

地震月報別冊第4号

昭和47年

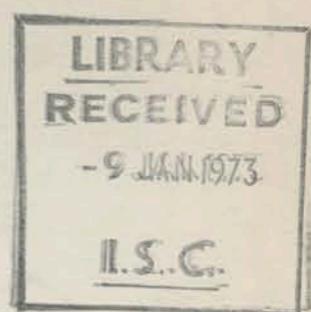
日本付近の地域別地震表 (昭和36年~昭和45年)

Regional Catalogue of Earthquakes
in and near Japan (1961~1970)

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Regional Catalogue of Earthquakes in and near Japan (1961～1970)

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序 文

本誌には、1961年～1970年の期間に、日本列島およびその周辺地域に発生した地震で、気象庁によって震源要素の決められた地震が収録されている。震源要素、記号等はすべて地震月報各号のものと同一である。

本誌は次の二つから成り立っている。

I. 地域別地震の表

緯度、経度各 1° の範囲を単位地域とし、その中に発生した地震を時間順に並べた。各地域の索引は次頁の図を参照されたい(図中の数字は、各地域の表を掲載した頁を示す)。

II. おもな地震の表

顕著、稍顕著地震、またはM5以上の地震を時間順に整理した。

Regional Catalogue of Earthquakes in and near Japan (1961—1970)

Introduction

This bulletin contains the data of earthquakes in and near Japan in a period from 1961 to 1970, source parameters of which were routinely determined by the Japan Meteorological Agency. The notation employed here is the same as in the Seismological Bulletin published monthly.

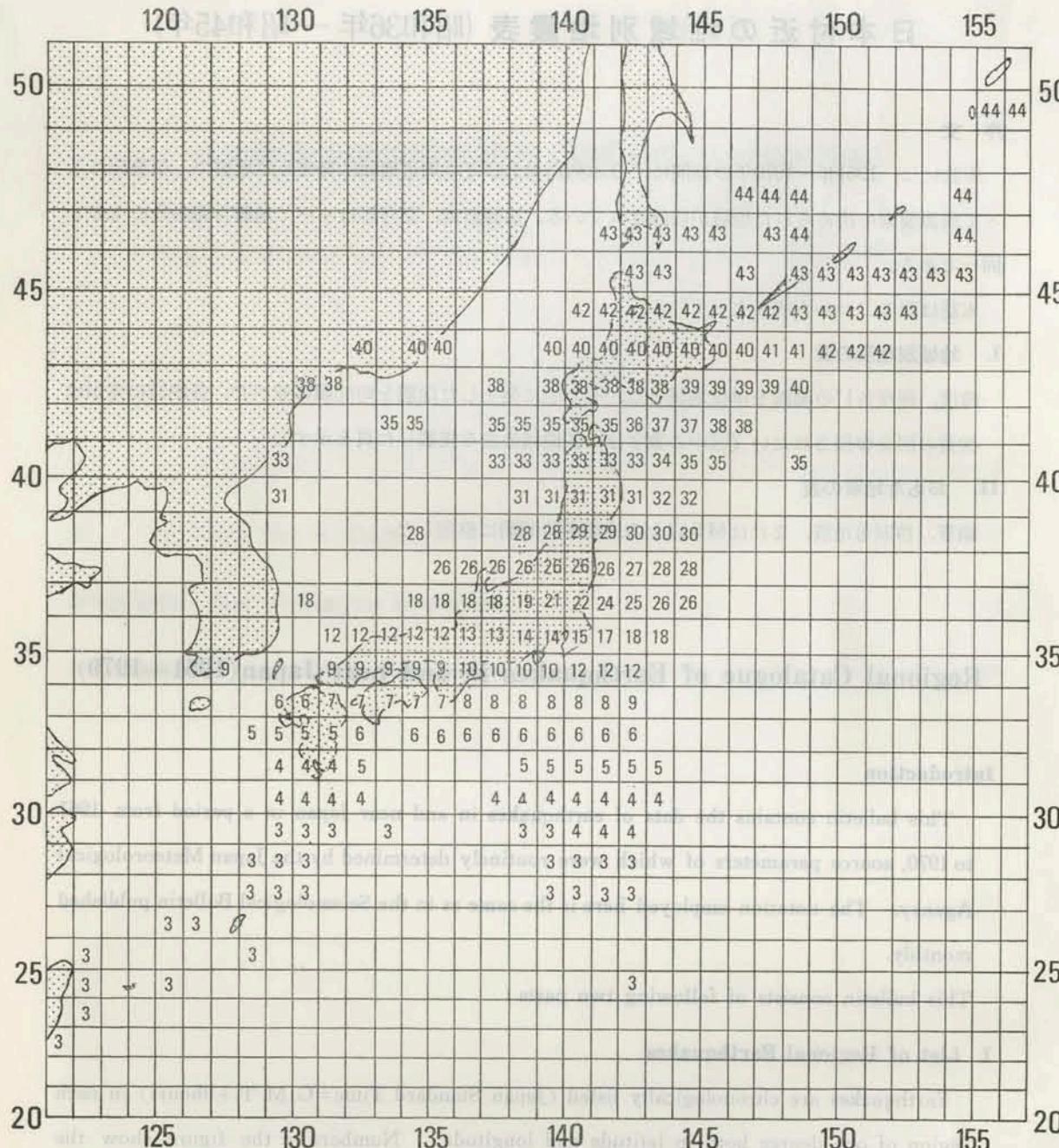
This bulletin consists of following two parts :

I. List of Regional Earthquakes

Earthquakes are chronologically listed (Japan Standard Time=G. M. T.+9hours) in each region of one degree both in latitude and longitude. Numbers in the figure show the pagination in which the corresponding regional list appears.

II. List of Major Earthquakes.

“Remarkable(R)” and “Moderate(M)” earthquakes and also those of magnitude larger than 5 are chronologically listed.



図中の数字は、各地域の表が掲載されている頁を示す。

Numbers in the figure show the pagination in which the corresponding regional list appears.

I. List of Regional Earthquakes

Y	M	D	H	M	S	LONG.	LAT.	DEP.	MAG.	C	Y	M	D	H	M	S	LONG.	LAT.	DEP.	MAG.	C	
LONG. 121. LAT. 22.																						
1968	2	26	19	50	16.7	121 30	22 42	24	U		1968	11	12	18	53	37.5	130 17	28 48	0	5.5	S	
1970	11	14	16	58	19.8	121 18	22 42	28	6.1	M	1969	12	21	19	18	2.6	130 43	28 5	80			
											1970	1	1	10	49	52.7	130 8	28 10	50	5.4	L	
											1970	3	30	4	30	52.7	130 1	28 40	60	5.4	L	
LONG. 122. LAT. 23.																						
1961	4	10	0	35	2.2	122 27	23 31	0	S		1961	2	11	15	12	32.6	139 49	28 59	450	U		
1970	2	25	19	20	58.8	122 35	23 48	10	5.5	L	1965	3	3	6	36	39.6	139 40	28 15	500	U		
											1967	3	10	9	31	19.1	139 7	28 47	500	U		
											1968	2	11	21	14	9.2	139 52	28 2	500	U		
											1970	7	25	20	4	46.1	139 45	28 56	420	R		
LONG. 122. LAT. 24.																						
1966	7	1	14	50	38.3	122 20	24 40	60	6.1	S		1963	8	15	11	17	17.9	140 15	28 1	500	U	
											1964	5	23	20	22	30.6	140 13	28 33	450	U		
LONG. 125. LAT. 24.																						
1968	5	3	14	32	47.2	125 1	24 57	30	5.7	S		1963	11	24	20	5	59.9	141 2	28 26	240	U	
1969	4	11	6	57	34.5	125 49	24 51	100				1961	12	2	5	17	57.3	142 12	28 39	80	U	
											1965	12	29	5	32	26.9	142 53	28 7	200	U		
LONG. 142. LAT. 24.																						
1970	2	13	12	12	54.3	142 26	24 52	300				1963	1	3	12	5	25.9	129 42	29 50	0	5.8	H
											1964	4	18	16	58	25.5	129 57	29 26	0	5.4	S	
LONG. 122. LAT. 25.																						
1968	10	20	16	8	17.1	122 30	25 0	15	5.7	L		1965	1	14	10	33	17.1	129 43	29 50	160		
											1968	5	14	23	5	3.3	129 48	29 35	160			
LONG. 128. LAT. 25.																						
1962	6	23	18	44	33.7	128 32	25 12	120				1969	3	19	7	53	12.7	129 56	29 46	70	L	
1968	8	3	13	54	33.9	128 17	25 39	100				1969	4	13	22	12	32.6	129 57	29 5	0	5.1	S
											1970	3	23	21	14	54.6	129 49	29 40	160			
LONG. 126. LAT. 26.																						
1962	10	6	14	38	31.3	126 58	26 21	20				1962	6	3	2	15	10.5	130 47	29 42	20	5.4	S
1963	1	31	14	6	29.9	126 45	26 0	20	6.2	R		1962	6	29	22	4	33.6	130 22	29 34	60		
1968	6	15	14	59	3.4	126 27	26 53	100				1963	4	19	11	53	51.8	130 26	29 51	20		
1969	11	7	22	41	12.4	126 24	26 20	130				1964	4	24	23	30	6.0	130 24	29 6	0		
												1965	4	26	6	28	39.4	130 28	29 18	40	5.4	R
LONG. 140. LAT. 26.																						
1963	8	14	8	0	21.3	140 33	26 51	400				1966	2	28	22	35	35.2	130 6	29 7	0	5.3	R
1968	10	8	4	20	17.2	140 56	26 9	480				1968	12	14	13	57	44.5	130 56	29 54	60	5.3	M
												1969	1	10	12	20	54.5	130 53	29 5	10	5.2	U
LONG. 128. LAT. 27.																						
1967	4	14	4	53	43.2	128 52	27 5	100	5.6	S		1961	7	18	23	3	37.9	131 46	29 37	60	6.6	R
1968	11	12	9	44	12.1	128 25	27 28	20				1961	7	18	23	34	3.9	131 36	29 48	60	5.9	R
												1961	7	19	0	16	7.9	131 41	29 23	100		
LONG. 129. LAT. 27.																						

Y	M	D	H	M	S	LONG.	LAT.	DEP.	MAG.	C
1962	6	10	22	54	1.3	139 12	29 45	450	U	
1962	12	7	23	3	40.0	139 35	29 12	400	R	
1964	3	1	4	42	43.6	139 25	29 54	280	U	
1965	7	27	1	17	51.7	139 44	29 59	400	U	
1967	10	23	17	27	7.6	139 40	29 0	480	R	
LONG. 142. LAT. 30.										
1961	10	31	6	15	44.9	142 28	30 8	0	5.4	U
1966	10	16	18	13	36.6	142 54	30 34	40	5.5	U
LONG. 143. LAT. 30.										
1966	2	10	14	28	55.5	143 33	30 51	160	U	
LONG. 141. LAT. 29.										
1964	1	16	6	36	3.9	141 17	29 21	60	6.2	S
1964	5	10	14	39	45.1	141 50	29 34	40	5.5	S
LONG. 129. LAT. 31.										
1961	3	8	17	2	46.9	129 36	31 51	40	L	
1962	2	7	4	14	13.9	129 55	31 52	0	U	
1964	2	20	9	16.0	129 55	31 58	40	U		
1965	1	3	13	26	46.4	129 53	31 33	20	4.4	SU
1969	9	29	23	54	47.8	129 32	31 18	30	4.2	U
LONG. 130. LAT. 31.										
1961	3	14	18	26	55.7	130 43	31 58	20	L	
1961	3	18	15	22	39.8	130 44	31 59	0	LL	
1961	3	18	17	57	54.7	130 46	31 56	20	LL	
1961	7	5	0	14	13.1	130 17	31 27	200	UU	
1961	9	15	11	38	11.8	130 41	31 53	0	UU	
1961	9	15	12	59	22.4	130 41	31 44	20	LL	
1962	9	8	2	40	55.7	130 14	31 22	60	SS	
1963	1	9	0	46	44.2	130 32	31 11	160	R	
1963	2	6	4	32	4.6	130 11	31 9	160	UU	
1963	4	11	1	16	7.4	130 31	31 14	160	UU	
1963	12	11	18	22	31.1	130 37	31 20	160	SU	
1964	4	4	1	37	52.3	130 23	31 13	140	SU	
1964	5	7	21	11	50.5	130 18	31 9	200	SU	
1964	10	2	10	24	44.3	130 40	31 21	120	UU	
1964	10	11	18	18	27.5	130 6	31 45	40	UU	
1966	2	22	11	38	40.2	130 10	31 14	0	4.9	S
1966	8	5	18	32	19.0	130 0	31 14	0	4.4	S
1967	7	3	5	34	41.6	130 33	31 14	120	S	
1968	2	7	15	28	40.6	130 42	31 0	40	4.9	S
1968	2	22	6	23	8.4	130 24	31 11	160	UU	
1968	3	21	10	33	46.4	130 34	31 37	10	4.2	UU
1968	3	25	1	19	33.1	130 46	31 59	20	4.5	SS
1968	3	25	1	20	59.6	130 44	31 59	10	5.4	SS
1968	3	25	1	33	59.0	130 43	31 57	10	4.1	UU
1968	5	3	7	51	11.2	130 44	31 52	30	3.7	UU
1968	5	29	3	51	16.1	130 38	31 26	10	4.2	UU
1968	8	13	20	22	14.3	130 40	31 55	40	4.3	SS
1970	3	18	2	7	12.9	130 45	31 24	180	UU	
1970	6	27	18	36	43.6	130 52	31 11	100	UU	
1970	12	10	4	32	58.8	130 28	31 7	160	SU	
LONG. 131. LAT. 30.										
1961	7	22	3	50	57.0	131 48	30 6	40	U	
1962	5	14	19	50	53.3	131 43	30 31	0	UU	
1963	8	17	20	12	40.9	131 3	30 24	80	R	
1963	11	16	8	50	16.0	131 1	30 31	60	L	
1964	2	24	22	39	0.3	131 37	30 47	40	U	
1966	11	2	9	21	51.7	131 19	30 58	80	S	
1967	3	27	9	50	17.0	131 54	30 50	0	4.7	U
1968	5	14	10	18	3.4	131 44	30 38	10	4.6	UU
1968	7	2	9	44	13.3	131 45	30 38	30	4.5	U
1968	9	7	4	22	45.7	131 59	30 54	70	M	
1968	10	5	17	9	29.0	131 21	30 48	10	4.3	M
1969	3	5	8	28	6.6	131 6	30 28	0	4.2	L
1969	3	21	1	39	49.1	131 15	30 27	0	5.0	L
1969	9	18	3	40	44.8	131 41	30 56	0	5.9	R
1970	6	22	11	30	19.3	131 8	30 57	70	L	
LONG. 131. LAT. 31.										
1961	1	6	21	52	14.7	131 35	31 46	20	L	
1961	2	27	3	10	48.1	131 51	31 36	40	7.0	R
1961	2	27	3	48	7.3	131 28	31 52	20	SS	
1961	2	27	4	43	2.5	131 38	31 26	0	SS	
1961	2	27	15	30	10.2	131 52	31 38	0	SS	
1961	2	28	4	35	33.2	131 45	31 40	20	SS	
1961	3	1	22	50	33.9	131 41	31 41	0	SS	
1961	4	8	3	13	42.3	131 46	31 46	0	UU	
1961	5	2	0	36	37.6	131 46	31 26	20	UU	
1961	6	19	5	28	38.1	131 56	31 51	20	UU	
1961	8	15	7	4	55.5	131 50	31 27	0	5.2	S
1961	8	15	12	19	1.6	131 43	31 16	20	UU	
1961	9	22	5	45	31.5	131 51	31 35	0	UU	
1961	11	4	6	14	8.4	131 37	31 31	60	UU	
1961	5	2	0	36	37.6	131 46	31 26	20	UU	
1961										

Y	M	D	H	M	S	LONG.	LAT.	DEP.	MAG.	C	Y	M	D	H	M	S	LONG.	LAT.	DEP.	MAG.	C											
1961	3	1	5	59	21.4	131 43	32 2	0	5.6	L	1968	5	5	16	21	1.3	135 32	32 57	30	4.9	S											
1961	3	30	2	24	27.4	131 57	32 53	60	5.6	L	1969	5	16	15	56	39.6	136 52	32 58	400	R												
1961	8	1	19	30	24.6	131 29	32 57	100	5.6	S	1969	5	16	15	56	39.6	136 52	32 58	400	R												
1961	10	2	0	22	22.9	131 13	32 53	20	5.6	L	1969	5	16	15	56	39.6	136 52	32 58	400	R												
1961	11	9	20	20	41.3	131 14	32 55	40	5.6	L	1969	5	16	15	56	39.6	136 52	32 58	400	R												
1962	2	10	3	22	48.2	131 20	32 1	0	5.6	L	1969	5	16	15	56	39.6	136 52	32 58	400	R												
1962	9	24	19	21	30.4	131 46	32 59	100	5.6	L	1969	5	16	15	56	39.6	136 52	32 58	400	R												
1963	10	5	16	34	5.2	131 38	32 26	40	5.6	L	1969	5	16	15	56	39.6	136 52	32 58	400	R												
1963	12	16	16	59	45.6	131 51	32 11	0	4.8	L	1969	5	16	15	56	39.6	136 52	32 58	400	R												
1964	11	8	20	42	23.5	131 28	32 7	20	4.8	L	1969	5	16	15	56	39.6	136 52	32 58	400	R												
1964	1	21	0	21	13.6	131 21	32 5	0	4.8	S	1969	5	16	15	56	39.6	136 52	32 58	400	R												
1966	2	24	8	10	6.2	131 32	32 29	80	5.6	S	1969	5	16	15	56	39.6	136 52	32 58	400	R												
1966	5	27	14	39	0.8	131 21	32 12	0	4.1	L	1969	5	16	15	56	39.6	136 52	32 58	400	R												
1966	6	12	5	24	21.0	131 35	32 9	0	3.8	U	1969	5	16	15	56	39.6	136 52	32 58	400	R												
1966	12	7	43	57.3	131 40	32 5	20	4.0	U	1969	5	16	15	56	39.6	136 52	32 58	400	R													
1966	12	5	16	23	4.0	131 49	32 20	0	5.0	S	1969	5	16	15	56	39.6	136 52	32 58	400	R												
1967	7	5	14	47	51.3	131 22	32 37	90	5.6	L	1969	5	16	15	56	39.6	136 52	32 58	400	R												
1967	7	7	8	15	58.0	131 10	32 35	150	5.6	S	1969	5	16	15	56	39.6	136 52	32 58	400	R												
1967	12	18	23	59	0.2	131 59	32 11	10	4.0	L	1969	5	16	15	56	39.6	136 52	32 58	400	R												
1968	7	16	22	9	18.3	131 39	32 13	0	4.4	L	1969	5	16	15	56	39.6	136 52	32 58	400	R												
1968	8	19	20	0	20.9	131 45	32 0	0	3.9	U	1969	5	16	15	56	39.6	136 52	32 58	400	R												
1969	1	1	9	18	24.7	131 55	32 17	0	3.8	U	1969	5	16	15	56	39.6	136 52	32 58	400	R												
1969	3	26	5	24	45.9	131 49	32 12	0	4.5	L	1969	5	16	15	56	39.6	136 52	32 58	400	R												
1969	4	24	7	44	34.8	131 59	32 9	0	4.1	L	1969	5	16	15	56	39.6	136 52	32 58	400	R												
1969	6	20	12	9	32.2	131 51	32 6	0	4.1	S	1969	5	16	15	56	39.6	136 52	32 58	400	R												
1969	8	1	19	19	28.3	131 53	32 13	0	4.1	U	1970	9	19	9	44	2.4	138 1	32 33	360	R												
1969	9	4	7	9	24.5	131 26	32 57	110	5.0	S	1970	9	19	9	44	2.4	138 1	32 33	360	R												
1970	2	3	16	22	35.8	131 56	32 7	0	4.1	L	1970	9	26	5	45.3	131 56	32 7	0	4.1	L												
1970	7	26	8	9	21.3	131 55	32 7	10	4.0	U	1970	7	26	8	28	23.4	131 46	32 10	0	4.7	L											
1970	7	26	9	22	54.9	131 51	32 9	0	3.7	U	1970	7	26	9	25	18.1	131 48	32 19	0	4.0	U											
1970	7	26	9	25	18.1	131 48	32 19	0	4.0	U	1970	9	26	12	35	38.2	131 26	32 19	0	4.0	U											
LONG., 132. LAT., 32.												LONG., 140. LAT., 32.																				
1961	9	14	10	8	47.6	132 18	32 44	20	5.0	S	1961	1	11	22	26	51.7	140 54	32 57	60	5.6	L	1961	4	28	6	32	20.4	132 19	33 25	20	5.6	S
1961	11	29	13	51	43.1	132 3	32 52	80	5.4	M	1961	2	6	3	44	57.0	140 42	32 3	120	5.6	L	1961	8	4	3	38	14.2	132 36	33 53	40	5.6	S
1962	7	31	4	9	14.9	132 25	32 31	0	5.4	M	1962	7	6	10	15	23.7	140 6	32 6	40	4.5	L	1961	10	13	18	53	1.7	132 8	33 24	80	5.6	S
1962	7	31	14	33	8.4	132 33	32 8	20	4.6	L	1962	5	5	20	4	12.9	140 10	32 44	100	5.6	L	1961	11	22	23	16	43.6	132 9	33 49	60	5.6	S
1962	8	1	22	38	52.1	132 40	32 2	40	4.6	S	1962	8	5	23	33	58.8	132 21	32 34	0	5.6	L	1961	12	16	1	2	3.7	132 1	33 4	100	5.6	S
1962	8	5	23	33	58.8	132 21	32 34	0	5.6	L	1962	6	1	23	28	39.7	132 2	33 47	40	5.6	L	1962	9	17	4	9	22.5	134 32	33 39	20	5.6	S
1962	11																															

Y	M	D	H	M	S	LONG.	LAT.	DEP.	MAG.	C	Y	M	D	H	M	S	LONG.	LAT.	DEP.	MAG.	C	Y	M	D	H	M	S	LONG.	LAT.	DEP.	MAG.	C																					
1969	2	18	9	49	56.1	135 36	34 26	20	4.0	L	1965	12	1	2	3	54.4	137 44	34 50	20	3.8	L	1962	7	22	14	46	1.3	139 15	34 37	0	4.1	L	1962	9	18	14	55	48.9	139 10	34 50	0	4.2	L										
1969	2	18	14	49	53.0	135 37	34 26	0	3.9	L	1965	12	13	23	21	40.6	137 39	34 44	40	3.5	L	1962	7	22	15	3	0.6	139 14	34 45	0	4.1	L	1962	9	20	2	16	13.1	139 29	34 4	20	4.0	L										
1969	3	15	0	30	10.1	135 7	34 4	10	4.0	L	1965	12	20	22	41	3.8	137 46	34 48	20	3.6	L	1962	8	25	7	49	35.7	139 31	34 10	40	4.6	U	1962	9	20	6	8	49.4	139 11	34 3	0	4.2	L										
1969	5	22	0	45	50.7	135 53	34 22	40	3.9	L	1966	6	9	21	7	7.6	137 34	34 56	0	3.8	S	1962	8	25	21	24	46.9	139 27	34 5	20	4.0	U	1962	10	5	9	23	0.3	139 9	34 51	0	4.2	L										
1969	5	31	19	44	38.6	135 7	34 1	10	4.4	S	1966	6	18	16	44	47.5	137 36	34 53	0	3.4	L	1962	8	26	0	29	55.8	139 16	34 3	20	4.6	U	1962	10	31	22	58	25.3	139 5	34 13	40	4.3	L										
1969	6	20	15	33	36.3	135 2	34 52	0	3.5	U	1967	3	10	23	18	25.8	137 43	34 28	320	3.8	R	1962	8	26	0	46	12.9	139 8	34 7	0	4.3	L	1962	11	20	15	23	59.3	139 2	34 4	40	4.0	U										
1969	6	20	16	7	47.8	135 5	34 56	10	3.5	U	1967	7	21	14	44	50.5	137 26	34 52	0	3.8	L	1962	8	26	1	30	30.8	139 27	34 10	0	4.0	U	1962	12	29	23	12	41.4	139 28	34 42	120	4.2	U										
1969	7	5	18	15	54.9	135 44	34 13	60	3.6	U	1967	9	25	2	45	42.5	137 40	34 49	300	3.8	L	1962	8	26	4	6	33.1	139 8	34 4	20	4.2	U	1963	1	8	22	4	29.2	139 11	34 32	20	4.0	L										
1969	7	9	19	21	49.7	135 8	34 10	10	4.4	L	1968	6	15	2	1	23.0	137 36	34 24	0	3.6	U	1968	9	6	17	7	42.9	137 40	34 53	10	3.1	U	1963	1	8	22	5	48.5	139 12	34 48	0	4.2	L										
1969	8	25	8	4	24.7	135 12	34 8	20	3.5	L	1968	9	19	10	27	57.6	137 44	34 54	10	3.5	L	1968	11	4	5	40	3.7	139 2	34 48	40	4.1	L	1963	1	8	22	4	29.2	139 11	34 32	20	4.0	L										
1969	9	13	13	10	39.7	135 7	34 10	10	3.4	L	1969	6	18	17	22	11.0	137 58	34 33	280	3.8	M	1969	6	18	17	22	11.0	137 58	34 33	280	3.8	M	1963	2	23	1	18	11.1	139 47	34 29	100	4.2	L										
1969	9	18	2	15	23.3	135 17	34 9	10	3.8	L	1970	2	19	17	41	20.9	137 44	34 54	10	3.6	U	1970	2	19	17	41	20.9	137 44	34 54	10	3.6	U	1963	4	6	20	42	36.4	139 16	34 47	0	4.0	U										
1969	10	18	1	48	19.3	135 5	34 3	0	4.5	S	1970	5	21	19	42.0	135 7	34 11	10	3.2	L	1970	7	14	12	14	49.0	135 6	34 7	0	3.5	L	1970	8	21	3	47	42.2	135 32	34 44	10	3.5	L	1964	6	3	2	17	57.2	139 58	34 52	80	4.2	L
1969	11	2	10	51	20.0	135 6	34 7	10	3.5	L	1970	10	17	4	16	39.4	135 29	34 4	0	3.8	U	1970	11	23	1	7	23.5	135 6	34 0	0	3.8	U	1964	6	7	6	29	37.7	139 10	34 16	80	4.2	L										
1969	11	25	22	53	38.0	135 11	34 11	10	3.6	L	1970	11	29	4	29	4.6	135 5	34 2	0	3.8	U	1970	12	30	1	24	57.2	135 14	34 7	10	3.7	L	1964	6	26	4	3	37	139 30	34 31	20	4.2	L										
1969	12	30	1	24	57.2	135 14	34 7	10	3.7	L	1970	12	30	1	24	57.2	135 14	34 7	10	3.7	L	1970	12	30	1	23	5.1	135 14	34 7	10	3.7	L	1964	6	26	4	3	37	139 14	34 4	40	4.4	L										
1970	5	21	19	3	42.0	135 7	34 11	10	3.2	L	1970	7	14	12	14	49.0	135 6	34 7	0	3.5	L	1970	8	21	3	47	42.2	135 32	34 44	10	3.5	L	1964	6	3	2	17	57.2	139 58	34 52	80	4.2	L										
1970	7	14	12	14	49.0	135 6	34 7	0	3.5	L	1970	10	17	4	16	39.4	135 29	34 4	0	3.8	U	1970	11	23	1	7	23.5	135 6	34 0	0	3.8	U	1964	6	26	4	3	37	139 30	34 31	20	4.2	L										
1970	8	21	3	47	42.2	135 32	34 44	10	3.5	L	1970	11	23	1	7	23.5	135 6	34 0	0	3.8	U	1970	12	30	1	23	5.1	135 14	34 7	10	3.7	L	1964	6	26	4	3	37	139 14	34 4	40	4.4	L										
1970	10	11	23	5.1	38.0	135 6	34 0	0	3.8	U	1970	11	23	1	7	23.5	135 6	34 0	0	3.8	U	1970	12	30	1	23	5.1	135 14	34 7	10	3.7	L	1964	6	26	4	3	37	139 14	34 4	40	4.4	L										
1970	11	23	1	7	23.5	135 6	34 0	0	3.8	U	1970</																																										

