

BULLETIN OF THE SEISMOLOGICAL STATION

L U N D



$\Phi = 55^{\circ} 42' N$ ;  $\Lambda = 13^{\circ} 11' E$ ;  $h = 32 m$   
 Sub-soil: Glacial moraines, depth about 100 m, on cretaceous limestone.

Observatory • Lund • Sweden

Instrument: WIECHERT 1000 Kg. horizontal seismograph.  
 Constants:

| Component |           | T    | v   | r   | V   |
|-----------|-----------|------|-----|-----|-----|
|           |           | sec. |     | mm. |     |
| NE        | 1/1-3/8   | 11.3 | 3.3 | 0.7 | 160 |
|           | 3/8-31/12 | 11.9 | 4.8 | 0.7 | 200 |
| NW        | 1/1-3/8   | 12.0 | 5.4 | 1   | 195 |
|           | 3/8-31/12 | 12.0 | 5.8 | 0.7 | 195 |

SIEMENS clock controlled daily by NAUEN ONOGO signals.  
 The seismographic records are read in the GEODETIC INSTITUTE,  
 Copenhagen, Denmark.

| No.             | Date            | Hour | Forerunners |                |      |                 | L                  | Undef.             | $\Delta$ | Remarks   |                    |
|-----------------|-----------------|------|-------------|----------------|------|-----------------|--------------------|--------------------|----------|-----------|--------------------|
|                 |                 |      | P           |                | S    |                 |                    |                    |          |           | h m                |
|                 |                 |      | m           | s              | m    | s               | h m                | h m                | o        |           |                    |
|                 | 1929            |      |             |                |      |                 |                    |                    |          |           |                    |
|                 | Jan.            |      |             |                |      |                 |                    |                    |          |           |                    |
| 1               | 1               | 14   |             |                |      |                 |                    | .1                 |          | Faint     |                    |
| 2               | 2               | 3    |             |                |      |                 |                    | .2                 |          | "         |                    |
| 3               | 6               | 0    |             |                |      |                 | 12                 |                    |          | " Iceland |                    |
| 4               | 8               | 8    |             |                |      |                 |                    | .2                 |          |           |                    |
| 5 <sup>x</sup>  | 13 <sup>x</sup> | 0    | 14          | 8              | 23   | 5               | 23 43              | 28.4               |          | 67        | Kurile Islands     |
| 6               | 13              | 19   |             |                |      |                 |                    |                    | .2       |           | Faint              |
| 7               | 14              | 5    |             |                |      |                 |                    |                    | .8       |           | "                  |
| 8               | 14              | 10   |             |                |      |                 |                    | .2                 |          |           |                    |
| 9               | 16              | 8    |             |                |      |                 | 29.3               | 49                 |          |           | Philippine Islands |
| 10              | 17              | 0    |             |                |      |                 |                    |                    | .2       |           |                    |
| 11 <sup>x</sup> | 17 <sup>x</sup> | 12   |             |                | 7    | 2               |                    |                    |          |           | Venezuela          |
| 12              | 17              | 23   |             |                |      |                 |                    | .4                 |          |           |                    |
| 13              | 18              | 22   |             |                |      |                 |                    | .0                 |          |           |                    |
| 14              | 19              | 4    |             |                |      |                 |                    | .1                 |          |           |                    |
| 15              | 20              | 15   |             |                |      |                 | .2                 |                    |          |           | Moluccas           |
| 16              | 21              | 6    |             |                |      |                 |                    | .1                 |          |           |                    |
