	-258
1260	-128	24	82	-55	-85	-14	71	105	37	-63
1270	-30	67	134	78	-54	-157	-135	18	100	57
1280	-51	-104	-35	56	69	23	-57	-11	52	82
1290	58	-25	-91	-87	-24	20	64	80	100	47
1300	-43	-129	-118	-33	41	119	48	-47	-113	-113
1310	-45	7	24	-25	12	82	64	14	-16	11
1320	66	55	21	-12	-45	-58	-55	-7	66	59
1330	-8	-85	-156	-45	75	154	137	20	-91	-172
1340	-155	-74	7	-69	-164	-29	106	29	-102	-174
1350	-147	19	165	154	25	-51	17	131	134	22
1360	-73	-103	-13	58	58	14	-26	-77	-69	24
1370	70	85	75	53	39	29	44	80	56	58
1380	116	-20	-126	-10	73	43	-87	-102	11	37
1390	-28	-95	33	66	15	-84	-9	67	38	38
1400	-14	9	107	148	69	-1	-64	-40	47	67
1410	68	43	24	34	76	106	21	-15	61	78
1420	105	73	11	-23	-36	10	25	-24	-74	-37
1430	49	94	154	137	10	-70	-46	58	101	113
1440	80	31	39	108	147	41	-55	-21	55	91
1450	123	77	-11	-58	0	105	63	-4	-31	-22
1460	9	32	41	1	-37	-43	5	42	55	52
1470	42	36	24	16	74	127	135	141	115	74
1480	-1	-5	39	65	82	104	87	40	9	9
1490	69	95	99	80	38	0	-4	83	110	46
1500	-45	-38	65	103	145	74	18	79	130	27

TO BE CONTINUED

CONTINUED (M-1017 EAST)

NO.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
990	-81	-97	-9	51	21	-36	-37	-67	-6	18
1000	-61	-137	-101	0	69	143	44	-78	-102	-73
1010	-25	-15	-41	-103	-129	-80	16	73	110	29
1020	-58	-117	-66	76	12	-40	-39	-11	12	126
1030	-120	-16	-13	49	73	-12	-92	-61	27	27
1040	-128	-128	-46	35	103	53	31	102	160	120
1050	53	16	1	0	40	24	-31	-74	-115	-120
1060	-19	80	-63	-46	-50	-16	-7	101	-121	36
1070	164	98	33	-167	-81	70	174	113	4	-98
1080	-134	-87	32	100	7	-74	-139	-197	-40	79
1090	-33	-111	-140	-33	-34	-101	-142	-126	-59	-23
1100	-71	-132	-158	-133	-16	82	90	52	12	19
1110	65	109	12	-92	-86	9	76	59	2	-79
1120	-164	-194	-92	106	86	-17	-102	-67	126	85
1130	12	-92	-16	113	49	-21	-84	-104	-33	14
1140	34	-36	-147	-240	-276	-229	-59	36	-40	-88
1150	-96	-31	58	-8	-101	35	181	93	-70	-114
1160	29	-14	-115	-156	-117	39	162	13	-155	-186
1170	100	212	82	-37	-39	120	86	-17	-97	-21
1180	3	-67	-101	21	135	106	8	-82	-172	-22
1190	93	5	-41	-61	4	74	61	-34	-177	-109
1200	42	93	36	-7	-21	50	96	113	83	-20
1210	-161	-119	-17	101	217	163	89	-75	-75	100
1220	214	223	106	-29	-8	68	-5	-25	6	57
1230	107	-52	-153	-103	-20	47	1	-68	-32	80
1240	45	-23	-31	105	211	157	49	-95	-39	39
1250	142	140	-101	-100	44	121	92	-71	-197	-258
1260	-128	24	82	-55	-85	-14	71	105	37	-63
1270	-30	67	134	78	-54	-157	-135	18	100	57
1280	-51	-104	-35	56	69	23	-57	-11	52	82
1290	58	-25	-91	-87	-24	20	64	80	100	47
1300	-43	-129	-118	-33	41	119	48	-47	-113	-113
1310	-45	7	24	-25	12	82	64	14	-16	11
1320	66	55	21	-12	-45	-58	-55	-7	66	59
1330	-8	-85	-156	-45	75	154	137	20	-91	-172
1340	-155	-74	7	-69	-164	-29	106	29	-102	-174
1350	-147	19	165	154	25	-51	17	131	134	22
1360	-73	-103	-13	58	58	14	-26	-77	-69	24
1370	70	85	75	53	39	29	44	80	56	58
1380	116	-20	-126	-10	73	43	-87	-102	11	37
1390	-28	-95	33	66	15	-84	-9	67	38	38
1400	-14	9	107	148	69	-1	-64	-40	47	67
1410	68	43	24	34	76	106	21	-15	61	78
1420	105	73	11	-23	-36	10	25	-24	-74	-37
1430	49	94	154	137	10	-70	-46	58	101	113
1440	80	31	39	108	147	41	-55	-21	55	91
1450	123	77	-11	-58	0	105	63	-4	-31	-22
1460	9	32	41	1	-37	-43	5	42	55	52
1470	42	36	24	16	74	127	135	141	115	74
1480	-1	-5	39	65	82	104	87	40	9	9
1490	69	95	99	80	38	0	-4	83	110	46
1500	-45	-38	65	103	145	74	18	79	130	27

END

RECORD = M-1017 COMPONENT = UP STATION = HANASAKI-M
 DATE AND TIME = 1986-06-08-20-02 TOTAL NUMBER OF DATA = 1700
 SAMPLING INTERVAL = 0.010 (SEC) SCAL = 0.10000
 SIGNAL = GR. ACC.
 CONNECTION POINT IN DATA NUMBER = 1700

Np.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	-30	-29	-31	-69	24	139	190	104	9	-60
10	-68	-66	-7	0	39	62	3	52	183	200
20	62	-43	-45	22	92	34	-56	-13	43	3
30	-68	-150	-228	-159	-12	162	234	196	133	101
40	-29	-146	-81	2	71	27	-76	-320	36	36
50	147	-14	-58	34	16	95	76	96	164	71
60	-34	-73	-2	16	77	151	130	96	95	16
70	-76	-152	-134	-66	28	87	160	194	123	25
80	6	6	-42	-53	-126	-182	-175	-60	68	212
90	160	-13	-39	95	98	-45	26	34	-68	-10
100	94	16	-97	-73	18	4	-143	-171	-45	118
110	156	30	2	64	197	212	-26	-189	-108	-44
120	-86	-88	-27	86	79	31	75	107	147	135
130	77	180	171	19	-186	-215	-36	53	188	55
140	-120	-153	-115	-49	-51	-71	-19	4	51	107
150	182	145	28	-55	-50	-51	-80	-132	-91	-46
160	-19	99	61	59	220	241	113	28	-92	-108
170	66	76	-58	-131	132	115	-47	-24	113	40
180	6	135	163	-73	-111	-3	74	59	-14	-137
190	-56	10	-19	86	166	101	-39	55	77	-79
200	-152	-18	70	51	177	171	-47	-20	117	117
210	-86	-88	-27	86	79	31	75	107	147	135
220	19	24	119	165	64	42	-5	-200	-314	-253
230	-155	-66	85	57	-69	-176	-57	88	89	114
240	174	193	97	-27	-79	-40	-10	-124	-148	-148
250	0	97	90	13	42	-9	-90	-74	-82	-142
260	-99	23	23	-67	-58	16	-3	-28	-20	-93
270	-104	89	98	67	93	48	10	20	16	-43
280	76	125	24	-10	35	-14	-32	38	1	-11
290	67	97	-33	-69	50	131	48	-25	-74	82
300	-81	-67	-28	20	108	142	85	7	30	135
310	88	-62	2	66	-79	-81	69	61	-25	-46
320	65	20	-117	-47	42	54	16	41	-69	-162
330	-49	80	36	-48	29	41	-27	-60	-56	-97
340	-88	-9	-40	-49	52	-29	-91	-39	26	2
350	-108	-126	-54	-56	-140	-93	37	51	-31	-35
360	38	-19	-17	110	40	-7	44	36	-56	-19
370	32	-72	-19	88	71	-36	54	86	44	80
380	35	-62	-135	-109	50	138	90	28	-25	-65
390	-70	-24	22	30	35	17	-7	36	25	-28
400	-51	34	61	-23	19	66	-11	-35	6	18
410	7	43	69	19	-108	-68	25	101	41	-28
420	-8	32	42	49	-1	-56	2	22	40	0
430	-66	-48	-49	-100	-85	-157	-73	6	59	31
440	46	70	70	43	0	51	106	100	5	-70
450	-18	-20	-14	104	-51	-121	-21	82	89	-38
460	-115	-104	-12	51	-3	-107	-190	-111	16	-10

TO BE CONTINUED

Np.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
470	-126	-121	-25	89	78	111	52	-4	38	-108
480	-147	-60	20	38	19	102	-13	-96	-31	-61
490	-71	23	103	162	99	-15	10	-31	-156	-113
500	-44	18	-12	-61	-30	26	74	96	91	-6
510	-43	101	158	7	-52	27	5	-50	-42	-44
520	-102	-56	33	1	-82	-55	-36	-41	0	-17
530	-126	-88	11	79	48	-39	-79	-87	-20	9
540	-20	-38	-20	0	-28	-85	-133	-132	-5	31
550	-8	-27	-35	7	50	44	37	85	34	-28
560	-68	-37	-4	-36	-25	23	50	41	-32	-96
570	-135	-74	55	22	-88	5	50	-32	-91	-79
580	-25	-13	-44	-88	-89	13	120	99	54	92
590	96	52	-5	-55	-62	-17	4	6	-31	-16
600	49	57	-1	-14	-18	3	-52	-62	-13	-42
610	-41	13	-1	-74	-20	-9	-89	-107	-71	-44
620	-61	-65	-19	-5	-35	-82	-45	7	-23	39
630	60	46	-15	19	62	-49	-41	43	68	9
640	-4	36	4	6	41	8	-42	-57	-23	35
650	44	17	-1	5	32	28	20	-30	-63	10
660	48	34	-9	-1	36	52	56	18	9	22
670	48	57	57	44	10	-20	-41	-78	-120	-76
680	12	29	-54	-14	43	58	27	-14	11	53
690	22	59	77	-5	-8	18	30	21	-22	31
700	113	79	-14	-40	6	44	21	-13	8	41
710	34	12	14	52	52	-17	10	-13	-37	7
720	-34	-36	-34	-19	15	63	79	64	55	75
730	72	27	-8	29	54	34	12	-89	-91	-22
740	29	8	-54	-29	11	-13	-59	-29	0	-5
750	-53	22	47	-27	-12	42	31	-26	-34	-35
760	-40	-77	-42	-42	3	11	-9	-24	19	57
770	19	-13	44	107	92	18	6	11	4	-52
780	-66	-34	-21	-38	-76	-20	47	25	-26	-38
790	0	22	21	-1	-33	-49	-34	-3	22	44
800	39	-1	-42	-33	-6	-14	-58	-5	83	53
810	15	-26	-54	-66	-9	45	10	-45	14	38
820	8	-47	-22	37	31	-45	-44	10	-25	-72
830	-15	19	45	30	-1	-24	-15	6	21	13
840	-21	-6	18	33	17	-10	-5	10	0	-12
850	13	48	57	24	-41	-29	24	57	26	-23
860	17	54	5	-49	-80	-38	-21	-43	-90	-67
870	-9	18	17	-12	-44	-37	31	46	26	3
880	-13	37	35	-2	-22	-22	-23	-27	-37	-30
890	-15	-4	24	31	-16	26	74	0	-53	-92
900	-46	18	28	4	-2	15	35	5	-1	9
910	54	35	-22	-48	21	31	-18	-1	14	-10
920	-34	14	53	41	43	30	-10	-24	-24	-23
930	-25	-19	-14	9	47	27	-18	-59	-50	-35
940	-35	-57	-83	-68	-35	19	-18	-63	-89	-90
950	-46	-9	21	35	25	5	-13	-3	12	33
960	47	39	14	-6	-23	-14	12	15	-27	-73
970	-75	-48	-32	-8	-3	-12	-12	-7	7	12
980	4	-18	-24	-23	-13	-19	-25	11	50	43

TO BE CONTINUED

CONTINUED(M-1017 UP)										CONTINUED(M-1017 UP)											
ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
990	14	-5	-11	15	37	47	21	-15	-35	-26	1510	-5	17	23	2	-10	6	10	11	1	-9
1000	4	7	-22	-43	-48	7	32	-10	-52	-47	1520	-14	6	35	44	46	39	24	21	26	55
1010	-19	-48	-89	-39	35	55	47	40	18	-1	1530	53	24	24	40	46	42	29	22	18	10
1020	-15	-18	5	7	-9	0	35	72	46	9	1540	2	-1	0	-1	0	10	21	22	22	22
1030	7	24	1	-32	-48	-31	2	14	16	-15	1550	22	21	23	16	10	8	-1	0	6	20
1040	-35	-28	7	23	21	17	-5	-5	0	-11	1560	27	45	40	2	-11	-12	1	11	10	0
1050	-31	-44	-4	5	-18	-36	23	35	-4	-11	1570	-20	-16	7	21	5	-27	-14	34	37	4
1060	33	53	31	8	-2	12	27	34	33	32	1580	0	-1	7	10	15	39	46	44	47	35
1070	16	-2	-24	-44	-48	-33	-15	13	23	20	1590	37	59	88	56	0	22	54	62	7	22
1080	-10	-34	-2	10	24	32	46	43	9	-12	1600	49	69	65	48	29	40	61	34	8	1
1090	21	6	12	58	24	-16	14	36	27	9	1610	-1	6	19	23	23	50	40	28	21	31
1100	0	32	13	-19	8	29	10	-1	1	6	1620	29	22	38	42	34	26	32	55	50	21
1110	24	32	10	-22	-14	-3	0	-7	-29	-36	1630	-7	1	39	56	49	38	28	34	45	36
1120	-16	7	11	-13	-10	21	10	-28	-45	-12	1640	28	29	35	33	34	34	33	41	46	44
1130	29	13	-32	-37	20	44	7	-41	-18	17	1650	45	45	45	45	44	46	37	34	48	56
1140	39	40	8	-25	-31	-15	-40	-50	-18	21	1660	46	45	35	33	33	35	50	71	30	-9
1150	0	-41	-61	-18	7	-15	-34	4	26	-8	1670	30	-4	-62	-22	46	2	-21	41	39	3
1160	-33	-4	30	55	52	19	-3	7	23	16	1680	19	46	44	45	28	38	40	12	15	22
1170	10	12	28	34	19	-3	-35	-55	-45	-9	1690	45	63	30	5	1	28	53	54	40	33
1180	37	41	17	8	32	47	25	13	1	-9											
1190	-62	-53	20	16	-7	-24	-18	3	12	9											
1200	18	23	17	9	24	66	73	43	-13	-42											
1210	2	39	37	12	1	9	43	73	39	-5											
1220	5	56	74	61	32	17	7	0	25	44											
1230	14	-9	-12	9	17	-17	-23	2	23	34											
1240	23	-12	-25	-23	-24	-13	-16	-25	-22	-28											
1250	13	78	28	-12	44	57	30	57	81	79											
1260	-7	-43	-10	27	3	-36	-18	-24	-54	-35											
1270	-22	-16	-25	-22	3	34	46	44	46	44											
1280	55	44	16	-20	-54	-80	-77	-50	-28	-3											
1290	19	54	51	18	0	46	84	58	46	43											
1300	45	54	26	-1	12	23	21	22	22	22											
1310	25	44	45	45	25	-3	-12	-3	11	35											
1320	66	45	37	23	10	15	6	-34	-13	28											
1330	33	17	0	-12	-6	16	32	45	44	54											
1340	34	24	10	21	50	52	27	8	-1	1											
1350	25	49	56	40	16	2	-6	-19	-24	-24											
1360	-23	-30	-7	43	69	49	19	0	30	71											
1370	46	-6	-25	-5	16	27	35	26	4	-1											
1380	0	-1	0	0	0	-9	-12	-12	-10	0											
1390	-1	0	-11	-29	-37	-25	-32	-28	7	11											
1400	5	0	28	52	52	28	7	-17	-10	3											
1410	13	36	42	24	22	21	37	47	40	25											
1420	9	-2	8	30	34	14	-21	-38	-22	-1											
1430	-7	-26	6	63	69	47	24	22	26	41											
1440	50	57	47	41	31	22	22	22	22	22											
1450	22	22	12	10	10	10	10	17	36	47											
1460	34	6	0	26	53	58	43	25	11	11											
1470	4	-2	0	0	-8	-13	-11	-11	-13	-8											
1480	0	-5	-13	-3	8	-8	-24	-21	14	12											
1490	-11	0	33	32	21	10	13	29	43	46											
1500	44	52	91	89	-8	38	69	4	-50	-56											

END

TO BE CONTINUED

RECORD = H-1022 COMPONENT = NORTH STATION = YAMASHITA-HEN-H
 DATE AND TIME = 1986-06-24-11-53 TOTAL NUMBER OF DATA = 5200
 SAMPLING INTERVAL = 0.010 (SEC) SIGNAL = GR. ACC.
 CONNECTION POINT IN DATA NUMBER = 1742, 3476, 5200,

CONTINUED (M-1022 NORTH)

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	12	28	30	39	38	39	39	38	26	12
10	-17	-47	-59	-59	-56	-44	-58	-22	2	21
20	41	69	79	70	56	36	24	19	13	0
30	-19	-29	-37	-39	-38	-26	-1	22	34	0
40	45	49	48	49	48	49	42	28	16	2
50	-8	-18	-20	-19	-19	-19	-19	-20	-19	-20
60	-21	-29	-29	-28	-18	-7	7	26	43	49
70	48	48	54	65	68	68	53	5	-63	-90
80	-80	-82	-46	-29	-19	-23	-38	-39	-19	17
90	29	28	29	28	59	48	49	59	15	-2
100	-39	-72	-78	-73	-62	-55	-36	-8	22	22
110	57	85	102	113	95	66	35	1	-24	-42
120	-55	-60	-51	-32	-28	-36	-56	-52	-31	-18
130	-21	-10	15	37	48	49	36	6	-9	-7
140	12	28	17	-3	-21	-42	-55	-63	-69	-69
150	-62	-36	-20	-11	-9	-10	1	16	28	33
160	28	15	9	9	10	0	-21	-32	-46	-54
170	-63	-68	-77	-77	-67	-52	-51	-8	12	51
180	46	67	88	111	134	133	98	57	23	10
190	1	-1	-10	-9	-13	-23	-35	-51	-72	-68
200	-39	0	30	49	58	58	76	89	81	48
210	6	-20	-29	-29	-21	-19	-18	-10	-7	6
220	9	9	9	9	9	17	11	0	-9	-26
230	-38	-39	-39	-39	-17	-10	-18	-34	-36	-16
240	0	21	40	48	48	48	49	40	47	48
250	32	9	-12	-35	-56	-48	-31	-16	0	3
260	10	8	10	5	-1	0	0	0	-6	-10
270	-9	-9	-11	-19	-19	-19	-20	-30	-28	-36
280	-36	-17	2	11	6	-6	-18	-28	-30	-26
290	-13	-9	-2	6	19	35	50	65	68	45
300	15	-15	-45	-65	-80	-91	-92	-81	-68	-55
310	-39	-23	-9	6	38	80	125	139	126	87
320	54	24	7	-12	-23	-37	-55	-88	-123	-164
330	-156	-119	-95	-58	-51	6	22	33	44	62
340	85	102	106	98	72	20	-15	-48	-72	-99
350	-103	-95	-86	-71	-63	-43	-18	8	30	43
360	49	45	26	8	-21	-58	-64	-86	-61	-37
370	-14	0	8	18	19	28	44	70	91	98
380	97	89	69	38	-15	-66	-104	-108	-99	-79
390	-59	-51	-73	-94	-74	-41	-5	34	68	87
400	91	81	60	47	37	28	40	65	84	78
410	46	0	-51	-99	-133	-137	-131	-117	-102	-102
420	-68	-75	-65	-51	-35	-25	-13	2	21	37
430	50	64	77	75	44	0	-39	-75	-102	-101
440	-90	-66	-43	-15	11	35	56	74	79	70
450	51	31	18	19	19	17	-9	-40	-58	-59
460	-58	-59	-58	-59	-57	-49	-41	-38	-24	-17

TO BE CONTINUED

TO BE CONTINUED

CONTINUED (M-1022 NORTH)

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
990	-102	-86	-66	-46	-26	0	22	41	61	80
1000	94	98	91	84	70	52	37	24	19	19
1010	19	19	19	20	30	42	55	59	59	51
1020	23	0	-31	-62	-77	-79	-67	-46	-27	-7
1030	10	19	19	19	19	19	20	13	8	10
1040	9	9	9	9	9	9	10	3	0	-8
1050	-1	14	19	19	19	11	8	12	23	31
1060	38	39	32	14	0	-16	-28	-30	-23	-17
1070	-9	9	9	9	1	0	-8	-10	-9	-9
1080	-10	-8	0	5	16	28	42	48	31	14
1090	-7	-17	-23	-30	-29	-27	-14	-10	-3	0
1100	0	0	0	0	0	0	0	0	0	0
1110	-11	-22	-28	-30	-28	-30	-18	-28	-19	-19
1120	-20	-19	-20	-18	-25	-31	-40	-55	-60	-60
1130	-58	-59	-55	-45	-37	-27	-6	8	15	19
1140	19	13	3	-6	-18	-21	-29	-21	-8	6
1150	21	37	55	76	94	107	104	94	80	56
1160	30	-10	-48	-88	-99	-97	-84	-60	-36	-5
1170	16	36	52	59	56	48	34	12	9	-27
1180	-45	-58	-67	-69	-68	-68	-69	-65	-54	-57
1190	-13	7	26	45	68	90	104	108	106	95
1200	70	44	22	9	-3	-21	-45	-66	-77	-79
1210	-75	-61	-39	-12	14	41	74	106	124	128
1220	120	100	70	39	11	-17	-32	-46	-49	-49
1230	-47	-39	-28	-7	11	32	67	80	64	35
1240	3	-27	-56	-74	-90	-104	-114	-117	-123	-129
1250	-121	-110	-90	-66	-43	-19	6	26	38	55
1260	67	68	57	34	15	1	0	0	0	0
1270	-7	-21	-24	-5	12	26	47	60	69	64
1280	57	50	47	49	45	36	29	21	13	3
1290	0	0	-3	-10	-9	-10	-9	-16	-20	-19
1300	-20	-18	-26	-30	-29	-29	-30	-23	-17	-9
1310	2	17	33	39	25	6	-12	-35	-57	-74
1320	-85	-97	-106	-108	-107	-108	-107	-107	-108	-107
1330	-100	-94	-82	-66	-42	-21	2	21	38	64
1340	94	105	114	108	92	69	33	16	5	0
1350	0	2	14	20	18	25	35	50	66	81
1360	93	105	121	133	143	147	146	146	126	93
1370	69	22	-19	-74	-123	-142	-154	-165	-167	-166
1380	-167	-165	-154	-128	-101	-77	-47	-15	11	37
1390	61	74	87	95	81	54	31	9	-29	-68
1400	-108	-141	-170	-198	-216	-223	-207	-189	-159	-114
1410	-49	3	47	93	127	163	191	216	243	261
1420	281	282	271	256	160	107	29	-59	-110	-139
1430	-153	-158	-152	-146	-142	-130	-118	-106	-112	-125
1440	-133	-120	-86	-50	-21	9	29	28	10	-37
1450	-89	-138	-172	-205	-222	-211	-199	-167	-127	-96
1460	-67	-29	8	33	65	107	137	162	159	142
1470	129	135	99	62	24	-20	-38	-38	-45	-50
1480	-48	-55	-88	-125	-162	-208	-225	-208	-183	-150
1490	-125	-105	-86	-70	-43	-15	12	68	87	121
1500	151	182	213	243	270	244	182	145	101	58

TO BE CONTINUED

CONTINUED (M-1022 NORTH)

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1510	19	-22	-57	-88	-118	-139	-165	-187	-196	-195
1520	-182	-155	-121	-89	-56	-22	0	10	16	26
1530	23	18	19	20	13	9	2	-20	-7	-10
1540	25	57	80	96	88	51	24	7	-6	-10
1550	-10	0	26	45	54	60	67	69	61	50
1560	45	35	22	18	19	19	19	19	19	19
1570	19	11	0	-8	-19	-33	-41	-49	-65	-69
1580	-68	-63	-29	5	30	62	63	26	-31	-91
1590	-138	-176	-218	-252	-272	-275	-273	-275	-267	-267
1600	-239	-212	-184	-133	-79	-32	29	86	140	186
1610	205	205	203	183	160	137	72	28	3	-19
1620	-35	-51	-66	-89	-121	-156	-165	-198	-228	-235
1630	-231	-199	-118	-59	38	158	174	192	180	131
1640	78	13	46	-98	-177	-220	-194	-162	-150	7
1650	69	97	120	128	138	147	146	147	130	96
1660	62	39	12	-12	-32	-59	-76	-100	-114	-118
1670	-117	-118	-106	-80	-49	-10	31	77	116	162
1680	206	239	255	254	254	252	225	191	177	175
1690	176	172	146	135	129	135	139	137	149	118
1700	38	-17	-79	-135	-210	-246	-251	-259	-264	-273
1710	-282	-285	-272	-252	-227	-154	-67	0	52	99
1720	146	186	228	306	363	358	334	295	271	235
1730	203	173	146	124	82	29	-39	-138	-179	-177
1740	-165	-169	-178	-195	-205	-192	-175	-147	-108	-77
1750	-62	-52	-48	-41	-39	-39	-28	-2	30	30
1760	82	151	241	302	331	327	297	244	166	45
1770	-26	-106	-211	-307	-362	-342	-345	-327	-275	-241
1780	-205	-139	-69	-49	-50	-59	-57	-58	-13	6
1790	18	18	-7	-53	-98	-140	-159	-152	-119	-75
1800	4	98	169	270	390	407	357	270	170	57
1810	-30	-123	-220	-302	-377	-457	-510	-479	-431	-344
1820	-261	-159	-6	-149	-230	293	339	371	397	402
1830	380	349	310	257	209	146	55	-41	-123	-194
1840	-288	-352	-351	-326	-262	-198	-110	10	124	184
1850	192	178	142	88	32	-19	-59	-97	-123	-140
1860	-148	-145	-121	-89	6	49	83	116	131	178
1870	201	229	244	245	227	179	150	79	29	-65
1880	-86	-156	-240	-313	-377	-417	-419	-389	-302	-208
1890	-114	-48	9	71	118	168	226	282	356	444
1900	490	476	412	327	234	144	51	-14	-59	-118
1910	-211	-266	-317	-354	-374	-384	-364	-289	-199	-118
1920	-57	3	47	80	134	176	195	195	181	143
1930	95	63	-7	-57	-110	-146	-132	-99	-58	-23
1940	-2	13	25	48	71	107	122	135	123	101
1950	60	13	-32	-69	-108	-140	-161	-168	-153	-124
1960	-98	-10	-10	-18	-28	-38	-39	-28	-6	-10
1970	-9	-10	-10	-18	-28	-38	-39	-28	-6	-10
1980	16	35	39	37	42	49	47	32	8	-19
1990	-48	-88	-99	-94	-67	-35	-8	18	27	27
2000	31	56	90	128	176	208	215	214	215	212
2010	195	171	139	109	86	17	-34	-64	-91	-107
2020	-116	-119	-102	-70	-22	7	29	53	58	49

TO BE CONTINUED

CONTINUED(M-1022 NORTH)

NO.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2030	2	-39	-83	-126	-160	-202	-247	-266	-282	-284
2040	-195	-160	-130	-103	-76	-45	-20	2	18	19
2050	19	19	20	31	45	48	49	60	68	68
2060	68	68	68	67	69	61	44	38	39	38
2070	39	35	18	-5	-39	-82	-124	-175	-216	-246
2080	-234	-194	-208	-172	-20	32	71	143	196	230
2090	235	225	207	180	149	105	55	21	-2	-21
2100	-29	-29	-11	16	31	37	42	49	48	48
2110	48	47	35	13	-14	-36	-59	-80	-88	-88
2120	-85	-68	-38	-45	-16	6	26	41	58	98
2130	139	169	176	175	156	116	79	49	27	19
2140	19	18	20	30	40	48	48	45	22	-6
2150	-37	-69	-104	-109	-104	-94	-76	-58	-43	-28
2160	-20	-11	-10	-4	8	9	8	-6	-16	-22
2170	-12	-1	4	16	19	20	30	39	32	5
2180	-25	-53	-74	-85	-88	-89	-81	-59	-28	14
2190	42	83	127	165	187	195	184	139	81	21
2200	-19	-45	-69	-91	-105	-108	-106	-95	-75	-51
2210	-32	-12	8	38	64	86	98	94	53	2
2220	-45	-89	-126	-168	-215	-253	-271	-254	-207	-161
2230	-84	-8	45	100	155	193	206	194	166	125
2240	75	16	-30	-79	-135	-178	-231	-261	-325	-380
2250	-96	-28	43	124	230	349	440	464	454	431
2260	386	336	255	153	66	2	-61	-125	-177	-233
2270	-254	-225	-177	-124	-72	-24	18	58	98	119
2280	104	85	44	0	-50	-50	-127	-158	-173	-176
2290	-162	-148	-126	-94	-61	-31	-11	0	12	32
2300	64	90	118	125	72	-4	-60	-107	-147	-180
2310	-204	-216	-215	-216	-210	-193	-164	-123	-78	-39
2320	-6	19	58	97	137	178	208	235	246	237
2330	210	171	125	78	33	0	-29	-49	-57	-59
2340	-58	-59	-59	-59	-59	-56	-42	-31	-23	-19
2350	-20	-18	-33	-38	-48	-48	-36	-26	-13	-9
2360	-11	4	35	63	96	117	105	81	54	30
2370	-5	-22	-59	-69	-19	-12	27	94	133	154
2380	167	156	115	66	18	-22	-53	-81	-97	-106
2390	-116	-118	-118	-117	-106	-98	-89	-74	-63	-54
2400	-48	-35	-39	-39	-39	-39	-41	-53	-65	-70
2410	-67	-72	-79	-77	-63	-38	-23	-15	-10	-4
2420	6	31	68	79	72	58	65	93	106	106
2430	94	72	38	0	-23	-20	-35	-40	-38	-40
2440	-36	-16	17	55	88	116	127	121	105	84
2450	58	32	9	-8	7	5	13	19	19	15
2460	8	10	8	15	37	48	48	43	34	25
2470	7	-13	-39	-66	-88	-107	-136	-165	-191	-211
2480	-220	-219	-196	-170	-144	-116	-90	-71	-55	-43
2490	187	-4	17	41	78	112	138	154	172	184
2500	-250	-86	161	131	98	66	43	6	-41	-66
2510	-86	105	-124	-128	-127	-107	-71	-49	-35	-18
2520	8	57	77	85	80	68	55	44	37	39
2530	37	42	48	54	59	65	72	78	86	90
2540	110	126	138	125	94	47	-26	-68	-108	-144

TO BE CONTINUED

CONTINUED(M-1022 NORTH)

NO.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2550	-173	-216	-270	-318	-342	-343	-343	-339	-303	-254
2560	-209	-157	-92	-47	2	74	151	217	258	272
2570	274	268	227	174	137	96	51	2	-39	-78
2580	-100	-116	-110	-89	-83	-72	-65	-50	-20	5
2590	30	61	79	94	103	114	116	106	92	77
2600	68	60	57	58	49	48	48	48	49	61
2610	75	78	78	75	60	38	26	8	-10	-25
2620	-33	-45	-50	-48	-50	-48	-50	-47	-63	-108
2630	-125	-125	-111	-96	-77	-63	-29	6	32	50
2640	42	27	2	-21	-48	-74	-83	-88	-89	-85
2650	-78	-77	-68	-67	-39	6	43	78	89	86
2660	88	81	77	69	68	65	54	42	26	12
2670	4	8	9	0	0	0	0	2	16	27
2680	37	46	54	62	68	67	68	67	74	78
2690	77	78	77	77	78	77	78	77	71	67
2700	67	69	78	76	68	68	68	65	45	27
2710	2	-21	-63	-95	-115	-144	-175	-212	-224	-226
2720	-225	-225	-212	-193	-166	-147	-124	-95	-82	-49
2730	-10	29	65	84	96	97	96	81	57	21
2740	-13	-36	-39	-20	2	15	19	18	19	18
2750	25	40	67	98	123	150	173	192	204	195
2760	166	136	111	79	26	-35	-77	-113	-117	-117
2770	-104	-95	-78	-35	26	65	93	112	125	126
2780	109	90	68	59	1	-50	-66	-103	-124	-146
2790	-14	-143	-133	-122	-109	-92	-56	-11	5	18
2800	28	43	49	42	17	-42	-32	-48	-69	-102
2810	-117	-135	-151	-158	-155	-147	-139	-126	-112	-100
2820	-80	-33	12	36	57	86	113	126	135	129
2830	120	116	117	117	116	122	131	137	136	136
2840	137	135	125	115	107	107	107	107	107	107
2850	107	98	97	97	98	96	95	41	8	-29
2860	-69	-107	-147	-174	-176	-176	-176	-168	-168	-167
2870	-165	-157	-154	-140	-131	-112	-79	-50	7	38
2880	55	65	68	74	78	85	89	99	85	58
2890	43	26	12	0	-13	-27	-37	-45	-50	-48
2900	-50	-37	-11	35	75	95	109	123	142	140
2910	116	95	72	49	19	-11	-35	-68	-109	-148
2920	-158	-156	-158	-151	-145	-132	-109	-82	-22	-4
2930	3	10	8	10	15	11	0	6	13	22
2940	32	29	2	-17	-19	-23	-30	-39	-59	-59
2950	-30	-58	-58	-40	-39	-30	-39	-39	-39	-39
2960	-59	-39	-40	-33	-39	-30	-29	-30	-30	-30
2970	-13	-4	11	35	61	87	114	138	153	156
2980	156	147	134	127	121	106	96	84	73	66
2990	57	47	35	22	12	8	8	-2	-10	-10
3000	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10
3010	-9	-10	-4	9	25	46	60	68	67	51
3020	41	24	5	-13	-27	-45	-61	-80	-96	-108
3030	-107	-109	-104	-94	-84	-61	-45	-23	-19	-20
3040	-13	-9	-10	-1	-5	-14	-25	-34	-40	-39
3050	-32	-23	-14	1	15	23	29	28	29	28
3060	32	44	56	71	84	88	84	65	37	8

TO BE CONTINUED

CONTINUED< M-1022 NORTH)

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
3070	-20	-43	-67	-59	-18	15	47	75	100	116
3080	117	108	90	71	54	41	33	23	21	8
3090	-12	-8	-11	-9	-10	-10	-10	-10	-10	-9
3100	-10	-8	0	0	-1	-10	-18	-18	-25	-36
3110	-48	-49	-57	-59	-59	-59	-59	-59	-59	-59
3120	-59	-59	-59	-59	-59	-48	-42	-42	-35	-29
3130	-30	-29	-29	-29	-18	-9	5	15	30	30
3140	18	-8	-11	-20	-27	-38	-39	-39	-40	-40
3150	-33	-28	-30	-29	-30	-28	-35	-40	-47	-50
3160	-45	-39	-34	-18	-10	-8	0	0	0	0
3170	2	13	20	31	45	54	65	68	76	78
3180	77	77	78	74	61	46	31	6	-8	-18
3190	-45	-49	-50	-45	-33	-19	-10	-3	0	2
3200	10	8	11	18	19	17	9	9	9	9
3210	9	9	9	9	9	9	9	8	10	5
3220	-1	-8	-9	-9	-12	-18	-26	-29	-35	-42
3230	-48	-49	-46	-26	-11	-4	1	9	17	24
3240	33	38	39	48	48	57	58	58	58	58
3250	55	44	37	27	17	8	-2	-19	-46	-66
3260	-90	-105	-113	-125	-125	-113	-98	-85	-69	-42
3270	-18	6	22	36	52	60	68	65	45	15
3280	-12	-32	-51	-71	-90	-102	-108	-100	-96	-89
3290	-82	-61	-42	-21	-8	2	15	30	45	54
3300	62	68	68	68	67	55	42	32	28	21
3310	8	0	0	-1	6	27	48	64	68	68
3320	67	55	42	35	24	18	11	-2	-18	-33
3330	-45	-50	-43	-33	-13	11	31	47	51	61
3340	67	71	80	87	88	87	88	84	72	61
3350	58	53	42	34	28	28	12	-8	-23	-35
3360	-45	-50	-48	-53	-59	-64	-70	-68	-60	-39
3370	-22	-11	-9	-10	-10	-10	-10	-10	-10	-10
3380	-10	-10	-10	-10	-17	-26	-39	-52	-61	-68
3390	-76	-84	-94	-100	-107	-108	-106	-98	-90	-79
3400	-69	-52	-41	-33	-25	-16	-3	10	33	55
3410	83	117	142	155	156	150	125	93	64	40
3420	21	1	-14	-20	-19	-28	-30	-26	-13	-4
3430	6	18	19	18	22	30	44	59	68	67
3440	69	58	37	26	11	6	-16	-26	-30	-29
3450	-29	-21	-19	-21	-30	-38	-38	-38	-46	-66
3460	-85	-88	-94	-99	-98	-98	-103	-112	-121	-134
3470	-138	-134	-120	-93	-61	-41	-34	-11	15	35
3480	46	54	54	54	54	54	53	40	25	7
3490	-10	-25	-40	-53	-64	-75	-95	-112	-123	-114
3500	-92	-76	-55	-37	-27	-14	0	6	-4	-15
3510	-24	-34	-40	-50	-52	-60	-56	-39	-27	23
3520	-23	-27	-34	-33	-33	-32	-32	-33	-25	23
3530	38	45	44	45	58	53	55	53	25	23
3540	13	5	5	5	5	5	5	14	28	41
3550	52	60	65	63	64	64	64	64	64	44
3560	31	12	-1	-23	-46	-60	-81	-92	-92	-90
3570	-83	-76	-64	-51	-36	-22	-6	12	31	35
3580	34	34	21	3	-20	-39	-56	-77	-88	-105

TO BE CONTINUED

CONTINUED< M-1022 NORTH)

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
3590	-112	-111	-112	-112	-111	-113	-122	-121	-121	-121
3600	-113	-103	-93	-92	-91	-81	-71	-62	-47	-33
3610	-20	-7	13	34	48	55	54	54	46	38
3620	24	12	-8	-29	-46	-53	-58	-64	-62	-63
3630	-62	-55	-47	-36	-33	-32	-23	-24	-20	-10
3640	1	12	15	15	15	8	14	15	15	25
3650	25	24	25	25	25	25	25	25	25	25
3660	25	25	20	6	-5	-19	-30	-34	-21	-4
3670	14	42	60	71	87	95	104	114	104	76
3680	57	38	15	1	-5	-19	-30	-37	-47	-56
3690	-66	-76	-89	-122	-115	-112	-121	-122	-121	-122
3700	-121	-122	-121	-123	-115	-112	-103	-85	-71	-54
3710	-41	-34	-30	-17	-2	18	25	23	9	-4
3720	-15	-24	-20	-10	1	20	37	51	55	60
3730	47	32	21	8	-3	-22	-34	-42	-54	-52
3740	-62	-63	-63	-62	-55	-47	-37	-29	-17	-1
3750	17	33	45	51	58	64	64	55	41	28
3760	18	14	16	8	5	2	-6	-16	-28	-35
3770	-25	-20	-11	-4	-4	-4	-3	-10	-20	-30
3780	-34	-33	-35	-44	-53	-53	-53	-44	-35	-30
3790	-12	8	24	42	64	79	93	93	94	82
3800	60	37	17	-1	-23	-41	-57	-63	-63	-62
3810	-63	-48	-25	-8	8	24	25	24	26	7
3820	-18	-32	-45	-60	-71	-75	-80	-73	-67	-53
3830	-45	-33	-12	8	23	30	36	45	56	64
3840	64	64	64	58	47	34	21	8	-5	-30
3850	-49	-63	-72	-73	-69	-62	-63	-61	-50	-30
3860	-12	12	37	57	73	82	84	83	82	73
3870	74	62	47	36	26	16	6	-3	-4	-4
3880	-4	-3	-5	-14	-14	-13	-23	-34	-33	-34
3890	-33	-35	-43	-43	-43	-35	-32	-18	-10	0
3900	7	15	15	15	15	15	14	21	25	24
3910	25	25	16	15	14	5	5	5	5	5
3920	5	5	5	5	5	-13	-2	4	11	15
3930	5	5	2	-11	-14	-13	-33	-33	-34	-24
3940	-1	-18	-32	-33	-33	-33	-33	-33	-24	-22
3950	-24	-20	-13	-6	-4	-4	-11	-18	-24	-24
3960	-30	-33	-38	-50	-56	-69	-75	-82	-84	-92
3970	-92	-92	-101	-102	-94	-80	-62	-46	-29	-14
3980	1	15	24	34	45	43	51	66	73	82
3990	83	84	77	56	41	28	23	15	15	15
4000	15	14	16	25	24	26	40	51	54	46
4010	41	28	18	5	-6	-13	-22	-24	-24	-15
4020	-14	-5	-5	5	25	24	25	24	25	25
4030	24	25	19	5	-6	-13	-19	-28	-34	-33
4040	-33	-33	-33	-33	-33	-33	-33	-33	-25	-25
4050	-23	-16	-10	0	7	14	21	25	24	25
4060	24	25	24	26	36	47	59	64	64	58
4070	48	38	24	9	-7	-32	-46	-58	-57	-44
4080	-34	-21	-14	-5	-3	-4	-4	-4	-4	-4
4090	4	5	6	1	-5	-13	-26	-32	-43	-53
4100	-53	-53	-53	-48	-38	-33	-33	-33	-33	-33

TO BE CONTINUED

CONTINUED (M-1022 NORTH)

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
4110	-33	-33	-33	-39	-50	-54	-63	-62	-63	-59
4120	-52	-46	-37	-28	-19	-14	-5	-4	5	15
4130	20	26	24	25	16	15	14	1	-10	-21
4140	-24	-24	-22	-14	-5	-4	1	6	6	5
4150	11	33	44	44	43	34	35	26	24	25
4160	25	24	25	32	46	66	78	84	83	65
4170	37	13	-11	-35	-59	-75	-83	-94	-102	-101
4180	-86	-73	-64	-54	-44	-35	-23	-14	-5	-4
4190	3	5	2	16	14	16	11	5	2	-5
4200	-3	5	2	6	4	6	15	14	21	25
4210	24	25	24	25	25	16	15	15	15	14
4220	18	25	24	25	24	25	25	25	25	25
4230	25	25	24	25	24	25	19	8	-3	-12
4240	-24	-34	-41	-52	-60	-69	-73	-72	-73	-72
4250	-73	-64	-62	-63	-63	-63	-63	-63	-63	-63
4260	-63	-62	-49	-53	-17	-4	9	24	53	35
4270	34	34	35	29	23	15	15	6	6	0
4280	-4	-9	-20	-30	-34	-33	-34	-33	-33	-33
4290	-33	-33	-33	-25	-15	-5	4	5	14	14
4300	18	26	24	25	24	25	24	25	24	25
4310	23	15	15	10	-1	-3	5	5	5	4
4320	10	19	25	24	25	25	25	25	25	25
4330	24	25	22	8	-3	-12	-14	-13	-15	-7
4340	12	32	56	80	97	110	113	113	108	99
4350	88	79	71	56	41	22	5	-13	-55	-45
4360	-60	-63	-63	-61	-53	-48	-38	-31	-5	18
4370	37	55	65	74	73	74	73	74	74	73
4380	66	58	50	43	33	23	13	5	5	6
4390	1	-5	-3	-4	-3	-7	-18	-32	-42	-43
4400	-43	-43	-43	-44	-40	-32	-34	-27	-22	-11
4410	0	6	16	24	36	49	54	55	48	35
4420	43	44	44	44	44	44	44	44	44	44
4430	44	45	44	44	44	44	44	44	44	44
4440	0	-16	-32	-38	-50	-53	-53	-53	-53	-53
4450	-52	-42	-44	-39	-33	-23	-14	-11	-3	2
4460	6	3	12	14	21	24	14	7	-3	-11
4470	-20	-24	-23	-24	-15	3	21	35	44	52
4480	55	54	54	54	54	53	47	32	19	2
4490	-4	-10	-15	-13	-12	-4	0	18	35	46
4500	54	54	46	44	37	32	25	23	14	7
4510	-1	-4	-9	-18	-24	-32	-34	-35	-34	-35
4520	-34	-33	-34	-30	-23	-23	-10	-3	-4	-4
4530	3	5	5	5	5	4	-7	-26	-36	-43
4540	-43	-43	-43	-43	-43	-44	-37	-33	-29	-15
4550	13	8	17	24	25	24	25	16	14	15
4560	14	19	25	24	25	25	24	28	35	34
4570	35	31	20	13	4	-4	-11	-26	-37	-48
4580	-52	-59	-63	-63	-57	-52	-50	-36	-24	-12
4590	-12	-20	-25	-18	-10	2	5	13	16	9
4600	-4	-20	-32	-33	-33	-33	-34	-35	-34	-31
4610	-24	-20	-13	-6	-3	-4	0	6	4	4
4620	5	5	5	5	5	5	5	5	5	5

TO BE CONTINUED

CONTINUED (M-1022 NORTH)

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
4630	5	5	6	0	-5	-3	-5	0	6	4
4640	11	15	23	25	25	24	25	19	14	15
4650	15	15	15	14	16	11	4	5	5	5
4660	5	5	6	0	-5	-3	-4	-4	-4	-2
4670	5	4	6	1	-5	-3	-4	-4	-4	-4
4680	-4	-3	-5	0	6	5	4	-4	-4	-4
4690	-4	-4	-4	-4	-1	8	14	19	25	24
4700	24	25	16	15	11	4	4	-4	-4	-4
4710	-4	-3	-9	-20	-32	-33	-33	-33	-34	-32
4720	-23	-23	-15	-13	-17	-24	-23	-25	-33	-33
4730	-33	-33	-33	-34	-32	-24	-14	0	17	31
4740	46	61	64	55	45	35	26	23	15	14
4750	16	4	4	-2	-4	-12	-17	-13	-14	-13
4760	-14	-13	-14	-15	-14	-10	-5	-4	-5	-14
4770	-12	-18	-24	-24	-20	-13	-6	-2	5	4
4780	9	16	14	15	15	15	15	23	25	24
4790	25	24	25	15	1	-6	-13	-14	-13	-17
4800	-24	-23	-24	-23	-24	-23	-24	-22	-13	-1
4810	9	19	25	24	25	25	24	30	37	44
4820	44	44	44	44	44	41	32	25	24	30
4830	39	45	43	34	27	15	16	9	5	2
4840	-8	-17	-28	-34	-47	-48	-35	-26	-15	-5
4850	-5	-2	4	11	15	15	12	1	-7	-17
4860	-28	-34	-33	-33	-33	-33	-33	-33	-33	-33
4870	-33	-33	-33	-33	-34	-32	-37	-43	-49	-54
4880	-52	-53	-53	-53	-53	-53	-53	-53	-53	-52
4890	-54	-49	-43	-37	-32	-34	-33	-33	-33	-33
4900	-33	-33	-33	-32	-23	-24	-20	-10	-2	4
4910	10	17	26	26	34	43	45	44	44	44
4920	41	30	24	25	25	25	25	25	24	25
4930	24	25	24	26	18	14	15	15	9	-4
4940	-21	-37	-47	-54	-52	-54	-49	-42	-35	-33
4950	-34	-33	-34	-33	-34	-29	-23	-15	-5	-2
4960	5	15	25	32	35	34	43	44	50	56
4970	47	45	41	34	30	17	15	11	4	6
4980	4	-4	-2	5	10	19	25	25	24	25
4990	16	14	7	1	-10	-20	-32	-33	-33	-28
5000	-16	-14	-8	-3	-4	-8	-5	-2	5	5
5010	5	5	5	5	4	9	15	15	14	21
5020	26	24	25	24	25	24	27	39	44	51
5030	53	43	31	18	4	-4	-13	-26	-33	-33
5040	-33	-33	-33	-25	-18	-9	-3	-4	-4	-4
5050	-4	-3	-5	1	5	6	15	14	15	12
5060	1	-5	-16	-30	-33	-33	-32	-23	-23	-24
5070	-23	-24	-17	-13	-9	2	10	22	25	25
5080	24	12	6	-3	-4	-12	-19	-28	-34	-41
5090	-52	-54	-63	-63	-63	-63	-63	-63	-65	-65
5100	-65	-65	-65	-62	-63	-62	-64	-56	-52	-53
5110	-54	-47	-43	-42	-33	-25	-15	-13	-6	2
5120	6	5	10	20	24	28	34	38	45	44
5130	37	28	14	5	3	-3	-7	-16	-23	-24
5140	-22	-13	-14	-10	-3	2	12	24	34	48

TO BE CONTINUED

RECORD = M-1022 COMPONENT = EAST STATION = YAMASHITA-HEN-M
 DATE AND TIME = 1986-06-24-11-53 TOTAL NUMBER OF DATA = 5200
 SAMPLING INTERVAL = 0.010 (SEC) SIGNAL = 6R ACC. SCAL = 0.10000
 CONNECTION POINT IN DATA NUMBER = 1742, 3476, 5200,

CONTINUED (M-1022 NORTH)

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
5150	54	54	51	40	34	34	34	34	35	34
5160	40	45	52	63	64	64	64	64	64	61
5170	48	38	28	21	13	5	3	-4	-4	-13
5180	-25	-33	-34	-33	-36	-45	-39	-33	-28	-16
5190	-6	2	5	5	-2	-4	-4	-4	-5	-14

END

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	9	19	34	59	65	56	-3	-68	-86	-104
10	-94	-62	-35	-15	13	37	57	68	79	85
20	84	85	83	71	61	42	15	-8	-31	-42
30	-47	-55	-49	-43	-38	-31	-24	-23	-16	-10
40	0	7	15	6	-16	-30	-35	-24	0	19
50	25	25	25	25	24	29	36	34	35	34
60	36	33	26	10	-22	-52	-55	-28	-9	13
70	32	49	62	52	26	-6	-22	-31	-19	15
80	-11	8	25	48	74	104	126	133	135	128
90	108	60	16	-13	-25	-23	-24	-23	-24	-32
100	-34	-33	-34	-32	-7	41	75	74	75	74
110	56	30	3	-16	-30	-34	-33	-34	-21	6
120	28	45	58	67	63	42	29	20	16	11
130	4	-21	-46	-49	-40	-26	-14	11	32	55
140	77	91	95	94	94	95	79	52	33	17
150	2	-11	-28	-41	-50	-51	-38	-24	-10	1
160	15	38	65	76	74	64	45	16	-34	-34
170	-47	-55	-47	-42	-29	-1	21	48	74	101
180	121	123	111	97	71	41	17	1	-7	-21
190	-32	-37	-45	-58	-74	-64	-40	-27	-22	-25
200	-17	5	46	73	61	63	21	-2	-25	-41
210	-44	-52	-54	-53	-45	-31	-2	39	72	85
220	84	84	68	45	22	3	-19	-36	-50	-54
230	-53	-53	-45	-15	25	55	75	87	101	105
240	104	104	104	101	81	54	18	-15	-44	-68
250	-79	-84	-79	-70	-58	-42	1	59	92	94
260	62	35	8	-8	-20	-30	-35	-44	-42	-32
270	-22	-14	-8	6	18	32	35	43	46	43
280	34	21	12	-1	-21	-33	-46	-52	-55	-64
290	-27	19	62	73	75	80	96	101	81	57
300	41	29	18	10	-11	-41	-63	-75	-72	-64
310	-49	-31	6	39	63	75	74	74	74	55
320	34	22	0	-16	-29	-48	-54	-61	-63	-63
330	-60	-45	-27	-2	46	80	95	104	79	55
340	32	14	-14	-42	-57	-72	-74	-69	-39	-8
350	13	28	47	67	83	95	93	101	104	81
360	51	17	-13	-61	-62	-63	-63	-55	-50	-39
370	-22	3	34	58	73	75	68	64	65	61
380	51	38	15	-3	-36	-64	-89	-90	-59	-36
390	-17	-4	9	19	27	37	58	72	62	56
400	-5	-40	-59	-50	-30	-2	32	49	56	53
410	45	36	13	0	-6	-13	-16	-28	-34	-33
420	-33	-39	-45	-31	-13	-1	13	40	69	85
430	81	61	37	12	-23	-63	-74	-74	-72	-74
440	-74	-67	-61	-53	-53	-45	-36	-16	-16	2
450	24	55	44	44	27	2	-12	-12	-16	-5
460	-2	4	9	16	15	9	-4	-4	-4	-23

TO BE CONTINUED

CONTINUED (M-1022 EAST)

CONTINUED (M-1022 EAST)

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
470	-24	-22	-14	-13	-14	-8	-2	-5	0	6
480	13	16	15	15	14	0	-8	-5	-24	-31
490	-40	-44	-43	-38	-9	53	77	70	62	45
500	27	18	27	42	45	46	40	18	5	-5
510	-15	-24	-32	-34	-33	-33	-34	-33	-34	-30
520	-17	9	35	39	35	22	16	11	4	6
530	5	6	18	27	34	64	53	58	65	47
540	32	13	0	-17	-58	-53	-58	-22	-46	-59
550	-52	-23	-10	41	62	74	87	83	68	25
560	-18	-52	-53	-44	-27	-11	17	43	56	48
570	25	8	5	5	11	17	25	22	5	-5
580	-7	9	19	26	19	11	5	5	5	5
590	5	6	-1	-18	-24	-23	-24	-18	-2	13
600	15	16	9	5	0	-14	-26	-11	-21	-20
610	-63	-49	-14	23	44	59	65	65	64	66
620	55	7	-25	-56	-77	-83	-83	-81	-84	-5
630	12	24	25	25	25	23	15	6	-19	-19
640	-44	-59	-53	-46	-36	-8	23	53	65	65
650	58	43	16	-3	-9	-15	-12	-18	-23	-27
660	-34	-34	-30	-8	33	69	83	84	65	49
670	33	17	4	-5	-15	-24	-31	-84	-54	-33
680	-54	-52	-54	-43	-37	-2	35	61	84	83
690	94	90	64	20	-25	-55	-76	-84	-83	-83
700	-83	-83	-74	-56	-56	-16	0	12	15	21
710	29	59	45	45	42	24	15	7	0	15
720	-83	-27	-34	-34	-34	-23	-18	-1	18	26
730	24	25	25	26	36	31	19	11	5	5
740	5	6	24	50	65	64	65	59	51	43
750	34	22	0	-26	-46	-53	-53	-52	-42	-52
760	-30	-11	8	17	25	25	31	37	44	45
770	43	34	28	20	16	9	5	4	-6	-12
780	-14	-14	-8	7	28	44	53	55	55	54
790	55	49	35	18	-1	-20	-24	-23	-9	12
800	16	11	5	2	-5	-11	-18	-24	-16	-2
810	12	25	41	51	61	66	59	49	38	33
820	19	13	5	-2	-13	-25	-33	-34	-28	-19
830	-13	-14	-14	-13	-14	-8	-1	7	22	25
840	30	13	-1	-26	-43	-38	-21	-7	4	4
850	5	-3	-22	-42	-43	-38	-38	-23	-1	18
860	26	21	11	2	-11	-22	-25	-33	-36	-50
870	-83	-75	-83	-83	-77	-52	-23	-1	18	37
880	52	65	66	58	54	46	18	-14	-44	-70
890	40	-102	-100	-75	-68	-47	-31	-17	7	16
900	45	68	75	73	61	53	44	32	18	18
910	-10	-23	-32	-40	-44	-5	-4	-42	-31	-43
920	-8	19	34	36	29	14	5	-2	-4	-4
930	-4	-4	-3	-7	-18	-25	-33	-34	-33	-34
940	-27	-14	-14	-10	-2	-8	-14	-21	-25	-19
950	-14	-8	-1	5	5	6	2	11	-23	-40
960	-54	-56	-69	-64	0	23	42	59	67	74
970	75	74	75	66	55	37	18	6	-2	-8
980	-14	-13	-13	-14	-10	-2	1	20	25	25

