



HARVARD UNIVERSITY

SEISMOGRAPH STATION

OAK RIDGE OBSERVATORY

Bulletin Number 18

January 1, 1942 through June 30, 1942

Paper No. 84, published under the auspices  
of the Committee on Experimental Geology and  
Geophysics and of the Division of Geological  
Sciences at Harvard University.

## Constants of the station:

 Latitude:  $42^{\circ} 30' 26''$  North

 Longitude:  $71^{\circ} 33' 45''$  West

Altitude: 180 Meters

## Mail address for the station:

Harvard Seismograph Station

Geological Museum

Cambridge, Massachusetts, U.S.A.

## Time:

All determinations are reduced to Universal Time. Clock rated daily by time signals from Arlington, Virginia. Accurate within 0.1 second unless otherwise specified.

## Instruments:

Three Benioff 112.7 kg. long and short period combinations, (one vertical, and two horizontal components oriented respectively north-south and east-west) with galvanometric registration and magnetic damping.

## Normal Operating Constants

Instrument	To sec.	Tg sec.	e	Drum speed	Displacement for acceleration of $10^{-6}$ gravity
ZSP	1.0	0.2	20:1	60 mm/min	15 mm
NSP	1.0	0.2	20:1	60 mm/min	15 mm
ESP	1.0	0.2	20:1	60 mm/min	15 mm
ZLP	1.0	14.0	20:1	30 mm/min	12 mm
NLP	1.0	14.0	20:1	30 mm/min	12 mm
ELP	1.0	14.0	20:1	30 mm/min	12 mm

Displacements of the ground upward or toward the north or east are designated by +, down or toward the south or west by -.

## Tables used:

For teleseisms, Jeffreys-Bullen 1939  
 For local earthquakes and blasts, Harvard travel times  
 (Reference: Bulletin Seismological Society of America,  
 Vol. 31, No. 4, October 1941).



Date	Phase	Time (UT)	Remarks
1942			
Jan. 1	iP <sub>2</sub> iS <sub>2</sub>	05-33-10 33-32.5	Local. Distance = 190 km.
Jan. 7	eL	11-59 ca.	
Jan. 7	iP <sub>1</sub> i iS <sub>1</sub>	21-06-07.8 06-31 06-34.0	Local. Distance = 210 km.
Jan. 8	i i	15-21-11 21-39	Rarefaction to southeast. Deep focus.
Jan. 9	i i	18-58-03 58-26	
Jan. 11	i i	15-40-30 40-51	
Jan. 15	e	22-09-07	
Jan. 16	e i	18-58-55 59-11	
Jan. 20	eP eS eL	06-33-00 38-56 46	USC&GS: 17° N, 105° W O=06-25-38 S-P distance = 39°
Jan. 26	i	06-53-08	
Jan. 27	eL	14-05	
Jan. 31	e	07-07-50	
Jan. 31	e e	04-13-06 13-22	
Feb. 13	eL	07-19	
March 1	eP eL	09-58-43 10-09	USC&GS: 13° N, 91° W O=09-52-01
March 2	iP iS iL	21-21-49 22-07.5 22-18.5	Local earthquake? Distance = 152 km O=21-21-24.5 Azimuth SSW
March 2	iP iS iL	21-47-11 47-29.5 47-41.5	Local earthquake? Distance and azimuth same as preceding. O=21-46-46.5

Date	Phase	Time (UT)	Remarks
1942			
March 5	iP i i eL	20-00-42 01-46 04-11 16	Rarefaction to the south? USC&GS: 44°7 N, 141°1 E O=19-48-10 Depth = 200 km.
March 9	i e e	10-09-53.5 11-32 14-02	Deep focus
March 19	eL	12-20	
March 20	eL	01-46 ca	Microseisms very large
March 25	iP <sub>1</sub> iS <sub>1</sub> iL	19-50-06.7 50-10.5 50-12.5	Local or blast. S-P distance = 31 km.
March 31	iP <sub>1</sub> iS <sub>1</sub>	04-32-47.9 32-55.2	Local. S-P distance = 60 km.
April 1	eP eS	02-20-26 23-07	S-P distance = 14.5 Caribbean
April 2	iP <sub>1</sub> iS <sub>1</sub>	21-48-15.2 48-28.2	Local or blast. S-P distance = 106 km.
April 3	i i	11-35-52.2 36-05.5	Local?
April 7	iP iS	23-55-11.5 55-31.8	Local or blast. S-P distance = 166 km.
April 8	eP' ePP e e eL	15-59-24 16-01-04 08-34 09-40 33	Reported felt in Philippines USC&GS: Region of 12½° N, 120° E O=15-40.3 Distance about 13,700 km.
April 10	eL	19-00-16	Local
April 10	eP eS	23-12-04 12-26	Blast. Distance = 180 km. O=23-11-35.6
April 11	iP	01-31-35	USC&GS: 15° N, 91°5 W, depth 100 km. JSA: 14°7 N, 91°2 W, depth 100 km.
April 13	eL	08-06.5	USC&GS: 3° S, 13° W



