

4
Jan 90

H α SOLAR FLARES

JANUARY 1990

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	Area Measurement			Remarks
																Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
0001	PALE	01	0002	0002	0021	N18	E46	5864	01	4.5	19	SF		3	E		15		F
0002	YUNN	01	0131E	0131U	0140	S20	W12	5858	12	31.1	9D	SN			P	0131	63	0.7	
0003	KANZ	01	0814	0818	0830	N14	E40	5864	01	4.4	16	SF			C				
0004		01	08451	08484	0858	N23	W48	5854	12	28.8	13	SF					30		
	KANZ	01	0845	0852	0856	N23	W48	5854	12	28.8	11	SF			V				
	LEAR	01	0846	0848	0859	N23	W49	5854	12	28.7	13	SF		3	E		30		
0005		01	08472	0849	0856	S18	W19	5858	12	31.0	9	SF					13		
	LEAR	01	0847	0849	0855	S19	W19	5858	12	31.0	8	SF		3	E		13		
	KANZ	01	0849	0849	0856	S18	W19	5858	12	31.0	7	SF			V				
0006	KANZ	01	0943	0943	0955	N21	W49	5854	12	28.7	12	SF			V				
0007		01	10023	10062	1042	N25	W54	5854	12	28.3	40	SF	C 3.6				38		
	KANZ	01	1002	1006	1056	N24	W54	5854	12	28.3	54	SF			V				
	LEAR	01	1005	1008	1028	N26	W54	5854	12	28.3	23	SF	C 3.6	2	E		38		
0008	KANZ	01	1125	1129	1136	N22	W51	5854	12	28.6	11	SF			V				
0009	KANZ	01	1303	1311	1339	S24	W63	5852	12	27.8	36	SF			V				
0010	HOLL	01	1513	1517	1529	N22	W52	5854	12	28.7	16	1F	C 4.0	2	E		108		H
0011	HOLL	01	1528	1533	1540	S24	W64	5852	12	27.8	12	SF		3	E		17		
0012	HOLL	01	1613	1613	1619	N26	W52	5854	12	28.7	6	SF		4	E		12		
0013	HOLL	01	1626	1631	1658	S08	W47	5853	12	29.3	32	SF		4	E		49		F
0014	HOLL	01	1848	1851	1856	N22	W55	5854	12	28.6	8	SF		3	E		11		
0015	HOLL	01	1856	1857	1912	N23	E10	5867A	01	2.5	16	SF		4	E		60		F
0016		01	2012	20181	2057	N15	E41	5864	01	4.9	45	SF	C 4.5				64		F
	HOLL	01	2012	2018	2110	N13	E40	5864	01	4.8	58	SF	C 4.5	4	E		81		F
	PALE	01	2012	2019	2044	N17	E42	5864	01	5.0	32	SF		3	E		47		F
0017	HOLL	01	2042	2042	2056	N14	E12	5862	01	2.8	14	SF		4	E		13		
0018		01	20445	20511	2100	S08	W42	5853	12	29.8	16	SF					61		F
	HOLL	01	2044	2051	2104	S07	W44	5853	12	29.7	20	SF		4	E		48		
	PALE	01	2049	2052	2057	S09	W41	5853	12	29.9	8	SF		3	E		74		F
0019	PALE	01	2102	2106	2115	N21	W55	5854	12	28.7	13	SF		3	E		21		F
0020		01	2118*	2120*	2203	N22	W52	5854	12	29.0	45	1N	M 2.1				134		EFK
	PALE	01	2118	2122	2424D	N23	W52	5854	12	29.0	186D	1F		3	E		233		
	HOLL	01	2119	2120	2149	N20	W54	5854	12	28.8	30	1N			E		125		K
	HOLL	01	2119	2128	2149	N20	W54	5854	12	28.8	30	1N	M 2.1	4	E		139		FE
	HOLL	01	2221	2222	2230	N25	W49	5854	12	29.2	9	SF		4	E		40		
0021	HOLL	01	2126	2126	2146	N14	E13	5862	01	2.9	20	SF		4	E		47		F
0022	HOLL	01	2240	2241	2253	S10	W44	5853	12	29.7	13	SF		4	E		70		
0023	HOLL	01	2256	2257	2311	S18	W29	5858	12	30.8	15	SF		4	E		28		F
0024	HOLL	01	2307	2311	2321	N14	E31	5864	01	4.3	14	SF		4	E		11		
0025		02	02204	02253	0244	N20	W56	5854	12	28.9	24	1N	C 5.9				128	3.2	EF
	PEKG	02	0220	0226	0242	N21	W57	5854	12	28.8	22	1B			C	0225	126	2.6	E
	MITK	02	0223	0225	0248	N20	W57	5854	12	28.8	25	1B			C	0225	140	3.0	E
	PALE	02	0224	0225	0248	N18	W56	5854	12	28.9	24	SF	C 5.9	3	E		63		F
	PURP	02	0226E	0228	0239	N22	W56	5854	12	28.9	13D	1N			C	0228	185	3.9	

JANUARY 1990

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Dur (Min)	Imp Opt	Xray	See	Obs Type	Area Measurement			Remarks
															Time (UT)	Apparent (10 ⁻⁶ Disk)	Corr (Sq Deg)	
0026		02	0235*	03062	0336	N25	W61	5854	12	28.5	61	1N	C 5.7			96	2.8	E
	YUNN	02	0235	0307	0348	N25	W58	5854	12	28.7	73	1N		C		94	2.2	
	MITK	02	0300	0307	0347	N26	W66	5854	12	28.1	47	1N		C	0307	100		E
	PALE	02	0304	0306	0324	N25	W62	5854	12	28.4	20	SF	C 5.7	3	E	33		
	PURP	02	0304	0308	0324	N23	W57	5854	12	28.8	20	1N		C	0308	159	3.4	
0027		02	02491	02549	0318	S18	W29	5858	12	31.0	29	SN	C 4.0			70	1.0	EF
	YUNN	02	0249	0303	0323	S16	W30	5858	12	30.9	34	SN		C		79	1.0	
	PALE	02	0250	0254	0317	S19	W28	5858	12	31.0	27	SF	C 4.0	3	E	62		F
	MITK	02	0250	0256	0315	S18	W30	5858	12	30.9	25	SN		C	0256			E
0028	YUNN	02	0409E	0409U	0414D	N15	E28	5864	01	4.3	5D	SN		P	0409	47	0.6	E
0029		02	0732	0736	0746	N22	W62	5854	12	28.6	14	SF				17		H
	LEAR	02	0732	0736	0743	N23	W63	5854	12	28.5	11	SF		3	E	17		H
	KANZ	02	0738E	0738U	0750	N22	W61	5854	12	28.7	12D	SF		C				
0030		02	1010*	10461	1114	S18	W33	5858	12	31.0	64	SN				120	1.5	
	HTPR	02	1010	1046	1125	S18	W32	5858	12	31.0	75	SN		C	1046	120	1.5	
	KANZ	02	1043	1047	1103	S18	W34	5858	12	30.9	20	SF		V				
0031	HTPR	02	1139	1153	1200	S18	W32	5858	12	31.0	21	SF		C	1153	70	0.9	U
0032		02	1157*	1158*	1233	N22	W62	5854	12	28.8	36	SF	C 3.0			25	0.6	AE
	HTPR	02	1157	1158	1205	N23	W55	5854	12	29.4	8	SF		C	1158	30	0.6	E
	KANZ	02	1158	1202	1214	N21	W63	5854	12	28.8	16	SF		V				
	HTPR	02	1200	1203	1255	N20	W65	5854	12	28.6	55	SN		C				A
	RAMY	02	1201	1202	1255	N21	W61	5854	12	28.9	54	SF	C 3.0	3	E	30		
	SVTO	02	1212E	1212U	1215	N23	W61	5854	12	28.9	3D	SF		2	E	16		
	KANZ	02	1236	1247	1253	N23	W65	5854	12	28.6	17	SF		V				
0033		02	12382	1240	1246	N23	E00	5867A	01	2.5	8	SF				90	0.9	U
	HTPR	02	1238	1240	1246	N23	E01	5867A	01	2.6	8	SF		C	1244	90	0.9	U
	KANZ	02	1240	1240	1247	N23	W01	5867A	01	2.4	7	SF		V				
0034		02	13572	1414	1448	S18	W35	5858	12	31.0	51	SF	C 4.4			70		F
	KANZ	02	1357	1415U	1417D	S18	W36	5858	12	30.9	20D	SF		V				
	RAMY	02	1359	1414	1448	S18	W35	5858	12	31.0	49	SF	C 4.4	3	E	73		
	HOLL	02	1422E	1423U	1447	S19	W35	5858	12	31.0	25D	SF		2	E	68		F
0035		02	1427	1439	1452	N13	E34	5864	01	5.2	25	SF				59	1.5	F
	RAMY	02	1427	1439	1454	N11	E34	5864	01	5.2	27	SF		3	E	29		
	HOLL	02	1435E	1440U	1451	N14	E33	5864	01	5.1	16D	SF		2	E	27		F
	HTPR	02	1438E		1501D	N14	E35	5864	01	5.2	23D	SN		C	1438	120	1.5	
0036	HOLL	02	1814	1814	1824	N24	E05	5867A	01	3.1	10	SF		3	E	20		
0037	HOLL	02	1836	1837	1853	N23	W57	5854	12	29.5	17	SF		3	E	26		F
0038		02	1859	1913	1924	N21	W65	5854	12	28.9	25	2N	C 6.9			212		EF
	HOLL	02	1859	1913	1924	N23	W62	5854	12	29.1	25	2N	C 6.9	3	E	301		FE
	PALE	02	1915E	1916U	1917D	N19	W68	5854	12	28.7	20	1F		3	E	123		
		02	1933		1937	No Flare Patrol												
0039	HOLL	02	1953E	1953U	2005	S28	W81	5852	12	27.6	12D	SF		3	E	94		
0040	HOLL	02	2030	2032	2040D	N20	W67	5854	12	28.8	10D	SF		3	E	63		FH
		02	2041		2045	No Flare Patrol												
0041	HOLL	02	2208	2208	2224	S18	W40	5858	12	31.0	16	SF		3	E	20		F
0042		03	00538	01039	0122	N14	E24	5864	01	4.8	29	SN				81	1.2	EHS
	MITK	03	0053	0103	0130	N14	E25	5864	01	4.9	37	SN		C	0103			EHS
	VORO	03	0058	0106	0112	N14	E25	5864	01	4.9	14	SF		2	C	0106	125	1.5
	LEAR	03	0101	0112	0128	N13	E25	5864	01	4.9	27	SF		3	E	53		EH
	PURP	03	0103E	0105	0117	N13	E20	5864	01	4.5	14D	SN		C	0105	66	0.8	

6
Jan 90

H α SOLAR FLARES

JANUARY 1990

Grp #	Sta	Start Day (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 Apparent (10-6 Disk)	Corr (Sq Deg)	Remarks
0043	LEAR	03 0428	0428	0442	N16	W69	5854	12 29.0	14	SF C 2.7	3 E		30		
0044		03 0620	0625	0632	N21	W77	5854	12 28.5	12	SN M 1.3			72		D
	PEKG	03 0617E	0617U	0630	N21	W73	5854	12 28.8	13D	1N	P	0622	63		D
	PURP	03 0620	0625	0632	N22	W77	5854	12 28.4	12	SB	C	0625	66		
	LEAR	03 0620	0625	0634	N21	W80	5854	12 28.2	14	SF M 1.3	3 E		86		
0045	LEAR	03 0625	0627	0643	S06	W65	5853	12 29.5	18	SF	3 E		89		
0046		03 0818	0821	0843	S24	W62	5867	12 29.6	25	SF			41		
	LEAR	03 0818	0821	0838	S24	W64	5867	12 29.5	20	SF	3 E		41		
	KANZ	03 0818	0825	0848	S23	W61	5867	12 29.7	30	SF	C				
0047		03 0957	1001	1018	S26	W64	5867	12 29.5	21	SF			30	0.6	E
	KANZ	03 0957	1001	1017	S25	W64	5867	12 29.5	20	SF	V				
	HTPR	03 0957	1002	1020	S27	W65	5867	12 29.4	23	SF	C	1002	30	0.6	E
0048	KANZ	03 1153	1153	1157	N17	W75	5854	12 28.9	4	SF	V				
0049		03 1523	1529	1619	S22	W67	5867	12 29.6	56	SF C 3.0			76		F
	RAMY	03 1523	1529	1619	S23	W67	5867	12 29.6	56	SF C 3.0	3 E		72		F
	HOLL	03 1524	1540U	1616D	S22	W67	5867	12 29.6	52D	SF	3 E		79		F
0050		03 1719	1737	1756	S26	W69	5867	12 29.5	37	SF C 2.9			40		F
	RAMY	03 1719	1737	1756	S25	W69	5867	12 29.5	37	SF C 2.9	3 E		18		F
	HOLL	03 1721E	1727U	1740D	S26	W69	5867	12 29.5	19D	SF	3 E		61		
0051		03 2002	2010	2024	S22	W70	5867	12 29.5	22	SF C 2.6			54		F
	RAMY	03 2002	2010	2021	S21	W69	5867	12 29.6	19	SF	3 E		43		F
	HOLL	03 2002	2013	2028	S22	W70	5867	12 29.5	26	SF C 2.6	3 E		65		F
0052	HOLL	03 2036	2043	2045	N25	W73	5854	12 29.3	9	SF	3 E		15		
0053		03 2048	2048	2053	N20	W86	5854	12 28.4	5	SF			23		
	RAMY	03 2048	2048	2100D	N20	W84	5854	12 28.5	12D	SF	3 E		24		
	HOLL	03 2049	2049	2053	N19	W89	5854	12 28.2	4	SF	3 E		22		
0054	HOLL	03 2134	2135	2138	S24	W69	5867	12 29.7	4	SF	3 E		19		
		03 2149		2152	No Flare Patrol										
0055	VORO	04 0101	0103	0122	N12	W17	5862	01 2.8	21	SF	1 C	0103	108	1.2	E
0056	KHAR	04 0845E		0900	S22	W90	5852	12 28.5	15D	SF	P	0847			D
0057		04 0905*	0915	0940	S16	E60	5876A	01 8.9	35	SF			30	0.6	DEGL
	HTPR	04 0905	0915	0940	S15	E60	5876A	01 8.9	35	SF	C	0915	30	0.6	EG
	KHAR	04 0915		0932U	S16	E60	5876A	01 8.9	17U	SF	V	0920			DL
0058		04 1018	1019	1025	S20	W80	5867	12 29.4	10	SN			52		EH
	SVTO	04 1018	1019	1025	S21	W81	5867	12 29.3	7	SF	3 E		52		
	KHAR	04 1019	1020	1032	S19	W80	5867	12 29.4	13	SN	P	1020			EH
0059	KHAR	04 1019		1025	S05	W82	5853	12 29.4	6	SF	V				DL
0060	KANZ	04 1203	1203	1207	N24	E27	5873	01 6.6	4	SF	V				
		04 1501		2204	No Flare Patrol										
0061	HOLL	04 1611	1611	1615	N14	W05	5864	01 4.3	4	SF C 4.9	3 E		17		F
0062	PEKG	05 0338	0340	0347	N13	W12	5864	01 4.2	9	1F	C	0340	189	2.1	D
0063	SVTO	05 0726	0745	0810	S14	E67	5874	01 10.4	44	SF	3 E		29		
0064		05 0813	0824*	0916	S12	E66	5874	01 10.3	63	SF			82		EF
	SVTO	05 0813	0845	0932	S13	E67	5874	01 10.4	79	SF	3 E		44		F
	HTPR	05 0815	0824	0900	S10	E63	5874	01 10.1	45	SN	C	0824	120		E
	KANZ	05 0820	0844	0852D	S14	E69	5874	01 10.6	32D	SF	C				

