

SERVICE INTERNATIONAL DES INDICES GEOMAGNETIQUES  
 INTERNATIONAL SERVICE OF GEOMAGNETIC INDICES



**Bureau des Publications SIIG - Bulletin Mensuel n°99-10 - Octobre 1999**  
**ISGI Publications Office Monthly Bulletin n°99-10 - October 1999**

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Explanations about published data are given in Special Issue 1994 of ISGI Monthly Bulletin.

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**PRELIMINARY REPORT ON RAPID VARIATIONS**

**OCTOBER 1999**

**SSC - Storm Sudden Commencements**

14 08 58 C : SPT QUE  
 sfe : BDV+ NAG HYB GNA  
 21 02 25 A : SOD\* CLF\* HRB NAG\* COI QUE LNP  
 HYB ETT CNB\*  
 B : NGK\* VAL\* BDV\* GCK\* EBR\* SPT\* GNA\*  
 - : WNG\*  
 28 12 16 B : NUR  
 C : NGK\* VAL\* BDV\* EBR SPT\* QUE HYB  
 ETT  
 - : WNG\*

**SFE - Solar Flare Effects**

14 0855-0908 BDV+ NAG HYB GNA  
 (ssc : HRB SPT QUE)  
 20 0920-0937 BDV  
 25 0629-0640 HYB ETT  
 27 0429-0436 LNP  
 31 1120-1148 WNG NGK VAL EBR SPT

