

IAGA Bulletin No. 12 o 2

INTERNATIONAL UNION OF GEODESY AND GEOPHYSICS

ASSOCIATION OF GEOMAGNETISM AND AERONOMY

**GEOMAGNETIC DATA 1960**

**RAPID VARIATIONS**

by

J. BARTELS † A. ROMANA and J. VELDKAMP

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UNESCO

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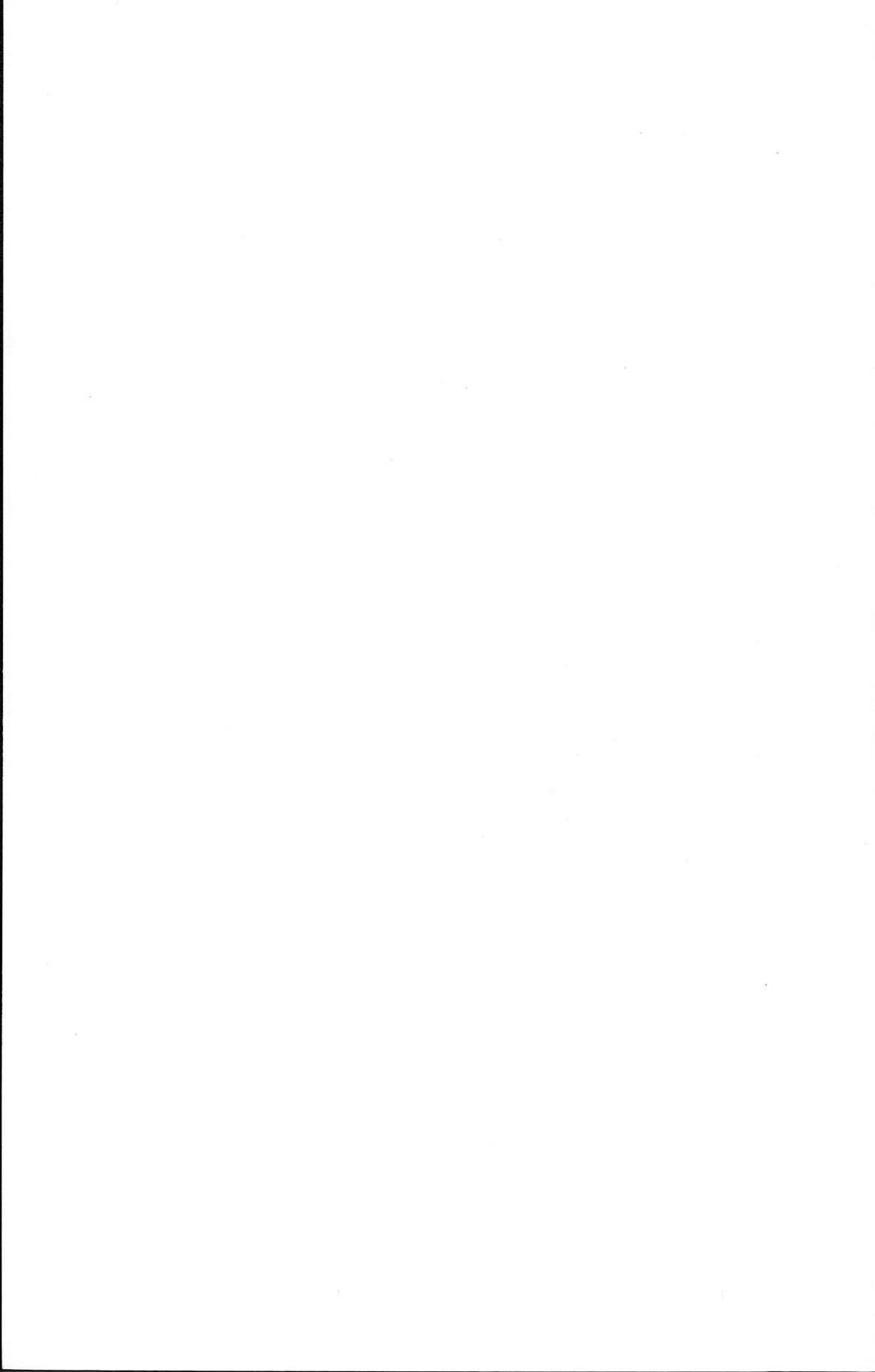
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## GEOMAGNETIC DATA 1960

## RAPID VARIATIONS

Introduction

List of observatories. The list of observatories has been taken from bulletin No 12 o 1 (Geomagnetic Data 1960, Indices K and C) with some little changes.

The first three pages of the list of observatories give the name of the observatory and its two-letter symbol, the name of the collaborator and the geographic and geomagnetic coordinates. The fourth to the sixth pages give the scale values of the instruments, used for scaling K or (and) C, the lower limit for K = 9, and the range of disturbances on a day with character-figures C = 1. The seventh to ninth pages give information on the instruments used for recording magnetograms and on the method used by some observatories for checking the solar-flare effects found in the magnetograms. The column "Ionospheric Stations or Radio Services" indicates the ionospheric or solar observatories or the radio services whose reports on Dellinger effects eruptions on the sun, and black-outs in the radio communication enable the magnetic observatory to distinguish between a solar-flare effect and a bay-disturbance caused by particle radiation from the sun.

Table 1 is a list of sudden commencements followed by a magnetic storm or by an increase in activity lasting at least one hour (ssc). The time in the column at the left are mean values. Observatories which checked the sudden commencements and agreed with the term ssc are classified in six groups under the letters A, B, C, D, E, X, as follows: A) when the phenomenon in their magnetograms is very distinct ssc; - B) when it is a fair, ordinary, but unmistakable ssc; - C) when it is a doubtful ssc; - D) when in the magnetograms the ssc was decidedly not recorded, although the records were satisfactory; - E) when the phenomenon cannot be discerned because of heavy disturbance; - X) when the recording is missing. In some cases one or more observatories preferred another qualification (si, b, bp, etc); these observatories are also indicated. Observatories having employed the symbol psc (which after the Copenhagen and Toronto resolutions should not be used in the future) or having filled in the checking-list one of the letter A, B, C, without another symbol (b, bs, bp, bps, pt,...) are indicated with the letter Y. The checking observatories were: Co Sr Le Nu Lo Si Kn Mo Me St Wn Wi Ir Sw Ni Vl Gt Ha Kv Ma Db Vi Fü Hb Ty Od Mb Lg Aq Tf Tk Md IK Eb Ci Tl Fr Pe Ak SM SF Ka Ks Tu Ky Ho SJ MB Mu Gu AA Pa Mc Hn Lu PM Hu Ap Tn Br LQ Pi Gn Hr To Am Tw Kg MI Wk DU Mw Ht SB.

Table 2a is a list of commencements of bays or pulsational disturbances associated with bays. All these disturbances were checked by the same observatories as in Table 1. The observatories are distributed in groups after the particular classification (b, bs, bp, etc) which they have attributed to the phenomenon in accordance with the definitions given by the Copenhagen Meeting and under this classification they are also distributed in the same groups as in Table 1. The meaning of symbols b, bs, etc, is the following:

- b . . . clear and isolated bay appearing during a calm period without pulsations or sharp beginning
- bs . . . bay with sharp beginning without pulsations
- bp . . . bay with pulsations without sharp beginning
- bps . . . bay with pulsations and sharp beginning
- pt . . . train of pulsations consisting of several series of oscillations, each series lasting generally 10 to 20 minutes, the whole phenomenon lasting for periods of more than about one hour
- pg . . . giant pulsations, viz., exceptional pulsations of very great period and regularity with a sufficient relative amplitude

When symbols bp and bps are used, pulsations are meant to precede or follow the beginning of the bay with a time lag of not more than about ten minutes. If the interval is greater, both phenomena are reported separately.

This list cannot be considered as complete, as it may be that a bay has been selected by the observatories out of a great many similar disturbances all occurring on the same day. Therefore it seems better not to use this table for statistical purposes without caution. This holds also for Tables 2b and 3.

Table 2b gives a summary of pulsational disturbances (pt and pg) not associated with bays.

Table 3 gives a summary of sudden magnetic changes or impulses (si) which could not be classified as ssc, b, bp, etc.

Table 4 is a list of minor disturbances (ssc, si, b, bs, bp, etc) which have been reported by less than ten observatories located between  $322^{\circ}5$  and  $52^{\circ}5$  or by less than four observatories located in other regions. These disturbances have not been checked by other observatories, although most of them have already been published in the three-monthly reports from the K+C Centre, De Bilt. Cases received too late for publication in the three-monthly reports or for inclusion in the checking-lists and new cases reported by observatories in their answer to the checking-lists, which naturally have not been checked by the other observatories, are likewise included in this Table. The type of disturbance predominantly assigned to each phenomenon and the number of observatories reporting them are given together with the time.

Table 5a gives a summary of solar-flare effects reported by the observatories. The times tabulated in the column at the left are mean values of the times given for the beginning of the phenomenon. A check for the solar-flare effects was made by 73 observatories, the same as for the other phenomena, except Kn Mo SF Hu; on the contrary Es Cm CF have checked the sfe's. In some particular cases and in order to get a better knowledge of the real effect observed, some observatories (Qu Ta Te Bn Lr Bi El Hu Va) have been taken into account when they gave in the monthly reports a clear sfe or another useful indication regarding the phenomenon, although their checking-lists have not been received; their symbols appear in square-brackets in the Table. Stations on the daylight hemisphere have been written behind the indicated times distributed in the same groups as in Tables 1 to 3. Underlined are observatories near the subsolar point. Stations lying in the twilight-zone of the dark hemisphere, which reported a clear disturbance, are indicated by dotted brackets. Stations under the same circumstances in the full dark have been given in parentheses. Stations on the night-side of the Earth, which gave a negative or doubtful answer, have been omitted. In

cases when one or more stations reported a simultaneous disturbance from an ionospheric or subsolar observatory or from a radio service which gave support to the geomagnetic solar-flare effect, the indicated time has been underlined.

Table 5b summarizes all doubtful solar-flare effects. As doubtful have been considered in general those cases where stations ... good location regarding the sub-solar point did not report such an effect or where some stations in full dark mentioned a disturbance which in account of the hour or of their geographic position could not be probably a bay coexisting in the night-side of the Earth with a sfe in the light-side. Nevertheless, it is very probable that several cases of the reported in this Table are real solar-flare effects.

Table 5c summarizes times of presumed solar-flare effects, which have proved to be most probably no real solar-flare effects, as several stations in full dark reported a sudden commencement, a sudden impulse or a bay disturbance at the indicated time, whereas stations in full daylight found only a doubtful effect or a disturbance which did not agree with an increase of the normal daily variation.

Committee on Characterization of Magnetic Disturbances

J. Bartels † Chairman

Geophysikalisches Institut  
Göttingen, Germany

J. Veldkamp

Kon. Nederl. Meteorol. Instituut  
De Bilt, Holland

Committee on Rapid Magnetic Variations and Earth Currents

A. Romanó, S.J., Chairman  
Observatorio del Ebro  
Tortosa, Spain

## LIST OF OBSERVATORIES 1960

Arranged according to geographic latitude

	Observatory	Collaborator	Geographic		Geomagnetic	
			Lat.	Long.	Lat.	Long.
NP7	North Pole 7	USSR	+86° 0'	250° -'	- 0°	- 0°
NP6	North Pole 6	USSR	+83 -	130 -	- -	- -
NP8	North Pole 8	USSR	- -	- -	- -	- -
BT	Bay Tikhaya	Bykov	+80 20	52 48	+71.5	153.3
CC	Cape Chelyuskin	A. I. Slonimskaya	+77 43	104 17	+65.9	177.5
Th	Thule	J. Olsen	+77 29	290 50	+89.0	0.0
RB	Resolute Bay	R. G. Madill	+74 41	265 10	+83.0	289.6
B4	Bear Island		+74 30	19 00	+71.0	123.0
Di	Dickson	Panov	+73 33	80 34	+63.0	161.5
MS	Matoshkin Shar	N. D. Medvedev	+73 16	56 24	+64.8	146.5
Ti	Tiksy	Melgunov	+71 35	129 00	+60.5	191.4
PB	Point Barrow	R. Z. Barela	+71 18	203 14	+68.6	241.0
Tr	Tromsø	E. Tόnsberg	+69 40	18 57	+67.1	116.7
Go	Godhavn	J. Olsen	+69 14	306 29	+79.8	32.5
Mm	Murmansk		+68 57	33 03	+64.1	126.5
Ki	Kiruna	N. Ambolt	+67 50	20 25	+65.3	115.8
So	Sodankylä	E. Kataja	+67 22	26 39	+63.8	120.0
We	Wellen	Andriunina	+66 10	190 11	+61.8	237.0
Co	College	C. J. Beers	+64 52	212 10	+64.5	255.4
BL	Baker Lake	R. G. Madill	+64 20	263 58	+73.8	315.2
Sr	Srednian	D. S. Slonimsky	+62 26	152 19	+53.1	210.6
YK	Yellow Knive		+62 24	245 36	+69.0	293.3
Do	Dombås	G. Gjellestad	+62 04	9 07	+62.3	100.1
Ya	Yakutsk	V. I. Tchirkov	+62 01	129 40	+51.0	193.8
Nu	Nurmijärvi	M. Kivinen	+60 30	24 39	+57.9	112.6
Le	Le wick	L. Jacobs	+60 08	358 49	+62.5	88.6
Ln	Leニングрад	E. P. Gluschkova	+59 57	30 42	+56.2	117.1
Lo	Lovö	F. Eleman	+59 21	17 50	+58.1	105.8
Si	Staka	M. L. Gleven	+57 04	224 40	+60.0	275.4
Sv	Sverdlovsk	S. P. Reschetnikov	+56 44	61 04	+48.5	140.7
Tm	Tomsk		+56 28	84 56	+46.1	159.8
RS	Rude Skov	A. Lundback	+55 51	12 27	+55.8	98.5
Kn	Kasan	N. F. Puschkin	+55 50	48 51	+49.3	130.4
Mo	Moskow	M. S. Mansurov	+55 29	37 19	+50.8	120.5
Es	Eskdalmuir	L. Jacobs	+55 19	356 48	+58.5	82.9
Me	Meanook	Anne B. Cook	+54 37	246 40	+61.8	301.0
Hl	Helu	W. Czyszek	+54 36	18 48	+53.5	103.7
St	Stonyhurst	J. E. Worthy S. J.	+53 51	0 10	+57.0	82.5
Wn	Wingst	O. Meyer	+53 45	9 04	+54.5	94.0
Wi	Witteveen	D. van Sabben	+52 49	6 40	+54.2	91.0
Ir	Irkutsk	V. M. Mischin	+52 10	104 27	+41.0	174.4
Sw	Swider	Z. Kalinowska	+52 07	21 15	+50.6	104.6
Ni	Niemegk	G. Fanselau	+52 04	12 40	+52.2	96.5
Vl	Valentia	S. Mc Williams	+51 56	349 45	+56.6	73.4
Be	Belsk		+51 50	20 48	+50.4	104.0
Gt	Göttingen	J. Bartels	+51 33	9 58	+52.3	93.7
Cm	Collmberg	C. Junge	+51 19	13 00	+51.5	96.5
Ha	Hartland	H. F. Finch	+51 00	355 31	+54.6	79.0
Kv	Kiev		+50 43	30 18	+47.3	112.2
Ma	Manhay	L. Koenigsfeld	+50. 18	5 41	+52 0	88.8

## LIST OF OBSERVATORIES 1960 - continued

Arranged according to geographic latitude

	Observatory	Collaborator	Geographic		Geomagnetic	
			Lat.	Long.	Lat.	Long.
Db	Dourbes	A. de Vuyst	+50° 06'	4° 36'	+51.7°	88.7°
Pr	Pruhonice	J. Bouska	+49 59	14 33	+50.1	97.5
Lw	Lwow	M. S. Babuschnikov	+49 54	23 45	+48.0	105.8
Bu	Budkov	J. Subrt	+49 04	14 01	+49.1	96.2
Vi	Victoria	B. Canner	+48 30	236 36	+54.1	293.0
Fü	Fürstenfeldbruck	K. Wienert	+48 10	11 17	+48.9	92.4
CF	Chambon-la-Forêt	G. Gibault	+48 01	2 16	+50.4	83.9
Hb	Hurbanovo	P. Ochabová	+47 54	18 12	+47.1	99.8
Na	Nantes	O. Noblanc	+47 15	358 27	+50.5	80.1
Sa	Sakhalinsk	N. I. Petrov	+46 57	142 43	+36.9	206.7
Ty	Tihany		+46 54	17 53	+46.4	99.1
Od	Odessa	A. I. Staroginsky	+46 47	30 53	+43.8	111.1
Su	Surlari		+44 41	26 15	+42.5	106.0
Gc	Grocka		+44 38	20 46	+53.6	100.9
Mb	Memambetsu	Y. Tamura	+43 55	144 12	+34.1	208.3
Ag	Agincourt	A. A. Onhauser	+43 47	280 44	+55.0	347.0
Wl	Wladiwostok	M. S. Lasarev	+43 41	132 20	+32.4	198.3
Lg	Logrono	T. Miguel Lafuente	+42 27	357 30	+46.1	77.2
Aq	Aquila	F. Molina	+42 23	13 19	+42.9	92.9
Tf	Tiflis	M. L. Tchelischvili	+42 05	44 42	+36.7	122.1
Tk	Tashkent	M. G. Antzilevitch	+41 25	69 12	+32.5	134.4
Md	Maddalena	M. Giorgi	+41 13	09 24	+42.7	88.5
IK	Istanbul-Kandilli	O. N. Sipahioglu	+41 04	29 04	+38.5	107.5
Eb	Ebro	J. O. Cardus S. J.	+40 49	0 30	+43.9	79.7
Ci	Coimbra	V. Seiça e Santos	+40 13	351 35	+44.8	71.3
Tl	Toledo	L. de Miguel	+39 53	355 57	+43.6	75.7
On	Onagawa		+38 26	141 28	+28.4	206.7
Fr	Fredericksburg	R. E. Gebhardt	+38 12	282 38	+49.6	349.9
Pe	Pendeli	A. Stavrou	+38 03	23 52	+36.2	102.0
Gi	Gibilmannia	M. Georgi	+37 59	14 01	+38.5	92.2
Ak	Ashkabad		+37 57	58 06	+30.6	133.5
SM	San Miguel	H. Amorim Ferreira	+37 46	334 21	+45.6	50.9
SF	San Fernando	F. F. de la Puente	+36 28	353 48	+41.0	71.3
Ka	Kakioka	T. Yoshimatsu	+36 14	140 11	+26.0	206.0
TI	Teheran Iran	H. K. Afshar	+35 41	51 25	+29.4	126.6
Ks	Ksara	J. Delpet S. J.	+33 50	35 54	+30.4	112.0
Ss	Simosato		+33 35	135 56	+23.1	202.3
As	Aso		+32 53	131 01	+22.1	198.1
Tu	Tuscon	R. F. White	+32 15	249 10	+40.4	312.2
Ky	Kanoya		+31 25	150 53	+20.7	198.1
Qu	Quetta	S. A. A. Kazmi	+30 11	66 57	+21.6	139.7
He	Helwan	M. Fahim	+29 52	31 20	+27.2	106.4
Ml	Misallat	M. Fahim	+29 45	30 54	+26.7	105.8
Ta	Tamanrasset	B. Lepretre a. o.	+22 48	5 31	+25.4	80.6
Ho	Honolulu	G. E. Haraden	+21 18	201 54	+21.1	266.5
Te	Teoloyucan	E. Salyano	+19 45	260 49	+29.6	327.1
Al	Alibag	S. L. Malurkar	+18 38	72 52	+ 9.5	143.6
SJ	San Juan	M. Vazquez	+18 23	293 53	+29.9	3.2
MB	M'Bour	R. Remiot	+14 24	343 03	+21.3	55.0
Mu	Muntinlupa	A. A. Luceno	+14 22	121.01	+ 3.2	190.8

## LIST OF OBSERVATORIES 1960 - continued

Arranged according to geographic latitude

	Observatory	Collaborator	Geographic		Geomagnetic	
			Lat.	Long.	Lat.	Long.
Gu	Guam	D. D. Newman	+13° 27'	144° 45'	+ 3.9°	212.8°
AA	Adis Ababa	P. Gouin S. J.	+09 02	38 46	+ 5.3	109.2
Kr	Koror	K. Gravens	+07 20	134 30	- 3.2	203.4
Pa	Paramaribo	D. van Sabben	+05 50	304 50	+17.0	14.5
Fq	Fuquene	C. Garavito	+05 28	286 16	+16.9	355.1
Ba	Bangui	M. Leroy	+04 26	18 34	+ 4.6	88.5
Mc	Moca	A. G. Cogollor	+03 21	8 40	+ 5.7	78.6
Bn	Bunia	P. Herrinck	+01 32	30 11	- 0.4	99.3
Tt	Tatuoca	L. I. Gama	-01 12	311 29	+ 9.5	20.8
Lr	Lwiro	G. Bonnet	-02 15	28 48	- 4.0	98.2
Hn	Hollandia	D. van Sabben	-02 34	140 31	-12.6	210.3
Bi	Binza	{P. Herrinck	-04 23	15 16	- 3.4	83.2
Ku	Kuyper	{G. Lesambo	-06 02	106 44	-12.5	175.5
Lu	Luanda	A. Fatalah	-08 55	13 10	- 7.2	80.5
PM	Port Moresbey	J. A. Brooks	-09 25	147 09	-18.6	217.9
El	Elisabethville	{P. Herrinck	-11 39	27 28	-12.7	94.1
Hu	Huancayo	{A. Kielal	-12 03	284 40	- 0.6	353.8
Da	Darwin	A. A. Giesecke Jr	-12 20	131 00	-22.0	201.3
Ap	Apia	L. S. Prior	-13 48	188 14	-16.0	260.2
Tn	Tananarive	A. L. Cullington	-18 55	47 33	-23.7	112.5
Mr	Mauritius	M. Burgaud S. J.	-20 06	57 33	-26.6	122.4
LQ	La Quiaca	E. G. Davy	-22 06	294 24	-10.6	3.2
Va	Vassouras	R. P. J. Hernández	-22 54	316 21	-11.9	23.9
Br	Brisbane	L. I. Gama	-27 32	152 55	-35.8	226.9
Wa	Watheroo	R. F. Thyer	-30 19	115 53	-41.8	185.6
Pi	Pilar	P. M. Mc Gregor	-31 40	296 07	-20.2	4.0
Gn	Gnangara	R. P. J. Hernández	-31 47	115 57	-43.2	185.8
Hr	Hermanus	P. M. Mc Gregor	-34 26	19 14	-33.7	81.7
To	Toolangi	A. M. van Wijk	-37 32	145 28	-46.7	220.8
Am	Amberley	R. F. Thyer	-43 09	172 43	-47.7	252.5
Tw	Trelew	A. L. Cullington	-43 15	294 41	-31.7	3.2
Kg	Kerguelen	O. Sidoti	-49 21	70 15	-57.2	128.0
MI	Maquarie Island	R. F. Thyer	-54 30	158 57	-61-1	243.1
Ar	Argentine Island	C. N. Horton	-65 15	295 44	-53.8	3.3
Oa	Oasis		-66 06	92 09	-77.4	160.8
Wk	Wilkes	L. S. Prior	-66 15	110 21	-77.8	110.5
Mi	Mirny		-66 36	92 54	-77.0	146.5
DU	Dumont d'Urville		-66 40	140 01	-75.5	230.9
Mw	Mawson	R. F. Thyer	-67 36	62 53	-73.2	103.1
Ct	Charcot		-69 23	139 01	-78.3	234.5
Po	Pionerskaya		-69 44	95 30	-80.3	146.5
La	Lazarevskaya		-69 58	12 55		
Ht	Hallett		-72 18	170 18	-78.6	278.1
HB	Halley Bay	J. C. Farman	-75 31	333 24	-65.8	24.3
SB	Scott Base	A. L. Cullington	-77 51	166 45	-78.8	294.6
LA	Little America	J. J. Gniewek	-78 11	197 50	-74.0	312.0
Vo	Vostok		-78 27	106 52	-90.0	171.8
By	Byrd Station	L. E. Davis	-79 57	240 10	-70.6	336.0
SP	South Pole	W. Jacobs	-90		-78.5	0.0

## LIST OF OBSERVATORIES 1960 - continued

	Scale Values			Lower Limit K = 9 γ	Ranges for C = 1
	D γ/mm	H γ/mm	Z γ/mm		
NP7					
NP6					
NP8					
BT				2000	
CC				2500	
Th	4.5	7.9	12.3	1000	
RB				1500	
B4	5.6	6.0	21.2	2000	
Di				1500	
MS				2500	
Ti				1000	
PB	16.0	32.2	29.9	2800	
Tr	4.7	5.3	7.2	2000	400 - 1200 γ
Go	2.3	9.5	14.1	1800	
Mm	7.6	11.9	8.2	2500	
Ki	11.5	11.4	11.9		
So	3.0	8.7	9.7	1500	45 - 200 γ
We				1250	
Co	3.7	7.8	7.1	2500	No fixed range
BL	2.5	5.7	8.1	2500	
Sr	4.8	3.8	4.9	550	
YK					
Do	9.6	9.2	6.5	750	
Ya	4.3	7.3	5.2	550	
Nu	3.8	7.8	7.4	750	D: 4' - 20'; H: 30 - 140γ; Z: 20 - 100γ
Le	4.0	4.0	6.6	1000	
Ln	3.3	4.6	2.7	600	
Lo	4.3	3.8	4.0	600	
Si	4.7	7.0	8.0	1000	No fixed range
Sv	4.6	5.3	6.7	550	
Tm					
RS	4.9	10.0	10.0	600	D: 4' - 12'; H: 14 - 42γ; Z: 9 - 27γ
Kn	4.7	5.7	5.0	550	
Mo	1.8	1.9	3.9	550	
Es	4.0	4.0	6.0	750	
Me	3.6	7.8	10.8	1500	
Hl	4.7	4.5	5.7	650	
St	4.6	6.3	6.9	600	Sum K: 20
Wn	4.4	6.2	5.5	500	Sum K: 20 - 30; CK: 0.7 - 1.3; Cs: 0.8 - 1.4
Wi	9.7	9.5	5.5	500	D: 4' - 12'; H: 15 - 45γ; Z: 7 - 21γ
Ir	5.5	4.6	3.2	350	
Sw	3.7	3.7	3.9	500	
Ni	2.0	2.0	2.0	500	
Vl	4.7	3.5	5.8	500	
Be	2.8	3.4	3.6	500	
Gt	3.2	3.2	1.6	500	
Cm	1.6	1.6	2.6	500	based on K-indices
Ha	5.5	4.1	4.0	500	
Kv					
Ma	5.2	1.5	3.9	500	D: 4' - 12'; H: 15 - 45γ; Z: 7 - 21γ

## LIST OF OBSERVATORIES 1960 - continued

	Scale Values			Lower Limit K = 9 γ	Ranges for C = 1
	D γ/mm	H γ/mm	Z γ/mm		
Db	5.3	3.9	3.8	500	
Pr	3.0	4.5	5.0	500	
Lw	4.0	1.7	2.8	550	
Bu		3.7-2.8			
Vi	2.7	2.4	3.3	500	
Fü	2.9	2.8	2.7	500	17 < ΣK < 29
CF	5.7	5.9	2.8	500	No fixed range
Hb	7.3	4.3	4.8	350	
Na	9.5	6.0	6.0	500	
Sa	4.2	3.1	5.1	350	
Ty	5.8	3.6	2.7		
Od	6.4	3.5	2.4	350	
Su	2.5	1.7	2.4	350	
Gc					
Mb	3.4	2.3	4.0	350	
Ag	4.0	5.1	6.1	600	12 - 150 γ
Wl	2.9	1.9	4.1	300	
Lg	6.0	3.7	5.0	350	15 < ΣK < 30
Aq	7.2	4.9	3.3	350	
Tf	1.7	3.2	2.5	350	
Tk	7.8	2.8	4.6	300	
Md	3.6	3.3	3.0	350	
IK	3.7	3.1	4.0	300	Sum K: 16 - 31 or 16 and 4 < K < 6
Eb	6.9	3.4	6.6	350	14 - 55 γ
Ci	7.7	4.0	5.0	350	C from Cs
Tl	2.8	2.8	2.8	350	D: 2 - 8 ; H: 10 - 60 γ ; Z: 10 - 50 γ
On					
Fr	2.7	2.5	2.9	500	Sum K: 25 - 44
Pe	7.5	7.2	11.3	300	
Gi	7.4	1.6	1.2	350	
Ak					
SM	9.7	4.0	4.5	350	No fixed range
SF	5.3	2.7	---	350	10 - 30 γ
Ka	6.2	2.8	3.5	300	No fixed range
TI	2.6	2.3	2.8	500	
Ks	8.8	6.0	5.0	300	15 - 45 γ
Ss	6.4	2.4	6.4	300	
As					
Tu	3.8	3.1	---	350	No fixed range
Ky	2.5	2.6	2.6	300	
Qu	4.9	3.0	4.3	300	No fixed range
He	3.7	2.6	3.0	300	10 - 30 γ
M1	3.9	2.4	2.2	300	
Ta	9.0	4.4	2.8	300	20 à 60 γ
Ho	8.4	2.6	3.7	300	Sum K: 22 - 38
Te	8.7	3.3	5.7	300	Lower limit: Sum K = 17 or 18
A1	11.3	4.4	2.5	300	No fixed range
SJ	8.1	2.5	5.0	300	Sum K: 14 or 18 - 35
MB	8.1	6.6	6.3	350	
Mu	---	---	---		

## LIST OF OBSERVATORIES 1960 - continued

	Scale Values			Lower Limit K = 9 γ	Ranges for C = 1
	D γ/mm	H γ/mm	Z γ/mm		
Gu	5.2	2.7	3.7	300	
AA					
Kr					
Pa	8.1	6.1	4.0	500	
Fq	8.8	4.0	4.1	300	
Ba	8.1	10.0	13.3	300	
Mc	7.8	3.9	1.6		19 - 43 γ
Bn	7.7	2.0	2.6		
Tt	8.4	2.6	3.7		
Lr	7.6	4.9	1.1	350	20 - 75 γ
Hn	5.2	5.0	4.0	300	
Bi	7.8	4.2	2.6		
Ku	0.9	4.3	3.9	300	
Lu	3.7	2.9	6.6	350	
PM	9.7	5.6	7.2	300	
El	3.9	4.9	2.0		H: 20 - 100 γ
Hu	8.3	3.5	3.6	600	Sum K: 25 - 41
Da					
Ap	9.3	3.9	3.8	300	Sum K: 25
Tn	2.9	0.9	2.2	300	No fixed range
Mr	7.6	3.2	5.0	300	
LQ	3.8	3.3	3.0	350	
Va	6.9	4.0	3.0	600	No fixed range
Br				500	
Wa	7.5	2.7	4.6	350	20 - 35 γ
Pi	6.7	3.6	2.9	350	
Gn	7.4	2.6	5.5	350	
Hr	2.1	2.3	4.2	300	No fixed range
To	7.7	4.6	4.4	500	Sum K: 18 - 34
Am	7.2	4.6	3.7	500	No fixed range
Tw	6.7	4.9	6.4	350	
Kg	2.0	5.8	2.1	750	
MI	3.5	12.5	14.1	1500	
Ar					
Oa	10.6	8.3	18.3	2000	
Wk	28.6	24.3	24.6	2500	
Mi	4.6	6.3	10.1	2000	
DU					
Mw	4.5	9.9	10.1	1500	
Ct	---	---	14.3	1500	
Po	10.6	12.1	14.9	2000	
La					
Ht	19.1	27.5	25.9	2500	
HB	5.4	7.2	6.8	2000	
SB	26.0(y)	22.0(x)	28.5	2000	No fixed range
LA	---	---	---	2500	
Vo					
By	26	24	25	2500	
SP	16.8	27.7	26	2000	

## LIST OF OBSERVATORIES - 1960 - continued

	Instruments	Ionospheric Stations or Radio Services
NP7		
NP6		
NP8		
BT		
CC		
Th	Normal, Low sens. + quick run	
RB		
B4		
Di		
MS		
Ti		
PB	Low sens. + quick run	
Tr	Normal sens.	
Go	Normal, low sens. + quick run	
Mm		
Ki		
So	Normal sens.	
We		
Co	Normal, low sens. + quick run	
BL	Normal sens.	
Sr		
YK		
Do	Normal sens.	
Ya		
Nu		
Le	Normal, low sens. + quick run	Nurmijärvi Ionospheric Stations Cable and wireless Ltd; Sol. Obs. Greenwich, Edinburgh
Ln		
Lo	Normal, low sens. + quick run	Transradio Espanola, Alcobendas(Madrid)
Si	Normal, low sens. + quick run	
Sv		
Tm		
RS	Normal, low sens. + quick run	
Kn		
Mo		
Es	Normal, low sens. + quick run	Cable and wireless Ltd; Sol. Obs. Greenwich, Edinburgh
Me	Normal and low sens.	
Hl		
St		
Wn	Normal, dX/dt, dY/dt, dZ/dt, quick run	Inst. für Ion.-forschung, Lindau Sol. Obs.; Fraunhofer Ins. Freiburg Nederhorst Den Berg Radio (Nera)
Wi	Normal sens. + quick run	
Ir		
Sw	Normal sens.	
Ni	Normal sens.	Zentralobs. Potsdam; Sol. Obs. Astrophysical. Obs., Potsdam
Vl	Normal sens. + quick run	Dunsink Astronomical Observatory, Dublin
Be		
Gt	Normal sens., str. var.+puls. recorder	
Cm	Normal sens.	
Ha	Normal sens. + quick run	Ion. Station Collm Observatory Cable and wireless ltd; Sol. Obs. Royal Obs. Greenwich
Kv		
Ma		

## LIST OF OBSERVATORIES - 1960 - continued

Instruments		Ionospheric Stations or Radio Services
Db	Normal sens. + quick run	Ion. Station Dourbes
Pr	Normal sens.	Ion. Station Pruhonice; Astrophysical Obs. (Ondrejov)
Lw		
Bu		
Vi	Normal sens.	
Fü	Normal sens. + high sens.	Inst. für Ion.-forschung, Lindau
CF	Normal sens. + quick run	Lab. Nat. de Radioelectr. Bagneux; Sol. Obs.: Obs. d'Astrophysique, Meudon
Hb	Normal sens.	
Na	Normal sens.	
Sa		
Ty		
Od		
Su	Normal sens.	
Gc		
Mb		
Ag	Normal sens. and low sens.	
W1		
Lg		
Aq		
Tf		
Tk		
Md		Astrophys. Obs. Arcetri (Firenze)
IK	Normal sens.	No
Eb	Normal sens.	Ion. Stat. Ebro; earth-currents; Transradio Espanola, Alcobendas (Madrid)
Ci	Normal sens.	
Tl	Normal sens.	
On		
Fr	Normal, low sens. + quick run	
Pe	Normal sens.	
Gi	Normal sens.	
Ak		
SM	Normal sens. + quick run	
SF	Normal sens.	
Ka	Normal sens. + high sens. for D	
TI		
Ks	Normal sens.	
Ss		
As		
Tu	Normal sens. + quick run	
Ky		
Qu	Normal sens. + quick run	
He	Normal sens.	
M1	Normal sens.	
Ta	Normal sens. + dH/dt, dD/dt, quick run	
Ho	Normal sens. + quick run	
Te	Normal sens.	
A1	Normal sens. + quick run	
SJ	Normal sens.	Boulder Observatory, Colorado
MB	Normal sens. + quick run	All India Radio, New Delhi; Radio Ceylon Colombo; Sol. Obs.; Sol. Phys. Obs., Kodiakanal
Mu		Station Ionosphérique Dakar-Cambarene Manila Observatory, Baquio City

## LIST OF OBSERVATORIES - 1960 - continued

Instruments		Ionospheric Stations or Radio Services
Gu	Normal sens. + quick run	
AA	Normal sens. + quick run	
Kr	Normal sens. + quick run	
Pa		
Fq	Normal sens.	
Ba	Normal sens. + quick run	Ionospheric Station Leopoldville - Binza
Mc		
Bn	Normal sens.	
Tt	Normal sens.	
Lr	Normal sens.	Ion. Station Lwiro, Radio astron. St. Lwiro
Hn		
Bi	Normal sens.	No
Ku		
Lu	Normal sens.	
PM		
El	Normal sens.	
Hu	Normal sens. + quick run	Inst. Geofisico de Huancayo Sol. Obs.: Inst. Geofisico de Huancayo
Da		
Ap	Normal sens.	Apia Radio
Tn	Normal sens.	
Mr		
Va	Normal sens.	
Br		
Wa	Normal sens.	
Pi	Normal sens.	
Gn		
Hr	Normal sens. + quick run	Ionospheric Station Mundaring Geoph. Obs. NTRL Johannesburg, Pan, Receiv. St. SABC Royal Observatory Cape town
To	Normal sens.	I. P. S. Canberra
Am	Normal sens.	Godley Head Ion. Stat. New Zealand Broadc. Service, Wellington; Sol. Obs.; Carter Obs. Wellington
Tw	Normal sens.	
Kg		
MI	Normal sens.	No
Ar		
Oa		
Wk	Low sens. + quick run	
Mi	Normal, low sens. + quick run	
DU		
Mw		
Ct		
Po		
La		
Ht		
HB	Low sens. + quick run	
SB	Low sens. + quick run	
LA		
Vo		
By	Low sens. + quick run	
SP	Low sens. + quick run	Ion. Station Scott Base

## TABLE 1 STORM SUDDEN COMMENCEMENTS (S. S. C. 'S) 1960

Sudden commencements followed by a magnetic storm or period of storminess.

JANUARY

04d 08h 11m	A: Lg Tk AA - B: Sr Nu Kn St Db Od Md SM SF Mu Pa PM Hu Ap Tn Gn Hr To Tw Kg - C: Lo Me Vl Gt Kv Ma Vi Fü Hb Mb Aq Tf IK Eb Ci Tl Pe Ak Ka Ky MB MC Hn Mw - X: Lu -(si: Ha Am Wk - bs: Ks) - D: 20.
05d 02h 01m	A: Co Kn Ma Fü Hb Ty Lg Md IK Fr SF Tu Ho SJ Tn Gn Am Tw - B: Sr Nu Si Mo Me Wn Wi Sw Vl Kv Db Vi Od Aq Tf Tk Eb Tl Pe Ak SM Mu Gu AA Pa Hn Lu PM Hu Ap Hr To Kg MI Ht SB - C: Le Lo Ir Mb Ci Ka Ks Ky MB - E: St - (si: Gt Ha Mc Wk) - D: 8.
10d 07h 18m	A: Ko Kn Me Mo Sw Gt Ha Ma Db Fü Ty Lg Tk Md IK? Eb? Tl Fr Ak SM SF Tu Ho SJ MB Mu Gu AA Mc Hn Lu Ap Tn Br Gn To Am Tw - B: Sr Nu Le Lo Si Wi Ir Ni Vl Kv Vi Hb Ci Hu Hr Kg SB - C: Mb Tf Ka Ks Ky Ht - E: Mw - X: Pe Pa - (si: St Od Aq MI Mw) - D: 2.
13d 18h 59m	A: Co Sr Nu Lo Si Me St Wn Gt Ha Kv Ma Db Vi Fü Hb Ty Od Mb Lg Tf Md IK Tl Fr Ak SM SF Ka Tu Ky Ho SJ MB Mu Gu AA Mc Lu PM Ap Tn Br Hr To Am Tw Kg MI DU Ht SB - B: Le Mo Wi Ir Sw Ni Vl Aq Tk Eb Ci Pe Ks Pa Hn Hu Wk Mw - X: Kn Gn
16d 21h 14m	A: od Tn - B: Co Sr Wi Ha Ma Db Fü Ty Lg Aq Tk Md Tl Ak SM SF Mu Pa Hn Lu PM Hu Ap Hr Tw Wk DU Ht SB - C: Le St Vl Ir Gt Kv Vi Hb Tf IK Eb Ci Ho MB To Am Kg - X: Gn - (si: Mb Ka Ky - b: Mc - bs: Ks - bp: Nu - bps: AA - pt: Lo Wn) - D: 14.
18d 06h 43m	A: Co Tf IK AA Tn - B: Me Fü Lg Tk Pe Ak SF Ks Pa Mc PM-C: Nu Mo Wn Ir Sw Vl Ha Kv Ma Db Vi Hb Mb Aq Md SM Ka Ky MB Mu Hn Ap Br Hr SB - E: St Am - X: Ty Gn - (si: Sr Od Eb Lu To Tw Kg) - D: 20.
19d 22h 08m	A: Ma Ty Lg Tf Tk Tl SF - B: Co Kn Wi Ha Kv Db Fü Hb Od Aq Md IK Pe Ak SM AA Pa Mc? Lu PM Hu Ap Tn Tw Ht SB - C: Sr Lo Me Ir Mb Ci Ka Ks Ky Ho MB Mu Hr To Am Kg Wk DU - X: Hn Gn - (si: St? Wn Sw Vl Gt Eb - b: Nu) - D: 12.
29d 02h 05m	A: Ty Tf Ap - B: Sr Fü Hb Lg IK Tl Pe Ak SM SF Mu AA Pa Mc Lu PM Hu Ap Tn Gn Hr To Am Tw - C: Lo Wn Wi Ir Vl Kv Vi Mb Tk Ka Ks Ky Ho SJ MB Gu - X: Md Hn Kg - (si: St? Sw Gt Ha Ma Db Od Aq Tu MI Mw) - D: 15

FEBRUARY

26d 10h 43m	A: Kn Me St Db Ty Od Tf Tl SF Tu Ho SJ AA Ap Tn Gn Tw - B: Sr Nu Lo Si Mo Wn Ir Kv Ma Vi Mb Aq Tk Md IK Pe Ak SM Ka Ks Mu Mc Hn Lu PM Hu Hr To Am Mw Ht - C: Co Le Wi Fü Hb Eb Ci Ky MB Gu DU SB - X: Lg Pa Kg - (si: Sw Vl Gt Ha Br MI Wk) - D: 1.
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MARCH

14d 15h 02m	A: Db - B: Ha Fü Hb Lg Tl Pe Ak Ap Tw Ht - C: Le Lo Me St Wi Ir Sw Gt Kv Vi Aq Tf Tk Md Ci SM SF Ks MB Mu Pa Mc PM Hr SB - X: Ty AA Kg - (si: Nu Wn Vl Ma Od Mb IK? Eb Ka Ky Lu Hu) - D: 22.
31d 09h 55m	B: Nu Me Vl Fü Hb Mu Ap SB - C: Mo Wn Wi Ir Sw Gt Od Mb Tk IK Ci SM Ka Ky Gu Mc PM Tn Gn Tw - E: Co St Ma Db Md Kg MI - X: Lg Pe Ak SF - (si: Ha AA - pg: Ty) - D: 30.
31d 10h 36m	B: Nu Me Vl Fü Hb Mu Ap SB - C: Mo Wn Wi Ir Sw Gt Od Mb Tk IK Ci SM Ka Ky Gu Mc PM Tn Gn Tw - E: Co St Ma Db Md Kg MI - X: Lg Pe Ak SF - (si: Ha AA - pg: Ty) - D: 30.
31d 10h 36m	A: Kn Sw Ks MB AA Mc Lu Ap Am - B: Od Lg Tk IK SM Mu Br Tw SB - C: Le Mo Ir Vl Gt Hb Tf Ci Tl Fr SF Ka Ky Hn PM Tn LQ - E: Co Nu Me St Wn Wi Ha Kv Ma Fü Aq Md To Kg MI DU

TABLE 1 STORM SUDDEN COMMENCEMENTS (S. S. C. 'S) 1960 - continued

## (MARCH)

Mw - X: Pe Ak Pa - (si: Db? - b: Tu - bs: Vi - bps: Sr - pg: Ty) - D: 11.  
 31d 10h 54m A: Ci SB - B: Mo Ma Tl SM Ap Tw - C: Kn Ir Sw Vl Gt Tk Md IK?  
 SF Mu AA PM Tn LQ Br Am - E: Co Nu Me St Wn Wi Ha Kv Hb  
 Mb Ka Ky Pa Hr To Kg MI DU Mw - X: Lg Pe Ak - (si: Db? Fü  
 Od Aq? MB Mc - pd: Ty) - D: 19.

