Bulletin Werkgroep Zon — januari 1994

NVWS Werkgroep Zon. Sekretariaat: Veenenburg 36, 2804 WZ Gouda, tel: 01820 -39082

Zonnevlekkengetallen

Day	Bals	Gr 6	Groe	Iden	Jn .9	Jn 4	Scho	vSlo	Span	Vers	Zans	Zijle
1					44	45	113	101	117	110		75
2			71									
3												
4	140		83		61			114	104	118		
5												
6												
7	141				45			86				
8					31							
9	80		49		30		68	67	59	87	46	
10	60			52						79		38
11												
12												
13	58				27							
14	48		29		25				48	43		
15								24				
16	36		26		13	13		32		26	24	27
17	33			30	14	15		23			32	28
18										28		
19												
20	36		31		17			31	39	32	40	
21												
22												
23					25						58	
24					38							
25			63		37							
26	77		58	81	26					75	68	
27												
28	48		51		12			60		50		
29												
30		30			0	23	56	39	42	25	26	53
31	33		27		23					39		
observ	12	1	10	3	17	4	3	10	6	12	7	5
k	0,82	1,77	1,15	0,88	2,11	2,03	0,92	1,07	0,97	0,99	1,21	1,09
st.dev.	0,10	—	0,14	0,07	0,64	0,26	0,12	0,20	0,20	0,37	0,41	0,15
st.d./k	0,12	—	0,12	0,08	0,31	0,13	0,13	0,19	0,21	0,37	0,34	0,14

Observers	[...] = Refractor, d = ... mm;	[Rf...] = Reflector, d = ... mm
Bals = H.A.M. Balster [70]	Jn .9 = D. Jannink [9]	Span = T. Spaninks [75]
Gr 6 = Mw G. Gravers [60]	Jn 4 = D. Jannink [40]	Vers = D. Verschuuren [Rf 40]
Groe = A. Groenewegen [102]	Scho = A. Scholten [60]	Zans = W. Zanstra [Rf 155]
Iden = J.A. Idenburg [Rf 125]	vSlo = B. van Slooten [90]	Zijle = W.A. Zijlema [90]

spot Index — Data Center

SUNSPOT BULLETIN

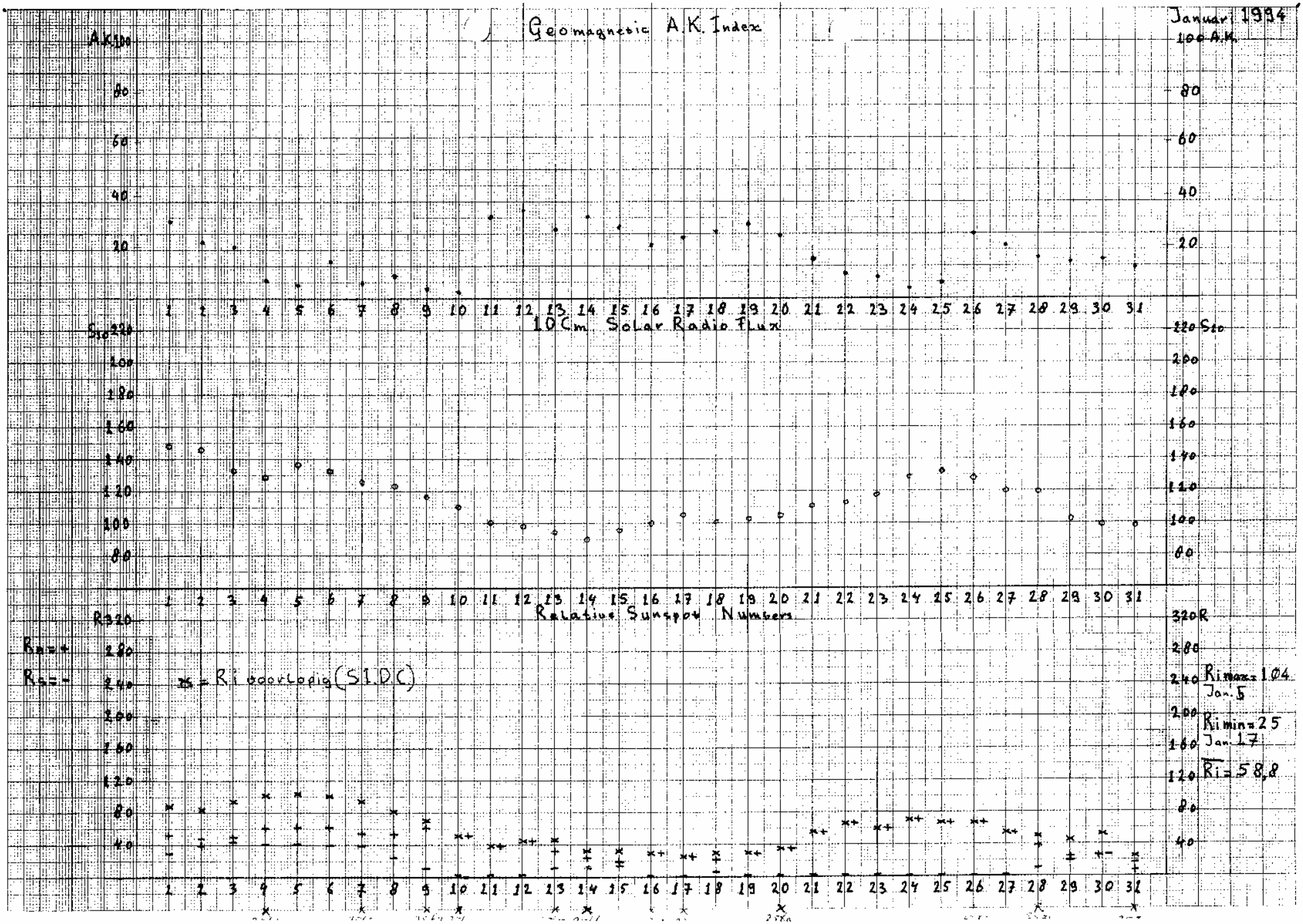
S.I.D.C. SUMMARY OF THE URSIGRAMS

1994 JANUARY R_{IM} = 58.8

Date	Rf	PPSI	600	2800	COS	SFI	XI	Ak	SEA	MAG
31	99	36	30	141	985	28	0/0	20		
1	86	170	33	148	977	8	0/0	30		
2	84	227	34	146	974	6	1/0	22		Sn(2248)+T
3	95	258	33	133	-	9	0/0	-		
4	103	242	32	129	982	14	0/0	7		
5	104	195	32	137	979	38	1/0	5		
6	101	197	32	132	976	8	0/0	14		
7	94	140	31	126	980	31	1/0	6		1n(0937);Sf(1231)
8	81	100	31	123	979	5	0/0	8		
9	71	93	31	117	975	2	0/0	3		
10	51	161	30	110	990	4	0/0	2		
11	38	62	29	101	981	4	0/0	32	0535	mgst
12	44	46	28	098	973	1	0/0	34		
13	45	31	28	095	972	3	0/0	27		
14	36	14	27	090	966	1	0/0	32		
15	35	4	26	096	973	0	0/0	28		
16	29	16	27	100	976	1	1/0	21		1n(2306)+T
17	25	35	28	105	981	14	0/0	24		
18	30	61	28	101	983	1	0/0	27		
19	28	87	28	103	?	3	0/0	29		
20	35	110	29	105	981	1	0/0	24		
21	53	141	29	111	982	4	0/0	15		
22	65	153	31	113	982	3	0/0	9		
23	60	136	30	118	981	10	0/0	8		
24	70	117	31	129	980	3	0/0	4		
25	66	121	32	132	981	26	1/0	6	2153	ssc
26	67	81	32	128	986	23	1/0	25		
27	54	44	31	120	983	24	1/0	21		1b(0456)
28	49	24	29	119	984	1	2/0	18		
29	46	10	29	102	977	1	2/0	14	1513	SEA(1117;1304?)
30	53	13	29	099	975	0	0/0	15		
31	26	18	29	098	-	0	0/0	-		

Rf, R_{IM} : provisional international sunspot numbers from the S.I.D.C.
PPSI : prompt photometric sunspot index from the S.I.D.C. in 10-5 w/m² : the quantity to subtract from the mean solar constant.
600 : 600 Mhz solar flux from Humain station (Belgium).
2800 : 2800 Mhz solar flux from Ottawa (origin : Ursigrams - UGEOI group 2)."The 10.7cm Flux data are provided as a service of the National Research Council of Canada."
COS : thousands of the cosmic ray counts (origin : Ursigrams - UCOSE Kerguelen).
SFI : From October 1992, Solar Flare Index from the S.I.D.C. (origin : Ursigrams - UGEOR group 3).
XI : X-flares index from the Ursigrams (M-flares/X-flares) (origin : Ursigrams - UGEOR group 2; UGEOI group 5).
Ak : planetary geomagnetic index from Wingst, Germany (origin : Ursigrams).
SEA : sudden enhancements of atmospherics from Uccle & Humain (Royal Observatory, Belgium).
MAG : magnetic events from Dourbes station (Royal Meteorological Institute, Belgium).
Remarks : **sid** (sudden ionospheric disturbance); **ssc** (sudden storm commencement); **mgst** (magnetic storm); **sfe** (solar flare effect); s-1-2-3-4 (class of flares); II-IV radio-burst; T (ten cm radio-burst); P (proton flare); p (proton event); gle (ground level event : neutron event); **sf** (sudden impulse); F (Forbush); **SFI Evaluation** (1 x Sn+10 x "1"+100 x ">1").


R
● = SIDC
– = Observers Werkgroep Zon
160
140
120
100
80
60
40
20
0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
T


Januar 1994
Geomagnetic A.K. Index
A.K.
10Cm Solar Radio Flux
S10
Relative Sunspot Numbers
R
Rn=+
Rs=-
Ri = Ri overlapig (SIDC)
Rimax=104
Jan. 5
Rimin=25
Jan. 17
Ri=58,8

Zonnevlekkengetallen noordelijk- en zuidelijk halfrond

(Hemispheric sunspot numbers)

januari 1994

	S.I.D.C.		Balster		Jannink 40		v. Slooten		Spaninks	
Day	Rn	Rs	Rn	Rs	Rn	Rs	Rn	Rs	Rn	Rs
1	54	32			19	26	55	46	68	49
2	37	47								
3	50	45								
4	61	42	78	62			59	55	37	67
5	62	42								
6	62	39								
7	55	39	75	66			52	34		
8	56	25								
9	61	10	66	14			54	13	46	13
10	51	0	60	0						
11	38	0								
12	44	0								
13	34	11	44	14					48	0
14	26	10	35	13						
15	19	16					24	0		
16	29	0	36	0	13	0	20	12		
17	25	0	33	0	15	0	23	0		
18	23	7								
19	28	0								
20	35	0	36	0			31	0	39	0
21	53	0								
22	65	0								
23	60	0								
24	70	0								
25	66	0								
26	67	0	77	0						
27	54	0								
28	39	10	48	23			46	14		
29	26	20								
30	27	26			11	12	23	16		
31	9	17	12	21						

Bulletin Werkgroep Zon — februari 1994

NVWS Werkgroep Zon. Sekretariaat: Veenenburg 36, 2804 WZ Gouda, tel: 01820 -39082

Zonnevlekkengetallen

Day	Bals	Gr 6	Groe	Iden	Jn .9	Jn 4	Scho	vSlo	Sp 7	Sp 8	Vers	Zans	Zijle
1													40
2	40		34	57	11			52	25		24	38	
3				48	22							36	
4													
5													
6								53					
7	75										42		49
8	58		39		35		60	73			61		
9					23			56					
10				38	24						36		
11													
12		54		52	25	27	49	44	55		50		50
13					16	16		65		74	60	73	53
14	63		11	38	11			50	50		57	40	36
15	25				11			14	23		24	38	24
16	40		13	47	12	13		35	45		26		50
17	48		12		12			41		25	35	35	
18	28		11	14	12			30	33		15	14	56
19	31	27	25		12			29	31		41		31
20	18	16	13		12			29	27		27		
21	17				12			28			14	12	14
22											26		
23	40			40	12							37	31
24													
25					22			36					
26			26		11	11		38			24		
27					11			40					
28	62				23			59					
observ	13	3	9	8	20	4	2	18	8	2	16	9	11
k	0,94	0,98	2,25	1,08	2,44	2,70	0,71	0,94	1,00	1,17	1,18	1,23	0,97
st.dev.	0,27	0,24	1,19	0,74	0,87	0,81	0,03	0,42	0,28	0,55	0,53	0,68	0,23
st.d./k	0,28	0,24	0,53	0,68	0,36	0,30	0,04	0,45	0,27	0,47	0,45	0,55	0,23

Observers	[...] = Refractor, d = ... mm;	[Rf...] = Reflector, d = ... mm
Bals = H.A.M. Balster [70]	Jn .9 = D. Jannink [9]	Sp 7 = T. Spaninks [75]
Gr 6 = Mw G. Gravers [60]	Jn 4 = D. Jannink [40]	Sp 8 = T. Spaninks [80]
Groe = A. Groenewegen [102]	Scho = A. Scholten [60]	Vers = D. Verschuuren [Rf 40]
Iden = J.A. Idenburg [Rf 125]	vSlo = B. van Slooten [90]	Zans = W. Zanstra [Rf 155]
		Zijle = W.A. Zijlema [90]

Sunspot Index Data Center

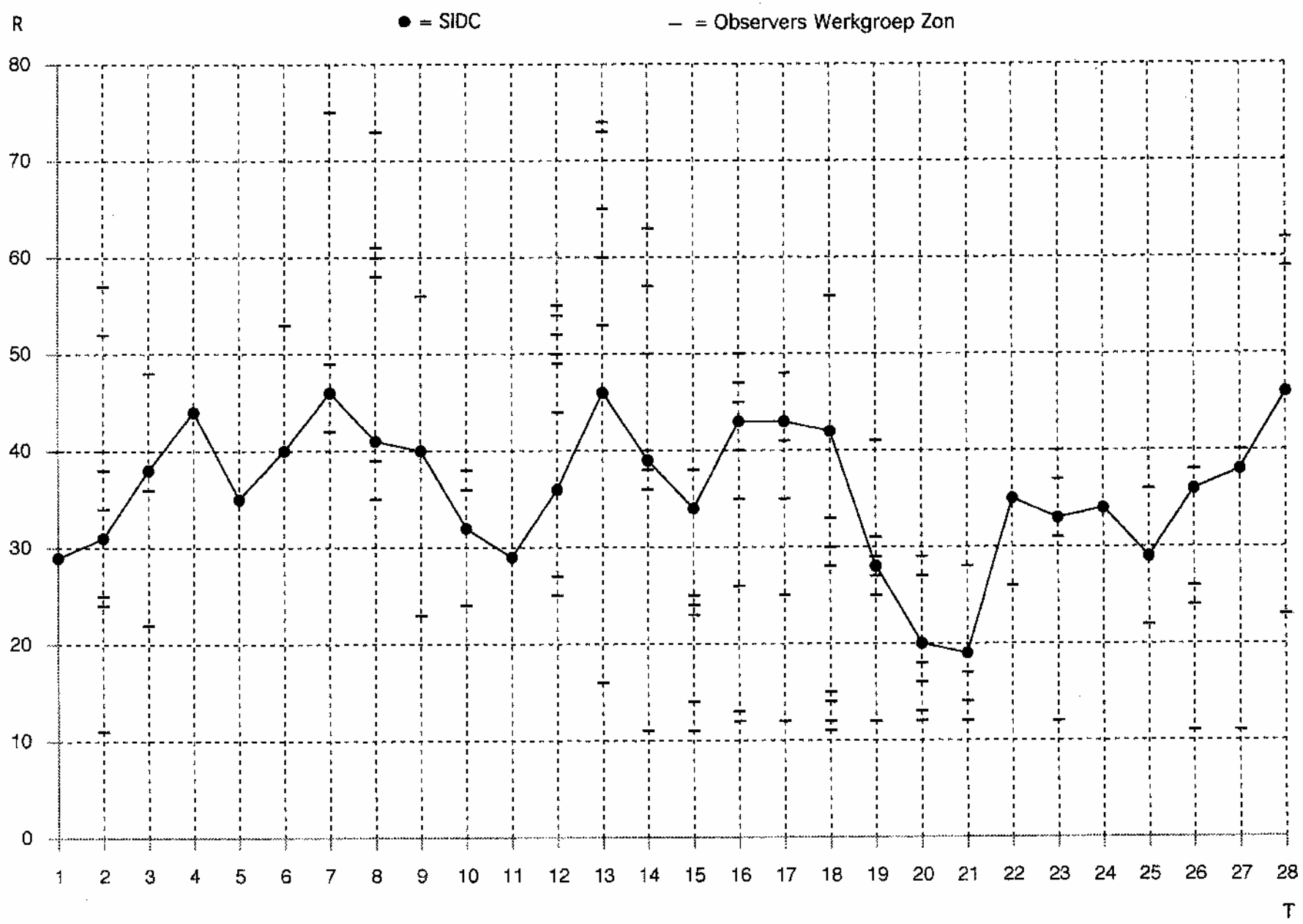
SUNSPOT BULLETIN

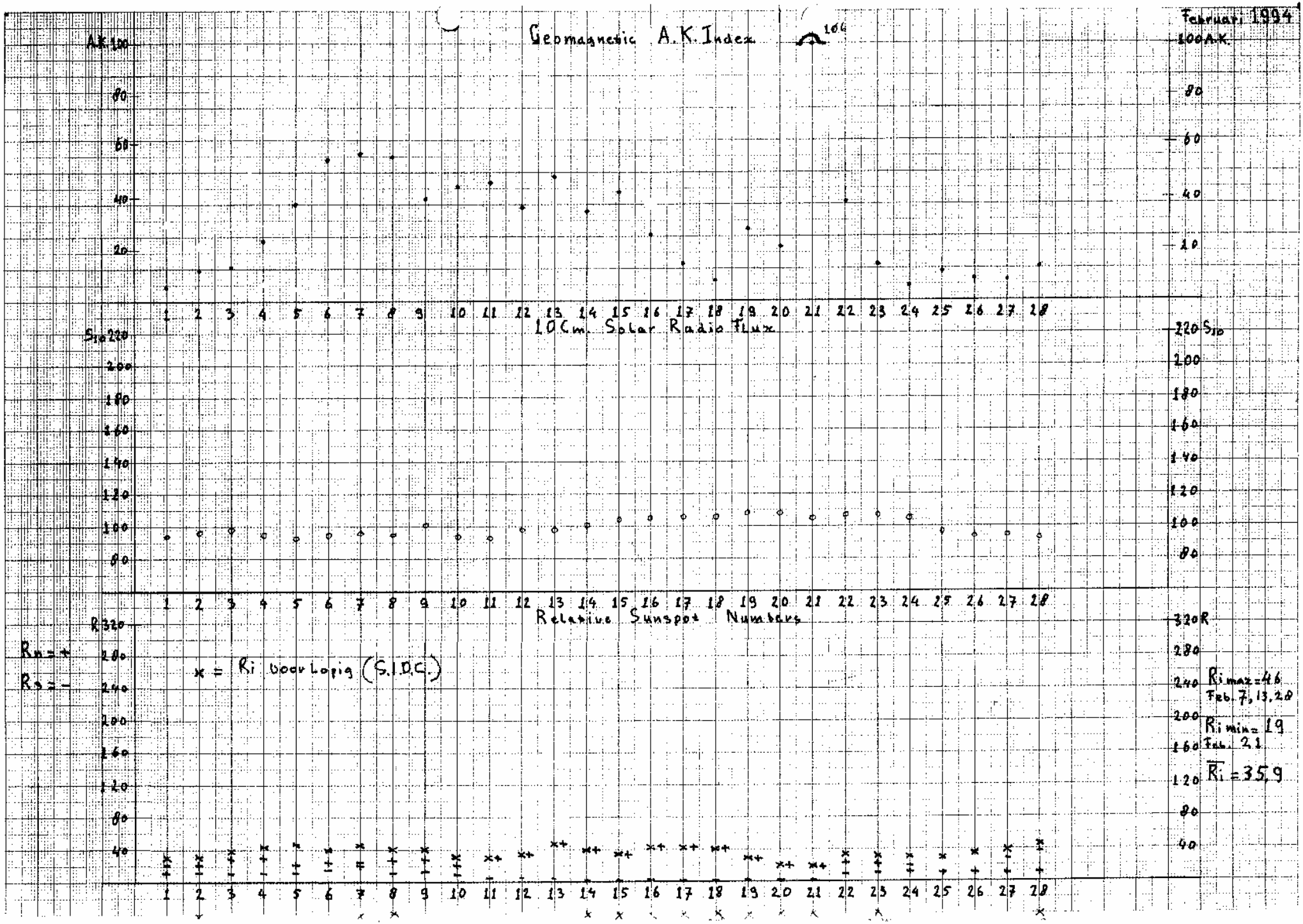
S.I.D.C. SUMMARY OF THE URSIGRAMS

1994 FEBRUARY R_{IM} = 35.9

Date	R_I	PPSI	600	2800	COS	SFI	XI	Ak	SEA	MAG
31	26	19	29	098	973	0	0/0	12		
1	29	15	30	094	971	0	0/0	6		
2	31	18	28	096	975	0	0/0	12		
3	38	21	28	098	974	5	0/0	-		
4	44	32	26	095	978	1	0/0	23		
5	35	29	26	093	-	0	0/0	34		
6	40	34	26	095	945	3	0/0	55		0954 mgst
7	46	35	26	096	944	2	0/0	58		
8	41	35	26	095	949	15	0/0	57		
9	40	50	26	101	947	5	0/0	40		
10	32	55	26	094	954	0	0/0	44		
11	29	53	26	093	962	1	0/0	47		
12	36	40	26	098	967	1	0/0	36		
13	46	23	27	098	971	0	0/0	48		
14	39	24	26	101	971	0	0/0	37		mag.min.storm
15	34	37	26	104	972	3	0/0	30		
16	43	51	27	105	971	2	0/0	26		
17	43	60	29	106	974	1	0/0	14		
18	42	64	29	106	973	2	0/0	8		
19	28	62	30	108	980	0	0/0	28		
20	20	58	30	108	980	101	1/0	21		P/36(0104);p(0300)
21	19	28	28	-	959	-	-	106		0858 ssc;F;pca
22	35	42	29	107	907	0	0/0	38		
23	33	36	29	107	954	0	0/0	14		
24	34	17	29	105	955	0	0/0	6		
25	29	12	29	097	955	0	0/0	11		
26	36	14	29	094	959	1	0/0	8		
27	38	14	28	095	963	1	1/0	8		X(0825)SEA(0900;1351)
28	46	24	27	093	964	1	0/0	13		

R_I, R_{IM} : provisional international sunspot numbers from the S.I.D.C.
PPSI : prompt photometric sunspot index from the S.I.D.C. in 10-5 w/m² : the quantity to subtract from the mean solar constant.
600 : 600 Mhz solar flux from Humain station (Belgium).
2800 : 2800 Mhz solar flux from Ottawa (origin : Ursigrams - UGEOI group 2)."The 10.7cm Flux data are provided as a service of the National Research Council of Canada."
COS : thousands of the cosmic ray counts (origin : Ursigrams - UCOSE Kerguelen).
SFI : From October 1992, Solar Flare Index from the S.I.D.C. (origin : Ursigrams - UGEOR group 3).
XI : X-flares index from the Ursigrams (M-flares/X-flares) (origin : Ursigrams - UGEOR group 2; UGEOI group 5).
Ak : planetary geomagnetic index from Wingst, Germany (origin : Ursigrams).
SEA : sudden enhancements of atmospherics from Uccle & Humain (Royal Observatory, Belgium).
MAG : magnetic events from Dourbes station (Royal Meteorological Institute, Belgium).
Remarks : sid (sudden ionospheric disturbance); ssc (sudden storm commencement); mgst (magnetic storm); sfe (solar flare effect); s-1-2-3-4 (class of flares); II-IV radio-burst; T (ten cm radio-burst); P (proton flare); p (proton event); gle (ground level event : neutron event); si (sudden impulse); F (Forbush); SFI Evaluation (1 x Sn+10 x "1"+100 x "2").


