Hα SOLAR FLARES

FEBRUARY 1975

OBSERVATORY	OBSERVED UT DATE FEB	START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY	DURATION MIN.	IMPORTANCE	OBS. COND.	TYPE	MEASUREMENTS TIME UT	MEAS. AREA Mill. of Disk	CORR. AREA Sq. Deg.	REMARKS
RAMY	02	1310	1340	1314	S12	E61	.870		7.1	30	SF	4	C		36		DE
HUAN	02	1509	1516		S13	E63	.886		7.4	7	SF	1	C				
MCMA	02	1510	1520	1511	S12	E62	.878	13465	7.3	10	SN		C	1511	25	.5	D
MCMA	02	1720	1731	1724	S12	E60	.861	13465	7.2	11	SF		C	1724	25	.5	D
ABST	03	0840	0901	0848	S07	E61	.871		7.9	21	SN		C	0848	87	1.7	DJ
ABST	03	0920	0935	0926	S08	E62	.879		8.0	15	SF		C	0926	96	1.9	DJ
HTPR	03	1020	1027	1024	S09	E58	.843		7.8	7	SF		C				
HTPR	03	1020	1027	1022	S09	E58	.843		7.8	7	SF		C	1022	10	.2	K
HTPR	03	1025	1028	1025	S12	E60	.861		7.9	3	SF		C	1025	10	.2	
HTPR	03	1028	10550	1032	S08	E59	.853		7.9	27D	SF		C	1032	20	.4	
HTPR	03	1031	10550		S12	E48	.740		7.0	24D	SF		C	1034	20	.2	
HTPR	03	1052	10550		S10	E57	.834		7.7	3D	SF		C	1052	10	.2	
HTPR	03	1128	1130	1129	S10	E57	.834		7.8	2	SF		C	1129	10	.2	
HTPR	03	1133	1142	1134	S10	E57	.834		7.8	9	SN		C	1134	30	.5	K
HTPR	03	1205	1208	1207	S08	E58	.844		7.9	3	SF		C	1207	10	.2	
HTPR	03	1206	1208	1208	S10	E56	.824		7.7	2	SF		C	1208	10	.2	
HTPR	03	1211	1235	1215	S08	E58	.844		7.9	24	SN		C	1215	10	.2	
HTPR	03	1220	1227	1223	N01	E90	1.000		10.3	7	SF		C	1223	10		
HTPR	03	1236	12570		N01	E90	1.000		10.3	21D	SF		C	1239	20		
HTPR	03	1245	1247	1246	S10	E56	.824		7.7	2	SF		C	1246	10	.1	
RAMY	03	1248	1257	1249	S 7	E56	.825		7.7	9	SF	3	C		27		DE H
HTPR	03	1249	1257	1250	S10	E56	.824		7.7	8	SB		C	1250	40	.7	
HTPR	03	1435	1441	1437	S08	E57	.834		7.9	6	SF		C	1437	10	.1	
HTPR	03	1515	1535	1516	S08	E56	.825		7.8	20	SB		C	1516	20	.3	EK
RAMY	03	1515	1533	1518	S 6	E58	.845		8.0	18	SF	3	C		20		DE
HTPR	03	1515	1535	1526	S08	E56	.825		7.8	20	SB		C				
MCMA	03	1516	1529	1518	S08	E58	.844	13465	8.0	13	SN		C	1518	35	.6	E
BOUL	03	1517	1539	1518	S 9	E57	.834		7.9	22	SF	2	C	1518	32	.6	
HTPR	03	1536	1553	1548	S12	E45	.704		7.0	17	SF		C	1548	20	.3	K
BOUL	03	1547	1600	1552	S10	E56	.824		7.9	13	SF	2	C	1552	21	.4	
HTPR	03	1551	1554	1552	S10	E55	.814		7.8	3	SN		C	1552	20	.3	
RAMY	04	2156	22060	2157	N 4	E64	.904		9.7	100	SF	2	C		36		DE
MANI	05	0049	0057	0052	N02	E64	.902		9.8	8	SN	2		0052	50	1.0	F
MANI	05	0655	0714	0657	N03	E62	.888		9.9	19	SF	2		0657	40	.8	F
HUAN	05	1324	1335	1330	N02	E54	.815		9.6	11	SF	1	C	1330	25	.4	DT
HUAN	05	1352	1358	1354	N02	E54	.815		9.6	6	SN	1	C	1354	45	.8	
