SUPPLEMENT

Daily soft X-ray flare indices (1979 and 1980)

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Abstract. The heliographic longitudinal distribution of the daily soft X-ray flare index values is given for 1979 and 1980 years (Table 1). The soft X-ray flare index was determined from the daily continuous SMS-GOES profile of solar soft X-ray flux (0.1–0.8 nm), as published in Solar Geophysical Data. The left (right) columns of Table 1 comprise the 1979 (1980) daily data. The Eastern (E), Central (C) and Western (W) LDE–type flare indices, as well as a daily flare index computed from the impulsive–type (I) flares were so far published for the decreasing part of the 20–th solar cycle, as well as for the onset part of the 21-st solar cycle (from January 1, 1969 to December 31, 1980).

Key words: the Sun - LDE type flares - impulsive flares - flare index (FI)

1. Spatial distribution of LDE-type flares

It was found that SXR flares, and in particular those of long duration, occur in connection with Coronal Mass ejections (CMEs, Kahler et al., 1989). The 1969–1978 daily SXR (0.1–0.8 nm) flare index has already been published (Antalová, 1996) in the Contributions of the Astronomical Observatory Skalnaté Pleso (Volumes 26, 27 and 28). This paper gives the 1979−1980 continuation of the daily flare indices (FIs). This FIs were constructed by weighing the SXR flare-classes (in units of 10^{-6} W/m^2) regardless the duration of a flare (Antalová, 1996). For example, the flare of GOES class C1.7, (M9.5; X12.3) has value of the SXR flare index equal to 2 (95; 1230). The LDE–type flare FI values are given into E-C-W heliographic belts and their sum represents the global value for the all solar disk (D). The left (right) columns of Table 1 comprise the 1979 (1980) daily SXR flare index, which was computed separately for: **(i)** the LDE-type flare (duration in SXR $\geq$ 2hours), which is identical with the flare-type known as a 'long decay' (Kahler, 1977) and related to an eruptive flare definition (Švestka, 1995), Coronal Mass ejections (Webb et al. 1997) and geomagnetic storms (Bravo, 1997; Webb et al. 1998); **(ii)** the impulsive-type flare (lasting in SXR less than 2 hours). The distribution of FI into E, C, and W heliolongitudinal belts is given only for LDE-type flares. The following flare subsets are given in Table 1:

Contrib. Astron. Obs. Skalnaté Pleso **29**, (1999), 59 – 68.

Table 1. The 1979 (the left E–T columns) and 1980 (right) daily values of the soft X-ray (0.1–0.8 nm) flare indices. E-C-W columns give the FI distribution of LDE-type flares located into Eastern, Central and Western solar longitudinal belts.