Date	Phase	Time (UT)	Remarks
1942			
April 14	e	19-22-37 22-55	
April 14	iP -1 iP -2 iP -3 iP -4 iS -1 iS -2 iS -3 iS -4	19-56-32.2 56-37.8 56-46.0 56-49.4 56-49.8 56-55.4 57-03.7 57-09.4	Series of four blasts at Distance = 142 km.
April 22	eL	23-38	
April 23	iP iS	18-07-37.5 07-56.0	Blast. Distance = 150 km.
April 24	iP iS	20-40-26.5 40-46.5	Blast. Distance = 170 km.
April 25	eL	19-51	
April 27	eL	09-28	
April 29	eL	12-12	
April 30	eL	02-34	
May 1	eL?	14-08-06	Local
May 1	e	17-43-33	
May 1	i	21-58-56.5	
May 2	e	10-25-04	
May 2	e	15-46-06	
May 2	iP <sub>1</sub> iS <sub>1</sub>	16-30-15.1 30-17.8	Blast. Distance = 22 km. 0=16-30-11.5
May 2	eL	23-02	
May 3	eL	11-00	
May 5	e e e e	15-54-00.0 54-01.4 54-02.5 54-03.5	Local

Date	Phase	Time (UT)	Remarks
1942			
May 5	eP <sub>1</sub> eS <sub>1</sub> iL	19-46-02.8 46-07.1 46-08	Local or blast. S-P distance = 35 km.
May 6	e	15-02-04	
May 8	iP <sub>1</sub> iS <sub>1</sub> iL	19-46-53.5 46-57.2 47-00.0	Blast. S-P distance = 29 km.
May 9	e	03-24-23	
May 9	e	04-48-23	
May 10	e e	02-39-30 39-53	
May 10	eL	21-00	
May 14	iP i iPP? iPcP iF? iS iSS eL	02-21-23.5 21-28 22-34 23-26 27-22 27-52.5 30-22 33	Great destruction and loss of life reported in Ecuador. S-P distance = 44.0° 0=02-13-18 USC&GS: 0°3 S, 80°0 W, 0=02-13-21 JSA: 0°3 S, 80°2 W, depth 500 <sup>1</sup> km.
May 14	eL	16-13	Aftershock of 02h
May 15	eL	03-08	
May 15	iP iS eSS eL	10-58-36 11-04-58 08-36 10	Aftershock of 02h, May 14 USC&GS: 0°, 80° W
May 15	iP iS eSS	11-59-20 12-05-42 09-06	Aftershock of 02h, May 14 USC&GS: 0°, 80° W
May 15	eP <sub>2</sub> iP <sub>1</sub> iS <sub>1</sub>	18-00-00 00-01.2 00-21.5	Local or blast. S-P distance = 165 km.
May 15	i	18-20-00	Deep focus
May 16	i	03-38-16.5	Deep focus



Date	Phase	Time (UT)	Remarks
1942			
May 17	iP ipP iPP i iS iScS	15-22-17 22-38 23-43 25-16 28-36 32-00	Aftershock of 02h, May 14 Depth of focus about 100 km.
May 17	iP <sub>2</sub> iS <sub>2</sub>	17-14-15 14-34	Distance = 157 km.
May 17	iP <sub>1</sub> iS <sub>1</sub>	18-57-26.5 57-41.0	Distance = 119 km.
May 19	iP <sub>1</sub> iS <sub>1</sub>	20-06-13.1 06-26.1	Distance = 106 km.
May 20	iP <sub>1</sub> iS <sub>2</sub> iS <sub>1</sub>	12-20-42.4 21-22.0 21-36.4	NESA: General region of 44°7 N, 76°5 W Distance = 450 km.
May 20	eL	18-09	
May 22	eP? eS? e	10-38-04 43-51 46-50	
May 23	iP <sub>2</sub> iS <sub>2</sub> i	22-18-58.9 19-39.7 19-40.9	
May 24	i e eL	03-49-06 51-44 04-42	
May 26	i	21-01-39	
May 28	iP' ipP' i e eSKP ePPP? e eL	01-20-44.8 21-03 21-33 23-27 24-15 25-16 41.0 02-11	USC&GS: 0°4 S, 122°6 E Depth about 100 km. O=01-01-45
May 29	eL	05-50	
May 29	eL	07-39	