MEUD	05	1352	1358	1352	N02	E56	.834		9.8	6	SF		C	1352	30	.5	
RAMY	05	1354	1406	1356	N 4	E53	.808		9.6	12	SN	3	C		36		DE H
HERS	05	1356E	1409	1356	N03	E54	.816		9.6	130	SN		P	1356	43	.8	E
HUAN	05	1432	1443	1438	N02	E53	.804		9.6	11	SF	2	C	1438	50	.9	
RAMY	05	1510	1528	1514	S 9	E26	.437		7.6	18	SF	3	C		27		DE
HUAN	05	1511	1522	1513	S11	E26	.440		7.6	11	SF	1	C	1513	40	.5	E
RAMY	05	1531	1548	1536	N 4	E52	.798		9.5	17	SN	3	C		27		DE H
HUAN	05	1532	1539	1536	N02	E54	.815		9.7	7	SN	2	C	1536	50	.9	E
MEUD	05	1532	1537	1533	N02	E55	.824		9.8	5	SF		C	1533	30	.5	
HUAN	05	1557	1606	1600	N02	E54	.815		9.7	9	SF	1	C	1600	40	.7	
HUAN	05	1639	1659	1645	N02	E53	.804		9.7	20	SN	1	C	1645	75	1.2	
RAMY	05	1643	1657	1647	N 4	E51	.787		9.5	14	SF	3	C		54		DE
HUAN	05	1735	17570		N02	E52	.794		9.6	22D	SB	1	P	1756	40	.7	
RAMY	05	1753	1814	1758	N 4	E50	.777		9.5	21	SN	3	C		63		F
PALE	05	1755	1821	1803	N 4	E56	.837	13470	9.9	26	1B	2	V		120		DE H
PALE	05	1755	1821	1803	N 4	E56	.837	13470	9.9	26	1B	2	C		120		DE H
HUAN	05	1853	1910D		N02	E52	.794		9.7	17D	SN	1	P	1910	35	.5	E
PALE	05	1911	1932	1918	N 4	E55	.828		9.9	21	SB	3	V		80		DE H
RAMY	05	1911	1922	1913	N 4	E49	.766		9.5	11	SB	3	C		27		DE H
PALE	05	1913E	1932	1918	N 4	E53	.808		9.8	19D	SB	3	C		90		DE H
RAMY	05	1914E	1923	1915	N 4	E51	.787		9.6	9D	SB	4	V		25		DE H
RAMY	05	1914E	1923	1915	N 4	E51	.787		9.6	9D	SB	4	C		25		DE H
PALE	05	2100E	2104D	2103U	N 2	E51	.784		9.7	4D	SF	2	C		50		DE
PALE	05	2101E	2121D	2105U	N 3	E51	.785		9.7	20D	SF	2	V		50		DE
RAMY	05	2132	2140	2133	N 4	E47	.744		9.4	8	SF	2	C		20		DE
RAMY	05	2203	22070	2204	N 4	E46	.732		9.4	4D	SF	2	C		27		DE
MANI	05	2256E	2301	2250U	N03	E50	.775		9.7	110	SF	1		2250	40	.6	F
MANI	06	0227	0248	0229	N03	E49	.764		9.8	21	SF	2		0229	30	.4	
MANI	06	0250	0310	0259	N03	E49	.764		9.8	20	SF	2		0259	30	.4	
PALE	06	0254	0309	0259	N 2	E48	.751		9.7	15	SF	2	C		45		DE
PALE	06	0256E	03060	03003	N 2	E49	.762		9.8	100	SF	2	V		40		DE
MANI	06	0510	0542D	0514U	N03	E46	.730		9.7	32D	SF	2		0514	40	.6	H
MANI	06	0510	0542D	0538	N03	E46	.730		9.7	32D	SF			0538	60	.9	
MONT	06	0940	0946	0942	N02	E43	.691		9.6	6	SF		C	0942	20		
MONT	06	1053	1105	1056	S10	E22	.376		8.1	12	SN		C	1056	60		D
MONT	06	1225	1230	1225	N03	E40	.656		9.5	5	SF		C	1225	20		D
BOUL	06	1451	1501	1455	N 1	E38	.624		9.5	10	SF	1	C	1455	32	.4	
CATA	06	1500	1555	1520	N01	E40	.651		9.6	55	SN	3		1520	56	.7	
HUAN	06	1731E	1737		N02	E41	.666		9.8	6D	SF	1	P	1733	35	.5	
HUAN	06	1810	1922		N02	E39	.640		9.7	72	SF	1	C	1852	40	.5	

