



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

SUNSPOT CO-ORDINATES AND CLASSIFICATIONS

1999

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GEORGI DOBROVOLSKI SOLAR OBSERVATORY

REGION CO-ORDINATES AND CLASSIFICATIONS FOR JANUARY 1999

All observations carried out by HOWARD BARNES .

Telescope : 76 mm refractor (f . l . 910 mm) .

Observed by PROJECTION . Full disc diameter = 145 mm approx .

CM is stated in degrees .

Region Numbers are NOAA/SEC Numbers .

B = Heliographic Latitude (+ if NORTH , - if SOUTH) .

CMD = Degrees of Longitude in respect to the Central Meridian (- if EAST , + if WEST) .

OBS	DATE	UT	CM	REG.No	B	CMD	f	p	s	gr	grfp	grf	efp	ef	Class.	Remarks
3542	1999 / 01 / 02	2025	121.22	8426	+15	-30	3	0	3	1	0	3	0	0	BXI	—
				8428	+22	+12	2	0	2	1	0	2	0	0	BXO	—
				8422	-23	+38	2	1	0	1	2	0	0	0	HAX	—
				8421	+26	+50	27	4	7	1	20	7	0	0	EKC	—
3543	1999 / 01 / 05	2030	81.66	8431	-28	-60	3	0	3	1	0	3	0	0	BXI	—
				8426	+15	+08	11	3	7	1	4	7	0	0	DHC	—
				8428	+22	+47	1	1	0	0	0	0	1	0	HSX	—
				8422	-22	+77	1	1	0	0	0	0	1	0	HSX	—
3544	1999 / 01 / 07	2050	55.14	8431	-28	-33	2	0	2	1	0	2	0	0	BXO	—
				8433	-28	-10	3	0	3	1	0	3	0	0	BXO	class correct
				8426	+15	+35	5	2	3	1	2	3	0	0	DSI	—
3545	1999 / 01 / 10	2055	15.58	8437	+12	-71	1	1	0	0	0	0	1	0	HSX	—
				8431	-28	+06	1	1	0	0	0	0	1	0	HAX	—
				8433	-28	+28	2	0	2	1	0	2	0	0	BXO	—
				8426	+14	+74	1	0	1	0	0	0	0	1	AXX	—
3546	1999 / 01 / 14	2140	322.50	8440	+20	-57	14	4	6	1	8	6	0	0	DAC	—
				8439	-23	-54	16	4	5	1	11	5	0	0	ESC	—
				8441	+17	-27	1	0	1	0	0	0	0	1	AXX	—
				8437	+11	-17	1	1	0	0	0	0	1	0	HSX	—
				8438	-18	+16	2	0	2	1	0	2	0	0	AXX	class correct
3547	1999 / 01 / 18	2105	270.15	8440	+20	-05	33	6	25	1	8	25	0	0	FSC	—
				8439	-24	-02	28	4	12	1	16	12	0	0	DAC	—
				8442	+24	+27	9	2	4	1	5	4	0	0	DAI	—
				8437	+11	+35	1	1	0	0	0	0	1	0	HSX	—
3548	1999 / 01 / 19	2020	257.39	8443	-16	-58	1	0	1	0	0	0	0	1	AXX	—
				8445	+11	-26	2	0	2	1	0	2	0	0	BXO	—
				8440	+19	+08	34	6	20	1	14	20	0	0	FAC	—
				8439	-24	+11	41	7	18	1	23	18	0	0	EKC	—
				8442	+24	+40	9	2	6	1	3	6	0	0	DAI	—
				8437	+11	+48	1	1	0	0	0	0	1	0	HSX	—



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

REGION CO-ORDINATES AND CLASSIFICATIONS FOR JANUARY 1999 continued.

OBS	DATE	UT	CM	REG.No	B	CMD	f	p	s	gr	grfp	grf	efp	ef	Class.	Remarks
3549	1999 / 01 / 24	1925	192.07	8443	-14	+02	1	0	1	0	0	0	0	1	AXX	—
				8444/7	+20	+39	12	4	6	1	6	6	0	0	EAC	—
				8440	+19	+72	2	0	2	1	0	2	0	0	BXO	—
				8439	-23	+78	1	1	0	0	0	0	1	0	HHX	—
3550	1999 / 01 / 25	2005	178.54	8448	-17	-12	1	0	1	0	0	0	1	AXX	—	
				8444/7	+20	+52	8	3	4	1	4	4	0	0	EAC	—
3551	1999 / 01 / 26	2030	165.14	8443	-15	+27	3	0	3	1	0	3	0	0	BXI	—
				8444/7	+19	+66	6	1	5	1	1	5	0	0	CSI	—
3552	1999 / 01 / 31	2100	99.03	8452	+21	+29	3	0	3	1	0	3	0	0	BXI	—
				8446	+16	+70	4	2	1	1	3	1	0	0	EAO	—



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

REGION CO-ORDINATES AND CLASSIFICATIONS FOR FEBRUARY 1999

All observations carried out by HOWARD BARNES .

Telescope : 76 mm refractor (f . l . 910 mm) .

Observed by PROJECTION . Full disc diameter = 145 mm approx .

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OBS	DATE	UT	CM	REG.No	B	CMD	f	p	s	gr	grfp	grf	efp	ef	Class.	Remarks
3553	1999 / 02 / 01	2020	86.23	8453	-26	-59	1	0	1	0	0	0	0	1	AXX	—
				8452	+23	+42	1	0	1	0	0	0	0	1	AXX	big
				8451	+27	+51	1	0	1	0	0	0	0	1	AXX	—
				8446	+17	+80	1	1	0	0	0	0	1	0	HSX	—
3554	1999 / 02 / 06	2210	19.40	8455	-19	-33	1	1	0	0	0	0	1	0	HSX	—
				8453	-25	+09	2	1	1	1	1	1	0	0	CSO	—
3555	1999 / 02 / 07	2040	7.05	8456	+23	-67	1	0	1	0	0	0	0	1	AXX	—
				8455	-17	-21	1	0	1	0	0	0	0	1	AXX	—
				8453	-26	+20	1	1	0	0	0	0	1	0	HSX	—
3556	1999 / 02 / 08	2030	353.97	8458	-22	-78	1	1	0	0	0	0	1	0	HHX	—
				8457	+18	-76	1	1	0	0	0	0	1	0	HSX	—
				8456	+23	-56	8	2	5	1	3	5	0	0	DAI	—
				8455	-18	-07	1	0	1	0	0	0	0	1	AXX	small
				8453	-25	+33	1	0	1	0	0	0	0	1	AXX	—
3557	1999 / 02 / 17	2150	234.74	8467	+16	-58	1	1	0	0	0	0	1	0	HSX	—
				8464	+19	-03	6	3	3	1	3	3	0	0	DAC	—
				8463	-17	+05	1	1	0	0	0	0	1	0	HSX	—
				8462	+19	+27	11	2	5	1	6	5	0	0	DAI	—
				8460	-17	+21	2	0	2	1	0	2	0	0	BXO	—
				8458	-22	+35	12	3	7	1	5	7	0	0	DKC	—
				8457	+15	+42	9	4	3	1	6	3	0	0	EAC	—
				8456	+23	+61	1	0	1	0	0	0	0	1	AXX	—
				8459	-30	+67	6	2	3	1	3	3	0	0	DAI	—



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

REGION CO-ORDINATES AND CLASSIFICATIONS FOR FEBRUARY 1999 continued.

OBS	DATE	UT	CM	REG.No	B	CMD	f	p	s	gr	grfp	grf	efp	ef	Class.	Remarks
3558	1999 / 02 / 18	1945	222.71	8467	+16	-46	4	1	1	1	3	1	0	0	CAO	—
				8464	+19	+09	4	3	0	1	4	0	0	0	DAC	compact
				8463	-17	+16	1	1	0	0	0	0	1	0	HSX	—
				8462	+20	+37	7	1	2	1	5	2	0	0	CKI	—
				8458	-22	+46	9	2	2	1	7	2	0	0	DKI	—
				8457	+15	+52	6	3	2	1	4	2	0	0	DAC	—
				8459	-30	+78	2	2	0	1	2	0	0	0	DSO	—
3559	1999 / 02 / 20	2010	196.41	8467	+16	-19	4	1	0	1	4	0	0	0	HAX	—
				8464	+18	+37	5	2	3	1	2	3	0	0	DSI	compact
				8463	-17	+43	1	1	0	0	0	0	1	0	HSX	—
				8468	+34	+62	2	1	1	1	1	1	0	0	CSO	compact
				8462	+20	+63	4	1	3	1	1	3	0	0	CSI	—
				8458	-23	+72	3	1	2	1	1	2	0	0	CHI	—
3560	1999 / 02 / 21	2005	183.02	8467	+16	-06	5	1	2	1	3	2	0	0	CAI	—
				8466	-21	+11	3	0	3	1	0	3	0	0	BXI	small
				8469	+15	+14	6	1	4	1	2	4	0	0	CAI	—
				8464	+18	+50	2	0	2	1	0	2	0	0	AXX	class correct
				8463	-17	+58	1	1	0	0	0	0	1	0	HSX	—
				8458	-23	+83	1	1	0	0	0	0	1	0	HHX	—
3561	1999 / 02 / 27	2030	103.77	8475	+33	-45	2	0	2	1	0	2	0	0	BXO	—
				8472	+30	-30	4	0	4	1	0	4	0	0	BXI	—
				8471	+28	-04	17	4	6	1	11	6	0	0	DAC	—
				8470	-24	-07	1	1	0	0	0	0	1	0	HSX	—



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

REGION CO-ORDINATES AND CLASSIFICATIONS FOR MARCH 1999

All observations carried out by HOWARD BARNES .

Telescope : 76 mm refractor (f . l . 910 mm) .

Observed by PROJECTION . Full disc diameter = 145 mm approx .

CM is stated in degrees .

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B = Heliographic Latitude (+ if NORTH , - if SOUTH) .

CMD = Degrees of Longitude in respect to the Central Meridian (- if EAST , + if WEST) .

OBS	DATE	UT	CM	REG.No	B	CMD	f	p	s	gr	grfp	grf	efp	ef	Class.	Remarks
3562	1999 / 03 / 03	2010	51.26	8477	-27	-43	4	1	1	1	3	1	0	0	CAO	—
				8475	+30	+08	13	4	7	1	6	7	0	0	EAC	—
				8481	-18	+11	1	0	1	0	0	0	0	1	AXX	—
				8476	+18	+19	21	4	11	1	10	11	0	0	DAC	—
				8479	-13	+29	4	0	4	1	0	4	0	0	BXI	—
				8478	-15	+37	2	0	2	1	0	2	0	0	BXO	—
				8471	+28	+49	3	1	1	1	3	1	0	0	CHO	—
3563	1999 / 03 / 09	2125	331.52	8484	-23	-68	3	1	2	1	1	2	0	0	CHI	—
				8485	+22	-55	7	2	3	1	4	3	0	0	DAI	—
				8477	-27	+29	12	3	5	1	7	5	0	0	DAC	—
				8483	-18	+45	3	1	2	1	1	2	0	0	CSI	—
3564	1999 / 03 / 10	1955	319.16	8484	-23	-56	7	2	2	1	5	2	0	0	DAI	small
				8485	+22	-42	16	3	8	1	8	8	0	0	DAC	—
				8477	-28	+43	9	2	3	1	6	3	0	0	DAI	—
				8483	-18	+59	2	0	2	1	0	2	0	0	BXO	—
3565	1999 / 03 / 11	2040	305.58	8487	+17	-67	3	1	2	1	1	2	0	0	CSI	—
				8484	-23	-44	6	2	3	1	3	3	0	0	CAI	—
				8485	+22	-29	24	7	8	1	16	8	0	0	EKC	—
				?	-25	-10	1	0	1	0	0	0	0	1	AXX	—
				8477	-29	+55	2	1	0	1	2	0	0	0	HKX	—
				8483	-20	+71	3	1	2	1	1	2	0	0	CSO	class correct
3566	1999 / 03 / 12	2020	292.58	8487	+17	-54	6	1	5	1	1	5	0	0	CSI	—
				8484	-23	-32	5	2	3	1	2	3	0	0	DSI	—
				8485	+22	-16	29	5	14	1	15	14	0	0	EAC	—
				8477	-29	+67	2	1	0	1	2	0	0	0	HKX	—
3567	1999 / 03 / 13	2100	279.04	8487	+17	-40	13	3	5	1	8	5	0	0	DAC	—
				8484	-23	-18	7	2	4	1	3	4	0	0	DAI	—
				8485	+22	-03	32	6	10	1	22	10	0	0	EKC	—
				8477	-30	+81	1	1	0	0	0	0	1	0	HHX	—



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

REGION CO-ORDINATES AND CLASSIFICATIONS FOR MARCH 1999 continued.

