

*Gravity Survey along the Lines of Precise Levels  
throughout Japan by Means of  
a WORDEN Gravimeter.*

Part II. Chûgoku District.

By Chuji TSUBOI, Akira JITSUKAWA and Hirokazu TAJIMA,  
Earthquake Research Institute.

(Read Feb. 17, 1953.—Received March 10, 1954.)

CONTENTS

|   | Page |
|---|------|
| 1. Introduction.....  | 48   |
| 2. Lines of Precise Levels in the Chûgoku District .....  | 48   |
| 3. Method of Calculations (I).....  | 51   |
| 4. Method of Calculations (II) .....  | 56   |
| 5. Results .....  | 58   |
| 6. Acknowledgements .....   | 61   |
| Reference.....  | 61   |
| Table I      Number of Gravimeter Stations.....   | 49   |
| Table II      Gravity Values at Key Stations in the Chûgoku<br>District as Determined by the First Method.....                            | 53   |
| Table III     Gravity Values at Key Stations in the Chûgoku<br>District as Determined by the Second Method.....                           | 54   |
| Table IV     Rate of Drift for Various Loops.....   | 55   |
| Table V      Comparison of the Gravity Values at Key Stations<br>in the Chûgoku District as Determined by Three<br>Different Methods..... | 55   |
| Table VI     Results along Route 11.....  | 63   |
| Table VII    Results along Route 12 .....   | 65   |
| Table VIII   Results along Route 13 .....   | 68   |
| Table IX     Results along Route 14 .....   | 71   |
| Table X      Results along Route 15 .....   | 74   |
| Table XI     Results along Route 16.....  | 80   |
| Table XII    Results along Route 17.....  | 84   |
| Table XIII   Results along Route 18.....  | 86   |
| Table XIV    Synoptic Results for Tottori Prefecture.....   | 92   |

|             |  |        |
|-------------|--|--------|
| Table XV    | Synoptic Results for Shimane Prefecture.....   | 96     |
| Table XVI   | Synoptic Results for Okayama Prefecture.....   | 101    |
| Table XVII  | Synoptic Results for Hiroshima Prefecture.....   | 106    |
| Table XVIII | Synoptic Results for Yamaguchi Prefecture.....   | 111    |
| Fig. 1.     | Chûgoku District.....  | 49     |
| Fig. 2.     | Lines of Precise Levels in the Chûgoku District and<br>Prefecture Boundaries.....  | 50     |
| Fig. 3.     | Key Stations in the Chûgoku District.....  | 52     |
| Fig. 4.     | Connection of Two Small Loops.....   | 56     |
| Fig. 5.     | Connection of the Routes 15 <sub>2</sub> and 17 <sub>1</sub> .....   | 57     |
| Fig. 6.     | Principal Horizontal Strains of the Earth's Crust Caused<br>by the Nankai Earthquake of 1946 (after INOUE,<br>SUZUKI and ONO)..... | 60     |
| Fig. 7.     | Gravity Stations in Tottori Prefecture.....  | 92     |
| Fig. 8.     | Gravity Stations in Shimane Prefecture.....  | Pl. IV |
| Fig. 9.     | Gravity Stations in Okayama Prefecture.....  | 100    |
| Fig. 10.    | Gravity Stations in Hiroshima Prefecture.....  | 105    |
| Fig. 11.    | Gravity Stations in Yamaguchi Prefecture.....  | 110    |
| Fig. 12.    | Lines of Equal BOUGUER Anomalies in the Chûgoku<br>District Based on the International Formula .Pl. V (in pocket)                  |        |

## 1. Introduction

The work to measure the gravity value at every other one of the bench marks laid along the whole lines of precise levels which densely cover entire Japan was started by us in the spring of 1951 and is progressing satisfactorily with the aid of a WORDEN gravimeter. The purpose of this big project was stated in Part I (C. TSUBOI et al.:1953) of the present serial reports. The results which are obtained by our measurements will be published serially and separately for each of the seven districts into which whole Japan is divided. The results obtained in the Shikoku District were published as Part I of the serial reports in which our method of measurements and reductions were also described in detail. The present report is the second of the serial reports and is concerned particularly with the results obtained in the Chûgoku District.

## 2. Lines of Precise Levels in the Chûgoku District

The Chûgoku District occupies the westernmost part of Honshû, the main island of Japan (Fig. 1). It lies to the north of the Shikoku

District across the Seto Inland Sea. It is approximately 300 km. long in the EW and 150 km. wide in the NS directions. The district is about 32,000 km<sup>2</sup> in area and comprises five administrative prefectures, viz. (30) Tottori, (31) Shimane, (32) Okayama, (33) Hiroshima, and (34) Yamaguchi. The lines of precise levels in this district, along which we measured gravity values are shown in Fig. 2, together with the prefecture boundaries. The lines are altogether about 1,700 km. in length and at 420 points along them, the gravity values were determined. As measured along the lines of precise levels, two consecutive bench marks are 2 km. apart and therefore two consecutive gravity stations are 4 km. apart on the average. Since the greater part of the lines was traversed twice in opposite directions in order to make appropriate gravimetric loops, the total distance covered by us may have easily reached 5,000 km. The gravity values were determined not only at bench marks, but also at several local weather stations and other identifiable points, of which the heights are known with sufficient accuracy for the purpose of our gravity reductions. The number

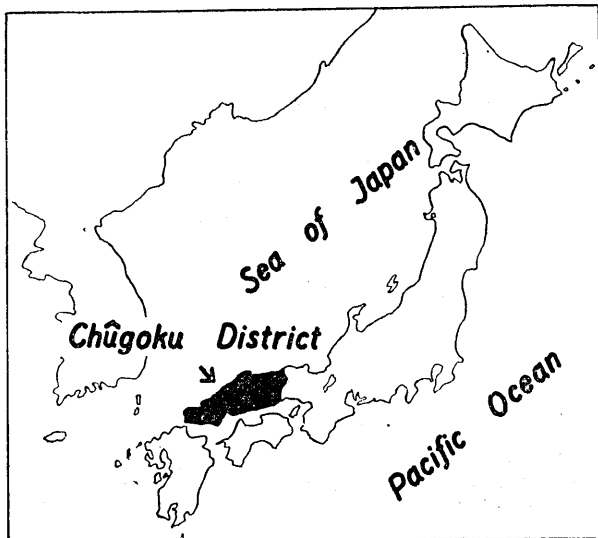


Fig. 1. Chūgoku District.

of points at which the gravity values were determined in each of the five prefectures is as in Table I. The measurements were made partly in December, 1951, but mainly in June, July and August, 1952.

Table I.  
Number of Gravimeter Stations.

| Prefecture    | Number |
|---------------|--------|
| 30) Tottori   | 64     |
| 31) Shimane   | 83     |
| 32) Okayama   | 79     |
| 33) Hiroshima | 94     |
| 34) Yamaguchi | 100    |
| Total         | 420    |

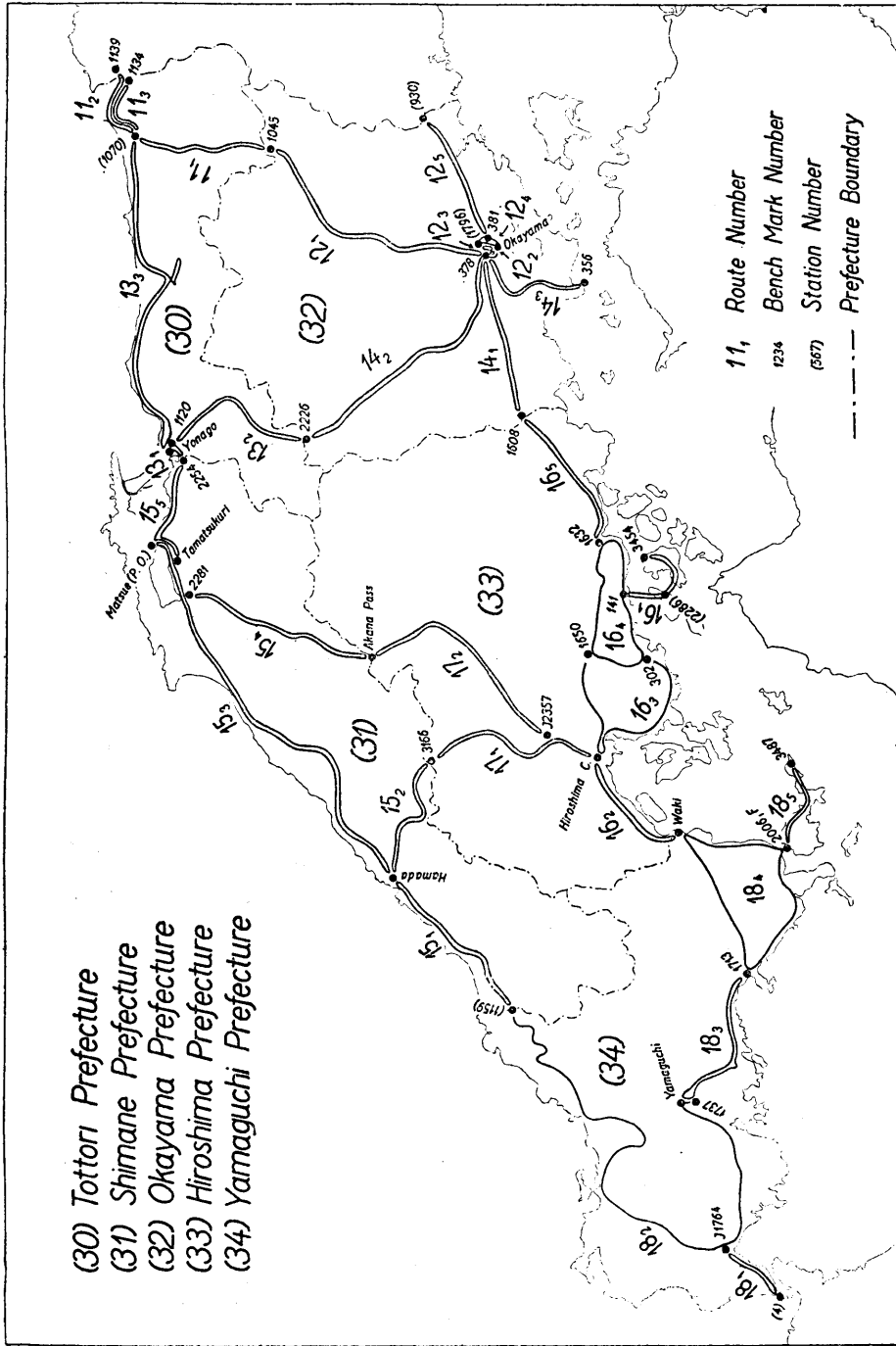


Fig. 2. Lines of Precise Levels in the Chūgoku District and Prefecture Boundaries.

### 3. Method of Calculation (I)

Our methods of measurements are similar to those described in Part I for the Shikoku District except that in this survey we removed the large dial disk of the gravimeter in order to avoid its accidental rotation which might happen during the process of transportations and settings. When necessary, the large dial head was twisted with a screw driver. As was stated before, we covered the whole length of the lines of measurements by making a gravimetric loop for each section of the lines in order to make the drift correction of the gravimeter spring possible. The whole length of the line of measurements is therefore an interconnected net consisting of a number of chains of short loops. The loops are numbered as illustrated in Fig. 2. To cover the whole length of the line in this way may not have been a wise procedure and may seem rather clumsy. It might have been better done by making fewer longer loops. But chiefly through unavoidable circumstances regarding transportation facilities, the procedure stated above was what we were compelled to adopt. From the nature of this procedure, the correction against the drift of the gravimeter spring was made for each one of the short loops separately and the final results for the consecutive loops were connected successively. The results obtained in this way may not be accurate when compared with those that would have been obtained by making a simultaneous net adjustment with fewer longer loops. But since our WORDEN gravimeter has been working with admirable perfectness, it is not likely that any difference in the process of reduction will result in a large difference in the final values.

In order to see how far the difference in the process of reduction will affect the results, let us calculate the gravity values at many key stations on the line which encircles the Chûgoku District by several different methods of reduction and compare the results.

Let us take the line which is shown in Fig. 3. First of all, we take a large clockwise loop:

Tottori (Prefecture Office) → B.M. 1045 → B.M. 378 → B.M. 1608 → B.M. 1632 → Hiroshima Castle → Waki → B.M. 1713 → B.M. 1737 → Prefecture Boundary → Hamada Lodging Inn → Matsue (Prefecture Office) → B.M. 2254 → Tottri (Prefecture Office).

The numerals given near the arrows attached to each of the sections in Fig. 3 are apparent gravity differences (not corrected for drift) between the starting and ending points of that section as measured

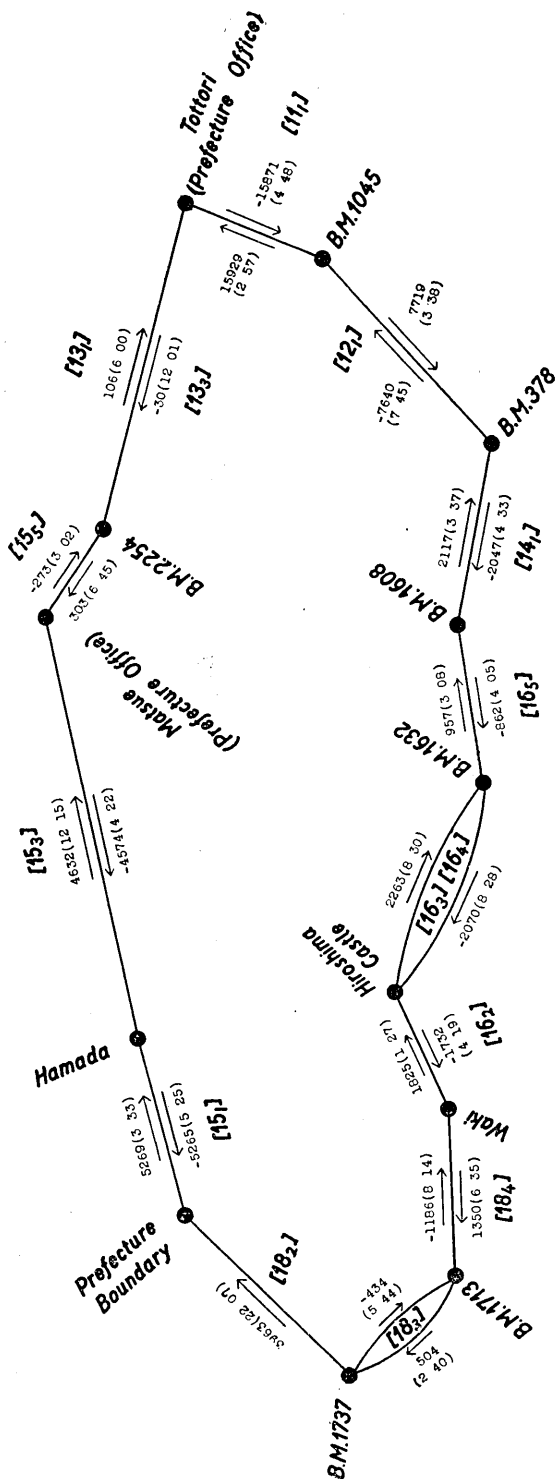


Fig. 3. Key Stations in the Chūgoku District.

in the direction indicated. They involve the effect of drift of the gravimeter spring. The numerals given in the brackets are the time in hour and minute needed to cover the respective distances. The numbers in the square brackets are the route numbers.

The total closing residual for this large clockwise loop is 6.88 mgals. and the time needed to complete this loop was 86.1 hours. The average rate of drift of the gravimeter spring is therefore

$$R = \frac{6.88}{86.1} = 0.0800 \text{ mgal./hour.}$$

The measured gravity values at all the stations on this loop were corrected against the effect of the drift of the gravimeter spring with this constant. So if  $\sum \delta T$  is the time needed to arrive at a station from Tottori, the correction  $R \sum \delta T$  was given to the measured gravity value at that station. Thus we get the gravity values at the stations relative to the value at Tottori. But since we

know already from other measurements that the gravity value at Tottori is 979.80429, we get finally the values given in Table II.

Table II. Gravity Values at Key Stations in the Chûgoku District as Determined by the First Method. (in 0.01 mgal.)

|                             | $\delta g$ | $\sum \delta g$<br>Obs. | $\delta T$   | $\sum \delta T$ | $R \sum \delta T$ | $\sum \delta g$<br>Corr. | $g$<br>979. |
|-----------------------------|------------|-------------------------|--|-----------------|-------------------|--------------------------|-------------|
| Tottori (Prefecture Office) |            | 0                       |  | 0               | 0                 | 0                        | 80429       |
|                             | -15871     |                         | <sup>h</sup> <sub>4</sub> <sup>m</sup> <sub>48</sub> |                 |                   |                          |             |
| B.M. 1045                   |            | -15871                  |  | 4 48            | 38                | -15909                   | 64520       |
| B.M. 378                    | 7719       | -8152                   |  | 3 38            | 8 26              | 67                       | 72210       |
|                             | -2047      | -10199                  |  | 4 33            | 12 59             | 104                      | 70126       |
| B.M. 1608                   |            | -11061                  |  | 4 05            | 17 04             | 137                      | 69231       |
| B.M. 1632                   | - 862      | -13131                  |  | 8 28            | 25 32             | 204                      | 67094       |
| Hiroshima Castle            | -2070      | -14863                  |  | 4 19            | 29 51             | 239                      | 65327       |
| Waki                        | 1350       | -13513                  |  | 6 35            | 36 26             | 291                      | 66625       |
| B.M. 1713                   |            | -13009                  |  | 2 40            | 39 06             | 312                      | 67108       |
| B.M. 1737                   | 504        | -9046                   |  | 22 07           | 61 13             | 489                      | 70894       |
| Prefecture Boundary         | 3963       | -3777                   |  | 3 33            | 64 46             | 518                      | 76134       |
| Hamada                      | 5269       | 855                     |  | 12 15           | 77 01             | 616                      | 80668       |
| Matsue (Prefecture Office)  | 4632       | 582                     |  | 3 02            | 80 03             | 640                      | 80371       |
| B.M. 2254                   | - 273      | 688                     |  | 6 00            | 86 03             | 688                      | 80429       |
| Tottori (Prefecture Office) | 106        |                         |  |                 |                   | 0                        |             |

In the second place, we can arrange our results of measurements so as to form a large counter-clockwise loop as a whole, except for the section between B.M. 1737 and the Prefecture Boundary which was covered in the clockwise sense only.

In this case, we have two routes to arrive at the Prefecture Boundary from B.M. 1737: the counter-clockwise one via Tottori and the clockwise one. For the first route,  $g(1737) - g(\text{P.B.}) = \sum_{1737}^{\text{P.B.}} \delta g$  is apparently 42.65 mgals. and the time  $t$  needed to cover this distance was 69.9 hours. For the second route, the corresponding values are  $\sum \delta g = 39.63$  mgals. and  $t = 22.1$  hours. If we assume that the rate of drift of the gravimeter spring was the same for both routes, then we have

$$42.65 = g(1737) - g(\text{P.B.}) + 69.9 R$$

$$39.63 = g(1737) - g(\text{P.B.}) + 22.1 R.$$

From the above equations, we get

$$42.65 - 39.63 = R(69.9 - 22.1),$$

hence

$$R = \frac{3.02}{47.8} = 0.0632 \text{ mgal./hour.}$$

Adopting this rate, the gravity values at all the stations on the loop can be calculated as before. The results are given in Table III.  $g(\text{Tottori})$  was taken to be 979.80429 as before.

Table III. Gravity Values at Key Stations in the Chūgoku District as Determined by the Second Method. (in 0.01 mgal.)  
First Route

|                             | $\delta g$ | $\Sigma \delta g$<br>Obs. | $\delta T$ | $\Sigma \delta T$ | $R \Sigma \delta T$ | $\Sigma \delta g$<br>Corr. | $g$<br>979. |
|-----------------------------|------------|---------------------------|------------|-------------------|---------------------|----------------------------|-------------|
| B.M. 1737                   | —          | —                         | —          | —                 | 0                   | —                          | 66860       |
| B.M. 1713                   | -434       | - 434                     | 5 44       | 5 44              | 36                  | - 470                      | 66390       |
| Waki                        | -1186      | -1620                     | 8 14       | 13 58             | 88                  | -1708                      | 65152       |
| Hiroshima Castle            | 1825       | 205                       | 1 27       | 15 25             | 97                  | 108                        | 66968       |
| B.M. 1632                   | 2263       | 2468                      | 8 30       | 23 55             | 151                 | 2317                       | 69177       |
| B.M. 1608                   | 957        | 3425                      | 3 08       | 27 03             | 171                 | 3254                       | 70114       |
| B.M. 378                    | 2117       | 5542                      | 3 37       | 30 40             | 194                 | 5348                       | 72208       |
| B.M. 1045                   | -7640      | -2098                     | 7 45       | 38 25             | 243                 | -2341                      | 64519       |
| Tottori (Prefecture Office) | 15929      | 13831                     | 2 57       | 41 22             | 262                 | 13569                      | 80429       |
| B.M. 2254                   | - 30       | 13801                     | 12 01      | 53 23             | 337                 | 13464                      | 80324       |
| Matsue (Prefecture Office)  | 303        | 14104                     | 6 45       | 60 08             | 380                 | 13724                      | 80584       |
| Hamada                      | -4574      | 9530                      | 4 22       | 64 30             | 408                 | 9122                       | 75982       |
| Prefecture Boundary         | -5265      | 4265                      | 5 25       | 69 55             | 442                 | 3823                       | 70683       |
| Second Route                |            |                           |            |                   |                     |                            |             |
| B.M. 1737                   | —          | —                         | —          | —                 | —                   | —                          | 66860       |
| Prefecture Boundary         | 3963       | 3963                      | 22 07      | 22 07             | 140                 | 3823                       | 70683       |

Thirdly and lastly, we can regard the whole route as a chain consisting of a number of short loops and one one-direction route which lies between B.M. 1737 and the Prefecture Boundary. We can calculate



the rate of drift of the gravimeter spring separately for each of the loops and derive gravity values at junction points of the chains and connect the results successively.

It was found that the rate of drift differs notably from a loop to another among the routes considered here as shown in Table IV.

Table IV. Rate of Drift for Various Short Loops.

| Route                            | Residual<br>(0.01 mgal.) | time                | R (mgal./hour) |
|----------------------------------|--------------------------|---------------------|----------------|
| 11 <sub>1</sub>                  | 58                       | <sup>h</sup><br>7.8 | 0.074          |
| 12 <sub>1</sub>                  | 79                       | 11.4                | 0.069          |
| 14 <sub>1</sub>                  | 70                       | 8.2                 | 0.085          |
| 16 <sub>5</sub>                  | 95                       | 7.2                 | 0.132          |
| 16 <sub>3</sub> ·16 <sub>4</sub> | 193                      | 17.0                | 0.114          |
| 16 <sub>2</sub>                  | 93                       | 5.8                 | 0.160          |
| 18 <sub>4</sub>                  | 164                      | 14.8                | 0.111          |
| 18 <sub>3</sub>                  | 70                       | 8.4                 | 0.083          |
| 15 <sub>1</sub>                  | 4                        | 9.0                 | 0.004          |
| 15 <sub>3</sub>                  | 58                       | 16.6                | 0.035          |
| 15 <sub>5</sub>                  | 30                       | 9.8                 | 0.031          |
| 13 <sub>1</sub> ·13 <sub>3</sub> | 76                       | 18.0                | 0.042          |

Now we have determined the gravity values at the key stations around the Chûgoku District according to three different processes. The values are compared in Table V.

Table V. Comparison of the Gravity Values at Key Stations in the Chûgoku District as determined by Three Different Methods.

|                             | 1st methods. | 2nd methods. | 3rd methods. |
|-----------------------------|--------------|--------------|--------------|
| Tottori (Prefecture Office) | 979.80429    | 979.80429    | 979.80429    |
| B.M. 1045                   | 64520        | 64519        | 64522        |
| B.M. 378                    | 72210        | 72208        | 72152        |
| B.M. 1608                   | 70126        | 70114        | 70066        |
| B.M. 1632                   | 69231        | 69177        | 69150        |
| Hiroshima Castle            | 67094        | 66968        | 66983        |
| Waki                        | 65327        | 65152        | 65182        |
| B.M. 1713                   | 66625        | 66390        | 66459        |
| B.M. 1737                   | 67108        | 66860        | 66941        |
| Prefecture Boundary         | 70894        | 70683        | 70774        |
| Hamada                      | 76134        | 75982        | 76041        |
| Matsue (Prefecture Office)  | 80668        | 80584        | 80630        |
| B.M. 2254                   | 80371        | 80324        | 80348        |
| Tottori (Prefecture Office) | 80429        | 80429        | 80429        |

It is seen in the table that there are no negligible differences

among the values as determined by the three different methods. On the whole, the values derived according to the first and second methods are extremes and those derived according to the third are intermediate. The advantage of the first two methods is that the associated calculations are simple because a long loop is considered but their disadvantage is that the rate of drift has to be assumed to remain constant throughout that long loop. On the contrary, the disadvantage of the third method is that the associated calculations are rather elaborate but its advantage is that the rate of drift is calculated for each of the short loops separately. It is difficult to decide which process is the best. But for the time being, we are going to adopt the third stepwise method.<sup>(1)</sup> This we do because the progress of our field measurements itself is also stepwise and it seems to be prudent to get the gravity values also stepwise without waiting the completion of the whole net of measurements throughout Japan.

#### 4. Method of Calculation (II)

Similar questions as above arises regarding the way to connect the two small loops which cross the Chûgoku District in NS direction. In Fig. 4 is shown one of the four instances we encountered in this district.

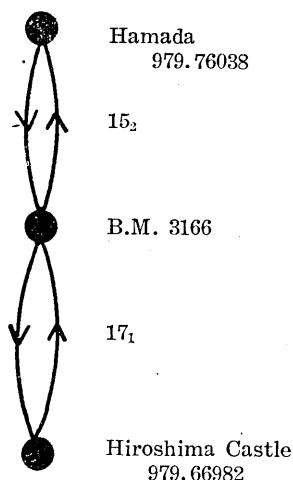


Fig. 4. Connection of Two Small Loops.

The loop 15<sub>2</sub> starts from Hamada, goes southward down to B.M. 3166 and gets back to Hamada. The closing residual is 0.23 mgal. and the time needed to complete this loop was 7<sup>h</sup>02<sup>m</sup>. The rate of flow is therefore  $0.23/7.05=0.0324$  mgal./hour. Adopting this rate and with  $g(\text{Hamada})=979.76038$ , which is already known, we find

$$g(3136)=979.61599.$$

Secondly, the other loop 17<sub>1</sub> starts from Hiroshima Castle, goes northward up to B.M. 3166, and gets back to the starting station, describing a loop. The closing residual is 0.78 mgal. and the time needed to complete this loop was 7<sup>h</sup>35<sup>m</sup>. The rate

(1) The gravity values given in Tables VI-XVIII differ a little from those given in Table V. This is due to the difference in the way of interconnecting short loops.

of flow is therefore  $0.78/7.6=0.103$  mgal./hour. Adopting this rate and with  $g(\text{Hiroshima Castle})=979.66982$ , which is already known, we find

$$g(3166)=979.61577.$$

Thirdly, the south-going half of the route  $15_2$  and the same of the route  $17_1$  may be connected. The times needed were  $4^h15^m$  and  $2^h41^m$  respectively, making a total  $6^h56^m$ . Since

$$g(\text{Hamada})-g(3166)=0.14425 \text{ from Route } 15_2$$

and  $g(3166)-g(\text{Hiroshima Castle})=-0.05433$  from Route  $17_1$ ,

we get  $g(\text{Hamada})-g(\text{Hiroshima Castle})=0.08992$ .

It is already known that

$$g(\text{Hamada})-g(\text{Hiroshima Castle})=979.76038-979.66982=0.09056.$$

The mean rate of flow is therefore

$$\frac{90.56-89.92}{4.25+2.70}=0.093 \text{ mgal./hour}$$

and with this rate we find

$$g(3166)=979.61564.$$

Fig. 5. Connection of the Routes  $15_2$  and  $17_1$ .

|                               |                                     |                                    |              |
|-------------------------------|-------------------------------------|------------------------------------|--------------|
| Hamada<br>979.76038           | mgal.<br>↓ -144.25<br>( $4^h15^m$ ) | mgal.<br>↑ 144.48<br>( $2^h48^m$ ) | Route $15_2$ |
| B.M. 3166                     |                                     |                                    |              |
| Hiroshima Castle<br>979.66982 | ↑ -53.55<br>( $4^h54^m$ )           | ↓ 54.33<br>( $2^h41^m$ )           | Route $17_1$ |

Fourthly and lastly, the north-going half of Route  $15_2$  and the same of Route  $17_1$  may be connected. The times needed were  $2^h48^m$  and  $4^h54^m$  respectively, making a total  $7^h42^m$ . Since in this case

$$g(\text{Hamada})-g(3166)=0.14448$$

$$g(3166)-g(\text{Hiroshima Castle})=-0.05355,$$

we get  $g(\text{Hamada})-g(\text{Hiroshima Castle})=0.09093$ .

The rate of flow in this case is

$$\frac{90.93-90.56}{2.80+4.90} \frac{0.37}{7.70}=0.048 \text{ mgal./hour}$$

and with this rate, we find

$$g(3166) = 979.61603.$$

After all, we have four values for  $g(3166)$ ;

| Method | $g(3166)$ |
|--------|-----------|
| I      | 979.61599 |
| II     | 61577     |
| III    | 61564     |
| IV     | 61603     |
| Mean   | 979.61586 |

according to the four different methods. We have no reason at hand to prefer one to the others. As a matter of fact, 979.61577 derived by the second method has been adopted simply because it is the nearest to the mean value of the four. As was stated before, this value was determined from the measurements along Route 17<sub>1</sub>. Some adjustments then need be applied to the values at the stations along Route 15<sub>2</sub> in order to make the small difference

$$979.61599 - 979.61577 = 0.22 \text{ mgal.}$$

disappear. The adjustments were given in proportion to the gravity difference at a station from Hamada. These adjustments are tabulated in Table X under the heading "Adjustment". Similar adjustments were also necessary for the small loops 12<sub>1</sub>, 12<sub>3</sub>, 13<sub>2</sub>, 15<sub>2</sub> and 15<sub>4</sub>. These adjustments are also given in Tables VII, VIII and X.

## 5. Results

Now that we have found the gravity values at a number of stations in the district, the free-air and BOUGUER anomalies were calculated. The methods of calculation were described in Part I of the present series. To state briefly, the coefficient for the free-air reduction was taken at exactly 0.308600 and the rock densities necessary for BOUGUER reductions were taken at exactly 2.6700. The normal values of gravity were calculated both according to the HELMERT formula of 1901 and to the International formula, assuming as if the constants appearing in the formulas are exact down to 0.01 mgal., thus

$$\begin{aligned} \gamma &= 978.03000(1 + 0.00530200 \sin^2 \varphi - 0.00000700 \sin^2 2\varphi), \\ \gamma &= 978.04900(1 + 0.00528840 \sin^2 \varphi - 0.00000590 \sin^2 2\varphi). \end{aligned}$$

The corrections for the height  $h$  of the gravimeter above bench marks

and for the effect of the earth tides were made of course. The free air and BOUGUER anomalies were calculated down to 0.1 mgal., although the gravity values at the stations were calculated down to 0.01 mgal. The gravity values at all the stations are given in Tables VI~XIII for each of the short loops separately. In Tables XIV~XVIII, the materials are arranged synoptically according to each of the five prefectures separately. The lines of equal BOUGUER anomalies based on the International formula are shown in Fig. 12 with 2 mgal. intervals. The figure is in the pocket attached to the back cover. The positions of the contour lines are accurate where they meet the lines of precise levels but no great accuracy can be claimed for the intervening parts.

Reserving the geophysical interpretations of the distribution of the BOUGUER anomalies for a future study, we will briefly enumerate only the especially notable facts in Fig. 12.

1. The BOUGUER anomaly increases towards north, that is towards the Sea of Japan. Along the Japan Sea coast, the isoanomaly lines are generally parallel to the coast line. This parallelism is disturbed rather abruptly at the westernmost part of the district, where the isoanomaly lines tend to run in the NS directions.

2. The parallelism of the coast line and the isoanomaly lines is disturbed near the city of Matsue, where the coast line is also irregular.

3. Along the middle zone of the Chûgoku District, the gravity anomaly is minimum. Geologically this corresponds to the median zone of an uplifted peneplain about 1,000 m above sea level at present, composed chiefly of granite.

4. There is an area of conspicuous negative anomaly around the city of Hiroshima as was anticipated in Part I from the trends isoanomaly lines in the Shikoku District. This area, in the form of an inverted oval, appears to be a depression of the earth's crust by about 2 km. It is interesting to note that there is a bay conforming to the isoanomaly lines.

5. An area of conspicuous positive anomaly, which was noticed towards north of Kagawa Prefecture of Shikoku has been found to extend to the Chûgoku District, comprising an elliptic area as a whole, with its major axis in the EW direction. It was stated in Part I that this positive anomaly might be closely related to the existence there of a dense mass of magma beneath the ground from which the sporadically distributed basaltic (sanukitic) rock bodies in this area must have been fed.

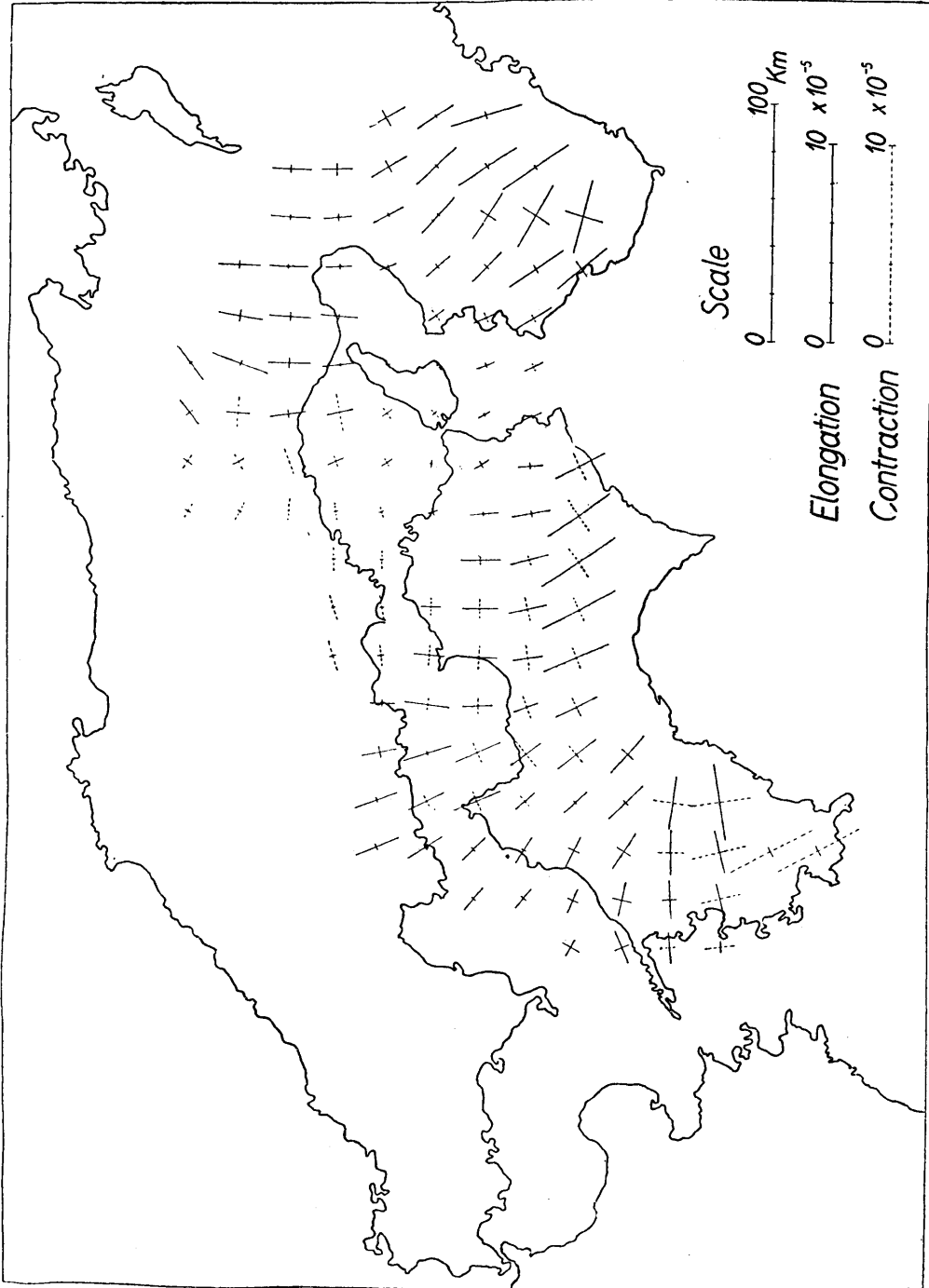


Fig. 6. Principal Horizontal Strains of the Earth's Surface Produced in Connection with the Nankai Great Earthquake of 1946. (after INOUE, SUZUKI and ONO.)

