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ANNUAL REPORT ON STRONG-MOTION EARTHQUAKE
RECORDS IN JAPANESE PORTS (1969)

by Hajime Tsuchida, Eiichi Kurata and Katsuko Sudo

[港湾地域強震観測年報 (1969)]

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港湾地域強震観測年報（1969）

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要 旨

わが国の港湾地域における強震観測は、昭和37年度より港湾技術研究所耐震構造研究室を中心となり、運輸省港湾局、各港湾建設局、北海道開発局港湾部、岩手県、静岡県、宮崎県の各港湾課、東京都、大阪市の各港湾局の協力のもとに実施している。観測網には、昭和44年末現在で57台の強震計が、35港に配置されていた。このうち、39台は地盤上に、また残り18台は構造物上に設置されていた。使用している強震計はSMAC-B2強震計および当研究室で開発したERS-A強震計の2種である。

この報告では、前記観測網で昭和44年中に得られた記録のうち、対応する地震がはっきりせず、かつその最大加速度が2.0 gal以下のものを除き、残りすべてを地震ごとに分類し地震の資料と各成分ごとの最大加速度を添えて、強震観測表（Strong-Motion Earthquake Observation Results）に示した。強震観測表の地震資料（Earthquake Data）に示すものは、備考（Remarks）を除き、気象庁地震課発行の地震火山概況によっている。また、地盤上における記録で最大加速度が5.0 gal以上のものについては、記録の原寸複製、数字化された記録、応答スペクトル、フーリエスペクトルを添えた。本報告で記録波形を示したものは、いづれもSMAC-B2強震計で記録したものである。

記録の原寸複製には、その方向が示してある。しかし、記録の一成分を構造物法線と平行にしたために、強震計のNS成分が真北を指していないものがある。この偏角や設置地点の条件等については、別に報告されているので参照されたい。

数字化された記録は原記録の密着印画を数字化装置により0.01秒ごとに読み取り、円弧補正を行なった上で再び0.01秒間隔の数値として示したものである。

応答スペクトルは数字化された記録から主要部分を取り出し、これについて1自由度1質点系の最大応答を求めてプロットしたものである。最大応答の計算は理論解を一定時間毎隔で数値計算し、その最大値を求める方法によった。時間毎隔は0.01秒を原則としたが、固有周期の短い部分では、時間毎隔が固有周期の1/20、もしくはそれ以下となるようにした。本報告で採用した方法と、これまでの年報で採用していたRunge-Kutta-Gill法で運動方程式を数値積分する方法と、スペクトルに現われる差が実用上無視し得るものであることは、いくつかの地震波による試算

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で確めてある。応答スペクトルの計算に用いた地震波の長さはTIME LENGTH, 記録の始めの部分で加速度が小さいので計算に用いなかった部分の長さはSKIPPED LENGTHとして、数値表中に示してある。

この報告に示すフーリエスペクトルは、地震波の最大加速度の部分を含む数秒間をとり出し、これをフーリエ級数に展開して、そのフーリエ係数をプロットしたものである。したがって、厳密には線スペクトルであるが、図では各スペクトル値を結んだ形にしてある。フーリエスペクトルを求めた区間の始点と記録の始点との時間はTSK、スペクトルを求めた区間の長さはTUSとして、秒を単位とする数値で図中に示してある。

この報告に示すような強震記録とその解析結果は海外の技術者や研究者にも極めて有用であり、その相互交換の提唱もあるので、本報告の説明は英文とした。応答スペクトルの計算法以外については、これまでの年報と同一手法なので、その説明文をそのまま準用してよい。

ANNUAL REPORT ON STRONG-MOTION EARTHQUAKE RECORDS IN JAPANESE PORTS (1969)

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Synopsis

In the major ports in Japan, the strong-motion earthquake and earthquake response of structures have been observed for these nine years; and as of the end of 1969, more than 520 records were accumulated and analysed in the Earthquake Resistant Structure Laboratory. The observation network consisted of 57 strong-motion accelerographs; the 39 accelerographs were on the ground and the rest, on the structures. Two types of accelerograph, the SMAC-B2 accelerograph and the ERS-A accelerograph were being used. This paper presents all the records obtained in 1969, which are listed in the tables with their maximum accelerations, being classified in accordance with earthquakes. The reproduced accelerograms, digitized records, response spectra and Fourier spectra of the ground acceleration records with maximum acceleration larger than 50 gals, are included. The records on the 1968 Tokachi-Oki earthquake and the three major aftershocks have been published separately in similar style to the annual report.

1. Introduction

The observation of the strong-motion earthquake in major ports was started in 1962 in Japan by the Earthquake Resistant Structure Laboratory of the Port and Harbour Research Institute. The observation network was expanded year by year; and as of December 1969, 57 accelerographs had been installed in 36 ports. Two types of accelerograph were being used, namely the SMAC-B2 accelerograph and the ERS-A accelerograph. The magnetic tape recorder was adopted for the ERS-A accelerograph which was developed by the Earthquake Resistant Structure Laboratory.

Until the end of 1969, more than 520 accelerograms had been obtained in the network and collected in the Laboratory for preliminary processing and analyses which would be explained later on. The records from 1963 to 1968 had been published in the previous annual reports which had similar style to this one. 1, 2, 3, 4) 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 structure. The largest acceleration was recorded in 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 style to the annual report, on the main shock and the three major aftershocks at 19:39 on May 16, at 22:42 on June 12, and at 20:06 on September 21. 5)

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.

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The report consists of the Strong-Motion Earthquake Observation Results, reproduced accelerograms, digitized records, response spectra and Fourier spectra. All the records in 1968 are listed in the Strong-Motion Earthquake Observation Results with their maximum accelerations, except a few number of records whose earthquakes are not known and whose maximum accelerations are less than 20 gals. The reproduced accelerograms, digitized records and the spectra are provided only on the ground acceleration records of which maximum accelerations are larger than 50 gals. Those of the 1968 Tokachi-Oki earthquake and its three major aftershocks are not published in the series of annual report, since those have been published separately.

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, Hokkaido Development Agency of the Prime Minister's Office;

The Harbour Sections of Iwate, Shizuoka, and Miyazaki Prefectural Governments; and

The Harbour Bureaus of Tokyo and Osaka Municipal Governments.

2. Network and Instrument

(1) Network

The network of the Port and Harbour Research Institute were covering the coast-line of Japan with 57 strong-motion accelerographs in 1969. The complete location of the stations is shown in Fig. 1, in which two new stations started in 1969 are included. The accelerographs at the 45 stations out of the 57 stations were the SMAC-B2 accelerographs and the rest, the ERS-A accelerographs. The details of both accelerographs can be seen in the previous reports. 7, 8)

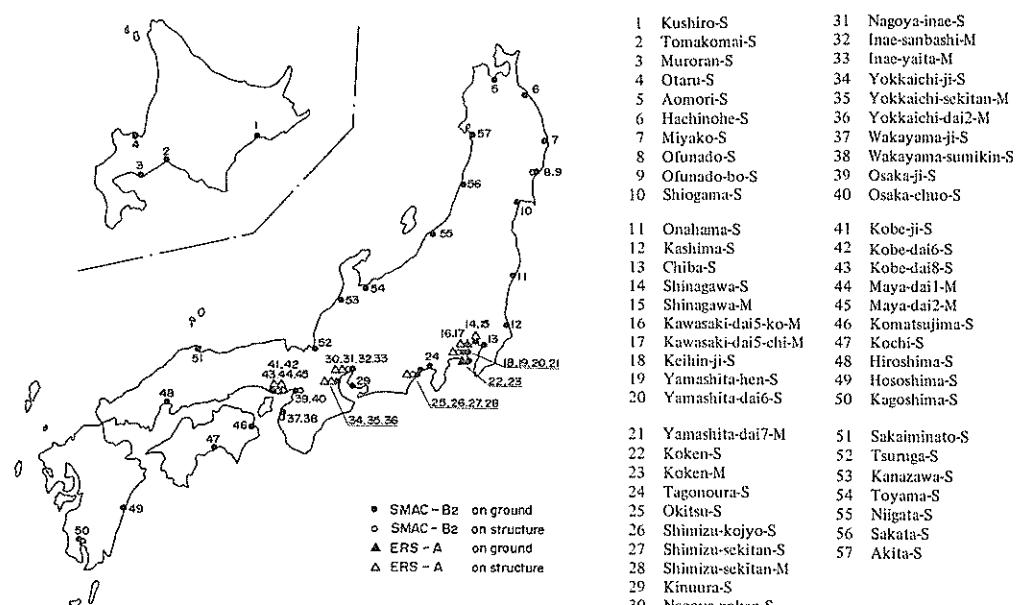


Fig. 1 Strong-Motion Earthquake Network of Port and Harbour Research Institute

(2) Servicing

The installation and the servicing of the network have been made by the port construction offices of the previously described organizations under the direction of the Earthquake Resistant Structure 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 Structure 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 Structure Laboratory has been offering every year a training course of 5 days to the persons who take care of the accelerographs in 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) Station

In the network, there are two kinds of stations; one is to record the ground acceleration, the other 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 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 quaywalls 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. In 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. As two horizontal components of the accelerographs are named NS and EW always, 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-A accelerograph is being used in a station, the name of the place is followed by a capital letter M. 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.⁶⁾

(4) Accelerograph

Two types of accelerographs are being used in the network, they are the SMAC-B2 accelerograph and the ERS-A accelerograph. The details of the accelerographs have been reported in the separate publications.^{7, 8)}

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.

(5) Foundation and Housing

All the 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. 2. 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 housing covering the instrument.

The most of the accelerographs are covered with housings which were built for the instruments. Some of the accelerographs were installed in houses which had been built for other purposes. The housing built for the instruments are made of reinforced concrete or concrete blocks; some are prefabricated houses. In Photo 1, as an example, the housing of the Otaru-S station is shown; that is made of concrete blocks.

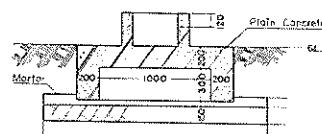
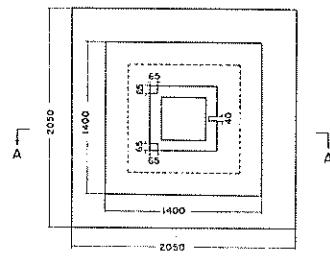


Fig. 2 Foundation for
 Accelerograph
 (SMAC-B2)

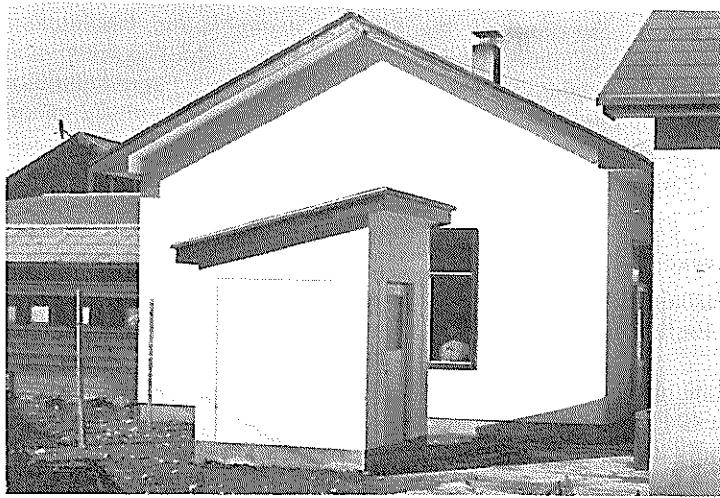


Photo 1 Housing of Otaru-S Station

3. Accelerogram Processing

(1) Preliminary Processing

The accelerograms collected at the Earthquake Resistant Structure Laboratory are listed in the tables "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-A 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. But a few of the accelerograms are sent without such information because the accelerograms have been found in the regular servicings, 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 information distributed by the Japan Meteorological Agency (JMA) in the Ministry of Transport; that is "Preliminary Report on Earthquake and Volcanic Activity (Jishin Kazan Gaikyo)." 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.

A direct copy is made from the original accelerogram and 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 is compiled every two months and sent to all the stations. The copy of the accelerogram is also sent with the necessary direction 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 table are based upon the Preliminary Report on Earthquake and Volcanic Activity. 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 class in the earthquake data is showing the scale of the earthquake based on the distance between the epicenter and the furthest point where the shock is felt. The classification criteria are shown in Table 1.

Table 1 Classification of Earthquakes (After Ref. 9)

Remarkable earthquake:

Distance of furthest point where shock is felt, is greater than 300 km

Moderate earthquake:

The distance is smaller than 300 km, but greater than 200 km.

Earthquake of small felt area:

The distance is smaller than 200 km, but greater than 100 km.

The distance Local earthquake:

The distance is smaller than 100 km

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

$$M = \log(A^2 + A'^2) + 1.73 \log A = 0.83 \dots \quad (1)$$

where, M is the magnitude; A_N and A_E are the maximum amplitudes of N- and E-components in micron respectively; and d 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 $\sqrt{A_N^2 + A_E^2}$ reported by the stations of IMA.

The intensity of the shock is estimated according to the scale as shown in Table 2.

Table 2. JMA Seismic Intensity Scale (After Ref. 9).

O·NO FEELING

Shocks too weak to cause human feelings and registered only by a seismograph.

1-SIGHT

Extremely feeble shocks only felt by persons at rest or by those who are observant to an earthquake.

2:WEAK

Shocks felt by most persons, slight shaking of doors and Japanese latticed sliding doors (shoji).

3: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.

4:STRONG

Strong shaking of houses and buildings, overturning of unstable objects, spilling of liquids out of vessels.

5:VERY STRONG

Cracks in the walls, overturning of gravestones, stone lanterns etc., damage to chimneys and mud-and-plaster warehouses.

6:DISASTROUS

Demolition of houses by less than 30% in total number, landslips, fissures in the ground etc.

7: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. Reproduced Accelerogram

The reproduced accelerograms in this report are offsets of full size from the original accelerograms. Therefore, 1 cm along the time axis corresponds to 1 second, and 1 cm of amplitude to 125 gals.

The direction written above and below each trace correspond to the directions of the ground acceleration when the motion of the ground is harmonic motion of frequency lower than the natural frequency of the pendulum of the accelerograph.

5. Digitized Record

The Earthquake Resistant Structure Laboratory intends to digitize all the accelerograms with maximum acceleration larger than 50 gals in the following procedure. As all of the digitized records in this report were obtained on the SMAC-B2 accelerograph, the procedure only for the accelerograms from the SMAC-B2 accelerograph will be described.

The direct copy of the accelerogram is made with the special photographic film whose base is stable against temperature and humidity. On the copy, the trace is black line and the background is semi-transparent. If the significant portion of the record is longer than 60 cm, the copy will be two sheets or more; more than 10 cm of the record on the both sides of the sheet is overlapping in the successive sheets.

With this copy, the record is digitized at equal time intervals of 0.01 second with an accelerogram digitizer as shown in Photo 2, which was designed especially for digitizing the accelerogram obtained on the SMAC-B2 accelerograph. If the portion to be digitized is longer than about 30 cm, the copy must be shifted on the table of the digitizer.

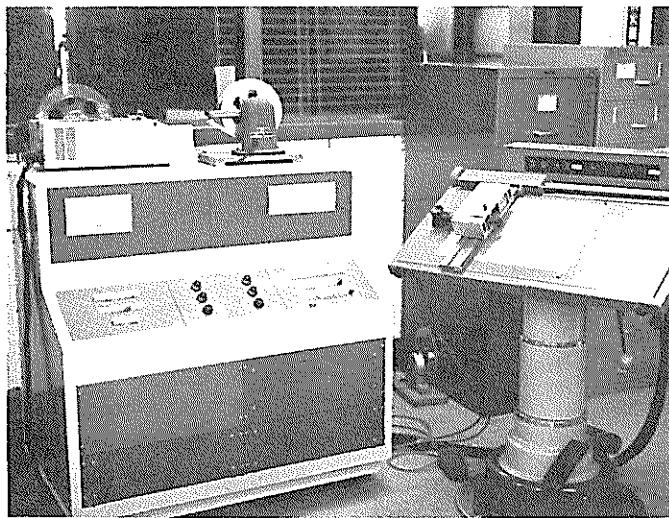


Photo 2 Accelerogram Digitizer

The acceleration is digitized in a rectangular co-ordinates and perforated on paper tape in the flexo writer code. Then the values are again perforated on paper tape in special code with a digital computer and converted into analog electronic voltage with a digital-analog converter. The output from the converter is recorded by an ink-writing oscilloscope in appropriate amplitude. Then, the record is carefully examined whether any fault in the digitizing or in the base-line setting exists or not. If there is any fault, it is corrected in the digital computer. As the pen of the SMAC-B2 accelerograph moves along an arc and the record is digitized in a rectangular co-ordinates, the arc error introduced in the digitizing in time values is corrected at the same time. The acceleration values are not corrected since the sensitivity of the SMAC-B2 accelerograph is the ratio of the acceleration to the displacement of the pen measured at a right angle to the base-line.

After the correction, the digitized accelerations are series of values at unequal time intervals, but they are converted into values at equal time intervals by means of linear interpolation. The reason to make the digitized record at equal time intervals is that the records obtained by the ERS-A accelerograph are always digitized at equal time intervals with an analog-digital converter and it is convenient to have digitized records in one standard form for application of them. The digitized record at equal time intervals is also convenient for converting them with a digital-analog converter into analog electronic voltage which is used as an input to an analog computer.

The final results are printed on paper as seen in the last part of this report and also written on a magnetic tape for future use.

6. Preliminary Analyses

(1) Response Spectrum

The response spectra in the previous annual reports were calculated from the digitized records by a digital computer using the Runge-Kutta-Gill method to integrate numerically the equation of motion of the oscillator. The response spectra in the present report were calculated with a new procedure which is a step by step calculation of the exact solution to the governing differential equation. 10) 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. The length of the record in the authers' calculation is limited within about 35 seconds. 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.

Although the smallest natural period in the response spectra in this report is 0.05 second, the spectral values for the shorter natural periods should be used taking the frequency characteristics of the SMAC-B2 accelerograph in mind. The ERS-A accelerograph has wider frequency range than that of the SMAC-B2 accelerograph and such caution is not necessary on the response spectra of the record by the ERS-A accelerograph.

(2) Fourier Spectrum

The Fourier spectra in this report are plots of the coefficients of the real Fourier series versus the periods. The real Fourier series of a periodic function is expressed by the following equation:

$$f(t) = a_0 + \sum_{m=1}^{\infty} (a_m \cos \frac{2\pi m}{T} t + b_m \sin \frac{2\pi m}{T} t) \dots \quad (2a)$$

$$a_0 = \frac{1}{T} \int_0^T f(\tau) d\tau \dots \quad (2b)$$

$$a_m = \frac{2}{T} \int_0^T f(\tau) \cos \frac{2\pi m}{T} \tau d\tau \dots \quad (2c)$$

$$b_m = \frac{2}{T} \int_0^T f(\tau) \sin \frac{2\pi m}{T} \tau d\tau \dots \quad (2d)$$

in which, $f(t)$ is the periodic function; and T is the period. Although this series is, in principle, applicable only to a periodic function and no earthquake is periodic, the coefficients a_m and b_m are calculated on the most significant part of the records. The resultant c_m of the two coefficients are plotted in the figures which will appear in the later part of this report. The coefficient c_m given by,

$$c_m = \sqrt{a_m^2 + b_m^2} \quad \dots \dots \dots \quad (3)$$

is a discrete quantity against the period; in the figures however, the successive values are connected with straight lines to show the shape of the spectrum as a whole.

The length of the record used for the spectrum calculation are usually 5 seconds including the maximum acceleration. In the figures, TSK indicates the beginning of the used part for the calculation counted from the starting point of the digitized record in second; TUS indicates the length of the used part in second.

The Fourier spectrum in this report have been provided temporarily to give engineers the information to select the most appropriate record for their response calculation. In the future routine analyses of the Laboratory, the Fourier spectra described previously, will be replaced with more suitable spectra to represent the frequency characteristics of the strong-motion earthquake record.

Acknowledgements

This report largely depends upon the people who serviced the instruments so effectively, although they have handful daily jobs and the servicing is quite additional. Their efforts should be appreciated not only by the authers but also by all the people who receive any benefit from the report. The authers also wish to express their appreciation to the organizations in concern, for their considerable supports to the observation.

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 Port and Harbour Research Institute No. 55, September 1968, pp. 1-86
 - 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 Port and Harbour Research Institute No. 62, December 1968, pp. 1-145
 - 3) Hajime Tsuchida, Eiichi Kurata and Katsuko Sudo: Annual Report on Strong-Motion Earthquake Records in Japanese Ports (1967), Technical Note of Port and Harbour Research Institute No. 64, March 1969, pp. 1-182

- 4) Hajime Tsuchida, Eiichi Kurata and Katsuko Sudo: Annual Report on Strong-Motion Earthquake Records in Japanese Ports (1968), Technical Note of Port and Harbour Research Institute No. 98, March 1970, pp.1- 342
- 5) 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, pp. 1-476
- 6) Hajime Tsuchida, Teiichiro Yamada and Eiichi Kurata: Site Characteristics of Strong-Motion Earthquake Stations in Ports and Harbours in Japan (Part 1), Technical Note of Port and Harbour Research Institute No. 34, November 1967, pp.- 1-306
- 7) Satoshi Hayashi, Nobuo Miyajima and Teiichiro Yamada: Strong-Motion Earthquake Observation in Principal Ports (The Second Report), Technical Note of Port and Harbour Research Institute No. 15, February 1965, pp. 27-67
- 8) Satoshi Hayashi and Nobuo Miyajima: Strong-Motion Earthquake Observation in Principal Ports (The First Report), Technical Note of Port and Harbour Research Institute No. 10, April 1964, pp. 1-44
- 9) The Seismological Bulletin of The Japan Meteorological Agency for January 1965, No. 181, The Japan Meteorological Agency, 1966,
- 10) Nava 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, pp.909-922

Observation Results
and
Preliminary Analyses

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

EARTHQUAKE DATA

Date and Time	16:02 January 19, 1969	Intensities
Location of Hypocenter		IV Kushiro, Hachinohe
Epicentral Region	NE Off Hokkaido	III Aomori, Ofunado
Latitude	44.6°N	II Sakata, Muroran, Miyako
Longitude	144.0°E	I Otaru, Tokyo, Akita
Depth	240 km	
Class	Remarkable	
Magnitude		

STRONG-MOTION ACCELEROGRAPH RESULTS

Abbreviated Name	Station Installation Condition	Record Number	Max. Acceleration (gal)			Note
			NS	EW	UD	
Aomori-S	on ground	S-433	8	6	3	
Hachinohe-S	on ground	S-434	15	11	5	
Muroran-S	on ground	S-438	5	3	2	
Kushiro-S	on ground	S-439	26	33	12	

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

EARTHQUAKE DATA

Date and Time	03:04 January 20, 1969	Intensities
Location of Hypocenter		I Hachinohe
Epicentral Region	E Off Aomori Pref.	
Latitude	41.2°N	
Longitude	142.7°E	
Depth	60 km	
Class	Moderate	
Magnitude		

STRONG-MOTION ACCELEROGRAPH RESULTS

Abbreviated Name	Station Installation Condition	Record Number	Max. Acceleration (gal)			Note
			NS	EW	UD	
Hachinohe-S	on ground	S-435	1	1	--	

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

EARTHQUAKE DATA

Date and Time	15:24 February 17, 1969	Intensities
Location of Hypocenter		II Kushiro
Epicentral Region	Off Kushiro	I Hiroo
Latitude	42.8°N	
Longitude	144.9°E	
Depth	40 km	
Class	Small felt area	
Magnitude		

STRONG-MOTION ACCELEROGRAPH RESULTS

Abbreviated Name	Installation Condition	Record Number	Max. Acceleration (gal)			Note
			NS	EW	UD	
Kushiro-S	on ground	S-440	2	2	3	

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

EARTHQUAKE DATA

Date and Time	05:39 March 13, 1969	Intensities
Location of Hypocenter		II Chiba
Epicentral Region	NE Part of Tokyo Bay	I Yokohama
Latitude	35.7°N	
Longitude	139.9°E	
Depth	80 km	
Class	Small felt area	
Magnitude		

STRONG-MOTION ACCELEROGRAPH RESULTS

Abbreviated Name	Installation Condition	Record Number	Max. Acceleration (gal)			Note
			NS	EW	UD	
Keihin-ji-S Yamashita-hen-S	on ground on ground	S-442 S-443	1 3	1 3	1 1	

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

EARTHQUAKE DATA

Date and Time	00:54 March 17, 1969	Intensities
Location of Hypocenter		III Miyako, Ofunado
Epicentral Region	Off Miyagi Pref.	II Hachinohe
Latitude	38.4°N	I Aomori, Sakata, Niigata, Onahama,
Longitude	142.8°E	Kushiro
Depth	40 km	
Class	Remarkable	
Magnitude		

STRONG-MOTION ACCELEROGRAPH RESULTS

Station		Record Number	Max. Acceleration (gal)			Note
Abbreviated Name	Installation Condition		NS	EW	UD	
Hachinohe-S Onahama-S	on ground on ground	S-444 S-461	3 2	4 2	1 --	

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

EARTHQUAKE DATA

Date and Time	16:40 March 21, 1969	Intensities
Location of Hypocenter		III Tokushima
Epicentral Region	SE Off Shikoku	II Muroto
Latitude	33.6°N	I Kochi
Longitude	134.6°E	
Depth	20 km	
Class	Small felt area	
Magnitude		

STRONG-MOTION ACCELEROGRAPH RESULTS

Station		Record Number	Max. Acceleration (gal)			Note
Abbreviated Name	Installation Condition		NS	EW	UD	
Komatsujima-S	on ground	S-445	7	7	3	

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

EARTHQUAKE DATA

Date and Time	04:26 April 1, 1969	Intensities
Location of Hypocenter		III Tokyo, Onahama
Epicentral Region	Middle of Japan Sea	II Kushiro, Ofunado
Latitude	38.7°N	I Aomori, Miyako, Yokohama
Longitude	134.0°E	
Depth	360 km	
Class	Remarkable	
Magnitude		

STRONG-MOTION ACCELEROGRAPH RESULTS

Station		Record Number	Max. Acceleration (gal)			Note
Abbreviated Name	Installation Condition		NS	EW	UD	
Kashima-S Onahama-S	on ground on ground	S-446 S-462	4 11	4 9	1 --	

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

EARTHQUAKE DATA

Date and Time	21:57 April 9, 1969	Intensities
Location of Hypocenter		III Tokyo
Epicentral Region	Middle of Tochigi Pref.	II Onahama, Ofunado
Latitude	36.8°N	I Yokohama, Choshi
Longitude	140.0°E	
Depth	100 km	
Class	Remarkable	
Magnitude		

STRONG-MOTION ACCELEROGRAPH RESULTS

Station		Record Number	Max. Acceleration (gal)			Note
Abbreviated Name	Installation Condition		NS	EW	UD	
Keihin-ji-S	on ground	S-447	9	7	3	
Yamashita-hen-S	on ground	S-448	6	5	2	
Shinagawa-S	on ground	S-449	17	12	3	
Kashima-S	on ground	S-450	11	8	2	
Onahama-S	On ground	S-463	10	6	--	

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

EARTHQUAKE DATA

Date and Time	16:19 April 21, 1969	Intensities
Location of Hypocenter		IV Nobeoka
Epicentral Region	Hyuganada	III Kagoshima
Latitude	32.1°N	II Kochi
Longitude	132.2°E	I Fukuoka
Depth	20 km	
Class	Remarkable	
Magnitude		

STRONG-MOTION ACCELEROGRAPH RESULTS

Abbreviated Name	Station Installation Condition	Record Number	Max. Acceleration (gal)			Note
			NS	EW	UD	
Kochi-S	on ground	S-451	8	6	3	
Kagoshima-S	on ground	S-452	4	6	3	
Hososhima-S	on ground	S-453	63	96	26	

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

EARTHQUAKE DATA

Date and Time	17:11 April 22, 1969	Intensities
Location of Hypocenter		III Miyako
Epicentral Region	Far Off Sanriku	II Sakata, Ofunado, Hachinohe, Aomori
Latitude	39.9°N	I Akita
Longitude	143.4°E	
Depth	40 km	
Class	Remarkable	
Magnitude		

STRONG-MOTION ACCELEROGRAPH RESULTS

Abbreviated Name	Station Installation Condition	Record Number	Max. Acceleration (gal)			Note
			NS	EW	UD	
Hachinohe-S	on ground	S-454	3	5	3	

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

EARTHQUAKE DATA

Date and Time	07:45 May 3, 1969	Intensities
Location of Hypocenter		III Morioka, Hachinohe
Epicentral Region	Off Iwate Pref.	II Miyako, Aomori
Latitude	40.1°N	I Ofunado
Longitude	142.5°E	
Depth	40 km	
Class	Moderate	
Magnitude		

STRONG-MOTION ACCELEROGRAPH RESULTS

Station		Record Number	Max. Acceleration (gal)			Note
Abbreviated Name	Installation Condition		NS	EW	UD	
Ofunado-S	on ground	S-455	4	6	3	
Ofunado-bo-S	on structure	S-458	4	16	2	
Hachinohe-S	On ground	S-467	5	3	2	

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

EARTHQUAKE DATA

Date and Time	03:53 May 13, 1969	Intensities
Location of Hypocenter		III Tateyama
Epicentral Region	Near Izu-oshima Island	II Katsuura
Latitude	35.1°N	I Tokyo, Yokohama
Longitude	139.6°E	
Depth	70 km	
Class	Local	
Magnitude		

STRONG-MOTION ACCELEROGRAPH RESULTS

Station		Record Number	Max. Acceleration (gal)			Note
Abbreviated Name	Installation Condition		NS	EW	UD	
Yamashita-hen-S	on ground	S-459	3	3	1	

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

EARTHQUAKE DATA

Date and Time	23:19 May 13, 1969	Intensities
Location of Hypocenter		III Onahama, Choshi
Epicentral Region	Kashima-nada	II Fukushima
Latitude	36.4°N	I Tokyo
Longitude	140.7°E	
Depth	50 km	
Class	Remarkable	
Magnitude		

STRONG-MOTION ACCELEROGRAPH RESULTS

Abbreviated Name	Installation Condition	Record Number	Max. Acceleration (gal)			Note
			NS	EW	UD	
Kashima-S Onahama-S	on ground on ground	S-460 S-464	14 10	25 7	4 --	

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

EARTHQUAKE DATA

Date and Time	10:56 May 15, 1969	Intensities
Location of Hypocenter		III Oshima
Epicentral Region	E Off Chiba Pref.	II Tokyo, Chiba, Yokohama
Latitude	35.0°N	I Fukushima
Longitude	140.2°E	
Depth	60 km	
Class	Remarkable	
Magnitude		

STRONG-MOTION ACCELEROGRAPH RESULTS

Abbreviated Name	Installation Condition	Record Number	Max. Acceleration (gal)			Note
			NS	EW	UD	
Keihin-ji-S	on ground	S-465	3	3	1	

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

EARTHQUAKE DATA

Date and Time	23:22 May 20, 1969	Intensities
Location of Hypocenter		III Hachinohe
Epicentral Region	E Off Aomori Pref.	I Aomori
Latitude	40.7°N	
Longitude	142.0°E	
Depth	60 km	
Class	Small felt area	
Magnitude		

STRONG-MOTION ACCELEROGRAPH RESULTS

Station		Record Number	Max. Acceleration (gal)			Note
Abbreviated Name	Installation Condition		NS	EW	UD	
Hachinohe-S	on ground	S-466	2	2	1	

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

EARTHQUAKE DATA

Date and Time	15:41 June 20, 1969	Intensities
Location of Hypocenter		III Miyako, Ofunado
Epicentral Region	Off Miyagi Pref.	II Akita, Onahama
Latitude	38.5°N	I Kushiro, Aomori, Sakata, Choshi,
Longitude	142.2°E	
Depth	60 km	
Class	Remarkable	
Magnitude		

STRONG-MOTION ACCELEROGRAPH RESULTS

Station		Record Number	Max. Acceleration (gal)			Note
Abbreviated Name	Installation Condition		NS	EW	UD	
Hachinohe-S	on ground	S-468	5	4	2	
Shiogama-S	on ground	S-470	11	9	10	
Ofunado-S	on ground	S-471	4	7	3	
Ofunado-bo-S	on structure	S-472	24	66	12	

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

EARTHQUAKE DATA

Date and Time	00:38 June 21, 1969	Intensities
Location of Hypocenter		IV Hachinohe
Epicentral Region	E Off Aomori Pref.	III Aomori, Miyako
Latitude	40.8°N	II Morioka
Longitude	142.2°E	I Ofunado
Depth	60 km	
Class	Remarkable	
Magnitude		

STRONG-MOTION ACCELEROGRAPH RESULTS

Abbreviated Name	Station Installation Condition	Record Number	Max. Acceleration (gal)			Note
			NS	EW	UD	
Hachinohe-S	on ground	S-469	34	23	7	

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

EARTHQUAKE DATA

Date and Time	19:21 July 9, 1969	Intensities
Location of Hypocenter		
Epicentral Region	W Coast of Wakayama Pref.	
Latitude	34.2°N	
Longitude	135.0°E	
Depth	10 km	
Class	Local	
Magnitude	*	

STRONG-MOTION ACCELEROGRAPH RESULTS

Abbreviated Name	Station Installation Condition	Record Number	Max. Acceleration (gal)			Note
			NS	EW	UD	
Wakayama-ji-S	on ground	S-520	31	22	8	

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

EARTHQUAKE DATA

Date and Time	22:14 July 23, 1969	Intensities
Location of Hypocenter		III Onahama
Epicentral Region	Off Fukushima Pref.	II Miyako, Chiba
Latitude	37.2°N	I Tokyo, Ofunado, Hachinohe
Longitude	141.6°E	
Depth	50 km	
Class	Remarkable	
Magnitude		

STRONG-MOTION ACCELEROGRAPH RESULTS

Abbreviated Name	Station Installation Condition	Record Number	Max. Acceleration (gal)			Note
			NS	EW	UD	
Kashima-S	on ground	S-473	3	3	1	

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

EARTHQUAKE DATA

Date and Time	06:28 August 12, 1969	Intensities
Location of Hypocenter		IV Kushiro
Epicentral Region	E Off Hokkaido	III Hachinohe, Aomori
Latitude	43.2°N	II Muroran, Miyako, Ofunado
Longitude	149.5°E	I Akita, Onahama, Tokyo
Depth	60 km	
Class	Remarkable	
Magnitude		

STRONG-MOTION ACCELEROGRAPH RESULTS

Abbreviated Name	Station Installation Condition	Record Number	Max. Acceleration (gal)			Note
			NS	EW	UD	
Chiba-S	on ground	S-474	1	2	1	
Kushiro-S	on ground	S-475	38	38	23	
Yamashita-hen-S	on ground	S-476	3	2	1	
Muroran-S	on ground	S-477	3	2	1	

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

EARTHQUAKE DATA

Date and Time	20:54 August 17, 1969	Intensities
Location of Hypocenter		III Kushiro, Hachinohe
Epicentral Region	Off Tomakomai	II Tomakomai, Aomori, Miyako
Latitude	42.8°N	I Muroran, Otaru, Ofunado
Longitude	141.5°E	
Depth	130 km	
Class	Remarkable	
Magnitude		

STRONG-MOTION ACCELEROGRAPH RESULTS

Abbreviated Name	Station Installation Condition	Record Number	Max. Acceleration (gal)			Note
			NS	EW	UD	
Kushiro-S	on ground	S-478	3	2	2	

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

EARTHQUAKE DATA

Date and Time	09:24 September 7, 1969	Intensities
Location of Hypocenter		III Oita
Epicentral Region	Iyo-nada	II Hiroshima
Latitude	33.7°N	I Kochi, Nobeoka
Longitude	131.8°E	
Depth	100 km	
Class	Moderate	
Magnitude		

STRONG-MOTION ACCELEROGRAPH RESULTS

Abbreviated Name	Station Installation Condition	Record Number	Max. Acceleration (gal)			Note
			NS	EW	UD	
Kochi-S	on ground	S-481	3	5	0	

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

EARTHQUAKE DATA

Date and Time	14:15 September 9, 1969	Intensities
Location of Hypocenter		V Mitake
Epicentral Region	Middle of Gifu Pref.	IV Osaka, Nagoya
Latitude	35.8°N	III Tokyo, Toyama, Kobe, Yokkaichi, Tsuruga
Longitude	137.0°E	II Kanazawa, Shizuoka, Onahama, Wakayama, Yokohama, Sakai
Depth	Very shallow	I Matsuyama
Class	Remarkable	
Magnitude		

STRONG-MOTION ACCELEROGRAPH RESULTS

Station Abbreviated Name	Record Number	Max. Acceleration (gal)			Note
		NS	EW	UD	
Yokkaichi-S	S-479	38	34	28	
Kinuura-S	S-480	55	43	--	
Nagoya-inae-S	S-482	29	48	23	
Kanazawa-S	S-483	30	25	--	
Osaka-ji-S	S-484	9	13	3	
Kobe-ji-S	S-485	20	19	4	
Kobe-dai6-S	S-486	33	29	8	
Kobe-dai8-S	S-487	19	18	9	
Okitsu-S	S-488	10	19	3	
Tagonoura-S	S-491	--	44	9	
Yamashita-hen-S	S-492	3	3	1	

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

EARTHQUAKE DATA

Date and Time	03:41 September 18, 1969	Intensities
Location of Hypocenter		IV Miyazaki
Epicentral Region	Near Yakushima	III Kagoshima
Latitude	30.9°N	II Nobeoka
Longitude	131.7°E	I Fukuoka
Depth	40 km	
Class	Remarkable	
Magnitude		

STRONG-MOTION ACCELEROGRAPH RESULTS

Station Abbreviated Name	Record Number	Max. Acceleration (gal)			Note
		NS	EW	UD	
Kagoshima-S	S-489	21	31	18	

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

EARTHQUAKE DATA

Date and Time	03:51 September 18, 1969	Intensities
Location of Hypocenter		III Miyazaki
Epicentral Region	Near Yakushima	II Kagoshima
Latitude	31.2°N	I Yakushima
Longitude	131.3°E	
Depth	20 km	
Class	Moderate	
Magnitude		