Y	M	D	H	M	S	LONG.	LAT.	DEP.	MAG.	C	Y	M	D	H	M	S	LONG.	LAT.	DEP.	MAG.	C	Y	M	D	H	M	S	LONG.	LAT.	DEP.	MAG.	C											
1967	4	6	18	6	42.4	139 11	34 17	20	4.9	M	1969	11	30	21	48	52.0	140 0	34 43	100	S		1961	5	14	4	17	52.3	135 37	35 20	20	L		1968	9	7	1	36	12.9	135 19	35 13	10	4.6	S
1967	4	7	8	28	49.9	139 9	34 15	10	5.2	S	1970	2	27	12	35	57.6	140 13	34 27	80	U		1961	6	5	7	52	42.9	135 28	35 46	0	L		1968	9	11	14	49	8.2	135 20	35 15	0	4.0	S
1967	4	7	9	50	41.9	139 12	34 20	10	3.7	L	1970	5	28	22	0	12.3	140 44	34 29	60	4.0	L	1961	6	27	7	8	51.9	135 29	35 3	0	L		1968	9	18	15	46	56.9	135 20	35 14	10	4.2	S
1967	5	16	14	21	27.0	139 59	34 53	50	4.5	M	1970	5	30	21	4	41.5	140 39	34 29	50	4.2	L	1961	9	10	11	10	42.5	135 57	35 19	0	4.1	S											
1967	6	20	19	16	5.6	139 7	34 9	0	4.1	L	1970	9	12	6	24	53.5	140 1	34 45	70	L		1962	2	1	21	19	34.1	135 8	35 11	0	U		1968	9	19	23	19	9.6	135 17	35 12	0	3.2	L
1967	6	20	19	41	26.2	139 4	34 1	0	3.7	U	1970	10	30	20	44	14.3	140 7	34 18	60	3.9	U	1962	6	4	18	31	1.5	135 46	35 10	20	L		1968	10	6	4	36	5.7	135 21	35 14	20	4.3	L
1967	9	2	13	51	18.1	139 13	34 16	10	3.7	U	1970	11	26	5	52	14.2	140 29	34 33	20	4.4	S	1963	1	31	22	30	26.8	135 32	35 15	20	L		1968	11	11	1	15	25.3	135 42	35 15	10	3.3	L
1967	9	11	8	2	6.5	139 46	34 53	90		U	1970	11	26	5	52	14.2	140 29	34 33	20	4.4	S	1963	3	27	6	34	35.9	135 47	35 47	0	R		1968	12	20	13	10	56.0	135 17	35 12	0	3.4	L
1967	9	19	22	46	49.8	139 3	34 15	0	4.3	L	1970	11	26	5	52	14.2	140 29	34 33	20	4.4	S	1963	3	27	6	50	3.7	135 51	35 38	0	4.8	S	1969	1	2	21	36	15.3	135 21	35 15	20	3.8	L
1967	12	2	3	42	31.0	139 26	34 42	40	3.8	L	1970	11	26	5	52	14.2	140 29	34 33	20	4.4	S	1962	6	15	10	7	37.9	135 41	35 7	20	L		1968	10	6	4	36	5.7	135 21	35 14	20	4.3	L
1967	12	6	8	57	20.5	139 44	34 34	100		L	1970	11	26	5	52	14.2	140 29	34 33	20	4.4	S	1963	1	31	22	30	26.8	135 32	35 15	20	L		1968	11	11	1	15	25.3	135 42	35 15	10	3.3	L
1968	1	3	18	37	46.4	139 32	34 17	0	3.7	L	1961	3	18	7	40	13.9	141 22	34 11	60	5.0	U	1963	3	27	6	34	35.9	135 46	35 47	0	R		1968	12	20	13	10	56.0	135 17	35 12	0	3.4	L
1968	2	25	0	10	46.0	139 12	34 14	10	4.2	L	1962	6	24	7	49	57.2	141 50	34 44	0	4.4	U	1963	3	27	7	11	17.2	135 52	35 44	0	U		1969	10	12	4	54	34.5	135 20	35 15	10	3.8	L
1968	2	25	0	24	28.9	139 15	34 14	0	5.0	L	1963	12	6	7	47	59.0	141 59	34 11	60		U	1963	3	27	7	21	38.1	135 49	35 49	20	S		1969	11	1	20	20	53.2	135 26	35 48	340		U
1968	2	25	0	34	18.9	139 7	34 8	20	5.0	L	1964	5	24	19	31	19.2	141 0	34 20	0	5.7	S	1963	3	27	8	0	33.2	135 57	35 49	0	L		1970	1	3	14	42	18.0	135 22	35 46	10	3.7	U
1968	2	25	1	1	29.2	139 14	34 7	10	4.9	S	1964	5	24	23	33	6.4	141 16	34 7	60	4.5	U	1963	3	27	8	13	2.3	135 52	35 51	0	S		1970	4	22	23	39	45.0	135 16	35 14	10	3.6	U
1968	2	25	1	49	45.6	139 13	34 11	20	4.9	L	1964	9	29	1	25	53.6	141 27	34 10	40	5.0	R	1963	3	27	8	22	28.5	135 48	35 49	20	U		1970	5	22	7	2	37.3	135 21	35 14	10	4.0	L
1968	4	24	21	53	59.7	139 56	34 47	60	3.6	L	1965	9	14	18	0	33.2	141 49	34 48	80	M		1963	3	27	8	25	45.5	135 46	35 42	0	U		1970	8	21	5	53	43.9	135 21	35 14	10	4.1	L
1968	7	4	9	34	12.4	139 48	34 50	100		M	1965	10	9	22	23	39.2	141 20	34 21	80	M		1963	3	27	8	45	12.3	135 44	35 52	20	U		1970	8	21	13	57	40.3	135 21	35 13	10	4.3	L
1968	9	29	2	24	29.8	139 6	34 6	0	4.8	L	1966	7	6	18	33	45.6	141 55	34 45	80		U	1963	3	27	10	19	15.3	135 46	35 45	0	L		1970	8	21	13	57	40.3	135 21	35 13	10	4.3	L
1968	11	1	0	55	49.7	139 52	34 40	40	3.6	L	1967	11	13	20	17	15.1	141 48	34 24	50	4.5	H	1963	3	27	11	19	1.9	135 45	35 47	0	L		1969	1	20	13	36	35.6	135 37	35 57			

Y	M	D	H	M	S	LONG.	LAT.	DEP.	MAG.	C	Y	M	D	H	M	S	LONG.	LAT.	DEP.	MAG.	C	Y	M	D	H	M	S	LONG.	LAT.	DEP.	MAG.	C												
1961	4	29	9	52	32.8	137 57	35 20	60	4.3	L	1961	11	5	23	55	5.3	138 15	35 0	20	4.9	S	1962	10	8	2	23	24.1	139 42	35 18	100	4.1	L	1969	2	8	1	12	33.0	139 56	35 3	60	3.6	U	
1961	5	14	2	47	3.0	137 26	35 47	20	4.3	S	1962	1	26	9	8	47.6	138 56	35 42	80	4.9	S	1962	10	18	22	14	58.5	139 19	35 18	120	4.1	S	1969	2	23	11	10	18.2	139 40	35 31	30	4.1	S	
1961	6	10	8	17	44.8	137 56	35 46	20	4.3	S	1962	3	22	5	36	31.0	138 51	35 24	60	4.9	S	1962	10	23	19	22	54.2	139 27	35 58	80	4.1	S	1969	3	2	14	40	6.8	139 12	35 46	130	3.2	L	
1962	4	1	13	45	46.3	137 5	35 37	20	4.3	S	1962	5	17	23	36	43.7	138 44	35 23	0	4.9	S	1962	11	12	8	5	38.8	139 3	35 31	0	4.1	S	1969	3	16	17	35	22.9	139 59	35 56	50	3.2	L	
1962	5	6	1	42	59.8	137 11	35 47	280	4.7	S	1962	8	18	4	55	23.3	138 57	35 15	120	4.9	S	1962	11	27	2	25	16.2	139 32	35 58	80	4.1	S	1969	4	17	12	59	42.7	139 59	35 55	0	5.0	L	
1962	6	30	3	54	10.9	137 47	35 34	20	4.7	S	1962	8	25	19	3	44.7	138 49	35 7	0	4.9	S	1962	12	25	23	23	46.1	139 6	35 26	0	4.6	S	1969	5	31	23	12	42.7	139 45	35 54	40	3.7	U	
1962	7	19	14	18	20.7	137 15	35 28	0	4.9	S	1963	1	18	4	28	58.4	138 54	35 28	20	4.9	S	1963	1	23	11	25	20.6	138 19	35 38	20	4.6	S	1969	2	23	11	10	18.2	139 40	35 31	30	4.1	S	
1962	8	28	14	25	5.8	137 2	35 4	40	4.9	S	1963	1	25	13	31	54.3	138 3	35 6	0	4.9	S	1963	2	23	21	28	59.3	138 44	35 56	160	4.6	S	1969	3	16	17	35	22.9	139 59	35 56	50	3.2	L	
1962	10	20	2	45	12.9	137 26	35 18	0	4.9	S	1963	5	22	3	32	50.0	138 58	35 33	20	4.9	S	1963	7	23	21	48	5.8	138 28	35 29	160	4.6	S	1969	4	17	12	59	42.7	139 59	35 55	20	3.1	L	
1962	12	14	16	57	21.4	137 55	35 52	20	4.8	M	1963	7	23	21	48	5.8	138 28	35 29	160	4.9	S	1963	7	27	2	32	16.0	139 15	35 13	0	4.6	S	1969	5	7	19	35	1.8	139 38	35 10	120	3.7	U	
1963	2	10	13	30	3.1	137 15	35 17	0	4.9	S	1963	7	23	21	48	5.8	138 28	35 29	160	4.9	S	1963	7	31	4	42	24.8	139 1	35 33	20	4.6	S	1969	6	7	22	28	44.2	139 56	35 42	70	3.2	L	
1963	4	12	19	23	11.3	137 7	35 21	20	4.9	S	1964	1	12	14	31	35.7	138 54	35 8	0	4.3	S	1964	4	12	14	31	35.7	138 54	35 8	0	4.3	S	1969	6	24	20	25	29.2	139 32	35 56	70	3.2	L	
1963	4	21	6	35	42.0	137 36	35 15	0	4.9	M	1964	2	9	23	47	4.3	138 55	35 29	20	4.9	S	1964	2	11	19	57.1	139 21	35 5	100	4.6	S	1969	3	21	3	43	6.0	139 35	35 50	140	4.0	L		
1963	4	21	22	3	37.4	137 38	35 20	20	4.9	M	1964	4	12	14	31	35.7	138 7	35 44	0	4.9	S	1964	4	19	26	50.7	139 21	35 33	120	4.6	S	1969	4	17	12	59	42.7	139 59	35 55	20	3.1	L		
1963	7	12	23	21	35.6	137 33	35 15	40	4.8	M	1964	5	20	6	39	24.3	138 31	35 18	200	4.9	S	1964	7	13	13	53.1	139 49	35 28	60	4.6	S	1969	5	7	19	35	1.8	139 38	35 10	120	3.7	U		
1963	7	12	23	48	23.2	137 33	35 17	0	4.9	S	1964	7	4	8	31	26.2	138 52	35 28	0	4.9	S	1964	9	10	11	41	49.7	139 49	35 36	80	4.6	S	1969	6	27	23	42	2.1	139 31	35 56	90	3.2	L	
1963	7	24	22	52	10.2	137 4	35 50	0	4.9	S	1965	2	26	3	30	3.2	138 7	35 45	0	3.7	S	1965	4	14	19	6	16.4	139 11	35 53	20	4.9	S	1969	9	10	3	29	34.4	139 47	35 33	90	3.2	L	
1963	7	28	2	31	44.1	137 34	35 17	60	4.9	S	1966	2	19	23	19	19.8	138 26	35 13	200	4.9	S	1966	9	16	21	55	28.1	139 37	35 57	60	4.6	S	1969	9	30	12	1	17.7	139 56	35 41	100	3.8	L	
1963	8	14	19	2	46.4	137 7	35 12	40	4.9	S	1966	6	18	18	28	32.8	138 54	35 28	20	3.8	L	1966	10	6	10	41	9.5	139 15	35 52	30	3.8	L	1969	10	6	10	41	9.5	139 56	35 41	100	3.8	L	
1963	10	3	3	17	26.4	137 4	35 21	40	4.9	S	1966	8	4	21	52	13.9	138 46	35 33	40	3.7	L	1966	7	12	10	29	15.0	139 7	35 33	20	4.6	S	1969	6	12	29	5	50	51.0	139 45	35 45	120	3.8	L
1963	10	30	0	11	58.6	137 35	35 51	0	4.9	S	1966	9	5	5	50																													

Y	M	D	H	M	S	LONG.	LAT.	DEP.	MAG.	C	Y	M	D	H	M	S	LONG.	LAT.	DEP.	MAG.	C	Y	M	D	H	M	S	LONG.	LAT.	DEP.	MAG.	C											
1962	1	30	2	15	39.7	140 49	35 36	40	4.2	L	1964	4	5	12	1	0.6	140 8	35 44	80	5	S	1967	2	18	17	50	46.6	140 4	35 20	80	4.6	L	1970	3	2	12	8	9.1	140 49	35 48	40	3.6	L
1962	1	30	2	17	57.0	140 49	35 30	40	4.2	L	1964	4	6	16	32	29.4	140 4	35 34	60	5	S	1967	2	22	17	47	1.0	140 16	35 5	40	4.6	S	1970	3	11	6	7	15.5	140 27	35 30	60	3.5	L
1962	2	6	2	47	14.7	140 48	35 39	40	4.2	L	1964	4	13	22	39	18.9	140 5	35 36	80	5	S	1967	3	2	17	17	42.8	140 7	35 32	80	5	S	1970	3	18	1	47	41.6	140 17	35 44	80	5	L
1962	2	8	23	16	22.1	140 52	35 36	20		L	1964	5	5	12	34	32.5	140 27	35 38	20	5	S	1967	3	13	8	31	16.6	140 4	35 26	80	5	S	1970	5	15	13	49	9.1	140 4	35 2	100	5	L
1962	2	10	2	31	1.1	140 0	35 32	80		L	1964	5	13	5	54	33.3	140 35	35 15	80	5	S	1967	3	21	23	2	7.7	140 9	35 38	90	5	S	1970	5	29	9	11	32.3	140 12	35 13	80	5	L
1962	2	22	20	7	58.0	140 5	35 45	80		L	1964	5	15	19	13	2.5	140 1	35 37	80	5	S	1967	3	26	10	30	55.2	140 1	35 45	50	4.4	L	1970	6	6	1	15	30.1	140 4	35 37	70	5	L
1962	2	25	1	59	41.8	140 17	35 43	100		L	1964	5	25	20	25	28.3	140 12	35 36	80	5	S	1967	4	7	8	32	6.0	140 59	35 38	50	5.3	S	1970	7	26	21	37	20.3	140 6	35 35	80	3.4	U
1962	2	25	14	34	34.9	140 13	35 31	80		L	1964	6	14	5	41	58.4	140 32	35 14	80	6	S	1967	4	12	11	32	29.9	140 6	35 47	70	5	S	1970	7	28	5	41	1.4	140 13	35 36	80	5	U
1962	3	1	16	51	26.3	140 22	35 4	60		L	1964	6	16	0	38	42.2	140 44	35 41	20	6	S	1967	4	19	19	24	53.5	140 20	35 31	70	5	S	1970	8	2	4	33	16.2	140 12	35 30	80	5	S
1962	3	24	13	11	15.0	140 23	35 22	0		L	1964	7	3	11	20	30.2	140 24	35 14	40	7	S	1967	4	30	7	2	7.8	140 56	35 50	80	5.1	L	1970	8	2	4	33	16.2	140 12	35 30	80	5	S
1962	4	7	1	3	53.6	140 55	35 41	60		L	1964	7	9	5	59	21.9	140 14	35 47	60	7	S	1967	4	30	7	12	42.2	140 57	35 57	0	4.1	L	1970	8	4	10	30	11.9	140 33	35 59	50	3.3	U
1962	5	3	20	20	9.9	140 38	35 17	80		L	1964	7	29	17	37	47.7	140 22	35 33	60	7	S	1967	5	5	17	12	57.43.9	140 20	35 53	0	3.5	L	1970	8	15	12	55	2.9	140 27	35 44	80	5	U
1962	5	10	0	16	4.9	140 9	35 29	40		L	1964	7	30	16	41	20.1	140 4	35 44	80	7	S	1967	6	2	23	54	49.9	140 10	35 52	80	4.3	S	1970	8	23	9	46	24.9	140 35	35 29	70	5	U
1962	6	1	20	36	54.2	140 59	35 31	20	4.1	L	1964	8	15	13	17	7.7	140 14	35 48	60	8	S	1967	6	15	20	33	53.3	140 3	35 24	50	3.9	L	1970	8	24	11	4	34.9	140 50	35 39	40	4.4	L
1962	6	6	5	6	4.6	140 7	35 43	80		L	1964	8	22	11	15	7.5	140 1	35 33	80	6	S	1967	6	29	10	42	58.1	140 19	35 31	70	5	S	1970	9	1	11	24	13.9	140 21	35 36	70	5	U
1962	6	8	3	36	57.6	140 41	35 13	40		L	1964	9	21	23	25	58.9	140 11	35 33	60	8	S	1967	7	31	14	55	47.0	140 12	35 50	70	5	S	1970	9	2	17	34	6.1	140 3	35 34	30	3.6	L
1962	6	8	4	38	28.9	140 33	35 18	0	4.1	L	1964	10	29	8	43	40.1	140 57	35 41	40	8	S	1967	8	30	11	6	10.0	140 11	35 33	70	5	S	1970	9	3	10	46	4.0	140 46	35 24	80	5	L
1962	6	14	4	43	5.3	140 18	35 36	80		L	1964	11	2	20	43	11.2	140 17	35 44	40	8	S	1967	9	4	6	3	48.7	140 52	35 50	80	4.3	S	1970	9	21	9	24	29.4	140 25	35 29	70	5	U
1962	6	14	10	23	27.6	140 25	35 17	0		L	1964	11	15	9	42	45.1	140 33	35 47	20	8	S	1967	9	15	9	28	36.0	140 55	35 36	40	5.6	M	1970	10	2	7	17	45.4	140 17	35 45	70	5	U
1962	6	17	0	47	21.8	140 32	35 53	80		L	1964	11	18	7	16	59.2	140 12	35 56	60	8	S	1967	9	20	9	32	40.6	140 12	35 56	80	5	L	1970	10	4	9	24	52.6	140 24	35 18	20	4.2	L
1962	6	19	19	38	47.5	140 2	35 43	80	4.6	L	1964	11	21	12	11	2.4	140 12	35 50	60	8	S	1967	9	21	22	42	58.5	140 51	35 57	40	3.8	L	1970	10	7	21	37	39.8	140 56	35 37	60	4.1	L

Y	M	D	H	M	S	LONG.	LAT.	DEP.	MAG.	C	LONG.	LAT.	DEP.	MAG.	C	LONG.	LAT.	DEP.	MAG.	C	LONG.	LAT.	DEP.	MAG.	C												
1965	10	11	0	49	51.2	141 25	35 25	20	4.5	L	1961	8 19 14 33 29.9	136 46	36 1	0	7.0	R	1968	3 30	5 41	17.0	137 22	36 2	0	3.9	L	1966	4 17	20	1	51.4	138 13	36 30	0	4.2	L	
1965	11	4	17	18	56.3	141 20	35 34	0	4.6	L	1961	8 19 15 13 57.3	136 48	36 1	0		U	1968	6 30	20	3 30.8	137 9	36 6	260	0	3.7	U	1966	4 17	20	6	41.6	138 14	36 31	0	3.9	L
1966	1	5	14	46	39.9	141 34	35 11	0	4.8	L	1961	8 19 15 18 58.5	136 46	36 5	0		U	1968	9 16	15 5	54.1	137 42	36 24	0	3.7	L	1966	4 17	20	28	15.4	138 17	36 26	0	4.7	L	
1966	8	26	13	26	53.5	141 16	35 10	20	4.6	L	1961	8 19 15 25 42.5	136 43	36 5	0	4.6	L	1968	10 31	3 17	38.5	137 50	36 29	10	4.0	L	1966	4 18	5 44	8.8	138 18	36 32	0	3.9	L		
1966	10	23	2	30	1.0	141 12	35 16	20	4.4	S	1961	8 19 15 25 52.3	136 44	36 0	0		U	1968	11 3	16	37 37.7	137 33	36 30	0	4.1	U	1966	4 19	7	35 13.3	138 20	36 33	0	4.7	S		
1967	1	17	11	3	0.3	141 27	35 57	0	4.4	S	1961	8 19 15 52 53.6	136 44	36 0	0		U	1968	11 16	7 25	28.6	137 39	36 31	10	3.8	U	1966	4 21	3	55 11.4	138 13	36 34	0	4.1	L		
1967	3	27	20	21	35.5	141 50	35 48	70		U	1961	8 19 16 14 29.9	136 29	36 8	0		U	1968	12 1	5 42	22.6	137 49	36 32	0	3.9	L	1966	4 17	20	25	46.3	138 18	36 32	0	4.0	L	
1967	4	30	7	39	39.5	141 1	35 50	30	4.3	M	1961	8 19 17 7 15.6	136 35	36 0	0	5.2	M	1969	8 31	20	18 19.3	137 43	36 12	10	4.7	S	1966	4 21	20	25	57.5	138 13	36 31	20	4.0	L	
1967	4	30	10	9	33.5	141 3	35 48	30	4.9	M	1961	8 19 17 27 37.8	136 36	36 5	0		U	1969	9 1	4	13 20.5	137 42	36 11	0	4.4	S	1966	4 22	3	0	9.3	138 18	36 32	0	4.1	L	
1967	5	12	1	24	45.6	141 32	35 54	50	4.3	M	1961	8 19 18 16 42.5	136 39	36 11	0		U	1969	9 2	21	7 13.9	137 43	36 12	0	5.0	S	1966	4 24	20	30	27.9	138 18	36 32	0	4.1	L	
1967	7	14	2	48	44.5	141 9	35 56	40	3.8	L	1961	8 19 18 48 17.3	136 36	36 1	0		U	1969	9 2	21	25 25.7	137 44	36 11	10	3.9	U	1966	4 25	15	27	32.9	138 17	36 32	0	3.9	L	
1967	8	24	3	49	49.1	141 16	35 34	20	4.3	L	1961	8 19 20 11 49.8	136 40	36 8	40		U	1969	9 3	21	9 54.1	137 42	36 12	10	3.4	U	1966	4 29	18	21	57.4	138 15	36 32	0	3.9	L	
1967	8	29	18	9	23.6	141 27	35 25	60	4.2	L	1961	8 19 21 15 28.0	136 39	36 3	0	4.3	L	1969	9 9	14	29 53.8	137 6	36 6	40	4.2	L	1966	4 30	17	42	50.5	138 18	36 33	0	4.3	L	
1967	9	5	2	48	49.2	141 16	35 27	40	4.6	S	1961	8 20 4 4 41.1	136 39	36 0	20		U	1969	9 13	11	57 48.1	137 43	36 12	0	4.0	L	1966	5 1	4	48 30.6	138 9	36 32	0	4.0	L		
1967	9	19	7	41	17.6	141 10	35 45	40	3.7	L	1961	8 20 10 35 42.7	136 37	36 1	0		U	1970	2 27	19 13 38.8	137 47	36 0	220	5.1	M	1966	5 2	0	44 3.0	138 19	36 33	0	4.5	L			
1967	9	27	21	31	46.0	141 31	35 32	10	4.2	L	1961	8 20 11 11 51.6	136 39	36 0	0		U	1970	5 20	7 26 6.2	137 47	36 4	20	3.4	U	1966	5 2	13	29 32.0	138 18	36 30	0	4.4	L			
1967	9	29	23	33	24.4	141 17	35 30	50	4.1	U	1961	8 20 20 10 46.0	136 39	36 9	20		U	1970	6 11	20 45 19.0	137 22	36 5	240	U	1966	5 4	8	36 59.9	138 18	36 32	0	4.0	L				
1967	11	8	10	56	10.8	141 10	35 27	40	5.0	S	1961	8 20 20 48 29.1	136 40	36 1	0		U	1969	5 4	10 40 48.3	138 16	36 31	0	4.6	L	1966	5 4	14	31 40.8	138 16	36 30	0	3.7	L			
1967	12	17	4	44	9.7	141 14	35 35	70		U	1961	8 20 21 1 35.5	136 37	36 8	0		U	1961	11 5	4 8 38.6	138 51	36 3	160	U	1966	5 5	12	55 6.3	138 18	36 33	0	4.1	L				
1968	1	5	3	54	20.8	141 8	35 56	40	3.7	U	1961	8 21 2 39 2.4	136 36	36 3	40		U	1962	8 7	5 4 8.5	138 10	36 57	0	L	1966	5 6	11	8 56.7	138 18	36 32	0	4.2	L				
1968	3	8	3	24	58.4	141 1	35 49	70		U	1961	8 21 9 31 32.5	136 34	36 5	40		U	1963	11 27	14 12 37.3	138 52	36 9	120	U	1966	5 6	19	5 59.0	138 17	36 31	0	4.3	L				
1968	6	3	14	31	50.3	141 46	35 51	10	4.7	L	1961	8 21 9 32 12.6	136 40	36 3	0		L	1964	1 22	23 2 42.8	138 4	36 26	0	L	1966	5 6	19	5 59.0	138 17	36 31	0	4.3	L				
1968	6	3	17	31	54.2	141 34	35 55	0	5.0	M	1961	8 21 16 11 34.9	136 43	36 4	0		L	1964	3	6 22 48 26.3	138 29	36 11	120	U	1966	5 6	19	8 12.4	138 15	36 31	0	5.0	L				
1968	7	15	8	49	24.7	141 24</																															

Y	M	D	H	M	S	LONG.	LAT.	DEP.	MAG.	C	Y	M	D	H	M	S	LONG.	LAT.	DEP.	MAG.	C	Y	M	D	H	M	S	LONG.	LAT.	DEP.	MAG.	C											
1966	7	12	14	8	57.3	138 20	36 33	0	4.4	L	1966	12	1	18	34	15.7	138 16	36 25	0	4.0	L	1967	12	9	11	2	20.4	138 5	36 52	0	4.4	L	1961	4	14	8	33	3.1	139 35	36 9	120	4.0	U
1966	7	18	5	40	7.8	138 18	36 30	20	3.9	L	1966	12	1	19	36	36.0	138 18	36 33	0	3.9	L	1967	12	11	16	34	24.4	138 5	36 24	0	3.7	L	1961	4	28	19	10	51.9	139 10	36 11	20	L	
1966	7	18	12	5	34.2	138 15	36 30	20	3.8	L	1966	12	5	4	24	58.6	138 13	36 30	0	3.6	L	1967	12	12	6	17	35.7	138 7	36 24	0	3.5	L	1961	5	25	7	29	41.3	139 47	36 11	60	L	
1966	7	19	7	7	17.5	138 16	36 33	0	3.9	L	1966	12	12	5	13	49.9	138 19	36 31	0	3.8	L	1967	12	12	15	37	28.5	138 5	36 26	0	3.7	L	1961	6	4	10	15	14.4	139 16	36 10	20	L	
1966	7	22	14	16	36.5	138 11	36 29	0	3.9	L	1966	12	14	12	39	9.5	138 18	36 33	0	3.7	L	1967	12	13	20	30	34.5	138 17	36 28	0	3.7	L	1961	6	12	6	13	57.2	139 49	36 8	60	L	
1966	7	26	7	26	19.4	138 18	36 32	0	3.9	L	1966	12	21	12	55	12.7	138 11	36 38	20	3.8	L	1967	12	14	5	6	44.7	138 6	36 25	0	3.7	L	1961	6	19	2	30	41.4	139 51	36 14	40	L	
1966	7	28	15	6	50.1	138 17	36 39	0	4.0	L	1966	12	22	18	41	37.9	138 23	36 54	0	4.2	L	1967	12	16	15	12	33.4	138 6	36 25	0	4.1	L	1961	7	9	1	16	9.3	139 54	36 7	60	4.4	S
1966	8	1	9	44	31.8	138 15	36 35	0	4.0	L	1967	1	4	3	12	6.9	138 18	36 34	0	4.2	L	1968	1	1	10	0	8.7	138 5	36 27	10	3.5	L	1961	7	14	8	41	32.1	139 57	36 2	60	4.7	S
1966	8	3	1	29	30.8	138 13	36 31	0	3.9	L	1967	1	7	20	50	23.6	138 9	36 31	10	4.6	L	1968	1	22	7	47	54.6	138 16	36 30	10	3.8	L	1961	8	12	8	28	18.0	139 12	36 12	120	U	
1966	8	4	9	33	58.2	138 14	36 33	0	3.9	L	1967	1	12	21	24	46.3	138 5	36 28	10	4.8	S	1968	1	22	23	28	45.2	138 5	36 27	10	4.7	S	1961	8	20	12	46	11.1	139 15	36 8	20	U	
1966	8	4	21	33	45.4	138 19	36 33	0	4.4	L	1967	1	16	12	31	16.2	138 8	36 26	0	4.8	S	1968	1	26	15	55	19.0	138 9	36 31	0	5.3	M	1961	9	10	18	45	49.7	139 43	36 5	100	S	
1966	8	5	10	26	30.2	138 16	36 35	0	3.9	L	1967	1	16	12	32	6.3	138 0	36 29	0	5.2	L	1968	1	26	17	5	43.5	138 10	36 29	10	4.6	L	1961	9	12	13	54	43.2	139 36	36 40	40	4.1	S
1966	8	6	3	47	43.6	138 18	36 31	20	4.0	L	1967	1	19	1	57	58.1	138 5	36 29	10	4.1	L	1968	1	26	17	23	40.8	138 10	36 28	0	3.9	L	1961	10	11	17	54	49.8	139 20	36 11	80	L	
1966	8	9	37	15.8	138 19	36 32	0	5.1	S	1967	1	27	18	29	45.7	138 5	36 27	0	5.4	S	1968	1	26	21	11	52.7	138 12	36 28	0	3.7	L	1961	11	4	14	24	52.4	139 49	36 15	60	U		
1966	8	9	12	33	59.8	138 15	36 25	0	3.7	L	1967	2	3	17	17	1.5	138 4	36 26	0	5.4	S	1968	1	26	18	16	35.0	138 19	36 33	10	4.3	L	1961	11	9	2	14	52.4	139 34	36 7	0	L	
1966	8	10	15	45	58.0	138 18	36 33	0	3.9	L	1967	2	8	18	49	36.3	138 2	36 27	10	4.8	S	1968	2	20	7	46	59.0	138 17	36 33	0	5.1	S	1961	11	13	23	11	4.8	139 59	36 4	60	L	
1966	8	12	4	55	53.1	138 18	36 32	0	4.3	L	1967	2	9	9	50	51.0	138 14	36 35	10	4.3	L	1968	2	25	7	3	14.0	138 14	36 34	10	3.5	L	1961	12	8	15	43	51.9	139 31	36 42	20	L	
1966	8	14	1	41	38.4	138 11	36 34	0	4.5	S	1967	2	12	9	21	29.5	138 18	36 38	10	4.5	L	1968	2	26	12	32	31.3	138 19	36 33	10	4.3	L	1961	12	19	20	57	23.1	139 6	36 9	120	U	
1966	8	14	4	5	0.2	138 13	36 29	0	4.1	L	1967	2	17	2	19	17.1	138 4	36 29	10	4.4	L	1968	3	9	23	15	13.8	138 9	36 23	0	4.1	L	1962	1	15	3	44	7.5	139 57	36 5	60	L	
1966	8	16	13	16	14.3	138 12	36 31	20	4.1	L	1967	2	21	14	31	3.8	138 18	36 37	0	4.1	L	1968	3	20	5	52	30.6	138 4	36 27	10	4.1	L	1962	1	27	12	24	58.2	139 59	36 3	60	L	
1966	8	16	18	42	9.5	138 10	36 29	0	4.2	L	1967	3	1	4	14	32.6	138 21	36 36	0	4.3	L	1968	4	21	5	12	4.4	138 7	36 26	10	3.9	L	1962	2	6	5	26	5					