NOTE: The measured area is now reported in millionths of the solar disk.

Several changes in the presentation of the Grouped Flare Data have been planned to begin with the January 1975 data. The preparation of the new presentation has been delayed because of problems in computer conversions. Therefore, only the observatory flare reports are included here. The grouped flares will no longer be classified as "confirmed" or "unconfirmed". The flare list for this month will be republished later and will include a summary line for each flare.

Hα SOLAR FLARES

FEBRUARY 1975

OBSERVATORY	OBSERVED UT DATE FEB	START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY	DURATION MIN.	IMPORTANCE	OBS. COND.	OBS. TYPE	MEASUREMENTS TIME UT	MEAS. AREA Mill. of Disk	CORR. AREA Sq. Deg.	REMARKS
PALE	06	1811	1913	1832	N 4	E39	.647		9.7	62	SN	2	C		35		DE
PALE	06	1811	1845	1813	N 4	E43	.697		10.0	34	SF	3	V		40		DE
HUAN	06	1925	1928D		N02	E37	.614		9.6	30	SF	1	P	1927	30	.4	
VORO	07	0210	0225	0215	N04	E34	.581		9.6	15	SB		C	0215	99	1.2	EJ
KODA	07	0211E	0426	0218	N03	E33	.563		9.6	135D	SN		P	0218	191	2.0	D
MANI	07	0213E	0216D	0213U	N03	E36	.604		9.8	3D	SF	1		0213	80	1.0	F
HTPR	07	0959E	1012D		N03	E31	.535		9.7	130	SF		C	0959	10	.1	
HTPR	07	1041E	1048D		N03	E30	.521		9.7	7D	SN		C	1048	20	.2	E
WEND	07	1130	1142		N03	E28	.492		9.6	12	SN						
WEND	07	1206	1220		N02	E27	.473		9.5	14	SN						
WEND	07	1349	1401		N02	E27	.473		9.6	12	SF						
WEND	07	1418	1432		N02	E27	.473		9.6	14	SB						
MCMA	07	1419	1425	1420	N03	E27	.478	13470	9.6	6	SF		C	1420	25	.3	D
WEND	07	1452	1500		N02	E25	.444		9.5	8	SN						
MCMA	07	1925	1931	1927	S12	W04	.119	13465	7.5	6	SF		P	1927	30	.3	E
PALE	07	1926	1933	1928	S12	W 4	.119		7.5	7	SF	3	V		30		U
PALE	07	1926	1930D	1928	S12	W 6	.142		7.4	4D	SF	3	C		35		U
HTPR	08	0742	0754	0750	N02	E18	.340		9.7	12	SF		C	0750	20	.2	K
HTPR	08	0812	0821	0814	S15	W14	.279		7.3	9	SF		C	0814	10	.1	
HTPR	08	0831	0902	0834	S15	W14	.279		7.3	31	SF		C	0834	10	.1	
HTPR	08	0958	1015	1004	S15	W13	.265		7.4	17	SF		C	1004	20	.2	
HTPR	08	1030	1105	1032	S15	W16	.307		7.2	35	SF		C	1042	10	.1	
HTPR	08	1030	1105	1042	S15	W16	.307		7.2	35	SF		C				
HTPR	08	1049	1126	1100	S15	W13	.265		7.5	37	SF		C	1100	20	.2	
HTPR	08	1120	1210	1150	N06	E15	.334		9.6	50	SF		C	1150	10	.1	
HTPR	08	1137	1208	1202	S15	W13	.265		7.5	31	SF		C	1202	10	.1	
HTPR	08	1155	1234	1218	S15	W12	.251		7.6	39	SF		C	1218	20	.2	E
HTPR	08	1505	1510	1505	N05	E12	.285		9.5	5	SF		C	1505	10	.1	
HTPR	09	1034	1038	1036	N05	W04	.211		9.1	4	SF		C	1036	10	.1	
ATHN	11	1301	1307	1303	N 4	W27	.484		9.5	6	SF	5	C		48		DE
ATHN	11	1301	1307	1303	N 4	W27	.484		9.5	6	SF	4	V		48		DE
RAMY	11	1301	1316	1306	N 3	W27	.479		9.5	15	SF	4	C		63		DE
HUAN	11	1302	1330	1303	N04	W29	.513		9.4	28	SN	1	C	1303	40	.5	E
LVOV	11	1305E	1315	1306D	N04	W26	.470		9.6	10D	1F		P	1306	400	4.7	E
WEND	11	1315E	1340		N02	W26	.459	13470	9.6	25D	1N		P		500	5.5	
LVOV	13	1303	1330	1311D	N04	W54	.819		9.5	27	1F		C	1311	250	4.5	E
RAMY	13	1308	1332	1313	N 3	W55	.827		9.4	24	SN	4	C		63		F
MCMA	13	1310E	1340		N04	W54	.819	13470	9.5	30D	SN		C	1311	80	1.4	E
HTPR	13	1310	1338	1312	N05	W59	.866		9.1	28	SB		C	1312	80	1.3	E
MCMA	13	1435	1450	1437	N04	W56	.838	13470	9.4	15	SN		C	1437	80	1.5	E
RAMY	13	1435	1452	1437	N 3	W56	.836		9.4	17	SF	3	C		54		F
HTPR	13	1436	1500	1438	N05	W60	.875		9.1	24	SN		C	1438	20	.3	EK
HTPR	13	1455	1505	1500	S10	W78	.975		7.8	10	SF		C	1500	10		
HTPR	13	1458	1601D		N05	W62	.891		9.0	63D	SF		C	1501	10	.2	
BOUL	13	2011	2049D	2019	N 3	W58	.855		9.5	38D	SN	3	P	2019	96	1.8	
HTPR	20	1248	1254	1252	N10	W01	.293		20.5	6	SF		C	1252	20	.2	E
HTPR	20	1305	1325	1320	N10	W02	.294		20.4	20	SF		C	1320	20	.2	E
HTPR	20	1404	1437	1408	N10	W03	.297		20.4	33	SF		C	1408	20	.2	E
HTPR	22	1057E	1106		N02	W02	.161		22.3	9D	SF		C	1057	10	.1	E
HTPR	22	1318	1333	1320	N02	W04	.172		22.3	15	SF		C	1318	20	.2	E
HTPR	23	1400	1408	1405	S10	E16	.277		24.8	8	SF		C	1405	20	.2	
HTPR	24	0800	0820	0816	S09	E04	.076		24.6	20	SF		C	0816	40	.4	ET
HTPR	24	0830	0857	0851	S09	E03	.061		24.6	27	SF		C	0851	30	.3	ET
TEHR	27	0418E	0429	0422	S 8	W31	.511		24.9	11D	SF	4	V		60		F
MCMA	27	1010	1025		S07	W37	.598		24.6	15	SF		C	1016	30	.4	D

DAILY FLARE INDICES
Includes all Flares

Date	Flare Index	HR. OBS.	Date	Flare Index	HR. OBS.	Date	Flare Index	HR. OBS.
750202	1.34	23.3	750210	0.00	20.8	750221	0.00	22.6
750203	11.76	24.0	750211	12.28	18.1	750222	0.28	21.8
750204	0.68	24.0	750212	0.00	23.0	750223	0.22	22.9
750205	17.15	23.1	750213	16.47	13.3	750224	1.33	23.2
750206	8.48	23.9	750214	0.00	23.5	750225	0.00	21.2
750207	24.82	20.0	750215	0.00	23.2	750226	0.00	23.9
750208	0.75	23.5	750217	0.00	23.8	750227	2.38	24.0
750209	0.05	23.7	750220	0.69	21.3	750228	0.00	23.5

When no Flare Index is given, it is 0 for that day.

Hα SOLAR FLARES

Since January 1968 the flare reports published six months after observation have been divided into two tables labeled "confirmed" and "unconfirmed". This separation was felt desirable in 1968 to present the most homogeneous and reliable flare data for use by the scientific community. However, it has become apparent that for small events, which currently constitute the majority of reports, such discrimination is questionable. Therefore, beginning with the January 1975 data, all reported Hα flares are published in one chronological list.

