S U N S P O T G R O U P S
(Ordered by Central Meridian Passage Date)

DECEMBER 2003

NOAA/ USAF Group	Mt Wilson Group	Sta	Observation Mo	Day	Time (UT)	Lat	CMD	CMP Mo	Day	Max H	Mag Class	Spot Class	Corrected Area (10-6 Hemi)	Spot Count	Long. Extent (Deg)	Qual
10513		TACH	11	26	0609	N12	E78	12	2.1			HSX	123	1	2	4
10513		HOLL	11	26	1600	N09	E75	12	2.3		A	HSX	40	1	3	3
10513	31956	MWIL	11	26	1600	N13	E74	12	2.2	4	(AP)					
10513		VORO	11	27	0008	N12	E70	12	2.3			HAX	105	1		3
10513		LEAR	11	27	0150	N12	E70	12	2.3		A	HSX	50	1	2	3
10513		TACH	11	27	0528	N12	E68	12	2.3			HSX	109	1	2	3
10513		SVTO	11	27	0836	N14	E66	12	2.3		A	HSX	40	1	2	3
10513	31956	MWIL	11	27	1600	N12	E63	12	2.4	5	(AP)					
10513		HOLL	11	27	1730	N12	E62	12	2.4		A	HSX	60	1	1	2
10513		LEAR	11	28	0022	N12	E57	12	2.3		A	HAX	70	1	2	3
10513		TACH	11	28	0628	N14	E54	12	2.3			HS	129	1	2	2
10513		SVTO	11	28	1125	N14	E51	12	2.3		A	HSX	30	1	2	3
10513		KAND	11	28	1210	N12	E51	12	2.3			HS		1	2	3
10513		HOLL	11	28	1720	N12	E49	12	2.4		A	HSX	60	1	2	2
10513	31956	MWIL	11	28	2130	N12	E45	12	2.3	5	AP					
10513		LEAR	11	29	0014	N12	E44	12	2.3		A	HSX	80	1	2	4
10513		SVTO	11	29	1000	N13	E38	12	2.3		A	HSX	100	1	2	3
10513		KAND	11	29	1130	N12	E38	12	2.3			HS		1	2	3
10513		HOLL	11	29	1456	N12	E37	12	2.4		A	HSX	70	1	2	4
10513	31956	MWIL	11	29	1600	N12	E36	12	2.4	5	(AP)					
10513		VORO	11	30	0004	N12	E31	12	2.3			HAX	86	1		2
10513		LEAR	11	30	0013	N13	E32	12	2.4		B	CSO	90	2	5	4
10513		SVTO	11	30	1209	N13	E24	12	2.3		A	HSX	70	1	2	2
10513		KAND	11	30	1210	N11	E25	12	2.4			HS		1	2	1
10513	31956	MWIL	11	30	1600	N12	E23	12	2.4	5	(AP)					
10513		HOLL	11	30	1610	N12	E22	12	2.3		A	HSX	40	2	2	3
10513		VORO	12	01	0006	N12	E18	12	2.4			HSX	82	1		2
10513		LEAR	12	01	0103	N13	E18	12	2.4		A	HSX	60	2	2	2
10513		SVTO	12	01	0805	N12	E14	12	2.4		A	HSX	60	1	2	3
10513	31956	MWIL	12	01	1530	N12	E10	12	2.4	5	AP					
10513		HOLL	12	01	1550	N12	E10	12	2.4		A	HSX	80	1	2	3
10513		LEAR	12	02	0022	N13	E04	12	2.3		A	HSX	80	1	2	3
10513		VORO	12	02	0033	N11	E05	12	2.4			HSX	68	1		3
10513		TACH	12	02	0640	N12	E01	12	2.3			HSX	77	1	1	2
10513		SVTO	12	02	0755	N12	E01	12	2.4		A	HSX	40	1	2	3
10513	31956	MWIL	12	02	1600	N12	W03	12	2.4	5	(AP)					
10513		HOLL	12	02	1940	N12	W07	12	2.3		A	HSX	60	1	2	3
10513		LEAR	12	03	0030	N12	W09	12	2.3		A	HSX	80	1	2	2
10513		VORO	12	03	0033	N12	W09	12	2.3			HHX	66	1		3
10513		SVTO	12	03	1003	N12	W14	12	2.4		A	HSX	40	1	2	3
10513	31956	MWIL	12	03	1545	N11	W16	12	2.4	5	(AP)					
10513		HOLL	12	03	1739	N12	W17	12	2.4		A	HSX	60	1	3	3
10513		LEAR	12	04	0046	N12	W22	12	2.4		A	HSX	40	1	41	2
10513		VORO	12	04	0048	N11	W22	12	2.4			HHX	79	1		3
10513		TACH	12	04	0547	N11	W26	12	2.3			HSX	85	1	2	3
10513		SVTO	12	04	1125	N12	W28	12	2.4		A	HSX	50	1	2	2
10513		KAND	12	04	1155	N11	W29	12	2.3			HA		1	2	2
10513	31956	MWIL	12	04	1530	N10	W30	12	2.4	5	(AP)					
10513		HOLL	12	04	1605	N12	W30	12	2.4		A	HSX	40	1	3	4
10513		VORO	12	05	0030	N11	W35	12	2.4			HAX	47	1		3
10513		LEAR	12	05	0113	N12	W37	12	2.3		A	HSX	90	2	2	1
10513		KAND	12	05	1010	N11	W41	12	2.3			HS		1	1	2
10513		HOLL	12	05	1708	N12	W44	12	2.4		A	HSX	60	1	2	3
10513	31956	MWIL	12	05	1830	N11	W45	12	2.4	4	(AP)					
10513		LEAR	12	06	0015	N11	W49	12	2.3		A	HSX	80	1	2	3
10513		VORO	12	06	0137	N11	W49	12	2.4			HAX	58	1		1
10513		TACH	12	06	0532	N12	W51	12	2.4			HSX	49	1	1	3
10513		SVTO	12	06	0800	N11	W54	12	2.3		A	HSX	30	1	2	3
10513		VORO	12	07	0000	N11	W60	12	2.5			HAX	65	2		3
10513		LEAR	12	07	0010	N11	W62	12	2.3		A	HAX	70	1	2	2
10513		HOLL	12	07	1630	N11	W71	12	2.3		A	HAX	60	1	1	3
10513		LEAR	12	08	0045	N11	W73	12	2.5		A	HSX	90	1	2	3
10513		VORO	12	08	0045	N12	W74	12	2.4			HAX	30	1		2
10513A	31957	MWIL	11	27	1600	N17	E78	12	3.6	3	AF					
10513A		VORO	12	08	0045	N14	W67	12	3.0			AXX	10	1		2
10515		LEAR	11	28	0022	S02	E79	12	3.9		A	AXX	10	1	1	3
10515		SVTO	11	28	1125	S02	E75	12	4.1		A	HRX	30	1	1	3

