



Georgi Dobrovolski Solar Observatory

Sunspot Co-ordinates and Classifications

2003

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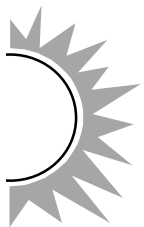


Georgi Dobrovolski Solar Observatory

REGION CO-ORDINATES AND CLASSIFICATIONS FOR JANUARY 2003

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) .
 L = Carrington Longitude .

OBS	DATE	UT	CM	REG.No	B	CMD	L	f	p	s	gr	grp	grf	efp	ef	Class.	Remarks
4205	2003 / 01 / 01	1915	291.6	0239	-09	+00	292	10	2	4	1	6	4	0	0	DAI	—
				0234	+19	+29	321	1	1	0	0	0	0	1	0	HSX	—
4206	2003 / 01 / 02	2005	278.0	0242	-08	-64	214	1	0	1	0	0	0	0	1	AXX	—
				0243	-19	+18	296	2	0	2	1	0	2	0	0	BXO	—
				0239	-09	+14	292	6	2	3	1	3	3	0	0	DAI	—
				0241	-25	+37	315	1	1	0	0	0	0	1	0	HSX	small
				0234	+19	+44	322	1	1	0	0	0	0	1	0	HSX	—
4207	2003 / 01 / 06	1920	225.7	0247	-17	-76	150	1	0	1	0	0	0	0	1	AXX	—
				0245	+11	-36	190	4	1	1	1	3	1	0	0	CAO	—
				0244	-23	-17	209	9	3	3	1	6	3	0	0	DAC	—
				0246	+08	-13	213	3	1	1	1	2	1	0	0	CAO	—
				0242	-08	-10	216	24	5	9	1	15	9	0	0	DAC	—
				?	-02	+56	282	2	1	1	1	1	1	0	0	CSO	—
				0239	-07	+64	290	3	1	2	1	1	2	0	0	CSI	—
0243	-19	+70	296	5	3	2	1	3	2	0	0	DSC	—				
4208	2003 / 01 / 10	1925	173.0	0254	-15	-75	098	1	1	0	0	0	0	1	0	HSX	—
				0251	-13	-47	126	12	2	5	1	7	5	0	0	DAI	—
				0250	-26	-40	133	6	1	2	1	4	2	0	0	CAI	—
				0247	-15	-23	150	24	6	8	1	16	8	0	0	EAC	—
				0253	+11	+33	206	5	2	2	1	3	2	0	0	DAI	—
				0242	-08	+45	218	14	5	6	1	8	6	0	0	DAC	—
4209	2003 / 01 / 14	1945	120.1	0259	+13	-75	045	1	0	1	0	0	0	0	1	AXX	—
				0258	+07	-59	061	3	1	1	1	2	1	0	0	CAO	—
				0256	-16	-31	089	1	1	0	0	0	0	1	0	HSX	—
				0254	-14	-20	100	2	1	0	1	2	0	0	0	HAX	—
				0257	+16	-12	108	3	0	3	1	0	3	0	0	BXI	—
				0251	-14	+02	122	2	0	2	1	0	2	0	0	BXO	—
				0255	-13	+09	129	15	4	7	1	8	7	0	0	DSC	—
				0250	-26	+09	129	4	1	2	1	2	2	0	0	CAI	—
				0247	-17	+30	150	17	4	6	1	11	6	0	0	DAC	—

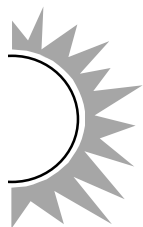


Georgi Dobrovolski Solar Observatory

REGION CO-ORDINATES AND CLASSIFICATIONS FOR

JANUARY 2003 *continued.*

OBS	DATE	UT	CM	REG.No	B	CMD	L	f	p	s	gr	grfp	grf	efp	ef	Class.	Remarks
4210	2003 / 01 / 15	1950	106.9	0260	+14	-80	027	1	1	0	0	0	0	1	0	HSX	—
				0259	+11	-61	046	3	1	1	1	2	1	0	0	CAO	—
				0258	+07	-47	060	1	1	0	0	0	0	1	0	HSX	—
				0256	-17	-19	088	1	1	0	0	0	0	1	0	HSX	—
				0254	-15	-07	100	2	1	0	1	2	0	0	0	HAX	—
				0257	+16	+00	107	2	0	2	1	0	2	0	0	BXO	—
				0251	-15	+11	118	4	1	2	1	2	2	0	0	CAI	small
				0255	-13	+20	127	8	3	4	1	4	4	0	0	DAC	—
				0250	-24	+21	128	5	1	3	1	2	3	0	0	CAI	—
				0247	-16	+43	150	4	2	2	1	2	2	0	0	DSI	—
4211	2003 / 01 / 16	1955	93.7	0260	+14	-68	026	3	1	0	1	3	0	0	0	HAX	—
				0259	+10	-44	050	8	2	6	1	2	6	0	0	DSI	small
				0258	+08	-30	064	1	1	0	0	0	0	1	0	HSX	—
				0256	-16	-06	088	3	1	1	1	2	1	0	0	CAO	—
				0254	-14	+08	102	2	1	0	1	2	0	0	0	HAX	—
				0257	+15	+16	110	1	0	1	0	0	0	0	1	AXX	—
				0251	-15	+25	119	1	0	1	0	0	0	0	1	AXX	small
				0250	-27	+33	127	4	1	2	1	2	2	0	0	CAI	—
				0255	-13	+36	130	7	2	3	1	4	3	0	0	DAI	—
				0247	-15	+61	155	2	1	1	1	1	1	0	0	CSO	—
4212	2003 / 01 / 18	1950	67.4	0260	+14	-42	025	2	1	0	1	2	0	0	0	HAX	—
				0259	+10	-14	053	9	2	3	1	6	3	0	0	DAI	—
				0258	+07	-01	066	3	1	1	1	2	1	0	0	CAO	—
				0256	-16	+23	090	2	0	2	1	0	2	0	0	BXO	—
				0261	+26	+31	098	1	0	1	0	0	0	0	1	AXX	—
				0254	-14	+35	102	2	1	0	1	2	0	0	0	HAX	—
				0257	+16	+46	113	4	0	4	1	0	4	0	0	BXI	—
				0250	-27	+61	128	5	2	2	1	3	2	0	0	DAI	—
				0255	-13	+65	132	1	1	0	0	0	0	1	0	HSX	—

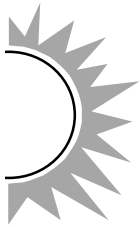


Georgi Dobrovolski Solar Observatory

REGION CO-ORDINATES AND CLASSIFICATIONS FOR

JANUARY 2003 continued.

OBS	DATE	UT	CM	REG.No	B	CMD	L	f	p	s	gr	grfp	grf	efp	ef	Class.	Remarks
4213	2003 / 01 / 19	2025	53.9	0260	+14	-29	025	7	2	2	1	5	2	0	0	DAI	tight
				0259	+10	-01	053	9	2	7	1	2	7	0	0	DSI	—
				0263	-13	+08	062	1	0	1	0	0	0	0	1	AXX	—
				0258	+07	+12	066	1	1	0	0	0	0	1	0	HSX	—
				0262	-05	+42	096	3	2	0	1	3	0	0	0	DAO	small
				0261	+26	+44	098	2	1	1	1	1	1	0	0	CSO	small
				0254	-14	+48	102	1	1	0	0	0	0	1	0	HSX	—
				0257	+16	+59	113	2	0	2	1	0	2	0	0	BXO	—
				0250	-27	+74	128	2	1	0	1	2	0	0	0	HAX	—
				0255	-13	+78	132	2	1	1	1	1	1	0	0	CSO	—
4214	2003 / 01 / 25	2005	335.1	0269	-08	-28	307	5	2	2	1	3	2	0	0	DAI	—
				0267	-20	-19	316	12	3	8	1	4	8	0	0	EAC	small
				0273	+08	-11	324	3	0	3	1	0	3	0	0	BXI	—
				0266E*	-22	+02	337	2	0	2	1	0	2	0	0	BXO	—
				0266	-20	+14	349	18	3	8	1	10	8	0	0	DAC	—
				0268	+14	+26	001	7	2	3	1	4	3	0	0	DAI	—
4215	2003 / 01 . 27	2100	308.3	0272	-08	-13	295	1	1	0	0	0	0	1	0	HSX	—
				0269	-07	-00	308	6	2	4	1	2	4	0	0	DSI	small
				0267	-19	+11	319	2	1	0	1	2	0	0	0	HAX	—
				0273	+06	+16	324	9	2	5	1	4	5	0	0	DAI	—
				0271	-05	+33	341	2	1	1	1	1	1	0	0	CSO	—
				0266	-21	+38	346	7	2	4	1	3	4	0	0	DAI	—
				0270	-03	+48	356	2	1	1	1	1	1	0	0	CSO	—
				0268	+16	+54	002	3	2	0	1	3	0	0	0	DAO	—
4216	2003 / 01 / 29	1945	282.6	0274	-07	-60	223	1	1	0	0	0	0	1	0	HSX	—
				0275	-11	+05	288	1	0	1	0	0	0	0	1	AXX	—
				0272	-06	+12	295	14	5	6	1	8	6	0	0	DAC	small
				0269	-07	+26	309	1	1	0	0	0	0	1	0	HSX	—
				0267	-19	+34	317	1	0	1	0	0	0	0	1	AXX	—
				0273	+06	+42	325	11	5	3	1	8	3	0	0	DAC	—
				0271	-06	+59	342	5	2	2	1	3	2	0	0	DAI	—
				0266	-21	+65	348	2	1	0	1	2	0	0	0	HAX	—

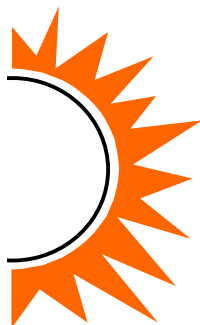


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REGION CO-ORDINATES AND CLASSIFICATIONS FOR

JANUARY 2003 continued.

OBS	DATE	UT	CM	REG.No	B	CMD	L	f	p	s	gr	grfp	grf	efp	ef	Class.	Remarks
4217	2003 / 01 / 30	1955	269.4	0274	-07	-48	221	4	1	3	1	1	3	0	0	CSI	—
				?	+18	-04	265	2	0	2	1	0	2	0	0	BXO	—
				?	-17	-02	267	3	0	3	1	0	3	0	0	BXI	—
				0272	-06	+29	298	12	2	8	1	4	8	0	0	DAI	—
				0269	-07	+42	311	1	1	0	0	0	0	1	0	HSX	—
				0267	-17	+49	318	1	0	1	0	0	0	0	1	AXX	small
				0273	+06	+56	325	6	2	2	1	4	2	0	0	DAI	—
				0271	-06	+75	344	1	1	0	0	0	0	1	0	HSX	—
				0266	-21	+80	349	1	1	0	0	0	0	1	0	HSX	—



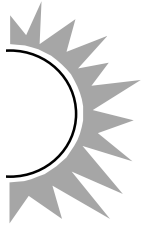
Georgi Dobrovolski Solar Observatory

REGION CO-ORDINATES AND CLASSIFICATIONS FOR

FEBRUARY 2003

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) .
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 L = Carrington Longitude .

