

DAILY RELATIVE SUNSPOT NUMBERS AND SUNSPOT AREAS

SEPTEMBER 2007

Day	Relative-Numbers				Sunspot Areas Drawing		
	Gro.	N.H.	S.H.	Sum	N.H.	S.H.	Sum
1	-	-	-	-	-	-	-
2	1	0	10	10	0	15	15
3	-	-	-	-	-	-	-
4	1	0	10	10	0	11	11
5	1	0	10	10	0	17	17
6	1	0	7	7	0	5	5
7	0	0	0	0	0	0	0
8	-	-	-	-	-	-	-
9	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0
13	-	-	-	-	-	-	-
14	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0
28	1	10	0	10	24	0	24
29	-	-	-	-	-	-	-
30	1	10	0	10	27	0	27
Mean		0.8	1.5	2.3	2.0	1.9	4.0

DAILY SUNSPOT OBSERVATIONS

SEPTEMBER 2007

Day	Group	CMP			CMD	Type	r/R	Corre. Area			Remarks	
		Mo-Day	Lat	L				Sd	Whole	Max		See.
1.00	-				-	-	-	-	-	-	-	
2.11	45	9-1.4	- 7	125	10W	BX0	0.27	29	15	7	4	QDT 取青站坐标
3.00	-				-	-	-	-	-	-	-	
4.19	45				38W	BXI	0.63	17	11	3	4	QDT
5.08	45				50W	BX0	0.78	21	17	7	4	QDT
6.10	45				61W	AXX	0.90	4	5	5	4	QDT
7.10	0				0	0	0.00	0	0	0	4	QDT
8.00	-				-	-	-	-	-	-	-	
9.25	0				0	0	0.00	0	0	0	3	
10.10	0				0	0	0.00	0	0	0	3	
11.08	0				0	0	0.00	0	0	0	3	
12.08	0				0	0	0.00	0	0	0	4	QDT
13.00	-				-	-	-	-	-	-	-	
14.23	0				0	0	0.00	0	0	0	3	
15.08	0				0	0	0.00	0	0	0	3	
16.08	0				0	0	0.00	0	0	0	3	
17.03	0				0	0	0.00	0	0	0	3	
18.27	0				0	0	0.00	0	0	0	3	
19.08	0				0	0	0.00	0	0	0	3	
20.06	0				0	0	0.00	0	0	0	3	

DAILY SUNSPOT OBSERVATIONS

SEPTEMBER 2007

Day	Group	CMP			CMD	Type	r/R	Corre. Area			Remarks	
		Mo-Day	Lat	L				Sd	Whole	Max		See.
21.04	0				0	0	0.00	0	0	0	3	
22.04	0				0	0	0.00	0	0	0	3	
23.05	0				0	0	0.00	0	0	0	3	
24.32	0				0	0	0.00	0	0	0	3	
25.28	0				0	0	0.00	0	0	0	3	
26.06	0				0	0	0.00	0	0	0	3	
27.03	0				0	0	0.00	0	0	0	3	
28.27	46	9-29.6	+ 3	113	16E	CRO	0.29	46	24	18	3	
29.00	-				-	-	-	-	-	-	-	
30.06	46				7W	CRO	0.15	55	27	19	3	

PREDICTED SMOOTHED SUNSPOT NUMBERS

APRIL 2007 — MARCH 2008

Date	Apr 2007	May 2007	Jun 2007	Jul 2007	Aug.2007	Sep.2007
R'	9.4	9.3	8.9	8.0	7.3	7.2
E'	0.5	0.7	0.9	1.2	1.5	1.6
Date	Oct 2007	Nov 2007	Dec 2007	Jan 2008	Feb 2008	Mar 2008
R'	7.1	6.6	6.9	7.2	7.8	8.7
E'	1.6	1.7	2.5	2.7	3.3	3.4

R' : The predicted value of monthly smoothed sunspot numbers.