R
● = SIDC
– = Observers Werkgroep Zon
80
70
60
50
40
30
20
10
0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28
T


Februari 1994
Geomagnetic A.K. Index
A.K.
100
80
60
40
20
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28
10Cm. Solar Radio Flux
S10
220
200
180
160
140
120
100
80
Relative Sunspot Numbers
R
320
280
240
200
160
120
80
40
Rn = +
Rs = −
x = Ri voorlopig (S.I.D.C.)
Ri max = 46
Feb. 7, 13, 20
Ri min = 19
Feb. 21
Ri = 35,9

Zonnevlekkengetallen noordelijk– en zuidelijk halfrond

(Hemispheric sunspot numbers)

Februari 1994

	S.I.D.C.		Balster		Jannink 40		v. Slooten		Spaninks	
Day	Rn	Rs	Rn	Rs	Rn	Rs	Rn	Rs	Rn	Rs
1	8	21								
2	22	9	26	14			39	13	12	13
3	30	8								
4	33	11								
5	23	12								
6	25	15					30	23		
7	22	24	39	36						
8	29	12	41	17			53	20		
9	27	13					34	22		
10	23	9								
11	29	0								
12	36	0			27	0	33	11	55	0
13	46	0			16	0	65	0	0	0
14	39	0	63	0			50	0	50	0
15	34	0	25	0			14	0	23	0
16	43	0	40	0	13	0	35	0	45	0
17	43	0	48	0			41	0	25	0
18	42	0	28	0			30	0	33	0
19	28	0	18	13			17	12	18	13
20	20	0	18	0			11	18	16	11
21	19	0	17	0			28	0		
22	26	9								
23	23	10	27	13						
24	14	20								
25	11	18					13	23		
26	14	22			0	11	15	23		
27	11	27					14	26		
28	9	37	11	51			11	48		

Bulletin Werkgroep Zon — maart 1994

NVWS Werkgroep Zon. Sekretariaat: Veenenburg 36, 2804 WZ Gouda, tel: 01820 -39082

Zonnevlekkengetallen

Day	Bals	Gr 6	Groe	Iden	Jn .9	Jn 4	Scho	vSlo	Sp 7	Sp 8	Vers	Zans	Zijle
1													
2													
3													
4	57		33		13	26		81	48		34	33	84
5	68		47	41	13			55	34		64		
6		76	73		12			76			38		86
7			64		14								
8													
9											26		
10	31		27	48	12		40	29			24	26	
11	41		38		11			30	17		25	15	25
12	49	52	41		0	0		33	44		44	39	49
13								44					
14					12			17					
15					11								
16	29		25	25	22			26			24		
17			25								24		
18	23				0			25				23	
19		12	11		11	11		11				11	11
20	12	12			11			11	11		11	11	11
21	25		24		11			25	25			11	28
22					11			27					
23													
24			46	22	0			23	35		11	22	
25													
26				12	0	0		35		13	11	0	
27		18	14		0			31	17		15		
28													
29	18		14		0			16	19			15	
30	41		32		0			15	18			15	
31	27				0			30	38				
observ	12	5	15	5	21	4	1	20	11	1	13	12	7
k	0,79	0,86	0,99	1,23	2,51	1,77	0,73	0,95	1,05	1,85	1,35	1,34	0,89
st.dev.	0,09	0,23	0,25	0,48	1,27	0,31	—	0,33	0,40	—	0,60	0,44	0,31
st.d./k	0,11	0,27	0,25	0,39	0,51	0,18	—	0,34	0,38	—	0,45	0,33	0,35

Observers	[...] = Refractor, d = ... mm;	[Rf...] = Reflector, d = ... mm
Bals = H.A.M. Balster [70]	Jn .9 = D. Jannink [9]	Sp 7 = T. Spaninks [75]
Gr 6 = Mw G. Gravers [60]	Jn 4 = D. Jannink [40]	Sp 8 = T. Spaninks [80]
Groe = A. Groenewegen [102]	Scho = A. Scholten [60]	Vers = D. Verschuuren [Rf 40]
Iden = J.A. Idenburg [Rf 125]	vSlo = B. van Slooten [90]	Zans = W. Zanstra [Rf 155]
		Zijle = W.A. Zijlema [90]

Sunspot Index Data Center

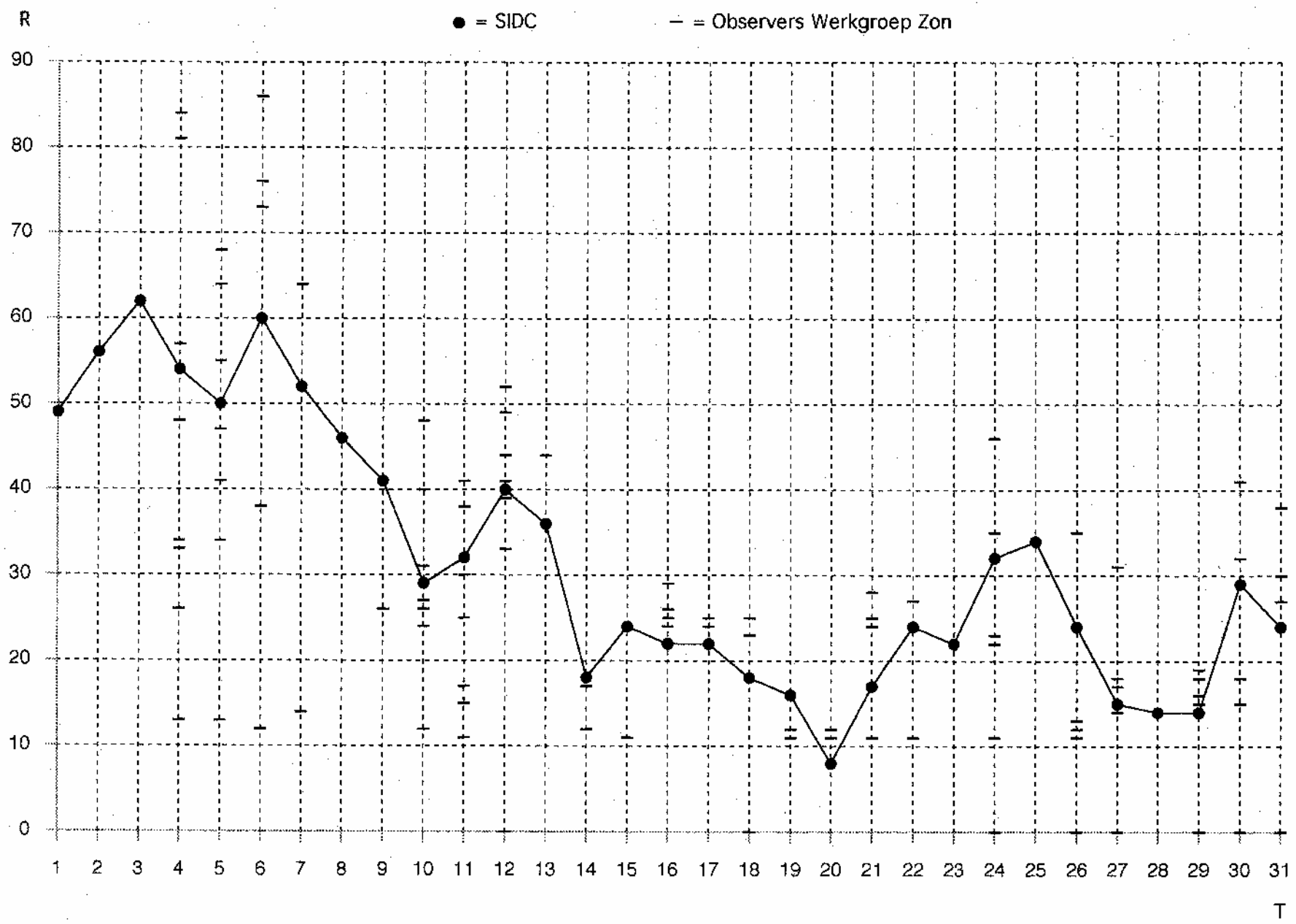
SUNSPOT BULLETIN

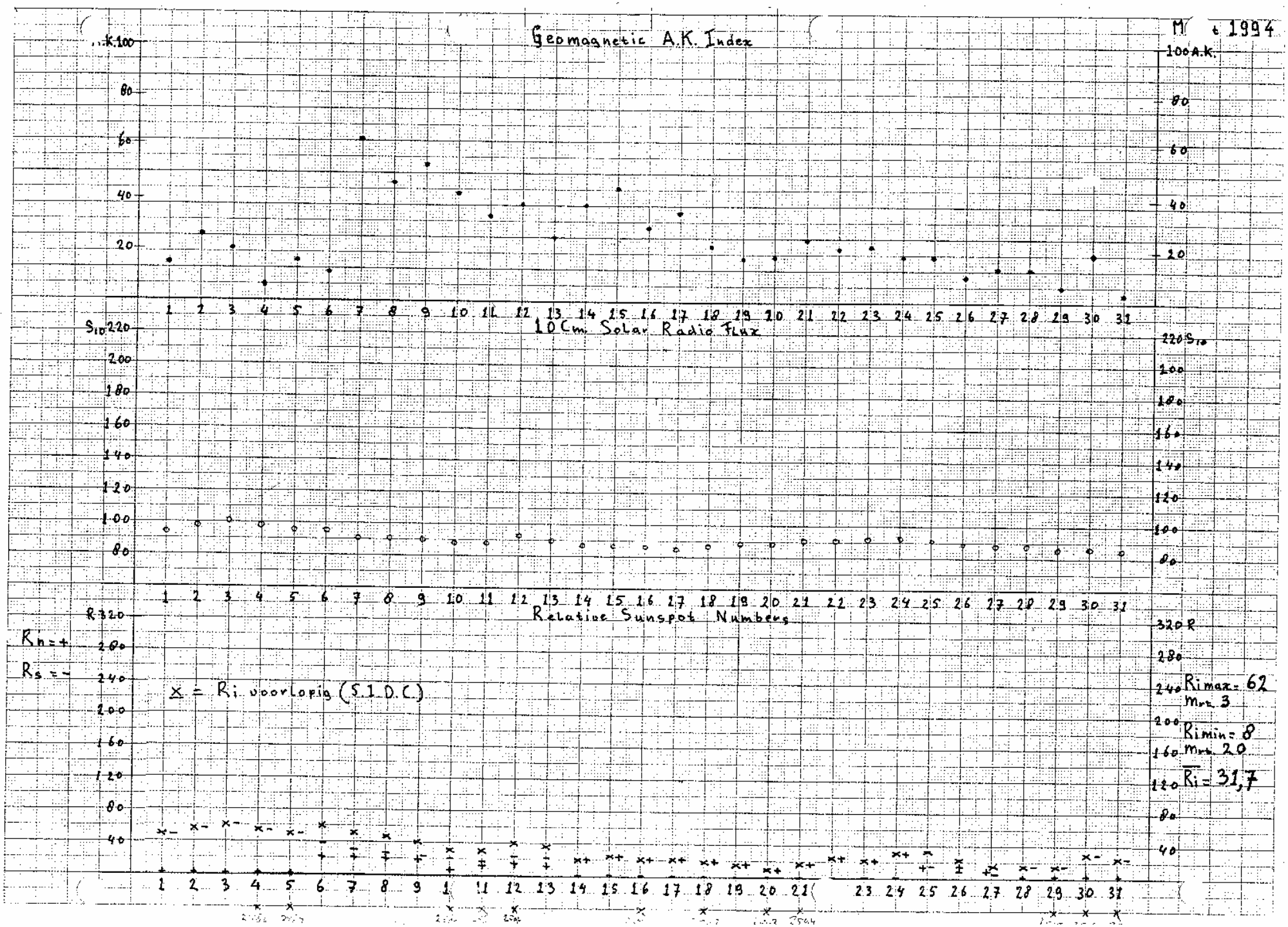
S.I.D.C. SUMMARY OF THE URSIGRAMS

1994 MARCH R_{iM} = 31.7

Date	R_i	PPSI	600	2800	COS	SFI	XI	Ak	SEA	MAG
28	46	27	27	093	964	1	0/0	13		
1	49	28	28	094	963	1	0/0	15	1130	
2	56	38	28	098	959	6	0/0	26		mag. act. moderate
3	62	34	28	101	954	10	0/0	20		
4	54	31	28	098	934	36	0/0	-	1230	
5	50	20	28	096	957	3	0/0	16	1320	
6	60	31	27	096	951	5	0/0	11	1233	
7	52	28	-	091	949	0	0/0	63		magstorm(major)
8	46	20	26	091	952	0	0/0	45		
9	41	23	24	090	953	1	0/0	52		
10	29	13	25	088	958	0	0/0	-		
11	32	9	26	088	957	0	0/0	33		
12	40	12	25	093	964	1	0/0	39		
13	36	15	25	-	965	2	-	25		
14	18	17	25	087	963	0	0/0	38		
15	24	16	25	087	962	1	0/0	44		
16	22	17	25	086	961	1	0/0	29		
17	22	15	26	085	967	1	0/0	35		
18	18	8	26	087	970	0	0/0	22		
19	16	7	26	089	973	0	0/0	17	1526	
20	8	7	26	089	978	0	0/0	19		
21	17	14	26	091	981	4	0/0	26		
22	24	11	26	091	978	0	0/0	21		
23	22	8	26	092	973	4	0/0	22		
24	32	5	27	093	975	0	0/0	18	2006	?
25	34	8	28	091	977	0	0/0	18		
26	24	5	28	089	971	0	0/0	10		
27	15	6	28	088	971	0	0/0	14		
28	14	8	27	088	952	1	0/0	13		
29	14	13	26	086	955	0	0/0	6		
30	29	9	26	086	958	1	0/0	19		
31	24	15	26	085	965	0	0/0	3		

R_i, R_{iM} : provisional international sunspot numbers from the S.I.D.C.
PPSI : prompt photometric sunspot index from the S.I.D.C. in 10-5 w/m² : the quantity to subtract from the mean solar constant.
600 : 600 Mhz solar flux from Humain station (Belgium).
2800 : 2800 Mhz solar flux from Ottawa (origin : Ursigrams - UGEOI group 2)."The 10.7cm Flux data are provided as a service of the National Research Council of Canada."
COS : thousands of the cosmic ray counts (origin : Ursigrams - UCOSE Kerguelen).
SFI : From October 1992, Solar Flare Index from the S.I.D.C. (origin : Ursigrams - UGEOR group 3).
XI : X-flares index from the Ursigrams (M-flares/X-flares) (origin : Ursigrams - UGEOR group 2; UGEOI group 5).
Ak : planetary geomagnetic index from Wingst, Germany (origin : Ursigrams).
SEA : sudden enhancements of atmospherics from Uccle & Humain (Royal Observatory, Belgium).
MAG : magnetic events from Dourbes station (Royal Meteorological Institute, Belgium).
Remarks : sid (sudden ionospheric disturbance); ssc (sudden storm commencement); mgst (magnetic storm); sfe (solar flare effect); s-1-2-3-4 (class of flares); II-IV radio-burst; T (ten cm radio-burst); P (proton flare); p (proton event); gle (ground level event : neutron event); si (sudden impulse); F (Forbush); SFI Evaluation (1 x Sn+10 x "1"+100 x ">1").


R
● = SIDC
– = Observers Werkgroep Zon
90
80
70
60
50
40
30
20
10
0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
T


M t 1994
Geomagnetic A.K. Index
A.K.
100
80
60
40
20
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
10 Cm. Solar Radio Flux
S10
220
200
180
160
140
120
100
80
Relative Sunspot Numbers
R
320
280
240
200
160
120
80
40
Rn = +
Rs = -
x = Ri voorlopig (S.I.D.C.)
Rimax = 62
mrt. 3
Rimin = 8
mrt. 20
Ri = 31,7

Zonnevlekkengetallen noordelijk– en zuidelijk halfrond

(Hemispheric sunspot numbers)

maart 1994

	S.I.D.C.		Balster		Jannink 40		v. Slooten		Spaninks	
Day	Rn	Rs	Rn	Rs	Rn	Rs	Rn	Rs	Rn	Rs
1	0	49								
2	0	56								
3	0	62								
4	0	54	0	57	0	26	0	81	0	48
5	0	50	0	68			0	55	0	34
6	22	38					29	47		
7	22	30								
8	20	26								
9	18	23								
10	7	22	0	31			0	29		
11	14	18	13	28			13	17	0	17
12	16	24	17	32	0	0	18	15	19	25
13	13	23					18	26		
14	18	0					17	0		
15	24	0								
16	22	0	29	0			26	0		
17	22	0								
18	18	0	23	0			25	0		
19	16	0			11	0	11	0		
20	8	0	12	0			11	0	11	0
21	17	0	25	0			25	0		
22	24	0					27	0		
23	22	0								
24	32	0					23	0	35	0
25	17	17								
26	15	9			0	0	23	12	0	13
27	6	9					11	20	0	17
28	0	14								
29	0	14	0	18			0	16	0	19
30	0	29	0	41			0	15	0	18
31	0	24	0	27			0	30		

Bulletin Werkgroep Zon — april 1994

NWWS Werkgroep Zon. Sekretariaat: Veenenburg 36, 2804 WZ Gouda, tel: 01820 -39082

Zonnevlekkengetallen

Day	Bals	Gr 5	Gr 6	Groe	Iden	Jn.9	Jn 4	Scho	vSlo	Sp 7	Sp15	Vers	Zans	Zijle
1						0			11			0		
2			0			0		0	0			0		0
3	0	0	0			0			0	0		0	0	
4	0			0		0			0	0				
5						0			0			0	0	
6	0				0	0			0	0		0		0
7	0				0	0			0	0		0	0	
8						0			0			0		
9			12			0	0		11	0		0		11
10	12	16				11	11	13	16	14		12	13	15
11	12	14				0			13				12	12
12						0			13				12	20
13						0			19				19	
14	13				0	0			15			0		
15									26			11		
16	24		24	12	24	11	11	14	12	12		11		12
17						11		13	14	13		11	12	
18	23			11	22	11		24	23	23		11	11	11
19	24	36			22	11			36			11		
20	37			36	47	11			36				12	
21	40	49		39	49	11			56		43	22		
22	47	57		44	48	11			50	55		42	46	61
23	44			40	41	23	23		48	45		38	39	53
24	65			37		22			39			47	26	46
25		38		23		22			36	37		22		
26		52				11								
27														
28		32		23		0			25	24				
29	13	13		12		0			12	13		12	13	12
30	12	12	12	11		0		11	12	11		0	0	23
observ	17	11	5	12	10	28	4	6	28	15	1	22	15	13
k	0,81	0,70	0,86	1,04	0,76	1,97	1,29	1,04	0,85	0,90	0,72	1,27	1,13	0,84
st.dev.	0,15	0,21	0,27	0,29	0,13	0,72	0,34	0,29	0,26	0,29	—	0,38	0,50	0,31
st.d./k	0,19	0,29	0,32	0,28	0,17	0,37	0,26	0,28	0,31	0,32	—	0,30	0,44	0,37

Observers	[...] = Refractor, d = ... mm;	[Rf...] = Reflector, d = ... mm
Bals = H.A.M. Balster [70]	Jn.9 = D. Janninк [9]	Sp 7 = T. Spaninks [75]
Gr 5 = Mw G. Gravers [50]	Jn 4 = D. Janninк [40]	Sp15 = T. Spaninks [Rf 150]
Gr 6 = Mw G. Gravers [60]	Scho = A. Scholten [60]	Vers = D. Verschuuren [Rf 40]
Groe = A. Groenewegen [102]	vSlo = B. van Slooten [90]	Zans = W. Zanstra [Rf 155]
Iden = J.A. Idenburg [Rf 125]		Zijle = W.A. Zijlema [90]