Date	E	C	W	D	I	T	E	C	W	D	I	T
JAN 01	0	12	0	12	32	44	23	3	0	26	12	38
JAN 02	0	14	0	14	56	70	2	3	0	5	16	21
JAN 03	2	17	6	25	61	86	0	9	0	9	22	31
JAN 04	2	2	3	7	28	35	2	11	0	13	17	30
JAN 05	3	15	6	24	51	75	0	10	0	10	36	46
JAN 06	0	14	4	18	23	41	101	34	2	137	37	174
JAN 07	0	11	2	13	39	52	0	24	30	54	64	118
JAN 08	36	8	2	46	57	103	0	244	0	244	54	298
JAN 09	0	2	10	12	51	63	3	108	7	118	45	163
JAN 10	4	15	0	19	56	75	0	159	0	159	63	222
JAN 11	5	59	0	64	62	126	0	48	7	55	70	125
JAN 12	2	23	5	30	64	94	59	71	27	157	96	253
JAN 13	0	129	0	129	136	265	80	12	61	153	92	245
JAN 14	0	52	7	59	66	125	10	13	29	52	116	138
JAN 15	5	27	70	102	88	190	0	0	8	8	23	31
JAN 16	8	8	21	37	99	136	0	12	0	12	57	69
JAN 17	0	12	5	17	41	58	0	2	0	2	16	18
JAN 18	0	18	8	26	99	125	0	2	0	2	16	18
JAN 19	9	35	7	51	100	151	0	6	0	6	26	32
JAN 20	3	6	0	9	27	36	0	2	1	3	8	11
JAN 21	0	31	0	31	95	126	0	12	0	12	13	25
JAN 22	12	5	0	17	96	113	0	9	0	9	27	36
JAN 23	0	8	0	8	74	82	0	8	0	8	71	79
JAN 24	0	53	0	53	68	121	5	30	6	41	57	98
JAN 25	0	53	0	53	56	109	50	19	102	171	61	232
JAN 26	0	16	0	16	46	62	9	5	12	26	65	91
JAN 27	0	12	0	12	59	71	55	11	275	341	46	347
JAN 28	0	10	19	29	45	74	55	100	56	111	80	191
JAN 29	4	8	2	14	72	86	54	27	0	81	63	144
JAN 30	2	6	2	10	30	40	6	54	0	60	20	80
JAN 31	2	7	7	16	21	37	14	0	0	14	51	65
FEB 01	20	3	0	23	35	58	4	15	0	19	36	55
FEB 02	7	14	0	21	44	65	0	14	0	14	51	65
FEB 03	12	2	0	14	24	38	0	122	0	122	20	142
FEB 04	0	5	0	5	22	27	4	104	0	108	25	133
FEB 05	10	28	5	43	56	99	51	2	0	53	92	145
FEB 06	0	24	0	24	48	72	48	43	11	102	104	206
FEB 07	0	16	4	20	35	55	0	15	19	34	63	97
FEB 08	11	40	14	65	55	120	0	5	150	155	46	201
FEB 09	3	35	3	41	58	99	0	5	0	5	35	40

Date	E	C	W	D	I	T	E	C	W	D	I	T
FEB 10	0	39	0	39	59	98	3	28	18	49	45	94
FEB 11	0	44	0	44	45	99	0	2	10	12	71	83
FEB 12	0	93	5	98	75	173	0	5	6	11	38	49
FEB 13	5	15	15	35	126	161	56	22	2	80	107	187
FEB 14	8	0	49	57	88	145	3	7	0	10	15	25
FEB 15	8	0	0	8	64	72	0	40	25	65	58	123
FEB 16	216	16	0	232	83	315	0	3	7	10	27	37
FEB 17	5	61	5	71	124	195	0	8	0	8	12	20
FEB 18	5	337	0	342	101	343	0	4	0	4	12	16
FEB 19	0	144	0	144	76	220	9	5	0	14	20	34
FEB 20	0	138	8	146	85	231	4	21	3	28	18	46
FEB 21	0	82	5	87	103	190	7	10	3	20	10	30
FEB 22	0	108	27	135	96	231	0	7	5	12	7	19
FEB 23	0	0	46	46	68	114	0	8	0	8	15	23
FEB 24	0	0	39	39	68	107	6	11	2	19	12	31
FEB 25	37	0	0	37	87	124	32	10	0	42	20	62
FEB 26	7	4	9	20	67	87	20	0	0	20	42	62
FEB 27	0	2	6	8	34	42	20	0	0	20	32	52
FEB 28	15	0	0	15	43	58	6	60	0	66	16	82
FEB 29	-	-	-	-	-	-	6	20	0	26	37	63
MAR 01	111	7	2	120	30	150	0	6	0	6	23	29
MAR 02	28	0	0	28	69	97	0	6	0	6	41	47
MAR 03	0	6	0	6	66	72	0	0	1	1	16	17
MAR 04	2	5	2	9	19	28	0	16	24	40	41	81
MAR 05	0	30	11	41	35	76	0	8	2	10	11	21
MAR 06	0	20	7	27	34	61	0	11	1	12	23	35
MAR 07	0	14	0	14	56	70	0	5	7	12	10	22
MAR 08	15	24	0	39	73	112	0	4	5	9	5	14
MAR 09	100	10	0	110	49	159	3	6	5	14	8	22
MAR 10	4	7	0	11	47	58	3	0	0	3	3	6
MAR 11	21	7	0	28	35	63	0	3	0	3	5	8
MAR 12	0	0	0	0	47	47	0	1	0	1	4	5
MAR 13	6	8	0	14	44	58	0	0	1	1	10	11
MAR 14	1	3	1	5	13	18	0	1	1	2	10	12
MAR 15	0	15	0	15	20	35	1	2	1	4	8	12
MAR 16	2	25	0	27	21	48	1	3	0	4	3	7
MAR 17	0	0	0	0	11	11	2	0	1	3	5	8
MAR 18	0	15	2	17	51	68	0	2	0	2	18	20
MAR 19	7	90	0	97	20	117	5	2	4	11	44	55
MAR 20	5	25	0	30	44	74	2	8	0	10	25	35
MAR 21	0	29	0	29	29	58	2	0	0	2	16	18
MAR 22	0	85	0	85	52	137	0	0	0	0	19	19
MAR 23	0	42	5	47	44	91	0	4	3	7	39	46
MAR 24	0	0	47	47	31	78	0	3	8	11	62	73
MAR 25	0	5	216	221	98	319	0	10	0	10	71	81