STRONG-MOTION ACCELEROGRAPH RESULTS

Abbreviated Name	Installation Condition	Record Number	Max. Acceleration (gal)			Note
			NS	EW	UD	
Kagoshima-S	on ground	S-490	4	8	3	

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

EARTHQUAKE DATA

Date and Time	10:14 October 18, 1969	Intensities
Location of Hypocenter		IV Morioka
Epicentral Region	S of Iwate Pref.	III Hachinohe Miyako Ofunado
Latitude	39.3°N	II Kushiro Aomori
Longitude	142.0°E	I Akita Yokohama
Depth	80 km	
Class	Remarkable	
Magnitude		

STRONG-MOTION ACCELEROGRAPH RESULTS

Abbreviated Name	Installation Condition	Record Number	Max. Acceleration (gal)			Note
			NS	EW	UD	
Sakata-S	on ground	S-496	7	3	1	
Hachinohe-S	on ground	S-498	9	10	3	
Muroran-S	on ground	S-499	3	3	1	

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

EARTHQUAKE DATA

Date and Time	21:29 October 19, 1969	Intensities
Location of Hypocenter		
Epicentral Region	Off Akita Pref.	
Latitude	39.6°N	
Longitude	139.6°E	
Depth	10 km	
Class	Moderate	
Magnitude		

STRONG-MOTION ACCELEROGRAPH RESULTS

Station		Record Number	Max. Acceleration (gal)			Note
Abbreviated Name	Installation Condition		NS	EW	UD	
Sakata-S Akita-S	on ground on ground	S-497 S-500	4 6	10 9	2 1	

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

EARTHQUAKE DATA

Date and Time	22:53 November 25, 1969	Intensities
Location of Hypocenter		
Epicentral Region	Near Wakayama	
Latitude	34.2°N	
Longitude	135.2°E	
Depth	10 km	
Class	Local	
Magnitude		

STRONG-MOTION ACCELEROGRAPH RESULTS

Station		Record Number	Max. Acceleration (gal)			Note
Abbreviated Name	Installation Condition		NS	EW	UD	
Wakayama-ji-S	on ground	S-522	8	10	3	

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

EARTHQUAKE DATA

Date and Time	22:32 Desember 18, 1969	Intensities
Location of Hypocenter		III Hachinohe
Epicentral Region	NE Off Hokkaido	II Aomori
Latitude	45.8°N	I Onahama
Longitude	143.5°E	
Depth	320 km	
Class	Remarkable	
Magnitude		

STRONG-MOTION ACCELEROGRAPH RESULTS

Abbreviated Name	Installation Condition	Record Number	Max. Acceleration (gal)			Note
			NS	EW	UD	
Muroran-S	on ground	S-514	2	1	1	

STRONG-MOTION EARTHQUAKE OBSERVATION RESULTS

EARTHQUAKE DATA

Date and Time	Intensities
Location of Hypocenter	
Epicentral Region	
Latitude	
Longitude	
Depth	
Class	
Magnitude	

STRONG-MOTION ACCELEROGRAPH RESULTS

Abbreviated Name	Installation Condition	Record Number	Max. Acceleration (gal)			Note
			NS	EW	UD	

gal

250

125

S

125 N

250

gal

250

125 D

125 U

250

gal

250

125 W

125 E

250

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NO.	COMPONENT=S			SAMPLING INTERVAL=0.010(SEC)			CORRECTION=ZERO, ARC FORMAT NO.=301			STATION=HOSOJIMA-S		
	(0)	(90)	(180)	(200)	(250)	(300)	(350)	(400)	(450)	(500)	(550)	(600)
1	0.11	-0.83	10.73	-20.56	6.49	1.95	13.07	-5.44	-3.98	7.25	7.47	7.47
2	-0.73	7.92	-18.26	5.80	2.95	12.24	"4.04	3.20	4.10	1.25	4.10	9.47
3	-0.55	2.29	-13.10	5.40	5.17	10.56	"1.25	4.10	4.10	4.10	4.10	10.85
4	-0.59	-9.07	4.99	8.96	8.96	8.87	0.95	4.09	4.09	4.09	4.09	4.09
5	-0.48	-4.11	-6.12	-4.52	4.59	9.72	6.98	1.95	3.95	3.95	3.95	10.85
6	0.57	10.66	-8.01	4.46	3.24	13.43	4.95	3.75	1.99	1.99	1.99	9.51
7	-0.60	15.68	-8.11	8.76	0.99	15.65	-3.52	4.85	4.85	4.85	4.85	7.83
8	0.61	10.05	-8.41	16.06	-1.41	15.52	-7.57	5.84	5.84	5.84	5.84	6.53
9	0.69	15.99	-8.71	18.16	-2.51	14.15	-12.67	5.74	5.74	5.74	5.74	5.04
10	1.49	14.49	-8.71	-2.51	12.69	-1.62	-1.62	-9.13	-9.13	-9.13	-9.13	-9.13
11	-0.21	2.40	-9.32	20.66	-3.11	8.47	-8.57	4.64	4.64	4.64	4.64	4.64
12	-0.66	-0.56	-9.59	19.65	-3.11	4.01	-5.89	5.14	5.14	5.14	5.14	5.14
13	2.04	-0.97	8.58	17.08	-3.11	-2.50	-2.50	10.66	10.66	10.66	10.66	10.66
14	10.54	-6.41	-6.14	10.24	-3.51	-4.97	3.39	6.44	6.44	6.44	6.44	5.04
15	-0.73	-1.78	9.30	5.87	-3.62	-5.86	5.49	6.48	6.48	6.48	6.48	5.14
16	-1.78	-12.15	9.50	-2.47	-4.42	-5.45	6.79	6.75	6.75	6.75	6.75	5.34
17	-0.51	15.45	-6.37	-6.44	-6.44	-6.44	7.18	6.13	6.13	6.13	6.13	5.54
18	-0.12	-5.31	18.76	-7.07	-8.93	2.44	7.17	5.83	5.83	5.83	5.83	5.43
19	-1.62	6.74	21.04	-7.20	-9.77	5.85	6.17	5.43	5.43	5.43	5.43	4.82
20	1.23	6.96	22.53	-6.75	-7.47	8.26	4.66	5.15	5.15	5.15	5.15	2.15
21	-2.22	9.73	21.92	-4.36	-3.61	10.45	0.48	4.93	4.93	4.93	4.93	1.55
22	-0.32	-0.86	20.36	-3.07	0.68	11.29	-1.82	4.35	4.35	4.35	4.35	4.35
23	-0.47	6.71	18.49	-2.97	2.18	9.81	-2.22	4.02	4.02	4.02	4.02	4.02
24	4.13	-5.31	10.95	-3.47	3.28	9.10	-2.02	2.72	2.72	2.72	2.72	2.72
25	0.87	5.71	10.95	-3.47	3.28	9.10	-2.02	2.72	2.72	2.72	2.72	2.72
26	7.04	-2.28	6.19	-3.57	4.48	7.79	-1.92	1.07	1.07	1.07	1.07	1.07
27	1.27	-3.76	6.76	-3.67	4.88	4.82	-1.93	2.48	2.48	2.48	2.48	2.48
28	2.05	-7.86	-2.27	5.48	2.92	-2.23	-4.18	6.10	6.10	6.10	6.10	6.10
29	0.23	-1.72	-0.48	6.17	0.72	-0.72	-2.63	-4.67	9.70	9.70	9.70	9.70
30	2.23	-21.50	3.23	6.37	-3.38	-3.38	-3.73	5.57	5.57	5.57	5.57	5.57
31	0.53	-21.70	7.28	5.97	-5.89	-5.89	-5.65	0.92	8.54	8.54	8.54	8.54
32	-0.19	-19.68	12.92	5.67	-7.29	-8.15	-8.15	4.02	6.36	6.36	6.36	6.36
33	6.71	-1.71	15.76	4.96	-8.49	-9.24	-4.15	4.76	4.76	4.76	4.76	4.76
34	1.24	2.05	-7.86	-2.27	5.48	2.92	-2.23	-4.18	6.10	6.10	6.10	6.10
35	0.23	-1.72	-0.48	6.17	0.72	-0.72	-2.63	-4.67	9.70	9.70	9.70	9.70
36	2.23	-21.50	3.23	6.37	-3.38	-3.38	-3.73	5.57	5.57	5.57	5.57	5.57
37	0.53	-21.70	7.28	5.97	-5.89	-5.89	-5.65	0.92	8.54	8.54	8.54	8.54
38	-0.19	-19.68	12.92	5.67	-7.29	-8.15	-8.15	4.02	6.36	6.36	6.36	6.36
39	6.71	-1.71	15.76	4.96	-8.49	-9.24	-4.15	4.76	4.76	4.76	4.76	4.76
40	1.24	2.05	-7.86	-2.27	5.48	2.92	-2.23	-4.18	6.10	6.10	6.10	6.10
41	0.23	-1.72	-0.48	6.17	0.72	-0.72	-2.63	-4.67	9.70	9.70	9.70	9.70
42	2.24	-21.48	2.47	4.94	-4.94	1.12	-0.63	11.47	0.63	0.63	0.63	0.63
43	0.44	-2.08	2.27	11.67	-5.85	3.92	2.07	9.99	2.27	2.27	2.27	2.27
44	-0.19	6.71	15.77	15.76	4.96	-8.49	-9.24	-4.15	4.76	4.76	4.76	4.76
45	1.24	2.05	-7.86	-2.27	5.48	2.92	-2.23	-4.18	6.10	6.10	6.10	6.10
46	0.23	-1.72	-0.48	6.17	0.72	-0.72	-2.63	-4.67	9.70	9.70	9.70	9.70
47	2.24	-21.48	2.47	4.94	-4.94	1.12	-0.63	11.47	0.63	0.63	0.63	0.63
48	0.44	-2.08	2.27	11.67	-5.85	3.92	2.07	9.99	2.27	2.27	2.27	2.27
49	-0.19	6.71	15.77	15.76	4.96	-8.49	-9.24	-4.15	4.76	4.76	4.76	4.76
50	1.24	2.05	-7.86	-2.27	5.48	2.92	-2.23	-4.18	6.10	6.10	6.10	6.10
51	0.23	-1.72	-0.48	6.17	0.72	-0.72	-2.63	-4.67	9.70	9.70	9.70	9.70

REC'D=8-455 DATE ANU (MM-DD-YY)=1969-04-21-16-19

SIGNAL=400, ACC. SAMPLING INTERVAL= 0.010(SEC)

STATION=HOSOJIMA-S TOTAL NUMBER OF DATA= 6100

CORRECTION=ZFR0, ARC FORMAT NO.=301

NO.	(200)	(250)	(300)	(350)	(400)	(450)	(500)	(550)	(600)	(650)	(700)	(750)	(800)	(850)	(900)	(950)			
1	0.50	-5.63	4.90	-18.14	-0.00	8.79	-5.10	-3.65	-11.68	-4.86	-0.00	-4.76	-4.96	-3.01	-7.48	-7.48			
2	0.90	-6.25	5.81	-19.17	-6.59	-0.75	-4.51	-6.80	-45.84	-9.71	-1.42	-5.57	-12.26	-5.80	-12.74	-9.71			
3	2.01	-1.95	7.21	-16.46	-16.42	-1.95	-4.51	-6.80	-62.75	-62.75	-15.07	-18.72	-13.13	-18.72	-15.07	-15.07			
4	0.60	-2.25	6.11	-6.85	-18.57	3.25	-4.51	-6.80	-62.75	-62.75	-15.28	-18.72	-13.13	-18.72	-15.28	-15.28			
5	4.71	-5.66	9.31	3.87	-21.02	6.18	-4.51	-6.80	-62.75	-62.75	-15.28	-18.72	-13.13	-18.72	-15.28	-15.28			
6	2.61	-4.86	10.08	14.05	-24.06	10.59	-4.51	-6.80	-62.75	-62.75	-15.28	-18.72	-13.13	-18.72	-15.28	-15.28			
7	7.40	-6.37	9.48	21.78	-24.56	7.79	-4.65	-6.96	-62.75	-62.75	-15.28	-18.72	-13.13	-18.72	-15.28	-15.28			
8	6.13	-7.96	8.78	31.48	-23.14	5.45	-4.13	-4.13	-21.21	-42.48	-4.91	-18.87	-2.95	-42.48	-4.91	-4.91			
9	7.44	-6.05	8.18	36.75	-18.87	-2.97	-9.56	-17.49	-27.05	-4.70	-16.92	-16.92	-8.92	-16.92	-16.92	-16.92			
10	7.09	-7.35	7.48	4.82	-11.06	-7.65	-7.12	-10.66	-10.66	-8.92	-16.92	-16.92	-8.92	-16.92	-16.92	-16.92			
11	7.44	-6.05	6.78	45.26	-5.65	-15.46	-1.09	-2.44	-7.24	-26.58	-7.24	-1.09	-2.44	-7.24	-26.58	-7.24			
12	5.51	-5.86	5.26	43.09	-3.40	-13.52	9.93	7.06	-21.16	-53.89	-11.75	-3.40	-9.93	-21.16	-53.89	-11.75			
13	7.37	-5.56	5.59	38.01	7.59	-9.63	16.37	19.41	30.34	35.75	-4.91	-9.63	16.37	19.41	30.34	35.75			
14	6.57	-5.55	5.62	50.04	7.27	-3.05	17.46	33.13	32.59	58.70	-4.91	-3.05	17.46	33.13	32.59	58.70			
15	7.67	-2.86	5.20	22.12	5.47	3.16	12.60	34.67	52.21	40.30	-2.86	22.12	5.47	3.16	12.60	34.67	52.21		
16	6.13	0.84	7.44	15.48	2.48	14.22	7.14	38.94	51.46	40.10	0.84	15.48	2.48	14.22	7.14	38.94	51.46		
17	5.20	1.73	9.90	5.59	1.48	19.10	3.08	34.61	50.70	59.67	1.73	5.59	1.48	19.10	3.08	34.61	50.70		
18	4.38	-1.81	9.31	-1.87	3.51	28.38	-1.12	29.40	28.52	39.17	-1.81	3.51	28.38	-1.12	29.40	28.52	39.17		
19	2.58	-0.57	6.91	-6.58	15.52	50.57	-4.55	19.41	22.78	38.58	-0.57	15.52	50.57	-4.55	19.41	22.78	38.58		
20	4.19	-1.57	8.61	-7.56	22.60	51.53	-10.93	16.05	16.69	36.60	-1.57	22.60	51.53	-10.93	16.05	16.69	36.60		
21	5.59	-1.37	6.01	-6.91	29.67	50.93	-23.69	9.11	8.92	32.15	-1.37	29.67	50.93	-23.69	9.11	8.92	32.15		
22	7.01	1.53	7.46	-0.77	51.01	26.45	-35.82	2.12	9.08	28.02	1.53	7.46	-0.77	51.01	26.45	2.12	9.08		
23	11.01	0.63	-2.12	4.75	26.52	17.91	-45.82	-5.85	-10.43	21.64	0.63	-2.12	4.75	26.52	17.91	-45.82	-5.85		
24	12.42	0.54	0.49	10.02	14.73	6.92	-47.42	-17.37	-19.58	9.58	0.54	-4.92	14.73	6.92	-47.42	-17.37	-19.58		
25	1.84	-1.12	6.49	19.39	-4.98	-2.98	36.61	-29.64	-23.77	4.82	-1.12	6.49	-4.98	-2.98	36.61	-29.64	-23.77	4.82	
26	1.58	0.80	6.61	25.80	-15.78	-8.45	18.15	-33.64	-33.64	2.72	0.80	-15.78	-8.45	18.15	-33.64	-33.64	2.72		
27	14.27	4.50	5.58	50.22	-27.77	-13.02	-4.43	-26.50	-19.93	2.72	4.50	-27.77	-13.02	-4.43	-26.50	-19.93	2.72		
28	14.24	7.78	4.70	29.95	-32.28	-14.16	17.62	-12.49	-19.46	5.94	7.78	-32.28	-14.16	17.62	-12.49	-19.46	5.94		
29	1.51	-2.19	2.27	27.17	-34.75	-14.20	26.61	-16.55	-4.40	6.06	-2.19	27.17	-34.75	-14.20	26.61	-16.55	-4.40		
30	1.27	-5.58	20.47	17.62	-54.15	-14.36	-14.36	21.31	32.84	10.72	-5.58	20.47	-54.15	-14.36	21.31	32.84	10.72		
31	3.55	3.88	15.05	5.35	-33.91	-18.16	16.36	-21.31	42.14	5.82	3.88	15.05	-33.91	-18.16	16.36	-21.31	42.14	5.82	
32	2.09	-2.76	5.54	7.95	-54.08	-21.59	-6.94	45.92	7.16	10.80	-2.76	5.54	-54.08	-21.59	-6.94	45.92	7.16	10.80	
33	2.57	-6.39	5.40	-17.46	-56.03	-50.09	-16.21	36.46	36.46	10.01	-6.39	2.57	-17.46	-56.03	-50.09	36.46	36.46	10.01	
34	4.47	-4.69	-12.05	-25.06	-59.50	-51.49	-20.32	24.27	5.06	9.49	-4.69	4.47	-12.05	-25.06	-59.50	24.27	5.06	9.49	
35	4.27	-2.19	-2.12	-28.78	-58.57	-58.57	-28.00	-35.53	4.06	7.96	-2.19	4.27	-28.78	-58.57	-58.57	4.06	7.96		
36	2.27	-6.38	-27.87	-32.60	-52.43	-7.88	-25.61	-25.30	-1.46	-2.90	-6.38	2.27	-27.87	-32.60	-52.43	-7.88	-25.61	-25.30	
37	0.46	-6.87	-30.54	-22.84	-25.43	-7.88	-9.31	-59.44	-59.44	-1.46	-6.87	0.46	-30.54	-22.84	-25.43	-7.88	-9.31	-59.44	
38	4.09	-4.75	-16.38	-16.18	-16.18	7.13	-1.31	-46.65	-46.65	-4.22	-4.22	4.09	-16.38	-16.18	-16.18	7.13	-1.31	-46.65	
39	1.54	1.51	-6.38	-14.58	-14.58	3.17	1.81	-20.32	-20.32	-4.22	-4.22	1.54	-6.38	-14.58	-14.58	3.17	1.81	-20.32	
40	4.25	0.22	-2.28	-9.95	6.87	24.51	8.96	-46.67	-46.67	-4.22	-4.22	4.25	-2.28	-9.95	6.87	24.51	8.96	-46.67	
41	4.54	5.22	-22.67	-7.67	17.36	-28.02	-16.11	-30.93	-9.27	5.06	5.22	4.54	-22.67	-7.67	-28.02	-16.11	-30.93	5.06	
42	2.74	4.42	-21.48	-27.87	-6.53	20.81	21.58	15.89	-23.94	1.46	4.42	2.74	-21.48	-27.87	-6.53	20.81	21.58	15.89	
43	7.72	-15.61	-15.61	0.21	26.41	15.16	14.64	-10.69	-17.77	-4.22	-15.61	7.72	-15.61	0.21	26.41	15.16	14.64	-10.69	
44	4.26	4.44	8.88	2.21	28.25	6.28	-1.31	-11.95	-11.95	-4.22	-4.22	4.26	4.44	8.88	2.21	28.25	6.28	-1.31	
45	4.50	2.50	2.50	4.21	31.69	4.01	5.34	33.74	33.74	-4.44	-4.44	4.50	2.50	2.50	4.21	31.69	4.01	5.34	
46	4.25	1.20	1.20	1.65	5.86	37.23	4.41	2.75	44.94	0.76	1.20	4.25	1.20	1.65	5.86	37.23	4.41	2.75	
47	7.70	1.65	9.03	9.03	36.07	6.41	-1.55	-2.95	-2.95	-4.77	1.65	7.70	9.03	9.03	36.07	6.41	-1.55	-2.95	
48	4.22	4.44	10.39	10.39	32.38	7.08	-3.55	57.12	57.12	-2.97	-2.97	4.22	4.44	10.39	10.39	32.38	7.08	-3.55	57.12
49	4.19	7.72	9.65	9.65	27.89	4.26	-4.12	24.44	24.44	-2.95	-2.95	4.19	7.72	9.65	9.65	27.89	4.26	-4.12	24.44
50	4.24	4.19	7.72	7.72	9.65	6.88	-3.50	-2.95	-2.95	-4.77	4.19	7.72	7.72	9.65	6.88	-3.50	-2.95	-2.95	
51	4.42	4.42	4.42	4.42	10.39	4.06	-1.55	45.09	45.09	-2.95	-2.95	4.42	4.42	4.42	4.42	10.39	4.06	-1.55	45.09

REC'DATE=3-4-52
 DATE 1969-04-21-16-19
 SIGNAL=ACC.
 SAMPLING INTERVAL=0.010(SEC)
 CORRECTION=ZERO.
 FORMAT NO.=3001

NO.	(1.00)	(1.50)	(1.00)	(1.50)	(1.00)	(1.50)	(1.00)	(1.50)	(1.00)	(1.50)	(1.00)	(1.50)
1	-20.80	50.37	0.30	-2.15	-18.41	1.85	13.87	-11.81	21.29	-11.95	-9.81	21.20
2	-21.74	52.59	-1.10	-1.15	-16.59	-0.85	15.51	-9.81	-11.94	-4.46	-7.91	21.18
3	-20.37	34.06	-5.50	0.95	-6.96	-4.46	17.72	-5.14	20.94	-10.11	-6.59	-11.61
4	-22.17	23.35	-2.10	-0.45	-3.18	-6.59	19.45	-3.35	20.31	-5.14	-3.16	-6.10
5	-33.01	19.55	2.80	-2.86	7.82	-11.11	19.98	-3.16	19.24	-3.16	-3.16	-3.94
6	-34.41	8.96	0.67	-5.02	17.46	-13.82	18.43	-3.16	19.24	-3.16	-3.16	-3.94
7	-29.93	4.50	14.79	-0.09	23.00	-14.98	14.80	-3.16	17.15	-3.16	-3.16	-3.94
8	-24.63	-5.14	16.89	-10.82	29.43	-15.26	8.73	-5.07	13.34	-5.07	-5.07	-6.59
9	-17.01	-1.52	18.40	-0.49	62.35	-15.26	4.68	-7.08	6.96	-7.08	-7.08	-11.48
10	-14.97	-26.29	16.33	-6.14	32.65	-15.23	-2.49	-9.12	3.98	-9.12	-9.12	-12.63
11	-8.54	-52.10	12.97	-3.95	26.87	-14.99	2.59	-12.19	-1.11	-12.19	-12.19	-12.19
12	-13.07	-36.95	10.39	-1.66	16.06	-13.62	5.62	-16.11	-4.72	-16.11	-16.11	-16.11
13	-17.73	-36.54	5.96	-2.36	5.53	-12.23	9.95	-18.92	-6.72	-18.92	-18.92	-18.92
14	-3.65	-61.40	2.88	-3.26	-2.42	-11.28	1.08	-19.36	-7.14	-19.36	-19.36	-19.36
15	-28.71	-1.26	1.49	-2.55	-10.04	-11.95	15.55	-19.55	-7.14	-19.55	-19.55	-19.55
16	-43.91	-13.21	3.80	4.04	-15.46	-14.67	16.89	-19.55	-7.21	-19.64	-19.64	-19.64
17	-45.11	-9.57	9.90	6.21	-14.32	-16.91	18.51	-14.61	-7.43	-14.61	-14.61	-14.61
18	-39.63	-9.59	1.39	15.65	-10.02	-19.41	18.87	-11.31	-8.74	-11.31	-11.31	-11.31
19	-22.97	-11.67	26.40	15.90	-5.66	-22.67	18.54	-9.35	-6.14	-9.35	-9.35	-9.35
20	-25.70	-10.77	22.84	15.08	3.30	-27.38	16.55	-8.67	-11.34	-11.34	-11.34	-11.34
21	-2.65	-10.77	62.36	10.18	11.45	-51.06	14.09	-8.61	-11.98	-11.98	-11.98	-11.98
22	12.92	-11.10	64.51	5.79	17.39	-53.70	7.41	-10.12	-12.69	-10.12	-10.12	-10.12
23	27.40	-5.23	34.16	-0.17	20.63	-56.14	1.68	-13.39	-7.43	-13.39	-13.39	-13.39
24	24.09	-1.56	51.04	-1.87	22.08	-56.26	-3.08	-16.41	-8.37	-16.41	-16.41	-16.41
25	24.90	-1.54	44.44	-2.27	21.03	-54.60	-5.63	-18.69	-4.70	-18.69	-18.69	-18.69
26	24.05	-1.25	52.13	-3.18	18.36	-50.04	-6.01	-18.01	-0.12	-18.01	-18.01	-18.01
27	22.58	-11.20	18.52	-4.28	14.15	-20.99	-4.31	-18.74	-0.12	-18.74	-18.74	-18.74
28	16.64	-12.12	10.71	-5.89	9.07	-14.35	-1.38	-15.47	-3.34	-15.47	-15.47	-15.47
29	3.46	-17.01	4.26	-7.94	3.56	-11.65	0.57	-9.67	-8.37	-9.67	-9.67	-9.67
30	4.16	-27.72	1.87	-12.20	-2.23	-10.57	2.87	-4.34	-7.37	-4.34	-7.37	-7.37
31	4.73	-36.31	0.37	-12.87	-6.63	-10.40	3.17	-5.15	-11.49	-5.15	-11.49	-11.49
32	1.30	-44.14	9.97	-12.68	-6.61	-11.20	2.47	-9.92	-21.93	-9.92	-21.93	-21.93
33	20.57	-48.58	2.07	-12.58	-4.50	-11.99	0.17	-14.70	-10.53	-14.70	-14.70	-14.70
34	27.53	-47.17	2.07	-12.92	2.37	-12.15	-3.24	-19.03	-6.89	-19.03	-19.03	-19.03
35	51.31	-40.25	2.36	-13.80	8.95	-11.15	-6.46	-16.46	-3.51	-16.46	-16.46	-16.46
36	58.41	-30.32	0.86	-15.08	14.00	*6.31	-9.25	-26.59	-34.94	-26.59	-34.94	-34.94
37	4.00	-19.45	-2.04	-17.01	15.26	2.63	-10.27	-26.95	-26.95	-26.95	-26.95	-26.95
38	4.66	-15.19	-6.82	-19.08	1.61	34.16	-12.95	-26.00	-40.00	-26.00	-40.00	-40.00
39	4.06	-7.61	-15.51	-21.15	12.73	11.65	-11.65	-26.55	-38.33	-26.55	-38.33	-38.33
40	3.71	-21.69	-24.75	-21.44	9.13	26.02	-12.23	-25.40	-34.91	-25.40	-34.91	-34.91
41	33.25	0.71	29.90	-18.35	7.13	30.19	-11.84	-24.41	-8.11	-24.41	-24.41	-24.41
42	39.64	0.71	-31.28	*8.72	4.15	33.00	*11.87	-25.72	-14.41	-25.72	-14.41	-14.41
43	26.95	0.01	-27.81	1.61	2.66	32.71	12.95	-26.00	-10.69	-26.00	-10.69	-10.69
44	26.88	-2.39	-15.19	-1.98	3.91	2.76	-13.18	-27.71	-15.43	-27.71	-15.43	-15.43
45	26.12	-7.61	-2.99	0.49	4.90	3.26	19.92	-12.24	-25.40	-12.24	-25.40	-25.40
46	27.05	-21.99	3.78	3.79	3.86	25.50	-15.13	-26.34	-14.71	-26.34	-14.71	-14.71
47	24.03	-0.20	5.55	-2.30	4.66	20.79	-16.76	-25.27	-14.01	-25.27	-14.01	-14.01
48	30.05	2.50	-9.60	5.25	5.25	17.51	-17.05	-24.26	-5.19	-24.26	-5.19	-5.19
49	31.12	5.00	0.95	-15.03	5.24	14.66	*6.88	-23.14	-4.80	-23.14	-4.80	-4.80
50	32.31	2.30	-1.85	-17.75	3.45	13.70	-14.22	-21.84	-4.49	-21.84	-4.49	-4.49

REC'DATE 1969-02-21-16:00
 DATE 1969-02-21-16:00
 NO. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50
 (1500) (1550) (1600) (1650) (1700) (1750) (1800) (1850) (1900) (1950)
 SIGNAL=0.000 CORRECTION=ZERO, ARC
 SAMPLING INTERVAL = 0.010(sec)
 FORMAT NO.=301

STATION=HOSODIMA-S
 TOTAL NUMBER OF DATA= 6100

NO.	(1500)	(1550)	(1600)	(1650)	(1700)	(1750)	(1800)	(1850)	(1900)	(1950)
1	-2.11	-0.92	-7.60	6.42	-19.15	15.48	-3.79	5.62	-1.90	-7.05
2	-2.91	-0.54	-10.00	13.31	-22.19	16.04	0.30	-1.65	5.17	-7.46
3	-2.21	0.25	-11.58	15.05	-23.00	15.73	-2.80	-6.09	4.51	-7.85
4	-2.01	-1.42	-17.12	23.86	13.34	4.91	-10.92	5.03	-7.52	-7.95
5	-2.01	0.05	-14.71	18.36	-24.25	6.10	7.31	-13.42	19.11	-6.95
6	-2.31	0.75	-11.56	19.85	-23.80	5.13	8.60	-15.15	10.63	-6.45
7	-2.41	0.13	-10.42	19.62	-22.76	2.04	8.69	-16.77	10.16	-6.02
8	-0.79	0.41	-18.92	19.19	-20.59	-3.16	8.29	-16.71	8.56	-5.76
9	-0.13	2.43	-15.92	17.36	-16.00	-6.76	7.98	-14.65	6.58	-6.36
10	-2.42	5.34	-17.77	17.36	-13.95	-7.46	7.39	-11.49	4.94	-6.67
11	-1.17	1.44	-12.76	15.96	-10.26	-7.86	7.69	-9.21	4.39	-6.29
12	-1.63	-1.66	-10.09	11.91	-10.05	-8.05	7.88	-6.25	3.64	-10.48
13	-1.27	2.36	-9.91	5.14	-6.51	-5.85	8.12	-4.70	2.99	-11.29
14	-1.94	2.04	-9.05	4.64	-6.91	-4.55	10.37	-4.50	3.49	-12.15
15	-1.76	6.34	-9.87	4.98	-6.24	2.79	-0.66	13.97	4.27	-11.65
16	-2.01	1.16	-10.41	11.99	-12.41	7.23	1.53	16.08	4.27	-10.33
17	-2.11	5.7	-14.47	2.44	11.20	1.25	17.77	-6.07	7.41	-6.65
18	-2.01	0.62	-12.59	5.76	15.42	0.43	19.06	-6.98	9.74	-9.23
19	-1.51	1.77	-10.97	4.95	16.10	-1.77	20.31	-7.87	12.59	-4.46
20	-1.07	1.38	-11.78	4.12	16.50	-2.47	20.52	-8.05	12.86	-1.97
21	-1.77	1.75	-11.72	1.85	16.71	-5.29	19.80	-7.75	12.56	0.35
22	-1.01	2.27	-12.43	1.23	15.46	-8.62	18.82	-6.56	12.27	2.03
23	-1.21	4.5	-1.45	1.47	2.03	13.16	-11.67	16.00	5.10	11.44
24	-1.01	2.7	1.64	-0.35	2.83	9.93	-15.14	16.77	3.67	13.13
25	-0.94	7.28	-12.62	4.66	7.85	-16.61	14.90	-3.07	9.16	4.26
26	-0.61	6.12	2.28	4.93	6.16	-18.87	11.29	-2.47	8.47	4.52
27	0.27	0.92	4.16	5.85	3.87	-20.06	8.13	-2.38	7.59	4.52
28	2.47	-0.13	5.07	7.04	4.09	-21.02	5.37	-3.88	8.18	4.12
29	-1.21	2.27	4.67	8.92	7.58	-21.22	4.27	-5.38	8.98	4.12
30	0.27	0.52	4.07	6.41	8.11	-21.65	3.47	-6.88	9.47	3.12
31	0.57	1.92	6.47	7.60	11.24	-21.27	4.37	-6.88	9.67	2.92
32	0.43	6.33	2.57	6.19	13.93	-21.39	5.26	-7.17	8.43	3.22
33	0.24	0.92	4.16	5.85	3.87	-20.24	6.68	-6.57	8.55	3.52
34	1.67	-0.05	3.57	2.21	15.44	-20.04	7.77	-5.67	7.22	4.02
35	1.34	1.69	0.45	0.67	-4.10	16.91	-20.01	7.77	-5.67	7.22
36	-2.64	2.27	0.56	-0.95	17.39	-19.38	8.26	-3.86	3.16	2.42
37	-0.24	1.92	4.07	6.41	12.77	17.68	-17.93	8.05	-2.74	6.66
38	-0.65	1.39	1.05	-1.17	17.00	-17.06	7.25	-0.74	7.11	2.92
39	1.26	0.61	0.24	-1.19	2.52	17.83	-15.12	6.16	1.21	5.34
40	-0.21	1.42	0.04	-2.11	0.4	17.92	-13.73	5.45	1.51	5.74
41	0.61	2.72	0.25	-2.11	2.27	16.69	-12.27	5.36	1.71	5.54
42	-7.16	0.19	4.65	-18.36	15.46	-11.08	2.56	1.41	-4.64	1.91
43	-0.24	1.31	1.79	-14.00	13.60	-11.38	2.26	0.66	0.64	0.52
44	-0.21	0.94	2.29	-10.96	12.00	-10.88	2.06	-2.59	-3.34	7.11
45	0.56	0.19	-0.13	-9.28	10.04	-10.27	2.96	-4.00	-3.34	-6.81
46	-0.59	4.59	-0.35	-8.99	9.25	-9.64	3.46	-6.61	-3.73	-8.28
47	11.63	-0.04	0.04	-9.02	9.16	-9.41	4.06	-7.81	-4.55	-7.28
48	4.7	-0.20	-0.01	-10.25	9.47	-10.00	4.35	-5.22	-0.58	-5.22
49	12.15	-5.45	-12.64	10.47	-9.98	4.45	-9.47	-5.93	-4.09	-6.00
50	12.04	-5.29	-2.20	-14.07	11.42	-8.90	4.05	-6.15	-6.35	-5.08

RECORD#=3-455 COMPONENT=S SIGNAL=GR,ACC CORRECTION=ZERO,ARC
DATE AND TIME=1968-04-21-16-19 SAMPLING INTERVAL= 0.010(SEC) FORMAT NO.=301

STATION=HOSOJIMA-S
TOTAL NUMBER OF DATA= 6100

REC'DATE=5-4-53
 [C1490] (EHT=4W-S)
 DATA=1969-04-21-16-19
 TIME=1969-04-21-16-19
 SIGNAL=GR. ACC.
 SAMPLING INTERVAL= 0.010(SEC)
 CARRCTION=ZERO ARC
 FORMAT NO.=301
 STATION=HOSOJIMA-S
 TOTAL NUMBER OF DATA= 6100
 NO. (2500) (2550) (2600) (2650) (2700) (2750) (2800) (2850) (2900) (2950)

1	-7.69	8.54	-5.99	1.15	1.40	-0.95	-2.80	-2.05	4.10	0.15
2	-9.29	8.14	-5.18	1.15	2.10	-0.95	-3.00	-2.15	3.60	0.15
3	-8.78	7.44	-4.90	0.95	2.50	-0.65	-3.50	-2.05	2.80	-0.05
4	-7.70	6.94	0.30	0.65	2.90	-0.75	-3.10	-1.65	2.20	-0.15
5	-7.18	6.04	2.80	0.25	3.30	-0.95	-2.80	-1.05	1.60	0.35
6	-6.41	5.34	2.60	0.34	3.40	-1.46	-2.70	-0.55	1.09	1.15
7	-6.50	5.14	3.39	-0.06	3.79	-1.76	-2.11	-0.26	1.09	1.74
8	-6.31	4.94	3.79	-0.06	3.99	-2.26	-1.11	-0.24	0.99	2.54
9	-6.11	4.94	4.09	-0.26	4.49	-2.56	-0.81	0.44	0.89	2.94
10	-6.41	5.04	4.09	-0.86	4.79	-2.96	-0.01	-0.26	0.59	3.54
11	-6.81	4.94	3.69	-1.36	4.79	-4.16	-0.09	-0.46	0.39	3.94
12	-7.11	5.04	2.99	-1.86	4.86	-4.86	-0.01	-0.96	-0.21	4.44
13	-7.22	4.84	2.29	-2.46	4.99	-5.46	-0.11	-1.56	-1.11	4.74
14	-7.71	5.53	2.86	-2.86	5.49	-5.77	-0.01	-2.36	-1.81	5.24
15	-7.71	5.43	1.69	-3.87	5.18	-6.16	-0.29	-4.32	5.32	5.54
16	-7.64	2.73	0.79	-3.96	4.88	-6.27	0.99	-2.77	-5.22	5.84
17	-7.51	2.53	0.98	-3.37	4.48	-6.27	0.38	-3.17	-5.72	6.54
18	-7.11	2.23	1.38	-5.07	3.58	-6.17	1.58	-3.67	-6.02	6.84
19	-6.51	1.23	1.76	-2.77	3.08	-5.97	1.78	-4.37	-6.22	7.14
20	-5.81	0.43	2.08	-2.47	2.48	-5.67	1.88	-4.17	-6.22	7.64
21	-5.22	0.07	2.58	-2.17	1.78	-5.57	2.38	-4.17	-6.62	8.02
22	-4.92	-0.37	2.88	-1.18	1.18	-5.47	2.48	-3.87	-6.92	7.53
23	-4.52	-0.47	2.68	-1.47	1.28	-5.47	2.48	-3.17	-7.02	7.32
24	-4.22	-0.87	2.88	-1.87	1.28	-5.06	2.48	-2.47	-7.13	6.32
25	-3.82	-1.37	3.08	-2.57	1.48	-3.57	2.18	-1.77	-7.43	5.32
26	-3.23	-1.78	3.18	-3.18	1.57	-2.57	1.67	-1.17	-7.73	4.22
27	-3.23	-2.43	3.27	-3.98	1.47	-1.58	1.17	-0.28	-7.83	3.92
28	-3.03	-2.78	5.57	-4.98	1.07	-1.28	0.77	-0.32	-8.23	4.12
29	-2.53	-3.04	5.77	-5.28	0.87	-0.42	0.07	-0.72	-8.64	4.52
30	-2.83	-5.89	3.87	-5.78	0.07	1.62	-0.13	-0.72	-9.23	4.82
31	-2.03	-7.32	4.17	-5.98	-0.63	2.02	-0.63	-0.92	-9.23	5.52
32	-0.23	-9.00	4.17	-5.28	-1.23	2.12	-0.83	0.92	-9.02	5.52
33	0.97	-10.20	4.27	-5.28	-1.63	2.32	-1.03	1.02	-8.53	5.01
34	1.97	-10.37	5.97	-4.28	-1.93	1.82	-1.43	1.02	-8.23	4.21
35	2.77	-10.28	3.66	-4.29	-2.43	1.42	-2.23	1.02	-7.73	3.01
36	3.47	-9.23	2.86	-4.79	-2.84	1.22	-3.04	1.12	-7.23	1.71
37	0.56	-9.57	2.26	-5.19	-3.84	1.61	-3.74	1.21	-6.53	0.91
38	0.36	-4.98	1.26	-5.49	-3.64	1.81	-4.24	1.31	-6.23	0.01
39	5.16	-8.48	0.76	-5.99	-4.14	2.51	-4.54	1.61	-5.63	-0.59
40	2.96	-10.37	5.97	-4.28	-1.93	1.82	-1.43	1.02	-7.73	3.01
41	2.96	-7.79	0.84	-6.19	-4.84	3.81	-5.64	2.91	-3.64	-2.19
42	2.66	-7.49	1.54	-6.09	-5.04	4.61	-5.94	3.51	-2.94	-3.19
43	2.96	-7.29	2.04	-5.89	-5.34	4.91	-5.64	4.31	-4.44	-4.80
44	3.20	-7.19	2.54	-5.69	-4.84	5.61	-5.04	4.91	-6.66	-5.90
45	4.26	-7.29	2.54	-5.49	-4.04	5.00	-4.44	5.51	1.56	-6.30
46	4.66	-7.29	1.84	-4.89	-3.84	4.20	-3.54	1.75	-6.70	-6.70
47	6.27	-7.20	0.85	-5.79	-2.85	2.60	-2.95	6.30	1.65	-7.60
48	7.66	-7.19	0.55	-2.79	-2.55	1.60	-2.45	6.10	1.15	-7.79
49	8.26	-7.00	0.35	-0.80	-2.15	0.30	-2.05	5.40	0.95	-7.49
50	8.94	-6.79	0.65	-1.85	-1.00	-1.00	-1.75	4.60	0.45	-7.09