OBS	DATE	UT	CM	REG.No	B	CMD	L	f	p	s	gr	grp	grf	efp	ef	Class.	Remarks	
4218	2003 / 02 / 01	1940	243.2	0276	-15	-81	162	3	2	0	1	3	0	0	0	DAO	—	
				0274	-07	-21	222	1	1	0	0	0	0	0	1	0	HSX	—
				?	-12	+10	253	1	0	1	0	0	0	0	0	1	AXX	—
				0272	-05	+54	297	5	2	1	1	4	1	0	0	0	DAI	—
				0269	-06	+69	312	1	1	0	0	0	0	0	1	0	HSX	—
4219	2003 / 02 / 06	1940	177.3	0281	-14	-75	102	1	1	0	0	0	0	1	0	HSX	—	
				0283	+18	-56	121	8	3	3	1	5	3	0	0	DAC	—	
				?	-26	-49	128	1	0	1	0	0	0	0	1	AXX	small	
				0277	-18	-43	134	2	0	2	1	0	2	0	0	0	BXO	—
				0280	-08	-31	146	7	3	3	1	4	3	0	0	0	DAC	—
				0276	-13	-17	160	21	5	12	1	9	12	0	0	0	EAC	small
				0279	-13	+10	187	1	0	1	0	0	0	0	0	1	AXX	small
0274	-05	-48	225	4	2	2	1	2	2	0	0	0	DSI	—				
4220	2003 / 02 / 09	1955	137.7	0285	-11	-67	071	2	1	0	1	2	0	0	0	HAX	—	
				0281	-15	-35	103	1	1	0	0	0	0	1	0	HSX	small	
				0283	+00	-27	111	5	3	1	1	4	1	0	0	DAC	small	
				?	+22	-24	114	1	0	1	0	0	0	0	1	AXX	—	
				0278	+17	-14	124	6	1	4	1	2	4	0	0	0	CAI	small
				0282	+11	-10	128	1	0	1	0	0	0	0	0	1	AXX	—
				0277	-19	-08	130	4	1	3	1	1	3	0	0	0	CSI	small
				0280	-07	+11	149	4	3	1	1	3	1	0	0	0	DSC	small
				0284	+13	+24	162	1	0	1	0	0	0	0	0	1	AXX	—
0276	-12	+24	162	8	2	5	1	3	5	0	0	0	EAI	small				



Georgi Dobrovolski Solar Observatory

REGION CO-ORDINATES AND CLASSIFICATIONS FOR

FEBRUARY 2003 *continued.*

OBS	DATE	UT	CM	REG.No	B	CMD	L	f	p	s	gr	grfp	grf	efp	ef	Class.	Remarks	
4221	2003 / 02 / 11	2020	111.1	0285	-11	-40	071	2	2	0	1	2	0	0	0	DSO	—	
				0281	-15	-09	102	1	1	0	0	0	0	0	1	0	HSX	—
				0283	+00	-02	109	1	0	1	0	0	0	0	0	1	AXX	—
				0278	+18	+14	125	1	1	0	0	0	0	0	1	0	HSX	—
				0282	-10	+17	128	8	2	5	1	3	5	0	0	0	DAI	—
				0277	-18	+19	130	4	2	1	1	3	1	0	0	0	DAI	small
				0280	-06	+40	151	6	1	5	1	1	5	0	0	0	CSI	small
				0276	-14	+49	160	5	2	2	1	3	2	0	0	0	DAI	—
4222	2003 / 02 / 13	2025	84.8	0285	-11	-14	071	1	1	0	0	0	0	1	0	HSX	—	
				0281	-15	+17	102	1	1	0	0	0	0	1	0	HSX	small	
				0283	+00	+24	109	1	0	1	0	0	0	0	1	AXX	—	
				0278	+18	+40	125	1	1	0	0	0	0	1	0	HSX	small	
				0282	+10	+43	128	4	2	2	1	2	2	0	0	0	DSI	—
				0276	-14	+75	160	2	1	1	1	1	1	0	0	0	CSO	—
				4223	2003 / 02 / 14	2010	71.7	0285	-11	-01	071	2	1	1	1	1	1	0
4223	2003 / 02 / 14	2010	71.7	0281	-15	+30	102	1	1	0	0	0	0	1	0	HSX	—	
				0283	+00	+37	109	1	0	1	0	0	0	0	1	AXX	small	
				0278	+18	+53	125	1	0	1	0	0	0	0	1	AXX	—	
				0282	+10	+56	128	6	3	2	1	4	2	0	0	0	EAC	small
				0276	-14	+88	160	1	1	0	0	0	0	1	0	0	HSX	—
4224	2003 / 02 / 15	2025	58.4	0285	-11	+13	071	3	1	2	1	1	2	0	0	CSI	small	
				0282	+10	+70	128	4	2	0	1	4	0	0	0	0	DAO	small
4225	2003 / 02 / 17	2020	32.1	0288	+12	-46	346	6	2	3	1	3	3	0	0	DAI	small	
4226	2003 / 02 / 28	1955	247.5	0296	+12	-76	171	6	3	0	1	6	0	0	0	EHC	—	
				0295	-17	-58	189	1	1	0	0	0	0	1	0	HSX	—	
				0294	-07	-32	215	7	2	4	1	3	4	0	0	0	DAI	—
				?	-19	+15	262	1	0	1	0	0	0	0	0	1	AXX	—

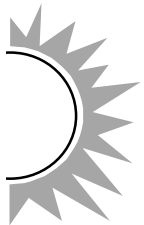


Georgi Dobrovolski Solar Observatory

REGION CO-ORDINATES AND CLASSIFICATIONS FOR MARCH 2003

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 .
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OBS	DATE	UT	CM	REG.No	B	CMD	L	f	p	s	gr	grp	grf	efp	ef	Class.	Remarks
4227	2003 / 03 / 03	1940	208.1	0299	+12	-50	158	4	2	1	1	3	1	0	0	DAI	—
				0297	-16	-46	162	2	2	0	1	2	0	0	0	DSO	—
				0296	+11	-38	170	11	4	4	1	7	4	0	0	DHC	—
				0298	-08	-21	187	5	2	2	1	3	2	0	0	DAI	—
				0295	-18	-16	192	3	1	1	1	2	1	0	0	CAO	—
				0294	-07	+10	218	2	0	2	1	0	2	0	0	BXO	—
4228	2003 / 03 / 16	2020	36.4	0314	-14	+24	060	22	4	6	1	16	6	0	0	EAC	—
				0313	+33	+36	072	1	1	0	0	0	0	1	0	HSX	—
				0306	+08	+43	079	8	3	1	1	7	1	0	0	DKC	—
				0311	-10	+48	084	3	1	2	1	1	2	0	0	CSI	—
4229	2003 / 03 / 19	2000	357.1	0316	-12	-54	303	1	1	0	0	0	0	1	0	HSX	small
				0317	+04	-19	338	1	1	0	0	0	0	1	0	HSX	small
				0314	-13	+64	061	18	4	7	1	11	7	0	0	EAC	—
				0306	+08	+86	083	1	1	0	0	0	0	1	0	HHX	—
4230	2003 / 03 / 22	0210	327.3	0316	-11	-23	304	1	1	0	0	0	0	1	0	HSX	—
4231	2003 / 03 / 23	2200	303.2	0318	-15	-63	240	2	2	0	1	2	0	0	0	DSO	tight
				0319	+13	-54	249	5	2	2	1	3	2	0	0	DAI	—
4232	2003 / 03 / 24	2025	290.9	0321	+05	-80	211	3	3	0	1	3	0	0	0	DSC	—
				0318	-15	-51	240	3	2	1	1	2	1	0	0	DSI	—
				0319	+13	-42	249	4	1	3	1	1	3	0	0	CSI	—
				0320	+05	-09	282	2	0	2	1	0	2	0	0	BXO	—
				?	+24	+09	300	1	0	1	0	0	0	0	1	AXX	small
4233	2003 / 03 / 28	2050	237.9	0326	-12	-76	162	1	1	0	0	0	0	1	0	HSX	—
				0325	+12	-67	171	2	1	0	1	2	0	0	0	HKX	—
				0324	-14	-55	183	3	2	0	1	3	0	0	0	DAO	—
				0321	+04	-23	215	17	4	11	1	6	11	0	0	DKC	—
				0323	-09	-13	225	15	5	9	1	6	9	0	0	DAC	—
				0318	-15	+04	242	7	2	2	1	5	2	0	0	DAI	—
				0319	+12	+16	254	21	4	6	1	15	6	0	0	EKC	—
				0320	+06	+46	284	8	2	5	1	3	5	0	0	DAI	—



Georgi Dobrovolski Solar Observatory

REGION CO-ORDINATES AND CLASSIFICATIONS FOR

MARCH 2003 continued.

OBS	DATE	UT	CM	REG.No	B	CMD	L	f	p	s	gr	grp	grf	efp	ef	Class.	Remarks
4234	2003 / 03 / 31	2020	198.6	0326	-13	-35	164	1	1	0	0	0	0	1	0	HSX	—
				0325	+12	-29	170	6	2	2	1	4	2	0	0	DKI	—
				0324	-12	-09	190	10	2	4	1	6	4	0	0	DAI	—
				0327	-07	+09	208	2	0	2	1	0	2	0	0	BXO	—
				0321	+06	+13	212	9	3	2	1	7	2	0	0	DAC	—
				0323	-08	+26	225	16	4	6	1	10	6	0	0	EAC	—
				?	+22	+42	241	1	0	1	0	0	0	0	1	AXX	big
				0318	-13	+46	245	5	0	5	1	0	5	0	0	BXI	—
				0319	+13	+58	257	2	1	0	1	2	0	0	0	HAX	—



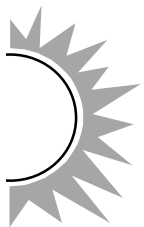
Georgi Dobrovolski Solar Observatory

REGION CO-ORDINATES AND CLASSIFICATIONS FOR

APRIL 2003

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) .
 L = Carrington Longitude .