The Shikoku and Chûgoku Districts were severely disturbed by the Nankaido great earthquake of 1946 and the comparison of the triangulations before and after the earthquake has disclosed conspicuous horizontal deformations of the earth's surface in these districts which must have occurred in connection with the earthquake. E. INOUE, H. SUZUKI and H. ONO of the Geographical Survey Institute have calculated the principal horizontal strains of the earth's crust in these districts using as data the horizontal displacement vectors of the triangulation points which were obtained by the surveys. They have got the results as shown in Fig. 6. Principal strains are notably smaller in the above-mentioned elliptic area than in anywhere else. This may be taken as indicating the relative rigidity of the deep-rooted basaltic mass in question.

## 6. Acknowledgements

We cannot close this report without expressing our sincere gratitude to the many officials and individuals who helped us in various ways in accomplishing this survey. Particularly, we wish to thank the Ministry of Education for financial support and also the Chûgoku High Tide Prevention Committee which sponsored a part of the expense needed for our survey.

Mrs. S. INOUE and Miss K. SEKI have helped us greatly in numerical computations and in preparing the present paper. We acknowledge gratefully their help.

## Reference

- TSUBOI, C., JITSUKAWA, A., TAJIMA, H. and OKADA, A.:  
1953 "Gravity Survey along the Lines of Precise Levels throughout Japan by Means of a WORDEN Gravimeter. Part I. Shikoku District".  
Bull. Earthq. Res. Inst., Suppl. Vol., IV, Part I.

### Explanations of Tables

#### Tables VI–XIII Results along Each of the Routes

|                         |   |
|-------------------------|---|
| Pref. ....              | Prefecture  |
| No. ....                | Number of Measurement   |
| B.M. ....               | Bench Mark Number   |
| Time ....               | Time of Measurement   |
| $\sum \delta T$ ....    | Net Time Needed to arrive at the Station from<br>the Starting Point |
| $SD$ ....               | Small Dial Reading  |
| $0.9150 \times SD$ .... | Conversion of Small Dial Reading to 0.01 mgal.                      |
| $h$ ....                | Height of the Gravimeter above the Bench Mark<br>Head               |
| $0.3086 \times h$ ....  | Free-air Reduction to the Bench Mark Head                           |
| $E.T.$ ....             | Correction for the Earth Tides (Factor 1.20)                        |
| Drift ....              | Correction for Drift  |
| $\sum \delta g$ ....    | Gravity Difference from the Starting Point                          |
| $g$ ....                | Gravity Value (corrected for Drift and Earth<br>Tides)              |

#### Tables XIV–XVIII Synoptic Results for Each of the Prefectures

|                     |  |
|---------------------|--|
| $\varphi$ ....      | Latitude   |
| $\lambda$ ....      | Longitude  |
| $H$ ....            | Height of the Bench Mark above the Sea Level           |
| $g$ ....            | Gravity Value (Corrected for Drift and Earth<br>Tides) |
| $g_0$ ....          | Gravity Value after the Free-air Reduction             |
| $g_0''$ ....        | Gravity Value after the BOUGUER Reduction              |
| $\gamma$ ....       | Normal Gravity   |
| $\Delta g_0$ ....   | Free-air Anomaly                                       |
| $\Delta g_0''$ .... | BOUGUER Anomaly  |



Table VI. Results along Route II. (0.01 mgal.).  
Route II<sub>1</sub> Tottori (No. 1070)—Chizu—B.M. 1045—Tottori (No. 1070).

| Pref. | No.   | B.M.          | Date   | Time  | $\sum \delta T$ | $SD$ | $0.9150 \times SD$ | $h$ (cm) | $0.3086 \times h$ | $E.T.$ | $7.44 \times \sum \delta T$ | $\sum \delta g$ | $g$   | Field Note No. |
|-------|-------|---------------|--------|-------|-----------------|------|--------------------|----------|-------------------|--------|-----------------------------|-----------------|-------|----------------|
| 30    | 1070  | Tottori P.O.* | XII 11 | 15 25 | 0 00            | 3982 | 3644               | 27       | 8                 | -8     | 0                           | 0               | 80429 | 26             |
| "     | 1079  | 1066          | "      | 15 58 | 33              | 3675 | 3363               | 65       | 20                | -8     | 4                           | 273             | 80156 | "              |
| "     | 1080  | 1065          | "      | 16 14 | 49              | 3019 | 2762               | 73       | 23                | -8     | 6                           | 873             | 79556 | "              |
| "     | 1081  | 1062          | "      | 16 30 | 1 05            | 2252 | 2061               | 69       | 21                | -8     | 8                           | 1578            | 78851 | "              |
| "     | 1082  | 1061          | "      | 16 46 | 1 21            | 2067 | 1891               | 66       | 20                | -6     | 10                          | 1749            | 78680 | "              |
| "     | 1083  | 1059          | "      | 16 58 | 1 33            | 1275 | 1167               | 54       | 17                | -6     | 12                          | 2478            | 77951 | "              |
| "     | 1084  | "             | "      | 17 02 | 4523            | 4139 | "                  | "        | "                 | -6     | "                           | "               | "     | "              |
| "     | 1085  | 1057          | "      | 17 17 | 1 48            | 2922 | 2674               | 73       | 23                | -6     | 13                          | 3938            | 76491 | "              |
| "     | "     | 1055          | "      | 17 31 | 2 02            | 1425 | 1304               | 70       | 22                | -2     | 15                          | 5307            | 75122 | "              |
| "     | "     | "             | "      | 17 35 | 7414            | 6784 | "                  | "        | "                 | -2     | "                           | "               | "     | "              |
| "     | 1086  | 1053          | "      | 17 52 | 2 19            | 6219 | 5690               | 55       | 17                | -2     | 17                          | 6408            | 74021 | "              |
| "     | 1087  | 1052          | "      | 18 07 | 2 34            | 5334 | 5338               | 50       | 15                | -2     | 19                          | 6764            | 73655 | 27             |
| "     | 1088  | 1051          | "      | 18 21 | 2 48            | 5105 | 4671               | 49       | 15                | -2     | 21                          | 7433            | 72996 | "              |
| "     | Chizu | "             | "      | 18 37 | 3 01            | 5766 | 5276               | 27       | 8                 | 3      | 23                          | 6832            | 73597 | "              |
| "     | "     | "             | XII 12 | 9 02  | 7301            | 6380 | "                  | "        | "                 | -5     | "                           | "               | "     | "              |
| "     | 1088  | Chizu W.S.**  | "      | 9 25  | 3 27            | 5909 | 5407               | 27       | 8                 | -5     | 26                          | 8108            | 72321 | "              |
| "     | 1089  | 1051          | "      | 9 45  | 3 47            | 6658 | 6092               | 48       | 15                | -3     | 28                          | 7416            | 73013 | "              |
| "     | 1090  | 1049          | "      | 9 58  | 4 00            | 4723 | 4322               | 65       | 20                | -3     | 30                          | 9183            | 71246 | "              |
| "     | "     | 1047          | "      | 10 16 | 4 18            | 2044 | 1870               | 60       | 19                | -3     | 32                          | 11638           | 68791 | "              |
| "     | "     | "             | "      | 10 20 | 7463            | 6833 | "                  | "        | "                 | -3     | "                           | "               | "     | "              |
| 32    | 1091  | 1045          | "      | 10 50 | 4 48            | 2812 | 2573               | 42       | 13                | -2     | 36                          | 15907           | 64522 | "              |
| 30    | 1090  | 1047          | "      | 11 26 | 5 24            | 7466 | 6831               | 58       | 18                | -2     | 40                          | 11648           | 68781 | "              |
| "     | "     | "             | "      | 11 30 | 6 07            | 0658 | 0602               | "        | "                 | -2     | "                           | "               | "     | "              |
| "     | 1086  | 1053          | "      | 12 13 | 6 07            | 6412 | 5867               | 52       | 16                | -2     | 45                          | 6390            | 74039 | "              |
| "     | "     | "             | "      | 12 16 | 0200            | 0183 | "                  | "        | "                 | -2     | "                           | "               | "     | "              |
| "     | 1070  | Tottori P.O.  | "      | 13 54 | 7 45            | 7211 | 6598               | 27       | 8                 | -6     | 58                          | 0               | 80429 | "              |

\* Tottori Prefecture Office. \*\* Old site of the Weather Station, Entrance.

Route II<sub>2</sub> Tottori (No. 1070)—B.M. 1139—Tottori (No. 1070).

| Pref. | No.  | B.M.    | Date   | Time               | $\Sigma\delta T$  | $SD$ | $0.9150 \times SD$ | $h$ | $0.3086 \times h$ | $E.T.$ | $6.80 \times \Sigma\delta T$ | Drift | $\Sigma\delta g$ | $g$   | Field Note No. |
|-------|------|---------|--------|--------------------|-------------------|------|--------------------|-----|-------------------|--------|------------------------------|-------|------------------|-------|----------------|
|       |      |         | 1951   |                    |                   |      |                    |     |                   |        |                              |       |                  |       |                |
| 30    | 1070 | Tottori | XII 15 | <sup>h</sup> 10 11 | <sup>m</sup> 0 00 | 4192 | 3836               | 27  | 8                 | -5     | 0                            | 0     | 0                | 80429 | 28             |
| "     | 974  | "       | "      | 12 49              | 2 38              | 2989 | 2735               | 59  | 18                | -2     | 18                           | 18    | -1106            | 79323 | "              |
| 30    | 1070 | Tottori | "      | 15 09              | 4 58              | 4230 | 3870               | 27  | 8                 | -5     | 34                           | 34    | 0                | 80429 | "              |

Route II<sub>3</sub> Tottori (No. 1070)—B.M. 1134—Tottori (No. 1070).

| Pref. | No.  | B.M.    | Date   | Time              | $\Sigma\delta T$  | $SD$ | $0.9150 \times SD$ | $h$ | $0.3086 \times h$ | $E.T.$ | $3.51 \times \Sigma\delta T$ | Drift | $\Sigma\delta g$ | $g$   | Field Note No. |
|-------|------|---------|--------|-------------------|-------------------|------|--------------------|-----|-------------------|--------|------------------------------|-------|------------------|-------|----------------|
|       |      |         | 1951   |                   |                   |      |                    |     |                   |        |                              |       |                  |       |                |
| 30    | 1070 | Tottori | XII 11 | <sup>h</sup> 9 45 | <sup>m</sup> 0 00 | 3953 | 3617               | 27  | 8                 | -1     | 0                            | 0     | 0                | 80429 | 26             |
| "     | 1071 | "       | "      | 9 59              | 14                | 3764 | 3444               | 46  | 14                | -1     | 1                            | 1     | 168              | 80261 | "              |
| "     | 1072 | "       | "      | 10 17             | 32                | 3011 | 2755               | 64  | 20                | -2     | 2                            | 2     | 853              | 79576 | "              |
| "     | 1073 | "       | "      | 10 37             | 52                | 4168 | 3814               | 54  | 17                | -2     | 3                            | 3     | 202              | 80631 | "              |
| "     | 1074 | "       | "      | 11 04             | 1 19              | 4868 | 4454               | 63  | 19                | -2     | 5                            | 5     | 842              | 81271 | "              |
| "     | 1075 | "       | "      | 11 18             | 1 33              | 4937 | 4517               | 65  | 20                | -2     | 6                            | 6     | 905              | 81334 | "              |
| "     | 1076 | "       | "      | 11 32             | 1 47              | 4568 | 4180               | 65  | 20                | -3     | 6                            | 6     | 567              | 80996 | "              |
| "     | 1077 | "       | "      | 11 49             | 2 04              | 3569 | 3266               | 56  | 17                | -3     | 7                            | 7     | 351              | 80078 | "              |
| "     | 1078 | "       | "      | 12 07             | 2 22              | 0880 | 0805               | 62  | 19                | -3     | 8                            | 8     | 2811             | 77618 | "              |
| "     | 1070 | Tottori | "      | 15 25             | 5 40              | 3982 | 3644               | 27  | 8                 | -8     | 20                           | 20    | 0                | 80429 | "              |

Table VII. Results along Route 12. (0.01 mgal.).  
Route 12<sub>1</sub> B.M. 378—B.M. 1045—Tsuyama—B.M. 378.

| Pref. | No.  | B.M.  | Date<br>1952 | Time  | $\Sigma \delta T$ | $SD$ | $\frac{0.9150}{SD} \times h$ | $h$<br>(cm) | $\frac{0.3086}{h} \times$ | $E.T.$ | $\frac{6.93 \times}{\Sigma \delta T} \times$<br>Drift | adjust-<br>ment | $\Sigma \delta g$ | $g$<br>979. | Field<br>Note<br>No. |
|-------|------|-------|--------------|-------|-------------------|------|------------------------------|-------------|---------------------------|--------|---|-----------------|-------------------|-------------|----------------------|
| 32    | 1810 | 378   | VI 25        | 8 55  | 0 00              | 4844 | 4432                         | 67          | 21                        | -      | 0   | 0               | 0                 | 72152       | 44                   |
| "     | 1811 | 1003  | " "          | 9 35  | 40                | 4946 | 4526                         | 67          | 21                        | 4      | 5   | 1               | 93                | 72245       | "                    |
| "     | 1812 | 1004  | " "          | 9 44  | 49                | 4912 | 4494                         | 72          | 22                        | 4      | 6   | 1               | 61                | 72213       | "                    |
| "     | 1813 | 1006  | " "          | 9 57  | 1 02              | 3611 | 3304                         | 66          | 20                        | 4      | 7   | - 9             | -1122             | 71030       | "                    |
| "     | 1814 | 1009  | " "          | 10 16 | 1 21              | 5684 | 5201                         | 75          | 23                        | 4      | 10  | - 6             | 760               | 72912       | "                    |
| "     | 1815 | 1012  | " "          | 10 50 | 1 55              | 5522 | 5053                         | 66          | 20                        | 9      | 13  | 5               | 612               | 72764       | "                    |
| "     | 1816 | 1013  | " "          | 11 00 | 2 05              | 5405 | 4946                         | 64          | 20                        | 9      | 15  | 4               | 504               | 72656       | "                    |
| "     | 1817 | 1015  | " "          | 12 15 | 3 20              | 5334 | 4881                         | 72          | 22                        | 13     | 23  | 4               | 437               | 72589       | "                    |
| "     | 1818 | 1018  | " "          | 12 32 | 3 37              | 5326 | 4873                         | 57          | 18                        | 15     | 25  | 4               | 425               | 72577       | "                    |
| "     | 1819 | 1020  | " "          | 12 43 | 3 48              | 5474 | 5009                         | 70          | 22                        | 15     | 26  | 5               | 563               | 72715       | "                    |
| "     | 1820 | 1022  | " "          | 12 56 | 4 01              | 5382 | 4925                         | 68          | 21                        | 15     | 28  | 4               | 477               | 72629       | "                    |
| "     | 1821 | 1024  | " "          | 13 10 | 4 15              | 5038 | 4610                         | 71          | 22                        | 15     | 30  | 1               | 164               | 72316       | "                    |
| "     | 1822 | 1026  | " "          | 13 22 | 4 27              | 5487 | 5021                         | 60          | 19                        | 15     | 31  | 5               | 567               | 72719       | "                    |
| "     | 1823 | 1028  | " "          | 13 34 | 4 39              | 6113 | 5593                         | 59          | 18                        | 14     | 33  | 9               | 1131              | 73283       | "                    |
| "     | 1824 | F. 32 | " "          | 14 15 | 5 20              | 7084 | 6482                         | 56          | 17                        | 14     | 37  | 17              | 2007              | 74159       | "                    |
| "     | 1825 | 1031  | " "          | 14 30 | 5 35              | 7240 | 6625                         | 51          | 16                        | 14     | 39  | 18              | 2146              | 74298       | "                    |
| "     | 1826 | 1033  | " "          | 14 45 | 5 50              | 7129 | 6523                         | 72          | 22                        | 12     | 40  | 17              | 2048              | 74200       | "                    |
| "     | 1827 | 1035  | " "          | 15 00 | 6 05              | 5776 | 5285                         | 60          | 19                        | 12     | 42  | 7               | 815               | 72967       | "                    |
| "     | 1828 | 1037  | " "          | 15 17 | 6 22              | 5254 | 4807                         | 56          | 17                        | 12     | 44  | 3               | 337               | 72489       | "                    |
| "     | 1829 | 1039  | " "          | 15 32 | 6 37              | 4927 | 4508                         | 59          | 18                        | 7      | 46  | 0               | 35                | 72187       | "                    |
| "     | 1830 | 1041  | " "          | 15 45 | 6 50              | 4013 | 3672                         | 43          | 13                        | 7      | 47  | - 7             | - 800             | 71352       | "                    |
| "     | 1831 | 1043  | " "          | 16 10 | 7 15              | 1923 | 1760                         | 64          | 20                        | 7      | 51  | -23             | -2693             | 69459       | "                    |
| "     | "    | "     | " "          | 16 15 | 7 27              | 7627 | 6979                         | "           | "                         | 7      | 52  | -45             | -5423             | 66729       | "                    |
| "     | 1832 | 1044  | " "          | 16 30 | 7 30              | 4627 | 4234                         | 61          | 19                        | 2      | 54  | -64             | -7630             | 64522       | "                    |
| "     | 1091 | 1045  | " "          | 16 45 | 7 45              | 2204 | 2017                         | 40          | 12                        | 2      | 56  | -22             | -2686             | 69466       | "                    |
| "     | 1831 | 1043  | " "          | 17 04 | 8 04              | 7648 | 6998                         | 63          | 19                        | 2      | 56  | -22             | -2686             | 69466       | "                    |
| "     | "    | "     | " "          | 17 08 | "                 | 2020 | 1848                         | "           | "                         | 2      | 62  | 18              | 2156              | 74308       | "                    |
| "     | 1825 | 1031  | " "          | 18 04 | 9 00              | 7371 | 6744                         | 50          | 15                        | - 2    | 64  | 17              | 1976              | 74128       | "                    |
| "     | "    | "     | " "          | 18 15 | 9 11              | 7182 | 6572                         | 27          | 8                         | - 2    | 64  | 17              | 1976              | 74128       | "                    |
| "     | "    | "     | VI 26        | 8 29  | "                 | 7267 | 6649                         | "           | "                         | - 5    | 64  | 17              | 1976              | 74128       | "                    |

Table VII. (Continued)

| Pref. | No.   | B.M. | Date  | Time              | $\Sigma \delta T$ | $SD$ | $0.9150 \times SD$ | $h$ | $0.3086 \times h$ | $E.T.$ | $6.93 \times \Sigma \delta T$ | adjustment | $\Sigma \delta g$ | $g$   | Field Note No. |
|-------|-------|------|-------|-------------------|-------------------|------|--------------------|-----|-------------------|--------|-------------------------------|------------|-------------------|-------|----------------|
| 32    | 1833* |      | 1952  |                   |                   |      |                    |     |                   |        |                               |            |                   |       |                |
| "     | 1810  | 378  | VI 26 | <sup>h</sup> 8 46 | <sup>m</sup> 9 28 | 6926 | 6337               | 27  | 8                 | - 3    | 66                            | 14         | 1667              | 73819 | 44             |
| "     |       |      | "     | 10 41             | 11 23             | 5081 | 4649               | 66  | 20                | 5      | 79                            | 0          | 0                 | 72152 | "              |

\* Tsuyama 1st Primary School, Entrance.

Route 12<sub>3</sub> Okayama—B.M. 378—Okayama.

| Pref. | No.     | B.M. | Date  | Time              | $\Sigma \delta T$ | $SD$ | $0.9150 \times SD$ | $h$ | $0.3086 \times h$ | $E.T.$ | $-13.33 \times \Sigma \delta T$ | Drift | $\Sigma \delta g$ | $g$   | Field Note No. |
|-------|---------|------|-------|-------------------|-------------------|------|--------------------|-----|-------------------|--------|---------------------------------|-------|-------------------|-------|----------------|
| 32    | Okayama |      | 1952  |                   |                   |      |                    |     |                   |        |                                 |       |                   |       |                |
| "     | 1810    | 378  | VI 25 | <sup>h</sup> 8 45 | <sup>m</sup> 0 00 | 4755 | 4351               | 27  | 8                 | - 1    | 0                               | 0     | 0                 | 72055 | 44             |
| "     | "       | "    | "     | 8 55              | 10                | 4844 | 4432               | 67  | 21                | - 1    | - 3                             | 97    | 97                | 72152 | "              |
| "     | Okayama | "    | VI 26 | 10 41             | 19                | 5081 | 4649               | 66  | 20                | 5      | 5                               | 0     | 0                 | 72055 | "              |
| "     |         |      | "     | 10 50             | 19                | 4987 | 4563               | 27  | 8                 | 5      | - 4                             | 0     | 0                 | 72055 | "              |

Route 12<sub>3</sub> Okayama (No. 1796)—Okayama—Okayama (No. 1796).

| Pref. | No.     | B.M.              | Date  | Time               | $\Sigma \delta T$ | $SD$ | $0.9150 \times SD$ | $h$ | $0.3086 \times h$ | $E.T.$ | $1.52 \times \Sigma \delta T$ | adjustment | $\Sigma \delta g$ | $g$   | Field Note No. |
|-------|---------|-------------------|-------|--------------------|-------------------|------|--------------------|-----|-------------------|--------|-------------------------------|------------|-------------------|-------|----------------|
| 32    | 1796    |                   | 1952  |                    |                   |      |                    |     |                   |        |                               |            |                   |       |                |
| "     | 1809    | O. <sub>1</sub> * | VI 24 | <sup>h</sup> 15 33 | <sup>m</sup> 0 00 | 4854 | 4441               | 48  | 15                | 8      | 0                             | 0          | 0                 | 72274 | 44             |
| "     | Okayama | W.S.**            | "     | 15 45              | 12                | 4824 | 4414               | 49  | 15                | 8      | 0                             | 1          | - 28              | 72246 | "              |
| "     | "       | "                 | "     | 17 10              | 1 37              | 4641 | 4247               | 27  | 8                 | 3      | 2                             | 11         | - 219             | 72055 | "              |
| "     | 1796    | O. <sub>1</sub>   | VI 23 | 16 50              | 3 15              | 4491 | 4109               | "   | "                 | - 1    | 5                             | 0          | 0                 | 72274 | 43             |
| "     |         |                   | "     | 15 12              | 3 15              | 4700 | 4301               | 52  | 16                | 10     | 0                             | 0          | 0                 | 72274 | "              |

\* Okayama Prefecture Bench Mark.

\*\* Weather Station Bench Mark.

Route 12<sub>1</sub> B.M. 381—Okayama—B.M. 381.

| Pref. | No.     | B.M. | Date<br>1952 | Time  | $\sum \delta T$ | $SD$ | $0.9150 \times SD$ | $h$<br>(cm) | $0.3086 \times h$ | E.T. | $5.42 \times \sum \delta T$<br>Drift | $\sum \delta g$ | $g$<br>979. | Field<br>Note<br>No. |
|-------|---------|------|--------------|-------|-----------------|------|--------------------|-------------|-------------------|------|--------------------------------------|-----------------|-------------|----------------------|
| 32    | 1797    | 381  | VI 24        | 15 16 | 0 00            | 4945 | 4525               | 72          | 22                | 12   | 0                                    | 0               | 72371       | 44                   |
| "     | 1796    | O-1  | "            | 15 33 | 17              | 4854 | 4441               | 48          | 15                | 8    | 2                                    | - 97            | 72274       | "                    |
| "     | "       | "    | VI 23        | 15 12 | 17              | 4700 | 4301               | 52          | 16                | 10   | 10                                   | -316            | 72055       | 43                   |
| "     | Okayama | "    | "            | 16 50 | 1 55            | 4491 | 4109               | 27          | 8                 | - 1  | 3                                    |                 |             | "                    |
| "     | "       | "    | VI 24        | 8 43  |                 | 4588 | 4198               | "           | "                 | 3    |                                      |                 |             | "                    |
| "     | 1797    | 381  | "            | 9 10  | 2 22            | 4921 | 4503               | 72          | 22                | 3    | 13                                   | 0               | 72371       | "                    |

Route 12<sub>2</sub> B.M. 381—Funasaka Pass (No. 930)—B.M. 381.

| Pref. | No.  | B.M.                | Date<br>1952 | Time  | $\sum \delta T$ | $SD$ | $0.9150 \times SD$ | $h$<br>(cm) | $0.3086 \times h$ | E.T. | $5.08 \times \sum \delta T$<br>Drift | $\sum \delta g$ | $g$<br>979. | Field<br>Note<br>No. |
|-------|------|---------------------|--------------|-------|-----------------|------|--------------------|-------------|-------------------|------|--------------------------------------|-----------------|-------------|----------------------|
| 32    | 1797 | 381                 | VI 24        | 9 10  | 0 00            | 4921 | 4503               | 72          | 22                | 3    | 0                                    | 0               | 72371       | 43                   |
| "     | 1798 | 382                 | "            | 9 28  | 18              | 5055 | 4625               | 67          | 21                | 3    | 2                                    | 119             | 72490       | "                    |
| "     | 1799 | 383                 | "            | 9 40  | 30              | 5280 | 4831               | 59          | 18                | 8    | 3                                    | 326             | 72697       | "                    |
| "     | 1800 | 385                 | "            | 9 51  | 41              | 6165 | 5641               | 54          | 17                | 8    | 4                                    | 1134            | 73505       | "                    |
| "     | 1801 | 387                 | "            | 10 10 | 1 00            | 6322 | 5785               | 70          | 22                | 8    | 5                                    | 1282            | 73653       | "                    |
| "     | 1802 | 389                 | "            | 10 26 | 1 16            | 6300 | 5765               | 60          | 19                | 8    | 7                                    | 1257            | 73628       | "                    |
| "     | 1803 | 391                 | "            | 10 42 | 1 32            | 6214 | 5686               | 73          | 23                | 13   | 8                                    | 1186            | 73557       | "                    |
| "     | 1804 | 393                 | "            | 10 59 | 2 07            | 6422 | 5876               | 40          | 12                | 13   | 9                                    | 1364            | 73735       | "                    |
| "     | 1805 | 395                 | "            | 11 17 | 2 07            | 5374 | 4917               | 51          | 16                | 13   | 11                                   | 407             | 72778       | "                    |
| "     | 1806 | 397                 | "            | 11 33 | 2 23            | 5078 | 4646               | 64          | 20                | 16   | 12                                   | 142             | 72513       | 44                   |
| "     | 1807 | 399                 | "            | 11 48 | 2 38            | 4723 | 4322               | 58          | 18                | 16   | 13                                   | - 185           | 72186       | "                    |
| 27-32 | 930  | Funasaka Pass P.B.* | "            | 12 10 | 3 00            | 2756 | 2522               | 27          | 8                 | 16   | 15                                   | -1997           | 70374       | "                    |
| 32    | 1808 | 400                 | "            | 12 19 | 3 09            | 4300 | 3935               | 51          | 16                | 16   | 16                                   | - 577           | 71794       | "                    |
| "     | 1802 | 389                 | "            | 14 27 | 5 17            | 6318 | 5781               | 60          | 19                | 15   | 27                                   | 1260            | 73631       | "                    |
| "     | 1797 | 381                 | "            | 15 16 | 6 06            | 4945 | 4525               | 72          | 22                | 12   | 31                                   | 0               | 72371       | "                    |

\* Funasaka Pass Prefecture Boundary.

Table VIII. Results along Route 13. (0.01 mgal.)  
Route 13<sub>1</sub> B.M. 1120—B.M. 2254—Yonago.

| Pref. | No.    | B.M.  | Date   | Time  | $\sum \delta T$ | $SD$ | $SD$ | $0.9150 \times SD$ | $h$ | $0.3086 \times h$ | $E.T. \times \sum \delta T$ | $Drift$ | $\sum \delta g$ | $g$   | Field Note No. |
|-------|--------|-------|--------|-------|-----------------|------|------|--------------------|-----|-------------------|-----------------------------|---------|-----------------|-------|----------------|
|       |        |       | 1951   |       |                 |      |      |                    |     |                   | $-0.71 \times$              |         |                 |       |                |
|       |        |       |        |       | $h^m$           |      |      |                    |     |                   |                             |         |                 |       |                |
| 30    | 1123   | 1120  | XII 13 | 15 42 | 0 00            | 5639 | 5160 | 70                 | 22  | -8                | 0                           | 0       | 0               | 80548 | 27             |
| 31    | 1124   | 2254  | "      | "     | 16 02           | 20   | 4960 | 62                 | 19  | -8                | 0                           | -203    | -203            | 80345 | "              |
| 30    | 1125   | W.S.* | "      | "     | 16 25           | 43   | 5441 | 4979               | 27  | 8                 | 0                           | -195    | -195            | 80353 | "              |
| "     | 1126   | "**   | "      | "     | 16 42           | 1 00 | 5456 | 4992               | 55  | 17                | -9                          | -1      | -173            | 80375 | "              |
| "     | Yonago |       | "      | "     | 17 07           | 1 25 | 5609 | 5132               | 27  | 8                 | -9                          | -1      | -42             | 80506 | "              |

\* Weather Station Seismometer Room, on the Surface of the Concrete Block for Seismometer Installation.

\*\* Weather Station Bench Mark.

Route 13<sub>2</sub> B.M. 1120—B.M. 2226—B.M. 1120.

| Pref. | No.  | B.M.     | Date   | Time  | $\sum \delta T$ | $SD$ | $SD$ | $0.9150 \times SD$ | $h$ | $0.3086 \times h$ | $E.T. \times \sum \delta T$ | $Drift$ | adjustment | $\sum \delta g$ | $g$   | Field Note No. |
|-------|------|----------|--------|-------|-----------------|------|------|--------------------|-----|-------------------|-----------------------------|---------|------------|-----------------|-------|----------------|
|       |      |          | 1951   |       |                 |      |      |                    |     |                   |                             |         |            |                 |       |                |
|       |      |          |        |       | $h^m$           |      |      |                    |     |                   |                             |         |            |                 |       |                |
| 30    | 1123 | 1120     | XII 14 | 9 27  | 0 00            | 5742 | 5254 | 68                 | 21  | -7                | 0                           | 0       | 0          | 0               | 80548 | 27             |
| "     | 1127 | 2250     | "      | 9 50  | 23              | 5378 | 4921 | 60                 | 19  | -4                | 2                           | 336     | 336        | 80212           | "     |                |
| "     | 1128 | 2248     | "      | 10 04 | 37              | 4389 | 4016 | 42                 | 13  | -4                | 4                           | 7       | 1254       | 79294           | "     |                |
| "     | 1129 | 2246     | "      | 10 20 | 53              | 2865 | 2621 | 53                 | 16  | -4                | 6                           | 14      | 2655       | 77893           | "     |                |
| "     | 1130 | 2244     | "      | 10 34 | 1 07            | 1406 | 1286 | 69                 | 21  | -3                | 7                           | 21      | 3992       | 76556           | "     |                |
| "     | "    | "        | "      | 10 37 |                 | 7335 | 6712 | "                  | "   | -3                |                             |         |            |                 | "     |                |
| "     | 1131 | 2242     | "      | 10 50 | 1 20            | 6154 | 5631 | 67                 | 21  | -3                | 8                           | 27      | 5080       | 75468           | "     |                |
| "     | 1132 | 2239     | "      | 11 05 | 1 35            | 4783 | 4876 | 58                 | 18  | -2                | 10                          | 33      | 6346       | 74202           | "     |                |
| "     | 1133 | 2237     | "      | 12 40 | 3 10            | 4195 | 3838 | 71                 | 22  | -2                | 20                          | 36      | 6892       | 73656           | 28    |                |
| "     | 1134 | 2235     | "      | 12 53 | 3 23            | 3729 | 3412 | 61                 | 19  | -2                | 21                          | 38      | 7324       | 73224           | "     |                |
| "     | 1135 | 2233     | "      | 13 07 | 3 37            | 2763 | 2628 | 54                 | 17  | -2                | 22                          | 43      | 8216       | 72332           | "     |                |
| "     | "    | Kurosaka | "      | 13 29 | 3 59            | 0395 | 0361 | -                  | -   | -2                | 25                          | 54      | -10414     | 70134           | "     |                |
| "     | 1136 | "        | "      | 13 31 |                 | 7488 | 6852 | -                  | -   | -3                |                             |         |            |                 | "     |                |
| "     | "    | 2231     | "      | 13 47 | 4 15            | 4422 | 4046 | 32                 | 10  | -3                | 27                          | 69      | -13227     | 67321           | "     |                |
| "     | 1137 | 2229     | "      | 14 08 | 4 36            | 1979 | 1811 | 56                 | 17  | -3                | 29                          | 81      | -15469     | 65079           | "     |                |

| 1138 | 2227 | " | 14 25 | 4 53 | 3533 | 3233 | 65 | 20 | -3 | 30 | 73 | -14037 | 66511 | " |
|------|------|---|-------|------|------|------|----|----|----|----|----|--------|-------|---|
| 32   | 2226 | " | 14 41 | 5 09 | 3194 | 2923 | 64 | 20 | -5 | 32 | 75 | -14353 | 66195 | " |
| "    | "    | " | 14 44 | "    | 0330 | 0302 | "  | "  | -5 | "  | "  | "      | "     | " |
| 30   | 2233 | " | 15 47 | 6 12 | 7025 | 6423 | 53 | 16 | -7 | 39 | 43 | - 8208 | 72340 | " |
| "    | "    | " | 15 49 | "    | 0451 | 0413 | "  | "  | -7 | "  | "  | "      | "     | " |
| 1129 | 2246 | " | 16 59 | 7 22 | 6498 | 5946 | 64 | 20 | -9 | 46 | 14 | - 2651 | 77897 | " |
| "    | "    | " | 17 01 | "    | 1328 | 1215 | "  | "  | -9 | "  | "  | "      | "     | " |
| 1123 | 1120 | " | 17 48 | 8 09 | 4213 | 3855 | 67 | 21 | -8 | 51 | 0  | 0      | 80548 | " |

| Route 13 <sub>3</sub> Tottori (No. 1070)—Kurayoshi—B.M. 1120—Yonago—Tottori (No. 1070). |        |                   |        |                               |       |                   |                    |     |                   |        |                               |       |                   |                |
|---|--------|-------------------|--------|-------------------------------|-------|-------------------|--------------------|-----|-------------------|--------|-------------------------------|-------|-------------------|----------------|
| Field Note No.  | $\eta$ | $\Sigma \delta g$ | $E.T.$ | $4.62 \times \Sigma \delta T$ | Drift | $0.3086 \times h$ | $0.9150 \times SD$ | $h$ | $0.3086 \times h$ | $E.T.$ | $4.62 \times \Sigma \delta T$ | Drift | $\Sigma \delta g$ | Field Note No. |
| 30  | 80429  | 0                 | -6     | 0                             | 0     | 8                 | 3515               | 27  | 8                 | -6     | 0                             | 0     | 0                 | 27             |
| "   | 80420  | 9                 | -6     | 11                            | 0 00  | 21                | 3842               | 69  | 21                | -6     | 11                            | 1     | 9                 | "              |
| "   | 80389  | -40               | -8     | 44                            | 3819  | 8                 | 3494               | 27  | 8                 | -8     | 44                            | 3     | -                 | "              |
| "   | 80393  | 36                | -8     | 1 00                          | 3803  | 8                 | 3480               | 27  | 8                 | -8     | 1 00                          | 5     | -                 | "              |
| "   | 80663  | 234               | -8     | 1 16                          | 3486  | 24                | 3486               | 78  | 24                | -8     | 1 16                          | 6     | -                 | "              |
| "   | 80517  | 88                | -8     | 1 29                          | 4089  | 3741              | 3741               | 72  | 22                | -8     | 1 29                          | 7     | 88                | "              |
| "   | 80477  | 48                | -9     | 1 45                          | 3932  | 3598              | 3598               | 46  | 14                | -9     | 1 45                          | 8     | 48                | "              |
| "   | 80747  | 318               | -9     | 2 01                          | 3899  | 3568              | 3568               | 67  | 21                | -9     | 2 01                          | 9     | 318               | "              |
| "   | 80699  | 270               | -9     | 2 11                          | 4188  | 3832              | 3832               | 69  | 21                | -9     | 2 11                          | 10    | 270               | "              |
| "   | 80720  | 291               | -8     | 2 32                          | 4137  | 3785              | 3785               | 69  | 21                | -8     | 2 32                          | 12    | 291               | "              |
| "   | 80268  | -                 | -8     | 2 47                          | 4175  | 3820              | 3820               | 27  | 8                 | -8     | 2 47                          | 13    | -                 | "              |
| "   | 80767  | 338               | -8     | 3 13                          | 3674  | 3362              | 3362               | 48  | 15                | -8     | 3 13                          | 15    | 338               | "              |
| "   | 79993  | -                 | -5     | 3 35                          | 4216  | 3858              | 3858               | 65  | 20                | -5     | 3 35                          | 17    | -                 | "              |
| "   | 80055  | -                 | -5     | 3 55                          | 3367  | 3081              | 3081               | 71  | 22                | -5     | 3 55                          | 18    | -                 | "              |
| "   | 79939  | -                 | -5     | 4 10                          | 3444  | 3151              | 3151               | 60  | 19                | -5     | 4 10                          | 19    | -                 | "              |
| "   | 79933  | -                 | -5     | 4 27                          | 3314  | 3032              | 3032               | 60  | 19                | -5     | 4 27                          | 21    | -                 | "              |
| "   | 79195  | -                 | -1     | 4 44                          | 3310  | 3029              | 3029               | 57  | 18                | -1     | 4 44                          | 22    | -                 | "              |
| "   | 79371  | -                 | -1     | 4 56                          | 2506  | 2293              | 2293               | 43  | 13                | -1     | 4 56                          | 23    | -                 | "              |
| "   | 79402  | -                 | -1     | 5 04                          | 2693  | 2464              | 2464               | 60  | 19                | -1     | 5 04                          | 24    | -                 | "              |
| "   |        | -                 | -7     | 5 04                          | 2740  | 2507              | 2507               | 27  | 8                 | -7     | 5 04                          | 24    | -                 | "              |
| "   |        | -                 | -7     | 9 05                          | 4368  | 3997              | 3997               | "   | "                 | -7     | 9 05                          | 24    | -                 | "              |

\* Weather Station, Entrance.  
 \*\* Weather Station Seismometer Room, on the Surface of the Concrete Block for Seismometer Installation.