**REPORTING OBSERVATORIES (up to 2<sup>nd</sup> December 1999) :**

SOD NUR WNG NGK VAL BDV CLF HRB NAG GCK MMB EBR COI SPT KAK KNY QUE LNP HYB  
 ETT GNA HER CNB

**FIVE INTERNATIONAL QUIETEST DAYS**

**FIVE INTERNATIONAL MOST DISTURBED DAYS**

<b>October 1999</b>	20	7	6	19K	30	22	12	10	23	14
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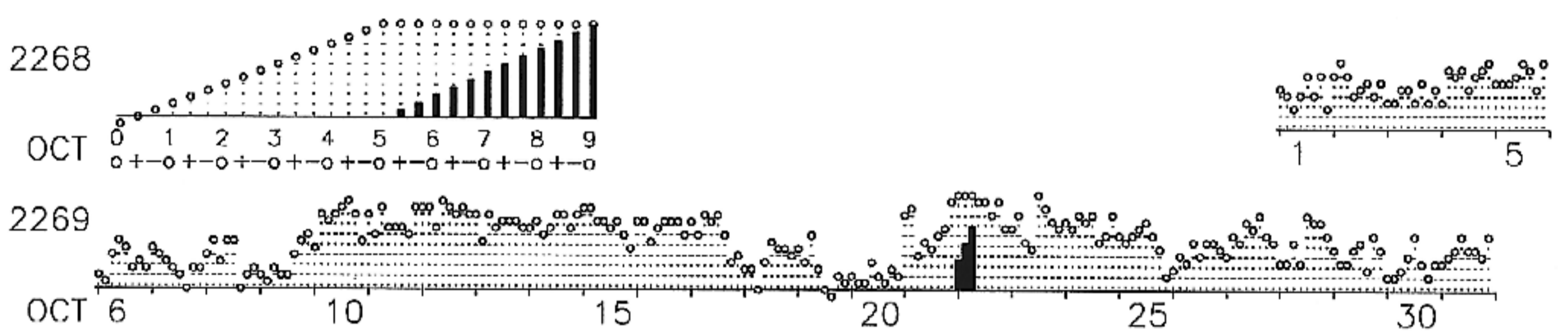
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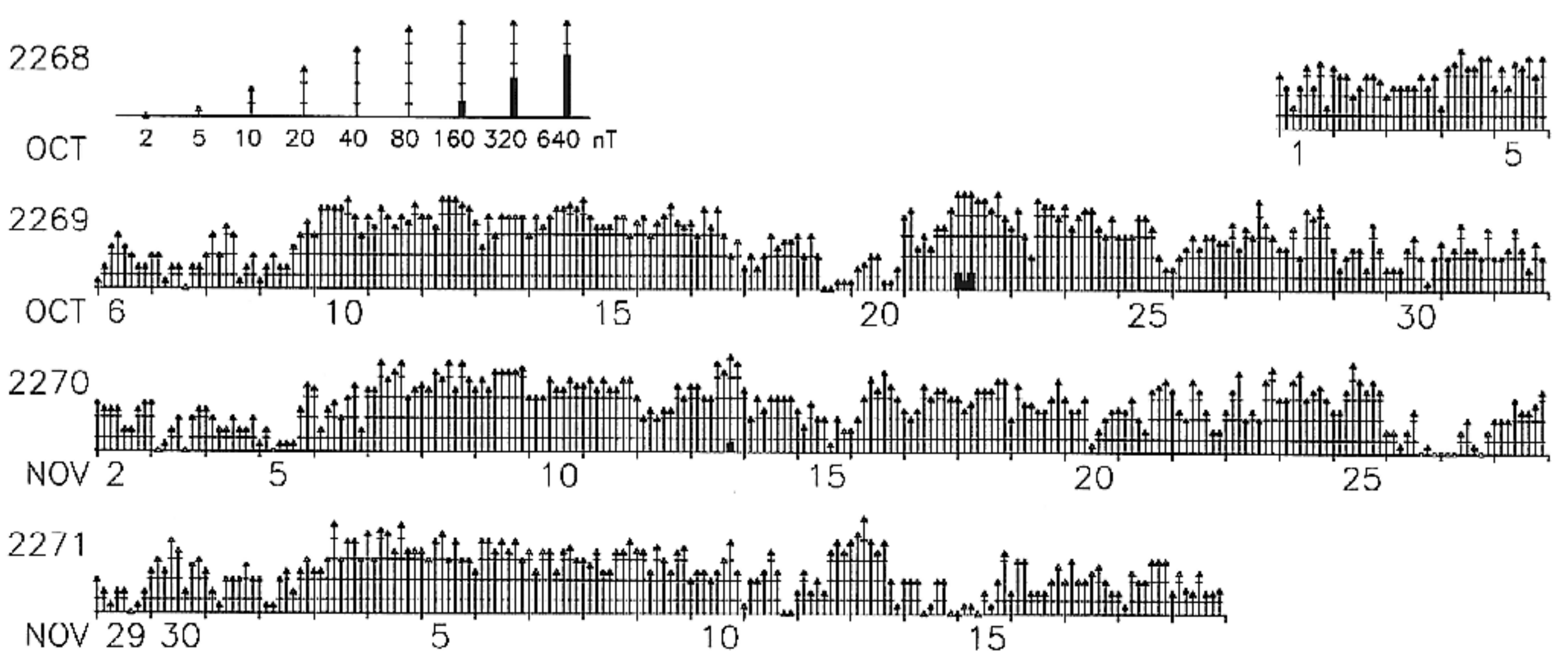
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OCTOBER 1999						Geomagnetic Indices (provisional)								Daily Average and Sum				
	aa				D	quiet days	am and Km for each three hour interval								Am Σ Km		Ap Σ Kp	
	N	S	am	pm			1	2	3	4	5	6	7	8				
1	23	16	16	23	20		18 2+	16 2o	10 1+	16 2o	31 3o	16 2o	31 3o	10 1+	19	17o	9	17o
2	23	21	23	21	22		27 3o	44 4-	32 3o	16 2o	18 2+	21 3-	16 2o	26 3-	25	21+	13	21+
3	18	17	15	20	18		13 2-	13 2-	19 2+	19 2+	11 2-	22 3-	11 2-	18 2+	16	16+	8	17-
4	42	31	34	39	36		13 2-	36 3+	32 3o	38 3+	20 2+	27 3o	36 3+	42 4-	31	24-	17	25-
5	38	24	25	37	31		24 3-	25 3-	22 3-	27 3o	41 4-	36 3+	20 2+	50 4-	31	24o	18	26-
6	11	13	13	11	12	C *	6 1o	5 1-	16 2o	23 3-	18 2+	10 1+	11 2-	9 1+	12	13o	6	12-
7	8	8	9	7	8	CK *	17 2+	14 2o	11 2-	8 1+	6 1o	2 0+	9 1+	8 1+	9	11+	5	10+
8	18	14	20	12	16	K	14 2o	21 3-	12 2-	24 3-	24 3-	2 0+	6 1o	10 1+	14	14+	7	13+
9	18	11	8	21	15		7 1o	5 1-	10 1+	6 1o	7 1o	14 2o	21 3-	29 3o	12	13-	6	12o
10	57	45	50	52	51		19 2+	55 4o	49 4-	60 4o	65 4+	80 5-	53 4o	25 3-	51	30-	33	33+
11	57	34	45	45	45		55 4o	32 3o	62 4+	36 3+	35 3+	39 3+	33 3o	63 4+	44	29-	29	32+