OBS	DATE	UT	CM	REG.No	B	CMD	f	p	s	gr	grfp	grf	efp	ef	Class.	Remarks
3568	1999 / 03 / 15	2215	251.99	8488	-26	-22	1	0	1	0	0	0	0	1	AXX	very small
				8487	+16	-12	14	4	6	1	8	6	0	0	EKC	—
				8484	-23	+08	6	1	4	1	2	4	0	0	CAI	—
				8489	+14	+13	1	1	0	0	0	0	1	0	HSX	small
				8485	+23	+24	47	8	20	1	27	20	0	0	FKC	—
3569	1999 / 03 / 16	2010	239.96	8488	-25	-10	3	1	1	1	2	1	0	0	CRO	—
				8487	+16	-00	13	4	5	1	8	5	0	0	EAC	—
				8484	-23	+20	3	1	2	1	1	2	0	0	CSI	—
				8489	+13	+26	2	0	2	1	0	2	0	0	AXX	class correct
				8485	+23	+36	42	6	17	1	25	17	0	0	FKC	—
3570	1999 / 03 / 17	2135	226.00	8490	-21	-68	1	0	1	0	0	0	0	1	AXX	—
				8491	+18	-07	3	2	0	1	3	0	0	0	DAO	small
				8488	-26	+03	10	3	2	1	7	3	0	0	DAC	—
				8487	+16	+13	11	2	8	1	3	8	0	0	ESI	—
				8484	-23	+33	2	0	2	1	0	2	0	0	BXO	—
				8485	+24	+51	34	5	15	1	19	15	0	0	FHC	—
3571	1999 / 03 / 18	2105	213.09	8490	-20	-55	1	0	1	0	0	0	0	1	AXX	—
				8491	+19	+06	6	0	6	1	0	6	0	0	BXI	—
				8488	-26	+15	16	3	4	1	12	4	0	0	DAC	—
				8487	+16	+28	5	1	3	1	2	3	0	0	CSI	—
				8484	-23	+45	1	0	1	0	0	0	0	1	AXX	—
				8485	+23	+64	14	3	7	1	7	7	0	0	FHC	—
3572	1999 / 03 / 21	2225	172.81	8497	+30	-75	1	1	0	0	0	0	1	0	HSX	—
				8495	-22	-38	1	0	1	0	0	0	0	1	AXX	big
				8490	-18	-12	3	0	3	1	0	3	0	0	BXI	—
				8494	-24	+11	3	0	3	1	0	3	0	0	BXI	—
				8496	-10	+30	6	2	3	1	3	3	0	0	DSI	—
				8488	-25	+57	2	0	2	1	0	2	0	0	BXO	—
				8487	+18	+72	1	1	0	0	0	0	1	0	HSX	—
3573	1999 / 03 / 23	2045	147.35	8498	+18	-70	1	1	0	0	0	0	1	0	HSX	—
				8497	+30	-50	1	1	0	0	0	0	1	0	HSX	—
				8496	-11	+56	1	0	1	0	0	0	0	1	AXX	—



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

REGION CO-ORDINATES AND CLASSIFICATIONS FOR MARCH 1999 continued.

OBS	DATE	UT	CM	REG.No	B	CMD	f	p	s	gr	grp	grf	efp	ef	Class.	Remarks
3574	1999/03/29	2025	68.41	8502	-26	-66	5	2	2	1	3	2	0	0	FAO	—
				8501	+29	-44	2	1	1	1	1	1	0	0	CRO	compact
				8498	+18	+09	1	1	0	0	0	0	1	0	HSX	—
				8503	-23	+15	2	0	2	1	0	2	0	0	BXO	—
				8497	+30	+25	1	1	0	0	0	0	1	0	HSX	—
3575	1999/03/31	2045	41.84	8502	-25	-41	6	2	2	1	4	2	0	0	FAO	sparse
				8501	+29	-18	1	0	1	0	0	0	0	1	AXX	—
				8498	+18	+35	1	1	0	0	0	0	1	0	HSX	—
				8497	+29	+51	1	1	0	0	0	0	1	0	HSX	—



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

REGION CO-ORDINATES AND CLASSIFICATIONS FOR APRIL 1999

All observations carried out by HOWARD BARNES .

Telescope : 76 mm refractor (f . l . 910 mm) .

Observed by PROJECTION . Full disc diameter = 145 mm approx .

CM is stated in degrees .

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B = Heliographic Latitude (+ if NORTH , - if SOUTH) .

CMD = Degrees of Longitude in respect to the Central Meridian (- if EAST , + if WEST) .

OBS	DATE	UT	CM	REG.No	B	CMD	f	p	s	gr	grfp	grf	efp	ef	Class.	Remarks
3576	1999 / 04 / 03	2030	2.39	8508	+20	-79	3	1	1	1	2	1	0	0	CAO	compact
				8507	+12	-61	3	0	3	1	0	3	0	0	BXO	class correct
				8504/6	-27	-06	22	5	12	1	10	12	0	0	FAC	—
				8498	+18	+71	1	0	1	0	0	0	0	1	AXX	—
3577	1999 / 04 / 06	2045	322.68	8511	-16	-61	7	2	1	1	6	1	0	0	DAI	—
				8510	-33	-55	1	0	1	0	0	0	0	1	AXX	—
				8508	+20	-38	9	3	3	1	6	3	0	0	DAC	—
				8507	+12	-21	11	3	6	1	5	6	0	0	DAC	—
				8504	-28	+25	2	0	2	1	0	2	0	0	BXO	—
				8506	-26	+41	13	4	5	1	8	5	0	0	EAC	—
3578	1999 / 04 / 09	2040	283.12	8513	-17	-51	6	1	4	1	2	4	0	0	CAI	small
				8512	-28	-40	7	2	2	1	5	2	0	0	DAI	—
				8511	-16	-22	3	2	0	1	3	0	0	0	DAO	—
				8508	+22	+01	27	4	12	1	15	12	0	0	DAC	—
				8507	+12	+20	6	2	3	1	3	3	0	0	DAI	—
				8506	-27	+80	1	1	0	0	0	0	1	0	HHX	—
3579	1999 / 04 / 11	2120	256.36	8513	-17	-22	11	2	5	1	6	5	0	0	DAI	—
				8512	-27	-13	3	2	0	1	3	0	0	0	DSO	—
				8511	-17	+05	4	2	0	1	4	0	0	0	DAO	—
				8508	+21	+28	12	3	8	1	4	8	0	0	DAC	—
3580	1999 / 04 / 14	2035	217.17	8516	-20	-70	1	1	0	0	0	0	1	0	HSX	—
				8515	-10	+08	8	1	4	1	4	4	0	0	CAI	small
				8513	-15	+18	3	1	2	1	1	2	0	0	CSI	—
				8514	-34	+22	4	1	3	1	1	3	0	0	CSI	—
				8512	-27	+28	1	1	0	0	0	0	1	0	HSX	—
				8511	-19	+46	1	0	1	0	0	0	0	1	AXX	—



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

REGION CO-ORDINATES AND CLASSIFICATIONS FOR APRIL 1999 continued.

OBS	DATE	UT	CM	REG.No	B	CMD	f	p	s	gr	grfp	grf	efp	ef	Class.	Remarks	
3581	1999 / 04 / 17	2045	177.46	8518	-16	-67	3	1	0	1	3	0	0	0	HAX	—	
				8516	-20	-30	2	1	0	1	2	0	0	0	HAX	—	
				8517	+22	+34	4	0	4	1	0	4	0	0	BXI	—	
				8515	-16	+44	1	0	1	0	0	0	0	0	1	AXX	—
				8514	-31	+58	6	1	4	1	2	4	0	0	CAI	—	
3582	1999 / 04 / 19	2105	150.87	8518	-15	-42	13	4	3	1	10	3	0	0	DAC	—	
				8520	+21	-14	4	1	2	1	2	2	0	0	CAI	—	
				8516	-19	-04	5	1	3	1	2	3	0	0	CAI	—	
				8517	+22	+61	4	2	2	1	2	2	0	0	DSI	—	
3583	1999 / 04 / 20	2120	137.52	8518	-15	-30	15	4	7	1	8	7	0	0	DAC	—	
				8516	-19	+09	3	1	1	1	2	1	0	0	CAO	—	
				8517	+22	+74	2	1	1	1	1	1	0	0	CSO	—	
3584	1999 / 04 / 21	2045	124.64	8518	-15	-17	16	3	6	1	10	6	0	0	DAC	—	
				8516	-19	+23	1	1	0	0	0	0	1	0	HSX	—	
				8521	+34	+32	2	1	1	1	1	1	0	0	CSO	—	
3585	1999 / 04 / 22	2105	111.25	8518	-15	-04	13	2	7	1	6	7	0	0	DAI	—	
				8516	-20	+36	4	1	3	1	1	3	0	0	CRI	—	
				8521	+34	+46	1	0	1	0	0	0	0	0	1	AXX	—
3586	1999 / 04 / 27	2045	45.37	8522	+16	-14	5	2	3	1	2	3	0	0	DAI	—	
				8524	+22	-15	12	4	4	1	8	4	0	0	DAC	—	
				8523	+31	-06	9	2	5	1	4	5	0	0	DAI	—	
				8518	-14	+63	1	1	0	0	0	0	1	0	HSX	—	
3587	1999 / 04 / 28	2045	32.15	8525	+15	-82	1	1	0	0	0	0	1	0	HSX	—	
				8522	+17	-01	4	1	2	1	2	2	0	0	CAI	—	
				8524	+22	00	17	3	5	1	12	5	0	0	DAC	—	
				8523	+32	+07	5	0	5	1	0	5	0	0	BXI	—	
				8518	-14	+75	1	1	0	0	0	0	1	0	HSX	—	



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

REGION CO-ORDINATES AND CLASSIFICATIONS FOR MAY 1999

All observations carried out by HOWARD BARNES .

Telescope : 76 mm refractor (f . l . 910 mm) .

Observed by PROJECTION . Full disc diameter = 145 mm approx .

CM is stated in degrees .

Region Numbers are NOAA/SEC Numbers .

B = Heliographic Latitude (+ if NORTH , - if SOUTH) .

CMD = Degrees of Longitude in respect to the Central Meridian (- if EAST , + if WEST) .

OBS	DATE	UT	CM	REG.No	B	CMD	f	p	s	gr	grfp	grf	efp	ef	Class.	Remarks
3588	1999 / 05 / 07	2105	273.01	8541	+22	-83	2	1	1	1	1	1	0	0	CSO	small
				8540	-27	-73	5	2	1	1	4	1	0	0	DAI	—
				8535	+21	-57	3	1	1	1	2	1	0	0	CHO	—
				8534	-18	-50	1	1	0	0	0	0	1	0	HSX	—
				8533	+04	-49	4	1	2	1	2	2	0	0	CAI	—
				8539	+14	-45	6	2	4	1	2	4	0	0	DSI	—
				8536	-24	-39	7	2	2	1	5	2	0	0	DAI	—
				8531	+18	-27	2	0	2	1	0	2	0	0	BXO	—
				8525	+16	+28	7	3	3	1	4	3	0	0	DHC	—
			8526/37	+19	+63	16	4	8	1	8	8	0	0	EAC	—	
3589	1999 / 05 / 08	2035	260.06	8541	+22	-69	10	3	4	1	6	4	0	0	DAC	—
				8540	-28	-60	7	3	2	1	5	2	0	0	DAC	—
				8535	+21	-44	4	1	0	1	4	0	0	0	HKX	—
				8534	-18	-37	1	1	0	0	0	0	1	0	HSX	—
				8533	+04	-36	2	1	1	1	1	1	0	0	CSO	—
				8539	+14	-32	3	1	2	1	1	2	0	0	CAO	class correct
				8536	-24	-27	9	3	4	1	5	4	0	0	DAC	—
				8531	+18	-12	3	0	3	1	0	3	0	0	BXI	—
				8525	+17	+45	3	1	2	1	1	2	0	0	CHI	—
			8526/37	+19	+77	11	2	6	1	5	6	0	0	EHI	—	
3590	1999 / 05 / 09	2155	246.11	8541	+22	-55	19	4	5	1	14	5	0	0	DAC	—
				8540	-28	-47	7	3	1	1	6	1	0	0	DAC	—
				8535	+21	-30	5	1	1	1	4	1	0	0	CKO	—
				8534	-18	-22	2	1	1	1	1	1	0	0	CAO	—
				8533	+04	-21	1	0	1	0	0	0	0	1	AXX	—
				8539	+14	-18	2	1	1	1	1	1	0	0	CSO	—
				8536	-24	-13	18	4	8	1	14	8	0	0	DAC	—
				8527	+24	+51	2	0	2	1	0	2	0	0	BXO	—
				8525	+17	+59	1	1	0	0	0	0	1	0	HSX	—



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

REGION CO-ORDINATES AND CLASSIFICATIONS FOR MAY 1999 continued.