E' : The error of the predicted value.

**SOLAR RADIO EMISSION FLUX AND
INTERVALS OF PATROL OBSERVATION
SEPTEMBER 2007**

Day	BEIJ 2840	BEIJ 232	BEIJ From To 2840		BEIJ From To 232
01	68		0005	1012	
			2346	2400	
02	64		0000	1012	
03	68		0004	1010	
			2356	2400	
04	65		0000	1010	
			2351	2400	
05	67		0000	1008	
			2338	2400	
06	67		0000	1005	
			2326	2400	
07	66		0000	1005	
			2338	2400	
08	70		0000	1005	
			2331	2400	
09	68		0000	1005	
			2338	2400	
10	66		0000	1005	
			2328	2400	
11	65		0000	1005	
			2332	2400	
12	65		0000	1003	
			2325	2400	
13	67		0000	1003	
			2329	2400	
14	67		0000	1003	
			2327	2400	
15	67		0000	1000	
			2324	2400	
16	66		0000	1000	
			2320	2400	

**SOLAR RADIO EMISSION FLUX AND
INTERVALS OF PATROL OBSERVATION
SEPTEMBER 2007**

Day	BEIJ 2840	BEIJ 232	BEIJ From To 2840	BEIJ From To 232
17	66		0000 1000 2323 2400	
18	69		0000 0955 2321 2400	
19	68		0000 0955 2314 2400	
20	68		0000 0950 2304 2400	
21	66		0000 0950 2318 2400	
22	68		0000 0950 2325 2400	
23	68		0000 0948 2324 2400	
24	69		0000 0948 2324 2400	
25	65		0000 0946 2321 2400	
26	71		0000 0943 2324 2400	
27	70		0000 0940 2326 2400	
28	69		0000 0940 2319 2400	
29	69		0000 0940	
30	70		0325 0935	
Mean	67.4			

SOLAR RADIO EMISSION OUTSTANDING OCCURRENCES

9 -- 10 2007

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Peak	Density Rel	Density Mean
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None

COSMIC RAY NEUTRON INTENSITY
Real Counts: 256 Times (Tabulated Counts Plus 1500)