Date	Phase	Time (UT)	Remarks
1942			
May 30	eL	03-05	
May 30	eL	04-55	
June 8	i	17-58-39.7	Local ?
	i	58-59.7	
	i	59-01.7	
June 8	i	18-34-05.6	Local
	i	34-25.4	
June 9	e	11-27-00	
	e	30-54	
June 10	eL	01-51 ca	
June 10	eP'	10-42-23	
	eSS	59-51	
	eL	11-20	
June 10	eL	15-10	
June 12	e	02-23-04	
	e	23-30	
	e	24-01	
June 12	eP	10-29-49	USC&GS: 290 S, 7699 W
	e	36-03	0=10-21-32
	eS	36-23	
	eL	40	
June	eL	17-15	
June 13	eL	20-13	
June 14	eP'	03-29-15	Distance about 135°
	eSKKS	38-49	
	e	39-15	
	eL	04-07	
June 14	i	11-05-05.7	
June 14	iP <sub>1</sub>	11-05-56.7	Distance = 49 km.
	iS <sub>1</sub>	06-02.7	Off Nahant, Massachusetts
	iL	06-05.7	
June 14	iP <sub>1</sub>	16-35-47.3	Distance = 57 km.
	iS <sub>1</sub>	35-54.2	
	iL	35-58.3	



Date	Phase	Time (UT)	Remarks
1942			
June 16	eP	21-13-13	USC&GS: 0°5 N, 80°9 W 0=21-05-14 JSA: 0°3 S, 80°2 W Depth 500 km.
	eS	19-37	
	eScS	23-07	
	eL	30	
June 18	eP'	09-49-50	Distance about 121°
	ePP	51-18	
	oPPP	54-31	
	eSKS	56-40	
	eL	10-22	
June 20	eP	10-08-50	USC&GS: 19°0 N, 100°7 W Depth about 65 km. 0=10-02-07 JSA: 18°2 N, 101°0 W Depth about 80 km.
	epP	09-11	
	ePP	10-03	
	eS	14-14	
	esS	15-05	
	eSS	16-45	
	eScS	19-03	
	e	25-39	
June 22	eL	20-09	
June 23	e	09-03-39	
	eL	15	
June 24	eP'	11-35-37	Considerable damage reported at Wellington, New Zealand
	ePP	37-57	
	e	38-59	
	eL	49.5	
June 29	iP	06-38-13	Reported felt in Chile USC&GS: 33½° S, 70½° W Depth about 200 km. 0=06-26-48 JSA: 31°9 S, 69°8 W Depth about 100 km.
	ipP	38-43	
	e	40-45	
	ePP	41-06	
	eS	47-47	
	esS	48-23	
	eL	57	



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SEISMOGRAPH STATION

OAK RIDGE OBSERVATORY  
Bulletin Number 19

July 1, 1942 through December 31, 1942

Paper No. 84<sup>5</sup>, published under the auspices  
of the Committee on Experimental Geology and  
Geophysics and of the Division of Geological  
Sciences at Harvard University.



Constants of the station:

Latitude:  $42^{\circ} 30' 26''$  North

Longitude:  $71^{\circ} 33' 45''$  West

Altitude: 180 Meters

Mail address for the station:

Harvard Seismograph Station

Geological Museum

Cambridge, Massachusetts, U.S.A.

Time:

All determinations are reduced to Universal Time. Clock rated daily by time signals from Arlington, Virginia. Accurate within 0.1 second unless otherwise specified.

Instruments:

Three Benioff 112.7 kg. long and short period combinations, (one vertical, and two horizontal components oriented respectively north-south and east-west) with galvanometric registration and magnetic damping.

Normal Operating Constants

Instrument	To sec.	T <sub>g</sub> sec.	e	Drum speed	Displacement for acceleration of $10^{-6}$ gravity
ZSP	1.0	0.2	20:1	60 mm/min	15 mm
NSP	1.0	0.2	20:1	60 mm/min	15 mm
ESP	1.0	0.2	20:1	60 mm/min	15 mm
ZLP	1.0	14.0	20:1	30 mm/min	12 mm
NLP	1.0	14.0	20:1	30 mm/min	12 mm
ELP	1.0	14.0	20:1	30 mm/min	12 mm

Displacements of the ground upward or toward the north or east are designated by +, down or toward the south or west by -.