OBS	DATE	UT	CM	REG.No	B	CMD	f	p	s	gr	grfp	grf	efp	ef	Class.	Remarks	
3591	1999 / 05 / 10	2045	233.53	8541	+22	-43	21	3	7	1	14	7	0	0	EAC	—	
				8540	-28	-37	7	1	5	1	2	5	0	0	CAI	—	
				8535	+21	-19	9	2	4	1	5	4	0	0	CKI	—	
				8534	-18	-11	5	1	3	1	2	3	0	0	CAI	—	
				8533	+04	-09	1	0	1	0	0	0	0	0	1	AXX	—
				8539	+14	-07	3	0	3	1	0	3	0	0	0	BXI	—
				8536	-24	-03	14	2	6	1	8	6	0	0	0	DAI	—
				8525	+17	+70	1	1	0	0	0	0	0	1	0	HSX	—
3592	1999 / 05 / 11	2150	219.70	8542	-18	-74	1	1	0	0	0	0	1	0	HSX	—	
				8541	+22	-29	22	4	10	1	12	10	0	0	EAC	—	
				8540	-28	-24	13	1	11	1	2	11	0	0	CAI	—	
				8535	+21	-08	10	1	5	1	5	5	0	0	0	CKI	—
				8534	-18	+03	14	3	8	1	6	8	0	0	0	DAC	—
				8536	-24	+11	7	2	2	1	5	2	0	0	0	DAI	—
3593	1999 / 05 / 16	2225	153.26	8545	+36	-52	1	1	0	0	0	0	1	0	HHX	—	
				8544	-20	-37	15	3	7	1	8	7	0	0	0	DAC	—
				8542	-19	-07	1	1	0	0	0	0	1	0	0	HSX	—
				8541	+20	+38	22	4	8	1	14	8	0	0	0	EAC	—
				8546	-31	+58	3	1	1	1	2	1	0	0	0	CAO	—
				8535	+22	+59	3	1	0	1	3	0	0	0	0	HKX	—
				8534	-17	+73	1	0	1	0	0	0	0	0	1	AXX	—
3594	1999 / 05 / 18	2325	126.26	8548	-21	-36	11	1	9	1	2	9	0	0	CAI	small	
				8545	+36	-25	1	1	0	0	0	0	1	0	0	HHX	—
				8544	-20	-08	17	2	5	1	12	5	0	0	0	EAI	—
				8542	-19	+20	1	1	0	0	0	0	1	0	0	HSX	—
				8541	+20	+65	4	2	2	1	2	2	0	0	0	DSI	—
3595	1999 / 05 / 19	2050	114.46	8550	-14	-84	1	1	0	0	0	0	1	0	HSX	—	
				8548	-20	-24	9	1	7	1	2	7	0	0	0	CAI	—
				8545	+37	-14	5	1	4	1	1	4	0	0	0	CKI	—
				8544	-20	+05	18	4	7	1	11	7	0	0	0	EAC	—
				8542	-18	+31	1	1	0	0	0	0	1	0	0	HSX	—
				8549	+23	+47	2	0	2	1	0	2	0	0	0	BXO	—
				8541	+20	+76	1	0	1	0	0	0	0	0	1	AXX	—



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

REGION CO-ORDINATES AND CLASSIFICATIONS FOR MAY 1999 continued.

OBS	DATE	UT	CM	REG.No	B	CMD	f	p	s	gr	grfp	grf	efp	ef	Class.	Remarks
3596	1999 / 05 / 20	2105	101.09	8551	+31	-77	1	0	1	0	0	0	0	1	AXX	—
				8550	-14	-71	4	1	1	1	3	1	0	0	CAO	—
				8548	-20	-11	8	1	6	1	2	6	0	0	CAI	—
				8545	+35	-01	7	1	5	1	2	5	0	0	CKI	—
				8544	-20	+18	13	4	5	1	8	5	0	0	EAO	class correct
				8542	-18	+44	1	1	0	0	0	0	1	0	HSX	—
				8549	+23	+61	9	3	1	1	8	1	0	0	DAC	—
3597	1999 / 05 / 21	2110	87.81	8551	+32	-64	2	0	2	1	0	2	0	0	BXO	compact
				8550	-14	-58	11	4	4	1	7	4	0	0	DAC	—
				8548	-20	+02	7	2	4	1	3	4	0	0	DAI	—
				8545	+35	+09	6	1	3	1	3	3	0	0	CKI	—
				8544	-19	+31	15	3	6	1	9	6	0	0	EAC	—
				8542	-18	+57	1	0	1	0	0	0	0	1	AXX	big
				8549	+25	+75	3	2	1	1	2	1	0	0	DSI	—
3598	1999 / 05 / 22	2100	74.67	8551	+32	-52	2	1	1	1	2	1	0	0	CSO	compact
				8550	-14	-46	14	2	3	1	11	3	0	0	CAI	class correct
				8548	-19	+15	12	1	8	1	4	8	0	0	CAI	—
				8545	+35	+22	4	1	2	1	2	2	0	0	CKI	—
				8544	-20	+44	10	2	6	1	4	6	0	0	EAI	—
				8542	-19	+70	1	0	1	0	0	0	0	1	AXX	—
3599	1999 / 05 / 23	2255	60.39	8552	+20	-81	1	1	0	0	0	0	1	0	HHX	—
				8551	+32	-37	6	1	4	1	2	4	0	0	CAI	—
				8550	-14	-31	15	3	5	1	10	5	0	0	EAC	—
				8548	-19	+29	5	1	4	1	1	4	0	0	CSI	—
				8545	+35	+36	3	1	1	1	2	1	0	0	CKO	—
				8544	-21	+59	5	2	2	1	3	2	0	0	FAI	—
3600	1999 / 05 / 24	2105	48.17	8552	+20	-70	3	1	2	1	1	2	0	0	CHI	—
				8551	+32	-26	3	1	2	1	1	2	0	0	CSI	—
				8550	-14	-19	19	2	4	1	15	4	0	0	EAI	—
				8548	-19	+43	5	1	4	1	1	4	0	0	HSX	—
				8545	+35	+47	2	1	0	1	2	0	0	0	HKX	—
				8544	-20	+70	2	1	1	1	1	1	0	0	FSO	class correct



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

REGION CO-ORDINATES AND CLASSIFICATIONS FOR MAY 1999 continued.

OBS	DATE	UT	CM	REG.No	B	CMD	f	p	s	gr	grfp	grf	efp	ef	Class.	Remarks	
3601	1999 / 05 / 25	2105	34.94	8552	+20	-56	3	1	1	1	2	1	0	0	CKO	—	
				8554	+26	-41	1	0	1	0	0	0	0	0	1	AXX	—
				8551	+32	-13	3	1	1	1	2	1	0	0	0	CAO	—
				8550	-14	-05	16	2	6	1	10	6	0	0	0	EAI	—
				8548	-19	+58	1	1	0	0	0	0	1	0	0	HSX	—
				8545	+36	+59	5	1	3	1	2	3	0	0	0	CKI	—
				8544	-21	+79	1	1	0	0	0	0	1	0	0	HSX	—



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

REGION CO-ORDINATES AND CLASSIFICATIONS FOR JUNE 1999

All observations carried out by HOWARD BARNES .
 Telescope : 76 mm refractor (f . l . 910 mm) .
 Observed by PROJECTION . Full disc diameter = 145 mm approx .
 CM is stated in degrees .
 Region Numbers are NOAA/SEC Numbers .
 B = Heliographic Latitude (+ if NORTH , - if SOUTH) .
 CMD = Degrees of Longitude in respect to the Central Meridian (- if EAST , + if WEST) .

OBS	DATE	UT	CM	REG.No	B	CMD	f	p	s	gr	grfp	grf	efp	ef	Class.	Remarks		
3602	1999 / 06 / 02	2100	289.12	8566	+21	-77	1	0	1	0	0	0	0	1	AXX	—		
				8564	-16	-54	1	1	0	0	0	0	0	1	0	HRX	—	
				8565	-08	-44	1	0	1	0	0	0	0	0	0	1	AXX	—
				8563	-25	-40	1	0	2	1	0	2	0	0	0	0	BXO	—
				8567	-14	-12	1	0	1	0	0	0	0	0	0	1	AXX	—
				8558	+16	-06	18	3	3	1	15	3	0	0	0	0	DKC	—
				8562	-16	+02	23	3	2	1	21	2	0	0	0	0	DKC	—
				8555	+15	+16	1	1	0	0	0	0	0	1	0	0	HSX	—
				?	-12	+40	1	0	1	0	0	0	0	0	0	1	AXX	—
				8552/9	+21	+51	5	2	1	1	4	1	0	0	0	0	EHO	—
8554	+27	+61	8	3	3	1	5	3	0	0	0	0	DAC	—				
3603	1999 / 06 / 04	2120	262.47	8570	-15	-77	1	1	0	0	0	0	1	0	HSX	—		
				8569	+17	-75	2	1	1	1	1	1	0	0	0	CSO	—	
				8566	+21	-50	1	0	1	0	0	0	0	0	1	AXX	—	
				8564	-15	-27	1	1	0	0	0	0	0	1	0	0	HSX	—
				8563	-25	-12	2	0	2	1	0	2	0	0	0	0	BXO	—
				8567	-14	+16	6	0	6	1	0	6	0	0	0	0	BXI	—
				8558	+16	+21	15	2	6	1	9	6	0	0	0	0	DKI	—
				8562	-16	+29	26	3	7	1	19	7	0	0	0	0	DKC	—
				8555	+15	+43	1	0	1	0	0	0	0	0	0	1	AXX	—
				8568	+12	+54	2	0	2	1	0	2	0	0	0	0	BXO	—
8559	+21	+75	1	1	0	0	0	0	0	1	0	0	HHX	—				



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

REGION CO-ORDINATES AND CLASSIFICATIONS FOR JUNE 1999 continued.

OBS	DATE	UT	CM	REG.No	B	CMD	f	p	s	gr	grp	grf	efp	ef	Class.	Remarks	
3604	1999 / 06 / 05	2120	249.23	8570	-15	-62	1	1	0	0	0	0	1	0	HSX	—	
				8571	-20	-62	2	1	1	1	1	1	0	0	CSO	—	
				8576	-30	-67	1	0	1	0	0	0	0	0	1	AXX	small
				8569	+19	-61	5	1	4	1	1	4	0	0	0	CSI	—
				8574	+29	-41	2	1	1	1	1	1	0	0	0	CSO	—
				8564	-15	-14	1	1	0	0	0	0	0	1	0	HSX	—
				8563	-25	+02	3	0	3	1	0	3	0	0	0	BXI	—
				8567	-14	+30	1	0	1	0	0	0	0	0	1	AXX	—
				8558	+16	+35	13	2	5	1	8	5	0	0	0	DAI	—
				8562	-15	+43	21	4	5	1	16	5	0	0	0	DAC	—
8568	+12	+67	1	1	0	0	0	0	0	1	0	HSX	—				
3605	1999 / 06 / 06	2110	236.09	8576	-29	-54	3	0	3	1	0	3	0	0	BXI	—	
				8570	-15	-51	1	1	0	0	0	0	1	0	HRX	—	
				8571	-19	-50	5	2	2	1	3	2	0	0	DAI	—	
				8569	+19	-48	6	1	4	1	2	4	0	0	CAI	—	
				8574	+30	-29	14	3	8	1	6	8	0	0	DAC	—	
				8564	-15	-02	1	1	0	0	0	0	1	0	HSX	—	
				8567	-15	+42	1	0	1	0	0	0	0	0	1	AXX	small
				8558	+16	+48	9	2	4	1	5	4	0	0	0	DAI	—
8562	-15	+56	11	2	5	1	6	5	0	0	0	DAI	—				
3606	1999 / 06 / 08	2210	209.07	8580	-20	-81	1	1	0	0	0	0	1	0	HHX	—	
				8579	+12	-23	1	1	0	0	0	0	1	0	HRX	—	
				8570	-14	-23	1	1	0	0	0	0	1	0	HSX	—	
				8571	-19	-23	7	2	2	1	5	2	0	0	0	DAI	—
				8569	+18	-21	9	3	4	1	5	4	0	0	0	DAC	—
				8578	+20	-04	6	1	4	1	2	4	0	0	0	CAI	—
				8574	+29	-02	24	4	7	1	17	7	0	0	0	DKC	—
				8564	-15	+25	3	0	3	1	0	3	0	0	0	BXI	—
				8577	+19	+37	4	2	1	1	3	1	0	0	0	DAI	compact
				8558	+16	+75	2	1	1	1	1	1	0	0	0	CSO	—
8562	-15	+83	2	1	1	1	1	1	0	0	0	CSO	—				



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

REGION CO-ORDINATES AND CLASSIFICATIONS FOR JUNE 1999 continued.

OBS	DATE	UT	CM	REG.No	B	CMD	f	p	s	gr	grp	grf	efp	ef	Class.	Remarks		
3607	1999/06/09	2110	196.38	8580	-19	-67	2	1	0	1	2	0	0	0	HAX	—		
				8581	-37	-13	1	0	1	0	0	0	0	0	1	AXX	—	
				8579	+12	-11	1	0	1	0	0	0	0	0	1	AXX	—	
				8576	-29	-11	2	0	2	1	0	2	1	0	0	0	BXO	—
				8571	-19	-10	7	1	5	1	2	5	1	0	0	0	CAI	—
				8570	-14	-09	1	1	0	0	0	0	0	1	0	0	HSX	—
				8569	+18	-07	14	3	4	1	10	4	1	0	0	0	EAC	—
				8578	+20	+08	9	3	2	1	7	2	1	0	0	0	DAC	—
				8574	+29	+11	20	4	8	1	12	8	1	0	0	0	DAC	—
				?	-20	+13	1	0	1	0	0	0	0	0	1	1	AXX	—
8577	+19	+50	3	1	2	1	1	2	1	0	0	0	0	CSI	—			
3608	1999/06/15	2140	116.70	8585	+37	-41	3	2	1	1	2	1	0	0	DSI	—		
				8588	-21	-22	2	0	2	1	0	2	0	0	0	0	BXO	—
				8583	-12	-18	14	3	5	1	9	5	1	0	0	0	DAC	—
				8580	-20	+10	5	1	2	1	3	2	1	0	0	0	CHI	compact
				8582	+25	+18	19	4	8	1	11	8	1	0	0	0	EAC	—
				8576E	-29	+62	1	0	1	0	0	0	0	0	1	1	AXX	—
				8576W	-31	+68	1	1	0	0	0	0	1	0	1	0	HRX	—
				8570	-14	+70	1	0	1	0	0	0	0	0	1	1	AXX	—
8569	+18	+71	4	2	2	1	2	2	1	0	0	0	DSI	—				
3609	1999/06/16	2100	103.82	8585	+37	-29	5	1	4	1	1	4	0	0	CSI	—		
				8588	-21	-07	4	1	2	1	2	2	0	0	0	CAI	—	
				8583	-12	-05	9	3	5	1	4	5	1	0	0	0	DAC	—
				8590	-22	-01	1	0	1	0	0	0	0	0	1	1	AXX	—
				8582	+26	+30	11	2	5	1	6	5	1	0	0	0	EAI	—
				8580	-20	+23	5	1	3	1	2	3	1	0	0	0	CHI	—
				8576(E)	-29	+74	1	0	1	0	0	0	0	0	1	1	AXX	—



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

REGION CO-ORDINATES AND CLASSIFICATIONS FOR JUNE 1999 continued.