The listing is prepared in cooperation with DASOP (Department d' Astronomie Solaire et Planétaire), Observatoire de Paris, 92190 Meudon, France. For each event there is a group report line more closely resembling the presentation of the flares as they will be published in the "IAU Quarterly Bulletin on Solar Activity" (QBSA). In *Solar-Geophysical Data* the flares as reported by the individual observatories follow the "group report" line. In QBSA only the summary of the observatory contributions is included.

The group report line is intended as a summary of all individual reports. The principal criteria for grouping reports together are flare position and times. The following new rules have been adopted to determine times, areas and importances of grouped events:

-- The beginning time is the time of first observation of an event by an observatory. If there is uncertainty in the beginning time, it is indicated by a "+" sign followed by the difference in minutes between the time of the first observation and the time of the latest observed beginning. More than 9 minutes difference appears as >9. The same applies for times of maximum. When two or more maxima are identified, their times are reported with the same group line.

-- With near agreement among observatories an average of the areas is used in determining importance.

-- With widely varying areas among several observatories the average area is not computed. The importance is estimated from the reported importances. An importance 1 or more is assigned only when reported by several observers or when only a single observatory is operating at the time of observing such a flare.

-- If only one or two observers report a flare of importance 1 or more with considerable disagreement in importance, no importance is assigned and a "?" is inserted in the importance column.

-- Queries are sent to observatories who have reported cinematographic observation at a time when only one or two observatories have reported an event of importance 1 or greater. Any new information thus obtained is included in the flare listing.

The columns in the table are as follows:

-- Group Number and Reporting Observatories using IAU abbreviation (see table on page 11 of February 1975 *Explanation of Data Reports*).
-- The Universal date.
-- Beginning time in UT.
-- Time of maximum phase in UT. (more than one maxima may be listed)
-- Ending time in UT.
-- The heliographic coordinates in degrees for the "center of gravity" of the emission region, corresponding to the time of maximum intensity.
-- The distance from the center of disk in units of disk radius.
-- McMath serial number of the associated plage region.
-- The time of central meridian passage of the position of the flare in tenths of the Universal date.
-- Duration in minutes.
-- The flare importance on the IAU scale of Sf* to 4b. (In the summary line for the group a "?" will be used when there has been too much discrepancy among individual reports to determine accurately the probable importance of the event).
-- Observing conditions where 1 means poor, 2 fair, and 3 good. (Observatories at Ramey, Palehua, Athenes and Tehran use a scale of 1-5).
-- Nature and completeness of available observations where -

C = a complete, or quasi complete sequence of photographs was obtained,
P = one or a few photographs of the event were obtained resulting in incomplete time coverage,
V = all (or most of) the development of the flare was visually observed, or
S = flare was seen visually for a small part of its probable duration.

* For easier visual selection of the more important flares a minus sign, "-", is used to indicate subflares instead of "S".

-- Time of measurement for tabulated areas.
-- Apparent (i.e., projected) area at time of maximum brightness in millionths of solar disk -- this is not necessarily the maximum area. (Prior to January 1975 this measured area in millionths was divided by 97 and was indicated as heliographic square degrees, hence the tabular heading was incorrect and should have been mill/97.)
-- Corrected area in square degrees.
-- Remarks in the IAU system of notes where

A = Eruptive prominence whose base is less than 90° from central meridian.
B = Probably the end of a more important flare.
C = Invisible 10 minutes before.
D = Brilliant point.
E = Two or more brilliant points.
F = Several eruptive centers.
G = No visible spots in the neighborhood.
H = Flare accompanied by a high speed dark filament.
I = Active region very extended.
J = Distinct variations of plage intensity before or after the flare.
K = Several intensity maxima.
L = Existing filaments show signs of sudden activity.
M = White-light flare.
N = Continuous spectrum shows effects of polarization.
O = Observations have been made in the calcium II lines H and K.
P = Flare shows helium D_3 in emission.
Q = Flare shows the Balmer continuum in emission.
R = Marked asymmetry in Hα line suggests ejection of high velocity material.
S = Brightness follows disappearance of filament (same position).
T = Region active all day.
U = Two bright branches, parallel (||) or converging (Y).
V = Occurrence of an explosive phase: important and abrupt expansion in about a minute with or without important intensity increase.
W = Great increase in area after time of maximum intensity.
X = Unusually wide Hα line.
Y = System of loop-type prominences.
Z = Major sunspot umbra covered by flare.

When importance is questionable the list of observatories reporting cinematographic patrol but not reporting flare follows the group report. The abbreviated observatory name is followed by "2" when a second look by the observer still did not identify a flaring event at that time. Observatories not observing the event and not making a second evaluation are followed by "1".

Intervals when no observatory reported times of patrol observation are listed chronologically in the table.

NEW STANDARDIZED FLARE DATA FOR JANUARY - APRIL 1975 ARE ON PAGES 26-40 OF THIS REPORT.