SEP 2007	U.T. Hours at End of Interval																								Mean	N
Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	500	505	507	513	520	519	527	524	527	529	528	523	508	504	499	506	502	500	497	506	492	504	496	507	510.1	24
2	506	500	503	510	513	519	528	528	524	517	522	530	521	511	505	505	515	506	498	502	507	500	508	501	511.6	24
3	510	512	524	523	528	536	536	532	532	528	525	529	524	520	528	519	510	511	511	496	508	506	518	514	520.0	24
4	517	518	521	529	533	533	533	537	535	528	527	516	503	509	506	498	503	502	508	503	503	507	509	521	516.6	24
5	512	516	525	525	537	540	536	541	536	527	518	522	515	510	513	499	505	507	502	495	507	500	498	516.2	24	
6	514	509	505	508	511	513	509	514	518	515	529	529	523	510	496	508	498	508	506	502	505	504	505	507	510.3	24
7	523	527	531	536	540	530	536	529	531	535	524	518	513	505	512	507	507	510	506	506	513	511	520.5	24		
8	514	506	521	512	516	509	516	523	521	527	513	504	505	502	504	511	498	496	498	510	498	515	499	513	509.6	24
9	508	504	512	506	507	511	496	499	491	503	502	511	503	507	502	495	496	498	492	495	508	500	501	501.7	24	
10	510	501	498	501	511	511	513	526	526	515	525	526	513	498	504	508	502	505	505	506	497	500	506	507	508.9	24
11	512	525	535	522	529	532	525	529	523	526	540	531	527	520	513	507	508	511	505	504	513	512	521	520.1	24	
12	510	514	529	527	529	541	536	536	532	534	542	528	524	522	510	515	516	509	517	511	512	517	521	498	522.1	24
13	509	513	514	507	520	512	508	501	515	515	512	511	508	510	513	502	511	509	518	510	509	512	511	511.3	24	
14	518	513	517	518	518	514	518	515	516	522	511	512	520	523	520	525	512	511	512	511	504	509	515	518	515.5	24
15	514	516	529	516	524	511	522	512	511	509	514	506	504	495	506	492	496	496	503	499	502	496	500	506	507.5	24
16	504	509	512	510	515	513	512	506	501	501	506	509	503	496	503	498	494	502	500	497	488	496	500	494	502.9	24
17	509	505	510	502	503	504	501	482	502	500	501	495	488	505	492	495	495	500	513	499	505	506	503	501.1	24	
18	507	511	512	512	515	515	515	518	508	505	512	509	517	503	510	502	514	513	512	519	518	509	525	521	512.6	24
19	523	513	521	523	521	519	506	508	510	515	509	510	513	506	510	517	511	521	511	514	509	520	525	532	515.3	24
20	524	533	517	523	521	515	511	510	507	517	516	508	498	507	510	512	499	521	517	500	505	508	522	513	513.1	24
21	520	517	523	523	520	513	521	507	515	510	509	506	505	511	506	494	498	500	505	497	501	509	508	6	24	
22	499	510	502	505	506	507	505	500	506	504	502	496	496	494	492	495	492	494	487	495	497	501	497	492	498.9	24
23	504	515	508	517	516	522	509	513	504	497	491	496	494	500	492	498	504	504	499	487	500	501	507	503.3	24	
24	506	512	514	510	514	511	508	506	501	499	495	491	497	500	502	501	495	493	491	489	501	501	508	497	501.8	24
25	510	504	507	513	499	506	512	494	508	496	498	494	495	492	488	498	496	487	493	488	491	499	493	498	0	24
26	502	509	505	501	501	513	504	503	504	498	501	490	498	501	498	488	502	502	502	500	505	505	514	508	502.3	24
27	517	509	524	516	518	507	522	505	520	508	505	501	492	503	496	500	504	500	507	510	502	507	509	512	508.1	24
28	516	514	512	520	521	509	522	517	515	517	519	512	506	509	507	512	515	503	507	511	507	511	514	518	513.1	24
29	521	523	523	523	522	520	521	520	521	510	514	516	516	522	519	509	517	504	507	510	519	516	522	519	516.9	24
30	527	528	521	522	525	527	524	519	521	524	510	521	521	508	520	514	511	517	506	507	519	509	516	511	517.8	24

MONTHLY MEAN DAILY VARIATION FOR 30 COMPLETE DAYS DEVIATIONS FROM AVERAGE: 510.519
 (1-12) 1.68 2.51 5.55 5.25 7.91 7.21 7.18 5.18 5.08 3.85 3.85 1.35
 (13-24) -2.12 -3.49 -4.82 -6.02 -6.62 -5.72 -5.99 -7.45 -6.89 -4.45 -1.22 -1.82

HARMONIC COMPONENTS (ORDER, COS, SIN, AMPLITUDE, MAX.-HR.)
 U.T. = (1 0.28 7.16 7.17 5.85) (2 -0.08 0.20 0.21 3.71) (3 -0.07 0.38 0.38 2.24) (4 0.31 -0.60 0.67 4.95)
 L.T. = (1 -6.34 -3.33 7.17 13.85) (2 0.21 -0.03 0.21 11.71) (3 -0.07 0.38 0.38 2.24) (4 0.36 0.56 0.67 0.95)

COSMIC RAY MESON INTENSITY

VERTICAL COMPONENT

Real Counts: 128 Times (Tabulated Counts Plus 3000)