H α SOLAR FLARES7
Jan 90

JANUARY 1990

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	Area Measurement			Remarks
																Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
0065		05	09208	09302	0942	S22	E46	5871	01	8.9	22	SF					60	0.8	D
	HTPR	05	0920	0930	0945	S22	E45	5871	01	8.8	25	SF			C	0930	60	0.8	D
	KHAR	05	0928	0932	0938	S23	E46	5871	01	8.9	10	SF			V	0932			D
0066	HTPR	05	1005	1008	1020	N12	W18	5864	01	4.1	15	SF			C	1008	130	1.4	
0067		05	10431	10441	1100	S14	E67	5874	01	10.5	17	SN					58		DH
	SVTO	05	1043	1045	1100	S12	E68	5874	01	10.6	17	SF		3	E		36		
	HTPR	05	1043	1045	1100	S13	E65	5874	01	10.3	17	SB			C	1045	80		DH
	KANZ	05	1044	1044	1052D	S16	E68	5874	01	10.6	8D	SF			C				
0068		05	11534	1200	1212	S26	W90	5867	12	29.6	19	SN	M 2.0				14		H
	HTPR	05	1153		1215	S25	W90	5867	12	29.6	22	SN			C				
	SVTO	05	1157	1200	1209	S26	W89	5867	12	29.7	12	SF	M 2.0	3	E		14		H
0069		05	1353	1355	1435	N14	W18	5864	01	4.2	42	SN					80	1.4	EF
	HTPR	05	1353	1355	1435	N15	W18	5864	01	4.2	42	SN			C	1355	125	1.4	E
	RAMY	05	1354E	1355U	1359D	N14	W17	5864	01	4.3	5D	SF		2	E		34		F
0070	RAMY	05	1635	1636	1643	N13	W18	5864	01	4.3	8	SF		3	E		20		
0071		05	17383	17471	1756	N13	W19	5864	01	4.3	18	SF					23		F
	RAMY	05	1738	1747	1757	N13	W19	5864	01	4.3	19	SF		3	E		22		
	HOLL	05	1741	1748	1754	N13	W19	5864	01	4.3	13	SF		3	E		24		F
0072		05	20064	2023	2106	S12	E66	5874	01	10.8	60	SF	C 6.0				74		F
	HOLL	05	2006	2023	2104	S12	E65	5874	01	10.7	58	SF	C 6.0	3	E		99		F
	RAMY	05	2010	2024U	2107	S12	E66	5874	01	10.8	57	SF		3	E		48		F
0073	HOLL	05	2259	2300	2318	S14	E59	5874	01	10.4	19	SF		3	E		18		F
0074	MITK	06	0122	0127	0154	S13	E53	5874	01	10.0	32	1N			C	0127	130	2.2	E
0075		06	0226	0228	0240	N12	W22	5864	01	4.4	14	SN					24	0.3	F
	YUNN	06	0223E	0236U	0242	N14	W22	5864	01	4.4	19D	SN			P	0236	24	0.3	
	PALE	06	0226	0228	0237	N11	W22	5864	01	4.4	11	SF		3	E		23		F
0076		06	02565	0309	0328	S12	E56	5874	01	10.3	32	SN	C 2.5				42	1.5	F
	YUNN	06	0256	0323U	0400D	S12	E56	5874	01	10.3	64D	SB			P	0323	79	1.5	
	PALE	06	0300	0309	0338	S10	E57	5874	01	10.4	38	SF	C 2.5	3	E		30		F
	LEAR	06	0301	0309	0318	S14	E56	5874	01	10.3	17	SF		3	E		16		
0077	PEKG	06	0522	0525	0528	N12	W28	5864	01	4.1	6	SF			C	0525	105	1.3	D
0078		06	0733	0819*	0941	S13	E55	5874	01	10.5	128	SF	C 2.4				54		FK
	SVTO	06	0733	0820	1011	S13	E55	5874	01	10.5	158	SF	C 2.4	4	E		54		F
	SVTO	06	0733	0854	1011	S13	E55	5874	01	10.5	158	SN			E		55		K
	KANZ	06	0756E	0819	0841	S14	E54	5874	01	10.4	45D	SF			V				
0079		06	09041	09081	0930	N12	W27	5864	01	4.3	26	SN					130	1.5	E
	HTPR	06	0904	0908	0930	N13	W28	5864	01	4.3	26	SN			C	0908	130	1.5	E
	KANZ	06	0905	0909	0923D	N12	W26	5864	01	4.4	18D	SF			V				
0080		06	09327	09403	1004	N15	W28	5864	01	4.3	32	1N					170	2.1	E
	HTPR	06	0932	0940	1010	N16	W30	5864	01	4.1	38	1B			C	0940	170	2.1	E
	KANZ	06	0939	0943	0959	N14	W26	5864	01	4.4	20	SF			V				
0081	HTPR	06	1018	1025	1035	S09	E90	5877	01	13.2	17	SN			C				
0082	SVTO	06	1043	1045	1100	S12	E68		01	11.6	17	SF		3	E		36		
0083	KANZ	06	1143	1146	1150	N13	W34	5864	01	3.9	7	SF			V				
0084		06	12023	12082	1215	S10	E84	5877	01	12.8	13	SF					22		H
	SVTO	06	1202	1208	1210	S09	E84	5877	01	12.8	8	SF		4	E		10		
	RAMY	06	1205	1210	1220	S11	E84	5877	01	12.8	15	SF		3	E		35		H

8
Jan 90

H α SOLAR FLARES

JANUARY 1990

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Dur (Min)	Imp Opt	Xray	Obs See	Type	Time (UT)	Area Measurement		Remarks
																Apparent (10-6 Disk)	Corr (Sq Deg)	
0085		06	12263	12281	1235	S10	E82	5877	01	12.7	9	SF				30		Y
	SVTO	06	1226	1228	1234	S10	E78	5877	01	12.4	8	SF	3	E		36		Y
	RAMY	06	1227	1228	1235	S11	E84	5877	01	12.8	8	SF	3	E		24		
	KANZ	06	1229	1229	1236	S10	E84	5877	01	12.8	7	SF		V				
0086		06	12363	1240	1250	N12	W30	5864	01	4.3	14	SF				14		
	KANZ	06	1236	1240	1246	N11	W31	5864	01	4.2	10	SF		V				
	RAMY	06	1239	1240	1255	N13	W28	5864	01	4.4	16	SF	3	E		14		
0087		06	1300	13041	1332	S13	E54	5874	01	10.6	32	SN				40	0.7	D
	KANZ	06	1300	1304	1332	S13	E54	5874	01	10.6	32	SF		V				
	HTPR	06	1300	1305	1335D	S13	E55	5874	01	10.7	35D	SN		C	1335	40	0.7	D
0088	KANZ	06	1310	1310	1314	N13	W35	5864	01	3.9	4	SF		V				
0089	HOLL	06	1836	1836	1848	S15	E49	5874	01	10.5	12	SF	3	E		18		F
0090	HOLL	06	1910	1911	1922	S11	E84	5877	01	13.1	12	SF	3	E		19		
0091	PALE	06	1912	1914	1919	N12	W38	5864	01	3.9	7	SF	4	E		18		
0092		06	19512	20031	2049	S11	E80	5877	01	12.8	58	SF				36		
	HOLL	06	1951	2003	2050	S11	E82	5877	01	13.0	59	SF	3	E		38		
	RAMY	06	1953	2004	2048	S11	E78	5877	01	12.7	55	SF	3	E		35		
0093	HOLL	06	1956	1957	2005	N14	W31	5864	01	4.5	9	SF	3	E		27		
0094	HOLL	06	2007	2008	2023	S13	E48	5874	01	10.4	16	SF	3	E		13		
0095	HOLL	06	2009	2010	2020	N14	W35	5864	01	4.2	11	SF	3	E		24		
0096	HOLL	06	2124	2150	2211	S10	E79	5877	01	12.8	47	SF	3	E		32		
0097		06	2246*	2315*	2421	S13	E46	5874	01	10.4	95	1F C 3.7				84		FK
	PALE	06	2246	2318	2447	S11	E48	5874	01	10.5	121	1F C 3.7	4	E		116		F
	PALE	06	2246	2350	2447	S11	E48	5874	01	10.5	121	1F		E		94		K
	HOLL	06	2247	2316	2355D	S14	E45	5874	01	10.3	68D	1N	3	E		135		F
	LEAR	06	2304	2315	2330	S14	E45	5874	01	10.4	26	SF	3	E		41		
	LEAR	06	2338	2350	2350D	S15	E44	5874	01	10.3	12D	SF	3	E		32		
0098		07	0150*	02101	0232	S13	E43	5874	01	10.3	42	1F				111	2.3	EIJ
	VORO	07	0150	0211	0232	S13	E42	5874	01	10.2	42	1F	2	C	0211	170	2.3	EIJ
	PALE	07	0205	0210	0219D	S13	E44	5874	01	10.4	14D	SF	4	E		52		
0099		07	0335	0336	0345	S13	E44	5874	01	10.5	10	1N				31	0.5	E
	PEKG	07	0335	0336	0345	S14	E43	5874	01	10.4	10	1N		V				E
	YUNN	07	0337E	0341U	0351D	S12	E46	5874	01	10.6	14D	SN		P	0341	31	0.5	
0100	KANZ	07	1044	1044	1052	S10	E77	5877	01	13.2	8	SF		V				
0101		07	12002	12071	1220	S10	E76	5877	01	13.2	20	SF				18		
	KANZ	07	1200	1207	1218	S10	E77	5877	01	13.3	18	SF		V				
	SVTO	07	1202	1208	1221	S09	E75	5877	01	13.1	19	SF	3	E		18		
0102	SVTO	07	1235E	1237U	1240	S10	E68	5877	01	12.6	5D	SF	2	E		57		
0103	HOLL	07	1538	1539	1545	S23	E10	5871	01	8.4	7	SF	3	E		11		
0104		07	1638	16382	1654	S14	E42	5874	01	10.9	16	SF				16		F
	RAMY	07	1638	1638	1658	S14	E41	5874	01	10.8	20	SF	3	E		16		F
	HOLL	07	1638	1640	1649	S14	E42	5874	01	10.9	11	SF	3	E		16		F
0105	HOLL	07	1652	1656	1705	N22	W51	5864	01	3.8	13	SF	3	E		28		F
0106		07	17132	1717	1725	S23	E10	5871	01	8.5	12	SF				15		F
	HOLL	07	1713	1717	1729	S23	E10	5871	01	8.5	16	SF	3	E		17		
	RAMY	07	1715	1717	1721	S23	E10	5871	01	8.5	6	SF	3	E		13		F
0107	HOLL	07	1736	1737	1742	S24	E10	5871	01	8.5	6	SF	3	E		11		

H α SOLAR FLARES9
Jan 90

JANUARY 1990

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 (10-6 Disk)	Corr (Sq Deg)	
0108		07	20353	20391	2058	S38	W11	5865	01	7.0	23	SF	C 1.7				26		F
	HOLL	07	2035	2039	2101	S38	W12	5865	01	6.9	26	SF	C 1.7	3	E		39		F
	RAMY	07	2038	2040	2056	S38	W13	5865	01	6.8	18	SF		3	E		28		F
	PALE	07	2039E	2043U	2056D	S39	W09	5865	01	7.1	17D	SF		3	E		12		F
0109		07	22472	22502	2302	S38	W14	5865	01	6.8	15	SF					22		
	HOLL	07	2247	2250	2306	S38	W15	5865	01	6.7	19	SF		3	E		32		
	PALE	07	2249	2252	2257	S38	W12	5865	01	7.0	8	SF		3	E		13		
0110	VORO	08	0151	0153	0158	S15	E30	5874	01	10.3	7	SF		2	C	0153	72	0.8	DI
0111		08	02233	02271	0233	N11	W58	5864	01	3.7	10	1F					63	2.1	DHIJ
	VORO	08	0223	0227	0234	N12	W59	5864	01	3.6	11	1F		2	C	0227	108	2.1	DHIJ
	PALE	08	0226	0228	0232	N10	W57	5864	01	3.8	6	SF		3	E		18		
0112	VORO	08	0230	0231	0249	N22	W61	5862	01	3.4	19	SF		2	C	0231	63	1.5	EH
0113		08	0317	03181	0330	N12	W51	5864	01	4.3	13	SF					34	0.5	EF
	YUNN	08	0315E	0326U	0337	N12	W52	5864	01	4.2	22D	SN			P	0326	31	0.5	E
	LEAR	08	0317	0318	0324	N13	W50	5864	01	4.4	7	SF		3	E		31		
	PALE	08	0317	0319	0328	N11	W52	5864	01	4.2	11	SF		3	E		39		F
0114		08	11167	11231	1137	S14	E25	5874	01	10.3	21	SF	C 1.2				26		
	SVTO	08	1116	1124	1150	S14	E26	5874	01	10.4	34	SF	C 1.2	3	E		29		
	RAMY	08	1120	1124	1131	S13	E24	5874	01	10.3	11	SF	C 1.2	3	E		22		
	KANZ	08	1123	1123	1131	S14	E26	5874	01	10.4	8	SF			V				
0115		08	11552	1159*	1552	S15	E25	5874	01	10.4	237	1N	M 1.6				190		FKTU
	RAMY	08	1155	1219	1601	S16	E25	5874	01	10.4	246	1N			E		193		KT
	RAMY	08	1155	1415	1601	S16	E25	5874	01	10.4	246	1N	M 1.6	3	E		200		UF
	SVTO	08	1156	1159	1314D	S14	E25	5874	01	10.4	78D	1N			E		157		K
	SVTO	08	1156E	1214	1514D	S14	E25	5874	01	10.4	198D	2N			E		191		K
	SVTO	08	1156	1237	1314D	S14	E25	5874	01	10.4	78D	2N			E		195		K
	SVTO	08	1156E	1314	1514D	S14	E25	5874	01	10.4	198D	2N		3	E		327		UF
	KANZ	08	1157	1242U	1417D	S16	E26	5874	01	10.5	140D	1F			V				F
	HOLL	08	1426E	1428U	1534	S14	E24	5874	01	10.4	68D	SF		1	E		66		F
		08	1359		1416	No Flare Patrol													
		08	1418		2209	No Flare Patrol													
0116	RAMY	08	1525	1537	1601	S23	W02	5871	01	8.5	36	SF		3	E		23		F
0117		08	1712	1713	1717	S12	E15	5874	01	9.8	5	SF	C 2.7				32		H
	HOLL	08	1712	1713	1717	S12	E15	5874	01	9.8	5	SF	C 2.7	3	E		32		H
	RAMY	08	1712	1713	1717	S13	E15	5874	01	9.8	5	SF	C 2.7	3	E		31		
0118	HOLL	08	1830	1834	1837	S15	E18	5874	01	10.1	7	SF		3	E		10		F
0119		08	2107	2107	2110	S12	E12	5874	01	9.8	3	SF					23		
	RAMY	08	2107	2107	2110	S13	E12	5874	01	9.8	3	SF		3	E		15		
	HOLL	08	2107E	2107U	2111	S12	E13	5874	01	9.8	4D	SF		3	E		31		
0120	HOLL	08	2156	2158	2232	S16	E18	5874	01	10.3	36	SF	C 1.4	3	E		32		F
		09	0016		0043	No Flare Patrol													
		09	0050		0108	No Flare Patrol													
0121	YUNN	09	0122	0126	0127D	S12	E24	5874	01	10.9	5D	1B			P		236	2.7	F
		09	0128		0141	No Flare Patrol													
		09	0234		0256	No Flare Patrol													
0122	YUNN	09	0618E	0620U	0620D	S24	W13	5871	01	8.2	2D	SN			P	0620	157	1.8	
0123		09	0700	0704	0712	S24	W14	5871	01	8.2	12	1N					112	0.4	D
	URUM	09	0700	0704	0710	S24	W15	5871	01	8.1	10	1N			C		193		D
	YUNN	09	0706E	0706U	0713	S24	W13	5871	01	8.3	7D	SN			P	0706	31	0.4	
0124	KAND	09	0825	0827	0830	S16	E14	5874	01	10.4	5	SF			P	0827	42	0.4	D