APRIL

02d 23h 13m A: Co Nu Si Kn Mo St Wn Sw Ha Ma Db Fü Hb Ty Lg Tf Tk Md  
 IK Ci Tl Fr Pe SF Tu Ky Ho SJ MB Mu Gu AA Mc Lu PM Ap Tn  
 Gn Am Tw MI Ht SB - B: Sr Le Lo Me Wi Ir Ni Vl Gt Kv Vi Mb  
 Aq Eb SM Ka Pa Hn LQ Hr To Kg Wk DU - X: Ak - (si: Od) - D: 3.  
 05d 13h 00m A: Nu Le Kn Mo St Wn Gt Ha Ma Db Fü Hb Ty Lg Tf Tk Md IK  
 Pe Ak SF Ks PM Ap Tn Tw - B: Lo Me Wi Ir Sw Ni Vl Kv Aq Eb  
 Ci Tl SM MB Mu Pa Mc Hn Lu LQ Hr To Am - C: Si Vi MB Fr  
 Ka Tu Ky SJ Gu Kg Wk DU Mw - E: Co - (si: Sr Od Ho AA Br Gn  
 MI) - D: 2.  
 07d 15h 11m A: Nu Kn Mo Me Fü Lg Tf Tk Ci Fr Ap LQ Gn Tw SB - B: Sr Le  
 Lo Si Wn Wi Ir Ni Vl Gt Ha Ma Db Aq IK Tl Pe Ak SM SF Mu  
 Gu Pa Mc Hn Lu PM Tn Br Hr To Am Kg Mw Ht - C: Kv Vi Hb  
 Mb Ka Ky Ho Wk - X: St Md DU - (si: Sw? Ty Od Eb Ks Tu SJ  
 MB AA) - D: 2.  
 10d 01h 26m A: Co Sr Nu Fü IK SF Ks Ho AA Ap Gn Am Tw - B: Le Lo Si Kn  
 Mo Me St Wn Wi Ir Sw Ni Vl Ha Kv Ma Db Hb Ty Od Lg Aq Tf  
 Tk Md Ci Tl Pe SM Mu Gu Pa Mc Hn Lu PM Tn LQ Br Hr To  
 Kg SB - C: Vi Mb Eb Ak Ka Ky MB Mw Ht - X: DU - (si: Gt Fr Tu  
 SJ MI) - D: 1.  
 27d 20h 00m A: Co Nu Lo Si Kn Mo Me St Wn Wi Vl Gt Ha Kv Ma Db Vi Fü  
 Hb Ty Od Lg Aq Md Tf Tk IK Eb Tl Fr Pe Ci Ak SM SF Ks Tu  
 Ky Ho SJ MB Mu Gu AA Mc Lu PM Ap Tn Gn Hr Am Tw MI Ht  
 - B: Sr Le Ir Sw Ni Mb Ka LQ Br To Kg Wk DU SB - X: Pa Hn -  
 D: 1.  
 30d 01h 32m A: Co Sr Nu Lo Si Kn Mo Me St Wn Wi Sw Gt Ka Kv Db Vi Fü Hb  
 Ty Lg Aq Tf Md IK Eb Ci Tl Fr Pe Ak SM SF Tu Ky Ho SJ Mu  
 Gu AA Mc Hn Lu PM Ap Tn LQ Gn Hr To Am Tw Ht SB - B: Le  
 Ir Ni Vl Mb Tk Ka Ks MB Br Kg Mw DU - X: Pa - (si: Ma Od MI).  
 30d 12h 13m A: Sr Nu Si Kn St Wn Sw Gt Ha Ma Db Fü Hb Mb Aq Tf Tk Md IK  
 Eb Ci Tl Fr Pe Ak SM Ka Ks Tu Ky MB Mu Gu Lu PM Ap Tn LQ  
 Br Gn Hr To Am Tw Wk - B: Le Wi Ir Ni Vl Kv Vi? Ty Mw - C:  
 Kg - E: Co Lo Mo Me Du Ht SB - X: Pa - (si: Od SF Ho MI) - D: 4.

MAY

06d 16h 50m A: St Fü Lg Tl SF MB - B: Nu Mo Wn Wi Sw Vl Ha Ma Tk Md SM  
 LQ - C: Le Lo Me Ir Gt Kv Db Vi Hb Ty Aq Eb Ci Pe Ak Ks Mu  
 Mc Ap Tn Hr Tw - E: Co MI - X: Pa - (si: Od Mb IK Ka Ky) - D: 24.  
 06d 17h 18m A: Nu Db Fü Ci Pe - B: Kn Mo Ir Vl Gt Ma Hb Lg Tf Tk IK Ak  
 SM Ks Mu AA Lu Ap LQ Am SB - C: Lo Me Wi Kv Ty Fr Tu SJ  
 Hn Tn Tw - E: Co Vi Tl MI - X: St Pa - (si: Wn Sw Ha? Od Mb Aq  
 Md Eb Ka Ky MB Mc PM Gn - bps: Mw) - D: 14.  
 08d 04h 21m A: Co Sr Nu Le Lo Si Kn Mo St Wn Sw Ni Gt Ha Ma Db Fü Hb Ty  
 Lg Aq Tf Md IK Eb Ci Tl Fr Pe SF Ks Tu Ho SJ MB Mu Gu AA  
 Pa Mc Lu PM Ap Tn Br Gn Hr Am Tw MI Mw SB - B: Wi Ir Vl  
 Kv Vi Mb Tk Ak SM Ka Ky Hn LQ To Kg Wk DU - E: Me - X: Ht  
 - (si: Od).  
 11d 04h 35m A: Co Sr Nu Lo? Si Mo Me St Gt Ha Ma Db Vi Fü Od Lg Tf Tk  
 Md IK Eb Ci Tl Fr SF Tu Ho SJ Mu Gu AA Mc Lu Ap Tn Am Tw  
 - B: Le Wn Wi Ir Sw Ni Vl Hb Mb Aq Pe Ak SM Ka Ks Ky Pa  
 Hn PM LQ Br Hr To MI DU Ht - C: Kv Kg SB - E: Kn - X: Gn -  
 (si: Ty MB Wk - bps: Mw).  
 16d 11h 20m A: Tn - B: Nu Kn Mo Me St Fü Lg Tf Tk IK SM Hn PM Ap Gn Am

TABLE 1 STORM SUDDEN COMMENCEMENTS (S. S. C. 'S) 1960 - continued

## (MAY)

- C: Le Lo Wi Ir Sw Vl Gt Kv Ma Db Vi Hb Mb Aq Md Tl Pe Ak SF Ka Ks Ky MB Mu Mc Lu Br Ho To Tw Mw SB - X: Ty Kg - (si: Wn Ha Od AA) - D: 17.
16d 13h 51m A: Co Nu Le Kn Mo Me St Wn Sw Gt Ha Kv Ma Db Fü Hb Od Lg Aq Tf Tk Md IK Eb Ci Tl Pe SF Ks MB AA Mc Lu Lq Gn Am Tw SB - B: Lo Si Wi Ir Ni Vl Vi Fr Ak SM Tu SJ Mu Pa Hn PM Br Hr To Kg Mw Ht - C: Ho Wk DU - X: Ty - (si: Sr Mb Ka Ky Ap) - D: 1.
23d 11h 37m B: Sr Nu Mo Me Ir Sw Ha Ma Db Fü Ty Lg Tf IK? Pe PM Gn Am - C: Le Lo St Gt Kv Hb Tk Md Ci Tl Ak SM MB Mu Lu LQ Hr To Tw - X: Ht - (si: Wn Od Mb Ka Ks? Ky AA - cr: Vi) - D: 21.
28d 20h 29m A: Co Nu Le Lo Si Kn Mo Me St Wn Wi Sw Vl Gt Ha Kv Ma Db Vi Fü Hb Ty Od Mb Lg Aq Tf Tk Md IK Eb Tl Fr Pe AK SF Ka Ks Tu Ky Ho SJ MB Mu Gu AA Pa Mc Hn Lu Ap Tn LQ Gn Am Tw Hb SB - B: Sr Ir Ni Ci PM Hr To Kg MI Wk DU - C: SM Br - (bps: Mw).

## JUNE

04d 02h 48m A: Co Kn Mo Me Ha Db Fü Hb Od Mb Lg Tf Tk Md IK Eb Ci Tl Fr Pe Ak SF Ka Ks Tu Ky Ho SJ MB Mu Gu AA Mc Lu Ap Tn Br Pi Gn Tw SB - B: Sr Nu Si St Wi Sw Vl Ma Aq SM Pa Hn PM LQ Hr To Am MI Ht - C: Le Lo Wn Ir Kv Ty DU - (si: Gt Vi - bps: Mw) - D: 3.
21d 00h 13m B: St Vl Ma Fü Od Lg Md IK Pe Tn - C: Sr Le Lo Wn Wi Gt Kv Hb Aq Tf Ci Ak Ks Lu Gn Hr Tw - X: Ty Ka Pa Hn SB - (b: Nu Sw? - bp: Ha Tl AA - bps: Eb Mw) - D: 34.
27d 01h 45m A: Co Sr Si Kn Me St Vl Gt Ha Ma Db Fü Hb Od Mb Tf Tk Md IK Eb Ci Tl Fr Ak SF Ka Ks Tu Ky Ho SJ MB Mu Gu AA Pa Mc Lu PM Ap Tn LQ Br Pi Gn To Am Tw MI Ht SB - B: Nu Le Lo Wn Wi Ir Sw Vi Lg Aq Pe SM Hn - C: Mo Kv MB Hr DU - X: Ty - (si: Kg Wk Mw).
29d 19h 39m A: Co Sr Si Kn Mo Me St Wn Sw Gt Ha Kv Ma Db Fü Hb Od Lg Aq Tf Tk Md IK Eb Ci Tl Fr Pe SF Ks Tu Ky Ho SJ Mu Gu AA Mc Lu Ap Tn LQ Pi Am Tw SB - B: Le Lo Wi Ir Ni Vl Vi Mb Ak SM Ka MB Pa Hn PM Br Hr To - C: Kg Mw Ht - X: Ty - (si: Gn MI Mw) - D: 1.
30d 17h 20m A: Nu St? Ma Fü Od Lg Tk IK SF Ks AA Lu - B: Kn Mo Me Wn Ir Vl Db Hb Tf Ci Tl Pe Ak SM MB Mu Pa Mc Hn PM Ap Tn Br Am Tw Ht SB - C: Le Si Wi Sw Gt Kv Ty Eb Fr Tu SJ Gu LQ Pi Hr To - E: Co - X: Ho MI - (si: Sr Ha Mb Aq Md? Ka Ky - bp: Vi? Gn Wk - bps: Kg? Mw) - D: 2.

## JULY

14d 04h 47m A: Co St Ma Fr SF Tu AA Tw - B: Sr Nu Le Lo Si Mo Me Wn Wi Ni Vl Gt Ha Db Fü Od Mb Lg Aq Tk Eb Ci Tl Ak SM Ka SJ Mu Pa PM Ap Tn Lq Br Pi Gn To Am Kg - C: Kn Ir Kv Hb Tf IK? Pe Ky Ho MB Mc Hn Hr Ht SB - X: Lu - (si: Ty Ks? Gu Mi DU? - bs: Vi) - D: 3.
14d 17h 02m A: Co Nu Le Si Mo Me St Wn Wi Ni Vl Gt Ha Ma Db Vi Fü Hb Lg Aq Tf Md IK Eb Ci Tl Fr Pe SF Ks Tu Ky Ho SJ MB Gu Pa Tn Lq Pi Gn Am Tw Ht SB - B: Lo Kn Ir Sw Kv Mb Ak SM Ka Mu Mc Hn PM Ap Br Hr To Kg MI Wk DU - X: AA Lu - (si: Sr Ty Od Tk - bps: Mw).

## AUGUST

14d 15h 10m A: Nu Kn Mo Me St Gt Ha Kv Ma Db Fü Hb Od Lg Aq Tf Tk Md IK Eb Ci Tl Pe SM SF Ks MB AA Pa Lu Ap Tn Br Gn To Am Tw - B: Lo Si Wn Wi Ir Ni Vl Mb Fr Ak Ka Ky Mu Gu Mc Hn Pi Hr Wk DU Ht SB - C: Vi Kg - E: Co - X: Ty LQ - (si: Sr Le Sw Tu Ho SJ PM Mw) - D: 1.
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TABLE 1 STORM SUDDEN COMMENCEMENTS (S.S.C.'S) 1960 - continued

## (AUGUST)

- 16d 14h 09m A: Co Sr Nu Le Lo Si Kn Mo Me St Wn Wi Sw Ni Gt Ha Kv Ma Db  
Vi Fü Hb Ty Od Mb Lg Aq Tf Tk Md IK Eb Ci Tl Fr Pe SM SF  
Ka Ks Tu Ky Ho SJ MB Mu Gu AA Pa Hn Lu PM Ap Tn Br Gn  
Hr To Am Tw Kg MI? SB B: Ir Vl Ak Mc LQ Pi Wk Mw DU Ht.  
19d 16h 16m A: Co Nu Le Kn Mo Me St Gt Ha Kv Ma Db Fü Hb Ty Od Mb Lg  
Aq Tf Tk Md IK Eb Ci Tl Pe SF Ka Ks Tu Ky Ho MB Mu Gu AA  
Ap Tn Br Gn Tw - B: Lo Si Wi Ir Sw Ni VI Fr Ak SM SJ Pa Mc  
Hn PM LQ To Am Kg MI Wk DU Ht SB - C: Vi Hr - X: Lu Pi -  
(si: Sr Mw) - D: 1.
- 29d 00h 22m A: Co Sr Nu Le Lo Si Kn Mo Me St Wn Wi Ni Gt Ha Kv Ma Db  
Fü Hb Ty Od Mb Lg Aq Tf Tk Md IK Eb Ci Tl Fr SF Ka Tu Ky  
Ho SJ MB Mu Gu AA Pa Mc PM Ap Tn Pi Gn Hr To Am Tw Kg  
MI Wk Ht SB - B: Wi Ir Vl Vi Ak SM Hn LQ Br DU Mw - X: Ks  
Lu - D: 1.

SEPTEMBER

- 02d 11h 58m A: Nu Lo St Ha Ma Db Fü Hb Ty Od Lg Tf Tk IK Ci SF Ks Ho  
AA Tn - B: Kn Mo Wn Wi Sw Ni VI Gt Kv Mb Aq Md Eb Tl Pe Ak  
SM MB Mu Gu Ps Mc Hn Lu PM Ap Br Gn Hr Tw Mw - C: Co Le  
Si Ir Vi Ka Tu Ky SJ Pi To Kg SB - X: LQ - (si: Me) - D: 7.
- 04d 02h 30m A: Co Me St Lg IK Ci Fr SF Tu Ho SJ Gu AA Ap Tn Am - B: Sr  
Nu Si Kn Wn Sw Vl Ha Ma Db Fü Hb Od Aq Tf Md Eb Tl Ak SM  
Ka Ks Ky Mb Mu Pa Mc Hn Lu Pm Br Gn To Tw Kg MI Ht SB  
- C: Lo Mo Wi Ir Kv Vi Mb Tk Pe Pi Hr Wk - E: Mw - X: LQ -  
(si: Gt Ty DU?) - D: 2.
- 22d 14h 04m A: Fü SF - B: Nu Lo? Mo St Ir Ha Db Ty Lg Tf Tk Md? IK? Tl  
Ak SM Ks Mu Pa Mc Hn Lu Ap Tn Pi Tw - C: Me Wi Kv Vi Hb  
Mb Aq Ci Fr Pe Ka Tu Ky SJ MB Hr To Am - X: Kn PM LQ Br  
- (si: Wn Gt Ma Eb Ho AA - bs: Vl - cr: Le Sw - sfe: Od) - D: 13.
- 29d 08h 36m A: Nu Tn - B: Fü Od Lg Tf Tk IK Ak SM Mc Lu PM Ap Gn Am  
C: Lo Wn Wi Ir Gt Kv Ma Ty Mb Aq Ci Tl Pe SF Ka Ky Mu Pa  
Hn Lq Pi Hr To - X: Mo - (si: Sw Ha Eb AA Br Tw) - D: 27.

OCTOBER

- 04d 14h 27m A: Ci - B: Nu St Sw Od Lg SM MB Hu LQ - C: Lo Mo Wn Ha Ma  
Db Fü Hb Mb Tf Tk Md IK Tl Ak Ka Ky Mu Mc Lu Tn Tw SB -  
X: Pi - (si: MI - b; Kv) - D: 38.
- 06d 02h 37m A: IK Ci Ks AA Am Mw - B: Nu Mo Ir Db Aq SM Mu Lu PM Hu  
LQ Br To Ht SB - C: Lo Wn Sw Vl Gt Kv Ma Hb Tl Pe SF Ka Ky  
Gu Pa Mc Hn Tn Hr - E: Co Sr Le Me St Gn Kg MI - X: Lg Pi -  
(si: Ha Fü Ty Od Tk Md MB Ap Tw) - D: 14.
- 24d 14h 52m A: Co Nu Lo Si Kn Mo Me St Wn Sw Gt Ha Ma Db Vi Fü Hb Ty  
Od Lg Tf Tk Md IK Eb Ci Tl Fr SM SF Ks Tu Ho SJ Mb Gu AA  
AA Pa Hn Lu Ap Tn Br Pi Gn To Am DU Ht SB - B: Sr Le Wi  
Ir Ni Vl Kv Aq Pe Ak Ka Ky Mc PM Hu LQ Hr Kg MI Wk Mw -  
X: Tw - (si: Mu) - D: 1.

NOVEMBER

- 10d 07h 18m A: Co Tf Tk Ak AA Ap Tn Gn To Am Tw - B: Sr Nu Si Kn Me St  
Wn Ha Db Fü Ty Od Lg IK Tl SM Ks Mu Pa Hn PM Hu LQ Br Pi  
MI SB - C: Le Wi Kv Ma Vi Hb Mb Aq Md Ci Pe SF Ka Ky MB  
Mc Hr DU Mw Ht - X: Lo Ir Lu - (si: Mo Vl Gt Fr Tu Ho SJ Gu  
Wk - cr: Sw) - D: 2.
- 11d 00h 34m A: IK Ci SF Ap Tn Tw - B: Nu Mo Me St Wi Ha Db Fü Od Lg Tf  
Fr Ak SM Tu SJ Mu AA Pa Mc Lu Hu Lq Pi Gn Am Kg Ht SB -  
C: Le Lo Wn Ir Gt Kv Ma Vi Hb Mb Aq Tk Tl Pe Ka Ky MB PM  
Br Hr To MI - X: Ks Hn - (si: Si Ty Md Eb Ho Wk - cr: Sw?) - D: 8.
- 12d 13h 49m A: Co Sr Nu Le Lo Kn Mo Me St Wn Wi Gt Ha Ma Db Vi Fü Hb  
Od Mb Lg Aq Tf Tk Md IK Ci Tl Fr SM SF Ka Ks Tu Ky Ho MB  
Mu Gu AA Mc Ap Tn Br Pi Gn To Am Tw Kg Ht SB - B: Wi Sw

## TABLE 1 STORM SUDDEN COMMENCEMENTS (S. S. C. 'S) 1960 - continued

## (NOVEMBER)

		Ir Vl Kv Ty Eb Pe Pa Lu PM Hu LQ Hr MI Wk DU Mw - X: Hn - (si: SJ) - D: 1.
12d 18h 45m	A:	Ir? Ma Fü Hb Aq Tf SM Mu AA Ap Gn To Am Tw Ht - B: Db Lg Mc PM LQ Br Pi Hr - C: Lo Vl Vi? Kv Fr Ak MB Pa SB - E: Co Sr Nu Le Si Mo St Ty Tl Ho Tn Kg MI DU - X: Hn - ( si: Wn Ha Od Mb Tk Md IK Pe Ka Ks Ky SJ Gu Mw) - D: 13.
15d 13h 04m	A:	Nu Le Mo Me St Wn Sw Gt Ha Ma Bd Fü Hb Mb Lg Tf Tk IK Ci Tl Fr SM SF Ks Tu Ky Ho SJ Gu Tn Br Am MI Ht SB - B: Lo Si Wi Ir Ni Vl Vi Aq Md Eb Ak Ka MB Mu Mc Hn Lu PM Hu Ap LQ Pi Gn Hr To Tw Kg Wk Mw DU - C: Pe Pa - E: Co -X:KvAA - (si: Sr Ty Od) - D: 1.
21d 06h 31m	A:	Nu St Tf Tk Ci SF AA Ap Tn Ht - B: Sr Mo Me Wn Wi Ir Sw Ni Vl Gt Ma Db Fü Od Lg Aq Md IK Ak SM Ks Ho GuPa Mc Hn Lu PM Hu LQ Br Pi Gn Hr To Am Tw Kg - C:Le Lo Si Kv Hb Ty Mb Eb Tl Fr' Pe Ka Ky MB Mu - E: Co MI DU Mw - X: Kn'- (si: Ha? Wk) - D: 4.
24d 12h 32m	B:	Ir/ Ha Fü Od Lg Ak AA Lu Hu LQ Pi - C: Nu Lo Me Wn Wi Gt Vl Ma Db Hb Mb Tf Tk Md IK Eb Tl SM Ka Ky MB Mu Pa Mc Hn PM Ap Tn Br Gn Hr To Am Tw SB - (si: Ks - b: Pe?) - D: 25.
30d 19h 09m	A:	Co Nu Si Kn Mo Me St Wn Wi Gt Ha Kv Ma Db Vi Fü Hb Ty Od Lg Aq Tf Tk Md IK Eb Ci Tl Fr Ak SM SF Ks Ky Ho SJ Gu AA Mc Lu LQ Tn Br Pi Gn To T w DU Ht SB - B: Sr Le Lo Ir Sw Ni Vl Mb Pe Ka Tu MB Mu Pa Hn PM Hu Hr Kg MI Wk - X: Ap Am - D: 1.
30d 23h 58m	A:	Mo Me St Sw Fü Hb IK Ci SF Mu AA Lu Ap Gn Am Tw SB-X:Wi Ir Kv Db Vi Lg Tf Tl Ak Pa Mc PM Hu Tn Br Pi - C: Co Le Lo Si Vl Gt Ma Pe Ks Tu MB Hr - E: Nu Kg DU - X: Sr SM Hn LQ To MI Ht (si:Wn? Ha Ty Od Aq Mb Tk Md Eb Fr Ka Ky SJ Wk-bs:Kn)-D:4.

DECEMBER

07d 18h 04m	A:	Nu Lo Si St Wn Ha Ma Db Fü Ty Od LLg IK Ci Fr Ak SM SF Tu Ho Gu Lu Lq Tn Pi Tw Ht SB - B: Co Le Mo Wi Ir Sw Ni Vl Gt Kv Hb Mb Aq Tf Eb Tl Pe SJ MB Mu Pa Mc Hn PM Hu Ap Br Hr To Am Kg Wk DU - C: Vi Tk Ka Ky Mw - X: Me Gn - (si: Sr AA? MI) - D: 2.
18d 05h 14m	A:	AA - B: Nu Mo Db Fü? Lg Tf IK SM Ks Mc Hn Lu Hu Ap Tn Br Pi To Am - C: Lo Le ,St Wn Wi Ir Sw Vl Kv Ma Hb Ty Mb Aq Tk Md Ci Tl Pe Ak SF Ka Ky MB Mu PM LQ Hr Kg MI Ht SB - (si: Gt Ha? Od Tw Wk DU Mw) - D: 15.
25d 20h 02m	A:	Me Ha Ma Fü Ty Lg Tf IK Tl Fr SF Lu Tn Tw Ht SB - B: Co Nu Le Lo Si Kn Mo St Wn Wi Ir Ni Vl Gt Kv Db Aq Md Ak Tu Ho Mu AA Mc Hn PM Hu Ap Lq Pi Gn Hr To Am Kg DU - C: Sr Mb Ci Ka Ky SJ MB MI Wk Mw - (si: Vi Hb Tk Eb Pe? SM Ks?Gu Pa Br - cr: Sw Od).

TABLE 2a BAYS AND PULSATIONS 1960

Commencements of bays or pulsational disturbances associated with bays. When pulsations are reported predominantly as pg the time is followed by an asterisk. Stations where appeared other kinds of disturbances are included in parentheses. The letter Y means that the nature of the bay or pulsation was not specified.

Note. It is not quite certain that the list of bays and pulsational disturbances is complete, as it may be that a bay or train of pulsations has been selected by the observatories out of a great many similar disturbances which all occurred on the same day. It therefore seems better not to use this list for statistical purposes without caution.

## JANUARY

02d 18h 29m	b: C: Pe - bp: B: Sr Kn Ir IK Mu PM Gn; C: Kv Mb Aq Md Ka Ky AA To - pt: B: Lo Wn Tf Am Tw Wk; C: Gt Fü Tk - Y: B: SM; C: Nu Od Ak - X: DU.
03d 23h 48m	b: C: Pe - bp: A: Ha; B: Wi Fü Od Lg IK Tl Tn ; C: Kv Hb Mc Mw - pt: A: Aq Md Eb MB; B: Wn Ni Vl Gt Ma Db Tf Ci Pa PM Hr Am Tw; C: Mb Tk Ka Ky - Y: B: Nu Lo SF; C: St Sw - X: SM Hn Gn MI.
04d 22h 20m	bp: C: Kv - pt: A: Sr St Wn Ha Ma Od Lg Tf Md Eb Tl Ht; B: Nu Le Lo Wi Ir Ni Vl Gt Db Fü Hb Ty Aq Tk IK Ci Pe Ak SM MB Mu AA Hn Lu Hu Tn Hr Tw Kg Mw; C: Me Tu Gu Mc Wk - E: Sw Am.
06d 14h 54m	b: C: Br - bp: B: Hn; C: Sr Mb Ka Ky PM - bps: B: To - pt: B: Wi Gn - Y: B: SM SF; C: Ir Mu - X: DU.
11d 13h 46m	b: B: Hn Pm; C: Wn Kv - bs: B: Br - bp: B: Ir Hb Ty IK Ka Ky Mu Wk Mw; C: Mb - bps: A: Kn Mo - pt: B: Wi Tw SB - Y: A: Nu; B: Lo Ak SM Ks; C: Si Sw Gt Ha Od Lg Tf Ci Gu Ap - E: Me Ma Db Fü Aq Md Eb SF To - X: Pe MI.
12d 20h 53m	b: A: Ty Pe; B: Sw Db Lg Hu Ap Ht; C: Br - bs: A: Nu Hb Tl SF: B: Ir MB? - bp: A: Kn Kv Ma Aq Tf Eb Mc? Lu; B: Mo Ni Fü Tk Hr Wk; C: Mb Ka Ky - bps: A: St Wn Wi Gt Ha Od Md IK SM AA; B: Vl Tw Mw - Y: A: Tn; B: Lo Ci Ak; C: Le Mu - X: Gn.
15d 15h 12m	b: A: Ty Br; B: Ha Ma Od Aq Tk Pe; C: Fü MB? Mc - bp: A: Sr Kn Mb Ka Ky Mu; B: Mo Kv Hb Lg Eb Gu Hn PM; C: Lu - bps: A: Ir IK; B: To - pt: B: Tf Tw - Y: B: SF; C: Co Si Sw Gt Db SM - E: Me Md - X: Gn.
17d 12h 26m	b: A: Ty Pe Ap Br; B: Kv MB Mc? PM Hr; C: Hn - bs: B: AA To - bp: A: Ha Lg Mu Tw; B: Ir Vl Ma Fü Hb Od IK Mw; C: Mo Mb Eb Ka Ky - Y: A: Tf; B: Me Ak; C: Nu Lo Wn Sw Gt Db Tk Md Ci Tl Tu Pa Am - E: St Wi Aq SF SJ - X: Gn - (sse: SM Lu).
20d 10h 56m	b: A: Si; B: Ir Hm; C: Kv Pe - bp: B: Sr Mo Ha Hb Od Mb Lg Ka Tu Ky PM To Mw; C: Vi - bps: B: Mu - pt: B: Wi Ht SB - Y: B: Ak Ks; C: Nu Me Sw Gt Ma Db IK SM Ho SJ AA Ap - E: Co Wn Fü Tf Md SF Mc Br Tw - X: Pa Gn.
21d 01h 20m	b: A: Ty Eb Pe; B: Sw Hu - bp: A: Kv Fü Aq IK MB; B: Ir Lg Tk Tl Tu Pa PM Hr Ht; C: Hn To - bps: A: Kn St Wn Wi Ni Gt Ha Ma Db Hb Md SM Tw; B: Mo Vl Mw - pt: A: Ap; B: Am - Y: A: Nu Tf SF; B: Lo Me Ak Ks; C: Ci Mu Tn - E: Vi Mb Ka Ky SJ Mc Br Wk - X: Gn DU - (si: Le Od).
21d 11h 22m	b: B: Ha Hn; C: Kv Pe - bs: A: Sr Si - bp: A: Ir Mb Ka Ky; B: Od Lg Tk Tu Mu PM Wk; C: Hb - bps: B: Mo To - pt: A: Ap; B: Gn - Y: A: Br; B: Ak Ks; C: Sw Gt Ha Db Tf IK SM Gu - E: Co Le Me St Wn Wi Vi Fü Aq Md SF MB AA Pa MI Mw.
21d 19h 26m	b: A: Ty Pe; B: Sw MB; C: Mc - bs: A: Nu Kn Hb; B: Ir - bp: A: Kv Fü Aq IK Eb Hr; B: Lg Tk Tl Lu Tw Kg - bps: A: Mo St Wi Ni Gt Ha Ma Db Od Md AA; B: Wn Vl - pt: B: Ht - Y: A: Tf Ak Tn; B: Lo SM; C: Le Ci Mu Br - E: Co Me Vi Mb SF Ka Ky To MI SB - X: Ap.
22d 10h 23m	b: A: Ap; B: Ir Ma Tu Ho; C: Kv Pe Pe - bs: B: Vi - bp: A: Sr Si; B: Od Mb Ka Ky; C: PM To - bps: B: Am - Y: B: Me Db Ks; C: Nu Wn Sw Gt Kv IK Tl SM Mu Br - E: Co St Fü Tf Tk Md - X: SF Kg.

TABLE 2a BAYS AND PULSATIONS 1960 - continued

## (JANUARY)

27d 00h 44m b: A: SF; B: Ma Ci; C: PM - bs; B: Pe - bp: A: Gt Lg IK Tl - B: Mo Wn Wi Sw Db Fü Hb Od Aq Eb Mc; C: Kv MB Mw - bps: A: Ha SM B: Vl Md Eb AA - pt: B: Tf - Y: B: Nu Lo; C: Le Me St Ak Tu Mu - X: Kg SB.

29d 22h 05m bp: A: IK Tw; B: Fü AA; C: Kv - pt: A: Nu Wn Gt Ha Ma Aq Md IK IK Eb Ap; B: St Wi Db Tf Tl MB Mc Hn PM Tn Gn Hr Am Mw; C: Hb Mb Tk Ka Ky - Y: B: Lo SM; C: Le Me Ci Ak - X: Kg SB.

## FEBRUARY

01d 03h 45m b: C: Fü - bp: B: Mw; C: PM - pt: A: MB Ap Am Tw; B: Ha Tf IK Hn Hu Gn; C: Mc - Y: B: SM; C: Me Wn Mu Ht - X: Ks Pa Kg.

01d 15h 47m b: B: PM - bp: B: Mb Lg Ka Ky Mu Hn Gn To - pt: A: Tf; C: Tk Tw - Y: C: Nu Me Ir Gt Ha Ma Od IK Pe SM Tu AA - E: Md MB? - X: Kg.

03d 12h 10m b: C: MI - bp: B: Si Gn To Am; C: Vi DU - bps: A: Co - pt: A: Ap; B: Tf Mu Hn; C: Mb Ka Ky PM Tw - Y: B: Ak SM; C: Me Sw Ha IK Fr Pe Tu AA - E: Lo Db Fü Md MB? Mw - X: Lg Kg.

03 22h 24m bs: C: Hb - bp: A: Fü Tl; B: Ma Od AA; C: Le Wi Mb Eb Ka Ky Hr - bps: B: Ha - pt: A: Nu Wn Tf Md Am Tw; B: Vl Gt Aq Ap Gn; C: PM Mw - Y: B: Lo Me Ty SM Ks; C: Sw IK Ci Pe SF - E: Db - X: Lg Kg DU.

03d 22h 46m b: B: Ht - bs: A: Pe; B: Hb; C: PM - bp: A: Nu IK Eb; B: Kn Wn Wi Ma Tl Mc Lu; C: Mo Tw - bps: A: MB AA; B: Vl Od Aq Md Hr Mw - pt: A: Tf Ap; B: Ni Gt Pa Hu Gn - Y: A: SF; B: Lo Me Ty Ci SM Ks; C: Le Sw Fr Ak Tu Mu - E: Db - X: Lg Kg DU.

04 17h 07m b: A: Co; C: Ht - bs: C: Hb - bp: A: Kn Mu; B: Sr Ir Hn Gn To; C: Mb Ka Ky P= Tw - pt: C: Tk - Y: B: Me SM Br; C: Ha Od Md Pe Tu AA - X: Kg.

04d 18h 59m b: A: Pe; B: Wk - bp: A: Lg IK; B: Kn Mo St Wn Vl Gt Ha Fü Aq Md Mc Lu Gn Hr; C: Mb En Ka Ky - bps: A: Nu; B: Hb Od Mw - pt: B: Wi Ma Hn Am; C: MB PM - Y: B: Db Ak SM Ks; C: Le Lo Me Sw Tf Tl SF Mu Tn - X: Kg.

08d 11h 46m bs: A: Co; B: MI - bp: A: Am; B: Si Kn Ir Lg Ap To; C: Vi Mb Ka Ky - pt: A: Tf Gn; B: Ha Aq Hn PM Hu Hr SB - pg: A: Mu - Y: B: Me Ak SM; C: Sw Gt Ty Od Pe Tu Gu Br - E: Fü Md - X: Kg.

09d 00h 19m bp: A: St; B: Vl - pt: A: Ma; B: Wn Wi Ni Ha Fü Ty Aq Tf Md Eb Tl Hn Ap Hr; C: Ci MB PM - Y: B: Nu Lo Me Db; C: Gt SM - X: Kg SB.

09d 01h 04m b: A: Pe; B: Tn Ht; C: Vl - bp: B: Wi Gt Ma Db Fü Hb Ty Od Lg Aq Md IK Eb Tl Lu Hu Mw; C: Wn Mc PM - bps: B: Ha Pe Mu; C: MB - pt: A: Ap Am; B: Hr; C: Tw MI - Y: B: Lo Me Ci SM SF; C: Le Sw Tf Ak AA - X: Kg - (si: SB).

09d 01h 56m bps: B: Db - pt: A: Tu SJ Mu Ap Tw SB; B: Gt Ha Fü Od Md IK Eb Ci Tl SM MB Pa Hn Lu PM Hu Hr Wk; C: Nu Lo Me Wn Wi Ir Vl Ty Mb Aq Ka Ky Mc - E: Sw - X: Le Lg Ak Kg.

12d 01h 05m b: B: Pe Tn; C: Tk - bp: A: Wn Ma Md IK AA; B: Sw Ni Gt Db Fü Hb Ty Lg Tf Eb Tl Mw; C: Mo - bps: A: St Ha Od; B: Wi Vl Aq; C: Le - pt: A: Ap; B: Pa Hr Tw; C: MB PM - Y: A: Nu; B: Me Ci Ak SM; C: Lo Mu Mc - X: Kg DU.

13d 20h 58m b: A: Pe; B: Tn; C: To - bs: A: Ks - bp: A: Fü Tf Tk IK AA Gn; B: Kn Mo Ir Ma Ty Od Lg Md Hr Mw; C: Wi Hb Mb Ka Ky Mc - bps: A: Ha - pt: B: Wn Ni Aq MB Ap Tw; C: PM Wk - Y: A: Nu; B: Lo Db Ci Ak; C: Le Me Sw Gt Tl SM Mu - E: St Eb - X: Br Am Kg Ht.

14d 19h 44m b: A: Lo Gn; B: Sw Tu Pa; C: Hn - bs: A: Nu Pe SF Ks; B: Hb; C: Hu - bp: A: St Gt Ha Ma Db Fü Ty Aq Tf Tk Md IK Tl Mu Hr; B: Sr Mb Lg Ka Ty Tw Wk; C: PM To - bps: A: Kn Mo Wi Ir Vl Od Eb AA; B: Wn Ni; C: Le - pt: A: SB - Y: Lo Ak Tn; B: Ci SM; C: Fr - X: Br Kg Ht.

TABLE 2a BAYS AND PULSATIONS 1960 - continued

## (FEBRUARY)

15d 13h 21m	b; B: Od - bs; A: Co - bp; A: Am; B: Sr Si Ir To; C: Vi Mb Ka Ky - pt; A: Ap; B: Wi Tf Mu Hn PM Tw; C: Ha Aq Md MB - Y; B: SM - C: Me Sw IK Ak Tu - X; Kg Ht - (si: MI).
15d 16h 29m	b; A: IK Pe; B: Sw Gt Fü Hb Od Aq Md PM; C: Wn Hr - bp; A: Kn Mo Mu; B: Ir Ma Mb Ka Ky Gn; C: Tk - bps; A: Co - pt; B: Wi; C: Ha Tf - Y; B: Db Ak; C: Le Lo Si Me SM Tu AA Mc Br - X: Hn Tw Kg Ht.
16d 01h 29m	b; A: Pe; B: Tn - bs; MB - bp; A: St Wn Wi Gt Ma Db Fü Ty Lg Md IK Ci Tl SF; B: Mo Sw Ni Hb Od AA Mc Lu Mw; C: Mb Ka Ky - bps; A: Vl Ha Eb; B: Le Aq Hr - pt; Tf Hn; C: PM - Y; Y: A: NuSM B: Lo; C: Me Tu - X: Tw Kg Ht.
18d 17h 59m	b; A: Fü Pe; B: Si Sw Ma Lg; C: Wn Vl MB? Mc Hr MI - bp; A: Kn IK; B: Wi Ir Ha Db Aq Tk Md Mu Tw Mw; C: Hb Mb Eb Ka Ky - bps; A: Co; B: Mo Od - pt; A: Tf - Y; A: Nu; B: Ak SM; C: Le Lo Me Gt Ty Ci Tu SJ AA - E: St PM SB - X: Br Kg Ht.
19d 17h 25m	b; A: Pe; B: Ma MI; C: MB - bp; A: Gt Fü Lg IK Mu; B: Sr Wn Vl Aq Tk Md Tl To Wk; C: Eb Hr - bps; A: Nu Kn Ha Hb Od Tw; B: Mo - pt; A: SB; B: Mb Ka Ky Pa PM Ap Am Ht - Y; B: Lo Db Tf Ak; C: Me Ir Sw Ty Ci Fr SM Tu AA Tn Br - E: St SF - X: Kg DU Mw.
20d 16h 09m	b; A: Nu Hb Tk Pe; B: Wn Ir Sw Ma Fü; C: MB - bp; A: Mo; B: Wi Gt Ha Db Lg Aq Md IK Eb Mu Hn Gn To; C: Ty Mb Ka Mc Wk - bps; A: Kn - pt; B: Pa PM Ap Am - Y; B: Tf Ak SM Ks; C: Le Lo St Od Ci Tl Tu SJ Tn Br - E: Me - X: Kg DU Ht.
20d 22h 09m	b; A: Pe; B: Sw - bp; A: Kn Ma Ty Lg IK AA; B: Mo St Wn Vl Gt Fü Hb Aq Md Eb Tl; C: Tk - bps; A: Ha Od; B: Wi - pt; B: Ni Nu Hr C: MB Mw - Y; A: Nu; B: Lo Db Ci SM Ks; C: Le Tf Ak Mc - E: Me - X: Hn Kg DU Ht.
21d 16h 13m	b; A: Wn Fü Md; B: Sw Ni Ma Aq Tk Tl Hr - bp; A: Kn Mo Ha Hb Ty Tf; B: Wi Vl Gt Db Lg IK Eb Mu Tw; C: Wk - bps; A: St Od; B: Le - pt; B: Ht; C: Md Ka Ky PM - Y; A: Nu Ak; B: SM; C: Ir Ci Tu SJ Mc Tr - E: Co Lo Me MI - X: SF Kg DU.
22d 19h 51m	b; A: Sw Tk Pe; B: Tn; C: MB? - bp; A: St Gt Ha Fü Hb Tf Md IK; B: Le Mo Wn Wi Ni Vl Ma Db Ty Lg Aq Eb Tl AA Hr Wk Mw; C: Mb Ka Ky - bps; A: Nu Od - pt; B: PM SB - Y; B: Lo Ak; C: Me Ci SM SF Mu - X: Am Kg.
23d 16h 09m	b; A: Co Fü Od Aq Md Pe; B: Wi Sw Ni Gt Ma IK Tk Hr Mi; C: Wn MB? Mc - bp; A: Kn Ha Ty IK Mu; B: Sr Le Db Hb Md Lg Ka Ky Hn PM Tw Wk Mw; C: Eb Lu To - bps; A: Mo Ir; B: Gn - Y; A: Nu; B: Lo Tf Ci Ak SM SF Ks; C: Me Tl Tu AA - X: Kg.
24d 04h 24m	b; B: Pe; C: Fü - bp; A: Tw; B: Ha Od Tl Tu SJ Mu AA Hu SB; C: Vi Hb Eb Pa - bps; B: Fr - pt; A: Ap Am; B: Hn PM; C: Mb Ka Ky MB Hr - Y; B: SM; C: Me St Wn Gt Ma Db IK Ci Ak - X: Kg.
25d 07h 15m	bp; C: Vi - pt; A: Mu Ap Am Tw; B: Si Me Ha Od Lg Tf Fr Ak Ho AA Hn Lu PM Hu Hr To Ht; C: Lo St Ir Gt Mb Md IK SM Ka Ky MB Pa Mc MI - E: Sw Ci - X: Aq Kg SB.
25d 21h 20m	bp; A: Ha - bps; B: Db - pt; A: Me Gt Ma Od Tf Md IK Tl Tu Lu Ap Hr Tw; B: Sr Nu St Wn Wi Ni Fü Hb Aq Tk Eb Ak Mu AA Pa Mc Hn Hu Tn; C: Le Lo Mb SM Ka Ky PM Mw - E: Sw Ci Am - X: Ty Lg Kg SB.
27d 02h 14m	b; B: Co Pe - bp; B: Wi Gt Ha Fü Ty Od Lg Tl Mu Mc; C: Hb - pt; A: Am; B: Ma Aq - Y; B: Db SM Ks; C: Nu Me Sw Tf Ci Ak SF AA Tn - E: Lo St Eb Br - X: Hn Kg - (si: IK).
29d 00h 33m	bp; A: Ha Ty IK Tn; B: St Wi Fü Od Lg Aq Md Eb Mc Lu Mw; C: Hb - pt; A: Gt Ma MB Ap Tw; B: Nu Wn Ni Vl Ci Tl Mu Pa Hn PM Hu Hr Am Ht; C: Mb Ka Ky - Y; A: SF; B: Lo Db Ak SM; C: Me Sw Tf Br - E: AA - X: Pe Kg.
29d 01h 53m	bp; A: Tw; B: Wi Sw Ha Fü Hb Lg Aq Md Tl Fr Mc; C: Wn Eb - pt;

TABLE 2a BAYS AND PULSATIONS 1960 - continued

(FEBRUARY)

A: Gt Ma Ty MB Ap Am; B: Nu IK Pa Hn PM Hu Hr Ht SB; C: Mb Ka Ky Gn - pg; A: Mu - Y; B: Lo Db Ci SM; C: Le Me Od Tf Tu SJ AA - X: Pe Kg.