Hα SOLAR FLARES

FEBRUARY 1975

OBSERVATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS			REMARKS
	DATE 1975 FEB	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		COND.	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.	
	02	1020	1038	NO FLARE PATROL													
	02	1228	1234	NO FLARE PATROL													
982 RAMY	02	1310	1314	1340	S12	E61	.870	13465	7.1	30	-F	4	C		36		
GRP61983	02	1509+1	1511	1518	S12	E62	.878	13465	7.3	9	-F						D
HUAN	02	1509		1516	S13	E63	.886	13465	7.4	7	-F	1	C				
MCMA	02	1510	1511	1520	S12	E62	.878	13465	7.3	10	-N		C	1511	25	.5	D
984 MCMA	02	1720	1724	1731	S12	E60	.861	13465	7.2	11	-F		C	1724	25		
	02	2307	2324	NO FLARE PATROL													
985 ABST	03	0840	0848	0901	S07	E61	.871	13465	7.9	21	-N		C	0848	87	1.7	
986 ABST	03	0920	0926	0935	S08	E62	.879	13465	8.0	15	-F		C	0926	96	1.9	
GRP61987	03	1020	1022+3	1028	S10	E58	.843	13465	7.8	8	-F						K
HTPR	03	1020	1024	1027	S09	E58	.843	13465	7.8	7	-F		C				
HTPR	03	1020	1022	1027	S09	E58	.843	13465	7.8	7	-F		C	1022	10	.2	K
HTPR	03	1025	1025	1028	S12	E60	.861	13465	7.9	3	-F		C	1025	10	.2	
GRP61988	03	1028	1032	1055D	S09	E58	.843	13465	7.8	27	-F						
HTPR	03	1028	1032	1055D	S08	E59	.853	13465	7.9	27D	-F		C	1032	20	.4	
HTPR	03	1052		1055D	S10	E57	.834	13465	7.7	30	-F		C	1052	10	.2	
989 HTPR	03	1031		1055D	S12	E48	.740	13465	7.0	24D	-F		C	1034	20		
990 HTPR	03	1128	1129	1130	S10	E57	.834	13465	7.8	2	-F		C	1129	10		
991 HTPR	03	1133	1134	1142	S10	E57	.834	13465	7.8	9	-N		C	1134	30		
GRP61992	03	1205	1207	1208	S09	E57	.834	13465	7.8	3	-F						
HTPR	03	1205	1207	1208	S08	E58	.844	13465	7.9	3	-F		C	1207	10	.2	
HTPR	03	1206	1208	1208	S10	E56	.824	13465	7.7	2	-F		C	1208	10	.2	
993 HTPR	03	1211	1215	1235	S08	E58	.844	13465	7.9	24	-N		C	1215	10		
994 HTPR	03	1220	1223	1227	N01	E90	1.000	13470	10.3	7	-F		C	1223	10		
995 HTPR	03	1236		1257D	N01	E90	1.000	13470	10.3	21D	-F		C	1239	20		
996 HTPR	03	1245	1246	1247	S10	E56	.824	13465	7.7	2	-F		C	1246	10		
GRP61997	03	1248+1	1249+1	1257	S08	E56	.825	13465	7.7	9	-N				35	.6	H
RAMY	03	1248	1249	1257	S07	E56	.825	13465	7.7	9	-F	3	C		27		DE H
HTPR	03	1249	1250	1257	S10	E56	.824	13465	7.7	8	-B		C	1250	40	.7	
998 HTPR	03	1435	1437	1441	S08	E57	.834	13465	7.9	6	-F		C	1437	10		
GRP61999	03	1515+2	1516+2 1526	1534	S08	E57	.834	13465	7.9	19	-N				30	.6	EK
RAMY	03	1515	1518	1533	S06	E58	.845	13465	8.0	18	-F	3	C		20		DE
HTPR	03	1515	1516	1535	S08	E56	.825	13465	7.8	20	-B		C	1516	20	.3	EK
HTPR	03	1515	1526	1535	S08	E56	.825	13465	7.8	20	-B		C				
MCMA	03	1516	1518	1529	S08	E58	.844	13465	8.0	13	-N		C	1518	35	.6	E
BOUL	03	1517	1518	1539	S09	E57	.834	13465	7.9	22	-F	2	C	1518	32	.6	
000 HTPR	03	1536	1548	1553	S12	E45	.704	13465	7.0	17	-F		C	1548	20		
GRP62001	03	1547+4	1552+0	1557	S10	E55	.814	13465	7.8	10	-F				20	.3	
BOUL	03	1547	1552	1600	S10	E56	.824	13465	7.9	13	-F	2	C	1552	21	.4	
HTPR	03	1551	1552	1554	S10	E55	.814	13465	7.8	3	-N		C	1552	20	.3	
	04	1537	1539	NO FLARE PATROL													
002 RAMY	04	2156	2157	2206D	N04	E64	.904	13470	9.7	10D	-F	2	C		36		
003 MANI	05	0049	0052	0057	N02	E64	.902	13470	9.8	8	-N	2		0052	50	1.0	
004 MANI	05	0655	0657	0714	N03	E62	.888	13470	9.9	19	-F	2		0657	40		
005 HUAN	05	1324	1330	1335	N02	E54	.815	13470	9.6	11	-F	1	C	1330	25		

