



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

MONTHLY SUNSPOT REPORTS

1995

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GEORGI DOBROVOLSKI SOLAR OBSERVATORY

NEW ZEALAND

E-MAIL: gdso@earthling.net

WEBSITE: www.cv-helios.net/gdso

SUNSPOT RESULTS FOR JANUARY 1995

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 .

Q = Quietness [ie. steadiness] refer to Kiepenheuer scale .

S = Sharpness [ie. clarity] refer to Kiepenheuer scale .

T = Transparency where 1 = excellent , 5 = worthless .

WN = Wolf Number ; SN = Pettisindex ; BX = Beckindex ; CV = Classification Value .

DATE	UT	g	f	WN	p	s	SN	BX	CV	Q	S	T	Ref.
01	2000	0	0	0	0	0	0	0	0	2.0	2.5	2.5	2781
02													
03	1950	0	0	0	0	0	0	0	0	2.5	2.5	2.5	2782
04	1955	1	2	12	0	2	2	8	2	1.0	2.5	2.5	2783
05	2230	0	0	0	0	0	0	0	0	2.5	3.0	2.5	2784
06	1950	0	0	0	0	0	0	0	0	1.5	2.5	2.5	2785
07	1945	0	0	0	0	0	0	0	0	1.0	2.5	2.5	2786
08													
09													
10	1925	0	0	0	0	0	0	0	0	1.5	2.5	2.5	2787
11	2025	1	1	11	0	1	1	4	1	2.0	3.0	3.5	2788
12	2035	0	0	0	0	0	0	0	0	2.0	2.0	2.5	2789
13	1940	1	2	12	0	2	2	8	2	1.5	2.0	2.5	2790
14	1935	1	4	14	2	1	21	32	9	1.5	2.0	2.5	2791
15	1950	1	5	15	2	1	21	40	9	1.5	2.0	2.5	2792
16													
17													
18													
19													
20													
21													
22	1930	4	30	70	5	20	70	436	53	1.5	1.5	2.5	2793
23													
24													
25	2300	2	15	35	3	9	39	240	34	2.5	4.0	4.0	2794
26													
27	2010	1	4	14	1	2	12	32	12	2.0	2.5	2.5	2795
28	2115	1	3	13	1	2	12	24	12	2.5	3.0	3.5	2796
29	1950	2	6	26	1	5	15	57	13	2.0	2.0	2.5	2797
30	2120	3	6	36	2	4	24	40	18	2.0	2.5	2.5	2798
31													
Σ	—	18	78	258	17	49	219	921	165	33.0	44.5	48.5	—
NOBS	—	18	18	18	18	18	18	18	18	18	18	18	—
MNS	—	1.00	4.33	14.33	0.94	2.72	12.17	51.17	9.17	1.83	2.47	2.69	—

MEAN WEIGHT = 0.4402

MEAN CONDITION = 2.3333

QUALITY COUNT = 2.61



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

SUNSPOT DISTRIBUTION & INTER-SOL INDICES FOR JANUARY 1995

All observations carried out by HOWARD BARNES .

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

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

Q = Quietness [ie. steadiness] refer to Kiepenheuer scale .

S = Sharpness [ie. clarity] refer to Kiepenheuer scale .

T = Transparency where 1 = excellent , 5 = worthless .

IS = Inter-Sol Index .

gr = number of multi-spot groups .

grfp = number of umbræ within penumbrae 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 .

DATE	UT	IS	gr	grfp	grf	efp	ef	Q	S	T	Ref.
01	2000	0	0	0	0	0	0	2.0	2.5	2.5	2781
02											
03	1950	0	0	0	0	0	0	2.5	2.5	2.5	2782
04	1955	3	1	0	2	0	0	1.0	2.5	2.5	2783
05	2230	0	0	0	0	0	0	2.5	3.0	2.5	2784
06	1950	0	0	0	0	0	0	1.5	2.5	2.5	2785
07	1945	0	0	0	0	0	0	1.0	2.5	2.5	2786
08											
09											
10	1925	0	0	0	0	0	0	1.5	2.5	2.5	2787
11	2025	1	0	0	0	0	1	2.0	3.0	3.5	2788
12	2035	0	0	0	0	0	0	2.0	2.0	2.5	2789
13	1940	3	1	0	2	0	0	1.5	2.0	2.5	2790
14	1935	5	1	3	1	0	0	1.5	2.0	2.5	2791
15	1950	6	1	4	1	0	0	1.5	2.0	2.5	2792
16											
17											
18											
19											
20											
21											
22	1930	33	3	10	19	0	1	1.5	1.5	2.5	2793
23											
24											
25	2300	17	2	6	9	0	0	2.5	4.0	4.0	2794
26											
27	2010	5	1	2	2	0	0	2.0	2.5	2.5	2795
28	2115	4	1	1	2	0	0	2.5	3.0	3.5	2796
29	1950	7	1	0	5	1	0	2.0	2.0	2.5	2797
30	2120	9	3	2	4	0	0	2.0	2.5	2.5	2798
31											
Σ	—	93	15	28	47	1	2	33.0	44.5	48.5	—
NOBS	—	18	18	18	18	18	18	18	18	18	—
MNS	—	5.17	0.83	1.56	2.61	0.06	0.11	1.83	2.47	2.69	—



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

SUNSPOT CENSUS BY CLASSIFICATION FOR JANUARY 1995

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 g ; f	B g ; f	C g ; f	D g ; f	E g ; f	F g ; f	G g ; f	H g ; f	J g ; f
01	2000	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
02										
03	1950	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
04	1955	0 ; 0	1 ; 2	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
05	2230	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
06	1950	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
07	1945	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
08										
09										
10	1925	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
11	2025	1 ; 1	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
12	2035	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
13	1940	0 ; 0	1 ; 2	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
14	1935	0 ; 0	0 ; 0	1 ; 4	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
15	1950	0 ; 0	0 ; 0	1 ; 5	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
16										
17										
18										
19										
20										
21										
22	1930	1 ; 1	0 ; 0	2 ; 3/6	1 ; 20	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
23										
24										
25	2300	0 ; 0	0 ; 0	1 ; 3	1 ; 12	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
26										
27	2010	0 ; 0	0 ; 0	1 ; 4	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
28	2115	0 ; 0	0 ; 0	1 ; 3	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
29	1950	0 ; 0	1 ; 5	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	1 ; 1
30	2120	0 ; 0	1 ; 2	2 ; 2/2	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
31										
TOTALS	—	2 ; 2	4 ; 11	9 ; 32	2 ; 32	0 ; 0	0 ; 0	0 ; 0	0 ; 0	1 ; 1
REGIONAL PERCENTAGES										
A	B	C	D	E	F	G	H	J	Σg	
11.1	22.2	50.0	11.1	0.0	0.0	0.0	0.0	5.6	18	
		NOBS = 18	\bar{p}/\bar{g} mean = 0.9015			\bar{f}/\bar{g} mean = 3.7273				
			\bar{p}/\bar{g} mean = 0.9444			\bar{f}/\bar{g} mean = 4.3333				
GROUP COMPLEXITY INDEX (GCI) = 5.2778										



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NEW ZEALAND

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SUNSPOT RESULTS FOR FEBRUARY 1995

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 .

Q = Quietness [ie. steadiness] refer to Kiepenheuer scale .

S = Sharpness [ie. clarity] refer to Kiepenheuer scale .

T = Transparency where 1 = excellent , 5 = worthless .

WN = Wolf Number ; SN = Pettisindex ; BX = Beckindex ; CV = Classification Value .

DATE	UT	g	f	WN	p	s	SN	BX	CV	Q	S	T	Ref.
01													
02	1945	3	12	42	1	11	21	80	16	2.0	2.5	3.0	2799
03	2135	3	14	44	1	13	23	92	16	1.5	2.5	2.5	2800
04													
05	2010	3	10	40	1	9	19	68	15	2.5	3.0	3.0	2801
06	2130	2	11	31	1	10	20	84	13	2.0	2.5	2.5	2802
07	2000	1	6	16	2	4	24	108	28	2.0	2.0	2.5	2803
08													
09													
10													
11													
12													
13													
14													
15													
16													
17													
18	1935	3	10	40	4	4	44	169	40	1.5	2.5	3.0	2804
19	2125	3	27	57	6	18	78	602	54	2.0	2.0	2.5	2805
20													
21													
22													
23	2250	3	12	42	3	8	38	165	41	1.5	2.0	2.5	2806
24	1930	3	8	38	2	6	26	118	20	1.5	2.0	2.0	2807
25	1940	2	6	26	2	4	24	36	15	1.0	2.0	2.5	2808
26													
27	2030	3	15	45	4	7	47	226	38	1.5	2.0	2.0	2809
28	2025	4	19	59	3	10	40	266	37	2.0	2.0	2.5	2810
29													
30													
31													
Σ	—	33	150	480	30	104	404	2014	333	21.0	27.0	30.5	—
NOBS	—	12	12	12	12	12	12	12	12	12	12	12	—
MNS	—	2.75	12.50	40.00	2.50	8.67	33.67	167.83	27.75	1.75	2.25	2.54	—

MEAN WEIGHT = 0.4661

MEAN CONDITION = 2.1806

QUALITY COUNT = 6.83



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

SUNSPOT DISTRIBUTION & INTER-SOL INDICES FOR FEBRUARY 1995

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

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

Q = Quietness [ie. steadiness] refer to Kiepenheuer scale .

S = Sharpness [ie. clarity] refer to Kiepenheuer scale .

T = Transparency where 1 = excellent , 5 = worthless .

IS = Inter-Sol Index .

gr = number of multi-spot groups .

grfp = number of umbrae within penumbrae within the groups (gr) .

grf = number of non-penumbra spots within the groups (gr) .

efp = number of single penumbral spots :

ef = number of single non-penumbra spots .