SUPPLEMENT

Date	E	C	W	D	I	T	E	C	W	D	I	T
MAR 26	0	5	280	285	110	395	2	6	0	8	69	77
MAR 27	25	10	100	135	57	192	30	0	70	100	82	182
MAR 28	2	0	0	2	23	25	0	42	0	42	132	174
MAR 29	14	4	0	18	28	46	0	32	0	32	127	159
MAR 30	0	30	0	30	40	70	0	6	0	6	65	71
MAR 31	0	42	0	42	44	86	0	0	0	0	33	33
APR 01	0	22	0	22	59	81	2	6	0	8	24	32
APR 02	0	21	0	21	36	57	6	35	3	44	43	87
APR 03	0	95	5	100	37	137	0	50	20	70	43	113
APR 04	0	9	9	18	29	47	0	70	0	70	66	136
APR 05	30	13	0	43	29	72	24	99	0	123	77	200
APR 06	9	6	8	23	55	78	0	264	3	267	57	324
APR 07	0	2	3	5	16	21	0	197	9	206	98	304
APR 08	3	8	0	11	22	33	10	40	42	92	129	221
APR 09	23	0	0	23	54	77	6	6	7	19	107	126
APR 10	19	5	8	27	40	67	0	87	7	94	100	194
APR 11	12	17	0	29	49	78	0	39	37	76	134	210
APR 12	5	0	0	5	27	32	0	33	47	80	121	201
APR 13	0	4	0	4	62	66	4	20	21	45	149	194
APR 14	0	9	0	9	79	88	0	29	2	31	95	126
APR 15	0	14	0	14	26	40	3	90	0	93	67	160
APR 16	0	8	0	8	32	40	0	15	0	15	63	78
APR 17	0	7	0	7	17	24	0	17	0	17	29	46
APR 18	0	2	0	2	10	12	14	9	0	23	24	47
APR 19	2	0	0	2	16	18	4	3	0	7	31	38
APR 20	0	0	0	0	26	26	11	2	0	13	17	30
APR 21	0	0	0	0	13	13	9	14	0	23	32	55
APR 22	0	0	3	3	18	21	0	15	0	15	34	49
APR 23	0	7	0	7	19	26	0	4	0	4	30	34
APR 24	4	0	0	4	25	29	0	13	2	15	30	45
APR 25	2	20	0	22	39	61	0	0	2	2	50	52
APR 26	0	7	0	7	35	42	86	0	4	90	121	211
APR 27	10	190	4	204	45	249	13	0	0	13	69	82
APR 28	0	6	0	6	39	45	15	27	18	60	122	182
APR 29	0	7	0	7	38	45	4	29	50	83	139	222
APR 30	0	15	0	15	35	50	9	51	48	108	58	166
MAY 01	0	26	10	36	35	71	220	12	62	294	35	329
MAY 02	2	103	0	105	41	146	10	27	0	37	79	116
MAY 03	0	8	0	8	29	37	20	33	0	53	67	120
MAY 04	0	4	0	4	38	42	0	16	0	16	76	92
MAY 05	0	3	0	3	37	40	0	0	11	11	56	67
MAY 06	3	3	23	29	38	67	0	10	7	17	48	65
MAY 07	4	2	3	9	23	32	0	7	0	7	83	90
MAY 08	8	6	3	17	41	58	0	9	0	9	84	93
MAY 09	6	13	5	24	39	63	3	6	0	9	97	106

