

Copies of

SEISMOLOGICAL BULLETIN OF CHINA
for
1959

Stations	φ_N	λ_E	$h(m.)$	Instruments	Foundation
PK (Peking)	40°02'.4	116°10'.5	43	SK, SH	Diluvium
CC (Changchun)	43°49'.8	125°18'.8	236	SK	Alluvium
CT (Canton)	23°05'.5	113°20'.6	30	SK	Red Sandstone
CU (Chengtu)	30°39'.6	104°00'.7	506	SK	Alluvium
DR (Dairen)	38°54'.0	121°39'.9	60	SS	Rock
KM (Kunming)	25°07'.4	102°44'.4	1945	SK	Alluvium
LC (Lanchow)	36°03'.0	103°50'.0	1518	SK, SH, SF	Alluvium
LF (Linfen)	36°05'.8	111°31'.1	452	SF	Loess
LS (Lhasa)	29°38'.2	91°02'.2	3658	SK	River deposit
NK (Nanking)	32°03'.8	118°47'.0	10	SK, SG, SW ₃	Alluvium
PT (Pactow)	40°34'.7	110°02'.0	1111	SK, SS	River deposit
SA (Sian)	34°14'.9	108°55'.2	395	SK, SS, SO	Alluvium
SN (Sining)	36°37'.2	101°46'.9	2244	SF	River deposit
SW (Suihwa)	46°37'.4	126°59'.5	179	SS	Alluvium
TS (Tientsui)	34°34'.7	105°45'.1	1132	SF	Alluvium
TU (Tatung)	40°05'.7	113°16'.8	1062	SS	Loess
TY (Taiyuan)	37°47'.2	112°35'.4	783	SF	Alluvium
WH (Wuhan)	30°31'.6	114°33'.5	29	SK	Alluvium
WW (Wuwei)	37°55'.7	102°38'.3	1585	SF	Alluvium
YC (Yinchuan)	38°28'.5	106°16'.2	1109	SF	Alluvium
YM (Yumen)	40°17'.8	97°00'.9	1539	SF	Alluvium
ZS (Zosé)	31°05'.8	121°11'.2	104	SK, SG, SW ₂	Sandstone

Temporary stations:

FL (Futzeling)	31°18'.0	116°18'.0
KT (Kwanting)	40°14'.4	115°36'.3

- SK Galvanometric registration (Kirnos type)
- SH " " (Harin type)
- SK_r " " (Krumbach type)
- SG " " (Galitzin-Wilip type)
- SW Wiechert, 1: 80kg, 2: 1200kg, 3: 17,000kg
- SO Optical registration. Hor. comps. only
- SS, SF Mechanical registration. Hor. comps. only

INSTITUTE OF GEOPHYSICS & METEOROLOGY
ACADEMIA SINICA
Peking, China

1959 January

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Date	Sta.	Phase	h m s	Date	Sta.	Phase	h m s
1	*Epc: $83^{\circ}\frac{1}{2}N$, O: 02-06-42,	$8^{\circ}W$	M: 5.9	4	PK	eP	08 01 53
	✓ CC	iP	02 15 38	X	SA	eP	03 02
	✓ PK	-iP	16 01		LC	P	25
	✓ LC	eP	22		CU	P	48
	✓ CU	-iP	59		KM	eP	04 24
	✓ KM	-P	17 32		LS	eP	05 07
	✓ CT	(P)	53				
1	*Epc: $18^{\circ}\frac{1}{2}S$, O: 07-26-07,	$175^{\circ}\frac{1}{2}W$	M: $5\frac{1}{2}$		ZS	+P	21 16 14
	✓ CC	P	07 38 37	X	NK	+P	22
	✓ PK	eP	52		KM	+P	32
	✓ KM	eP	39 15		CU	+P	58
					SA	+iP	17 06
					PK	P	30
					LC	+iP	34
						iS	24 02
					CC	eP	17 50
					LS	+P	54
						pP	19 12
						iS	24 37
						esS	26 59
1	*Epc: $18^{\circ}\frac{1}{2}S$, O: 07-49-35,	$177^{\circ}W$	M: $5\frac{3}{4}$				
	✓ PK	P	08 02 18				
	✓ SA	eP	33				
	✓ KM	eP	40				
	✓ PT	eP	42				
	✓ CU	eP	46				
		S	13 48				
4	*Epc: $10^{\circ}S$, O: 03-16-36,	$111^{\circ}\frac{1}{2}E$	M: $5\frac{1}{2}-5\frac{3}{4}$		✓ ZS	+iP	09 58 09
	✓ KM	+P	03 23 46		✓ CT	+iP	14
		eS	29 26		✓ NK	+iP	23
	✓ CU	+P	24 27			PP	10 01 06
	✓ ZS	S	30 37	✓ CC	+iP	09 53 47	
	✓ SA	eP	24 32	✓ PK	+iP	59 00	
	✓ LS	+P	51		iS	10 09 01	
	✓ LC	P	53		ScS	21	
		S	31 23		PPS	10 09	
	✓ PK	+P	25 10	✓ KM	+iP	09 59 07	
		eP	37	✓ SA	ePP	10 02 15	
					S	09 13	
				✓ PT	+iP	09 59 07	
				✓ LC	S	10 09 14	
					P	09 59 23	
					+iP	31	
					PP	10 02 53	
					iSKS	09 46	
4	*Epc: $46^{\circ}\frac{1}{2}N$, O: 07-56-27,	$151^{\circ}E$	h:100km ca.				

P.S. Epc., M, etc. with asterisk are from foreign reports. (mostly of USCGS, Pasadena and Moskva.)

Date	Sta.	Phase	h m s	Date	Sta.	Phase	h m s
✓ 5	✓ LC	IS	10 09 59	✓ 12	✓ LS	-iP	14 24 44
	✓ LS	+iP	00 02			eS	31 15
		iSKS	10 25				

8 *Epc: $15^{\circ}\frac{1}{2}N$, $61^{\circ}W$
 O: 01-33-48
 h: 100km ca., M: $6\frac{1}{2}-6\frac{3}{4}$

✓ PK	PP	01 54 32
	SKS	59 31
✓ CU	PKS	56 23
✓ NK	SKS	59 52
✓ ZS	PP	55 25
✓ WH	PP	41

8 *Epc: $4^{\circ}\frac{1}{2}S$, $138^{\circ}\frac{1}{2}E$
 O: 22-36-08, M: $5\frac{3}{4}$

✓ ZS	+P	22 43 46
	eS	49 47
✓ NK	eS	50 04
✓ KM	eP	44 31
	eS	51 07
✓ CU	eP	44 50
	eS	51 41
✓ PK	eP	44 57
	eS	51 56
✓ LS	P	45 57
	S	53 46

12 Epc: $44^{\circ}N$, $146^{\circ}E$
 O: 14-16-28
 h: 100km ca., *M: 5.5

✓ CC	-iP	14 19 56
✓ PK	-iP	21 22
	eS	25 20
✓ ZS	P	21 34
	S	25 38
✓ NK	-iP	21 43
	eS	25 54
✓ WH	-iP	22 17
	eS	26 57
✓ LC	-iP	22 58
✓ CT	-P	23 08
✓ CU	-iP	21
	eS	28 44
	eP	23 57
✓ KM	PP	25 31
	eS	29 51

13 Epc: $14^{\circ}N$, $146^{\circ}\frac{1}{2}E$
 O: 01-15-28, M: $5\frac{1}{2}$

✓ ZS	P	01 21 29
	PP	22 23
	(S)	26 18
✓ NK	+P	21 48
	PP	22 51
✓ WH	+P	12
	PP	23 21
	(S)	27 34
✓ CC	+iP	22 24
	PP	23 43
	iS	27 56
✓ PK	+iP	22 42
	S	29 28
✓ SA	+iP	23 01
	PP	24 40
	PcS	28 52
	S	29 04
✓ PT	+iP	23 17
	S	29 37
✓ CU	+iP	23 24
	PP	25 02
	e(S)	29 45
✓ KM	+P	23 26
	e(S)	29 48
✓ LC	+P	23 38
	S	30 11
✓ LS	+iP	24 51
	S	32 22

13 *Epc: $53^{\circ}N$, $167^{\circ}\frac{1}{2}W$
 O: 07-20-58

✓ CC	e(P)	07 29 04
✓ ZS	e(P)	30 28
✓ WH	P	58
✓ CU	P	31 40
✓ LS	e(P)	32 31

13 *Epc: $3^{\circ}S$, $102^{\circ}E$
 O: 07-33-43
 h: 150km ca., M: 6

✓ WH	P	07 40 28
✓ NK	(P)	54

Date	Sta.	Phase	h	m	s	Date	Sta.	Phase	h	m	s		
18	*Epc: 5°S, 152° $\frac{1}{2}$ E					18	LC	SKS	22	45	26		
	O: 19-25-45, M: 5 $\frac{1}{2}$ -5 $\frac{3}{4}$							IS		46	06		
							LS	iSKS			09		
								S		47	13		
	SA	P	19	35	36								
	PT	+P			58								
	LC	P	36	08									
	LS	F			54								
18	*Epc: 19°S, 178°W					19	*Epc: 30°N, 132°E						
	O: 22-23-15						O: 08-12-47, h: 60km ca.						
	h: 450km ca., M: 6 $\frac{1}{2}$												
	ZS	-iP	22	34	23		ZS	eP	08	15	06		
		ipP		36	10		WH	eP		16	41		
		esP			56		PK	eP			42		
		S		43	34		SA	eP		17	23		
		ScS			54		PT	eP			31		
	NK	-iP		34	37		CU	eP		18	08		
		ipP		36	24			S		22	26		
		esP		37	15		LC	eP		18	09		
		S		43	59		KM	e(P)			28		
		ScS		44	10								
	CT	-P		34	37		20	Epc: 8°S, 127°E					
		epP		36	26			O: 16-46-14, M: 4 $\frac{3}{4}$					
		S		44	00								
	CC	-iP		34	47			CT	e(P)	16	53	00	
		pP		36	33			ZS	eP			47	
		esP		37	25			KM	P			57	
		S		44	20				S	17	00	08	
	WH	-iP		34	49			NK	eP	16	53	58	
		pP		36	35			CU	P		54	27	
		sP		37	26				S	17	00	59	
		S		44	23			SA	eP	16	54	38	
	PK	-iP		35	06			LC	eP		55	05	
		opP		36	57				S	17	02	10	
		SKS		44	44			LS	P	16	55	18	
		S			57				S	17	02	34	
	SA	-iP		35	19			21	Epc: 19°N, 120°E				
		pP		37	06				O: 11-08-03, M: 5				
		sP			55								
		iSKS		45	00			CT	+P	11	09	56	
		iS			24			WH	e(P)		11	14	
	KM	P		35	26				eS		13	45	
		epP		37	13			NK	eP		11	22	
		S		45	34				eS		13	55	
		PT		35	29			KM	+P		12	08	
		epP		37	17			SA	+iP			26	
		esP		38	04				S		15	55	
		SKS		45	12			CU	+iP		12	28	
		S			43				S		15	57	
	LC	-P		35	40			TS	eP		12	47	
		pP		37	28			PK	+iP		13	02	
									S			17	02

Date	Sta.	Phase	h	m	s	Date	Sta.	Phase	h	m	s
21	LC	P	11	13	09	22	ZS	eP	07	38	16
		PP			37			S		42	21
		S		17	14		NK	P		38	25
	PT	+P		13	21		TU	eP			25
		S		17	39		PT	P			46
	CC	e(P)		13	43		WH	P		39	00
		eS		18	17		SA	eP			18
	LS	P		14	07		LC	eP			45
		S		18	53		CU	eP		40	06
							KM	P			40
								eS		46	37
22	Epc: $37^{\circ}\frac{1}{2}N$, $142^{\circ}E$						LS	eP		41	32
	O: 05-10-25,		M: $6\frac{1}{2}$					eS		48	09

	CC	+iP	05	13	51
		S		16	30
	SW	eP		14	00
	DR	eP			17
	ZS	+iP			42
		S		18	03
	NK	+iP		14	59
		S		18	38
	PK	+iP		15	03
		S		18	43
	TU	eP		15	26
	TY	eP			30
	WH	+iP			40
	PT	+iP			52
	SA	+iP	16	10	
	YC	eP			24
	CT	+iP			26
		S		21	14
	TS	eP		16	36
		S		21	35
	LC	+iP		16	43
		iS		21	45
	WW	eP		16	48
	CU	+iP		17	00
	YM	eP			22
	KM	+iP			27
		S		23	04
	LS	+iP		18	29
		PP		20	13
		PcS		24	07
		iS			55

22	* Epc: $38^{\circ}\frac{1}{2}N$, $142^{\circ}E$				
	O: 09-46-40,		M: 5.8		
	CC	eP	09	50	03
	ZS	P			55
	NK	eP		51	11
	PK	eP			14
		eS		54	54
	WH	P		51	53
	PT	P		52	04
	SA	+P			21
	CT	eP			37
	LC	P			54
	CU	eP		53	06
	KM	P			37
	LS	eP		54	39

23	* Epc: $37^{\circ}.7N$, $143^{\circ}.5E$				
	O: 06-59-53,		M: $4\frac{1}{2}$		
	CC	e(P)	07	03	22
	ZS	e(P)		04	13
	PK	eP			35
		eS		08	17
	WH	eP		05	09
	LS	eP		07	59

24	Epc: $37^{\circ}\frac{1}{4}N$, $141^{\circ}E$				
	O: 05-08-36				
	h: 60km ca.,		M: $5\frac{1}{2}$		
	CC	+iP	05	11	47
		sP		12	03
		S		14	20
	SW	eP		11	48
	DR	eP		12	11

22	* Epc: $43^{\circ}\frac{1}{2}N$, $144^{\circ}\frac{1}{2}E$				
	O: 07-33-14,		M: $5\frac{3}{4}$		
	SW	eP	07	36	22
	CC	P			33
	PK	eP		38	03

Date	Sta.	Phase	h	m	s	Date	Sta.	Phase	h	m	s	
24	ZS	eP	06	12	39	24	*Epc: 15°N, 92° $\frac{1}{2}$ W					
		PP			54		O: 19-42-20, M: 6 $\frac{1}{4}$					
		sP			57			ZS	ePKP	20	01	23
		S		15	50			NK	ePKP			25
		i		16	20			SA	ePKP			29
	NK	P		12	53			LC	ePKP			30
		sP		13	12			WH	ePKP			32
		eS		16	17			CU	ePKP			40
	PK	+P		12	57				PKS		05	07
		PP		13	15			LS	ePKP		01	47
		sP			18			KM	ePKP			50
		S		16	26							
		SS			48							
	WH	P		13	36							
		pP			52			24	*Epc: 37° $\frac{1}{2}$ N, 24° $\frac{1}{2}$ W			
		S		17	36			O: 19-55-14, M: 6 $\frac{1}{4}$ -6 $\frac{1}{2}$				
	PT	eP		13	47			LS	P	20	08	25
		PP		14	23				PP		11	52
	SA	+P			04				SKKS		18	53
		sP			23				(S)		19	17
		S		18	30			PT	eP		08	26
	CT	eP		14	20				SKS		18	59
		sP			41				S		19	25
		S		18	54			LC	eP		08	30
	LC	eP		14	36				ePP		12	15
		PP		15	34				SKS		19	01
		S		19	26				S			32
	CU	+P		14	41			CC	SKS			11
		(sP)		15	11				i		21	08
		S		19	48			PK	eP		08	41
	KM	eP		15	21				ePP		12	33
		S		20	43				SKS		19	15
	LS	+P		16	24				S			56
		sP			49			SA	eP		08	48
		eS		26	36				SKS		19	25
									SKKS			51
24	*Epc: 1° $\frac{1}{2}$ S, 116° $\frac{1}{2}$ E								S		20	09
	O: 07-50-52, M: 5 $\frac{1}{4}$							CU	PP		12	49
									SKS		19	25
		KM	eP	07	57	06			WH	SKS		42
		WH	eP			22			KM	SKS		46
		ZS	eP			35			NK	SKS		56
		NK	eP			37			ZS	SKS	20	03
		CU	eP			43			CT	SKS		23
		SA	eP			59				SKKS	21	11
		LS	eP		58	25				PS	23	33
			eS	08	04	21						
		LC	eP	07	58	25						
		PK	eP			42			26	*Epc: 27°N, 128° $\frac{1}{2}$ E		
		PT	P			49			O: 21-43-12			

Date	Sta.	Phase	h	m	s	Date	Sta.	Phase	h	m	s				
26	ZS	eP	21	45	07	28	*Epc: 28 ⁰ ₂ N, 130 ⁰ E								
	NK	eP			38		O: 13-59-55								
		eS		47	31		h: 550km ca.,	M: 5 ¹ / ₄							
	WH	-P		46	20				ZS	eS	14	05	36		
	PK	eP		47	09				NK	S		06	17		
	LC	eP		48	19				CC	eP		03	38		
		eS		52	23			S		06	44				
	KM	eP		48	24			WH	eP		03	59			
								PK	e(P)		04	05			
27						29	Epc: 51 ⁰ ₂ N, 173 ⁰ ₂ W								
							O: 20-21-25,	M: 5 ¹ / ₂							
									CC	(P)	20	29	36		
									PK	P		30	12		
	*Epc: 4 ⁰ N, 126 ⁰ E							ZS	P			34			
	O: 21-05-29							NK	P			40			
	h: 200km ca., M: 4 ³ / ₄ -5							WH	P		31	07			
								SA	eP			14			
	CT	eS	21	14	11			LC	eP			26			
	LC	eP		12	30			KM	P			32	21		
	LS	eP		13	04			S				41	13		
		eS		19	06										
28						29	*Epc: 71 ⁰ N, 8 ⁰ E								
							O: 23-24-30, M: 6 ¹ / ₄ -6 ¹ / ₂								
		*Epc: 30 ⁰ ₂ S, 79 ⁰ W							CC	eP	23	34	25		
		O: 10-04-10, M: 6 ¹ / ₄							S			42	18		
		CC	ePKP ₁	10	24		06			PK	P		34	30	
			ePKP ₂				36			S			42	32	
			PP		28		13			LC	P		34	32	
		ZS	ePKP ₁		24		14			LS	P		34	45	
			ePKP ₂		25		02			S			43	01	
		PK	PKP ₁		24		14			SA	eP		34	51	
			PKP ₂		25		11			NK	eP		35	26	
			PP		28		57			S			44	17	
		NK	ePKP ₁		24		13			WH	eP		35	26	
			PKP ₂		25		13			S			44	18	
			PP		28		59			ZS	eP		35	34	
		CT	ePKP ₁		24		19			KM	P			36	
			ePKP ₂		25		21			S			44	33	
			PP		29		14			ScS				45	30
		WH	ePKP ₁		24		19								
			ePKP ₂		25		29								
		ePP		29	17										
	SA	-iPKP ₁		24	21										
		iPKP ₂		25	45										
		PP		29	28										
	LS	-PKP ₁		24	22										
		PKP ₂		25	45										
		PP		29	33										
	LC	-PKP ₁		24	23										
		ePKP ₂		25	54										
		PP		29	45										
	KM	-PKP ₁		24	23										
		ePKP ₂		25	55										
		PP		30	01										
	CU	-PKP ₁		24	23										
		PKP ₂		26	09										
		PP		30	01										

30 *Epc: 10⁰S, 161⁰E
O: 00-19-25, M: 6³/₄

Date	Sta.	Phase	h	m	s	Date	Sta.	Phase	h	m	s
30	✓ NK	iP	00	29	22	30	✓ DR	P	20	43	06
		S		37	25		✓ PK	-iP			45
	✓ WH	eP		29	35			S		47	31
	✓ CC	P			52		✓ ZS	-P		43	54
		S		38	18			S		48	00
	✓ PK	+P		30	06		✓ NK	-iP		44	04
		S		30	44			S		48	13
	✓ SA	+P		30	14		✓ TU	P		44	09
	✓ KM	+P			19		✓ FL	eP			28
		eS		39	09		✓ WH	iP			41
	✓ LC	+P		30	44			S		49	14
		S		39	57		✓ SA	+P		44	59
								PP		45	49
							✓ YC	eP			04
							✓ TS	eP			21
30	*Epc: 31°S, 179°W O: 18-09-02						✓ LC	+P			23
	✓ ZS	(P)	18	21	27		✓ WW	eP			27
		i		31	06		✓ CT	eP			32
	✓ CT	iP		21	31			eS		50	48
		e		31	07		✓ SN	eP		45	37
	✓ NK	-iP		21	40		✓ CU	+P			45
		i		23	30			S		51	10
		i		31	15			SS		53	21
	✓ WH	-iP		21	49		✓ YM	eP		45	54
		e		31	27		✓ KM	+P		46	22
		i			46			iS		52	17
	✓ CC	P		22	02		✓ LS	iP		47	13
		i		24	03			S		53	47
		e		31	39						
	✓ PK	P		22	13	30	Epc: 43°N, 144° $\frac{1}{2}$ E O: 22-16-49, M: 6				
		i		24	03		✓ SW	P	22	19	54
		i		31	55		✓ CC	P		20	08
	✓ KM	eP		22	14			S		22	45
		e		24	12		✓ DR	P		20	57
		i		31	59		✓ PK	-iP		21	37
	✓ SA	P		22	19			S		25	27
		e		24	14		✓ ZS	P		21	47
		i		32	04			S		25	51
	✓ LC	eP		22	57		✓ NK	iP		21	58
		i			25			ePP		22	31
	✓ LS	i			55			S		26	07
							✓ WH	+P		22	33
30	Epc: 43° $\frac{1}{2}$ N, 144° $\frac{1}{2}$ E O: 20-38-58, M: 5 $\frac{3}{4}$							S		27	09
	✓ SW	P	20	42	10		✓ SA	+P		22	50
	✓ CC	iP			16			PP		23	51
		S		44	51		✓ TS	eP			13
							✓ LC	+P			16

Date	Sta.	Phase	h	m	s	Date	Sta.	Phase	h	m	s
30	LC	PP	22	24	25	February					
		S		28	19	1	*Epc: 36° ¹ / ₂ N, 71° ¹ / ₂ E				
	WW	eP		23	17		O: 03-13-31				
	CT	eP			25		h: 250km, M: 5.5				
		ePP		24	36		LS	-P	03	17	34
		S		28	41			S		20	48
		SSS		29	55		LC	e		18	52
	SN	eP		23	28		CU	e		19	08
	CU	eP			37		KM	eP		20	26
		iS		29	03		PK	e		21	38
	KM	eP		24	13		WH	P		22	36
		iS		30	10						
	LS	P		25	05						
		iS		31	35						
		ScS		34	59						

30 Epc: 36°¹/₂N, 105°³/₄E
O: 22-52-54, M: 4³/₄

TS	eP	22	53	25
	S			44
LC	eP			26
	S			47
YC	(P)			43
	S			54 11
SA	iS			31
WW	e(P)			53 52
	eS			54 34
SN	eP			53 57
	S			54 39
CU	i			55 26
WH	i			57 31
PK	i			32

31 Epc: 37°N, 104°E
O: 02-45-04, M: 4³/₄

LC	+P	02	45	24
	S			36
WW	P			34
	S			52
SN	P			43
	eS			46 08
YC	P			45 51
	S			46 19
TS	eP			00
	S			36
SA	i			36
	S			47 36
YM	eP			07
	eS			48 27

1 Epc: 37°N, 104°E
O: 17-01-44, M: 3¹/₂

LC	iP	17	02	03
	iS			16
WW	eS			32
SN	eP			20
	eS			45
YC	eS			03 02
SA	S			04 27

2 *Epc: 6°¹/₂S, 126°E
O: 03-56-12, h: 150km ca.

CT	-P	04	02	43
WH	-iP			03 37
NK	-iP			40
KM	-P			42
CU	-P			04 10
SA	-iP			18
PK	-P			45
LC	-iP			47
CC	-P			05 05

4 Epc: 10°N, 125°¹/₂E
O: 04-56-42, M: 4

CT	S	05	04	06
ZS	-P			01 33
	eS			05 23
WH	eP			01 45
	eS			05 51
NK	eP			01 47
	eS			05 55
KM	e(P)			02 20

Date	Sta.	Phase	h m s	Date	Sta.	Phase	h m s	
4	KM	eS	05 06 47	6	CT	-iP	06 03 55	
	SA	eP	02 41			sP	04 31	
	PK	eP	03 05			eS	08 07	
	LC	eP	15			ZS	eP	04 52
	LS	eP	04 01				sP	05 29
						WH	-P	04 55
							sP	05 32
						KM	-P	04 56
							sP	05 33
						NK	-P	05 02
						sP	39	
					CU	-iP	28	
						sP	06 05	
						S	10 49	
					SA	eP	05 45	
					LC	-P	06 08	
					PK	eP	10	
						sP	47	
					TU	P	12	
					LS	P	26	
						sP	07 04	
						iS	12 36	
5	* Epc: 57°N, 157°W							
	O: 01-04-50							
	h: 100km ca., M: 5½							
	CC	P	01 13 26					
	PK	+P	14 22					
	ZS	+P	53					
	NK	+iP	55					
	WH	+P	15 19					
	SA	+iP	19					
	LC	+iP	25					
		S	23 57					
	CU	+iP	15 52					
		S	24 51					
	CT	+P	16 02					
	KM	+P	23					
	LS	+iP	36					
5	* Epc: 36°N, 141°E							
	O: 10-05-42, M: 4½							
	CC	P	10 09 08					
	ZS	eP	47					
	NK	eP	10 04					
	PK	eP	15					
	WH	eP	46					
	SA	+iP	11 20					
	LC	+P	52					
	CU	+P	12 05					
	KM	+P	33					
	LS	+P	13 39					
6	* Epc: 43°N, 144°E							
	O: 07-19-22, M: 4¾							
	After shock of Jan. 30. 22h							
	CC	eP	07 22 49					
		S	25 29					
	PK	e(P)	21 18					
		e(S)	28 10					
	CU	eP	26 17					
		eS	31 49					
	KM	eP	26 52					
6	* Epc: 51°N, 176°W							
	O: 14-33-00, M: 5½							
	CC	+iP	14 40 29					
		PP	42 04					
		eS	46 21					
	PK	+iP	41 33					
		S	48 20					
	TU	P	41 50					
	ZS	eP	57					
	NK	+iP	42 02					
	WH	+iP	27					
	SA	+iP	35					
	LC	+iP	47					
		S	50 41					
6	* Epc: 0° Lat, 124°E							
	O: 05-15-54							
	KM	e	05 55 37					
	SA	eP	23 14					
	LC	eP	44					
	LS	e	24 09					
6	* Epc: 0° Lat, 122°E							
	O: 05-58-44, h: 100km ca.							