10
Jan 90

H α SOLAR FLARES

JANUARY 1990

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	Area Measurement			Remarks
																Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
0125	KANZ	09	1007	1011	1022	S25	W16	5871	01	8.2	15	SF			V				
0126		09	11452	11483	1157	S23	W17	5871	01	8.2	12	SN					155	1.8	F
	ATHN	09	1145	1148	1151	S20	W17	5871	01	8.2	6	1N		3	V	1148	206	2.4	F
	KAND	09	1147	1150	1200	S24	W18	5871	01	8.1	13	SB			P	1150	104	1.2	F
	KANZ	09	1147	1151	1201	S25	W17	5871	01	8.2	14	SN			V				
0127	KANZ	09	1259	1303	1313	S17	E09	5874	01	10.2	14	SF			V				
0128	KANZ	09	1346	1346	1350	S16	E09	5874	01	10.2	4	SF			V				
		09	1403		1416	No Flare Patrol													
		09	1418		1420	No Flare Patrol													
0129		09	14501	14531	1522	S25	W18	5871	01	8.2	32	1B M 2.5					84		FH
	HOLL	09	1450	1454	1506	S25	W18	5871	01	8.2	16	SB		2	E		65		H
	RAMY	09	1451	1453	1537	S25	W19	5871	01	8.1	46	1B M 2.5		2	E		104		FH
0130	HOLL	09	1646	1655	1659	S15	E12	5874	01	10.6	13	SF		3	E		15		F
0131	HOLL	09	1654	1655	1659	S23	W20	5871	01	8.2	5	SF		3	E		17		H
0132	HOLL	09	1715	1716	1721	S23	W20	5871	01	8.2	6	SF		3	E		10		H
0133		09	1728*	1731*	1753	S15	E10	5874	01	10.5	25	SF					19		F
	RAMY	09	1728	1731	1755	S15	E10	5874	01	10.5	27	SF		3	E		18		
	HOLL	09	1730	1731	1739	S15	E11	5874	01	10.6	9	SF		3	E		25		F
	HOLL	09	1742	1742	1804	S15	E10	5874	01	10.5	22	SF		3	E		13		F
0134	HOLL	09	1807	1810	1814	S23	W21	5871	01	8.1	7	SF		3	E		11		
0135	HOLL	09	1945	1946	1950	S23	W20	5871	01	8.3	5	SF		3	E		11		
0136		09	2005*	2008*	2030	S24	W22	5871	01	8.1	25	SF					30		FHK
	HOLL	09	2005	2008	2031	S24	W22	5871	01	8.1	26	SF			E		29		K
	HOLL	09	2005	2019	2031	S24	W22	5871	01	8.1	26	SF		3	E		52		FH
	RAMY	09	2007	2023	2032	S24	W23	5871	01	8.1	25	SF		3	E		23		F
	PALE	09	2020	2022	2026	S26	W19	5871	01	8.4	6	SF		3	E		16		
0137		09	20401	20413	2100	S25	W22	5871	01	8.1	20	1N M 1.2					99		EFHU
	HOLL	09	2040	2041	2104	S25	W22	5871	01	8.1	24	1B M 1.2		3	E		137		UH
	RAMY	09	2040	2042	2103	S24	W23	5871	01	8.1	23	1N M 1.2		3	E		104		FE
	PALE	09	2041	2044	2054	S25	W20	5871	01	8.3	13	SF		2	E		56		F
0138		09	22541	22583	2310	S15	E08	5874	01	10.5	16	SF					20		F
	HOLL	09	2254	2258	2310	S15	E08	5874	01	10.5	16	SF		3	E		26		
	PALE	09	2255	2301	2309	S15	E07	5874	01	10.5	14	SF		3	E		13		F
0139	PALE	10	0030	0034	0056	S26	W23	5871	01	8.2	26	SF C 1.2		3	E		14		F
0140	PALE	10	0124	0125	0130	N24	W46	5873	01	6.5	6	SF		3	E		13		F
0141		10	0223	0224	0242	S15	E06	5874	01	10.5	19	SF					32		F
	LEAR	10	0223E		0246	S15	E06	5874	01	10.5	23D	SF		3	E		45		
	PALE	10	0223	0224	0239	S15	E05	5874	01	10.5	16	SF		3	E		18		F
0142	LEAR	10	0224	0229	0254	N26	W45	5873	01	6.6	30	SF		3	E		63		
0143		10	02403	02442	0312	S25	W25	5871	01	8.2	32	1B M 2.2					255	3.6	DFZ
	LEAR	10	0240	0244	0321	S26	W25	5871	01	8.2	41	2B M 2.2		3	E		275		ZF
	PALE	10	0241	0244	0312	S26	W24	5871	01	8.2	31	1B M 2.2		3	E		217		
	YUNN	10	0243E	0243U	0309	S22	W25	5871	01	8.2	26D	1B			P	0243	314	3.7	
	PEKG	10	0243	0246	0307	S25	W25	5871	01	8.2	24	1B			P	0246	294	3.6	D
	URUM	10	0255E	0255U	0309	S25	W26	5871	01	8.1	14D	1F			C		177		D
0144		10	07381	07393	0749	S23	W29	5871	01	8.1	11	SF C 3.0					13		
	LEAR	10	0738	0742	0747	S22	W30	5871	01	8.0	9	SF C 3.0		4	E		13		
	KANZ	10	0739	0739	0751	S24	W28	5871	01	8.1	12	SF			C				

H α SOLAR FLARES11
Jan 90

JANUARY 1990

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 ⁻⁶ Disk)	Corr (Sq Deg)	
0145		10	12582	13002	1310	S23	W33	5871	01	8.0	12	SN	C 4.6					120	2.1	EH
	HTPR	10	1258	1302	1310	S23	W30	5871	01	8.2	12	1B				C	1302	160	2.1	H
	KANZ	10	1300	1300	1310	S23	W34	5871	01	7.9	10	SF				V				
	RAMY	10	1300	1302	1310	S22	W34	5871	01	7.9	10	SF	C 4.6	2	E			81		EH
0146		10	1304	13061	1314	S13	W11	5874	01	9.7	10	SN						80	0.8	
	HTPR	10	1304	1306	1315	S14	W09	5874	01	9.9	11	SN				C	1306	80	0.8	
	KANZ	10	1304	1307	1313	S12	W13	5874	01	9.6	9	SF				V				
0147		10	13161	1317	1346	S14	W26	5870	01	8.6	30	SF						15		
	RAMY	10	1316	1317	1357	S13	W24	5870	01	8.7	41	SF			3	E		15		
	KANZ	10	1317	1317	1336	S14	W29	5870	01	8.4	19	SF				V				
0148	HOLL	10	1447E	1450U	1455	N24	W49	5873	01	6.8	8D	SF			3	E		22		
0149	HTPR	10	1510	1516	1520	S14	W10	5874	01	9.9	10	SN				C	1516	70	0.7	
0150	HOLL	10	1512	1516	1525	N26	W51	5873	01	6.7	13	SF			3	E		23		
0151		10	1526*	1538*	1555	N26	W51	5873	01	6.7	29	SF						24		
	RAMY	10	1526	1538	1556	N26	W51	5873	01	6.7	30	SF			3	E		26		
	HOLL	10	1547	1552	1554	N25	W51	5873	01	6.7	7	SF			3	E		23		
		10	1625		1628	No Flare Patrol														
0152		10	1727*	17363	1804	S14	W06	5874	01	10.3	37	SN						50		
	HOLL	10	1727	1736	1822	S13	W06	5874	01	10.3	55	SN			3	E		79		
	HOLL	10	1738	1739	1746	S14	W06	5874	01	10.3	8	SF			3	E		20		
0153	HOLL	10	1729	1738	1755	N26	W53	5873	01	6.6	26	SF			3	E		30		
0154		10	2017	2020	2057	S24	W34	5871	01	8.2	40	1N	M 2.0					150		F
	HOLL	10	2017	2020	2057	S25	W35	5871	01	8.1	40	2B	M 2.0	3	E			255		F
	PALE	10	2028E	2028U	2100D	S24	W34	5871	01	8.2	32D	SF			3	E		45		
0155	HOLL	10	2106	2107	2110	N25	W54	5873	01	6.7	4	SF			3	E		14		F
0156	VORO	11	0102	0103	0111	N37	W55		01	6.6	9	SF			2	C	0103	81	1.6	D
0157	VORO	11	0113	0117	0154	N37	W55		01	6.6	41	1F			2	C	0117	116	2.8	D
0158	LEAR	11	0345	0346	0351	N25	W59	5873	01	6.6	6	SF			3	E		14		
0159	LEAR	11	0417	0418	0424	S25	W38	5871	01	8.2	7	SF			3	E		21		
0160	ISTA	11	0932	0954	1001	S13	W39	5870	01	8.4	29	SB				V				DJM
0161	ISTA	11	0944	0944	0949	S29	E85	5881	01	18.1	5	1F				V				D
0162	ISTA	11	1001	1001	1008	N26	W61	5873	01	6.7	7	SN				V				E
0163		11	14064	14102	1430	S22	W45	5871	01	8.1	24	SN						52	1.2	E
	HTPR	11	1406	1410	1430	S18	W45	5871	01	8.2	24	SN				C	1410	80	1.2	E
	RAMY	11	1410	1412	1431	S25	W45	5871	01	8.1	21	SF			3	E		24		
0164	HTPR	11	1408	1412	1415	S05	W10	5785	01	10.8	7	SF				C	1412	30	0.3	D
0165	HOLL	11	1802	1803	1814	S11	E19	5877	01	13.2	12	SF			4	E		18		F
0166		11	20441	2050	2108	S24	W49	5871	01	8.1	24	SF	C 2.4					50		F
	HOLL	11	2044	2050	2116	S25	W49	5871	01	8.1	32	SF	C 2.4	3	E			62		F
	RAMY	11	2045	2050	2100	S23	W49	5871	01	8.1	15	SF	C 2.4	3	E			38		
0167		12	0045*	0056*	0125	S25	W50	5871	01	8.1	40	SF	M 1.1					140	4.8	EJ
	LEAR	12	0045	0056	0120	S25	W50	5871	01	8.1	35	SF	M 1.1	3	E			88		
	VORO	12	0058E	0059	0121	S24	W50	5871	01	8.2	23D	1N			1	C	0059	287	4.8	EJ
	PALE	12	0108	0109	0134	S27	W50	5871	01	8.1	26	SF			3	E		44		

12
Jan 90

H α SOLAR FLARES

JANUARY 1990

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	Area Measurement			Remarks
																	Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
0168		12	07392	0741	0748	N23	E76	5882	01	18.2	9	1N	C	8.4				52		D
	ABST	12	0739	0741	0750	N24	E80	5882	01	18.5	11	1N			C		0741	87		D
	LEAR	12	0741	0741	0747	N22	E73	5882	01	17.9	6	SF	C	8.4	3	E		17		
0169		12	0802		0814	N22	E75	5882	01	18.1	12	1N						250		FH
	HTPR	12	0800E		0820	N25	E75	5882	01	18.1	20D	1N			C		0804	250		H
	ISTA	12	0802		0808	N20	E75	5882	01	18.1	6	1N			V					F
0170	HTPR	12	1000		1050	N24	E72	5882	01	18.0	50	SF			C		1035	100		
0171	KANZ	12	1135	1135	1138	S25	E48	5878A	01	16.2	3	SF			V					
0172	RAMY	12	1358	1407	1418	N26	W77	5873	01	6.6	20	SF			3	E		43		
0173	HOLL	12	1852	1914	1926	N21	E68	5882	01	18.0	34	SF			3	E		30		
0174	HOLL	12	2053	2057	2100	N20	E65	5882	01	17.8	7	SF			3	E		14		
			12 2104		2147	No Flare Patrol														
0175	HOLL	12	2116E	2118U	2200D	N21	E65	5882	01	17.9	44D	SN	M	3.5	3	E		80		EH
			12 2152		2202	No Flare Patrol														
			12 2216		2226	No Flare Patrol														
			12 2230		2243	No Flare Patrol														
0176	LEAR	13	0056	0057	0100	N21	E64	5882	01	17.9	4	SF	C	1.2	3	E		19		
0177	VORO	13	0121	0122	0125	N26	W88	5873	01	6.2	4	SF			1	C	0122	27		DH
0178	YUNN	13	0559E	0610	0634	N25	W88	5873	01	6.4	35D				P					A
0179		13	08041	08061	0813	S09	W02	5877	01	13.2	9	1N	C	1.9				88	1.8	F
	SVTO	13	0804	0806	0817	S09	W02	5877	01	13.2	13	SF	C	1.9	3	E		67		F
	KANZ	13	0804	0807	0815	S10	W02	5877	01	13.2	11	SF			V					
	LEAR	13	0805	0806	0810	S09	W03	5877	01	13.1	5	SF	C	1.9	3	E		24		F
	ISTA	13	0805	0807	0809	S08	W01	5877	01	13.3	4	2B			V					F
	YUNN	13	0805E	0808U	0812	S11	W04	5877	01	13.0	7D	SB			P	0808	173	1.8		
0180		13	08095	08151	0818	N33	E56	5884	01	17.8	9	SF						15		
	KANZ	13	0809	0815	0819	N33	E56	5884	01	17.8	10	SF			V					
	LEAR	13	0814	0816	0818	N33	E56	5884	01	17.8	4	SF			3	E		15		
0181	HTPR	13	0902	0910	0919	N25	E85	5887	01	20.0	17	SN			C		0910	10		A
0182		13	0938	0939*	1035	N26	E85	5887	01	20.0	57	SN						13		AK
	HTPR	13	0938	0939	1035	N26	E85	5887	01	20.0	57	SN			C		0939	10		AK
	HTPR	13	0938	0953	1035	N26	E85	5887	01	20.0	57	SN			C		0953	20		AK
	HTPR	13	0938	1028	1035	N26	E85	5887	01	20.0	57	SN			C		1028	10		AK
0183	HTPR	13	0958	1001	1005	N35	E54	5884	01	17.7	7	SF			C		1001	70	1.5	
0184	HTPR	13	1115	1117	1145	S17	E80		01	19.5	30	SN			C		1117	10		D
0185	HTPR	13	1151	1157	1201	S09	W10	5877	01	12.7	10	SF			C		1157	20	0.2	E
0186	HTPR	13	1154	1154	1205	N22	E65	5882	01	18.5	11	SF			C		1154	30	0.9	D
0187	HTPR	13	1202	1205	1212	S35	E29	5879	01	15.8	10	SN			C		1205	10	0.1	D
0188	HTPR	13	1209	1212	1240	N16	E59	5882	01	18.0	31	SF			C		1212	10	0.2	D
0189	HTPR	13	1529	1530	1536	N32	E48	5884	01	17.4	7	SF			C		1530	40	0.7	D
0190	RAMY	13	1609	1616	1634	S25	W74	5871	01	7.9	25	SF			3	E		42		
0191	RAMY	13	1612	1613	1618	N26	W88	5873	01	6.8	6	SN	C	3.4	3	E		46		