## MARCH

02d 01h 34m	b: A: Nu Pe; B: Tu Tn; C: Br - bp; A: St Ma Fü Hb Ty Aq Md IK Eb SM SF AA Lu; B: Le Mo Wn Wi Sw Ni Vl Gt Kv Mu Mc Hr; C: Mb Tk Ka Ky Pa - bps; A: Ha Od Tl MB; B: Mw - pt; A: LQ Tw; B: Hu Ht; C: Gn - Y: A: Tf Ks; B: Lo Db Ci Ak; C: Me Fr SJ-X; Kg Wk.
02d 08h 13m	b: B: Ir Ma Od IK Fr Mu Br; C: Wn Kv Aq Md Hn - bs; A: Co-bp; B: Mo Lg Tu Hu To Tw; C: Vi Hb Mb Tk Ka Ky Mw - bps; A: Am - pt; B: Ap Ht; C: Ha Gn - Y: B: Tf Ak SM; C: Si Me Sw Gt Ty Ci SJ Mc PM - E: Hr - X: Db SF Lu Kg Wk.
02d 11h 57m	b: A: Br MI; B: Tu; C: Wi Kv - bp; A: Si Ap; B: Kn Ir Ty Mb Lg Ka Ky Mu Hn PM To; C: Vi Hb - bps; A: Co Sr Od Am - pt; C: Gn - Y: B: Ak SM SF; C: Me Sw Gt Ha Ma Tf IK Ci Fr AA - E: Fü Md Hr - X: Pa Lq Kg Wk.
02d 21h 57m	b: A: Pe; B: Sw Mu Tn - bs; A: Ks - bp; A: Kv Ma Fü Hb Lg Tk IK AA Lu; B: Kn Ir Ty Eb Mc - bps; A: Gt Ha Od Md; B: Mo Wn Wi Ni Db Aq Hr Mw - pt; A: Ht; B: Vl Tl Hu Am; C: MB? Gn Tw - Y: A: Nu Tf Ak SF; B: Lo SM; C: Me Ci Tu Br - X: Pa Kg.
03d 22h 44m	b: B: Vl; C: Tn - bp; A: Lg; B: St Kv Tl; C: Mb Eb Ka Ky - bps; B: Ha - pt; A: Nu Ht; B: Wn Ni Gt Ma Db Fü Ty Aq Md Hr; C: Mw - Y: A: Tf; B: Lo SF; C: Me Sw IK Ak SM Tu - X: Gu Pa Hn Kg SB.
03d 23h 03m	b: A: Ci Pe; B: Hb; C: Tn Mc - bp; A: Nu Fü Ty Lg IK; B: Kn Mo Sw Tl AA Lu; C: Eb Hr Wk - bps; A: Gt Ma Od; B: Wn Wi VlDb Aq Md Mw - pt; A: Ht; B: Am - Y: B: Lo Ak SM SF; C: Me Ir Tu - X: Gu Pa Kg SB - (si: Le).
04d 14h 16m	b: A: Si Ap Br; B: Ir Ha Kv Od Aq Am - bp; A: Mb Ka Ky Mu Gu Gn; B: Sr Lg Th PM To Wk DU Mw; C: Hb - bps; A: Co Kn Mo - pt; B: Wi Pa; C: Wn - Y: B: Db Ak; C: Gt Ty Tf IK SM SF Tu Tn - E: Me Fü Md LQ MI - X: Pe Kg.
04d 29h 59m	b: A: Tn; B: Sw Ir Tw - bs; A: Ma Pe; B: SM Ks - bp; A: Ty Lg IK AA; B: Nu Mo Wn Vl Gt Kv Fü Hb Tk Md Eb Tl Mc Lu Hr Wk; C: Mb Ka Ky MB? - bps; A: Ha Od; B: Kn Wi Aq Mw - pt; B: Mu - Y: A: Tf; B: Lo Db Ci Ak; C: Le SF Tu SJ - E: Me St - X: LQ Kg SB.
05d 06h 57m	b: B: Od Lg SJ; C: To - bs; B: Fr; C: Wn - bp; A: Tw; B: Ha Tu Hu LQ Am; C: Mb Ka Ky - bps; B: Vi - pt; B: Mu Ap Ht - Y: B: Ak SM C: Ci Si Me Gt Ma IK Ci Br - X: Pe Mc Kg SB.
05d 13h 47m	b: B: Co Ir Od MB Br Ht; C: Kv Mc - bp; A: Gn; B: Hb Lg Tk Mu To Am - bps; A: Sr; C: Mo - Y: B: Me Ak SM; C: Nu Ha Ma Db Tf IK Ci Fr Pe PM - E: Wn Fü Md SF - X: LQ Kg SB.
07d 14h 05m	bp; C: Mb Ka Ky - pt; A: Sr Mu; B: Si Wi Ir Db Od Lg Aq IK SM Gu Pa Hn Lu PM Hu Am Tw DU; C: Me Kv Tf Md Eb Tu AA Mc LQ Hr To - E: Sw - X: Kg.
07d 20h 37m	b: A: Ht - bp; B: Lg; C: Kn - pt; A: Gt Od Tf; B: Nu Lo Wn Wi Ni Ha Kv Ma Db Fü Aq Md IK Eb? Tl Tn Hr - Y: B: SM; C: Ak - E: MB - X: Kg - (si: SB - cr: Am - sfe: Hu LQ Tw).
08d 03h 09m	bp; A: Tw; B: Lg Mu Mc Hn; C: Mb Tl Ka Ky Mw - bps; Hu - pt; A: Od SM; B: St Wn Gt Kv Db Fü Aq IK Eb MB Mu Pa Ap LQ Hr SSB; C: Nu Md PM - Y: C: Lo Me Tf Ci Pe Ak SJ AA Tn Am - X: Ty Gu Kg.
11d 01h 07m	b: B: Vl Pe; C: Kv - bp; A: Lg; B: Wn Wi Sw Fü Aq IK? Tl SF Mc C: Mo Kv Hb Md Lu - bps; A: Sr Kn Ha; B: Gt AA - pt; A: Gn; B: Tf Eb Hr Am Ht; C: PM - Y: B: Nu Lo Ma Db; C: Le St Ty Od Ci Mu - E: Tk LQ Br DU - X: Kg - (ssc: SM?).
11d 11h 07m	b: B: Tu; C: Kv Pe - bs; B: Mo Hu - bp; A: Si Mb Ka Mu Gu Ap To Tw; B: Ir Ha Od Lg Ky Hn Wk DU; C: Vi - bps; A: Gn Am; B: Hb

TABLE 2a BAYS AND PULSATIONS 1960 - continued

## (MARCH)

	pt; A: Ht; B: SB; C: PM - Y: A: BR; B: Ma Ty Tf Ak; C: Nu Le Lo Sw Gt IK Ci Fr SM SJ - E: Co Me Wn Wi Db Fü Aq Md SFAAPa Tn LQ Hr Mw - X: Kg.
11d 20h 07m	b; B: Sw Od Pe - bp: A: Nu Wn Gt Ma; B: Mo St Vl Fü Hb Lg Aq? IK Eb AA Ht; C: Kv Md Mc Lu - bps: A: Ha; B: Wi - pt: A: SB; B: Gn Hr - Y: B: Lo Db; C: Le Ty Tf Ci Tl Ak SM Ks - E: Co Me SF LQ Am - X: Kg.
11d 23h 04m	b; B: Pe - bp: A: Wn Gt Ma Lg IK; B: St Wi Sw Fü Hb Od Aq Md Eb AA Mc Mw; C: Kv Hr - bps: A: Vl Ha Tl; B: Le Mo Db - pt: A: Ap Ht SB; B: Pa Hn Gn; C: Mb Ka Ky MB - Y: A: SM SF; B: Lo Nu Ci; C: Ks Br - E: Me LQ Am - X: Kg.
13d 17h 48m	b; A: Pe; B: Vl; C: MB? - bp: A: Kn; B: Mo Ir Gt Ha Ma Fü Hb Od Lg Md IK; C: Wi Kv Tk Pa Mc Lu To - bps: B: Gn - pt: B: Wn Mb Aq Eb Ka Ky PM Ap Hr Am Wk - pg: A: Mu - Y: B: Nu Lo Tf SM C: Me Sw Db Ty Ci Ak Tn - E: LQ - X: Kg Ht.
14d 09h 08m	b; A: Ap; B: Si Ir Tu - bp: A: Am Ht; B: Sr Lg To; C: Mb Ka Ky - bps: A: Co; Q Vi - pt: A: Tf Tw; B: Hu; C: PM LQ - Y: A: Me; B: Ak SM; C: Fr Br - X: Eb Kg.
18d 05h 34m	b; B: Ir Od Pa Hn Br To; C: Wn - bp: A: Sr SJ Mu Tw Ht; B: Vi Mb Lg Ka Ky Hu Gn Mw; C: Kb Tk Eb Hr - bps: B: Tu - pt: B: Am SB - Y: A: Me; B: Ak SM; C: Co Sw Ty Tf IK Ci Pe AA PM-E: Fü Md Tn Wk - X: Kg.
18d 22h 21m	b; A: Pe; B: Sw Ap - bp: A: St; B: Ma Hb Od Lg Aq Md Eb Tl Tn Hr C: Mb Ka Ky - bps: A: Ha; B: Le - pt: A: Nu; B: Wn Db Hu; C: MB - Y: A: SF; B: Lo Me SM; C: Gt IK Tu AA PM Br SB - X: Mo Kv Ty Kg.
18d 22h 41m	bs: B: Mw - bp: A: Lg Md IK Tl SM Tw; B: Sr Kn Wi F1 Gt Fü SF AA Mc; C: Wn Hb Lu - bps: B: Db - pt: A: Ap; B: Aq Md Hn Hu Am Ht; C: PM LQ - E: Hr - Y: A: Nu; B: Me Tf Ci Ak; C: Le Ir Sw SJ Br - X: Mo Kv Ty Kg SB.
21d 12h 37m	b; A: Si Br; B: Ho; C: Kv - bs: B: MI - bp: A: Kn Mb Ka Ky Mu Gu Ap Gn; B: Ir Vi Od Lg Tk Hn PM To Wk - bps: A: Co Sr DU; B: Mo - pt: A: Am; B: Ht - Y: B: Ak; C: Lo Me Sw Vl Gt Ha Fü Hb Ty Tf IK Ci SM Ks Tu SJ - E: Md - X: LQ.
22d 12h 40m	b; B: Co Br - bp: A: Am; B: Sr Ir Mb Ka Ky Mu Gu Hn PM Ap Gn To DU; C: Vi Wk - pt: B: SB - Y: B: Me; C: Lg Ci Ak SM Hr-E: Lo Md - X: LQ.
22d 23h 56m	b; A: Pe; B: Sw - bp: A: Md IK; B: Wn Vl Fü Lg Aq? Eb Tn Mc; C: Wi Kv Hb MB Lu PM Mw - bps: B: Ha - pt: A: Gt Ap LQ Am Tw; B: St Od Tl Pa Hn Hu Wk - Y: B: Nu Lo Db C i SM; C: Le Me Ma SF SY AA Br Hr - X: Ty TO MI SB.
23d 21h 42m	bp: A: St Ha; B: Fü Od Lg Tn; C: Kv - bps: B: Mw - pt: A: Wn Gt Ma Hb Aq Md IK MB Ap LQ; B: Nu Wi Ni Vl Db Tk Eb Tl Pa Gn Tw Ht SB; C: Mb Ka Ky - pg: B: AA - Y: A: SM Ks; B: Lo Ak SF; C: Le Me Sw Tf - X: Ty Pe Am - (si: Hr?).
25d 23h 29m	b; A: Pe SF; B: Tn - bp: A: Kn St Wn Gt Ha Ma Db Fü Hb Ty Od Lg Md IK Ci Tl; B: Mo Ir Sw Ni Vl Aq Eb MB AA Hr Tw; C: Tk Mc Lu - bps: B: Le Wi Mw - pt: A: Ap SB; C: Mb Ka Ky PM Gn - Y: A: Nu Tf; B: Lo Ak SM; C: Ks Tu - X: Kv LQ.
26d 08h 19m	b; B: Pe SJ - bp: A: Tw Ht SB; B: Co Ir Lg Tu Pa Hu; C: Vi To - bps: B: Fr - pt: A: Tf Ap Am; B: LQ; C: Mb Aq Md Ka Ky MB PM - Y: A: Me; B: Ak SM; C: Si Ha Ty Od Tn - X: Lu.
26d 14h 07m	bp: B: Sr - pt: A: Od Tu Tw; B: Me Wi Ir Db Mb Lg Md Tl SM Ka Ky Mu Gu AA Hn Lu PM Hu Ap LQ To Am MI SB; C: Hb Ty Tf Tk IK Eb Ci Ak MB Mc Hr - E: Sw - X: Pe Tn Kg.
27d 03h 57m	bp: A: Tw; B: Lg Pa; C: Md Eb MB - bps: B: Hu - pt: A: Mu Ap; B: AA Hn LQ Am; C: Wn Ha Mb Aq Ka Ky PM - Y: B: SM; C: Me Gt Db IK Ci Tl Fr Ak Tu SJ Hr - X: Ty.

TABLE 2a BAYS AND PULSATIONS 1960 - continued

## (MARCH)

29d 22h 31m	b: B: Ir Vl - bp: A: Fü; B: Le Ma Lg Md Tl Mc Hr Tw Kg; C: Kv Eb PM - bps: B: Ha AA - pt: A: Ap Am B: Wn Wi Gt Db Aq IK Ht SB; C: Mb Ka Ky MB? Wk - Y: B: Nu Lo SM; C: Me Sw Ty Od Ci Ak Mu - E: St LQ - X: Gn.
29d 23h 02m	b: A: Pe - bp: A: St Fü Lg Md IK Tl SF; B: Wn Sw Vl Od Aq Eb AA Mc Hr Tw; C: Mo Hb MB Lu - bps: A: Gt; B: Wi Db Mw - pt: A: Am; B: Hu Ap Ht SB; C: Mb Ka Ky PM LQ - Y: B: Nu Lo Ci SM; C: Le Me Ak Tn - X: Ty Ln Gn
30d 15h 20m	b: C: Wn Kv - bs: B: Hu - bp: A: Ko Kn Mu; B: Od Lg Pa Hn PM To Mw; C: Mo Th Wk DU - bps: A: Sr; B: Ir; C: Vi Mb Ka Ky - pt: B: Wi Aq Md Am; C: Ha Tw - Y: B: Ak; C: Si Me Sw Gt Ky IK Ci SM Ks Tu Br - E: Le LQ - X: Ty Gn - (si: Gu).
30d 21h 28m	b: A: Pe; C: MB? - bs: A: Ks - bp: A: Fü Hb Ty; B: Wi Ir Sw Ha Kv Lg Aq Md Eb Tl AA Hr Kg; C: Mb Ka Ky Mc - bps: A: Nu Kn Wn Gt Od IK; B: Mo - pt: A: Am; B: Ht; C: PM Tw - Y: B: Lo Ma Db Tf Ak; C: Le Me Vl Ci SM Tn Br - E: St SF SJ Lu Mw - X: LQ Gn.

APRIL

04d 21h 03m	b: B: Sw; C: To - bp: A: Kn St Gt Ha Fü Lg IK Tl Wk; B: Sr Wn Wi Ni Vl Kv Db Ty Od Aq Eb SM Tw; C: Hb Mb Md Ka Ky MB Hn Lu PM Hr - bps: A: Mo; B: Mw - pt: A: Ap SB; B: Pa Am Ht - Y: A: Nu Lo; B: Ak SF; C: Le Me Ma Tf Ci Fr SJ Mu AA - E: Tk Mc Tn LQ - X: Gn.
05d 14h 35m	b: A: Co; B: Gt; C: MB - bp: A: Si; B: Kn Wi Ir Lg Hn To ; C: Mb Ka Ky - bps: Mo Gn - pt: A: Am; B: Ap Tw SB; C: Ha PM - pg: A: Mu - Y: A: Tf; B: Lo Ak; C: Le Me Wn IK Fr SM Ks Tu SJ Gu AA - E: Nu St Db Fü Tk Md SF LQ Hr - X: Aq.
06d 05h 25m	b: B: Fr MB Ht - bp: A: Tw; B: Tu SJ Pa Wk SB; C: Vi - pt: B: Wi LQ; C: Tf Gn - Y: B: SM; C: Me Wn Gt - X: Ak SF.
06d 12h 25m	b: A: Co; B: Si; C: Vi - bs: A: MI - bp: A: Sr Am; B: Ir Od Hn Ap To DU; C: Mb Ka Ky PM - pt: B: Mu Gu Gn; C: Kv Tf - Y: C: Me SM Tu - X: SB.
08d 01h 26m	b: B: Sw Pe - bp: A: Tl SF Tw; B: St Wn Wi Gt Ha Fü Og Lg Md Eb Tu MB Pa Mc LQ Hr; C: Kv Hb SM SJ - bps: B: Fr - pt: B: Ma Ty SB; C: Gn - Y: B: Db Ci AA; C: Le Me IK Ak Mu - X: Hn.
08d 17h 00m	b: A: Wn Pe; B: St Ir Sw Gt Am; C: Mc? PM - bs: A: Ks - bp: A: Fü Ty IK; B: Kn Wi Vl Kv Hb Lg Ak Th Md Eb AA Gn Hr Wk; C: Lu To Tw Kg Mw - bps: A: Mo Od; B: Ha - pt: A: Ht; C: Mb Ka Ky - Y: A: Nu Tf Ak; B: Lo Db SM; C: Co Le Me Ma Ci Tl Mu Tn - E: LQ - X: Pa.
09d 03h 05m	b: B: Vl - bs: B: MB - bp: B: Ha Fü Od Lg Tl Mw SB; C: Wn Wi Ty Eb - bps: A: SM; B: Tu Mu Pa Tw - pt: B: Gt Aq Ap; C: Mb Ka Ky - Y: C: Le Me St Ir Sw Db IK Ci Fr Pe Ak SJ AA Br Hr Am - E: Md SF Mc PM LQ.
12d 22h 20m	b: A: Pe Mc; B: IK Mb Br - bp: A: Ha Fü Ty Lg SF; B: Mo Wi Kv Hb Od Aq? Tl AA Lu Hr; C: Mb Ka Ky Kg - bps: B: Mw - pt: B: Tf Ap Gn Ht; C: PM - Y: B: Nu Lo Db Tn; C: Le Wn Ir Gt Ci SM Tu - E: Me St Md Am - X: MI.
14d 21h 04m	b: B: Sw - bp: A: Nu St; B: Kn Wn Wi Vl Gt Ha Fü Ty Od Lg Aq? Md IK? Tl Tn; C: Kv Eb AA Hr - pt: A: Am; B: Ht SB; C: Mb Tk Ka Ky - Y: B: Lo Db Ak SM; C: Le Me Ma Tf Ci Pe Ks SJ.
15d 04h 11m	b: A: Co Vl Fü Tu Ho SJ Br; B: Wn Sw Kv Db Tl Fr To MI - bp: A: Si Kn St Ha SM Tw; B: Ir Gt Hb Od Lg Tk IK Mu Hr Am; C: Mb Ka Ky Kg - bps: A: Wk; B: Mo - pt: B: Ht SB - Y: A: SF; B: Nu Lo Ak; C: Le Me Ma Ty Tf Ci Ks - E: Aq Md Mc LQ - X: Gu.
16d 13h 05m	b: A: Br; C: MB? - bp: A: Nu Lg Gn; B: Kn Ir Vl Mb Ka Ky Hn PM Ap To Wk - bps: A: Sr Mu; B: Mo Am - pt: A: Ht; B: Ha Pa SB - Y: C: Le Lo Si Sw Gt IK Ci Pe SM Tu AA - E: Co Me Wn Wi Vi Fü Od Aq Tf Tk Mc LQ Hr MI Mw - X: Kv DU.

TABLE 2a BAYS AND PULSATIONS 1960 - continued

## (APRIL)

16d 16h 35m	b; A: Fü; B: Kv Pe; C: Hr - bs; A: Sr Br - bp; A: Mu Gn; B: Ir Lg IK Hn PM To Wk; C: Mb Ka Ky Mw - bps; B: Mo - pt; A: AmB: Ap SB - Y; C: Lo Sw Gt Ha Ma Od Ak SM Tu Gu - E: Co Nu Le Me Wn Wi Db Vi Aq Tf Tk Md Eb SF LQ MI - X: DU.
17d 02h 13m	b; A: St Wn Vl Aq Ci MB; B: Md Tl Tu Br; C: Vi - bs; A: Gt Pe - bp; A: Ha Fü IK SM Tw; B: Mo Wi Hb Od Lg SJ Pa Mc Lu Hr; C: Mb Eb Ka Ky LQ - bps; B: Mw - pt; B: Ht - Y; A: SF SB; B: Nu Lo Sw Db Ak; C: Le Me Ir Ma Ty Fr Mu - E: Tf Tk Tr Am - X: Kv DU.
17d 09h 16m	b; A: Co Si To; B: Tu L Q Br; C: Aq Tw - bp; A: Sr Am; B: Ir Mb Lg Ka Ky Gn; C: Vi Hb - pt; A: Ht SB; B: Ap; C: Tf - Y; B: Me Ak PM; C: Sw IK Pe SM SJ Mu AA - E: Tk Md MI - X: SF DU.
18d 10h 35m	b; A: Co - bs; B: MI - bp; A: SB; B: Si Ir Lg Hn PM Ap To Ht; C: Mb Ka Ky Gn - bps; A: Sr Am - pt; B: Wi Ha Tf Mu - Y; C: Lo Me Gt Od IK Ak SM Tu SJ Br - E: Tk LQ - X: Ks Pa.
21d 23h 39m	b; B: Pe SB - bp; A: Ha IK; B: St Wi Ma Fü Ty Lg Eb Tl Mc; C: Kv Hb Mb Md Ka Ky - bps; B: Le Mw - pt; A: Ap; B: Wn Vl Gt Aq Ci Mu Tn; C: Tf Tk MB PM Gn Hr Tw - pg; B: Od - Y; B: Lo Db SM Ks; C: Nu Me Sw AA - X: Pa LQ Br Am.
23d 21h 16m	b; A: SJ; B: Pe? Br Gn To; C: MI - bp; A: Kn Kv Ty IK Mu; B: Sr Wi Ir Vl Gt Fü Lg Tk Kg Wk; C: Mb Md Eb PM Tw - bps; A: Mo B: Od; C: Mb Ka Ky - pt; A: Tf Ht SB; B: Wn Ma Aq Hn Am - Y; A: Nu Ks; B: Lo Ak; C: Me Ha Db Tl Fr SM SF Tu AA - E: Le Ci Hr - (ssc: Sw?).
24d 03h 17m	b; A: Br; B: Ir; C: Am - bp; A: Fü Lg Mu; B: Wi Md IK? Eb AA Hn PM Tw; C: Kv Mb Ka Ky To - bps; A: Hr; B: Kn Ha - pt; A: Wn Gt Ma; B: Aq Pa; C: Db - Y; B: Ak SM Ks; C: Si Ty Od Ci Pe SF SJ Tn - E: Nu Le Lo Me Vi Tk Tl Fr Mc LQ MI.
24d 12h 36m	b; A: Co; B: Kv Vi Pe; C: MB - bs; B: Wn - bp; A: Si Kn Gn To; B: Ir Ma Mb Lg Ka Ky Mu PM Ap Wk DU Mw; C: Mb Eb Pa Hr - bps; B: Mo Ha - pt; A: Am; B: Wi Hn - Y; A: Nu Me; B: Db Ak Ks Tn; C: Sw Gt Od IK Ci Tl Fr SM SJ - E: Le Lo Fü Aq Md SF LQ MI.
24d 20h 46m	b; A: Tn Mc; B: Sw Pe; C: MB - bs; A: Gt Ma - bp; A: St Fü Lg Hr; B: Kn Kv Eb Tl Kg Wk; C: Mb Lu - bps; A: Mo Ha AA; B: Wn Wi Od - pt; B: Ht - Y; A: Nu IK; B: Lo Me Db Ak SM; C: Ci Tu SJ Mu Br - E: Le Mb Aq Tk Md SF Ka Ky LQ Ti MI - X: Ty - (ssc: Vl).
25d 01h 04m	b; A: IK Pe Mc; B: Sw MB Tn - bs; A: Gt Ma Fü Lg; B: Mo Wn - bp; B: Ir Kn Kv Tl Mu Lu Hr; C: Hn Tw - bps; A: Wi Ha AA Mw; B: Gn Am - Y; A: Od Tf Ak Ks; B: Db SM; C: Lo Me Vl Ci Fr SJ Br - E: Nu Le St Vi Mb Aq Tk Md SF Ka Tu Ky PM LQ MI Wk - X: Ty Ht.
26d 23h 07m	b; A: Hb IK Pe SF MB Tn - bs; A: Ks - bp; A: Mo St Gt Ha Fü Ty Lg Aq Md Eb Tl AA Mc Tw; B: Wn Wi Ni Kv Od Fr Tu Hr Kg; C: Mb Ka Ky - bps; A: Ma; B: Vl Mw - pt; A: Ht; B: Pa Am; C: LQ - Y; A: Nu Db; B: Lo Tf Ci Ak SM; C: Le Me Ir SJ - E: Tk.
27d 06h 46m	b; B: SJ - bp; A: Tw Ht; B: Sr Vi Od Tu AA Am SB; C: Wn Mb Ka Ky To - bps; B: Fr Pa; C: Ha Md PM - pg; B: Mu - Y; A: Me; B: Ak C: Si Ir Gt Ci Pe SM MB Tn - E: Tk - X: Ty Lg Hn.
28d 12h 02m	b; A: Si Pe; B: Aq; C: Ky - bp; A: Mu Gu Hn PM Ap Am Tw Sb; B: Mb Lg Ka Ky Wk DU; C: Mb Eb Mw - bps; A: Ir To; B: Kn Mo Vi - pt; B: Wi; C: Ha? - Y; A: SF; B: Ak; C: Lo Gt Ma Ty IK Tl Fr SM Ks Ho SJ - E: Co Nu Le Me Wn Fü Tf Tk Md Tu Tn Mc LQ Br Hr MI - X: Pa Ht.
29d 19h 24m	b; A: Pe - bp; A: Nu St Fü IK; B: Kn Wi Hb Ty Lg Aq Md Eb Tl Lu Hr Kg; C: Mc PM - bps; A: Mo Vl Gt Ha Ma; B: Wn Od AA Mw - pt; A: Tf Ht; B: MB - Y; A: SF; B: Lo Db Ci SM Ks; C: Le Me Ir Sw Ak Tu SJ Mu Tn Br - E: Tk LQ MI SB - X: Pa Hn Ap Am.
	<u>MAY</u>
01d 21h 05m	b; A: SM MB; B: Ir Sw Gt; C: LQ Tw - bp; A: Kn Ma Fü Hb Ty Od

TABLE 2a BAYS AND PULSATIONS 1960 - continued

## (MAY)

		Aq Md IK Tl SF Ks AA Mc; B: Sr Mo St Kv Tk Lu Hr; C: Wn Mb Ka Ky - bps; A: Ha Eb; B: Wi Vl Mw - pt; A: Ht; B: Am - Y: A: Nu Tf Ci Tn; B: Lo Db Ak; C: Le Fr Tu SJ - E: Lg PM MI SB - X: Pe Pa Hn.
05d 20h 00m		bp: A: Nu St Gt Ha Fü Ty Md IK Tn; B: Wi Ir Vl Od Lg Eb AA Mc Tw Mw; C: Lu - bps; B: Db - pt; A: Wn Ma MB Am Ht; B: Lo Kn Ni Hb Aq Tk Ci Tl Mu Ap LQ Hr SB; C: Mb Ka Ky Gn - Y: A: Ks; B: Tf Ak SM SF; C: Le Me Sw Tu - X: Kv Pa.
06d 05h 42m		b: C: Mc - bp: B: Lg Mu - bps: C: Vi - pt: A: Am Tw; B: Wi Ha Tf Hn LQ Ht; C: Mb Ka Ky - pg: B: Mw - Y: B: Ak; C: Gt SM Tu AA - E: Me Tk - X: Ir Pa.
07d 04h 16m		bs: B: Fr - bp: B: Lg Tw Ht SB - bps: B: Tu Mu; C: Vi - pt: A: Tk IK; B: Wi Hn - pg: B: Ty Y: B: SM; C: Si Gt Ha Pe Ks SJ - E: Co Sr Nu Me St Fü Mb Aq Tf Md SF Ka Ky AA PM Ap Tn LQ To Am MI - (si: Gn Wk Mw).
11d 01h 49m		b: A: Tw; B: Wn Wi Vl Gt Kv Fü Hb IK Eb Pe MB Pa Mc Br - bp: B: Kn Mo St Sw Ha Lg Aq Md Mu AA Hr; C: Lu - pt: B: Hn - Y: B: Me Db Ci Tl SM SF; C: Nu Le Lo Ma Od Fr Ak Tu SJ - E: LQ - X: Gn.
11d 21h 42m		b: A: Pe; B: Ty; C: Tw - bp: B: Nu Vl Ma Fü Od Lg Aq Md IK Eb AA Mc Lu Tn Hr Kg; C: Kv Hb MB - bps: B: Ha Mw - pt: A: Am; B: Wn Wi Gt Tl SB - Y: A: Ks; B: Lo Db; C: Le Ir Sw Tf Ci SM SF Mu - E: Me LQ - X: Gn.
19d 05h 53m		bp: A: Tw; B: Pa LQ Ht; C: Vi Mb Eb Ka Ky MB - bps: A: SB; B: SJ - pt: A: Wn; B: Wi Vl Gt Ha IK Mu Ap Tn Am; C: Ty Aq Md - Y: A: Me; B: SM; C: Nu Ak Fr Tu Hr - X: Lg Ks.
23d 20h 20m		b: C: MB PM Gn - bs: C: Vi - bp: A: Nu Fü Lg Ap Tw; B: Sr Ir Gt Ma Ty Aq Tl SM Mu Pa Hn Kg; C: Wn Kv Mb Md Ka Ky Lu Hr To Wk - bps: A: Ha IK AA; B: Kn Mo Wi Hb Od Mw - pt: A: Tf; B: Ni Vl Am Ht - Y: A: Ks; B: Lo Db Ak; C: Le Me Sw Ci Fr Pe SJ Lu - E: St Tk Eb SF Tn Mc LQ Br.
25d 17h 42m		b: A: Fü Od IK Pe Mu Gn; B: Co Sw AA Mc PM Br Hr Wk; C: Wn Wi Eb MB Tw MI - bp: A: Nu Kn Mo Mb Hn; B: Ir Ha Hb Ty Lg Aq Tk Md Ka Ky Gu To Am; C: Lu - bps: B: Sr - pt: B: SB - Y: A: Tf; B: Db Ak Ks; C: Lo Me Gt Ci Tl FrSM Tu SJ Tn - E: St LQ - X: Kv.
25d 23h 48m		b: A: Pe; B: Wn Od IK MB - bp: A: Fü Tl Mc Lü; B: Mo St Wi Sw Vl Gt Hb Lg Aq Md Eb Hr Tw Kg - bps: A: Ha - pt: B: Ma Pa - Y: A: SF; B: Nu Lo Db Tf Ci; C: Le Me Fr Tu SJ Tn Br - X: Kv SM MI SB.
26d 12h 29m		b: C: PM Am MI - bp: B: Sr Lg Mu Hn Gn To DU; C: Mb Ka Ky Wk - bps: B: Ht - pt: B: Tf; C: Aq Md - Y: B: SM; C: Nu Me Ir Db Ci - E: LQ - X: AA.
26d 16h 17m		bp: C: Kv - pt: A: SB; B: Sr Nu Ir Gt Fü Hb Od Aq IK SM Tu Mu Mc PM Gn; C: Lo Ha Db Ty Mb Lg Tf Tk Md Ci Ak Ka Ky AALu Wk - E: Sw Mw.
26d 16h 57m		b: A: Pe - bp: A: Nu Kn Wn Gt Od Md; B: Sr Wi Ir Kv Hb Lg Aq Tk? IK Mu AA Gn Kg Wk Mw; C: Eb - bps: B: Mo - pt: A: Fü; B: Ni Ha Hn Hr; C: Mb Ka Ky - Y: B: Lo Db Tf Ak; C: Le Me Sw Ma Ci SM Tu Lu Tn Mc MI.
31d 21h 10m		b: A: Pe; B: Ty Tn - bp: A: Nu; B: Sr Mo Wn Wi Vl Gt Ha Kv Fü Lg Md IK Eb Gn Wk; C: Hb Lu To - bps: A: St; B: Od AA Mw - pt: B: Aq - Y: B: Lo Ma? Tf Ak; C: Le Me Ir Sw Db Ci Tl SM Tu Hr - E: Mb Tk SF Ka Ky Mc - X: Ks Ht.
		<u>JUNE</u>
03d 21h 41m		b: A: SF; B: Sw Pe MB Mc - bp: A: St Ty Lg; B: Kn Mo Wi Vl Gt Ma Fü Hb Od Aq Md IK Eb Tl SM Hr; C: Wn Kv AA Lu - bps: A: Ha; B: Mw - pt: A: Tf; C: Mb Tk Ka Ky - Y: A: Nu; B: Lo Db Ci Ak Tn;

TABLE 2a BAYS AND PULSATIONS 1960 - continued

(JUNE)

- C: Le Me SJ - E: LQ Pi.
06d 10h 50m b: A; Ty Pe Mu Ap Br; B: Wn Ir Kv Ma MB Gn; C: Eb - bp; A: Sr Kn Ha Hb Tf Tk; B: Wi Lg Md IK Ho AA Hn PM To Am Ht; C: Vi Mb Aq Ka Ky Lu DU - bps; B: Mo Od - pt; A: SB - pg; St Vl - Y; B: Nu Lo Ak; C: Co Le Me Sw Db Ci Tl Fr SM SJ Hr - E: Fü Tn LQ MI - X: Pa.
06d 23h 59m b: A: Vl; B: Pe; C: Mc - bp; B: St Gt Fü Ty Od Lg Md; C: Wn Wi Kv Hb Eb - bps; B: Ha Mw - pt; B: Ma Aq Tf Tl Hr - Y; C: Le Lo Me Sw Dk IK Ci Tu Mu AA Tn - X: SM Pa Ht SB.
08d 02h 57m b: A: Ty SF; B: Vl SJ; C: Kv - bs; B: Fr MB - bp; A: AA Mc Tw SB; B: Wi Gt Fü Hb Od Lg Md IK Pa Lu LQ Pi Hr; C: Aq Eb Wk - bps; B: Ha Mw - pt; A: Tf Am; B: Wn Ap - Y; B: Ma Db Ak SM Ks; C: Le Lo Me St Sw Ci Tl Tu Mu Tn - X: Ht.
14d 06h 33m b: A: SF; C: Wn Kv Aq Pe Gn Hr - bp; A: Tw; B: Kn Vl Ha Od Lg Tf IK Eb PM Pi; C: Wi Vi Hb Mb Md Ka Ky MB? Lu Mw - bps; B: Fr Tu - pt; B: Pa Hn Ap LQ; C: Tk - Y: A: Me; B: Db Ak SM Ks; C: Nu Le Lo St Ci Tl SJ Tn - X: Co Ty Ht.
15d 07h 59m b: B: SJ; C: Wn Kv Mc Hr - bs; B: Fr - bp; A: SB; B: Wi Ir Ha Od Lg Pa Ap Pi Am; C: Mb Eb Ka Ky PM LQ To MI Mw - bps; B: Vi - pt; B: Mu - Y; B: Me SM Tn; C: Le Lo Gt Ma Fü Ty IK Ci Tl AA Br - X: Tw Ht.
17d 00h 04m b: C: Pe - bp; A: Ty; B: Wi Vl Ha Fü Lg Tf IK Eb AA Mc Hr; C: Mb Md Ka Ky Lu - bps; B: Mw - pt; A: Gt Od; B: Lo Wn Db Aq Tl SM Am; C: Nu St Kv Hb - Y; C: Me Ci Tu Mu Tn - E: SB - X: Sr Pa Hn Tw.
17d 15h 57m b: A: Co Pe; B: IK - bp; B: Ir Ha Od Lg PM To; C: Hb Lg Hn Wk - pt; A: Mu; B: Kn Wn Wi Tk Md Pa Pi Gn; C: Mb Aq Ka Ky MB - Y; B: Ak; C: Lo Me Sw Ma Db Fü Ci SM Tu AA Br - E: SB - X: Kv Eb Tw.
18d 01h 38m b: B: Pe; C: PM Tw - bp; A: SM; B: Wi Vl Gt Fü Lg IK Tl Mu AA Pa Mc Hr; C: Wn Kv Vi Mb Aq Md Ka Ky MB Hn To - bps; B: Ha Pi; C: LQ - pt; A: Ap - Y; B: Me Db Ty Ak; C: Nu Le Lo St Ir Sw Ma Ci Fr Tu SJ - E: SB - (sfe: Od).
19d 09h 55m b: A: Si; B: Pe Ht; C: Kv Tw Wk - bs; A: Co Mu; B: Br - bp; A: Ap To; B: Ir Gn Am; C: Wi Vi Mb Md Ka SB - bps; B: Sr Gu Hn PM DU C: Ky - pt; A: Tf; C: Wn Ha Aq - Y; B: Nu Ak SM; C: Gt Fü Ci Fr Tu SJ AA Tn - E: Lo Me MI - X: IK - (sfe: Od).
20d 02h 24m b: B: Wn Vl Gt Lg IK Pe MB; C: Eb Mc Tw - bs; B: Fr - bp; A: SM B: Wi Ha Fü Aq? Tl Pa; C: Kv Hb Md LQ Pi - pt; B: Ma Tf - Y; B: Db; C: Le Mo Me Sw Od Si SJ AA Hr.
20d 11h 40m b: B: Co Pe; MI - bp; A: Sr Mu; B: Ir Hn PM Gn To DU; C: Mb Ka Ky - pt; A: Am; B: Od Tf IK SB; C: Aq Md Pi - Y; B: Ty Ak SM Ks; C: Lo Me Ha Fü Gu AA Br - X: Kv Pa.
21d 16h 35m b: B: Co Br SB; C: MI - bp; A: Mu Gn; B: Ir Hn PM To Am Wk; C: Kv Mb Ka Ky DU - pt; A: Tf; C: Wn Tk - Y; B: Ks; C: Nu Lo Me Gt Ha Od IK Ci Pe Ak SM SJ Gu Mc - E: Fü Md LQ Pi - X: Ty.
22d 02h 33m b: A: Pe SF Tw; B: St IK Mc; C: Md - bp; A: Ha SM Mb Lu; B: Sw Vl Gt Fü Hb Od Lg Aq Tl AA Pa LQ Pi Hr Mw; C: Mo Wi - pt; C: Wn - Y; A: Ci; B: Db; C: Le Lo Me Ma Fr SJ - X: Kv Ty Eb Ht.
22d 19h 50m b: B: Pe; C: PM - bp; A: Nu; B: Kn Mo Ir Lg IK; C: Kv Hb - pt; A: Wn Gt Od Tf Tn; B: St Wi Ha Ma Db Fü Aq Tk Eb Tl Gn; C: Mb Ka Ky MB LQ Pi Hr Wk - pg; B: Lo? - Y; B: SM Ks; C: Me Ak Mu AA Br Kg - X: Ty Md Lu Ht.
22d 23h 57m b: A: Pe; B: Wn Tn; C: MB? Mc Gn - bp; A: Nu St Gt Fü IK; B: Kn Wi Sw Vl Kv Hb Lg Aq Tl AA Mw; C: Mb Tk Ka Ky Hr - bps; A: Ha; B: Od Eb - Y; A: SF; B: Lo Ma Db Tf Ak; C: Le Me Ci Fr SJ Mu - X: Sr Ty Md SM Hn Lu PM Ht SB.

TABLE 2a BAYS AND PULSATIONS 1960 - continued

## (JUNE)

23d 05h 10m	b: B: Pe SJ Tw; C: MB? Mc - bp: A: SB; B: Si Ha Lg Mw; C: Eb LQ Pi Hr - bps: B: Vi Fr Tu - pt; A: Tf Ap; B: Wi Od Ht; C: Wn Aq - pg; B: Mu - Y: A: Me; B: SM; C: Le Gt Db Fü IK Tl - X: Ty Md Lu.
24d 19h 20m	b: A: Pe; B: Sw Wk; C: PM - bp: A: Kn Mo Gt Kv Fü Kb Ty Md IK Eb Tl; B: Wn Wi Ir Ni Vl Db Lg Aq MB Pa Kg; C: Mc Lu Gn Hr - bps: A: Nu St Ha Od AA; B: Le Mw - pt; A: Ma Tk - Y: A: Tf SF Ks; B: Lo Me Ci Ak SM Tn; C: SJ Mu - E: Mb Ka Ky LQ Pi SB - X: Ap Tw.
25d 12h 19m	b: B: Si Ap - bp: A: Am; B: Tl Mu To MI; C: Vi Mb Lg Ka Ky Hn PM - bps: A: Co - pt; A: Tf; B: Pa; C: Ha - Y: B: SM; C: Me Ir Gt Od Pe Tu Tn Br - E: Nu Lo Ma Fü Md LQ Pi - X: Tw.
25d 20h 29m	bs: A: Pe - bp: A: Fü; B: Mo Wn Vl Lg Aq Md IK Mc Lu Hr; C: Kv Eb Mw - bps: A: Ha Od AA; B: Hb - pt: A: Gt Am; B: Ma - Y: A: Nu; B: Lo Ak SM SF Ks Tn; C: Me Ir Sw Ci Tl Fr Mu - E: St Mb Tf Ka Tu Ky PM LQ Pi To - X: Db Ty.
25d 21h 24m	b: A: Pe; C: Tw - bp: A: Nu Kn Mo Vl Fü; B: Wn Wi Ir Kv Hb Lg Aq Md IK Tl Mc Lu LQ Pi Hr; C: Eb AA Wk - bps: A: Ha Od; B: Mw - pt: A: Ap SB; B: Gt Ma MB Pa Hn Ht - Y: A: SM; B: Lo Db Ak SF Ks Tn; C: Me Sw Fr SJ - E: St Mb Tf Ka Tu Ky PM To - X: Ty Am.
26d 20h 58m	b: C: Pe - bp: A: Nu Kn; B: Mo Wi Gt Kv Hb Od Lg IK; C: Wn - bps: B: Mw - pt: A: Ha Ma Fü Tf Md Am Ht; B: Ni Vl Aq Eb Tl MB Pa Hr SB - Y: B: Lo Db Ak SM; C: Me Sw Si Tu - E: St Tk SF - X: Ty Mu Tn.
28d 10h 54m	b: B: Ho; C: Kv - bs: A: Co MI - bp: A: Sr; B: Vi Mw; C: Mb Ka Ky - bps: A: Si Kn Am; B: Mo Mu - pt: A: Ap; B: Hn SB - Y: B: Db; C: Lo Me Ir Gt Ha SM - E: Nu St Wn Wi Ma Fü Od Lg Aq Tf Tk Md Pe SF Ks Tu AA Mc PM Tn LQ Br Hr To - X: Ty Pa Pi - (si: IK).

JULY

01d 17h 57m	b: A: Vl Fü Ty IK Pn; B: Si Sw Gt Kv Ma Lg Md MB Mc SB; C: Wn Vi Aq Eb - bs: A: Od - bp: A: Ha; B: Wi Ir Tl LQ Pi; C: Mb Tk Ka Ky Lu - bps: B: Mo Hb Mw - Y: A: SF Ks; B: Nu Lo Db Ci Ak SM C: Le Tf SJ Mu AA PM Br - E: Hr - X: Ht.
02d 00h 29m	b: B: Pe Tu PM; C: Tn Tw - bs: A: SF - bp: A: Vl Fü Ty Lg Tl; B: Sr St Wi Gt Db Eb Mu Mc Lu; C: Wn Kv Hb Mb Ka Ky MB Hr - bps: B: Ha Md SM Mw - pt: B: Ma Aq Pa SB - Y: B: Nu Lo Ci; C: Le Me Sw Od IK Fr SJ AA - X: Ht.
03d 16h 00m	bp: B: Gn - pt: A: Sr; B: Ir Gt Ha Fü Mb Lg Aq Tf IK Tl SF Ka Ky Mu PM Am DU; C: Wn Ma Tk Eb Ak SM SJ Lu To Wk - E: Sw Si Mw - X: Kv Ty Kg.
04d 00h 47m	b: A: IK Pe MB Mc; B: Ir Kv PM Tn Br Tw; C: Ir Vi Hn - bp: A: Kn Fü Lg Md SF; B: Sr Le Mo Wi Sw Ni Gt Ha Ma Hb Od Aq Tf Eb Tl Lu Hr Kg; C: Wn Mb Ka Ky Wk - bps: B: Mw - pt: B: Pa Am Ht SB - Y: A: Nu; B: Lo Me Db Ak; C: Ci Fr SM Tu Mu - E: St - X: Co Ty.
10d 01h 36m	b: C: PM - bp: A: Fü; B: Sr Nu St Vl Ha? Lg IK Mu; C: Kv Hb - pt: A: Wn Gt Md Ci SM MB LQ Pi Am Tw; B: Lo Wi Ni Ma Db Ty Aq Tf Eb Pa Mc Hn Hr; C: Mb Ka Ky Gn Wk - Y: B: Me Tu; C: Le Tl Pe SJ AA - X: Ap Br DU Ht.
10d 22h 12m	bp: B: Nu Ha? Fü Lg IK; C: Kv Hb - bps: B: Mw - pt: A: Gt Ma Tf Md MB; B: Lo Wn Wi Ni Vl Db Aq Eb Tl SM Pa Mc; C: Ty Mb Ka Ky Hr Tw - Y: C: Le Me Ci Pe Tu Mu AA Tn - X: St Br Ht.
11d 20h 59m	b: B: Sw Tw - bp: A: Nu St Wn Vl Gt Fü Tf Md IK Eb; B: Kn Mo Wi Ha Ma Hb Ty Lg Aq Tk AA Tn Gn Hr Kg Wk; C: Hn To - bps: B: Od Mw - pt: A: MB Am; B: Ni Tl Mc; C: Mb Ka Ky - Y: B: Lo Db Ci Ak SM; C: Le Me Ir SJ Mu - X: Kv Pa.
12d 05h 39m	b: B: Fü Od Lg SB; C: Wn - bp: A: Tw; B: Sr Vi SJ Pa LQ Pi; C: Mb - bps: B: Fr Tu - pt: B: Tf Mu Ht - Y: B: Me SM; C: Nu Gt Ha IK Ci.

