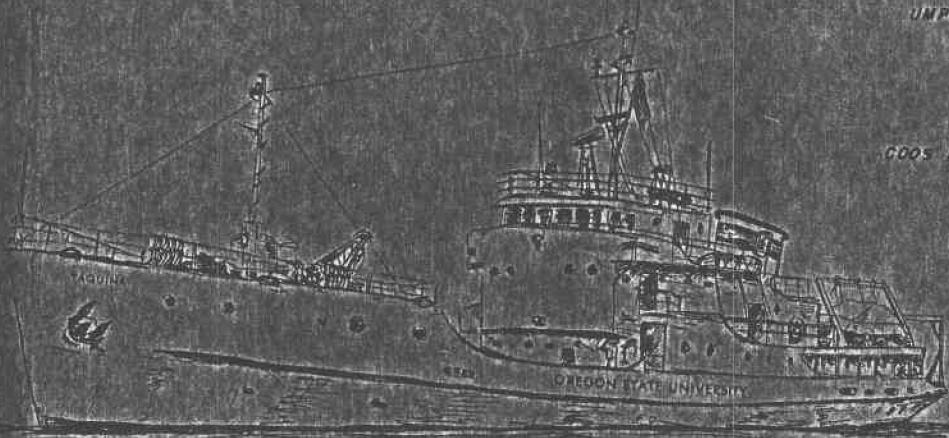


GC 856  
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no. 22

# DEPARTMENT of OCEANOGRAPHY

SCHOOL of SCIENCE

OREGON STATE UNIVERSITY



## OREGON STATE UNIVERSITY SEISMOLOGICAL BULLETIN NO. 7

January 1 to March 31, 1965

by

A. J. Skorpen, J. N. Gallagher and  
Peter Dehlinger

Air Force Cambridge Research Laboratories  
Contract AF 19(628)-2778

Office of Naval Research  
Contract Nonr 1286(10) Project NR 083-102

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DEPARTMENT OF OCEANOGRAPHY  
Geophysics Research Group  
OREGON STATE UNIVERSITY  
Corvallis, Oregon

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SEISMOLOGICAL BULLETIN NO. 7  
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(Data Report No. ~~21~~<sup>22</sup> Official correction)

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Wayne V. Burt  
Chairman

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Oregon State University operates a World-Wide Standard Seismograph Station at Corvallis (COR) and a seismic station at Klamath Falls (KFO), Oregon. Data recorded at the Portland (PTD), Oregon, seismic station, operated by the Oregon Museum of Science and Industry, are included in this Seismological Bulletin.

The Corvallis station includes three short-period Benioff seismographs ( $T_0 = 1$  sec,  $T_g = 0.75$  sec), three long-period Sprengnether seismographs ( $T_0 = 30$  sec,  $T_g = 100$  sec), and a small short-period vertical Benioff seismograph ( $T_0 = 1.0$  sec,  $T_g = 0.2$  sec) to provide visual recording on the OSU campus.

The Klamath Falls station consists of a small short-period vertical Benioff seismograph ( $T_0 = 1$  sec,  $T_g = 0.2$  sec), with visual recording on the campus of the Oregon Technical Institute.

The Portland station consists of a short-period vertical Wilson-Lamison seismograph ( $T_0 = 1$  sec,  $T_g = 1.5$  sec) with visual recording at the Museum.

#### Station Constants:

|               | Latitude  | Longitude  | Elevation   |
|---------------|-----------|------------|-------------|
| Corvallis     | 44°35.1'N | 123°18.2'W | 123 meters  |
| Klamath Falls | 42°16.0'N | 121°44.7'W | 1321 meters |
| Portland      | 45°30.5'N | 122°43.0'W | 208 meters  |

#### Abbreviations:

i - impetus (sudden beginning of motion).

e - emersio (gradual beginning of motion).

(Z, N, E) (following phase of arrival) - recorded on vertical north-south, east-west component seismometers, respectively.

c, r (following phase of arrival) - first motion arrived as a compression or rarefaction, respectively.

u, d, N, S, E, W (following phase of arrival) - first motion is up, down, north, south, east, or west, respectively.

Mag - magnitude.

h - depth of focus.

$\Delta$  - epicentral distance from Corvallis.

94 ft. alt. 25

| DATE<br>1965 | STA. | PHASE                                                                        | TIME (GCT)<br>h, m, s                                            | PERIOD<br>sec                 | REMARKS                                                                                                                                           |
|--------------|------|------------------------------------------------------------------------------|------------------------------------------------------------------|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 Jan.       | COR  | eP (Z, N, E)u, N, W<br>eS? (E)<br>e                                          | 01:57:17.1<br>01:57:27.5<br>01:57:32.6                           | 1<br>1.2<br>1.2               | Local? $\Delta$ about 75 km.                                                                                                                      |
| 5 Jan.       | COR  | eLR (E)                                                                      | 18:44:44                                                         | 16                            | Tonga Islands. USCGS<br>(card 3-65A): 20.3°S,<br>174.1°W; 18:05:58.6;<br>h about 33 km; Mag 6.0.<br>$\Delta$ about 8890 km.                       |
| 6 Jan.       | COR  | ePn (Z)u<br>e (E)E<br>e (Z)u<br>e S <sub>n</sub> (E)<br>e S <sub>n</sub> (Z) | 02:03:17.1<br>02:03:22.4<br>02:03:45.4<br>02:05:21.4<br>02:05:36 | 1.6<br>2.0<br>1.6<br>1.6<br>4 | Large S amplitude<br>Eastern Idaho. USCGS<br>(card 2-56): 44.9°N,<br>112.7°W; 02:01:22.2;<br>h about 7 km; Mag 5.1.<br>$\Delta$ about 860 km.     |
| 6 Jan.       | COR  | e P? (Z)d<br>e (E)E<br>e S? (E)E                                             | 23:52:45.4<br>23:52:48.5<br>23:53:01                             | 1<br>0.4<br>1                 | Local?                                                                                                                                            |
| 7 Jan.       | COR  | e LR (Z)d                                                                    | 16:19:26.5                                                       | 8                             | Oaxaca, Mexico. USCGS<br>(card 3-65A): 16.2°N,<br>97.2°W; 15:56:32.5;<br>h about 43 km; Mag 5.5.<br>$\Delta$ about 4000 km.                       |
| 8 Jan.       | COR  | eLR (Z, N, E)d, N, W                                                         | 21:35:55                                                         | 20                            | Northern Easter Island<br>Cordillera. USCGS<br>(card 7-65): 13.2°S,<br>112.0°W; 21:08:06.0;<br>h about 33 km; Mag 4.9.<br>$\Delta$ about 6700 km. |
| 9 Jan.       | COR  | e LR (Z)                                                                     | 14:17:07                                                         |                               | Philippine Islands region.<br>USCGS (card 5-65): 11.9°N,<br>126.2°E; 13:32:46.4; h<br>about 5 km; Mag 6.1. $\Delta$<br>about 10,800 km.           |
| 9 Jan.       | COR  | e P? (Z, N, E)u, S, E<br>e S? (E)                                            | 23:52:56.3<br>23:53:09.7                                         | 0.4<br>1                      | Local?                                                                                                                                            |