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Date	Sta.	Phase	h	m	s	Date	Sta.	Phase	h	m	s
6	CT	+iP	14	43	10	7	*Epc: 60°S, 113°E				
	CU	+iP		13			O: 16-45-35, h: 600km ca.				
		eS		51	26						
	KM	+iP		43	44						
		S		52	26						
7	LS	+iP	44	09							
		S		53	14						
		*Epc: 4°S, 81°W									
		O: 09-36-51, M: 7¼ - 7½									
	CC	+iPKP	09	56	08						
		iPP		58	36						
	PK	+iPKP		56	15						
		ePP		59	08						
		PKS			58						
		SKS	10	03	08						
		SKKS		05	56						
	PT	PKP	09	56	18						
		iPP		59	27						
	ZS	PKP		56	30						
		PP		59	46						
YC	PKP		56	32							
NK	+iPKP			33							
	PP		59	55							
	SKS	10	03	47							
	SKKS		06	44							
WW	PKP	09	56	34							
LC	+iPKP			35							
	iPP	10	00	03							
SA	PKP	09	56	36							
WH	+iPKP			40							
	PP	10	00	15							
	SKKS		07	00							
CU	+iPKP	09	56	41							
	PP	10	00	30							
	SKS		04	00							
LS	+iPKP	09	56	46							
	PP	10	00	37							
	SKKS		07	26							
CT	+iPKP	09	56	49							
	PP	10	00	52							
KM	+PKP	09	56	52							
	PP	10	00	55							
8		*Epc: 48°N, 28°W									
		O: 01-02-24, M: 6¼ - 6½									
	CC	P		01	15	01					
	LS	+P			06						
		S			25	38					
	SA	-P			15	21					
	CU	+P			28						
		S			26	23					
9		Epc: 50°N, 177°W									
		O: 01-42-33, M: 5½									
	CC	-iP		04	49	59					
		iPP			51	32					
		S			55	57					
	PK	-iP			51	01					
		PP			52	53					
		S			57	48					
	ZS	-iP			51	21					
		iPP			53	13					
		S			58	23					
	NK	-iP			51	26					
		PP			53	22					
		S			58	34					
		ScS		05	01	17					
	SS			02	04						
PT	-iP		04	51	29						
	PP			53	29						
WH	-iP			51	55						
	eS			59	25						
	ScS		05	01	43						
SA	-iP		04	52	02						
LC	-iP			18							
	PP			54	27						
	eS		05	00	12						
CT	-iP		04	52	37						

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Date	Sta.	Phase	h	m	s	Date	Sta.	Phase	h	m	s	
9	CT	S	05	00	49	11	CC	eP	03	50	33	
		eScS		02	22		LS	eP		51	08	
	CU	-iP	04	52	42	12	*Epc: 22°S, 173°E O: 17-03-10, M: 5½ -6					
		PP		54	57		ZS	+P	17	14	39	
	KM	-iP		53	12		CT	+P			44	
	ePP		55	31	NK	+iP			51			
	eS	05	01	53	WH	+iP		15	03			
	-iP	04	53	43	CC	+iP			16			
	S	05	02	47	PK	+iP			30			
9	Epc: 4°½S, 154°½E O: 21-13-22 h: 60km ca., *M: 6½					12	Epc: 7°½N, 126°E O: 17-56-40					
	ZS	eP	21	21	51		SA	P		15	35	
		sP		22	11		KM	+iP			37	
		PP		23	49		CU	+iP			45	
	NK	eP		22	10			eS		25	59	
		sP			28		LC	+iP		15	59	
		S		29	10			eSKS		26	16	
		eP		22	23			S			29	
		sP			42		14	Epc: 7°½S, 122°E O: 04-36-15, M: 5				
	WH	eP		22	23			CT	+P	18	01	25
	sP			42	ZS	eP			02	11		
CC	eP			45		S			06	20		
	sP		23	06		SS			07	10		
PK	eP		22	58	WH	eP			02	18		
	esP		23	17	NK	eP				19		
SA	+iP			05	KM	eP				46		
	sP			25	SA	+iP			03	07		
	S		30	54	CU	+P				07		
KM	eP		23	10	PK	eP			29			
	sP			29	LC	+iP			42			
	S		31	02		eS		08	06			
PT	+P		23	26	CC	eP		03	50			
	sP			46	ZS	eP		04	20			
LC	+P			33								
	sP			58								
	S		31	54								
LS	eP		24	25								
	sP			44								
	S		33	22								
11	Epc: 8°½N, 127°E O: 03-43-32, M: 4¾					14	Epc: 7°½S, 122°E O: 04-36-15, M: 5					
	CT	e(P)	03	48	03		CT	e(P)	04	42	40	
	ZS	+iP			39		KM	-iP		43	32	
		S		52	44			PP		45	03	
	WH	eP		48	53			S		49	22	
NK	+iP			54	WH	+P		43	41			
	iS		53	16		eS		49	39			
PK	eP		50	09	NK	+iP		43	50			
						eS		49	53			

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Date	Sta.	Phase	h	m	s	Date	Sta.	Phase	h	m	s	
14	CU	P	04	44	05	14	PK	eS	22	34	20	
		S		50	20		ZS	P		30	43	
	SA	F		44	19			S		34	46	
		S		50	47		CC	P		31	44	
	LC	-P		44	45							
		PP		46	36							
		eS		51	35	15	*Epc: 44° 5N, 84° 0E					
	LS	-iP		44	52		O: 04-02-33, M: 5 -5 1/4					
		S		51	45		YM	e(P)	04	05	01	
	PK	+P		44	53		WW	e(P)		06	12	
		eS		51	47		LS	+iP			13	
	CC	P		45	26			eS		09	19	
							LC	P		06	32	
								S		09	53	
14	Epc: 28°N, 96°E						YC	eP	06	40		
	O: 22-10-43, M: 4 3/4 -5						PT	iP		58		
	LS	+P	22	12	07		CU	+iP	07	13		
		S		13	12			eS	11	16		
	KM	+iP		12	18		SA	+iP	07	21		
		S		13	27		PK	eP		46		
	CU	eS		14	00			eS	12	13		
	LC	+P		13	17		KM	eP	07	48		
	SA	eS		16	19		WH	eS	12	16		
	WH	eP		14	29			eP	08	20		
	CT	eS		19	20							
	PT	eP		14	44							
	NK	eP		15	14		15	*Epc: 59° 1/2 S, 26° W				
	PK	P		24			O: 04-42-35, M: 6 3/4					
14	Epc: 28° 1/2 N, 96° E						LS	PP	05	03	59	
	O: 22-25-44, M: 5 1/2						KM	PP		04	07	
	LS	+iP	22	27	13		PKS		05	09		
	KM	+iP			24		CT	ePKP	01	55		
		S		28	39		PP		04	31		
	CU	P		27	40		CU	ePKP	01	58		
		S		29	08		PP		04	51		
	SN	eP		28	19		LC	PKP	02	01		
	LC	+P			23		PKS		05	41		
		S		30	19		SA	PKP	02	04		
	WW	eP		28	40		WH	PKP		05		
	SA	P			50		NK	PKP		07		
	WH	P		29	34		PP		05	21		
		eS		32	28		ZS	PKP	02	08		
	CT	iP		29	37		PP		05	27		
	PT	P			49		PK	PKP	02	16		
	TU	P		30	14		PT	iPKP		18		
	NK	+iP			21		CC	PKP		27		
		eS		34	05		16	*Epc: 1° S, 81° 1/2 W				
	PK	+P		30	30		O: 00-39-32, M: 6					

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Date	Sta.	Phase	h m s	Date	Sta.	Phase	h m s
16	NK	PKP	00 59 10	17	CC	P	12 53 22
	LC	+PKP	13		NK	e(P)	38
		ePP	01 02 29		PK	eP	54 08
	SA	PKP	00 59 15	18	*Epc: 24°S, 179°W		
		ePP	01 02 34		O: 01-57-21		
	CU	ePKP	00 59 24		h: 500km ca., M: 5½		
		PP	01 03 00		NK	-P	02 08 50
	LS	PKP	00 59 27		WH	-iP	09 02
	CT	ePKP	31		CC	-iP	06
	KM	PKP	33		SA	-P	31
		PP	01 03 34		KM	-iP	33
					LC	-P	51
16	*Epc: 25°S, 180° Long.			18	*Epc: 42°N, 142°E		
	O: 07-54-23, h:500km ca.				O: 12-05-22		
	NK	eP	08 05 57		CC	eP	12 08 37
	WH	-iP	06 07		PK	eP	10 02
	CC	-P	14		LS	eP	13 35
	KM	-P	39	18	*Epc: 14°N, 144°E		
	CU	-iP	46		O: 17-29-07, h:250km ca.		
	LC	eP	57		PK	eP	17 36 03
					SA	+P	26
17	Epc: 51°N, 171°W				LC	+P	37 03
	O: 12-03-04, M: 5½			21	Epc: 14°N, 121°E		
	CC	eP	12 11 00		O: 08-27-17, M: 4½-5		
		eS	17 17		ZS	+iP	08 31 22
	PK	eP	12 01		WH	+iP	26
		eS	19 07			S	34 47
	ZS	eP	12 22		NK	+iP	31 35
		eS	19 51		KM	+P	58
	PT	eP	12 27			iS	35 41
	NK	eP	30		CU	+iP	32 21
		S	20 05			iS	36 24
	WH	P	12 55		SA	+iP	32 24
		S	20 51		PK	P	55
	SA	-P	13 02		LC	+P	59
		S	21 05		PT	iP	33 12
	WW	iP	13 12		LS	P	45
	LC	-P	14			iS	38 44
		iS	21 26				
	CT	eP	13 37				
		eS	22 11				
	KM	P	14 09				
		S	23 09				
	LS	P	14 34				
		S	23 59				
17	*Epc: 31°N, 141°E			22	Epc: 29°N, 91°E		
	O: 12-49-18, h:60km ca.				O: 03-30-42, M: 5		

Date	Sta.	Phase	h	m	s	Date	Sta.	Phase	h	m	s
22	LS	+iP	03	31	02	22	LC	+iP	18	20	20
	KM	eP		33	15			iS			33
	LC	eP			37		WW	eP			23
	SA	eP		34	20			iS			39
	PT	eP		35	06		SN	eP			34
	WH	eP			14			iS			57
		eS		38	49		YC	eP			47
	CT	eP		35	20			iS		21	19
		eS		39	02		TS	eP			57
	TU	P		35	22			iS		21	36
	PK	eP			47		SA	eP			37
	NK	eS		40	03			iS		22	41
	ZS	eS			47		PT	eP			51
	CC	eP		36	58			iS		23	07
							YM	iS			23
							PK	e			08

22 Epc: $5^{\circ}\frac{1}{2}S$, $131^{\circ}E$
 O: 10-26-24
 h: 150km ca., *M: $5\frac{1}{4}-5\frac{1}{2}$

23 *Epc: $5^{\circ}\frac{1}{3}S$, $150^{\circ}E$
 O: 01-58-38, M: $6\frac{1}{4}-6\frac{1}{2}$

ZS	eP	10	33	33
	epP		34	03
WH	+iP		33	41
	pP		34	09
	sP			34
	S		39	31
NK	+iP		33	41
	sP		34	36
	S		39	33
KM	+iP		33	57
	esP		34	50
	S		39	58
CU	+iP		34	21
	iS		40	44
SA	+iP		34	27
	ipP			57
	eS		40	52
PK	+iP		34	47
	sP		35	59
	S		41	30
LC	+iP		34	58
	iS		41	48
CC	+P		35	03
	esP			54
	S		42	00
PT	+P		35	06
LS	P			21
	iS		42	33

ZS	+iP	02	07	05
	S		13	54
WH	P		07	33
CC	+iP		08	08
	eS		15	52
KM	eS		16	14
PK	eP		06	14
PT	eP			42

23 *Epc: $52^{\circ}\frac{1}{2}N$, $159^{\circ}E$
 O: 10-31-14, h: 100km ca.

CC	-iP	10	36	20
	S		40	22
PK	eP		37	29
PT	eP			59
LC	P		38	55

23 *Epc: $50^{\circ}N$, $157^{\circ}E$
 O: 16-04-48, M: $5\frac{1}{2}-5\frac{3}{4}$

CC	eP	16	09	48
	ePP		10	44
	S		13	57
PK	e(P)		10	41
ZS	+P		11	25
WH	eP		12	04
LC	+P			31
	eS		18	43

22 Epc: $37^{\circ}N$, $103^{\circ}\frac{1}{2}E$
 O: 18-19-58, M: $4-4\frac{1}{2}$

Date	Sta.	Phase	h m s	Date	Sta.	Phase	h m s
23	✓ KM	+iP	16 13 35	25	✓ KM	eP	10 14 53
	✓ LS	+P	14 09		✓ PT	eP	53
					✓ CU	eP	57
23	*Epc: 28° $\frac{1}{2}$ S,	177°W			S		25 11
	O: 22-20-58				✓ LC	eP	15 07
	✓ CC	eP	22 33 58	25	*Epc: 28° $\frac{1}{2}$ N,	139°E	
	✓ PK	eP	34 11		O: 11-19-07,		
					h: 550km ca.,	*M: 6.1	
24	*Epc: 44° $\frac{1}{2}$ N,	149°E			✓ ZS	eP	11 22 22
	O: 00-48-03				S		25 01
	✓ CC	eP	00 52 14		✓ DR	eP	22 46
	✓ PT	eP	54 17		✓ CC	+iP	55
	✓ LC	eP	55 06		✓ WH	eP	23 15
						iS	28 37
24	Epc: 33° $\frac{1}{4}$ N,	104° $\frac{1}{4}$ E			✓ PK	+P	23 23
	O: 11-39-24,	M: 3 $\frac{1}{2}$			S		26 47
	✓ TS	eP	11 39 56		✓ TU	eP	23 42
	S		40 18		✓ PT	+P	24 06
	✓ LC	Pn	14		S		28 02
	F		23		✓ CU	P	24 37
	iSn		49			iS	28 57
	S		41 01		✓ LC	+iP	24 38
	SA	(Sn)	17			iS	29 00
					✓ KM	eP	24 54
						iS	29 30
24	*Epc: 11°N,	122° $\frac{1}{2}$ E		25	*Epc: 2°S,	129°E	
	O: 12-45-41				O: 20-08-09		
	h: 100km ca.,	M: 5 $\frac{1}{2}$			h: 200km ca.,	M: 5 $\frac{3}{4}$	
	✓ ZS	iP	12 50 14		✓ ZS	+P	20 14 35
	S		53 59		✓ WH	+iP	47
	✓ WH	eP	50 20		✓ NK	+iP	49
	eS		54 15		eS		20 18
	✓ KM	+iP	50 47		✓ KM	+iP	15 04
	S		55 04			iS	20 46
	✓ PK	eP	51 43		✓ CU	+iP	15 30
	eS		56 42		S		21 29
	✓ LC	eP	51 49		✓ PK	+iP	15 57
	✓ CC	eP	52 13		✓ LC	+iP	16 06
						ePP	17 50
					S		22 36
25	*Epc: 19°S,	177°W			✓ PT	P	16 14
	O: 10-02-43,	h: 500km ca.			✓ CC	+P	15
	✓ CC	-iP	10 14 15			iPP	18 03
	S		23 47		✓ LS	+iP	18 34
	✓ PK	eP	14 33			iS	23 26

Date	Sta.	Phase	h m s	Date	Sta.	Phase	h m s
26 Epc: 25°N, 125°E O: 01-42-35	ZS	P	01 44 21	27	CC	+iP	21 00 28
	NK	P	46			iS	03 39
	WH	eS	46 24		SA	P	00 49
	WH	+P	45 10		SW	P	58
	PK	eS	47 09		PT	+iP	01 09
	PK	-iP	46 30			iS	04 59
	KM	eS	49 35		TS	eP	01 18
	PT	eP	47 09		LC	+iP	35
	PT	+P	28			iS	05 42
	LC	+P	44		KM	+iP	01 42
27 *Epc: 22° $\frac{1}{2}$ S, 175°W O: 15-20-27, M: 5 $\frac{1}{2}$	WH	+P	15 33 11	WW	S	05 52	
	CC	+iP	13	WW	eP	01 52	
	PK	eP	31	SN	eP	52	
	KM	eP	47	LS	+iP	03 10	
					eS	08 25	
27 *Epc: 7°S, 126°E O: 18-47-05, h: 600km ca.	ZS	-iP	18 53 38	28 *Epc: 53°N, 168° $\frac{1}{2}$ W O: 01-32-22, M: 5 $\frac{1}{2}$	CC	+P	01 40 30
	WH	-iP	43		PK	eP	41 31
	KM	eS	59 02		ZS	+P	54
	KM	-P	53 46		PT	P	54
	NK	iS	59 05		WW	+P	42 24
	NK	-iP	53 50		LC	eP	40
	LC	eS	59 12		KM	+P	43 37
	LC	-iP	54 52				
	LS	iS	19 01 05				
	LS	-iP	18 55 07				
CC	iS	19 01 32					
CC	-P	18 55 13					
27 Epc: 27°N, 128° $\frac{1}{2}$ E O: 20-56-28, M: 5 $\frac{1}{4}$	ZS	-iP	20 58 25	1 Epc: 74° $\frac{1}{2}$ N, 3°E O: 00-31-14, M: 5 $\frac{1}{4}$ -5 $\frac{1}{2}$	CC	eP	00 40 51
	NK	iS	59 49		PT	eP	52
	NK	-iP	58 57		PK	eP	41 04
	FL	iS	21 00 53		LC	eP	09
	FL	eP	20 59 22			ePP	43 19
	WH	iP	37			eS	49 07
	WH	S	21 02 04		SA	eP	41 30
	DR	eP	20 59 42		LS	eP	32
	CT	-iP	21 00 02			S	49 47
	PK	eS	02 51		CU	P	41 43
PK	+P	00 26		S	50 12		
	S	03 36	KM	eP	42 17		
			ZS	S	51 15		
				P	42 39		

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Date	Sta.	Phase	h m s	Date	Sta.	Phase	h m s
1	Epc: 1°S, 135°E			1	LC	1	17 03 26
	O: 16-49-08					IS	04 24
	h: 100km ca., M: 6 $\frac{3}{4}$ -7				PT	+iP	16 57 39
	CT	+P	16 55 30			1	17 04 13
		sP	55			IS	34
		(PP)	56 35		YC	eP	16 57 46
		PPP	55		SN	eP	50
		S	17 00 35		SW	eP	50
	ZS	+P	16 55 54		WW	eP	54
		sP	56 23		LS	+iP	58 14
		PP	57 17			sP	44
		PcP	58 24			PcP	59 24
		iS	17 01 19			iS	17 05 30
	NK	+iP	16 56 10			ScS	07 50
		sP	36			SS	09 05
		iPP	57 37		YM	eP	16 58 33
		PPP	58 02				
		iS	17 01 48	2	*Epc: 7° $\frac{1}{2}$ S, 127° $\frac{1}{2}$ E		
	WH	+P	16 56 14		O: 09-13-37, M: 6		
		sP	42		CT	e(P)	09 20 38
		PP	57 42			i(S)	26 14
		S	17 01 56		ZS	e(P)	21 23
	FL	eP	16 56 15			eP	34
	KM	+iP	44		KM	eP	27 44
		sP	57 11			eS	22 01
		PP	58 24		CU	eP	23 51
		PcP	40			PP	28 35
		iS	17 02 48			S	48
		i	06 42			PPS	31 50
	DR	P	16 57 00			ScS	22 34
	SA	+iP	03		PK	e(P)	37
		iS	17 03 30		LC	eP	29 42
	CU	+iP	16 57 05			eS	22 53
		sP	34		LS	P	30 10
		PP	58 54			eS	
		iS	17 03 27				
		iScS	06 52	2	Epc: 36°N, 70° $\frac{1}{2}$ E		
	PK	+P	16 57 16		O: 15-51-43		
		isP	43		h: 200km ca., M: 6		
		PP	59 01		LS	+iP	15 55 44
		iS	17 03 47			PPP	56 27
		PS	04 17			sP	40
		i	06 57			iS	59 01
	TS	eP	16 57 20			PcP	31
	CC	(P)	24			1	16 00 28
		sP	54			iScS	06 58
		PP	59 14			eP	15 56 11
		iS	17 04 04		YM	eP	48
		PS	19		SN	eP	53
		SS	07 22		WW	eP	57 03
	LC	+iP	16 57 36		LC	+iP	
		i	58 00				

Date	Sta.	Phase	h m s	Date	Sta.	Phase	h m s
2	LC	i	15 58 55	4	LC	eP	01 00 42
		eS	16 01 23	✓	CU	eP	01 07 47
✓	SA	+iP	15 57 12	✓	KM	+P	
✓	CU	+iP	17				
		pP	58 03				
		PP	21	4	Epc: 12° ³ / ₄ N, 93°E		
		sP	24		O: 19-58-02		
		i	59 07	✓	KM	(P)	20 01 53
		PcP	16 00 22				
		iS	01 48	✓	LS	eS	04 57
✓	TS	eP	15 57 20	✓	LS	eP	02 07
✓	KM	+iP	28	✓	CU	S	05 19
		i	58 30	✓	CU	-iP	02 47
		sP	35	✓	LC	S	06 36
		iS	16 02 08	✓	LC	eP	03 33
		sS	03 18	✓	SA	eS	08 10
		SS	04 05	✓	SA	-P	03 38
		ScS	07 42	✓	PT	eP	04 29
✓	PT	+iP	15 57 40	✓	PK	P	51
		e	58 45	✓	CC	eP	05 55
		e	59 29				
		S	16 02 31				
✓	TU	eP	15 58 05	4	*Epc: 37° ⁶ / ₄ N, 138° ⁷ / ₄ E		
✓	PK	+iP	21		O: 23-00-52		
		sP	59 32		h: 200km, M: 5 -5 ³ / ₄		
		PP	48	✓	CC	-iP	23 03 36
		PPP	16 00 24				
		SS	06 27	✓	ZS	eS	05 49
		iScS	08 13	✓	ZS	P	04 23
✓	WH	+iP	15 58 30	✓	NK	iS	07 20
		sP	59 39	✓	NK	P	04 39
		PP	16 00 09	✓	PK	e(P)	44
		iPcP	36	✓	WH	iS	07 52
		i	01 05	✓	WH	e(P)	05 22
		eS	04 00	✓	CT	S	09 01
		ScP	11	✓	CT	e(P)	06 11
		sS	05 27				
		i	07 06				
✓	CT	+iP	15 58 49	5	*Epc: 44° ¹ / ₂ N, 147°E		
		sP	59 57		O: 14-09-47		
		i	16 04 34		h: 100km ca., M: 5.2		
✓	NK	+iP	15 58 55	✓	CC	+P	14 13 22
✓	CC	esP	16 00 03				
✓	CC	iP	15 59 12	✓	PK	P	39
✓	ZS	sP	16 00 22	✓	PK	eS	16 10
		+iP	15 59 13	✓	PK	iP	14 48
		sP	16 00 22	✓	NK	iS	18 53
		eS	05 18	✓	NK	eS	19 26
		sS	06 39	✓	PT	+P	15 28
				✓	SA	eP	16 06
				✓	LC	+P	24
				✓	LC	S	21 37
				✓	CU	iS	22 16
4		*Epc: 51° ¹ / ₂ N, 159° ¹ / ₂ E					
		O: 00-52-49, M: 5 ¹ / ₄					

Date	Sta.	Phase	h	m	s	Date	Sta.	Phase	h	m	s
5	KM	iS	14	23	20	10	PK	-iP	07	03	43
								S		05	54
						X	PT	-P		04	29
							SA	-P			33
							LC	eP		05	10
5	*Epc: 2°N, 97°E O: 22-55-39, h: 100km. ca.					11	Epc: 28°N, 104°E O: 02-59-54, M: 4 $\frac{3}{4}$				
✓	KM	+P	23	00	43	✓	KM	eP _n	03	00	50
✓		eS		04	57			iP			59
✓	LS	P		01	27			iS _n		01	21
✓		eS		06	17			iS			31
✓	SA	eP		02	14	✓	SA	+P _n			47
✓	LC	eP			19			P		02	18
✓	PT	eP		03	09			S _n		03	09
✓	PK	P			19	✓	LC	eP _n		01	52
✓	CC	eP			46			P		02	26
								S _n		03	15
9	Epc: 13°N, 125°E O: 10-18-06, *M: 5 $\frac{1}{4}$ -5 $\frac{1}{2}$					✓		S		04	00
	ZS	P	10	22	22	✓	WH	e(P)		02	15
		eS		25	43			S		03	54
X	WH	iP		22	41	✓	CT	e(P)		02	19
		eS		26	19	✓	PT	P		05	07
	NK	e(P)		22	42	✓		S		05	30
		S		26	22	✓	PK	eP		03	37
	KM	iP		23	24						
	SA	eP			38	12	Epc: 7 $\frac{1}{2}$ °N, 146°E O: 01-29-08, M: 5 $\frac{1}{2}$				
	CU	eP			43	✓	ZS	+iP	01	35	41
	PK	eP			58			PP		36	52
		eS		28	39			(S)		40	51
	LC	eP		24	21	✓		SS		42	43
	LS	P		25	05	✓	CT	F		35	57
		eS		30	38			S		41	26
						✓	WH	+iP		36	17
9	Epc: 41°N, 142 $\frac{1}{2}$ °E O: 18-44-21, *M: 5.-					✓		S		42	00
✓	CC	eP	18	47	31	✓	CC	+P		36	49
		eS		50	55			PP		38	20
✓	PK	e(P)		43	54	✓		S		42	55
✓	ZS	eP			54	✓	PK	+iP		36	58
✓	NK	eP		49	06			ePP		38	36
✓	PT	eP			40			PcP			56
✓	WH	eP			45			iS		43	15
✓	SA	P		50	09	✓	SA	+iP		37	08
✓	LC	eP			39	✓	TU	eP			11
✓	CU	eP			53	✓	PT	+iP			30
✓	KM	eP		51	29			PP		39	16
10	Epc: Japan. O: 06-59-40					✓	LC	iP		37	45
X								PP		39	33
								PcS		43	21

Date	Sta.	Phase	h	m	s	Date	Sta.	Phase	h	m	s
12	LC	S	01	44	22	17	NK	PKP	13	18	34
14	*Epc: 45°N, 151° ¹ / ₂ E O: 02-55-24					17	ZS	+PKP			35
	CC	eP	02	59	46		PK	+PKP			48
	PK	P	03	01	08	17	*Epc: 4°N, 96°E O: 19-01.7				
	PT	P			47		KM	+iP	19	06	56
	LC	eP	02	27			WH	eP		08	20
		eS	07	08			SA	+P			28
16	*Epc: 45° ¹ / ₂ N, 151°E O: 08-02-10						LC	+P			32
	CC	P	08	06	33		PT	+iP	09	22	
	PK	(P)			52		PK	+iP			36
	PT	eP	08	27		18	Epc: 26° ¹ / ₂ N, 130°E O: 00-41-16, M: 5 ³ / ₄				
	LC	+iP	09	23			ZS	e(P)	00	43	28
17	Epc: 27°N, 130°E O: 08-25-z7, M: 5 ³ / ₄						NK	e(P)			49
	ZS	+iP	08	27	26		WH	eP		44	37
	NK	iP			57			PP			48
		(S)			56		CT	e(P)		45	06
	WH	+iP	28	36			CC	eP			23
	CT	eP			57			PP			41
	PK	+iP	29	22			S			48	37
		iPP			35		SS			49	13
		(S)			25		PK	+iP		45	26
		iSS			41		SA	+P		45	48
	CC	+P	29	23				S		49	24
		PP			35		PT	+P		46	08
		S			27			S		50	03
	TU	eP	29	46			TS	eP		46	16
	SA	+iP			47		CU	eP			23
		S			18			ePP			53
	SW	e(P)	29	57			LC	+P		50	23
	PT	+iP	30	07				S		46	35
	TS	eP			16		SA	+P		50	51
	LC	+iP			33		PK	+iP		46	41
		S			43			iS		51	00
	KM	+iP	30	41			WW	eP		46	50
		iS			54	18	Epc: 36° ¹ / ₂ N, 141°E O: 07-26-47, *M: 6				
		iSS			40		CC	eP	07	30	04
	WW	eP	30	50			ZS	eP			44
		eS			12		NK	eP		31	03
17	*Epc: 57°S, 25°W O: 12-58-57						PK	P			09
							WH	eP			42

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Date	Sta.	Phase	h m s	Date	Sta.	Phase	h m s
18	WH	(S)	07 35 37	20	CT	e(P)	15 50 31
	PT	e(P)	31 57			e(S)	55 25
		eS	36 17		LC	+P	50 49
	SA	P	32 14			eS	55 59
	LC	P	48		CU	e(P)	51 02
		eS	37 38			e(S)	56 11
	CU	eP	32 59		KM	eP	51 34
		eS	37 54				
	KM	P	33 28				
		S	38 48				