Hα SOLAR FLARES

FEBRUARY 1975

OBSERVATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS		MEASUREMENTS			REMARKS
	DATE 1975 FEB	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		COND.	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg	
GRP62006	05	1352+2	1352+4	1402	N03	E54	.816	13470	9.6	10	-N				40	.7	EH
MEUO	05	1352	1352	1358	N02	E56	.834	13470	9.8	6	-F		C	1352	30	.5	
HUAN	05	1352	1354	1358	N02	E54	.815	13470	9.6	6	-N	1	C	1354	45	.8	
RAMY	05	1354	1356	1406	N04	E53	.808	13470	9.6	12	-N	3	C		36		DE H
HERS	05	1356E	1356	1409	N03	E54	.816	13470	9.6	130	-N		P	1356	43	.8	E
007 HUAN	05	1432	1438	1443	N02	E53	.804	13470	9.6	11	-F	2	C	1438	50		
GRP62008	05	1510+1	1513+1	1525	S10	E26	.438	13465	7.6	15	-F				35	.4	E
RAMY	05	1510	1514	1528	S09	E26	.437	13465	7.6	18	-F	3	C		27		DE
HUAN	05	1511	1513	1522	S11	E26	.440	13465	7.6	11	-F	1	C	1513	40	.5	E
GRP62009	05	1531+1	1533+3	1539	N03	E54	.816	13470	9.7	8	-N				40	.7	EH
RAMY	05	1531	1536	1548	N04	E52	.798	13470	9.5	17	-N	3	C		27		DE H
MEUO	05	1532	1533	1537	N02	E55	.824	13470	9.8	5	-F		C	1533	30	.5	
HUAN	05	1532	1536	1539	N02	E54	.815	13470	9.7	7	-N	2	C	1536	50	.9	E
010 HUAN	05	1557	1600	1606	N02	E54	.815	13470	9.7	9	-F	1	C	1600	40		
GRP62011	05	1639+4	1645+2	1658	N03	E52	.796	13470	9.6	19	-F				60	1.0	
HUAN	05	1639	1645	1659	N02	E53	.804	13470	9.7	20	-N	1	C	1645	75	1.2	
RAMY	05	1643	1647	1657	N04	E51	.787	13470	9.5	14	-F	3	C		54		DE
GRP62012	05	1753+2	1758+5	1821	N03	E53	.806	13470	9.7	28	-B				90	1.5	H
HUAN	05	1735		1757D	N02	E52	.794	13470	9.6	22D	-B	1	P	1756	40	.7	
RAMY	05	1753	1758	1814	N04	E50	.777	13470	9.5	21	-N	3	C		63		F
PALE	05	1755	1803	1821	N04	E56	.837	13470	9.9	26	1B	2	V		120		DE H
PALE	05	1755	1803	1821	N04	E56	.837	13470	9.9	26	1B	2	C		120		DE H
013 HUAN	05	1853		1910D	N02	E52	.794	13470	9.7	17D	-N	1	P	1910	35		
GRP62014	05	1911+0	1913+5	1928	N04	E52	.798	13470	9.7	17	-B						EH
PALE	05	1911	1918	1932	N04	E55	.828	13470	9.9	21	-B	3	V		80		DE H
RAMY	05	1911	1913	1922	N04	E49	.766	13470	9.5	11	-B	3	C		27		DE H
PALE	05	1913E	1918	1932	N04	E53	.808	13470	9.8	19D	-B	3	C		90		DE H
RAMY	05	1914E	1915	1923	N04	E51	.787	13470	9.6	9D	-B	4	V		25		DE H
RAMY	05	1914E	1915	1923	N04	E51	.787	13470	9.6	9D	-B	4	C		25		DE H
	05	2033	2100	NO FLARE PATROL													
GRP62015	05	2100E	2103+2	2121D	N02	E51	.784	13470	9.7	21	-F				50	.8	
PALE	05	2100E	2103U	2104D	N02	E51	.784	13470	9.7	4D	-F	2	C		50		DE
PALE	05	2101E	2105U	2121D	N03	E51	.785	13470	9.7	20D	-F	2	V		50		DE
	05	2105	2127	NO FLARE PATROL													
016 RAMY	05	2132	2133	2140	N04	E47	.744	13470	9.4	8	-F	2	C		20		
017 RAMY	05	2203	2204	2207D	N04	E46	.732	13470	9.4	4D	-F	2	C		27		
	05	2207	2214	NO FLARE PATROL													
018 MANI	05	2250E	2250U	2301	N03	E50	.775	13470	9.7	11D	-F	1		2250	40		
019 MANI	06	0227	0229	0248	N03	E49	.764	13470	9.8	21	-F	2		0229	30		
GRP62020	06	0250+4	0259+1	0310	N02	E49	.762	13470	9.8	20	-F				40	.6	
MANI	06	0250	0259	0310	N03	E49	.764	13470	9.8	20	-F	2		0259	30	.4	
PALE	06	0254	0259	0309	N02	E48	.751	13470	9.7	15	-F	2	C		45		DE
PALE	06	0256E	03003	0306D	N02	E49	.762	13470	9.8	10D	-F	2	V		40		DE
GRP62021	06	0510	0514 0538	0542D	N03	E46	.730	13470	9.7	32	-F						H
MANI	06	0510	0514U	0542D	N03	E46	.730	13470	9.7	32D	-F	2		0514	40	.6	H
MANI	06	0510	0538	0542D	N03	E46	.730	13470	9.7	32D	-F			0538	60	.9	
	06	0556	0600	NO FLARE PATROL													
	06	0726	0731	NO FLARE PATROL													
022 MONT	06	0940	0942	0946	N02	E43	.691	13470	9.6	6	-F		C	0942	20		
023 MONT	06	1053	1056	1105	S10	E22	.376	13465	8.1	12	-N		C	1056	60		
024 MONT	06	1225	1225	1230	N03	E40	.656	13470	9.5	5	-F		C	1225	20		
025 BOUL	06	1451	1455	1501	N01	E38	.624	13470	9.5	10	-F	1	C	1455	32		
026 CATA	06	1500	1520	1555	N01	E40	.651	13470	9.6	55	-N	3		1520	56		

