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The Quarterly Bulletin on Solar Activity for 1985 is not presently (Oct 1988) edited. Many people are waiting for the definitive Sunspot Relative Numbers and Sunspot Areas. We publish now the preprint of the SIDC's part of the QBSA for 1985.

A. KOECKELENBERGH

Sunspot Relative-Numbers and Sunspot Areas

1985

Cooperating Observatories for Sunspot Relative-Numbers :

Altamira(Venezuela), Ankara, Athens(Nat.Obs.), Attikis(Nat.Obs.Greece), Auckland(New-Zealand), Bagdad, Berlin, Beyazit, Boom(Belgium), Boulder(USA), Bruxelles-Uccle(Belgium), Bruxelles-Univ., Budapest, Buenos-Aires, Campinas(Centric.Obs.Brazil), Campinas, Catania, Chung-Li (Telecom.Taiwan), Cochabamba(Bolivia), Culgoera(Australia), Dinant (Belgium), Dover(UK), Holloman(USA), Huancayo, Macranovo, Malwan, Inzernhagen(West-Germ.), Jeddah, Kandilli, Kandelohne, Nawapuchú-Saitama, Mayama(Venezuela), Kiev, Kislovodsk, Lengemark(Belgium), Leermouth(Australia), Locarno, Lunping(Taiwan), Madrid, Manila, Mercedes(Uruguay), Misaki(OAA Japan), Naples(Orion-Mexico), Nijmegen (Netherlands), Oakland(USA), Potsdam, Palenau(Hawaii), Prades(France), Puerto-Monte(Chile), Pulligny(France), Pyongyang(Korea), Guazon-City (Philippines), Rambouillet(France), Rome, Rome-Renzix(Belgium), Rodrigues-Tortosa, Roodstadt(East-Germ.), San Miguel, Santiago, Sao de Francisco de Oliveira(Brazil), Sao Quirino(Brazil), Skalste-Pleso, Sonneberg(East-Germ.), Suva-City, Taipei(Obs.), Taipei (Weather-Bureau), Tangkumbesi(Indonesia), Tashkent, Tokyo-Mitaka, Tokyo(Nat.Science Museum), Trieste(Italy), Uruwa-Saitama, Valencia(Spain), Viny(Belgium).

The first column gives the definitive international Sunspot-Numbers for whole disk of the sun (R_{\odot}) established by the Sunspot Index Data Centre-Brussels on the basis of the observations of Locarno station as reference, the second that for the central zone (R_{\odot}) on the basis of the observations of Athens(Nat.Obs.), Bruxelles-Uccle, Inzernhagen, Nawapuchú-Saitama, Kiev, Kislovodsk, Misaki, Nijmegen, Rambouillet, Rodrigues-Tortosa, Skalste-Pleso, Suva-City, Taipei-Obs., Tashkent, Tokyo-Sci.Mus., Uruwa-Saitama.

The diameter of the central zone is half that of the sun's disk.

The sunspot-areas A_1 are determined at Catania, A_2 at Rome and A_3 are evaluated by the Sunspot Index Data Centre - Brussels on the observations of Athens(Nat.Obs.), Chung-Li, Malwan, Jeddah, Manila, Rambouillet, Rome, Taipei(Obs.) and Taipei(Weath.Bur.) attached to Catania values by a monthly scaling factor.

The apparent total area of the umbra plus penumbra is uncorrected for foreshortening and expressed in millionths of the solar disk.

FEBRUARY 1985

1985 FEB.	R _I	R _{IC}	A _C	A _R	A _I
1	18	14	36	-	33
2	22	14	306	-	165
3	25	10	301	-	195
4	22	0	-	-	215
5	20	0	84	-	72
6	16	0	0	-	34
7	7	0	0	0	2
8	16	0	0	-	2
9	24	12	68	-	114
10	19	11	-	-	103
11	13	0	78	89	55
12	10	9	63	76	44
13	11	10	-	-	47
14	13	11	58	-	46
15	11	10	47	-	40
16	10	10	21	-	20
17	12	0	0	-	5
18	10	0	0	-	2
19	19	13	-	102	34
20	27	10	-	70	189
21	27	9	233	408	249
22	25	0	-	235	161
23	16	12	-	223	127
24	11	11	148	-	117
25	11	10	95	175	83
26	11	11	106	-	82
27	10	8	74	-	71
28	9	0	63	134	66
29					
30					
31					