20 *Epc: 10°S, 117°E
O: 23-53-24, M: 5½

19 *Epc: 6°½S, 125°½E
O: 01-58-43

X	WH	-P	02 06 25
	NK	-iP	29
	CU	eP	07 02
	SA	-iP	09
	PK	-P	33
	LC	-iP	38
	LC	-iP	38
		iS	14 05
	PT	eP	07 50
	CC	P	52

	KM	eP	24 00 46
	WH	P	01 09
	ZS	+P	12
	SA	eP	41
	LC	eP	02 05
	PK	+P	20

21 *Epc: 19°S, 178°W
O: 04-27-21
h: 550km, M: 5½

19 *Epc: 27°N, 130°E
O: 07-24-11

X	PK	eP	07 28 18
	SA	eP	41
	PT	eP	29 09
	LC	eP	27
		eS	33 40

	ZS	eP	04 38 18
		S	47 18
	NK	-iP	38 31
		eS	47 46
	CT	-iP	38 33
		eS	47 51
	CC	-iP	38 42
		iS	48 10
	WH	-iP	38 43
	PK	-iP	39 00
		S	48 41
	SA	-iP	39 14
		S	49 12
	KM	-iP	39 21
	CU	-iP	27
		iS	50 33
	LC	-P	39 34
		S	49 52

20 Epc: 37°N, 143°½E
O: 15-44-23, M: 4¾-5

	CC	eP	15 48 00
		e(S)	50 40
	ZS	eP	48 53
	NK	eP	49 08
		eS	52 59
	PK	P	49 13
		S	53 04
	WH	+iP	49 49
		eS	54 11
	PT	eP	50 03
		eS	54 36
	SA	+iP	50 19
		eS	55 03

21 *Epc: 20°S, 177°½W
O: 19-46-00

	NK	eP	19 58 06
		eS	20 07 21
	CT	eS	08 18
	WH	eP	19 58 18
	CC	-P	21
	PK	(P)	37

Date	Sta.	Phase	h	m	s	Date	Sta.	Phase	h	m	s	
28	ZS	S	20	07	11	29	Epc: 45° ¹ / ₂ N, 137° ¹ / ₂ E					
	CT	-iP	19	58	20		O: 19-09-32					
		epP	20	00	23		h: 300km ea., M: 4 ¹ / ₄					
		esP	01	22			✓ CC	-iP	19	11	40	
		ePP	07	36			✓ IS	iS	13	20		
		S	11	16			✓ PK	oP	07			
		isS	19	58	20		✓ PT	iS	16	02		
	NK	-iP	20	00	26		✓ NK	eP	13	50		
		pP	01	24			✓ LC	eS	16	59		
		sP	07	38			✓ CU	eP	14	49		
		ePP	13	03		✓ KM	S	18	59			
		iS	19	58	31		eS	19	42			
		SS	20	00	42		iS	20	57			
	CC	(P)	01	37			eSS	23	38			
		pP	08	00		30	Epc: 26°N, 100° ¹ / ₂ E					
		sP	10	03			O: 12-41-05, M: 4 ³ / ₄					
		PP	11	47			✓ KM	+iPn	12	41	43	
		eS	19	58	31			+iF	48			
	✓ WH	-iP	20	01	01			iS	42	11		
	✓ PK	-iP	02	26			✗ CU	+iPn	31			
	ipP	08	17				iF	48				
	sP	12	37				iSn	43	33			
	ePT	12	21				iS	55				
	SKS	19	59	01			SA	e(P)	41			
	S	20	01	10		LC	eP	44				
	isS	02	09			eS	45	43				
SA	iP	08	30			CT	e(P)	43	56			
	pP	09	03			eS	46	02				
	sP	12	56			WH	e(P)	44	09			
	eSKS	19	59	10		PT	eS	48	28			
	S	20	01	20		TU	eP	45	00			
	isS	02	17			PK	e(S)	49	02			
PT	-iP	08	46			ZS	eS	04				
	ipP	09	21		31	*Epc: 15°S, 175°W						
	isP	13	12			O: 07-20-45, M: 6						
	iSKS	19	59	11		✓ ZS	+P	07	32	48		
	iS	20	01	23			PP	38	50			
	sS	02	20			✓ NK	eS	42	55			
	iSKS	08	46				+P	33	01			
	iS	09	21				S	43	21			
	sS	13	12				PS	44	12			
LC	-iP	19	59	22			CC	+iP	33	06		
	epP	20	01	33			iS	43	30			
	esP	02	31									
	SKS	08	59									
	iS	09	45									

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Date	Sta.	Phase	h	m	s	Date	Sta.	Phase	h	m	s
31	CT	eP	07	33	09	1	NK	eP	14	59	28
		eS		43	34		WH	-P			38
	WH	+P		33	14		CC	P			52
		eSKS		43	37		PK	-P	15	00	07
		S			47		KM	-iP			17
	PK	+iP		33	28		CU	eP			24
		eSKS		43	56						
		iS		44	08						
		ePS		45	15						
	PT	+iP		33	50	1	*Epc: 17°S, 173°W				
	CU	(P)			57		O: 19-15-38				
		iSKS		44	39		CC	eP	19	28	07
		S		45	05		PK	eP			28
	KM	P		33	57			eS			39 08
	LC	eP		34	05		KM	eP			28 56
								eSKS			39 29
								eS			40 02

31 *Epc: 34°N, 132°E
O: 15-57-36

X	CC	eP	16	00	06
		iS		01	56
	ZS	P		00	40
	PK	-P			59
		S		03	37
	PT	eP		01	49
	SA	eP		02	05
	LC	+P			38

1 *Epc: 17°S, 168°E
O: 22-47-54, h: 100km ca.

X	CC	eP	22	59	18
	PK	P			33
	CU	eP			50
		eS	23	09	44

1 Epc: 6°S, 154°E
O: 23-33-44
h: 100km ca., *M: 5 1/4 - 5 1/2

1 *Epc: 27°N, 21°W
O: 00-34-18, M: 6 1/4

✓	PK	e	00	52	18
✓	CC	e			19
✓	KM	e			44
✓	WH	iPKP	53	14	
✓	NK	e(PKP)			21

1 *Epc: 47°S, 98°E
O: 14-11-35, M: 5

X	KM	eP	14	23	03
		eS		32	28
	PK	eP		24	30
		S		35	19

1 *Epc: 18°S, 169°E
O: 14-48-34
h: 200km ca., M: 5 - 5 1/4

✓	CT	eP	23	42	34
		epP			49
		eS			49 40
✓	NK	+iP			42 46
		pP			43 00
		esP			14
		eS			49 55
✓	WH	+P			42 56
		pP			43 13
		eS			50 18
✓	CC	eP			43 20
✓	PK	eP			32
		eS			51 27
✓	KM	+iP			43 43
		pP			59
		eS			51 49
✓	CU	+P			43 51
		epP			44 07
		esP			21
		eS			52 02
✓	LC	+P			44 11
		epP			28

Date	Sta.	Phase	h m s	Date	Sta.	Phase	h m s	
5	* Epc: 8° $\frac{1}{2}$ S, 113°E 0: 02-54.6			5	* Epc: 15° $\frac{1}{2}$ S, 167° $\frac{1}{2}$ E 0: 21-05-54 h: 150km ca., M: 5 $\frac{1}{4}$			
	LC	eP	03 02 00	✓	CC	P	21 16 59	
	CU	eP	16	✓	PK	eP	17 16	
	SA	P	40			eS	26 36	
5	Epc: 21° $\frac{1}{2}$ N, 121°E 0: 10-33-14, M: 3 $\frac{1}{2}$			✓	SA	+P	17 24	
	CT	eP	10 35 00	✓	KM	eP	28	
		eS	36 21	✓		epP	18 01	
	SA	eP	37 09	✓	iS	26 58		
	CU	eP	23	✓	CU	eP	17 35	
		eS	40 39			epP	18 12	
	PK	P	37 36	✓	iS	27 11		
	LC	eP	58	✓	PT	P	17 41	
				✓	LC	+P	48	
5	* Epc: 44°N, 7°E- 0: 10-47-52			5	Epc: 5°S, 147°E 0: 23-29-29, M: 5 $\frac{1}{2}$			
✓	✓	LC	eP	10 59 09	✓	CT	eP	23 37 31
✓		PK	eP	34			i	43
						eS	43 55	
						i	44 16	
				✓	ZS	+P	37 35	
						i	46	
						S	44 03	
						i	23	
				✓	NK	+P	37 51	
						i	38 01	
						iS	44 32	
						i	54	
				✓	KM	P	38 41	
						S	46 06	
				✓		i	27	
				✓	CC	+iP	38 41	
						i	53	
						eS	46 07	
				✓	PK	P	38 46	
						i	58	
						iS	46 15	
						i	35	
				✓	CU	eP	38 54	
						i	39 07	
						iS	46 30	
						i	51	
				✓	SA	P	38 46	
						i	56	
						iS	46 16	
				✓	PT	+P	39 13	
5	* Epc: 46°N, 151°E 0: 19-59-58							
✓	✓	PK	eP	20 05 34				
✓		PT	eP	06 09				
✓		SA	eP	44				
✓		LC	+iP	07 03				
✓		CU	eP	29				

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Date	Sta.	Phase	h	m	s	Date	Sta.	Phase	h	m	s	
5	PT	i	23	39	24	6	Epc: 13°N, 146° $\frac{1}{2}$ E					
		S		47	06		O: 23-58-52					
		i			26							
	LC	+iP	39	18				PK	P	00	06	13
		i			29			SA	-P			32
		S	47	14				PT	-P			48
		i			34			CU	eP			55
								KM	eP			58
								LC	-iP	07	10	
									eS	13	43	
6	Epc: 10°S, 121°E											
	O: 14-12-40, M: 6											
	CT	iP	14	19	22	8	*Epc: 32° $\frac{1}{2}$ S, 179° $\frac{1}{2}$ E					
		iPPP		20	54		O: 01-23-26					
		eS		24	42		h: 400km ca., M: 6-6 $\frac{1}{4}$					
	KM	+iP		20	09			ZS	+iP	01	35	17
		PP		21	44				eSKS		45	00
		iS		26	09			CT	+iP		35	18
	ZS	P		20	22				eS		45	13
		PP		22	02				esS		48	00
		PcP			16			NK	+iP		35	28
		PPP			34				eSKS		45	14
		S		26	31				eS			29
	NK	+iP		20	31			CC	+iP		35	48
		i		21	06				epP		37	24
		PP		22	17				iS		46	11
		S		26	50				sS		49	01
		SS		29	49			KM	eP		36	00
	CU	+iP		20	43				epP		37	36
		PP		22	28				PP		39	50
		iPcS		26	23				iS		46	33
		iS		27	09				sS		49	27
	SA	+iP		20	59			PK	+P		35	59
		iPcS		26	33				pP		37	35
		iS		27	35				PP		39	51
	TS	eP		21	09				SKS		45	52
	LC	+iP			25				iS		46	33
		PcP			51				esS		49	23
		iPcS		26	45				+iP		36	04
		iS		28	20			SA				
		iScS		31	15			CU	+P			10
	SN	eP		21	34				pP		37	45
	PK	+iP			35				ePP		40	09
		S		28	43				eSKS		46	04
	YC	eP		21	36				S			50
		eS		28	45				+P		36	25
	WW	eP		21	42				i		46	22
		eS		28	52				eSKKS			53
	PT	+iP		21	44				S		47	20
		S		28	54							
	CC	+iP		22	01							
		PP		24	04							
		eS		29	34							
								8	*Epc: 17°S, 174° $\frac{1}{2}$ W			
									O: 08-01-36, h: 100km ca.			

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Date	Sta.	Phase	h m s	Date	Sta.	Phase	h m s
8	NK	+iP	08 13 45	9	PK	-P	04 55 19
	CT	+iP	49		eS		05 04 36
	CC	+iP	51		eP		04 55 30
	PK	+iP	14 11		KM	eP	34
		eS	24 39			epP	54
	SA	+iP	14 27			eS	05 05 01
	PT	+iP	34			ssS	42
	KM	+iP	38		CU	eP	04 53 39
	CU	+iP	40			epP	56 00
		eS	25 36			S	05 05 14
	LC	+iP	14 48			ssS	42
					PT	eP	04 55 45
					LC	P	55

8 * Epc: $50^{\circ}\frac{1}{2}S$, $73^{\circ}W$
 O: 11-44-25, M: $6\frac{1}{4}$

✓	CT	+PKP ₁	12 04 18
		PKP ₂	36
		PP	08 10
✓	KM	iPKP ₁	04 22
		PKP ₂	45
		PP	08 19
✓	ZS	+PKP ₁	04 26
		PKP ₂	05 00
		PP	08 40
✓	CU	+PKP ₁	04 28
		PKP ₂	05 07
		PP	08 49
		SKKS	15 39
✓	SA	+iPKP ₁	04 31
		iPKP ₂	05 23
		iPP	09 07
✓	CC	+PKP ₁	04 32
		PKP ₂	05 45
		PP	09 22
✓	LC	+iPKP ₁	04 34
		iPKP ₂	05 31
		iPP	09 17
		SKKS	16 08
✓	PK	+PKP ₁	04 34
		PKP ₂	05 42
		PP	09 31
✓	PT	+iPKP ₁	04 37
		iPKP ₂	05 51
		iPP	09 37

9 * Epc: $36^{\circ}S$, $77^{\circ}E$
 O: 06-18-34, M: 6

✓	KM	P	06 29 24
		PPP	33 29
		S	38 10
		SS	42 29
✓	CT	eP	39 41
		eS	38 43
✓	CU	-P	29 56
		iS	39 11
✓	LC	-P	30 25
		S	40 09
✓	SA	-P	30 26
		iS	40 11
✓	NK	eP	30 38
		eS	40 31
✓	ZS	-iP	30 40
		eS	40 37
✓	PT	-P	31 00
		S	41 16
✓	PK	P	31 07
		S	41 30
✓	CC	eP	31 42
		PP	35 22
		eS	42 39
		PS	43 50
		SS	48 45

9 * Epc: $14^{\circ}\frac{1}{2}S$, $167^{\circ}\frac{1}{2}E$
 O: 04-43-59
 h: 100km ca., M: 7.3

✓	CC	eP	04 55 03
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9 * Epc: $44^{\circ}\frac{1}{2}N$, $119^{\circ}E$
 O: 12-24-20, h: 60km ca.

PK	eP	12 29 37
	eS	33 52
CU	eP	31 34
KM	eP	52 09

Date	Sta.	Phase	h	m	s	Date	Sta.	Phase	h	m	s
09	Epc: 26°N,		95° $\frac{1}{2}$ E			10	PK	-iP	05	59	24
	O: 17-08-38							pP	06	01	32
	h: 50km ca.,		M: 4 $\frac{3}{4}$					isP		02	34
								iSKS		08	53
								iS		09	16
	✓ KM	+iP	17	10	25		✓ KM	-iP	05	59	32
		esP			44			pP	06	01	41
		S			11 46			sP		02	42
	✓ CU	eP	10	55			✓ SKS		09	04	
		sP			11 14			S			29
		iS			12 38		✓ CU	-iP	05	59	40
	✓ LC	-P	11	40				pP	06	01	47
		isP			11 59			sP		02	50
		eS			14 02			iPP		03	24
	✓ WW	eP	11	53				SKS		09	12
	✓ SA	eP	12	12				S			44
		S			12 04		✓ PT	-iP	05	59	45
	✓ CT	eP	12	36				pP	06	01	53
		sP			12 55			iSKS		09	17
		eS			15 51			iS			58
	✓ PT	eP	13	04			✓ LC	-iP	05	59	52
		S			16 36			pP	06	02	01
	✓ PK	eP	13	39				iSKS		09	27
		sP			13 54			iS		10	13
		eS			17 43						
	✓ ZS	eS	18	06							
10	* Epc: 25°S,		178° $\frac{1}{2}$ E			11	Epc: 1° $\frac{1}{2}$ S,		129°E		
	O: 05-47-34						O: 11-28-54,			M: 5	
	h: 600km ca.,		M: 6.5								
	✓ ZS	-iP	05	58	39		✓ WH	P	11	35	38
		isP			06 01 46		✓ NK	P			41
		iS			07 47			iPcP		38	19
	✓ CT	-iP	05	58	46		✓ KM	+iP		25	57
		pP			06 00 52			PcP		38	24
		sP			01 53			iS		41	37
		iS			07 58		✓ CU	+iP		36	22
	✓ NK	-iP	05	58	52			iPP		37	51
		pP			06 01 04		✓ PK	iS		42	19
		sP			02 00			eP		36	48
		eS			08 11		✓ LC	ePP		38	28
	✓ WH	-iP	05	59	02			S		43	09
		pP			06 01 08		✓ PT	+iP		36	58
		sP			02 10			PcP		38	39
		SKS			08 25			iS		43	26
		S			08 31			eP		37	07
	✓ CC	-iP	05	59	11						
		pP			06 01 16		12	Epc: 24° $\frac{1}{2}$ N,		122°E	
		sP			02 19			O: 10-59-21,		M: 5	
		PP			03 36						
		iS			08 50		✓ ZS	P	11	01	09
		eS			12 40			S		02	30

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Date	Sta.	Phase	h	m	s	Date	Sta.	Phase	h	m	s
13	✓ KM	P	18	34	17	15	✓ LC	iPP	00	22	41
		eS		36	04			S		26	43
	✓ CU	eP		35	07		✓ CT	+iP		21	40
		ePPP			24			i			54
		eS		37	36		✓ WW	eS		26	43
	✓ LC	eP		35	57	✓	✓ CU	eP		21	42
		eS		39	05			+iP			57
	✓ SA	eP		36	17			i		22	11
	✓ WH	eP			42			PP		23	09
		PP		37	04			S		27	14
		eS		40	29		✓ KM	iP		22	32
	✓ PK	eP		37	35			i			46
		eS		42	06			PP		23	59
								iS		28	16

14 *Epc: 57° $\frac{1}{2}$ N, 155°W
O: 07-20-28, h: 60km

✓	CC	+iP	07	29	14
✓	PK	+P	30	08	
✓	PT	+P		28	
✓	ZS	+iP	40		
✓	NK	+iP	43		
✓	SA	+P	31	05	
✓	WH	+iP		06	
✓	LC	+iP		10	
✓	CU	+iP		39	
✓	CT	P		48	

15 *Epc: 51°N, 177°W
O: 17-02-45, *M: 4 $\frac{3}{4}$ -5

✗	PK	eP	17	11	16
✗	ZS	eP		37	
✗	PT	P		44	
✗	SA	eP	12	17	
✗	LC	+P		32	
✗	CU	eP		56	
✗	KM	eP	13	27	

15 *Epc: 54°N, 160° $\frac{1}{2}$ E
O: 19-11-20, M: 5-5 $\frac{1}{4}$

✓	CC	+iP	19	16	44
✓	PT	+P		18	23
✓	SA	eP		19	03
✓	LC	+P		17	

15 Epc: 41°N, 143° $\frac{1}{2}$ E
O: 00-15-22, M: 5 $\frac{1}{2}$

✓	CC	+iP	00	18	32
		i		46	
		S		20	59
✓	ZS	+iP		19	57
		i		20	11
		S		23	38
✓	PK	+iP		19	57
		i		20	10
		PP		19	
✓		eS		23	39
		SS		24	14
✓	NK	P		20	09
		eS		24	01
✓	PT	P		20	46
		S		25	06
✓	WH	eP		20	48
		i		21	03
		eS		25	09
✓	SA	+iP		21	11
✓	LC	+iP		39	

16 *Epc: 23° $\frac{1}{2}$ S, 179°E
O: 07-27-27, h: 550km ca.

✓	ZS	eP	07	38	32
		eS		47	43
✓	NK	P		38	45
✓	WH	eP		56	
✓	CC	P		39	01
		eS		48	41
✓	PK	P		39	16
✓	SA	P		25	
✓	KM	eP		27	
✓	CU	-P		34	
		SKS		49	11
		eS		41	

Date	Sta.	Phase	h	m	s	Date	Sta.	Phase	h	m	s
16	PT	eP	07	39	36	16	WW	eP	16	22	01
16	LC	eP			47			pP			21
16	Epc: 13°N, 143° ¹ / ₂ E O: 16-13-56 h: 100km ca., M: 5 ¹ / ₂					18	Epc: 4° ¹ / ₂ S, 153° ¹ / ₂ E O: 06-17-59 h: 100km ca., M: 5 ¹ / ₂				
16	ZS	-iP	16	19	38	16	ZS	+iP	06	26	26
		ipP			56			eS		33	11
		isP	20	03		16	CT	+iP		26	35
		iPP			26	16	NK	+iP			44
		iS	24	12				epP		27	08
		sS			51			iPP		26	37
16	NK	-iP	19	58		16	WH	+iP		33	43
		ipP	20	14		16	CC	+iP		26	58
		sP			24	16	PK	+iP		27	23
		PP			52	16		+iP			34
		S	24	43		16		eS		35	17
16	CT	-P	20	04		16	SA	+iP		27	40
		pP			23	16	KM	+iP			44
		sP			34	16	CU	+iP			53
		iPP	21	02		16		eS		35	55
		S	24	58		16	PT	+iP		28	04
16	WH	(P)	20	17		16	LC	+iP			14
		pP			38	16	WW	eP			26
		sP			47						
		PP	21	22							
		iS	25	24		19	* Epc: 58°N, 152° ¹ / ₂ W O: 15-03-26, M: 6 ¹ / ₄				
16	CC	-iP	20	43		19	CC	eP	15	12	27
		isP	21	11				iS		19	41
		PP	22	02		19	PK	eP		13	20
		iS	26	05				S		21	20
16	PK	-iP	20	56		19	LC	eP		14	20
		ipP	21	15				S		23	09
		sP			23	19	CU	eP		14	46
		PP	22	23				iS		24	02
		iS	26	30		19	KM	eP		15	18
16	SA	-iP	21	10				S		25	01
16	CU	-iP			31						
		ipP			30						
		isP			58						
		PP	23	06							
		iS	27	31		20	Epc: 6°S, 149° ¹ / ₂ E O: 03-27-51 h: 50km, M: 5 ¹ / ₂				
16	KM	-iP	21	30		20	CT	eP	03	36	02
		ipP			49			esP			28
		sP			55			S		42	37
		S	27	32		20	ZS	+iP		36	09
16	PT	-iP	21	30				pP			23
		ipP			50			sP			33
16	LC	-iP			49			S		42	45
		pP	22	08							
		PP	23	28							

Date	Sta.	Phase	h	m	s	Date	Sta.	Phase	h	m	s
20	NK	+iP	03	36	25	22	CC	+P	11	03	16
		pP			37		PK	e(P)		04	15
		sP			45		PT	eP			39
		PP	38	16			ZS	+P			40
		S	43	18			NK	(P)			44
	WH	+P	36	36			SA	+P	05		14
		esP			55		LC	+P			24
	CC	+iP	37	14			CU	P			50
		sP			33		CT	+iP			53
	PK	+P			19		KM	+iP	06		22
		pP			33						
		sP			40						
		PP	39	17		22	Epc: 40°N, 104° $\frac{3}{4}$ E				
		S	44	54			O: 18-58-35, M: 5 $\frac{1}{4}$				
	KM	+P	37	17			WW	\bar{P}	18	59	20
		esP			41			i \bar{S}			50
		eS	44	55			YC	e \bar{P}			23
		PS	45	18				\bar{S}			55
	SA	+P	37	20			SN	\bar{P}			48
	CU	+P			30			i \bar{S}	19	00	37
		sP			53			eP _n	18	59	51
		S	45	15			PT	i \bar{P}	19	00	06
	PT	+P	37	46				i \bar{S}			01 05
		pP			59			e \bar{P}			00 16
	LC	+P			53		YM	\bar{S}			01 21
		pP	38	09				i \bar{S}			01 33
		sP			16		TS	eP _n			00 21
		eS	45	57			SA	\bar{P}			02 49
		PS	46	24			CU	S			02 36
							PK	eP			00 56
							KM	eP			02 16
								eS			05 07
							CC	eP			02 29
21	Epc: 31°N, 94° $\frac{3}{4}$ E					22	*Epc: 36° $\frac{1}{2}$ S, 97° $\frac{1}{2}$ W				
	O: 07-37-33, M: 4						O: 20-26-46, M: 5 $\frac{3}{4}$ -6				
	CU	eP	07	39	33		CC	PKP	20	46	26
		eS			41 05		NK	oPKP			42
	KM	eP			39 40		PK	(PKP)			46
		e(S)			41 18						
	LC	eP			39 48						
	PK	eP			42 06						
	CC	eP			43 20						
21	*Epc: 45°N, 152° $\frac{1}{2}$ E					24	*Epc: 31°S, 178°W				
	O: 10-02-30						O: 17-57-58, M: 6 $\frac{3}{4}$ -7				
	CC	eP	10	07	01		ZS	+iP	18	10	36
	PK	eP			08 20			S			20 52
	LC	eP			09 49			PS			21 35
							CT	+iP			10 39
							NK	+iP			48
								PP			14 03
22	*Epc: 54°N, 167°W										
	O: 10-55-05										
	h: 100km ca., M: 4										

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Date	Sta.	Phase	h m s	Date	Sta.	Phase	h m s
24	NK	S	18 21 18	26	KM	(S)	12 36 03
		SoS	32		CU	iP _n	18
	WH	+iP	10 57			iP	40
	CC	+iP	11 07			S _n	37 20
	PK	+iP	19			iS	50
		S	22 11		LC	eP	31
		PS	49			eS	39 28
	KM	+iP	11 22		SA	eP	37 34
		eSKS	21 52			S	39 34
		S	22 15		CT	eP	37 48
	CU	+iP	11 30		WH	P	38 04
						iS	40 25
					PT	eP	38 51
					NK	e(P)	39 00
					ZS	e(P)	21
					PK	eP	24
						eS	42 48
					CC	e(P)	40 40
						e(S)	45 09
25	* Epc: 37°N, 28° $\frac{1}{2}$ E O: 00-26-40, M: 5 $\frac{3}{4}$			26	Epc: 25°N, 122°E O: 20-40-37 h: 150km ca., M: 7 $\frac{1}{2}$		
	LC	eP	00 36 41		ZS	-iP	20 42 11
	CU	-P	59			iS	52
	KM	-P	37 09			iS	43 25
		iS	45 42			isS	44 04
	SA	-P	37 12		NK	-iP	42 33
	PK	-P	28			S	44 02
		S	46 17		CT	-iP	42 41
	CC	-P	37 52		WH	+iP	48
		S	47 07		SA	+iP	44 08
	ZS	eP	38 16		TY	P	15
		S	47 49			iS	47 11
					PK	+iP	44 22
					CU	+iP	35
					TU	P	36
					TS	P	40
					KM	-iP	45
					CC	+iP	53
					PT	+iP	53
					YC	P	58
					LC	+iP	45 02
						iS	48 41
					WW	eP	45 20
						eS	49 09
					SN	P	45 20
						iS	47
						S	49 12
					YM	eP	46 06
25	* Epc: 40° $\frac{1}{2}$ N, 142° $\frac{1}{2}$ E O: 22-49-44						
	CC	eP	22 52 56				
	ZS	eP	54 12				
	PK	eP	15				
	LC	eP	55 56				
26	O: 05-11-51						
	PK	eP	05 15 56				
	SA	eP	16 39				
	PT	eP	49				
	LC	eP	17 21				
		eS	21 45				
26	Epc: 26°N, 101°E O: 12-34-59, M: 5 $\frac{1}{4}$						
	KM	+iP _n	12 35 36				
		iP	40				