Sunspot Index — Data Center

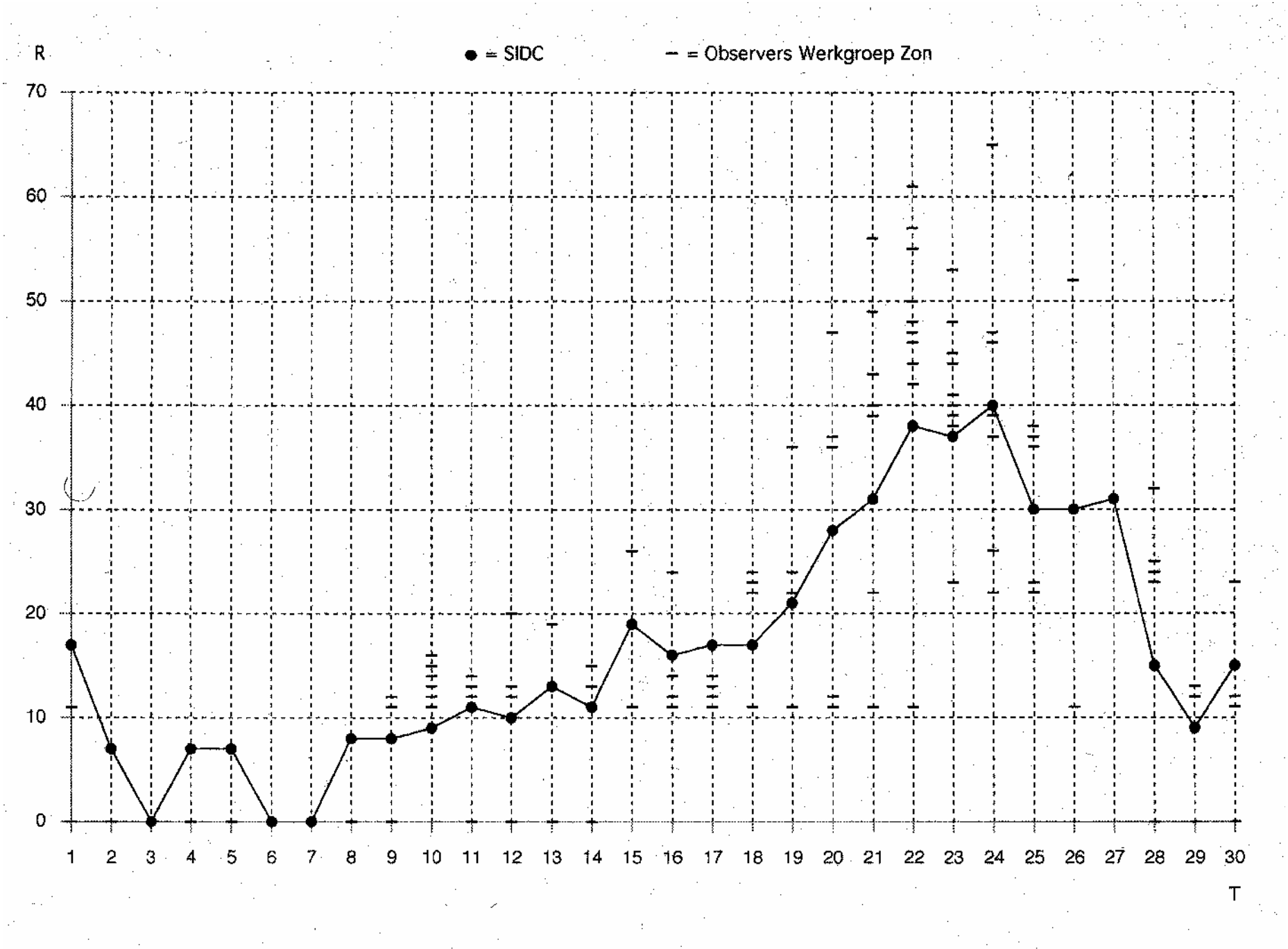
SUNSPOT BULLETIN

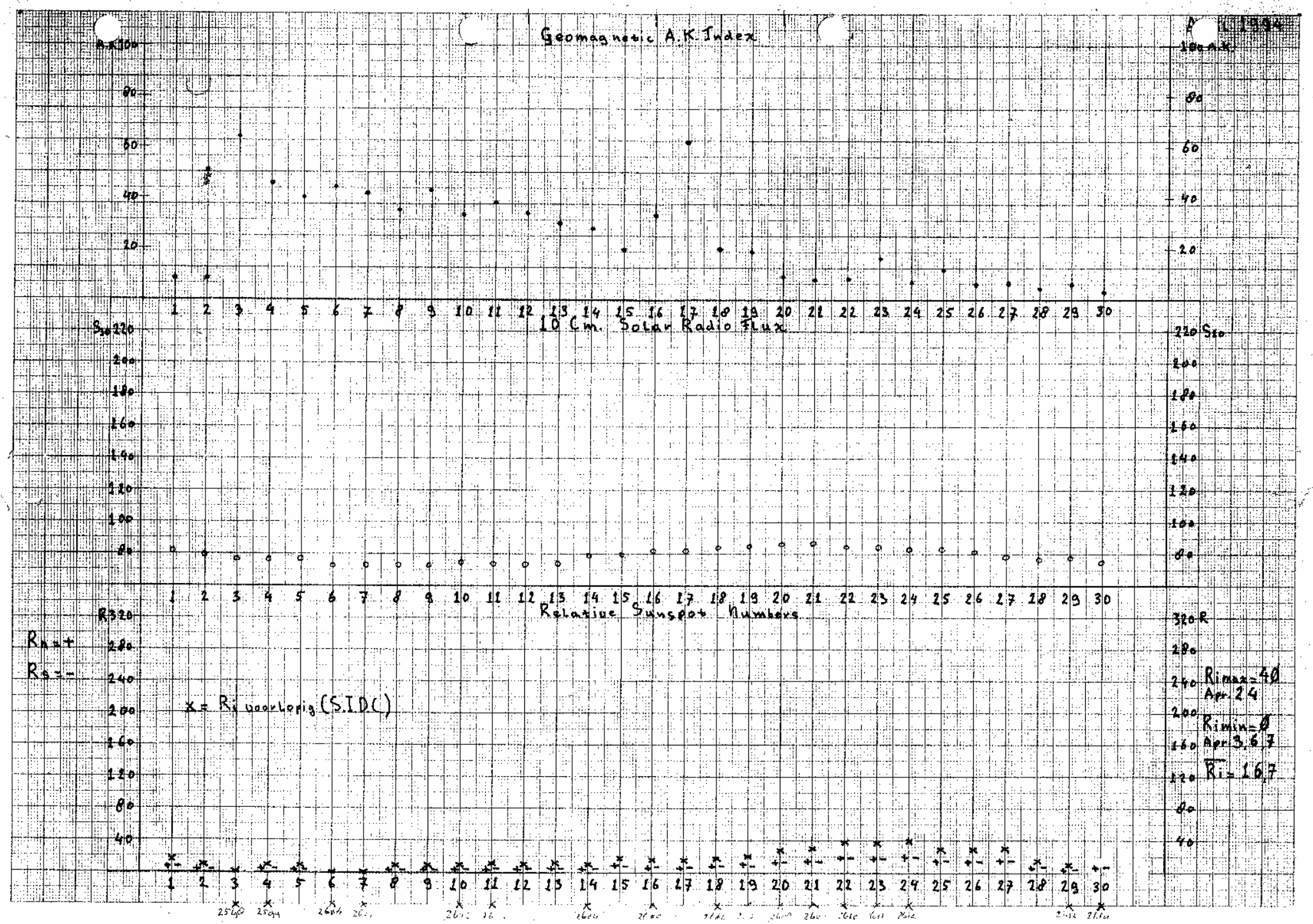
S.I.D.C. SUMMARY OF THE URSIGRAMS

1994 APRIL R_{IM} = 16.7

Date	Rf	PPSI	600	2800	COS	SFI	XI	Ak	SEA	MAG
31	24	15	26	085	965	0	0/0	8		
1	17	3	25	082	968	0	0/0	8		
2	7	1	23	079	963	0	0/0	51		
3	0	0	23	077	954	0	0/0	64		
4	7	-	21	077	953	0	0/0	47		
5	7	0	23	077	955	0	0/0	40		
6	0	-	22	073	956	0	0/0	44		
7	0	-	22	073	963	0	0/0	42		
8	8	0	21	073	962	0	0/0	35		
9	8	0	21	073	966	0	0/0	43		
10	9	2	22	075	971	5	0/0	33		
11	11	3	22	074	968	0	0/0	38		
12	10	5	21	074	967	1	0/0	34		
13	13	6	22	074	966	1	0/0	30		
14	11	4	23	079	969	1	0/0	28		
15	19	6	23	080	960	1	0/0	19		
16	16	9	25	082	962	1	0/0	33		
17	17	13	25	082	946	1	0/0	62		
18	17	17	26	084	953	0	0/0	20		
19	21	21	28	085	955	4	0/0	19		
20	28	29	28	086	962	2	0/0	9		
21	31	28	28	087	965	8	0/0	8		
22	38	33	28	085	-	3	0/0	8		
23	37	40	28	085	-	1	0/0	16		
24	40	42	26	083	-	2	0/0	7		
25	30	16	25	083	965	1	0/0	12		
26	30	12	25	081	966	0	0/0	(4)		
27	31	8	23	078	963	1	0/0	7		
28	15	2	23	077	965	2	0/0	4		
29	9	2	23	078	964	1	0/0	6		
30	15	4	22	075	964	0	0/0	3		

Rf, R_{IM} : provisional international sunspot numbers from the S.I.D.C.
PPSI : prompt photometric sunspot index from the S.I.D.C. in 10-5 w/m² : the quantity to subtract from the mean solar constant.
600 : 600 Mhz solar flux from Humain station (Belgium).
2800 : 2800 Mhz solar flux from Ottawa (origin : Ursigrams - UGEOI group 2)."The 10.7cm Flux data are provided as a service of the National Research Council of Canada."
COS : thousands of the cosmic ray counts (origin : Ursigrams - UCOSE Kerguelen).
SFI : From October 1992, Solar Flare Index from the S.I.D.C. (origin : Ursigrams - UGEOR group 3).
XI : X-flares index from the Ursigrams (N-flares/X-flares) (origin : Ursigrams - UGEOR group 2; UGEOI group 5).
Ak : planetary geomagnetic index from Wingst, Germany (origin : Ursigrams).
SEA : sudden enhancements of atmospherics from Uccle & Humain (Royal Observatory, Belgium).
MAG : magnetic events from Dourbes station (Royal Meteorological Institute, Belgium).
Remarks : sid (sudden ionospheric disturbance); ssc (sudden storm commencement); mgst (magnetic storm); sfe (solar flare effect); s-1-2-3-4 (class of flares); II-IV radio-burst; T (ten cm radio-burst); P (proton flare); p (proton event); gle (ground level event : neutron event); si (sudden impulse); F (Forbush); SFI Evaluation (1 x Sn*10 x "1"+100 x ">1").


R
● = SIDC
– = Observers Werkgroep Zon
70
60
50
40
30
20
10
0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
T


Geomagnetic A.K Index
A.K.
10 Cm. Solar Radio Flux
Relative Sunspot Numbers
R
Rn = +
Rs = -
x = Ri voorlopig (S.I.D.C)
Rimax = 40
Apr. 24
Rimin = 0
Apr. 3, 6, 7
Ri = 16,7

Zonnevlekkengetallen noordelijk– en zuidelijk halfrond

(Hemispheric sunspot numbers)

April 1993

	S.I.D.C.		Balster		Jannink 40		v. Slooten		Spaninks	
Day	Rn	Rs	Rn	Rs	Rn	Rs	Rn	Rs	Rn	Rs
1	9	8					0	11		
2	4	3					0	0		
3	0	0	0	0			0	0	0	0
4	4	3	0	0			0	0	0	0
5	4	3					0	0		
6	0	0	0	0			0	0	0	0
7	0	0	0	0			0	0	0	0
8	4	4					0	0		
9	4	4			0	0	11	0	0	0
10	5	4	12	0	11	0	16	0	14	0
11	6	5	12	0			13	0		
12	5	5					13	0		
13	7	6					19	0		
14	6	5	13	0			15	0		
15	10	9					26	0		
16	8	8	24	0	11	0	12	0	12	0
17	9	8					14	0	13	0
18	9	8	12	11			12	11	12	11
19	11	10	12	12			23	13		
20	14	14	25	12			24	12		
21	16	15	40	0			41	15	43*	0*
22	19	19	47	0			50	0	55	0
23	19	18	44	0	23	0	48	0	45	0
24	20	20	52	13			39	0		
25	15	15					36	0	37	0
26	15	15								
27	16	15								
28	8	7					11	14	24	0
29	5	4	0	13			12	0	13	0
30	8	7	0	12			0	12	0	11

* = Rf 150 mm

Bulletin Werkgroep Zon — mei 1994

NVWS Werkgroep Zon. Sekretariaat: Veenenburg 36, 2804 WZ Gouda. tel: 01820 -39082

Zonnevlekkengetallen

Day	Bals	Gr 5	Groe	Iden	Jn .9	Scho	vSlo	Sp 7	Sp15	Vers	Zans	Zijle
1	25		25		0	40	26	26				
2	43	32	29	32	0	36	34	31		13	16	20
3	27		40	50	0		38	25		13	15	28
4	13				0		12			12	11	12
5		0			0		12		18		0	14
6												
7					0		20	20				
8											15	27
9		16	12		0		12	14				
10	12	26	12		0		13				13	14
11	23		37	23	0		23	36		0	24	24
12	41	46	49	26	12	38	36	39		25	14	36
13	54	42	39	40	25	30	44	49		28	27	41
14	42			61	25	32	34	43		25	40	48
15	39	31	42		13	31	29	30		26		
16	43	45	41		14		33	41		14		
17	55				13		41			14		
18	33			45	23		32			29	33	
19	34		29		24		34			28		
20	34				23		31	35		39	34	
21	31		29		13	35	35	30		39		
22		27			13		30	31			24	
23	25	26	27		13		24	24		12		
24	0				0		0			0	0	
25							0					
26												
27	0				0			0		0	0	0
28	0	0			0		0					0
29	0	0	0		0	0	0	0			0	
30	0	0	0	0	0	0	0	0		0	0	
31	0	0	0	0	0		0	0			0	0
observ	23	14	16	9	27	9	27	19	1	18	18	13
k	0,86	0,81	0,88	0,79	1,76	0,85	0,90	0,81	0,50	1,48	1,29	0,96
st.dev.	0,22	0,14	0,28	0,21	0,58	0,18	0,20	0,16	0,00	0,68	0,46	0,35
st.d./k	0,26	0,18	0,33	0,27	0,33	0,22	0,22	0,20	0,00	0,46	0,36	0,36

Observers	[...] = Refractor, d = ... mm;	[Rf...] = Reflector, d = ... mm
Bals = H.A.M. Balster [70]	Jn .9 = D. Jannink [9]	Sp15 = T. Spaninks [150]
Gr 5 = Mw G. Gravers [50]	Scho = A. Scholten [60]	Vers = D. Verschuuren [Rf 40]
Groe = A. Groenewegen [102]	vSlo = B. van Slooten [90]	Zans = W. Zanstra [Rf 155]
Iden = J.A. Idenburg [Rf 125]	Sp 7 = T. Spaninks [75]	Zijle = W.A. Zijlema [90]

Sunspot Index — Date Center

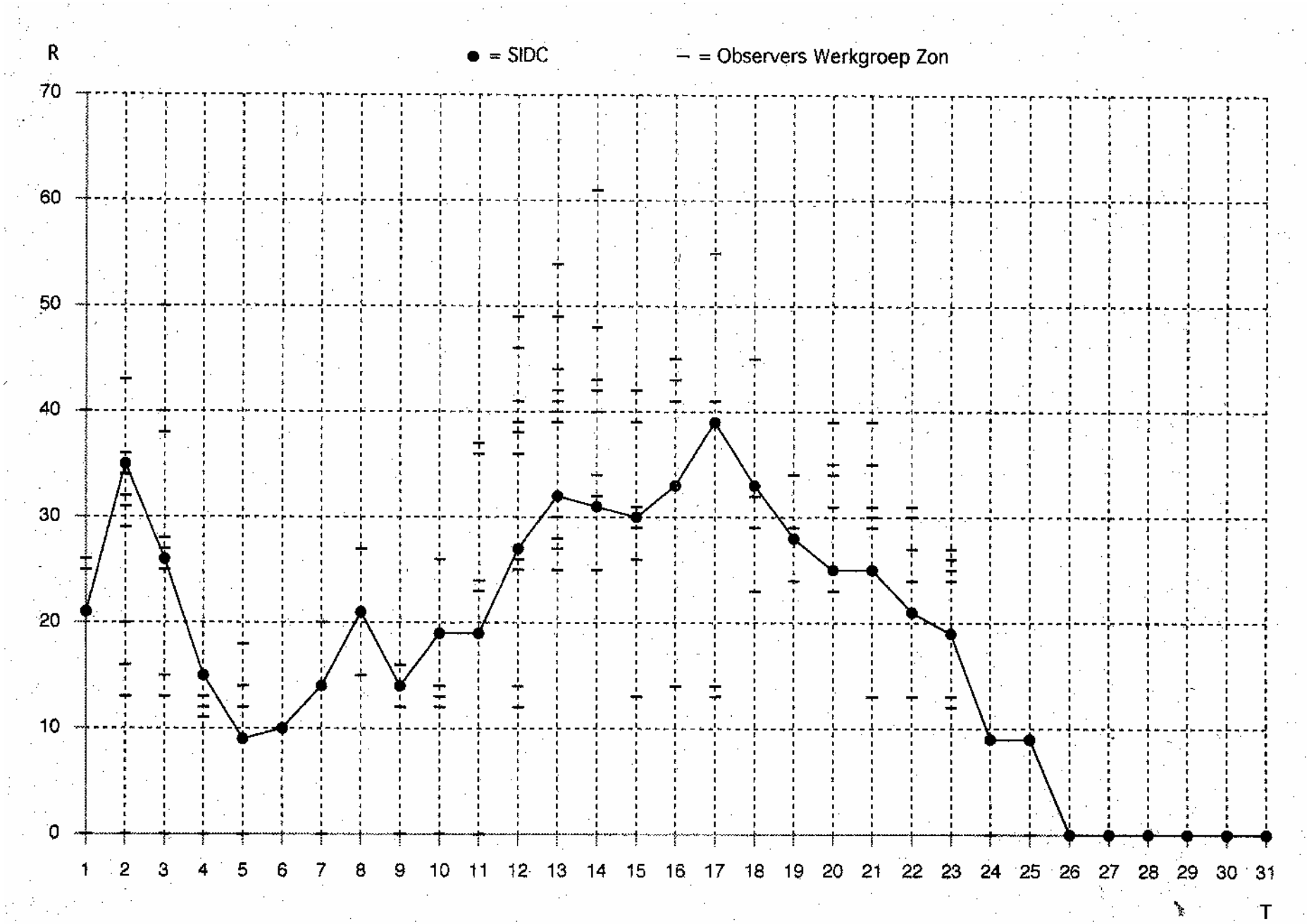
SUNSPOT BULLETIN

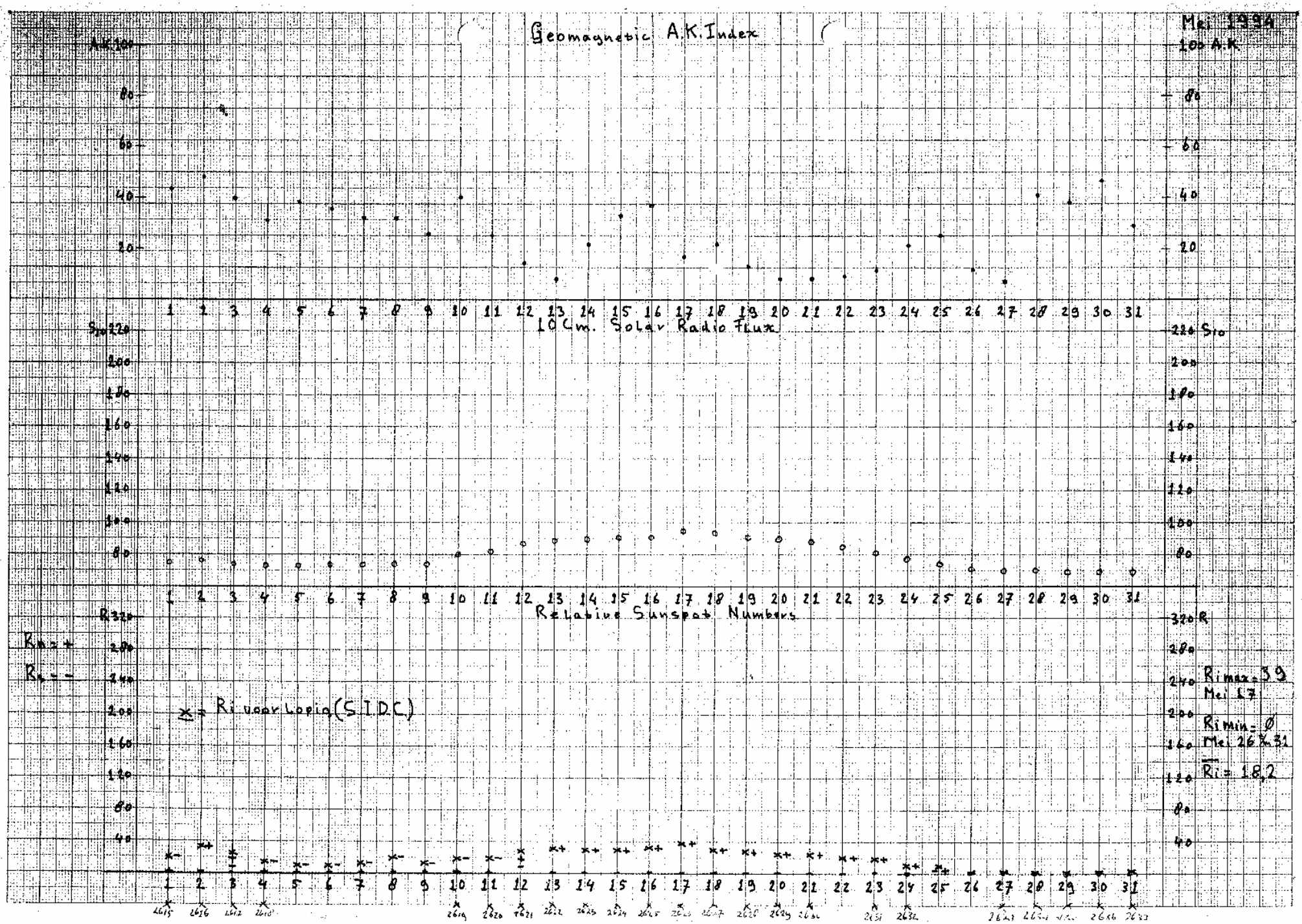
S.I.D.C. SUMMARY OF THE URSIGRAMS

1994 MAY R_{IM} = 16.2

Date	Rf	PPSI	600	2800	COS	SFI	XI	Ak	SEA	MAG
30	15	4	22	075	964	0	0/0	3		
1	21	5	22	075	961	0	0/0	43		
2	35	10	23	076	960	1	0/0	48		
3	26	4	22	074	958	0	0/0	40		
4	15	3	21	073	960	0	0/0	31		
5	9	3	21	073	956	0	0/0	39		
6	10	5	22	074	961	0	0/0	36		
7	14	5	23	074	960	1	0/0	32		
8	21	7	22	075	958	0	0/0	32		
9	14	4	23	077	965	0	0/0	27		
10	19	3	23	080	967	0	0/0	39		
11	19	3	23	082	973	0	0/0	25		
12	27	11	24	087	972	2	0/0	14		
13	32	28	23	089	971	1	0/0	8		
14	31	36	25	090	978	11	0/0	22		
15	30	51	26	091	974	1	0/0	32		
16	33	65	27	091	973	3	0/0	37		
17	39	74	26	095	973	3	0/0	17		
18	33	67	26	094	971	5	0/0	22		
19	28	69	26	091	969	0	0/0	13		
20	25	57	25	090	977	1	0/0	8		
21	25	42	25	088	981	3	0/0	8		
22	21	21	24	085	978	0	0/0	9		
23	19	10	23	081	968	1	0/0	12		
24	9	1	23	078	971	1	0/0	21		
25	9	1	22	074	973	0	0/0	25		
26	0	-	21	071	971	0	0/0	12		
27	0	0	20	070	978	0	0/0	7		
28	0	0	22	070	977	0	0/0	41	SSC	(1357)
29	0	-	21	069	971	0	0/0	39		
30	0	-	21	069	968	0	0/0	53		
31	0	-	22	069	-	0	0/0	29		

Rf, R_{IM} : provisional international sunspot numbers from the S.I.D.C.
PPSI : prompt photometric sunspot index from the S.I.D.C. in 10-5 w/m² : the quantity to subtract from the mean solar constant.
600 : 600 Mhz solar flux from Humain station (Belgium).
2800 : 2800 Mhz solar flux from Ottawa (origin : Ursigrams - UGEOI group 2)."The 10.7cm Flux data are provided as a service of the National Research Council of Canada."
COS : thousands of the cosmic ray counts (origin : Ursigrams - UCOSE Kerguelen).
SFI : From October 1992, Solar Flare Index from the S.I.D.C. (origin : Ursigrams - UGEOR group 3).
XI : X-flares index from the Ursigrams (M-flares/X-flares) (origin : Ursigrams - UGEOR group 2; UGEOI group 5).
Ak : planetary geomagnetic index from Wingst, Germany (origin : Ursigrams).
SEA : sudden enhancements of atmospherics from Uccle & Humain (Royal Observatory of Belgium).
MAG : magnetic events from Dourbes station (Royal Meteorological Institute, Belgium).
Remarks : sid (sudden ionospheric disturbance); ssc (sudden storm commencement); mgat (magnetic storm); sfe (solar flare effect); s-1-2-3-4 (class of flares); II-IV radio-burst; T (ten cm radio-burst); P (proton flare); p (proton event); gle (ground level event : neutron event); sI (sudden impulse); F (forbush); SFI Evaluation (1 x Sn+10 x M1+100 x M>1+).