U.T. Hours at End of Interval

SEP 2007	Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean	N
	1	149	131	158	160	160	167	160	148	168	140	149	148	156	140	157	142	154	150	138	145	144	156	150	156	151	1 24
	2	148	153	142	161	158	156	160	148	152	152	155	134	140	146	149	139	155	146	151	134	151	141	145	148	7 24	
	3	139	157	144	149	150	163	157	162	149	164	156	155	157	151	153	150	150	146	138	145	128	159	153	155	151	3 24
	4	139	152	169	148	144	153	166	143	163	159	156	152	161	150	152	155	168	149	152	150	139	141	152	157	152	9 24
	5	160	157	158	153	155	162	154	169	180	157	160	158	171	162	155	156	151	158	149	142	151	150	166	149	157	6 24
	6	164	157	163	146	159	171	159	156	143	164	144	141	156	155	160	153	152	155	160	150	163	155	154	156	0 24	
	7	152	162	175	156	173	158	171	156	161	156	158	156	148	158	140	166	144	160	146	157	147	141	154	142	155	7 24
	8	158	158	143	160	144	159	157	154	163	149	155	153	160	152	146	136	135	158	146	158	154	160	143	159	152	5 24
	9	142	169	169	154	151	165	159	151	145	159	154	155	155	154	151	153	152	156	153	140	149	142	138	140	152	3 24
	10	145	165	153	151	165	152	163	163	165	162	166	158	165	164	148	154	137	150	164	160	155	167	155	158	157	7 24
	11	163	160	155	151	153	163	161	165	153	160	140	166	156	150	155	147	159	160	153	157	161	161	158	154	156	7 24
	12	159	148	166	161	165	151	161	166	167	162	176	164	173	167	167	157	162	148	153	150	164	165	157	166	161	5 24
	13	159	154	171	162	141	155	165	149	170	169	163	158	168	169	190	144	156	158	152	156	171	149	158	157	158	5 24
	14	161	155	166	142	163	156	168	161	169	183	168	167	167	149	169	153	161	152	154	155	160	164	155	157	160	6 24
	15	159	165	144	178	151	165	168	182	172	162	162	163	155	160	157	145	146	149	141	147	140	147	151	152	156	8 24
	16	144	156	162	167	161	164	150	158	162	143	143	158	165	148	158	148	146	156	151	152	145	152	141	158	153	7 24
	17	168	147	152	155	166	163	159	156	166	164	168	147	160	157	158	166	138	168	168	143	162	160	165	167	159	3 24
	18	157	160	157	159	162	171	165	170	175	170	158	154	162	151	167	154	163	152	156	161	153	171	145	166	160	8 24
	19	173	156	170	159	157	158	179	148	165	163	154	161	159	154	155	169	152	148	161	154	165	162	156	161	160	0 24
	20	150	165	171	149	162	165	166	160	161	166	164	154	161	167	168	160	163	159	144	167	181	152	166	160	161	7 24
	21	173	156	146	151	172	159	161	164	161	158	155	162	166	152	161	148	153	140	161	139	152	160	159	150	156	6 24
	22	143	142	160	152	148	160	154	172	149	158	158	147	153	139	133	126	145	135	145	145	149	137	138	138	146	9 24
	23	131	141	141	151	159	160	162	158	160	148	138	146	160	136	145	140	126	141	149	143	138	157	141	149	146	7 24
	24	148	141	155	144	152	157	156	158	153	150	150	143	149	141	125	131	147	140	133	142	130	149	147	152	145	5 24
	25	152	147	138	167	163	165	159	161	151	150	132	153	160	144	142	147	152	136	150	142	153	154	142	153	150	5 24
	26	155	149	152	148	163	153																				2 19
	27	151	175	151	158	153	153	173	164	162	171	162	161	159	143	149	144	148	148	150	156	138	155	150	149	155	1 24
	28	153	158	152	156	165	155	154	173	158	161	155	158	155	155	146	151	167	143	147	145	143	146	140	153	153	7 24
	29	143	158	148	151	156	161	165	159	162	146	154	149	147	149	143	146	148	142	147	134	129	141	137	140	148	1 24
	30	150	147	153	146	150	164	153	151	145	151	150	146	152	150	148	151	151	156	139	157	130	131	159	151	149	2 24