| 17              | 21              | 10   |             |                |      |                 | 49 12 <sup>x</sup> | 1.1                |          |           | Alaska             |
| 18              | 22              | 14   |             |                |      |                 | 59                 |                    |          |           |                    |
| 19              | 23              | 11   | 19          | 21             | 23   | 19              |                    | 27                 |          | 23        | Greece             |
| 20 <sup>x</sup> | 24 <sup>x</sup> | 20   | 49.5        |                |      |                 | 61 23              | 1.3                |          |           | Central America    |
| 21              | 27              | 16   |             |                | 26.1 |                 |                    | .6                 |          |           |                    |
| 22              | 30              | 17   |             |                |      |                 | 18 32              | .8                 |          |           |                    |
| 23              | 31              | 18   |             |                |      |                 |                    | .9                 |          |           |                    |
|                 | Febr.           |      |             |                |      |                 |                    |                    |          |           |                    |
| 24 <sup>x</sup> | 1 <sup>x</sup>  | 17   | 22          | 7              | 28   | 14 <sup>x</sup> | 22 58              | 29 33 <sup>x</sup> | 31       | 41        | Turkestan          |
| 25 <sup>x</sup> | 2 <sup>x</sup>  | 0    | 10          | 56             | 19   | 35 <sup>x</sup> | 11.9               |                    |          | 64        | Atlantic Ocean     |
| 26              | 3               | 3    |             |                |      |                 |                    | 26                 |          |           |                    |
| 27              | 6               | 7    | 0           | 15             | 9    | 17              |                    | .4                 |          | 67        | Sea of Okhotsk     |
| 28              | 10              | 16   |             |                |      |                 | 2.8                | 1.3                |          |           |                    |
| 29              | 10              | 17   |             |                |      |                 | 29.5               |                    |          |           | Caucase            |
| 30              | 14              | 15   |             |                |      |                 |                    | 22                 |          |           |                    |
| 31              | 15              | 6    |             |                |      |                 | 5.8                |                    |          |           |                    |
| 32              | 15              | 8    |             |                |      |                 |                    | .8                 |          |           |                    |
| 33              | 16              | 20   |             |                |      |                 |                    | .9                 |          |           |                    |
| 34              | 18              | 19   |             |                |      |                 |                    |                    |          | 8         | Spain              |
| 35 <sup>x</sup> | 22 <sup>x</sup> | 20   | 52          | 9              | 60   | 38              | 62.1               | 68                 |          | 63        | Atlantic Ocean     |
| 36              | 26              | 9    | 12          | 1 <sup>x</sup> | 21   | 9               |                    | .5                 |          | 69        | Alaska             |
| 37              | 27              | 20   |             |                |      |                 |                    | 6                  |          |           |                    |







| No.              | Date            | Hour | Forerunners      |                |      |                 | L    | Undef. | △    | Remarks |       |     |     |     |                        |
|------------------|-----------------|------|------------------|----------------|------|-----------------|------|--------|------|---------|-------|-----|-----|-----|------------------------|
|                  |                 |      | P                |                | S    |                 |      |        |      |         | h m s | m s | h m | h m | o                      |
|                  |                 |      | m                | s              | m    | s               | h    | m      | s    | m       | s     | h   | m   | o   |                        |