TO BE CONTINUED

TO BE CONTINUED

CONTINUED (M-1022 EAST)										CONTINUED (M-1022 EAST)											
NO.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	NO.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1510	5	-119	-161	-186	-192	-184	-166	-144	-126	-102	2030	59	87	97	100	94	87	75	58	29	-9
1520	-63	-35	-16	-1	7	34	62	87	105	116	2040	-53	-98	-123	-133	-124	-56	11	21	51	17
1530	124	124	121	84	46	2	-41	-94	-154	-190	2050	3	19	18	18	7	-20	-65	-92	-99	-98
1540	-204	-200	-203	-201	-198	-181	-181	-151	-120	-87	2060	-99	-98	-99	-98	-99	-90	-59	-20	3	18
1550	-51	-10	36	74	120	147	177	201	220	237	2070	20	18	9	2	-6	-12	-19	-20	-16	2
1560	251	253	252	253	250	225	171	119	80	34	2080	14	20	19	19	19	19	20	18	4	-16
1570	-22	-74	-111	-136	-151	-150	-131	-102	-80	63	2090	-36	-40	-33	-19	-4	1	-4	-10	-9	-7
1580	-65	-45	-19	-17	41	7	-23	-50	-76	104	2100	19	58	76	80	75	62	58	60	55	49
1590	-125	-126	-111	-74	-39	27	90	105	76	36	2110	44	32	21	19	21	30	46	63	69	58
1600	-27	-83	-149	-188	-213	-236	-242	-232	-245	-236	2120	35	12	-13	-34	-59	-48	-49	-49	-40	-25
1610	-212	-175	-152	-118	-69	-22	-19	-50	-97	-117	2130	-9	10	22	45	67	85	103	119	129	129
1620	-123	-122	-129	-133	-132	-125	-94	-43	-17	42	2140	141	151	154	132	88	26	-61	-151	-200	-234
1630	95	145	196	251	274	237	172	105	42	-14	2150	-251	-267	-277	-276	-278	-274	-269	-243	-210	-188
1640	-83	-158	-219	-260	-285	-290	-281	-261	-226	-208	2160	-164	-129	-88	-50	-4	38	67	92	133	165
1650	-197	-191	-192	-191	-192	-162	-112	-83	-55	-64	2170	179	176	168	157	131	128	128	129	118	108
1660	-56	-39	-22	0	22	45	71	92	107	121	2180	107	98	89	77	69	60	50	49	49	49
1670	123	114	114	114	114	120	145	132	198	203	2190	41	40	61	81	101	112	120	128	121	112
1680	198	163	131	111	104	103	106	71	21	-31	2200	108	103	91	80	56	28	9	-12	-37	-56
1690	-56	-51	-55	-51	-64	-102	-156	-259	-306	-377	2210	-76	-78	-69	-69	-68	-53	-40	-31	-29	-29
1700	-426	-422	-385	-317	-249	-180	-118	-51	33	108	2220	-59	-29	-30	-25	-19	-22	-32	-32	-39	-47
1710	180	263	310	310	308	306	289	271	226	184	2230	-55	-63	-69	-58	-38	-19	-1	18	19	21
1720	135	94	42	-17	-57	-98	-128	-164	-189	-192	2240	29	30	23	17	5	-17	-35	-46	-49	-45
1730	-192	-181	-122	-7	74	134	145	195	235	241	2250	-5	32	27	36	39	47	52	64	69	78
1740	241	252	262	221	135	13	-87	-143	-191	-203	2260	73	58	69	50	43	38	40	38	41	49
1750	-185	-165	-135	-128	-129	-137	-154	-131	-99	-75	2270	50	59	59	59	60	69	68	69	63	51
1760	-37	8	48	72	88	103	109	109	92	58	2280	55	20	11	9	10	8	-2	-26	-45	-65
1770	38	9	24	-49	-89	-125	-153	-159	-156	-132	2290	-86	-87	-100	-95	-87	-79	-79	-71	-66	-51
1780	-73	19	76	132	158	166	160	132	82	35	2300	-35	-20	-10	2	8	16	20	19	20	11
1790	-11	-45	-79	-117	-149	-170	-160	-132	-102	-82	2310	9	10	9	10	2	-23	-50	-83	-89	-66
1800	-76	-56	-20	6	33	57	72	86	106	106	2320	-89	-79	-67	-53	-21	7	25	41	59	66
1810	82	62	49	35	29	29	30	46	63	78	2330	73	79	79	79	79	77	69	68	58	60
1820	95	112	139	192	217	216	188	112	25	-24	2340	52	49	43	38	31	29	24	16	10	6
1830	-59	-81	-102	-125	-129	-128	-128	-120	-108	-96	2350	-4	-11	-22	-36	-45	-61	-73	-83	-117	-139
1840	-70	-20	19	60	83	101	110	108	100	100	2360	-132	-115	-90	-67	-42	-16	10	29	29	29
1850	89	75	62	50	49	52	72	80	106	135	2370	29	22	15	9	10	9	10	8	-1	-15
1860	138	132	96	46	-12	-55	-98	-144	-194	-238	2380	-32	-43	-56	-81	-63	-47	-27	-12	9	34
1870	-274	-274	-236	-180	-121	-42	63	113	180	225	2390	-159	-110	-95	-72	-78	-89	-98	-102	-110	-124
1880	227	223	193	152	94	36	-25	-77	-128	-175	2400	61	76	79	79	78	65	49	41	23	1
1890	-211	-250	-269	-258	-233	-170	-112	-86	-36	8	2410	-17	-33	-60	-36	-19	-7	16	37	63	80
1900	67	109	145	174	195	215	228	226	213	190	2420	78	80	72	68	69	69	69	61	57	49
1910	170	154	141	118	94	71	46	19	9	-41	2430	-49	49	61	33	27	19	21	30	43	58
1920	-76	-89	-89	-83	-78	-79	-84	-101	-124	-144	2440	69	79	80	88	89	85	78	71	59	46
1930	-150	-148	-102	-44	16	59	124	175	237	278	2450	35	17	5	-6	-27	-38	-63	-86	-100	-115
1940	274	246	180	130	52	-10	-79	-158	-220	-259	2460	-125	-159	-128	-128	-128	-127	-127	-115	-98	-83
1950	-253	-231	-193	-145	-54	-25	-25	15	68	79	2470	-73	-62	-49	-32	-17	-16	0	-1	-9	-13
1960	61	40	9	-20	-51	-77	-104	-126	-143	-148	2480	-21	-32	-52	-71	-95	-116	-138	-162	-177	-171
1970	-140	-86	-22	6	26	30	28	17	-6	35	2490	-121	-69	-42	-17	17	55	88	119	114	89
1980	-68	-80	-78	-79	-78	-61	-42	14	60	94	2500	66	51	35	19	6	-17	-58	-95	-117	-126
1990	129	162	190	199	189	166	122	70	23	-24	2510	-111	-89	-63	-31	-3	20	40	52	62	76
2000	-80	-18	-185	-181	-160	-159	-108	-52	-12	-1	2520	79	80	72	60	37	18	20	20	13	8
2010	11	38	93	138	161	177	160	153	99	68	2530	10	9	9	9	1	0	11	21	29	29
2020	46	18	-2	-24	-49	-65	-69	-52	-20	19	2540	29	29	21	19	19	28	30	29	29	29

TO BE CONTINUED

TO BE CONTINUED

CONTINUED< M-1022 EAST)

NP.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2550	29	37	45	50	47	39	31	29	29	29
2560	29	35	51	26	79	79	73	65	57	48
2570	23	2	-9	-24	-39	-64	-89	-106	-106	-105
2580	-81	-57	-31	-8	10	19	25	30	29	30
2590	17	-12	-41	-57	-70	-68	-71	-78	-80	-89
2600	-97	-99	-98	-91	-83	-72	-60	-58	-60	-53
2610	-43	-32	-29	-26	-18	-20	-19	-19	-20	-19
2620	-23	-30	-29	-21	-19	-20	-6	-21	49	21
2630	82	104	135	155	158	153	155	123	81	42
2640	10	-29	-57	-75	-78	-80	-72	-68	-61	-58
2650	-45	-25	-10	3	25	48	59	59	59	58
2660	59	50	45	39	36	28	30	21	19	19
2670	18	23	30	29	29	30	25	19	19	19
2680	19	19	20	13	9	4	-1	-7	-10	-9
2690	-10	-6	12	29	29	30	24	15	9	9
2700	15	24	32	48	59	64	71	78	79	79
2710	79	71	63	53	37	18	9	9	9	10
2720	9	18	20	19	20	14	-3	-30	-52	-77
2730	-81	-78	-79	-78	-79	-78	-62	-41	-24	-11
2740	5	16	20	19	20	19	20	13	8	-2
2750	-16	-29	-41	-52	-66	-60	-41	-27	-20	-11
2760	-1	5	16	25	33	43	56	59	67	61
2770	51	36	19	9	2	-3	-17	-36	-38	-26
2780	-12	11	33	56	67	75	79	79	79	79
2790	78	82	90	96	108	103	84	63	35	6
2800	-18	-38	-39	-39	-39	-40	-59	-48	-19	-29
2810	-40	-47	-58	-59	-59	-59	-59	-58	-65	-70
2820	-68	-70	-62	-41	-24	-1	23	40	49	57
2830	59	42	21	0	-13	-22	-29	-40	-66	-79
2840	-78	-79	-71	-65	-58	-19	-2	13	23	31
2850	42	56	60	52	31	13	5	0	-9	-9
2860	-9	-16	-21	-31	-19	18	48	69	82	89
2870	97	99	98	88	70	57	49	49	49	49
2880	49	48	36	21	6	-6	-10	-9	-10	-9
2890	-13	-29	-42	-66	-100	-125	-137	-135	-116	-96
2900	-78	-63	-54	-30	-12	0	14	19	12	5
2910	0	0	0	-5	-20	-36	-67	-95	-126	-144
2920	-148	-157	-152	-106	-77	-33	8	41	83	109
2930	136	147	175	178	178	173	151	138	153	159
2940	114	105	88	79	73	68	69	60	59	59
2950	50	24	0	-28	-56	-74	-88	-106	-116	-125
2960	-129	-128	-128	-129	-127	-119	-107	-84	-61	-33
2970	-6	23	49	72	79	78	79	69	52	39
2980	14	-8	-29	-42	-53	-68	-77	-87	-77	-69
2990	-99	-96	-83	-79	-75	-69	-58	-38	-24	-12
3000	-9	-9	-21	-37	-59	-59	-40	-33	-19	-53
3010	5	27	46	58	62	71	78	79	75	65
3020	55	47	39	39	40	36	26	21	15	9
3030	-4	-30	-47	-72	-88	-97	-99	-98	-99	-98
3040	-99	-95	-85	-69	-42	-22	0	23	47	65
3050	81	89	88	89	89	83	69	61	48	39
3060	28	6	-11	-30	-46	-61	-70	-67	-73	-79

TO BE CONTINUED

CONTINUED< M-1022 EAST)

NP.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
3070	-79	-78	-85	-90	-88	-89	-87	-78	-67	-58
3080	-43	-27	17	10	21	28	33	40	38	40
3090	33	23	14	0	-26	-45	-61	-76	-80	-89
3100	-80	-78	-79	-77	-66	-51	-39	-39	-25	-19
3110	-19	-20	-10	-10	0	-10	-12	-24	-31	-31
3120	-39	-39	-39	-39	-39	-39	-40	-53	-29	-24
3130	-12	-10	-7	7	23	32	47	63	72	82
3140	96	116	129	124	107	80	52	31	13	-6
3150	-32	-55	-77	-75	-68	-62	-55	-43	-9	26
3160	54	60	58	59	58	60	53	37	17	2
3170	-17	-36	-57	-69	-69	-66	-45	-23	-8	13
3180	29	44	60	58	59	56	35	12	4	-8
3190	-25	-36	-40	-39	-39	-40	-33	-28	-21	-19
3200	-20	-19	-10	6	10	9	12	26	31	19
3210	41	49	49	49	49	44	32	20	19	20
3220	19	20	14	5	-6	-20	-38	-56	-76	-93
3230	-99	-98	-99	-92	-79	-66	-55	-42	-24	-20
3240	-10	-16	-19	-25	-30	-32	-40	-38	-40	-39
3250	-39	-31	-23	-16	-3	11	27	46	58	59
3260	59	59	60	69	69	69	69	69	69	69
3270	51	47	60	33	18	0	-25	-51	-73	-80
3280	-89	-89	-96	-103	-109	-108	-107	-98	-99	-90
3290	-88	-78	-69	-82	-19	-19	-21	-29	-38	-58
3300	-83	-97	-103	-108	-112	-119	-118	-117	-107	-95
3310	-87	-78	-66	-51	-32	-8	24	46	66	69
3320	69	69	69	69	69	67	59	59	51	47
3330	60	34	22	19	19	19	19	19	19	19
3340	19	19	19	19	19	19	11	9	1	-16
3350	-20	-19	-19	-25	-34	-40	-39	-39	-39	-39
3360	-59	-42	-37	-73	-79	-79	-69	-58	-60	-56
3370	-45	-37	-28	-19	-12	-5	0	8	10	10
3380	8	13	20	19	20	19	19	19	19	19
3390	19	19	19	28	29	32	43	50	48	55
3400	59	59	56	47	39	26	13	5	-1	-11
3410	-19	-19	-20	-27	-38	-39	-39	-39	-45	-61
3420	-73	-79	-79	-79	-79	-79	-79	-79	-79	-79
3430	-79	-79	-77	-69	-69	-69	-69	-68	-70	-63
3440	-58	-60	-58	-60	-57	-50	-45	-39	-34	-24
3450	-20	-18	-16	-16	-20	-19	-20	-17	-16	-5
3460	0	8	10	9	10	9	7	-18	-42	-61
3470	-78	-78	-79	-78	-82	-103	-116	-110	-104	-96
3480	-97	-90	-86	-60	-76	-68	-67	-61	-48	-45
3490	-37	-37	-37	-37	-37	-37	-37	-36	-43	-48
3500	-46	-53	-57	-56	-57	-56	-57	-55	-46	-47
3510	-38	-36	-30	0	22	33	31	32	31	32
3520	31	32	26	19	11	-1	-3	-23	-33	-43
3530	-51	-58	-56	-58	-41	-20	-7	2	1	2
3540	1	2	1	2	1	-8	-6	-14	-17	-17
3550	-17	-18	-13	-9	-2	-8	-7	-5	2	10
3560	15	25	25	25	7	9	26	32	31	36
3570	46	59	68	71	71	70	61	60	50	35
3580	21	8	-1	-14	-18	-17	-25	-33	-44	-47

TO BE CONTINUED

CONTINUED (M-1022 EAST)										CONTINUED (M-1022 EAST)											
ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
3590	-46	-47	-46	-47	-45	-37	-37	-36	-23	-8	4110	71	71	71	71	71	71	62	61	52	38
3600	1	17	26	32	31	31	32	25	22	15	4120	25	12	4	0	-6	-11	-18	-25	-17	-17
3610	11	11	2	1	-11	-20	-26	-33	-37	-37	4130	-27	-35	-37	-37	-34	-25	-17	-17	-28	-27
3620	-37	-37	-35	-28	-21	-17	-16	-7	-5	7	4140	-17	-17	-18	-13	-6	-6	-8	-6	-11	-18
3630	12	20	21	28	32	31	32	40	42	41	4150	-17	-18	-16	-23	-28	-26	-28	-21	-16	-9
3640	41	41	41	41	33	31	32	23	13	10	4160	2	18	32	47	63	78	90	91	91	80
3650	2	-9	-24	-27	-26	-33	-38	-36	-38	-29	4170	62	48	30	22	15	11	11	15	23	21
3660	-14	0	18	28	31	34	43	40	48	52	4180	22	22	22	21	22	22	22	22	22	22
3670	51	59	62	55	41	25	12	-4	-23	-4	4190	21	22	22	22	13	2	-11	-18	-17	-26
3680	-38	-44	-57	-55	-64	-107	-114	-117	-115	-117	4200	-27	-27	-27	-28	-21	-16	-18	-17	-17	-17
3690	-16	-116	-107	-106	-106	-107	-100	-87	-78	-62	4210	-17	-17	-17	-17	-17	-17	-17	-17	-17	-17
3700	-56	-57	-57	-55	-47	-38	-20	-9	-3	2	4220	-17	-16	-7	-7	-7	-7	-7	-7	-7	-7
3710	10	12	11	11	4	-4	-16	-19	-27	-28	4230	-7	-7	-7	-7	1	7	16	22	21	22
3720	-38	-36	-43	-47	-33	-23	-15	-14	-4	0	4240	-7	-8	-1	3	1	1	7	16	22	22
3730	15	35	45	52	59	62	61	53	42	27	4250	21	22	16	8	-1	-8	-7	-7	-7	-7
3740	21	20	11	12	11	12	12	12	12	20	4260	-7	-7	-7	-8	12	12	23	31	38	42
3750	22	21	22	21	25	32	31	32	25	21	4270	42	61	42	41	42	38	31	32	31	31
3760	22	20	11	12	10	2	0	-7	-9	-17	4280	31	35	35	42	4	14	41	41	41	40
3770	-17	-17	-17	-17	-17	-16	-7	-7	-7	-7	4290	28	19	12	3	-3	-14	-17	-17	-17	-17
3780	-7	-7	-6	2	1	6	12	11	12	12	4300	-16	-21	-28	-27	-27	-27	-26	-29	-36	-43
3790	11	12	11	15	23	21	22	21	23	15	4310	-55	-69	-86	-96	-107	-106	-107	-106	-106	-97
3800	12	6	1	-2	-12	-18	-28	-37	-28	-27	4320	-80	-67	-49	-33	-21	-11	-4	-8	-31	12
3810	-27	-27	-27	-27	-26	-33	-37	-38	-48	-57	4330	5	-15	-34	-54	-57	-57	-48	-38	-31	-14
3820	-57	-65	-67	-66	-59	-56	-58	-53	-46	-44	4340	-1	14	28	38	42	42	53	61	60	45
3830	-32	-26	-16	-7	-7	0	7	25	41	61	4350	32	23	21	22	21	22	21	27	34	41
3840	75	85	100	101	98	87	75	61	45	31	4360	41	42	40	31	32	31	31	32	31	32
3850	18	9	1	-11	-18	-17	-17	-17	-17	-17	4370	22	22	15	12	8	0	-8	-17	-20	-29
3860	-17	-17	-16	-7	-8	-7	0	6	11	17	4380	-24	-18	-13	-6	9	33	52	71	79	90
3870	23	21	23	31	31	31	31	31	31	31	4390	91	91	89	81	78	68	62	55	45	35
3880	31	32	31	32	30	21	22	22	21	14	4400	28	19	13	5	1	2	7	19	22	21
3890	8	-7	-23	-38	-47	-47	-47	-47	-47	-47	4410	22	20	12	9	-10	-28	-38	-51	-65	-68
3900	-47	-53	-57	-57	-57	-65	-67	-66	-66	-67	4420	-63	-56	-56	-47	-38	-21	-11	-11	0	10
3910	-61	-66	-74	-19	0	28	44	50	40	31	4430	33	41	50	51	51	51	43	33	33	25
3920	52	30	35	42	41	41	41	33	31	31	4440	21	22	22	22	22	22	13	11	12	12
3930	32	39	49	62	61	61	61	62	55	31	4450	12	20	20	22	29	34	41	42	40	29
3940	12	3	-6	-7	-6	5	16	22	20	12	4460	-1	-18	-26	-33	-38	-36	-37	-37	-29	-17
3950	12	11	12	11	15	22	21	21	6	10	4470	-4	9	12	11	11	12	11	12	10	1
3960	-18	-16	-21	-29	-37	-45	-55	-60	-74	-86	4480	-13	-27	-32	-44	-47	-47	-46	-33	-18	-9
3970	-103	-115	-117	-112	-106	-103	-95	-97	-86	-75	4490	-6	-9	8	30	37	42	41	42	35	31
3980	-64	-43	-19	-5	3	12	10	-1	-12	-25	4500	32	23	20	5	-14	-17	-17	-27	-33	-39
3990	-34	-34	-26	-19	-17	-11	-6	-8	1	10	4510	-33	-26	-27	-27	-28	-25	-17	-16	-7	-7
4000	12	11	20	22	22	18	9	1	-9	-17	4520	7	7	7	-8	-1	12	27	39	38	30
4010	-17	-17	-18	-13	-2	-2	1	11	18	22	4530	32	31	24	9	-7	-25	-37	-55	-57	-56
4020	21	14	5	1	7	1	2	9	18	22	4540	-57	-57	-57	-57	-57	-57	-57	-57	-57	-57
4030	-22	20	11	4	-4	-16	-26	-27	-30	-38	4550	-56	-57	-55	-47	-44	-30	-18	-17	-17	-17
4040	36	-37	-36	-38	-34	-25	-18	-15	-7	-7	4560	-17	-17	-17	-17	-16	-29	-26	-29	-36	-40
4050	-7	-7	-7	-7	-7	-8	-6	-13	-18	-17	4570	-48	-55	-57	-48	-38	-20	-3	11	20	22
4060	-17	-17	-17	-17	-25	-28	-26	-28	-21	-15	4580	-4	-22	-21	22	22	22	22	22	21	22
4070	-8	-7	-7	-7	-8	-6	-13	-18	-16	-21	4590	21	22	21	22	21	22	15	11	12	11
4080	-28	-26	-36	-37	-45	-47	-47	-45	-37	-29	4600	12	12	12	12	9	-4	-16	-26	-27	-27
4090	-18	-8	-7	-6	2	10	18	24	30	56	4610	-27	-27	-27	-27	-28	-24	-16	-18	-15	-8
4100	41	45	52	52	61	62	71	71	71	71	4620	-1	3	1	2	1	2	1	3	-3	-8

TO BE CONTINUED

TO BE CONTINUED

CONTINUED (M-1022 EAST)

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
4630	-7	-8	-7	-8	-6	-8	1	25	38	51
4640	51	52	48	40	42	33	31	24	15	5
4650	-9	-24	-36	-53	-57	-57	-51	-45	-48	-40
4660	-36	-37	-37	-37	-35	-27	-27	-27	-24	-13
4670	-7	0	6	15	28	32	40	42	49	57
4680	68	66	57	68	34	31	32	31	31	31
4690	31	12	31	32	30	21	22	21	22	20
4700	11	12	6	-4	-16	-26	-27	-30	-38	-35
4710	-41	-47	-50	-58	-56	-57	-47	-33	-26	-19
4720	-17	-17	-17	-17	-17	-17	-17	-17	-17	-17
4730	-17	-17	-12	4	18	28	32	31	32	31
4740	32	31	24	18	11	13	8	0	-4	-18
4750	-26	-37	-35	-43	-33	-2	1	16	27	39
4760	42	41	40	31	24	17	12	8	0	-4
4770	-14	-18	-17	-17	-17	-17	-16	-18	-15	-7
4780	-2	6	16	22	29	37	48	52	51	51
4790	51	50	40	32	28	20	29	31	35	42
4800	41	42	41	42	40	31	23	23	13	3
4810	-6	-16	-16	-23	-28	-27	-27	-28	-23	-16
4820	-18	-8	-7	-7	-7	-7	-7	-12	-22	-26
4830	-31	-37	-37	-34	-26	-28	-26	-29	-37	-37
4840	-37	-37	-37	-28	-27	-27	-27	-27	-28	-21
4850	-16	-18	-16	-7	-8	-3	2	11	22	29
4860	32	31	32	31	32	31	32	23	22	16
4870	5	-7	-27	-43	-56	-56	-57	-55	-47	-38
4880	-23	-13	-5	1	10	12	20	22	22	21
4890	25	32	31	31	32	28	21	22	22	20
4900	11	4	-4	-8	-16	-17	-17	-8	-8	-3
4910	2	2	-4	-7	-12	-37	-37	-37	-37	-29
4920	-26	-27	-27	-35	-37	-37	-37	-28	-27	-27
4930	-27	-27	-27	-27	-27	-24	-10	-7	-7	0
4940	2	2	1	2	1	6	12	17	23	21
4950	22	21	22	21	22	21	22	21	22	20
4960	12	11	4	-4	-9	-17	-16	-21	-28	-26
4970	-27	-18	-17	-17	-17	-9	-4	6	22	33
4980	42	49	57	48	35	25	21	22	30	32
4990	31	32	40	42	41	42	41	42	35	31
5000	31	35	42	32	31	32	31	32	25	20
5010	22	20	28	32	40	39	27	11	1	2
5020	0	-8	-6	-11	-17	-25	-28	-26	-27	-27
5030	-27	-27	-27	-27	-27	-19	-17	-17	-17	-17
5040	-17	-17	-17	-17	-17	-17	-17	-17	-17	-17
5050	-17	-17	-18	-15	-7	-7	-7	1	8	8
5060	12	12	22	21	22	20	28	32	34	43
5070	40	44	50	53	60	67	72	70	72	70
5080	72	68	59	49	36	32	27	22	18	11
5090	11	17	23	21	22	21	22	22	21	22
5100	21	22	21	22	18	10	13	8	0	-13
5110	-26	-28	-38	-53	-57	-57	-46	-20	0	19
5120	39	55	70	71	71	72	70	78	66	66
5130	43	28	21	22	13	3	2	2	3	12
5140	12	24	31	38	42	41	42	41	42	40

TO BE CONTINUED

END

RECORD = M-1022 COMPONENT = UP STATION = YAMASHITA-HEN-H
 DATE AND TIME = 1986-06-24-11-53 TOTAL NUMBER OF DATA = 5200
 SIGNAL = GR. ACC. SCAL = 0.10000
 CONNECTION POINT IN DATA NUMBER = 1741, 3476, 5200,

NO.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	-2	-12	18	47	50	65	67	48	1	-38
10	-51	-53	-40	-8	12	27	27	29	17	-22
20	-37	-60	-32	7	25	27	1	-93	-132	-85
30	-32	19	38	15	-21	-51	-54	-87	-52	31
40	120	190	111	33	-57	-28	47	73	37	-11
50	-47	-128	-114	-59	22	40	31	18	18	-18
60	17	37	67	109	56	-30	-85	-94	-63	-42
70	-14	10	32	48	29	-12	50	-75	-101	-122
80	-107	-46	16	-13	-66	-64	-1	62	90	90
90	97	80	49	33	21	23	55	66	42	42
100	51	30	-25	-116	-190	-150	-58	1	-5	-61
110	-72	-38	10	34	39	26	36	50	17	39
120	54	28	-9	-52	-73	-102	-87	-20	34	79
130	98	70	46	17	-24	-53	-64	-35	-20	-29
140	-16	20	47	47	47	56	58	41	-44	-44
150	-133	-33	29	-19	-64	-31	28	64	84	36
160	-38	-60	-11	0	-21	-33	-28	-7	15	48
170	11	-46	18	37	-4	-18	28	75	119	135
180	85	31	-12	-21	-26	-53	-78	-89	-51	-5
190	-5	27	84	157	110	38	-44	-48	-25	-83
200	-121	-62	36	10	-16	-16	12	25	50	65
210	20	-15	16	-15	-69	-86	-65	-19	12	45
220	39	49	64	18	-13	17	66	65	50	29
230	15	-15	-37	-13	0	-6	1	18	0	-33
240	-38	35	97	66	2	-35	-1	-12	-74	-62
250	-9	31	51	96	127	66	-13	-55	-54	-44
260	-24	-22	-21	-23	-8	23	56	60	56	58
270	57	53	-28	-68	-82	-47	-19	-12	-9	17
280	24	3	-20	-43	-52	-51	-51	-51	-60	-1
290	27	54	22	-34	-60	-53	-49	-18	35	21
300	-5	-23	-17	4	43	58	4	-51	-74	-63
310	-42	-1	5	-9	-12	7	19	16	10	1
320	18	31	-2	-53	-68	-33	18	73	67	42
330	20	-6	-3	19	14	-8	-31	-11	25	21
340	-1	-43	-50	-10	0	-16	-8	31	-2	-26
350	-11	-29	-26	9	64	34	-12	6	41	71
360	38	36	57	49	32	25	35	36	41	-9
370	-37	-6	-16	-28	-43	-9	30	51	12	-9
380	47	31	5	-38	-19	47	77	71	46	18
390	7	7	6	-11	-10	-18	-27	-13	-11	-41
400	7	7	2	49	13	-45	-55	-25	15	49
410	-73	-58	2	-20	22	59	44	3	-48	-72
420	56	4	-32	-20	-12	-3	-11	1	14	18
430	-59	-36	-20	54	69	60	49	43	18	10
440	17	17	24	54	44	28	0	-26	-15	33
450	31	54	56	44	28	0	0	-26	-15	33
460	-24	-54	-34	10	19	0	-17	-29	-35	12

TO BE CONTINUED

TO BE CONTINUED

CONTINUED (M-1022 UP)

CONTINUED (M-1022 UP)

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2030	55	61	69	87	72	42	24	47	67	80
2040	78	66	60	61	60	61	60	75	90	90
2050	90	91	79	57	41	27	15	-18	-34	-54
2060	-47	-49	-61	-85	-87	-87	-71	-54	-36	-17
2070	-9	-7	-15	-33	-47	-48	-48	-49	-42	-18
2080	3	23	32	20	10	12	24	32	38	51
2090	60	61	57	49	37	12	0	20	11	10
2100	11	11	9	1	-4	-10	-1	17	31	41
2110	32	27	19	10	0	-8	-8	-8	-10	-18
2120	-18	-13	0	13	20	21	12	2	-7	-9
2130	-1	18	21	11	-2	-9	-7	-9	-4	2
2140	18	37	48	64	83	105	110	111	104	96
2150	83	54	27	1	-13	41	-18	-18	-27	-28
2160	-20	-14	9	26	37	41	40	41	32	30
2170	22	19	9	0	-6	-14	-20	-28	-37	-38
2180	-38	-37	-62	-69	-47	-49	-43	-21	-7	12
2190	30	38	47	52	46	31	22	10	0	-6
2200	-15	-19	-18	-18	-18	-18	-18	-18	-13	-1
2210	1	1	0	10	34	47	52	44	40	41
2220	37	28	22	17	10	10	14	22	17	9
2230	1	0	6	15	21	20	7	-5	-19	-28
2240	-28	-28	-28	-28	-30	-37	-40	-47	-52	-55
2250	-46	-35	-16	-1	9	12	21	38	53	60
2260	61	59	51	42	43	52	43	23	4	18
2270	34	47	51	51	47	31	14	11	4	6
2280	12	10	11	10	11	10	11	7	-2	-15
2290	-19	-18	-18	-18	-18	-19	-15	-7	-14	-22
2300	-29	-27	-21	-14	-8	-7	1	0	-15	-36
2310	-56	-74	-78	-58	-37	-27	-18	-13	-3	1
2320	6	16	38	57	61	60	60	52	40	30
2330	31	30	36	48	44	18	0	-8	-8	0
2340	1	0	1	0	1	0	2	-2	-9	-8
2350	-9	-8	-9	-8	-14	-25	-29	-24	0	28
2360	47	55	61	60	55	63	60	41	40	41
2370	41	41	49	51	49	39	30	32	40	41
2380	35	8	8	-3	-18	-32	-40	-48	-48	-48
2390	-48	-49	-59	-54	-47	-40	-37	-38	-38	-38
2400	-38	-38	-39	-35	-22	-14	-8	-17	-19	-18
2410	-19	-14	-8	-3	3	10	11	12	21	20
2420	27	31	30	31	29	21	21	20	21	20
2430	21	20	24	31	30	31	30	31	31	25
2440	16	10	3	0	5	11	19	22	17	10
2450	21	31	30	31	22	19	11	11	11	9
2460	0	-10	-18	-18	-18	-18	-10	-3	5	11
2470	11	10	14	21	20	21	20	21	29	31
2480	30	31	25	16	7	-11	-20	-28	-19	-10
2490	1	11	19	21	20	21	20	21	20	21
2500	20	21	17	8	1	1	1	9	12	0
2510	-21	-40	-55	-58	-57	-44	-29	-19	-18	-15
2520	-1	1	1	1	0	-6	-19	-28	-36	-39
2530	-35	-21	-9	-8	-8	-9	-5	3	10	12
2540	24	35	41	40	41	34	15	-5	-17	-18

TO BE CONTINUED

TO BE CONTINUED

CONTINUED (M-1022 UP)

CONTINUED (M-1022 UP)

Nd.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
3070	2	11	10	11	5	-10	-25	-28	-37	-35	19	19	20	18	10	3	0	0	0	0
3080	-24	-16	-8	-8	-8	-8	-8	-8	-8	-8	0	0	0	0	0	-4	-9	-13	0	0
3090	-8	-9	-7	-12	-19	-18	-13	-6	0	1	3610	-30	-30	-37	-42	-39	-28	-22	-12	-20
3100	0	1	0	1	0	7	11	10	11	11	3620	-1	0	0	0	0	0	0	0	0
3110	19	31	42	51	39	20	8	-5	-10	-18	3630	0	0	0	0	0	8	9	13	21
3120	-18	-10	-8	0	1	1	1	1	0	7	3640	18	36	30	29	29	29	30	29	30
3130	13	21	20	27	31	30	31	30	31	30	3650	28	36	40	33	28	30	29	22	15
3140	31	29	21	21	21	21	21	18	6	0	3660	6	-17	-17	-24	-30	-26	-19	-19	-20
3150	1	1	1	1	0	-8	-9	-7	0	-9	3670	-9	-17	-29	-19	-17	-8	-12	-18	-51
3160	-8	-8	-14	-28	-44	-49	-48	-40	-37	-38	3680	-49	-49	-49	-49	-50	-49	-50	-43	-38
3170	-50	-19	-4	1	0	1	1	1	1	1	3690	-30	-28	-19	-20	-19	-20	-20	-30	-29
3180	1	9	11	10	12	4	-4	-16	-18	-25	3700	-30	-28	-19	-20	-19	-20	-16	-9	-9
3190	-23	-15	-9	-8	-9	-7	-12	-19	-18	-18	3710	-9	-10	5	12	19	20	19	20	20
3200	-18	-18	-18	-10	-8	-8	-14	-20	-17	-25	3720	19	20	16	9	10	9	10	8	0
3210	-29	-28	-29	-28	-37	-38	-38	-39	-32	-32	3730	0	38	-40	-37	-30	-26	-19	-22	-35
3220	-27	-29	-28	-28	-28	-28	-28	-18	-18	-18	3740	-40	-38	-40	-37	-30	-26	-19	-20	-19
3230	-18	-18	-18	-18	-10	-8	-9	-8	-8	-8	3750	-19	-19	-19	-19	-21	-20	-11	-10	-4
3240	-9	-7	-14	-19	-18	-19	-17	-8	-9	-2	3760	-19	-19	-19	-19	-20	-19	-20	-11	-4
3250	2	0	1	1	-1	-13	-18	-28	-39	-38	3770	6	16	21	22	15	9	10	11	20
3260	-38	-30	-28	-29	-27	-18	-18	-19	-12	-12	3780	20	16	9	10	9	10	17	26	30
3270	-7	-10	-4	1	4	12	10	11	10	11	3790	29	28	19	20	19	20	19	23	30
3280	9	1	1	1	1	1	1	1	-8	-4	3800	30	29	30	28	36	40	39	38	29
3290	1	6	12	10	11	10	11	11	11	19	3810	23	19	19	20	13	9	4	0	-10
3300	26	33	34	27	16	10	6	-3	-9	-16	3820	-9	-10	-8	-13	-20	-19	-20	-19	-20
3310	-19	-18	-19	-17	-25	-28	-29	-38	-38	-32	3830	-31	-25	-20	-13	-9	-1	0	1	9
3320	-22	-12	-8	-8	-8	-8	-9	-2	9	14	3840	21	19	20	19	20	18	10	9	10
3330	22	11	-1	-13	-19	-17	-8	-9	-8	-14	3850	16	20	19	19	20	19	20	16	9
3340	-20	-28	-28	-28	-28	-28	-27	-18	-19	-14	3860	0	0	0	0	1	10	9	10	6
3350	1	15	21	21	18	6	0	2	-8	-4	3870	0	0	0	0	0	6	10	9	10
3360	1	4	3	0	1	1	1	1	0	7	3880	9	9	1	-5	-14	-21	-29	-29	-30
3370	12	24	26	15	11	5	-1	-7	-15	-19	3890	-19	-19	-25	-30	-29	-30	-29	-30	-21
3380	-18	-18	-18	-18	-10	0	1	1	1	1	3900	-19	-20	-16	-8	-10	-9	-2	4	9
3390	1	1	-7	-16	-25	-29	-28	-28	-28	-28	3910	19	23	30	29	30	29	29	29	29
3400	-28	-28	-28	-29	-25	-17	-19	-17	-19	-18	3920	21	19	20	19	19	19	28	30	29
3410	-7	-9	-8	-8	-8	-8	-8	-9	-8	-10	3930	30	29	30	28	20	19	12	5	0
3420	-18	-24	-35	-42	-49	-47	-49	-42	-28	-29	3940	-10	-17	-21	-29	-29	-30	-30	-25	-19
3430	-22	-18	-16	-3	1	9	11	10	11	11	3950	-16	-8	-2	0	0	0	0	0	-7
3440	11	11	10	11	5	-2	-14	-23	-28	-28	3960	-11	-5	0	7	10	9	10	4	-6
3450	-28	-37	-38	-37	-21	-1	18	17	10	7	3970	-20	-19	-28	-30	-29	-30	-23	-18	-21
3460	-11	-17	-28	-22	-15	1	22	30	31	19	3980	-9	-10	-11	9	0	0	0	0	0
3470	-5	-26	-27	-15	-3	0	3	10	1	-8	3990	0	3	11	9	18	19	20	13	9
3480	-5	4	10	18	20	19	20	19	12	5	4000	9	9	10	4	-2	-9	-10	-9	10
3490	0	0	-8	-10	-23	-30	-29	-30	-28	-35	4010	-10	-9	-10	-5	0	5	12	19	20
3500	-40	-40	-33	-15	-6	7	10	10	9	11	4020	9	10	9	11	3	0	-8	-10	-9
3510	20	19	20	19	20	14	3	-3	-11	-20	4030	-9	-9	-10	-9	-10	-9	-13	-20	-24
3520	-27	-36	-40	-40	-38	-30	-26	-18	-20	-19	4040	-38	-43	-50	-49	-50	-46	-38	-40	-31
3530	-19	-20	-18	-9	-10	-9	-10	-9	-13	-20	4050	-19	-20	-19	-20	-16	-9	-10	-9	-9
3540	-19	-20	-19	-20	-13	-7	0	0	0	-3	4060	-9	-9	-10	-9	-10	-3	0	0	0
3550	-16	-23	-31	-41	-49	-50	-60	-59	-60	-56	4070	0	0	8	10	9	10	9	10	9
3560	-48	-50	-43	-37	-28	-19	-20	-18	-19	-9	4080	9	10	9	10	9	10	9	18	20
3570	-9	-1	0	0	5	10	9	18	19	21	4090	20	13	9	10	9	10	10	9	18
3580	29	29	29	29	29	29	30	29	30	21	4100	19	19	20	16	9	10	9	10	9

TO BE CONTINUED

TO BE CONTINUED

CONTINUED (M-1022 UP)

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
4110	9	9	9	1	-5	-17	-19	-20	-16	-9
4120	-1	0	0	-5	-11	-8	-16	-20	-19	-19
4130	-20	-16	-9	-10	-9	-10	-16	-8	-16	-19
4140	-23	-30	-29	-30	-29	-29	-29	-29	-29	-29
4150	-30	-29	-30	-29	-30	-25	-20	-16	-9	-7
4160	4	11	19	28	30	29	30	29	29	29
4170	29	29	29	29	29	21	19	20	19	20
4180	18	10	8	0	-1	-10	-9	-10	-9	-9
4190	-9	-9	-9	-9	-9	-10	-9	-10	-9	-9
4200	-10	-9	-16	-20	-19	-20	-19	-19	-19	-19
4210	-20	-16	-9	-10	-9	-10	-9	-9	-9	-9
4220	-9	-9	-9	-10	-9	-10	-9	-10	-3	9
4230	18	11	0	0	0	1	4	10	10	9
4240	13	20	19	19	20	19	26	30	29	30
4250	29	30	29	29	29	29	30	29	30	29
4260	30	27	20	13	9	6	-1	1	-3	-10
4270	-8	-13	-20	-19	-20	-13	-9	-10	0	0
4280	-9	-10	-9	-10	-9	-10	0	0	0	5
4290	0	0	0	0	0	0	0	0	0	0
4300	11	8	13	20	19	20	19	19	19	19
4310	20	14	15	0	0	0	0	0	0	0
4320	0	1	10	9	10	9	10	9	10	9
4330	10	9	13	20	19	20	19	20	19	20
4340	19	19	19	19	11	9	11	5	0	0
4350	0	0	6	10	9	9	16	20	19	20
4360	19	19	19	11	9	10	10	9	11	19
4370	19	19	20	19	20	19	20	13	9	6
4380	-1	0	0	0	-1	-10	-9	-10	-9	-16
4390	-20	-19	-20	-19	-20	-19	-19	-11	-9	-10
4400	-9	-9	-9	-9	-10	-9	-10	-9	-18	-19
4410	-21	-29	-29	-29	-31	-40	-39	-41	-49	-49
4420	-49	-50	-47	-40	-34	-23	-15	-9	-10	-19
4430	-10	-9	-9	-9	-9	-10	-9	-11	-19	-19
4440	-19	-19	-19	-19	-19	-28	-30	-29	-30	-23
4450	-18	-21	-12	-10	-6	1	0	0	0	0
4460	0	0	0	0	0	0	0	0	0	0
4470	0	0	-5	-14	-20	-19	-20	-18	-10	-4
4480	7	10	10	9	10	9	16	20	19	20
4490	19	20	19	19	19	19	19	19	19	19
4500	11	9	10	8	0	0	0	0	0	0
4510	0	0	0	0	0	0	0	0	0	0
4520	0	0	0	0	0	0	0	0	0	0
4530	0	0	0	0	0	0	0	0	0	0
4540	0	0	1	10	9	16	20	19	28	29
4550	30	29	30	23	18	20	11	9	9	-14
4560	9	10	9	10	1	0	0	-10	-8	-10
4570	-19	-25	-32	-39	-40	-39	-40	-39	-40	-33
4580	-29	-24	-18	-20	-11	-9	-9	-10	-1	0
4590	-9	-9	-9	-9	-9	-9	-9	-10	-1	0
4600	0	0	0	0	0	0	3	11	8	16
4610	20	19	20	19	11	9	11	6	0	0
4620	0	0	0	0	0	0	0	0	0	-6

TO BE CONTINUED

CONTINUED (M-1022 UP)

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
4630	-10	-9	-9	-13	-20	-19	-28	-30	-29	-30
4640	-28	-20	-18	-9	-10	-9	-10	-9	-9	-9
4650	-9	-9	-9	-9	-9	-10	-9	-10	-9	-10
4660	-5	0	5	11	9	18	20	19	20	18
4670	-10	6	-2	-9	-9	-11	-19	-19	-19	-20
4680	-19	-20	-16	-9	-10	-10	-4	1	-1	6
4690	10	9	10	10	9	15	21	17	10	9
4700	10	9	10	9	16	20	19	20	19	20
4710	19	26	30	29	30	29	29	29	29	29
4720	29	29	29	29	29	29	29	29	29	29
4730	30	20	20	13	9	5	-5	-9	-16	-20
4740	-19	-20	-19	-20	-19	-20	-19	-20	-19	-20
4750	-19	-20	-13	-8	-10	-9	-10	-9	-16	-20
4760	-19	-20	-11	-9	-9	-10	-8	0	0	1
4770	10	9	10	3	-1	0	-1	6	10	9
4780	10	9	18	20	19	19	19	19	19	19
4790	19	11	9	10	9	10	9	10	17	24
4800	30	29	30	29	38	40	39	40	35	29
4810	30	29	30	29	29	29	29	29	22	29
4820	29	38	40	39	39	40	33	29	30	29
4830	21	19	11	10	4	-1	-6	-15	-18	-27
4840	-40	-47	-49	-55	-61	-57	-50	-44	-33	-27
4850	-19	-19	-11	-9	-10	-9	-10	-6	0	0
4860	0	0	0	3	11	9	10	8	13	20
4870	19	19	25	30	29	30	29	30	29	29
4880	29	29	29	29	29	29	29	30	29	38
4890	39	40	39	43	50	49	49	49	49	49
4900	49	50	43	38	40	39	40	39	40	39
4910	40	36	29	21	19	20	18	10	10	9
4920	10	9	10	8	0	0	0	3	10	9
4930	10	9	10	9	10	9	10	9	10	7
4940	0	-3	-10	-9	-9	-13	-20	-19	-18	-9
4950	-10	0	0	3	10	9	10	9	9	10
4960	8	0	0	0	0	0	0	0	0	0
4970	-8	-10	-9	-10	-9	-9	-9	-9	-9	-9
4980	-10	-9	-10	-9	-11	-3	0	5	11	9
4990	10	9	18	20	19	28	30	29	30	26
5000	19	20	19	20	11	9	10	9	10	10
5010	9	10	8	0	0	0	0	8	10	10
5020	9	13	20	19	20	19	20	19	19	19
5030	19	19	19	20	19	20	16	7	1	-6
5040	-10	-9	-10	-4	4	10	9	18	20	19
5050	20	19	20	19	20	19	20	11	20	19
5060	10	3	0	0	0	0	0	0	0	-11
5070	-5	0	3	10	10	10	29	31	39	-9
5080	40	39	40	39	40	36	28	30	29	30
5090	28	33	40	39	39	39	39	31	29	30
5100	21	19	20	19	20	19	19	19	19	19
5110	19	19	19	20	19	20	19	20	18	10
5120	9	10	6	0	0	0	0	0	0	0
5130	-10	0	0	0	-1	-9	-9	-9	-10	-9
5140	-10	-8	0	3	11	9	10	8	16	20

TO BE CONTINUED

RECORD = F-12 COMPONENT = EAST STATION = HITACHINAKA-F
 DATE AND TIME = 1986-9-20-12-5 TOTAL NUMBER OF DATA = 5100
 SAMPLING INTERVAL = 0.010 (SEC) SCAL = 0.10000
 SIGNAL = GR. ACC.
 CONNECTION POINT IN DATA NUMBER = 5100

CONTINUED (M-1022 UP)
 NO. (1) (2) (3) (4) (5) (6) (7) (8) (9) (10)
 5150 19 20 19 19 20 19 20 15 9 9 4
 5160 -2 -9 -10 -9 -9 -10 -8 1 11 19 28
 5170 30 29 29 30 26 18 20 19 20 19 9
 5180 28 30 29 30 28 20 19 20 13 9
 5190 9 10 6 0 0 -10 -9 -9 -11 -6 1
 END

NO.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	1	0	0	0	0	0	0	0	0	1
10	1	1	0	0	0	0	0	2	1	0
20	1	0	0	0	0	0	0	0	0	0
30	0	1	1	0	0	0	1	0	0	0
40	1	0	0	0	0	0	0	0	0	1
50	1	0	-2	-1	4	6	1	-4	-3	4
60	5	-5	-10	6	26	21	-12	-60	-33	-6
70	8	8	13	30	51	13	-8	-28	-31	-23
80	-3	21	57	15	-21	-28	-11	16	36	13
90	-18	-11	0	-1	0	0	2	24	51	9
100	-55	-50	-1	48	68	24	-27	-31	-22	-42
110	-21	-21	5	37	75	45	-21	-61	-66	-35
120	21	61	34	-30	-68	16	121	129	59	59
130	-21	-89	-109	-108	-89	-17	108	173	113	-18
140	129	-141	-51	43	98	93	-69	-201	-164	-164
150	-21	126	198	165	88	-20	-154	-76	76	76
160	156	155	56	-100	-197	-167	-52	101	147	115
170	50	-53	-121	-147	-78	28	103	134	123	39
180	-86	-161	-130	-15	115	184	141	-14	-194	-275
190	-203	-16	173	276	251	83	-141	-274	-235	-66
200	95	166	158	57	-101	-185	-113	55	198	225
210	105	-86	-244	-263	-119	89	248	289	179	-23
220	-193	-230	-113	73	188	159	18	-143	-218	-158
230	-9	132	189	138	16	-113	-173	-123	0	111
240	144	95	12	-82	-154	-146	-55	68	159	163
250	79	-29	-119	-173	-166	-95	-1	82	124	113
260	79	42	8	-4	-19	-62	-107	-118	-83	-3
270	105	201	229	175	53	-115	-249	-246	-118	60
280	208	244	120	-77	-220	-206	-42	136	208	150
290	-6	-182	-373	-209	-21	170	270	219	66	-78
300	-170	-170	-76	41	104	78	-5	-87	-116	-67
310	41	128	103	2	-75	-95	-65	6	99	156
320	116	-6	-124	-160	-94	28	120	126	56	-35
330	-81	-66	-50	-4	21	44	48	40	35	31
340	4	-44	-62	-20	38	54	4	-71	-115	-101
350	-45	16	65	87	58	6	-25	-19	31	76
360	58	0	-61	-102	-93	-25	44	61	33	-11
370	-34	-18	18	44	41	-1	-66	-93	-51	28
380	84	80	51	11	-34	-61	-46	9	73	72
390	-6	-93	-118	-61	28	97	118	84	26	-35
400	-83	-86	-64	-17	56	81	42	5	-9	-4
410	-23	-51	-37	10	27	6	7	44	32	-33
420	-69	-34	24	32	15	-2	-38	-63	-51	11
430	91	93	25	-35	-66	-70	-55	-11	29	43
440	65	75	50	14	-35	-80	-79	-36	0	24
450	60	69	11	-38	-24	0	13	42	38	4
460	-29	-62	-68	-44	-5	41	87	103	46	-38

TO BE CONTINUED

CONTINUED(F-12) EAST										CONTINUED(F-12) EAST											
ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
470	-70	-61	-49	-31	-10	-6	-10	2	27	36	990	9	46	46	21	-24	-76	-79	0	96	140
480	59	89	56	-34	-109	-135	-99	-14	58	96	1000	108	33	-25	-64	-95	-114	-92	-39	-9	-6
490	120	93	0	-52	-17	10	-3	-13	-16	-38	1010	8	44	93	144	175	160	101	16	-60	-88
500	-84	-70	-54	4	108	164	117	37	-15	-73	1020	-65	-21	-6	-51	-101	-99	-64	-12	48	84
510	-66	-61	-32	-17	-15	4	55	98	94	94	1030	33	-68	-112	-66	4	58	78	58	31	-8
520	24	-57	-105	-126	-94	-17	45	91	101	42	1040	-61	-68	-7	77	113	76	-3	-73	-91	-17
530	-22	-39	-6	18	-5	-25	-11	3	-6	-15	1050	-60	-42	-25	4	153	93	104	55	-45	-117
540	0	25	27	-3	-28	-12	7	2	4	4	1060	-79	44	153	201	186	99	-48	-210	-301	-253
550	-14	-35	-11	27	44	43	11	-9	4	12	1070	-106	25	80	71	48	24	70	104	100	-58
560	13	9	-33	-98	-64	-19	33	92	4	8	1080	-14	-3	19	51	57	49	70	104	100	53
570	81	11	-42	-64	-65	0	18	16	8	-27	1090	8	-35	-49	-41	-33	-27	-43	-89	-134	-155
580	-48	-23	16	63	65	1	-55	-69	-66	4	1100	-129	-34	106	194	173	88	5	-55	-88	-86
590	66	89	46	-58	-116	-99	18	111	123	84	1110	-57	-32	-46	-78	-77	-32	33	93	122	101
600	-12	-79	-148	-91	9	91	116	69	-10	-82	1120	49	19	17	29	47	61	12	-2	6	23
610	-119	-8	55	58	54	29	-12	-51	-59	54	1130	36	45	28	-6	-45	-76	-93	-66	-5	84
620	-31	4	14	14	9	-20	-35	-6	20	-1	1140	114	100	7	-98	-141	-102	-6	103	158	111
630	9	1	18	44	48	38	17	-21	-61	-65	1150	-29	105	-298	-265	-100	86	184	181	108	-6
640	-11	71	105	51	-26	-66	-61	-25	19	81	1160	-91	-76	21	86	33	-86	-182	-181	-75	63
650	109	37	-81	-82	-6	48	55	63	33	-4	1170	161	176	111	4	-95	-145	-132	-69	16	81
660	127	118	210	218	106	-48	-159	-209	-159	-14	1180	98	80	60	66	90	117	139	147	124	51
670	135	156	-8	-189	-185	-15	173	241	90	-222	1190	-64	-171	-199	-119	25	138	150	179	-28	-126
680	-515	-610	-405	11	406	545	394	156	-21	-124	1200	-165	-124	-25	44	31	-35	88	-16	33	53
690	-190	-280	-390	478	804	841	330	-401	-903	-891	1210	115	140	71	-51	-149	-155	219	149	-9	-177
700	-524	-586	-263	313	804	841	330	-401	-903	-891	1220	20	-30	-35	14	100	187	108	18	-74	-131
710	-411	253	758	833	474	-29	-339	-284	11	231	1230	-875	-246	-101	61	155	165	99	-6	-83	-101
720	192	14	154	-263	-241	-99	18	19	-73	-148	1240	-55	42	131	163	140	75	4	-28	-44	-76
730	-47	264	573	624	368	-15	-364	-607	-645	-450	1250	-114	-98	-17	84	151	160	108	18	-74	-131
740	-161	82	251	300	304	251	169	56	-91	-230	1260	-125	-75	-21	33	73	49	-46	-135	-133	149
750	-315	-226	-90	50	50	64	51	10	61	171	1270	80	133	110	28	-84	-164	-143	-28	93	149
760	281	329	266	36	-304	-506	-506	-186	288	461	1280	126	58	24	-110	-151	-106	0	88	96	52
770	434	155	-234	-540	-526	-131	398	683	575	231	1290	-11	-66	-89	-68	-17	44	103	124	73	-22
780	-155	-434	-468	-251	75	346	400	193	-105	-295	1300	-86	-91	32	128	154	81	-56	-124	-141	-73
790	-315	-180	58	263	310	175	-25	-104	-26	77	1310	33	98	85	-3	-108	-141	-66	38	91	97
800	75	-20	-137	-224	-258	-183	60	291	301	165	1320	75	25	-27	-54	-38	4	24	6	-16	-13
810	50	18	4	-25	-31	-50	-90	-133	-175	-122	1330	0	-10	-38	-57	-58	-44	-21	13	43	29
820	18	80	43	16	46	113	168	135	-7	-205	1340	-8	-29	-23	-11	10	46	59	36	-18	-77
830	-330	-287	-61	233	416	412	293	114	-114	-315	1350	-87	-31	45	84	58	-17	-107	-163	-144	-35
840	-373	-253	-59	94	117	-3	-131	-113	28	173	1360	118	214	204	118	100	-100	-127	-67	-36	138
850	225	138	-79	155	-126	-93	9	84	43	-102	1370	169	102	-4	-74	-76	-27	19	26	-1	-48
860	-230	-179	155	378	440	304	54	-212	-395	-426	1380	-81	-66	-1	61	79	56	10	-40	-77	-87
870	-341	-213	-411	138	238	271	298	295	241	147	1390	-73	-51	-35	-27	-3	51	98	79	0	-34
880	-15	-235	-389	376	-236	-62	79	140	88	5	1400	-109	-86	-8	81	108	54	-25	-62	-24	34
890	20	125	216	196	4	-140	-247	-240	-130	8	1410	56	37	-1	-48	-74	-54	-1	48	70	53
900	168	238	182	58	-25	-15	37	42	8	-23	1420	6	-39	-6	158	253	219	72	-124	-246	-198
910	-35	-92	-166	-204	-182	-126	-46	76	205	249	1430	-142	6	8	82	33	4	15	57	84	59
920	162	-29	-218	-303	-246	-41	224	359	289	16	1440	16	84	82	33	4	33	68	60	73	72
930	-228	-293	-141	85	188	107	-91	-265	-294	-127	1450	-54	-53	-38	-23	4	33	68	60	73	72
940	153	369	378	179	-97	-283	-279	-123	67	187	1460	38	-28	-97	-111	-56	4	33	68	60	73
950	186	100	30	34	39	-32	-144	-188	-119	-6	1470	-128	-90	12	101	114	33	-140	-140	-55	54
960	61	51	14	-25	-74	-88	-22	-44	-88	-125	1480	93	231	248	134	-33	-140	-140	-55	54	113
970	129	75	19	-16	-46	-72	-74	-66	-73	-66	1490	89	-8	-118	-155	-107	-13	73	113	109	90
980	-33	-23	-26	8	76	110	82	11	-55	-49	1500	67	42	8	-40	-88	-115	-111	-73	-2	73

TO BE CONTINUED

TO BE CONTINUED

CONTINUED (F-12 EAST)										CONTINUED (F-12 EAST)											
NO.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	NO.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1510	119	116	69	0	-64	-100	-98	-69	-31	-9	2030	-79	-82	-35	44	116	139	93	3	-76	-102
1520	-4	-3	-6	-14	-15	8	13	44	51	36	2040	-81	-38	-6	0	-11	-21	-25	-24	-11	5
1530	20	-1	-21	-11	18	38	24	-8	-18	1	2050	13	18	18	4	-24	-49	-50	-21	18	39
1540	44	84	85	30	-51	-95	-77	-8	71	98	2060	37	23	4	-18	-37	-35	-12	25	56	70
1550	64	0	-53	-60	-32	32	54	5	-81	-134	2070	58	21	-26	-59	-61	-28	20	58	63	38
1560	-107	-18	54	61	-64	-105	-64	-80	-8	67	2080	-1	-63	-57	-55	27	70	82	58	3	-51
1570	101	91	42	-32	-75	-46	26	81	84	52	2090	-82	-33	9	34	44	58	28	13	-3	-5
1580	1	-59	-96	-83	-32	38	110	148	117	43	2100	-6	-44	-42	-17	-16	6	8	0	-8	-20
1590	-19	-51	-56	-61	-23	-10	-11	-28	-48	-62	2110	-77	-46	-40	-30	49	58	48	33	2	-19
1600	-61	-41	-10	36	82	88	35	-46	-108	-120	2120	-12	6	30	49	58	53	38	25	16	12
1610	-76	-13	29	33	12	-5	4	39	83	100	2130	18	13	-14	-52	-71	-62	-34	7	33	23
1620	73	9	-53	-73	-40	17	47	21	-16	-17	2140	-8	-35	-41	-21	6	30	48	46	18	-7
1630	18	48	51	28	-15	-65	-92	-67	20	115	2150	-15	-8	-3	-19	-67	-64	-55	25	8	32
1640	147	111	44	-29	-89	-105	-63	-4	26	29	2160	31	6	-15	-21	-15	-4	13	35	41	39
1650	6	-29	-62	-65	-30	35	103	137	109	27	2170	28	6	-15	-20	-2	38	66	50	4	-41
1660	-64	-116	-99	-35	28	62	50	11	-21	-33	2180	-67	-61	-22	29	69	65	16	-41	-71	-51
1670	-32	-34	-51	-84	-101	-64	10	79	101	65	2190	0	43	-56	41	14	-8	-11	5	13	7
1680	-15	-75	-66	6	81	97	42	-38	-81	-69	2200	-16	-51	-72	-69	-39	-6	4	-16	-46	-63
1690	-23	20	32	19	1	-11	-6	18	44	38	2210	-62	-53	-38	-9	24	47	51	43	35	33
1700	1	-17	19	88	128	99	7	-92	-143	-126	2220	33	30	24	5	-21	-43	-49	-34	-6	28
1710	-71	-12	30	28	-11	-47	-48	-2	61	86	2230	53	59	40	-1	-39	-35	5	51	70	55
1720	59	1	-58	-78	-35	45	112	115	59	-9	2240	13	-25	-35	-7	33	57	58	33	-12	-61
1730	-44	-38	12	9	8	-19	-51	-55	-23	23	2250	-87	-74	-26	31	56	31	-23	-61	-62	-31
1740	48	41	-3	-47	-83	37	38	89	84	84	2260	1	10	8	11	20	36	47	38	14	-18
1750	28	-28	-44	-12	37	63	38	-36	-116	-148	2270	-44	-42	-15	13	26	6	-35	-59	-46	-11
1760	-109	-31	44	91	94	50	-13	-54	-46	-11	2280	19	29	17	-4	-8	13	43	52	37	6
1770	1	-5	-6	7	11	-14	-55	-59	-26	12	2290	-18	-22	-18	-18	-21	-16	-1	13	36	58
1780	63	70	80	65	44	25	19	31	48	52	2300	65	43	9	-21	-31	-9	24	45	38	-3
1790	31	0	-19	-21	-11	-11	-20	-10	16	51	2310	-55	-82	-69	-23	21	31	13	-1	0	10
1800	86	93	65	11	-58	-114	-126	-91	-46	-25	2320	33	56	50	14	-35	-81	-101	-93	-55	-7
1810	-29	-21	-6	15	42	64	71	50	9	-18	2330	32	48	40	13	-14	-33	-25	15	28	58
1820	-23	-21	-28	-41	-54	-72	-84	-72	-29	19	2340	42	-7	-40	-41	-23	2	25	42	45	26
1830	48	65	62	44	26	15	7	4	2	-6	2350	0	-14	-15	-7	4	8	0	-1	13	33
1840	-15	-21	-34	-39	-31	-14	0	18	48	65	2360	36	15	-6	-25	-39	-33	-8	20	28	6
1850	59	33	4	-6	-1	10	15	8	-4	-19	2370	-39	-84	-102	-78	-19	44	91	97	58	-3
1860	-34	-40	-25	-12	6	44	89	90	26	-55	2380	-47	-53	-21	18	39	37	13	-22	-47	-45
1870	-103	-96	-49	4	36	31	9	-2	-1	5	2390	-15	15	38	48	45	22	-6	-15	1	33
1880	12	4	-18	-41	-57	-46	1	68	114	101	2400	58	46	7	-42	-72	-56	-6	40	55	33
1890	31	-65	-135	-151	-109	-35	23	28	-8	-40	2410	-6	-64	-60	-45	-10	4	10	-10	-46	-62
1900	-35	11	79	129	131	81	7	-46	-52	-17	2420	-46	-4	35	45	24	4	-17	-22	-14	-2
1910	49	82	70	13	-44	-67	-55	-24	-15	-32	2430	0	1	16	35	48	54	48	25	-12	-50
1920	-50	-38	-14	0	8	5	-18	-24	7	58	2440	-59	-29	13	36	28	-1	18	-39	-27	0
1930	95	93	44	-25	-68	-65	-31	15	40	41	2450	32	43	31	8	-6	0	18	40	50	44
1940	27	2	-29	-51	-53	-35	-8	24	59	86	2460	21	-15	-49	-62	-49	-8	34	55	37	-10
1950	86	46	-17	-72	-91	-66	-8	55	88	65	2470	-62	-95	-87	-48	-3	30	46	37	1	-3
1960	1	-55	-70	-47	-11	15	20	13	9	11	2480	5	20	18	1	-14	-18	-15	-9	1	23
1970	27	56	77	56	5	-44	-72	-83	-83	-73	2490	31	21	2	-19	-32	-16	6	17	5	5
1980	-48	-11	25	49	56	49	28	-4	82	86	2500	-12	-14	2	28	44	31	-6	-69	-69	-50
1990	-4	3	-1	-11	-18	-15	8	52	87	16	2510	-2	42	50	23	-6	-21	-15	-2	15	23
2000	43	-26	-91	-122	-105	-57	-6	22	13	-16	2520	16	0	-8	5	44	73	64	16	-35	-55
2010	-32	-13	28	81	125	123	63	6	-38	-43	2530	-37	-1	20	18	0	-16	-14	-1	16	26
2020	-40	-35	-27	-20	-10	8	51	40	17	-35	2540	17	-11	-41	-61	-56	-25	16	40	38	12

