



1984

No. 10

Provisional Sunspot - Numbers for OCTOBER 1984

Dependent on observations at Locarno Specola Solare,
 complemented by an international network and
 determined at the Observatoire Royal de Belgique.
 Thirty nine cooperating stations on 1984, nov. 1st, 1000 UT

Day	R _I '	Day	R _I '
1	7	16	19
2	9	17	24
3	10	18	25
4	11	19	25
5	0	20	16
6	0	21	22
7	0	22	12
8	12	23	11
9	14	24	10
10	17	25	10
11	25	26	9
12	18	27	8
13	11	28	0
14	12	29	8
15	14	30	14
		31	18

MEAN = 12.6

 Predictions of the smoothed
 monthly Sunspot - Numbers

Classical Method		S.I.D.C. Adjusted Values	
1984 NOV. 38	1985 FEB. 34	1984 NOV. 33	1985 FEB. 26
DEC. 37	MAR. 33	DEC. 31	MAR. 24
1985 JAN. 35	APR. 31	1985 JAN. 28	APR. 22

Precision on the sixth predicted value : ± 5

Classical estimated smoothed value for 1985 July : 28 ± 7
 Forecasted values are evaluated on the basis of the latest
 monthly smoothed value (1984 April) : $49.7 \pm 5 \%$

Brussels, November 1st, 1984

A. Koeckelenbergh.

Reproduction permitted if the source is mentioned.

S.I.D.C. SUMMARY OF URSIGRAMS

1984 OCTOBER

 $R'_{im} = 12.6$

Date	R'_1	PPSI	2800	COS	XFI	XI	A_k	
1	7	0	72	68	4	4/0	10	PCA
2	9	0	75	73	4	4/0	10	
3	10	0	75	68	0	0/0	16	
4	11	0	75	68	0	0/0	7	
5	0	0	74	74	4	4/0	8	
6	0	0	73	94	0	0/0	22	SSC . mgst.
7	0	0	74	79	0	0/0	39	
8	12	0	75	78	0	0/0	27	
9	14	2	74	78	0	0/0	24	
10	17	2	74	76	0	0/0	24	SSC . mgst.
11	25	2	75	75	0	0/0	29	
12	18	0	74	73	1	0/0	34	
13	11	0	75	74	1	0/0	16	mgst.
14	12	0	74	75	0	0/0	18	
15	14	2	77	70	1	0/0	15	
16	19	11	77	69	2	0/0	19	
17	24	19	77	70	1	0/0	4	
18	25	23	77	72	0	0/0	42	SSC. mgst.
19	25	17	75	76	1	0/0	57	
20	16	12	74	83	0	0/0	58	
21	22	10	74		1	0/0	40	
22	12	6	75		1	0/0	42	
23	11	3	73		0	0/0	28	
24	10	2		73				
25	10	0	71	74	0	0/0	23	
26	9	2	70	87	3	3/0	13	
27	8	0	70	84	0	0/0	10	
28	0	0	70	80	0	0/0	8	
29	8	0	69	83	0	0/0	8	
30	14	0	73	73	0	0/0	7	
31	18	1	71	68	0	0/0	6	SSC. mgst.

Probably slight growing of the sunspot number from november .

R'_{im} : provisional International monthly Sunspot-Number from the S.I.D.C.

R'_1 : provisional International daily Sunspot-Numbers from the S.I.D.C.

PPSI : Prompt Photometric Sunspot Index from the S.I.D.C. in 10^{-5} W.m^{-2}
Quantity to subtract at the mean solar constant, due to the presence of the sunspots .

2800 : 2800 Mhz solar flux from the Ursigrams (origin:Herzberg Institute Ottawa)

COS : thousands of cosmic rays counts from the Ursigrams

XFI : X-flare Index from the S.I.D.C. on the base of the Ursigrams .The sum of number of class C-flares +10 x class M-flares of significative X-ray flux + 100 x X-flares with important X-ray flux .