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10515		KAND	11	28	1210	S02	E77	12	4.2			CRO		5	5	3
10515		HOLL	11	28	1720	S02	E72	12	4.1		A	HAX	120	5	2	2
10515	31958	MWIL	11	28	2130	S03	E68	12	4.0	4	B					
10515		LEAR	11	29	0014	S02	E67	12	4.0		B	DSO	70	7	4	4
10515		SVTO	11	29	1000	S03	E62	12	4.0		B	DSO	60	5	6	3
10515		KAND	11	29	1130	S03	E61	12	4.0			BXI		7	5	3
10515		HOLL	11	29	1456	S03	E57	12	3.9		B	DSO	90	9	6	4
10515	31958	MWIL	11	29	1600	S03	E58	12	4.0	4	(B)					
10515		VORO	11	30	0004	S02	E51	12	3.8			BRO	26	2	6	2
10515		LEAR	11	30	0013	S03	E52	12	3.9		B	BXO	40	8	6	4
10515	31958	MWIL	11	30	1600	S02	E43	12	3.9	4	(B)					
10515		HOLL	11	30	1610	S04	E41	12	3.7		B	BXO	10	7	6	3
10515		VORO	12	01	0006	S02	E37	12	3.8			BRI	56	3	3	2
10515		LEAR	12	01	0103	S02	E38	12	3.9		B	BXO	10	5	2	2
10515		SVTO	12	01	0805	S01	E36	12	4.0		A	AXX	10	2	1	3
10515	31958	MWIL	12	01	1530	S02	E29	12	3.8	4	B					
10515		HOLL	12	01	1550	S03	E28	12	3.7		B	DSO	50	12	4	3
10515		LEAR	12	02	0022	S02	E23	12	3.7		B	DAO	70	16	3	3
10515		VORO	12	02	0033	S02	E23	12	3.7			CRI	35	6	3	3
10515		TACH	12	02	0640	S02	E19	12	3.7			BRI	33	6	4	2
10515		SVTO	12	02	0755	S02	E21	12	3.9		B	CRO	30	6	5	3
10515	31958	MWIL	12	02	1600	S02	E16	12	3.9	4	(B)					
10515		HOLL	12	02	1940	S03	E12	12	3.7		B	DSO	30	6	4	3
10515		LEAR	12	03	0030	S02	E10	12	3.8		B	DSO	70	7	3	2
10515		VORO	12	03	0033	S01	E11	12	3.8			CRO	31	6	3	3
10515		SVTO	12	03	1003	S02	E06	12	3.9		B	CSO	10	4	3	3
10515	31958	MWIL	12	03	1545	S03	E03	12	3.9	4	(B)					
10515		HOLL	12	03	1739	S05	E02	12	3.9		B	BXO	40	7	4	3
10515		LEAR	12	04	0046	S02	W04	12	3.7		B	BXO	20	10	4	2
10515		TACH	12	04	0547	S06	W07	12	3.7			BRI	13	7	3	3
10515		HOLL	12	04	1605	S03	W12	12	3.8		A	AXX		1	1	4
10515		LEAR	12	06	0015	S05	W32	12	3.6		A	AXX	10	1	1	3
10515A		SVTO	12	03	1003	S09	E05	12	3.8		B	DSO	20	2	3	3
10515A	31963	MWIL	12	03	1545	S09	E03	12	3.9	5	(B)					
10515A		LEAR	12	04	0046	S09	W03	12	3.8		B	DAO	40	9	4	2
10515A		VORO	12	04	0048	S08	W03	12	3.8			CRO	30	7	4	3
10515A		KAND	12	04	1155	S09	W10	12	3.7			BXO		5	4	2
10515A	31963	MWIL	12	04	1530	S09	W11	12	3.8	4	(B)					
10515A		HOLL	12	04	1605	S08	W11	12	3.8		B	CAO	80	7	5	4
10515A		VORO	12	05	0030	S08	W16	12	3.8			CRI	19	9	3	3
10515A		LEAR	12	05	0113	S08	W17	12	3.8		B	BXO	10	8	4	1
10516		LEAR	11	28	0022	S17	E81	12	4.2		A	HSX	30	1	2	3
10516		TACH	11	28	0628	S14	E75	12	3.9			HSX	122	1	2	2
10516		SVTO	11	28	1125	S16	E78	12	4.4		A	HSX	30	1	2	3
10516		KAND	11	28	1210	S17	E77	12	4.3			HS		1	3	3
10516		HOLL	11	28	1720	S17	E73	12	4.3		A	HAX	120	2	2	2
10516	31959	MWIL	11	28	2130	S17	E68	12	4.1	4	AP					
10516		LEAR	11	29	0014	S17	E68	12	4.2		B	CAO	100	4	3	4
10516		SVTO	11	29	1000	S16	E65	12	4.3		B	DSO	70	3	4	3
10516		KAND	11	29	1130	S17	E65	12	4.4			HA		3	4	3
10516		HOLL	11	29	1456	S17	E60	12	4.2		B	CSO	50	5	3	4
10516	31959	MWIL	11	29	1600	S17	E60	12	4.2	4	(B)					
10516		VORO	11	30	0004	S16	E55	12	4.2			HAX	123	2		2
10516		LEAR	11	30	0013	S16	E56	12	4.2		B	CAO	100	7	4	4
10516		SVTO	11	30	1209	S15	E49	12	4.2		B	DSO	80	3	4	2
10516		KAND	11	30	1210	S18	E50	12	4.3			DSI		4	4	1
10516	31959	MWIL	11	30	1600	S18	E49	12	4.4	5	(BP)					
10516		HOLL	11	30	1610	S18	E49	12	4.4		B	DAO	80	11	7	3
10516		VORO	12	01	0006	S18	E44	12	4.3			DAI	171	5	6	2
10516		LEAR	12	01	0103	S16	E43	12	4.3		B	DSO	70	17	8	2
10516		SVTO	12	01	0805	S16	E38	12	4.2		B	DAO	50	6	6	3
10516	31959	MWIL	12	01	1530	S17	E37	12	4.4	5	BP					
10516		HOLL	12	01	1550	S17	E35	12	4.3		B	ESO	50	15	8	3
10516		LEAR	12	02	0022	S17	E32	12	4.4		B	DAO	60	20	10	3
10516		VORO	12	02	0033	S16	E29	12	4.2			HAX	97	10	4	3
10516		TACH	12	02	0640	S17	E25	12	4.2			CAI	50	7	4	2
10516		SVTO	12	02	0755	S15	E25	12	4.2		B	DSO	40	6	5	3

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10516	31959	MWIL	12	02	1600	S17	E23	12	4.4	5	(BP)					
10516		HOLL	12	02	1940	S16	E18	12	4.2		B	CSO	40	18	6	3
10516		LEAR	12	03	0030	S14	E17	12	4.3		B	DAO	60	20	8	2
10516		VORO	12	03	0033	S16	E16	12	4.2			DAI	69	6	4	3
10516		SVTO	12	03	1003	S16	E09	12	4.1		B	DSO	70	6	4	3
10516	31959	MWIL	12	03	1545	S17	E08	12	4.3	4	(BP)					
10516		HOLL	12	03	1739	S16	E07	12	4.3		B	CSO	50	5	6	3
10516		LEAR	12	04	0046	S16	E01	12	4.1		B	CSO	30	4	3	2
10516		VORO	12	04	0048	S16	E01	12	4.1			DAO	67	3	2	3
10516		TACH	12	04	0547	S16	W04	12	3.9			HSX	31	1	1	3
10516		SVTO	12	04	1125	S16	W07	12	3.9		A	HSX	40	2	3	2
10516		KAND	12	04	1155	S17	W06	12	4.0			HA		1	2	2
10516	31959	MWIL	12	04	1530	S18	W06	12	4.2	5	(BP)					
10516		HOLL	12	04	1605	S17	W07	12	4.1		B	CSO	50	6	6	4
10516		VORO	12	05	0030	S16	W12	12	4.1			HAX	63	7	2	3
10516		LEAR	12	05	0113	S16	W13	12	4.1		B	CSO	60	6	3	1
10516		KAND	12	05	1010	S17	W17	12	4.1			DSO		7	5	2
10516		HOLL	12	05	1708	S17	W21	12	4.1		B	DAO	100	11	5	3
10516	31959	MWIL	12	05	1830	S16	W20	12	4.2	5	(B)					
10516		LEAR	12	06	0015	S17	W24	12	4.2		B	DAO	90	13	6	3
10516		VORO	12	06	0137	S16	W25	12	4.2			DAI	70	3	4	1
10516		TACH	12	06	0532	S16	W26	12	4.2			CAO	61	6	5	3
10516		SVTO	12	06	0800	S17	W29	12	4.1		B	DSO	100	8	6	3
10516		VORO	12	07	0000	S17	W37	12	4.2			DAI	81	5	5	3
10516		LEAR	12	07	0010	S16	W37	12	4.2		B	CSO	90	8	7	2
10516		HOLL	12	07	1630	S17	W49	12	4.0		B	DAO	90	5	4	3
10516		VORO	12	08	0045	S15	W51	12	4.2			HAX	67	2	2	2
10516		LEAR	12	08	0045	S16	W51	12	4.2		B	CSO	60	2	2	3
10516	31959	MWIL	12	08	1545	S16	W61	12	4.0	4	(AP)					
10516		HOLL	12	08	2117	S16	W65	12	3.9		A	HSX	40	1	1	2
10516		VORO	12	09	0030	S16	W66	12	4.0			HAX	66	1		3
10516		LEAR	12	09	0035	S16	W66	12	4.0		A	HSX	50	1	2	3
10516		TACH	12	09	0510	S16	W68	12	4.0			HXX	41	1	2	3
10516		SVTO	12	09	0855	S16	W75	12	3.7		A	HSX	100	1	3	3
10516		KAND	12	09	0905	S17	W71	12	4.0			HS		1	2	3
10516	31959	MWIL	12	09	1530	S16	W75	12	3.9	5	(AP)					
10516		HOLL	12	09	1708	S17	W75	12	4.0		A	AXX	10	1	1	3
10516		VORO	12	10	0021	S16	W79	12	4.0			HAX	36	1		3
10516		LEAR	12	10	0105	S16	W80	12	4.0		A	HSX	60	1	2	2
10518	31962	MWIL	12	01	1530	S21	E40	12	4.7	4	B					
10518		HOLL	12	01	1550	S23	E39	12	4.7		B	BXO	20	2	5	3
10518		VORO	12	02	0033	S22	E34	12	4.6			ARX	7	1		3
10518		TACH	12	02	0640	S22	E31	12	4.7			AXX	9	1	1	2
10518	31962	MWIL	12	02	1600	S21	E27	12	4.7	4	(B)					
10518		HOLL	12	02	1940	S22	E23	12	4.6		A	HSX	10	1	1	3
10518		LEAR	12	03	0030	S21	E22	12	4.7		A	AXX	10	2	1	2
10518		VORO	12	03	0033	S21	E21	12	4.6			ARX	6	2		3
10518	31962	MWIL	12	03	1545	S22	E13	12	4.6	4	(B)					
10518		HOLL	12	03	1739	S22	E12	12	4.6		A	AXX		1	1	3
10518		LEAR	12	04	0046	S21	E09	12	4.7		B	BXO	10	3	3	2
10518		VORO	12	04	0048	S22	E09	12	4.7			BXX	2	3	3	3
10518		HOLL	12	04	1605	S21	E01	12	4.7		A	AXX		1	1	4
10517		LEAR	11	30	0013	S07	E81	12	6.1		A	HAX	100	2	2	4
10517		SVTO	11	30	1209	S06	E76	12	6.2		B	CAO	90	2	4	2
10517		KAND	11	30	1210	S08	E80	12	6.5			HS		1	4	1
10517	31960	MWIL	11	30	1600	S07	E77	12	6.4	5	(B)					
10517		HOLL	11	30	1610	S07	E77	12	6.4		B	DAO	280	2	9	3
10517		VORO	12	01	0006	S06	E71	12	6.3			DKI	587	4	7	2
10517		LEAR	12	01	0103	S06	E70	12	6.3		B	DAO	300	4	10	2
10517		SVTO	12	01	0805	S05	E68	12	6.4		B	DSO	240	3	10	3
10517	31960	MWIL	12	01	1530	S07	E65	12	6.5	5	B					
10517		HOLL	12	01	1550	S08	E64	12	6.4		B	DKO	260	8	10	3
10517		LEAR	12	02	0022	S05	E60	12	6.5		B	DAO	400	6	9	3
10517		VORO	12	02	0033	S07	E58	12	6.4			HHX	514	5	7	3
10517		TACH	12	02	0640	S07	E55	12	6.4			DAO	324	4	7	2
10517		SVTO	12	02	0755	S06	E55	12	6.4		B	DSO	290	3	10	3
10517	31960	MWIL	12	02	1600	S07	E50	12	6.4	5	(B)					