12	66	57	51	72	61		61 4+	62 4+	35 3+	75 5-	70 4+	59 4o	63 4+	56 4o	60	33+	46	39o
13	41	35	31	45	38		54 4o	26 3-	52 4o	36 3+	50 4-	43 4-	47 4-	40 3+	44	28+	23	29+
14	57	41	37	61	49		34 3+	43 4-	30 3o	34 3+	60 4o	55 4o	40 3+	57 4o	44	29-	31	33+
15	50	34	47	37	42		63 4+	64 4+	46 4-	41 4-	40 3+	45 4-	29 3o	19 2+	43	28+	31	33-
16	54	28	36	46	41		47 4-	46 4-	21 3-	34 3+	48 4-	50 4-	41 4-	30 3o	40	27+	26	31-
17	37	30	38	29	33		42 4-	28 3o	59 4o	43 4-	56 4o	27 3o	12 2-	14 2o	35	25o	21	26+
18	17	13	10	20	15		8 1+	8 1+	2 0+	11 2-	22 3-	18 2+	18 2+	15 2o	13	14o	6	13-
19	10	12	18	4	11	KK *	20 2+	13 2-	28 3o	9 1+	3 0+	1 0o	6 1o	5 1-	11	10+	6	10-
20	6	10	9	8	8	C *	6 1o	5 1-	4 1-	13 2-	7 1o	5 1-	9 1+	7 1o	7	8o	3	6o
21	32	39	36	35	36		54 4o	63 4+	14 2o	21 3-	17 2+	28 3o	35 3+	78 5-	39	26+	20	25o
22	105	106	140	72	106		184 6+	246 7o	331 8-	82 5-	73 5-	54 4o	86 5-	34 3+	136	42+	91	46o
23	46	50	32	65	48		40 3+	59 4o	24 3-	17 2+	94 5o	64 4+	42 4-	40 3+	48	29-	32	33+
24	50	41	51	40	46		49 4-	34 3+	55 4o	46 4-	53 4o	24 3-	27 3o	52 4o	43	28+	26	31+
25	25	29	30	25	27		29 3o	23 3-	30 3o	38 3+	49 4-	31 3o	18 2+	7 1o	28	22o	16	23+
26	22	14	15	21	18		9 1+	16 2o	12 2-	24 3-	16 2o	22 3-	22 3-	19 2+	18	17+	10	18o
27	43	25	26	41	34		15 2o	33 3o	25 3-	41 4-	34 3+	56 4o	31 3o	21 3-	32	24+	19	26o
28	41	30	19	52	36		13 2-	13 2-	24 3-	11 2-	56 4o	49 4-	49 4-	31 3o	31	22o	21	25+
29	19	13	13	19	16		17 2+	12 2-	13 2-	20 2+	24 3-	9 1+	27 3o	19 2+	18	17+	9	17+
30	12	11	10	13	12	C *	7 1o	6 1o	8 1+	15 2o	29 3o	13 2-	7 1o	11 2-	12	13-	6	13-
31	23	17	21	19	20		13 2-	14 2o	20 2+	29 3o	19 2+	19 2+	14 2o	33 3o	20	19-	10	18+