Date	Sta.	Phase	h	m	s	Date	Sta.	Phase	h	m	s
26	YM	esP	20	46	33	27	CC	eP	09	57	14
		eS		50	30			pP			48
								sP		58	06
27	Epc: 7°S, 129°E							ScP	10	02	11
	O: 09-48-31							iS		04	16
	h: 150km ca., M: 5 $\frac{1}{4}$							sS		05	16
	ZS	P	09	55	41		PT	eP	09	57	15
		ipP		56	14			epP			49
		esP			26			sP		58	06
		iS	10	01	24			S	10	04	15
		iScP			26			sS		05	13
		sS		02	18						
		iScS		05	45						
	NK	eP	09	55	52	27	Epc: 33°N, 93°E				
		ipP		56	26		O: 13-09-23, M: 5 $\frac{3}{4}$				
		esP			38		LC	eP	13	11	44
		PPP		57	56			S		13	28
		ScP	10	01	27		CU	+P		11	50
		eS			40			iS		13	43
		iS			46		WW	eP		11	42
		isS		02	41		TS	eP		12	04
		SS		04	31		KM	P			14
		iScS		05	40			iS		14	22
	WH	-iP	09	55	52		SA	P		12	37
		pP		56	22			S		15	04
		sP			41		PT	eP		13	03
		iPcP		57	58		WH	+P			45
		iScP	10	01	27			iS		17	15
		iS			42		PK	eP		13	58
		isS		02	40			iS		17	45
		ScS		05	39		NK	+iP		14	20
	KM	P	09	56	01			eS		18	21
		PP		57	39		ZS	+iP		14	44
		PPP		58	14			eS		19	05
		iS	10	02	01		CC	e(P)		15	11
		sS		03	01						
		iScS		05	49						
	SA	+P	09	56	33	28	* Epc: 15°N, 93°W				
		pP		57	04		O: 11-09-30, M: 6 $\frac{1}{2}$ - 6 $\frac{3}{4}$				
		sP			25		PK	PKP	11	28	21
		S	10	03	00			PP		29	44
		sS			59		PT	PKP		28	24
	PK	+eP	09	56	55			iPP		29	57
		ipP		57	31		SA	+PKP		28	36
		esP			45			PP		30	32
		iS	10	03	43		LC	+PKP		28	37
		esS		04	41			PP		30	33
	LC	+P	09	57	03		WH	PKP		28	38
		pP			36			PP		30	42
		esP			54			PKS		31	57
		iS	10	03	54						
		sS		04	59						

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Date	Sta.	Phase	h	m	s	Date	Sta.	Phase	h	m	s	
28 ✓	WH	PPP	11	33	32	1 X	LC	e(P)	05	55	28	
	KM	+PKP		28	57		PK	eP			44	
		PP		31	41			eS			57	37
		PKS		32	32		CU	eP			56	47
		PPP		34	41		WH	eP			57	20
						KM	eP			51		
							eS		06	01	29	

28 * Epc: 36°N, 141°E
O: 22-01-04

✓	PK	eP	22	05	26
✓	LC	+P	07	01	
✓	CU	+P		10	

1 Epc: 4°S, 136°E
O: 07-19-16, M: 4 $\frac{3}{4}$

✓	ZS	eP	07	26	35
		eS		32	24
✓	NK	eP		26	51
		eS		32	55
✓	WH	eP		26	56
✓	KM	eP		27	22
✓	CU	eP			44
✓	PK	eP			55
		eS		34	49

30 * Epc: 27°N, 128°E
O: 07-03,7

	ZS	P	07	04	25
	PK	(P)	06	37	
	LC	+P	07	21	

1 Epc: 36°N, 52°E
O: 08-24-04, M: 4 $\frac{3}{4}$

	NK	eP	08	56	44
		eS	09	00	38
	PK	e(P)	08	57	20
	WH	eP		58	22

✓	LC	eP	08	31	52
		PP		33	56
		S		38	12
✓	CU	eP		32	10
		S		38	38
✓	KM	eP		32	20
		S		38	55
✓	SA	eP		32	27
		eS		39	13
✓	PK	eP		32	59
✓	WH	eP		33	15
		S		40	36
✓	CT	eP		33	33
		eS		41	09
✓	NK	-P		33	35
		eS		41	13
✓	CC	eP		33	37
✓	ZS	-P			51
		eS		41	41

30 * Epc: 55 $\frac{1}{2}$ °S, 26°W
O: 13-25-35

✓	LC	PKP	13	45	07
✓	SA	PKP		08	
✓	ZS	PKP		19	
✓	NK	PKP		19	
✓	PK	PKP		31	
✓	CC	PKP		34	

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1 Epc: 45°N, 104°E
O: 05-53-16, M: 4 $\frac{1}{2}$ -5

	PT	+iP _n	05	54	51
		P		55	09
	YC	eS _n		56	09

2 * Epc: 32°N, 136 $\frac{1}{2}$ °E
O: 05-25-33, M: 4 $\frac{1}{4}$

	CC	eP	05	29	04
	PK	eP			43
		eS		33	12

Date	Sta.	Phase	h	m	s	Date	Sta.	Phase	h	m	s
X 2	SA	eP	05	30	36	4	KM	S	17	23	01
	LC	eP		31	18			i			
3	*Epc: 12° ¹ / ₂ N, 87° ¹ / ₂ W O: 04-41-24 h: 100km ca., M: 5.6						CU	eP		21	08
	ZS	+PKP	05	00	26		LC	eP		21	29
	NK	+PKP			27		PT	eP		22	57
	LC	ePKP			30		WH	eP		23	04
	SA	PKP			30		CT	eP		23	10
	CU	PKP			42		PK	eP		23	39
	WH	PKP			44		NK	eP		23	44
	KM	(PKP)			51		CC	eP		24	48
4	Epc: 52° ¹ / ₂ N, 159° ¹ / ₂ E O: 07-15-50, M: 7 ¹ / ₂					5	Epc: 53°N, 159° ¹ / ₂ E O: 19-04-12, M: 6				
	SW	iP	07	20	38		CC	-iP	19	09	30
	CC	+iP			21 01		PK	eP		10	40
	PK	+iP			22 10		PT	P		11	10
		i			23 33		ZS	eP		11	11
		S			27 14			PP		12	33
	TU	P			22 27			e		16	45
	ZS	+iP			41		NK	eP		11	17
		iS			28 07		WH	eP		11	45
	PT	+iP			22 40		SA	eP		11	50
	NK	+iP			46			PP		13	26
		S			28 19			PcP			55
	YC	P			23 13		LC	P		12	05
	WH	+iP			15			PP		13	45
		i			25 16			PPP		14	14
		i			28 11			eS		18	25
	SA	+iP			23 19		CU	-P		12	34
	TS	eP			36			PP		14	22
		S			29 43			e(S)		19	14
	LC	+P			23 36			i		22	49
		eS			29 50		CT	-P		12	42
	SN	eP			23 45						
	YM	eP			48						
	CU	+iP			24 04						
	CT	+iP			08						
	KM	+iP			43						
		S			31 47						
4	Epc: 29°N, 92°E O: 17-18-33, M: 4 ³ / ₄					6	Epc: 2° ¹ / ₂ S, 128°E O: 18-52-26, *M: 5 ¹ / ₂				
	KM	eP	17	21	05		NK	eP	18	59	27

Date	Sta.	Phase	h m s	Date	Sta.	Phase	h m s	
6	NK	eS	19 05 02	7	ZS	eP	09 11 58	
	KM	eP	18 59 39			eS	18 50	
		i	48			ScS	21 51	
		iS	19 05 25			NK	eP	12 17
	SA	eS	06 21			eS	19 05	
	LC	eP	00 41			PK	eP	13 08
	PT	S	07 16			eS	20 39	
	eP	00 52		SA	eP	13 14		
	S	07 38		KM	eP	17		
					eS	20 55		
					CU	eP	17 26	
					eS	21 09		
					PT	eP	15 36	
					LC	eP	46	
					eS	21 50		
6	Epc: $38^{\circ}\frac{1}{2}N$, $143^{\circ}E$			7	Epc: $3^{\circ}\frac{1}{2}S$, $148^{\circ}\frac{1}{2}E$			
	O: 18-53-15				O: 11-17-15, M: $4\frac{3}{4}$			
	ZS	eP	18 57 44		After shock.			
	PK	eP	56		ZS	eP	11 25 29	
	WH	eP	58 40			S	32 04	
	SA	eP	59 05			ScS	35 26	
	LC	eP	37		CT	eS	32 09	
	CU	eP	51		NK	eP	25 46	
						S	32 36	
					CC	eP	26 28	
						eS	33 54	
					PK	eP	26 39	
					SA	eP	44	
						eS	34 21	
					KM	eP	26 46	
						eS	34 24	
					CU	eP	26 56	
					PT	eP	27 08	
						eS	35 05	
					LC	eP	27 17	
						eS	35 20	
7	Epc: $3^{\circ}\frac{1}{2}S$, $148^{\circ}\frac{1}{2}E$			7	Epc: $8^{\circ}S$, $124^{\circ}E$			
	O: 00-03-24, M: $5\frac{1}{2}$				O: 20-22-46, M: $4\frac{1}{2}$			
	ZS	-iP	00 11 25		CT	eP	20 29 25	
		PP	13 08			eS	34 39	
		PPP	44		ZS	eP	30 18	
		S	17 52		KM	+P	18	
		SS	21 01			PPP	32 14	
	CT	-P	11 31			S	36 19	
		S	17 59			SSS	39 34	
		SS	21 09			iP	30 22	
	NK	P	11 45			eS	36 27	
		PPP	14 12					
		S	18 25					
	CC	-iP	12 34					
	PK	-iP	40					
		i	14 18					
		iS	20 05					
		SSS	25 27					
	SA	P	12 41					
	KM	P	43					
		i	49					
		S	20 12					
		SS	23 53					
	CU	P	12 53					
		iS	20 29					
	PT	eP	13 05					
		i	09					
7	Epc: $3^{\circ}\frac{1}{2}S$, $149^{\circ}\frac{1}{2}E$							
	O: 09-03-46, *M: 5							

Date	Sta.	Phase	h m s	Date	Sta.	Phase	h m s
9	KM	-iP	08 51 22	12	LC	-P	00 40 35
	SA	-P	28		KM	P	48
	PK	-P	(29)			eS	44 50
	PT	-P	55		SA	eP	41 17
	LC	-P	52 00		PT	eP	29
	CC	eP	33		PK	eP	42 11
					eS	47 15	
					CC	e(P)	43 09

9 Epc: $44^{\circ}\frac{1}{2}N$, $150^{\circ}E$
 O: 23-57-03, M: $4\frac{1}{2}$

✓ CC	eP	24 01 10
✓ PK	+iP	02 28
✓ ZS	+P	59
	eS	07 09
✓ NK	eP	02 47
	eS	07 23
✓ SA	P	03 38
✓ LC	+P	04 02
✓ CU	+P	24
	S	10 13
✓ KM	+P	04 59
	S	11 18

12 Epc: $55^{\circ}N$, $168^{\circ}E$
 O: 04-57-35, M: $6\frac{1}{4}$

✓ CC	-iP	05 03 41
	PPP	04 47
	S	08 34
	i	09 19
	i	13 27
	i(ScS)	14 19
✓ PK	-P	04 48
	PP	06 11
	S	10 35
	ScS	14 40
✓ TU	eP	05 03
✓ PT	-P	16
	ePP	06 49
	(S)	11 16
✓ ZS	-P	05 18
	PP	06 58
	PPP	07 18
	S	11 28
	ScS	15 24
✓ NK	-P	05 23
	i	06 11
	PP	07 03
	eS	11 38
✓ WH	P	05 53
	PP	07 59
	S	12 31
	ScS	15 48
✓ SA	-P	05 56
	PP	07 41
	iS	12 37
✓ WW	eP	06 06
✓ LC	-iP	09
	iPP	07 57
	PPP	08 39
	(S)	12 55
✓ TS	eP	06 09
	eS	12 59
✓ SN	eP	06 19
✓ CU	-P	39

10 Epc: $48^{\circ}\frac{1}{2}N$, $148^{\circ}E$
 O: 09-44-03, h:360km ca.

✓ CC	-P	09 47 33
✓ PK	P	48 50
✓ ZS	eP	49 12
✓ NK	-P	19
✓ WH	P	54
✓ SA	-iP	50 02
✓ LC	-P	21
✓ KM	-iP	51 24
	ePP	53 15
	eS	57 17

11 * Epc: $53^{\circ}\frac{1}{2}N$, $160^{\circ}E$
 O: 16-28-49, M: $4\frac{1}{4}$

✓ CC	P	16 34 08
	eS	38 23
✓ PK	eP	35 18
✓ PT	+P	47
✓ LC	+P	36 43

12 Epc: $32^{\circ}\frac{1}{2}N$, $79^{\circ}E$
 O: 00-35-46, M: $4\frac{1}{2}$

Date	Sta.	Phase	h m s	Date	Sta.	Phase	h m s
12	CU	PP	05 08 37	12	ZS	PP	10 12 09
		iS	13 51			SKKS	18 58
	CT	eP	06 43			SS	33 05
	KM	-P	07 14		NK	+PKP1	07 05
		PP	09 21			-PKP2	08 21
		ePPP	10 36			iPP	12 10
		iS	14 58			SKKS	19 00
		SS	18 39			SS	33 08
					WH	PKP1	07 07
						PKP2	08 30
12	* Epc: $90^{\circ}S$, $159^{\circ}E$					iPP	12 21
	O: 08-06-01, h: 100km ca.					SKKS	19 11
	ZS	eS	08 22 46			SS	33 26
	CC	P	16 08		CT	PKP1	07 10
	PK	eP	19			PKP2	08 59
	SA	eP	28			iPP	12 55
	KM	+P	30			iPPP	17 15
	CU	+P	39			SKKS	19 35
	PT	eP	47			i	20 23
	LC	eP	56			i	49

12 * Epc: $23^{\circ}S$, $64^{\circ}W$
O: 09-46-51, M: $6\frac{3}{4}$

	CC	+PKP1	10 06 52
		PKP2	07 25
		PP	11 01
		i	16 21
		(SKKS)	17 53
	PT	+PKP1	06 59
		ePP	11 25
	PK	+PKP1	07 00
		PKP2	48
		PP	11 32
		SS	31 43
	LC	+PKP1	07 00
		PP	11 37
	SA	+PKP1	07 04
		PKP2	08 14
		PP	11 58
		(SKKS)	18 39
	CU	+PKP1	07 04
		PKP2	08 14
		PP	12 01
	KM	+PKP1	07 34
		iPKP2	08 16
		iPP	12 05
		iSKKS	18 49
		SS	32 56
	ZS	+PKP1	07 04
		PKP2	08 19

12 Epc: $51^{\circ}N$, $177^{\circ}W$
O: 21-40-22, M: $5\frac{3}{4}$

	CC	+iP	21 47 49
		PP	49 20
		i	53 59
	PK	+iP	48 53
		ePP	50 46
		S	55 42
		iPS	57
		eSS	59 02
	ZS	+iP	49 12
		ePP	51 07
		eS	56 17
		PS	33
	NK	+iP	49 18
	PT	+iP	20
		S	56 32
		PS	47
	WH	iP	49 47
		PS	57 34
	YC	eP	49 47
	SA	+P	54
		PP	52 02
		eS	57 33
		PS	50
	WW	eP	50 05
	LC	+P	07
		PP	52 12
		S	57 58
		PS	58 12

Date	Sta.	Phase	h m s	Date	Sta.	Phase	h m s
12	TS	eP	21 50 09	14	SA	+P	00 55 43
	CT	eP	30		LC	+iP	51
	KM	+iP	51 04		NK	e(P)	56
		eS	59 45		ZS	+P	56 00
		PS	22 00 02		PT	+P	35
					PK	+P	46
						eS	01 03 18

12 Epc: $51^{\circ}\frac{1}{2}N$, $177^{\circ}W$
 O: 21-59-56, M: $5\frac{1}{2}$

✓	CC	+iP	22 07 25
✓		PP	09 00
✓		eS	13 24
✓	PK	+iP	08 27
✓		S	15 17
✓		iPS	32
✓	ZS	+P	08 46
✓		ePP	10 43
✓		S	15 54
✓		PS	16 07
✓	NK	eP	08 52
✓		PP	10 51
✓		i	16 18
✓	PT	+iP	08 54
✓		PP	10 54
✓		S	16 06
✓		PS	21
✓	WH	P	09 22
✓		ScS	19 09
✓	YC	eP	09 23
✓	SA	P	29
✓		(S)	17 08
✓		PS	28
✓	WW	eP	09 38
✓	LC	+P	43
✓		PP	11 51
✓		S	17 35
✓		PS	48
✓	SN	eP	09 51
✓	CT	P	10 06
✓	KM	eP	38
✓		eS	19 19
✓		PS	31

14 Epc: $1^{\circ}S$, $99^{\circ}\frac{1}{2}E$
 O: 00-48-37, M: 5

✓	KM	+iP	00 54 17
✓		S	58 49
✓	CU	+P	55 04
✓		S	01 00 12
✓	WH	e(P)	00 55 30

14 * Epc: $35^{\circ}N$, $24^{\circ}9E$
 O: 06-36-55, M: $5\frac{1}{2}$ - $5\frac{3}{4}$

✓	ww	ep	06 47-14
✓	LC	+P	06 47 22
✓		PcP	49 02
✓		PP	46
✓		iS	55 47
✓	YC	eP	47 31
✓	TS	eP	36
✓	CU	+iP	39
✓		PP	49 06
✓		iS	56 18
✓		SS	07 00 35
✓	PT	+P	06 47 39
✓		PP	50 09
✓		iS	56 20
✓	KM	+P	47 48
✓		PP	50 14
✓		S	56 34
✓		ScS	57 45
✓	SA	+P	47 51
✓		iS	56 43
✓	PK	eP	48 06
✓		PP	50 45
✓		PPP	52 25
✓		iS	57 11
✓		SS	07 01 36
✓	WH	P	06 48 28
✓		PP	51 19
✓		iS	57 52
✓		SS	07 02 34
✓	CC	P	06 48 29
✓		S	57 55
✓	NK	eP	48 40
✓		ePP	51 36
✓		iS	58 16
✓	CT	eP	48 47
✓		eS	58 27
✓	ZS	+P	48 52
✓		ePP	51 48
✓		S	58 39
✓	WW	eP	47 14
✓		ePP	46 33

Date Sta. Phase h m s | Date Sta. Phase h m s

14 * Epc: 19°S, 170°E
O: 09-33-22, M: 5 $\frac{3}{4}$

ZS	-P	09 44 26
CT	-P	34
NK	-P	41
WH	P	52
CC	-P	45 05
PK	-P	20
	eS	55 11
	ePS	56
SA	-P	45 28
KM	-iP	30
	eS	55 29
CU	-iP	45 37
	eS	55 45
PT	-P	45 43
LC	-P	52

14 ZS eP 13 30 23

NK	-P	37
WH	P	50
CC	-iP	31 02
PK	-P	16
SA	-P	25
KM	-iP	27
CU	-P	35
PT	-P	39
LC	-P	49

14 * Epc: 26°N, 128°E
O: 17-31.2, M: 3 $\frac{3}{4}$

PK	eP	17 35 15
CC	P	22
SA	eP	32
LC	eP	36 17
KM	eP	18

14 * Epc: 19°S, 170°E
O: 10-41-56, h: 100km ca.

ZS	P	10 52 53
CT	P	59
NK	P	53 08
WH	P	20
CC	-P	33
PK	-P	46
SA	P	55
KM	P	56
CU	eP	54 04
LC	eP	19

16 Epc: 4 $\frac{1}{2}$ °S, 153 $\frac{1}{2}$ °E
O: 06-16-23
h: 100km ca., M: 6 $\frac{1}{2}$

ZS	iP	06 24 55
	sP	25 26
	PP	26 48
	eS	31 39
	iScS	34 45
CT	+iP	25 02
	sP	34
	S	31 58
	ScS	34 54

14 * Epc: 19°S, 170°E
O: 11-49-20, h: 100km ca.

ZS	eP	12 00 17
CT	P	25
NK	P	33
CC	eP	56
PK	eP	01 09
KM	eP	20
SA	eP	20
CU	eP	27
PT	P	35
LC	eP	42

NK	+iP	25 13
	sP	42
	S	32 16
WH	+iP	25 26
OC	+iP	51
	sP	26 23
	ePP	29 09
	eS	33 26
PK	iP	26 02
	sP	34
	S	33 48
	PS	34 17
	ScS	35 46
SA	+iP	26 10
KM	+iP	13
	esP	45
	iS	34 08
TU	P	26 17

14 * Epc: 19°S, 170°E
O: 13-19-32
h: 150km ca., M: 5 $\frac{1}{2}$ -5 $\frac{3}{4}$

Date	Sta.	Phase	h m s	Date	Sta.	Phase	h m s
20	PT	eS	19 45 56	21	CC	epPKP	11 54 36
	SA	+P	41 38			ePP	58 47
		S	46 51		PK	PKP1	54 30
	LC	+iP	42 03			pPKP1	45
		iS	47 34			PKP2	56 33
	KM	+iP	43 01			pPKP2	48
		iS	49 19			PP	59 19
					ZS	ePKP1	54 30
						pPKP1	46
						ePP	59 32
20	* Epc: $41^{\circ}\frac{1}{2}N$, $42^{\circ}E$					SKKS	12 06 16
	O: 19-49-12, M: $5\frac{3}{4}$				LC	ePKP1	11 54 31
	LC	eP	19 57 53			PKP2	55 51
	SA	eP	58 28			PP	59 39
	KM	P	35		PT	PKP1	54 32
	PK	eP	59 03			pPKP1	47
	NK	eP	31			PKP2	55 38
	ZS	eP	46			PP	59 25
					NK	PKP1	54 32
						pPKP1	48
						ePKP2	55 54
21	* Epc: $18^{\circ}\frac{1}{2}N$, $121^{\circ}E$					ePP	59 42
	O: 02-22-56, M: 4				SA	ePKP1	54 33
	KM	P	02 27 15			ePKP2	56 05
		eS	30 40			iPP	59 56
	SA	eP	27 25			eSKKS	12 06 44
	CU	eP	29		KM	PKP1	11 54 35
		eS	31 08			pPKP1	51
	PK	eP	27 54			PKP2	56 04
		ePP	28 20			PP	12 00 00
		S	31 53			SKKS	06 52
	LC	P	28 08		CU	ePKP1	11 54 35
						pPKP1	51
						PKP2	56 10
						pPKP2	27
21	* Epc: $52^{\circ}\frac{1}{2}N$, $170^{\circ}\frac{1}{2}W$					PP	12 00 01
	O: 06-51-40, M: 5					SKKS	06 47
	CC	eP	06 59 33		WH	PKP1	11 54 35
	PK	eP	07 00 35			pPKP1	51
	ZS	P	57			PKP2	56 16
	PT	P	01 00			PP	12 00 02
	NK	eP	03		CT	ePKP1	11 54 36
	SA	P	35			pPKP1	50
	LC	P	46			PP	12 00 09
	CU	P	13				
	KM	eP	44				
					22	* Epc: $25^{\circ}\frac{1}{2}N$, $96^{\circ}\frac{1}{2}E$	
						O: 08-31-00, M: $4\frac{3}{4}$	
21	* Epc: $28^{\circ}S$, $69^{\circ}W$					KM	ePn
	O: 11-34-23						08 32 38
	h: 60km ca., M: 6						59
	CC	ePKP	11 54 23		CU	ePn	33 18
						eSn	35 06

Date	Sta.	Phase	h m s	Date	Sta.	Phase	h m s
22	LC	eP	08 34 10	24	ZS	+P	11 34 07
	SA	eP	39			eS	58 46
	CT	eP	51		CC	+i	34 59
	WH	eP	35 05				
	PT	eP	31	24	* Epc: 17° ¹ / ₂ N, 97°W		
	TU	eP	46		O: 19-17-40		
	NK	eP	52		h: 100km ca., M: 6 ³ / ₄ -7		
		eS	39 47		CC	iPP	19 36 21
	PK	eP	36 07			PPP	38 37
		eS	40 14			i	44 32
		ScS	43 12		PK	PKP	36 16
	ZS	eP	36 14			PP	37 14
		iS	40 25			ePPP	39 40
22	Epc: 38° ³ / ₄ N, 104°E					i	45 29
	O: 21-21-12, M: 3 ¹ / ₂				ZS	PKP	36 23
	WW	eP	21 21 45			PP	37 40
		eS	22 02		NK	ePKP1	36 24
	CU	eP	21 50			ipPKP1	46
		eP	22 02			PP	37 43
	YC	S	22 14		WH	ipPKP1	36 28
	LC	P _n	01			pPKP	50
		iP	05			iPP	38 05
		iS	35		SA	-PKP	36 29
	PT	eP	50			iPP	36 04
		S	23 54		LC	-PKP	36 31
	SA	P	05			iPP	38 10
		S	24 24		CU	PKP	36 40
						pPKP	37 02
						PP	38 43
24	Epc: 25° ¹ / ₂ N, 90°E					PKS	40 13
	O: 11-28-18, M: 4 ³ / ₄				CT	ipPKP1	36 44
	KM	+iP	11 31 04			ipPKP1	37 05
		iS	33 11			iPP	38 54
	SN	eP	31 45			ipKS	40 11
	LC	+P	55		KM	PKP1	36 51
	TS	eP	32 05			pPKP1	37 14
	SA	+P	29			iPP	39 19
	YC	P	41			ipKS	40 21
	CT	+P	33 07	25	* Epc: 40° ¹ / ₂ N, 143° ¹ / ₂ E		
		eS	37 01		O: 10-49-22		
	WH	iP	33(14)		CC	eP	10 52 37
		iS	37(13)		PK	eP	54 00
	PT	iP	33 14		ZS	eP	01
	TU	P	36		NK	eP	11
	NK	eP	49		KM	eP	56 34
		eS	38 14				
	PK	+P	33 52				
		S	38 20				

Date	Sta.	Phase	h m s	Date	Sta.	Phase	h m s
25	*Epc: 40° .7N, 143° .3E O: 10-59-09			26	KM	iSS	04 22 34
	CC	eP	11 02 26		WW	eP	18 06
	ZS	eP	03 47		SN	eP	08
	PK	eP	48		YM	eP	50
	NK	eP	57				
	CU	eP	05 47				
	KM	eP	06 22				
25	Epc: 27°N, 92°E O: 19-20-48			26	*Epc: 37° .3N, 70°E O: 06-36-02, M: 5 1/4		
	KM	i(P _n)	19 22 33		LC	eP	06 41 44
	CU	eP	23 15			eS	46 28
		eS	25 08		CU	eP	42 01
	LC	e	24 08			eS	46 50
	SA	eP	27		KM	eP	42 16
					S	47 16	
			WH		e(P)	43 17	
					e(S)	49 04	
			PK		e(S)	15	
26	Epc: 27°N, 127° 1/2 E O: 04-13-01 h: 100km ca., M: 5 1/2			CT	e(P)	43 35	
					e(S)	49 40	
				CC	eP	43 52	
				e(S)	50 09		
			ZS	eP	43 58		
				e(S)	50 18		
27	ZS	iP	04 14 43	27	Epc: 23° 1/2 N, 120° 1/2 E O: 13-49-47, M: 4 1/2		
		S	15 56		ZS	eP	13 51 49
	NK	-iP	15 13			eS	53 24
		S	16 54		SA	eP	27
	WH	iP	15 51		KM	eP	43
		S	18 05		CU	P	43
	DR	P	16 05		PK	eP	50
	CT	(P)	08		LC	eP	54 16
	PK	-iP	45		CC	eP	32
	CC	iP	56				
	SA	-iP	17 03				
		isP	33				
		S	20 18				
	TU	eP	17 07	28	Epc: 38° 1/2 N, 99°E O: 10-40-24, M: 3 1/2		
	PT	P	28		YM	eP	10 41 12
	SW	eP	30			S	43
	TS	eP	32		WW	S	42 01
CU	-iP	37	LC		P	41 56	
	PP	18 00			eS	42 56	
	S	21 17	YC		eS	43 28	
YC	eP	17 41					
LC	-iP	50					
	ipP	18 12					
	isP	22					
	S	21 46					
	-iP	17 54	28	Epc: 13° 1/2 N, 124°E O: 15-14-33, M: 4 1/4			
	PP	18 27		ZS	eP	15 18 50	
	(S)	21 45					
	iPcP	55					