Y	M	D	H	M	S	LONG.	LAT.	DEP.	MAG.	C	Y	M	D	H	M	S	LONG.	LAT.	DEP.	MAG.	C
1964	11	15	9	55	35.8	139 49	36 7	60	5.1	S	1969	8	13	3	20	20.8	139 41	36 39	0	3.9	L
1964	11	16	8	28	55.5	139 44	36 33	20	4.5	L	1969	8	15	18	47	58.6	139 32	36 18	120	3.6	L
1964	11	23	11	46	34.3	139 58	36 8	40	4.6	S	1969	8	16	12	39	37.1	139 57	36 0	50	3.6	L
1964	12	24	18	38	21.4	139 50	36 5	60	4.6	S	1969	9	3	16	59	28.6	139 55	36 3	40	3.6	L
1964	12	26	12	3	53.6	139 40	36 4	100		L	1969	10	3	22	51	2.5	139 3	36 15	90		L
1965	1	27	8	47	36.1	139 46	36 1	80		M	1969	11	9	5	14	57.5	139 50	36 31	90		L
1965	1	27	17	55	56.1	139 27	36 5	60	4.1	L	1969	12	6	10	19	44.0	139 8	36 23	90		L
1965	1	28	0	31	26.3	139 44	36 0	80		S	1970	1	8	20	58	10.9	139 32	36 0	90		L
1965	2	1	0	16	21.1	139 52	36 4	100		L	1970	2	11	20	25	11.1	139 55	36 3	40	4.1	S
1965	2	7	4	26	47.6	139 43	36 17	20	3.2	L	1970	2	14	1	29	58.3	139 38	36 14	90		S
1965	2	7	11	36	12.5	139 53	36 10	60	4.2	L	1970	2	17	15	24	8.0	139 18	36 12	80		L
1965	2	10	2	11	45.7	139 25	36 5	58	120	S	1970	4	12	21	14	48.9	139 30	36 31	130		L
1965	2	14	22	49	48.4	139 54	36 4	60	4.3	S	1970	4	26	10	59	29.8	139 16	36 25	90		L
1965	4	6	14	31	58.6	139 55	36 3	60	5.5	M	1970	6	2	0	13	58.7	139 49	36 31	110		S
1965	4	10	4	24	25.2	139 20	36 15	120		S	1970	6	10	22	54	22.3	139 49	36 6	50	4.2	S
1965	4	13	12	50	21.4	139 57	36 4	60	4.5	S	1970	6	15	2	41	27.0	139 9	36 24	100		L
1965	5	14	6	55	57.8	139 51	36 13	40	3.4	L	1970	6	16	2	40	41.7	139 56	36 10	50		L
1965	5	19	9	48	46.7	139 56	36 4	40	3.5	S	1970	7	14	3	11	27.0	139 51	36 12	60	4.0	L
1965	5	19	11	32	21.1	139 47	36 2	60	4.3	S	1970	8	14	15	44	24.4	139 21	36 11	80		L
1965	6	19	23	24	42.7	139 48	36 12	80		S	1970	8	22	9	41	22.7	139 44	36 7	120		L
1965	7	3	4	3	49.6	139 57	36 22	60	3.7	L	1970	8	27	20	53	16.2	139 56	36 8	60	3.9	L
1965	7	7	22	38	23.3	139 42	36 16	120		L	1970	9	9	3	22	56.2	139 41	36 13	80		L
1965	7	27	22	59	27.6	139 51	36 3	40	4.2	L	1970	9	30	3	43	35.6	139 55	36 2	40	3.3	L
1965	8	6	1	22	50.5	139 53	36 7	60	3.4	L	1970	10	5	7	29	38.0	139 54	36 6	50	3.8	L
1965	8	13	1	34	52.0	139 54	36 8	60	3.4	S	1970	10	6	3	23	53.7	139 55	36 2	40	3.9	S
1965	8	24	7	24	48.2	139 30	36 25	120		S	1970	10	7	2	56	7.0	139 59	36 8	50	3.4	L
1965	9	26	6	24	9.7	139 58	36 7	60	3.5	S	1970	10	19	15	11	37.4	139 9	36 21	0		L
1965	9	30	8	6	10.2	139 17	36 42	0	3.9	L	1970	10	30	8	14	42.4	139 56	36 0	60	4.9	M
1965	10	1	21	52	25.4	139 29	36 19	20	3.8	L	1970	11	3	23	43	21.7	139 56	36 4	50	3.2	L
1965	10	14	0	43	7.0	139 38	36 20	120		S	1970	12	18	17	11	22.7	139 57	36 7	50	3.6	L
1965	11	3	11	54	50.6	139 54	36 7	60	4.0	S											
1965	11	17	21	32	26.4	139 50	36 8	60	3.5	L											
1966	1	13	22	42	21.0	139 57	36 6	60	4.3	S											
1966	3	30	9	41	11.4	139 21	36 4	60	3.8	L											
1966	6	2	21	7	54.0	139 23	36 10	120		S											
1966	7	15	20	31	9.7	139 12	36 5	60	3.9	L											
1966	7	25	2	54	7.9	139 52	36 13	40	4.0	L											
1966	10	26	9	54	7.9	139 37	36 2	40	3.5	L											
1966	11	19	11	17	11.7	139 51	36 9	40	3.4	L											
1966	12	10	2	48	56.7	139 55	36 8	40	3.3	S											
1966	12	14	20	4	22.5	139 52	36 5	60	4.9	S											
1966	12	15	12	4	5.3	139 51	36 4	40	4.0	L											
1966	12	30	0	42	50.1	139 29	36 22	120		S											
1967	2	13	20	21	9.1	139 54	36 8	50	4.9	M											
1967	2	21	5	39	57.1	139 45	36 15	50	3.6	S											
1967	3	1	22	13	9.3	139 55	36 8	50	3.9	L											
1967	3	10	5	41	36.6																

Y	M	D	H	M	S	LONG.	LAT.	DEP.	MAG.	C	Y	M	D	H	M	S	LONG.	LAT.	DEP.	MAG.	C	Y	M	D	H	M	S	LONG.	LAT.	DEP.	MAG.	C											
1970	9	12	11	23	47.8	140 24	36 24	60	3.0	L	1961	9	20	6	18	40.7	141 9	36 9	40	U		1964	5	26	0	18	37.3	141 36	36 17	40	U		1967	12	7	15	46	30.9	141 27	36 37	40	4.7	M
1970	9	18	15	1	59.2	140 8	36 6	70		L	1961	9	27	18	45	59.2	141 13	36 42	100	U		1964	5	30	23	30	44.2	141 11	36 14	40	6.2	R	1968	1	9	22	26	13.5	141 16	36 30	50	3.8	U
1970	11	1	23	45	36.8	140 25	36 14	90		L	1961	10	8	10	13	12.5	141 23	36 38	20	U		1964	6	10	23	31	50.1	141 3	36 29	40	U		1968	1	17	15	49	39.5	141 37	36 23	0	3.9	U
1970	11	7	15	4	6.3	140 30	36 31	70		L	1961	10	8	13	13	3.2	141 12	36 33	60	U		1964	7	5	17	1	48.2	141 49	36 57	20	4.5	U	1968	2	5	8	31	17.9	141 22	36 28	40	4.3	S
1970	11	20	19	10	12.1	140 12	36 3	70		L	1961	10	16	20	51	6.3	141 33	36 7	40	U		1964	7	21	19	8	41.2	141 21	36 24	40	4.3	L	1968	2	6	20	59	1.3	141 21	36 41	40	3.5	U
1970	11	26	2	53	17.5	140 12	36 0	70		L	1961	11	1	8	0	24.7	141 15	36 15	60	U		1964	8	25	22	7	0.6	141 27	36 37	20	U		1968	2	9	10	21	7.9	141 21	36 23	30	3.8	L
1970	12	3	18	44	25.8	140 57	36 8	50	3.7	L	1961	11	17	4	42	12.5	141 41	36 8	0	U		1964	9	6	4	50	19.7	141 40	36 34	40	U		1968	3	7	12	0	42.6	141 25	36 37	50	4.2	U
1970	12	6	7	15	12.2	140 7	36 1	70		S	1961	11	27	13	9	1.9	141 17	36 27	100	S		1964	9	13	12	13	9.1	141 24	36 33	40	U		1968	3	18	8	55	48.5	141 36	36 38	50	4.0	U
1970	12	8	5	6	57.7	140 40	36 34	60	3.6	L	1962	1	1	15	40	13.9	141 5	36 35	40	L		1964	9	22	22	36	10.3	141 38	36 35	40	U		1968	5	20	1	19	29.3	141 40	36 46	50	4.9	L
1970	12	18	17	15	43.3	140 0	36 6	50	3.3	L	1962	1	14	9	34	40.9	141 8	36 34	20	U		1964	9	26	9	40	33.2	141 34	36 40	40	4.3	S	1968	5	25	2	21	2.1	141 50	36 45	20	4.3	S
1970	12	23	14	40	13.2	140 2	36 6	70		U	1962	2	6	1	16	58.7	141 33	36 11	60	U		1964	9	27	16	28	56.2	141 22	36 59	40	U		1968	6	12	2	33	18.8	141 2	36 37	50	4.0	S
											1962	2	7	5	2	39.9	141 28	36 22	0	4.6	S	1964	10	6	7	10	11.6	141 26	36 2	20	5.3	S	1968	6	18	7	12	30.6	141 20	36 35	40	4.0	L
LONG. 141. LAT. 36.											1962	2	17	1	15	27.2	141 23	36 53	80	U		1964	10	13	10	36	8.5	141 24	36 14	60	4.2	L	1968	6	21	13	22	53.6	141 45	36 22	60	4.1	U
1961	1	9	17	19	7.4	141 33	36 2	0		U	1962	3	16	10	28	38.6	141 53	36 20	20	4.3	U	1964	10	21	12	39	12.0	141 22	36 34	40	4.0	L	1968	8	20	4	43	16.4	141 23	36 15	60	3.9	U
1961	1	10	16	23	54.8	141 25	36 21	0		U	1962	4	8	17	59	12.9	141 51	36 14	20	U		1964	10	21	17	26	20.0	141 20	36 37	80	4.1	S	1968	8	8	13	55	5.4	141 35	36 21	10	5.6	H
1961	1	16	16	48	39.1	141 34	36 11	0		U	1962	4	9	5	6	58.7	141 15	36 18	0	U		1964	10	22	18	54	36.4	141 14	36 38	60	5.5	M	1968	8	9	13	16	31.6	141 25	36 26	20	3.8	U
1961	1	16	17	30	17.0	141 34	36 6	0		U	1962	4	10	14	51	35.5	141 10	36 23	40	U		1964	11	24	3	55	30.2	141 4	36 24	40	4.6	S	1968	8	16	1	1	9.9	141 40	36 49	0	4.6	S
1961	1	16	17	48	3.6	141 54	36 1	0	5.5	M	1962	4	24	19	11	47.9	141 17	36 25	40	4.5	L	1964	1	22	2	6	58.4	141 9	36 34	40	3.8	U	1968	10	27	2	12	16.5	141 0	36 28	50	3.6	U
1961	1	16	18	23	5.8	141 31	36 19	0		U	1962	5	11	10	29	2.9	141 31	36 19	40	S		1965	1	24	6	51	11.8	141 4	36 35	60	5.2	R	1968	11	12	11	46	35.0	141 7	36 37	40	3.4	U
1961	1	16	19	9	35.7	141 51	36 4	20		U	1962	5	14	1	37	49.5	141 49	36 19	20	4.1	U	1965	1	24	10	16	59.3	141 13	36 32	40	4.1	S	1968	12	15	6	17	47.7	141 8	36 23	50	3.9	L
1961	1	16	19	13	56.5	141 54	36 21	0	5.1	M	1962	5	15	12	34	24.5	141 47	36 14	120	U		1965	1	25	13	35	34.6	141 16	36 47	40	3.7	U	1968</td										

Y	M	D	H	M	S	LONG.	LAT.	DEP.	MAG.	C
1966	3	6	11	11	20.6	142 0	36 0	0	4.4	U
1967	3	14	8	2	30.6	142 9	36 13	40	4.5	U
1967	6	3	53	55.0	142 9	36 11	50	4.4	M	
1967	9	9	14	34	34.0	142 35	36 58	70		
1968	9	3	14	11	5.3	142 10	36 1	40	4.8	U
1968	11	4	13	42	50.8	142 23	36 46	70		
1969	2	22	12	6	32.8	142 32	36 29	70		
1969	8	19	17	15	58.2	142 10	36 12	50	4.1	U
1969	8	29	13	22	22.4	142 14	36 41	40	4.1	U
1969	11	7	7	0	42.7	142 6	36 21	10	4.1	U
1969	12	12	1	33	54.9	142 39	36 37	60	4.1	U
1970	1	23	18	33	46.6	142 31	36 40	50	4.2	U
1970	3	3	7	7	44.7	142 23	36 3	60	4.4	U
1970	4	24	0	54	3.2	142 34	36 44	70		
1970	8	25	0	31	47.3	142 1	36 3	60	4.2	U
1970	11	9	8	59	33.8	142 0	36 20	50	4.2	U
LONG.	143.	LAT.	36.							
1963	10	2	18	51	32.6	143 5	36 23	80		U
1964	4	16	10	4	24.9	143 7	36 56	0	6.0	R
1967	6	12	1	19	14.5	143 9	36 23	60	4.6	U
1970	10	14	19	4	41.1	143 19	36 38	70		U
LONG.	143.	LAT.	36.							
1962	3	4	20	46	38.6	144 20	36 33	80		U
1963	6	20	9	55	59.2	144 46	36 7	100		R
LONG.	135.	LAT.	37.							
1962	4	11	8	54	16.7	135 27	37 34	320		R
1966	2	9	23	44	24.8	135 9	37 10	360		U
1969	10	15	5	39	12.7	135 14	37 55	360		U
1970	8	2	1	33	37.5	135 43	37 6	20	4.5	S
LONG.	136.	LAT.	37.							
1962	3	12	11	40	34.5	136 7	37 27	360		U
LONG.	137.	LAT.	37.							
1961	8	10	21	3	19.6	137 3	37 17	40	5.2	S
1961	11	3	19	20	10.6	137 32	37 2	240		U
1963	4	13	23	38	42.4	137 35	37 36	20	4.2	L
1965	7	30	4	53	55.7	137 37	37 14	0	3.8	U
1966	10	3	23	15	53.7	137 24	37 15	20	4.5	U
1967	4	6	8	50	1.2	137 52	37 27	10	4.3	L
1969	5	14	21	58	2.6	137 37	37 52	0	4.1	U
1970	1	22	4	33	6.0	137 46	37 43	0	4.0	U
1970	2	14	5	5	15.9	137 28	37 0	240		U
LONG.	138.	LAT.	37.							
1961	2	2	3	39	3.8	138 50	37 27	20	5.2	M
1961	2	3	7	0	57.0	138 47	37 28	20		U
1961	5	30	19	41	23.8	138 42	37 27	0		L
1962	7	5	14	17	12.3	138 12	37 20	200		S
1962	10	4	5	14	39.0	138 41	37 29	200		M
1962	12	9	8	15	21.4	138 39	37 30	200		L
1963	12	27	14	3	28.2	138 11	37 37	60		U
1964	8	18	22	49	25.9	138 39	37 49	0		
1964	10	3	17	57	53.2	138 42	37 25	40	4.4	L
1965	2	22	19	34	51.0	138 22	37 7	20	4.0	U
1966	1	9	7	39	17.6	138 33	37 9	0	5.2	S
1966	1	20	10	44	45.1	138 7	37 53	0	5.3	M
1966	1	22	21	27	39.4	138 12	37 58	20	4.5	S
1966	9	8	1	19	55.0	138 37	37 11	0	4.8	S
1966	9	22	13	15	24.0	138 40	37 25	0	4.7	S
1967	5	10	13	12	35.5	138 48	37 17	10	3.9	L
1967	6	26	2	44	45.0	138 4	37 41	10	4.3	U
1968	5	24	6	58	34.1	138 18	37 5	10	4.1	L
1968	5	1	3	0	49.4	138 45	37 18	30	4.2	L
1968	6	12	0	20	18.4	138 25	37 48	0	4.2	M
1968	6	15	11	14	8.5	138 40	37 9	10	5.0	M
1968	7	23	3	12	25.7	138 36	37 10	20	4.2	L
1969	7	30	4	16	37.0	138 22	37 37	0	4.2	U
1970	9	22	22	28	15.6	138 31	37 17	30	4.1	U
LONG.	138.	LAT.	37.							
1961	1	2	3	39	3.8	138 50	37 27	20	5.2	M
1961	2	3	7	0	57.0	138 47	37 28	20		U
1961	5	30	19	41	23.8	138 42	37 27	0		L
1962	7	5	14	17	12.3	138 12	37 20	200		S
1962	10	4	5	14	39.0	138 41	37 29	200		M
1962	12	9	8	15	21.4	138 39	37 30	200		L
1963	12	27	14	3	28.2	138 11	37 37	60		U
1964	8	18	22	49	25.9	138 39	37 49	0		
1964	10	3	17	57	53.2	138 42	37 25	40	4.4	L
1965	2	22	19	34	51.0	138 22	37 7	20	4.0	U
1966	1	9	7	39	17.6	138 33	37 9	0	5.2	S
1966	1	20	10	44	45.1	138 7	37 53	0	5.3	M
1966	1	22	21	27	39.4	138 12	37 58	20	4.5	S
1966	9	8	1	19	55.0	138 37	37 11	0	4.8	S
1966	9	22	13	15	24.0	138 40	37 25	0	4.7	S
1967	5	10	13	12	35.5	138 48	37 17	10	3.9	L
1967	6	26	2	44	45.0	138 4	37 41	10	4.3	U
1968	5	24	6	58	34.1	138 18	37 5	10	4.1	L
1968	5	1	3	0	49.4	138 45	37 18	30	4.2	L
1968	6</td									

Y	M	D	H	M	S	LONG.	LAT.	DEP.	MAG.	C
1970	6	17	10	46	50.5	142 5	37 22	50	4.2	U
1962	2	19	9	49	43.1	143 3	37 45	60	4.4	U
1962	4	13	8	23	11.9	143 19	37 50	60	4.7	U
1962	4	14	7	54	27.0	143 1	37 28	0	4.7	U
1962	4	15	3	42	48.3	143 20	37 29	20	5.0	U
1962	4	18	3	49	25.1	143 16	37 55	20	4.6	U
1962	10	6	2	44	50.3	143 29	37 56	20	4.6	U
1964	1	14	14	18.4	143 10	37 8	0	4.8	U	
1964	5	7	2	10	40.4	143 14	37 8	0	5.2	M
1967	7	9	4	18	19.1	143 54	37 43	80	0	R
1970	2	7	21	27	27.5	143 37	37 19	20	4.7	U
LONG.	143.	LAT.	37.							
1962	2	12	23	34	59.0	144 17	37 22	160	0	U
1964	12	29	12	30	42.8	144 1	37 58	80	0	R
LONG.	119.	LAT.	38.							
1969	7	18	14	24	48.0	119 24	38 18	33	7.3	R
LONG.	134.	LAT.	38.							
1969	4	1	4	25	25.3	134 34	38 34	420	0	R
LONG.	138.	LAT.	38.							
1962	7	21	10	20	43.7	138 48	38 14	40	0	U
1964	6	16	15	52	35.0	138 56	38 1	20	0	S
1964	6	17	1	43	20.0	138 51	38 23	40	4.0	S
1964	6	17	5	58	37.0	138 54	38 14	40	0	U
1964	6	17	14	12	17.9	138 47	38 26	20	0	L
1964	6	20	3	47	38.6	138 56	38 21	40	0	U
1964	7	3	8	43	53.2	138 56	38 26	0	0	U
1964	11	27	22	47	39.4	138 17	38 2	40	5.8	R
1964	11	28	0	52	8.5	138 7	38 1	0	0	U
1965	3	4	22	43	46.1	138 53	38 45	80	0	U
LONG.	139.	LAT.	38.							
1962	12	24	4	34	0.1	139 22	38 26	0	4.7	S
1962	12	24	12	42	34.7	139 16	38 30	80	0	S
1963	2	15	10	3	11.6	139 6	38 4	0	0	L
1963	2	21	1	45	47.9	139 3	38 29	200	0	M
1964	6	16	13	1	39.9	139 11	38 21	40	7.5	R
1964	6	16	13	17	32.8	139 2	38 48	0	6.1	R
1964	6	16	13	31	49.5	139 8	38 6	0	5.0	S
1964	6	16	13	35	25.0	139 9	38 24	0	5.4	S
1964	6	16	13	40	42.4	139 8	38 6	20	5.1	S
1964	6	16	13	46	33.1	139 11	38 34	20	5.2	M
1964	6	16	13	50	34.9	139 34	38 39	40	0	S
1964	6	16	13	53	9.5	139 10	38 17	20	5.0	S
1964	6	16	13	58	42.2	139 24	38 31	0	5.1	M
1964	6	16	14	11	34.0	139 17	38 34	40	5.0	M
1964	6	16	14	21	4.2	139 23	38 30	0	0	L
1964	6	16	14	24	9.6	139 3	38 25	40	0	L
1964	6	16	14	37	47.7	139 20	38 21	0	0	L
1964	6	16	14	39	22.7	139 25	38 37	20	5.2	S
1964	6	16	14	42	20.4	139 41	38 26	0	0	S
1964	6	16	14	46	33.1	139 5	38 30	20	5.0	S
1964	6	16	14	50	15.5	139 17	38 19	20	0	S
1964	6	16	14	51	55.7	139 11	38 32	60	0	U
1964	6	16	14	54	40.4	139 22	38 36	40	0	U
1964	6	16	14	59	42.8	139 15	38 17	20	4.4	S
1964	6	16	15	3	4.5	139 40	38 19	20	4.0	U
1964	6	16	15	9	38.4	139 3	38 19	20	4.3	L
1964	6	16	15	13	0.3	139 12	38 34	40	0	S
1964	6	16	15	15	55.7	139 9	38 41	20	0	S
1964	6	16	15	17	6.1	139 8	38 22	20	5.2	M
1964	6	16	15	33	27.1	139 7	38 18	20	4.5	L
1964	6	16	15	43	44.9	139 29	38 26	0	0	S
1964	6	16	15	53	2.7	139 12	38 38	0	6.1	M
1964	6	16	16	8	56.3	139 13	38 17	0	4.9	S
1964	6	16	16	14	57.1	139 19	38 22	20	6.1	M
1964	6	16	16	27	35.4	139 5	38 17	0	4.8	S
1964	6	16	16	35	55.2	139 8	38 32	20	4.2	L
1964	6	16	16	45	23.5	139 11	38 20	40	5.1	S
1964	6	16	16	51	10.6	139 5	38 19	20	5.1	S
1964	6	16	16	57	14.5	139 15	38 6	0	0	U
1964	6	16	17	8	51.9	139 8	38 33	40	0	U
1964	6	16	17	15	15.2	139 9	38 40	40	5.0	S
1964	6	16	18	7	35.5	139 22	38 23	40	0	U
1964	6	16	18	10	18.6	139 23	38 22	0	4.9	S
1964	6	16	18	32	35.9	139 16	38 20	0	4.3	S
1964	6	16	18	37	1.4	139 9	38 13	40	4.2	S
1964	6	16	18	39	49.9	139 10	38 25	40	4.2	U
1964	6	16	18	44	26.2	139 21	38 31	20	0	S
1964	6	16	18	51	43.8	139 10	38 6	20	4.1	U
1964	6	16	19	14	53.4	139 19	38 34	20	4.1	U
1964	6	16	19	17	13.3	139 19	38 33	20	4.0	U
1964	6	16	19	23	14.9	139 13	38 35	20	4.4	S
1964	6	16	19	42	40.1	139 10	38 38	60	0	U
LONG.	143.	LAT.	37.							
1964	6	16	19	48	45.7	139 12	38 23	0	4.3	L
1964	6	16	20	6	31.9	139				

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LONG. 142. LAT. 38.										LONG. 143. LAT. 38.										LONG. 144. LAT. 38.																									
Y	M	D	H	M	S	LONG.	LAT.	DEP.	MAG.	C	Y	M	D	H	M	S	LONG.	LAT.	DEP.	MAG.	C	Y	M	D	H	M	S	LONG.	LAT.	DEP.	MAG.	C													
1964	10	31	4	34	31.8	141	34	38	52	40	4.2	S	1964	2	18	0	7	27.8	142	14	38	40	4.2	S	1964	129	129	129	41	39	8	500	R	1967	3	9	7	0	28.4	141	22	39	29	120	
1964	10	31	4	34	31.8	141	34	38	46	0	3.8	L	1964	2	18	0	10	32.7	142	8	38	36	0	4.4	S	1964	129	129	129	44	39	8	360	U	1967	4	20	7	57	56.4	141	53	39	45	60
1965	1	5	6	22	8.5	141	25	38	52	0	5.2	M	1964	4	21	16	38	58.7	142	38	38	55	20	4.2	S	1964	12	12	1	4	54.3	129	44	39	48	360									
1965	1	13	17	40	53.5	141	8	38	43	0	3.6	U	1964	6	19	5	1	17.2	142	17	38	8	40	4.0	L	1968	3	17	9	33	29.8	141	54	39	45	50									
1965	2	18	0	55	17.4	141	2	38	1	80	0	4.9	S	1965	2	8	6	5	54.5	142	2	38	15	40	4.5	S	1965	9	23	7	40	6.2	141	56	39	47	60								
1965	5	16	12	6	13.7	141	6	38	44	0	4.9	S	1965	2	14	5	33	49.4	142	15	38	26	40	4.5	S	1968	3	1	3	42	18.9	141	51	39	45	50									
1965	5	16	14	40	22.8	141	10	38	45	60	3.9	S	1965	2	16	21	24	6.9	142	11	38	52	60	5.7	R	1968	5	9	10	22	35.8	141	32	39	28	80									
1965	5	18	10	19	22.7	141	50	38	45	60	3.9	S	1965	2	21	7	26	18.4	142	19	38	50	20	3.9	L	1968	8	12	2	24	7.3	141	37	39	0	90									
1965	6	11	13	9	9.5	141	23	38	54	100	0	S	1965	3	4	15	16	27.7	142	6	38	52	20	4.3	L	1968	12	4	3	23	7.8	141	27	39	1	100									
1965	8	6	4	3	3.1	141	19	38	46	80	0	S	1965	3	14	5	56	5.0	142	16	38	28	40	4.8	S	1968	3	8	4	3	43	141	50	39	45	50									
1965	8	14	11	43	56.5	141	58	38	13	40	4.4	M	1965	3	14	5	56	5.0	142	16	38	5	60	3.9	S	1968	5	16	32	35.3	141	46	39	40	100										
1965	12	27	1	15	29.3	141	59	38	15	60	3.9	M	1965	3	18	3	58	16.8	142	4	38	5	60	3.9	S	1968	5	16	11	14	14.7	141	51	39	45	80									
1966	1	31	15	55	29.8	141	41	38	19	80	0	S	1965	4	12	11	29	16.0	142	7	38	53	60	3.9	S	1968	8	12	2	24	7.3	141	37	39	0	90									
1966	6	24	6	51	55.5	141	46	38	22	60	4.0	R	1965	4	27	11	21	21.3	142	15	38	25	40	4.5	S	1968	8	12	14	21	18	1.8	141	56	39	45	50								
1966	7	10	21	12	7.0	141	48	38	22	40	4.8	S	1965	12	10	16	8	6.8	142	8	38	20	40	4.8	S	1968	3	8	4	3	43	141	50	39	45	50									
1966	7	18	13	39	21.3	141	50	38	14	40	4.3	S	1966	3	4	15	16	27.7	142	24	38	40	20	4.2	L	1968	5	16	32	35.3	141	46	39	40	100										
1966	10	16	8	37	36.8	141	41	38	13	60	3.8	L	1966	7	20	11	21	46.2	142	24	38	59	20	4.9	S	1968	8	12	16	54	7.6	141	20	39	40	90									
1966	11	26	14	39	45.6	141	34	38	40	10	3.9	L	1967	1	17	20	59	30.4	142	5	38	15	30	6.3	R	1968	8	12	13	13	41.8	141	26	39	49	80									
1967	2	18	1	50	4.2	141	3	38	43	90	0	S	1967	1	17	21	26	19.9	142	17	38	12	40	4.8	S	1968	8	12	13	15	18.6	141	27	39	57	70									
1967	2	22	21	30	30.6	141	12	38	43	90	0	S	1967	1	17	21	34	36.6	142	19	38	16	10	3.8	S	1968	8	12	13	15	18.6	141	27	39	57	120									
1967	3	19	17	20	34.3	141	59	38	14	40	3.8	S	1967	3	20	39	35	34.4	142	17	38	18	50	4.5	S	1968	8	12	13	15	55.9	141	57	39	16	60									
1967	3	30	16	55	45.9	141	54	38	17	40	3.8	S	1967	3	20	40	20	3.4	142	21	38	5	50	4.8	S	1968	8	12	13	15	55.9	141	57	39	16	60									
1967	4	18	23	33	2.6	141	3	38	44	20	3.4	S	1967	5	17	18	34	41.1	142	21	38	5	40	4.2	S	1968	8	12	13	15	55.9	141	57	39	16	60									
1967	6	23	15	52	52.3	141	20	38	7	70	0	S	1967	5	17	18	46	3.6	142	21	38	34	50	3.5	S	1968	8	12	13	15	55.9	141	57	39	16	60									
1967	6	29	4	39	40.0	141	48	38	11	50	3.9	M	1967																																