READING NUMBER - CLOUDY WEATHER - S
 DATE NO 111951765 - 14-21-16-19
 SIGNAL=GP, ACC. = 0.010(SEC) CORRECTION=ZERO, ARC
 SAMPLING INTERVAL = 0.010(SEC) FORMAT NO. = 301
 STATION=HOSOJIMA-S
 TOTAL NUMBER OF DATA= 6100

NO.	(301.0)	(305.0)	(310.0)	(315.0)	(320.0)	(325.0)	(330.0)	(335.0)	(340.0)	(345.0)
1	-0.70	6.25	-4.80	4.95	-1.00	-5.05	5.71	-8.15	2.60	0.35
2	-0.60	6.25	-4.50	4.15	-0.80	-5.35	6.1	-8.35	2.10	0.85
3	-0.60	6.66	-4.00	6.05	0.40	-5.65	7.41	-8.25	1.80	1.45
4	-0.71	7.16	-6.40	2.15	0.50	-6.15	7.81	-8.04	1.20	1.95
5	-0.60	8.16	-6.20	1.65	1.10	-6.25	8.21	-7.74	0.70	2.55
6	-0.60	8.96	-6.20	1.55	1.41	-6.85	8.81	-7.64	0.00	2.30
7	-0.89	8.45	-0.29	0.86	1.91	-7.15	8.71	-7.14	-0.99	2.56
8	-0.90	8.75	-0.59	0.36	2.11	-7.45	8.91	-6.35	-1.79	2.86
9	-0.09	8.25	-0.19	0.04	2.61	-7.84	9.00	-5.45	-2.19	2.84
10	-0.99	7.76	-4.49	-0.64	2.74	-8.04	8.70	-5.84	-2.89	2.86
11	-0.99	7.56	-4.99	-0.94	3.01	-8.24	8.30	-5.04	-2.99	2.86
12	-1.60	7.25	-5.50	-1.54	2.91	-8.34	7.91	-2.14	-2.79	2.46
13	-1.59	6.36	-6.79	-1.64	2.41	-8.14	7.51	-2.59	-2.59	2.56
14	-1.59	5.85	-7.19	-1.74	2.61	-8.03	7.21	-1.44	-2.49	1.96
15	-1.59	5.06	-7.68	-2.04	3.22	-7.43	6.70	-0.74	-2.59	1.66
16	-1.68	4.26	-7.38	-2.03	3.72	-7.13	5.61	-0.65	-2.48	1.46
17	-1.61	3.16	-7.08	-2.03	4.32	-6.93	5.11	0.47	-2.48	0.67
18	-1.58	2.27	-6.46	-2.23	4.62	-6.53	3.71	0.77	-2.58	0.17
19	-1.63	1.17	-6.18	-2.63	5.42	-6.23	2.62	0.97	-2.38	0.17
20	-1.88	0.57	-5.68	-2.63	6.42	-5.68	2.12	1.07	-2.58	0.17
21	-1.78	0.03	-5.07	-2.83	6.62	-5.63	1.72	1.17	-2.98	0.17
22	-1.82	0.93	-5.78	-2.93	7.12	-4.83	0.92	1.47	-3.38	0.07
23	-1.57	1.43	-5.36	-4.33	7.12	-4.73	0.52	1.57	-4.05	-0.56
24	-0.67	1.85	-2.77	-4.94	6.71	-4.25	0.22	1.87	-4.58	-0.93
25	-2.97	2.43	-1.43	-6.84	5.62	-4.03	0.18	1.87	-4.72	-1.26
26	-2.27	2.93	-0.17	-8.03	5.12	-4.02	0.78	1.96	-5.38	-1.56
27	-1.27	3.53	1.13	-8.73	4.32	-3.82	-1.07	1.96	-6.58	-1.92
28	-0.57	2.15	-8.13	-9.13	3.93	-3.82	-1.67	2.28	-6.87	-2.12
29	-0.17	4.22	0.65	-9.42	3.73	-3.82	-2.37	2.68	-6.97	-2.52
30	-2.97	4.72	4.65	-9.62	3.23	-3.92	-2.67	2.78	-6.47	-2.72
31	-2.57	5.22	1.07	-9.13	3.03	-3.92	-3.57	3.18	-5.87	-3.12
32	-2.27	5.52	6.13	-9.61	3.13	-3.72	-3.77	3.38	-5.87	-3.32
33	-1.87	5.72	6.54	-9.21	3.13	-3.72	-4.87	3.58	-6.56	-3.72
34	-1.57	5.92	6.94	-9.01	3.13	-3.32	-5.98	3.28	-3.96	-4.02
35	-0.47	6.32	7.23	-8.41	2.93	-2.91	-7.17	2.88	-4.22	-4.22
36	0.14	6.72	7.14	-8.01	2.63	-2.61	-7.26	2.58	-4.56	-4.71
37	0.84	7.02	7.23	-7.61	1.84	-1.71	-7.16	2.09	-4.66	-4.41
38	1.14	7.22	7.13	-6.92	1.24	-0.81	-6.56	1.59	-4.06	-4.21
39	1.34	7.51	6.14	-7.09	0.84	-0.21	-5.96	1.29	-3.76	-3.91
40	1.44	7.61	5.84	-5.20	0.44	0.99	-5.06	0.89	-4.46	-5.71
41	1.34	7.81	5.54	-4.11	-0.16	1.69	-4.36	0.69	0.44	-3.11
42	1.34	8.11	5.04	-3.81	-0.66	2.49	-4.36	0.69	1.04	-2.31
43	1.14	8.11	5.55	-3.21	-0.96	3.09	-4.06	1.06	1.24	-1.92
44	1.14	8.20	6.35	-3.11	-1.26	3.29	-4.36	1.99	1.74	-1.51
45	1.64	7.90	7.05	-2.81	-1.16	3.49	-4.86	1.69	0.54	-1.21
46	2.55	7.50	7.55	-2.40	-1.56	3.70	-5.46	2.00	0.14	-1.11
47	2.85	6.90	7.94	-2.30	-2.15	3.00	-6.36	2.00	-0.05	-1.60
48	3.55	6.40	7.44	-2.20	-2.76	4.00	-7.06	2.70	-0.05	-2.10
49	4.15	5.60	6.84	-2.60	-4.05	4.50	-7.56	2.80	-0.05	-2.90
50	5.05	5.60	6.24	-1.90	-4.55	4.90	-7.95	2.80	0.15	-3.20

RECORD# = S-455		COMPONENT=N-S	SAMPLING INTERVAL = 0.010(SEC)	CORRECTION=ZERO, ARC FORMAT NO.=301	STATION=HOSOJIMA'S TOTAL NUMBER OF DATA# 6100					
No.	(3500)	(3550)	(3600)	(3650)	(3700)	(3750)	(3800)	(3850)	(3900)	(3950)
1	-3.50	-1.35	3.20	0.65	2.90	-0.25	-0.80	0.55	1.60	1.35
2	-3.90	-1.95	3.30	1.35	3.20	-0.05	-0.60	0.85	1.50	1.15
3	-4.30	-2.45	3.50	1.35	2.90	0.15	-0.40	0.85	1.20	0.95
4	-4.60	-3.05	3.60	1.95	3.20	-0.10	0.35	1.10	0.85	0.85
5	-4.60	-3.75	3.90	2.95	3.10	0.65	0.40	0.25	1.00	0.15
6	-4.79	-3.95	4.14	2.95	2.90	1.36	0.61	-0.05	0.70	-0.25
7	-4.79	-4.35	4.31	3.24	2.61	1.36	0.91	-0.54	0.41	-0.84
8	-4.59	-4.74	4.51	3.64	2.31	1.26	0.61	-0.94	0.09	-1.44
9	-4.29	-5.14	4.74	4.04	1.61	1.16	1.01	-1.44	-0.39	-1.94
10	-4.19	-5.14	4.71	3.44	0.51	0.96	0.51	-2.04	-0.49	-2.04
11	-4.09	-5.54	4.71	3.24	0.71	0.66	0.71	-2.14	-0.59	-2.14
12	-3.99	-5.74	4.41	2.94	0.01	0.56	0.71	-2.74	-0.49	-2.44
13	-3.69	-5.84	5.71	2.64	-0.19	0.16	0.81	-2.94	-0.29	-2.64
14	-3.39	-5.73	5.51	2.54	-0.39	1.04	0.71	-3.44	-0.19	-2.74
15	-2.79	-5.33	5.61	2.14	-0.49	1.94	1.41	-3.84	0.21	-3.14
16	-2.48	-5.03	5.41	1.73	-1.08	-2.24	1.72	-4.24	-0.42	-3.84
17	-1.78	-4.48	2.72	1.73	-0.98	-2.63	2.12	-4.63	0.42	-3.73
18	-0.88	-4.03	2.12	1.63	-0.88	-2.53	2.32	-4.73	0.42	-3.74
19	-0.88	-3.73	1.62	1.83	-0.98	-2.23	2.22	-4.73	0.02	-4.63
20	0.32	-3.73	1.42	1.93	-1.28	-1.63	2.22	-4.73	-0.28	-4.73
21	1.02	-3.63	1.12	1.93	-2.18	-1.23	1.72	-4.53	-0.68	-4.93
22	1.52	-4.53	1.02	1.93	-2.28	-1.03	1.72	-4.23	-1.38	-5.03
23	2.02	-5.13	0.62	1.93	-2.48	-1.53	1.22	-3.73	-1.88	-5.03
24	2.02	-5.73	0.42	1.23	-2.38	-0.43	1.02	-3.43	-2.08	-5.02
25	2.02	-6.48	0.28	1.13	-2.58	-0.33	1.22	-2.93	-2.08	-4.42
26	2.03	-6.83	0.48	2.23	-3.38	-0.73	0.73	-2.63	-2.07	-3.72
27	2.03	-7.22	0.87	2.52	-2.57	-0.82	0.83	-2.72	-1.87	-3.22
28	2.13	-6.92	0.97	2.22	-1.87	-1.52	0.63	-2.72	-1.37	-2.82
29	2.25	-6.52	1.57	2.22	-1.37	-0.53	1.22	-3.73	-1.97	-2.42
30	2.53	-5.82	1.57	2.42	-0.97	-2.22	0.43	-2.62	-0.97	-2.02
31	2.65	-5.12	1.77	2.42	-0.37	-2.52	0.37	-2.52	-0.87	-2.02
32	2.83	-4.42	1.77	2.12	-0.17	-2.62	0.67	-2.72	-0.57	-1.92
33	2.83	-3.61	1.97	2.62	-0.27	-2.72	-1.07	-2.72	-0.57	-1.12
34	5.03	-2.42	2.27	0.92	-0.27	-2.62	-1.17	-2.82	-0.57	-0.62
35	5.03	-1.92	2.37	-0.42	-0.57	-2.62	-1.37	-2.82	-0.22	-0.22
36	2.83	-1.01	2.66	-0.51	-0.56	-2.51	-1.67	-2.71	-0.46	0.49
37	2.64	-0.41	2.66	-0.11	-0.46	-2.51	-1.76	-2.71	-0.46	0.89
38	2.24	-0.04	2.56	0.29	-1.06	-2.21	-1.76	-2.11	-0.26	1.19
39	1.74	-0.39	0.36	0.69	-1.06	-2.21	-1.76	-1.61	-0.59	1.69
40	1.34	-0.69	0.36	0.99	-1.36	-2.21	-1.76	-1.21	-0.54	1.99
41	1.04	-0.89	0.86	1.29	-1.66	-2.21	-1.76	-1.01	-0.84	2.19
42	0.84	-0.49	0.96	1.19	-1.66	-2.21	-1.66	-0.51	-1.24	2.49
43	0.64	-0.39	0.25	1.59	-1.46	-2.21	-1.36	-0.01	-1.64	2.79
44	0.64	-1.19	0.59	1.59	-1.56	-2.61	-1.16	-0.59	-1.84	2.69
45	0.54	-1.49	1.15	1.69	-1.16	-2.51	-1.06	-0.99	-2.24	2.89
46	0.34	-1.60	2.95	1.90	-1.05	-2.40	-0.96	-1.20	-2.14	3.30
47	0.15	-1.90	2.45	0.75	-1.05	-2.20	-1.05	-1.80	-1.95	3.40
48	-0.05	-2.40	2.25	2.20	-0.65	-1.50	-0.35	-1.80	-1.75	4.20
49	-0.25	-2.70	1.75	2.50	-1.50	-1.50	-0.15	-1.70	-1.75	4.30
50	-0.85	-3.00	0.95	2.70	-0.65	-1.00	-0.65	-1.70	-1.45	4.30

RECORDED=S-423 CO-OP UNIT=E-W DATE AND TIME=1969-04-21-16-19

SIGNAL=GR ACC. CORRECTION=ARC. ERROR=.0010(SEC) SAMPLING INTERVAL=.0010(SEC)

STATION=HOSOJIMA-S
TOTAL NUMBER OF DATA= 6000

NO.	(-)	(50)	(100)	(150)	(200)	(250)	(300)	(350)	(400)	(450)
1	-0.000	13.01	16.73	2.79	-5.38	-12.33	-0.70	0.10	3.10	-10.88
2	-1.50	13.16	12.05	-0.20	-1.40	-10.09	-2.10	1.40	4.50	-9.99
3	-5.53	11.83	19.53	-4.92	3.20	-9.48	-2.60	2.00	5.51	-9.39
4	-9.95	6.47	7.25	-9.24	4.91	-8.19	-3.40	2.00	7.21	-8.88
5	20.81	2.99	2.49	-16.24	7.73	-7.29	-4.00	2.50	8.32	-7.99
6	19.75	-5.71	-5.41	-18.98	9.81	-6.49	-4.40	1.20	9.33	-7.50
7	-0.50	-7.31	-6.03	-21.02	10.19	-5.68	-4.70	-2.80	10.83	-7.50
8	-3.64	-8.44	-9.81	-19.92	9.77	-2.80	-4.40	-5.42	12.02	-7.20
9	-1.40	0.03	-1.40	-15.46	8.09	-1.90	-3.69	-6.99	15.82	-7.51
10	-0.60	6.87	-7.47	-9.26	7.19	1.60	-1.70	-14.29	16.22	-8.21
11	1.91	13.96	-5.29	-6.16	6.39	3.60	0.90	-16.31	16.43	-8.01
12	4.84	15.27	-4.00	-1.20	5.80	4.20	3.40	-18.31	15.05	-9.31
13	13.50	14.43	-4.30	1.20	5.39	4.70	4.31	-20.19	11.98	-9.81
14	13.27	8.53	-5.01	2.00	3.39	4.19	7.13	-2.34	8.08	-10.40
15	7.37	3.97	-6.00	-1.10	0.50	3.70	9.61	-25.41	6.48	-10.29
16	-9.53	-3.81	-6.39	-1.20	-1.90	2.00	9.90	-25.94	3.90	-8.78
17	-15.52	-6.31	-5.28	-1.40	-3.40	0.90	9.88	-20.45	2.80	-8.99
18	-23.18	-7.70	-2.19	-1.70	-4.80	-0.00	8.70	-20.48	2.90	-8.69
19	-21.25	-7.04	6.11	-1.70	-4.88	-0.90	8.40	-17.83	3.81	-7.90
20	-2.81	-6.19	8.05	-1.80	-1.40	-1.30	8.08	-12.63	7.87	-7.60
21	7.75	2.70	11.57	-1.80	3.71	-0.10	6.79	-7.69	15.03	-7.20
22	19.37	5.30	13.98	-1.60	6.52	2.91	5.78	-6.69	13.74	-7.40
23	23.24	6.50	11.18	-0.60	8.56	5.82	2.89	-5.70	14.60	-6.99
24	20.22	5.49	9.94	-0.00	12.38	9.15	-3.00	-5.20	14.71	-6.19
25	14.50	4.59	0.80	-0.70	11.72	11.82	-5.01	-5.01	14.91	-5.37
26	0.80	2.00	-6.21	-1.40	9.06	12.21	-7.71	-7.71	12.86	-8.00
27	-7.94	-1.60	-7.74	-2.50	7.08	12.75	-8.36	-8.41	8.96	-8.51
28	-17.86	-2.70	-10.55	-4.81	5.09	11.45	-5.87	-9.10	6.55	-7.40
29	-18.52	-4.30	-12.56	-6.71	3.99	9.65	-2.29	-9.18	3.99	-7.22
30	-15.95	-5.00	-12.54	-7.81	0.00	7.16	-2.50	-8.18	1.50	-9.23
31	-9.97	-6.62	-3.02	-8.19	1.50	3.48	5.71	-6.59	-2.10	11.11
32	-6.34	-8.02	11.31	-7.29	3.15	-4.58	7.41	-5.91	-3.81	11.50
33	-7.69	-6.25	19.15	-6.10	4.12	-12.52	8.23	-5.20	-5.81	11.50
34	-9.27	-12.13	2.05	-5.21	8.38	-18.93	10.04	-5.41	-6.60	11.49
35	-2.87	-1.62	23.76	-6.52	13.79	-21.86	11.81	-5.69	-6.70	11.28
36	4.44	-15.77	29.46	-8.21	16.01	-24.28	12.18	-4.69	-6.30	10.44
37	14.52	-17.11	2.27	-8.71	17.92	-31.04	11.60	-3.00	-5.80	7.99
38	-1.67	-16.37	2.74	-9.15	18.17	-30.81	11.49	-1.40	-5.91	6.99
39	17.07	-19.77	2.48	-6.18	17.69	-28.60	11.30	-0.20	-6.70	6.39
40	15.93	-21.28	18.74	-3.29	15.76	-24.43	11.88	1.60	-7.01	5.40
41	6.59	-21.50	12.21	-0.40	8.06	-18.29	12.33	1.00	-8.01	5.10
42	1.91	-22.46	9.57	-0.80	4.96	-15.29	13.12	0.90	-6.62	4.80
43	-9.91	-22.93	8.05	-0.10	-2.81	-9.64	13.69	0.80	-9.59	5.60
44	-7.53	-21.91	4.79	-0.90	-9.57	-6.27	13.46	1.70	-8.98	5.70
45	-9.61	-17.50	2.50	-6.01	-16.13	-3.19	12.43	2.60	-6.40	6.40
46	-4.77	-6.92	0.10	-6.62	-13.83	0.00	10.22	3.00	-7.81	6.40
47	1.21	1.30	0.30	-2.10	-8.10	1.10	6.59	3.40	-8.21	6.10
48	4.21	6.13	2.00	-8.29	-13.55	1.20	5.18	3.10	-8.63	5.20
49	7.03	9.16	3.00	-7.69	-12.52	1.00	0.90	2.70	-10.24	5.20
50	10.05	12.64	4.00	-6.69	-12.98	-0.10	-0.20	2.50	-11.77	4.60

RECORD=S-453 CORRONE=IT=E-W SIGNAL=GR.ACC.
 DATE AND TIME=1969-04-21-16-19 SAMPLING INTERVAL= 0.010(SEC) CORRECTION=ARC.ERR.
 NO. (500) (550) (600) (650) (700) (750) (800) (850) (900) (950)
 1 4.80 4.30 -4.90 9.24 -27.00 -24.63 -77.30 12.17 -24.92 +52.90
 2 5.51 4.71 -4.91 5.95 -31.26 *4.55 *88.02 14.56 -34.46 +51.49
 3 6.41 5.81 -7.82 -0.80 -62.42 5.47 *98.12 18.67 -38.88 +49.16
 4 7.62 7.50 -1.55 -13.73 -29.04 16.62 *92.73 29.36 -35.62 +46.65
 5 7.41 7.88 -12.05 -22.49 -22.49 21.96 *69.77 37.92 -27.75 +43.45
 6 7.79 6.56 -16.51 -50.41 -18.68 23.70 *42.17 48.73 -18.81 +37.89
 7 9.38 2.49 -11.10 -34.93 -13.43 19.35 *14.85 57.04 -27.57 +4.83
 8 6.39 -4.32 -7.29 -36.89 -11.09 11.67 7.56 61.84 -10.90 +10.90
 9 7.78 -8.76 2.11 -34.29 -10.68 1.00 20.79 62.04 20.40 +3.95
 10 6.59 -12.62 8.48 -28.68 -9.68 *6.98 25.60 60.12 17.52
 11 2.29 -15.90 16.51 -18.62 -8.48 *14.47 25.53 54.53 25.44
 12 3.79 -17.55 16.26 -13.64 -7.08 -16.00 23.52 47.89 22.27
 13 1.70 -16.29 17.25 -7.45 -5.29 -15.23 20.99 39.35 16.47
 14 0.17 -7.84 0.08 -3.08 -4.20 -1.20 16.47 28.99 7.85 47.75
 15 -1.91 -6.43 17.55 6.92 -4.21 10.98 7.85 19.04 -2.92 51.98
 16 -5.10 2.40 16.92 18.66 -6.94 *2.91 25.62 51.50 53.50
 17 -4.81 4.51 17.40 27.96 -11.41 44.99 *9.36 -13.04 51.31
 18 -6.61 6.00 19.44 27.96 -11.51 45.99 *9.40 -11.88 46.96
 19 -8.13 6.39 26.45 41.81 -20.94 70.07 *24.55 18.28 40.77
 20 -10.37 5.58 28.14 47.95 -26.71 73.13 *29.17 26.18 33.42
 21 -13.31 2.79 31.41 52.49 -61.07 70.78 *30.30 32.19 20.46
 22 -15.49 1.90 31.42 55.90 -56.55 54.72 *28.85 38.27 -14.49 20.46
 23 -16.17 -8.80 28.89 55.45 -52.44 57.83 -23.69 *43.00 14.62
 24 -12.36 -4.99 22.29 51.26 -46.67 48.79 *21.26 48.75 6.75
 25 -11.09 -3.17 9.78 44.98 -48.96 39.06 *19.75 54.78 7.72 2.00
 26 -10.98 4.11 4.97 33.44 -45.92 29.79 *16.82 58.24 9.61 -2.90
 27 -9.99 6.96 -18.64 17.25 -54.65 20.73 *13.68 *59.82 9.94 -4.90
 28 -9.59 12.61 -28.72 7.73 -15.49 17.94 -6.17 *56.01 7.12 -4.87
 29 -8.50 15.76 -45.00 -13.77 22.05 15.77 *2.19 *44.33 0.60
 30 -8.69 16.82 -45.10 -17.86 36.16 15.33 11.44 *31.58 0.00 4.52
 31 -7.89 17.11 -43.69 -20.45 30.39 26.24 *2.88 *21.26 8.51
 32 -7.19 15.48 -55.36 -120.49 45.05 15.94 12.72 *20.81 25.36 9.37
 33 -6.61 11.30 -19.64 -23.86 48.67 16.67 10.50 *19.36 29.79 7.94
 34 -6.29 4.36 -8.00 -19.04 48.97 17.85 5.92 -21.0 30.94 4.98
 35 -5.60 5.12 -0.90 -7.9 45.55 20.21 -4.21 *28.44 1.00
 36 -4.89 -9.48 2.10 7.64 39.68 23.83 -7.83 37.44 -9.64 -7.76
 37 -3.50 -35.46 0.60 45.26 37.12 *9.04 *2.88 *41.57 7.04 -12.88
 38 -2.70 -14.84 0.68 65.98 47.23 26.24 *2.88 *37.85 20.34 -17.85
 39 -2.60 18.37 -33.66 24.70 56.57 25.99 5.98 -30.56 71.07 1.01
 40 -2.80 -12.30 -22.68 53.10 4.43 22.46 15.93 20.22 25.86 -19.96
 41 -2.01 0.90 -30.64 51.25 -26.06 7.77 20.19 42.81 23.12 -19.25
 42 -3.70 0.07 -35.46 45.26 -37.12 *9.04 16.89 55.76 16.05 -14.92
 43 -4.80 14.08 -40.11 65.98 47.23 17.66 0.80 68.72 9.75 -9.50
 44 -5.20 18.37 -33.66 24.70 56.57 30.56 *6.61 71.07 1.01 -3.97
 45 -4.69 20.58 -33.07 15.10 50.54 36.66 18.40 66.33 -16.16 3.72
 46 -5.50 20.10 -19.30 5.45 *58.92 -40.76 17.72 49.46 -25.29 6.99
 47 -1.70 16.51 -7.95 *2.1 53.96 -45.10 *8.35 32.39 -35.92 14.05
 48 -0.30 10.10 5.02 *10.96 *48.12 *30.97 1.60 17.08 -41.36 17.65
 49 1.80 5.77 12.06 -17.04 -41.93 -58.25 6.13 1.20 -46.39 19.97
 50 2.40 1.90 13.71 -19.79 -34.79 -70.18 9.45 -9.60 -51.33 23.22

RECUD=5~453 COMPONENT=E-W SIGNAL=GR,ACC,
 DATE AND TIME=1969-04-21-16-19 SAMPLING INTERVAL=0.010(SEC) CORRECTION=ARC,ERR.
 FORMAT NO.=301 STATION=HOSOJIMA-S
 TOTAL NUMBER OF DATA= 6000

NO.	(1000)	(1050)	(1100)	(1150)	(1200)	(1250)	(1300)	(1350)	(1400)	(1450)
1	26.17	*10.62	*9.99	18.05	*36.42	21.35	-8.36	7.80	*4.60	*26.98
2	29.34	*15.48	*9.54	17.26	*34.84	18.75	-5.98	*0.74	*28.16	*28.16
3	31.86	*18.99	*11.76	15.00	*31.00	15.63	*3.30	*9.81	*11.71	*30.56
4	34.17	*20.01	*13.79	10.92	*25.06	14.35	*3.00	*15.11	*15.41	*30.78
5	34.10	*18.32	*15.82	7.97	*21.18	15.13	-3.00	*19.29	*19.41	*30.03
6	30.53	*8.47	*16.08	5.80	*16.92	11.17	*4.31	*20.25	*20.93	*26.38
7	24.68	*6.69	*13.76	5.81	*12.58	9.96	*5.91	*19.40	*21.20	*21.47
8	15.10	*5.27	*8.08	7.15	*9.28	7.98	*7.30	*16.82	*22.99	*19.04
9	-1.80	*0.80	0.00	9.93	*8.29	6.59	*7.29	*12.52	*20.95	*14.41
10	-15.97	0.90	2.10	11.18	*7.30	5.09	*6.67	*10.29	*17.02	*8.26
11	-14.92	4.92	1.80	8.67	*7.75	3.00	*3.40	*9.68	*8.22	*5.79
12	-19.79	8.63	*1.90	6.19	*11.79	2.50	*1.80	*8.60	*2.69	*4.09
13	-20.46	16.66	*8.09	4.90	*14.80	3.91	*1.50	*8.51	*1.70	*1.90
14	-28.07	19.46	*14.49	4.21	*17.00	8.01	*2.90	*9.31	*5.91	0.00
15	-30.27	22.40	*21.07	6.75	*18.50	16.12	*3.00	*9.73	*7.73	*6.60
16	-32.36	22.38	*25.64	11.79	*18.46	20.62	*4.00	*11.46	*9.70	*1.20
17	-34.87	22.19	*26.04	14.70	*21.60	25.39	*4.00	*13.71	*9.69	*1.80
18	-36.50	22.33	*22.91	14.77	*11.94	30.11	*3.10	*16.35	*9.20	*2.40
19	-35.48	24.87	*19.07	14.01	*9.97	32.34	*1.40	*17.07	*9.10	*2.80
20	-31.57	29.09	*10.54	11.91	*8.33	34.50	*1.40	*16.47	*9.02	*2.80
21	-26.27	32.28	*8.08	8.95	*6.76	34.01	*1.40	*14.16	*9.98	*2.10
22	-19.24	37.02	*6.79	4.97	*2.99	31.52	*1.70	*10.96	*13.91	*1.40
23	-12.54	39.31	*5.30	*2.20	*1.90	28.28	*4.72	*9.40	*16.63	*2.61
24	-4.95	37.06	*4.91	*3.71	*4.91	23.96	*9.36	*9.42	*18.87	*6.72
25	4.31	34.47	*5.91	*6.42	*7.13	17.35	*12.77	*10.52	*21.21	*9.17
26	7.12	28.26	*6.71	*8.21	*9.92	7.84	*14.86	*11.32	*23.10	*13.84
27	9.16	19.43	*7.93	*9.40	*10.39	*3.73	*16.3	*12.20	*23.03	*17.21
28	7.07	12.69	*10.59	*9.23	10.72	*14.15	*16.3	*12.15	*18.96	*18.96
29	5.87	3.98	*14.36	*5.57	*7.47	*24.75	*17.10	*10.17	*21.93	*19.33
30	-3.94	*3.31	*1.97	*1.66	*1.00	*31.21	*17.08	*9.17	*20.82	*21.17
31	-15.13	*8.97	*16.75	*5.58	*0.00	*39.93	*16.62	*7.67	*19.97	*20.15
32	-26.40	-7.43	*15.89	*3.20	*3.51	*47.96	*15.02	*5.58	*19.59	*20.30
33	-36.26	-1.79	*1.84	*2.40	*6.73	*53.62	*9.52	*2.30	*19.62	*18.92
34	-44.25	11.50	*10.08	2.10	*9.95	*58.00	*5.55	*2.30	*23.50	*14.11
35	-49.86	25.51	*9.21	1.10	*12.40	*59.27	*7.0	*3.71	*25.66	*7.66
36	-56.39	31.03	*9.73	*0.40	*15.34	*57.04	*2.90	*2.90	*23.42	*4.28
37	-21.23	32.58	*11.33	*0.40	*16.10	*50.05	*2.79	*9.55	*20.55	*1.90
38	-44.31	28.81	*12.47	2.00	*15.93	*40.68	*2.21	*12.12	*20.19	*5.71
39	-53.41	18.78	*11.38	4.00	*12.78	*30.92	*8.01	*12.27	*16.61	*7.52
40	-19.43	6.59	*10.50	*10.08	*9.95	*58.00	*5.55	*2.30	*23.50	*14.11
41	-4.66	*5.07	5.56	6.21	*2.49	*18.05	*18.75	*8.32	*4.28	*12.07
42	4.14	*17.54	14.73	7.10	*5.97	*13.35	*21.50	*2.69	*0.00	*14.42
43	14.23	*24.73	17.56	7.08	*15.20	*12.12	*24.55	*2.91	*5.12	*14.93
44	19.53	*33.71	19.80	4.97	*21.37	*12.90	*27.09	*6.73	*8.05	*15.52
45	21.94	*41.04	19.68	*0.50	*25.99	*15.70	*28.13	*10.30	*11.55	*15.77
46	20.31	-4.11	*7.16	4.81	*6.66	*22.50	*16.05	*11.22	*9.05	*15.20
47	18.02	*36.82	15.35	*17.11	*27.77	*17.59	*28.30	*10.28	*13.49	*13.24
48	12.77	*27.77	14.55	*21.95	*27.82	*19.00	*27.88	*9.26	*15.72	*11.62
49	6.30	*19.89	15.58	*30.71	*26.05	*18.61	*21.47	*4.10	*20.50	*8.84
50	-5.53	*12.23	17.16	*34.93	23.71	*13.59	*17.77	*3.80	*23.89	*5.49

RECDID=S-455 COMPONET=E-W DATE AND TIME=1969-04-21 16:19
 SIGNAL=GR.ACC. CORRECTION=ARC.EHR.
 SAMPLING INTERVAL= 0.010(SEC) TOTAL NUMBER OF DATA= 6000
 FORMAT NO.=301

NO.	(1500)	(1550)	(1600)	(1650)	(1700)	(1750)	(1800)	(1850)	(1900)	(1950)
1	-3.89	0.30	4.40	-18.43	0.10	-6.22	-13.10	-4.80	2.70	-11.15
2	2.10	-0.20	4.60	-20.15	0.00	-8.14	-10.57	-1.49	5.70	-9.39
3	-0.40	0.70	4.40	-20.69	2.00	-10.65	-9.38	-2.90	6.40	-8.69
4	4.90	0.00	3.70	-20.23	2.50	-12.75	-8.06	-1.70	6.92	-8.30
5	2.61	0.50	3.40	-19.73	2.80	-11.22	-5.19	-1.10	8.72	-7.99
6	-6.81	1.40	3.30	-18.74	4.10	-14.66	-4.00	-1.30	10.11	-7.59
7	7.90	2.10	3.00	-16.26	4.60	-13.72	-3.20	-2.40	10.49	-7.10
8	7.68	3.50	3.40	-14.26	4.90	-11.65	-3.20	-2.70	10.10	-6.90
9	6.48	4.10	3.60	-11.51	5.20	-9.88	-2.90	-3.40	9.89	-6.70
10	3.88	4.60	4.40	-8.37	5.20	-8.77	-2.70	-5.00	9.28	-6.50
11	-2.40	4.50	5.51	-6.08	4.90	-6.88	-2.30	-5.61	8.18	-6.30
12	-2.22	3.60	6.51	-4.50	4.30	-4.68	-1.90	-6.40	6.49	-6.20
13	-8.28	2.50	6.01	-3.60	4.30	0.00	-1.50	-6.69	4.90	-6.10
14	-16.18	0.30	8.80	-3.50	4.70	3.20	-0.90	-6.09	4.40	-6.00
15	-12.95	-2.30	8.49	-3.10	4.90	4.10	-0.60	-5.19	3.90	-5.69
16	-11.42	-5.81	7.80	-2.90	4.90	4.70	-0.40	-4.30	3.80	-4.90
17	-8.14	-6.32	0.40	-2.80	4.80	5.20	1.10	-4.10	3.60	-4.19
18	-5.39	-8.32	1.50	-2.60	4.30	5.20	1.80	-4.80	3.50	-4.29
19	-3.99	-9.71	5.01	-1.70	3.90	4.80	4.91	-5.74	3.10	-4.72
20	-0.90	-10.30	6.00	-0.80	4.00	4.10	6.61	-7.31	2.30	8.31
21	1.60	-10.20	-0.29	1.80	4.00	4.00	7.92	-8.52	1.40	8.94
22	2.90	-10.31	-2.40	2.90	3.60	3.80	9.13	-9.51	-2.60	11.12
23	3.40	-10.72	-4.89	4.00	2.90	3.50	10.60	-9.90	-5.81	15.59
24	4.40	-11.68	-5.90	4.40	1.80	3.10	10.78	-9.79	-7.21	17.23
25	4.80	-17.65	-2.49	5.20	0.90	3.40	9.75	-9.50	-8.53	17.59
26	5.20	-16.59	1.40	5.90	0.90	2.90	7.47	-9.19	-10.19	17.38
27	4.90	-21.22	6.90	5.90	1.10	2.50	4.59	-9.19	-9.78	17.00
28	4.29	-24.24	4.81	6.20	1.70	1.90	2.70	-8.90	-8.70	15.31
29	2.60	-24.36	7.12	6.60	2.00	1.80	2.10	-8.49	-7.39	16.57
30	2.20	-28.10	6.87	6.60	2.80	1.50	1.80	-8.29	-6.49	12.90
31	-1.40	-20.55	12.74	6.59	2.80	1.50	2.20	-7.80	-5.19	12.79
32	-0.60	-17.71	12.90	5.29	2.20	2.00	3.60	-7.38	-2.70	12.39
33	-1.10	-15.51	12.98	4.29	0.90	2.20	4.80	-5.77	-0.40	11.98
34	-1.70	-8.75	12.38	1.40	-0.80	2.70	5.00	-2.10	0.20	11.49
35	-1.60	-5.93	6.90	-2.00	-0.01	3.00	5.20	1.80	0.40	10.99
36	-1.30	2.70	6.87	-3.0	-5.51	3.40	5.70	3.51	0.00	10.80
37	-0.50	5.11	7.08	-5.21	-6.70	3.60	5.19	7.95	-1.70	10.80
38	0.90	6.80	4.80	-6.20	-7.40	3.90	3.60	11.34	-4.31	10.60
39	1.70	7.09	4.30	-6.00	-6.80	4.60	2.10	12.69	-6.62	10.39
40	2.30	6.39	4.20	-6.29	-6.39	4.60	2.00	15.12	-9.23	9.70
41	3.10	4.79	4.80	-5.19	-4.88	3.90	0.20	15.48	-10.69	9.79
42	3.40	2.10	5.70	-4.20	-0.10	2.70	-1.00	15.15	-14.44	9.49
43	3.50	1.40	6.40	-3.10	2.40	0.10	-2.10	14.09	-15.33	9.19
44	3.80	1.10	6.80	-1.10	2.80	-4.01	-2.80	11.52	-15.92	8.89
45	3.70	0.70	4.89	-0.90	5.10	-6.62	-3.20	8.76	-16.11	8.49
46	3.50	0.80	4.18	-0.70	2.80	-9.15	-3.60	6.17	-16.45	8.10
47	2.70	1.90	4.80	-5.19	-4.21	2.00	-1.14	4.10	3.09	7.99
48	1.70	2.90	7.46	-0.60	-0.50	-13.22	-4.60	-16.18	-0.10	7.60
49	1.40	3.40	12.76	-0.60	-2.20	-13.82	-5.10	-16.66	-0.60	-15.74
50	1.00	4.30	17.56	-0.50	-4.01	-14.16	-5.30	-15.74	-0.50	6.60