| DATE<br>1965 | STA. | PHASE                                                                                           | TIME (GCT)<br>h, m, s                                                        | PERIOD<br>sec                    | REMARKS                                                                                                                          |
|--------------|------|-------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| 10 Jan.      | COR  | e P (Z, N, E)d, S, W<br>e P (Z, E)u, E<br>e S (N, E)<br>e S (Z)<br>e SSS? (Z, E)<br>e LR (Z, E) | 13:49:10.2<br>13:49:07.1<br>13:59:28.6<br>13:59:36.7<br>14:09:00<br>14:15:07 | 1.2<br>7<br>10<br>16<br>22<br>22 | New Hebrides Islands.<br>USCGS (card 3-65A):<br>13.5°S, 166.6°E;<br>13:36:30.7; h about 32 km;<br>Mag 6.5. Δ about 9400 km.      |
| 12 Jan.      | COR  | e P? (Z)d<br>e S? (E)W                                                                          | 01:41:36.2<br>01:41:47.7                                                     | 0.8<br>0.8                       | Local. ?                                                                                                                         |
| 14 Jan.      | COR  | e P (Z)u<br>e S (N, E)N, E<br>e (Z)                                                             | 08:35:40.8<br>08:44:10.2<br>09:00:26                                         | 2<br>8<br>20                     | Near coast of northern<br>Peru. USCGS (card 3-65A):<br>5.5°S, 81.3°W; 08:25:17.5;<br>h about 32 km; Mag 5.3.<br>Δ about 6900 km. |
| 15 Jan.      | COR  | e P? (Z, N) u, N<br>e S? (N)                                                                    | 00:57:58<br>00:58:07                                                         | 0.4<br>1.6                       | Local. ?                                                                                                                         |
| 15 Jan.      | COR  | i P (Z, N)u, N<br>e (Z, N)                                                                      | 06:12:32.8<br>06:12:56                                                       | 1<br>1                           | Eastern Kazakh, USSR.<br>USCGS (card 6-65): 49.9°N,<br>790°E; 05:59:58.5; h about<br>0 km; Mag 6.0. Δ about<br>9400 km.          |
| 15 Jan.      | COR  | e P? (Z, N)u, N<br>e S?                                                                         | 22:55:03.6<br>22:55:08.2                                                     | 0.3<br>1                         | Local. ?                                                                                                                         |
| 16 Jan.      | COR  | e P? (Z)u<br>e S? (N)N                                                                          | 23:35:40.8<br>23:35:46                                                       | 1<br>1.2                         | Local?                                                                                                                           |
| 17 Jan.      | COR  | e P (Z, N)d, S<br>e PP (N)<br>e PPP (Z, N)<br>e LR (Z, N, E)                                    | 02:18:24.5<br>02:18:44<br>02:19:00.5<br>02:24:16.3                           | 2<br>2.4<br>2<br>14              | Kodiak Island region.<br>USCGS (card 4-65):<br>58.3°N, 151.8°W;<br>02:13:28.6; h about 33 km;<br>Mag 5.3. Δ about 2400 km.       |
| Jan. 17      | COR  | e P (Z, N)d, S<br>e P (N)<br>(N)                                                                | 10:55:04.6<br>10:55:10.2<br>10:55:22.3                                       | 1.8<br>2                         | South of Fiji Islands.<br>USCGS (card 5-65): 24.5°S,<br>178.4°E; 10:43:17.5;<br>h about 568 km; Mag 5.5.<br>Δ about 9600 km.     |



| DATE<br>1965 | STA. | PHASE                                       | TIME (GCT)<br>h, m, s                  | PERIOD<br>sec   | REMARKS                                                                                                                                |
|--------------|------|---------------------------------------------|----------------------------------------|-----------------|----------------------------------------------------------------------------------------------------------------------------------------|
| 17 Jan.      | COR  | e PKP (Z)<br>e (Z)                          | 21:16:08.5<br>21:16:25.3               | 2<br>2          | Java. USCGS (card 5-65):<br>6.8°S, 109.1°E; 20:57:41.3<br>h about 242 km; Mag 6.5.<br>Δ about 13,400 km.                               |
| 21 Jan.      | COR  | e P? (Z, N)d, S<br>e S? (N)<br>e (Z)        | 00:53:23.5<br>00:53:30.6<br>00:53:33.7 | 0.8<br>1.2<br>2 | Local. ?                                                                                                                               |
| 24 Jan.      | COR  | e P? (E)W<br>e S? (E)W                      | 00:10:42.1<br>00:10:51.1               | 0.8<br>1.2      | Local. ?                                                                                                                               |
| 24 Jan.      | COR  | e P (Z)u<br>e (E)E                          | 00:25:30.6<br>00:25:41.8               | 6<br>11         | Ceram Sea. USCGS<br>(card 6-65): 2.4°S,<br>126.0°E; 00:11:12.1;<br>h about 6 km; Mag 6.6.<br>Δ about 11,900 km.                        |
| 28 Jan.      | COR  | e LR (Z, N)d, N                             | 16:40:47.9                             | 18              | Northern Easter Island<br>Cordillera. USCGS (card<br>7-65): 4.0°S, 104.2°W;<br>16:15:35.0; h about 33 km;<br>Mag 5.0. Δ about 6100 km. |
| 29 Jan.      | COR  | e LR (N)N                                   | 00:24:04                               | 16              | Gulf of California. USCGS<br>(card 10-65): 23.9°N,<br>108.7°W; 00:11:22; h about<br>33 km; Mag 5.4. Δ about<br>2800? km.               |
| 1 Feb.       | COR  | e P (Z, N, E)d, N, E<br>e P (Z)d<br>e P (N) | 05:38:27.5<br>05:38:34.6<br>05:38:46.5 | 1<br>1.3<br>1.5 | Fiji Islands region. USCGS<br>(card 8-65): 18.6°S,<br>178.1°W; 05:27:04.5;<br>h about 472 km; Mag 5.6.<br>Δ about 8900 km.             |
| 3 Feb.       | COR  | e P? (N, E)W<br>e S? (Z, E)                 | 00:44:24.2<br>00:44:33.6               | 0.8<br>1.6      | Local. ?                                                                                                                               |
| 3 Feb.       | COR  | e (Z, N)u, N<br>e (Z, N, E)                 | 04:52:27.5<br>04:52:33.1               | 1.5<br>1.9      | Local. (?)                                                                                                                             |