Y	M	D	H	M	S	LONG.	LAT.	DEP.	MAG.	C	Y	M	D	H	M	S	LONG.	LAT.	DEP.	MAG.	C	Y	M	D	H	M	S	LONG.	LAT.	DEP.	MAG.	C										
1968	9	13	8	2	17.5	142 55	39 22	20	4.4	S	1968	6	13	3	55	42.1	143 46	39 32	40	5.3	M	1969	2	1	0	38	27.0	144 33	39 57	0	5.0	U	1963	12	24	6	43	4.8	141 57	40 16	20	U
1968	9	16	4	17	30.2	142 58	39 17	0	4.2	U	1968	6	13	4	36	20.3	143 10	39 32	30	4.6	S	1969	7	15	0	55	47.9	144 2	39 50	30	4.8	U	1964	1	26	21	5	51.3	141 2	40 41	120	S
1968	10	17	22	28	22.5	142 7	39 18	50	4.9	M	1968	6	13	4	48	26.3	143 7	39 21	40	4.8	S	1969	8	21	1	33	43.7	144 21	39 33	60	4.8	U	1964	1	28	9	2	31.0	141 40	40 24	120	S
1968	10	25	0	56	4.2	142 31	39 57	50	4.2	L	1968	6	13	5	13	10.2	143 38	39 11	40	5.2	M	1969	8	23	11	54	19.4	144 8	39 47	40	4.8	U	1964	3	26	5	34	54.8	141 47	40 3	60	S
1969	1	28	19	6	37.6	142 13	39 37	50	4.5	S	1968	6	13	6	16	36.7	143 8	39 37	30	4.6	R	1969	8	23	12	49	26.8	144 29	39 42	70	5.3	U	1964	7	27	6	44	2.6	141 13	40 49	80	L
1969	2	16	15	29	46.4	142 34	39 2	50	4.5	S	1968	6	13	9	4	58.6	143 15	39 29	40	5.8	R	1969	8	24	4	56	43.9	144 28	39 38	70	U	1965	4	29	1	33	6.5	141 25	40 22	100	S	
1969	3	23	14	12	51.9	142 14	39 38	30	3.8	L	1968	6	13	9	42	12.4	143 1	39 17	40	5.2	M	1969	8	24	19	50	17.4	144 21	39 35	90	U	1964	3	26	5	34	54.8	141 47	40 3	60	L	
1969	6	15	18	39	37.3	142 9	39 19	50	4.0	L	1968	6	13	10	42	53.4	143 12	39 25	40	5.0	S	1969	8	25	7	3	0.4	144 36	39 43	80	U	1965	8	14	20	39	28.2	141 19	40 48	100	M	
1969	6	20	16	26.7	142 3	39 59	50	4.0	S	1968	6	13	11	5	39.7	143 10	39 25	30	5.8	M	1969	8	25	10	12	3.3	144 27	39 44	70	U	1966	5	2	19	34	34.8	141 14	40 58	160	L		
1969	6	27	12	18	57.3	142 11	39 39	40	3.8	L	1968	6	13	17	48	4.5	143 32	39 7	50	5.4	M	1969	8	25	10	12	3.3	144 27	39 44	70	U	1967	1	13	4	29	47.3	141 15	40 7	10	3.8	
1969	7	2	5	43	32.5	142 12	39 36	50	4.1	S	1968	6	13	20	56	20.0	143 17	39 14	40	5.7	R	1969	8	26	5	23	43.6	144 6	39 29	40	4.5	U	1967	3	14	6	26	8.3	141 17	40 17	100	U
1969	8	1	6	15	31.7	142 15	39 3	40	3.8	L	1968	6	13	23	56	13.0	143 10	39 26	30	5.2	M	1969	8	26	5	41	19.9	144 54	39 32	80	U	1967	9	8	13	59	18.4	141 19	40 18	100	L	
1969	8	29	19	13	57.1	142 8	39 43	40	3.8	L	1968	6	14	1	16	35.6	143 24	39 39	30	4.6	M	1969	8	24	19	50	17.4	144 21	39 35	90	U	1965	6	20	19	18	25.6	141 52	40 58	80	S	
1969	10	22	16	38	42.5	142 44	39 6	0	4.3	L	1968	6	14	6	10	33.4	143 6	39 25	40	5.8	R	1969	8	25	7	3	0.4	144 36	39 43	80	U	1965	8	14	20	39	28.2	141 19	40 48	100	M	
1969	10	24	1	50	40.1	142 34	39 7	10	3.9	U	1968	6	14	9	46	4.4	143 4	39 29	20	5.0	S	1969	8	25	10	12	3.3	144 27	39 44	70	U	1967	3	13	4	29	47.3	141 15	40 7	10	3.8	
1969	11	7	1	21	56.9	142 41	39 56	30	4.3	S	1968	6	14	10	36	36.4	143 6	39 27	40	4.7	S	1969	8	26	5	23	43.6	144 6	39 29	40	4.5	U	1967	3	14	6	26	8.3	141 17	40 17	100	U
1970	2	6	5	34	41.3	142 20	39 2	40	3.7	L	1968	6	14	20	52	35.8	143 0	39 13	30	4.6	S	1969	8	27	8	39	4.6	144 22	39 53	100	U	1967	9	8	13	59	18.4	141 19	40 18	100	L	
1970	4	1	23	23	23.2	142 3	39 45	80	4.0	R	1968	6	15	11	29	27.5	143 0	39 26	30	4.6	S	1969	8	27	11	18	52.2	129 20	40 11	500	U	1965	5	5	23	39	37.7	141 55	40 55	60	4.3	
1970	5	4	11	13	27.0	142 24	39 59	30	4.0	L	1968	6	17	5	38	42.8	143 1	39 19	40	4.6	S	1969	8	28	11	13	37.7	141 55	40 55	60	4.3	U	1965	5	20	23	21	49.7	141 55	40 55	50	4.4
1970	5	5	10	12	9.9	142 25	39 44	20	4.1	U	1968	6	18	1	44	54.2	143 14	39 52	10	4.7	S	1969	8	28	11	13	36.4	141 30	40 51	90	L	1967	9	19	21	1	36.4	141 30	40 51	90	L	
1970	8	24	15	53	27.9	142 51	39 22	0	4.1	S	1968	6	19	10	38	14.8	143 11	39 27	50	5.7	M	1969	8	25	10	7	4.9	141 55	40 52	90	L	1967	3	28	16	33	54.6	141 54	40 55	80	L	
1970	10	5	0	42	22.8	142 7	39 38	50	4.0	L																																

Y	M	D	H	M	S	LONG.	LAT.	DEP.	MAG.	C
1967	10	4	21	37	13.0	142 27	40 10	30	3.9	U
1967	10	29	2	21	26.7	142 24	40 9	30	4.5	S
1967	12	15	1	6	54.0	142 27	40 33	40	4.1	S
1968	1	24	4	16	27.9	142 50	40 42	20	5.1	M
1968	2	4	4	54	8.8	142 29	40 10	30	3.7	U
1968	5	2	4	12	53.9	142 37	40 50	40	5.3	R
1968	5	2	4	16	35.0	142 34	40 51	10	4.5	U
1968	5	2	14	38	44.8	142 30	40 54	0	4.4	U
1968	5	16	11	58	2.1	142 35	40 16	10	4.6	S
1968	5	16	12	36	18.7	142 51	40 6	0	4.9	U
1968	5	16	13	15	42.8	142 42	40 39	0	4.8	S
1968	5	16	17	19	57.7	142 57	40 59	40	5.3	M
1968	5	17	3	43	19.6	142 20	40 45	40	5.9	R
1968	5	17	5	12	32.9	142 10	40 47	40	4.6	L
1968	5	17	8	51	40.7	142 31	40 30	40	5.1	S
1968	5	17	9	24	23.9	142 43	40 17	0	5.0	S
1968	5	19	4	10	13.4	142 36	40 6	40	3.7	U
1968	5	19	12	19	55.2	142 29	40 8	20	4.2	L
1968	5	19	20	22	31.6	142 19	40 10	10	3.9	L
1968	5	20	11	31	42.7	142 38	40 9	40	5.1	S
1968	5	20	23	31	45.9	142 52	40 39	30	5.1	S
1968	5	21	8	57	37.5	142 42	40 8	20	4.7	S
1968	5	23	4	29	24.0	142 34	40 15	30	6.3	R
1968	5	24	4	53	40.8	142 25	40 12	30	4.2	U
1968	5	24	8	37	41.2	142 32	40 16	20	4.1	L
1968	5	25	4	47	41.0	142 54	40 5	20	4.8	U
1968	5	27	2	41	38.6	142 34	40 8	40	5.2	R
1968	5	27	15	17	52.5	142 21	40 17	10	4.7	S
1968	5	29	8	0	36.6	142 27	40 52	40	4.6	L
1968	5	30	18	4	19.0	142 31	40 47	40	4.6	S
1968	5	30	21	19	1.9	142 31	40 9	30	4.4	L
1968	6	1	2	56	30.8	142 39	40 13	50	4.2	U
1968	6	1	12	21	35.6	142 7	40 43	30	4.2	S
1968	6	1	19	31	47.2	142 30	40 10	30	5.7	R
1968	6	2	23	24	29.1	142 31	40 7	30	3.7	L
1968	6	4	11	31	4.5	142 10	40 51	40	4.0	L
1968	6	6	13	30	36.2	142 27	40 7	20	4.5	L
1968	6	7	3	21	23.2	142 25	40 39	90	5.0	M
1968	6	8	7	46	55.1	142 15	40 55	50	4.5	S
1968	6	8	21	32	46.6	142 32	40 18	20	4.3	L
1968	6	10	11	38	40.8	142 29	40 7	30	4.9	S
1968	6	14	4	31	13.1	142 18	40 24	40	4.6	S
1968	6	14	11	38	43.5	142 6	40 23	40	4.3	S
1968	6	16	18	10	54.1	142 12	40 55	50	4.1	L
1968	6	16	21	4	46.8	142 18	40 13	40	4.0	U
1968	6	18	16	14	17.3	142 33	40 8	20	4.2	S
1968	6	20	17	15	7.0	142 32	40 6	40	5.0	M
1968	6	28	2	11	55.2	142 32	40 10	30	5.0	M
1968	6	29	13	20	45.1	142 50	40 1	20	4.8	S
1968	7	3	0	50	53.4	142 24	40 7	10	4.2	S
1968	7	8	12	53	33.4	142 2	40 56	40	4.4	S
1968	7	13	3	43	20.1	142 45	40 34	40	4.4	U
1968	7	22	8	5	33.1	142 15	40 15	10	3.9	L
1968	7	25	1	25	43.2	142 31	40 10	30	4.3	L
1968	7	28	23	3	36.1	142 33	40 48	40	4.8	S
1968	8	11	8	3	18.5	142 7	40 16	0	3.7	L
1968	8	13	5	4	36.5	142 5	40 43	40	4.0	S
1968	8	22	5	49	52.7	142 41	40 55	20	4.3	S
1968	8	27	13	43	0.7	142 24	40 13	10	3.8	U
1968	8	30	11	44	51.0	142 57	40 1	30	5.4	R
1968	9	3	16	56	8.4	142 49	40 8	20	3.9	L
1968	9	13	16	39	33.6	142 13	40 26	20	4.1	L
1968	9	24	4	25	1.3	142 13	40 19	30	4.4	S
1968	10	1	4	52	34.4	142 39	40 6	20	3.8	L
1968	10	6	4	28	1.0	142 43	40 23	30	4.0	U
1968	10	25	17	59	19.2	142 19	40 19	40	4.0	L
1968	10	31	17	32	8.0	142 29	40 11	30	4.3	L
1968	11	4	7	21	10.0	142 2	40 52	60	4.2	L
1968	11	7	18	19	3.9	142 33	40 8	40	5.4	R
1968	11	12	23	4	31.2	142 50	40 4	30	5.4	R
1968	11	14	3	41	44.7	142 47	40 9	30	6.0	R
1968	11	14	3	59	2.1	142 41	40 8	30	4.4	S
1968	11	23	14	22	11.2	142 27	40 9	30	4.8	S
1968	11	23	14	25	23.0	142 18	40 10	30	4.5	S
1968	11	25	6	20	58.2	142 34	40 16	50	6.0	R
1968	11	28	16	0	5.3	142 34	40 6	20	5.3	M
1968	11	29	0	30	51.9	142 23	40 13	20	3.9	S
1968	12	1	3	13	16.1	142 24	40 9	20	4.6	S
1968	12	3	16	8	3.6	142 26	40 8	20	4.4	S
1968	12	27	2	44	5.8	142 44	40 43	30	4.4	U
1968	1	4	11	34	30.8	142 10	40 46	40	4.1	L
1968	1	17	0	35	15.0	142 27	40 7	30	4.8	S
1968	1	24	13	0	15.4	142				

Y	M	D	H	M	S	LONG.	LAT.	DEP.	MAG.	C	Y	M	D	H	M	S	LONG.	LAT.	DEP.	MAG.	C	Y	M	D	H	M	S	LONG.	LAT.	DEP.	MAG.	C	
1961	1	11	1	28	41.8	142	9	41	35	40	1968	2	21	2	30	35.8	142	40	41	6	4.6	1968	7	16	19	55	35.8	142	32	41	24	0	
1961	1	30	14	36	48.5	142	5	41	30	20	1968	2	26	22	38	45.5	142	18	41	57	80	1968	7	21	4	29	38.6	142	24	41	17	0	
1961	1	20	11	0	40.0	142	6	41	16	100	1968	5	16	16	48	58.8	142	42	41	17	10	1968	7	28	4	16	0.2	142	27	41	9	10	
1961	2	27	2	49	29.0	142	27	41	5	60	1968	5	16	17	58	11.0	142	36	41	24	10	1968	8	4	10	17	30.3	142	44	41	32	80	
1961	3	2	20	51	38.2	142	21	41	4	20	4.9	1968	5	16	18	15	29.9	142	34	41	34	10	1968	8	6	9	26	2.0	142	43	41	28	0
1961	5	27	16	18	4.0	142	20	41	10	40	5.5	1968	5	16	21	34	26.1	142	46	41	34	40	1968	8	11	22	38	43.8	142	4	41	35	90
1961	6	1	14	58	6.4	142	31	41	32	60	1968	5	16	21	45	36.7	142	48	41	11	20	1968	8	13	5	31	45.8	142	50	41	25	10	
1961	7	16	2	38	18.8	142	17	41	36	40	1968	5	16	22	16	55.9	142	0	41	29	10	1968	8	13	5	57	46.9	142	47	41	27	10	
1961	8	7	13	2	15.8	142	14	41	59	60	4.9	1968	5	16	22	20	3.5	142	41	41	8	40	1968	8	15	15	0	40.4	142	12	41	22	0
1961	8	9	16	48	23.5	142	45	41	58	40	4.3	1968	5	16	22	29	39.4	142	46	41	11	30	1968	8	4	10	17	30.3	142	44	41	32	80
1961	8	12	8	11	43.9	142	17	41	34	60	4.8	1968	5	16	23	2	38.1	142	15	41	25	10	1968	8	6	9	26	2.0	142	43	41	28	0
1961	8	22	18	4	53.0	142	13	41	47	80	1968	5	16	23	16	15.7	142	39	41	20	0	1968	8	11	22	38	43.8	142	4	41	35	90	
1961	10	23	4	1	32.2	142	17	41	55	80	1968	5	17	0	52	33.1	142	36	41	26	40	1968	8	17	11	42	42.7	142	44	41	35	10	
1961	10	29	6	50	13.4	142	14	41	55	80	1968	5	17	2	21	45.8	142	35	41	4	0	1968	8	19	18	43	9.9	142	46	41	22	0	
1961	11	14	12	19	6.8	142	8	41	54	60	1968	5	17	4	14	45.3	142	35	41	17	30	1968	8	27	22	1	52.1	142	52	41	27	40	
1962	1	6	10	39	16.7	142	23	41	3	40	1968	5	17	4	21	36.7	142	30	41	16	20	1968	9	3	3	22	21.0	142	32	41	10	10	
1962	2	3	3	13	50.3	142	53	41	2	20	1968	5	17	5	22	9.6	142	40	41	24	0	1968	9	5	20	36	6.4	142	13	41	59	50	
1962	2	8	4	7	3.8	142	47	41	5	100	1968	5	17	5	40	56.2	142	26	41	20	20	1968	9	5	20	55	18.4	142	29	41	15	30	
1962	2	18	19	42	32.4	142	45	41	11	40	5.3	1968	5	17	6	3	23.8	142	34	41	11	30	1968	9	12	21	40	17.2	142	32	41	10	10
1962	2	26	10	13	9.3	142	12	41	33	40	5.1	1968	5	17	11	28	25.6	142	43	41	20	50	1968	9	13	10	0	13.6	142	35	41	20	10
1962	4	27	14	55	12.1	142	13	41	59	60	1968	5	17	11	42	38.9	142	52	41	10	60	1968	9	18	0	14	37.2	142	32	41	19	10	
1962	5	8	20	41	27.9	142	36	41	57	80	1968	5	17	13	7	24.0	142	41	41	13	20	1968	9	20	10	6	49.1	142	55	41	16	60	
1962	6	20	20	48	2.5	142	4	41	34	80	1968	5	17	18	1	50.5	142	42	41	13	0	1968	9	21	22	5	59.7	142	48	41	59	80	
1962	7	13	10	26	55.1	142	53	41	55	40	4.1	1968	5	17	21	13	21.8	142	49	41	39	30	1968	9	22	3	19	44.8	142	24	41	52	30
1962	9	27	18	18	26.4	142	30	41	56	40	5.0	1968	5	17	22	2	36.4	142	58	41	24	40	1968	9	26	23	7	36.4	142	52	41	20	90
1962	11	13	17	54	39.5	142	10	41	50	60	5.0	1968	5	18	13	51	7.4	142	31	41	22	20	1968	9	29	0	58	15.2	142	15	41	16	20
1962	12	14	22	6	48.5	142	2	41	31	60	4.6	1968	5	18	13	56	0.5	142	1	41	55	60	1968	9	29	3	20	29.4	142	15	41	58	70
1962	12	24	21	41	19.6	142	27	41	41	80	1968	5	18	16	4	26.4	142	19	41	12	10	1968	9	30	22	19	19.8	142	55	41	16	20	
1962	12	29	6	14	21.0	142	2	41	36	100	1968</																						

Y	M	D	H	M	S	LONG.	LAT.	DEP.	MAG.	C	Y	M	D	H	M	S	LONG.	LAT.	DEP.	MAG.	C	Y	M	D	H	M	S	LONG.	LAT.	DEP.	MAG.	C												
1961	11	7	15	12	11.0	144 56	41 54	40		S	1962	12	16	4	52	23.5	142 33	42 41	20		S	1963	4	27	11	0	44.9	143 58	42 56	100		L	1961	8	12	0	51	31.9	145 34	42 51	80		R	
1962	4	19	7	45	20.0	144 15	41 30	40		S	1962	12	21	18	33	18.5	142 30	42 1	60	6.3	R	1963	5	23	21	9	23.4	143 7	42 17	80		L	1961	8	12	2	57	28.1	145 24	42 56	80		R	
1962	11	26	22	28	31.6	144 57	41 50	40	4.9	S	1962	12	21	19	21	42.7	142 32	42 14	60		S	1963	8	30	13	24	15.3	143 51	42 29	80		S	1961	8	12	5	1	19.2	145 13	42 55	0		L	
1963	10	23	18	47	3.1	144 35	41 8	60	5.3	R	1963	2	10	21	0	43.6	142 32	42 5	60	4.5	S	1963	9	17	6	0	32.2	143 4	42 57	120		S	1961	8	12	8	33	49.6	145 34	42 49	0		R	
1964	1	8	21	57	43.1	144 30	41 27	20		U	1963	4	26	13	7	26.7	142 24	42 0	60	4.1	L	1964	3	25	7	30	55.5	143 29	42 34	100		U	1961	8	19	21	44	56.6	145 33	42 53	100		R	
1964	10	31	4	52	14.0	144 7	41 42	40		U	1963	5	2	1	19	52.2	142 50	42 2	40		L	1964	7	30	21	13	31.6	143 12	42 28	60		S	1961	8	22	15	12	11.3	145 6	42 45	40		M	
1964	12	8	13	37	21.8	144 17	41 34	40	4.4	S	1963	3	8	20	56	41.8	142 32	42 4	60		L	1964	8	14	14	10	49.7	143 24	42 50	160		U	1961	8	24	13	52	21.4	145 36	42 44	40		S	
1966	10	29	14	47	49.1	144 24	41 39	0	4.5	U	1963	4	3	0	56	52.1	142 29	42 3	80		L	1964	10	8	13	4	43.3	143 3	42 15	60		L	1961	8	29	14	55	34.2	145 37	42 39	20		S	
1966	10	29	15	30	18.3	144 30	41 34	20	4.6	S	1963	4	26	13	7	26.7	142 24	42 0	60	4.1	L	1964	7	20	19	50	39.5	143 40	42 35	80		L	1961	8	19	21	44	56.6	145 50	42 47	60		M	
1966	10	29	23	32	38.4	144 25	41 39	60	5.1	M	1963	5	30	22	46	31.7	142 59	42 15	60		L	1964	8	17	23	54	3.6	143 10	42 15	60	5.1	M	1961	8	24	13	52	21.4	145 46	42 45	40		S	
1966	11	12	21	49	40.8	144 26	41 37	40	5.9	M	1963	6	3	14	1	26.4	142 21	42 30	100		S	1964	9	14	14	10	49.7	143 24	42 50	160		U	1961	8	25	7	40	52.0	145 40	42 42	40		M	
1966	11	13	22	56	13.9	144 25	41 36	0	4.6	S	1963	7	1	23	26	48.6	142 18	42 0	20		L	1964	10	5	12	35	8.2	143 12	42 2	40	5.3	M	1961	8	26	17	45	9.2	145 15	42 48	80		R	
1966	11	13	8	4	55.4	144 31	41 36	20	4.7	S	1963	7	9	4	38	11.0	142 32	42 43	80		L	1964	11	13	15	1	26.9	143 26	42 49	120		L	1961	9	11	5	21	48.4	145 56	42 51	80		S	
1966	11	13	11	56	23.8	144 31	41 34	20	4.6	S	1963	7	29	17	20	32.3	142 18	42 5	40		L	1964	12	7	20	12	15.0	143 18	42 38	120		M	1961	9	30	1	50	32.2	145 51	42 44	60		S	
1966	11	30	2	16	29.2	144 37	41 37	20	4.7	S	1963	8	18	8	23	22.6	142 21	42 27	100		S	1964	8	17	23	54	3.6	143 10	42 15	60	5.1	M	1961	10	8	22	3	40.5	145 3	42 52	60		L	
1968	6	16	10	6	26.3	144 3	41 36	0	4.4	U	1963	9	14	15	45	8.7	142 34	42 4	80	4.4	S	1965	3	12	4	16	23.0	143 9	42 18	80		M	1961	10	8	22	3	40.5	145 3	42 52	60		L	
1968	7	9	13	27	50.3	144 5	41	20	10	4.8	S	1963	9	25	0	12	25.6	142 34	42 16	60	4.1	L	1965	5	8	8	7	7	143 39	42 36	100		S	1961	11	15	16	17	9.9	145 34	42 39	20		S
1968	7	10	11	11	6.7	144 6	41	24	70		U	1963	10	7	15	45	41.3	142 39	42 12	120		L	1964	10	8	13	4	43.3	143 3	42 15	60		L	1961	9	21	21	46	48.4	145 49	42 55	60		R
1969	8	18	18	28	2.8	144 13	41	10	70		R	1964	1	12	0	34	33.5	142 28	42 12	60		U	1966	3	5	13	48	41.1	143 24	42 42	120		M	1962	1	13	11	56	14.6	145 49	42 39	60		R
1969	9	14	5	0	23.3	144 2	41	31	30	4.8	S	1964	2	1	1	40	10.3	142 17	42 1	80	4.2	U	1966	8	15	18	41	4.1	143 1	42 18	60	5.2	R	1962	1	14	16	24	51.0	145 23	42 41	40		S
1970	2	20	13	7	3.0	144 34	41	26	50	4.7	S	1964	5	21	20	41	5.8	142 1	4	24		U	1966	9	18	14	22	30.0	143 1	42 14	60	4.9	M											