Tables used:

For teleseisms, Jeffreys-Bullen 1939  
 For local earthquakes and blasts, Harvard travel times  
 (Reference: Bulletin Seismological Society of America,  
 Vol. 31, No. 4, October 1941).

Date	Phase	Time (UT)	Remarks
1942			
July 1	iP iS iL	20-36-53.4 37-06.7 37-13.5	Local or blast. S-P distance = 106 km.
July 2	iP iS iL	23-44-20.6 44-30.1 44-35.8	Local or blast. S-P distance = 77 km.
July 3	eL	03-43	
July 4	iP eS eScS	02-01-06 07-28 11-00	USC&GS: 0°7 N, 80°7 W O=01-53-07 JSA: near 0°3 N, 80°2 W depth 500±km.
July 4	eP eS eScS e eL	06-16-42 23-08 26-28 27-28 34	USC&GS: 0°7 N, 80°7 W O=06-08-33 JSA: near 0°3 S, 80°2 W depth 500±km.
July 4	i i e eL	18-56-49 19-00-52 09-25 21	
July 5	iP -1 iP -2 i eS -1 eS -2	10-37-46 39-48 40-37 44-12 46-12	USC&GS: 0°7 N, 80°7 W O=10-29-53 1/2°N, 80 1/2°W O=10-31.9 JSA: 0°3 S, 80.2 W, depth 500±km
July 5	iP i i iS eL e	23-21-13 21-21 21-55 25-21 29 42.0	USC&GS: 19°N, 70° W O = 23-16.1 S-P Distance = 23°O=23-16-05
July 7	e e e e	03-09-42 13-52 17-54 21-56	USC&GS: 21°4 S, 177°8 W depth about 400 km. O=03-53-48
July 7	eP e eS e eL	12-45-41 47-41 52-05 56-33 13-02	USC&GS: 0°7 N, 80°5 W O=12-37-44 JSA: 0°3 S, 80°2 W depth 500±km.



Date	Phase	Time (UT)	Remarks
1942			
July 8	iP iS i eL	07-06-31 15-24 16-24 22	USC&GS: 25°0 S, 69°7 W 0=06-55-33 JSA: 24°5 S, 69°5 W depth 175 km.
July 8	eS eL	15-36-13 36-15	Local
July 8	i	19-30-45	
July 8	iP eS e eL	22-38-55 45-13 48-41 53	USC&GS: 0°7 N, 80°5 W 0=22-30-56 JSA: 0°3 S, 80°2 W depth 500±km.
July 9	e	04-58-52	
July 9	e	19-42-25	
July 9	e	20-26-11.5	
July 9	eP eS eL	20-31-20.2 31-32 31-35	Local
July 12	iP i iS i eL	05-13-23 15-01 19-46 23-17 27	USC&GS: 0°3 S, 80°1 W 0=05-05-16 JSA: 0°3 S, 80°2 W depth 500±km.
July 21	e eL	07-58-19 08-08	
July 24	iS iL	19-01-19 01-21	Local
July 24	iP iS iL	21-46-19 46-38 46-34	Local. S-P Distance = 72 km.
July 25	eL	01-37	
July 25	iP' i ePP e e e eL	06-41-31 41-48 42-52 43-30 52-54 59-50 25	USC&GS: 11°9 N, 125°5 E 0=06-22-30

Date	Phase	Time (UT)	Remarks
1942			
July 25	eL	15-47	
July 29	iP'	23-08-38	USC&GS: 2°8 S, 127°9 E 0=22-49-13
	e	10-21	
	e	11-06	
	e	12-31	
	eL	43	
Aug. 1	eL	05-55	
Aug. 1	iP'	12-53-08	Reported felt from Auckland to Dunedin and Queenstown USC&GS: 41°1 S, 176°2 E
	iPP	55-30	
	iSKP	56-30	
	eL	13-14	
Aug. 1	i	20-38-49.8	Local or blast
	i	39-03.7	
Aug. 1	e	14-50-20	
	e	55-29	
Aug. 6	iP	23-43-33	Felt at Guatemala City and San Salvador USC&GS: 14°1 N, 90°9 W 0=23-36-57 S-P Distance = 33.4
	iS	48-55	
	i	49-13	
	i	49-45	
Aug. 8	iP	07-26-04	Aftershock
	eL	36	
Aug. 8	eP	22-43-11	Aftershock
	eS	48-33	
	eL	50.5	
Aug. 11	iP	04-54-55	Aftershock
	eS	05-00-18	
	eL	02	
Aug. 11	eL	07-30	
Aug. 13	eP'	16-03-48	USC&GS: Region of 8°S, 156½°E
	ePP	05-36	
	eL	45	
Aug. 13	iP	19-37-25	Deep focus
	ipP	37-46	
Aug. 14	e	08-32-52	