OBS	DATE	UT	CM	REG.No	B	CMD	L	f	p	s	gr	grp	grf	efp	ef	Class.	Remarks
4235	2003 / 04 / 01	2025	185.4	0326	-13	-23	162	1	1	0	0	0	0	1	0	HSX	—
				0325	+12	-16	169	4	1	1	1	3	1	0	0	CKO	—
				0324	-11	+06	191	10	2	5	1	5	5	0	0	DAI	—
				0327	-06	+23	208	3	2	0	1	3	0	0	0	DAO	—
				0321	+06	+27	212	11	2	5	1	6	5	0	0	CAI	class correct
				0323	-08	+41	226	25	7	8	1	17	8	0	0	EAC	—
				0318	-12	+63	248	2	0	2	1	0	2	0	0	BXO	small
0319	+12	+72	257	2	1	0	1	2	0	0	0	HAX	—				
4236	2003 / 04 / 02	2115	171.8	0329	+01	-33	139	2	1	1	1	1	1	0	0	CSO	small
				0326	-11	-11	161	1	1	0	0	0	0	1	0	HSX	—
				0325	+10	-07	165	12	3	7	1	5	7	0	0	DKC	—
				0324	-12	+19	191	19	5	6	1	13	6	0	0	DAC	—
				0327	-05	+36	208	3	2	1	1	2	1	0	0	DSI	—
				0321	+07	+38	210	12	3	5	1	7	5	0	0	DAC	—
				0323	-07	+54	226	17	5	8	1	9	8	0	0	EAC	—
4237	2003 / 04 / 06	2135	118.8	0332	+11	-74	045	1	1	0	0	0	0	1	0	HSX	—
				0330	+07	-38	081	2	2	0	1	2	0	0	0	DHO	—
				0331	-07	+20	139	5	1	3	1	2	3	0	0	CAI	—
				0326	-11	+42	161	1	1	0	0	0	0	1	0	HSX	—
				0325	+13	+49	168	3	1	0	1	3	0	0	0	HKX	—
				0324	-11	+73	192	4	2	2	1	2	2	0	0	DSI	—
4238	2003 / 04 / 07	2035	106.1	0332	+11	-60	046	1	0	1	0	0	0	0	1	AXX	—
				0330	+07	-26	080	4	1	3	1	1	3	0	0	CHI	—
				0331	-07	+32	138	3	1	1	1	2	1	0	0	CAO	—
				0325	+15	+61	167	3	1	0	1	3	0	0	0	HKX	—
				0324	-13	+83	189	1	1	0	0	0	0	1	0	HSX	—

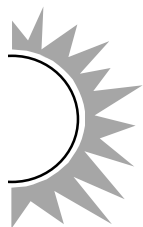


Georgi Dobrovolski Solar Observatory

REGION CO-ORDINATES AND CLASSIFICATIONS FOR

APRIL 2003 continued.

OBS	DATE	UT	CM	REG.No	B	CMD	L	f	p	s	gr	grfp	grf	efp	ef	Class.	Remarks
4239	2003 / 04 / 08	2115	92.6	0332	+11	-47	046	2	1	1	1	1	1	0	0	CSO	small
				0330	+07	-12	081	4	1	3	1	1	3	0	0	CHI	—
				0331	-08	+46	139	1	1	0	0	0	0	1	0	HSX	small
				0325	+14	+75	168	2	1	0	1	2	0	0	0	HKX	—
4240	2003 / 04 / 09	2040	79.7	0334	-08	-84	356	1	1	0	0	0	0	1	0	HSX	—
				0332	+11	-33	047	2	1	1	1	1	1	0	0	CSO	—
				0330	+08	+00	080	8	1	7	1	1	7	0	0	CHI	—
				?	-04	+48	128	1	0	1	0	0	0	0	1	AXX	—
0331	-08	+60	140	3	2	1	1	2	1	0	0	DSI	—				
4241	2003 / 04 / 10	2050	66.4	0334	-08	-70	356	5	1	1	1	4	1	0	0	CAO	—
				0332	+11	-19	047	2	0	2	1	0	2	0	0	BXO	—
				?	-20	+04	070	1	0	1	0	0	0	0	1	AXX	small
				0330	+07	+15	081	6	1	5	1	1	5	0	0	CHI	—
4242	2003 / 04 / 11	2025	53.4	0334	-08	-57	356	5	1	1	1	4	1	0	0	CAI	—
				0330	+07	+29	082	7	2	4	1	3	4	0	0	DHI	—
4243	2003 / 04 / 12	2040	40.1	0335	-21	-71	329	2	0	2	1	0	2	0	0	BXO	—
				0334	-08	-45	355	4	1	2	1	2	2	0	0	CAI	—
				0332	+12	+05	045	3	1	2	1	1	2	0	0	CSI	resighted
				0330	+07	+41	081	8	3	4	1	4	4	0	0	DHC	—
4244	2003 / 04 / 13	2055	26.8	0335	-21	-58	329	4	2	1	1	3	1	0	0	DAI	—
				0334	-08	-31	356	5	1	1	1	4	1	0	0	CAO	—
				0332	+12	+18	045	6	1	4	1	2	4	0	0	CAI	—
				0330	+07	+55	082	2	1	1	1	1	1	0	0	CHO	—
4245	2003 / 04 / 16	2030	347.4	?	+12	-12	335	1	0	1	0	0	0	0	1	AXX	small
				0334	-10	+10	357	3	1	1	1	2	1	0	0	CAO	—
4246	2003 / 04 / 17	2045	334.0	0336	+12	-77	257	1	1	0	0	0	0	1	0	HSX	—
				0335	-22	-08	326	5	0	5	1	0	5	0	0	BXI	—
				0334	-08	+22	356	5	1	3	1	2	3	0	0	CAI	—
4247	2003 / 04 / 21	2045	281.2	0341	-10	-75	206	1	0	1	0	0	0	0	1	AXX	—
				0340	-04	-56	225	1	0	1	0	0	0	0	1	AXX	—
				0337	-13	-44	237	13	4	7	1	6	7	0	0	DKC	—
				0336	+13	-24	257	3	1	0	1	3	0	0	0	HAX	—
				0338	+18	+04	285	8	3	3	1	5	3	0	0	DAC	—
				0339	+16	+57	338	4	1	2	1	2	2	0	0	CAI	—



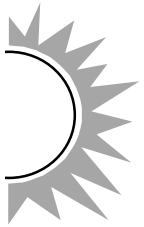
Georgi Dobrovolski Solar Observatory

REGION CO-ORDINATES AND CLASSIFICATIONS FOR

APRIL 2003 continued.

OBS	DATE	UT	CM	REG.No	B	CMD	L	f	p	s	gr	grfp	grf	efp	ef	Class.	Remarks	
4248	2003 / 04 / 22	2120	267.7	0341	-10	-63	205	1	0	1	0	0	0	0	1	AXX	—	
				0340	-06	-45	223	1	0	1	0	0	0	0	0	1	AXX	—
				0337	-14	-31	237	11	2	6	1	5	6	0	0	0	DKI	—
				0336	+14	-12	256	3	2	0	1	3	0	0	0	0	DAO	—
				0338	+18	+18	286	23	3	10	1	13	10	0	0	0	EAC	—
				0339	+16	+69	337	2	1	1	1	1	1	0	0	0	CSO	—
4249	2003 / 04 / 24	2125	241.2	0346	+16	-75	166	1	1	0	0	0	0	1	0	HSX	—	
				0345	-17	-75	166	3	2	0	1	3	0	0	0	0	DAO	—
				0343	+06	-46	195	4	2	1	1	3	1	0	0	0	DAI	—
				0344	+16	-40	201	10	3	5	1	5	5	0	0	0	DAC	—
				0337	-14	-01	240	14	3	7	1	7	7	0	0	0	DKC	—
				0336	+14	+15	256	4	2	2	1	2	2	0	0	0	DSI	—
				0338	+18	+44	285	19	6	10	1	9	10	0	0	0	EAC	—
4250	2003 / 04 / 25	2115	228.1	0349	-14	-74	154	1	0	1	0	0	0	0	1	AXX	—	
				0346	+16	-62	166	1	1	0	0	0	0	1	0	0	HSX	—
				0345	-17	-62	166	5	2	1	1	4	1	0	0	0	DAI	—
				0343	+06	-33	195	3	0	3	1	0	3	0	0	0	BXO	class correct
				0344	+16	-27	201	16	3	4	1	12	4	0	0	0	DAC	—
				?	+02	-04	224	2	0	2	1	0	2	0	0	0	BXO	small
				0337	-14	+12	240	6	2	2	1	4	2	0	0	0	DKI	—
				0338	+18	+57	285	21	7	6	1	15	6	0	0	0	EAC	small
4251	2003 / 04 / 27	2040	202.0	0349	-14	-48	154	13	4	5	1	8	5	0	0	DAC	—	
				0348	-36	-46	156	4	2	2	1	2	2	0	0	0	DSI	small
				0346	+16	-37	165	1	1	0	0	0	0	1	0	0	HSX	—
				0345	-17	-36	166	5	2	0	1	5	0	0	0	0	DAO	—
				0347	-20	-24	178	3	0	3	1	0	3	0	0	0	BXI	—
				0344	+16	-01	201	12	2	3	1	9	3	0	0	0	DAI	—
				0337N*	-14	+37	239	8	3	3	1	5	3	0	0	0	DAC	—
				0337S*	-18	+39	241	6	3	2	1	4	2	0	0	0	DAC	—
				0338	+18	+83	285	1	1	0	0	0	0	1	0	0	HSX	—

* GDSO designation



Georgi Dobrovolski Solar Observatory

REGION CO-ORDINATES AND CLASSIFICATIONS FOR

APRIL 2003 *continued.*

OBS	DATE	UT	CM	REG.No	B	CMD	L	f	p	s	gr	grp	grf	efp	ef	Class.	Remarks
4252	2003 / 04 / 28	2140	188.2	0349	-14	-34	154	19	6	5	1	14	5	0	0	DAC	—
				0348	-36	-32	156	2	2	0	1	2	0	0	0	DSO	—
				0346	+16	-23	165	1	1	0	0	0	0	1	0	HSX	—
				0345	-17	-22	166	9	2	3	1	6	3	0	0	DAI	—
				0344	+16	+13	201	12	2	3	1	9	3	0	0	DKI	—
				0340	-09	+36	224	10	3	4	1	6	4	0	0	DAC	—
				0337N	-14	+51	239	6	2	1	1	5	1	0	0	DAI	—
				0337S	-18	+53	241	5	2	1	1	4	1	0	0	DAI	—



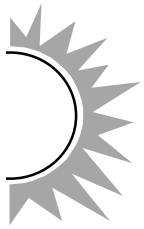
Georgi Dobrovolski Solar Observatory

REGION CO-ORDINATES AND CLASSIFICATIONS FOR

MAY 2003

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) .
 L = Carrington Longitude .