Y	M	D	H	M	S	LONG.	LAT.	DEP.	MAG.	C	Y	M	D	H	M	S	LONG.	LAT.	DEP.	MAG.	R																				
1968	1	30	13	10	36.2	147 27	42 57	40	5.1	U	1966	2	28	11	2	11.5	139 48	43 38	240																						
1968	1	31	3	35	0.0	147 9	42 48	0	5.0	U	1968	1	19	19	19.5	147 42	42 48	60	4.9	U	1961	3	14	10	4	55.8	140 36	43 48	0	S											
1968	2	1	1	19	21.7	147 17	42 42	10	5.3	M	1968	2	4	2	6	6.8	147 27	42 50	60	5.0	S	1961	11	12	17	3	30.5	140 32	43 55	60	M										
1968	2	4	18	10	21.7	147 17	42 42	10	5.3	M	1968	2	4	20	0	48.3	147 5	42 40	10	5.8	R	1968	2	4	20	6	22.6	147 12	42 47	70	S	1964	9	17	0	13	5.6	140 11	43 32	240	U
1968	2	5	5	15	5.8	147 5	42 47	50	4.5	S	1968	2	8	22	20	53.0	147 26	42 59	50	4.8	U	1968	6	23	14	1	43.2	140 15	43 33	240	U										
1969	8	12	6	27	39.1	147 37	42 42	30	7.8	R	1969	8	12	9	19	4.8	147 2	42 55	40	4.8	S	1969	1	28	19	19	10.1	141 55	43 15	160	U										
1969	8	12	9	53	34.8	147 19	42 56	60	5.3	M	1969	8	12	11	6	42.8	147 49	42 48	50	4.8	U	1969	8	12	11	34	43.5	147 8	42 48	50	4.8	U									
1969	8	12	12	33	36.9	147 42	42 57	60	5.5	S	1969	8	12	13	48	25.1	147 53	42 52	110	0	U	1969	8	12	14	14	58.0	147 15	42 33	30	5.2	M									
1969	8	12	15	38	53.2	147 18	42 52	60	5.0	S	1969	8	12	16	54	44.4	147 13	42 41	50	5.4	M	1969	8	12	18	25	40.6	147 13	42 56	10	5.5	M									
1969	8	13	6	16	8.0	147 10	42 42	60	5.4	M	1969	8	14	2	7	8.2	147 22	42 47	40	5.1	M	1969	8	14	20	51	12.0	147 36	42 58	60	4.8	U									
1969	8	14	23	19	1.2	147 15	42 54	0	6.2	R	1969	8	15	0	27	44.6	147 56	42 30	70	0	U	1969	8	15	2	5	54.9	147 25	42 42	50	4.9	S									
1969	8	15	1	13	32	2.8	147 24	42 50	10	5.6	R	1969	8	15	19	19	34.3	147 11	42 53	0	4.5	U	1969	8	16	7	43	47.1	147 25	42 53	50	5.2	M								
1969	8	16	17	47	47.6	147 38	42 51	60	5.0	U	1969	8	16	22	12	38.4	147 36	42 53	50	4.4	U	1969	8	17	0	15	31.1	147 25	42 53	60	5.9	R									
1969	8	17	2	13	41.6	147 34	42 52	60	5.5	M	1969	8	20	8	36	29.3	147 42	42 56	60	4.7	U	1969	8	21	11	43	58.8	147 34	42 49	60	5.2	U									
1969	8	21	12	32	8.5	147 6	42 53	10	5.4	R	1969	8	21	13	47	23.8	147 36	42 53	60	5.1	S	1969	8	22	13	40	26.2	147 30	42 53	10	4.8	S									
1969	8	29	6	35	19.1	147 32	42 53	0	5.1	U	1969	8	29	10	2	1.5	147 18	42 52	0	4.2	U	1969	9	1	18	49	50.6	147 40	42 56	60	5.2	U									
1969	9	4	7	1	30.7	147 38	42 59	50	4.4	U	1969	9	4	13	30	14.8	147 17	42 43	10	4.8	U	1969	9	4	13	30	42.3	147 42	42 58	60	4.7	U									
1969	9	10	1	2	45.2	147 42	42 58	60	4.7	U	1969	12	28	23	37	52.8	147 52	42 54	0	4.9	U	1969	12	31	14	39	4.9	147 3	42 40	10	4.7	U									
1970	2	3	2	22	5.2	147 45	42 50	60	5.4	R	1970	2	3	2	26	19.7	147 14	42 41	10	4.9	U	1970	2	3	2	49	48.7	147 48	42 58	80	0	R									
1970	2	3	3	5	49.3	147 37	42 48	60	5.2	S	1970	2	3	14	57	44.8	147 42	42 52	60	5.0	U	1970	2	3	19	1	8.8	147 37	42 58	60	4.6	U									
1970	2	27	10	59	40.2	147 55	42 58	0	5.1	U	1970	2	27	11	50	51.3	147 36	42 59	0	5.3	U	1970	2	27	12	41	9.7	147 43	42 55	0	4.9	U									
1970	4	19	5	20	57.4	147 56	42 43	50	5.0	U	1970	4	19	8	25	29.4	147 39	42 41	60	5.4	S	1970	10	15	3	35	14.9	147 44	42 53	10	5.1	U									
1969	LONG.	148.	LAT.	148.	42.						1969	LONG.	144.	LAT.	144.	43.																									
1961	5	20	20	51	2.3	148 36	42 53	0		U	1961	4	9	3	40	14.1	144 27	43 26	0		L																				
1968	2	8	21	4	0.5	148 22	42 41	60	5.3	M	1961	8	12	10	37	6.2	144 48	43 0	0		L																				
1969	8	12	14	3	26.5	148 16	42 58	70		R	1961	12	24	15	50	53.3	144 29	43 5	120		R																				
1969	8	12	21	31	42.2	148 19	42 38	70		U	1961	12	26	6	47	51.8	144 3	43 35	240		S																				
1969	8	15	19	2	16.0	148 11	42 45	90		U	1962	5	9	1	25	14.0	144 46	43 25	120		S																				
1969	8	15	20	29	47.5	148 25	42 53	50	4.9	U	1962	6	29	2	51	12.8	144 44	43 31	100		L																				
1969	8	27	10	10	19.4	148 23	42 55	60	5.2	U	1963	1	6	0	4	43.9	144 43	43 21	160		S																				
1969	8	27	10	28	26.3	148 23	42 54	60	4.9	U	1963	4	23	15	42	48.5	144 19	43 30	0	4.1	L																				
1969	8	27	12	26	6.7	148 15	42 48	50	5.4	U	1963	10	5	13	22	19.4	144 19	43 30	0	4.4	L																				
1969	8	29	12	9	3.4	148 4	42 52	50	5.1	U	1964	1	6	0	17	42.2	144 34	43 13	100		S																				
1969	9	30	2	58	30.8	148 29	42 57	40	5.5	R	1965	8	31	16	48	52.4	144 26	43 29	0	5.1	S																				
1969	10	27	4	15	49.1	148 21	42 59	70		U	1965	6	3	28	17	39.8	144 18	43 28	0	5.1	L																				
1969	11	21	6	0	23.6	148 11	42 56	60	5.2	U	1967	7	9	12	9	8.1	144 43	43 32	150		R																				
1969	12	19	13	29	52.1	148 27	42 54	40	5.2	U	1967	11	4	23	30	34.8	144 16	43 29	20	6.5	R																				
1970	2	27	10	45	5.8	148 20	42 54	40	5.2	U	1967	11	5	1	26	6	144 10	43 30	0	5.7	S																				
1970	7	16	10	41	8.4	148 29	42 59	0	4.7	U	1967	11	9	0	53	24.4	144 20	43 32	0	3.7	L																				
1970	10	15	1	0	32.2	148 3	42 49	40	5.2	U	1968	4	1	11	3	8.5	144 22	43 31	0	4.8	L																				
1970	LONG.	132.	LAT.	132.	43.						1970	LONG.	145.	LAT.	145.	43.																									
1966	6	30	17	59	49.4	132 37	43 12	500		U	1961	8	12	7	47	32.3	145 20	43 4	100		L																				
1965	12	6	16	55	7.2	134 31	43 23	500		U	1962	2	14	5	33	33.7	145 48	43 6	100		R																				
1963	12	6	12	16	23.9	135 46	43 23	400		U	1963	1	23	13	48	18.1	146 24	43 17	120	5.9	R																				
1963	12	6	12	16	23.9	135 46	43 23	400		U	1961	5	27	22	17	35.6	146 26	43 26	80		M																				
1964	12	4	4	55	5.5	135 12	43 15	400		U	1961	11	1	8	58	54.1	146 33	43 18	40		L																				
1964	12	4	4	55	5.5	135 12	43 15	400		U	1962	2	11	2	32	46.9	146 37	43 37	120		U																				
1964	12	4	4	55	5.5	135 12	43 15	400		U	1962	2	27	0	55	45.9	146 49	43 28	100		S																				
1964	12	4	4	55	5.5	135 12	43 15	400		U	1962	10	14	6	49	36.1	146 53	43 54	120		M																				
1964	12	4	4	55	5.5	135 12	43 15	400		U	1963	3	27	14	12	9.1	146 15	43 27	100		S																				
1964	12	4	4	55	5.5	135 12	43 15	400		U	1963	11	14	5	9	54.0	146 59	43 31	40		L																				
1964	12	4	4	55	5.5	135 12	43 15	400		U	1964	4	4	11	35	10.1	146 11	43 40	100		S																				
1964	12	4	4	55	5.5	135 12	43 15	400		U	1964	6	1	20	22	6.0	146 58	43 11	60	4.9	M																				
1964	12	4	4	55	5.5	135 12	43 15	400		U	1964	7	11	4	28	59.9	146 49	43 47	60		L																				

Y	M	D	H	M	S	LONG.	LAT.	DEP.	MAG.	C	Y	M	D	H	M	S	LONG.	LAT.	DEP.	MAG.	C		
1965	5	19	7	46	31.7	146 54	43 18	60	5.5	M	1969	8	13	14	54	54.2	147 59	43 42	50	5.1	U		
1965	5	19	12	9	4.5	146 54	43 32	60	5.1	M	1969	8	13	15	10	26.8	147 26	43 35	2	20	5.0	U	
1967	4	21	13	15	53.2	146 23	43 8	30	4.6	M	1969	8	13	16	24	1.0	147 36	43 7	60	5.1	U		
1967	12	20	14	45	32.5	146 17	43 5	40	4.5	L	1969	8	13	17	31	33.2	147 56	43 31	50	5.7	U		
1968	1	29	20	36	35.5	146 48	43 16	30	4.5	L	1969	8	14	4	33	41.6	147 14	43 21	0	5.0	U		
1968	1	30	10	30	16.5	146 49	43 1	30	5.3	S	1969	8	14	12	7	29.9	147 42	43 10	50	4.9	U		
1968	2	3	22	7	10.1	146 45	43 16	30	4.2	L	1969	8	14	17	59	47.5	147 51	43 5	50	4.7	U		
1968	2	4	22	54	49.1	146 50	43 12	0	4.5	S	1969	8	15	0	38	19.7	147 28	43 7	60	4.7	U		
1968	5	10	0	26	42.8	146 36	43 8	30	4.7	S	1969	8	15	5	15	40.5	147 39	43 3	60	4.9	U		
1968	12	24	21	1	28.5	146 52	43 23	40	4.6	L	1969	8	15	18	47	56.9	147 15	43 2	0	4.9	U		
1969	1	28	14	38	36.8	146 19	43 43	70		S	1969	8	16	5	6	17.2	147 52	43 16	50	4.8	U		
1969	5	15	5	34	10.8	146 43	43 20	40	4.9	M	1969	8	16	5	47	44.8	147 6	43 2	30	5.1	U		
1969	8	12	13	12	49.2	146 54	43 28	50	4.9	M	1969	8	17	14	52	18.9	147 17	43 7	10	4.2	U		
1969	8	14	3	48	11.8	146 38	43 13	10	4.1	M	1969	8	18	3	9	8.8	147 30	43 3	60	4.8	U		
1969	8	22	16	12	33.0	146 17	43 36	0	4.7	L	1969	8	20	19	12	2.3	147 49	43 6	50	4.4	U		
1969	8	30	16	54	28.2	146 35	43 6	40	5.4	R	1969	8	21	16	51	32.0	147 14	43 33	50	5.2	U		
1969	9	1	7	17	2.5	146 50	43 16	50	5.0	M	1969	8	25	23	4	7.4	147 44	43 5	50	5.1	U		
1969	9	5	8	46	45.6	146 38	43 12	40	4.9	L	1969	8	27	19	45	39.8	147 35	43 11	40	4.7	U		
1969	9	18	20	52	36.2	146 33	43 16	0	4.9	L	1969	8	28	23	53	42.9	147 42	43 22	70	4.6	U		
1969	11	12	10	27	4.1	146 38	43 27	0	4.3	U	1969	9	5	6	12	38.8	147 4	43 28	10	5.6	R		
1970	1	6	10	46	41.4	146 40	43 21	50	4.4	L	1969	9	6	16	43	31.8	147 0	43 29	0	5.4	R		
1970	1	15	17	42	59.9	146 49	43 28	30	4.6	M	1969	9	7	3	58	37.9	147 4	43 7	50	4.4	U		
1970	1	31	2	10	23.5	146 54	43 20	30	4.4	U	1969	9	13	20	52	10.6	147 44	43 4	70	5.0	M		
1970	4	27	17	4	54.4	146 35	43 14	40	4.6	L	1969	9	14	21	49	11.6	147 31	43 8	40	5.0	S		
1970	4	29	14	54	59.2	146 44	43 9	60	5.4	S	1969	9	22	11	35	41.1	147 27	43 13	0	5.1	S		
1970	5	3	13	19	40.0	146 41	43 25	40	4.8	L	1969	9	27	13	2	16.9	147 9	43 23	50	5.0	S		
1970	5	9	4	22	39.1	146 50	43 10	40	4.7	L	1969	10	9	23	7	35.1	147 45	43 12	0	4.9	U		
1970	7	4	23	50	31.3	146 15	43 14	40	4.2	L	1969	11	18	2	56	47.2	147 1	43 22	50	4.8	S		
1970	10	14	16	14	24.5	146 41	43 26	0	4.5	U	1970	2	27	8	49	12.3	147 50	43 8	0	4.4	U		
1970	10	15	6	14	0.9	146 53	43 4	40	5.7	R	1970	2	27	10	35	7.8	147 31	43 19	0	4.6	U		
1970	11	20	22	48	22.5	146 58	43 8	40	5.6	R	1970	5	2	5	35	38.3	147 28	43 10	120	5.0	U		
1970	12	6	21	47	33.9	146 52	43 25	30	4.9	S	1970	6	23	6	33	28.9	147 32	43 5	0	5.8	R		
ONG. 147.						LAT. 43.						ONG. 147.						LAT. 43.					
961	2	8	6	1	47.2	147 14	43 29	100		R	1961	4	20	1	12	34.3	148 13	43 21	80		R		
961	2	13	6	53	45.2	147 53	43 13	80		R	1961	5	7	9	59	13.4	148 56	43 29	60		U		
961	2	13	11	31	25.7	147 18	43 27	120		U	1961	5	11	22	36	43.6	148 28	43 27	40		U		
961	2	15	19	45	14.9	147 56	43 16	60	6.3	M	1961	8	2	21	12	13.4	148 27	43 33	60		R		
961	7	29	0	19	36.3	147 41	43 12	40		M	1961	9	5	18	11	33.7	148 18	43 18	20		R		
961	9	12	21	27	11.6	147 54	43 17	60		M	1961	9	30	9	21	25.7	148 57	43 45	60		U		
962	3	27	19	10	29.4	147 55	43 21	40		U	1961	11	5	12	41	52.1	148 45	43 10	40		U		
962	11	10	10	33	1.7	147 35	43 11	100		M	1962	2	3	2	20	15.1	148 17	43 9	40		U		
962	12	19	5	47	42.2	147 6	43 9	40	4.3	M	1962	12	9	19	17	30.7	148 49	43 29	40	4.7	U		
963	2	11	6	35	54.4	147 58	43 49	100		R	1963	3	31	1	52	0.2	148 24	43 14	40	4.7	U		
963	3	27	4	47	43.9	147 41	43 43	120		R	1963	7	13	22	58	31.7	148 33	43 31	40		U		
964	2	17	6	1	18.8	147 38	43 39	60	5.2	S	1963	7	23	21	40	50.8	148 7	43 6	80		U		
964	5	31	9	40	35.7	147 14	43 16	60	6.7	R	1963	10	12	20	26	58.1	148 54	43 53	0	6.3	R		
964	6	2	3	31	17.7	147 1	43 10	60	5.0	M	1963	10	14	8	52	30.8	148 52	43 43	0	5.7	U		
964	10	23	5	42	33.1	147 12	43 3	20		S	1963	10	15	19	47	16.7	148 55	43 41	40	5.4	U		
965	2	21	13	38	51.6	147 57	43 54	0	5.2	S	1963	11	17	11	3.3		148 45	43 25	40		U		
966	2	20	7	48	52.4	147 15	43 34	40	5.2	M	1963	11	12	16	56	5.6	148 38	43 37	40		U		
966	4	5	13	57	41.8	147 14	43 28	0	5.1	M	1963	10	18	10	59	44.0	148 35	43 26	0	4.5	U		
966	6	10	0	39	27.8	147 37	43 51	120		M	1963	10	20	17	26	19.9	148 39	43 23	60		U		
967	8	24	12	21	17.0	147 40	43 16	70		R	1963	11	21	7	33	35.9	148 42	43 13	0	5.2	U		
967	10	23	11	53	32.5	147 3	43 4	60	5.0	S	1963	11	25	2	56	5.9	148 45	43 20	0	5.1	U		
68	1	29	19	19	2.4	147 0	43 11	30	6.9	R	1963	11	11	18	49	43.0	148 45	43 28	0	5.6	U		
68	1	29	21	7	9.0	147 16	43 5	20	4.9	U	1963	11	12	16	21	50.9	148 59	43 29	40		U		
68	1	30	1	42	50.0	147 10	43 12	40	5.7	R	1963	11	19	20	0	58.5	148 52	43 18	40	5.4	U		
68	1	30	2	14	3.8	147 14	43 19	0	4.6	U	1963	11	21	7	33	35.9	148 22	43 22	0	5.1	U		
68	1	30	3	39	15.5	147 49	43 16	60	4.7	U	1963	11	23	10	49	25.1	148 46	43 33	20	5.1	U		
68	1	30	7	27	33.8	147 29	43 1	40	4.5	U	1964	7	16	19	37	27.4	148 18	43 27	40	5.1	U		
68	1	30	15	8	35.1	147 9	43 21	30	4.8	U	1964	7	29	3	8	20.8	148 21	43 50	0		U		
68	1	30	18	6	24.7	147 16	43 6	10	4.7	U	1964	10	16	16	21	50.9	148 59	43 31	40	5.4	U		
68	1	30	20	34	35.8	147 11	43 2	0	4.4	U	1964	11	3	23	55	47.0	148 52	43 25	0	5.0	U		
68	2	3	20	30	43.4	147 26	43 5	50	4.9	U	1964	11	6	18	53	22.9	148 57	43 45	40	5.7	M		
68	6	2	15	28	20.8	147 12	43 37	80		S	1965	6	11	12	33	44.2	148 48	43 39	0	6.4	R		
68	6	8	14	29	46.6	147 5	43 8	40	5.7	R	1965	6	11	13	14	51.9	148 58	43 53	20	5.2	U		
68	7	4	16	12	24.9	147 25	43 38	70		M	1965	6	11	16	11	9.1	148 37	43 30	20	5.3	U		
68	8	9	19	38	0.4	147 34	43 28	60	5.1	S	1965	6	11	17	41	3.6	148 26	43 30	0	5.3	U		
68	9	3	22	22	36.6	147 10	43 40	10	4.9	U	1965	10	25	3</td									

Y	M	D	H	M	S	LONG.	LAT.	DEP.	MAG.	C
1969	8	12	8	34	6.5	148 17	43 34	60	5.3	U
1969	8	12	12	18	42.0	148 46	43 32	70	5.0	U
1969	8	12	14	53	33.7	148 3	43 19	70	5.9	R
1969	8	12	20	21	21.6	148 52	43 13	50	5.9	R
1969	8	12	22	18	6.1	148 32	43 10	90	5.0	R
1969	8	13	8	5	53.6	148 19	43 2	80	5.0	R
1969	8	13	11	7	7.8	148 53	43 14	70	5.0	U
1969	8	14	7	57	8.9	148 23	43 38	50	5.8	R
1969	8	14	13	47	49.0	148 8	43 7	50	5.0	U
1969	8	15	1	27	41.8	148 19	43 11	40	4.9	U
1969	8	15	7	12	23.8	148 46	43 19	50	5.1	U
1969	8	15	15	18	29.7	148 30	43 12	60	5.3	M
1969	8	16	8	3	14.7	148 23	43 38	60	5.2	R
1969	8	18	20	43	34.7	148 4	43 27	60	5.3	U
1969	8	19	17	49	53.2	148 16	43 20	80	5.0	R
1969	8	19	18	30	14.5	148 0	43 16	60	4.6	U
1969	8	21	9	28	33.1	148 18	43 20	60	5.1	U
1969	8	22	14	30	11.9	148 9	43 16	50	4.6	U
1969	8	29	1	15	38.5	148 46	43 8	60	4.6	U
1969	8	30	15	52	30.3	148 16	43 26	70	5.0	U
1969	8	30	16	11	33.1	148 27	43 22	100	5.0	R
1969	8	30	17	28	1.2	148 15	43 1	50	5.5	R
1969	9	10	16	46	51.6	148 27	43 37	40	5.0	U
1969	10	10	9	13	41.6	148 48	43 28	20	5.0	U
1969	10	25	21	3	43.3	148 19	43 45	60	5.3	M
1969	11	6	10	55	33.5	148 47	43 39	40	5.1	U
1969	11	18	7	28	36.8	148 25	43 34	40	4.5	U
1969	11	23	16	8	34.2	148 54	43 25	50	4.9	U
1969	12	28	10	19	4.8	148 24	43 17	40	5.1	U
1969	12	28	13	24	33.0	148 9	43 10	0	4.7	U
1969	12	28	13	52	57.2	148 58	43 36	80	5.0	M
1969	12	28	14	6	43.9	148 31	43 4	50	4.8	U
1970	2	4	4	17	10.9	148 21	43 3	70	5.0	M
1970	2	4	22	7	6.4	148 16	43 13	40	5.2	U
1970	2	6	22	57	10.3	148 2	43 24	50	5.1	U
1970	2	27	8	5	54.0	148 16	43 0	70	5.0	R
1970	2	27	8	28	55.0	148 41	43 11	80	5.0	M
1970	3	10	13	58	32.1	148 53	43 43	70	5.0	R
1970	4	21	13	43	26.8	148 36	43 10	40	5.2	U
1970	5	9	0	43	24.2	148 26	43 33	40	4.8	U
1970	5	24	8	9	44.1	148 37	43 15	40	5.3	U
1970	7	9	17	11	4.5	148 44	43 22	40	5.3	R
1970	7	9	20	24	33.0	148 56	43 19	50	5.3	U
1970	7	9	21	11	54.7	148 35	43 23	40	5.6	U
1970	7	31	10	53	9.8	148 1	43 10	50	5.1	S
1970	8	7	10	43	18.0	148 32	43 14	50	4.8	U
1970	10	11	14	29	9.9	148 19	43 12	60	5.2	M
1970	10	15	3	5	50.0	148 40	43 9	20	5.2	U
1970	10	15	3	15	26.4	148 57	43 1	40	5.8	R
1970	10	19	17	8	32.9	148 1	43 6	50	5.1	U
LONG. 149. LAT. 43.										
1961	2	7	3	15	32.7	149 12	43 21	20	5.0	U
1961	4	23	18	1	49.2	149 34	43 33	0	5.0	U
1963	2	10	1	5	9.6	149 50	43 7	60	5.0	U
1963	7	26	11	39	39.7	149 11	43 34	20	5.0	U
1963	10	12	22	7	9.9	149 5	43 57	40	5.3	U
1963	10	12	22	55	7.8	149 15	43 16	0	5.1	U
1963	10	12	23	15	9.8	149 20	43 47	20	4.7	U
1963	10	13	1	11	54.5	149 31	43 39	40	5.2	U
1963	10	13	3	48	36.4	149 32	43 39	60	5.0	U
1963	10	13	4	46	57.5	149 26	43 37	40	4.7	U
1963	10	13	10	26	34.7	149 12	43 47	0	5.0	U
1963	10	13	22	21	7.2	149 3	43 36	40	8.1	R
1963	10	13	23	26	15.2	149 25	43 36	60	5.0	U
1963	10	14	1	29	7.5	149 48	43 43	40	5.0	U
1963	10	14	13	6	6.4	149 43	43 56	40	5.9	R
1963	10	15	18	32	16.7	149 34	43 48	0	5.4	U
1963	10	20	18	10	48.3	149 7	43 39	0	5.7	U
1963	10	20	20	52	25.8	149 25	43 36	0	5.9	U
1963	10	22	0	38	30.9	149 30	43 50	0	5.3	R
1963	10	22	2	20	48.8	149 59	43 18	60	4.9	U
1963	10	22	8	18	47.1	149 20	43 9	20	5.0	U
1963	10	22	8	29	26.4	149 32	43 12	40	5.0	U
1963	10	23	20	18	23.7	149 26	43 27	40	5.0	U
1963	10	24	10	6	28.4	149 42	43 25	0	5.4	U
1963	10	25	5	18	19.0	149 18	43 42	40	5.0	U
1963	10	26	14	59	50.1	149 14	43 53	20	5.0	U
1963	10	26	20	21	50.9	149 19	43 42	0	5.0	U
1963	10	26	20	32	2.0	149 15	43 52	40	4.7	U
1963	10	29	5	37	0.6	149 43	43 49	60	4.8	U
1963	11	3	2	53	34.2	149 37	4			

Y	M	D	H	M	S	LONG.	LAT.	DEP.	MAG.	C
1964	11	16	8	57	22.6	147 44	46 3	400	U	
LONG.	148.	LAT.	46.							
1964	8	1	5	43	20.9	148 23	46 55	400	R	
1964	8	26	14	40	27.2	148 30	46 47	280	R	
LONG.	154.	LAT.	46.							
1961	8	28	1	22	9.7	154 48	46 2	100	U	
1967	6	13	8	22	41.9	154 55	46 14	40	5.8	U
LONG.	146.	LAT.	47.							
1970	10	23	8	55	22.0	146 7	47 27	480	U	
LONG.	147.	LAT.	47.							
1966	11	22	15	29	49.5	147 47	47 35	500	R	
1970	10	3	14	44	25.1	147 3	47 47	500	U	
LONG.	148.	LAT.	47.							
1969	3	9	20	35	32.0	148 34	47 34	360	R	
LONG.	154.	LAT.	47.							
1967	12	1	22	57	11.3	154 59	47 14	120	U	
LONG.	155.	LAT.	49.							
1969	6	13	17	48	29.5	155 30	49 24	64	5.9	U
LONG.	151.	LAT.	52.							
1970	8	31	2	46	9.0	151 36	52 24	645	6.6	R
1970	9	5	16	52	27.9	151 24	52 12	580	5.7	R
LONG.	159.	LAT.	52.							
1969	7	16	17	16	53.3	159 0	52 12	69	5.8	U

II. List of Major Earthquakes

DATE	AND TIME	C	LOCATION	ORIGIN TIME	C=CLASS						
					D	H	M	+	-	+	-
1961(S36) JAN.	1 23 45	M	OFF MIYAGI PREF	45 23.8 0.9	141 52	12	38 31	4	60		
	6 10 20	R	S OFF HOKKAIDO	20 34.3 0.3	143 49	3	42 2	1	40	5.6	
	15 20 53	R	OFF COAST OF IWATE PREF	53 8.0 0.5	143 16	3	39 36	1	80	5.8	
	16 16 20	R	E OF IBARAKI PREF	20 4.7 1.3	142 16	6	36 2	3	40	6.8	TSUNAMI
	16 17 48	M	E OF IBARAKI PREF	48 3.6 0.9	141 54	4	36 1	2	0	5.5	
	16 19 14	M	E OF IBARAKI PREF	13 56.5 1.3	141 54	6	36 21	3	0	5.1	
	16 20 19	R	E OF IBARAKI PREF	19 33.0 1.1	141 55	5	36 1	3	20	6.4	
	16 20 41	M	E OF IBARAKI PREF	40 58.2 0.9	141 37	4	36 18	2	0	5.5	
	16 21 12	R	E OF IBARAKI PREF	12 23.1 0.8	141 59	4	36 13	2	20	6.5	TSUNAMI
	16 22 9	R	OF IBARAKI PREF	9 6.4 0.7	141 54	4	35 58	2	20	5.7	
	16 23 4	R	OF IBARAKI PREF	3 49.9 1.4	142 31	6	36 3	4	40	6.1	
	16 23 44	R	OF IBARAKI PREF	44 6.8 1.0	141 42	6	36 21	3	0	5.5	
	17 0 41	R	OF IBARAKI PREF	41 7.0 1.1	142 8	5	36 9	3	40	6.6	
	17 15 41	M	E OF IBARAKI PREF	41 28.4 1.4	141 49	7	36 6	3	20	5.2	
	18 16 12	M	E OF IBARAKI PREF	12 33.1 1.9	142 20	9	36 9	4	20	5.7	
	21 7 34	M	E OF FUKUSHIMA PREF	34 46.1 0.4	141 37	2	37 6	1	40	5.5	
FEB.	23 13 48	R	OFF E COAST OF HOKKAIDO	48 18.1 1.3	146 24	9	43 17	3	120	5.9	
	3 2 39	M	NAGADKA NIIGATA PREF	39 3.8 0.3	138 50	2	37 27	1	20	5.2	DAMAGE,5 KILLED
	3 22 31	R	E OF IBARAKI PREF	31 39.8 0.4	141 15	2	36 36	1	20	5.4	
	7 13 19	R	E COAST OF AOMORI PREF	18 59.8 0.2	141 21	3	40 48	1	100		
	7 23 37	S	S PART OF CHIBA PREF	37 2.1 0.4	140 18	2	35 14	2	0	5.0	
	8 6 2	R	OFF E COAST OF HOKKAIDO	1 47.2 1.2	147 14	7	43 29	4	100		
	13 6 54	R	OFF E COAST OF HOKKAIDO	53 45.2 1.1	147 53	6	43 13	3	80		
	13 8 27	R	OFF E COAST OF HOKKAIDO	26 44.2 1.1	147 14	6	42 55	3	20	6.3	
	14 1 27	R	OFF E COAST OF HOKKAIDO	27 27.2 1.2	147 47	7	42 59	3	60	6.1	
	15 19 45	R	OFF E COAST OF HOKKAIDO	45 14.9 1.6	147 56	8	43 16	6	60	6.3	
	22 55 55	M	OFF E COAST OF HOKKAIDO	54 53.3 1.8	147 41	9	43 12	5	40		
	23 13 16	R	OFF MIYAGI PREF	16 10.7 1.0	143 30	5	38 16	2	0	6.4	
	27 3 10	R	OFF MIYAZAKI PREF	10 48.1 0.5	131 51	2	31 36	2	40	7.0	DAMAGE,2 KILLED
	27 10 12	M	OFF MIYAGI PREF	12 14.8 0.9	142 42	5	38 15	2	40	5.0	TSUNAMI,95cm AT TOSA-SHIMIZU
MAR.	5 7 26	M	OFF FUKUSHIMA PREF	26 0.6 0.6	142 22	3	37 50	1	40	5.3	
	16 7 16	S	KAGOSHIMA PREF	16 32.2 0.2	130 42	1	32 0	1	0	5.5	
	18 7 40	U	SE OFF BOSO PEN	40 13.9 0.6	141 22	3	34 11	2	60	5.0	
	19 13 52	M	OFF SANRIKU	51 51.2 0.6	143 25	4	40 11	1	60	5.5	
	19 18 18	R	OFF IBARAKI PREF	18 44.5 0.6	141 28	3	36 38	2	60	5.3	
	20 20 39	R	S PART OF OKHOTSK SEA	38 39.4 0.7	143 28	9	46 5	4	360		
	25 7 57	R	OFF IBARAKI PREF	57 5.5 0.8	141 17	4	35 44	2	0	6.1	
APR.	30 3 10	M	OFF IBARAKI PREF	10 13.7 0.6	141 47	3	36 48	1	20	5.4	
	9 4 19	M	MIYAGI FUKUSHIMA BORDER	18 52.8 0.2	140 44	2	37 55	1	120		
	20 1 13	R	SOUTHERN KURILE IS	12 34.3 0.9	148 13	5	43 21	3	80		
MAY	1 9 42	M	E OF IBARAKI PREF	42 1.0 0.8	141 40	4	35 53	2	0	5.2	
	7 21 14	R	W PART OF HYOGO PREF	14 15.5 0.2	134 25	2	35 6	1	40	5.9	
	7 21 20	M	W PART OF HYOGO PREF	19 58.5 0.2	134 30	1	35 2	1	20	5.2	
	17 6 45	S	SE OFF KAGOSHIMA PREF	45 26.7 0.5	132 2	2	30 27	2	60	5.8	
	27 16 18	R	E OFF AOMORI PREF	18 4.0 0.2	142 20	2	41 10	1	40	5.5	
	27 19 23	M	OFF MIYAGI PREF	23 6.8 0.2	141 54	2	38 40	1	60	5.0	
JUNE	27 22 17	M	KURILE IS</								

