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Feb 03

H $\alpha$  SOLAR FLARES

FEBRUARY 2003

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Day	Dur (Min)	Imp Opt	Xray	Obs See	Type	Time (UT)	Area Measurement		Remarks
																	Apparent (10 <sup>-6</sup> Disk)	Corr (Sq Deg)	
		01	1124		1125			No Flare Patrol											
0001	HOLL	01	1542	1545	1553	S15	E86	10276	02	8.2	11	SF		3	E			71	
0002	RAMY	01	1543E	1543U	1608	S19	E71	10276	02	7.1	25D	SF		3	E			24	
0003	HOLL	01	1946	1948	1952	S14	E89	10276	02	8.5	6	SF		3	E			42	
0004	HOLL	01	2012	2015	2019	S13	E86	10276	02	8.3	7	SF		3	E			18	
0005		01	23231	23257	2345	S15	E78	10276	02	7.9	22	SF						36	H
	HOLL	01	2323	2332	2357D	S15	E79	10276	02	7.9	34D	SF		3	E			47	
	LEAR	01	2324	2325	2345	S15	E78	10276	02	7.9	21	SF		3	E			25	H
0006	LEAR	02	0118	0122U	0132	S15	E78	10276	02	7.9	14	SF		2	E			32	H
0007	LEAR	02	0327	0333	0337	S15	E77	10276	02	8.0	10	SF		2	E			51	
0008	LEAR	02	0357	0400	0405	S15	E77	10276	02	8.0	8	SF		2	E			45	
0009	LEAR	02	0535	0543	0548	S15	E67	10276	02	7.3	13	SF		3	E			42	
0010	LEAR	02	0632	0636	0639	S15	E67	10276	02	7.3	7	SF		3	E			21	
		02	1124		1128			No Flare Patrol											
		02	1408		1410			No Flare Patrol											
		02	1428		1429			No Flare Patrol											
		02	1922		1932			No Flare Patrol											
		02	2129		2235			No Flare Patrol											
		03	0131		0330			No Flare Patrol											
		03	0554		0655			No Flare Patrol											
		03	0745		0752			No Flare Patrol											
		03	0801		0807			No Flare Patrol											
		04	0255		0422			No Flare Patrol											
		04	1030		1050			No Flare Patrol											
		04	1127		1543			No Flare Patrol											
		04	1602		1737			No Flare Patrol											
		04	1807		2000			No Flare Patrol											
0011	HOLL	04	2116	2122	2132	S20	E67	10277	02	10.0	16	SF		3	E			34	F
		05	0843		0915			No Flare Patrol											
		05	1043		1053			No Flare Patrol											
0012	RAMY	05	1411E	1411U	1416	S16	E63	10277	02	10.4	5D	SF		3	E			15	
0013	RAMY	05	1547E	1547U	1553	N20	E73	10278	02	11.2	6D	SF		3	E			34	
0014	RAMY	05	1651E	1651U	1701	N20	E69	10287	02	11.0	10D	SF		3	E			28	
		05	1838		2230			No Flare Patrol											
		05	2258		2400			No Flare Patrol											
0015	LEAR	06	0224E	0224	0233	S17	E55	10277	02	10.3	9D	SF		3	E			36	F
0016	LEAR	06	0234	0239	0242	S17	E55	10277	02	10.3	8	SF		3	E			12	
0017	LEAR	06	0302	0302	0306	N18	E62	10278	02	10.8	4	SF		3	E			19	
0018	LEAR	06	0333	0348	0447	N18	E64	10278	02	11.0	74	1N		3	E			172	EF
0019	LEAR	06	0502	0505	0509	S17	E54	10277	02	10.3	7	SF		3	E			16	H
0020	LEAR	06	0523	0532	0541	N17	E59	10278	02	10.7	18	SF		3	E			25	FH
0021		06	08421	0847	0859	N18	E60	10278	02	10.9	17	SF						21	FH
	LEAR	06	0842	0847	0900	N19	E59	10278	02	10.9	18	SF		2	E			21	FH
	KANZ	06	0843	0847	0858	N17	E60	10278	02	10.9	15	SF		2	E				