OBS	DATE	UT	CM	REG.No	B	CMD	f	p	s	gr	grp	grf	efp	ef	Class.	Remarks	
3610	1999 / 06 / 17	2140	90.22	8585	+36	-17	3	1	1	1	2	1	0	0	CHO	—	
				8588	-21	+05	3	1	1	1	2	1	0	0	CAO	—	
				8583	-12	+08	7	2	3	1	4	3	0	0	DAI	—	
				8589	+27	+11	3	1	2	1	1	2	0	0	CSO	class correct	
				8590	-22	+14	1	0	1	0	0	0	0	0	1	AXX	—
				8580	-20	+36	1	1	0	0	0	0	0	1	0	HHX	—
				8582	+26	+44	12	2	3	1	9	3	0	0	0	DAI	—
3611	1999 / 06 / 18	2130	77.08	8585	+37	-05	3	1	1	1	2	1	0	0	CAO	big	
				8588	-21	+16	1	0	1	0	0	0	0	0	1	AXX	—
				8583	-13	+22	3	1	2	0	1	2	0	0	0	CAI	—
				8589	+27	+24	6	3	2	1	4	2	0	0	0	DAI	class correct
				8580	-21	+49	1	1	0	0	0	0	0	1	0	HHX	—
				8582	+26	+57	7	2	5	1	2	5	0	0	0	DSI	—
3612	1999 / 06 / 21	2115	37.51	8599	-16	-78	1	0	1	0	0	0	0	1	AXX	—	
				8594	+14	-69	7	2	2	1	5	2	0	0	0	CAI	compact
				8597	+21	-67	1	1	0	0	0	0	0	1	0	HAX	—
				8598	+26	-71	1	1	0	0	0	0	0	1	0	HSX	—
				8592	+22	-47	5	1	3	1	2	3	0	0	0	CAI	—
				8585	+38	+29	4	1	2	1	2	2	0	0	0	CSI	—
				8589	+28	+62	2	1	1	1	1	1	0	0	0	CSO	—
3613	1999 / 06 / 22	2125	24.18	8599	-16	-66	3	1	2	1	1	2	0	0	CSI	—	
				8598	+25	-58	5	2	3	1	2	3	0	0	0	ESO	—
				8594	+14	-58	6	2	2	1	4	2	0	0	0	DAI	—
				8597	+20	-56	2	1	0	1	2	0	0	0	0	HAX	—
				8592	+24	-32	4	2	2	1	2	2	0	0	0	DSO	—
				8595	+26	-05	2	0	2	1	0	2	0	0	0	BXO	—
				8600	+19	+20	1	0	1	0	0	0	0	0	1	AXX	—
				8601	-15	+21	2	0	2	1	0	2	0	0	0	BXO	—
				8585	+38	+42	1	1	0	0	0	0	0	1	0	HSX	—
8589	+28	+75	1	0	1	0	0	0	0	0	0	1	AXX	—			



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

REGION CO-ORDINATES AND CLASSIFICATIONS FOR JUNE 1999 continued.

OBS	DATE	UT	CM	REG.No	B	CMD	f	p	s	gr	grp	grf	efp	ef	Class.	Remarks
3614	1999 / 06 / 23	2150	10.71	8602	+19	-77	4	2	0	1	4	0	0	0	DAO	—
				8603	-16	-77	2	1	1	1	1	1	0	0	CSO	—
				?	+17	-63	1	0	1	0	0	0	0	1	AXX	—
				8599	-17	-54	5	3	1	1	4	1	0	0	DAC	—
				?	+16	-51	3	1	2	1	1	2	0	0	CSI	—
				8594	+14	-42	9	3	2	1	7	2	0	0	DAC	—
				8597	+21	-41	2	1	0	1	2	0	0	0	HKX	—
				8598	+23	-45	11	2	9	1	2	9	0	0	DSI	—
				8592	+22	-20	2	1	1	1	1	1	0	0	DSO	—
				8595	+23	+06	1	0	1	0	0	0	0	1	AXX	small
				8600	+19	+35	2	0	2	1	0	2	0	0	BXO	—
				8601	-15	+34	2	0	2	1	0	2	0	0	BXO	—
				8605	-25	+17	2	0	2	1	0	2	0	0	BXO	—
8604	+12	+39	2	0	2	1	0	2	0	0	BXO	close				
8585	+38	+53	1	1	0	0	0	0	1	0	HSX	—				
3615	1999 / 06 / 28	2105	304.94	8611	-25	-49	8	4	2	1	6	2	0	0	DAC	—
				8602	+18	-10	11	2	4	1	7	4	0	0	DKI	—
				8603	-15	-20	22	4	9	1	13	9	0	0	FAC	—
				8606	+17	+16	7	3	2	1	5	2	0	0	DAC	—
				8594	+14	+23	9	3	5	1	4	5	0	0	EAC	small penums
				8598	+22	+23	14	4	7	1	7	7	0	0	DAC	—
				8599	-14	+12	1	1	0	0	0	0	1	0	HAX	—
				8592	+23	+44	1	1	0	0	0	0	1	0	HSX	—
3616	1999 / 06 / 29	2230	290.92	8611	-25	+59	19	6	4	1	15	4	0	0	EAC	—
				8602	+18	+06	11	2	5	1	6	5	0	0	DKI	—
				8603	-15	-05	28	5	15	1	13	15	0	0	FAC	—
				8599	-14	+29	1	0	1	0	0	0	0	1	AXX	—
				8606	+17	+31	5	2	3	1	2	3	0	0	DSI	—
				8594	+15	+37	6	3	3	1	3	3	0	0	DSC	—
				8598	+23	+37	12	3	7	1	5	7	0	0	EAC	—
				8592	+23	+59	1	1	0	0	0	0	1	0	HSX	—



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

REGION CO-ORDINATES AND CLASSIFICATIONS FOR JUNE 1999 continued.

OBS	DATE	UT	CM	REG.No	B	CMD	f	p	s	gr	grp	grf	efp	ef	Class.	Remarks
3617	1999 / 06 / 30	2310	277.31	8613	+18	-66	1	0	1	0	0	0	0	1	AXX	big
				8611	-25	-21	25	5	6	1	19	6	0	0	FAC	—
				8603	-14	+11	28	5	10	1	18	10	0	0	EAC	—
				8602	+18	+21	11	2	4	1	7	4	0	0	DKI	—
				8610	+12	+25	1	0	1	0	0	0	0	1	AXX	—
				8606	+17	+46	3	2	1	1	2	1	0	0	DSO	class correct
				8598	+23	+50	5	2	3	1	2	3	0	0	DSI	—
				8594	+14	+51	3	0	3	1	0	3	0	0	BXI	—



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

REGION CO-ORDINATES AND CLASSIFICATIONS FOR JULY 1999

All observations carried out by HOWARD BARNES .
 Telescope : 76 mm refractor (f . l . 910 mm) .
 Observed by PROJECTION . Full disc diameter = 145 mm approx .
 CM is stated in degrees .
 Region Numbers are NOAA/SEC Numbers .
 B = Heliographic Latitude (+ if NORTH , - if SOUTH) .
 CMD = Degrees of Longitude in respect to the Central Meridian (- if EAST , + if WEST) .

OBS	DATE	UT	CM	REG.No	B	CMD	f	p	s	gr	grfp	grf	efp	ef	Class.	Remarks		
3618	1999 / 07 / 01	2130	265.00	8615	-29	-78	1	1	0	0	0	0	1	0	HSX	—		
				8614	+19	-73	1	1	0	0	0	0	0	1	0	HSX	—	
				8614W	+19	-63	1	0	1	0	0	0	0	0	1	AXX	—	
				8613	+18	-56	1	1	0	0	0	0	0	0	1	0	HSX	—
				8611	-25	-08	24	3	10	1	14	10	0	0	0	0	FAC	—
				8603	-14	+24	18	4	8	1	10	8	0	0	0	0	EAC	—
				8602	+18	+33	11	1	3	1	8	3	0	0	0	0	CKI	—
				8610	+11	+38	1	0	1	0	0	0	0	0	0	1	AXX	—
				8606	+16	+59	1	1	0	0	0	0	0	0	1	0	HSX	—
				8594	+14	+63	1	0	1	0	0	0	0	0	0	1	AXX	—
8598	+22	+66	2	1	1	1	1	1	1	0	0	0	CSO	—				
3619	1999 / 07 / 03	2135	238.48	8619	-17	-72	1	0	1	0	0	0	0	1	AXX	—		
				8620	+22	-57	1	1	0	0	0	0	0	1	0	HSX	—	
				8614	+19	-48	5	1	4	1	1	4	0	0	0	0	CSI	—
				8618	-17	-58	1	0	1	0	0	0	0	0	0	1	AXX	—
				8615	-29	-51	1	1	0	0	0	0	0	0	1	0	HHX	—
				8613	+19	-31	1	0	1	0	0	0	0	0	0	1	AXX	—
				8611	-25	+19	21	3	6	1	15	6	0	0	0	0	FKC	—
				8617	+14	+41	11	2	5	1	6	5	0	0	0	0	DAI	—
				8603	-15	+53	17	4	6	1	11	6	0	0	0	0	FAC	—
8602	+19	+61	5	1	3	1	2	3	0	0	0	0	CAI	—				



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

REGION CO-ORDINATES AND CLASSIFICATIONS FOR JULY 1999 continued.

OBS	DATE	UT	CM	REG.No	B	CMD	f	p	s	gr	grp	grf	efp	ef	Class.	Remarks
3620	1999 / 07 / 04	2100	225.56	8621	+20	-70	1	0	1	0	0	0	0	1	AXX	—
				8619	-18	-59	1	1	0	0	0	0	1	0	HSX	—
				8620	+21	-44	1	1	0	0	0	0	1	0	HSX	—
				8614	+18	-31	19	4	7	1	12	7	0	0	DAC	—
				8615	-29	-39	1	1	0	0	0	0	1	0	HHX	—
				8611	-25	+33	20	3	9	1	11	9	0	0	FAC	—
				8617	+14	+55	6	2	3	1	3	3	0	0	DAI	—
				8603	-16	+66	5	3	1	1	4	1	0	0	EAC	—
				8602	+19	+73	1	1	0	0	0	0	1	0	HSX	—
3621	1999 / 07 / 08	2125	172.39	8627	-12	-71	4	2	2	1	2	2	0	0	ESI	—
				8625	-20	-50	1	1	0	0	0	0	1	0	HSX	—
				8620	+21	+09	2	1	0	1	2	0	0	0	HAX	—
				8615	-29	+15	3	1	2	1	1	2	0	0	CHI	—
				8614	+18	+25	6	2	2	1	4	2	0	0	EHI	—
				8626	-21	+29	11	3	5	1	6	5	0	0	DSC	—
				8630	-10	+39	1	0	1	0	0	0	0	1	AXX	—
				8629	+23	+54	2	0	2	1	0	2	0	0	BXO	—
				8611	-25	+83	1	1	0	0	0	0	1	0	HHX	—
3622	1999 / 07 / 09	2105	159.34	8627	-13	-64	5	2	3	1	2	3	0	0	ESI	—
				8628	+18	-55	2	0	2	1	0	2	0	0	BXO	—
				8625	-20	-39	1	1	0	0	0	0	1	0	HSX	—
				8621	+20	-04	1	0	1	0	0	0	0	1	AXX	resighted
				8620	+21	+19	1	1	0	0	0	0	1	0	HSX	—
				8615	-29	+25	3	1	2	1	1	2	0	0	CHI	—
				8614	+18	+36	11	2	7	1	4	7	0	0	EKI	—
				8626	-21	+40	8	2	5	1	3	5	0	0	DSI	—
				8630	-10	+52	2	0	2	1	0	2	0	0	BXO	—
8629	+23	+67	5	1	3	1	2	3	0	0	CAI	—				



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

REGION CO-ORDINATES AND CLASSIFICATIONS FOR JULY 1999 continued.