RECORD=S-456		COMPONENT=E-W		SAMPLING INTERVAL=0.010 (SEED)		CORRECTION=ARC-ERR.		STATION=HOSOJIMA-S		
DATE AND TIME=1969-04-21-16-19	SIGNAL=SP, ACC.	SAMPLE NUMBER=301	FORMAT NO.=301	TOTAL NUMBER OF DATA= 6000						
NO.	(2000)	(2050)	(2100)	(2150)	(2200)	(2250)	(2300)	(2350)	(2400)	(2450)
1	6.47	1.40	-3.00	9.19	-13.89	0.10	-0.80	-4.50	-4.20	1.00
2	6.40	2.20	-4.20	8.35	-13.59	-0.70	-1.70	-5.00	-4.20	-0.00
3	6.20	3.10	-4.30	7.80	-13.28	-1.50	-2.10	-5.00	-4.10	-0.30
4	2.90	3.70	-4.52	7.80	-12.69	-1.90	-1.92	-5.00	-5.00	-0.30
5	2.80	4.61	-9.79	7.80	-12.38	-3.50	-9.62	-4.40	-4.90	-0.20
6	5.40	6.11	-14.02	8.11	-11.88	-3.90	-10.60	-3.29	-5.30	0.30
7	4.80	7.01	-16.80	8.91	-11.10	-4.50	-10.70	-1.00	-5.30	0.60
8	4.29	8.34	-18.39	9.21	-11.06	-4.50	-10.68	0.90	-5.70	1.10
9	2.20	10.97	-19.00	9.90	-10.50	-4.20	-9.98	2.90	-6.30	1.70
10	1.00	13.68	-20.79	10.10	-10.28	-3.90	-8.98	4.31	-6.40	2.20
11	-0.03	15.63	-21.78	10.10	-9.19	-3.80	-7.98	5.70	-6.39	2.70
12	-6.04	16.23	-22.52	9.99	-8.66	-3.80	-6.78	6.20	-5.80	3.00
13	-4.71	16.74	-22.72	9.99	-7.48	-4.20	-4.99	6.30	-5.30	3.00
14	-6.41	17.31	-22.92	8.59	-4.98	-4.70	-3.99	5.99	-4.59	3.00
15	-7.41	17.48	-23.12	8.19	-4.60	-4.80	-1.41	4.39	-2.70	2.40
16	-8.64	17.20	-23.30	7.50	-0.00	-4.80	-0.50	2.90	-1.80	1.80
17	-11.16	17.19	-23.50	7.40	2.10	-4.80	-0.40	0.20	-1.20	1.50
18	-10.24	17.42	-23.51	7.50	2.80	-4.20	-0.30	-1.30	-0.30	1.50
19	-14.33	17.41	-23.50	7.40	3.00	-3.90	-1.20	-3.20	0.60	1.60
20	-15.12	17.60	-23.15	7.40	3.00	-3.90	-1.30	-4.70	2.10	2.10
21	-15.33	17.30	-21.90	7.30	2.60	-2.80	-1.80	-4.90	2.20	2.80
22	-16.02	17.29	-20.92	7.20	2.00	-2.40	-1.90	-5.00	2.70	2.70
23	-16.33	17.37	-19.82	6.99	1.50	-1.00	-2.00	-4.70	3.50	2.40
24	-16.64	16.95	-16.16	6.29	1.30	0.00	-2.40	-4.20	4.80	2.10
25	-16.92	16.13	-10.92	5.06	1.40	-2.60	-3.50	5.00	1.40	1.40
26	-11.21	14.98	-7.07	2.10	2.20	1.90	-2.50	-2.60	5.70	-0.00
27	-17.27	14.40	-2.38	1.10	3.50	2.20	-2.60	-1.60	5.70	-1.70
28	-16.69	12.17	-1.40	1.90	4.91	2.20	-2.40	-0.30	2.70	2.70
29	-16.63	11.32	0.50	3.71	5.91	1.40	-2.10	-0.60	5.69	4.91
30	-16.31	8.37	1.50	5.91	7.91	0.80	-1.70	1.60	4.79	6.91
31	-14.69	6.49	-1.50	7.70	8.71	-0.00	-0.60	1.60	3.60	7.91
32	-14.49	5.49	2.90	7.90	9.20	-1.10	-0.20	1.80	-0.20	8.92
33	-14.53	4.10	6.90	7.89	9.19	-2.30	0.00	1.00	1.00	-9.91
34	-13.14	6.90	3.90	7.40	8.59	-2.90	1.60	-0.00	0.80	-10.31
35	-12.94	5.90	6.40	7.29	7.79	-3.00	2.10	-0.70	1.60	-10.60
36	-12.72	5.90	4.00	6.70	6.80	-2.60	3.90	-2.90	1.10	-10.60
37	-11.61	4.10	2.60	6.00	6.40	-2.00	4.81	-5.51	2.10	-10.60
38	-11.22	4.50	2.50	6.60	6.60	-0.60	6.11	-7.12	3.10	-10.60
39	-11.52	4.50	2.70	6.10	6.10	-0.50	0.50	-8.71	3.90	-10.53
40	-11.14	4.10	4.91	6.20	6.50	1.90	7.10	-9.30	3.90	-10.30
41	-11.97	6.09	0.92	7.50	6.49	-3.00	2.00	-6.99	3.90	-10.30
42	-11.93	5.90	6.73	7.51	5.89	2.00	6.09	-9.50	3.20	-9.89
43	-10.63	10.51	10.72	8.31	4.99	1.40	4.99	-9.29	2.60	-9.39
44	-11.85	11.71	-1.71	9.11	4.00	1.00	3.00	-8.38	2.00	-8.99
45	-9.74	-2.40	12.11	9.92	3.00	1.10	1.50	-7.79	1.60	-8.59
46	-7.94	-2.40	12.40	10.92	2.20	1.40	0.00	-6.99	1.60	-7.89
47	-7.36	-2.60	12.46	11.83	1.60	2.10	-1.30	-5.99	1.90	-6.90
48	-7.60	-2.60	12.61	11.67	1.20	2.40	-2.40	-5.50	1.70	-6.49
49	-1.67	-2.70	10.74	10.03	1.80	1.80	-3.30	-4.70	1.80	-5.90
50	-1.21	-2.70	10.70	10.90	0.50	0.40	-3.70	-4.10	1.50	-5.60

REC'D=5-4-55 DATE AND TIME=1969-04-21-16-19	COMPONENT=E-W	SAMPLING INTERVAL= 0.010 (SEC)	STATION=HOSOJIMA-S												
			SIGNAL=GR. ACC.	CORRECTION=ARC. ERR.	FORMAT NO.=501	TOTAL NUMBER OF DATA= 6000	(2500)	(2600)	(2650)	(2700)	(2750)	(2800)	(2850)	(2900)	(2950)
1	-4.60	0.50	-2.30	0.40	-0.20	-3.70	2.70	-4.10	-1.70	-1.70	-1.70	-1.70	-1.70	-1.70	1.00
2	-5.81	0.20	-2.80	0.40	-1.60	-4.50	-2.60	-3.50	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	0.90
3	-6.17	0.50	-2.80	0.20	-2.40	-5.61	-2.60	-3.30	-2.60	-2.60	-2.60	-2.60	-2.60	-2.60	1.00
4	-2.10	0.00	-3.40	1.00	-2.40	-6.40	-2.60	-3.00	-3.10	-3.10	-3.10	-3.10	-3.10	-3.10	1.20
5	-1.47	0.00	-3.80	1.80	-2.20	-6.91	-2.70	-2.10	-3.70	-3.70	-3.70	-3.70	-3.70	-3.70	1.50
6	-0.40	0.00	-4.10	1.90	-1.40	-7.81	-2.80	-1.80	-4.90	-4.90	-4.90	-4.90	-4.90	-4.90	1.20
7	0.68	0.20	-4.10	1.90	0.20	-8.40	-2.80	-1.30	-5.80	-5.80	-5.80	-5.80	-5.80	-5.80	1.20
8	2.57	0.10	-4.10	2.10	-0.50	-8.79	-3.20	-0.80	-6.50	-6.50	-6.50	-6.50	-6.50	-6.50	1.10
9	2.11	0.10	-4.10	2.10	-1.70	-8.39	-3.20	-0.70	-6.70	-6.70	-6.70	-6.70	-6.70	-6.70	1.20
10	2.10	0.20	-5.50	1.40	-3.00	-8.00	-2.70	-0.30	-6.70	-6.70	-6.70	-6.70	-6.70	-6.70	1.40
11	2.10	0.20	-5.80	1.80	-3.30	-7.70	-2.70	0.10	-6.70	-6.70	-6.70	-6.70	-6.70	-6.70	1.50
12	2.70	0.50	-5.50	1.50	-3.50	-7.70	-1.50	0.70	-6.70	-6.70	-6.70	-6.70	-6.70	-6.70	1.50
13	0.67	-1.10	-3.00	1.00	-2.50	-7.70	-1.10	1.10	-6.49	-6.49	-6.49	-6.49	-6.49	-6.49	1.60
14	0.40	-2.10	-3.00	0.20	0.70	-8.01	0.50	1.70	-5.80	-5.80	-5.80	-5.80	-5.80	-5.80	1.30
15	0.77	-2.00	-2.80	0.00	2.20	-8.40	0.30	1.60	-5.30	-5.30	-5.30	-5.30	-5.30	-5.30	1.20
16	0.10	-3.50	-2.00	-1.00	2.87	-8.00	0.00	1.40	-4.60	-4.60	-4.60	-4.60	-4.60	-4.60	1.00
17	2.10	0.20	-3.40	1.80	-3.30	-7.70	-2.00	0.10	-6.70	-6.70	-6.70	-6.70	-6.70	-6.70	1.50
18	2.80	0.70	-3.50	1.50	-3.50	-7.70	-1.50	0.70	-6.70	-6.70	-6.70	-6.70	-6.70	-6.70	1.60
19	3.30	-4.20	0.00	-5.01	5.91	-7.79	-1.00	1.10	-6.49	-6.49	-6.49	-6.49	-6.49	-6.49	1.60
20	5.61	-4.20	2.00	-6.51	6.10	-7.50	-1.40	0.80	-4.20	-4.20	-4.20	-4.20	-4.20	-4.20	0.00
21	3.67	-4.20	2.00	-7.31	6.50	-7.50	-1.70	0.80	-4.10	-4.10	-4.10	-4.10	-4.10	-4.10	1.00
22	0.67	-4.00	3.60	-8.91	6.50	-7.69	-1.70	0.80	-4.10	-4.10	-4.10	-4.10	-4.10	-4.10	1.00
23	3.50	-4.10	4.10	-8.90	6.10	-5.60	-1.90	0.90	-4.20	-4.20	-4.20	-4.20	-4.20	-4.20	0.40
24	3.50	-3.80	4.20	-8.90	6.10	-5.50	-1.90	0.90	-4.20	-4.20	-4.20	-4.20	-4.20	-4.20	0.40
25	3.60	-2.70	4.20	-8.89	5.90	-4.20	-1.90	1.50	-2.60	-2.60	-2.60	-2.60	-2.60	-2.60	0.20
26	3.60	-2.70	3.20	-8.80	5.70	-3.90	-1.90	2.50	-2.20	-2.20	-2.20	-2.20	-2.20	-2.20	0.60
27	0.90	-3.10	4.00	-8.20	5.70	-3.00	-2.00	3.20	-1.80	-1.80	-1.80	-1.80	-1.80	-1.80	1.30
28	4.10	-3.60	4.00	-7.90	5.80	-2.60	-3.60	3.20	-1.50	-1.50	-1.50	-1.50	-1.50	-1.50	0.70
29	4.40	-4.00	0.00	-7.29	5.70	-2.30	-3.90	3.10	-1.50	-1.50	-1.50	-1.50	-1.50	-1.50	0.70
30	4.77	-4.20	0.70	-7.10	5.30	-1.90	-4.40	2.00	-1.50	-1.50	-1.50	-1.50	-1.50	-1.50	1.10
31	4.70	-4.20	1.50	-6.70	4.80	-1.40	-5.20	2.10	-1.20	-1.20	-1.20	-1.20	-1.20	-1.20	1.20
32	4.60	-5.40	2.10	-6.70	4.20	-1.00	-5.61	2.00	-1.20	-1.20	-1.20	-1.20	-1.20	-1.20	1.20
33	4.40	-5.91	6.20	-6.70	3.10	-0.70	-6.10	1.70	-1.60	-1.60	-1.60	-1.60	-1.60	-1.60	0.90
34	4.00	-6.10	6.00	-6.70	1.50	-0.10	-6.60	1.50	-1.70	-1.70	-1.70	-1.70	-1.70	-1.70	0.30
35	3.60	-6.70	4.10	-7.10	1.50	0.50	-6.80	1.10	-1.70	-1.70	-1.70	-1.70	-1.70	-1.70	0.50
36	3.00	-6.69	4.60	-7.50	1.10	1.50	-7.00	0.80	-1.70	-1.70	-1.70	-1.70	-1.70	-1.70	0.30
37	2.10	-6.10	4.00	-7.00	1.00	1.00	-7.00	0.80	-1.70	-1.70	-1.70	-1.70	-1.70	-1.70	0.00
38	1.00	-5.60	4.70	-7.10	1.00	1.50	-6.99	0.40	-1.70	-1.70	-1.70	-1.70	-1.70	-1.70	0.91
39	0.20	-5.20	4.00	-7.00	0.50	1.60	-6.40	0.40	-1.70	-1.70	-1.70	-1.70	-1.70	-1.70	0.82
40	-0.40	-4.60	4.40	-7.00	0.20	1.00	-6.40	0.00	-1.70	-1.70	-1.70	-1.70	-1.70	-1.70	0.30
41	-0.43	-4.30	4.10	-7.00	0*	1.10	-6.20	-0.60	-0.80	-0.80	-0.80	-0.80	-0.80	-0.80	-0.39
42	-0.40	-4.30	3.00	-7.00	0*	1.10	-6.20	-0.90	-0.40	-0.40	-0.40	-0.40	-0.40	-0.40	-0.00
43	-0.10	-4.20	2.60	-7.81	0*	1.10	-5.90	-0.90	-1.70	-1.70	-1.70	-1.70	-1.70	-1.70	-0.89
44	0.20	-4.20	2.10	-7.80	0*	1.10	-5.90	-0.90	-1.70	-1.70	-1.70	-1.70	-1.70	-1.70	-0.50
45	0.60	-4.30	1.00	-7.00	0*	1.00	-5.80	-0.90	-1.70	-1.70	-1.70	-1.70	-1.70	-1.70	-0.40
46	1.10	-4.20	0.50	-7.99	0.00	1.80	-4.80	-1.70	-1.70	-1.70	-1.70	-1.70	-1.70	-1.70	1.50
47	1.20	-3.60	0.00	-6.72	-0.30	2.20	-4.80	-1.70	-1.70	-1.70	-1.70	-1.70	-1.70	-1.70	1.50
48	1.20	-3.60	0.50	-5.19	-1.10	2.00	-4.80	-1.70	-1.70	-1.70	-1.70	-1.70	-1.70	-1.70	1.50
49	1.00	-3.00	0.50	-5.00	-1.80	2.20	-4.30	-1.70	-1.70	-1.70	-1.70	-1.70	-1.70	-1.70	1.60
50	0.90	-2.60	0.40	-4.00	-2.90	2.40	-4.30	-1.70	-1.70	-1.70	-1.70	-1.70	-1.70	-1.70	1.40

RECORD=S-453
DATE AND TIME=1969-04-21-16-19

COMPONENT=E-W
SAMPLING INTERVAL=0.010(SEC)

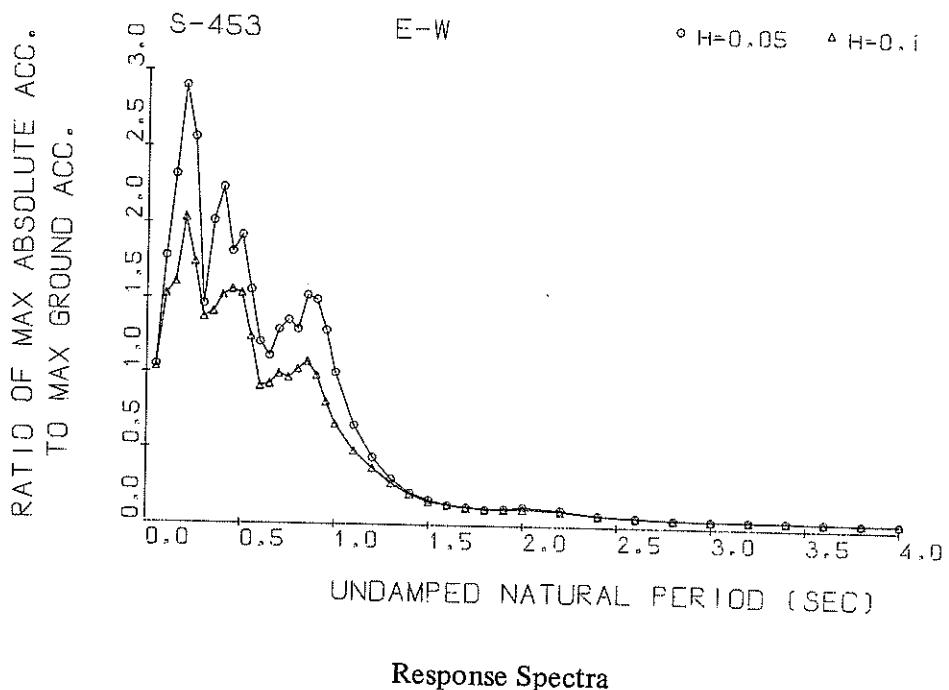
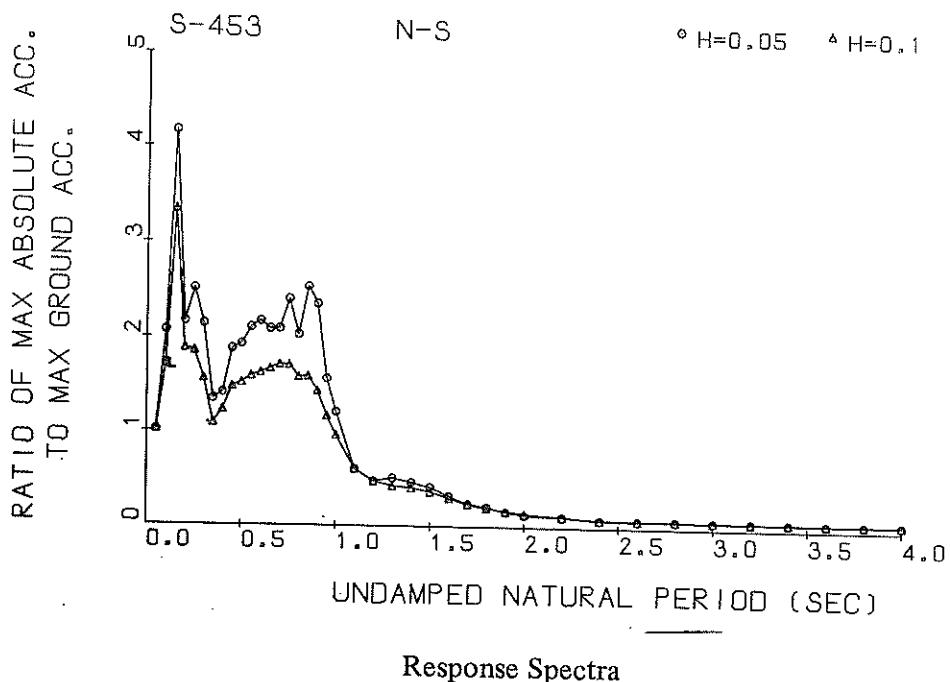
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CORRECTION=ARC.ERR.
FORMAT NO.=3011

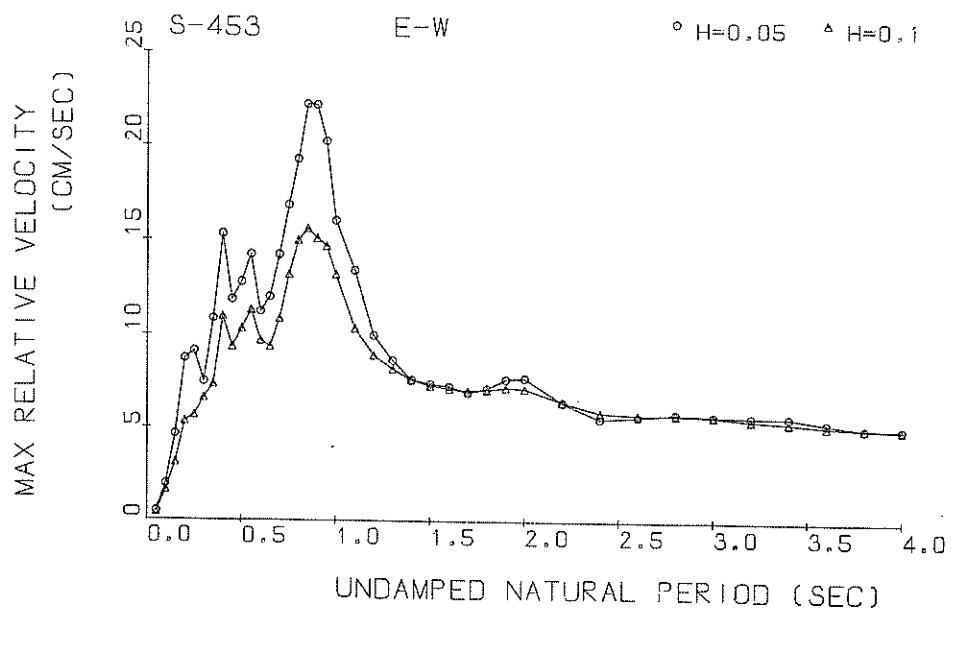
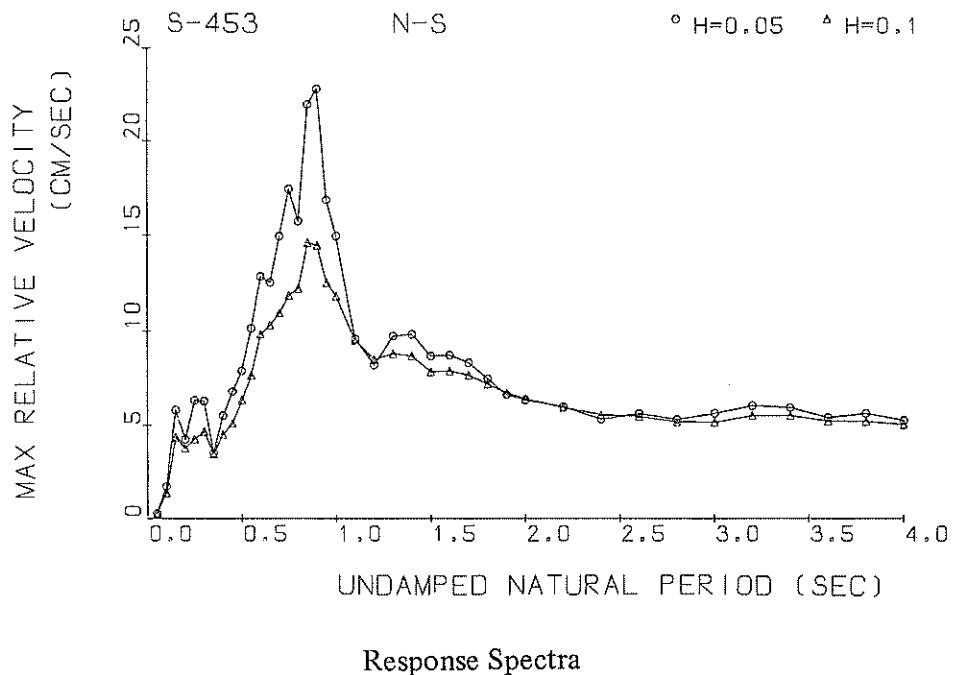
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TOTAL NUMBER OF DATA= 6000

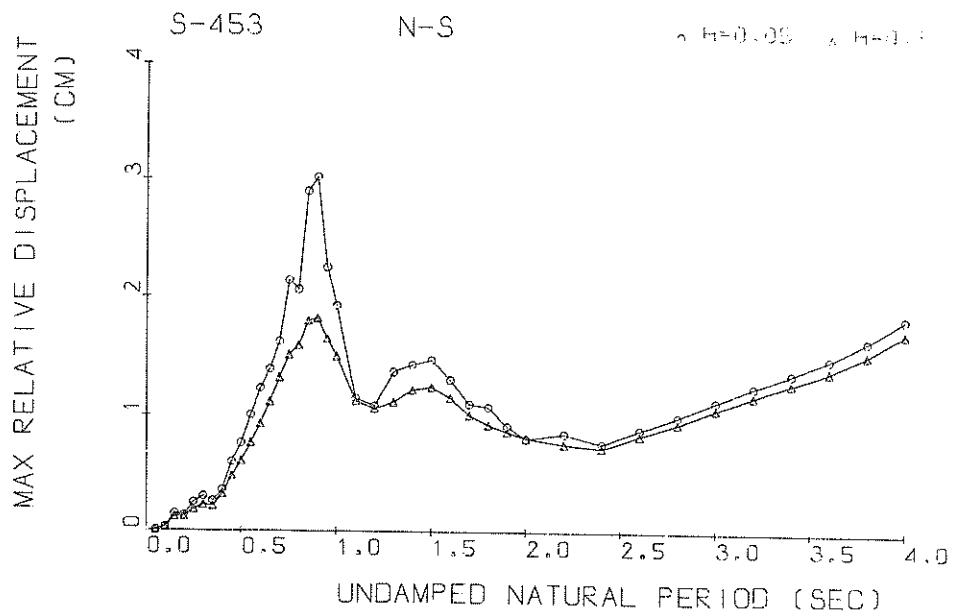
NO.	(3000)	(3050)	(3100)	(3150)	(3200)	(3250)	(3300)	(3350)	(3400)	(3450)
1	-6.30	1.60	-0.30	-7.09	1.30	-3.60	-0.30	2.30	-7.71	3.70
2	-5.80	1.50	-0.30	-5.99	1.30	-3.30	-0.70	2.90	-8.20	3.0
3	-5.80	1.10	-0.30	-4.70	1.30	-3.00	-1.00	3.70	-8.50	4.00
4	-5.40	0.60	-0.30	-4.30	1.60	-2.70	-1.60	4.70	-8.80	4.00
5	-5.10	0.00	0.00	-4.60	1.90	-2.10	-1.60	5.70	-9.00	4.10
6	-4.70	-0.30	0.10	-4.60	1.90	-1.80	-2.10	6.20	-9.20	4.10
7	-4.10	0.90	0.60	-5.10	1.90	-1.40	-2.60	6.81	-9.20	3.40
8	-2.80	-1.50	1.00	-5.70	1.90	-1.30	-2.80	7.50	-9.19	2.80
9	-2.00	-1.80	1.80	-6.20	1.50	-0.90	-3.40	7.50	-9.19	2.40
10	-1.70	-2.30	2.30	-6.20	0.80	0.00	-4.70	7.50	-8.69	1.90
11	-0.80	-2.90	2.80	-6.60	0.40	0.90	-5.41	7.50	-8.19	1.30
12	-0.10	-3.20	4.40	-6.60	-0.60	1.90	-6.61	7.40	-7.19	0.80
13	0.60	-3.60	5.10	-6.60	-1.00	2.50	-7.30	7.19	-6.70	0.50
14	1.00	-3.80	5.90	-6.50	-1.70	2.50	-7.51	6.69	-6.70	0.00
15	1.10	-4.20	6.40	-6.20	-2.20	2.50	-8.11	5.79	-6.50	0.90
16	1.10	-4.40	6.40	-5.60	-2.80	2.50	-8.91	4.79	-5.99	-1.30
17	1.10	-4.80	6.40	-5.19	-2.80	2.20	-9.30	3.40	-5.30	-1.70
18	0.80	-5.10	6.00	-4.30	-2.30	1.60	-9.40	2.50	-4.80	-2.50
19	0.40	-5.70	5.60	-3.10	-2.30	0.90	-9.60	2.00	-4.40	-3.70
20	0.20	-6.30	5.10	-2.20	-2.30	0.60	-9.60	1.40	-4.00	-4.70
21	-0.01	-6.70	4.90	-1.00	-2.30	0.40	-9.60	1.20	-3.60	-5.30
22	-0.30	-6.70	4.40	-0.70	-3.10	0.40	-9.60	1.20	-3.20	-5.90
23	-0.30	-6.50	4.40	-0.20	-3.40	0.40	-9.49	1.20	-2.80	-6.40
24	-0.31	-6.20	3.90	-0.90	-3.80	0.70	-8.99	1.60	-2.30	-6.90
25	-0.30	-5.90	3.50	-1.20	-4.40	0.90	-8.60	2.30	-2.10	-7.20
26	0.50	-5.91	3.50	-2.00	-5.00	1.40	-8.50	2.70	-1.70	-7.19
27	0.99	-5.60	2.60	-2.40	-5.50	1.80	-8.30	3.00	-1.30	-7.19
28	1.23	-5.60	2.20	-2.40	-5.90	1.90	-8.30	3.00	-1.10	-6.70
29	1.60	-6.00	2.20	-2.20	-6.00	1.90	-8.20	3.00	-0.70	-6.40
30	2.00	-6.60	1.00	-2.20	-6.01	1.00	-8.00	2.20	-0.30	-6.30
31	2.37	-6.80	1.20	-2.20	-5.90	2.10	-7.70	1.50	0.00	-6.19
32	2.73	-7.20	0.90	-1.90	-5.80	2.20	-7.49	0.60	0.00	-5.30
33	2.93	-7.30	0.90	-1.80	-5.50	2.50	-6.70	0.00	0.60	-4.80
34	3.61	-7.56	0.70	-1.80	-5.40	2.60	-6.29	-1.10	1.20	-4.20
35	3.91	-6.89	0.10	-1.80	-5.81	2.60	-5.00	-2.50	2.00	-3.50
36	4.80	-6.19	0.10	-1.80	-5.81	2.70	-4.20	-3.50	2.00	-2.80
37	2.17	-5.49	0.10	-2.00	-5.30	2.70	-3.60	-4.30	1.50	-2.80
38	3.11	-5.41	-0.10	-2.00	-5.40	2.80	-2.00	-4.90	0.90	-2.80
39	2.91	-5.70	-1.00	-2.00	-5.50	2.50	-1.90	-5.00	0.90	-2.80
40	4.90	-2.20	-3.70	-2.80	-5.40	2.60	-1.80	-5.00	1.20	-2.80
41	4.91	-1.50	-4.71	-2.80	-6.50	2.60	-1.80	-5.40	1.40	-3.50
42	4.00	-0.90	-5.91	-2.60	-6.70	3.90	-1.40	-5.80	1.90	-3.0
43	6.61	-0.50	-7.32	-2.40	-7.00	3.90	-1.30	-6.00	2.30	-4.20
44	3.41	-3.70	-1.00	-2.00	-5.40	2.80	-1.30	-6.40	2.70	-4.40
45	3.22	-2.70	-1.90	-2.70	-5.50	2.50	-1.30	-6.70	2.90	-4.90
46	3.11	-0.30	-1.30	-1.40	-6.40	3.20	-0.60	-6.80	3.10	-5.30
47	2.81	-0.30	-1.28	-1.10	-6.20	2.50	-0.20	-6.80	3.10	-5.30
48	2.61	-0.50	-10.48	1.00	-5.79	1.60	0.20	-6.80	3.10	-5.30
49	2.11	-0.30	-9.48	1.10	-4.90	1.00	0.90	-7.00	3.10	-5.30
51	1.91	-0.30	-8.38	1.10	-4.50	0.20	1.70	-7.30	3.10	-5.30

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DATE AND : 14=1969-11-14-21:16:19 SAMPLING INTERVAL=0.010 (SEC) FORMAT NO.=301

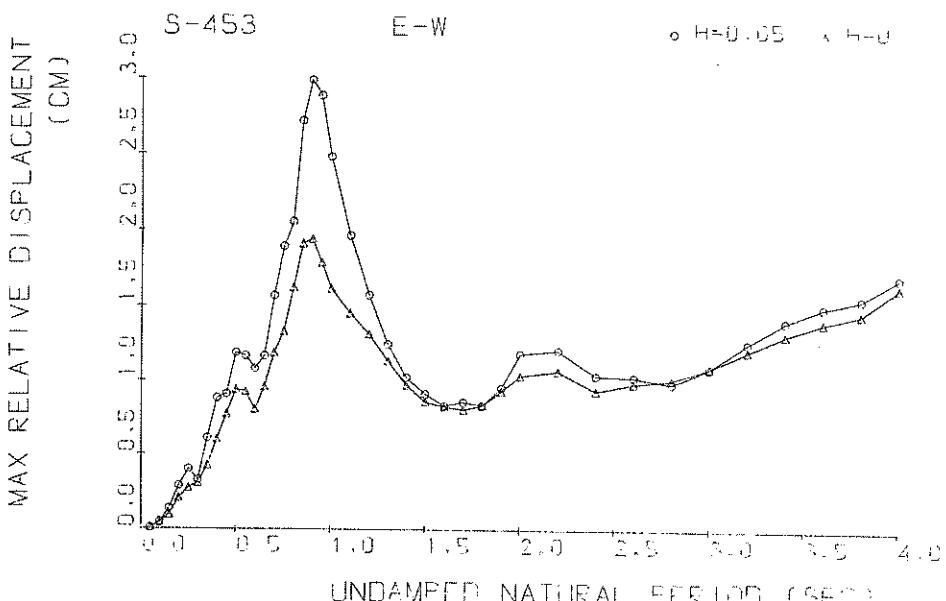
NO.	(3540)	(3550)	(3660)	(3690)	(3700)	(3750)	(3800)	(3850)	(3900)	(3950)
1	-5.30	-1.40	-3.00	-4.20	1.40	-1.60	-0.10	-2.00	-2.50	-0.70
2	-5.30	-1.10	-2.60	-3.10	1.10	-1.80	-0.10	-2.10	-2.50	-0.70
3	-5.30	-1.60	-2.20	-3.10	0.80	-1.90	-0.05	-2.00	-2.60	-0.50
4	-5.00	-1.90	-3.10	-3.10	-0.60	-1.90	-0.30	-2.00	-2.70	-0.40
5	-4.60	-1.60	-1.90	-3.10	-0.60	-1.60	-0.90	-2.00	-2.90	-0.50
6	-4.60	-1.00	-1.10	-3.10	-1.10	-1.20	-1.10	-2.20	-2.90	-0.50
7	-4.40	-1.80	-0.40	-3.00	-2.10	-0.60	-1.30	-2.20	-3.10	-0.50
8	-4.20	-2.00	-0.20	-3.10	-2.90	-0.00	-1.10	-2.00	-3.10	-0.60
9	-5.80	-2.60	0.60	-3.10	-3.10	0.00	-1.20	-2.20	-2.80	-0.90
10	-5.60	-2.40	1.10	-3.10	-3.10	0.10	-1.00	-1.80	-2.80	-1.10
11	-2.80	-2.50	1.70	-2.80	-3.10	0.10	-0.10	-1.70	-2.80	-1.10
12	-2.10	-2.70	1.90	-2.40	-3.10	0.00	-0.90	-1.70	-2.60	-1.70
13	-1.90	-2.60	2.80	-2.00	-3.10	0.00	-0.90	-1.70	-2.40	-1.70
14	-1.70	-3.10	6.60	-1.50	-3.50	0.90	-1.30	-1.90	-2.40	-2.30
15	-1.40	-3.20	4.10	-1.10	-3.20	1.50	-1.80	-2.50	-2.50	-2.50
16	-1.00	-6.30	5.10	-1.00	-2.70	1.50	-2.10	-2.60	-2.60	-2.60
17	-0.80	-7.50	5.10	-0.70	-2.20	2.50	-2.60	-2.80	-2.80	-2.80
18	-0.40	-4.20	2.10	-0.70	-2.00	2.10	-2.70	-2.70	-2.70	-2.70
19	-0.20	-4.50	5.20	-0.80	-1.60	2.60	-2.90	-4.00	-2.90	-2.90
20	0.00	-4.30	2.20	-0.80	-1.30	2.60	-3.20	0.	-2.60	-1.70
21	0.30	-4.70	5.10	-1.10	-1.10	2.00	-3.80	0.	-2.50	-1.70
22	1.00	-4.70	4.60	-1.70	-1.10	-2.90	-3.10	0.	-2.30	-1.60
23	1.20	-4.70	5.10	-0.70	-2.20	-2.50	-3.40	-0.00	-2.20	-1.50
24	1.50	-4.90	4.20	-2.00	-1.10	-3.10	-3.10	-0.30	-1.70	-1.50
25	2.00	-4.90	3.80	-2.40	-1.10	-3.50	-3.20	-0.40	-1.40	-1.30
26	1.60	-4.90	2.00	-2.00	-1.10	-3.00	-2.60	-0.60	-1.20	-1.20
27	2.00	-5.20	2.80	-2.40	-1.50	-3.60	-2.10	-1.10	-1.20	-1.30
28	1.70	-5.30	0.80	-2.00	-1.50	-3.50	-2.50	-1.30	-1.10	-1.50
29	1.60	-4.70	4.10	-2.00	-1.10	-3.00	-2.50	-0.00	-1.10	-1.50
30	1.60	-5.50	4.20	-2.00	-1.10	-1.50	-2.80	-2.10	-1.80	-1.50
31	1.60	-5.50	2.10	-1.00	-1.50	-2.80	-2.10	-1.70	-1.40	-1.50
32	1.60	-4.90	5.71	-0.60	-1.10	-2.00	-2.40	-1.70	-1.80	-1.50
33	2.80	-4.90	5.20	0.00	-1.70	-2.30	-2.40	-1.20	-1.10	-1.50
34	1.70	-4.60	6.60	0.00	-1.70	-2.00	-2.50	-1.20	-1.10	-1.50
35	1.70	-4.20	-6.60	0.60	-2.00	-2.30	-2.50	-0.80	-1.80	-1.20
36	1.60	-4.00	6.60	1.20	-2.50	-2.50	-2.50	-0.80	-1.80	-1.20
37	2.30	-3.80	-6.20	1.20	-2.90	-2.10	-2.10	-0.80	-1.70	-1.20
38	2.30	-3.80	5.70	1.60	-2.90	-2.40	-2.00	-0.70	-1.30	-1.30
39	2.30	-3.80	5.20	1.60	-2.60	-2.10	-1.80	-0.80	-1.50	-1.50
40	1.90	-4.30	5.50	1.60	-1.80	-2.00	-1.00	-1.00	-0.60	-1.50
41	2.30	-4.20	5.60	1.20	-1.50	-2.20	-1.80	-1.90	-0.30	-1.80
42	0.60	-4.20	5.50	1.20	-1.40	-2.50	-1.70	-1.70	-0.80	-1.50
43	-0.20	-4.30	5.90	1.60	-1.10	-2.10	-1.50	-1.50	-0.80	-1.00
44	-1.10	-4.30	6.20	1.60	-1.00	-2.20	-1.50	-1.50	-0.70	-1.90
45	-1.50	-4.30	5.20	1.60	-1.00	-1.70	-1.00	-1.00	-0.60	-1.50
46	-1.50	-4.30	6.20	1.40	-1.00	-0.70	-1.00	-1.00	-0.70	-1.50
47	-1.50	-4.00	5.79	1.40	-1.20	-0.10	-1.00	-1.80	-2.30	-1.50
48	-1.40	-3.70	5.00	1.40	-1.50	-0.10	-0.10	-1.00	-2.00	-1.50
49	-1.40	-3.40	4.80	1.40	-1.70	-0.30	-1.00	-2.00	-2.00	-1.50
50	-1.40	-3.30	4.30	1.40	-1.60	-0.10	-2.10	-2.10	-2.10	-1.50