H α SOLAR FLARES13
Jan 90

JANUARY 1990

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement			Remarks
															Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
0192		13	18274	18284	1841	S14	W72	5870	01	8.3	14	SF C 1.8				36		F
	HOLL	13	1827	1828	1841	S14	W72	5870	01	8.3	14	SF C 1.8	3	E		49		F
	RAMY	13	1827	1829	1840	S13	W73	5870	01	8.3	13	SF C 1.8	3	E		39		
	PALE	13	1831	1832	1841	S16	W70	5870	01	8.5	10	SF	3	E		19		
0193	PALE	13	2134	2136	2142	S36	E31	5879	01	16.4	8	SF	3	E		11		
0194		13	23311	2333	2343	N16	E54	5882	01	18.1	12	SF				28		
	PALE	13	2331	2333	2346	N18	E55	5882	01	18.2	15	SF	3	E		22		
	HOLL	13	2332	2333	2340	N13	E52	5882	01	17.9	8	SF	3	E		33		
0195	LEAR	14	0051	0052	0056	S12	W69	5870	01	8.8	5	SF C 1.3	3	E		17		
0196	YUNN	14	0105E	0107U	0134	N20	E44	5882	01	17.4	29D	SN		P	0107	110	1.8	
0197		14	1005	10064	1035	N21	E48	5882	01	18.1	30	1N M 2.8				244	7.1	EF
	LEAR	14	1005	1006	1018	N22	E46	5882	01	17.9	13	1F M 2.8	3	E		105		FE
	KANZ	14	1005	1009	1052	N20	E47	5882	01	18.0	47	1F		V				
	ATHN	14	1005	1010	1020D	N20	E50	5882	01	18.2	15D	2B	3	V	1010	382	7.1	
0198		14	12091	1217	1222	N32	E38	5884	01	17.5	13	SF				36		
	RAMY	14	1209	1217	1223	N31	E38	5884	01	17.5	14	SF	3	E		36		
	KANZ	14	1210	1217	1221	N33	E38	5884	01	17.5	11	SF		V				
0199	RAMY	14	1309	1326	1342	N31	E38	5884	01	17.5	33	SF	3	E		20		
0200		14	1317	1321	1326	S24	E71		01	20.0	9	SF				18		
	KANZ	14	1317	1321	1324	S23	E71		01	20.0	7	SF		V				
	RAMY	14	1322E	1322U	1327	S24	E71		01	20.0	5D	SF	3	E		18		
0201		14	16112	16151	1622	N17	E44	5882	01	18.0	11	SF				16		
	HOLL	14	1611	1616	1626	N20	E43	5882	01	18.0	15	SF	3	E		21		
	RAMY	14	1613	1615	1619	N14	E44	5882	01	18.0	6	SF	3	E		12		
0202	HOLL	14	2243	2246	2304	N24	E79	5887	01	21.0	21	SF	4	E		24		
0203		15	06434	06501	0713	N20	E43	5882	01	18.6	30	1N C 7.5				235	6.1	F
	YUNN	15	0643	0650	0700D	N20	E42	5882	01	18.5	17D	2N		P		393	6.1	F
	LEAR	15	0647	0651	0713	N20	E44	5882	01	18.6	26	SF C 7.5	3	E		77		F
0204	YUNN	15	0830E	0841U	0901	S35	E11	5879	01	16.2	31D	SB		P	0841	47	0.6	
0205	RAMY	15	1546	1548	1554	N20	E29	5882	01	17.9	8	SF	3	E		12		
0206	RAMY	15	1603	1608	1623	N20	E32	5882	01	18.1	20	SF C 4.7	3	E		30		F
0207		15	1955*	2019	2022	N21	E28	5882	01	18.0	27	SF				20		F
	RAMY	15	1955	2019	2022	N21	E30	5882	01	18.1	27	SF	3	E		29		F
	HOLL	15	2016	2019	2023	N21	E26	5882	01	17.8	7	SF	3	E		11		
0208	RAMY	15	2103	2111	2118	S16	W70	5874	01	10.6	15	SF	3	E		19		
		15	2156		2323	No Flare Patrol												
		16	0008		0009	No Flare Patrol												
0209	VORO	16	0016E		0041	S26	W73	5875	01	10.3	25D	1F	2	C	0017	99		E
0210	YUNN	16	0611	0619	0648	N15	E21	5891	01	17.8	37	SN		C		79	0.9	
0211	YUNN	16	0717E	0717U	0734	S35	W05	5879	01	15.9	17D	SN		P	0717	47	0.6	E
0212	YUNN	16	0740	0755	0820	S20	E88	5892A	01	23.0	40			C				A
0213		16	0940	0948*	1015	S27	W02		01	16.2	35	SF				20	0.2	GK
	HTRP	16	0940	0948	1015	S27	W02		01	16.2	35	SF		C	0948	20	0.2	GK
	HTRP	16	0940	0959	1015	S27	W02		01	16.2	35	SF		C	0959	20	0.2	GK

14
Jan 90

H α SOLAR FLARES

JANUARY 1990

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Dur (Min)	Imp Opt	Xray	Obs See	Type	Time (UT)	Area Measurement Apparent (10-6 Disk)	Corr (Sq Deg)	Remarks
0214		16	10113	10141	1023	S17	W81	5874	01	10.3	12	SF				36		
	HTPR	16	1011	1014	1020	S17	W80	5874	01	10.3	9	SN		C	1014	40		
	KANZ	16	1014	1014	1025	S17	W77	5874	01	10.6	11	SF		V				
	SVTO	16	1014	1015	1023	S16	W85	5874	01	10.0	9	SF	4	E		32		
0215		16	1015	1036*	1154	S10	E85	5890	01	22.8	99	SF				40		AK
	HTPR	16	1015	1036	1154	S10	E85	5890	01	22.8	99	SF		C	1036	30		AK
	HTPR	16	1015	1055	1154	S10	E85	5890	01	22.8	99	SF		C	1055	40		AK
	HTPR	16	1015	1129	1154	S10	E85	5890	01	22.8	99	SF		C	1129	50		AK
0216		16	1042*	10521	1059	N21	E20	5882	01	18.0	17	SF				52	1.1	
	HTPR	16	1042	1052	1105	N22	E22	5882	01	18.1	23	SF		C	1052	90	1.1	
	SVTO	16	1052	1053	1056	N21	E18	5882	01	17.8	4	SF	3	E		15		
	KANZ	16	1053	1053	1056	N20	E20	5882	01	18.0	3	SF		V				
0217	HTPR	16	1117	1118	1130	N20	E22	5882	01	18.1	13	SF		C	1118	40	0.5	
0218	HTPR	16	1158	1204	1255	S11	E85	5890	01	22.9	57	SF		C	1204	30		
0219	HTPR	16	1234	1234	1258	N21	E17	5882	01	17.8	24	SF		C	1234	20	0.2	D
0220		16	1440*	1505	1513	S14	W82	5874	01	10.4	33	1F				71		A
	HTPR	16	1440	1505	1550	S13	W80	5874	01	10.6	700	1F		C	1505	110		A
	RAMY	16	1501	1505	1513	S14	W83	5874	01	10.3	12	SF	3	E		32		
0221	RAMY	16	1805	1829	1839	N20	E18	5882	01	18.1	34	SF	3	E		28		F
0222	RAMY	16	1923	1924	1933	N21	E16	5882	01	18.0	10	SF	3	E		14		FH
		16	2056		2102	No Flare Patrol												
		16	2109		2314	No Flare Patrol												
		16	2326		2400	No Flare Patrol												
		17	0000		0034	No Flare Patrol												
0223		17	07167	07185	0728	S12	E78	5890	01	23.2	12	SN	C 7.2			87		H
	LEAR	17	0716	0718	0726	S13	E78	5890	01	23.2	10	SB	C 7.2	3	E	37		
	SVTO	17	0717E	0720U	0730	S11	E79	5890	01	23.2	130	1F	C 7.2	2	E	192		H
	YUNN	17	0722E	0724U	0729	S10	E79	5890	01	23.2	70	SB		P	0724	31		
	KANZ	17	0723	0723	0727	S13	E76	5890	01	23.0	4	SF		C				
0224	ISTA	17	0738	0738	0745	S29	E06	5881	01	17.8	7	SB		V				D
0225	KANZ	17	0747	0747	0754	N32	E04	5884	01	17.6	7	SF		C				
0226	HTPR	17	0835	0846	0850	S07	E63	5889	01	22.1	15	SF		C	0846	20	0.4	D
0227		17	08375	08411	0856	N21	E11	5882	01	18.2	19	SN				70	0.8	EF
	ISTA	17	0837	0841	0857	N21	E13	5882	01	18.3	20	SB		V				F
	HTPR	17	0837	0841	0900	N22	E11	5882	01	18.2	23	SN		C	0841	60	0.7	
	KANZ	17	0842	0842	0850	N20	E10	5882	01	18.1	8	SF		V				
	YUNN	17	0842E	0843U	0843D	N21	E09	5882	01	18.0	10	SN		P	0843	79	0.9	E
0228		17	08464	0857	0914	N12	W24	5878	01	15.5	28	SF				30	0.3	E
	HTPR	17	0846	0857	0907	N12	W23	5878	01	15.6	21	SF		C	0857	30	0.3	
	ISTA	17	0850		0920	N11	W24	5878	01	15.6	30	SF		V				E
0229		17	08572	08595	0913	S12	E77	5890	01	23.2	16	1N	C 5.6			172		EFHMu
	BUCA	17	0855E		0900D	S09	E78	5890	01	23.2	50	2B		P	0900	214		E
	KANZ	17	0857	0901	0912	S14	E76	5890	01	23.1	15	1N		V				U
	HTPR	17	0857	0902	0914	S14	E80	5890	01	23.4	17	1N		C	0902	90		H
	LEAR	17	0857	0903	0912	S14	E77	5890	01	23.2	15	SF		3	E	49		
	SVTO	17	0857	0904	0920	S12	E74	5890	01	22.9	23	2N	C 5.6	3	E	337		
	ISTA	17	0859	0859	0909	S12	E76	5890	01	23.1	10	2B		V				MUF
0230		17	10032	10063	1018	N21	E10	5882	01	18.2	15	SF	C 1.9			45	0.9	
	HTPR	17	1003	1006	1017	N22	E10	5882	01	18.2	14	SF		C	1006	80	0.9	
	KANZ	17	1004	1007	1018	N21	E10	5882	01	18.2	14	SF		V				
	SVTO	17	1005	1009	1019	N21	E10	5882	01	18.2	14	SF	C 1.9	3	E	10		

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	NOAA/USAF			CMP Mo	Dur (Min)	Imp Opt	Xray	Obs See	Type	Time (UT)	Area Measurement		Remarks
						Region	Mo	Day								Apparent (10-6 Disk)	Corr (Sq Deg)	
0231		17	10036	10101	1014	S07	E62	5889	01	22.1	11	SF				28	0.6	
	HTPR	17	1003	1010	1013	S07	E62	5889	01	22.1	10	SF		C	1010	30	0.6	
	KANZ	17	1007	1011	1015	S08	E62	5889	01	22.1	8	SF		V				
	SVTO	17	1009	1011	1015	S06	E62	5889	01	22.1	6	SF	3	E		26		
0232		17	1005	1016*	1105	S12	E78	5890	01	23.3	60	SF				33		DK
	HTPR	17	1005	1016	1105	S12	E78	5890	01	23.3	60	SF		C	1016	10		DK
	HTPR	17	1005	1042	1105	S13	E78	5890	01	23.3	60	SF		C	1042	40		K
	HTPR	17	1005	1058	1105	S12	E78	5890	01	23.3	60	SF		C	1058	50		K
0233	HTPR	17	1009	1009	1025	S12	E26	5888	01	19.4	16	SN		C	1009	10	0.1	D
0234		17	10092	10096	1018	N10	W24	5878	01	15.6	9	SF				10		
	SVTO	17	1009	1009	1019	N11	W25	5878	01	15.5	10	SF	3	E		10		
	KANZ	17	1011	1015	1018	N10	W24	5878	01	15.6	7	SF		V				
0235	HTPR	17	1057	1102	1120	S29	E03	5881	01	17.7	23	SN		C	1102	20	0.2	H
0236	HTPR	17	1112	1113	1115	S22	E08	5883	01	18.1	3	SF		C	1113	10	0.1	
0237	HTPR	17	1113	1117	1125	S07	E62	5889	01	22.1	12	SF		C	1117	20	0.4	
0238		17	1135	1146*	1220	S08	E62	5889	01	22.1	45	SF				50	1.0	DK
	HTPR	17	1135	1146	1220	S08	E62	5889	01	22.1	45	SF		C	1146	50	1.0	DK
	HTPR	17	1135	1207	1220	S08	E62	5889	01	22.1	45	SF		C	1207	50	1.0	DK
0239		17	1136	11518	1211	S13	E76	5890	01	23.2	35	SF				36		H
	KANZ	17	1136	1151	1210	S14	E76	5890	01	23.2	34	SF		V				
	SVTO	17	1136	1154	1207	S12	E74	5890	01	23.0	31	SF	3	E		18		
	HTPR	17	1136	1154	1215	S13	E77	5890	01	23.3	39	SN		C	1154	40		
	RAMY	17	1152E	1159	1215D	S14	E75	5890	01	23.2	23D	SF	3	E		50		H
0240		17	1215*	12282	1254	N19	E11	5882	01	18.3	39	SF				71	1.3	FIU
	HTPR	17	1215	1228	1255	N20	E11	5882	01	18.3	40	SN		C	1228	120	1.3	IU
	RAMY	17	1221	1228	1254	N20	E10	5882	01	18.3	33	SF	3	E		22		F
	KANZ	17	1226	1230	1253	N18	E12	5882	01	18.4	27	SF		V				
0241	HTPR	17	1222	1223	1230	S13	E78	5890	01	23.4	8	SF		C	1223	20		
0242		17	12292	12302	1242	S08	E61	5889										