MONTHLY MEAN=154.371

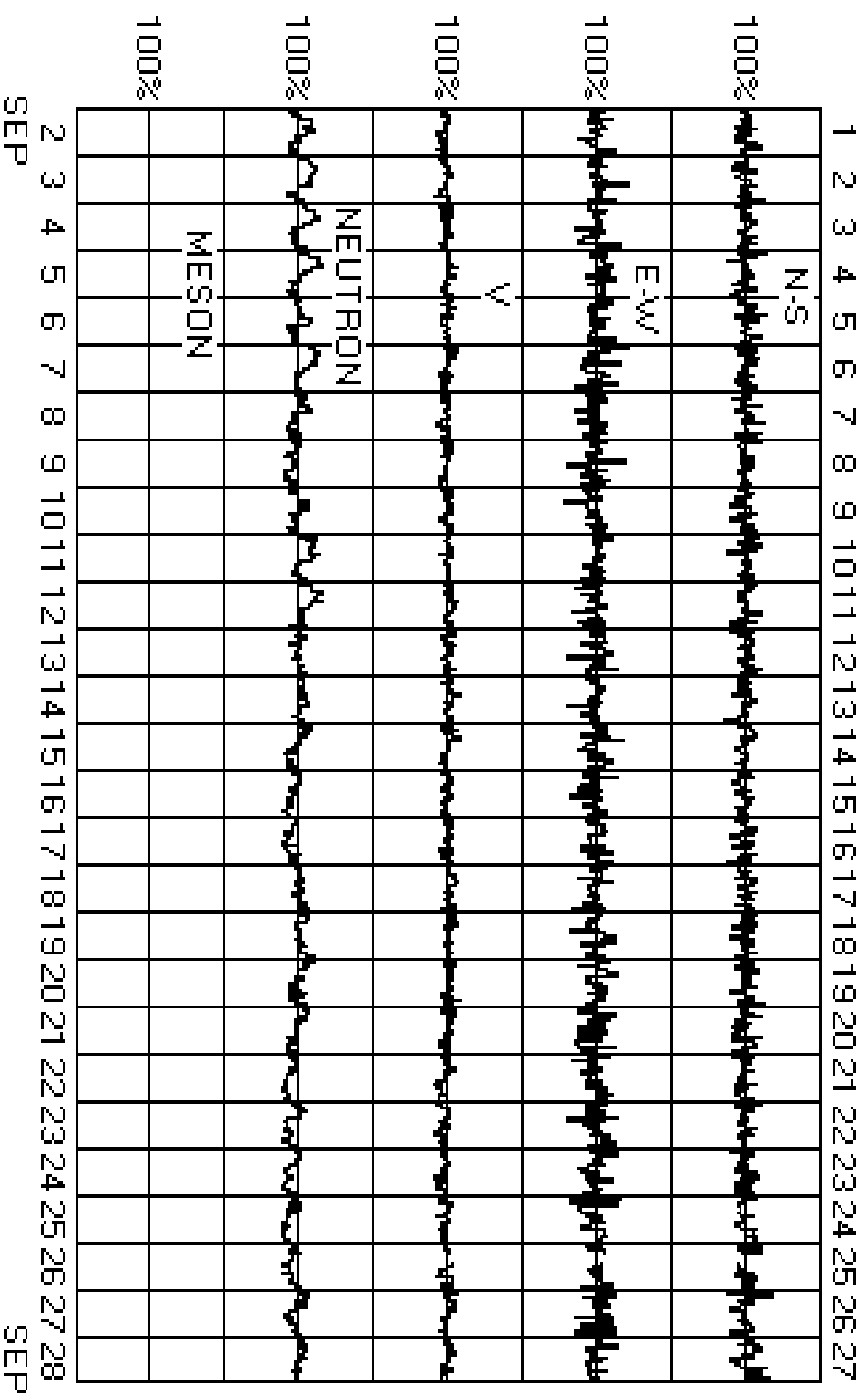
MONTHLY MEAN DAILY VARIATION FOR 29 COMPLETE DAYS DEVIATIONS FROM AVERAGE:154.404