TO BE CONTINUED

TO BE CONTINUED

CONTINUED(F-12 EAST)										
ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
3070	21	4	-19	-32	-19	11	35	35	12	-15
3080	-27	-22	-8	0	-14	-45	-66	-59	-31	6
3090	31	26	-4	-38	-51	-31	4	32	36	18
3100	-2	-16	-9	18	51	65	52	24	1	-10
3110	-4	8	18	21	15	-1	-16	-24	-24	-24
3120	-21	-15	-4	12	23	21	11	-5	-20	-21
3130	-6	14	26	29	20	0	-21	-30	-5	-14
3140	0	10	14	8	-8	-21	-21	-31	-1	2
3150	-1	-3	-1	-3	15	38	50	41	15	-11
3160	-28	-28	-14	-1	2	-3	-5	8	24	31
3170	23	-2	-35	-52	-39	-8	13	19	5	-9
3180	-18	-19	-8	9	21	14	-7	-24	-29	-10
3190	-21	-6	8	14	5	-13	-28	-26	-12	10
3200	28	33	25	13	11	19	19	12	1	-5
3210	-10	-14	-23	-29	-28	-20	-5	9	16	-6
3220	12	5	2	0	4	15	23	22	9	-6
3230	-15	-20	-21	-18	-19	-18	-10	1	13	18
3240	16	9	8	19	31	35	28	20	13	5
3250	-3	-9	-12	-10	-1	7	3	-10	-25	-37
3260	-40	-33	-9	11	19	13	-1	-20	-35	-39
3270	-25	0	27	45	49	42	27	10	4	8
3280	11	4	-10	-19	-19	-16	-11	0	13	18
3290	21	24	24	12	-3	-16	-23	-24	-21	-12
3300	0	8	14	15	5	1	22	28	11	-17
3310	6	-23	-48	-54	-37	-5	7	18	30	27
3320	-37	-35	-10	19	35	33	17	-1	-11	-7
3330	-1	-3	-11	-19	-11	6	23	28	18	-6
3340	-27	-27	-9	5	5	-6	-21	-25	-14	6
3350	24	30	13	-11	-29	-27	-10	7	-9	-6
3360	-19	-15	6	28	38	31	13	-3	-12	-26
3370	8	24	26	13	-4	-21	-26	-24	-22	-26
3380	-29	-22	-10	1	8	-9	-5	3	10	21
3390	26	20	1	-19	-22	-26	-16	-4	0	-6
3400	-20	-24	-12	6	22	23	10	-14	-35	-43
3410	-28	2	31	44	44	33	9	-8	10	35
3420	44	37	15	-6	-15	-6	11	29	32	18
3430	-2	-23	-35	-24	5	31	35	23	9	0
3440	-3	-3	-2	-2	-5	-15	-29	-41	-41	-31
3450	-10	9	16	12	4	1	0	0	-5	-11
3460	11	26	23	8	33	27	6	-15	-15	0
3470	-18	-6	-3	9	-5	-8	-1	7	11	6
3480	-2	-18	-24	-3	11	-8	-3	-3	-1	1
3490	-6	-18	-24	-9	18	-8	-3	-4	-9	-17
3500	-23	-20	-9	0	2	-3	-14	-21	-25	-21
3510	-3	16	29	28	13	-4	-11	2	24	35
3520	30	12	3	16	35	48	38	15	-15	-40
3530	-46	-34	-12	-34	0	-11	-3	13	22	24
3540	31	14	-11	-27	-31	-21	-9	-15	-16	-8
3550	21	13	4	0	0	-2	-14	-1	14	21
3560	11	25	25	13	13	-2	-14	-1	14	21
3570	18	4	-13	-25	-33	-32	-21	-21	-5	6
3580	-4	-20	-29	-19	-27	-18	46	54	40	8

TO BE CONTINUED

CONTINUED(F-12 EAST)										
ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2550	-18	-35	-32	-12	6	8	0	-17	-33	-34
2560	-7	37	68	38	-4	-4	-41	-47	-15	28
2570	49	31	-13	-51	-64	-15	-34	-6	8	11
2580	18	28	39	40	28	16	15	21	26	24
2590	11	-23	-71	-94	-72	-18	28	44	18	-25
2600	-46	-29	10	43	45	21	-4	-20	-21	-1
2610	24	30	10	-21	-35	-16	17	33	24	-4
2620	-25	-20	12	47	51	18	-30	-60	-56	-25
2630	17	54	64	38	-4	-38	-2	41	59	-4
2640	39	-10	-55	-72	-59	-24	11	30	32	27
2650	14	0	-5	0	4	2	-4	-11	-14	-13
2660	0	21	45	57	45	20	1	-6	-10	-6
2670	-13	-7	-2	0	-13	-28	0	-31	-25	-17
2680	-18	-33	-51	-55	-46	-25	0	27	37	-22
2690	-6	-25	-25	-21	-15	-17	7	19	51	73
2700	79	58	24	0	-3	13	33	35	18	-7
2710	-25	-26	-6	24	38	27	6	-8	-11	-1
2720	9	5	-12	-39	-58	-53	-26	6	26	24
2730	6	-21	-41	-36	-11	12	15	-5	-31	-66
2740	-35	3	45	65	41	3	-31	-40	-17	-8
2750	38	32	8	-13	-20	-14	5	13	11	8
2760	-33	-46	-39	-18	6	21	16	8	5	11
2770	20	13	-11	-33	-30	-2	32	51	44	18
2780	-7	-25	-24	-4	24	34	20	-9	-35	-40
2790	-20	8	29	35	21	-3	-21	-15	9	38
2800	47	26	-15	-53	-69	-47	5	58	78	53
2810	2	-41	-51	-17	-15	2	21	10	-6	-16
2820	-17	-13	-3	-17	-15	-6	0	5	1	-9
2830	-19	-16	-3	8	18	10	-3	-7	3	14
2840	18	13	4	-6	-21	-38	-41	-23	4	32
2850	50	44	13	-20	-39	-35	-7	36	64	57
2860	18	-21	-28	-3	28	35	16	-17	-42	-40
2870	-14	18	38	30	5	-14	-21	-11	6	12
2880	-6	-36	-60	-63	-40	4	50	75	68	30
2890	-11	-33	-34	-17	6	22	20	5	-14	-25
2900	-14	7	20	16	8	2	6	6	2	-3
2910	-3	0	1	9	13	17	13	-6	-32	-22
2920	-49	-23	14	4	40	8	-37	-62	-49	-8
2930	38	60	45	4	-39	-57	-4	9	10	10
2940	-8	-31	-29	0	33	48	34	4	17	24
2950	7	33	45	42	22	-1	-8	1	20	24
2960	9	-25	-57	-61	-32	8	36	36	9	-19
2970	-35	-30	-7	13	23	18	12	10	13	18
2980	13	-1	-21	-30	-25	-15	-11	-16	-24	-23
2990	-16	-6	5	12	9	4	4	0	10	13
3000	13	9	0	-8	-14	-15	-19	-11	6	22
3010	29	25	11	-3	-12	-6	9	18	15	5
3020	4	14	30	35	17	-14	-45	-59	-45	-9
3030	24	39	28	4	-20	-32	2	20	19	22
3040	4	-15	-26	-28	-15	7	29	43	40	22
3050	0	-13	-15	-12	-6	-3	1	9	17	19
3060	17	15	15	-6	-9	-22	-21	-6	15	25

TO BE CONTINUED

CONTINUED (F-12 EAST)										CONTINUED (F-12 EAST)												
ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
3590	-17	-29	-24	-14	-1	7	10	13	16	13	4110	4	-6	-15	-20	-11	4	13	12	0	-17	
3600	5	-7	-19	-28	-29	-22	-11	-3	-1	-6	4120	-29	-26	-10	-15	19	23	13	-2	-15	-13	
3610	-7	-1	8	13	16	13	3	0	8	17	4130	-6	7	16	16	7	-1	-8	-6	-6	-1	
3620	17	4	-15	-29	-32	-23	-10	0	1	-4	4140	3	12	8	0	18	10	-21	-15	-20	-10	
3630	-8	-4	8	20	18	-4	-15	-21	-13	-2	4150	3	7	5	1	-4	-5	-6	-1	5	11	
3640	8	18	26	23	9	-4	-8	0	0	9	4160	6	7	5	1	-4	-5	-6	0	9	18	
3650	-1	-4	-10	-11	-4	-19	20	23	18	1	4170	10	8	4	-1	-6	-7	-6	0	15	18	
3660	1	-1	-2	-4	-11	-19	19	-12	3	23	4180	21	13	-9	-12	-13	-6	5	15	18	10	
3670	36	33	17	1	-4	6	19	24	16	4	4190	-16	-7	0	1	14	20	16	7	-7	-16	
3680	3	7	11	5	-3	-2	4	8	10	4	4200	-16	-7	0	1	-4	-14	-22	-21	-4	18	
3690	-9	-20	-24	-16	-2	9	13	8	2	-16	4210	31	24	3	-15	-17	4	12	-1	-4	18	
3700	-30	-40	-38	-28	-15	0	7	0	0	-9	4220	-1	-11	-8	2	12	18	17	6	-5	-13	
3710	-13	-11	-2	5	11	10	0	6	0	-6	4230	-11	0	0	-3	-10	-18	-22	-7	-14	-13	
3720	0	3	2	0	1	4	4	6	10	15	4240	-6	0	0	0	0	5	11	13	12	4	
3730	17	11	0	-9	-9	0	13	23	26	21	4250	-6	0	0	-1	0	0	-7	-16	-21	-20	
3740	13	5	-3	-7	-3	11	20	17	6	-2	4260	8	5	0	-1	0	0	5	11	13	12	
3750	-10	-16	-20	-18	-14	-13	-20	-28	-29	-19	4270	-3	-8	-5	-1	-4	-4	0	9	13	9	
3760	-8	2	10	11	4	-6	-12	-13	-12	-11	4280	-5	-4	5	12	9	1	-9	-8	-1	15	
3770	-9	-6	-6	-7	-1	13	28	33	30	16	4290	5	9	9	7	3	0	1	5	11	15	
3780	-1	-19	-23	-13	-13	7	24	26	15	0	4300	13	8	4	-2	-6	-11	-11	-8	-4	-3	
3790	-9	7	29	38	35	6	-6	-11	-5	9	4310	-3	0	1	4	6	8	9	9	4	14	
3800	20	11	-6	-26	-35	-30	-18	-7	-3	-8	4320	-10	-13	-11	-3	6	12	10	0	-15	-30	
3810	-20	-30	-25	-9	10	21	18	5	-3	-1	4330	-33	-26	-15	-8	-3	0	7	14	19	16	
3820	11	21	24	19	8	-1	-3	0	5	9	4340	8	-3	-7	-6	5	13	13	6	-5	-14	
3830	14	12	1	-21	-34	-35	-19	3	24	35	4350	-12	-1	13	19	12	1	-6	-6	3	14	
3840	28	1	-24	-40	-35	-11	16	29	26	7	4360	18	14	2	2	-9	-13	-8	-1	2	4	
3850	-14	-27	-24	-12	0	5	3	1	1	1	4370	2	1	2	3	3	1	-7	-4	5	13	
3860	0	-3	-8	-13	-12	-1	12	19	18	13	4380	20	19	9	-9	-24	-29	-22	-8	7	15	
3870	12	11	11	15	24	28	21	8	-6	-15	4390	15	10	8	10	8	0	-14	-25	-30	-22	
3880	-18	-16	-7	0	1	0	-7	-15	-20	-15	4400	-3	13	16	6	-8	-21	-22	-14	-3	6	
3890	-8	-1	5	9	9	8	4	-4	-12	-9	4410	7	0	-3	-2	4	14	16	17	12	4	
3900	0	12	18	15	7	4	7	14	14	6	4420	2	4	6	0	-6	-4	-6	4	16	23	
3910	-5	-11	-13	-9	-6	-6	-6	-5	-4	-1	4430	18	4	-11	-19	-16	-4	8	12	6	-2	
3920	5	11	8	-4	-24	-35	-32	-15	2	13	4440	-9	-8	-1	4	4	2	-1	0	0	-9	
3930	10	0	-9	-11	-5	8	16	13	5	-4	4450	-1	-8	-14	-15	-12	-6	-2	-1	-3	-9	
3940	-6	1	9	15	17	13	12	10	7	1	4460	-13	-13	-6	1	5	7	5	0	0	6	
3950	-2	-8	-11	-7	0	9	16	16	4	-11	4470	13	16	13	8	2	-1	-4	1	8	13	
3960	-18	-14	-2	10	18	13	0	-10	-9	-2	4480	13	9	8	8	5	5	4	5	8	11	
3970	4	8	11	13	13	8	-2	-15	-25	-29	4490	13	13	13	8	1	-3	-7	-11	-11	-9	
3980	-6	-15	-21	-21	-19	-14	-8	0	4	2	4500	-5	-2	-2	-3	-4	-2	-2	0	0	0	
4000	-1	-3	-1	6	14	22	23	13	0	4	4510	-3	-8	-6	-1	4	7	3	-3	-6	-1	
4010	0	13	28	36	33	21	6	-1	0	4	4520	0	1	-1	-1	-2	-4	-6	-7	2	3	
4020	6	4	-1	-6	-11	-12	-10	-9	-10	-7	4530	-1	-6	-6	-2	0	5	8	7	5	1	
4030	0	4	2	-5	-14	-18	-18	-9	-7	22	4540	-4	-10	-8	-2	0	1	-3	-10	-15	-15	
4040	24	7	-15	-34	-39	-23	4	24	24	8	4550	-11	-5	-1	-10	-6	-10	-11	-6	4	8	
4050	-8	-15	-9	5	16	15	6	-4	-8	-2	4560	5	-1	-10	-14	-11	0	11	16	14	4	
4060	8	21	26	18	4	-7	-12	-6	0	4	4570	-6	-24	-6	5	16	17	8	-3	-11	-6	
4070	0	-5	-9	-8	-3	2	4	4	3	3	4580	9	24	33	24	8	-9	-17	-11	4	16	
4080	4	6	6	6	6	4	10	10	0	0	4590	14	0	-15	-21	-14	1	14	13	-1	-19	
4090	-18	-34	-38	-21	2	21	26	18	5	-1	4600	-23	-16	0	16	18	8	-6	-18	-9	-9	
4100	5	14	18	18	8	-8	-23	-25	-15	-1	4610	4	12	9	0	-11	-21	-25	-20	-7	4	
											4620	9	10	7	2	-3	-6	-1	5	11	9	9

TO BE CONTINUED

TO BE CONTINUED

RECORD = F-12 COMPONENT = NORTH STATION = HITACHINAKA-F
 DATE AND TIME = 1986- 9-20-12- 5 TOTAL NUMBER OF DATA = 5100
 SAMPLING INTERVAL = 0.010 (SEC) SCAL = 0.10000
 SIGNAL = GR. ACC.
 CONNECTION POINT IN DATA NUMBER = 5100,

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
4630	8	3	-1	-3	-2	0	4	9	10	6
4640	0	-4	-3	2	5	5	5	5	6	5
4650	4	3	4	4	4	4	4	3	0	-7
4660	-12	-11	-6	2	7	9	8	7	5	1
4670	0	0	-6	4	5	4	0	-1	-1	1
4680	2	0	-6	-11	-13	-11	-6	-1	4	3
4690	-3	-13	-19	-12	-2	6	11	10	4	-2
4700	-5	-5	-2	0	2	5	4	-1	-7	-6
4710	0	7	12	10	2	-8	-12	-12	-6	4
4720	8	4	-4	-10	-11	-2	5	10	5	-3
4730	-11	-11	-7	-2	7	10	8	5	4	6
4740	11	9	5	0	-2	0	4	9	13	10
4750	1	-10	-14	-11	-8	13	11	4	4	-6
4760	-10	-6	4	16	19	-11	-2	-11	-11	-2
4770	6	-8	4	-2	0	-9	-6	-4	-5	-5
4780	-6	-8	-4	2	5	4	-3	-8	-6	0
4790	6	9	5	0	-1	0	8	13	13	4
4800	-6	-17	-20	-13	-2	6	5	0	-2	0
4810	4	9	11	8	2	-3	3	1	6	5
4820	0	-4	-2	4	13	14	10	1	-5	-3
4830	1	6	5	-1	-9	-15	-19	-20	-21	-19
4840	-16	-11	-7	-1	0	0	-5	-11	-15	-14
4850	-11	-4	-1	1	2	5	8	8	9	5
4860	1	-4	-7	-8	-9	0	6	13	18	13
4870	4	-8	-11	-7	5	13	21	20	9	1
4880	-1	2	10	17	17	13	1	-11	-15	-10
4890	-4	3	13	18	16	8	-1	-7	-10	-6
4900	-1	-1	-4	-8	-7	-2	6	11	12	5
4910	-5	-12	-13	-6	4	13	10	1	-6	-11
4920	-8	-9	0	1	0	-1	-3	-1	4	8
4930	2	-9	-21	-27	-23	-14	-2	4	5	0
4940	-3	-6	-1	5	9	11	7	5	5	9
4950	13	13	10	7	7	8	13	13	12	4
4960	-2	-6	-3	-2	-5	-10	-13	-12	-6	2
4970	9	11	9	7	5	3	-1	-5	-9	-15
4980	-16	-12	-3	7	13	14	10	4	-1	-3
4990	-1	-2	1	-3	-9	-13	-13	-9	-4	0
5000	2	1	1	1	-2	-6	-6	-6	-6	-1
5010	3	8	8	4	-3	-4	0	6	11	10
5020	4	-6	-10	-8	-4	0	0	0	-1	1
5030	4	4	4	0	-6	-4	4	15	22	18
5040	9	-3	8	-3	3	6	2	-2	-1	4
5050	11	16	13	6	-3	-9	-8	-3	2	0
5060	-8	-16	-20	-15	-9	-1	0	-3	-11	-11
5070	-7	-1	2	1	-2	-3	-1	2	1	-3
5080	-8	-15	-21	-17	-7	8	18	18	8	0
5090	-3	0	5	10	13	12	8	4	5	1

END

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0	-1	0	0	0	0	0	0	0	0
10	0	0	0	0	1	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0
30	0	0	1	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	1
50	0	0	2	2	0	2	5	4	-5	-11
60	-5	5	8	0	0	12	10	-17	-35	-14
70	27	37	14	-4	2	-1	-25	-45	-29	4
80	24	43	47	-4	-24	-51	-22	-28	26	-29
90	-42	21	45	-6	-37	0	59	56	-10	-51
100	-25	-3	-43	-54	12	27	-21	-16	54	89
110	24	-56	-64	-12	25	16	13	26	12	-11
120	-4	20	5	-33	-26	29	60	22	-60	-115
130	-61	51	92	52	-3	-33	-42	-31	-16	16
140	77	87	10	-64	-61	-27	-16	12	61	92
150	61	-19	-88	-91	-35	22	35	4	-27	-35
160	25	10	77	107	67	-15	-117	-183	-151	-40
170	99	202	189	57	-85	-126	-72	-15	34	76
180	36	-72	-113	-35	87	151	104	-4	-90	-127
190	-105	-16	78	131	111	26	-42	-66	-63	-29
200	12	29	41	39	-11	-66	-80	-61	-15	34
210	66	92	94	49	-33	-123	-163	-130	-41	75
220	151	134	36	-77	-138	-124	-35	92	175	160
230	33	-121	-184	-135	-21	96	155	130	39	-63
240	-96	-42	29	56	55	32	-22	-71	-86	-63
250	-12	39	80	79	49	14	-41	-92	-80	-15
260	44	76	82	45	-23	-81	-72	-2	54	62
270	24	-43	-104	-116	-79	-16	54	96	82	37
280	-12	-44	-30	-12	54	61	17	-51	-95	-82
290	-16	59	79	66	41	0	-24	-23	-10	-2
300	-8	-35	-63	-34	47	118	133	96	15	-85
310	-157	-135	-44	-44	42	37	20	-2	-33	-38
320	16	76	67	11	-31	-56	-90	-96	-24	76
330	114	87	54	22	-39	-113	-128	-66	22	69
340	64	32	2	-19	-25	3	46	80	83	36
350	-31	-84	-92	-52	5	43	49	29	9	13
360	15	-12	-35	-29	-27	-33	-31	-17	11	33
370	33	48	72	45	-35	-90	-95	-64	-13	27
380	47	41	30	27	24	0	-34	-48	-13	46
390	57	22	0	-12	-42	-64	-42	22	82	81
400	-3	-81	-88	-47	0	53	113	104	5	-89
410	-64	-62	-85	-43	78	128	24	-109	-140	-75
420	47	46	133	202	150	-17	-152	-139	-61	-17
430	12	50	71	27	-39	-15	69	76	-24	-83
440	-15	39	-16	-73	-53	-17	7	37	59	96
450	104	12	-93	-115	-86	-60	-12	55	79	57
460	20	-29	-64	-34	-5	5	48	68	68	-4

TO BE CONTINUED

CONTINUED (F-12 NORTH)

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
470	-69	-52	-6	14	12	29	62	46	-32	-113
480	-88	15	50	16	17	35	34	36	43	27
490	-11	-48	-65	-39	17	59	37	3	-4	-25
500	-56	43	-4	32	27	4	31	-37	-4	33
510	54	46	1	-42	-50	-22	20	37	15	-20
520	-45	-24	42	62	37	15	-31	-93	-89	-14
530	59	62	29	34	31	-11	-51	-56	-16	-7
540	-33	0	66	55	-12	-41	10	64	22	-59
550	-75	-28	9	29	56	82	62	-9	-62	-79
560	-83	-63	-31	24	74	124	104	14	-55	-85
570	-85	-71	-22	32	59	33	0	-14	-4	12
580	8	-14	-5	-12	-22	-30	-18	17	44	34
590	0	-14	-15	-34	-44	-4	76	89	5	-34
600	0	36	35	1	-3	0	-40	-70	-38	37
610	62	27	9	8	-11	-8	45	85	40	-70
620	-174	-187	-97	34	132	141	96	45	-17	-62
630	-80	-88	-59	18	37	59	41	10	38	11
640	98	116	113	112	43	-105	-229	-210	-98	-11
650	45	72	29	-71	-148	-103	40	146	148	96
660	17	-101	-214	-240	-199	-169	-103	98	394	568
670	444	95	-259	-478	-493	-281	43	304	365	218
680	62	59	128	82	-128	-371	-659	-271	151	600
690	802	588	47	-523	-833	-734	-277	289	637	587
700	243	85	-216	-275	-324	-280	-180	-96	11	195
710	421	545	400	15	-361	-470	-284	37	260	198
720	-65	-319	-422	-248	101	333	304	62	-233	-316
730	-116	174	356	309	36	-280	-394	-240	78	392
740	507	346	30	-230	-294	-239	-188	-158	-100	3
750	93	161	240	299	219	10	-115	-114	-88	-52
760	-29	-39	-59	-58	-20	59	126	141	82	-18
770	-117	-207	-214	-93	44	133	138	94	66	79
780	43	-94	-239	-277	-212	-67	132	315	366	212
790	-59	-255	-237	-56	79	40	-99	-234	-283	-58
800	187	324	335	260	158	67	-16	-106	-212	-361
810	-483	-397	-77	313	627	699	449	44	-320	-513
820	-439	-158	119	255	217	-9	-284	-335	124	252
830	517	521	245	-186	-530	-588	-352	35	353	426
840	235	-94	-355	-404	-230	67	326	432	333	135
850	-150	-362	-431	-308	-33	230	367	306	145	-76
860	-254	-308	-220	-24	202	347	354	293	5	-269
870	-357	-254	-59	93	95	43	135	226	245	148
880	197	41	-219	-407	-387	-219	-14	133	166	148
890	152	133	62	-63	-207	-301	-306	-176	82	338
900	332	334	121	-96	-244	-287	-233	-167	-189	-68
910	38	153	230	205	61	-132	-298	-339	-150	174
920	371	314	92	-150	-263	-164	85	318	361	186
930	-78	-258	-265	-140	-17	16	-13	31	32	153
940	246	266	180	7	-15	-158	-33	115	140	-7
950	-211	-331	-284	-68	176	291	229	26	-168	-209
960	-113	23	123	138	47	-100	-214	-219	-104	39
970	106	106	84	74	48	-12	-54	-46	-19	17
980	53	48	2	-53	-91	-100	-42	105	257	297

TO BE CONTINUED

CONTINUED (F-12 NORTH)

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
990	190	-14	-211	-302	-204	57	305	375	198	-115
1000	-326	-320	-147	79	240	260	129	-65	-183	-144
1010	-30	45	38	-34	-115	-130	-78	-11	39	51
1020	10	-54	-88	-71	-34	-17	-12	12	62	97
1030	114	126	118	78	6	-118	-185	-151	-21	132
1040	242	261	153	44	-229	-282	-160	22	153	190
1050	123	-7	-130	-132	9	143	134	2	-154	-242
1060	-227	-122	30	148	120	-33	-168	-180	-63	116
1070	239	217	59	-145	-294	-292	-121	101	233	224
1080	134	38	-12	9	62	62	-25	-135	-186	-129
1090	25	184	258	206	61	-87	-161	-135	-26	109
1100	207	190	79	-25	-80	-108	-124	-89	-20	3
1110	-48	-107	-100	-31	32	71	109	145	123	31
1120	-61	-100	-114	-125	-104	-58	-25	-6	11	19
1130	20	25	36	30	0	-32	-47	-45	-34	-30
1140	-17	17	64	98	129	172	190	147	54	-57
1150	-149	-185	-144	-73	-24	26	82	103	92	61
1160	45	40	46	15	-52	-102	-95	-28	48	68
1170	21	-52	-111	-125	-73	19	76	65	12	-37
1180	-38	9	66	88	52	-37	-100	-93	-47	15
1190	57	50	0	-58	-68	-17	40	47	17	-1
1200	-14	-31	-28	0	-1	-9	-29	-16	40	103
1210	112	41	-76	-168	-187	-111	47	185	214	131
1220	-4	-110	-115	-9	111	125	27	-93	-150	-130
1230	-71	-1	67	89	17	-95	-137	-77	27	110
1240	122	79	22	-4	16	70	99	79	-5	-135
1250	-245	-251	-135	45	207	267	187	13	-145	-207
1260	-152	-22	106	163	131	37	-67	-114	-87	0
1270	100	141	96	2	-90	-152	-160	-98	22	153
1280	222	195	106	13	-58	-116	-127	-73	-19	-4
1290	-19	-35	-28	-4	18	27	25	16	2	-27
1300	-59	-69	-54	-12	19	15	16	43	69	78
1310	50	-16	-103	-167	-151	-51	71	161	201	165
1320	73	-4	-33	-38	-43	-38	-20	-9	-14	-4
1330	29	64	75	57	8	-74	-147	-169	-140	-65
1340	29	106	133	93	4	-65	-74	-37	6	62
1350	62	49	3	-37	-43	-32	-29	-41	-58	-61
1360	-25	19	43	54	55	45	40	33	0	-63
1370	-74	-83	-63	-18	51	66	69	62	42	42
1380	51	37	20	-38	-101	-126	-105	-54	7	57
1390	77	78	89	106	106	72	13	-57	-123	-148
1400	-110	-34	47	106	105	53	12	6	8	-14
1410	140	-65	-81	-15	32	47	48	25	-16	-35
1420	1420	-18	-17	-46	-54	-14	40	33	-1	-99
1430	1430	-84	-54	7	72	104	89	32	-22	51
1440	22	-8	-71	-103	-71	-3	56	86	88	54
1450	0	-9	24	40	-5	-71	-56	-54	33	111
1460	138	101	16	45	-75	-133	-128	-66	-1	22
1470	-38	-51	-12	64	138	163	126	47	-28	-66
1480	-84	-100	-97	-74	-24	36	74	83	52	-19
1490	-75	-74	-25	26	35	-1	-53	-81	-44	33
1500	82	62	-10	-52	-127	-84	15	121	167	123

TO BE CONTINUED

CONTINUED(F-12 NORTH)										CONTINUED(F-12 NORTH)											
ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1510	16	-91	-150	-125	-47	33	84	90	51	3	2030	12	-27	-66	-39	-14	12	25	13	-12	-31
1520	-16	-5	-4	-14	-49	-69	-46	20	82	92	2040	-46	-56	-41	3	52	62	36	14	9	8
1530	61	-36	-39	-6	45	64	17	-103	-91	-2	2050	8	12	19	22	14	-5	-13	17	10	-5
1540	-77	-16	45	79	100	83	16	-56	-132	-132	2060	-21	-43	-52	-43	-21	0	-15	-71	-58	-8
1550	-127	-85	-23	38	78	101	112	91	47	71	2070	14	-1	19	19	0	-26	-54	-38	110	146
1560	0	-12	-27	-45	-66	-18	27	74	92	71	2080	45	54	14	-31	-57	-56	-25	38	110	146
1570	17	-46	-87	-88	47	13	59	62	17	-50	2090	127	69	14	-25	-53	-50	-19	14	31	29
1580	-105	-114	-51	57	139	132	55	-76	-130	-103	2100	14	-1	-13	-29	-31	-4	26	40	32	9
1590	-23	54	89	-59	13	-68	-71	-24	35	-25	2110	-25	-52	-53	-41	-23	-25	1	34	33	26
1600	92	64	9	-48	-63	-36	-14	-19	-30	-16	2120	19	11	0	-19	-33	-25	7	37	46	24
1610	22	58	48	0	-41	-30	15	49	56	46	2130	-13	-49	-70	-67	-45	-19	3	8	-1	-5
1620	22	-6	24	-17	0	1	-39	-81	-87	-65	2140	8	20	17	17	-4	-23	-43	-40	-1	43
1630	-19	45	93	92	44	-10	-26	-8	13	10	2150	58	46	31	17	-2	-16	-11	0	-9	-25
1640	-21	-84	-145	-150	-88	0	81	114	87	33	2160	-16	16	57	79	67	36	-6	-43	-45	-24
1650	-11	-37	-35	-11	12	22	20	22	8	17	2170	-13	-15	-12	0	22	52	69	54	9	-39
1660	39	48	36	18	0	-24	-44	-52	-49	-27	2180	-64	-57	-38	-19	-4	2	2	-2	-4	-2
1670	16	50	47	19	-9	-21	-10	12	34	44	2190	3	-12	-20	-13	3	25	31	14	-16	-36
1680	35	14	-8	-29	-33	-29	-27	-16	-5	-17	2200	-35	-19	4	17	7	-14	-25	-27	-16	4
1690	-24	0	33	46	29	-7	-32	-38	-59	-23	2210	17	5	-24	-46	-47	-30	5	40	56	53
1700	8	29	22	0	-28	-31	-5	20	22	6	2220	43	38	40	40	26	5	68	82	28	-43
1710	-13	-29	-24	12	71	125	138	90	-1	-76	2230	-51	-79	-84	-56	5	5	98	82	28	-43
1720	-93	-75	-39	10	37	35	-16	-49	-42	4	2240	-85	-80	-47	-7	22	25	-12	-22	-21	-10
1730	54	72	29	-57	-120	-137	-100	-12	69	90	2250	8	-11	-31	-38	-8	-14	-23	-22	41	15
1740	51	-19	-69	-61	-9	45	82	98	76	10	2260	45	48	47	33	8	-14	-23	-22	41	15
1750	-61	-73	-26	33	66	73	66	43	6	-33	2270	4	14	3	-31	-56	-54	-21	34	83	85
1760	-46	-14	19	5	-33	-51	-2	-28	-71	-38	2280	30	-41	-75	-55	3	61	-80	-67	-18	32
1770	-36	-5	12	8	6	2	-28	-65	-14	-38	2290	-43	-2	30	29	-6	-54	-60	-75	-54	-6
1780	14	54	60	29	-16	-48	-42	4	62	96	2300	61	59	41	17	3	6	16	13	-12	-45
1790	82	20	-53	-89	-56	32	107	123	76	0	2310	-58	-37	2	36	54	53	34	8	-16	-33
1800	-63	-86	-54	3	46	50	16	-21	-33	-17	2320	-42	-52	-59	-56	-44	-29	-9	26	57	64
1810	15	44	33	-11	-60	-92	-80	-24	38	61	2330	35	-7	-44	-56	-31	22	77	99	82	45
1820	32	-11	-24	-9	22	61	69	21	-71	-155	2340	8	-11	-6	7	13	8	-15	-33	-22	7
1830	-159	-66	52	124	133	89	14	-56	-65	-55	2350	22	17	-2	-31	-51	-31	16	42	22	-11
1840	3	22	0	-34	-56	-29	20	51	51	30	2360	-58	-52	-48	-16	33	73	74	35	-12	-66
1850	5	-21	-29	-3	34	43	17	-6	-3	29	2370	-56	-37	0	41	56	35	-13	-60	-75	-54
1860	64	67	37	-6	-57	-88	-71	-26	0	-14	2380	-17	17	39	39	16	-19	-45	-56	-5	14
1870	-50	-60	-28	17	45	50	38	21	10	15	2390	17	15	2	-7	-9	0	13	13	0	-4
1880	37	50	33	-3	-39	-69	-79	-63	-24	32	2400	2	17	26	12	-10	-22	-18	0	22	22
1890	88	108	85	47	8	-36	-71	-80	-56	-14	2410	-1	-36	-52	-31	18	57	62	34	-6	-25
1900	27	62	85	87	72	37	-19	-76	-100	-74	2420	-17	1	13	2	-30	-56	-44	-7	34	56
1910	-30	-4	-3	-27	-59	-69	-37	20	58	49	2430	62	8	-25	-63	-39	-24	-14	-9	-1	7
1920	-1	-61	-96	-95	-72	-33	20	78	116	19	2440	18	22	21	11	16	43	48	35	16	0
1930	92	55	20	-12	-34	-43	-38	-19	7	31	2450	-9	-34	-41	-20	16	-22	-4	5	15	20
1940	52	64	44	-3	-56	-78	-54	5	64	94	2460	-8	-12	-12	-16	-22	-24	-11	-46	-45	-19
1950	74	17	-35	-61	-43	-1	33	27	-14	-59	2470	17	12	12	17	15	0	-24	-46	-45	-19
1960	-78	-59	-16	21	38	34	17	4	-6	-5	2480	8	22	25	16	0	-4	8	20	22	22
1970	5	9	3	2	2	-3	-6	-11	-16	-19	2490	17	7	-2	-12	-10	9	33	34	7	-44
1980	-27	-42	-43	-19	22	56	54	12	-43	-74	2500	-93	-101	-58	14	74	82	37	-22	-59	-46
1990	-59	-9	46	79	80	51	7	-21	-7	33	2510	0	44	68	3	-53	-75	-48	2	39	45
2000	43	3	-48	-76	-74	-45	0	42	65	64	2520	17	-15	-29	-25	-14	-9	-16	-29	-27	5
2010	51	30	12	-3	-18	-32	-38	-42	-42	-26	2530	53	83	-70	28	3	20	20	55	31	14
2020	0	11	6	-15	-37	-31	6	56	81	59	2540	-11	-30	-18	15	45	56	47	20	-12	-37

TO BE CONTINUED

TO BE CONTINUED

CONTINUED (F-12 NORTH)

CONTINUED (F-12 NORTH)

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2550	-49	-43	-24	2	19	22	27	24	5	-17
2560	-33	-39	-27	-14	19	-28	-25	-12	4	15
2570	6	-26	-71	-97	-78	-31	14	37	32	13
2580	8	16	27	35	35	20	1	-3	8	17
2590	11	-9	-24	-18	2	26	30	15	-3	-17
2600	-21	0	24	27	9	-19	-29	-12	17	42
2610	45	27	0	-29	-40	-19	22	54	46	5
2620	-38	-63	-65	-54	-37	-19	-3	5	12	19
2630	24	25	22	16	10	2	-9	-18	-17	-5
2640	9	22	30	33	16	-17	-47	-54	-35	2
2650	37	56	45	12	-18	-21	-4	8	8	7
2660	9	8	2	-6	-14	-16	-16	-7	2	3
2670	2	8	12	8	2	-1	-4	-12	-20	-24
2680	-29	-38	-40	-26	-4	17	25	22	8	-6
2690	-18	-20	-15	-5	14	34	41	37	33	20
2700	2	-17	-32	-32	-12	16	38	38	18	-2
2710	-12	-10	-1	15	29	22	-5	-32	-38	-24
2720	3	29	39	32	17	-1	-15	-14	-9	-1
2730	6	8	-2	-22	-41	-62	-17	19	41	40
2740	20	-5	-25	-33	-28	-16	-3	3	-3	-15
2750	-20	-12	4	21	32	27	5	-22	-34	-21
2760	1	22	29	5	-35	-63	-56	-11	45	73
2770	56	14	-22	-36	-19	12	33	24	-4	-28
2780	-19	21	57	57	22	-11	-15	1	9	3
2790	-7	-16	-16	-9	1	8	3	-18	-38	-37
2800	-11	26	51	55	35	-9	-57	-84	-82	72
2810	-4	29	27	1	-29	-50	-44	-9	38	52
2820	69	37	4	-11	-10	10	36	46	29	-3
2830	-32	-40	-29	-13	-6	-4	-4	-5	-11	-14
2840	-6	8	20	16	4	-11	-25	-27	-12	10
2850	25	29	24	15	6	-2	-12	-19	-18	-9
2860	8	20	20	21	29	34	30	22	7	-10
2870	-31	-45	-41	-14	20	46	45	22	-5	-23
2880	-20	-10	-4	-12	-24	-29	-26	-18	-7	5
2890	17	22	15	-1	-16	-24	-28	-24	-12	0
2900	7	16	23	22	13	-1	-15	-22	-22	-18
2910	-8	12	29	36	27	9	-7	-15	-5	17
2920	46	59	49	20	-16	-37	-32	-12	3	11
2930	11	0	-17	-29	-28	-23	-19	-15	-6	6
2940	15	14	3	-11	-22	-16	7	35	46	32
2950	7	-17	-31	-24	0	17	17	3	-11	-13
2960	-6	0	3	1	-4	-9	-11	-4	14	30
2970	25	25	13	-24	-21	-14	-6	5	14	16
2980	19	25	23	13	-2	-21	-37	-42	-28	-4
2990	12	15	5	-12	-28	-32	-24	-9	-2	-5
3000	-5	-5	0	13	13	-1	-21	-31	-23	7
3010	43	62	50	17	-24	-56	-58	-30	10	40
3020	54	53	36	12	-1	-1	6	7	1	-12
3030	-21	-20	-9	3	15	19	11	1	0	4
3040	4	-5	-17	-25	-26	-21	-11	-3	8	17
3050	21	20	12	-3	-16	-21	-14	-6	2	10
3060	9	0	-7	-11	-7	-2	-1	-1	8	17

TO BE CONTINUED

TO BE CONTINUED

CONTINUED (F-12 NORTH)

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
3590	19	33	46	45	25	-4	-29	-31	-17	4
3600	17	15	0	-15	-17	-10	0	3	-4	-14
3610	-16	-6	8	22	20	2	-20	-31	-26	-11
3620	1	7	5	-2	-8	-7	-4	0	5	10
3630	17	27	25	14	1	-8	-20	-30	-26	-15
3640	-9	-9	-8	-3	0	0	0	2	3	5
3650	7	10	10	9	8	11	10	8	3	22
3660	-2	0	5	4	-1	-1	3	13	20	11
3670	17	3	-12	-19	-15	-6	1	-14	-9	-2
3680	8	14	20	16	5	-5	-14	-14	-9	-2
3690	0	0	3	13	15	8	-6	-25	-37	-37
3700	-26	-15	-5	-5	-12	-17	-21	-14	-1	8
3710	8	-3	-12	-11	4	25	38	33	11	-14
3720	-29	-26	8	13	25	27	17	4	-4	-6
3730	-1	4	9	11	8	1	-2	-5	-8	-11
3740	-9	-4	1	0	-4	-8	-6	0	9	16
3750	16	12	2	-13	-24	-24	-8	9	20	20
3760	16	17	-2	-7	-11	-17	-24	-22	-9	-9
3770	4	10	11	6	-2	-9	-8	-5	-1	6
3780	15	17	14	9	2	-2	-6	-1	7	13
3790	9	5	4	9	12	9	5	3	-1	-5
3800	-4	3	14	16	9	1	-8	-16	-20	-19
3810	-12	-1	2	0	-3	-5	-2	5	13	19
3820	14	0	-14	-19	-11	-4	2	-5	-16	-16
3830	-19	-6	8	14	6	-7	-14	-9	5	21
3840	27	14	-8	-28	-32	-16	6	23	29	21
3850	12	4	-4	-9	-6	-2	-1	2	5	2
3860	-10	-25	-26	-13	1	12	17	19	15	7
3870	3	0	2	6	13	15	5	-12	-24	-24
3880	-14	0	12	9	-2	-12	-15	-7	4	15
3890	17	10	-5	-20	-23	-11	8	23	24	17
3900	12	4	-6	-19	-24	-20	-15	-9	1	13
3910	19	18	12	10	11	9	4	0	-1	0
3920	0	3	10	13	5	-6	-12	-12	-6	0
3930	1	0	-3	-4	0	7	8	2	-8	-16
3940	-16	-12	-8	-4	-6	-12	-16	-14	-5	4
3950	7	5	0	-7	-9	-5	-2	-3	-6	-10
3960	-12	-11	-5	-1	2	1	0	-1	-1	0
3970	0	-2	-4	0	13	23	12	5	5	5
3980	14	22	24	16	1	-7	-9	-2	4	3
3990	-3	-10	-7	2	9	2	-14	-27	-29	-19
4000	-4	5	8	3	-1	-1	3	9	11	6
4010	0	0	1	1	0	-5	-12	-11	0	16
4020	22	17	6	0	-4	-4	2	12	21	19
4030	14	8	0	-4	-10	-8	0	7	9	7
4040	7	8	5	3	3	0	-4	-14	-21	-21
4050	-9	7	16	14	1	-13	-22	-25	-27	-27
4060	-24	-19	-12	-4	3	5	4	0	-7	-17
4070	-19	-12	1	22	40	42	31	17	9	8
4080	14	20	19	8	-6	-15	-10	2	14	19
4090	15	7	0	2	10	11	2	-13	-25	-24
4100	-16	-2	6	3	-12	-25	-29	-19	-6	2

TO BE CONTINUED

CONTINUED (F-12 NORTH)

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
4110	2	-6	-15	-16	-7	2	5	-4	-16	-21
4120	-16	-10	-5	-2	0	3	8	15	20	16
4130	5	-2	-1	12	29	37	30	17	3	-5
4140	-5	2	10	11	5	0	-2	0	3	7
4150	5	-2	-7	-6	0	5	7	-8	-9	-12
4160	-9	-3	0	-1	-6	-7	-8	-8	-9	-11
4170	-12	-12	-12	-11	-11	-10	-8	-5	0	9
4180	14	9	-1	-9	-9	0	15	27	27	16
4190	-1	-14	-13	-5	6	16	17	10	-3	-19
4200	-29	-27	-16	0	16	24	22	12	0	-8
4210	-10	-9	-2	6	13	8	0	-8	-6	4
4220	19	27	24	11	-2	-12	-16	-12	-2	8
4230	13	6	-4	-10	-5	-1	2	7	-8	-19
4240	-27	-30	-21	1	16	20	14	7	1	0
4250	2	4	3	0	-2	-3	14	5	11	15
4260	14	6	-4	-12	-17	-16	-9	-2	0	3
4270	0	0	-2	0	3	3	1	-3	-4	-1
4280	2	4	5	2	-3	-8	-12	-11	-5	-1
4290	-2	-1	5	12	13	8	2	0	-1	0
4300	0	0	-2	-4	0	8	10	2	-11	-21
4310	-22	-15	-4	1	4	3	3	3	4	6
4320	4	0	-5	-4	1	4	2	0	-1	-5
4330	0	3	7	4	0	-1	3	10	12	8
4340	-2	-12	-11	0	13	21	19	10	-2	-13
4350	-13	-7	0	5	4	-3	-8	-9	-2	10
4360	17	19	11	0	-7	-9	-9	-12	-14	-11
4370	-6	-5	-7	-5	2	9	8	-1	-10	-14
4380	-9	-3	4	-7	12	14	10	4	0	0
4390	1	3	3	2	-1	-2	-3	-1	5	9
4400	11	9	8	5	6	8	9	4	-5	-11
4410	-12	-6	-1	-2	-6	-14	-22	-23	-14	1
4420	15	22	25	24	17	7	-6	-17	-24	-21
4430	-12	2	5	9	4	-9	-22	-24	-16	-4
4440	4	7	7	2	-4	-4	-4	1	10	14
4450	1	-9	-14	-12	-6	0	2	-3	-10	-11
4460	-4	4	12	17	17	14	8	6	-14	-17
4470	-5	-4	-3	0	3	5	0	-6	-14	-17
4480	-12	-2	12	25	29	22	10	-1	-4	-1
4490	1	3	1	-5	-14	-20	-13	-3	4	4
4500	6	2	-3	-7	5	-4	16	17	9	-1
4510	-7	-3	5	10	6	-4	-12	-13	-4	8
4520	11	4	-4	-12	-8	0	10	14	13	9
4530	5	1	-1	0	0	-1	-1	3	8	14
4540	12	2	-6	-11	-4	6	15	15	6	-7
4550	-17	-15	-6	-3	-6	-12	0	-8	-15	-16
4560	-13	-10	-4	-3	-6	-12	-11	-10	-8	-7
4570	-5	-6	-7	-11	-13	-9	-1	8	17	20
4580	14	2	-8	-12	-9	0	6	2	-6	-13
4590	-12	-3	8	17	20	15	8	5	8	17
4600	26	27	19	4	-5	-8	-2	6	13	10
4610	0	-12	-19	-16	-5	-4	9	2	-11	-24
4620	-26	-16	0	6	4	-4	-11	-14	-13	-9

TO BE CONTINUED

CONTINUED (F-12 NORTH)

RECORD = F-12 COMPONENT = UP STATION = HITACHINAKA-F
DATE AND TIME = 1986- 9-20-12- 5 TOTAL NUMBER OF DATA = 5100
SAMPLING INTERVAL = 0.010 (SEC) SIGNAL = GR. ACC. SCAL = 0.10000
CONNECTION POINT IN DATA NUMBER = 5100,

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
4630	-4	-3	-5	-7	-3	4	13	17	17	12
4640	5	-1	0	4	5	3	-2	-9	-11	-6
4650	1	9	10	6	4	6	12	16	17	14
4660	8	2	-3	-4	0	0	0	2	3	5
4670	5	5	4	0	-4	-9	-10	-8	-4	-1
4680	-4	-12	-20	-24	-21	0	1	10	11	7
4690	0	-6	-6	-1	5	9	4	-2	-5	0
4700	8	13	10	0	-11	-17	-16	-10	1	6
4710	12	12	6	-2	-8	-7	-2	2	2	-4
4720	-11	-16	-13	-5	3	8	3	-4	-6	0
4730	7	15	17	9	-2	-12	-12	-4	7	14
4740	14	8	2	-2	-6	-4	1	7	7	6
4750	7	9	12	12	8	3	2	1	-1	-5
4760	-8	-15	-16	-21	-4	1	3	5	10	11
4770	7	-2	-14	-21	-21	-6	-6	3	11	11
4780	5	-1	-1	3	7	9	8	4	1	1
4790	4	8	9	6	4	3	3	4	8	8
4800	5	0	-1	-2	0	1	2	0	2	0
4810	-11	-11	-7	-2	2	7	9	8	3	-1
4820	-4	1	3	7	3	-3	-12	-16	-11	0
4830	6	5	-1	-5	-3	-1	3	6	8	5
4840	2	-2	-4	-4	-4	-4	-4	-6	-6	-4
4850	-1	2	0	-1	-2	0	3	4	2	0
4860	-4	-6	-4	0	3	2	-3	-4	-4	-4
4870	0	4	4	3	0	0	0	1	2	0
4880	-5	-8	-7	-6	-6	-6	-8	-11	-6	-2
4890	7	12	12	8	2	-3	-7	-8	-4	-1
4900	0	0	0	0	3	6	7	7	3	1
4910	1	1	0	-3	-7	-9	-2	5	11	12
4920	6	-1	-4	-4	0	3	2	0	-1	3
4930	8	15	12	4	-5	-12	-10	-4	2	4
4940	1	-2	-1	3	9	12	7	1	-1	-1
4950	0	0	-1	-1	-3	-2	1	5	8	8
4960	4	0	0	-1	-1	0	4	6	6	2
4970	-4	-10	-12	0	7	11	10	10	10	10
4980	9	7	3	0	-5	-6	-4	-4	-4	-5
4990	-5	-4	-1	-1	-4	-6	-7	-5	-2	0
5000	1	-1	-6	-12	-14	-14	-11	-4	3	3
5010	7	8	5	-1	-6	0	11	20	19	19
5020	9	-2	-11	-8	0	9	14	10	2	-5
5030	-6	-2	4	9	9	5	6	9	10	3
5040	-6	-18	-22	-18	-9	0	3	0	-6	-11
5050	-9	-4	4	9	11	9	5	3	4	8
5060	10	9	4	0	-5	-4	-4	-1	2	4
5070	3	-2	-6	-5	3	12	17	15	5	-3
5080	-6	-4	3	9	9	5	-1	-6	-8	-7
5090	-4	-1	0	-2	0	2	7	8	4	-1

END

TO BE CONTINUED

CONTINUED(F-12) UP)										CONTINUED(F-12) UP)												
Nb.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	Nb.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
470	104	-21	-125	-6	92	24	-22	22	37	6	990	92	85	-15	-94	-81	19	92	109	17	-88	
480	8	-1	-92	-89	74	82	-68	-67	78	85	1000	-119	-131	-109	22	172	141	-15	-67	16	64	
490	-39	-54	10	-13	-53	-24	-98	-31	55	61	1010	-6	28	-46	-36	-126	-211	-120	62	147	118	
500	-24	-65	-79	41	99	-26	-98	-48	31	80	1020	51	-25	11	-45	0	-26	-78	-8	58	93	
510	64	54	-32	-144	-65	85	38	100	72	158	1030	104	35	-31	-65	-62	-10	15	16	58	99	
520	-35	-186	16	169	69	-126	-76	100	71	-111	1040	54	6	1	5	-32	-90	-38	109	118	-19	
530	-136	97	200	-54	-208	19	188	-55	-251	-34	1050	-40	56	42	-78	-66	91	129	-5	-71	4	
540	188	83	-62	21	134	20	-121	-64	8	-9	1060	33	-59	-97	2	92	-22	-62	-19	44	0	
550	-18	-4	-45	-31	115	89	-101	-87	81	79	1070	23	-15	-47	-8	3	-47	-19	44	-13	-126	
560	-77	-99	30	65	24	0	-10	68	107	23	1080	-123	-47	-38	-46	34	163	165	45	7	25	
570	-145	-98	37	50	-62	-67	32	50	-21	-45	1090	8	-30	-10	30	25	-17	-3	44	24	-29	
580	174	66	-179	-143	72	82	-72	-25	165	77	1100	-8	66	73	-16	-84	-54	0	6	5	23	
590	-216	-202	131	237	-48	-155	107	145	-160	-265	1110	42	49	-4	-52	10	67	1	-66	-29	-5	
600	16	193	-4	-113	45	77	-52	-68	-16	-39	1120	-66	-113	-63	43	92	41	-19	-31	1	33	
610	-6	85	16	-105	20	121	85	67	62	6	1130	18	1	24	30	-16	-32	10	18	-15	-16	
620	-106	-157	11	136	33	-83	34	126	-39	-129	1140	5	6	-39	-104	-101	-8	59	30	13	60	
630	57	158	-41	-178	18	200	85	-50	-10	57	1150	77	31	-15	-23	-28	-146	-165	-68	16	19	
640	-38	-239	-218	65	268	170	-19	-40	-13	-15	1160	85	30	5	23	-28	-146	-165	-68	16	19	
650	-123	-10	15	-108	-158	18	200	129	-13	55	1170	-1	18	46	17	-45	-10	95	104	13	-57	
660	106	-106	-229	-64	54	-8	38	222	188	-110	1180	-65	-46	-23	17	60	39	-66	25	49	17	
670	-306	-186	21	56	60	203	235	-21	-235	-113	1190	109	22	-6	8	-29	-93	-62	25	49	17	
680	119	121	-59	-157	-67	40	34	76	254	321	1200	11	13	-27	-83	-91	-43	22	18	-51	-38	
690	25	-408	-439	1	306	205	53	13	219	421	1210	31	10	-62	-62	7	43	72	57	-19	-4	
700	-78	187	217	-82	-263	-207	-203	-131	219	421	1220	-62	-46	-37	38	46	-20	-84	-38	15	-9	
710	146	-159	-150	-60	-2	107	122	36	-49	-186	1230	77	85	39	38	6	-79	-88	13	-6	-74	
720	-276	-116	198	345	190	-72	-220	-198	-84	-24	1240	-8	58	84	6	-79	-88	13	-6	-74	-4	
730	152	254	187	-101	-325	-155	119	85	-38	42	1250	-81	-45	-3	16	23	28	-2	-53	-43	14	
740	147	86	11	78	129	-20	-132	-196	-188	-111	1260	29	-11	-30	14	48	-8	-99	-106	-25	52	
750	60	206	168	-45	-8	-39	-92	-84	86	200	1270	70	57	47	22	-42	-65	25	95	42	-44	
760	8	-225	-221	-69	64	47	37	79	27	-134	1280	-25	-10	-13	-28	-36	-7	25	41	45	29	
770	-165	3	128	83	24	12	-13	-81	-152	-121	1290	-11	-18	17	21	-8	-6	28	40	7	-31	
780	-6	96	134	112	89	71	14	5	-8	-185	1300	-35	-14	7	21	3	-34	-50	-28	-22	-57	
790	-299	-86	143	113	27	85	186	141	-2	-53	1310	54	3	48	35	-2	30	101	54	-78	-108	
800	-32	-176	-239	-31	161	91	-52	-32	53	29	1320	-40	-23	-52	2	102	78	-16	-7	68	48	
810	-22	59	163	81	-59	-70	-64	-151	-188	-72	1330	-45	-46	14	12	-20	-9	34	37	20	-3	
820	53	58	50	141	161	18	-77	-4	96	54	1340	-22	-8	16	11	-10	-9	13	14	-34	-60	
830	-91	-176	-139	-70	-53	-42	60	183	180	68	1350	21	103	53	-17	-2	16	-20	-80	-88	-25	
840	-37	-38	46	93	-75	-68	-113	-64	-21	-105	1360	17	-18	-46	-9	25	4	-22	17	54	15	
850	-146	31	244	154	-75	-52	83	11	-126	-47	1370	-46	-47	1	13	-8	5	28	20	4	-3	
860	115	78	-82	-82	56	85	-49	-141	-27	128	1380	-3	19	37	3	-40	-16	25	19	-5	2	
870	109	25	20	-46	-198	-191	-23	75	25	-32	1390	14	-5	-20	-6	-1	-13	-4	34	44	-20	
880	4	53	70	73	38	-31	-106	-138	-83	40	1400	-69	-11	68	54	-31	-62	-12	16	-2	10	
890	150	114	-54	-138	-83	-2	54	89	123	111	1410	50	28	-43	-60	-2	0	-36	-9	38	-2	
900	10	-74	-22	59	-2	-103	-45	65	33	8	1420	-55	0	43	-7	-19	28	25	1	24	41	
910	91	112	49	-13	-106	-143	-43	67	47	-38	1430	-37	-92	-6	89	58	-39	-57	8	-15	-47	
920	-48	-41	-76	25	229	254	75	-128	-184	-80	1440	9	85	63	-16	-18	36	36	-2	-2	11	
930	14	3	-41	66	61	-23	-47	-61	76	-62	1450	10	-8	-8	18	14	-14	-36	-52	-42	-7	
940	-89	-189	-63	65	46	-40	-47	-61	-76	-62	1460	32	22	-45	-54	9	33	2	-7	48	62	
950	-3	-2	36	117	121	13	-110	-134	-72	-38	1470	-16	-44	-1	-11	-37	25	80	11	-69	-32	
960	-11	43	49	-2	-25	13	10	-10	45	64	1480	36	14	-41	-30	6	-17	-25	-34	40	40	
970	-19	-34	46	67	11	-22	14	36	17	37	1490	37	41	27	36	2	28	25	-42	-60	-22	
980											1500	37	41	27	36	2	28	25	-42	-60	-22	52

TO BE CONTINUED

TO BE CONTINUED

CONTINUED (F-12 UP)