Table VIII. (Continued)

| Pref. | No.     | B.M.          | Date   | Time   | $\Sigma \delta T$                                      | SD   | $0.9150 \times SD$ | $h$ (cm) | $0.3086 \times h$ | E.T. | $4.62 \times \Sigma \delta T$ | $\Sigma \delta g$ | $g$ 979. | Field Note No. |
|-------|---------|---------------|--------|--|--|------|--------------------|----------|-------------------|------|-------------------------------|-------------------|----------|----------------|
| 30    | 1107    | 1093          | 1951   | $9 \begin{smallmatrix} h \\ 27 \\ m \end{smallmatrix}$ | $5 \begin{smallmatrix} h \\ 26 \\ m \end{smallmatrix}$ | 4317 | 3950               | 60       | 19                | -7   | 25                            | -1064             | 79365    | 27             |
| "     | 1108    | B.H.*         | "      | 10 22  | 6 21   | 2654 | 2428               | 27       | 8                 | -4   | 30                            | -2599             | 77830    | "              |
| "     | 1109    | Misasa Bridge | "      | 10 36  | 6 35   | 2195 | 2008               | 27       | 24                | -3   | 30                            | -3002             | 77427    | "              |
| "     | 1110    | 1095          | "      | 11 20  | 7 19   | 4714 | 4313               | 55       | 17                | -3   | 34                            | -708              | 79721    | "              |
| "     | 1111    | 1097          | "      | 11 43  | 7 42   | 5779 | 5288               | 57       | 18                | -2   | 36                            | -267              | 80696    | "              |
| "     | 1112    | 1099          | "      | 11 54  | 7 53   | 5278 | 4829               | 70       | 22                | -2   | 36                            | -188              | 80241    | "              |
| "     | 1113    | 1101          | "      | 12 08  | 8 07   | 4661 | 4265               | 51       | 16                | -3   | 37                            | -760              | 79669    | "              |
| "     | 1114    | 1102          | "      | 13 05  | 9 04   | 4760 | 4355               | 69       | 21                | -3   | 42                            | -670              | 79759    | "              |
| "     | 1115    | 1104          | "      | 13 20  | 9 19   | 4633 | 4239               | 55       | 17                | -3   | 43                            | -791              | 79638    | "              |
| "     | 1116    | 1106          | "      | 13 38  | 9 37   | 4256 | 3894               | 64       | 20                | -5   | 44                            | -1136             | 79293    | "              |
| "     | 1117    | 1108          | "      | 13 52  | 9 51   | 4263 | 3901               | 64       | 20                | -5   | 46                            | -1131             | 79298    | "              |
| "     | 1118    | 1110          | "      | 14 10  | 10 09  | 5154 | 4716               | 57       | 18                | -5   | 47                            | -319              | 80110    | "              |
| "     | 1119    | 1112          | "      | 14 33  | 10 32  | 5135 | 4699               | 41       | 13                | -7   | 48                            | -344              | 80085    | "              |
| "     | 1120    | 1114          | "      | 14 46  | 10 45  | 5010 | 4584               | 66       | 20                | -7   | 50                            | -454              | 79975    | "              |
| "     | 1121    | 1116          | "      | 15 01  | 11 00  | 5578 | 5104               | 66       | 20                | -7   | 51                            | -65               | 80494    | "              |
| "     | 1122    | 1118          | "      | 15 23  | 11 22  | 5566 | 5093               | 69       | 21                | -7   | 53                            | -53               | 80482    | "              |
| "     | 1123    | 1120          | "      | 15 42  | 11 41  | 5639 | 5160               | 70       | 22                | -8   | 54                            | -119              | 80548    | "              |
| "     | "       | "             | XII 14 | 17 48  | 12 13  | 4213 | 3855               | 67       | 21                | -8   | 55                            | -77               | 80506    | 28             |
| "     | Yonago  | "             | "      | 18 06  | 11 59  | 4183 | 3827               | 27       | 8                 | -8   | 55                            | -200              | 80229    | "              |
| "     | Tottori | "             | "      | 22 47  | 16 40  | 3880 | 3550               | 27       | 8                 | -14  | 77                            | -                 |          | "              |
| "     | "       | Tottori       | XII 15 | 9 57   | 16 54  | 3973 | 3635               | "        | "                 | -5   | 78                            | -                 | 80429    | "              |
| "     | 1070    | P.O.          | "      | 10 11  | 16 54  | 4192 | 3836               | 27       | 8                 | -5   |                               | -                 |          | "              |

\* Okayama University, Misasa Branch Hospital, Entrance.



Table IX. Results along Route 14. (0.01 mgal.).  
Route 14<sub>1</sub> B.M. 378—Nishiebara—B.M. 1608—B.M. 378.

| Pref. | No.        | B.M.    | Date<br>1952 | Time<br><sup>h</sup> <sup>m</sup> | $\sum \delta T$<br><sup>h</sup> <sup>m</sup> | $SD$ | $0.9150 \times SD$ | $h$<br>(cm) | $0.3086 \times h$ | E.T. | $8.54 \times \sum \delta T$<br>Drift | $\sum \delta g$ | $g$<br>979. | Field<br>Note<br>No. |
|-------|------------|---------|--------------|-----------------------------------|--|------|--------------------|-------------|-------------------|------|--------------------------------------|-----------------|-------------|----------------------|
| "     | 1810       | 378     | VI 27        | 15 31                             | 0 00   | 5906 | 5404               | 70          | 22                | 9    | 0                                    | 0               | 72152       | 45                   |
| "     | 1855       | J. 1587 | " "          | 16 45                             | 1 14   | 6296 | 5761               | 52          | 16                | 6    | 10                                   | 338             | 72490       | "                    |
| "     | 1856       | 1589    | " "          | 16 59                             | 1 28   | 5690 | 5206               | 57          | 18                | 6    | 13                                   | 218             | 71934       | "                    |
| "     | 1857       | 1591    | " "          | 17 12                             | 1 41   | 5262 | 4815               | 56          | 17                | 6    | 15                                   | 612             | 71540       | "                    |
| "     | 1858       | 1593    | " "          | 17 36                             | 2 05   | 5596 | 5120               | 61          | 19                | 3    | 18                                   | 311             | 71841       | "                    |
| "     | 1859       | 1595    | " "          | 17 51                             | 2 20   | 5628 | 5150               | 55          | 17                | 3    | 20                                   | 285             | 71867       | "                    |
| "     | 1860       | 1597    | " "          | 18 07                             | 2 36   | 5476 | 5011               | 67          | 21                | 3    | 22                                   | 422             | 71730       | "                    |
| "     | 1861       | 1600    | " "          | 18 30                             | 2 59   | 5708 | 5223               | 33          | 10                | 3    | 26                                   | 225             | 71927       | "                    |
| "     | 1862       | 1602    | " "          | 18 55                             | 3 24   | 5007 | 4581               | 72          | 22                | -1   | 29                                   | 862             | 71290       | "                    |
| "     | 1863       | 1604    | " "          | 19 09                             | 3 38   | 4401 | 4027               | 52          | 16                | -1   | 31                                   | -1424           | 70728       | "                    |
| "     | Nishiebara |         | " "          | 19 20                             | 3 49   | 4141 | 3789               | 27          | 8                 | -1   | 32                                   | -1671           | 70481       | "                    |
| "     | 1864       | 1606    | VI 28        | 8 56                              | 4 13   | 4218 | 3859               | "           | "                 | -3   | 36                                   | -2095           | 70057       | "                    |
| "     | 1865       | 1608    | " "          | 9 20                              | 4 33   | 3749 | 3430               | 56          | 17                | -3   | 39                                   | -2086           | 70066       | "                    |
| "     | 1810       | 378     | " "          | 13 17                             | 8 10   | 6061 | 5546               | 66          | 20                | 7    | 70                                   | 0               | 72152       | "                    |

Route 14<sub>2</sub> Okayama—Niimi—B.M. 2226—Niimi—B.M. 378.

| Pref. | No.     | B.M. | Date<br>1952 | Time<br><sup>h</sup> <sup>m</sup> | $\sum \delta T$<br><sup>h</sup> <sup>m</sup> | $SD$ | $0.9150 \times SD$ | $h$<br>(cm) | $0.3086 \times h$ | E.T. | $8.18 \times \sum \delta T$<br>Drift | $\sum \delta g$ | $g$<br>979. | Field<br>Note<br>No. |
|-------|---------|------|--------------|-----------------------------------|--|------|--------------------|-------------|-------------------|------|--------------------------------------|-----------------|-------------|----------------------|
| 32    | Okayama | 376  | VI 26        | 10 50                             | 0 00   | 4987 | 4563               | 27          | 8                 | 5    | 0                                    | 0               | 72055       | 44                   |
| "     | 1834    | 2181 | " "          | 13 49                             | 2 59   | 5180 | 4740               | 80          | 25                | 13   | 24                                   | 178             | 72233       | "                    |
| "     | 1835    | 2183 | " "          | 14 20                             | 3 30   | 5159 | 4720               | 60          | 19                | 13   | 29                                   | 147             | 72202       | "                    |
| "     | 1836    | 2185 | " "          | 14 33                             | 3 43   | 5017 | 4591               | 60          | 19                | 12   | 30                                   | 16              | 72071       | "                    |
| "     | 1837    | 2185 | " "          | 14 47                             | 3 57   | 4706 | 4306               | 58          | 18                | 12   | 33                                   | -273            | 71782       | "                    |

Table IX. (Continued)

| Pref. | No.   | B.M. | Date<br>1952 | Time<br>$h^m$ | $\sum \delta T$<br>$h^m$ | SD   | $0.9150 \times SD$ | $h$<br>(cm) | $0.3086 \times h$ | E.T. | Drift<br>$\frac{8.18 \times \sum \delta T}{\text{Drift}}$ | $\sum \delta g$ | $g$<br>979. | Field<br>Note<br>No. |
|-------|-------|------|--------------|---------------|--------------------------|------|--------------------|-------------|-------------------|------|---|-----------------|-------------|----------------------|
| 32    | 1838  | 2187 | VI 26        | 15 00         | 4 10                     | 4453 | 4074               | 70          | 22                | 12   | 34  | -502            | 71553       | 44                   |
| "     | 1839  | 2189 | " "          | 15 10         | 4 20                     | 4159 | 3805               | 24          | 7                 | 12   | 35  | -787            | 71268       | "                    |
| "     | 1840  | 2191 | " "          | 15 30         | 4 40                     | 4457 | 4078               | 67          | 21                | 12   | 38  | -503            | 71552       | "                    |
| "     | 1841  | 2194 | " "          | 15 53         | 5 03                     | 4422 | 4046               | 48          | 15                | 9    | 42  | -548            | 71507       | "                    |
| "     | 1842  | 2196 | " "          | 16 35         | 5 45                     | 4040 | 3697               | 62          | 19                | 5    | 47  | -902            | 71153       | "                    |
| "     | 1843  | 2198 | " "          | 16 49         | 5 59                     | 3375 | 3088               | 66          | 20                | 5    | 49  | -1512           | 70543       | "                    |
| "     | 1844  | 2201 | " "          | 17 04         | 6 14                     | 3313 | 3031               | 64          | 20                | 5    | 51  | -1571           | 70484       | "                    |
| "     | 1845  | 2204 | " "          | 17 21         | 6 31                     | 4236 | 3875               | 53          | 16                | 5    | 53  | -733            | 71322       | "                    |
| "     | 1846  | 2206 | " "          | 17 45         | 6 55                     | 3758 | 3439               | 60          | 19                | 1    | 56  | -1173           | 70882       | "                    |
| "     | 1847  | 2209 | " "          | 18 06         | 7 16                     | 3697 | 3383               | 40          | 12                | 1    | 60  | -1240           | 70815       | "                    |
| "     | 1848  | 2212 | " "          | 18 29         | 7 39                     | 3394 | 3106               | 58          | 18                | 1    | 63  | -1514           | 70541       | "                    |
| "     | 1849  | 2214 | " "          | 18 51         | 8 01                     | 3204 | 2932               | 74          | 23                | 4    | 65  | -1690           | 70365       | "                    |
| "     | Niimi |      | " "          | 18 57         | 8 07                     | 3235 | 2960               | 27          | 8                 | -    | 66  | -1678           | 70377       | 45                   |
| "     | 1850  | 2216 | VI 27        | 8 35          | 8 32                     | 3342 | 3058               | "           | "                 | -    | 69  | -2155           | 69900       | "                    |
| "     | 1850  |      | " "          | 9 00          | 8 32                     | 2813 | 2574               | 57          | 18                | 3    | 69  | -2155           | 69900       | "                    |
| "     | 1850  |      | " "          | 9 25          | 8 57                     | 0696 | 0637               | -           | -                 | -    | 74  | -4115           | 67940       | "                    |
| "     | "     |      | " "          | 9 32          | 9 08                     | 6042 | 5528               | -           | -                 | 3    | 74  | -4115           | 67940       | "                    |
| "     | 1851  | 2219 | " "          | 9 43          | 9 08                     | 5321 | 4869               | 30          | 9                 | -    | 74  | -4765           | 67290       | "                    |
| "     | 1852  | 2221 | " "          | 10 05         | 9 30                     | 6859 | 6276               | 59          | 18                | -    | 78  | -3353           | 68702       | "                    |
| "     | 1853  | 2223 | " "          | 10 20         | 9 45                     | 5885 | 5385               | 55          | 17                | -    | 80  | -4247           | 67808       | "                    |
| "     | 1854  | 2225 | " "          | 10 41         | 10 06                    | 4493 | 4111               | 46          | 14                | 1    | 83  | -5524           | 66531       | "                    |
| "     | 1139  | 2226 | " "          | 10 53         | 10 18                    | 4121 | 3771               | 62          | 19                | 1    | 84  | -5860           | 66195       | "                    |
| "     | Niimi | "    | " "          | 10 58         | 11 34                    | 1178 | 1078               | "           | "                 | 1    | 84  | -5860           | 66195       | "                    |
| "     | "     |      | " "          | 12 14         | 11 34                    | 5758 | 5269               | 27          | 8                 | 5    | 95  | -1687           | 70368       | "                    |
| "     | "     |      | " "          | 12 18         | 12 18                    | 3947 | 3612               | "           | "                 | 5    | 95  | -1687           | 70368       | "                    |
| "     | 1810  | 378  | " "          | 15 31         | 14 47                    | 5906 | 5404               | 70          | 22                | 9    | 121   | 97              | 72152       | "                    |

Gravity Survey along the Lines of Precise Levels.

Route 14<sub>3</sub> B.M. 378—B.M. 356—Kurashiki—B.M. 378.

| Pref. | No.       | B.M. | Date  | Time                               | $\Sigma \delta T$ | $SD$ | $0.9150 \times SD$ | $h$ (cm) | $0.3086 \times h$ | E.T. | $10.00 \times \Sigma \delta T$ Drift | $\Sigma \delta g$ | $g$   | Field Note No. |
|-------|-----------|------|-------|------------------------------------|-------------------|------|--------------------|----------|-------------------|------|--------------------------------------|-------------------|-------|----------------|
| 32    | 1810      | 378  | VI 28 | 13 17 <sup>h</sup> 00 <sup>m</sup> | 0 00              | 6061 | 5546               | 66       | 20                | 7    | 0                                    | 0                 | 72152 | 45             |
| "     | 1866      | 373  | "     | 13 40                              | 23                | 5968 | 5461               | 66       | 20                | 8    | 4                                    | 88                | 72064 | "              |
| "     | 1867      | 371  | "     | 13 54                              | 37                | 5888 | 5388               | 71       | 22                | 8    | 6                                    | 161               | 71991 | "              |
| "     | 1868      | 369  | "     | 14 11                              | 54                | 5679 | 5196               | 59       | 18                | 8    | 9                                    | 360               | 71792 | "              |
| "     | 1869      | 367  | "     | 14 25                              | 1 08              | 6183 | 5657               | 14       | 4                 | 8    | 11                                   | 85                | 72237 | "              |
| "     | 1870      | 365  | "     | 14 49                              | 1 32              | 6344 | 5805               | 60       | 19                | 9    | 15                                   | 245               | 72397 | "              |
| "     | 1871      | 363  | "     | 15 03                              | 1 46              | 6117 | 5597               | 80       | 25                | 9    | 18                                   | 40                | 72192 | "              |
| "     | 1872      | 361  | "     | 15 19                              | 2 02              | 5576 | 5102               | 65       | 20                | 9    | 20                                   | 462               | 71690 | "              |
| "     | 1873      | 359  | "     | 15 37                              | 2 20              | 5645 | 5165               | 75       | 23                | 8    | 23                                   | 400               | 71752 | "              |
| "     | 1874      | 356  | "     | 16 30                              | 3 13              | 4410 | 4035               | 31       | 10                | 8    | 32                                   | -1552             | 70600 | "              |
| "     | 1875      | 357  | "     | 16 45                              | 3 28              | 5648 | 5168               | 58       | 18                | 5    | 35                                   | 917               | 71235 | "              |
| "     | Kurashiki |      | "     | 17 55                              | 4 38              | 6012 | 5501               | 27       | 8                 | 2    | 46                                   | 108               | 72044 | "              |
| "     | "         |      | VI 29 | 13 11                              |                   | 6141 | 5619               | "        | "                 | 3    |                                      |                   |       | "              |
| "     | 1810      | 378  | "     | 13 49                              | 5 16              | 6250 | 5719               | 70       | 22                | 4    | 53                                   | 0                 | 72152 | "              |

Table X. Results along Route 15. (0.01 mgal.).  
Route 15<sub>1</sub> Hamada—Prefecture Boundary (No. 1159)—Hamada.

| Pref. | No.         | B.M.  | Date   | Time  | $\sum \delta T$ | $SD$ | $\frac{0.9150}{SD} \times h$ | $h$<br>(cm) | $\frac{0.3086}{h} \times E.T.$ | $E.T.$ | $\frac{0.44 \times \sum \delta T}{Drift}$ | $\sum \delta g$ | $g$   | Field Note No. |
|-------|-------------|-------|--------|-------|-----------------|------|------------------------------|-------------|--------------------------------|--------|---|-----------------|-------|----------------|
| 31    | Hamada      |       | XII 18 | 8 18  | 0 00            | 5027 | 4600                         | 27          | 8                              | -5     | 0   | 0               | 76038 | 28             |
| "     | "           | 3029  | "      | 8 51  | 33              | 5023 | 4596                         | 69          | 21                             | -7     | 0   | 7               | 76045 | "              |
| "     | "           | 3031  | "      | 9 03  | 45              | 4959 | 4537                         | 58          | 18                             | -7     | 0   | 55              | 75983 | "              |
| "     | "           | 3033  | "      | 9 20  | 1 02            | 4794 | 4387                         | 30          | 9                              | -7     | 0   | -214            | 75824 | "              |
| "     | "           | 3035  | "      | 9 31  | 1 13            | 3413 | 3123                         | 56          | 17                             | -6     | 1   | -1470           | 74563 | "              |
| "     | "           | 3037  | "      | 9 43  | 1 25            | 3135 | 2869                         | 41          | 13                             | -6     | 1   | -1728           | 74310 | "              |
| "     | "           | 3040  | "      | 9 59  | 1 41            | 2646 | 2421                         | 55          | 17                             | -6     | 1   | -2172           | 73865 | "              |
| "     | "           | 3042  | "      | 10 09 | 1 51            | 1347 | 1233                         | 44          | 14                             | -6     | 1   | -3363           | 72675 | "              |
| "     | "           | 3044  | "      | 10 26 | 2 08            | 2344 | 2145                         | 28          | 9                              | -6     | 1   | -2456           | 73583 | "              |
| "     | "           | 3046  | "      | 10 36 | 2 18            | 1605 | 1469                         | 34          | 10                             | -6     | 1   | -3131           | 72907 | "              |
| "     | "           | 3047  | "      | 10 47 | 2 29            | 1127 | 1031                         | 52          | 16                             | -6     | 1   | -3563           | 72475 | "              |
| "     | "           | "     | "      | 10 52 | "               | 4988 | 4564                         | "           | "                              | -6     | "   | "               | "     | "              |
| "     | "           | 3049  | "      | 11 02 | 2 39            | 4646 | 4251                         | 60          | 19                             | -6     | 1   | -3873           | 72165 | "              |
| "     | "           | 3051  | "      | 12 38 | 4 15            | 5117 | 4682                         | 41          | 13                             | -4     | 2   | -3447           | 72591 | "              |
| "     | "           | 3053  | "      | 12 52 | 4 29            | 4695 | 4296                         | 50          | 15                             | -4     | 2   | -3831           | 72207 | "              |
| "     | "           | 3055  | "      | 13 05 | 4 42            | 4451 | 4073                         | 41          | 13                             | -4     | 2   | -4056           | 71982 | "              |
| "     | "           | 3057  | "      | 13 25 | 5 02            | 2884 | 2639                         | 40          | 12                             | -4     | 2   | -5491           | 70547 | "              |
| "     | "           | 3059  | "      | 13 42 | 5 19            | 3217 | 2944                         | 63          | 19                             | -2     | 2   | -5177           | 70861 | "              |
| 34-31 | "           | P.B.* | "      | 13 48 | 5 25            | 3131 | 2865                         | 27          | 8                              | -2     | 2   | -5267           | 70771 | "              |
| 34    | "           | "     | "      | 13 53 | "               | 0349 | 0319                         | "           | "                              | -2     | "   | "               | "     | "              |
| 31    | 1160 Hamada | G**   | "      | 16 58 | 8 30            | 6264 | 5732                         | 57          | 18                             | -2     | 4   | 154             | 76192 | "              |
| "     | "           | "     | "      | 17 26 | 8 58            | 6107 | 5588                         | 27          | 8                              | -2     | 4   | 0               | 76038 | "              |

\* Prefecture Boundary.

\*\* Hamada Tide Gauge Station Bench Mark.

Gravity Survey along the Lines of Precise Levels.

Route 15, Hamada—B.M. 3166—Hamada.

| Pref. | No.    | B.M.    | Date<br>1951 | Time  | $\Sigma \delta T$ | $SD$ | $0.9150 \times SD$ | $h$ (cm) | $0.3086 \times h$ | $E.T.$ | $3.24 \times \Sigma \delta T$<br>Drift | adjust-<br>ment | $\Sigma \delta g$ | $g$<br>979. | Field<br>Note<br>No. |
|-------|--------|---------|--------------|-------|-------------------|------|--------------------|----------|-------------------|--------|--|-----------------|-------------------|-------------|----------------------|
| 31    | Hamada | J. 3028 | XII 19       | 9 00  | 0 00              | 6175 | 5650               | 27       | 8                 | 5      | 0                                      | 0               | 0                 | 76038       | 28                   |
| "     | "      | " 3190  | "            | 10 14 | 1 14              | 5966 | 5459               | 112      | 35                | 7      | 4                                      | 0               | 170               | 75868       | "                    |
| "     | "      | "       | "            | 10 32 | 1 32              | 1713 | 1567               | 59       | 18                | 6      | 5                                      | 6               | 4085              | 71953       | "                    |
| "     | "      | "       | "            | 10 35 | "                 | 7071 | 6470               | "        | "                 | 6      | "                                      | 10              | 6410              | 69628       | "                    |
| "     | 1163   | 3186    | "            | 11 01 | 1 58              | 4532 | 4147               | 69       | 21                | 6      | 6                                      | 10              | 6410              | 69628       | "                    |
| "     | 1164   | 3184    | "            | 11 14 | 2 11              | 4906 | 4489               | 44       | 14                | 6      | 7                                      | 9               | 6075              | 69963       | "                    |
| "     | 1165   | 3182    | "            | 11 27 | 2 24              | 4075 | 3729               | 57       | 18                | 6      | 8                                      | 10              | 6833              | 69205       | "                    |
| "     | 1166   | 3180    | "            | 11 41 | 2 38              | 0764 | 0699               | 31       | 10                | 5      | 8                                      | 15              | 9875              | 66163       | "                    |
| "     | "      | "       | "            | 11 44 | "                 | 5478 | 5012               | "        | "                 | 5      | "                                      | "               | "                 | "           | "                    |
| "     | 1167   | 3178    | "            | 11 58 | 2 52              | 3612 | 3305               | 49       | 15                | 5      | 9                                      | 18              | 11581             | 64457       | "                    |
| "     | 1168   | 3176    | "            | 12 13 | 3 07              | 6327 | 5789               | 46       | 14                | 5      | 10                                     | 14              | 9095              | 66943       | "                    |
| "     | 1169   | 3169    | "            | 12 55 | 3 49              | 5798 | 5305               | 43       | 13                | 3      | 12                                     | 15              | 9581              | 66457       | "                    |
| 33    | "      | 3166    | "            | 13 21 | 4 15              | 0466 | 0426               | 67       | 21                | 3      | 14                                     | 22              | 14461             | 61577       | "                    |
| 31    | 1169   | 3169    | "            | 13 42 | 4 36              | 5793 | 5301               | 47       | 15                | 1      | 15                                     | 15              | 9584              | 66454       | "                    |
| "     | "      | "       | "            | 13 45 | "                 | 1009 | 0923               | "        | "                 | 1      | "                                      | "               | "                 | "           | "                    |
| "     | 1171   | 3171    | "            | 13 56 | 4 47              | 2750 | 2516               | 41       | 13                | 1      | 16                                     | 12              | 7991              | 68047       | "                    |
| "     | 1172   | 3173    | "            | 14 08 | 4 59              | 4171 | 3816               | 45       | 14                | 1      | 16                                     | 10              | 6688              | 69850       | "                    |
| "     | "      | "       | "            | 14 10 | "                 | 0127 | 0116               | "        | "                 | 1      | "                                      | "               | "                 | "           | "                    |
| "     | 1173   | 3188    | "            | 15 41 | 6 30              | 2158 | 1975               | 66       | 20                | 1      | 21                                     | 7               | 4823              | 71215       | "                    |
| "     | "      | "       | "            | 15 43 | "                 | 0270 | 0247               | "        | "                 | 1      | "                                      | "               | "                 | "           | "                    |
| "     | Hamada | "       | "            | 16 16 | 7 03              | 5549 | 5077               | 27       | 8                 | 1      | 23                                     | 0               | 0                 | 76038       | "                    |

Route 15<sub>3</sub> Matsue—Hamada—Yunotsu—Izumo—B.M. 2281—Matsue.

| Pref. | No.     | B.M.         | Date   | Time  | $\Sigma \delta T$ | $SD$ | $0.9150 \times SD$ | $h$ (cm) | $0.3086 \times h$ | $E.T.$ | $3.49 \times \Sigma \delta T$ Drift | $\Sigma \delta g$ | $g$ 979. | Field Note No. |
|-------|---------|--------------|--------|-------|-------------------|------|--------------------|----------|-------------------|--------|-------------------------------------|-------------------|----------|----------------|
| 31    | Hamada  | Matsue P.O.* | XII 17 | 11 18 | 0 00              | 7148 | 6540               | 27       | 8                 | -6     | 0                                   | 0                 | 80627    | 28             |
| "     | "       | "            | "      | 15 40 | 4 22              | 2145 | 1963               | 27       | 8                 | -3     | 15                                  | -4589             | 76038    | "              |
| "     | "       | 3026         | XII 19 | 16 16 | 5 49              | 5549 | 5077               | "        | "                 | 1      | 17                                  | -4692             | 75935    | 29             |
| "     | "       | 3023         | "      | 16 48 | 4 54              | 5423 | 4962               | 73       | 23                | 0      | 18                                  | -5142             | 75485    | "              |
| "     | "       | "            | "      | 17 03 | 5 09              | 4939 | 4519               | 54       | 17                | 0      | "                                   | "                 | "        | "              |
| "     | "       | 3021         | "      | 17 14 | 5 20              | 5099 | 4666               | 58       | 18                | 0      | 18                                  | -4994             | 75633    | "              |
| "     | "       | 3019         | "      | 17 25 | 5 31              | 6560 | 6002               | 61       | 19                | 0      | 19                                  | -3658             | 76969    | "              |
| "     | "       | "            | "      | 17 28 | "                 | 3973 | 3635               | "        | "                 | 0      | "                                   | "                 | "        | "              |
| "     | "       | 3017         | "      | 17 39 | 5 42              | 4716 | 4315               | 43       | 13                | -1     | 20                                  | -2986             | 77641    | "              |
| "     | "       | 3014         | "      | 17 54 | 5 57              | 5745 | 5257               | 54       | 17                | -1     | 21                                  | -2041             | 78586    | "              |
| "     | "       | "            | "      | 17 56 | "                 | 3529 | 3229               | "        | "                 | "      | "                                   | "                 | "        | "              |
| "     | "       | 3012         | "      | 18 10 | 6 11              | 4110 | 3761               | 49       | 15                | -1     | 22                                  | -1512             | 79115    | "              |
| "     | "       | 3010         | "      | 18 25 | 6 26              | 2679 | 2451               | 55       | 17                | -1     | 22                                  | -2820             | 77807    | "              |
| "     | Yunotsu | "            | "      | 19 20 | 7 21              | 2814 | 2575               | 27       | 8                 | -3     | 26                                  | -2711             | 77916    | "              |
| "     | "       | "            | XII 20 | 9 47  | "                 | 2895 | 2649               | "        | "                 | -5     | "                                   | "                 | "        | "              |
| "     | "       | 3008         | "      | 10 50 | 8 24              | 0707 | 0647               | 34       | 10                | -6     | 29                                  | -4715             | 75912    | "              |
| "     | "       | "            | "      | 10 53 | "                 | 5527 | 5057               | "        | "                 | -6     | "                                   | "                 | "        | "              |
| "     | "       | 3006         | "      | 11 06 | 8 37              | 3409 | 3119               | 53       | 16                | -6     | 30                                  | -6648             | 73979    | "              |
| "     | "       | 3003         | "      | 11 26 | 8 57              | 2013 | 1842               | 60       | 19                | -6     | 31                                  | -7923             | 72704    | "              |
| "     | "       | 3000         | "      | 11 46 | 9 17              | 2490 | 2278               | 49       | 15                | -6     | 32                                  | -7492             | 73135    | "              |
| "     | "       | 2998         | "      | 12 02 | 9 33              | 3452 | 3159               | 67       | 21                | -6     | 34                                  | -6607             | 74020    | "              |
| "     | "       | F. 30        | "      | 12 21 | 9 52              | 5143 | 4706               | 38       | 12                | -6     | 35                                  | -5070             | 75557    | "              |
| "     | "       | "            | "      | 12 24 | "                 | 1034 | 0946               | "        | "                 | -6     | "                                   | "                 | "        | "              |
| "     | "       | 2993         | "      | 12 42 | 10 10             | 2867 | 2623               | 52       | 16                | -5     | 36                                  | -3389             | 77238    | "              |
| "     | "       | 2991         | "      | 12 59 | 10 27             | 3742 | 3424               | 47       | 15                | -4     | 37                                  | -2589             | 78038    | "              |

\* Shimane Prefecture Office.



Route 15<sub>4</sub> B.M. 2281—Akana Pass—Kitsuki—B.M. 2281.

| Pref. | No.  | B.M.             | Date<br>1951 | Time<br><sup>h</sup> <sup>m</sup> | $\Sigma \delta T$<br><sup>h</sup> <sup>m</sup> | $SD$ | $0.9150 \times$<br>$SD$ | $h$<br>(cm) | $0.3086$<br>$\times$<br>$h$ | $E.T.$ | $1.59 \times$<br>$\Sigma \delta T$<br>Drift | adjust-<br>ment | $\Sigma \delta g$ | $g$<br>979. | Field<br>Note<br>No. |
|-------|------|------------------|--------------|-----------------------------------|--|------|-------------------------|-------------|-----------------------------|--------|---|-----------------|-------------------|-------------|----------------------|
| 31    | 1202 | 2281             | XII 21       | 10 02                             | 0 00   | 7080 | 6478                    | 57          | 18                          | -4     | 0   | 0               | 0                 | 81008       | 29                   |
| "     | 1203 | 2283             | "            | 10 13                             | 11   | 5530 | 5078                    | 57          | 18                          | -4     | 0   | 2               | -1402             | 79606       | "                    |
| "     | 1204 | 2285             | "            | 10 24                             | 22   | 5555 | 5083                    | 61          | 19                          | -4     | 1   | 2               | -1397             | 79611       | "                    |
| "     | 1205 | 2287             | "            | 10 37                             | 35   | 4672 | 4275                    | 57          | 18                          | -6     | 1   | 3               | -2209             | 78799       | "                    |
| "     | 1206 | 2289             | "            | 11 21                             | 1 19   | 4411 | 4036                    | 69          | 21                          | -6     | 2   | 3               | -2446             | 78562       | "                    |
| "     | 1207 | 2292             | "            | 11 37                             | 1 35   | 2879 | 2634                    | 68          | 21                          | -6     | 3   | 5               | -3851             | 77157       | "                    |
| "     | 1208 | 2295             | "            | 11 52                             | 1 50   | 1222 | 1118                    | 57          | 18                          | -6     | 3   | 6               | -5371             | 75637       | "                    |
| "     | "    | "                | "            | 11 55                             | "  | 7030 | 6432                    | "           | "                           | -6     | "   | "               | "                 | "           | "                    |
| "     | 1209 | 2297             | "            | 12 05                             | 2 00   | 5619 | 5141                    | 45          | 14                          | -6     | 3   | 8               | -6688             | 74340       | "                    |
| "     | 1210 | 2299             | "            | 12 16                             | 2 11   | 4028 | 3686                    | 50          | 15                          | -6     | 3   | 10              | -8124             | 72884       | "                    |
| "     | 1211 | 2301             | "            | 12 30                             | 2 25   | 1664 | 1431                    | 40          | 12                          | -6     | 4   | 12              | -10385            | 70623       | "                    |
| "     | "    | "                | "            | 12 31                             | "  | 7002 | 6407                    | "           | "                           | -6     | "   | "               | "                 | "           | "                    |
| "     | 1212 | 2304             | "            | 12 49                             | 2 43   | 2283 | 2089                    | 59          | 18                          | -6     | 4   | 17              | -14702            | 66306       | "                    |
| "     | 1213 | 2307             | "            | 13 07                             | 3 01   | 2717 | 2486                    | 46          | 14                          | -6     | 5   | 17              | -14310            | 66698       | "                    |
| "     | 1214 | 2309             | "            | 14 36                             | 4 30   | 2578 | 2359                    | 48          | 15                          | -2     | 7   | 17              | -14434            | 66574       | "                    |
| "     | 1215 | 2311             | "            | 14 48                             | 4 42   | 2618 | 2395                    | 53          | 16                          | -2     | 7   | 17              | -14597            | 66611       | "                    |
| "     | 1216 | 2314             | "            | 15 03                             | 4 57   | 2391 | 2188                    | 62          | 19                          | -2     | 8   | 17              | -14602            | 66406       | "                    |
| "     | 1217 | 2316             | "            | 15 14                             | 5 08   | 1156 | 1058                    | 56          | 17                          | -2     | 8   | 19              | -15736            | 65272       | "                    |
| "     | "    | "                | "            | 15 16                             | "  | 6025 | 5513                    | "           | "                           | -2     | "   | "               | "                 | "           | "                    |
| "     | 1218 | Akana Pass P.B.* | "            | 15 31                             | 5 23   | 3010 | 2754                    | 44          | 14                          | 1      | 9   | 22              | -18499            | 62509       | "                    |
| "     | "    | "                | "            | 15 33                             | "  | 0157 | 0144                    | "           | "                           | "      | "   | "               | "                 | "           | "                    |
| "     | 1219 | 2318             | "            | 15 42                             | 5 32   | 0446 | 0408                    | 71          | 22                          | 1      | 9   | 22              | -18227            | 62781       | "                    |
| "     | 1213 | 2307             | "            | 16 28                             | 6 18   | 4753 | 4349                    | "           | "                           | 1      | 10  | 17              | -14304            | 66704       | "                    |
| "     | "    | "                | "            | 16 30                             | "  | 0127 | 0116                    | "           | "                           | 1      | "   | "               | "                 | "           | "                    |
| "     | 1210 | 2299             | "            | 17 07                             | 6 55   | 6365 | 6231                    | 49          | 15                          | 2      | 11  | 10              | -8117             | 72891       | "                    |

\* Akana Pass Prefecture Boundary.