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								Region	Mo Day							Apparent (10-6 Disk)	Corr (Sq Deg)		
0022		06	09142	09241	0940	N18	E59	10278	02	10.9	26	SF					36	F	
	LEAR	06	0914	0924	0942	N19	E58	10278	02	10.8	28	SF	2	E			36	F	
	KANZ	06	0916	0925	0937	N17	E60	10278	02	10.9	21	SF	2	E					
0023	LEAR	06	1004	1005	1013	N20	E59	10278	02	10.9	9	SF	2	E			17	F	
		06	1058		1059	No Flare Patrol													
		06	1107		1113	No Flare Patrol													
0024		06	1118	1127	1140	N19	E56	10278	02	10.7	22	SF					25	FH	
	KANZ	06	1118	1127	1143	N18	E56	10278	02	10.7	25	SF	2	E					
	RAMY	06	1131E	1131U	1138	N20	E56	10278	02	10.8	7D	SF	2	E			25	FH	
0025		06	12451	12503	1300	S16	E50	10277	02	10.3	15	SF					22	F	
	RAMY	06	1245	1250	1306	S16	E50	10277	02	10.3	21	SF	3	E			22	F	
	KANZ	06	1246	1253	1255	S16	E50	10277	02	10.3	9	SF	2	E					
0026		06	13112	13136	1328	S14	E22	10276	02	8.2	17	SF					11	F	
	KANZ	06	1311	1319	1330	S14	E22	10276	02	8.2	19	SF	2	E					
	RAMY	06	1313	1313	1327	S15	E22	10276	02	8.2	14	SF	3	E			11	F	
0027	RAMY	06	1652	1653	1657	N19	E57	10278	02	11.0	5	SF	3	E			25		
0028	RAMY	06	1843	1845	1848	S20	E43	10277	02	10.1	5	SF	3	E			15		
0029	RAMY	06	1907	1908	1917	N20	E53	10278	02	10.8	10	SF	3	E			15	F	
0030		06	23117	23126	2319	N00	E65	10280	02	11.8	8	SF					16	FH	
	HOLL	06	2311	2312	2314	N00	E65	10280	02	11.8	3	SF	3	E			12		
	HOLL	06	2318	2318	2324	N00	E65	10280	02	11.8	6	SF	3	E			21	FH	
0031	LEAR	07	0107	0110	0126	S17	E42	10277	02	10.2	19	SF	3	E			10	F	
0032	RAMY	07	1605	1625	1709	S03	W61	10274	02	3.1	64	SF	3	E			34	F	
		07	2223		2400	No Flare Patrol													
		08	1543		1616	No Flare Patrol													
		08	2051		2307	No Flare Patrol													
		09	0000		0322	No Flare Patrol													
		09	0333		0456	No Flare Patrol													
		09	0731		0738	No Flare Patrol													
		09	0751		0834	No Flare Patrol													
		09	1029		1053	No Flare Patrol													
		09	1059		1104	No Flare Patrol													
	0033	RAMY	09	1503E	1503U	1510	S08	W06	10280	02	9.2	7D	SF	3	E			30	F
	0034	RAMY	09	2043E	2043U	2051	S14	W23	10276	02	8.1	8D	SF	3	E			19	F
			10	0231		0502	No Flare Patrol												
		10	0954		1156	No Flare Patrol													
		10	1820		1852	No Flare Patrol													
		10	2020		2049	No Flare Patrol													
		10	2125		2249	No Flare Patrol													
0035	LEAR	11	0837	0840	0859	S05	W33	10280	02	8.9	22	SF	2	E			20	F	
		11	1145		1202	No Flare Patrol													
		11	1217		1330	No Flare Patrol													
		11	1354		1450	No Flare Patrol													
0036	RAMY	11	1512	1515	1532D	S19	W15	10277	02	10.5	20D	SF	3	E			22	F	
		11	1717		1849	No Flare Patrol													
		11	1900		1909	No Flare Patrol													
		11	2016		2237	No Flare Patrol													
0037	LEAR	12	0145	0157	0248	S05	W43	10280	02	8.8	63	1F	3	E			171	FU	



