Hα SOLAR FLARES

APRIL 1997

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	CMP Day	Dur (Min)	Imp Opt	Imp Xray	Imp See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
0001	SVTO	01	0506E	0508U	0515	S26	E22	8026	04	2.9	9D	SB		2	E		21		
0002		01	07552	07572	0808	S25	E20	8026	04	2.9	13	SF					30	0.6	EF
	MEUD	01	0755	0757	0809	S25	E20	8026	04	2.9	14	SF				0757	50	0.6	E
	SVTO	01	0757	0759	0807	S25	E20	8026	04	2.9	10	SF		3	E		11		F
0003		01	1007	1015	1038	S24	E20	8026	04	3.0	31	SF					30	0.3	EK
	MEUD	01	1007	1015	1038	S24	E21	8026	04	3.0	31	SF				1015	30	0.3	EK
	KANZ	01	1009E	1013U	1017D	S24	E18	8026	04	2.8	8D	SF		2					
0004		01	1007*	1031	1044	S24	E22	8026	04	3.1	37	SF					40	0.4	EK
	MEUD	01	1007	1031	1038	S24	E21	8026	04	3.0	31	SF				1031	40	0.4	EK
	KHAR	01	1019	1031	1050	S25	E27	8026	04	3.5	31	SN		2	V				E
	KANZ	01	1029E	1037U	1037D	S24	E19	8026	04	2.9	8D	SF		2					
0005	RAMY	01	1143	1143	1147	S26	E17	8026	04	2.8	4	SF	B 1.6	3	E		12		
0006		01	1252	1254U	1259	S25	E19	8026	04	3.0	7	SF	B 3.6				10		
	MEUD	01	1252		1259	S24	E21	8026	04	3.1	7	SF							
	RAMY	01	1252E	1254U	1259D	S26	E17	8026	04	2.8	7D	SF	B 3.6	4	E		10		
0007		01	13433	13471	1408	S25	E17	8026	04	2.9	25	1B	M 1.9				146	2.2	EH
	MEUD	01	1343	1348	1409	S25	E20	8026	04	3.1	26	1B				1348	220	2.2	
	RAMY	01	1343	1348	1410	S25	E16	8026	04	2.8	27	1B	M 1.9	4	E		135		EH
	KANZ	01	1343E	1350U	1350D	S25	E16	8026	04	2.8	7D	1B		2					
	SVTO	01	1344	1347	1404	S25	E16	8026	04	2.8	20	1N		3	E		100		EH
	HOLL	01	1346	1347	1408	S26	E16	8026	04	2.8	22	1N		3	E		130		EH
0008		01	14475	14494	1458	S26	E18	8026	04	3.0	11	SF	B 6.6				31	0.5	
	MEUD	01	1447	1449	1459	S25	E20	8026	04	3.2	12	SF				1449	50	0.5	
	RAMY	01	1452	1453	1458	S26	E17	8026	04	2.9	6	SF	B 6.6	4	E		12		
0009		02	00318	0040	0048	S26	E08	8026	04	2.6	17	SF	C 2.2				22		HS