Table XI. Results along Route 16. (0.01 mgal.).  
Route 16<sub>1</sub> B.M. 141—B.M. 3454—B.M. 141.

| Pref. | No.               | B.M. | Date    | Time                  | $\sum \delta T$      | $\frac{0.9150}{\times}$<br>SD | $h$<br>(cm) | $\frac{0.3086}{\times}$<br>$h$ | $E.T.$ | $\frac{11.96 \times}{\sum \delta T}$<br>Drift | $\sum \delta g$ | $g$<br>979. | Field<br>Note<br>No. |
|-------|-------------------|------|---------|-----------------------|----------------------|-------------------------------|-------------|--------------------------------|--------|---|-----------------|-------------|----------------------|
|       |                   |      | 1952    |                       |                      |                               |             |                                |        |   |                 |             |                      |
|       | 2285              | 141  | VIII 27 | <sup>h</sup><br>17 55 | <sup>m</sup><br>0 00 | 2083                          | 1906        | 20                             | -4     | 0   | 0               | 68495       | 52                   |
| "     | 2286              | "    | "       | 20 13                 | 2 18                 | 1054                          | 0964        | 8                              | -6     | 28  | -984            | 67511       | "                    |
| "     | 2287 <sup>2</sup> | "    | VIII 28 | 7 17                  | 3526                 | 3226                          | "           | "                              | 7      | 71  | -1081           | 67414       | "                    |
| 37    | 2288              | 3447 | "       | 10 51                 | 5 52                 | 3470                          | 3175        | 14                             | -2     | 81  | -562            | 67933       | "                    |
| "     | 2289              | 3448 | "       | 11 48                 | 6 49                 | 4028                          | 3686        | 32                             | -2     |   |                 |             |                      |
| "     | 2290              | 3449 | "       | 12 07                 | 7 08                 | 4095                          | 3747        | 19                             | -2     | 85  | 518             | 67977       | "                    |
| "     | 2291              | 3450 | "       | 12 24                 | 7 25                 | 4049                          | 3705        | 15                             | -2     | 89  | -568            | 67927       | "                    |
| "     | 2292              | 3451 | "       | 13 27                 | 8 28                 | 2814                          | 2575        | 21                             | -2     | 102   | -1705           | 66790       | "                    |
| "     | 2293              | 3453 | "       | 13 53                 | 8 54                 | 4914                          | 4496        | 25                             | -2     | 106   | 216             | 68711       | "                    |
| "     | 2294              | 3454 | "       | 14 06                 | 9 07                 | 4904                          | 4487        | 11                             | -2     | 109   | 190             | 68685       | "                    |
| 33    | 2295              | 141  | "       | 16 11                 | 11 12                | 4715                          | 4314        | 21                             | -4     | 134   | 0               | 68495       | "                    |

Route 16<sub>2</sub> Hiroshima Castle—Waki—Hiroshima Castle.

| Pref. | No.  | B.M.      | Date    | Time                  | $\sum \delta T$      | $\frac{0.9150}{\times}$<br>SD | $h$<br>(cm) | $\frac{0.3086}{\times}$<br>$h$ | $E.T.$ | $\frac{16.03 \times}{\sum \delta T}$<br>Drift | $\sum \delta g$ | $g$<br>979. | Field<br>Note<br>No. |
|-------|------|-----------|---------|-----------------------|----------------------|-------------------------------|-------------|--------------------------------|--------|---|-----------------|-------------|----------------------|
|       |      |           | 1952    |                       |                      |                               |             |                                |        |   |                 |             |                      |
|       | 2314 | Hiroshima | VIII 29 | <sup>h</sup><br>13 32 | <sup>m</sup><br>0 00 | 3860                          | 3532        | -20                            | -4     | 0   | 0               | 66982       | 52                   |
| "     | 2315 | C.*       | "       | 14 17                 | 45                   | 3507                          | 3209        | 37                             | -4     | 13  | -319            | 66663       | "                    |
| "     | 2316 | 1673      | "       | 14 50                 | 1 18                 | 3091                          | 2828        | 66                             | -4     | 21  | -689            | 66283       | "                    |
| "     | 2317 | 1675      | "       | 15 14                 | 1 42                 | 2681                          | 2453        | 63                             | -4     | 27  | -1081           | 65901       | "                    |
| "     | 2318 | 1677      | "       | 16 35                 | 3 03                 | 2578                          | 2359        | 58                             | -5     | 50  | -1200           | 65782       | "                    |

\* Castle, Monument.

B.M. printed in Gothic type are 2nd order bench marks.

| Pref.  | No.    | B.M.            | Date    | Time  | $\sum \delta T$ | SD   | $0.9150 \times SD$ | $h$ | $0.3086 \times h$ | E.T. | Drift | $\sum \delta g$ | $g$   | Field Note No. |
|--|--------|-----------------|---------|-------|-----------------|------|--------------------|-----|-------------------|------|-------|-----------------|-------|----------------|
| "  | 2319   | 1679            | "       | 16 46 | 3 14            | 2214 | 2026               | 65  | 20                | -5   | 51    | -1532           | 65450 | "              |
| "  | 2320   | 1681            | "       | 17 03 | 3 31            | 2057 | 1882               | 69  | 21                | -5   | 56    | -1680           | 65302 | "              |
| "  | 2321   | 1683            | "       | 17 17 | 3 45            | 1986 | 1817               | 54  | 17                | -5   | 61    | -1754           | 65238 | "              |
| "  | 2322   | 1685            | "       | 17 34 | 4 02            | 2013 | 1842               | 63  | 19                | -6   | 64    | -1731           | 65251 | "              |
| 34   | 2323   | Waki            | "       | 17 51 | 4 19            | 1954 | 1788               | 27  | 8                 | -6   | 69    | -1801           | 65181 | "              |
| 33   | 2324.1 | Hiroshima C.    | "       | 19 18 | 5 46            | 3964 | 3627               | -22 | -7                | -5   | 93    | 0               | 66982 | "              |
| Route 16 <sub>3</sub> B.M. 302—Hiroshima Castle—B.M. 1650. |        |                 |         |       |                 |      |                    |     |                   |      |       |                 |       |                |
| Pref.  | No.    | B.M.            | Date    | Time  | $\sum \delta T$ | SD   | $0.9150 \times SD$ | $h$ | $0.3086 \times h$ | E.T. | Drift | $\sum \delta g$ | $g$   | Field Note No. |
| 33   | 2306   | 302             | VIII 29 | 10 23 | 0 00            | 4542 | 4156               | 62  | 19                | 4    | 0     | 0               | 67673 | 52             |
| "  | 2307   | 305             | "       | 10 43 | 20              | 3642 | 3332               | 75  | 23                | 1    | 3     | -826            | 66847 | "              |
| "  | 2308   | 308             | "       | 11 06 | 43              | 3827 | 3502               | 69  | 21                | 1    | 7     | -662            | 67011 | "              |
| "  | 2309   | 311             | "       | 11 26 | 1 03            | 3629 | 3321               | 66  | 20                | 1    | 12    | -849            | 66824 | "              |
| "  | 2310   | 314             | "       | 12 23 | 2 00            | 3406 | 3116               | 69  | 21                | -2   | 21    | -1065           | 66608 | "              |
| "  | 2311   | 317             | "       | 12 39 | 2 16            | 3338 | 3054               | 61  | 19                | -3   | 24    | -1133           | 66540 | "              |
| "  | 2312   | 320             | "       | 12 55 | 2 32            | 3579 | 3275               | 65  | 20                | -3   | 27    | -914            | 66759 | "              |
| "  | 2313   | 322             | "       | 13 06 | 2 43            | 4083 | 3736               | 64  | 20                | -3   | 29    | -455            | 67218 | "              |
| "  | 2314   | C.              | "       | 13 32 | 3 09            | 3860 | 3532               | -20 | -6                | -4   | 34    | -691            | 66982 | "              |
| "  | 2245   | "               | VIII 26 | 8 54  |                 | 6336 | 5797               | -23 | -7                | -2   |       |                 |       | 51             |
| "  | 2246   | Hiroshima M.O.* | "       | 9 33  | 3 48            | 5384 | 4926               | 47  | 15                | -3   | 40    | -1547           | 66126 | "              |
| "  | 2247   | Enami           | "       | 9 43  | 3 58            | 5198 | 4756               | 35  | 11                | -3   | 42    | -1723           | 65950 | "              |
| "  | 2248   | 1666            | "       | 10 43 | 4 58            | 6695 | 6126               | 74  | 23                | -3   | 53    | -352            | 67321 | "              |
| "  | 2249   | 1664            | "       | 11 00 | 5 15            | 6735 | 6163               | 75  | 23                | -2   | 56    | -317            | 67356 | "              |
| "  | 2250   | 1662            | "       | 11 16 | 5 31            | 6778 | 6202               | 58  | 18                | -2   | 58    | -285            | 67388 | "              |
| "  | 2251   | 1660            | "       | 11 38 | 5 53            | 6026 | 5514               | 51  | 16                | -1   | 63    | -979            | 66694 | "              |
| "  | 2252   | 1658            | "       | 11 58 | 6 13            | 5602 | 5126               | 52  | 16                | -1   | 66    | -1370           | 66303 | "              |
| "  | 2253   | 1656            | "       | 12 11 | 6 26            | 3979 | 3641               | 37  | 11                | -1   | 68    | -2862           | 64811 | "              |
| "  | 2254   | 1654            | "       | 12 27 | 6 42            | 2515 | 2301               | 80  | 25                | -1   | 71    | -4191           | 63482 | "              |
| "  | 2255   | 1652            | "       | 12 42 | 6 57            | 3083 | 2821               | 97  | 30                | 1    | 74    | -3667           | 64006 | "              |
| "  | 2256   | 1650            | "       | 14 10 | 8 25            | 3520 | 3221               | 94  | 29                | 2    | 89    | -3282           | 64891 | "              |

\* Meteorological Observatory Bench Mark. \*\* Triangulation Point.  
 B.M. printed in Gothic type are 2nd order bench marks.

Route 16<sub>4</sub> B.M. 1632—B.M. 141—B.M. 302—B.M. 1650—B.M. 1632.

| Pref. | No.                | B.M.    | Date    | Time               | $\Sigma\delta T$  | $SD$ | $\frac{0.9150}{SD}$ | $h$ | $0.3086 \times h$ | $E.T.$ | $\frac{12.00 \times \Sigma\delta T}{Drift}$ | $\Sigma\delta g$ | $g$   | Field Note No. |
|-------|--------------------|---------|---------|--------------------|-------------------|------|---------------------|-----|-------------------|--------|---|------------------|-------|----------------|
|       |                    |         | 1952    |                    |                   |      |                     |     |                   |        |   |                  |       |                |
| 33    | 2279               | 1632    | VIII 27 | <sup>h</sup> 15 34 | <sup>m</sup> 0 00 | 2767 | 2532                | 57  | 18                | -2     | 0   | 0                | 69150 | 52             |
| "     | 2280               | 131     | "       | 15 57              | 23                | 2646 | 2421                | 63  | 19                | -2     | 5   | -115             | 69035 | "              |
| "     | 2281               | 133     | "       | 16 21              | 47                | 2785 | 2548                | 63  | 19                | -2     | 10  | 7                | 69157 | "              |
| "     | 2282               | 135     | "       | 16 35              | 1                 | 2670 | 2443                | 60  | 19                | -2     | 12  | -100             | 69050 | "              |
| "     | 2283               | 3457    | "       | 17 12              | 1 38              | 0671 | 0614                | 69  | 21                | -2     | 19  | -1934            | 67216 | "              |
| "     | 2284               | 138     | "       | 17 36              | 2 02              | 2057 | 1882                | 56  | 17                | -4     | 24  | 677              | 68473 | "              |
| "     | 2285               | 141     | "       | 17 55              | 2 21              | 2083 | 1906                | 64  | 20                | -4     | 29  | -655             | 68495 | "              |
| "     | 2295               | "       | VIII 28 | 16 11              | 47                | 4314 | 4314                | 67  | 21                | -4     | 43  | -622             | 68528 | "              |
| "     | 2296               | 143     | "       | 17 28              | 3 38              | 4783 | 4376                | 20  | 6                 | -4     | 52  | -1369            | 67781 | "              |
| "     | 2297               | 293     | "       | 18 10              | 4 20              | 3962 | 3625                | 60  | 19                | -4     | 56  | -766             | 68384 | "              |
| "     | 2298               | 296     | "       | 18 31              | 4 41              | 4615 | 4223                | 94  | 29                | -5     | 60  | -2803            | 66347 | "              |
| "     | 2299               | 299     | "       | 18 48              | 4 58              | 2408 | 2203                | 51  | 16                | -5     | 64  | -1477            | 67673 | "              |
| "     | 2300               | 302     | "       | 19 09              | 5 19              | 3859 | 3531                | 59  | 18                | -5     | 72  | -4550            | 64600 | "              |
| "     | 2301               | 327     | "       | 19 48              | 5 58              | 0509 | 0466                | 62  | 19                | -6     | 74  | -4499            | 64651 | "              |
| "     | 2302               | 329     | "       | 20 01              | 6 11              | 0566 | 0518                | 65  | 20                | -6     | 77  | -4516            | 64634 | "              |
| "     | 2303 <sub>-1</sub> | 331     | "       | 20 15              | 6 25              | 0550 | 0503                | 69  | 21                | -6     | 80  | -4759            | 64391 | "              |
| "     | 2303 <sub>-2</sub> | "       | "       | 20 21              | 6 44              | 1159 | 1060                | "   | "                 | -6     | 84  | -6581            | 62569 | "              |
| "     | 2304               | 1650    | "       | 20 40              | 6 44              | 0887 | 0812                | 94  | 29                | -6     | 89  | -3011            | 66139 | "              |
| "     | 2256               | "       | VIII 26 | 14 10              | 6 59              | 3520 | 3221                | "   | "                 | 2      | 94  | -1283            | 67867 | "              |
| "     | 2257               | 1648    | "       | 14 25              | 6 59              | 1554 | 1422                | 34  | 10                | 2      | 100   | -2341            | 66809 | "              |
| "     | 2258               | 1645    | "       | 14 52              | 7 26              | 5455 | 4991                | 52  | 16                | 2      | 106   | -858             | 68292 | "              |
| "     | 2259               | 1643    | "       | 15 16              | 7 50              | 7349 | 6724                | 53  | 16                | 2      | 89  | -3011            | 66139 | "              |
| "     | 2260               | 1640    | "       | 15 43              | 8 17              | 6205 | 5678                | 39  | 12                | 0      | 94  | -1283            | 67867 | "              |
| "     | 2261 <sub>-1</sub> | 1639    | "       | 16 13              | 8 47              | 7825 | 7160                | 60  | 19                | 0      | 100   | -2341            | 66809 | "              |
| "     | 2261 <sub>-2</sub> | "       | "       | 16 16              | 8 47              | 1591 | 1456                | "   | "                 | 0      | 106   | -858             | 68292 | "              |
| "     | 2262               | 3459    | "       | 16 37              | 9 08              | 2300 | 2105                | 62  | 19                | -2     | 109   | -214             | 68936 | "              |
| "     | 2263               | J. 1637 | "       | 16 53              | 9 24              | 2922 | 2674                | 116 | 36                | -2     | 113   | 368              | 69518 | "              |
| "     | 2264               | 1635    | "       | 17 05              | 9 36              | 2791 | 2554                | 66  | 20                | -2     | 115   | 230              | 69380 | "              |
| "     | 2265               | 1633    | "       | 17 15              | 9 46              | 2758 | 2524                | 220 | 68                | -2     | 118   | 245              | 69395 | "              |
| "     | 2266               | 1632    | "       | 17 27              | 9 58              | 2547 | 2331                | 58  | 18                | -2     | 120   | 0                | 69150 | "              |

B.M. printed in Gothic type are 2nd order bench marks.

Route 165 B.M. 1632—B.M. 1608—B.M. 1632.

| Pref. | No.  | B.M. | Date<br>1952 | Time<br>h <sup>m</sup> | $\sum \delta T$<br>h <sup>m</sup> | SD   | $0.9150 \times SD$ | $h$<br>(cm) | $0.3086 \times h$ | E.T. | $13.19 \times \sum \delta T$<br>Drift | $\sum \delta g$ | $g$<br>979. | Field<br>Note<br>No. |
|-------|------|------|--------------|------------------------|-----------------------------------|------|--------------------|-------------|-------------------|------|---------------------------------------|-----------------|-------------|----------------------|
| 33    | 2266 | 1632 | VIII 26      | 17 27                  | 0 00                              | 2547 | 2331               | 58          | 18                | -2   | 0                                     | 0               | 69150       | 51                   |
| "     | 2267 | 1629 | "            | 17 54                  | 27                                | 2536 | 2320               | 61          | 19                | -4   | 7                                     | -19             | 69131       | "                    |
| "     | 2268 | 1627 | "            | 18 10                  | 43                                | 2519 | 2305               | 60          | 19                | -4   | 9                                     | -36             | 69114       | 52                   |
| "     | 2269 | 1625 | "            | 18 26                  | 59                                | 2959 | 2707               | 104         | 32                | -4   | 13                                    | -375            | 69525       | "                    |
| "     | 2270 | 1622 | "            | 18 48                  | 1 21                              | 3176 | 2906               | 16          | 5                 | -6   | 18                                    | 540             | 69690       | "                    |
| "     | 2271 | 1619 | "            | 19 10                  | 1 43                              | 3680 | 3367               | 68          | 21                | -6   | 22                                    | 1013            | 70163       | "                    |
| "     | 2272 | 1617 | "            | 19 28                  | 2 01                              | 3883 | 3553               | 55          | 17                | -6   | 26                                    | 1191            | 70341       | "                    |
| "     | 2273 | 1615 | "            | 19 43                  | 2 16                              | 4132 | 3781               | 47          | 15                | -7   | 30                                    | 1412            | 70562       | "                    |
| "     | 2274 | "    | VIII 27      | 10 37                  | 4244                              | 3883 | 45                 | 14          | 14                | -2   | 33                                    | 1521            | 70671       | "                    |
| "     | 2275 | 1613 | "            | 10 50                  | 2 29                              | 4363 | 3992               | 54          | 17                | -2   | 33                                    | 1521            | 70671       | "                    |
| "     | 2276 | 1611 | "            | 11 08                  | 2 47                              | 4090 | 3742               | 54          | 17                | -2   | 37                                    | 1267            | 70417       | "                    |
| "     | 2277 | 1609 | "            | 11 20                  | 2 59                              | 3790 | 3468               | 50          | 15                | -2   | 40                                    | 988             | 70138       | "                    |
| 32    | 2278 | 1608 | "            | 11 29                  | 3 08                              | 3716 | 3400               | 39          | 12                | -2   | 41                                    | 916             | 70066       | "                    |
| 33    | 2279 | 1632 | "            | 15 34                  | 7 13                              | 2767 | 2532               | 57          | 18                | -2   | 95                                    | 0               | 69150       | "                    |

Table XII. Results along Route 17. (0.01 mgal.).  
 Route 17, Hiroshima Castle—B.M. J. 2357—B.M. 3166—Hiroshima Castle.

| Pref. | No.    | B.M.         | Date    | Time  | $\sum \delta T$ | SD   | $0.9150 \times SD$ | $h$ (cm) | $0.3086 \times h$ | E.T. | Drift | $\sum \delta g$ | $g$ 979. | Field Note No. |
|-------|--------|--------------|---------|-------|-----------------|------|--------------------|----------|-------------------|------|-------|-----------------|----------|----------------|
| "     | 2203   | Hiroshima C. | VIII 24 | 8 26  | 0 00            | 3710 | 3595               | -24      | -7                | -7   | 0     | 0               | 66982    | 50             |
| "     | 2204   | 2363         | "       | 8 48  | 22              | 3752 | 3433               | 62       | 19                | -5   | 4     | 62              | 67044    | "              |
| "     | 2205   | 2361         | "       | 9 05  | 39              | 4035 | 3692               | 65       | 20                | -5   | 7     | 319             | 67301    | "              |
| "     | 2206   | 2359         | "       | 9 20  | 54              | 4317 | 3950               | 49       | 15                | -5   | 9     | 570             | 67552    | "              |
| "     | 2207   | J. 2357      | "       | 9 32  | 1 06            | 4776 | 4370               | 56       | 17                | -1   | 11    | 994             | 67976    | "              |
| "     | 2230   | "            | VIII 25 | 11 47 |                 | 5057 | 4627               | 58       | 18                | 2    |       |                 |          | 51             |
| "     | 2231   | 3142         | "       | 12 02 | 1 21            | 4250 | 3889               | 58       | 18                | 2    | 14    | 253             | 67235    | "              |
| "     | 2232   | 3145         | "       | 12 20 | 1 39            | 4162 | 3808               | 58       | 18                | 2    | 17    | 169             | 67151    | "              |
| "     | 2233   | 3147         | "       | 12 40 | 1 59            | 2849 | 2607               | 56       | 17                | 4    | 21    | -1035           | 65947    | "              |
| "     | 2234.1 | 3148         | "       | 12 53 | 2 12            | 1463 | 1339               | 56       | 17                | 4    | 23    | -2305           | 64677    | "              |
| "     | 2234.2 | "            | "       | 12 58 |                 | 7001 | 6406               | "        | "                 | 4    |       |                 |          | "              |
| "     | 2235   | 3151         | "       | 13 15 | 2 29            | 4434 | 4057               | 55       | 17                | 5    | 26    | -4656           | 62326    | "              |
| "     | 2236   | 3153         | "       | 13 27 | 2 41            | 6920 | 6332               | 53       | 16                | 5    | 28    | -2384           | 64598    | "              |
| "     | 2237   | 3159         | "       | 14 51 | 4 05            | 6670 | 6103               | 72       | 22                | 4    | 42    | -2622           | 64360    | "              |
| "     | 2238   | 3161         | "       | 15 05 | 4 19            | 6839 | 6258               | 62       | 19                | 4    | 44    | -2472           | 64510    | "              |
| "     | 2239   | 3164         | "       | 15 20 | 4 34            | 6033 | 5520               | 56       | 17                | 4    | 47    | -3215           | 63767    | "              |
| "     | 2240.1 | 3166         | "       | 15 40 | 4 54            | 3643 | 3333               | 63       | 19                | 2    | 50    | -5405           | 61577    | "              |
| "     | 2240.2 | "            | "       | 15 45 | 0229            | 0210 | 0210               | "        | "                 | 2    |       |                 |          | "              |
| "     | 2241   | 3157         | "       | 16 31 | 5 40            | 4674 | 4277               | 75       | 23                | -2   | 58    | -1346           | 65636    | "              |
| "     | 2242   | 3155         | "       | 16 47 | 5 56            | 4715 | 4314               | 68       | 21                | -2   | 61    | -1314           | 65668    | "              |
| "     | 2243   | J. 2357      | "       | 17 49 | 6 58            | 7278 | 6659               | 57       | 18                | -5   | 72    | 1014            | 67996    | "              |
| "     | 2244   | Hiroshima C. | "       | 18 26 | 7 35            | 6202 | 5675               | -24      | -7                | -4   | 78    | 0               | 66982    | "              |

Gravity Survey along the Lines of Precise Levels.

Route 17<sub>2</sub> B.M. J. 2357—Akana Pass—B.M. J. 2357.

| Pref. | No.    | B.M.            | Date    | Time             | $\Sigma \delta T$ | $\frac{0.9150}{SD}$ | $h$  | $\frac{0.3086}{h}$ | $E.T.$ | $\frac{10.40 \times \Sigma \delta T}{Drift}$ | $\Sigma \delta g$ | $g$   | Field Note No. |
|-------|--------|-----------------|---------|------------------|-------------------|---------------------|------|--------------------|--------|--|-------------------|-------|----------------|
|       |        |                 | 1952    | <sup>h. m.</sup> | <sup>h. m.</sup>  | $\times SD$         | (cm) | $\times h$         |        |  |                   | 979.  |                |
| 33    | 2207   | J. 2357         | VIII 24 | 9 32             | 0 00              | 4370                | 56   | 17                 | -1     | 0  | 0                 | 67986 | 50             |
| "     | 2208   | 2355            | "       | 9 45             | 13                | 4009                | 91   | 28                 | -1     | 2  | -352              | 67694 | 51             |
| "     | 2209   | 2353            | "       | 9 54             | 22                | 2946                | 66   | 17                 | -1     | 4  | -1678             | 66308 | "              |
| "     | 2210   | 2350            | "       | 10 09            | 37                | 1128                | 50   | 15                 | -1     | 6  | -3846             | 64640 | "              |
| "     | 2211   | 2347            | "       | 10 22            | 50                | 2685                | 53   | 16                 | -1     | 8  | -1922             | 66064 | "              |
| "     | 2212   | 2345            | "       | 10 35            | 1 03              | 2696                | 45   | 14                 | 3      | 11   | -1684             | 66302 | "              |
| "     | 2213   | 2343            | "       | 10 46            | 1 14              | 3003                | 54   | 17                 | 3      | 12   | -1630             | 66356 | "              |
| "     | 2214   | 2341            | "       | 12 33            | 3 01              | 3079                | 73   | 23                 | 7      | 31   | -1570             | 66416 | "              |
| "     | 2215   | 2339            | "       | 12 45            | 3 13              | 3752                | 67   | 21                 | 7      | 33   | -958              | 67028 | "              |
| "     | 2216   | 2337            | "       | 13 09            | 3 37              | 4478                | 26   | 8                  | 7      | 37   | -311              | 67675 | "              |
| "     | 2217   | 2334            | "       | 13 28            | 3 56              | 4883                | 49   | 15                 | 7      | 41   | 63                | 68049 | "              |
| "     | 2218   | 2331            | "       | 13 43            | 4 11              | 5734                | 70   | 22                 | 7      | 44   | 846               | 68832 | "              |
| "     | 2219   | 2329            | "       | 13 56            | 4 24              | 5641                | 49   | 15                 | 7      | 46   | 752               | 68738 | "              |
| "     | 2220   | 2327            | "       | 14 08            | 4 36              | 5543                | 63   | 19                 | 7      | 48   | 664               | 68650 | "              |
| "     | 2221   | 2325            | "       | 14 20            | 4 48              | 4870                | 62   | 19                 | 7      | 50   | 460               | 68446 | "              |
| "     | 2222   | 2323            | "       | 14 32            | 5 00              | 4014                | 49   | 15                 | 4      | 52   | -746              | 67240 | "              |
| "     | 2223-1 | 2321            | "       | 14 45            | 5 13              | 2297                | 50   | 15                 | 4      | 54   | -2319             | 65667 | "              |
| "     | 2223-2 | "               | "       | 14 50            | 7 020             | 6423                | "    | "                  | 4      | 4  |                   |       | "              |
| "     | 2224   | 2319            | "       | 15 15            | 5 38              | 5021                | 78   | 24                 | 4      | 58   | -4143             | 63843 | "              |
| 31    | 2225   | Akana Pass P.B. | "       | 15 27            | 5 50              | 3273                | 41   | 13                 | 4      | 60   | -5477             | 62509 | "              |
| 33    | 2226-1 | 2321            | "       | 15 54            | 6 17              | 7037                | 54   | 17                 | 1      | 66   | -2316             | 65670 | "              |
| "     | 2226-2 | "               | "       | 15 58            | 2353              | 2153                | "    | "                  | 1      | 72   | 574               | 68560 | "              |
| "     | 2227   | 2330            | "       | 16 37            | 6 56              | 5523                | 55   | 17                 | -4     | 75   | 845               | 68831 | "              |
| "     | 2228   | 2331            | "       | 16 52            | 7 11              | 5323                | 72   | 22                 | -4     |  |                   |       | "              |
| "     | 2229   | "               | VIII 25 | 9 01             | 5952              | 5446                | "    | "                  | -5     |  |                   |       | "              |
| "     | 2230   | J. 2357         | "       | 11 47            | 9 57              | 5057                | 58   | 18                 | 2      | 104  | 0                 | 67986 | "              |

Table XIII. Results along Route 18. (0.01 mgal.)  
 Route 18<sub>1</sub> B.M. J. 1764—(4)—Shimonoseki—B.M. J. 1764.

| Pref. | No.         | B.M.              | Date<br>1952 | Time               | $\Sigma\delta T$  | $SD$ | $0.9150 \times SD$ | $h$<br>(cm) | $0.3086 \times h$ | $E.T.$ | $12.00 \times \Sigma\delta T$<br>Drift | $\Sigma\delta g$ | $g$<br>979. | Field<br>Note<br>No. |
|-------|-------------|-------------------|--------------|--------------------|-------------------|------|--------------------|-------------|-------------------|--------|--|------------------|-------------|----------------------|
| 34    | 1939        | J. 1764           | VII 19       | <sup>h</sup> 16 36 | <sup>m</sup> 0 00 | 5297 | 4847               | 61          | 19                | -6     | 0                                      | 0                | 67983       | 47                   |
| "     | 1940        | 1766              | "            | 16 49              | 13                | 5349 | 4894               | 58          | 18                | -6     | 2                                      | 44               | 68027       | "                    |
| "     | 1941        | 1768              | "            | 17 04              | 28                | 5319 | 4867               | 43          | 13                | -6     | 6                                      | 8                | 67991       | "                    |
| "     | 1942        | 1770              | "            | 17 19              | 43                | 5623 | 5145               | 46          | 14                | -8     | 8                                      | 285              | 68268       | "                    |
| "     | 1943        | 1771              | "            | 17 30              | 54                | 5840 | 5344               | 119         | 37                | -6     | 11                                     | 502              | 68485       | "                    |
| "     | 1944        | 1772              | "            | 17 41              | 1 05              | 5841 | 5345               | -28         | -9                | -8     | 13                                     | 455              | 68438       | "                    |
| "     | 1945        | (3)               | "            | 18 07              | 1 31              | 6027 | 5515               | 87          | 27                | -8     | 18                                     | 656              | 68639       | "                    |
| "     | 1946        | (4)               | "            | 19 22              | 2 46              | 5401 | 4942               | 0           | 0                 | -8     | 34                                     | 40               | 68023       | "                    |
| "     | Shimonoseki |                   | "            | 20 05              | 3 29              | 6086 | 5569               | 27          | 8                 | -7     | 42                                     | 668              | 68651       | "                    |
| "     | "           |                   | VII 20       | 8 49               | 6138              | 6138 | 5616               | "           | "                 | 8      |  |                  |             | "                    |
| "     | 1947        | Shimonoseki W.S.* | "            | 9 43               | 4 23              | 5018 | 4591               | 19          | 6                 | 13     | 53                                     | -365             | 67618       | "                    |
| "     | 1939        | J. 1764           | "            | 10 51              | 5 31              | 5414 | 4954               | 57          | 18                | 16     | 66                                     | 0                | 67983       | "                    |

\* Weather Station, on the Surface of the Stone Block at the Foot of the Wireless Antenna Tower.

Route 18<sub>2</sub> B.M. 1737—B.M. J. 1764—Yumoto—Prefecture Boundary (No. 1159).

| Pref. | No.  | B.M.             | Date<br>1952 | Time              | $\Sigma\delta T$  | $SD$ | $0.9150 \times SD$ | $h$<br>(cm) | $0.3086 \times h$ | $E.T.$ | $5.97 \times \Sigma\delta T$<br>Drift | $\Sigma\delta g$ | $g$<br>979. | Field<br>Note<br>No. |
|-------|------|------------------|--------------|-------------------|-------------------|------|--------------------|-------------|-------------------|--------|---------------------------------------|------------------|-------------|----------------------|
| 34    | 1924 | 1737             | VII 19       | <sup>h</sup> 9 47 | <sup>m</sup> 0 00 | 4103 | 3754               | 55          | 17                | 15     | 0                                     | 0                | 66940       | 46                   |
| "     | 1925 | Yamaguchi Univ.* | "            | 10 00             | 13                | 3663 | 3352               | 27          | 8                 | 15     | 1                                     | -412             | 66528       | "                    |
| "     | "    | "                | "            | 10 15             | "                 | 3655 | 3344               | "           | "                 | 15     | 15                                    | "                | 67002       | "                    |
| "     | 1926 | 1738             | "            | 11 11             | 1 09              | 4163 | 3809               | 72          | 22                | 16     | 7                                     | 62               | 67002       | "                    |
| "     | 1927 | 1740             | "            | 11 29             | 1 27              | 4398 | 4024               | 52          | 16                | 16     | 9                                     | 269              | 67209       | "                    |

\* Yamaguchi University, Main Building, Entrance.



Gravity Survey along the Lines of Precise Levels.

|   |      |      |        |       |       |      |      |    |    |    |    |       |       |    |
|---|------|------|--------|-------|-------|------|------|----|----|----|----|-------|-------|----|
| " | 1928 | 1742 | "      | 11 43 | 1 41  | 4036 | 3693 | 66 | 20 | 15 | 10 | 60    | 66880 | "  |
| " | 1929 | 1744 | "      | 13 33 | 3 31  | 3963 | 3626 | 73 | 23 | 7  | 21 | 143   | 66797 | "  |
| " | 1930 | 1746 | "      | 13 50 | 3 48  | 3451 | 3158 | 50 | 15 | 7  | 23 | 621   | 66319 | "  |
| " | 1931 | 1748 | "      | 14 10 | 4 08  | 3153 | 2885 | 64 | 20 | 7  | 24 | 890   | 66050 | "  |
| " | 1932 | 1750 | "      | 14 28 | 4 26  | 3662 | 3351 | 51 | 16 | 7  | 26 | 430   | 66510 | "  |
| " | 1933 | 1752 | "      | 14 49 | 4 47  | 3496 | 3199 | 52 | 16 | 2  | 29 | 590   | 66350 | 47 |
| " | 1934 | 1754 | "      | 15 06 | 5 04  | 4257 | 3895 | 54 | 17 | 2  | 30 | 106   | 67046 | "  |
| " | 1935 | 1756 | "      | 15 22 | 5 20  | 4999 | 4574 | 59 | 18 | 2  | 32 | 784   | 67724 | "  |
| " | 1936 | 1759 | "      | 15 47 | 5 45  | 4215 | 3857 | 59 | 18 | -3 | 35 | 59    | 66999 | "  |
| " | 1937 | 1761 | "      | 16 02 | 6 00  | 5185 | 4744 | 44 | 14 | -3 | 36 | 941   | 67881 | "  |
| " | 1938 | 1763 | "      | 16 19 | 6 17  | 5284 | 4835 | 56 | 17 | -3 | 38 | 1033  | 67973 | "  |
| " | 1939 | 1764 | "      | 16 36 | 6 34  | 5297 | 4847 | 61 | 19 | -6 | 39 | 1043  | 67983 | "  |
| " | "    | "    | VII 20 | 10 51 | 5 414 | 4954 | 57   | 18 | 16 | 16 | 41 | 198   | 67138 | "  |
| " | 1948 | 3129 | "      | 11 05 | 6 48  | 4498 | 4116 | 41 | 13 | 16 | 42 | 1757  | 68697 | "  |
| " | 1949 | 3127 | "      | 11 18 | 7 01  | 6199 | 5672 | 54 | 17 | 16 |    |       |       | "  |
| " | 1950 | 3125 | "      | 11 31 | 7 14  | 7100 | 6497 | 45 | 14 | 16 | 43 | 2578  | 69518 | "  |
| " | "    | "    | "      | 11 36 | "     | 3500 | 3203 | "  | "  | 16 | 45 | 2601  | 69541 | "  |
| " | 1951 | 3123 | "      | 11 50 | 7 28  | 3523 | 3224 | 57 | 18 | 16 | 46 | 2459  | 69399 | "  |
| " | 1952 | 3121 | "      | 12 06 | 7 44  | 3370 | 3084 | 56 | 17 | 16 | 48 | 1545  | 68485 | "  |
| " | 1953 | 3119 | "      | 12 20 | 7 53  | 2376 | 2174 | 48 | 15 | 16 |    |       |       | "  |
| " | 1954 | 3117 | "      | 12 51 | 8 29  | 2598 | 2377 | 58 | 18 | 14 | 51 | 1746  | 68686 | "  |
| " | 1955 | 3115 | "      | 13 08 | 8 46  | 2279 | 2085 | 52 | 16 | 14 | 53 | 1450  | 68390 | "  |
| " | 1956 | 3113 | "      | 13 24 | 9 02  | 0490 | 0448 | 48 | 15 | 14 | 54 | 189   | 66751 | "  |
| " | 1957 | 3111 | "      | 15 35 | 11 13 | 4510 | 4127 | 55 | 17 | -1 | 67 | 3464  | 70404 | "  |
| " | 1958 | 3109 | "      | 15 49 | 11 27 | 5619 | 5141 | 82 | 25 | -1 | 69 | 4484  | 71424 | "  |
| " | 1959 | 3107 | "      | 16 10 | 11 48 | 5547 | 5076 | 56 | 17 | -1 | 70 | 4410  | 71350 | "  |
| " | 1960 | 3105 | "      | 16 23 | 12 01 | 4589 | 4199 | 48 | 15 | -1 | 72 | 3529  | 70469 | "  |
| " | 1961 | 3103 | "      | 16 39 | 12 17 | 3460 | 3166 | 58 | 18 | -5 | 73 | 2494  | 69434 | "  |
| " | 1962 | 3101 | "      | 16 54 | 12 32 | 1978 | 1810 | 85 | 26 | -5 | 75 | 1144  | 68084 | "  |
| " | "    | "    | "      | 16 57 | "     | 4030 | 3687 | 85 | 26 | -5 |    |       |       | "  |
| " | 1963 | 3099 | "      | 17 14 | 12 49 | 0777 | 0711 | 54 | 17 | -5 | 76 | -1842 | 65098 | "  |
| " | 1964 | 3097 | "      | 17 30 | 13 05 | 1581 | 1447 | 51 | 16 | -8 | 78 | -1112 | 65828 | "  |
| " | 1965 | 3096 | "      | 17 41 | 13 16 | 1535 | 1405 | 55 | 17 | -8 | 79 | -1154 | 65786 | "  |
| " | 1966 | 3094 | "      | 17 56 | 13 31 | 0240 | 0220 | 45 | 14 | -8 | 81 | -2344 | 64596 | "  |
| " | 1967 | 3092 | "      | 18 12 | 13 47 | 3529 | 3229 | 60 | 19 | -8 | 82 | 669   | 67609 | "  |

Table XIII. (Continued)

| Pref. | No.    | B.M.   | Date   | Time  | $\Sigma \delta T$ | SD   | $0.9150 \times SD$ | $h$<br>(cm) | $0.3086$ |     | $E.T.$ | $5.97 \times \Sigma \delta T$<br>Drift | $\Sigma \delta g$ | $g$<br>979. | Field<br>Note<br>No. |
|-------|--------|--------|--------|-------|-------------------|------|--------------------|-------------|----------|-----|--------|--|-------------------|-------------|----------------------|
|       |        |        |        |       |                   |      |                    |             | $\times$ | $h$ |        |  |                   |             |                      |
|       |        |        | 1952   |       |                   |      |                    |             |          |     |        |  |                   |             |                      |
| 34    | 1968   | 3090   | VII 20 | 18 25 | 14 00             | 4420 | 4044               | 51          | 16       | -8  | 84     | 1479                                   | 68419             | 47          |                      |
| "     | 1969   | 3087   | "      | 18 55 | 14 30             | 5576 | 5102               | 68          | 21       | -9  | 87     | 2538                                   | 69478             | "           |                      |
| "     | 1970   | 3086   | "      | 19 07 | 14 42             | 5363 | 5365               | 72          | 22       | -6  | 88     | 2801                                   | 69741             | "           |                      |
| "     | Yumoto |        | "      | 20 42 | 16 17             | 6643 | 6078               | 27          | 8        | -6  | 97     | 3494                                   | 70434             | "           |                      |
| "     | "      |        | VII 21 | 8 57  |                   | 6725 | 6153               | "           | "        | 8   |        |  |                   | "           |                      |
| "     | 1970   | 3086   | "      | 10 34 | 17 54             | 5967 | 5460               | 72          | 22       | 16  | 107    | 2813                                   | 69753             | "           |                      |
| "     | 1971   | W.S.*  | "      | 10 45 | 18 05             | 5961 | 5454               | 64          | 20       | 16  | 108    | 2804                                   | 69744             | "           |                      |
| "     | 1972   | 3085   | "      | 11 25 | 18 45             | 5645 | 5165               | 49          | 15       | 16  | 112    | 2506                                   | 69446             | "           |                      |
| "     | 1973   | 3082   | "      | 11 46 | 19 06             | 1625 | 1487               | 69          | 21       | 16  | 114    | -1168                                  | 65772             | "           |                      |
| "     | 1974   | 3079   | "      | 12 08 | 19 28             | 2612 | 2390               | 50          | 15       | 16  | 116    | - 273                                  | 66667             | "           |                      |
| "     | 1975   | 3077   | "      | 12 22 | 19 42             | 2898 | 2652               | 51          | 16       | 16  | 118    | - 12                                   | 66928             | "           |                      |
| "     | 1976   | 3075   | "      | 12 36 | 19 56             | 0899 | 0823               | 41          | 13       | 16  | 119    | -1845                                  | 65095             | "           |                      |
| "     | "      | "      | "      | 12 39 |                   | 3950 | 3614               | "           | "        | 16  |        |  |                   | "           |                      |
| "     | 1977   | 3073   | "      | 12 57 | 20 14             | 3000 | 2745               | 34          | 10       | 16  | 121    | -2719                                  | 64221             | "           |                      |
| "     | 1978   | 3071   | "      | 13 15 | 20 32             | 1957 | 1791               | 38          | 12       | 16  | 122    | -3672                                  | 63263             | "           |                      |
| "     | 1979   | 3069   | "      | 13 30 | 20 47             | 3244 | 2968               | 31          | 10       | 13  | 124    | -2502                                  | 64438             | "           |                      |
| "     | 1980   | 3067   | "      | 13 46 | 21 03             | 6956 | 6365               | 12          | 4        | 13  | 126    | 887                                    | 67827             | "           |                      |
| "     | "      | "      | "      | 13 50 |                   | 0754 | 0690               | "           | "        | 13  |        |  |                   | "           |                      |
| "     | 1981   | 3065   | "      | 14 05 | 21 18             | 0787 | 0720               | 46          | 14       | 13  | 127    | 926                                    | 67866             | "           |                      |
| "     | 1982   | 3063   | "      | 14 20 | 21 33             | 4279 | 3915               | 41          | 13       | 13  | 129    | 4118                                   | 71058             | "           |                      |
| "     | 1983   | 3061   | "      | 14 36 | 21 49             | 5422 | 4961               | 52          | 16       | 8   | 130    | 5161                                   | 72101             | "           |                      |
| "     | 1159   | P.B.** | "      | 14 54 | 22 07             | 3979 | 3641               | 27          | 8        | 8   | 132    | 3881                                   | 70771             | "           |                      |

\* Weather Station Bench Mark. \*\* Prefecture Boundary.