R
● = SIDC
– = Observers Werkgroep Zon
70
60
50
40
30
20
10
0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
T


Geomagnetic A.K.Index
Mei 1994
A.K.
10 Cm. Solar Radio flux
Relative Sunspot Numbers
Ri waarnemingen (S.I.D.C.)
Rimax = 39
Mei 17
Rimin = 0
Mei 26 & 31
Ri = 18,2

Zonnevlekkengetallen noordelijk– en zuidelijk halfrond

(Hemispheric sunspot numbers)

mei 1994

	S.I.D.C.		Balster		v. Slooten		Spaninks	
Day	Rn	Rs	Rn	Rs	Rn	Rs	Rn	Rs
1	0	21	0	25	14	12	0	26
2	27	8	32	11	34	0	31	0
3	19	7	27	0	27	11	14	11
4	0	15	0	13	0	12		
5	0	9			0	12		
6	0	10						
7	0	14			0	20	0	20
8	0	21						
9	0	14			0	12	0	14
10	0	19	0	12	0	13		
11	0	19	0	23	0	23	13	23
12	19	8	30	11	24	12	27	12
13	32	0	42	12	32	12	38	11
14	31	0	42	0	34	0	43	0
15	30	0	39	0	29	0	30	0
16	33	0	43	0	33	0	41	0
17	39	0	55	0	41	0		
18	33	0	33	0	32	0		
19	28	0	34	0	34	0		
20	25	0	34	0	31	0	35	0
21	25	0	31	0	35	0	30	0
22	21	0			30	0	31	0
23	19	0	25	0	24	0	24	0
24	9	0	0	0	0	0		
25	5	4			0	0		
26	0	0						
27	0	0	0	0			0	0
28	0	0	0	0	0	0		
29	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0

Bulletin Werkgroep Zon — juni 1994

NVWS Werkgroep Zon. Sekretariaat: Veenenburg 36, 2804 WZ Gouda, tel 01820-39082

Zonnevlekkengetallen

Day	Bals	Gr 5	Gr 6	Groe	Iden	Jn.9	Jn 4	Scho	vSlo	Sp 7	Vers	Zans	Zijle
1	0			0	0	0			0	0	0	0	0
2													
3		0		0		0		0	0	0	0	0	
4	0	0				0		0	0		0	0	
5	0	0	0		0	0			0	0	0	0	0
6						0			0			0	0
7						0							
8	52					22			23				
9	55				64	22			56	48	27	37	31
10	65	77		57		22			61	63	43	45	75
11	78	57				24		75	82		40	42	71
12	62					25	25		79	57	39	44	65
13	74	69		55		24			75	78	52	54	
14	73	61		62	54	23			80	73	64	59	66
15	59	58		63	40	22		60	79	71	64	52	68
16												27	
17		48			26	11			50	36		24	41
18				33		0			59				
19			24	11		0		11	36	24	0		
20				37		0			14				
21	0					0	0		0		0		
22	18			21		0			20	20		17	18
23	28	30		29		0	0	30	20	27	0	28	17
24	42	38		45		0		33	50	47	0	17	40
25	36					0		23	24	34	0	13	25
26	0	15				0		0	0	0	0	0	
27	13			12		0		12	13	12	11		11
28	25	19		15		11		15	13	24	12	13	24
29	42			16		12			19	29	14	28	32
30	37	39		22		15	26	25	26	32	28	18	34
observ	21	14	2	16	6	28	4	12	27	20	21	22	18
k	0,79	0,87	1,54	1,11	1,18	2,29	1,58	1,24	0,95	0,86	1,23	1,34	0,92
st.dev.	0,08	0,14	—	0,69	0,40	0,60	0,76	0,81	0,31	0,21	0,33	0,46	0,21
st.d./ k	0,10	0,16	—	0,62	0,34	0,26	0,48	0,66	0,33	0,24	0,27	0,34	0,23

Observers	[...] = Refractor, d = ... mm;	[Rf...] = Reflector, d = ... mm
Bals = H.A.M. Balster [70]	Iden = J.A. Idenburg [Rf 125]	vSlo = B. van Slooten [90]
Gr 5 = Mw G. Gravers [50]	Jn .9 = D. Jannink [9]	Sp 7 = T. Spaninks [75]
Gr 6 = Mw G. Gravers [60]	Jn 4 = D. Jannink [40]	Vers = D. Verschuuren [Rf 40]
Groe = A. Groenewegen [102]	Scho = A. Scholten [60]	Zans = W. Zanstra [Rf 155]
		Zijle = W.A. Zijlema [90]

Sunspot Index Data Center

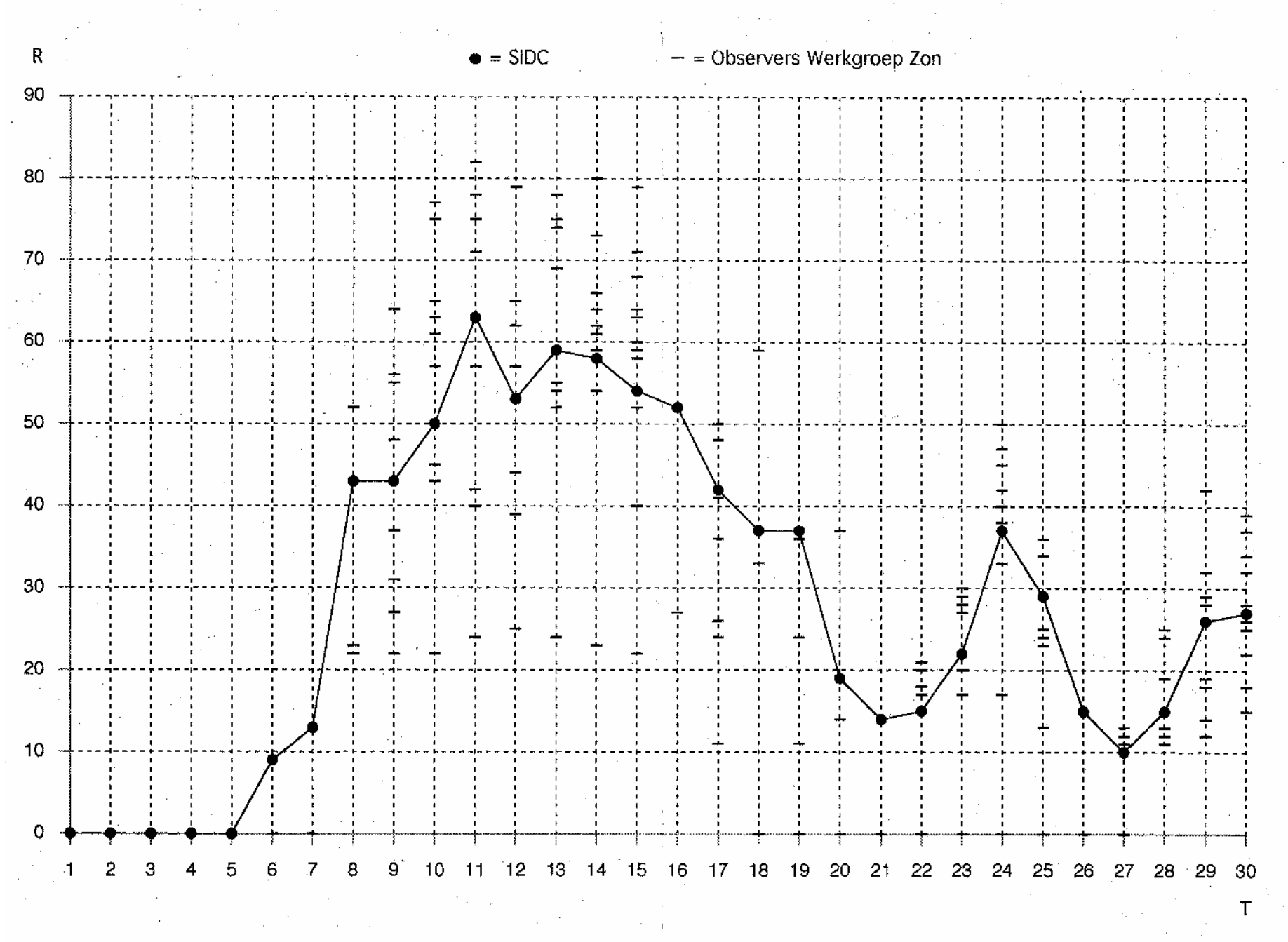
SUNSPOT BULLETIN

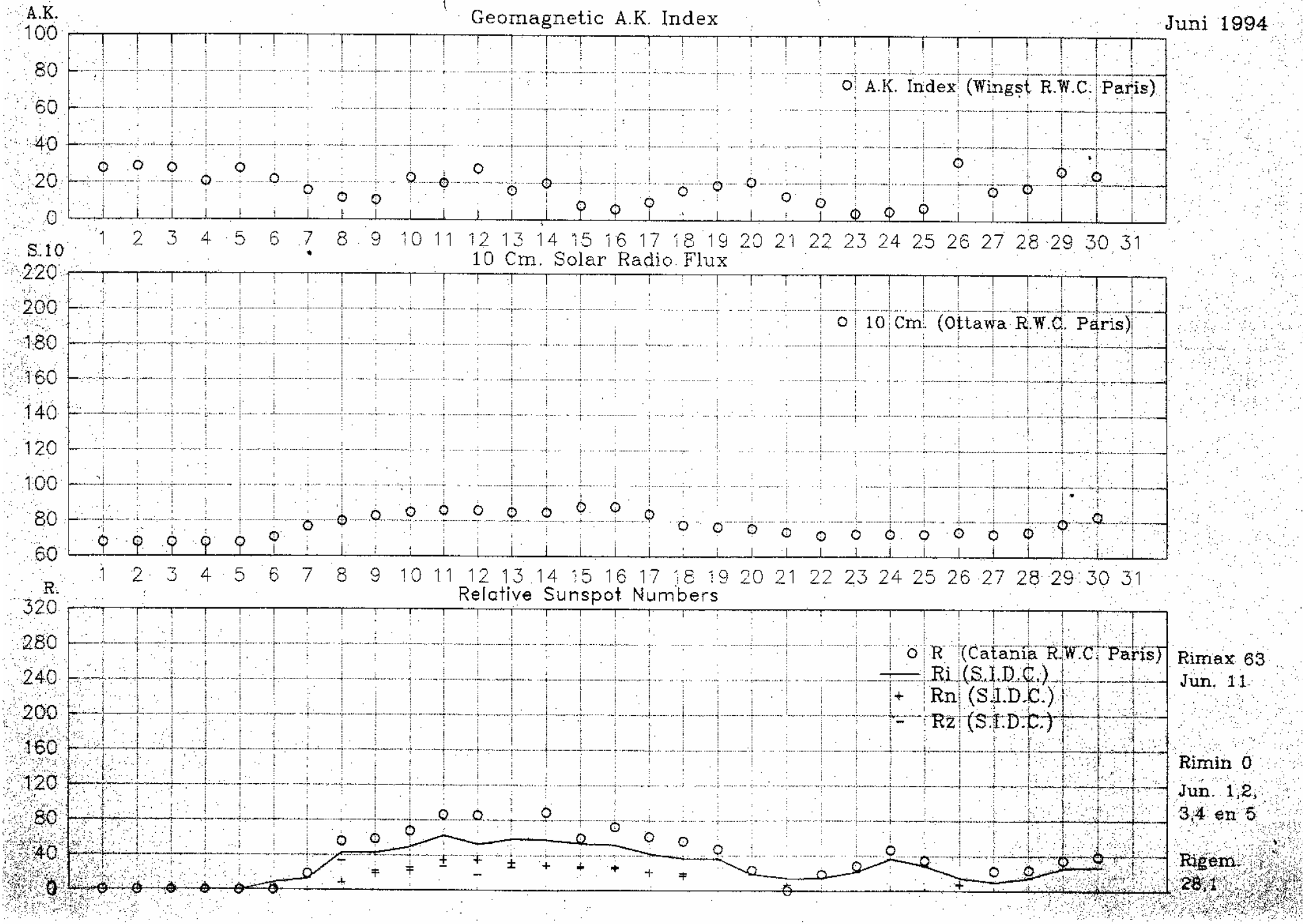
S.I.D.C. SUMMARY OF THE URSIGRAMS

1994 JUNE R_{IM} = 28.1

Date	R_I	PPSI	600	2800	COS	SFI	XI	Ak	SEA	MAG
31	0	-	22	069	-	0	0/0	29		
1	0	0	21	068	960	0	0/0	28		
2	0	0	19	068	-	0	0/0	-		
3	0	0	20	068	958	0	0/0	28		
4	0	0	20	068	959	0	0/0	21		
5	0	-	21	068	964	0	0/0	28		
6	9	6	21	071	965	4	0/0	22		
7	13	6	22	077	963	3	0/0	16		
8	43	14	22	080	965	0	0/0	12		
9	43	24	21	083	971	3	0/0	11		
10	50	35	22	085	973	0	0/0	23		
11	63	48	24	086	971	1	0/0	20		
12	53	45	25	086	974	1	0/0	28		
13	59	33	25	085	980	0	0/0	16		
14	58	33	25	085	980	1	0/0	20		
15	54	30	23	088	979	5	0/0	8		
16	52	29	22	088	980	3	0/0	6		
17	42	15	22	084	976	2	0/0	10		
18	37	7	23	078	973	1	0/0	16		
19	37	3	22	077	959	1	0/0	19		
20	19	2	22	076	957	0	0/0	21		
21	14	1	22	074	965	0	0/0	13		
22	15	5	21	072	972	0	0/0	10		
23	22	6	20	073	-	0	0/0	4		
24	37	8	20	073	983	1	0/0	5		
25	29	6	20	073	986	0	0/0	7	1554	
26	15	2	20	074	983	0	0/0	32		mgst (1000) minor
27	10	2	20	073	976	0	0/0	16		
28	15	4	18	074	977	0	0/0	18	1627	
29	26	17	21	079	968	5	0/0	27	1328	
30	27	29	22	083	968	20	1/0	25		

R_I, R_{IM} : provisional international sunspot numbers from the S.I.D.C.
PPSI : prompt photometric sunspot index from the S.I.D.C. in 10-5 W/m² : the quantity to subtract from the mean solar constant.
600 : 600 Mhz solar flux from Humain station (Belgium).
2800 : 2800 Mhz solar flux from Ottawa (origin : Ursigrams - UGEOI group 2)."The 10.7cm Flux data are provided as a service of the National Research Council of Canada."
COS : thousands of the cosmic ray counts (origin : Ursigrams - UCOSE Kerguelen).
SFI : From October 1992, Solar Flare Index from the S.I.D.C. (origin : Ursigrams - UGEOR group 3).
XI : X-flares index from the Ursigrams (M-flares/X-flares) (origin : Ursigrams - UGEOR group 2; UGEOI group 5).
Ak : planetary geomagnetic index from Wingst, Germany (origin : Ursigrams).
SEA : sudden enhancements of atmospherics from Uccle & Humain (Royal Observatory, Belgium).
MAG : magnetic events from Dourbes station (Royal Meteorological Institute, Belgium).
Remarks : sid (sudden ionospheric disturbance); ssc (sudden storm commencement); mgst (magnetic storm); sfe (solar flare effect); s-1-2-3-4 (class of flares); II-IV radio-burst; T (ten cm radio-burst); P (proton flare); p (proton event); gle (ground level event : neutron event); si (sudden impulse); F (Forbush); SFI Evaluation (1 x Sn+10 x "1"+100 x ">1").


R
● = SIDC
– = Observers Werkgroep Zon
90
80
70
60
50
40
30
20
10
0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
T


A.K.
Geomagnetic A.K. Index
Juni 1994
100
80
60
40
20
0
A.K. Index (Wingst R.W.C. Paris)
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
S.10
10 Cm. Solar Radio Flux
220
200
180
160
140
120
100
80
60
10 Cm. (Ottawa R.W.C. Paris)
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
R.
Relative Sunspot Numbers
320
280
240
200
160
120
80
40
0
R (Catania R.W.C. Paris)
Ri (S.I.D.C.)
Rn (S.I.D.C.)
Rz (S.I.D.C.)
Rimax 63
Jun. 11
Rimin 0
Jun. 1,2,
3,4 en 5
Rigem.
28,1

Zonnevlekkengetallen noordelijk- en zuidelijk halfrond

(Hemispheric sunspot numbers)

Juni 1993

	S.I.D.C.		Balster		Jannink 40		v. Slooten		Spaninks	
Day	Rn	Rs	Rn	Rs	Rn	Rs	Rn	Rs	Rn	Rs
1	0	0	0	0			0	0	0	0
2	0	0								
3	0	0					0	0	0	0
4	0	0	0	0			0	0		
5	0	0	0	0			0	0	0	0
6	5	4					0	0		
7	0	13								
8	9	34	12	40			11	12		
9	20	23	26	29			24	32		
10	23	27	30	35			28	33	28	35
11	35	28	43	35			48	34		
12	35	18	41	21	12	13	45	34	38	19
13	32	27	40	34			41	34	47	31
14	29	29	38	35			39	41	39	34
15	28	26	31	28			44	35		
16	25	27								
17	21	21					25	25	23	13
18	17	20					22	37		
19	0	37					12	24	0	24
20	0	19					0	14		
21	7	7	0	0	0	0	0	0		
22	0	15	0	18			0	20	0	20
23	0	22	0	28	0	0	0	20	0	27
24	0	37	0	42			0	50	0	47
25	0	29	0	36			0	24	11	23
26	8	7	0	0			0	0	0	0
27	0	10	0	13			0	13	0	12
28	0	15	0	25			0	13	0	24
29	0	26	0	42			0	19	0	29
30	0	27	0	37	0	26	0	26	0	32

Bulletin Werkgroep Zon — juli 1994

NVWS Werkgroep Zon. Sekretariaat: Veenenburg 36, 2804 WZ Gouda, tel: 01820 -39082

Zonnevlekkengetallen

Day	Bals	Gr 5	Gr 6	Groe	Iden	Jn.9	Jn 4	Scho	vSlo	Sp 7	Zans	Zijle
1	37	40		38		14	16	38	38	39	28	
2	57	48		48		14		38	57	49	56	44
3	48	41	42			24		41	59	47	38	45
4	50	33				23	24		53	46	44	49
5	35	30		36		23			33			
6	35				32	24			35		32	33
7	79	68		64		12			82	62		
8	76	71			83	22			78	64		
9		66	65	59		36		63	66		65	
10	84	78	69	62		36		45	96		65	72
11		87			114	37		83	98		81	109
12		82		77	94	46		84	100		70	81
13	64				40	11			84		52	65
14						0			51		24	
15	52	54		51	62	0			56		37	
16	72	70		67		0	11		77		35	74
17		59	72	66		11	22	66	85		24	101
18	64	27		38	23	12			53	39	14	56
19	28	27		40	37	12		16	29	28	28	33
20	40					11		26	39	39	26	42
21	39	24		25	26	11	11		38	24	13	45
22		14	17		13	11		13	27	13	11	
23	17			18		11		14	17	17	14	19
24	18					12		19	15	18	13	
25	14			12	11	11			15	14	11	15
26	25			11		11			22	23	11	22
27	24			11		11			12	12	11	12
28				11	12	0		0	11		11	
29				0		0		0	0		0	0
30	14	0		0	15	0	0	0	15	14	0	11
31	13		0	14	15	0		0	15	13	0	17
observ	23	19	6	21	14	31	6	17	31	18	28	21
k	0,78	0,96	0,88	0,96	1,02	2,25	2,70	1,06	0,80	0,93	1,32	0,81
st.dev.	0,10	0,27	0,15	0,25	0,43	1,20	1,27	0,32	0,17	0,20	0,59	0,16
st.d./k	0,13	0,29	0,18	0,26	0,42	0,53	0,47	0,30	0,22	0,21	0,45	0,19

