




Georgi Dobrovolski Solar Observatory

NEW ZEALAND

E-MAIL: gdso@earthling.net

WEBSITE: <http://gdso.cv-helios.net> 

SUNSPOT RESULTS FOR JUNE 2005

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 .

DATE	UT*	g	f	WN	p	s	SN	BX	CV	QC	QC ²	Q	S	T	Ref.
01	2325	5	20	70	8	5	85	345	84	14	46	1.0	2.0	2.0	4546-0
02															
03															
04															
05	2305	5	29	79	12	11	131	492	171	19	73	1.0	2.0	2.5	4547-0
06	2255	5	33	83	10	13	113	564	157	19	73	2.0	2.5	2.0	4548-0
07															
08	2250	4	38	78	9	11	101	803	149	17	73	1.5	2.5	2.5	4549-0
09	2255	5	45	95	13	11	141	944	145	17	67	1.0	2.5	2.5	4550-0
10															
11															
12															
13															
14															
15															
16															
17															
18															
19	2305	2	18	38	4	6	46	415	45	9	41	1.0	2.0	2.0	4551-1
20															
21															
22															
23															
24															
25	2255	0	0	0	0	0	0	0	0	0	0	2.0	2.0	2.0	4552-1
26	2310	0	0	0	0	0	0	0	0	0	0	1.5	2.0	2.0	4553-1
27															
28															
29	2300	5	16	66	7	6	76	259	76	15	49	2.0	2.0	3.0	4554-1
30	2240	5	36	86	11	12	122	568	93	18	66	1.5	2.0	2.0	4555-1
31	—														
TOTALS	—	36	235	595	74	75	815	4390	920	128	488	14.5	21.5	22.5	—
NOBS	—	10	10	10	10	10	10	10	10	10	10	10	10	10	—
MNS	—	3.60	23.50	59.50	7.40	7.50	81.50	439.00	92.00	12.80	48.80	1.45	2.15	2.25	—

MEAN WEIGHT = 0.5188

MEAN CONDITION = 1.9500

TRUNCATED WOLF NUMBER = 56.10

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

Georgi Dobrovolski Solar Observatory

SUNSPOT DISTRIBUTION & INTER-SOL INDICES FOR JUNE 2005

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	2325	23	3	14	4	1	1	1.0	2.0	2.0	4546-0
02											
03											
04											
05	2305	34	5	18	11	0	0	1.0	2.0	2.5	4547-0
06	2255	38	5	20	13	0	0	2.0	2.5	2.0	4548-0
07											
08	2250	42	4	27	11	0	0	1.5	2.5	2.5	4549-0
09	2255	49	4	34	10	0	1	1.0	2.5	2.5	4550-0
10											
11											
12											
13											
14											
15											
16											
17											
18											
19	2305	20	2	12	6	0	0	1.0	2.0	2.0	4551-1
20											
21											
22											
23											
24											
25	2255	0	0	0	0	0	0	2.0	2.0	2.0	4552-1
26	2310	0	0	0	0	0	0	1.5	2.0	2.0	4553-1
27											
28											
29	2300	20	4	9	6	1	0	2.0	2.0	3.0	4554-1
30	2240	41	5	24	12	0	0	1.5	2.0	2.0	4555-1
31	—										
TOTALS	—	267	32	158	73	2	2	14.5	21.5	22.5	—
NOBS	—	10	10	10	10	10	10	10	10	10	—
MNS	—	26.70	3.20	15.80	7.30	0.20	0.20	1.45	2.15	2.25	—