| DATE<br>1965             | STA.   | PHASE | TIME (GCT)<br>h, m, s                              | PERIOD<br>sec                                      | REMARKS                                                                                                                                                 |
|--------------------------|--------|-------|----------------------------------------------------|----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| -65):<br>57:41.3<br>6.5. | 4 Feb. | COR   | i P? (Z, N, E)d, N, W<br>e S? (Z, N, E)            | 00:34:44.5<br>00:34:53.4                           | 0.2<br>1.4<br>Local. ?                                                                                                                                  |
|                          | 4 Feb. | COR   | e P (Z, N, E)d, N, W<br>e P (Z)<br>e P (Z, N, E)   | 05:08:44.3<br>05:08:53<br>05:09:12.6               | 1.6<br>4<br>4<br>Rat Islands, Aleutian<br>Islands. USCGS (card<br>9-65): 51.3°N, 178.6°E;<br>05:01:21.8; h about 40 km<br>Mag 7.5. Δ about 4200         |
|                          |        | PTD   | e P (Z)                                            | 05:08:52.6                                         | 3                                                                                                                                                       |
|                          | 4 Feb. | COR   | e P (Z)u<br>e P (N, E)S, E<br>e S (Z, N, E)        | 08:47:00<br>08:47:02.5<br>08:52:53                 | 1<br>1<br>5<br>Rat Islands, Aleutian<br>Islands. USCGS (card<br>9-65): 51.3°N, 179.5°E;<br>08:40:40.9; h about 40 km<br>Mag 6.4. Δ about 4200 km        |
|                          | 4 Feb. | COR   | e P (Z)u<br>e P (E)E<br>e S (Z, E)                 | 12:13:58<br>12:14:01.5<br>12:20:20                 | 1<br>1<br>3<br>Rat Islands, Aleutian<br>Islands. USCGS (card<br>9-65): 52.6°N, 172.1°E;<br>12:06:04.3; h about 25 km<br>Mag 5.8. Δ about 4600 km        |
|                          |        | PTD   | e P (Z)                                            | 12:13:54                                           | 3                                                                                                                                                       |
|                          |        | KFO   | e P (Z)                                            | 12:14:16                                           | 1                                                                                                                                                       |
|                          | 4 Feb. | COR   | e P (Z)u<br>e P (N, E)S, E<br>e S (E)W<br>e LQ (N) | 14:26:24.1<br>14:26:26.6<br>14:32:49.0<br>14:36:00 | 1<br>1<br>4<br>20<br>Rat Islands, Aleutian<br>Islands. USCGS (card<br>9-65): 53.0°N, 171.0°E;<br>14:18:27.9; h about 30 km<br>Mag 5.7. Δ about 4700 km  |
|                          |        | KFO   | e P (Z)                                            | 14:26:42                                           | 0.8                                                                                                                                                     |
|                          | 4 Feb. | COR   | e P (Z)u<br>e P (E)W<br>e S (E)<br>e LQ (N)        | 15:59:22.4<br>15:59:23.5<br>16:05:46<br>16:09:20   | 1<br>1<br>4<br>12<br>Rat Islands, Aleutian<br>Islands. USCGS (card<br>9-65): 53.1°N, 170.8°E;<br>15:51:25.5; h about 40 km;<br>Mag 5.7. Δ about 4800 km |
|                          | 5 Feb. | COR   | e P (Z)d                                           | 09:39:51.1                                         | 1.4<br>Rat Islands, Aleutian<br>Islands. USCGS (card<br>9-65): 52.3°N, 174.3°E;<br>09:32:09.3; h about 41 km;<br>Mag 5.9. Δ about 4500 km               |
|                          | 6 Feb. | COR   | e P (E)<br>e P (N)S                                | 01:46:12<br>01:46:16                               | 5<br>South of Alaska. USCGS<br>(card 11-65): 53.2°N,<br>161.9°W; 01:40:33.2;<br>h about 33 km; Mag 6.4.<br>Δ about 3000 km.                             |
|                          |        | PTD   | e P? (Z)                                           | 01:46:11                                           | 3                                                                                                                                                       |
|                          |        | KFO   | e P (Z)                                            | 01:46:31                                           | 1.3                                                                                                                                                     |

| DATE<br>1965 | STA. | PHASE                                        | TIME (GCT)<br>h, m, s                              | PERIOD<br>sec       | REMARKS                                                                                                                              |
|--------------|------|----------------------------------------------|----------------------------------------------------|---------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| 6 Feb.       | COR  | e P (Z)d<br>e P (E)W<br>e P (Z)d<br>e S (N)d | 16:56:05.1<br>16:56:06.6<br>16:56:05.1<br>17:00:49 | 1.5<br>2<br>4<br>12 | South of Alaska. USCGS<br>(card 13-65): 53.3°N,<br>161.8°W; 16:50:29; h<br>about 33 km; Mag 6.1.                                     |
|              | KFO  | e P (Z)                                      | 16:56:23                                           | 1.1                 | Δ about 3000 km.                                                                                                                     |
| 7 Feb.       | COR  | e P (Z, N, E)d, N, W<br>e S (N)<br>e LQ (N)  | 02:24:58<br>02:31:17<br>02:34:30                   | 1<br>8<br>24        | Rat Islands, Aleutian<br>Islands. USCGS (card<br>9-65): 51.4°N, 173.4°E;<br>02:17:09.2; h about 40 km;<br>Mag 6.0. Δ about 4600 km.  |
| 7 Feb.       | COR  | e P <sub>n</sub> (Z)u                        | 09:29:31.2                                         | .5                  | Off coast of Oregon.<br>USCGS (card 23-65):<br>44.1°N, 128.6°W;<br>09:28:31; h about 10 km;<br>Mag 4.2. Δ about 430 km.              |
| 7 Feb.       | COR  | e P (Z)<br>e S (N, E)N, E<br>e LR (Z)        | 09:33:11.2<br>09:39:08<br>09:43:51                 | 2<br>4<br>18        | Rat Islands, Aleutian<br>Islands. USCGS (card<br>9-65): 51.4°N, 179.1°E;<br>09:25:51.1; h about 30 km;<br>Mag 5.3. Δ about 4200 km.  |
| 7 Feb.       | COR  | e P (Z, N, E)u, N, W                         | 12:29:16.3                                         | 0.8                 | Rat Islands, Aleutian<br>Islands. USCGS (card<br>9-65): 53.0°N, 171.7°E;<br>12:21:21.1; h about 25 km;<br>Mag 5.3. Δ about 4600 km.  |
| 7 Feb.       | COR  | e P (Z)d                                     | 16:11:12.2                                         | 1                   | Rat Islands, Aleutian<br>Islands. USCGS (card<br>12-65): 51.3°N, 179.0°E;<br>16:03:52.3; h about 40 km;<br>Mag 5.1. Δ about 4200 km. |
| 8 Feb.       | COR  | e (N, E)N, E<br>e (Z, N)u<br>e (Z)           | 15:01:55<br>15:05:22.4<br>15:12:32.8               | 16<br>12<br>8       | Fiji Islands region. USCGS<br>(card 26-65): 17.5°S, 179.0°<br>W; 14:17:37; h about 482 km;<br>Mag 4.9. Δ about 9100 km.              |
| 9 Feb.       | COR  | e P (Z)d<br>e P (E) E                        | 17:45:07.6<br>17:45:08.2                           | 1.0<br>1.0          | Rat Islands, Aleutian<br>Islands. USCGS (card<br>9-65): 52.8°N, 171.9°E;<br>17:37:15.9; h about 41 km;<br>Mag 5.7. Δ about 4600 km.  |