Route 18<sub>3</sub> Yamaguchi—B.M. 1737—B.M. 1713—Tokuyama—Yamaguchi.

| Pref. | No.            | B.M.  | Date<br>1952 | Time<br><sup>h</sup> <sup>m</sup> | $\sum \delta T$<br><sup>h</sup> <sup>m</sup> | SD   | 0.9150<br>×<br>SD | h<br>(cm) | 0.3086<br>×<br>h | E.T. | 8.33 ×<br>$\sum \delta T$ | $\sum \delta g$ | g<br>979. | Field<br>Note<br>No. |
|-------|----------------|-------|--------------|-----------------------------------|--|------|-------------------|-----------|------------------|------|---------------------------|-----------------|-----------|----------------------|
|       |                |       |              |                                   |  |      |                   |           |                  |      |                           |                 |           |                      |
| 34    | Yamaguchi      |       | VII 22       | 8 57                              | 0 00   | 3673 | 3361              | 27        | 8                | 4    | 0                         | 66920           | 48        |                      |
| "     | 1924           | 1737  | "            | 9 14                              | 17   | 3687 | 3374              | 56        | 17               | 4    | 2                         | 66940           | "         |                      |
| "     | 1984           | 1735  | "            | 9 30                              | 33   | 3280 | 3001              | 57        | 18               | 10   | 5                         | 66571           | "         |                      |
| "     | 1985           | 1733  | "            | 9 40                              | 43   | 2568 | 2350              | 66        | 20               | 10   | 6                         | 65921           | "         |                      |
| "     | 1986           | 1731  | "            | 9 58                              | 1 01   | 1173 | 1073              | 50        | 15               | 10   | 8                         | 64637           | "         |                      |
| "     | 1987           | 1730  | "            | 10 10                             | 1 13   | 2717 | 2486              | 49        | 15               | 10   | 10                        | 66048           | "         |                      |
| "     | 1988           | 1728  | "            | 10 27                             | 1 30   | 3537 | 3236              | 45        | 14               | 10   | 12                        | 66795           | "         |                      |
| "     | 1988.1         | W.S.* | "            | 10 54                             | 1 57   | 3548 | 3246              | 27        | 8                | 14   | 17                        | 66798           | "         |                      |
| "     | 1989           | 1726  | "            | 11 27                             | 2 30   | 3912 | 3579              | 67        | 21               | 14   | 21                        | 67140           | "         |                      |
| "     | 1990           | 1724  | "            | 11 45                             | 2 48   | 4069 | 3723              | 61        | 19               | 16   | 23                        | 67282           | "         |                      |
| "     | 1991           | 1722  | "            | 12 02                             | 3 05   | 3139 | 2872              | 49        | 15               | 16   | 26                        | 66424           | "         |                      |
| "     | 1992           | 1720  | "            | 12 22                             | 3 25   | 4410 | 4035              | 48        | 15               | 16   | 28                        | 67585           | "         |                      |
| "     | 1993           | 1718  | "            | 12 36                             | 3 39   | 4436 | 4059              | 56        | 17               | 15   | 31                        | 67607           | "         |                      |
| "     | 1994           | 1716  | "            | 12 51                             | 3 54   | 3904 | 3572              | 50        | 15               | 15   | 32                        | 67117           | "         |                      |
| "     | 1995           | 1714  | "            | 14 49                             | 5 52   | 3186 | 2915              | 57        | 18               | 8    | 49                        | 66439           | "         |                      |
| "     | 1996           | 1713  | "            | 14 58                             | 6 01   | 3205 | 2933              | 64        | 20               | 8    | 50                        | 66458           | "         |                      |
| "     | 2026.*         | "     | VII 23       | 22 03                             |  | 3426 | 3135              | 63        | 19               | -5   |                           |                 | "         |                      |
| "     | Tokuyama 2027  |       | "            | 22 18                             | 6 16   | 3494 | 3197              | 27        | 8                | -5   | 52                        | 66507           | "         |                      |
| "     | 2028           |       | VII 24       | 9 35                              |  | 3568 | 3265              | "         | "                | 1    |                           |                 | "         |                      |
| "     | Yamaguchi 2029 |       | "            | 11 43                             | 8 24   | 4030 | 3687              | 27        | 8                | 10   | 70                        | 66920           | "         |                      |

\* Weather Station, on Concrete Corridor.

Route 18<sub>4</sub> B.M. 1713—Komatsu—Waki—B.M. 1718.

| Pref. | No.            | B.M. | Date<br>1952 | Time<br>h <sup>m</sup> | $\sum \delta T$<br>h <sup>m</sup> | $SD$ | $0.9150$<br>$\times$<br>$SD$ | $h$<br>(cm) | $0.3086$<br>$\times$<br>$h$ | $E.T.$ | $11.08 \times$<br>$\sum \delta T$<br>Drift | $\sum \delta g$ | $g$<br>979. | Field<br>Note<br>No. |
|-------|----------------|------|--------------|------------------------|-----------------------------------|------|------------------------------|-------------|-----------------------------|--------|--|-----------------|-------------|----------------------|
| 34    | 1996           | 1713 | VII 22       | 14 58                  | 0 00                              | 3205 | 2933                         | 64          | 20                          | 8      | 0  | 0               | 66458       | 48                   |
| "     | 1997           | 3132 | "            | 15 14                  | 16                                | 3405 | 3116                         | 61          | 19                          | 8      | 3  | 179             | 66637       | "                    |
| "     | 1998           | 3134 | "            | 15 34                  | 36                                | 2377 | 2175                         | 72          | 22                          | 2      | 7  | -769            | 65689       | "                    |
| "     | 1999           | 3136 | "            | 15 53                  | 55                                | 2365 | 2164                         | 55          | 17                          | 2      | 10   | -788            | 65670       | "                    |
| "     | 2000           | 3138 | "            | 16 11                  | 1 13                              | 2193 | 2007                         | 60          | 19                          | 2      | 13   | -946            | 65512       | "                    |
| "     | 2001           | 3140 | "            | 16 27                  | 1 29                              | 1628 | 1490                         | 68          | 21                          | 2      | 17   | -1465           | 64993       | "                    |
| "     | 2002           | 3514 | "            | 17 13                  | 2 15                              | 1208 | 1105                         | 61          | 19                          | -3     | 25   | -1865           | 64593       | "                    |
| "     | "              | "    | "            | 17 16                  | "                                 | 3775 | 3454                         | "           | "                           | -3     | "  | "               | "           | "                    |
| "     | 2003           | 3511 | "            | 17 46                  | 2 45                              | 3860 | 3532                         | 74          | 23                          | -7     | 31   | -1793           | 64665       | "                    |
| "     | 2004           | 3509 | "            | 18 05                  | 3 04                              | 3599 | 3293                         | 72          | 22                          | -7     | 34   | -2036           | 64422       | "                    |
| "     | 2005           | 3507 | "            | 19 10                  | 4 09                              | 3340 | 3056                         | 70          | 22                          | -9     | 47   | -2288           | 64170       | "                    |
| "     | 2006           | "    | "            | 19 29                  | 4 28                              | 3300 | 3020                         | 51          | 16                          | -9     | 50   | -2333           | 64125       | "                    |
| "     | Komatsu 2006.1 | "    | "            | 20 17                  | 5 16                              | 2994 | 2740                         | 27          | 8                           | -8     | 59   | -2629           | 63829       | "                    |
| "     | "              | Waki | VII 23       | 12 26                  | "                                 | 4772 | 4366                         | "           | "                           | 14     | "  | "               | "           | "                    |
| "     | 2014           | "    | "            | 15 24                  | 8 14                              | 6289 | 5754                         | 27          | 8                           | 10     | 91   | -1277           | 65181       | "                    |
| "     | 2015           | 1688 | "            | 15 34                  | 8 24                              | 6346 | 5807                         | 47          | 15                          | 5      | 93   | -1224           | 65234       | "                    |
| "     | 2016           | 1689 | "            | 15 48                  | 8 38                              | 6165 | 5641                         | 59          | 18                          | 5      | 95   | -1389           | 65069       | "                    |
| "     | 2017           | 1691 | "            | 16 06                  | 8 56                              | 6112 | 5592                         | 59          | 18                          | 5      | 99   | -1442           | 65016       | "                    |
| "     | 2018           | 1698 | "            | 18 03                  | 10 53                             | 3653 | 3342                         | 64          | 20                          | -5     | 121  | -3722           | 62736       | "                    |
| "     | 2019           | 1700 | "            | 18 29                  | 11 19                             | 3920 | 3587                         | 46          | 14                          | -5     | 125  | -3487           | 62971       | "                    |
| "     | 2020           | 1702 | "            | 18 44                  | 11 34                             | 4303 | 3937                         | 50          | 15                          | -8     | 129  | -3143           | 63315       | "                    |
| "     | 2021           | 1703 | "            | 18 59                  | 11 49                             | 4140 | 3788                         | 40          | 12                          | -8     | 131  | -3297           | 63161       | "                    |
| "     | 2022           | 1705 | "            | 19 50                  | 12 40                             | 3980 | 3642                         | 69          | 21                          | -9     | 141  | -3445           | 63013       | "                    |
| "     | 2023           | 1707 | "            | 20 15                  | 13 05                             | 5051 | 4622                         | 52          | 16                          | -9     | 145  | -2474           | 63984       | "                    |
| "     | 2024           | 1709 | "            | 20 34                  | 13 24                             | 5940 | 5435                         | -45         | -14                         | -7     | 148  | -1692           | 64766       | "                    |
| "     | 2025           | 1711 | "            | 21 12                  | 14 02                             | 6930 | 6341                         | 48          | 15                          | -7     | 155  | -764            | 65694       | "                    |
| "     | 2026.1         | "    | "            | 21 49                  | 14 39                             | 7392 | 6764                         | -           | -                           | -5     | 163  | -362            | 66096       | "                    |
| "     | "              | "    | "            | 21 53                  | "                                 | 3050 | 2791                         | -           | -                           | -5     | "  | "               | "           | "                    |
| "     | 2026.2         | 1713 | "            | 22 03                  | 14 49                             | 3426 | 3135                         | 63          | 19                          | -5     | 164  | 0               | 66458       | "                    |

Route 18, Komatsu—B.M. 3504—B.M. 3487—Komatsu.

| Pref. | No.            | B.M. | Date   | Time               | $\sum \delta T$   | $SD$ | $0.9150 \times SD$ | $h$ | $0.3086 \times h$ | $E.T.$ | $10.22 \times \sum \delta T$ | $\sum \delta g$ | $g$ | Field Note No. |
|-------|----------------|------|--------|--------------------|-------------------|------|--------------------|-----|-------------------|--------|------------------------------|-----------------|-----|----------------|
| 34    | Komatsu 2006.1 |      | VII 23 | <sup>h</sup> 7 45  | <sup>m</sup> 0 00 | 3064 | 2804               | 27  | 8                 | -5     | 0                            | 63829           | 48  |                |
| "     | 2007           | 3504 | "      | <sup>h</sup> 7 58  | <sup>m</sup> 13   | 3064 | 2804               | 69  | 21                | -5     | 2                            | 63840           | "   |                |
| "     | 2008           | 3502 | "      | <sup>h</sup> 8 13  | <sup>m</sup> 28   | 3291 | 3011               | 58  | 18                | -5     | 5                            | 64041           | "   |                |
| "     | 2009           | 3499 | "      | <sup>h</sup> 8 38  | <sup>m</sup> 53   | 2962 | 2710               | 92  | 28                | 0      | 9                            | 63751           | "   |                |
| "     | 2010           | 3496 | "      | <sup>h</sup> 9 03  | <sup>m</sup> 1 18 | 2089 | 1911               | 67  | 21                | 0      | 13                           | 62941           | "   |                |
| "     | 2011.1         | 3494 | "      | <sup>h</sup> 9 17  | <sup>m</sup> 1 32 | 1410 | 1290               | 67  | 21                | 0      | 15                           | 62318           | "   |                |
| "     | 2011.2         | "    | "      | <sup>h</sup> 9 20  | <sup>m</sup> 9 20 | 3086 | 2824               | "   | "                 | 0      | 20                           | 62194           | "   |                |
| "     | 2012           | 3491 | "      | <sup>h</sup> 9 50  | <sup>m</sup> 2 02 | 2954 | 2703               | 57  | 18                | 5      | 28                           | 61046           | "   |                |
| "     | 2013           | 3487 | "      | <sup>h</sup> 10 28 | <sup>m</sup> 2 40 | 1715 | 1569               | 40  | 12                | 5      | 47                           | 63829           | "   |                |
| "     | Komatsu 2006.1 |      | "      | <sup>h</sup> 12 26 | <sup>m</sup> 4 38 | 4772 | 4366               | 27  | 8                 | 14     | 0                            |                 | "   |                |

(30) Tottori Prefecture.

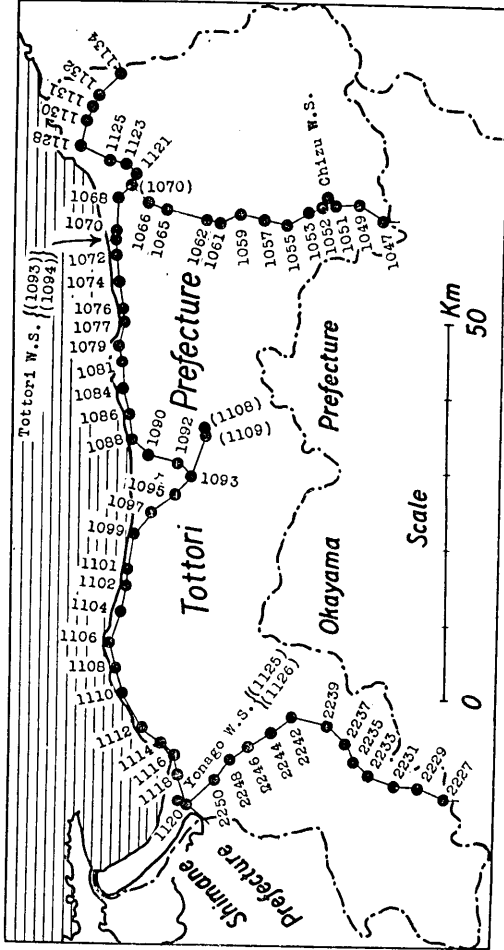


Fig. 7. Gravity Stations in Tottori Prefecture.

Table XIV. Synoptic Results for Tottori Prefecture (I).

| B.M. | No.  | $\phi$     | $\lambda$ | H (m)  | Date   | $g$   | $g_0$ | $g_0''$ | HELMERT Formula of 1901 |                      | International Formula |                      |
|------|------|------------|-----------|--------|--------|-------|-------|---------|-------------------------|----------------------|-----------------------|----------------------|
|      |      |            |           |        |        |       |       |         | $\gamma_0$ 979.         | $\Delta g_0$ (mgal.) | $\gamma_0$ 979.       | $\Delta g_0$ (mgal.) |
|      |      | $35^\circ$ | $133'$    |        |        | 979.  | 979.  | 979.    | $\Delta g_0$ (mgal.)    | $\gamma_0$ 979.      | $\Delta g_0$ (mgal.)  | $\Delta g_0''$       |
|      | 1138 | 06.4       | 21.2      | 463.04 | XII 14 | 66511 | 8080  | 7562    | 7390                    | 7546                 | 53.4                  | 1.6                  |
|      | 1137 | 08.1       | 23.1      | 558.29 | "      | 65079 | 8231  | 7606    | 7414                    | 7570                 | 66.1                  | 3.6                  |
|      | 1136 | 10.2       | 23.5      | 466.29 | "      | 67321 | 8171  | 7649    | 7444                    | 7600                 | 57.1                  | 4.9                  |
|      | 1135 | 12.2       | 23.3      | 237.21 | "      | 72332 | 7965  | 7700    | 7472                    | 7628                 | 33.7                  | 7.2                  |
|      | "    | "          | "         | "      | "      | 72340 | 7966  | 7700    | "                       | "                    | 33.8                  | 7.2                  |

Gravity Survey along the Lines of Precise Levels.

|         |       |      |      |        |        |       |      |      |      |      |      |      |      |      |
|---------|-------|------|------|--------|--------|-------|------|------|------|------|------|------|------|------|
| 2235    | 1134  | 13.2 | 24.8 | 208.89 | "      | 78224 | 7967 | 7733 | 7486 | 48.1 | 24.7 | 7642 | 32.5 | 9.1  |
| 2237    | 1133  | 14.0 | 26.6 | 195.74 | "      | 73656 | 7970 | 7751 | 7498 | 47.2 | 25.3 | 7654 | 31.6 | 9.7  |
| 2239    | 1132  | 15.5 | 28.2 | 168.66 | "      | 74202 | 7941 | 7752 | 7519 | 42.2 | 23.3 | 7675 | 26.6 | 7.7  |
| 2242    | 1131  | 17.7 | 28.5 | 129.48 | "      | 75468 | 7946 | 7802 | 7550 | 39.6 | 25.2 | 7706 | 24.0 | 9.6  |
| 2244    | 1130  | 19.1 | 27.2 | 95.25  | "      | 76556 | 7950 | 7843 | 7570 | 38.0 | 27.3 | 7726 | 22.4 | 11.7 |
| 2246    | 1129  | 20.9 | 26.0 | 66.75  | "      | 77893 | 7995 | 7921 | 7596 | 39.9 | 32.5 | 7751 | 24.4 | 17.0 |
| "       | "     | "    | "    | "      | "      | 77897 | 7996 | 7921 | "    | 40.0 | 32.5 | "    | 24.5 | 17.0 |
| 2248    | 1128  | 22.7 | 24.7 | 42.20  | "      | 79294 | 8060 | 8012 | 7621 | 43.9 | 39.1 | 7777 | 28.3 | 23.5 |
| 2250    | 1127  | 23.8 | 22.5 | 18.35  | "      | 80212 | 8078 | 8057 | 7637 | 44.1 | 42.0 | 7792 | 28.6 | 26.5 |
| Yonago  | W.S.* | 26.0 | 21.0 | 6.54   | XII 13 | 80375 | 8058 | 8050 | 7668 | 39.0 | 38.2 | 7824 | 23.4 | 22.6 |
| "       | "     | "    | "    | 7.17   | "      | 80353 | 8057 | 8049 | "    | 38.9 | 38.1 | "    | 23.3 | 22.5 |
| J. 1120 | 1125  | 25.7 | 20.6 | 4.08   | "      | 80548 | 8067 | 8063 | 7664 | 40.3 | 39.9 | 7819 | 24.8 | 24.4 |
| 1118    | 1123  | 30.7 | 22.9 | 4.63   | "      | 80482 | 8063 | 8057 | 7670 | 39.3 | 38.7 | 7825 | 23.8 | 23.2 |
| 1116    | 1121  | 26.9 | 25.0 | 4.51   | "      | 80494 | 8063 | 8058 | 7681 | 38.2 | 37.7 | 7836 | 22.7 | 22.2 |
| 1114    | 1120  | 28.6 | 26.5 | 15.50  | "      | 79975 | 8045 | 8028 | 7705 | 34.0 | 32.3 | 7861 | 18.4 | 16.7 |
| 1112    | 1119  | 29.8 | 28.5 | 4.59   | "      | 80085 | 8023 | 8018 | 7722 | 30.1 | 29.6 | 7878 | 14.5 | 14.0 |
| 1110    | 1118  | 30.7 | 30.8 | 4.86   | "      | 80110 | 8026 | 8021 | 7735 | 29.1 | 28.6 | 7890 | 13.6 | 13.1 |
| 1108    | 1117  | 30.9 | 32.9 | 37.02  | "      | 79298 | 8044 | 8003 | 7738 | 30.6 | 26.5 | 7893 | 15.1 | 11.0 |
| 1106    | 1116  | 31.3 | 35.5 | 32.08  | "      | 79293 | 8028 | 7992 | 7744 | 28.4 | 24.8 | 7899 | 12.9 | 9.3  |
| 1104    | 1115  | 30.9 | 38.2 | 11.56  | "      | 79638 | 8000 | 7987 | 7738 | 26.2 | 24.9 | 7893 | 10.7 | 9.4  |
| 1102    | 1114  | 30.2 | 40.3 | 4.77   | "      | 79759 | 7991 | 7985 | 7728 | 26.3 | 25.7 | 7883 | 10.8 | 10.2 |
| 1101    | 1113  | 30.2 | 41.6 | 6.05   | "      | 79669 | 7986 | 7979 | 7728 | 25.8 | 25.1 | 7883 | 10.3 | 9.6  |
| 1099    | 1112  | 29.7 | 44.2 | 5.32   | "      | 80241 | 8041 | 8035 | 7721 | 32.0 | 31.4 | 7876 | 16.5 | 15.9 |
| 1097    | 1111  | 28.5 | 46.7 | 2.86   | "      | 80696 | 8078 | 8075 | 7704 | 37.4 | 37.1 | 7859 | 21.9 | 21.6 |
| 1095    | 1110  | 26.9 | 48.3 | 18.98  | "      | 79721 | 8031 | 8010 | 7681 | 35.0 | 32.9 | 7836 | 19.5 | 17.4 |
| 1093    | 1107  | 25.7 | 49.2 | 16.22  | "      | 79365 | 7987 | 7968 | 7664 | 32.3 | 30.4 | 7819 | 16.8 | 14.9 |
| "       | "     | "    | "    | "      | XII 12 | 79371 | 7987 | 7969 | "    | 32.3 | 30.5 | "    | 16.8 | 15.0 |
| 1092    | 1106  | 26.3 | 50.6 | 18.78  | "      | 79195 | 7978 | 7957 | 7673 | 30.5 | 28.4 | 7828 | 15.0 | 12.9 |
| 1090    | 1105  | 28.5 | 51.4 | 6.20   | "      | 79933 | 8012 | 8006 | 7704 | 30.8 | 30.2 | 7859 | 15.3 | 14.7 |
| 1088    | 1104  | 30.1 | 52.2 | 3.00   | "      | 79939 | 8003 | 8000 | 7727 | 27.6 | 27.3 | 7882 | 12.1 | 11.8 |
| 1086    | 1103  | 30.2 | 55.0 | 10.91  | "      | 80055 | 8039 | 8027 | 7728 | 31.1 | 29.9 | 7883 | 15.6 | 14.4 |
| 1084    | 1102  | 30.6 | 56.9 | 20.22  | "      | 79993 | 8062 | 8039 | 7734 | 32.8 | 30.5 | 7889 | 17.3 | 15.0 |
| 1081    | 1101  | 30.7 | 59.5 | 2.51   | "      | 80767 | 8084 | 8082 | 7735 | 34.9 | 34.7 | 7890 | 19.4 | 19.2 |
| 1079    | 1100  | 31.0 | 01.2 | 24.11  | "      | 80268 | 8101 | 8074 | 7740 | 36.1 | 33.4 | 7895 | 20.6 | 17.9 |
| 1077    | 1099  | 30.4 | 03.4 | 2.50   | "      | 80699 | 8078 | 8075 | 7731 | 34.7 | 34.4 | 7886 | 19.2 | 18.9 |

\* Weather Station Bench Mark.  
 \*\* Weather Station Seismometer Room, on the Surface of the Concrete Block for Seismometer Installation.

Table XIV. (I) (Continued)

| B.M.  | No.  | $\varphi$ | $\lambda$ | H<br>(m) | Date   | g<br>979. | $g_0$<br>979. | $g_0''$<br>979. | HELMERT Formula<br>of 1901 |                         |                           | International<br>Formula |                         |                           |  |  |
|-------|------|-----------|-----------|----------|--------|-----------|---------------|-----------------|----------------------------|-------------------------|---------------------------|--------------------------|-------------------------|---------------------------|--|--|
|       |      |           |           |          |        |           |               |                 | $\gamma_0$<br>979.         | $\Delta g_0$<br>(mgal.) | $\Delta g_0''$<br>(mgal.) | $\gamma_0$<br>979.       | $\Delta g_0$<br>(mgal.) | $\Delta g_0''$<br>(mgal.) |  |  |
|       |      | 35°       | 134°      |          | 1951   |           |               |                 |                            |                         |                           |                          |                         |                           |  |  |
| 1076  | 1098 | 30.8      | 04.2      | 3.60     | XII 12 | 80747     | 8086          | 8082            | 7737                       | 34.9                    | 34.5                      | 7892                     | 19.4                    | 19.0                      |  |  |
| 1074  | 1097 | 31.0      | 06.2      | 8.50     | "      | 80477     | 8074          | 8064            | 7740                       | 33.4                    | 32.4                      | 7895                     | 17.9                    | 16.9                      |  |  |
| 1072  | 1096 | 31.4      | 08.4      | 5.34     | "      | 80517     | 8068          | 8062            | 7745                       | 32.3                    | 31.7                      | 7900                     | 16.8                    | 16.2                      |  |  |
| W.S.* | 1093 | 30.4      | 10.5      | 17.22    | "      | 80389     | 8092          | 8073            | 7731                       | 36.1                    | 34.2                      | 7886                     | 20.6                    | 18.7                      |  |  |
| " **  | 1094 | "         | "         | "        | "      | 80393     | 8092          | 8073            | "                          | 36.1                    | 34.2                      | "                        | 20.6                    | 18.7                      |  |  |
| 1070  | 1095 | 30.9      | 11.0      | 6.39     | "      | 80663     | 8086          | 8079            | 7738                       | 34.8                    | 34.1                      | 7893                     | 19.3                    | 18.6                      |  |  |
| 1068  | 1092 | 30.3      | 13.4      | 4.42     | "      | 80420     | 8056          | 8051            | 7730                       | 32.6                    | 32.1                      | 7885                     | 17.1                    | 16.6                      |  |  |
| 1121  | 1071 | 29.4      | 14.9      | 8.53     | XII 11 | 80261     | 8052          | 8043            | 7717                       | 33.5                    | 32.6                      | 7872                     | 18.0                    | 17.1                      |  |  |
| 1123  | 1072 | 30.3      | 16.7      | 50.26    | "      | 79576     | 8113          | 8057            | 7730                       | 38.3                    | 32.7                      | 7885                     | 22.8                    | 17.2                      |  |  |
| 1125  | 1073 | 31.9      | 17.4      | 5.72     | "      | 80631     | 8081          | 8074            | 7752                       | 32.9                    | 32.2                      | 7907                     | 17.4                    | 16.7                      |  |  |
| 1128  | 1074 | 33.8      | 18.8      | 1.89     | "      | 81271     | 8133          | 8131            | 7779                       | 35.4                    | 35.2                      | 7934                     | 19.9                    | 19.7                      |  |  |
| 1130  | 1075 | 33.5      | 20.8      | 10.40    | "      | 81334     | 8166          | 8154            | 7775                       | 39.1                    | 37.9                      | 7930                     | 22.4                    | 22.4                      |  |  |
| 1131  | 1076 | 33.1      | 22.0      | 22.24    | "      | 80996     | 8168          | 8143            | 7769                       | 39.9                    | 37.4                      | 7925                     | 24.3                    | 21.8                      |  |  |
| 1132  | 1077 | 32.6      | 23.0      | 55.18    | "      | 80078     | 8178          | 8116            | 7762                       | 41.6                    | 35.4                      | 7917                     | 26.1                    | 19.9                      |  |  |
| 1134  | 1078 | 31.4      | 24.5      | 145.22   | "      | 77618     | 8210          | 8047            | 7745                       | 46.5                    | 30.2                      | 7900                     | 31.0                    | 14.7                      |  |  |

\* Weather Station, Entrance.

\*\* Weather Station Seismometer Room, on the Surface of the Concrete Block for Seismometer Installation.



Synoptic Results for Tottori Prefecture (II).

| B.M. | No.  | $\varphi$ | $\lambda$ | H<br>(m) | Date   | g<br>979. | g <sub>0</sub><br>979. | g <sub>0</sub> ''<br>979. | HELMERT Formula<br>of 1901 |                             |                                | International<br>Formula |                             |                                |  |
|------|------|-----------|-----------|----------|--------|-----------|------------------------|---------------------------|----------------------------|-----------------------------|--------------------------------|--------------------------|-----------------------------|--------------------------------|--|
|      |      |           |           |          |        |           |                        |                           | $\gamma_0$<br>979.         | $\Delta\gamma_0$<br>(mgal.) | $\Delta\gamma_0$ ''<br>(mgal.) | $\gamma_0$<br>979.       | $\Delta\gamma_0$<br>(mgal.) | $\Delta\gamma_0$ ''<br>(mgal.) |  |
|      |      | 35°       | 134'      |          |        |           |                        |                           |                            |                             |                                |                          |                             |                                |  |
| 1065 | 1079 | 29.0      | 13.5      | 6.40     | XII 11 | 80156     | 8085                   | 8028                      | 7711                       | 32.4                        | 31.7                           | 7866                     | 16.9                        | 16.2                           |  |
| 1065 | 1080 | 27.4      | 13.1      | 9.11     | "      | 79556     | 7984                   | 7974                      | 7688                       | 29.6                        | 28.6                           | 7844                     | 14.0                        | 13.0                           |  |
| 1062 | 1081 | 24.7      | 12.2      | 22.08    | "      | 78851     | 7953                   | 7929                      | 7650                       | 30.3                        | 27.9                           | 7805                     | 14.8                        | 12.4                           |  |
| 1061 | 1082 | 23.7      | 12.4      | 28.56    | "      | 78680     | 7956                   | 7924                      | 7636                       | 32.0                        | 28.8                           | 7791                     | 16.5                        | 13.3                           |  |
| 1059 | 1083 | 22.1      | 13.1      | 49.30    | "      | 77951     | 7935                   | 7884                      | 7613                       | 32.2                        | 27.1                           | 7768                     | 16.7                        | 11.6                           |  |
| 1057 | 1084 | 20.3      | 12.5      | 73.29    | "      | 76491     | 7875                   | 7793                      | 7587                       | 28.8                        | 20.6                           | 7743                     | 13.2                        | 5.0                            |  |
| 1055 | 1085 | 18.4      | 12.0      | 107.05   | "      | 75122     | 7843                   | 7723                      | 7560                       | 28.3                        | 16.3                           | 7716                     | 12.7                        | 0.7                            |  |
| 1053 | 1086 | 17.3      | 13.6      | 145.85   | "      | 74039     | 7854                   | 7691                      | 7545                       | 30.9                        | 14.6                           | 7700                     | 15.4                        | -0.9                           |  |
| "    | "    | "         | "         | "        | "      | 74021     | 7852                   | 7689                      | "                          | 30.7                        | 14.4                           | "                        | 15.2                        | -1.1                           |  |
| 1052 | 1087 | 16.4      | 13.7      | 163.87   | "      | 73665     | 7872                   | 7689                      | 7592                       | 34.0                        | 15.7                           | 7688                     | 18.4                        | 0.1                            |  |
| 1051 | 1088 | 15.5      | 13.8      | 181.93   | XII 12 | 72996     | 7861                   | 7657                      | 7519                       | 34.2                        | 13.8                           | 7675                     | 18.6                        | -1.8                           |  |
| "    | "    | "         | "         | "        | "      | 73013     | 7863                   | 7659                      | "                          | 34.4                        | 14.0                           | "                        | 18.8                        | -1.6                           |  |
| 1049 | 1089 | 13.5      | 13.8      | 241.45   | "      | 71246     | 7870                   | 7600                      | 7491                       | 37.9                        | 10.9                           | 7647                     | 22.3                        | -4.7                           |  |
| 1047 | 1090 | 12.1      | 12.4      | 362.33   | "      | 68781     | 7996                   | 7591                      | 7471                       | 52.5                        | 12.0                           | 7627                     | 36.9                        | -3.6                           |  |
| "    | "    | "         | "         | "        | "      | 68791     | 7997                   | 7592                      | "                          | 52.6                        | 12.1                           | "                        | 37.0                        | -3.5                           |  |

(31) Shimane Prefecture.