DATE	UT	IS	gr	grfp	grf	efp	ef	Q	S	T	Ref.
01											
02	1945	14	2	1	10	0	1	2.0	2.5	3.0	2799
03	2135	16	2	1	12	0	1	1.5	2.5	2.5	2800
04											
05	2010	12	2	1	8	0	1	2.5	3.0	3.0	2801
06	2130	12	1	1	9	0	1	2.0	2.5	2.5	2802
07	2000	7	1	2	4	0	0	2.0	2.0	2.5	2803
08											
09											
10											
11											
12											
13											
14											
15											
16											
17											
18	1935	12	2	5	4	1	0	1.5	2.5	3.0	2804
19	2125	29	2	8	18	1	0	2.0	2.0	2.5	2805
20											
21											
22											
23	2250	14	2	3	8	1	0	1.5	2.0	2.5	2806
24	1930	10	2	2	5	0	1	1.5	2.0	2.0	2807
25	1940	8	2	2	4	0	0	1.0	2.0	2.5	2808
26											
27	2030	17	2	8	6	0	1	1.5	2.0	2.0	2809
28	2025	22	3	9	9	0	1	2.0	2.0	2.5	2810
29											
30											
31											
Σ	—	173	23	43	97	3	7	21.0	27.0	30.5	—
NOBS	—	12	12	12	12	12	12	12	12	12	—
MNS	—	14.42	1.92	3.58	8.08	0.25	0.58	1.75	2.25	2.54	—



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

SUNSPOT CENSUS BY CLASSIFICATION FOR FEBRUARY 1995

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 g ; f	B g ; f	C g ; f	D g ; f	E g ; f	F g ; f	G g ; f	H g ; f	J g ; f
01										
02	1945	1 ; 1	1 ; 3	1 ; 8	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
03	2135	1 ; 1	1 ; 4	1 ; 9	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
04										
05	2010	1 ; 1	1 ; 2	1 ; 7	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
06	2130	1 ; 1	0 ; 0	1 ; 10	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
07	2000	0 ; 0	0 ; 0	0 ; 0	1 ; 6	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
08										
09										
10										
11										
12										
13										
14										
15										
16										
17										
18	1935	0 ; 0	0 ; 0	1 ; 3	1 ; 6	0 ; 0	0 ; 0	0 ; 0	0 ; 0	1 ; 1
19	2125	0 ; 0	0 ; 0	1 ; 5	0 ; 0	1 ; 21	0 ; 0	0 ; 0	0 ; 0	1 ; 1
20										
21										
22										
23	2250	0 ; 0	1 ; 5	0 ; 0	1 ; 6	0 ; 0	0 ; 0	0 ; 0	0 ; 0	1 ; 1
24	1930	1 ; 1	0 ; 0	1 ; 5	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	1 ; 2
25	1940	0 ; 0	1 ; 3	1 ; 3	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
26										
27	2030	1 ; 1	0 ; 0	1 ; 3	1 ; 11	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
28	2025	1 ; 1	1 ; 3	1 ; 2	1 ; 13	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
29										
30										
31										
TOTALS	—	7 ; 7	6 ; 20	10 ; 55	5 ; 42	1 ; 21	0 ; 0	0 ; 0	0 ; 0	4 ; 5
REGIONAL PERCENTAGES										
A	B	C	D	E	F	G	H	J	Σg	
21.2	18.2	30.3	15.2	3.0	0.0	0.0	0.0	12.1	33	
		NOBS = 12	\bar{p}/\bar{g} mean = 0.9653			\bar{f}/\bar{g} mean = 4.6042				
			\bar{p}/\bar{g} mean = 0.9091			\bar{f}/\bar{g} mean = 4.5455				
GROUP COMPLEXITY INDEX (GCI) = 5.4545										



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

NEW ZEALAND

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SUNSPOT RESULTS FOR MARCH 1995

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 .

Q = Quietness [ie. steadiness] refer to Kiepenheuer scale .

S = Sharpness [ie. clarity] refer to Kiepenheuer scale .

T = Transparency where 1 = excellent , 5 = worthless .

WN = Wolf Number ; SN = Pettisindex ; BX = Beckindex ; CV = Classification Value .

DATE	UT	g	f	WN	p	s	SN	BX	CV	Q	S	T	Ref.
01	2020	4	20	60	4	11	51	289	46	2.0	3.0	3.5	2811
02													
03													
04	1940	5	28	78	4	20	60	342	49	2.0	2.0	2.0	2812
05	1945	3	15	45	3	8	38	261	34	1.5	2.0	2.5	2813
06	2005	2	10	30	3	4	34	199	32	2.0	2.5	2.5	2814
07	2005	3	11	41	1	9	19	72	13	1.5	2.0	2.5	2815
08	1940	1	2	12	1	1	11	16	8	2.0	2.5	2.5	2816
09	2110	0	0	0	0	0	0	0	0	1.5	2.5	2.5	2817
10													
11													
12	2130	0	0	0	0	0	0	0	0	2.0	4.0	4.0	2818
13	1950	0	0	0	0	0	0	0	0	2.0	2.5	2.5	2819
14	2000	1	1	11	1	0	10	37	10	2.0	2.5	2.5	2820
15	2000	1	5	15	2	2	22	90	22	2.5	3.0	3.0	2821
16	1955	1	7	17	3	3	33	126	31	2.0	3.0	2.5	2822
17	2040	1	9	19	3	4	34	162	31	1.5	2.0	2.5	2823
18	2145	3	17	47	3	12	42	242	35	1.5	2.5	2.5	2824
19	2000	3	12	42	2	7	27	160	26	2.0	3.5	3.5	2825
20	1950	3	21	51	5	12	62	310	42	1.5	2.5	2.5	2826
21	2220	3	24	54	2	20	40	188	22	2.0	2.5	2.5	2827
22	2000	2	25	45	5	13	63	450	56	1.5	2.0	2.5	2828
23	2200	3	30	60	6	17	77	526	63	2.0	3.0	3.0	2829
24	2200	4	19	59	5	12	62	308	59	1.5	2.5	2.5	2830
25	1955	3	16	46	4	11	51	178	49	2.0	3.0	3.5	2831
26	2000	3	15	45	3	4	34	120	31	1.0	2.5	2.5	2832
27	2040	2	17	37	1	6	16	132	10	1.5	2.5	3.0	2833
28													
29	2255	2	10	30	1	3	13	76	10	1.0	2.5	2.5	2834
30	2340	2	13	33	2	5	25	104	20	1.5	2.5	2.5	2835
31	2155	2	9	29	1	4	14	64	11	2.0	2.5	2.5	2836
Σ	—	57	336	906	65	188	838	4452	710	45.5	67.5	70.5	—
NOBS	—	26	26	26	26	26	26	26	26	26	26	26	—
MNS	—	2.19	12.92	34.85	2.50	7.23	32.23	171.23	27.31	1.75	2.60	2.71	—

MEAN WEIGHT = 0.4336

MEAN CONDITION = 2.3526

QUALITY COUNT = 6.12



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

SUNSPOT DISTRIBUTION & INTER-SOL INDICES FOR MARCH 1995

All observations carried out by HOWARD BARNES .

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

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

Q = Quietness [ie. steadiness] refer to Kiepenheuer scale .

S = Sharpness [ie. clarity] refer to Kiepenheuer scale .

T = Transparency where 1 = excellent , 5 = worthless .

IS = Inter-Sol Index .

gr = number of multi-spot groups .

grfp = number of umbrae within penumbrae 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 .

DATE	UT	IS	gr	grfp	grf	efp	ef	Q	S	T	Ref.
01	2020	23	3	8	11	1	0	2.0	3.0	3.5	2811
02											
03											
04	1940	32	4	8	19	0	1	2.0	2.0	2.0	2812
05	1945	17	2	6	8	1	0	1.5	2.0	2.5	2813
06	2005	11	1	5	4	1	0	2.0	2.5	2.5	2814
07	2005	13	2	2	8	0	1	1.5	2.0	2.5	2815
08	1940	3	1	1	1	0	0	2.0	2.5	2.5	2816
09	2110	0	0	0	0	0	0	1.5	2.5	2.5	2817
10											
11											
12	2130	0	0	0	0	0	0	2.0	4.0	4.0	2818
13	1950	0	0	0	0	0	0	2.0	2.5	2.5	2819
14	2000	1	0	0	0	1	0	2.0	2.5	2.5	2820
15	2000	6	1	3	2	0	0	2.5	3.0	3.0	2821
16	1955	8	1	4	3	0	0	2.0	3.0	2.5	2822
17	2040	10	1	5	4	0	0	1.5	2.0	2.5	2823
18	2145	19	2	5	11	0	1	1.5	2.5	2.5	2824
19	2000	14	2	5	6	0	1	2.0	3.5	3.5	2825
20	1950	24	3	9	12	0	0	1.5	2.5	2.5	2826
21	2220	26	2	4	19	0	1	2.0	2.5	2.5	2827
22	2000	27	2	12	13	0	0	1.5	2.0	2.5	2828
23	2200	32	2	13	16	0	1	2.0	3.0	3.0	2829
24	2200	22	3	7	11	0	1	1.5	2.5	2.5	2830
25	1955	19	3	5	11	0	0	2.0	3.0	3.5	2831
26	2000	18	3	11	4	0	0	1.0	2.5	2.5	2832
27	2040	18	1	11	5	0	1	1.5	2.5	3.0	2833
28											
29	2255	11	1	7	2	0	1	1.0	2.5	2.5	2834
30	2340	15	2	8	5	0	0	1.5	2.5	2.5	2835
31	2155	11	2	5	4	0	0	2.0	2.5	2.5	2836
Σ	—	380	44	144	179	4	9	45.5	67.5	70.5	—
NOBS	—	26	26	26	26	26	26	26	26	26	—
MNS	—	14.62	1.69	5.54	6.88	0.15	0.35	1.75	2.60	2.71	—



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

SUNSPOT CENSUS BY CLASSIFICATION FOR MARCH 1995

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 g ; f	B g ; f	C g ; f	D g ; f	E g ; f	F g ; f	G g ; f	H g ; f	J g ; f
01	2020	0 ; 0	1 ; 5	1 ; 2	1 ; 12	0 ; 0	0 ; 0	0 ; 0	0 ; 0	1 ; 1
02										
03										
04	1940	1 ; 1	1 ; 2	2 ; 4/8	1 ; 13	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
05	1945	0 ; 0	1 ; 2	0 ; 0	1 ; 12	0 ; 0	0 ; 0	0 ; 0	0 ; 0	1 ; 1
06	2005	0 ; 0	0 ; 0	0 ; 0	1 ; 9	0 ; 0	0 ; 0	0 ; 0	0 ; 0	1 ; 1
07	2005	1 ; 1	1 ; 3	1 ; 7	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
08	1940	0 ; 0	0 ; 0	1 ; 2	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
09	2110	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
10										
11										
12	2130	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
13	1950	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
14	2000	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	1 ; 1
15	2000	0 ; 0	0 ; 0	0 ; 0	1 ; 5	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
16	1955	0 ; 0	0 ; 0	0 ; 0	1 ; 7	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
17	2040	0 ; 0	0 ; 0	0 ; 0	1 ; 9	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
18	2145	1 ; 1	0 ; 0	1 ; 5	1 ; 11	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
19	2000	1 ; 1	1 ; 3	0 ; 0	1 ; 8	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
20	1950	0 ; 0	1 ; 2	1 ; 4	1 ; 15	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
21	2220	1 ; 1	0 ; 0	2 ; 10/13	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
22	2000	0 ; 0	0 ; 0	0 ; 0	2 ; 12/13	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
23	2200	1 ; 1	0 ; 0	0 ; 0	2 ; 11/18	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
24	2200	1 ; 1	0 ; 0	1 ; 2	2 ; 7/9	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
25	1955	0 ; 0	0 ; 0	2 ; 4/7	1 ; 5	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
26	2000	0 ; 0	0 ; 0	3 ; 2/2/11	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
27	2040	1 ; 1	0 ; 0	1 ; 16	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
28										
29	2255	1 ; 1	0 ; 0	1 ; 9	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
30	2340	0 ; 0	0 ; 0	2 ; 5/8	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
31	2155	0 ; 0	1 ; 2	1 ; 7	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
TOTALS	—	9 ; 9	7 ; 19	20 ; 128	17 ; 176	0 ; 0	0 ; 0	0 ; 0	0 ; 0	4 ; 4