Date	E	C	W	D	I	T	E	C	W	D	I	T
MAY 10	0	0	0	0	32	32	0	8	3	11	23	34
MAY 11	0	8	0	8	47	55	0	4	0	4	138	142
MAY 12	0	0	0	0	45	45	0	7	1	8	42	50
MAY 13	0	9	0	9	31	40	2	2	0	4	17	21
MAY 14	5	8	0	13	39	52	2	14	0	16	49	65
MAY 15	0	2	1	3	43	46	5	24	0	29	40	69
MAY 16	0	0	3	3	50	53	24	9	0	33	51	84
MAY 17	0	4	45	49	86	135	7	43	0	50	63	113
MAY 18	6	2	16	24	96	120	5	34	0	39	53	92
MAY 19	0	20	42	62	22	84	5	7	0	12	74	86
MAY 20	3	30	5	38	56	94	18	4	0	22	29	51
MAY 21	20	5	20	45	67	112	0	140	0	140	33	173
MAY 22	0	7	5	12	25	37	4	26	2	32	41	73
MAY 23	0	1	0	1	30	31	4	12	0	16	34	50
MAY 24	0	10	0	10	19	29	2	14	6	22	80	102
MAY 25	0	1	0	1	25	26	4	34	20	58	52	110
MAY 26	1	1	0	2	14	16	14	7	6	27	66	93
MAY 27	0	0	0	0	13	13	0	32	0	32	61	93
MAY 28	1	1	0	2	13	15	0	275	0	275	101	376
MAY 29	3	0	0	3	13	16	0	34	0	34	65	99
MAY 30	3	3	0	6	32	38	0	3	6	9	18	27
MAY 31	2	8	0	10	25	35	1	3	0	4	15	19
JUN 01	12	0	0	12	58	70	22	11	3	36	52	88
JUN 02	31	12	0	43	62	105	63	35	3	101	51	152
JUN 03	12	97	0	109	35	144	169	0	7	176	61	237
JUN 04	0	100	0	100	61	161	120	23	105	248	170	418
JUN 05	0	221	0	221	26	247	15	35	13	63	92	155
JUN 06	25	0	0	25	41	66	0	9	14	23	89	112
JUN 07	2	11	5	18	99	117	0	30	81	111	64	175
JUN 08	0	20	0	20	60	80	2	29	40	71	28	99
JUN 09	0	2	11	13	92	105	0	6	0	6	22	28
JUN 10	10	0	203	213	54	267	7	9	0	16	25	41
JUN 11	0	0	2	2	51	53	0	1	2	3	24	27
JUN 12	0	0	2	2	30	32	0	10	0	10	50	60
JUN 13	5	0	5	10	38	48	0	26	7	33	46	79
JUN 14	1	1	0	2	26	28	52	15	6	73	81	154
JUN 15	0	3	0	3	26	29	10	33	4	47	41	88
JUN 16	0	0	11	11	19	30	9	2	0	11	14	25
JUN 17	0	1	0	1	21	22	14	0	2	16	15	31
JUN 18	0	12	0	12	28	40	2	0	0	2	22	24
JUN 19	1	0	1	2	12	14	31	14	5	50	100	150
JUN 20	0	3	0	3	12	15	3	43	3	49	60	109
JUN 21	2	0	0	2	7	9	0	70	2	72	307	379
JUN 22	0	0	6	6	7	13	0	95	0	95	55	150