Table XV. Synoptic Results for Shimane Prefecture (I).

| B.M.    | No.  | $\varphi$  | $\lambda$   | H<br>(m) | Date   | g     | $g_0$<br>979. | $g_0''$<br>979. | HELMERT Formula<br>of 1901 |                         |                           | International<br>Formula |                         |                           |  |  |
|---------|------|------------|-------------|----------|--------|-------|---------------|-----------------|----------------------------|-------------------------|---------------------------|--------------------------|-------------------------|---------------------------|--|--|
|         |      |            |             |          |        |       |               |                 | $\gamma_0$<br>979.         | $\Delta g_0$<br>(mgal.) | $\Delta g_0''$<br>(mgal.) | $\gamma_0$<br>979.       | $\Delta g_0$<br>(mgal.) | $\Delta g_0''$<br>(mgal.) |  |  |
|         |      | $34^\circ$ | $131^\circ$ |          | 1951   |       |               |                 |                            |                         |                           |                          |                         |                           |  |  |
| 3059    | 1158 | 35.8       | 43.4        | 97.17    | XII 18 | 70861 | 7386          | 7277            | 6958                       | 42.8                    | 31.9                      | 7115                     | 27.1                    | 16.2                      |  |  |
| 3057    | 1157 | 36.5       | 45.6        | 108.82   | "      | 70547 | 7391          | 7269            | 6968                       | 42.3                    | 30.1                      | 7125                     | 26.6                    | 14.4                      |  |  |
| 3055    | 1156 | 38.2       | 46.6        | 36.15    | "      | 71982 | 7310          | 7269            | 6992                       | 31.8                    | 27.7                      | 7149                     | 16.1                    | 12.0                      |  |  |
| 3053    | 1155 | 39.6       | 47.5        | 13.22    | "      | 72207 | 7262          | 7247            | 7011                       | 25.1                    | 23.6                      | 7168                     | 9.4                     | 7.9                       |  |  |
| 3051    | 1154 | 40.5       | 50.6        | 7.85     | "      | 72591 | 7283          | 7275            | 7024                       | 25.9                    | 25.1                      | 7181                     | 10.2                    | 9.4                       |  |  |
| 3049    | 1153 | 40.4       | 51.8        | 9.29     | "      | 72165 | 7245          | 7235            | 7023                       | 22.2                    | 21.2                      | 7180                     | 6.5                     | 5.5                       |  |  |
| 3047    | 1152 | 42.1       | 52.0        | 20.62    | "      | 72475 | 7311          | 7288            | 7047                       | 26.4                    | 24.1                      | 7203                     | 10.8                    | 8.5                       |  |  |
| 3046    | 1151 | 43.0       | 51.9        | 17.62    | "      | 72907 | 7345          | 7325            | 7059                       | 28.6                    | 26.6                      | 7216                     | 12.9                    | 10.9                      |  |  |
| 3044    | 1150 | 44.8       | 52.7        | 29.04    | "      | 73582 | 7448          | 7415            | 7085                       | 36.3                    | 33.0                      | 7241                     | 20.7                    | 17.4                      |  |  |
| 3042    | 1149 | 45.2       | 55.1        | 64.05    | "      | 72675 | 7465          | 7394            | 7090                       | 37.5                    | 30.4                      | 7247                     | 21.8                    | 14.7                      |  |  |
| 3040    | 1148 | 46.2       | 56.9        | 37.97    | "      | 73866 | 7504          | 7461            | 7104                       | 40.0                    | 35.7                      | 7261                     | 24.3                    | 20.0                      |  |  |
| 3037    | 1147 | 48.4       | 58.6        | 49.14    | "      | 74310 | 7583          | 7528            | 7135                       | 44.8                    | 39.3                      | 7292                     | 29.1                    | 23.6                      |  |  |
| 3035    | 1146 | 49.8       | 59.7        | 43.04    | "      | 74568 | 7590          | 7541            | 7155                       | 43.5                    | 38.6                      | 7312                     | 27.8                    | 22.9                      |  |  |
| 3033    | 1145 | 51.2       | 01.2        | 5.87     | "      | 75824 | 7601          | 7594            | 7175                       | 42.6                    | 41.9                      | 7332                     | 26.9                    | 26.2                      |  |  |
| 3031    | 1144 | 52.1       | 03.1        | 2.08     | "      | 75983 | 7605          | 7602            | 7188                       | 41.7                    | 41.4                      | 7344                     | 26.1                    | 25.8                      |  |  |
| 3029    | 1143 | 53.3       | 04.9        | 4.67     | "      | 76045 | 7619          | 7614            | 7205                       | 41.4                    | 40.9                      | 7361                     | 25.8                    | 25.3                      |  |  |
| 6*      | 1160 | 54.4       | 04.8        | 5.63     | "      | 76192 | 7637          | 7630            | 7220                       | 41.7                    | 41.0                      | 7377                     | 26.0                    | 25.3                      |  |  |
| J. 3028 | 1161 | 53.8       | 05.7        | 7.12     | XII 19 | 75868 | 7609          | 7601            | 7212                       | 39.7                    | 38.9                      | 7368                     | 24.1                    | 23.3                      |  |  |
| 3026    | 1174 | 55.1       | 06.6        | 21.19    | "      | 75935 | 7659          | 7635            | 7230                       | 42.9                    | 40.5                      | 7387                     | 27.2                    | 24.8                      |  |  |
| 3023    | 1175 | 55.1       | 09.3        | 27.89    | "      | 75485 | 7635          | 7603            | 7230                       | 40.5                    | 37.3                      | 7387                     | 24.8                    | 21.6                      |  |  |
| 3021    | 1176 | 56.5       | 10.8        | 48.43    | "      | 75633 | 7713          | 7659            | 7250                       | 46.3                    | 40.9                      | 7406                     | 30.7                    | 25.3                      |  |  |
| 3019    | 1177 | 58.3       | 10.5        | 2.92     | "      | 76969 | 7706          | 7703            | 7275                       | 43.1                    | 42.8                      | 7432                     | 27.4                    | 27.1                      |  |  |
| 3017    | 1178 | 59.8       | 12.0        | 5.39     | "      | 77641 | 7781          | 7775            | 7297                       | 48.4                    | 47.8                      | 7453                     | 32.8                    | 32.2                      |  |  |
| 3014    | 1179 | 01.4       | 14.3        | 7.17     | "      | 78586 | 7881          | 7873            | 7319                       | 56.2                    | 55.4                      | 7475                     | 40.6                    | 39.8                      |  |  |
| 3012    | 1180 | 02.0       | 16.1        | 6.34     | "      | 79115 | 7931          | 7924            | 7328                       | 60.3                    | 59.6                      | 7484                     | 44.7                    | 44.0                      |  |  |

\* Hamada Tide Gauge Station Bench Mark.

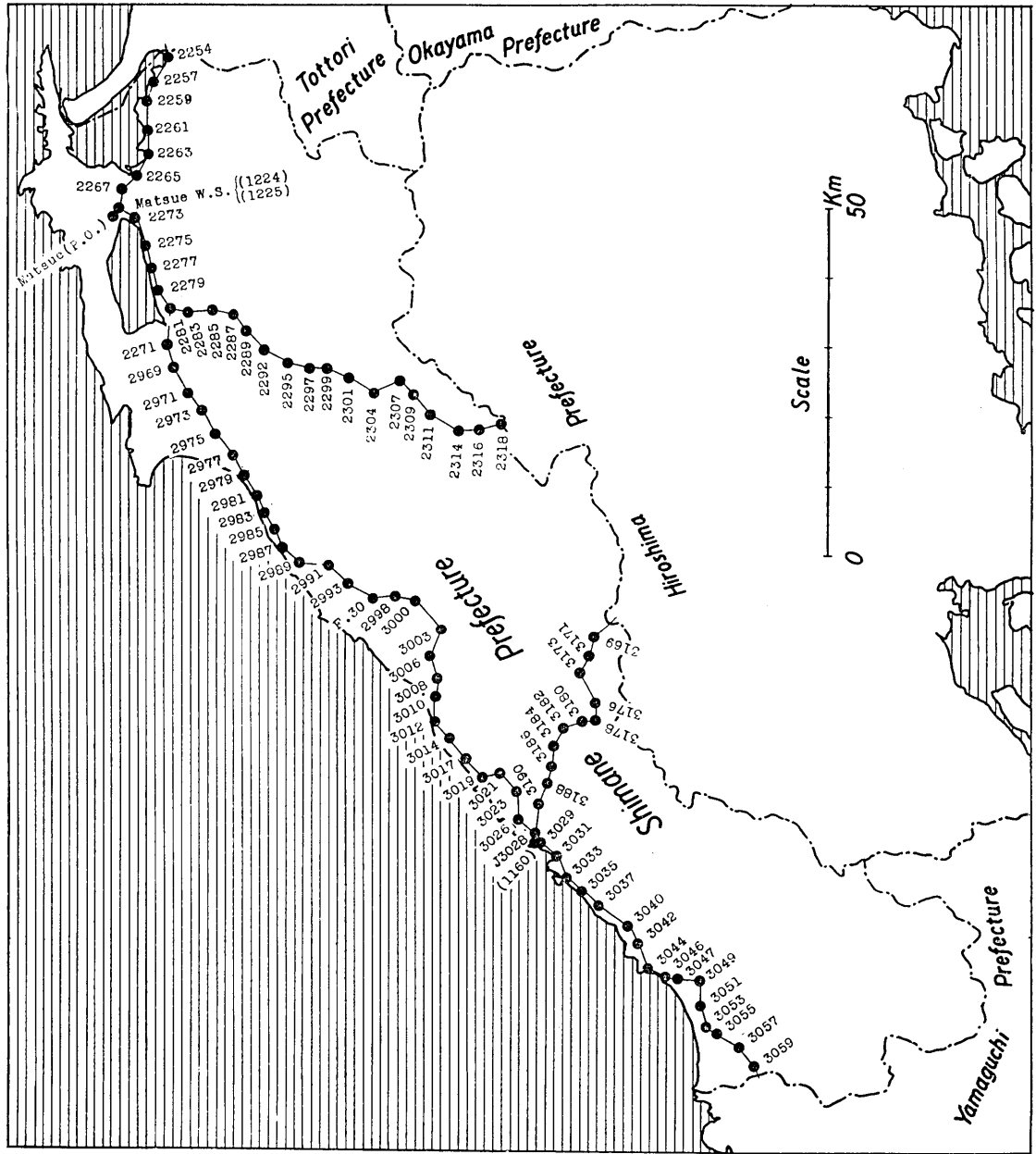


Fig. 8. Gravity Stations in Shimane Prefecture.

Gravity Survey along the Lines of Precise Levels.

|       |      |      |      |        |        |       |      |      |      |       |      |      |      |      |
|-------|------|------|------|--------|--------|-------|------|------|------|-------|------|------|------|------|
| 3010  | 1181 | 01.9 | 18.5 | 18.32  | "      | 77807 | 7887 | 7817 | 7326 | 151.1 | 49.1 | 7482 | 35.5 | 33.5 |
| 3008  | 1182 | 02.2 | 20.2 | 84.51  | XII 20 | 75912 | 7832 | 7757 | 7381 | 52.1  | 42.6 | 7487 | 36.5 | 27.0 |
| 3006  | 1183 | 02.7 | 22.7 | 180.77 | "      | 73979 | 7956 | 7754 | 7388 | 61.8  | 41.6 | 7494 | 46.2 | 26.0 |
| 3003  | 1184 | 01.9 | 25.0 | 243.86 | "      | 72704 | 8023 | 7750 | 7326 | 69.7  | 42.4 | 7482 | 51.1 | 26.8 |
| 3000  | 1185 | 03.4 | 27.1 | 240.94 | "      | 73135 | 8057 | 7787 | 7348 | 70.9  | 43.9 | 7504 | 55.3 | 28.3 |
| 2998  | 1186 | 05.1 | 27.6 | 187.52 | "      | 74020 | 7981 | 7771 | 7372 | 60.9  | 39.9 | 7528 | 45.3 | 24.3 |
| F. 30 | 1187 | 07.1 | 27.0 | 110.18 | "      | 75557 | 7896 | 7772 | 7400 | 49.6  | 37.2 | 7556 | 34.0 | 21.6 |
| 2993  | 1188 | 09.2 | 28.8 | 22.08  | "      | 77238 | 7792 | 7767 | 7430 | 36.2  | 33.7 | 7586 | 20.6 | 18.1 |
| 2991  | 1189 | 10.8 | 30.4 | 32.11  | "      | 78038 | 7903 | 7867 | 7452 | 45.1  | 41.5 | 7608 | 29.5 | 25.9 |
| 2989  | 1190 | 12.8 | 30.3 | 7.63   | "      | 77788 | 7802 | 7794 | 7481 | 32.1  | 31.3 | 7637 | 16.5 | 15.7 |
| 2987  | 1191 | 14.4 | 31.9 | 5.03   | "      | 78102 | 7826 | 7820 | 7504 | 32.2  | 31.6 | 7659 | 16.7 | 16.1 |
| 2985  | 1192 | 15.0 | 33.8 | 110.30 | "      | 76226 | 7963 | 7840 | 7512 | 45.1  | 32.8 | 7668 | 29.5 | 17.2 |
| 2983  | 1193 | 15.8 | 35.2 | 10.37  | "      | 78647 | 7897 | 7885 | 7523 | 37.4  | 36.2 | 7679 | 21.8 | 20.6 |
| 2981  | 1194 | 16.5 | 36.8 | 34.35  | "      | 78369 | 7943 | 7905 | 7533 | 41.0  | 37.2 | 7689 | 23.4 | 21.6 |
| 2979  | 1195 | 17.4 | 38.9 | 8.72   | "      | 78480 | 7875 | 7865 | 7546 | 32.9  | 31.9 | 7702 | 17.3 | 16.3 |
| 2977  | 1196 | 18.5 | 40.9 | 12.90  | "      | 78476 | 7887 | 7873 | 7562 | 32.5  | 31.1 | 7717 | 17.0 | 15.6 |
| 2975  | 1197 | 19.6 | 42.8 | 5.15   | "      | 79061 | 7922 | 7916 | 7577 | 34.5  | 33.9 | 7733 | 18.9 | 18.3 |
| 2973  | 1198 | 20.9 | 44.7 | 8.57   | "      | 79357 | 7962 | 7953 | 7596 | 36.6  | 35.7 | 7751 | 21.1 | 20.2 |
| 2971  | 1199 | 22.0 | 46.9 | 10.78  | "      | 79800 | 8013 | 8001 | 7611 | 40.2  | 39.0 | 7767 | 24.6 | 23.4 |
| 2969  | 1200 | 23.2 | 49.1 | 6.94   | XII 21 | 80339 | 8055 | 8048 | 7629 | 42.6  | 41.9 | 7784 | 27.1 | 26.4 |
| 2271  | 1201 | 23.8 | 51.6 | 3.11   | "      | 80779 | 8088 | 8084 | 7637 | 45.1  | 44.7 | 7792 | 29.6 | 29.2 |
| 2281  | 1202 | 23.6 | 54.5 | 7.55   | "      | 81008 | 8124 | 8116 | 7634 | 49.0  | 48.2 | 7790 | 33.4 | 32.6 |
| 2279  | 1220 | 24.7 | 56.0 | 3.43   | XII 22 | 80772 | 8088 | 8084 | 7650 | 43.8  | 43.4 | 7805 | 28.3 | 27.9 |
| 2277  | 1221 | 25.2 | 58.4 | 2.58   | "      | 80634 | 8071 | 8069 | 7657 | 41.4  | 41.2 | 7812 | 25.9 | 25.7 |
| 2275  | 1222 | 25.7 | 00.8 | 2.90   | "      | 80490 | 8058 | 8055 | 7664 | 39.4  | 39.1 | 7819 | 23.9 | 23.6 |
| "     | "    | "    | "    | "      | "      | 80502 | 8059 | 8056 | "    | 39.5  | 39.2 | "    | 24.0 | 23.7 |
| 2273  | 1223 | 26.4 | 03.0 | 2.80   | "      | 80444 | 8053 | 8050 | 7674 | 37.9  | 37.6 | 7829 | 22.4 | 22.1 |
| W.S.* | 1224 | 27.2 | 04.1 | 18.00  | "      | 79989 | 8054 | 8034 | 7685 | 36.9  | 34.9 | 7841 | 21.3 | 19.3 |
| "**   | 1225 | "    | "    | 17.05  | "      | 73990 | 8052 | 8033 | "    | 36.7  | 34.8 | "    | 21.1 | 19.2 |
| 2267  | 1231 | 27.3 | 05.5 | 2.36   | "      | 80107 | 8018 | 8015 | 7687 | 33.1  | 32.8 | 7842 | 17.6 | 17.3 |

\* Weather Station Seismometer Room, on the Surface of the Concrete Block for Seismometer Installation.

\*\* Weather Station Bench Mark.

Table XV. (I) (Continued)

| B.M. | No.  | $\varphi$ | $\lambda$ | H<br>(m) | Date   | g<br>979. | $g_0$<br>979. | $g_0''$<br>979. | HELMERT Formula<br>of 1901 |                         |                           | International<br>Formula |                         |                           |  |
|------|------|-----------|-----------|----------|--------|-----------|---------------|-----------------|----------------------------|-------------------------|---------------------------|--------------------------|-------------------------|---------------------------|--|
|      |      |           |           |          |        |           |               |                 | $\gamma_0$<br>979.         | $\Delta g_0$<br>(mgal.) | $\Delta g_0''$<br>(mgal.) | $\gamma_0$<br>979.       | $\Delta g_0$<br>(mgal.) | $\Delta g_0''$<br>(mgal.) |  |
|      |      | 35°       | 133°      |          |        |           |               |                 |                            |                         |                           |                          |                         |                           |  |
| 2265 | 1226 | 26.1      | 07.4      | 3.04     | XII 22 | 79638     | 7973          | 7970            | 7670                       | 30.3                    | 30.0                      | 7825                     | 14.8                    | 14.5                      |  |
| 2263 | 1227 | 25.8      | 09.7      | 2.05     | "      | 80037     | 8010          | 8008            | 7666                       | 34.4                    | 34.2                      | 7821                     | 18.9                    | 18.7                      |  |
| 2261 | 1228 | 25.8      | 11.8      | 1.42     | "      | 80293     | 8034          | 8032            | 7666                       | 36.8                    | 36.6                      | 7821                     | 21.3                    | 21.1                      |  |
| 2259 | 1229 | 25.5      | 14.2      | 2.59     | "      | 80350     | 8043          | 8040            | 7661                       | 38.2                    | 37.9                      | 7817                     | 22.6                    | 22.3                      |  |
| 2257 | 1230 | 25.4      | 16.6      | 3.47     | "      | 80601     | 8071          | 8067            | 7660                       | 41.1                    | 40.7                      | 7815                     | 25.6                    | 25.2                      |  |
| 2254 | 1124 | 24.4      | 19.2      | 1.94     | "      | 80345     | 8041          | 8038            | 7646                       | 39.5                    | 39.2                      | 7801                     | 24.0                    | 23.7                      |  |

Synoptic Results for Shimane Prefecture (II).

| B.M. | No.  | $\varphi$ | $\lambda$ | H<br>(m) | Date   | g<br>979. | $g_0$<br>979. | $g_0''$<br>979. | HELMERT Formula<br>of 1901 |                         |                           | International<br>Formula |                         |                           |  |
|------|------|-----------|-----------|----------|--------|-----------|---------------|-----------------|----------------------------|-------------------------|---------------------------|--------------------------|-------------------------|---------------------------|--|
|      |      |           |           |          |        |           |               |                 | $\gamma_0$<br>979.         | $\Delta g_0$<br>(mgal.) | $\Delta g_0''$<br>(mgal.) | $\gamma_0$<br>979.       | $\Delta g_0$<br>(mgal.) | $\Delta g_0''$<br>(mgal.) |  |
|      |      | 34°       | 132°      |          |        |           |               |                 |                            |                         |                           |                          |                         |                           |  |
| 3190 | 1162 | 53.4      | 07.9      | 170.96   | XII 19 | 71953     | 7723          | 7532            | 7206                       | 51.7                    | 32.6                      | 7363                     | 36.0                    | 16.9                      |  |
| 3188 | 1173 | 53.1      | 09.5      | 177.03   | "      | 71215     | 7668          | 7470            | 7202                       | 46.6                    | 26.8                      | 7358                     | 31.0                    | 11.2                      |  |
| 3186 | 1163 | 52.7      | 11.3      | 238.78   | "      | 69628     | 7700          | 7433            | 7196                       | 50.4                    | 23.7                      | 7353                     | 34.7                    | 8.0                       |  |
| 3184 | 1164 | 52.5      | 13.5      | 219.99   | "      | 69963     | 7675          | 7429            | 7193                       | 48.2                    | 23.6                      | 7350                     | 32.5                    | 7.9                       |  |
| 3182 | 1165 | 52.1      | 15.3      | 253.88   | "      | 69205     | 7704          | 7420            | 7188                       | 51.6                    | 23.2                      | 7344                     | 36.0                    | 7.6                       |  |
| 3180 | 1166 | 50.5      | 16.1      | 365.60   | "      | 66163     | 7745          | 7335            | 7165                       | 58.0                    | 17.0                      | 7322                     | 42.3                    | 1.3                       |  |
| 3178 | 1167 | 49.5      | 16.1      | 434.97   | "      | 64457     | 7788          | 7301            | 7151                       | 63.7                    | 15.0                      | 7308                     | 48.0                    | -0.7                      |  |
| 3176 | 1168 | 49.4      | 18.2      | 289.22   | "      | 66943     | 7587          | 7263            | 7150                       | 43.7                    | 11.3                      | 7306                     | 28.1                    | -4.3                      |  |
| 3173 | 1172 | 51.0      | 20.4      | 185.72   | "      | 69350     | 7508          | 7300            | 7172                       | 33.6                    | 12.8                      | 7329                     | 17.9                    | -2.9                      |  |
| 3171 | 1171 | 50.2      | 22.5      | 247.07   | "      | 68047     | 7567          | 7291            | 7161                       | 40.6                    | 13.0                      | 7317                     | 25.0                    | -2.6                      |  |
| 3169 | 1169 | 49.7      | 24.1      | 323.54   | "      | 66457     | 7644          | 7282            | 7154                       | 49.0                    | 12.8                      | 7310                     | 33.4                    | -2.8                      |  |
| "    | "    | "         | "         | "        | "      | 66454     | 7644          | 7282            | "                          | 49.0                    | 12.8                      | "                        | 33.4                    | -2.8                      |  |

Gravity Survey along the Lines of Precise Levels.

Synoptic Results for Shimane Prefecture ( III ).

| B.M. | No.  | $\varphi$ | $\lambda$ | H<br>(m) | Date   | g<br>979. | $g_0$<br>979. | $g_0''$<br>979. | HELMERT Formula<br>of 1901 |                         |                           | International<br>Formula |                         |                           |                    |                         |
|------|------|-----------|-----------|----------|--------|-----------|---------------|-----------------|----------------------------|-------------------------|---------------------------|--------------------------|-------------------------|---------------------------|--------------------|-------------------------|
|      |      |           |           |          |        |           |               |                 | $\gamma_0$<br>979.         | $\Delta g_0$<br>(mgal.) | $\Delta g_0''$<br>(mgal.) | $\gamma_0$<br>979.       | $\Delta g_0$<br>(mgal.) | $\Delta g_0''$<br>(mgal.) |                    |                         |
|      |      |           |           |          |        |           |               |                 |                            |                         |                           |                          |                         |                           | $\gamma_0$<br>979. | $\Delta g_0$<br>(mgal.) |
|      |      | 35°       | 132°      |          | 1951   |           |               |                 |                            |                         |                           |                          |                         |                           |                    |                         |
| 2283 | 1203 | 21.8      | 54.2      | 65.86    | XII 21 | 79606     | 8164          | 8090            | 55.5                       | 48.1                    | 7609                      | 7764                     | 40.0                    | 32.6                      |                    |                         |
| 2285 | 1204 | 19.8      | 54.6      | 36.97    | "      | 79611     | 8075          | 8034            | 49.5                       | 45.4                    | 7580                      | 7736                     | 33.9                    | 29.8                      |                    |                         |
| 2287 | 1205 | 18.1      | 54.2      | 41.16    | "      | 78831     | 8010          | 7964            | 45.4                       | 40.8                    | 7556                      | 7712                     | 29.8                    | 25.2                      |                    |                         |
| "    | "    | "         | "         | "        | "      | 78799     | 8007          | 7961            | 45.1                       | 40.5                    | "                         | "                        | 29.5                    | 24.9                      |                    |                         |
| 2289 | 1206 | 16.8      | 52.2      | 52.44    | "      | 78562     | 8018          | 7959            | 48.0                       | 42.1                    | 7588                      | 7693                     | 32.5                    | 26.6                      |                    |                         |
| 2292 | 1207 | 15.5      | 50.2      | 106.84   | "      | 77157     | 8045          | 7926            | 52.6                       | 40.7                    | 7519                      | 7675                     | 37.0                    | 25.1                      |                    |                         |
| 2295 | 1208 | 13.8      | 49.3      | 160.19   | "      | 75637     | 8058          | 7879            | 56.3                       | 38.4                    | 7495                      | 7651                     | 40.7                    | 22.8                      |                    |                         |
| 2297 | 1209 | 12.1      | 49.0      | 199.36   | "      | 74340     | 8049          | 7836            | 57.8                       | 35.5                    | 7471                      | 7627                     | 42.2                    | 19.9                      |                    |                         |
| 2299 | 1210 | 10.3      | 49.3      | 245.86   | "      | 72891     | 8048          | 7773            | 60.3                       | 32.8                    | 7445                      | 7601                     | 44.7                    | 17.2                      |                    |                         |
| "    | "    | "         | "         | "        | "      | 72884     | 8047          | 7772            | 60.2                       | 32.7                    | "                         | "                        | 44.6                    | 17.1                      |                    |                         |
| 2301 | 1211 | 08.9      | 47.9      | 332.18   | "      | 70623     | 8087          | 7716            | 66.2                       | 29.1                    | 7425                      | 7581                     | 50.6                    | 13.5                      |                    |                         |
| 2304 | 1212 | 07.0      | 46.6      | 530.83   | "      | 66306     | 8269          | 7675            | 87.0                       | 27.6                    | 7399                      | 7555                     | 71.4                    | 12.0                      |                    |                         |
| 2307 | 1213 | 05.3      | 48.2      | 479.29   | "      | 66704     | 8150          | 7613            | 77.6                       | 23.9                    | 7374                      | 7531                     | 61.9                    | 8.2                       |                    |                         |
| "    | "    | "         | "         | "        | "      | 66698     | 8149          | 7613            | 77.5                       | 23.9                    | "                         | "                        | 61.8                    | 8.2                       |                    |                         |
| 2309 | 1214 | 04.0      | 46.8      | 449.39   | "      | 66574     | 8044          | 7541            | 68.8                       | 18.5                    | 7356                      | 7512                     | 53.2                    | 2.9                       |                    |                         |
| 2311 | 1215 | 02.8      | 44.9      | 425.37   | "      | 66611     | 7974          | 7498            | 63.5                       | 15.9                    | 7389                      | 7495                     | 47.9                    | 0.3                       |                    |                         |
| 2314 | 1216 | 00.7      | 43.5      | 425.04   | "      | 66406     | 7952          | 7477            | 64.3                       | 16.8                    | 7309                      | 7466                     | 48.6                    | 1.1                       |                    |                         |
| 2316 | 1217 | 58.8      | 43.6      | 467.66   | "      | 65272     | 7970          | 7447            | 68.8                       | 16.5                    | 7282                      | 7439                     | 53.1                    | 0.8                       |                    |                         |
| 2318 | 1219 | 57.5      | 44.3      | 579.53   | "      | 62781     | 8067          | 7418            | 80.3                       | 15.4                    | 7264                      | 7420                     | 64.7                    | -0.2                      |                    |                         |

(32) Okayama Prefecture.

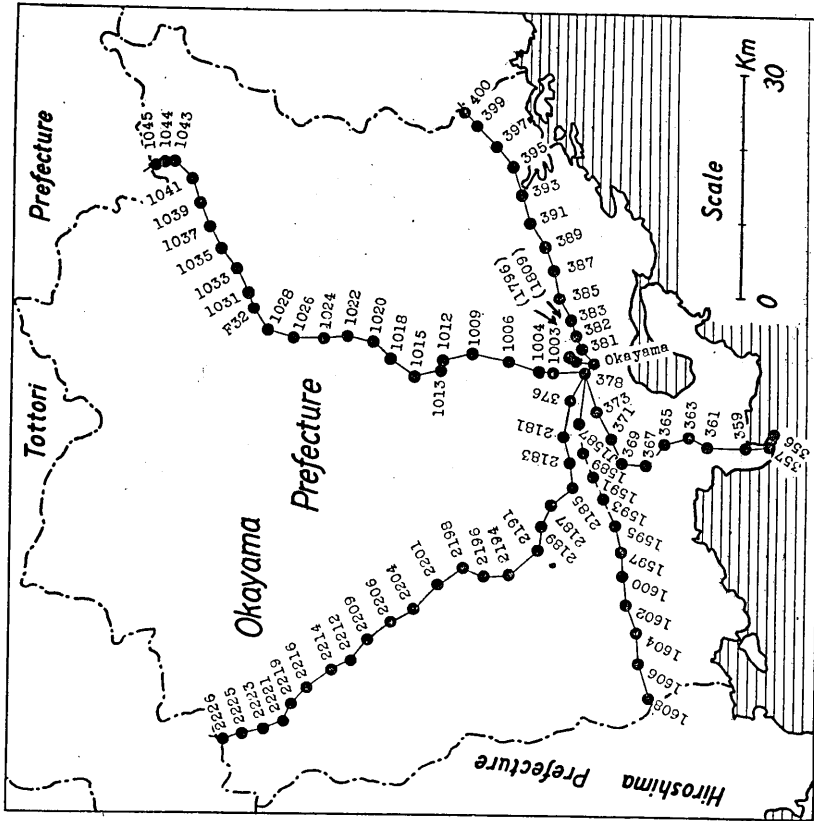


Fig. 9. Gravity Stations in Okayama Prefecture.

Table XVI. Synoptic Results for Okayama Prefecture (I).

| B.M. | No.  | $\varphi$  | $\lambda$   | H<br>(m) | Date  | g<br>979. | $g_0$<br>979. | $g''$<br>979. | HELMERT Formula<br>of 1901 |                         |                           | International<br>Formula |                         |                           |                           |                           |                           |  |  |
|------|------|------------|-------------|----------|-------|-----------|---------------|---------------|----------------------------|-------------------------|---------------------------|--------------------------|-------------------------|---------------------------|---------------------------|---------------------------|---------------------------|--|--|
|      |      |            |             |          |       |           |               |               | $\gamma_0$<br>979.         | $\Delta g_0$<br>(mgal.) | $\Delta g_0''$<br>(mgal.) | $\gamma_0$<br>979.       | $\Delta g_0$<br>(mgal.) | $\Delta g_0''$<br>(mgal.) |                           |                           |                           |  |  |
|      |      |            |             |          |       |           |               |               |                            |                         |                           |                          |                         |                           | $\Delta g_0''$<br>(mgal.) | $\Delta g_0''$<br>(mgal.) | $\Delta g_0''$<br>(mgal.) |  |  |
|      |      | $34^\circ$ | $133^\circ$ |          |       |           |               |               |                            |                         |                           |                          |                         |                           |                           |                           |                           |  |  |
|      | 1865 | 34.6       | 25.6        | 30.04    | VI 28 | 70066     | 7099          | 7066          | 6941                       | 15.8                    | 12.5                      | 7098                     | 0.1                     | - 3.2                     |                           |                           |                           |  |  |
|      | 1866 | 35.4       | 27.8        | 36.95    | "     | 70057     | 7120          | 7078          | 6952                       | 16.8                    | 12.6                      | 7109                     | 1.1                     | -                         |                           |                           |                           |  |  |
|      | 1863 | 35.5       | 30.1        | 31.67    | VI 27 | 70728     | 7171          | 7135          | 6954                       | 21.7                    | 18.1                      | 7111                     | 6.0                     | 2.4                       |                           |                           |                           |  |  |
|      | 1862 | 36.0       | 32.6        | 26.31    | "     | 71290     | 7210          | 7181          | 6961                       | 24.9                    | 22.0                      | 7118                     | 9.2                     | 6.3                       |                           |                           |                           |  |  |
|      | 1861 | 37.0       | 35.0        | 23.45    | "     | 71927     | 7265          | 7239          | 6975                       | 29.0                    | 26.4                      | 7132                     | 13.3                    | 10.7                      |                           |                           |                           |  |  |
|      | 1860 | 36.8       | 38.2        | 18.07    | "     | 71730     | 7229          | 7209          | 6972                       | 25.7                    | 23.7                      | 7129                     | 10.0                    | 8.0                       |                           |                           |                           |  |  |
|      | 1859 | 37.4       | 40.6        | 14.64    | "     | 71867     | 7232          | 7216          | 6980                       | 25.2                    | 23.6                      | 7137                     | 9.5                     | 7.9                       |                           |                           |                           |  |  |
|      | 1858 | 38.3       | 43.2        | 11.07    | "     | 71841     | 7218          | 7206          | 6993                       | 22.5                    | 21.3                      | 7150                     | 6.8                     | 5.6                       |                           |                           |                           |  |  |
|      | 1857 | 39.1       | 45.3        | 30.84    | "     | 71540     | 7249          | 7215          | 7004                       | 24.5                    | 21.1                      | 7161                     | 8.8                     | 5.4                       |                           |                           |                           |  |  |
|      | 1856 | 39.8       | 47.6        | 20.92    | "     | 71934     | 7258          | 7235          | 7014                       | 24.4                    | 22.1                      | 7171                     | 8.7                     | 6.4                       |                           |                           |                           |  |  |
|      | 1855 | 40.1       | 50.3        | 3.84     | "     | 72490     | 7261          | 7257          | 7018                       | 24.3                    | 23.9                      | 7175                     | 8.6                     | 8.2                       |                           |                           |                           |  |  |
| J.   | 378  | 39.9       | 54.1        | 2.56     | VI 25 | 72152     | 7223          | 7220          | 7016                       | 20.7                    | 20.4                      | 7173                     | 5.0                     | 4.7                       |                           |                           |                           |  |  |
|      | 381  | 40.0       | 57.1        | 5.03     | VI 24 | 72371     | 7253          | 7247          | 7017                       | 23.6                    | 23.0                      | 7174                     | 7.9                     | 7.3                       |                           |                           |                           |  |  |
|      | 382  | 40.3       | 58.0        | 4.16     | "     | 72490     | 7262          | 7257          | 7021                       | 24.1                    | 23.6                      | 7178                     | 8.4                     | 7.9                       |                           |                           |                           |  |  |
|      | 383  | 40.6       | 59.2        | 3.04     | "     | 72697     | 7279          | 7276          | 7025                       | 25.4                    | 25.1                      | 7182                     | 9.7                     | 9.4                       |                           |                           |                           |  |  |
|      | 385  | 41.8       | 01.5        | 5.27     | "     | 73505     | 7367          | 7361          | 7042                       | 32.5                    | 31.9                      | 7199                     | 16.8                    | 16.2                      |                           |                           |                           |  |  |
|      | 387  | 41.9       | 03.7        | 3.96     | "     | 73653     | 7378          | 7373          | 7044                       | 33.4                    | 32.9                      | 7201                     | 17.7                    | 17.2                      |                           |                           |                           |  |  |
|      | 389  | "          | 06.0        | 13.57    | "     | 73628     | 7405          | 7390          | 7055                       | 35.0                    | 33.5                      | 7212                     | 19.3                    | 17.8                      |                           |                           |                           |  |  |
|      | "    | "          | "           | "        | "     | 73631     | 7405          | 7390          | 7055                       | 35.0                    | 33.5                      | "                        | 19.3                    | 17.8                      |                           |                           |                           |  |  |
|      | 391  | 43.8       | 07.9        | 14.67    | "     | 73557     | 7401          | 7385          | 7071                       | 33.0                    | 31.4                      | 7227                     | 17.4                    | 15.8                      |                           |                           |                           |  |  |
|      | 393  | 44.2       | 10.3        | 12.92    | "     | 73735     | 7413          | 7399          | 7076                       | 33.7                    | 32.3                      | 7233                     | 18.0                    | 16.6                      |                           |                           |                           |  |  |
|      | 395  | 45.1       | 12.6        | 41.93    | "     | 72778     | 7407          | 7360          | 7089                       | 31.8                    | 27.1                      | 7246                     | 16.1                    | 11.4                      |                           |                           |                           |  |  |
|      | 397  | 46.3       | 14.6        | 57.58    | "     | 72513     | 7429          | 7365          | 7106                       | 32.8                    | 29.9                      | 7263                     | 16.6                    | 10.2                      |                           |                           |                           |  |  |
|      | 399  | 47.8       | 16.2        | 86.49    | "     | 72186     | 7486          | 7389          | 7127                       | 35.9                    | 26.2                      | 7284                     | 20.2                    | 10.5                      |                           |                           |                           |  |  |
| 400  | 1808 | 48.5       | 17.2        | 105.65   | "     | 71794     | 7505          | 7387          | 7137                       | 36.8                    | 25.0                      | 7294                     | 21.1                    | 9.3                       |                           |                           |                           |  |  |



Synoptic Results for Okayama Prefecture (II).

| B.M. | No.  | $\varphi$  | $\lambda$ | H<br>(m) | Date<br>1952 | g<br>979. | $g_0$<br>979. | $g_0''$<br>979. | HELMERT Formula<br>of 1901 |                         |                           | International<br>Formula |                         |                           |  |  |  |
|------|------|------------|-----------|----------|--------------|-----------|---------------|-----------------|----------------------------|-------------------------|---------------------------|--------------------------|-------------------------|---------------------------|--|--|--|
|      |      |            |           |          |              |           |               |                 | $\gamma_0$<br>979.         | $\Delta g_0$<br>(mgal.) | $\Delta g_0''$<br>(mgal.) | $\gamma_0$<br>979.       | $\Delta g_0$<br>(mgal.) | $\Delta g_0''$<br>(mgal.) |  |  |  |
|      |      | $34^\circ$ | $133'$    |          |              |           |               |                 |                            |                         |                           |                          |                         |                           |  |  |  |
| 376  | 1834 | 40.5       | 52.2      | 2.81     | VI           | 72233     | 7232          | 7229            | 7024                       | 20.8                    | 20.5                      | 7181                     | 5.1                     | 4.8                       |  |  |  |
| 2181 | 1835 | 41.3       | 49.0      | 7.81     | "            | 72202     | 7244          | 7236            | 7035                       | 20.9                    | 20.1                      | 7192                     | 5.2                     | 4.4                       |  |  |  |
| 2183 | 1836 | 40.7       | 46.6      | 10.46    | "            | 72071     | 7239          | 7228            | 7027                       | 21.2                    | 20.1                      | 7184                     | 5.5                     | 4.4                       |  |  |  |
| 2185 | 1837 | 40.7       | 44.2      | 17.83    | "            | 71782     | 7233          | 7213            | 7047                       | 20.6                    | 18.6                      | 7184                     | 4.9                     | 2.9                       |  |  |  |
| 2187 | 1838 | 42.1       | 43.2      | 28.00    | "            | 71553     | 7242          | 7210            | 7027                       | 19.5                    | 16.3                      | 7203                     | 3.9                     | 0.7                       |  |  |  |
| 2189 | 1839 | 42.9       | 41.0      | 33.16    | "            | 71268     | 7229          | 7192            | 7058                       | 17.1                    | 13.4                      | 7215                     | 1.4                     | -2.3                      |  |  |  |
| 2191 | 1840 | 43.2       | 38.8      | 40.45    | "            | 71552     | 7230          | 7235            | 7062                       | 21.8                    | 17.3                      | 7219                     | 6.1                     | 1.6                       |  |  |  |
| 2194 | 1841 | 45.3       | 36.6      | 51.13    | "            | 71507     | 7309          | 7251            | 7092                       | 21.7                    | 15.9                      | 7249                     | 6.0                     | 0.2                       |  |  |  |
| 2196 | 1842 | 46.9       | 36.8      | 59.53    | "            | 71153     | 7299          | 7232            | 7114                       | 18.5                    | 11.8                      | 7271                     | 2.8                     | -3.9                      |  |  |  |
| 2198 | 1843 | 48.8       | 37.1      | 75.96    | "            | 70543     | 7239          | 7204            | 7141                       | 14.8                    | 6.3                       | 7298                     | -0.9                    | -9.4                      |  |  |  |
| 2201 | 1844 | 50.7       | 35.6      | 91.08    | "            | 70484     | 7330          | 7223            | 7168                       | 16.2                    | 6.0                       | 7325                     | 0.5                     | -9.7                      |  |  |  |
| 2204 | 1845 | 52.3       | 33.7      | 107.10   | "            | 71322     | 7463          | 7343            | 7191                       | 27.2                    | 15.2                      | 7347                     | 11.6                    | -0.4                      |  |  |  |
| 2206 | 1846 | 53.8       | 32.4      | 127.18   | "            | 70882     | 7481          | 7338            | 7212                       | 26.9                    | 12.6                      | 7368                     | 11.3                    | -3.0                      |  |  |  |
| 2209 | 1847 | 55.6       | 30.7      | 147.99   | "            | 70815     | 7538          | 7373            | 7237                       | 30.1                    | 13.6                      | 7394                     | 14.4                    | -2.1                      |  |  |  |
| 2212 | 1848 | 56.9       | 28.9      | 164.77   | "            | 70541     | 7563          | 7378            | 7256                       | 30.7                    | 12.2                      | 7412                     | 15.1                    | -3.4                      |  |  |  |
| 2214 | 1849 | 58.8       | 28.2      | 186.54   | "            | 70365     | 7612          | 7404            | 7282                       | 33.0                    | 12.2                      | 7439                     | 17.3                    | -3.5                      |  |  |  |
| 2216 | 1850 | 00.1       | 26.8      | 215.43   | VI           | 69900     | 7655          | 7414            | 7301                       | 35.4                    | 11.3                      | 7457                     | 19.8                    | -4.3                      |  |  |  |
| 2219 | 1851 | 00.5       | 24.7      | 361.73   | "            | 67290     | 7845          | 7441            | 7306                       | 53.9                    | 13.5                      | 7463                     | 38.2                    | -2.2                      |  |  |  |
| 2221 | 1852 | 01.6       | 23.6      | 303.17   | "            | 68702     | 7806          | 7467            | 7322                       | 48.4                    | 14.5                      | 7478                     | 32.8                    | -1.1                      |  |  |  |
| 2223 | 1853 | 03.2       | 23.1      | 349.34   | "            | 67808     | 7859          | 7468            | 7345                       | 51.4                    | 12.3                      | 7501                     | 35.8                    | -3.3                      |  |  |  |
| 2225 | 1854 | 04.4       | 22.0      | 410.56   | "            | 66531     | 7920          | 7461            | 7362                       | 55.8                    | 9.9                       | 7518                     | 40.2                    | -5.7                      |  |  |  |
| 2226 | 1139 | 05.5       | 22.2      | 450.45   | "            | 66195     | 8010          | 7506            | 7377                       | 63.3                    | 12.9                      | 7533                     | 47.7                    | -2.7                      |  |  |  |

Gravity Survey along the Lines of Precise Levels.