| DATE<br>1965 | STA. | PHASE                                                                                | TIME (GCT)<br>h, m, s                                | PERIOD<br>sec            | REMARKS                                                                                                                                 |
|--------------|------|--------------------------------------------------------------------------------------|------------------------------------------------------|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| 11 Feb.      | COR  | e P (Z, N, E)d, N, W<br>e S (Z, N, E)                                                | 01:52:20.6<br>01:52:30.6                             | 0.8<br>1.0               | Local. 00:52:08.7.<br>Δ about 70 km.                                                                                                    |
| 11 Feb.      | COR  | e P (Z)u<br>e (N)N<br>e (N)<br>e S? (Z)                                              | 16:31:38.2<br>16:31:40.3<br>16:31:47.4<br>16:31:57.8 | 0.8<br>0.8<br>0.8<br>2.0 | Local. Δ about 160? km.                                                                                                                 |
| 11 Feb.      | COR  | e P (Z, E)u, E<br>e (Z)                                                              | 16:57:58.6<br>16:58:02.5                             | 0.4<br>0.6               | Local.                                                                                                                                  |
| 12 Feb.      | COR  | e P (Z, N, E)u, N, W<br>e (Z)<br>e (Z)                                               | 00:50:31.6<br>00:50:39.8<br>00:51:05                 | 1<br>1<br>2              | Rat Islands, Aleutian<br>Islands. USCGS (card<br>12-65): 51.5°N, 175.8°E;<br>00:43:17.1; h about 33 km;<br>Mag 5.4. Δ about 4100 km.    |
| 12 Feb.      | COR  | e P (Z)d<br>e (Z)d<br>e S (N, E)<br>e (Z)                                            | 01:03:00.1<br>01:04:00.2<br>01:09:18.4<br>01:16:04   | 2<br>8<br>12<br>12       | Rat Islands, Aleutian<br>Islands. USCGS (card<br>14-65): 52.2°N, 172.8°E;<br>00:55:06.2; h about 25 km;<br>Mag 5.5. Δ about 4600 km.    |
| 12 Feb.      | COR  | e P <sub>n</sub> (Z, N, E)d, S, E<br>e S <sub>n</sub> (Z, N, E)<br>e (E)<br>e (Z, E) | 10:51:27.0<br>10:52:14.3<br>10:53:03<br>10:53:58.5   | 1.4<br>1<br>2<br>10      | Near coast of northern<br>California. USCGS (card<br>13-65); 40.3°N, 124.9°W;<br>10:50:19.7; h about 33 km;<br>Mag 5.3. Δ about 480 km. |
|              | KFO  | e P (Z)                                                                              | 10:51:05                                             | 0.8                      |                                                                                                                                         |
| 12 Feb.      | COR  | e P <sub>n</sub> (E)E<br>e S <sub>n</sub> (E)                                        | 20:51:52<br>20:52:38.8                               | 0.8<br>1.4               | Near coast of northern<br>California. USCGS (card<br>13-65): 40.3°N, 124.7°W;<br>20:50:46; h about 33 km;<br>Mag 4.9. Δ about 460 km.   |
| 15 Feb.      | COR  | e P (Z, E)u, E<br>e S (N)<br>e (Z)                                                   | 01:32:27<br>01:38:24.7<br>01:43:30                   | 1.6<br>5<br>16           | Rat Islands, Aleutian<br>Islands. USCGS (card<br>12-65): 51.4°N, 179.4°E;<br>01:25:08.8; h about 42 km;<br>Mag 5.8. Δ about 4200 km.    |
| 16 Feb.      | COR  | e P (Z)u<br>e P (N)S<br>e (Z)                                                        | 11:04:06<br>11:04:08<br>11:13:41.9                   | 1<br>1<br>8              | Gulf of California. USCGS<br>(card 16-65): 26.4°N,<br>110.0°W; 10:59:17.5; h<br>about 33 km; Mag 5.2.<br>Δ about 2400 km.               |

| DATE<br>1965 | STA. | PHASE                                                                                         | TIME (GCT)<br>h, m, s                                                                      | PERIOD<br>sec                          | REMARKS                                                                                                                               |
|--------------|------|-----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| 17 Feb.      | COR  | e (Z, N)d, N<br>e (E)                                                                         | 00:43:54.5<br>00:44:00.8                                                                   | 1.6<br>1.8                             | Local. ?                                                                                                                              |
| 17 Feb.      | COR  | i P? (Z, N, E)d, S, E<br>e S? (N, E)                                                          | 01:29:08.2<br>01:29:16.8                                                                   | 0.5                                    | Local. ?                                                                                                                              |
| 17 Feb.      | COR  | e P (Z, N, E)u, s, W<br>e S (N, E)<br>e (Z)<br>e SS (N)<br>e SSS (E)<br>e (Z)                 | 10:26:23.5<br>10:32:32<br>10:32:42<br>10:35:16<br>10:35:56<br>10:36:00                     | 1.0<br>20<br>24<br>20<br>30<br>30      | Rat Islands, Aleutian<br>Islands. US CGS (card<br>12-65): 51.8°N, 176.6°E;<br>10:18:51.3; h about 44 km;<br>Mag 5.6. Δ about 4400 km. |
| 17 Feb.      | COR  | e (Z)u<br>e (N, E)N, E<br>e (N, E)                                                            | 18:50:19.4<br>18:50:21.2<br>18:50:33.7                                                     | 1.8<br>1<br>2                          | Local. ?                                                                                                                              |
| 18 Feb.      | COR  | i P <sub>n</sub> (Z, N, E)d, N, E<br>e P <sub>n</sub> (N, E)<br>e S <sub>n</sub>              | 22:42:45.9<br>22:42:53.0<br>22:43:12.2                                                     | 1.5<br>1.5<br>1.5                      | Local. 22:42:11.0.<br>Δ about 230 km.                                                                                                 |
| 18 Feb.      | COR  | i P (Z, N, E)d, S, W<br>e P (Z)d<br>i S (N, S)<br>e S (N, E)<br>e LR (Z)<br>e (Z, N)<br>e (Z) | 23:20:57.1<br>23:20:57.1<br>23:26:50.7<br>23:26:51.0<br>23:31:32.6<br>23:36:00<br>23:38:02 | 1.2<br>2<br>2.4<br>6<br>14<br>12<br>10 | Rat Islands, Aleutian<br>Islands. USCGS (card<br>14-65): 51.4°N, 179.1°E;<br>23:13:36.3; h about 28 km;<br>Mag 5.4. Δ about 4200 km.  |
| 19 Feb.      | COR  | e P (Z, E)u, W<br>e (N, E)<br>e SS (N, E)<br>e (Z)                                            | 19:00:06.1<br>19:00:20.4<br>19:08:30<br>19:13:51                                           | 1<br>1.5<br>1.5<br>10                  | Rat Islands, Aleutian<br>Islands. USCGS (card<br>17-65): 51.1°N, 178.4°E;<br>18:52:42.1; h about 35 km;<br>Mag 5.6. Δ about 4200 km.  |
| 20 Feb.      | COR  | e (Z)d<br>(E)                                                                                 | 00:43:40.8<br>00:43:46.9                                                                   | 2<br>1                                 | Local. ?                                                                                                                              |
| 21 Feb.      | COR  | e LR (Z)                                                                                      | 11:48:34                                                                                   | 14                                     | Tonga Islands. USCGS<br>(card 025-65): 15.1°S,<br>173.2°W; 11:14:15.1;<br>h about 33 km; Mag 5.7.<br>Δ about 8500 km.                 |