Observers	[...] = Refractor, d = ... mm:	[Rf...] = Reflector, d = ... mm
Bals = H.A.M. Balster [70]	Iden = J.A. Idenburg [Rf 125]	vSlo = B. van Slooten [90]
Gr 5 = Mw G. Gravers [50]	Jn .9 = D. Jannink [9]	Sp 7 = T. Spaninks [75]
Gr 6 = Mw G.-Gravers [60]	Jn 4 = D. Jannink [40]	Zans = W. Zanstra [Rf 155]
Groe = A. Groenewegen [102]	Scho = A. Scholten [60]	Zijle = W.A. Zijlema [90]

Sunspot Index Date Center

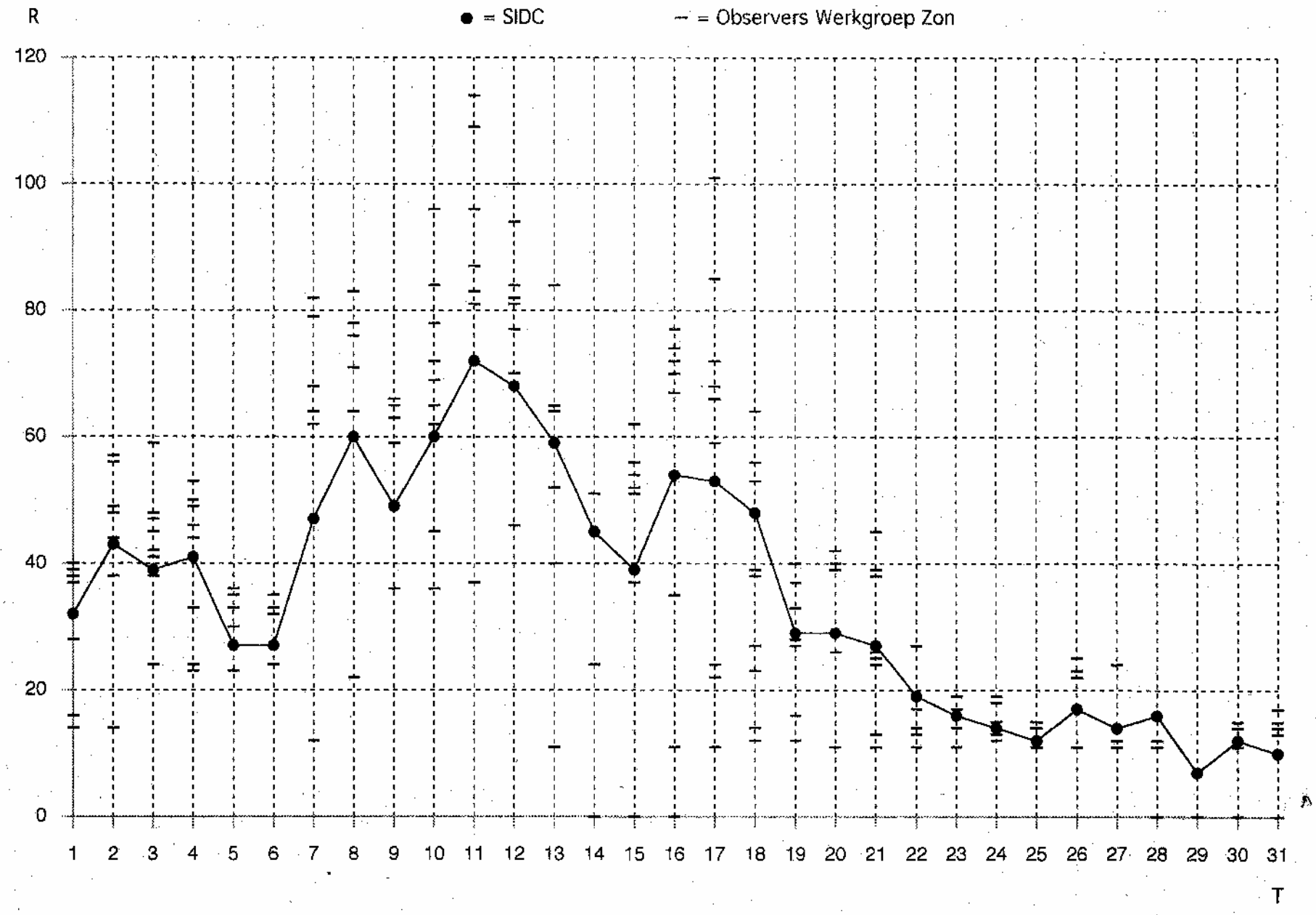
SUNSPOT BULLETIN

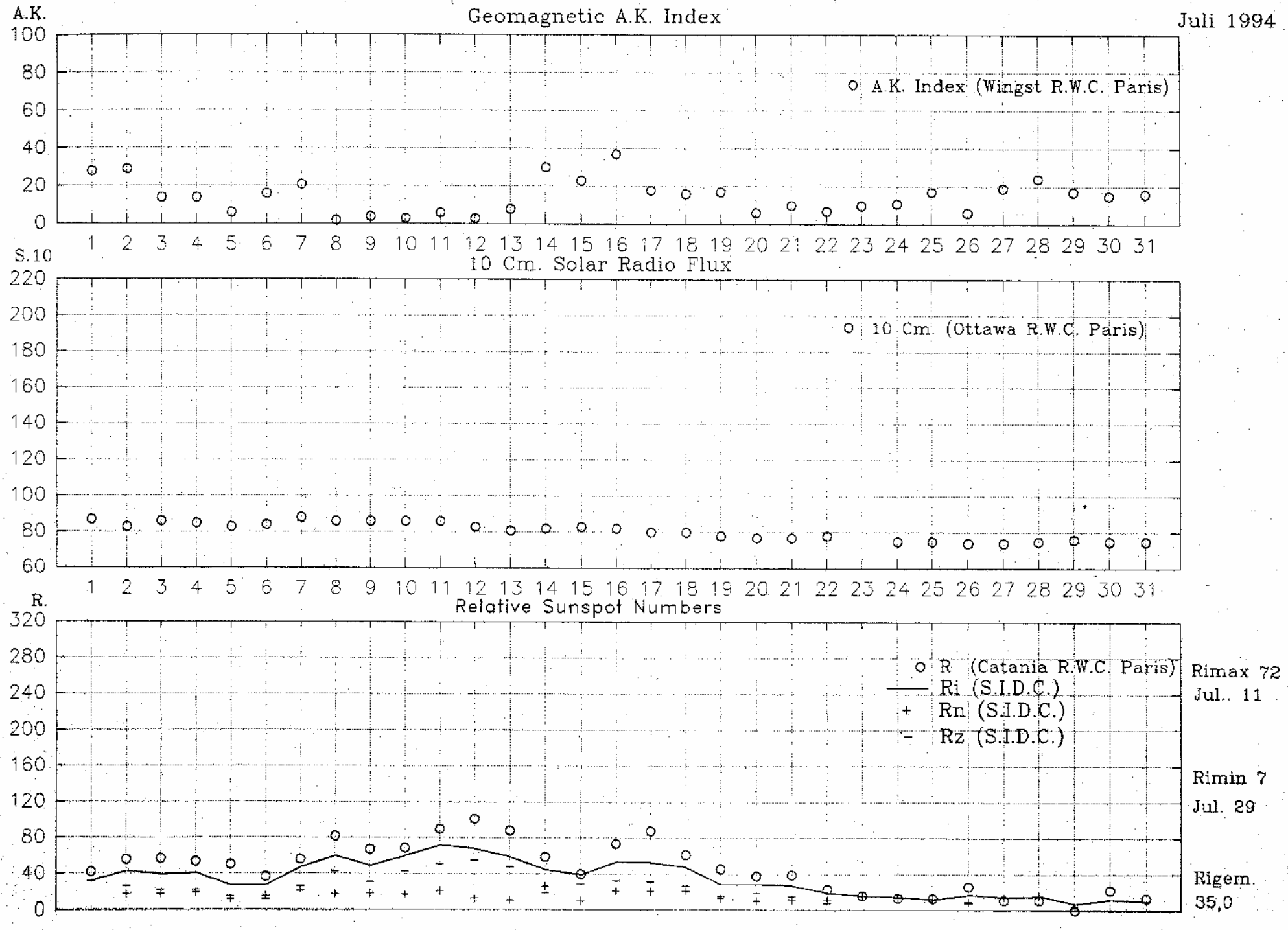
S.I.D.C. SUMMARY OF THE URSIGRAMS

1994 JULY R_{jM} = 35.0

Date	Rj	PPSI	600	2800	COS	SFI	XI	Ak	SEA	MAG
30	27	29	22	083	968	20	1/0	25		-
1	32	37	21	087	964	0	0/0	28	1550	
2	43	37	22	000	960	0	0/0	29		
3	39	40	22	086	962	4	0/0	14	1402	
4	41	35	24	085	962	0	0/0	14		
5	27	34	23	083	973	1	0/0	6		
6	27	48	23	084	974	2	0/0	16		
7	47	28	24	088	-	16	1/0	21	0955	
8	60	46	26	086	985	1	0/0	7		
9	49	46	26	086	983	2	0/0	9		
10	60	44	26	086	989	2	0/0	6		
11	72	42	25	-	990	1	-	6		
12	68	27	25	083	990	2	0/0	3		
13	59	12	25	081	989	6	0/0	8		
14	45	8	25	082	987	2	0/0	30		mgst(0935)
15	39	11	25	083	971	1	0/0	23		
16	54	14	-	082	969	2	0/0	37		
17	53	19	24	080	969	0	0/0	18		
18	48	13	-	080	-	0	0/0	16		
19	29	23	22	078	974	1	0/0	17		
20	29	30	21	077	982	2	0/0	6		
21	27	35	21	077	986	2	0/0	10		
22	19	28	24	078	983	1	0/0	7		
23	16	32	22	-	988	-	-	10		
24	14	26	22	075	982	0	0/0	11		
25	12	22	20	075	985	1	0/0	17		
26	17	14	21	074	982	0	0/0	6		
27	14	8	21	074	978	0	0/0	19	1217	ssc(1758)
28	16	6	22	075	976	0	0/0	24		
29	7	-	23	076	977	1	0/0	-		
30	12	2	23	075	971	0	0/0	-		
31	10	1	24	075	968	0	0/0	-		

Rj, R_{jM} : provisional international sunspot numbers from the S.I.D.C.
PPSI : prompt photometric sunspot index from the S.I.D.C. in 10-5 w/m² : the quantity to subtract from the mean solar constant.
600 : 600 Mhz solar flux from Humain station (Belgium).
2800 : 2800 Mhz solar flux from Ottawa (origin : Ursigrams - UGEOI group 2)."The 10.7cm Flux data are provided as a service of the National Research Council of Canada."
COS : thousands of the cosmic ray counts (origin : Ursigrams - UCOSE Kerguelen).
SFI : From October 1992, Solar Flare Index from the S.I.D.C. (origin : Ursigrams - UGEOR group 3).
XI : X-flares index from the Ursigrams (M-flares/X-flares) (origin : Ursigrams - UGEOR group 2; UGEOI group 5).
Ak : planetary geomagnetic index from Wingst, Germany (origin : Ursigrams).
SEA : sudden enhancements of atmospherics from Uccle & Humain (Royal Observatory, Belgium).
MAG : magnetic events from Dourbes station (Royal Meteorological Institute, Belgium).
Remarks : sid (sudden ionospheric disturbance); ssc (sudden storm commencement); mgst (magnetic storm); sfe (solar flare effect); s-1-2-3-4 (class of flares); II-IV radio-burst; T (ten cm radio-burst); P (proton flare); p (proton event); gle (ground level event : neutron event); si (sudden impulse); F (Forbush); SFI Evaluation (1 x Sn+10 x "1"+100 x ">1").


R
● = SIDC
– = Observers Werkgroep Zon
120
100
80
60
40
20
0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
T


A.K.
Geomagnetic A.K. Index
Juli 1994
A.K. Index (Wingst R.W.C. Paris)
S.10
10 Cm. Solar Radio Flux
10 Cm. (Ottawa R.W.C. Paris)
R.
Relative Sunspot Numbers
R (Catania R.W.C. Paris)
Ri (S.I.D.C.)
Rn (S.I.D.C.)
Rz (S.I.D.C.)
Rimax 72
Jul.. 11
Rimin 7
Jul. 29
Rigem.
35,0

Zonnevlekkengetallen noordelijk– en zuidelijk halfrond

(Hemispheric sunspot numbers)

juli 1994

	S.I.D.C.		Balster		Jannink 40		v. Slooten		Spaninks	
Day	Rn	Rs	Rn	Rs	Rn	Rs	Rn	Rs	Rn	Rs
1	0	32	0	37	0	16	0	38	0	39
2	17	26	26	31			46	11	11	38
3	17	22	24	24			26	33	22	25
4	19	22	25	25	11	13	25	28	25	21
5	12	15	14	21			16	17		
6	15	12	17	18			19	16		
7	21	26	26	53			26	56	23	39
8	17	43	18	58			21	57	16	48
9	18	31					22	44		
10	17	43	25	59			29	67		
11	21	51					30	66		
12	13	55					20	80		
13	11	48	17	47			14	70		
14	26	19					26	25		
15	10	29	12	40			0	56		
16	21	33	26	46	0	11	29	48		
17	21	32			11	11	32	53		
18	21	27	27	37			13	40	12	27
19	13	16	15	13			16	13	15	13
20	10	19	14	26			13	26	12	27
21	12	15	16	23	11	0	16	22	13	11
22	11	8					16	11	13	0
23	16	0	17	0			17	0	17	0
24	14	0	18	0			15	0	18	0
25	12	0	14	0			15	0	14	0
26	9	8	13	12			11	11	12	11
27	14	0	13	11			12	0	12	0
28	16	0					11	0		
29	4	3					0	0		
30	0	12	0	14	0	0	0	15	0	14
31	0	10	0	13			0	15	0	13

Bulletin Werkgroep Zon augustus 1994

NVWS Werkgroep Zon. Sekretariaat. Veenenburg 36, 2804 WZ Gouda, tel. 01820-39082

Zonnevlekkengetallen

Day	Bals	Gr 5	Gr 6	Groe	Iden	Scho	vSlo	Sp 7	Vers	Zan(J)	Zijl 9	Zijl(J)
1	11		13	0	12		13					
2	12			13	0		11	15			0	
3	18			16	17	16	18	18		14	20	
4	21			20	27		16	21		18	20	
5	19			23	27		23	15		23		
6	19	18		20	30		25	20		21	25	
7	17	14	14	11			17	15		15	23	
8	16	15		16	24	15	17	15		15	25	
9	15	18		16	14		16	16		16	21	
10	16					17	22	19		19		
11	26			22	11		26	27		27		27
12										51		51
13	54			47	48		62	52	45	61		
14	51	54				52	56	50	44	75		50
15	55	49		52	59		61	53	53	54		46
16	63	43		58	32		59	58	47	56		58
17	59			41					45			
18	58	50		50		58	52	45		54		
19				47			52			47		
20				29	25		44	30		28	43	
21	27						27	13	47	15		
22	13	14					13			12		
23	37	28		28			15			30		
24	15				25		16		23		20	
25	15				25		15		23		17	
26	15				24		15				19	
27							0			0		
28	12	23	11	22		24	22	22	0	0	11	
29	11			24			24	11	11	11	23	
30	35						33		22			
31	49						49		40		52	
observ.	27	11	3	20	16	6	29	19	12	23	14	5
k	0,82	0,81	0,99	0,83	0,81	0,76	0,78	0,87	0,66	0,85	0,69	0,80
st.dev.	0,16	0,13	0,17	0,14	0,38	0,13	0,19	0,24	0,30	0,20	0,17	0,09
st.d./ k	0,20	0,16	0,18	0,17	0,47	0,17	0,24	0,28	0,35	0,24	0,24	0,12

Observers	[...] = Refractor, d = ... mm;	[Rf...] = Reflector, d = ... mm
Bals = H.A.M. Balster [70]	Iden = J.A. Idenburg [Rf 125]	Vers = D. Verschuuren [Rf 40]
Gr 5 = Mw G. Gravers [50]	Scho = A. Scholten [60]	Zan(J) = W. Zanstra [100, Jura]*
Gr 6 = Mw G. Gravers [60]	vSlo = B. van Slooten [90]	Zijl 9 = W.A. Zijlema [90]
Groe = A. Groenewegen [102]	Sp 7 = T. Spaninks [75]	Zijl (J) = W.A. Zijlema [100, Jura]*

*Jura Sternwarte, Switzerland

Correcties en aanvulling Bulletin van juli '94.
Vers 60 mm: 22 juli: no observation; 28 juli: R = 17; observ. = 6; k = 0,85; st.dev. = 0,10; st.dev./ k = 0,11
Zan(J) Jurain: observ. = 27; k = 1.40; st.dev. = 0,65; st.dev./ k = 0,46

Sunspot Index Data Center

SUNSPOT BULLETIN

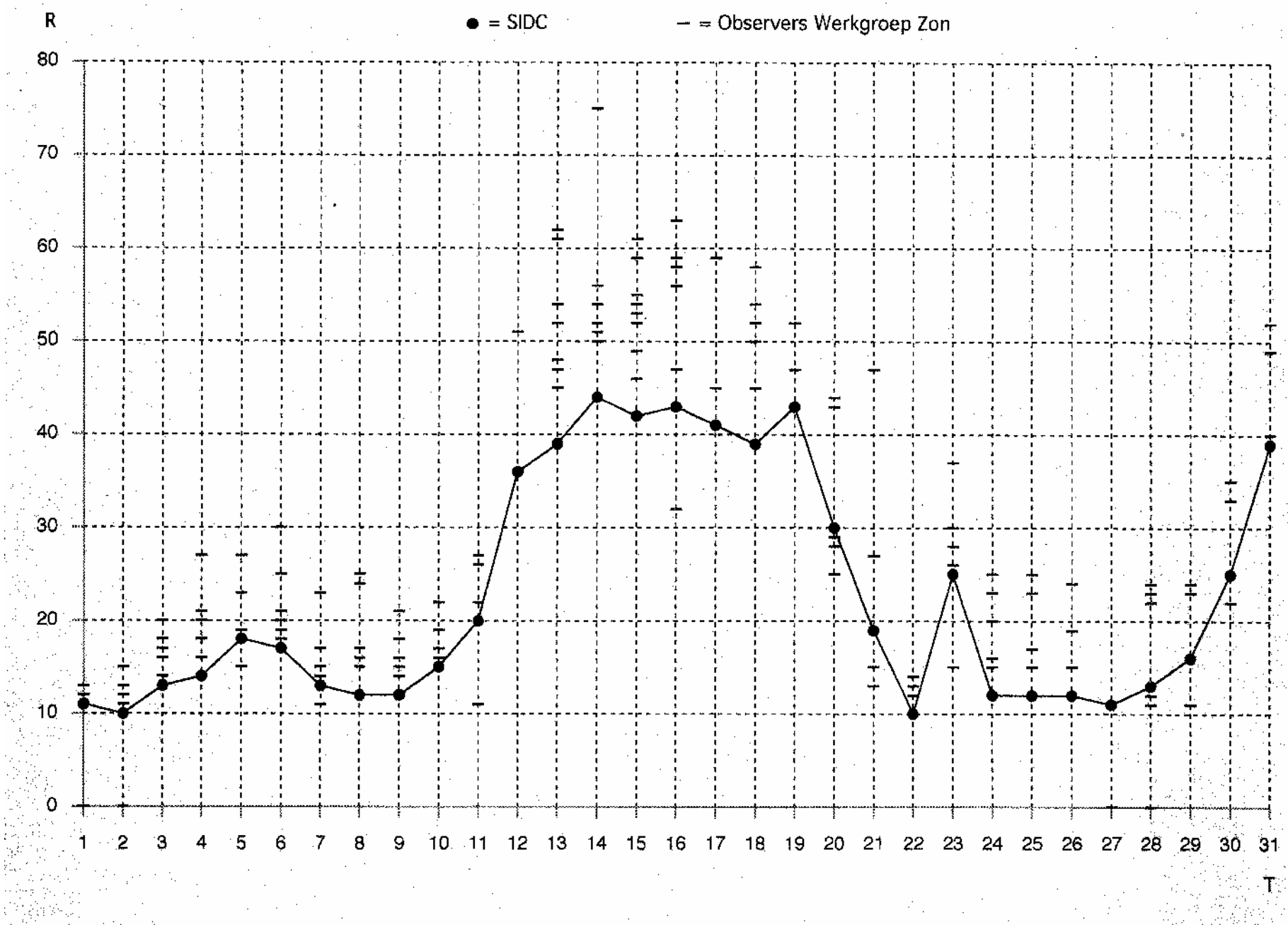
S.I.D.C. SUMMARY OF THE URSIGRAMS

1994 AUGUST R_{IM} = 22.8

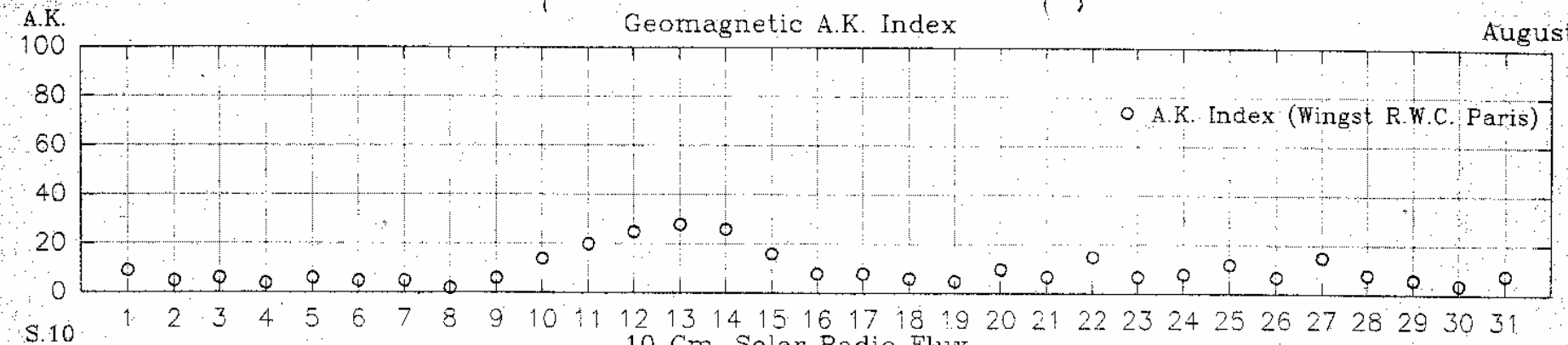
Date	Rf	PPSI	600	2800	COS	SFI	XI	Ak	SEA	MAG
31	10	1	24	075	968	0	0/0	-		
1	11	0	24	074	974	0	0/0	9		
2	10	1	23	075	975	3	0/0	5		
3	13	6	23	076	983	0	0/0	6		
4	14	6	23	075	988	0	0/0	4		
5	18	12	23	076	988	0	0/0	6		
6	17	17	22	075	995	4	0/0	5	1821	
7	13	21	23	076	990	3	0/0	5		
8	12	19	23	074	992	0	0/0	2	1633	
9	12	15	23	075	995	0	0/0	6		
10	15	17	24	078	990	0	0/0	14		
11	20	12	-	077	979	1	0/0	20		
12	36	15	24	081	971	6	0/0	25		
13	39	34	23	084	978	5	0/0	28		
14	44	69	22	089	978	16	1/0	26	1734	1729 s-1n
15	42	70	23	081	979	104	1/0	16	1245	1235 s-2n
16	43	47	22	077	-	4	0/0	8	0719	
17	41	37	23	078	-	12	1/0	8		
18	39	21	22	077	-	13	2/0	-	1509	
19	43	16	23	075	986	2	1/0	-		
20	30	16	22	072	989	2	0/0	-		
21	19	9	22	071	988	0	0/0	-		
22	10	2	20	071	997	0	0/0	15		
23	25	5	22	072	997	0	0/0	7		
24	12	11	22	072	995	0	0/0	8		
25	12	9	23	071	994	0	0/0	12		
26	12	9	23	072	989	1	0/0	7		
27	11	2	23	071	860	0	0/0	15		
28	13	1	23	071	988	0	0/0	8		
29	16	4	23	078	986	0	0/0	6	1238	
30	25	11	23	083	991	9	2/0	4	1035	
31	39	36	24	082	984	9	0/0	8		