Response Spectra



Response Spectra

RESPONSE SPECTRUM

RECDUR = S-450 N-S 1969-04-21-16-19 HYUGA NADA
 STATION = HOSOJIMA-S INPUT SIGNAL = GR.ACC.
 SAMPLING INTERVAL = 0.0100(SEC) CORRECTION = ZERO,ARC
 TIME LENGTH = 2.000(SEC) SKIPPED LENGTH = 0. (SEC)
 DAMPING COEFFICIENT = 0.050 MAX.GROUND ACC.= 62.75(GAL)

PERIOD (SEC)	ACCELE RATIO	ABSOLUT ACCELE. (GAL)	RELATIV ACCELE. (GAL)	RELATIVE VELOCITY (KINE)	RELATIVE DISPLACE (CM)
0.050	1.014	63.62	30.43	0.250	0.0040
0.100	2.077	130.33	88.53	1.692	0.0331
0.150	4.177	262.12	224.83	5.801	0.1484
0.200	2.170	136.16	147.39	4.230	0.1370
0.250	2.516	157.85	175.93	6.323	0.2488
0.300	2.143	134.48	143.74	6.281	0.3041
0.350	1.651	84.79	91.53	3.501	0.2622
0.400	1.420	89.11	92.81	5.525	0.3598
0.450	1.888	118.49	105.62	6.797	0.6050
0.500	1.940	121.76	101.41	7.899	0.7684
0.550	2.112	132.52	111.08	10.133	1.0111
0.600	2.176	136.54	117.85	12.828	1.2408
0.650	2.097	131.57	127.26	12.521	1.4017
0.700	2.102	131.89	131.47	14.929	1.6295
0.750	2.412	151.33	158.10	17.695	2.1465
0.800	2.044	28.29	55.93	5.687	2.0682
0.850	2.544	159.62	169.43	21.917	2.9078
0.900	2.363	148.31	171.24	22.761	3.0249
0.950	1.580	99.16	139.19	16.774	2.2533
1.000	1.222	76.66	111.02	14.899	1.9305
1.100	0.606	38.04	92.91	9.521	1.1542
1.200	0.480	30.12	82.31	8.165	1.0909
1.300	0.516	32.40	78.90	9.698	1.3767
1.400	0.467	29.28	74.06	9.791	1.4383
1.500	0.420	26.34	67.13	8.655	1.4817
1.600	0.329	20.65	61.48	8.703	1.3195
1.700	0.247	15.50	60.21	8.307	1.1133
1.800	0.215	13.49	58.82	7.473	1.0847
1.900	0.164	10.30	60.79	6.607	0.9208
2.000	0.132	8.28	61.89	6.324	0.8158
2.200	0.115	7.22	60.91	5.991	0.8608
2.400	0.087	5.43	61.89	5.296	0.7745
2.600	0.085	5.34	62.48	5.579	0.8928
2.800	0.082	5.17	60.86	5.252	1.0064
3.000	0.081	5.07	59.89	5.587	1.1418
3.200	0.079	4.97	60.85	6.012	1.2675
3.400	0.077	4.82	62.52	5.906	1.3835
3.600	0.074	4.64	63.51	5.671	1.5073
3.800	0.073	4.58	63.40	5.598	1.6591
4.000	0.073	4.59	62.53	5.226	1.8526

RESPONSE SPECTRUM

RECORD = S-456 N-S 1969-04-21-16-19 HYUGANADA
 STATION = HOSUJIMA-S INPUT SIGNAL = GR.ACCELERATION
 SAMPLING INTERVAL = 0.0100(SEC) CORRECTION = ZERO,ARC
 TIME LENGTH = 28.000(SEC) SKIPPED LENGTH = 0. (SEC)
 DAMPING COEFFICIENT = 0.100 MAX.GROUND ACC.= 62.75(GAL)

PERIOD (SEC)	ACCELE RATIO	ABSOLUT ACCELE. (GAL)	RELATIV ACCELE, (GAL)	RELATIVE VELOCITY (KI E)	RELATIVE DISPLACE (CM)
0.050	1.031	64.68	22.63	0.222	0.0041
0.100	1.729	108.49	66.20	1.322	0.0271
0.150	6.351	210.27	167.78	4.616	0.1174
0.200	1.901	119.31	120.87	3.720	0.1175
0.250	1.872	117.46	126.80	4.222	0.1819
0.300	1.377	98.99	101.86	4.633	0.2214
0.350	1.104	69.25	82.95	3.441	0.2104
0.400	1.249	78.35	76.47	4.485	0.3126
0.450	1.495	93.82	85.27	5.091	0.4743
0.500	1.535	96.35	79.43	6.612	0.6013
0.550	1.608	100.91	81.99	7.637	0.7621
0.600	1.042	103.02	85.49	9.822	0.9265
0.650	1.688	105.24	101.82	10.279	1.1148
0.700	1.730	108.53	116.64	10.921	1.3203
0.750	1.724	108.17	126.98	11.844	1.5117
0.800	1.595	100.07	127.63	12.207	1.5901
0.850	1.600	100.40	127.37	14.588	1.7974
0.900	1.444	90.63	121.49	14.446	1.8172
0.950	1.174	76.64	107.65	12.512	1.6452
1.000	0.967	60.65	90.69	11.815	1.5004
1.100	0.601	37.74	83.49	9.505	1.1257
1.200	0.476	29.87	78.22	8.492	1.0581
1.300	0.428	26.88	71.49	8.790	1.1170
1.400	0.408	25.60	68.31	8.664	1.2199
1.500	0.367	23.01	63.05	7.827	1.2468
1.600	0.302	18.98	60.00	7.852	1.1571
1.700	0.237	14.86	59.65	7.022	1.0091
1.800	0.197	12.39	59.99	7.160	0.9299
1.900	0.168	10.54	60.74	6.683	0.8689
2.000	0.145	9.07	61.27	6.671	0.8166
2.200	0.115	7.24	61.29	5.929	0.7689
2.400	0.087	5.46	61.65	5.527	0.7305
2.600	0.084	5.28	61.81	5.423	0.8394
2.800	0.082	5.14	61.19	5.141	0.9421
3.000	0.079	4.95	60.81	5.130	1.0676
3.200	0.076	4.77	61.23	5.490	1.1849
3.400	0.074	4.66	62.03	5.481	1.2942
3.600	0.072	4.52	62.56	5.189	1.4027
3.800	0.069	4.36	62.58	5.166	1.5445
4.000	0.070	4.37	62.20	5.003	1.7273

RESPONSE SPECTRUM

RECORD = S-456 E-W 1969-04-21-16-19 HYUGANADA
 STATION = HOSOJIMA-S INPUT SIGNAL = GR.ACC.
 SAMPLING INTERVAL = 0.0000(SEC) CORRECTION = ARC.ERR.
 TIME LENGTH = 28.000(SEC) SKIPPED LENGTH = 0. (SEC)
 DAMPING COEFFICIENT = 0.050 MAX.GROUND ACC.= 98.12(GAL)

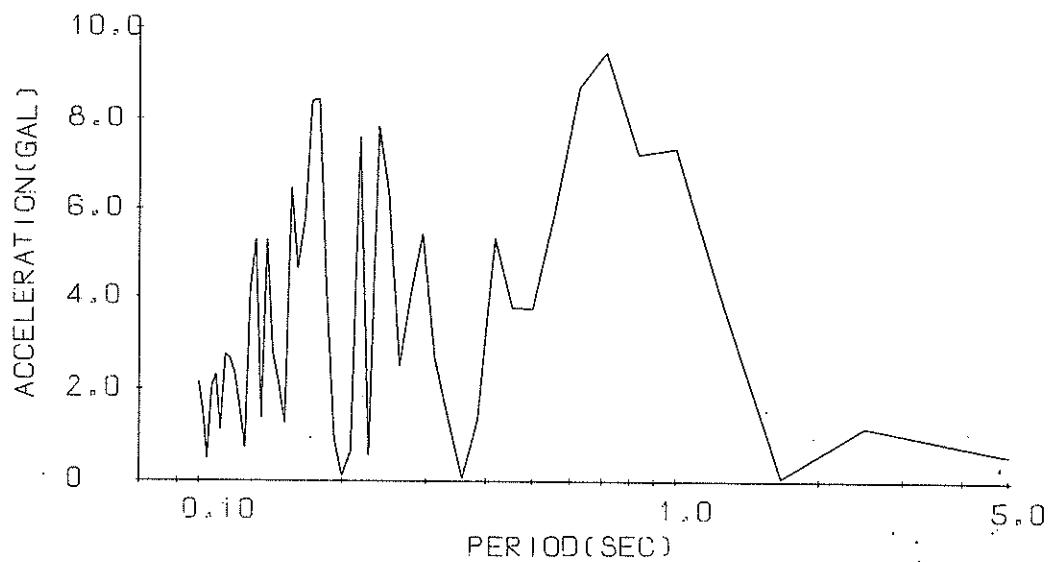
PERIOD (SEC)	ACCELE RATIO	ABSOLUT ACCELE. (GAL)	RELATIV ACCELE. (GAL)	RELATIVE VELOCITY (KINE)	RELATIVE DISPLACE (CM)
0.050	1.050	103.00	55.15	0.462	0.0065
0.100	1.780	174.64	105.94	1.928	0.0441
0.150	2.619	227.58	182.44	4.654	0.1298
0.200	2.899	284.49	275.88	8.718	0.2853
0.250	2.559	251.09	223.01	9.123	0.3976
0.300	1.459	143.12	163.85	7.485	0.3256
0.350	2.014	197.58	206.74	10.846	0.6081
0.400	2.231	218.89	251.10	15.635	0.8812
0.450	1.813	177.85	238.18	11.880	0.9093
0.500	1.923	188.63	218.53	12.793	1.1872
0.550	1.561	153.13	166.23	14.248	1.1673
0.600	1.213	119.05	177.28	11.220	1.0804
0.650	1.118	109.68	164.60	11.996	1.1670
0.700	1.296	127.20	196.66	14.225	1.5677
0.750	1.561	133.57	196.74	16.839	1.8934
0.800	1.298	127.34	168.92	19.265	2.0543
0.850	1.526	149.72	196.49	22.180	2.7215
0.900	1.497	146.89	206.70	22.133	2.9915
0.950	1.295	127.07	195.79	20.198	2.8892
1.000	1.007	98.78	165.92	15.989	2.4824
1.100	0.658	64.52	149.54	13.395	1.9653
1.200	0.443	43.48	127.30	9.955	1.5740
1.300	0.301	29.49	119.94	8.621	1.2495
1.400	0.213	20.91	113.70	7.607	1.0242
1.500	0.166	16.30	112.16	7.376	0.9146
1.600	0.136	13.31	109.49	7.235	0.8386
1.700	0.123	12.05	107.96	6.895	0.8636
1.800	0.106	10.45	108.05	7.123	0.8397
1.900	0.110	10.83	106.81	7.632	0.9607
2.000	0.123	12.07	106.74	7.686	1.1878
2.200	0.105	10.28	98.88	6.381	1.2119
2.400	0.074	7.30	99.02	5.498	1.0411
2.600	0.063	6.22	99.76	5.607	1.0311
2.800	0.053	5.16	99.31	5.771	0.9883
3.000	0.051	4.96	98.51	5.638	1.0910
3.200	0.051	5.05	98.03	5.584	1.2634
3.400	0.051	5.00	97.90	5.581	1.4104
3.600	0.049	4.78	97.95	5.267	1.5030
3.800	0.046	4.46	98.03	4.984	1.5578
4.000	0.045	4.45	98.10	4.973	1.6985

RESPONSE SPECTRUM

RECORD = S-456 E-W 1969-04-21-16-19 HYUGANADA
 STATION = HOSUJIMA-S INPUT SIGNAL = GR,ACC.
 SAMPLING INTERVAL = 0.0100(SEC) CORRECTION = APC,ERR.
 TIME LENGTH = 28.000(SEC) SKIPPED LENGTH = 0. (SEC)
 DAMPING COEFFICIENT = 0.100 MAX.GROUND ACC.= 98.12(GAL)

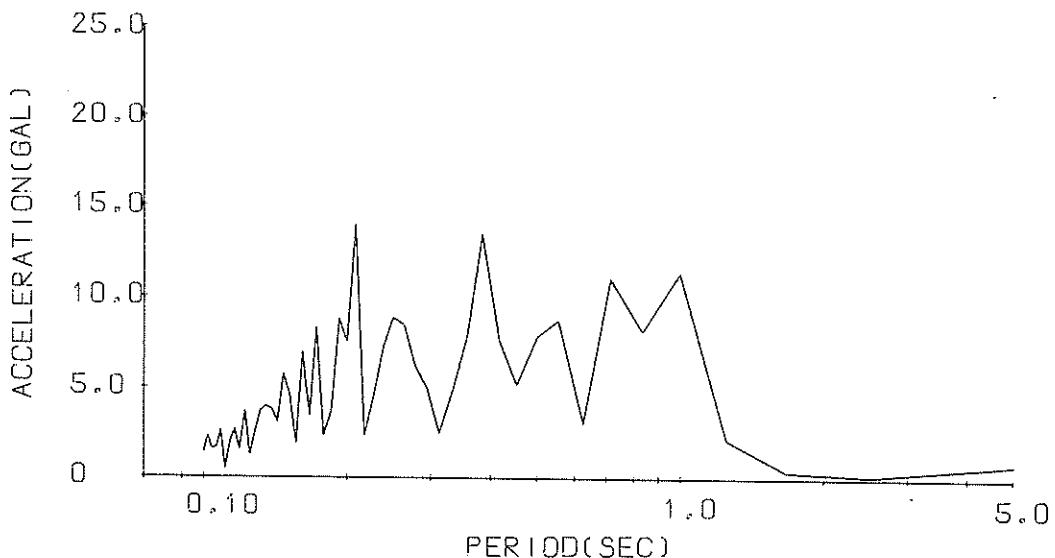
PERIOD (SEC)	ACCELE RATIO	Absolut ACCELE. (GAL)	RELATIV ACCELE. (GAL)	RELATIVE VELOCITY (KINE)	RELATIVE DISPLACE (C1)
0.050	1.038	101.89	43.84	0.659	0.0064
0.100	1.529	150.03	82.14	1.536	0.0377
0.150	1.609	157.84	119.45	3.034	0.0886
0.200	2.037	199.91	164.88	5.286	0.1997
0.250	1.745	171.26	147.63	5.634	0.2669
0.300	1.382	135.60	150.60	6.547	0.3030
0.350	1.417	139.02	171.08	7.284	0.4208
0.400	1.527	149.87	180.80	10.918	0.5983
0.450	1.568	153.80	180.93	9.298	0.7706
0.500	1.539	151.03	176.39	10.241	0.9354
0.550	1.252	122.84	144.71	11.241	0.9208
0.600	0.920	90.25	150.90	9.607	0.7998
0.650	0.935	91.77	158.07	9.288	0.9514
0.700	1.004	98.46	168.02	10.764	1.1821
0.750	0.979	96.08	166.60	13.110	1.3274
0.800	1.038	101.80	144.67	14.904	1.6145
0.850	1.088	106.74	153.25	15.521	1.9031
0.900	0.991	97.27	153.97	14.999	1.9336
0.950	0.816	80.04	159.28	14.582	1.7746
1.000	0.670	65.78	150.01	13.94	1.6070
1.100	0.490	48.10	140.25	10.229	1.4449
1.200	0.377	37.00	127.22	8.811	1.3079
1.300	0.279	27.34	119.43	8.079	1.1279
1.400	0.207	20.34	114.42	7.201	0.9662
1.500	0.159	15.64	111.62	7.203	0.8518
1.600	0.140	13.70	109.45	7.036	0.8204
1.700	0.123	12.07	107.90	6.913	0.8009
1.800	0.114	11.20	106.87	6.971	0.8316
1.900	0.114	11.18	105.51	7.096	0.9266
2.000	0.115	11.26	106.60	7.050	1.0316
2.200	0.100	9.84	100.40	6.670	1.0632
2.400	0.077	7.52	99.56	5.792	0.9290
2.600	0.063	6.22	99.51	5.672	0.9772
2.800	0.057	5.57	99.15	5.664	1.0049
3.000	0.054	5.25	98.63	5.557	1.0854
3.200	0.052	5.12	98.25	5.376	1.2011
3.400	0.051	4.98	98.07	5.268	1.3107
3.600	0.049	4.76	98.02	5.067	1.3933
3.800	0.048	4.68	98.02	4.962	1.4500
4.000	0.049	4.82	98.05	4.893	1.6266

S-453 N-S
TSK=6.00
TUS=5.00



Fourier Spectrum

S-453 E-W
TSK=6.00
TUS=5.00



Fourier Spectrum

gal

250

125

W

125 E

250

gal

250

125 D

125 U

250

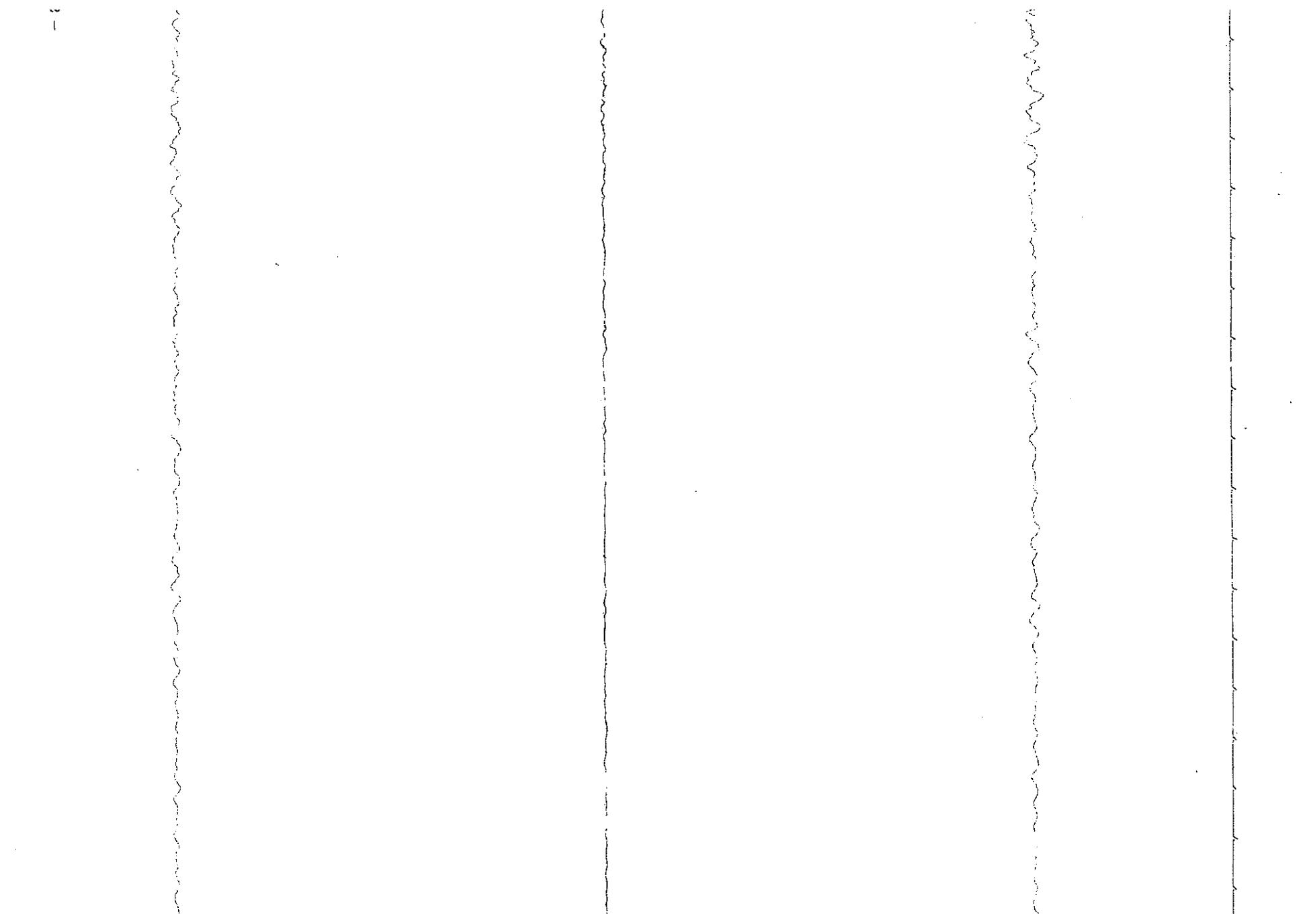
gal

250

125 N

125 S

250



RECORD=S=480 COMPONENT=N-S DATE AND TIME=1969-09-14 15:00:00
 SIGNAL=GR,ACC. CORRECTION=ARC,ERR.
 SAMPLING INTERVAL= 0.040(SEC) FORMAT NO.=301.
 STATION=KINUIURAS
 TOTAL NUMBER OF DATA= 4000

NO.	(0)	(50)	(100)	(150)	(200)	(250)	(300)	(350)	(400)	(450)
1	0,	3.50	-2.50	-2.30	+1.20	-6.51	1.90	-5.67	-5.30	-4.20
2	-0.00	4.00	-2.30	-0.20	+1.30	-7.58	1.90	-4.30	-4.60	-4.81
3	-0.20	3.29	-1.30	4.01	+2.30	-6.27	2.10	-4.10	-4.10	-7.21
4	-1.10	4.10	0.70	8.02	-3.00	-3.29	1.60	-5.40	-3.50	-7.70
5	-1.90	-1.30	1.60	9.29	-4.00	-1.10	0.60	-6.20	-2.30	-7.68
6	-1.20	-4.52	3.10	8.86	-3.51	5.01	-0.80	6.49	-1.20	-6.29
7	-0.10	-9.93	4.50	6.58	-2.61	6.61	-2.70	5.18	-0.60	-5.29
8	-0.20	-11.12	5.20	4.59	-1.30	7.19	-5.11	1.40	-0.90	-2.99
9	-1.10	-11.15	5.39	2.30	-0.70	6.69	-6.41	-0.00	-1.50	-0.10
10	2.30	-10.16	3.20	-0.30	-2.40	5.78	-7.41	-2.80	-1.80	1.20
11	-2.30	-8.28	1.60	-0.50	-3.60	3.09	-8.29	-4.00	-2.20	-1.70
12	1.10	-6.79	0.70	-1.30	-4.70	0.00	-7.48	-4.10	-2.50	2.00
13	1.20	-5.29	-3.30	-2.80	-4.10	-2.60	-6.18	-3.29	-2.80	2.20
14	0.20	-3.59	-4.71	-5.00	-3.70	-4.20	-4.29	-0.70	-3.00	-1.90
15	-0.60	-2.50	-7.83	-5.40	-3.40	-5.29	-2.80	-0.10	-3.11	1.50
16	-1.20	-1.00	-10.45	-5.90	-5.31	-4.19	-0.60	0.20	-5.61	-0.30
17	-1.40	-1.22	-12.02	-5.49	-6.81	-2.30	-0.40	-0.40	-7.52	-1.10
18	-1.60	3.00	-13.17	-4.29	-7.70	-0.30	-1.30	-0.60	-9.72	-4.91
19	-0.30	4.50	-12.27	-2.30	-7.39	0.10	0.80	-1.00	-10.11	-7.11
20	-1.10	5.00	-11.27	-0.60	-6.81	-0.00	0.00	-1.20	-10.59	-8.21
21	3.20	4.60	-10.25	0.10	-6.41	-0.20	-1.60	1.10	-10.28	-8.67
22	4.00	4.30	-8.16	1.10	-7.00	-0.50	-2.00	2.20	-9.38	-6.98
23	3.20	3.90	-5.19	1.60	-7.44	-0.50	-4.00	4.00	-8.28	-4.59
24	1.80	3.10	-2.60	-0.50	-10.43	-0.60	-4.40	-3.80	-6.68	-2.20
25	-0.40	2.80	0.20	-1.70	-11.11	-0.70	-3.30	-2.60	-4.70	-1.10
26	-2.50	2.10	-2.30	-2.70	-8.32	-1.20	-2.60	0.30	-3.70	0.00
27	-2.60	3.00	-2.80	-3.10	-3.08	-1.70	-1.70	-2.80	-2.40	-0.00
28	-3.30	3.90	-0.10	-2.00	5.22	-3.40	-1.90	-4.71	-1.40	1.90
29	-4.82	4.70	-2.91	1.10	9.44	-4.40	-2.20	-5.91	0.20	2.80
30	-8.52	5.09	-6.45	2.60	11.55	-4.90	-3.00	-3.00	0.50	2.0
31	-9.59	3.79	-12.07	4.40	9.78	-5.80	-3.30	-7.89	1.10	1.60
32	-9.06	2.10	-14.43	5.09	4.28	-5.09	-2.00	-6.89	1.50	0.20
33	-6.18	1.70	-14.94	3.79	-0.90	-2.60	-6.19	-1.20	-0.60	-0.60
34	-4.67	1.40	-13.01	-1.60	-3.72	-1.20	-2.50	-4.40	-1.10	-2.50
35	1.60	2.91	-10.42	1.40	-9.72	0.80	4.90	-5.91	0.20	2.80
36	4.20	6.01	-6.86	-0.20	-10.81	3.90	5.50	-1.11	0.50	2.0
37	5.30	7.91	-2.59	-0.70	-11.33	4.70	4.88	-1.30	-1.30	-6.28
38	5.20	8.38	-1.10	-8.83	4.19	1.90	-1.60	-2.30	-4.29	0.00
39	5.27	7.17	-9.79	-1.80	-4.68	2.00	-1.90	-1.10	-2.50	-3.00
40	0.90	4.89	13.94	-2.10	-0.86	-0.20	-2.90	-0.30	-1.20	-1.70
41	-1.00	3.10	14.83	-0.70	5.12	-2.30	-5.04	1.10	2.20	-1.10
42	-4.32	1.60	13.32	1.20	8.41	-3.30	-6.01	2.10	5.63	-0.70
43	-8.74	0.20	15.19	2.50	9.00	-3.60	-7.30	3.00	9.80	0.40
44	-11.21	-0.50	7.13	2.80	8.99	-2.90	-7.00	3.80	9.80	1.10
45	-14.67	-1.30	1.00	0.40	8.57	-1.90	-6.90	2.90	9.98	2.00
46	-10.64	-2.30	-2.30	-1.10	6.99	-0.90	-6.70	1.10	9.03	2.20
47	-8.03	-14.94	-2.40	5.87	-0.30	-6.40	-1.40	5.09	2.10	2.10
48	-2.70	-2.60	-7.80	-4.00	2.30	0.10	-6.20	-4.30	3.79	1.70
49	0.50	-8.06	-3.99	-0.30	0.50	-6.20	-5.30	0.10	1.00	0.50
50	2.70	-5.38	-2.30	-2.91	1.60	-2.90	-5.90	-2.90	-2.90	0.50

RECORD=S-480 COMPONENT=N-S DATE AND TIME=1969-09-14-15

SIGNAL=GR-ACC. SAMPLING INTERVAL= 0.010(SEC)

CORRECTION=ARC-ERR. TOTAL NUMBER OF DATA= 4000

NO.	(500)	(550)	(600)	(650)	(700)	(750)	(800)	(850)	(900)	(950)
1	0.10	-6.17	-6.40	-5.99	1.80	-0.70	-5.50	-4.40	-0.60	-5.19
2	0.10	-2.70	-6.90	-4.90	3.40	-0.90	-5.30	-4.70	-1.30	-2.90
3	0.00	-6.70	-6.49	-4.59	4.00	-0.80	-5.20	-5.61	-2.20	-2.40
4	0.10	1.40	-5.30	-3.40	4.40	-1.10	-4.90	-6.49	-2.60	-2.10
5	0.10	2.50	-4.90	-3.10	4.00	-1.40	-4.20	-5.90	-2.60	-2.50
6	0.10	3.10	-4.09	-3.40	3.79	-0.90	-3.20	-5.69	-2.20	-3.10
7	0.10	2.90	-2.70	-4.00	1.90	0.60	-1.70	-4.30	-2.10	-3.50
8	0.30	2.20	-1.40	-4.40	-0.90	1.80	-0.70	-3.40	-2.60	-4.10
9	0.30	0.80	-1.30	-4.20	-2.90	2.80	-0.40	-2.40	-3.70	-4.60
10	-0.00	-0.00	-0.70	-3.80	-3.71	4.00	0.80	-2.20	-4.40	-4.10
11	-0.30	-0.70	-0.80	-3.60	-6.20	4.40	0.30	-2.00	-4.00	-3.49
12	-0.80	-1.90	-0.10	-3.60	-6.00	3.79	-0.40	-2.20	-3.30	-1.50
13	-1.90	-3.20	0.10	-3.90	-6.00	1.20	-0.80	-2.40	-2.10	-0.10
14	-2.30	-4.40	0.70	-4.20	-6.30	-1.30	-1.20	-2.70	-1.80	0.20
15	-2.80	-4.89	0.60	-4.30	-6.40	-2.30	-1.70	-3.30	-2.70	-0.00
16	-2.90	-3.60	-0.30	-4.19	-6.40	-5.21	-1.40	-3.70	-5.41	-0.50
17	-3.70	-2.30	-1.40	-2.60	-6.20	-6.81	-1.20	-2.90	-6.81	-1.10
18	-4.90	-1.20	-1.20	-1.10	-6.10	-7.79	-1.20	-1.90	-7.90	-0.60
19	-5.01	1.20	-3.10	-3.10	-5.81	-6.90	-1.00	-0.90	-7.68	0.00
20	-6.10	4.11	-3.50	0.70	-5.19	-6.59	-0.70	0.80	-6.27	1.80
21	-6.50	5.80	-2.40	0.80	-3.79	-5.19	-0.40	1.80	-2.60	2.50
22	-6.19	6.30	-1.30	1.00	-2.00	-3.70	-0.10	2.20	0.60	3.20
23	-5.50	5.20	-0.60	0.50	-0.60	-3.20	0.20	3.00	1.90	4.20
24	-5.00	5.50	0.00	0.40	0.60	-2.20	1.10	2.40	4.10	4.60
25	-4.40	5.00	0.10	0.00	0.40	-1.50	1.50	1.80	3.00	4.20
26	-4.70	4.60	0.30	0.80	-0.80	-1.30	2.30	1.00	1.20	3.80
27	-5.20	4.09	-0.00	-2.50	-1.31	-1.00	3.00	-0.00	-0.40	2.50
28	-5.60	2.50	-0.40	-3.30	-2.20	-0.70	3.70	-0.70	-1.30	1.00
29	-5.70	0.10	-0.40	-3.50	-2.70	-1.00	4.60	-1.90	-2.00	-0.80
30	-5.40	-1.10	-0.40	-4.00	-3.20	-1.70	4.90	-3.20	-1.30	-1.30
31	-4.70	-3.20	-0.40	-3.40	-3.30	-2.60	4.60	-5.11	-0.90	-0.90
32	-4.30	-4.60	-0.60	-3.00	-2.91	-3.81	4.30	-6.20	-0.50	-0.50
33	-3.80	-4.90	-0.70	-2.50	-2.50	-6.51	4.10	-6.39	-0.40	-0.20
34	-3.10	-4.30	-1.00	-1.30	-2.20	-0.70	3.70	-0.70	-1.30	1.00
35	-2.10	-3.50	-1.70	-0.80	-1.91	-1.91	1.90	-1.90	-2.00	-0.20
36	-2.50	-3.20	-1.90	0.30	-1.30	-9.69	0.46	0.80	-5.21	-0.60
37	-1.30	-3.00	-1.40	-1.00	-1.81	-9.37	-1.70	3.30	-7.11	-1.20
38	0.00	-3.00	-2.10	1.40	-1.80	-7.68	-2.80	4.50	-7.89	-1.40
39	1.40	-3.20	-2.30	1.80	-1.40	-6.18	-4.11	5.49	-6.99	-0.30
40	2.10	-3.10	-2.30	1.20	-2.20	-7.92	2.80	-4.98	-5.99	-0.10
41	2.40	-4.10	-2.00	0.00	-0.30	-1.91	-1.91	-1.80	-2.80	-0.20
42	2.00	-5.01	-2.00	-1.30	0.50	-2.40	-5.00	1.70	-1.00	-0.00
43	1.60	-4.61	-1.70	-1.20	1.10	-2.70	-5.30	-0.40	-2.70	0.20
44	-0.80	-5.80	-1.90	-5.91	1.70	-3.30	-5.40	-2.80	0.20	-2.30
45	-3.21	-5.50	-2.80	-6.71	1.20	-3.80	-5.80	-3.80	-3.50	-3.30
46	-7.32	-4.80	-3.10	-7.29	0.80	-4.10	-6.10	-4.80	-4.71	-3.70
47	-8.82	-4.40	-6.60	-6.59	-0.00	-4.60	-6.39	-4.00	-6.61	-3.30
48	-9.19	-4.90	-4.40	-5.88	-0.50	-4.70	-5.69	-3.30	-7.69	-2.80
49	-9.28	-5.20	-4.50	-3.69	-0.60	-5.10	-4.60	-2.20	-7.09	-2.30
50	-8.1	-5.61	-5.30	-0.50	-0. n	-5.50	-4.50	-1. 0	-6.29	-1.90