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								Region	Mo							Day	Time (UT)	Apparent (10-6 Disk)		Corr (Sq Deg)
0050	KANZ	18	0830	0845	0922	N08	W42	10289	02	15.2	52	SF		2	E					
0051	KANZ	18	1133	1135	1140	N08	W42	10289	02	15.3	7	SF		2	E					
			18 1411		1413			No Flare												
			18 1519		1633			No Flare												
			18 1648		1732			No Flare												
			18 2034		2239			No Flare												
0052	LEAR	19	0324	0324	0328	N13	E29	10288	02	21.3	4	SF		3	E			12		
0053	LEAR	19	0643	0643	0654	N17	E38	10290	02	22.2	11	SF		3	E			19		F
0054	KANZ	19	0900	0906	0910	N18	E41	10290	02	22.5	10	SF		2	E					
0055	KANZ	19	0930	0937	0946	N17	E38	10290	02	22.3	16	SF		2	E					
0056	KANZ	19	1045	1049	1101	N18	E40	10290	02	22.5	16	SF		2	E					
0057	KANZ	19	1128	1136	1140	N18	E40	10290	02	22.5	12	SF		2	E					
0058		19	13127	1322	1335	N18	E40	10290	02	22.6	23	SF						13		F
	KANZ	19	1312	1322	1341	N18	E40	10290	02	22.6	29	SF		2	E					
	RAMY	19	1319	1325U	1329	N17	E39	10290	02	22.5	10	SF		3	E			13		F
0059		19	14142	1435	1600D	N18	E36	10290	02	22.3	106D	SF						13		F
	KANZ	19	1414	1435	1521D	N19	E37	10290	02	22.4	67D	SF		2	E					
	RAMY	19	1416	1420U	1600D	N17	E35	10290	02	22.2	104D	SF		3	E			13		F
			19 1426		1427			No Flare												
			19 1517		1518			No Flare												
			19 1520		1629			No Flare												
			19 1816		1825			No Flare												
0060	RAMY	19	1825	1830	1934	N17	E37	10290	02	22.6	69	SF		3	E			15		
0061	RAMY	19	1944	1946	1948	N12	E21	10288	02	21.4	4	SF		3	E			31		F
0062	RAMY	19	2004	2006	2012	N17	E34	10290	02	22.4	8	SF		3	E			13		F
			19 2125		2243			No Flare												
			19 2352		2400			No Flare												
			20 0000		0016			No Flare												
			20 0141		0321			No Flare												
0063	KANZ	20	1156	1158	1208	N13	E10	10288	02	21.2	12	SF		2	E					
0064		20	1222	1224	1232	N18	E27	10290	02	22.6	10	SF						44		
	KANZ	20	1222	1224	1233	N18	E26	10290	02	22.5	11	SF		2	E					
	RAMY	20	1224E	1224U	1231	N18	E28	10290	02	22.6	7D	SF		3	E			44		
0065	RAMY	20	1249E	1249U	1302	N19	E28	10290	02	22.7	13D	SF		3	E			47		
0066	KANZ	20	1331	1334	1344	S22	E22	10291	02	22.2	13	SF		2	E					
0067	KANZ	20	1350	1358	1417	N20	E17	10290	02	21.9	27	SF		2	E					
			20 1631		1637			No Flare												
			20 1830		2249			No Flare												
0068	LEAR	21	0505	0505	0512	N11	E14	10290	02	22.3	7	SF		3	E			45		F
0069	KANZ	21	0831	0908	0944	N16	E08	10290	02	22.0	73	SF		2	E					
0070	KANZ	21	1000	1005	1011	N16	E08	10290	02	22.0	11	SF		2	E					
0071	KANZ	21	1048	1123	1148	N16	E08	10290	02	22.0	60	SF		2	E					
0072	KANZ	21	1214	1231	1244	N16	E06	10290	02	22.0	30	SF		2	E					