| DATE<br>1965 | STA. | PHASE                 | TIME (GCT)<br>h, m, s | PERIOD<br>sec | REMARKS                                                                                                                              |
|--------------|------|-----------------------|-----------------------|---------------|--------------------------------------------------------------------------------------------------------------------------------------|
| 22 Feb.      | COR  | e PKPPKP (Z)          | 22:16:20              | 16            | Fiji Islands region.<br>USCGS (card 025-65):<br>16.8°S, 175.7°E;<br>21:38:15.5; h about 73 km;<br>Mag 4.9. Δ about 9100 km.          |
| 23 Feb.      | COR  | e (Z)d                | 01:44:32.1            | 1             | Local. ?                                                                                                                             |
| 23 Feb.      | COR  | e P (Z, N, E)d, S, E  | 22:24:18.9            | 1.8           | Near coast of northern<br>Chile. USCGS (card 20-65):<br>25.7°S, 70.5°W; 22:11:50.2;<br>h about 80 km; Mag 6.2.<br>Δ about 9300 km.   |
|              |      | e P (Z, N, E)d, S, E  | 22:24:19.4            | 6             |                                                                                                                                      |
|              |      | e S (E)               | 22:34:42.8            | 10            |                                                                                                                                      |
|              |      | e S (N)               | 22:34:51              | 12            |                                                                                                                                      |
|              |      | e LR (Z)              | 22:53:40.8            | 16            |                                                                                                                                      |
|              |      |                       | 23:04:40.8            | 10            |                                                                                                                                      |
|              | KFO  | e P (Z)               | 22:24:05.5            | 1.0           |                                                                                                                                      |
|              | PTD  | e P (Z)               | 22:24:23              | 2.6           |                                                                                                                                      |
| 23 Feb.      | COR  | e P? (Z)d             | 22:58:51.9            | 1             | Local. ?                                                                                                                             |
| 24 Feb.      | COR  | e P? (Z)u             | 00:44:33.7            | 0.6           | Local. ?                                                                                                                             |
|              |      | e S? (N, E)S, W       | 00:44:47.0            | 0.6           |                                                                                                                                      |
| 24 Feb.      | COR  | e S (Z, N, E)d, N, W  | 08:23:10.2            | 6             | Near coast of Chiapas,<br>Mexico. USCGS (card 16-65):<br>14.0°W, 92.2°W; 08:09:17.2<br>h about 56 km; Mag 5.0.<br>Δ about 4500 km.   |
|              |      | e LR (Z, N)           | 08:34:51              | 12            |                                                                                                                                      |
|              |      | e (Z)                 | 08:38:23.4            | 8             |                                                                                                                                      |
|              |      |                       | 08:39:24.4            |               |                                                                                                                                      |
| 24 Feb.      | COR  | i P? (Z, N, E)d, N, E | 19:51:59.2            | 1             | Local. ?                                                                                                                             |
| 24 Feb.      | COR  | e P (Z, N)u, N        | 21:30:42              | 1.2           | Rat Islands, Aleutian<br>Islands. USCGS (card<br>21-65): 51.4°N, 178.2°E;<br>21:23:16.5; h about 33 km;<br>Mag 5.2. Δ about 4200 km. |
| 24 Feb.      | COR  | e P? (Z, E)d, w       | 23:00:18.4            | 1             | Local. ?                                                                                                                             |
|              |      | e S? (N, E)           | 23:00:25              | 1.2           |                                                                                                                                      |

| DATE<br>1965 | STA. | PHASE                                                                                      | TIME (GCT)<br>h, m, s                                                                                | PERIOD<br>sec                               | REMARKS                                                                                                                               |
|--------------|------|--------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|---------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| 25 Feb.      | COR  | e P (Z, N)u, S<br>e P (Z)u<br>e S (E)<br>e S (N)<br>e SS (E)<br>e LR (Z)<br>e (N)<br>e (N) | 05:04:26<br>05:04:26.5<br>05:15:10.2<br>05:15:26.5<br>05:21:42<br>05:33:15.3<br>05:39:42<br>05:54:10 | 1.6<br>10<br>6<br>14<br>10<br>18<br>20<br>6 | New Britain region. USCGS<br>(card 024-65): 5.5°S,<br>152.0°E; 04:51:27.8;<br>h about 35 km; Mag 5.9.<br>Δ about 9900 km.             |
| 26 Feb.      | COR  | e P (Z, E)d, E<br>e (E)                                                                    | 23:45:48<br>23:45:55                                                                                 | 1<br>1                                      | Northern Columbia. USCGS<br>(card 16-65): 6.9°N, 73.0°W;<br>23:36:12.2; h about 146 km;<br>Mag 5.7. Δ about 6300 km.                  |
| 27 Feb.      | COR  | e P (Z, N, E)d, S, E<br>e S (Z, E)<br>(Z)                                                  | 07:50:42<br>07:54:20.4<br>07:56:27.6                                                                 | 6<br>12<br>16                               | Gulf of California. USCGS<br>(card 20-65): 28.5°N,<br>112.1°W; 07:46:29.1;<br>h about 33 km; Mag 5.3.<br>Δ about 2000 km.             |
| 1 Mar.       | COR  | e P (Z)u                                                                                   | 07:33:54                                                                                             | 1.6                                         | New Britain region. USCGS<br>(card 024-65): 5.5°S,<br>152.1°E; 07:20:55.3; h about<br>35 km; Mag 5.7. Δ about<br>9900 km.             |
| 1 Mar.       | COR  | i P (Z, N, E)u, S, E<br>e P (Z)u<br>e S (N, E)<br>e (E)<br>e (Z)                           | 21:39:31.6<br>21:39:32.3<br>21:45:26.5<br>21:48:38.8<br>21:48:45                                     | 1.2<br>3<br>6<br>14<br>10                   | Mexico-Guatemala border<br>region. USCGS (card 023-65):<br>15.4°N, 92.5°W; 21:32:11.8;<br>h about 93 km; Mag 5.9.<br>Δ about 4200 km. |
| 2 Mar.       | COR  | e P (Z, N, E)u, S, W<br>e PcP? (N)                                                         | 21:47:34.6<br>21:47:44.3                                                                             | 1.2<br>1                                    | Bonin Islands region.<br>USCGS (card 20-65):<br>28.2°N, 139.3°E;<br>21:36:38.4; h about 495 km;<br>Mag 5.7. Δ about 8300 km.          |