RECORD=S*480		COMPONENT=N-S		SAMPLING INTERVAL= 0.010(SEC)		CORRECTION=ARC. ERR.		STATION=KINUURA'S		
DATE AND TIME=1969-09-14-15		FORMAT NO.=301						TOTAL NUMBER OF DATA= 4000		
No.	(1000)	(1050)	(1100)	(1150)	(1200)	(1250)	(1300)	(1350)	(1400)	(1450)
1	-1.50	*8.17	1.40	5.82	9.17	-21.04	22.77	-13.15	-20.14	-8.18
2	-3.20	*5.87	0.80	8.65	7.58	-21.74	29.61	-22.27	-12.00	0.00
3	*5.01	*2.29	-4.41	11.77	6.08	-25.69	33.05	-25.37	-2.59	5.43
4	-7.25	2.80	-6.62	14.06	3.39	-31.72	34.00	-24.04	4.02	10.45
5	-11.77	5.21	*9.11	15.51	-0.10	-34.33	32.89	-15.43	10.54	12.54
6	-14.27	7.09	-9.72	15.57	-4.31	-34.29	31.68	-6.74	12.22	
7	-15.64	6.08	*10.60	14.97	-6.31	-29.61	27.93	-0.30	12.55	
8	-14.45	3.99	*10.70	14.37	-7.29	-21.43	24.26	6.52	8.21	16.64
9	-13.20	1.90	*10.62	13.65	-12.53	-21.47	21.47	8.77	2.09	18.46
10	-10.51	*0.10	*11.60	12.31	-6.69	-7.79	17.79	13.03	19.75	
11	-6.88	*0.70	*11.72	9.62	-5.39	-7.24	14.17	16.84	-13.54	22.05
12	-4.59	1.30	*12.30	5.78	-1.30	-10.91	13.58	20.77	-19.29	21.39
13	-2.60	1.40	*12.36	3.20	-3.41	-15.18	18.28	22.62	-17.71	18.98
14	-0.50	4.10	*11.26	2.40	-2.70	-18.84	22.35	24.67	-13.62	13.67
15	1.60	4.90	-9.96	1.50	1.50	-21.56	26.54	26.74	-11.67	5.85
16	3.10	4.60	-7.97	1.00	-1.70	-18.85	28.17	28.17	-6.77	21.47
17	4.00	4.10	-6.07	0.70	-1.20	-11.93	21.28	28.55	-2.00	4.92
18	5.00	5.59	-2.80	*1.70	1.20	-3.38	14.77	28.71	1.00	8.00
19	4.00	0.30	-2.10	-2.40	2.70	5.56	0.50	28.15	4.32	7.99
20	3.90	*2.40	-2.10	-3.41	4.00	14.59	*7.88	27.03	8.84	7.48
21	2.80	*4.92	-2.10	-5.72	4.60	20.88	*21.43	24.80	10.97	
22	1.20	*8.92	-8.50	-7.96	3.90	22.39	*26.99	23.81	13.61	-6.08
23	0.00	*9.18	-2.80	-12.21	3.20	20.27	*29.84	21.51	16.27	-3.90
24	0.40	7.98	-3.20	*15.87	2.80	16.63	*25.54	17.70	13.98	-3.30
25	1.40	-6.58	-6.50	-18.87	2.60	12.26	*20.84	13.34	11.06	-2.90
26	4.10	*4.29	-3.80	*19.74	4.61	10.97	*14.09	9.32	5.70	
27	5.40	*2.40	-4.30	-20.25	6.62	9.69	*4.88	4.96	1.87	-4.62
28	5.30	*2.30	-5.42	-20.84	8.52	9.02	-0.40	-1.91	*5.02	-11.14
29	4.48	*2.00	-8.82	-21.21	9.91	9.93	-1.40	-9.38	-8.81	-12.62
30	0.90	*1.60	-10.02	-21.65	10.62	11.32	-5.66	-13.40	-9.55	-16.05
31	-2.40	*1.40	-10.89	-22.13	11.41	12.22	-15.28	-15.55	-6.95	-18.59
32	-5.31	0.90	-10.58	-22.16	11.67	12.66	*27.04	-12.04	-2.29	-24.73
33	-6.60	1.20	-9.57	*19.44	10.56	11.36	*32.74	-8.54	-2.21	-18.53
34	-6.70	2.30	-8.29	*11.84	9.07	6.44	*34.39	-4.59	-1.51	-19.45
35	-7.00	1.90	-7.27	-6.54	7.49	*0.40	*31.63	-1.0	7.59	
36	-6.60	1.00	-4.29	-10.50	6.58	*5.54	*27.00	-3.71	6.46	
37	-7.10	0.50	-2.20	1.90	4.79	-11.82	*26.49	-8.16	-2.71	
38	-7.41	0.90	-10.58	-22.13	11.41	3.69	*12.41	*23.73	*8.87	
39	-7.91	0.30	-2.00	2.60	5.81	-0.70	-9.70	-14.94	-13.07	
40	-8.30	*0.00	5.51	7.51	-8.12	-4.79	-26.81	*18.03	-1.73	-25.65
41	-8.60	*0.30	6.51	8.00	-17.05	*2.00	-2.00	*27.92	*21.31	
42	-8.40	*0.50	7.49	8.10	-24.40	-2.00	-2.00	*25.32	-22.39	
43	-8.30	0.60	6.78	7.79	-29.00	-2.30	-2.30	*24.38	-22.90	
44	-8.21	0.90	5.09	6.70	-30.87	-2.60	-2.60	*15.20	*30.04	
45	-8.61	*1.20	3.20	6.20	-28.61	-2.90	-2.90	*14.94	-13.25	
46	-9.01	*0.70	2.20	5.80	-25.91	-4.79	-4.79	-26.81	-1.73	-24.60
47	-9.41	0.80	1.60	6.21	-22.71	*0.40	*0.40	*27.92	*21.31	
48	-9.20	2.00	1.10	7.11	-21.14	2.91	2.91	3.31	*38.45	
49	*9.98	2.90	2.10	7.81	-20.34	9.03	9.03	7.37	*37.81	
50	-9.18	3.20	3.11	8.51	-20.73	16.74	16.74	*35.26	*15.16	

RECORD=S=480 COMPONENT=N=S SIGNAL=GR.ACC. CORRECTION=ARC.ERR.
 DATE AND TIME=1969-09-14-15 SAMPLING INTERVAL= 0.010 (SEC) FORMAT NO.=301
 STATION=KINUURA=S TOTAL NUMBER OF DATA= 4000

NO.	(1500)	(1550)	(1600)	(1650)	(1700)	(1750)	(1800)	(1850)	(1900)	(1950)
1	17.49	-11.21	*13.21	*6.18	2.00	*4.69	*17.36	5.91	9.83	*12.40
2	17.19	*11.61	*10.84	*3.19	*1.90	-2.10	*15.09	6.70	11.12	*12.51
3	17.20	*11.91	*4.46	*0.50	-2.81	-0.90	*10.87	6.69	11.84	-12.94
4	17.17	*12.31	5.74	2.80	-6.32	0.10	*5.68	5.99	13.05	-14.02
5	16.74	*12.56	11.58	2.50	-6.91	-0.00	-2.79	4.09	14.37	-14.48
6	15.78	*11.14	12.83	0.80	-9.39	-0.10	0.20	1.90	15.99	-13.96
7	15.37	*5.18	16.10	*2.30	*8.85	1.10	1.80	-0.20	17.57	*13.04
8	14.88	-2.30	16.41	*3.71	*5.79	2.10	1.90	-1.20	18.50	-11.38
9	14.38	0.10	15.60	*5.60	*4.10	2.60	1.90	-1.60	18.50	-10.69
10	13.91	2.00	7.27	*5.30	-3.09	4.00	2.60	-1.80	18.38	-10.17
11	14.10	*1.40	4.80	*5.40	0.10	5.21	3.91	-2.00	16.77	-8.80
12	14.12	*1.91	4.30	*5.50	4.02	7.44	6.62	-2.00	14.57	-8.69
13	14.50	*8.78	4.81	*5.60	9.87	10.53	8.93	-1.90	11.84	-8.29
14	14.50	*13.85	7.82	*5.29	18.36	11.84	10.41	-2.00	9.97	-7.79
15	14.53	*14.94	7.71	*7.70	25.18	13.33	10.69	-1.60	8.49	-6.79
16	12.90	*13.57	10.39	-2.40	32.24	14.19	10.17	-1.00	8.11	-5.79
17	9.95	*10.18	9.98	*1.30	36.39	13.88	8.66	0.40	8.93	-4.90
18	2.98	*4.88	9.05	*0.30	39.53	13.47	6.48	3.61	10.43	-4.60
19	-5.35	*0.40	6.46	*0.20	38.71	12.63	4.20	5.61	11.73	-4.70
20	-9.88	0.80	2.20	1.70	35.54	7.87	3.70	7.60	12.69	-4.90
21	-13.56	2.40	1.10	3.20	31.08	5.98	3.20	7.79	12.48	-5.30
22	-17.45	4.10	0.80	4.00	22.34	2.90	2.90	6.76	11.78	-5.70
23	-17.70	5.11	0.80	4.20	15.76	1.60	3.10	3.19	7.75	-6.10
24	-16.25	6.60	0.80	3.39	11.41	*2.41	3.10	*1.00	3.59	-6.00
25	-15.30	6.50	0.20	0.40	8.38	*7.42	2.70	-8.37	0.70	-5.39
26	-13.16	6.08	*1.50	*0.70	7.24	*9.47	2.40	-12.80	-2.70	-4.19
27	-9.44	4.09	-3.21	*1.90	10.57	*13.21	0.10	*15.68	-3.20	-2.44
28	-6.09	0.10	-7.76	*2.70	9.39	*18.53	*0.10	*1.11	-2.70	-0.60
29	-5.30	*7.76	*12.09	*0.80	8.89	*14.34	*3.60	-17.18	-2.60	1.50
30	-4.90	-12.27	-15.23	*0.60	8.29	*15.16	*3.70	-16.84	-2.30	3.80
31	-5.04	-14.28	*19.82	0.00	7.35	*16.35	*2.40	-15.83	-3.51	5.20
32	-6.32	-13.83	*20.95	0.10	2.79	*17.04	*1.30	-14.42	-6.13	5.70
33	-8.81	-12.22	*19.34	0.40	-3.32	*16.02	*0.40	-12.63	-10.40	5.19
34	-9.60	-9.71	*17.33	0.20	*10.74	*14.70	0.70	-10.58	-14.90	3.20
35	-9.80	-5.48	*14.86	*16.44	*16.44	*14.44	2.40	-9.69	-17.04	1.90
36	-9.68	-1.80	*13.96	*3.82	*20.62	*10.85	2.80	-9.28	-17.57	0.90
37	-8.61	-8.71	*13.08	*1.25	*32.85	-8.71	*11.03	*16.92	-16.62	6.61
38	-2.79	3.71	*12.59	*14.70	*23.56	*8.86	1.00	*8.32	-17.15	1.10
39	4.01	6.41	*12.29	*17.59	*25.59	*6.59	*0.30	*9.43	-16.35	1.90
40	5.61	6.89	*11.86	*18.75	*29.16	*6.01	-5.32	-12.79	-15.59	3.40
41	7.00	5.48	*10.65	*3.80	*31.90	*14.44	2.40	*9.23	-15.38	4.40
42	7.30	3.69	-8.72	*45.85	*32.85	-8.71	*11.03	*16.92	-16.62	6.61
43	6.89	*1.20	-3.89	*11.25	*33.56	*9.42	-12.22	-17.26	-16.89	7.30
44	6.37	*4.53	*2.30	*5.77	*32.82	*10.63	*12.68	*16.44	-16.68	7.70
45	3.39	-10.26	*2.10	*1.90	*31.17	*11.86	*11.95	*13.74	-16.27	7.69
46	-1.70	-12.91	*2.40	0.40	-27.88	*14.00	*10.22	-9.90	-15.66	7.20
47	-4.42	-16.12	-2.90	3.40	*24.54	*16.37	*6.67	*5.38	-14.87	7.19
48	-8.03	-18.16	-4.21	5.40	*19.15	*17.60	-3.69	-5.40	-14.27	6.40
49	-10.01	-18.66	-6.21	5.39	*15.80	*19.02	0.50	*3.61	-13.47	5.99
50	-10.42	-15.58	-6.50	-12.06	-19.16	4.51	7.53	-12.59	-12.59	4.49

No.	RECORD=S-480		COMPONENT=N-S		SAMPLING INTERVAL= 0.010(SEC)		CORRECTION=ARC. ERR.		STATION=KINUIRA-S	
	DATE AND TIME=1969-09-01 14:15	SIGNAL=GR,ACC.	FORMAT NO.=301	SIGNAL=GR,ACC.	FORMAT NO.=301	SIGNAL=GR,ACC.	FORMAT NO.=301	SIGNAL=GR,ACC.	FORMAT NO.=301	TOTAL NUMBER OF DATA= 4000
	(2000)	(2050)	(2100)	(2150)	(2200)	(2250)	(2300)	(2350)	(2400)	(2450)
1	3.30	2.10	-5.29	7.20	-1.40	-15.38	3.30	-3.00	-4.50	-8.39
2	1.60	1.80	-4.10	6.79	-0.90	-15.04	5.41	-2.70	-4.20	-7.69
3	-0.50	1.10	-3.90	5.99	-0.10	-13.68	6.41	-2.00	-3.00	-7.19
4	-2.80	0.10	-4.10	5.29	0.90	-10.65	7.81	-2.00	-2.20	-6.40
5	-4.31	-0.70	-5.11	4.39	2.70	-8.75	8.80	-2.10	-1.10	-6.10
6	-5.60	-2.40	-6.62	2.50	3.9	-5.58	8.99	-1.50	-0.70	-6.00
7	-6.31	-3.50	-8.31	0.70	4.60	-2.70	8.60	-1.20	-0.20	-6.60
8	-7.20	-4.40	-9.01	-0.20	4.50	-1.60	8.29	-0.80	0.00	-7.00
9	-7.61	-4.30	-9.30	0.70	4.80	-1.10	7.47	-0.30	1.00	-7.50
10	-8.31	-4.60	-9.07	-1.20	4.80	-1.40	5.39	0.10	2.20	-7.80
11	-8.80	-4.29	-7.27	-0.60	4.91	-1.90	3.49	0.80	3.60	-7.80
12	-9.00	-2.50	-4.59	0.40	5.41	-1.60	1.40	1.90	5.11	-7.69
13	-9.10	-1.30	-2.00	2.10	5.91	-1.30	0.10	3.70	6.21	-7.10
14	-8.89	0.00	-0.50	3.10	7.20	-1.30	0.10	5.41	7.41	-7.30
15	-8.28	0.30	2.80	3.90	7.61	-0.70	-0.30	7.52	8.00	-7.31
16	-6.88	0.70	4.30	3.50	8.51	-1.30	-0.60	9.22	8.19	-8.19
17	-4.79	0.90	5.50	2.80	8.51	-1.80	-0.20	10.31	7.79	-7.39
18	-3.70	1.40	5.70	0.90	8.20	-2.70	0.10	10.91	7.29	-6.69
19	-2.80	1.60	5.90	-0.70	7.89	-3.80	-0.10	11.08	6.39	-5.89
20	-2.40	2.00	5.90	-3.41	7.49	-4.60	-0.10	10.46	5.10	-5.09
21	-2.30	2.80	5.69	-7.13	6.49	-5.50	-1.20	8.68	4.60	-3.90
22	-1.30	3.10	4.09	-10.24	5.20	-5.60	-1.40	7.18	4.00	-3.40
23	-0.50	2.70	2.60	-11.83	4.61	-5.50	-1.90	5.70	3.60	-2.80
24	1.70	1.90	0.80	-12.91	4.50	-5.40	-2.10	5.00	3.40	-2.40
25	4.41	0.40	-0.90	-13.30	5.21	-5.50	-2.20	4.40	2.70	-1.60
26	7.01	-0.80	-2.00	-13.19	6.21	-4.90	-3.20	4.20	1.30	-1.30
27	8.01	-2.00	-2.90	-12.91	6.91	-5.30	-3.00	4.00	0.60	-1.00
28	8.40	-2.90	-3.20	-13.16	7.10	-6.11	-4.20	3.90	0.80	-0.50
29	8.20	-4.10	-3.00	-12.19	6.68	-7.02	-4.61	3.10	2.50	-0.60
30	8.10	-5.01	-3.30	-11.99	4.69	-9.23	-6.13	1.90	-2.50	-0.20
31	7.79	-7.02	-3.50	-11.79	2.20	-10.65	-9.73	0.30	-3.60	-0.30
32	7.10	-8.81	-3.60	-11.30	0.41	-12.56	-11.31	-3.60	-4.50	-0.80
33	6.79	-9.50	-4.51	-11.31	-1.31	-14.23	-11.81	-6.12	-4.90	-0.40
34	6.09	-9.50	-4.91	-11.70	-1.10	-15.02	-11.71	-8.01	-5.50	-0.10
35	4.99	-9.80	-7.31	-11.81	-2.20	-15.41	-12.01	-8.71	-5.70	-0.10
36	3.60	-9.70	-8.41	-12.11	-2.10	-15.48	-12.31	-9.11	-5.50	0.10
37	1.80	-9.50	-9.01	-12.41	-3.10	-15.15	-12.55	-9.81	-5.50	0.10
38	0.50	-9.30	-9.73	-12.60	-4.01	-14.56	-14.14	-10.70	-5.10	0.00
39	-0.30	-9.20	-11.02	-12.51	-5.11	-13.0	-14.14	-10.31	-5.20	1.00
40	-0.60	-9.19	-11.74	-12.77	-7.72	-10.63	-14.69	-10.60	-5.00	1.10
41	0.00	-8.68	-12.11	-11.84	-8.91	-9.31	-14.51	-10.49	-5.70	1.00
42	0.50	-7.29	-12.25	-9.76	-9.20	-6.48	-14.69	-9.87	-6.30	0.00
43	1.70	-6.39	-10.64	-7.69	-9.31	-4.80	-14.48	-8.38	-6.71	-0.50
44	2.80	-5.60	-8.15	-6.58	-9.20	-3.80	-14.07	-7.18	-7.31	-1.00
45	3.00	-5.70	-4.68	-4.59	-9.20	-2.20	-13.45	-5.60	-8.31	-2.30
46	-0.60	-6.00	-0.80	-2.40	-9.31	-1.60	-12.15	-5.00	-9.11	-3.00
47	3.20	-6.60	-5.71	-1.20	-9.76	-0.60	-10.55	-4.70	-9.41	-4.00
48	3.00	-6.80	6.64	-0.70	-12.65	0.40	-8.47	-4.00	-9.70	-3.80
49	2.90	-6.60	7.70	-0.80	-11.13	1.10	-6.28	-4.50	-9.59	-3.30
50	2.50	-6.09	7.99	-1.00	-14.83	2.00	-3.70	-4.60	-8.89	-3.30

RECORD#5*480 COMPONENT=N-S SIGNAL=GR.ACC. CORRECTION=ARC.ERR.
 DATE AND TIME=1969-09-09 14:15 SAMPLING INTERVAL= 0.010(SEC) FORMAT NO.=301
 STATION=KINUJIRAS TOTAL NUMBER OF DATA= 4000

NO.	(2500)	(2550)	(2600)	(2650)	(2700)	(2750)	(2800)	(2850)	(2900)	(2950)
1	-2.90	1.40	-6.50	-2.20	2.00	*9.78	4.00	8.00	1.40	-5.10
2	-2.20	1.60	-6.70	-2.30	0.80	*8.98	3.10	7.69	2.20	-3.40
3	-1.40	1.42	-6.40	-1.60	-1.00	-7.68	1.90	6.98	2.70	-2.90
4	-0.90	1.60	-6.49	-0.60	-2.90	*6.39	0.90	4.99	3.10	-2.60
5	-1.00	1.80	-5.80	0.50	-3.30	*5.30	*0.90	4.00	3.80	-2.50
6	-0.80	2.20	-5.30	2.00	-4.20	-4.70	-3.30	3.50	4.20	-2.40
7	-1.00	3.00	-5.00	3.00	-4.40	-3.80	*2.21	3.10	4.40	-1.80
8	-0.50	4.40	-4.40	3.80	-4.60	*3.00	*5.84	3.20	4.50	-1.20
9	0.00	4.50	-6.80	4.10	-4.80	-2.60	*7.34	3.20	4.60	-0.90
10	0.40	4.60	-3.30	4.70	-5.20	-2.10	-8.20	2.80	5.20	-0.90
11	0.10	5.20	-3.60	4.10	-5.40	-1.70	-8.12	2.40	4.90	-0.70
12	0.50	4.90	-3.20	3.60	-5.60	-2.60	-9.34	1.90	5.00	-0.80
13	0.20	4.20	-3.40	2.50	-5.40	-3.70	-9.59	1.20	4.80	-0.60
14	-0.30	3.60	-3.10	1.60	-4.90	-4.40	*9.31	4.90	4.50	-0.60
15	-0.70	2.50	-2.90	0.00	-4.70	-5.60	-9.71	2.00	4.60	-0.90
16	-1.30	1.60	-3.20	-1.10	-4.40	-5.80	-10.01	-3.40	4.90	-1.10
17	-1.70	-0.30	-2.70	-1.10	-4.20	-5.90	-10.61	-4.21	4.90	-1.20
18	-2.00	-1.40	-2.30	-2.10	-4.40	-5.60	-11.11	-5.60	4.60	-1.80
19	-2.90	-2.20	-4.40	-2.40	-4.00	-5.50	-11.62	-6.30	4.40	-0.90
20	-3.50	-3.40	-1.20	-2.50	-3.70	-5.00	-12.44	-6.60	4.00	-0.80
21	-4.30	-3.70	0.00	-2.70	-3.80	-4.70	-13.55	-6.50	3.80	-0.70
22	-4.70	-3.80	0.10	-3.30	-3.00	-4.50	-14.72	-6.10	2.80	0.00
23	-4.90	-3.40	-0.20	-3.10	-2.30	-4.90	-15.10	-5.90	1.60	-0.80
24	-4.50	-3.00	0.50	-3.70	-2.10	-5.00	-14.97	-5.40	0.50	-0.70
25	-4.20	-2.30	-0.00	-2.20	-2.10	-5.60	-14.36	-5.00	0.30	-0.80
26	-3.80	-1.40	-1.40	-0.70	-2.30	-6.30	-15.34	-5.40	1.60	0.60
27	-3.10	-0.60	-1.20	-1.20	-2.30	-5.80	-11.62	-5.40	2.40	0.30
28	-3.00	-0.30	-1.80	-5.30	-2.60	-5.70	-8.77	-5.20	3.80	0.00
29	-3.40	0.00	-2.20	-4.50	-3.10	-5.30	-6.87	-5.40	4.41	-0.20
30	-3.80	0.40	-3.80	-3.40	-3.80	-4.69	-1.39	-5.81	-6.30	-0.60
31	-4.60	-0.00	-5.01	-3.30	-4.30	-3.60	-2.90	-6.50	-7.21	-0.90
32	-5.61	-0.60	-7.11	-1.70	-5.30	-3.40	-1.50	-6.90	-8.31	-1.10
33	-6.80	-1.10	-8.43	-1.40	-7.71	-2.60	-2.20	-7.19	-8.91	-1.40
34	-7.10	-1.70	-10.11	-1.50	-6.71	-2.10	-1.30	-6.70	-9.20	-1.50
35	-6.69	-3.70	-10.48	-1.40	-7.40	-1.80	-1.30	-6.30	-9.30	-1.20
36	-5.90	-5.21	-9.78	-1.20	-7.80	-1.50	-0.80	-6.30	-9.29	-0.80
37	-5.30	-6.11	-6.68	-0.90	-7.69	-0.50	-0.00	-6.10	-8.89	-0.30
38	-4.60	-7.20	-7.28	-1.10	-7.10	0.00	0.90	-5.90	-8.40	0.10
39	-4.30	-7.40	-5.89	0.30	-6.90	0.50	-2.50	-6.20	-8.09	0.50
40	-3.3	-7.30	-4.30	-1.80	-6.49	-1.20	-1.10	-6.40	-7.19	1.10
41	-2.80	-7.20	-4.00	1.30	-5.90	-1.60	-5.10	-6.90	-6.68	1.10
42	-1.80	-6.79	-5.70	2.70	-5.70	-3.80	-5.40	-6.90	-5.09	1.20
43	-0.10	-6.10	-6.20	3.70	-6.41	-4.30	-5.80	-6.70	-5.70	1.50
44	0.70	-5.90	-4.30	3.80	-7.10	5.10	-6.30	-6.40	-3.20	1.00
45	1.00	-6.10	-4.60	3.80	-7.51	5.30	-6.51	-5.89	-2.70	1.00
46	0.90	-6.30	-4.80	3.70	-8.42	5.10	-7.11	-6.60	-2.60	0.90
47	1.10	-6.50	-4.90	3.50	-9.71	5.50	-7.70	-4.79	-2.60	0.00
48	1.10	-6.60	-4.30	3.50	-10.32	4.80	-7.90	-3.69	-2.40	0.60
49	1.30	-6.60	-3.60	3.00	-11.10	4.10	-8.10	-1.70	-2.60	0.00
50	1.10	-6.70	-3.20	-10.97	4.00	8.30	-8.30	-2.20	-2.90	-1.30

RECORD=S=480 COMPONENT=N=S SIGNAL=GR,ACC. CORRECTION=ARC,ERR.
 DATE AND TIME=1969-09-14,15 SAMPLING INTERVAL= 0.010(SEC) TOTAL NUMBER OF DATA# 4000
 NO. (3000) (3050) (3100) (3150) (3200) (3250) (3300) (3350) (3400) (3450)
 1 -1.70 5.50 5.50 8.00 0.90 2.30 *2.30 *3.30 -2.00 1.80
 2 -1.50 5.39 5.39 7.69 1.10 *3.70 *3.70 *3.30 -2.30 1.40
 3 -1.70 4.00 4.20 6.89 1.50 *4.40 *4.40 *3.10 -2.70 1.10
 4 -1.70 3.89 3.90 5.99 1.70 *0.00 *4.90 *2.30 *3.10 0.70
 5 -1.50 2.40 3.49 5.29 1.70 *0.50 *5.70 *2.00 0.20
 6 -1.70 0.00 1.50 3.50 1.80 *2.30 *6.30 *1.50 *1.50 0.00
 7 -1.80 1.70 0.60 2.40 2.00 *3.60 *6.70 *1.50 *0.70 0.20
 8 -1.80 3.00 0.20 1.00 2.10 *4.40 *7.00 *1.00 0.60 0.90
 9 -2.60 5.01 -1.70 0.60 2.10 *5.10 *7.40 *0.90 1.20 -1.40
 10 -2.90 6.61 -2.40 1.60 2.50 *5.70 *7.60 *1.70 1.90 -1.00
 11 -3.30 7.01 -2.90 -2.00 2.60 *6.10 *7.81 *2.30 2.50
 12 -3.60 8.11 -3.20 -3.30 2.50 *6.60 *8.96 *1.90 3.00
 13 -4.00 8.81 -4.20 -3.80 2.50 *7.00 *8.99 *1.70 2.50
 14 -4.20 9.60 -5.34 -4.10 1.60 *6.70 *8.70 *1.20 2.20
 15 -4.30 9.61 -6.71 -5.10 0.90 *6.80 *8.49 *0.60 1.60
 16 -4.80 -10.12 -8.13 -5.91 0.60 *6.80 *7.69 *0.60 1.10
 17 -5.20 -10.80 -9.93 -6.10 -0.20 *6.50 *6.80 *0.70 0.50
 18 -5.40 -10.81 -11.43 -7.01 -0.60 *6.60 *6.29 *1.20 0.90
 19 -5.50 -11.11 -12.41 -7.01 -1.10 *5.40 *5.56 *1.60 0.40
 20 -6.10 -11.32 -12.80 -8.01 -1.80 *4.90 *3.30 *2.10 0.00
 21 -6.30 -12.21 -12.92 -8.51 -2.00 *4.40 *1.00 *2.70 0.40
 22 -6.60 -12.59 -13.52 -9.01 -2.90 *4.40 *0.40 *3.20 0.20
 23 -7.00 -12.27 -14.11 -9.41 -3.30 *3.70 *0.70 0.70 0.40
 24 -7.30 -14.48 -14.28 -9.70 -0.00 *3.50 *0.50 *4.50
 25 -6.99 -10.88 -13.79 -9.90 -4.50 *3.00 *1.00 *4.00
 26 -6.39 -9.98 -13.48 -9.70 -4.90 *2.50 *1.20 *3.50
 27 -5.20 -9.08 -12.21 -8.83 -9.39 -5.30 *1.90 *1.00 *0.90
 28 -4.80 -8.19 -12.27 -9.29 -5.70 -0.30 *2.20 *4.10
 29 -3.90 -7.28 -11.36 -8.59 -6.20 *0.90 *1.60 *4.00
 30 -3.10 -5.09 -8.17 -8.19 -6.50 *2.00 *2.00 *4.60
 31 -2.20 -3.99 -8.17 -7.69 -6.30 *3.60 *2.50 *4.00
 32 -1.60 -2.00 -6.23 -7.00 -5.00 *4.50 *1.60 *3.60
 33 -1.10 0.00 -4.39 -6.70 -5.60 *5.00 *1.50 *3.20
 34 -0.40 0.90 -2.60 -4.20 -4.90 *5.90 *1.20 *3.10
 35 -0.20 1.30 -0.60 -5.99 -4.10 *6.20 *0.60 *2.90
 36 0.50 1.50 0.60 -5.20 -3.30 *6.81 *0.00 *2.40
 37 0.70 1.80 1.50 -4.70 -2.30 *7.40 *0.80 *2.00
 38 1.20 1.90 2.40 -4.20 -1.70 *7.79 *1.00 *1.00
 39 1.50 1.40 3.90 -4.20 -1.00 *7.10 *1.50 *0.50
 40 2.00 1.60 2.60 -4.20 -0.60 *6.60 *1.20 *2.60
 41 2.60 1.30 5.70 -3.30 -0.70 *6.50 *2.10 *0.30
 42 3.20 1.20 6.34 -2.60 -0.40 *6.00 *1.80 *0.00
 43 4.00 1.20 1.50 -4.70 -1.90 *7.10 *1.40 *0.30
 44 4.80 1.40 7.90 -1.40 *0.70 *4.90 *0.80 *0.80
 45 5.10 1.40 2.20 8.00 -1.10 *1.20 *4.20 *0.40
 46 5.20 2.00 2.70 8.30 -0.30 *1.50 *3.40 *0.30
 47 5.40 3.60 6.50 8.50 0.00 *1.90 *2.40 *0.60
 48 5.70 4.40 8.00 8.00 *0.20 *2.00 *2.10 *0.90
 49 5.90 6.49 8.49 8.30 0.20 *2.00 *2.40 *1.20
 50 5.70 7.90 0.50 0.50 2.20 -0.60 *2.80 *1.90

RECORD=S-480 COMPONENT=N-S DATE AND TIME=1969-09-14+15
 SIGNAL=GR,ACC. SAMPLING INTERVAL: 0.010(SEC) CORRECTION=ARC.ERR.
 FORMAT NO.=301 STATION=KINUURA-S
 TOTAL NUMBER OF DATA= 4000

NO.	(3500)	(3550)	(3600)	(3650)	(3700)	(3750)	(3800)	(3850)	(3900)	(3950)
1	-4.50	-1.30	-1.40	-1.70	2.90	2.10	1.60	1.00	2.00	-1.40
2	-3.70	-2.00	-1.60	-1.90	2.50	1.90	1.10	2.20	-1.10	-1.10
3	-2.70	0.20	-2.30	-1.90	4.50	3.00	2.10	2.50	-1.10	-1.10
4	-2.50	0.50	-2.20	-1.00	5.40	3.30	2.50	2.80	-0.50	-0.50
5	-1.80	0.70	-2.50	-0.30	5.30	3.60	3.10	2.50	-0.30	-0.30
6	-1.00	1.30	-3.40	-0.10	5.80	4.00	3.50	3.00	3.50	-0.00
7	0.00	1.90	-3.70	-0.40	5.90	4.10	3.90	3.40	3.70	-0.00
8	0.50	1.10	-3.90	-0.50	6.10	4.00	4.30	3.20	4.10	-0.10
9	1.60	1.90	-4.80	-2.00	6.50	4.40	4.20	3.10	4.20	-1.20
10	2.30	3.20	-5.40	-1.70	6.30	4.70	4.60	3.00	4.70	-1.30
11	3.00	3.20	-5.90	-1.70	6.50	5.30	4.80	3.20	4.80	-1.10
12	3.60	2.50	-6.51	-1.80	6.20	5.50	4.80	3.20	5.10	-0.90
13	4.61	2.10	-7.10	-1.40	6.70	5.80	4.20	3.30	5.00	-1.10
14	5.81	2.80	-7.30	-1.20	6.20	5.90	3.80	3.20	5.20	-0.90
15	6.71	2.30	-7.19	-0.80	5.80	5.60	3.40	3.20	5.30	-0.80
16	7.51	2.30	-6.29	-0.60	5.60	5.80	3.20	3.40	5.60	-0.60
17	8.01	1.00	-5.49	0.00	4.89	5.90	2.60	3.20	5.50	-0.10
18	8.51	1.10	-4.60	0.60	2.60	5.70	2.20	3.10	5.30	0.20
19	9.41	0.90	-3.80	0.60	4.10	5.49	1.80	3.20	5.40	0.80
20	9.70	1.10	-3.20	0.90	3.20	3.80	1.40	3.20	4.90	1.20
21	9.49	1.00	-2.30	1.40	1.20	3.60	1.00	3.20	4.30	1.90
22	9.09	1.50	-2.30	1.00	2.40	3.30	0.70	3.00	4.00	2.40
23	8.69	1.80	-1.70	2.20	1.90	2.90	0.70	2.90	3.60	3.00
24	7.80	2.30	-0.80	2.40	1.00	2.50	0.40	3.10	3.10	3.50
25	7.59	2.10	-0.20	3.50	0.40	2.20	-0.00	3.40	2.90	4.00
26	6.99	1.60	0.20	3.80	-0.20	1.90	-0.30	3.50	2.30	3.90
27	6.19	1.00	1.40	3.50	-1.30	1.70	-0.50	3.40	2.10	3.90
28	4.89	0.50	1.90	3.10	-2.10	1.40	-0.60	2.70	1.80	3.80
29	3.90	0.10	3.30	2.20	-3.00	1.30	-0.70	2.10	1.50	3.50
30	2.80	-0.20	3.90	1.10	-4.50	0.90	-1.10	1.70	1.20	3.00
31	1.80	-0.70	4.50	0.20	-4.70	0.60	-1.30	1.00	0.10	3.10
32	1.40	-0.80	5.10	-0.90	-4.00	-0.20	-1.20	0.50	-0.00	2.90
33	0.40	-0.30	5.20	-1.00	-4.20	-0.50	-1.50	-0.30	-0.10	2.70
34	-0.90	0.00	5.60	-1.60	-4.20	-0.80	-1.70	-0.70	-0.40	2.60
35	-2.00	0.60	5.90	-2.70	-3.70	-1.10	-2.00	-1.10	-0.40	2.40
36	-2.70	0.50	6.30	-3.50	-3.70	-1.30	-2.30	-1.20	0*	2.10
37	-4.50	1.00	3.40	-2.00	-3.20	-1.10	-2.60	-1.00	0*	2.00
38	-5.41	1.00	5.60	-2.70	-3.70	-0.80	-2.60	-0.60	0*	2.20
39	-6.41	2.00	5.40	-3.50	-4.00	-0.30	-2.80	-0.70	0.50	2.10
40	-7.00	1.20	5.20	-2.80	-4.30	0.00	-2.90	-0.70	0.50	2.00
41	-7.30	1.40	4.79	-2.50	-4.30	0.40	-1.10	0.40	-0.20	0.50
42	-7.29	1.00	3.40	-2.00	-3.70	0.20	-3.20	-0.50	1.00	1.50
43	-6.69	0.80	2.60	-1.60	-3.50	0.40	-3.20	-0.30	0.80	0.90
44	-5.90	0.40	2.00	-0.20	-2.60	0.40	-3.20	0*	0.40	0.50
45	-5.30	0.00	1.30	0.00	-1.70	0.40	-2.50	0.00	0.10	0.30
46	-5.29	-0.00	0.00	0.40	-1.10	0.40	-2.90	-0.70	0.50	0.50
47	-4.30	-0.30	1.30	-0.60	-0.60	0.40	-2.20	0.30	-0.20	0.50
48	-4.00	-0.80	1.80	1.10	-0.10	0.60	-1.00	0.70	-0.00	0.60
49	-2.70	-0.80	1.90	1.10	0.60	1.40	-0.50	1.10	-0.90	0.80
50	-3.00	-0.70	1.80	1.50	1.50	1.50	1.60	1.30	-1.30	0.30

NO.	RECORD=S-480		COMPONENT=E-W		DATE AND TIME=1969-09-14-15		SAMPLING INTERVAL= 0.040 (SEC)		CORRECTION=ARC-ERR.		STATION=KINUURA-S		
	()	()	()	()	()	()	
1	0.	(	3.70	(	5.28	(	3.68	(	6.58	(	0.20	(	-2.00
2	0.	(	3.50	(	1.60	(	-2.70	(	-4.18	(	-2.30	(	-2.61
3	0.	(	3.80	(	-2.71	(	-3.90	(	0.50	(	-4.11	(	-3.50
4	0.00	(	3.50	(	-5.29	(	-1.30	(	-5.62	(	-4.80	(	-3.22
5	0.90	(	3.60	(	-1.34	(	-3.70	(	-3.00	(	-6.68	(	-4.51
6	1.20	(	4.10	(	-14.31	(	-2.50	(	-3.61	(	-7.90	(	-7.18
7	-2.30	(	4.01	(	-14.39	(	-3.50	(	-7.64	(	-6.29	(	-7.58
8	-4.31	(	5.88	(	-9.77	(	-5.11	(	-18.31	(	-5.69	(	-5.59
9	-5.99	(	3.80	(	-8.44	(	-6.31	(	-19.47	(	-1.80	(	-4.29
10	-5.27	(	3.50	(	-4.47	(	-6.88	(	-16.20	(	-2.00	(	-2.20
11	0.30	(	4.00	(	-1.50	(	-4.67	(	-6.81	(	-2.10	(	-2.70
12	7.43	(	3.80	(	-1.50	(	-6.51	(	-6.81	(	-1.60	(	-3.00
13	-9.89	(	4.10	(	9.49	(	2.10	(	8.24	(	2.20	(	-1.80
14	9.22	(	4.10	(	8.87	(	0.70	(	9.06	(	1.70	(	-0.80
15	4.97	(	3.88	(	6.98	(	0.00	(	7.08	(	1.80	(	-0.80
16	0.10	(	-3.20	(	5.28	(	-1.20	(	5.59	(	-2.90	(	-2.20
17	-1.10	(	-3.70	(	1.60	(	-2.30	(	4.09	(	-1.60	(	-2.70
18	-3.41	(	4.20	(	-2.20	(	-3.30	(	1.50	(	-3.41	(	-2.90
19	-6.61	(	-3.60	(	-3.40	(	-4.30	(	-0.61	(	-2.20	(	-1.80
20	-7.71	(	-2.90	(	-2.70	(	-4.69	(	-2.61	(	-2.00	(	-1.60
21	-8.74	(	-2.20	(	-2.80	(	-3.00	(	-3.80	(	-1.80	(	-2.20
22	-4.98	(	-1.50	(	-3.70	(	-0.70	(	-5.00	(	-6.10	(	-2.00
23	-1.30	(	-1.40	(	-5.00	(	-4.22	(	-6.49	(	-0.40	(	-2.50
24	1.50	(	-0.30	(	-5.80	(	-8.30	(	-5.89	(	-3.78	(	-1.20
25	1.80	(	-1.20	(	-6.29	(	-8.17	(	-4.39	(	-0.61	(	-0.50
26	2.20	(	-1.50	(	-4.69	(	-6.78	(	-3.61	(	-4.99	(	-5.71
27	2.30	(	-1.70	(	-1.70	(	-5.07	(	-2.41	(	-7.47	(	-7.83
28	4.60	(	-0.70	(	-4.84	(	-0.00	(	-5.41	(	-0.40	(	-5.40
29	4.89	(	4.50	(	12.04	(	-2.70	(	3.41	(	-0.41	(	-4.80
30	3.19	(	0.60	(	13.28	(	-3.90	(	5.91	(	-7.78	(	-4.51
31	0.40	(	-0.00	(	10.16	(	-4.90	(	7.50	(	-10.77	(	-5.71
32	-1.50	(	-2.00	(	8.17	(	-5.78	(	7.78	(	-7.78	(	-3.30
33	-4.35	(	-6.19	(	6.19	(	-6.19	(	5.47	(	-6.09	(	-2.80
34	-3.30	(	-14.75	(	5.14	(	-4.40	(	-2.81	(	-7.68	(	-4.30
35	-2.90	(	-15.64	(	6.12	(	-4.39	(	-6.55	(	-0.91	(	-4.80
36	-2.40	(	-4.24	(	-8.02	(	-2.69	(	-11.63	(	-4.10	(	-5.30
37	-0.70	(	-8.57	(	-9.73	(	-1.60	(	-12.43	(	-4.10	(	-4.59
38	0.30	(	-6.45	(	-11.32	(	-3.10	(	-10.26	(	-3.10	(	-5.40
39	0.30	(	-1.20	(	-11.85	(	-4.40	(	-8.27	(	-1.50	(	-2.80
40	3.49	(	-1.60	(	-10.08	(	-9.38	(	-2.70	(	-2.80	(	-3.62
41	1.10	(	3.40	(	-9.31	(	-4.09	(	-3.30	(	-1.70	(	-1.50
42	2.10	(	3.90	(	-9.72	(	-2.50	(	-1.00	(	-0.10	(	-3.20
43	3.30	(	4.20	(	-10.69	(	-0.40	(	-3.00	(	-2.30	(	-3.70
44	3.90	(	4.80	(	-10.08	(	-1.70	(	-1.30	(	-1.50	(	-4.40
45	4.00	(	4.00	(	-9.38	(	-0.10	(	-2.70	(	-0.30	(	-5.00
46	2.90	(	3.50	(	-10.08	(	-4.80	(	-6.45	(	-2.80	(	-5.60
47	3.20	(	4.91	(	-4.05	(	-9.31	(	-5.21	(	-3.61	(	-5.30
48	3.10	(	5.91	(	-5.50	(	-2.30	(	-6.29	(	-5.71	(	-4.60
49	3.80	(	7.00	(	-5.59	(	-3.30	(	-4.97	(	-7.11	(	-3.60
50	3.70	(	6.79	(	-5.71	(	-4.31	(	-5.00	(	-7.86	(	-4.30