Hα SOLAR FLARES

FEBRUARY 1975

OBSERVATORY	OBSERVED UT DATE 1975 FEB	START	MAX. PHASE	END	LOCATION APPROX LAT.	MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMR DAY	DURATION MIN.	IMPORTANCE	OBS. COND	TYPE	MEASUREMENTS TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.	REMARKS
027 HUAN	06	1731E		1737	N02	E41	.666	13470	9.8	60	-F	1	P	1733	35		
GRP62028	06	1810+1	1813	1913	N03	E40	.656	13470	9.8	63	-F						
			1832														
HUAN	06	1810		1922	N02	E39	.640	13470	9.7	72	-F	1	C	1852	40	.5	
PALE	06	1811	1832	1913	N04	E39	.647	13470	9.7	62	-N	2	C		35		DE
PALE	06	1811	1813	1845	N04	E43	.697	13470	10.0	34	-F	3	V		40		DE
029 HUAN	06	1925		1928D	N02	E37	.614	13470	9.6	30	-F	1	P	1927	30		
GRP62030	07	0210	0213+5	0225D	N03	E34	.577	13470	9.6	15	-N				100	1.2	J
VORO	07	0210	0215	0225	N04	E34	.581	13470	9.6	15	-B		C	0215	99	1.2	EJ
KODA	07	0211E	0218	0426	N03	E33	.563	13470	9.6	135D	-N		P	0218	191	2.0	D
MANI	07	0213E	0213U	0216D	N03	E36	.604	13470	9.8	30	-F	1		0213	80	1.0	F
031 HTPR	07	0959E		1012D	N03	E31	.535	13470	9.7	130	-F		C	0959	10		
032 HTPR	07	1041E		1048D	N03	E30	.521	13470	9.7	70	-N		C	1048	20		
033 WEND	07	1130		1142	N03	E28	.492	13470	9.6	12	-N						
034 WEND	07	1206		1220	N02	E27	.473	13470	9.5	14	-N						
035 WEND	07	1349		1401	N02	E27	.473	13470	9.6	12	-F						
GRP62036	07	1418+1	1420	1429	N02	E27	.473	13470	9.6	11	-N						D
WEND	07	1418		1432	N02	E27	.473	13470	9.6	14	-B						
MCMA	07	1419	1420	1425	N03	E27	.478	13470	9.6	6	-F		C	1420	25	.3	D
037 WEND	07	1452		1500	N02	E25	.444	13470	9.5	8	-N						
	07	1605	1836	NO FLARE PATROL													
GRP62038	07	1925+1	1927+1	1932	S12	W05	.130	13465	7.4	7	-F				30	.3	EU
MCMA	07	1925	1927	1931	S12	W04	.119	13465	7.5	6	-F		P	1927	30	.3	E
PALE	07	1926	1928	1930D	S12	W06	.142	13465	7.4	4D	-F	3	C		35		U
PALE	07	1926	1928	1933	S12	W04	.119	13465	7.5	7	-F	3	V		30		U
	07	1940	1947	NO FLARE PATROL													
	07	1949	2012	NO FLARE PATROL													
	07	2028	2120	NO FLARE PATROL													
	07	2343	2353	NO FLARE PATROL													
039 HTPR	08	0742	0750	0754	N02	E18	.340	13470	9.7	12	-F		C	0750	20		
040 HTPR	08	0812	0814	0821	S15	W14	.279	13465	7.3	9	-F		C	0814	10		
041 HTPR	08	0831	0834	0902	S15	W14	.279	13465	7.3	31	-F		C	0834	10		
042 HTPR	08	0958	1004	1015	S15	W13	.265	13465	7.4	17	-F		C	1004	20		
GRP62043	08	1030	1032	1126	S15	W15	.293	13465	7.3	56	-F						
			1100														
HTPR	08	1030	1032	1105	S15	W16	.307	13465	7.2	35	-F		C	1042	10	.1	
HTPR	08	1030	1042	1105	S15	W16	.307	13465	7.2	35	-F		C				
HTPR	08	1049	1100	1126	S15	W13	.265	13465	7.5	37	-F		C	1100	20	.2	
044 HTPR	08	1120	1150	1210	N06	E15	.334	13470	9.6	50	-F		C	1150	10		
GRP62045	08	1137	1202	1234	S15	W12	.251	13465	7.6	57	-F						E
			1218														
HTPR	08	1137	1202	1208	S15	W13	.265	13465	7.5	31	-F		C	1202	10	.1	
HTPR	08	1155	1218	1234	S15	W12	.251	13465	7.6	39	-F		C	1218	20	.2	E
046 HTPR	08	1505	1505	1510	N05	E12	.285	13470	9.5	5	-F		C	1505	10		
	08	2222	2255	NO FLARE PATROL													
047 HTPR	09	1034	1036	1038	N05	W04	.211	13470	9.1	4	-F		C	1036	10		
	09	2022	2028	NO FLARE PATROL													
	09	2127	2131	NO FLARE PATROL													
	09	2226	2234	NO FLARE PATROL													
	10	2015	2305	NO FLARE PATROL													
	10	2312	2334	NO FLARE PATROL													
	11	0041	0048	NO FLARE PATROL													
	11	0105	0135	NO FLARE PATROL													
	11	0143	0150	NO FLARE PATROL													
	11	0210	0215	NO FLARE PATROL													