OBS	DATE	UT	CM	REG.No	B	CMD	L	f	p	s	gr	grp	grf	efp	ef	Class.	Remarks	
4253	2003 / 05 / 03	2045	122.6	0354	+19	-74	049	1	0	1	0	0	0	0	1	AXX	big	
				0351	+08	-41	082	1	1	0	0	0	0	0	1	0	HHX	—
				0348	-35	+24	147	15	5	5	1	10	5	0	0	EAC	—	
				0349	-14	+31	154	35	8	12	1	23	12	0	0	FKC	—	
				0346	+14	+37	160	1	1	0	0	0	0	1	0	HSX	—	
				0345	-17	+43	166	3	2	0	1	3	0	0	0	DAO	—	
				0344	+16	+78	201	1	1	0	0	0	0	1	0	HSX	—	
4254	2003 / 05 / 04	2120	109.1	0355	+12	-61	048	1	0	1	0	0	0	0	1	AXX	—	
				0354	+19	-60	049	1	1	0	0	0	0	1	0	HSX	—	
				0351	+08	-27	082	1	1	0	0	0	0	1	0	HHX	—	
				0348	-35	+42	151	24	7	5	1	19	5	0	0	FAC	—	
				0349	-15	+45	154	33	7	9	1	24	9	0	0	FKC	—	
				0346	+14	+52	161	1	1	0	0	0	0	1	0	HSX	—	
				0345	-17	+58	167	4	2	1	1	3	1	0	0	DAI	—	
4255	2003 / 05 / 05	2100	96.1	0354	+19	-49	047	1	1	0	0	0	0	1	0	HSX	—	
				0355	+12	-47	049	1	0	1	0	0	0	0	1	AXX	big	
				0351	+08	-14	082	1	1	0	0	0	0	1	0	HHX	—	
				0348	-35	+53	149	27	5	6	1	21	6	0	0	FAC	—	
				0349	-14	+58	154	26	6	6	1	20	6	0	0	FKC	—	
				0346	+14	+65	161	1	1	0	0	0	0	1	0	HSX	—	
				0345	-17	+70	166	2	1	1	1	1	1	0	0	CSO	—	
4256	2003 / 05 / 07	2105	69.6	0354	+19	-24	046	2	1	1	1	1	1	0	0	CSO	—	
				?	-14	+08	078	2	0	2	1	0	2	0	0	BXO	—	
				0351	+08	+12	082	3	1	2	1	1	2	0	0	CHI	—	
				0348	-34	+77	147	11	3	5	1	6	5	0	0	FAC	—	
				0349	-14	+83	153	1	1	0	0	0	0	1	0	HSX	small	

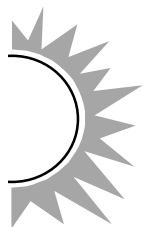


Georgi Dobrovolski Solar Observatory

REGION CO-ORDINATES AND CLASSIFICATIONS FOR

MAY 2003 *continued.*

OBS	DATE	UT	CM	REG.No	B	CMD	L	f	p	s	gr	grfp	grf	efp	ef	Class.	Remarks
4257	2003 / 05 / 09	2125	42.9	0356	+15	-66	337	2	1	1	1	1	1	0	0	CSO	—
				0351	+10	+38	081	1	1	0	0	0	0	1	0	HHX	—
4258	2003 / 05 / 10	2105	29.9	0356	+15	-50	340	1	1	0	0	0	0	1	0	HSX	—
				0351	+09	+52	082	1	1	0	0	0	0	1	0	HHX	—
4259	2003 / 05 / 12	2130	3.2	0357	-16	-58	305	5	2	2	1	3	2	0	0	DAI	—
				0356	+17	-24	339	4	1	3	1	1	3	0	0	CSI	—
				0359	-16	+16	019	3	1	2	1	1	2	0	0	CSI	—
				0351	+08	+80	083	1	1	0	0	0	0	1	0	HHX	—
4260	2003 / 05 / 13	2125	350.1	0357	-16	-46	304	5	2	2	1	3	2	0	0	DAI	—
				?	-07	-21	329	2	0	2	1	0	2	0	0	BXO	—
				0358	+09	-13	337	9	2	2	1	7	2	0	0	DAI	—
				0356	+17	-12	338	8	1	4	1	4	4	0	0	CAI	—
				0360	-03	+04	354	1	0	1	0	0	0	0	1	AXX	small
4261	2003 / 05 / 14	2125	336.8	0357	-16	-33	304	4	2	2	1	2	2	0	0	DSI	—
				0358	+09	+00	337	8	3	4	1	4	4	0	0	DAC	—
				0356	+17	+01	338	6	1	3	1	3	3	0	0	CAI	—
				0360	-03	+17	354	1	0	1	0	0	0	0	1	AXX	big
4262	2003 / 05 / 15	2135	323.5	0362	-10	-80	244	3	2	0	1	3	0	0	0	EAO	—
				0361	+09	-42	282	5	0	5	1	0	5	0	0	BXI	—
				0357	-17	-20	304	2	1	0	1	2	0	0	0	HAX	—
				0358	+08	+14	338	4	1	2	1	2	2	0	0	CAI	—
				0356	+18	+14	338	5	1	3	1	2	3	0	0	CAI	—
4263	2003 / 05 / 16	2145	310.2	0362	-11	-66	244	6	2	0	1	6	0	0	0	EAO	—
				0361	+08	-27	283	2	0	2	1	0	2	0	0	BXO	—
				0357	-17	-09	301	5	2	1	1	4	1	0	0	DAI	—
				0356	+18	+27	337	2	1	1	1	1	1	0	0	CSO	small
				0358	+08	+29	339	3	1	1	1	2	1	0	0	CAO	—
4264	2003 / 05 22	2135	230.9	0368	-32	-78	153	1	1	0	0	0	0	1	0	HHX	—
				0367	-14	-71	160	1	1	0	0	0	0	1	0	HSX	—
				0370	+16	-68	163	1	0	1	0	0	0	0	1	AXX	—
				0365	-07	-40	191	3	1	1	1	2	1	0	0	CAO	—
				?	-26	-29	202	1	0	1	0	0	0	0	1	AXX	small
				0362	-11	+13	244	13	4	7	1	6	7	0	0	DAC	—
				0364	-26	+65	296	1	0	1	0	0	0	0	1	AXX	small



Georgi Dobrovolski Solar Observatory

REGION CO-ORDINATES AND CLASSIFICATIONS FOR

MAY 2003 continued.

OBS	DATE	UT	CM	REG.No	B	CMD	L	f	p	s	gr	grfp	grf	efp	ef	Class.	Remarks	
4265	2003 / 05 / 24	2135	204.5	0368	-33	-52	152	1	1	0	0	0	0	1	0	HHX	—	
				0367	-14	-44	160	1	1	0	0	0	0	0	1	0	HSX	—
				0365	-08	-20	184	7	2	3	1	4	3	0	0	0	DAI	—
				?	-06	-12	192	1	0	1	0	0	0	0	0	1	AXX	small
				?	-12	+16	220	1	0	1	0	0	0	0	0	1	AXX	small
4266	2003 / 05 / 25	2130	191.3	0368	-33	-39	152	2	1	0	1	2	0	0	0	HKX	—	
				0367	-14	-31	160	4	1	1	1	3	1	0	0	CAO	—	
				0366	+11	-25	166	2	0	2	1	0	2	0	0	BXO	—	
				0365	-08	-10	181	22	5	8	1	14	8	0	0	DAC	—	
4267	2003 / 05 / 27	2125	164.9	0373	+08	-83	082	1	1	0	0	0	0	1	0	HSX	—	
				0368	-32	-13	152	3	2	1	1	2	1	0	0	DSI	—	
				0367	-14	-06	159	5	1	3	1	2	3	0	0	CAI	—	
				0372	-14	+01	166	2	0	2	1	0	2	0	0	BXO	—	
				0365	-07	+17	182	25	2	4	1	21	4	0	0	DKI	—	
4268	2003 / 05 / 28	2140	151.5	0373	+08	-69	082	3	1	2	1	1	2	0	0	CSI	—	
				0368	-32	+01	152	5	1	2	1	3	2	0	0	CAI	—	
				0367	-14	+08	159	1	1	0	0	0	0	1	0	HSX	—	
				0365	-07	+31	182	26	3	2	1	24	2	0	0	DKC	—	

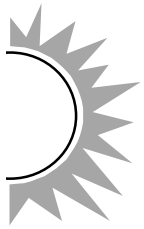


Georgi Dobrovolski Solar Observatory

REGION CO-ORDINATES AND CLASSIFICATIONS FOR JUNE 2003

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) .
 L = Carrington Longitude .

OBS	DATE	UT	CM	REG.No	B	CMD	L	f	p	s	gr	grp	grf	efp	ef	Class.	Remarks
4269	2003/06/01	2140	98.6	0375	+11	-76	023	3	2	0	1	3	0	0	0	DAO	—
				0373	+07	-17	082	8	3	5	1	3	5	0	0	DSC	—
				0368	-33	+49	148	1	0	1	0	0	0	0	1	AXX	—
4270	2003/06/02	2145	85.3	0375	+12	-65	020	5	2	1	1	4	1	0	0	DAI	—
				0376	-12	-14	071	5	2	2	1	3	2	0	0	DAI	—
				0373	+06	-01	084	10	2	7	1	3	7	0	0	DAI	—
4271	2003/06/06	2150	32.3	0380	-16	-82	310	2	2	0	1	2	0	0	0	DHO	—
				0378	+16	-58	334	2	2	0	1	2	0	0	0	DSO	—
				0377	+04	-44	348	6	2	3	1	3	3	0	0	DAI	—
				?	+11	-22	010	3	0	3	1	0	3	0	0	BXI	—
				0375	+12	-10	022	34	8	10	1	24	10	0	0	EKC	—
				0376	-11	+43	075	4	0	4	1	0	4	0	0	BXI	—
4272	2003/06/07	2140	19.1	0380	-16	-69	310	11	3	2	1	9	2	0	0	DKC	—
				0378	+17	-45	334	5	0	5	1	0	5	0	0	BXI	—
				0377	+04	-30	349	9	3	5	1	4	5	0	0	DSC	—
				?	+12	-09	010	1	0	1	0	0	0	0	1	AXX	small
				0375	+12	+03	022	39	11	13	1	26	13	0	0	EKC	—
				0376	-14	+42	061	2	1	1	1	1	1	0	0	CSO	—
4273	2003/06/08	2220	5.5	0380	-15	-58	308	17	4	3	1	14	3	0	0	EKC	—
				0378	+16	-30	336	1	0	1	0	0	0	0	1	AXX	big
				?	+15	-19	347	1	0	1	0	0	0	0	1	AXX	small
				0377	+04	-16	350	15	4	6	1	9	6	0	0	ESC	—
				0375	+13	+16	022	46	7	12	1	34	12	0	0	EKC	—
				0373	+07	+76	082	1	1	0	0	0	0	1	0	HSX	—



Georgi Dobrovolski Solar Observatory

REGION CO-ORDINATES AND CLASSIFICATIONS FOR

JUNE 2003 continued.