16
Jan 90

H α SOLAR FLARES

JANUARY 1990

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	Area Measurement			Remarks
															Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
0251		18	02212	0225	0229	S12	E65	5890	01	23.0	8	SN	M 1.7			84	1.8	
	YUNN	18	0221	0225	0229	S11	E63	5890	01	22.8	8	SN		C		79	1.8	
	LEAR	18	0223	0223U	0235D	S14	E67	5890	01	23.2	12D	SF	M 1.7	2	E	88		
0252	ISTA	18	0815	0823	0841	N21	W07	5882	01	17.8	26	SN		V				D
0253	ISTA	18	0815	0815	0823	S12	E63	5890	01	23.1	8	SN		V				D
0254	ISTA	18	0831	0831	0837	S07	W82		01	12.2	6	SN		V				F
0255	ISTA	18	0839		0843	S29	E06	5894	01	18.8	4	SF		V				D
0256	ISTA	18	0940	0942	0946	N21	W07	5882	01	17.9	6	SF		V				D
0257		18	11132	11161	1123	S10	E48	5889	01	22.1	10	SF				46	0.6	E
	HTPR	18	1113	1116	1121	S11	E49	5889	01	22.1	8	SF		C	1116	30	0.4	
	KAND	18	1115	1117	1125	S10	E48	5889	01	22.1	10	SF		P	1117	62	0.9	E
0258	HTPR	18	1123	1127	1145	S09	E90	5897	01	25.2	22	SF		C	1127	30		A
0259	HTPR	18	1156	1205	1216D	N17	W06	5891	01	18.0	20D	SF		C	1205	30	0.3	E
		18	1321		1509	No Flare Patrol												
		18	1553		1720	No Flare Patrol												
		18	1754		1854	No Flare Patrol												
		18	1904		1920	No Flare Patrol												
		18	1936		2002	No Flare Patrol												
0260	HOLL	18	2002E	2005U	2008	S13	E57	5890	01	23.1	6D	SF		2	E		44	
		18	2030		2215	No Flare Patrol												
		18	2230		2252	No Flare Patrol												
		18	2326		2355	No Flare Patrol												
0261	VORO	19	0124	0130	0137	S33	E71	5892	01	24.7	13	1F		2	C	0130	108	D
0262	KODA	19	0430		0430D	N21	W21	5882	01	17.6	13D	1N		P	0430	452	4.7	
0263		19	08441	08462	0941	S12	E49	5890	01	23.0	57	SF	C 5.6			62	1.7	
	KANZ	19	0844	0848	0947	S12	E50	5890	01	23.1	63	SF		V				
	LEAR	19	0845	0846	0917	S12	E48	5890	01	23.0	32	SF	C 5.6	3	E	23		
	HTPR	19	0846E	0848	1000	S12	E50	5890	01	23.1	74D	SN		C	0848	100	1.7	
0264	HTPR	19	0846E	0846	0905	N22	W17	5882	01	18.0	19D	SF		C	0846	30	0.3	E
0265	HTPR	19	0848	0849	0857	S32	E65	5892	01	24.5	9	SF		C	0849	40	1.0	
0266	HTPR	19	0848	0905	0915	S10	E85	5897	01	25.7	27	SF		C	0905	40		A
0267	HTPR	19	0900	0907	0940	S35	W40		01	16.2	40	SF		C	0907	40	0.6	E
0268		19	09085	09136	0935	N22	W23	5882	01	17.6	27	SF				57	0.6	DE
	HTPR	19	0908	0913	0945	N22	W23	5882	01	17.6	37	SN		C	0913	50	0.6	E
	KANZ	19	0911	0919	0931	N21	W22	5882	01	17.7	20	SF		V				
	URUM	19	0913	0915	0930	N22	W25	5882	01	17.5	17	SF		C		64		D
0269		19	0926*	0937*	1106	S10	E85	5897	01	25.8	100	SF				47		AK
	HTPR	19	0926	0937	1120	S10	E85	5897	01	25.8	114	SF		C	0937	40		AK
	HTPR	19	0926	1010	1120	S10	E85	5897	01	25.8	114	1N		C	1010	60		AK
	HTPR	19	0926	1043	1120	S10	E85	5897	01	25.8	114	SF		C	1043	40		AK
	KANZ	19	1007	1010	1023	S10	E85	5897	01	25.8	16	SF		V				
0270		19	09505	09554	1009	N22	E58	5893	01	23.9	19	SF				90	1.8	
	HTPR	19	0950	0955	1015	N22	E58	5893	01	23.9	25	SF		C	0955	90	1.8	
	KANZ	19	0955	0959	1003	N23	E59	5893	01	23.9	8	SF		V				
0271		19	10491	10501	1101	S33	E65	5892	01	24.6	12	SN				40	1.0	
	HTPR	19	1049	1051	1102	S32	E65	5892	01	24.6	13	SN		C	1051	40	1.0	
	KANZ	19	1050	1050	1100	S34	E65	5892	01	24.6	10	SF		V				

H α SOLAR FLARES17
Jan 90

JANUARY 1990

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	Area Measurement			Remarks
																Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
0272	KANZ	19	1115	1115	1119	S12	E52	5890	01	23.4	4	SF			V				
0273	HTPR	19	1140	1157	1255	S10	E85	5897	01	25.9	75	SF			C	1157	40		T
0274		19	11469	11575	1219	N22	W25	5882	01	17.6	33	SF	C 5.6				125	2.1	F
	RAMY	19	1146	1200	1246D	N22	W24	5882	01	17.6	60D	SF	C 5.6	2	E		80		F
	HTPR	19	1150	1157	1220	N22	W26	5882	01	17.5	30	1N			C	1157	170	2.1	
	KANZ	19	1155	1202	1218	N21	W25	5882	01	17.6	23	SF			V				
0275	HTPR	19	1325	1325	1327	S13	E47	5890	01	23.1	2	SF			C	1325	60	0.8	
0276	RAMY	19	1436	1441	1445	S11	E78	5897	01	25.5	9	SF		3	E		16		F
0277	HTPR	19	1500	1520	1552	S10	E80	5897	01	25.6	52	SF			C	1520	50		
0278		19	15181	15203	1537	N20	W21	5882	01	18.0	19	SF					36	0.4	
	RAMY	19	1518	1523	1554D	N21	W20	5882	01	18.1	36D	SF		3	E		43		
	HTPR	19	1519	1520	1537	N20	W22	5882	01	17.9	18	SF			C	1520	30	0.4	
0279		19	15244	1532*	1616	S12	E45	5890	01	23.0	52	SN	M 2.0				126	2.9	FKU
	HTPR	19	1524	1537	1552D	S12	E45	5890	01	23.0	28D	1B			C	1537	210	2.9	
	RAMY	19	1528	1532	1616	S12	E45	5890	01	23.0	48	SN			E		83		K
	RAMY	19	1528	1600	1616	S12	E45	5890	01	23.0	48	SN	M 2.0	3	E		84		UF
0280	RAMY	19	1616	1616	1642	S12	E44	5890	01	23.0	26	SF		3	E		53		F
		19	1658		1703														
		19	1732		1749														
		19	1805		1822														
0281		19	1929*	1932*	1958	S12	E40	5890	01	22.8	29	SF					40		F
	RAMY	19	1929	1932	1938	S11	E40	5890	01	22.8	9	SF		3	E		19		F
	RAMY	19	1939	2000	2017	S12	E40	5890	01	22.8	38	SF		3	E		61		F
0282	RAMY	19	2004	2015	2035	S30	W16	5894	01	18.6	31	SF		3	E		32		
0283	RAMY	19	2018	2030	2041	S12	E40	5890	01	22.8	23	SF		3	E		42		F
		19	2018		2032														
		19	2054		2121														
		19	2133		2212														
		19	2216		2222														
		19	2337		2344														
		19	2359		2400														
		20	0000		0001														
0284	LEAR	20	0119	0123	0130	S10	E76	5897	01	25.8	11	SF		3	E		20		
0285		20	01194	01243	0155	N18	W24	5882	01	18.2	36	1N					184	2.8	EFI
	VORO	20	0119	0124	0230	N19	W25	5882	01	18.1	71	1F		2	C	0126	260	3.1	EI
	YUNN	20	0121E	0128U	0144D	N18	W25	5882	01	18.1	23D	1B			P	0128	189	2.3	
	LEAR	20	0122	0127	0150	N19	W23	5882	01	18.3	28	SF		3	E		35		F
	PEKG	20	0123	0124	0125	N17	W25	5882	01	18.1	2	1F			P	0123	252	3.1	E
0286		20	01271	01291	0139	S32	E55	5892	01	24.4	12	SF					38	1.0	D
	VORO	20	0127	0130	0139	S33	E55	5892	01	24.4	12	SF		2	C	0130	72	1.4	D
	YUNN	20	0128E	0128U	0144	S31	E55	5892	01	24.4	16D	SN			P	0128	31	0.6	
	LEAR	20	0128	0129	0134	S33	E56	5892	01	24.5	6	SF		3	E		12		
0287	LEAR	20	0140	0147	0155	S11	E76	5897	01	25.8	15	SF		3	E		17		
0288	LEAR	20	0323	0323	0331	S28	E60	5892	01	24.8	8	SF		3	E		10		
0289	LEAR	20	0331	0333	0341	S10	E76	5897	01	25.8	10	SF	C 4.0	3	E		22		
0290	LEAR	20	0703	0707	0713	S11	E70	5897	01	25.6	10	SF		3	E		11		
0291	SVTO	20	0729	0828	0839	S11	E70	5897	01	25.6	70	SF		3	E		83		

18
Jan 90

H α SOLAR FLARES

JANUARY 1990

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	Area Measurement			Remarks
																Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
0292	SVTO	20	0831	0832	0839	S22	W25	5883	01	18.4	8	SF		3	E		16		F
0293		20	0916	0918	1001	S12	E35	5890	01	23.0	45	SN					47	0.5	
	HTPR	20	0916	0918	0940	S12	E37	5890	01	23.2	24	SN			C	0918	40	0.5	
	SVTO	20	0919E	0919	1022	S12	E33	5890	01	22.9	63D	SF		3	E		54		
0294	HTPR	20	0953	0954	1005	S11	E70	5897	01	25.7	12	SF			C	0954	30		
0295	HTPR	20	1039	1040	1047	S08	E28	5889	01	22.5	8	SF			C	1040	30	0.3	
0296		20	1059	1103	1119	S12	E36	5890	01	23.2	20	SN					20	0.2	E
	HTPR	20	1059	1103	1120	S12	E35	5890	01	23.1	21	SN			C	1103	20	0.2	E
	KANZ	20	1100	1104	1118	S12	E36	5890	01	23.2	18	SF			V				
0297		20	1137	1146	1250	N22	W32	5882	01	18.0	73	1N M 1.7					217	3.0	
	HTPR	20	1137	1146	1240	N23	W32	5882	01	18.0	63	1N			C	1146	220	3.0	
	SVTO	20	1140	1149	1259	N22	W33	5882	01	17.9	79	1N M 1.7		3	E		214		
	KANZ	20	1149E	1149U	1220D	N21	W32	5882	01	18.0	31D	1N			V				
0298	SVTO	20	1142	1146	1153	S10	E67	5897	01	25.5	11	SF		3	E		24		
0299		20	1145	1147	1152	S14	E30	5890	01	22.7	7	SN					30	0.3	E
	HTPR	20	1145	1147	1152	S13	E30	5890	01	22.7	7	SN			C	1147	30	0.3	E
	KANZ	20	1149E	1149U	1152	S14	E30	5890	01	22.7	3D	SF			V				
0300		20	1209*	1214*	1340	S11	E30	5890	01	22.8	91	1B M 4.2					172	1.9	KV
	HTPR	20	1209	1214	1227	S11	E31	5890	01	22.8	18	SN			C	1214	90	1.0	
	SVTO	20	1210	1254	1454	S11	E29	5890	01	22.7	164	1B M 4.2		3	E		168		
	HTPR	20	1229	1243	1403D	S11	E31	5890	01	22.8	94D	1B			C	1243	210	2.3	K
	HTPR	20	1229	1327	1403D	S11	E31	5890	01	22.8	94D	1B			C	1327	220	2.4	KV
0301	SVTO	20	1231	1247	1310	S10	E20	5889	01	22.0	39	SF		3	E		18		
0302	HOLL	20	1544	1547	1552	N21	W35	5882	01	18.0	8	SF		2	E		55		F
0303	HOLL	20	1619	1619	1632	N21	W35	5882	01	18.0	13	SF		4	E		37		F
0304		20	1720	1724	1738	S32	W38	5881	01	17.7	18	SF					28		EF
	HOLL	20	1720	1724	1738	S32	W38	5881	01	17.7	18	SF		4	E		38		E
	RAMY	20	1721	1726	1744D	S32	W38	5881	01	17.7	23D	SF		3	E		19		F
0305	HOLL	20	1722E	1722	1728	N21	W36	5882	01	18.0	6D	SF		3	E		24		F
0306	HOLL	20	1737	1740	1754D	N21	W37	5882	01	17.9	17D	SF C 9.3		3	E		61		
0307	RAMY	20	1803E	1821U	1827	N21	W37	5882	01	17.9	24D	SF		3	E		47		F
0308	RAMY	20	1808	1814U	1825D	S26	E44	5892	01	24.2	17D	SF		3	E		15		
0309	RAMY	20	1831E	1834U	1851D	N21	W37	5882	01	17.9	20D	SF		3	E		27		F
0310	HOLL	20	1902	1903	1909	S11	E63	5897	01	25.5	7	SF		3	E		26		
0311		20	2113	2116	2142	N20	W36	5882	01	18.1	29	1N C 9.0					128		FH
	RAMY	20	2113	2116	2134	N20	W36	5882	01	18.1	21	1N C 9.0		3	E		125		FH
	HOLL	20	2113	2116	2149	N20	W35	5882	01	18.2	36	1N C 9.0		3	E		131		F
0312	HOLL	20	2143	2146	2151	S10	E62	5897	01	25.6	8	SF		3	E		24		
0313	HOLL	20	2233	2257	2337D	N21	W39	5882	01	17.9	64D	1N		3	E		119		F
		20	2237		2244	No Flare Patrol													
0314	HOLL	20	2246	2252	2300	S10	E61	5897	01	25.5	14	SF C 6.7		3	E		30		
		20	2338		2356	No Flare Patrol													
0315	VORO	21	0147	0154	0208	S32	W44	5881	01	17.6	21	1F		2	C	0149	161	2.5	EH