TABLE 2a BAYS AND PULSATIONS 1960 - continued

(JULY)

13d 20h 19m	b: B: Tw; C: PM - bp: A: Fü; B: Nu Ir Lg Aq Md Kg Wk; C: Mo Kv Hb Mb Eb Ka Ky Mc Hr - bps: B: Mw - pt: A: Ma Od Ht; B: Wn Wi Ni Vl Gt Ha Ty Tf IK Tl - Y: B: Lo Db SM; C: Le Me Sw Ci Mu - X: Lu.
15d 16h 37m	b: A: Pe? Ap; B: AA Lu; C: Gt MB - bs: A: Br - bp: IK; B: Wi Ir Kv Hb Lg - bps: A: Mo Mu Hn Gn To; C: Mb Ka Ky - pt: A: Ht; B: Aq SB - Y: B: SM; C: Sw Tl - E: Co Nu Le Lo Si Me St Ha Ma Db Vi Fü Ty Od Tf Tk Md Ci Fr SF Tu SJ Gu Pa Mc Tn LQ Pi Hr Am Tw Kg MI - X: Ak - (si: Wn PM).
17d 08h 08m	b: A: SJ Am; B: Wn Fü Ty Pe Tu Hn PM Br Tw SB; C: Kv MB Pa Mc - bp: A: Ht; B: Ir Hb Od Lg Mu To; C: Mo Wi Md Lu Hr -bps: A: Sr; C: LQ Pi - pt: B: Ap Wk - Y: B: Db Ak SM; C: Co Lo Si Sw Gt Ha Ma Tf IK Ci Tl Fr - E: Me SF MI - X: Kn St - (si: Gn).
17d 16h 14m	b: A: Pe SF; B: Ir Sw Br; C: MB? Mc - bp: B: Kn Mo Kv Fü Hb Od Lg IK Tl Wk Mw; C: Wn Md Eb Lu Gn To - bps: A: Nu - pt: A: Tf; B: Ni Aq Am Ht; C: Tk - Y: B: Lo Db Ak; C: Me St Ct Ha Ma Ty Ci SM Mu - E: MI.
17d 22h 56m	b: A: Pe; B: Tn Mc PM; C: Gn - bp: A: Nu Gt Fü Md IK; B: St Wn Wi Sw Ni Vl Ha Kv Ma Db Hb Od Lg Aq Eb Tl MB Lu Hr Tw; C: Mb Ka Ky - bps: B: Le, Mo AA Mw - pt: B: Pa Pi Ht - Y: A: SF; B: Lo Ci SM; C: Me Ir Ty Ak Tu Mu Br.
18d 15h 00m	b: B: Sw Fü Pe Ak; C: Wn PM - bp: A: IK Mu; B: Ir Kv Lg Tk To Kg Wk; C: Wi Vi Mb Md Eb Ka Ky Hn DU Mw - bps: A: Kn Mo Gn; B: Hb Od - pt: C: Ty Aq - Y: A: Nu; B: Me; C: Co Le Lo Ci Gt Ha Ma Db Tf Ci Fr SM Tu SJ Am - E: St Pi - X: Sr Lq Ht.
19d 18h 45m	b: A: Pe Ks; B: Sw Mc Tn; C: MB? - bp: A: Nu Fü Hb Ty Aq IK; B: St Wi Gt Ha Kv Od Md Eb Tl Lu Kg - bps: B: Mo Mw - pt: A: Ht SB; B: Tk Am - Y: B: Lo Ak; C: Le Ma Db Ci SM - E: Me Wn Tf Pi - X: Lg LQ.
19d 23h 23m	b: A: IK Pe SF MB Mc Tw; B: Vl Fr AA - bp: A: Nu St Wi Fü Tl Hr; B: Le Sw Ni Ha Kv Ma Hb Ty Od Aq Md Eb SJ Mu Pa Lu Pi Kg - bps: A: Gt; B: Mo Wn Mw - pt: B: Ap Ht - Y: A: Ci Ks; B: Lo Db SM; C: Ak Tu Br - E: Me Mb Tk Ka Ky Tn Am - X: Lg PM LQ SB.
20d 11h 21m	b: A: Ap; B: Ir Tu; C: MB? - bs: A: Co; B: MI - bp: A: Vi; B: Mo Od Mb Tl Ka Ky To Ht; C: Tw - bps: A: Sr Si Am - pt: B: SB - Y: B: Ak SM; C: Le Lo Gt Ci Mu - E: Me Fü Tf Tk SF - X: Kv Lg.
20d 11h 46m	b: A: Pe PM; B: Ir Wk - bs: A: Br - bp: A: Gn; B: Mu Gu Hn DU; C: Vi Hb Tw - pt: A: Am; B: Ht SB - Y: B: Ak SM; C: Nu Le Lo Sw Gt Db IK Ci Tu SJ - E: Co Me Fü Tk SF MI - X: Kv Lg.
20d 22h 12m	b: A: Pe SF Mc Tn; B: Ir Tl MB SJ Mu PM Gn Tw Wk -bs: A: Ma - bp: A: Kn St Fü Ty Lg Tf Md IK Ks; B: Nu Mo Wi Sw Vl Aq Eb Pa Lu LQ Pi Hr Kg Ht; C: Vi Mb Ka Ky Hn - bps: A: Gt Ha Hb Od AA Mw; B: Wn Ni - pt: A: Am - pg: C: Le? - Y: A: Db Ak; B: Lo Ci SM; C: Tu - E: Me Tk.
21d 04h 22m	b: A: Co SJ MB Br Gn; B: Si Vi Fü Ty Lg Md Eb Mc PM To; C: Kn Wn Wi Kv - bp: A: SM Mu Pa LQ Pi Hr Am Ht; B: Sr Mo St Ir Vl Gt Ha Od Mb Tk IK Tl Ka Tu Lu Kg Wk Mw SB; C: Hb - bps: A: Tw; B: Le - Y: A: Nu Me; B: Lo Ma Db Ci Ak; C: Sw Tf Fr Pe Ho Tn.
22d 12h 44m	b: A: Co; B: Si Lg; C: Kv - bp: A: Am; B: Sr Mo Ir To; C: Vi Hb Mb Ka Ky - pt: A: Mu Ht; B: Tf Hn Gn; C: Aq Pi - Y: B: Nu Me; C: Le Lo Sw Gt Ha Db IK Ci Ak SM Tu AA Br - E: Fü - X: Ty LQ.
21d 17h 42m	b: B: Pe - bp: A: Nu; B: Kn Mo Ir Gt Kv Fü Hb Od Lg IK Mu Wk; C: Wn Wi Eb - bps: B: Gn - pt: A: Ma Tf Pi; B: Aq Tk Md Tl Ka Pa Hn Am Ht; C: Mb Ky - Y: B: Ak; C: Co Le Lo Me St Ha Ci Sm AA - X: Ty LQ.
21d 22h 59m	bp: B: Mw - pt: A: Mo Fü Od Lg Md Lu; B: Sr Nu Lo Wn Wi Gt Ha Ma Hb Aq IK Tl Mc Tn Hr Ht; C: St Sw Kv Mb Eb Ci SM Ka Ky AA PM Kg - X: Le Ty LQ.

TABLE 2a BAYS AND PULSATIONS 1960 - continued

## (JULY)

22d 12h 05m	b: B; PM Ap; C: MB? - bs: A: Co; B: MI - bp: A: Am Ht; B: Sr Ir Hn To SB; C: Vi Mb Ka Ky - bps: B: Gn - pt; B: Tf; C: Ty Aq Tk - pg; B: Mu - Y; B: SM; C: Si Me Ha Od Ci Ak Tu AA - E: Fü - X: Tn LQ.
23d 00h 16m	b: A; Fü Ty Od; B: Wn Ir Gt Tk IK Pe SJ Mc Tn Br Pi; C: Eb - bp: A: St Ha Tf; B: Wi Sw Vl Kv Db Hb Lg; C: Mo Mb Md Ka Ky Lu Hr To Wk - bps: B: Le Mw - pt: A: Am Ht - Y: A: SM SF; B: Nu Lo Ak; C: Me Ma Ci Tl Fr Tu Mu AA - E: Tw - X: LQ SB.
23d 16h 44m	b: C: PM - bp: B: Gn To; C: Wi - pt: A: Am; B: Lo Mb Ka Ky Pa Hn Ap - pg: A: Mu - Y: C: Me Gt Ha SM AA - X: Tk Eb LQ Br.
23d 23h 54m	b: B: Pe - bp: A: Fü IK; B: Nu St Wi Sw Vl Ha Lg Mc Lu Tn Mw; C: Ky Hb Eb Hr - pt: A: Wn Gt Ma Tf Md Ap Ht; B: Db Aq Ci Tl Mu Pa Hn Pi; C: Ty Tk; B: Lo - Y: C: Le Me SJ AA - E: Am - X: SM PM LQ Br To MI.
25d 20h 35m	bp: B: Nu Ha Fü Lg; C: Mc Lu - bps: B: Mw - pt: A: Wn Gt Ma Ty Od Md Am Ht; B: Lo St Wi Db Aq Tf IK Eb Tl MB Mu Pa Hn Ap Pi Hr; C: Mb Tk Ka Ky - Y: B: SM; C: Ci Pe AA Br - X: Tn LQ.
26d 03h 03m	b: C: PM - bp: B: Sw Mu - pt: A: Od MB Pi Am; B: St Wn Wi Gt Ha Ty Aq IK Eb Tl Pa Mc Hn Hr Tw; C: Md Ci - Y: A: SM; B: Db Br; C: Me Fr Tu SJ AA - X: Tn LQ Ht.
28d 22h 40m	bp: A: Fü Md IK Tn; B: Nu St Wi Vl Lg AA; C: Mo Kv Lu - bps: B: Mw - pt: A: Wn Gt Ha Ma Od Aq Tf Eb MB Pi Am; B: Lo Kn Db Tl Pa Hn Ap Hr Tw; C: Mb Tk Ka Ky Tw - Y: B: Sw SM; C: Me Ci Pe Mu Br - X: Ty LQ.
29d 00h 52m	bp: A: Ha Fü Lg Md Ci Tl Tn; B: Wi Vl Eb AA Pi Tw Mw; C: MB Hr - pt: A: Wn Gt Ma Od Aq Tf IK Ap Am Ht; B: Lo Kn Sw Kv Tk Pa Wh SB; C: St - pg: A: Mu - Y: A: SM SF; B: Db; C: Le Ks SJ - E: Nu Me Vi Mb Ka Ky PM - X: Ty Lu LQ - (ssc: Fr - si: MI).
29d 14h 46m	b: A: Co; B: PM - bs: B: MI Mw - bp: A: Gn; B: Ir Lg Mu Hn Am Wk C: Mb Ka Ky - bps: A: Sr; B: Mo To - pt: B: Ht - Y: B: Br; C: Lo Si Gt Od IK Pe Tu - E: Nu Me Wn Sw Ha Kv Ma Fü Aq Tf Md Ci SF Ks SJ Pi - X+ LQ.
29d 23h 56m	b: A: Ty Pe Tn; B: Ak Gn - bs: A: Ks - bp: A: Fü Lg IK AA; B: Wi Vl Kv Hb Aq Md Eb Tl Mc Lu Hr Kg; C: Kn Wn Wk - bps: A: Mo Mw; B: Ha Od; C: Le - pt: A: Ma Am; B: Gt - Y: A: Nu Tf; B: Lo Db SM SF; C: Sw Ci Tu SJ Mu - E: St Mb Tk Fr Ka Ky Pi - X: Sr PM LQ To MI Ht SB.
30d 11h 27m	b: A: Si Vi Ty Pe; B: Od Aq Ak Tu MB Mu Gn; C: Wn Kv Eb Mc PM Hr To - bs: A: Co; B: Fr MI - bp: A: Ht; B: Sr Kn Wi Ir Ma Hb Mb Lg Tf Tk Md IK Ho Wk DU; C: Mo Ka Ky - bps: B: Ha - pt: B: Pa Am - Y: A: SF Ks; B: Nu Lo SM; C: Le Sw Gt Db Ci Tl SJ - E: Me Fü - X: LQ.
31d 01h 39m	b: A: Ty Pe SF Mc Tn Br; B: Tu SJ AA Pa Gn Ht SB; C: Hn PM - bs: A: Ks Tw - bp: A: Nu St Gt Fü Lg Md IK Eb Tl MB Lu Hr; B: Wn Wi Ir Sw Ni Vl Kv Db Hb Od Aq SM Pi Am Kg; C: Mb Ka Ky To - bps: A: Ha Mw; B: Le Mo - Y: B: Lo Tf Ci Ak; B: Ma Mu - E: Me Fr - X: LQ.

AUGUST

01d 13h 00m	b: A: Co Si Tk Pe Mu; B: Ir Vl Ha Kv Ma Fü Ty Aq IK Hn Ap Br SB; C: Wn Eb MB Pa Hr Tw - bp: A: Kn Mo; B: Mb Lg Ka Ky Gu Gn Wk DU; C: Vi Hb Md Mw - bps: A: Sr Od - pt: C: Pi - Y: A: Tf; B: Nu Lo Ci SM PM; C: Le Me Sw Gt Fr Tu SJ Mc Tn Am - E: Db - X: Wi LQ Ht.
02d 21h 34m	b: A: Ha IK Pe Tn; B: Ir Sw Ma Db SJ Mc Tw - bs: A: Ks - bp: A: Od Tf AA; B: Mo Wi Vl Fü Hb Lg Aq Md Eb Tl Hr Wk; C: Wn Mb Ka Ky - bps: B: Mw - pt: A: Ht; B: Gt Am SB; C: Pi - Y: A: SF; B: Nu Lo Ci Ak; C: Me Tu PM - X: Kv Ty SM Pa Lu.
03d 15h 28m	b: C: Fü - bp: A: Mu; B: Ir Od; C: Mo Mb Ka Ky - pt: A: Gn; B: Wi; C: Aq Tk - Y: B: Tf Ak; C: Me Sw Gt IK Ci Pe SM Tu - X: Kv.

TABLE 2a BAYS AND PULSATIONS 1960 - continued

(AUGUST)

10d 04h 54m	b: A: Co Si Ap; B: Ir Vl Fü Ty Od Aq Pe Hu To Mc 'Tn Gn SB; C: Wn Kv Md Eb MB Hr MI - bp; A: Sr Am Ht; B: Ha Vj IK Lu To; C: Hb - Y; B: Tf Ak SM; C: Sw Ma Db Tk Tl SF SJ FM Br - X: Lg Pa Tw.
06d 08h 41m	b: A: Co - bp; A: Si Ht; B: Lg Tu MI; C: Vi Tk Lu - pt; A: Pi; B: Tf SM Pa Ap Tw; C: Kv Ty Mb Aq Ka Ky MB PM - Y; C: Nu Me Fü Od IK Fr Ak SJ Mu - X: St.
07d 01h 02m	b: B: Fr Mu - bp; B: St Wi Vl Ha Fü Lg IK Tw; C: Hn Lu - pt; A: MB Pi Am; B: Ni Gt Db Tf Eb Tl Pa LQ Ht; C: Wn Kv - Y: A: SM; C: Le Lo Me Sw Ma Mc PM - X: Md - (cr: Od).
07d 16h 29m	b: A: Kn Mo Gt Fü Ty Aq Md Pe MB Mc Lu Ap Tn? LQ Pi; B: Sr St Wi Sw Kv Lg Tl Ho Pa Hn Br Gn Am; C: Wn Hr To Tw - bs; A: Od SF Ks; B: Ir Eb - bp; A: Hb Tf Tk IK Mu; B: Vl; C: Mb Ka Ky - bps; A: Ha - Y; B: Nu Lo Ma Db Ci Ak SM PM; C: Le Tu SJ Gu - X: Ht - (sfe: AA).
08d 06h 49m	b: B: Ty Lg - bp; B: Ha Od To Am Tw; C: Mo Hb Mb Ka Ky MI - bps; C: Vi - pt; A: Pi; B: St Pa Ap LQ Ht; C: Kv Tf - Y; B: Ak; C: Co Si Lo Me Ir Gt Fü IK Ci Fr SM Tu SJ Mu PM Br - E: Hr - X: Lu.
08d 11h 01m	b: A: Co; B: Si - bp; A: Am; B: To MI - pt; A: Ht; B: Ty Mb Tf Mu Hn Ap; C: Ka Ky - Y; B: SM; C: Me Pe SJ PM - E: Fü.
09d 10h 45m	b: A: Si; B: Ir Ty Tu Ap; C: Ha Kv - bs; A: Co - bp; A: Am Ht SB; B: Od Mb Lg Ka To MI DU; C: Vi Hb Md Ky Tw - pt; B: Hn; C: Aq PM - Y; A: SF; B: Tf SM; C: Nu Lo Me Sw Db IK Fr Pe Ks Ho SJ Mc Br - E: Fü Hr - X: St Pa LQ.
10d 00h 31m	b: B: Tn - bp; A: Fü Lg; B: Wi Sw Ha Kv Db Od Eb Tl; C: AA Mc - bps; B: Mw - pt; A: Gt; B: Wn Vl Ty Aq Md IK MB Pa Pi Hr Am; C: Tw - Y; A: SM; B: Nu Lo Ci; C: Le Me Ma Pe - X: St LQ Ht.
11d 02h 57m	b: A: SJ Br; B: Ir Sw Od Pe Tu; C: Kv - bs; A: SM - bp; A: St Gt Ha Fü Eb Tl Pa LQ Pi Tw; B: Wn Wi Vl Db Hb Lg Aq Md Mc Hr; C: Mo Kg - bps; A: Fr MB; B: Le - pt; B: Hn SB; C: Md Ka Ky PM - Y; A: Ci SF; B: Nu Lo Ma Ak; C: Co Me IK - X: Ty.
11d 10h 50m	b: A: Ap Gn; B: Ir Fü; C: Wn Ha Kv Eb MB - bs; A: Co MI - bp; A: Si Ht; B: Hb Od Mb Lg Ka Tu SJ Mu DU SB; C: Wi Vi Md Ky Mc - bps; A: To Am; B: Sr; C: Mo - pt; B: Hn PM - Y; B: Nu Ak SM; C: Le Lo Me Sw Ma Db IK Ci Tl Fr Pe Br Hr - X: Ty.
12d 00h 16m	b: B: Ir Kv Pe; C: Tw - bp; A: Nu St Gt Fü Ty Tf; B: Wi Sw Vl Ha Db Hb Od Lg Md IK Eb AA Pa Mc; C: Mo Mb Ka Ky Hr - bps; B: Mw - pt; A: Ht; B: Wn Tl; C: MB PM Pi - Y; B: Lo Ak SM; C: Le Me Ma Ci SJ - X: Aq.
12d 16h 45m	b: B: Ir Sw Tn; C: MB Am - bp; A: Mo Wn Fü IK; B: Wi Vl Gt Ha Kv Hb Lg Md Eb Kg Wk; C: Aq Lu - bps; A: Nu Kn Od Tf; B: AA Gn - pt; B: Mb Tk Tl Pi; C: Ka Ky Hr - Y; A: Ks; B: Lo Db Ak PM; C: Me Ty Ci Pe SM Tu Mc - (si: Ma - cr: Mu).
16d 20h 07m	b: A: Pe Br; B: Sw Vl - bs; A: Kn Gt Gn - bp; A: Fü Eb Gu SB; B: Wi Ty Lg Aq Tl Ka Ky Wk; C: Mb MB Lu - bps; A: Sr Mo Ha Od IK Mu AA Hn To; B: Wn Ir Kv Ma Hb Md - pt; B: Pa Ht - Y; B: Db Ci Ak SM PM - E: Co Nu Le Lo Me St Tf Tk Fr SF Ks Tu SJ Mc Tn LQ Pi Hr Am Tw Kg MI.
16d 23h 50m	bs: B: Vl - bp; A: Kn Fü Ty Lg Aq Md Eb Tl Mc Lu Tn; B: Wi Ir Sw Kv Hb MB Tw - bps; A: Mo Gt Ha Od IK AA Hr Mw; B: Ma Mu - pt; A: Am; B: Pa Ap - Y; A: SM; B: Db Ci Ak; C: SF - E: Nu Le Lo St Vi Mb Tf Fr Pe Ka Ks Tu Ky SJ Br Gn Kg MI - X: Sr PM LQ Pi To - (si: Wn).
20d 07h 40m	b: B: Ir Gt Fü Aq; C: Kv Md Eb Wk - bs; A: Co; B: Mi; C: Wn - bp; A: Si Tu Ap Am Ht; B: Wi Vi Ty Lg Mu Pa To; C: Hb Mw - bps; A: Sr SB; B: SJ Tw; C: Mo - pt; B: Hn - Y; A: SM; B: Db Ci; C: Sw Ha Ma Od IK Tl Pe Ak Mc PM - E: St Mb Tf Fr SF Ka Ks Ky Br Hr - X: Lu LQ - (si: AA).

TABLE 2a BAYS AND PULSATIONS 1960 - continued

(AUGUST)

21d 17h 58m	b: A: Wn Gt Fü Pe Gn; B: Sw Ni Ty Aq Md Eb Tn; C: MB Hr - bp; A: Sr Kn St Hb Od Tf IK; B: Nu Wi Ir Kv Ma Db Lg Mu Kg Wk Mw; C: Mw; C: Mb Ka Ky Tw - bps; A: Mo - pt; B: Ap Ht - Y; B: Lo Ci Ak SM; C: Co Le Me Tl Tu SJ Mc PM - E: Ha Tk SF Pi MI - X: Lu LQ.
21d 22h 35m	b: B: Ty Tn - bp; A: Fü Lg; B: Nu Ma Md IK AA Mc Ht; C: Mo Kv Hb Eb Hr - bps; B: Ha Tl Mw - pt; A: Wn; B: Wi Ni Vl Gt Aq Pa; C: Tf MB PM - Y; B: Db SM; C: Le Lo Me Od Ci Pe - E: St SF Pi - X: LQ.
22d 01h 05m	b: A: SF; B: IK Pe Tu SJ Pa - bs; A: Fr MB; B: Vl Db - bp; A: Fü Lg Pi; B: Nu Mo St Wi Ha Kv Ma Od Tl SM Mu Mc Tn LQ Mw; C: Hb Mb Aq Ka Ky - bps; A: Tw; B: Le Eb Hr; C: Md - pt; A: Gt Ap; B: Wn Ht; C: PM - Y; B: Lo Ci Ak; C: Me Tf AA Br.
22d 18h 46m	b: A: Pe Ks; B: Sw - bp; A: Nu St Wn Wi Ni Gt Ha Kv Fü Hb Ty Od Lg Tf Tk IK Ci Mu Tn Kg; B: Sr Ir Vl Ma Aq Md Eb Tl AA Gn Wk; C: Mb Ka Ky Hr - bps; A: Kn Mo Db; B: Le Mw - pt; A: Pi Am SB; B: Pa Hn Tw Ht; C: PM - Y; A: SF; B: Lo Ak SM; C: Me SJ. - X: Lu LQ.
23d 17h 41m	b: A: Ma; B: Sw Gt Tw; C: Eb - bp; A: Nu Tk IK Mu Wk; B: Sr St Ir Vl Ha Fü Od Lg Tf AA Hn To Am Kg Mw; C: Wn Wi Kv Hb Mb Md Ka Ky Hr DU - bps; A: Gn; B: Kn - pt; B: Pi Ht; Y: A: SM; B: Lo Db Ak; C: Le Me Ci Pe Tu SJ PM Tn Br - X: Mo LQ.
24d 09h 18m	b: B: Si - bs; A: Co - bp; B: Sr Ap Tn To Ht; C: Lg MI - bps; A: Am C: Vi - pt; A: Gn; B: Wi Tf Hn PM; C: Mb Aq Tk Md? Ka Ky - Y; B: SM; C: Me AA Mc Br - X: St SF Lu LQ.
24d 09h 37m	b: B: Ir SB; C: Gn - bs; A: Co - bp; A: Ap Ht; B: Lg Tu; C: To-bps; B: Vi - pt; A: Am; B: Wi Hn; C: Tk Md PM - Y; B: SM; C: Ha Fü IK Fr Pe AA Mc - E: MI - X: St Ty Lu LQ.
24d 17h 38m	b: B: Br - bp; B: Sr Kn Ir Mb Lg IK Ka Ky Mu Hn Am Wk; C: Nu Kv Vi MI - bps; A: Gn; B: To - pt; A: Fü Od Tf Tk Md Pi; B: Wn Wi Ni Gt Ha Db Aq Eb Tl MB Pa PM Ap Tn Ht; C: Tw - Y: A: SM; C: Ty Pe Gu - X: LQ.
24d 19h 30m	b: C: Mw - pt; A: Nu Wn Fü Lg Tf Ak; B: Co Sr Lo St Wi Ir Ni Gt Kv Db Hb Ty Od Aq Tk Md IK Tl SM Mu Pa Tn Hr Am Kg Wk; C: Ha Vi Mb Eb Ka Ky SJ AA Mc PM Pi Gn - E: Sw Ci - X: LQ.
25d 15h 23m	b: C: Kv - pt; A: Mu; B: Sr Ir Gt Ty Od Mb Lg Tf Tl Ak SM Ka Ky Pa Mc Hn Lu PM Tn Gn To Am DU Mw; C: Lo Wn Ha Db Fü Hb Aq Tk IK Eb Gu AA Pi Hr Kg MI Wk - E: Sw Ci Ap-X: St LQ Br.
26d 18h 49m	b: C: Kv Wk - bps; B: Gn - pt; A: Sr Gt Ty Tf Tk Ak Lu Tn Pi Ht; B: Nu Lo Sr Wn Wi Ir Ha Fü Od Lg Aq IK? Eb Tl SM Mu Mc Hn Hr Kg Mw SB; C: Db Hb Mb Ka Ks Ky MB AA PM To MI DU - E: Sw Ci - X: Pa LQ.
26d 23h 56m	b: A: Pe - bs; A: SF - bp; A: Fü Ty Od Lg IK Tl Mc Tn; B: Kn Mo St Wn Sw Vl Kv Md Eb Lu Hr Tw; C: MB Gn - bps; A: Nu Gt Ha; B: Wi Ni Ma Db Hb Aq Fr AA Mw; C: Le - pt; A: Am; B: Hn PM Ap Wk; C: Mb Ka Ky - pg; A: Mu; B: Ty - Y: A: Lo SM Ks; B: Ci Ak; C: Me Tu SJ - X: Pa LQ To MI.
27d 20h 07m	b: A: Pe Ap Tn; B: Sw Vl Gu Hn Ht; C: Pa Hr - bs; A: Ho Gn; B: Ir SB; C: Vi - bp; A: Ma Fü Lg IK Mu AA; B: Wi Gt Kv Ty To Kg; C: Wn Mb Eb Ka Ky Mw - bps; A: Nu; B: Kn Mo Ha Hb; C: Md Mc? - Y: A: SM SF; B: Lo Db Ak PM; C: Le Me Ci Tl Fr Tu SJ Br - E: St Tf Tk Fr Pi Tw - X: LQ Am - (si: Od Aq?).
30d 03h 14m	b: A: Gt Ty Pe SF MB SB; B: Vl Ha IK Eb; C: Md - bs; B: Od - bp; A: Fü Pa Pi Am Tw Ht; B: Wi Kv Hb Lg Tl Hr; C: Lu - bps; B: Mu C: Mo - pt; C: PM - Y: A: SM; B: Db Ak; C: Co Si Sw Ci AA Mc Hn Tn - E: Nu Le Lo St Wn Ma Mb Aq Tf Fr Ka Tu Ky To MI Mw - X: LQ Br - (si: Vi).
31d 17h 37m	b: A: Pe; B: Wn Wi Ir Sw Ma Lg Tn; C: Ha - bp; A: Gt; B: Kn Mo Ni Vl Kv Fü Hb Ty Od Md IK Tl AA Kg; C: Mb Eb Ka Ky Lu Hr Wk

TABLE 2a BAYS AND PULSATIONS 1960 - continued

## (AUGUST)

- bps: A: Nu; B: Le - pt: A: Pi; B: Mu SB; C: Tk PM - Y: A: Tf SF; B: Ak Lo SM Ks; C: Db Ci - X: LQ.

31d 21h 16m b: A: Wn Ma Hb Ty Ci Pe SF Mc Tn; B: Ir Sw Tk Ks Mu; C: Tw - bp; A: Nu Kn Gt Ha Kv Fü Od Md IK Eb AA; B: Le Mo Wi Ni Vl Lg Aq Tl Lu; C: Mb Ka Ky Pi Hr Wk - pt: A: SB; B: Ht; C: PM-Y: A: Tf; B: Lo Ak SM; C: Db Tu SJ - X: St LQ.

SEPTEMBER

- 01d 21h 51m b: C: Pe - bp; A: Fü Tn; B: Nu Vl IK? Eb Mw - pt: A: Wn Ma Od Tf Md; B: Lo Wi Ni Gt Ha Kv Aq Tl Mu Mc Ap Pi Hr Am SB; C: Hb Ty Mb Tk Ka Ky MB - Y: A: Db; C: Sw Ci Ak SM AA - X: St LQ.
- 02d 05h 01m b: B: SJ SB - bp; B: Nu Vl Lg Wk; C: Hr - bps: A: Tw Ht; B: Ha; C: Vi - pt: A: Pi; B: Wi Ty Mu Pa Am; C: Wn Aq Mb Tf Md Ka Ky MB Mc - Y: A: Me; B: Ak SM Tu; C: Gt Ma Fü IK Fr AA - X: St Pe LQ Br.
- 03d 00h 52m b: A: Pe Tn; B: Ir Vl SJ; C: MB - bs: C: Vi - bp: A: Kn Fü TlAA Mc Lu Hr Am; B: Sr Wn Wi Sw Kv Hb Lg Aq Md IK Pa Tw; C: Mb Ka Ky Gn - bps: A: Mo Ni Gt Mu; B: Ha Hn - pt: A: Ht; C: Pi - Y: A: SM; B: Lo Db Ak; C: Nu Le Si Me Ci Fr - E: St Tf SF Tu - X: Ty Eb LQ.
- 04d 17h 28m b: B: Sw Ty; C: MB - bs: A: Gt Pe - bp; A: Fü Mu; B: Kv Mb Hb Lg Eb Tl Ky Hn Wk; C: Mb Ka AA Lu - bpe: A: Sr Kn Mo Od IK Gn Mw; B: Wi Ir Ha; C: Wn - pt: B: Ht SB - Y: A: Tn; B: Lo Db Ci Ak SM; C: Vl - E: Co Nu Le Me St Aq Tf Tk SF Ks Mc PM Pi Hr Am Kg MI - X: Md LQ Br To.
- 05d 17h 47m b: A: Fü Eb Gn; B: Sw Ha Kv Ty; C: Wn - bs: A: Pe; B: Ir - bp: A: Sr Aq IK; B: Si Wi Hb Lg Hn Wk; C: Mb Ka Ky Lu To - bps: A: Kn Mo Od Mu - Y: B: Lo Ak Tu; C: Co Gt Ci SM AA - E: Nu Me St Ma Db Tf Tk SF Mc PM Tn Pi Hr Kg MI - X: Md LQ Br.
- 06d 14h 22m b: C: Kv Pe - bp; B: Sr Ir Lg Mu Hn To; C: Mo Hb Mb Ka Ky PM - bps: B: Gn - pt: A: SB; B: Ty Tf Pa - Y: B: SM; C: Gt Ha Fü IK Ak MI - X: St Md LQ Br Pi.
- 06d 22h 22m b: A: SF; B: Sw Gt Fü Od IK Fr MB Wk; C: Wn Pa - bp; B: Mo Ha Ir Kv Hb Ty Lg Eb Lu Tw Kg Mw; C: Mb - pt: A: SB; B: Wi Ap Am - Y: B: Nu Lo Db SM; C: Le Ma Ci Tl SJ - X: St Md LQ Br Ht.
- 07d 12h 06m b: B: Ir Ty Pe; C: Kv Hr - bs: A: Co Ap Br Gn To; B: MI - bp: A: Vi Mb Ky Gu Ht SB; B: Ha Lg Ka Mu Hn Lu PM Wk DU; C: Wi Ma - bps: A: Sr Si Od Ho Am; B: Mo; C: Hb - Y: B: Ak SM Tu; C: Sw Gt IK Ci Fr SJ - E: Nu Me Fü Aq Tf Tk Eb Mc Tn - X: St Md SF LQ - (si: Lo? Wn Mw - sfe: Pi).
- 08d 07h 30m b: A: Si; B: Co Ir Od Ho Tw Ht; C: Aq - bs: B: Fr - bp: A: Am; B: Vi Hb Lg; C: Mb Ka Ky - Y: B: Ak SM Tu; C: Ty Tf Ci Tl SF SJ Mu Mc Br - E: Nu Me Fü PM Wk - X: St Md Lu MI.
- 08d 10h 56m b: B: Co Ir Br; C: Pe - bs: A: Sr; B: Ap MI - bp: B: Nu Si Lg Hn Gn Ht SB; C: Mo Mb Ka Ky PM - bps: A: To Am; B: Vi - pt: B: Tf - Y: C: Me Sw Gt Ha Fü Ci Tl Fr Tu SJ Mc - E: Br - X: Ty Md.
- 09d 02h 29m b: B: Co; C: Pe - bp: B: Nu Vi Lg Mu Tw - pt: A: Pi; B: Aq Tf Pa Hn LQ Am; C: Kv Db Mb Ka Ky MB Hr Wk - Y: B: Me SM; C: Le Si Sw Gt Ha Fü Ci Tl Fr Tu SJ Mc - E: Br - X: Ty Md.
- 09d 23h 33m b: B: Sw IK Ak; C: Gn - bp: A: Nu Gt Tf; B: Mo St Wn Wi Vl Ha Kv Ma Db Fü Hb Od Lg Aq Md Eb Tl Mu AA; C: Mb Tk Ka Ky Mc Mw - pt: B: Ni Hr Am; C: LQ Pi - Y: B: Lo Ci SM; C: Le Me Tu-X: Ty Pe.
- 11d 01h 50m b: A: Hb Od IK Ci Pe SM SF MB Tn; B: Ni Ak Tw; C: PM Gn - bs: A: Ks; B: Ma Fr Mw - bp: A: St Fü Lg Tf Mc; B: Sw Aq Md Eb Tl Mu AA Pa Lu LQ Pi Hr; C: Mb Ka Ky - bps: A: Nu Kn Gt Ha; B: Mo Wn Wi Vl; B: Lo - Y: C: Le Me Tu SJ - X: Kv Ty.
- 13d 00h 54m b: A: Pe; C: Tw - bp: A: Gt Fü Hb Ty IK; B: Nu Mo St Wn Wi St Vl

TABLE 2a BAYS AND PULSATIONS 1960 - continued

## (SEPTEMBER)

		Ha Ma Od Aq Md Eb Tl SM AA Mc Lu Mw; C: Mb Hr - pt; B: Pa Ht SB - Y; B: Lo Db Tf Ci Ak; C: Le Tu - X: Kv Lg.
13d	13h 46m	b: A: Co; B: Si Ir Ap Br - bs; C: MI - bp; A: Sr Am; B: Hn To; C: Mb Ka Ky PM Gn Wk - bps; B: DU - pt; B: Tf; C: Aq - Y; B: Me SM; C: Tu Mu - X: Md SF Pa LQ.
13d	23h 49m	b: A: Ty IK MB Tn; B: Ir Fr Ak Br Gn Tw Ht - bs; A: Pe - bp; A: Nu Kn St Ni Ha Kv Ma Fü Hb Aq Tf Md Eb Tl AA Mc Lu; B: Wi Sw Db Lg Hr Kg Mw; C: Mb Ka Ky - bps; A: Mo Gt Od; B: Wn Vl - pt; B: Pa Ap - Y; A: SF; B: Lo Ci Tu; C: Le Me - X: SM PM ToSB.
15d	03h 52m	b: B: Lg - bp; B: Vl Ha; C: Eb - pt; A: LQ Pi Am Tw; B: Nu Lo St Wn Wi Gt Fü Aq Tl MB Pa Hn Hr SB; C: Mb Tk Md Ka Ky Gn - pg; A: Mu - Y; A: SM; B: Db Ci; C: Me IK SJ - X: Ty PM.
17d	20h 35m	b: B: Sw - bs; A: Mw - bp; A: Fü Tf IK; B: Kn Mo Ir Kv Ty Lg Pe Mu AA Mc Gn Hr Wk; C: Mb MB To Tw - bps; A: Nu St Wn Gt Ha Ma Od Md Ks; B: Wi Vl Db Hb Aq Eb - pt; A: Tk Ap Ht SB; B: Ni Ci Pa Hn LQ Pi; C: Ka Ky Am - Y; A: SM; B: Lo Tn; C: Co Me Fr Tu - X: MI - (ssc: Le - si: Tl).
20d	08h 29m	b: B: Mc SB - bp; B: Od - bps; B: Vi - pt; A: Tf Ap Pi; B: Wi Aq Tk Md IK Eb Tl Ka Hn Gn Hr Tw Ht; C: Mb Ky MB - pg; A: Mu Am - Y; A: SM; B: Ks MI; C: Me Fü Ci Tu SJ - X: Pa.
20d	22h 56m	b: B: Pe Tn - bs; B: Mw - bp; A: St Gt Fü SM Tw; B: Nu Wi Sw Vl Ha Kv Ma Hb Od Lg Aq Md Eb Tl AA Pa Mc Lu Hr Mw - bps; B: Le - pt; A: Wn Tf; B: Ty MB Mu Hn Ap; C: Mb Ka Ky - Y; A: SF B: Lo Db Ci; C: Me - X: Kn Ht.
23d	10h 13m	b: B: Ir; C: Wn Eb MI - bs; A: Co - bp; B: Ha Lg Ap To Tw SB; C: Mo Kv Lu - bps; A: Am; B: Si Vi Fr - pt; A: Tf; B: Mb Aq Mu Hn; C: Ka Ky Gn - Y; A: SF; B: Me Db SM Tu; C: Nu Lo Gt Ma Ty Od IK Ci SJ - E: Fü Md - X: Pa Br.
23d	22h 35m	b: B: Pe Tn - bs; B: Mw - bp; A: St Vl Ma Fü Od IK; B: Wi Sw Kv Hb Ty Lg Aq Md Lu Kg Mw; C: Mo Eb Mc Gn - bps; A: Nu Gt Ha - pt; A: Wn Tf SM MB Ap Pi Ht; B: Ci Tl Mu Pa Hn LQ Hr Tw Wk; C: Mb Ka Ky - Y; B: Lo Db; C: Le Me Ak SF AA - X: Br.
24d	16h 31m	b: B: Co Fü Ty Od Aq Pe; C: Md Eb Hr - bp; A: Kn Mu Gn; B: Sr Mo Ir Kv Mb Lg IK Ka Ky Hn PM To Am Wk; C: Hb Lu - pt; A: SB; B: Pa Ap; C: Tk - Y; A: SF; B: Ma Tf SM; C: Le Lo SiSwGtHa Db Ci Gu Tu MI - E: Me LQ Pi - X: Br.
26d	01h 13m	b: C: Pe Tn - bp; A: Fü SM Tw; B: St Sw Vl Ha Lg Eb Pi SB; C: Aq LQ Hr - bps; B: Fr - pt; A: Gt Od Mu; B: Wn Wi Ma Db Ty Tf Md Eb Ci Tl MB Pa Mc Hn Am; C: Ka Ky - Y; B: Me Ks; C: Nu Le Lo Tu SJ - X: Sr Kv Tn Br.
28d	14h 35m	b: B: Co Ir - bp; B: Sr Mu Hn To MI; C: Mb Ka Ky PM - bps; B: Gn - pt; A: Tf; B: Db Pa Am Wk; C: Ty Aq IK Ci LQ Pi - Y; B: SM; C: Me - X: St.
30d	00h 14m	b: A: IK Pe Mc; B: MB Gn; C: To - bs; Hb - bp; A: St Fü Lg SMAA; B: Kn Wi Sw Ni Kv Ma Ty Od Aq Eb Tl Pa Hr Kg; C: Pi Tw Mw - bps; A: Nu Md; B: Mo Wn Vl Gt Ha Lu - pt; A: Ht; B: Am SB - Y; A: Tn; B: Lo Db Ci Ak SF; C: Le Tf Tu SJ Mu - E: Me Ks - X: Hn.
30d	18h 47m	b: A: Pe; B: Ir Sw Mu Tn Ht SB; C: Mc - bs; B: Hb - bp; A: Wn Gt; B: Wi Ni Kv Fü Ty Lg Aq Md Eb AA; C: Tw Kg - bps; A: Nu Kn Mo Od IK - pt; B: Ap Wk; C: Mb Ka Ky - Y; A: Tf Ks; B: Lo Db Ak SM; C: Co Ha Ci Tl - E: St Ma Tk SF Tu PM LQ Br Pi Hr To MI - X: Hn.
30d	19h 46m	b: B: Ir Sw Mu Tn; C: Pe - bs; B: Hb - bp; A: Fü; B: Nu Wn Wi Gt Ha Kv Ty Od Lg Md Eb Tl SJ AA Wk Mw; C: Mb Ka Ky Tw - bps; A: Mo - pt; A: SB; B: Ni Aq Pa Am - Y; A: Tf; B: Lo Db Ak SM; C: Me IK Ci Tu Br Hr - E: St Ma Tk SF PM Pi Gn To Kg MI - X: Hn Ap LQ.

TABLE 2a BAYS AND PULSATIONS 1960 - continued

## OCTOBER

01d 08h 34m	b; A: Ht; B: Tu SJ - bs; A: Br; B: Vi - bp; A: Mu Gn; B: Lg Wk SB; C: Kv Hb Tw - bps; A: Sr Si Ho Gu PM Ap To Am; B: Kn Mo Ir DU; C: Mb Ka Ky - pt; C: Tn - Y; B: Ak SM; C: Lo Sw Gt Ha Ma Db Ty Ci AA - E; Co Nu Me Fü Tf Tk Fr LQ Pi MI Mw - X; SF Hn Lu.
01d 13h 25m	b; A: Mo Pe Ap Gn; B: Ir Ty Mc - bs; A: Br; B: MI - bp; A: Si Ht; B: Hb Od Lg Md Mu To Kg Wk; C: Vi Lu - bps; A: Am; B: DU; C: Mb Ka Ky - pt; A: SB - Y; A: Tf; B: Lo Ak PM; C: Sw Gt Ha Ma IK Ci SM Tu Ho SJ AA - E; Co Nu Me Db Fü Aq Tk Eb SF LQ Pi Hr Mw - X; St Kv Hn.
01d 20h 59m	b; A: Hb Ty Ci SJ Mu Mc; B: Ir Sw Ak Tu Hu; C: Vi - bs; A: Mo Gt IK Pe SM SF Ks Gn; B: Db - bp; A: Sr Kv Fü Lg Tf Eb Tl Ap Am; B: Pa Hr To Wk; C: Pi - bps; A: Kn Wn Wi Ni Ha Ma Od Aq Md AA Lu Tw; B: Vl Mb Ka Ky Kg Mw - pt; A: Ht SB; C: MB - Y; A: St Tn; B: Lo; C: Le Fr Ho LQ Br - E; Nu Me Tk - X: Hn Pi.
02d 08h 04m	b; A: Ap Br; B: To MI - bp; A: Ho PM; B: Ir Lg Ky; C: Vi Mb Ka - bps; A: Am - pt; B: SB - Y; A: SF; B: Db; C: Si Ha Ma Od Tf Ci Pe SM Mu Gu Lu - E; Co Me Fü Tu - X: Kv Hn Pi Ht.
02d 11h 36m	b; A: Pe SJ Ap Br; B: Vi Ty Ho; C: Wn - bs; A: Sr; B: Od - bp; A: Si Mu Gu PM; B: Hb Lg DU; C: Md Tw - bps; A: Mo Mb Ka Ky Gn; B: Ir - Y; B: Lo Db Ak; C: Sw Ha Tf IK Fr SM AA - E; Co Nu Me Fü Aq Tk Eb SF Tu LQ Pi Hr KG MI - X; Kv Mc Hn.
02d 13h 44m	b; A: Br; B: Wn Ap - bs; A: Mu Gn - bp; B: Si Ir Hb Ty Lg AA PM To Wk DU Mw - bps; A: Sr; B: Mo Wi Od Ky; C: Ka - Y; A: Tf Ks; B: Lo Db Ak; C: Sw Gt Ha Ma IK Pe SM Tu SJ Gu - E; Co Nu Me Fü Aq Tk Md SF LQ Pi Hr KG MI - X; Kv Mc Hn.
02d 16h 43m	b; B: Ir Sw Ty; C: MB? Gn - bs; A: Od IK Pe; B: Kg - bp; A: Mo St Ni Fü Lg Mc; B: Gt Eb Tl Hr Mw; C: Mb Tw - bps; A: Wi Ha Ma Db Aq Md AA Lu; B: Kn Wn Vl Hb - pt; B: Ht SB; C: PM Wk-Y; A: Tf Tn; B: Lo Ci Ak SF; C: SM Tu SJ Mu Br - E; Co Nu Me LQ MI - X: Kv Hn Pi - (si: Le Tk).
03d 09h 49m	b; A: Br; B: Si Ir Kv Fü Vi Ty Fr Pe Tu Ho SJ Mu Gn To; C: Wn Aq Eb MB Hr - bs; A: Co Ap; B: MI - bp; A: Sr Ht SB; B: Le Mo Od Mb Lg Md Ka Ky Pa Lu PM LQ Pi; C: Hb Tk Tw Wk Mw - bps; A: Am - Y; A: SF; B: Tf Ak; C: Lo Me Sw Ha Db IK SM - E: AA - X; Ci Mc Hn.
04d 18h 16m	b; A: Ni Ap Br; C: MB - bs; A: Vl Ha IK; B: Mo - bp; A: Gu; B: Kv Ma Lg Tn Lu PM Wk Mw; C: Mb Ka Ky - bps; A: Sr Gt Md; B: Wi Ir Hb - pt; A: Am; B: Hn SB - Y; B: Db SM; C: Sw Ty Pe MU AA - E; Co Nu Le Lo St Vi Fü Od Aq Tf Tk Fr SF Ks Tu Ho SJ Mc Tn LQ Pi Gn Hr To Tw Kg MI DU.
05d 22h 00m	b; B: Ir - bs; B: Pe - bp; A: Sr St Fü Lg; B: Wn Wi Ni Vl Gt Ha Aq IK Mu Lu Kg; C: Vi Mb Eb Ka Ky Hr - bps; A: Nu AA Gn Mw; B: Kn Mo Od Md Wk; C: Hb - pt; A: Am Ht; B: Ap SB; C: MB - Y; A: SM Ks; B: Lo Db Tl Ak Tn; C: Le Sw SJ - E: Me Ma Ty Tf Tk Fr SF Tu Mc Hn PM LQ Br To Tw MI DU - X: Kv Pi.
07d 11h 22m	b; A: To Ht; B: Ty Pe; C: Kv - bs; A: Gn; B: Kn Mo Od Mu Br; C: Vi - bp; B: Lg; C: Mb Md Eb - bps; A: Hn Pm Ap; B: Ir; C: Hb Ka Ky - pt; B: SB - Y; B: Nu Ak SM; C: Lo Sw Gt Ha IK Ci SJ Gu - E; Co Sr Le Si Me St Wn Ma Db Fü Aq Tf Tk Fr SF Tu Ho Mc LQ Pi Hr Tw Kg MI Mw - X; Tn - (si: AA Am).
09d 14h 31m	b; A: Wn Fü IK Eb Pe SF Br; B: Sw Ni Gt Kv Ty Aq Md Ap Tn; C: Vi MB Mc? Hr - bs; A: Mu; B: Co Ir Ma Od - bp; A: Ha Hb Ht; B: Si St Wi Vl Db Lg PM To Am Wk; C: Tl Lu - bps; A: Sr Nu Kn Mo Mb Tf Ka Gu Hn DU; B: Ky - Y; A: SM; B: Lo Ci; C: Le Tu SJ AA Kg - E: Me Tk LQ Pi MI.
09d 19h 12m	b; A: Hb Pe; B: Ir MB Mc Tn - bp; A: St Kn Fü Ty Tf AA; B: Mo Wi Ni Kv Db Lg Aq Md IK Eb Lu; C: Tl Hr - bps; A: Nu Gt Ha; B: Wn Vl Ma Od Mw - pt; A: Ht; B: Wk SB - Y; A: SF; B: Lo Si Ak SM Ks; C: Le SJ PM - E: Me Tk LQ Pi - X: Ap Am.