REGIONAL PERCENTAGES

A	B	C	D	E	F	G	H	J	Σg
15.8	12.3	35.1	29.8	0.0	0.0	0.0	0.0	7.0	57

NOBS = 26

\bar{p}/\bar{g} mean = 1.2703

\bar{f}/\bar{g} mean = 5.8703

\bar{p}/\bar{g} mean = 1.1404

\bar{f}/\bar{g} mean = 5.8947

GROUP COMPLEXITY INDEX (GCI) = 7.0351



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

NEW ZEALAND

E-MAIL: gdso@earthling.net

WEBSITE: www.cv-helios.net/gdso

SUNSPOT RESULTS FOR APRIL 1995

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 .

Q = Quietness [ie. steadiness] refer to Kiepenheuer scale .

S = Sharpness [ie. clarity] refer to Kiepenheuer scale .

T = Transparency where 1 = excellent , 5 = worthless .

WN = Wolf Number ; SN = Pettisindex ; BX = Beckindex ; CV = Classification Value .

DATE	UT	g	f	WN	p	s	SN	BX	CV	Q	S	T	Ref.
01	1955	2	7	27	1	4	14	48	11	1.5	2.0	2.5	2837
02	2000	2	8	28	2	5	25	64	21	1.5	2.0	2.5	2838
03	2045	3	3	33	0	3	3	12	3	1.5	2.0	2.5	2839
04	2000	0	0	0	0	0	0	0	0	1.5	2.0	3.0	2840
05	2005	0	0	0	0	0	0	0	0	1.5	2.5	3.0	2841
06													
07													
08													
09	2025	0	0	0	0	0	0	0	0	1.5	2.0	2.5	2842
10													
11	2110	1	16	16	1	5	15	48	12	2.0	3.0	3.5	2843
12	2015	1	17	27	1	12	22	136	9	1.5	2.0	3.0	2844
13	2110	2	23	43	3	16	46	344	34	2.0	2.5	3.0	2845
14													
15	2005	2	37	57	7	18	88	848	63	1.5	2.5	2.5	2846
16	2035	2	43	63	8	22	102	970	63	1.5	2.5	2.5	2847
17													
18	2115	2	28	48	7	18	88	630	63	2.5	2.5	2.5	2848
19													
20	2200	2	11	31	1	5	15	80	44	1.5	3.0	3.0	2849
21													
22													
23													
24													
25													
26	2000	0	0	0	0	0	0	0	0	1.5	2.0	2.5	2850
27	2035	0	0	0	0	0	0	0	0	2.0	2.5	2.5	2851
28	2020	0	0	0	0	0	0	0	0	2.5	2.5	2.5	2852
29	2115	0	0	0	0	0	0	0	0	2.5	3.0	2.5	2853
30													
31													
Σ	—	19	183	373	31	108	418	3180	323	30.0	40.5	46.0	—
NOBS	—	17	17	17	17	17	17	17	17	17	17	17	—
MNS	—	1.12	10.76	21.94	1.82	6.35	24.59	187.06	19.00	1.76	2.38	2.71	—

MEAN WEIGHT = 0.4430

MEAN CONDITION = 2.2843

QUALITY COUNT = 3.41



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

SUNSPOT DISTRIBUTION & INTER-SOL INDICES FOR APRIL 1995

All observations carried out by HOWARD BARNES .

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

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

Q = Quietness [ie. steadiness] refer to Kiepenheuer scale .

S = Sharpness [ie. clarity] refer to Kiepenheuer scale .

T = Transparency where 1 = excellent , 5 = worthless .

IS = Inter-Sol Index .

gr = number of multi-spot groups .

grfp = number of umbrae within penumbrae 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 .

DATE	UT	IS	gr	grfp	grf	efp	ef	Q	S	T	Ref.
01	1955	9	2	3	4	0	0	1.5	2.0	2.5	2837
02	2000	10	2	3	5	0	0	1.5	2.0	2.5	2838
03	2045	3	0	0	0	0	3	1.5	2.0	2.5	2839
04	2000	0	0	0	0	0	0	1.5	2.0	3.0	2840
05	2005	0	0	0	0	0	0	1.5	2.5	3.0	2841
06											
07											
08											
09	2025	0	0	0	0	0	0	1.5	2.0	2.5	2842
10											
11	2110	7	1	1	5	0	0	2.0	3.0	3.5	2843
12	2015	18	1	5	12	0	0	1.5	2.0	3.0	2844
13	2110	25	2	7	16	0	0	2.0	2.5	3.0	2845
14											
15	2005	39	2	19	18	0	0	1.5	2.5	2.5	2846
16	2035	45	2	21	22	0	0	1.5	2.5	2.5	2847
17											
18	2115	30	2	10	18	0	0	2.5	2.5	2.5	2848
19											
20	2200	13	2	6	5	0	0	1.5	3.0	3.0	2849
21											
22											
23											
24											
25											
26	2000	0	0	0	0	0	0	1.5	2.0	2.5	2850
27	2035	0	0	0	0	0	0	2.0	2.5	2.5	2851
28	2020	0	0	0	0	0	0	2.5	2.5	2.5	2852
29	2115	0	0	0	0	0	0	2.5	3.0	2.5	2853
30											
31											
Σ	—	199	16	75	105	0	3	30.0	40.5	46.0	—
NOBS	—	17	17	17	17	17	17	17	17	17	—
MNS	—	11.71	0.94	4.41	6.18	0.00	0.18	1.76	2.38	2.71	—



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

SUNSPOT CENSUS BY CLASSIFICATION FOR APRIL 1995

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 g ; f	B g ; f	C g ; f	D g ; f	E g ; f	F g ; f	G g ; f	H g ; f	J g ; f
01	1955	0 ; 0	1 ; 2	1 ; 5	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
02	2000	0 ; 0	0 ; 0	2 ; 3/5	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
03	2045	3 ; 1/1/1	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
04	2000	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
05	2005	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
06										
07										
08										
09	2025	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
10										
11	2110	0 ; 0	0 ; 0	1 ; 6	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
12	2015	0 ; 0	0 ; 0	1 ; 17	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
13	2110	0 ; 0	1 ; 5	0 ; 0	1 ; 18	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
14										
15	2005	0 ; 0	0 ; 0	0 ; 0	1 ; 11	1 ; 26	0 ; 0	0 ; 0	0 ; 0	0 ; 0
16	2035	0 ; 0	0 ; 0	0 ; 0	1 ; 15	1 ; 28	0 ; 0	0 ; 0	0 ; 0	0 ; 0
17										
18	2115	0 ; 0	0 ; 0	0 ; 0	1 ; 10	1 ; 18	0 ; 0	0 ; 0	0 ; 0	0 ; 0
19										
20	2200	0 ; 0	1 ; 2	1 ; 9	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
21										
22										
23										
24										
25										
26	2000	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
27	2035	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
28	2020	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
29	2115	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
30										
31										
TOTALS	—	3 ; 3	3 ; 9	6 ; 45	4 ; 54	3 ; 72	0 ; 0	0 ; 0	0 ; 0	0 ; 0
REGIONAL PERCENTAGES										
A	B	C	D	E	F	G	H	J	Σg	
15.8	15.8	31.6	21.1	15.8	0.0	0.0	0.0	0.0	19	
		NOBS = 17	\bar{p} / \bar{g} mean = 1.6500			\bar{f} / \bar{g} mean = 10.2500				
			\bar{p} / \bar{g} mean = 1.6316			\bar{f} / \bar{g} mean = 9.6316				
GROUP COMPLEXITY INDEX (GCI) = 11.2632										



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

NEW ZEALAND

E-MAIL: gdso@earthling.net

WEBSITE: www.cv-helios.net/gdso

SUNSPOT RESULTS FOR MAY 1995

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 .

Q = Quietness [ie. steadiness] refer to Kiepenheuer scale .

S = Sharpness [ie. clarity] refer to Kiepenheuer scale .

T = Transparency where 1 = excellent , 5 = worthless .

WN = Wolf Number ; SN = Pettisindex ; BX = Beckindex ; CV = Classification Value .

DATE	UT	g	f	WN	p	s	SN	BX	CV	Q	S	T	Ref.
01	2045	0	0	0	0	0	0	0	0	2.5	2.5	2.5	2854
02	2100	0	0	0	0	0	0	0	0	2.0	2.0	2.5	2855
03													
04													
05													
06	2145	1	1	11	1	0	10	44	40	2.0	2.5	2.5	2856
07	2045	1	1	11	1	0	10	44	40	2.5	2.0	2.0	2857
08													
09	2055	1	4	14	1	1	11	32	38	2.5	3.0	2.5	2858
10	2035	1	5	15	1	1	11	40	38	2.5	2.5	3.0	2859
11													
12	2040	2	17	37	4	9	49	306	50	1.5	2.0	2.0	2860
13													
14	2110	3	17	47	3	12	42	264	34	1.5	2.0	2.0	2861
15													
16	2120	2	31	51	4	17	57	558	98	1.5	2.5	2.5	2862
17	2040	2	36	56	8	17	97	648	113	2.0	3.0	3.0	2863
18	2055	2	33	53	5	19	69	504	97	1.5	2.0	2.5	2864
19													
20													
21													
22	2045	0	0	0	0	0	0	0	0	2.0	3.0	3.0	2865
23													
24	2055	0	0	0	0	0	0	0	0	1.0	2.0	2.5	2866
25	2045	0	0	0	0	0	0	0	0	2.5	3.0	3.5	2867
26													
27													
28	2215	1	1	11	1	0	10	37	4	2.0	2.5	2.5	2868
29	2040	1	3	13	0	3	3	12	3	1.5	2.0	2.5	2869
30	2200	1	2	12	0	2	2	8	2	2.0	2.5	2.5	2870
31	2045	1	1	11	0	1	1	4	1	2.0	2.5	3.0	2871
Σ	—	19	152	342	29	82	372	2501	558	35.0	43.5	46.5	—
NOBS	—	18	18	18	18	18	18	18	18	18	18	18	—
MNS	—	1.06	8.44	19.00	1.61	4.56	20.67	138.94	31.00	1.94	2.42	2.58	—

MEAN WEIGHT = 0.4411

MEAN CONDITION = 2.3148

QUALITY COUNT = 3.17



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

SUNSPOT DISTRIBUTION & INTER-SOL INDICES FOR MAY 1995

All observations carried out by HOWARD BARNES .