|                  | 1929            |      |                  |                |      |                 |      |        |      |         |       |     |     |     |                        |
|                  | June            |      |                  |                |      |                 |      |        |      |         |       |     |     |     |                        |
| 90               | 1               | 18   | 11.0             |                | 20   | 58              |      |        |      | .7      |       |     |     |     | Riou-Kiou Islands      |
| 91 <sup>x</sup>  | 2 <sup>x</sup>  | 21   | 50               | 4 <sup>x</sup> | 59   | 25              |      |        |      |         |       |     |     | 70  | P uncertain.           |
| 92 <sup>x</sup>  | 3 <sup>x</sup>  | 20   | 36               | 55             | 42   | 38              | 12   | 45.1   |      |         |       |     |     | 37  | Turkestan              |
| 93               | 4               | 7    |                  |                |      |                 | .3   |        |      |         |       | 23  |     |     |                        |
| 94               | 4               | 15   |                  |                |      |                 | 32   | 52     | 38   | 41      |       |     |     |     | Philippine Islands     |
| 95               | 5               | 9    |                  |                |      |                 |      |        |      |         |       | 25  |     |     |                        |
| 96               | 6               | 11   | 0.6 <sup>x</sup> |                | 8    | 50              |      |        |      |         |       | .3  |     |     |                        |
| 97               | 6               | 16   |                  |                |      |                 |      |        |      |         |       | .7  |     |     |                        |
| 98               | 9               | 9    | 19               | 24             | 28   | 47              |      | 24.3   |      |         |       | .7  |     | 71  | Kurile Islands         |
| 99               | 10 <sup>x</sup> | 23   | 6                | 50             | 9    | 58 <sup>x</sup> |      |        |      |         |       | 11  |     | 17  | Arctic Sea             |
| 100              | 12              | 12   |                  |                |      |                 | 2.5  | 12     | 10   |         |       | 38  |     |     | Pacific Ocean          |
| 101              | 12              | 15   |                  |                |      |                 |      |        |      |         |       | .1  |     |     |                        |
| 102 <sup>x</sup> | 13 <sup>x</sup> | 0    | 23               | 43             | 33.1 |                 | 33   | 51     |      |         |       | .8  |     | 72  | Kurile Islands         |
| 103 <sup>x</sup> | 13 <sup>x</sup> | 9    | 38.0             |                |      |                 | 49.0 | 49.8   |      |         |       | 61  |     |     | Mindanao region        |
| 104              | 13              | 20   |                  |                |      |                 |      |        |      |         |       | .6  |     |     |                        |
| 105              | 13              | 23   |                  |                |      |                 | 24.6 |        |      |         |       | .8  |     |     |                        |
| 106              | 15              | 9    |                  |                |      |                 |      |        |      |         |       | .9  |     |     |                        |
| 107              | 15              | 20   |                  |                |      |                 |      |        |      |         |       | .5  |     |     |                        |
| 108 <sup>x</sup> | 16 <sup>x</sup> | 23   |                  |                |      |                 | 7.7  | 8      | 17   |         |       |     |     |     | New Zealand            |
| 109              | 17              | 10   |                  |                |      |                 | 40.7 |        |      |         |       | 1.1 |     |     | Mindanao region        |
| 110              | 19              | 7    | 44               |                |      |                 | 54   | 51     | 55   | 31      |       | 80  |     |     | Pacific Ocean          |
| 111              | 20              | 21   |                  |                |      |                 |      |        |      |         |       | .0  |     |     |                        |
| 112              | 22              | 15   |                  |                |      |                 | .9   |        |      |         |       |     |     |     | New Zealand            |
| 113              | 22              | 20   |                  |                |      |                 |      |        |      |         |       | .1  |     |     | " "                    |