No.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1510	3	-3	-31	-58	-49	-6	38	57	40	8
1520	-6	11	38	25	-21	-47	-54	-64	-26	54
1530	57	-16	-43	4	22	-37	-51	10	38	-17
1540	-37	24	68	8	-66	-59	19	21	0	6
1550	28	35	23	-11	-37	6	48	2	-62	-56
1560	15	52	25	6	-14	-54	-62	-10	49	4
1570	57	33	11	-9	-53	-78	-24	43	37	45
1580	-98	-46	33	36	0	30	94	52	-68	-110
1590	-27	64	53	-3	-15	5	0	-20	8	85
1600	96	-10	-61	-55	-10	20	17	0	5	25
1610	13	-19	-10	33	20	-61	-102	-41	30	34
1620	16	11	4	-27	-62	-4	11	-9	0	44
1630	48	-2	-16	24	21	-19	-34	-38	-50	-49
1640	8	53	8	-43	-17	45	57	10	-21	-7
1650	-12	-42	-49	-10	30	31	25	47	49	10
1660	-15	14	38	1	-31	-11	1	-19	-16	25
1670	36	-4	-12	23	29	-17	-40	4	25	-22
1680	-55	-18	24	23	6	-2	0	22	25	-26
1690	-54	-16	10	-9	-34	-15	30	30	-4	-12
1700	-3	-6	-22	-26	5	24	-2	-33	-9	50
1710	60	-4	-65	-39	43	54	-10	-34	-14	-19
1720	-38	-9	27	21	8	12	7	5	19	29
1730	13	-15	-18	11	22	-1	-10	10	25	15
1740	-5	-10	-15	-28	-39	-23	27	64	25	-50
1750	-61	-11	13	2	29	79	47	-38	-48	8
1760	27	6	1	13	8	-17	-51	-49	11	59
1770	42	-3	-13	21	36	-6	-44	-47	-40	-13
1780	10	1	-5	32	57	-13	-99	-70	14	22
1790	-28	-47	-19	5	13	25	48	46	8	8
1800	-33	-46	-29	-10	0	23	45	46	19	-5
1810	0	25	47	28	-23	-31	5	7	-21	-26
1820	0	32	47	36	15	0	-1	1	-8	-9
1830	-9	-27	-30	-16	-15	-17	-9	-9	-10	0
1840	14	7	-28	-41	-26	-33	-50	-14	42	56
1850	25	0	-5	-10	-7	6	11	-8	-13	14
1860	25	8	-2	-10	19	-1	-16	13	36	16
1870	-2	-2	-2	-14	-24	12	27	14	0	0
1880	-17	-39	-15	21	7	-9	6	15	-4	-10
1890	2	0	-18	-11	5	0	-15	-26	-13	8
1900	10	-4	0	14	8	1	29	67	42	1
1910	13	49	39	-4	-49	-69	-48	1	19	-6
1920	-16	1	10	7	18	23	-2	-38	-16	-16
1930	0	-6	-1	16	11	-19	-40	-18	15	11
1940	-8	-11	17	46	33	3	3	6	1	-13
1950	-14	-1	-2	-25	-32	-1	38	43	9	-16
1960	-8	11	9	-15	-22	-6	1	-3	-7	9
1970	29	39	26	-6	-32	-43	-47	-29	0	16
1980	6	-12	-10	13	21	-5	-23	-12	6	11
1990	4	-1	8	14	4	0	8	-3	-32	-23
2000	33	72	48	11	6	1	-8	3	19	7
2010	-16	-26	-22	-11	-6	-2	3	-14	-40	-25
2020	13	10	-32	-52	-19	23	25	3	4	30

TO BE CONTINUED

CONTINUED (F-12 UP)

No.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2030	30	-15	-49	-18	30	30	3	11	3	2
2040	-34	-22	2	0	-3	16	25	3	-30	-30
2050	-10	24	52	47	16	6	11	11	8	5
2060	6	-23	-47	-22	17	25	-7	-46	-5	-5
2070	19	16	9	16	13	-18	-32	-6	17	-2
2080	-32	-21	8	2	-25	-22	11	33	19	3
2090	9	17	6	-8	-10	3	10	6	16	28
2100	16	0	3	8	-6	-19	1	29	18	-14
2110	-22	-1	8	-1	-13	-10	5	0	-16	-6
2120	18	11	-14	-12	-3	-23	-39	-21	5	24
2130	44	37	-5	-29	-16	6	25	39	29	-18
2140	-46	-9	33	4	-52	-35	24	17	-55	-28
2150	23	24	-10	-10	23	32	8	-9	10	21
2160	-12	-58	-58	-18	4	3	12	33	37	8
2170	-10	-2	-10	-42	-54	-5	45	20	-32	-23
2180	16	3	-31	-6	48	43	-2	-4	16	16
2190	-18	-2	-32	-3	29	24	-7	11	6	3
2200	18	-25	-2	13	-2	-9	4	-3	-28	-15
2210	25	39	18	5	6	2	2	11	13	0
2220	-9	-18	-21	-26	10	55	4	0	-22	15
2230	27	-18	-31	-26	10	5	-8	-2	5	-6
2240	-17	1	37	36	-5	-32	-21	8	20	1
2250	-20	-16	5	19	1	-28	-31	-16	-2	13
2260	17	1	-8	0	6	-11	-28	-8	21	17
2270	2	15	36	21	-6	-4	13	13	-8	9
2280	11	0	-44	-46	-35	0	18	20	17	19
2290	17	3	-14	-19	-18	-30	-32	0	28	20
2300	8	17	18	-22	-45	-13	14	-1	-15	-3
2310	-1	-21	-16	17	18	-18	-31	-11	9	21
2320	31	37	21	1	-3	-5	-14	-17	11	39
2330	10	-22	-28	2	10	-1	6	37	37	-8
2340	-38	-21	0	4	16	30	17	-20	-35	-8
2350	23	17	-18	-30	-14	1	2	14	29	16
2360	-22	-49	-42	-10	14	7	-9	0	16	10
2370	5	21	30	6	-22	-2	-4	-7	-22	-12
2380	0	-4	-1	13	10	-5	-10	-4	8	23
2390	21	-3	-31	-18	15	21	9	15	25	16
2400	2	3	4	-14	-31	-10	13	3	-10	3
2410	13	-9	-27	-16	-4	-2	14	43	37	-2
2420	-23	2	33	14	-28	-42	-4	-1	-1	-1
2430	11	20	-1	-28	-24	5	10	8	16	16
2440	-42	-16	1	25	12	-18	-18	-5	0	0
2450	3	6	-4	-18	-24	-18	-6	1	2	-9
2460	-13	-6	1	8	11	11	17	19	1	-14
2470	-13	-2	9	6	8	11	33	39	1	-35
2480	6	10	2	-6	-15	-20	-15	1	10	1
2490	-5	3	16	10	-15	-20	4	25	25	26
2500	20	-5	-26	-16	5	6	8	8	8	8
2510	3	9	12	-10	-27	-18	-8	-9	8	8
2520	44	1	-29	1	40	17	-28	-35	-22	-26
2530	-21	15	32	8	-7	4	10	-1	-6	6
2540	3	-31	-47	-24	-1	8	19	28	15	-8

TO BE CONTINUED

CONTINUED (F-12 UP)										
ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2550	-12	-7	-2	5	18	22	10	-4	-9	-6
2560	3	13	6	-4	-8	-6	-18	-23	-4	17
2570	8	-20	-1	15	-2	-30	-18	13	5	-25
2580	-38	-23	0	13	13	4	12	14	22	16
2590	23	38	28	-4	-18	-1	14	11	3	-2
2600	-10	4	36	32	-6	-25	-19	-23	-32	-28
2610	-11	2	1	-4	-3	3	6	9	9	0
2620	-15	-20	-8	3	2	0	-2	-13	-21	-14
2630	4	6	-2	3	23	27	6	-4	4	7
2640	-2	3	27	30	17	6	-8	-21	-6	25
2650	18	-14	-9	8	-3	-16	1	20	-6	-31
2660	-2	21	-4	-31	-22	-10	-21	-18	5	10
2670	-4	-28	-28	0	20	14	0	1	20	23
2680	-6	-26	-6	12	-9	-27	6	40	19	-2
2690	13	27	3	-21	-7	17	13	-2	0	6
2700	-14	-30	-13	3	-1	-1	20	27	0	-22
2710	-11	3	8	8	1	-15	-23	-7	11	13
2720	8	8	13	3	-9	5	5	-5	-5	11
2730	12	-8	-15	0	13	20	22	8	-6	-16
2740	-20	-16	-9	-6	-2	1	5	7	11	0
2750	-26	-24	0	5	5	5	25	17	-9	-16
2760	-8	-17	-17	0	9	-4	-11	-6	-1	5
2770	15	11	-8	-13	3	13	13	16	16	2
2780	-14	-16	3	20	27	25	10	-6	-8	10
2790	27	18	-14	-29	-6	25	25	-1	-14	-4
2800	3	-4	-15	-17	-9	-11	-13	-13	-2	-1
2810	-4	5	5	-10	-16	-11	-13	-17	-14	3
2820	21	22	10	-2	-15	-10	15	36	16	-15
2830	-13	1	0	5	16	-2	-22	6	30	0
2840	-29	-8	10	-8	-22	1	11	-9	-15	5
2850	8	-23	-35	-4	6	-11	-10	20	41	29
2860	8	-3	-7	-1	11	11	-7	-4	16	17
2870	1	1	8	3	-1	7	16	11	-4	-14
2880	-14	-11	-9	6	18	4	-16	-13	3	-3
2890	-4	-4	-3	-4	-5	-9	-8	-8	-15	-18
2900	-6	9	5	-17	-16	10	28	17	5	8
2910	6	-8	-13	-6	15	25	25	25	5	-10
2920	1	19	16	-1	-3	-3	-9	-3	3	-5
2930	-4	10	11	-21	-40	-10	14	-1	-19	0
2940	21	1	-16	-1	15	5	-3	0	0	-2
2950	8	10	-8	-8	6	-1	-35	-45	-10	19
2960	7	-6	8	19	9	-1	-1	-8	-18	-13
2970	1	8	10	20	23	14	2	-1	1	4
2980	-8	-21	-15	-1	14	27	23	2	-16	-14
2990	-3	-3	-10	-14	-10	-7	-4	5	17	18
3000	2	21	13	18	-2	-14	-6	0	-12	-21
3010	-2	21	19	-2	-14	0	18	13	3	10
3020	16	5	-8	-9	-6	-10	-11	0	16	21
3030	7	-6	-2	7	1	-6	-8	-10	-18	-18
3040	-1	11	6	-8	-13	-2	0	-11	-18	-5
3050	7	11	17	23	-12	-13	-16	5	9	-5
3060	-8	-4	-3	2	14	9	-6	-5	8	6

TO BE CONTINUED

TO BE CONTINUED

CONTINUED (F-12)

UP (3)

(4)

(5)

(6)

(7)

(8)

(9)

(10)

UP (3)

(4)

(5)

(6)

(7)

(8)

(9)

(10)

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
3590	6	6	3	0	-2	-11	-15	0	-16	3
3600	8	11	2	1	0	0	-8	-8	1	3
3610	-14	-14	-5	-1	-6	14	0	5	0	0
3620	2	1	-5	-2	8	14	7	-3	0	2
3630	-13	-15	3	20	8	-3	1	-1	0	-2
3640	-1	1	3	7	6	1	8	6	3	-4
3650	11	17	8	0	3	6	-8	-6	0	0
3660	-7	-2	1	3	9	8	4	-10	-3	-2
3670	13	7	-2	-8	-1	5	-7	-22	1	4
3680	7	6	3	2	-5	6	0	11	5	-6
3690	-6	5	10	3	-6	-11	0	17	-3	8
3700	-2	2	0	1	-3	-2	3	-1	-2	3
3710	10	1	-3	-1	1	-8	-9	6	0	-2
3720	-11	-6	0	0	1	1	12	5	-1	0
3730	3	5	5	6	-2	-2	-13	2	-2	-8
3740	4	4	-2	-8	-1	16	18	7	1	2
3750	21	17	-1	-6	-1	0	-5	0	0	2
3760	1	-8	-8	-11	-12	-4	8	7	1	17
3770	4	3	-11	-11	5	11	3	1	3	-5
3780	-3	-3	3	2	-6	-6	5	9	0	8
3790	-3	6	5	-2	-3	0	0	-4	-1	-7
3800	1	-1	-4	-8	-8	-5	-5	0	0	0
3810	6	0	6	17	14	1	-5	-4	-3	9
3820	5	17	15	0	-4	0	-4	-6	-6	-6
3830	-9	-1	3	-1	-1	-1	3	-1	1	-10
3840	6	5	-8	-11	-1	-2	-6	-15	0	-6
3850	-17	-15	2	8	2	8	19	14	-2	4
3860	4	1	-4	-9	-10	-8	-4	1	1	2
3870	-7	-2	0	-6	-10	-5	3	6	-3	4
3880	4	9	0	-6	-1	5	1	-2	0	-4
3890	8	10	1	0	12	22	14	6	6	3
3900	-8	-12	3	15	8	-9	-12	0	8	0
3910	-6	-3	14	4	-12	-13	0	0	-8	-11
3920	-5	-3	-2	1	8	6	-2	-5	0	4
3930	2	-1	-1	0	-4	-6	5	16	9	1
3940	5	6	0	-7	-5	1	4	8	3	5
3950	1	0	-3	-10	-7	3	8	-1	1	10
3960	0	-8	-10	0	9	0	-12	-9	-4	5
3970	-16	-8	-4	-8	-4	8	13	6	1	-8
3980	-4	-2	6	5	-5	-10	-4	-4	3	9
3990	7	1	1	11	17	9	0	1	-4	-11
4000	-6	4	4	-4	-9	-6	0	2	2	9
4010	-3	-5	-1	2	-2	-9	-4	4	6	3
4020	1	2	2	-1	-6	-1	1	-1	-5	0
4030	11	10	2	5	14	10	0	0	2	0
4040	1	9	6	-4	-8	0	7	3	1	-1
4050	-8	-13	-5	-10	-9	-5	-11	-2	6	4
4060	5	8	3	-10	-13	-4	1	2	2	5
4070	4	-2	-7	-9	-10	-4	3	3	0	-1
4080	-3	-6	-2	6	-3	-8	-9	3	8	3
4090	2	5	0	-8	2	4	3	-2	-4	1
4100	1	2	3	7	7	0	-7	-2	15	16

TO BE CONTINUED

TO BE CONTINUED

RECORD = S-1946 COMPONENT = SOUTH STATION = OHAKAMA-JI-S
 DATE AND TIME = 1986-10-14-06-17 TOTAL NUMBER OF DATA = 2000
 SIGNALING INTERVAL = 0.1010 (SEC) SCAL = 0.10000
 SIGNAL = GR. ACC.
 CONNECTION POINT IN DATA NUMBER = 2000,

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
4630	10	6	8	8	0	-7	-5	1	6	6
4640	4	3	1	-1	-6	-11	-9	-1	-2	-9
4650	-9	-1	-8	6	-9	-6	-3	-1	0	-2
4660	-5	-6	1	6	5	3	8	5	8	4
4670	0	0	1	2	5	9	3	2	-1	1
4680	6	1	0	0	4	6	3	0	1	1
4690	-1	-8	-10	-6	-1	2	3	-5	-9	-9
4700	-2	0	-5	-6	-2	0	-7	-10	-4	5
4710	3	0	0	0	-2	1	7	11	11	9
4720	5	-1	-1	1	0	1	6	8	1	-3
4730	0	5	4	1	4	2	-2	-4	-2	1
4740	2	0	-4	-9	-7	1	2	-1	-1	1
4750	1	0	3	10	11	4	2	5	5	1
4760	2	3	1	-3	-7	-7	-3	0	1	1
4770	0	-6	-5	-1	0	0	-1	-2	-3	-6
4780	-6	-3	-2	1	-1	-1	-2	-6	-11	-13
4790	-8	0	-2	-2	-6	-1	3	-1	-2	1
4800	3	-3	-6	-2	-1	-3	-3	-2	-2	-4
4810	-2	1	0	5	3	0	-5	2	5	10
4820	8	0	0	5	3	2	1	5	10	8
4830	5	4	3	1	2	3	2	3	4	6
4840	6	2	-2	-1	4	5	1	3	3	6
4850	-8	-6	0	0	-4	-2	0	-2	-10	-10
4860	-4	-1	-1	-2	0	1	-2	-6	0	8
4870	0	0	1	0	1	1	1	0	2	5
4880	10	10	11	8	1	0	2	6	5	3
4890	1	0	1	1	0	-1	-2	0	3	1
4900	-1	-4	-6	-7	-8	-9	-5	-1	-2	-7
4910	-5	0	-2	-7	-8	-4	-4	-5	-2	0
4920	-3	-3	-3	-2	-1	-4	0	-5	-8	-1
4930	3	3	3	10	11	6	1	6	4	9
4940	7	4	5	6	9	10	8	6	4	1
4950	-1	-1	0	-1	1	1	4	1	-2	-1
4960	3	4	-1	0	1	0	-5	-9	-5	-4
4970	-8	-12	-6	-1	-2	-3	0	4	0	-6
4980	-7	-5	-2	-5	-7	-2	5	4	0	0
4990	-2	-5	-1	6	8	3	1	5	5	3
5000	1	-1	-3	-2	1	5	4	-2	2	0
5010	5	7	5	3	1	-2	-4	2	2	3
5020	2	0	0	-1	-1	0	1	2	2	-1
5030	-9	-9	-1	0	-6	-9	-6	0	3	4
5040	5	0	-3	-2	0	0	-4	-3	-2	-5
5050	-3	0	0	0	0	-1	-4	0	3	10
5060	11	5	0	0	0	1	4	8	7	3
5070	4	5	1	-1	-1	1	4	2	-3	-7
5080	-4	-2	-6	-7	-2	1	1	0	-2	-1
5090	0	2	1	-1	0	-1	-3	-5	-2	-2

END

ND. (1) (2) (3) (4) (5) (6) (7) (8) (9) (10)
 0 -9 -21 -33 -45 -57 -69 -81 -93 -112 -135
 10 -158 -181 -204 -213 -216 -220 -223 -228 -234 -240
 20 -246 -267 -294 -294 -310 -352 -402 -460 -513 -561 -626
 30 221 247 272 310 352 402 460 513 561 626
 40 448 370 287 185 82 4 -59 -140 -234 -311
 50 -378 -408 -435 -453 -461 -471 -481 -491 -501 -511
 60 -38 49 99 131 142 139 115 89 62 25
 70 -10 -45 -79 -97 -99 -66 -30 8 24 6
 80 -41 -87 -130 -167 -193 -207 -186 -148 -120 -71
 90 18 145 214 308 339 320 269 206 165 99
 100 78 82 95 106 86 26 -49 -138 -230 -282
 110 -314 -304 -247 -173 -10 99 159 148 76 22
 120 -33 -69 -87 -59 -22 2 18 14 -32 -70
 130 -118 -143 -124 -87 -48 -6 41 79 90 85
 140 65 41 31 57 85 119 155 169 122 42
 150 -48 -131 -197 -235 -210 -169 -103 -35 12 37
 160 39 30 17 -76 -63 9 13 11 -4 -29
 170 -56 -79 -87 -76 -63 9 13 11 -4 -29
 180 27 19 5 -12 -29 -58 -107 -159 -185 -185
 190 -139 -79 10 66 106 127 118 103 93 85
 200 73 71 71 71 71 72 78 87 89 85
 210 24 -14 -31 -49 -64 -65 -60 -63 -85 -107
 220 -113 -76 -50 -16 22 35 24 -9 -37 -65
 230 -86 -100 -94 -76 -53 -46 -43 -24 -9 6
 240 18 42 58 61 60 46 24 10 0 10
 250 29 34 34 21 20 17 8 38 45 45
 260 45 44 41 34 19 8 -10 -24 -47
 270 -58 -51 -34 40 65 96 108 113 75 43
 280 0 -45 -73 -90 -95 -79 -62 -55 -34 -31
 290 -25 -16 -1 17 28 36 41 40 30 7
 300 -16 -37 -50 -55 -62 -59 -55 -57 -61 -59
 310 -45 -11 38 67 106 131 147 151 129 91
 320 64 35 2 -30 -48 -38 -12 2 17 7
 330 -2 -13 -19 -5 25 50 65 57 17 -26
 340 -65 -97 -110 -112 -106 -80 -40 -11 14 62
 350 64 76 85 85 82 74 65 57 49 39
 360 21 -4 -29 -60 -82 -91 -98 -91 -70 -42
 370 -23 -9 8 20 24 19 7 5 19 38
 380 49 53 52 46 32 19 31 54 73 88
 390 93 75 34 -1 -26 -42 -45 -36 -26 -22
 400 -26 -41 -43 -26 6 37 66 87 97 85
 410 54 28 19 17 16 17 16 -5 -47 -79
 420 -101 -110 -105 -79 -46 -15 1 24 41 34
 430 20 10 -5 -12 -15 -24 -26 -28 -32 -35
 440 -33 -15 3 14 34 50 66 88 93 84
 450 66 47 14 -12 -34 -46 -33 -23 1 24
 460 29 29 48 89 117 141 161 155 137 104

TO BE CONTINUED

CONTINUED(S-1946 SOUTH)

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
470	49	23	20	20	20	20	-5	-34	-53	-67
480	-84	-85	-83	-43	-19	-4	6	-5	-22	-36
490	-49	-62	-64	-41	-21	-2	15	43	49	16
500	-12	-45	-64	-70	-44	-23	-11	5	16	20
510	6	-14	-25	-18	1	17	29	34	35	36
520	36	36	37	50	71	71	63	48	20	3
530	-15	-36	-38	-15	6	37	57	48	15	-10
540	-41	-63	-76	-89	-90	-61	-43	-27	-4	-6
550	-8	-5	29	46	68	73	40	46	25	-9
560	8	7	9	14	16	16	14	12	10	12
570	21	28	38	52	64	61	39	7	-20	-52
580	-67	-70	-58	-39	-29	-24	-26	-31	-26	-9
590	26	83	110	115	94	41	-15	-70	-114	-136
600	-142	-130	-116	-96	-81	-70	-68	-62	-40	-1
610	38	63	83	90	80	57	33	16	4	-5
620	-9	-12	-14	-18	-19	-14	-9	-1	7	17
630	21	17	10	1	-7	-14	-22	-31	-40	-42
640	-26	0	13	16	20	20	21	25	32	33
650	30	24	11	-1	-11	-20	-29	-26	-23	-2
660	-22	21	-22	-25	-22	-11	8	37	59	71
670	71	64	51	42	41	45	55	61	61	49
680	19	4	0	0	8	18	23	24	24	18
690	8	5	-12	-22	-17	-10	2	10	15	14
700	6	-6	-15	-28	-40	-50	-54	-50	-45	-38
710	-39	-42	-48	-53	-57	-54	-40	-33	-32	-27
720	-20	-6	4	14	38	60	73	77	77	62
730	47	37	28	20	16	14	15	15	14	14
740	14	14	15	15	16	15	12	6	-6	-16
750	-20	-32	-26	-18	-7	5	25	43	44	25
760	-6	-34	-62	-44	-48	-48	-48	-46	-43	-41
770	-35	-29	-21	-2	15	23	25	13	7	0
780	-9	-1	15	24	30	31	16	-2	-20	-39
790	-40	-14	-9	-5	-2	6	14	31	42	49
800	62	70	72	61	37	12	-14	-36	-38	-24
810	-5	16	21	28	39	39	43	42	38	25
820	11	3	-16	-19	-23	-31	-34	-34	-30	-23
830	-17	-12	-1	4	7	11	15	17	20	21
840	21	17	8	3	-1	-8	-10	-10	-8	-5
850	-7	-10	-9	-3	0	6	12	18	25	26
860	23	16	6	4	6	11	19	27	27	25
870	17	14	14	14	15	16	16	16	19	27
880	40	54	64	64	61	53	38	25	15	6
890	2	5	15	20	21	16	7	2	0	-3
900	0	4	8	10	4	-12	-29	-36	-40	-38
910	-26	-11	-5	-16	-32	-44	-55	-45	-45	-34
920	-26	-27	-37	-33	-33	-35	-32	-25	-21	-20
930	-19	-9	7	20	27	28	28	21	8	-6
940	-14	-14	0	11	13	8	1	2	14	6
950	37	58	76	75	65	46	28	11	-2	-12
960	-14	-17	-21	-30	-46	-53	-52	-43	-27	-17
970	-4	2	6	6	6	6	7	14	19	18
980	20	19	15	13	7	1	-4	1	10	18

TO BE CONTINUED

CONTINUED(S-1946 SOUTH)

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
990	29	33	26	17	4	-2	-1	0	-5	-10
1000	-10	-18	-30	-30	-21	-3	16	37	42	47
1010	49	42	24	9	-7	-10	-10	-10	-12	-19
1020	-32	-42	-43	-31	-20	-8	15	23	26	24
1030	-14	-10	-33	-35	-30	-28	-24	-19	-15	-14
1040	-4	-18	-23	-35	-30	-31	-31	-33	-34	-30
1050	-23	-23	-23	-20	-14	-7	0	1	3	3
1060	4	4	4	7	10	10	-3	-7	-12	-16
1070	-16	-4	-6	8	15	22	28	34	40	40
1080	40	39	33	23	17	8	4	11	-3	-6
1090	-6	-6	-6	-4	2	12	17	11	1	-10
1100	-21	-22	-15	-6	0	3	0	-10	-20	-32
1110	-32	-25	-15	-8	-4	0	6	11	15	13
1120	5	-6	-21	-30	-37	-40	-35	-34	-31	-30
1130	-27	-20	-10	-2	0	5	6	8	10	7
1140	2	0	-4	-14	-24	-27	-27	-26	-24	-14
1150	-5	-5	-4	-5	-7	4	21	21	21	18
1160	-4	-12	-18	-25	-32	-38	-35	-30	-30	-28
1170	-19	-5	-7	-8	-8	-8	-7	0	9	15
1180	-2	-5	0	4	10	14	16	16	14	6
1190	20	24	24	24	23	23	15	5	3	3
1200	3	4	-12	-19	-27	-15	1	14	19	20
1210	21	19	13	13	21	25	24	10	-5	-15
1220	-27	-36	-37	-31	-21	-12	-2	4	12	19
1230	21	17	4	-7	-17	-24	-33	-36	-34	-26
1240	-22	-21	-24	-26	-29	-24	-24	-16	-7	-1
1250	5	9	12	14	15	15	15	14	6	0
1260	-2	1	9	15	19	21	8	1	-2	-7
1270	-9	-7	-5	-3	-1	0	3	5	5	5
1280	0	-2	-5	-1	1	5	5	5	2	2
1290	0	4	13	20	24	27	35	28	16	6
1300	-3	-12	-14	-14	-13	-18	-26	-28	-26	-4
1310	-1	-1	5	5	1	-6	-16	-20	-24	-29
1320	-30	-30	-25	-22	-16	-15	-14	-14	-19	-19
1330	-22	-25	-25	-25	-20	-17	-9	-1	6	12
1340	14	14	7	4	-1	-4	-3	1	3	6
1350	6	1	-3	-9	-15	-15	-10	1	3	0
1360	0	0	0	0	0	0	1	2	4	3
1370	1	-1	0	3	7	10	10	7	3	0
1380	15	46	55	70	70	66	54	39	25	13
1390	-3	-23	-19	-7	2	16	22	22	19	10
1400	0	-8	-11	-12	-9	-5	-4	-6	-11	-19
1410	-21	-22	-24	-23	-20	-11	-3	-1	0	-1
1420	-7	-13	-11	-4	5	12	16	20	18	8
1430	-7	-18	-24	-32	-34	-31	-19	-9	0	2
1440	-2	-10	-17	-20	-20	-21	-23	-22	-20	-16
1450	-10	-3	2	4	4	6	8	9	10	10
1460	11	15	14	18	20	20	19	16	8	4
1470	8	14	19	24	27	19	9	1	-1	-2
1480	-3	0	7	8	6	6	6	6	5	4
1490	6	5	4	4	4	4	4	4	3	3
1500	1	0	4	10	13	15	20	23	23	23

TO BE CONTINUED

RECORD = S-1946 COMPONENT = EAST STATION = ONAHAMA-JI-S
 DATE AND TIME = 1986-10-14-06-17 TOTAL NUMBER OF DATA = 2050
 SAMPLING INTERVAL = 0.010 (SEC)
 SIGNAL = GR. ACC. SCAL = 0.10000
 CONNECTION POINT IN DATA NUMBER = 2050

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1510	22	12	5	-6	-13	-14	-6	4	11	14
1520	14	14	11	7	6	6	6	5	5	3
1530	-5	-7	-9	-9	-9	-9	-9	-9	-9	-9
1540	-9	-8	-6	-6	-6	-7	-9	-12	-17	-19
1550	-19	-18	-14	-4	-10	-10	-10	-7	-3	2
1560	5	6	4	4	-1	-11	-15	-15	-15	-13
1570	-10	-9	-8	-5	-3	0	1	4	4	4
1580	4	1	3	10	14	21	21	21	24	24
1590	21	13	11	11	2	-2	-8	-16	-27	-33
1600	-34	-31	-14	8	13	17	21	23	24	24
1610	23	24	26	24	9	2	-14	-20	-37	-37
1620	-33	-28	-28	-28	-28	-22	-11	5	15	15
1630	19	17	9	-6	-16	-18	-22	-19	-9	0
1640	2	8	14	14	14	14	14	12	9	5
1650	1	0	1	8	13	14	15	13	8	5
1660	4	3	1	-1	-7	-13	-19	-25	-30	-25
1670	-16	-14	-14	-13	-10	-8	-7	-5	0	2
1680	5	9	9	0	-10	-15	-22	-9	8	11
1690	4	-11	-16	-20	-17	-7	-7	5	10	14
1700	14	14	14	13	11	10	10	10	8	1
1710	-3	-3	-5	-11	-16	-19	-20	-10	6	13
1720	10	6	1	-5	-12	-15	-9	0	5	8
1730	7	5	5	4	-1	-7	-8	-12	-15	-16
1740	-17	-16	-6	6	16	21	24	46	61	52
1750	45	26	13	-2	-21	-26	-26	-22	-19	-8
1760	-11	-5	-2	0	4	7	9	10	8	3
1770	-6	-16	-28	-34	-32	-25	-16	-13	-9	-8
1780	-5	2	16	24	29	36	29	22	13	6
1790	0	-6	-8	-8	-8	-10	-11	-12	-13	-12
1800	-5	0	6	14	20	22	25	25	23	16
1810	5	-3	-9	-10	-4	0	0	0	0	4
1820	5	5	14	22	23	19	9	5	0	0
1830	-8	-15	-12	-10	-14	-17	-19	-20	-20	-1
1840	7	20	20	20	20	19	2	1	-16	-21
1850	-23	-23	-14	-14	0	6	11	11	14	15
1860	18	23	27	25	21	14	12	10	6	5
1870	4	4	4	5	10	10	10	13	14	14
1880	12	4	1	0	-2	-3	-5	-3	5	6
1890	3	-1	-7	-8	-8	-8	-8	-8	-12	-12
1900	-16	-22	-26	-28	-29	-25	-16	-7	-3	-2
1910	0	1	3	7	9	9	9	5	-5	-12
1920	-21	-31	-35	-35	-34	-32	-28	-23	-18	-14
1930	-10	-6	0	9	19	29	34	31	25	14
1940	0	-8	-17	-21	-26	-30	-30	-28	-20	-10
1950	-18	-17	-12	-5	0	2	0	-9	-14	-14
1960	-8	-2	1	6	8	9	8	7	5	4
1970	5	-8	9	7	1	-6	-9	-6	2	9
1980	16	19	16	13	7	4	8	9	7	3
1990	0	0	-4	-8	-6	2	7	8	8	7

END

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	4	4	4	4	4	4	4	4	4	4
10	197	275	322	312	303	293	283	262	235	207
20	180	137	78	18	-41	-87	-133	-167	-12	142
30	236	151	195	168	133	98	115	145	169	187
40	205	220	231	166	100	-5	-134	-203	-243	-183
50	202	162	-117	-42	46	98	138	153	169	183
60	168	128	76	20	-33	-84	-127	-157	-184	-215
70	224	222	-209	-86	-156	-122	-65	17	129	201
80	247	292	247	165	59	59	-89	-106	72	35
90	-5	14	38	-8	-75	-141	-202	-220	-236	-198
100	-117	-42	42	109	178	247	294	348	367	390
110	365	312	235	109	-7	-124	-279	-416	-530	-583
120	614	-579	-508	-415	-188	45	249	391	478	471
130	415	353	297	224	158	106	62	13	-40	-91
140	-141	-194	-229	-254	-256	-233	-199	-132	-55	7
150	56	80	97	112	137	173	207	224	209	165
160	107	50	-13	-105	-202	-268	-309	-339	-355	-356
170	-357	-287	-201	-84	49	201	313	343	335	291
180	241	195	143	95	31	-19	-69	-120	-161	-161
190	-196	-164	-139	-120	-106	-103	-114	-127	-123	-53
200	-6	6	5	108	134	119	87	63	40	23
210	3	-3	-14	-30	-37	-13	11	35	45	56
220	56	42	19	0	-5	-17	-34	-50	-71	-86
230	-90	-71	-44	-13	10	28	35	35	29	15
240	4	4	4	4	6	8	17	14	15	19
250	20	20	18	15	13	7	-1	-25	-25	-21
260	-15	-6	0	1	0	-5	-11	-18	-18	-24
270	-24	-29	-34	-34	-25	-15	9	25	48	82
280	86	88	85	69	50	27	5	-21	-53	-103
290	-134	-169	-172	-163	-139	-107	-70	-32	14	66
300	112	137	140	137	128	114	97	86	73	55
310	17	-24	-65	-100	-127	-146	-138	-112	-81	-56
320	-35	-19	-18	-16	-9	4	22	45	63	65
330	56	39	28	15	-1	-11	-11	-11	-10	-8
340	-6	-6	-6	-6	-7	-9	-9	-11	-11	-12
350	-19	-30	-38	-49	-57	-56	-47	-28	-4	10
360	23	30	29	23	14	12	27	49	73	88
370	82	60	19	-26	-63	-89	-72	-41	-28	-18
380	-65	64	23	34	38	47	53	56	61	65
390	6	8	59	28	-6	-33	-63	-66	-43	-12
400	4	13	16	4	-24	-41	-56	-60	-40	-16
410	9	30	39	37	29	21	14	0	-13	-36
420	-58	-85	-93	-87	-82	-80	-73	-70	-74	-76
430	-75	-75	-59	-50	-24	7	40	61	65	59
440	44	19	5	0	-7	-9	-16	-19	-21	-21
450	-19	-11	6	32	48	66	81	83	70	57
460	41	17	7	-25	-44	-65	-84	-85	-94	-102

TO BE CONTINUED

CONTINUED (S-1946 EAST)

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
470	-73	-47	-32	-18	-4	59	117	172	187	190
480	184	152	92	29	-12	-39	-58	-66	-70	-72
490	-82	-95	-102	-105	-78	-44	-11	18	58	80
500	96	98	101	100	85	77	56	50	31	0
510	-34	-47	-75	-100	-113	-104	-79	-55	-36	-4
520	0	0	0	0	-6	-16	-30	-31	-28	-16
530	-13	-4	2	5	4	-1	-3	-8	0	11
540	38	58	68	74	73	50	24	-22	-57	-86
550	-96	-104	-83	-24	-5	15	31	40	55	62
560	67	70	70	69	61	39	19	6	-2	-28
570	-49	-66	-80	-89	-78	-51	-10	0	14	26
580	40	54	54	57	66	78	86	83	62	31
590	6	-13	-31	-39	-40	-38	-37	-40	-42	-43
600	610	41	32	23	21	20	16	-10	-45	-55
620	-72	-56	-15	-19	-16	32	40	49	54	46
630	28	1	-19	-15	-2	14	30	40	38	26
640	15	-6	-35	-46	-37	-20	-10	-8	-8	-8
650	-5	0	12	22	17	-1	14	9	8	19
660	-19	-5	8	20	24	21	14	9	8	19
670	32	40	41	39	27	20	16	14	13	12
680	11	7	4	-1	-8	-17	-25	-30	-32	-37
690	-39	-36	-22	-6	0	2	7	12	14	15
700	8	3	-1	-9	-13	-14	-13	-12	-7	-2
710	-1	0	-5	-13	-24	-27	-29	-29	-29	-25
720	-21	-19	-15	-8	-1	-1	-13	-16	-19	-23
730	-19	-13	-8	-4	-2	3	6	15	21	21
740	25	26	26	24	15	22	23	23	20	11
750	1	-2	-7	-9	-10	-11	-8	-4	-1	0
760	-4	-10	-21	-33	-41	-43	-30	-19	-4	6
770	19	23	25	24	20	14	10	10	13	19
780	23	23	21	11	2	-3	-5	-2	1	1
790	3	6	13	14	16	16	20	21	21	21
800	20	3	-2	-8	-14	-25	-44	-45	-40	-28
810	-9	5	21	34	38	37	35	28	14	1
820	-8	-9	-9	-6	-1	0	3	3	3	2
830	4	13	14	17	19	21	25	28	29	29
840	28	23	18	8	3	3	7	13	20	27
850	33	32	25	13	5	2	-2	-8	-8	-9
860	-12	-14	-15	-14	-5	5	13	24	34	35
870	31	19	2	-15	-20	-24	-23	-17	-7	-2
880	0	0	-3	-9	-15	-16	-14	-8	-3	0
890	4	7	10	19	27	30	28	19	6	-6
900	-14	-11	-7	-5	-6	-9	-13	-15	-16	-13
910	-4	1	3	-8	-18	-21	-23	-23	-23	-23
920	-23	-23	-25	-26	-20	-10	11	20	21	15
930	14	3	-9	-17	-21	-19	-12	-10	-13	-15
940	-21	-24	-18	-7	3	12	15	15	14	12
950	16	21	21	29	37	39	31	23	18	17
960	13	7	5	-3	-10	-13	-14	-14	-14	-8
970	0	3	4	5	11	15	18	17	15	15
980	8	0	-9	-17	-18	-4	5	11	14	12

TO BE CONTINUED

CONTINUED (S-1946 EAST)

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
990	10	9	0	0	5	7	8	0	-7	-13
1000	-16	-18	-19	-19	-17	-16	-16	-16	-15	-15
1010	-15	-11	-3	4	7	8	1	0	2	12
1020	17	20	26	31	30	0	-2	-14	-21	-26
1030	-31	-35	-33	-29	-29	-18	-15	-9	-6	-8
1040	-13	-29	-40	-41	-40	-24	-24	-24	-19	-18
1050	-16	-16	-16	-16	-14	-14	-12	-3	9	24
1060	29	35	35	31	21	13	10	0	9	11
1070	12	21	25	23	18	16	14	16	25	29
1080	37	44	42	30	15	-1	-6	-18	-21	-20
1090	-20	-18	-12	-14	-14	-11	-7	2	13	13
1100	10	7	-1	-2	-5	-7	-10	-11	-9	-8
1110	-11	-16	-19	-19	-19	-18	-15	-15	-16	-16
1120	-11	-1	6	14	21	22	22	21	19	12
1130	4	3	2	0	0	0	0	0	0	0
1140	0	-3	-4	-2	-2	3	9	15	16	17
1150	20	19	10	-2	-11	-20	-30	-34	-33	-29
1160	-22	-20	-23	-25	-24	-19	-10	0	7	11
1170	13	13	11	7	2	1	3	2	-2	-5
1180	-5	-4	4	15	22	26	24	23	17	9
1190	1	-7	-12	-13	-15	-18	-21	-23	-22	-17
1200	-6	0	5	8	5	1	-1	-4	-8	-9
1210	-10	-10	-12	-15	-16	-16	-16	-15	-17	-19
1220	-19	-17	-15	-9	-2	3	5	5	4	0
1230	-4	-8	-11	-12	-13	-13	-11	-7	-1	10
1240	20	26	27	24	14	1	-12	-16	-16	-20
1250	-22	-21	-18	-18	-22	-24	-24	-17	-13	-7
1260	6	12	16	18	19	17	17	19	15	12
1270	7	0	-1	-3	-12	-18	-30	-29	-26	-22
1280	-18	-14	-2	0	0	1	1	0	-1	-2
1290	-7	-10	-10	-2	13	16	16	16	-4	-15
1300	-28	-30	-17	-2	7	8	8	8	6	6
1310	6	5	-1	-1	-1	-1	-1	-1	-4	-5
1320	-8	-9	-9	-9	-9	-6	3	3	4	7
1330	14	20	24	22	15	15	11	4	-4	-7
1340	-16	-18	-17	-16	-15	-16	-13	-13	-12	-10
1350	-9	-8	-6	-5	-5	-6	-3	-16	-20	-26
1360	-28	-28	-30	-30	-30	-25	-12	-6	16	49
1370	67	68	66	63	45	9	-6	-12	9	-2
1380	0	4	4	2	1	-2	0	1	4	7
1390	10	13	17	21	21	18	8	-2	-3	-3
1400	-2	1	5	6	6	5	5	5	5	5
1410	5	5	5	5	3	0	-1	-2	-3	-8
1420	-16	-17	-16	-10	-5	-1	8	12	11	-11
1430	-23	-23	-23	-23	-24	-24	-22	-22	-22	-19
1440	-20	-18	-18	-17	-16	-14	-11	-8	-6	-6
1450	-8	-8	-8	-8	-7	-6	-7	-8	-8	-4
1460	1	5	7	6	2	0	2	8	12	13
1470	8	4	4	4	4	0	20	26	29	29
1480	29	29	30	31	23	16	10	6	1	-2
1490	-3	-1	5	11	16	18	18	18	13	7
1500	-3	-16	-21	-20	-17	-5	6	6	0	-7

TO BE CONTINUED

CONTINUED(S-1946 EAST)										CONTINUED(S-1946 EAST)												
ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
1510	-12	-13	-4	7	25	34	41	43	40	38	2030	-14	-14	-17	-22	-25	-22	-18	-13	-7	-3	
1520	28	22	21	19	19	19	14	8	0	0	2040	-2	-1	-2	-3	-6	-6	-6	-7	-10	-12	
1530	0	-1	-4	-5	-5	-5	4	6	9	11												
1540	11	10	5	-5	-7	-10	-10	-12	-13	-13												
1550	-13	-21	-3	-20	-7	-1	0	2	8	11												
1560	13	13	15	15	12	2	26	25	25	25												
1570	0	6	12	15	26	26	16	15	6	6												
1580	26	26	26	18	18	18	16	15	6	6												
1590	6	6	6	6	6	6	6	6	6	6												
1600	19	21	21	21	20	18	10	4	-14	-14												
1610	-19	-23	-22	-17	-11	-7	0	5	12	17												
1620	19	20	21	22	20	19	21	21	21	17												
1630	12	5	-2	-13	-26	-31	-34	-33	-27	-27												
1640	-23	-11	0	2	3	2	1	3	7	8												
1650	-9	-9	-9	-13	-17	-20	-21	-21	-19	-16												
1660	-12	-7	-7	-8	-7	-4	-2	0	3	6												
1670	7	6	4	4	6	7	6	4	1	-4												
1680	-6	-7	-6	-2	1	4	4	1	-1	-4												
1690	6	9	11	10	7	6	5	3	2	1												
1700	2	2	1	0	2	7	11	13	13	9												
1710	2	-5	-2	-1	-21	-19	-19	-18	-15	-13												
1720	-10	-5	-2	-1	-3	-4	-7	-10	-9	-6												
1730	-4	-2	-1	0	1	2	3	3	2	0												
1740	-2	-7	-13	-15	-15	-14	-11	-9	-9	-10												
1750	-11	-12	-11	-8	-7	-5	-3	-3	-3	-3												
1760	-3	-3	-2	0	0	0	-3	-6	-10	-12												
1770	-13	-16	-19	-21	-20	-20	-20	-16	-13	-8												
1780	6	14	16	15	13	8	5	6	12	14												
1790	12	10	9	9	10	15	27	32	36	37												
1800	38	35	28	22	15	7	3	4	6	7												
1810	11	12	13	14	10	8	8	7	6	5												
1820	4	4	3	3	0	-5	-5	-4	-6	-10												
1830	-11	-15	-15	-12	-7	-2	1	6	8	3												
1840	3	1	0	-1	-3	-3	-4	-6	-6	0												
1850	4	8	10	10	6	5	6	10	19	23												
1860	24	16	14	11	7	4	3	3	3	3												
1870	2	0	0	0	0	1	2	2	-1	-1												
1880	0	-2	-4	0	-4	-4	3	4	4	2												
1890	1	0	0	-1	-4	-5	-5	-5	-8	-11												
1900	-8	-13	-18	-21	-20	-14	-9	-2	0	2												
1910	4	4	5	5	1	-3	-3	-3	-2	-2												
1920	-3	-5	-5	-5	-5	-5	-4	-1	0	3												
1930	9	14	13	6	-7	-11	-17	-17	-11	-8												
1940	-10	-15	-18	-18	-20	-16	-7	-2	0	1												
1950	0	-6	-13	-7	0	0	-2	-8	-14	-16												
1960	-19	-20	-18	-18	-17	-14	-10	-4	2	7												
1970	-10	-11	-11	8	1	-3	-3	2	9	9												
1980	7	4	0	-4	-8	-7	-6	-4	-2	-2												
1990	-1	0	0	2	3	5	5	1	-4	-11												
2000	-15	-16	-16	-16	-15	-10	-7	-6	-7	-10												
2010	-13	-14	-14	-13	-10	-7	-6	-2	0	-1												
2020	-2	-7	-11	-13	-15	-18	-18	-15	-14	-14												

TO BE CONTINUED

RECORD = S-1946 COMPONENT = DOWN STATION = OHAMA-JI-S
 DATE AND TIME = 1986-10-14-06-17 TOTAL NUMBER OF DATA = 2050
 SIGNALING INTERVAL = 0.010 (SEC) SCAL = 0.10000
 SIGNAL = GR. ACC.
 CONNECTION POINT IN DATA NUMBER = 2050,

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	-3	8	20	32	43	55	67	79	92	106
10	119	133	167	115	38	-37	-113	-165	-142	-119
20	-96	-75	-59	-42	-26	-13	0	15	-11	-42
30	-71	-79	16	58	93	128	128	123	115	104
40	93	-77	64	44	23	5	-10	-26	-43	-65
50	-95	-116	-133	-120	-94	-68	-42	-33	-24	-5
60	12	29	35	35	49	65	84	97	106	106
70	84	44	-2	-35	-51	-55	-64	-76	-76	-73
80	-65	-47	-34	-23	-14	-12	-16	-26	-42	-46
90	-40	-26	-7	15	42	74	103	119	111	87
100	57	50	37	28	19	1	-43	-93	-128	-148
110	-152	-143	-133	-122	-108	-84	-41	11	55	103
120	132	153	166	168	151	115	57	17	-66	-93
130	-102	-96	-71	-34	-1	16	22	17	6	-1
140	-14	-29	-40	-52	-56	-37	-16	11	23	37
150	40	30	6	-13	-17	-1	23	45	53	47
160	41	37	34	28	15	-2	-14	-14	-11	-10
170	-15	-40	-29	-55	-80	-87	-89	-67	-42	-5
180	33	58	73	91	87	64	30	4	-16	-35
190	-45	-40	-28	-10	18	49	69	71	71	59
200	28	-12	-41	-59	-73	-63	-37	-9	3	22
210	39	40	40	39	27	15	-1	-24	-46	-42
220	-21	-11	-2	6	13	16	16	10	2	2
230	-11	-27	-45	-48	-49	-46	-33	-9	3	23
240	23	23	23	21	21	16	13	-3	-9	-18
250	-29	-65	-56	-44	-23	-15	-1	9	14	30
260	51	65	61	36	3	-10	-13	-19	-22	-24
270	-23	-19	-10	-6	0	11	19	26	33	40
280	28	17	-4	-21	-33	-40	-42	-37	-19	2
290	20	36	53	64	65	57	40	22	14	26
300	35	41	38	14	-17	-22	-35	-45	-51	-53
310	-53	-52	-48	-34	-10	-9	13	40	40	37
320	31	24	9	-13	-40	-64	-75	-69	-55	-37
330	-12	4	13	28	39	63	63	64	39	26
340	11	0	-7	-16	-24	-31	-31	-27	-23	-16
350	-7	7	25	44	59	57	44	23	2	-14
360	-25	-29	-21	-15	-15	-18	-24	-35	-62	-43
370	-36	-26	-18	-1	16	28	36	39	37	34
380	28	21	15	9	15	23	24	17	6	-4
390	-13	-17	-18	-18	-15	-10	-7	-3	-1	-38
400	-9	-15	-13	-4	7	21	35	50	57	58
410	56	45	36	31	26	24	23	13	2	-8
420	-22	-39	-50	-61	-68	-68	-60	-46	-15	18
430	45	63	56	42	28	15	9	0	-7	-11
440	-29	-11	-11	-2	12	17	23	37	43	42
450	20	14	5	4	-8	-32	-53	-57	-46	-59
460	-6	7	18	26	34	39	42	41	38	38

TO BE CONTINUED

TO BE CONTINUED

CONTINUED(S-1946 DOWN)

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
990	2	2	3	3	3	3	3	3	4	4
1000	4	0	-8	-14	-15	-23	-23	-17	-15	-12
1010	-11	-11	-11	-11	-13	-10	-10	-12	-15	-22
1020	-34	-33	-28	-25	-22	-27	-28	-28	-27	-17
1030	-15	-12	-11	-11	-13	-16	-24	-28	-29	-27
1040	-14	-13	-3	1	5	-8	8	8	7	5
1050	-3	-5	0	10	13	14	17	23	24	24
1060	24	23	15	20	21	21	21	23	24	8
1070	1	-3	-5	-5	-5	-5	-5	-5	-5	-4
1080	-3	-1	0	0	-1	-3	-3	0	0	-2
1090	-9	-9	-9	-9	-8	-3	4	4	6	6
1100	5	1	-5	-7	-9	-13	-13	-15	-15	-13
1110	-16	-18	-17	-14	-12	-11	-12	-14	-10	-5
1120	1	3	3	1	-2	-5	-10	-17	-8	-8
1130	-1	1	5	7	8	7	6	5	5	5
1140	5	5	5	3	6	6	6	6	7	9
1150	7	3	3	3	4	6	9	12	15	16
1160	15	10	5	0	-5	-7	-12	-21	-31	-35
1170	-35	-31	-28	-23	-18	-20	-23	-21	-16	-15
1180	-18	-21	-21	-20	-22	-26	-28	-29	-30	-27
1190	-22	-18	-13	-7	-2	1	3	3	4	4
1200	2	0	0	1	1	1	1	0	-1	-4
1210	-10	-13	-10	-5	0	10	17	21	23	23
1220	14	3	-1	-2	-3	-4	-5	0	3	5
1230	9	13	17	23	25	14	9	6	1	-9
1240	-15	-16	-11	-7	-4	-2	0	5	11	13
1250	15	15	13	10	-3	-5	-5	-4	-4	-6
1260	-3	-5	-4	-4	-4	-10	-3	-3	-3	-2
1270	-6	-5	-4	-4	-4	-3	-6	-6	-4	0
1280	-1	-1	-1	0	3	6	6	6	4	4
1290	-1	-3	-4	-4	-4	-4	-4	-4	-3	-3
1300	-3	-5	-9	-9	-11	-14	-19	-21	-21	-19
1310	-16	-15	-13	-11	-3	0	4	5	-5	-9
1320	-10	-14	-15	-17	-20	-23	-23	-20	-18	-18
1330	-18	-18	-18	-18	-18	-20	-20	-21	-11	-11
1340	-7	3	4	5	8	9	9	9	9	8
1350	1	-2	-2	0	1	1	0	0	3	3
1360	3	4	6	7	12	18	18	7	6	6
1370	7	12	16	15	13	17	18	18	14	11
1380	3	3	7	11	13	14	18	18	19	19
1390	17	14	10	3	-2	-6	-6	-6	-6	-4
1400	2	10	10	9	-4	-4	-11	-19	-20	-20
1410	-20	-17	-11	-8	-6	-4	-5	-5	-5	-5
1420	-4	-6	-8	-10	-10	-9	-6	-5	-5	-3
1430	-2	-1	-1	-1	-1	0	1	2	1	2
1440	7	14	19	20	22	23	23	22	20	17
1450	15	15	16	18	20	22	23	21	19	9
1460	0	-2	-3	-3	-7	-11	-11	-7	-3	-3
1470	16	7	9	-9	-8	-4	-4	-1	0	1
1480	1	1	1	-1	-3	-7	-9	-9	-9	-4
1490	-1	-1	-1	-2	-4	-4	-4	-4	-4	-5
1500	-5	-5	-5	-5	-5	-5	-5	-2	3	14

TO BE CONTINUED

CONTINUED(S-1946 DOWN)

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1510	23	34	38	35	26	13	7	3	1	-1
1520	-1	0	9	16	22	30	30	23	13	9
1530	0	3	10	15	15	15	15	15	12	10
1540	10	8	8	8	11	13	17	18	18	18
1550	15	13	13	14	1	-2	-4	2	5	6
1560	3	0	2	4	7	8	4	3	0	-5
1570	-9	-13	-25	-24	-2	0	2	3	3	3
1580	3	3	3	-16	-15	-10	0	1	3	6
1590	8	8	10	10	11	11	11	10	9	8
1600	7	1	-4	-8	10	11	3	7	10	14
1610	16	20	18	12	10	-14	-11	0	0	-2
1620	-11	-13	-14	-14	-16	15	10	-9	-5	-4
1630	3	8	11	15	16	15	10	5	-4	-4
1640	-5	-10	-10	-10	-8	-3	-2	1	3	5
1650	5	2	-4	-3	-5	-5	-2	-6	-3	5
1660	7	9	12	13	15	16	16	15	9	1
1670	-1	-3	-3	-3	-3	-3	-1	3	3	3
1680	-4	-3	-5	0	6	8	8	7	3	-2
1690	-4	-3	-1	0	2	6	8	7	8	11
1700	13	14	15	15	17	19	21	23	23	17
1710	8	3	0	-1	-2	-5	-13	-19	-21	-25
1720	-26	-17	-6	-3	-3	-3	-4	-7	-9	-9
1730	-9	-8	-6	-3	-5	0	4	5	6	4
1740	-1	-8	-12	-13	-13	-8	-3	0	7	7
1750	10	11	11	4	-5	-10	-13	-15	-15	-15
1760	-15	-11	-6	-1	3	8	12	14	17	18
1770	13	9	6	4	4	3	3	0	-3	-6
1780	-7	-7	-3	1	4	6	8	9	10	6
1790	4	3	3	3	3	6	6	5	5	5
1800	4	3	8	8	8	9	10	11	13	14
1810	13	10	5	4	-1	-3	-4	-8	-9	-8
1820	-7	-3	3	5	6	6	2	-2	-6	-6
1830	-3	0	5	4	-1	-3	-7	-9	-11	-14
1840	-8	-7	0	1	6	9	10	5	4	-1
1850	-5	-10	-20	-23	-24	-24	-21	-8	-4	-3
1860	-1	0	3	5	8	9	10	11	11	9
1870	0	-7	-8	-8	-7	-1	-2	-4	-4	-4
1880	8	9	9	6	1	1	1	6	2	1
1890	-4	-3	-1	1	4	5	6	6	3	4
1900	1	1	2	3	2	0	-1	0	3	4
1910	4	4	2	0	-4	-1	4	5	6	5
1920	3	1	0	-4	-13	-13	-14	-18	-18	-14
1930	-12	-11	-11	-11	-10	-9	-5	-8	-2	-5
1940	9	9	9	7	10	12	14	14	10	2
1950	-8	-3	3	2	-4	-3	-1	-1	0	0
1960	-1	-1	-1	-2	-4	-3	-1	-1	0	-3
1970	0	0	-2	-5	-8	-8	-7	-4	-2	-3
1980	-3	-3	-1	0	-8	-8	-7	-4	0	6
1990	7	8	8	7	6	2	0	-2	4	0
2000	5	5	6	6	0	0	-6	-11	-14	-16
2010	-16	-14	-11	-9	0	5	-4	-2	1	-1
2020	-4	-4	-3	-3	-3	-2	-1	0	1	3

TO BE CONTINUED

CONTINUED (S-1946 DOWN)

Np.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2030	3	3	3	3	3	3	3	2	1	1
2040	-4	-7	-8	-8	-8	-8	-10	-15	-16	-19

END

RECORD = F-15 COMPONENT = EAST STATION = HITACHINAKA-F
DATE AND TIME = 1986-11-15-15-6 TOTAL NUMBER OF DATA = 5100
SAMPLING INTERVAL = 0.010 (SEC) SCAL = 0.10000
SIGNAL = GR. ACC.
CONNECTION POINT IN DATA NUMBER = 5100,

Np.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	0	0	0	0	0	0	1	0	0	1
10	0	0	0	1	0	0	1	0	0	0
20	0	0	0	0	0	0	0	0	0	0
30	-1	0	1	1	0	0	0	1	0	0
40	1	0	0	0	0	0	0	1	0	0
50	0	1	0	0	0	1	1	0	1	1
60	0	0	0	0	0	0	0	0	0	0
70	0	1	0	0	0	0	0	0	0	0
80	0	0	0	0	0	0	0	0	0	0
90	0	0	0	0	0	0	0	0	0	0
100	3	1	-1	-10	-10	3	19	14	0	2
110	-26	19	54	52	15	-38	-60	-35	16	-39
120	34	-39	-83	-54	22	83	71	25	-13	58
130	-22	-2	-13	-7	-7	-33	-41	-11	31	-37
140	68	13	-53	-73	-25	54	89	66	0	66
150	-120	-87	-13	39	54	3	-29	36	109	-77
160	22	-60	-87	-55	-16	-3	0	14	0	94
170	47	70	8	-36	-43	-46	-10	58	64	-8
180	6	-58	-64	18	54	-11	-45	-26	23	23
190	36	93	131	119	-13	-178	-169	-37	72	-10
200	84	-43	-116	-96	-76	-38	51	99	84	64
210	16	-51	-61	-39	-35	-38	-23	-1	3	3
220	21	69	89	40	-12	-31	-59	-90	-75	-16
230	49	86	51	-23	-60	-68	-61	0	94	128
240	74	3	-57	-88	-35	39	32	-8	-37	-64
250	-23	79	102	74	56	1	-65	-81	-55	-15
260	24	40	26	17	4	-43	-69	-29	51	103
270	87	46	-10	-60	-75	-78	-63	-26	-5	12
280	51	73	54	26	9	0	-21	-46	-45	-21
290	0	10	0	-39	-55	-16	30	66	56	-23
300	-73	-22	55	69	36	0	-24	-43	-59	-52
310	-8	51	92	100	58	-23	-79	-65	-5	27
320	25	-7	-51	-39	29	22	6	5	-7	0
330	33	25	-25	-55	-51	-35	-15	9	31	59
340	54	19	9	-6	-35	-8	19	-49	-110	-45
350	34	54	59	14	-72	-103	30	119	231	179
360	-25	-203	-233	-160	-18	124	121	8	-50	-2
370	71	101	99	79	16	-50	-85	-105	-65	18
380	57	31	-53	-99	-9	88	74	-7	-55	-35
390	0	45	89	83	-11	-132	-153	-75	22	103
400	121	64	0	-14	-17	-49	-70	-30	38	76
410	24	-60	-71	-50	-43	15	79	82	59	4
420	-56	-39	53	116	104	29	-70	-155	-169	-68
430	86	154	109	18	-71	-99	-30	23	1	-19
440	-28	-54	-25	64	116	97	39	-50	-142	-109
450	19	103	140	134	56	-81	-207	-236	-118	58
460	124	63	10	-10	-58	-61	-4	36	71	110

TO BE CONTINUED

CONTINUED (F-15 EAST)