MEAN 15.9 7.0 85 151 85

JANUARY 1985

1985 JAN.	R _I	R _{IC}	A _C	A _R	A _I
1	0	0	0	-	0
2	0	0	0	-	0
3	0	0	0	0	0
4	0	0	0	-	0
5	0	0	0	-	0
6	0	0	0	-	0
7	0	0	0	-	0
8	11	0	0	-	0
9	14	0	0	-	5
10	0	0	0	0	2
11	0	0	0	0	0
12	13	0	0	0	0
13	16	16	-	-	11
14	26	23	509	350	414
15	25	22	-	-	170
16	26	24	-	-	134
17	29	0	-	414	357
18	26	0	259	-	297
19	27	12	-	-	219
20	55	30	666	-	376
21	59	35	1095	-	635
22	50	14	296	-	505
23	39	11	508	-	439
24	33	14	296	-	348
25	20	10	73	-	244
26	9	0	0	-	0
27	8	0	0	-	0
28	0	0	0	0	0
29	9	0	0	0	0
30	0	0	0	-	0
31	17	12	31	9	14

MEAN 16.5 7.5 156 86 134

MARCH 1985

APRIL 1985

1985 MAR.	R _I	R _{IC}	A _C	A _R	A _I	1985 APR.	R _I	R _{IC}	A _C	A _R	A _I
1	13	0	63	-	68	1	25	0	158	191	322
2	13	0	21	-	42	2	21	0	121	-	183
3	9	0	0	-	13	3	23	0	94	-	205
4	0	0	0	-	0	4	17	16	95	118	113
5	0	0	0	-	0	5	23	16	126	-	117
6	0	0	0	-	0	6	19	14	68	-	88
7	0	0	0	-	0	7	11	10	21	-	26
8	14	0	0	-	0	8	9	0	-	-	0
9	15	0	15	-	22	9	9	11	0	-	17
10	13	17	5	-	7	10	0	0	0	-	0
11	16	0	31	-	10	11	0	0	0	0	0
12	18	0	26	70	30	12	0	0	0	0	0
13	14	0	10	-	30	13	0	0	0	0	0
14	10	0	26	-	9	14	10	0	-	-	0
15	0	0	0	-	0	15	0	0	-	-	0
16	11	0	0	-	0	16	0	0	-	-	0
17	20	0	53	-	36	17	0	0	0	-	0
18	35	21	90	-	105	18	10	0	-	0	45
19	27	19	57	54	46	19	9	0	0	0	12
20	19	21	-	-	20	20	11	0	0	0	0
21	9	0	-	-	8	21	17	0	58	-	123
22	15	0	89	-	44	22	31	0	614	859	822
23	22	0	275	-	335	23	28	0	1421	-	1352
24	36	0	316	-	375	24	30	31	1845	-	1737
25	30	0	555	525	373	25	37	38	1696	-	1705
26	33	21	519	652	359	26	37	41	1527	-	1596
27	27	26	509	-	316	27	31	41	1654	1814	1817
28	36	34	-	688	311	28	27	33	949	-	1331
29	25	23	392	477	297	29	26	0	742	-	992
30	29	35	339	366	242	30	26	0	551	-	948
31	23	0	275	-	270	31	-	-	-	-	-

MEAN 17.2 7.0 131 354 109 MEAN 16.2 8.4 470 298 452

JUNE 1985

1985 JUN.	R _I	R _{IC}	A _C	A _R	A _I
1	10	0	0	0	0
2	0	0	0	0	0
3	11	0	10	0	8
4	26	0	233	0	358
5	35	0	338	0	299
6	37	0	529	429	594
7	38	0	662	0	658
8	42	23	655	0	519
9	42	36	704	0	591
10	58	50	809	0	505
11	66	54	962	0	747
12	54	28	698	0	639
13	45	22	624	0	540
14	36	15	412	0	563
15	37	14	0	0	461
16	27	11	184	0	279
17	23	11	99	0	112
18	18	11	36	0	104
19	10	11	0	0	0
20	9	10	5	0	5
21	9	0	5	9	12
22	9	0	21	0	12
23	12	11	10	0	14
24	13	13	26	38	49
25	12	13	21	0	34
26	10	10	21	0	13
27	8	10	0	0	0
28	8	0	0	0	0
29	9	0	84	0	110
30	11	0	180	0	165
31					