	HOLL	02	0031	0040	0048	S27	E09	8026	04	2.7	17	SF	C 2.2	3	E		29		H
	LEAR	02	0039	0040	0047	S25	E08	8026	04	2.6	8	SF		3	E		14		HS
0010	LEAR	02	0529	0530	0532	S25	E05	8026	04	2.6	3	SF	C 1.3	3	E		13		
0011		02	07051	07091	0721	S24	E10	8026	04	3.1	16	SF	B 3.8				24		F
	SVTO	02	0705	0709	0724	S24	E09	8026	04	3.0	19	SF	B 3.8	3	E		24		F
	KANZ	02	0706	0710	0718	S24	E10	8026	04	3.1	12	SF		2					
0012		02	07077	07131	0728	S26	E08	8026	04	2.9	21	SF					100	1.1	ET
	MEUD	02	0707	0713	0731	S25	E08	8026	04	2.9	24	SF				0713	100	1.1	ET
	KANZ	02	0714	0714	0726	S26	E07	8026	04	2.8	12	SF		2					
0013	SVTO	02	0800	0800	0804	S25	E07	8026	04	2.9	4	SF		3	E		11		F
0014		02	08322	0834	0848	S24	E08	8026	04	3.0	16	SF	B 3.5				15		F
	SVTO	02	0832	0834	0849	S24	E08	8026	04	3.0	17	SF	B 3.5	3	E		15		F
	KANZ	02	0834	0834	0846	S24	E09	8026	04	3.0	12	SF		2					
0015	KHAR	02	0910E		0915U	S25	E14	8026	04	3.5	5U	SF		2	V				H
0016		02	09224	09235	0937	S24	E09	8026	04	3.1	15	SN	B 6.8				68	1.1	EFHT
	MEUD	02	0922	0923	0939	S24	E08	8026	04	3.0	17	SN				0926	100	1.1	T
	KANZ	02	0922	0926	0938	S24	E08	8026	04	3.0	16	SF		2					
	SVTO	02	0924	0927	0942	S24	E07	8026	04	2.9	18	SF	B 6.8	3	E		35		F
	KHAR	02	0926	0928	0929	S25	E14	8026	04	3.5	3	SN		2	V				HE
0017	KHAR	02	1023		1037	S25	E14	8026	04	3.5	14	SF		2	V				H
0018		02	10221	10242	1034	S24	E06	8026	04	2.9	12	SF	B 2.4				19		
	KANZ	02	1022	1026	1034	S25	E07	8026	04	3.0	12	SF		2					
	SVTO	02	1023	1024	1035	S24	E06	8026	04	2.9	12	SF	B 2.4	3	E		19		
0019		02	12024	12066	1221	S24	E07	8026	04	3.0	19	SF	B 2.4				67	1.1	FT
	KANZ	02	1202	1206	1225	S25	E07	8026	04	3.0	23	SF		2					
	SVTO	02	1205	1207	1224	S24	E06	8026	04	3.0	19	SF	B 2.4	3	E		34		F
	MEUD	02	1206	1212	1215	S24	E08	8026	04	3.1	9	SF				1212	100	1.1	T