OBS	DATE	UT	CM	REG.No	B	CMD	f	p	s	gr	grp	grf	efp	ef	Class.	Remarks	
3623	1999/07/10	2210	145.51	8627	-12	-50	8	3	4	1	4	4	0	0	FSC	—	
				?	+20	-50	1	0	1	0	0	0	0	0	1	AXX	—
				8628	+19	-39	12	3	6	1	6	6	0	0	0	DAC	—
				8625	-19	-26	1	1	0	0	0	0	0	1	0	HSX	—
				8620	+22	+31	5	1	4	1	1	4	0	0	0	CAI	—
				8615	-31	+37	6	1	4	1	2	4	0	0	0	CAI	—
				8614	+18	+49	13	3	7	1	6	7	0	0	0	EHC	—
				8626	-20	+54	6	1	2	1	4	2	0	0	0	CAI	—
3624	1999/07/11	2235	132.05	8631	+11	-79	1	1	0	0	0	0	1	0	HSX	—	
				8627	-14	-35	9	3	3	1	6	3	0	0	0	FAC	—
				8628	+18	-22	15	3	8	1	7	8	0	0	0	DAI	class correct
				8625	-20	-12	1	1	0	0	0	0	0	1	0	HSX	—
				8620	+22	+46	3	1	2	1	1	2	0	0	0	CSI	—
				8615	-29	+53	3	1	1	1	2	1	0	0	0	CKO	—
				8614	+18	+64	6	2	4	1	2	4	0	0	0	ESI	—
				8626	-20	+69	8	3	3	1	5	3	0	0	0	FAC	—
3625	1999/07/12	2200	119.13	8634	-18	-71	1	0	1	0	0	0	0	1	AXX	—	
				8631	+11	-66	3	1	1	1	2	1	0	0	0	CAO	—
				8633	+42	-23	1	0	1	0	0	0	0	0	1	AXX	—
				8627	-14	-21	11	3	6	1	5	6	0	0	0	FAC	—
				8628	+17	-06	19	4	6	1	13	6	0	0	0	EAC	—
				8625	-20	-00	3	1	2	1	1	2	0	0	0	CSI	—
				8620	+22	+59	1	1	0	0	0	0	0	1	0	HSX	—
				8615	-30	+67	3	1	2	1	1	2	0	0	0	CAI	—
				8614	+17	+78	1	1	0	0	0	0	0	1	0	HHX	—
				8626	-21	+82	2	0	2	1	0	2	0	0	0	BXO	—



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

REGION CO-ORDINATES AND CLASSIFICATIONS FOR JULY 1999 continued.

OBS	DATE	UT	CM	REG.No	B	CMD	f	p	s	gr	grp	grf	efp	ef	Class.	Remarks
3626	1999 / 07 / 13	2220	105.72	8634	-18	-61	1	0	1	0	0	0	0	1	AXX	—
				8631	+11	-52	3	1	0	1	3	0	0	0	HKX	—
				8627	-14	-08	14	3	7	1	7	7	0	0	FAC	—
				8628	+17	+07	15	4	5	1	10	5	0	0	EAC	—
				8625	-19	+12	3	1	2	1	1	2	0	0	CSI	—
				8620	+22	+73	3	2	0	1	3	0	0	0	CAO	—
				8615	-29	+81	1	1	0	0	0	0	1	0	HSX	—
3627	1999 / 07 / 17	2225	52.74	8636	+20	-75	4	2	2	1	2	2	0	0	ESI	—
				8631	+11	+01	11	3	7	1	4	7	0	0	EAO	—
				8627	-13	+45	7	1	3	1	4	3	0	0	CAI	long
				8628	+19	+60	4	1	3	1	1	3	0	0	CSI	—
				8625	-18	+64	4	2	1	1	3	1	0	0	DSI	—
3628	1999 / 07 / 19	2245	26.10	8636	+20	-52	17	5	6	1	11	6	0	0	EKC	—
				8639	+38	+13	2	0	2	1	0	2	0	0	BXO	—
				8631/7	+12	+34	5	2	2	1	3	2	0	0	EAO	sparse
				8627	-13	+70	3	1	2	1	1	2	0	0	CSI	—
3629	1999 / 07 / 23	2215	333.45	8644	-24	-69	1	1	0	0	0	0	1	0	HSX	—
				8642	-18	-39	3	0	3	1	0	3	0	0	BXI	—
				8640	+17	-38	1	1	0	0	0	0	1	0	HSX	—
				?	+19	-23	1	0	1	0	0	0	0	1	AXX	—
				8636	+21	-01	33	6	8	1	25	8	0	0	FKC	—
				8646	+12	+05	1	0	1	0	0	0	0	1	AXX	—
				8639	+38	+61	11	3	4	1	7	4	0	0	EKC	—
3630	1999 / 07 / 27	2210	280.58	8650	+17	-77	1	0	1	0	0	0	0	1	AXX	big
				8651	+24	-75	1	1	0	0	0	0	1	0	HSX	—
				8648	+23	-57	2	0	2	1	0	2	0	0	BXO	—
				8647	-18	-39	7	3	3	1	4	3	0	0	ESO	class correct
				8645	-27	-37	14	2	4	1	10	4	0	0	FKI	—
				8644	-25	-18	1	1	0	0	0	0	1	0	HSX	—
				8649	-15	-11	11	2	2	1	9	2	0	0	DAI	—
				8640	+17	+14	2	1	1	1	1	1	0	0	CSO	—
				8653	+28	+15	1	0	1	0	0	0	0	1	AXX	—
				8636	+21	+52	26	3	12	1	14	12	0	0	FKC	—



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

REGION CO-ORDINATES AND CLASSIFICATIONS FOR JULY 1999 continued.

OBS	DATE	UT	CM	REG.No	B	CMD	f	p	s	gr	grp	grf	efp	ef	Class.	Remarks		
3631	1999 / 07 / 29	2200	254.21	8650	+17	-51	1	1	0	0	0	0	1	0	HSX	—		
				8651	+24	-50	23	4	6	1	17	6	0	0	DKC	—		
				8648	+22	-30	1	0	1	0	0	0	0	0	1	AXX	—	
				8647	-18	-12	8	1	7	1	1	7	0	0	0	CSI	—	
				8645	-24	-11	28	5	13	1	15	13	0	0	0	FKC	—	
				8644	-26	+07	1	1	0	0	0	0	0	1	0	HRX	—	
				8649	-15	+15	21	3	13	1	8	13	0	0	0	DAC	—	
				8640	+16	+41	3	1	2	1	1	2	0	0	0	0	CSI	—
				8653	+28	+43	2	0	2	1	0	2	0	0	0	0	BXO	—
8636	+20	+81	6	3	2	1	4	2	0	0	0	0	EAC	—				
3632	1999 / 07 / 30	2205	240.94	8650	+16	-38	1	1	0	0	0	0	1	0	HSX	—		
				8651	+24	-38	30	5	7	1	23	7	0	0	0	EKC	—	
				8648	+23	-18	2	0	2	1	0	2	0	0	0	BXO	—	
				8645	-25	+01	17	6	6	1	11	6	0	0	0	FKC	—	
				8647	-17	+01	8	2	5	1	3	5	0	0	0	EAI	—	
				8654	+19	+03	2	0	2	1	0	2	0	0	0	BXO	—	
				8644	-25	+21	1	1	0	0	0	0	0	1	0	HRX	—	
				8649	-15	+28	14	4	6	1	8	6	0	0	0	0	EAC	—
				8640	+16	+53	2	1	1	1	1	1	0	0	0	0	CSO	—
8653	+29	+56	1	0	1	0	0	0	0	0	1	0	AXX	—				
3633	1999 / 07 / 31	2205	227.72	8655	+25	-53	1	0	1	0	0	0	0	1	AXX	—		
				8650	+18	-25	4	3	0	1	4	0	0	0	0	DSC	—	
				8651	+25	-25	36	5	10	1	26	10	0	0	0	FKC	—	
				8645	-25	+14	13	3	4	1	9	4	0	0	0	FAC	—	
				8647	-18	+16	19	4	13	1	6	13	0	0	0	EAC	—	
				8654	+19	+16	3	1	2	1	1	2	0	0	0	CRI	—	
				8649	-15	+42	4	1	2	1	2	2	0	0	0	CAI	—	
				8640	+17	+67	1	1	0	0	0	0	0	1	0	0	HSX	—
				8653	+28	+70	1	0	1	0	0	0	0	0	1	0	AXX	—



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

REGION CO-ORDINATES AND CLASSIFICATIONS FOR AUGUST 1999

All observations carried out by HOWARD BARNES .
 Telescope : 76 mm refractor (f . l . 910 mm) .
 Observed by PROJECTION . Full disc diameter = 145 mm approx .
 CM is stated in degrees .
 Region Numbers are NOAA/SEC Numbers .
 B = Heliographic Latitude (+ if NORTH , - if SOUTH) .
 CMD = Degrees of Longitude in respect to the Central Meridian (- if EAST , + if WEST) .

OBS	DATE	UT	CM	REG.No	B	CMD	f	p	s	gr	grfp	grf	efp	ef	Class.	Remarks	
3634	1999 / 08 / 05	2135	161.87	8657	-30	-30	8	3	2	1	6	2	0	0	DSC	—	
				8661	-14	-03	1	0	1	0	0	0	0	0	1	AXX	—
				8656	+19	+18	12	3	8	1	4	8	0	0	0	FSC	small in area
				8660	-34	+36	1	0	1	0	0	0	0	0	1	AXX	—
				8650	+17	+41	1	1	0	0	0	0	0	1	0	HSX	—
				8651	+26	+42	27	6	9	1	18	9	0	0	0	FKC	—
				8645	-28	+76	3	2	1	1	2	1	0	0	0	DSI	—
3635	1999 / 08 / 06	2100	148.96	8662	-16	-62	1	1	0	0	0	0	1	0	HRX	—	
				8657	-30	-18	6	3	2	1	4	2	0	0	DSC	—	
				8661	-14	+10	1	0	1	0	0	0	0	0	1	AXX	—
				8656	+18	+31	7	2	5	1	2	5	0	0	0	ESI	small in area
				8650	+17	+54	1	1	0	0	0	0	0	1	0	HSX	—
				8651	+26	+55	22	7	6	1	16	6	0	0	0	FKC	—
3636	1999 / 08 / 07	2110	135.65	8662	-16	-52	4	1	3	1	1	3	0	0	CSI	—	
				8664	+23	-31	1	0	1	0	0	0	0	0	1	AXX	—
				8657	-30	-05	8	3	5	1	3	5	0	0	0	DSC	—
				8661	-14	+24	2	1	1	1	1	1	0	0	0	CSO	—
				8656	+18	+44	7	1	5	1	2	5	0	0	0	CAI	widespread
				8651	+26	+68	14	5	4	1	10	4	0	0	0	FKC	—
				8650	+18	+68	1	1	0	0	0	0	0	1	0	HSX	—



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

REGION CO-ORDINATES AND CLASSIFICATIONS FOR AUGUST 1999 continued.

OBS	DATE	UT	CM	REG.No	B	CMD	f	p	s	gr	grp	grf	efp	ef	Class.	Remarks
3637	1999 / 08 / 08	2110	122.43	8662	-16	-37	16	4	7	1	9	7	0	0	EAC	—
				8664	+23	-17	2	0	2	1	0	2	0	0	BXO	—
				8657	-31	+08	4	2	2	1	2	2	0	0	DSI	—
				8661	-15	+39	1	0	1	0	0	0	0	1	AXX	—
				8656	+17	+58	5	1	4	1	1	4	0	0	CSI	—
				8651	+26	+80	4	2	1	1	3	1	0	0	DKI	—
				8650	+17	+81	1	0	1	0	0	0	0	1	AXX	—
3638	1999 / 08 / 09	2120	109.12	8662	-16	-23	21	4	8	1	13	8	0	0	EAC	—
				8657	-30	+20	2	2	0	1	2	0	0	0	DSO	—
				8661	-15	+52	1	0	1	0	0	0	0	1	AXX	—
				8656	+16	+70	4	1	3	1	1	3	0	0	CSI	—
3639	1999 / 08 / 10	2105	96.04	8662	-16	-10	23	5	9	1	14	9	0	0	EAC	—
				8657	-31	+32	2	1	1	1	1	1	0	0	CSO	—
3640	1999 / 08 / 12	2110	69.55	8667	+22	-72	2	0	2	1	0	2	0	0	BXO	—
				8665	-25	-54	1	0	1	0	0	0	0	1	AXX	—
				8662	-16	+16	12	3	8	1	4	8	0	0	FAC	—
				8657	-28	+53	2	1	1	1	1	1	0	0	CSO	—
3641	1999 / 08 / 16	2050	16.85	8668	+22	-43	5	1	1	1	4	1	0	0	CKO	—
				8669	-20	-17	1	0	1	0	0	0	0	1	AXX	—
				8671	-09	+24	1	0	1	0	0	0	0	1	AXX	—
				8662	-15	+72	1	1	0	0	0	0	1	0	HSX	small
3642	1999 / 08 / 17	2040	3.73	8668	+21	-30	9	1	3	1	6	3	0	0	CKI	—
				8672	+12	-17	2	0	2	1	0	2	0	0	BXO	—
				8671	-10	+40	3	0	3	1	0	3	0	0	BXI	—
3643	1999 / 08 / 18	2100	350.33	8668	+22	-17	6	2	2	1	4	2	0	0	DKI	—
				8672	+12	-03	8	1	6	1	2	6	0	0	CAI	—
				8671	-10	+54	1	0	1	0	0	0	0	1	AXX	—
3644	1999 / 08 / 22	2220	296.74	8673	-20	-47	29	5	14	1	15	14	0	0	FAC	—
				8674	-25	-49	8	2	3	1	5	3	0	0	DAI	—
				?	+13	+10	1	0	1	0	0	0	0	1	AXX	—
				8668	+23	+34	11	2	6	1	5	6	0	0	DAI	—



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

REGION CO-ORDINATES AND CLASSIFICATIONS FOR AUGUST 1999 continued.