| DATE<br>1965 | STA. | PHASE                             | TIME (GCT)<br>h, m, s | PERIOD | REMARKS                        |
|--------------|------|-----------------------------------|-----------------------|--------|--------------------------------|
| 3 Mar.       | COR  | e P (Z)u                          | 15:27:07.1            | 1.8    | New Britain region.            |
|              |      | e (E)                             | 15:27:12.2            | 2      | USCGS (card 026-65):           |
|              |      | e (Z)u                            | 15:27:12.2            | 6      | 5.5°S, 151.9°E;                |
|              |      | e (N)                             | 15:27:17.3            | 2      | 15:14:09.7; h about 44 km;     |
|              |      | e (N)                             | 15:27:34.6            | 1.8    | Mag 6.0. Δ about 9900 km.      |
|              |      | e S (E)                           | 15:37:55              | 8      |                                |
|              |      | e (N)                             | 15:38:03              | 5      |                                |
|              |      | e G (N)                           | 15:51:18.3            | 42     |                                |
|              |      | e LR (Z)                          | 15:55:12.2            | 20     |                                |
| 3 Mar.       | COR  | e P (Z)d                          | 16:55:22.4            | 2      | Rat Islands, Aleutian          |
|              |      | e (N)                             | 16:55:33              | 1.5    | Islands. USCGS (card           |
|              |      |                                   |                       |        | 17-65): 53.1°N, 171.2°E;       |
|              |      |                                   |                       |        | 16:47:25.7; h about 23 km;     |
|              |      |                                   |                       |        | Mag 5.6. Δ about 4600 km.      |
| 3 Mar.       | COR  | e (Z, N, E)d, S, E                | 19:15:20.9            | 1.8    |                                |
|              |      | e (E)                             | 19:15:53.8            | 1.8    |                                |
|              |      |                                   | 19:18:19.9            | 2      |                                |
|              | KFO  | e (Z)                             | 19:15:00              | 1.5    |                                |
| 4 Mar.       | COR  | e P <sub>n</sub> (Z, N, E)u, S, E | 00:27:31.6            | 1      | Local. 00:27:00.8.             |
|              |      | e S <sub>n</sub> (E)              | 00:27:55              | 1.2    | Δ about 200 km.                |
|              |      | e (E)                             | 00:28:07              | 1      |                                |
| 4 Mar.       | COR  | e P? (Z, N, E)u, S, E             | 01:02:48.8            | 0.6    | Local. ?                       |
|              |      | e S? (N, E)                       | 01:02:58              | 1      |                                |
| 5 Mar.       | COR  | e P (Z, N, E)u, N, E              | 06:22:22.4            | 2.0    | Rat Islands, Aleutian Islands. |
|              |      | e (N)                             | 06:22:27              | 1      | USCGS (card 21-65): 51.2°N,    |
|              |      | e (N, E)                          | 06:22:36.2            | 2      | 179.3°E; 06:15:01.1; h about   |
|              |      | e LR (Z)                          | 06:33:09              | 26     | 25 km; Mag 5.6. Δ about        |
|              |      |                                   |                       |        | 4200 km.                       |
| 5 Mar.       | COR  | e P (Z, N, E)d, S, W              | 14:44:18.8            | 1      | Local. 14:44:10.4.             |
|              |      | e (Z)                             | 14:44:21.9            | 2      | Δ about 50 km.                 |
|              |      | e S (N, E)                        | 14:44:25.7            | 1.6    |                                |
| 5 Mar.       | COR  | e P (Z)u                          | 23:37:18.8            | 1.8    | Rat Islands, Aleutian          |
|              |      | e (Z)                             | 23:37:25              | 2      | Islands. USCGS (card           |
|              |      |                                   |                       |        | 21-65): 53.0°N, 171.1°E;       |
|              |      |                                   |                       |        | 23:29:23.2; h about 45 km;     |
|              |      |                                   |                       |        | Mag 5.4. Δ about 4600 km.      |

| DATE<br>1965 | STA. | PHASE                                                                 | TIME (GCT)<br>h, m, s                              | PERIOD<br>sec            | REMARKS                                                                                                                   | DATE<br>196 |
|--------------|------|-----------------------------------------------------------------------|----------------------------------------------------|--------------------------|---------------------------------------------------------------------------------------------------------------------------|-------------|
| 8 Mar.       | COR  | e P (E)W<br>e P (Z, N)                                                | 23:23:54<br>23:23:55                               | 1.6<br>1                 | Chile-Argentine border region. USCGS (card 023-65): 24.6°S, 67.1°W; 23:11:31.7; h about 168 km; Mag 5.4. Δ about 9400 km. | 14 M        |
| 9 Mar.       | COR  | e LR? (N)<br>e<br>e (Z)                                               | 18:42:16<br>18:50:42<br>18:51:06                   | 20<br>12<br>18           | Aegean Sea. USCGS (card 024-65): 39.4°N, 24.0°E; 17:57:53.7; h about 18 km; Mag 5.7. Δ about 10,400 km.                   | 14 M        |
| 9 Mar.       | COR  | e P? (Z, N)d, S,<br>e                                                 | 23:36:23.5<br>23:36:25.6                           | 0.8<br>1.0               | Local. ?                                                                                                                  |             |
| 10 Mar.      | COR  | e P (N, E)N, W                                                        | 13:52:29.6                                         | 0.3                      | Local.                                                                                                                    | 15          |
| 10 Mar.      | COR  | e P <sub>n</sub> (Z, N, E)d, S, E<br>e S <sub>n</sub> (N, E)<br>e (N) | 20:09:46.5<br>20:10:19.4<br>20:10:52               | 0.4<br>1<br>1.6          | Off coast of Oregon. USCGS (card 034-65): 43.4°N, 125.4°W; 20:09:15; h about 33 km; Mag 4.0. Δ about 200 km.              | 16          |
| 10 Mar.      | COR  | e P? (Z, E)u, E<br>e (E)                                              | 23:57:46<br>23:57:49                               | 1.6<br>2                 | Local. ?                                                                                                                  |             |
| 11 Mar.      | COR  | e PP (E)E<br>e (Z)                                                    | 23:43:09.2<br>23:43:19                             | 0.8<br>1.2               | Kurile Islands. USCGS (card 025-65): 45.3°N, 151.3°E; 23:31:02.7; h about 47 km; Mag 4.8. Δ about 6400 km.                | 16          |
| 12 Mar.      | COR  | e P (Z, N, E)u, N, E<br>e (E)<br>e (E)<br>e (E)                       | 21:26:40.5<br>21:26:47.5<br>21:27:04<br>21:27:13.8 | 0.4<br>0.8<br>1.0<br>1.4 | Local.                                                                                                                    | 17          |
| 13 Mar.      | COR  | e (Z, N, E)u, N, E<br>e (Z)<br>e (E)                                  | 06:39:02.5<br>06:39:14<br>06:39:25.5               | 1.6<br>2<br>2            | New Hebrides Islands. USCGS (Card 030-65): 14.2°S, 166.9°E; 06:08:12.3; h about 51 km; Mag 4.9. Δ about 9700? km.         | 1           |