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

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

Q = Quietness [ie. steadiness] refer to Kiepenheuer scale .

S = Sharpness [ie. clarity] refer to Kiepenheuer scale .

T = Transparency where 1 = excellent , 5 = worthless .

IS = Inter-Sol Index .

gr = number of multi-spot groups .

grfp = number of umbrae within penumbrae 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 .

DATE	UT	IS	gr	grfp	grf	efp	ef	Q	S	T	Ref.
01	2045	0	0	0	0	0	0	2.5	2.5	2.5	2854
02	2100	0	0	0	0	0	0	2.0	2.0	2.5	2855
03											
04											
05											
06	2145	1	0	0	0	1	0	2.0	2.5	2.5	2856
07	2045	1	0	0	0	1	0	2.5	2.0	2.0	2857
08											
09	2055	5	1	3	1	0	0	2.5	3.0	2.5	2858
10	2035	6	1	4	1	0	0	2.5	2.5	3.0	2859
11											
12	2040	19	2	8	9	0	0	1.5	2.0	2.0	2860
13											
14	2110	19	2	5	11	0	1	1.5	2.0	2.0	2861
15											
16	2120	33	2	14	17	0	0	1.5	2.5	2.5	2862
17	2040	38	2	19	17	0	0	2.0	3.0	3.0	2863
18	2055	35	2	14	19	0	0	1.5	2.0	2.5	2864
19											
20											
21											
22	2045	0	0	0	0	0	0	2.0	3.0	3.0	2865
23											
24	2055	0	0	0	0	0	0	1.0	2.0	2.5	2866
25	2045	0	0	0	0	0	0	2.5	3.0	3.5	2867
26											
27											
28	2215	1	0	0	0	1	0	2.0	2.5	2.5	2868
29	2040	4	1	0	3	0	0	1.5	2.0	2.5	2869
30	2200	3	1	0	2	0	0	2.0	2.5	2.5	2870
31	2045	1	0	0	0	0	1	2.0	2.5	3.0	2871
Σ	—	166	14	67	80	3	2	35.0	43.5	46.5	—
NOBS	—	18	18	18	18	18	18	18	18	18	—
MNS	—	9.22	0.78	3.72	4.44	0.17	0.11	1.94	2.42	2.58	—



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

SUNSPOT CENSUS BY CLASSIFICATION FOR MAY 1995

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 g ; f	B g ; f	C g ; f	D g ; f	E g ; f	F g ; f	G g ; f	H g ; f	J g ; f
01	2045	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
02	2100	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
03										
04										
05										
06	2145	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	1 ; 1	0 ; 0
07	2045	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	1 ; 1	0 ; 0
08										
09	2055	0 ; 0	0 ; 0	1 ; 4	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
10	2035	0 ; 0	0 ; 0	1 ; 5	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
11										
12	2040	0 ; 0	0 ; 0	0 ; 0	2 ; 7/10	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
13										
14	2110	1 ; 1	1 ; 2	0 ; 0	1 ; 14	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
15										
16	2120	0 ; 0	0 ; 0	0 ; 0	2 ; 14/17	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
17	2040	0 ; 0	0 ; 0	0 ; 0	2 ; 14/22	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
18	2055	0 ; 0	0 ; 0	1 ; 9	1 ; 24	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
19										
20										
21										
22	2045	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
23										
24	2055	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
25	2045	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
26										
27										
28	2215	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	1 ; 1
29	2040	0 ; 0	1 ; 3	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
30	2200	0 ; 0	1 ; 2	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
31	2045	1 ; 1	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
TOTALS	—	2 ; 2	3 ; 7	3 ; 18	8 ; 122	0 ; 0	0 ; 0	0 ; 0	2 ; 2	1 ; 1

REGIONAL PERCENTAGES

A	B	C	D	E	F	G	H	J	Σg
10.5	15.8	15.8	42.1	0.0	0.0	0.0	10.5	5.3	19

NOBS = 18

\bar{p}/\bar{g} mean = 1.2692

\bar{f}/\bar{g} mean = 6.3205

\bar{p}/\bar{g} mean = 1.5263

\bar{f}/\bar{g} mean = 8.0000

GROUP COMPLEXITY INDEX (GCI) = 9.5263



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

NEW ZEALAND

E-MAIL: gdso@earthling.net

WEBSITE: www.cv-helios.net/gdso

SUNSPOT RESULTS FOR JUNE 1995

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 .

Q = Quietness [ie. steadiness] refer to Kiepenheuer scale .

S = Sharpness [ie. clarity] refer to Kiepenheuer scale .

T = Transparency where 1 = excellent , 5 = worthless .

WN = Wolf Number ; SN = Pettisindex ; BX = Beckindex ; CV = Classification Value .

DATE	UT	g	f	WN	p	s	SN	BX	CV	Q	S	T	Ref.
01													
02	2045	1	2	12	0	2	2	8	2	2.0	2.5	2.5	2872
03	2055	1	2	12	0	2	2	8	2	2.5	2.5	2.5	2873
04	2100	1	8	18	1	6	16	64	9	2.0	2.5	2.5	2874
05	2205	2	15	35	2	8	28	256	23	1.5	2.0	2.5	2875
06	2110	2	13	33	2	11	31	150	31	2.0	3.0	3.0	2876
07													
08													
09	2145	1	31	41	3	22	52	558	31	1.5	2.0	2.5	2877
10													
11	2255	1	16	26	3	11	41	400	32	1.5	2.5	2.5	2878
12	2110	2	13	33	2	8	28	304	24	2.0	3.0	3.0	2879
13	2135	1	3	13	1	2	12	24	12	1.0	2.0	2.5	2880
14													
15	2100	1	2	12	0	2	2	8	2	2.0	2.5	2.5	2881
16													
17													
18													
19	2230	1	4	14	1	3	13	32	12	2.5	2.5	2.5	2882
20	2110	1	3	13	1	2	12	24	12	2.5	3.0	3.0	2883
21	2125	1	11	21	1	10	20	88	12	2.0	2.5	2.5	2884
22	2105	1	10	20	1	9	19	80	12	2.5	3.0	2.5	2885
23	2100	1	6	16	1	5	15	48	9	1.0	2.5	2.5	2886
24	2145	1	8	18	1	6	16	64	9	1.5	2.0	2.5	2887
25	2245	1	6	16	1	5	15	48	9	1.5	2.0	2.5	2888
26													
27	2135	1	1	11	0	1	1	4	1	2.0	2.5	3.0	2889
28													
29	2110	0	0	0	0	0	0	0	0	2.5	2.5	2.5	2890
30	2115	3	6	36	2	3	23	73	17	2.0	2.0	2.5	2891
31													
Σ	—	24	160	400	23	118	348	2241	261	38.0	49.0	52.0	—
NOBS	—	20	20	20	20	20	20	20	20	20	20	20	—
MNS	—	1.20	8.00	20.00	1.15	5.90	17.40	112.05	13.05	1.90	2.45	2.60	—

MEAN WEIGHT = 0.4380

MEAN CONDITION = 2.3167

QUALITY COUNT = 3.30



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

SUNSPOT DISTRIBUTION & INTER-SOL INDICES FOR JUNE 1995

All observations carried out by HOWARD BARNES .

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

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

Q = Quietness [ie. steadiness] refer to Kiepenheuer scale .

S = Sharpness [ie. clarity] refer to Kiepenheuer scale .

T = Transparency where 1 = excellent , 5 = worthless .

IS = Inter-Sol Index .

gr = number of multi-spot groups .

grfp = number of umbræ within penumbrae 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 .

DATE	UT	IS	gr	grfp	grf	efp	ef	Q	S	T	Ref.
01											
02	2045	3	1	0	2	0	0	2.0	2.5	2.5	2872
03	2055	3	1	0	2	0	0	2.5	2.5	2.5	2873
04	2100	9	1	2	6	0	0	2.0	2.5	2.5	2874
05	2205	16	1	7	7	0	1	1.5	2.0	2.5	2875
06	2110	15	2	2	11	0	0	2.0	3.0	3.0	2876
07											
08											
09	2145	32	1	9	22	0	0	1.5	2.0	2.5	2877
10											
11	2255	17	1	5	11	0	0	1.5	2.5	2.5	2878
12	2110	14	1	5	7	0	1	2.0	3.0	3.0	2879
13	2135	4	1	1	2	0	0	1.0	2.0	2.5	2880
14											
15	2100	3	1	0	2	0	0	2.0	2.5	2.5	2881
16											
17											
18											
19	2230	5	1	1	3	0	0	2.5	2.5	2.5	2882
20	2110	4	1	1	2	0	0	2.5	3.0	3.0	2883
21	2125	12	1	1	10	0	0	2.0	2.5	2.5	2884
22	2105	11	1	1	9	0	0	2.5	3.0	2.5	2885
23	2100	7	1	1	5	0	0	1.0	2.5	2.5	2886
24	2145	9	1	2	6	0	0	1.5	2.0	2.5	2887
25	2245	7	1	1	5	0	0	1.5	2.0	2.5	2888
26											
27	2135	1	0	0	0	0	1	2.0	2.5	3.0	2889
28											
29	2110	0	0	0	0	0	0	2.5	2.5	2.5	2890
30	2115	7	1	2	2	1	1	2.0	2.0	2.5	2891
31											
Σ	—	179	19	41	114	1	4	38.0	49.0	52.0	—
NOBS	—	20	20	20	20	20	20	20	20	20	—
MNS	—	8.95	0.95	2.05	5.70	0.05	0.20	1.90	2.45	2.60	—