Date	Sta.	Phase	h m s	Date	Sta.	Phase	h m s
28	ZS	eS	15 22 13	29	CT	S	11 02 43
	WH	eP	19 05		NK	eP	10 53 56
	NK	eP	08			sP	54 18
		e(S)	22 44			iS	11 02 58
	KM	eP	19 47			PS	03 29
		eS	23 59		WH	eP	10 54 06
	SA	eP	20 01			sP	29
	CU	eP	06			S	11 03 17
		e(S)	24 34		CC	P	10 54 22
	PK	eP	20 25			isP	44
		eS	25 06			S	11 03 50
	LC	eP	20 39		PK	eP	10 54 36
	PT	eP	47			sP	58
						S	11 04 17

28 Epc: 4°S , $141^{\circ}\frac{1}{2}\text{E}$
 O: 22-27-15, h: 100km ca.

ZS	+iP	22 34 51
NK	P	35 06
WH	P	16
KM	eP	52
SA	+P	36 02
PK	eP	06
CC	P	07
CU	P	09
PT	eP	32
LC	+iP	34

		S	11 02 43
		eP	10 53 56
		sP	54 18
		iS	11 02 58
		PS	03 29
	WH	eP	10 54 06
		sP	29
		S	11 03 17
	CC	P	10 54 22
		isP	44
		S	11 03 50
	PK	eP	10 54 36
		sP	58
		S	11 04 17
	KM	-iP	10 54 44
		isP	55 07
		iS	11 04 31
	CU	eP	10 54 52
		isP	55 15
		iS	11 04 47
	SA	-iP	10 55 06
	TS	eP	20
	PT	-P	21
	LC	-iP	30
	SN	eP	42
	WW	eP	42

31 Epc: 6°S , 156°E
 O: 09-28-08, M: $5\frac{1}{4}$

28 * Epc: 4°S , 125°E
 O: 22-37.0

CT	+iP	22 43 07
ZS	+iP	35
WH	iP	39
KM	+iP	40
NK	+iP	45
CU	+iP	44 10
SA	+iP	42
PK	eP	48
LC	+iP	45 10

ZS	P	09 37 11
	eS	44 24
CT	eP	37 17
NK	+iP	24
	ePP	39 19
	S	44 50
WH	P	37 38
	S	45 17
CC	eP	38 00
PK	P	14
	eS	46 24
SA	+P	38 20
KM	eP	24
	eS	46 39
CU	P	38 33
	eS	46 58
PT	eP	38 40
LC	eP	50
LS	P	39 37

29 Epc: 19°S , $169^{\circ}\frac{1}{2}\text{E}$
 O: 10-42-50
 h: 60km ca., M: 6

ZS	eP	10 53 42
	sP	54 05
	S	11 02 34
CT	eP	10 53 48
	sP	54 09

Date	Sta.	Phase	h m s	Date	Sta.	Phase	h m s
1 * Epc: $6^{\circ}\frac{1}{2}S$, $155^{\circ}E$ O: 12-32-20, h: 400km ca.				2 ✓ SA +P 00 51 45			
				✓ LC +P 52 29			
				✓ WW eP 40			
				✓ KM eP 55			
✓	ZS	eP	12 40 48				
		S	47 26				
✓	NK	P	40 58				
		S	47 48				
✓	CC	eP	41 35	2 * Epc: 0° Lat, $123^{\circ}\frac{1}{2}E$ O: 01-56-32, h: 200km ca.			
		S	48 57				
✓	PK	eP	41 47	✓	ZS	P	02 02 41
		S	49 17			epP	03 23
✓	SA	eP	41 52			esP	32
		eS	49 27	✓	KM	eP	02 45
✓	KM	-iP	41 56	✓	NK	+iP	46
		S	49 34			pP	03 27
✓	LC	-iP	42 23			sp	45
		eS	50 25	✓	CC	e(P)	06
✓	LS	P	43 08			P	15
		S	51 51			spP	04 05
				✓	SA	+P	03 24
				✓	PK	eP	52
				✓	LC	spP	04 45
				✓	LS	+P	03 54
						spP	04 47
						+iP	16
1 Epc: $6^{\circ}\frac{1}{2}S$, $156^{\circ}E$ O: 17-07-23 h: 100km ca., *M: $6 - 6\frac{1}{4}$				2 Epc: $21^{\circ}N$, $121^{\circ}E$ O: 02-37-44, M: $5\frac{1}{2}$			
✓	ZS	+iP	17 16 19	✓	CT	eP	02 39 33
		pP	46			eS	40 58
✓	NK	+iP	16 30	✓	ZS	P	20
		pP	54			S	42 22
✓	CC	+iP	17 06	✓	NK	eP	40 28
		pP	35			eS	42 35
✓	PK	+iP	18	✓	SA	-P	41 44
		pP	47			(S)	44 55
✓	SA	+P	26	✓	KM	-iP	41 48
✓	KM	+P	28			S	45 05
✓	TU	P	30	✓	CU	-iP	41 55
✓	CU	+P	37			eP	42 09
✓	LC	+P	57	✓	PK	-P	14
✓	LS	eP	18 43			S	45 50
						PcP	49 34
2 Epc: $32^{\circ}N$, $131^{\circ}\frac{1}{2}E$ O: 00-47-17, M: 5				✓	TU	P	42 28
✓	ZS	eP	00 49 39	✓	LC	-iP	34
✓	NK	e(P)	57			S	46 28
✓	DR	eP	50 00	✓	PT	eP	42 39
✓	CC	+P	31	✓	YC	eP	39
✓	PK	+P	54	✓	CC	P	51
		iPP	51 07	✓		S	47 00
✓	SW	eP	50 58	✓	SN	eP	42 51
✓	TU	eP	51 26	✓	WW	eP	58
✓	CT	eP	37				

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✓ 2 ✓ LS P 02 43 45
iS 48 31

2 *Epc: 25°S, 176°W
O: 03-23-12

✓ ZS eP 03 35 46
✓ NK eP 50
✓ CC eP 36 05
✓ FK eP 22
✓ KM eP 34
✓ CU eP 39

2 *Epc: 25°S, 176°W
O: 03-31-55

✓ ZS +P 03 44 26
✓ NK +iP 33
✓ CC +iP 48
✓ PK +P 45 02
✓ SA +P 12
✓ KM +iP 15
✓ CU +iP 21
✓ LC +P 33

2 *Epc: 25°S, 176°W
O: 03-52-06

✓ ZS +P 03 04 38
✓ NK +iP 45
✓ CC +iP 58
✓ PK +iP 05 14
✓ SA eP 24
✓ KM +iP 27
✓ CU +iP 33
✓ LC eP 44

2 Epc: 21°N, 121°E
O: 04-57-17, M: 5 $\frac{3}{4}$

✓ CT eP 04 59 03
eS 05 00 25
✓ ZS eP 04 59 53
S 05 01 56
✓ NK eP 00 02
eS 02 10
✓ SA iP 01 17
S 04 30
✓ KM -P 01 21
✓ CU -iP 28

2 ✓ CU eS 05 04 45
✓ TS eP 01 15
✓ PK -iP 47

✓ TU eP 05 23
✓ LC -iP 02 02
07

✓ YC eS 05 59
✓ YC eP 02 12
✓ PT eP 13
✓ SM eP 24
✓ CG -P 24
eS 06 33
✓ LS eP 03 17
e(S) 08 04

2 Epc: 21°N, 121°E
O: 05-42-33, *M: 5 $\frac{1}{2}$ -6

✓ ZS e(P) 05 46 09
✓ NK eP 21
✓ SA eP 33
✓ CU eP 41
✓ KM P 43
✓ PK +P 47 02
eS 50 35
✓ TU eP 47 16
✓ LC eP 25
e(S) 51 19
✓ CC eP 47 39
✓ LS eP 48 38

2 Epc: 23°N, 121°E
O: 19-13-36, M: 5

ZS eP 19 15 (32)
eS 16 (58)
NK -P 15 41
eS 17 15
SA eP 13
PK +P 36
CU eP 41
eS 20 52
KM eP 17 51
TU eP 54
LC eP 18 09
CC eP 14
PP 32
eS 21 55
LS e(P) 19 39

Date	Sta.	Phase	h m s		Date	Sta.	Phase	h m s	
3	Epc: $30^{\circ}\frac{1}{2}N$, $99^{\circ}\frac{1}{2}E$		03 59 17		3	NK	eS	03 54 28	
	O: 03-58-07, M: $4\frac{1}{4}$					PK	eP	51 38	
	CU	eP							
		S	48						
	KM	eP	55						
	LC	P	59						
	LS	ePn	04 00 07						
7	Epc: $10^{\circ}\frac{1}{2}N$, $126^{\circ}\frac{1}{2}E$		08 38 42		7	CT	eP	08 38 42	
	O: 08-34-32, M: $4\frac{1}{2}$						eS	41 58	
	LS	eSn	01 37						
	PK	e	03 37						
	CC	eP	37						
	ZS	+iP							39 19
		eS							43 11
		+P							39 34
		eS							43 38
		eP							40 14
3	*Epc: $52^{\circ}\frac{1}{2}N$, $170^{\circ}W$		05 51 27		3	PK	+P	40 50	
	O: 05-43-28, M: $5\frac{1}{4}$ - $5\frac{1}{2}$						eS	45 15	
	CC	P							40 50
	PK	P	52 28						45 52
	NK	+iP	56						51 26
	ZS	+iP	53 00						41 07
	SA	eP	30						12
	LC	+iP	39						53
	CU	+iP	54 05						
	KM	+iP	37						
8	*Epc: $10^{\circ}\frac{1}{2}S$, $112^{\circ}\frac{1}{4}E$		09 51 41		8	KM	eP	09 51 41	
	O: 09-44-27, M: $4\frac{1}{2}$						eP	52 22	
	LS	+iP	58						26
		eS							47
		ScS							
	LC	P							
	PT	P							
	LS	P							
3	*Epc: $32^{\circ}\frac{3}{4}N$, $137^{\circ}E$		11 44 00		3	CU	eP	09 51 41	
	O: 11-40-50, h: 360km ca.						eP	52 22	
	NK	eP							26
	PK	-P	26						47
LC	e	46 22							
10	*Epc: $35^{\circ}\frac{3}{4}N$, $24^{\circ}\frac{1}{4}E$		04 26 34		10	LC	-iP	04 26 34	
	O: 04-16-03, M: 5						eP	50	
	LS	eP							27 01
	SA	(P)							03
PK	-P					27 16			
4	*Epc: $54^{\circ}N$, $107^{\circ}\frac{1}{2}E$		07 36 29		4	LC	P	07 36 29	
	O: 07-32-33						eP	37 29	
CU	eP								
10	Epc: $29^{\circ}N$, $91^{\circ}\frac{3}{4}E$		04 25 36		10	LS	iP	04 25 36	
	O: 04-25-10, M: 5						e	27 57	
LC	eP						28 08		
PT	e(P)						29 34		
CT	eP						49		
PK	eP						30 15		
	e(S)						34 22		
7	Epc: $10^{\circ}\frac{1}{2}N$, $126^{\circ}E$		03 50 09		7	LS	iP	04 25 36	
	O: 03-45-21, M: $4\frac{1}{4}$ - $4\frac{1}{2}$						e	27 57	
	ZS	eP							28 08
		eS							29 34
		eS							49
	NK	eP							30 15

Date	Sta.	Phase	h m s	Date	Sta.	Phase	h m s
10	CC	(P)	04 31 27	13	SA	i	16 06 43
					YM	eP	05 53
10	Epc: 13° $\frac{1}{2}$ N, 120°E					eS	07 00
	O: 09-49-53, h: 100km ca.				CU	e(Pn)	06 06
						P	40
	SA	eP	09 54 56			i	07 30
	PK	eP	55 28			i	08 11
	LC	eP	32			iS	17
	PT	eP	44		LS	eP	07 29
	LS	eP	56 14				
		S	10 01 15				
11	Epc: 38° $\frac{1}{2}$ N, 71° $\frac{1}{2}$ E			14	*Epc: 20° $\frac{1}{2}$ S, 68°W		
	O: 08-23-49, M: 4				O: 00-11-57		
					h: 100km ca., M: 7.2-7.5		
	LS	eP	08 28 11		CC	-PKP	00 31 42
		eS	31 37			PP	35 40
	LC	eP	29 23		PK	-PKP	31 51
	CU	eP	42			pPKP	32 26
						PP	36 13
					PT	-PKP1	31 52
						ipPKP1	32 27
						ipPKP2	33 04
						PP	36 44
					LS	-PKP-	31 54
						pPKP1	32 28
						PP	36 14
						iSKKS	42 58
					DR	PKP	31 56
					LC	ePKP	31 57
						pPKP	32 33
					ZS	-PKP	31 57
						pPKP	32 33
						PP	36 47
					NK	-PKP	31 58
						PP	36 49
					CU	-PKP	32 00
						pPKP	34
						PP	36 50
						iSKKS	43 33
					KM	-PKP	32 01
						PP	37 18
						iSKKS	43 53
					CT	-PKP1	32 06
						pPKP1	40
						PKP2	33 48
						PP	37 37
						SKKS	44 19
12	*Epc: 51° $\frac{1}{2}$ N, 152° $\frac{1}{2}$ E			14	Epc: 37° $\frac{1}{2}$ N, 141°E		
	O: 13-13-26, h: 100km ca.				O: 16-15-54, *M: 5.5		
	CC	eP	13 17 35		ZS	eP	16 20 05
		sP	18 16				
	PK	eP	54				
		sP	19 34				
	LC	P	20 18				
	CU	eP	46				
13	Epc: 38°N, 104°E						
	O: 16-04-10, M: 4 $\frac{1}{2}$ -4 $\frac{3}{4}$						
	WW	P	16 04 34				
		iS	49				
	YC	P	47				
		i	05 02				
		S	11				
	LC	-iPn	04 53				
		iP	56				
		iS	05 27				
	SN	P	04 57				
		eS	05 28				
	TS	eP	05 31				
		S	06 21				
	PT	e(Pn)	05 33				
		P	47				
		i	06 23				
	SA	ePn	05 38				
		P	58				

Date	Sta.	Phase	h m s	Date	Sta.	Phase	h m s
25	Epc: 30° ¹ / ₂ N, O: 13-37-10,	131°E M: 4 ³ / ₄		27	CT	SKS	19 26 57
						S	27 10
						iPS	28 24
	ZS	P	13 39 21		ZS	+iP	16 55
	NK	eP	49			pP	17 36
	CC	eP	40 41			sP	53
	PK	eP	59			SKS	27 02
	SA	eP	41 33		NK	+iP	17 07
	PT	eP	46			ipP	51
	CU	eP	42 20			isP	18 04
	LC	eP	23			i	20 13
		(S)	46 38			PP	21 05
	KM	e(P)	42 45			eS	27 15
						i	28 40
						i	31 50
26	* Epc: 44° ³ / ₄ N, O: 05-03-59, h:280km ca.	141° ¹ / ₄ E			CC	+iP	17 28
						pP	18 08
						sP	24
	PK	eP	05 08 03			SKS	27 59
	PT	eP	47			S	28 15
	LC	eP	09 43		KM	P	17 38
	KM	eP	10 44			sP	18 38
					PK	+P	17 39
						epP	18 22
						sP	38
26	* Epc: 31°N, O: 08-35-51, h:450km ca.	139°E				i(PP)	21 24
					CU	P	17 49
	ZS	S	08 41 43			pP	18 34
	CC	eP	39 26			sP	46
		eS	42 21				
	NK	eP	39 26				
		sP	41 16				
		iS	42 23				
	PK	eP	40 01				
		ePPP	41 03				
		isP	51				
		S	43 22				
	SA	eP	40 34				
	PT	eP	45				
		eS	44 40				
	LC	-iP	41 22				
		eS	45 43				
	KM	eP	41 45				
27	* Epc: 42°N, O: 19-11-23,	80°E M: 5 ¹ / ₂			LS	+iP	19 15 05
						S	17 55
					NK	eP	15 34
					WW	eP	38
					LC	+iP	54
						S	19 33
					YC	eP	16 10
					TS	eP	18
					PT	+iP	19
					CU	+iP	25
						S	20 28
					KM	eP	16 54
						S	21 22
					PK	P	17 13
					CC	eP	18 03
					ZS	+iP	17
					CT	e(P)	20
27	* Epc: 33°S, O: 19-04-27 h: 100km ca.,	179°W M: 6 ³ / ₄					
					CT	+iP	19 16 55
						pP	17 38
						sP	53
						PP	20 14

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Date	Sta.	Phase	h	m	s	Date	Sta.	Phase	h	m	s
1	Epc: 28° ¹ / ₂ N, 139°E					2	*Epc: 20°S, 178° ¹ / ₂ W				
	O: 02-27-49						O: 11-27-45, h: 650km ca.				
	h: 540km ca., M: 5 ³ / ₄ -6										
✓	ZS	eP	02	31	06	✓	NK	-P	11	38	52
		sP		33	07	✓	CC	eP		39	05
		iS			44	✓	PK	-P			21
		i			36	✓	KM	-P			39
✓	NK	-iP			31	2	*Epc: 20°S, 178° ¹ / ₂ W				
		e			33		O: 11-34-20, h: 650km ca.				
		esP			35	✓	ZS	eP	11	45	15
		iS			34	✓	CT	eP			26
		i			31	✓	NK	eP			27
		esS			36	✓	CC	-P			39
✓	CC	+iP			31	✓	PK	-P			56
		epP			32	✓	KM	-P	46		14
		isP			33						
		S			34						
		i			36						
		eP			32						
✓	PK	sP			34		2	Epc: 31° ³ / ₄ N, 115° ¹ / ₄ E			
		S			35		O: 18-33-54, M: 4 ¹ / ₂				
		iPcP			50						
		P			32						
✓	PT	epP			34		NK	e(<u>R_w</u>)	18	34	46
		sP			35			<u>P</u>			52
		S			36			<u>S</u>			35
		i			37			i			55
		esS			39		✓	ZS	e(<u>P_w</u>)		16
		-iP			33			<u>S</u>			36
✓	CU	sP			35			i			53
		i			36		✓	PK	(<u>S_n</u>)		38
		S			37			e <u>S</u>			29
		i			38			<u>S</u>			47
		P			33			PT	e <u>S</u>		51
✓	LC	epP			34			CU	e <u>S_n</u>		39
		sP			35			<u>S</u>			08
		ePcP			58						
		S			37						
		i			56		3	*Epc: 16° 1S, 172° 8E			
		esS			39		O: 17-55-12, M: 6 ¹ / ₄ -6 ¹ / ₂				
		eSS			37						
		eScS			41		✓	ZS	-P	18	06
		-iP			33		✓	CT	eS		15
		epP			35		✓	CT	-iP		06
		sP			36		✓		S		15
		S			38		✓	NK	-iP		06
		i			41		✓		eS		15
		P			34		✓	CC	-iP		06
		epP			36		✓		S		16
		sP			37		✓	PK	-iP		07
		i			39		✓		S		16
		eScP			40		✓	KM	-iP		07
		S			40		✓		eS		17
		esS			43		✓	PT	P		07
		i			56		✓		S		17

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Date	Sta.	Phase	h m s	Date	Sta.	Phase	h m s
9	PT	PKP	16 25 12	11	LC	+P	18 29 56
	LS	iPKP	13		S		35 23
	LC	PKP	15		CU	+iP	30 18
	ZS	ePKP	16		iS		36 03
		epPKP	50		KM	eP	30 53
		sPKP	26 02		iS		37 07
	NK	ePKP	25 18	12	*Epc: 19° ¹ / ₂ S, 177° ¹ / ₂ W		
		epPKP	51		O: 00-24-22, M: 6 ¹ / ₄		
		sPKP	26 03		h: 400m ca.,		
		ePP	30 07		NK	-iP	00 35 52
	KM	ePKP	25 22		iS		45 25
		pPKP	56		SKS		34
		sPKP	26 07		CT	eP	35 52
		ePP	30 34		iS		45 24
	CT	ePKP	25 24		PK	-P	36 23
					SKS		46 09
					S		24
					KM	-P	36 42
					eSKS		46 34
					S		47 01
					LC	eP	36 56
					S		47 32
11	*Epc: 37° ¹ / ₂ S, 78°E			13	*Epc: 52°N, 172° ¹ / ₂ W		
	O: 12-01-42, M: 6 ¹ / ₄ - 6 ¹ / ₂				O: 12-28-45, M: 6 ¹ / ₂		
	KM	-iP	12 12 27		PK	-iP	12 37 37
		+iP	30		PP		39 35
		iS	21 14		eS		44 46
	LS	-P	12 37		FS		45 01
		S	21 32		ZS	-iP	37 56
	CT	eP	12 43		PP		40 00
		+iP	45		NK	-iP	38 04
		iS	21 46		PP		40 10
	CU	P	13 01		eS		45 35
		+iP	04		PS		51
		iS	22 17		LC	-iP	38 51
	LC	eP	13 30		S		47 01
		+iP	34		CT	-iP	39 14
		S	23 14		PP		41 42
		iS	18		eS		47 42
	NK	+iP	13 45		PS		57
		iS	23 37		KM	-iP	39 46
	ZS	+iP	13 45		PP		42 18
		eS	23 40		iS		48 44
	PK	eP	14 11		PS		49 01
		+iP	14		LS	-iP	40 09
		iS	24 36		eS		49 31
				16	*Epc: 50° ¹ / ₂ N, 177°W		
					O: 15-17-27		
	PK	+iP	18 28 21		PK	eP	15 25 55
		eS	32 35		PT	-P	26 24
	ZS	+P	28 31		LC	P	27 13
		eS	32 53		S		35 12
	NK	eP	28 40		CU	eP	27 36
		eS	33 11		KM	eP	28 07

Date	Sta.	Phase	h	m	s	Date	Sta.	Phase	h	m	s
18	*Epc: 15° ¹ / ₂ N,		120° ¹ / ₂ E			19	PT	SKKS	15	36	14
	O: 19-54-57						LS	-PKP ₁	25	48	
	h: 150km ca.,		M: 7.1				LS	SKKS	36	33	
	CT	-iP	19	57	23		LC	-PKP ₁	25	49	
	ZS	+iP		58	30			PKP ₂	26	23	
		iS	20	01	22			PP	30	09	
	NK	+iP	19	58	46		NK	-PKP ₁	25	51	
		S	20	01	46			PKP ₂	26	37	
	KM	-iP	19	59	17			pPKP ₁		47	
		iS	20	02	46			PP	30	18	
	PK	-iP		00	08			SKKS	36	49	
		iS		04	16			SKSP	41	09	
	LC	-iP		00	21		ZS	-PKP ₁	25	52	
		iS		04	34			pPKP ₁	26	47	
	CC	-iP		00	43			ePP	30	19	
		iS		05	13			i	31	09	
	LS	-iP		01	03			SKKS	36	48	
								SKSP	41	06	
19	Epc: 5°S,		105° ¹ / ₂ E				CU	-PKP ₁	25	54	
	O: 03-42-13,		M: 5 -5 ¹ / ₄					pPKP ₁	26	49	
	CT	eP	03	48	15			i	27	39	
	KM	eP			31			PP	30	32	
	LS	eP	49	31				(PPP)	34	24	
		S	55	21				SKKS	36	59	
	ZS	eP	49	44				SKSP	41	15	
	SA	P		47			KM	-PKP ₁	25	57	
	NK	eP		47				ipPKP ₁	26	53	
	LC	eP	50	03				i	28	05	
	PK	eP		42				PP	31	10	
	CC	+iP	51	26				SKKS	32	25	
							CT	-PKP ₁	26	00	
								pPKP ₁		55	
								PP	31	10	
								iSKKS	37	42	
								iSKSP	41	46	
								i	51	57	
19	*Epc: 15°S,		70° ¹ / ₂ W								
	O: 15-06-10										
	h: 200km ca.,		M: 7								
	CC	ePKP ₁	15	25	32						
		pPKP ₁		26	27						
		iPP		29	28						
		i			56						
		iSKS	32	33							
		iSKKS	35	37							
		i	56	13							
	PK	-PKP ₁	25	44							
		ipPKP ₁	26	39							
		PP	29	32							
		SKKS	36	10							
	PT	-PKP ₁	25	43							
		PKP ₂	26	06							
		PP	29	43							
20	Epc: 5°S,		112°E								
	O: 02-41-15										
	h: 540km ca.,		M: 6 ¹ / ₂								
	CT	+iP	02	46	27						
		epP		47	53						
		S		50	40						
		i		53	09						
	KM	+iP		46	55						
		pP		48	23						
		iS		51	31						
		SS		54	28						
	CU	+iP		47	36						
		iS		52	40						
	ZS	+iP		47	43						

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Date	Sta.	Phase	h	m	s	Date	Sta.	Phase	h	m	s
22	SA	eP	21	53	12	23	NK	eP	13	49	45
	KM	eP		24			SA	eP		50	54
	CU	P		27			LC	eP		51	24
		S		56	54						
	PK	eP		53	34						
		eS		57	07						
	LC	+iP		53	59						
		S		57	55						
CC	P		54	08							
	eS		58	11							

*Epc: $24^{\circ}15'S$, $176^{\circ}W$
 O: 14-56-45
 h: 60km ca., M: $5\frac{3}{4}$

22 Epc: $5^{\circ}S$, $152^{\circ}15'E$
 O: 23-02-27
 h: 40km ca., M: $6\frac{1}{2}$

✓ ZS	+iP	23	10	57
	PcP		12	31
	S		17	45
	SS		21	08
✓ CT	+iP		11	03
	PcP		12	34
	PP			51
	S		17	56
✓ NK	+iP		11	15
✓ CC	+iP			54
	i		15	08
	(PPP)			24
	eS		19	31
	PS			53
✓ PK	+iP		12	05
	PcP			14
	PPP			15
	eS		19	49
	SP			20
✓ SA	+iP		12	11
✓ KM	+iP			14
✓ CU	+iP			22
	iPcP		13	12
	PPP			16
	S		20	21
	iPS			46
✓ PT	iP		12	33
✓ LC	+iP			42
	S		20	57

✓ ZS	eP	15	09	00
	pP			31
	eS			19
✓ CT	-iP		09	08
	pP			42
	eS		19	19
✓ NK	-P		09	11
	pP			45
	eS		19	26
✓ CC	-iP		09	26
	pP			58
	eS		19	56
✓ PK	-iP		09	41
	pP			10
	SKS		20	02
	eS			26
✓ SA	eP		09	50
✓ KM	eP			55
	SKS		20	23
✓ CU	-P		10	01
	pP			33
	SKS		20	29
	eS		21	02
✓ PT	P		10	01
✓ LC	eP			12
	eS		21	28

23 Epc: $25^{\circ}N$, $125^{\circ}15'E$
 O: 21-25-40
 h: 70km ca., M: 4

23 Epc: $40^{\circ}N$, $140^{\circ}E$
 O: 13-45-26

✓ ZS	iP	13	49	31
✓ PK	eP			45
	S		53	09

ZS	iP	21	27	33
	(S)			28
NK	eP			00
	eS			29
CT	eP			28
PK	P			29
	S			32
SA	eP			29
CC	e(P)			30
CU	P			12
PT	P			18
KM	eP			21

Date	Sta.	Phase	h	m	s	Date	Sta.	Phase	h	m	s	
26	LS	eS	03	29	00	5	SA	eP	05	22	20	
		(S)			41		CU	eP				27
	PK	eP		29	10			eS			27 01	
31	Epc: $38^{\circ}\frac{1}{2}N$, $70^{\circ}\frac{1}{2}E$					5	PK	eP			22 43	
	O: 19-53-00, M: 5						S				27 28	
	LS	+iP	19	57	32		LC	eP			22 57	
		S	20	01	04			S			27 54	
	LC	+P	19	58	45		CC	P			23 06	
		eS	20	03	21		Epc: $5^{\circ}\frac{1}{2}N$, $126^{\circ}E$					
	CU	+P	19	59	03		O: 13-48-52					
	KM	+P			18		CT	eP	13	53	40	
	PT	+P	19	59	18			S			57 31	
	PK	eP			58		NK	-P			54 39	
	eS	20	05	31	CU	eP			55 19			
CT	+P		00	36	PK	eP			45			
NK	+P			36	LC	P			55			
CC	e(S)		06	42	CC	eP			56 08			
	(P)		00	47								

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4 *Epc: $20^{\circ}\frac{1}{2}S$, $178^{\circ}W$
O: 08-02-17, h: 600km ca.