TABLE 2a BAYS AND PULSATIONS 1960 - continued

(OCTOBER)

09d 21h 26m	b: B; Ir Pe Mc Tn; C: Aq MB - bp; A: Nu St Gt Ty Lg AA; B: Mo Wn Ni Vl Kv Db Fü Hb IK Eb Tl Lu Kg; C: Md Hr - bps; A: Ha; B: Wi Ma Od - pt; B: Am Ht; C: MI - Y; A: SF; B: Lo Ci Ks; C: Sw Tf Ak SM - E: Me Tk Pi - (si: Le).
09d 22h 04m	b: A: Pe SB; B: Wi Ty Fr SJ MB Pa Mc Tn Br; C: Gn - bp: A: Nu St Lg Tl LQ Pi Tw; B: Sr Kn Mo Wn Gt Kv Fü Hb Od Eb Mu Hr; C: Mb Aq Ka Ky - bps; A: Ha AA; B: Vl Ma Md Lu Hu Mw - pt; A: Tf; B: Am; C: MI - Y: A: SM; B: Lo Db Ci SF Ks; C: Le Sw IK PM - E: Me Tk.
11d 20h 08m	b: B: Sw Ma Db; C: Hb - bp: A: Ha Fü IK; B: St Wi Ir Ni Vl Gt Ty Od Lg AA Tn; C: Md Eb Gn - bps; A: Nu - pt: A: Wn; B: Aq Tl Hu LQ Pi Hr; C: Mb Tk Ka Ky Mc MI - Y; B: Lo Tf; C: Le Ci Ak SM Tu - X: Kv Pe Mu Ht.
12d 19h 21m	b: A: Tn; B: Sw Hb - bp: A: Nu Kn Tf IK; B: Mo St Wn Ir Gt Ha Kv Fü Od Lg Tk Tn Gn; C: Ma Aq Eb Wk Mw - pt: A: Ty; B: Wi Db Md Tl Pa Hu LQ Pi Hr; C: Mb Ka Ky MI - Y: B: Lo Ak; C: Ci SM Mu AA - X: Pe Ks Am.
12d 21h 28m	b: A: Tn; B: Sw - bp: A: Wn Ni Vl Gt Fü Ty Od Md IK Tl AA; B: Kn Mo Wi Ir Kv Hb Lg Eb SM; C: Hr Tw Wk - bps; A: Nu St Ha Ma; B: Le Db Aq Mw - pt; A: Tk MB Pi; B: Hu Mc; C: Mb Ka Ky LQ - Y: A: Lo Tf; B: Ci Ak; C: Mu - X: Pe Ks.
15d 10h 42m	b: B: Nu Ir - bs; B: MI - bp; B: Sr - bps; A: Am; B: Vi - pt; A: LQ Pi Ht; B: Mb Tf Hn Gn To; C: Aq Tk Md Ka Ky MB PM Hr Tw - pg; B: Mu - Y; C: Me Sw Gt Ha Ty Od IK SM Tu AA - E: Fü - X: Kv Hb Pe Ks Pa Ap - (ccs: Co).
15d 16h 26m	b: B: Ty Od Br - bp: A: Mu Gn; B: Sr Ir Mb Ka Ky Gu Hn PM To; C: Hb - bps; B: Mo - pt; B: Wi Tf SB - Y; B: SM Pa; C: Le Lo Si Sw Gt Ha Db IK Ci Tu - E: Me Fü Tk LQ Pi MI - X: Kv Pe Ks Ap.
16d 12h 32m	b: B: Co Si Pe Br - bs; B: Le - bp; B: Sr Ir Od Hn Ap To Tw MI DU; C: Vi Mb Ka Ky PM - bps; A: Am - pt; B: Tf Gn Ht; C: Aq LQ Pi - pg; A: Mu - Y; B: Me Db; C: Sw Fü SM Tu - X: Kv Ma.
18d 08h 07m	b: B: Ap Br - bs; A: Co; B: MI - bp; B: Ir Mu Hn To; C: Vi Mb Ka Ky PM - bps; A: Si Am - pt; B: Hu - Y; B: Tf SM; C: Tu SJ - X: Kv Lu.
18d 18h 39m	b: A: Ty Tn; B: Sw Db; C: MB - bs; A: Ha Hb Pe Ks Kb; B: Ir - bp; A: Fü Tk; B: St Ni Vl Kv Mb Lg Ka Ky Mc Hn To Am Wk; C: Lu PM Hr - bps; A: Sr Nu Kn Mo Wn Gt Od Tf IK Tl Mu AA Gn; B: Wi Ma Aq Md Eb - pt; A: Ht; B: Ap SB - Y; A: SF; B: Lo Ci Ak SM Br; C: Le Me - E: LQ Pi MI.
19d 15h 42m	bp: A: Mu; B: Sr Kn Ir Hb Od Mb Ka Ky Hn Gn To MI DU; C: Mo Tw Wk - pt; B: Tf Pi - Y; B: Br; C: Co Gt Ma Db Fü IK Pe SM - X: Mw.
19d 20h 58m	b: A: IK Ci Pe Ks Tn; B: Wi Ir Sw Ty Lg Ak - bp; A: Nu St Gt Ha Kv Hb Od Tf AA; B: Kn Wn Vl Ma Fü Aq Tk Md Eb Tl Kg; C: Mb Ka Ky Hr Tw - bps; B: Le Mo - pt; A: Ht; B: SB - Y; B: Lo Db SM; C: SJ Mu - X: Mw.
20d 04h 55m	b: B: Lg Tu - bp; B: SJ; C: Vi Mb Ka Ky Tw - pt; B: Tf Pa LQ Pi Am Ht - Y; B: Ks; C: Me Sw Od Fr SM - X: Hb Mw.
20d 09h 21m	b: B: Ir Fr SJ; C: To - bs; B: Vi - bp; A: Tu Ht SB; B: Lg Hu Am Tw C: Mb Ka Ky Wk - pt; A: Tn; B: Tf Ap; C: Md Gn - Y; B: Me SM Ks C: Co Ak Ho - E: MI - X: Hb.
20d 15h 13m	b: A: Co; B: Lg Ap; C: Kv Vi Aq Eb - bp; B: Ir Od Ka Mu To; C: Mo Md PM - pt; B: Am; C: Wn - Y; B: Me Br; C: Si Gt Ha Ma Fü Ty Tf IK Fr Pe SM Tu Gu Tn - E: MI - X: Hb Pi.
20d 20h 59m	bp: C: Mw - pt; A: St Gt Od Tf Tn Ht; B: Sr Nu Le Lo Wn Wi Ir Ha Kv Db Fü Ty Lg Aq Md IK Tl Ak Mc Lu Hu SB; C: Me Tk Eb Ci SM Mu AA Hr Tw - E: Sw - X: Hb PM LQ Pi Kg.
20d 21h 45m	b: B: Sw Pe Ht - bp; A: St Kn Kv Fü Ty Lg Tf IK AA Tn; B: Mo Ir

TABLE 2a BAYS AND PULSATIONS 1960 - continued

## (OCTOBER)

		Db Md Eb Tl Mc Wk; C: Hr Mw - bps; A: Nu Wn Gt Ha Od; B: Le Wi Vl Ma Aq - pt; A: SB; B: Tk Hu Ap Am; C: Mb Ka Ky Gn MI-Y; A: Lo Ks; B: Ci Ak SM; C: Me - X: Hb LQ Pi.
21d 10h 28m	b; A: Co; B: Ap; C: Gn - bs; B: MI; C: Vi - bp; A: Sr; B: Si Ir Mu Hn To Am; C: Mb Ka Ky PM - pt; B: Hu Ht; C: Md - Y: B: SM Br; C: Me Tu.	
21d 20h 59m	b; A: Ci Pe SF; B: Sw Ak SJ; C: MB - bs; A: SM - bp; A: Nu Gt Ha Kv Db Fü Hb Ty Tf IK Tn; B: Sr Kn St Wn Ir Vl Ma Lg Aq Tk Md Eb Tl Mc Lu LQ Pi Hr Wk; C: Mb Ka Ky Gn Tw - bps; A: Od AA; B: Mo Wi Mw - pt; A: SB; B: Hu Am Ht - Y: B: Lo; C: Le Fr Tu Mu.	
22d 07h 44m	b; B: AA - bp; B: Co Tu MI; C: Vi - pt; A: Ap Tn LQ Pi; B: Db Tf Eb Tl Pa Hn Hu Hr; C: Wn Ha Kv Mb Aq Md Ka Ky MB To - pg; A: Mu Am - Y: B: Me; C: Si Fr SM Ks - X: Pe Lu Ht.	
23d 20h 22m	b; B: Sw - bp; A: Nu Gt Ha Ty Lg Tf IK Tn; B: Le St Wi Vl Kv Fü Hb Od Aq Md Mc Mw; C: Kn Mo Eb AA - pt; A: Wn Tk MB; B: Ma Tl Pa Hn Hu Ap Pi Hr; C: Mb Ka Ky Gn Tw - Y: A: Ks; B: Lo Db Ak; C: Ci Pe SF - X: SM Lu Lq Ht.	
26d 17h 20m	b; C: Kv - pt; A: SB - pg; A: Co Me MI; B: Si; C: Vi SM Mu Hn - E: Nu Sw Ci LQ Pi - X: Ht.	
27d 16h 33m	b; A: Mu; B: Si Gt Vi Od IK Pe Mc Gn; C: MB Hr - bs; A: Ap Br To; B: Co Ir - bp; B: Wi Hb Lg Md Eb Tl Ka Lu Am; C: Mb Ky Tw - bps; B: Mo Hn PM - pt; B: Pa SB - Y: A: SF; B: Ak; C: Sw Ma Tf Ci Sm Tu Gu AA - E: Nu Lo Kn Me St Wn Ha Db Fü Aq Tk Fr Ks Tn LQ Pi Kg MI - X: Kv - (si: Ty).	
28d 17h 03m	b; B: Sw Br; C: Mc - bs; A: Gt Pe Mu Gn; B: Wn Ir Hb Od - bp; A: St Ni Ha Fü SB; B: Sr Vl Kv Ty Lg Aq Eb Tl Ka Ky Hn Lu Am; C: Mb Hr - bps; A: Mo Md IK AA; B: Kn Wi; Y: A: Ks; B: Lo Ma Db Tf; C: Si Ci Ak Gu PM - E: Co Me SF Tu Tn LQ Pi To Kg MI - X: SM - (si: Nu Tk).	
29d 00h 47m	b; A: Gt Hb Aq IK SF Ks MB Mc Tn; B: Ir Br - bs; A: Pe SM; B: Vi Fr - bp; A: Nu St Wn Ha Fü Ty Od Lg Tf Eb Tl Wk; B: Sr Kn Sw Ni Kv Tu SJ Mu Gu AA Pa Lu Hu Hr Kg; C: Mb Ka Ky Hn LQ Pi Tw - bps; A: Mo Md Mw; B: Wi Vl Ma - pt; B: Am Ht - Y: B: Lo Me Db Ci Ak; C: Le Si PM - E: Tk To DU.	
29d 12h 46m	b; A: Mu Gn; B: Ir Kv Ty Pe Br - bs; A: Sr - bp; A: Kn; B: Hb Od Lg Hn PM; C: Mb Ka Ky Tw - bps; A: Mo - pt; A: SB; B: Pa - Y: B: Tf Ak; C: Lo Si Sw Gt IK SM SJ - E: Co Nu Me St Wn Wi Db Fü Aq Tk Md SF Mc Tn LQ Pi Hr To Kg MI DU.	
29d 15h 56m	b; A: Kv Ty IK Eb Pe Br Gn; C: Wn Wi Hr - bs; A: Nu; B: Ma Od - bp; A: Sr Gt Hb Md Mu; B: Si Ir Ha Mb Lg Tl Ka Ky Gu Hn Lu PM To Wk; C: Vi - bps; A: Kn Mo - pt; A: Ht SB; B: Pa Ap - Y: B: Lo Tf Ak; C: Sw Db Ci - E: Co Me St Fü Aq Tk SF Mc Tn LQ Pi Tw Kg MI DU - X: SM.	
29d 18h 00m	bp; B: Gt Mw - pt; A: SB - pg; A: Co Ty SF MI; B: Me Lg SM Tu Am; C: Sr Wn Kv Hb Od Tf SJ MB Mc To; E: Sw Vi Fü Ak Ci PM LQ Pi Ht.	
30d 13h 45m	b; B: Pe; C: Kv - bs; A: Mu; B: Ir Gn - bp; B: Sr; C: Hb MB Ky To - bps; B: Mo Hn PM; C: Ka - Y: B: Ak; C: Si Gt Ty Od IK SM Gu Br - E: Nu Lo Me Fü Tk Md LQ Pi Hr Am MI Mw.	
31d 23h 05m	b; B: Pe - bp; A: Gt Ha Fü Lg; B: Nu St Wi Vl Ty IK Eb Tl AA Tw; C: Kv Hb Md MB Mc Lu Hr - pt; A: SB; B: Wn Aq Pa Hu Ap; C: Pi - Y: A: SM Ks; B: Lo Db Ci Tn; C: Le Sw Od Fr Tu SJ - E: Me Ht - X: LQ To.	
	<u>NOVEMBER</u>	
01d 21h 20m	b; B: Sw Pe; C: Pa - bs; A: SF - bp; A: Nu Fü Ty IK; B: Mo Kv Ma Hb Lg Md Tl AA Mc Tn Tw; C: Lu - bps; A: St Ha; B: Le Wi Od Aq Eb - pt; A: Wn Gt Tf Ap; B: Ni Db Hu LQ Hr; C: Mb MB Pi - Y: A: Lo SM; B: Ks; C: Ir Ci Kg - E: SB.	

TABLE 2a BAYS AND PULSATIONS 1960 - continued

## (NOVEMBER)

01d 21h 37m	b: A: Ci - bs; B: Pe Mu; C: MB - bp; A: Nu Tl SM; B: Wi Vl Lg Md SJ AA Lu Hr Tw Mw; C: Mb Ka Ky - bps; A: Wn Gt Ha IK; B: Aq Eb - pt; A: Tf Ap; B: Ty Hu Am Ht; C: Tk Pi - Y; A: SF; B: Db; C: Le Me Ir Sw Fr Ak - E: SB.
02d 12h 13m	b: A: Co; B: Ir Od Ap; C: Vi - bs; A: Br - bp; A: Gn Am; B: Mu Hn PM T o Wk DU Mw; C: Mb Ka Ky - bps; B: Sr - pt; B: Ht; C: Tk - Y; C: Me Sw Gt Ha Md IK Pe SM Gu - E: Pi MI.
02d 19h 50m	b: A: Pe; B: Sw Lg IK Ak; C: Mc - bp; A: St Tn; B: Kn Wi Ir Ni Vl Kv Ma Fü Hb Ty Aq Md Eb AA; C: Lu Tw - bps; A: Nu Wn Gt Ha Od; B: Mo - pt; B: Tk Mu LQ Gn Hr Ht SB; C: Mb Ka Ky - Y; A: Tf Ks; B: Lo Db Tl SM; C: Le Me Ci - X: Pi.
02d 20h 39m	b: A: Pe Tn; B: SJ - bp; A: Nu Fü Ty SM; B: Kn Mo Wi Ir Ni Kv Hb Lg IK Eb AA Mc LQ Tw Wk; C: Mb Tl Ka Ky MB Lu - bps; A: Gt Ha Od; B: Wn Vl Aq Md Mw - pt; B: Pa Ap Hr Am Ht; C: Tk Mu PM - Y; A: Tf Ks; B: Lo Ma Db Ak Tu; C: Le Me Sw Ci - X: Pi.
03d 10h 37m	b: C: Kv Vi - bp; A: Sr; B: To; C: Mb Ka Ky - pt; A: Tf Am; B: Hu SB; C: PM - Y; C: Si Gt Fü IK Od Pe SM SJ Br - E: Me Mi - X: Pa - (sfe: Db?).
03d 19h 57m	b: A: IK; B: Sw Ak - bs; Kv Pe? - bp; A: Nu Kn St Ha Fü Ty AA Tn; B: Wn Wi Ir Ma Hb Lg Aq Md Eb Tl Mc Lu Wk; C: Hr Kg - bps; A: Gt Ks; B: Mo Od Mw - pt; A: Ht; B: Ni; C: MB PM LQ - Y; A: Tf; B: Lo Db; C: Ci - E: Le Me Tk - X: SM Pi - (ssc: Vl).
04d 06h 52m	b: B: Ap Br - bs; A: MI - bp; B: Ir Ho Hn PM To; C: Wi Mb Md Ka Ky Wk - bps; A: Sr Am; B: Vi Mu - pt; B: Tf - Y; B: Gt Ha Db Od Pe SJ - E: Co Nu Le Si Me Wn Fü Tk Fr Tu Hr Mw - X: Ty Lg Ak Lu.
04d 14h 06m	b: A: Tn; B: Ir Fü Pe AA Ap Br; C: Kv Vi Mc - bs; B: Od Mi - bp; B: Lg Mu PM To Am; C: Hb Md Ka Lu Tw - bps; B: Sr Mo Hn Gn; C: Ky - pt; A: Ht - Y; B: Tf SM; C: Co Si Sw Gt Ha Ma Db Ty IK Fr Tu SJ MB? Hr - E: Nu Me Wn Tk LQ Pi - X: Ak.
04d 14h 47m	b: A: Fü Ty Eb; B: Sw Kv Br - bs; A: Kn Wn Ni Gt Ha? Od Md; B: Ir - bp; A: St Hb IK; B: Wi Ma Lg Aq Tl AA To Mw; C: Mc - bps; A: Sr Nu Mo; B: VI - pt; B: Pa SB - Y; A: Tf; B: Lo Db Ci SM; C: Co Le Pe SF Tu MB? Mu SJ - E: Me Tk LQ Pi Hr MI - X: Ak.
04d 23h 17m	b: B: Ir Gt Od Pe Mc Ap; C: Wn Md MB - bs; A: Gn; B: Vl Mu - bp; A: Lg; B: Mo Wi Ha Fü Hb Tl Hn Lu Hr; C: Kv Eb Mw - bps; B: SJ Pa Tw - pt; B: Aq Hu Ht; C: PM LQ Pi - Y; A: SF; B: Nu Lo Db Ci; C: Le Sw Ma Ty Tf IK Fr Tu AA - E: Tk - X: Me Ak SM SB.
05d 13h 23m	b: A: Co Kn Ap Br; B: Si Vl Kv Ma Fü Od IK Pe SJ Mc MI Ht; C: Wn Aq MB AA - bp; A: Sr Mu; B: Mo Ir Ha Vi Hb Ty Mb Lg Ka Ky Gu Hn PM DU; C: Tk Md Eb Lu Tw Wk - bps; A: Gn To; B: Am - pt; C: Pi - Y; B: Nu Me Db Tf SM Ks Tn; C: Lo Sw Gt Ci Tl Tu.
06d 18h 24m	bp: B: Kv IK - pt; A: Sr Ty Mu Gn; B: Lo Ir Gt Od Aq Tf Tk Tl Ak Ks Hn Lu Ap Tn To Am Wk Ht SB; C: Nu Me Wn Db Fü Hb Mb SM Ka Ky SJ Gu AA PM LQ Pi Hr Kg MI - E: Sw Ci.
06d 20h 16m	b: A: Tn; B: Pe; C: MB - bs; B: SM - bp; A: Nu Wn Ha Ty IK; B: St Wi Ir Ni Vl Gt Kv Ma Db Fü Hb Od Lg Aq Eb Tl AA Mc Wk Mw; C: Mb Tk Md Ka Ky - bps; B: Le - pt; B: Kn Ap LQ Pi; C: Gn Hr - Y; A: Ks; B: Lo Tf Ci Ak; C: Me Sw.
08d 23h 26m	b: B: Pe - bp; B: Ha Fü Ty Lg IK AA Tn; C: Kv Tk Md Mc Lu - pt; A: Wn Gt Od Tf; B: St Sw Ma Db Aq Eb Tl Pa Hr; C: MB LQ Pi - Y; B: Ak Ks; C: Lo Ci - X: SM.
09d 21h 11m	b: B: Sw; C: Pe - bp; A: Nu Ha Ty IK Tn; B: Wi Vl Kv Fü Lg Eb AA Hu Mw - pt; A: Wn Ma Od Md Pi; B: Kn Ni Gt Db Hb Aq Tk Tl Mu Pa Mc Hn Ap Hr Am SB; C: Mb Ka Ky MB PM LQ - Y; B: Lo St Tf Ak SM; C: Le Ci.
11d 23h 01m	b: A: Pe; B: Sw Tn - bp; A: Nu Fü Od Lg IK AA; B: Kn Mo St Wi Vl Gt Kv Hb Ty Aq Md Eb Tl Mu Lu Mc Mw; C: Wn Tk MB - bps;

TABLE 2a BAYS AND PULSATIONS 1960 - continued

## (NOVEMBER)

A: Ha - pt; B: Pa Hu Pi Hr Ht; C: PM - Y; A: Tf Ks; B: Ma Db Ci Ak SM SF; C: Le - E: Gn - X: LQ SB.

- 14d 19h 17m b: B: Ir MB Mu Br; C: PM - bs; A: Md Ks Lu; B: Mo Wi Vl Ma Od - bp; A: Fü Lg Tl Ht; B: Sr Eb Mc Wk; C: To - bps; A: Nu IK AA; B: Kn Kv Hb Aq; C: Hr - pt; B: Pa Ap; C: LQ - Y; A: Tf SM; B: Lo Db Ci Ak; C: Sw Tu - E: Me St Mb Tk Fr SF Ka Ky SJ Tn Pi Kg MI Mw - X: Hn SB - (si: Wn Gt Ha Ty Pe Tw).
- 17d 19h 37m b: B: Ir Aq Mc Tn; C: MB - bs; A: SF; B: Wi IK Pe - bp; A: Lg; B: Kn St Wn Vl Gt Kv Ma Fü Hb Ty Md Eb Tl AA Lu Hr - bps; A: Nu; B: Mo Ha Od Mw - pt; A: Ht; B: Am SB - Y; A: SM; B: Db Tf Ci Ak Ks; C: Le Sw - E: Lo - X: Pi.
- 20d 22h 59m bp: B: IK - pt; A: Sr St Wn Ha Ma Fü Od Tf SF Lu; B: Nu Lo Si Wi Sw Ni Gt Kv Db Hb Ty Aq Md Eb Ak Tn Hr Am MwSB; C: Le Mb Ci SM Ka Ky Ks Mu AA LQ Pi Tw - X: Br Kg.
- 22d 21h 16m b: B: Sw Pe Mc; C: Md - bp; A: Gt Ha Fü Ty Tl; B: Mo St Wn Wi Kv Ma Od Lg Aq Eb AA Mw; C: Hb Hr - bps; A: Nu; B: Le - pt; C: Pi; Y: A: SF; B: Lo Db Tf Ci Ak SM Ks; C: IK Tn.
- 25d 16h 17m b: A: Pe; B: Wn Sw Vl Gt Ty IK Eb Mw; C: Mc - bp; A: Kn St Ha AA; B: Sr Ir Kv Fü Hb Od Lg Md Tl Kg; C: Wi Mb Ka Ky Hn PM To Wk - bps; A: Gn; B: Mo - pt; A: SB; B: Pi Ht - Y; A: Tf SF; B: Nu Db Ak SM; C: Lo Ma Ci Ks Mu - E: Aq Tk LQ MI.
- 27d 23h 36m b: A: Pe; B: Sw Db Ty Tn - bp; A: St Wn Gt Fü AA; B: Nu Wi Ir Kv Hb Od Lg IK Eb Tl Mc Mw; C: Mb Ka Ky Lu Hr Tw - bps; A: Ha; B: Mo Vl Ma Md - pt; A: Aq; B: Ap Am; C: LQ Pi To - Y; A: Tf; B: Lo Ci Ak; C: Le SJ - X: SM PM.
- 28d 04h 41m b: B: Pe SJ Br; C: Tk MI - bs; B: Mu - bp; A: Sr St SM MB Tw Ht SB; B: Nu Wi Ir Ni Ha Kv Ma Fü Hb Ty Od Lg Aq Md IK Eb Tl Pa Mc LQ Pi Hr To; C: Mb Ka Ky PM - bps; A: Wn Gt; B: Le Mo Vl Vi Hu - pt; A: Am; B: Hn Ap - Y; B: Lo Me Db Tf Ci SF; C: Si Tu AA - E: Fr.
- 28d 09h 10m b: A: Ap; B: Ir; C: Gn - bs; B: Co MI - bp; A: Sr Si To; b: Mb Lg Ka Ky PM; C: Vi Hn Mw - bps; A: Am - pt; B: Tf SB - Y; A: Br; B: Me C: Fü Ak SM Gu Mc Tn - X: AA.
- 28d 13h 14m b: A: Kv; B: Sw Ni Db Ty Ak Tn Br; C: Eb - bs; A: Ha Pe; B: Le Hu - bp; A: Nu Kn St Gt Od IK; B: Wn Ir Vl Ma Fü Hb Lg Aq Tk PM Gn To Am Wk - bps; A: Mo Mu; B: Sr Wi Hn; C: Md - Y; A: Tf; B: Lo SM; C: Me Tl Fr Tu SJ Gu AA Mc Hr - E: MI - X: LQ Pi.
- 28d 23h 54m b: A: Nu Fü Hb Od IK Pe SF; B: Ni Ty Eb Ak Mc Tn; C: MB Tw - bs; B: Wn - bp; A: Mo St Gt Ci; B: Le Kn Wi Sw Kv Ma Aq Md Tl AA Mw; C: Lu - bps; A: Ha; B: Vl - pt; B: Am; C: Mb Ka Ky LQ - Y; B: Lo Db Tf; C: Me Fü Tu SJ Mu Hr - X: SM Hn PM Pi SB.
- 29d 01h 15m bp: A: St - pt; A: Wn Gt Ha Kv Fü Ty Md Eb Ci Tl SM MB AA Hr Tw; B: Nu Le Lo Wi Sw Ni Ir Vl Db Od Aq IK Ak SF Mu Pa Mc Lu Pm Hu LQ Pi Kg; C: Me Ma Mb Tf Ka Ky Hn To MI DU - E: Mw Wk.
- 29d 11h 20m b: A: Co Mu; B: Od Lg Tn Br Tw; C: Wn Ha Kv Aq Pe MB AA - bs; B: MI - bp; A: Sr To Am; B: Kn Mo Ir Mb Ka Ky PM Hn; C: Hb Tk DU - bps; B: Gn - pt; C: Md - Y; B: Ak; C: Nu Si Me Ma Db Fü Ty Tf Tl SM Gu Mc Hr Wk - X: Eb.

DECEMBER

- 01d 18h 46m b: B: Gu Hn Tn Br; C: Eb MB - bs; A: Gt; B: Ir Pe; C: Vi - bp; A: St Aq Md Mu AA Gn; B: Wi Ha Kv Hb Ty Ka KY SJ PM; C: Lg Pa Hr To Wk - bps; A: Kn Mo IK; B: Od Mb - pt; A: Am SB - Y; B: Db Tl Ak SM Ks; C: Si Sw Ci Tu - E: Sr Nu Le Lo Wn Ma Fü Tf Tk LQ Pi Tw Kg MI.
- 02d 12h 06m b: A: Kv Ty Pe Br Gn; B: Wn Vi Fr Hn; C: Aq - bs; B: Ir - bp; A: Nu Si Hb Mu Gu To; B: Sr Gt Ma Od Lg SJ PM Tw Wk Mw; C: Md - bps; A: Mo; B: Mb Ka Ky - Y; B: Db Fü Ak Tu; C: Me Ha IK Ci Tl SM Mc Am - E: Lo Tf Tk SF LQ Pi.

TABLE 2a BAYS AND PULSATIONS 1960 - continued

## (DECEMBER)

03d 03h 38m	b; A: SF; B: Sw Gt Hb Ty Od MB Am - bs; A: SM; C: Pe - bp; A: Wn Lg; B: Le St Wi Ir Ma Fü Aq Md IK Eb Mu; C: Kv Vi TlMw - bps; A: Tw; B: Vl Ha Db Fr SJ Pa Hu LQ Pi - pt; C: Hr - Y; B: Lo Me Ci Ak Tu; C: Nu Tf Br.
05d 16h 33m	b; C: Kv Pe - bp; B: Ir Mu Gn; C: Mb Ka Ky - pt; A: SB; B: Tf MI Ht; C: PM - Y; C: Fü Od IK SM - E: LQ - X: Pi Kg.
06d 11h 40m	b; A: Co Ap; B: Nu Wn Sw Ni Od Pe MI; C: Mc Hn PM Hr - bp; A: Gn To Am; B: Ir Kv Hb Lg IK Ho Mu Tw Wk Mw; C: Mb Ka Ky - bps; B: Sr Mo - pt; B: Wi; C: Tk - Y; A: St? Tf; B: Lo Db Fü Ak Tu; C: Si Gt Ha Ma SM Ci; E: Me Md LQ Pi - X: Vi.
06d 20h 23m	b; B: Sw Hb Od Pe - bp; A: Nu Ha Fü Ty; B: Wn Wi Ni Kv Db Lg Eb Tl Mc Hr Kg; C: Mo Md - bps; A: St Gt - pt; B: Aq Ht SB-Y; B: Lo Ma IK Ci; C: Le Tf Fr Ak SM - E: Me - X: Vi Lu Ap Br.
07d 12h 51m	b; A: Pe Ap Br; B: Nu Wn Vl Sw Kv Ty Od Aq IK; C: Vi Eb-bs; A: Co MI - bp; A: Si Kn Mo Am; B: Ir Ha Ma Hb Lg Md PM DU; C: Wi Fü Tk Gn - bps; A: Mu; B: Sr Gu Hn To - pt; B: Ht SB - Y; B: Lo St Ak SM Tu; C: Gt Db Fü Tf Ci Ho - E: AA LQ Pi.
07d 20h 27m	b; A: IK Pe Ht; B: Ir Sw MB - bp; A: Sr Kn St Ha Kv Fü Hb Ty Aq Eb Tl Mu AA; B: Lg Pa To Wk; C: PM Hr Tw Mw - bps; A: Nu Mo Wn Ni Gt Db Od Md; B: Wi Vl; C: Mb Ka Ky - pt; A: Ma Ap Am; B: SB - Y; A: Lo SF; B: Tf Ci Ak SM Ks Tn; C: Le Si Tu SJ - E: Tk Mc LQ Pi Kg MI - X: Gn.
09d 14h 00m	b; A: Wn Pe; B: Ir Gt Ty Od Br; C: Vi Eb - bs; B: Hn - bp; B: Nu Si Vl Ha Kv Hb Lg Aq? IK To; C: Mb Tk Md Ka Ky Mc Lu PM - bps; A: Kn Mo Mu - pt; A: MB; B: Wi Pa - Y; A: SF; B: Lo Db Fü Ak; C: Co St Ma Tf Ci SM Tu - E: Me AA LQ Pi Gn MI Mw.
10d 11h 45m	b; B: Co Ir - bs; C: MI - bp; B: Sr Mu Hn To Am; C: Vi Mb Ka Ky PM - pt; B: Tf Gn Ht; C: Md - Y; B: Me SM; C: Fü Tu Br - X: Pe.
10d 20h 19m	b; A: Ni Db Hb Ci Pe SF Ks Tn; B: Ir Sw Lg Tl Mu Tw; C: MB LQ Pi - bs; B: Le - bp; A: Nu St Wn Ha Ty Od Tf Md IK Mu Kg; B: Sr Kn Wi Vl Kv Ma Fü Aq Eb SM AA Lu Gn Hr Mw; C: MB Ka Ky To - bps; A: Mo Gt; B: Tk - pt; A: Am Ht; B: Wk; C: PM - Y; B: Lo Ak; C: Tu SJ.
12d 18h 10m	b; A: Ty; B: Ha; C: MB? Am - bs; A: Gt IK Pe Ks Gn; B: Ir Eb - bp; A: St Fü Mu; B: Kv Ma Lg Hn To; C: Vi Mb Tl Ka Ky Mc PM Wk - bps; A: Sr Nu Kn Mo Hb Od AA; B: Wn Wi Ni Vl Aq Tk Md Hr Mw - pt; A: Ht - Y; A: Tf; B: Lo Db Ci Ak Tn; C: Co Le Si Me Tu SJ Br - E: LQ Pi Tw MI - X: SM Ap Kg - (si: Sw?).
13d 00h 13m	b; C: Pe Mc - bs; B: Ma - bp; A: IK; B: Wi Vl Fü Lg Mw; C: Md - bps; C: Mo - pt; A: Wn Gt Aq Tf; B: Ni Kv Eb Tn Hr; C: MB PM MI - Y; B: Ak; C: Lo Me Sw Db Ty Od Ci SM Mu - E: Nu - X: Ht-(si: Ha Tl).
13d 11h 36m	b; A: Ap; B: Ir Ty Od Aq Br; C: Kv Pe - bs; A: Co; B: MI - bp; A: Si Am; B: Mb Lg Ka Mu Hn Gn Mw; C: Vi Ky - bps; B: Sr PM To - pt; B: Wk Ht SB; C: Tk - Y; B: Tf Ak; C: Sw Gt Db Fü IK Ci SM Gu.
13d 19h 49m	b; C: Pe - bp; B: Nu St Vl Ha Kv Lg IK Tn; C: Mo Wn Fü Hb - pt; A: Gt Ty Od Ht SB; B: Wi Db Aq Md Eb Tl Hr; C: Ma Tk Mc PM - Y; B: Lo Tf Ak Ks; C: Ir Sw SM - E: MB.
15d 14h 13m	b; A: Kv Gt; B: Ir Ma Ty Eb - bp; A: Aq Mu; C: Ha Md - E: Lo Mo Me Vi LQ Pi Kg MI - (ssc: St Wn Wi Sw Vl Db Fü Hb Lg Tf Tk IK Ci Tl Pe Ak SM AA Lu - si: Od).
16d 11h 22m	b; A: Ap Br Gn; B: Ir MI; C: Kv Pe - bs; A: Co - bp; A: Mu; B: Mo Vi Od Mb Lg Ka Ky Gu To Mw; C: Hb Tw - bps; A: Si; B: Sr - pt; A: Am C: Tk - Y; B: Db Ak; C: Me Sw Fü Ty Tf IK SM Ho Mc - E: ST - X: Hn PM.
17d 19h 48m	b; B: Sw Pe - bp; A: SB; B: Nu Kn Mo St Ir Kv Fü Lg Tk IK Mu AA Mc; C: Mb Mw - bps; B: Hu - pt; A: Wn Gt Ha Ty Od; B: Wi Aq Eb Tl Tn LQ Gn Am Tw; C: Ma Hb Ka Ky Wk - Y; B: Lo Db Tf Ak Ks; C: Tu - X: SM Pi.

TABLE 2a BAYS AND PULSATIONS 1960 - continued

(DECEMBER)

19d 20h 58m	b; B: Pe; C: MB? - bp; A: St Fü Ty Lg Tw; B: Kn Ir Kv Ni Gt Ma Hb Aq Md Eb Tl AA Wk; C: Mb Ka Ky Mc - bps; A: Wn Ha Od IK; B: Le Mo Wi Vl Db Mw - pt; B: Hn Hu Ht SB; C: Tk PM - Y: A: Tf B: Lo Ci Ak Ks; C: Tu SJ Hr - E: LQ Pi - X: SM.
20d 19h 05m	b; A: Gt Pe; B: Ir Sw SJ; C: MB - bs; Le Wn - bp; A: St Vl Ha Fü? Hb Od Aq Tl; B: Sr Kn Wi Ni Kv Ma Db Ty Lg IK Eb Pa Lu Tw; C: Mb Ka Ky Mc PM Hr - bps; A: Mo; B: W - pt; A: Ht SB; B: Am - Y: A: Tf SM SF; B: Lo Ci Ak; C: Tu Mu - E: Tk Tn LQ Pi To.Wk.
21d 15h 04m	b;A: Kv Fü Pe Mu Gn; B: Wn Ir Sw Ty Eb Br MI - bp; A: St Hb Aq?; B: Si Vl Gt Ma Od Lg IK Hn PM Wk; C: Wi AA Mc To - bps; A: Kn Mo; C: Vi - pt; A: Ht SB; B: Pa Am - Y: A: SF; B: Nu Lo Ha Db Tf Ci Ak SM Ks; C: Le Me Tl SJ Gu - E: Tk LQ Pi Hr.
23d 10h 59m	b; A: Br; B: Ir SJ Ap SB; C: Kv - bs; A: MI; B: Co - bp; A: Mu; B: Si Mo Mb Lg Ky Mw Ht; C: PM - bps; A: Sr Gn To Am; B: Vi Ka Gu Hn - pt; B: Wi; C: Tk - Y: B: Ak SM; C: Me Sw Ha Db Fü Od Tf IK Ci Pe Tu AA - E: Wk.
23d 12h 56m	b; A: Wn Fü Hb Pe Br; B: Si Ir Gt Kv Od Aq SJ MI; C: Vi Eb MB - bp; A: Mb Mu Gu Gn To; B: St Ty Lg Hn Am Wk; C: PM-bps; A: Kn Mo; B: Sr - pt; B: Wi - Y: A: Tf; B: Lo Ha Db Ak SM; C: Co Le Ma Me IK Ci Tl Tu Mc Ap - E: Tk LQ Pi.
24d 13h 04m	b; A: Co; B: Ir Sw Kv Pe MI; C: Wn - bp; A: Sr Kn; B: Od Lg Wk Mw; C: Hb Mb Ka Ky AA Mc To - bps; B: Mo - pt; B: Wi Db Aq IK Tl Hn Gn Am; C: PM Hr - pg; A: Mu - Y: B: Nu Ha Ak; C: Lo Si Me Gt Ma Fü Ty Tf Ci SM Tu Tn - E: Tk LQ Pi.
24d 16h 50m	b; A: Fü Pe; B: Sw Gt Ty IK SJ Lu MI Mw; C: Wn MB Pa Hr To - bp; A: Sr Kn St; B: Wi Ir Vl Kv Hb Od Mb Lg Aq Ka Ky Mu Wk; C: Me - bps; A: Mo Gn - pt; B: Tk Tw Ht; C: PM - Y: A: SM; B: Lo Ha Db Ci Ak Tu Br; C: Le Si Ma Me Tf Tl SF - E: LQ Pi DU.
24d 21h 36m	b; A: He Pe; B: Sw - bp; A: Nu St Wn Gt Kv Fü Od; B: Kn Wi Ir Ni Vl Ty Lg Aq Tk IK Eb; C: Mc - bps; B: Mo - pt; A: Ma SB; B: Tl Hu Mw; C: PM Hr - Y: A: Ha Tf; B: Lo Db Ak Ks; C: Me Ci SF Tn - E: DU Ht.
24d 22h 23m	b; B: Ir SJ - bs; A: SF - bp; A: Nu Gt Fü Lg IK Tl SM AA; B: Hb Ty MB Mc Hr Wk; C: Mb Ka Ky - bps; A: Mo Ma Eb; B: Le Wn Wi Vl Db Od Aq Mw; C: Lu - pt; A: Ht; B: Pa Hu Ap Am SB; C: Tk PM LQ Pi Tw - Y: A: Ha; B: Lo Tf Ci Ks; C: Me Sw Fr Pe Tu Mu Tn - E: DU.
25d 01h 24m	b; B: SJ - bp; A: Lg SM; B: Wn Wi Pa Tw; C: Fü Tl MB LQ Pi-bps; B: Vl Eb Fr Hu - pt; B: Sw Gt Ty Aq; C: Kv PM Hr - Y: B: Ha Db Ci; C: Le Mo St IK Pe Tu Mu AA - E: DU.
26d 12h 07m	b; A: Co; B: Si Ir Kv Fü Ty Od Pe Am Gn; C: Wn Wi MB Hr - bs; B: MI - bp; A: Sr; B: Kn Mo St Vi Lg Ka To Am; C: Hb Mb Ky Wk - pt; A: Ht; B: SB; C: PM - Y: B: Me (Ha) Tf Ak SM Tu; C: Nu Lo Sw Gt Ma Db IK Ci Fr Ho SJ Mu AA - E: Md LQ.
28d 10h 11m	b; B: Co - bs; A: Mu; B: Br Mw - bp; B: Ir Lg Gn - bps; B: Sr Mb Ka Ky Hn To; C: PM - pt; A: Am; B: Pa Hu - Y: C: Si Me Sw Gt Fü Ty Fr Pe SM Ks AA - E: Tn - X: Lu Kg.
28d 10h 40m	b; A: Si Aq Ap Br Gn; B: Nu Ir Vl Gt Kv Ty Od Ho SJ Mu; C: Wn Eb MB - bs; B: MI - bp; A: Tf Hn Am SB; B: Vi Lg Gu Mc PM Ht; C: Wi - bps; A: Kn To; B: Mo Hb; C: Md - Y: B: Ha Ak SM Ks Tu; C: Le Me Sw Ma Db IK Ci Tl Fr Pe AA Tn Hr - E: Co Lo St Fü Tk Mw - X: Pa Lu Kg.
28d 13h 56m	b; A: Mu Br; B: Co Wi Ir Kv Ty Od Lg Ap MI; C: Wn Vi - bp; A: Hn; B: Sr Si Kn Mo Mb Ka Ky Gu PM To; C: Hb Wk - pt; A: SB; B: Am Ht - Y: B: Ak SM; C: Sw Gt Ma Tf IK Ci Pe Tu Mc - E: Lo Fü Tk LQ Pi Mw - X: Lu Kg.
28d 14h 26m	b; B: Pe Mc - bp; A: Nu IK Mu; B: Wi Vl Kv Ma Hb Lg Tn; C: Wn Eb To - bps; A: Kn Mo Gn; B: Od - pt; A: Gt Fü Mb Ky; B: Aq Ka

TABLE 2a BAYS AND PULSATIONS 1960 - continued

## (DECEMBER)

		Pa Hn Am Ht SB; C: PM - Y: B: Lo Db Tf Ak SM; C: Sw Ha Ci Ks Tu - E: Tk LQ Pi Hr MI - X: MB Lu Tw Kg - (Si: Ty).
29d 15h 32m	b:	A: Kv SF Br; B: Sw Mc Ap - bs; A: Co Wn Ci Mu; B: Tk Hu - bp; A: St Fü Hb Tf Am Ht; B: Si Wi Ir Ni Ma Db Vi Ty Lg Aq Md Eb Ky Gu Hn PM To Tw Wk DU; C: Tl Pa Lu LQ Pi - bps; A: Sr Nu Kn Mo Gt Od IK; B: Le Vl Mb Ka Mw; C: Gn - Y: A: Ha SM; B: Lo Ak; C: Fr Pe SJ AA Tn Hr - E: MI.
31d 12h 17m	b:	A: Mu Gn; B: Ir Sw Kv - bs; B: MI - bp; A: Sr; B: Gt Od Lg IK Tl Ky Hn Wk; C: Hb Mb Md Ka PM - bps; B: Mo - Y: B: Ak; C: Me Ma Db Fü Ty Tf Pe AA Tn - E: Tk LQ Pi - X: SM.
31d 14h 45m	b:	A: Co Mu; B: Wn Ir Sw Gt Kv Fü Ty Od Lg Aq IK Pe Mc Br MI Mw; C: Vi MB - bs; A: Gn - bp; B: Si Wi Hb Mb Tf Tl Ka Ky Hn PM To; C: Md Lu - bps; A: Mo - pt; B: Am Ht - Y: B: Lo Db Ak SF C: Ha Ma Ci Tu Gu - E: Nu Tk LQ Pi - X: SM.

## TABLE 2b BAYS AND PULSATIONS 1960

Commencements of pulsational disturbances not associated with bays.  
When pulsations are reported predominantly as pg the time is followed by an asterisk.  
(See the other remarks at the head of Table 2a).

JANUARY

11d 05h 40m*	pg: A: Sr Ty Od Lg AA - B: Ir Tf Mw SB - C: Nu Me St Wn Vl Ha Db Hb Tk IK Ci Pe SM Mu Tn Hr - E: Aq Am Wk - X: Sw Kv.
12d 06h 00m*	A: Am - pg: A: Od - B: Me Lg Mu Mw Wk SB - C: Nu Ha Tk Tu SM Hr - X: Sw AA Gn.
14d 18h 10m*	B: Vl - pg: A: Od - B: Co Sr Me Wn Hb Lg Tk IK Ci SJ Ap Hr MI Mw Ht - C: Nu Si Ir Gt Ha Kv Db Ty SM MB Mu - E: Vi Fü MB Tf Tl SF Ka Ky Pa Mc PM Am SB - X: Sw Aq Tn Gn.
29d 12h 45m*	pg: A: Od Lg - B: Me Tk Tu Mc Tn Mw - C: Ha Hb IK Ci SM AA Hr - E: Fü - X: Sw.
31d 15h 22m	A: Tw - B: Ir Lg SF Mu Lu PM Gn - C: St Wn Ha Kv Hb Od Mb Aq Tf Tk Md IK Pe SM Ka Tu Ky MB Hr To MI DU - E: Sw Ci Mw - X: Pa Kg.

FEBRUARY

03d 21h 35m	A: Wn Fü Md SM - B: Wi Sw Gt Ma Db Od Aq IK Eb Tl Ak Tu Lu Ap Hr Am Tw SB - C: Nu Le Lo Tf SJ MB Mu Mc PM - E: Ci Mw - X: Lg Hn Kg - (si: St? Ha).
24d 22h 12m	A: Nu St Ty Od Tf Md - B: Lo Wn Wi Ni Gt Ha Ma Db Fü Lg Aq IK Eb Tl Ak Mc Lu Hu Ap Tn Hr Am Tw Mw Ht - C: Le Ir Hb Mb SM Ka Ky MB PM - E: Sw Ci - X: Tu Hn Kg.
24d 23h 59m	A: Nu St Fü Od Md Lu Ap - B: Sr Wn Wi Ni Gt Ha Ma Db Ty Aq Tf IK Tl Ak Mc Tn Hr Am Tw Mw Ht - C: Le Lo Me Hb Mb Ci SM Ka Ky MB AA - X: Lg Tu PM Kg SB.
25d 16h 59m	A: Od Tf Tu Mu Tw - B: Sr St Wn Ir Gt Ha Mb Tk Ak Ka Ky AA Pa Hn Lu PM Hu Hr - C: Nu Lo Me Vl Db Hb Aq Md IK Tl SM MB Gu Mw - E: Sw Ci - X: Lg Eb Kg SB.
28d 04h 27m*	B: IK - C: Mb Ka Ky - pg: B: Sr Nu Ir Ha Od Lg SM SF Mu Lu Am - C: St Wn Gt Hb Tf Ci Tu AA PM Gn To MI Wk - E: Sw Ks SB - X: Ty Pa Mw.