| DATE<br>1965 | STA. | PHASE                                                                                                               | TIME (GCT)<br>h, m, s                                                                                            | PERIOD<br>sec                                  | REMARKS                                                                                                                                         |
|--------------|------|---------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| 14 Mar.      | COR  | e P (Z, N, E)d, S, W<br>e (N)<br>e (Z)                                                                              | 08:59:09.2<br>08:59:14.8<br>08:59:19.4                                                                           | 1.8<br>1.6<br>2                                | Gulf of Campeche.<br>USCGS (card 025-65):<br>18.8°N, 94.6°W;<br>08:52:22.2; h about 97 km;<br>Mag 4.8. $\Delta$ about 3900 km.                  |
| 14 Mar.      | COR  | e P (Z, E)u, W<br>e (Z, N, E)u, S, E<br>e (N)S<br>e (Z)u<br>e PP (Z)<br>e (N)<br>e S (N)<br>e PS (N)<br>PTD e P (Z) | 16:06:22<br>16:06:22<br>16:06:24.2<br>16:06:24.5<br>16:10:19.5<br>16:10:26<br>16:17:41.2<br>16:19:20<br>16:06:18 | 1.8<br>7<br>1<br>1<br>2<br>10<br>3<br>3<br>4.8 | Hindu Kush region.<br>USCGS (card 026-65):<br>36.3°N, 70.7°E;<br>15:53:06.6; h about 219 km;<br>Mag 6.6. $\Delta$ about 10,800 km.              |
| 15 Mar.      | COR  | e P (Z, N, E)u, N, E<br>e S? (N)<br>e (Z, E)<br>e (E)                                                               | 23:56:58<br>23:57:04<br>23:57:10<br>23:57:17                                                                     | 0.4<br>0.8<br>1.0<br>1.2                       | Local.                                                                                                                                          |
| 16 Mar.      | COR  | e P? (Z, N)u, S,<br>e (N)<br>e (N)<br>e (Z, N)<br>KFO e (Z)                                                         | 15:44:13<br>15:44:19.5<br>15:44:44.5<br>15:45:12<br>15:43:47                                                     | 1.8<br>1<br>1<br>1.6                           | Local. ?                                                                                                                                        |
| 16 Mar.      | COR  | e P (Z)u<br>e (Z)d<br>e S (N, E)<br>e (N, E)<br>e (Z)                                                               | 16:56:55.5<br>16:57:04<br>17:05:42<br>17:13:17<br>17:17:51                                                       | 2<br>4<br>8<br>16<br>16                        | Near east coast of Honshu,<br>Japan. USCGS (card 025-65):<br>40.8°N, 142.9°E;<br>16:46:15.5; h about 34 km;<br>Mag 5.6. $\Delta$ about 7200 km. |
| 17 Mar.      | COR  | e P (Z, E)d, E<br>e (E)<br>e SSS (N)                                                                                | 14:35:06<br>14:36:09<br>14:44:57                                                                                 | 1<br>2<br>20                                   | Near Islands, Aleutian<br>Islands. USCGS (card<br>025-65): 52.8°N, 171.9°E;<br>14:27:12.4; h about 23 km;<br>Mag 6.0. $\Delta$ about 4600 km.   |
| 17 Mar.      | COR  | e P? (Z)u<br>e S? (E)                                                                                               | 23:46:16<br>23:46:29                                                                                             | 0.2<br>1.6                                     | Local. ?                                                                                                                                        |

| DATE<br>1965 | STA. | PHASE                                                      | TIME (GCT)<br>h, m, s                            | PERIOD<br>sec        | REMARKS                                                                                                                            | DATE<br>1965 |
|--------------|------|------------------------------------------------------------|--------------------------------------------------|----------------------|------------------------------------------------------------------------------------------------------------------------------------|--------------|
| 18 Mar.      | COR  | e <sub>p</sub> P (Z)u<br>e S (N, E)                        | 06:34:49<br>06:43:46                             | 4<br>8               | Fiji Islands region.<br>USCGS (card 026-65):<br>19.9°S, 176.1°W;<br>06:22:02.9; h about 151 km;<br>Mag 5.5. Δ about 8900 km.       | 24           |
| 19 Mar.      | COR  | e (E)W                                                     | 02:22:20                                         | 0.6                  | Local. ?                                                                                                                           | 24           |
| 21 Mar.      | COR  | e P? (Z, N, E)d, S, E                                      | 11:17:54                                         | 0.8                  | Local. ?                                                                                                                           |              |
| 21 Mar.      | COR  | e PP (Z)u<br>e SKS (N, E)<br>e SSS (Z)<br>e LR (Z)         | 11:27:00<br>11:33:19<br>11:45:49<br>11:57:00     | 8<br>10<br>30<br>36  | Molucca Sea. USCGS (card<br>030-65): 1.5°S, 126.5°E;<br>11:08:16.2; h about 33 km;<br>Mag 6.2. Δ about 11700 km.                   | 24           |
| 22 Mar.      | COR  | e P (Z, N)d, S<br>e P (Z, E)d, W<br>e S (N, E)<br>e LR (Z) | 02:56:25<br>02:56:27<br>03:06:08<br>03:18:37     | 1.0<br>4<br>10<br>20 | Tonga Islands. USCGS<br>(card 035-65): 15.3°S,<br>173.4°W; 02:44:47.5;<br>h about 51 km; Mag 5.9.                                  | 26           |
|              | PTD  | e P (Z)                                                    | 02:56:27.2                                       |                      | Δ about 8300 km.                                                                                                                   |              |
| 22 Mar.      | COR  | e P (Z, N, E)                                              | 03:17:53                                         | 1                    | Jujuy Province, Argentina.<br>USCGS (card 030-65):<br>23.8°S, 66.7°W; 03:05:33.3;<br>h about 176 km; Mag 5.5.<br>Δ about 9400 km.  | 26           |
| 22 Mar.      | COR  | e P (Z)d<br>e (Z)d<br>e SKS (N)<br>e (Z)                   | 23:09:22<br>23:09:32<br>23:19:49<br>23:40:18     | 2<br>5<br>16<br>40   | Near coast of central<br>Chile. USCGS (card 029-65):<br>31.9°S, 71.5°W;<br>22:56:26.5; h about 46 km;<br>Mag 6.0. Δ about 9900 km. | 2            |
| 24 Mar.      | COR  | e P (Z)d<br>e P (N)s<br>e SKS (E)<br>e (N, E)              | 00:05:43.7<br>00:05:48.7<br>00:15:19<br>00:28:35 | 2<br>2<br>6<br>20    | Tonga Islands. USCGS<br>(card 036-65): 15.2°S,<br>173.5°W; 23:54:14.7; h<br>about 130 km; Mag 5.7.<br>Δ about 8100 km.             | 2            |
| 24 Mar.      | COR  | e P (Z, N, E)u<br>e S (N, E)                               | 05:58:53.3<br>05:58:54.3                         | 1                    | Local.                                                                                                                             |              |