19
Jan 90

Jan 90

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	Area Measurement			Remarks		
													Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)			
0316		21	02429	02502	0308	S12	E23	5890	01	22.8	26	1N						
	VORO	21	0242		0250D	S11	E23	5890	01	22.8	8D	1F	2	C	0249	218	2.8	EFIJ
	LEAR	21	0244	0250	0308	S11	E23	5890	01	22.8	24	SF	4	E		251	2.8	EIJ
	MITK	21	0244	0252	0316	S11	E23	5890	01	22.8	32	SN		C	0252	86		F
	PURP	21	0245E	0250	0301	S12	E24	5890	01	22.9	16D	SB		C	0250	132	1.5	E
	PEKG	21	0245	0250	0305	S12	E24	5890	01	22.9	20	1N		V				E
	KODA	21	0251		0251D	S12	E22	5890	01	22.8	20D	1N		P	0251	404	4.2	
0317	LEAR	21	0303	0306	0310	N21	W41	5882	01	18.0	7	SF C 8.8	4	E		20		F
0318		21	0429*	04447	0536	S12	E22	5890	01	22.8	67	2B M 6.9				481	5.9	EFZ
	LEAR	21	0429	0444	0538	S11	E22	5890	01	22.8	69	1N M 6.9	4	E		219		ZF
	MITK	21	0430	0449	0548	S11	E23	5890	01	22.9	78	18		C	0449	270	3.0	E
	PEKG	21	0430	0450	0509	S12	E23	5890	01	22.9	39	2B		C	0450	631	7.0	E
	YUNN	21	0440E	0440U	0603	S12	E20	5890	01	22.7	83D	2B		P	0440	472	5.2	F
	KODA	21	0445	0451	0522	S12	E23	5890	01	22.9	37	2B		P	0457	814	8.4	
0319		21	04351	0436	0442	N20	W40	5882	01	18.1	7	SF				37		DF
	PEKG	21	0435	0436	0439	N19	W42	5882	01	18.0	4	SF		V				D
	LEAR	21	0436	0436	0444	N21	W38	5882	01	18.3	8	SF	4	E		37		F
0320	KODA	21	0513			N20	W42	5882	01	18.0		1F		P	0513	420	4.3	
0321	LEAR	21	0752	0754	0759	S12	E53	5897	01	25.3	7	SF	3	E		14		
0322	SVTO	21	0912	0922	0946	S09	E10	5889	01	22.1	34	SF	3	E		26		
0323	SVTO	21	0913	0914	0927	N20	W43	5882	01	18.1	14	SF C 3.3	3	E		34		
0324	SVTO	21	1015	1015	1020	S10	E54	5897	01	25.5	5	SF	3	E		36		
0325	RAMY	21	1324	1325	1329	S08	E08	5889	01	22.1	5	SF	3	E		13		
0326	RAMY	21	1418	1425	1434	N21	W47	5882	01	18.0	16	SF	3	E		37		F
		21	1429		1437	No Flare Patrol												
0327	RAMY	21	1459	1459	1503	S13	E53	5897	01	25.6	4	SF	3	E		13		
0328	RAMY	21	1500	1501	1516	S12	E18	5890	01	23.0	16	SF	3	E		39		F
0329		21	1518*	1524*	1544	N21	W49	5882	01	17.9	26	SF				12		K
	RAMY	21	1518	1524	1548	N21	W50	5882	01	17.8	30	SF		E		14		K
	RAMY	21	1518	1534	1548	N21	W50	5882	01	17.8	30	SF	3	E		10		
	HOLL	21	1534	1534	1536	N21	W48	5882	01	18.0	2	SF	3	E		12		
0330	RAMY	21	1604	1623	1719D	S28	E39	5892	01	24.7	75D	1N M 1.6	3	E		235		F
		21	1609		1739	No Flare Patrol												
0331	RAMY	21	1610	1615	1633	S13	E18	5890	01	23.0	23	SF	3	E		19		
0332	RAMY	21	1657	1718	1728	S13	E52	5897	01	25.6	31	SF	3	E		18		
0333	RAMY	21	1701	1702	1714	S15	E39	5895	01	24.7	13	SF	3	E		75		F
0334	RAMY	21	1731	1732	1744	S13	E52	5897	01	25.6	13	SF	3	E		13		
0335	HOLL	21	1740E	1740U	1824D	S27	E38	5892	01	24.7	44D	SF	3	E		64		FU
0336	HOLL	21	1828E	1845U	1848	N21	W50	5882	01	17.9	20D	SF	2	E		19		
0337		21	1829*	1853*	1959	S12	E16	5890	01	23.0	90	SF C 7.5				78		F
	HOLL	21	1829	1853	1925	S12	E16	5890	01	23.0	56	SF C 7.5	3	E		91		F
	RAMY	21	1910	1949	2016	S12	E16	5890	01	23.0	66	SN	3	E		70		F
	HOLL	21	1944	1955	2017	S12	E16	5890	01	23.0	33	SF	3	E		74		F
		21	1838		1842	No Flare Patrol												

20
Jan 90

H α SOLAR FLARES

JANUARY 1990

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	Area Measurement			Remarks
																Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
0338	RAMY	21	1928	1929	1934	S10	E78	5900	01	27.7	6	SF		3	E		20		
0339	RAMY	21	1940	1945	1952	N19	W49	5882	01	18.1	12	SF	C 5.9	3	E		26		
0340	HOLL	21	2028	2029	2045	N21	W51	5882	01	17.9	17	SF		3	E		11		F
0341	HOLL	21	2035	2035	2056	S12	E15	5890	01	23.0	21	SF		3	E		27		F
0342	HOLL	21	2040	2042	2046	S04	E70	5900	01	27.1	6	SF		3	E		13		
0343		21	20425	20471	2058	S13	E48	5897	01	25.5	16	SF					26		F
	HOLL	21	2042	2048	2101	S13	E48	5897	01	25.5	19	SF		3	E		34		F
	RAMY	21	2047	2047	2055	S13	E49	5897	01	25.6	8	SF		3	E		18		
0344	HOLL	21	2124	2124	2134	S08	E03	5889	01	22.1	10	SF		3	E		13		F
0345	HOLL	21	2130	2135	2152	S12	E14	5890	01	22.9	22	SF		3	E		39		F
0346	HOLL	21	2255	2305	2324	S11	E09	5890	01	22.6	29	SF		3	E		41		F
0347	HOLL	21	2318	2319	2322	N24	E31	5893	01	24.4	4	SF		3	E		13		F
0348		22	0017	00183	0036	S10	E76	5900	01	27.7	19	SF	C 6.8				76		E
	LEAR	22	0017	0018	0036	S10	E76	5900	01	27.7	19	SF	C 6.8	4	E		89		
	VORO	22	0017	0021	0036	S09	E75	5900	01	27.6	19	SF		2	C	0021	63		E
0349		22	00301	00323	0042	S12	E52	5897	01	25.9	12	SF					74	1.7	DFH
	VORO	22	0030	0035	0044	S12	E51	5897	01	25.9	14	SF		2	C	0035	108	1.7	DH
	LEAR	22	0031	0032	0040	S13	E52	5897	01	25.9	9	SF		4	E		41		F
0350		22	02354	02402	0306	S11	E09	5890	01	22.8	31	SF					139	1.8	E1
	PEKG	22	0235	0240	0300	S12	E12	5890	01	23.0	25	SN			P	0240	168	1.8	E
	LEAR	22	0236	0242	0312	S11	E09	5890	01	22.8	36	SF		4	E		79		
	VORO	22	0239	0240	0300D	S11	E07	5890	01	22.6	21D	SF		2	C	0240	170	1.8	E1
0351	LEAR	22	0258	0301	0308	S10	E76	5900	01	27.8	10	SF		4	E		48		
0352	LEAR	22	0421	0422	0432	S09	E69	5900	01	27.3	11	SF	C 4.8	3	E		29		
0353		22	05201	05221	0542	S29	E34	5892	01	24.9	22	SF	C 3.8				69	1.4	EF
	PEKG	22	0520	0523	0540	S29	E34	5892	01	24.9	20	SF			P	0523	105	1.4	E
	LEAR	22	0521	0522	0545	S29	E33	5892	01	24.8	24	SF	C 3.8	3	E		33		F
0354		22	0536*	05496	0639	S12	E10	5890	01	23.0	63	1N	M 1.2				316	3.5	EF
	LEAR	22	0536	0555	0641	S12	E09	5890	01	22.9	65	1N	M 1.2	3	E		219		FE
	PEKG	22	0545	0550	0645	S12	E10	5890	01	23.0	60	1N			C	0550	463	4.8	E
	URUM	22	0545	0555	0630	S12	E10	5890	01	23.0	45	1N			C		370		E
	MITK	22	0549	0549	0615D	S11	E10	5890	01	23.0	26D	1N			C	0549	210	2.2	E
0355	SVTO	22	0710E	0735U	0750	S11	E07	5890	01	22.8	40D	SF		2	E		40		F
0356	SVTO	22	0714	0715	0735	S32	E27	5892	01	24.4	21	SF		2	E		29		F
0357	SVTO	22	0724	0726	0750	N20	W56	5882	01	18.0	26	SF		2	E		28		F
0358		22	07281	07302	0745	S08	E68	5900	01	27.4	17	SF					30		
	KANZ	22	0728	0732	0743	S09	E71	5900	01	27.6	15	SF			C				
	SVTO	22	0729	0730	0747	S07	E66	5900	01	27.2	18	SF		2	E		30		
0359		22	07452	0747	0754	S12	E45	5897	01	25.7	9	SF					52		F
	SVTO	22	0745	0747	0755	S13	E44	5897	01	25.6	10	SF		2	E		52		F
	KANZ	22	0747	0747	0754	S12	E46	5897	01	25.8	7	SF			C				
0360	KANZ	22	0802	0802	0813	S09	E73	5900	01	27.8	11	SF			C				
0361	KANZ	22	0825	0829	0849	S09	E73	5900	01	27.8	24	SF			V				
0362		22	0900	0900	0903	S12	E07	5890	01	22.9	3	SF					15		F
	SVTO	22	0859E	0901U	0911D	S12	E08	5890	01	23.0	12D	SF		2	E		15		F
	KANZ	22	0900	0900	0903	S12	E06	5890	01	22.8	3	SF			V				

H α SOLAR FLARES21
Jan 90

JANUARY 1990

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/		CMP	Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement			Remarks
								Region	Mo							Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
0363		22	10002	10011	1006	S09	E70	5900	01	27.7	6	SF					22		
	LEAR	22	1000	1001	1008	S09	E69	5900	01	27.6	8	SF		3	E		22		
	KANZ	22	1002	1002	1005	S09	E71	5900	01	27.7	3	SF			V				
0364	KANZ	22	1044	1102	1138	S09	E71	5900	01	27.8	54	SF			V				
0365		22	11469	12031	1310	S28	E29	5892	01	24.7	84	1N M 1.5					182		FU
	KANZ	22	1146	1203	1259	S29	E30	5892	01	24.8	73	1F			V				U
	SVTO	22	1150E	1226U	1324D	S28	E29	5892	01	24.7	94D	1N		2	E		161		UF
	RAMY	22	1155	1204	1322	S26	E29	5892	01	24.7	87	1N M 1.5		3	E		202		F
0366		22	1149*	1153*	1410	S09	E70	5900	01	27.7	141	SF					75		DFKT
	KANZ	22	1149	1153	1236	S09	E71	5900	01	27.8	47	1F			V				
	SVTO	22	1154E	1154U	1324D	S08	E71	5900	01	27.8	90D	1F		2	E		113		FT
	RAMY	22	1155	1155	1306	S10	E70	5900	01	27.7	71	1N		3	E		206		
	RAMY	22	1309	1314	1543	S11	E68	5900	01	27.7	154	SF		3	E		34		
	RAMY	22	1309	1343	1543	S11	E68	5900	01	27.7	154	SF			E		46		K
	HTPR	22	1312	1314	1335	S09	E70	5900	01	27.8	23	SF			C	1314	20		D
	HTPR	22	1342	1343	1420	S09	E70	5900	01	27.8	38	SF			C	1343	30		
	HTPR	22	1401	1403	1420	S11	E11	5890	01	23.4	19	SF			C	1403	60	0.6	
0368		22	14063	14122	1458	N21	W60	5882	01	18.0	52	SN C 5.0					59	1.9	F
	RAMY	22	1406	1412	1458	N21	W60	5882	01	18.0	52	SN C 5.0		3	E		54		F
	KANZ	22	1409	1412	1426D	N21	W61	5882	01	17.9	17D	SF			V				
	HTPR	22	1409	1414	1431D	N22	W58	5882	01	18.1	22D	SN			C	1414	80	1.9	
	SVTO	22	1411E	1421U	1440D	N19	W60	5882	01	18.0	29D	SF		1	E		42		F
0369	RAMY	22	1425	1429	1445	S13	W07	5889	01	22.1	20	SF		3	E		16		
0370	HTPR	22	1435E		1500	N23	W66	5882	01	17.5	25D	SF			C				E
0371	HTPR	22	1519	1521	1535	S08	E70	5900	01	27.9	16	SN			C	1521	60		D
0372		22	15222	15251	1558	S11	E04	5890	01	22.9	36	SN C 3.3					86	1.2	F
	HTPR	22	1522	1526	1545D	S10	E03	5890	01	22.9	23D	SN			C	1526	120	1.2	
	RAMY	22	1524	1525	1558	S12	E04	5890	01	22.9	34	SF C 3.3		3	E		52		F
0373	HTPR	22	1548		1555D	S12	E40	5897	01	25.7	7D	SF			C	1554	110	1.3	E
0374	RAMY	22	1620	1621	1645	S12	W02	5890	01	22.5	25	SF C 2.9		3	E		78		F
0375	RAMY	22	1630	1633	1648	S27	E17	5892	01	24.0	18	SF		3	E		20		
0376	RAMY	22	1630	1636	1707	N20	W69	5882	01	17.4	37	SF		3	E		51		
0377	RAMY	22	1721	1736	1831	N21	W61	5882	01	18.0	70	SF		3	E		80		
0378	RAMY	22	1737	1740	1751	S27	E17	5892	01	24.0	14	SF C 4.8		3	E		20		F
		22	2016		2023	No Flare Patrol													
0379	RAMY	22	2024	2024	2031D	S14	E62	5901	01	27.5	7D	SF		3	E		13		
		22	2032		2223	No Flare Patrol													
		22	2240		2300	No Flare Patrol													
0380	LEAR	22	2302	2303	2318	S10	W02	5890	01	22.8	16	SF		3	E		20		
0381	LEAR	23	0216	0217	0224	N22	W69	5882	01	17.8	8	SF		3	E		19		F
0382		23	0503	05041	0526	S10	E58	5900	01	27.6	23	1B M 2.3					134	3.3	E
	LEAR	23	0503	0504	0535	S10	E56	5900	01	27.4	32	1N M 2.3		3	E		100		
	PEKG	23	0503	0505	0518	S09	E60	5900	01	27.7	15	1B			C	0505	168	3.3	E
0383		23	08164	08201	0830	S09	E58	5900	01	27.7	14	SF					86	1.6	
	HTPR	23	0816	0821	0830	S09	E57	5900	01	27.6	14	SF			C	0821	86	1.6	
	KANZ	23	0820	0820	0824D	S09	E58	5900	01	27.7	4D	SF			V				