C=CLASS

DATE	AND TIME	C	LOCATION	ORIGIN TIME	LONG.			LAT.		H	M	REMARKS
					M	S	+/-	+/-	+/-	KM		
1961(S36) AUG.	22 2 0	S	W OF AOMORI PREF	0 36.9 0.5	139 19	3	40 54	1	40	5.5		
	24 13 52	M	OFF SE COAST OF HOKKAIDO	52 21.4 0.5	145 36	3	42 44	2	40	5.2		
	25 7 41	M	S OF HANASAKI PEN	40 52.0 0.6	145 40	4	42 42	2	40			
	29 14 55	M	S OF HANASAKI PEN	55 34.2 1.0	145 37	7	42 39	3	20			
SEPT	2 3 59	S	KANAGAWA PREF	59 32.2 0.1	139 12	1	35 26	1	20	5.0		
	9 18 16	M	N OF HACHIJOGIMA	16 5.9 0.3	139 54	2	33 55	1	160			
	12 8 47	S	OFF HANASAKI PEN	47 20.3 0.7	145 43	5	42 46	2	60	5.3		
	12 21 27	M	E OF HOKKAIDO	27 11.6 1.5	147 54	8	43 17	5	60			
	15 6 50	M	OFF FUKUSHIMA PREF	50 42.3 0.7	141 30	4	37 33	2	40	5.0		
	17 22 0	M	SE OF HOKKAIDO	56 47.1 0.6	144 10	4	42 27	2	60	4.6		
	25 6 41	R	SE OF KWANTO	40 54.0 0.6	141 43	4	33 37	2	80			
	28 12 24	U	SE OF HONSHU	24 34.3 1.3	141 53	7	30 46	3	60	5.5		
	30 1 50	M	S OF HANASAKI PEN	50 32.2 0.6	145 51	4	42 44	1	60	5.6		
	30 22 13	M	OFF IWATE PREF	13 8.1 0.3	142 28	3	40 11	1	20	4.9		
OCT.	24 16 25	R	SOUTHERN KURILE IS	25 20.5 1.3	147 27	8	44 19	4	120			
	31 6 16	U	SE OFF HONSHU	15 44.9 1.8	142 28	13	30 8	6	0	5.4		
NOV.	5 19 37	R	SOUTHERN KURILE IS	36 46.4 2.7	147 47	16	44 51	8	20	5.2		
	14 19 2	R	KANAGAWA PREF	2 27.2 0.1	139 22	1	35 28	1	160			
	15 16 17	R	SE OF HOKKAIDO	17 9.9 0.4	145 34	3	42 39	1	60	6.9 TSUNAMI		
	20 13 32	M	OFF FUKUSHIMA PREF	32 32.0 0.3	141 38	2	37 3	1	60	5.1		
	26 5 20	R	OFF IBARAKI PREF	19 46.2 0.6	141 43	3	36 12	1	20	5.8		
	27 14 57	R	OFF MIYAZAKI PREF	57 10.7 0.5	131 33	3	31 18	2	40	6.0		
	29 1 37	S	NEAR CHOSHII	37 50.6 0.5	140 51	3	35 39	2	60	5.0		
DEC.	2 6 13	M	RYUKYU IS	13 6.1 2.0	125 27	1	26 18	11	240			
	6 11 16	M	OFF FUKUSHIMA PREF	15 55.6 0.8	142 56	4	37 45	1	60	5.3		
	13 8 6	R	E OF HOKKAIDO	6 18.9 1.0	146 40	6	42 56	2	80			
	24 4 12	R	SURUGA BAY	11 54.6 0.1	138 23	2	34 41	2	240			
	24 15 51	R	EASTERN HOKKAIDO	50 53.3 0.2	144 29	2	43 5	1	120			
1962(S37) JAN.	4 13 16	M	W PART OF KANAGAWA PREF	16 1.7 0.2	139 17	1	35 6	1	160			
	4 13 35	R	W COAST OF WAKAYAMA PREF	35 40.0 0.2	135 13	1	33 38	1	40	6.4		
	9 21 41	R	OFF SE COAST OF HOKKAIDO	40 46.2 0.4	145 21	3	42 39	1	60	6.0		
	12 22 38	M	S PART OF HOKKAIDO	38 10.0 0.2	143 4	2	42 25	1	100			
	14 22 34	R	W OFF HOKKAIDO	34 5.5 0.3	141 0	5	44 21	2	280			
	26 14 22	R	S OFF HACHIJOGIMA	22 49.9 0.4	138 27	2	32 13	3	360			
FEB.	6 7 56	R	TOKYO-SAITAMA BORDER	55 52.5 0.1	139 17	1	35 52	1	120			
	13 2 26	R	OFF SHIZUOKA PREF	26 5.0 0.2	138 15	2	34 0	2	280			
	18 19 42	S	E OFF AOMORI PREF	42 32.4 0.3	142 45	2	41 11	1	40	5.3		
	21 1 5	R	OFF SE COAST OF HOKKAIDO	5 41.6 0.4	145 13	3	42 46	2	80			
MAR.	2 3 35	R	E OFF AOMORI PREF	13 9.3 0.3	142 12	2	41 33	1	40	5.1		
	13 15 7	M	SE PART OF NIIGATA PREF	7 42.4 0.1	139 6	1	37 3	1	0	5.1		
	18 14 28	S	OFF IWATE PREF	28 19.5 0.3	142 50	2	40 12	1	20	5.4		
APR.	21 1 38	M	KII CHANNEL	39 24.7 0.2	135 4	1	33 43	1	60	4.9		
	1 14 2	S	OFF HOKKAIDO	1 54.0 0.4	143 56	3	41 36	1	40	5.3		
	11 8 55	R	OFF NOTO PEN	54 16.7 0.5	135 27	3	37 34	3	320			
	12 9 53	R	OFF MIYAGI PREF	52 39.4 0.5	142 49	3	37 58	1	40	6.8 TSUNAMI		
	12 10 6	S	OFF MIYAGI PREF	6 0.8 0.7	142 29	4	38 7	2	0	5.1		
	12 14 16	R	OFF MIYAGI PREF	16 0.9 0.5	142 54	3	37 45	1	40	5.8		
	12 16 1	M	OFF MIYAGI PREF	0 36.2 1.3	142 54	8	37 59	3	20	4.7		
	13 15 41	M	KUMAMOTO PREF	41 31.6 0.6	130 46	4	32 49	5	40	4.0		
	15 1 50	M	OFF MIYAGI PREF	49 57.4 0.8	142 50	5	38 2	2	0	5.3		
	15 3 43	U	OFF MIYAGI PREF	42 48.3 1.4	143 20	7	37 29	3	20	5.0		
	15 16 32	S	OFF IBARAKI PREF	32 7.8 0.3	140 57	2	36 16	1	1	20	5.0	
	16 22 20	R	S OFF HONSHU	20 10.6 0.8	141 3	5	30 27	2	100			
	18 5 54	M	OFF MIYAGI PREF	54 4.3 0.6	142 48	4	38 2	1	40	5.6		
	22 16 11	M	OFF MIYAGI PREF	11 41.0 0.3	141 51	2	37 58	1	60	4.6		
	23 4 15	R	S PART OF KUMAMOTO PREF	15 32.0 0.2	130 54	2	32 10	2	160			
	23 12 54	M	IBARAKI PREF	54 37.9 0.1	139 48	1	36 13	1	60	5.1		
	23 14 58	R	OFF SE COAST OF HOKKAIDO	58 11.8 0.3	143 55	2	42 14	2	60	7.0 DAMAGE		
	26 0 47	R	OFF MIYAGI PREF	47 22.9 0.7	143 5	4	38 14	1	60	6.4		
	26 4 50	M	OFF MIYAGI PREF	49 49.4 0.8	142 58	5	38 12	2	40	5.3		
	30 11 26	R	N PART OF MIYAGI PREF	26 21.0 0.2	141 8	2	38 44	1	0	6.5 DAMAGE, 3 KILLED		
MAY	3 11 38	S	SE OF HOKKAIDO	37 54.8 0.4	144 57	2	42 15	1	20	5.3		
	5 20 11	M	NEAR MIYAKE-JIMA	11 41.7 0.2	139 20	1	34 7	1	0	5.8		
	8 2 40	M	SOUTHERN KURILE IS	39 38.6 2.0	148 35	12	45 10	9	120			
	15 12 34	M	OFF IBARAKI PREF	34 24.5 1.0	141 47	7	36 14	3	120			
JUNE	3 2 15	S	OFF S COAST OF KYUSHU	15 10.5 2.5	130 47	7	29 42	10	20	5.4		
	9 1 4	M	OFF FUKUSHIMA PREF	4 21.0 0.3	141 40	2	37 28	1	40	4.8		
	16 6 29	M	OFF SE COAST OF HOKKAIDO	29 36.5 0.3	143 53	2	42 14	2	40	4.6		
	28 13 14	S	OFF KAGOSHIMA PREF	13 53.7 0.4	131 5	3	31 15	1	0	5.0		
JULY	15 15 47	R	IWATE PREF	47 21.6 0.1	141 18	1	39 29	1	100			
	16 0 12	M	OFF IWATE PREF	12 36.6 0.4	142 52	3	40 1	1	0	5.3		
	18 2 20	R	OFF KUSHIRO	20 22.3 0.3	145 10	3	42 38	1	60	5.9		
	29 4 43	S	OFF IBARAKI PREF	42 57.5 0.6	142 3	4	36 40	1	40	5.5		
	29 6 54	M	S PART OF HOKKAIDO	54 43.2 0.4	143 4	2	42 7	2	80			
	31 14 9	M	OFF MIYAZAKI PREF	9 14.9 0.3	132 25	1	32 31	2	0	5.4		
AUG.	31 16 23	M	OFF IWATE PREF	22 37.2 0.5	143 23	3	40 7	2	0	4.9		
	9 2 55	M	OFF FUKUSHIMA PREF	55 36.3 0.3	141 34	2	37 4	1	40	4.9		
	9 19 44	R	NEAR AMAMIOSHIMA	43 57.8 1.0	129 34	5	28 38	4	160			
	19 15 42	M	KII CHANNEL	42 24.1 0.2	135 15	1	33 43	1	40	5.0		
	26 15 49	M	NEAR MIYAJIMA	48 54.9 0.3	139 27	1	34 7	1	40	5.9		

C=CLASS

JST DATE	AND TIME	C	LOCATION	ORIGIN TIME	LONG.	LAT.	H	M	REMARKS
									KM
62(S37) AUG.	27 7 35	M	NEAR MIYAJIMA	35 10.1	0.2	139 23 1	34 11	1	40 5.2
	28 1 20	R	OFF MIYAGI PREF	20 0.4	0.6	142 47 3	38 9	1	40 5.8
	28 9 13	S	NEAR MIYAKEJIMA	13 13.9	0.6	139 31 2	34 1	2	20 5.0
	28 9 29	L	NEAR MIYAKEJIMA	29 19.9	0.6	139 32 2	33 54	2	40 5.2
	28 17 13	S	NEAR MIYAKEJIMA	13 5.5	0.6	139 30 2	33 58	2	20 5.4
	28 20 16	S	NEAR MIYAKEJIMA	16 18.3	0.6	139 29 2	33 56	2	20 5.1
	30 2 39	L	NEAR MIYAKEJIMA	39 1.7	0.3	139 26 2	34 5	1	40 5.1
	30 5 20	S	NEAR MIYAKEJIMA	20 18.7	0.3	139 25 2	34 5	1	40 5.2
	30 7 37	S	NEAR MIYAKEJIMA	36 47.4	0.8	139 19 2	34 2	2	0 5.8
	30 22 46	S	NEAR MIYAKEJIMA	46 5.9	0.6	139 29 2	34 2	2	20 5.3
SEPT	7 2 38	S	NEAR MIYAKEJIMA	38 34.3	0.2	139 21 1	34 7	1	20 5.1
	24 23 38	M	OFF SE COAST OF HOKKAIDO	38 19.4	0.6	145 46 4	42 31	2	40 5.6
	25 11 37	M	SUD NADA	37 13.8	0.2	131 44 1	33 54	1	0 4.9
	27 18 18	M	OFF URAKAWA	18 26.4	0.3	142 30 2	41 56	1	40 5.0
OCT.	4 5 15	M	NIIGATA PREF	14 39.0	0.1	138 41 1	37 29	1	200
	6 14 38	R	RYUKYU IS	38 31.3	0.6	126 58 3	26 21	4	20
	8 22 47	M	OFF MIYAGI PREF	47 2.5	0.6	142 20 4	37 53	1	0 4.5
	14 6 50	M	E OFF HOKKAIDO	49 36.1	1.7	146 53 10	43 54	5	120
	15 0 9	M	OFF MIYAZAKI PREF	8 57.2	0.6	131 46 3	31 41	2	0 5.4
	15 6 13	M	OFF MIYAGI PREF	13 39.6	0.5	142 6 4	38 34	1	60 4.7
NOV.	17 21 39	R	S OFF CHUBU	39 13.0	0.3	138 1 2	33 17	3	320
	2 8 21	R	F COAST OF HOKKAIDO	21 6.4	0.5	145 10 4	43 27	3	80
	3 0 0	R	E OFF IBARAKI PREF	0 20.8	0.4	141 25 2	36 45	1	40 5.7
	9 18 21	R	IBARAKI-CHIBA BORDER	21 34.5	0.2	140 28 1	35 55	1	40 5.4
	10 10 33	R	E OFF HOKKAIDO	33 17.7	1.0	147 35 6	43 11	3	100
	11 4 32	R	OFF MIYAGI PREF	31 57.9	0.4	142 20 2	38 25	1	40 5.1
	13 17 54	M	OFF S COAST OF HOKKAIDO	54 39.5	0.2	142 10 2	41 50	1	60 5.0
	14 16 48	R	OFF CHOSH	48 2.1	0.4	141 8 2	35 44	1	40 5.8
	21 1 2	S	OFF SE COAST OF HOKKAIDO	2 15.0	0.2	143 48 1	42 17	1	40 5.0
	22 12 10	M	S PART OF HOKKAIDO	9 51.5	0.2	143 14 2	42 33	1	60 4.8
DEC.	4 15 15	M	OFF IBARAKI PREF	15 30.8	0.3	141 21 2	36 43	1	40 4.7
	7 23 4	R	NEAR TORISHIMA	3 40.0	0.5	139 35 3	29 12	3	400
	10 6 17	S	IWATE-AKITA BORDER	16 56.2	0.2	140 52 1	39 47	1	0 5.0
	19 5 48	M	OFF E COAST OF NEMUR	47 42.2	1.4	147 6 7	43 9	3	40 4.3
	21 18 33	R	OFF URAKAWA	33 18.5	0.1	142 30 1	42 1	1	60 6.3
3(S38) JAN.	28 3 18	R	OFF IWATE PREF	18 41.0	0.3	142 14 2	39 40	1	40 5.9
	3 12 5	M	S OFF KYUSHU	5 4.8	1.5	129 42 4	29 50	5	0 5.8
	9 0 14	M	SE OFF TOKUSHIMA PREF	14 17.6	0.3	134 43 1	33 34	2	20 4.4
	9 0 47	R	S PART OF SATSUMA PEN	46 44.2	0.3	130 32 2	31 11	2	160
	18 12 12	R	OFF KII PEN	12 4.2	0.5	136 1 6	33 10	7	450
	19 16 22	R	E OFF AOMORI PREF	22 22.6	0.3	142 20 4	40 41	2	120
	28 13 5	M	E PART OF HOKKAIDO	5 26.8	0.8	145 0 6	43 35	2	40 5.3
	29 17 1	R	FAR E OFF SANRIKU	1 24.4	0.5	144 37 3	40 7	2	80
FEB.	31 14 7	L	RYUKYU IS	6 29.9	1.9	126 45 13	26 0	8	20 6.2
	9 12 53	S	W PART OF NAGANO PREF	53 0.8	0.1	137 42 1	36 22	1	0 5.5
	11 6 36	R	E OFF HOKKAIDO	35 54.4	1.1	147 58 7	43 49	3	100
	19 6 54	R	S OFF SHIZUOKA PREF	53 57.7	0.4	138 9 3	33 40	4	320
	19 21 13	M	E OFF AOMORI PREF	12 44.6	0.3	143 13 3	40 48	1	20 4.9
	21 11 33	R	NEAR HACHIJOGIMA	33 34.5	0.4	139 38 2	33 21	2	160
MAR.	1 19 46	M	S OFF HOKKAIDO	45 53.5	0.4	143 18 3	40 59	2	60 5.5
	7 8 23	M	OFF IBARAKI PREF	22 56.9	0.3	141 16 2	36 25	1	40 4.4
	16 17 46	R	KURILE IS	44 55.9	1.1	154 20 7	45 47	6	80
	21 13 0	M	OFF IBARAKI PREF	0 6.4	0.5	141 6 3	36 24	1	0 5.4
	22 12 58	R	KURILE IS	57 22.4	1.4	149 3 9	44 56	4	160
	27 4 48	R	E OFF HOKKAIDO	47 43.9	0.6	147 41 4	43 43	2	120
	27 6 34	R	OFF ECHIZEN&MISAKI	34 35.9	0.2	135 46 1	35 47	1	0 6.9
	27 12 27	M	WAKASA BAY	27 47.1	0.2	135 48 1	35 48	1	0 5.2
	27 15 49	M	WAKASA BAY	49 21.6	0.2	135 47 1	35 47	1	20 5.3
	28 1 13	R	WAKASA BAY	13 14.0	0.2	135 47 1	35 44	1	0 5.2
	31 1 52	R	E OFF HOKKAIDO	52 0.2	1.3	148 10 7	43 14	4	60 6.0
APR.	31 21 26	M	W COAST OF SHIMANE PREF	26 5.3	0.2	132 24 1	35 8	1	20 5.1
	1 0 2	M	COAST OF SHIMANE PREF	2 17.9	0.2	132 26 1	35 6	1	0 5.0
	1 13 29	R	NW COAST OF HOKKAIDO	28 42.7	0.3	141 38 6	44 42	2	280
	21 22 2	M	S PART OF NAGANO PREF	2 37.4	0.2	137 38 1	35 15	1	20 4.9
MAY	8 19 22	R	E OFF IBARAKI PREF	22 8.6	0.3	141 11 2	36 24	1	40 6.1
	12 11 57	M	E OFF IBARAKI PREF	57 16.6	0.3	141 5 2	36 27	1	40 4.6
	17 21 9	R	E OFF SHIRIYAZAKI	9 5.7	0.2	142 12 2	41 28	1	40 5.4
	25 11 37	M	S OFF IZU PEN	37 37.3	0.2	138 44 1	33 48	1	40 5.1
	25 17 41	R	SE OFF KUSHIRO	41 8.0	0.3	144 42 2	42 27	1	60 5.3
JUNE	3 16 20	M	OFF IWATE PREF	20 4.0	0.6	143 42 3	39 41	2	40 4.8
	3 16 36	R	OFF SHIZUOKA PREF	35 50.3	0.2	138 46 1	34 3	1	40 5.9
	20 9 56	R	OFF E COAST OF KWANTO	55 59.2	0.8	144 46 4	36 7	3	100
	26 17 33	M	OFF MIYAZAKI PREF	33 16.2	0.7	142 26 4	38 37	1	40 4.8
JULY	12 23 21	M	NAGANO PREF	21 35.6	0.2	137 33 1	35 15	1	40 4.8
	19 18 0	R	OFF IBARAKI PREF	0 38.7	0.5	141 6 3	36 16	1	0 5.3
	23 15 18	M	E OFF AOMORI PREF	17 48.5	0.2	142 9 2	41 26	1	60 5.1
	24 20 50	S	GIFU PREF	50 26.6	0.1	136 59 1	35 51	1	0 5.1
	30 17 28	M	OFF WAKAYAMA PREF	27 50.7	0.2	134 59 1	33 50	1	20 5.2
AUG.	4 20 43	S	E COAST OF CHIBA PREF	43 14.3	0.2	140 21 1	35 26	1	40 5.1

C=CLASS													
JST			ORIGIN TIME			LONG.			LAT.		H	M	REMARKS
DATE	AND TIME	C	D	H	M	S	+/-	+	/-	KM			
1963(S38) AUG.	11 16 37 M	N PART OF MIYAGI PREF	37 14.7	0.2	141	8	1	38 42	1	0	5.3		
	15 15 11 R	OFF FUKUSHIMA PREF	11 30.8	0.3	141	57	2	37 40	1	40	6.6		
	17 20 12 R	NEAR TANEGASHIMA	12 40.9	0.5	131	3	4	30 24	2	80			
	21 0 48 R	E OFF ADMORI PREF	48 9.4	0.2	143	2	2	41	5	1	60	5.7	
	23 12 45 M	KURILE IS	45 20.2	0.6	146	28	4	44	8	2	160		
SEPT	28 7 3 R	FAR OFF SANRIKU	2 51.3	0.5	145	34	3	40 10	1	80			
	3 8 46 U	KURILE IS	45 7.8	1.5	150	5	9	44 15	6	0	5.4		
	3 14 30 U	KURILE IS	29 42.5	2.0	150	55	11	44 20	8	40	6.0		
	6 15 4 R	SW PART OF JAPAN SEA	3 47.1	1.2	130	40	3	36 39	5	60	6.0		
	7 10 17 R	SW PART OF JAPAN SEA	16 50.6	2.5	130	40	7	36 40	10	40	6.2		
	7 16 14 U	S PART OF KURILE IS	13 48.7	1.3	150	8	7	44 8	4	0	5.4		
	14 19 6 M	TOKYO/SAITAMA BORDER	6 16.4	0.1	139	11	1	35 53	1	20	4.9		
OCT.	28 1 26 M	OFF FUKUSHIMA PREF	26 45.2	0.3	141	36	2	37	3	1	40	4.7	
	4 8 24 R	E OFF MIYAZAKI PREF	24 31.0	0.6	132	9	2	31 53	2	20	6.3		
	4 9 27 S	SE OFF MIYAZAKI PREF	27 50.4	1.4	132	11	3	31 33	6	40	5.8		
	5 16 34 L	E COAST OF MIYAZAKI PREF	34 5.2	0.7	131	38	4	32 26	5	40	5.6		
	12 20 27 R	OFF ETOROFU IS	26 58.1	1.4	148	54	7	43 53	5	0	6.3		
	12 22 7 U	OFF ETOROFU IS	7 9.9	1.8	149	5	10	43 57	5	40	5.3		
	12 22 55 U	OFF ETOROFU IS	55 7.8	1.6	149	15	9	43 16	6	0	5.1		
	13 1 12 U	OFF ETOROFU IS	11 54.5	2.1	149	31	11	43 39	9	40	5.2		
	13 14 18 R	OFF ETOROFU IS	17 50.5	1.0	149	58	6	43 45	4	20	8.1	TSUNAMI, 130cm AT HACHINOHE	
	13 21 35 U	OFF ETOROFU IS	34 31.9	2.6	148	48	14	43 36	9	40	5.4		
	13 21 59 U	OFF ETOROFU IS	58 26.1	2.0	149	16	12	44 18	6	0	5.8		
	13 23 26 U	OFF ETOROFU IS	26 15.2	2.0	149	25	11	43 36	7	60	5.0		
	14 1 0 R	OFF ETOROFU IS	59 56.8	1.5	150	15	9	44 19	5	0	6.2		
	14 8 53 U	OFF ETOROFU IS	52 30.8	1.9	148	52	13	43 43	9	0	5.7		
	14 12 32 U	OFF ETOROFU IS	31 18.2	1.7	151	32	10	44 38	7	40	5.9		
	14 13 6 R	OFF ETOROFU IS	6 6.4	1.4	149	43	7	43 56	6	40	5.9		
	14 14 25 U	OFF ETOROFU IS	24 16.8	2.5	150	32	14	43 37	10	40	5.2		
	14 22 22 R	OFF ETOROFU IS	21 51.3	1.7	150	11	10	43 48	6	40	5.4		
	15 2 51 U	OFF ETOROFU IS	50 20.7	2.2	150	49	13	44 26	11	60	5.0		
	15 18 3 U	OFF ETOROFU IS	2 14.5	2.5	149	38	15	44 6	10	0	5.4		
	15 18 33 U	OFF ETOROFU IS	32 16.7	2.1	149	34	11	43 48	9	0	5.4		
	15 19 47 U	OFF ETOROFU IS	47 16.7	2.0	148	55	11	43 41	9	40	5.3		
	17 6 31 U	OFF ETOROFU IS	30 59.1	1.9	150	9	10	43 39	8	40	5.3		
	18 8 25 R	OFF ETOROFU IS	24 30.4	1.8	149	30	10	43 47	8	20	5.8		
	18 14 16 M	NEAR TOMAKOMAI	16 21.9	0.2	141	41	2	42 35	2	100	4.9		
	19 2 56 U	OFF ETOROFU IS	55 5.7	2.4	150	37	15	44 28	14	60	6.0		
	20 9 54 R	OFF ETOROFU IS	53 8.6	3.1	150	8	17	44 8	11	0	6.7	TSUNAMI	
	20 13 59 U	OFF ETOROFU IS	59 2.7	3.3	149	11	18	44 1	13	40	6.0		
	20 18 11 U	OFF ETOROFU IS	10 48.3	1.4	149	7	8	43 39	4	0	5.7		
	20 20 53 U	OFF ETOROFU IS	52 25.8	1.6	149	25	9	43 36	6	0	5.9		
	20 21 10 U	OFF ETOROFU IS	9 30.9	2.1	149	10	14	44 28	15	20	5.7		
	21 2 59 U	OFF ETOROFU IS	59 6.8	2.1	148	42	11	43 13	8	0	5.2		
	22 0 39 R	OFF ETOROFU IS	38 30.9	1.6	149	30	9	43 50	6	0	5.3		
	22 8 19 U	OFF ETOROFU IS	18 47.1	2.0	149	20	11	43 9	7	20	5.0		
	22 8 30 U	OFF ETOROFU IS	29 26.4	2.3	149	32	12	43 12	8	40	5.0		
	22 12 18 U	OFF ETOROFU IS	17 18.7	3.0	149	28	17	45 26	16	60	5.1		
	23 18 47 R	SE OFF HOKKAIDO	47 3.1	0.6	144	35	3	41 8	2	60	5.3		
	24 10 7 U	OFF ETOROFU IS	6 28.4	5.0	149	42	27	43 25	15	0	5.4		
NOV.	2 7 42 R	OFF ETOROFU IS	41 25.6	2.0	148	42	11	43 39	7	0	5.6		
	11 2 18 U	OFF ETOROFU IS	17 44.2	1.3	149	4	8	43 36	4	40	6.0		
	16 6 7 R	OFF ETOROFU IS	6 34.4	1.1	149	4	6	43 32	4	60	6.2		
	19 20 1 U	OFF ETOROFU IS	0 58.5	1.6	148	52	9	43 18	5	40	5.4		
	21 7 34 U	OFF ETOROFU IS	33 35.9	1.7	148	22	9	43 22	5	0	5.1		
	22 23 46 U	OFF ETOROFU IS	45 56.2	1.2	149	5	7	43 34	3	40	5.5		
	23 10 50 U	OFF ETOROFU IS	49 25.1	1.8	148	46	10	43 33	6	20	5.1		
DEC.	4 10 29 U	KURILE IS	27 44.8	1.6	152	19	10	45 10	9	40	5.4		
	10 9 56 S	HYUGANADA	56 5.2	0.6	132	0	3	32 7	2	0	5.0		
	13 8 25 U	OFF ETOROFU IS	24 45.5	2.3	149	59	14	45 4	7	0	5.2		
	16 20 10 R	SOYA STRAIT	9 38.3	0.8	142	20	8	45 40	5	280			
	18 15 57 M	SE OFF KII PEN	57 20.5	0.5	137	14	2	33	6	3	20		
	20 13 9 R	OFF KUNASHIRI IS	9 25.1	0.6	146	28	5	44 37	3	200			
	24 3 40 U	OFF ETOROFU IS	39 46.2	1.6	149	22</td							

