



1986 , No. 1

Provisional Sunspot - Numbers for JANUARY 1986

Dependent on observations at Locarno Specola Solare,
 complemented by an international network and
 determined at the Observatoire Royal de Belgique.
 Thirty nine coop. stations on Feb. 1st, 0930 UT.

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

MEAN = 2.3

 Predictions of the smoothed
 monthly Sunspot - Numbers

Classical Method				S.I.D.C. Adjusted Values			
1986 Feb.	10	1986 May	7	1986 Feb.	0	1986 May	0
Mar.	9	Jun.	6	Mar.	0	Jun.	0
Apr.	8	Jul.	5	Apr.	0	Jul.	0

Precision on the sixth predicted value : ± 3 Classical estimated smoothed value for 1986 October = 2 (± 4)Forecasted values are evaluated on the basis of the latest
 monthly smoothed value (1985 July) : 17.4 ± 5 %

Brussels, February 1st, 1986

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S.I.D.C. SUMMARY OF URSIGRAMS
1986 JANUARY $R_{im}^i = 2.3$

Date	R_i	PPSI	2800	COS	XFI	XI	A_k	
1	0	0	69	1025	0	0/0	29	
2	0	0	70	21	0	0/0	21	
3	0	0	71	14	0	0/0	10	
4	0	0	72	12	0	0/0	5	
5	0	0	73	11	0	0/0	4	
6	0	0	75	..	0	0/0	20	mgst - SSC
7	0	0	74	14	0	0/0	28	
8	0	0	74	20	0	0/0	11	
9	0	0	75	16	0	0/0	23	
10	0	0	75	13	0	0/0	9	
11	0	0	74	10	0	0/0	3	
12	0	0	74	6	0	0/0	6	
13	13	2	77	9	0	0/0	2	
14	14	4	79	..	5	0/0	3	
15	12	1	78	6	20	1/0	6	Xf1 -SID -II + IV
16	8	0	83	14	23	2/0	2	Xf1 - 10cm
17	0	0	77	18	0	0/0	7	
18	0	0	76	17	0	0/0	7	
19	0	0	73	15	0	0/0	4	
20	0	0	72	17	0	0/0	14	
21	0	0	72	17	0	0/0	14	
22	0	0	70	19	0	0/0	26	
23	0	0	70	26	0	0/0	14	
24	0	0	69	24	0	0/0	22	
25	0	0	70	19	0	0/0	29	SSC
26	7	0	70	16	0	0/0	12	
27	0	0	69	16	0	0/0	38	mgst -SSC
28	0	0	72	13	0	0/0	31	
29	0	0	73	11	0	0/0	27	
30	8	0	76	18	0	0/0	15	
31	8	4	79	..	3	0/0	11	

The beginning of the minimum phase seems confirmed .

- R_{im}^i : provisional International monthly Sunspot-Number from the S.I.D.C.
 R_i^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 (Ampli.fluct.in 2nT).
sid : Sudden ionospheric disturbance ;ssc :sudden storm commencement
sfe : solar flare effect ; // :two ribbonsflare ; 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

SUNSPOT RELATIVE NUMBERS

STATION UCCLE BELGIUM

JANVIER 1986

DATE	TU	NOMBRE DE GROUPES	NOMBRE DE TACHES	NOMBRE DE WOLF	PPSI 10-6 WM-2	QUALITE	OBSER
2	955	0	0	0	0.	2	AK
4	1054	0	0	0	0.	1	HB
7	930	0	0	0	0.	1	HB
12	1030	0	0	0	0.	4	AK
16	1430	0	0	0	0.	2	AK
17	1031	0	0	0	0.	2	HB
20	857	0	0	0	0.	3	HB
21	1034	0	0	0	0.	1	HB
22	1041	0	0	0	0.	3	HB
23	1216	0	0	0	0.	1	ST
24	1017	0	0	0	0.	3	HB
25	930	0	0	0	0.	3	CG
26	1030	0	0	0	0.	3	AK
27	1112	0	0	0	0.	1	ST
28	957	0	0	0	0.	4	HB
30	1200	0	0	0	0.	1	HB
31	944	1	2	12	4.	1	HB

LE SOLEIL A ETE OBSERVE 17 JOURS SUR 31 POSSIBLES
 LE NOMBRE RELATIF DE WOLF MOYEN EST DE 0.7
 EDITEUR RESPONSABLE
 A. KOECKELENBERGH
 OBSERVATOIRE ROYAL DE BELGIQUE
 UCCLE BELGIUM

NORMALISED UCCLE OBSERVATIONAL SUNSPOT NUMBERS

U* = K*U FOR 1986 JANUARY

K* = .938 (*)

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

THE SUN WAS OBSERVED 17 DAYS ON 31 POSSIBLE
 THE NORMALISED RELATIVE MONTHLY MEAN WOLF NUMBER IS 0.7

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

UCCLE OBSERVATIONAL MAJOR SUNSPOTS FOR 1986 JANUARY
 E AND F BRUNNER'S TYPE GROUPS

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

NONE

PROBABLE RETURN OF MAJOR GROUPS FOR 1986 FEBRUARY

NO	NEW EAST LIMB	NEW CMP	NEW WEST LIMB
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NONE