MARCH

13d 13h 19m	A: Sr Tw - B: Me Wi Ir Ty Od Lg IK Tl SM Mu Pa Hn Ap To Am MI - C: Le Ha Hb Mb Aq Md Eb? Ak SF Ka Tu Ky MB AA Mc PM Hr - E: Sw Ci Mw - X: Kg Ht.
16d 20h 00m*	pg: A: Sr Me MI - B: Co Tu Wk Ht - C: Si Ir Kv Hb Ty Lg Tk Pe SJ PM To Mw - E: Nu Lo St Wi Sw Fü Ci Mc Lu LQ Gn Am SB - X: Tn.

APRIL

04d 01h 40m*	pg: A: Sr Me Od Lg SF - B: Co Le Si Db Tf MI - C: Lo Sw Gt Ha Fü Hb SM Tu Mu AA To - E: Nu Tk Mc Tn LQ - X: Kv.
21d 12h 38m	A: Sr Od SM Ks Gu Mu Tw - B: Ir Ha Ty Lg Eb Tu Lu Ap LQ To Am Ht - C: Co Lo Si Wn Fü Mb Aq Md IK Tl Ka Ky MB AA PM MI - E: Sw Ci - X: Pa Br Hr Kg.
23d 17h 07m	A: Sr Lg Tf Mu Lu Tw - B: Nu Wn Wi Ir Fü Ty Od Mb Aq Md Eb Tl Ak SM SF Ka Ks Tu Ky Gu MB Pa Hn PM Ap Tn LQ Gn Am Wk - C: St Gt Ha Kv Db Hb Tk IK Mc Hr To Mw - E: Sw Ci Kg - X: Hn.

MAY

01d 02h 20m*	pg: A: Sr Nu Le Si Ha Od Lg IK Tu MI - B: Co Ir Gt Db SJ To Mw - C: Me Vi Hb Tf Ci SM Ho Ap Hr Ht - E: Lo Wn Wi Sw Fü Ty Mb Aq Tk Md Eb Tl Pe SF Ka Ks Ky Mu Gu AA Mc Lu PM Tn LQ Gn Am Wk SB - X: Kv Pa Hn.
01d 02h 20m	

TABLE 2b BAYS AND PULSATIONS 1960 - continued

## (MAY)

01d 08h 40m	C: Mc? - pg: A: Lo Sr Nu Lr Od Lg Aq Md IK Lu MI - B: Gt Ha Ma Db Hb Ty Ci Tl SM Tu SJ MB Hr To Am Mw Ht - C: Me Kv Mb Ka Ky Ap SB - E: Wn Wi Sw Fü Tf Tk Eb SF Ks Mu AA PM Tn LQ Gn Wk - X: St Pa Hn.
04d 20h 06m	A: Wn Gt Ha Ma Fü Od Lg Tf Md IK Ht SB - B: Nu Lo St Wi Ir Ni Db Ty Aq Tl Ak SM Lu Th Hr Am Tw Kg - C: Le VlHb Mb Tk Eb Ci SF Ka Tu Ky MB Mu AA Mc LQ Gn Mw Wk - E: Sw - X: Pa.
05d 08h 08m*	A: Ht - B: Ha - pg: A: St - B: Me Wn Wi Vl Hb Am - C: Le Ir Kv Ty Ci SM Tu - X: Pa.
06d 07h 10m*	A: Am - B: Ha - pg: A: Me - B: Sr Le Wn Wi Vl Od Lg SF - C: St Gt Kv Hb Ty SM Ks Tu - E: Nu Sw Fü Mc Tn LQ - X: Pa Lu.

JUNE

11d 18h 47m	A: Sr St Ha Ma Ty Od Tf Md IK SM - B: Nu Lo Wn Wi Ir Ni Vl Gt Db Fü Hb Lg Aq Tk Eb Tu MB Mu Pa Lu PM Tn LQ PiGnHr Am Kg Mw SB - C: Kv Mb Tl Pe SF Ka Ky AA Mc Wk - E: Sw Ci - X: Ak Tw Ht.
12d 13h 30m	A: Sr Ty Tf Am - B: Wi Ir Ha Db Fü Od Mb Lg Aq Md IK Eb Tl SM Ka Tu Ky MB Pa Hn Lu PM Gn To Wk DU - C: St Wn Gt Hb Tk Mc Hr Kg MI - pg: A: Mu - E: Sw - X: Ci Ak Tw Ht.
28d 03h 35m*	pg: A: Sr Si Me Hb Od Lg Aq Md IK Tl Pe SM Ks AA Ap Am MI - B: Co Le Wn Wi Vl Gt Kv Db Gu Lu Br Ht SB - C: Lo Ir Sw Ha Vi Mb Tf Ci Ka Ky Ho SJ Mu Hr To - E: Sw Tk SF Mc PM Tn LQ Pi Wn Gk - X: Ty Pa - (si: Fü?).

JULY

05d 19h 44m*	pg: A: Sr - B: Hn PM MI - C: Me Tf SM Mu To - E: Sw - X: Ty Am.
09d 22h 31m	A: Ma Ty Od Lg Tl MB Lu - B: St Wn Wi Ir Ni Gt Ha Kv Db Fü Hb Aq Tf Md IK Eb Ci Ak SF Mu Mc Tn Pi Hr - C: Nu Le Sw Vl Mb Tk Ka Ky Pi Tw Kg - X: SM PM Ap LQ Br Ht.
20d 03h 20m*	C: Wk - pg: A: Sr - B: Co SF Am MI - C: Si Ir Sw SM Mu PM - X: Lg.
27d 07h 53m	A: Me Od SM Mu Ap Am Tw SB - B: Si Wi Ir Ha Hb Lg Aq Tf Md IK Eb Ak Tu MB Pa Mc Lu Hr - C: Wn Ma Db Vi Fü Ty Mb Tk Ci SF Ka Ky PM Pi MI DU - E: Sw - X: Tl LQ Ht.
28d 20h 27m	A: Sr Me St Wn Ma Fü Od Lg Tf Md Tl Lu Tn Am - B: Nu Lo Ir Gt Ha Kv Db Hb Aq Tk IK Eb Ak SM Tu Mu Pa Mc Hn Ap Mw Ht SB - C: Le Si Vi Mb Ci Ka Ks Ky SJ AA Pi Gn Hr MI - E: Sw - X: Ty LQ Kg.

AUGUST

05d 00h 04m	A: Ha Md Tl - B: Lo St Wi Sw Ni Vl Gt Kv Ma Db Fü Ty Od Aq IK Eb Ci SM Mu Lu Tn Hr - C: Me Wn Hb Mb Tf Ka Ky MB Mc Pi Kg Mw - X: Sr Lg Ak Br SB.
23d 03h 15m*	B: Pa Hn - pg: A: Sr Fü Hb Ty Lg SM Pi - B: Nu Le Wn Wi Gt Kv Db Od Aq Md Tl Mu Ap Tn - C: Lo Ha Ma IK SF MB AA Mc PM To Am - E: Sw Pe - X: Lu LQ.
23d 07h 08m*	pg: A: Gt Hb Ty Lg SM - B: Nu Le Wn Wi Vl Kv Ma Db Od Aq Md Tl SF Mw - C: Lo AA - E: Sw - X: Lu LQ.
24d 00h 04m	A: Gt Fü Ty Lg Md Eb Ci TL SM MB Lu Pi - B: Nu Lo St Wn Wi Sw Vl Ha Db Od Aq IK Ak Mu Pa Tn Hr Am Kg Mw - C: Le Kv Hb Mb SF Ka Ky AA Mc PM Tw - X: Sr LQ SB.
24d 06h 02m*	A: Ha - B: Db Pa - C: Mb Ka Ky MB Mc Hr - pg: A: Sr Gt Ty - B: Nu Me St Ir Tf Tn Pi - C: Le Lo Wn Fü Ci Mu AA Lu Wk - E: Sw - X: Vl Lg LQ.
25d 13h 23m	A: Od Mu Pi Am - B: Sr Wn Wi Ir Ha Fü Lg Tf IK Tl SM Ka Pa Hn Lu PM Ap Gn Hr To DU Mw Ht - C: Nu Lo Gt Db Hb Ty Mb Aq Tk Md Eb Ky Gu MB AA Mc Tn Tw MI - E: Sw Ci - X: St LQ Br.

TABLE 2b BAYS AND PULSATIONS 1960 - continued

SEPTEMBER

13d 09h 54m*	C: Wn Mb Ka Ky PM - pg: A: SF Am - B: Me Mu Ap Pi Ht - C: Vi SM Mu - E: Sw Fü MI - X: Lu.
14d 19h 56m	A: Od - B: Sr Mu St Wn Ir Ha Db Fü Lg Aq Tf Md IK Eb Tl Ak Mc Lu Tn Kg Mw - C: Le Lo Gt Kv Ma Hb Tk SM AA LQ Pi Gn Hr - E: Sw.
15d 15h 31m	A: Od Tf Mu Gu Pi Gn To Tw - B: Sr Ni Wi Ir Gt Ha Fü Lg Aq Md IK Tl SM Ka Hn Lu PM Hr Am MI Wk DU SB - C: Lo Wn Vi Ma Db Hb Mb Tk Eb Tu Ky MB AA Mc - E: Sw - X: Ty Ci Ak Tn LQ.
16d 00h 41m	A: Wn Gt Ha Ma Db MD Eb Ci Tl - B: Sr Nu Lo Me St Wi Ir Sw Vl Kv Fü Od Lg Aq IK SM SF MB Mu Mc Hn LQ Pi Hr Tw - C: Le Vi Hb Mb Ka Tu Ky SJ AA Lu PM Gn Am Kg MI - X: Ty.
21d 09h 15m	A: Sr Od Tf Mu Ap Am - B: Ir Vl Lg Aq Md Eb Ak SM SF Tu Ho SJ Gu AA Mc Hn Lu PM DU - C: Wn Ha Vi Hb Ty Mb Tk IK Ka Ky Gn Hr To - E: Sw - X: Ci Br - (si: MI).
28d 21h 01m	A: Nu Wn Ha Od Lg Tf - B: Lo St Wi Ni Gt Kv Ma Db Fü Ty Aq Md Tl Ak AA Lu Tn Hr Am Kg - C: Le Me Ir Sw Vl Mb Tk IK Eb SM Ka Ky MB Mc PM Pi LQ - E: Mw - X: Ht.
29d 07h 27m	A: Sr Me Tf Tu Mu Gu AA Ap - B: Ir Ha Vi Od Lg Aq Tl Ak Ka Ky Ho Mc Hn PM Gn Hr To Ht SB - C: Le Si Wn Mb Tk Md Eb Fr SM SF Pi Tw MI - pg: A: Am - E: Sw Mw - X: Ci Lu.

OCTOBER

02d 04h 45m*	A: SB - pg: B: Od Tf LQ Pi MI - C: Sr Le Me Wn - E: Sw Mw - X: Kv Ht.
08d 02h 45m*	pg: A: Sr Me - B: Le Ir Od Lg Tf Hn MI - C: Wi Sw Gt SM SF Ks Lu Ap Br To Mw - E: Co Nu Vi Fü Mu PM LQ Pi.
16d 22h 09m	A: Sr Nu Lo Me St Wn Gt Ha Ma Db Fü Hb Ty Od Lg Tf Md Tl SF Mc Lu Ap Tn LQ Pi Ht - B: Le Wi Ir Ni Vl Aq IK Eb Ci Ak SM MB Gu AA Hn PM Hu Hr To Am Tw Kg SB - C: Co Mb Tk Pe Ka Tu Ky Mu Gn Wk - E: Sw - X: Kv.
21d 17h 00m	A: Sr Od Mu SB - B: St Wn Wi Ir Gt Ha Kv Db Fü Ty Lg Aq Tf Tk Md IK Tl Ak Pa Hn Lu Hn Gu Hr To Am Wk DU-C: Hb Mb SM Ka Ky MB AA PM MI Mw - E: Sw Ci - X: Eb LQ Pi Kg.
23d 00h 53m	A: St Gt Ha Fü Ty Od Ci Tl SM Mu LQ Pi Tw - B: Nu Le Lo Wn Wi Ir Sw Kv Db Lg Aq Md IK Eb Fr Ho MB Gu Pa Hn Lu PM Hu Ap Hr Am Mw SB - C: Hb Mb SF Ka Ky AA Gn Kg - X: Pe Ht.
24d 14h 01m	A: Sr Mu - B: Ir Od Lg Ka Gu Pa Mc Hn Lu Pm Hu Pi Gn Hr To Am Wk DU - C: Co Db Hb Ty Mb Tf IK Eb Tl SM Ky Tn Tw MI - E: Sw Ci - X: Le LQ Kg.

NOVEMBER

08d 14h 23m	A: Sr Ty Mu LQ Pi Gn Tw Ht - B: Si St Wn ir Fü Od MB Lg Aq Tf Md IK Tl SM Ka Ky AA Pa Mc Hn Lu PM Hu Ap Hr To Am Kg Wk - C: Nu Lo Vl Gt Db Hb Tk Eb MB Gu PM MI DU - E: Sw Ha.
08d 23h 56m	A: Wn Kv Md - B: Wi Sw Vl Ha Db Aq Eb Hu Hr? Am - C: Mb Ka Ky - pg: A: Nu Fü LQ Pi - B: Ty Od Tf Tl Mu Lu - C: Gt Hb Ci Ho Mc - X: SM PM MI SB.
11d 03h 41m*	pg: A: Sr Nu Fü Hb Ty SM SF Br Am SB - B: Le Lo Me Wn Wi Ir Vl Gt Ha Db Od Lg Tf Hn Ap Hr To MI Wk - C: Si Sw Kv Vi Aq Md IK Ci Tl Pe Tu MB - E: Tk Mu AA Mc PM LQ Pi - (si: Mb Ka Ky Tw).
13d 16h 59m*	pg: A: Sr Nu Le Me Wn Wi Gt Ha Ma Db Hb Od Lg Aq Md IK Eb Tl MB AA Ap Hr Ht - B: Ir Ni Kv SM Pa - C: Co St Ci Pe Ks Ho Hn Lu - E: Lo Si Sw Vi Fü Ty Mb Tf Tk Ka Tu Ky Mu Mc PM LQ Pi Gn To Am MI Mw SB - X: SF.

TABLE 2b BAYS AND PULSATIONS 1960 - continued

## (NOVEMBER)

16d 15h 30m\* B: Pa - pg; A: Sr Me Od Lg MB MI Ht SB - B: Wn Wi Gt Ha Db Tf  
 IK Tu Ap ; C: Le Kv Ma Vi Hb Ty Ci Pe SM SJ AA Hr - E: Nu Lo  
 Sw Fü Aq Md Tl Ks Mc LQ Pi Mw - X: SF.

17d 04h 20m\* pg: A: Sr Me Od SF Ht - B: Ir Ty Lg Tf SM Ap To MI Wk - C: Le  
 Si Ha Kv Vi Fü Hb Tu Mu Am - E: Sw AA PM LQ Pi.

DECEMBER

12d 13h 47m A: SF - B: Ir Od Lg Mu Pa Hn Lu PM To Ht - C:C:Db Hb Ty Mb  
 Tf Tk IK SM Ka Ky Gu LQ Pi Hr Am Tw - E: Sw Ci Mw - X:  
 Ap Gn.

TABLE 3 SUDDEN IMPULSES (S. I. 'S) 1960

This list cannot be considered as complete and can therefore not be used for statistical purposes without caution.  
(See cautionary note at the head of Table 2a).

JANUARY

14d 08h 19m	A: Nu Wn Ty Lg Tk SM SF Ho MB PM Ap Br Am Tw - B: Sr Le Kn Mo Vl Ha Ma Fü Hb Od Aq Tf Md Eb Ci Ak Tu SJ Mu Pa Mc Lu Hu Wk DU Ht SB - C: Co Si Me Ir Sw Gt Kv Db Vi Mb IK Fr Ka Ky MI Mw - E: Lo St Tl Ks AA Hr To Kg - X: Pe Tn Gn - D: 4.
14d 09h 28m	A: Nu Ty Lg Tk IK Ho MB Lu PM Ap Br Am Tw - B: Kn Me Wn Vl Gt Ha Fü Hb Od Aq Tf Md Eb Fr Ak SM Tu SJ Mu Pa Mc Hu Wk Ht SB - C: Le Mo Ir Sw Kv Db Mb Ci Ka Ky Gu Hn MI Mw - E: Co Le St Ma Vi Tl Ks AA Hr To Kg - X: Pe SF Tn Gn - ( bs: Sr ) - D: 4.
14d 13h 39m	A: Sr Me Ty Tk IK AA Ap Am - B: Ir Ha Fü Od Ak Ho Mu Lu PM Hu Br Hr To Tw - C: Mo Wn Sw Gt Kv Db Mb Tf Pe SM SF Ka Tu Ky MB Pa Mc Hn MI SB - E: Nu Lo St Ma Vi Lg Md Ks Kg - X: Aq Tn Gn - D: 17.
16d 22h 22m	A: Me Ty Lg Tk IK Ho Mu Gu AA Lu PM Ap Tw Ht SB - B: Sr Kn Ir Vl Kv Hb Od Mb Tf Tl Pe Ak Ka Ks Tu Ky Pa Hu Tn Hr Am Wk Mw - C: Co Si St Wn Gt Ha Ma Db Vi Fü Aq Md Ci SM SF SJ MB Mc Br MI DU - X: Gn - (cr: Sw) - D: 11.
18d 07h 35m	A: Sr Me Od Lg Tf Tk IK Ho MB Mu Gu AA PM Ap Br Hr Am Tw - B: Kn Wn Ir Sw Gt Ha Db Aq Md Pe Ak SM Tu Pa Mc Hn Hu To Kg Wk - C: Lo Wi Kv Vi Fü Hb Ty Mb Ci Ka Ky SJ MI Ht SB - E: Nu St Ma Ks Tn Mw - X: Lu Gn - D: 11.
28d 19h 16m	A: Mo Me St Gt Ha Kv Ma Hb Ty Od Lg Tf IK Tl Fr SF MB Ap Tn Am Tw - B: Sr Lo Si Kn Wn Wi Ir Sw Ni Vl Fü Ak Ks Ho SJ Mu Gu AA Pa Mc PM Hu Tö SB - C: Co Le Vi Mb Tk Ci Pe Ka Tu Ky MI - X: Md Gn Kg - (ssc: Db Aq SM? Pa Hn Lu Hr) - D: 6.
29d 06h 55m	A: Tk IK AA Lu Ap Br Am - B: Nu Kn Mo Me St Ir Ha Ma Ty Od Lg Aq Tf Ak Ks Mu PM Hu Tn Gn SB - C: Lo Wn Vl Gt Kv Db Mb Pe SM Ka Tu Ky MB Gu Hr Tw MI - E: Sr - X: Fü Md Mc Hn Kg - D: 20.
31d 10h 43m	A: Kn IK? AA - B: Wn Ni Gt Ha Kv Ma? Fü Lg Aq Tk Hu Ap SB - C: Le Lo Me Wi Ir Mb Tf Eb Ka SF Ka Tu Ky Mu AA Mc Hn Hr To Ht - X: Kg - (cr: Sw Vi Pa PM Am DU - sfe: Nu St Vl Hb Ty Od Md Tl Pe? SM Ks? MB Lu Gn Tw Wk Mw) - D: 12.

FEBRUARY

04d 23h 05m	A: Me Ty Lg SF Ap Tw Ht - B: Kn Gt Ha Db Fü Hb Od Aq Md IK Ci Tl Pe Ak SM Ks Tu Lu PM Hu Gn Hr To Am Wk SB - C: Nu Mo St Wn Sw Vl Kv Ma Vi Tf Tk Fr Ho SJ MB Mu Gu AA Mc Hn MI - E: DU - X: Kg - (bp: Mb Ka Ky) - D: 13.
05d 11h 34m	A: Mo Lg IK SF AA Hr Am Mw - B: Me Ir Fü Hb Ak Tf Md Eb Pe Ak SM Ks Tu Mu Mc Lu PM Hu Ap Br Gn To - C: Wn Sw Vl Gt Ha Kv Ty Od Mb Tk Ci Tl Fr Ka Ky SJ MB Pa Tw DU Ht - E: Co St Vi - X: Kg - (b: Ma? - bps: Sr) - D: 15.
09d 17h 38m	A: Me Lg IK SM Tw - B: Sr Nu Si Mo St Wn Ir Ni Vl Gt Ha Db Fü Hb Ty Od Aq Tf Tk Md Ti Ak Tu Lu PM Hu Ap Am SB - C: Le Lo Wi Sw Kv Ma Vi Mb Ci Pe Fr SF Ka Ky Ho SJ MB Mu AA Pa Mc MI - E: Ks - X: Kg - D: 14.
13d 08h 41m	A: Lg IK AA - B: Kn Nu Me Ir Ha Fü Ty Od Tf Tl Fr Pe Ak SF Tu Mu Gu Lu PM Tn Mc Hu Ap Tw Wk - C: Le Mo Wn Vl Gt Kv Ma Hb Mb Aq Md Ci SM Ka Ky SJ MB Hn Gn Hr To Mw - E: Lo Ks - X: St Db Kg Ht - D: 15.
16d 11h 05m	A: Kn St Od IK? Pe AA Tw - B: Nu Me Wn Ir Vl Gt Ma Db Fü Hb Lg Aq Tk Tl Ak SM MB Mc Lu PM Hu Gn To - C: Le Sw Kv Mb Tf Md Ci Ka Tu Ky SJ Mu Gu Ap Br Wk Mw - E: Sr SF Ks Tn - X: Pa Kg Ht - (b: Ty Am - bs: Ha - bp: Mo) - D: 14.

TABLE 3 SUDDEN IMPULSES (S. I. 'S) 1960 - continued

## (FEBRUARY)

- 16d 13h 24m A: Kn Me St Od Lg AA Ap Tw - B: Nu Ir Gt Fü Md Tk IK Ci Tl Ak SF Ka Tu Ky MB Mc Lu PM To Mw - C: Le Wn Sw Kv Hb Ty Mb Tf Fr Pe SM Mu Pa SB - E: Sr Ma Vi Ks Tn Br - X: Kg Ht - (b: Am - bs: Vl) - D: 19.
- 17d 06h 33m A: Lg IK Mu AA PM Tn Am Tw - B: Sr Nu Mo Ir Od Tf Ak Ka Ky Mc Lu Hu Ap Br To Wk - C: Wn Sw Gt Ha Kv Hb Mb Aq Md Ci Tl SM Tu SJ MB Gu Hn Hr - E: Lo St Vi Fü Ks Mw - X: Ty Pe Kg Ht - D: 18.
- 27d 11h 26m A: Nu Si Kn Mo Me St Ni Gt Db Hb Ty Lg IK Pe SF AA Ap - B: Wn Ir Vl Ha Od Aq Tf Tk Md Eb Ci Tl Ak SM Tu MB Mu Mc Lu PM Hu Gn Am - C: Le Sw Kv Vi Mb Ka Ky SJ Gu Tn Br To Tw MI Ht SB - E: Lo Ma Fü Ks Hr - X: Hn Kg - D: 9.

MARCH

- 05d 17h 39m A: Ks - B: Me Ir Hb Lg Tf Tk IK Ak SM Mu Pa Hu LQ Ht - C: Nu Si Mo Wn Gt Ha Kv Db Fü Ty Mb Aq Md Ci Tl SF Ka Ky Gu Mc Hn Lu PM Br To Tw MI - X: Kg SB - (b: Ma? - bps: Od) - D: 27.
- 07d 11h 45m A: NU Kn St Wn Gt Db Hb Ty Lg Tl SM - B: Le Lo Mo Me Wi Ir Sw Vl Ha Fü Aq Tf Md Eb Ci AA - C: Kv Tk SF SJ MB LQ Mw - X: Pa Kg - (sfe: Ma? Od IK? Ks) - D: 33.
- 14d 16h 21m A: Sr Nu Kn Mo Me St Db Hb Lg Tk IK SM SF AA Tw SB - B: Wn Wi Ir Vl Gt Ha Fü Ty Od Aq Tf Eb Ci Tl Pe Ak SJ MB Pa Mc Hu Ap LQ Ht - C: Le Lo Sw Kv Ma Mb Md Fr Ka Tu Ky Mu PM Gn Hr Am - E: Ks - X: Lu Kg - D: 14.
- 15d 08h 20m A: Nu Kn St Ha Ty Lg IK? Ks AA - B: Lo? Mo Me Wn Ir Vl Ma Db Fü Aq Tf Tk Md Ak Mc Lu Hu Ap Tn Gn Hr Tw Wk - C: Wi Sw Gt Kv Hb Mb Eb Ci Fr Ka Tu Ky MB Mu Hn PM Br To Am Mw SB - X: Pe LQ Kg - (ssc: Tl SM - sfe: Od) - D: 14.
- 16d 08h 47m A: Sr Wn Ir Gt Lg Tf AA Ap Gn Hr Am Tw - B: Nu Le Kn Wi Vl Ha Ma Fü Tk IK Ci Tl Ak SM Tu SJ Mu Mc LQ Hu To Mw Ht SB - C: Lo Mo Sw Hb Ty Mb Aq Md Eb Fr SF Ka Ky MB Gu PM Br Wk - E: Co Me St Vi Ks Tn - X: Pe Lu Kg - D: 10.

APRIL

- 03d 08h 55m A: Sr Nu Si Kn Mo St Wn Gt Ha Db Fü Hb Od Lg Tf Tk IK Ci SF AA Mc Lu Ap Tn Gn Hr Am SB - B: Me Wi Ir Sw Vl Kv Ma Aq Md Eb Tl Pe SM MB Mu Kg Wk - C: Le Lo Mb Fr Ka Tu Ky Ho SJ LQ To Tw Ht - E: Co Vi Ty PM MI - X: Ak - D: 8.
- 04d 04h 03m A: Mo Wn Fü Lg Tf Tk IK SM SF Mu Gu AA Lu Ap Tn Gn Hr To Am Tw Ht SB - B: Le Si Me Ir Sw Vl Gt Ha Kv Db Hb Ty Od Mb Aq Ci Tl Ak Ka Tu Ky Ho SJ MB Pa Mc PM LQ Kg Wk Mw - C: Co Lo Wi Ma Vi Md Eb Fr Pe Hn MI DU - E: Sr Nu Kn - X: Br - D: 3.
- 05d 08h 42m A: Sr Fü Ty Od Lg Tf Tk IK Ks MB AA Mc Lu Ap Tn Gn Am - B: Kn Mo Ir Sw Gt Ha Hb Mb Tl Ak SM Ka Tu Ky SJ Mu Pa Hn PM LQ Br Hr To Tw SB - C: Me Wn Wi Vl Kv Ma Vi Md Ci Fr SF Ho MI Mw Ht - E: Nu - X: Db Pe - D: 12.
- 06d 16h 28m A: Sr Nu Lo Si Kn Mo St Ir Fü Hb Ty Od Mb Tf IK? Ci Ak SF Ka Ky Ho SJ MB Mu Gu AA Mc PM Ap Tn Br Gn Hr Kg Ht - B: Wi Sw Kv Tk Fr Hn LQ To MI Wk Mw - C: Tu - X: SB - (ssc: Le Me Wn Vl Gt Ha Ma Db Vi Lg Aq Md Eb Tl Pe SM Ks Pa Lu Am Tw - pg: Co) - D: 2.
- 15d 14h 41m A: Kn Mo Ty Tk IK SF Ks - B: Nu Me Ha Fü Od Mb Lg Aq Tf Md Eb Tl Pe Ak SM MB Mu Mc? Ap LQ - C: Lo St Wn Ir Gt Kv Ma Db Hb Ci Fr Ka Tu Ky Ho Hn PM Tn Hr To Am Tw Mw Ht SB - X: Gu AA - (ssc: SJ - cr: Sw) - D: 15.

MAY

- 07d 09h 27m A: Sr Nu Kn Mo Me St Wn Gt Ha Ma Db Fü Ty Od Lg Tk IK Md Eb Mu AA Mc Lu Tn Gn Hr Am Ht - B: Le Lo Wi Ir Sw Vl Kv Hb

TABLE 3 SUDDEN IMPULSES (S. I. 'S) 1960 - continued

## (MAY)

	Mb Aq Tf Tl Pe Ak SM Ka Ks Ky MB Gu Pa PM Ap LQ Br To Kg Wk DU SB - C: Vi Ci Fr Tu Hn MI Mw - X: SF - D: 6.
07d 11h 08m	A: Sr Mo Me Gt Ha Fü Od Lg Tk Md IK Eb SF Ho MB Mu AA Mc Lu Ap Tn Gn Hr Am - B: Le Si Wn Ir Sw Kv Db Ty Mb Aq Tf Tl Pe Ak SM Ka Tu Ky Gu PM LQ Br To Tw SB - C: Lo Wi Vi Hb Ci Fr Hn MI Mw - E: Nu St Vl - X: Ma Ks - (ssc: Kn) - D: 8.
11d 19h 30m	A: Mo Me St Ha Ht SB - B: Wn Sw Vl Gt Ma Fü? Md IK Pe-C: Lo Si Wi Ir Db Vi Hb Ci Fr SF Tu SJ Mu Mc Tn Hr - X: Ap Gn - (cr: Le Lu Wk - sfe: Nu Kv Ty Od Lg Aq Tl SM MB Am Tw) - D: 25.
15d 10h 09m	A: Nu St Wn Ty Od Tf Md IK? AA Lu Tn? Gn - B: Lo Kn Mo Me Sr Sw Vl Gt Ha Ma Db Fü Hb Lg Aq Tk Eb Tl Pe Ak SM Ho Mu Mc? Hn Ap Hr Am Kg Mw - C: Le Wi Kv Mb Ci Fr Ka Tu Ky MB Gu Pa PM LQ To Wk - X: SB - (cr: Vi - sfe: Ks?) - D: 11.
16d 20h 36m	A: Sr Nu Si Kn Mo St Wn Wi Ni Gt Ha Db Fü Od Aq Tf Tk IK Ci Tl Fr Pe SM SF Ho SJ MB Mu Gu AA Mc Lu Ap Tn LQ Gn Am Tw SB - B: Me Ir Sw Vl Kv Vi Hb Mb Lg Md Eb Ka Ky Pa PM Hr To Ht - C: Co Le Hn MI - E: Lo Ma - X: Ty Ak - (ssc: Ks? - bps: Mw) - D: 5.
17d 06h 25m	A: Nu Le Kn Mo St Wn Gt Db Tl SF Ks AA Lu Tn - B: Lo Wi Ir Sw Vl Ha Ma Fü Hb Od Lg Aq Tk Md IK Pe Ak SM MB Mu Mc Hn Ap LQ Wk Mw - C: Me Kv Mb Ci Ka Tu Ky Ho SJ PM Hr To Am Tw - X: Ty Gn - (b: Vi - bps: Sr) - D: 14.
22d 14h 38m	A: Sr Nu Lo Kn Me St Wi Ma Db Fü Hb Od Tf Md IK Eb? Ci Ak SM SF Ka Ks SJ MB Gu AA Pa Mc Ap Tn Gn Tw - B: Co Si Le Ir Sw Ni Vl Kv Mb Lg Aq Fr Ky Ho Hn PM LQ Hr Am DU Mw Ht SB - C: Vi Pe Tu Kg MI - (ssc: Mo Wn Gt Ha Ty Tk Tl Mu Lu) - D: 3.
29d 01h 06m	A: Sr Mo Db Lg Md IK Pe SJ MB Mu Gu AA Mc Ap Gn Am Tw Ht SB - B: Kn Wn Wi Gt Ha Ty Od Aq Tk Ci Tl Ak SM Ka Pa Lu PM Br Hr To Wk Mw - C: Co Le Lo Si Sw Vl Kv Hb Mb Tf Fr Tu Ky Ho - E: Nu St Ma Vi Fü SF Ks Tn - X: LQ MI - D: 5.
29d 06h 31m	A: Sr Mo Tk AA Mc Gn Am - B: Nu Le Kn Me Wn Ir Sw Vl Gt Ha Db Od Lg Aq IK Tl Pe Ak SM MB Mu Lu Ap Br To Tw Wk Mw SB - C: Lo Wi Kv Ma Hb Mb Tf Ci SF Ka Tu Ky SJ Hn PM Hr - E: St Fü Ks Tn - X: Ty Md LQ Kg MI - D: 11.
29d 13h 34m	A: Mo Me Ty Tk Pe MB AA Mc Lu Gn Tw - B: Le Kn Mo St Wn Ir Sw Vl Gt Ha Kv Hb Od Lg Aq Md? IK Ak SM Tu SJ Mu Pa Ap Hr SB - C: Si Wi Db Mb Tf Ci Fr SF Ka Ky Hn PM MI - E: Nu Lo Ma Fü Tl Ks Tn - X: LQ Ht - D: 13.

JUNE

04d 21h 17m	A: Co Sr Kn Mo Ha Od Lg IK Ci Tl SF AA Ap Tn Gn Tw SB - B: Nu Wn Ir Vl Gt Db Hb Ty Aq Tf Tk Md Fr Pe Ak SM Ks MB Mu Mc Lu PM LQ Pi Hr To MI DU Ht - C: Le Si Me Wi Sw Mb Ka Tu Ky Gu Hn - E: Lo St Fü - X: Kv - (ssc: Am - bs: Ma? - bp: Vi) - D: 9.
27d 21h 16m	A: Sr Nu Kn Mo Wn Gt Fü Od SF Ap Am Ht SB - B: St Sw Vl Ha Db Hb Lg Aq Tk Md IK Tl Pe SM Tu Ho MB Mu LQ Pi Tw - C: Le Lo Si Me Wi Ir Kv Vi Mb Ci Ak Ka Ky AA Mc PM Br To MI - E: Ma Ks Hr - X: Ty Pa - D: 15.
28d 05h 24m	A: Sr Kn Mo Gt Tk SF Ks AA Lu - B: Lo Me Wn Ir Db Fü Od Mb Lg Tf Pe SM Ka Ky MB SJ Mu Mc Ap LQ Pi To Am Tw Mw - C: Le Si Wi Sw Ha Kv Vi Hb Aq Md Ci Tl Fr Tu PM Br Gn Hr SB - E: Nu St Ma Tn - X: Ty IK Pa - D: 13.
29d 06h 50m	A: St Wn Ha SF AA Gn Mw - B: Nu Le Lo Mo Wi Ir Vl Gt Ma Db Od Lg Aq Tf Tk Md Ci Tl Ak SM MB Tn Wk SB - C: Kn Kv Hb Mb IK Pe Ka Ky SJ Mu Mc Hn Lu Ap Br Hr To Am - E: Me Fü Ks - X: Ty Eb - (bps: Sr - pt: PM) - D: 16.

TABLE 3 SUDDEN IMPULSES (S. I. 'S) 1960 - continued

JULY

01d 12h 41m A: Nu Me IK Pe AA Tn - B: Lo Kn Mo Wn Ir Ni Vl Gt Ha Fü Hb Ty Od Lg Aq Tf Tk Md Ak SM Ka Ky Mu Mc Ap Br Gn Am - C: Le Wi Db Vi Mb Eb Tl Fr Tu MB Gu Hn Lu To SB - E: Ks LQ - X: Kv Pi Ht - (ssc: Ma Mw - bs: PM - bps: Sr - cr: Sw - D: 13.

14d 21h 32m A: Co Sr Nu Si Kn Mo Me St Wn Ni Vl Gt Ha Ma Db Fü Hb Ty Lg Aq Tf Tk Md IK Eb Ci Tl Fr Pe SF Ho SJ MB Mu Gu Mc Ap Tn LQ Br Pi Gn Am Tw Ht SB - B: Le Lo Wi Ir Sw Kv Mb Ak SM Ka Ky Pa Hn Hr To Wk - C: Od Tu MI - E: Ks - X: AA Lu - (ssc: PM) - D: 3.

28d 16h 50m A: Lg IK SF - B: Nu Le Mo Vl Gt Ha Db Fü Hb Od SM MB Tn - C: Lo Me St Wn Ir Kv Ma Aq Md Tl SJ Mu AA Mc Lu Gn Hr Tw - X: Ty LQ - (sfe: Pi) - D: 36.

29d 01h 27m A: Mo Me St SF Ks - B: Sr Lo Wi Ir Gt Ha Db Fü Od Lg IK T1SM Mb Ap Tn Am - C: Wn Vl Kv Ma Vi Hb Mb Aq Tf Tk Md Ci Pe Ka Tu Ky SJ Mu Mc Hn Pi Gn - E: Nu PM - X: Ty Lu LQ DU - (cr: Sw) - D: 22.

AUGUST

18d 00h 20m A: Sr Nu Kn Mo Me St Fü Hb Ty Lg Tk Tl SM SF Am Tw - B: Si Wn Ir Sw Gt Ha Kv Ma Db Od Aq Md IK Ci Fr Ak Tu Mu Gu PM Ap Pi Gn To Kg SB - C: Le Lo Wi Vl Vi Tf Mb Eb Pe Ka Ky Ho SJ Mc Tn Hr MI - E: Ks - X: Hn Lu LQ Ht - D: 8.

28d 06h 27m A: Sr Nu Kn Mo Fü Ty AA Gn - B: Lo Me Wn Ir Sw Ni Vl Ha Ma Db Hb Aq Tf IK Ci Tl Ak SM Mu Mc Lu Ap Pi Hr Am Tw Mw SB - C: Le Kv Vi Od Mb Md Pe SF Ka Tu Ky MB Gu PM To - X: Lg LQ Br - (sfe: Gt) - D: 17.

SEPTEMBER

02d 18h 18m A: Me IK SF Tw Ht SB - B: Mo Ir Vl Gt Ha Db Fü Od Mb Lg Aq Tk Ci Pe Ak SM SJ Mu AA Mc Lu Ap Br Pi Gn - C: Wn Wi Sw Kv Ma Vi Hb Tf Md Ka Ky Ho MB Gu Hn PM Tn Hr MI Mw ; E: Nu Lo St Sl Ks Am - X: Ty LQ - D: 14.

04d 11h 45m A: Sr Nu Lo Kn Mo Me Wn? Kv Fü Hb Od Tf Tk IK Ci Pe SM SF Ho MB Mu Gu AA Mc Ap Tn Pi Gn Am Tw Kg - B: Le Ir Sw Ha Db Vi Ty Mb Lg Aq Tl Ak Ka Ks Tu Ky SJ Pa Hn PM Hr To Mw Ht SB - C: Si Wi Fr - E: St MI - X: Md LQ Br - (ssc: Vl Gt Ma Eb Lu Wk DU?) - D: 2.

04d 21h 25m A: St. Wn Wi Ma Db Fü Hb Od Lg IK Ci Tl AA Tn - B: Le Vl Kv Tf Pe? SM Pi Tw - C: Ir SF Ks MB Mu Mc Lu Ap - E: Sr Nu Lo Kn Mo Me Ty Mb Ka Ky Am Kg MI Mw - X: Md LQ Br To - (ssc: Sw Gt - bp: Ha - bps: Aq' Eb Hr Wk) - D: 18.

OCTOBER

07d 08h 44m A: Gt Od Lg IK AA Lu Tw - B: Le Wn Ir Vl Ha Hb Tk Md Eb Ci Tl Pe SM MB Mu Mc Hu MI Mw Ht - C: Lo Wi Sw Kv Vi Tf Ka Ky SJ Hn PM - E: Co Sr Nu Si Me St Fü Ty Ks Ho Br Gn Hr Kg - X: Db SF Tn - (ssc: Ma - b; Ap To Am - bp: Wk - pt: Mb) - D: 12.

13d 21h 47m A: Sr St Gt Ha Db Fü Hb Ty Lg Tf IK Ci SM SF Ho SJ Gu AA Lu Ap Tn LQ Pi Am Tw Ht SB - B: Nu Lo Si Mo Me Wi Ir Sw Ni Vl Kv Ma Aq Md Eb Fr Ak MB Pa Mc Hu Hr Kg MI Wk DU - C: Co Le Tu Br - X: Pe Mu - (ssc: Wn Wi Mb Tk Tl Ka Ks? Ky Hn PM Gn To - cr: Od) - D: 2.

23d 17h 25m A: Me Ty Lg IK? SM Tw - B: Lo St Gt Ha Db Fü Tf Md Ak MB Pa Hu Tn - C: Le Wn Vl Kv Ma Hb Mb Aq Eb Ci SF Ka Ky SJ Hn Lu PM Ap Gn Hr To - X: Am Ht - (ssc: Tk - b: Ks AA Mc? - cr: Od Pe Mu - sfe: Nu Ir Tl Pi) - D: 21.

NOVEMBER

13d 10h 21m A: Wn Fü Od Mb Md IK Eb Pe SM Ka Ho MB Mu AA Ap Br Am Wk Ht SB - B: Ir Lg Tk Ci Tl Fr Ky Mc Hn PM LQ Pi - C: Tf

TABLE 3 SUDDEN IMPULSES (S.I.'S) 1960 - continued

## (NOVEMBER)

Hb Tu Ky Ks SJ Gu Tn Gn To Kg MI DU Mw - X: Ak SF Lu - (ssc:  
Gt Aq Tw) - D: 1.

21d 21h 47m A: Sr Kn Mo Me Gt Ha Hb Ty Lg Tf IK Ak SM SF Ho Mu Gu AA  
Lu Ap Tn LQ Pi Am Tw Ht - B: St Wn Wi Ir Sw Kv Ma Db Fü Od  
Aq Tk Md Eb Ci Tl Pe Ky SJ Pa Mc Hn PM Hu Br Hr To MI -  
C: Nu Le Si Vi Mb Fr Ka Tu MB - E: Lo Ks - D: 7.

24d 20h 52m A: Mo Gt Ty Lg SM? SF Ho Lu Ap LQ Pi Gn Am Tw SB - B: Sr  
Me Wn Ir? Ha Kv Db Fü Hb Od Aq Tf Tk Md IK Tl Pe Ak SM SJ  
Mu Gu AA Pa Mc PM Hu Br To MI Ht - C: Co Nu Le St Wi Sw  
Vi-Mb Ci Fr K a Tu Ky MB Hn Hr - E: Ks - (b: Ma) - D: 8.

## DECEMBER

05d 19h 43m A: Me Ty Lg Tf IK SF Tn Ht - B: Sr Mo St Ir Vl Gt Ha Ma Db Fü  
Od Md Tl Ak Mu AA Lu Hu Ap LQ Gn Am Tw SB - C: Co Nu Le  
Lo Wn Sw Kv Vi Hb Mb Aq Tk Ci Pe Ka Ky SJ MB Mc PM Br Hr  
To - X: Fr Pi - D: 17.

14d 10h 57m A: Mo Gt Lg Tf IK SM SF AA Lu Tn - B: Nu Le Me St Wn Ir Ni  
Vl Ha Kv Ma Db Fü Hb Ty Od Aq Tk Md Ci Tl Pe Ak MB Mu Mc  
Hu Ap LQ Gn Am Tw - C: Lo Wi Sw Mb Eb Ka Ky SJ Hn PM Br  
Hr Wk DU - E: Ks - X: Pa Pi To - D: 14.

14d 15h 02m A: Nu Me Gt Ty Lg Tf IK SM SF Ks LQ Pi Tw SB - B: Le Lo Mo  
Wn St Ir Sw Ni Vl Ha Ma Db Hb Od Aq Tk Ci Tl Ak Tk Tl Ak MB  
Mu Lu Hu Ap Gn Am DU Ht - C: Si Wi Kv Mb Md Eb Fr Pe Ka  
Ky SJ Pa Mc Hn PM Tn Br Hr MI Wk Mw - E: Fü - X: Tu To-D:8.

17d 23h 27m A: Kn Mu - B: Lo St Fü Ir Lg Aq Tf Tl Ak MB Mc Hn Hu Tn Br  
Ht - C: Nu Me Wn Wi Sw Kv Hb Mb Tl Ci Pe SF Ka Tu Ky Ho AA  
Pa Hr To MI - X: SM Pi Gn SB - (bs: IK - bp: Ha Md - bps: Vl-cr;  
Gt Ma Od Lu - sfe: Vi Ty Ks Gu? PM LQ Tw Mw) - D: 15.

20d 08h 34m A: Mo St Ni Gt Ha Fü Ty Tf SF - B: Sr Le Lo Wn Wi Ir Sw Vl Ma  
Db Hb Od Lg Aq Md IK Ci Tl - C: Co Si Me Kv Mb Eb Pe? Ak Ka  
Tu Ky SJ MB Mu Mc Lu Hr - E: Kn DU - X: SM - D: 27.

27d 15h 15m A: St Wi Gt Fü Hb Od IK SF Ks AA - B: Wn Sw Db Lg Tf Ci Tl  
Ak SM Hr Mw - C: Kv Ho SJ MB Mu Mc Lu PM LQ Pi Tw-E:Co  
Sr Nu Lo Me Ty Tn To Kg MI - X: Ht - (ssc: Le Tk Md - bs: Kn  
Vl Ma Pe - bp: Ha - bps: Mo Aq - pt: Mb Ka Ky) - D: 18.

