Georgi Dobrovolski Solar Observatory

NEW ZEALAND

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SUNSPOT RESULTS FOR JUNE 2006

All observations carried out by HOWARD BARNES .
Telescope : 76 mm refractor (f . l . 910 mm) k considered as 1 .
Observed by PROJECTION . Full disc diameter = 145 mm approx .
WN = Wolf Number ; SN = Pettisindex ; BX = Beckindex ; CV = Classification Value ;
QC = Quality Count ; QC² = Squared Quality Count .
Q = Quietness [ie. steadiness] refer to Kiepenheuer scale .
S = Sharpness [ie. clarity] refer to Kiepenheuer scale .
T = Transparency where 1 = excellent , 5 = worthless .

Stated times (UT) approximate Co-ordinated Universal Time / Temps Universel Coordonné (UTC).

DATE	UT	g	f	WN	p	s	SN	BX	CV	QC	QC²	Q	S	T	Ref.
01	2235	0	0	0	0	0	0	0	0	0	0	1.5	2.0	2.0	4678-3
02															
03															
04	2250	1	8	18	5	2	52	288	33	6	36	2.0	2.5	2.0	4679-4
05	2310	1	11	21	3	2	32	396	33	6	36	2.0	2.5	2.0	4680-4
06															
07															
08															
09	2230	2	19	39	5	9	59	390	41	8	34	1.5	2.5	2.5	4681-4
10															
11															
12															
13															
14															
15	2220	1	1	11	0	1	1	4	1	1	1	1.5	2.5	2.5	4682-4
16															
17															
18															
19															
20															
21	2250	0	0	0	0	0	0	0	0	0	0	1.5	2.5	2.5	4683-4
22															
23	2240	0	0	0	0	0	0	0	0	0	0	1.5	2.0	2.0	4684-4
24	2245	0	0	0	0	0	0	0	0	0	0	2.0	2.5	2.0	4685-4
25	2255	1	2	12	1	1	11	16	11	3	9	1.5	2.0	2.0	4686-4
26	2235	1	4	14	1	3	13	32	12	3	9	1.5	1.5	2.0	4687-4
27															
28															
29	2235	2	15	35	5	8	58	270	83	8	32	2.0	2.0	2.5	4688-4
30	2240	2	9	29	4	5	45	197	81	9	41	2.0	2.0	2.0	4689-4
31	—														
TOTALS	——	11	69	179	24	31	271	1593	295	44	198	20.5	26.5	26.0	——
NOBS	——	12	12	12	12	12	12	12	12	12	12	12	12	12	——
MNS	——	0.92	5.75	14.92	2.00	2.58	22.58	132.75	24.58	3.67	16.50	1.71	2.21	2.17	——

MEAN WEIGHT = 0.4973 MEAN CONDITION = 2.0278 TRUNCATED WOLF NUMBER = 14.00

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SUNSPOT DISTRIBUTION & INTER-SOL INDICES FOR

JUNE 2006

All observations carried out by HOWARD BARNES .
Telescope : 76 mm refractor (f . l . 910 mm) .
Observed by PROJECTION . Full disc diameter = 145 mm approx .
IS = Inter-Sol Index .
gr = number of multi-spot groups .
grfp = number of umbræ within penumbræ within the groups (gr) .
grf = number of non-penumbral spots within the groups (gr) .
efp = number of single penumbral spots .
ef = number of single non-penumbral spots .
Q = Quietness [ie. steadiness] refer to Kiepenheuer scale .
S = Sharpness [ie. clarity] refer to Kiepenheuer scale .
T = Transparency where 1 = excellent , 5 = worthless .

DATE	UT	IS	gr	grfp	grf	efp	ef	Q	S	T	Ref.
01	2235	0	0	0	0	0	0	1.5	2.0	2.0	4678-3
02											
03											
04	2250	9	1	6	2	0	0	2.0	2.5	2.0	4679-4
05	2310	12	1	9	2	0	0	2.0	2.5	2.0	4680-4
06											
07											
08											
09	2230	21	2	10	9	0	0	1.5	2.5	2.5	4681-4
10											
11											
12											
13											
14											
15	2220	1	0	0	0	0	1	1.5	2.5	2.5	4682-4
16											
17											
18											
19											
20											
21	2250	0	0	0	0	0	0	1.5	2.5	2.5	4683-4
22											
23	2240	0	0	0	0	0	0	1.5	2.0	2.0	4684-4
24	2245	0	0	0	0	0	0	2.0	2.5	2.0	4685-4
25	2255	3	1	1	1	0	0	1.5	2.0	2.0	4686-4
26	2235	5	1	1	3	0	0	1.5	1.5	2.0	4687-4
27											
28											
29	2235	17	2	7	8	0	0	2.0	2.0	2.5	4688-4
30	2240	11	2	4	5	0	0	2.0	2.0	2.0	4689-4
31	—										
TOTALS	——	79	10	38	30	0	1	20.5	26.5	26.0	——
NOBS	——	12	12	12	12	12	12	12	12	12	——
MNS	——	6.58	0.83	3.17	2.50	0.00	0.08	1.71	2.21	2.17	——

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SUNSPOT CENSUS BY CLASSIFICATION FOR

JUNE 2006

All observations carried out by HOWARD BARNES .
Telescope : 76 mm refractor (f . l . 910 mm) .
Observed by PROJECTION . Full disc diameter = 145 mm approx .
IF 2 OR MORE REGIONS ARE OF THE SAME CLASSIFICATION , THEN SUNSPOT COUNTS ARE SEPARATED BY SOLIDI (/) .