NP.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
470	66	-21	-53	-45	-26	-7	-13	-23	9	36
480	9	-35	-53	-37	-6	9	16	56	78	31
490	-35	-60	-21	31	116	88	151	167	51	-116
500	-184	-154	-91	113	151	73	-45	-117	-117	40
510	-30	78	119	109	41	-82	-176	-138	18	151
520	171	100	-41	-157	-140	-56	21	105	154	55
530	-126	-169	-41	-17	86	127	54	-64	-123	-251
540	95	224	223	61	-135	-244	-250	-109	14	291
550	208	-31	-271	-340	304	288	148	-16	109	148
560	-150	-178	-106	14	107	-106	31	-88	183	49
570	34	161	212	98	-171	-221	-143	34	127	4
580	64	-48	-126	-108	3	93	123	111	60	-43
590	-66	-7	81	120	84	-10	-132	-207	-165	-18
600	131	167	100	-3	-118	185	128	28	159	194
610	126	1	-115	-133	-36	84	136	45	36	41
620	-75	-101	-86	-118	-60	64	169	163	64	-48
630	-18	-83	-114	-118	-60	64	169	163	64	-48
640	-115	-49	163	384	439	257	-66	-362	-490	-421
650	-229	22	263	359	247	44	-52	75	396	724
660	739	279	-495	-1253	-1681	-1598	-1033	-224	578	1139
670	1341	1255	1053	860	659	314	-264	962	-1493	-1603
680	-1295	-763	-150	423	761	783	622	426	240	138
690	5	-133	-183	-153	-86	21	88	-28	-317	-613
700	-734	-603	-253	173	513	678	634	491	346	148
710	-151	-440	-588	-523	-232	129	379	96	-86	-111
720	-30	-370	-130	219	504	569	379	96	-86	-111
730	-60	-54	-150	-299	-400	-425	-318	-40	274	443
740	412	303	230	214	183	43	-200	-424	-504	-422
750	-224	8	183	242	176	68	20	25	26	14
760	39	-130	-205	-230	-163	9	221	351	389	398
770	311	30	-349	-624	-637	-363	54	444	659	586
780	279	-88	-325	-525	-145	57	141	49	-128	-237
790	-213	-91	26	29	-80	-211	-261	-115	-220	554
800	731	666	365	-55	-418	-564	-485	-300	-119	-47
810	-70	-55	28	123	226	339	379	276	87	-87
820	-188	-220	-267	-338	-350	-285	-163	-6	152	266
830	305	260	157	19	-106	-130	-38	91	128	0
840	-179	-255	-206	-55	138	274	339	360	304	186
850	64	-3	-27	-67	-157	-281	-404	-470	-424	-259
860	-18	229	438	533	451	234	-15	-210	-285	-198
870	-8	131	139	49	-72	-164	-182	-114	-18	23
880	-11	-105	-187	-165	-3	224	383	395	286	123
890	-44	-163	-224	-246	-235	-198	-161	-15	114	114
900	193	171	78	-35	-106	-85	10	103	141	118
910	66	24	23	60	100	101	26	-122	-286	-362
920	-209	-153	8	147	221	227	201	149	88	40
930	29	38	15	-27	-41	-5	4	-77	-224	-358
940	-387	-289	-94	133	311	389	338	194	48	-48
950	-93	-119	-149	-182	-198	-172	-95	16	107	140
960	146	133	89	42	10	-30	-81	-132	-173	-174
970	-86	64	199	249	164	5	-97	-94	9	154
980	235	193	34	-190	-374	-400	-223	63	286	354

TO BE CONTINUED

CONTINUED (F-15 EAST)

NP.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
990	240	18	-160	-200	-101	86	234	219	51	-150
1000	-283	-273	-98	146	501	294	167	-2	-139	-185
1010	-146	-70	6	50	75	99	82	24	-40	93
1020	-107	-74	-14	38	59	40	31	0	31	91
1030	107	37	-65	-140	-138	-88	-50	1	83	126
1040	1030	80	-32	-113	-91	-4	84	156	191	150
1050	-150	-275	-290	-183	-4	164	247	188	26	122
1060	-189	-155	-25	133	227	193	37	-175	-313	-253
1070	-64	91	148	100	115	-113	-106	9	174	286
1080	281	183	49	-82	-147	-116	-77	-124	-218	-241
1090	-154	4	186	322	329	186	-38	-206	-228	-107
1100	86	222	221	116	-51	-234	-308	-213	-63	36
1110	63	20	-27	-9	44	95	153	179	111	-30
1120	-178	-260	-223	-73	94	165	108	-9	-100	-106
1130	-35	64	193	299	250	37	-168	-239	-186	-46
1140	88	123	63	-30	-109	-170	-196	-151	-37	114
1150	235	265	206	100	-6	-75	-95	-71	-25	18
1160	34	-20	-129	-210	-218	-188	-124	21	196	286
1170	287	144	8	-86	-120	-106	-65	-30	-40	-75
1180	-105	-105	-43	32	66	74	76	81	103	139
1190	141	91	16	-45	-53	-36	-21	-19	-58	-119
1200	-161	-141	-13	161	273	275	170	15	-125	-210
1210	-178	-34	122	192	149	29	-136	-258	-245	-111
1220	69	224	284	220	77	-80	-185	-203	-155	-73
1230	-21	51	67	-80	-63	0	83	115	98	71
1240	40	-4	-57	-57	-87	-112	-95	-21	76	176
1250	259	189	51	-70	-120	-106	-38	46	109	130
1260	88	-23	-135	-186	-180	-130	-49	4	17	34
1270	85	163	222	206	123	31	-24	-49	-46	-29
1280	-23	-41	-70	-99	-120	-90	18	137	161	96
1290	15	-50	-77	-54	-1	47	34	-47	-113	-121
1300	-103	-75	-18	66	112	87	24	-31	-61	-55
1310	-25	10	26	0	-56	-96	-78	-5	70	101
1320	95	68	22	-26	-53	-61	-48	3	59	83
1330	72	26	-40	-86	-83	-48	6	49	40	-10
1340	-62	-75	-39	15	62	99	132	136	119	75
1350	-21	-137	-212	-231	-177	-59	68	161	197	159
1360	68	-23	-59	-23	25	38	24	0	-47	-76
1370	-59	-13	34	54	41	10	-19	-63	-105	-111
1380	-78	-5	94	152	121	50	-17	-55	-43	-8
1390	21	37	21	-38	-105	-116	-66	-6	31	33
1400	23	31	17	-43	-113	-133	-75	5	46	71
1410	97	91	40	-11	-28	-28	-17	11	36	46
1420	51	43	4	-47	-76	-65	-28	3	8	3
1430	15	40	41	13	3	31	55	38	-11	-45
1440	-28	22	58	68	60	231	-30	-88	-117	-118
1450	-71	1	68	89	54	-15	-83	-85	-3	103
1460	188	209	141	12	-105	-167	-166	96	4	70
1470	68	11	-55	-92	-71	-7	59	99	89	20
1480	-66	-12	-103	-58	9	58	54	24	-11	-37
1490	-50	36	103	118	79	11	-55	-83	-80	-55
1500	-50	-23	-28	-147	-49	4	87	153	193	186

TO BE CONTINUED

CONTINUED(F-15 EAST)

NO.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1510	119	27	-40	-71	-75	-68	-46	-27	-25	-23
1520	-18	-18	-37	-68	-82	-74	-36	38	114	158
1530	155	103	19	-70	-128	-138	-110	-47	45	110
1540	91	0	-122	-215	-218	-142	-34	69	148	176
1550	156	99	11	-63	-85	-68	-33	4	26	28
1560	14	1	-30	-78	-98	-71	-22	34	97	124
1570	102	66	33	1	-14	4	48	66	36	13
1580	-73	-115	-106	-59	1	41	43	31	29	24
1590	9	-24	-55	-65	-58	-14	68	130	138	81
1600	-34	-150	-198	-166	-63	61	135	144	108	50
1610	-6	-39	-39	-31	-30	-36	-45	-50	-56	-48
1620	-13	16	15	6	6	8	16	51	29	-5
1630	-48	-50	10	18	19	11	-7	-15	9	52
1640	88	103	88	14	-86	-155	-143	-45	87	164
1650	141	59	-28	-101	-113	-45	41	89	87	44
1660	-17	-78	-110	-89	-14	70	125	140	110	48
1670	-23	-74	-83	-49	12	63	64	25	-16	-50
1680	-71	-58	-6	49	76	75	53	20	-5	-24
1690	-36	-43	-63	-86	-70	-17	14	20	13	11
1700	-20	6	-4	-18	-19	8	39	96	98	43
1720	-23	-73	-79	-40	4	20	-3	-40	-70	-56
1730	9	94	146	137	66	-38	-112	-105	-34	40
1740	68	41	-11	-54	-66	-56	-34	-3	14	25
1750	47	60	61	60	34	-26	-94	-131	-100	-5
1760	75	76	6	-67	-99	-70	10	103	143	99
1770	14	-40	-53	-38	-18	-10	0	14	24	29
1780	51	80	79	45	-5	-39	-46	-26	-8	-17
1790	-42	-67	-75	-42	7	33	39	33	12	-10
1800	-23	-23	-2	24	36	29	24	9	-25	-50
1810	-62	-63	-50	-24	9	40	57	46	6	-33
1820	-58	-69	-40	26	96	142	124	33	-93	-186
1830	-199	-121	7	114	136	62	-48	-130	-133	-38
1840	93	176	179	104	-1	-81	-96	-44	39	111
1850	133	101	58	25	-8	-50	-87	-113	-108	-56
1860	19	75	92	73	26	-19	-40	-30	-3	14
1870	9	-23	-66	-90	-80	-32	34	81	82	46
1880	-5	-51	-59	-31	3	19	-7	-60	-84	-56
1890	0	43	54	41	31	37	39	34	21	-18
1900	-73	-105	-91	-34	36	86	78	16	-46	-60
1910	-1	89	144	134	71	-13	-70	-78	-54	-20
1920	-3	-22	-55	-62	-26	23	54	49	18	-2
1930	0	9	19	8	-33	-88	-112	-70	21	90
1940	93	51	0	-38	-53	-53	-30	23	78	112
1950	122	94	23	-69	-139	-162	-140	-86	-15	51
1960	84	69	24	-8	10	56	78	59	41	-42
1970	-73	-79	-61	-20	39	94	113	79	1	-69
1980	-85	-61	-14	34	55	34	1	-22	-33	-30
1990	-21	-26	-27	-5	14	14	-1	-32	-57	-58
2000	-34	8	49	58	33	3	-20	-26	-10	18
2010	39	34	8	8	-5	3	4	-1	-6	-2
2020	2	4	9	7	2	4	18	34	38	21

TO BE CONTINUED

CONTINUED(F-15 EAST)

NO.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2030	-16	-66	-105	-105	-70	-13	43	74	58	18
2040	-4	9	47	76	74	39	-8	-42	-46	-19
2050	8	18	10	4	-3	-5	2	5	7	-5
2060	-39	-56	-47	-28	-3	12	15	27	38	24
2070	0	-15	-17	-11	6	24	29	14	-13	-37
2080	-38	-18	1	17	26	20	13	14	16	15
2090	8	-5	-16	-16	-7	0	4	0	-14	-26
2100	-22	0	16	-8	-63	-97	-76	-3	78	127
2110	113	57	-2	-42	-46	-25	-6	0	-6	-15
2120	-9	10	28	24	2	-35	-68	-66	-25	14
2130	21	9	0	-10	2	54	54	43	9	-13
2140	-3	29	68	93	81	31	-39	-88	-113	-83
2150	-28	16	29	26	21	14	9	5	-7	-29
2160	-52	-56	-38	-14	7	23	16	9	-18	-1
2170	29	57	58	37	17	-1	-18	-20	-25	-29
2180	-26	-28	-20	1	24	33	20	-4	-28	-50
2190	-51	-28	3	29	28	2	-27	-26	-17	18
2200	39	31	9	-19	-35	-16	11	22	19	5
2210	-9	-26	-33	11	47	61	50	52	26	24
2220	9	-9	-36	-78	-105	-88	-35	28	78	94
2230	69	19	-25	-43	-35	-6	15	14	-10	-41
2240	-45	-11	44	86	81	31	-21	-52	-40	5
2250	44	45	9	-46	-95	-106	-69	-12	34	59
2260	54	37	38	60	69	55	30	9	1	9
2270	17	13	-6	-36	-60	-53	-11	36	48	11
2280	-65	-80	-74	-27	34	69	51	-10	-63	-64
2290	-30	35	64	68	10	-28	-44	-21	19	45
2300	22	-46	-96	-85	-30	53	76	83	61	34
2310	17	14	9	-22	-71	-103	-101	-69	-6	64
2320	96	68	1	-60	-68	-15	56	104	101	61
2330	5	-43	-59	-46	-20	0	6	0	-6	-6
2340	7	33	43	13	-41	-75	-73	-45	-6	17
2350	17	8	0	-4	9	26	26	17	-2	-42
2360	-76	-84	-51	2	41	45	20	-1	-2	5
2370	11	9	-6	-38	-59	-43	9	73	101	77
2380	22	-20	-25	14	77	113	86	9	-78	-120
2390	-95	-56	19	53	54	34	11	3	-4	-6
2400	-11	-17	-28	-22	-15	1	23	31	21	4
2410	0	10	28	33	9	-35	-72	-86	-76	-39
2420	14	47	44	20	-3	13	-5	14	23	4
2430	-21	-38	-33	0	39	50	31	-6	-42	-53
2440	-26	11	28	14	-20	-53	-53	-18	41	94
2450	98	50	-6	-55	-76	-59	-17	19	39	31
2460	5	-15	-13	-2	1	-5	-20	-50	-68	-45
2470	2	36	40	11	-24	-39	-18	34	84	99
2480	70	5	-55	-76	-58	-10	44	79	74	34
2490	-5	-18	-2	4	-9	-16	-10	6	33	54
2500	54	28	-13	-47	-39	5	56	77	43	40
2510	-127	-161	-118	-25	69	116	100	37	-40	-80
2520	-70	-18	38	68	61	38	14	2	-5	-13
2530	-25	-43	-54	-45	-61	22	26	5	-21	-26
2540	-2	24	27	-2	-24	-50	-57	-36	-2	24

TO BE CONTINUED

CONTINUED(F-15 EAST)											CONTINUED(F-15 EAST)										
NO.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	NO.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2550	43	36	1	-18	0	28	46	48	21	-16	3070	-62	-25	16	34	8	-33	-51	-34	3	32
2560	-35	-33	-10	14	21	6	-12	-21	-22	-15	3080	46	43	23	4	7	14	-14	-21	-24	-3
2570	2	9	26	33	21	0	-30	-51	-49	-29	3090	-40	-28	-10	3	0	-25	-38	-3	14	46
2580	-20	20	19	13	7	6	9	14	13	-5	3100	56	30	-8	-36	-40	-15	20	36	22	-5
2590	-26	-40	-38	-18	0	0	-9	-16	-11	7	3110	-24	-15	8	26	28	0	-35	-50	-40	-20
2600	37	71	79	46	-10	-54	-64	-38	3	23	3120	2	11	4	-1	1	10	21	29	26	7
2610	20	4	-18	13	22	56	61	31	-15	-47	3130	48	19	-15	-36	-33	-5	8	31	50	20
2620	-48	-32	-8	-13	23	19	9	1	0	9	3140	48	19	-24	-11	4	12	14	27	29	20
2630	18	9	-5	-17	-18	-13	0	7	6	6	3150	2	-20	-24	-11	16	18	1	-17	-26	-25
2640	-1	-30	-56	-59	-39	1	45	66	50	4	3170	-10	2	-19	9	7	-32	-51	-50	-28	8
2650	-48	-64	-33	11	33	29	4	-12	-8	26	3180	35	31	2	20	-15	6	24	28	9	-20
2660	56	50	25	-3	-28	-31	-6	24	39	20	3190	-50	-20	4	30	44	30	0	-20	-17	2
2670	-15	-33	-21	16	48	49	14	-35	-65	-55	3200	24	28	9	-16	31	-31	-20	-8	0	-3
2680	-15	30	59	46	1	-36	-54	-53	-21	29	3210	-24	-35	3	29	41	34	17	3	0	0
2690	64	68	54	26	-5	-22	-29	-23	-2	22	3220	-2	-10	-15	-17	-16	3	39	68	74	46
2700	34	28	9	-23	-57	-71	-55	-20	13	27	3230	0	-42	-63	-53	-21	11	39	50	38	6
2710	9	-26	-55	-59	-35	5	36	48	36	9	3240	-25	-43	-35	-10	11	22	14	-3	-23	-31
2720	-18	-22	0	29	49	50	40	25	-5	-42	3250	-18	13	43	49	31	4	-17	-33	-26	-1
2730	-65	-71	-55	-25	-1	13	22	30	29	14	3260	27	38	21	-11	-34	-38	-25	-3	13	14
2740	-5	-26	-38	-35	-11	18	38	36	14	-10	3270	0	-25	-41	-39	-22	0	14	19	13	9
2750	-20	-22	-20	-6	9	27	39	38	11	-20	3280	12	15	16	8	2	0	-1	-2	2	11
2760	-37	-37	-30	-23	-15	-11	-22	-36	-33	-11	3290	18	14	0	-12	-11	4	16	12	3	-5
2770	15	34	48	46	16	-7	-2	18	35	33	3300	-8	-6	4	19	24	5	-30	-65	-71	-44
2780	6	-27	-45	-36	-5	35	63	61	33	-1	3310	1	39	53	41	26	21	26	24	9	-15
2790	-20	-16	12	38	36	9	-24	-47	-41	-14	3320	-38	-45	-24	23	73	88	50	20	-77	-83
2800	7	9	10	17	18	5	-13	-30	-35	-20	3330	44	9	41	36	0	-43	-59	-34	11	48
2810	1	24	38	41	35	21	0	-13	-8	3	3340	-64	9	-39	-69	-69	-38	6	31	23	-5
2820	3	-11	-31	-35	-25	-9	1	3	-3	-9	3350	-30	-28	-1	29	49	47	21	-10	-34	-37
2830	-10	-6	0	4	4	-2	-21	-35	-35	-20	3360	-20	6	33	44	59	24	0	-20	-51	-58
2840	2	21	39	58	66	49	16	-8	-22	-35	3370	-14	0	11	9	-9	-35	-50	-59	-4	52
2850	-36	-22	1	19	14	-15	-46	-56	-44	-11	3380	59	69	54	21	-13	-31	-30	-16	-2	7
2860	23	48	54	31	-1	-19	-12	9	33	43	3390	15	13	14	20	23	13	-8	-28	-33	-19
2870	41	19	-15	-38	-41	-34	-14	6	8	-1	3400	0	4	0	-15	-33	-36	-32	1	30	48
2880	-10	-12	-11	-1	9	-3	-25	-33	-18	14	3410	36	0	0	-35	-48	-35	-3	39	69	78
2890	41	46	24	0	-21	-30	-24	0	16	16	3420	26	-24	-61	-68	-43	-7	19	26	15	-7
2900	9	-1	-5	3	15	20	11	-15	-44	-52	3430	-22	-27	-18	1	9	14	12	9	1	7
2910	-33	-1	19	19	0	-30	-50	-44	-9	40	3440	-11	-5	16	29	34	34	29	19	7	-3
2920	82	96	76	24	-33	-65	-60	-20	26	56	3450	-12	-19	-25	-3	-25	-13	0	-16	0	18
2930	50	14	-23	-48	-20	21	51	53	29	-5	3460	-9	-5	0	-3	-13	-25	-26	-16	0	26
2940	-5	-28	-18	14	40	38	9	-23	-40	-37	3470	29	17	-3	-4	-12	-8	1	21	38	34
2950	-19	-1	-4	-25	-41	-40	-27	3	49	79	3480	37	32	14	-4	-12	-8	-1	21	38	34
2960	67	14	-43	-75	-63	-15	34	64	54	4	3490	18	4	-4	-5	-3	0	0	-1	-5	-10
2970	-48	-81	-72	-30	23	52	34	-6	-37	-45	3500	-14	-19	-13	4	20	27	21	-6	-8	-15
2980	-21	17	40	34	20	11	2	-1	14	32	3510	-15	-2	14	28	15	-3	-16	-18	-4	15
2990	34	17	-10	-26	-14	4	15	9	-15	-42	3520	16	22	12	-8	-54	-28	-19	-8	4	15
3000	-44	-19	11	29	24	10	0	-7	-12	-5	3530	18	11	7	1	-3	-6	-15	-27	-2	-26
3010	13	30	34	19	-1	-18	-33	-49	-48	-18	3540	-10	5	9	-21	-28	-20	0	19	21	-33
3020	22	59	71	49	5	-35	-50	-39	-12	14	3550	8	-7	-18	-21	-11	11	29	23	-3	-33
3030	25	9	-20	-46	-48	-13	44	84	78	29	3560	-47	-42	-20	8	31	38	25	-6	-6	-3
3040	-30	-71	-76	-47	-1	37	54	40	7	-15	3570	0	4	5	1	-5	-10	-11	-6	4	-9
3050	-13	0	13	12	6	8	17	29	29	13	3580	8	9	8	8	-20	-23	-15	-4	31	44
3060	-11	-39	-48	-25	17	53	58	29	-21	-62											

TO BE CONTINUED

TO BE CONTINUED

CONTINUED(F-15 EAST)

CONTINUED(F-15 EAST)

Nd.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
3590	33	1	-31	-49	-39	-3	34	49	41	19	-13	-23	-25	-16	2	21	29	24	9	-7	
3600	0	-3	5	7	1	-10	-16	-15	1	22	4120	-18	-9	4	10	6	0	-10	0	9	-7
3610	36	31	9	-13	-25	-19	0	24	41	39	4130	-11	8	18	18	9	3	0	0	1	-18
3620	18	-12	-32	-36	-29	-16	-13	-20	-25	-16	4140	12	12	5	-2	9	9	6	15	5	8
3630	3	19	24	19	3	-7	-7	-4	4	14	4150	24	24	20	9	-2	-8	-7	0	9	22
3640	13	-1	-15	-19	-10	9	20	13	2	4	4160	16	7	10	-6	-19	-6	3	8	9	9
3650	-16	-14	-3	9	19	23	21	10	-5	-20	4170	1	-7	-12	-11	-5	1	8	9	13	9
3660	-25	-15	-5	14	18	9	3	-4	9	8	4180	0	-3	-4	1	8	4	-8	17	14	4
3670	14	-5	-11	-16	-21	-23	-18	-10	-1	9	4190	0	-3	-4	1	8	4	-8	17	14	4
3680	19	21	21	13	2	-9	-13	-8	5	18	4200	6	8	0	-13	-23	-2	9	22	23	9
3690	23	17	9	1	3	14	23	19	4	-14	4210	14	8	0	-9	-8	0	8	6	0	9
3700	-28	-31	-20	-6	0	0	-10	-17	-14	-7	4220	1	14	24	25	19	4	-6	-9	-5	0
3710	2	13	9	-1	-14	-17	-5	11	28	28	4230	0	3	7	6	2	0	4	9	4	0
3720	8	-18	-32	-32	-16	11	30	34	20	-6	4240	-8	-24	-32	-29	9	3	3	-3	-5	4
3730	-28	-30	-18	-1	21	24	19	9	9	-3	4250	0	-2	0	5	9	3	-3	-5	-4	9
3740	-15	-16	-7	3	9	13	9	5	1	6	4260	0	3	3	0	-3	-6	-6	-3	-3	4
3750	9	21	6	4	0	-11	-25	-30	-25	-6	4270	4	0	-5	-3	2	5	4	1	0	-5
3760	13	21	15	4	-4	-3	7	19	20	8	4280	-11	-19	-20	-14	-10	-5	4	0	-3	-10
3770	-11	-25	-25	-10	15	41	44	29	8	-9	4290	-19	-20	-12	29	32	19	26	0	-15	-19
3780	-10	0	8	-5	-8	-20	-21	-4	19	29	4300	9	9	26	31	24	5	-14	-27	-24	-7
3790	13	-21	-46	-41	-19	1	11	7	-5	-17	4310	12	26	29	19	1	-10	-13	-5	0	5
3800	-26	-23	-5	12	14	3	-10	-15	-6	6	4320	4	2	1	4	2	-3	-5	-2	1	-8
3810	13	13	10	17	4	0	0	1	1	0	4330	9	11	3	-11	-22	-7	7	14	13	0
3820	-1	10	4	13	18	14	5	0	-9	-20	4340	5	-5	-6	0	11	20	18	6	-13	-25
3830	-25	-20	-6	4	6	4	1	0	-1	3	4350	-27	-19	-8	-9	-3	-8	2	14	19	0
3840	16	27	31	26	14	5	-1	-3	0	0	4360	9	7	18	-13	2	19	26	0	0	0
3850	0	1	8	9	13	13	4	-6	-15	-20	4370	0	8	18	16	16	16	30	-36	8	0
3860	-22	-21	-14	-3	0	-8	-21	-28	-22	-6	4380	4	14	16	16	12	9	4	-8	-11	-8
3870	9	16	11	0	-9	-10	-5	4	12	14	4390	0	4	4	4	0	-2	-8	-12	-18	-8
3880	9	-5	-20	-30	-28	-20	-5	5	10	4	4400	-18	-16	-5	3	3	0	-9	-9	-5	2
3890	15	6	-4	-12	-12	-15	5	10	4	-2	4410	5	5	3	2	8	5	-9	-5	2	2
3900	-10	-14	-8	2	9	15	18	14	8	4	4420	-8	-8	1	12	11	11	34	28	11	-2
3910	7	14	24	28	29	29	26	19	4	-13	4430	1	-5	-4	0	3	4	9	1	-2	8
3920	-27	-36	-35	-25	-11	-2	3	7	7	4	4440	-8	-4	0	0	2	4	11	13	8	3
3930	4	8	9	15	14	6	-2	0	6	9	4450	14	-2	-2	-4	9	4	6	0	18	19
3940	14	16	11	-1	-13	-18	-18	-10	0	-14	4460	14	9	2	-4	2	4	9	0	0	8
3950	9	-1	-15	-18	-12	-2	-3	-10	-18	-5	4470	1	-4	-5	0	0	9	13	5	-7	-18
3960	-11	-6	3	6	1	-5	-13	-20	-18	-5	4480	-22	-16	0	18	24	0	-11	-21	-20	8
3970	11	19	15	-13	-6	-10	-3	8	20	20	4490	-13	-3	1	2	20	6	-11	-21	-4	-3
3980	7	-6	-12	-13	-9	-6	-8	-7	-5	8	4500	0	6	13	14	14	6	-4	-11	-9	-4
3990	23	30	21	1	-14	-15	-5	5	8	2	4510	0	7	7	3	0	-5	-8	-10	-9	9
4000	-8	-18	-20	-13	-5	5	8	4	0	1	4520	4	10	14	13	6	0	4	29	24	6
4010	4	2	0	1	6	16	27	26	13	-4	4530	7	-2	-13	-16	-10	3	20	9	6	9
4020	-16	-18	-10	6	21	23	13	-5	-21	-27	4540	-11	-19	-11	2	16	22	14	-22	-18	-26
4030	-14	9	27	28	14	-9	-28	-9	-19	-5	4550	-18	3	19	23	11	-8	-21	-22	-10	6
4040	9	14	8	-5	-19	-22	-15	2	15	19	4560	13	7	7	-9	-11	-5	2	9	14	14
4050	13	4	-5	-8	-2	6	11	17	16	7	4570	9	3	-1	-6	-6	-3	-2	-9	-18	-22
4060	-2	-11	-13	-6	3	7	7	7	0	-3	4580	-16	5	12	19	13	0	-2	-9	-10	1
4070	-1	0	1	6	4	-3	-8	-9	-4	2	4590	13	16	11	0	-15	0	-9	5	13	9
4080	8	9	5	4	4	9	14	14	4	-5	4600	0	-10	-13	-8	-3	0	-1	-1	-3	0
4090	-13	-15	-14	-12	-10	-5	0	2	3	3	4610	2	5	7	4	-2	-11	-17	-15	-4	4
4100	0	-9	-16	-15	-6	0	4	5	6	-1	4620	4	-1	-7	-10	-9	-4	14	14	14	9

TO BE CONTINUED

TO BE CONTINUED

RECORD = F-15 COMPONENT = NORTH STATION = HITACHINAKA-F
 DATE AND TIME = 1986-11-15-15-6 TOTAL NUMBER OF DATA = 5100
 SAMPLING INTERVAL = 0.010 (SEC) SCAL = 0.10000
 SIGNAL = GR. ACC.
 CONNECTION POINT IN DATA NUMBER = 5100,

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
4630	3	-1	-1	2	6	6	0	-10	-14	-7
4640	4	17	24	21	9	-4	-10	-9	-5	0
4650	-1	-6	-10	-9	2	5	6	6	6	4
4660	9	10	9	6	1	1	14	17	17	14
4670	4	-5	-10	-9	-4	0	1	0	0	0
4680	-3	-3	2	4	2	-1	-5	11	17	14
4690	21	14	0	-12	-17	-13	11	8	1	-10
4700	3	-7	-9	-6	1	8	1	-10	-10	0
4710	-20	-20	-10	4	16	14	5	-5	-10	0
4720	-9	-14	-18	-11	-3	4	6	0	0	0
4730	-8	-10	-6	1	9	15	13	4	-5	-11
4740	0	14	24	26	27	19	4	-11	-23	-22
4750	-9	5	14	16	9	-2	-14	-15	-8	5
4760	18	25	24	13	0	-8	-10	-3	6	11
4770	9	4	1	-1	-5	-8	-10	-10	-8	-4
4780	-1	0	1	0	-3	-1	1	5	8	9
4790	7	-1	-13	-21	-20	-10	4	11	12	9
4800	1	-9	-10	-6	-1	1	-2	-10	-10	-10
4810	-6	-1	2	2	0	-15	-8	-6	-8	6
4820	18	20	14	7	-1	0	6	18	26	26
4830	34	1	-9	-11	-10	-3	2	5	4	0
4840	-1	0	2	5	6	2	-5	-10	-8	-2
4850	0	-1	-5	-5	-1	3	4	4	2	-1
4860	-10	0	9	16	14	4	4	4	2	0
4870	-3	-1	4	9	9	8	3	0	-1	-3
4880	1	4	9	10	9	8	3	1	4	9
4890	-6	-8	-7	-6	-6	-5	-3	1	2	5
4900	8	3	0	-1	-5	-2	1	1	2	5
4910	6	7	5	0	-5	-4	2	6	6	3
4920	-6	-13	-14	-9	1	11	14	8	2	-1
4930	0	1	3	3	1	-7	-8	-3	-3	1
4940	4	7	5	4	4	0	-4	-5	-3	0
4950	1	3	2	0	1	0	2	4	4	7
4960	8	8	3	3	4	6	6	0	-3	-1
4970	-16	-15	-8	-8	-16	-17	-10	0	7	6
4980	6	8	2	-8	-16	-19	19	7	-5	-12
5000	-10	-12	-13	-6	3	-9	-15	-10	-1	8
5010	15	14	9	1	3	0	5	8	9	6
5020	1	0	0	2	6	4	-1	-7	-9	-7
5030	5040	-2	2	4	3	-5	8	-5	3	-1
5040	-6	-3	-1	-13	-10	-3	5	7	3	-1
5050	4	-5	2	2	8	4	0	-2	0	2
5060	-3	-1	3	3	4	2	2	-1	-5	-9
5070	4	-5	2	6	4	0	-6	-8	-7	-3
5080	-8	-3	2	6	4	0	-6	-8	-7	-3
5090	1	-7	6	5	2	-1	1	1	6	9

END

TO BE CONTINUED

CONTINUED (F-15 NORTH)

CONTINUED (F-15 NORTH)

NO.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
470	-42	-80	-97	-87	-22	52	101	149	148	176	139	91	25	-3	-12	-24	-56	-110	-141	-117
480	5	-26	-43	-63	-60	-19	2	-46	-125	-131	990	101	190	215	176	50	-66	-86	-81	-84
490	-52	62	188	244	166	29	-81	-175	-226	-175	1010	-56	-35	-49	17	72	108	98	59	65
500	-66	41	101	97	57	20	44	92	86	29	1020	120	141	-24	-115	-167	-122	20	144	185
510	-10	-31	-96	-145	-86	-27	3	62	74	0	1030	120	-48	-295	-219	-85	9	46	72	118
520	-62	-46	8	78	174	197	61	-110	-157	-117	1040	143	113	48	-146	-184	-106	40	155	173
530	-59	19	62	31	-26	-11	-91	32	200	164	1050	110	20	-38	-36	17	59	41	-52	-188
540	-13	-112	-95	-96	-111	32	36	70	-165	-125	1060	-341	181	59	200	210	134	34	-11	16
550	-7	12	29	28	13	32	36	-70	-68	-79	1070	143	121	15	-112	-188	-169	-66	44	163
560	-40	24	82	95	84	65	-7	-63	-69	-49	1080	106	13	-16	43	117	121	73	8	-70
570	3	21	17	41	57	16	-61	-43	79	109	1090	-122	-6	107	147	119	49	-65	-129	-140
580	68	25	-15	-81	-147	-156	-71	61	126	111	1100	-41	28	38	-9	-85	-152	-188	-195	-151
590	50	-45	-84	-28	48	110	127	71	9	-48	1110	45	172	250	213	111	16	-44	-39	-10
600	-96	-81	-24	21	31	13	-1	-9	3	20	1120	-17	-23	-73	-141	-118	11	136	139	-15
610	-23	-102	-126	-64	34	101	105	71	51	7	1130	-127	93	-34	32	87	109	72	-85	-73
620	-50	-11	87	136	118	74	26	-58	-158	-209	1140	-1	67	101	132	165	146	40	-71	-132
630	-213	-199	-162	-93	-22	111	299	358	238	46	1150	-161	-84	42	141	156	111	34	-48	-132
640	-132	-853	-313	-344	-408	-537	-651	-535	-12	766	1160	-16	65	79	29	-49	-91	-46	67	150
650	1436	1712	1450	687	-327	-255	-1768	-1688	-1062	-184	1170	17	-131	-229	-219	-130	-5	92	84	3
660	491	697	525	235	106	296	655	892	847	411	1180	-71	-13	68	101	52	-16	28	17	85
670	-325	-1017	-1291	-1003	-303	520	1070	1057	535	-256	1190	107	-19	-175	-245	-173	0	181	258	30
680	-979	-1190	-715	143	934	1343	1214	621	-158	823	1200	-29	-75	-28	66	113	59	-84	-239	-354
690	-119	-985	-561	27	593	846	753	477	91	-231	1210	-216	-36	151	265	279	230	147	41	-44
700	-344	-356	-310	-152	-30	-75	-194	-298	-276	-24	1220	-80	-38	27	50	13	-52	-140	-205	-162
710	314	472	368	61	-315	-589	-651	-456	-66	323	1230	129	203	35	-116	-184	-135	22	207	307
720	570	698	701	472	57	-337	-599	-705	-624	-373	1240	261	80	-126	-261	-147	19	136	163	51
730	-56	198	308	298	269	279	312	309	206	24	1250	-63	-126	-198	-13	57	86	75	31	-69
740	-164	-310	-343	-194	19	105	79	8	-89	-111	1260	-26	13	25	15	6	0	-18	-61	-59
750	-16	104	178	147	-31	-257	-353	-239	44	357	1270	5	101	180	212	181	102	5	-73	-106
760	533	667	144	-298	-621	-642	-363	89	526	717	1280	-82	-43	-18	-9	13	50	5	-29	-44
770	591	269	-99	-358	-383	-221	-266	62	-15	-226	1290	-61	-56	59	89	71	16	-32	-63	-68
780	-421	-405	-103	416	884	991	670	77	-545	-995	1300	-37	-54	-88	-93	-43	34	84	84	56
790	-1120	-827	-263	247	565	703	635	404	144	-45	1310	-30	-76	-66	-19	34	65	52	-1	-66
800	-190	-367	-550	-583	-427	-192	76	327	473	520	1320	-86	-29	48	101	106	74	25	-9	-20
810	499	376	168	55	-297	-551	-722	-668	-346	125	1330	-67	-101	-85	-38	0	42	90	96	35
820	533	679	540	226	-123	-373	-418	-192	202	506	1340	-140	-88	13	81	99	73	26	-21	-61
830	541	275	-147	-518	-723	-669	-352	32	330	511	1350	32	76	91	79	51	3	-46	-81	-15
840	545	640	311	259	266	218	38	-232	-514	-729	1360	82	76	80	-11	-107	-169	-185	-159	-89
850	-797	-645	-263	214	607	856	929	754	351	-135	1370	62	76	55	38	55	77	69	41	-17
860	-562	-795	-773	-546	-201	97	210	190	150	125	1380	-94	-98	-68	-25	9	63	134	165	142
870	137	203	266	250	92	177	-397	-469	-409	-264	1390	94	26	-63	-128	-125	9	88	-54	14
880	-103	76	279	420	442	382	295	215	114	-30	1400	96	17	-60	-82	37	22	47	49	42
890	-10	-212	-258	-287	-279	-258	-189	-51	73	124	1410	-86	-16	10	56	45	-33	-117	-127	-56
900	129	88	12	-25	26	136	224	62	96	-80	1420	182	228	173	54	-66	-133	-41	-66	66
910	-239	-348	-323	-148	48	155	144	67	11	21	1430	0	-72	-80	-39	-16	-47	-87	-80	25
920	67	121	153	118	28	-40	-66	15	77	93	1440	21	17	33	16	-30	-34	35	111	117
930	49	-88	-241	-273	-200	-80	91	235	268	212	1450	-56	-118	-119	-54	34	92	15	-88	-127
940	128	42	-44	-120	-167	-188	-205	-214	-194	-135	1460	-68	37	119	144	113	40	-53	-122	-136
950	-14	156	308	422	466	340	94	-135	-311	-394	1470	-33	5	45	41	11	-4	-1	-2	-14
960	-334	-190	-57	32	95	101	52	3	-44	-66	1480	22	53	74	76	61	44	17	-13	-16
970	40	158	244	294	170	-83	-335	-462	-430	-62	1490	-23	-82	-128	-125	-62	37	114	126	75
980	-266	-61	96	161	121	-9	-115	-66	66	137	1500	-118	-147	-80	55	160	162	74	-58	-178

TO BE CONTINUED

TO BE CONTINUED

CONTINUED(F-15

NORTH)

(1) (2) (3) (4) (5) (6) (7) (8) (9) (10)

CONTINUED(F-15

NORTH)

(1) (2) (3) (4) (5) (6) (7) (8) (9) (10)

CONTINUED(F-15

NORTH)

(1) (2) (3) (4) (5) (6) (7) (8) (9) (10)

1510	-146	-6	113	172	152	62	-39	-90	-72	-12	2030	-62	-50	-24	20	59	71	49	-1	-66	-105
1520	42	76	79	39	-33	-80	-54	10	52	56	2040	-86	-11	72	111	109	75	20	34	-63	-53
1530	45	16	-44	-112	-142	-105	-9	99	161	176	2050	-17	11	25	31	40	41	17	-22	-49	-30
1540	132	16	-103	-154	-110	11	127	170	140	45	2060	-9	12	13	-9	-36	-59	-64	-37	6	33
1550	-74	-147	-158	-109	-19	49	61	34	-19	-66	2070	28	2	-17	0	44	79	83	49	6	-25
1560	-75	-61	-14	38	77	97	81	37	-7	-39	2080	50	-58	-42	-36	-50	-59	-37	9	51	81
1570	-50	-28	10	32	16	-33	-62	20	77	72	2090	90	67	19	-24	-46	-37	-12	-4	-5	-3
1580	20	-50	-103	-120	-90	-11	80	98	42	-24	2100	-4	-4	0	3	-8	-41	-66	-57	-12	36
1590	-62	-66	-41	-10	11	24	32	29	18	27	2110	76	92	67	1	-63	-88	-59	0	41	40
1600	45	46	42	50	57	48	24	-17	-77	-108	2120	9	-24	-40	-31	10	84	92	80	44	8
1610	-94	-70	-48	-37	-54	-80	-77	-52	3	87	2130	-24	-40	-38	-27	-10	1	5	15	21	-4
1620	156	180	160	110	55	15	-1	-18	-40	-63	2140	-46	-78	-78	-42	-4	22	47	45	20	9
1630	-95	-123	-112	-64	-6	49	83	83	55	27	2150	22	57	77	52	-9	-61	-71	-45	0	29
1640	19	13	-1	-1	-23	-72	-115	-135	-115	-135	2160	35	34	20	-4	14	-7	-8	-27	-43	-24
1650	-112	-50	19	81	107	89	43	-2	2	52	2170	-21	-8	-4	5	15	22	38	35	3	-40
1660	90	92	67	-3	-99	-144	-117	-38	2	2	2180	-27	0	47	82	87	64	25	-16	-38	-29
1670	50	10	-50	-114	-136	-81	19	101	132	121	2190	2	22	17	-2	-21	-31	-36	-36	-37	-44
1680	80	22	-4	-4	8	7	-25	-48	-32	-10	2200	-64	-87	-90	-61	-1	59	97	98	69	29
1690	0	12	2	-42	-81	-80	-44	-7	27	50	2210	12	19	24	9	-22	-53	-66	-59	-20	52
1700	35	-19	-60	-39	25	87	101	69	15	-27	2220	60	48	22	-4	-28	-38	-34	-24	-21	-30
1710	-44	-26	11	26	7	-27	-51	-43	-18	11	2230	-35	-26	-16	-10	-9	0	28	42	31	11
1720	52	88	108	95	52	0	-50	-91	-112	-106	2240	0	-11	-13	-11	-19	-26	-14	10	27	40
1730	-61	0	51	69	49	12	-15	-34	-36	-1	2250	42	24	-7	3	-30	-46	-37	0	39	42
1740	66	109	101	52	-4	-68	-130	-164	-140	-71	2260	11	-2	-7	4	21	14	-16	-32	-14	22
1750	3	56	74	59	17	-14	1	44	72	80	2270	52	57	32	-13	-61	-68	77	49	13	-8
1760	77	32	-69	-160	-159	-64	27	62	69	51	2280	-33	-95	-111	-66	12	68	77	69	13	-8
1770	-11	-66	-45	17	62	59	30	12	5	11	2290	-11	0	12	-4	-42	-66	-68	-52	-21	9
1780	-34	-56	-61	-56	-39	-1	41	55	35	-7	2300	34	51	51	40	32	22	-1	-16	2	36
1790	-35	-17	31	84	97	46	-27	-80	-74	-12	2310	37	0	-33	-39	-37	-21	6	12	-16	-56
1800	49	72	48	-11	-39	-3	41	47	1	-84	2320	-73	-50	3	61	91	74	27	-21	-48	-37
1810	-150	-144	-69	45	144	168	107	11	-70	-91	2330	-1	27	47	41	9	-12	-9	11	30	38
1820	-36	37	76	82	61	-1	-66	-86	-81	-61	2340	29	1	-29	-40	-29	-11	0	6	3	-4
1830	-26	11	38	45	32	10	-18	-43	-45	-14	2350	-17	-22	-10	12	30	17	-16	-36	-36	-26
1840	30	54	47	15	-23	-52	-49	-7	50	97	2360	-7	17	50	77	77	51	0	-59	-72	-41
1850	108	67	8	-50	-105	-109	-63	-9	19	7	2370	-16	-1	5	-5	-16	-22	-24	-4	25	45
1860	-30	-58	-28	12	32	35	19	-1	0	0	2380	35	8	-21	-45	-50	-27	0	22	47	62
1870	27	69	107	107	61	-5	-44	-37	-11	4	2390	51	24	-2	-24	-40	-41	-27	-4	-4	4
1880	-12	-61	-103	-111	-83	-27	29	54	48	32	2400	4	12	26	44	42	25	4	-14	-26	-38
1890	14	-1	4	22	31	31	25	8	-23	-58	2410	-53	-66	-73	-68	-52	-25	16	51	59	47
1900	-87	-82	-40	8	71	134	150	109	35	-47	2420	26	-6	-39	-54	-27	16	57	84	78	39
1910	-106	-112	-62	2	40	44	65	2	-16	-1	2430	-5	-45	-70	-60	-27	-9	-6	4	16	21
1920	29	50	41	2	-54	-92	-100	-73	-32	9	2440	28	28	7	-25	-46	-41	-21	7	32	66
1930	25	16	7	13	31	48	62	68	40	-13	2450	50	50	47	37	11	-17	-41	-60	-56	-29
1940	-61	-88	-80	-29	38	77	63	6	-46	-61	2460	7	36	42	32	17	-2	-21	-30	-50	-34
1950	-40	1	42	64	55	24	-7	-24	-9	14	2470	-36	-41	-31	-9	4	8	15	21	26	34
1960	15	-3	-22	-31	-25	-3	17	17	-12	-65	2480	25	-4	-33	-34	1	65	115	121	82	17
1970	-103	-85	-11	71	114	114	71	-11	-96	-128	2490	-44	-69	-45	2	28	22	-9	-42	-51	-30
1980	-84	21	121	155	111	28	-59	-90	-63	-1	2500	-4	13	19	4	-10	-11	-5	2	0	-17
1990	52	48	-11	-69	-74	-29	38	81	71	16	2510	-28	-24	-7	20	38	29	-3	-36	-36	3
2000	-63	-123	-108	-21	77	131	124	72	14	-24	2520	46	48	6	-57	-108	-112	-69	-4	55	76
2010	-35	-38	-51	-57	-55	-44	-16	29	61	52	2530	49	2	-24	-12	21	35	12	-34	-68	-68
2020	17	13	12	17	13	5	-10	-10	-36	-66	2540	-27	41	92	91	42	-23	-57	-29	-34	-7

TO BE CONTINUED

TO BE CONTINUED

CONTINUED (F-15 NORTH)

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2550	6	15	12	4	1	13	39	59	50	22
2560	10	13	14	-4	-24	-37	-39	-39	-32	-26
2570	-31	-35	-14	28	75	93	71	38	3	-21
2580	-17	10	36	35	-5	-67	-108	-109	-70	-7
2590	50	77	57	9	-21	-23	-7	15	17	8
2600	-3	-18	-29	-26	-15	-4	8	22	25	7
2610	-17	-28	-22	-3	17	39	49	38	17	1
2620	-9	-24	-38	-41	-29	-3	25	48	57	46
2630	22	0	-24	-46	-48	-34	-18	-5	-2	-7
2640	-12	-26	-43	-36	-3	30	45	67	41	31
2650	22	30	42	36	9	-26	-49	-50	-32	-7
2660	9	17	14	9	-7	0	13	20	16	9
2670	4	-1	-4	-15	-33	-45	-33	-11	8	29
2680	40	27	1	-12	-16	0	22	33	22	4
2690	-13	-22	-28	-16	5	25	15	10	11	-19
2700	-9	2	8	-1	-19	-30	-37	-46	-46	-25
2710	21	21	32	34	21	10	-4	-22	-28	-16
2720	-3	-12	-28	-31	-19	-7	-2	3	3	3
2730	6	9	13	13	13	22	41	54	51	32
2740	2	-24	-33	-18	1	9	3	0	2	6
2750	10	9	6	6	8	6	5	-4	-1	-34
2760	-33	-9	28	47	32	0	-28	-32	-8	24
2770	56	62	32	-14	-46	-47	-32	-16	-3	-5
2780	-21	-35	-24	0	13	25	29	20	5	-8
2790	-10	-6	2	9	11	3	-11	-20	-7	12
2800	21	-5	-19	-31	-21	-1	19	26	13	-7
2810	-28	-37	-30	-6	13	13	-4	-22	-37	-41
2820	-23	15	52	65	55	22	-7	-20	-23	-16
2830	2	15	10	-5	-7	12	38	49	42	25
2840	3	-17	-35	-39	-21	0	1	-3	5	22
2850	26	13	0	-3	-6	-15	-22	-21	-10	-1
2860	-1	-10	-14	-15	-8	9	26	25	11	-6
2870	-9	0	14	27	28	13	-6	-11	-11	-4
2880	9	14	-3	-29	-41	-25	10	46	61	41
2890	1	-37	-54	-39	-6	17	5	-22	-40	-40
2900	-19	12	38	44	22	-7	-27	-26	-10	6
2910	22	36	36	29	26	21	9	-7	-28	-43
2920	-47	-40	-26	-14	-17	-26	-26	-16	0	24
2930	40	39	22	3	-9	-14	12	-4	-1	-5
2940	-11	-11	-2	10	17	17	20	21	27	30
2950	17	-6	-28	-43	-32	0	28	34	12	-13
2960	-21	-18	-14	-11	-6	-1	-3	4	28	44
2970	45	32	-6	-19	-32	-24	-4	18	26	0
2980	-39	-66	-6	-47	-16	17	32	22	4	-3
2990	-7	-9	-9	-5	15	42	55	44	27	11
3000	-7	-20	-21	-16	-11	-10	-16	-26	-25	-14
3010	-6	1	11	19	25	42	56	44	12	-24
3020	-47	-49	-40	-25	-10	-9	-19	-16	5	40
3030	62	56	26	-4	-24	-33	-28	-3	35	62
3040	55	28	1	-7	-1	3	7	5	1	0
3050	1	0	-9	-25	-44	-50	-32	7	39	42
3060	19	-10	-37	-50	-56	-1	23	29	20	5

TO BE CONTINUED

CONTINUED (F-15 NORTH)

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
3070	-6	-6	-2	-4	-3	-4	7	31	41	20
3080	-14	-44	-60	-50	-17	9	13	0	-7	-5
3090	2	13	15	-34	-16	-30	2	2	42	65
3100	51	12	-29	-51	-32	12	47	45	10	-30
3110	-46	-18	28	63	64	38	-1	-31	-40	-22
3120	2	12	0	-22	-36	-33	-21	-3	20	30
3130	25	10	-11	-29	-34	-30	6	27	24	0
3140	-28	-39	-21	-29	-20	50	45	24	7	-2
3150	-10	-21	-29	-29	-26	-24	-11	5	10	10
3160	9	6	-1	-12	-19	-10	10	28	31	57
3170	-3	-29	-30	-8	17	29	13	-16	-46	-22
3180	-4	0	25	30	21	11	12	22	29	17
3190	0	-12	-17	-20	-24	-29	-33	-24	0	24
3200	38	42	38	19	-3	-9	8	22	21	5
3210	-12	-26	-26	-16	-4	0	-2	-13	-25	-28
3220	-19	-4	9	19	22	22	15	16	16	15
3230	9	-1	-11	-14	-8	-2	3	12	13	0
3240	-17	-24	-24	-16	0	22	27	16	-4	-26
3250	-34	-4	-3	24	36	24	7	2	6	9
3260	14	16	6	-8	-12	-4	12	20	10	-12
3270	-34	-40	-31	-5	17	20	5	-12	-24	-22
3280	-2	22	42	42	27	6	-1	-4	-14	-31
3290	-44	-38	-17	18	46	50	28	-10	-49	-59
3300	-26	26	67	64	17	-38	-68	-63	-28	13
3310	39	33	0	-37	-59	-48	-11	32	62	62
3320	38	0	-35	-53	-40	9	57	64	38	-1
3330	-39	-59	-53	-16	37	66	58	29	-2	-24
3340	-24	-16	-3	6	17	25	19	5	-4	12
3350	-3	0	3	5	2	-9	-13	-1	10	12
3360	3	-17	-30	-24	-1	20	25	-2	-32	-52
3370	-39	-4	34	50	36	0	32	-43	-28	-1
3380	17	17	3	-12	-16	-1	9	10	1	-3
3390	0	3	0	-2	-11	-20	-25	-21	-1	19
3400	28	25	17	5	-6	0	0	0	-2	-12
3410	-17	-7	9	20	32	37	32	19	2	-10
3420	-9	-3	-1	-3	-7	-7	0	0	-9	-14
3430	-16	-16	-13	-13	-4	8	17	22	22	14
3440	-4	-21	-22	-12	-2	5	3	-7	-23	-36
3450	-28	-2	22	35	31	13	-8	-25	-22	-6
3460	8	12	12	5	0	-6	-4	1	0	-1
3470	-2	3	8	5	0	-9	-18	-22	-11	9
3480	21	17	8	0	-3	-1	-1	-6	-10	-19
3490	-28	-21	-2	17	32	37	19	-7	-24	-14
3500	12	26	14	-7	-20	-30	-28	-11	13	30
3510	29	18	12	10	7	4	0	-2	-4	0
3520	12	25	28	11	-17	-38	-38	-22	0	18
3530	31	34	25	13	3	-1	-4	-6	-2	0
3540	-1	-7	-11	-9	-7	-6	0	3	2	0
3550	62	56	26	-4	-24	-33	-28	-3	35	62
3560	28	1	-7	-1	3	7	5	1	0	0
3570	0	-5	-10	-14	-5	-24	-9	-9	22	12
3580	-14	-13	-5	-24	-17	-31	-39	-27	15	-9
3590	-19	-14	-5	-5	-17	-31	-39	-27	5	38

TO BE CONTINUED

CONTINUED(F-15 NORTH)

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
3590	53	50	32	5	-20	-23	-7	13	30	40
3600	36	16	-3	-19	-27	-19	-8	-1	3	2
3610	2	8	16	16	22	19	10	-1	-12	-15
3620	-12	-10	-11	-10	-11	-12	-10	8	12	13
3630	3	-9	-22	-24	-6	24	48	46	22	-3
3640	-23	-27	-19	-34	-19	-34	-19	-37	-19	11
3650	38	46	30	5	-12	-14	-4	8	9	0
3660	-10	-18	-11	3	9	4	-1	-3	-3	-6
3670	-5	-2	-1	-1	-4	-7	-9	-11	-17	-16
3680	0	17	30	36	29	6	-21	-39	-33	-14
3690	0	10	10	4	-3	-3	8	19	17	3
3700	-9	-18	-12	8	26	32	17	-7	-22	-24
3710	-16	-2	-1	-9	-11	-6	0	8	11	12
3720	15	17	19	9	9	-4	-15	-9	5	17
3730	19	6	-18	-41	-50	-36	-1	30	41	24
3740	-6	-32	-33	-7	33	55	45	12	-26	-52
3750	-46	-17	18	46	51	35	15	1	-5	-1
3760	4	3	2	4	-1	-10	-21	-26	-19	29
3770	-2	9	7	-3	-10	-14	-18	-12	7	29
3780	38	32	14	-7	-18	-18	-14	-12	-17	-23
3790	-19	-3	17	35	36	17	-8	-34	-39	-22
3800	7	31	38	21	0	-12	-9	5	17	21
3810	13	-3	-14	-24	-28	-16	0	10	15	17
3820	14	1	-14	-27	-27	-14	0	13	22	16
3830	0	-16	-23	-4	12	16	8	0	-3	0
3840	-7	-8	4	17	21	19	9	-4	-9	-3
3850	13	32	31	8	-27	-55	-53	-26	8	32
3860	29	6	-18	-32	-26	-4	14	21	17	7
3870	-2	0	5	9	12	13	12	1	-9	-17
3880	-19	-15	-9	-7	-6	-4	-1	2	5	6
3890	-2	-13	-12	0	13	25	27	15	-6	-23
3900	-27	-17	3	22	29	21	9	1	-2	-6
3910	-8	-6	-2	1	11	21	22	17	9	0
3920	-7	-15	-16	-7	-1	-4	-5	-7	-10	-12
3930	-14	-10	-2	6	14	18	19	19	12	-4
3940	-20	-30	-29	-22	-16	-7	-6	-6	-6	0
3950	10	14	5	-6	-16	-22	-17	-5	5	8
3960	3	0	0	0	-2	0	3	6	10	21
3970	31	30	22	11	1	0	0	4	-10	-8
3980	-16	-14	0	15	25	26	15	2	-4	-8
3990	-10	-11	-10	-9	-11	-8	2	17	24	22
4000	11	-2	-12	-17	-16	-7	3	14	19	11
4010	0	-6	-7	0	9	15	17	13	0	-13
4020	-19	-18	-16	-12	-7	-5	-8	-9	-3	2
4030	3	-1	-11	-19	-26	-26	-11	10	27	28
4040	13	-5	-19	-22	-18	-12	-5	0	2	-1
4050	4050	13	-1	2	0	6	19	30	25	13
4060	4060	-6	3	0	-3	-5	-11	-16	-19	-19
4070	4070	-11	-1	8	11	9	3	8	17	21
4080	4080	17	3	-16	-28	-14	-5	2	6	2
4090	4090	0	0	8	17	20	17	11	5	0
4100	4100	-3	-8	-14	-17	-19	-6	10	20	20

TO BE CONTINUED

CONTINUED(F-15 NORTH)

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
4110	17	9	9	0	-9	-12	1	5	6	16
4120	10	16	15	5	-7	-19	-24	-21	-8	12
4130	31	35	21	4	-8	-17	-21	-20	-13	-6
4140	-3	-1	3	10	13	8	0	-8	-9	-2
4150	3	2	-11	-24	-34	-26	-2	22	28	13
4160	-10	-29	-31	-16	2	15	13	0	-12	-8
4170	11	58	48	36	7	-17	-24	-14	5	15
4180	13	-3	-17	14	0	17	25	22	3	-9
4190	-1	12	14	9	0	-4	-4	-1	7	6
4200	-10	-16	-11	-1	8	14	12	11	9	5
4210	-1	-9	-17	-26	-28	-21	-3	11	17	6
4220	-11	-18	-19	-13	-4	4	8	5	1	3
4230	7	8	3	-4	-4	-12	-16	-11	-4	0
4240	0	-1	0	6	10	5	0	-2	1	10
4250	11	10	4	1	3	9	16	13	2	-11
4260	-17	-14	-3	8	13	6	-7	-16	-14	-3
4270	8	11	8	0	-4	-2	3	5	2	-5
4280	-16	-20	-13	0	14	21	17	7	-4	-7
4290	0	14	28	27	12	-8	-20	-20	-13	-1
4300	10	10	0	-10	-12	-6	1	3	0	-9
4310	-20	-24	-23	-11	8	27	32	31	22	8
4320	-8	-18	-17	-10	-4	-2	-5	-7	-6	-6
4330	-2	-1	-2	-10	-17	-15	-2	6	11	8
4340	5	0	0	0	5	12	-15	13	11	8
4350	7	8	8	4	0	-2	-1	4	12	15
4360	13	3	-5	-2	3	10	7	-7	-21	-29
4370	-27	-19	-6	2	-5	0	-9	-5	1	9
4380	8	1	-5	-7	-5	0	4	6	2	-5
4390	-13	-19	-17	-7	9	25	30	17	0	-11
4400	-16	-11	-3	16	18	9	-7	-23	-25	-11
4410	3	14	14	6	-3	-8	-7	0	10	21
4420	23	13	0	-10	-18	-19	-11	2	1	-4
4430	-10	-11	-9	-3	0	1	2	1	0	0
4440	7	8	8	2	-5	-7	0	9	14	11
4450	2	-4	-6	-1	8	9	24	21	8	-2
4460	-7	-8	-3	1	8	9	2	-6	-13	-18
4470	-12	-6	-1	0	-1	-4	-3	-1	4	13
4480	20	17	15	13	6	-1	-5	-5	-3	0
4490	0	0	-6	-9	-9	-10	-11	-11	-8	-6
4500	-3	-1	0	0	-3	-5	-4	-2	-2	-4
4510	-2	1	3	6	10	13	14	12	5	1
4520	-2	-4	-5	-6	-9	-16	-21	-16	-6	6
4530	16	21	20	12	0	-8	-10	-3	6	12
4540	3	-9	-12	-15	-11	-5	0	5	11	13
4550	12	9	4	-6	-13	-11	-2	4	7	3
4560	-5	-10	-9	-1	10	16	11	0	-6	-7
4570	-6	-3	0	3	2	-1	-4	-6	-5	-4
4580	-4	-5	-1	3	8	10	8	3	-3	-6
4590	-1	3	11	12	3	-3	-7	-10	-8	-2
4600	3	7	5	1	-1	-3	-3	-6	-8	-8
4610	-4	1	6	5	-1	-11	-16	-12	0	10
4620	14	9	-1	-11	-12	-7	0	8	13	10