| 114              | 23              | 22   |                  |                |      |                 |      |        |      |         |       | .8  |     |     |                        |
| 115              | 26              | 7    |                  |                |      |                 |      |        |      |         |       | .2  |     |     | Disturbed              |
| 116              | 26              | 17   |                  |                |      |                 |      |        |      |         |       | .5  |     |     |                        |
| 117 <sup>x</sup> | 27 <sup>x</sup> | 13   | 2.2              |                |      |                 |      |        |      |         |       | 34  |     |     | South Sandwich Islands |
| 118              | 27              | 22   | 43               | 11             | 46.3 |                 |      |        |      |         |       | 49  |     | 17  |                        |
| 119              | 30              | 3    |                  |                |      |                 | 8    | 56     |      |         |       | .6  |     |     | Mindanao region        |
| 120              | 30              | 6    |                  |                |      |                 |      |        |      |         |       | .2  |     |     |                        |
|                  | July            |      |                  |                |      |                 |      |        |      |         |       |     |     |     |                        |
| 121              | 3               | 8    |                  |                |      |                 | .5   |        |      |         |       |     |     |     |                        |
| 122              | 4               | 7    | 20               |                |      |                 |      |        |      |         |       | 27  |     |     |                        |
| 123              | 4               | 7    |                  |                |      |                 |      |        |      |         |       | 45  |     |     | Faint preceding move-  |
| 124              | 4               | 8    |                  |                |      |                 |      |        |      |         |       | 10  |     |     | " " ment.              |
| 125 <sup>x</sup> | 5 <sup>x</sup>  | 14   | 30               | 34             | 39   | 58              | 40   | 14     | 45   | 8       |       |     |     |     | Aleutian Islands       |
| 126              | 5               | 22   | 47.8             |                | 57   | 14              | 57.5 |        |      |         |       |     |     |     |                        |
| 127              | 6               | 2    | 15               | 24             |      |                 |      |        |      |         |       | .6  |     |     | S uncertain            |
| 128 <sup>x</sup> | 6 <sup>x</sup>  | 9    | 56               | 33             | i64  | 56 <sup>x</sup> |      |        |      |         |       | 72  |     | 62  | Atlantic Ocean         |
| 129 <sup>x</sup> | 7 <sup>x</sup>  | 21   | 34               | 42             | i44  | 7 <sup>x</sup>  | 37   | 21     | i44  | 59      |       | .9  |     | 71  | Aleutian Islands       |
| 130              | 8               | 2    |                  |                |      |                 |      |        |      |         |       | .7  |     |     | Faint                  |
| 131              | 8               | 19   |                  |                |      |                 | .6   |        |      |         |       | .9  |     |     |                        |
| 132              | 11              | 21   |                  |                |      |                 | 17.9 |        |      |         |       | .6  |     |     | S of Aleutian Islands  |
| 133              | 12              | 18   |                  |                |      |                 |      |        |      |         |       | .7  |     |     |                        |
| 134              | 13              | 7    | 43.7             |                | 49.2 |                 |      |        |      |         |       | .9  |     |     |                        |
| 135              | 13              | 15   |                  |                |      |                 | .4   |        |      |         |       | .8  |     |     |                        |
| 136 <sup>x</sup> | 14 <sup>x</sup> | 9    | 48               | 7              | 57   | 19              | 52   | 42     | 65.4 |         |       | 70  |     | 69  | Sea of Okhotsk         |
| 137 <sup>x</sup> | 15 <sup>x</sup> | 7    | 51               | 3              | i56  | 31              | 56   | 40     |      |         |       |     |     | 35  | Persia                 |
| 138              | 17              | 8    | 49               | 36             | 58   | 59              |      |        |      |         |       | 1.2 |     | 62  |                        |