22
Jan 90

H α SOLAR FLARES

JANUARY 1990

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	Area Measurement			Remarks
															Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
0384		23	0835*	0838*	0854	S06	E54	5900	01	27.4	19	SF				65	1.2	D
	HTPR	23	0835	0838	0845	S05	E53	5900	01	27.3	10	SF		C	0838	60	1.1	D
	KANZ	23	0838E	0838U	0841	S06	E53	5900	01	27.3	3D	SF		V				
	HTPR	23	0850	0902	0915	S08	E56	5900	01	27.6	25	SN		C	0902	70	1.3	
0385	HTPR	23	0844	0846	0900	S25	E10	5892	01	24.1	16	SF		C	0846	90	1.0	E
0386	HTPR	23	0849		0905	N15	E90	5904	01	30.2	16	SN		C				
0387		23	0920*	0926*	1100	S09	E56	5900	01	27.6	100	SN	C 3.4			86	1.6	EFK
	SVTO	23	0909E	0926	1115	S09	E56	5900	01	27.6	126D	SN	C 3.4	3	E	89		F
	KANZ	23	0909E	0927	1109	S09	E57	5900	01	27.6	120D	SF		V				
	SVTO	23	0909E	1038	1115	S09	E56	5900	01	27.6	126D	SN		E		85		K
	HTPR	23	0920	0926	1015	S08	E56	5900	01	27.6	55	SB		C	0926	70	1.3	E
	HTPR	23	1028	1042	1105	S08	E54	5900	01	27.5	37	SN		C	1042	100	1.8	E
0388		23	09524	1000	1023	S26	E10	5892	01	24.2	31	SF				40	0.5	E
	HTPR	23	0952	1000	1025	S25	E08	5892	01	24.0	33	SF		C	1000	40	0.5	E
	KANZ	23	0956	1000	1021	S27	E13	5892	01	24.4	25	SF		V				
0389		23	10281	1031	1035	N12	E86	5904	01	29.9	7	SN						A
	HTPR	23	1028	1031	1035	N15	E89	5904	01	30.2	7	SN		C				A
	KANZ	23	1029	1031	1035	N10	E82	5904	01	29.6	6	SF		V				
0390		23	11502	11595	1218	S10	W12	5890	01	22.6	28	SF				28		F
	RAMY	23	1150	1204	1222	S10	W12	5890	01	22.6	32	SF		3	E	28		F
	KANZ	23	1152	1159	1214	S09	W12	5890	01	22.6	22	SF		V				
0391	SVTO	23	1212	1213	1229	S09	E54	5900	01	27.6	17	SF		3	E		12	F
0392		23	12463	12482	1311	S10	W11	5890	01	22.7	25	SF				87	1.7	EF
	RAMY	23	1246	1248	1324	S11	W12	5890	01	22.6	38	SF		3	E	62		F
	HTPR	23	1246	1249	1305	S11	W10	5890	01	22.8	19	SF		C	1249	160	1.7	E
	SVTO	23	1247	1250	1304	S10	W11	5890	01	22.7	17	SF		3	E	38		
	KANZ	23	1249	1249	1311	S10	W12	5890	01	22.6	22	SF		V				
0393		23	12472	12494	1302	S10	E55	5900	01	27.7	15	SF				37	1.3	DH
	HTPR	23	1247	1253	1305	S08	E55	5900	01	27.6	18	SF		C	1253	70	1.3	D
	KANZ	23	1249	1249	1304	S10	E55	5900	01	27.7	15	SF		V				
	RAMY	23	1249	1250	1254	S12	E55	5900	01	27.7	5	SF		3	E	21		H
	SVTO	23	1249	1250	1303	S09	E54	5900	01	27.6	14	SF		3	E	19		
0394		23	14205	14291	1440	S10	E53	5900	01	27.6	20	SF				47	1.4	DF
	KANZ	23	1420	1427U	1440	S09	E54	5900	01	27.6	20	SF		V				
	RAMY	23	1423	1429	1435	S11	E52	5900	01	27.5	12	SF		3	E	14		F
	HTPR	23	1425	1430	1445	S09	E52	5900	01	27.5	20	SN		C	1430	80	1.4	D
0395		23	14221	1423	1441	S12	W12	5890	01	22.7	19	SF				29		
	RAMY	23	1422	1424U	1441	S13	W11	5890	01	22.8	19	SF		3	E	29		
	KANZ	23	1423	1423	1427D	S12	W12	5890	01	22.7	4D	SF		V				
0396		23	1424*	1431*	1514	N22	E02	5893	01	23.7	50	1F				197	5.1	FU
	HTPR	23	1424	1431	1505	N23	E04	5893	01	23.9	41	1N		C	1431	450	5.1	F
	SVTO	23	1427E	1433	1452D	N23	E01	5893	01	23.7	25D	SF		2	E	39		F
	KANZ	23	1427	1434U	1451D	N23	W00	5893	01	23.6	24D	1F		V				
	RAMY	23	1439	1446	1524	N21	E01	5893	01	23.7	45	1F		3	E	101		U
0397		23	1639	1657*	1800	S11	W13	5890	01	22.7	81	1F	C 2.9			101		FHK
	RAMY	23	1639	1657	1800	S11	W14	5890	01	22.6	81	1N	C 2.9	3	E	151		FH
	RAMY	23	1639	1720	1800	S11	W14	5890	01	22.6	81	1F		E		123		K
	HOLL	23	1718E	1720U	1809D	S11	W11	5890	01	22.9	51D	SF		2	E	30		F
0398	RAMY	23	1732	1749	1754	N17	W62	5882	01	19.0	22	SF		3	E		19	
0399	RAMY	23	1748	1749	1754	S07	E45	5900	01	27.1	6	SF		3	E		16	
0400		23	1801*	1827	1922	N20	W76	5882	01	17.9	81	1N	C 5.0			78		F
	RAMY	23	1801	1827	1922	N20	W78	5882	01	17.8	81	1N		3	E	110		
	HOLL	23	1822	1827U	1924D	N21	W75	5882	01	18.0	62D	SF	C 5.0	2	E	47		F

H α SOLAR FLARES23
Jan 90

JANUARY 1990

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	Area Measurement			Remarks	
													Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)		
0401	RAMY	23	1848	1851	1857	S07	E44	5900	01 27.1	9	SF	3 E			12		
0402		23	1918*	1937	1957	S06	E44	5900	01 27.1	39	SF C 2.9				18		F
	RAMY	23	1918	1937	1957	S07	E44	5900	01 27.1	39	SF C 2.9	3 E			21		F
	HOLL	23	1934	1938	2012D	S06	E45	5900	01 27.2	38D	SF	3 E			15		F
0403	RAMY	23	2043	2045	2100	S07	E43	5900	01 27.1	17	SF	3 E			21		
		23	2146		2234	No Flare Patrol											
		23	2245		2351	No Flare Patrol											
0404		24	0644*	07073	0717	S29	E07	5892	01 24.8	33	SN C 3.2				125	1.8	EF
	PEKG	24	0644	0710	0720	S30	E06	5892	01 24.7	36	SN	P 0710			147	1.7	E
	SVTO	24	0704	0707	0715	S29	E07	5892	01 24.8	11	SF C 3.2	2 E			72		F
	YUNN	24	0705E	0708U	0716	S28	E09	5892	01 25.0	11D	SB	P 0708			157	1.8	
0405	KAND	24	1005	1017	1030	S11	W25	5890	01 22.5	25	SN	P 1017			104	1.1	E
0406		24	1146*	12185	1316	S26	W06	5892	01 24.0	90	1N				120		F
	RAMY	24	1146	1218	1310	S26	W05	5892	01 24.1	84	1N				136		F
	SVTO	24	1201	1223	1323	S25	W07	5892	01 23.9	82	1N	3 E			105		F
0407	SVTO	24	1155	1157	1202	S16	W65	5902	01 19.6	7	SF	3 E			17		
0408		24	12223	1226	1235	S06	E34	5900	01 27.1	13	SF C 6.5				32		
	RAMY	24	1222	1226	1235	S07	E35	5900	01 27.1	13	SF C 6.5	3 E			27		
	SVTO	24	1225	1226	1235	S06	E33	5900	01 27.0	10	SF C 6.5	3 E			38		
0409	RAMY	24	1230	1231	1236	S12	W23	5890	01 22.8	6	SF	3 E			13		
0410		24	12471	12482	1256	S04	E34	5900	01 27.1	9	SN				46	0.8	EF
	SVTO	24	1247	1248	1257	S06	E34	5900	01 27.1	10	SF	3 E			31		E
	KAND	24	1248	1250	1255	S01	E34	5900	01 27.1	7	SN	P 1250			62	0.8	E
0411	RAMY	24	1406	1406	1432	S12	E37	5900	01 27.4	26	SF	3 E			16		F
0412		24	14549	15031	1516	S11	E40	5900	01 27.6	22	SF				22		F
	RAMY	24	1454	1504	1517	S11	E39	5900	01 27.5	23	SF	3 E			24		F
	HOLL	24	1503	1503	1514	S11	E42	5900	01 27.8	11	SF	3 E			21		F
0413		24	14567	15152	1541	S26	W07	5892	01 24.1	45	SF				21		F
	RAMY	24	1456	1515	1546	S26	W07	5892	01 24.1	50	SF	3 E			19		F
	HOLL	24	1503	1517	1536	S26	W07	5892	01 24.1	33	SF	3 E			23		F
0414	RAMY	24	1631	1632	1637	S11	W34	5889	01 22.1	6	SF	3 E			12		H
0415	RAMY	24	1718	1721	1735	S07	E31	5900	01 27.0	17	SF	3 E			25		F
0416	HOLL	24	1846	1846	1906	S16	W68	5902	01 19.6	20	SF	3 E			41		
0417	HOLL	24	1939	1945	1958D	S12	E38	5901A	01 27.7	19D	SF	3 E			33		
0418	HOLL	24	1944	1944	1951	S15	W68	5902	01 19.7	7	SF	3 E			14		
0419		24	2001	2015	2110	S28	W04	5892	01 24.5	69	28 M 1.7				213		F
	RAMY	24	2001	2015	2103	S28	W04	5892	01 24.5	62	28 M 1.7	3 E			301		UF
	HOLL	24	2015E	2015U	2116	S27	W04	5892	01 24.5	61D	18 M 1.7	3 E			125		UF
0420	HOLL	24	2135	2136	2143	S25	W13	5892	01 23.9	8	SF	3 E			30		
0421	HOLL	24	2203	2205	2219	N13	E20	5907	01 26.4	16	SF	3 E			24		
0422	HOLL	24	2209	2211	2219	S07	E27	5900	01 26.9	10	SF	3 E			15		
0423	HOLL	24	2237	2239	2247	S09	W31	5890	01 22.6	10	SF	3 E			18		
0424	HOLL	24	2242	2245	2307	S11	E36	5900	01 27.6	25	SF	3 E			18		
0425	HOLL	24	2311	2320	2336	S08	E27	5900	01 27.0	25	SF C 4.7	3 E			98		

24
Jan 90

H α SOLAR FLARES

JANUARY 1990

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	NOAA/USAF			CMP Mo	Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement			Remarks
						Lat	CMD	Region							Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
0426	HOLL	24	2338	2338	2355	S26	W10	5892	01	24.2	17	SF	3	E		35		
0427	KAND	25	0936	0951	1005	S23	E05	5982B	01	25.8	29	SN		P	0951	83	0.9	EG
0428		25	1153*	12122	1230	S11	E32	5900	01	27.9	37	SN C 3.1				60	0.7	E
	RAMY	25	1153	1214	1236	S12	E32	5900	01	27.9	43	SF C 3.1	3	E		57		
	KAND	25	1204	1212	1225	S10	E31	5900	01	27.8	21	SN		P	1212	62	0.7	E
0429	KAND	25	1209	1210	1215	S26	W17	5982	01	24.2	6	SN		P	1210	83	0.9	E
0430	SVTO	25	1237	1251	1328	N24	E40	5909	01	28.6	51	SF	3	E		76		F
0431		25	1309I	1314I	1344	N12	E12	5907	01	26.4	35	1N C 4.1				86		F
	RAMY	25	1309	1314	1345	N12	E13	5907	01	26.5	36	1F C 4.1	3	E		100		F
	SVTO	25	1310	1315	1342	N13	E12	5907	01	26.4	32	SN	3	E		72		F
0432	RAMY	25	1424	1427	1436	N14	E11	5907	01	26.4	12	SF	3	E		27		F
0433	HOLL	25	1720	1724	1727	N12	E56	5904	01	29.9	7	SF	3	E		22		
0434	HOLL	25	1831	1834	1848	N22	E39	5909	01	28.8	17	SF	3	E		36		
0435	HOLL	25	1842	1844	1859	S12	E26	5900	01	27.7	17	SF	3	E		60		
0436	HOLL	25	2009	2012	2020	N14	E08	5907	01	26.4	11	SF	4	E		17		
0437	HOLL	25	2117	2122	2140	S13	W50	5889	01	22.1	23	SF	4	E		52		F
0438	HOLL	25	2136	2137	2149	N12	E53	5904	01	29.9	13	1N C 3.9	4	E		186		EH
0439	HOLL	25	2136	2141	2217	S10	E24	5900	01	27.7	41	SF	4	E		26		
0440	HOLL	25	2141	2146	2157	S28	W18	5892	01	24.5	16	SF	4	E		24		
0441	HOLL	25	2253	2259	2307	N13	E07	5907	01	26.5	14	SF	4	E		40		F
0442	HOLL	25	2336	2340	2353	S12	W05	5897	01	25.6	17	SF	3	E		28		
		26	0119		0127	No Flare Patrol												
0443	ISTA	26	0823		0828	S27	W27	5892	01	24.2	5	SF		V				F
0444	KAND	26	0940	0950	1015	N14	E01	5907	01	26.5	35	SN		P	0950	83	0.9	EF
		26	1036		1054	No Flare Patrol												
0445		26	1208	1220*	1259	N11	E09	5906	01	27.2	51	SF				141	1.9	EF
	SVTO	26	1205E	1229U	1252	N11	E13	5906	01	27.5	47D	1F	1	E		167		F
	RAMY	26	1208	1230	1306	N10	E10	5906	01	27.2	58	SF	3	E		75		
	HTPR	26	1209E	1220	1237D	N13	E05	5906	01	26.9	28D	SN		C	1220	180	1.9	E
0446		26	1230	1232	1331D	N22	E24	5909	01	28.4	61D	1N				162	2.7	E
	SVTO	26	1220E	1232U	1331D	N21	E29	5909	01	28.7	71D	1N	1	E		113		
	HTPR	26	1230	1232	1237D	N23	E20	5909	01	28.1	7D	1N		C	1232	210	2.7	E
0447	RAMY	26	1259	1259	1314	S11	E15	5900	01	27.7	15	SF	3	E		18		
0448	RAMY	26	1259	1302	1306	N13	W03	5907	01	26.3	7	SF	3	E		12		
0449		26	1336	1339	1349	N22	E24	5909	01	28.4	13	SN				88	2.0	E
	HTPR	26	1336	1339	1345	N23	E20	5909	01	28.1	9	SN		C	1339	160	2.0	E
	RAMY	26	1336	1339	1353	N22	E27	5909	01	28.6	17	SF	3	E		16		
		26	1357		1402	No Flare Patrol												
0450	RAMY	26	1407	1410U	1426D	N14	W04	5907	01	26.3	19D	SF	3	E		15		
		26	1427		1530	No Flare Patrol												

H α SOLAR FLARES25
Jan 90

JANUARY 1990

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	NOAA/USAF			CMP Mo	Day	Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement			Remarks
						Region	Lat	CMD								Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
0451	HOLL	26	1532	1536	1550	S10	E13	5900	01	27.6	18	SF		2	E		48		
0452	HOLL	26	1545	1546	1551	N23	E25	5909	01	28.6	6	SF		3	E		42		
0453	HOLL	26	1616	1618	1630	N23	E24	5909	01	28.5	14	SN C 3.3		3	E		70		
0454	HOLL	26	1624	1627	1632	S13	W62	5889	01	22.0	8	SF		3	E		13		
0455	HOLL	26	1632	1632	1654	N14	W05	5907	01	26.3	22	SF		3	E		15		
0456	HOLL	26	1829	1842	1855	S06	E01	5900	01	26.8	26	SF		3	E		30		
0457	HOLL	26	2227	2237	2251	N14	W07	5907	01	26.4	24	SF		3	E		34		F
0458	HOLL	26	2246	2255	2319	S10	E07	5900	01	27.5	33	SF		3	E		92		F
0459	HOLL	26	2251	2257	2307	N23	E22	5909	01	28.6	16	1F C 5.6		3	E		112		F
0460	YUNN	27	0145E	0149U	0219	S13	W63	5890	01	22.3	34D	SB			P	0149	24	0.5	
0461	MITK	27	0231	0234	0305	N27	E17	5909	01	28.4	34	SB			C	0234			E
0462	SVTO	27	1037	1039	1052	N25	W51	5893	01	23.5	15	SF C 2.1		3	E		61		
0463	SVTO	27	1146	1147	1152	N14	W15	5907	01	26.3	6	SF		3	E		31		
0464	RAMY	27	1238	1238	1253	N23	E15	5909	01	28.7	15	SF C 1.8		3	E		32		F
0465	RAMY	27	1442	1445	1453	N15	E33	5904	01	30.1	11	SF		3	E		12		
0466		27	1502	1510	1520	N11	E34	5904	01	30.2	18	SF					24		F
	RAMY	27	1502E	1502U	1529D	N10	E34	5904	01	30.2	27D	SF		3	E		25		F
	SVTO	27	1502	1510	1520	N12	E33	5904	01	30.1	18	SF		3	E		22		
		27	1627		1631	No Flare Patrol													
		27	1638		1706	No Flare Patrol													
		27	1717		1759	No Flare Patrol													
		27	1823		2215	No Flare Patrol													
		27	2252		2339	No Flare Patrol													
0467	MITK	27	2340E		2423	S25	W22		01	26.3	43D	SN			C	2343			EG
0468		28	0002E	0003U	0024	S11	W73	5890	01	22.5	22D	1F					56		EFI
	VORO	28	0002E		0024	S10	W75	5890	01	22.4	22D	1F		1	C	0004	81		EI
	HOLL	28	0003E	0003U	0020D	S12	W71	5890	01	22.6	17D	SF		2	E		30		F
0469		28	0019*	00412	0120	N32	W60	5890A	01	23.3	61	1F					215		EF
	MITK	28	0019	0043	0143	N31	W60	5890A	01	23.3	84	2F			C	0043	340		F
	VORO	28	0040	0041	0058	N33	W61	5890A	01	23.2	18	SF		1	C	0041	90		E
0470	VORO	28	0157	0158	0202	N19	E27	5904	01	30.1	5	SF		1	C	0158	99	1.2	D
0471	SVTO	28	0923E	0938	1050	S11	W05	5900	01	28.0	87D	SF C 2.6		3	E		50		F
0472	SVTO	28	1111E	1114	1124	S11	W06	5900	01	28.0	13D	SF		2	E		25		F
		28	1252		1416	No Flare Patrol													
0473		28	14457	14541	1520	S11	W07	5900	01	28.1	35	SF C 2.5					44		F
	RAMY	28	1445	1455	1516	S11	W07	5900	01	28.1	31	SF C 2.5		3	E		62		F
	HOLL	28	1452	1454	1525	S11	W07	5900	01	28.1	33	SF		2	E		25		F
0474	HOLL	28	1616	1619	1641	S11	W09	5900	01	28.0	25	SF		3	E		22		
0475		28	17091	1710	1731	S11	W09	5900	01	28.0	22	SF C 1.9					24		F
	HOLL	28	1709	1710	1736	S11	W09	5900	01	28.0	27	SF C 1.9		4	E		26		F
	RAMY	28	1710		1726	S11	W09	5900	01	28.0	16	SF		2	E		22		F
0476	RAMY	28	1835	1838	1850	S11	W09	5900	01	28.1	15	SF		3	E		25		