TO BE CONTINUED

RECORD = F-15 COMPONENT = UP STATION = HITACHINAKA-F
 DATE AND TIME = 1986-11-15-15-6 TOTAL NUMBER OF DATA = 5100
 SAMPLING INTERVAL = 0.010 (SEC) SCAL = 0.10000
 SIGNAL = GR. ACC.
 CONNECTION POINT IN DATA NUMBER = 5100

CONTINUED(F-15 NORTH)

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
4630	2	-4	-6	-2	0	2	2	-4	-9	-6
4640	1	6	4	0	-3	-4	0	7	17	19
4650	10	0	-6	4	0	3	3	3	1	0
4660	3	6	10	7	0	-6	-7	-5	0	5
4670	8	8	5	1	-2	-4	-6	-10	-9	-6
4680	-5	-4	0	1	-3	-7	-7	-5	-2	-4
4690	-4	-3	-1	-1	-4	-4	-3	-4	4	12
4700	13	11	4	-2	-6	2	4	12	17	12
4710	3	-2	-7	-5	0	2	2	0	-2	-3
4720	-1	2	5	9	13	17	17	13	5	-1
4730	-4	-4	-3	-4	-5	-7	-8	-4	2	8
4740	8	7	9	12	12	-6	-1	-4	-2	3
4750	10	9	0	-14	-28	-31	-24	-8	4	9
4760	7	-3	-10	-11	-1	10	19	15	0	-15
4770	-22	-17	-8	-2	-4	-8	-12	-9	-1	3
4780	12	8	0	-5	-2	3	9	10	7	-1
4790	-7	-9	-6	0	0	-3	-2	-2	-4	3
4800	-4	-6	-4	0	0	0	2	8	10	7
4810	2	0	-4	-6	-1	9	16	12	3	-1
4820	-3	-4	-5	-3	0	3	5	6	1	-4
4830	-8	-10	-7	0	9	12	7	-1	-6	-5
4840	1	5	8	7	4	4	2	5	8	9
4850	8	2	0	-1	4	-1	-6	-10	-10	-6
4860	-2	-2	0	3	6	8	9	11	11	9
4870	8	8	6	4	1	-1	-2	0	-1	0
4880	3	5	2	0	-1	-4	-9	-10	-2	4
4890	9	9	2	-6	-11	-10	-6	-1	-1	-4
4900	-7	-7	0	7	11	7	0	3	4	-5
4910	-4	-3	-4	-6	-8	-3	4	9	9	3
4920	0	-6	-12	-17	-16	-11	-7	-3	0	3
4930	5	6	8	8	5	0	-4	-7	-6	-2
4940	0	9	0	-3	-5	-8	-7	-4	0	5
4950	9	13	17	15	9	3	-1	-5	-6	0
4960	5	5	0	-5	-10	-15	-19	-17	-10	-1
4970	7	15	16	6	-3	-10	-5	3	13	14
4980	8	-4	-14	-14	-6	2	10	12	12	9
4990	7	7	9	8	-2	-3	-6	-6	-2	3
5000	5	3	0	-3	-6	-6	-4	-2	-1	-1
5010	0	2	3	2	0	0	-1	-1	0	3
5020	7	8	0	-6	-10	-11	-5	2	8	9
5030	6	0	-6	-10	-11	-5	2	8	9	2
5040	-7	-16	-16	-7	3	9	9	2	-6	-6
5050	-1	6	12	13	8	3	0	0	5	12
5060	13	7	-1	-7	-6	0	7	10	5	-3
5070	-11	-11	-4	4	10	9	6	4	2	3
5080	4	4	2	0	0	4	9	9	2	-10
5090	-18	-17	-10	0	7	6	1	-4	-5	2

END

TO BE CONTINUED

CONTINUED (F-15)										CONTINUED (F-15)											
ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
470	-63	110	12	-90	12	45	-51	-80	-63	39	990	14	-79	-95	-121	-83	68	182	84	-93	-73
480	152	152	-56	-142	78	161	13	-91	-88	-22	1000	36	24	-21	32	123	28	-174	-123	120	167
490	-3	-4	-7	-73	-6	176	107	-103	-98	74	1010	-35	-132	-22	-1	-66	62	112	48	-27	-31
500	121	-16	-69	-18	0	-36	-125	-75	53	46	1020	-65	-125	-99	7	115	74	-73	-44	155	202
510	106	159	-40	-185	66	259	-51	-217	133	129	1030	52	-38	-24	-14	59	142	100	-22	-86	-50
520	-355	-326	197	318	-123	-299	106	313	34	-117	1040	-69	-136	-89	-38	-11	49	60	88	100	75
530	87	237	-18	-272	106	84	-35	-214	-156	108	1050	44	44	-3	-129	-157	5	113	28	-86	-72
540	231	72	-155	-119	224	286	-145	-355	42	319	1060	-54	142	-110	140	273	102	-64	9	68	-60
550	148	-70	-201	-200	0	145	-56	-237	62	309	1070	-83	117	132	-161	-295	-88	81	11	-3	140
560	41	-133	140	342	-75	-411	-68	250	-10	-285	1080	122	-127	-218	-19	104	-28	-99	20	56	-31
570	-11	329	107	-186	26	173	-66	-192	-58	116	1090	-46	11	24	-5	-12	-20	-53	-59	0	98
580	52	-28	66	78	-47	-101	-26	-8	-63	24	1100	156	91	42	36	0	-85	-69	-9	10	-27
590	74	-86	-177	-12	211	152	-47	0	151	40	1110	-61	-28	1	-11	34	126	74	-70	-61	97
600	-267	-319	-51	145	160	156	69	-170	-214	-3	1120	88	-127	-138	100	180	13	-80	33	116	28
610	81	-2	-41	70	165	41	-101	-32	101	133	1130	-64	-56	-29	7	37	-9	-43	42	139	79
620	40	-104	-197	-221	-55	140	61	-93	-63	171	1140	-35	-10	56	22	-46	-69	-39	-4	-5	-16
630	231	79	-35	-58	-104	-186	-105	180	291	-8	1150	-24	-27	16	38	29	-118	-152	28	147	67
640	-355	-219	235	306	-37	-195	-25	-15	-74	-4	1160	-36	2	47	-1	-64	-91	-66	-16	7	29
650	116	152	69	-43	29	113	-148	-473	-265	500	1170	54	20	-50	-103	-51	56	81	7	-77	-68
660	475	93	-233	-167	-98	-198	-103	293	585	432	1180	-6	-2	-39	14	117	93	0	-19	39	66
670	57	-235	-480	-549	-240	108	113	24	117	171	1190	-6	-70	-63	-39	-24	-14	15	53	36	-28
680	68	2	129	414	456	-2	-496	-512	-198	-56	1200	-63	-56	-29	2	49	94	49	-44	-88	-71
690	-114	-39	127	171	154	216	261	108	-125	-250	1220	33	21	71	73	50	15	-13	-15	-7	12
700	-277	-164	98	254	159	-46	-168	-228	-291	-176	1230	-36	-67	51	122	19	-87	50	20	39	54
710	109	314	288	216	181	44	-138	-156	-17	-22	1240	-26	-1	26	-25	-58	-11	12	-16	9	48
720	-233	-329	-150	-179	352	158	-15	-74	-37	58	1250	-12	-105	-125	-41	53	88	40	-68	-83	-28
730	163	91	-69	-135	-180	-159	64	275	199	-28	1260	-10	4	5	-38	-42	18	45	-12	-65	-61
740	-147	-140	-105	-97	-90	28	167	132	21	34	1270	-16	32	44	30	-11	-70	-62	21	28	-34
750	167	232	61	-185	-262	-250	-243	-203	-41	201	1280	-7	129	219	112	-65	-69	12	-22	-86	-5
760	260	139	108	185	78	-142	-119	38	8	-115	1290	84	-15	-73	72	126	-27	-110	12	85	-30
770	-51	113	70	-124	-174	-94	-14	12	-18	-51	1300	-143	-126	-17	74	60	32	11	-24	-5	24
780	-32	7	-33	12	321	495	195	-242	-440	-339	1310	29	5	-55	-43	18	34	63	84	18	-75
790	-246	-307	-265	74	442	431	138	56	172	64	1320	-65	46	128	78	-35	-47	32	26	-63	-67
800	-102	24	141	-57	-283	-182	29	48	0	14	1330	-44	-13	-59	-66	-25	50	113	88	26	20
810	31	38	74	129	196	186	12	-146	-70	106	1340	19	-10	-15	-5	-6	14	5	-68	-10	15
820	179	144	-5	-184	-253	-229	-142	-33	0	23	1350	17	-56	-44	26	-8	-82	-85	-10	38	34
830	110	162	81	-17	6	26	132	259	138	8	1360	9	-8	-11	-7	-9	5	-1	54	90	32
840	-96	-211	-144	-77	-51	-49	-67	-37	69	110	1370	80	2	8	-90	-116	16	110	53	19	72
850	40	-15	7	43	19	-81	-171	-83	138	-202	1380	-90	22	-44	-35	24	46	-19	-61	10	64
860	136	102	-114	-156	-62	44	41	-89	-216	229	1390	3	-60	-44	-9	-12	-8	20	24	-11	64
870	-48	102	103	4	24	105	29	-78	-51	81	1400	-11	46	59	13	-27	-39	-11	23	-17	-103
880	159	6	-267	-195	182	240	-91	-242	-74	71	1410	-131	-68	21	47	38	42	34	14	11	32
890	-28	-123	-40	81	95	54	57	144	162	-9	1420	56	54	41	11	-31	-53	-28	11	-7	-61
900	910	-155	-71	43	-67	-222	-143	78	143	8	1430	-55	4	31	5	-3	60	88	-12	-106	-43
910	68	110	71	64	69	72	54	-17	-111	-141	1440	74	64	24	54	-17	-75	-26	34	24	24
920	-75	-20	-44	-91	-35	127	196	100	17	133	1450	-9	-8	11	15	-6	-19	5	33	6	-67
930	261	126	-146	-256	-135	16	50	67	84	52	1460	-86	77	80	27	-8	-15	-3	-1	-16	-25
940	-17	-65	-58	-59	-64	-29	44	79	-15	-79	1470	-3	-7	-28	1	32	21	-11	-24	-6	-1
950	0	72	2	36	95	16	-81	-51	-19	-89	1480	-20	29	49	39	-35	-78	-28	42	22	-46
960	-132	-99	2	36	-100	-144	-1	103	72	-18	1490	-40	29	51	-27	-78	-56	-2	39	42	37
970	4	90	103	70	4	-44	-59	-142	-240	-231	1500	44	29	-7	-31	-2	68	78	13	-7	-16
980	-88	63	123	121	125	112	41	-22	40	107											

TO BE CONTINUED

TO BE CONTINUED

CONTINUED (F-15)										CONTINUED (F-15)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
UP					UP					UP					UP																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
1510	-97	-88	52	96	-2	-64	14	27	-46	58	2030	34	32	21	33	43	33	33	43	2040	-15	-16	-12	8	0	-25	58	9	2050	11	17	68	-3	8	0	8	9	2060	-16	37	-76	-107	-43	9	9	0	2070	34	37	-136	-37	31	18	6	36	2080	11	-113	-69	67	26	24	34	0	2090	-88	-21	136	-37	31	18	6	36	2100	-57	14	38	-22	-27	40	32	27	2110	-88	-21	136	-37	31	18	6	36	2120	-57	14	38	-22	-27	40	32	27	2130	-88	-21	136	-37	31	18	6	36	2140	-57	14	38	-22	-27	40	32	27	2150	-88	-21	136	-37	31	18	6	36	2160	-57	14	38	-22	-27	40	32	27	2170	-88	-21	136	-37	31	18	6	36	2180	-57	14	38	-22	-27	40	32	27	2190	-88	-21	136	-37	31	18	6	36	2200	-57	14	38	-22	-27	40	32	27	2210	-88	-21	136	-37	31	18	6	36	2220	-57	14	38	-22	-27	40	32	27	2230	-88	-21	136	-37	31	18	6	36	2240	-57	14	38	-22	-27	40	32	27	2250	-88	-21	136	-37	31	18	6	36	2260	-57	14	38	-22	-27	40	32	27	2270	-88	-21	136	-37	31	18	6	36	2280	-57	14	38	-22	-27	40	32	27	2290	-88	-21	136	-37	31	18	6	36	2300	-57	14	38	-22	-27	40	32	27	2310	-88	-21	136	-37	31	18	6	36	2320	-57	14	38	-22	-27	40	32	27	2330	-88	-21	136	-37	31	18	6	36	2340	-57	14	38	-22	-27	40	32	27	2350	-88	-21	136	-37	31	18	6	36	2360	-57	14	38	-22	-27	40	32	27	2370	-88	-21	136	-37	31	18	6	36	2380	-57	14	38	-22	-27	40	32	27	2390	-88	-21	136	-37	31	18	6	36	2400	-57	14	38	-22	-27	40	32	27	2410	-88	-21	136	-37	31	18	6	36	2420	-57	14	38	-22	-27	40	32	27	2430	-88	-21	136	-37	31	18	6	36	2440	-57	14	38	-22	-27	40	32	27	2450	-88	-21	136	-37	31	18	6	36	2460	-57	14	38	-22	-27	40	32	27	2470	-88	-21	136	-37	31	18	6	36	2480	-57	14	38	-22	-27	40	32	27	2490	-88	-21	136	-37	31	18	6	36	2500	-57	14	38	-22	-27	40	32	27	2510	-88	-21	136	-37	31	18	6	36	2520	-57	14	38	-22	-27	40	32	27	2530	-88	-21	136	-37	31	18	6	36	2540	-57	14	38	-22	-27	40	32	27

TO BE CONTINUED

TO BE CONTINUED

CONTINUED(F-15 UP)										CONTINUED(F-15 UP)											
Nb.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	Nb.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
3590	3	-4	-5	-1	-4	-4	3	1	-8	-19	4110	-4	-4	0	6	10	11	4	-1	0	6
3600	-10	7	8	-2	-9	-4	1	2	5	13	4120	6	6	-7	5	12	11	-9	-4	4	2
3610	15	10	0	-12	-9	5	9	-11	-4	3	4130	4	3	-4	-6	-1	3	0	-4	2	0
3620	4	-18	-30	-9	18	15	-6	7	3	3	4140	2	-1	4	0	-7	-15	-5	-4	-4	-14
3630	-9	-9	2	4	-6	-4	7	12	10	8	4150	-8	4	4	-5	0	0	-5	2	0	5
3640	6	-1	-6	2	15	-3	-11	-7	-8	-19	4160	-3	-3	-15	-9	8	11	-3	-9	-4	12
3650	-17	0	11	3	-9	-2	9	8	4	1	4170	3	11	26	20	0	-7	-2	2	3	0
3660	-1	-2	0	0	-4	0	5	4	0	-2	4180	17	10	-3	-2	9	6	5	-7	1	6
3670	-7	-9	2	15	12	2	12	27	21	-2	4190	-2	2	1	0	-9	0	14	10	-4	-11
3680	-14	-8	-2	-5	-4	-5	-15	-15	-1	9	4200	4	4	0	-10	-3	3	12	-4	-15	0
3690	9	0	0	-4	-7	3	12	9	3	7	4210	-4	2	1	10	-9	0	9	10	0	-1
3700	14	3	-15	-7	12	-4	-14	-9	9	5	4220	2	4	8	10	-3	2	12	-4	0	0
3710	-7	0	5	-4	-14	-9	4	9	2	-7	4230	0	7	15	12	5	-4	2	0	1	-9
3720	-14	-16	-11	0	-1	-7	-3	-17	-17	-4	4240	-3	4	7	4	6	0	-14	0	8	-2
3730	8	16	12	0	-6	-7	3	20	23	-1	4250	0	2	15	1	5	0	-9	1	0	3
3740	-26	-20	3	15	10	4	5	8	6	3	4260	-8	-18	4	1	-5	-3	-5	-4	2	2
3750	4	0	-10	-11	1	13	1	-20	-23	-5	4270	1	3	5	0	1	0	-3	-5	5	2
3760	15	14	-4	-12	-8	-6	-5	9	28	21	4280	1	3	3	-1	-7	-2	-3	-4	-8	-9
3770	3	-3	2	7	4	-4	-8	-11	-10	-1	4290	1	0	4	-5	2	5	-2	-5	-4	0
3780	11	15	11	7	0	-9	-9	2	8	-1	4300	5	3	-4	0	-3	-1	3	5	-4	-1
3790	-12	-15	-7	0	11	12	-1	-4	-2	0	4310	0	3	7	4	0	0	3	-9	4	8
3800	0	0	6	5	-2	-13	10	0	15	19	4320	-3	-7	-1	0	-3	4	0	4	5	3
3810	16	6	-8	-9	4	15	10	-2	6	19	4330	6	10	10	10	4	-2	0	4	0	0
3820	8	-12	-9	2	-1	-12	-1	12	2	-13	4340	0	1	1	1	1	2	0	3	4	2
3830	-11	1	13	10	-4	-11	-7	0	-3	-9	4350	-6	-1	-5	5	-7	5	-5	-7	-10	-6
3840	-6	-2	-4	-10	-7	0	-7	-17	-19	-13	4360	5	-8	5	14	4	-10	-9	7	-10	-5
3850	-7	4	13	3	-14	-9	9	13	0	1	4370	-5	4	-2	-2	-3	3	7	4	7	7
3860	10	0	-14	-7	14	20	1	-9	1	12	4380	7	-3	10	4	-4	-3	3	4	3	8
3870	5	-13	-15	3	12	6	3	8	16	21	4390	3	3	-11	8	0	4	0	-4	0	4
3880	10	-2	2	10	6	0	4	0	-12	-10	4400	-1	0	-10	-4	1	2	-2	-2	5	2
3890	0	-3	-12	-4	4	-1	-4	4	0	-14	4410	4	3	8	7	-3	4	0	1	-19	0
3900	-14	2	8	-4	-10	-2	1	-5	-8	2	4420	0	5	5	0	1	-9	-3	0	7	4
3910	10	7	4	4	-2	5	10	8	-3	-18	4430	4	0	-1	-10	-4	9	-7	-4	1	10
3920	-7	7	4	-3	-2	5	8	4	4	1	4440	0	0	-5	0	6	12	6	4	1	2
3930	8	20	8	-14	-11	8	7	-8	-7	7	4450	6	7	5	10	7	0	6	6	-1	1
3940	4	-10	-5	10	-4	-4	-10	-5	-3	-9	4460	0	3	2	0	0	1	0	6	2	-3
3950	-15	-16	-7	8	13	0	-11	-4	9	8	4470	-10	-2	5	1	0	2	-3	-11	-5	-7
3960	0	-4	-7	-7	-2	4	0	-10	-17	-12	4480	-4	-15	-9	0	0	0	-4	-6	-5	3
3970	-5	0	0	0	0	-1	2	9	9	4	4490	-1	1	0	-6	0	11	-4	6	2	-2
3980	-4	-10	2	20	20	12	7	-2	-15	-5	4500	1	-5	0	0	0	11	6	6	0	0
3990	17	15	-1	-2	7	5	0	2	0	-9	4510	-7	-3	3	7	9	11	3	5	0	0
4000	-10	-6	-4	11	7	8	-3	-14	-9	-2	4520	1	1	0	0	0	0	-4	-6	-5	-5
4010	5	9	11	11	3	0	4	5	4	1	4530	0	5	5	3	0	0	0	0	0	0
4020	0	0	-1	-3	-2	4	10	8	1	-1	4540	-2	6	2	-4	-8	0	1	0	-4	-8
4030	-3	-8	-7	1	8	10	4	-2	-7	-9	4550	7	2	-2	-4	0	4	5	6	5	5
4040	4	0	-12	12	5	0	0	2	-4	-1	4560	4	4	-7	-3	6	10	5	0	2	8
4050	-15	5	8	12	5	0	0	0	-4	3	4570	4	4	-7	-5	-4	5	2	10	2	0
4060	4	0	-8	-8	-1	4	-4	-9	2	13	4580	4	4	12	10	-5	2	0	-2	0	-3
4070	12	0	-2	-2	-13	-14	-12	-1	12	11	4590	1	8	4	-5	-9	-4	0	-7	-9	-6
4080	-2	-6	2	2	-9	-14	0	8	7	7	4600	-2	1	1	2	-5	-3	-4	-9	-4	-3
4090	4	0	2	2	-1	-2	6	-1	-7	0	4610	-1	-3	-2	2	0	0	1	4	0	-5
4100	-3	4	-1	-1	4	7	0	0	4	0	4620	-3	0	-2	-12	-14	-1	1	0	4	6

TO BE CONTINUED

TO BE CONTINUED

RECORD = M-1056 COMPONENT = NORTH STATION = YAMASHITA-HEN-M
 DATE AND TIME = 1986-11-15-15-06 TOTAL NUMBER OF DATA = 1700
 SAMPLING INTERVAL = 0.010 (SEC) SCAL = 0.10000
 SIGNAL = GR. ACC. CONNECTION POINT IN DATA NUMBER = 1700.

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
4630	0	-11	-6	9	12	3	-1	2	4	0
4640	-4	-2	-1	-5	-9	-7	0	8	8	6
4650	5	-2	-9	-4	1	0	2	2	-2	1
4660	-2	4	8	11	15	12	2	-1	1	4
4670	1	4	14	11	0	4	3	6	-4	2
4680	7	1	-7	-5	4	-6	-3	0	0	2
4690	0	-4	-2	1	-2	-5	-4	0	0	-1
4700	-3	0	5	2	4	8	-5	0	0	-4
4710	-3	-4	2	10	8	-1	-5	0	-5	0
4720	1	0	-8	-7	-3	-1	-2	-2	0	-4
4730	-7	-3	-4	-7	4	10	13	2	-2	-4
4740	8	0	-5	4	7	2	-1	3	4	1
4750	3	7	8	6	2	-1	0	4	4	0
4760	0	1	0	7	2	2	4	1	0	1
4770	0	-4	0	0	-7	-4	3	0	1	-4
4780	0	-6	0	0	-4	4	3	-1	-2	-1
4790	-6	-6	2	5	-2	-9	-4	-6	-6	-4
4800	1	0	-2	-2	0	-3	-10	-9	2	10
4810	5	0	-4	-3	1	7	10	9	4	7
4820	10	6	2	0	0	0	1	4	4	1
4830	-5	-4	4	9	6	0	-4	-1	1	0
4840	-5	-5	-1	0	0	0	-4	0	7	-4
4850	-7	1	0	-2	0	2	5	7	-9	2
4860	1	3	-3	-9	-5	3	0	-9	2	0
4870	5	-2	-3	4	7	0	-3	1	6	-10
4880	-2	-7	-4	0	1	0	3	-1	0	0
4890	-11	-3	2	0	-6	-4	5	7	3	0
4900	2	6	7	4	0	3	3	-1	0	6
4910	10	3	-4	0	4	-3	-10	-4	6	2
4920	-5	-2	4	1	-1	0	4	-4	2	4
4930	7	1	1	-2	0	3	0	-4	-4	-2
4940	1	2	0	-4	0	4	1	0	4	2
4950	-4	-7	-1	3	0	4	-1	0	4	-4
4960	-1	5	-4	-1	0	-4	-6	-4	-8	2
4970	-6	0	-7	-4	0	-5	-7	-2	2	1
4980	-2	0	0	-2	0	4	1	0	4	4
4990	0	-1	-1	0	0	2	0	-2	3	7
5000	4	-3	-1	0	0	0	2	0	0	-2
5010	1	7	8	0	-7	-7	-3	-1	-2	0
5020	0	0	-1	0	2	0	-1	3	8	0
5030	-8	-5	-2	-1	-1	-2	0	1	1	0
5040	0	-2	-2	-2	-2	-2	0	0	0	0
5050	4	4	2	4	4	-5	-7	1	7	3
5060	-2	0	0	0	0	4	7	2	-4	-4
5070	0	0	0	0	0	1	1	0	-4	-1
5080	5	5	-2	-4	5	6	-3	-5	-1	3
5090	-4	-7	-1	-3	0	-5	-4	-1	-6	-7

END

CONTINUED(F-15)

TO BE CONTINUED

CONTINUED (M-1056 NORTH)

Nb.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
670	-50	-45	-37	-24	-13	-2	6	15	24	34
680	33	34	30	18	6	-2	-12	-11	-16	-24
690	-22	-23	-22	-14	-6	0	2	25	47	75
700	100	122	145	149	142	118	94	68	40	6
710	-21	-43	-66	-89	-108	-122	-141	-160	-170	-174
720	-164	-134	-93	-45	0	45	67	68	61	32
730	-9	-46	-95	-123	-126	-100	-72	-59	-47	-47
740	-61	-76	-87	-106	-118	-119	-100	-77	-44	-4
750	32	71	107	135	153	170	162	152	137	137
760	130	124	126	124	130	137	146	148	129	94
770	35	-15	-90	-138	-193	-247	-308	-368	-400	-415
780	-403	-361	-310	-238	-174	-97	-13	80	160	245
790	338	434	500	504	505	460	395	311	234	158
800	93	15	-66	-150	-230	-270	-273	-223	-181	-136
810	-107	-117	-113	-96	-71	-50	-15	13	51	97
820	129	194	228	230	208	158	128	106	102	103
830	102	102	102	102	102	102	95	90	74	41
840	5	-42	-100	-136	-147	-151	-141	-118	-104	-80
850	-34	10	56	80	98	112	121	128	137	137
860	137	123	89	46	-4	-62	-117	-145	-155	-158
870	-142	-117	-78	-59	-47	-46	-45	-59	-82	-92
880	-101	-107	-117	-110	-87	-28	41	111	181	216
890	208	170	131	80	45	0	-31	-64	-102	-127
900	-126	-127	-125	-127	-112	-92	-69	-33	-16	-7
910	13	36	53	67	78	90	101	103	96	85
920	70	66	57	56	60	76	90	88	71	48
930	20	-7	-34	-69	-109	-134	-161	-187	-209	-233
940	-255	-273	-275	-276	-252	-207	-153	-80	28	151
950	324	475	555	657	680	662	549	373	257	139
960	-5	-157	-268	-361	-424	-494	-571	-594	-528	-421
970	-280	-151	-27	73	151	286	364	422	499	545
980	548	612	632	519	358	171	16	-117	-266	-377
990	-497	-573	-584	-564	-524	-431	-351	-260	-141	-3
800	77	176	266	275	275	274	275	251	201	135
810	48	-52	-131	-213	-285	-330	-358	-385	-398	-403
820	-398	-376	-333	-229	-101	79	315	445	516	565
830	555	503	562	221	70	-37	125	-204	-262	-339
840	-369	-366	-372	-346	-278	-177	-75	-2	59	123
850	200	237	243	255	238	196	137	78	32	-12
860	-48	-77	-90	-92	-92	-86	-65	-35	0	39
870	60	85	98	111	137	149	148	149	134	91
880	34	-28	-100	-140	-167	-184	-202	-217	-228	-229
890	-207	-155	-93	-15	42	77	11	141	168	173
900	160	133	112	97	84	71	58	46	34	13
910	-8	-32	-54	-81	-93	-97	-113	-133	-156	-180
920	-191	-166	-151	-134	-96	-58	-11	55	127	220
930	273	288	296	286	263	216	155	103	59	19
940	-12	-58	-99	-146	-196	-217	-218	-213	-184	-141
950	-108	-83	-64	-35	-1	26	44	45	51	65
960	77	87	92	90	92	85	70	52	38	51
970	23	18	9	2	-2	6	17	30	33	34
980	26	22	16	8	-3	-15	-22	-30	-37	-45

TO BE CONTINUED

CONTINUED (M-1056 NORTH)

Nb.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
990	-69	-94	-114	-123	-101	-69	-6	49	86	105
1000	132	148	165	162	126	94	76	56	12	-20
1010	-38	-55	-73	-85	-92	-92	-91	-93	-88	-77
1020	-52	-25	-34	-44	-43	-31	-23	-23	-23	-23
1030	-19	-7	13	43	77	91	90	68	22	-12
1040	-37	-62	-88	-93	-90	-79	-61	-31	-9	9
1050	23	22	22	22	22	22	22	23	20	11
1060	1	-6	-28	-49	-79	-105	-118	-128	-125	-127
1070	-116	-115	-108	-98	-90	-73	-36	-4	22	52
1080	87	107	132	154	172	188	175	137	96	96
1090	73	40	12	-36	-79	-111	-129	-137	-147	-150
1100	-145	-136	-123	-107	-93	-91	-82	-69	-49	-23
1110	7	29	38	45	45	44	32	20	11	10
1120	15	33	44	62	88	110	115	113	95	68
1130	38	13	-4	-16	-24	-22	-24	-21	-11	10
1140	37	49	62	68	77	80	88	99	103	102
1150	102	103	99	88	79	61	43	19	0	-15
1160	-26	-34	-35	-24	-23	-22	-27	-36	-43	-54
1170	-78	-93	-91	-92	-69	-22	9	26	41	55
1180	57	56	57	65	75	90	91	91	80	64
1190	42	22	7	-8	-23	-36	-46	-55	-72	-91
1200	-102	-101	-86	-80	-58	-31	-8	11	26	41
1210	60	66	37	8	-19	-42	-50	-65	-79	-90
1220	-92	-90	-77	-50	-15	16	39	59	76	80
1230	79	80	76	54	37	31	24	34	42	50
1240	67	78	80	79	70	68	58	56	56	57
1250	50	33	15	-3	-26	-42	-33	-65	-76	-88
1260	-91	-72	-36	-7	0	0	0	-13	-33	-48
1270	-58	-73	-83	-91	-92	-92	-92	-92	-92	-91
1280	-92	-82	-81	-77	-63	-35	-5	11	22	22
1290	22	31	44	54	64	69	67	68	56	50
1300	40	32	18	-2	-26	-45	-59	-85	-92	-92
1310	-85	-73	-55	-27	-2	15	26	42	65	87
1320	101	112	115	110	95	77	65	58	49	35
1330	27	15	3	-11	-11	-12	-11	-3	4	11
1340	10	20	23	21	26	34	33	34	43	45
1350	45	45	45	45	45	4	-8	-8	-8	-8
1360	-78	-94	-103	-104	-103	-94	-87	-73	-64	-51
1370	-2	26	47	72	102	129	149	162	171	171
1380	171	172	165	141	117	92	58	24	-10	-42
1390	-76	-100	-113	-115	-114	-116	-98	-79	-60	-39
1400	-7	20	41	56	56	57	52	44	45	45
1410	43	33	34	34	33	34	23	22	12	11
1420	-73	-1	0	-5	-22	-23	-23	-23	-23	-23
1430	13	-11	-12	-11	-11	-11	-11	-11	-11	-11
1440	-8	-91	-92	-92	-92	-92	-92	-91	-93	-85
1450	-88	-51	-31	-9	8	26	41	46	45	45
1460	45	45	45	45	45	45	45	45	45	45
1470	26	22	11	-4	-25	-42	-52	-66	-78	-85
1480	-93	-91	-83	-78	-68	-53	-42	-26	-3	0
1490	-9	-14	-21	-28	-34	-34	-34	-34	-34	-34
1500	-100	-84	-73	-45	-23	-3	15	35	54	75

TO BE CONTINUED

RECORD = M-1056 COMPONENT = EAST STATION = YAMASHITA-HEN-H
 DATE AND TIME = 1986-11-15-15-06 TOTAL NUMBER OF DATA = 1700
 SIGNAL = GR. ACC. SAMPLING INTERVAL = 0.010 (SEC) SCAL = 0.10000
 CONNECTION POINT IN DATA NUMBER = 1700,

CONTINUED (M-1056 NORTH)

NO.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1510	90	91	91	91	90	92	89	79	56	21
1520	-3	-20	-33	-35	-34	-35	-24	-13	0	12
1530	24	32	41	45	49	58	65	69	61	49
1540	44	36	29	18	3	-13	-32	-34	-42	-47
1550	-46	-44	-55	-31	-18	-7	4	15	30	54
1560	76	100	94	72	54	33	15	-119	-108	-12
1570	-45	-89	-116	-135	-138	-134	-134	-119	-108	-1
1580	-90	-84	-68	-36	-16	0	0	10	4	-1
1590	0	-2	-12	-10	-19	-23	-23	-22	-30	-35
1600	-38	-47	-45	-47	-33	-11	5	10	18	23
1610	22	22	22	22	22	21	27	44	56	69
1620	68	68	68	68	68	68	68	68	57	30
1630	12	9	-3	-20	-20	-2	13	22	23	18
1640	6	-1	0	-4	-13	-11	-22	-21	-11	-11
1650	-2	3	15	29	46	56	57	56	60	76
1660	90	78	53	37	14	1	-7	-14	-23	-23
1670	-23	-22	-25	-34	-34	-34	-34	-25	90	92
1680	-13	-5	14	26	42	61	82	92	90	92
1690	89	73	53	43	46	37	33	32	20	10

END

NO.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	-20	-34	-40	-44	-42	-43	-42	-43	-42	-43
10	-42	-43	-41	-31	-32	-31	-23	-12	0	12
20	12	19	25	23	25	24	34	36	35	35
30	35	35	35	34	23	16	8	3	-1	-10
40	38	-11	-19	-27	-32	-31	-41	-43	-42	-44
50	-38	-9	-8	-10	-22	-19	-21	-18	-9	-9
60	9	13	12	13	11	1	1	2	0	-9
70	13	13	12	13	11	1	1	2	0	-9
80	-9	-19	-21	-20	-20	-20	-20	-20	-20	-20
90	-20	-11	-8	-16	-21	-20	-20	-20	-20	-20
100	-20	-20	-20	-20	-20	-21	-13	-6	1	1
110	3	13	12	14	8	0	2	1	2	0
120	2	1	8	18	25	13	0	-9	-9	-9
130	-9	-9	-9	-9	-9	-9	-8	-11	-20	-29
140	-32	-31	-32	-29	-21	-16	-6	2	17	28
150	40	47	46	47	46	47	46	45	35	24
160	11	0	-10	-8	-13	-21	-20	-30	-32	-22
170	-20	-21	-20	-21	-13	-8	-10	-2	2	0
180	4	12	13	11	2	-8	-8	-16	-21	-20
190	-20	-11	12	1	1	2	2	1	2	8
200	14	12	13	13	13	13	3	1	2	1
210	1	1	1	1	1	2	1	2	-7	-9
220	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
230	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
240	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
250	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
260	1	1	1	1	1	1	1	1	1	1
270	2	1	2	1	3	12	23	33	43	47
280	46	46	47	42	35	29	12	3	-14	-20
290	-20	-20	-21	-16	-7	-11	-1	1	8	14
300	12	19	32	35	39	48	46	47	46	46
310	47	37	35	34	24	23	9	0	-9	-9
320	-9	-9	-9	-9	-9	-9	-10	-2	4	12
330	13	6	-2	-10	-8	-16	-21	-20	-20	-20
340	-20	-21	-14	-6	1	2	0	2	0	8
350	14	12	13	12	14	6	0	2	0	4
360	12	20	25	24	24	24	24	15	8	1
370	2	1	1	1	1	2	1	2	1	1
380	13	12	14	8	1	1	1	2	1	1
390	1	1	1	1	1	1	1	1	1	1
400	1	2	1	2	1	2	-5	-10	-8	-9
410	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
420	1	11	22	34	44	51	59	48	40	30
430	23	24	14	13	12	14	8	1	-6	1
440	-17	-14	-7	-10	-8	-10	-8	-10	-7	-38
450	-44	-43	-43	-42	-34	-28	-11	-23	-32	-38
460	-5	-10	-8	-10	-22	-51	-32	-31	-32	-27

TO BE CONTINUED

CONTINUED(M-1056 EAST)

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
470	-16	-4	1	8	23	35	47	46	47	46
480	47	36	20	-1	-19	-30	-32	-31	-32	-31
490	32	-31	-32	-31	22	8	2	21	40	57
500	58	58	47	33	-23	-9	-12	-33	-43	-44
510	-58	-79	-100	-111	-110	-102	-92	-77	-67	-55
520	-54	-54	-55	-51	-38	-29	-20	-20	-20	-20
530	-20	-30	-32	-31	-41	-43	-51	-61	-66	-55
540	-54	-54	-54	-55	-50	-29	-5	25	58	84
550	93	100	104	96	84	67	40	13	-16	-30
560	32	-30	-36	-44	-42	-43	-43	-43	-43	-41
570	-32	-30	-20	-29	-45	-62	-66	-74	-84	-89
580	-80	-54	-18	6	21	50	81	109	128	151
590	174	195	222	227	195	148	94	9	-49	-49
600	-87	-124	-162	-190	-203	-192	-168	-128	-77	-33
610	18	66	100	137	184	225	246	279	283	258
620	215	172	127	81	49	9	-20	-46	-67	-91
630	-100	-99	-99	-90	-87	-89	-81	-74	-65	-79
640	-99	-99	-99	-98	-86	-77	-75	-58	-22	8
650	51	93	113	112	82	51	13	-26	-50	-77
660	-106	-138	-166	-187	-211	-215	-225	-218	-202	-187
670	-149	-105	-39	15	54	83	106	136	145	128
680	110	92	76	66	59	54	42	35	36	35
690	37	46	48	59	71	80	80	70	49	20
700	-7	-22	-31	-15	0	15	25	24	33	42
710	47	46	47	46	46	47	40	21	-5	-23
720	-39	-55	-65	-75	-77	-85	-77	-85	-100	-99
730	-99	-99	-89	-88	-80	-56	-39	-25	-12	-8
740	-8	2	1	3	15	46	81	110	140	156
750	178	182	182	182	178	133	173	16	-32	16
760	-79	-124	-170	-200	-201	-184	-128	-73	-20	5
770	56	104	203	329	384	363	316	241	156	156
780	85	20	-58	-133	-190	-231	-279	-323	-349	-369
790	-371	-358	-338	-268	-212	-129	-44	16	95	184
800	266	318	358	362	340	285	226	158	112	68
810	15	-16	-57	-87	-147	-194	-231	-289	-325	-324
820	-323	-300	-259	-223	-200	-181	-160	-147	-119	-101
830	-81	-60	-46	-35	-8	9	27	36	44	47
840	46	47	46	47	46	47	47	47	26	13
850	43	81	112	133	147	148	147	130	112	87
860	65	40	5	-17	-29	-39	-32	-7	13	37
870	54	65	70	68	70	56	37	16	-15	-41
880	-68	-91	-111	-125	-141	-154	-147	-126	-95	-61
890	-24	4	26	44	62	80	95	110	115	110
900	95	59	12	-24	-74	-123	-163	-183	-190	-189
910	-189	-187	-159	-108	-55	-8	29	55	77	90
920	95	108	114	121	121	95	63	24	-17	-51
930	-89	-125	-143	-144	-145	-127	-89	-58	-28	-10
940	-9	-9	-17	-28	-32	-32	-29	-21	-13	-8
950	-5	11	32	54	68	79	90	102	125	151
960	167	171	151	123	94	48	12	-32	-72	-110
970	-149	-162	-146	-113	-91	-67	-40	-14	14	56
980	85	102	113	114	105	89	73	62	48	34

TO BE CONTINUED

CONTINUED(M-1056 EAST)

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
990	7	-13	-28	-41	-50	-55	-54	-54	-54	-54
1000	-55	-47	-32	-22	-20	-20	-20	-20	-20	-20
1010	11	13	11	-1	-22	-40	-42	-46	-46	-46
1020	-55	-46	-24	-3	26	58	81	106	122	127
1030	119	100	83	59	35	9	-21	-66	-98	-111
1040	-107	-91	-62	-19	42	94	130	158	186	216
1050	228	227	220	192	148	105	69	38	-4	-56
1060	-96	-133	-161	-176	-190	-189	-190	-187	-190	-187
1070	-180	-157	-109	-66	-20	26	71	107	147	177
1080	199	206	181	157	126	80	35	-8	-39	-65
1090	-93	-119	-141	-144	-126	-104	-67	-35	-11	8
1100	27	47	59	70	85	35	91	92	83	76
1110	68	70	63	43	35	32	27	4	-28	-60
1120	-88	-118	-140	-158	-169	-179	-190	-188	-171	-163
1130	-112	-91	-61	-74	-44	44	93	133	151	156
1140	133	105	84	70	65	37	-20	-60	-70	-77
1150	-76	-67	-54	-38	-20	-4	2	10	14	21
1160	29	35	27	10	-8	-16	-22	-16	-1	2
1170	1	2	1	25	64	80	74	67	50	26
1180	2	-25	-31	-32	-29	-21	-13	10	13	13
1190	13	11	2	-2	-10	-17	-22	-13	0	12
1200	26	36	54	68	69	69	69	68	56	45
1210	32	15	-6	-25	-32	-41	-44	-42	-44	-36
1220	-21	-10	6	23	43	50	47	37	38	55
1230	74	81	80	80	81	74	61	51	43	37
1240	28	24	22	13	9	-1	-8	-9	-9	-9
1250	-8	-10	-2	2	1	2	1	2	21	51
1260	77	81	81	74	61	46	32	15	-5	-16
1270	-30	-32	-31	-32	-31	-32	-31	-33	-27	-20
1280	-14	-1	3	18	45	73	84	97	103	112
1290	115	114	115	104	92	72	44	17	-12	-33
1300	-62	-49	-57	-65	-65	-66	-59	-42	-30	-8
1310	21	40	51	17	1	-11	-20	-29	-33	-43
1320	-42	-43	-33	-22	-8	1	8	13	16	32
1330	49	72	88	82	64	48	37	32	14	-20
1340	-43	-61	-67	-61	-36	-9	18	49	63	71
1350	84	94	102	103	102	94	78	67	61	53
1360	46	46	48	39	32	12	0	2	7	17
1370	29	52	69	84	99	105	114	111	93	69
1380	50	27	4	-13	-27	-36	-45	-42	-43	-45
1390	-51	-51	-22	-15	-2	8	17	28	38	44
1400	51	59	57	58	58	58	58	56	47	40
1410	34	36	33	24	8	1	-4	-14	-24	-36
1420	-49	-62	-66	-65	-65	-66	-57	-40	-31	-16
1430	2	17	58	87	91	92	91	92	85	79
1440	72	57	47	32	7	1	1	2	1	1
1450	1	1	1	1	1	1	1	1	1	1
1460	1	2	1	2	1	2	1	25	56	76
1470	81	80	81	80	81	79	69	69	69	69
1480	69	69	69	69	69	69	69	69	69	69
1490	69	69	70	67	58	52	39	24	11	1
1500	2	0	-9	-9	-9	-8	-16	-22	-18	-10

TO BE CONTINUED

RECORD = M-1056 COMPONENT = UP STATION = YAMASHITA-HEN-M
 DATE AND TIME = 1986-11-15-15-06 TOTAL NUMBER OF DATA = 1700
 SAMPLING INTERVAL = 0.010 (SEC) SCAL = 0.10000
 SIGNAL = GR. ACC.

CONNECTION POINT IN DATA NUMBER = 1700,

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	-14	-26	-35	-54	-62	-63	-59	-40	-21	-6
10	-3	-3	-3	-3	-5	-13	-13	-12	-19	-24
20	-30	-39	-42	-42	-42	-42	-42	-42	-34	-32
30	-35	-32	-35	-35	-35	-35	-32	-33	-30	-15
40	-5	2	6	5	6	6	6	6	2	3
50	-3	-2	-7	-14	-12	-13	-13	-15	-15	-15
60	-13	-13	-13	-13	-13	-13	-13	-13	-13	-13
70	-13	-13	-13	-13	-13	-13	-13	-13	-13	-13
80	-13	-11	-3	-3	-3	-3	-3	-3	-3	-3
90	-3	-2	-7	-14	-12	-13	-13	-13	-13	-13
100	-13	-13	-13	-13	-13	-13	-13	-13	-12	-14
110	-6	-3	1	7	5	7	0	-4	-3	-3
120	-3	-3	-3	-4	-2	-2	-14	-12	-13	-13
130	-13	-13	-13	-13	-13	-12	-5	-12	-12	-19
140	-22	-12	-13	-13	-13	-13	-13	-12	-17	-24
150	-30	-35	-42	-43	-42	-43	-34	-24	-14	-13
160	-13	-13	-13	-13	-13	-13	-13	-13	-13	-13
170	-13	-13	-13	-13	-13	-13	-13	-13	-13	-13
180	-12	-14	-9	-2	-3	-3	-3	-3	-3	-3
190	-5	-9	-15	-22	-31	-33	-32	-33	-33	-33
200	-32	-35	-32	-35	-32	-34	-28	-23	-19	-12
210	-14	-12	-13	-13	-13	-13	-13	-12	-19	-24
220	-22	-23	-23	-21	-13	-13	-13	-13	-13	-13
230	-13	-13	-13	-14	-7	-2	-4	-2	-5	-13
240	-13	-13	-13	-13	-13	-13	-12	-14	-7	-2
250	-4	-3	-3	-3	-5	-13	-13	-13	-13	-13
260	-13	-13	-13	-12	-19	-23	-23	-22	-26	-34
270	-32	-33	-32	-33	-33	-33	-33	-33	-32	-21
280	-13	-12	-19	-24	-22	-23	-22	-22	-15	-6
290	-3	-3	-2	-2	-13	-13	-5	-3	-5	-13
300	-13	-13	-13	-13	-13	-13	-5	-1	-4	-2
310	-3	-3	-4	0	6	5	-2	-3	-11	-20
320	-13	-13	-12	-14	-7	-2	-3	-3	-23	-22
330	-23	-28	-34	-32	-33	-31	-23	-23	-23	-23
340	-24	-11	-2	4	6	6	6	6	0	-4
350	-3	-3	-3	-3	-6	2	6	6	6	6
360	3	-5	-12	-16	-28	-32	-38	-44	-50	-55
370	-61	-64	-45	-16	8	17	15	16	16	12
380	5	-1	-9	-19	-24	-21	-13	-13	-15	-15
390	-13	-13	-13	-13	-13	-13	-12	-14	-9	-2
400	-4	-3	-3	-3	-5	-3	-11	-14	-10	0
410	6	5	7	2	-5	-13	-14	-24	-32	-33
420	-31	-22	-15	-11	-17	-23	-23	-19	-12	-13
430	-13	-10	1	6	3	14	17	9	6	2
440	-4	-3	-3	-3	-3	-3	5	5	9	16
450	15	16	15	16	16	15	8	2	-4	-3
460	-17	-28	-32	-31	-2	7	6	6	5	-5

TO BE CONTINUED

CONTINUED (M-1056 EAST)

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1510	-5	2	1	1	2	1	5	20	36	47
1520	66	84	97	103	110	115	114	115	114	115
1530	114	115	107	91	74	55	39	31	16	3
1540	-1	-17	-30	-32	-31	-32	-31	-32	-31	-32
1550	-25	-6	6	20	28	7	-21	-33	-31	-32
1560	-31	-32	-31	-21	-1	2	11	13	16	31
1570	43	47	46	41	19	-6	-25	-32	-33	-43
1580	-42	-44	-56	-24	-7	10	11	2	1	1
1590	2	1	3	13	12	20	26	20	10	2
1600	1	1	3	15	24	27	43	47	47	40
1610	23	9	-3	-9	-17	-6	7	13	12	13
1620	11	17	24	31	36	35	29	9	-9	-21
1630	-19	-21	-7	3	0	6	13	13	12	16
1640	38	59	69	70	82	73	69	63	50	40
1650	22	5	-8	-19	-20	-21	-32	-31	-33	-17
1660	1	11	13	12	15	16	30	35	42	48
1670	46	47	46	47	45	51	59	48	45	35
1680	35	35	35	36	28	23	15	3	0	-9
1690	-17	-28	-32	-31	-31	-32	-21	-2	13	28

END

CONTINUED (M-1056 UP)

CONTINUED (M-1056 UP)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
470	-13	-13	-13	-13	-14	-7	2	10	16	15
480	16	15	17	9	5	6	6	0	-4	-5
490	-3	-3	-4	0	6	12	17	15	16	16
500	15	16	16	15	16	-6	-6	-19	-24	-22
510	-24	-16	4	20	28	44	55	49	43	43
520	35	22	11	5	6	14	16	15	16	16
530	12	5	6	6	-2	-3	-7	-14	-13	-13
540	-13	-7	-1	5	6	5	6	5	9	17
550	12	-1	-17	-26	-35	-42	-43	-40	-35	-21
560	-2	9	20	27	35	44	45	46	39	25
570	9	-12	-23	-23	-23	-23	-15	0	0	0
580	12	19	27	19	15	10	3	-2	-11	-14
590	-27	-28	-15	-13	-5	-3	-3	-11	-15	-15
600	-23	-23	-23	-23	-22	-26	-34	-32	-32	-29
610	-19	-3	6	6	6	6	6	0	-5	-5
620	-13	-21	-23	-22	-24	-16	-12	-13	-13	-13
630	-13	-13	-13	-10	5	16	36	51	68	71
640	42	29	25	26	25	25	26	22	12	2
650	-7	-17	-23	-23	-23	-23	-23	-23	-23	-23
660	-23	-23	-23	-23	-17	-2	5	12	12	12
670	16	15	16	15	16	15	16	7	6	0
680	-3	-8	-14	-11	-4	-2	6	5	7	15
690	21	33	35	35	35	36	23	5	-9	-14
700	-12	-13	-13	-13	-12	-14	-9	-2	4	15
710	15	16	15	16	10	0	-9	-16	-34	-56
720	-65	-62	-55	-59	-27	-17	-7	2	12	17
730	20	16	7	6	2	-4	-11	-14	-9	-2
740	-3	5	6	7	16	15	16	10	4	-3
750	-3	-4	-13	-13	-13	-12	-14	-9	-2	4
760	14	17	26	33	45	45	46	41	35	26
770	15	8	5	6	-2	-3	-3	-3	-3	-2
780	-9	-14	-20	-20	-24	-27	-12	-3	-4	-2
790	-5	-13	-22	-20	6	2	15	24	34	36
800	30	18	15	16	16	15	19	27	14	-1
810	-20	-37	-44	-52	-52	-53	-51	-40	-25	-9
820	3	21	41	57	76	85	84	85	81	67
830	42	10	-10	-12	-17	-4	-30	-44	-43	-39
840	-35	-5	6	5	-1	-4	-2	-10	-13	-19
850	-23	-23	-20	-10	-4	-3	-3	-3	-11	-17
860	-24	-22	-23	-11	0	4	10	16	10	10
870	-4	-3	-21	-23	-22	-23	-22	-23	-20	-7
880	2	8	15	16	15	16	14	4	-3	-3
890	-4	0	7	5	6	6	6	6	6	-1
900	-4	-3	-4	2	12	22	35	35	35	35
910	36	27	26	22	15	16	7	6	-2	-4
920	-3	-3	-3	-3	-3	-3	-3	-3	-4	-2
930	-7	-13	-16	-24	-23	-23	-24	-23	-27	-27
940	-10	8	23	20	13	6	-1	-7	-14	-13
950	-13	-13	-13	-13	-13	-13	-13	-13	-13	-22
960	-24	-19	-13	-9	-2	-3	-4	2	7	5
970	-1	-4	-5	-11	-17	-16	-22	-14	-15	-5
980	1	10	16	15	16	16	16	16	16	16

TO BE CONTINUED

TO BE CONTINUED

RECORD = F-19 COMPONENT = EAST STATION = HITACHINAKA-F
 DATE AND TIME = 1986-11-29-7-30 TOTAL NUMBER OF DATA = 5150
 SIGNALING INTERVAL = 0.010 (SEC) SCAL = 0.10000
 SIGNAL = GR. ACC.
 CONNECTION POINT IN DATA NUMBER = 5150,

CONTINUED(M-1056 UP)

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1510	45	45	46	41	35	30	16	8	0	-4
1520	0	6	5	6	6	6	5	11	20	26
1530	25	27	19	16	10	5	7	-2	4	6
1540	5	6	5	10	16	16	15	21	27	24
1550	27	35	36	32	22	11	5	-1	-9	-17
1560	-23	-23	-17	-3	17	32	41	46	41	25
1570	13	0	-12	-14	-9	-2	-4	-2	-9	-14
1580	-12	-21	-23	-23	-23	-23	-23	-23	-23	-23
1590	-23	-23	-23	-14	-7	-2	-4	-2	-9	-2
1600	-5	-13	-13	-13	-14	-7	-2	-4	-2	-9
1610	-14	-13	-13	-13	-13	-5	-3	-4	-2	-7
1620	-14	-13	-13	-13	-13	-13	-13	-14	-23	-23
1630	-23	-23	-23	-23	-17	-8	-3	-3	-3	-3
1640	-3	-3	-3	-3	-3	-4	-1	5	13	13
1650	5	6	7	16	25	38	45	45	45	45
1660	45	46	42	34	27	3	-4	-3	-3	-3
1670	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3
1680	-4	0	7	5	6	6	6	6	6	6
1690	-2	-3	-3	-2	-7	-13	-13	-7	-3	-2

END

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	1	0	0	0	0	0	0	1	1	1
10	1	1	0	1	0	0	1	1	1	0
20	1	0	0	0	0	0	0	0	0	1
30	0	0	1	0	1	1	1	1	0	0
40	1	0	0	0	0	0	0	0	1	1
50	0	0	0	1	1	1	1	1	0	0
60	1	0	0	0	0	0	0	1	1	1
70	0	0	1	0	0	1	1	1	1	1
80	0	0	0	0	0	0	0	0	0	1
90	0	0	0	0	0	0	1	0	0	1
100	0	0	0	1	2	2	3	4	3	1
110	0	0	3	2	2	2	1	1	2	1
120	0	-1	-3	-2	2	6	2	0	0	2
130	3	8	13	13	2	-7	-9	0	8	5
140	-2	-4	1	3	-4	-16	-17	-6	8	25
150	25	26	28	12	-10	-10	3	4	-3	-10
160	-11	-7	0	8	-2	-18	9	23	18	2
170	-14	12	11	1	-8	33	33	5	-36	-46
180	-22	-39	-46	-20	18	7	42	33	-16	-31
190	-22	-40	-26	11	63	61	71	106	69	-16
200	-35	-73	-86	-45	-6	12	56	13	-42	-40
210	-30	-16	-32	-30	-19	23	69	58	17	-16
220	1	-16	-32	-30	-19	23	69	58	17	-16
230	-30	-20	-1	0	-23	-51	-55	-26	15	33
240	5	-58	-107	-100	-39	26	69	89	93	71
250	12	-36	-46	-57	-48	-7	5	-32	-51	-17
260	14	-10	-76	-115	-96	-48	-6	27	50	45
270	27	18	17	4	-6	-17	-16	13	51	49
280	27	6	-17	-23	1	10	8	23	23	0
290	0	17	7	-4	8	-3	-23	8	65	101
300	103	63	-11	-82	-116	-104	-48	0	9	20
310	49	44	-3	-40	-54	-48	3	76	99	68
320	13	-47	-73	-34	52	113	109	78	43	19
330	16	-4	-36	-36	-45	-84	-93	-32	46	78
340	66	-44	-132	-130	-51	43	120	145	118	28
350	-86	-143	-110	-30	33	44	26	14	5	-7
360	-13	-3	5	6	9	12	19	35	51	65
370	13	-26	-33	-24	-15	6	23	28	46	55
380	25	-3	-29	-64	-83	-65	-35	-26	-18	18
390	72	88	53	0	-48	-78	-80	-43	25	93
400	112	52	-51	-137	-173	-129	-8	113	167	148
410	76	-20	-105	-142	-115	-41	40	101	120	95
420	59	25	11	11	-11	-66	-96	-51	38	101
430	113	72	-3	-78	-110	-58	43	123	127	43
440	-49	-88	-86	-62	-10	26	8	-36	-173	-88
450	-47	30	59	20	-33	-66	-46	18	63	63
460	40	12	-13	-18	21	64	9	-20	-26	-26

TO BE CONTINUED

CONTINUED(F-19 EAST)

Nb.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
470	-12	23	41	13	-16	-20	-30	-46	-51	-51
480	-45	-46	-66	-56	6	81	128	121	64	-16
490	-113	-176	-120	19	120	136	100	-235	-235	-77
500	-46	-8	47	93	88	51	13	-17	-40	-28
510	0	-2	-14	3	33	47	22	-54	-108	-100
520	-66	-11	71	113	52	-50	-112	-135	-102	3
530	93	101	49	-3	-19	30	115	150	103	13
540	-78	-112	-53	43	108	123	83	0	-66	-46
550	8	43	42	-11	-166	-104	8	98	102	102
560	0	-150	-228	-210	-137	-13	133	224	216	136
570	18	-86	-122	-98	-51	28	113	111	-9	-9
580	-43	-59	-15	38	42	33	27	-12	-66	-76
590	-67	-40	13	39	13	21	43	19	-12	-22
600	-30	-39	-33	-21	-9	13	23	-3	-28	3
610	63	83	70	37	-12	-33	-37	-48	-10	80
620	131	99	32	-29	-68	-65	-36	-29	-66	-88
630	-64	-12	30	41	29	6	-36	-66	-57	-16
640	50	59	70	43	-14	-46	-52	-34	8	51
650	63	62	81	110	93	5	-116	-196	-201	-121
660	39	177	193	110	0	-96	-149	-137	-45	83
670	159	149	88	8	-71	-122	-120	-86	-55	-34
680	-24	-20	2	33	22	-15	-23	-20	-2	37
690	55	38	-11	-21	-13	53	119	135	88	-4
700	-103	-153	-115	-33	37	71	59	14	30	-56
710	-28	39	92	105	74	14	-36	-48	-28	7
720	37	35	-2	-40	-58	-59	-48	-33	-26	-35
730	-46	-33	1	49	78	63	17	-28	-28	19
740	80	106	61	-16	-52	-46	-27	-9	14	19
750	-10	-51	-66	-42	3	51	84	73	13	-38
760	-66	-37	-3	1	-36	77	-102	-100	-100	-100
770	-54	30	93	91	56	33	32	53	83	72
780	27	-5	-11	21	68	88	68	33	2	-36
790	-71	-81	-79	-66	-29	12	27	-7	-56	-58
800	-27	-81	-16	-27	-66	-114	-108	-51	16	93
810	132	103	52	-3	-62	-70	-23	21	61	99
820	96	57	47	47	20	-8	-26	-39	-28	2
830	3	-51	-112	-120	-77	-22	23	60	73	53
840	7	-56	-95	-90	-61	-29	-9	-9	-4	8
850	32	93	166	179	116	8	-100	-169	-151	-51
860	45	73	53	23	9	11	21	35	52	63
870	-20	-86	-85	-55	-6	71	127	103	51	32
880	43	25	-51	-176	-259	-200	-5	228	399	412
890	207	-156	-510	-711	-640	-278	207	583	718	550
900	172	-186	-325	-189	148	509	703	607	263	-166
910	-513	-621	-438	-89	221	337	197	-146	-522	-708
920	-598	-320	-66	40	-79	-346	-531	-476	-136	422
930	962	1167	893	306	310	-710	-713	-404	-16	295
940	423	321	66	-254	-418	-336	-26	348	589	552
950	253	-106	-337	-340	-166	37	302	379	-106	37
960	-507	-814	-913	-810	-513	-72	305	446	351	66
970	-267	-438	-340	-11	439	842	1023	936	660	336
980	149	167	273	333	293	143	-83	-289	-378	-312