| 139              | 18              | 21   |                  |                |      |                 |      |        |      |         |       |     | 9   |     | Faint                  |
| 140              | 21              | 14   |                  |                |      |                 |      |        |      |         |       | .0  |     |     |                        |
| 141 <sup>x</sup> | 23 <sup>x</sup> | 18   | 47               | 32             | i51  | 20              |      |        |      |         |       | 52  |     | 19  | Iceland                |
| 142              | 23              | 20   |                  |                | 12   |                 |      |        |      |         |       | 14  |     |     | In foregoing repe-     |
| 143              | 25              | 0    |                  |                |      |                 | .5   |        |      |         |       |     |     |     | dition                 |
| 144              | 25              | 23   |                  |                |      |                 |      |        |      |         |       | .6  |     |     |                        |
| 145              | 26              | 23   | 0                | 14             | 10   | 3               | 2.9  |        |      |         |       | .5  |     | 76  | Japan                  |
| 146              | 27              | 13   |                  |                |      |                 |      |        |      |         |       | .4  |     |     |                        |



| No.              | Date                     | Hour | Forerunners |                 |      |                 | L                  | Undef. | △   | Remarks |       |   |
|------------------|--------------------------|------|-------------|-----------------|------|-----------------|--------------------|--------|-----|---------|-------|---|
|                  |                          |      | P           |                 | S    |                 |                    |        |     |         | h m s | m s                                     |
|                  |                          |      | m           | s               | m    | s               | h m s              | m s    | h m | h m     | o     |   |
| 147              | 1929 Aug. 1              | 5    | 13          | 36              | i23  | 12              | 23 40              |        |     |         | 73    | Aug. 3-14 no records<br>Central America |
| 148              | 15                       | 20   | 9           | 24              | 20   | 10 <sup>x</sup> | 19 48              |        | .6  |         |       |   |
| 149              | 16                       | 23   |             |                 | 38   | 52              | 34.7               |        | .7  |         |       |   |
| 150              | 17                       | 23   | 53.6        |                 |      |                 | 57.1               | 64.2   | 1.4 |         |       | Central America                         |
| 151              | 18                       | 9    |             |                 |      |                 |                    |        | .7  |         |       |   |
| 152              | 19                       | 2    | 55          | 18              | 65   | 20              | 58.4               |        | 1.4 |         | 78    | Japan                                   |
| 153              | 19                       | 21   |             |                 |      |                 |                    |        | .4  |         |       |   |
| 154              | 20                       | 16   | 50.5        |                 | 60   | 33              |                    |        | 1.3 |         | 80    | Riou Kiou Islands                       |
| 155              | 21                       | 10   |             |                 |      |                 |                    |        | .3  |         |       |   |
| 156              | 28                       | 19   |             |                 | 13   | 1               |                    |        |     | 28      |       | Japan                                   |
| 157              | 29                       | 20   |             |                 |      |                 |                    |        | .5  |         |       |   |
| 158              | 1929 Sept. 2             | 5    |             |                 |      |                 |                    |        |     |         | 57    |   |
| 159              | 2                        | 11   |             |                 |      |                 | 37.2               |        | 1.0 |         |       |   |
| 160              | 3                        | 12   | 15.9        |                 | i22  | 32              | 25.8               |        | .6  |         |       | P disturbed, uncer-<br>tain             |
