



198 5 , No. 11

Provisional Sunspot - Numbers for NOVEMBER 198 5

Dependent on observations at Locarno Specola Solare,
 complemented by an international network and
 determined at the Observatoire Royal de Belgique.
 Thirty eight coop. stations on Dec 1st, 1000 UT

Day	R _I '	Day	R _I '
1	0	16	39
2	0	17	43
3	0	18	38
4	0	19	30
5	17	20	28
6	19	21	25
7	20	22	12
8	18	23	10
9	25	24	0
10	15	25	0
11	17	26	0
12	19	27	0
13	30	28	0
14	44	29	0
15	48	30	0

MEAN = 16.6

 Predictions of the smoothed
 monthly Sunspot - Numbers

Classical Method		S.I.D.C. Adjusted Values	
1985 Dec. 10	1986 Mar. 7	1985 Dec. 0(1 to-5)	1986 Mar. 0
1986 Jan. 9	Apr. 6	1986 Jan. 0(0 to-6)	Apr. 0
Feb. 8	May 5	Feb. 0	May 0

Precision on the sixth predicted value : ± 3

Classical estimated smoothed value for 1986 August : 2 ± 4
 Forecasted values are evaluated on the basis of the latest
 monthly smoothed value (1985 May) : $18.3 \pm 5\%$

Brussels, December 1, 198 5

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S.I.D.C. SUMMARY OF URSIGRAMS
 1985 NOVEMBER $R'_{im} = 16.6$

Date	R'_i	PPSI	2800	COS	XFI	XI	A_k	
1	0	0	70	1014	0	0/0	18	
2	0	0	70	15	0	0/0	33	
3	0	0	69	12	0	0/0	28	
4	0	0	69	11	0	0/0	22	
5	17	3	70	10	0	0/0	14	
6	19	5	71	13	0	0/0	14	
7	20	5	73	15	1	0/0	10	
8	18	10	75	8	4	0/0	9	
9	25	10	74	7	0	0/0	14	
10	15	10	74	4	0	0/0	20	
11	17	19	76	5	3	0/0	10	
12	19	19	76	11	0	0/0	5	
13	30	21	76	5	1	0/0	23	
14	44	30	79	17	0	0/0	21	
15	48	50	86	12	1	0/0	16	
16	39	62	81	12	0	0/0	14	
17	43	65	79	11	0	0/0	20	
18	38	64	79	18	0	0/0	17	
19	30	43	78	12	0	0/0	12	
20	28	24	78	13	1	0/0	3	
21	25	7	76	11	0	0/0	4	
22	12	4	75	9	0	0/0	8	
23	10	0	75	3	0	0/0	4	
24	0	0	74	1000	0	0/0	4	
25	0	0	72	3	0	0/0	6	
26	0	0	71	5	0	0/0	6	
27	0	0	72	8	0	0/0	6	SSC
28	0	0	71	7	0	0/0	8	
29	0	0	71		0	0/0	17	SSC
30	0	0						

The minimum of the solar cycle would probably begin between 1986 March and September .

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

NOVEMBRE 1985

DATE	UT	NOMBRE DE GROUPES	NOMBRE DE TACHES	NOMBRE DE WOLF	NOMB REL ZONE CENTRALE	PPSI 10-6 WM-2	QUAL	OBS
2	1241	0	0	0	0	0.	3	HB
3	1100	0	0	0	0	0.	4	AK
4	0850	0	0	0	0	0.	3	AK
6	0813	1	11	21	0	51.	2	VI
7	1301	1	9	19	0	36.	1	VI
9	1025	2	7	27	0	20.	4	CG
11	0840	1	7	17	0	36.	3	HB
12	1430	1	10	20	0	192.	2	AK
13	1154	2	12	32	19	229.	1	HB
17	1245	2	20	40	23	653.	3	AK
18	0950	2	11	31	31	702.	2	PC
28	0935	0	0	0	0	0.	3	AK

LE SOLEIL A ETE OBSERVE 12 JOURS SUR 30 POSSIBLES
LE NOMBRE RELATIF DE WOLF MOYEN EST DE 17.3

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NORMALISED UCCLE OBSERVATIONAL SUNSPOT NUMBERS

U* \bar{K} *U FOR 1985 NOVEMBER

\bar{K} * = .990 (*)

1	***	7	16	13	31	19	***	25	***
2	0	8	***	14	***	20	***	26	***
3	0	9	26	15	***	21	***	27	***
4	0	10	***	16	***	22	***	28	0
5	***	11	16	17	39	23	***	29	***
6	20	12	19	18	30	24	***	30	***
								31	***

THE SUN WAS OBSERVED 12 DAYS ON 30 POSSIBLE
 THE NORMALISED RELATIVE MONTHLY MEAN WOLF NUMBER IS 16

* \bar{K} * IS THE MEAN OF THE MONTHLY \bar{K} 'S FOR THE LAST FIVE YEARS

UCCLE OBSERVATIONAL MAJOR SUNSPOTS FOR 1985 NOVEMBER
 E AND F BRUNNER'S TYPE GROUPS

UCCLE NO	EAST LIMB DATE	DATE	AND TYPE	WEST LIMB DATE
		IST OBS	OMP	LAST OBS

NONE

PROBABLE RETURN OF MAJOR GROUPS FOR 1985 JANUARY

NO	NEW EAST LIMB	NEW CMP	NEW WEST LIMB
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NONE