TO BE CONTINUED

CONTINUED(F-19 EAST)

Nb.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
990	-140	38	143	114	-69	-312	-513	-588	-488	-272
1000	-49	133	259	291	245	179	133	121	121	84
1010	-26	-225	-446	-588	-617	-530	-323	-66	263	479
1020	583	510	299	46	-155	-234	-148	78	357	583
1030	688	596	310	-37	-308	-433	-374	-189	-10	53
1040	-81	-234	-684	-687	-715	-512	-166	184	431	493
1050	340	49	-259	-403	-356	-113	213	509	638	511
1060	179	-208	-489	-560	-408	-140	93	226	213	49
1070	-168	-305	-315	-207	-30	141	252	293	269	183
1080	71	-88	-118	-199	-224	-176	-69	68	179	209
1090	173	116	41	-46	127	190	-198	-134	15	157
1100	353	523	613	579	443	282	142	31	-77	-219
1110	372	486	510	426	-258	-52	127	223	219	139
1120	23	-92	-178	-218	-180	-69	49	132	177	166
1130	99	6	-94	-168	-172	-114	-44	-16	-50	-135
1140	-251	-229	-743	-7	167	296	367	359	258	102
1150	-42	-137	-170	-134	-73	-52	-56	-47	-23	23
1160	99	152	153	131	111	97	103	119	118	113
1170	129	123	80	21	-29	-101	-197	-289	-353	-348
1180	-248	-116	-31	-14	-43	-93	-126	-106	-36	49
1190	111	112	67	26	0	-4	59	206	383	503
1200	468	267	3	-227	-380	-436	-396	-506	-211	-127
1210	-53	-7	-6	-22	-21	1	16	11	-3	-23
1220	-56	-96	-107	-77	-6	102	233	328	315	189
1230	56	-96	-115	-51	51	137	156	90	-19	-110
1240	-146	-117	-43	33	64	13	-88	-196	-242	-213
1250	-138	-40	47	75	33	-32	-90	-87	-13	83
1260	173	246	290	299	287	248	181	93	13	-26
1270	-13	20	41	37	22	3	-26	-38	-32	-66
1280	-178	-313	-616	-455	-400	-263	-38	129	202	174
1290	86	5	-28	-8	68	184	279	308	251	110
1300	-40	-111	-78	17	113	142	70	83	-240	-330
1310	-333	-234	-46	155	260	233	99	-56	160	-195
1320	-176	-113	-38	0	-10	-39	-63	-42	39	136
1330	199	218	206	179	139	89	39	19	60	142
1340	231	290	265	148	-6	-137	-204	-198	-166	-160
1350	-206	-262	-277	-229	-136	-38	65	51	2	2
1360	-30	-26	0	13	3	-44	-98	-99	-53	55
1370	119	132	77	-30	-146	-211	-206	-152	-80	-53
1380	13	5	0	18	49	66	41	-8	-40	-11
1390	88	215	303	323	260	168	122	127	146	157
1400	139	80	3	-53	-53	3	86	148	137	41
1410	-196	-196	-209	-153	-78	-19	-36	-56	-190	-347
1420	-456	-472	-412	-320	-218	-119	-36	22	49	50
1430	45	62	115	201	303	393	323	373	277	138
1440	123	102	130	183	212	173	80	-32	95	-158
1450	-129	-109	-94	-96	-123	-176	-237	-235	-176	-68
1460	-76	-16	-11	-42	-66	-16	-91	-106	-101	-68
1470	-19	35	85	90	28	-73	-159	-203	-126	-126
1480	-11	98	165	153	66	-46	16	133	253	253
1490	352	402	373	251	77	-78	-151	-126	-58	6
1500	56	78	73	73	100	123	103	41	-18	-32

TO BE CONTINUED

CONTINUED(F-19 EAST)										CONTINUED(F-19 EAST)										
ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(10)	ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(10)	
1510	-16	21	22	-6	-41	-62	-66	-36	30	94	-88	-32	22	46	46	37	30	41	63	82
1520	118	78	-26	-152	-233	-233	-176	-83	-8	-6	67	13	-51	-86	-66	-4	53	93	103	76
1530	-54	-90	-97	-74	-31	1	3	-26	-87	-149	16	-34	-43	-19	8	31	36	31	22	19
1540	-181	-187	-179	-173	-172	-157	-90	23	143	238	2050	27	35	29	0	-58	-128	-181	-138	-59
1550	279	233	108	-30	-150	-144	-56	70	157	168	2070	17	67	70	33	-26	-80	-93	-52	17
1560	99	-22	-139	-194	-171	-76	63	213	301	300	2080	98	102	85	53	36	53	103	166	188
1570	203	39	-97	-122	-28	119	230	239	138	-24	2090	49	-66	-140	-159	-74	7	43	43	43
1580	-169	-241	-210	-76	107	241	239	118	-51	-193	2100	59	4	-36	-80	-115	-110	-57	20	82
1590	-235	-152	-20	83	133	108	23	-54	-88	-52	2110	63	4	-51	-80	-97	18	52	30	-24
1600	47	-69	181	153	104	60	28	20	23	17	2120	-76	-106	-86	-9	28	43	53	23	13
1610	-12	-69	-141	-202	-226	-197	-132	-64	-33	-52	2130	6	-2	-9	3	49	99	118	76	5
1620	-100	-143	-152	-148	-142	-118	-80	-33	25	83	2140	-73	-128	-133	-85	-2	93	170	188	77
1630	113	110	90	60	39	55	115	193	250	246	2150	3	-39	-53	-54	-60	-73	-83	-76	35
1640	160	19	-106	-151	-118	-25	83	159	166	100	2160	83	81	30	-47	-133	-203	-180	-93	2
1650	3	-82	-134	-137	-111	-81	-56	-36	-27	-46	2170	93	119	106	72	43	39	49	59	51
1660	-86	-126	-133	-84	26	153	221	192	82	-43	2180	52	7	-10	-19	-28	-42	-55	-22	-39
1670	-101	-68	11	86	127	118	53	-28	-90	-116	2190	23	43	59	19	0	-15	-7	27	71
1680	-107	-93	-75	-32	39	120	186	213	182	104	2200	111	93	59	18	-16	-26	-3	59	78
1690	11	-66	-102	-86	-39	-24	-56	-94	-108	-93	2210	88	55	8	-28	-46	-40	-23	-19	-22
1700	-61	-12	49	91	91	52	-7	-64	-93	-92	2220	-177	-213	-205	-142	-46	48	115	142	123
1710	-57	15	108	188	233	239	200	133	73	43	2230	23	-17	-40	-37	-19	5	23	30	28
1720	33	32	26	7	-23	-53	-88	-117	-113	-71	2240	21	19	13	-5	-46	-79	-36	15	61
1730	-17	19	25	8	-26	-76	-119	-135	-106	-58	2250	96	109	83	22	-48	-94	-66	-16	33
1740	33	70	53	-19	-119	-199	-223	-195	-270	287	2260	67	88	41	13	1	-16	-38	-62	-77
1750	33	28	-36	-123	-166	-116	13	163	270	287	2270	-74	-56	-39	-35	-39	-40	-16	33	88
1760	205	77	-28	-83	-80	-33	15	31	13	-24	2280	120	73	3	-50	-60	-14	48	83	76
1770	-70	-96	-71	-14	49	106	133	108	27	-82	2290	-27	-64	-58	-15	31	39	-6	-80	-106
1780	-172	-194	-140	-36	82	168	184	134	51	-32	2300	-23	61	108	95	28	-58	-119	-114	-56
1790	-84	-74	-4	91	162	167	95	-28	-147	-206	2310	73	83	46	-6	-44	-47	-20	17	43
1800	-197	-143	-70	-8	21	13	-15	-57	-40	-16	2320	51	39	23	13	8	1	-2	-4	-12
1810	18	48	73	93	93	67	27	-6	-17	-11	2330	-17	-10	-4	8	23	50	81	110	123
1820	-14	-44	-95	-136	-129	-71	13	88	111	68	2340	59	-54	-137	-175	-131	-86	-10	43	57
1830	-27	-127	-173	-131	-9	146	268	295	223	110	2350	-6	-42	-71	-79	-66	-44	-20	12	23
1840	21	-7	28	96	136	119	46	-47	-116	-112	2360	52	98	143	163	140	92	48	18	1
1850	-44	39	93	97	43	-34	-96	-125	-126	-98	2370	16	43	57	39	-6	-54	-82	-94	-71
1860	-64	-56	-74	-96	-92	-60	-16	13	15	13	2380	-59	-51	-36	-11	22	58	75	65	36
1870	10	8	10	26	55	72	53	12	-28	-30	2390	-43	-81	-109	-118	-115	-106	-96	-88	-76
1880	3	53	93	110	83	22	-47	-99	-119	-106	2400	-33	0	29	53	73	89	101	108	106
1890	-64	-8	35	53	42	13	3	21	48	53	2410	31	-25	-70	19	47	1	46	61	33
1900	45	37	43	59	84	101	91	53	9	-20	2420	-55	-58	-30	15	50	64	59	33	3
1910	-22	-6	-6	-41	-99	-146	-155	-106	-4	85	2430	-22	-10	8	35	43	27	-7	-46	-43
1920	103	43	-50	-119	-119	-40	65	143	148	79	2440	3	66	118	129	86	21	-52	-56	-49
1930	-20	-106	-148	-146	-113	-79	-56	-46	-38	-26	2450	18	49	59	41	0	-62	-63	-54	-59
1940	1	23	31	23	13	10	19	21	10	-9	2460	13	22	28	43	72	102	108	-67	-28
1950	-22	-16	13	52	83	90	73	50	30	14	2470	15	22	28	43	72	102	113	81	31
1960	8	8	0	-14	-32	-48	-48	-25	8	28	2480	-16	-46	-40	0	58	109	126	88	8
1970	21	-3	-31	-41	-24	-9	-19	-42	-53	-33	2490	-84	-66	-28	7	22	20	9	-4	-17
1980	7	39	43	20	-12	-32	-28	0	52	47	2500	0	11	-118	-80	-30	-91	-67	-36	-48
1990	43	15	-31	-63	-63	-53	-40	-26	-14	-9	2510	-86	-116	100	90	56	43	87	93	79
2000	5	35	82	134	173	179	143	76	-9	-72	2520	71	86	100	90	56	43	87	93	79
2010	-99	-109	-110	-100	-73	-14	70	142	168	132	2530	-40	-69	-91	-98	-83	-50	-18	-20	-33
2020	39	-93	-122	-127	-94	-47	-24	-35	-69	-98	2540	21	31	59	81	70	32	-10	-36	-38

TO BE CONTINUED

TO BE CONTINUED

CONTINUED (F-19 EAST)										CONTINUED (F-19 EAST)											
NO.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	NO.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2550	31	59	60	37	13	8	8	0	-27	-68	3070	23	14	28	53	68	63	37	12	-16	-12
2560	-108	-128	-108	-51	12	51	54	39	22	17	3080	8	28	33	13	-32	-85	-116	2	-86	-50
2570	57	70	88	81	61	35	13	10	20	37	3090	-19	-1	-7	-28	-51	-71	-78	-10	-50	-26
2580	53	57	41	12	-13	-23	-25	-30	-46	-66	3100	8	20	20	28	7	-13	-24	-19	-5	14
2590	-91	-106	-99	-74	-41	-8	23	53	62	50	3110	27	27	13	21	-28	-38	-36	-18	5	26
2600	27	9	0	-8	0	22	48	53	42	23	3120	46	51	42	21	-19	-19	-31	-37	-38	23
2610	12	15	25	32	23	0	-30	-49	-46	-19	3130	0	42	75	87	76	45	12	-2	5	23
2620	8	33	46	29	-16	-63	-96	-108	-94	-58	3140	38	37	15	-11	-24	-16	2	17	19	8
2630	-13	23	42	36	23	13	3	-6	-16	-18	3150	-7	-19	-20	-21	-31	-55	-78	-83	-66	-42
2640	-18	57	-2	-6	-18	-29	-40	-32	0	36	3160	-23	-23	-47	-82	-98	-75	-26	28	63	51
2650	56	57	43	18	2	9	36	61	70	50	3170	27	-16	-47	-50	-20	20	52	66	61	51
2660	5	-58	-110	-126	-102	-49	3	40	43	20	3180	39	30	23	6	-2	-16	-12	11	17	33
2670	-13	-40	-51	-49	-48	-43	-30	-6	16	23	3190	38	19	-6	13	5	32	56	64	54	35
2680	16	-3	-19	-23	-12	13	32	11	-48	-115	3200	5	-16	-19	10	-11	-43	-72	-86	-79	-60
2690	-146	-113	-40	42	103	123	93	40	-2	-25	3210	1	7	13	10	10	-11	-43	-72	-86	-79
2700	-28	-8	20	43	53	53	38	19	1	-9	3220	-30	-2	17	29	32	26	13	6	3	9
2710	-7	8	39	77	106	111	86	41	-2	-26	3230	19	33	41	32	32	1	-26	-34	-18	11
2720	-18	9	32	39	55	29	23	23	19	12	3240	53	35	1	-29	-39	-29	-11	1	-1	-20
2730	3	8	21	31	21	-20	-82	-133	-146	-88	3250	-42	48	61	47	48	61	47	13	-12	-16
2740	-113	-58	-9	11	3	-17	-36	-34	-28	-28	3260	20	72	113	128	103	56	0	-36	-4	-36
2750	-39	-56	-56	-34	3	40	59	57	39	14	3270	-21	-17	-31	-59	-78	-80	-61	-32	-5	5
2760	2	8	23	36	31	12	-11	-19	-6	20	3280	-7	-28	-43	-46	-36	-23	-17	-20	-27	-30
2770	43	44	23	-2	-18	-10	19	53	76	73	3290	-26	-16	-4	0	-6	-16	-16	-19	3	33
2780	48	17	23	-6	14	41	51	39	13	-10	3300	0	65	48	16	-14	-30	-28	-7	13	22
2790	-25	-34	-40	-61	-34	-26	-25	-39	-66	-93	3310	11	-11	-34	-49	-23	8	49	68	60	27
2800	-111	-118	-113	-100	-77	-42	0	43	73	88	3320	-10	-38	-49	-46	-28	0	26	38	32	17
2810	89	83	68	49	25	0	-26	-45	-56	-55	3330	7	7	7	7	3	-8	-26	-36	-27	-5
2820	-51	-44	-40	-44	-44	-35	-14	13	50	76	3340	22	43	55	55	40	8	-17	-26	-17	-6
2830	79	59	31	8	8	31	68	93	81	32	3350	0	1	3	17	43	72	92	87	52	-2
2840	-22	-50	-39	0	39	53	24	-33	-83	-100	3360	-51	-79	-75	-43	-1	23	12	-7	-75	-106
2850	-80	-35	13	53	63	41	17	11	20	26	3370	-102	-72	-31	8	33	55	20	2	-7	-4
2860	16	-13	-53	-88	-110	-105	-70	-16	39	73	3380	8	53	64	91	95	71	26	-13	-37	-36
2870	77	59	33	8	-9	-11	1	11	10	1	3390	-19	1	6	-16	-69	-73	-77	-55	-8	37
2880	-13	-20	-10	3	15	29	43	53	59	63	3400	59	46	10	-26	-45	-35	-6	23	33	26
2890	65	64	61	59	59	53	26	-9	-41	-56	3410	6	-10	-19	-15	-10	-6	-13	-20	-20	-9
2900	-52	-46	-43	-49	-63	-81	-96	-91	-68	-36	3420	2	6	1	-16	-33	-38	-31	-18	7	31
2910	-9	5	11	13	20	25	23	11	-4	-12	3430	37	26	13	8	12	23	34	32	20	3
2920	-14	-13	-6	0	0	-10	-30	-54	-63	-48	3440	-10	-9	5	22	33	37	26	10	6	8
2930	-16	13	23	12	-14	-30	13	29	66	77	3450	23	30	16	-5	-21	-27	-20	-6	8	13
2940	59	30	1	-14	-5	21	48	53	33	8	3460	4	-16	-34	-36	-20	0	16	26	25	21
2950	-6	-16	-28	-31	30	13	-5	-16	-32	-4	3470	20	22	24	23	18	5	-12	-26	-27	-11
2960	-6	0	-16	-36	-50	-51	-46	-38	-30	-26	3480	-27	19	22	23	21	19	12	5	0	-10
2970	22	3	-16	-56	-6	6	0	-10	-13	-6	3500	-63	-55	-33	-13	0	0	-10	-26	-39	-44
2980	-17	-11	-5	2	6	29	19	-5	-37	-62	3510	-33	-7	23	51	58	40	1	-45	-83	-98
2990	3	10	18	23	28	29	6	0	-6	-2	3520	-83	-46	-1	29	35	15	-17	-40	-40	-16
3000	-70	-59	-24	25	66	73	83	28	13	28	3530	20	50	61	49	19	-13	-34	-33	-9	28
3010	66	95	99	71	32	8	8	19	23	13	3540	62	77	71	48	13	-13	-20	-16	-8	-7
3020	-1	-15	-24	-24	-21	-31	-61	-106	-132	-120	3550	-11	-17	-16	-8	-5	0	13	23	30	23
3030	-72	-17	13	-13	-19	-85	-93	-40	7	60	3560	8	-7	-16	-3	18	41	53	53	43	31
3040	25	0	-51	-101	-118	-83	-16	43	75	60	3570	16	3	-6	-13	-26	-36	-36	-28	-9	19
3050	23	-1	3	23	68	109	133	153	112	85	3580	44	43	23	-4	-33	-48	-48	-33	-13	3
3060	63	49	37	23	12	11	23	41	50	41											

TO BE CONTINUED

TO BE CONTINUED

CONTINUED(F-19 EAST)										CONTINUED(F-19 EAST)											
ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
3590	8	7	0	5	23	40	43	35	14	-13	4110	33	39	31	15	-1	-6	3	25	43	64
3600	-42	-56	-47	-22	7	33	50	53	43	28	4120	28	1	-15	-12	9	33	48	41	13	-21
3610	12	0	-18	-41	-63	-66	-52	-23	6	25	4130	-47	-59	-57	-42	-24	-14	-8	-7	-9	-11
3620	26	18	10	7	13	19	13	-7	-10	15	4140	-11	-16	-18	-26	-33	-24	-31	-23	-20	-23
3630	8	3	21	32	32	21	7	-5	-16	-24	4150	-36	-49	-52	-39	-16	-2	-3	-20	-40	-51
3640	-26	-18	-5	8	17	18	9	-5	-6	10	4160	-43	-20	1	13	15	9	-3	-9	0	15
3650	32	42	30	-48	-34	-11	6	7	-1	-11	4170	27	51	25	16	7	0	-3	-3	0	3
3660	40	-6	-39	-48	-11	6	7	-1	-11	-11	4180	13	19	17	10	4	2	-5	-7	0	8
3670	-15	-15	-16	-26	-37	-39	-25	-6	0	-3	4190	11	4	-11	-23	-22	-14	-6	-8	-16	-31
3680	-13	-26	-26	11	7	20	15	-6	-36	-52	4200	-41	-36	-15	5	13	8	-11	-31	-42	-42
3690	-50	-30	-3	16	21	18	15	8	2	-8	4210	-33	15	3	19	31	36	33	25	16	17
3700	-21	-33	-28	-12	3	9	3	-9	-18	-15	4220	25	33	43	46	38	26	13	3	1	3
3710	-5	5	11	8	4	1	3	11	24	36	4230	0	-7	-21	-26	-22	-15	-6	2	8	13
3720	38	28	13	-8	-28	-38	-39	-30	-15	5	4240	20	18	11	6	0	-2	4	20	37	45
3730	19	23	13	2	-5	0	11	23	30	19	4250	42	28	15	5	3	2	0	-4	-10	-18
3740	-6	-32	-42	-30	-11	16	32	27	7	-9	4260	34	23	15	9	8	-7	-11	-13	-14	-11
3750	-9	8	31	50	58	52	36	19	9	13	4270	-22	-24	-20	-14	-8	-7	-11	-10	-17	-29
3760	35	62	78	80	64	28	-19	-63	-87	-85	4280	-8	-9	-16	-23	-36	-12	5	13	21	23
3770	-59	-27	7	20	15	3	0	2	8	8	4290	-43	-56	43	43	30	12	-1	-1	10	23
3780	8	7	6	1	-6	-12	-16	-13	-8	2	4300	28	37	43	30	12	-6	20	37	33	13
3790	13	23	23	6	-25	-56	-78	-81	-66	-39	4310	35	32	12	11	-20	-6	20	37	33	13
3800	-18	-11	-16	-23	-26	-23	-19	-17	-17	-19	4320	-9	-25	-33	-30	-26	-22	-21	-24	-22	-13
3810	-23	-24	-20	-13	-11	-16	-26	-34	-35	-21	4330	0	8	15	13	8	0	-1	4	11	13
3820	4	29	51	62	63	58	49	39	23	13	4340	13	8	1	-3	-5	3	12	13	8	-2
3830	13	23	35	50	56	45	23	3	-13	-23	4350	1	3	1	-3	-5	-4	5	8	8	8
3840	-20	-13	-6	-8	-17	-27	-21	-6	12	20	4360	-17	-30	-32	-26	-16	-4	5	8	8	8
3850	26	13	0	-16	-25	-21	-6	-19	1	21	4370	7	4	3	8	18	25	26	18	-1	-12
3860	-14	-30	-28	-7	21	42	49	39	19	5	4380	-16	-14	-12	-14	-16	-19	-21	-26	-25	-24
3870	-20	-21	-7	12	27	26	17	8	8	-5	4390	-19	-18	-18	-17	-13	0	17	23	26	25
3880	25	28	32	33	28	16	1	-16	-24	-26	4400	21	11	0	-13	-19	-16	-6	0	-5	-13
3890	-27	-26	-16	-8	-4	-6	-15	-28	-36	-50	4410	-18	19	10	-33	-50	-49	34	7	-14	-19
3900	-20	-14	-13	-14	-18	-20	-22	-22	-15	0	4420	-5	19	39	46	40	29	19	12	6	-2
3910	13	18	11	0	-9	-7	5	23	32	30	4430	-16	-28	-30	-24	-8	2	6	5	-6	-21
3920	19	-2	-26	-45	-51	-42	-20	0	6	6	4440	-6	5	16	18	9	0	-6	0	6	13
3930	6	8	5	2	-2	-6	-2	7	17	19	4450	16	6	6	-21	-25	-16	0	13	13	5
3940	19	19	21	29	39	43	40	31	16	2	4460	-13	-24	-23	-9	10	23	23	11	-4	-11
3950	-7	-6	6	12	8	1	-6	-3	2	-3	4470	-6	5	17	23	21	13	6	2	1	3
3960	0	-13	-20	-20	-11	0	8	5	-3	-16	4480	2	-8	-23	-33	-30	-18	-6	7	-10	-11
3970	-26	-33	-39	-46	-48	-48	-43	-35	-20	-4	4490	-20	-19	-6	12	12	21	7	-32	-17	15
3980	13	27	30	20	0	-26	-40	-27	1	33	4500	13	30	29	15	-13	-58	-46	-32	-22	12
3990	63	75	69	48	18	-7	-19	-18	-11	-4	4510	25	19	2	-11	-16	-7	9	21	22	12
4000	-3	-11	-8	-20	-26	-20	-19	-22	-20	-12	4520	-21	-11	-12	-7	-2	-1	-9	-18	-24	-26
4010	-1	18	18	19	13	11	14	21	21	13	4530	-22	-17	-10	-7	-6	0	0	0	1	2
4020	-2	-18	-22	-11	7	22	31	31	23	8	4540	2	-3	-8	-6	2	13	23	19	8	-6
4030	1	-2	-3	-4	-7	-8	-4	3	8	8	4550	-13	-10	-3	4	4	5	6	8	17	23
4040	1	-2	-3	-4	-15	13	41	48	36	13	4560	27	-6	13	5	5	15	23	28	23	13
4050	-7	-50	-40	-36	-12	-18	-29	-36	-23	-4	4570	2	26	17	-26	8	8	5	-1	-11	-20
4060	10	12	4	-4	-6	-4	-3	-6	-7	-6	4580	-18	-16	-18	-26	-25	-17	-8	6	13	11
4070	-8	-10	-10	-6	8	23	31	29	12	-9	4590	3	-7	-7	-5	11	23	16	13	-9	-29
4080	-30	-43	-44	-29	-2	23	40	43	33	22	4600	-33	-19	-31	18	25	24	16	6	-3	-9
4090	9	3	10	14	16	15	13	8	3	3	4610	-10	-10	-11	-6	0	4	3	-1	-12	-23
4100	13	28	40	41	28	12	1	-3	3	18	4620	-29	-29	-20	-11	-3	1	2	0	-4	-6

TO BE CONTINUED

TO BE CONTINUED

CONTINUED (F-19 EAST)
 RECORD = F-19 COMPONENT = NORTH STATION = HITACHINAKA-F
 DATE AND TIME = 1986-11-29-7-30 TOTAL NUMBER OF DATA = 5150
 SAMPLING INTERVAL = 0.010 (SEC) SCAL = 0.10000
 SIGNAL = GR. ACC. CONNECTION POINT IN DATA NUMBER = 5150,

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
4630	-7	-1	8	20	25	24	18	8	3	-2
4640	-1	4	13	20	19	9	-6	-18	-23	-20
4650	-10	1	8	5	-3	-12	-18	-13	-2	12
4660	22	21	10	-6	-18	-20	-13	1	13	23
4670	28	22	13	8	11	20	30	33	28	13
4680	-3	-20	-32	-32	-20	-3	10	13	12	5
4690	-6	-16	-15	-11	-6	-4	-6	-7	-11	-11
4700	-8	-7	-6	0	0	-3	-6	-9	-15	-18
4710	-20	-16	-8	1	8	13	17	19	20	20
4720	17	9	0	-4	-8	-6	-1	3	8	7
4730	0	-8	-16	-19	-13	-4	0	0	-6	-11
4740	-11	-9	-2	1	0	-6	-8	-4	5	11
4750	13	10	7	8	11	13	13	10	7	8
4760	16	23	32	33	28	13	0	-8	4	4
4770	20	30	30	21	8	-5	-11	-12	-6	3
4780	8	3	-6	-18	-26	-28	-24	-24	-22	-21
4790	-20	-17	-11	-2	2	2	-2	-7	-14	-16
4800	-16	-13	-6	0	0	0	0	4	7	7
4810	2	-5	-16	-20	-18	-6	7	17	20	16
4820	8	2	1	0	-3	-8	-11	-9	-5	1
4830	10	21	28	28	23	13	3	-7	-18	-23
4840	-20	-12	-5	0	-5	-8	-15	-19	-19	-18
4850	-18	-18	-11	0	13	25	33	36	35	32
4860	27	22	19	13	9	7	3	-1	-6	-8
4870	-3	3	10	12	6	-1	-8	-12	-14	-11
4880	-8	-9	-16	-21	-21	-19	-12	-5	-4	-6
4890	-10	-12	-12	-8	-1	2	2	-4	-11	-17
4900	-16	-8	3	12	13	11	1	-11	-20	-23
4910	-16	-5	3	7	2	-6	-11	-8	5	16
4920	23	19	6	-6	-8	3	21	36	41	33
4930	23	8	0	-7	-6	3	15	24	23	17
4940	7	-2	-7	-7	-1	3	3	-6	-22	-32
4950	-32	-20	-4	8	14	7	-4	-18	-22	-17
4960	-7	0	3	5	4	3	3	3	3	3
4970	0	0	-2	-6	-6	-7	-7	-4	0	5
4980	8	5	-3	-13	-22	-24	-18	-5	11	27
4990	37	40	37	31	26	25	22	25	23	22
5000	19	15	15	13	13	8	1	-6	-10	-8
5010	-5	0	-2	-6	-9	-14	-17	-20	-24	-26
5020	-27	-29	-30	-31	-34	-36	-36	-35	-33	-30
5030	-28	-25	-20	-14	-6	0	5	7	8	9
5040	11	9	3	0	0	0	6	18	28	32
5050	29	23	18	16	19	25	31	32	24	8
5060	-6	-11	-6	3	14	21	12	-2	-15	-20
5070	-20	-13	-9	2	6	5	2	-2	-1	5
5080	12	13	13	7	0	-9	-14	-11	-6	-1
5090	1	0	-6	-11	-10	0	12	20	13	3
5100	-8	-16	-13	-1	12	19	17	10	3	1
5110	5	8	7	-6	-10	-17	-17	-12	-10	-14
5120	-24	-29	-23	-9	7	18	15	0	-18	-32
5130	-34	-22	-6	7	8	3	0	1	-8	3
5140	0	-8	-18	-26	-22	-10	7	23	30	28

TO BE CONTINUED

END

CONTINUED(F-19 NORTH)

CONTINUED(F-19 NORTH)

No.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
470	120	114	31	-66	-98	-77	-28	51	112	77
480	-25	-103	-104	-45	37	93	84	23	-35	-55
490	-27	36	81	65	2	-56	-81	-81	-58	-20
500	12	26	19	21	39	81	99	29	-76	-108
510	-69	-13	54	115	108	32	-49	-87	-57	14
520	64	64	34	-11	-66	-81	-38	27	67	63
530	16	-52	-100	-118	-107	-39	73	155	84	84
540	-17	-128	-177	-131	-45	44	96	58	-42	-98
550	-70	2	85	123	76	-31	-119	-128	-66	27
560	102	135	152	149	89	-22	-135	-179	-158	-104
570	30	50	91	73	23	-17	-14	11	20	2
580	-35	-69	51	17	104	158	130	19	-111	-171
590	-27	85	146	137	87	22	-22	-44	-66	-66
600	-80	-48	7	47	65	47	-18	-102	-146	-103
610	-10	71	121	106	28	-43	-66	-43	16	69
620	67	7	-47	-63	-51	-22	21	46	37	19
630	0	8	50	72	39	-20	-42	-11	26	58
640	107	115	31	-91	-185	-226	-175	-36	96	153
650	117	16	-84	-123	-106	-69	-25	32	96	143
660	140	88	-14	-101	-107	-70	-19	50	101	98
670	37	-56	-125	-123	-46	65	144	155	106	-14
680	-171	-248	-198	-88	24	126	187	159	42	-72
690	-100	-45	17	39	39	14	-44	-81	19	17
700	98	115	113	107	45	-46	-81	-41	19	17
710	-49	-107	-109	-39	81	170	177	103	-26	-155
720	-229	-220	-127	-27	17	24	9	-13	-17	11
730	50	64	36	7	21	54	48	20	12	12
740	-17	-48	-51	-39	-37	-58	-18	14	42	73
750	103	96	54	19	18	9	-47	-99	-113	-111
760	-106	-67	18	81	69	6	-36	-53	-62	-39
770	42	120	148	135	87	30	-3	-23	-36	-28
780	9	51	53	24	2	-15	-29	-4	36	52
790	36	-6	-76	-114	-71	25	91	75	6	-69
800	-136	-149	-92	-17	76	165	184	135	46	-56
810	-113	-90	-6	71	80	52	24	-7	28	-27
820	-15	-12	-16	-52	-82	-51	15	55	19	-20
830	-19	-11	-11	0	-12	-73	-125	-125	-57	54
840	140	132	19	-128	-234	-247	-149	19	107	50
850	-49	-103	-88	-2	136	245	210	15	-232	-426
860	-474	-339	-63	241	476	572	479	204	-126	-367
870	-657	-384	-155	143	354	387	234	-38	-288	-397
880	-344	-135	176	430	461	234	-135	-461	-560	-379
890	-25	353	632	697	502	168	-112	-237	-189	-66
900	47	58	2	697	-155	-163	22	333	583	654
910	491	97	-353	-659	-715	-459	2	404	556	447
920	114	-296	-550	-548	-376	-158	19	131	170	177
930	209	266	365	486	500	355	139	-92	-275	-286
940	-106	160	348	279	-52	-505	-903	-1052	-819	-255
950	333	653	615	263	-192	-462	-425	123	283	564
960	580	355	23	-259	-365	-264	-37	180	266	158
970	-76	-346	-561	-600	-412	-73	288	547	620	456
980	90	-353	-600	-570	-271	143	462	561	438	121

TO BE CONTINUED

TO BE CONTINUED

CONTINUED (F-19 NORTH)

CONTINUED (F-19 NORTH)

NO.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1510	279	323	339	44	-188	-374	-412	-270	-54	79
1520	37	-83	-240	-302	-200	38	299	461	455	285
1530	38	-158	-226	-162	-28	86	126	91	14	-66
1540	-111	-102	-102	-78	-62	-110	-139	-140	-110	-110
1550	-58	-10	12	2	-23	-27	14	64	86	101
1560	131	153	140	115	105	110	103	76	22	-80
1570	219	-325	-140	-239	-115	0	76	91	42	-42
1580	-109	-115	-59	17	74	100	96	64	21	-11
1590	-24	-7	10	8	-12	-56	-106	-127	-96	-7
1600	107	216	276	265	210	157	118	111	131	140
1610	106	56	15	-15	-39	-64	-90	-136	-208	-283
1620	-308	-252	-135	-2	107	170	178	137	61	-4
1630	-44	-62	-68	-69	-59	-27	32	96	128	125
1640	89	36	5	19	56	77	64	28	12	38
1650	85	117	90	8	-81	-152	-165	-101	-7	47
1660	32	-60	-180	-247	-237	-168	-59	48	91	57
1670	5	-15	-5	27	76	131	156	130	55	-44
1680	-133	-167	-106	31	162	206	155	47	-69	-123
1690	-70	55	170	210	140	-8	-163	-237	-207	-106
1700	2	67	56	-12	-90	-135	-129	-76	7	80
1710	99	80	56	32	-17	-101	-197	-248	-214	-115
1720	-2	98	155	126	39	-27	-12	84	200	235
1730	154	-3	-175	-296	-323	-246	-97	48	128	125
1740	66	-1	-59	-96	-79	-11	64	115	137	131
1750	115	103	91	79	75	79	61	7	-57	-93
1760	-93	-57	17	98	142	128	54	-42	-106	-110
1770	-78	-30	17	52	61	40	-2	-30	-24	1
1780	24	36	29	-12	-72	-99	-74	-17	35	47
1790	0	-76	-133	-130	-58	59	160	185	131	38
1800	-53	-101	-78	0	71	99	83	37	-38	-113
1810	-141	-95	-2	86	133	132	91	44	22	32
1820	56	67	32	-49	-150	-228	-244	-172	-59	26
1830	52	37	-10	-76	-127	-130	-86	-36	2	37
1840	71	97	111	113	96	71	56	32	12	5
1850	-1	-39	-92	-125	-120	-88	-42	2	32	59
1860	85	111	140	175	173	108	8	-66	-81	-56
1870	-9	42	76	63	-2	-69	-96	-86	-61	-36
1880	-22	-13	5	36	70	88	71	31	-23	-64
1890	-70	-46	-27	-24	-36	-60	-87	-100	-99	-88
1900	-76	-65	-31	32	102	140	127	75	24	1
1910	2	22	42	36	-12	-90	-136	-94	2	91
1920	128	101	36	-27	-61	-55	-17	11	0	-34
1930	-41	6	76	124	125	78	-1	83	-134	-132
1940	-89	-42	-15	-3	6	29	81	149	180	157
1950	95	35	-2	-22	-31	-31	-38	-56	-66	-46
1960	2	60	94	86	45	-11	-63	-85	-86	-81
1970	-82	-96	-101	-81	-39	2	32	32	11	-6
1980	-7	-2	1	-4	-14	-14	-8	-1	0	-2
1990	-7	-12	-11	6	40	78	103	103	70	-7
2000	-90	-139	-130	-81	-22	22	27	0	-29	-25
2010	22	88	123	105	45	-19	-54	-48	-14	11
2020	6	-28	-66	-83	-72	-32	25	91	158	192

TO BE CONTINUED

TO BE CONTINUED

CONTINUED(F-19 NORTH)										CONTINUED(F-19 NORTH)											
ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2550	144	131	75	2	-46	-51	-27	0	2	-15	3070	-10	-7	-18	-36	-52	-54	-36	-10	12	21
2560	-27	-21	-3	25	43	18	-31	-69	-62	-29	3080	6	-27	-60	-70	-51	-15	-36	-10	34	27
2570	2	14	7	-14	-31	-26	14	74	101	66	3090	-6	-5	12	36	55	61	50	22	0	-10
2580	-5	-77	-120	-122	-92	-49	-9	14	22	27	3100	-6	2	22	42	47	22	17	-51	-64	-52
2590	29	31	35	18	-12	-48	-60	-45	-11	-11	3110	-24	2	10	-5	-34	-59	-73	-69	-48	-27
2600	16	34	37	12	-20	-50	-65	-52	-10	41	3120	-27	-52	-72	-58	-13	42	91	112	98	49
2610	76	81	54	18	-2	1	17	22	8	-28	3130	-4	-28	-12	19	41	38	16	-4	-14	-10
2620	-80	-114	-99	-41	23	60	52	16	-27	57	3140	4	19	22	12	2	2	8	18	26	25
2630	-71	-56	-20	5	8	-11	-40	-57	-10	-27	3150	21	15	0	-17	-20	-14	-7	1	10	12
2640	12	49	70	61	-40	-74	-62	-48	-18	-19	3160	2	-15	-29	-31	-19	2	18	1	5	-14
2650	-34	-22	-4	2	-2	-3	5	17	30	54	3170	-30	-41	-40	-25	-11	-13	-24	-38	-56	-69
2660	81	101	108	95	71	39	-2	-60	-59	-58	3180	-62	-51	16	60	76	70	44	7	-25	-36
2670	-46	-17	23	52	66	54	24	-15	-54	-73	3190	-22	6	30	38	32	22	6	-7	-11	-2
2680	-61	-24	22	56	71	67	59	52	52	53	3200	14	22	17	-8	-45	-75	-86	-71	-34	6
2690	48	29	-3	-31	-37	-17	17	47	55	37	3210	36	43	35	21	9	8	18	32	40	42
2700	-2	-49	-79	-76	-36	22	80	111	106	65	3220	38	30	22	5	-17	-27	-22	-2	22	42
2710	-7	-77	-118	-117	-81	-39	-18	-23	-33	-30	3230	54	52	39	-21	32	39	61	56	33	2
2720	-8	27	59	58	17	-27	-38	-10	32	68	3240	-85	-37	-34	-21	-14	-11	-19	-34	-39	-28
2730	69	32	-14	-49	-56	-35	-9	0	-11	-42	3250	-10	-4	2	1	-8	-13	-8	2	14	10
2740	-70	-82	-77	-64	-49	-36	-17	2	29	52	3260	-10	-38	-59	-65	-61	-49	-36	-29	-27	-19
2750	69	76	65	31	-4	-20	-14	5	22	22	3270	-7	7	24	35	34	21	2	-7	-7	0
2760	9	-9	-12	4	31	42	17	-40	-102	-140	3280	12	36	55	58	48	34	22	18	14	7
2770	-142	-114	-65	-8	45	79	84	67	41	12	3290	-6	-18	-24	-19	-7	2	0	-12	-27	-32
2780	-8	-25	-19	8	44	58	40	10	-18	-40	3300	-28	-19	-13	-11	-8	-10	-14	-17	-10	0
2790	-50	-36	-9	12	19	19	18	22	39	71	3310	5	-4	-25	-35	-31	-14	0	2	0	-5
2800	108	121	91	26	-56	-121	-138	-99	-34	14	3320	-10	-10	-2	10	25	38	32	13	-13	-34
2810	27	-1	-46	-75	-71	-41	-6	12	6	-15	3330	-36	-18	8	28	31	23	19	18	15	11
2820	-29	-13	27	66	77	59	21	-11	-17	13	3340	8	2	6	10	12	18	22	22	22	2
2830	59	89	86	52	10	-29	-50	-47	-27	-7	3350	-9	4	27	44	48	37	19	2	-15	-22
2840	0	-10	-33	-49	-49	-36	-18	-7	-9	-13	3360	0	4	8	-1	-17	-32	-44	-40	-18	7
2850	-7	7	22	28	24	13	0	-13	-16	-3	3370	28	34	21	-3	-29	-44	-39	-22	-4	6
2860	12	22	26	31	34	41	45	35	15	0	3380	10	6	-9	-52	-57	-73	-76	-57	-28	0
2870	-4	0	8	24	40	47	36	20	12	16	3390	25	37	26	-3	-36	-53	-48	-27	1	28
2880	10	-5	-7	2	15	22	27	32	36	28	3400	41	32	12	-2	-1	7	17	32	56	74
2890	12	6	6	7	4	6	12	21	20	14	3410	79	75	65	47	19	-4	-12	-10	-5	-5
2900	0	-27	-64	-94	-113	-115	-112	-107	-100	-89	3420	-21	-39	-47	-38	-14	18	41	43	31	19
2910	-73	-44	-13	13	26	21	2	-20	-36	-31	3430	5	-2	-3	0	1	9	22	29	22	4
2920	-8	23	47	50	59	29	22	16	17	29	3440	-17	-33	-65	-68	-40	-28	-18	-18	-28	-40
2930	35	24	-5	-28	-59	-21	-14	-9	-14	-59	3450	-45	-35	-11	12	36	47	41	26	11	7
2940	-46	-52	-39	-17	-12	-33	-57	-70	-61	-27	3460	14	22	27	27	19	2	-14	-20	-15	-14
2950	24	73	94	74	31	-2	-22	62	88	60	3470	-20	-34	-32	-28	-18	-2	14	16	5	-14
2960	94	90	86	78	63	38	0	-35	-59	-60	3480	-50	-60	-50	-34	-36	-35	-36	-39	-41	-39
2970	-37	-7	12	11	17	17	20	12	-1	-24	3490	-24	0	31	55	65	59	37	7	-22	-41
2980	-48	-60	-53	-32	-7	12	24	19	17	17	3500	-44	-28	11	10	17	25	31	36	32	23
2990	21	28	23	12	-15	-39	-51	-47	-31	-10	3510	27	18	11	31	21	-8	-46	-68	-62	-36
3000	6	17	27	31	29	22	12	2	-4	-12	3520	17	19	27	31	21	-8	-46	-68	-62	-36
3010	-20	-27	-32	-38	-59	-37	-37	-31	-32	-39	3530	-2	28	61	29	3	-15	-13	10	44	74
3020	-47	-55	-56	-48	-83	-28	2	42	69	74	3540	81	67	52	29	-38	-58	-14	14	28	19
3030	61	52	39	29	27	34	37	22	-4	-20	3550	-2	-31	-56	-60	-44	-21	-2	7	16	22
3040	-7	23	48	58	52	34	17	17	36	60	3560	25	12	-8	-35	-54	-58	-44	-24	-8	-3
3050	71	59	32	12	1	0	-2	-4	-1	-3	3570	-16	-35	-49	-48	-31	-17	-13	-18	-19	-11
3060	16	22	19	2	-23	-49	-64	-66	-51	-27	3580	-1	9	7	-4	-22	-34	-24	6	34	41

TO BE CONTINUED

TO BE CONTINUED

CONTINUED(F-19 NORTH)

HP.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
3590	24	-4	-31	-44	-36	-6	21	33	22	12
3600	16	32	56	74	74	55	22	-4	-10	0
3610	12	19	13	-8	-30	-35	-19	2	11	4
3620	-10	-23	-22	-11	-2	2	-2	-9	-2	22
3630	48	59	50	27	6	-1	16	19	19	10
3640	-7	-24	-25	-16	-10	-19	-41	-67	-79	-72
3650	-45	-10	21	36	32	15	-4	-14	-14	-1
3660	23	42	47	27	-7	-39	-58	-54	-22	21
3670	53	59	43	22	16	21	32	35	19	-9
3680	-34	-40	-22	7	29	33	19	-1	-13	-9
3690	2	9	8	2	-4	2	2	12	23	28
3700	28	29	35	39	34	27	11	-11	-32	-38
3710	-30	-19	-12	-14	-20	-28	-31	-34	-32	-31
3720	-33	-36	-36	-30	-21	-10	-3	0	2	8
3730	17	35	52	55	39	11	-14	-22	-7	22
3740	46	52	46	18	-20	-54	-69	-59	-33	0
3750	22	21	-1	-27	-33	-22	-2	14	12	-9
3760	-36	-56	-59	-43	-18	1	2	-8	-21	-26
3770	-20	-8	0	2	-4	-10	-7	2	11	21
3780	30	40	49	52	47	35	19	9	9	11
3790	12	16	15	12	6	2	2	8	16	22
3800	23	15	2	-12	-25	-29	-28	-22	-12	0
3810	15	29	31	17	-2	-21	-33	-39	-38	-35
3820	-37	-52	-73	-84	-72	-38	7	50	73	71
3830	53	27	7	2	12	22	28	27	21	6
3840	-10	-22	-27	-18	-10	-3	0	2	5	2
3850	6	10	11	-11	12	20	29	32	32	28
3860	19	7	-3	-11	-18	-18	-11	-3	5	10
3870	10	2	-4	-5	2	12	12	-1	-29	-56
3880	-67	-65	-47	-24	-7	1	53	48	32	19
3890	21	21	21	25	35	47	18	7	0	1
3900	11	10	16	26	27	18	7	0	1	1
3910	-7	-21	-36	-47	-51	-44	-27	-11	-11	-27
3920	-42	-44	-20	4	32	42	29	1	-27	-39
3930	-28	0	20	25	12	-10	-27	-27	-17	-12
3940	-20	-36	-40	-27	2	34	48	39	9	-22
3950	-36	-22	8	41	56	47	18	4	-10	-4
3960	-7	-17	-30	-40	-44	-40	-34	-28	-24	-27
3970	-22	-7	12	24	20	5	-5	-6	1	17
3980	32	36	22	0	-18	-21	-10	1	9	8
3990	3	0	0	9	23	35	44	52	56	56
4000	49	37	22	6	0	2	8	8	3	0
4010	-1	2	1	-4	-18	-31	-35	-28	-8	12
4020	31	38	37	31	26	24	24	24	16	2
4030	-11	-27	-40	-48	-48	-39	-31	-27	-27	-31
4040	-40	-50	-48	-22	12	32	26	1	-27	-45
4050	-40	-19	10	35	39	27	9	-2	0	14
4060	35	46	40	21	-3	-27	-49	-56	-47	-30
4070	-12	2	10	6	-7	-22	-29	-27	-11	2
4080	21	32	35	27	20	20	21	20	14	2
4090	-17	-39	-49	-38	-13	12	24	19	3	-9
4100	-17	-15	-7	1	0	-7	-14	-13	-4	7

TO BE CONTINUED

CONTINUED(F-19 NORTH)

HP.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
4110	17	28	42	52	51	37	22	12	11	15
4120	22	28	27	16	6	0	6	-11	-11	-8
4130	-2	2	2	-1	-11	-23	-31	-59	-20	-7
4140	2	9	10	6	-1	-11	-22	-28	-31	-31
4150	-29	-22	-9	0	2	-17	-36	-44	-46	-36
4160	-15	10	27	27	12	-4	-10	-2	16	42
4170	58	60	46	26	10	0	-4	-5	-2	-2
4180	0	6	11	9	10	-11	-20	-18	-8	-1
4190	2	4	2	-3	-8	-5	-7	-12	-27	-38
4200	-41	-27	-6	7	11	2	2	0	2	11
4210	19	19	12	7	7	13	22	30	35	37
4220	36	31	27	19	7	-4	-9	-3	7	17
4230	20	11	-3	-17	-11	4	28	41	38	22
4240	5	-9	-17	-18	-20	-18	-19	-19	-19	-15
4250	-11	-10	-10	-12	-14	-11	-10	-6	-2	1
4260	2	2	2	-2	-2	-21	-22	-12	-1	7
4270	11	8	2	-5	-1	14	33	44	42	31
4280	14	2	0	7	17	19	7	-12	-29	-56
4290	-28	-15	-5	-5	-17	-31	-41	-44	-42	-39
4300	-31	-20	-6	-2	12	8	-5	-17	-21	-13
4310	0	12	17	2	-20	-37	-40	-27	-9	4
4320	9	1	7	-9	-4	2	10	16	17	10
4330	-1	-15	-20	-13	2	22	39	47	41	23
4340	0	-14	-11	8	32	48	45	30	10	0
4350	2	8	8	-2	-19	-30	-20	-7	2	2
4360	10	8	6	2	5	7	2	-5	-14	-17
4370	-10	-1	6	6	0	-10	-18	-19	-14	-8
4380	-10	-20	-27	-27	-19	-10	-3	-4	-9	-20
4390	-27	-27	-10	9	23	27	24	22	21	26
4400	32	38	39	36	28	26	29	35	38	37
4410	29	19	12	11	7	7	11	17	17	8
4420	-7	-21	-31	-33	-23	-6	2	0	-15	-29
4430	-31	-24	-9	-11	-6	-24	-45	-52	-37	-8
4440	19	32	26	7	-7	-10	1	12	22	22
4450	15	6	5	15	25	24	10	-9	-27	-37
4460	-39	-31	-17	-8	-6	7	-8	-3	0	0
4470	6	-9	-9	-9	-8	-5	0	2	5	5
4480	-9	17	27	31	32	31	28	15	-2	-20
4490	-27	-19	-5	12	19	14	1	-11	-20	-21
4500	-18	-11	-6	-1	-1	-6	-11	-16	-18	-17
4510	-10	-7	-7	-5	-3	-2	0	2	5	2
4520	-2	-4	-4	-1	2	6	4	-2	-8	-8
4530	-2	4	10	8	3	0	1	7	10	11
4540	6	-2	-14	-27	-7	-13	1	16	22	17
4550	0	-14	-23	-22	-11	-2	8	12	8	8
4560	7	12	22	31	32	28	21	12	10	10
4570	11	14	17	22	22	16	5	-5	-12	-17
4580	-17	-15	-14	-12	-11	-8	-3	-1	0	-4
4590	-10	-14	-11	-2	9	17	14	5	-5	-5
4600	-11	-8	-2	0	-7	-13	-17	-16	-17	-18
4610	-16	-9	-2	9	19	27	24	14	7	5
4620	7	14	17	11	2	-7	-10	-10	-5	1

TO BE CONTINUED

STATION = HITACHINAKA-F
 TOTAL NUMBER OF DATA = 5150
 SCAL = 0.10000

RECORD = F-19 COMPONENT = UP
 DATE AND TIME = 1986-11-29- 7-30
 SAMPLING INTERVAL = 0.010 (SEC)
 SIGNAL = 6R. ACC.
 CONNECTION POINT IN DATA NUMBER = 5150/

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
4630	9	12	8	1	-5	-10	-11	-9	-2	2
4640	5	-1	-11	-22	-27	-23	-15	-9	-9	-12
4650	-14	-7	6	26	39	22	37	-17	-18	-18
4660	-4	13	-20	-9	-13	-29	-27	-7	16	31
4670	24	2	25	40	-32	-27	22	40	22	22
4680	0	-14	-17	-9	0	2	-1	-7	-16	-21
4690	-22	-10	-15	-10	-2	2	5	10	12	5
4700	-4	-12	-14	-10	-2	2	1	17	-18	-24
4710	-27	-22	-13	1	16	26	24	24	7	2
4720	2	7	10	6	-2	-14	-22	-19	-8	5
4730	16	17	11	0	-4	0	12	22	29	27
4740	20	13	11	8	6	6	8	9	5	-2
4750	-12	18	-18	-11	-4	1	-2	5	7	11
4760	16	-12	0	-13	-26	-28	-18	-4	2	0
4770	-9	-17	-18	-9	6	17	18	11	2	0
4780	5	11	16	14	10	17	27	32	31	27
4790	0	-2	-2	0	-32	-23	-7	12	11	11
4800	16	0	-17	-29	-7	-23	-6	-7	-23	-27
4810	0	-7	-9	-1	8	12	6	7	12	11
4820	-23	-18	-16	-17	-11	-8	-10	4	7	2
4830	-9	-20	-27	-23	-18	-14	-10	-4	2	14
4840	21	15	0	-22	-39	-41	-27	-10	24	38
4850	39	32	22	10	-2	-9	-13	-12	0	10
4860	16	14	2	0	-2	2	2	6	9	5
4870	2	2	2	2	0	0	0	5	10	12
4880	11	2	-7	-10	-9	-8	-10	-15	-22	-28
4890	-24	-11	2	10	6	-4	-13	-11	-1	12
4900	23	20	7	-8	-18	-17	-10	-3	1	0
4910	2	8	14	16	14	8	2	6	10	54
4920	11	5	-2	-9	-10	-9	-7	-7	-9	-11
4930	-10	-2	8	19	26	29	32	31	27	20
4940	12	-2	0	0	4	9	11	-4	-14	-7
4950	-18	-14	-5	0	2	-4	-11	-17	-15	-7
4960	4	15	22	23	12	-3	-17	-20	-12	15
4970	11	12	2	-12	-20	-18	-8	2	12	15
4980	8	-2	-9	-11	-9	-7	-2	0	2	6
4990	6	0	-8	-17	-19	-10	2	9	2	-10
5000	-23	-8	-21	-10	12	11	9	4	-4	-6
5010	0	7	12	16	10	2	1	21	24	20
5020	-7	-7	-7	-7	-7	1	11	11	24	20
5030	11	-1	-4	-1	6	12	8	-2	-17	-27
5040	-29	-9	-21	-10	-2	1	8	-5	-12	-17
5050	-15	-7	4	12	18	19	17	10	-12	-11
5060	9	8	9	9	8	7	7	10	16	26
5070	34	39	32	19	2	-6	-8	-7	-2	-3
5080	-10	-10	-32	-26	-33	-27	-27	-19	-19	-22
5090	-4	-22	-14	-7	1	1	-2	-3	-8	-10
5100	-7	-5	1	6	6	6	4	6	10	9
5110	2	-2	-8	-10	-2	11	22	22	13	1
5120	-7	-6	1	10	14	12	9	6	12	22
5130	32	36	32	26	18	14	16	18	19	17
5140	11	2	-2	-5	-5	-1	2	3	-2	-10

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0	1	0	0	0	0	1	0	0	0	1
10	0	1	1	1	0	1	1	1	1	1
20	0	0	0	0	0	0	0	1	1	1
30	1	1	1	0	0	0	1	1	1	0
40	0	0	0	-1	0	1	2	0	0	0
50	0	1	1	1	0	0	2	1	1	1
60	1	0	0	0	0	0	0	1	0	0
70	-3	-2	0	0	5	5	-4	3	6	-6
80	-10	3	6	-5	-6	9	6	-15	-11	10
90	1	-27	-17	16	18	-11	-13	10	2	-27
100	-35	-6	12	-10	-27	-15	-3	-23	-28	-20
110	0	-13	-20	-15	1	-3	-23	-12	28	75
120	71	16	13	34	9	-33	-37	52	96	0
130	-96	-62	19	-3	-117	-129	-17	45	37	16
140	-16	4	80	69	-7	-7	68	49	-80	-105
150	35	111	16	-63	-33	45	68	-3	-57	-37
160	-23	1	112	212	138	-24	-46	20	-23	-76
170	25	132	74	-38	-54	74	160	-12	-269	-186
180	104	102	103	-115	92	230	74	-162	-143	11
190	6	-35	99	11	45	-14	22	-19	-107	-52
200	33	-59	-85	92	139	-56	-139	52	128	-3
210	-57	22	-16	-162	-111	106	155	-20	-115	-7
220	78	24	-44	-40	-58	-151	-154	55	103	-26
230	-135	-77	16	35	29	17	-33	-40	69	111
240	18	19	67	-13	-54	52	73	-112	-201	8
250	152	-23	-139	74	255	89	-135	-103	-47	-100
260	6	190	146	0	-19	-7	-59	-60	-45	-117
270	-83	74	112	55	25	-22	-85	-43	69	33
280	-104	-98	70	133	55	-14	97	113	-79	-153
290	158	89	-52	-92	38	124	70	-67	-156	-51
300	108	155	-75	-129	69	161	-13	-163	-19	141
310	42	-95	-43	83	82	-36	-103	-31	77	29
320	-83	-56	89	88	-19	-33	-73	-37	-52	14
330	70	-18	-68	68	135	-24	-162	-63	53	-43
340	-126	-13	75	-8	-78	-18	19	-3	18	14
350	-82	-113	33	133	100	10	-15	-44	-68	-44
360	-5	35	23	-86	-108	22	137	65	-58	-35
370	80	59	-53	-33	-47	40	23	-103	-19	25
380	-17	-121	-37	94	75	34	109	124	-50	-136
390	4	33	-1	-44	11	65	16	-41	-8	34
400	-54	3	6	75	108	-14	-159	-96	159	198
410	13	6	75	108	-14	-159	-96	159	198	42
420	-90	-75	-27	-61	-29	107	124	55	1	-27
430	6	51	9	-93	-142	-35	83	39	-3	3
440	50	74	40	28	-136	-13	54	60	-8	-106
450	-79	50	50	23	-83	88	44	-109	-29	148
460	81	-105	-52	118	77	-54	-11	52	-60	-135

TO BE CONTINUED

END

CONTINUED (F-19 UP)

CONTINUED (F-19 UP)

Nd.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
470	-18	45	-13	-2	82	88	-15	-69	-1	57
480	7	-93	-56	25	15	-20	3	-13	-61	-28
490	15	-20	-28	60	129	93	5	-49	0	123
500	88	-89	-143	-27	32	13	25	59	72	41
510	-33	-41	45	62	-36	67	12	25	-47	-82
520	-72	-72	-15	88	132	97	-26	95	-34	34
530	39	1	-128	-162	-29	127	157	63	10	44
540	-4	-111	-52	122	103	-43	-21	105	75	-112
550	-218	-93	143	157	-75	-112	114	177	-31	-168
560	63	54	39	-19	-30	42	69	-76	-163	-24
570	104	32	-119	-142	11	135	35	-93	-23	75
580	-30	-73	84	84	-72	11	200	60	-206	-141
590	108	124	-29	-52	20	8	-25	5	28	48
600	72	-14	-192	-221	11	181	-28	-141	5	186
610	78	-102	-40	98	28	-98	-14	112	53	-36
620	20	136	80	-131	-154	25	100	16	-47	-1
630	44	12	-56	-85	2	55	-41	-95	14	82
640	-33	-128	-6	124	45	-94	-84	22	55	35
650	18	-35	-100	-87	45	129	35	-75	-49	39
660	13	-75	-7	140	123	0	15	58	22	-87
670	-45	116	114	-95	-201	-52	86	0	-108	-30
680	125	163	22	-128	-67	48	-14	-94	-15	56
690	-44	-83	71	141	20	-93	-49	39	-6	-67
700	-9	45	22	6	21	-10	-48	33	79	-52
710	-108	8	54	-37	-38	98	135	-13	-102	7
720	22	-131	-206	-66	84	94	24	11	65	93
730	101	94	45	-3	-6	-13	-115	-179	-23	213
740	212	0	-48	119	94	-136	-186	-47	-29	-166
750	-151	72	160	30	-43	28	60	-37	-138	-117
760	-11	84	102	40	-6	10	20	-9	-19	-9
770	-20	-23	-15	-18	55	120	8	-84	24	146
780	84	-86	-129	-8	64	63	1	-82	-122	-67
790	55	88	28	-82	-147	-57	84	73	5	53
800	45	-119	-170	30	179	71	7	59	39	-101
810	-102	132	247	51	-76	21	35	-127	-174	-16
820	70	-11	-23	71	63	-66	-134	-21	145	134
830	-17	-136	-130	-46	44	91	38	-32	-6	35
840	-9	-85	-55	-4	-76	-105	20	113	84	49
850	78	47	-85	-86	80	94	-66	-91	87	141
860	-57	-106	116	183	17	-82	-53	-63	-131	-149
870	-92	3	98	140	114	63	-18	-12	-144	-87
880	-43	-72	-39	109	222	187	63	-3	-88	-231
890	-191	46	165	89	18	-14	7	73	32	-85
900	-59	49	2	-139	-134	30	109	35	-10	-1
910	-5	-21	3	73	64	-43	-67	101	217	65
920	-103	-43	81	1	-114	35	258	201	-9	-8
930	104	-52	-403	-123	192	227	84	50	40	40
940	-76	-123	23	116	-20	-22	44	235	163	40
950	114	-212	52	-212	-192	-30	-88	-214	-124	27
960	28	-37	-19	-139	-169	24	209	-24	141	-37
970	-109	-83	-16	104	254	230	117	-43	170	-202
980	-111	1	-27	-161	-169	19	199	190	55	-33