SUPPLEMENT

Date	E	C	W	D	I	T	E	C	W	D	I	T
JUN 23	0	1	0	1	12	13	5	43	100	148	120	268
JUN 24	0	2	0	2	12	14	0	24	3	27	89	116
JUN 25	0	40	0	40	17	57	0	87	10	97	84	181
JUN 26	10	0	0	10	22	32	0	6	24	30	48	78
JUN 27	0	2	0	2	13	15	0	0	26	26	118	144
JUN 28	1	2	0	3	18	21	0	4	21	25	62	87
JUN 29	0	0	0	0	23	23	0	25	114	139	26	165
JUN 30	2	0	0	2	27	29	0	35	6	41	52	93
JUL 01	2	4	0	6	78	84	0	258	3	261	8	269
JUL 02	14	8	0	22	25	47	0	2	0	2	14	16
JUL 03	6	2	0	8	53	61	0	2	1	3	17	20
JUL 04	74	42	0	116	40	156	3	2	0	5	7	12
JUL 05	0	4	0	4	14	18	0	142	0	142	17	159
JUL 06	0	3	0	3	18	21	0	31	0	31	17	48
JUL 07	0	4	0	4	22	26	0	6	21	27	27	54
JUL 08	0	33	0	33	35	68	3	2	8	13	30	43
JUL 09	0	15	0	15	31	46	5	3	4	12	56	68
JUL 10	0	2	0	2	13	15	8	5	3	16	49	65
JUL 11	0	5	0	5	16	21	215	4	2	221	49	270
JUL 12	0	0	0	0	15	15	117	42	3	162	44	206
JUL 13	2	0	0	2	6	8	43	7	0	50	25	75
JUL 14	0	3	6	9	13	22	0	84	0	84	29	113
JUL 15	0	4	9	13	21	34	0	3	0	3	28	31
JUL 16	0	0	0	0	7	7	0	6	3	9	21	30
JUL 17	0	0	1	1	4	5	0	38	0	38	36	74
JUL 18	0	1	0	1	8	9	0	21	0	21	51	72
JUL 19	0	0	0	0	22	22	2	5	0	7	30	37
JUL 20	0	4	10	14	32	46	1	22	0	23	44	67
JUL 21	0	6	15	21	45	66	10	1	91	102	43	145
JUL 22	0	4	20	24	51	75	0	20	6	26	44	70
JUL 23	0	15	9	24	58	82	0	113	10	123	82	205
JUL 24	0	44	0	44	51	95	2	8	3	13	46	59
JUL 25	3	13	0	16	35	51	6	3	0	9	36	45
JUL 26	0	11	0	11	20	31	1	5	1	7	47	54
JUL 27	2	16	0	18	27	45	0	10	2	12	22	34
JUL 28	0	3	0	3	34	37	2	3	1	6	9	15
JUL 29	0	20	0	20	12	32	1	1	18	20	14	34
JUL 30	0	13	2	15	18	33	2	9	4	15	6	21
JUL 31	0	0	0	0	13	13	0	5	0	5	7	12
AUG 01	0	36	0	36	38	74	0	2	0	2	3	5
AUG 02	1	0	0	1	18	19	0	0	2	2	5	7
AUG 03	0	0	2	2	13	15	0	2	0	2	3	5
AUG 04	0	0	2	2	15	17	1	1	0	2	7	9
AUG 05	0	4	0	4	9	13	1	2	4	7	3	10
AUG 06	0	5	0	5	4	9	0	8	3	11	18	29