Synoptic Results for Okayama Prefecture (III).

| B.M.           | No.  | φ         | λ          | H (m) | Date  | g     | g <sub>0</sub> | g <sub>0</sub> '' | HELMERT Formula of 1901 |                         |                    | International Formula |                         |                    |
|----------------|------|-----------|------------|-------|-------|-------|----------------|-------------------|-------------------------|-------------------------|--------------------|-----------------------|-------------------------|--------------------|
|                |      |           |            |       |       |       |                |                   | γ <sub>0</sub> 979.     | Δγ <sub>0</sub> (mgal.) | Δγ <sub>0</sub> '' | γ <sub>0</sub> 979.   | Δγ <sub>0</sub> (mgal.) | Δγ <sub>0</sub> '' |
| Okayama W.S.** | 1796 | 34°, 41.1 | 133°, 55.2 | 3.85  | VI 24 | 72274 | 7239           | 7235              | 20.7                    | 20.3                    | 7189               | 5.0                   | 4.6                     |                    |
|                | 1809 | 40.5      | 54.6       | 3.27  | "     | 72246 | 7235           | 7231              | 21.1                    | 20.7                    | 7181               | 5.4                   | 5.0                     |                    |
|                | 1811 | 42.4      | 54.5       | 8.97  | VI 25 | 72245 | 7252           | 7242              | 20.1                    | 19.1                    | 7208               | 4.4                   | 3.4                     |                    |
|                | 1003 | 43.5      | 54.6       | 18.14 | "     | 72213 | 7277           | 7257              | 21.1                    | 19.1                    | 7223               | 5.4                   | 3.4                     |                    |
|                | 1812 | 43.5      | 54.6       | 18.14 | "     | 72213 | 7277           | 7257              | 21.1                    | 19.1                    | 7223               | 5.4                   | 3.4                     |                    |
|                | 1006 | 44.9      | 54.7       | 97.00 | "     | 71030 | 7402           | 7294              | 31.6                    | 20.8                    | 7243               | 15.9                  | 5.1                     |                    |
| 1009           | 47.7 | 56.2      | 35.32      | "     | 72912 | 7400  | 7361           | 27.4              | 23.5                    | 7282                    | 11.8               | 7.9                   |                         |                    |
| 1012           | 50.2 | 55.6      | 47.51      | "     | 72764 | 7423  | 7370           | 26.2              | 20.9                    | 7317                    | 10.6               | 5.3                   |                         |                    |
| 1013           | 50.1 | 54.6      | 51.33      | "     | 72656 | 7424  | 7367           | 26.5              | 20.8                    | 7316                    | 10.8               | 5.1                   |                         |                    |
| 1015           | 52.1 | 54.0      | 63.27      | "     | 72589 | 7454  | 7383           | 26.6              | 19.5                    | 7344                    | 11.0               | 3.9                   |                         |                    |
| 1018           | 53.8 | 56.0      | 95.66      | "     | 72577 | 7553  | 7446           | 34.1              | 23.4                    | 7368                    | 18.5               | 7.8                   |                         |                    |
| 1020           | 55.1 | 57.4      | 121.33     | "     | 72715 | 7646  | 7511           | 41.6              | 28.1                    | 7387                    | 25.9               | 12.4                  |                         |                    |
| 1022           | 57.0 | 57.7      | 154.42     | "     | 72629 | 7739  | 7567           | 48.2              | 31.0                    | 7413                    | 32.6               | 15.4                  |                         |                    |
| 1024           | 59.0 | 57.7      | 156.27     | "     | 72316 | 7715  | 7540           | 43.0              | 25.5                    | 7442                    | 27.3               | 9.8                   |                         |                    |
| 1026           | 00.7 | 57.7      | 127.23     | "     | 72719 | 7665  | 7522           | 35.6              | 21.3                    | 7466                    | 19.9               | 5.6                   |                         |                    |
| 1028           | 02.5 | 58.3      | 102.10     | "     | 73283 | 7643  | 7529           | 30.8              | 19.4                    | 7491                    | 15.2               | 3.8                   |                         |                    |
| F. 32          | 03.2 | 00.7      | 91.51      | "     | 74159 | 7698  | 7596           | 35.3              | 25.1                    | 7501                    | 19.7               | 9.5                   |                         |                    |
| 1031           | 03.7 | 01.3      | 88.90      | "     | 74298 | 7704  | 7605           | 35.2              | 25.3                    | 7508                    | 19.6               | 9.7                   |                         |                    |
| "              | "    | "         | "          | "     | 74308 | 7705  | 7606           | 35.3              | 25.4                    | "                       | 19.7               | 9.8                   |                         |                    |
| 1033           | 04.1 | 03.5      | 105.23     | "     | 74200 | 7745  | 7627           | 38.8              | 27.0                    | 7514                    | 23.1               | 11.3                  |                         |                    |
| 1035           | 05.3 | 05.2      | 156.72     | "     | 72967 | 7780  | 7605           | 40.6              | 23.1                    | 7531                    | 24.9               | 7.4                   |                         |                    |
| 1037           | 06.3 | 07.5      | 189.36     | "     | 72489 | 7833  | 7621           | 44.4              | 23.2                    | 7545                    | 28.8               | 7.6                   |                         |                    |
| 1039           | 06.9 | 09.4      | 225.04     | "     | 72187 | 7913  | 7661           | 51.6              | 26.4                    | 7553                    | 36.0               | 10.8                  |                         |                    |
| 1041           | 07.5 | 11.7      | 269.96     | "     | 71352 | 7968  | 7406           | 56.2              | 26.0                    | 7562                    | 40.6               | 10.4                  |                         |                    |
| 1043           | 08.9 | 13.1      | 328.59     | "     | 69459 | 7960  | 7592           | 53.5              | 16.7                    | 7581                    | 37.9               | 1.1                   |                         |                    |
| "              | "    | "         | "          | "     | 69466 | 7961  | 7593           | 53.6              | 16.8                    | "                       | 38.0               | 1.2                   |                         |                    |
| 1044           | 09.9 | 12.7      | 472.10     | "     | 66729 | 8130  | 7602           | 69.0              | 16.2                    | 7596                    | 53.4               | 0.6                   |                         |                    |
| 1045           | 10.9 | 12.8      | 581.77     | "     | 64522 | 8248  | 7597           | 79.4              | 14.3                    | 7610                    | 63.8               | -1.3                  |                         |                    |

\* Okayama Prefecture Bench Mark. \*\* Weather Station Bench Mark.

Synoptic Results for Okayama Prefecture (IV).

| B.M. | No.  | $\varphi$ | $\lambda$ | H<br>(m) | Date | g     | g <sub>0</sub> | g <sub>0</sub> '' | HELMERT Formula    |                         |                           | International Formula |                         |                           |  |
|------|------|-----------|-----------|----------|------|-------|----------------|-------------------|--------------------|-------------------------|---------------------------|-----------------------|-------------------------|---------------------------|--|
|      |      |           |           |          |      |       |                |                   | $\gamma_0$<br>979. | $\Delta g_0$<br>(mgal.) | $\Delta g_0''$<br>(mgal.) | $\gamma_0$<br>979.    | $\Delta g_0$<br>(mgal.) | $\Delta g_0''$<br>(mgal.) |  |
|      |      | 34°       | 133°      |          |      |       |                |                   |                    |                         |                           |                       |                         |                           |  |
| 373  | 1866 | 38.3      | 50.7      | 2.06     | VI   | 72064 | 7213           | 7211              | 6993               | 22.0                    | 21.8                      | 7150                  | 6.3                     | 6.1                       |  |
| 371  | 1867 | 37.5      | 48.6      | 2.05     | "    | 71991 | 7205           | 7203              | 6982               | 22.3                    | 22.1                      | 7139                  | 6.6                     | 6.4                       |  |
| 369  | 1868 | 36.3      | 46.3      | 3.99     | "    | 71792 | 7192           | 7187              | 6905               | 22.7                    | 22.2                      | 7122                  | 7.0                     | 6.5                       |  |
| 367  | 1869 | 35.2      | 47.7      | 3.73     | "    | 72257 | 7235           | 7231              | 6949               | 28.6                    | 28.2                      | 7107                  | 12.8                    | 12.4                      |  |
| 365  | 1870 | 33.6      | 48.7      | 2.31     | "    | 72397 | 7247           | 7244              | 6927               | 32.0                    | 31.7                      | 7084                  | 16.3                    | 16.0                      |  |
| 363  | 1871 | 31.8      | 48.7      | 6.59     | "    | 72192 | 7240           | 7232              | 6902               | 33.8                    | 33.0                      | 7059                  | 18.1                    | 17.3                      |  |
| 361  | 1872 | 29.9      | 48.1      | 26.80    | "    | 71690 | 7253           | 7223              | 6875               | 37.8                    | 34.8                      | 7032                  | 22.1                    | 19.1                      |  |
| 359  | 1873 | 28.0      | 48.2      | 1.83     | "    | 71762 | 7181           | 7179              | 6848               | 33.3                    | 33.1                      | 7006                  | 17.5                    | 17.3                      |  |
| 357  | 1875 | 26.0      | 48.4      | 3.46     | "    | 71235 | 7134           | 7130              | 6820               | 31.4                    | 31.0                      | 6978                  | 15.6                    | 15.2                      |  |
| 356  | 1874 | 25.6      | 49.5      | 48.37    | "    | 70600 | 7209           | 7155              | 6315               | 39.4                    | 34.0                      | 6972                  | 23.7                    | 18.3                      |  |

(33) Hiroshima Prefecture.

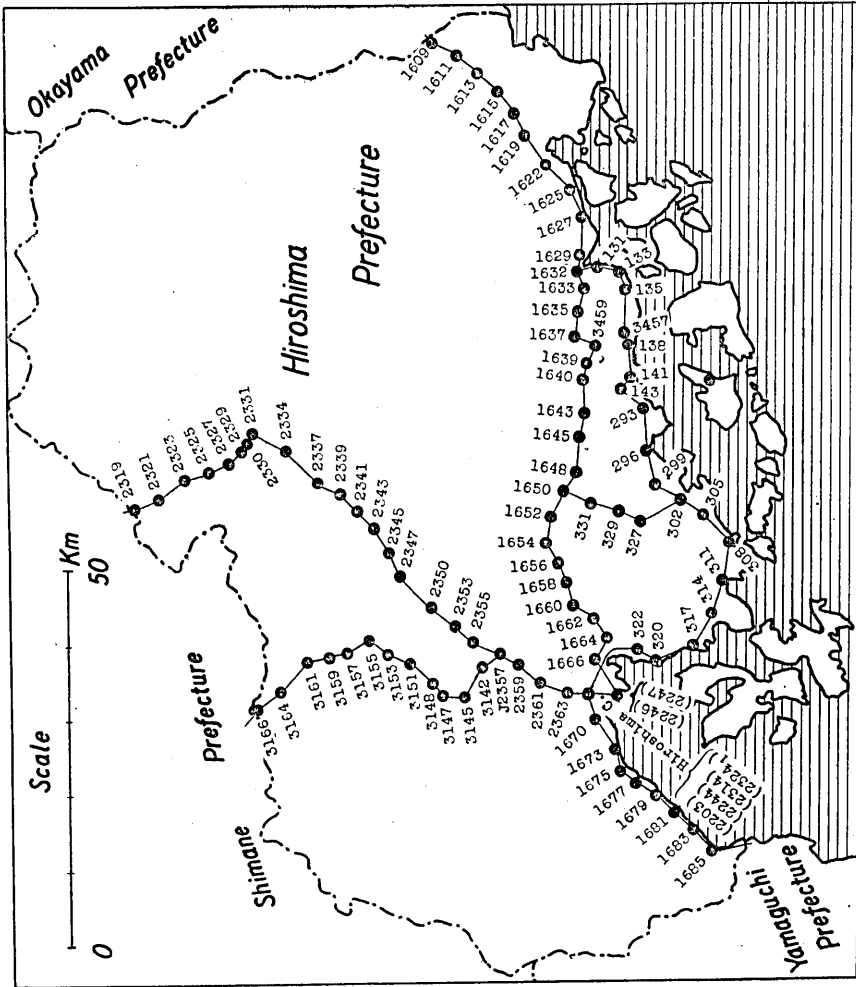


Fig. 10. Gravity Stations in Hiroshima Prefecture.

Table XVII. Synoptic Results for Hiroshima Prefecture (I).

| B.M.                                 | No.  | $\varphi$ | $\lambda$ | H<br>(m) | Date | g     | $g_0$ | $g_0''$ | HELMERT Formula<br>of 1901 |                          | International<br>Formula |                          |
|--------------------------------------|------|-----------|-----------|----------|------|-------|-------|---------|----------------------------|--------------------------|--------------------------|--------------------------|
|                                      |      |           |           |          |      |       |       |         | $\gamma_0$<br>979.         | $\Delta g_0'$<br>(mgal.) | $\gamma_0$<br>979.       | $\Delta g_0'$<br>(mgal.) |
| 1685<br>1683<br>1681<br>1679<br>1677 | 2322 | 34°, 132° |           |          | 1952 | 65251 | 6535  | 6531    | -12.2                      | -12.6                    | 6815                     | -28.4                    |
|                                      | 2321 | 14.4      | 3.12      | VIII 29  | "    | 65228 | 6534  | 6530    | -14.3                      | -14.7                    | 6835                     | -30.5                    |
|                                      | 2320 | 15.8      | 3.66      | "        | "    | 65302 | 6538  | 6535    | -15.9                      | -16.2                    | 6854                     | -31.6                    |
|                                      | 2319 | 17.2      | 2.39      | "        | "    | 65450 | 6551  | 6712    | -15.8                      | -16.1                    | 6870                     | -31.9                    |
|                                      | 2318 | 18.3      | 2.89      | "        | "    | 65782 | 6588  | 6736    | -14.8                      | -15.2                    | 6893                     | -30.9                    |
|                                      | 2317 | 20.0      | 3.02      | "        | "    |       |       |         |                            |                          |                          |                          |
|                                      | 2316 | 21.3      | 3.13      | "        | "    | 65901 | 6600  | 6596    | -15.4                      | -15.8                    | 6912                     | -31.6                    |
|                                      | 2315 | 22.0      | 2.97      | "        | "    | 66283 | 6638  | 6634    | -12.6                      | -13.0                    | 6921                     | -28.3                    |
| Hiroshima<br>Enami                   | 2246 | 21.5      | 25.3      | VIII 26  | "    | 66663 | 6676  | 6672    | -10.9                      | -11.3                    | 6942                     | -26.6                    |
|                                      | 2247 | 21.8      | 29.31     | "        | "    | 66126 | 6703  | 6670    | -5.4                       | -8.7                     | 6914                     | -21.1                    |
|                                      | 2248 | 23.4      | 35.60     | "        | "    | 65950 | 6705  | 6665    | -5.6                       | -9.6                     | 6919                     | -21.4                    |
|                                      | 2249 | 22.3      | 0.97      | "        | "    | 67321 | 6735  | 6734    | -4.9                       | -5.0                     | 6941                     | -20.7                    |
|                                      | 2250 | 23.2      | 3.00      | "        | "    | 67356 | 6745  | 6742    | -2.3                       | -2.6                     | 6926                     | -18.1                    |
|                                      | 2251 | 24.8      | 9.29      | "        | "    | 67388 | 6768  | 6757    | -1.3                       | -2.4                     | 6938                     | -18.1                    |
|                                      | 2252 | 25.5      | 44.04     | "        | "    | 66694 | 6805  | 6756    | 0.2                        | -4.7                     | 6961                     | -15.6                    |
|                                      | 2253 | 26.2      | 82.17     | "        | "    | 66303 | 6884  | 6792    | 7.1                        | -2.1                     | 6971                     | -8.7                     |
| 1656<br>1654<br>1652<br>1650<br>1648 | 2253 | 39.1      | 167.21    | "        | "    | 64811 | 6997  | 6810    | 17.4                       | 1.3                      | 6980                     | -17.0                    |
|                                      | 2254 | 26.6      | 41.0      | "        | "    | 63482 | 7111  | 6835    | 28.2                       | 0.6                      | 6986                     | -15.1                    |
|                                      | 2255 | 26.3      | 226.25    | "        | "    | 64006 | 7099  | 6846    | 27.5                       | 2.2                      | 6982                     | -13.6                    |
|                                      | 2256 | 25.5      | 212.59    | "        | "    | 64391 | 7095  | 6857    | 28.2                       | 4.4                      | 6971                     | -11.4                    |
|                                      | 2257 | 24.4      | 239.76    | "        | "    | 62569 | 7182  | 6847    | 38.4                       | 4.9                      | 6955                     | -10.8                    |
|                                      | 2258 | 24.2      | 124.02    | "        | "    | 66139 | 6997  | 6858    | 20.2                       | 6.3                      | 6952                     | -9.4                     |
|                                      | 2259 | 23.6      | 58.71     | "        | "    | 67867 | 6968  | 6900    | 18.1                       | 11.3                     | 6944                     | -2.4                     |
|                                      | 2260 | 23.5      | 125.75    | "        | "    | 66809 | 7069  | 6928    | 28.4                       | 14.3                     | 6942                     | -1.4                     |
| 1639<br>3459                         | 2261 | 23.5      | 53.15     | "        | "    | 68292 | 6993  | 6934    | 20.8                       | 14.9                     | 6942                     | -0.8                     |
|                                      | 2262 | 23.0      | 58.3      | "        | "    | 68936 | 6972  | 6943    | 19.4                       | 16.5                     | 6935                     | 3.7                      |

\* Meteorological Observatory Bench Mark. \*\* Triangulation Point.

| J. 1637   | 2263 | 24.4     | 58.9      | 7.67   | 69518   | 6976  | 6987           | 6798             | 17.8                    | 16.9                      | 6955                       | 2.1                   | 1.2                       |                            |
|---|------|----------|-----------|--------|---------|-------|----------------|------------------|-------------------------|---------------------------|----------------------------|-----------------------|---------------------------|----------------------------|
|   |      |          |           |        |         |       |                |                  |                         |                           |                            |                       |                           | 133°                       |
|   | 2264 | 24.0     | 01.0      | 9.21   | 69380   | 6966  | 6956           | 6792             | 17.4                    | 16.4                      | 6949                       | 1.7                   | 0.7                       |                            |
|   | 2265 | 23.3     | 03.8      | 4.05   | 69395   | 6952  | 6948           | 6782             | 17.0                    | 16.6                      | 6940                       | 1.2                   | 0.8                       |                            |
|   | 2266 | 24.0     | 03.9      | 11.66  | 69150   | 6951  | 6938           | 6792             | 15.9                    | 14.6                      | 6949                       | 0.2                   | - 1.1                     |                            |
|   | 2267 | 22.8     | 06.9      | 3.07   | 69131   | 6923  | 6919           | 6775             | 14.8                    | 14.4                      | 6933                       | - 1.0                 | - 1.4                     |                            |
|   | 2268 | 23.7     | 09.6      | 12.89  | 69114   | 6951  | 6937           | 6788             | 16.3                    | 14.9                      | 6945                       | 0.6                   | - 0.8                     |                            |
|   | 2269 | 24.1     | 11.9      | 2.89   | 69525   | 6961  | 6958           | 6794             | 16.7                    | 16.4                      | 6951                       | 1.0                   | 0.7                       |                            |
|   | 2270 | 25.7     | 13.7      | 4.24   | 69690   | 6982  | 6977           | 6816             | 16.6                    | 16.1                      | 6973                       | 0.9                   | 0.4                       |                            |
|   | 2271 | 27.2     | 16.5      | 7.90   | 70163   | 7041  | 7032           | 6837             | 20.4                    | 19.5                      | 6994                       | 4.7                   | 3.8                       |                            |
|   | 2272 | 28.2     | 18.7      | 10.76  | 70341   | 7067  | 7055           | 6851             | 21.6                    | 20.4                      | 7008                       | 5.9                   | 4.7                       |                            |
|   | 2273 | 29.7     | 20.4      | 5.09   | 70562   | 7072  | 7066           | 6872             | 20.0                    | 19.4                      | 7029                       | 4.3                   | 3.7                       |                            |
|   | 2275 | 31.2     | 21.8      | 7.85   | 70671   | 7091  | 7083           | 6893             | 19.8                    | 19.0                      | 7050                       | 4.1                   | 3.3                       |                            |
|   | 2276 | 32.6     | 23.5      | 12.21  | 70417   | 7079  | 7066           | 6913             | 16.6                    | 15.3                      | 7070                       | 0.9                   | - 0.4                     |                            |
|   | 2277 | 34.1     | 24.6      | 21.30  | 70138   | 7080  | 7056           | 6934             | 14.6                    | 12.2                      | 7091                       | - 1.1                 | - 3.5                     |                            |
|   |      |          |           |        | VIII 27 |       |                |                  |                         |                           |                            |                       |                           |                            |
|   | 1615 |          |           |        |         |       |                |                  |                         |                           |                            |                       |                           |                            |
|   | 1613 |          |           |        |         |       |                |                  |                         |                           |                            |                       |                           |                            |
|   | 1611 |          |           |        |         |       |                |                  |                         |                           |                            |                       |                           |                            |
|   | 1609 |          |           |        |         |       |                |                  |                         |                           |                            |                       |                           |                            |
| Synoptic Results for Hiroshima Prefecture (II). |      |          |           |        |         |       |                |                  |                         |                           |                            |                       |                           |                            |
| B.M.  | No.  | φ        | λ         | H (m)  | Date    | g     | g <sub>0</sub> | g <sub>0</sub> ' | HELMERT Formula of 1901 |                           |                            | International Formula |                           |                            |
|   |      |          |           |        |         |       |                |                  | γ <sub>0</sub> 979.     | Δg <sub>0</sub> ' (mgal.) | Δg <sub>0</sub> '' (mgal.) | γ <sub>0</sub> 979.   | Δg <sub>0</sub> ' (mgal.) | Δg <sub>0</sub> '' (mgal.) |
| 2363  | 2204 | 34° 25.3 | 132° 27.5 | 6.33   | VIII 24 | 67044 | 6724           | 6717             | 6810                    | - 8.6                     | - 9.3                      | 6968                  | - 24.4                    | - 25.1                     |
| 2361  | 2205 | 27.1     | 28.6      | 10.31  | "       | 67301 | 6762           | 6750             | 6836                    | - 7.4                     | - 8.6                      | 6993                  | - 23.1                    | - 24.3                     |
| 2359  | 2206 | 28.8     | 30.0      | 16.85  | "       | 67552 | 6807           | 6788             | 6860                    | - 5.3                     | - 7.2                      | 7017                  | - 21.0                    | - 22.9                     |
| 2357  | 2207 | 30.5     | 30.9      | 21.54  | "       | 67986 | 6865           | 6841             | 6883                    | - 1.8                     | - 4.2                      | 7041                  | - 17.6                    | - 20.0                     |
| "   | "    | "        | "         | "      | "       | 67976 | 6864           | 6840             | "                       | - 1.9                     | - 4.3                      | "                     | - 17.7                    | - 20.1                     |
| "   | 2243 | "        | "         | "      | VIII 25 | 67996 | 6866           | 6842             | "                       | - 1.7                     | - 4.1                      | "                     | - 17.5                    | - 19.9                     |
| 3142  | 2231 | 31.6     | 29.3      | 76.24  | "       | 67235 | 6959           | 6874             | 6899                    | 6.0                       | - 2.5                      | 7056                  | - 9.7                     | - 18.2                     |
| 3145  | 2232 | 32.8     | 27.0      | 94.45  | "       | 67151 | 7007           | 6901             | 6916                    | 9.1                       | - 1.5                      | 7073                  | - 6.6                     | - 17.2                     |
| 3147  | 2233 | 34.6     | 27.5      | 169.86 | "       | 65947 | 7119           | 6929             | 6941                    | 17.8                      | - 1.2                      | 7098                  | 2.1                       | - 16.9                     |
| 3148  | 2234 | 35.0     | 28.5      | 239.87 | "       | 64677 | 7208           | 6940             | 6947                    | 26.1                      | - 0.7                      | 7104                  | 10.4                      | - 16.4                     |
| 3151  | 2235 | 36.6     | 30.2      | 385.09 | "       | 62326 | 7421           | 6990             | 6969                    | 45.2                      | 2.1                        | 7126                  | 29.5                      | - 13.6                     |
| 3153  | 2236 | 38.5     | 31.0      | 302.49 | "       | 64598 | 7393           | 7055             | 6996                    | 39.7                      | 5.9                        | 7153                  | 24.0                      | - 9.8                      |
| 3155  | 2242 | 40.3     | 32.2      | 272.18 | "       | 65668 | 7407           | 7102             | 7021                    | 38.6                      | 8.1                        | 7178                  | 22.9                      | - 7.6                      |
| 3157  | 2241 | 41.9     | 30.8      | 291.87 | "       | 65636 | 7464           | 7138             | 7044                    | 42.0                      | 9.4                        | 7201                  | 26.3                      | - 6.3                      |
| 3159  | 2237 | 43.7     | 30.5      | 366.95 | "       | 64360 | 7568           | 7158             | 7069                    | 49.9                      | 8.9                        | 7226                  | 34.2                      | - 6.8                      |

Table XVII. (II) (Continued)

| B.M. | No.  | $\varphi$ | $\lambda$ | H<br>(m) | Date    | g<br>979. | g <sub>0</sub><br>979. | HELMERT Formula<br>of 1901 |                             |                               | International<br>Formula |                             |                               |                    |
|------|------|-----------|-----------|----------|---------|-----------|------------------------|----------------------------|-----------------------------|-------------------------------|--------------------------|-----------------------------|-------------------------------|--------------------|
|      |      |           |           |          |         |           |                        | $\gamma_0$<br>979.         | $\Delta\gamma_0$<br>(mgal.) | $\Delta\gamma_0''$<br>(mgal.) | $\gamma_0$<br>979.       | $\Delta\gamma_0$<br>(mgal.) | $\Delta\gamma_0''$<br>(mgal.) |                    |
|      |      |           |           |          |         |           |                        |                            |                             |                               |                          |                             |                               | $\gamma_0$<br>979. |
| 3161 | 2238 | 34°       | 132°      |          | 1952    |           |                        |                            |                             |                               |                          |                             |                               |                    |
| 3164 | 2239 | 45.3      | 29.8      | 377.81   | VIII 25 | 64510     | 7617                   | 7194                       | 7092                        | 52.5                          | 10.2                     | 7249                        | 36.8                          | - 5.5              |
| 3166 | 2240 | 45.8      | 26.7      | 453.99   | "       | 63767     | 7716                   | 7230                       | 7099                        | 61.7                          | 13.1                     | 7256                        | 46.0                          | - 2.6              |
|      |      | 48.6      | 26.2      | 555.73   | "       | 61577     | 7873                   | 7251                       | 7138                        | 73.5                          | 11.3                     | 7295                        | 57.8                          | - 4.4              |

Synoptic Results for Hiroshima Prefecture (III).

| B.M. | No.    | $\varphi$ | $\lambda$ | H<br>(m) | Date    | g<br>979. | g <sub>0</sub><br>979. | HELMERT Formula<br>of 1901 |                             |                               | International<br>Formula |                             |                               |                    |
|------|--------|-----------|-----------|----------|---------|-----------|------------------------|----------------------------|-----------------------------|-------------------------------|--------------------------|-----------------------------|-------------------------------|--------------------|
|      |        |           |           |          |         |           |                        | $\gamma_0$<br>979.         | $\Delta\gamma_0$<br>(mgal.) | $\Delta\gamma_0''$<br>(mgal.) | $\gamma_0$<br>979.       | $\Delta\gamma_0$<br>(mgal.) | $\Delta\gamma_0''$<br>(mgal.) |                    |
|      |        |           |           |          |         |           |                        |                            |                             |                               |                          |                             |                               | $\gamma_0$<br>979. |
| 2355 | 2208   | 34°       | 132°      |          | 1952    |           |                        |                            |                             |                               |                          |                             |                               |                    |
| 2353 | 2209   | 32.4      | 32.0      | 62.25    | VIII 24 | 67634     | 6956                   | 6886                       | 6910                        | 4.6                           | - 2.4                    | 7067                        | -11.1                         | -18.1              |
| 2350 | 2210   | 33.9      | 33.6      | 130.34   | "       | 66308     | 7033                   | 6887                       | 6931                        | 10.2                          | 4.4                      | 7088                        | - 5.5                         | -20.1              |
| 2347 | 2211   | 35.6      | 35.5      | 264.11   | "       | 64640     | 7279                   | 6984                       | 6955                        | 32.4                          | 2.9                      | 7112                        | 16.7                          | -12.8              |
| 2345 | 2212   | 37.6      | 38.3      | 216.54   | "       | 66064     | 7275                   | 7032                       | 6983                        | 29.2                          | 4.9                      | 7140                        | 13.5                          | -10.8              |
|      |        | 38.6      | 40.4      | 207.05   | "       | 66302     | 7269                   | 7038                       | 6997                        | 27.2                          | 4.1                      | 7154                        | 11.5                          | -11.6              |
| 2343 | 2213   | 39.6      | 42.6      | 199.99   | "       | 66356     | 7253                   | 7029                       | 7011                        | 24.2                          | 1.8                      | 7168                        | 8.5                           | -13.9              |
| 2339 | 2214   | 40.7      | 44.5      | 196.99   | "       | 66416     | 7250                   | 7029                       | 7027                        | 22.3                          | 0.2                      | 7184                        | 6.6                           | -15.5              |
| 2337 | 2215   | 42.1      | 45.8      | 188.62   | "       | 67028     | 7285                   | 7074                       | 7047                        | 23.8                          | 2.7                      | 7203                        | 8.2                           | -12.9              |
| 2334 | 2216   | 44.0      | 47.0      | 176.57   | "       | 67675     | 7312                   | 7115                       | 7073                        | 23.9                          | 4.2                      | 7230                        | 8.2                           | -11.5              |
|      |        | 46.0      | 49.7      | 165.23   | "       | 68049     | 7315                   | 7130                       | 7102                        | 21.3                          | 2.8                      | 7258                        | 5.7                           | -12.8              |
| 2331 | 2218   | 48.2      | 51.2      | 156.17   | "       | 68832     | 7365                   | 7190                       | 7133                        | 23.2                          | 5.7                      | 7289                        | 7.6                           | - 9.9              |
| "    | 2228   | "         | "         | "        | "       | 68831     | 7365                   | 7190                       | "                           | 23.2                          | 5.7                      | "                           | 7.6                           | - 9.9              |
| 2330 | 2227   | 48.7      | 50.6      | 166.17   | "       | 68560     | 7369                   | 7183                       | 7140                        | 22.9                          | 4.3                      | 7296                        | 7.3                           | -11.3              |
| 2329 | 2219   | 49.1      | 49.4      | 152.77   | "       | 68738     | 7345                   | 7174                       | 7145                        | 20.0                          | 2.9                      | 7302                        | 4.3                           | -12.8              |
| 2327 | 2220   | 50.4      | 48.2      | 170.52   | "       | 68650     | 7391                   | 7200                       | 7164                        | 22.7                          | 3.6                      | 7320                        | 7.1                           | -12.0              |
| 2325 | 2221   | 52.3      | 47.4      | 210.61   | "       | 68446     | 7495                   | 7259                       | 7191                        | 30.4                          | 6.8                      | 7347                        | 14.8                          | - 8.8              |
| 2323 | 2222   | 54.0      | 46.8      | 291.03   | "       | 67240     | 7622                   | 7296                       | 7215                        | 40.7                          | 8.1                      | 7371                        | 25.1                          | - 7.5              |
| 2321 | 2223.1 | 55.0      | 45.6      | 404.23   | "       | 65667     | 7814                   | 7362                       | 7229                        | 58.5                          | 13.3                     | 7385                        | 42.9                          | - 2.3              |
| "    | 2226.1 | "         | "         | "        | "       | 65670     | 7815                   | 7362                       | "                           | 58.6                          | 13.3                     | "                           | 43.0                          | - 2.3              |
| 2319 | 2224   | 56.8      | 44.3      | 524.54   | "       | 63343     | 8003                   | 7416                       | 7254                        | 74.9                          | 16.2                     | 7411                        | 59.2                          | - 0.5              |

Synoptic Results for Hiroshima Prefecture (IV).