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DECEMBER 2003

NOAA/ USAF Group	Mt Wilson Group	Sta	Observation Mo	Day	Time (UT)	Lat	CMD	CMP Mo	Day	Max H	Mag Class	Spot Class	Corrected Area (10-6 Hemi)	Spot Count	Long. Extent (Deg)	Qual
10517		HOLL	12	02	1940	S07	E48	12	6.4		B	DKO	350	10	9	3
10517		LEAR	12	03	0030	S05	E46	12	6.5		B	DSO	230	10	8	2
10517		VORO	12	03	0033	S06	E45	12	6.4			DAI	398	7	7	3
10517		SVTO	12	03	1003	S06	E40	12	6.4		B	DSO	200	3	8	3
10517	31960	MWIL	12	03	1545	S07	E37	12	6.4	5	(B)					
10517		HOLL	12	03	1739	S07	E36	12	6.4		B	DKO	360	10	9	3
10517		LEAR	12	04	0046	S07	E32	12	6.4		B	DAO	250	15	10	2
10517		VORO	12	04	0048	S07	E32	12	6.4			DHO	404	9	7	3
10517		TACH	12	04	0547	S07	E28	12	6.3			DAI	387	9	7	3
10517		SVTO	12	04	1125	S06	E27	12	6.5		B	DAO	230	7	9	2
10517		KAND	12	04	1155	S07	E25	12	6.4			DSO		10	9	2
10517	31960	MWIL	12	04	1530	S07	E25	12	6.5	5	(B)					
10517		HOLL	12	04	1605	S05	E23	12	6.4		B	DAO	340	13	10	4
10517		VORO	12	05	0030	S07	E19	12	6.4			DHI	327	10	7	3
10517		LEAR	12	05	0113	S06	E20	12	6.5		B	DAO	220	21	8	1
10517		KAND	12	05	1010	S07	E14	12	6.5			DAO		13	9	2
10517		HOLL	12	05	1708	S06	E10	12	6.5		B	DAO	270	17	10	3
10517	31960	MWIL	12	05	1830	S06	E10	12	6.5	5	(B)					
10517		LEAR	12	06	0015	S07	E07	12	6.5		BG	DSO	230	23	9	3
10517		VORO	12	06	0137	S06	E05	12	6.4			DKI	282	7	7	1
10517		TACH	12	06	0532	S05	E03	12	6.4			DAI	192	13	6	3
10517		SVTO	12	06	0800	S07	E02	12	6.5		B	DSO	210	14	10	3
10517		VORO	12	07	0000	S07	W08	12	6.4			DKI	195	10	7	3
10517		LEAR	12	07	0010	S07	W07	12	6.5		BG	DAO	190	12	9	2
10517		HOLL	12	07	1630	S08	W17	12	6.4		B	DAO	140	18	11	3
10517		VORO	12	08	0045	S06	W21	12	6.4			DAI	114	2	7	2
10517		LEAR	12	08	0045	S07	W20	12	6.5		B	DAO	120	16	8	3
10517	31960	MWIL	12	08	1545	S07	W31	12	6.3	5	(B)					
10517		HOLL	12	08	2117	S08	W35	12	6.3		A	HSX	70	2	2	2
10517		VORO	12	09	0030	S07	W37	12	6.2			HAX	111	1		3
10517		LEAR	12	09	0035	S07	W38	12	6.2		A	HAX	70	3	2	3
10517		TACH	12	09	0510	S07	W40	12	6.2			HSX	79	1	1	3
10517		SVTO	12	09	0855	S08	W43	12	6.1		A	HSX	60	1	1	3
10517		KAND	12	09	0905	S07	W43	12	6.1			HA		1	2	3
10517	31960	MWIL	12	09	1530	S07	W46	12	6.2	5	(BP)					
10517		HOLL	12	09	1708	S08	W48	12	6.1		A	HSX	50	1	1	3
10517		VORO	12	10	0021	S07	W50	12	6.3			HAX	107	1		3
10517		LEAR	12	10	0105	S07	W53	12	6.1		A	HSX	60	2	2	2
10517		KAND	12	10	0710	S08	W55	12	6.2			HA		1	2	3
10517		HOLL	12	10	1520	S08	W60	12	6.1		A	HAX	70	1	2	3
10517		LEAR	12	11	0150	S06	W66	12	6.1		A	HAX	60	1	2	2
10517		VORO	12	11	0158	S07	W64	12	6.3			HRX	32	1		2
10517		SVTO	12	11	0737	S08	W69	12	6.1		A	HSX	50	1	2	2
10517		HOLL	12	11	1604	S09	W74	12	6.1		A	HAX	60	1	2	3
10517	31960	MWIL	12	11	2115	S07	W75	12	6.3	4	(AP)					
10517		LEAR	12	12	0005	S07	W79	12	6.1		A	HSX	30	1	2	3
10517		VORO	12	12	0044	S08	W77	12	6.2			HRX	40	1		3
10522	31966	MWIL	12	12	1530	N15	W31	12	10.3	4	(B)					
10522		HOLL	12	12	2135	N16	W35	12	10.2		B	BXO	20	4	3	2
10522		LEAR	12	13	0011	N16	W36	12	10.3		B	CRO	20	5	4	4
10522		VORO	12	13	0024	N15	W36	12	10.3			BRO	21	6	3	3
10522		SVTO	12	13	0845	N16	W41	12	10.2		B	CAO	30	5	5	3
10522		HOLL	12	13	1025	N15	W45	12	10.0		B	CSO	20	3	6	2
10522	31966	MWIL	12	13	1615	N15	W45	12	10.3	4	(B)					
10522		LEAR	12	14	0031	N16	W50	12	10.2		B	CRO	30	4	4	3
10522		VORO	12	14	0136	N15	W50	12	10.3			BRO	21	2	5	3
10522		TACH	12	14	0517	N15	W53	12	10.2			BXO	34	2	7	3
10522		SVTO	12	14	0825	N16	W55	12	10.2		B	CAO	30	4	6	3
10522	31966	MWIL	12	14	1530	N15	W58	12	10.2	4	(B)					
10522		HOLL	12	14	1605	N15	W59	12	10.2		B	DSO	20	5	4	4
10522		VORO	12	15	0013	N15	W62	12	10.3			BRI	40	6	5	3
10522		LEAR	12	15	0240	N15	W64	12	10.3		B	CSO	20	3	8	3
10522		SVTO	12	15	0858	N15	W70	12	10.1		B	CRO	50	5	8	2
10522		KAND	12	15	1000	N15	W70	12	10.1			CSO		3	4	3
10522	31966	MWIL	12	15	1700	N16	W75	12	10.0	4	(B)					
10522B	31969	MWIL	12	16	1530	S06	W60	12	12.1	4	(B)					
10522A	31968	MWIL	12	15	1700	S13	W47	12	12.2	4	(AF)					