OBS	DATE	UT	CM	REG.No	B	CMD	f	p	s	gr	grfp	grf	efp	ef	Class.	Remarks	
3645	1999/08/23	2050	284.34	8673	-20	-35	31	5	14	1	17	14	0	0	FHC	—	
				8674	-25	-36	12	2	6	1	6	6	0	0	DAI	—	
				8668	+23	+47	8	2	5	1	3	5	0	0	DAI	—	
3646	1999/08/24	2100	271.04	8675	+21	-77	1	1	0	0	0	0	1	0	HSX	—	
				8676	+25	-73	2	0	2	1	0	2	0	0	BXO	—	
				8673	-20	-22	39	7	15	1	24	15	0	0	FKC	—	
				8674	-25	-21	14	3	8	1	6	8	0	0	DAC	—	
				8678	+16	+24	1	0	1	0	0	0	0	0	1	AXX	—
				8680	+20	+49	1	0	1	0	0	0	0	0	1	AXX	—
				8668	+23	+60	11	3	4	1	7	4	0	0	0	DAC	—
3647	1999/08/25	2050	257.91	8679	-33	-72	1	1	0	0	0	0	1	0	HSX	—	
				8677	+07	-72	1	1	0	0	0	0	0	1	0	HSX	—
				8675	+19	-65	3	1	1	1	2	1	0	0	0	CAO	—
				8676	+25	-62	2	0	2	1	0	2	0	0	0	BXO	—
				8673	-21	-13	36	5	16	1	20	16	0	0	0	FHC	—
				8674	-25	-09	11	3	5	1	6	5	0	0	0	DAC	—
				8678	+16	+38	1	0	1	0	0	0	0	0	1	AXX	big
				8680	+20	+62	1	0	1	0	0	0	0	0	1	AXX	—
8668	+24	+73	4	1	3	1	1	3	0	0	0	0	CSI	—			
3648	1999/08/26	2055	244.66	8677	+07	-61	4	1	1	1	3	1	0	0	CAO	—	
				8679	-33	-59	3	1	1	1	2	1	0	0	0	CAO	—
				8675	+19	-54	5	2	2	1	3	2	0	0	0	DAI	—
				8676	+25	-46	2	0	2	1	0	2	0	0	0	BXO	—
				8673	-20	+00	42	7	11	1	31	11	0	0	0	FHC	—
				8674	-25	+05	7	2	3	1	4	3	0	0	0	DAI	—
				8678	+16	+50	1	0	1	0	0	0	0	0	1	AXX	big
				8680	+21	+75	1	0	1	0	0	0	0	0	1	AXX	small



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

REGION CO-ORDINATES AND CLASSIFICATIONS FOR AUGUST 1999 continued.

OBS	DATE	UT	CM	REG.No	B	CMD	f	p	s	gr	grp	grf	efp	ef	Class.	Remarks
3649	1999 / 08 / 27	2055	231.45	8677	+07	-47	4	1	2	1	2	2	0	0	CAI	—
				8679	-32	-46	2	1	1	1	1	1	0	0	CSO	—
				8675	+19	-41	9	2	3	1	6	3	0	0	DAI	—
				8676	+26	-34	2	0	2	1	0	2	0	0	BXO	—
				8681	+21	-22	5	0	5	1	0	5	0	0	BXI	—
				8673	-19	+15	48	7	14	1	34	14	0	0	FHC	—
				8674	-24	+20	6	2	3	1	3	3	0	0	DAI	—
				8678	+17	+64	1	0	1	0	0	0	0	0	1	AXX
3650	1999 / 08 / 29	2045	205.12	8682	+18	-66	1	1	0	0	0	0	1	0	HSX	—
				8677	+09	-21	3	1	2	1	1	2	0	0	CSI	—
				8675	+20	-16	11	5	3	1	8	3	0	0	DAC	—
				8676	+25	-09	1	0	1	0	0	0	0	1	AXX	—
				8679	-33	-23	2	0	2	1	0	2	0	0	BXO	—
				8681	+21	+03	19	4	11	1	8	11	0	0	DAC	—
				8673	-19	+40	38	6	16	1	22	16	0	0	FKC	—
				8674	-23	+45	2	1	1	1	1	1	0	0	CSO	—



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

REGION CO-ORDINATES AND CLASSIFICATIONS FOR SEPTEMBER 1999

All observations carried out by HOWARD BARNES .
 Telescope : 76 mm refractor (f . l . 910 mm) .
 Observed by PROJECTION . Full disc diameter = 145 mm approx .
 CM is stated in degrees .
 Region Numbers are NOAA/SEC Numbers .
 B = Heliographic Latitude (+ if NORTH , - if SOUTH) .
 CMD = Degrees of Longitude in respect to the Central Meridian (- if EAST , + if WEST) .

OBS	DATE	UT	CM	REG.No	B	CMD	f	p	s	gr	grfp	grf	efp	ef	Class.	Remarks
3651	1999 / 09 / 02	2025	152.46	8688	-24	-29	2	0	2	1	0	2	0	0	BXO	—
				8682	+19	-13	2	1	1	1	1	1	0	0	CSO	—
				8687	+12	+05	6	1	4	1	2	4	0	0	CAI	—
				8686	-24	+22	2	1	1	1	1	1	0	0	CSO	—
				8677	+08	+34	1	1	0	0	0	0	1	0	HSX	—
				8675	+19	+39	5	2	2	1	3	2	0	0	DAI	—
				8681	+20	+55	2	2	0	1	2	0	0	0	DSO	—
3652	1999 / 09 / 03	2050	139.02	8688	-24	-16	1	0	1	0	0	0	0	1	AXX	—
				8682	+18	-00	6	1	5	1	1	5	0	0	CSI	small
				8687	+11	+19	4	0	4	1	0	4	0	0	BXI	—
				8686	-25	+35	7	1	6	1	1	6	0	0	CSI	small
				8677	+08	+47	1	1	0	0	0	0	1	0	HSX	—
				8675	+19	+52	1	1	0	0	0	0	1	0	HSX	—
				8681	+20	+70	6	1	2	1	4	2	0	0	CAI	—
3653	1999 / 09 / 04	2050	125.81	8682	+18	+12	10	3	6	1	4	6	0	0	DAC	—
				8687	+11	+32	5	1	4	1	1	4	0	0	CSI	—
				8686	-25	+48	1	0	1	0	0	0	0	1	AXX	—
				8677	+08	+59	2	1	1	1	1	1	0	0	CSO	—
				8675	+20	+66	1	1	0	0	0	0	1	0	HSX	—
				8681	+20	+84	1	1	0	0	0	0	1	0	HSX	—
3654	1999 / 09 / 09	2045	59.83	8692	-25	-49	12	2	4	1	8	4	0	0	EAI	—
				8693	+12	-52	1	1	0	0	0	0	1	0	HSX	—
				8690	+13	-34	7	2	4	1	3	4	0	0	DSI	—
				8694	-15	+25	1	0	1	0	0	0	0	1	AXX	—
3655	1999/09/10	2105	46.44	8695	+19	-73	1	1	0	0	0	0	1	0	HSX	—
				8693	+13	-37	5	2	3	1	2	3	0	0	DSI	—
				8692	-26	-36	15	3	8	1	7	8	0	0	EAC	—
				8690	+13	-21	12	3	6	1	6	6	0	0	DAC	—
				8697	-21	-08	2	0	2	1	0	2	0	0	BXO	—
				8696	+14	+34	2	0	2	1	0	2	0	0	BXO	—



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

REGION CO-ORDINATES AND CLASSIFICATIONS FOR SEPTEMBER 1999 continued.

OBS	DATE	UT	CM	REG.No	B	CMD	f	p	s	gr	grp	grf	efp	ef	Class.	Remarks	
3656	1999 / 09 / 13	2100	6.88	8700	+15	-72	9	2	4	1	5	4	0	0	EAI	—	
				8695	+21	-35	1	1	0	0	0	0	0	1	0	HSX	—
				8699	+21	-03	17	3	6	1	11	6	0	0	0	EAC	—
				8693	+12	+00	3	1	1	1	2	1	0	0	0	CAO	—
				8692	-27	+01	13	3	5	1	8	5	0	0	0	EAC	—
				8690	+14	+18	16	4	5	1	11	5	0	0	0	DAC	—
3657	1999 / 09 / 14	2055	353.72	8700	+15	-60	13	2	9	1	4	9	0	0	EAI	—	
				8695	+21	-22	2	1	1	1	1	1	0	0	0	CSO	—
				8699	+21	+09	17	5	8	1	9	8	0	0	0	ESC	—
				8693	+12	+13	4	1	3	1	1	3	0	0	0	CSI	—
				8692	-27	+13	12	3	8	1	4	8	0	0	0	ESC	—
				8690	+14	+31	22	3	7	1	15	7	0	0	0	DAC	—
3658	1999/09/16	2045	327.41	8704	-21	-78	1	1	0	0	0	0	1	0	HSX	—	
				8700	+14	-31	15	2	6	1	9	6	0	0	0	DAI	—
				8695	+21	+04	2	1	1	1	1	1	0	0	0	CSO	—
				8699	+21	+37	12	3	5	1	7	5	0	0	0	EAC	—
				8692	-27	+40	11	2	5	1	6	5	0	0	0	EAI	—
				8693	+13	+41	1	1	0	0	0	0	0	1	0	HSX	—
3659	1999 / 09 / 17	2135	313.75	8704	-21	-65	1	1	0	0	0	0	1	0	HSX	—	
				8700	+13	-21	19	3	12	1	7	12	0	0	0	DAC	—
				8695	+21	+15	2	1	1	1	1	1	0	0	0	CSO	—
				8699	+21	+49	6	2	3	1	3	3	0	0	0	EAI	—
				8692	-26	+52	9	2	6	1	3	6	0	0	0	EAI	—
				8693	+12	+54	1	1	0	0	0	0	0	1	0	HSX	—
3660	1999 / 09 / 19	2120	287.49	8706	+20	-80	1	1	0	0	0	0	1	0	HSX	—	
				8704	-21	-40	5	2	2	1	3	2	0	0	0	DSI	—
				?	+18	+03	1	0	1	0	0	0	0	0	1	AXX	—
				8700	+12	+04	10	3	6	1	4	6	0	0	0	DAC	small penums
				8695	+21	+41	2	1	1	1	1	1	0	0	0	CSO	—
				8699	+22	+76	5	2	3	1	2	3	0	0	0	ESI	—



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

REGION CO-ORDINATES AND CLASSIFICATIONS FOR SEPTEMBER 1999 continued.

OBS	DATE	UT	CM	REG.No	B	CMD	f	p	s	gr	grfp	grf	efp	ef	Class.	Remarks
3661	1999 / 09 / 21	2045	261.41	8706	+21	-55	1	1	0	0	0	0	1	0	HSX	—
				8704	-21	-17	5	1	4	1	1	4	0	0	CSI	—
				8700	+13	+30	7	1	6	1	1	6	0	0	CSI	small
3662	1999 / 09 / 22	2040	248.25	8708	-09	-58	4	0	4	1	0	4	0	0	BXI	—
				8706	+20	-41	1	1	0	0	0	0	1	0	HSX	—
				8704	-21	-03	6	1	4	1	2	4	0	0	CAI	—
				8707	-08	+05	1	0	1	0	0	0	0	1	AXX	—
				8700	+13	+44	3	1	2	1	1	2	0	0	CSO	class correct
3663	1999 / 09 / 23	2050	234.96	8708	-09	-45	5	1	4	1	1	4	0	0	CSI	—
				8706	+20	-28	1	1	0	0	0	0	1	0	HSX	—
				8704	-21	+09	2	1	1	1	1	1	0	0	CSO	—
				8700	+13	+57	2	0	2	1	0	2	0	0	BXO	—
3664	1999 / 09 / 24	2005	222.17	8708	-10	-33	4	1	3	1	1	3	0	0	CSI	small
				8706	+20	-15	1	1	0	0	0	0	1	0	HSX	—
				8704	-21	+22	3	1	2	1	1	2	0	0	CSI	—
3665	1999 / 09 / 25	2100	208.47	8708	-11	-19	1	0	1	0	0	0	0	1	AXX	big
				8706	+20	-02	1	1	0	0	0	0	1	0	HSX	—
				8704	-21	+39	1	1	0	0	0	0	1	0	HSX	—
3666	1999 / 09 / 27	2035	182.30	8710	+18	-65	1	1	0	0	0	0	1	0	HSX	—
				?	+17	+08	1	0	1	0	0	0	0	1	AXX	—
				8706	+20	+25	1	1	0	0	0	0	1	0	HSX	—
				8704	-20	+65	1	1	0	0	0	0	1	0	HSX	—
3667	1999 / 09 / 29	2110	155.59	8713	-13	-66	1	0	1	0	0	0	0	1	AXX	small
				8714	+12	-75	1	1	0	0	0	0	1	0	HSX	—
				8715	+11	-59	1	0	1	0	0	0	0	1	AXX	—
				8712	-14	+03	3	0	3	1	0	3	0	0	BXI	compact
				8706/11	+21	+46	5	1	4	1	1	4	0	0	CSI	—



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

REGION CO-ORDINATES AND CLASSIFICATIONS FOR OCTOBER 1999

All observations carried out by HOWARD BARNES .
 Telescope : 76 mm refractor (f . l . 910 mm) .
 Observed by PROJECTION . Full disc diameter = 145 mm approx .
 CM is stated in degrees .
 Region Numbers are NOAA/SEC Numbers .
 B = Heliographic Latitude (+ if NORTH , - if SOUTH) .
 CMD = Degrees of Longitude in respect to the Central Meridian (- if EAST , + if WEST) .