OBS	DATE	UT	CM	REG.No	B	CMD	L	f	p	s	gr	grfp	grf	efp	ef	Class.	Remarks		
4274	2003 / 06 / 10	2145	339.4	0380	-15	-31	308	36	8	14	1	22	14	0	0	EKC	—		
				0381	-18	-09	330	11	3	4	1	7	4	0	0	0	DAI	class correct	
				0378	+15	-03	336	1	0	1	0	0	0	0	0	1	AXX	small	
				0377	+04	+12	351	18	5	8	1	10	8	0	0	0	ESC	—	
				0382	-18	+14	353	4	0	4	1	0	4	0	0	0	BXI	—	
				0375	+12	+44	023	47	7	5	1	42	5	0	0	0	FKC	—	
4275	2003 / 06 / 11	2150	326.1	0380	-15	-17	309	42	9	19	1	23	19	0	0	FKC	—		
				0381	-19	+04	330	12	3	8	1	4	8	0	0	0	DAC	—	
				0378	+14	+11	337	1	0	1	0	0	0	0	0	1	AXX	big	
				0377	+03	+26	352	11	4	5	1	6	5	0	0	0	ESC	—	
				0382	-17	+28	354	3	2	1	1	2	1	0	0	0	DSI	—	
				0375	+12	+60	026	37	6	8	1	29	8	0	0	0	FKC	—	
4276	2003 / 06 / 12	2150	312.9	0380	-15	-05	308	45	9	13	1	32	13	0	0	FAC	—		
				0381	-18	+17	330	12	3	6	1	6	6	0	0	0	DAC	—	
				0378	+14	+24	337	7	2	2	1	5	2	0	0	0	DAI	—	
				0377	+03	+39	352	3	1	1	1	2	1	0	0	0	CAO	—	
				0382	-18	+43	356	8	2	3	1	5	3	0	0	0	DAI	—	
				0375	+11	+71	024	21	4	3	1	18	3	0	0	0	FKC	—	
4277	2003 / 06 / 15	2155	273.1	0385	+30	-32	241	6	2	2	1	4	2	0	0	DAI	—		
				0380	-17	+34	307	8	2	3	1	5	3	0	0	0	DAI	—	
				0381	-18	+59	332	3	2	1	1	2	1	0	0	0	DSI	small	
4278	2003 / 06 / 16	2315	259.1	0386	-07	-72	187	10	2	2	1	8	2	0	0	DAI	—		
				0385	+29	-18	241	6	2	3	1	3	3	0	0	0	DAI	—	
				?	+19	+03	262	1	0	1	0	0	0	0	0	1	AXX	small	
				?	-26	+15	274	3	1	2	1	1	2	0	0	0	0	CSI	—
				0383	+19	+39	298	1	0	1	0	0	0	0	0	0	1	AXX	big
				0380S*	-19	+50	309	1	1	0	0	0	0	0	1	0	0	HSX	—
4279	2003 / 06 / 18	2135	233.6	0387	+18	-64	170	5	2	1	1	4	1	0	0	DAI	—		
				0386	-07	-47	187	18	4	5	1	13	5	0	0	0	DAC	—	
				0388	-03	-23	211	3	1	2	1	1	2	0	0	0	0	CSI	—
				0385	+28	+07	241	4	2	0	1	4	0	0	0	0	0	DAO	—
				?	-26	+39	273	1	0	1	0	0	0	0	0	0	1	AXX	—
				0380	-17	+75	309	1	1	0	0	0	0	0	1	0	0	HSX	—

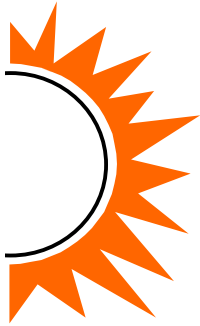
* GDSO designation



Georgi Dobrovolski Solar Observatory

REGION CO-ORDINATES AND CLASSIFICATIONS FOR JUNE 2003 continued.

OBS	DATE	UT	CM	REG.No	B	CMD	L	f	p	s	gr	grfp	grf	efp	ef	Class.	Remarks	
4280	2003 / 06 / 20	2155	206.9	0387	+18	-38	169	14	5	5	1	9	5	0	0	EAC	—	
				0386	-07	-19	188	15	2	4	1	11	4	0	0	DKI	—	
				0389	-12	-16	191	1	0	1	0	0	0	0	0	1	AXX	—
				0388	-03	+04	211	17	3	7	1	10	7	0	0	DAC	—	
4281	2003 / 06 / 21	2200	193.7	0387	+18	-25	169	13	4	5	1	8	5	0	0	EAC	—	
				0386	-07	-06	188	13	3	2	1	11	2	0	0	DAC	—	
				0389	-12	-03	191	2	0	2	1	0	2	0	0	BXO	—	
				0388	-03	+17	211	15	5	5	1	10	5	0	0	DAC	—	
4282	2003/06/24	2305	153.3	0393	-15	-72	081	2	2	0	1	2	0	0	0	DSO	—	
				0392	+07	-69	084	1	0	1	0	0	0	0	1	AXX	—	
				0390	+13	-51	102	2	1	0	1	2	0	0	0	HAX	—	
				0391	+14	+09	162	16	3	5	1	11	5	0	0	DAC	—	
				0387	+19	+16	169	8	2	3	1	5	3	0	0	EAI	—	
				0386	-06	+35	188	3	1	1	1	2	1	0	0	CAO	—	
4283	2003 / 06 / 25	2235	140.4	0395	+10	-76	064	1	1	0	0	0	0	1	0	HSX	—	
				0392	+05	-57	083	1	0	1	0	0	0	0	1	AXX	—	
				0393	-18	-57	083	3	1	1	1	2	1	0	0	CAO	—	
				0390	+13	-37	103	2	1	0	1	2	0	0	0	HAX	—	
				0391	+14	+23	163	15	5	4	1	11	4	0	0	DAC	—	
				0387	+18	+29	169	7	3	3	1	4	3	0	0	EAC	—	
				0386	-05	+48	188	2	1	1	1	1	1	0	0	CSO	—	

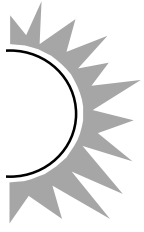


Georgi Dobrovolski Solar Observatory

REGION CO-ORDINATES AND CLASSIFICATIONS FOR JULY 2003

All observations carried out by HOWARD BARNES .
 Telescope : 76 mm refractor (f . l . 910 mm) .
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OBS	DATE	UT	CM	REG.No	B	CMD	L	f	p	s	gr	grp	grf	efp	ef	Class.	Remarks	
4284	2003 / 07 / 01	2220	61.1	0398	+04	-53	008	1	1	0	0	0	0	1	0	HSX	—	
				0399	+16	-41	020	3	1	1	1	2	1	0	0	CAO	—	
				0397	+12	-27	034	22	6	7	1	15	7	0	0	FHC	—	
				0395	+11	+03	064	1	0	1	0	0	0	0	0	1	AXX	big
				0390	+16	+42	103	1	1	0	0	0	0	0	1	0	HSX	—
				0394	+08	+48	109	1	1	0	0	0	0	0	1	0	HSX	small
				0396	-05	+68	129	4	2	1	1	3	1	0	0	0	DAI	—
4285	2003 / 07 / 05	2230	8.1	0400	+05	-19	349	16	4	4	1	12	4	0	0	DAC	—	
				0397	+11	+25	033	37	7	10	1	27	10	0	0	FHC	—	
4286	2003 / 07 / 06	2225	354.9	0404	-10	-79	276	1	1	0	0	0	0	1	0	HSX	—	
				0403	-18	-69	286	2	0	2	1	0	2	0	0	BXO	—	
				0400	+05	-04	351	19	3	5	1	14	5	0	0	DAC	—	
				0398	+03	+13	008	3	0	3	1	0	3	0	0	0	BXI	—
				0397	+11	+38	033	34	7	11	1	23	11	0	0	0	FHC	—
4287	2003 / 07 / 07	2230	341.6	0404	-10	-66	276	3	2	1	1	2	1	0	0	DSI	—	
				0403	-18	-56	286	1	1	0	0	0	0	1	0	HSX	—	
				0401	-10	-54	288	1	0	1	0	0	0	0	1	AXX	—	
				0400	+05	+08	350	14	3	5	1	9	5	0	0	0	DAC	—
				0402	-12	+42	024	7	2	3	1	4	3	0	0	0	DAI	—
				0397	+12	+50	032	26	7	9	1	17	9	0	0	0	FKC	—
4288	2003 / 07 / 18	2210	196.2	0414	-02	-60	136	1	1	0	0	0	0	1	0	HSX	—	
				0415	+13	-45	151	2	1	1	1	1	1	0	0	0	CSO	—
				0411	+14	-28	168	1	1	0	0	0	0	1	0	0	HSX	—
				0413	+20	-24	172	1	1	0	0	0	0	1	0	0	HSX	small
				0409/12	+16	-02	194	46	7	15	1	31	15	0	0	0	FAC	—
				0410	-11	-01	195	38	6	11	1	27	11	0	0	0	EAC	—
				0405	-10	+27	223	2	1	0	1	2	0	0	0	0	HAX	—

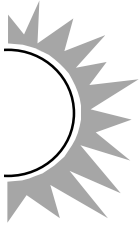


Georgi Dobrovolski Solar Observatory

REGION CO-ORDINATES AND CLASSIFICATIONS FOR

JULY 2003 continued.

OBS	DATE	UT	CM	REG.No	B	CMD	L	f	p	s	gr	grfp	grf	efp	ef	Class.	Remarks	
4289	2003 / 07 / 19	2225	182.8	0414	-01	-47	136	1	1	0	0	0	0	1	0	HHX	—	
				0415	+13	-32	151	9	2	2	1	7	2	0	0	DAI	—	
				0411	+15	-15	168	1	1	0	0	0	0	1	0	HSX	—	
				0413	+18	-11	172	1	0	1	0	0	0	0	0	1	AXX	—
				0418	-05	-07	176	2	0	2	1	0	2	0	0	0	BXO	—
				0410	-12	+11	194	41	4	10	1	31	10	0	0	0	EAC	—
				0409/12	+16	+12	195	32	5	9	1	23	9	0	0	0	FAC	—
				0417	-22	+21	204	9	3	4	1	5	4	0	0	0	DAC	small
				0416	-09	+27	210	2	2	0	1	2	0	0	0	0	DSO	—
0405	-10	+41	224	2	1	0	1	2	0	0	0	0	HAX	—				
4290	2003 / 07 / 21	2200	156.6	0414	-03	-21	136	1	1	0	0	0	0	1	0	HHX	—	
				0415	+12	-04	153	5	2	1	1	4	1	0	0	DAI	—	
				0411	+15	+13	170	1	1	0	0	0	0	1	0	HSX	—	
				0413	+20	+17	174	1	0	1	0	0	0	0	0	1	AXX	—
				0418	-06	-21	178	3	1	2	1	1	2	0	0	0	CSI	—
				0410	-12	+38	195	29	4	7	1	22	7	0	0	0	EKC	—
				0409/12	+15	+40	197	21	5	7	1	14	7	0	0	0	FAC	—
				0417	-21	+47	204	14	3	4	1	10	4	0	0	0	DAC	—
				0416	-07	+56	213	4	1	2	1	2	2	0	0	0	CAI	—
4291	2003 / 07 / 22	2245	143.0	0414	-03	-06	137	1	1	0	0	0	0	1	0	HHX	—	
				0415	+12	+10	153	7	2	5	1	2	5	0	0	DSI	—	
				0411	+14	+26	169	1	1	0	0	0	0	1	0	HSX	—	
				0413	+20	+31	174	1	0	1	0	0	0	0	0	1	AXX	—
				0418	-05	+36	179	1	1	0	0	0	0	0	1	0	HSX	—
				0410	-13	+52	195	17	2	3	1	14	3	0	0	0	EKI	—
				0409/12	+16	+54	197	9	3	4	1	5	4	0	0	0	FAC	—
				0417	-21	+63	206	13	4	3	1	10	3	0	0	0	DAC	—

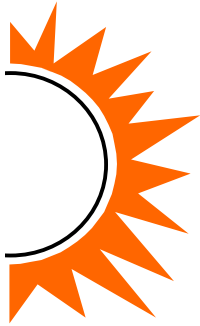


Georgi Dobrovolski Solar Observatory

REGION CO-ORDINATES AND CLASSIFICATIONS FOR

JULY 2003 continued.