| B.M. | No.  | $\phi$   | $\lambda$ | H<br>(m) | Date    | g<br>979. | g <sub>0</sub><br>979. | g <sub>0</sub> '<br>979. | HELMERT Formula<br>of 1901 |                         |                          | International<br>Formula |                         |                          |
|------|------|----------|-----------|----------|---------|-----------|------------------------|--------------------------|----------------------------|-------------------------|--------------------------|--------------------------|-------------------------|--------------------------|
|      |      |          |           |          |         |           |                        |                          | $\gamma_0$<br>979.         | $\Delta g_0$<br>(mgal.) | $\Delta g_0'$<br>(mgal.) | $\gamma_0$<br>979.       | $\Delta g_0$<br>(mgal.) | $\Delta g_0'$<br>(mgal.) |
| 322  | 2313 | 34° 20.8 | 132° 31.5 | 3.64     | VIII 29 | 67218     | 6733                   | 6729                     | 6747                       | -1.4                    | -1.8                     | 6905                     | -17.2                   | -17.6                    |
| 320  | 2312 | 19.2     | 30.1      | 2.95     | "       | 66759     | 6685                   | 6682                     | 6725                       | -4.0                    | -4.3                     | 6882                     | -19.7                   | -20.0                    |
| 317  | 2311 | 16.6     | 31.3      | 3.67     | "       | 66540     | 6665                   | 6661                     | 6688                       | -2.3                    | -2.7                     | 6846                     | -18.1                   | -18.5                    |
| 314  | 2310 | 14.7     | 33.5      | 3.40     | "       | 66608     | 6671                   | 6668                     | 6662                       | 0.9                     | 0.6                      | 6819                     | -14.8                   | -15.1                    |
| 311  | 2309 | 14.3     | 36.0      | 3.73     | "       | 66824     | 6694                   | 6690                     | 6656                       | 3.8                     | 3.4                      | 6814                     | -12.0                   | -12.4                    |
| 308  | 2308 | 13.0     | 39.7      | 3.03     | "       | 67011     | 6711                   | 6707                     | 6638                       | 7.3                     | 6.9                      | 6796                     | -8.5                    | -8.9                     |
| 305  | 2307 | 14.3     | 42.7      | 18.94    | "       | 66847     | 6743                   | 6722                     | 6656                       | 8.7                     | 6.6                      | 6814                     | -7.1                    | -9.2                     |
| 302  | 2306 | 16.8     | 44.7      | 1.36     | "       | 67673     | 6772                   | 6770                     | 6691                       | 8.1                     | 7.9                      | 6849                     | -7.7                    | -7.9                     |
| 327  | 2301 | 19.6     | 42.5      | 171.43   | VIII 28 | 64600     | 6989                   | 6797                     | 6730                       | 25.9                    | 6.7                      | 6888                     | 10.1                    | -9.1                     |
| 329  | 2302 | 21.4     | 43.5      | 173.31   | "       | 64651     | 7000                   | 6806                     | 6756                       | 24.4                    | 5.0                      | 6913                     | 8.7                     | -10.7                    |
| 331  | 2303 | 23.3     | 44.3      | 188.44   | "       | 64634     | 7045                   | 6834                     | 6782                       | 26.3                    | 5.2                      | 6940                     | 10.5                    | -10.6                    |

Synoptic Results for Hiroshima Prefecture (V).

| B.M. | No.  | $\phi$   | $\lambda$ | H<br>(m) | Date    | g<br>979. | g <sub>0</sub><br>979. | g <sub>0</sub> '<br>979. | HELMERT Formula<br>of 1901 |                         |                          | International<br>Formula |                         |                          |
|------|------|----------|-----------|----------|---------|-----------|------------------------|--------------------------|----------------------------|-------------------------|--------------------------|--------------------------|-------------------------|--------------------------|
|      |      |          |           |          |         |           |                        |                          | $\gamma_0$<br>979.         | $\Delta g_0$<br>(mgal.) | $\Delta g_0'$<br>(mgal.) | $\gamma_0$<br>979.       | $\Delta g_0$<br>(mgal.) | $\Delta g_0'$<br>(mgal.) |
| 299  | 2299 | 34° 18.5 | 132° 45.5 | 84.27    | VIII 28 | 66347     | 6895                   | 6801                     | 6715                       | 18.0                    | 8.6                      | 6872                     | 2.3                     | 7.1                      |
| 296  | 2298 | 18.9     | 48.6      | 3.05     | "       | 68384     | 6848                   | 6844                     | 6721                       | 12.7                    | 12.3                     | 6878                     | -3.0                    | -3.4                     |
| 293  | 2297 | 19.3     | 51.8      | 29.70    | "       | 67781     | 6870                   | 6837                     | 6726                       | 14.4                    | 11.1                     | 6884                     | -1.4                    | -4.7                     |
| 143  | 2296 | 21.7     | 53.6      | 2.90     | "       | 68528     | 6862                   | 6859                     | 6760                       | 10.2                    | 9.9                      | 6917                     | -5.5                    | -5.8                     |
| 141  | 2295 | 20.1     | 55.2      | 2.65     | "       | 68495     | 6858                   | 6855                     | 6737                       | 12.1                    | 11.8                     | 6895                     | -3.7                    | -4.0                     |
| 138  | 2284 | 20.3     | 57.5      | 12.79    | VIII 27 | 68473     | 6887                   | 6873                     | 6740                       | 14.7                    | 13.3                     | 6898                     | -1.1                    | -2.5                     |
| 3457 | 2283 | 21.1     | 59.1      | 90.23    | "       | 67216     | 7000                   | 6899                     | 6751                       | 24.9                    | 14.8                     | 6909                     | 9.1                     | -1.0                     |
| 135  | 2282 | 20.1     | 02.6      | 2.70     | "       | 69050     | 6913                   | 6910                     | 6737                       | 17.6                    | 17.3                     | 6895                     | 1.8                     | 1.5                      |
| 133  | 2281 | 20.5     | 04.6      | 3.75     | "       | 69157     | 6927                   | 6923                     | 6743                       | 18.4                    | 18.0                     | 6900                     | 2.7                     | 2.3                      |
| 131  | 2280 | 22.4     | 05.4      | 3.98     | "       | 69035     | 6914                   | 6910                     | 6770                       | 14.4                    | 14.0                     | 6927                     | -1.3                    | -1.7                     |

B.M. printed in Gothic type are 2nd order bench marks.



(34) Yamaguchi Prefecture.

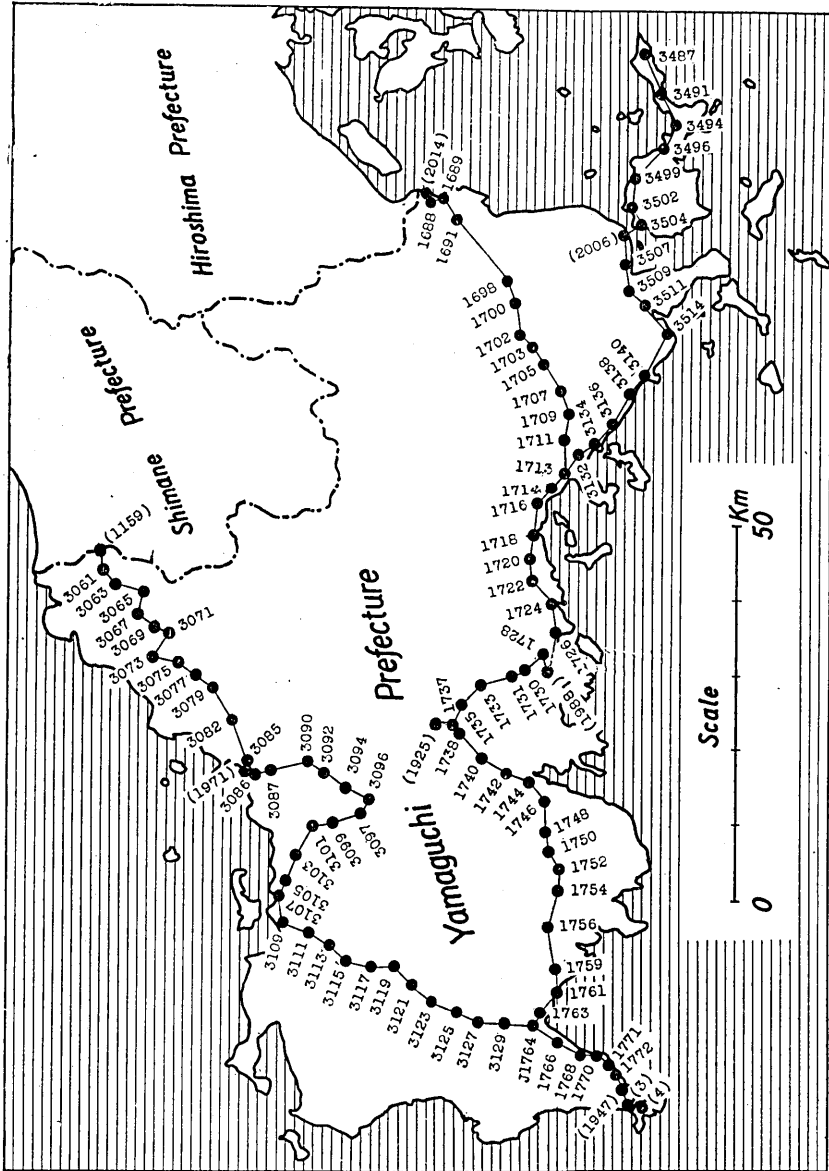


Fig. 11. Gravity Stations in Yamaguchi Prefecture.

Table XVIII. Synoptic Results for Yamaguchi Prefecture (I).

| B.M.              | No.  | $\varphi$ | $\lambda$ | H (m) | Date   | $g$   | $g_0$ | $g_0''$ | HELMERT Formula of 1901 |              |                | International Formula |              |                |
|-------------------|------|-----------|-----------|-------|--------|-------|-------|---------|-------------------------|--------------|----------------|-----------------------|--------------|----------------|
|                   |      |           |           |       |        |       |       |         | $\gamma_0$              | $\Delta g_0$ | $\Delta g_0''$ | $\gamma_0$            | $\Delta g_0$ | $\Delta g_0''$ |
| Shimonoseki W.S.* | 1947 | 33° 57.0  | 130° 56.0 | 45.80 | VII 20 | 67618 | 6903  | 6852    | 6414                    | 48.9         | 43.8           | 6573                  | 33.0         | 27.9           |
|                   | 1946 | 56.1      | 57.9      | 21.27 | VII 19 | 68023 | 6868  | 6844    | 6402                    | 46.6         | 44.2           | 6560                  | 30.8         | 28.4           |
|                   | 1945 | 57.0      | 55.1      | 2.14  | "      | 68639 | 6871  | 6868    | 6414                    | 45.7         | 45.4           | 6573                  | 29.8         | 29.5           |
|                   | 1944 | 57.6      | 57.4      | 6.18  | "      | 68438 | 6863  | 6856    | 6423                    | 44.0         | 43.3           | 6581                  | 28.2         | 27.5           |
|                   | 1943 | 58.2      | 58.4      | 5.22  | "      | 68485 | 6865  | 6859    | 6431                    | 43.4         | 42.8           | 6589                  | 27.6         | 27.0           |
| 1770              | 58.8 | 59.3      | 4.81      | "     | 68268  | 6842  | 6836  | 6439    | 40.3                    | 39.7         | 6598           | 24.4                  | 23.8         |                |
| 1768              | 00.7 | 59.9      | 5.00      | "     | 67991  | 6815  | 6809  | 6466    | 34.9                    | 34.3         | 6624           | 19.1                  | 18.5         |                |
| J.                | 1766 | 02.6      | 02.2      | 4.46  | "      | 68027 | 6817  | 6812    | 6492                    | 32.5         | 32.0           | 6650                  | 16.7         | 16.2           |
|                   | 1939 | 04.1      | 02.1      | 5.17  | "      | 67983 | 6814  | 6809    | 6513                    | 30.1         | 29.6           | 6671                  | 14.3         | 13.8           |
|                   | 3129 | 06.0      | 02.3      | 75.06 | VII 20 | 67138 | 6945  | 6861    | 6540                    | 40.5         | 32.1           | 6698                  | 24.7         | 16.3           |
| 3127              | 08.0 | 02.5      | 16.33     | "     | 68697  | 6920  | 6902  | 6568    | 35.2                    | 33.4         | 6726           | 19.4                  | 17.6         |                |
| 3125              | 09.5 | 03.4      | 29.68     | "     | 69518  | 7043  | 7010  | 6589    | 45.4                    | 42.1         | 6747           | 29.6                  | 26.3         |                |
| 3123              | 11.3 | 04.8      | 37.09     | "     | 69541  | 7069  | 7027  | 6614    | 45.5                    | 41.3         | 6772           | 29.7                  | 25.6         |                |
| 3121              | 12.6 | 05.9      | 54.08     | "     | 69399  | 7107  | 7046  | 6632    | 47.5                    | 41.4         | 6790           | 31.7                  | 25.6         |                |
| 3119              | 14.0 | 07.1      | 99.44     | "     | 68485  | 7155  | 7044  | 6652    | 50.3                    | 39.2         | 6810           | 34.5                  | 23.4         |                |
| 3117              | 15.7 | 07.5      | 98.41     | "     | 68686  | 7172  | 7062  | 6676    | 49.6                    | 38.6         | 6833           | 33.9                  | 22.9         |                |
| 3115              | 17.3 | 07.4      | 127.62    | "     | 68390  | 7233  | 7090  | 6698    | 53.5                    | 39.2         | 6856           | 37.7                  | 23.4         |                |
| 3113              | 18.6 | 08.7      | 213.67    | "     | 66751  | 7335  | 7095  | 6716    | 61.9                    | 37.9         | 6874           | 46.1                  | 22.1         |                |
| 3111              | 20.1 | 10.5      | 40.51     | "     | 70404  | 7165  | 7120  | 6737    | 42.8                    | 38.3         | 6895           | 27.0                  | 22.5         |                |
| 3109              | 23.0 | 11.0      | 7.03      | "     | 71424  | 7164  | 7156  | 6778    | 38.6                    | 37.8         | 6935           | 22.9                  | 22.1         |                |
| 3107              | 22.0 | 13.1      | 1.56      | "     | 71350  | 7140  | 7138  | 6764    | 37.6                    | 37.4         | 6921           | 21.9                  | 21.7         |                |
| 3105              | 21.7 | 15.6      | 9.50      | "     | 70469  | 7076  | 7066  | 6760    | 31.6                    | 30.6         | 6917           | 15.9                  | 14.9         |                |
| 3103              | 21.0 | 17.9      | 36.06     | "     | 69434  | 7035  | 7014  | 6750    | 30.5                    | 26.4         | 6907           | 14.8                  | 10.7         |                |
| 3101              | 20.0 | 19.9      | 87.63     | "     | 68084  | 7079  | 6981  | 6736    | 34.3                    | 24.5         | 6893           | 18.6                  | 8.8          |                |
| 3099              | 18.3 | 19.8      | 239.08    | "     | 65098  | 7248  | 6980  | 6712    | 53.6                    | 26.8         | 6870           | 37.8                  | 11.0         |                |

\* Weather Station, on the Surface of the Stone Block at the Foot of the Wireless Antenna Tower.

Table XVIII. (I) (Continued)

| B.M.  | No.  | $\varphi$  | $\lambda$   | H<br>(m) | Date   | g<br>979. | $g_0$<br>979. | $g_0''$<br>979. | HELMERT Formula<br>of 1901 |                         |                           | International<br>Formula |                         |                           |      |  |  |
|-------|------|------------|-------------|----------|--------|-----------|---------------|-----------------|----------------------------|-------------------------|---------------------------|--------------------------|-------------------------|---------------------------|------|--|--|
|       |      |            |             |          |        |           |               |                 | $\gamma_0$<br>979.         | $\Delta g_0$<br>(mgal.) | $\Delta g_0''$<br>(mgal.) | $\gamma_0$<br>979.       | $\Delta g_0$<br>(mgal.) | $\Delta g_0''$<br>(mgal.) |      |  |  |
|       |      | $34^\circ$ | $131^\circ$ |          |        |           |               |                 |                            |                         |                           |                          |                         |                           |      |  |  |
|       | 1964 | 16.4       | 20.9        | 182.36   | VII 20 | 65828     | 7146          | 6942            | 6686                       | 46.0                    | 25.6                      | 6843                     | 30.3                    | 30.3                      | 9.9  |  |  |
|       | 1965 | 15.8       | 21.6        | 180.19   | "      | 65786     | 7135          | 6933            | 6677                       | 45.8                    | 25.6                      | 6835                     | 30.0                    | 30.0                      | 9.8  |  |  |
|       | 1966 | 17.6       | 22.6        | 240.89   | "      | 64596     | 7203          | 6933            | 6702                       | 50.1                    | 23.1                      | 6860                     | 34.3                    | 34.3                      | 7.3  |  |  |
|       | 1967 | 19.1       | 23.8        | 90.99    | "      | 67609     | 7042          | 6940            | 6723                       | 31.9                    | 21.7                      | 6881                     | 16.1                    | 16.1                      | 5.9  |  |  |
|       | 1968 | 20.7       | 25.3        | 35.54    | "      | 68419     | 6952          | 6912            | 6746                       | 20.6                    | 16.6                      | 6903                     | 4.9                     | 4.9                       | 0.9  |  |  |
|       | 1969 | 23.4       | 24.3        | 2.91     | "      | 69478     | 6957          | 6954            | 6784                       | 17.3                    | 17.0                      | 6941                     | 1.6                     | 1.6                       | 1.3  |  |  |
|       | 1970 | 24.4       | 24.1        | 2.16     | "      | 69741     | 6981          | 6978            | 6798                       | 18.3                    | 18.0                      | 6955                     | 2.6                     | 2.6                       | 2.3  |  |  |
|       | "    | "          | "           | "        | VII 21 | 69753     | 6982          | 6980            | 6798                       | 18.4                    | 18.2                      | "                        | 2.7                     | 2.7                       | 2.5  |  |  |
| Hagi  | 1971 | 24.2       | 24.1        | 2.00     | "      | 69744     | 6981          | 6978            | 6795                       | 18.6                    | 18.3                      | 6952                     | 2.9                     | 2.9                       | 2.6  |  |  |
| W.S.* | 1972 | 24.6       | 25.5        | 15.20    | "      | 69446     | 6992          | 6975            | 6801                       | 19.1                    | 17.4                      | 6958                     | 3.4                     | 3.4                       | 1.7  |  |  |
|       | 1973 | 25.8       | 28.3        | 198.06   | "      | 65772     | 7188          | 6967            | 6817                       | 37.1                    | 15.0                      | 6975                     | 21.3                    | 21.3                      | 0.8  |  |  |
|       | 1974 | 27.3       | 31.3        | 144.80   | "      | 66667     | 7114          | 6952            | 6838                       | 27.6                    | 11.4                      | 6996                     | 11.8                    | 11.8                      | 4.4  |  |  |
|       | 1975 | 28.6       | 32.2        | 162.94   | "      | 66928     | 7196          | 7013            | 6857                       | 33.9                    | 15.6                      | 7014                     | 18.2                    | 18.2                      | 0.1  |  |  |
|       | 1976 | 30.0       | 33.7        | 267.60   | "      | 65095     | 7335          | 7036            | 6876                       | 45.9                    | 16.0                      | 7034                     | 30.1                    | 30.1                      | 0.2  |  |  |
|       | 1977 | 32.0       | 34.4        | 353.81   | "      | 64221     | 7514          | 7118            | 6904                       | 61.0                    | 21.4                      | 7062                     | 45.2                    | 45.2                      | 5.6  |  |  |
|       | 1978 | 30.9       | 35.9        | 381.78   | "      | 63268     | 7505          | 7078            | 6889                       | 61.6                    | 18.9                      | 7046                     | 45.9                    | 45.9                      | 3.2  |  |  |
|       | 1979 | 32.0       | 37.0        | 351.04   | "      | 64438     | 7527          | 7134            | 6904                       | 62.3                    | 23.0                      | 7062                     | 46.5                    | 46.5                      | 7.2  |  |  |
|       | 1980 | 33.0       | 37.8        | 201.06   | "      | 67827     | 7403          | 7178            | 6919                       | 48.4                    | 25.9                      | 7076                     | 32.7                    | 32.7                      | 10.2 |  |  |
|       | 1981 | 32.5       | 40.0        | 182.91   | "      | 67866     | 7351          | 7146            | 6912                       | 43.9                    | 23.4                      | 7069                     | 28.2                    | 28.2                      | 7.7  |  |  |
|       | 1982 | 34.2       | 40.4        | 55.07    | "      | 71058     | 7276          | 7214            | 6935                       | 34.1                    | 27.9                      | 7093                     | 18.3                    | 18.3                      | 12.1 |  |  |
|       | 1983 | 35.5       | 41.6        | 24.97    | "      | 72101     | 7287          | 7259            | 6954                       | 33.3                    | 30.5                      | 7111                     | 17.6                    | 17.6                      | 14.8 |  |  |

\* Weather Station Bench Mark.

## Synoptic Results for Yamaguchi Prefecture (II).

| B.M.  | No.    | $\varphi$ | $\lambda$ | H<br>(m) | Date   | g<br>979. | $g_0$<br>979. | $g_0''$<br>979. | HELMERT Formula<br>of 1901 |                         |                           | International<br>Formula |                         |                           |  |
|-------|--------|-----------|-----------|----------|--------|-----------|---------------|-----------------|----------------------------|-------------------------|---------------------------|--------------------------|-------------------------|---------------------------|--|
|       |        |           |           |          |        |           |               |                 | $\gamma_0$<br>979.         | $\Delta g_0$<br>(mgal.) | $\Delta g_0''$<br>(mgal.) | $\gamma_0$<br>979.       | $\Delta g_0$<br>(mgal.) | $\Delta g_0''$<br>(mgal.) |  |
|       |        | 34°       | 131°      |          |        |           |               |                 |                            |                         |                           |                          |                         |                           |  |
| 1763  | 1938   | 03.7      | 03.1      | 3.27     | VII 19 | 67973     | 6807          | 6804            | 6508                       | 29.9                    | 29.6                      | 6666                     | 14.1                    | 13.8                      |  |
| 1761  | 1937   | 02.4      | 04.9      | 4.81     | "      | 67881     | 6803          | 6798            | 6490                       | 31.3                    | 30.8                      | 6648                     | 15.5                    | 15.0                      |  |
| 1759  | 1936   | 02.5      | 07.1      | 60.61    | "      | 66999     | 6837          | 6819            | 6491                       | 39.6                    | 32.8                      | 6649                     | 23.8                    | 17.0                      |  |
| 1756  | 1935   | 03.0      | 10.5      | 12.04    | "      | 67724     | 6810          | 6796            | 6498                       | 31.2                    | 29.8                      | 6656                     | 15.4                    | 14.0                      |  |
| 1754  | 1934   | 02.5      | 12.8      | 11.69    | "      | 67046     | 6741          | 6728            | 6491                       | 25.0                    | 23.7                      | 6649                     | 9.2                     | 7.9                       |  |
| 1752  | 1933   | 02.2      | 15.0      | 39.35    | "      | 66350     | 6756          | 6712            | 6487                       | 26.9                    | 22.5                      | 6645                     | 11.1                    | 6.7                       |  |
| 1750  | 1932   | 02.6      | 17.0      | 17.45    | "      | 66510     | 6705          | 6685            | 6492                       | 21.3                    | 19.3                      | 6650                     | 5.5                     | 3.5                       |  |
| 1748  | 1931   | 03.4      | 18.8      | 37.82    | "      | 66050     | 6722          | 6679            | 6504                       | 17.5                    | 14.5                      | 6662                     | 6.0                     | 1.7                       |  |
| 1746  | 1930   | 03.1      | 21.3      | 18.99    | "      | 66319     | 6691          | 6669            | 6499                       | 19.2                    | 17.0                      | 6657                     | 3.4                     | 1.2                       |  |
| 1744  | 1929   | 04.4      | 23.1      | 14.41    | "      | 66797     | 6724          | 6708            | 6518                       | 20.6                    | 19.0                      | 6676                     | 4.8                     | 3.2                       |  |
| 1742  | 1928   | 06.2      | 24.2      | 3.58     | "      | 66880     | 6699          | 6695            | 6543                       | 15.6                    | 15.2                      | 6701                     | - 0.2                   | - 0.6                     |  |
| 1740  | 1927   | 07.8      | 25.3      | 11.07    | "      | 67209     | 6755          | 6743            | 6565                       | 19.0                    | 17.8                      | 6723                     | 3.2                     | 2.0                       |  |
| 1738  | 1926   | 09.3      | 27.8      | 15.65    | "      | 67002     | 6749          | 6731            | 6586                       | 16.3                    | 14.5                      | 6744                     | 0.5                     | - 1.3                     |  |
| 1737  | 1924   | 09.9      | 28.3      | 21.20    | "      | 66940     | 6759          | 6736            | 6594                       | 16.5                    | 14.2                      | 6752                     | 0.7                     | - 1.6                     |  |
| 1735  | 1984   | 09.4      | 30.3      | 33.88    | VII 22 | 66571     | 6762          | 6724            | 6587                       | 17.5                    | 13.7                      | 6745                     | 1.7                     | - 2.1                     |  |
| 1733  | 1985   | 07.7      | 31.7      | 44.35    | "      | 65921     | 6729          | 6679            | 6564                       | 16.5                    | 11.5                      | 6722                     | 0.7                     | - 4.3                     |  |
| 1731  | 1986   | 05.7      | 32.6      | 101.96   | "      | 64637     | 6778          | 6664            | 6536                       | 24.2                    | 12.8                      | 6694                     | 8.4                     | - 3.0                     |  |
| 1730  | 1987   | 04.6      | 33.2      | 38.45    | "      | 66048     | 6724          | 6681            | 6520                       | 20.4                    | 16.1                      | 6678                     | 4.6                     | 0.3                       |  |
| 1728  | 1988   | 03.5      | 34.8      | 14.19    | "      | 66795     | 6723          | 6707            | 6505                       | 21.8                    | 20.2                      | 6663                     | 6.0                     | 4.4                       |  |
| W.S.* | 1988-1 | 02.6      | 32.5      | 3.03     | "      | 66798     | 6689          | 6686            | 6492                       | 19.7                    | 19.4                      | 6650                     | 3.9                     | 3.6                       |  |
| 1726  | 1989   | 02.5      | 36.6      | 2.15     | "      | 67140     | 6721          | 6718            | 6491                       | 23.0                    | 22.7                      | 6649                     | 7.2                     | 6.9                       |  |
| 1724  | 1990   | 02.7      | 38.7      | 3.76     | "      | 67282     | 6740          | 6736            | 6494                       | 24.6                    | 24.2                      | 6652                     | 8.8                     | 8.4                       |  |
| 1722  | 1991   | 04.1      | 40.5      | 51.41    | "      | 66424     | 6801          | 6744            | 6513                       | 28.8                    | 23.1                      | 6671                     | 13.0                    | 7.3                       |  |
| 1720  | 1992   | 04.4      | 42.5      | 8.30     | "      | 67585     | 6784          | 6775            | 6518                       | 26.6                    | 25.7                      | 6676                     | 10.8                    | 9.9                       |  |
| 1718  | 1993   | 04.2      | 44.7      | 4.65     | "      | 67607     | 6775          | 6770            | 6515                       | 26.0                    | 25.5                      | 6673                     | 10.2                    | 9.7                       |  |
| 1716  | 1994   | 04.1      | 47.7      | 3.41     | "      | 67117     | 6722          | 6718            | 6513                       | 20.9                    | 20.5                      | 6671                     | 5.1                     | 4.7                       |  |
| 1714  | 1995   | 02.5      | 48.8      | 6.58     | "      | 66439     | 6664          | 6657            | 6491                       | 17.3                    | 16.6                      | 6649                     | 1.5                     | 0.8                       |  |
| 1713  | 1996   | 02.1      | 49.6      | 5.38     | "      | 66458     | 6662          | 6656            | 6485                       | 17.7                    | 17.1                      | 6644                     | 1.8                     | 1.2                       |  |
| 1711  | 2025   | 02.0      | 52.3      | 23.63    | VII 23 | 65694     | 6642          | 6616            | 6484                       | 15.8                    | 13.2                      | 6642                     | 0.0                     | - 2.6                     |  |
| 1709  | 2024   | 01.6      | 54.7      | 40.67    | "      | 64766     | 6602          | 6557            | 6478                       | 12.4                    | 7.9                       | 6637                     | - 3.5                   | - 8.0                     |  |

\* Weather Station, on Concrete Corridor.

Table XVIII. (II) (Continued)

| B.M. | No.  | $\psi$   | $\lambda$ | H<br>(m) | Date   | g<br>979. | g <sub>0</sub><br>979. | g <sub>0</sub> ''<br>979. | HELMERT Formula<br>of 1901 |                         |                           | International<br>Formula |                         |                           |
|------|------|----------|-----------|----------|--------|-----------|------------------------|---------------------------|----------------------------|-------------------------|---------------------------|--------------------------|-------------------------|---------------------------|
|      |      |          |           |          |        |           |                        |                           | $\gamma_0$<br>979.         | $\Delta g_0$<br>(mgal.) | $\Delta g_0''$<br>(mgal.) | $\gamma_0$<br>979.       | $\Delta g_0$<br>(mgal.) | $\Delta g_0''$<br>(mgal.) |
|      |      |          |           |          |        |           |                        |                           |                            |                         |                           |                          |                         |                           |
| 1707 | 2023 | 34° 02.0 | 131° 57.0 | 49.31    | VII 23 | 63984     | 6551                   | 6495                      | 6484                       | 6.7                     | 1.1                       | 6642                     | -9.1                    | -14.7                     |
| 1705 | 2022 | 33° 03.3 | 132° 58.9 | 61.03    | "      | 63013     | 6490                   | 6421                      | 6502                       | -1.2                    | -8.1                      | 6660                     | -17.0                   | -23.9                     |
| 1703 | 2021 | 04.2     | 01.1      | 33.21    | "      | 63161     | 6419                   | 6381                      | 6515                       | -9.6                    | -13.4                     | 6673                     | -25.4                   | -29.2                     |
| 1702 | 2020 | 05.0     | 01.6      | 36.24    | "      | 63315     | 6443                   | 6403                      | 6526                       | -8.3                    | -12.3                     | 6684                     | -24.1                   | -28.1                     |
| 1700 | 2019 | 05.3     | 04.2      | 51.70    | "      | 62971     | 6457                   | 6399                      | 6530                       | -7.3                    | -13.1                     | 6688                     | -23.1                   | -28.9                     |
| 1698 | 2018 | 06.2     | 06.4      | 87.73    | "      | 62736     | 6544                   | 6446                      | 6543                       | 0.1                     | -9.7                      | 6701                     | -15.7                   | -25.5                     |
| 1691 | 2017 | 09.7     | 11.2      | 4.55     | "      | 65016     | 6516                   | 6511                      | 6592                       | -7.6                    | -8.1                      | 6749                     | -23.3                   | -28.8                     |
| 1689 | 2016 | 10.9     | 13.9      | 2.12     | "      | 65069     | 6513                   | 6511                      | 6608                       | -9.5                    | -9.7                      | 6766                     | -25.3                   | -25.5                     |
| 1688 | 2015 | 11.8     | 14.0      | 2.08     | "      | 65234     | 6530                   | 6528                      | 6621                       | -9.1                    | -9.3                      | 6779                     | -24.9                   | -25.1                     |

Synoptic Results for Yamaguchi Prefecture (III).

| B.M. | No.  | $\psi$   | $\lambda$ | H<br>(m) | Date   | g<br>979. | g <sub>0</sub><br>979. | g <sub>0</sub> ''<br>979. | HELMERT Formula<br>of 1901 |                         |                           | International<br>Formula |                         |                           |
|------|------|----------|-----------|----------|--------|-----------|------------------------|---------------------------|----------------------------|-------------------------|---------------------------|--------------------------|-------------------------|---------------------------|
|      |      |          |           |          |        |           |                        |                           | $\gamma_0$<br>979.         | $\Delta g_0$<br>(mgal.) | $\Delta g_0''$<br>(mgal.) | $\gamma_0$<br>979.       | $\Delta g_0$<br>(mgal.) | $\Delta g_0''$<br>(mgal.) |
|      |      |          |           |          |        |           |                        |                           |                            |                         |                           |                          |                         |                           |
| 3132 | 1997 | 34° 01.0 | 131° 51.3 | 1.89     | VII 22 | 66637     | 6670                   | 6667                      | 6470                       | 20.0                    | 19.7                      | 6628                     | 4.2                     | 3.9                       |
| 3134 | 1998 | 59.3     | 53.0      | 4.06     | "      | 65689     | 6581                   | 6577                      | 6446                       | 13.5                    | 13.1                      | 6605                     | -2.4                    | -2.8                      |
| 3136 | 1999 | 58.2     | 55.3      | 4.41     | "      | 65670     | 6581                   | 6576                      | 6431                       | 15.0                    | 14.5                      | 6589                     | -0.8                    | -1.3                      |
| 3138 | 2000 | 57.3     | 57.0      | 4.40     | "      | 65512     | 6565                   | 6560                      | 6419                       | 14.6                    | 14.1                      | 6577                     | -1.2                    | -1.7                      |
| 3140 | 2001 | 55.6     | 58.4      | 4.25     | "      | 64993     | 6512                   | 6508                      | 6395                       | 11.7                    | 11.3                      | 6553                     | -4.1                    | -4.5                      |
| 3514 | 2002 | 54.3     | 02.3      | 8.49     | "      | 64593     | 6486                   | 6476                      | 6377                       | 10.9                    | 9.9                       | 6535                     | -4.9                    | -5.9                      |
| 3511 | 2003 | 56.0     | 04.5      | 2.53     | "      | 64665     | 6474                   | 6474                      | 6400                       | 7.4                     | 7.2                       | 6559                     | -8.5                    | -8.7                      |
| 3509 | 2004 | 57.4     | 06.1      | 2.84     | "      | 64422     | 6451                   | 6448                      | 6420                       | 3.1                     | 2.8                       | 6578                     | -12.7                   | -13.0                     |
| 3507 | 2005 | 57.4     | 07.5      | 2.81     | "      | 64170     | 6426                   | 6423                      | 6420                       | 0.6                     | 0.3                       | 6378                     | -15.2                   | -15.5                     |
|      | 2006 | 57.6     | 10.7      | 3.08     | "      | 64125     | 6422                   | 6419                      | 6423                       | -0.1                    | -0.4                      | 6581                     | -15.9                   | -16.2                     |

|      |      |      |      |       |     |    |       |      |      |      |      |       |      |       |       |
|------|------|------|------|-------|-----|----|-------|------|------|------|------|-------|------|-------|-------|
| 3504 | 2007 | 56.7 | 11.2 | 4.55  | VII | 23 | 63840 | 6398 | 6398 | 6410 | 1.2  | -1.7  | 6568 | -17.0 | -17.5 |
| 3502 | 2008 | 57.0 | 12.9 | 2.17  | "   | "  | 64041 | 6411 | 6414 | 6414 | 0.3  | -0.6  | 6573 | -16.2 | -16.5 |
| 3499 | 2009 | 56.7 | 15.7 | 2.15  | "   | "  | 63751 | 6382 | 6410 | 6410 | 2.8  | -3.1  | 6568 | -18.6 | -18.9 |
| 3496 | 2010 | 55.0 | 18.2 | 2.30  | "   | "  | 62941 | 6301 | 6386 | 6386 | 8.5  | -8.7  | 6545 | -24.4 | -24.6 |
| 3494 | 2011 | 53.9 | 20.0 | 1.83  | "   | "  | 62318 | 6237 | 6371 | 6371 | 13.4 | -13.6 | 6529 | -29.2 | -29.4 |
| 3491 | 2012 | 54.8 | 22.6 | 3.83  | "   | "  | 62194 | 6231 | 6384 | 6384 | 15.3 | -15.7 | 6542 | -31.1 | -31.5 |
| 3487 | 2013 | 56.1 | 26.5 | 52.20 | "   | "  | 61046 | 6266 | 6402 | 6402 | 13.6 | -19.4 | 6560 | -29.4 | -35.2 |

ウオルドン重力計による日本全国の重力測定  
第二報 中国地方

坪井忠二・実川 顕・田島広一

これは、四国地方に関する第一報にひきつづき、中国地方における測定結果をまとめたものである。測定と計算との方法は、第一報のそれとほとんど同じであるから、ここにはくりかえさない。

結果は、第VI表～第XIII表(ルート別)、第XIV表～第XVIII表(県別)に示してある。ブーゲー異常の分布は、第6図に示してある。

第6図からわかる主なことがらは、次のとおりである。

1) ブーゲー異常は、北方すなわち日本海の方へむかつて大きくなる。日本海岸に沿つたところでは、等異常線は海岸線と大体平行である。しかし、中国地方の西方においてこの平行性はやぶれ、等異常線は南北に走る。

2) 等異常線と海岸線との平行性は、松江市の近くで乱れている。ここでは海岸線自身も乱れている。

3) 中国地方の中軸帯に沿つては、重力異常は極小である。ここは地質学的には、隆起準平原の中軸帯にあたり、高さは約1000mであつて、主として花崗岩からできている。

4) 広島市の近くには、いちじるしい負の異常がある。これは四国地方における測定からも推定されたところである。この負地域は逆立卵形をなして、およそ2km程度の地殻陥没を暗示する。等異常線とほとんど同じ形をした湾があることは面白い。

5) 香川県の北方に見出された著しい正の異常地域は、中国地方にまでのび、東西方向に長軸をもつた楕円形をなしていることがわかつた。これは、地下に密度の大きいものがあることを示すのであつて、これは恐らく讃岐玄武岩を供給した本源であると思われる。

1946年の南海地震に伴つて生じた地殻変動から、土地の水平変形の主な歪を計算した結果をみると、変形の主な歪は、この正地域内では、いちじるしく小さい。これは、上述の玄武岩体が、かたいことを示していると思われる。