TABLE 4 MINOR DISTURBANCES 1960

Minor disturbances (ssc, etc) reported by less than ten stations lying between  $322.5^{\circ}$  and  $52.5^{\circ}$  or by less than four stations lying between  $52.5^{\circ}$  and  $322.5^{\circ}$ . Most of these disturbances have already been published in the three-monthly reports from the C + K Centre, De Bilt. Cases received too late for publication in the three-monthly reports or for inclusion in the checking-lists are likewise included here. Disturbance type assigned to each phenomenon and number of observatories reporting them are also given together with the time.

JANUARY

d	h	m		d	h	m		d	h	m		d	h	m					
01	21	40	2 pt	-	01	22	15	6 pt	-	02	11	28	1 pt	-	02	13	30	1 pt	-
02	14	55	2 pt	-	02	18	28	7 b+pt	-	03	03	30	1 pt	-	03	04	15	1 pt	-
03	11	59	5 b+pt	-	03	12	43	3 b+pt	-	03	13	48	1 pt	-	03	17	46	1 si	-
03	20	10	1 pt	-	03	21	48	1 si	-	03	23	07	1 pt	-	04	00	00	1 pt	-
04	00	15	2 b+pt	-	04	01	04	2 pt	-	04	04	21	1 ssc	-	04	07	10	1 ssc	-
04	11	41	4 si	-	04	12	14	5 si	-	04	13	37	1 pt	-	04	15	23	1 pt	-
04	23	06	1 pt	-	04	23	45	4 b+pt	-	05	00	30	5 pt	-	05	07	44	4 pt	-
05	12	03	1 si	-	05	12	09	1 si	-	05	12	50	4 b+pt	-	05	18	18	1 b+pt	-
05	22	27	3 b+pt	-	05	22	47	1 si	-	05	23	25	1 b+pt	-	06	13	03	2 si	-
06	19	30	1 pt	-	06	20	48	1 pt	-	06	22	14	8 pt	-	06	22	55	1 pt	-
07	18	36	4 pt	-	08	11	12	3 pt	-	08	11	24	2 pt	-	08	20	10	1 b+pt	-
08	20	50	1 b+pt	-	09	16	59	1 pt	-	09	17	15	1 pt	-	09	20	25	1 si	-
09	22	57	7 pt	-	10	00	30	2 pt	-	10	01	35	1 pt	-	10	06	08	2 b+pt	-
10	06	45	3 pt	-	10	06	58	2 pg	-	10	10	00	2 si	-	10	16	00	1 pt	-
10	16	36	8 si	-	10	19	40	2 b+pt	-	10	20	10	3 b+pt	-	10	20	33	1 b+pt	-
11	03	20	1 pg	-	11	09	36	2 pg	-	11	10	56	1 b+pt	-	11	16	36	4 b+pt	-
11	16	55	1 b+pt	-	11	23	26	2 b+pt	-	12	00	49	1 b+pt	-	12	10	44	2 si	-
12	12	14	4 b+pt	-	12	14	35	3 b+pt	-	12	18	05	1 pt	-	12	19	13	1 pt	-
13	00	45	1 pt	-	13	01	25	9 b+pt	-	13	01	55	1 pt	-	13	02	55	2 b+pt	-
14	01	19	2b+pt	-	14	01	48	1 b+pt	-	14	05	56	2 si	-	14	07	57	4 ssc	-
14	09	00	4 si	-	14	18	10	1 pg	-	14	19	07	1 b+pt	-	14	20	09	6 si	-
14	21	17	1 b+pt	-	14	21	48	1 b+pt	-	15	00	40	1 b+pt	-	15	01	23	2 b+pt	-
15	05	29	1 ssc	-	15	10	50	1 pt	-	15	19	15	1 pt	-	15	20	46	4 pt	-
15	21	42	2 pt	-	15	22	37	1 pt	-	15	23	08	1 pt	-	16	03	17	3 b+pt	-
16	07	26	1 b+pt	-	16	17	18	3 b+pt	-	17	11	52	1 pt	-	17	12	47	1 ssc	-
17	14	37	1 pt	-	17	15	34	3 si	-	17	21	16	1 si	-	17	22	59	2 si	-
18	04	27	2 b+pt	-	18	07	50	1 ssc	-	18	09	57	1 si	-	18	11	44	1 b+pt	-
18	13	13	1 si	-	18	23	42	3 b+pt	-	19	00	01	4 b+pt	-	19	09	04	1 b+pt	-
19	12	45	4 pt	-	19	16	58	4 pt	-	19	19	05	1 b+pt	-	20	02	23	2 b+pt	-
20	03	57	2 ssc	-	20	09	33	3 si	-	20	10	21	1 b+pt	-	20	13	57	2 si	-
20	15	22	4 pt	-	20	16	02	1 pt	-	20	22	18	1 ssc	-	21	00	00	2 b+pt	-
21	00	40	1 ssc	-	21	01	00	1 b+pt	-	21	05	10	1 pt	-	21	09	13	1 ssc	-
21	13	36	1 si	-	21	13	55	2 si	-	21	15	58	1 b+pt	-	21	16	36	4 b+pt	-
21	22	36	1 b+pt	-	21	22	51	2 b+pt	-	22	05	09	1 si	-	22	09	31	1 si	-
22	09	58	2 si	-	22	11	10	1 si	-	22	18	35	1 pt	-	23	02	42	1 ssc	-
23	05	02	1 pt	-	23	06	35	1 ssc	-	23	07	21	1 pt	-	23	13	12	2 b+pt	-
23	17	05	3 b+pt	-	23	19	32	1 si	-	24	02	43	1 pt	-	24	10	27	2 si	-
25	10	08	1 si	-	25	17	05	2 b+pt	-	25	22	06	1 b+pt	-	26	06	26	1 pt	-
26	23	40	1 b+pt	-	27	00	17	1 b+pt	-	27	01	46	1 pt	-	27	10	30	1 b+pt	-
27	14	17	4 pt	-	27	15	15	1 pt	-	28	00	28	2 pt	-	28	01	43	1 pt	-
28	02	28	4 b+pt	-	28	12	15	1 pt	-	28	12	36	1 b+pt	-	28	14	13	1 pt	-
28	15	15	ssc	-	28	16	15	4 pt	-	28	21	15	1 ssc	-	29	02	20	1 ssc	-
29	10	47	1 pt	-	29	12	22	1 pt	-	29	13	01	1 pt	-	29	23	28	2 pt	-
30	12	45	1 pt	-	30	13	49	1 pt	-	30	20	15	1 pt	-	30	20	57	3 pt	-
30	22	05	1 pt	-	31	00	39	7 pt	-	31	01	10	1 pt	-	31	02	40	2 pt	-
31	02	56	1 pt	-	31	09	25	1 pt	-	31	17	49	1 si	-	31	21	32	4 pt	-

FEBRUARY

01	14	21	1 pt	-	01	14	34	1 pt	-	02	03	47	1 pt	-	02	04	22	2 b+pt	-
02	10	00	1 pt	-	02	10	30	2 b+pt	-	02	10	47	2 pt	-	02	14	00	1 pt	-
02	16	15	1 pt	-	02	16	47	1 si	-	02	19	23	4 b+pt	-	02	19	44	1 si	-
02	20	05	2 si	-	02	22	28	2 b+pt	-	03	10	09	3 b+pt	-	03	11	34	2 si	-
03	15	07	4 b+pt	-	03	15	30	2 b+pt	-	03	19	54	1 si	-	03	23	02	1 pt	-
03	23	20	1 b+pt	-	04	01	30	1 pt	-	04	04	51	1 b+pt	-	04	05	12	2 pt	-
04	07	22	1 pt	-	04	09	29	2 pt	-	04	09	58	5 pt	-	04	12	00	1 b+pt	-
04	12	15	1 b+pt	-	04	12	35	1 b+pt	-	04	16	00	1 ssc	-	04	17	20	1 b+pt	-

TABLE 4 MINOR DISTURBANCES 1960 - continued  
(FEBRUARY)

d	h	m	d	h	m	d	h	m	d	h	m	d	h	m
04	18	18	1	b+pt	-	04	18	30	1	b+pt	-	04	21	03
05	10	00	1	ssc	-	05	10	48	2	b+pt	-	05	11	10
05	14	00	1	pg	-	05	14	21	4	pt	-	05	21	34
06	01	58	6	b+pt	-	06	02	58	1	b+pt	-	06	16	22
06	22	24	2	b+pt	-	06	23	21	1	si	-	07	01	20
07	01	57	2	pt	-	07	12	41	1	pt	-	07	01	36
08	04	42	1	si	-	08	09	44	3	pt	-	08	11	09
08	15	35	4	pt	-	08	15	54	1	b+pt	-	08	16	16
09	12	10	1	pt	-	09	14	10	1	pt?	-	10	10	00
10	17	38	1	si	-	11	10	42	2	si	-	11	11	42
11	17	04	6	b+pt	-	11	11	18	1	b+pt	-	12	00	36
12	08	12	1	pt	-	12	18	55	1	b+pt	-	12	20	34
13	14	35	4	si	-	13	19	15	9	b+pt	-	13	19	30
13	22	29	9	b+pt	-	13	23	14	4	b+pt	-	14	00	00
14	20	35	3	b+pt	-	14	21	00	1	b+pt	-	15	08	07
15	14	03	2	pt	-	15	18	30	1	pt	-	15	21	07
16	07	31	1	ssc	-	16	08	47	6	ssc	-	16	09	20
16	11	40	1	si	-	16	14	14	3	b+pt	-	16	14	43
16	21	06	1	pt	-	16	22	07	5	b+pt	-	17	01	43
17	04	26	1	pt	-	17	05	18	1	pt	-	17	07	35
17	11	09	1	ssc	-	17	11	56	4	pt	-	17	12	09
17	18	00	2	b+pt	-	17	18	15	1	b+pt	-	17	22	00
18	00	13	1	si	-	18	01	58	1	pt	-	18	05	45
18	08	04	8	si	-	18	12	12	3	pt	-	18	17	23
19	04	55	2	pt	-	19	07	18	1	ssc	-	19	09	12
19	17	00	1	b+pt	-	19	20	16	4	b+pt	-	19	23	17
20	15	52	4	b+pt	-	20	20	09	1	b+pt	-	20	20	33
21	01	33	2	si	-	21	08	00	1	pt	-	21	08	55
21	10	12	2	b+pt	-	21	15	49	2	b+pt	-	21	16	50
21	19	55	8	b+pt	-	21	20	37	2	pt	-	22	00	12
22	07	20	2	b+pt	-	22	10	38	4	pt	-	22	19	26
23	01	09	2	pt	-	23	01	42	4	pt	-	23	04	42
23	12	52	7	si	-	23	16	50	2	b+pt	-	24	05	24
24	16	44	4	pt	-	24	21	27	1	pt	-	24	22	59
25	07	50	1	pt	-	25	08	27	2	b+pt	-	25	11	45
25	22	24	5	b+pt	-	25	22	40	1	b+pt	-	25	22	57
26	00	07	2	pt	-	26	06	45	1	pt	-	26	07	42
26	15	20	2	si	-	26	17	54	6	si	-	27	03	31
27	10	54	2	si	-	27	11	53	1	si	-	27	12	14
27	15	07	1	pg	-	27	15	27	1	si	-	27	15	56
27	18	05	1	b+pt	-	27	20	35	1	si	-	27	21	42
27	22	18	2	pt	-	28	07	38	2	pt	-	28	10	30
28	21	30	1	pt	-	28	23	50	3	pt	-	29	09	05
29	05	23	2	pt	-	29	10	14	1	b+pt	-	29	17	40
29	23	50	1	pt	-									

MARCH

01	01	15	1	pt	-	01	01	34	1	b+pt	-	01	09	59
01	18	14	1	b+pt	-	01	18	52	5	b+pt	-	01	19	46
02	01	19	3	b+pt	-	02	02	20	4	pt	-	02	02	35
02	05	40	1	pt	-	02	11	05	1	pt	-	02	16	32
02	20	58	1	b+Pt	-	03	06	43	1	b+pt	-	03	07	16
03	16	24	1	pt	-	03	17	24	3	pt	-	04	01	48
04	14	51	3	b+pt	-	04	20	15	2	pt	-	05	10	43
05	13	30	2	b+pt	-	05	20	37	8	b+pt	-	05	20	58
06	03	30	1	si	-	06	04	08	3	b+pt	-	06	06	35
06	08	50	1	pt	-	06	13	19	4	pt	-	06	16	52
07	05	36	3	si	-	07	10	54	11	pt?	-	07	11	10
07	12	04	2	pt	-	07	13	05	1	pt?	-	07	19	40
07	23	42	6	pt	-	07	23	59	5	pt	-	08	00	31
08	01	39	2	pt	-	08	01	57	2	pt	-	08	03	42
08	05	29	4	pt	-	08	05	43	3	b+pt	-	08	09	28
08	15	12	1	si	-	08	15	13	1	b+pt	-	08	21	33
08	23	21	1	b+pt	-	08	23	51	1	b+pt	-	09	09	26
09	15	25	1	pt?	-	10	05	33	1	pt	-	10	07	48

TABLE 4 MINOR DISTURBANCES 1960 - continued

## (MARCH)

d	h	m		d	h	m		d	h	m		d	h	m					
10	11	20	1 b+pt	-	10	14	50	4 pt	-	10	16	05	2 b+pt	-	10	16	21	1 b+pt	-
10	18	27	1 pt	-	10	19	21	1 b+pt	-	11	05	27	1 ssc	-	11	08	50	1 ssc	-
11	10	21	5 si	-	11	10	47	1 b+pt	-	11	16	23	4 b+pt	-	11	17	19	1 b+pt	-
11	17	33	2 b+pt	-	11	23	56	1 pt	-	12	09	00	1 pt	-	12	12	38	3 b+pt	-
12	12	55	4 b+pt	-	12	15	00	5 pt	-	12	15	44	1 pt	-	12	17	20	1 pt	-
12	17	42	1 pt	-	12	19	20	1 pt	-	12	20	48	1 pt	-	12	21	18	5 pt	-
13	00	40	pg?	-	13	01	46	6 pt	-	13	02	27	1 pt	-	13	12	49	3 pt	-
13	14	33	2 pt	-	13	15	04	4 pt	-	13	15	20	1 pt	-	13	16	03	1 pt	-
13	16	27	2 pt	-	13	16	58	1 pt	-	13	20	44	6 b+pt	-	13	22	27	1 pt	-
14	03	07	1 pt	-	14	03	23	1 si	-	14	10	40	1 ssc	-	14	15	59	3 si	-
14	17	25	1 si	-	15	08	42	1 ssc	-	15	12	25	8 ssc	-	15	15	53	7 si	-
15	16	05	1 ssc	-	15	16	52	1 b+pt	-	15	17	54	1 b+pt	-	15	18	49	1 si	-
15	23	16	1 b+pt	-	15	23	36	1 b+pt	-	16	00	03	1 si	-	16	01	50	1 b+pt	-
16	02	18	1 si	-	16	05	11	3 si	-	16	05	34	1 si	-	16	06	02	3 si	-
16	08	19	1 ssc	-	16	09	33	2 si	-	16	14	40	1 ssc	-	16	16	42	1 pt	-
16	17	06	1 b+pt	-	16	19	07	1 b+pt	-	16	19	23	7 b+pt	-	16	19	43	2 b+pt	-
16	20	00	1 pg	-	16	22	00	1 b+pt	-	16	22	24	5 b+pt	-	17	02	27	1 si	-
17	03	10	1 b+pt	-	17	05	30	2 pt	-	17	08	48	1 si	-	17	11	49	1 pt	-
17	19	17	7 b+pt	-	17	20	01	5 b+pt	-	18	00	23	1 pt	-	18	04	28	1 pt	-
18	11	45	2 pt	-	18	12	48	3 pt	-	18	14	19	3 pt	-	18	23	44	2 pt	-
19	00	03	1 pt	-	19	06	43	1 si	-	19	13	45	1 pt	-	19	15	45	1 si	-
20	01	31	1 pt	-	20	01	57	1 si	-	20	04	15	4 b+pt	-	20	12	58	2 pt	-
20	13	58	1 pt	-	20	20	35	2 pt	-	20	23	33	1 pt	-	21	07	36	3 b+pt	-
21	11	42	1 si	-	21	12	10	1 si	-	22	03	44	1 pg?	-	22	08	42	1 pt	-
22	09	45	1 pt	-	22	12	01	4 pt	-	22	12	44	1 b+pt	-	22	14	26	2 pt	-
22	18	30	1 pt	-	22	21	45	1 pt	-	22	22	46	9 pt	-	22	23	01	2 b+pt	-
22	23	28	4 pt	-	23	03	21	1 pt	-	23	04	35	2 b+pt	-	23	04	57	1 pt	-
23	05	27	1 pt	-	23	11	30	1 si	-	23	13	34	1 pt	-	23	13	49	1 si	-
23	21	24	2 b+pt	-	23	22	14	1 pt	-	24	00	37	4 pt	-	24	01	21	3 b+pt	-
24	09	21	2 b+pt	-	24	10	50	1 b+pt	-	24	14	45	5 ssc	-	24	15	10	1 b+pt	-
24	15	28	2 pt	-	24	15	58	2 b+pt	-	26	00	00	1 pt	-	26	01	26	2 pt	-
26	09	16	1 b+pt	-	26	16	42	3 pt	-	27	00	47	1 pt	-	27	00	56	1 pt	-
27	01	11	2 pt	-	27	01	24	3 pt	-	27	19	36	2 pt	-	28	04	53	1 pt	-
28	07	15	1ssc	-	28	07	30	1 ssc	-	28	08	00	1 b+pt	-	28	11	13	1 si	-
28	15	30	4 pt	-	28	19	29	2 b+pt	-	28	23	19	1 b+pt	-	29	00	10	2 pt	-
29	06	58	1 si	-	29	07	15	3 b+pt	-	29	10	12	1 si	-	29	14	32	1 pt	-
29	15	06	9 si	-	29	17	18	3 pt	-	29	21	41	4 pt	-	29	21	55	1 pt	-
29	22	18	1 pt	-	30	00	00	1 pt	-	30	10	33	1 pt	-	30	11	54	1 b+pt	-
30	12	26	1 pt	-	30	20	09	1 b+pt	-	30	23	06	4 pt	-	30	23	21	1 b+pt	-
30	23	35	1 pt	-	31	00	04	2 pt	-	31	08	13	1 b+pt	-	31	09	01	1 pt	-
31	12	50	4 si	-	31	16	22	2 b+pt	-	31	18	34	3 si	-	31	19	43	5 si	-
31	21	42	4si	-	31	22	27	1 ssc	-	31	23	18	1 si	-					-

APRIL

01	03	07	3 ssc	-	01	10	36	1 ssc	-	01	11	30	1 si	-	01	16	30	1 si	-
01	19	55	1 si	-	02	06	13	1 si	-	02	18	19	5 si	-	02	22	32	1 ssc	-
03	00	21	2 b+pt	-	03	00	55	1 si	-	03	03	20	1 si	-	03	03	55	1 si	-
03	05	25	3 si	-	03	09	58	1 si	-	03	11	30	1 si	-	03	12	49	1 si	-
03	17	00	1 si	-	03	18	32	5 si	-	04	01	40	1 pg	-	04	13	38	9 si	-
04	14	37	1 si	-	04	16	03	3 si	-	04	16	20	1 b+pt	-	04	18	36	1 pt	-
04	20	27	4 b+pt	-	05	01	26	1 b+pt	-	05	03	15	1 pg	-	05	07	50	1 si	-
05	08	20	1 pt	-	05	15	00	6 b+pt	-	05	15	44	1 si	-	05	19	57	1 si	-
05	20	54	1 si	-	05	21	57	1 pt	-	06	07	51	1 pt	-	06	09	04	1 pt	-
06	09	35	1 pt	-	06	16	09	1 pt	-	06	16	43	2 b+pt	-	06	17	10	1 si	-
06	19	30	1 b+pt	-	06	22	05	1 si	-	06	23	12	2 pt	-	07	03	53	4 b+pt	-
07	14	20	5 si	-	07	16	03	1 si	-	07	16	16	1 si	-	07	16	34	4 pt	-
07	21	50	4 b+pt	-	08	03	05	5 b+pt	-	08	12	34	1 si	-	08	15	49	4 pt	-
08	23	29	5 pt	-	08	23	57	2 pt	-	09	16	10	1 b+pt	-	09	23	51	9 pt	-
10	00	12	1 ssc	-	10	01	03	1 pt	-	10	04	45	1 pt	-	10	05	03	1 ssc	-
10	06	03	1 ssc	-	10	11	31	2 b+pt	-	10	14	26	1 pt	-	10	17	31	2 pt	-
10	18	08	1 b+pt	-	10	18	27	2 b+pt	-	10	21	07	1 pt	-	10	22	34	5 si	-
10	22	57	3 b+pt	-	11	17	58	2 b+pt	-	11	21	39	1 si	-	11	23	40	1 ssc	-
12	01	18	1 b+pt	-	12	01	40	4 b+pt	-	12	07	35	1 b+pt	-	12	09	02	2 pt	-
12	12	19	2 b+pt	-	12	13	25	1 pt	-	12	20	47	2 pt	-	12	21	22	4 b+pt	-
12	21	45	2 b+pt	-	13	01	58	3 b+pt	-	13	13	14	3 si	-	13	15	43	1 pt	-

TABLE 4 MINOR DISTURBANCES 1960 - continued

## (APRIL)

d	h	m	d	h	m	d	h	m	d	h	m
13	21	45	1	b+pt	-	13	22	54	1	pt	-
14	04	00	1	pt	-	14	04	41	1	pt	-
15	00	36	1	b+pt	-	15	04	25	2	b+pt	-
15	15	53	4	pt	-	15	19	30	1	pg	-
16	02	28	1	pt	-	16	03	13	1	pt	-
16	12	52	4	b+pt	-	16	20	10	1	b+pt	-
17	09	40	1	pt	-	17	10	12	1	si	-
17	16	09	4	si	-	17	17	12	3	b+pt	-
18	00	48	4	b+pt	-	18	04	08	1	si	-
18	22	45	1	b+pt	-	18	23	10	1	pt	-
19	06	15	2	b+pt	-	19	07	07	2	b+pt	-
19	12	48	3	pt	-	19	14	07	1	pt	-
20	13	40	2	pt	-	21	13	22	1	pt	-
22	05	45	3	b+pt	-	23	03	45	3	b+pt	-
23	05	10	1	si	-	23	07	45	1	pt?	-
24	01	20	1	si	-	24	05	15	1	si	-
24	13	02	4	b+pt	-	24	14	03	1	b+pt	-
24	23	55	1	pt	-	25	02	48	1	si	-
25	08	55	1	si	-	25	10	01	1	b+pt	-
25	20	16	7	b+pt	-	25	20	37	4	b+pt	-
25	22	57	2	pt	-	26	07	00	2	b+pt	-
27	05	02	1	pt	-	27	13	35	2	b+pt	-
27	23	45	1	pt	-	28	01	34	5	b+pt	-
28	12	14	2	si	-	28	14	49	1	b+pt	-
29	00	48	1	b+pt	-	29	01	08	1	si	-
29	18	48	2	b+pt	-	29	19	05	1	b+pt	-
30	09	55	1	si	-	30	16	11	2	si	-
									30	17	04
										2	si

## MAY

01	08	38	2	pt	-	01	11	12	1	si	-
01	14	48	1	si	-	01	15	20	1	pt	-
01	21	24	1	b+pt	-	02	03	06	1	pt	-
02	09	13	4	si	-	02	11	05	1	pt	-
02	19	12	2	b+pt	-	02	21	07	1	b+pt	-
03	03	01	1	pt	-	03	09	27	2	b+pt	-
03	19	41	1	pt	-	04	06	06	1	b+pt	-
05	02	10	1	pt	-	05	03	02	2	si	-
05	06	05	1	pt	-	05	08	08	1	pg	-
05	17	00	1	ssc?	-	05	18	37	1	pt	-
05	23	26	5	b+pt	-	06	00	00	1	pt	-
06	04	33	1	pt	-	06	05	42	4	b+pt	-
06	17	45	2	b+pt	-	06	18	03	1	b+pt	-
06	22	32	1	b+pt	-	07	00	43	2	si	-
07	08	46	1	ssc	-	07	10	24	1	ssc	-
07	13	30	1	si	-	07	17	50	1	b+pt	-
07	23	15	2	b+pt	-	08	08	46	2	b+pt	-
08	23	05	1	si	-	08	23	29	5	si	-
09	10	35	5	si	-	09	12	08	1	si	-
10	23	06	1	b+pt	-	10	23	20	3	b+pt	-
11	07	51	1	b+pt	-	11	22	10	1	b+pt	-
12	06	29	1	pt	-	12	07	53	1	b+pt	-
12	21	45	1	pt	-	12	22	52	4	b+pt	-
13	14	09	1	pt	-	13	13	42	2	pt	-
13	23	05	1	pt	-	13	23	30	2	pt	-
14	12	56	1	pt	-	14	20	52	8	b+pt	-
15	08	00	1	b+pt	-	15	09	08	1	ssc	-
16	01	48	3	pt	-	16	03	18	1	pt	-
16	12	31	1	ssc	-	16	13	07	1	pt	-
16	17	35	2	si	-	16	23	05	2	si	-
17	11	10	1	pt	-	17	12	48	1	si	-
17	15	46	1	b+pt	-	17	21	34	5	pt	-
18	02	46	2	b+pt	-	18	03	51	2	pt	-
18	13	46	2	pt	-	18	14	49	2	pt	-
18	23	51	1	pt	-	19	06	39	1	pt	-
20	17	33	2	pt	-	20	23	19	4	pt	-
									20	23	33
									5	pt	-

TABLE 4 MINOR DISTURBANCES 1960 - continued

## (MAY)

d	h	m		d	h	m		d	h	m		d	h	m					
21	06	04	1 pt	-	21	08	58	1 pt	-	21	10	03	1 si	-	21	13	08	1 b+pt	-
21	13	52	1 si	-	21	14	38	1 si	-	21	15	24	3 pt	-	21	16	25	3 pt	-
21	16	50	2 pt	-	21	18	46	2 b+pt	-	22	09	35	2 pt	-	22	14	07	1 si	-
22	14	22	1 ssc	-	22	19	30	1 pt	-	22	22	26	1 ssc	-	22	23	48	1 b+pt	-
23	14	15	1 si	-	23	14	38	1 si	-	23	16	27	4 pt	-	23	23	52	2 pt	-
24	05	10	1 b+pt	-	24	05	53	1 b+pt	-	24	06	27	1 b+pt	-	24	09	50	1 b+pt	-
24	11	46	2 pt	-	24	18	01	7 pt	-	24	19	03	3 b+pt	-	24	19	33	1 b+pt	-
24	20	20	1 b+pt	-	24	22	23	5 b+pt	-	24	22	35	2 b+pt	-	25	03	32	2 b+pt	-
25	11	02	1 pt	-	25	13	47	1 b+pt	-	25	18	00	1 b+pt	-	25	18	42	1 pt	-
25	22	37	1 pt	-	26	03	21	1 b+pt	-	26	12	45	1 si	-	26	20	07	1 pt	-
26	21	02	2 pt	-	26	21	22	1 b+pt	-	26	23	00	1 b+pt	-	26	23	17	3 pt	-
26	23	34	5 b+pt	-	26	23	47	7 pt	-	27	01	15	1 b+pt	-	27	18	40	1 pt	-
27	22	30	1 b+pt	-	28	00	35	1 pt	-	28	01	54	4 b+pt	-	28	08	10	1 pt	-
28	15	04	1 pt	-	28	20	28	1 pt	-	29	00	14	3 pt	-	29	02	12	1 pt	-
29	20	13	3 b+pt	-	29	20	33	5 b+pt	-	29	23	43	6 si	-	30	08	39	1 b+pt	-
30	09	45	3 si	-	30	15	44	1 si	-	30	21	24	4 b+pt	-	31	07	50	2 ssc	-
31	12	13	3 ssc	-	31	12	47	1 pt	-	31	16	46	1 si	-					

## JUNE

01	00	11	3 b+pt	-	01	00	30	1 b+pt	-	01	03	03	4 b+pt	-	01	03	35	4 b+pt	-
01	04	38	1 pt	-	01	05	40	5 b+pt	-	01	08	30	1 b+pt	-	01	08	55	2 b+pt	-
01	09	35	4 pt	-	01	12	50	1 b+pt	-	01	13	43	1 si	-	02	01	23	3 b+pt	-
02	02	51	1 ssc	-	02	03	40	1 pt?	-	02	04	40	1 pt	-	02	08	00	1 pt	-
02	10	23	1 b+pt	-	02	12	11	1 pt	-	02	13	59	3 si	-	02	21	18	1 b+pt	-
03	02	47	1 ssc	-	03	14	11	2 pt	-	03	14	33	2 pt	-	03	17	17	3 pt	-
03	17	32	1 ssc	-	03	18	00	1 si	-	03	20	44	7 pt	-	03	20	59	2 b+pt	-
03	21	16	4 b+pt	-	04	09	42	2 si	-	04	10	23	2 b+pt	-	04	10	53	1 b+pt	-
04	14	21	1 b+pt	-	04	15	54	5 pt	-	04	20	39	4 si	-	05	00	24	6 b+pt	-
05	02	10	2 b+pt	-	05	03	29	5 b+pt	-	05	06	11	1 b+pt	-	05	06	29	1 b+pt	-
05	09	17	1 si	-	05	10	28	4 pt	-	05	11	21	1 b+pt	-	05	11	45	3 b+pt	-
05	19	13	5 b+pt	-	06	00	12	3 b+pt	-	06	01	03	5 b+pt	-	06	12	25	1 b+pt	-
06	19	22	3 pt	-	06	19	57	6 pt	-	07	00	02	4 b+pt	-	07	00	40	2 b+pt	-
07	18	03	1 b+pt	-	07	18	18	2 b+pt	-	07	18	36	1 b+pt	-	07	22	14	3 pt	-
08	01	47	3 pt	-	08	02	14	2 pt	-	08	02	40	3 b+pt	-	08	03	31	1 b+pt	-
08	03	56	1 b+pt	-	08	04	26	1 si	-	08	10	11	1 pt	-	08	10	54	1 b+pt	-
08	20	35	2 pt	-	08	22	09	3 b+pt	-	09	00	43	7 b+pt	-	09	01	35	4 b+pt	-
09	03	56	3 b+pt	-	09	05	56	2 b+pt	-	09	06	33	1 si	-	09	12	25	2 si	-
09	14	06	1 pt	-	09	14	26	2 b+pt	-	09	17	58	5 b+pt	-	09	18	53	2 b+pt	-
09	20	00	1 pt	-	10	01	40	1 pt	-	10	01	55	6 b+pt	-	10	04	40	2 b+pt	-
10	07	45	1 pt	-	10	09	27	1 ssc	-	10	19	36	5 pt	-	10	20	46	5 b+pt	-
11	01	50	2 b+pt	-	11	08	32	1 si	-	11	19	18	1 b+pt	-	12	02	05	1 b+pt	-
12	04	24	5 pt	-	12	04	48	2 pt	-	12	05	15	1 pt	-	12	05	43	3 pt	-
12	06	42	2 pt	-	12	08	27	2 pt	-	12	09	03	2 pt	-	12	09	26	1 pt	-
12	16	52	1 b+pt	-	13	01	37	2 pt	-	13	02	10	1 pt	-	13	02	32	1 pt	-
13	16	58	1 b+pt	-	13	22	34	1 si	-	14	01	38	9 b+pt	-	14	10	56	2 b+pt	-
14	11	29	2 b+pt	-	14	12	01	1 b+pt	-	14	12	44	2 b+pt	-	14	13	19	4 b+pt	-
14	19	22	1 pt	-	14	19	35	1 pt	-	15	01	23	7 b+pt	-	15	01	46	2 pt	-
15	11	22	1 b+pt	-	15	23	18	3 pt	-	16	00	01	1 b+pt	-	16	03	10	4 b+pt	-
16	06	00	1 b+pt	-	16	06	15	1 pt	-	17	14	44	1 b+pt	-	17	16	58	1 b+pt	-
17	22	52	7 pt	-	17	23	47	1 pt	-	18	00	48	1 b+pt	-	18	10	55	1 b+pt	-
18	12	53	2 pt	-	18	22	15	3 si	-	19	01	36	1 pt	-	19	01	50	1 pt	-
19	02	06	7 pt	-	19	02	21	5 pt	-	19	02	58	2 pt	-	19	05	25	1 b+pt	-
19	10	49	1 si	-	19	18	53	2 pt	-	19	19	41	4 pt	-	19	20	37	6 b+pt	-
19	22	42	4 pt	-	20	06	45	1 pt	-	20	11	16	2 b+pt	-	20	14	12	4 pt	-
20	14	44	3 pt	-	20	15	05	1 pt	-	20	16	21	1 pt	-	21	00	16	1 pt	-
21	03	09	5 si	-	21	03	28	1 pt	-	21	03	50	1 b+pt	-	21	11	06	1 si	-
21	14	12	4 pt	-	21	14	48	1 ssc	-	21	21	48	9 pt	-	21	22	18	1 pt	-
22	00	30	1 pt	-	22	02	56	2 b+pt	-	22	04	38	2 b+pt	-	22	05	48	1 b+pt	-
22	11	35	2 pt	-	23	00	21	3 pt	-	23	00	49	3 b+pt	-	23	13	06	4 pt	-
23	15	42	2 pt	-	23	15	58	2 b+pt	-	23	19	42	1 pt	-	24	03	48	1 pt	-
24	06	30	2 b+pt	-	24	06	50	2 b+pt	-	24	13	25	2 b+pt	-	24	19	40	2 b+pt	-
24	22	14	2 pt	-	24	22	47	2 pt	-	25	00	58	1 pt	-	25	05	26	1 pt	-
25	08	14	1 pt	-	25	09	32	2 pt	-	25	16	19	6 b+pt	-	25	16	38	3 b+pt	-
25	17	36	1 b+pt	-	25	19	30	1 b+pt	-	25	20	58	2 b+pt	-	26	01	39	7 b+pt	-
26	02	00	1 b+pt	-	26	08	46	1 si	-	26	12	22	4 pt	-	26	19	55	1 pt	-

TABLE 4 MINOR DISTURBANCES 1960 - continued

## (JUNE)

d	h	m	d	h	m	d	h	m	d	h	m
26	20	15	7	b+pt	-	26	21	40	1	si	-
27	02	22	1	pt	-	27	02	39	2	b+pt	-
27	05	21	1	b+pt	-	27	06	07	1	pt	-
27	14	20	1	pt	-	27	17	00	3	pt	-
28	00	30	4	si	-	28	03	35	3	si	-
28	07	21	3	si	-	28	09	57	1	si	-
28	23	01	1	pt	-	28	23	19	7	b+pt	-
29	06	52	1	si	-	29	18	36	1	b+pt	-
30	02	45	1	si	-	30	02	57	1	pt	-
30	18	01	1	si	-						

JULY

01	00	17	5	pt	-	01	04	58	1	pt	-
01	12	09	4	si	-	01	13	28	1	si	-
03	00	54	1	b+pt	-	03	11	00	2	b+pt	-
03	20	30	1	b+pt	-	03	21	01	5	b+pt	-
04	20	32	2	pt	-	05	00	05	2	pt	-
05	05	32	1	pt	-	05	06	11	2	pt	-
05	12	32	1	pg	-	05	13	05	1	pt	-
06	02	35	1	pt	-	06	03	48	1	si	-
06	18	31	1	pt	-	07	03	08	2	pt	-
07	16	48	1	si	-	07	17	45	11	si	-
08	01	27	1	pt	-	08	03	02	6	pt	-
08	09	36	1	pt	-	08	20	20	8	pt	-
09	01	12	3	pt	-	09	01	33	9	pt	-
09	07	15	1	pt	-	09	07	38	1	pt	-
09	18	00	1	pt	-	09	22	18	1	pt	-
10	00	44	1	pt	-	10	03	15	1	pt	-
10	19	32	1	pt	-	10	19	52	2	pt	-
11	20	13	1	pt	-	11	21	56	2	pt	-
12	04	50	1	b+pt	-	12	08	06	1	b+pt	-
13	03	25	2	b+pt	-	13	04	05	2	pt	-
13	16	33	2	b+pt	-	13	20	50	1	si	-
14	04	56	2	b+pt	-	14	09	16	1	pg?	-
14	10	59	1	si	-	14	11	10	1	b+pt	-
14	21	00	2	si	-	14	21	17	1	si	-
15	04	03	1	b+pt	-	15	18	45	1	si	-
15	23	46	1	si	-	16	00	31	2	b+pt	-
16	06	30	1	b+pt	-	16	10	32	2	b+pt	-
16	15	51	1	b+pt	-	16	16	46	3	b+pt	-
17	03	05	1	b+pt	-	17	07	34	3	b+pt	-
17	21	33	1	pt	-	17	21	45	1	b+pt	-
19	04	27	1	ssc	-	19	04	40	1	ssc	-
19	10	31	5	b+pt	-	19	11	00	5	b+pt	-
19	19	35	1	si	-	20	00	00	1	pt	-
20	10	06	1	pt	-	20	12	35	2	pt	-
20	18	11	3	b+pt	-	21	03	50	1	b+pt	-
22	01	33	1	pt	-	22	03	08	1	pt	-
22	15	00	1	pt	-	22	18	12	1	b+pt	-
22	21	54	1	pt	-	22	22	16	1	si	-
23	04	45	1	si	-	23	05	35	3	b+pt	-
23	20	02	1	pt	-	23	23	32	5	pt	-
24	03	35	1	pt	-	24	05	33	3	pt	-
24	21	22	1	pt	-	24	21	42	1	pt	-
25	02	30	1	pt	-	25	21	28	1	pt	-
26	03	35	1	pt	-	26	12	13	4	b+pt	-
26	23	37	1	pt	-	27	04	20	1	b+pt	-
28	11	18	2	b+pt	-	28	11	30	3	pt	-
28	23	17	5	pt	-	28	23	50	1	pt	-
29	10	00	1	ssc	-	29	14	29	3	si	-
29	19	49	1	b+pt	-	30	01	20	1	b+pt	-
30	19	52	1	b+pt	-	30	23	04	1	si	-
31	00	23	1	pt	-	31	01	10	2	b+pt	-
31	17	15	1	b+pt	-	31	17	54	1	b+pt	-
31	22	21	5	b+pt	-	31	22	37	1	si	-

TABLE 4 MINOR DISTURBANCES 1960 - continued

## AUGUST

d	h	m	d	h	m	d	h	m	d	h	m												
01	08	36	1	pt	-	01	09	43	1	pt	-	01	12	26	1	pt	-	01	13	30	5	b +pt	-
01	19	24	2	b +pt	-	01	21	25	1	pt	-	01	22	07	8	b +pt	-	02	01	31	1	si	-
02	02	44	2	b +pt	-	02	03	09	1	b +pt	-	02	03	33	8	b +pt	-	02	10	10	2	b +pt	-
02	15	26	3	pt	-	02	20	21	1	pt	-	02	22	02	2	si	-	03	16	10	1	b +pt	-
03	23	00	4	pt	-	04	04	27	5	b +pt	-	04	08	24	2	pt	-	04	10	34	3	b +pt	-
04	15	38	4	pt	-	04	16	06	1	pt	-	04	19	48	1	pt	-	05	00	59	3	pt	-
05	01	29	1	pt	-	05	05	23	1	pt	-	05	08	59	2	b +pt	-	05	18	33	3	pt	-
05	19	10	1	pt	-	05	19	29	6	b +pt	-	05	19	41	1	pt	-	06	00	42	3	pt	-
06	01	45	1	pt	-	06	03	06	1	pg	-	05	05	50	2	pt	-	06	11	16	1	si	-
06	20	31	2	pt	-	06	21	16	3	pt	-	06	21	40	2	pt	-	07	01	36	2	b +pt	-
07	12	18	2	si	-	07	13	11	1	pt	-	07	22	24	1	si	-	08	01	12	1	pt	-
08	01	42	1	pt	-	08	03	39	4	ssc	-	08	07	16	1	pt	-	08	09	01	3	pg	-
09	11	22	1	b +pt	-	08	14	17	1	pt	-	08	15	09	3	b +pt	-	08	20	25	2	b +pt	-
08	21	50	1	b +pt	-	08	22	14	1	pt	-	08	23	23	4	b +pt	-	08	23	51	2	b +pt	-
09	04	20	2	b +pt	-	09	05	01	4	b +pt	-	09	05	50	1	pg	-	09	10	09	1	b +pt	-
09	11	32	3	b +pt	-	09	17	04	1	pt	-	09	18	56	4	pt	-	09	23	50	4	pt	-
10	03	00	1	pt	-	10	19	12	1	pt	-	11	04	28	1	b +pt	-	11	11	24	1	si	-
11	15	19	1	b +pt	-	11	18	39	1	pt	-	11	18	58	1	b +pt	-	11	23	35	1	si	-
12	04	33	1	b +pt	-	12	10	44	1	b +pt	-	12	11	21	2	b +pt	-	12	20	27	2	pt	-
13	01	35	1	pt	-	13	02	06	1	pt	-	13	03	33	4	b +pt	-	13	09	35	1	pt	-
13	11	33	1	b +pt	-	13	12	23	1	pt	-	13	12	50	1	b +pt	-	13	19	05	1	b +pt	-
13	19	51	5	pt	-	13	22	00	1	pt	-	14	01	23	1	pt	-	14	02	10	1	pt	-
14	02	27	1	b +pt	-	14	02	54	1	pt	-	14	03	15	1	pt	-	14	14	32	2	pt	-
14	17	12	6	si	-	14	20	08	4	b +pt	-	14	20	58	1	si	-	14	23	55	3	b +pt	-
15	02	43	3	b +pt	-	16	00	12	8	b +pt	-	16	01	48	1	pt	-	16	16	35	2	b +pt	-
17	02	40	2	b +pt	-	17	04	06	1	pt	-	17	04	55	1	pt	-	17	06	15	1	si	-
17	08	17	1	si	-	17	09	36	1	si	-	17	15	44	4	si	-	17	16	37	2	pt	-
17	18	34	4	si	-	19	06	39	1	si	-	19	12	01	1	si	-	19	21	17	3	b +pt	-
19	22	04	2	b +pt	-	20	04	29	1	si	-	20	05	20	1	pt	-	20	06	27	2	b +pt	-
20	08	14	4	pt	-	20	08	30	1	pg	-	20	21	18	6	b +pt	-	21	00	16	1	b +pt	-
21	06	44	4	si	-	21	08	33	1	b +pt	-	21	13	06	1	pt	-	21	18	46	1	pt	-
21	21	10	1	ssc	-	21	23	50	1	si	-	22	00	25	1	b +pt	-	22	14	00	1	pt	-
22	18	00	1	b +pt	-	22	19	36	1	pt	-	22	20	00	1	pt	-	22	20	29	1	pt	-
22	22	57	1	pt	-	22	23	35	1	pt	-	23	00	05	1	pt	-	23	00	20	1	pt	-
23	02	00	2	pt	-	23	03	02	1	b +pt	-	23	04	35	1	pt	-	23	05	01	1	si	-
23	10	50	1	pt	-	23	11	07	1	pt	-	23	16	25	3	pt	-	23	16	55	1	b +pt	-
23	18	04	1	pt	-	23	18	50	1	pt	-	23	20	57	2	pt	-	24	00	36	3	b +pt	-
24	01	14	2	pt	-	24	02	21	1	si	-	24	06	00	1	pt	-	24	19	12	1	pt	-
24	23	00	1	pt	-	25	08	32	1	pt	-	25	10	07	2	pt	-	25	11	38	1	pt	-
25	17	10	1	pt	-	25	19	28	1	pt	-	26	07	06	1	pt	-	26	09	52	1	pt	-
26	13	17	3	pt	-	26	13	38	4	pt	-	26	16	30	1	pt	-	26	16	53	3	pt	-
26	23	05	8	pt	-	26	23	33	2	pt	-	27	00	41	1	pt	-	27	08	48	1	pt	-
27	10	12	1	pt	-	27	11	50	1	ssc	-	27	16	26	5	pt	-	27	16	43	3	b +pt	-
27	19	39	3	b +pt	-	27	20	33	6	si	-	27	20	54	1	pt	-	28	02	35	3	b +pt	-
28	03	29	1	pt	-	28	05	26	2	si	-	28	11	28	1	si	-	28	12	37	4	pt	-
28	13	09	1	b +pt	-	28	13	35	1	si	-	28	15	29	5	pt	-	28	16	01	7	b +pt	-
26	16	22	1	si	-	29	04	28	1	si	-	29	04	42	1	b +pt	-	29	05	10	1	si	-
29	08	00	1	b +pt	-	29	14	29	8	si	-	29	14	43	1	b +pt	-	29	15	08	1	si	-
29	15	20	1	si	-	29	16	11	1	si	-	30	06	20	1	si	-	30	07	00	1	si	-
30	07	42	1	si	-	30	09	00	1	b +pt	-	30	10	50	3	b +pt	-	30	14	45	1	pt	-
30	18	00	1	b +pt	-	31	00	12	2	b +pt	-	31	02	49	2	b +pt	-	31	03	10	2	b +pt	-
31	12	18	1	b +pt	-	31	16	15	1	pt	-	31	20	00	1	pt	-						