MEAN 27.5 16.1 369 494 350 24.2 11.8 253 79 24.9

MAY 1985

1985 MAY	R _I	R _{IC}	A _C	A _R	A _I
1	19	0	339	0	453
2	15	0	106	0	153
3	14	0	26	0	26
4	18	0	31	13	28
5	16	17	0	0	18
6	14	16	21	0	19
7	32	13	173	9	163
8	44	34	0	0	728
9	56	23	724	0	768
10	49	0	948	0	690
11	49	23	1425	1533	921
12	33	40	1018	0	776
13	32	34	1018	1400	725
14	32	41	742	1146	659
15	32	26	752	779	621
16	31	23	79	722	501
17	38	11	656	700	601
18	41	24	623	704	651
19	40	12	524	0	595
20	37	12	455	0	429
21	36	39	444	0	369
22	34	44	328	0	352
23	32	40	280	397	260
24	25	15	222	0	177
25	19	12	58	0	60
26	13	0	42	0	57
27	12	0	21	3	20
28	12	0	0	0	0
29	10	0	0	0	0
30	8	0	0	0	0
31	8	0	0	0	2

MEAN 27.5 16.1 369 494 350

AUGUST 1985

JULY 1985

1985 JUL.		1985 AUG.				1985 JUL.		1985 AUG.			
	R _I	R _{IC}	A _C	A _R	A _I		R _I	R _{IC}	A _C	A _R	A _I
1	21	0	238	302	201	1	35	27	296	391	283
2	27	0	392	350	347	2	25	31	269	270	230
3	30	15	402	-	422	3	27	24	243	-	173
4	32	14	412	-	413	4	27	25	179	-	165
5	38	14	678	690	472	5	20	11	158	239	144
6	43	46	720	-	574	6	14	0	159	-	132
7	71	58	1393	-	956	7	12	0	63	-	101
8	67	58	1336	2195	1297	8	12	0	42	-	80
9	82	25	1537	2412	1483	9	17	0	47	29	40
10	82	18	1695	2243	1546	10	12	0	31	35	44
11	61	18	1323	-	1398	11	12	10	5	-	18
12	45	0	152	-	985	12	12	8	0	0	0
13	25	0	254	-	455	13	0	0	0	0	0
14	9	0	12	-	48	14	0	0	0	-	0
15	8	0	0	0	0	15	0	0	0	-	0
16	9	0	50	-	63	16	14	0	0	-	0
17	11	0	100	-	151	17	12	0	0	-	0
18	11	0	110	-	118	18	11	11	15	-	11
19	11	0	74	159	86	19	12	0	0	0	0
20	11	9	63	-	72	20	10	0	26	-	45
21	10	9	53	-	42	21	9	0	0	0	0
22	10	9	26	35	32	22	0	0	0	0	0
23	18	9	10	0	34	23	0	0	0	0	0
24	12	0	10	0	14	24	0	0	0	0	0
25	10	9	5	-	7	25	0	0	0	-	0
26	13	13	6	0	2	26	8	0	0	0	0
27	12	8	37	-	169	27	8	0	0	0	2
28	36	0	301	-	240	28	10	0	5	0	1
29	51	7	327	-	346	29	9	0	0	0	0
30	46	12	338	57	364	30	8	0	0	0	0
31	40	25	385	-	371	31	9	10	-	0	3