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10526		LEAR	12	17	0040	N12	W42	12	13.9		A	HSX	30	1	1	3
10526		TACH	12	17	0534	N12	W44	12	13.9			HSX	43	1	1	3
10526		SVTO	12	17	0738	N12	W46	12	13.8		B	CSO	30	2	3	3
10526	31973	MWIL	12	17	1530	N12	W50	12	13.9	4	(B)					
10526		HOLL	12	17	1625	N11	W50	12	13.9		B	AXX	30	2	3	3
10526		LEAR	12	18	0055	N13	W55	12	13.9		A	HAX	20	1	1	1
10526		TACH	12	18	0537	N11	W59	12	13.8			BXO	6	2	7	4
10526	31973	MWIL	12	18	1500	N13	W61	12	14.0	3	(B)					
10526		HOLL	12	18	1555	N12	W62	12	14.0		A	HSX	20	1	1	3
10527	31967	MWIL	12	13	1615	S15	E16	12	14.9	4	(AP)					
10527		LEAR	12	14	0031	S15	E11	12	14.8		A	AXX	10	1	1	3
10527	31967	MWIL	12	14	1530	S15	E05	12	15.0	3	(AP)					
10527		LEAR	12	17	0040	S14	W28	12	14.9		B	CSO	10	4	5	3
10527		TACH	12	17	0534	S13	W31	12	14.9			CSO	35	2	4	3
10527		SVTO	12	17	0738	S15	W33	12	14.8		B	CSO	40	3	4	3
10527	31974	MWIL	12	17	1530	S15	W36	12	14.9	4	(B)					
10527		HOLL	12	17	1625	S15	W36	12	14.9		B	AXX	40	4	3	3
10527		LEAR	12	18	0055	S14	W42	12	14.9		B	BXO	20	3	4	1
10527		TACH	12	18	0537	S16	W45	12	14.8			BXO	6	2	6	4
10527		SVTO	12	18	1042	S16	W51	12	14.6		A	AXX		1		3
10527	31974	MWIL	12	18	1500	S16	W54	12	14.5	4	(B)					
10527		HOLL	12	18	1555	S16	W52	12	14.7		A	HSX	30	3	1	3
10527		LEAR	12	19	0010	S15	W58	12	14.6		A	AXX	10	1	1	3
10527		VORO	12	19	0046	S16	W58	12	14.6			HRX	13	1		3
10521		KAND	12	10	0710	S11	E84	12	16.6			HS		1	2	2
10521		HOLL	12	10	1520	S11	E86	12	17.1		B	DAO	60	1	4	3
10521		LEAR	12	11	0150	S12	E74	12	16.6		B	DAO	90	3	7	2
10521		VORO	12	11	0158	S11	E73	12	16.6			DAO	121	3	5	2
10521		SVTO	12	11	0737	S12	E75	12	17.0		B	DSO	80	2	9	2
10521		HOLL	12	11	1604	S10	E65	12	16.5		B	DSO	140	3	7	3
10521	31965	MWIL	12	11	2115	S12	E62	12	16.5	4	(B)					
10521		LEAR	12	12	0005	S12	E61	12	16.6		B	CSO	90	4	6	3
10521		VORO	12	12	0044	S11	E60	12	16.5			DAO	175	2	5	3
10521		KAND	12	12	0820	S11	E58	12	16.7			CSO		2	6	3
10521	31965	MWIL	12	12	1530	S12	E52	12	16.6	5	(B)					
10521		HOLL	12	12	2135	S11	E50	12	16.7		B	DSO	90	2	4	2
10521		LEAR	12	13	0011	S12	E48	12	16.6		B	DSO	90	4	6	4
10521		VORO	12	13	0024	S11	E47	12	16.5			DAO	104	2	5	3
10521		SVTO	12	13	0845	S12	E43	12	16.6		B	DSO	80	4	7	3
10521		HOLL	12	13	1025	S12	E38	12	16.3		B	DSO	80	2	6	2
10521	31965	MWIL	12	13	1615	S12	E38	12	16.5	5	(B)					
10521		LEAR	12	14	0031	S12	E34	12	16.6		B	DAO	80	5	6	3
10521		VORO	12	14	0136	S11	E33	12	16.5			DAO	107	2	5	3
10521		TACH	12	14	0517	S11	E31	12	16.5			DSO	76	2	5	3
10521		SVTO	12	14	0825	S12	E29	12	16.5		B	DSO	30	2	6	3
10521	31965	MWIL	12	14	1530	S12	E26	12	16.6	4	(B)					
10521		HOLL	12	14	1605	S12	E25	12	16.5		B	DSO	50	5	6	4
10521		VORO	12	15	0013	S11	E21	12	16.6			DAO	70	2	5	3
10521		LEAR	12	15	0240	S12	E20	12	16.6		B	DSO	40	3	6	3
10521		SVTO	12	15	0858	S11	E16	12	16.6		B	CSO	40	4	7	2
10521		KAND	12	15	1000	S11	E16	12	16.6			DSO		4	6	3
10521	31965	MWIL	12	15	1700	S11	E12	12	16.6	5	(BG)					
10521		VORO	12	16	0043	S11	E09	12	16.7			DAO	74	4		3
10521		LEAR	12	16	0150	S11	E08	12	16.7		BG	DSO	40	6	6	3
10521		TACH	12	16	0635	S10	W01	12	16.2			BRI	48	5	3	3
10521		SVTO	12	16	0858	S11	E02	12	16.5		B	DSO	50	5	7	2
10521	31965	MWIL	12	16	1530	S11	W01	12	16.6	5	(BG)					
10521		HOLL	12	16	1630	S11	W01	12	16.6		B	CSO	70	6	6	3
10521		LEAR	12	17	0040	S10	W07	12	16.5		BG	DSO	20	5	6	3
10521		TACH	12	17	0534	S10	W09	12	16.5			BRO	36	3	6	3
10521		SVTO	12	17	0738	S11	W11	12	16.5		B	CSO	30	4	8	3
10521	31965	MWIL	12	17	1530	S12	W13	12	16.7	4	(B)					
10521		HOLL	12	17	1625	S11	W17	12	16.4		A	AXX	10	1	1	3
10521		LEAR	12	18	0055	S10	W22	12	16.4		B	CRO	30	3	2	1
10521		TACH	12	18	0537	S12	W21	12	16.6			BXO	15	2	6	4
10521		SVTO	12	18	1042	S12	W28	12	16.3		A	HSX	20	2	1	3
10521	31965	MWIL	12	18	1500	S12	W30	12	16.4	4	(AP)					