Date	Phase	Time(UT)	Remarks
1942			
Aug. 14	eP e(PP) eS eL	20-58-15 59-38 21-03-48 10	USC&GS: $17\frac{1}{2}^{\circ}$ N, $108^{\circ}$ W S-P Distance = $35^{\circ}$
Aug. 15	eL	06-53	
Aug. 15	eL	16-05	
Aug. 16	i e i	11-40-22 42-08 43-38	
Aug. 16	iP eS eL	20-14-26 19-38 25	JSA: $12^{\circ}5$ N, $90^{\circ}0$ W O=20-07-37
Aug. 20	eP eS eL	22-43-39 48-55 56	USC&GS: Near $14^{\circ}$ N, $91^{\circ}$ W O=22-37.0
Aug. 21	iP iS iL	20-11-03.4 11-07.0 11-09	Local or blast. Distance = 28 km.
Aug. 21	eL	10-01	
Aug. 23	iP iPP ePcS e eL	06-46-52 49-37 51-20 07-01 15	USC&GS: $54^{\circ}8$ N, $164^{\circ}8$ E O=06-35-40 Depth about 150 km.
Aug. 24	iP iS i e eL	23-00-15 08-12 08-49 10-34 15	Destructive in Nazca and Ica, Peru. USC&GS: $14^{\circ}7$ S, $75^{\circ}0$ W O=22-50-41 Depth possibly 150 km. Distance = $57^{\circ}5$
Aug. 26	iP eS e eL	20-25-38 33-34 35-26 47	Aftershock

Date	Phase	Time (UT)	Remarks
1942			
Aug. 27	iP	12-18-22	Aftershock of Peruvian quake of August 24. Depth about 50 km.
	ipP	18-32	
	eS	26-18	
	esS	26-35	
	eL	40	
Aug. 28	iP	06-24-55	Reported destructive around Tirana, Albania. USC&GS: 42°N, 20°E, 0=06-14.2
	eS	33-38	
	eL	50	
Sept. 1	e	09-53-46	
	eL	10-21	
Sept. 1	e	19-12-32	
	eL	53	
Sept. 2	eP	03-27-40	USC&GS: 52°4 N, 169°6 W 0=03-17-09 S-P Distance = 59°
	eS	35-45	
	eL	49	
Sept. 4	e	02-58-33	
Sept. 4	eP	03-00-09	USC&GS: 14°5 N, 91°3 W 0=02-53-54
	eS	06-05	
	eL	11	
Sept. 4	eP	17-56-17	USC&GS: Near 52½°N, 170°W 0=17-46.1
	eS	18-04-46	
	eL	17	
Sept. 6	i	16-04-39	
	i	04-55	
	eL	33	
Sept. 7	eL	05-12	
Sept. 9	eP	01-35-22	USC&GS: 53°1 N, 165°W 0=01-25.3
	ePP	37-35	
	e	38-56	
	eS	43-29	
	eL	50	
Sept. 9	i	02-42-29.2	Local?
	i	42-42.0	
Sept. 10	i	05-10-06	
	eL	55	
Sept. 10	eL	23-55	



Date	Phase	Time (UT)	Phase
1942			
Sept. 12	eL	05-12	
Sept. 14	eP'	11-49-49	USC&GS: Region of 22°S, 172°E Depth about 200 km.
	e	50-55	
	ePP	51-35	
	e	52-12	
	e	52-32	
	eL	12-25	
Sept. 24	e	05-08.0	
	e	09.0	
	eL	41	
Sept. 25	eL	08-48	
Sept. 26	eP	04-06-53	USC&GS: 12.8°N, 87.7°W 0=04-00-16 Distance = 32°
	ePP	07-12	
	e	08-08	
	eS	12-09	
	eSS	13-05	
	e	14-21	
	eL	15	
Oct. 1	e	20-09-02	
	e	09-29.5	
Oct. 2	e	17-15-36	
Oct. 6	eL	03-20	
Oct. 6	eL	12-50	
Oct. 6	iP	16-37-52.2	Local or blast. Distance = 29 km.
	iS	37-55.9	
	iL	37-58.4	
Oct. 8	eP	03-10-00	USC&GS: 5.9°N, 82.7°W 0=03-02-41
	ePP	11-18	
	e	11-58	
	e	13-18	
	eL	18.5	
Oct. 8	eL	21-07	
Oct. 9	eL	01-23	
Oct. 9	i	13-41-29	
	i	41-39	
	i	41-44	