SEPTEMBER

01	05	18	1 pt	-	01	13	27	4 pt	-	01	14	48	1 pt	-	02	03	35	1 ssc	-
02	04	36	3 pt	-	02	06	12	2 si	-	02	13	22	1 si	-	02	14	11	1 pt	-
02	16	43	4 ssc	-	02	18	46	1 pt	-	02	21	56	1 pt	-	02	22	31	6 b+pt	-
02	23	00	1 si	-	03	05	58	4 b+pt	-	03	06	29	10 b+pt	-	03	06	50	1 si	-
03	08	38	2 si	-	03	10	18	5 si	-	03	12	30	1 b+pt	-	03	17	43	1 b+pt	-
03	17	56	6 b+pt	-	04	00	08	2 pt	-	04	07	20	3 si	-	04	08	07	2 b+pt	-
04	13	52	1 b+pt	-	04	14	12	2 b+pt	-	05	03	07	2 ssc	-	05	06	18	9 si	-
05	06	52	4 si	-	05	14	13	1 b+pt	-	05	14	48	1 b+pt	-	05	15	18	1 si	-
05	18	17	1 b+pt	-	05	22	13	1 pt	-	05	22	36	4 b+pt	-	06	06	36	1 pt	-
06	12	06	1 pt	-	06	19	12	2 b+pt	-	06	19	30	1 b+pt	-	07	02	12	1 pt	-
07	05	30	1 pg	-	07	08	19	1 si	-	07	08	34	1 pt	-	07	09	40	1 ssc	-
07	12	05	1 b+pt	-	07	17	37	9 b+pt	-	07	18	00	2 b+pt	-	07	18	17	2 b+pt	-

TABLE 4 MINOR DISTURBANCES 1960 - continued  
(SEPTEMBER)

d	h	m	d	h	m	d	h	m	d	h	m	d	h	m
07	18	45	1	pg	-	07	20	07	4	b+pt	-	07	20	38
07	23	48	1	b+pt	-	08	00	01	1	b+pt	-	08	07	49
08	16	10	2	b+pt	-	09	00	00	2	b+pt	-	09	03	07
09	13	04	3	b+pt	-	09	21	11	4	pt	-	10	01	50
10	07	11	1	pt	-	10	10	19	1	b+pt	-	10	14	32
10	22	15	6	b+pt	-	10	22	43	1	b+pt	-	11	02	12
11	11	50	1	b+pt	-	11	12	06	2	si	-	11	13	06
11	16	19	5	pt	-	11	19	40	1	pt	-	11	20	08
11	22	53	1	pt	-	12	00	33	3	pt	-	12	00	52
12	15	27	2	b+pt	-	12	18	04	1	pt	-	12	19	05
13	00	00	1	b+pt	-	13	01	27	2	b+pt	-	13	03	22
13	08	06	1	pt	-	13	09	16	1	pt	-	13	10	12
13	20	08	6	pt	-	13	20	52	4	b+pt	-	13	23	00
14	03	35	2	b+pt	-	14	17	57	1	pt	-	14	19	04
14	23	51	1	b+pt	-	15	04	40	1	b+pt	-	15	10	45
15	13	55	3	pt	-	15	14	21	1	pt	-	15	16	00
15	20	50	1	pt	-	15	22	22	3	pt	-	15	22	53
15	23	55	1	pt	-	16	11	07	4	pt	-	16	12	47
16	21	13	2	pt	-	16	22	04	1	pt	-	17	02	58
17	14	42	1	pt	-	17	17	12	1	pt	-	18	01	19
18	09	09	1	b+pt	-	18	14	04	1	b+pt	-	18	15	28
18	22	00	1	pt	-	18	22	30	2	pt	-	18	23	16
19	06	04	3	b+pt	-	19	10	40	1	pt	-	20	06	24
20	09	12	1	pt	-	20	11	10	1	pt	-	20	15	37
20	21	50	1	b+pt	-	20	22	27	2	pt	-	20	22	40
20	23	58	2	b+pt	-	21	07	15	1	pt	-	21	14	39
21	15	10	1	b+pt	-	21	18	30	9	b+pt	-	21	20	27
21	23	02	5	pt	-	21	23	20	1	b+pt	-	22	14	17
22	19	29	2	ssc	-	22	22	50	1	b+pt	-	23	09	30
23	21	41	2	pt	-	24	01	35	1	b+pt	-	24	02	15
24	09	00	1	pt	-	24	10	08	1	b+pt	-	24	14	21
24	17	00	1	b+pt	-	24	19	20	1	pt	-	24	19	55
25	10	50	1	pt	-	25	11	26	1	pt	-	25	18	05
25	19	39	1	pt	-	25	20	10	1	pt	-	25	20	30
26	01	00	2	pt	-	26	02	10	1	pt	-	26	06	44
26	19	31	6	pt	-	26	23	00	1	b+pt	-	26	23	45
27	00	36	2	b+pt	-	27	03	42	2	b+pt	-	27	06	39
27	22	32	1	pt	-	27	23	10	1	pt	-	28	01	49
28	23	02	3	pt	-	29	00	00	1	pt	-	29	00	35
29	03	50	2	pt	-	29	04	09	1	pt	-	29	05	51
29	13	49	3	b+pt	-	29	20	55	6	b+pt	-	29	21	31
30	08	36	1	b+pt	-	30	12	36	1	pt	-	30	12	49
30	13	55	1	b+pt	-	30	20	04	2	b+pt	-			

OCTOBER

01	05	12	1	b+pt	-	01	11	46	3	b+pt	-	01	18	17
01	18	47	5	b+pt	-	02	02	24	1	b+pt	-	02	04	45
02	14	31	1	b+pt	-	02	17	43	3	b+pt	-	02	22	40
02	23	37	3	b+pt	-	03	08	40	1	si	-	03	11	47
03	20	34	3	pt	-	03	23	03	5	b+pt	-	04	04	05
04	07	46	1	pg	-	04	09	40	1	pt	-	04	10	00
04	14	43	3	b+pt	-	04	17	48	5	b+pt	-	04	19	06
04	22	29	6	b+pt	-	05	01	13	3	b+pt	-	05	07	14
05	12	53	4	pt	-	05	15	29	4	pt	-	05	16	40
05	17	12	1	pt	-	05	19	25	1	ssc	-	05	21	43
06	01	35	1	si	-	06	02	00	1	b+pt	-	06	02	23
06	07	18	1	si	-	06	08	37	2	si	-	06	09	16
06	13	19	1	si	-	06	15	24	1	b+pt	-	06	16	52
06	17	48	3	b+pt	-	06	20	56	1	si	-	06	21	40
07	01	01	3	si	-	07	01	18	1	si	-	07	03	37
07	14	44	6	si	-	07	16	30	1	b+pt	-	07	20	29
07	23	02	2	b+pt	-	08	00	01	1	b+pt	-	08	00	58
08	03	42	1	si	-	08	09	50	7	b+pt	-	08	12	27
08	19	45	1	b+pt	-	08	20	04	1	pt	-	08	20	20
09	05	03	1	b+pt	-	09	18	48	1	b+pt	-	09	21	05
10	02	37	2	b+pt	-	10	14	36	b+pt	-	10	17	00	
									1	pt	-	10	17	51

TABLE 4 MINOR DISTURBANCES 1960 - continued

(OCTOBER)

NOVEMBER

01	03	01	1 pt	-	01	04	00	1 b+pt	-	01	07	48	1 pt	-	01	11	25	4 b+pt -	
01	11	42	1 b+pt	-	01	12	05	2 b+pt	-	01	18	02	1 si	-	01	20	23	1 pt	-
01	20	34	1 pt	-	02	05	58	1 b+pt	-	02	06	19	1 b+pt	-	02	19	24	1 pt	-
03	00	00	1 pt	-	03	00	46	1 b+pt	-	03	01	15	1 b+pt	-	03	10	21	1 si	-
03	11	00	1 b+pt	-	03	11	30	1 b+pt	-	03	11	54	1 b+pt	-	03	12	27	3 pt	-
03	17	26	4 pt	-	03	21	50	1 pt	-	03	22	17	3 pt	-	03	22	28	2 ssc	-
03	22	56	2 b+pt	-	03	23	37	2 pt	-	04	02	20	3 b+pt	-	04	05	56	1 ssc	-
04	10	00	1 ssc?	-	04	18	04	7 b+pt	-	05	03	09	2 b+pt	-	05	19	57	1 pt	-
05	20	15	1 b+pt	-	05	22	44	2 pt	-	06	06	42	1 si	-	06	10	59	1 b+pt	-
06	19	58	4 pt	-	07	01	35	2 pt	-	07	02	19	2 b+pt	-	07	07	18	1 si	-
07	20	48	1 pt	-	08	07	27	1 si	-	08	23	53	2 pt	-	09	03	32	2 pt	-
09	03	55	2 b+pt	-	09	07	17	1 ssc	-	09	11	06	1 pt	-	09	13	46	1 pt	-
09	22	45	1 si	-	10	11	20	1 b+pt	-	11	02	12	5 si	-	11	03	44	6 si	-
11	09	30	1 b+pt	-	11	13	18	1 si	-	11	16	30	1 si	-	11	19	31	1 b+pt	-
12	10	49	1 pt	-	12	17	34	2 si	-	12	21	04	2 si	-	12	23	01	1 b+pt	-
13	00	29	2 si	-	13	06	35	2 si	-	13	14	40	1 si	-	13	15	10	1 si	-
13	16	52	1 pg	-	13	19	15	3 si	-	13	23	28	1 si	-	14	00	30	1 si	-
14	14	11	2 b+pt	-	14	17	15	1 b+pt	-	14	17	32	1 b+pt	-	14	18	59	3 si	-
15	01	53	2 b+pt	-	15	05	30	2 b+pt	-	15	07	40	3 b+pt	-	15	13	48	1 si	-
15	18	46	7 b+pt	-	15	20	56	1 ssc	-	15	21	38	1 ssc	-	15	22	00	8 ssc	-
16	02	34	1 si	-	16	07	17	1 si	-	16	12	14	1 b+pt	-	16	12	53	5 b+pt	-
16	14	40	1 pg	-	16	15	30	1 pg	-	16	23	44	1 b+pt	-	17	04	20	1 pg	-
17	10	20	1 pt	-	17	12	00	1 b+pt	-	17	16	01	2 b+pt	-	17	21	36	1 pt	-
17	23	15	1 pt	-	17	23	37	4 b+pt	-	18	15	06	1 pt	-	19	04	09	1 si	-
19	05	05	1 ssc?	-	19	10	20	2 si	-	19	12	05	4 si	-	19	12	20	3 si	-
20	00	05	1 si	-	20	05	16	1 si	-	20	06	33	1 ssc	-	20	21	12	1 pt	-
21	11	45	2 b+pt	-	21	14	29	2 pt	-	21	15	19	7 b+pt	-	21	16	02	1 b+pt	-
21	18	22	9 si	-	21	18	50	1 b+pt	-	22	01	10	1 si	-	22	02	00	1 b+pt	-

TABLE 4 MINOR DISTURBANCES 1960 - continued

(NOVEMBER)

d	h	m	d	h	m	d	h	m	d	h	m	d	h	m
22	07	35	1	b+pt	-	22	11	00	4	si	-	22	11	22
22	21	35	2	b+pt	-	22	22	07	4	b+pt	-	23	02	18
24	00	30	1	pt	-	24	01	45	8	b+pt	-	24	02	11
24	06	55	1	b+pt	-	24	12	53	1	ssc	-	24	17	07
24	22	41	2	b+pt	-	25	02	55	3	b+pt	-	25	03	40
25	09	16	1	si	-	25	10	00	4	b+pt	-	25	13	27
25	20	08	8	b+pt	-	25	20	54	7	b+pt	-	25	21	58
26	03	58	1	b+pt	-	26	04	15	1	b+pt	-	26	07	40
26	12	10	1	b+pt	-	26	19	51	7	b+pt	-	26	20	56
26	23	46	2	b+pt	-	27	06	34	2	pt	-	27	07	47
27	13	21	1	pt	-	27	13	33	1	pt	-	27	16	02
27	20	19	1	pt	-	27	23	19	1	b+pt	-	28	00	15
28	12	31	2	b+pt	-	28	12	51	1	b+pt	-	28	21	30
29	04	15	2	b+pt	-	29	19	13	7	pt	-	29	21	17
29	22	10	2	pt	-	29	22	38	1	pt	-	30	01	13
30	03	24	1	b+pt	-	30	03	43	3	b+pt	-	30	17	12

DECEMBER

01	00	07	2	si	-	01	00	42	1	si	-	01	02	56
01	03	00	8	si	-	01	03	46	1	si	-	01	05	02
01	07	30	1	b+pt	-	01	07	43	1	si	-	01	08	25
01	11	23	1	b+pt	-	01	15	11	7	b+pt	-	01	16	39
01	21	45	1	b+pt	-	01	22	10	5	b+pt	-	01	22	27
02	05	28	1	si	-	02	08	46	1	ssc	-	02	12	27
02	20	02	9	b+pt	-	03	09	23	3	b+pt	-	03	16	24
04	06	16	2	b+pt	-	04	11	15	2	pt	-	04	14	36
04	15	40	1	b+pt	-	04	22	42	8	pt	-	05	11	03
05	16	57	1	b+pt	-	05	17	12	1	b+pt	-	06	04	43
06	16	13	1	si	-	06	20	54	4	b+pt	-	07	01	50
07	10	10	1	b+pt	-	07	12	14	4	b+pt	-	07	13	10
07	19	37	3	si	-	07	21	28	1	pt	-	07	22	23
08	04	52	4	si	-	09	12	13	1	pt	-	09	16	42
09	23	16	3	b+pt	-	10	15	42	4	pt	-	01	16	18
10	23	56	1	pt	-	11	00	30	1	pt	-	11	05	37
11	11	26	1	pt	-	11	15	58	1	pt	-	11	20	06
11	22	25	1	pt	-	11	23	53	2	b+pt	-	12	00	14
12	16	09	1	b+pt	-	12	17	26	2	pt	-	12	18	33
13	00	54	1	pt	-	13	15	04	1	si	-	13	16	35
14	02	10	1	ssc	-	14	04	12	1	si	-	14	06	26
14	09	13	5	ssc	-	15	06	25	1	ssc	-	15	13	53
15	16	33	1	b+pt	-	15	17	46	3	pt	-	15	18	21
15	20	00	2	b+pt	-	15	20	31	1	b+pt	-	15	20	55
15	21	48	1	pt	-	15	22	31	1	b+pt	-	15	23	50
16	06	24	2	si	-	16	09	20	3	si	-	16	16	02
16	21	14	2	b+pt	-	17	05	48	1	b+pt	-	17	12	08
17	20	20	3	b+pt	-	17	22	57	1	pt	-	17	23	48
18	07	30	1	b+pt	-	18	10	05	1	si	-	18	14	15
18	18	38	6	b+pt	-	18	19	30	1	b+pt	-	18	23	12
19	14	06	4	pt	-	19	16	18	2	b+pt	-	19	16	40
20	05	49	1	si	-	20	11	28	1	pt	-	20	12	00
20	19	16	1	ssi	-	20	22	06	2	b+pt	-	21	01	23
21	10	30	1	pt	-	21	10	43	1	pt	-	21	13	40
21	14	36	4	b+pt	-	21	16	00	1	pt	-	22	00	02
22	15	22	4	pt	-	22	20	39	3	b+pt	-	22	22	30
23	19	23	3	pt	-	23	20	04	6	pt	-	23	20	19
24	01	50	1	pt	-	24	02	40	1	b+pt	-	24	20	03
25	12	49	4	pt	-	25	13	21	1	pt	-	25	13	38
26	00	18	6	b+pt	-	26	15	15	1	pt	-	26	15	57
27	02	56	9	b+pt	-	27	05	11	4	ssc	-	27	07	01
27	11	00	1	ssc	-	27	11	20	1	pt	-	27	14	57
27	20	51	5	b+pt	-	28	10	27	1	si	-	28	11	00
28	18	22	1	pt	-	29	01	34	2	b+pt	-	29	02	02
29	20	33	1	b+pt	-	29	21	12	1	pt	-	30	04	15
30	11	20	4	b+pt	-	30	15	21	1	b+pt	-	30	17	14
30	18	00	1	b+pt	-	31	08	57	2	b+pt	-	31	17	09
31	18	24	1	b+pt	-				1	b+pt	-	31	17	52

TABLE 5a SOLAR-FLARE EFFECTS (S. F. E. 'S) 1960

Starting-times of solar-flare effects checked by 73 observatories. Observatories near the subsolar point are underlined. A simultaneous ionospheric or radiosolar disturbance or simultaneous chromospheric flare observed on the sun has been indicated by underlining the time. Stations near the twilight-zone are indicated by dotted brackets. Stations in full dark are given in parentheses. Stations on the night-side of the Earth which gave a negative or doubtful answer have been omitted. Stations whose checking-lists have not been received, but whose monthly reports have been sometimes taken into account in order to get a better knowledge of the real effect observed (Qu, Ta, Te, Bn, Lr, Bi, El, Hu, Va) are included in square-brackets. Strong effects are marked by an asterisk.

## JANUARY

none

## FEBRUARY

01d 12h 59m\* A: Es St Wi Ni Ha Db CF Ty IK Tl Pe Ks MB (Mu) AA (Gn) Tw -  
B: Le Sw Vl Ma Hb Od Lg Md Eb Ci SM Mc (Hn) [Hu] Tn [Va] -  
C: Lo Wn Kv SJ Pa Lu Hr - D: Nu Tf Fr Ak Wk Ht SB - E: Sr -  
X: Cm LQ Pi Kg - (si: Gt? Fü [Ta] - b: Aq (PM) - bs: Mw).

## MARCH

none

## APRIL

06d 11h 32m\* A: Ni Kv CF Ty IK Pe Ks MB - B: Nu Le Es Wn Wi Sw Vl Gt Cm  
Ha Ma Db Od Lg Aq SM Mc [Lr] Lu Hr - C: Lo Md SJ Pa Tn - D:  
Ir Hb Tf Tk Eb Ci Tl Fr Ak LQ Tw Kg Mw - E: AA - X: St Pi  
(SB) - (si: Fü [Bi]).

## MAY

none

## JUNE

none

## JULY

none

## AUGUST

06d 13h 10m A: Ks - B: Ni Vl Od IK Tl Pe AA Pa Tn Hr - C: Lo Es St Wn Wi  
Gt Ha Kv Ma Fü CF Hb Lg Tf Md Eb SM Tu SJ MB Lu - D: Co  
Nu Le Si Me Sw Cm Db Vi Ty Aq Ci Fr Ak Mc Pi Tw -(si:[Ta]).

11d 19h 26m A: Fr Sj Pi - B: SM Tu Ho Pa [Hu] LQ Tw - C: Le Vl Vi Ap - D:  
Me - E: Co Sr Si Es (Fü) - X: (Aq) (Am) - (si: Ha - ssc: [Te] - bp: [IK]).

14d 05h 17m A: Pe Mu Gu AA Hn Gn - B: Nu Ir Od Tk IK Ak Ka Ky (Mc) PM  
To Wk - C: Sr Le Lo Wi Gt Cm Kv Ma Db Fü CF Hb MB Aq Tf  
Ks Tn - D: Co Es St Sw Ni Ha Md Ap Br Am Kg MI DU Mw - E:  
Wn - X: Ty (Ci).

14d 13h 08m\* A: Le Es St Wn Wi Ni Gt Ha Fü CF Lg Md IK Pe Ks Pa Tn - B:  
Nu Lo Sw Vl Cm Kv Ma Db Od Aq Eb Tl SJ MB Mc [Lr] Lu [Hu]  
Hr - C: Tf Ci Ak Tu LQ Tw - D: Me Tk Fr - X: Ty - (si: Hb SM  
[Ta] AA - ssc: Pi).

## SEPTEMBER

18d 18h 26m A: Tw - B: (Od) Fr SM Tu Ho [Te] SJ Pa [Hu] LQ Pi - C: Vi - D:  
Co Le Si Es Me St Ci MB Ap - X: (DU).

21d 08h 28m A: Mu AA Lu Tn Gn - B: Nu Gt Db Fü Ty Od Tl Ak Hn Hr - C:  
Le Lo Es Wn Wi Ir Sw Cm Kv CF Hb Lg Tf Tk Md Eb Ci Pe SM  
- D: Ni Vl Ha Ma Mb Aq Ka Ky MB Mc Kg Wk Mw - X: St IK(Br)  
DU - (si: (Ho)).

TABLE 5a SOLAR-FLARE EFFECTS (S. F. E. 'S) 1960 - continued

## OCTOBER

11d 11h 12m A: Es Db Cf Hb Ty Lg Ci Tl - B: (Ir) Sw Vl Cm Kv Fu Od Ik Eb  
Pe Sm [Ta] MB AA Lu (Ap) Tn LQ Pi Hr Tw - C:Nu Le St Wn Wi  
Gt Ma Aq Md Ak SJ Mc Wk - D: Lo Ni Tf Tk Ks Kg - E: Sr (Fr)  
(MI) - X: (Mu) Pa Ht - (si: Ha ? Mw ).

## NOVEMBER

none

## DECEMBER

none

TABLE 5b DOUBTFUL SOLAR-FLARE EFFECTS 1960

Starting-times of presumed solar-flare effects checked by 73 observatories. Observatories near the subsolar point are underlined. A simultaneous ionospheric or radiosolar disturbance or simultaneous chromospheric flare observed on the sun has been indicated by underlining the time. Stations near the twilight-zone are indicated by dotted brackets. Stations in full dark are given in parentheses. Stations on the night-side of the Earth which give a negative or doubtful answer have been omitted. Stations whose checking-lists have not been received, but whose monthly data have been sometimes taken into account in order to get a better knowledge of the real effects observed (Qu, Ta, Te, Bn, Lr, Bi, El, Hu, Va,) are included in square-brackets. Effects which very probably are real sfe are indicated by an asterisk.

## JANUARY

20d 07h 23m	A: Ty Od IK Pe Mu (SJ) AA Gu (Tw) - B: Nu (Le) (Vi) Tk (Fr) Ak (SM) (Pa) [Lr] [El] Tn Mw - C: Ir Sw Gt Kv Hb Md Mc Hn Lu PM SB - D: Ni Cm Aq Eb Br Am Kg Ht - E: (Sr) (St) Tf To Wk - X: (Ci) (LQ) )Pi( Gn Hr MI - (si: Fü Ka Ky).
30d 11h 15m	A: Tk Pe - B: Kv Db Fü CF Hb Ty Od IK (Mu) Mc Tn [Gu] - C: Le Lo St Wn Sw Gt Cm Ha Aq Md Ci Tl Ak SM MB Pa Lu [El] Hr Tw Wk Mw - D: Nu Es Wi Ni Vl Lg Tf Eb SJ DU Ht SB-X: Ma Ks LQ Pi Kg - (si: AA - b: [Bn] - bp: [Bi]).

## FEBRUARY

04d 13h 12m	A: AA Tw - B: Db Ty Od Ak MB (Mu) Pa (PM) [Hu] Hr - C: Wn Sw Gt Ha Kv Ma IK Eb Ci Tl Fr Pe SM Ks SJ Mc Lu Tn - D: Nu St Wi Ni Vl Cm Hb Lg Aq Tf Md Wk Mw Ht SB - E: (Sr) Le Lo Es Fü CF [Tu] - X: LQ Pi Kg.
10d 11h 42m	A: (Mu) - B: Db Cf Od Lg MB AA Pa [El] - C: Nu Le Lo Es Wn Wi Sw Gt Cm Kv Ma Fü Hb Ty Tk Md IK Ci Tl Pe Ak SM Mc Tn Hr - D: St Ni Vl Ha Aq Tf Eb SJ Lu Wk Mw SB - E: (Ka) Ks (Ky) Tw - X: LQ Pi Kg.
11d 10h 39m	A: Od IK MB (Mu) AA - B: Le (Ir) Cm Kv Ma CF Ty Lg Tl Ak Pe Pa (Hn) (PM) Gn - C: Nu Lo Es Wn Sw Gt Ha Db Fü Hb Aq Md Eb Ci SM Ks Mc Tn Hr Tw - D: St Wi Ni Vl Tf Tk Wk DU Mw Ht SB - X: (Sr) Lu LQ Pi Kg (Mi).
22d 13h 54m	B: Tl (Mu) AA [El] Hr - C: Es Lg Eb Ci Pe SM SJ Pa Tn - D: Nu Le Lo St Wn Wi Sw Ni Gt Cm Ha Kv Ma Db Fü Hb Ty Od Aq Tf Md IK Fr Ks Tu MB Mc Lu Tw Mw - E: CF - X: LQ Pi Kg -(pt:Vi).

## MARCH

21d 15h 27m	B: Wi Ty Od IK Pe SM [Hu] - C: St Sw Kv Db Hb Aq Md Fr Tu SJ Pa Tw - D: Nu Le Lo Si Me Wn Wi Vl Gt Cm Ha Ma Vi Fü Eb Ci Tl Ks MB Mc Lu Hr - E: Es CF Lg AA - X: LQ Pi.
29d 09h 17m	A: Es Od Ks AA - B: St Ma Db Hb Ty Lg IK Pe - C: Le Wn Wi Sw Cm Ha Kv Fü Ci Tl Ak SM MB? Mu Wk - D: Nu Ir Ni Vl Tf Tk Eb Ky Mc Lu Gn Hr Kg - E: (Sr) Lo Tn Mw - X: CF (LQ) (Pü-(si: Gt Aq?) Md? - bps: (Tu)).
29d 10h 47m	A: St Ks Tw - B: Le Ha Kv Db Hb Ty Od Lg Tf IK Pe SM (Mu) MB Pa - C: Lo Es Wn Wi Sw Vl Gt Ma Fü Aq Tk Md Ci Ak SJ Lu - D: Nu Ir Ni Eb Mc Hr Kg - E: (Sr) Cm Tl Tn Mw - X: CF LQ Pi - (si: AA).

## APRIL

02d 08h 36m	A: Ty Pe (Gu) Mu (PM) - B: Es Ir Gt Db CF [Lr] Hr - C: Sw Ma Hb IK SM Mo - D: Ni Vl Tf Eb MB Lu - E: (Sr) Nu Le Lo (Si) St Wn Wi Cm Ha Kv (Vi) Fü Od Mb Lg Aq Tk Md Ci Tl (Fr) Ka (Tu) Ky (Pa) (Hn) Tn Kg (DU) (Tw) Mw - X: Ak (Pi) - (si: AA [Bi] (Br) (To) (Am) - b: Gn).
09d 10h 50m	B: Ni Kv Ty Od MB (Gu) [Lr] Lu - C: Nu Le Lo Wn Wi Ir Sw Gt Ha Hb Tk IK Pe SM Mc Tn - D: Es St Vl Ma Db Fü Aq Tf Md Eb Ci Tl Fr Ak Ks SJ LQ Tw Kg Mw - E: Cm CF AA Pa Hr - X: Lg Pi

TABLE 5b DOUBTFUL SOLAR-FLARE EFFECTS 1960 - continued

## (APRIL)

18d 09h 25m A: AA - B: Fü Od Mc - C: Lo Wn Wi Tk Md IK SM Mu Tn Hr - D: Nu St Ir Sw Ni Vl Gt Cm Ha Kv Ma Db Hb Lg Aq Tf Ci Tl Ak Ky MB Lu Gn Kg Mw - E: (Sr) Le Es CF (Fr) - X: Ks (Pi) - (b: Ty Eb Pe [Bn] (Tw)).

22d 10h 20m\* A: Od IK Ks (Mu) AA - B: Ty Tk Pe Ak MB Mc Tn Hr - C: Nu Lo Wn Ir Kv Ma Db Fü Aq Tf Md Eb SJ (Hn) Lu (Ap) (Gn) - D: Le Es St Wi Sw Ni Vl Gt Ha Hb Lg Ci Tl Kg Mw - E: CF - X: Cm Pa (Br) (Pi) - (si: (Tw) - bs: [Bn] - pt: SM).

## MAY

04d 10h 13m B: Wn IK Tl Ak Tn Hr - C: Le Db Lg Md SM Mc - D: Nu Lo Es St Wi Ir Sw Ni Vl Gt Cm Ha Kv Ma Fü Hb Ty Od Aq Tf Ci Pe SJ MB Mu AA Lu Kg - E: CF - X: Pa (Pi) (Am) - (b: Eb Ks? [Qu][Ta]).

13d 05h 18m A: Ky - B: Od Mb Tk Eb Ka PM - C: Le Wn Sw Db Hb Ty IK Tn - D: Sr Lo Es St Ni Vl Gt Cm Ha Ma Lg Aq Tf Md Tl Ak Ks Gu Hn Br To Am Kg MI - E: Co Nu Wi Fü CF AA Wk Mw - X: Kv (Pi) - (b: Pe? Mu Gn - bp: Ir (Lu) - pt: (LQ)).

26d 09h 14m B: Le Db Od AA [Lr] - C: Nu Lo Es St Wn Wi Ir Sw Gt Hb Tf Tk IK Tl Pe Ak SM Ks Mc Lu - D: Sr Ni Vl Cm Ha Ma Fü Ty Mb Lg Aq Eb Ci Ka Ky MB Mu Tn Gn Kg - E: Kv CF Md (Fr) Hr (Mw) - X: (Pi).

## JUNE

02d 09h 00m A: Ty Ks Mu - B: Od Lg Tk IK Pe Ak SM (Gu) (Pa) [Lr] (Hn) (PM) Gn Hr - C: Nu Ir Cm Kv Ma Fü Hb Aq Tf Md Mc Lu Tn - D: Sr Le Lo Es St Wn Wi Sw Ni Vl Gt Ha Db CF Mb Ci Tl Ka Ky Kg - E: MB - X: Eb - (si: AA).

02d 09h 36m\* A: Ty Od Pe Ks Mu - B: Ir Vl Kv Tk MD IK Ak MB (Gu) (Pa) Mc [Lr] (Hn) (PM) (Ap) (Gn) Hr (Am) - C: Es Wn Wi Sw Gt Cm Ma Db Fü CF Hb Ag Tf Eb Tl SM Lu Tn - D: Sr Nu Le Lo St Ni Ha Mb Lg Ci Ka Ky Kg - (si: AA).

15d 02h 52m\* A: Gu - B: (Ma) Tk IK Hn PM - C: Nu Kv Od Mb Ak Ka Ky - D: Co Sr Le Lo Si Me Ir Sw Vi Tf Ks Ho Ap Gn To Am MI Du - X(Ci) Br (Tw) (Ht) - (si: Mu - bp: (Hr?)).

19d 13h 32m A: Ni Gt Pe - B: Db CF Od Lg IK Ci Tl MB [Hu] - C: Le Es Wn Wi Sw Ha Kv Ma Fü Ty Eb SM Pa Hr - D: Co Nu Si Me St Vl Cm Vi Hb Tf Tk Ak Tu SJ AA Mc Lu Tn LQ PI Tw - E: Lo Aq Md Ks - X: Fr.

20d 01h 28m\* A: Gu Gn - B: (Wn) (SM) (AA) Hn PM Ap - C: Ir Vi Mb Ka Tu Ky - D: Sr Nu Si Me Ak Ho Br To Am MI - E: Co (Mw) - X: (Ty) (Ci) - (si: Mu - ssc: Tk).

26d 04h 30m\* B: Ir Ak Mu Gu (SB) - C: Sw Gt Hb Mb Ka Ky AA PM Gn - D: Co Si Es St Ni Vl Ha Ma Aq Tf IK Ks Ho Ap To Kg MI - E: Sr Nu Le Lo Wn Wi Cm Kv Db (Vi) Fü CF (Lg) Tk Md (Fr) Pe (Tu) (SJ) (Pa) Hn Br (Hr) Wk (Mw) - X: Ty (Ci) Tn Am - (pg: Od).

## JULY

11d 09h 39m\* A: Ks Mu AA Mc Tn - B: Es Fü CF Od Tk IK Ak SM MB(Gu) Pa [Lr] (Hn) Lu (Gn) Kg (Wk) - C: Le Lo I Sw Gt Cm Kv Ma Hb Ty Tf Md Ci Tl Hr - D: Sr Nu St Wi Ni Ha Db Mb Lg Ag Eb Ka Ky - E: Wn (Fr) (TU) - X: Vl (LQ) - (si: (Tw) - b: Pe (Am) - bs: ([Te]) - bps: (PM)).

18d 11h 01m A: Od (Mu) - B: Ir Vl Db Ty Tf IK Pe Ak Mc - C: Nu Le Es Sw Gt Cm Ha Kv CF Hb Tl SM Ks MB AA Pa Tn - D: St Wi Ni Lg Eb Ci Fr SJ Lu Kg - E: Lo (Si) Wn Ma Fü (Mb) Ag Tk Md (Ka) (Tu) (Ky) Hr - X: (LQ) (Ht).

20d 07h 14m\* A: Od Ks AA Gn - B: Es St Ir Sw Vl Db Hb Lg Tk Md IK Tl Ak Mu (Pa) Mc Tn Hr (Tw) - C: Le Wi Gt Cm Kv Ma Fü CF Ty Ad Tf Eb Ci Pe MB PM - D: Sr Nu Lo Ni Ha Mb Ka Ky Gu Hn To Kg - E: Wn Mw - X: Lu - (si: SM).

TABLE 5b DOUBTFUL SOLAR-FLARE EFFECTS 1960 - continued

## (JULY)

21d 07h 06m B: Nu Le Es Wi Vl Db Fü CF Od Lg SM Mu AA (Pa) - C: Lo Wn Ir Sw Gt Cm Ha Kv Ma Hb Md IK Ci Tl Pe Ks Hn PM Tn Hr - D: Sr Ni Mb Aq Tf Tk Eb Ak Ka Ky MB Gu Mc Lu Gn To Kg-X: St Ty - (si: Mw - pt: (Am)).

22d 07h 44m A: Ks AA - B: Nu Es Ir Db Od Lg Mu Hr - C: Le Lo Wi Sw Gt Ha Kv Ma Fü Hb Ty Tf Tk IK Pe SM Hn Lu PM - D: Sr Ni Vl CM Mb Aq Md Eb Ci Tl Ak Ka Ky MB Gu Mc Tn Gn Kg Mw - E: Wn - X: St CF (LQ).

## AUGUST

01d 10h 15m A: Lg - B: Nu Le Es Wi Ir Vl CF Hb Ty Od Pe SM AA ([Te]) - C: Wn Sw Gt Ha Ma IK Mu Pa Lu Hr - D: St Ni Tf Tk Eb Tl Ak MB Mc Tn Kg - E: Sr Lo Kv Db Fü Aq Md Ci Fr Ks (Tu) SJ (Mw) - X: Cm (LQ) - (b: (Am) - bp: (DU)).

05d 14h 29m A: Es Ty - B: Co (Sr) Nu Le St Vl Ha Db Fü CF Hb Od Lg IK Tl Lu [Hu] LQ Pi Tw - C: Lo Si Wi Sw Gt Cm Kv Ma Vi Eb Ci Fr Pe SM Tu SJ AA Pa - D: Me Ni Aq Tf Tk Md Ak MB Mc Hr - (si: Wn).

06d 15h 11m\* A: Tl - B: Wi Ni Vl Gt Db Fü Od Lg Eb Ci AA Pa Hr - C: Le Es St Wn Cm Ha Ma Hb Ty Aq Md IK Pe Tu SJ Lu LQ Pi Tw - D: Co Nu Lo Si Me Sw Kv Vi Tf Fr Ak Ks MB Mc - E: CF - (si: SM).

13d 11h 33m A: Ty Od IK Pe - B: Wi Gt Kv Db Fü Hb (Gu) AA (Ap) - C: Le Wn Ir Sw Cm Ma CF Tf Tk Eb Tl Fr Ak SM Ks SJ Mc Lu LQ Hr - D: Es St Ni Vl Lg Ci MB Tn Kg - E: Lo - (b: (Am)) - bp: Nu Md - pt: Ha Ag Pi).

21d 13h 01m A: CF Pe Ks Tw - B: Nu Vl Gt Ma Db Fü Ty Od Tl SM MB (Mu) [Hu] (Ap) (SB) - C: Le Wn Sw Cm Ha Kv Hb Md IK SJ Pa Mc Tn LQ Pi - D: Me Ni Tf Eb Ak - E: Lo Es St Wi (Mb) Lg Aq Tk Ci Fr (Ka) Tu (Ky) Hr - X: Lu - (si: AA - b: (Am)).

## SEPTEMBER

15d 10h 11m\* A: Od IK Ks - B: Ir Vl Db Eb (Mu) (Gu) Mc Tn Gn (Am) - C: Nu Le Lo Wn Wi Sw Gt Cm Kv Ma Fü CF Hb Lg Aq Tf Tk Tl Pe Ak SM Pa Hr Wk Mw - D: Es St Ni Ha Ty Md Ci MB Lu Kg - X: (LQ) (Pi) - (si: AA).

25d 01h 04m\* A: Ty IK Ks - B: Kv Fü Hb Od Lg SM (Mu) Lu (Ap) Tn - C: Nu Lo Wi Ir Gt Cm Ma Db Aq Tf Tk Md Tl Pe Ak AA Pa Mc Gn - D: Le Es St Wn Sw Ni Vl Ha CF Eb Ci MB Hr Kg Wk Mw - X: (Br).

26d 05h 24m A: (SM) Ks Mu AA Ap Tn Gn Am (Tw) - B: Ir Od (Lg) Tk Gu (Pa) [Lt] Hn SB - C: Sw Gt Kv Fü Hb Tf' IK Pe Ak Lu PM - D: Nu Lo Ni Cm Ty Mb Aq Md Ka Ky Br Hr To Kg MI Wk DU Mw Ht - E: Wn (CF) (SJ).

## OCTOBER

11d 14h 06m A: St Db Fü CF Tl Pe - B: Nu (Ir) Vl Ma Ty Od Lg Md IK Si SM [Te] Pa Pi Tw - C: Le Lo Es Sw Ha Gt Kv Hb Aq Tf Eb Tu SJ MB AA Mc LQ Hr - D: Ni Ks Lu Tn - E: (Sr) Wi CM Fr (MI) - X: (Mu) (Ht) - (b: Wn (Gn)).

14d 10h 15m A: (Mu) AA Tn - B: (Si) Wi Ir Kv Db Fü Ty Od Lg IK Tl Ak SM (Gu) Pa (Hn) Mc (Ap) Gn (Am) - C: Le Lo Es St Wn Sw Vl CF Hb Tf Tk Md Es Ci Ks Lu Hr Tw - D: Ni Gt Cm Ha Ma Aq MB LQ Kg Wk Mw SB - E: Nu - X: Pe Pi.

## NOVEMBER

08d 06h 42m A: Od Mu Gn - B: Ir Kv Fü Tf IK Ak [Qu](Pa) Hn (Ap) Tn (LQ) Am Wk DU - C: Sw Pe Ks AA Mc PM Br Hn - D: Nu Ni Cm Hb Ty Aq Tk Md To Kg MI Mw Ht SB - X: (Ci) Lu (Pi) - (si: Mb Ka Ky (Tw)).

08d 11h 05m A: Gt Db Fü CF Ty Od Md IK Tl (Mu) (Am) Tw SB - B: Nu Le Lo Es St Wi (Ir) Sw Vl Kv Hb Lg Tf Tk Ci Pe Ak SM AA (Gu) Pa

TABLE 5b DOUBTFUL SOLAR-FLARE EFFECTS 1960 - continued

## (NOVEMBER)

(Hn) Mc (Ap) Tn LQ {Gn} Hr - C: Wn Cm Ha Ma Aq Eb Ks SJ Lu  
 - D: Ni MB Kg Wk DU Mw Ht - X: Pi - (b: [B]).

12d 13h 25m

A: Ni Gt Cm Ha Ty Aq IK MB AA Hr - B: Es Wi Sw Db Od Eb (Ak)  
 Pa - C: Le Lo St Wn Kv Hb Ci Ks Mc - D: Nu Tf Kg Wk Mw Ht  
 SB - E: CF - X: (Hn) (PM) - (si; Ma Md - bs; Vl - ssc; (Ir) Fü Lg  
 Tl Fr Pe SM (Ho) SJ Lu Tn LQ Pi Tw (DU)).

15d 02h 21m\*

A: CF Mb Ka Ky Ho Mu Gu Hn PM Ap Tn Gn Am Ht Sb - B: (Sw)  
 (Ma) (Db) (Ty) (Lg) (Aq) (Pe) (Ak) (SM) (Hr) To (Tw) - D: Kg - E:  
 (Co) Sr (Lo) (Es) (Wi) (Cm) (Kv) (Md) (Tl) (Fr) (Tu) MI DU-X:(Vi)  
 (Ci) - (si: Ir? (Od) (AA) Br Mw - b: (Wn) (Ha) (Fü?) (IK) (Eb)-ssc:  
 Wk).

## DECEMBER

none

## TABLE 5c REJECTED SOLAR-FLARE EFFECTS 1960

Starting-times of presumed cases, presented by one or more observatories, which most probably do not represent real solar-flare effects.

## JANUARY

06d 18h 59m - 12d 12h 59m - 31d 10h 43m -

## FEBRUARY

01d 07h 08m - 01d 08h 55m - 03d 12h 30m -

## MARCH

06d 10h 01m - 29d 15h 06m -

## APRIL

02d 18h 19m - 05d 16h 01m -

## MAY

11d 19h 30m - 25d 15h 43m -

## JUNE

10d 11h 27m - 25d 10h 24m - 26d 13h 58m - 27d 11h 48m - 27d 18h 40m -  
28d 18h 38m -

## JULY

07d 17h 45m - 08d 14h 30m - 23d 18h 04m - 25d 14h 18m - 26d 17h 09m -  
27d 14h 11m -

## AUGUST

16d 11h 44m - 21d 15h 47m - 25d 14h 26m - 26d 12h 29m - 26d 14h 24m -

## SEPTEMBER

02d 02h 39m - 22d 17h 03m - 29d 14h 48m -

## OCTOBER

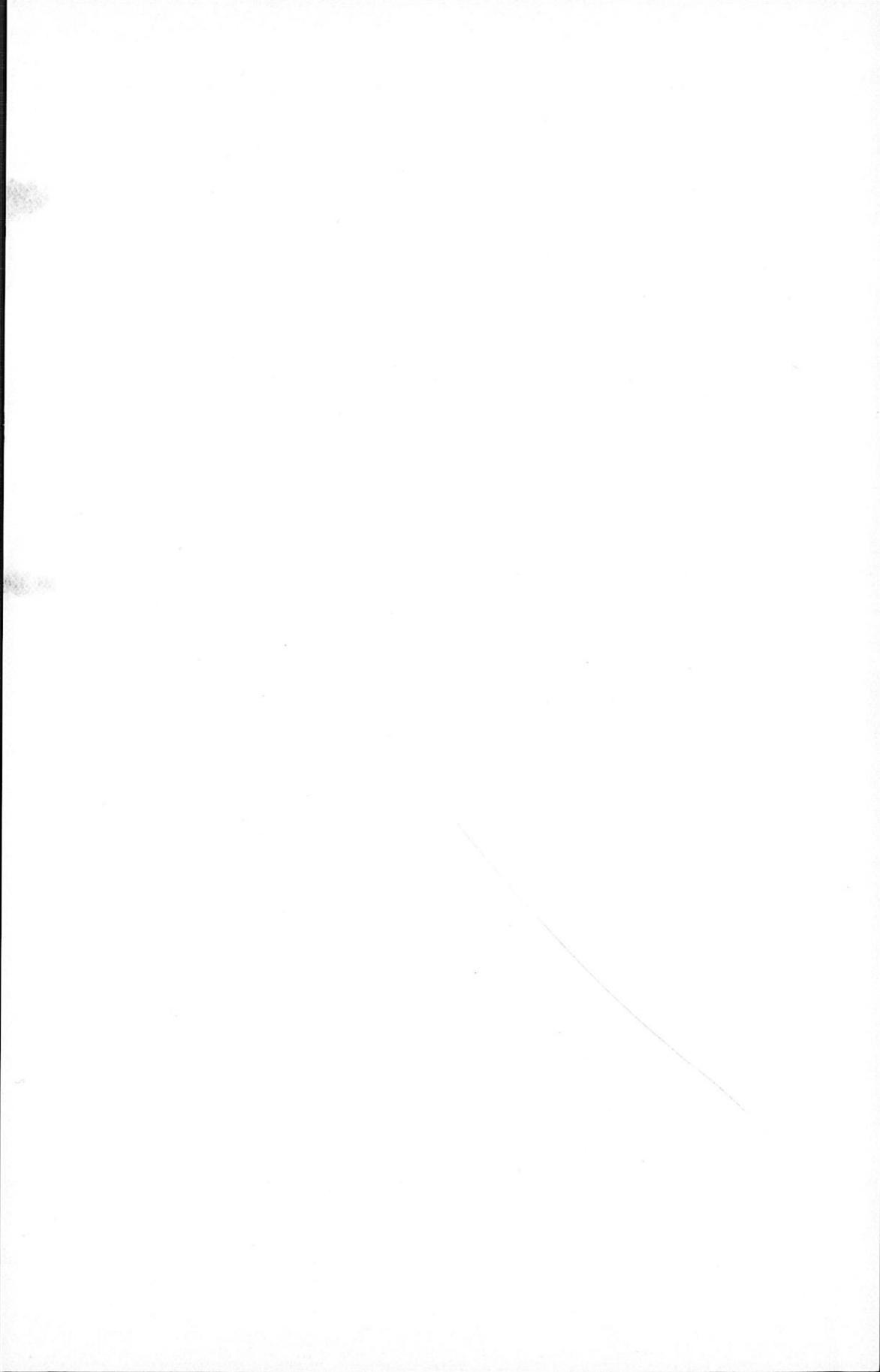
23d 17h 25m - 29d 10h 24m -

## NOVEMBER

10d 10h 17m - 22d 17h 22m -

## DECEMBER

06d 11h 54m - 17d 23h 27m - 19d 12h 57m - 24d 16h 19m





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Photographic Atlas of Auroral Forms and Scheme for Visual Observations, 1930; second edition, 1951 .	Out of print
Supplements to the Photographic Atlas of Auroral Forms, I, 1932	Out of print
Caractère Magnétique Numérique des Jours (from 1 January 1930 to 31 December 1939) and Caractère Magnétique Numérique des Jours pendant l'Année Polaire 1932- 1933 (in complete sets only) . . . . .	\$ 5.60

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