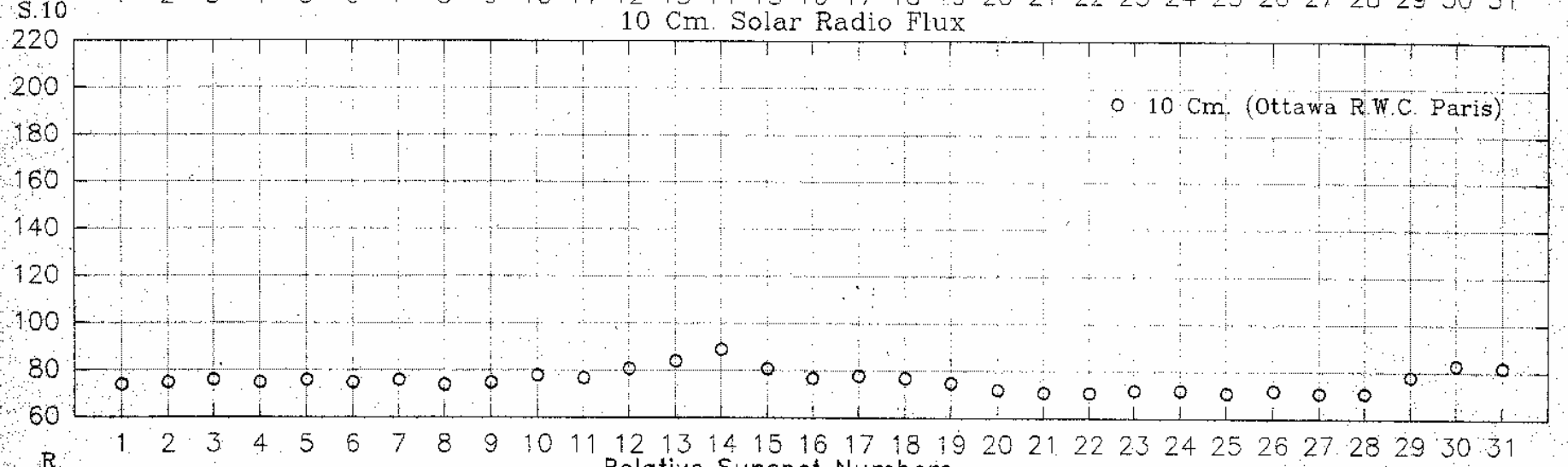
significant increase of activity around the middle of the month.

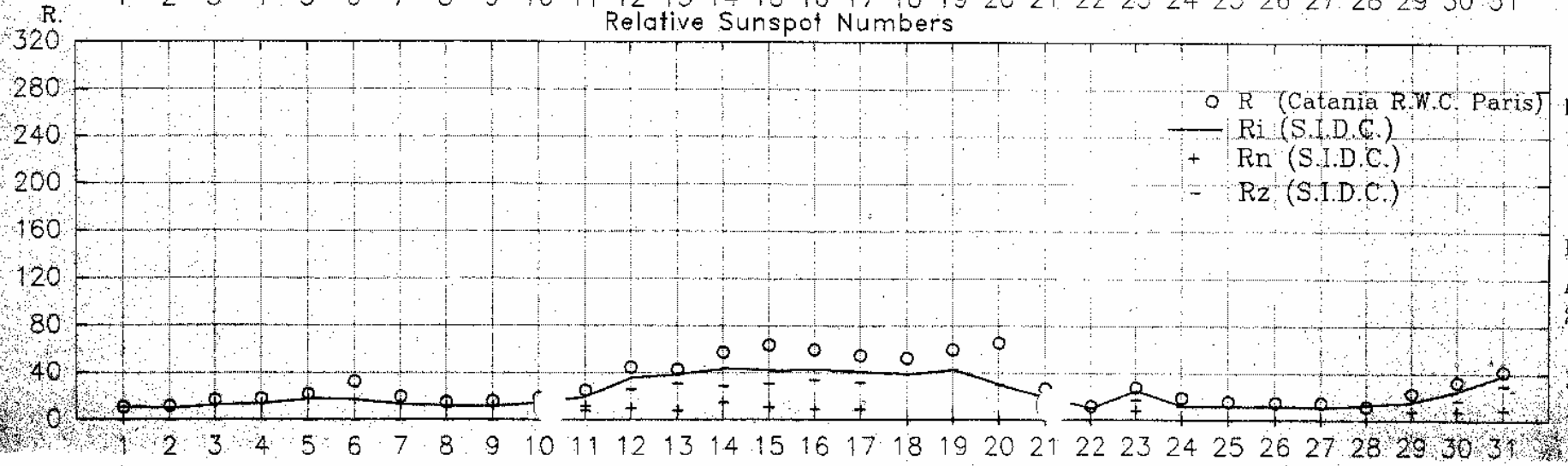
Rf, R_{IM} : provisional international sunspot numbers from the S.I.D.C.
PPSI : prompt photometric sunspot index from the S.I.D.C. in 10^{-5} w/m² : the quantity to subtract from the mean solar constant.
600 : 600 Mhz solar flux from Humain station (Belgium).
2800 : 2800 Mhz solar flux from Ottawa (origin : Ursigrams - UGEOI group 2)."The 10.7cm Flux data are provided as a service of the National Research Council of Canada."
COS : thousands of the cosmic ray counts (origin : Ursigrams - UCOSE Kerguelen).
SFI : From October 1992, Solar Flare Index from the S.I.D.C. (origin : Ursigrams - UGEOR group 3).
XI : X-flares index from the Ursigrams (M-flares/X-flares) (origin : Ursigrams - UGEOR group 2; UGEOI group 5).
Ak : planetary geomagnetic index from Wingst, Germany (origin : Ursigrams).
SEA : sudden enhancements of atmospherics from Uccle & Humain (Royal Observatory, Belgium).
MAG : magnetic events from Dourbes station (Royal Meteorological Institute, Belgium).
Remarks : sid (sudden ionospheric disturbance); ssc (sudden storm commencement); mgst (magnetic storm); sfe (solar flare effect); s-1-2-3-4 (class of flares); II-IV radio-burst; T (ten cm radio-burst); P (proton flare); p (proton event); gle (ground level event : neutron event); si (sudden impulse); F (Forbush); SFI Evaluation (1 = Sn<10 x 10⁻⁶; 2 = 10<Sn<100 x 10⁻⁶; 3 = Sn>100 x 10⁻⁶).


R
● = SIDC
– = Observers Werkgroep Zon
80
70
60
50
40
30
20
10
0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
T

Augustus 1994







Rimax 44
Aug. 14

Rimin 10
Aug. 2 en 22

Rigem. 22,8

Zonnevlekkengetallen noordelijk– en zuidelijk halfrond

(Hemispheric sunspot numbers)

augustus 1994

	S.I.D.C.		Balster		v. Slooten		Spaninks	
Day	Rn	Rs	Rn	Rs	Rn	Rs	Rn	Rs
1	0	11	0	11	0	13		
2	10	0	12	0	11	0	15	0
3	13	0	18	0	18	0	18	0
4	14	0	21	0	16	0	21	0
5	18	0	19	0	23	0	15	0
6	17	0	19	0	25	0	20	0
7	13	0	17	0	17	0	15	0
8	12	0	16	0	17	0	15	0
9	12	0	15	0	16	0	16	0
10	15	0	16	0	22	0	19	0
11	12	8	15	11	15	11	16	11
12	10	26						
13	8	31	12	42	11	51	11	41
14	15	29	12	39	13	43	11	39
15	11	31	13	42	17	44	15	38
16	9	34	11	52	13	46	12	46
17	9	32	12	47				
18	0	39	0	58	0	52	0	45
19	0	43			0	52		
20	0	30			0	44	0	30
21	0	19	0	27	0	27	0	13
22	0	10	0	13	0	13		
23	8	17	11	26	0	15		
24	0	12	0	15	0	16		
25	0	12	0	15	0	15		
26	0	12	0	15	0	15		
27	0	11			0	0		
28	0	13	0	12	11	11	11	11
29	8	8	11	0	11	13	11	0
30	8	17	12	23	11	22		
31	9	30	13	36	11	38		

Bulletin Werkgroep Zon — september 1994

NVWS Werkgroep Zon. Sekretariaat: Veenenburg 36, 2804 WZ Gouda, tel: 01820 -39082

Zonnevlekkengetallen

Day	Bals	Gr 6	Groe	iden	Jn 9	Jn 4	Scho	vSlo	Sp 7	Vers	Zan(J)	Zans	Zijle
1			50		26			49		44	35		
2	80		77		26			89	59	42			
3			75		35			71	59	55	80		96
4					36			65					
5	96		80		35			87				59	
6	87			104	36			72	58				88
7			61		49			71					
8	82				45			57	62	50			
9	63		49		34			51					
10	50	43	39		22	22		50	48	24			40
11		23	24		11		12	34				11	22
12	12		25		11		12	12	12	11			
13	12		11		11			12	12	11		11	11
14												11	11
15													
16					0								
17													
18	28		26		0			31	28			28	28
19					0			0					0
20					0								0
21	0		0		0	0		0		0		0	0
22	14		13		0	0	13	14	14	12		0	14
23	13			34	11	11		15		12		12	14
24	17	17		45	12			18		24		15	21
25	21	21			12	14		23	20	26			18
26					12					25		16	31
27	36			45	23				35	24			
28	24			34	11			24				24	24
29													
30	24												
observ	17	4	13	5	25	5	3	21	11	14	2	11	16
k	0,75	0,78	0,78	0,51	1,46	1,21	1,09	0,77	0,83	0,97	0,91	1,10	0,80
st.dev.	0,10	0,05	0,13	0,17	0,42	0,17	0,43	0,10	0,12	0,22	0,25	0,38	0,10
st.d./ k	0,14	0,07	0,17	0,33	0,29	0,14	0,39	0,13	0,14	0,23	0,27	0,34	0,12

Observers	[...] = Refractor, d = ... mm;	[Rf...] = Reflector, d = ... mm
Bals = H.A.M. Balster [70]	Jn 9 = D. Jannink [9]	Vers = D. Verschuuren [Rf 40]
Gr 6 = Mw G. Gravers [60]	Jn 4 = D. Jannink [40]	Zan(J) = W. Zanstra [100, Jura]*
Groe = A. Groenewegen [102]	Scho = A. Scholten [60]	Zans = W. Zanstra [Rf 155]
Iden = J.A. Idenburg [Rf 125]	vSlo = B. van Slooten [90]	Zijle = W.A. Zijlema [90]
	Sp 7 = T. Spaninks [75]	* Jura Sternwarte, Switzerland

Sunspot Index Data Center

SUNSPOT BULLETIN

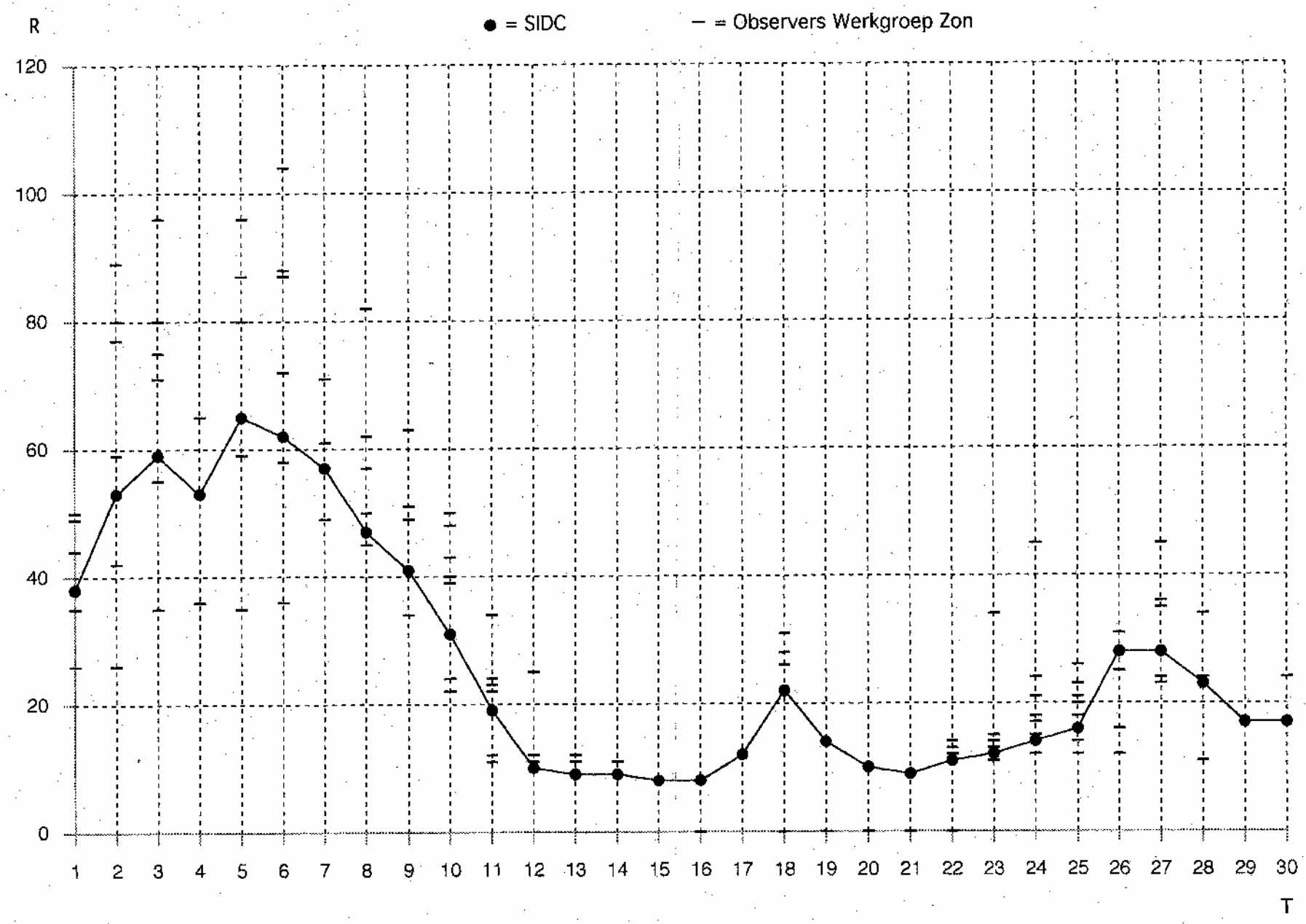
S.I.D.C. SUMMARY OF THE URSIGRAMS

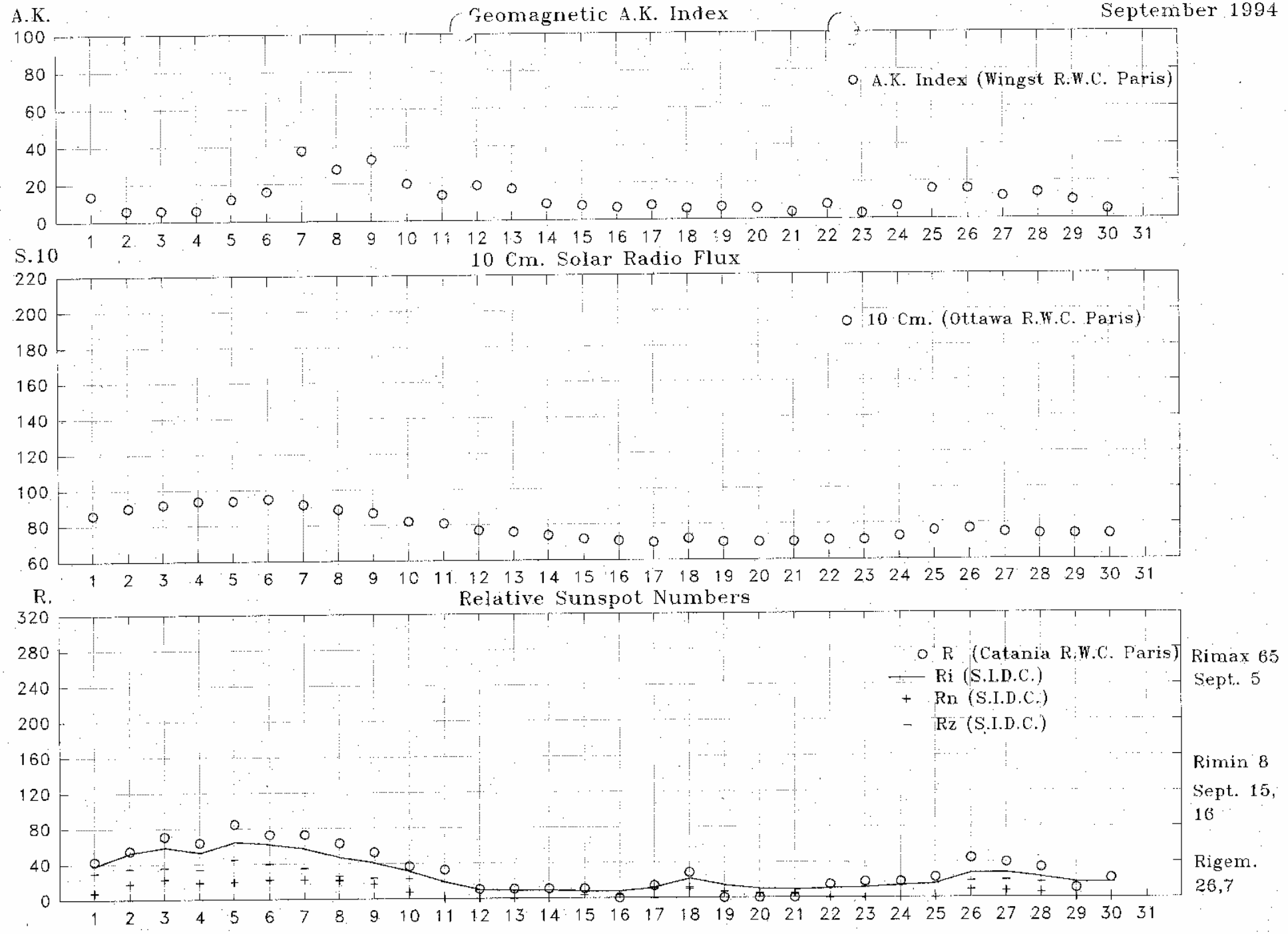
1994 SEPTEMBER R_{I_M} = 26.7

Date	R_I	PPSI	600	2800	COS	SFI	XI	Ak	SEA	MAG
31	39	36	24	082	984	9	0/0	8		
1	38	47	36	086	996	6	0/0	14		
2	53	71	37	090	1096	0	0/0	6	1000	
3	59	94	37	000	1092	4	0/0	6	1554	
4	53	112	38	094	995	3	0/0	6	1405	
5	65	115	39	094	997	15	0/0	12		
6	62	125	40	095	995	16	0/0	16		
7	57	115	39	092	987	4	0/0	38		
8	47	82	39	089	980	2	0/0	28		
9	41	61	38	087	980	0	0/0	33	0944	
10	31	40	38	082	983	2	0/0	20		
11	19	25	38	081	988	2	0/0	14		
12	10	22	37	077	989	0	0/0	19		
13	9	12	35	076	996	0	0/0	17		
14	9	56	34	074	993	0	0/0	9		
15	8	0	34	072	989	0	0/0	8		
16	8	0	34	071	984	0	0/0	10		
17	12	5	34	070	984	2	0/0	8		
18	22	5	34	072	983	1	0/0	6	1710	
19	14	0	32	070	987	0	0/0	7		
20	10	0	33	070	989	0	0/0	6		
21	9	-	33	070	985	0	0/0	4		
22	11	4	33	071	988	0	0/0	8	1727	
23	12	6	34	071	990	0	0/0	3		
24	14	7	34	073	994	0	0/0	7		
25	16	9	32	076	999	1	0/0	16		mgst(1759)
26	28	13	34	077	998	0	0/0	16	0730	
27	28	8	35	075	999	2	0/0	12		
28	23	9	35	074	554	0	0/0	14		
29	17	12	34	074	998	0	0/0	10		
30	17	13	35	074	-	0	0/0	-		

Very low solar activity; low to moderate geomagnetic activity, reaching however storm level on 7-8-9.