DATE	UT	A		B		C		D		E		F		G		H		J	
		g	f	g	f	g	f	g	f	g	f	g	f	g	f	g	f	g	f
01	2235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02																			
03																			
04	2250	0	0	0	0	0	0	0	0	0	0	1	8	0	0	0	0	0	0
05	2310	0	0	0	0	0	0	0	0	0	0	1	11	0	0	0	0	0	0
06																			
07																			
08																			
09	2230	0	0	0	0	1	5	0	0	1	14	0	0	0	0	0	0	0	0
10																			
11																			
12																			
13																			
14																			
15	2220	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16																			
17																			
18																			
19																			
20																			
21	2250	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22																			
23	2240	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	2245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	2255	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0
26	2235	0	0	0	0	1	4	0	0	0	0	0	0	0	0	0	0	0	0
27																			
28																			
29	2235	0	0	0	0	0	0	2	6/9	0	0	0	0	0	0	0	0	0	0
30	2240	0	0	0	0	0	0	1	4	1	5	0	0	0	0	0	0	0	0
31	—																		
TOTALS	——	1	1	0	0	3	11	3	19	2	19	2	19	0	0	0	0	0	0

REGIONAL PERCENTAGES

A	B	C	D	E	F	G	H	J	Σ g
9.1	0.0	27.3	27.3	18.2	18.2	0.0	0.0	0.0	11

NOBS = 12 $\overline{p / g}$ mean = 2.1250 $\overline{f / g}$ mean = 5.9375

$\overline{p} / \overline{g}$ mean = 2.1818 $\overline{f} / \overline{g}$ mean = 6.2727

GROUP COMPLEXITY INDEX (GCI) = 8.4545

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SMOOTHED RESULTS OF OBSERVED VALUES FOR THE LAST 12 MONTHS (OBTAINABLE) USING THE WALDMEIER & BARNES-13 METHODS.

DATA BELOW ARE PRELIMINARY. FINAL VALUES WILL BE PUBLISHED IN GDSO ANNUAL REPORTS.

WALDMEIER METHOD

MONTH	$g(S^W)$	$WN(S^W)$	$SN(S^W)$	$BX(S^W)$	$CV(S^W)$	$QC(S^W)$	$IS(S^W)$
2005 JANUARY	2.83	47.36	60.71	432.0	64.03	9.38	21.14
FEBRUARY	2.81	46.03	59.67	391.9	62.75	9.27	20.02
MARCH	2.79	45.29	58.30	376.6	61.02	9.13	19.49
APRIL	2.58	41.97	53.70	350.4	56.63	8.44	18.03
MAY	2.32	37.30	47.99	301.4	50.99	7.54	15.82
JUNE	2.33	36.69	47.03	279.9	49.91	7.44	15.11
JULY	2.37	36.83	47.22	274.0	49.81	7.48	14.78
AUGUST	2.22	34.42	44.96	256.9	46.61	7.03	13.74
SEPTEMBER	2.11	32.64	42.97	243.8	43.20	6.65	13.02
OCTOBER	2.08	32.20	42.68	242.2	42.17	6.52	12.81
NOVEMBER	2.06	31.17	40.20	221.1	40.18	6.31	11.88
DECEMBER	1.93	28.14	34.77	182.9	34.93	5.71	10.00

BARNES-13 METHOD

MONTH	$g(S^{B13})$	$WN(S^{B13})$	$SN(S^{B13})$	$BX(S^{B13})$	$CV(S^{B13})$	$QC(S^{B13})$	$IS(S^{B13})$
2005 JANUARY	2.72	44.53	55.15	390.9	59.85	8.85	19.33
FEBRUARY	2.67	43.30	54.11	362.6	58.93	8.70	18.55
MARCH	2.64	42.71	53.98	349.1	58.26	8.62	18.23
APRIL	2.58	41.72	53.68	337.8	57.16	8.43	17.88
MAY	2.50	40.44	53.26	323.2	55.88	8.20	17.39
JUNE	2.48	39.88	53.22	312.6	55.11	8.12	17.01
JULY	2.44	38.85	52.00	298.9	53.16	7.92	16.25
AUGUST	2.32	36.39	48.69	276.3	49.17	7.42	14.92
SEPTEMBER	2.15	33.32	44.22	249.2	44.31	6.78	13.33
OCTOBER	2.01	30.56	40.00	223.5	40.02	6.22	11.80
NOVEMBER	1.93	28.43	36.02	197.0	36.23	5.78	10.37
DECEMBER	1.83	26.24	31.96	170.5	32.19	5.31	8.97