MEAN 30.7 12.1 4.1 665 4.10 MEAN 11.1 5.1 51 57 47

SEPTEMBER 1985

OCTOBER 1985

1985 SEP.	R _I	R _{IC}	A _C	A _R	A _I	1985 OCT.	R _I	R _{IC}	A _C	A _R	A _I
1	7	8	0	-	0	1	0	0	0	0	0
2	0	0	0	0	0	2	0	0	0	0	0
3	0	0	0	0	0	3	0	0	0	0	0
4	0	0	0	0	0	4	0	0	0	0	0
5	0	0	0	0	0	5	0	0	0	0	0
6	0	0	0	0	0	6	0	0	0	0	0
7	0	0	0	0	0	7	0	0	0	0	0
8	0	0	0	0	0	8	0	0	0	0	0
9	0	0	0	0	0	9	0	0	0	0	0
10	0	0	0	0	0	10	0	0	0	0	0
11	7	0	0	0	0	11	0	0	0	0	0
12	0	0	0	0	0	12	0	0	0	0	0
13	9	0	0	0	2	13	11	0	0	0	0
14	9	0	53	134	37	14	13	15	15	11	11
15	9	0	105	-	46	15	15	21	21	25	25
16	9	0	-	207	54	16	25	296	211	191	319
17	8	0	-	255	40	17	19	3818	302	302	549
18	10	10	53	111	41	18	31	450	461	461	1134
19	10	11	-	111	43	19	31	582	668	668	1019
20	9	8	21	-	16	20	44	582	-	-	1234
21	8	8	5	0	5	21	50	720	-	-	1113
22	7	0	0	0	0	22	72	1208	-	-	1551
23	0	0	0	0	0	23	67	1357	-	-	1779
24	0	0	0	0	0	24	63	1144	-	-	1470
25	0	0	0	0	0	25	55	805	-	-	1256
26	0	0	0	0	0	26	40	-	430	430	1006
27	0	0	0	0	0	27	27	445	-	-	544
28	0	0	0	0	0	28	14	-	-	-	217
29	7	0	0	0	0	29	11	-	-	-	141
30	7	8	0	0	0	30	0	-	-	-	0
31						31	0	0	0	-	0
MEAN	3.9	2.3	9	36	9	MEAN	18.6	11.5	395	130	433

DECEMBER 1985

1985 DEC.	R _I	R _{IC}	A _C	A _R	A _I
1	0	0	0	-	0
2	16	0	0	0	0
3	13	0	0	0	0
4	0	0	0	-	0
5	18	12	0	-	14
6	26	12	41	0	54
7	15	0	-	0	13
8	12	0	-	0	6
9	16	0	31	0	3
10	15	0	42	-	47
11	18	0	42	-	89
12	19	0	58	83	73
13	18	14	42	-	92
14	30	11	63	-	106
15	47	23	159	-	147
16	66	38	317	267	312
17	63	31	328	395	249
18	52	29	243	-	273
19	40	16	79	-	96
20	24	0	37	6	58
21	17	0	10	-	24
22	11	0	0	-	0
23	0	0	0	0	0
24	0	0	0	0	0
25	0	0	0	-	0
26	0	0	0	-	0
27	0	0	0	-	0
28	0	0	0	-	0
29	0	0	-	-	0
30	0	0	0	-	0
31	0	0	0	-	0

NOVEMBER 1985

1985 NOV.	R _I	R _{IC}	A _C	A _R	A _I
1	0	0	0	-	0
2	0	0	0	-	0
3	0	0	0	-	0
4	0	0	0	0	0
5	16	11	26	-	4
6	19	0	79	-	46
7	19	0	74	-	73
8	18	0	95	-	85
9	25	0	74	-	164
10	15	0	132	-	101
11	17	0	137	197	160
12	19	0	159	111	126
13	30	18	337	-	114
14	44	16	337	-	113
15	48	16	-	-	213
16	39	51	-	-	248
17	43	21	-	-	208
18	37	34	360	-	314
19	30	29	275	-	202
20	28	22	190	-	169
21	18	10	89	-	83
22	12	0	5	-	44
23	10	0	21	-	20
24	0	0	0	-	0
25	0	0	0	-	0
26	0	0	0	0	0
27	0	0	0	0	0
28	0	0	0	0	0
29	0	0	0	0	0
30	0	0	0	0	0
31					

MEAN 17.3 6.0 53 75 53

MEAN 16.2 7.6 74 44 83