| 161              | 3                        | 15   |             |                 |      |                 |                    |        | .8  |         |       |   |
| 162              | 4                        | 22   |             |                 |      |                 | 39                 |        |     |         |       |   |
| 163              | 11                       | 22   |             |                 | 40   | 54              |                    |        | 1.0 |         |       | Formosa. S small                        |
| 164              | 15                       | 13   | 15          | 16              | 19   | 20              |                    |        |     |         | 23    | Asia Minor. S small                     |
| 165              | 17                       | 19   | 28.8        |                 | 38.1 |                 |                    |        |     |         |       | Pacific Ocean                           |
| 166              | 27                       | 23   |             |                 |      |                 | 44                 |        | .9  |         |       |   |
| 167              | 1929 Oct. 5              | 17   | i10         | 53              | 19   | 48 <sup>x</sup> | 24                 |        | .6  |         | 67    | Kamtchatka                              |
| 168              | 5                        | 19   |             |                 |      |                 |                    |        | .6  |         |       | Faint                                   |
| 169              | 6                        | 8    |             |                 |      |                 | 16.3               | 19.0   |     |         |       | Pacific Ocean                           |
| 170              | 8                        | 17   |             |                 |      |                 | 39.8               |        | 1.4 |         |       | " "                                     |
| 171              | 10                       | 23   |             |                 |      |                 |                    |        |     | 12      |       |   |
| 172              | 14                       | 10   |             |                 | 31   |                 |                    |        | .8  |         |       |   |
| 173              | 16                       | 20   |             |                 |      |                 | .9                 |        | 1.1 |         |       |   |
| 174              | 18                       | 11   |             |                 |      |                 |                    |        | .3  |         |       | Faint                                   |
| 175 <sup>x</sup> | 19 <sup>x</sup>          | 10   | 27          |                 |      |                 | 37 22              | 38.2   | .9  |         |       | Chile                                   |
| 176              | 21                       | 11   |             |                 |      |                 |                    |        | .6  |         |       |   |
| 177              | 22                       | 19   |             |                 |      |                 |                    |        |     | 22      |       |   |
| 178              | 24                       | 7    |             |                 |      |                 |                    |        | .3  |         |       |   |
| 179              | 26                       | 13   |             |                 |      |                 | 47 48              | i48 12 |     |         |       | Felt in Halland.<br>Sweden.             |
| 180              | 27                       | 17   |             |                 |      |                 |                    |        |     | .0      |       | Faint                                   |
| 181              | 29                       | 6    |             |                 |      |                 | 6                  |        | .2  |         |       | Persia                                  |
| 182 <sup>x</sup> | 1929 Nov. 1 <sup>x</sup> | 7    | 0           | 15 <sup>x</sup> | 2    | 40              |                    |        |     |         | 13    | Rumania                                 |
| 183              | 5                        | 12   |             |                 |      |                 |                    |        | .4  |         |       |   |
| 184 <sup>x</sup> | 15 <sup>x</sup>          | 19   |             |                 |      |                 | 8.9                | 17.9   | .6  |         |       | Caroline Islands                        |
| 185 <sup>x</sup> | 17 <sup>x</sup>          | 3    | 56.8        |                 |      |                 | 60.6               | 67 48  |     |         |       | Mindanao region                         |
| 186              | 18                       | 6    |             |                 |      |                 |                    |        | .5  |         |       |   |