R_I, R_{I_M} : provisional international sunspot numbers from the S.I.D.C.
PPSI : prompt photometric sunspot index from the S.I.D.C. in 10^{-5} w/m² : the quantity to subtract from the mean solar constant.
600 : 600 Mhz solar flux from Humain station (Belgium).
2800 : 2800 Mhz solar flux from Ottawa (origin : Ursigrams - UGEOI group 2)."The 10.7cm Flux data are provided as a service of the National Research Council of Canada."
COS : thousands of the cosmic ray counts (origin : Ursigrams - UCOSE Kerguelen).
SFI : From October 1992, Solar Flare Index from the S.I.D.C. (origin : Ursigrams - UGEOR group 3).
XI : X-flares index from the Ursigrams (M-flares/X-flares) (origin : Ursigrams - UGEOR group 2; UGEOI group 5).
Ak : planetary geomagnetic index from Wingst, Germany (origin : Ursigrams).
SEA : sudden enhancements of atmospherics from Uccle & Humain (Royal Observatory, Belgium).
MAG : magnetic events from Dourbes station (Royal Meteorological Institute, Belgium).
Remarks : sid (sudden ionospheric disturbance); ssc (sudden storm commencement); mgst (magnetic storm); sfe (solar flare effect); s-1-2-3-4 (class of flares); II-IV radio-burst; T (ten cm radio-burst); P (proton flare); p (proton event); gle (ground level event : neutron event); si (sudden impulse); F (Forbush); SFI Evaluation (1 x Sn+10 x "1"+100 x ">1").


R
● = SIDC
— = Observers Werkgroep Zon
120
100
80
60
40
20
0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
T


A.K.
Geomagnetic A.K. Index
September 1994
A.K. Index (Wingst R.W.C. Paris)
S.10
10 Cm. Solar Radio Flux
10 Cm. (Ottawa R.W.C. Paris)
R.
Relative Sunspot Numbers
R (Catania R.W.C. Paris)
Ri (S.I.D.C.)
Rn (S.I.D.C.)
Rz (S.I.D.C.)
Rimax 65
Sept. 5
Rimin 8
Sept. 15, 16
Rigem. 26,7

Zonnevlekkengetallen noordelijk– en zuidelijk halfrond

(Hemispheric sunspot numbers)

september 1993

	S.I.D.C.		Balster		Jannink 40		v. Slooten		Spaninks	
Day	Rn	Rs	Rn	Rs	Rn	Rs	Rn	Rs	Rn	Rs
1	8	30					11	38		
2	18	35	35	45			37	52		
3	23	36					33	38		
4	19	34					27	38		
5	20	45	31	65			30	57		
6	22	40	37	50			32	40	26	32
7	22	35					36	35		
8	21	26	39	43			29	28	29	33
9	17	24	25	38			22	29		
10	8	23	12	38	0	22	22	28	11	37
11	0	19					11	23		
12	0	10	0	12			0	12	0	12
13	0	9	0	12			0	12	0	12
14	0	9								
15	4	4								
16	4	4								
17	12	0								
18	12	10	13	15			18	13	15	13
19	7	7					0	0		
20	5	5								
21	5	4	0	0	0	0	0	0		
22	0	11	0	14	0	0	0	14	0	14
23	0	12	0	13	0	11	0	15		
24	0	14	0	17			0	18		
25	0	16	0	21	0	14	0	23	0	20
26	9	19								
27	8	20	12	24					11	24
28	6	17	0	24			0	24		
29	0	17								
30	0	17	0	24						

Bulletin Werkgroep Zon — Oktober 1994

NVWS Werkgroep Zon. Sekretariaat: Veenenburg 36, 2804 WZ Gouda. Tel: 01820-39082

Zonnevlekkengetallen (Sunspot numbers)

Day	Bals	Gr13	Groe	Iden	Jn.9	Jn 4	Scho	vSlod	Sp 7	Vers	Zans	Zijle
1											22	
2								22		22	22	
3	23	24			22							
4	37	37	33	34	22	33		35	33	33		33
5	65		64	58	22			68		50	58	67
6		74	55	64								
7	55		56		33			66			53	81
8					22	22	45	66	57			
9	64				45	45		72	74			
10	61		60		44			64	56	48		
11	74		39	50	33			69	84			49
12	62		57	55	34			64		53		51
13	59		49	73	37			54		68	74	71
14	81		64	89	39	43	96	87		76	74	93
15	68		59	60	29		92	85		56		
16			46		28			71		51		
17	46		32	43	27			45	50			
18	76		62	81	24			77	65		56	71
19	68			82	44			73			54	64
20	63		57		35	46		57	54			55
21	61		47	79	23			63			49	44
22	33											
23	34		35		22			42	49		41	29
24	17		17		11			14				
25	42				11					26	26	
26	70		68	57						34		
27			67		25							
28	78		71		28			76		32	33	
29										29		
30												
31												
observ	22	3	20	13	23	5	3	21	9	13	12	12
k	0.80	0.69	0.94	0.78	1.65	1.27	0.74	0.79	0.74	1.10	0.91	0.79
st.dev.	0.20	0.03	0.22	0.14	0.53	0.47	0.21	0.29	0.13	0.41	0.31	0.13
st.d / k	0.25	0.04	0.23	0.19	0.32	0.37	0.28	0.36	0.18	0.38	0.34	0.17

Observers	[...] = Refractor. d = ... mm:	[Rf..] = Reflector. d = ... mm
Bals = H.A.M. Balster [70]	Jn .9 = D. Jannink [9]	Sp 7 = T. Spaninks [75]
Gr 13 = Mw G. Gravers [Rf 130]	Jn 4 = D. Jannink [40]	Vers = D. Verschuuren [Rf 40]
Groe = A. Groenewegen [102]	Scho = A. Scholten [60]	Zans = W. Zanstra [Rf 155]
Iden = J.A. Idenburg [Rf 125]	vSlo = B. van Slooten [90]	Zijle = W.A. Zijlema [90]

Sunspot Index Data Center

SUNSPOT BULLETIN

S.I.D.C. SUMMARY OF THE URSIGRAMS

1994 OCTOBER R_{IM} = 43.8

Date	R_I	PPSI	600	2800	COS	SFI	XI	Ak	SEA	MAG	
30	17	13	35	074	1091	0	0/0	5			
1	16	18	35	075	1098	0	0/0	4			
2	16	19	34	075	?	0	0/0	22			
3	16	23	35	074	999	0	0/0	63	1500		
4	25	28	36	075	986	0	0/0	29			
5	48	32	36	079	985	8	0/0	38			
6	53	40	36	084	984	2	0/0	32			
7	46	34	36	084	981	4	0/0	44			
8	44	34	36	086	982	0	0/0	20			
9	50	34	37	087	985	18	0/0	16	1621		
10	49	43	37	087	988	4	0/0	24			
11	48	34	36	088	987	1	0/0	20			
12	45	41	36	088	988	1	0/0	17			
13	45	57	37	093	985	7	0/0	13			
14	60	75	37	093	983	6	0/0	13			
15	57	85	37	093	976	6	0/0	11			
16	51	60	40	091	980	0	0/0	6			
17	39	68	39	092	985	0	0/0	6		1046	
18	55	67	39	090	987	10	0/0	6			
19	56	58	42	091	990	11	1/0	9			P M3.2/1F(2047)
20	49	43	40	090	990	0	0/0	10			p (0340)
21	41	35	38	088	990	0	0/0	4			
22	29	25	37	086	983	13	0/0	25			
23	25	14	38	084	984	1	0/0	43			
24	28	12	36	082	987	0	0/0	36			flare in prog.(1110
25	31	8	39	089	-	1	0/0	13			
26	56	19	40	093	991	2	0/0	10			
27	57	35	39	093	999	0	0/0	4			
28	57	51	40	097	999	1	0/0	7			mgst ssc(0025)
29	55	44	41	098	984	7	0/0	37			
30	59	72	40	098	975	2	0/0	53			
31	51	71	39	097	977	5	0/0	(24)			

Moderate resurgence of Solar activity during the month.

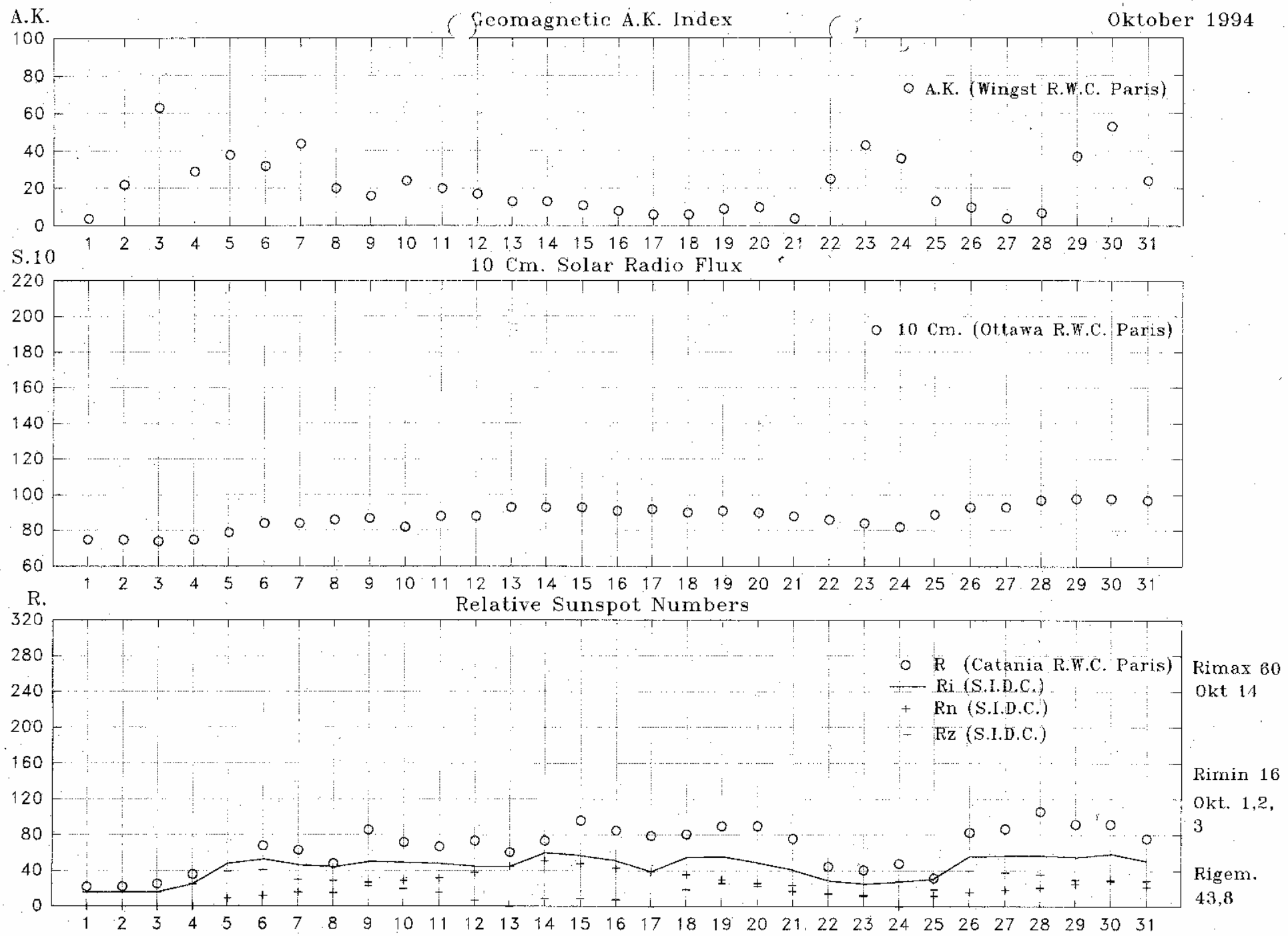
R_I, R_{IM} : provisional international sunspot numbers from the S.I.D.C.
PPSI : prompt photometric sunspot index from the S.I.D.C. in 10-5 W/m² : the quantity to subtract from the mean solar constant.
600 : 600 Mhz solar flux from Humain station (Belgium).
2800 : 2800 Mhz solar flux from Ottawa (origin : Ursigrams - UGEOI group 2)."The 10.7cm Flux data are provided as a service of the National Research Council of Canada."
COS : thousands of the cosmic ray counts (origin : Ursigrams - UCOSE Kerguelen).
SFI : From October 1992, Solar Flare Index from the S.I.D.C. (origin : Ursigrams - UGEOR group 3).
XI : X-flares index from the Ursigrams (M-flares/X-flares) (origin : Ursigrams - UGEOR group 2; UGEOI group 5).
Ak : planetary geomagnetic index from Wingst, Germany (origin : Ursigrams).
SEA : sudden enhancements of atmospherics from Uccle & Humain (Royal Observatory, Belgium).
MAG : magnetic events from Dourbes station (Royal Meteorological Institute, Belgium).
Remarks : sid (sudden ionospheric disturbance); ssc (sudden storm commencement); mgst (magnetic storm); sfe (solar flare effect); s-1-2-3-4 (class of flares); 11-1V radio-burst; T (ten cm radio-burst); P (proton flare); p (proton event); gle (ground level event : neutron event); si (sudden impulse); F (Forbush); SFI Evaluation (1 x Sn+10 x "1"+100 x ">1").

Zonnevlekkengetallen noordelijk– en zuidelijk halfrond

(Hemispheric sunspot numbers)

oktober 1994

	S.I.D.C.		Balster		Jannink 40		v. Slooten		Spaninks	
Day	Rn	Rs	Rn	Rs	Rn	Rs	Rn	Rs	Rn	Rs
1	0	16								
2	0	16					0	22		
3	0	16	0	23						
4	0	25	0	37	0	33	0	35	0	33
5	9	39	11	54			11	57		
6	12	41								
7	16	30	17	38			22	44		
8	15	29			0	22	22	44	19	38
9	27	23	35	29	11	24	36	36	40	34
10	29	20	33	28			37	27	30	26
11	32	16	48	26			46	23	60	24
12	38	7	50	12			53	11		
13	45	0	59	0			54	0		
14	51	9	66	15	23	20	69	18		
15	48	9	55	13			85	0		
16	43	8					59	12		
17	39	0	46	0			45	0	50	0
18	36	19	46	30			48	29	38	27
19	30	26	35	33			39	34		
20	26	23	29	34	22	24	28	29	27	27
21	17	24	29	32			32	31		
22	15	14	17	16						
23	12	13	16	18			20	22	30	19
24	0	28	0	17			0	14		
25	12	19	15	27						
26	16	40	18	52						
27	19	38								
28	21	36	34	44			35	41		
29	25	30								
30	30	29								
31	22	29								


A.K.
Geomagnetic A.K. Index
Oktober 1994
A.K. (Wingst R.W.C. Paris)
S.10
10 Cm. Solar Radio Flux
10 Cm. (Ottawa R.W.C. Paris)
R.
Relative Sunspot Numbers
R (Catania R.W.C. Paris)
Ri (S.I.D.C.)
Rn (S.I.D.C.)
Rz (S.I.D.C.)
Rimax 60
Okt 14
Rimin 16
Okt. 1,2,
3
Rigem.
43,8

Bulletin Werkgroep Zon — November 1994

NVWS Werkgroep Zon. Sekretariaat: Veenenburg 36, 2804 WZ Gouda. Tel: 01820-39082

Zonnevlekkengetallen (Sunspot numbers)

Day	Bals	Gr 5	Gr 5*	Groe	Jn .9	Jn 4	vSlo	Sp 7	Vers	Zans	Zijle
1	82			45	25		56	71	52		61
2	82			42	36	37	66	74	50	51	
3	58			41	33		45	54		50	
4	40			34	33		38	40	34	37	
5	36				11		47			45	46
6		35			22	22	46	34	22		
7											
8				22	22		22	24	22		
9	35								22		
10											
11									11		
12											
13											
14											
15	0				0				0		
16	11			12	0				0		
17	23			24	0				11	0	31
18			0		0						26
19			0								
20			0								
21			11					11			
22	12		11	11	0				11		
23			11								
24			0		0					0	
25	17			17	0		26			14	16
26			24								
27			21								
28			18		11	11	21			17	
29	14		14		11						
30			14							14	15
observ	12	1	12	9	16	3	9	7	11	9	6
k	0,71	0,69	0,82	0,82	1,42	1,49	0,75	0,66	0,96	0,92	0,71
st.dev.	0,16	—	0,21	0,22	0,69	0,53	0,15	0,03	0,23	0,29	0,26
st.d./k	0,23	—	0,25	0,27	0,49	0,35	0,20	0,05	0,24	0,32	0,36

Observers	[...] = Refractor, d = ... mm;	[Rf...] = Reflector, d = ... mm
Bals = H.A.M. Balster [70]	Jn .9 = D. Jannink [9]	Vers = D. Verschuuren [Rf 40]
Gr 5 = Mw G. Gravers [50]	Jn 4 = D. Jannink [40]	Zans = W. Zanstra [Rf 155]
Gr 5* = Mw G. Gravers [50]	vSlo = B. van Slooten [90]	Zijle = W.A. Zijlema [90]
Groe = A. Groenewegen [102]	Sp 7 = T. Spaninks [75]	