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		02	2220		2240	No Flare Patrol													
		02	2302		2330	No Flare Patrol													
		03	0301		0609	No Flare Patrol													
		03	1226		1239	No Flare Patrol													
		03	1934		1956	No Flare Patrol													
		03	2033		2044	No Flare Patrol													
		03	2106		2205	No Flare Patrol													
		04	0514		0528	No Flare Patrol													
		04	1354		1420	No Flare Patrol													
		04	1858		1900	No Flare Patrol													
		04	2142		2147	No Flare Patrol													
0020	PALE	05	0107	0107	0112	S28	E50	8027	04	8.9	5	SF		3	E		17		
		05	0336		0358	No Flare Patrol													
		05	0409		0540	No Flare Patrol													
0021	SVTO	05	1528	1535	1538	S29	E41	8027	04	8.8	10	SF B	4.8	3	E		11		F
0022		05	2028	2028	2040	S28	E39	8027	04	8.9	12	SF B	5.6				40		
	RAMY	05	2025E	2026U	2041	S30	E38	8027	04	8.8	16D	SF		3	E		40		
	PALE	05	2028	2028	2039	S27	E40	8027	04	9.0	11	SF B	5.6	3	E		39		
		06	0120		0459	No Flare Patrol													
		06	0517		0525	No Flare Patrol													
		06	0638		0751	No Flare Patrol													
		06	0802		0816	No Flare Patrol													
		06	0927		1009	No Flare Patrol													
0023		06	12024	12103	1224	S28	E29	8027	04	8.8	22	SF					36	0.6	EF
	KANZ	06	1202	1210	1226	S29	E29	8027	04	8.8	24	SF		2					
	SVTO	06	1206	1213	1227	S28	E29	8027	04	8.8	21	SF		3	E		21		F
	MEUD	06	1210E	1213	1220	S28	E30	8027	04	8.8	10D	SF				1213	50	0.6	E
		07	0119		0317	No Flare Patrol													
		07	0327		0433	No Flare Patrol													
0024	KANZ	07	1011	1015	1023	S23	W59	8026	04	2.9	12	SF		2					
0025		07	13532	13598	1508	S29	E20	8027	04	9.1	75	2N C	6.8				300	5.2	CSUY
	MEUD	07	1353	1406	1447	S27	E25	8027	04	9.5	54	2B				1406	450	5.2	CSU
	RAMY	07	1354	1403	1524	S30	E19	8027	04	9.1	90	2N C	6.8	4	E		297		UY
	HOLL	07	1355	1359	1456	S29	E17	8027	04	8.9	61	1F		3	E		161		US
	SVTO	07	1355	1401U	1459D	S30	E19	8027	04	9.1	64D	2N		2	E		290		US
	KANZ	07	1355	1407	1523	S29	E18	8027	04	9.0	88	3N		2					U
0026	SVTO	09	0440E	0445U	0503D	S29	W04	8027	04	8.9	23D	SF B	4.2	1	E		55		
0027		09	1055*	11309	1142	S24	W80		04	3.3	47	SF							C
	MEUD	09	1055	1130	1142	S24	W80		04	3.3	47	SF							C
	KANZ	09	1135	1139	1143	S24	W81		04	3.2	8	SF		2					
0028	SVTO	10	1021	1029	1033	N24	W28	8029	04	8.3	12	SF		3	E		13		
0029	MEUD	10	1233	1239	1242	S30	W15	8027	04	9.3	9	SF				1239	40	0.5	E
		10	2112		2118	No Flare Patrol													
		10	2131		2322	No Flare Patrol													
		11	2205		2246	No Flare Patrol													
0030		13	18383	1842	1853	S30	W46	8031	04	10.1	15	SF B	8.2				19		F
	RAMY	13	1838	1842	1855	S29	W47	8031	04	10.1	17	SF B	8.2	3	E		21		F
	HOLL	13	1841	1842	1851	S30	W45	8031	04	10.2	10	SF		3	E		17		
0031	MEUD	14	0835	0846	0854	S28	W55	8031	04	10.0	19	SF				0846	20	0.4	E
0032		15	0629	0645	0711	S23	E12	8032	04	16.2	42	SF B	1.7				31		
	KANZ	15	0629	0645	0709	S23	E12	8032	04	16.2	40	SF		2					
	SVTO	15	0629	0645	0713	S23	E13	8032	04	16.3	44	SF B	1.7	3	E		31		