| 187 <sup>x</sup> | 18 <sup>x</sup>          | 20   | 40.1        |                 | i46  | 38              | i49 59             |        |     |         | 44    | New Foundland                           |
| 188              | 23                       | 1    |             |                 |      |                 | .5                 | 36.9   | .9  |         |       | New Guinea                              |
| 189              | 1929 Dec. 6              | 17   |             |                 |      |                 | 16 18 <sup>x</sup> | 22.4   | .7  |         |       | Sandwich Group                          |
| 190              | 6                        | 20   |             |                 |      |                 | 50.7               | 57.1   | 1.3 |         |       | " "                                     |
| 191              | 9                        | 7    |             |                 |      |                 | 12                 |        | .6  |         |       | Sumatra                                 |
| 192              | 13                       | 4    |             |                 |      |                 | 53.6               |        |     | 55      |       |   |
| 193              | 15                       | 1    |             |                 |      |                 |                    |        |     | 45      |       |   |
| 194              | 16                       | 12   |             |                 |      |                 |                    |        | .5  |         |       |   |
| 195 <sup>x</sup> | 17 <sup>x</sup>          | 11   | 9           | 50 <sup>x</sup> | i19  | 0               | 12.2               | 23.5   | .5  |         | 69    |   |
| 196              | 18                       | 7    |             |                 |      |                 |                    |        | .7  |         |       |   |
| 197              | 20                       | 20   |             |                 |      |                 |                    |        |     | 28      |       |   |
| 198              | 31                       | 1    |             |                 |      |                 |                    |        | .9  |         |       |   |
| 199              | 31                       | 5    |             |                 |      |                 |                    |        | .6  |         |       | Faint                                   |



- | No.  | Notes   |
|------|---|
| 5.   | Jan. 13. 0 <sup>h</sup> . Kurile Islands. Very strong record. Phases well defined. First forerunners strongest on NE. P <sub>c</sub> P (?) 14 <sup>m</sup> 58 <sup>s</sup> ; PP 16 <sup>m</sup> 7. Further pulses 17 <sup>m</sup> 6, 18 <sup>m</sup> 5. 19 <sup>m</sup> some regular oscillations. S large; PS large and clearly separated from S; followed by large movement. on NW pulses 24 <sup>m</sup> 12 <sup>s</sup> , 24 <sup>m</sup> 28 <sup>s</sup> . SS clearly marked. SSS 31 <sup>m</sup> 1; great increase of movement 32 <sup>m</sup> 0. Large oscillations 35 <sup>m</sup> 0, possibly the beginning of L. M large. |
| 11.  | Jan. 17. 12 <sup>h</sup> . Venezuela. $\Delta = \text{ca. } 73^\circ$ . S not well defined, followed by irregular movement. The beginning of L not certain; several regular M groups.   |
| 20.  | Jan. 24. 20 <sup>h</sup> . Central America. P faint. First part of S phase in hour-mark. PS, 61 <sup>m</sup> 23 <sup>s</sup> , distinct on NW. SS 66 <sup>m</sup> SSS 70 <sup>m</sup> . Regular M groups.   |
| 24.  | Febr. 1. 17 <sup>h</sup> . Zéravchan. Deep focus. In forerunners continued strong oscillatory movement. e <sub>NW</sub> 23 <sup>m</sup> 9; e <sub>NE</sub> 29 <sup>m</sup> 1; 31 <sup>m</sup> 0. SS, i 31 <sup>m</sup> 29 <sup>s</sup> , larger than L.   |
| 25.  | Febr. 2. 0 <sup>h</sup> . Atlantic Ocean. P read on NE, not very clearly marked. S clearly marked on NW. On NE some increase of movement 18 <sup>m</sup> 1, followed by increasing movement of rather long period; no distinct S.   |
| 35.  | Febr. 22. 20 <sup>h</sup> . Atlantic Ocean. The beginning of P small; iP 52 <sup>m</sup> 13 <sup>s</sup> . S very large. On NW, L begins with long - period waves of large amplitude.   |
| 41.  | March 7. 1 <sup>h</sup> . Aleutian Islands. P begins sharply with oscillations of very large amplitude. The beginning of S less sharp; iS 55 <sup>m</sup> 47 <sup>s</sup> followed by very large oscillations. Large L waves, but forerunners relatively larger.  |
| 67.  | May 1. 15 <sup>h</sup> . Persia and Turkestan. Very strong record. In forerunners continued strong oscillatory movement. M very large.  |
| 78.  | May 18. 6 <sup>h</sup> . Asia Minor. P small, increases 43 <sup>m</sup> 1 <sup>s</sup> . The beginning of S small; large movement 47 <sup>m</sup> 7 <sup>s</sup> . L irregular.   |
| 84.  | May 26. 22 <sup>h</sup> . Pacific Ocean near Alaska. First forerunners small; the beginning of P quite small, increase 51 <sup>m</sup> 2. S large; the beginning uncertain, in hour-mark. e 60 <sup>m</sup> 53 <sup>s</sup> .   |