Date	Phase	Time (UT)	Remarks
1942			
Oct. 9	i	16-05-09	Deep focus?
	i	05-21	
	e	14-38	
	eL	40	
Oct. 10	i	16 51-42	Local
Oct. 12	e	01-25-24	
	eL	47	
Oct. 12	eL	06-51	
Oct. 14	eL	00-36	
Oct. 15	eL	07-56	
Oct. 15	eL	08-36	
Oct. 18	eL	05-44	
Oct. 20-21	eP'	23-40-53	USC&GS: Probably near 7°N, 123°E
	ePP	42-58	0=23-21.8
	e	56-50	PP-P' Distance = 129°
	eL	00-16	
Oct. 21	iP	16 29-20	USC&GS: 33°1 N, 116°0 W
	eS	35-05	0=16-22-15
	iS	35-09	
	eL	41	
Oct. 22	eS	02-03-40	Aftershock
	eL	09-19	
Oct. 25	eL	07-58	
Oct. 25	eL	09-58	
Oct. 26	iP	21-21-40	JSA: 47°7 N, 151°2 E, depth 50 km.
	iSKS	32-00	0=21-09-21
	eL	49	
Oct. 28	iP	10-51-30	USC&GS: 15°4 N, 96°0 W
	eS	56-58	0=10-44-43
	eL	11-02	S-P Distance = 34.3
Oct. 31	i	15 30-19	
	i	30-31	
	e	36.1	
	eL	41	



Date	Phase	Time (UT)	Remarks
1942			
Nov. 1	eL	15-58	
Nov. 1	i e e	19-06-14 06-30 08-34	
Nov. 3	e e eL	00-20-51 22-57 50	USC&GS: Region of $18\frac{1}{2}^{\circ}$ S, $174^{\circ}$ W O=23-59.6
Nov. 6	iP ipP i iPcP iS isS? e eSS eL	13-39-50 40-16 40-30 41-07 46-17 46-39 48-05 50-21 58	USC&GS: $6^{\circ}$ S, $76^{\circ}$ W O=13-31-09 Depth slightly more than 100 km.
Nov. 7	i i	08-51-37 55-05	Deep focus
Nov. 7	eL	13-02	
Nov. 10	eP iP' iPP i i iL	11-57-41 12-00-30 02-34 02-49 04-39 34-05	USC&GS: $48^{\circ}$ S, $32^{\circ}$ E O=11-41.4 Depth 350 km.
Nov. 12	iP eS eL	05-02-17 08-25 13	USC&GS: $16^{\circ}$ 8' N, $94^{\circ}$ 2' W O=04-55.4
Nov. 12	iP e eS e	15-34-25 40-30 40-56 44-12	USC&GS: $0^{\circ}$ 1' S, $81^{\circ}$ 0' W O=15-26-15
Nov. 14	eL	06-27	
Nov. 15	i eL	17-36-45 42	USC&GS: $35\frac{1}{2}^{\circ}$ N, $142\frac{1}{2}^{\circ}$ E O=17-12.2
Nov. 18	eL	11-06	

Date	Phase	Time (UT)	Remarks
1942			
Nov. 25	iP	01-24-41	USC&GS: 16°6 N, 97°8 W O=01-18.0  S-P Distance = 37°
	e	28-18	
	eS	30-26	
	eL	39	
Dec. 5	i	14-37-30	
	eL	48	
Dec. 9	iP	22-29-28	USC&GS: 53°4 N, 166°0 W O=22-19-00 S-P Distance = 55°5
	iS	37-12	
	eL	49	
Dec. 11	eP	02-50-51	S-P Distance = 74°3
	eS	03-00-27	
	eL	17	
Dec. 13	i	08 53-47	Deep focus?
Dec. 20	i	14-14-48	
Dec. 22	eL	05-08	
Dec. 22	i	06-30-57	
Dec. 26	iP	12-38-26	USC&GS: 9°6 N, 75°6 W O=12-31-58 S-P Distance = 32°6
	i	38-37	
	eS	43-44	
	e	43-56	
	e	46-26	
	eL	48	