OBS	DATE	UT	CM	REG.No	B	CMD	f	p	s	gr	grfp	grf	efp	ef	Class.	Remarks			
3668	1999 / 10 / 02	2215	115.40	8716	+21	-70	1	1	0	0	0	0	1	0	HHX	—			
				8719	-20	-63	1	1	0	0	0	0	0	1	0	HSX	—		
				8714	+13	-32	1	1	0	0	0	0	0	1	0	HSX	—		
				8713	-13	-22	1	0	1	0	0	1	0	0	0	1	AXX	—	
				8712	-12	+46	1	0	1	0	0	1	0	0	0	1	AXX	—	
3669	1999 / 10 / 03	2055	102.94	8721	-16	-60	6	2	4	1	2	4	0	0	ESI	small in area			
				8720	+13	-66	1	0	1	0	0	0	0	0	1	AXX	—		
				8719	-20	-51	2	1	1	1	1	1	1	0	0	CSO	—		
				8716	+21	-62	3	1	2	1	1	2	1	2	0	0	CHO	class correct	
				8714	+13	-19	1	1	0	0	0	0	0	0	1	0	HSX	—	
3670	1999 / 10 / 04	1945	90.39	8723	+20	-78	1	0	1	0	0	0	0	1	AXX	—			
				8720	+13	-54	2	1	1	1	1	1	1	0	0	CSO	—		
				8716	+20	-49	5	1	3	1	2	3	1	2	3	0	0	CKI	—
				8721	-18	-48	8	3	3	1	5	3	1	5	3	0	0	DAC	small in area
				8719	-21	-40	6	2	2	1	4	2	1	4	2	0	0	DAI	—
				8722	+13	-25	4	0	4	1	0	4	1	0	4	0	0	BXI	—
				8714	+13	-06	1	0	1	0	0	1	0	0	0	0	1	AXX	—
8718	-26	+07	2	0	2	1	0	2	1	0	2	0	0	BXO	—				
3671	1999 / 10 / 10	2020	10.92	8729E	+13	-66	1	0	1	0	0	0	0	1	AXX	—			
				?	+17	-58	1	0	1	0	0	0	0	0	1	AXX	—		
				8729W	+12	-57	2	0	2	1	0	2	1	0	2	0	0	BXO	—
				8728	+22	-52	11	2	6	1	5	6	1	5	6	0	0	EHI	—
				8727	+18	-14	2	1	1	1	1	1	1	1	1	0	0	CRO	small
				8725	-25	-04	1	1	0	0	0	0	0	0	0	1	0	HSX	—
				8716	+21	+30	2	1	0	1	1	0	1	2	0	0	0	HKX	—
				8719/21	-19	+37	2	1	1	1	1	1	1	1	1	0	0	CSO	—
8714	+15	+69	1	0	1	0	0	1	0	0	0	0	1	AXX	—				



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

REGION CO-ORDINATES AND CLASSIFICATIONS FOR OCTOBER 1999 continued.

OBS	DATE	UT	CM	REG.No	B	CMD	f	p	s	gr	grp	grf	efp	ef	Class.	Remarks
3672	1999 / 10 / 12	2110	344.07	8731	+12	-53	16	5	4	1	12	4	0	0	DKC	—
				8732	+21	-44	4	1	3	1	1	3	0	0	CSI	—
				8729E	+13	-37	9	3	6	1	3	6	0	0	DSI	small
				8729W	+12	-30	3	1	2	1	1	2	0	0	CSI	—
				8728	+22	-26	19	4	8	1	11	8	0	0	EKC	—
				8733	+25	-01	3	0	3	1	0	3	0	0	BXI	—
				8727	+18	+10	5	1	4	1	1	4	0	0	CSI	small
				8725	-24	+24	1	1	0	0	0	0	1	0	HSX	small
				8716	+22	+59	1	1	0	0	0	0	1	0	HHX	—
8719	-20	+67	1	1	0	0	0	0	1	0	HSX	—				
3673	1999 / 10 / 13	2020	331.34	8731	+11	-40	26	6	14	1	12	14	0	0	EKC	—
				8732	+20	-31	7	2	3	1	4	3	0	0	DAI	—
				8729E	+13	-24	4	1	3	1	1	3	0	0	CSI	small
				8728	+22	-15	17	5	5	1	12	5	0	0	EKC	—
				8729W	+12	-16	3	1	2	1	1	2	0	0	CSI	—
				8727	+20	+23	4	1	2	1	2	2	0	0	CAI	—
				?	+25	+29	2	0	2	1	0	2	0	0	BXO	—
				8725	-24	+37	1	0	1	0	0	0	0	1	AXX	—
				8716	+22	+72	1	1	0	0	0	0	1	0	HSX	—
3674	1999 / 10 / 14	2010	318.24	8734	+17	-38	1	0	1	0	0	0	0	1	AXX	—
				8731	+13	-26	28	5	4	1	24	4	0	0	EKC	—
				8732	+20	-20	9	2	5	1	4	5	0	0	EAI	—
				8729E	+13	-11	3	0	3	1	0	3	0	0	BXI	—
				8728	+21	-02	15	5	6	1	9	6	0	0	EHC	—
				8729W	+12	-02	2	1	1	1	1	1	0	0	CSO	small
				?	-09	+04	1	0	1	0	0	0	0	1	AXX	—
				8727	+20	+35	1	0	1	0	0	0	0	1	AXX	big
				8716	+21	+79	1	1	0	0	0	0	1	0	HSX	—



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

REGION CO-ORDINATES AND CLASSIFICATIONS FOR OCTOBER 1999 continued.

OBS	DATE	UT	CM	REG.No	B	CMD	f	p	s	gr	grfp	grf	efp	ef	Class.	Remarks	
3675	1999 / 10 / 15	2045	304.73	8734	+17	-25	1	0	1	0	0	0	0	1	AXX	—	
				8731	+13	-13	36	5	10	1	26	10	0	0	FKC	—	
				8732	+20	-05	10	4	4	1	6	4	0	0	FAC	—	
				8728	+22	+10	22	5	9	1	13	9	0	0	FAC	—	
				8729(W)	+12	+10	3	0	3	1	0	3	0	0	BXI	—	
3676	1999 / 10 / 16	2040	291.58	8736	-21	-50	1	0	1	0	0	0	0	1	AXX	—	
				8735	+18	-44	3	1	2	1	1	2	0	0	BXI	—	
				8731	+12	+00	45	7	10	1	35	10	0	0	FKC	—	
				8732	+21	+08	8	3	3	1	5	3	0	0	FAC	—	
				8728	+22	+24	7	3	4	1	3	4	0	0	FAC	—	
3677	1999 / 10 / 17	1955	278.80	8736	-20	-39	1	0	1	0	0	0	0	1	AXX	—	
				8735	+18	-24	4	1	3	1	1	3	0	0	CSI	—	
				8731	+13	+15	50	8	15	1	35	15	0	0	FKC	—	
				8732	+21	+23	19	5	9	1	10	9	0	0	FAC	—	
				8728	+23	+38	5	2	2	1	3	2	0	0	CKO	class correct	
3678	1999 / 10 / 18	1950	265.66	8737	-16	-30	3	0	3	1	0	3	0	0	BXI	—	
				8736	-22	-24	1	0	1	0	0	0	0	0	1	AXX	—
				?	+31	-17	1	0	1	0	0	0	0	0	1	AXX	small
				8735	+19	-11	4	1	3	1	1	3	0	0	CSI	—	
				8731	+14	+27	47	6	19	1	28	19	0	0	EKC	—	
				?	-13	+31	1	0	1	0	0	0	0	0	1	AXX	—
				8732	+21	+37	21	5	11	1	10	11	0	0	FAC	—	
				8728	+23	+57	1	1	0	0	0	0	0	1	0	HHX	—
3679	1999 / 10 / 19	1950	252.47	8737	-15	-17	7	2	3	1	4	3	0	0	DSI	—	
				8736	-22	-09	1	0	1	0	0	0	0	0	1	AXX	very small
				8735	+19	+03	2	1	1	1	1	1	0	0	CRO	—	
				8731	+14	+41	32	5	9	1	23	9	0	0	EKC	—	
				8732	+21	+52	21	7	5	1	16	5	0	0	FAC	—	
				8728	+24	+71	1	1	0	0	0	0	0	1	0	HHX	—



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

REGION CO-ORDINATES AND CLASSIFICATIONS FOR OCTOBER 1999 continued.

OBS	DATE	UT	CM	REG.No	B	CMD	f	p	s	gr	grp	grf	efp	ef	Class.	Remarks	
3680	1999 / 10 / 21	2040	225.63	8739	-12	-60	6	3	2	1	4	2	0	0	DAC	—	
				8738	+17	-15	1	1	0	0	0	0	0	1	0	HSX	—
				8737	-15	+10	14	3	5	1	9	5	0	0	0	DAC	—
				8731	+13	+66	7	3	2	1	5	2	0	0	0	EKC	—
				8732	+21	+75	3	2	1	1	2	1	0	0	0	DSI	—
3681	1999 / 10 / 24	2005	186.38	8742	+09	-69	9	2	4	1	5	4	0	0	EAI	—	
				8741	-25	-40	12	4	5	1	7	5	0	0	0	EAC	—
				8739	-12	-19	27	5	17	1	10	17	0	0	0	FKC	—
				8738	+17	+25	4	1	3	1	1	3	0	0	0	CSI	—
				8737	-14	+51	6	2	2	1	4	2	0	0	0	EKO	—
3682	1999 / 10 / 30	1925	107.63	8751	+20	-70	1	1	0	0	0	0	1	0	HSX	—	
				8747	+13	-32	11	3	3	1	8	3	0	0	0	DAI	class correct
				8749	-21	-34	4	1	3	1	1	3	0	0	0	CRI	—
				8745	-15	-17	7	1	4	1	3	4	0	0	0	CAI	—
				8748	+19	+06	4	1	2	1	2	2	0	0	0	CAI	small
				8742	+10	+09	12	2	6	1	6	6	0	0	0	DKI	—
				8741	-25	+38	7	3	3	1	4	3	0	0	0	EAC	—
				8743	-13	+44	6	3	3	1	3	3	0	0	0	FSC	—
				8739	-11	+60	9	3	4	1	5	4	0	0	0	ESC	—



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

REGION CO-ORDINATES AND CLASSIFICATIONS FOR NOVEMBER 1999

All observations carried out by HOWARD BARNES .
 Telescope : 76 mm refractor (f . l . 910 mm) .
 Observed by PROJECTION . Full disc diameter = 145 mm approx .
 CM is stated in degrees .
 Region Numbers are NOAA/SEC Numbers .
 B = Heliographic Latitude (+ if NORTH , - if SOUTH) .
 CMD = Degrees of Longitude in respect to the Central Meridian (- if EAST , + if WEST) .

OBS	DATE	UT	CM	REG.No	B	CMD	f	p	s	gr	grfp	grf	efp	ef	Class.	Remarks	
3683	1999 / 11 / 04	2125	40.60	8755	+18	-81	1	1	0	0	0	0	1	0	HSX	—	
				8754	-09	-67	1	1	0	0	0	0	0	1	0	HSX	—
				8751	+21	-03	5	1	3	1	2	3	0	0	0	CAI	—
				8752	-13	+13	3	0	3	1	0	3	0	0	0	BXI	—
				8749	-19	+36	16	6	5	1	11	5	0	0	0	FAC	—
				8747	+12	+37	7	2	4	1	3	4	0	0	0	DAI	—
3684	1999 / 11 / 11	2055	308.58	8765	-09	-74	8	4	2	1	6	2	0	0	EAC	—	
				8763	-14	-63	6	2	3	1	3	3	0	0	0	DAI	—
				8759	+11	-22	30	4	10	1	20	10	0	0	0	FKC	—
				8761	+18	-14	2	0	2	1	0	2	0	0	0	BXO	—
				8755	+21	+07	1	1	0	0	0	0	1	0	0	HSX	—
				8760	+14	+15	33	6	14	1	19	14	0	0	0	FKC	—
				8754	-09	+24	1	0	1	0	0	0	0	0	1	AXX	—
				8753	+18	+33	18	4	13	1	5	13	0	0	0	DAC	—
				?	-07	+50	1	0	1	0	0	0	0	0	1	AXX	—
8757	+36	+64	5	2	2	1	3	2	0	0	0	DAI	—				
3685	1999 / 11 / 12	2045	295.49	8765	-11	-61	13	4	5	1	8	5	0	0	EAC	—	
				8763	-14	-48	6	1	4	1	2	4	0	0	0	CAI	—
				8759	+11	-08	35	9	11	1	24	11	0	0	0	FKC	—
				8761	+19	-00	1	0	1	0	0	0	0	0	1	AXX	—
				8755	+22	+21	1	1	0	0	0	0	1	0	0	HSX	—
				8760	+14	+29	24	5	9	1	15	9	0	0	0	EKC	—
				8764	+18	+41	2	0	2	1	0	2	0	0	0	BXO	—
				8753	+19	+48	8	3	3	1	5	3	0	0	0	DAC	—
				?	-06	+63	1	0	1	0	0	0	0	0	1	AXX	—



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

REGION CO-ORDINATES AND CLASSIFICATIONS FOR NOVEMBER 1999 continued.