Hα SOLAR FLARES

FEBRUARY 1975

OBSERVATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS			REMARKS
	DATE 1975 FEB	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		COND.	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.	
GRP62048	11	1301+1	1303+3	1317	N03	W27	.479	13470	9.5	16	-F				50	.6	E
RAMY	11	1301	1306	1316	N03	W27	.479	13470	9.5	15	-F	4	C		63		DE
ATHN	11	1301	1303	1307	N04	W27	.484	13470	9.5	6	-F	4	V		48		DE
ATHN	11	1301	1303	1307	N04	W27	.484	13470	9.5	6	-F	5	C		48		DE
HUAN	11	1302	1303	1330	N04	W29	.513	13470	9.4	28	-N	1	C	1303	40	.5	E
LVOV	11	1305E	1306D	1315	N04	W26	.470	13470	9.6	10D	1F		P	1306	400	4.7	E
WEND	11	1315E		1340	N02	W26	.459	13470	9.6	250	1N		P		500	5.5	
	11	1552	1600	NO FLARE PATROL													
	11	2025	2240	NO FLARE PATROL													
	11	2246	0125	NO FLARE PATROL													
	12	2121	2129	NO FLARE PATROL													
	12	2132	2143	NO FLARE PATROL													
	12	2149	2201	NO FLARE PATROL													
	12	2205	2234	NO FLARE PATROL													
	13	0402	0725	NO FLARE PATROL													
GRP62049	13	1303+7	1311+2	1335	N04	W55	.828	13470	9.4	32	-N				80	1.4	E
LVOV	13	1303	1311D	1330	N04	W54	.819	13470	9.5	27	1F		C	1311	250	4.5	E
RAMY	13	1308	1313	1332	N03	W55	.827	13470	9.4	24	-N	4	C		63		F
HTPR	13	1310	1312	1338	N05	W59	.866	13470	9.1	28	-B		C	1312	80	1.3	E
MCMA	13	1310E		1340	N04	W54	.819	13470	9.5	30D	-N		C	1311	80	1.4	E
GRP62050	13	1435+1	1437+1	1452	N04	W57	.847	13470	9.3	17	-N				50	.9	EK
RAMY	13	1435	1437	1452	N03	W56	.836	13470	9.4	17	-F	3	C		54		F
MCMA	13	1435	1437	1450	N04	W56	.838	13470	9.4	15	-N		C	1437	80	1.5	E
HTPR	13	1436	1438	1500	N05	W60	.875	13470	9.1	24	-N		C	1438	20	.3	EK
051 HTPR	13	1458		1601D	N05	W62	.891	13470	9.0	63D	-F		C	1501	10		
052 HTPR	13	1455	1500	1505	S10	W78	.975	13465	7.8	10	-F		C	1500	10		
053 BOUL	13	2011	2019	2049D	N03	W58	.855	13470	9.5	38D	-N	3	P	2019	96	1.8	
	13	2049	2057	NO FLARE PATROL													
	13	2100	2120	NO FLARE PATROL													
	13	2159	2206	NO FLARE PATROL													
	13	2248	2255	NO FLARE PATROL													
	13	2329	2332	NO FLARE PATROL													
	13	2336	0110	NO FLARE PATROL													
	14	1514	1515	NO FLARE PATROL													
	14	1535	1539	NO FLARE PATROL													
	14	1550	1601	NO FLARE PATROL													
	14	1704	1713	NO FLARE PATROL													
	14	2146	2153	NO FLARE PATROL													
	15	0401	0404	NO FLARE PATROL													
	15	2000	2004	NO FLARE PATROL													
	15	2021	2025	NO FLARE PATROL													
	15	2124	2154	NO FLARE PATROL													
	15	2200	2209	NO FLARE PATROL													
	17	1739	1750	NO FLARE PATROL													
	17	2218	2220	NO FLARE PATROL													
	20	0440	0443	NO FLARE PATROL													
	20	0620	0705	NO FLARE PATROL													
	20	0715	0725	NO FLARE PATROL													
	20	0735	0745	NO FLARE PATROL													
	20	0815	0820	NO FLARE PATROL													
054 HTPR	20	1248	1252	1254	N10	W01	.293	13499	20.5	6	-F		C	1252	20		
055 HTPR	20	1305	1320	1325	N10	W02	.294	13499	20.4	20	-F		C	1320	20		
056 HTPR	20	1404	1408	1437	N10	W03	.297	13499	20.4	33	-F		C	1408	20		
	20	2135	2142	NO FLARE PATROL													
	20	2250	0000	NO FLARE PATROL													
	21	0720	0725	NO FLARE PATROL													
	21	2206	2214	NO FLARE PATROL													
	21	2220	2227	NO FLARE PATROL													
	21	2232	2254	NO FLARE PATROL													
	21	2315	2347	NO FLARE PATROL													
	22	0005	0013	NO FLARE PATROL													
	22	0022	0043	NO FLARE PATROL													
	22	0048	0231	NO FLARE PATROL													
057 HTPR	22	1057E		1106	N02	W02	.161	13503	22.3	9D	-F		C	1057	10		

Hα SOLAR FLARES

FEBRUARY 1975

OBSERVATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS			REMARKS
	DATE 1975 FEB	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		COND	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.	
058 HTPR	22	1318	1320	1333	N02	W04	.172	13503	22.3	15	-F		C	1318	20		
059 HTPR	23	1400	1405	1408	S10	E16	.277	13506	24.8	8	-F		C	1405	20		
	23	2022	2033	NO FLARE PATROL													
	23	2038	2100	NO FLARE PATROL													
	23	2230	2256	NO FLARE PATROL													
	23	2332	2339	NO FLARE PATROL													
	24	0002	0013	NO FLARE PATROL													
	24	0019	0027	NO FLARE PATROL													
	24	0056	0123	NO FLARE PATROL													
060 HTPR	24	0800	0816	0820	S09	E04	.076	13506	24.6	20	-F		C	0816	40		
061 HTPR	24	0830	0851	0857	S09	E03	.061	13506	24.6	27	-F		C	0851	30		
	25	0337	0400	NO FLARE PATROL													
	25	0450	0714	NO FLARE PATROL													
	26	2050	2057	NO FLARE PATROL													
062 TEHR	27	0418E	0422	0429	S08	W31	.511	13506	24.9	11D	-F	4	V		60		
063 MEUD	27	1010		1025	S07	W37	.598	13506	24.6	15	-F	*	C	1016	30		
	28	1652	1719	NO FLARE PATROL													