ZS	eP	08	13	18
NK	-P			29
CT	eP			30
CC	-iP			42
PK	-P	14	00	
SA	eP			10
KM	eP			17
LC	eP			32

5 Epc: $13^{\circ}N$, $125^{\circ}\frac{1}{2}E$
O: 05-16-45, *M: $5\frac{1}{4}$ - $5\frac{1}{2}$

CT	eP	05	20	32
	S			23 30
ZS	eP			21 10
	S			24 42
NK	eP			21 29
	eS			25 15
KM	eP			22 07
	eS			26 26

7 *Epc: $56^{\circ}N$, $154^{\circ}W$
O: 10-43-32, M: $5\frac{3}{4}$

CC	P	10	52	32
PK	eP			53 26
	S			11 01 27
LC	+P	10	54	28
CU	eP			55
LS	+P			55 36

7 *Epc: $56^{\circ}\frac{1}{2}N$, $154^{\circ}W$
O: 21-45-26, M: $5\frac{1}{4}$ - 6

CC	+iP	21	54	25
	eS	22	01	41
PK	eP	21	55	22
	eS	22	03	23
LC	P	21	56	23
	eS	22	05	21
CU	eP	21	56	49
KM	eP			57 19
LS	+P			30

8 *Epc: $55^{\circ}N$, $162^{\circ}\frac{1}{2}E$
O: 00-47-38, M: $6\frac{1}{2}$

PK	P	00	54	22
LC	P			55 46

Date	Sta.	Phase	h m s	Date	Sta.	Phase	h m s
8	CU	eP	00 56 15	10	LC	e(P _n)	23 08 56
	KM	eP	57 03			iF	07 19
						iS	10 27
					PK	iF	09 26
9	Epc: 3°N, 127° $\frac{1}{2}$ E				KM	eP	10 28
	O: 02-34-48					iS	12 41
	KM	eP	02 41 22		CC	iP	11 01
	PK	eP	42 12		LS	eP	43
		eS	48 05				
	LC	eP	42 22	11	*Epc: 11°S, 165°E		
		eS	48 24		O: 21-49-42, M: 5 $\frac{3}{4}$ -6		
	LS	-P	42 54		ZS	eP	21 59 41
		eS	49 16			S	22 07 39
					CT	eP	21 59 51
9	*Epc: 0° Lat, 66°E					S	22 08 01
	O: 04-48-30				NK	eP	21 59 56
	LS	P	04 55 43			S	22 08 11
		eS	05 01 38		CC	P	00 24
	KM	eP	04 56 24			S	09 05
		S	05 02 51		PK	eP	00 40
	LC	eP	04 57 19			S	09 33
	CC	eP	59 25		KM	+iP	00 53
						S	09 58
					CU	P	01 00
						S	10 11
9	*Epc: 10°S, 161°E				LC	P	01 17
	O: 20-29-28					S	10 42
	h: 100km ca., M: 5 $\frac{3}{4}$ -6						
	CC	eP	20 39 50	12	Epc: 25° $\frac{1}{2}$ N, 125° $\frac{1}{2}$ E		
		S	48 14		O: 08-54-28		
	PK	eP	40 04		ZS	eP	08 56 19
		eS	48 39			S	57 44
	KM	eP	40 17		NK	eP	56 47
		eS	49 06			eS	58 36
	CU	eP	40 22		PK	-P	28
	LC	eP	41		CC	-iP	52
	LS	eS	49 51			eS	09 02 19
					CU	P	08 59 03
					KM	eP	11
10	Epc: 35° 30'N, 110°25'E						
	O: 23-07-29, M: 5						
	SA	+iP _n	23 08 06	12	*Epc: 16° $\frac{1}{2}$ S, 177° $\frac{1}{2}$ W		
		+iF	09		O: 09-58-22, M: 6 $\frac{1}{2}$		
		i	21		ZS	eP	10 10 12
	OU	e(P _n)	09 21			eS	19 57
		iF	57		NK	eP	10 24
		i	10 23			eS	20 27
		iS _n	41		CT	eP	10 29
		iS	11 30				

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Date	Sta.	Phase	h	m	s	Date	Sta.	Phase	h	m	s
12	GC	eP	10	10	33	15	CC	+iP	09	01	54
		eS		20	37		LS	+iP		02	55
	PK	eP		10	55	16	*Epc: 21°S, 169°E O: 00-51-40, M: 6				
		S		21	21		ZS	eP	01	02	52
	SA	eP		11	10			S		11	59
	KM	eP			10		CT	eP		02	59
	CU	eP			24		NK	eP		05	06
	eS		22	18		S		12	28		
LC	eP		11	51	CC	+P		03	33		
LS	eP		12	14		eS		13	18		
12	Epc: 27°N, 103°E O: 18-58-02					16	Epc: 22°N, 120°E O: 01-21-13, M: 5 3/4				
	KM	P _n	18	58	37		PK	+P	03	46	
		S _n		59	03			S		13	45
	CU	eP _n		58	59		KM	P	03	52	
		eP		59	09		SA	+P		53	
		eS _n			42		LC	P	04	17	
	LS	eP	19	00	46		LS	eP		49	
	NK	eP		01	32						
	PK	eP			57						
CC	eP		03	21							
14	Epc: 1/2°N, 125°E O: 04-39-16, *M: 5 3/4					16	Epc: 18°S, 178°W O: 09-53-52, h: 360km				
	CT	eP	04	44	42		ZS	eP	10	04	53
		S		49	04		NK	eP		05	07
	ZS	P		45	33		CC	+iP		18	
	NK	eP			44			S		14	34
	CU	eP		46	18		PK	eP		06	36
		S		51	57			eS		15	38
	PK	eP		46	53		KM	eP		05	58
		(S)		52	58						
	CC	P		47	16						
	LS	P			19						
15	Epc: 22°N, 121°E O: 08-57-01, M: 7.2					16	Epc: 18°S, 178°W O: 09-53-52, h: 360km				
	CT	+iP	08	58	46		ZS	eP	10	04	53
	ZS	+iP		59	12		NK	eP		05	07
	NK	+iP			28		CC	+iP		18	
	SA	P	09	00	49			S		14	34
	KM	+iP		01	01		PK	eP		06	36
	CU	+iP			04			eS		15	38
	PK	+iP			19		KM	eP		05	58
	LC	+iP			42						
	FT	+iP			45						

Date	Sta.	Phase	h	m	s	Date	Sta.	Phase	h	m	s	
16	Epc: 27°N, 128° $\frac{1}{2}$ E					17	CC	eS	01	54	06	
	O: 17-52-11, M: 4 $\frac{1}{2}$ -4 $\frac{3}{4}$						NK	eP		45	02	
	ZS	eP	17	54	00			eS		54	45	
		S		55	23		ZS	+P		45	14	
	NK	eP		54	28			eS		55	06	
	CT	eP		55	30		CT	+P		45	15	
	PK	eP		56	06			eS		55	07	
		eS		59	11							
	CC	P		56	22		17	Epc: 22° $\frac{1}{2}$ N, 121° $\frac{1}{2}$ E				
		S		59	36			O: 04-27-21, M: 4 $\frac{3}{4}$ -5				
	SA	P		56	27			CT	eP	04	29	07
	PT	P			53				eS		30	29
	OU	-P		57	01			ZS	eP		29	28
	LC	P			16			NK	eP			41
	eS		18	01	19	SA		eP		31	05	
KM	eP		17	57	18			S		34	02	
	eS		18	01	26	KM		eP		31	25	
						CU		eP			28	
								S		34	44	
						PK		eP		31	33	
						PT		P		32	01	
						LC		eP			02	
							eS		35	46		
						CC	P		32	16		
							S		36	12		
						LS	eP		33	15		
17	Epc: 22°N, 121° $\frac{1}{2}$ E					17	Epc: 22° $\frac{1}{2}$ N, 121° $\frac{1}{2}$ E					
	O: 01-02-30, M: 5 $\frac{1}{4}$						O: 07-58-00, M: 4 $\frac{3}{4}$					
	CT	eP	01	04	23		CT	eP	07	59	51	
	ZS	eP			43			eS		08	01	17
		eS		06	22		NK	e(P)		00	24	
	NK	eP		04	58		SA	P		01	48	
	SA	eP		06	21		CU	eP		02	06	
	KM	eP			39		KM	eP			08	
		eS		09	56			eS		05	24	
	PK	+P		06	51		PK	eP		02	16	
		eS		10	16		LC	eP			43	
	PT	P		07	15			eS		06	30	
	LC	eP			17		PT	P		02	45	
		S		11	02		CC	eP			58	
CC	eP		07	28		eS		06	55			
	S		11	28	LS	eP		03	59			
LS	eP		08	32								
17	*Epc: 41°N, 20°E					17	Epc: 22° $\frac{1}{2}$ N, 121° $\frac{1}{2}$ E					
	O: 01-33-11, M: 6 -6 $\frac{1}{4}$						O: 08-25-13, M: 5 -5 $\frac{1}{4}$					
	LS	P	01	43	08		CT	+P	08	27	02	
	LC	+P			47							
	CU	+P		44	06							
		S		52	56							
	SA	+iP		44	16							
	KM	+eP			20							
		eS		53	22							
	PK	+P		44	23							
		S		53	31							
	CC	+iP		44	43							

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Date Sta. Phase h m s | Date Sta. Phase h m s

17 CT eS 08 28 24
 ZS eP 27 19
 NK eP 36
 SA +P 29 02
 CU eP 20
 S 32 35
 KM P 29 20
 S 32 35
 PK +P 29 28
 LC eP 54
 S 33 40
 PT P 29 55
 CC eP 30 07
 LS eP 31 10
 eS 35 53

17 *Epc: 7° $\frac{1}{2}$ S, 156°E
 O: 21-04-40, M: 7 $\frac{1}{2}$

ZS +iP 21 13 48
 NK +iP 14 07
 CC +iP 43
 PK (P) 57
 KM +iP 15 05
 CU +iP 15

18 Epc: 1°N, 124°E
 O: 00-30-18, h: 250km

CT eP 00 35 09
 KM +iP 36 13
 CU +iP 42
 PK +P 37 22
 LC +iP 22
 LS +iP 43
 CC +P 48

18 Epc: 22° $\frac{1}{2}$ N, 121°E
 O: 00-33-57, M: 5 $\frac{1}{2}$

CT +iP 00 35 55
 eS 37 19
 ZS +iP 36 02
 KM +iP 38 04
 S 41 18
 CU +iP 38 05
 PK +P 05
 LC P 33
 PT P 33
 CC +iP 43

18 *Epc: 22° $\frac{1}{2}$ S, 172°E
 O: 05-38-39

CC eP 05 50 45
 PK eP 58
 eS 06 01 11
 KM eP 05 51 05

18 *Epc: 44°55'N, 111°05'W
 O: 06-37-15, M: 7.5

CC -P 06 49 16
 -iP 21
 i 59 17
 i 26
 PK -P 49 53
 iP 58
 PP 53 11
 PPP 55 09
 i 07 00 21
 i 31
 PT eP 06 50 03
 -iP 08
 iPP 53 30
 ZS -P 50 17
 -iP 22
 iPP 53 58
 i 07 00 54
 i 01 24
 NK -P 06 50 20
 iP 25
 i 53 32
 PP 50
 i 54 07
 i 07 00 55
 i 01 04
 i 25
 LC -P 06 50 31
 P 38
 PP 54 17
 i 07 01 19
 CU eP 06 50 58
 P 51 03
 PP 55 00
 i 07 01 40
 i 02 36
 CT eP 06 51 10
 eP 12
 PP 55 19
 PPP 57 39
 i 07 01 47
 i 02 54

Date	Sta.	Phase	h	m	s	Date	Sta.	Phase	h	m	s							
18	LS	eP	06	51	18	X	19	CC	eP	07	13	29						
		P			22													
		PP		55	38													
		i			44													
		i	07	01	58													
		i		02	09													
	KM	eP	06	51	22		X	20	*Epc: $10^{\circ}\frac{1}{2}S$, $161^{\circ}E$ O: 01-59-06, M: $5\frac{1}{4}$	CC	eP	02	09	37				
		P			24					S		18	12					
		iPP		55	38					PK	eP		09	52				
		PPP		57	53					KM	P		10	04				
		i	07	02	05						S		19	01				
		i		03	13													
18	*Epc: $44^{\circ}53'N$, $110^{\circ}44'W$ O: 15-26-06.5, M: $6\frac{1}{2}$	CC	-iP	15	38	10	X	20	Epc: $5^{\circ}S$, $152^{\circ}E$ O: 08-55-05, *M: 5	ZS	eP	09	03	29				
			PP		41	09				NK	eP			48				
			(S)		48	10					eS			10	44			
			PK	-P		38				47	CC	eP		04	25			
				iPP		42				05	PK	eP			37			
				i		49				20		e(S)			12	18		
		ZS	-iP		39	11		KM	eP		04	43						
			PP		42	49		LC	eP		05	12						
			PPP		44	52			eS			13	24					
		NK	i		49	42		21	Epc: $40^{\circ}\frac{1}{2}N$, $102^{\circ}\frac{1}{4}E$ O: 07-13-03	X	LC	iP	07	14	17			
			i		50	09						PT	P			40		
			-P		39	14						SA	eP			59		
PP			42	50	CU	eP						15	31					
i			50	16		eS							17	23				
i			50	36	PK	eP							15	41				
LC	P		39	26	NK	eP			16	41								
	i		50	36	KM	eP				46								
	i		51	17		eS				19	41							
CU	-P		39	47	ZS	P				17	11							
	PP		43	47		S				20	24							
	i		50	34	CC	P				17	17							
CT	i		51	17		(S)				20	37							
	eP		40	02														
	ePP		44	10														
KM	eP		40	12														
	eP		40	12														
	PP		44	28														
19	Epc: $21^{\circ}N$, $121^{\circ}\frac{1}{2}E$ O: 07-08-20	X	NK	eP	07	11	08	21	Epc: $50^{\circ}S$, $140^{\circ}\frac{1}{2}E$ O: 08-03-15, *M: $5\frac{3}{4}-6$	X	CT	eP	08	15	10			
				KM	P		12					26	KM	eP			40	
				PK	+P							48		S			25	55
					eS		16					23	ZS	eP			15	41
				LC	P		13					09		eS			25	58
	S		16	57		NK	-P			15	50							

Date	Sta.	Phase	h m s	Date	Sta.	Phase	h m s
21	NK	eS	08 26 15	23	CU	eS	22 44 35
	CU	eP	16 03		PK	eP	34 13
		SKS	26 30			eS	44 24
		S	41		SA	+P	34 14
	SA	-P	16 12		KM	eP	21
	LC	P	25		CC	eP	21
	PK	P	29				
	CC	eP	41				

24 Epc: 27°N, 96° $\frac{1}{2}$ E
 O: 08-13-40, M: 3 $\frac{1}{2}$ -4

21 Epc: 49°S, 140°E
 O: 08-05-32, *M: 6

CT	eP	08 17 29
	S	27 19
KM	+P	17 59
	S	28 18
ZS	P	18 01
	S	28 23
NK	+P	18 08
	S	28 36
CU	eP	18 21
	SKS	28 51
	S	29 01
LC	P	18 45
PK	eP	48
CC	eP	59
	S	30 15

LS	-iPn	08 15 01
	i	20
	i	52
	iSn	16 03
KM	-iPn	15 09
	i	42
	iSn	15 18
CU	-P	15 34
	S	17 00
	i	26
LC	-iP	16 22
	i	18 32
SA	-P	16 45
	i	54
NK	e(P)	18 10
	i	21 56
PK	-P	18 22
	i	28
	e	22 17
ZS	eP	18 29

21 Epc: 50°S, 140° $\frac{1}{2}$ E
 O: 09-37-49, *M: 6

KM	eP	09 50 14
	eS	10 00 30
ZS	eP	09 50 16
	eS	10 00 33
NK	eP	09 50 21
	eS	10 00 46
CU	eP	09 50 36
SA	eP	44
LC	-P	51 00
	eS	10 02 00
PK	eP	09 51 02
	eS	10 01 40
CC	eP	09 51 13

24 *Epc: 10° $\frac{1}{2}$ S, 161° $\frac{1}{2}$ E
 O: 15-41-40, M: 5 $\frac{3}{4}$

ZS	eP	15 51 24
	S	59 16
CT	eP	51 35
	eS	59 33
NK	eP	51 41
	eS	59 46
CC	P	52 12
	S	16 00 46
PK	eP	15 52 24
	eS	16 01 07
KM	eP	15 52 37
	S	16 01 34
CU	eP	15 52 45
	S	16 01 46
LC	eP	15 53 03
	S	16 02 18

23 *Epc: 35° $\frac{1}{2}$ N, 3°W
 O: 22-21-30, M: 5 $\frac{1}{2}$

LC	+P	22 33 50
CU	eP	34 08

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Date	Sta.	Phase	h m s	Date	Sta.	Phase	h m s
24	Epc: 11°S, 161°E			26	ZS	S	10 49 27
	O: 21-30-38, M: 6½				NK	eP	39 38
	ZS	eP	21 40 32			S	49 32
		S	43 30		LC	eP	39 58
	CT	eP	40 43			S	50 08
		PP	42 59		CT	eP	40 32
		S	48 49			PP	44 06
	NK	eP	40 50			eSKS	51 02
		PP	43 05			S	19
		S	49 03		KM	P	40 53
	CC	eP	41 16			SKS	51 25
		S	49 54		LS	-P	40 56
	PX	eP	41 33			SKS	51 28
		S	50 24				
	SA	P	41 43	27	Epc: 25°N, 95°E		
	KM	eP	45		O: 23-53-00, *M: 5½-5¾		
	CU	eP	53		KM	-P	23 54 50
		S	51 02		LS	+iP	52
	PT	P	42 00		CU	-iP	55 24
	LC	eP	08		CT	eP	56 56
		iS	51 35		NK	-iP	57 58
	LS	eP	42 53			iS	24 01 56
					PK	-P	23 58 12
						S	24 02 22
26	*Epc: 18°N, 94°W				ZS	-P	23 58 17
	O: 08-25-30, M: 6¾				CC	eP	59 23
	ZS	+PKP	08 44 25			eS	24 04 29
		SKS	51 29				
		SKKS	52 52				
		PS	55 54	28	*Epc: 17°S, 167°E		
	NK	+PKP	44 25		O: 15-52-10, M: 5½-5¾		
		PP	46 07		ZS	P	16 02 58
		PPP	48 34			e	03 56
		PS	55 52		CT	eP	06
	SA	+iPKP	44 31		NK	-P	11
	LC	+iPKP	32		CC	-P	38
	CT	+PKP	46		PK	-P	52
	LS	+iPKP	48			eS	13 34
	KM	+iPKP	51			PS	14 04
					SA	eP	04 00
					KM	-P	02
26	*Epc: 51°N, 132°W				CU	-P	09
	O: 10-27-41, M: 6.5				LC	-iP	26
	CC	+P	10 38 23			S	14 37
		PP	40 48		LS	P	04 52
		PPP	52 25				
		S	47 09	29	*Epc: 52°.6N, 107°.1E		
	PK	eP	39 09		O: 17-03-16, M: 6½		
		eS	48 37				
	ZS	+P	39 35				

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Date	Sta.	Phase	h	m	s	Date	Sta.	Phase	h	m	s
4 Epc: 29°N, 92° $\frac{1}{2}$ E						5 Epc: 1° $\frac{1}{2}$ N, 129° $\frac{1}{2}$ E					
O: 00-09-50, M: 4 $\frac{3}{4}$						O: 15-34-46, M: 5					
	LS	+iP	00	10	16		CT	-P	15	40	31
		S			33			i		41	03
	KM	eP	12	41			eS		45	07	
		eS	14	52			KM	eP	41	41	
	CU	e(P)	12	24			S		47	12	
	CT	e(P)	14	28			SA	P	42	07	
	PK	e(P)		46			PK	P		27	
	NK	e(S)	19	00				PP		44	02
	ZS	(S)		42			eS		48	34	
							LC	P	42	40	
							S		49	00	
							CC	F	42	46	
								PP	44	27	
							eS		49	14	
							PT	P	42	47	
							LS	P	43	13	
							iS		49	58	
5 Epc: 30°N, 92° $\frac{1}{2}$ E						5 *Epc: 51°N, 179° $\frac{1}{2}$ E					
O: 05-33-33, M: 4						O: 21-28-42, M: 5 $\frac{1}{2}$ -5 $\frac{3}{4}$					
	LS	iP	05	33	53		CC	P	21	35	49
		S		34	07		PK	eP	36	54	
	CU	eP	36	05			eS		43	31	
		eS	38	05			LC	P	38	11	
	KM	e(P)	36	08							
		eS	38	00							
	LC	eP	36	22							
	PT	e(P)	37	56							
	PK	eP	38	37							
	CC	eP	39	46							
5 Epc: 1° $\frac{1}{2}$ N, 129° $\frac{1}{2}$ E						6 Epc: .6° $\frac{1}{2}$ N, 126° $\frac{1}{2}$ E					
O: 06-07-44, M: 5 $\frac{1}{2}$						O: 00-28-06, *M: 5 $\frac{1}{4}$					
	CT	eP	06	13	25		NK	eP	00	33	50
		PP		15	10		KM	+P	34	12	
		S		17	57		eS		39	04	
	ZS	eP	14	01			PK	eP	35	00	
		eS	19	02			S		40	30	
	NK	+P	14	19			LC	+P	35	11	
		eS	19	33			S		40	51	
	KM	-P	14	37			CC	(P)	35	29	
		PP		15	51						
		S		20	08						
	CU	eP	15	00							
		S	20	47							
	PK	eP	15	23							
		S	21	30							
	LC	P	15	36							
		S	21	54							
	CC	eP	15	40							
	PT	P		48							
		(S)	22	08							
	LS	-iP	16	09							
		iS	22	53							

Date	Sta.	Phase	h m s	Date	Sta.	Phase	h m s
6	LS	iS	00 41 56	8	KM	eP	11 23 30
*Epc: 13°N, 124°E O: 13-18-05, *M: 5				*Epc: 18°N, 121°E O: 19-04-10			
CC	eP	04	21 25	CT	eP	19	06 20
PK	eP	21	43	KM	eP	08	31
KM	eP	21	52	PK	eP	09	11
CU	eP	22	01	S	13	13	
LC	eP	22	16	LC	eP	09	25
LS	eP	23	00				
S	32	56					
*Epc: 36°N, 140°E O: 10-03-29 h: 100km ca., M: 5.9				*Epc: 42°N, 143°E O: 19-19-35 h: 70km, *M: 5.3			
KM	eP	13	23 14	CC	P	19	22 42
PK	eP	23	56	sP	23	02	
LC	eP	24	13	PK	eP	24	08
LS	eP	30	24	sP	27	46	
	eS			eS	24	11	
				eS	28	01	
				NK	eP	24	26
				sP	28	21	
				S	25	50	
				LC	P	25	50
				CT	eP	26	14
				sP	30	58	
				eS	26	09	
				eS	31	20	
				KM	+P	26	45
				sP	27	07	
				eS	32	29	
				LS	eP	27	37
				sP	34	03	
				eS			
8	PK	eP	11 21 02	9	LS	P	05 48 36
*Epc: 52°N, 107°E O: 11-17-40				*Epc: 36°N, 71°E O: 05-44-31, h: 120km ca.			
CC	eP	10	06 46	eS	51	45	
ZS	eP	07	24	LC	eP	50	01
NK	+P	07	41	CU	eP	14	
PK	eP	09	07	KM	e	26	
CT	eP	09	07				
LC	P	09	29				
CU	eP	10	09				
KM	+P	10	09				
LS	+P	11	16				
10	ZS	+P	05 43 56				
*Epc: 6°S, 154°E O: 05-35-04, M: 5 1/2 - 5 3/4							

Date Sta. Phase h m s | Date Sta. Phase h m s

12 Epc: 36°N, 70°E
 O: 21-19-57
 h: 220km ca., M: 5

✓ LS	-P	21 24 03
	iS	27 20
✓ LC	eP	25 23
	pP	26 02
	sP	27
	S	29 42
	sS	30 49
✓ CU	P	25 36
	pP	26 20
	esP	46
	iS	30 06
✓ KM	eP	25 50
	isP	26 53
	iS	30 29
	esS	31 39
✓ PT	eP	26 01
	PP	56
	sP	27 04
	iS	30 49
✓ SA	+P	26 01
	eP	27 07
	S	30 52
✓ PK	P	26 40
	epP	27 25
	ePP	28 07
	eS	31 52
✓ CT	P	27 10
	esP	28 15
	eS	32 48
✓ NK	+P	27 14
	iS	33 02
✓ CC	P	27 31
✓ ZS	P	34
	epP	28 15
	sP	45
	S	33 35

13 Epc: 40°N, 74°¹/₂E
 O: 19-15-52, M: 4¹/₂

✓ LS	eP	19 20 00
	eS	23 15
✓ LC	+P	21 13
	e(S)	25 30
✓ CU	e(P)	21 30
	eS	26 00
✓ PT	e(P)	21 47
✓ SA	e(P)	22 01
	eS	27 01

13 Epc: 1°¹/₃S, 130°E
 O: 22-40-40, *M: 5³/₄ -6

✓ CT	eS	22 51 00
✓ ZS	eP	47 00
	eS	52 04
✓ NK	eP	47 14
	S	52 29
✓ KM	-iP	47 37
	iS	53 10
✓ CU	eP	48 01
	iS	53 50
✓ PK	eP	48 23
	eS	54 30
✓ LC	P	48 35
	eS	54 52
✓ CC	eP	48 40
	S	55 04
✓ LS	-iP	49 09
	S	55 55

14 *Epc: 28°¹/₃S, 177°W
 O: 14-09-39, M: 7³/₄

✓ ZS	+iP	14 22 11
	iP	14
	i	30
✓ CT	+P	14
	i	41
✓ NK	+P	22
	iP	25
	i	43
	i(S)	32 08
✓ CC	+iP	22 39
	i	23 03
✓ PK	+P	22 53
	e	23 17
✓ KM	+iP	23 00
	i	26
	i	32 38
✓ SA	+P	23 00
✓ PT	P	15
✓ LC	eP	20
✓ LS	eP	32