OBS	DATE	UT	CM	REG.No	B	CMD	f	p	s	gr	grp	grf	efp	ef	Class.	Remarks
3686	1999 / 11 / 14	1930	269.81	8766	+18	-60	11	1	2	1	9	2	0	0	CKI	—
				8765	-13	-36	27	3	2	1	25	2	0	0	EKC	—
				8768	+16	-36	2	0	2	1	0	2	0	0	BXO	—
				8763	-15	-22	3	1	1	1	2	1	0	0	CAO	—
				8759	+11	+17	34	6	19	1	15	19	0	0	FAC	—
				8767	+42	+27	4	1	3	1	1	3	0	0	CRI	—
				8755	+22	+45	1	1	0	0	0	0	1	0	HSX	—
				8760	+14	+55	10	2	2	1	8	2	0	0	FKO	—
3687	1999 / 11 / 15	1930	256.63	8769	-11	-78	1	1	0	0	0	0	1	0	HSX	—
				8766	+17	-46	17	2	3	1	14	3	0	0	DAC	—
				8765	-13	-23	35	3	3	1	32	3	0	0	EKC	—
				8768	+16	-22	4	1	3	1	1	3	0	0	CSI	—
				8763	-15	-08	4	1	2	1	2	2	0	0	CAI	—
				8770	-15	+07	1	0	1	0	0	0	0	1	AXX	—
				8759	+11	+29	21	4	14	1	7	14	0	0	FAC	—
				8767	+41	+40	3	1	2	1	1	2	0	0	CSO	class correct
				8755	+22	+58	1	1	0	0	0	0	1	0	HSX	—
8760	+14	+68	7	2	2	1	5	2	0	0	FKO	—				
3688	1999 / 11 / 16	2200	242.07	8769	-10	-66	1	1	0	0	0	0	1	0	HSX	—
				8766	+17	-32	18	4	3	1	15	3	0	0	DKC	—
				8768	+17	-08	9	2	2	1	7	2	0	0	DAI	—
				8765	-13	-08	36	4	3	1	33	3	0	0	FKC	—
				8763	-14	+06	3	1	1	1	2	1	0	0	CAO	—
				8770	-15	+22	4	2	1	1	3	1	0	0	DAI	—
				8767	+41	+53	2	0	2	1	0	2	0	0	BXO	—
				8759	+12	+44	6	2	3	1	3	3	0	0	EAO	—
				8755	+22	+71	1	1	0	0	0	0	1	0	HSX	—
				8760	+14	+82	1	0	1	0	0	0	0	1	AXX	—



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

REGION CO-ORDINATES AND CLASSIFICATIONS FOR NOVEMBER 1999 continued.

OBS	DATE	UT	CM	REG.No	B	CMD	f	p	s	gr	grfp	grf	efp	ef	Class.	Remarks	
3689	1999 / 11 / 18	1955	216.85	8772	+05	+02	1	0	1	0	0	0	0	1	AXX	—	
				8771	-13	-47	11	3	3	1	8	3	0	0	FAC	—	
				8769	-10	-40	3	1	1	1	2	1	0	0	CAO	—	
				8766	+17	-05	19	5	8	1	11	8	0	0	EAC	—	
				8775	-15	+02	1	0	1	0	0	0	0	0	1	AXX	—
				8765	-12	+17	39	4	5	1	34	5	0	0	EKC	—	
				8768	+17	+21	9	2	4	1	5	4	0	0	EAI	—	
				8763	-13	+32	1	0	1	0	0	0	0	0	1	AXX	—
				8770	-14	+48	8	3	3	1	5	3	0	0	DAC	—	
8759	+13	+65	3	2	1	1	2	1	0	0	DSI	—					
3690	1999 / 11 / 21	2140	176.34	8778	-15	-61	2	1	1	1	1	1	0	0	CSO	—	
				8772	+05	-30	6	1	4	1	2	4	0	0	CAI	—	
				8773	-15	-13	3	1	2	1	1	2	0	0	CSI	—	
				8776	-30	-09	9	2	6	1	3	6	0	0	DAI	—	
				8771	-15	-03	17	5	4	1	13	4	0	0	EAC	—	
				8766	+17	+35	11	4	4	1	7	4	0	0	DAC	—	
				8765	-12	+58	19	3	5	1	14	5	0	0	EKC	—	
				8768	+16	+63	4	2	2	1	2	2	0	0	DAI	—	
3691	1999 / 11 / 22	1950	164.17	8778	-13	-49	1	1	0	0	0	0	1	0	HSX	—	
				8772	+05	-19	3	1	2	1	1	2	0	0	CSI	—	
				8773	-15	-01	5	0	5	1	0	5	0	0	BXI	—	
				8776	-30	-00	3	2	1	1	2	1	0	0	DSO	class correct	
				8771	-15	+09	20	3	7	1	13	7	0	0	EAC	—	
				8766	+17	+47	11	2	8	1	3	8	0	0	DAI	—	
				8765	-12	+69	13	2	4	1	9	4	0	0	EKI	—	
				8768	+16	+75	3	2	1	1	2	1	0	0	DSI	—	
3692	1999 / 11 / 29	2125	71.04	8781	-13	-10	18	3	6	1	12	6	0	0	DAI	—	
				8782	+10	+26	16	4	6	1	10	6	0	0	DAC	—	
				8778	-13	+44	11	3	4	1	7	4	0	0	DSC	—	
3693	1999 / 11 / 30	1955	58.68	8784	+29	-34	3	1	2	1	1	2	0	0	CSI	—	
				8781	-12	+01	21	2	12	1	9	12	0	0	EAI	—	
				8782	+10	+38	19	5	6	1	13	6	0	0	DAC	—	
				8783	-15	+40	2	1	1	1	1	1	0	0	CSO	—	
				8778	-14	+58	10	3	5	1	5	5	0	0	DAC	—	



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

REGION CO-ORDINATES AND CLASSIFICATIONS FOR DECEMBER 1999

All observations carried out by HOWARD BARNES .
 Telescope : 76 mm refractor (f . l . 910 mm) .
 Observed by PROJECTION . Full disc diameter = 145 mm approx .
 CM is stated in degrees .
 Region Numbers are NOAA/SEC Numbers .
 B = Heliographic Latitude (+ if NORTH , - if SOUTH) .
 CMD = Degrees of Longitude in respect to the Central Meridian (- if EAST , + if WEST) .

OBS	DATE	UT	CM	REG.No	B	CMD	f	p	s	gr	grfp	grf	efp	ef	Class.	Remarks
3694	1999 / 12 / 04	1940	6.11	8788	+11	-58	11	3	4	1	7	4	0	0	FKI	—
				8785	+13	-34	1	1	0	0	0	0	1	0	HSX	—
				8787	+12	-20	1	0	1	0	0	0	0	1	AXX	—
				8781	-12	+54	1	1	0	0	0	0	1	0	HAX	—
3695	1999 / 12 / 06	2010	339.48	8790	+09	-48	3	1	2	1	1	2	0	0	CSI	—
				8788	+10	-31	15	4	6	1	9	6	0	0	FHC	—
				8785	+13	-07	1	1	0	0	0	0	1	0	HSX	—
				8787	+12	+07	4	1	3	1	1	3	0	0	CSI	—
3696	1999 / 12 / 08	2015	313.08	8794	-15	-75	1	1	0	0	0	0	1	0	HSX	small
				8792	+15	-73	2	1	0	1	2	0	0	0	HAX	—
				8791	-14	-53	1	0	1	0	0	0	0	1	AXX	—
				8790	+10	-22	5	1	3	1	2	3	0	0	CAI	—
				8788	+10	-05	12	3	5	1	7	5	0	0	FHC	—
				?	-11	+09	1	0	1	0	0	0	0	1	AXX	—
				8785	+13	+19	1	1	0	0	0	0	1	0	HSX	—
3697	1999 / 12 / 09	2030	299.76	8794	-15	-62	1	1	0	0	0	0	1	0	HSX	—
				8792	+15	-60	2	1	0	1	2	0	0	0	HAX	—
				8791	-14	-40	1	0	1	0	0	0	0	1	AXX	—
				8795	-11	-20	4	2	1	1	3	1	0	0	DAI	small
				8793	-16	-13	4	1	3	1	1	3	0	0	CSI	small
				8790	+11	-09	12	2	8	1	4	8	0	0	DAI	widespread
				8788	+10	+08	19	3	9	1	10	9	0	0	FKI	—
8785	+14	+33	1	1	0	0	0	0	1	0	HSX	big				
3698	1999 / 12 / 13	2055	246.83	8798	-14	-62	1	0	1	0	0	0	0	1	AXX	—
				8797	-34	-13	3	1	1	1	2	1	0	0	CAO	—
				8794	-14	-08	2	1	1	1	1	1	0	0	CSO	—
				8792	+16	-05	3	0	3	1	0	3	0	0	BXI	—
				8796	-26	+00	2	1	1	1	1	1	0	0	CSO	—
8788	+14	+62	11	2	6	1	5	6	0	0	FHI	—				



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

REGION CO-ORDINATES AND CLASSIFICATIONS FOR DECEMBER 1999 continued.

OBS	DATE	UT	CM	REG.No	B	CMD	f	p	s	gr	grp	grf	efp	ef	Class.	Remarks	
3699	1999 / 12 / 14	2025	233.94	8799	-10	-63	2	1	1	1	1	1	0	0	CSO	—	
				8800	+11	-62	1	0	1	0	0	0	0	0	1	AXX	—
				8798	-14	-63	9	1	2	1	7	2	0	0	0	CAI	—
				8797	-34	+00	7	1	4	1	3	4	0	0	0	CAI	—
				8794	-13	+06	3	1	2	1	1	2	0	0	0	CSI	small penum.
				8796	-27	+14	1	0	1	0	0	0	0	0	1	AXX	—
				8788	+12	+74	5	2	1	1	4	1	0	0	0	FHI	—
3700	1999 / 12 / 17	2105	194.04	8806	+18	-72	6	3	2	1	4	2	0	0	EHC	—	
				8804	-16	-68	1	1	0	0	0	0	1	0	HHX	—	
				8798/803	-14	-19	47	9	21	1	26	21	0	0	0	FKC	—
				8805	+17	+26	1	0	1	0	0	0	0	1	0	AXX	—
				8797	-34	+39	2	0	2	1	0	2	0	0	0	BXO	—
3701	1999 / 12 / 19	2140	167.37	8807	+11	-58	4	1	2	1	2	2	0	0	CAI	—	
				8806	+18	-50	26	4	5	1	21	5	0	0	0	FKC	—
				8804	-18	-43	2	1	1	1	1	1	0	0	0	CHO	—
				8808	-20	-09	1	0	1	0	0	0	0	1	0	AXX	—
				8798/803	-14	+09	39	6	18	1	21	18	0	0	0	FKC	—
				8797	-33	+65	1	0	1	0	0	0	0	1	0	AXX	—
3702	1999 / 12 / 22	2010	128.68	8807	+11	-19	6	1	4	1	2	4	0	0	CAI	—	
				8806	+18	-13	42	5	8	1	34	8	0	0	0	FHC	—
				8804	-18	-05	1	1	0	0	0	0	1	0	0	HHX	—
				8798/803	-14	+46	23	4	13	1	10	13	0	0	0	FAC	—
3703	1999 / 12 / 23	2055	115.09	8807	+11	-05	5	1	4	1	1	4	0	0	CSI	—	
				8806	+19	-00	43	6	9	1	34	9	0	0	0	FKC	—
				8804	-18	+09	2	1	0	1	2	0	0	0	0	HKX	—
				8798/803	-14	+60	11	2	3	1	8	3	0	0	0	EAI	—
3704	1999 / 12 / 27	2025	62.68	8810	+38	-46	12	4	6	1	6	6	0	0	EKC	—	
				8809	+23	-30	4	1	3	1	1	3	0	0	0	CSI	—
				8806	+19	+52	23	5	10	1	13	10	0	0	0	FHC	—
				8804	-18	+61	1	1	0	0	0	0	1	0	0	HHX	—
3705	1999 / 12 / 29	2020	36.38	8814	+11	-74	1	1	0	0	0	0	1	0	HSX	—	
				8813	-14	-66	1	0	1	0	0	0	0	1	0	AXX	—
				8810	+36	-21	14	2	5	1	9	5	0	0	0	EKI	—
				8812	-29	+18	1	0	1	0	0	0	0	1	0	AXX	—
				8806	+19	+80	1	1	0	0	0	0	1	0	0	HSX	—