* = Canarische Eilanden

Sunspot Index Data Center

SUNSPOT BULLETIN

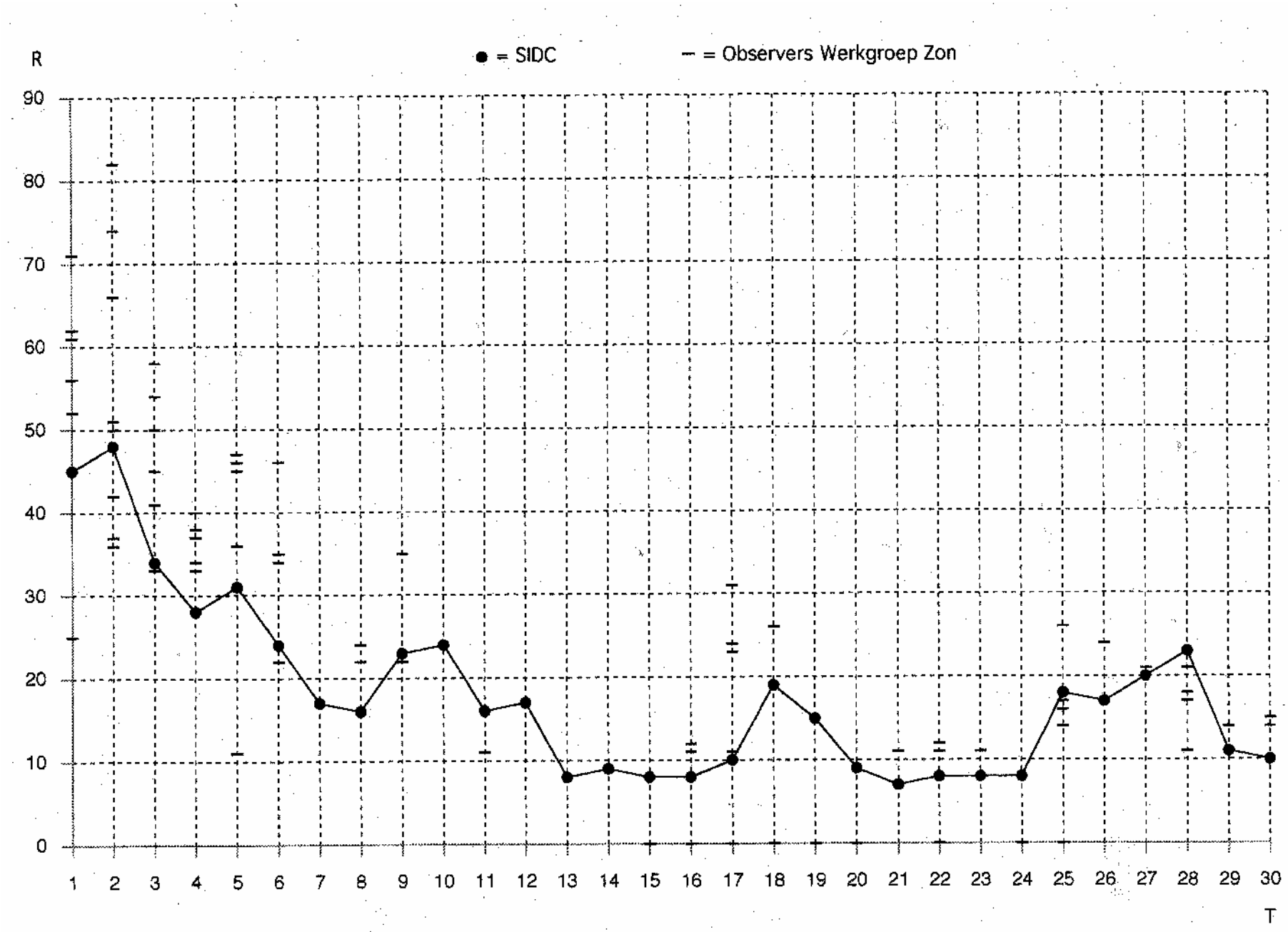
S.I.D.C. SUMMARY OF THE URSIGRAMS

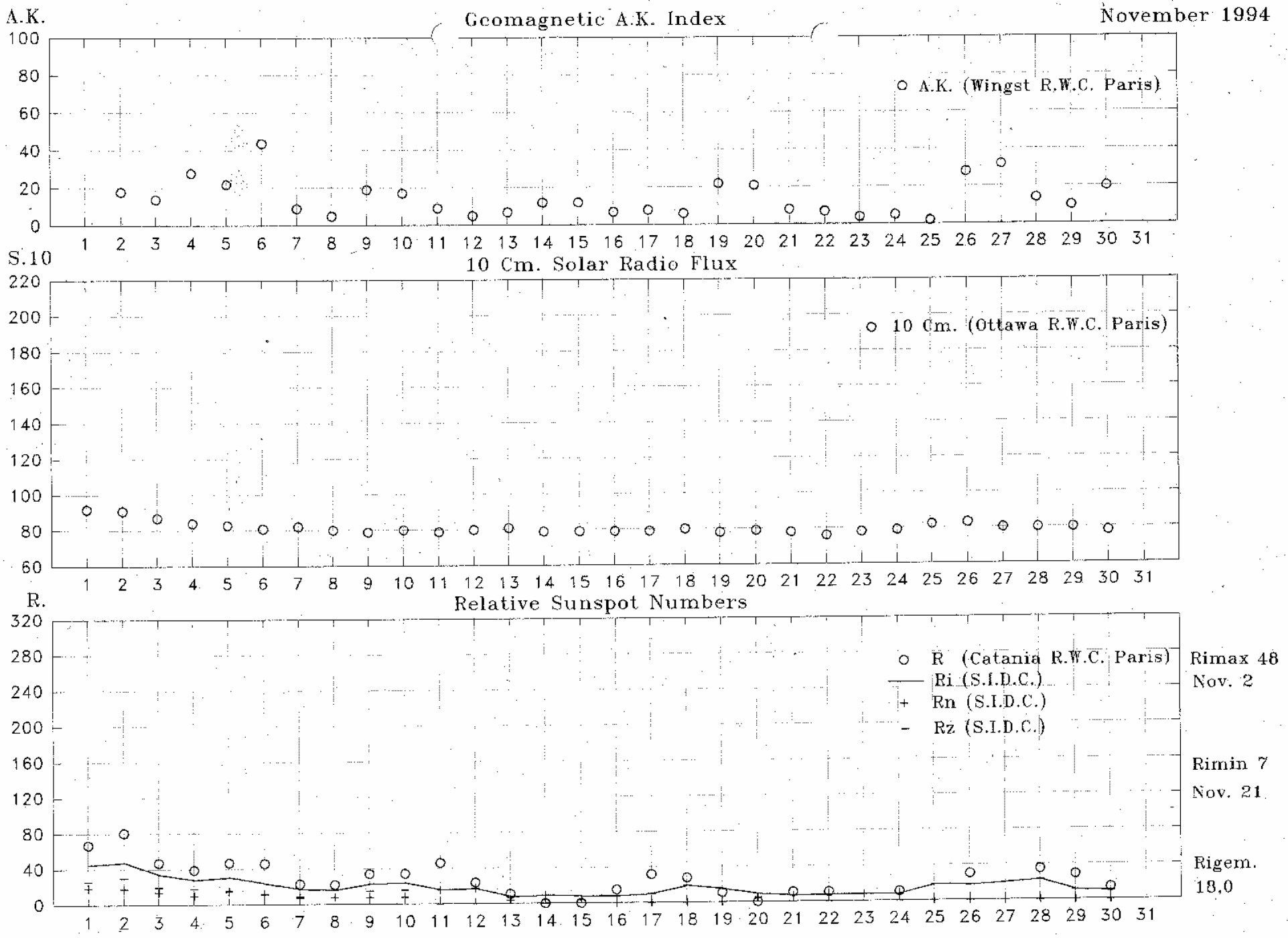
1994 NOVEMBER R_{IM} = 18.0

Date	R_I	PPSI	600	2800	COS	SFI	XI	Ak	SEA	MAG
31	51	71	39	097	977	5	0/0	(24)		
1	45	53	38	092	?	2	0/0	(12)		
2	48	73	39	-	985	-	-	18		
3	34	33	38	-	988	-	-	14		
4	28	26	37	084	989	0	0/0	28		
5	31	19	37	083	985	0	0/0	22		
6	24	11	36	081	986	0	0/0	44		
7	17	17	37	082	986	0	0/0	9		
8	16	15	37	080	987	1	0/0	5		
9	23	13	36	079	989	1	0/0	19		
10	24	5	37	080	981	0	0/0	17		
11	16	6	37	079	986	0	0/0	9		
12	17	3	37	080	987	0	0/0	5		
13	8	0	38	081	986	0	0/0	7		
14	9	-	37	079	984	0	0/0	12		
15	8	-	36	079	983	0	0/0	12		
16	8	2	37	079	978	0	0/0	7		
17	10	3	37	079	991	0	0/0	8		
18	19	4	37	080	995	2	0/0	6		
19	15	1	37	078	998	0	0/0	22		
20	9	0	36	079	993	1	0/0	21		
21	7	1	36	078	991	0	0/0	8		
22	8	1	35	076	992	0	0/0	7		
23	8	5	34	078	1000	0	0/0	4		
24	8	2	35	079	999	1	0/0	5		
25	18	7	36	082	1000	0	0/0	2		
26	17	13	37	083	992	7	0/0	28		ssc(0724)
27	20	13	38	080	983	13	0/0	32		
28	23	14	38	080	986	2	0/0	14		
29	11	5	38	080	991	1	0/0	10		
30	10	3	37	078	987	8	0/0	20		

Very low Solar activity.

R_I, R_{IM} : provisional international sunspot numbers from the S.I.D.C.
PPSI : prompt photometric sunspot index from the S.I.D.C. in 10-5 w/m² : the quantity to subtract from the mean solar constant.
600 : 600 Mhz solar flux from Humain station (Belgium).
2800 : 2800 Mhz solar flux from Ottawa (origin : Ursigrams - UGEOI group 2)."The 10,7cm Flux data are provided as a service of the National Research Council of Canada."
COS : thousands of the cosmic ray counts (origin : Ursigrams - UCOSE Kerguelen).
SFI : From October 1992, Solar Flare index from the S.I.D.C. (origin : Ursigrams - UGEOR group 3).
XI : X-flares index from the Ursigrams (M-flares/X-flares) (origin : Ursigrams - UGEOR group 2; UGEOI group 5).
Ak : planetary geomagnetic index from Wingst, Germany (origin : Ursigrams).
SEA : sudden enhancements of atmospherics from Uccle & Humain (Royal Observatory, Belgium).
MAG : magnetic events from Dourbes station (Royal Meteorological Institute, Belgium).
Remarks : sid (sudden ionospheric disturbance); ssc (sudden storm commencement); mgst (magnetic storm); sfe (solar flare effect); s-1-2-3-4 (class of flares); II-IV radio-burst; T (ten cm radio-burst); P (proton flare); p (proton event); gle (ground level event : neutron event); si (sudden impulse); F (Forbush); SFI Evaluation (1 x Sn+10 x "1"+100 x ">1").


R
● = SIDC
– = Observers Werkgroep Zon
90
80
70
60
50
40
30
20
10
0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
T


A.K.
Geomagnetic A.K. Index
November 1994
A.K. (Wingst R.W.C. Paris)
S.10
10 Cm. Solar Radio Flux
10 Cm. (Ottawa R.W.C. Paris)
R.
Relative Sunspot Numbers
R (Catania R.W.C. Paris)
Ri (S.I.D.C.)
Rn (S.I.D.C.)
Rz (S.I.D.C.)
Rimax 48
Nov. 2
Rimin 7
Nov. 21
Rigem.
18,0

Zonnevlekkengetallen noordelijk- en zuidelijk halfrond

(Hemispheric sunspot numbers)

november 1994

	S.I.D.C.		Balster		Jannink 40		v. Slooten	
Day	Rn	Rs	Rn	Rs	Rn	Rs	Rn	Rs
1	19	26	36	26			29	27
2	18	30	31	51	14	23	23	43
3	14	20	30	28			17	28
4	10	18	14	26			13	25
5	15	16	12	24			22	25
6	12	12			11	11	22	24
7	9	8						
8	8	8					11	11
9	8	15	12	23				
10	8	16						
11	16	0						
12	17	0						
13	4	4						
14	9	0						
15	4	4	0	0				
16	0	8	0	11				
17	0	10	0	23				
18	0	19						
19	0	15						
20	5	4						
21	7	0						
22	8	0	12	0				
23	8	0						
24	8	0						
25	0	18	0	17			0	26
26	0	17						
27	0	20						
28	0	23			0	11	0	21
29	0	11	0	14				
30	0	10						

Bulletin Werkgroep Zon — December 1994

NVWS Werkgroep Zon. Sekretariaat: Veenenburg 36, 2804 WZ Gouda. Tel: 01820-39082

Zonneviekkengetallen (Sunspot numbers)

Day	Bais	Gr 6	Groe	Iden	Jn .9	Jn 4	vSlo	Sp 7	Vers	Zans	Zijle
1	15			14	11		13		11	13	
2	11	0	0	0	0		0		0		
3	0	0	0		0		0	0	0	0	0
4			12				14				
5	25		12		11		29				
6	14		12		12	12	14	13	12	23	16
7	25				12						
8					24						
9	50			44			57			44	54
10											
11			65				55	58			
12			38								
13	42				18	18					
14	36		20	42	18				45		
15			21							24	
16			20		16		29			25	34
17											
18	49				22		25		25		
19	51		26	11	11		31	36	22	24	26
20	28		15		12	12	20	25	23	12	27
21			15		12		20			25	
22			16		13		24		19		
23	27							16	12		14
24	40		15		12		35		15	15	27
25											
26											
27											
28											
29											
30	0		0		0		0				
31	0	0			0		0				0
observ	16	3	16	5	16	3	17	6	11	10	9
k	0,79	—	1,36	1,39	1,76	1,73	0,93	1,00	1,31	1,16	0,98
st.dev.	0,12	—	0,34	1,07	0,59	0,72	0,22	0,16	0,39	0,46	0,30
st.d./k	0,15	—	0,25	0,77	0,33	0,42	0,23	0,19	0,30	0,40	0,30

Observers	[...] = Refractor, d = ... mm;	[Rf...] = Reflector, d = ... mm
Bais = H.A.M. Balster [70]	Jn .9 = D. Jannink [9]	Vers = D. Verschuuren [Rf 40]
Gr 6 = Mw G. Gravers [60]	Jn 4 = D. Jannink [40]	Zans = W. Zanstra [Rf 155]
Groe = A. Groenewegen [102]	vSlo = B. van Slooten [90]	Zijle = W.A. Zijlema [90]
Iden = J.A. Idenburg [Rf 125]	Sp 7 = T. Spaninks [75]	

Sunspot Index Data Center

SUNSPOT BULLETIN

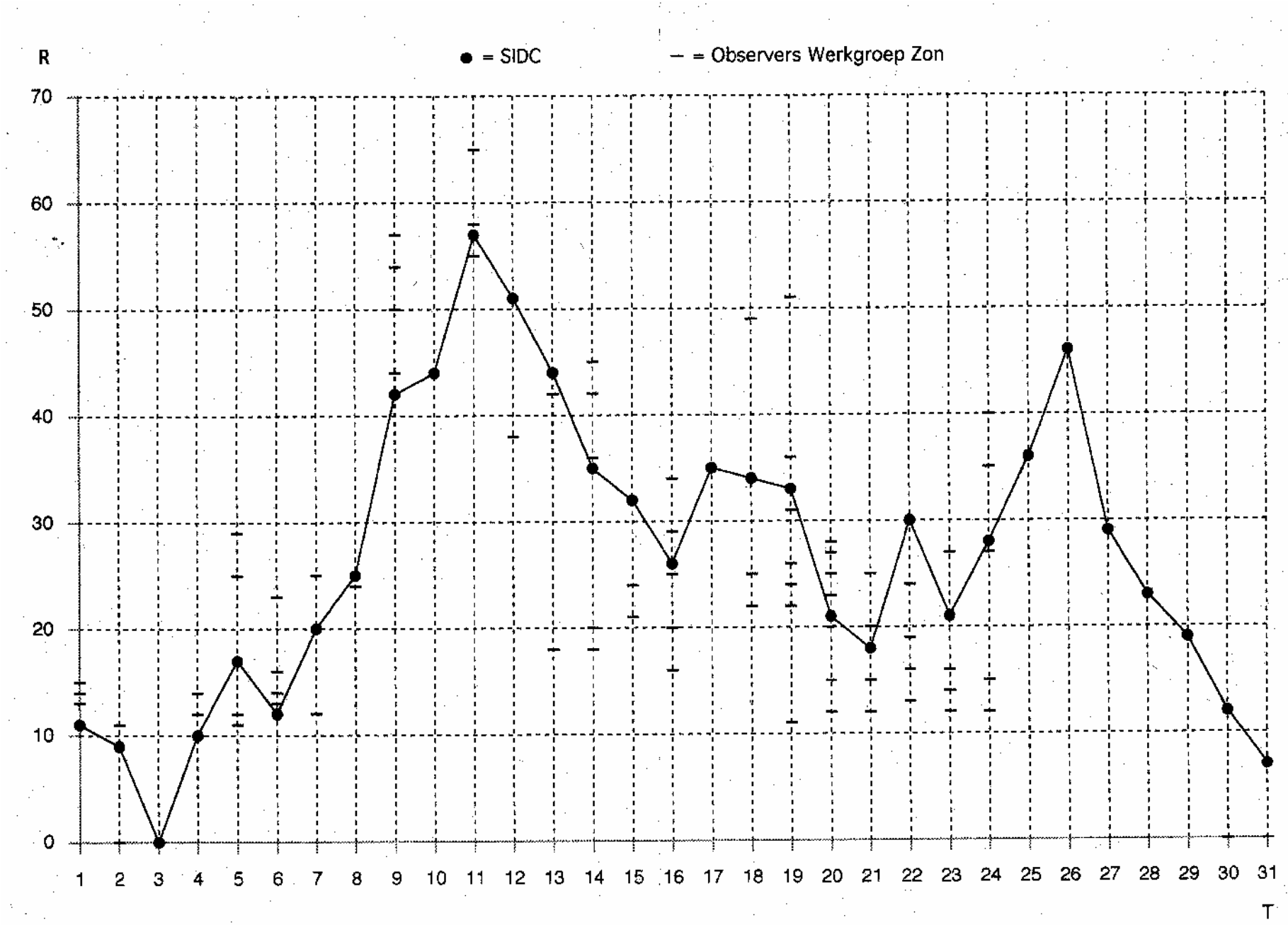
S.I.D.C. SUMMARY OF THE URSIGRAMS

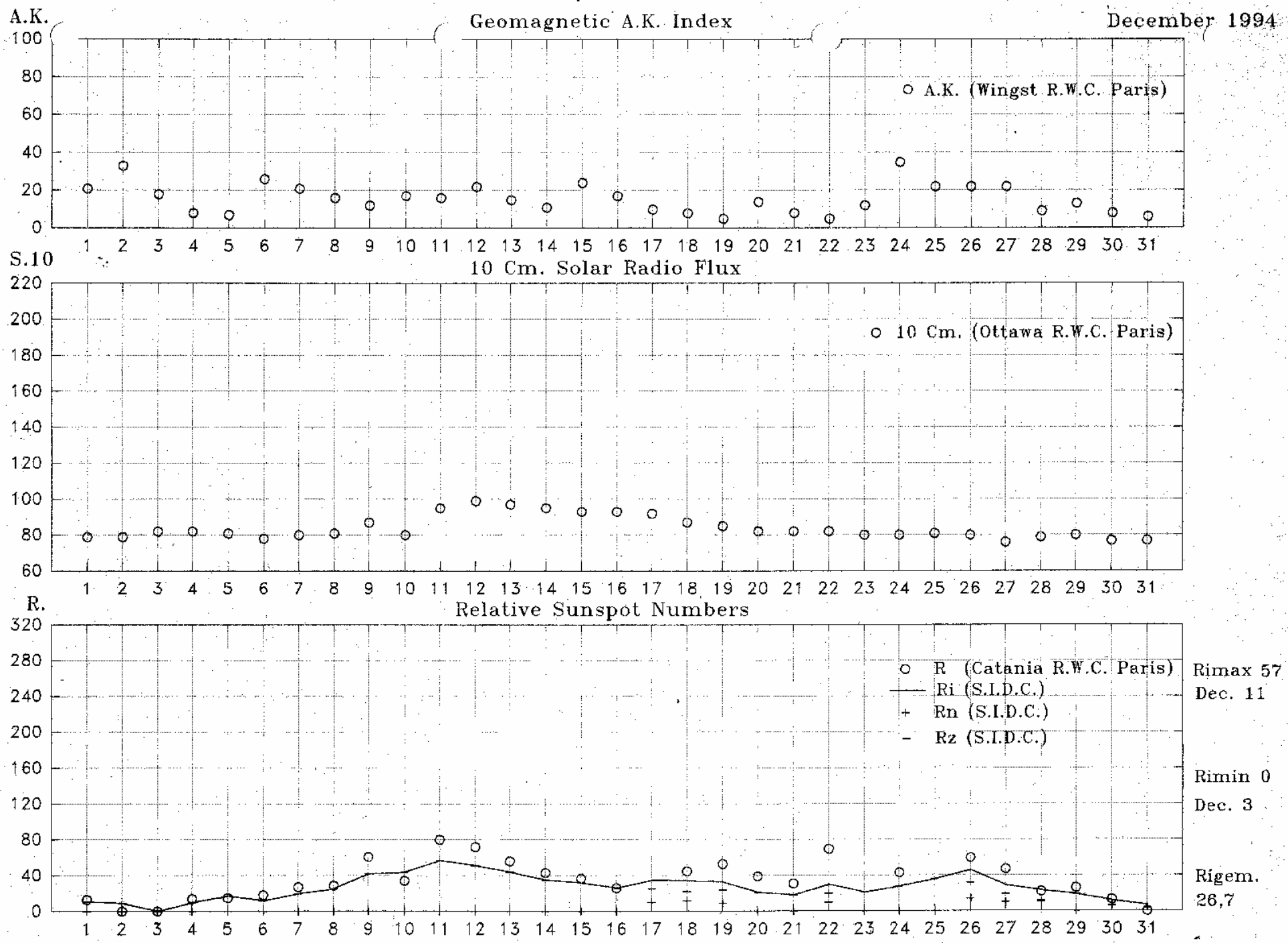
1994 DECEMBER R_{fM} = 26.7

Date	Rf	PPSI	600	2800	COS	SFI	XI	Ak	SEA	MAG
30	10	3	37	078	987	8	0/0	20		
1	11	3	37	079	990	1	0/0	21		
2	9	0	37	079	983	0	0/0	33		
3	0	0	36	082	983	0	0/0	18		
4	10	2	36	082	984	1	0/0	8		
5	17	7	37	081	989	2	0/0	7		mgst SSC(2106)
6	12	11	37	078	985	0	0/0	26		
7	20	10	38	080	985	3	0/0	21		
8	25	10	37	081	984	8	0/0	16		
9	42	22	38	087	978	12	0/0	12		
10	44	34	38	086	983	3	0/0	17		
11	57	65	38	095	985	7	0/0	16		
12	51	118	42	099	982	19	0/0	22		
13	44	134	40	097	980	4	0/0	15		S-1n(2055)
14	35	104	41	095	983	11	1/0	11		S-1n(0535)
15	32	101	40	093	991	1	0/0	24		
16	26	69	40	093	991	11	0/0	17		
17	35	48	41	092	989	1	0/0	10		
18	34	29	40	087	994	15	0/0	8		
19	33	19	40	085	996	12	0/0	5		
20	21	23	40	082	991	0	0/0	14		
21	18	27	40	082	990	5	0/0	8		
22	30	34	40	082	994	2	0/0	5		
23	21	28	39	080	995	0	0/0	12		
24	28	27	38	080	994	2	0/0	35		
25	36	19	40	081	990	2	0/0	20		
26	46	20	38	080	991	2	0/0	22		
27	29	7	-	076	989	1	0/0	22		
28	23	3	37	079	988	0	0/0	9		
29	19	4	37	080	986	0	0/0	13		
30	12	0	38	077	987	0	0/0	8		
31	7	0	37	077	953	0	0/0	6		

Very low activity until 8 then moderate with minor flares due to a new active center in the southern hemisphere two eruptive events on 13 and 14

R_f, R_{fM} : provisional international sunspot numbers from the S.I.D.C.
PPSI : prompt photometric sunspot index from the S.I.D.C. in 10-5 w/m² : the quantity to subtract from the mean solar constant.
600 : 600 Mhz solar flux from Humain station (Belgium).
2800 : 2800 Mhz solar flux from Ottawa (origin : Ursigrams - UGEOI group 2)."The 10.7cm Flux data are provided as a service of the National Research Council of Canada."
COS : thousands of the cosmic ray counts (origin : Ursigrams - UCOSE Kerguelen).
SFI : From October 1992, Solar Flare Index from the S.I.D.C. (origin : Ursigrams - UGEOR group 3).
XI : X-flares index from the Ursigrams (M-flares/X-flares) (origin : Ursigrams - UGEOR group 2; UGEOI group 5).
Ak : planetary geomagnetic index from Wingst, Germany (origin : Ursigrams).
SEA : sudden enhancements of atmospherics from Uccle & Humain (Royal Observatory, Belgium).
MAG : magnetic events from Dourbes station (Royal Meteorological Institute, Belgium).
Remarks : sid (sudden ionospheric disturbance); ssc (sudden storm commencement); mgst (magnetic storm); sfe (solar flare effect); s-1-2-3-4 (class of flares); II-IV radio-burst; T (ten cm radio-burst); P (proton flare); p (proton event); gle (ground level event : neutron event); sf (sudden impulse); F (Forbush); SFI Evaluation (1 x Sn+10 x "1"+100 x ">1").


R
● = SIDC
– = Observers Werkgroep Zon
70
60
50
40
30
20
10
0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
T


A.K.
Geomagnetic A.K. Index
December 1994
A.K. (Wingst R.W.C. Paris)
S.10
10 Cm. Solar Radio Flux
10 Cm. (Ottawa R.W.C. Paris)
R.
Relative Sunspot Numbers
R (Catania R.W.C. Paris)
Ri (S.I.D.C.)
Rn (S.I.D.C.)
Rz (S.I.D.C.)
Rimax 57
Dec. 11
Rimin 0
Dec. 3
Rigem.
26,7

Zonneviekkengetallen noordelijk– en zuidelijk halfrond

(Hemispheric sunspot numbers)

december 1994

	S.I.D.C.		Balster		Jannink 40		v. Slooten		Spaninks	
Day	Rn	Rs	Rn	Rs	Rn	Rs	Rn	Rs	Rn	Rs
1	0	11	0	15			0	13		
2	0	9	0	11			0	0		
3	0	0	0	0			0	0	0	0
4	0	10					0	14		
5	0	17	0	25			0	29		
6	0	12	0	14	0	12	0	14		
7	0	20	0	25						
8	0	25								
9	0	42	0	50			0	57		
10	0	44								
11	0	57					0	55		
12	0	51								
13	0	44	0	42	0	18				
14	0	35	0	36						
15	0	32								
16	0	26					0	29		
17	10	25								
18	12	22	11	38			11	14		
19	9	24	0	51			15	16		
20	0	21	0	28	12	0	20	0		
21	0	18					20	0		
22	20	10					24	0		
23	0	21	16	11						
24	0	28	17	23			14	21		
25	0	36								
26	14	32								
27	10	19								
28	11	12								
29	0	19								
30	6	6	0	0			0	0		
31	4	3	0	0			0	0		