Date	E	C	W	D	I	T	E	C	W	D	I	T
AUG 07	20	0	0	20	33	53	11	3	0	14	16	30
AUG 08	1	5	0	6	16	19	1	1	0	2	8	10
AUG 09	8	1	0	9	21	30	7	11	0	18	13	31
AUG 10	16	2	1	19	9	28	26	2	4	32	35	67
AUG 11	0	1	1	2	12	14	21	2	5	28	22	50
AUG 12	0	1	0	1	7	8	10	1	0	11	33	44
AUG 13	24	3	0	27	27	54	2	45	1	48	19	67
AUG 14	68	0	0	68	114	182	2	5	2	9	15	24
AUG 15	38	5	0	43	59	102	6	9	0	15	12	27
AUG 16	27	4	0	31	26	57	2	10	0	12	29	41
AUG 17	0	5	0	5	15	20	2	10	0	12	21	33
AUG 18	624	9	0	633	126	759	4	6	0	10	31	41
AUG 19	0	23	6	29	66	95	0	5	2	7	30	37
AUG 20	641	29	4	674	90	764	4	9	4	17	29	46
AUG 21	29	22	0	51	91	142	86	27	0	113	48	161
AUG 22	21	13	3	37	64	101	9	12	9	30	66	96
AUG 23	2	32	0	34	55	89	0	29	2	31	54	85
AUG 24	0	31	0	31	73	104	0	23	35	58	55	113
AUG 25	0	38	11	49	65	114	0	0	31	31	109	140
AUG 26	0	192	15	207	56	263	0	9	11	20	67	87
AUG 27	6	8	0	14	50	64	17	11	4	32	52	84
AUG 28	6	22	0	28	77	105	8	9	3	20	41	61
AUG 29	0	3	0	3	43	46	13	0	3	16	45	61
AUG 30	2	5	0	7	22	29	6	21	0	27	49	76
AUG 31	8	0	2	10	62	72	0	50	0	50	38	88
SEP 01	7	2	11	20	48	68	0	6	0	6	115	121
SEP 02	25	10	13	48	38	46	0	29	0	29	90	119
SEP 03	10	5	0	15	35	50	4	47	0	51	81	132
SEP 04	0	16	0	16	28	44	1	96	0	97	79	176
SEP 05	0	3	0	3	45	48	0	7	0	7	45	52
SEP 06	0	2	5	7	33	40	0	5	5	10	23	33
SEP 07	0	1	0	1	50	51	13	10	10	33	51	84
SEP 08	0	11	10	21	29	50	14	12	97	123	76	199
SEP 09	2	2	0	4	42	46	10	10	13	33	41	74
SEP 10	0	11	15	26	29	55	2	14	2	18	20	38
SEP 11	0	34	0	34	46	80	5	18	9	32	37	69
SEP 12	0	7	6	13	17	30	0	13	6	19	39	58
SEP 13	0	42	0	42	40	82	0	11	2	13	21	34
SEP 14	200	257	56	513	35	548	0	6	0	6	14	20
SEP 15	98	25	15	138	43	181	0	5	0	5	17	22
SEP 16	413	25	2	440	51	491	0	12	0	12	34	46
SEP 17	10	0	3	13	25	38	0	10	4	14	24	38
SEP 18	25	0	10	35	41	76	0	11	5	16	28	44
SEP 19	0	341	25	366	86	452	1	10	5	16	26	42
SEP 20	9	49	0	58	33	91	3	18	9	30	25	55