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

SUNSPOT CENSUS BY CLASSIFICATION FOR JUNE 1995

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 g ; f	B g ; f	C g ; f	D g ; f	E g ; f	F g ; f	G g ; f	H g ; f	J g ; f
01										
02	2045	0 ; 0	1 ; 2	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
03	2055	0 ; 0	1 ; 2	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
04	2100	0 ; 0	0 ; 0	1 ; 8	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
05	2205	1 ; 1	0 ; 0	0 ; 0	1 ; 14	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
06	2110	0 ; 0	1 ; 6	0 ; 0	1 ; 7	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
07										
08										
09	2145	0 ; 0	0 ; 0	0 ; 0	1 ; 31	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
10										
11	2255	0 ; 0	0 ; 0	0 ; 0	0 ; 0	1 ; 16	0 ; 0	0 ; 0	0 ; 0	0 ; 0
12	2110	1 ; 1	0 ; 0	0 ; 0	0 ; 0	1 ; 12	0 ; 0	0 ; 0	0 ; 0	0 ; 0
13	2135	0 ; 0	0 ; 0	1 ; 3	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
14										
15	2100	0 ; 0	1 ; 2	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
16										
17										
18										
19	2230	0 ; 0	0 ; 0	1 ; 4	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
20	2110	0 ; 0	0 ; 0	1 ; 3	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
21	2125	0 ; 0	0 ; 0	1 ; 11	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
22	2105	0 ; 0	0 ; 0	1 ; 10	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
23	2100	0 ; 0	0 ; 0	1 ; 6	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
24	2145	0 ; 0	0 ; 0	1 ; 8	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
25	2245	0 ; 0	0 ; 0	1 ; 6	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
26										
27	2135	1 ; 1	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
28										
29	2110	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
30	2115	1 ; 1	0 ; 0	1 ; 4	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	1 ; 1
31										
TOTALS	—	4 ; 4	4 ; 12	10 ; 63	3 ; 52	2 ; 28	0 ; 0	0 ; 0	0 ; 0	1 ; 1
REGIONAL PERCENTAGES										
A	B	C	D	E	F	G	H	J	Σg	
16.7	16.7	41.7	12.5	8.3	0.0	0.0	0.0	4.2	24	
		NOBS = 20	\bar{p} / \bar{g} mean = 0.9825			\bar{f} / \bar{g} mean = 7.1316				
			\bar{p} / \bar{g} mean = 0.9583			\bar{f} / \bar{g} mean = 6.6667				
GROUP COMPLEXITY INDEX (GCI) = 7.6250										



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

NEW ZEALAND

E-MAIL: gdso@earthling.net

WEBSITE: www.cv-helios.net/gdso

SUNSPOT RESULTS FOR JULY 1995

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 .

Q = Quietness [ie. steadiness] refer to Kiepenheuer scale .

S = Sharpness [ie. clarity] refer to Kiepenheuer scale .

T = Transparency where 1 = excellent , 5 = worthless .

WN = Wolf Number ; SN = Pettisindex ; BX = Beckindex ; CV = Classification Value .

DATE	UT	g	f	WN	p	s	SN	BX	CV	Q	S	T	Ref.
01													
02	2145	2	6	26	1	4	14	44	40	1.5	2.5	2.5	2892
03	2110	1	5	15	1	3	13	40	9	2.0	2.0	2.5	2893
04													
05	2130	2	6	26	2	3	23	77	52	2.0	2.5	3.0	2894
06													
07	2140	2	10	30	2	8	28	80	54	2.5	2.5	2.5	2895
08	2140	2	13	33	2	11	31	104	54	2.0	2.5	2.5	2896
09	2055	2	6	26	2	4	24	77	52	2.5	3.0	3.0	2897
10	2110	2	4	24	1	3	13	49	43	2.0	2.5	2.0	2898
11													
12													
13	2130	1	3	13	0	3	3	12	3	2.0	3.5	4.0	2899
14	2125	1	7	17	2	3	23	126	22	2.0	2.5	2.5	2900
15													
16	2115	1	9	19	2	5	25	162	22	2.0	2.5	2.5	2901
17	2100	1	6	16	2	3	23	108	22	2.5	2.5	2.5	2902
18													
19													
20	2100	1	3	13	0	3	3	12	3	2.0	2.0	2.5	2903
21	2240	0	0	0	0	0	0	0	0	2.5	2.5	2.5	2904
22	2125	0	0	0	0	0	0	0	0	2.5	2.5	2.5	2905
23													
24	2050	0	0	0	0	0	0	0	0	2.5	2.5	2.5	2906
25	2040	1	1	11	0	1	1	4	1	2.0	2.0	2.5	2907
26	2105	1	2	12	0	2	2	8	2	2.5	2.5	2.0	2908
27													
28	2110	0	0	0	0	0	0	0	0	2.0	2.5	2.0	2909
29													
30													
31													
Σ	—	20	81	281	17	56	226	903	379	39.0	45.0	46.0	—
NOBS	—	18	18	18	18	18	18	18	18	18	18	18	—
MNS	—	1.11	4.50	15.61	0.94	3.11	12.56	50.17	21.06	2.17	2.50	2.56	—

MEAN WEIGHT = 0.4196

MEAN CONDITION = 2.4074

QUALITY COUNT = 3.00



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

SUNSPOT DISTRIBUTION & INTER-SOL INDICES FOR JULY 1995

All observations carried out by HOWARD BARNES .

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

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

Q = Quietness [ie. steadiness] refer to Kiepenheuer scale .

S = Sharpness [ie. clarity] refer to Kiepenheuer scale .

T = Transparency where 1 = excellent , 5 = worthless .

IS = Inter-Sol Index .

gr = number of multi-spot groups .

grfp = number of umbrae within penumbrae 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 .

DATE	UT	IS	gr	grfp	grf	efp	ef	Q	S	T	Ref.
01											
02	2145	7	1	2	3	0	1	1.5	2.5	2.5	2892
03	2110	6	1	2	3	0	0	2.0	2.0	2.5	2893
04											
05	2130	7	1	2	3	1	0	2.0	2.5	3.0	2894
06											
07	2140	12	2	2	8	0	0	2.5	2.5	2.5	2895
08	2140	15	2	2	11	0	0	2.0	2.5	2.5	2896
09	2055	7	1	1	4	1	0	2.5	3.0	3.0	2897
10	2110	5	1	0	3	1	0	2.0	2.5	2.0	2898
11											
12											
13	2130	4	1	0	3	0	0	2.0	3.5	4.0	2899
14	2125	8	1	4	3	0	0	2.0	2.5	2.5	2900
15											
16	2115	10	1	4	5	0	0	2.0	2.5	2.5	2901
17	2100	7	1	3	3	0	0	2.5	2.5	2.5	2902
18											
19											
20	2100	4	1	0	3	0	0	2.0	2.0	2.5	2903
21	2240	0	0	0	0	0	0	2.5	2.5	2.5	2904
22	2125	0	0	0	0	0	0	2.5	2.5	2.5	2905
23											
24	2050	0	0	0	0	0	0	2.5	2.5	2.5	2906
25	2040	1	0	0	0	0	1	2.0	2.0	2.5	2907
26	2105	3	1	0	2	0	0	2.5	2.5	2.0	2908
27											
28	2110	0	0	0	0	0	0	2.0	2.5	2.0	2909
29											
30											
31											
Σ	—	96	15	22	54	3	2	39.0	45.0	46.0	—
NOBS	—	18	18	18	18	18	18	18	18	18	—
MNS	—	5.33	0.83	1.22	3.00	0.17	0.11	2.17	2.50	2.56	—



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

SUNSPOT CENSUS BY CLASSIFICATION FOR JULY 1995

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 g ; f	B g ; f	C g ; f	D g ; f	E g ; f	F g ; f	G g ; f	H g ; f	J g ; f
01										
02	2145	1 ; 1	0 ; 0	1 ; 5	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
03	2110	0 ; 0	0 ; 0	1 ; 5	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
04										
05	2130	0 ; 0	0 ; 0	1 ; 5	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	1 ; 1
06										
07	2140	0 ; 0	0 ; 0	2 ; 5/5	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
08	2140	0 ; 0	0 ; 0	2 ; 6/7	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
09	2055	0 ; 0	0 ; 0	1 ; 5	0 ; 0	0 ; 0	0 ; 0	0 ; 0	1 ; 1	0 ; 0
10	2110	0 ; 0	1 ; 3	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	1 ; 1	0 ; 0
11										
12										
13	2130	0 ; 0	1 ; 3	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
14	2125	0 ; 0	0 ; 0	0 ; 0	1 ; 7	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
15										
16	2115	0 ; 0	0 ; 0	0 ; 0	1 ; 9	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
17	2100	0 ; 0	0 ; 0	0 ; 0	1 ; 6	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
18										
19										
20	2100	0 ; 0	1 ; 3	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
21	2240	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
22	2125	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
23										
24	2050	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
25	2040	1 ; 1	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
26	2105	0 ; 0	1 ; 2	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
27										
28	2110	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
29										
30										
31										
TOTALS	—	2 ; 2	4 ; 11	8 ; 43	3 ; 22	0 ; 0	0 ; 0	0 ; 0	2 ; 2	1 ; 1
REGIONAL PERCENTAGES										
A	B	C	D	E	F	G	H	J	Σg	
10.0	20.0	40.0	15.0	0.0	0.0	0.0	10.0	5.0	20	
		NOBS = 18	\bar{p}/\bar{g} mean = 0.8571			\bar{f}/\bar{g} mean = 4.1786				
			\bar{p}/\bar{g} mean = 0.8500			\bar{f}/\bar{g} mean = 4.0500				
GROUP COMPLEXITY INDEX (GCI) = 4.9000										



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

NEW ZEALAND

E-MAIL: gdso@earthling.net

WEBSITE: www.cv-helios.net/gdso

SUNSPOT RESULTS FOR AUGUST 1995

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 .

Q = Quietness [ie. steadiness] refer to Kiepenheuer scale .

S = Sharpness [ie. clarity] refer to Kiepenheuer scale .

T = Transparency where 1 = excellent , 5 = worthless .

WN = Wolf Number ; SN = Pettisindex ; BX = Beckindex ; CV = Classification Value .