Georgi Dobrovolski Solar Observatory

SUNSPOT CENSUS BY CLASSIFICATION FOR

JUNE 2005

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	2325	1	1	0	0	1	2	2	4/12	0	0	0	0	0	0	0	0	0	1	1
02																				
03																				
04																				
05	2305	0	0	0	0	1	3	4	3/6/11	0	0	0	0	0	0	0	0	0	0	0
06	2255	0	0	0	0	1	3	4	4/6/9/11	0	0	0	0	0	0	0	0	0	0	0
07																				
08	2250	0	0	0	0	0	0	3	5/7/9	1	17	0	0	0	0	0	0	0	0	0
09	2255	1	1	0	0	1	2	2	3/15	1	24	0	0	0	0	0	0	0	0	0
10																				
11																				
12																				
13																				
14																				
15																				
16																				
17																				
18																				
19	2305	0	0	0	0	0	0	1	5	1	13	0	0	0	0	0	0	0	0	0
20																				
21																				
22																				
23																				
24																				
25	2255	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	2310	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27																				
28																				
29	2300	0	0	1	2	1	2	2	5/6	0	0	0	0	0	0	0	0	0	1	1
30	2240	0	0	0	0	2	4/4	3	5/9/14	0	0	0	0	0	0	0	0	0	0	0
31	—																			
TOTALS	—	2	2	1	2	7	20	21	155	3	54	0	0	0	0	0	0	0	2	2
REGIONAL PERCENTAGES																				
A	B	C	D	E	F	G	H	J	Σg											
5.6	2.8	19.4	58.3	8.3	0.0	0.0	0.0	5.6	36											
NOBS = 10		$\overline{p/g}$ mean = 2.0562				$\overline{f/g}$ mean = 6.7875														
		$\overline{p/g}$ mean = 2.0556				$\overline{f/g}$ mean = 6.5278														
GROUP COMPLEXITY INDEX (GCI) = 8.5833																				

Georgi Dobrovolski Solar Observatory

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	$g(S^W)$	$WN(S^W)$	$SN(S^W)$	$BX(S^W)$	$CV(S^W)$	$QC(S^W)$	$IS(S^W)$
2004 JANUARY	4.00	65.23	78.05	575.9	77.59	12.71	28.00
FEBRUARY	3.75	61.35	72.76	548.3	72.73	11.90	26.48
MARCH	3.56	58.70	70.01	537.4	70.74	11.30	25.59
APRIL	3.53	57.59	70.08	508.8	70.66	11.20	24.77
MAY	3.57	57.74	71.00	503.5	71.37	11.34	24.58
JUNE	3.47	56.82	70.02	515.1	70.41	11.12	24.53
JULY	3.35	54.72	66.85	494.3	67.50	10.69	23.50
AUGUST	3.28	53.46	64.65	482.4	66.12	10.40	22.91
SEPTEMBER	3.15	51.44	61.95	464.3	64.60	9.98	22.12
OCTOBER	3.05	49.75	59.58	444.3	62.91	9.67	21.33
NOVEMBER	2.95	48.53	59.05	446.4	62.64	9.47	21.14
DECEMBER	2.87	48.18	60.36	456.1	63.75	9.40	21.60

BARNES-13 METHOD

MONTH	$g(S^{B13})$	$WN(S^{B13})$	$SN(S^{B13})$	$BX(S^{B13})$	$CV(S^{B13})$	$QC(S^{B13})$	$IS(S^{B13})$
2004 JANUARY	3.80	61.44	73.72	524.8	73.91	12.09	26.12
FEBRUARY	3.68	59.12	70.59	500.3	70.85	11.63	24.88
MARCH	3.61	57.85	69.17	492.8	69.40	11.33	24.29
APRIL	3.58	57.27	68.92	486.3	68.87	11.18	23.97
MAY	3.57	57.45	69.47	497.3	69.37	11.18	24.20
JUNE	3.52	57.42	69.76	520.6	69.89	11.11	24.67
JULY	3.43	56.59	69.09	529.8	69.48	10.90	24.68
AUGUST	3.33	55.33	67.92	526.0	68.88	10.65	24.38
SEPTEMBER	3.21	53.53	65.96	508.9	67.87	10.34	23.68
OCTOBER	3.10	51.52	63.32	486.0	66.22	10.02	22.72
NOVEMBER	2.95	48.95	60.06	459.0	63.78	9.58	21.54
DECEMBER	2.80	46.43	57.15	426.5	61.36	9.13	20.38