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10521		HOLL	12	18	1555	S12	W29	12	16.5		A	HSX	20	3	1	3
10521		LEAR	12	19	0010	S12	W36	12	16.3		B	BXO	10	2	4	3
10521		VORO	12	19	0046	S12	W31	12	16.7			CRO	10	2	6	3
10521		TACH	12	19	0529	S14	W39	12	16.3			AXX	10	1	1	3
10521		SVTO	12	19	0746	S12	W39	12	16.4		A	HRX	10	1	1	3
10521		HOLL	12	19	1546	S12	W42	12	16.5		A	AXX		1	1	3
10520		HOLL	12	10	1520	N03	E79	12	16.5		A	HAX	120	2	2	3
10520		LEAR	12	11	0150	N02	E73	12	16.5		A	HAX	70	2	3	2
10520		VORO	12	11	0158	N03	E72	12	16.5			HAX	143	1		2
10520		SVTO	12	11	0737	N02	E73	12	16.8		A	HSX	80	1	3	2
10520		HOLL	12	11	1604	N03	E65	12	16.5		A	HAX	140	1	2	3
10520	31964	MWIL	12	11	2115	N02	E62	12	16.5	5	(AF)					
10520		LEAR	12	12	0005	N02	E60	12	16.5		A	HSX	80	1	2	3
10520		VORO	12	12	0044	N03	E59	12	16.4			HAX	180	1		3
10520		KAND	12	12	0820	N03	E58	12	16.7			HS		1	2	3
10520	31964	MWIL	12	12	1530	N02	E52	12	16.5	5	(AF)					
10520		HOLL	12	12	2135	N02	E48	12	16.5		A	HSX	120	1	2	2
10520		LEAR	12	13	0011	N02	E47	12	16.5		A	HSX	90	1	2	4
10520		VORO	12	13	0024	N02	E46	12	16.4			HAX	169	1		3
10520		SVTO	12	13	0845	N02	E42	12	16.5		A	HSX	130	1	3	3
10520		HOLL	12	13	1025	N03	E36	12	16.1		B	DSO	130	4	5	2
10520	31964	MWIL	12	13	1615	N02	E37	12	16.4	5	(AP)					
10520		LEAR	12	14	0031	N01	E32	12	16.4		BG	DAO	160	14	5	3
10520		VORO	12	14	0136	N02	E31	12	16.4			CAO	186	10	4	3
10520		TACH	12	14	0517	N01	E26	12	16.2			CAO	127	5	2	3
10520		SVTO	12	14	0825	N03	E26	12	16.3		B	DSO	130	6	7	3
10520	31964	MWIL	12	14	1530	N02	E23	12	16.4	5	(BG)					
10520		HOLL	12	14	1605	N02	E23	12	16.4		B	DSO	130	9	7	4
10520		VORO	12	15	0013	N03	E20	12	16.5			HHX	164	7		3
10520		LEAR	12	15	0240	N02	E17	12	16.4		B	DSO	60	7	6	3
10520		SVTO	12	15	0858	N03	E14	12	16.4		B	DSO	120	3	7	2
10520		KAND	12	15	1000	N03	E14	12	16.5			CSO		4	5	3
10520	31964	MWIL	12	15	1700	N02	E09	12	16.4	5	(BG)					
10520		VORO	12	16	0043	N03	E04	12	16.3			DHO	195	7	5	3
10520		LEAR	12	16	0150	N02	E04	12	16.4		BG	DSO	130	10	6	3
10520		TACH	12	16	0635	N02	E02	12	16.4			CAO	119	5	5	3
10520		SVTO	12	16	0858	N01	W01	12	16.3		B	DSO	210	5	8	2
10520	31964	MWIL	12	16	1530	N02	W03	12	16.4	5	(BG)					
10520		HOLL	12	16	1630	N01	W02	12	16.5		B	DSO	190	10	7	3
10520		LEAR	12	17	0040	N02	W10	12	16.3		BG	DSO	90	7	6	3
10520		TACH	12	17	0534	N02	W12	12	16.3			DAO	154	3	6	3
10520		SVTO	12	17	0738	N03	W13	12	16.3		B	DSO	110	2	7	3
10520	31964	MWIL	12	17	1530	N02	W16	12	16.4	6	(BG)					
10520		HOLL	12	17	1625	N03	W17	12	16.4		B	CSO	130	4	7	3
10520		LEAR	12	18	0055	N03	W23	12	16.3		B	DSO	90	2	7	1
10520		TACH	12	18	0537	N02	W26	12	16.3			CSO	119	2	7	4
10520		SVTO	12	18	1042	N04	W29	12	16.3		B	DAO	110	3	7	3
10520	31964	MWIL	12	18	1500	N03	W30	12	16.4	5	(AF)					
10520		HOLL	12	18	1555	N02	W31	12	16.3		B	DAO	140	3	7	3
10520		LEAR	12	19	0010	N03	W35	12	16.4		B	CSO	100	3	7	3
10520		VORO	12	19	0046	N03	W36	12	16.3			DSO	175	2	7	3
10520		TACH	12	19	0529	N01	W39	12	16.3			CSO	88	2	7	3
10520		SVTO	12	19	0746	N03	W40	12	16.3		B	CSO	120	2	8	3
10520		HOLL	12	19	1546	N03	W44	12	16.4		B	DSO	90	3	7	3
10520		LEAR	12	20	0012	N03	W49	12	16.3		B	CSO	120	3	7	2
10520		VORO	12	20	0104	N03	W49	12	16.4			DAO	141	3	7	3
10520		KAND	12	20	0805	N03	W50	12	16.6			HS		1	2	2
10520		SVTO	12	20	0830	N02	W54	12	16.3		B	CSO	190	2	8	2
10520		HOLL	12	20	1522	N03	W57	12	16.4		B	CSO	90	2	7	4
10520		LEAR	12	21	0002	N03	W58	12	16.7		A	HSX	70	1	2	2
10520		VORO	12	21	0047	N03	W58	12	16.7			HAX	126	1		3
10520		SVTO	12	21	0755	N02	W63	12	16.6		A	HSX	80	2	2	3
10520		KAND	12	21	1045	N02	W66	12	16.5			HS		1	2	5
10520		HOLL	12	21	1705	N02	W68	12	16.6		A	HKX	110	1	1	3
10520	31964	MWIL	12	21	1900	N04	W68	12	16.7	5	(AF)					
10520		LEAR	12	22	0004	N03	W72	12	16.6		A	HSX	120	1	2	3
10520		VORO	12	22	0019	N03	W71	12	16.7			HAX	117	1		3
10520		KAND	12	22	0805	N02	W78	12	16.5			HS		1	2	3