C=CLASS

JST DATE AND TIME	C	LOCATION	ORIGIN TIME	LONG.	LAT.	H	M	REMARKS	
								M	S
1964(S39) AUG. 26 14 41	R	SEA OF OKHOTSK	40 27.2	1.1	148 30 10	46 47 8	280		
28 3 23	M	OFF IBARAKI PREF	23 40.2	0.2	140 48 1	36 16 1	40	4.1	
SEPT 15 5 41	U	S OFF ETOROFU IS	40 32.4	1.8	150 20 10	43 50 7	20	5.1	
20 4 7	S	OFF SHIZUOKA PREF	7 29.3	0.3	138 37 1	33 34 1	40	5.0	
20 23 37	R	W OFF TORISHIMA	36 8.8	0.4	138 43 2	30 7 2	450		
25 3 0	R	OFF IWATE PREF	59 52.1	0.3	142 1 3	40 5 1	100		
29 1 26	R	SE OFF BOSO PEN	25 53.6	0.7	141 27 4	34 10 2	40	5.0	
OCT. 5 12 35	M	NEAR ERIMOMISAKI	35 8.2	0.3	143 12 2	42 2 2	40	5.3	
6 7 10	S	E OFF IBARAKI PREF	10 11.6	0.7	141 26 3	36 2 1	20	5.3	
14 12 5	U	SE OFF BOSO PEN	4 59.7	1.8	142 0 7	33 46 6	20	5.1	
16 5 27	U	OFF ETOROFU IS	26 54.6	1.9	149 31 10	43 25 6	20	5.9	
16 7 41	U	OFF ETOROFU IS	40 36.2	1.7	149 26 9	43 37 5	40	5.0	
16 16 0	U	OFF ETOROFU IS	59 35.2	2.1	149 59 12	43 38 6	20	5.9	
16 16 22	U	OFF ETOROFU IS	21 50.9	2.5	148 59 14	43 31 8	40	5.4	
16 16 38	U	OFF ETOROFU IS	37 20.9	3.2	149 11 17	44 2 12	40	5.3	
16 17 19	U	OFF ETOROFU IS	18 23.8	2.2	149 58 12	43 23 7	60	6.1	
16 18 19	U	OFF ETOROFU IS	18 18.0	1.9	149 22 11	43 45 6	20	5.6	
18 15 17	U	ETOROFU IS	16 39.7	2.5	148 26 18	45 20 16	40	5.1	
22 18 54	M	OFF IBARAKI PREF	54 36.4	0.3	141 14 2	36 38 1	60	5.5	
24 6 6	R	E OFF HOKKAIDO	6 19.5	1.7	148 19 10	43 36 5	60	5.4	
NOV. 3 11 5	M	SE OFF CHIBA PREF	5 39.3	0.6	140 37 3	34 48 2	100		
3 20 9	R	E PART OF SHIZUOKA PREF	9 32.6	0.2	138 48 1	34 38 1	0	5.4	
3 23 56	U	E OFF HOKKAIDO	55 47.0	1.8	148 52 10	43 25 7	0	5.0	
6 18 54	M	E OFF HOKKAIDO	53 22.9	1.5	148 57 8	43 45 4	40	5.7	
9 2 56	S	SETONAIKAI	56 25.9	0.3	133 22 2	34 7 2	20	5.0	
13 4 57	R	OFF URAKAWA	57 34.8	0.2	142 43 1	41 59 1	80		
14 12 56	R	BUNGO CHANNEL	56 6.4	0.2	132 7 1	33 26 1	60	5.8	
14 14 56	R	E OFF IBARAKI PREF	56 44.5	0.2	140 38 1	36 28 1	40	5.1	
15 9 55	S	SW PART OF IBARAKI PREF	55 35.8	0.1	139 49 1	36 7 1	60	5.1	
21 8 34	U	E OFF HOKKAIDO	33 10.0	1.2	149 35 7	43 32 6	0	5.7	
21 8 52	U	FAR E OFF HOKKAIDO	51 35.3	1.8	150 1 10	43 35 9	40	5.3	
27 22 47	R	SADOGASHIMA	47 39.4	0.3	138 17 2	38 2 1	40	5.8	
28 21 51	M	E OFF CHIBA PREF	50 59.3	0.8	141 21 4	35 23 2	40	5.1	
DEC. 7 20 20	M	S PART OF HOKKAIDO	20 15.0	0.2	143 18 2	42 38 2	120		
9 2 49	M	NEAR OSHIMA	49 40.0	0.2	139 18 1	34 35 1	0	5.8	
11 0 11	R	OFF OGA PEN	11 3.0	0.3	138 56 2	40 25 1	40	6.3	
11 8 30	M	OFF OGA PEN	30 45.1	1.2	138 48 6	40 30 4	40	5.3	
17 11 33	R	OFF CHIBA PREF	33 21.1	0.8	142 12 3	35 28 2	60	4.9	
17 14 19	U	KURILE IS	18 42.9	1.0	149 43 6	44 36 3	0	5.4	
18 15 5	M	OFF FUKUSHIMA PREF	5 12.9	1.0	142 10 6	37 4 3	0	5.0	
20 22 32	R	OFF FUKUSHIMA PREF	31 51.6	0.5	141 48 3	37 15 1	40	5.3	
24 4 48	S	S OFF KYUSHU	47 59.2	0.7	131 14 3	30 14 3	40	5.1	
25 4 54	S	NEAR OSHIMA	54 51.2	0.3	139 15 1	34 40 1	0	5.2	
25 22 50	S	NEAR OSHIMA	50 37.1	0.2	139 19 1	34 44 1	20	5.3	
26 2 1	M	NEAR OSHIMA	1 26.7	0.2	139 17 1	34 40 1	0	5.5	
29 12 31	R	FAR OFF MIYAGI PREF	30 42.8	0.4	144 1 2	37 58 1	80		
29 21 51	S	OFF OGA PEN	50 42.5	0.7	139 5 4	40 27 2	20	5.0	
31 0 28	R	S OFF HONSHU	27 24.1	0.2	139 31 2	31 21 2	280		
6 5 45	S	NEAR OSHIMA	45 13.5	0.2	139 17 1	34 38 1	20	5.1	
6 5 46	S	NEAR OSHIMA	46 5.0	0.9	139 31 3	34 41 3	20	5.3	
13 17 41	M	N PART OF MIYAGI PREF	40 53.5	0.1	141 8 1	38 43 1	0	5.2	
21 11 41	S	KUMANOGENADA	41 4.4	0.4	136 19 2	33 44 2	20	5.0	
24 6 51	R	OFF IBARAKI PREF	51 11.8	0.4	141 4 3	36 35 1	60	5.2	
27 8 47	M	E PART OF SAITAMA PREF	47 36.1	0.1	139 46 1	36 1 1	80		
FEB. 2 13 13	M	OFF FUKUSHIMA PREF	13 37.7	0.7	142 22 4	37 38 2	40	5.0	
16 21 24	R	OFF MIYAGI PREF	24 6.9	0.4	142 11 3	38 52 1	60	5.7	
21 13 39	S	OFF ETOROFU IS	38 51.6	1.3	147 57 7	43 54 5	0	5.2	
26 15 43	S	MIDDLE OF SHIMANE PREF	42 53.4	0.2	132 44 1	35 16 1	20	5.1	
MAR. 12 4 16	M	S PART OF HOKKAIDO	16 23.0	0.1	143 9 1	42 18 1	80		
17 1 46	R	E OFF AOMORI PREF	46 13.7	0.3	143 12 3	40 42 1	40	6.4	
19 20 53	M	E OFF AOMORI PREF	52 55.3	0.4	143 16 4	40 41 1	80		
29 19 47	R	E OFF AOMORI PREF	47 35.7	0.2	143 9 2	40 39 1	40	6.4	
30 21 11	R	WAKASA BAY	10 29.5	0.2	135 31 3	35 53 3	360		
31 0 59	M	E OFF AOMORI PREF	59 32.7	0.3	143 4 3	40 41 1	40	5.4	
APR. 5 22 53	R	S PART OF KURILE IS	52 16.5	1.0	150 24 5	43 45 3	60	5.7	
6 14 32	M	SW OF IBARAKI PREF	31 58.6	0.1	139 55 1	36 3 1	60	5.5	
12 20 22	M	E OFF IBARAKI PREF	22 1.4	0.5	141 4 3	36 28 1	40	4.6	
13 0 50	M	SW PART OF IBARAKI PREF	50 37.9	0.2	139 55 1	35 59 1	40	5.1	
13 5 42	R	S OFF HONSHU	41 14.3	0.5	138 54 3	30 8 4	450		
13 6 27	M	OFF TOMAKOMAI	27 9.7	0.2	141 54 2	42 24 1	120		
20 8 42	R	NEAR SHIZUOKA	41 58.4	0.2	138 18 1	34 53 1	20	6.1	DAMAGE, 2 KILLED
20 15 54	M	W OFF YAMAGATA PREF	54 40.1	0.1	139 22 1	38 47 1	0	4.9	
22 7 53	M	E OFF FUKUSHIMA PREF	52 45.5	0.3	141 50 2	37 50			

C=CLASS											
JST			DATE AND TIME			C LOCATION			ORIGIN TIME		
DATE	AND	TIME	D	H	M	C	LOCATION	M	S	+/-	+
1966(S41)	JAN.	3 3 59	M	NEAR MATSUSHIRO	59 12.8	0.2	138 12 1	36 31	1	0	4.7
		9 7 39	S	S PART OF NIIGATA PREF	39 17.6	0.2	138 33 1	37 9	1	0	5.2
		11 23 6	U	OFF SHIMA PEN	6 15.0	0.5	137 14 2	33 44	2	20	5.4
		11 23 16	R	OFF SHIMA PEN	16 27.4	0.3	137 17 1	33 36	1	20	5.9
		17 8 42	R	OFF ONAHAMA	41 55.4	0.2	141 12 2	36 53	1	40	4.8
		20 10 44	M	NEAR SADO	44 45.1	0.2	138 7 1	37 53	1	0	5.3
		23 20 15	M	NEAR MATSUSHIRO	15 55.3	0.1	138 13 1	36 31	1	0	5.1
	FEB.	24 8 9	S	OFF CHOSH	9 11.5	0.5	140 57 3	35 34	2	60	5.0
		18 9 28	M	E OFF IBARAKI PREF	27 51.8	0.2	140 39 1	36 27	1	60	5.1
		19 4 3	R	N OFF HOKKAIDO	2 49.4	0.2	143 18 2	44 11	1	240	
		19 23 19	M	SHIZUOKA PREF	19 19.8	0.1	138 26 2	35 13	1	200	
		20 7 49	M	E OFF HOKKAIDO	48 52.4	1.8	147 15 9	43 34	6	40	5.2
		28 11 2	R	W OFF HOKKAIDO	2 11.5	0.4	139 48 4	43 38	2	240	
		28 22 36	R	NEAR AMAMIOSHIMA	35 35.2	0.7	130 8 8	29 7	4	0	5.3
MAR.		5 13 48	M	SE PART OF HOKKAIDO	48 41.1	0.1	143 24 1	42 42	1	120	
		10 13 27	R	SE OFF KII PEN	26 20.9	0.6	137 54 3	32 20	5	400	
		14 15 38	S	OFF IBARAKI PREF	38 3.8	0.2	141 5 2	36 36	1	40	5.0
	APR.	19 17 11	M	SE COAST OF HOKKAIDO	11 49.6	0.7	145 47 4	42 58	2	40	5.3
		3 7 43	M	E OFF MIYAGI PREF	43 19.5	0.4	142 17 3	38 25	7	40	5.3
		3 13 43	R	E OFF IBARKI PREF	43 30.3	0.1	141 31 6	36 16	2	20	5.8
		5 13 58	M	E OFF HOKKAIDO	57 41.8	1.0	147 14 5	43 28	3	0	5.1
		5 17 51	S	NEAR MATSUSHIRO	51 14.7	0.2	138 19 1	36 35	1	0	5.4
		7 4 46	S	S OFF KYUSHU	45 44.4	2.6	131 27 6	29 31	10	40	5.4
		16 2 59	M	OFF IBARAKI PREF	59 31.5	0.6	141 6 4	36 24	1	20	4.9
		16 19 13	U	E OFF CHIBA PREF	13 20.3	1.3	142 4 6	34 48	3	60	5.2
		22 0 45	U	E OFF KWANTO	45 18.3	1.0	142 17 5	35 30	3	40	5.8
	MAY	22 2 37	U	E OFF KWANTO	36 42.2	1.0	142 13 5	35 30	2	40	5.5
		6 19 8	L	NEAR MATSUSHIRO	8 12.6	0.1	138 15 1	36 31	1	0	5.0
		15 1 59	M	OFF IZU PEN	59 47.7	0.2	139 0 1	34 5	1	20	5.4
		15 2 4	M	OFF IZU PEN	3 53.1	0.3	139 0 1	34 4	1	20	5.5
		16 22 7	S	NEAR YAKUSHIMA	6 37.7	1.7	130 21 7	30 15	7	60	5.1
		17 9 59	S	E OFF CHIBA PREF	59 3.7	0.3	140 37 2	35 40	1	40	5.1
		26 7 49	M	S OFF GIFU PREF	49 43.7	0.1	136 30 1	35 21	1	20	5.1
JUNE		28 14 21	M	NEAR MATSUSHIRO	21 19.7	0.1	138 13 1	36 34	1	0	5.3
		5 8 49	U	KURILE IS	48 29.8	1.1	152 1 6	44 57	4	20	6.0
		10 0 39	M	E OFF HOKKAIDO	39 27.8	1.1	147 37 7	43 51	4	120	
		12 9 43	M	NEAR MATSUSHIRO	43 5.3	0.1	138 19 1	36 32	1	0	5.0
		15 6 4	R	S OFF HONSHU	3 46.9	0.5	139 3 3	30 51	3	450	
		23 14 2	R	OFF SHAKOTAN PEN	1 43.2	0.3	140 15 3	43 33	1	240	
		24 6 52	R	E OFF MIYAGI PREF	51 55.5	0.3	141 46 2	38 1	1	60	5.1
		26 16 34	S	NEAR MATSUSHIRO	34 50.0	0.1	138 21 1	36 33	1	0	5.0
	JULY	29 21 72	M	E PART OF HYOGO PREF	21 56.8	0.2	135 24 1	34 47	1	0	4.7
		14 15 19	M	E COAST OF CHIBA PREF	18 40.7	0.3	140 23 1	35 13	1	40	5.1
		18 13 39	M	E OFF MIYAGI PREF	39 21.3	0.8	141 48 5	38 22	3	40	4.8
		30 7 8	M	E OFF IBARAKI PREF	7 51.7	0.9	141 52 5	36 7	2	20	4.8
AUG.		2 5 32	U	KURILE IS	32 3.1	1.9	150 4 11	43 50	9	0	5.4
		3 3 48	M	NEAR MATSUSHIRO	48 32.8	0.1	138 12 1	36 28	1	0	5.3
		8 5 18	R	S PART OF HOKKAIDO	18 41.4	0.2	143 8 2	42 18	1	60	5.2
		8 9 37	S	NEAR MATSUSHIRO	37 15.8	0.1	138 19 1	36 32	1	0	5.1
		13 4 22	R	ENSHUNADNA	22 25.8	0.1	137 37 2	34 0	2	320	
		19 21 46	R	OFF IBARAKI PREF	46 20.9	0.8	141 58 4	36 17	2	40	5.7
		20 18 32	R	W OFF HOKKAIDO	32 31.6	0.2	140 50 3	42 59	1	160	
		28 13 9	M	NEAR MATSUSHIRO	9 20.1	0.1	138 8 1	36 28	0	0	5.3
		29 0 36	S	NEAR MATSUSHIRO	36 14.1	0.2	138 15 1	36 34	1	0	5.1
		29 5 3	M	TOKYO RAY	3 30.7	0.2	139 54 2	35 25	1	80	
SEPT.		1 23 16	U	SE OFF HACHIJOGIMA	16 14.7	1.6	142 32 7	32 7	6	60	5.0
		14 10 14	M	NEAR MATSUSHIRO	14 15.5	0.2	138 15 1	36 34	1	0	5.0
		18 9 35	M	FUKUSHIMA PREF	35 19.4	0.2	140 46 3	37 5	1	80	
	OCT.	18 14 22	M	NEAR URAKAWA	22 30.0	0.3	143 1 2	42 14	2	60	4.9
		16 3 0	S	OFF ERIMOMISAKI	0 4.7	0.3	143 6 2	41 47	1	40	5.0
		16 18 14	U	E OFF TORISHIMA	13 36.6	0.8	142 54 3	30 34	3	40	5.5
		26 3 4	M	NEAR MATSUSHIRO	4 6.7	0.2	138 22 1	36 33	1	0	5.3
		26 14 23	R	OFF URAKAWA	22 55.6	0.2	142 45 2	42 2	2	80	
		28 8 47	M	NE OFF SHIRIYAZAKI	46 47.2	0.1	142 3 1	41 35	1	60	5.0
		28 22 20	S	N PART OF CHIBA PREF	20 28.1	0.2	140 13 1	35 45	1	60	5.0
	NOV.	29 23 32	M	OFF ERIMOMISAKI	32 38.4	0.4	144 25 3	41 39	1	60	5.1
		1 16 1	R	MIDDLE PART OF HOKKAIDO	1 1.0	0.2	143 26 1	43 6	2	120	
		3 2 25	M</td								

C=CLASS

DATE AND TIME	JST D H M	C LOCATION	ORIGIN TIME M S +/-S	LONG. +/ -	LAT. +/ -	H	M	REMARKS	EARTHQUAKE	
									KM	
1967(S42)	NOV. 4 23 30	R E PART OF HOKKAIDO	30 34.8 0.3	144 16 2	43 29 1	20	6.5	DAMAGE		
	4 23 45	S E PART OF HOKKAIDO	45 57.7 0.3	144 10 2	43 30 1	0	5.7			
	8 10 56	S E OFF CHIBA PREF	56 10.8 0.7	141 10 3	35 27 2	40	5.0			
	10 3 19	M MIDDLE OF CHIBA PREF	19 33.6 0.3	140 13 2	35 30 1	80				
	12 11 28	U E OFF HOKKAIDO	27 26.9 2.1	149 16 11	43 52 8	30	5.1			
	13 20 17	M SE OFF KWANTO	17 15.1 1.3	141 48 7	34 24 3	50	4.5			
	19 21 7	R OFF IBARAKI PREF	6 59.2 0.4	141 13 3	36 26 1	50	6.0			
	20 19 48	U NEAR HACHIJOGIMA	48 32.7 1.1	141 1 4	32 34 4	0	5.1			
	26 9 8	R E OFF AMAMI-OISHIMA	8 8.3 1.3	130 17 11	28 28 5	40	5.6			
	28 11 37	R SW OFF MIYAZAKI PREF	36 54.7 0.2	130 57 1	32 5 1	130				
1968(S43)	DEC. 7 15 46	M OFF IBARAKI PREF	46 30.9 0.5	141 27 3	36 37 1	40	4.7			
	7 20 13	U E OFF HACHIJOGIMA	12 28.8 1.0	142 1 4	33 36 3	40	5.6			
	12 1 13	R SE OFF BOSO PEN	12 42.7 0.7	141 27 4	34 12 2	50	5.0			
	19 8 36	M E OFF AOMORI PREF	30 22.4 0.4	142 44 3	41 4 1	40	4.8			
	24 4 16	M E OFF AOMORI PREF	16 27.9 0.3	142 50 2	40 42 1	20	5.1			
	26 16 55	M NEAR MATSUSHIRO	55 19.0 0.2	138 9 1	36 31 1	0	5.3			
	29 19 19	R E OFF HOKKAIDO	19 2.4 0.8	147 0 4	43 11 3	30	6.9	TSUNAMI		
	29 19 42	U E OFF HOKKAIDO	42 3.8 1.7	147 28 9	42 59 5	20	5.3			
	29 20 44	U E OFF HOKKAIDO	43 56.8 1.4	147 36 7	42 58 5	50	5.4			
	30 1 43	R E OFF HOKKAIDO	42 50.0 1.6	147 10 8	43 12 7	40	5.7			
	30 10 30	M E OFF HOKKAIDO	30 16.5 1.0	146 49 5	43 1 4	30	5.3			
	30 10 48	U E OFF HOKKAIDO	48 27.8 1.7	147 17 9	42 49 5	0	5.4			
	30 11 38	U E OFF HOKKAIDO	38 16.1 1.3	147 9 7	42 49 3	20	5.1			
	30 12 2	R E OFF HOKKAIDO	1 41.7 1.3	147 34 7	42 54 4	50	5.6			
	30 12 24	U E OFF HOKKAIDO	23 40.5 1.0	147 17 6	42 59 3	0	5.3			
FEB.	30 13 11	U E OFF HOKKAIDO	10 36.2 0.8	147 27 4	42 57 3	40	5.1			
	31 3 35	U E OFF HOKKAIDO	35 0.0 2.5	147 9 13	42 48 8	0	5.0			
	1 21 47	L E OFF HOKKAIDO	47 23.4 1.2	146 41 6	42 59 4	10	5.3			
	2 4 2	S E OFF HOKKAIDO	2 6.8 2.6	147 27 15	42 50 7	60	5.0			
	3 20 31	S E OFF HOKKAIDO	30 43.4 1.0	147 2 5	43 3 3	50	5.3			
	4 18 10	M E OFF HOKKAIDO	10 21.7 1.8	147 17 9	42 42 6	10	5.3			
	4 20 1	R E OFF HOKKAIDO	0 48.3 1.3	147 5 7	42 40 3	10	5.8			
	7 21 15	M E OFF HOKKAIDO	15 16.7 1.8	145 59 9	42 57 6	30	5.0			
	8 21 4	M E OFF HOKKAIDO	4 0.5 1.6	148 22 9	42 41 5	60	5.3			
	13 20 30	M E OFF AOMORI PREF	30 2.6 0.3	142 0 2	41 28 1	0	4.6			
	14 11 31	M N OFF KYUETO PREF	31 25.8 0.2	135 21 1	35 13 1	10	4.8			
MAR.	21 8 51	S SW OFF MIYAZAKI PREF	51 37.4 0.3	130 43 1	32 1 1	0	5.7			
	21 10 45	R SW OFF MIYAZAKI PREF	44 49.9 0.2	130 43 1	32 1 1	0	6.1	DAMAGED, 3 KILLED		
	22 19 19	S SW OFF MIYAZAKI PREF	19 45.0 0.3	130 46 2	32 0 1	0	5.6			
	25 0 24	L NEAR NIJJIMA	24 28.9 0.3	139 15 1	34 14 1	0	5.0			
	25 0 34	L NEAR NIJJIMA	34 18.9 0.9	139 7 3	34 8 3	20	5.0			
	25 19 26	R N OFF HOKKAIDO	25 52.8 0.7	142 10 10	45 12 5	300				
	26 5 0	R OFF FUKUSHIMA PREF	0 30.7 0.3	141 37 2	37 34 1	50	5.4			
	28 21 8	R OFF TOKAI	8 1.9 0.3	137 56 2	32 55 2	340				
	6 9 12	S SW OFF IBARAKI PREF	12 32.9 0.2	139 55 1	36 3 1	50	5.2			
	7 11 54	S MIDDLE OF CHIBA PREF	54 42.6 0.2	140 8 1	35 32 1	50	5.1			
	23 5 35	M OFF FUKUSHIMA PREF	34 43.2 0.6	142 41 3	37 27 2	40	5.4			
APR.	25 0 58	M SW OFF MIYAZAKI PREF	58 47.8 0.3	130 43 1	32 1 1	0	5.7			
	25 1 21	S SW OFF MIYAZAKI PREF	20 59.6 0.4	130 44 2	31 59 2	10	5.4			
	28 3 54	U W OFF AOMORI PREF	53 28.5 0.8	138 20 4	40 51 2	0	5.0			
	29 23 30	R FAR OFF SANRIKU	30 2.8 0.4	144 55 3	40 15 1	80				
	30 4 4	S NEAR WAKAYAMA	4 29.3 0.2	135 10 1	0	5.0				
	1 9 42	R HYUGANADA	42 1.5 0.5	132 32 2	32 17 2	30	7.5			
	1 16 13	R HYUGANADA	13 14.2 0.4	132 23 7	32 18 2	0	6.3	TSUNAMI, 236cm AT HOSOJIMA		
	4 19 54	S NEAR KATSUSHIRO	54 13.9 0.2	138 11 1	36 34 1	0	5.1			
	7 3 28	M E OFF FUKUSHIMA PREF	28 3.3 0.2	141 2 2	37 43 1	80				
	7 11 47	M OFF MIYAGI PREF	47 41.4 0.6	141 47 4	38 19 2	40	4.9			
MAY	14 22 5	U E OFF HACHIJOGIMA	4 57.1 1.0	142 19 5	33 4 4	60	5.3			
	21 17 34	R FAR OFF SANRIKU	33 58.5 0.4	143 28 2	38 36 1	60	5.8			
	26 22 21	M OFF FUKUSHIMA PREF	21 9.2 0.2	141 43 1	37 18 1	40	5.3			
	27 23 47	M FAR OFF SANRIKU	47 1.4 1.3	143 21 6	38 21 3	10	4.6			
	1 17 44	R OFF MIYAGI PREF	43 42.7 0.7	143 31 4	38 34 2	60	5.5			
	2 4 13	R E OFF AOMORI PREF	12 53.9 0.4	142 37 3	40 50 1	40	5.3			
	3 14 33	S RYUKYU IS	32 47.2 0.8	125 1 12	24 57 12	30	5.7			
	9 23 22	R OFF SHIMA PEN	22 5.2 0.5	136 56 2	34 1 3	0	5.6			
	10 0 3	M OFF SHIMA PEN	3 25.2 0.5	136 51 2	34 9 2	0	4.5			
	14 23 5	R SW OFF YAKUSHIMA	5 3.3 0.5	129 48 5	29 35 3	160				