TO BE CONTINUED

TO BE CONTINUED

CONTINUED(F-19

UP)

UP)

CONTINUED(F-19

UP)

UP)

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1510	52	177	199	139	94	65	5	-26	-3	-7
1520	-11	22	10	-12	-124	-59	44	25	-91	-147
1530	-129	-119	-55	49	87	20	-53	-44	11	11
1540	28	16	55	86	12	-66	-59	-46	-68	-82
1550	-18	-48	-75	-3	71	51	25	88	133	82
1560	-59	-70	42	69	-41	-75	70	173	93	6
1570	58	91	-4	-75	-17	28	-28	-66	11	118
1580	143	75	16	25	21	-55	-125	-134	-47	-11
1590	7	10	14	25	6	-35	-50	-36	-40	-59
1600	-54	-25	-9	-10	-15	-14	11	40	55	22
1610	13	1	-3	-26	14	21	40	28	-1	-59
1620	-62	-49	-16	-6	23	15	-3	7	15	52
1630	41	0	4	18	-23	-87	-97	-50	-26	-25
1640	6	40	47	59	100	108	43	5	34	21
1650	-43	-50	15	22	-52	-92	-56	-26	-27	14
1660	67	7	-123	-161	-83	-10	1	4	0	-33
1670	-75	-84	-14	-14	55	67	35	18	25	45
1680	60	38	12	51	110	94	48	63	101	65
1690	-3	0	75	144	133	44	-20	-16	6	7
1700	-15	-10	22	23	-16	-41	-33	-30	-54	-88
1710	-103	-90	-82	-95	-103	-79	-45	-36	-56	-54
1720	3	40	14	-3	30	61	39	-3	-23	-28
1730	-35	-41	-42	-8	-24	49	88	25	-33	-3
1740	37	25	5	10	64	94	80	43	21	29
1750	39	55	84	91	63	40	24	4	51	-72
1760	-92	-62	-9	10	4	10	4	-40	-87	-92
1770	-59	-30	-26	-27	-1	28	16	-14	-11	5
1780	-3	-30	-14	39	54	8	-23	25	89	63
1790	10	12	27	6	-13	6	25	16	-14	-48
1800	-67	-71	-72	-53	-14	11	-8	-47	-31	5
1810	18	19	9	3	25	81	89	28	-27	-16
1820	13	16	6	6	7	19	43	43	20	50
1830	102	60	-41	-66	-13	16	-24	-72	-27	-7
1840	-35	-95	-92	-29	-1	-30	-44	-16	-6	-24
1850	-37	-47	-52	-62	-99	-123	-83	-20	50	53
1860	28	-14	83	15	25	37	53	35	-8	-2
1870	67	114	87	39	37	55	53	35	28	38
1880	35	16	1	2	26	45	46	54	62	45
1890	20	21	35	16	-9	-17	-39	-61	-62	-62
1900	-68	-60	-28	-13	-37	-50	-30	-55	-55	-78
1910	-45	23	61	44	12	2	-1	-7	18	78
1920	108	55	-15	-13	35	40	2	0	24	-8
1930	-93	-114	35	50	64	38	19	-7	-59	-75
1940	-15	43	32	-11	-1	62	94	57	-15	-55
1950	-44	-32	-37	-40	-33	-25	-27	-44	-80	-82
1960	-27	0	-9	20	71	35	-54	-56	11	17
1970	-27	-45	-29	2	44	55	19	5	7	25
1980	-3	-64	-70	-17	21	25	29	30	10	-15
1990	-11	21	25	-4	-19	4	16	-20	-27	37
2000	80	47	30	75	103	61	6	-15	-35	-54
2010	-48	-5	25	21	15	10	-8	-19	-10	-15
2020	-10	26	46	9	-16	13	32	-3	-29	-8

TO BE CONTINUED

TO BE CONTINUED

CONTINUED(F-19 UP)

CONTINUED(F-19 UP)

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2550	55	44	5	-13	-11	-8	6	35	45	17
2560	-7	-7	5	20	23	-33	-48	-25	-40	-18
2570	4	8	0	0	0	3	5	28	39	30
2580	1	-33	-23	19	35	25	29	50	24	-30
2590	-30	16	24	-21	-25	33	61	16	-23	-3
2600	25	22	11	22	24	0	-26	-29	-14	-7
2610	-15	-23	-20	-15	-16	-31	-10	60	61	61
2620	13	-19	-19	-15	-23	-32	-26	-11	-17	-41
2630	-35	8	22	-10	-27	-15	4	14	11	16
2640	41	55	53	46	37	15	-8	-8	11	24
2650	19	15	25	29	7	-11	-4	-11	-48	-73
2660	-49	-13	3	-4	-18	-19	-15	-15	-23	-23
2670	-7	15	25	11	-12	-15	-13	-19	-19	-6
2680	12	6	-23	-40	-29	-9	3	18	37	48
2690	42	29	14	5	-7	-14	-6	5	11	20
2700	19	6	2	18	25	4	-15	-6	15	24
2710	14	-6	-21	-13	-3	-1	-8	-31	-63	-76
2720	-55	-22	-3	-5	-17	-27	-35	-34	-18	-9
2730	-7	-10	-14	-6	16	41	55	60	60	54
2740	42	43	61	65	35	15	23	28	9	5
2750	35	62	55	30	24	24	0	-37	-50	-36
2760	-29	-37	-54	-63	-52	-31	-27	-33	-19	-6
2770	-15	-29	-9	16	7	-19	-24	-5	11	2
2780	-5	-7	-11	-13	0	-3	-13	-9	0	1
2790	0	0	0	1	6	6	4	12	23	15
2800	8	25	55	52	13	-9	-1	12	10	4
2810	11	15	-9	-29	-9	24	21	-9	-24	-23
2820	-39	-56	-42	-7	5	-17	-34	-33	-39	-43
2830	-15	25	32	8	-1	-8	-14	-14	-13	-17
2840	-18	-5	4	-3	-3	9	35	48	33	9
2850	5	17	16	5	15	35	29	12	18	34
2860	20	-8	-16	-6	-3	-9	-11	15	41	50
2870	-13	-33	-14	-5	-12	-15	-4	3	-13	-33
2880	-13	14	15	-7	-8	8	-1	-24	-15	13
2890	18	-6	-26	-20	-6	-7	-17	-11	10	23
2900	16	13	9	-2	-23	-26	-10	0	-4	-6
2910	2	12	6	-1	11	25	8	-19	-1	33
2920	24	-6	-3	16	17	3	3	19	24	7
2930	0	19	24	-15	-45	-28	-3	-6	-14	-13
2940	-9	-7	-9	-14	-4	15	16	1	4	2
2950	-3	11	16	-4	-23	-29	-33	-16	20	39
2960	20	-10	-25	-23	-16	-9	-3	2	1	1
2970	9	8	-2	-10	-10	-7	9	32	43	41
2980	42	37	9	-15	-17	-13	-18	-27	-19	0
2990	-1	-6	9	21	-5	-35	-23	7	13	2
3000	-5	-7	-2	9	25	30	16	-5	-21	-27
3010	-20	0	16	8	4	14	39	22	-51	-56
3020	-12	8	4	9	35	42	18	-2	7	16
3030	3	-15	-27	-26	-14	-3	-10	-22	-23	-25
3040	-26	-10	2	-6	-9	-1	-13	-35	-25	3
3050	-7	-20	0	30	27	2	7	29	25	4
3060	-4	2	5	-9	-29	-43	-43	-19	11	10

TO BE CONTINUED

TO BE CONTINUED

CONTINUED (F-19)										UP											
NP.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	NP.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
3590	-7	-31	-36	-35	-29	-16	0	6	-2	-7	4110	-16	-15	-14	-7	-4	-2	0	3	-1	-4
3600	9	24	7	-16	-11	6	-6	-5	13	25	4120	5	11	2	1	9	11	1	-8	0	10
3610	33	44	45	30	5	-13	0	0	-6	13	4130	8	17	9	16	16	15	13	19	25	30
3620	24	6	-3	11	28	21	20	15	4	3	4140	25	17	16	16	11	6	4	1	0	-7
3630	6	24	28	3	-23	-23	-10	3	11	4	4150	0	-6	-6	-6	8	14	5	0	5	6
3640	0	-16	-10	5	11	10	-1	-16	-31	-30	4160	0	-1	4	6	4	-1	-5	-6	-4	-11
3650	-4	22	25	13	6	6	-5	-9	-2	-3	4170	-13	-13	-14	-13	-21	-23	-3	-4	-6	-7
3660	-17	-19	4	23	16	4	6	-2	-5	-5	4180	-3	-13	-14	-10	2	9	3	-7	-3	4
3670	3	9	-3	-23	-33	-27	-11	0	-2	-4	4190	3	3	6	2	-4	3	14	10	0	2
3680	-14	-17	-16	-21	-16	6	21	11	2	11	4200	4	0	-3	0	0	-3	-3	-7	-6	-3
3690	22	16	4	-1	-3	4	0	4	3	-6	4210	8	4	-7	8	1	6	-1	-7	-4	2
3700	-17	-20	-15	-14	-14	-13	-9	-9	-5	-5	4220	6	5	5	11	11	0	-8	-9	-1	8
3710	-9	-4	7	8	-3	-11	-12	-13	-18	-10	4230	11	4	-3	3	12	10	8	12	11	6
3720	4	3	-8	-9	3	6	-4	-7	0	0	4240	2	1	2	-4	-18	-6	-23	-17	-13	-8
3730	0	3	11	12	6	2	-7	-15	-10	4	4250	-6	-9	-17	-25	-23	-8	1	-3	-13	-7
3740	17	22	12	0	9	8	3	8	6	15	4260	0	-2	-6	-2	2	5	5	2	1	8
3750	25	26	9	9	25	28	22	24	31	24	4270	16	11	6	9	12	11	13	20	20	11
3760	15	8	6	3	5	13	17	10	2	0	4280	5	6	6	1	10	8	10	-2	8	0
3770	-8	-13	-3	0	-10	-5	-3	7	-5	-19	4290	8	10	11	12	6	0	10	16	8	-6
3780	-15	-3	-2	-8	3	11	19	12	4	0	4300	-7	-5	-5	-7	-1	5	1	-9	-14	-14
3790	-4	-7	-1	7	1	-16	-25	-16	-10	-14	4310	-15	-13	-8	-4	-3	10	12	8	3	-3
3800	-17	-13	-9	-16	-23	-22	-18	-22	-17	-6	4320	-1	-9	-9	-9	-8	-10	-8	-6	-10	-10
3810	6	3	8	20	23	14	8	5	9	22	4330	-14	-9	-1	2	2	5	11	14	10	1
3820	32	22	2	-7	-5	-14	-24	-17	-5	-13	4340	0	1	0	-3	1	7	5	-3	-10	-11
3830	-23	-9	4	-7	-24	-22	-12	-19	-28	-16	4350	-7	-3	-6	-8	-4	3	3	3	10	21
3840	3	3	-6	0	10	8	1	5	10	3	4360	23	12	3	1	-3	-8	-6	7	16	16
3850	4	16	20	13	6	10	19	25	24	15	4370	9	5	7	10	8	4	6	12	10	3
3860	8	11	18	8	-10	-16	-8	-5	-8	-3	4380	2	3	1	-10	-17	-6	3	-4	-13	-7
3870	5	1	-8	-4	6	13	5	-3	3	16	4390	-3	-16	-27	-21	-6	1	-2	-11	-17	-15
3880	21	16	10	6	0	-13	-26	-26	-13	-8	4400	-9	-5	-4	-3	-4	-1	6	10	1	-14
3890	-16	-22	-15	-8	-16	-36	-44	-33	-18	-5	4410	-18	-7	-1	-3	1	12	16	11	8	15
3900	2	6	9	5	-3	-3	-3	-5	-8	2	4420	22	15	6	6	12	16	20	20	13	5
3910	14	17	9	-1	-2	14	24	14	0	0	4430	0	1	3	1	-2	-6	-9	-14	-20	-19
3920	2	-1	-9	-7	5	12	5	-1	2	3	4440	-13	-9	-10	-13	-13	-13	-13	-7	0	2
3930	1	2	-6	11	13	12	9	12	24	32	4450	-5	-11	-13	-9	-7	-3	0	0	1	-1
3940	13	-13	-18	-15	-16	-14	-1	11	8	-8	4460	-3	4	-15	18	10	4	1	-4	-7	-3
3950	-23	-10	16	30	23	8	2	8	15	11	4470	4	5	2	0	3	4	1	-4	-5	-1
3960	4	3	9	12	11	15	14	4	-3	8	4480	4	5	3	10	15	11	2	0	4	2
3970	2	6	2	1	11	20	15	11	-11	-18	4490	-7	-8	-2	3	5	6	0	-8	-3	-3
3980	-18	-17	-13	-8	-9	-11	-6	-4	-15	-27	4500	1	2	9	10	0	-8	-3	4	1	-3
3990	-29	-26	-24	-19	-15	-17	-13	-3	-3	-9	4510	-3	3	6	5	3	6	10	6	-5	-13
4000	-14	-13	-4	2	0	-6	-7	0	0	0	4520	0	-1	2	0	-3	-4	-4	-4	-1	5
4010	-9	-3	9	5	-6	4	4	3	-5	-2	4530	-7	-3	-6	-7	-8	-9	-3	10	16	13
4020	5	-14	-20	-13	-4	-4	-7	-11	-7	-5	4540	6	4	2	0	1	11	20	14	1	-3
4030	-11	-13	2	18	17	15	19	25	29	25	4550	6	12	1	-5	-3	0	-7	-13	-3	-8
4040	14	2	-6	-8	1	16	22	20	22	22	4560	-3	-6	3	10	4	2	6	-8	-7	-8
4050	20	19	16	11	7	1	-14	-19	-3	9	4570	1	-3	-14	-15	-6	-3	-8	0	-3	-4
4060	2	-8	2	11	0	-6	14	23	21	-11	4580	-13	-9	-11	-20	-20	-6	4	0	2	-6
4070	28	20	-4	-13	4	14	-9	-17	-11	9	4590	7	2	-4	-4	7	10	10	2	-2	-1
4080	13	-3	-15	-13	-3	-2	-6	-19	-16	-4	4600	-2	-2	-1	4	7	6	3	3	2	-1
4090	-4	-12	-10	6	3	1	6	11	-2	-27	4610	0	3	6	0	-3	0	-3	-13	-13	-4
4100	-36	-23	-15	-18	-17	-6	-20	-20	-33	-24	4620	-3	-8	-11	-4	1	7	11	15	21	25

TO BE CONTINUED

TO BE CONTINUED

RECORD = S-1957 COMPONENT = SOUTH STATION = KASHIMA-ZOKAN-S
 DATE AND TIME = 1986-11-29-07-29 TOTAL NUMBER OF DATA = 3000
 SAMPLING INTERVAL = 0.010 (SEC) SCAL = 0.10000
 SIGNAL = GR. ACC.
 CONNECTION POINT IN DATA NUMBER = 3000.

CONTINUED (F-19	UP	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
6630	24	22	21	17	11	6	5	5	2	1	
6640	5	5	-16	-15	-4	-3	4	3	-4	-11	
6650	-9	-9	-6	0	-7	-3	-9	-13	-11	-11	
6660	15	-6	0	0	-6	-14	-15	-8	0	9	
6670	8	-1	-3	5	13	14	10	8	7	7	
6680	0	5	1	9	12	10	9	9	11	13	
6690	15	16	14	14	15	14	6	-3	-10	-14	
6700	-16	-23	-24	-23	-11	-3	-6	-8	-10	-10	
6710	-4	1	1	3	-3	-5	-5	-8	-9	-8	
6720	-5	-2	2	3	2	0	-3	3	5	6	
6730	0	-8	-7	-5	-4	0	3	4	0	2	
6740	7	6	6	8	7	6	8	13	12	7	
6750	2	0	-1	-3	-1	2	-1	-9	-13	-9	
6760	-7	-8	-8	-7	-6	-9	-17	-17	-14	8	
6770	9	3	5	16	20	10	4	11	14	6	
6780	5	16	19	10	6	8	5	0	-2	0	
6790	-3	-10	-10	-10	-13	-14	-13	-16	-24	-24	
6800	-19	-16	-16	-11	-3	-4	-6	-3	8	14	
6810	13	8	5	4	8	11	10	1	-8	-14	
6820	0	3	9	12	9	6	4	4	1	-4	
6830	0	1	0	0	1	5	5	4	1	1	
6840	8	14	16	13	4	0	0	3	8	10	
6850	6	1	-1	3	7	0	-7	-4	4	6	
6860	6	-3	-1	-5	-6	0	3	2	0	-3	
6870	-11	-13	-4	6	4	-3	-4	0	-3	2	
6880	8	11	-1	-12	-12	-5	1	4	6	2	
6890	0	2	3	0	-6	-13	-15	-17	-16	-6	
6900	0	-3	-9	-13	-14	-13	-9	-5	-4	-2	
6910	0	3	3	4	4	1	-3	-1	0	3	
6920	5	4	1	0	2	5	8	9	1	-9	
6930	-5	6	10	3	-1	1	-1	-5	-10	-5	
6940	0	-3	-6	-3	3	1	1	0	1	4	
6950	5	6	9	15	16	15	8	5	7	13	
6960	15	10	4	4	4	0	-6	-4	4	7	
6970	5	5	5	-5	-4	1	4	0	-4	-5	
6980	-9	-14	-13	-10	-8	-5	-2	-1	-3	-1	
6990	1	0	-3	-1	1	2	1	0	0	-2	
5000	0	4	6	5	5	4	-1	-7	-8	-4	
5010	0	0	1	3	0	-5	-13	-14	-11	-8	
5020	-7	-7	-4	-1	3	2	0	-2	2	5	
5030	3	1	2	5	3	0	-3	0	-6	-12	
5040	-13	-8	1	6	5	6	9	12	12	9	
5050	4	1	2	5	5	10	15	15	11	10	
5060	9	7	4	0	1	6	8	6	6	13	
5070	16	11	5	0	-5	-9	-7	-3	1	1	
5080	0	-4	-11	-6	-11	-7	-12	-13	-8	-11	
5090	-15	-12	-7	-10	-15	-11	-2	-3	-3	-15	
5100	-8	-3	0	-1	0	-1	-2	-3	0	0	
5110	0	-6	-11	-6	2	9	8	8	8	3	
5120	-3	-3	2	3	0	0	1	3	2	3	
5130	6	8	8	6	6	5	7	10	10	8	
5140	4	-3	-7	-6	0	5	5	7	9	6	

TO BE CONTINUED

END

CONTINUED (S-1957 SOUTH)

CONTINUED (S-1957 SOUTH)

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
470	-2	5	9	10	4	6	8	8	7	0
480	-7	-11	-10	-3	0	2	4	5	5	0
490	-5	-2	5	12	-4	-23	-16	-4	6	18
500	23	21	-20	-20	-21	-12	-1	-4	-7	-17
510	-18	-17	-15	-12	-10	-7	-4	2	0	0
520	2	4	4	4	0	-9	-18	-16	-7	0
530	6	7	5	1	1	3	4	3	2	-5
540	-6	1	0	-4	-11	-12	0	2	7	3
550	-8	-16	-19	-16	-6	6	5	9	14	14
560	13	4	-8	-18	-13	-8	-6	-11	-20	-23
570	-22	-16	11	17	18	11	1	-11	-17	-23
580	-22	-9	1	2	-8	0	0	2	0	-1
590	-2	0	3	-6	-7	-11	-21	-27	3	18
600	27	38	13	0	-12	-11	-10	-11	-15	-18
610	-17	-18	-16	-8	0	20	27	11	-2	-19
620	-29	-20	-11	-9	-3	0	2	4	5	5
630	1	0	-1	0	1	0	-11	-24	-20	-4
640	4	11	14	-3	-17	-15	-2	-9	-8	-8
650	-10	-14	-18	-14	-4	0	2	-1	-10	-18
660	-15	-7	-2	0	-3	-9	-10	-5	5	12
670	19	14	-2	-6	-11	-14	-4	6	3	-5
680	-14	-18	-20	-18	-8	-5	-7	-8	-4	0
690	5	6	0	-8	-5	4	13	22	-20	0
700	-6	-16	-27	-8	7	11	0	-11	-29	-31
710	-9	12	17	17	17	-8	-11	-14	-12	-2
720	2	7	7	-1	-14	-18	-11	0	13	16
730	9	-10	-39	-61	-47	-22	-5	8	19	23
740	19	8	14	16	25	28	14	1	-8	-10
750	-10	-8	-9	-12	-18	-17	-11	-1	13	19
760	16	5	-3	0	6	10	3	-1	0	1
770	4	6	5	2	-4	-5	-1	0	5	9
780	9	7	2	-2	-3	-3	-4	-10	-19	-25
790	-25	-16	-7	9	27	27	12	-6	-13	22
800	19	26	21	1	-24	-45	-41	-11	18	37
810	44	30	11	-1	-10	-14	-14	-9	3	18
820	22	10	-9	-14	-15	-11	-9	-9	-9	-11
830	-16	-11	10	18	30	45	43	-4	-15	-33
840	-39	-13	27	27	7	-38	-39	-29	15	12
850	35	28	21	2	-13	-13	2	15	23	22
860	5	2	-3	4	13	16	6	-2	-7	-8
870	52	52	103	127	133	150	119	110	89	67
880	53	34	10	-15	-27	-22	-13	-5	8	12
890	12	12	11	-13	-54	-90	-143	-182	-217	-253
900	-290	-312	-309	-245	-129	-13	58	93	79	46
910	22	-9	10	47	96	189	282	366	500	182
920	526	522	422	356	126	-24	-158	-274	-369	-412
930	-432	-458	-409	-337	-275	-232	-240	-297	-360	-412
940	-423	-409	-318	8	242	398	516	598	539	242
950	486	287	-31	-227	-444	-558	-486	-395	-270	-111
960	82	390	503	573	612	499	399	282	166	166
970	93	35	-8	-56	-21	-10	-6	-6	-140	-200
980	-247	-234	-211	-147	83	133	227	278	286	264

TO BE CONTINUED

TO BE CONTINUED

CONTINUED(S-1957 SOUTH)

CONTINUED(S-1957 SOUTH)

NO.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	NO.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1510	49	27	5	-14	-30	-39	-47	-53	-56	-56	2030	24	20	19	19	18	16	10	10	6	-4
1520	-45	-37	-11	-55	-80	-99	-122	-133	-125	-97	2040	-27	-31	-32	-69	-84	-88	-88	10	6	-4
1530	-64	-39	11	18	47	71	82	81	67	36	2050	-83	-66	-60	-49	-39	-34	-20	-20	-20	-20
1540	16	12	34	77	128	164	182	185	176	141	2060	-25	-33	-33	-38	-42	-40	-21	-11	9	9
1550	88	24	20	-53	-51	-46	-36	-20	-14	-19	2070	17	21	28	28	28	28	21	19	19	13
1560	-32	-33	-14	18	38	42	17	-18	-41	-41	2080	-2	-11	-25	-30	-27	-15	2	11	31	56
1570	-46	-31	-20	-21	-31	-46	-56	-45	-24	-4	2090	71	74	68	58	42	24	18	11	5	0
1580	4	6	4	-3	-18	-35	-49	-57	-55	-22	2100	-3	-8	-10	-10	-10	-10	-8	-6	-19	-43
1590	0	20	29	29	18	-15	-44	-57	-55	-55	2110	-59	-76	-69	-90	-71	-41	-19	1	31	59
1600	-64	-94	-119	-133	-130	-86	-37	10	63	101	2120	72	75	61	37	18	4	-5	-12	-14	-12
1610	119	133	154	176	181	182	167	130	109	82	2130	0	11	16	19	18	9	-1	-5	-7	-6
1620	66	48	37	0	-25	-54	-77	-97	-77	32	2140	-4	-9	-5	-16	-17	-27	-24	-20	-10	-10
1630	-83	-70	-47	-23	-8	1	16	19	38	40	2150	13	20	19	8	-9	-9	-32	-49	-75	-65
1640	42	43	41	32	7	-11	-33	-51	-77	-83	2160	-49	-28	-16	-9	-3	10	16	21	21	21
1650	-72	-62	-57	-56	-49	-42	-30	-25	-15	-14	2170	21	21	14	5	-5	-3	5	6	6	4
1660	-25	-25	-8	11	22	41	55	60	61	61	2180	4	3	3	1	0	-1	0	0	0	0
1670	58	52	51	51	51	50	41	29	19	14	2190	-11	-11	-5	-1	3	4	9	10	13	14
1680	8	7	7	14	25	38	48	50	42	52	2200	18	18	18	12	11	11	0	-4	-10	-17
1690	19	-23	-67	-100	-115	-112	-91	-72	-58	-83	2210	-21	-21	-21	-18	-20	-28	-53	-60	-64	-76
1700	-53	-61	-69	-62	-42	-42	-13	21	49	62	2220	-71	-61	-42	-16	12	38	50	52	44	25
1710	71	73	84	99	104	92	66	39	18	7	2230	12	2	-4	-6	0	0	2	0	-5	-13
1720	0	-12	-21	-25	-17	-3	7	14	16	10	2240	-18	-23	-30	-28	-20	-10	4	30	53	60
1730	-2	-16	-32	-47	-69	-102	-117	-131	-145	-154	2250	66	72	75	76	75	74	69	61	48	42
1740	-163	-149	-113	-66	-13	54	114	133	134	121	2260	65	49	55	55	54	45	32	6	-34	-69
1750	95	74	57	45	21	9	12	25	39	47	2270	-91	-102	-106	-88	-56	-32	-15	-2	11	17
1760	51	50	43	51	51	51	50	29	26	12	2280	25	33	32	29	26	16	10	0	-22	-48
1770	6	-9	-15	-8	-1	0	-1	1	1	1	2290	-63	-73	-74	-76	-77	-76	-74	-69	-63	-50
1780	1	2	3	4	0	-26	-31	-32	-16	16	2300	-41	-26	-14	-6	-3	-3	-4	-11	-21	-24
1790	36	51	65	66	56	31	6	-28	-31	-58	2310	-27	-28	-25	-10	-7	6	16	28	31	31
1800	-75	-86	-87	-76	-65	-45	-19	-6	14	36	2320	31	30	39	49	63	75	80	68	35	26
1810	39	28	4	-27	-49	-60	-63	-47	-71	-8	2330	-2	-25	-45	-56	-60	-60	-45	-40	-31	-26
1820	2	9	7	6	9	17	24	27	29	30	2340	-20	-22	-24	-24	-16	-10	-6	-4	-5	-8
1830	29	27	19	7	-4	-6	5	20	29	38	2350	-21	-25	-26	-24	-11	0	18	25	35	35
1840	42	35	16	0	-16	-29	-35	-32	-19	-12	2360	51	55	61	66	73	75	67	49	24	-1
1850	-1	10	14	15	15	12	9	8	7	11	2370	-23	-35	-39	-34	-31	-27	-19	-13	-7	-4
1860	23	37	44	41	24	0	-18	-35	-38	-32	2380	-2	1	6	9	11	4	-5	-17	-32	-46
1870	-25	-24	-28	-40	-64	-89	-100	-94	-70	-37	2390	-56	-66	-66	-77	-81	-79	-60	-44	-26	-13
1880	-11	4	5	9	11	19	28	40	39	32	2400	-3	0	4	12	17	27	38	47	50	57
1890	20	7	0	-3	-3	-4	-4	-5	-7	-8	2410	61	62	56	39	22	18	12	9	2	2
1900	-16	-30	-41	-66	-65	-65	-32	-31	-19	-1	2420	7	8	8	9	9	9	5	2	-5	-5
1910	21	46	62	79	89	98	92	72	53	29	2430	-17	-17	-14	8	8	9	5	2	-12	-13
1920	11	-5	-21	-29	-29	-21	-5	7	11	11	2440	-22	-27	-34	-35	-29	-13	-10	-4	0	0
1930	-5	-28	-45	-62	-83	-84	-76	-69	-23	-5	2450	0	6	14	38	38	37	28	16	9	0
1940	3	8	13	24	43	55	62	63	61	48	2460	0	1	3	5	11	26	35	51	55	58
1950	34	26	19	13	0	-14	-33	-49	-57	-51	2470	58	46	43	31	5	-27	-47	-70	-74	-75
1960	-44	-28	-10	-1	8	23	33	37	38	33	2480	-69	-53	-42	-22	-7	22	35	38	37	37
1970	21	7	-2	1	11	17	18	17	16	16	2490	35	24	15	9	-5	-19	-30	-38	-43	-45
1980	12	7	3	-2	-10	-19	-25	-18	-17	4	2500	-40	-33	-28	-26	-25	-25	-23	-18	-11	-6
1990	11	10	4	-3	-6	-9	-13	-19	-31	-38	2510	-2	4	10	18	25	24	26	23	19	14
2000	-39	-42	-47	-64	-33	-25	-17	-5	13	28	2520	10	10	15	18	21	25	24	23	19	14
2010	29	29	21	11	-2	-15	-21	-23	-8	7	2530	-8	-13	-21	-26	-24	-21	-18	-22	-30	-37
2020	27	61	99	115	115	108	88	67	43	33	2540	-44	-44	-36	-26	-13	-2	0	6	6	6

TO BE CONTINUED

TO BE CONTINUED

RECORD = S-1957 COMPONENT = EAST STATION = KASHIMA-ZOKAN-S
 DATE AND TIME = 1986-11-29-07-29 TOTAL NUMBER OF DATA = 3050
 SAMPLING INTERVAL = 0.010 (SEC) SCAL = 0.10000
 SIGNAL = GR. ACC.
 CONNECTION POINT IN DATA NUMBER = 3050,

CONTINUED(S-1957 SOUTH)

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2550	6	-1	-10	-18	-22	-29	-38	-56	-54	-31
2560	-29	-23	-16	-13	-9	-8	-8	-8	-8	-8
2570	-6	-6	-3	3	15	21	30	53	59	64
2580	64	62	50	49	45	43	39	36	34	22
2590	13	13	11	8	6	0	0	-9	-11	-17
2600	-27	-36	-39	-40	-42	-50	-53	-53	-49	-42
2610	-39	-38	-38	-38	-35	-32	-34	-31	-31	-27
2620	-25	-22	-18	-14	-11	-6	1	3	8	8
2630	14	23	33	36	36	35	26	18	12	6
2640	3	5	8	10	11	14	13	8	-20	-20
2650	-30	-37	-33	-26	-25	-22	-15	-9	-3	6
2660	16	22	24	24	25	20	12	2	-9	-14
2670	-20	-24	-28	-28	-26	-24	-20	-14	-9	-5
2680	-2	2	12	23	43	57	65	74	76	72
2690	63	55	38	34	32	33	36	36	30	24
2700	14	8	16	22	26	30	36	41	47	47
2710	48	47	33	22	15	4	-6	-20	-29	-35
2720	-42	-46	-38	-26	-16	-3	7	15	23	23
2730	23	15	7	-2	-8	-15	-24	-28	-31	-24
2740	-16	-7	0	9	15	22	24	30	38	39
2750	41	41	33	20	12	7	0	-6	-9	-9
2760	-11	-12	-10	-7	-3	-1	0	6	8	8
2770	8	8	6	5	1	0	-1	0	3	7
2780	13	21	28	26	22	18	10	-1	-9	-10
2790	-8	-7	-9	-14	-17	-17	-18	-18	-11	1
2800	10	18	32	36	23	0	-16	-27	-28	-30
2810	-33	-32	-28	-25	-21	-8	9	10	11	11
2820	11	11	10	8	11	16	19	18	11	-1
2830	-3	0	8	8	1	-12	-21	-36	-38	-42
2840	-43	-38	-28	-23	-8	-8	-3	1	19	19
2850	21	22	22	22	17	17	17	17	17	19
2860	21	26	27	27	34	36	36	36	26	24
2870	15	4	-4	-10	-3	-1	6	10	11	10
2880	7	6	5	0	-4	-5	-5	-11	-18	-24
2890	-25	-27	-30	-25	-18	-11	-16	-23	-26	-30
2900	-31	-38	-41	-45	-51	-53	-51	-49	-47	-39
2910	-32	-30	-30	-30	-28	-19	-13	-6	-1	2
2920	7	9	13	14	18	24	26	20	14	12
2930	10	8	6	6	8	9	9	8	6	5
2940	4	5	8	15	23	26	32	36	39	44
2950	52	61	63	68	69	69	69	56	36	33
2960	20	3	-2	-4	-10	-18	-26	-28	-31	-24
2970	-33	-35	-34	-33	-26	-13	-12	-15	-23	-23
2980	-23	-23	-16	-12	2	14	16	16	18	21
2990	19	17	12	7	-10	-12	-13	-13	-11	-1

END

TO BE CONTINUED

CONTINUED (S-1957 EAST)

CONTINUED (S-1957 EAST)

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
470	3	3	3	3	4	7	8	8	8	8
480	-5	-2	-3	-4	-4	-4	14	14	14	9
490	-13	-18	-6	1	-1	-4	-7	-13	-18	-9
500	6	24	33	32	28	18	6	0	7	19
510	24	18	8	-1	-9	-10	0	22	28	14
520	-2	-26	-31	-23	-13	-2	-1	-5	-7	-5
530	0	11	17	17	15	6	1	-2	-2	-2
540	-1	0	1	-3	-2	1	9	6	-4	-5
550	-2	5	11	19	20	6	6	3	0	9
560	10	14	5	-14	-27	-26	-18	9	15	17
570	14	-14	-2	-12	-13	-13	-8	-7	-7	-7
580	-14	-14	-5	-2	6	11	12	5	-2	-14
590	-20	-22	-6	1	8	0	-3	-10	-12	-4
600	-2	5	7	7	6	-2	-4	-5	-3	6
610	9	13	15	12	0	-14	-15	-12	-11	-1
620	2	-4	-12	-16	-13	-10	-6	0	5	5
630	0	-7	-15	-17	-8	0	3	3	-6	-15
640	-8	4	12	17	19	12	1	-8	-13	-6
650	2	2	0	-2	-3	-9	-14	-10	-5	0
660	2	1	-1	0	4	4	2	-6	-19	-22
670	-27	-26	-8	12	12	12	8	0	-3	1
680	10	18	20	13	2	-7	-14	-14	-9	-4
690	-6	-8	-5	2	12	22	28	16	6	-1
700	-6	-9	-5	-2	2	2	6	7	7	13
710	10	-4	-18	-19	-1	18	33	35	5	7
720	20	6	17	27	31	23	10	-2	-5	2
730	14	26	20	10	-2	-6	1	13	23	29
740	20	9	-1	-13	-16	-9	-2	2	7	12
750	14	12	7	3	1	8	15	18	12	4
760	-2	-7	-10	-6	2	13	21	21	12	0
770	16	24	30	34	27	13	1	-9	-9	2
780	16	24	30	34	27	13	1	-9	-9	2
790	17	27	25	13	8	-1	-13	-12	-3	0
800	0	-4	-9	-6	2	14	26	34	24	6
810	-4	-4	-4	0	6	0	-16	-30	-53	-16
820	6	31	37	34	10	-8	-17	-12	3	10
830	16	17	11	-6	-18	-27	-28	-18	-2	11
840	17	16	1	-10	-4	14	31	50	51	40
850	16	-8	-20	7	24	39	33	3	-9	-18
860	-5	24	41	58	63	45	18	-4	19	35
870	65	89	93	98	103	107	110	110	84	56
880	33	19	24	33	39	31	11	-35	-60	-55
890	-31	7	45	37	-8	-60	-116	-133	-166	-143
900	-114	-94	-76	-56	-29	3	26	44	50	44
910	51	64	81	98	96	82	61	68	121	166
920	187	174	133	66	-14	-72	-99	-99	-86	-74
930	-78	-103	-155	-230	-298	-368	-414	-434	-378	-322
940	-281	-174	-21	33	52	63	70	83	55	-2
950	-104	-226	-281	-303	-245	-96	53	134	160	162
960	109	103	166	255	287	292	244	175	71	-14
970	-39	-57	-35	-50	-49	-71	-83	-73	18	62
980	82	108	99	75	60	59	61	61	49	17

TO BE CONTINUED

TO BE CONTINUED

CONTINUED (S-1957 EAST)

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1510	22	26	23	3	-21	-49	-80	-92	-70	-41
1520	-26	-20	-21	-29	-34	-21	9	35	60	64
1530	51	44	37	36	37	37	37	18	11	12
1540	25	55	87	100	106	105	98	85	78	77
1550	76	70	63	55	48	22	-10	-46	-79	-76
1560	-97	-88	-74	-61	-53	-46	-38	-31	-20	-19
1570	66	92	100	88	61	33	6	-16	-36	-48
1580	-52	-55	-55	-55	-61	-70	-77	-75	-65	-48
1590	-7	38	58	66	59	35	0	-31	-53	-67
1600	-65	-38	-10	8	19	24	29	34	34	30
1610	24	25	31	40	54	74	85	79	48	24
1620	-3	-47	-82	-107	-123	-126	-117	-90	-62	-37
1630	22	67	90	61	28	-12	-35	-55	-60	-60
1640	-55	-41	-36	-43	-48	-49	-42	-37	-30	-27
1650	-32	-34	-43	-38	-28	-18	0	7	8	12
1660	22	38	56	46	29	26	14	22	42	57
1670	72	75	60	45	28	10	12	34	49	58
1680	63	63	59	56	48	37	15	-17	-50	-80
1690	-92	-76	-51	-21	2	15	20	19	10	-2
1700	-14	-17	-16	-15	-24	-40	-61	-79	-93	-88
1710	-67	-46	-9	22	40	53	55	50	49	54
1720	63	70	69	59	40	16	-12	-41	-58	-80
1730	-107	-87	-87	-72	-52	-28	-9	1	12	18
1740	21	23	23	19	15	10	4	-1	-5	-7
1750	-14	-18	-17	-11	-2	12	27	41	48	49
1760	48	45	39	32	20	0	-12	-22	-32	-32
1770	-34	-47	-59	-82	-61	-58	-46	-18	-6	-10
1780	-26	-39	-42	-43	-25	-2	8	18	20	20
1790	16	16	23	25	29	44	52	57	58	61
1800	61	59	56	56	51	31	23	17	12	10
1810	8	4	1	-2	-1	-4	-14	-19	-28	-39
1820	-45	-45	-36	-24	-13	-7	-4	0	5	9
1830	10	11	11	13	11	3	-2	-3	-1	1
1840	3	6	9	0	-9	-19	-35	-53	-74	-88
1850	-91	-89	-79	-64	-37	-11	12	49	93	121
1860	120	110	86	56	29	14	0	-13	-20	-20
1870	-16	-8	-5	-4	-10	-19	-24	-59	-52	-65
1880	-77	-82	-89	-82	-59	-45	-83	-89	7	58
1890	96	106	99	84	69	55	45	40	38	27
1900	16	-6	-19	-19	-22	-34	-34	-26	-17	-34
1910	-4	17	44	55	55	52	47	38	30	12
1920	5	4	17	31	-53	-44	-44	-43	-36	-28
1930	-20	-19	-26	-42	-53	-71	-81	-78	-75	-72
1940	69	-67	-61	-50	-18	-17	52	74	82	82
1950	63	50	18	-8	-29	-44	-48	-48	-58	-58
1960	-26	-13	0	14	27	38	48	53	56	58
1970	60	60	60	57	55	42	34	30	18	1
1980	-16	-19	-19	-24	-32	-40	-49	-52	-43	-32
1990	-26	-22	-15	-8	-2	5	12	23	38	59
2000	73	68	59	54	37	17	3	-11	-33	-27
2010	-29	-34	-47	-51	-40	-18	-10	8	27	27
2020	29	26	19	4	-15	-38	-47	-47	-47	-46

TO BE CONTINUED

CONTINUED (S-1957 EAST)

ND.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2030	-44	-40	-36	-34	-31	-29	-25	-20	-19	-19
2040	-18	-18	-19	-23	-24	-20	-9	0	6	10
2050	10	8	0	-5	-10	-15	-12	-4	3	10
2060	18	22	24	24	20	7	2	-6	1	10
2070	16	18	20	20	20	20	20	20	14	14
2080	-4	-32	-46	-56	-56	-44	-31	-21	-18	-17
2090	-19	-20	-21	-22	-22	-32	-46	-62	-70	-59
2100	-46	-39	-37	-37	-30	-24	-19	-17	-18	-18
2110	-18	-17	-10	-4	0	5	7	9	10	9
2120	7	0	-7	-10	-12	-15	-15	-10	-3	2
2130	10	16	19	24	31	43	52	56	63	64
2140	62	50	35	24	8	-6	-18	-37	-44	-60
2150	-68	-64	-49	-30	-4	0	12	22	29	51
2160	34	34	32	29	20	13	10	4	1	-2
2170	-14	-26	-29	-35	-43	-48	-49	-58	-74	-79
2180	-79	-76	-66	-52	-34	-20	-1	15	15	15
2190	14	14	-1	-8	-10	-16	-16	-16	-15	-17
2200	-24	-29	-37	-45	-47	-47	-47	-47	-57	-68
2210	-70	-66	-58	-3	21	33	42	43	40	40
2220	40	41	41	40	40	41	42	46	52	58
2230	60	54	49	41	33	24	20	19	16	8
2240	0	-6	-11	-17	-19	-17	-7	6	12	13
2250	14	15	15	12	3	4	13	19	25	25
2260	24	22	18	12	3	14	-28	-34	-44	-49
2270	-50	-52	-59	-64	-64	-64	-58	-40	-24	-12
2280	-12	-26	-44	-58	-67	-72	-76	-77	-75	-72
2290	-65	-52	-40	-28	-22	-21	-17	-4	1	9
2300	18	30	40	49	55	60	61	61	60	52
2310	36	34	37	50	59	58	50	58	18	10
2320	2	-4	-17	-27	-32	-41	-45	-45	-17	-11
2330	0	10	25	48	60	60	63	60	39	34
2340	30	24	15	5	4	2	-6	-13	-25	-30
2350	-36	-39	-39	-33	-26	-19	-15	-12	-9	0
2360	-2	-4	-2	-1	2	6	11	16	27	32
2370	38	43	45	40	34	32	29	24	19	13
2380	10	9	9	6	0	-7	-12	-13	-8	-2
2390	-2	-2	-8	-13	-15	-18	-22	-30	-35	-36
2400	-31	-26	-24	-21	-21	-21	-22	-24	-24	-24
2410	-22	-16	-17	-28	-39	-48	-53	-55	-53	-48
2420	-34	-25	-20	-10	-8	-2	0	2	7	8
2430	9	9	10	10	8	1	0	-2	-7	-10
2440	-8	-8	-8	-10	-12	-12	-9	-1	0	0
2450	0	-7	-5	-3	-1	-2	-7	-11	-15	-15
2460	-17	-17	-13	-13	-13	-15	-10	0	8	8
2470	21	28	31	26	26	29	35	42	48	50
2480	52	50	35	16	-1	-27	-58	-69	-68	-61
2490	-55	-44	-21	-12	-5	-3	0	13	19	24
2500	29	30	25	15	5	-10	-17	-14	-7	0
2510	2	5	8	13	17	18	16	7	-11	-23
2520	-26	-27	-27	-30	-37	-40	-40	-40	-40	-40
2530	-34	-21	-12	-5	0	3	3	0	-9	-16
2540	-16	-8	-8	9	15	23	27	35	43	41

TO BE CONTINUED

CONTINUED (S-1957 EAST)

RECORD = S-1957 COMPONENT = DOWN STATION = KASHIMA-TOKAN-S
DATE AND TIME = 1986-11-29-07-29 TOTAL NUMBER OF DATA = 3000
SAMPLING INTERVAL = 0.010 (SEC) SCAL = 0.10000
SIGNAL = GR. ACC.
CONNECTION POINT IN DATA NUMBER = 3000

NP.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2550	41	44	48	50	53	55	50	54	13	0
2560	-7	-21	-35	-44	-48	-49	-48	-43	-43	-40
2570	-40	-36	-27	-26	-19	-15	-9	-3	-3	-3
2580	0	3	0	-1	-13	-7	-4	-4	-4	-3
2590	0	0	0	-8	-12	-10	-10	-10	-12	-11
2600	-10	-16	-18	-28	-30	-19	-16	-12	-10	-6
2610	13	16	17	17	21	24	25	25	26	25
2620	21	22	22	18	16	14	10	7	2	0
2630	0	-1	-2	-7	-12	-12	-7	1	4	4
2640	4	6	8	9	9	9	5	1	-1	-4
2650	-6	-10	-13	-13	-14	-16	-18	-19	-19	-22
2660	-6	4	13	20	28	33	33	31	28	22
2670	16	13	12	7	-1	-5	-12	-20	-23	-28
2680	-28	-28	-18	-4	0	9	5	-6	-14	-18
2690	-23	-28	-28	-28	-26	-19	-9	0	2	13
2700	16	22	29	35	45	51	54	54	49	30
2710	19	5	3	0	-12	-11	0	4	9	16
2720	20	22	24	26	30	30	32	37	34	34
2730	24	14	0	-6	-21	-31	-33	-31	-24	-22
2740	-1	7	11	24	27	30	31	25	16	8
2750	-2	-13	-30	-34	-36	-40	-41	-42	-42	-41
2760	-36	-24	-16	-12	-13	-17	-24	-27	-27	-27
2770	-27	-26	-25	-18	-13	-12	-9	-2	3	8
2780	12	12	12	10	6	4	4	3	2	6
2790	16	29	37	39	39	39	35	30	26	18
2800	11	7	5	0	-8	-16	-23	-30	-30	-30
2810	-22	-6	5	14	29	44	46	51	55	56
2820	54	50	38	23	6	-5	-10	-15	-22	-31
2830	-40	-41	-41	-38	-29	-19	-12	-3	0	0
2840	-6	-25	-27	-33	-40	-38	-29	-24	-19	-15
2850	-11	-3	-2	0	10	14	15	16	17	17
2860	29	41	45	51	51	51	50	45	41	35
2870	24	18	15	16	8	5	4	1	-2	1
2880	-5	-5	-4	-1	-1	-1	-5	-11	-13	-15
2890	-17	-11	-5	-4	-3	-2	-2	-3	-7	-15
2900	-26	-33	-35	-32	-25	-16	-5	0	3	9
2910	20	26	27	27	26	19	15	14	5	-6
2920	-10	-10	-6	-2	0	1	2	2	2	2
2930	2	3	7	11	15	17	18	22	27	27
2940	24	21	22	23	24	27	27	26	26	29
2950	27	17	5	-6	-17	-17	-19	-19	-15	-9
2960	0	0	1	11	19	27	27	27	27	27
2970	22	13	7	0	0	0	-1	-2	-7	-8
2980	-12	-13	-11	-1	1	2	3	10	10	8
2990	-2	-8	-12	-30	-30	-30	-35	-43	-48	-50
3000	-52	-48	-40	-35	-33	-27	-21	-14	-11	-3
3010	3	13	21	28	32	34	39	43	44	44
3020	44	43	38	31	20	9	0	-6	-13	-25
3030	-31	-36	-39	-39	-40	-40	-40	-40	-40	-40
3040	-39	-37	-33	-28	-23	-19	-7	0	1	4

END

TO BE CONTINUED

CONTINUED (S-1957 DOWN)

CONTINUED (S-1957 DOWN)

Nd.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
470	-28	-19	-8	0	10	12	9	5	-1	-3
480	-7	-10	-11	-12	-9	-7	-5	-3	0	0
490	0	0	-2	-7	-14	-15	-11	-7	-4	-2
500	0	-3	-9	-12	-12	-12	-11	-11	-15	-22
510	-26	-28	-29	-19	-6	-4	-3	-3	-6	-11
520	-12	-11	-7	-3	0	1	1	3	7	7
530	7	5	0	-8	-12	-16	-18	-16	-11	-11
540	-11	-11	-11	-11	-12	-16	-28	-26	-17	-11
550	-6	2	-3	-10	-12	-13	-13	-14	-18	-16
560	-12	-15	-20	-28	-26	-12	-2	6	6	0
570	-8	-11	-12	-12	-6	0	-10	-11	-6	-28
580	-20	-9	-1	7	4	0	-10	-12	-24	-17
590	-10	-5	0	1	-4	-4	-4	-5	-10	-15
600	-16	-11	-7	-9	-13	-22	-27	-16	-8	7
610	30	32	11	-7	-26	-32	-21	-11	9	-9
620	-12	-24	-16	-16	-12	-10	-8	-6	-3	-3
630	-4	-9	-15	-21	-25	-21	-10	-1	0	-2
640	-8	-11	-12	-16	-19	-19	-18	-15	-8	-1
650	4	13	24	29	27	13	-10	-25	-28	-17
660	-9	0	3	3	2	-2	-14	-27	-39	-39
670	-30	-13	-4	-3	-4	-8	-15	-16	-16	-20
680	-22	-25	-23	-5	1	6	10	9	0	-6
690	-12	-15	-15	-11	-1	4	12	22	22	16
700	0	-15	-28	-31	-27	-11	-6	2	4	-5
710	-12	-1	-1	-1	-3	-7	-12	-20	-21	-20
720	-14	-10	-5	0	2	3	0	-10	-11	-10
730	-28	-31	-20	-5	3	11	21	28	40	46
740	43	26	5	-4	-21	-29	-30	-24	-16	-13
750	-13	-4	12	18	13	2	-13	-32	-28	-8
760	8	15	23	26	24	20	22	33	50	51
770	34	13	-3	-25	-38	-33	-8	17	31	35
780	22	-2	-28	-40	-39	-30	-18	-11	-2	2
790	7	14	22	28	30	29	16	-10	-26	-35
800	-34	-20	2	25	14	-1	-18	-26	-15	0
810	20	39	39	27	10	-3	-6	1	10	16
820	9	-21	-40	-51	-13	3	21	26	28	31
830	42	59	59	39	7	-27	-50	-48	-33	-25
840	-12	6	6	0	0	0	7	7	7	-12
850	-36	-45	-56	-40	-33	-17	0	16	23	25
860	23	18	22	16	1	-16	-32	-33	-25	-18
870	-9	-3	6	11	15	17	15	12	1	-1
880	4	8	7	0	-30	-42	-30	-6	24	43
890	26	0	-25	-43	-38	-20	0	11	1	-23
900	-39	-32	-4	22	40	45	32	11	0	-1
910	2	6	10	13	13	13	13	13	15	19
920	24	28	27	12	-13	-37	-48	-36	-12	0
930	19	36	36	33	26	19	15	10	-8	-39
940	-74	-95	-85	-48	-17	18	28	26	23	21
950	22	25	19	-8	-46	-46	-55	-40	-22	-12
960	0	12	18	25	27	24	24	2	-16	-18
970	-1	2	22	50	67	72	42	21	12	4
980	-1	-8	-25	-41	-58	-52	-9	3	3	0

TO BE CONTINUED

TO BE CONTINUED

CONTINUED (S-1957 DOWN)

CONTINUED (S-1957 DOWN)

No.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1510	-35	-27	-16	-7	-1	0	2	4	5	9
1520	9	-4	0	11	27	36	38	34	21	-4
1530	-16	-6	0	8	11	11	9	9	0	-9
1540	-28	-11	-3	3	3	3	8	11	12	13
1550	13	11	10	7	5	3	3	4	10	13
1560	15	20	25	28	32	36	36	34	28	21
1570	13	7	4	4	0	-9	-15	-20	-22	-23
1580	-19	-16	-16	-18	-26	-35	-35	-28	-21	-17
1590	-12	-5	12	45	66	68	64	52	50	6
1600	-4	-10	-15	-16	-16	-16	-4	-4	12	23
1610	24	24	17	6	19	29	30	26	24	17
1620	11	10	12	13	13	11	1	-13	-16	-12
1630	-3	-1	-1	-4	-10	-9	1	5	12	13
1640	15	19	20	14	11	4	4	0	-3	-4
1650	0	0	0	4	4	4	0	-7	-9	-16
1660	-16	-17	-24	-26	-23	-1	0	-1	11	18
1670	21	21	29	29	23	13	10	-6	-11	-12
1680	-15	-16	-17	-18	-28	-36	-38	-22	-16	-12
1690	-8	-4	2	10	20	32	41	45	49	50
1700	47	37	25	15	11	4	-5	-10	-10	-10
1710	-10	-10	-13	-16	-16	-22	-26	-22	-9	1
1720	9	18	23	24	23	23	22	16	1	-22
1730	-45	-56	-56	-56	-55	-50	-41	-37	-34	-25
1740	-11	2	15	21	21	21	21	18	10	6
1750	-2	-4	-6	-6	-4	1	15	23	25	29
1760	34	35	35	34	29	22	15	8	-1	-12
1770	-16	-18	-18	-18	-20	-20	-20	-20	-19	-17
1780	-10	-6	-1	-1	-1	1	8	11	11	8
1790	2	-1	-7	-10	-12	-16	-16	-12	-8	-6
1800	-3	-3	0	0	3	4	4	2	-2	-16
1810	-19	-19	-19	-19	-19	-13	-6	7	19	28
1820	16	4	-1	-12	-21	-35	-25	-17	-12	-11
1830	-12	-5	4	16	27	33	35	33	26	16
1840	1	-11	-24	-38	-42	-42	-42	-59	-50	-19
1850	-10	1	9	9	9	7	2	-3	-6	-8
1860	-8	-7	-3	3	11	18	22	26	29	25
1870	17	9	7	7	7	4	2	1	1	0
1880	-4	-8	-11	-11	-18	-21	-26	-26	-25	-30
1890	-36	-32	-24	-11	1	6	7	6	2	-3
1900	-6	-16	-17	-18	-16	-7	-5	0	0	0
1910	9	16	16	16	5	3	0	-4	-14	-18
1920	-22	-22	-19	-7	5	4	4	4	4	4
1930	-1	-3	-2	0	0	4	8	13	17	24
1940	27	28	28	28	27	23	21	11	4	-1
1950	-4	-4	-4	-3	-4	-9	-10	-10	-14	-16
1960	-16	-16	-11	-7	-5	-4	-3	2	17	26
1970	35	44	48	43	31	21	16	12	5	-2
1980	-10	-14	-16	-20	-24	-27	-30	-33	-32	-23
1990	-16	-15	-15	-14	-12	-8	-2	2	3	5
2000	9	9	6	0	-4	-5	0	0	0	0
2010	2	5	6	7	7	6	7	6	4	-4
2020	-8	-9	-9	1	2	3	8	14	22	22

TO BE CONTINUED

TO BE CONTINUED

CONTINUED (S-1957 DOWN)

NP.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2550	-4	-4	-4	-3	0	4	6	6	6	4
2560	5	5	7	5	3	2	1	-3	-4	-5
2570	-7	-8	-5	1	0	0	-1	-3	-2	-2
2580	-4	-5	-11	-11	-8	-2	-1	-1	-1	-4
2590	-4	-4	-4	-2	-3	-4	-4	-4	-22	-24
2600	-27	-27	-33	-31	-23	-21	-13	-10	-6	0
2610	10	12	16	19	26	28	28	28	27	22
2620	20	20	18	16	16	16	14	11	10	9
2630	5	0	-2	-1	0	1	1	-3	-6	-8
2640	-8	-8	-5	0	0	0	4	6	6	6
2650	6	4	3	2	2	0	-5	-15	-19	-21
2660	-22	-23	-25	-26	-23	-16	-9	-6	-2	7
2670	22	27	27	25	21	21	22	21	16	16
2680	12	8	1	-4	-8	-10	-11	-10	-9	-9
2690	-9	-9	-9	-9	-7	-7	-7	-7	-7	-7
2700	-9	-11	-12	-12	-11	-8	-4	-3	-3	-3
2710	-1	0	0	0	0	0	0	2	3	4
2720	11	17	21	21	21	23	26	26	26	20
2730	28	34	33	31	24	23	19	10	10	6
2740	-7	-10	-11	-14	-17	-17	-12	-8	-1	5
2750	7	8	8	5	5	5	5	4	-1	-3
2760	-3	-2	-1	-3	-5	-7	-9	-10	-12	-13
2770	-17	-17	-17	-17	-16	-14	-12	-11	-12	-10
2780	-6	0	2	6	10	16	19	19	18	15
2790	12	10	6	1	-2	-6	-5	-3	-1	1
2800	4	6	9	10	10	8	4	1	-2	-1
2810	0	0	1	4	5	7	7	7	9	11
2820	12	13	11	4	-4	-6	-7	-8	-13	-14
2830	-14	-11	-4	-3	-4	-11	-11	-12	-14	-14
2840	-7	6	9	7	-1	-1	-1	-2	-2	-1
2850	-1	-2	-2	-2	-4	-4	-4	-4	7	11
2860	18	18	15	19	20	21	23	22	21	18
2870	17	11	7	0	-2	-9	-18	-21	-12	-11
2880	-10	-7	-7	-7	-5	0	4	6	6	6
2890	6	4	0	-1	-5	-3	0	0	1	1
2900	1	1	1	1	4	7	7	1	-1	-1
2910	-5	-7	-5	0	3	3	3	3	2	1
2920	1	0	-1	-3	-3	-3	-3	-3	-1	-1
2930	-1	-3	-3	-3	-2	-2	-2	-2	-5	-9
2940	-9	-9	-9	-8	-7	-7	-7	-7	-8	-6
2950	-4	-1	4	4	5	5	6	7	8	8
2960	8	8	11	11	11	11	12	13	13	13
2970	12	7	0	-3	-3	-4	-6	-8	-9	-9
2980	-8	-8	-8	-8	-8	-8	-4	-4	-2	-1
2990	-1	-1	-2	-4	-6	-9	-11	-11	-11	-11

END

港湾技研資料 No. 588

1987.6

編集兼発行人 運輸省港湾技術研究所

発行所 運輸省港湾技術研究所
横須賀市長瀬3丁目1番1号

印刷所 阿部写真印刷株式会社

Published by the Port and Harbour Research Institute
Nagase, Yokosuka, Japan.