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	CMP Day	Dur (Min)	Imp Opt	Imp Xray	Imp See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
0033	SVTO	15	0959	1001	1007	S23	E11	8032	04	16.3	8	SF	B 6.8	3	E		34		F
0034	SVTO	15	1011	1018U	1028D	S23	E11	8032	04	16.3	17D	SF	B 5.9	3	E		29		F
0035	KANZ	15	1249	1249	1253	S22	E10	8032	04	16.3	4	SF		2					
0036	KANZ	15	1301	1304	1309	S22	E10	8032	04	16.3	8	SF		2					
0037	MEUD	15	1303	1306	1321	N25	W90	8029	04	8.6	18	SF							
0038		15	14091	14121	1430	S24	E10	8032	04	16.4	21	SN	C 1.0				88	0.9	H
	MEUD	15	1409	1413	1428	S23	E14	8032	04	16.7	19	SN				1413	90	0.9	
	KANZ	15	1409	1413	1429	S24	E10	8032	04	16.4	20	SF		2					
	HOLL	15	1409	1413	1432	S24	E08	8032	04	16.2	23	SF	C 1.0	3	E		73		H
	RAMY	15	1410	1412	1432	S23	E09	8032	04	16.3	22	1N		3	E		102		
0039		15	1730	1731	1742	S28	W77	8031	04	9.7	12	SF	B 5.3				47		
	HOLL	15	1730	1731	1740	S27	W78	8031	04	9.6	10	SF		3	E		39		
	RAMY	15	1730	1731	1743	S28	W76	8031	04	9.8	13	SF	B 5.3	3	E		55		
0040	HOLL	15	2006	2007	2010	S24	E04	8032	04	16.1	4	SF	B 3.1	3	E		22		
		16	0126		0202	No Flare Patrol													
0041	LEAR	16	0400	0401	0403	S30	W74	8031	04	10.3	3	SF		3	E		37		
0042		16	1105	1108	1117	S22	W00	8032	04	16.5	12	SF					83	1.5	
	MEUD	16	1105	1108	1121	S23	W00	8032	04	16.5	16	SF				1108	150	1.5	
	RAMY	16	1106E	1108U	1113	S20	W01	8032	04	16.4	7D	SF		2	E		16		
		17	0942		0949	No Flare Patrol													
		17	0951		0957	No Flare Patrol													
		17	1004		1016	No Flare Patrol													
		17	2119		2127	No Flare Patrol													
		17	2138		2151	No Flare Patrol													
		17	2211		2255	No Flare Patrol													
		18	0134		0210	No Flare Patrol													
		19	0000		0011	No Flare Patrol													
		19	0201		0626	No Flare Patrol													
		20	0953		1025	No Flare Patrol													
		20	2201		2259	No Flare Patrol													
		21	0002		0204	No Flare Patrol													
		21	0618		0642	No Flare Patrol													
		21	1529		1905	No Flare Patrol													
		21	1945		2011	No Flare Patrol													
		21	2046		2050	No Flare Patrol													
		21	2115		2256	No Flare Patrol													
		22	0949		1025	No Flare Patrol													
		22	1123		1127	No Flare Patrol													
		22	2046		2101	No Flare Patrol													
		22	2123		2131	No Flare Patrol													
		22	2139		2204	No Flare Patrol													
		22	2230		2243	No Flare Patrol													
		23	1846		1851	No Flare Patrol													
		23	1936		2150	No Flare Patrol													
		23	2223		2244	No Flare Patrol													
		24	2216		2218	No Flare Patrol													
		25	1911		2005	No Flare Patrol													
		25	2020		2258	No Flare Patrol													
		26	2053		2101	No Flare Patrol													
		26	2202		2257	No Flare Patrol													
0043	LEAR	26	2340	2351	2355	S17	W37	8036	04	24.2	15	SF	B 6.8	3	E		16		F
		27	0920		0924	No Flare Patrol													
		27	0941		0945	No Flare Patrol													
		27	1009		1040	No Flare Patrol													
		27	1149		1158	No Flare Patrol													
		27	1211		1226	No Flare Patrol													
		27	1317		1318	No Flare Patrol													

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		28	0316		0326	No Flare Patrol													
		28	0750		0759	No Flare Patrol													
		28	1248		1251	No Flare Patrol													
		29	2050		2112	No Flare Patrol													
		29	2221		2231	No Flare Patrol													
		30	1641		1714	No Flare Patrol													

"Remarks"

A = Eruptive prominence whose base is less than 90 degrees 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 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 H and K lines of Ca II.
P = Flare shows Helium D3 in emission.
Q = Flare shows Balmer continuum in emission.
R = Marked asymmetry in H-alpha line suggests ejection of high-velocity material.
S = Brightness follows disappearance of filament in same position.
T = Region active all day.
U = Two bright branches, parallel or converging.
V = Occurrence of an explosive phase; important, expansion within roughly 1 minute that often includes a significant intensity increase.
W = Great increase in area after time of maximum intensity.
X = Unusually wide H-alpha line.
Y = System of loop-type prominences.
Z = Major sunspot umbra covered by flare.

Observation Type: C=Cinematographic, E=Electronic, P=Photographic, V=Visual