C=CLASS

DATE	AND TIME	C	LOCATION	ORIGIN	TIME	LONG.	LAT.	H	M	REMARKS
1968(S43) MAY 30	14 24	R	S OFF KURILE IS	23 51.2	1.5	149 59	8	43 39	6	60 5.8
JUNE 1	4 52	M	E OFF AOMORI PREF	51 58.1	0.2	142 55	2	41 24	1	40 5.3
1 19 32	R	OFF IWATE PREF	31 47.2	0.2	142 30	1	40 10	1	30 5.7	
3 17 32	M	OFF IBARAKI PREF	31 54.2	0.9	141 34	4	35 55	2	0 5.0	
3 23 17	R	S OF KURILE IS	16 20.6	0.9	148 35	6	44 50	3	180	
5 0 10	M	S OFF HOKKAIDO	10 11.2	0.5	142 51	3	41 46	2	50 4.9	
7 3 21	M	E OFF AOMORI PREF	21 23.2	0.2	142 25	2	40 39	1	90	
7 6 17	R	E OFF AOMORI PREF	17 14.0	0.2	142 38	2	41 16	1	40 5.7	
7 7 52	R	E OFF HOKKAIDO	52 1.0	1.6	148 16	8	43 44	11	20 5.2	
8 11 45	M	E OFF N HONSHU	44 34.4	0.7	144 0	4	40 34	2	50 5.3	
8 14 30	R	E OFF HOKKAIDO	29 46.6	1.1	147 5	5	43 8	4	40 5.7	
9 5 55	M	E OFF AOMORI PREF	54 45.0	0.3	142 19	2	41 21	1	40 5.3	
9 6 42	L	NEAR AMAMIOSHIMA	42 1.2	1.7	129 53	21	28 8	10	0 5.4	
9 22 48	U	E OFF N HONSHU	48 8.1	0.5	144 20	4	40 13	2	50 5.0	
12 22 42	R	OFF IWATE PREF	41 42.8	0.4	143 8	3	39 25	1	0 7.2	
12 23 17	M	OFF IWATE PREF	17 23.3	0.6	142 56	3	39 17	2	20 5.5	
12 23 38	M	OFF IWATE PREF	38 10.3	0.6	142 56	4	39 18	2	30 5.3	
12 23 44	S	OFF IWATE PREF	44 2.9	1.0	143 5	6	39 16	2	30 5.1	
13 0 9	M	E OFF N HONSHU	8 49.9	0.6	143 16	3	39 29	2	40 5.2	
13 0 24	M	E OFF N HONSHU	23 50.2	0.5	143 16	3	39 31	1	40 5.1	
13 0 49	M	OFF IWATE PREF	48 57.4	0.5	143 12	3	39 18	2	40 5.3	
13 1 23	S	E OFF N HONSHU	23 16.4	1.0	143 39	7	39 30	3	60 5.0	
13 1 29	S	E OFF N HONSHU	29 11.0	0.8	143 16	4	39 12	2	30 5.1	
13 2 52	R	OFF IWATE PREF	51 58.9	0.4	143 6	2	39 9	1	40 5.6	
13 3 49	M	OFF IWATE PREF	48 50.7	0.4	143 2	2	39 20	1	40 5.1	
13 3 56	M	E OFF N HONSHU	55 42.1	0.6	143 46	3	39 32	2	40 5.3	
13 5 13	M	E OFF N HONSHU	13 10.2	0.6	143 38	3	39 11	2	40 5.2	
13 6 57	R	OFF IWATE PREF	57 38.1	0.4	143 5	2	39 19	1	40 6.1	
13 9 5	R	OFF IWATE PREF	4 58.6	0.3	143 15	2	39 29	1	40 5.8	
13 9 42	M	OFF IWATE PREF	42 12.4	0.4	143 1	2	39 17	1	40 5.2	
13 10 43	S	OFF IWATE PREF	42 53.4	0.6	143 12	3	39 25	1	40 5.0	
13 11 5	R	OFF IWATE PREF	5 39.7	0.3	143 10	2	39 25	1	30 5.8	
13 17 48	M	E OFF N HONSHU	48 9.5	0.7	143 32	4	39 7	2	50 5.4	
13 20 56	R	E OFF N HONSHU	56 20.0	0.5	143 17	3	39 14	1	40 5.7	
13 23 56	M	OFF IWATE PREF	56 13.0	0.4	143 10	2	39 26	1	30 5.2	
14 6 10	R	OFF IWATE PREF	10 33.4	0.3	143 6	2	39 25	1	40 5.8	
14 9 46	S	OFF IWATE PREF	46 4.4	0.7	143 4	4	39 29	1	20 5.0	
14 12 18	M	OFF IWATE PREF	18 12.7	0.4	142 57	2	39 25	1	20 5.7	
14 20 52	R	OFF IWATE PREF	52 35.8	0.4	143 7	2	39 20	1	30 5.5	
15 11 14	M	SE OF NIIGATA PREF	14 8.5	0.2	138 40	1	37 9	1	10 5.0	
15 12 31	M	OFF IWATE PREF	31 16.2	0.3	142 59	2	39 24	1	40 5.5	
15 14 59	R	W OFF RYUKYU IS	59 3.4	0.5	126 27	4	26 53	2	100	
16 4 53	M	S OFF HOKKAIDO	53 10.3	0.4	142 53	2	41 42	2	50 5.3	
17 20 53	R	E OFF N HONSHU	52 54.5	0.4	143 22	3	40 56	1	10 6.4	
18 1 56	M	E OFF N HONSHU	56 13.4	0.5	144 8	3	40 8	1	60 5.6	
18 3 57	R	E OFF N HONSHU	57 22.1	0.9	144 13	5	38 38	2	40 6.0	
19 10 38	M	OFF IWATE PREF	38 14.8	0.5	143 11	3	39 27	2	50 5.7	
20 3 3	M	E OFF N HONSHU	3 18.9	0.5	143 41	4	40 17	1	70	
20 17 15	S	OFF IWATE PREF	15 7.0	0.5	142 32	3	40 6	1	40 5.0	
21 3 12	M	E OFF AOMORI PREF	12 22.5	0.5	142 47	3	41 25	1	30 4.9	
22 10 12	R	E OFF N HONSHU	12 31.3	0.4	143 54	2	40 20	1	70	
26 8 33	R	E OFF N HONSHU	33 15.0	0.8	144 0	4	39 30	2	50 5.5	
26 19 23	R	S OFF HOKKAIDO	23 49.5	0.2	142 49	2	41 54	1	40 5.7	
28 2 12	M	OFF IWATE PREF	11 55.2	0.4	142 32	3	40 10	1	30 5.0	
28 23 24	U	E OFF N HONSHU	23 57.6	0.6	143 53	3	40 22	2	30 5.2	
30 23 48	M	OFF MIYAGI PREF	48 38.0	0.8	142 40	4	38 46	2	40 5.2	
JULY 1 19 45	R	MIDDLE OF SAITAMA PREF	45 11.8	0.2	139 26	1	35 59	1	50 6.1	
3 1 44	U	E OFF N HONSHU	43 48.7	1.0	144 6	7	39 41	3	0 5.0	
4 9 34	M	E OFF OSHIMA	34 12.4	0.2	139 48	1	34 50	1	100	
4 16 12	M	E OFF HOKKAIDO	12 24.9	1.8	147 25	10	43 38	8	70	
5 20 28	R	E OFF MIYAGI PREF	28 11.4	0.5	142 13	3	38 26	1	50 6.4	
7 22 16	R	OFF IWATE PREF	16 10.6	0.5	142 51	3	39 24	1	10 5.1	
8 9 19	M	E OFF N HONSHU	18 36.7	0.7	143 29	6	40 47	2	20 5.0	
9 17 6	S	OFF IWATE PREF	6 3.6	0.6	142 55	3	39 25	1	0 5.3	
9 17 28	M	E OFF N HONSHU	28 17.7	1.2	144 6	4	40 21	4	60 5.1	
11 5 40	R	E OFF N HONSHU	40 27.9	0.4	143 34	3	40 11	1	30 5.7	
11 7 21	M	E OFF N HONSHU	21 7.5	0.4	143 40	3	40 14	1	40 5.1	
12 9 44	R	E OFF N HONSHU	44 33.6	0.4	143 29	2	39 34	1	40 6.4	
12 12 56	R	E OFF N HONSHU	56 24.5	0.4	143 26	2	39 35	1	30 5.8	
14 14 25	M	E OFF N HONSHU	24 43.7	0.5	143 18	3	40 47	1	20 4.9	
18 20 21	M	E OFF N HONSHU	20 57.4	0.4	143 52	3	40 15	2	70	
22 9 14	M	S OFF HOKKAIDO	13 55.2	0.2	142 30	1	42 10	1	80	
24 3 9	M	E OFF N HONSHU	9 15.6	0.5	143 50	3	39 53	2	40 5.1	
24 8 3	R	E OFF N HONSHU	2 35.3	0.7	143 42	4	40 16	2	50 5.7	
25 19 51	U	NEAR ETOROFU IS	50 37.1	1.4	146 21	8	45 17	7	50 5.4	
27 7 7	M	OFF IWATE PREF	7 7.9	0.5	142 3	4	39 21	2	110	
29 0 55	M	E OFF AOMORI PREF	55 0.0	0.5	143 0	3	40 54	1	0 4.7	
31 10 37	U	E OFF N HONSHU	37 23.8	1.1	143 52	7	40 19	3	30 5.0	
AUG. 2 3 27	M	OFF AKITA PREF	27 18.5	0.4	139 8	2	40 4	1	30 4.8	
3 13 54	R	RYUKYU IS	54 33.9	1.7	128 17	7	25 39	8	100	

C=CLASS

DATE	AND	TIME	C	LOCATION	ORIGIN	TIME	LONG.	LAT.	H	M	REMARKS	
1968(S43)	AUG.	6 1 17	R	W COAST OF EHIME PREF	17	6.0	0.2	132 23 1	33 18 1	40	6.6	DAMAGE
		6 5 51	M	W COAST OF EHIME PREF	51	20.7	0.3	132 24 2	33 22 1	40	4.8	
		6 11 34	M	W COAST OF EHIME PREF	34	39.0	0.3	132 24 2	33 20 2	40	4.9	
		6 13 21	R	W COAST OF EHIME PREF	21	3.4	0.3	132 27 2	33 21 1	40	5.3	
		7 17 0	R	SE OF HOKKAIDO	0	13.2	0.3	144 58 2	42 58 2	80		
		8 13 55	M	OFF IBARAKI PREF	55	5.4	0.6	141 35 3	36 21 1	10	5.6	
		9 19 38	U	E OFF HOKKAIDO	38	0.4	1.3	147 34 7	43 28 5	60	5.1	
		13 5 32	M	E OFF AOMORI PREF	31	45.8	0.3	142 50 2	41 25 1	10	5.2	
		16 19 39	R	E OFF N HONSHU	39	8.6	0.5	143 51 3	38 34 1	0	5.9	
		17 13 38	U	NE OFF TORISHIMA	38	4.8	0.7	141 12 4	31 48 3	40	5.3	
		18 16 12	R	MIDDLE OF KYOTO PREF	12	13.3	0.3	135 23 1	35 13 1	0	5.6	
		18 16 13	S	MIDDLE OF KYOTO PREF	13	11.8	0.5	135 23 2	35 10 3	40	5.2	
		25 18 7	M	E OFF N HONSHU	7	28.6	0.5	143 33 3	40 2 2	30	5.8	
		25 18 14	R	E OFF N HONSHU	13	46.5	0.4	143 32 3	40 2 2	50	5.7	
		30 11 45	R	OFF IWATE PREF	44	51.0	0.4	142 57 2	40 1 1	30	5.4	
SEPT		1 1 45	U	FAR OFF SANRIKU	45	25.9	0.8	144 2 5	39 41 2	60	5.0	
		1 18 24	U	NEAR ETOROFU IS	23	52.1	1.2	148 38 8	44 18 11	0	5.2	
		3 14 23	R	SE OFF NEMURU PEN	23	27.9	0.7	145 43 4	42 47 2	60	5.2	
		3 16 1	R	OFF MIYAGI PREF	1	35.1	0.4	141 50 3	37 55 1	80		
		7 4 23	M	NEAR YAKUSHIMA	22	45.7	0.5	131 59 2	30 54 2	70		
		12 22 36	U	FAR OFF SANRIKU	36	27.9	0.3	143 54 2	39 44 1	60	5.2	
		13 14 6	M	OFF MIYAGI PREF	6	17.7	0.3	142 20 2	38 41 1	40	4.4	
		15 19 50	R	FAR OFF SANRIKU	50	10.7	0.6	143 31 3	40 46 2	20	5.8	
		20 22 54	M	FAR OFF SANRIKU	53	32.6	0.6	143 50 3	40 37 2	20	5.2	
		21 7 25	M	N PART OF NAGANO PREF	25	31.2	0.2	138 16 1	36 49 1	10	5.3	
		21 22 6	R	OFF URAKAWA	5	59.7	0.2	142 48 2	41 59 1	80		
		23 14 4	M	FAR OFF SANRIKU	3	44.9	1.0	143 53 5	40 15 3	10	5.7	
		24 12 35	R	FAR OFF SANRIKU	34	45.0	0.4	143 55 3	40 17 1	20	5.8	
		24 13 46	U	FAR OFF SANRIKU	46	0.7	0.8	144 8 5	40 16 2	50	5.3	
		26 6 37	R	OFF URAKAWA	36	49.8	0.2	142 8 2	41 52 1	80		
		28 19 48	M	HYUGANADA	48	39.5	0.4	132 11 1	32 17 2	0	4.6	
OCT.		29 3 20	M	OFF URAKAWA	20	29.4	0.2	142 15 2	41 58 1	70		
		4 9 40	M	OFF URAKAWA	40	0.4	0.3	142 54 2	41 37 1	40	5.4	
		4 13 24	M	OFF SANRIKU	24	5.1	0.7	143 46 4	40 19 1	20	5.0	
		8 4 22	R	NEAR BONIN IS	20	17.2	0.8	140 56 4	26 9 3	480		
		8 5 49	R	OFF URAKAWA	49	3.6	0.2	142 43 2	41 49 1	60	6.2	
		8 9 50	M	MIDDLE OF CHIBA PREF	50	40.2	0.3	140 9 2	35 31 1	70		
		14 18 11	R	OFF MIYAGI PREF	11	22.6	0.5	142 18 3	38 19 1	20	5.3	
		16 16 46	L	NEAR AMAMIOSHIMA	45	44.6	1.3	129 58 13	28 52 4	0	5.4	
		17 22 28	M	OFF IWATE PREF	28	22.5	0.4	142 7 4	39 18 1	50	4.9	
NOV.		27 0 56	M	SE OFF NEMURU PEN	56	25.5	0.7	145 43 4	42 48 2	60	5.2	
		28 23 41	R	NEAR HACHIJOGIMA	40	41.7	0.5	140 52 3	33 35 1	40	5.3	
		29 13 6	U	NE OFF TORISHIMA	6	8.0	1.4	142 4 8	31 36 6	50	5.4	
		31 16 40	M	OFF MIYAGI PREF	40	15.3	0.8	142 20 5	38 19 2	30	4.7	
		1 22 58	M	OFF FUKUSHIMA PREF	58	10.1	0.5	142 9 3	37 16 1	20	4.8	
		3 23 54	U	FAR OFF SANRIKU	53	29.1	1.1	144 5 6	40 12 3	0	5.0	
		7 18 19	R	OFF IWATE PREF	19	3.9	0.3	142 33 2	40 8 1	40	5.4	
		7 23 37	U	E OFF HOKKAIDO	36	44.5	2.1	149 39 12	43 34 13	40	5.3	
		11 23 41	R	FAR OFF SANRIKU	41	12.5	0.4	143 25 2	40 7 1	30	6.0	
		12 9 44	S	NEAR AMAMIOSHIMA	44	12.1	0.4	128 25 7	27 28 3	20	5.6	
		12 14 53	U	NEAR AMAMIOSHIMA	52	33.2	1.2	129 41 12	27 43 7	60	5.0	
		12 17 57	R	OFF KUSHIRO	57	27.1	0.3	144 13 2	41 10 1	70		
		12 18 54	R	NEAR AMAMIOSHIMA	53	37.5	1.7	130 17 15	28 48 6	0	5.5	
		12 23 4	M	OFF IWATE PREF	4	31.2	0.3	142 50 2	40 4 1	30	5.2	
		14 3 41	R	OFF IWATE PREF	41	44.7	0.3	142 47 2	40 9 1	30	6.0	
		14 21 12	S	HYUGANADA	11	51.0	0.7	131 53 3	31 32 2	10	5.3	
		15 10 47	M	OFF URAKAWA	47	15.3	0.2	142 46 7	41 37 1	80		
		17 21 59	U	FAR OFF SANRIKU	59	6.2	0.5	143 35 3	39 43 2	40	5.0	
		18 15 2	M	OFF FUKUSHIMA PREF	2	29.0	0.5	141 48 3	37 15 1	50	4.8	
		25 6 21	R	OFF IWATE PREF	20	58.2	0.3	142 34 2	40 16 1	50	6.0	
DFC.		28 16 0	M	OFF IWATE PREF	0	5.3	0.5	142 34 3	40 6 1	20	5.3	
		5 21 59	R	OFF URAKAWA	58	59.3	0.2	142 59 2	42 6 1	50	5.0	
		11 20 45	M	E PART OF KOCHI PREF	45	30.0	0.3	134 6 2	33 30 2	50	5.6	
		14 13 58	M	NEAR YAKUSHIMA	57	44.5	1.9	130 56 6	29 54 7	60	5.3	
		17 6 23	U	FAR OFF SANRIKU	22	55.2	1.0	143 52 5	39 47 3	40	5.5	
		18 7 16	S	FAR OFF SANRIKU	16	19.1	0.5	143 55 3	39 48 2	20	5.0	
		19 4 40	M	FAR OFF SANRIKU	40	32.5	0.5	143 23 3	40 48 1	30	5.1	
		21 21 58	M	FAR OFF SANRIKU	58	11.0	0.9	144 16 5	40 35 2	50	5.2	
		24 21 1	M	SE OFF NEMURU PEN	1	28.5	0.9	146 52 5	43 23 3	40	4.6	
		25 12 56	M	OFF URAKAWA	56	37.4	0.2	142 54 2	41 40 1	30	5.6	
JST		10 12 21	U	S OFF YAKUSHIMA	20	54.5	1.4	130 53 7	29 5 5	10	5.2	
		15 1 2	M	OFF FUKUSHIMA PREF	1	58.5	0.5	141 40 3	37 27 1	50	4.9	
		19 16 2	R	NE OFF HOKKAIDO	2	9.4	0.4	143 29 3	44 33 3	260		
		20 3 4	M	E OFF AOMORI PREF	4	23.7	0.4	142 39 3	41 9 1	40	5.0	
FER.		1 0 39	U	FAR OFF SANRIKU	38	27.0	1.9	144 33 11	39 57 5	0	5.0	
		17 16 29	M	COAST OF FUKUSHIMA PREF	29	7.5	0.3	141 2 4	37 27 2	80		
		28 6 6	M	IYONADA	5	46.7	0.3	132 5 2	33 38 2	70		
MAR.		8 19 20	R	W OFF AOMORI PREF	20	8.7	0.6	139 53 6	41 17 2	190		
		9 20 36	R	NW OF KURILE IS	35	32.0	1.1	148 34 12	47 34 7	360		
		17 0 54	R	OFF MIYAGI PREF	56	14.3	0.5	162 59 3	38 32 1	70		

C=CLASS

JST			ORIGIN TIME			LONG.			LAT.			H M			REMARKS		
DATE	AND TIME	C LOCATION	M	S	+/-	H	M	+/-	KM								
1969(S44) MAR.	17 0 57	M OFF MIYAGI PREF	57 37.5	1.0	142 52 5	38 26	2	50	5.2								
	17 1 57	M OFF TOKACHI	57 4.0	0.4	143 4 2	41 1	1	10	4.9								
	19 1 17	U S OF KURILE IS	16 42.9	2.0	150 18 10	43 28	9	50	5.2								
	19 2 3	O R NEAR AMAMIOSHIMA	59 22.7	0.5	128 44 8	28 21	5	180									
	21 1 40	L E OFF TANEGASHIMA	39 49.1	1.4	131 15 5	30 27	4	0	5.0								
	21 12 5	R FAR OFF SANRIKU	6 5.9	0.7	144 5 4	40 20	2	30	5.6								
	1 4 26	R MIDDLE OF JAPAN SEA	25 25.3	0.3	134 34 2	38 34	2	420									
	4 21 57	R MIDDLE OF TOCHIGI PREF	57 25.2	0.1	139 46 1	36 47	1	100									
	10 23 55	U W OF JAPAN SEA	54 3.9	0.0	130 54 0	42 0	0	555	5.6	USCGS							
	13 22 13	S NE OF OKINAWA	12 32.6	1.0	129 57 13	29 5	5	0	5.1								
APR.	16 2 31	R FAR OFF SANRIKU	30 51.3	0.5	143 52 3	39 50	2	20	5.9								
	17 13 56	M FAR OFF SANRIKU	56 12.8	0.6	143 47 4	39 34	2	70									
	19 10 23	M OFF MIYAGI PREF	23 19.5	0.5	141 59 3	37 55	1	40	4.8								
	21 16 19	R HYUGANADA	19 24.5	0.5	132 7 2	32 9	2	10	6.5								
	22 17 11	R FAR OFF SANRIKU	11 18.4	0.5	143 25 3	39 50	2	60	5.9								
	3 5 40	M OFF SANRIKU	40 8.7	0.4	143 14 3	40 55	1	40	5.2								
	3 7 45	M OFF IWATE PREF	45 41.8	0.3	142 32 2	40 8	1	30	5.1								
	9 5 52	U S OF KURILE IS	52 9.9	1.3	148 43 7	44 4	13	40	5.0								
	11 19 43	R S OFF KURILE IS	42 46.4	1.1	148 49 6	43 38	5	50	5.2								
	13 23 19	R KASHIMANADA	19 43.2	0.2	140 40 2	36 28	1	50	5.2								
MAY	15 10 56	R SE OFF CHINA PREF	56 8.0	0.3	140 6 2	34 54	1	70									
	16 15 57	R SE OFF KII PEN	56 39.6	0.3	130 52 2	32 58	3	400									
	19 5 56	M E OFF AOMORI PREF	56 22.9	0.3	142 30 3	41 22	1	40	4.8								
	20 15 36	M OFF MIYAGI PREF	35 58.8	0.3	141 50 3	38 21	1	60	4.8								
	20 15 57	R FAR OFF SANRIKU	52 57.8	0.9	144 12 5	40 13	3	0	5.0								
	6 3 42	M OFF FUKUSHIMA PREF	42 0.9	0.5	141 41 3	37 36	1	60	4.3								
	10 8 10	U E OFF HOKKAIDO	9 47.8	2.6	149 39 15	43 29	3	50	5.0								
	11 7 52	U FAR OFF SANRIKU	51 42.9	1.1	144 26 7	40 23	3	0	5.0								
	12 16 41	M FAR OFF SANRIKU	41 21.4	0.8	144 2 5	40 20	2	40	5.6								
	18 17 22	M ENSHUNADA	22 11.0	0.8	137 58 7	34 33	8	280									
JUNE	20 15 41	R OFF MIYAGI PREF	41 4.5	0.3	142 12 2	38 25	1	70									
	21 0 38	R E OFF AOMORI PREF	37 47.9	0.3	142 22 2	40 42	1	40	5.6								
	23 14 57	R OFF FUKUSHIMA PREF	57 7.1	0.3	141 40 2	37 18	1	50	5.2								
	24 10 22	R S OFF HONSHU	21 12.1	0.0	138 18 0	31 18	0	387		USCGS							
	27 11 15	R S OFF HOKKAIDO	15 48.9	0.2	143 9 1	42 11	1	60	5.4								
	28 6 29	M OFF FUKUSHIMA PREF	29 25.0	0.3	141 36 2	37 2	1	50	4.5								
	13 4 16	M OFF SANRIKU	16 24.9	0.8	143 54 4	39 45	2	10	5.6								
	22 4 44	M OFF SANRIKU	44 10.5	0.4	143 18 2	39 29	1	30	5.2								
	23 22 14	R OFF FUKUSHIMA PREF	14 32.0	0.4	141 45 2	37 14	1	40	5.5								
	28 22 3	M SE OFF KYUSHU	13 15.9	0.6	132 35 2	30 32	3	80									
AUG.	2 8 44	R S OF KURILE IS	43 45.5	1.7	151 4 10	44 46	8	60	5.8								
	2 9 35	U S OF KURILE IS	34 21.1	1.7	150 54 10	44 30	11	20	5.3								
	6 3 34	M E OFF FUKUSHIMA PREF	34 31.7	0.2	140 49 2	37 22	1	110									
	12 6 27	R E OFF HOKKAIDO	26 32.6	1.2	148 11 7	43 6	5	50									
	12 6 28	R E OFF HOKKAIDO	27 39.1	1.8	147 37 9	42 42	7	30	7.8	Tsunami, 129cm at Hanasaki							
	12 7 54	R E OFF HOKKAIDO	54 2.9	1.8	148 5 9	43 22	8	50	5.6								
	12 8 3	M E OFF HOKKAIDO	2 55.9	1.8	147 41 10	43 12	7	100									
	12 8 34	U E OFF HOKKAIDO	34 6.5	2.2	148 17 12	43 34	14	60	5.3								
	12 8 39	M E OFF HOKKAIDO	39 25.7	1.4	146 59 7	42 56	5	10	5.3								
	12 8 43	U E OFF HOKKAIDO	42 3.9	2.0	147 41 12	43 10	14	60	5.2								
JULY	12 9 53	M E OFF HOKKAIDO	53 34.8	1.8	147 19 10	42 56	6	60	5.3								
	12 10 3	S E OFF HOKKAIDO	2 59.0	2.9	147 56 15	43 7	14	60	5.3								
	12 12 34	S E OFF HOKKAIDO	33 36.9	1.7	147 42 10	42 57	5	60	5.5								
	12 13 13	M E OFF HOKKAIDO	12 49.2	1.5	146 54 8	43 28	7	50	4.9					</td			

C=CLASS													
DATE AND TIME			JST		C LOCATION			ORIGIN TIME					
	D	H M		M	S	+/-	LONG.	+	LAT.	+	H	M	REMARKS
1970(S45) JAN.	28	17 40	U	FAR OFF SANRIKU	39	35.6	0.6	143 48 3	40 16 2	50	5.0		
	29	15 3	M	N OF CHIBA PREF	3	20.3	0.4	140 35 3	35 53 2	60	5.1		
FEB.	3	0 37	M	OFF NEMURO PEN	37	34.2	0.9	145 59 5	43 29 3	60	5.1		
	3	2 22	R	E OFF HOKKAIDO	22	5.2	1.3	147 45 7	42 50 4	60	5.4		
	3	2 50	R	E OFF HOKKAIDO	49	48.7	1.4	147 48 8	42 58 4	80			
	3	3 6	S	E OFF HOKKAIDO	5	49.3	1.4	147 37 8	42 48 3	60	5.2		
	3	14 58	U	E OFF HOKKAIDO	57	44.8	2.0	147 42 10	42 52 6	60	5.0		
	4	4 17	M	E OFF HOKKAIDO	17	10.9	1.6	148 21 9	43 3 7	70			
	4	19 17	M	KASHIMANADA	17	45.8	0.4	140 47 2	36 26 1	40	4.8		
	4	22 7	U	E OFF HOKKAIDO	7	6.4	1.4	148 16 7	43 13 6	40	5.2		
	6	22 57	U	E OFF HOKKAIDO	57	10.3	1.8	148 2 9	43 24 7	50	5.1		
	15	13 1	R	OFF FUKUSHIMA PREF	1	34.0	0.2	141 28 2	37 21 1	50	5.1		
	25	16 57	M	OFF IWATE PREF	56	56.2	0.5	142 49 3	40 1 1	20	5.2		
	25	19 21	L	NEAR YONAGUNIJIMA	20	58.8	0.6	122 35 2	23 48 2	10	5.5		
	27	8 6	R	E OFF HOKKAIDO	5	54.0	1.3	148 16 7	43 0 4	70			
	27	8 29	M	E OFF HOKKAIDO	28	55.0	1.4	148 41 9	43 11 4	80			
	27	10 45	U	E OFF HOKKAIDO	45	5.8	1.6	148 20 8	42 54 5	40	5.2		
	27	11 0	U	E OFF HOKKAIDO	59	40.2	1.9	147 55 9	42 58 8	0	5.1		
	27	11 51	U	E OFF HOKKAIDO	50	51.3	1.3	147 36 7	42 59 5	0	5.3		
	27	18 49	U	E OFF HOKKAIDO	49	17.6	2.7	147 44 14	43 0 13	0	5.0		
MAR.	27	19 13	M	COAST OF TOYAMA PREF	13	38.8	0.2	137 39 1	36 58 1	0	5.1		
	8	3 52	M	OFF FUKUSHIMA PREF	52	20.3	0.4	141 37 2	37 4 1	40	4.9		
	9	9 50	R	FAR OFF SANRIKU	50	2.5	0.5	143 41 2	39 33 1	40	5.5		
	10	13 59	R	E OFF HOKKAIDO	58	32.1	1.2	148 53 6	43 43 5	70			
	14	21 52	U	NEAR ETOROFU IS	51	35.3	1.6	150 32 8	44 23 9	40	5.1		
APR.	23	9 21	R	N OF AKITA PREF	20	54.5	0.2	140 29 2	40 8 1	150			
	23	21 15	R	NEAR AMAMIOSHIMA	14	54.6	0.8	129 49 4	29 40 4	160			
	30	4 31	L	NEAR AMAMIOSHIMA	30	52.7	0.9	130 1 12	28 40 6	60	5.4		
	30	17 23	S	OFF NEMURO	22	56.5	0.6	145 50 3	43 3 2	40	5.0		
	1	23 23	R	COAST OF IWATE PREF	23	23.2	0.2	142 3 2	39 45 1	80			
	9	1 44	S	NEAR MATUSHIRO	43	59.1	0.3	138 6 1	36 26 1	0	5.0		
	16	10 56	U	SE OFF BOSO PEN	55	49.3	0.8	142 8 3	34 17 3	60	5.3		
	17	0 19	M	OFF MIYAGI PREF	19	0.8	0.5	141 43 4	38 11 2	50	4.7		
	19	5 21	U	E OFF HOKKAIDO	20	57.4	2.3	147 56 13	42 43 6	50	5.0		
	19	8 25	S	E OFF HOKKAIDO	25	29.4	1.6	147 39 9	42 41 4	60	5.4		
MAY	21	13 44	U	E OFF HOKKAIDO	43	26.8	2.1	148 36 11	43 10 8	40	5.2		
	29	14 55	S	E OFF HOKKAIDO	54	59.2	1.1	146 44 6	43 9 3	60	5.4		
	5	11 38	M	OFF IWATE PREF	37	54.0	0.7	142 27 4	40 8 2	30	4.4		
	17	23 52	R	SE OFF BOSO PEN	51	50.8	0.7	141 10 3	34 38 2	70			
	24	8 10	U	E OFF HOKKAIDO	9	44.1	1.1	148 37 6	43 15 5	40	5.3		
	27	21 6	R	BONIN IS	5	6.8	1.3	140 44 6	27 22 5	440			
	28	4 5	R	OFF IWATE PREF	5	35.3	0.5	143 15 3	40 9 2	30	6.2		
	28	7 36	R	OFF IWATE PREF	35	46.8	0.4	143 13 2	40 12 1	30	6.0		
	28	8 56	R	OFF IWATE PREF	56	36.6	0.4	143 6 2	40 16 1	20	5.8		
	29	13 31	M	E OFF HOKKAIDO	31	1.6	1.4	147 18 8	43 39 5	80			
JUNE	3	8 34	U	OFF ETOROFU IS	33	39.3	1.6	150 30 10	44 13 12	0	5.3		
	8	2 53	M	OFF IWATE PREF	53	45.8	0.4	142 11 3	40 20 1	40	4.6		
	11	1 18	R	OFF ETOROFU IS	17	47.7	1.1	149 46 6	43 54 4	60	5.8		
	20	11 24	R	FAR OFF SANRIKU	24	23.1	0.4	143 19 3	40 11 1	20	5.1		
	23	6 33	R	E OFF HOKKAIDO	33	28.9	0.8	147 32 4	43 5 3	0	5.8		
JULY	1	1 14	M	E OFF AOMORI PREF	13	47.3	0.2	142 42 1	41 33 1	40	5.1		
	1	4 5	M	OFF URAKAWA	5	9.6	0.3	142 38 2	41 35 1	40	4.7		
	2	6 28	M	OFF URAKAWA	28	42.9	0.3	142 41 2	41 36 1	40	5.1		
	9	17 11	R	OFF E COAST OF HOKKAIDO	11	4.5	1.8	148 44 9	43 22 8	40	5.3		
	9	20 25	U	OFF E COAST OF HOKKAIDO	24	33.0	2.3	148 56 12	43 19 10	50	5.3		
	9	21 12	R	OFF E COAST OF HOKKAIDO	11	54.7	1.1	148 35 6	43 23 5	40	5.6		
	11	1 17	L	NEAR AMAMIOSHIMA	16	58.3	0.5	129 15 8	28 41 4	50	5.2		
	11	23 28	M	NORTHERN IBARAKI PREF	28	15.1	0.3	140 35 2	36 30 1	50	5.1		
	12	6 17	L	NEAR AMAMIOSHIMA	16	33.3	1.1	129 35 16	28 15 7	30	5.2		
	25	20 6	R	BONIN IS	4	46.1	0.8	139 45 5	28 56 4	420			
AUG.	26	7 41	R	OFF MIYAZAKI PREF	41	8.3	0.4	132 2 2	32 4 2	10	6.7	DAMAGE, TSUNAMI	
	26	16 10	R	OFF MIYAZAKI PREF	10	33.4	0.3	132 6 1	32 7 1	10	6.1		
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