XI : X-flare Index from the Ursigrams (number of M-flares/number of X-flares)

A_k : geomagnetic Index of Wingst station from the Ursigrams .

sid : Sudden ionospheric disturbance ;ssc :sudden storm commencement

sfe : solar flare effect ; // :two ribbons flare ; P :proton flare

mst : magnetic storm ; II radio- outburst ; pca :polar cap absorption

aur : aurorae ; 1b ,2b ...: flare of class 1 or2 (bright) .

OBSERVATOIRE ROYAL DE BELGIQUE

DEPARTEMENT 4 RADIOASTRONOMIE ET PHYSIQUE SOLAIRE

NOMBRES RELATIFS DE WOLF JOURNALIERS

PROVISOIRES

PROVISIONAL

SUNSPOT RELATIVE NUMBERS

STATION UCCLE BELGIUM

OCTOBRE 1984

DATE	UT	NOMBRE DE GROUPES	NOMBRE DE TACHES	NOMBRE DE WOLF	NOMB REL ZONE CENTRALE	PPSI 10-6 WM-2	QUAL	OBS
2	1017	0	0	0	0	0.	3	HB
3	0900	0	0	0	0	0.	4	AK
4	1010	0	0	0	0	0.	3	AK
5	0900	0	0	0	0	0.	2	AK
7	1032	1	3	13	0	1.	2	HB
11	1230	2	14	34	14	17.	2	HB
12	1335	1	4	14	0	2.	3	AK
13	1020	0	0	0	0	0.	2	HB
15	1033	1	10	20	0	2.	2	VI
16	1320	1	13	23	0	147.	3	AK
17	1035	1	18	28	0	192.	4	AK
18	0820	1	10	20	20	230.	2	AK
19	0750	1	18	28	28	66.	1	HB
20	1010	1	9	19	19	65.	2	AK
21	0845	1	7	17	17	58.	2	HB
23	1250	1	1	11	0	29.	2	HB
24	0837	1	1	11	0	1.	1	VI
25	0818	1	2	12	0	1.	2	VI
26	0804	1	3	13	13	63.	4	VI
27	0910	0	0	0	0	0.	4	AK
28	1415	0	0	0	0	0.	1	HB
30	1314	2	4	24	11	7.	4	VI
31	1105	2	9	29	29	8.	4	AK

LE SOLEIL A ETE OBSERVE 23 JOURS SUR 31 POSSIBLES
LE NOMBRE RELATIF DE WOLF MOYEN EST DE 13.7

ED.RESP. DR. ANDRE KOECKELENBERGH
3, AV. CIRCULAIRE, B 1180 BRUXELLES, BELGIUM.
TELEX : 21565 OBSBEL - TEL. : (02) 3752484 EXT 611

NORMALISED UCCLE OBSERVATIONAL SUNSPOT NUMBERS

U' = K' U FOR 1984 OCTOBER

K' = 1.007 (*)

1	***	7	13	13	0	19	28	25	12
2	0	8	***	14	***	20	19	26	13
3	0	9	***	15	20	21	17	27	0
4	0	10	***	16	23	22	***	28	0
5	0	11	34	17	28	23	11	29	***
6	***	12	14	18	20	24	11	30	24
								31	29

THE SUN WAS OBSERVED 23 DAYS ON 31 POSSIBLE
 THE NORMALISED RELATIVE MONTHLY MEAN WOLF NUMBER IS 13

* K' IS THE MEAN OF THE MONTHLY K'S FOR THE LAST FIVE YEARS

UCCLE OBSERVATIONAL MAJOR SUNSPOTS FOR 1984 OCTOBER
 E AND F BRUNNER'S TYPE GROUPS

UCCLE EAST LIMB	DATE AND TYPE			WEST LIMB	
NO	DATE	1ST OBS	CMP	LAST OBS	DATE
NONE					

PROBABLE RETURN OF MAJOR GROUPS FOR 1984 NOVEMBER

NO	NEW EAST LIMB	NEW CMP	NEW WEST LIMB
NONE			

NONE