26
Jan 90

H α SOLAR FLARES

JANUARY 1990

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Day	Dur (Min)	Imp Opt	Xray	See	Obs Type	Area Measurement			Remarks
																Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
0477	RAMY	28	1902	1903	1907	S29	W52	5892	01	24.7	5	SF		3	E		16		F
0478	HOLL	28	2115	2116	2129	S10	W11	5900	01	28.0	14	SF		3	E		21		
0479	HOLL	28	2218	2218	2235	S27	W56	5892	01	24.6	17	SF C	2.2	2	E		23		
		29	0021		0149	No Flare Patrol													
0480		29	06314	06386	0652	S32	W56	5892	01	24.8	21	SN C	2.2				43	1.3	
	YUNN	29	0631	0638	0645	S31	W58	5892	01	24.7	14	SB			C		63	1.3	
	LEAR	29	0635	0644	0700	S32	W54	5892	01	25.0	25	SF C	2.2	2	E		23		
		29	0751		0839	No Flare Patrol													
		29	1051		1133	No Flare Patrol													
0481	RAMY	29	1228	1248	1253	N15	E13	5913	01	30.5	25	SF		3	E		23		
0482	RAMY	29	1235	1235	1239	N27	E32	5911	02	1.0	4	SF		3	E		14		
0483		29	14546	14547	1502	S12	W20	5900	01	28.1	8	SF					17		F
	RAMY	29	1454	1454	1500	S12	W20	5900	01	28.1	6	SF		3	E		16		F
	HOLL	29	1500	1501	1504	S11	W21	5900	01	28.0	4	SF		3	E		18		F
0484		29	14591	1501	1510	N14	E12	5913	01	30.5	11	SF					19		F
	RAMY	29	1459	1501	1514	N13	E13	5913	01	30.6	15	SF		3	E		18		F
	HOLL	29	1500	1501	1506	N14	E12	5913	01	30.5	6	SF		3	E		20		F
0485		29	1653	1657	1710	N22	E46	5914	02	2.2	17	SF C	2.5				70		
	HOLL	29	1653	1657	1708	N24	E46	5914	02	2.2	15	SF C	2.5	3	E		76		
	RAMY	29	1653	1657	1713	N21	E45	5914	02	2.1	20	SF C	2.5	3	E		65		
0486	RAMY	29	2012	2015	2036	S32	W73	5892	01	24.1	24	SF		3	E		22		
0487	RAMY	29	2022	2022	2041	S16	E77	5918	02	4.7	19	SF		3	E		14		
0488		29	2046*	21068	2329	S26	W74	5892	01	24.1	163	1F M	1.5				134		FU
	HOLL	29	2046	2106	2329	S23	W76	5892	01	24.0	163	1F M	1.5	4	E		133		UF
	PALE	29	2101E	2126U	2314D	S26	W73	5892	01	24.2	133D	2F		3	E		250		F
	RAMY	29	2102	2114	2129D	S31	W74	5892	01	24.0	27D	1F		3	E		137		
	PALE	29	2317E	2318U	2348D	S26	W74	5892	01	24.2	31D	SF		3	E		15		
0489		29	2108	21123	2124	N24	E45	5914	02	2.3	16	SF					34		
	HOLL	29	2108	2112	2124	N24	E44	5914	02	2.3	16	SF		4	E		30		
	RAMY	29	2108	2115	2124	N24	E46	5914	02	2.4	16	SF		3	E		37		
		29	2214		2253	No Flare Patrol													
0490		29	2334	2340	2404	N14	E15	5913	01	31.1	30	SF C	6.1				70		F
	HOLL	29	2334	2340	2404	N13	E15	5913	01	31.1	30	SF		2	E		93		F
	PALE	29	2342E	2342U	2404	N16	E15	5913	01	31.1	22D	SF C	6.1	3	E		47		F
0491	PALE	30	0103	0107	0123	S12	W25	5917	01	28.2	20	SF		3	E		20		F
0492	LEAR	30	0321	0321	0325	N22	E41	5914	02	2.3	4	SF		3	E		28		
0493		30	09461	09482	1001	S11	W32	5900	01	28.0	15	SF					19		F
	KANZ	30	0946	0950	1002	S11	W32	5900	01	28.0	16	SF			V				
	LEAR	30	0947	0948	1000	S11	W32	5900	01	28.0	13	SF		3	E		19		F
0494	HTPR	30	1050	1053	1100	N24	E36	5914	02	2.2	10	SF			C	1053	50	0.8	
0495	HTPR	30	1135	1139	1150	N24	E36	5914	02	2.3	15	SF			C	1139	60	0.9	E
0496	RAMY	30	1255	1257	1304	N25	E38	5914	02	2.5	9	SF		3	E		11		H
0497	HTPR	30	1255		1320	S15	W90	5903	01	23.7	25	SF			C				

JANUARY 1990

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Dur Day	(Min)	Imp Opt	Xray	See	Obs Type	Area Measurement			Remarks
																Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
0498		30	1240*	1343*	1421	S07	W42	5900	01	27.4	101	SF	C 1.7				60	0.8	EFK
	RAMY	30	1240	1343	1427	S09	W40	5900	01	27.5	107	SF	C 1.7	3	E		51		F
	RAMY	30	1240	1400	1427	S09	W40	5900	01	27.5	107	SF			E		69		K
	HTPR	30	1355	1358	1415	S05	W45	5900	01	27.2	20	SN			C	1358	60	0.8	E
	KANZ	30	1356	1359	1415	S06	W44	5900	01	27.3	19	SF			C				
0499		30	13102	13132	1330	N24	E35	5914	02	2.2	20	SF					76	1.8	ET
	HTPR	30	1310	1313	1325	N24	E35	5914	02	2.2	15	SF			C	1313	120	1.8	ET
	RAMY	30	1312	1315	1336	N23	E35	5914	02	2.2	24	SF		3	E		31		
0500	RAMY	30	1337	1338	1350	N24	E35	5914	02	2.3	13	SF		3	E		16		
0501	RAMY	30	1359	1400	1408	N14	W01	5913	01	30.5	9	SF		3	E		15		F
0502		30	14299	1429*	1459	S11	W35	5900	01	28.0	30	SF					68	1.1	EF
	RAMY	30	1429	1429	1509	S11	W34	5900	01	28.0	40	SF		3	E		39		
	HTPR	30	1430E	1430	1445	S10	W35	5900	01	28.0	15D	SF			C	1430	90	1.1	E
	KANZ	30	1431	1431	1458	S11	W36	5900	01	27.9	27	SF			C				
	HOLL	30	1438	1439	1505	S11	W36	5900	01	27.9	27	SF		3	E		76		F
0503	HTPR	30	1421		1450	S15	W90	5903	01	23.8	29	SF			C				
0504		30	1442	1442*	1450	S09	W40	5900	01	27.6	8	SF					21		F
	SVTO	30	1427E	1458	1515D	S10	W36	5900	01	27.9	48D	SF		2	E		21		F
	KANZ	30	1442	1442	1450	S08	W43	5900	01	27.4	8	SF			C				
0505		30	1517*	1519*	1538	N09	W05	5904	01	30.3	21	SF					44	1.1	EFH
	HTPR	30	1517	1530	1550	N10	W05	5904	01	30.3	33	SN			C	1530	100	1.1	EH
	RAMY	30	1519	1519	1523	N10	W05	5904	01	30.3	4	SF		3	E		13		
	HOLL	30	1529	1532	1542	N08	W04	5904	01	30.3	13	SF		3	E		19		F
0506		30	1528*	1532*	1548	N24	E34	5914	02	2.3	20	SF					40	1.2	EH
	HOLL	30	1528	1533	1542	N24	E34	5914	02	2.3	14	SF		3	E		18		
	HTPR	30	1530	1532	1551	N24	E34	5914	02	2.3	21	SN			C	1532	80	1.2	EH
	HOLL	30	1543	1544	1551	N24	E34	5914	02	2.3	8	SF		3	E		21		
0507		30	1824	18261	1836	N24	E30	5914	02	2.1	12	SF					16		F
	RAMY	30	1824	1826	1831	N24	E31	5914	02	2.2	7	SF		3	E		21		F
	HOLL	30	1824	1827	1840	N24	E30	5914	02	2.1	16	SF		3	E		10		F
0508	RAMY	30	1832	1832	1842	N08	E52	5919	02	3.7	10	SF		3	E		15		
0509	RAMY	30	1841	1843	1901	N24	W27	5909	01	28.7	20	SF		3	E		12		
0510		30	1847	18482	1856	S14	W36	5917	01	28.1	9	SF					16		H
	RAMY	30	1847	1848	1857	S14	W36	5917	01	28.1	10	SF		3	E		20		H
	HOLL	30	1847	1850	1854	S13	W35	5917	01	28.1	7	SF		3	E		11		
0511	RAMY	30	2001	2004	2013	N23	E31	5914	02	2.2	12	SF		3	E		18		
0512	HOLL	30	2025E	2025U	2030	S10	W37	5900	01	28.1	5D	SF		2	E		18		F
0513	HOLL	30	2207	2208	2213	N26	E30	5914	02	2.2	6	SF		3	E		39		
0514	LEAR	31	0024	0033	0050	S10	W41	5900	01	27.9	26	SF		3	E		29		
0515	VORO	31	0119		0124D	N48	W69		01	25.2	5D	1F		2	C	0120	90		D
0516	LEAR	31	0217	0227	0233	N11	W53	5906	01	27.1	16	SF		4	E		11		
0517	LEAR	31	0338	0338	0344	N14	W06	5913	01	30.7	6	SF		3	E		12		
0518	LEAR	31	0419	0420	0427	S13	W41	5917	01	28.1	8	SF		4	E		46		
0519	LEAR	31	0559	0602	0615	N26	E28	5914	02	2.4	16	SF		3	E		44		F
0520		31	0945	0948	1006	N26	E24	5914	02	2.3	21	1F	C 3.4				133		F
	LEAR	31	0945	0948	1006	N26	E24	5914	02	2.3	21	1F	C 3.4	3	E		131		F
	SVTO	31	0958E	0958U	1050D	N26	E24	5914	02	2.3	52D	1F		2	E		135		

28
Jan 90

H α SOLAR FLARES

JANUARY 1990

Grp #	Sta	Start Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Dur Day	(Min)	Imp Opt	Xray	Obs See	Type	Time (UT)	Area Measurement Apparent (10-6 Disk)	Corr (Sq Deg)	Remarks
0521	LEAR	31	0946	1000	1019	S10	W52	5900	01	27.5	33	SF		3	E		25		F
0522		31	10244	10311	1048	S10	W44	5900	01	28.1	24	SN C	6.0				76		F
	LEAR	31	1024	1031	1045	S09	W45	5900	01	28.0	21	SN C	6.0	3	E		76		F
	KANZ	31	1028	1032	1051	S10	W44	5900	01	28.1	23	SF			V				
0523	SVTO	31	1053E	1141U	1215	N08	E43	5919	02	3.7	82D	SF C	4.6	3	E		57		
0524	KANZ	31	1111	1118	1130	N11	W56	5906	01	27.2	19	SF			V				
0525		31	1130	1130	1154	S12	W45	5917	01	28.1	24	SF					18		FH
	RAMY	31	1125E	1136U	1154	S12	W45	5917	01	28.1	29D	SF		3	E		18		FH
	KANZ	31	1130	1130	1153	S12	W45	5917	01	28.1	23	SF			V				
0526		31	11353	11401	1148	N12	W57	5906	01	27.2	13	SF					42		
	RAMY	31	1135	1140	1144	N11	W58	5906	01	27.1	9	SF		3	E		42		
	KANZ	31	1138	1141	1153	N12	W56	5906	01	27.3	15	SF			V				
0527		31	1227*	1257*	1331	S12	W46	5917	01	28.0	64	SN C	4.4				74		FK
	RAMY	31	1227	1257	1342	S11	W47	5917	01	28.0	75	SN C	4.4	3	E		96		F
	RAMY	31	1227	1321	1342	S11	W47	5917	01	28.0	75	SN			E		48		K
	SVTO	31	1231	1258	1335	S12	W47	5917	01	28.0	64	SN C	4.4	3	E		77		
	KANZ	31	1253	1301	1305	S12	W45	5917	01	28.1	12	SF			V				
0528	RAMY	31	1321	1323	1339	N24	W33	5909	01	29.0	18	SF		3	E		12		H
0529	KANZ	31	1328	1332	1340D	N11	W58	5906	01	27.2	12D	SF			V				
0530		31	1430	14301	1434	N08	E39	5919	02	3.5	4	SN					42		
	KANZ	31	1430	1430	1434	N09	E39	5919	02	3.5	4	SF			V				
	RAMY	31	1430	1431	1434	N07	E39	5919	02	3.5	4	SN		3	E		42		
0531	RAMY	31	1443	1454	1505	S10	W52	5900	01	27.7	22	SF		3	E		38		
0532	RAMY	31	1511	1516	1530	S11	W48	5900	01	28.0	19	SF		3	E		31		
0533	RAMY	31	1624	1632	1657	S16	W30	5908	01	29.4	33	SF		3	E		28		
0534	RAMY	31	1646	1656	1706	N11	W61	5906	01	27.1	20	SF		3	E		24		
0535	RAMY	31	1737	1738	1749	N23	E26	5914	02	2.7	12	SF C	1.8	3	E		23		H
0536	RAMY	31	1813	1813	1829	S11	W50	5900	01	28.0	16	SF		3	E		16		F
		31	2133		2137	No Flare Patrol													
		31	2145		2224	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.