| 87.  | May 29. 23 <sup>h</sup> . Skagerak. Felt in Norway and Denmark. Movement begins quite faintly 32 <sup>m</sup> 4. On NW several pulses. Strongest movement sets in 33 <sup>m</sup> 17 <sup>s</sup> .   |
| 91.  | June 2. 21 <sup>h</sup> . Two shocks according to URSS. P <sub>2</sub> not very clearly marked 51 <sup>m</sup> 20 <sup>s</sup> ; S <sub>2</sub> probably in hour-mark. e <sub>NW</sub> 61 <sup>m</sup> 8; e 64 <sup>m</sup> 5.  |
| 92.  | June 3. 20 <sup>h</sup> . Turkestan. P well defined. PP slightly larger, on NW preceded by some increase of movement. The beginning of L uncertain. Some large M.   |
| 99.  | June 10. 23 <sup>h</sup> . Arctic Sea W of Norway. The beginning of P small, followed by larger movement; i 7 <sup>m</sup> 8 <sup>s</sup> . Large well-defined S, on NE preceded by increase of movement. Large M.  |
| 102. | June 13. 0 <sup>h</sup> . Kurile Islands. P read on NE, quite small on NW. S not clearly marked. 25 <sup>m</sup> 44 <sup>s</sup> possibly P of a second shock. 37 <sup>m</sup> 20 <sup>s</sup> P of a third, stronger shock; the corresponding S 46 <sup>m</sup> 48 <sup>s</sup> .  |
| 103. | June 13. 9 <sup>h</sup> . Mindanao region. Phases not clearly marked. Additional readings; 50 <sup>m</sup> 58 <sup>s</sup> . 55 <sup>m</sup> 0.   |
| 108. | June 16. 23 <sup>h</sup> . New Zealand; $\Delta = 160^\circ 5$ . Strong record. PP 12 <sup>m</sup> 3 <sup>s</sup> . PPP 15 <sup>m</sup> 7; S <sub>c</sub> P <sub>c</sub> S <sub>i</sub> P 22 <sup>m</sup> 18 <sup>s</sup> ; PPS 25 <sup>m</sup> 8 <sup>s</sup> ; e 27 <sup>m</sup> 9 <sup>s</sup> ; SS 32 <sup>m</sup> 0. SS and subsequent waves very large, of long period. The beginning of L uncertain.   |
| 117. | June 27. 13 <sup>h</sup> . South Sandwich Islands. $\Delta = \text{ca. } 115^\circ$ . Very strong record. P quite small. PP 6 <sup>m</sup> 58 <sup>s</sup> . e <sub>NW</sub> 7 <sup>m</sup> 37 <sup>s</sup> . PPP 9 <sup>m</sup> 5. Readings on NE: 12 <sup>m</sup> 38 <sup>s</sup> ; 12 <sup>m</sup> 55 <sup>s</sup> ; 13 <sup>m</sup> 7, 15 <sup>m</sup> 6. (PS) 16 <sup>m</sup> 8. e <sub>NW</sub> 20 <sup>m</sup> 6. SS 22 <sup>m</sup> 7 very large; SSS 27 <sup>m</sup> . L begins 34 <sup>m</sup> with long-period waves of very large amplitude.  |
| 125. | July 5. 14 <sup>h</sup> . Aleutian Islands. P small, but beginning clearly marked on NW. S well defined on NW; smaller on NE, followed by some large waves of long period. L regular.   |
| 128. | July 6. 9 <sup>h</sup> . Atlantic Ocean. P clearly marked on NE; S large and clearly marked on NW. On NW, large waves of long period in first part of L.  |
| 129. | July 7. 21 <sup>h</sup> . Aleutian Islands. Very strong record. The beginning of P small; iP 34 <sup>m</sup> 45 <sup>s</sup> . S large and clearly marked on NW, on NE smaller and preceded by some increase of movement so that beginning less certain; e 44 <sup>m</sup> 22 <sup>s</sup> . SS 49 <sup>m</sup> 17 <sup>s</sup> , very clearly marked on NW.  |



No. 3

L U N D

| No.  | Notes   |
|------|---|
| 136. | July 14. 9 <sup>h</sup> . Sea of Okhotsk. The beginning of P small, uncertain. L earliest on NW.  |
| 137. | July 15. 7 <sup>h</sup> . Persia. The beginning of P not clearly marked. S large on NE; on NW, large movement 56 <sup>m</sup> 40 <sup>s</sup> .   |
| 141. | July 23. 18 <sup>h</sup> . Iceland, 63°9 N 21°5 W. Phases clearly marked. S large on NE. L regular, earliest on NE.   |
| 175. | Oct. 19. 10 <sup>h</sup> . Pacific Ocean off Northern Chile. P quite small. PP 31 <sup>m</sup> 0, stronger. 40 <sup>m</sup> 6 ; 45 <sup>m</sup> 7 ; 51 <sup>m</sup> . L regular.  |
| 182. | Nov. 1. 7 <sup>h</sup> . Rumania. Time not accurately known. S clearly marked on NE ; followed by strong movement.  |
| 184. | Nov. 15. 19 <sup>h</sup> . Caroline Islands; $\Delta = \text{ca. } 105^\circ$ . Phases not very clearly marked. PP 8 <sup>m</sup> 9 ; ( $\overline{S_c P_c P_c S}$ ) 15 <sup>m</sup> 9 ; S <sub>n</sub> 16 <sup>m</sup> 5 ; PS 17 <sup>m</sup> 9, large on NE; SS 23 <sup>m</sup> 8.        |
| 185. | Nov. 17. 3 <sup>h</sup> . Mindanac region. P quite small. 67 <sup>m</sup> 48 <sup>s</sup> , ( $\overline{S_c P_c S}$ ), clearly marked. SS 75 <sup>m</sup> 17 <sup>s</sup> . L earliest on NW with waves of period of more than 1 min.  |
| 187. | Nov. 18. 20 <sup>h</sup> . New Foundland. The beginning of P quite small ; increase i 40 <sup>m</sup> 13 <sup>s</sup> ; followed by strong oscillatory movement. PP not clearly marked, possibly 41 <sup>m</sup> 8. S large. SS large on NE. L a few minutes later. One very large M group. |
| 195. | Dec. 17. 11 <sup>h</sup> . Between Kamtchatka and Aleutian Islands. Very strong record. S very large, read on NE ; iS <sub>NW</sub> 19 <sup>m</sup> 9 <sup>s</sup> ; followed by very large movement. In first part of L, very large waves of long period, largest on NE.                   |