OBS	DATE	UT	CM	REG.No	B	CMD	L	f	p	s	gr	grfp	grf	efp	ef	Class.	Remarks	
4292	2003 / 07 / 23	2225	129.9	0419	+10	-64	066	1	0	1	0	0	0	0	1	AXX	small	
				0414	-03	+06	136	1	1	0	0	0	0	0	1	0	HHX	—
				0415	+12	+24	154	4	1	2	1	2	2	0	0	0	CAI	—
				0411	+14	+38	168	1	1	0	0	0	0	1	0	0	HSX	—
				0418	-05	+49	179	1	0	1	0	0	0	0	0	1	AXX	—
				0410	-13	+64	194	14	2	2	1	12	2	0	0	0	EKI	—
				0409/12	+16	+65	195	7	4	2	1	5	2	0	0	0	FAC	—
0417	-22	+74	204	5	3	2	1	3	2	0	0	0	DSC	—				
4293	2003 / 07 / 24	2225	116.7	0420	+11	-81	036	1	1	0	0	0	0	1	0	HSX	—	
				?	+19	+16	133	1	0	1	0	0	0	0	1	AXX	small	
				0414	-04	+18	135	4	1	3	1	1	3	0	0	0	CHI	—
				0415	+11	+37	154	1	1	0	0	0	0	1	0	0	HSX	small
				0411	+13	+52	169	1	1	0	0	0	0	1	0	0	HSX	—
				0410	-13	+77	194	11	3	2	1	9	2	0	0	0	EKC	—
				0409/12	+15	+78	195	2	2	0	1	2	0	0	0	0	ESO	—
4294	2003 / 07 / 25	2255	103.2	0420	+10	-65	038	1	1	0	0	0	0	1	0	HSX	—	
				0419	+10	-36	067	2	0	2	1	0	2	0	0	BXO	resighted	
				0414	-04	+33	136	2	1	1	1	1	1	0	0	0	CSO	—
				0415	+13	+49	152	1	1	0	0	0	0	1	0	0	HSX	small
4295	2003 / 07 / 28	2240	63.6	0421	-08	-68	356	9	3	0	1	9	0	0	0	EAC	—	
				0420	+11	-26	038	2	1	1	1	1	1	0	0	0	CSO	—
				0422	+14	+39	103	8	3	2	1	6	2	0	0	0	DAC	—
				0414	-04	+74	138	1	1	0	0	0	0	1	0	0	HSX	—

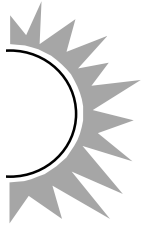


Georgi Dobrovolski Solar Observatory

REGION CO-ORDINATES AND CLASSIFICATIONS FOR AUGUST 2003

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) .
 L = Carrington Longitude .

OBS	DATE	UT	CM	REG.No	B	CMD	L	f	p	s	gr	grp	grf	efp	ef	Class.	Remarks	
4296	2003 / 08 / 04	2115	331.8	0424	-18	-41	291	11	4	2	1	9	2	0	0	EKC	—	
				0425	-09	-38	294	9	3	4	1	5	4	0	0	ESC	—	
				0426	-12	-05	327	1	0	1	0	0	0	0	0	1	AXX	small
				0428	+16	+08	340	3	0	3	1	0	3	0	0	0	BXI	—
				0427	+05	+28	360	5	2	2	1	3	2	0	0	0	DSI	—
				0421	-07	+28	360	3	1	2	1	1	2	0	0	0	CSI	—
				0420	+11	+69	041	1	1	0	0	0	0	0	1	0	HSX	—
4297	2003 / 08 / 05	2150	318.3	0429	-24	-56	262	3	0	3	1	0	3	0	0	BXI	—	
				0424	-18	-27	291	17	3	4	1	13	4	0	0	EKC	—	
				0425	-09	-24	294	11	2	4	1	7	4	0	0	EAI	—	
				0430	-08	-15	303	1	0	1	0	0	0	0	0	1	AXX	—
				0428	+16	+23	341	4	1	3	1	1	3	0	0	0	CSI	—
				0421	-07	+42	360	2	1	1	1	1	1	0	0	0	CSO	—
				0427	+05	+43	001	5	3	2	1	3	2	0	0	0	DSC	—
4298	2003 / 08 / 06	2210	304.9	0429	-24	-45	260	6	2	2	1	4	2	0	0	DAI	—	
				0424	-18	-15	290	17	3	4	1	13	4	0	0	EKC	—	
				0425	-09	-12	293	11	2	5	1	6	5	0	0	EAI	—	
				0428	+16	+36	341	1	0	1	0	0	0	0	0	1	AXX	—
				0421	-07	+56	001	1	1	0	0	0	0	1	0	0	HSX	—
				0427	+05	+58	003	3	1	2	1	1	2	0	0	0	CSI	—
4299	2003 / 08 / 08	2225	278.3	0431	-12	-83	195	1	0	1	0	0	0	0	1	AXX	big	
				0429	-24	-19	259	8	2	2	1	6	2	0	0	0	DAI	—
				0424	-18	+12	290	22	4	5	1	17	5	0	0	0	EKC	—
				0425	-09	+15	293	6	3	2	1	4	2	0	0	0	EAC	short
				0430	-08	+27	305	4	1	2	1	2	2	0	0	0	CAI	resighted
4300	2003 / 08 / 12	2150	225.7	0431	-13	-32	194	13	3	7	1	6	7	0	0	EAC	—	
				0429	-24	+32	258	12	4	6	1	6	6	0	0	EAC	small	
				0424	-18	+65	291	7	2	3	1	4	3	0	0	0	DAI	—
				0425	-09	+69	295	1	1	0	0	0	0	1	0	0	HSX	—



Georgi Dobrovolski Solar Observatory

REGION CO-ORDINATES AND CLASSIFICATIONS FOR AUGUST 2003 continued.

OBS	DATE	UT	CM	REG.No	B	CMD	L	f	p	s	gr	grfp	grf	efp	ef	Class.	Remarks
4301	2003 / 08 / 13	2120	212.8	0432	-05	-73	140	1	1	0	0	0	0	1	0	HSX	—
				0431	-13	-19	194	30	6	9	1	21	9	0	0	EAC	—
				0429	-24	+45	258	8	3	5	1	3	5	0	0	DSC	small
				0424	-18	+78	291	3	1	2	1	1	2	0	0	CSI	—
4302	2003 / 08 / 15	2115	186.4	0432	-04	-45	141	1	1	0	0	0	0	1	0	HSX	—
				0433	-19	-12	174	1	1	0	0	0	0	1	0	HSX	—
				0434	-23	-04	182	2	2	0	1	2	0	0	0	DSO	—
				0431	-11	+11	197	46	12	16	1	30	16	0	0	EAC	—
4303	2003 / 08 / 22	2200	93.5	0442	-12	-66	027	3	2	0	1	3	0	0	0	DAO	—
				0441	+12	-34	059	9	3	4	1	5	4	0	0	DAC	—
				0436	+07	-04	089	22	5	7	1	15	7	0	0	EAC	—
				0440	-07	+05	098	11	3	4	1	7	4	0	0	DAC	—
				0439	+08	+37	130	4	2	1	1	3	1	0	0	DSI	class correct
4304	2003 / 08 / 23	2120	80.6	0444	+09	-62	019	1	0	1	0	0	0	0	1	AXX	—
				0442	-12	-56	025	2	2	0	1	2	0	0	0	DSO	—
				0441	+11	-21	060	17	5	6	1	11	6	0	0	DAC	—
				0436	+07	+10	091	19	6	6	1	13	6	0	0	EAC	—
				0440	-08	+18	099	12	2	4	1	8	4	0	0	DAI	—
				0439	+07	+49	130	1	0	1	0	0	0	0	1	AXX	small
4305	2003 / 08 / 24	2120	67.4	0442	-12	-45	022	5	2	2	1	3	2	0	0	DSI	—
				0441	+12	-09	059	16	5	4	1	12	4	0	0	DAC	—
				?	+21	+05	072	1	0	1	0	0	0	0	1	AXX	small
				0443	+14	+15	082	3	0	3	1	0	3	0	0	BXI	—
				0436	+08	+24	091	17	5	5	1	12	5	0	0	FAC	—
				0440	-08	+31	098	6	2	4	1	2	4	0	0	DSI	—
				0439	+07	+62	129	2	1	1	1	1	1	0	0	CSO	tight
4306	2003 / 08 / 27	2055	28.0	0449	-16	-84	304	1	1	0	0	0	0	1	0	HSX	—
				0448	+19	-49	339	3	1	2	1	1	2	0	0	CSI	—
				0446	-22	-38	350	3	1	1	1	2	1	0	0	CAO	—
				0445	+03	-12	016	7	2	5	1	2	5	0	0	DSI	—
				0444	+10	-10	018	11	3	5	1	6	5	0	0	DAC	—
				0447	+16	-10	018	4	1	2	1	2	2	0	0	CAO	—
				0442	-13	-06	022	2	1	1	1	1	1	0	0	CSO	—
				?	-08	+03	031	2	0	2	1	0	2	0	0	BXO	—
				0441	+13	+31	059	12	2	3	1	9	3	0	0	DAI	—
				0443	+14	+57	085	1	0	1	0	0	0	0	1	AXX	big



Georgi Dobrovolski Solar Observatory

REGION CO-ORDINATES AND CLASSIFICATIONS FOR AUGUST 2003 continued.