14 *Epc: 29°S, 176°¹/₂W
 O: 17-05-15, M: 6¹/₂ -6³/₄

✓ ZS	+iP	17 18 47
✓ CT	+iP	51
	i	19 05
✓ NK	+iP	18 59

Date	Sta.	Phase	h	m	s	Date	Sta.	Phase	h	m	s
14	NK	i	17	19	11	15	*Epc: 21° $\frac{1}{2}$ S, 179° $\frac{1}{2}$ W				
	CC	+iP			15		O: 11-05-33				
		i			31		h: 600km ca., M: 6 $\frac{1}{2}$				
		iSKS			29						
		i			30						
	PK	+P			19						
		i			42						
		SKS			30						
		iS			16						
	SA	+P			19						
		iPcP			50						
	KM	+iP			37						
		iPcP			50						
		PP			22						
		i			30						
		iSKS			13						
	LC	P			19						
14		*Epc: 29°S, 177°W									
		O: 22-23-53, M: 6 $\frac{1}{2}$									
	NK	+P	22	36	37						
		i			47						
	CC	+iP			36						
		eSKS			47						
		i			48						
	PK	eP			37						
		eSKS			47						
	KM	eP			37						
		eSKS			47						
	LC	eP			37						
15		*Epc: 28° $\frac{1}{2}$ S, 177°W									
		O: 05-59-42, M: 6 $\frac{1}{2}$ - 6 $\frac{3}{4}$									
	ZS	+iP	06	12	13						
		S			42						
	CT	+iP			12						
		PP			15						
		S			22						
	NK	P			12						
	WH	+iP			36						
	CC	+iP			12						
	PK	+iP			55						
		SKS			23						
		S			24						
	KM	+iP			13						
		SKS			23						
		S			24						
	PT	S			13						
	LC	P			13						
		P			23						
		SKS			24						
16		*Epc: 28° $\frac{1}{2}$ S, 176°W									
		O: 15-57-03, M: 5 $\frac{3}{4}$ - 6									
	CT	e(P)	16	09	44						
		i			10						
	CC	eP			10						
		i			11						
		S			21						
	PK	eP			10						
		i			11						
		SKS			20						
		S			21						
	KM	eP			10						
		sP			11						
		SKS			21						
		S			21						

Date	Sta.	Phase	h	m	s	Date	Sta.	Phase	h	m	s			
16	CU	eP	16	10	39	21	CC	PP	02	20	22			
		i						S			26	16		
		SKS						-iP			18	22		
		S						S			26	22		
						PK	-P		18	23				
							eS		26	23				
							ScS		28	18				
17	*Epc: 28° $\frac{1}{2}$ S, 176°W													
	O: 14-36-11, M: 5 $\frac{3}{4}$ -6													
	CT	eP	14	48	53	21	CU	-iP						
	CC	eP		49	14			PP			20	37		
		S		15	00			10	iS			26	35	
	PK	eP	14	49	32			PT	P			18	48	
		SKS			59			59	eS			27	15	
		S			15			00	37	LC	-iP		18	53
	KM	P	14	49	42				S			27	21	
		SKS			15			00	12	LS	P		19	32
		eS						57		eS		28	32	
	CC	eP	14	49	44			21		Epc: 9°S, 121°E				
	SKS			15	00			20	O: 13-09-38					
	S				01			01	21	KM	P	13	17	08
LC	eP	14	50	01			eS				23	07		
	SKS			15	00	34	WH	eP				17	22	
							ZS	eP					24	
							NK	eP					32	
							CU	eP					43	
							PK	P					18	34
							CC	eP					19	02
18	*Epc: 57° $\frac{1}{2}$ S, 24°W													
	O: 12-01-11, M: 6 $\frac{1}{4}$													
	KM	e(PKP)	12	20	27	23	*Epc: 83° $\frac{1}{2}$ N, 113° $\frac{1}{2}$ E	O: 10-38-59						
	CT	e(PKP)			34			CC			eP	10	46	35
	LC	e(PKP)			44			PK	eP		47	06		
	ZS	e(PKP)			49				eS		53	38		
	NK	e(PKP)			49			LC	eP		47	37		
PK	e(PKP)			21	03			CU	eP		48	17		
								KM	eP			59		
21	Epc: 10°S, 149° $\frac{1}{2}$ E													
	O: 02-08-26, *M: 5 $\frac{3}{4}$ -6													
	CT	-P	02	17	08	23	Epc: 35° $\frac{1}{2}$ N, 139° $\frac{1}{2}$ E	O: 22-23-02, M: 5						
		PP			19			00	CC	P	22	26	20	
		eS			24			06		S		28	54	
	ZS	-P			17			12		ZS	P		26	51
		ePP			19			00		eS		29	47	
		eS			24			14	NK	eP		27	07	
	NK	-P			17			29			eS		30	20
		PP			19			25		PK	P		27	25
		S			24			45						
	WH	-iP			17			40						
eS				25	05									
KM	-iP			18	16									
	S			26	12									
CC	-P			18	18									

Date	Sta.	Phase	h	m	s	Date	Sta.	Phase	h	m	s
23	PK	S	22	30	52	27	PK	+P	10	29	01
	WH	P		27	54		LC	+iP			10
		S		31	47			iS			35 59
	SA	-iP		28	28		LS	+P			29 34
		i			35			S			36 41
	GT	eP		28	36						
		eS		33	03						
	LC	P		29	00						
		S		35	44						
	CU	eP		29	11						
		eS		34	06						
	KM	eP		29	40						
	LS	eP		30	47						

27 Epc: 33°N, 109°¹/₂E
O: 16-40-30, M: 4¹/₂

SA	+iP _n	16	40	56
	iP			59
	iS _n			41 15
CU	eP _n			53
	e			42 05
	iP			16
	iS _n			56
	S			43 24
LC	eP _n			41 55
	P			42 20
	iS			43 30
NK	eP _n			42 20
	P			55
	i			44 27
	iS			33
PT	S			32
PK	eP _n			42 35
	iS			45 00
KM	eP			42 55
	eS			44 45
	i			45 56
ZS	(P)			42 59
	(S)			44 59
CT	e(S)			45 06
LS	eP			44 27
	e(S)			47 32

25 Epc: 22°N, 121°¹/₂E
O: 02-36-45, M: 6¹/₂

CT	-P	02	38	41
	S			39 10
ZS	-P			02
	S			40 47
WH	eP			39 20
	eS			41 18
NK	eP			39 17
	S			41 19
SA	-iP			40 40
KM	eP			54
	S			41 10
CU	-iP			40 59
	iS			44 18
PK	+P			41 08
	iS			44 36
LC	+iP			41 32
	iS			45 22
PT	iP			41 34
	S			45 27
CC	+P			41 44
	S			45 45

28 Epc: 26°N, 129°E
O: 04-20-22, M: 4³/₄-5

ZS	+iP	04	22	29
	eS			24 07
NK	eP			22 59
	eS			25 02
WH	eP			23 38
PK	eP			24 30
	eS			27 47
CC	eP			24 57
	S			28 00
SA	P			24 49
CU	eP			25 25

27 Epc: 5°S, 129°¹/₂E
O: 10-20-38, *M: 5¹/₂

ZS	eP	10	27	43
NK	eP			55
WH	+P			56
	eS			33 46
KM	+iP			28 09
	eS			34 10
CU	+P			28 34
	eS			34 53
SA	+iP			28 39

Date	Sta.	Phase	h m s	Date	Sta.	Phase	h m s
28	CU	eS	04 29 28	30	CT	S	20 46 00
	LC	P	25 36		NK	eP	37 08
	KM	eP	39			eS	46 12
		eS	29 52		CC	+iP	37 34
	LS	eP	27 07			eS	47 00

29 Epc: $30^{\circ}\frac{1}{2}N$, $99^{\circ}\frac{1}{2}E$
 O: 02-49-48, M: $4\frac{1}{4}$

CU	e(P _n)	02 50 57
	iP	51 08
	S _n	40
	iS	52 00
	i	10
KM	e(P _n)	51 24
	P	45
	iS _n	52 23
	iS	53 02
	i	09
LC	P	32 04
	S _n	53 01
	e	26
LS	iS	32
	P	52 06
	iS _n	53 04
SA	iS	37
	iS	54 43
NK	eP	53 50
CC	eP	55 13

30 Epc: $28^{\circ}N$, $102^{\circ}\frac{1}{2}E$
 O: 13-57-46, M: 4

KM	P _n	13 58 33
	iP	37
LC	iS	59 10
	i	14 00 03
LS	e(P)	12
	S	02 00
WH	P	00 10
	eS	02 07
PK	eP	00 24
	eP	01 38

October

29 * Epc: $29^{\circ}S$, $176^{\circ}\frac{1}{2}W$
 O: 15-31-57, M: $6\frac{1}{2}-6\frac{3}{4}$

ZS	+iP	15 44 31
CT	eP	35
	S	55 05
NK	+iP	44 43
WH	+P	54
CC	+iP	45 00
PK	+P	13
KM	eP	23
CU	+iP	30
LC	eP	43

5 * Epc: $83^{\circ}.5N$, $114^{\circ}.5E$
 O: 18-27-47, M: $5\frac{3}{4}-6$

CC	+P	18 35 24
	PP	27 00
PK	eS	41 33
	SS	44 35
NK	eP	35 53
	eS	42 28
ZS	SS	45 50
	+P	36 55
CU	eS	44 23
	eP	37 02
WH	P	07
	eS	44 41
CT	+P	37 07
	P	59

30 * Epc: $18^{\circ}S$, $168^{\circ}E$
 O: 20-25-58, M: $6\frac{1}{2}$

ZS	eP	20 36 53
	eS	45 46
CT	P	37 03

Date	Sta.	Phase	h m s.	Date	Sta.	Phase	h m s.
6 Epc: 0° Lat, 122°E O: 05-44-35, h:150km ca.				8 PK (P) 02 44 19			
✓	CT	P	05 49 42	✓	ZS	e(P)	41
✓	ZS	eP	50 40	✓	NK	e(P)	45
✓	WH	iS	55 34	✓	WH	+P	45 13
✓	NK	P	50	✓	LC	P	29
✓	CU	iS	55 51	✓	CU	+P	55
✓	LC	eP	51 14	✓	KM	+P	46 27
✓	LC	iS	56 33				
✓	LC	P	51 55				
✓	PK	S	57 46				
✓	PK	eP	51 59				
✓	LS	eP	52 14				
7 *Epc: 41°N, 190 ³ / ₄ E O: 08-30-41, M: 5.9				8 *Epc: 52° 7N, 107° 1E O: 14-14-10, M: 5			
✓	LS	P	08 40 33	✓	PK	eP	14 17 31
✓	CU	+iP	41 34	✓	CC	(S)	20 51
✓	LC	eS	50 26	✓	CC	P	17 43
✓	LC	+iP	41 13	✓	LC	(S)	20 54
✓	SA	+iP	43	✓	LC	eP	18 08
✓	KM	+iP	47	✓	CU	eP	19 11
✓	PK	+iP	51	✓	CU	d(S)	23 37
✓	CC	eS	51 02	✓	NK	e(P)	19 11
✓	CC	+P	42 09	✓	KM	eP	20 00
✓	NK	+iP	30	✓	KM	d(S)	25 06
✓	CT	+P	41				
✓	ZS	+iP	42				
8 *Epc: 19°S, 169°E O: 00-03-28				11 *Epc: 41° ¹ / ₂ N, 142°E O: 09-33-44			
✓	ZS	+iP	00 14 32	✓	CC	P	09 36 55
✓	CT	+iP	37	✓	PK	S	39 33
✓	NK	+iP	45	✓	PK	P	38 17
✓	PK	+P	15 25	✓	ZS	eS	42 07
✓	SA	eS	25 09	✓	ZS	eP	38 20
✓	SA	+iP	15 32	✓	NK	S	42 11
✓	KM	+iP	34	✓	NK	eP	38 30
✓	LC	eS	25 26	✓	WH	eS	42 28
✓	LC	+iP	15 57	✓	WH	eP	39 10
✓	LS	eS	26 12	✓	LC	P	59
✓	LS	P	16 32	✓	CU	eP	40 18
				✓	KM	eP	52
8 *Epc: 52° ¹ / ₂ N, 171°W O: 02-35-20				12 *Epc: 2°N, 98° ¹ / ₂ E O: 03-21-52, M: 6.3			
✓	CC	e(P)	02 43 18	✓	KM	+iP	03 27 06
				✓	LS	i	37 50
				✓	LS	P	27 51
				✓	WH	S	32 24
				✓	WH	P	28 24
				✓	SA	i	29 48
				✓	SA	eS	33 36
				✓	SA	eP	28 36
				✓	LC	S	33 54
				✓	LC	+P	28 42

Date	Sta.	Phase	h	m	s	Date	Sta.	Phase	h	m	s
12 ✓	LC	S	03	34	01	15 ✓	PK	S	06	29	21
✓	NK	eP		28	56	✓	CC	P		25	43
		i		30	24			PP		25	51
		eS		34	29			S		30	16
✓	ZS	P		29	00						
		i		30	30						
		S		34	34	16 *	Epc: 6°N, 125°E				
		SS		38	00		O: 16-14-53				
✓	CC	+iP		30	37	✓	CT	+P	16	20	53
		i		32	15	✓	KM	eP		21	43
		eS		37	32	✓	SA	P		22	20
						✓	PK	P			48
						✓	LC	+iP			51
14	Epc: 26° $\frac{1}{2}$ N, 125° $\frac{1}{2}$ E										
	O: 09-56-48, M: 4 $\frac{1}{2}$										
	ZS	-P	09	58	23	17	Epc: 12°N, 134°E				
		S		59	36		O: 07-23-03, h: 350km ca.				
		SS			47		CC	-iP	07	24	49
	NK	-iP		58	53			iS		26	11
		eS	10	00	30		PK	P			05
	WH	eP	09	59	31			S		29	32
		eS	10	01	40		NK	P		26	29
		i		02	36		WH	eP		27	06
	PK	-P		00	28		SA	eP			24
		eS		03	20		LC	P			48
	SA	-iP		00	42						
	CC	P			44						
		S		03	48	17 *	Epc: 35 $\frac{1}{2}$ N, 80°E				
	LC	-P		01	29		O: 10- 10-11 , M: 4 $\frac{1}{2}$				
	KM	eP			30		47-11				
		eS		05	18		LS	eP	10	49	37
							LC	eP		51	29
							CU	eP			40
15	Epc: $\frac{1}{2}$ °S, 120°E						KM	eP			54
	O: 06-15-33, M: 6 $\frac{1}{4}$							e(S)			55 59
✓	CT	P	06	20	51						
		S		25	07	19	Epc: 45°N, 147°E				
✓	KM	-P		21	49		O: 02-47-00				
		PP		22	46	✓	CC	P	02	50	40
		S		26	51	✓	PK	P		52	06
✓	ZS	+P		21	55			eS		56	14
		S		26	39	✓	ZS	eP		52	17
✓	WH	P		21	59	✓	NK	eP			26
✓	NK	eP		22	04	✓	LC	+iP		53	40
✓	CU	P			21			eS		58	59
		PP		23	34	✓	WH	eP		53	57
		iS		27	43	✓	KM	eP		54	36
✓	SA	P		22	35			eS		03	00 42
✓	LC	P		23	04						
		S		28	59						
✓	PK	eP		23	12						

Date	Sta.	Phase	h	m	s	Date	Sta.	Phase	h	m	s
26	Epc: 38°N, 144°E					26	WH	eP	10	36	16
	O: 07-34-58, M: 6 $\frac{1}{4}$ -6 $\frac{1}{2}$							ScS		46	13
✓	CC	+iP	07	38	37	✓	SA	P		36	21
		S		41	29	✓	LC	-P			39
✓	ZS	+P		39	30			pP		37	09
		-iP			32	✓	CU	ScS		46	28
		S		43	10			+P		37	08
✓	NK	+iP		39	46			pP			38
		i		40	46	✓		S		43	26
		eS		43	39	✓		ScS		46	49
✓	PK	eP		39	49	✓	KM	-iP		37	43
		+iP			51			ScS		47	23
		PPP		40	26						
		S		43	43	27	Epc: 45° $\frac{1}{2}$ N, 150° $\frac{1}{2}$ E				
✓	WH	P		40	27		O: 06-52-54, M: 6 $\frac{3}{4}$				
		+iP			29	✓	CC	+iP	06	57	01
		PPP		41	20	✓	PK	+iP		59	21
		S		44	48	✓		iS	07	02	44
✓	SA	+iP		40	58	✓	ZS	+iP	06	58	36
✓	CT	eP		41	11	✓		S	07	03	10
		+iP			13	✓	NK	+iP	06	58	43
		i		42	15	✓		S	07	03	23
		iS		46	08	✓	WH	P	06	59	17
✓	LC	P		41	27	✓		S	07	04	23
		+iP			30	✓	SA	+iP	06	59	32
		eS		46	39	✓	LC	+iP			55
		S			43	✓		i	07	00	10
✓	CU	eP		41	41			eS		05	24
		+iP			43	✓	CT	+iP	00	07	
		iS		47	03	✓		PP	01	37	
✓	KM	P		42	11	✓		iS	05	54	
		+iP			13	✓	CU	+iP	00	18	
		iPP		43	39	✓		PP	01	53	
		iS		47	54	✓		S	06	12	
✓	LS	P		43	15	✓	KM	+iP	00	53	
		PP		45	03	✓		PP	02	42	
						✓		S	07	14	
						✓	LS	+iP	01	37	
								PP	03	28	
								iS	08	39	
26	* Epc: 51° $\frac{1}{2}$ N, 157° $\frac{1}{2}$ E					27	Epc: 45° $\frac{1}{2}$ N, 151° $\frac{1}{2}$ E				
	O: 10-29-09						O: 13-18-55				
	h: 150km ca., M: 6 $\frac{1}{2}$ -6 $\frac{3}{4}$					✓	CC	P	13	23	12
✓	CC	eP	10	34	00	✓	PK	eP		24	30
		pP			28	✓		P			43
		eS		37	50	✓	ZS	P			52
		e		45	01	✓	NK	eP			52
✓	PK	eP		35	11	✓	WH	eP	25	25	
		pP			41	✓	SA	+iP			41
		ScS		45	33						
✓	ZS	eP		35	39						
✓	NK	eP			43						
		pP		36	12						

Date	Sta.	Phase	h m s	Date	Sta.	Phase	h m s
30	WH	eS	06 38 04	31	*Epc: $16^{\circ}\frac{1}{2}S$, $178^{\circ}W$		
✓	NK	-P	32 14		O: 04-27-12		
	CU	eP	34		h: 450km ca., M: $6\frac{1}{2}$ - $6\frac{3}{4}$		
		S	38 53	✓	CT	eP	04 38 28
	SA	eP	32 48			eS	47 48
	LC	-P	33 16	✓	CC	eP	38 55
		eS	40 06			iP	40 10
	PK	eP	33 19			S	48 04
		eS	40 11			S	10
	LS	eP	33 27	✓	WH	+iP	38 39
						iP	40 15
30	*Epc: $19^{\circ}S$, $177^{\circ}\frac{1}{2}W$			✓		iS	48 13
	O: 07-04-48, h: 450km ca.					sS	51 06
✓	NK	-P	07 16 13	✓	PK	+P	38 55
✓	WH	-P	22			pP	40 31
✓	CC	-iP	24			S	48 46
✓	PK	-P	43	✓		sS	51 38
✓	SA	-iP	55	✓	KM	+iP	39 18
✓	KM	P	17 02	✓	CU	eP	34
✓	CU	eP	07			pP	40 59
✓	LC	-P	17			i	47 10
						eSKS	49 25
						S	37
						sS	51 37
30	*Epc: $23^{\circ}\frac{1}{2}S$, $175^{\circ}\frac{1}{2}W$			✓	LC	P	39 30
	O: 13-53-25, M: $5\frac{3}{4}$ - 6						
✓	ZS	eP	14 10 48				
		eSKS	21 04				
		S	15				
✓	NK	+P	10 49				
		eS	21 22				
✓	CT	eP	10 58				
✓	WH	+P	11 11				
		SKS	21 40				
		S	22 03				
✓	CC	+P	11 13				
		SKS	21 41				
		S	22 05				
✓	PK	+P	11 29				
		SKS	21 59				
		S	22 29				
✓	SA	+P	11 40				
✓	KM	+iP	45				
		SKS	22 21				
✓	CU	e(P)	11 50				
		SKS	22 24				
		iS	23 09				
✓	LC	eP	12 00				
		SKS	22 37				

November

2	Epc: $22^{\circ}\frac{1}{2}N$, $144^{\circ}E$		
	O: 08-44-04, M: 5		
✓	ZS	-P	08 48 58
		PP	49 24
		S	52 56
		SS	53 36
		SSS	52
✓	NK	-iP	49 19
		eS	53 37
✓	WH	eP	49 48
		S	54 23
		i	55 18
✓	CT	eP	49 58
		iP	50 44
		S	54 41
✓	PK	eP	50 05
		S	54 54
✓	SA	eP	50 36
✓	LC	iP	51 14

Date	Sta.	Phase	h m s	Date	Sta.	Phase	h m s
2	LC	S	08 56 55	2	PK	PS	20 21 23
	KM	eP	51 18		KM	+iP	13 10
		PP	52 40			PP	15 16
		PPP	53 02			eS	20 56
		S	57 05			PS	21 15
		i	49		SA	+iP	13 11
		iScS	09 01 24		LC	+iP	42
	LS	-P	08 52 41			eS	21 55
		S	59 33				

2 Epc: $22^{\circ}12'N$, $92^{\circ}E$
O: 13-15-36, M: 5

✓	LS	P	13 17 37
		PP	48
		e(S)	19 05
✓	KM	P	18 05
		S	20 00
✓	LC	-P	19 42
		PP	55
		e(S)	22 53
✓	SA	eP	20 02
		S	23 33
✓	CT	P	20 03
		PP	23
		S	23 39
✓	WH	iP	20 28
		S	24 23
✓	NK	-iP	21 08
		e(S)	25 37
✓	PK	eP	21 24
		S	26 01

3 Epc: $10^{\circ}15'S$, $111^{\circ}E$
O: 09-40-10, M: $6\frac{1}{4}$

✓	CT	-iP	09 46 52
		S	52 16
✓	KM	-iP	47 18
		(PP)	48 51
		S	53 01
✓	WH	-iP	47 54
		S	54 04
✓	ZS	-P	48 08
		PPP	50 16
		S	54 31
		SS	57 34
		ScS	10 58 07
✓	LS	-iP	09 48 23
		S	54 55
✓	SA	iP	48 24
		iS	34 59
✓	LC	-iP	48 43
		iS	55 32
✓	PK	-iP	49 09
		S	56 21
✓	CC	-iP	49 46
		S	57 29

2 Epc: $6^{\circ}S$, $151^{\circ}E$
O: 20-03-32, M: 6

✓	ZS	+P	20 11 58
		ePP	13 52
		S	18 42
		SS	21 50
✓	CT	+iP	12 01
		eS	18 47
		PS	19 02
✓	NK	+P	12 14
		eS	19 14
✓	WH	+iP	12 29
		ePP	14 42
		eS	19 40
		PS	20 03
✓	CC	+iP	12 58
✓	PK	+iP	13 06
		S	20 49

5 * Epc: $13^{\circ}S$, $166^{\circ}12'E$
O: 11-50-17
h: 100km ca., M: $5\frac{3}{4}-6$

✓	ZS	P	12 00 32
		S	08 54
✓	CT	+iP	00 44
		S	09 11
✓	NK	+iP	00 49
		eS	09 24
✓	WH	+iP	01 02
		P	13
✓	CC	P	29
		S	10 41
✓	SA	eP	01 42
✓	KM	+iP	45
		iS	11 11

Date	Sta.	Phase	h m s	Date	Sta.	Phase	h m s			
5	CU	+iP	12 01 52	6	*Epc: 9°S, 157° $\frac{1}{2}$ E O: 01-07-31, M: 5 $\frac{3}{4}$ -6	ZS	eP	01 16 52		
		iS	11 22				S	24 22		
	LC	+iP	02 07				ScS	26 40		
		S	11 53					CT	eP	17 00
								NK	eS	24 38
5	Epc: 30° $\frac{1}{2}$ N, 129° $\frac{1}{2}$ E O: 14-59-33 h: 150km ca., M: 5 $\frac{1}{4}$ -5 $\frac{1}{2}$								+P	17 08
	ZS	-iP	15 01 20					S	24 53	
		S	02 40					ScS	26 58	
	NK	-iP	01 48					WH	P	17 21
		iS	03 33					S	25 16	
	WH	eP	02 34					CC	eP	17 43
		iS	04 56					S	25 57	
	CC	iP	02 48					PK	eP	17 57
		iS	05 21					S	26 22	
	PK	iP	02 55					ScS	27 51	
		S	05 35			SA	P	18 03		
	SA	P	03 30			S	26 35			
		S	06 38			KM	+P	18 06		
	LC	iP	04 14			eS	26 41			
		S	08 01			ScS	28 03			
	KM	eP	04 33			CU	+P	18 14		
		eS	08 37			S	26 54			
						ScS	28 11			
						LC	+P	18 33		
						S	27 30			
5	*Epc: 9°S, 157° $\frac{1}{2}$ E O: 17-38-08, M: 6.2			6	*Epc: 9°S, 157° $\frac{1}{2}$ E O: 01-11-36					
	ZS	eP	17 47 28		WH	eP	01 21 25			
		S	55 01			eS	29 28			
	CT	P	47 36		CC	eP	21 46			
		S	55 15		PK	eP	22 00			
	NK	eP	47 45			eS	30 24			
		S	55 29		KM	eP	22 09			
	WH	P	47 58		CU	eP	18			
		e	49 18			eS	30 58			
		S	55 33			eScS	32 16			
	CC	eP	48 20		LC	P	22 36			
		S	56 35							
	PK	P	48 33		6	*Epc: 24°S, 174° $\frac{1}{2}$ W O: 11-43-06, M: 5 $\frac{1}{2}$				
		S	56 59			ZS	eP	11 55 33		
	KM	P	48 41			eS	12 05 56			
		S	57 15			CT	-P	11 55 42		
	SA	P	48 47							
	LC	iP	49 10							
		eS	58 08							
	CU	P	48 50							
		iS	57 34							

Date	Sta.	Phase	h m s	Date	Sta.	Phase	h m s
6	CT	eSKS	12 06 02	8	CC	eS	13 59 52
		eS	10		PK	-iP	17
	NK	-P	11 55 44		S	14 02 43	
	WH	eS	12 06 15		ZS	-P	13 59 31
		-P	11 55 56		PP	48	
	CC	eS	12 06 33		S	14 03 10	
		-P	11 55 57		NK	eP	13 59 59
	PK	eSKS	12 06 24		S	14 03 30	
		eS	42		WH	eP	00 14
	KM	-P	11 56 13		S	04 37	
		SKS	12 06 44		SA	P	00 36
	SA	S	07 13		S	05 10	
		-P	11 56 27		LC	-P	00 59
	CU	eSKS	12 07 03		CT	eP	01 13
		eS	39		S	06 15	
LC	P	11 56 28	CU	PP	01 24		
	eP	35	PP	02 26			
	(SKS)	12 07 19	S	06 33			
	S	52	KM	eP	01 59		
	eP	11 56 44	PP	03 28			
			eS	07 37			
			-P	02 49			
			PP	04 34			
			iS	08 08			

7 * Epc: $23^{\circ}\frac{1}{2}S$, $175^{\circ}\frac{1}{2}W$
 O: 22-16-15, M: $6\frac{1}{4}$

ZS	+P	22 28 36
	eSKS	38 53
CT	S	39 00
	eP	28 46
CC	eSKS	39 12
	eS	19
WH	+P	29 01
	eSKS	39 27
PK	eS	49
	+P	29 01
SA	+P	17
	SKS	39 47
KM	S	40 20
	P	29 29
CU	S	40 40
	+P	29 33
LC	eSKS	40 01
	S	49
ZS	+P	29 38
	SKS	40 13
CT	iS	58
	eP	29 49
	S	41 20

8 Epc: $43^{\circ}\frac{1}{2}N$, $141^{\circ}E$
 O: 13-54-55, M: $6 - 6\frac{1}{4}$
 CC P 13 57 41

10 Epc: $36^{\circ}0'$, $88^{\circ}.6E$
 O: 20-56-12, M: $5\frac{1}{2}$

LS	+P _n	20 57 59
	-iP	58 24
CU	iS _n	59 20
	i	43
KM	i	21 00 01
	+P	20 59 31
PK	(S)	21 02 07
	i	20
WH	+P	00 02
	i	16
NK	i(S)	03 15
	+P	01 10
CT	e(S)	06 09
	i	21
ZS	-iP	01 13
	(S)	05 18
CC	i	23
	-P	01 43
PK	eS	06 09
	i	22
WH	e(P)	01 43
	e(S)	06 12
ZS	-P	02 02
	e(S)	06 48