RECORD=S=480 COMPONENT=E-W CORRECTION=GR.ACC.
 DATE AND TIME=1969-09-14 15:00:00 SAMPLING INTERVAL=0.010(SEC) TOTAL NUMBER OF DATA= 4050
 NO. (500) (550) (600) (650) (700) (750) (800) (850) (900) (950)
 1 -4.50 -12.71 4.57 -0.80 +12.76 +0.50 +3.40 0.90 +5.51 -3.18
 2 -4.89 -10.19 +1.60 +1.70 +11.57 +1.00 +4.00 2.90 +7.35 4.10
 3 -2.70 -9.58 +3.30 +2.70 +10.36 +1.40 +4.50 4.41 +11.11 4.81
 4 -3.00 -8.38 +4.81 +2.10 +8.79 +1.80 +4.91 7.20 +7.79 6.49
 5 -1.40 -7.39 +6.61 +1.70 +7.99 +0.00 +6.80 7.10 +6.89 5.79
 6 -0.30 +6.89 +7.28 +1.40 +6.99 +1.40 +5.90 7.29 +5.70 5.40
 7 2.80 +6.29 +5.59 +1.90 +6.40 +0.70 +5.60 6.60 +5.70 4.40
 8 1.90 +5.10 +3.60 +1.60 +5.90 +0.80 +5.00 4.40 +6.29 3.29
 9 0.60 -4.70 +3.20 +2.30 +5.60 +1.20 +4.40 +4.84 +4.70 0.30
 10 -0.80 +4.60 +3.60 +3.00 +5.29 +0.40 +3.70 +3.70 +3.70 +2.10
 11 -1.70 +4.60 +3.30 +2.90 +5.30 +1.30 +3.90 +3.90 +3.90 +2.80
 12 -0.80 +3.70 +4.10 +2.90 +5.70 +2.50 +4.30 +5.80 +5.80 +2.20
 13 0.90 +4.00 +4.10 +3.40 +5.40 +2.10 +4.60 +5.76 +5.76 +1.30
 14 2.60 +2.80 +4.80 +3.70 +5.20 +1.20 +5.00 +14.90 +1.10 +0.70
 15 3.20 +3.20 +5.50 +3.20 +5.20 +1.30 +5.50 +12.69 +0.40 +0.60
 16 3.90 +2.60 +6.21 +2.70 +6.60 +0.60 +6.40 +9.67 +0.00 +0.80
 17 4.00 +1.30 +6.90 +2.00 +7.00 +1.30 +5.30 +6.00 +6.00 +0.30
 18 3.10 +1.70 +7.31 +2.60 +7.20 +1.20 +5.90 +5.60 +5.60 +2.60
 19 3.30 +1.30 +7.80 +2.40 +7.50 +0.50 +5.81 +5.70 +5.70 +3.61
 20 2.80 +2.80 +6.20 +2.70 +6.00 +0.00 +6.70 +6.40 +6.40 +1.60
 21 2.90 +1.70 +8.21 +3.80 +8.40 +0.40 +6.60 +6.91 +6.91 +7.44
 22 1.00 +1.80 +8.94 +3.80 +8.50 +0.00 +6.70 +7.00 +7.00 +7.99
 23 0.90 +0.90 +9.49 +3.60 +9.50 +0.50 +6.70 +7.19 +7.19 +5.19
 24 0.40 +0.00 +14.08 +2.20 +14.08 +0.80 +7.09 +6.69 +6.69 +3.99
 25 +0.50 +13.64 +1.64 +0.20 +0.50 +0.50 +6.59 +6.10 +11.64 +4.09
 26 -1.30 +1.10 +12.12 +1.60 +1.60 +0.90 +5.89 +5.70 +12.87 +1.70 +0.50
 27 +2.00 +1.90 +9.58 +2.10 +9.58 +2.10 +1.50 +5.50 +12.04 +0.40 +0.30
 28 -3.80 +1.70 +8.57 +2.10 +8.57 +2.20 +1.50 +5.90 +11.24 +1.40 +1.30
 29 -4.80 +1.90 +6.69 +1.50 +6.50 +3.50 +3.90 +5.60 +9.66 +1.80 +2.20
 30 -5.41 +3.20 +5.19 +0.10 +5.19 +2.00 +5.00 +5.79 +6.68 +2.80 +2.10
 31 -6.31 +3.90 +3.79 +0.30 +3.90 +1.60 +5.80 +3.79 +4.88 +4.20 +4.01
 32 -7.11 +4.60 +2.00 +0.40 +2.00 +1.10 +5.59 +2.00 +5.00 +5.00 +6.11
 33 -7.70 +5.20 +1.00 +0.80 +1.00 +0.60 +3.99 +0.20 +4.71 +6.81 +6.81
 34 -7.69 +4.80 +2.50 +1.10 +2.50 +1.00 +0.90 +2.00 +3.70 +6.41 +6.16
 35 -6.60 +4.60 +1.60 +0.20 +1.60 +0.00 +2.00 +2.90 +5.04 +7.71 +5.67
 36 -7.11 +3.50 +2.70 +0.30 +2.70 +0.70 +3.40 +3.30 +6.00 +8.28 +1.70
 37 -8.31 +2.60 +1.40 +0.10 +1.40 +1.30 +4.31 +3.00 +6.60 +6.69 +3.50
 38 -6.92 +2.40 +1.60 +0.54 +2.40 +1.30 +3.51 +3.00 +6.00 +5.32 +3.80
 39 -10.02 +0.50 +1.00 +4.00 +1.00 +0.60 +3.70 +6.11 +2.90 +5.19 +1.80
 40 -10.75 +1.30 +7.11 +1.10 +7.11 +0.30 +6.79 +2.70 +6.60 +4.68 +2.10
 41 -8.71 +2.30 +7.58 +1.50 +7.58 +0.30 +5.80 0.30 +5.57 +1.30 +3.10
 42 -9.18 +2.80 +5.69 +1.40 +5.40 +3.40 +5.80 +0.30 +0.80 +3.40 +3.50
 43 -8.30 +1.40 +4.60 +1.40 +4.60 +1.30 +4.31 +3.00 +4.00 +4.00 +4.00
 44 -8.39 +2.40 +2.80 +5.60 +2.80 +3.50 +5.90 +2.20 +4.91 +8.79 +3.69
 45 -7.79 +3.00 +0.80 +5.20 +0.80 +2.90 +5.60 +2.80 +6.29 +8.29 +0.00
 46 -7.10 +2.00 +3.00 +5.40 +2.00 +2.70 +5.40 +3.80 +5.50 +7.89 +1.30
 47 -6.80 +2.30 +0.40 +5.82 +0.40 +2.90 +4.90 +4.40 +4.50 +7.19 +2.01
 48 -7.20 +2.80 +1.70 +9.26 +1.70 +2.60 +4.00 +4.70 +4.20 +6.59 +8.92
 49 -7.43 +4.70 +1.00 +12.45 +1.00 +3.20 +4.20 +4.00 +4.20 +9.82 +4.70
 50 -9.76 +5.00 +0.10 -13.95 +0.10 +3.19 +3.30 +3.30 +3.30 +4.70 +10.81

RECORD=S=480		COMPONENT=E-W		DATE AND TIME=1969-09-14-15		SAMPLING INTERVAL= 0.010(SEC)		SIGNAL=GR.ACC.		CORRECTION=ARC,ERR.		STATION=KINURU-S
NO.	(1000)	(1050)	(1100)	(1150)	(1200)	(1250)	(1300)	(1350)	(1400)	(1450)	TOTAL NUMBER OF DATA= 4050	FORMAT NO.=301
1	-7.38	13.90	5.80	-0.80	9.01	19.48	-20.73	-31.50	-12.65	16.31		
2	-5.99	13.90	6.31	-3.50	3.80	18.00	-12.54	-30.21	-1.16	18.16		
3	-4.70	13.90	7.09	-4.96	2.90	16.65	-5.19	-27.58	-9.42	18.62		
4	-3.80	13.90	6.50	-15.93	0.91	15.80	21.11	-17.47	4.30	14.82		
5	-3.80	13.86	6.70	-16.60	0.61	14.01	32.43	-4.45	5.19	9.16		
6	-2.70	12.88	6.50	-18.28	1.90	11.85	39.10	6.09	4.29	7.09		
7	-0.30	12.31	5.98	-19.32	2.70	10.16	38.69	18.17	0.90	5.78		
8	-0.10	9.56	3.50	-19.58	1.30	8.48	35.28	28.92	-5.01	2.60		
9	-0.80	7.44	1.90	-19.25	-0.60	7.45	28.25	34.35	-7.51	3.91		
10	-0.70	2.79	-0.00	-19.19	-2.40	11.62	22.39	39.74	-6.62	5.61		
11	-3.70	-4.71	-1.70	-19.07	-5.73	15.75	24.56	40.91	-9.66	6.41		
12	-4.62	5.80	-2.70	-18.65	-10.75	14.75	28.69	41.47	-7.65	7.08		
13	-8.25	5.81	-5.00	-17.91	-16.84	13.67	31.71	43.05	-3.39	5.39		
14	-11.85	6.50	-6.20	-16.62	-19.73	10.56	37.88	44.67	2.61	3.89		
15	-13.34	6.20	-2.20	-15.26	-28.14	8.84	43.15	44.40	6.21	0.50		
16	-11.53	-6.41	3.80	-14.57	-30.70	-5.82	45.22	42.95	7.21	-2.80		
17	-5.79	-7.12	4.60	-13.72	-32.64	-8.45	44.15	37.80	4.09	-4.70		
18	-4.70	-8.84	4.80	-14.18	-33.92	-17.62	40.38	27.16	0.50	-4.50		
19	-4.00	-11.14	5.10	-13.82	-34.35	-16.34	35.61	16.43	-1.80	-5.30		
20	-3.50	-12.53	4.40	-14.20	-34.25	-13.43	30.98	41.30	-3.70	-5.90		
21	-5.30	-13.85	4.80	-14.08	-33.22	-6.60	26.82	-7.32	-5.29	-6.20		
22	-6.89	-14.20	4.20	-13.69	-32.04	4.25	23.48	-6.81	-5.01	-6.71		
23	-6.30	-14.75	3.80	-13.56	-28.76	17.54	22.88	-9.27	-1.50	-8.05		
24	-5.89	-15.43	3.10	-15.03	-17.52	23.82	25.62	-7.38	-1.70	-11.95		
25	-4.90	-16.03	2.50	-16.81	-7.88	23.70	28.69	-5.63	-2.20	-13.87		
26	-4.30	-16.62	1.50	-18.59	1.10	21.13	28.51	-10.97	-2.91	-17.97		
27	-4.00	-17.04	0.70	-19.67	1.80	16.73	29.26	-21.90	-6.81	-20.58		
28	-4.00	-17.67	-1.20	-19.11	-0.01	3.58	29.50	-33.37	-7.70	-22.54		
29	-2.70	-18.61	-1.70	-16.83	-3.44	-3.42	27.26	-4.49	-7.38	-24.80		
30	-0.70	-18.78	-0.10	-15.16	-17.85	-12.10	21.77	-47.91	-5.66	-21.26		
31	-0.30	-18.36	3.81	-4.86	-18.32	-19.13	16.49	-45.0	-0.80	-18.00		
32	-0.30	-16.02	5.62	-2.41	-15.01	-29.52	6.68	-39.08	0.60	-13.37		
33	0.00	-6.29	8.54	-0.70	-4.35	-34.07	-5.29	-28.36	-0.20	-7.56		
34	0.50	-5.49	17.64	13.19	6.24	-38.42	-2.47	-17.6	-1.10	-3.99		
35	0.80	-4.30	19.53	15.33	10.76	-43.07	-42.72	-6.87	-4.31	-2.20		
36	2.50	-3.70	18.94	13.93	9.02	-49.12	-52.64	-3.61	-5.35	-2.80		
37	3.10	-4.91	13.24	12.36	4.68	-53.77	-56.63	-8.52	-10.00	-5.30		
38	2.40	-6.79	9.05	11.15	0.61	-57.94	-60.83	-8.44	-14.88	-4.40		
39	1.80	-6.19	6.32	13.09	-9.50	-59.86	-59.58	-10.94	-18.43	-5.10		
40	-0.00	-5.29	2.50	12.94	-20.11	-56.48	-56.82	-12.34	-18.85	-5.09		
41	-1.50	-4.00	4.31	13.93	-25.54	-53.52	-52.55	-10.40	-19.36	-3.69		
42	-1.20	-5.10	6.59	-4.96	-25.27	-47.57	-47.07	-10.40	-17.57	-1.60		
43	0.00	-1.19	-5.09	-4.19	-21.64	-40.68	-40.76	-10.53	-15.86	-0.80		
44	6.53	0.00	-2.90	3.91	-18.36	-37.16	-31.53	-11.76	-16.83	-0.10		
45	10.18	0.50	-2.80	14.28	-6.59	-35.29	-18.31	-13.97	-15.61	1.00		
46	13.60	1.80	-1.50	-1.91	5.06	-35.08	-13.37	-17.96	-13.90	2.00		
47	13.61	2.70	-0.40	15.19	16.19	-35.02	-15.28	-19.98	-1.32	2.40		
48	13.90	3.90	1.30	6.88	21.21	-35.22	-19.75	-18.60	-4.86	2.90		
49	13.90	4.50	2.50	16.39	23.05	-32.79	-30.48	-17.16	3.82	4.20		
50	13.90	5.50	0.70	14.26	21.67	-29.31	-32.57	-14.89	10.64			

RECORD=S-480 COMPONENT=E-W SIGNAL=GR.ACC. CORRECTION=ARC.ERR.
 DATE AND TIME=1969-09-14-15 SAMPLING INTERVAL= 0.010(SEC) FORMAT NO.=301
 STATION=KINUJRA-S TOTAL NUMBER OF DATA= 40550

NO.	(1500)	(1550)	(1600)	(1650)	(1700)	(1750)	(1800)	(1850)	(1900)	(1950)
1	4.90	-17.20	-15.35	-22.59	0.40	21.32	13.79	5.10	-2.30	-5.80
2	4.80	-18.81	-8.80	-21.57	-2.80	26.10	8.75	5.19	-2.70	-5.41
3	4.82	-20.20	-2.98	-19.79	-3.71	25.76	5.60	2.89	-3.20	-7.32
4	6.19	-21.11	-13.04	-6.22	23.27	5.41	-4.21	-5.60	-8.76	-1.31
5	14.71	-20.05	15.17	-8.68	-8.31	19.73	6.61	-7.41	-6.11	-12.31
6	19.14	-17.14	17.75	-7.69	-9.29	16.87	7.96	-8.62	-7.61	-12.62
7	20.84	-13.07	18.33	-7.30	-8.78	10.83	12.50	-9.10	-8.30	-13.16
8	21.12	-7.04	17.40	-7.70	-7.26	4.37	15.67	-9.89	-8.12	-12.13
9	19.67	-15.00	15.72	-7.98	-3.69	-2.70	18.81	-9.19	-7.39	-9.88
10	15.08	4.61	12.29	-6.16	0.20	-5.43	20.07	-8.69	-6.59	-8.66
11	8.79	7.60	8.97	-1.80	3.80	-10.57	14.65	-7.19	-5.39	-6.45
12	2.39	7.46	7.57	1.60	4.40	-13.10	19.06	-7.17	-4.10	-1.30
13	-5.04	4.19	4.69	6.04	3.60	-13.27	18.33	-4.77	-3.60	0.20
14	-11.84	0.80	3.10	10.66	3.50	-12.57	14.61	-2.00	-3.10	1.10
15	-16.33	-6.14	4.81	12.90	1.60	-11.45	10.56	6.51	-3.39	1.10
16	-18.44	-10.80	7.03	12.78	-2.20	-9.76	8.96	7.90	-0.70	0.10
17	-1.05	-10.61	10.04	12.15	-5.91	-7.98	6.48	7.59	-4.32	-1.30
18	-19.45	-6.85	13.14	10.46	-7.49	-6.80	4.70	6.65	8.94	-2.90
19	-17.62	-2.30	16.81	8.86	-6.38	-6.23	3.69	1.50	11.50	-3.80
20	-1.45	1.10	18.51	6.44	-4.09	2.40	1.60	-3.91	11.47	-4.70
21	-15.67	2.50	17.26	-0.70	-2.10	2.80	-1.60	-5.63	10.58	-5.10
22	-15.13	4.11	15.05	-0.10	-0.80	1.10	-3.40	-9.39	9.15	-5.10
23	-13.43	8.14	11.95	-2.60	-0.80	-1.10	-5.21	-8.78	7.31	-5.50
24	-6.69	11.22	10.17	0.60	-1.00	-7.52	-7.62	-7.68	0.70	-5.39
25	-5.49	15.54	8.96	5.54	-2.70	-17.88	-9.10	-5.79	-2.60	-4.20
26	-3.20	18.51	6.87	11.24	-4.11	-27.62	-8.98	-4.39	-3.91	-3.60
27	-2.80	22.44	5.98	16.60	-4.90	-7.88	-7.88	-1.20	-7.72	-3.60
28	-4.30	-0.50	19.81	-5.09	-30.96	-6.60	-6.60	0.70	-8.94	-3.40
29	-5.20	21.11	9.94	19.90	-4.10	-31.05	-6.21	3.71	-11.42	-2.90
30	-5.90	19.19	4.45	19.90	-3.30	-2.43	-7.02	5.50	-1.97	-2.30
31	-5.39	17.35	9.36	19.84	-2.90	-23.63	-9.25	-11.06	-2.80	-3.61
32	-3.89	18.51	4.76	19.05	-2.50	-18.33	-12.30	5.49	-6.42	-10.47
33	-1.50	6.58	2.54	16.64	-1.90	-1.45	-15.32	3.50	-7.21	-3.40
34	1.50	3.99	-25.24	7.79	0.90	-9.55	-17.61	2.00	-9.31	-8.12
35	4.21	-0.10	-10.45	-0.70	0.90	-7.17	-19.26	0.60	-9.88	-9.82
36	5.71	-6.23	-1.16	-8.34	1.60	-4.29	-19.98	-1.30	-8.77	-10.56
37	7.83	-9.32	-8.73	-17.57	2.80	-3.00	-19.77	-3.10	-6.64	-8.96
38	9.85	-10.40	-4.69	-22.80	3.10	-2.30	-19.37	-7.74	-6.55	-10.10
39	12.08	-10.62	-2.20	-22.32	3.00	-2.80	-19.08	-5.81	-1.20	-1.30
40	11.58	-11.30	-0.70	-17.73	3.00	-3.80	-21.07	-7.10	-1.20	-2.81
41	10.73	-11.40	-2.71	-9.70	3.00	-5.00	-20.97	-7.38	0.90	6.93
42	7.64	-11.40	-6.35	0.00	2.40	-5.50	-22.72	-5.89	-0.00	9.61
43	-4.74	-11.40	-1.17	-6.52	1.10	-5.28	-2.77	-4.50	-1.50	-1.50
44	-12.54	-11.41	-15.13	8.81	-2.30	-1.90	-24.21	-3.79	-1.60	10.07
45	-19.80	-14.60	-19.70	9.70	-5.11	4.12	-23.59	-2.00	-3.60	8.34
46	-23.18	-11.63	-21.94	9.59	-2.73	-1.21	-22.30	-1.20	-4.30	-2.00
47	-23.09	-12.84	-22.36	9.07	-7.44	10.21	-12.27	-0.60	-4.80	-6.28
48	-20.37	-13.91	-23.06	7.48	-2.49	19.93	-5.36	-0.10	-4.20	-15.19
49	-16.93	-24.22	5.89	4.44	20.09	0.70	-0.20	-4.50	-1.87	-19.53
50	-15.87	-16.64	-23.58	3.89	15.09	4.00	0.30	-5.10	-5.10	-19.53

RECORD=S=480 COMPONENT=E-W DATE AND TIME=1969-09-14-15
 SIGNAL=GR.ACC. SAMPLING INTERVAL= 0.010(SEC) CORRECTION=ARC.ERR.
 FORMAT NO.=301 STATION=KINNURRA-S TOTAL NUMBER OF DATA= 4050

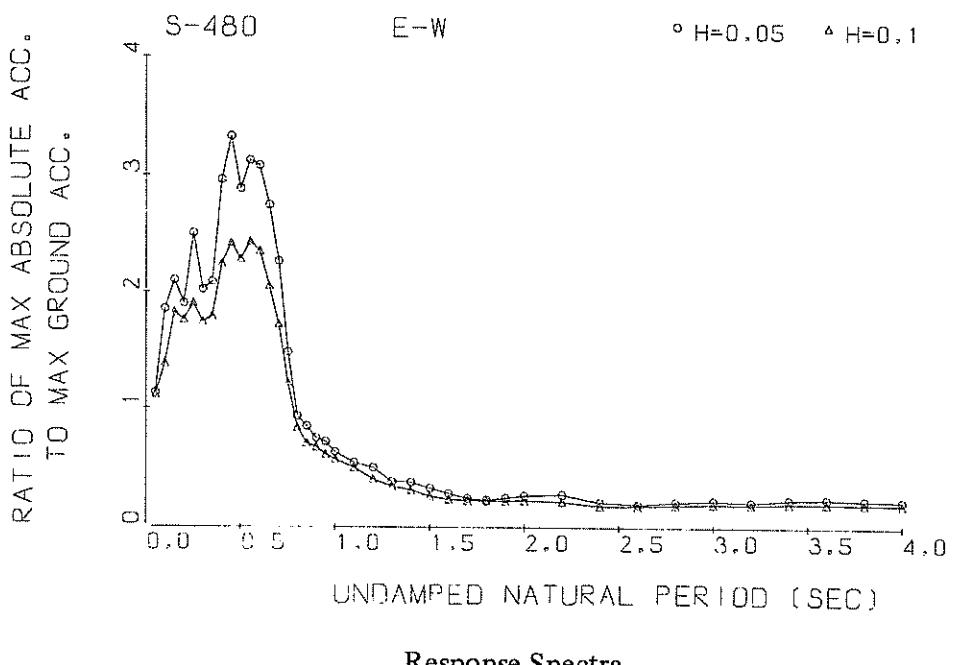
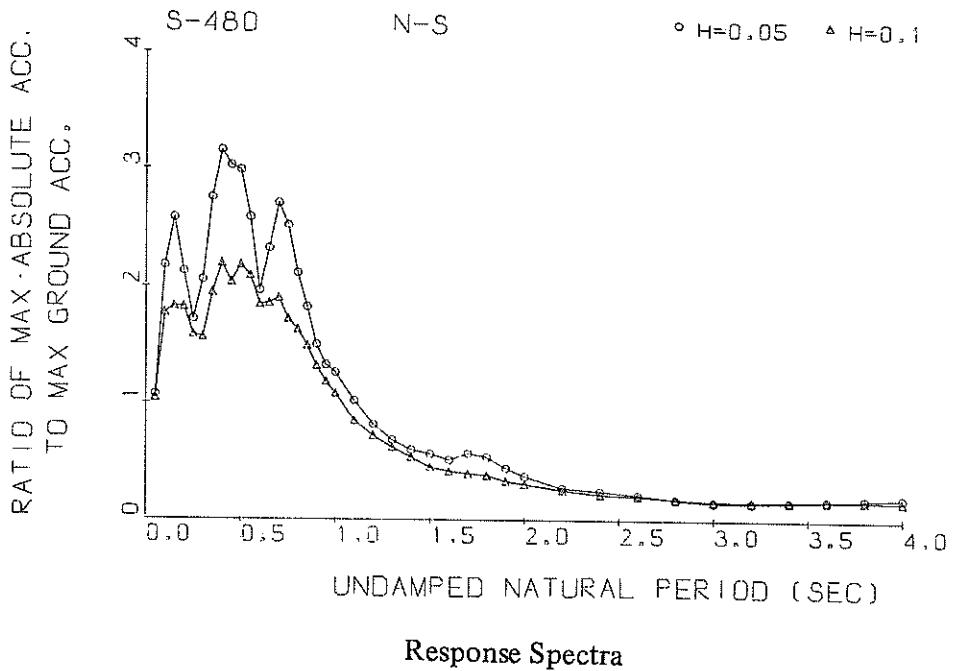
NO.	(2000)	(2050)	(2100)	(2150)	(2200)	(2250)	(2300)	(2350)	(2400)	(2450)
1	-17.44	"6.11	"0.70	-7.50	-16.94	-17.21	"13.04	-0.70	-7.60	"9.73
2	-14.52	-7.31	-1.60	-7.50	-15.92	-17.49	"14.25	-0.80	-7.91	-11.42
3	-10.66	-7.98	-1.00	-7.48	-14.51	-18.79	"15.36	-1.00	-8.31	-12.01
4	-9.16	-6.46	-0.80	-5.70	-12.65	-19.36	"16.57	-1.30	-9.05	-12.18
5	-7.16	-2.40	-3.11	-5.69	-11.28	-27.02	"17.85	-2.20	-11.81	-11.68
6	-3.69	1.00	5.82	-4.20	-10.69	-27.78	"19.67	-4.81	-12.28	-11.08
7	-1.50	2.90	7.93	-2.99	-10.30	-28.05	"20.51	-6.72	-10.77	-10.26
8	-0.10	4.51	9.82	2.61	-10.30	-27.27	"20.44	-8.33	-10.67	-8.47
9	0.80	5.81	10.91	6.34	-10.31	-26.62	"18.70	-10.52	-9.59	-6.60
10	-0.00	7.22	11.22	11.01	-10.84	-23.82	"17.30	-11.42	-8.89	-6.09
11	-3.11	9.20	11.82	15.42	-12.32	-23.14	"14.20	-12.23	-8.59	-5.40
12	-8.38	9.00	12.60	17.71	-13.01	-22.44	"9.77	-13.21	-7.99	-4.70
13	-13.63	9.19	12.51	19.31	-13.26	-19.99	"8.86	-13.62	-7.30	-3.80
14	-16.83	8.48	9.84	20.66	-12.12	-16.22	"5.89	-14.24	-7.00	-3.20
15	-19.02	7.39	7.16	21.34	-9.73	"8.14	"4.40	-15.10	-6.69	-3.20
16	-20.45	6.47	3.49	21.60	-6.28	"4.19	"3.80	-14.98	-5.59	-3.00
17	-20.93	3.70	0.30	20.63	-3.58	"1.90	-3.10	-12.62	-4.40	-2.70
18	-20.13	2.40	-2.40	19.86	2.90	-0.90	-2.60	-10.25	-3.59	-2.30
19	-18.22	0.80	-6.41	19.28	5.61	-1.10	-2.20	-8.18	-1.60	-3.20
20	-17.04	0.30	-8.02	17.84	7.80	-1.40	"1.90	-7.00	-1.00	-2.70
21	-16.00	-0.10	-9.60	16.94	8.13	-1.40	-2.40	-7.21	-0.90	-3.00
22	-14.14	-0.30	-9.49	16.06	9.92	-1.70	-2.80	-8.01	-1.20	-2.40
23	-12.60	-0.70	-9.19	15.64	10.81	-1.90	-3.30	-8.61	-1.40	-2.00
24	-9.69	-1.20	-8.70	14.43	11.12	-2.10	-3.30	-9.19	-2.00	-1.60
25	-9.40	-1.50	-8.81	12.91	11.83	-1.70	-4.30	-8.60	-2.30	-2.10
26	-9.29	-2.10	-9.27	10.33	12.93	-2.30	-4.70	-8.29	-1.90	-3.20
27	-8.89	-2.90	-13.04	7.37	13.68	-1.40	-5.70	-7.69	-1.30	-4.20
28	-8.19	-3.80	-4.60	13.17	13.17	-0.70	-6.20	-7.30	0.00	-5.20
29	-7.80	-4.83	-17.37	3.68	12.46	-0.10	-5.70	-7.30	-3.10	-5.70
30	-7.81	-10.47	-18.44	-1.80	11.38	1.20	-6.10	-7.40	-3.60	-5.20
31	-8.50	-13.30	-18.86	-5.61	10.78	1.80	-6.39	-7.00	-4.50	-4.50
32	-8.40	-16.60	-18.32	-7.22	-8.89	2.20	-5.60	-6.70	-5.20	-3.60
33	-8.41	-21.57	-17.29	-9.23	9.29	2.90	-5.10	-6.61	-4.60	-3.20
34	-8.88	-23.40	-17.10	-10.60	8.89	4.00	-4.90	-7.20	-5.00	-4.20
35	-7.99	-25.81	-17.16	-10.78	8.37	4.50	-4.10	-7.39	-3.10	-4.50
36	-7.16	-26.49	-18.02	-9.89	6.69	3.80	-3.80	-6.79	-1.20	-1.90
37	-3.30	-26.27	-18.36	-9.28	5.88	2.50	-3.70	-6.20	-0.20	-2.50
38	-1.20	-25.27	-19.28	-8.23	3.19	2.00	-4.10	-5.89	-1.60	-2.50
39	-0.00	-23.44	-20.24	-6.62	-1.70	1.80	-3.70	-5.20	-2.70	-2.90
40	-0.60	-20.40	-20.82	-8.31	-4.81	1.00	-4.60	-6.40	-3.00	-2.20
41	-1.70	-25.81	-21.87	-9.25	-7.31	1.00	-4.50	-5.00	-4.40	-4.50
42	-3.20	-14.58	-20.64	-11.86	-16.67	0.30	-5.20	-5.20	-5.40	-5.40
43	-3.80	-14.94	-19.69	-13.15	-19.38	0.00	-5.30	-5.21	-6.20	-6.20
44	-3.10	-6.97	-18.52	-15.50	-20.30	0.30	-5.00	-6.21	-6.60	-6.50
45	-3.40	-4.09	-16.17	-21.06	-20.60	0.40	-5.00	-7.11	-6.10	-3.80
46	-3.10	-1.70	-13.75	-20.57	-20.31	-1.50	-5.70	-8.20	-7.00	-4.50
47	-2.10	0.40	-10.17	-19.25	-20.20	-2.30	-6.00	-8.29	-7.30	-4.89
48	-2.50	0.80	-8.78	-16.64	-19.11	-3.60	-5.59	-8.89	-7.71	-3.60
49	-3.10	0.20	-7.60	-17.87	-18.01	-4.20	-5.00	-7.50	-8.11	-4.00
50	-4.51	-0.00	-7.89	-17.37	-16.82	-5.35	-2.60	-7.30	-8.91	-4.50

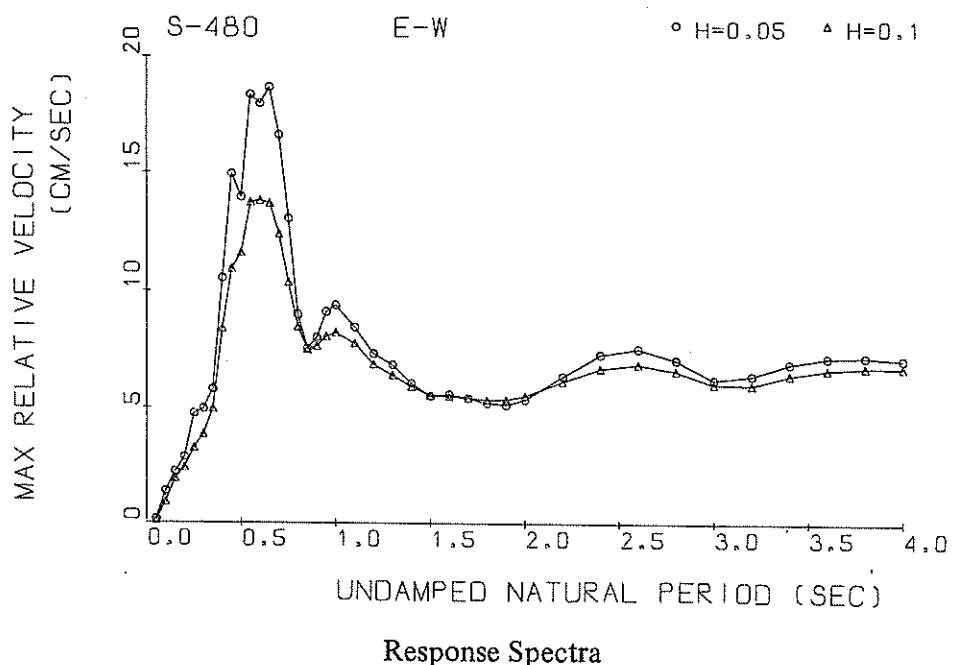
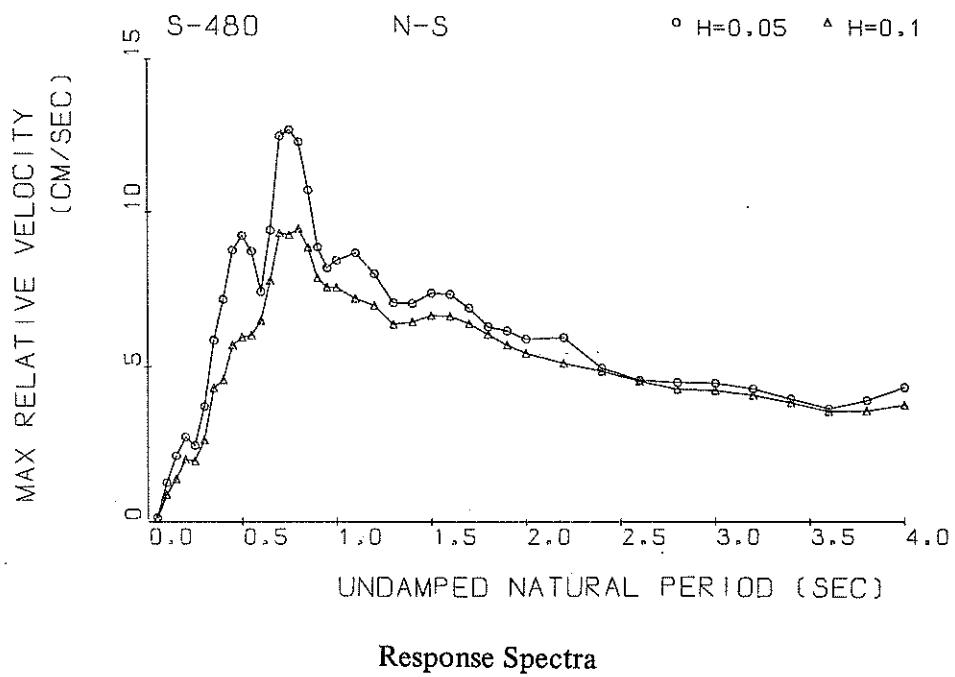
RECORDS=480 COMPONENT=E-W CORRECTION=ARC-ERR.
 DATE AND TIME=1969-09-14-15 SAMPLING INTERVAL= 0.010(SEC.)
 FORMAT NO.=301. STATION=KINUJIRAS
 TOTAL NUMBER OF DATA= 4050