OBS	DATE	UT	CM	REG.No	B	CMD	L	f	p	s	gr	grfp	grf	efp	ef	Class.	Remarks	
4307	2003 / 08 / 28	2125	14.5	0449	-16	-71	304	3	2	0	1	3	0	0	0	DAO	--	
				0448	+19	-36	339	7	4	2	1	5	2	0	0	DAC	--	
				0446	-23	-25	350	1	1	0	0	0	0	1	0	HSX	small	
				?	-34	-10	005	1	0	1	0	0	0	0	0	1	AXX	--
				0445	+03	+02	017	4	2	1	1	3	1	0	0	DAI	--	
				0447	+16	+03	018	3	1	2	1	1	2	0	0	CSI	--	
				0442	-13	+04	019	1	1	0	0	0	0	1	0	HSX	--	
				0444	+09	+04	019	6	3	1	1	5	1	0	0	DAC	--	
				0441	+14	+45	060	3	1	2	1	1	2	0	0	CSI	--	
				0451	-10	+50	065	1	0	1	0	0	0	0	0	1	AXX	--
4308	2003 / 08 / 30	2120	348.2	0450	-18	-54	294	1	1	0	0	0	0	1	0	HSX	--	
				0449	-15	-41	307	4	2	0	1	4	0	0	0	DAO	--	
				0448	+20	-08	340	9	3	4	1	5	4	0	0	DAC	--	
				0445	+03	+30	018	2	1	1	1	1	1	0	0	CSO	long	
				0444	+09	+31	019	10	2	7	1	3	7	0	0	DSI	--	
				0442	-12	+33	021	2	1	1	1	1	1	0	0	CSO	--	
				0447	+15	+35	023	3	0	3	1	0	3	0	0	BXI	--	



Georgi Dobrovolski Solar Observatory

REGION CO-ORDINATES AND CLASSIFICATIONS FOR SEPTEMBER 2003

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) .
 L = Carrington Longitude .

OBS	DATE	UT	CM	REG.No	B	CMD	L	f	p	s	gr	grp	grf	efp	ef	Class.	Remarks
4309	2003 / 09 / 06	2045	256.0	0454	-10	+02	258	2	2	0	1	2	0	0	0	DSO	—
				0450	-17	+50	306	3	1	2	1	1	2	0	0	CSI	—
				0453E*	-23	+61	317	1	1	0	0	0	0	1	0	HSX	—
				0453W*	-21	+71	327	1	1	0	0	0	0	1	0	HSX	small
4310	2003 / 09 / 09	2055	216.3	0456	-09	+04	220	12	2	5	1	7	5	0	0	DAI	—
4311	2003 / 09 / 10	2040	203.2	0458	-08	-10	193	1	1	0	0	0	0	1	0	HSX	small
				0457	-11	+04	207	2	0	2	1	0	2	0	0	BXO	—
				0456	-09	+17	220	21	3	7	1	14	7	0	0	DAC	—
4312	2003 / 09 / 11	2045	190.0	0458	-08	+04	194	2	1	1	1	1	1	0	0	CSO	—
				0456	-08	+30	220	17	3	8	1	9	8	0	0	DAC	—
4313	2003 / 09 / 14	2105	150.2	0459	-11	-39	111	2	1	1	1	1	1	0	0	CSO	small
				0461	+11	+08	158	2	0	2	1	0	2	0	0	BXO	big
				0458	-09	+45	195	1	0	1	0	0	0	0	1	AXX	—
				0456	-08	+72	222	5	2	1	1	4	1	0	0	DAI	—
4314	2003 / 09 / 20	2205	70.4	0464	+05	-79	351	4	2	1	1	3	1	0	0	EKI	—
				0463	+08	-35	035	1	1	0	0	0	0	1	0	HSX	—
				0460	+17	-09	061	2	1	1	1	1	1	0	0	CSO	small
				0459	-12	+39	109	8	3	5	1	3	5	0	0	DSC	—
4315	2003 / 09 / 21	2055	57.9	0465	-02	-66	352	2	1	1	1	1	1	0	0	CSO	—
				0464	+03	-65	353	8	2	1	1	7	1	0	0	FKI	—
				0463	+09	-21	037	1	1	0	0	0	0	1	0	HSX	—
				0460	+17	+02	060	1	0	1	0	0	0	0	1	AXX	—
				0459	-11	+53	111	3	2	0	1	3	0	0	0	DAO	—
4316	2003 / 09 / 22	2105	44.6	0466	-04	-75	330	2	1	1	1	1	1	0	0	CSO	—
				0465	-02	-53	352	2	0	2	1	0	2	0	0	BXO	—
				0464	+06	-52	353	12	3	7	1	5	7	0	0	FKC	—
				0463	+09	-09	036	1	1	0	0	0	0	1	0	HSX	—
				0459	-12	+66	111	1	0	1	0	0	0	0	1	AXX	small

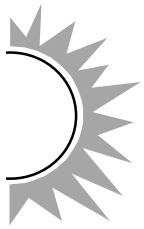


Georgi Dobrovolski Solar Observatory

REGION CO-ORDINATES AND CLASSIFICATIONS FOR OCTOBER 2003

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) .
 L = Carrington Longitude .

OBS	DATE	UT	CM	REG.No	B	CMD	L	f	p	s	gr	grp	grf	efp	ef	Class.	Remarks	
4317	2003 / 10 / 01	1955	286.5	0471	-08	-62	224	15	5	7	1	8	7	0	0	FAC	—	
				0473	-07	-49	237	1	1	0	0	0	0	0	1	0	HSX	—
				0470	-13	-07	279	4	1	1	1	3	1	0	0	0	CAO	—
				0472	-23	-01	285	8	2	4	1	4	4	0	0	0	DAI	—
				0466	-04	+47	333	1	1	0	0	0	0	1	0	0	HSX	—
				0464	+05	+70	356	7	3	4	1	3	4	0	0	0	FHI	—
4318	2003 / 10 / 04	2125	246.0	0471	-08	-24	222	26	6	11	1	15	11	0	0	EAC	—	
				0473	-09	-09	237	3	1	2	1	1	2	0	0	0	CSI	—
				0474	-14	+47	293	1	0	1	0	0	0	0	0	1	AXX	big
4319	2003 / 10 / 05	2010	233.5	0475	-22	-50	184	1	0	1	0	0	0	0	1	AXX	—	
				0471	-08	-12	222	25	5	13	1	12	13	0	0	0	FAC	—
				0473	-09	+03	237	1	1	0	0	0	0	1	0	0	HSX	big
4320	2003 / 10 / 06	2055	219.9	0477	-15	-65	155	1	1	0	0	0	0	1	0	HSX	small	
				0476	-16	-14	206	1	0	1	0	0	0	0	0	1	AXX	small
				0471	-08	+02	222	22	6	11	1	11	11	0	0	0	EAC	—
				0473	-09	+17	237	4	1	3	1	1	3	0	0	0	CSI	—
4321	2003 / 10 / 10	2125	166.9	0479	+24	-65	102	1	0	1	0	0	0	0	1	AXX	big	
				0477	-15	-21	146	2	1	0	1	2	0	0	0	0	HAX	—
				0471	-08	+55	222	14	4	7	1	7	7	0	0	0	EAC	small
				0473	-09	+72	239	1	1	0	0	0	0	1	0	0	HSX	—
4322	2003 / 10 / 12	1955	141.3	0479	+23	-42	099	1	0	1	0	0	0	0	1	AXX	—	
				0477	-15	+05	146	2	1	0	1	2	0	0	0	0	HAX	—
4323	2003 / 10 / 13	2005	128.0	0477	-15	+19	147	2	1	0	1	2	0	0	0	HAX	small	
4324	2003 / 10 / 14	2020	114.7	0480	+20	+10	125	2	0	2	1	0	2	0	0	BXO	small	
4325	2003 / 10 / 15	1955	101.7	0480	+20	+23	125	4	2	1	1	3	1	0	0	DAI	—	
				0477	-14	+46	148	3	2	0	1	3	0	0	0	0	DAO	small & resighted
4326	2003 / 10 / 18	2005	62.1	0484	+05	-71	351	15	3	0	1	15	0	0	0	DKC	—	
				0482	+17	-53	009	5	1	2	1	3	2	0	0	0	CAI	—
				0481	-08	+29	091	1	1	0	0	0	0	1	0	0	HRX	—



Georgi Dobrovolski Solar Observatory

REGION CO-ORDINATES AND CLASSIFICATIONS FOR

OCTOBER 2003 continued.

OBS	DATE	UT	CM	REG.No	B	CMD	L	f	p	s	gr	grfp	grf	efp	ef	Class.	Remarks
4327	2003 / 10 / 19	2015	48.8	0484	+06	-56	353	22	2	4	1	18	4	0	0	DKI	–
				0482	+16	-37	012	2	1	1	1	1	1	0	0	CSO	–
				0481	-09	+45	094	1	0	1	0	0	0	0	1	AXX	–
4328	2003 / 10 / 20	2055	35.2	0485	-06	-62	333	2	0	2	1	0	2	0	0	BXO	–
				0484	+05	-42	353	34	2	6	1	28	6	0	0	EKI	–
				0483	-11	-29	006	4	1	1	1	3	1	0	0	CAO	–
				0482	+15	-22	013	3	1	2	1	1	2	0	0	CSI	–
4329	2003 / 10 / 21	1930	22.8	0485	-06	-50	333	3	2	1	1	2	1	0	0	DSI	small
				0484	+04	-29	354	31	2	7	1	24	7	0	0	EKI	–
				0483	-10	-16	007	4	1	2	1	2	2	0	0	CAI	–
				0482	+14	-08	015	1	0	1	0	0	0	0	1	AXX	big
4330	2003 / 10 / 25	1935	330.0	0487	+13	-75	255	6	2	2	1	4	2	0	0	DAI	–
				0490	-10	-54	276	3	2	1	1	2	1	0	0	DSI	–
				0486	-15	-48	282	37	6	5	1	32	5	0	0	FKC	–
				0484	+04	+25	355	30	1	4	1	26	4	0	0	EKI	–
4331	2003 / 10 / 26	2005	316.6	0487	+14	-62	255	4	2	1	1	3	1	0	0	DAI	–
				0490	-10	-41	276	1	1	0	0	0	0	1	0	HSX	–
				0486	-16	-34	283	44	9	11	1	33	11	0	0	FKC	–
				0488	+09	-25	292	11	1	9	1	2	9	0	0	CAI	small
				0491	-06	-25	292	1	0	1	0	0	0	0	1	AXX	–
				0484	+03	+38	355	22	2	2	1	20	2	0	0	DKI	–
4332	2003 / 10 / 28	1950	290.3	0487	+13	-35	255	11	3	4	1	7	4	0	0	DAC	–
				0490	-11	-14	276	1	1	0	0	0	0	1	0	HSX	–
				0486	-17	-07	283	52	5	4	1	48	4	0	0	FKC	big
				0488	+08	+01	291	37	3	4	1	33	4	0	0	FKC	–
				0491	-07	+02	292	9	3	4	1	5	4	0	0	DAC	–
				0489	-11	+05	295	7	2	5	1	2	5	0	0	DSI	–
				0492	-23	+31	321	14	3	7	1	7	7	0	0	DAC	–
				0484	+03	+65	355	15	2	3	1	12	3	0	0	EKI	–



Georgi Dobrovolski Solar Observatory

REGION CO-ORDINATES AND CLASSIFICATIONS FOR OCTOBER 2003 continued.