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF		Dur (Min)	Imp Opt	Xray	Obs See	Type	Time (UT)	Area Measurement		Remarks		
								Region	Mo Day							Apparent (10-6 Disk)	Corr (Sq Deg)			
0073		21	1246	1258	1311	N16	E06	10290	02	22.0	25	SF					20		F	
	KANZ	21	1246	1258	1311	N16	E06	10290	02	22.0	25	SF	2	E						
	RAMY	21	1253E	1253U	1311	N16	E07	10290	02	22.1	18D	SF	3	E			20		F	
0074		21	1512	1515	1535	N16	E06	10290	02	22.1	23	SF					28		FH	
	RAMY	21	1511E	1511U	1548	N16	E05	10290	02	22.0	37D	SF	3	E			39			
	SVTO	21	1512	1515	1522	N15	E07	10290	02	22.2	10	SF	3	E			18		FH	
		21	1608		1614															
		21	1642		1704															
		21	1730		2400															
		22	0000		0101															
0075	LEAR	22	0159	0203	0217	N11	E02	10290	02	22.2	18	SF	3	E			66			
0076	LEAR	22	0509	0512	0515	N16	W02	10290	02	22.1	6	SF	3	E			23			
		22	0520		0526															
		22	0534		0540															
0077		22	0929	0929I	0936	N16	W04	10290	02	22.1	7	SF					36		F	
	SVTO	22	0929E	0929	0935	N16	W03	10290	02	22.2	6D	SF	3	E			16			
	LEAR	22	0929	0930	0938	N16	W05	10290	02	22.0	9	SF	3	E			55		F	
0078	SVTO	22	1044	1044	1047	N16	E03	10290	02	22.7	3	SF	3	E			18			
0079	RAMY	22	1221	1226	1230	N17	W06	10290	02	22.0	9	SF	3	E			21		F	
		22	1727		1900															
		22	2154		2251															
		22	2324		2400															
		23	0000		0011															
		23	0208		0433															
		23	0531		0816															
		23	0835		0836															
		23	0859		0900															
		23	2158		2228															
		23	2240		2342															
		24	0013		0154															
		24	0423		0437															
		24	0518		0602															
	0080	KANZ	24	0740	0744	0805	N15	W27	10290	02	22.3	25	SF	2	E					
0081		24	1124	1143	1219	N16	W28	10290	02	22.3	55	SF					28		F	
	KANZ	24	1124	1143	1221	N16	W28	10290	02	22.3	57	SF	2	E						
	RAMY	24	1126E	1126U	1217	N16	W29	10290	02	22.3	51D	SF	3	E			28		F	
	24	2054		2130																
	24	2144		2400																
	25	0000		0001																
0082	LEAR	25	0227	0229	0234	N18	W35	10290	02	22.4	7	SF	3	E			32		F	
		25	0407		0411															
0083		25	1418I	1419I	1425	N16	W44	10290	02	22.2	7	SF					15		F	
	KANZ	25	1418	1419	1425	N15	W42	10290	02	22.4	7	SF	2	E						
	RAMY	25	1419	1420	1425	N18	W45	10290	02	22.2	6	SF	3	E			15		F	
		25	1754		1811															
		25	2043		2221															
	25	2345		2400																
	26	0000		0013																
	26	0050		0141																
0084		26	0945	0945	0949	N16	W61	10290	02	21.8	4	SF					11			
	KANZ	26	0945	0945	0949	N16	W61	10290	02	21.8	4	SF	2	E						
	LEAR	26	0945	0945	0949	N16	W61	10290	02	21.8	4	SF	2	E			11			

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								USAF Region	CMP Mo Day						Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)		
			27 0028		0201			No Flare	Patrol										
			27 0247		0255			No Flare	Patrol										
			27 0323		0343			No Flare	Patrol										
			27 0355		0405			No Flare	Patrol										
			27 0417		0437			No Flare	Patrol										
			27 0443		0603			No Flare	Patrol										
			27 1932		1937			No Flare	Patrol										
			27 1941		1951			No Flare	Patrol										
			27 2033		2042			No Flare	Patrol										
			28 0241		0310			No Flare	Patrol										
0085	KANZ	28	1251	1255	1301	S21	E18	10293	03	1.9	10	SF		2	E				
0086	RAMY	28	1254E	1254U	1311	S06	W19	10293	02	27.1	17D	SF		3	E		15	F	
0087		28	13048	13113	1322	N12	E58		03	4.9	18	SF					14		
	KANZ	28	1304	1311	1318	N11	E58		03	4.9	14	SF		2	E				
	RAMY	28	1312	1314	1326	N12	E59		03	5.0	14	SF		3	E			14	
		28	1749		1810													No Flare	Patrol

"Remarks"

- |   |   |
|---|---|
| <p>A = Eruptive prominence whose base is less than 90 degrees from central meridian.<br/>                 B = Probably the end of a more important flare.<br/>                 C = Invisible 10 minutes before.<br/>                 D = Brilliant point.<br/>                 E = Two or more brilliant points.<br/>                 F = Several eruptive centers.<br/>                 G = No visible spots in the neighborhood.<br/>                 H = Flare accompanied by high-speed dark filament.<br/>                 I = Active region very extended.<br/>                 J = Distinct variations of plage intensity before or after the flare.<br/>                 K = Several intensity maxima.<br/>                 L = Existing filaments show signs of sudden activity.<br/>                 M = White-light flare.<br/>                 N = Continuous spectrum shows effects of polarization.</p> | <p>O = Observations have been made in the H and K lines of Ca II.<br/>                 P = Flare shows Helium D3 in emission.<br/>                 Q = Flare shows Balmer continuum in emission.<br/>                 R = Marked asymmetry in H-alpha line suggests ejection of high-velocity material.<br/>                 S = Brightness follows disappearance of filament in same position.<br/>                 T = Region active all day.<br/>                 U = Two bright branches, parallel or converging.<br/>                 V = Occurrence of an explosive phase; important, expansion within roughly 1 minute that often includes a significant intensity increase.<br/>                 W = Great increase in area after time of maximum intensity.<br/>                 X = Unusually wide H-alpha line.<br/>                 Y = System of loop-type prominences.<br/>                 Z = Major sunspot umbra covered by flare.</p> |
|---|---|

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