Date	Sta.	Phase	h	m	s	Date	Sta.	Phase	h	m	s
17	Epc: $30^{\circ}\frac{1}{2}N$, O: 23-55-03,		94°E			19	PK	iS	11	25	18
			M: $4\frac{3}{4}$					sS		26	15
✓	LS	Pn	23	55	51	✓	SA	iP		17	56
		\bar{P}			54	✓	CU	pP		18	30
		\bar{S}			56			-iP			05
		i			52			pP			42
✓	CU	ePn	57	13				PP		20	05
		i			30			i			47
		i(\bar{P})			44	✓	LC	-iP		25	35
		S _n	58	52				pP		18	28
		i	59	23				iS		19	03
		i \bar{S}			37	✓	LS	-iP		26	19
✓	KM	eP	57	23				pP		19	10
		S _n	59	14				iS			46
		\bar{S}			59					27	36
✓	LC	eP	57	29		22	Epc: $4^{\circ}S$, $140^{\circ}E$				
		S	59	25			O: 12-47-55, *M: $5\frac{1}{2}$				
✓	SA	P	58	09		✓	ZS	eP	12	55	21
✓	WH	P	59	08		✓	NK	eS	13	01	15
✓	PK	P			42	✓	NK	eP	12	55	37
		eS	24	03	28	✓		eS	13	01	48
✓	NK	P	23	59	50	✓	KM	eP	12	56	20
✓	ZS	eP	24	00	03	✓	PK	eP			37
✓	CC	P			53	✓		S	15	03	38
						✓	CC	eP	12	56	47
						✓	LC	eP		57	05
19	*Epc: $5^{\circ}\frac{1}{2}S$, $146^{\circ}E$					22	*Epc: $21^{\circ}\frac{1}{2}S$, $178^{\circ}\frac{1}{2}W$				
	O: 11-08-41						O: 19-34-35				
	h: 100km ca., M: 7						h: 550km ca., M: 6				
✓	ZS	iP	11	16	44	✓	ZS	iP	19	45	40
		pP			17	20		S		54	53
		PP			18	30	✓	CT	-iP	45	52
		iS			23	07		S		55	13
		isS			24	03	✓	NK	-iP	45	53
✓	NK	-iP	17	02				PP		49	03
		ipP			35			eS		55	16
		sP			56			sS		59	00
		PP	18	51		✓	WH	-iP	46	06	
		iS	23	39				epP		48	03
		isS	24	34		✓	CC	-iP	46	10	
✓	WH	-iP	17	11				pP		48	09
✓	KM	-iP			52			iS		55	47
		pP	18	26		✓	PK	-iP	46	23	
		iS	25	10				epP		48	22
		sS	26	14		✓	SA	S	56	17	
✓	CC	iP	17	54				iP	46	34	
		pP	18	30							
		iS	25	13							
		sS	26	11							
✓	PK	-iP	17	56							
		pP	18	32							

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Date	Sta.	Phase	h	m	s	Date	Sta.	Phase	h	m	s
22	✓ KM	-iP	19	46	40	26	✓ CU	i	07	13	36
	✓ CU	-iP			45			PP		14	43
	✓ LC	S			56 59			iS		18	59
		eP			46 55		✓ LS	i		19	12
		pP			48 57			+iP		13	30
		eS			57 21			i			44
								eS		19	11
23	Epc: $24^{\circ}\frac{1}{2}N$, $123^{\circ}E$						✓ WH	i			30
	O: 21-05-26, M: $4\frac{3}{4}-5$						✓ SA	+P		13	36
	✓ ZS	+P	21	07	08			i			50
	✓ NK	-iP			29		✓ SA	iP			57
		eS			09 05		✓ NK	i		14	08
	✓ CT	eP			07 38			+iP			00
	✓ WH	-iP			44			i			14
	✓ SA	eP			09 04		✓ ZS	eS		20	07
	✓ PK	eP			19			iP		14	01
		e			50			i			15
		eS			12 24			PP		15	34
	✓ CU	-iP			09 33		✓ LC	eS		20	09
		iS			12 52			+iP		14	09
	✓ KM	-iP			09 41			pP			21
		S			13 03			S		20	21
	✓ CC	+iP			09 51		✓ PK	+iP		14	53
		i			10 18			i		15	07
		S			13 22			eS		21	43
	✓ LC	-P			09 58		✓ CC	i			59
		S			13 35			+iP		15	40
								i			54
								eS		23	09
								i			27

24 Epc: $16^{\circ}\frac{1}{2}N$, $120^{\circ}\frac{1}{2}E$
O: 14-57-07

✓ KM	P	15	01	30
	S		04	58
✓ CU	P		01	52
	S		05	39
✓ PK	eP		02	28
✓ LC	eP			31

26 Epc: $5^{\circ}\frac{1}{2}S$, $102^{\circ}\frac{1}{2}E$
O: 07-06-22, M: $6-6\frac{1}{4}$

✓ CT	+P	07	12	34
	i			47
	eS			17 32
	i			51
✓ KM	+iP			12 36
	i			51
	eS			17 35
✓ CU	+iP			13 22

26 Epc: $5^{\circ}S$, $102^{\circ}\frac{1}{2}E$
O: 23-09-29, M: $6\frac{1}{4}$

✓ CT	+P	23	15	37
	i			54
	PP			16 39
	PPP			59
	S			20 36
✓ KM	+iP			15 41
	i			36
	PP			16 48
	PPP			17 05
	iS			20 40
	i			58
✓ CU	+iP			16 26
	i			44
	PP			17 46
	iS			22 01
	i			20
✓ LS	+iP			16 34

Date	Sta.	Phase	h m s	Date	Sta.	Phase	h m s
28	CT	+iP	22 49 49	1	CC	+iP	12 50 26
		S	58 14			S	13 00 01
	NK	+iP	49 54		WH	+iP	12 50 31
		i	50 27		NK	+P	42
		S	58 22		ZS	P	54
	CC	+iP	50 18				
		i	52				
		S	59 09	1	* Epc: 63°S, 154°E		
	PK	+iP	50 34		O: 14-59-40, M: 6 $\frac{1}{4}$ - 6 $\frac{1}{2}$		
		i	54		ZS	ePP	15 17 26
		i	51 12			eSKKS	24 16
		S	59 28		KM	e(PP)	17 27
		PS	23 00 27			i(SKS)	24 04
	SA	P	22 50 44		LS	ePP	18 22
	KM	+iP	50			eSKS	24 41
		iS	23 00 08		PK	ePP	18 30
	LC	+iP	22 51 12		CC	ePP	42
		S	23 00 49				
	LS	eP	22 51 51				
		i	52 26	1	* Epc: 5°N, 125°E		
		SKS	23 01 58		O: 18-11-49, h:400km ca.		
		S	02 06		NK	eP	18 17 04

30 Epc: 44° 5N, 80° CE
O: 11-12-55, M: 5 - 5 $\frac{1}{2}$

LS	-iP	11 16 57
	iS	20 09
LC	-iP	17 27
	iS	21 00
SA	-iP	18 13
KM	eP	35
	iS	23 08

KM	eP	20
CU	eP	45
	eS	22 28
PK	eP	18 14
LC	iP	23
	S	23 37
LS	iP	18 55
	iS	24 34

December

1 * Epc: 38°N, 20° 1E
O: 12-38-49, M: 5.9

LS	P	12 48 43
	eS	56 46
LC	+P	49 26
CU	+iP	44
	eS	58 40
KM	P	49 57
	S	59 03
PK	+iP	50 06
	eS	59 22

2 Epc: 5°S, 105°E
O: 07-29-55, h:120km ca.

KM	+P	07 36 06
	eS	41 04
CU	eP	36 54
	eS	42 29
LS	iP	37 01
	pP	28
	S	42 33
LC	P	37 39
	eS	43 52
PK	+P	38 22
	eS	45 07
CC	+iP	39 09

Date	Sta.	Phase	h m s	Date	Sta.	Phase	h m s
2	Epc: $22^{\circ}\frac{1}{2}N$, $94^{\circ}E$			8	ZS	eP	03 04 11
	O: 07-43-53				PK	eP	32
	LS	P	07 45 58		WH	eP	05 10
		S	47 34		SA	eP	39
	KM	+iP	45 58		LC	eP	06 11
	LC	eP	47 43		CU	eP	23
					KM	+P	55
					LS	eP	07 56
2	*Epc: $1^{\circ}S$, $123^{\circ}E$			8	Epc: 0° Lat, $124^{\circ}\frac{1}{2}E$		
	O: 09-34-00, M: $6\frac{1}{2}-6\frac{3}{4}$				O: 04-30-10		
	CT	+iP	09 39 39		ZS	eP	04 36 37
		(PP)	40 14		KM	eP	47
		S	44 02			S	42 04
		i	32		CU	eP	37 17
	ZS	+P	40 33			S	42 58
		i-	36		SA	+iP	37 25
		PP	41 39		LC	P	55
	WH	e(S)	45 44		PK	eP	56
		+iP	40 37		LS	eP	38 14
		PP	41 48			eS	44 41
		S	45 46				
	KM	+iP	40 40	8	Epc: $31^{\circ}N$, $57^{\circ}E$		
		i	41 10		O: 12-50-48		
		PP	52		LS	eP	12 56 53
		S	45 50		LC	eP	58 18
	NK	+iP	40 43		KM	eP	30
		i	41 06			eS	13 04 40
		eS	45 57		SA	P	12 58 54
	CU	+iP	41 11		CU	P	55
		i	42				
		iS	46 48	8	Epc: $41^{\circ}N$, $44^{\circ}E$		
	LC	+P	41 50		O: 13-34-03, M: $5-5\frac{1}{4}$		
	PK	+iP	50		LS	eP	13 41 39
		PP	43 26			P	42 28
		SS	48 50			eS	49 12
	LS	+P	42 09		CU	P	42 52
		i	50			S	49 58
		iS	48 33		KM	eP	43 05
		SS	51 44			eS	50 17
	CC	+iP	42 17			PS	30
		PcP	44 02		SA	P	43 07
		eS	48 53		FK	eP	21
		SS	52 04			eS	50 49
		ScS	14		WH	eP	43 41
		SSS	59		CC	eP	56
8	Epc: $37^{\circ}N$, $140^{\circ}E$						
	O: 03-00-07						
	CC	P	03 03 20				

Date	Sta.	Phase	h	m	s	Date	Sta.	Phase	h	m	s
8	CT	eP	13	44	13	11	CU	S	02	03	17
		eS		52	26		LC	eP	01	52	09
	ZS	eP		44	21			eS	02	03	36
		eS		52	42						

11 Epc: 4°S, 130°¹/₂E
 0: 00-31-49, *M: 5³/₄

ZS	+P	00	38	53
WH	+P		39	07
	S		44	59
NK	+iP		39	08
	eS		44	58
KM	+iP		39	22
	PP		41	01
	S		45	25
PK	+iP		40	13
	eS		46	57
LC	+P		40	23
	eS		47	15
CC	+P		40	29
LS	P			48
	eS		48	00

11 *Epc: 23°S, 175°W
 0: 01-38-33, M: 5³/₄

ZS	eP	01	50	55
	eS	02	01	14
CT	+P	01	51	05
	eSKS	02	01	28
	S			35
NK	+P	01	51	07
	i			20
	eSKS	02	01	29
	S			38
CC	+iP	01	51	19
	eSKS	02	01	43
	eS		02	03
WH	+P	01	51	19
	SKS	02	01	45
	S		02	02
PK	+P	01	51	36
	SKS	02	02	08
	S			35
SA	P	01	51	48
KM	+P			52
	i		52	05
	SKS	02	02	29
	S		03	05
CU	P	01	51	58
	eSKS	02	02	32

13 Epc: 9°¹/₂S, 106°¹/₂E
 0: 05-39-29

KL	eP	05	46	19
	i			32
	eS		51	46
CU	eP		47	02
	i			14
LS	eP			16
ZS	eP			27
	i			39
	eS		53	50
NK	eP		47	27
	i			40
	eS		53	51
SA	eP		47	31
	i			42
	S		53	57
LC	eP		47	47
	eS		54	24
PK	eP		48	23
	i			35
	S		55	32
CC	eP		49	08
	i			18
	eS		56	51

13 *Epc: 18°S, 173°¹/₂W
 0: 17-36-07, M: 5³/₄

ZS	eP	17	48	21
	S		58	43
NK	eP		48	31
	eS		58	58
	eSKS		59	08
CT	eP		48	35
	eS		59	04
CC	+P		48	38
PK	+P			59
	eSKS		59	30
	S			56
KM	+P		49	23
	eSKS	18	00	05
	eS			40
CU	eP	17	49	27
	SKS		59	59
	S	18	00	46
LC	eP		49	35

Date	Sta.	Phase	h	m	s	Date	Sta.	Phase	h	m	s
14	Epc: 32°N, 115°E. O: 05-12-00, M: 4					14	*Epc: 52° ¹ / ₂ N, 168°W O: 22-00-50, M: 6				
	WH	P _n	05	12	35	✓	CC	+P	22	09	00
		eP			37			PP			10 45
		iS			59			S			15 37
	NK	P _n			57	✓	PK	+P			09 59
		P	13	01				PP			12 00
		S			40			S			17 21
	ZS	S	14	56		✓	ZS	eP			10 22
	SA	eP _n	13	22				PP			12 26
		P			50			eS			18 03
		E	15	04		✓	NK	+P			17 27
	PK	i(S)	16	44				S			18 14
	CT	iS			55	✓	WH	+P			10 55
	KM	(P)	15	52				PP			13 03
	LS	(P)	16	52				S			19 05
						✓	LC	+P			11 10
						✓	CU	+P			35
								PP			13 59
								S			20 18
14	Epc: 6°N, 126°E O: 17-58-34 h: 160km ca., M: 5 ¹ / ₄ -5 ¹ / ₂					✓	CT	eP			11 40
		eP	18	03	11			PP			14 05
		S			06 55			iS			20 32
	✓	ZS	eP	03	54	✓	KM	+iP			12 07
		pP			04 25			PP			14 40
		S			08 11			iS			21 19
	✓	WH	P	04	18	✓	LS	+iP			12 38
	✓	KM	-iP	27				PP			15 13
		pP			3			S			21 57
	✓	CU	iS	09	40						
		eP	04	52							
		pP	05	22							
		iS	09	52							
	✓	SA	P	04	52						
	✓	PK	+P	05	18						
		iS	10	40							
	✓	LC	-P	05	27						
		pP	06	00							
		iS	10	57							
	✓	CC	+P	05	41						
		S	11	23							
	✓	LS	-iP	06	01						
		pP			30						
		iS	12	00							
14						14	*Epc: 60° ¹ / ₂ S, 27° ¹ / ₂ W O: 23-21-55, M: 7				
✓	CT	eP	21	54	41	✓	LS	+iPKP	23	41	07
✓	KM	P	55	47				iPP			43 15
✓	CU	eP	56	14				iPKS			44 42
✓	PK	eP	59			✓	KM	+PKP			41 11
✓	LS	+P	57	18				PP			43 29
								PKS			44 37
						✓	CT	PKP			41 18
								PP			43 53
								PKS			44 49
						✓	LC	PKP			41 21
						✓	CU	PKP			21
								PP			44 05
								PKS			44 56
						✓	SA	PKP			41 25
						✓	WH	PKP			30
								PP			44 34
								PKS			45 08
						✓	ZS	+PKP			41 32

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Date	Sta.	Phase	h m s	Date	Sta.	Phase	h m s
14	ZS	PP	23 44 48	17	LS	eS	06 06 44
	NK	+PKP	41 32		SA	P	01 28
	PK	+iPKP	43			iP	29
		PP	45 28		ZS	eP	33
	CC	+PKP ₁	41 53		LC	P	40
		PKP ₂	42 30			S	08 00
		i(PP)	46 14		PK	eP	02 25
						eS	09 16
					CC	P	03 09

15 Epc: 17°N, 145° $\frac{1}{2}$ E
O: 08-56-20

ZS	eP	09 01 56
	eS	06 26
PK	eP	03 05
	S	08 31
CU	eP	03 54
	eS	09 53
KM	P	04 00
	eS	10 08
LC	eP	04 07
	eS	10 20
LS	eP	05 24

18 *Epc: 53°N, 168° $\frac{1}{2}$ W
O: 16-24-50, M: 6 $\frac{1}{2}$

CC	+iP	16 32 57
	PP	34 40
	S	39 29
PK	+P	33 57
	PP	35 59
	S	41 19
	PS	29
ZS	+P	34 20
	i	39
	PP	36 23
	S	42 02
	PS	13
NK	+iP	34 25
	i	44
	S	42 08
	PS	21
WH	+P	34 52
	eS	42 58
SA	iP	34 57
LC	+iP	35 08
CU	+iP	34
	i	54
	S	44 18
	PS	44
CT	+iP	35 34
	i	53
	S	44 18
	PS	36
KM	+iP	36 04
	i	22
	iS	45 15
	PS	46
LS	+iP	36 25
	i	44
	S	45 53
	i	46 09

15 *Epc: 60° $\frac{1}{2}$ S, 27° $\frac{1}{2}$ W
O: 12-15-48

LS	ePKP	12 35 00
	PP	37 06
KM	PKP	35 04
ZS	ePKP	25
NK	ePKP	25
PK	PKP	36

17 Epc: 21° $\frac{1}{2}$ N, 121° $\frac{1}{4}$ E
O: 02-31-02, M: 4 $\frac{3}{4}$

SA	iP	02 35 01
KM	P	07
PK	P	27
LC	+P	49
CC	P	36 05

17 Epc: 6°S, 103°E
O: 05-53-50, M: 5 $\frac{3}{4}$

KM	+P	06 00 08
	eS	05 09
LS	iP	01 01
	PP	12

18 Epc: 31° $\frac{1}{2}$ N, 91°E
O: 18-08-04

Date	Sta.	Phase	h m s	Date	Sta.	Phase	h m s
18	LS	-iP	18 08 42	21	KM	P	11 28 06
		Sn	09 08			i	33
		S	10 10			ePP	30 06
	CU	eP	10 50			iS	35 12
	KM	eP	11 01		LC	P	28 25
		e(S)	13 17			e	41
	LC	eP	11 22			S	35 42
	PK	eP	13 00		SA	+iP	28 52
					CT	P	29 18

21 * Epc: 27° $\frac{1}{2}$ S, 176°W
O: 10-20-33, M: 6

✓	ZS	eP	10 33 08
		SKS	43 32
✓	WH	eP	33 11
		SKS	43 50
✓	CT	eP	33 12
		eS	44 05
✓	NK	eP	33 19
		SKS	43 47
		eS	44 03
✓	CC	eP	33 32
		S	44 30
✓	PK	eP	33 47
		SKS	44 23
		S	58
✓	KM	eP	34 01
		SKS	44 38
		S	45 22
✓	CU	eP	34 06
		SKS	44 44
		S	45 34
✓	LC	eP	34 25
		eS	45 53

21 * Epc: 27° $\frac{1}{2}$ S, 176°W
O: 11-14-17, M: 6 $\frac{1}{2}$

✓	CT	eP	11 26 55
✓	WH	P	27 08
✓	CC	+iP	14
✓	PK	P	29

21 * Epc: 13° $\frac{1}{2}$ N, 52°E
O: 11-19-13, M: 6 $\frac{1}{2}$ - 6 $\frac{3}{4}$

✓	LS	P	11 26 50
		ePP	28 29
		iS	32 55

✓	WH	P	29 24
		eS	37 38
✓	PK	iP	29 37
		i	30 01
✓	NK	eP	29 48
		S	38 22
✓	ZS	+P	30 02
		S	38 47
		PS	50
✓	ZS	SS	43 00
✓	CC	iP	30 22
		i	45
		PP	32 57
		iS	39 28

22 Epc: 37°N, 141° $\frac{1}{2}$ E
O: 17-20-18

✓	CC	eP	17 23 39
		S	26 16
✓	ZS	eP	24 35
✓	NK	eP	48
		eS	28 24
✓	PK	P	24 53
		eS	28 31
✓	WH	P	25 30
		eS	29 43
✓	SA	P	26 01
✓	LC	eP	31
✓	KM	+iP	27 16
✓	LS	P	28 17

23 * Epc: 27° $\frac{1}{2}$ S, 176°W
O: 13-59-02

✓	NK	eP	14 11 46
		SKS	21 25
		S	22 24
✓	PK	eP	12 14

Date	Sta.	Phase	h	m	s	Date	Sta.	Phase	h	m	s
23	PK	SKS	14	22	51	25	ZS	pPKP ₂	10	40	32
		S		23	19			PP		43	40
	KM	eP		12	28		NK	pPP		44	09
		SKS		23	05			-PKP ₁		38	49
	CU	S			43			pPKP ₁		39	19
eP			12	34	PKP ₂			40	06		
SKS			23	07	pPKP ₂				46		
		S		56	PP		43	58			
					pPP		44	27			
24	Epc: 8 ⁰ ₂ N, 127 ⁰ E					SA	LC	PKP ₁	38	50	
	O: 13-08-30								pPKP ₁	39	20
	CT	eP	13	12	59	KM	-PKP		38	48	
		S		16	35		PP		44	07	
	ZS	+P		13	34	WH	-iPKP ₁		38	50	
		S		17	39		pPKP ₁		39	20	
		SS		18	26		PKP ₂		40	16	
	NK	+iP		13	49		pPKP ₂			47	
		S		18	07		PP		44	10	
	WH	eP		13	51	pPP			39		
		S		18	07	SKS		45	54		
	KM	eP		14	30	-PKP ₁		38	51		
		eS		19	17	pPKP ₁		39	21		
	SA	eP		14	44	PKP ₂		40	22		
		PK	+iP	15	02	pPKP ₂			52		
	i			13	PP		44	14			
	oS		20	13	pPP			42			
LC	eP		15	18	CU	-iPKP ₁		38	50		
	eP			25		pPKP ₁		39	20		
CC	eP			25	PKP ₂		40	42			
	LS	eP	16	04	iPP		44	36			
					iSKKS		50	42			

25 * Epc: 25⁰₂S, 67⁰W
 O: 10-18-47
 h: 100km ca., M: 6¹/₂-6³/₄

CC	-iPKP ₁	10	38	34
	pPKP ₁		39	02
	PKP ₂			38
	PP		42	52
	pPP		43	20
PK	-PKP ₁		38	45
	pPKP ₁		39	16
	PKP ₂			41
	pPKP ₂		40	10
	PP		43	29
	pPP			56
	PPP		47	06
	SKKS		50	06
	-PKP ₁		38	48
	pPKP ₁		39	18
ZS	PKP ₂		40	02

26 * Epc: 59⁰₂N, 151⁰₂W
 O: 18-19-10, M: 6¹/₄

CC	P	18	28	09
	PK		29	04
NK	eS		36	59
	eP		29	39
ZS	eP			39
SA	iP			57
LC	eP			59
CU	P		30	32
	S		39	44
KM	eP		30	59

26 * Epc: 53⁰N, 160⁰E
 O: 22-02-35, M: 6.7

CC	+P	22	07	53
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Date	Sta.	Phase	h m s	Date	Sta.	Phase	h m s
26	PK	P	22 09 03	27	WH	PKP1	12 58 16
		ue	13 16			PKP2	13 00 03
	ZS	eP	09 33			PP	04 01
		se	14 11				
	NK	P	09 38				
	SA	P	10 13	27	* Epc: 56°N, 162°E O: 15-52-55, M: 6 $\frac{3}{4}$ -7		
	LC	P	27		CC	+P	15 58 34
	CU	eP	58			iPP	59 29
	KM	P	11 34			S	16 03 17
	LS	P	12 04		PK	+P	15 59 40
						iPP	16 01 06
27	* Epc: 52°N, 160°E O: 04-47-45, M: 6					eS	05 13
	CC	+P	04 53 05		PT	+P	00 07
	PK	eP	54 16		ZS	+P	15
		e(S)	59 39			PP	01 53
	ZS	+P	54 46			eS	06 19
		eS	05 00 39		NK	eP	00 17
	NK	P	04 54 50			iPP	01 59
		eS	05 00 45			eS	06 24
	SA	eP	04 55 19		SA	P	00 45
	LC	P	42		WH	eP	48
	KM	+P	56 48			PP	02 32
	LS	eS	05 04 15		LC	P	01 02
		eP	04 57 19		CU	+P	33
						iPP	03 28
27	* Epc: 28°S, 63°W O: 12-39-09 h: 650km, M: 6				CT	+P	01 39
	LS	-iPKP1	12 58 03		KM	+P	02 11
		iPKP2	39		LS	+iP	35
		iPP	13 02 20	28	Epc: 53°N, 161°E O: 07-20-32, M: 6 $\frac{1}{2}$		
	CC	ePKP1	12 58 07		CC	+P	07 25 33
		ePKP2	59 00			S	30 10
		ePP	13 02 45		PK	+P	27 03
	LC	-PKP1	12 58 11			S	32 15
		iPKP2	59 11		ZS	+P	27 33
		PP	13 03 04			S	33 11
	KM	-PKP1	12 58 11		PT	+P	27 35
		PKP2	59 20		NK	+iP	37
		PP	13 03 05			eS	33 18
	PK	-PKP1	12 58 12		WH	P	28 08
		PKP2	59 23		SA	P	13
		PP	13 03 13		LC	+iP	30
	CU	-iPKP1	12 58 13		CT	+iP	29 00
		iPKP2	59 27			eS	35 47
	SA	PKP1	58 14		KM	+iP	29 35
		PKP2	59 37			PP	31 36
	ZS	PKP	58 16			S	36 51
	NK	PKP	16		LS	+iP	30 05
		PP	13 03 50				

Date	Sta.	Phase	h m s	Date	Sta.	Phase	h m s
28	*Epc: 52° ¹ / ₂ N, 160°E O: 13-01-30, M: 6			29	CC	-iP	20 41 00
						eP	42 19
						iS	45 36
						i	48 12
✓	CC	+P	13 09 52		PK	-iP	41 23
		PPP	10 46			eP	42 49
		S	14 17			iS	46 16
✓	PK	+P	11 03			i	49 04
		PP	12 10	✓	SA	-iP	41 47
		S	16 20			iS	47 00
✓	ZS	+P	11 31	✓	PT	-iP	42 01
		eS	17 14			eP	43 36
✓	PT	P	11 34	✓	CU	-P	42 13
✓	NK	+P	36			iS	47 46
		(S)	17 33			i	50 59
✓	WH	eP	12 07		KM	eP	42 19
✓	SA	P	14	✓		iS	47 58
✓	LC	P	29			iSS	51 14
✓	KM	+P	13 35		LC	-iP	42 25
		S	20 53			iS	44 01
✓	LS	P	14 04			iS	48 03
		eS	21 46	✓	LS	P	43 41
						eP	44 52
						eP	45 39
						iS	50 27
						iS	52 48
29	*Epc: 21° ¹ / ₂ S, 174°W O: 17-14-40			30	Epc: 31° ¹ / ₂ N, 142°E O: 11-22-50		
✓	NK	+P	17 27 12		CC	P	11 27 09
		eS	37 48			S	30 34
✓	CC	+P	27 22		NK	P	27 23
		S	38 08		PK	P	53
✓	PK	+P	27 40			eS	31 58
		eSKS	38 14		WH	eP	28 02
		S	40		CT	eP	31
✓	SA	P	27 52		LC	eP	29 18
✓	KM	+P	59				
		SKS	38 33				
		S	39 17				
✓	CU	eP	28 04				
		eSKS	38 44				
		S	39 23				
✓	LC	eP	28 13				
29	Epc: 18° ¹ / ₂ N, 145°E O: 20-35-16 h: 380km ca., *M: 6-6 ¹ / ₄						
✓	NK	eP	20 40 33				
		iS	41 55				
		eS	44 47				
✓	CT	eP	42 14				
		iS	45 31				
		i	47 53				