Date	E	C	W	D	I	T	E	C	W	D	I	T
SEP 21	0	43	0	43	71	114	0	6	3	9	23	32
SEP 22	0	88	0	88	36	124	0	30	5	35	26	61
SEP 23	0	3	0	3	78	81	2	53	0	55	52	107
SEP 24	0	10	0	10	49	59	6	49	0	55	45	100
SEP 25	23	3	0	26	59	85	8	4	3	15	33	48
SEP 26	0	3	3	6	43	49	4	10	2	16	27	43
SEP 27	0	3	0	3	40	43	7	6	2	15	40	55
SEP 28	0	3	0	3	38	41	14	4	0	18	31	49
SEP 29	3	5	2	10	29	39	3	15	0	18	20	38
SEP 30	8	29	10	47	47	94	6	26	0	32	43	75
OCT 01	14	4	30	48	110	158	2	9	0	11	29	40
OCT 02	18	19	0	37	106	143	15	9	0	24	24	48
OCT 03	7	14	0	21	44	65	0	9	5	14	31	45
OCT 04	126	5	40	171	84	255	2	4	5	11	26	37
OCT 05	128	12	15	155	105	260	1	19	4	24	22	46
OCT 06	9	64	5	78	82	160	4	9	12	25	40	65
OCT 07	0	36	16	52	71	123	103	18	4	125	27	152
OCT 08	4	7	17	28	62	90	10	35	15	60	108	168
OCT 09	0	15	0	15	76	91	99	9	0	108	170	278
OCT 10	5	0	2	7	39	46	11	31	0	42	87	129
OCT 11	12	25	2	39	43	82	0	82	2	84	67	151
OCT 12	7	21	0	28	24	52	0	56	16	72	140	212
OCT 13	13	7	13	33	57	90	3	66	23	92	139	231
OCT 14	19	12	61	92	97	189	0	378	53	431	56	487
OCT 15	12	6	7	25	53	78	25	24	40	89	76	165
OCT 16	7	22	13	42	76	118	0	25	8	33	79	112
OCT 17	9	78	3	90	97	187	24	6	6	36	78	114
OCT 18	9	54	0	63	74	137	45	3	0	48	124	172
OCT 19	0	306	0	306	50	356	14	6	0	20	67	87
OCT 20	0	85	10	95	65	160	0	65	0	16	45	61
OCT 21	0	35	30	65	59	124	0	3	0	3	40	43
OCT 22	10	3	38	51	36	87	0	23	0	23	39	62
OCT 23	0	22	3	25	40	65	0	0	0	0	78	78
OCT 24	0	11	29	40	80	120	0	1	3	4	9	13
OCT 25	4	19	30	53	56	109	0	7	19	26	457	483
OCT 26	0	4	9	13	79	92	0	7	0	7	43	50
OCT 27	0	11	0	11	33	44	6	17	0	23	37	60
OCT 28	2	11	0	13	20	33	0	38	10	48	109	157
OCT 29	6	10	0	16	47	63	17	20	10	47	63	110
OCT 30	4	9	2	15	26	41	2	16	4	22	54	76
OCT 31	2	16	0	18	30	48	21	17	0	38	57	95
NOV 01	5	2	15	22	37	59	16	17	4	37	91	128
NOV 02	0	6	0	6	24	30	2	24	6	32	96	128
NOV 03	0	29	2	31	32	63	0	78	0	78	57	135
NOV 04	41	13	14	68	48	116	30	87	5	122	52	174