OBS	DATE	UT	CM	REG.No	B	CMD	L	f	p	s	gr	grfp	grf	efp	ef	Class.	Remarks
4333	2003 / 10 / 30	2130	263.1	0496	-12	-24	239	1	0	1	0	0	0	0	1	AXX	—
				0495	-22	-22	241	12	2	8	1	4	8	0	0	DAI	—
				0487	+12	-09	255	8	2	2	1	6	2	0	0	DAI	—
				0486	-18	+21	284	55	4	8	1	47	8	0	0	FKC	big
				0488	+08	+26	289	42	5	10	1	32	10	0	0	FKC	—
				0491	-06	+30	293	7	3	3	1	4	3	0	0	DAC	—
				0489	-12	+34	297	5	2	1	1	4	1	0	0	DAI	—
				0492	-23	+60	323	8	3	1	1	7	1	0	0	DAC	—
4334	2003 / 10 / 31	1955	250.7	0496	-12	-12	239	2	0	2	1	0	2	0	0	BXO	—
				0495	-22	-08	243	12	2	6	1	6	6	0	0	DAI	—
				0487	+12	+05	256	14	2	5	1	9	5	0	0	DAI	—
				0486	-17	+33	284	47	6	9	1	38	9	0	0	FKC	—
				0488	+08	+39	290	32	4	7	1	25	7	0	0	FKC	—
				0491	-07	+44	295	8	2	3	1	5	3	0	0	DAI	—
				0489	-12	+47	298	4	2	1	1	3	1	0	0	DAI	—
				0492	-23	+71	322	5	2	2	1	3	2	0	0	DAI	—

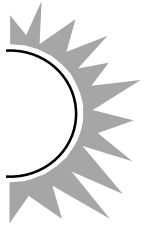


Georgi Dobrovolski Solar Observatory

REGION CO-ORDINATES AND CLASSIFICATIONS FOR NOVEMBER 2003

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) .
 L = Carrington Longitude .

OBS	DATE	UT	CM	REG.No	B	CMD	L	f	p	s	gr	grfp	grf	efp	ef	Class.	Remarks
4335	2003 / 11 / 04	2045	197.5	0495	-22	+45	243	4	2	2	1	2	2	0	0	DSI	—
				0487	+12	+58	256	1	0	1	0	0	0	0	0	1	AXX
4336	2003 / 11 / 05	2020	184.6	0495	-22	+57	242	2	1	1	1	1	1	0	0	CSO	—
4337	2003 / 11 / 06	2025	171.3	0495	-21	+74	245	1	1	0	0	0	0	1	0	HSX	—
4338	2003 / 11 / 07	1950	158.5	—	—	—	—	0	0	0	0	0	0	0	0	—	—
4339	2003 / 11 / 08	1920	145.6	0500	-08	+05	151	2	0	2	1	0	2	0	0	BXO	—
				0499	-17	+15	161	5	2	1	1	4	1	0	0	DAI	—
				0498	-03	+22	168	4	2	1	1	3	1	0	0	DAI	—
4340	2003 / 11 / 09	1925	132.3	0500	-08	+19	151	7	3	3	1	4	3	0	0	DAC	small
				0499	-16	+30	162	3	2	0	1	3	0	0	0	DAO	small
				0498	-04	+36	168	6	3	0	1	6	0	0	0	DAC	small
4341	2003 / 11 / 13	1925	79.6	0501	+05	-68	012	4	2	0	1	4	0	0	0	DKO	—
				0502	+05	-58	022	1	1	0	0	0	0	1	0	HSX	—
4342	2003 / 11 / 15	1935	53.1	0501	+03	-51	002	12	3	3	1	9	3	0	0	DKC	old 0484
				0503	+17	-12	041	3	2	1	1	2	1	0	0	DSI	—
				0504	+04	+35	088	1	1	0	0	0	0	1	0	HSX	small
4343	2003 / 11 / 17	1910	27.0	0505	-23	-61	326	2	0	0	1	0	2	0	0	BXO	—
				0501	+03	-25	002	14	3	4	1	10	4	0	0	DAC	old 0484
4344	2003 / 11 / 18	2000	13.4	0507	+10	-80	293	5	2	1	1	4	1	0	0	EKI	old 0488
				0506	-23	-74	299	3	2	1	1	2	1	0	0	DSI	small
				0505	-22	-47	326	1	0	1	0	0	0	0	1	AXX	—
				0501	+03	-11	002	15	3	4	1	11	4	0	0	DAC	old 0484
4345	2003 / 11 / 19	2100	359.6	0508	-17	-78	282	10	3	0	1	10	0	0	0	FKC	old 0486
				0507	+10	-65	295	11	3	2	1	9	2	0	0	FKC	old 0488
				0506	-21	-62	298	2	1	1	1	1	1	0	0	CSO	small
				0501	+03	+02	002	14	3	3	1	11	3	0	0	DAC	old 0484



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REGION CO-ORDINATES AND CLASSIFICATIONS FOR

NOVEMBER 2003 *continued.*

OBS	DATE	UT	CM	REG.No	B	CMD	L	f	p	s	gr	grfp	grf	efp	ef	Class.	Remarks
4346	2003 / 11 / 28	1935	241.8	0516	-17	-73	169	1	1	0	0	0	0	1	0	HSX	–
				0515	-02	-71	171	3	1	1	1	2	1	0	0	CAO	–
				0513	+13	-48	194	1	1	0	0	0	0	1	0	HSX	–
				0510	-23	-14	228	15	4	7	1	8	7	0	0	EAC	small
				0509	-11	-05	237	3	1	0	1	3	0	0	0	HAX	–
				0511	-15	+12	254	5	1	3	1	2	3	0	0	CAI	–
				0508	-19	+41	283	14	4	3	1	11	3	0	0	DAC	old 0486
				?	-15	+42	284	4	2	1	1	3	1	0	0	DAI	–
				0507	+07	+53	295	11	2	0	1	11	0	0	0	DKO	old 0488
4347	2003 / 11 / 30	1955	215.3	0517	-07	-70	145	4	2	0	1	4	0	0	0	EAO	–
				?	-23	-52	163	1	0	1	0	0	0	0	1	AXX	–
				0516	-17	-47	168	6	2	3	1	3	3	0	0	DAI	–
				0513	+13	-21	194	1	1	0	0	0	0	1	0	HSX	–
				0510	-23	+13	228	17	1	14	1	3	14	0	0	CAI	very small
				0509	-11	+21	236	3	0	3	1	0	3	0	0	BXI	–
				0511	-15	+41	256	1	1	0	0	0	0	1	0	HSX	–
				0508	-19	+68	283	5	2	2	1	3	2	0	0	DAI	old 0486
				0507	+07	+79	294	4	2	1	1	3	1	0	0	DKI	old 0488

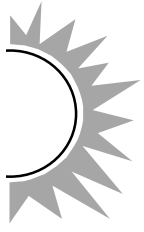


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REGION CO-ORDINATES AND CLASSIFICATIONS FOR DECEMBER 2003

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) .
 L = Carrington Longitude .

OBS	DATE	UT	CM	REG.No	B	CMD	L	f	p	s	gr	grp	grf	efp	ef	Class.	Remarks
4348	2003 / 12 / 04	2015	162.4	0517	-06	-22	140	12	3	4	1	8	4	0	0	DAC	—
				0518	-21	+01	163	1	1	0	0	0	0	1	0	HSX	—
				0519	-08	+13	175	3	1	1	1	2	1	0	0	CAO	—
				0515	-03	+14	176	4	1	3	1	1	3	0	0	CSI	—
				0510	-24	+67	229	1	1	0	0	0	0	1	0	HSX	—
4349	2003 / 12 / 05	2105	148.7	0517	-06	-10	139	13	3	6	1	7	6	0	0	DAC	—
				0518	-21	+14	163	1	1	0	0	0	0	1	0	HSX	—
				0519	-08	+25	174	9	3	4	1	5	4	0	0	DAC	—
				0510	-24	+78	227	1	1	0	0	0	0	1	0	HSX	—
4350	2003 / 12 / 15	2135	16.7	0520	+02	-08	009	9	3	4	1	5	4	0	0	DAC	—
				0521	-12	-11	006	6	3	3	1	3	3	0	0	DSC	—
4351	2003 / 12 / 16	1945	4.5	0523	-15	-76	289	1	1	0	0	0	0	1	0	HSX	small
				0521	-11	+01	006	6	3	2	1	4	2	0	0	DAC	—
				0520	+01	+03	008	8	2	5	1	3	5	0	0	DSI	—
				0527	-15	+24	029	3	2	1	1	2	1	0	0	DSI	—
				0526	+12	+37	042	1	0	1	0	0	0	0	1	AXX	big
4352	2003 / 12 / 17	1950	351.3	0523	-15	-62	290	1	1	0	0	0	0	1	0	HSX	—
				0525	+09	-60	292	8	3	4	1	4	4	0	0	DAC	—
				0524	-08	-58	294	3	1	0	1	3	0	0	0	HAX	—
				0521	-11	+16	008	1	1	0	0	0	0	1	0	HRX	—
				0520	+03	+18	010	4	2	2	1	2	2	0	0	DSI	—
				0527	-15	+37	029	1	0	1	0	0	0	0	1	AXX	—
				0526	+12	+50	042	2	2	0	1	2	0	0	0	DSO	—



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REGION CO-ORDINATES AND CLASSIFICATIONS FOR

DECEMBER 2003 continued.

OBS	DATE	UT	CM	REG.No	B	CMD	L	f	p	s	gr	grp	grf	efp	ef	Class.	Remarks
4353	2003 / 12 / 18	2130	337.2	0528	+08	-73	264	2	1	0	1	2	0	0	0	HAX	—
				0523	-13	-47	290	2	1	1	1	1	1	0	0	CSO	—
				0525	+09	-46	291	9	3	3	1	6	3	0	0	DAC	—
				0524	-07	-41	296	3	1	1	1	2	1	0	0	CAO	tight
				0521	-12	+32	009	1	1	0	0	0	0	1	0	HSX	—
				0520	+03	+33	010	2	1	1	1	1	1	0	0	CSO	—
4354	2003 / 12 / 24	1925	259.3	0530	-22	-27	232	1	0	1	0	0	0	0	1	AXX	—
				0532	-11	-18	241	3	1	2	1	1	2	0	0	CSI	—
				0528	+09	+01	260	25	6	7	1	18	7	0	0	FAC	—
				0525	+09	+31	290	6	2	3	1	3	3	0	0	DAI	—
4355	2003 / 12 / 29	1930	193.4	?	-13	+03	196	1	0	1	0	0	0	0	1	AXX	big
				0532	-12	+48	241	1	0	1	0	0	0	0	1	AXX	—
				0528	+08	+66	259	8	3	5	1	3	5	0	0	FSC	—
4356	2003 / 12 / 31	1935	167.0	0534	-05	-43	124	6	1	3	1	3	3	0	0	CAI	small