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NOAA/ USAF Group	Mt Wilson Group	Sta	Observation Mo	Day	Time (UT)	Lat	CMD	CMP Mo	Day	Max H	Mag Class	Spot Class	Corrected Area (10-6 Hemi)	Spot Count	Long. Extent (Deg)	Qual
10520	31964	MWIL	12	22	1720	N04	W83	12	16.5	4	(AF)					
10520		LEAR	12	23	0019	N04	W86	12	16.6		A	HRX	20	1	1	2
10529		HOLL	12	19	1546	N09	E01	12	19.7		B	DSO	20	2	3	3
10529		LEAR	12	20	0012	N10	W04	12	19.7		B	BXO	10	2	3	2
10529		VORO	12	20	0104	N09	W05	12	19.7			BRX	5	2	3	3
10529		HOLL	12	20	1522	N09	W14	12	19.6		A	AXX		1	1	4
10529		LEAR	12	23	0019	N09	W47	12	19.5		A	AXX	10	1	1	2
10531	31976	MWIL	12	21	1900	N04	W05	12	21.4	3	(AP)					
10531		LEAR	12	22	0004	N02	W07	12	21.5		B	BXO	20	4	5	3
10531		KAND	12	22	0805	N02	W16	12	21.1			HA		1	1	3
10531	31979	MWIL	12	22	1720	N02	W20	12	21.2	4	(BP)					
10531		LEAR	12	23	0019	N03	W25	12	21.1		B	BXO	40	13	3	2
10531		VORO	12	23	0020	N03	W24	12	21.2			BRI	61	15	3	3
10531		KAND	12	23	0855	N02	W31	12	21.0			BXO		4	3	1
10531		HOLL	12	23	1524	N02	W33	12	21.2		B	CSO	20	5	4	3
10531		LEAR	12	24	0013	N03	W38	12	21.2		B	BXO	10	4	3	1
10531		VORO	12	24	0028	N04	W39	12	21.1			AXX	14	7		3
10524	31970	MWIL	12	16	1530	S07	E69	12	21.8	4	(AP)					
10524		HOLL	12	16	1630	S08	E71	12	22.0		A	AXX	30	2	1	3
10524		LEAR	12	17	0040	S08	E66	12	22.0		A	HSX	20	1	1	3
10524		TACH	12	17	0534	S07	E62	12	21.9			HSX	64	1	1	3
10524		SVTO	12	17	0738	S07	E60	12	21.8		B	CSO	40	2	2	3
10524	31970	MWIL	12	17	1530	S08	E57	12	21.9	5	(B)					
10524		HOLL	12	17	1625	S08	E57	12	21.9		A	BXO	60	5	4	3
10524		LEAR	12	18	0055	S08	E51	12	21.9		A	HSX	50	3	5	1
10524		TACH	12	18	0537	S08	E46	12	21.7			BXO	20	3	4	4
10524		SVTO	12	18	1042	S08	E45	12	21.8		B	CRO	40	8	5	3
10524	31970	MWIL	12	18	1500	S08	E43	12	21.8	4	(BP)					
10524		HOLL	12	18	1555	S07	E43	12	21.9		B	CAO	20	5	4	3
10524		LEAR	12	19	0010	S08	E38	12	21.8		B	CAO	20	5	4	3
10524		VORO	12	19	0046	S08	E35	12	21.6			CRO	26	4	1	3
10524		TACH	12	19	0529	S07	E34	12	21.8			HSX	36	1	1	3
10524		SVTO	12	19	0746	S07	E32	12	21.7		B	CSO	20	2	2	3
10524		HOLL	12	19	1546	S07	E28	12	21.7		A	HSX	10	2	1	3
10524		LEAR	12	20	0012	S07	E23	12	21.7		A	HRX	10	2	2	2
10524		VORO	12	20	0104	S08	E22	12	21.7			BRX	12	3	1	3
10524		KAND	12	20	0805	S07	E19	12	21.8			BXO		2	2	2
10524		SVTO	12	20	0830	S08	E17	12	21.6		B	CRO	20	2	2	2
10524		HOLL	12	20	1522	S08	E17	12	21.9		B	CSO	10	2	3	4
10524		LEAR	12	21	0002	S08	E10	12	21.7		B	BXO		2	1	2
10524		VORO	12	21	0047	S08	E09	12	21.7			HAX	4	1		3
10524A	31977	MWIL	12	21	1900	N09	W01	12	21.7	3	(AP)					
10525	31971	MWIL	12	16	1530	N10	E75	12	22.3	4	(B)					
10525		HOLL	12	16	1630	N10	E72	12	22.1		A	AXX	30	1	1	3
10525		LEAR	12	17	0040	N08	E68	12	22.1		B	CSO	30	3	1	3
10525		TACH	12	17	0534	N11	E66	12	22.2			AXX	26	1	1	3
10525		SVTO	12	17	0738	N10	E66	12	22.3		B	CRO	40	4	6	3
10525	31971	MWIL	12	17	1530	N09	E61	12	22.2	5	(D)					
10525		HOLL	12	17	1625	N09	E60	12	22.2		B	CSO	140	7	5	3
10525		LEAR	12	18	0055	N09	E55	12	22.2		B	CSO	90	7	6	1
10525		TACH	12	18	0537	N09	E52	12	22.1			CAO	68	4	5	4
10525		SVTO	12	18	1042	N10	E50	12	22.2		B	DAO	80	12	7	3
10525	31971	MWIL	12	18	1500	N09	E48	12	22.2	5	(BG)					
10525		HOLL	12	18	1555	N09	E49	12	22.3		B	DAI	90	18	8	3
10525		LEAR	12	19	0010	N09	E43	12	22.2		BG	DAI	200	17	10	3
10525		VORO	12	19	0046	N09	E42	12	22.2			DAI	209	16	7	3
10525		TACH	12	19	0529	N10	E38	12	22.1			DAI	37	6	6	3
10525		SVTO	12	19	0746	N10	E39	12	22.2		B	DAI	160	8	10	3
10525		HOLL	12	19	1546	N10	E35	12	22.3		B	DKI	170	18	9	3
10525		LEAR	12	20	0012	N09	E30	12	22.2		B	DAI	200	17	10	2
10525		VORO	12	20	0104	N09	E29	12	22.2			DAI	194	18	9	3
10525		KAND	12	20	0805	N10	E27	12	22.4			DAO		11	10	2
10525		SVTO	12	20	0830	N09	E26	12	22.3		B	DSI	90	11	9	2
10525		HOLL	12	20	1522	N09	E21	12	22.2		B	DAI	100	20	9	4

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10525		LEAR	12	21	0002	N08	E17	12	22.3		BG	DAI	120	29	10	2
10525		VORO	12	21	0047	N09	E16	12	22.2			DAO	159	12	8	3
10525		SVTO	12	21	0755	N09	E13	12	22.3		BG	DSI	130	14	9	3
10525		KAND	12	21	1045	N09	E12	12	22.3			DAO		19	8	5
10525		HOLL	12	21	1705	N08	E06	12	22.2		B	DAO	110	18	9	3
10525	31971	MWIL	12	21	1900	N09	E07	12	22.3	4	(BD)					
10525		LEAR	12	22	0004	N08	E04	12	22.3		BG	DAI	90	37	8	3
10525		VORO	12	22	0019	N09	E03	12	22.2			DRI	99	22	7	3
10525		KAND	12	22	0805	N08	E00	12	22.3			DAO		11	9	3
10525	31971	MWIL	12	22	1720	N09	W06	12	22.3	4	(D)					
10525		LEAR	12	23	0019	N09	W09	12	22.3		BG	DAO	100	12	8	2
10525		VORO	12	23	0020	N09	W08	12	22.4			DAI	134	11	6	3
10525		KAND	12	23	0855	N09	W14	12	22.3			CSO		6	6	1
10525		HOLL	12	23	1524	N08	W18	12	22.3		B	DAO	70	10	7	3
10525		LEAR	12	24	0013	N09	W22	12	22.3		BG	DAO	80	14	8	1
10525		VORO	12	24	0028	N09	W22	12	22.4			BRI	54	14	6	3
10525		TACH	12	24	0657	N10	W23	12	22.6			CSO	73	2	4	3
10525	31971	MWIL	12	24	1600	N10	W29	12	22.5	4	(B)					
10525		HOLL	12	24	1933	N09	W34	12	22.3		B	CAO	40	9	9	2
10525		VORO	12	25	0044	N09	W36	12	22.3			BRI	19	5	6	2
10525		LEAR	12	25	0055	N09	W36	12	22.3		B	DRO	40	8	9	2
10525		SVTO	12	25	1025	N10	W43	12	22.2		A	AXX	10	2	3	3
10525		LEAR	12	26	0212	N09	W50	12	22.3		B	CRO	10	2	2	4
10523	31972	MWIL	12	16	1530	S16	E79	12	22.6	3	(AP)					
10523		HOLL	12	16	1630	S15	E76	12	22.4		A	HSX	60	2	1	3
10523		LEAR	12	17	0040	S17	E73	12	22.6		A	AXX		2		3
10523		TACH	12	17	0534	S16	E72	12	22.7			HSX	168	1	2	3
10523		SVTO	12	17	0738	S16	E69	12	22.5		A	HSX	80	1	2	3
10523	31972	MWIL	12	17	1530	S16	E66	12	22.6	4	(AP)					
10523		HOLL	12	17	1625	S15	E63	12	22.4		A	HSX	90	1	2	3
10523		LEAR	12	18	0055	S17	E60	12	22.6		A	HAX	40	1	2	1
10523		TACH	12	18	0537	S17	E58	12	22.6			AXX	24	1	1	4
10523		SVTO	12	18	1042	S17	E56	12	22.7		A	HSX	40	1	1	3
10523	31972	MWIL	12	18	1500	S16	E52	12	22.6	4	(AF)					
10523		HOLL	12	18	1555	S16	E54	12	22.7		A	HAX	40	2	3	3
10523		LEAR	12	19	0010	S17	E47	12	22.6		B	CSO	50	5	3	3
10523		VORO	12	19	0046	S16	E47	12	22.6			DAI	40	3	1	3
10523		TACH	12	19	0529	S16	E46	12	22.7			HSX	44	1	1	3
10523		SVTO	12	19	0746	S16	E44	12	22.7		B	CSO	30	2	2	3
10523		HOLL	12	19	1546	S17	E39	12	22.6		A	HSX	20	2	2	3
10523		LEAR	12	20	0012	S17	E36	12	22.7		B	CAO	20	2	3	2
10523		VORO	12	20	0104	S17	E34	12	22.6			HAX	15	2		3
10523		KAND	12	20	0805	S16	E31	12	22.7			BXO		3	2	2
10523		SVTO	12	20	0830	S17	E31	12	22.7		A	HSX	10	1	1	2
10523		HOLL	12	20	1522	S17	E27	12	22.7		A	HSX	20	1	1	4
10523		LEAR	12	21	0002	S17	E22	12	22.7		A	AXX		2		2
10523		VORO	12	21	0047	S17	E21	12	22.6			HAX	5	1		3
10523		KAND	12	21	1045	S20	E18	12	22.8			BXO		4	2	5
10523		HOLL	12	21	1705	S20	E14	12	22.8		B	BXO	10	5	3	3
10523	31972	MWIL	12	21	1900	S19	E13	12	22.8	3	(AF)					
10523		LEAR	12	22	0004	S18	E12	12	22.9		B	BXO	20	12	4	3
10523		KAND	12	22	0805	S19	E07	12	22.9			BXO		4	3	3
10523	31972	MWIL	12	22	1720	S19	E00	12	22.7	4	(AF)					
10523		LEAR	12	23	0019	S18	W01	12	22.9		B	BXO	20	7	8	2
10523		VORO	12	23	0020	S16	E03	12	23.2			AXX	12	5		3
10523		VORO	12	23	0020	S18	W04	12	22.7			AXX	14	6		3
10523		HOLL	12	23	1524	S19	W08	12	23.0		B	BXO	10	3	3	3
10523		LEAR	12	24	0013	S19	W13	12	23.0		A	AXX	10	1	1	1
10523		VORO	12	24	0028	S16	W10	12	23.3			AXX	5	7		3
10523		VORO	12	24	0028	S19	W16	12	22.8			BRI	16	5	4	3
10523C		TACH	12	26	0710	N09	W38	12	23.4			BRO	6	3	4	4
10528		LEAR	12	18	0055	N08	E80	12	24.0		A	HAX	80	1	3	1
10528		TACH	12	18	0537	N08	E78	12	24.1			HSX	86	1	2	4
10528		SVTO	12	18	1042	N09	E78	12	24.3		B	DSO	210	2	4	3
10528	31975	MWIL	12	18	1500	N08	E75	12	24.2	4	(BP)					
10528		HOLL	12	18	1555	N08	E75	12	24.3		A	HAX	150	7	3	3