| DATE<br>1965 | STA. | PHASE                                                                       | TIME (GCT)<br>h, m, s                            | PERIOD<br>sec       | REMARKS                                                                                                                                                           |
|--------------|------|-----------------------------------------------------------------------------|--------------------------------------------------|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4 Mar.       | COR  | e P (Z)u<br>e S (N, E)                                                      | 08:12:59.5<br>08:17:02.5                         | 2<br>5              | Kodiak Island region.<br>USCGS (card 031-65):<br>56.6°N, 152.4°W;<br>08:08:05.2; h about 30 km;<br>Mag 5.2. Δ about 2500 km.                                      |
| 4 Mar.       | COR  | e sSS (E)                                                                   | 08:30:02.7                                       | 5                   | New Hebrides Islands.<br>USCGS (card 039-65):<br>16.3°S, 167.9°E;<br>07:59:39.0; h about 189 km;<br>Mag 5.6. Δ about 9900 km.                                     |
| 24 Mar.      | COR  | e P? (Z)u<br>e S? (N)<br>e (E)                                              | 23:53:30.4<br>23:53:38<br>23:53:40               | 1.2<br>1<br>1       | Local. ?                                                                                                                                                          |
| 26 Mar.      | COR  | e PPP (Z, N, E)d, E<br>e S (N, E)                                           | 15:36:27<br>15:40:10.8                           | 1.2<br>6            | Rat Islands, Aleutian Islands.<br>USCGS (card 037-65): 50.8°N,<br>176.9°E; 15:26:28; h about<br>29 km; Δ about 4400 km.                                           |
| 26 Mar.      | COR  | i P <sub>n</sub> (Z, N, E)u, N, W<br>i S <sub>n</sub> (N, E)<br>e LR (N, E) | 18:59:25.3<br>18:59:59.8<br>19:02:22.8           | 1.5<br>1<br>1.5     | Off coast of Oregon.<br>USCGS (card 033-65):<br>43.2°N, 126.2°W;<br>18:58:46.3; h about 33 km;<br>Mag 5.0. Δ about 260 km.<br>O. S. U. origin time<br>18:58:38.3. |
| 26 Mar.      | COR  | i P? (Z, N, E)d, N, E<br>i S? (Z, N, E)                                     | 19:24:24.8<br>19:24:31.7                         | 1<br>1              | Local. ?                                                                                                                                                          |
| 27 Mar.      | COR  | e P? (Z, N, E)d, N, E<br>e (N, E)                                           | 10:04:41.7<br>10:04:48                           | 2<br>2              | Local. ?                                                                                                                                                          |
| 28 Mar.      | COR  | i P (Z, N, E)d, S, W<br>e S (N)<br>e sSS (N)<br>e (N)                       | 16:46:09.8<br>16:56:28.6<br>17:03:00<br>17:09:37 | 2<br>10<br>20<br>18 | Near coast of central Chile.<br>USCGS (card 028-65):<br>32.4°S, 71.2°W; 16:33:14.6;<br>h about 61 km; Mag 6.4.<br>Δ about 10, 100 km.                             |

| DATE<br>1965 | STA. | PHASE                 | TIME (GCT)<br>h, m, s | PERIOD<br>sec | REMARKS                                                                                                                                              |
|--------------|------|-----------------------|-----------------------|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| 29 Mar.      | COR  | e P (Z)d              | 10:58:19.9            | 1.8           | Near east coast of<br>Honshu, Japan. USCGS<br>(card 031-65): 40.8°N,<br>142.8°E; 10:47:37.6;<br>h about 33 km; Mag 6.1.<br>Δ about 7300 km.          |
|              |      | e S (N, S)            | 11:07:02.7            | 6             |                                                                                                                                                      |
|              |      | e LQ (N)              | 11:14:48              | 10            |                                                                                                                                                      |
|              |      | e (E)                 | 11:20:25              | 12            |                                                                                                                                                      |
|              | PTD  | e P (Z)               | 10:58:24              | 3.5           |                                                                                                                                                      |
| 30 Mar.      | COR  | e P (Z, N, E)d, N, E  | 02:34:34.5            | 1             | Rat Islands, Aleutian<br>Islands. USCGS (card<br>030-65): 50.6°N, 177.9°E;<br>02:27:07.2; h about 51 km;<br>Mag 6 3/4 - 7 (BRK).<br>Δ about 4400 km. |
|              |      | e S (N, E)            | 02:40:44              | 3             |                                                                                                                                                      |
|              | PTD  | e P (Z)               | 02:34:32              | 3             |                                                                                                                                                      |
| 30 Mar.      | COR  | e P? (Z, E)u, W       | 23:29:06.4            | 1             | Local. ?                                                                                                                                             |
|              |      | e S?                  | 23:29:08.4            | 1             |                                                                                                                                                      |
| 30 Mar.      | COR  | e P? (Z, N, E)d, N, E | 23:47:44.4            | 1             | Local. ?                                                                                                                                             |
|              |      | e S? (Z, N, E)        | 23:47:56              | 1             |                                                                                                                                                      |
| 31 Mar.      | COR  | e pP (Z)d             | 10:00:32              | 2             | Greece. USCGS (card<br>034-65): 38.6°N, 22.4°E;<br>09:47:30.7; h about 78 km;<br>Mag 6.3. Δ about 10,200 km.                                         |
|              |      | e pP (Z, E)d, W       | 10:00:32              | 12            |                                                                                                                                                      |
|              |      | e pPP (Z, E)          | 10:04:10.8            | 8             |                                                                                                                                                      |
|              |      | e (Z)                 | 10:04:13.9            | 2             |                                                                                                                                                      |
|              |      | e S (Z)               | 10:10:55.6            | 12            |                                                                                                                                                      |
|              |      | e (Z)                 | 10:13:06              | 40            |                                                                                                                                                      |
|              |      | e SKPPKP? (Z)         | 10:29:00              | 24            |                                                                                                                                                      |
|              |      | e (Z)                 | 10:32:16              | 40            |                                                                                                                                                      |

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