DATE	UT	g	f	WN	p	s	SN	BX	CV	Q	S	T	Ref.
01													
02	2135	1	7	17	1	4	14	56	9	2.0	2.0	2.5	2910
03													
04													
05	2130	2	10	30	2	4	24	166	23	1.5	2.0	2.0	2911
06													
07													
08													
09	2115	0	0	0	0	0	0	0	0	2.5	2.0	2.0	2912
10	2040	0	0	0	0	0	0	0	0	2.0	2.0	2.0	2913
11	2050	0	0	0	0	0	0	0	0	1.0	2.5	3.0	2914
12	2035	0	0	0	0	0	0	0	0	1.5	2.5	2.0	2915
13	2120	0	0	0	0	0	0	0	0	2.0	2.5	2.5	2916
14	2045	0	0	0	0	0	0	0	0	1.5	2.0	2.0	2917
15													
16	2230	0	0	0	0	0	0	0	0	2.0	3.0	3.0	2918
17													
18	2155	0	0	0	0	0	0	0	0	2.0	2.0	2.5	2919
19	2050	0	0	0	0	0	0	0	0	1.5	2.5	2.5	2920
20													
21													
22	2025	1	1	11	0	1	1	4	1	2.0	2.5	2.5	2921
23													
24	2045	2	17	37	3	8	38	226	31	2.0	2.5	2.5	2922
25	2105	4	18	58	4	12	52	255	46	1.5	2.0	2.0	2923
26	2045	3	10	40	4	6	46	169	50	2.0	3.0	2.5	2924
27													
28	2040	2	8	28	1	7	17	56	14	1.5	2.0	2.5	2925
29	2120	1	6	16	1	5	15	48	12	1.5	2.0	2.5	2926
30													
31													
Σ	—	16	77	237	16	47	207	980	186	30.0	39.0	40.5	—
NOBS	—	17	17	17	17	17	17	17	17	17	17	17	—
MNS	—	0.94	4.53	13.94	0.94	2.76	12.18	57.65	10.94	1.76	2.29	2.38	—

MEAN WEIGHT = 0.4709

MEAN CONDITION = 2.1471

QUALITY COUNT = 2.59



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

SUNSPOT DISTRIBUTION & INTER-SOL INDICES FOR AUGUST 1995

All observations carried out by HOWARD BARNES .

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

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

Q = Quietness [ie. steadiness] refer to Kiepenheuer scale .

S = Sharpness [ie. clarity] refer to Kiepenheuer scale .

T = Transparency where 1 = excellent , 5 = worthless .

IS = Inter-Sol Index .

gr = number of multi-spot groups .

grfp = number of umbræ within penumbrae 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 .

DATE	UT	IS	gr	grfp	grf	efp	ef	Q	S	T	Ref.
01											
02	2135	8	1	3	4	0	0	2.0	2.0	2.5	2910
03											
04											
05	2130	11	1	6	3	0	1	1.5	2.0	2.0	2911
06											
07											
08											
09	2115	0	0	0	0	0	0	2.5	2.0	2.0	2912
10	2040	0	0	0	0	0	0	2.0	2.0	2.0	2913
11	2050	0	0	0	0	0	0	1.0	2.5	3.0	2914
12	2035	0	0	0	0	0	0	1.5	2.5	2.0	2915
13	2120	0	0	0	0	0	0	2.0	2.5	2.5	2916
14	2045	0	0	0	0	0	0	1.5	2.0	2.0	2917
15											
16	2230	0	0	0	0	0	0	2.0	3.0	3.0	2918
17											
18	2155	0	0	0	0	0	0	2.0	2.0	2.5	2919
19	2050	0	0	0	0	0	0	1.5	2.5	2.5	2920
20											
21											
22	2025	1	0	0	0	0	1	2.0	2.5	2.5	2921
23											
24	2045	19	2	9	8	0	0	2.0	2.5	2.5	2922
25	2105	21	3	5	12	1	0	1.5	2.0	2.0	2923
26	2045	12	2	3	6	1	0	2.0	3.0	2.5	2924
27											
28	2040	10	2	1	7	0	0	1.5	2.0	2.5	2925
29	2120	7	1	1	5	0	0	1.5	2.0	2.5	2926
30											
31											
Σ	—	89	12	28	45	2	2	30.0	39.0	40.5	—
NOBS	—	17	17	17	17	17	17	17	17	17	—
MNS	—	5.24	0.71	1.65	2.65	0.12	0.12	1.76	2.29	2.38	—



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

SUNSPOT CENSUS BY CLASSIFICATION FOR AUGUST 1995

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 g ; f	B g ; f	C g ; f	D g ; f	E g ; f	F g ; f	G g ; f	H g ; f	J g ; f
01										
02	2135	0 ; 0	0 ; 0	1 ; 7	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
03										
04										
05	2130	1 ; 1	0 ; 0	0 ; 0	1 ; 9	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
06										
07										
08										
09	2115	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
10	2040	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
11	2050	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
12	2035	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
13	2120	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
14	2045	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
15										
16	2230	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
17										
18	2155	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
19	2050	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
20										
21										
22	2025	1 ; 1	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
23										
24	2045	0 ; 0	0 ; 0	1 ; 8	1 ; 9	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
25	2105	0 ; 0	1 ; 2	1 ; 6	1 ; 9	0 ; 0	0 ; 0	0 ; 0	0 ; 0	1 ; 1
26	2045	0 ; 0	0 ; 0	1 ; 3	1 ; 6	0 ; 0	0 ; 0	0 ; 0	0 ; 0	1 ; 1
27										
28	2040	0 ; 0	1 ; 2	1 ; 6	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
29	2120	0 ; 0	0 ; 0	1 ; 6	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
30										
31										
TOTALS	—	2 ; 2	2 ; 4	6 ; 36	4 ; 33	0 ; 0	0 ; 0	0 ; 0	0 ; 0	2 ; 2
REGIONAL PERCENTAGES										
A	B	C	D	E	F	G	H	J	Σg	
12.5	12.5	37.5	25.0	0.0	0.0	0.0	0.0	12.5	16	
NOBS = 17			\bar{p}/\bar{g} mean = 0.9167			\bar{f}/\bar{g} mean = 4.9167				
			\bar{p}/\bar{g} mean = 1.0000			\bar{f}/\bar{g} mean = 4.8125				
GROUP COMPLEXITY INDEX (GCI) = 5.8125										



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

NEW ZEALAND

E-MAIL: gdso@earthling.net

WEBSITE: www.cv-helios.net/gdso

SUNSPOT RESULTS FOR SEPTEMBER 1995

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 .

Q = Quietness [ie. steadiness] refer to Kiepenheuer scale .

S = Sharpness [ie. clarity] refer to Kiepenheuer scale .

T = Transparency where 1 = excellent , 5 = worthless .

WN = Wolf Number ; SN = Pettisindex ; BX = Beckindex ; CV = Classification Value .

DATE	UT	g	f	WN	p	s	SN	BX	CV	Q	S	T	Ref.
01													
02	2055	1	1	11	1	0	10	37	10	1.5	2.5	3.0	2927
03													
04													
05													
06	2025	1	1	11	1	0	10	37	10	2.0	2.5	2.5	2928
07	2040	0	0	0	0	0	0	0	0	2.0	2.5	2.5	2929
08	2035	0	0	0	0	0	0	0	0	2.0	2.5	2.0	2930
09	2030	0	0	0	0	0	0	0	0	1.5	2.0	2.0	2931
10	2215	0	0	0	0	0	0	0	0	1.5	2.5	2.5	2932
11	2045	0	0	0	0	0	0	0	0	1.0	2.0	2.0	2933
12	2105	0	0	0	0	0	0	0	0	1.5	2.5	1.5	2934
13	2250	0	0	0	0	0	0	0	0	3.0	3.0	2.5	2935
14													
15	2100	1	1	11	0	1	1	4	1	2.0	2.0	2.0	2936
16	2055	1	2	12	0	2	2	8	2	1.5	2.0	2.0	2937
17													
18													
19													
20													
21	2150	2	6	26	2	3	23	77	19	1.5	2.5	2.5	2938
22	2115	3	7	37	2	5	25	81	23	2.0	2.5	2.5	2939
23													
24													
25	2215	2	5	25	1	4	14	28	14	2.0	3.0	4.0	2940
26													
27													
28	2105	0	0	0	0	0	0	0	0	2.0	2.0	2.5	2941
29													
30	2045	0	0	0	0	0	0	0	0	1.5	2.0	2.5	2942
31													
Σ	—	11	23	133	7	15	85	272	79	28.5	38.0	38.5	—
NOBS	—	16	16	16	16	16	16	16	16	16	16	16	—
MNS	—	0.69	1.44	8.31	0.44	0.94	5.31	17.00	4.94	1.78	2.38	2.41	—

MEAN WEIGHT = 0.4677

MEAN CONDITION = 2.1875

QUALITY COUNT = 1.44



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

SUNSPOT DISTRIBUTION & INTER-SOL INDICES FOR SEPTEMBER 1995

All observations carried out by HOWARD BARNES .

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

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

Q = Quietness [ie. steadiness] refer to Kiepenheuer scale .

S = Sharpness [ie. clarity] refer to Kiepenheuer scale .

T = Transparency where 1 = excellent , 5 = worthless .

IS = Inter-Sol Index .

gr = number of multi-spot groups .

grfp = number of umbrae within penumbrae 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 .

DATE	UT	IS	gr	grfp	grf	efp	ef	Q	S	T	Ref.
01											
02	2055	1	0	0	0	1	0	1.5	2.5	3.0	2927
03											
04											
05											
06	2025	1	0	0	0	1	0	2.0	2.5	2.5	2928
07	2040	0	0	0	0	0	0	2.0	2.5	2.5	2929
08	2035	0	0	0	0	0	0	2.0	2.5	2.0	2930
09	2030	0	0	0	0	0	0	1.5	2.0	2.0	2931
10	2215	0	0	0	0	0	0	1.5	2.5	2.5	2932
11	2045	0	0	0	0	0	0	1.0	2.0	2.0	2933
12	2105	0	0	0	0	0	0	1.5	2.5	1.5	2934
13	2250	0	0	0	0	0	0	3.0	3.0	2.5	2935
14											
15	2100	1	0	0	0	0	1	2.0	2.0	2.0	2936
16	2055	3	1	0	2	0	0	1.5	2.0	2.0	2937
17											
18											
19											
20											
21	2150	7	1	2	3	1	0	1.5	2.5	2.5	2938
22	2115	8	1	1	4	1	1	2.0	2.5	2.5	2939
23											
24											
25	2215	7	2	1	4	0	0	2.0	3.0	4.0	2940
26											
27											
28	2105	0	0	0	0	0	0	2.0	2.0	2.5	2941
29											
30	2045	0	0	0	0	0	0	1.5	2.0	2.5	2942
31											
Σ	—	28	5	4	13	4	2	28.5	38.0	38.5	—
NOBS	—	16	16	16	16	16	16	16	16	16	—
MNS	—	1.75	0.31	0.25	0.81	0.25	0.12	1.78	2.38	2.41	—



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

SUNSPOT CENSUS BY CLASSIFICATION FOR SEPTEMBER 1995

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 g ; f	B g ; f	C g ; f	D g ; f	E g ; f	F g ; f	G g ; f	H g ; f	J g ; f
01										
02	2055	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	1 ; 1
03										
04										
05										
06	2025	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	1 ; 1
07	2040	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
08	2035	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
09	2030	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
10	2215	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
11	2045	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
12	2105	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
13	2250	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
14										
15	2100	1 ; 1	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
16	2055	0 ; 0	1 ; 2	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
17										
18										
19										
20										
21	2150	0 ; 0	0 ; 0	1 ; 5	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	1 ; 1
22	2115	1 ; 1	0 ; 0	1 ; 5	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	1 ; 1
23										
24										
25	2215	0 ; 0	1 ; 3	1 ; 2	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
26										
27										
28	2105	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
29										
30	2045	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
31										
TOTALS	—	2 ; 2	2 ; 5	3 ; 12	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	4 ; 4
REGIONAL PERCENTAGES										
A	B	C	D	E	F	G	H	J	Σg	
18.2	18.2	27.3	0.0	0.0	0.0	0.0	0.0	36.4	11	
		NOBS = 16	\bar{p}/\bar{g} mean = 0.5952			\bar{f}/\bar{g} mean = 1.8333				
			\bar{p}/\bar{g} mean = 0.6364			\bar{f}/\bar{g} mean = 2.0909				
GROUP COMPLEXITY INDEX (GCI) = 2.7273										



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

NEW ZEALAND

E-MAIL: gdso@earthling.net

WEBSITE: www.cv-helios.net/gdso

SUNSPOT RESULTS FOR OCTOBER 1995

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 .