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10528		LEAR	12	19	0010	N08	E75	12	24.6		B	DAO	300	11	14	3
10528		VORO	12	19	0046	N09	E74	12	24.6			DHI	380	5	13	3
10528		TACH	12	19	0529	N09	E70	12	24.5			DAO	211	5	6	3
10528		SVTO	12	19	0746	N10	E70	12	24.6		B	FSO	290	7	16	3
10528		HOLL	12	19	1546	N09	E66	12	24.6		B	FKC	270	26	19	3
10528		LEAR	12	20	0012	N09	E62	12	24.7		B	ESI	470	13	15	2
10528		VORO	12	20	0104	N09	E61	12	24.6			ESI	515	16	15	3
10528		KAND	12	20	0805	N10	E58	12	24.7			FAO		12	20	2
10528		SVTO	12	20	0830	N09	E56	12	24.5		B	FSO	290	8	17	2
10528		HOLL	12	20	1522	N09	E53	12	24.6		B	FKI	330	29	20	4
10528		LEAR	12	21	0002	N08	E49	12	24.7		BG	FHO	400	35	17	2
10528		VORO	12	21	0047	N09	E48	12	24.6			FSI	526	7	15	3
10528		SVTO	12	21	0755	N09	E45	12	24.7		BG	FHO	380	9	18	3
10528		KAND	12	21	1045	N09	E43	12	24.7			FAO		18	24	5
10528		HOLL	12	21	1705	N09	E38	12	24.6		B	FKO	440	19	18	3
10528	31975	MWIL	12	21	1900	N08	E39	12	24.7	5	(D)					
10528		LEAR	12	22	0004	N09	E35	12	24.6		BG	FKI	360	48	18	3
10528		VORO	12	22	0019	N08	E27	12	24.0			HHX	289	8		3
10528		VORO	12	22	0019	N10	E40	12	25.0			DAI	176	14	3	3
10528		KAND	12	22	0805	N09	E30	12	24.6			FSO		20	17	3
10528	31975	MWIL	12	22	1720	N08	E24	12	24.5	5	(BG)					
10528		LEAR	12	23	0019	N09	E21	12	24.6		BG	FAI	530	39	17	2
10528		VORO	12	23	0020	N08	E14	12	24.1			HKX	294	11		3
10528		VORO	12	23	0020	N10	E26	12	25.0			DAI	411	29	8	3
10528		KAND	12	23	0855	N09	E17	12	24.6			FKO		33	19	1
10528		HOLL	12	23	1524	N09	E14	12	24.7		BG	FKC	510	45	18	3
10528		LEAR	12	24	0013	N09	E08	12	24.6		BG	FAI	540	38	17	1
10528		VORO	12	24	0028	N08	E01	12	24.1			HHX	250	8		3
10528		VORO	12	24	0028	N09	E13	12	25.0			DKI	416	28	7	3
10528		TACH	12	24	0657	N09	E10	12	25.0			DAI	215	8	5	3
10528		TACH	12	24	0657	N09	W01	12	24.2			HA	205	2	2	3
10528	31975	MWIL	12	24	1600	N09	W00	12	24.7	6	(B)					
10528		HOLL	12	24	1933	N10	W03	12	24.6		BG	FKC	700	25	17	2
10528		VORO	12	25	0044	N09	W02	12	24.9			DKI	600	19	6	2
10528		VORO	12	25	0044	N09	W12	12	24.1			HHX	263	2		2
10528		LEAR	12	25	0055	N09	W05	12	24.7		BG	FKI	760	27	18	2
10528		SVTO	12	25	1025	N10	W10	12	24.7		B	FKI	770	17	18	3
10528		HOLL	12	25	1652	N10	W14	12	24.6		BG	FKO	670	25	16	2
10528		VORO	12	26	0003	N08	W25	12	24.1			HHX	244	2		3
10528		VORO	12	26	0003	N09	W15	12	24.9			DKI	699	24	8	3
10528		LEAR	12	26	0212	N09	W18	12	24.7		BG	FKI	720	65	18	4
10528		TACH	12	26	0710	N08	W14	12	25.2			CSO	214	2	4	4
10528		SVTO	12	26	0805	N11	W22	12	24.7		B	FKI	680	17	19	3
10528		HOLL	12	26	1735	N08	W27	12	24.7		B	FKO	670	15	16	3
10528	31975	MWIL	12	26	2200	N09	W30	12	24.7	5	(B)					
10528		VORO	12	27	0007	N08	W38	12	24.1			HHX	244	2		3
10528		VORO	12	27	0007	N09	W28	12	24.9			DKI	660	22	8	3
10528		LEAR	12	27	0245	N09	W32	12	24.7		B	FKI	590	39	17	2
10528		TACH	12	27	0523	N06	W41	12	24.1			CSO	208	2	2	2
10528		TACH	12	27	0523	N09	W32	12	24.8			EAI	387	7	10	2
10528		SVTO	12	27	0815	N11	W36	12	24.6		B	FHI	700	11	20	3
10528	31975	MWIL	12	27	1600	N09	W39	12	24.7	5	(B)					
10528		HOLL	12	27	1820	N08	W40	12	24.8		B	FKI	600	14	17	3
10528		VORO	12	28	0016	N09	W42	12	24.8			DKI	461	14	9	3
10528		VORO	12	28	0016	N09	W51	12	24.2			HKX	240	1		3
10528		LEAR	12	28	0227	N10	W44	12	24.8		BG	EAO	250	11	15	2
10528		SVTO	12	28	0830	N10	W48	12	24.7		B	FKO	540	10	18	3
10528		HOLL	12	28	1524	N09	W51	12	24.8		BG	FKC	340	16	16	2
10528	31975	MWIL	12	28	1545	N09	W51	12	24.8	5	(B)					
10528		LEAR	12	29	0002	N09	W57	12	24.7		B	FKO	480	16	17	2
10528		VORO	12	29	0031	N09	W64	12	24.2			HKX	234	1		3
10528		VORO	12	29	0031	N10	W55	12	24.9			DKI	392	11	11	3
10528		KAND	12	29	0647	N09	W60	12	24.8			FKO		10	19	2
10528		HOLL	12	29	1547	N08	W64	12	24.8		B	FKC	390	10	17	3
10528		VORO	12	30	0047	N09	W68	12	24.9			DKO	308	5	13	3
10528		VORO	12	30	0047	N09	W76	12	24.3			HKX	254	1		3
10528		LEAR	12	30	0130	N09	W69	12	24.9		BG	FSO	80	4	18	3
10528		KAND	12	30	0910	N09	W73	12	24.9			FAO		4	19	2
10528		HOLL	12	30	1635	N11	W72	12	25.3		B	CAO	120	5	3	3