ROT DAY IN SOLAR ROTATION INTERVAL Three-hour indices Km(provisional) OCT 1999



ROT DAY IN SOLAR ROTATION INTERVAL Three-hour indices aa (logscale) OCT-DEC 1999





HOURLY EQUATORIAL DST VALUES (PROVISIONAL) - OCTOBER 1999 -

Unit=NT

U.T. DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	-21	-19	-20	-20	-18	-14	-16	-17	-13	-11	-12	-14	-14	-14	-14	-13	-13	-12	-10	-14	-16	-17	-15	-14
2	-16	-19	-17	-17	-14	-14	-26	-26	-23	-19	-18	-17	-20	-20	-18	-19	-17	-9	-7	-8	-16	-16	-13	-14
3	-14	-14	-15	-15	-11	-10	-9	-6	-7	-26	-29	-24	-16	-11	-13	-18	-16	-9	-1	-2	-9	-14	-14	-8
4	-4	-3	-3	-7	-21	-31	-30	-24	-20	-19	-17	-11	-13	-12	-12	-10	-13	-22	-30	-28	-24	-18	-23	-17
5	-10	-6	-3	-4	-3	-11	-11	-2	4	7	5	4	-20	-16	-15	-13	-20	-26	-21	-17	-18	-17	-16	-13
6	-9	-8	-11	-15	-16	-16	-16	-16	-11	-13	-9	-7	-4	-3	0	-2	-2	-4	-4	-4	-5	-3	-1	1
7	2	3	-1	0	1	4	4	5	7	8	4	4	7	5	4	3	5	5	2	0	-1	-3	-2	4
8	7	11	15	14	10	5	7	11	13	7	0	-11	-23	-22	-12	-10	-11	-10	-7	-7	-9	-7	-4	1
9	3	5	7	6	4	5	3	-2	-3	-2	-3	-4	-4	0	3	2	6	11	14	21	16	13	18	18
10	18	6	-4	-6	1	-7	-33	-35	-39	-35	-48	-46	-58	-65	-84	-76	-77	-76	-71	-57	-48	-46	-47	-45
11	-43	-45	-45	-40	-40	-36	-43	-66	-56	-44	-38	-42	-42	-37	-31	-31	-25	-22	-15	-19	-12	-18	-25	-19
12	-21	-20	-30	-44	-46	-48	-51	-47	-52	-72	-68	-74	-60	-50	-46	-48	-56	-51	-48	-30	-39	-39	-31	-34
13	-42	-46	-49	-46	-38	-39	-44	-47	-53	-54	-48	-50	-56	-44	-38	-35	-36	-28	-12	-28	-34	-33	-26	-28
14	-31	-31	-30	-31	-37	-37	-32	-31	-22	-18	-18	-19	-32	-44	-53	-48	-34	-29	-25	-26	-31	-27	-27	-28
15	-40	-50	-60	-56	-55	-70	-64	-52	-51	-52	-48	-48	-43	-42	-40	-44	-37	-33	-30	-34	-34	-32	-27	-23
16	-28	-31	-33	-32	-32	-38	-33	-27	-29	-27	-30	-27	-27	-39	-42	-33	-24	-19	-26	-33	-28	-30	-30	-26
17	-33	-35	-36	-36	-36	-43	-49	-49	-49	-43	-45	-54	-58	-51	-41	-33	-28	-30	-28	-24	-22	-19	-16	-15
18	-15	-14	-10	-9	-8	-9	-7	-8	-10	-10	-10	-12	-17	-15	-10	-14	-19	-16	-14	-17	-14	-15	-18	-16
19	-16	-15	-11	-7	-7	-12	-22	-24	-23	-19	-15	-12	-12	-10	-7	-6	-5	-5	-3	-3	-4	-5	-5	-2
20	1	1	1	2	4	6	11	12	9	12	9	5	3	5	5	2	4	4	3	1	-2	2	5	6
21	9	9	25	32	27	17	19	15	14	10	9	13	13	10	11	11	18	13	2	-3	0	0	-1	21
22	-24	-68	-92	-108	-152	-201	-231	-221	-202	-181	-180	-179	-164	-137	-121	-110	-112	-109	-106	-90	-92	-82	-75	-68
23	-62	-61	-62	-67	-68	-61	-60	-61	-59	-55	-54	-51	-50	-48	-49	-56	-67	-69	-66	-60	-55	-58	-64	-62
24	-57	-53	-58	-68	-63	-62	-66	-64	-70	-65	-60	-58	-63	-60	-50	-48	-49	-42	-38	-34	-35	-41	-42	-43
25	-44	-39	-44	-48	-42	-37	-36	-39	-39	-41	-46	-41	-47	-46	-39	-39	-48	-44	-41	-37	-36	-35	-35	-31
26	-29	-29	-29	-31	-27	-24	-21	-23	-22	-23	-26	-30	-32	-34	-34	-34	-33	-25	-19	-17	-19	-19	-23	-21
27	-24	-24	-22	-26	-32	-34	-35	-45	-52	-54	-46	-42	-48	-56	-60	-64	-61	-48	-42	-50	-51	-49	-49	-46
28	-45	-38	-33	-31	-31	-29	-29	-35	-34	-32	-27	-25	-17	-18	-42	-54	-65	-67	-54	-52	-60	-59	-55	-49
29	-50	-45	-44	-41	-39	-39	-41	-43	-42	-36	-29	-28	-30	-25	-15	-13	-12	-12	-12	-13	-16	-13	-16	-22
30	-24	-22	-23	-21	-21	-18	-17	-20	-21	-21	-21	-22	-23	-26	-32	-28	-26	-22	-21	-19	-16	-18	-18	-14
31	-17	-19	-18	-18	-14	-8	-3	3	-2	-8	0	6	2	5	6	5	1	7	5	4	2	-1	-1	-8

DST  
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1999  
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