Q = Quietness [ie. steadiness] refer to Kiepenheuer scale .

S = Sharpness [ie. clarity] refer to Kiepenheuer scale .

T = Transparency where 1 = excellent , 5 = worthless .

WN = Wolf Number ; SN = Pettisindex ; BX = Beckindex ; CV = Classification Value .

DATE	UT	g	f	WN	p	s	SN	BX	CV	Q	S	T	Ref.
01													
02													
03	2035	0	0	0	0	0	0	0	0	2.5	2.5	2.5	2943
04													
05													
06	2105	0	0	0	0	0	0	0	0	2.5	4.0	4.0	2944
07													
08													
09	1955	2	7	27	3	3	33	56	53	2.0	2.5	2.5	2945
10													
11	1950	4	25	65	7	9	79	396	117	2.0	2.0	2.0	2946
12	2225	4	22	62	5	11	61	284	115	2.0	3.0	3.0	2947
13													
14													
15	2010	2	9	29	2	6	26	108	82	2.0	2.5	2.5	2948
16													
17	2005	4	12	52	2	9	29	113	55	2.0	2.5	2.5	2949
18													
19	1930	3	7	37	1	6	16	48	44	1.5	2.0	2.5	2950
20	2145	3	5	35	2	3	23	65	53	2.5	2.5	2.5	2951
21													
22													
23													
24													
25	2040	2	8	28	1	6	16	60	10	1.5	2.0	2.0	2952
26	1950	2	7	27	1	6	16	52	13	1.5	2.5	3.0	2953
27													
28													
29	1940	0	0	0	0	0	0	0	0	1.5	2.0	2.0	2954
30	1920	0	0	0	0	0	0	0	0	1.5	2.5	2.5	2955
31													
Σ	—	26	102	362	24	59	299	1182	542	25.0	32.5	33.5	—
NOBS	—	13	13	13	13	13	13	13	13	13	13	13	—
MNS	—	2.00	7.85	27.85	1.85	4.54	23.00	90.92	41.69	1.92	2.50	2.58	—

MEAN WEIGHT = 0.4406

MEAN CONDITION = 2.3333

QUALITY COUNT = 4.85



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

SUNSPOT DISTRIBUTION & INTER-SOL INDICES FOR OCTOBER 1995

All observations carried out by HOWARD BARNES .

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

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

Q = Quietness [ie. steadiness] refer to Kiepenheuer scale .

S = Sharpness [ie. clarity] refer to Kiepenheuer scale .

T = Transparency where 1 = excellent , 5 = worthless .

IS = Inter-Sol Index .

gr = number of multi-spot groups .

grfp = number of umbrae within penumbrae within the groups (gr) .

grf = number of non-penumbra spots within the groups (gr) .

efp = number of single penumbral spots :

ef = number of single non-penumbra spots .

DATE	UT	IS	gr	grfp	grf	efp	ef	Q	S	T	Ref.
01											
02											
03	2035	0	0	0	0	0	0	2.5	2.5	2.5	2943
04											
05											
06	2105	0	0	0	0	0	0	2.5	4.0	4.0	2944
07											
08											
09	1955	9	2	4	3	0	0	2.0	2.5	2.5	2945
10											
11	1950	28	3	16	8	0	1	2.0	2.0	2.0	2946
12	2225	26	4	11	11	0	0	2.0	3.0	3.0	2947
13											
14											
15	2010	10	1	2	6	1	0	2.0	2.5	2.5	2948
16											
17	2005	14	2	2	8	1	1	2.0	2.5	2.5	2949
18											
19	1930	8	1	1	4	0	2	1.5	2.0	2.5	2950
20	2145	6	1	1	2	1	1	2.5	2.5	2.5	2951
21											
22											
23											
24											
25	2040	9	1	2	5	0	1	1.5	2.0	2.0	2952
26	1950	8	1	1	5	0	1	1.5	2.5	3.0	2953
27											
28											
29	1940	0	0	0	0	0	0	1.5	2.0	2.0	2954
30	1920	0	0	0	0	0	0	1.5	2.5	2.5	2955
31											
Σ	—	118	16	40	52	3	7	25.0	32.5	33.5	—
NOBS	—	13	13	13	13	13	13	13	13	13	—
MNS	—	9.08	1.23	3.08	4.00	0.23	0.54	1.92	2.50	2.58	—



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

SUNSPOT CENSUS BY CLASSIFICATION FOR OCTOBER 1995

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 g ; f	B g ; f	C g ; f	D g ; f	E g ; f	F g ; f	G g ; f	H g ; f	J g ; f
01										
02										
03	2035	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
04										
05										
06	2105	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
07										
08										
09	1955	0 ; 0	0 ; 0	2 ; 3/4	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
10										
11	1950	1 ; 1	0 ; 0	1 ; 4	2 ; 8/12	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
12	2225	0 ; 0	1 ; 3	2 ; 3/4	1 ; 12	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
13										
14										
15	2010	0 ; 0	0 ; 0	1 ; 8	0 ; 0	0 ; 0	0 ; 0	0 ; 0	1 ; 1	0 ; 0
16										
17	2005	1 ; 1	1 ; 2	1 ; 8	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	1 ; 1
18										
19	1930	2 ; 1/1	0 ; 0	1 ; 5	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
20	2145	1 ; 1	0 ; 0	1 ; 3	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	1 ; 1
21										
22										
23										
24										
25	2040	1 ; 1	0 ; 0	1 ; 7	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
26	1950	1 ; 1	0 ; 0	1 ; 6	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
27										
28										
29	1940	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
30	1920	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
31										
TOTALS	—	7 ; 7	2 ; 5	11 ; 55	3 ; 32	0 ; 0	0 ; 0	0 ; 0	1 ; 1	2 ; 2

REGIONAL PERCENTAGES

A	B	C	D	E	F	G	H	J	Σg
26.9	7.7	42.3	11.5	0.0	0.0	0.0	3.8	7.7	26

NOBS = 13

\bar{p}/\bar{g} mean = 0.8889

\bar{f}/\bar{g} mean = 3.8056

\bar{p}/\bar{g} mean = 0.9231

\bar{f}/\bar{g} mean = 3.9231

GROUP COMPLEXITY INDEX (GCI) = 4.8462



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

NEW ZEALAND

E-MAIL: gdso@earthling.net

WEBSITE: www.cv-helios.net/gdso

SUNSPOT RESULTS FOR NOVEMBER 1995

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 .

Q = Quietness [ie. steadiness] refer to Kiepenheuer scale .

S = Sharpness [ie. clarity] refer to Kiepenheuer scale .

T = Transparency where 1 = excellent , 5 = worthless .

WN = Wolf Number ; SN = Pettisindex ; BX = Beckindex ; CV = Classification Value .

DATE	UT	g	f	WN	p	s	SN	BX	CV	Q	S	T	Ref.
01	1940	2	2	22	0	2	2	8	2	1.5	2.0	2.0	2956
02	1935	1	2	12	0	2	2	8	2	1.5	2.0	2.0	2957
03													
04	2000	0	0	0	0	0	0	0	0	2.0	2.5	2.5	2958
05													
06	1940	1	1	11	1	0	10	37	7	1.5	2.0	2.0	2959
07	1930	3	3	33	1	2	12	45	12	1.5	2.0	2.5	2960
08													
09													
10													
11	2005	1	3	13	1	2	12	24	42	2.5	3.0	3.0	2961
12	2000	1	1	11	1	0	10	44	40	3.0	3.5	3.0	2962
13													
14	1940	1	2	12	1	1	11	16	41	2.0	2.5	2.5	2963
15	2010	2	6	26	2	4	24	84	52	1.5	2.0	2.5	2964
16													
17	2040	3	4	34	2	2	22	57	22	1.0	2.0	2.0	2965
18	2130	1	4	14	1	2	12	32	9	1.5	2.5	2.5	2966
19													
20													
21													
22	1950	1	3	13	0	3	3	12	3	1.5	2.5	3.0	2967
23													
24	2105	0	0	0	0	0	0	0	0	2.0	3.0	3.5	2968
25	2020	0	0	0	0	0	0	0	0	2.0	2.5	3.0	2969
26	2015	0	0	0	0	0	0	0	0	2.0	2.5	2.5	2970
27													
28	2000	1	4	14	1	3	13	32	9	2.0	2.0	2.5	2971
29	1945	1	5	15	1	4	14	40	9	2.0	2.0	2.0	2972
30	1955	1	6	16	1	5	15	48	9	2.0	3.5	3.5	2973
31													
Σ	—	20	46	246	13	32	162	487	259	33.0	44.0	46.5	—
NOBS	—	18	18	18	18	18	18	18	18	18	18	18	—
MNS	—	1.11	2.56	13.67	0.72	1.78	9.00	27.06	14.39	1.83	2.44	2.58	—

MEAN WEIGHT = 0.4516

MEAN CONDITION = 2.2870

QUALITY COUNT = 2.50



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

SUNSPOT DISTRIBUTION & INTER-SOL INDICES FOR

NOVEMBER 1995

All observations carried out by HOWARD BARNES .

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

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

Q = Quietness [ie. steadiness] refer to Kiepenheuer scale .

S = Sharpness [ie. clarity] refer to Kiepenheuer scale .

T = Transparency where 1 = excellent , 5 = worthless .

IS = Inter-Sol Index .

gr = number of multi-spot groups .

grfp = number of umbrae within penumbrae 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 .