S U N S P O T G R O U P S
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NOAA/ USAF Group	Mt Wilson Group	Sta	Observation Mo	Day	Time (UT)	Lat	CMD	CMP Mo	Day	Max H	Mag Class	Spot Class	Corrected Area (10-6 Hemi)	Spot Count	Long. Extent (Deg)	Qual
10528	31975	MWIL	12	30	2000	N11	W75	12	25.2	4	(AF)					
10528		VORO	12	31	0050	N10	W84	12	24.7			HAX	147	1		3
10528		LEAR	12	31	0202	N09	W79	12	25.1		B	CAO	120	3	6	2
10528		KAND	12	31	0845	N09	W79	12	25.4			HA		1	2	2
10528	31975	MWIL	12	31	1600	N10	W85	12	25.3	4	AF					
10528B		TACH	12	26	0710	N08	W05	12	25.9			DAI	348	11	7	4
10532		VORO	12	24	0028	S11	E29	12	26.2			AXX	2	1		3
10532	31980	MWIL	12	24	1600	S11	E20	12	26.2	4	(B)					
10532		HOLL	12	24	1933	S11	E16	12	26.0		B	BXO	20	12	5	2
10532		VORO	12	25	0044	S12	E12	12	25.9			AXX	17	4		2
10532		LEAR	12	25	0055	S12	E11	12	25.9		B	CRO	20	4	4	2
10532		SVTO	12	25	1025	S10	E09	12	26.1		B	CSO	30	3	5	3
10532		HOLL	12	25	1652	S10	E06	12	26.1		B	FAO	30	4	4	2
10532		VORO	12	26	0003	S11	E02	12	26.1			BRI	45	4	3	3
10532		LEAR	12	26	0212	S11	E01	12	26.2		B	EAO	50	15	4	4
10532		SVTO	12	26	0805	S11	W03	12	26.1		B	DSO	40	3	4	3
10532		HOLL	12	26	1735	S11	W07	12	26.2		B	DAO	40	6	4	3
10532	31980	MWIL	12	26	2200	S11	W10	12	26.2	5	(B)					
10532		VORO	12	27	0007	S11	W11	12	26.2			DRO	88	9	3	3
10532		LEAR	12	27	0245	S11	W13	12	26.1		B	DAO	70	17	4	2
10532		TACH	12	27	0523	S10	W14	12	26.2			BRO	52	4	5	2
10532		SVTO	12	27	0815	S11	W17	12	26.1		B	DSO	30	3	4	3
10532	31980	MWIL	12	27	1600	S11	W20	12	26.2	5	(B)					
10532		HOLL	12	27	1820	S11	W21	12	26.2		B	CAO	40	6	4	3
10532		VORO	12	28	0016	S11	W25	12	26.1			BRI	33	5	3	3
10532		LEAR	12	28	0227	S11	W27	12	26.1		B	CSO	20	4	4	2
10532		SVTO	12	28	0830	S11	W31	12	26.0		B	CSO	20	2	4	3
10532		HOLL	12	28	1524	S11	W34	12	26.1		B	CSO	20	4	5	2
10532	31980	MWIL	12	28	1545	S11	W34	12	26.1	4	(BF)					
10532		LEAR	12	29	0002	S11	W38	12	26.1		B	CSO	30	7	4	2
10532		VORO	12	29	0031	S11	W39	12	26.1			BRI	14	4	4	3
10532		KAND	12	29	0647	S12	W40	12	26.3			AX		2	1	2
10532		HOLL	12	29	1547	S12	W47	12	26.1		A	HSX	20	1	1	3
10532B		TACH	12	26	0710	S11	E10	12	27.0			BXO	13	2	4	4
10530		HOLL	12	20	1522	S19	E78	12	26.6		A	HSX	40	1	1	4
10530		LEAR	12	21	0002	S21	E75	12	26.7		A	HAX	40	1	2	2
10530		VORO	12	21	0047	S20	E73	12	26.6			AXX	4	1		3
10530		SVTO	12	21	0755	S19	E73	12	26.9		A	HAX	30	1	2	3
10530		KAND	12	21	1045	S21	E73	12	27.0			HS		1	2	5
10530		HOLL	12	21	1705	S20	E65	12	26.7		A	HSX	20	1	1	3
10530	31978	MWIL	12	21	1900	S21	E65	12	26.8	4	(AP)					
10530		LEAR	12	22	0004	S21	E63	12	26.8		B	CAO	30	2	4	3
10530		VORO	12	22	0019	S20	E60	12	26.6			HRX	21	1		3
10530		KAND	12	22	0805	S21	E58	12	26.8			HA		1	1	3
10530	31978	MWIL	12	22	1720	S22	E52	12	26.7	4	(AP)					
10530		LEAR	12	23	0019	S23	E49	12	26.8		B	BXO	20	3	4	2
10530		VORO	12	23	0020	S22	E49	12	26.8			BRO	33	2	3	3
10530		KAND	12	23	0855	S22	E47	12	27.0			BXO		2	5	1
10530		HOLL	12	23	1524	S22	E41	12	26.8		B	DSO	50	6	4	3
10530		LEAR	12	24	0013	S22	E37	12	26.8		B	BXO	10	3	4	1
10530		VORO	12	24	0028	S22	E35	12	26.7			BRI	10	3	4	3
10530	31978	MWIL	12	24	1600	S21	E28	12	26.8	3	(AP)					
10530		HOLL	12	24	1933	S22	E25	12	26.7		B	BXO	10	6	5	2
10530		LEAR	12	29	0002	S21	W23	12	27.2		B	BXO	10	2	3	2
10530		VORO	12	29	0031	S19	W23	12	27.3			AXX	4	1		3
10530B		VORO	12	28	0016	S24	W04	12	27.7			BRO	19	3	1	3
10530A		VORO	12	26	0003	N10	E31	12	28.3			AXX	5	3		3
10530C		VORO	12	28	0016	S30	E08	12	28.6			AXX	4	1		3
10532A	31981	MWIL	12	28	1545	N11	E12	12	29.5	4	(AP)					
10532A		HOLL	12	30	1635	N13	W12	12	29.8		A	AXX	10	2	2	3
10535		VORO	12	30	0047	S19	W01	12	29.9			AXX	2	1		3

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DECEMBER 2003

NOAA/ USAF Group	Mt Wilson Group	Sta	Observation Time Mo	Day	(UT)	Lat	CMD	CMP Mo	Day	Max H	Mag Class	Spot Class	Corrected Area (10-6 Hemi)	Spot Count	Long. Extent (Deg)	Qual
10535		LEAR	12	30	0130	S19	W01	12	30.0		A	AXX	10	1	1	3
10535		KAND	12	30	0910	S20	W03	12	30.1			AX		1		2
10535		SVTO	01	01	0926	S19	W31	12	30.1		B	CRO	20	3	3	3
10535		KAND	01	01	1000	S20	W30	12	30.2			BXO		3	3	4
10535		HOLL	01	01	1603	S20	W34	12	30.2		B	CSO	30	4	3	2
10535	31984	MWIL	01	01	2100	S20	W35	12	30.3	3	(BF)					
10535		VORO	01	02	0031	S20	W37	12	30.3			HRX	25	7		2
10535		LEAR	01	02	0131	S19	W38	12	30.3		B	CSO	80	5	3	3
10535		SVTO	01	02	0734	S19	W43	12	30.1		B	DSO	80	4	4	3
10535		KAND	01	02	1205	S20	W45	12	30.2			DSO		10	5	3
10535		HOLL	01	02	1531	S18	W47	12	30.2		B	DAI	60	7	5	2
10535		LEAR	01	03	0005	S19	W51	12	30.2		B	DSO	160	6	3	3
10535		VORO	01	03	0055	S19	W51	12	30.2			DAI	183	8	4	2
10535		TACH	01	03	0615	S18	W55	12	30.2			DAI	170	6	4	2
10535		HOLL	01	03	1620	S16	W60	12	30.2		B	DAI	100	9	6	3
10535		LEAR	01	04	0010	S19	W64	12	30.2		B	DAO	100	12	6	3
10535		VORO	01	04	0123	S19	W65	12	30.2			DAO	177	6	4	2
10535		TACH	01	04	0723	S20	W68	12	30.2			HR	174	3	5	3
10535		SVTO	01	04	1220	S24	W71	12	30.1		B	DAO	180	3	8	3
10535	31984	MWIL	01	04	1600	S18	W72	12	30.3	4	(BF)					
10535		HOLL	01	04	1630	S20	W70	12	30.4		B	DAO	60	6	5	3
10535		VORO	01	05	0035	S19	W76	12	30.3			CAI	114	5	3	2
10535		SVTO	01	05	0735	S24	W80	12	30.2		A	HSX	30	1	2	3
10535		HOLL	01	05	1150	S20	W80	12	30.5		A	HSX	20	2	4	4
10535A		VORO	01	04	0123	S06	W58	12	30.8			AXX	3	1		3

Stations reporting:

HOLL = Holloman
KAND = Kandilli
LEAR = Learmonth
MWIL = Mt. Wilson
PALE = Palehua
RAMY = Ramey
SVTO = San Vito
TACH = Tashkent
VORO = Voroshilov