Date	E	C	W	D	I	T	E	C	W	D	I	T
NOV 05	32	100	19	151	185	336	589	112	5	706	112	818
NOV 06	88	181	30	299	259	558	1175	268	50	1493	211	1704
NOV 07	0	60	9	69	126	195	108	466	3	577	173	750
NOV 08	89	135	0	224	308	532	18	387	15	420	99	519
NOV 09	30	33	10	73	271	344	0	65	14	79	95	174
NOV 10	20	54	61	135	472	607	2	29	136	267	86	353
NOV 11	0	73	27	100	214	314	0	92	228	320	124	444
NOV 12	5	88	12	105	141	246	0	115	30	145	360	505
NOV 13	4	13	37	54	66	120	8	208	170	386	93	479
NOV 14	0	56	0	56	51	107	7	172	200	379	78	457
NOV 15	2	96	10	108	18	126	0	31	284	315	81	396
NOV 16	2	14	5	21	65	86	19	180	120	319	50	369
NOV 17	3	62	38	103	92	195	10	81	41	132	75	207
NOV 18	3	8	45	56	74	130	58	96	4	158	71	229
NOV 19	10	14	34	58	35	93	0	158	100	258	42	300
NOV 20	0	28	8	36	32	68	0	47	0	47	27	74
NOV 21	2	5	33	40	44	84	0	37	0	37	39	76
NOV 22	0	9	11	20	34	54	2	62	4	68	27	95
NOV 23	0	20	7	27	32	59	0	25	2	27	20	47
NOV 24	0	8	17	25	24	49	2	28	0	30	35	65
NOV 25	0	4	1	5	6	11	0	11	5	16	17	33
NOV 26	0	3	0	3	7	10	2	3	9	14	41	55
NOV 27	0	1	2	3	4	7	6	4	2	12	34	46
NOV 28	0	0	3	3	5	8	20	22	0	42	26	68
NOV 29	6	2	7	15	8	23	4	13	0	17	37	54
NOV 30	1	4	0	5	11	16	0	14	0	14	31	45
DEC 1	5	4	0	9	19	28	1	25	0	26	21	57
DEC 2	2	0	0	2	13	15	7	1026	16	1049	47	1096
DEC 3	20	2	0	22	18	40	0	4	1	5	24	29
DEC 4	0	29	0	29	55	84	0	7	0	7	31	38
DEC 5	0	9	3	12	56	68	2	3	0	5	14	19
DEC 6	0	2	0	2	26	28	0	4	26	30	8	38
DEC 7	4	10	0	14	23	37	3	2	0	5	57	62
DEC 8	0	3	12	15	62	77	7	0	2	9	15	24
DEC 9	0	3	0	3	45	48	0	22	0	22	35	57
DEC 10	0	7	0	7	42	49	0	21	0	21	44	65
DEC 11	5	6	0	11	44	55	6	54	0	60	85	145
DEC 12	0	16	4	20	92	112	80	35	0	115	149	264
DEC 13	2	54	5	61	52	113	16	0	0	16	101	117
DEC 14	0	13	9	22	137	159	10	37	0	47	73	120
DEC 15	2	19	0	21	62	83	0	104	0	104	81	185
DEC 16	0	7	4	11	54	65	15	180	5	200	95	295
DEC 17	0	3	3	6	31	37	14	43	8	65	70	135
DEC 18	1	4	2	7	63	70	6	33	0	39	26	65
DEC 19	0	228	0	228	31	259	0	9	0	9	24	33

Date	E	C	W	D	I	T	E	C	W	D	I	T
DEC 20	0	143	0	143	117	260	0	7	2	9	46	55
DEC 21	9	17	0	26	42	68	0	4	0	4	24	28
DEC 22	19	10	5	34	25	59	2	7	4	13	46	59
DEC 23	0	0	50	50	15	65	0	2	10	12	55	67
DEC 24	0	4	0	4	34	38	4	4	0	8	48	56
DEC 25	0	32	0	32	16	48	9	8	2	19	32	51
DEC 26	0	13	0	13	11	24	0	33	4	37	24	61
DEC 27	9	6	0	15	22	37	0	10	0	10	42	52
DEC 28	2	4	0	6	37	43	0	30	2	32	60	92
DEC 29	34	0	20	54	67	121	0	61	0	61	79	140
DEC 30	0	11	13	24	15	39	0	12	2	14	48	62
DEC 31	0	12	0	12	15	27	0	0	2	2	19	21

E - the daily FI from LDE-type flares located between E90° and E45° on the solar disk;
C - the FI for LDE-type flares located from E44° to W44° on the Sun;
W - the same as above but for LDE-type flares located from W45° to W90°;
D - the soft X–ray flare index of all LDE-type flares observed in the given day;
I - the daily flare index of the impulsive–type flares;
T - the daily flare index of all soft X-ray flares (total, T = D + I).

Flares and CMEs appear to be often closely related (Dryer, 1996). The role of the coronal mass ejections (by using soft X ray solar emission as proxy data) in producing the nonrecurrent geomagnetic storms has been confirmed by Landi and Storini (1997) as well as Landi et al. (1998).

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