DATE	UT	IS	gr	grfp	grf	efp	ef	Q	S	T	Ref.
01	1940	2	0	0	0	0	2	1.5	2.0	2.0	2956
02	1935	3	1	0	2	0	0	1.5	2.0	2.0	2957
03											
04	2000	0	0	0	0	0	0	2.0	2.5	2.5	2958
05											
06	1940	1	0	0	0	1	0	1.5	2.0	2.0	2959
07	1930	3	0	0	0	1	2	1.5	2.0	2.5	2960
08											
09											
10											
11	2005	4	1	1	2	0	0	2.5	3.0	3.0	2961
12	2000	1	0	0	0	1	0	3.0	3.5	3.0	2962
13											
14	1940	3	1	1	1	0	0	2.0	2.5	2.5	2963
15	2010	7	1	1	4	1	0	1.5	2.0	2.5	2964
16											
17	2040	5	1	1	1	1	1	1.0	2.0	2.0	2965
18	2130	5	1	2	2	0	0	1.5	2.5	2.5	2966
19											
20											
21											
22	1950	4	1	0	3	0	0	1.5	2.5	3.0	2967
23											
24	2105	0	0	0	0	0	0	2.0	3.0	3.5	2968
25	2020	0	0	0	0	0	0	2.0	2.5	3.0	2969
26	2015	0	0	0	0	0	0	2.0	2.5	2.5	2970
27											
28	2000	5	1	1	3	0	0	2.0	2.0	2.5	2971
29	1945	6	1	1	4	0	0	2.0	2.0	2.0	2972
30	1955	7	1	1	5	0	0	2.0	3.5	3.5	2973
31											
Σ	—	56	10	9	27	5	5	33.0	44.0	46.5	—
NOBS	—	18	18	18	18	18	18	18	18	18	—
MNS	—	3.11	0.56	0.50	1.50	0.28	0.28	1.83	2.44	2.58	—



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

SUNSPOT CENSUS BY CLASSIFICATION FOR NOVEMBER 1995

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 g ; f	B g ; f	C g ; f	D g ; f	E g ; f	F g ; f	G g ; f	H g ; f	J g ; f
01	1940	2 ; 1/1	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
02	1935	0 ; 0	1 ; 2	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
03										
04	2000	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
05										
06	1940	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	1 ; 1
07	1930	2 ; 1/1	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	1 ; 1
08										
09										
10										
11	2005	0 ; 0	0 ; 0	1 ; 3	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
12	2000	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	1 ; 1	0 ; 0
13										
14	1940	0 ; 0	0 ; 0	1 ; 2	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
15	2010	0 ; 0	0 ; 0	1 ; 5	0 ; 0	0 ; 0	0 ; 0	0 ; 0	1 ; 1	0 ; 0
16										
17	2040	1 ; 1	0 ; 0	1 ; 2	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	1 ; 1
18	2130	0 ; 0	0 ; 0	1 ; 4	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
19										
20										
21										
22	1950	0 ; 0	1 ; 3	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
23										
24	2105	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
25	2020	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
26	2015	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
27										
28	2000	0 ; 0	0 ; 0	1 ; 4	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
29	1945	0 ; 0	0 ; 0	1 ; 5	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
30	1955	0 ; 0	0 ; 0	1 ; 6	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
31										
TOTALS	—	5 ; 5	2 ; 5	8 ; 31	0 ; 0	0 ; 0	0 ; 0	0 ; 0	2 ; 2	3 ; 3
REGIONAL PERCENTAGES										
A	B	C	D	E	F	G	H	J	Σg	
25.0	10.0	40.0	0.0	0.0	0.0	0.0	10.0	15.0	20	
NOBS = 18		\bar{p}/\bar{g} mean = 0.7143			\bar{f}/\bar{g} mean = 2.6667					
		\bar{p}/\bar{g} mean = 0.6500			\bar{f}/\bar{g} mean = 2.3000					
GROUP COMPLEXITY INDEX (GCI) = 2.9500										



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

NEW ZEALAND

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SUNSPOT RESULTS FOR **DECEMBER 1995**

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 .

Q = Quietness [ie. steadiness] refer to Kiepenheuer scale .

S = Sharpness [ie. clarity] refer to Kiepenheuer scale .

T = Transparency where 1 = excellent , 5 = worthless .

WN = Wolf Number ; SN = Pettisindex ; BX = Beckindex ; CV = Classification Value .

DATE	UT	g	f	WN	p	s	SN	BX	CV	Q	S	T	Ref.
01													
02	2150	1	2	12	1	1	11	16	11	2.5	2.5	2.0	2974
03													
04	0325	1	1	11	1	0	10	37	10	2.0	3.0	2.5	2975
05													
06	0240	1	2	12	1	1	11	16	11	2.0	3.0	3.0	2976
07	2240	1	2	12	1	1	11	16	11	1.5	3.0	2.5	2977
08													
09													
10	1940	2	2	22	1	1	11	41	11	1.5	2.0	2.5	2978
11	1955	1	5	15	2	3	23	90	28	1.5	3.0	3.0	2979
12													
13													
14													
15													
16													
17	2025	0	0	0	0	0	0	0	0	1.5	2.5	2.5	2980
18	2220	0	0	0	0	0	0	0	0	1.0	3.0	3.0	2981
19													
20													
21													
22													
23													
24													
25	2025	1	2	12	0	2	2	8	2	1.5	2.0	1.5	2982
26													
27	2000	3	5	35	1	4	14	32	14	1.5	2.0	2.5	2983
28	2020	2	3	23	0	3	3	12	3	1.5	2.0	2.0	2984
29													
30	2010	0	0	0	0	0	0	0	0	2.0	2.5	2.5	2985
31	2015	0	0	0	0	0	0	0	0	2.0	2.5	3.0	2986
Σ	—	13	24	154	8	16	96	268	101	22.0	33.0	32.5	—
NOBS	—	13	13	13	13	13	13	13	13	13	13	13	—
MNS	—	1.00	1.85	11.85	0.62	1.23	7.38	20.62	7.77	1.69	2.54	2.50	—

MEAN WEIGHT = 0.4536

MEAN CONDITION = 2.2436

QUALITY COUNT = 2.15



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

SUNSPOT DISTRIBUTION & INTER-SOL INDICES FOR

DECEMBER 1995

All observations carried out by HOWARD BARNES .

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

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

Q = Quietness [ie. steadiness] refer to Kiepenheuer scale .

S = Sharpness [ie. clarity] refer to Kiepenheuer scale .

T = Transparency where 1 = excellent , 5 = worthless .

IS = Inter-Sol Index .

gr = number of multi-spot groups .

grfp = number of umbrae within penumbrae 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 .

DATE	UT	IS	gr	grfp	grf	efp	ef	Q	S	T	Ref.
01											
02	2150	3	1	1	1	0	0	2.5	2.5	2.0	2974
03											
04	0325	1	0	0	0	1	0	2.0	3.0	2.5	2975
05											
06	0240	3	1	1	1	0	0	2.0	3.0	3.0	2976
07	2240	3	1	1	1	0	0	1.5	3.0	2.5	2977
08											
09											
10	1940	2	0	0	0	1	1	1.5	2.0	2.5	2978
11	1955	6	1	2	3	0	0	1.5	3.0	3.0	2979
12											
13											
14											
15											
16											
17	2025	0	0	0	0	0	0	1.5	2.5	2.5	2980
18	2220	0	0	0	0	0	0	1.0	3.0	3.0	2981
19											
20											
21											
22											
23											
24											
25	2025	3	1	0	2	0	0	1.5	2.0	1.5	2982
26											
27	2000	6	1	1	2	0	2	1.5	2.0	2.5	2983
28	2020	4	1	0	2	0	1	1.5	2.0	2.0	2984
29											
30	2010	0	0	0	0	0	0	2.0	2.5	2.5	2985
31	2015	0	0	0	0	0	0	2.0	2.5	3.0	2986
Σ	—	31	7	6	12	2	4	22.0	33.0	32.5	—
NOBS	—	13	13	13	13	13	13	13	13	13	—
MNS	—	2.38	0.54	0.46	0.92	0.15	0.31	1.69	2.54	2.50	—



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

SUNSPOT CENSUS BY CLASSIFICATION FOR DECEMBER 1995

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 g ; f	B g ; f	C g ; f	D g ; f	E g ; f	F g ; f	G g ; f	H g ; f	J g ; f
01										
02	2150	0 ; 0	0 ; 0	1 ; 2	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
03										
04	0325	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	1 ; 1
05										
06	0240	0 ; 0	0 ; 0	1 ; 2	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
07	2240	0 ; 0	0 ; 0	1 ; 2	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
08										
09										
10	1940	1 ; 1	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	1 ; 1
11	1955	0 ; 0	0 ; 0	0 ; 0	1 ; 5	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
12										
13										
14										
15										
16										
17	2025	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
18	2220	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
19										
20										
21										
22										
23										
24										
25	2025	0 ; 0	1 ; 2	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
26										
27	2000	2 ; 1/1	0 ; 0	1 ; 3	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
28	2020	1 ; 1	1 ; 2	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
29										
30	2010	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
31	2015	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0	0 ; 0
TOTALS	—	4 ; 4	2 ; 4	4 ; 9	1 ; 5	0 ; 0	0 ; 0	0 ; 0	0 ; 0	2 ; 2

REGIONAL PERCENTAGES

A	B	C	D	E	F	G	H	J	Σg
30.8	15.4	30.8	7.7	0.0	0.0	0.0	0.0	15.4	13

NOBS = 13

\bar{p} / \bar{g} mean = 0.7593

\bar{f} / \bar{g} mean = 2.0185

\bar{p} / \bar{g} mean = 0.6154

\bar{f} / \bar{g} mean = 1.8462

GROUP COMPLEXITY INDEX (GCI) = 2.4615



GEORGI DOBROVOLSKI SOLAR OBSERVATORY

OBSERVED ANNUAL MEANS OF SUNSPOT DATA FOR

1995

All observations carried out by HOWARD BARNES .

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

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

Q = Quietness [ie. steadiness] refer to Kiepenheuer scale .

S = Sharpness [ie. clarity] refer to Kiepenheuer scale .

T = Transparency where 1 = excellent , 5 = worthless .

g	=	1.34
f	=	6.85
Wolf Number	=	20.25
Truncated Wolf Number	=	15.22
p	=	1.36
s	=	4.24
Pettisindex	=	17.83
Beckindex	=	94.18
Classification Value	=	18.91
Quality Count	=	3.52
Inter-Sol Index	=	7.81
Mean Weight	=	0.4457
Q	=	1.84
S	=	2.44
T	=	2.58
Mean Condition	=	2.2896
Total Number of Observations	=	206