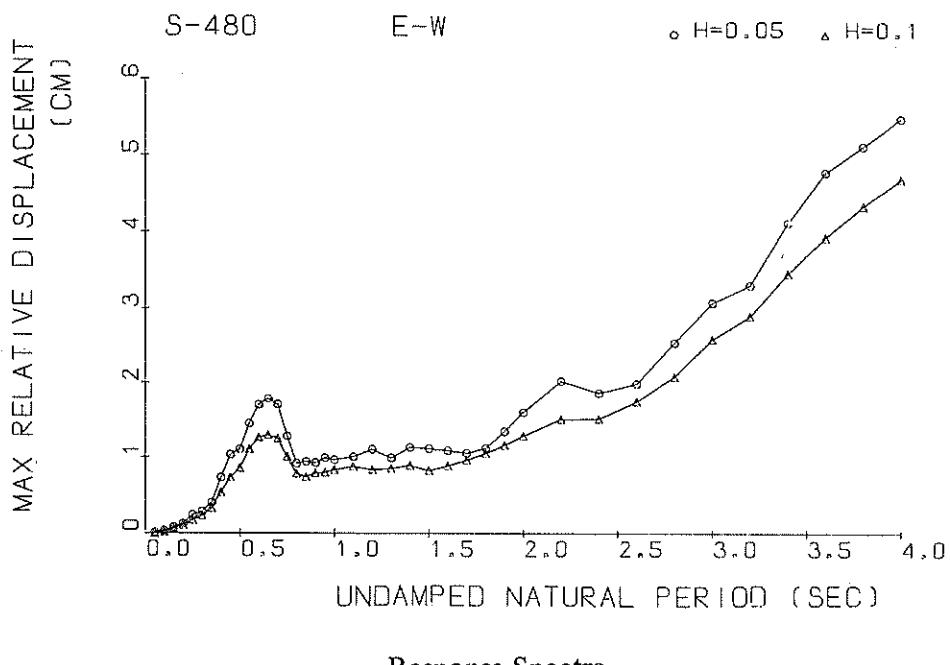
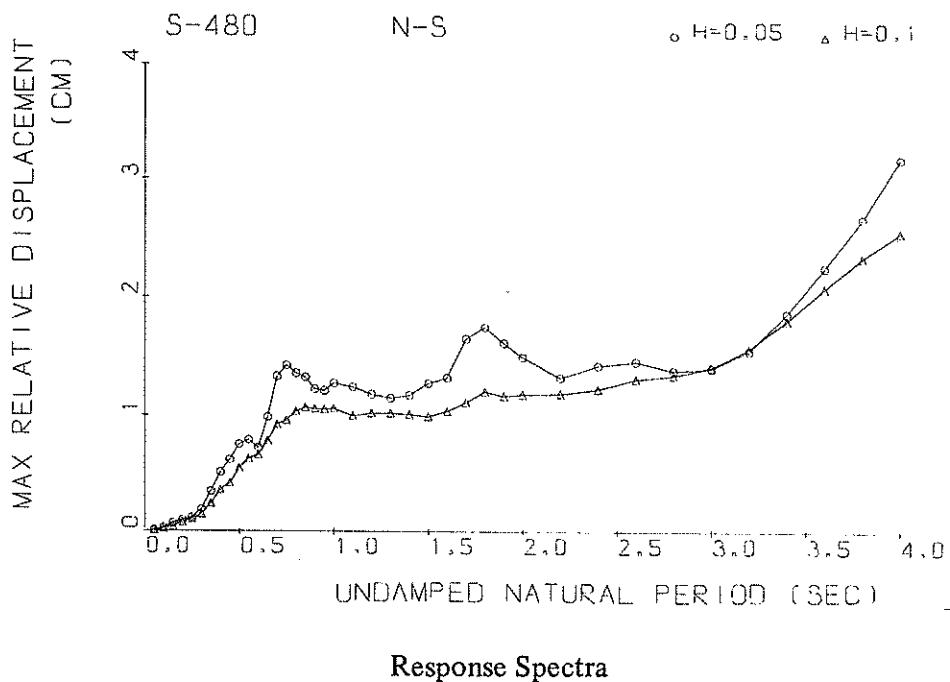
NO.	(2500)	(2550)	(2600)	(2650)	(2700)	(2750)	(2800)	(2850)	(2900)	(2950)
1	4.10	-7.40	-7.09	-1.60	-12.26	-13.18	-4.80	-10.08	-7.39	0.10
2	4.50	-7.71	-6.19	0.70	-10.97	-12.57	-5.00	-9.19	-6.90	0.40
3	3.40	-8.30	-5.40	3.71	-9.97	-11.51	-4.80	-8.68	-6.60	2.30
4	4.00	-8.49	-4.70	5.60	-8.77	-8.47	-4.70	-7.59	-7.09	3.10
5	4.70	-7.89	-4.00	4.90	-6.88	-6.58	-4.20	-6.70	-6.60	3.90
6	5.80	-7.39	-4.20	5.81	-5.09	-4.70	-3.60	-6.29	-6.20	2.60
7	4.20	-6.59	-3.80	6.80	-3.90	-4.70	-3.30	-5.50	-5.69	2.50
8	3.70	-5.70	-4.10	6.59	-3.30	-4.30	-2.70	-4.90	-4.80	1.90
9	3.30	-5.70	-3.20	6.00	-2.70	-3.80	-2.20	-4.00	-4.30	1.70
10	2.90	-5.90	-2.30	6.21	-1.71	-3.50	-1.60	-3.30	-3.80	1.10
11	2.60	-6.00	-1.40	7.00	-1.21	-3.10	-1.10	-3.10	-3.10	1.00
12	2.50	-6.20	-0.50	7.01	-0.70	-2.80	-0.50	-2.80	-2.80	0.10
13	2.20	-5.60	1.00	7.71	-0.30	-2.30	0.00	-1.20	-2.30	-0.40
14	2.10	-5.70	2.60	8.30	0.00	-2.00	0.20	-0.90	-2.60	-1.40
15	1.40	-5.90	4.40	8.51	0.80	-1.80	0.00	-0.50	-2.90	-1.90
16	-0.00	-5.70	5.30	9.10	1.80	-2.20	0.60	-0.70	-3.60	-2.00
17	-1.60	-5.80	4.80	9.30	3.50	-2.30	0.50	-0.10	-3.40	-2.30
18	-3.40	-6.00	5.10	9.27	4.27	-2.00	1.00	0.40	-2.80	-2.60
19	-4.30	-6.31	4.70	7.78	4.40	-2.10	0.90	1.20	-2.20	-3.30
20	-5.40	-6.90	5.50	5.88	4.50	-2.00	1.20	0.30	-1.60	-3.90
21	-6.20	-7.20	5.10	3.20	-4.80	-2.00	2.40	0.40	-1.30	-5.21
22	-6.81	-7.60	5.60	1.00	3.90	-1.70	2.80	0.10	-1.70	-6.71
23	-7.51	-7.89	5.89	-3.51	4.00	-2.00	2.40	-0.20	-2.30	-7.61
24	-8.29	-7.29	5.10	-7.21	4.00	-2.80	2.10	-0.40	-2.90	-8.10
25	-7.69	-6.58	4.38	-8.11	3.80	-4.11	1.80	-1.10	-3.30	-8.30
26	-7.29	-4.59	0.60	-9.02	3.40	-5.70	1.50	-1.70	-2.20	-8.30
27	-6.79	-4.10	5.20	-10.29	3.60	-6.30	1.00	-1.30	-1.70	-8.40
28	-6.20	-4.10	5.32	-9.71	2.90	-6.31	-0.10	-1.30	-6.60	-8.60
29	-5.70	-4.70	8.42	-10.21	2.50	-7.40	-1.10	-1.00	-1.20	-8.80
30	-5.00	-0.20	9.66	-10.60	1.60	-7.30	-2.50	-0.60	-1.00	-9.01
31	-4.60	-0.20	12.85	-10.81	-2.00	-7.00	-3.40	-0.40	-1.20	-9.55
32	-5.00	0.50	17.85	-11.35	-3.00	-7.20	-3.00	-0.70	-2.10	-11.99
33	-5.40	-0.50	20.13	-12.39	-4.82	-6.90	-4.40	-1.00	-2.81	-11.59
34	-5.90	-1.00	5.10	-15.10	-7.92	-6.60	-5.21	-1.70	-5.81	-11.18
35	-6.40	-1.40	23.44	-15.08	-9.64	-6.30	-6.21	-1.80	-6.61	-10.58
36	-6.20	-2.30	23.85	-16.62	-11.44	-6.30	-7.76	-1.90	-7.60	-9.90
37	-6.39	-3.00	24.74	-17.02	-13.02	-6.20	-12.33	-2.50	-7.71	-9.69
38	-5.78	-3.00	23.40	-17.51	-13.64	-6.20	-13.33	-3.50	-8.51	-9.19
39	-3.40	-1.70	21.92	-17.73	-14.75	-6.50	-14.21	-4.60	-8.70	-8.69
40	-2.30	-1.10	21.21	-18.25	-15.73	-6.80	-14.54	-5.60	-8.99	-8.29
41	-1.80	-1.30	19.24	-18.95	-16.24	-7.10	-15.34	-6.30	-8.28	-7.60
42	-2.40	-0.60	18.49	-19.44	-16.28	-7.40	-16.03	-6.50	-6.79	-7.20
43	-5.71	-1.10	18.16	-18.89	-15.89	-7.20	-16.12	-6.70	-5.89	-7.60
44	-6.61	-2.90	15.54	-18.06	-15.68	-7.50	-16.81	-6.80	-4.40	-7.79
45	-7.70	-3.30	14.41	-17.48	-15.29	-7.19	-16.92	-7.00	-3.40	-7.29
46	-7.70	-3.60	12.42	-17.08	-15.03	-6.70	-17.17	-7.20	-2.50	-6.80
47	-7.40	-4.51	10.08	-15.18	-14.69	-6.30	-16.66	-7.60	-1.60	-6.70
48	-7.10	-5.81	-8.59	-14.77	-14.49	-5.90	-15.96	-8.01	-1.00	-6.50
49	-7.20	-6.60	-8.14	-14.07	-14.18	-5.40	-15.06	-8.49	-0.60	-6.70
50	-7.30	-7.00	-3.99	-16.26	-13.78	-5.20	-12.23	-8.09	-0.30	-6.80

NO.	RECORD=S-480		COMPONENT=E-W		SIGNAL=GR.ACC.		CORRECTION=ARC.ERR.		STATION=KINUURA-S	
	(3000)	(3050)	(3100)	(3150)	(3200)	(3250)	(3300)	(3350)	(3400)	(3450)
1	-7.00	-10.50	-2.90	-9.91	-3.70	-1.40	0.50	-2.30	-3.20	-3.20
2	-7.10	-10.70	-3.20	-5.31	-4.40	-1.90	0.50	-2.40	-2.70	-2.70
3	-6.80	-10.80	-3.70	-6.41	-10.71	-5.30	-2.00	-0.40	-2.30	-2.90
4	-6.40	-10.80	-3.70	-7.31	-11.34	-5.70	-3.10	-0.60	-3.30	-3.00
5	-6.00	-11.00	-3.60	-7.81	-12.64	-6.31	-2.70	-0.70	-3.60	-3.40
6	-5.50	-11.09	-3.40	-8.61	-13.92	-6.90	-2.40	-0.90	-4.40	-5.30
7	-5.21	-10.90	-2.80	-9.20	-14.43	-6.90	-2.20	-0.70	-4.90	-6.00
8	-6.39	-10.80	-2.30	-9.01	-14.99	-7.10	-1.90	-0.30	-5.81	-6.51
9	-5.80	-10.91	-2.00	-9.41	-14.86	-7.31	-1.60	0.00	-6.60	-6.90
10	-6.29	-11.19	-1.60	-9.71	-14.81	-7.80	-1.30	0.50	-6.20	-7.29
11	-5.10	-10.99	-2.10	-10.01	-14.99	-7.50	-1.00	0.90	-5.70	-6.60
12	-5.28	-10.79	-1.50	-10.29	-14.67	-7.50	-0.20	1.20	-5.80	-6.20
13	-1.10	-10.28	-1.10	-9.50	-14.07	-7.60	0.50	1.50	-4.69	-5.59
14	-2.40	-9.57	-1.40	-9.78	-13.27	-7.30	-1.40	1.80	-3.60	-4.20
15	-1.70	-7.77	-0.50	-8.97	-12.54	-6.99	-2.00	1.90	-2.50	-3.40
16	-1.10	-5.59	0.	-7.37	-10.88	-6.09	-2.80	2.10	-1.70	-3.00
17	0.00	-3.80	0.00	-4.29	-9.95	-5.29	-3.70	-2.10	-2.70	-2.70
18	1.30	-2.40	0.00	-3.20	-7.47	-4.10	4.00	2.20	-1.20	-2.60
19	3.81	-2.40	0.50	-4.20	-5.39	-3.50	3.20	1.90	-1.00	-2.50
20	5.51	-1.40	1.10	-0.30	-4.51	-2.00	3.60	1.00	-0.70	-2.80
21	7.11	0.90	1.00	-1.10	-3.50	-2.00	3.80	1.40	-0.40	-2.20
22	7.91	2.10	1.60	3.00	-2.50	-1.70	4.10	1.40	-0.20	-2.20
23	8.51	3.40	2.10	4.80	-1.71	-1.40	4.40	0.90	0.00	-1.90
24	8.90	4.20	2.30	5.81	-1.30	-0.90	4.70	0.40	0.50	-1.60
25	9.00	3.89	2.40	6.71	-0.40	-0.30	4.90	-0.00	1.30	-1.10
26	8.80	2.20	2.00	7.81	0.10	-0.10	5.10	-0.40	1.90	-0.60
27	8.60	2.80	2.90	8.91	0.60	0.10	5.00	-0.90	3.10	-0.10
28	8.59	2.50	2.00	9.51	1.40	0.90	5.10	-0.90	3.50	0.50
29	7.77	2.10	2.90	9.81	1.80	1.20	5.30	-0.10	3.80	1.00
30	5.40	1.20	3.20	10.39	2.80	1.50	5.10	0.10	4.30	1.40
31	6.20	0.90	3.40	9.99	3.60	1.90	5.40	0.20	4.80	1.90
32	5.89	0.50	3.40	9.69	4.20	2.20	5.10	0.20	4.90	2.50
33	5.00	0.10	3.50	9.29	5.10	2.50	4.90	-0.00	3.80	3.90
34	4.39	-0.70	3.50	8.49	5.60	2.90	5.00	-0.30	5.80	4.00
35	2.60	-1.40	3.60	7.89	5.91	3.20	4.70	-0.10	5.20	3.40
36	2.10	-2.30	3.90	6.78	6.00	3.80	4.00	0.10	4.80	3.70
37	2.80	-2.80	4.50	4.99	5.90	4.40	3.40	0.40	4.40	3.90
38	3.10	-3.70	4.70	3.40	5.40	4.10	2.90	0.20	3.90	3.90
39	4.60	-4.60	4.80	2.40	5.10	4.20	2.20	-0.00	3.80	4.00
40	2.10	-5.61	3.90	0.80	4.60	3.60	1.90	-0.30	5.50	3.20
41	1.10	-6.41	3.40	-0.70	4.20	3.20	1.10	-0.40	3.10	4.50
42	-1.10	-7.00	2.50	-2.00	3.80	2.30	0.80	-0.70	3.00	4.80
43	-2.80	-7.20	1.40	-3.40	3.20	1.80	1.10	-1.10	2.70	4.90
44	-5.01	-7.00	0.90	-4.40	2.50	1.10	0.80	-1.40	3.00	5.10
45	-6.64	-6.89	0.30	-5.31	1.80	0.60	-1.90	-1.90	3.10	5.00
46	-8.01	-6.29	0.00	-6.41	1.10	0.10	0.50	-2.10	2.50	4.70
47	-8.61	-5.60	-0.50	-7.51	0.1n	-0.40	0.70	-1.70	1.40	4.80
48	-9.51	-4.99	-0.70	-8.32	-1.1n	-1.00	0.90	-1.80	0.90	4.40
49	-10.01	-3.60	-1.20	-9.41	-2.00	-1.30	1.00	-1.70	0.30	4.10
50	-10.50	-3.00	-1.60	-9.70	-2.8n	-1.60	-1.00	-2.00	-0.90	3.60

RECORD=S-480		COMPONENT=E-W		DATE AND TIME=1969-09-14-15		SAMPLING INTERVAL= 0.040(SEC)		CORRECTION=ARC.ERR.		STATION=KINUURA'S	
										TOTAL NUMBER OF DATA= 4050	
NO.	(3500)	(3550)	(3600)	(3650)	(3700)	(3750)	(3800)	(3850)	(3900)	(3950)	
1	3.50	3.10	2.40	1.80	-0.50	0.90	10.30	6.20	3.60	0.00	
2	3.40	2.90	2.10	1.60	-1.00	0.40	10.10	6.10	3.50	0.30	
3	2.80	2.60	1.70	2.10	-1.70	0.20	9.89	5.80	4.30	0.60	
4	2.30	2.40	0.90	2.30	-2.50	-0.20	9.59	5.70	5.51	0.90	
5	0.80	1.90	0.40	2.40	-2.70	-0.60	9.19	5.50	6.61	1.20	
6	-0.40	1.50	-0.20	2.60	-2.70	-1.30	8.79	5.20	7.50	1.50	
7	-0.80	0.80	-0.70	3.00	-3.20	-1.0	7.99	4.90	7.71	1.70	
8	-2.30	0.40	-1.00	3.50	-3.70	-1.80	7.50	4.70	8.40	3.00	
9	-3.70	-0.30	-1.30	3.00	-4.00	-2.00	7.29	4.50	8.71	4.90	
10	-4.51	-1.20	-1.60	2.60	-3.80	-2.30	5.99	4.20	9.10	5.30	
11	-5.81	-1.40	-2.00	2.80	-5.50	-2.50	4.99	3.50	8.91	5.70	
12	-7.21	-1.70	-2.70	3.00	-2.90	-2.90	3.20	2.20	9.20	6.10	
13	-8.32	-2.40	-3.50	3.10	-2.60	-3.30	2.00	1.50	9.30	6.41	
14	-9.91	-3.40	-3.50	2.60	-2.50	-3.0	1.40	0.20	9.20	7.40	
15	-10.51	-3.80	-4.00	2.80	-2.30	-3.50	0.80	-0.70	9.30	6.70	
16	-10.83	-4.20	-4.00	3.00	-2.30	-4.00	-0.10	-1.10	9.09	6.40	
17	-11.82	-4.80	-4.30	2.70	-2.20	-4.00	-1.30	-1.30	8.80	5.90	
18	-12.41	-5.30	-5.30	2.80	-2.00	-4.50	-2.20	-1.80	8.60	5.60	
19	-12.71	-5.20	-3.20	2.80	-1.90	-3.70	-2.30	-2.30	8.19	5.40	
20	-13.09	-4.90	-3.40	2.50	-1.70	-3.80	-2.60	-2.80	7.79	5.10	
21	-12.67	-4.60	-3.70	2.20	-1.60	-3.60	-3.40	-3.40	7.36	4.60	
22	-11.66	-4.10	-3.70	2.00	-1.90	-3.90	-3.10	-4.00	6.10	4.40	
23	-10.27	-4.40	-5.10	1.90	-1.70	-3.20	-4.60	-4.70	6.00	4.10	
24	-8.98	-4.30	-2.10	1.70	-1.70	-3.20	-5.10	-5.20	5.80	3.90	
25	-8.09	-3.80	-2.40	1.50	-1.40	-3.40	-5.60	-5.60	5.60	3.50	
26	-7.60	-3.40	-1.60	1.20	-1.30	-2.90	-5.90	-5.90	5.10	3.10	
27	-7.19	-2.80	-1.00	1.00	-1.10	-2.60	-6.10	-6.10	4.60	2.60	
28	-6.39	-2.50	-1.10	0.70	-0.90	-2.70	-6.30	-5.70	4.00	2.10	
29	-5.60	-1.70	-0.70	0.20	-0.20	-2.10	-6.80	-6.80	3.50	1.20	
30	-4.89	-1.40	-0.70	0.00	0.00	-0.70	-7.30	-7.30	2.50	0.00	
31	-3.70	-0.50	1.00	0.10	1.80	-1.10	-7.71	-6.20	1.90	0.10	
32	-2.00	-0.30	1.00	0.50	2.50	-0.70	-8.39	-6.00	1.30	0.70	
33	-0.60	0.00	1.80	0.90	3.40	-0.20	-7.69	-5.70	0.60	1.70	
34	-0.60	0.50	2.00	0.90	4.50	-0.50	-7.29	-5.70	0.00	-1.70	
35	-0.40	0.60	2.00	1.10	4.90	-2.00	-6.59	-5.30	-0.30	-2.20	
36	-0.10	1.00	2.50	1.40	5.10	-3.40	-5.79	-4.70	-0.90	-2.30	
37	0.00	1.60	2.00	1.70	5.00	-4.71	-4.59	-4.20	-1.30	-2.20	
38	0.30	1.90	2.10	1.80	5.10	-6.11	-3.20	-4.00	-1.60	-1.60	
39	0.60	2.20	1.90	1.70	4.80	-6.81	-2.40	-3.80	-1.30	-2.50	
40	1.50	2.40	2.00	1.60	4.50	-7.41	-1.10	-3.90	-1.20	-2.50	
41	2.10	2.40	2.10	1.80	4.40	-7.91	-0.20	-3.10	-0.90	-2.10	
42	3.00	2.50	1.90	2.00	4.00	-8.70	0.40	-2.90	-0.60	-2.60	
43	3.30	2.90	2.20	2.00	3.70	-9.01	-1.60	-2.30	-0.50	-2.00	
44	3.50	3.10	2.50	2.00	3.10	-9.50	-2.20	-1.60	-0.30	-1.60	
45	3.50	3.00	2.60	1.70	2.50	-9.70	-3.60	-0.90	-0.20	-1.10	
46	3.40	2.80	2.00	1.0	1.50	-2.10	-9.80	-4.60	-0.20	-0.80	
47	3.10	2.40	1.60	1.10	1.70	-2.10	-9.90	-5.40	-0.20	-0.10	
48	3.40	2.50	1.60	0.70	1.70	-1.70	-10.10	-5.70	-1.10	-0.20	
49	3.00	2.80	2.30	0.20	1.40	-1.00	-10.00	-5.20	-0.20	-0.50	
50	3.40	2.20	0.60	1.70	2.50	-2.50	-3.60	-0.90	-0.20	-0.80	







RESPONSE SPECTRUM

RECORD = S-480 N-S 1969-09-14-15 GIFUKEN
 STATION = KINUURA-S INPUT SIGNAL = GR.ACCELEROMETER.
 SAMPLING INTERVAL = 0.0100(SEC) CORRECTION = ARC.ERR.
 TIME LENGTH = 25.000(SEC) SKIPPED LENGTH = 9.000(SEC)
 DAMPING COEFFICIENT = 0.050 MAX.GROUND ACC.= 39.53(GAL)

PERIOD (SEC)	ACCELF RATIO	ABSOLUT ACCELE. (GAL)	RELATIV ACCELE. (GAL)	RELATIVE VELOCITY (KINE)	RELATIVE DISPLACE (CM)
0.050	1.076	42.53	12.13	0.122	0.0027
0.100	2.183	86.31	74.15	1.272	0.0218
0.150	2.586	102.23	88.97	2.144	0.0586
0.200	2.130	84.19	99.89	2.759	0.0853
0.250	1.728	68.30	57.91	2.490	0.1073
0.300	2.061	81.46	84.30	3.746	0.1843
0.350	2.756	108.96	98.53	5.848	0.3361
0.400	3.159	124.88	126.54	7.163	0.5037
0.450	3.032	119.88	123.88	8.744	0.6128
0.500	2.992	118.28	126.36	9.215	0.7448
0.550	2.595	102.60	115.15	8.699	0.7812
0.600	1.976	78.11	89.93	7.394	0.7088
0.650	2.332	92.21	102.59	9.391	0.9823
0.700	2.713	107.26	110.46	12.491	1.3244
0.750	2.527	99.88	116.15	12.701	1.4156
0.800	2.121	83.84	115.40	12.309	1.3526
0.850	1.836	72.59	98.79	10.715	1.3191
0.900	1.515	59.89	86.42	8.838	1.2198
0.950	1.343	53.10	80.78	8.170	1.2050
1.000	1.276	50.46	78.77	8.416	1.2680
1.100	1.027	40.59	68.97	8.664	1.2343
1.200	0.820	32.42	66.19	7.979	1.1728
1.300	0.685	27.08	61.39	7.052	1.1465
1.400	0.602	23.80	58.19	7.029	1.1692
1.500	0.569	22.48	54.28	7.359	1.2710
1.600	0.517	20.43	49.20	7.327	1.3198
1.700	0.573	22.65	45.81	6.885	1.6473
1.800	0.542	21.44	45.90	6.289	1.7482
1.900	0.448	17.70	46.17	6.151	1.6121
2.000	0.375	14.84	43.41	5.902	1.4949
2.200	0.277	10.94	47.52	5.956	1.3215
2.400	0.250	9.87	48.26	4.982	1.4204
2.600	0.219	8.64	45.78	4.599	1.4573
2.800	0.179	7.10	43.82	4.534	1.3856
3.000	0.158	6.25	43.19	4.510	1.4092
3.200	0.155	6.12	42.77	4.322	1.5568
3.400	0.166	6.55	41.87	4.011	1.8816
3.600	0.178	7.02	40.67	3.691	2.2658
3.800	0.188	7.41	39.68	3.962	2.6836
4.000	0.201	7.94	39.23	4.376	3.2021

RESPONSE SPECTRUM

RECORD = S-480 N-S 1969-09-09-14-15 GIFUKEN
 STATION = KINUURA=S INPUT SIGNAL = GR.ACCE.
 SAMPLING INTERVAL = 0.0100(SEC) CORRECTION = ARC.ERR.
 TIME LENGTH = 25.000(SEC) SKIPPED LENGTH = 9.000(SEC)
 DAMPING COEFFICIENT = 0.100 MAX.GROUND ACC.= 39.53(GAL)

PERIOD (SEC)	ACCELE RATIO	ABSOLUT ACCELE. (GAL)	RELATIV ACCELE. (GAL)	RELATIVE VELOCITY (KINE)	RELATIVE DISPLACE (CM)
0.050	1.051	41.54	9.22	0.107	0.0026
0.100	1.785	70.55	53.17	0.900	0.0178
0.150	1.842	72.83	56.95	1.405	0.0405
0.200	1.835	72.56	73.69	2.045	0.0730
0.250	1.600	63.27	48.15	1.998	0.0986
0.300	1.577	62.36	60.96	2.677	0.1395
0.350	1.960	77.48	64.94	4.350	0.2376
0.400	2.207	87.26	91.89	4.605	0.3483
0.450	2.049	81.02	81.82	5.714	0.4089
0.500	2.194	86.73	93.19	5.974	0.5390
0.550	2.103	83.15	95.16	6.032	0.6231
0.600	1.861	73.57	86.12	6.494	0.6566
0.650	1.871	73.95	83.27	7.786	0.7792
0.700	1.917	75.78	84.87	9.325	0.9233
0.750	1.740	68.77	85.68	9.257	0.9582
0.800	1.652	65.30	87.46	9.455	1.0375
0.850	1.512	59.76	81.99	8.825	1.0674
0.900	1.339	52.95	76.19	7.836	1.0566
0.950	1.203	47.56	73.31	7.545	1.0552
1.000	1.096	43.34	70.69	7.536	1.0630
1.100	0.856	33.83	62.72	7.188	0.9990
1.200	0.728	28.79	61.10	6.963	1.0229
1.300	0.629	24.87	58.37	6.358	1.0235
1.400	0.544	21.49	55.55	6.442	1.0155
1.500	0.457	18.07	52.32	6.642	0.9967
1.600	0.421	16.63	48.63	6.620	1.0450
1.700	0.398	15.73	45.09	6.386	1.1230
1.800	0.385	15.23	42.83	6.038	1.2131
1.900	0.338	13.36	42.53	5.701	1.1784
2.000	0.311	12.30	41.72	5.438	1.1917
2.200	0.262	10.35	44.93	5.120	1.2001
2.400	0.225	8.90	45.90	4.876	1.2370
2.600	0.208	8.21	44.90	4.553	1.3260
2.800	0.185	7.30	43.72	4.300	1.3577
3.000	0.170	6.71	43.01	4.261	1.4261
3.200	0.166	6.55	42.45	4.112	1.5861
3.400	0.169	6.68	41.77	3.876	1.8279
3.600	0.173	6.85	41.01	3.586	2.1032
3.800	0.175	6.91	40.40	3.589	2.3597
4.000	0.172	6.78	40.12	3.788	2.5753

RESPONSE SPECTRUM

RECORD = S-480 E-W 1969-09-14-15 GIFUKEN
 STATION = KINUURA-S INPUT SIGNAL = GR.ACCELERATION
 SAMPLING INTERVAL = 0.0100(SEC) CORRECTION = ARC.ERR.
 TIME LENGTH = 25.000(SEC) SKIPPED LENGTH = 9.000(SEC)
 DAMPING COEFFICIENT = 0.050 MAX.GROUND ACC.= 60.83(GAL)

PERIOD (SEC)	ACCELE RATIO	ABSOLUT ACCELE. (GAL)	RELATIV ACCELE. (GAL)	RELATIVE VELOCITY (KINE)	RELATIVE DISPLACE (CM)
0.050	1.128	68.58	14.97	0.148	0.0043
0.100	1.852	112.66	82.57	1.358	0.0286
0.150	2.102	127.84	89.74	2.198	0.0723
0.200	1.904	115.80	89.93	2.847	0.1175
0.250	2.510	152.70	139.33	4.748	0.2406
0.300	2.022	123.02	116.41	4.951	0.2783
0.350	2.090	127.14	104.81	5.796	0.3928
0.400	2.962	180.17	171.32	10.558	0.7277
0.450	3.329	202.50	203.29	14.945	1.0340
0.500	2.883	175.37	199.85	13.972	1.1058
0.550	3.125	190.07	235.17	18.359	1.4493
0.600	3.080	187.34	225.96	17.963	1.6981
0.650	2.748	167.15	217.34	18.668	1.7773
0.700	2.267	137.88	198.24	16.598	1.6995
0.750	1.481	90.07	138.22	13.049	1.2750
0.800	0.931	56.65	104.29	8.989	0.9127
0.850	0.848	51.55	98.48	7.551	0.9375
0.900	0.746	45.36	105.50	8.028	0.9207
0.950	0.716	43.56	101.96	9.115	0.9866
1.000	0.628	38.23	92.40	9.395	0.9600
1.100	0.540	32.86	76.97	8.470	0.9964
1.200	0.497	30.25	70.80	7.339	1.0981
1.300	0.382	23.22	69.71	6.873	0.9853
1.400	0.375	22.84	67.49	6.057	1.1276
1.500	0.324	19.70	65.11	5.518	1.1118
1.600	0.277	16.88	64.22	5.609	1.0904
1.700	0.239	14.51	63.12	5.457	1.0541
1.800	0.226	13.75	62.86	5.239	1.1186
1.900	0.243	14.81	63.44	5.152	1.3469
2.000	0.261	15.90	64.26	5.369	1.5988
2.200	0.272	16.55	64.52	6.377	2.0226
2.400	0.211	12.85	62.22	7.309	1.8673
2.600	0.192	11.68	58.84	7.555	1.9936
2.800	0.212	12.92	56.55	7.099	2.5447
3.000	0.224	13.65	56.67	6.242	3.0905
3.200	0.212	12.87	55.94	6.426	3.3183
3.400	0.233	14.18	54.79	6.936	4.1351
3.600	0.241	14.63	55.69	7.191	4.7902
3.800	0.232	14.09	56.52	7.237	5.1368
4.000	0.224	13.64	57.11	7.135	5.5000

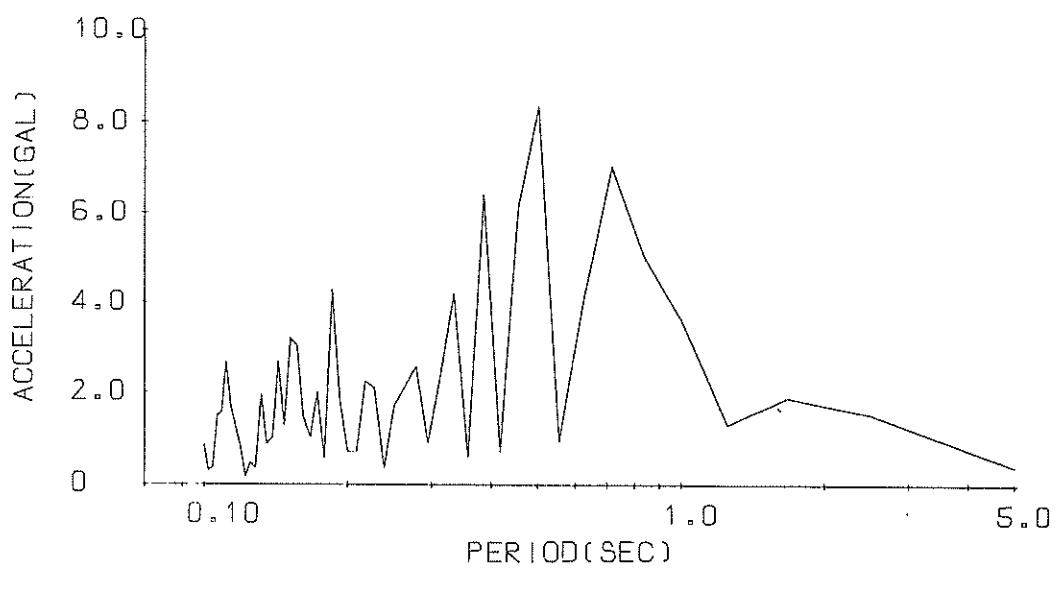
RESPONSE SPECTRUM

RECORD = S-480 E-W 1969-09-09-14-15 GIFUKEN
 STATION = KINUURA-S INPUT SIGNAL = GR.ACCELERATION
 SAMPLING INTERVAL = 0.0100(SEC) CORRECTION = ARC.ERR.
 TIME LENGTH = 25.000(SEC) SKIPPED LENGTH = 9.000(SEC)
 DAMPING COEFFICIENT = 0.100 MAX.GROUND ACC.= 60.83(GAL)

PERIOD (SEC)	ACCELE RATIO	ABSOLUT ACCELE. (GAL)	RELATIV ACCELE. (GAL)	RELATIVE VELOCITY (KINE)	RELATIVE DISPLACE (CM)
0.050	1.116	67.91	12.77	0.142	0.0043
0.100	1.382	84.07	53.89	0.928	0.0212
0.150	1.826	111.07	69.93	1.939	0.0627
0.200	1.759	106.99	72.08	2.424	0.1077
0.250	1.905	115.85	99.01	3.277	0.1800
0.300	1.742	105.98	98.56	3.884	0.2376
0.350	1.790	108.89	103.58	4.997	0.3339
0.400	2.246	136.60	129.61	8.441	0.5436
0.450	2.423	147.35	156.16	10.998	0.7395
0.500	2.282	138.82	168.25	11.656	0.8618
0.550	2.434	148.06	177.74	13.782	1.1116
0.600	2.355	143.26	178.76	13.849	1.2743
0.650	2.053	124.89	174.35	13.744	1.3030
0.700	1.720	104.65	163.58	12.449	1.2575
0.750	1.213	73.81	134.63	10.392	1.0132
0.800	0.834	50.74	111.54	8.507	0.7883
0.850	0.703	42.74	103.57	7.544	0.7451
0.900	0.669	40.72	101.55	7.688	0.7949
0.950	0.610	37.12	97.73	8.101	0.8059
1.000	0.566	34.44	91.53	8.264	0.8423
1.100	0.495	30.10	79.20	7.782	0.8873
1.200	0.400	24.33	71.26	6.902	0.8461
1.300	0.338	20.56	67.66	6.432	0.8611
1.400	0.305	18.57	66.69	5.959	0.9001
1.500	0.252	15.36	66.24	5.572	0.8349
1.600	0.230	14.01	65.47	5.540	0.8942
1.700	0.222	13.47	64.70	5.455	0.9674
1.800	0.218	13.24	64.32	5.369	1.0579
1.900	0.217	13.20	64.33	5.381	1.1678
2.000	0.218	13.25	64.48	5.538	1.2923
2.200	0.206	12.52	64.11	6.159	1.5134
2.400	0.173	10.53	62.36	6.731	1.5175
2.600	0.175	10.64	59.92	6.897	1.7543
2.800	0.184	11.21	57.73	6.609	2.0915
3.000	0.192	11.66	56.25	6.031	2.5916
3.200	0.189	11.52	55.53	6.014	2.9078
3.400	0.198	12.03	55.40	6.437	3.4695
3.600	0.200	12.18	55.64	6.683	3.9457
3.800	0.198	12.04	56.06	6.777	4.3559
4.000	0.194	11.79	56.52	6.756	4.6997

S-480 N-S

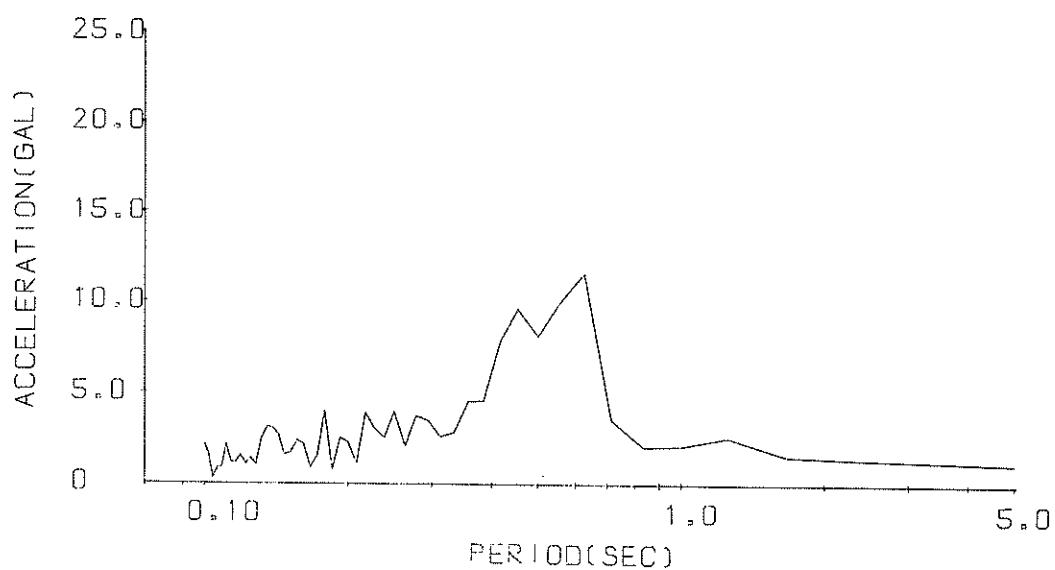
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Fourier Spectrum

S-480 E-W

TSK=11.00
TUS=5.00



Fourier Spectrum

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