(1-12)	-1.54	0.49	1.87	0.67	-2.77	5.98	7.18	5.08	5.94	4.11	1.46	0.46
(13-24)	3.35	-2.40	-2.71	-4.47	-3.85	-3.89	-4.71	-4.30	-5.61	-1.20	-3.65	-1.02

U.T. = (1 -1.18 4.85 4.99 6.91) (2 -0.37 -0.69 0.78 8.05) (3 0.23 -0.38 0.45 6.69) (4 0.52 0.31 0.60 0.51))
 L.T. = (1 -3.61 -3.45 4.99 14.91) (2 -0.41 0.66 0.78 4.05) (3 0.23 -0.38 0.45 6.69) (4 -0.53 0.30 0.60 2.51))

COSMIC RAY INDICES

Bartels Rotation 2376 (SEP 2007)



SUDDEN IONOSPHERIC DISTURBANCES (D REGION)

SEPTEMBER 2007

Day	Sta	Start	Max	End	Imp	SPA		SFA
		(UT)	(UT)	(UT)		LF	VLf	LF

None→

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GEOMAGNETIC ACTIVITY INDICES K AND A_K

SEPTEMBER 2007

BGMO

Day	Three-Hourly Indices K								Sun	A_K
	0-3	3-6	6-9	9-12	12-15	15-18	18-21	21-24		
1	2	1	3	3	4	3	3	3	22	14
2 D	4	5	3	4	5	3	3	2	29	25
3	2	3	2	3	4	3	1	2	20	12
4	0	2	3	3	2	1	2	2	15	8
5	1	2	3	3	4	2	2	2	19	11
6	2	1	2	3	2	3	3	2	18	10
7	3	3	1	2	2	3	2	2	18	10
8	2	2	2	2	2	3	2	1	16	8
9 Q	2	0	1	2	1	2	0	0	8	3
10 Q	1	0	1	2	1	1	2	0	8	3
11 Q	1	1	1	2	2	1	1	1	10	4
12 Q	1	1	1	1	2	0	1	1	8	3
13 Q	0	1	0	2	0	0	2	2	7	3
14	2	2	0	3	2	3	3	3	18	10
15	3	2	2	2	1	2	2	1	15	7
16	1	2	2	2	1	1	1	0	10	4
17	1	0	0	0	2	1	1	2	7	3
18	2	2	1	2	2	0	0	1	10	4
19	0	2	2	2	2	1	2	1	12	5
20	1	2	2	3	4	3	3	2	20	12
21	2	2	3	2	3	3	3	3	21	12
22	3	3	3	2	3	3	3	3	23	14
23 D	3	5	4	3	2	2	2	3	24	18
24	3	4	3	2	3	3	2	2	22	14
25	2	1	2	1	1	2	2	2	13	6
26	2	2	2	2	1	0	1	1	11	5
27 D	1	0	1	3	2	6	4	4	21	20
28 D	4	3	4	3	3	3	3	4	27	20
29 D	4	4	4	5	5	3	3	3	31	28
30	2	3	3	3	3	2	2	2	20	11
Sum									307	
Mean									10.2	

MAGNETIC STORMS

SEPTEMBER 2007

BGMO

Time of Magnetic			Sudden Com.			Deg.	Maximum Acti.			Maximum					
			Amplitude			of	on K-scale			Range					
Begining		Ending					3hour k								
Day	h	m	Day	h	Type	D'	HnT	ZnT	Acti.	Day	Int.	Index	D'	HnT	ZnT

NONE