



Bureau des Publications SIIG - Bulletin Mensuel n° 97-04 - Avril 1997

ISGI Publications Office Monthly Bulletin n° 97-04 - April 1997

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

Ce Bulletin est adressé gracieusement aux Scientifiques intéressés, grâce à une dotation du FAGS et au soutien du laboratoire d'accueil, le CETP, et des organismes français de Recherche Scientifique (CNRS, INSU, BCMT).
Nous remercions aussi tout particulièrement les collaborateurs du Bulletin (cités ci-dessous) qui nous fournissent les données à diffuser dans des délais aussi brefs que possible.

*This Bulletin is freely offered to interested Scientists thanks to a dotation from FAGS, and to the support of the hosting laboratory CETP and of French Organisations of Scientific Research (CNRS, INSU, BCMT).
Special thanks are due to contributors (quoted below) for providing the here published geomagnetic data within shortly possible delay.*

| PRELIMINARY REPORT ON RAPID VARIATIONS | | APRIL 1997 |
|---|--|---|
| SSC - Storm Sudden Commencements | | SFE - Solar Flare Effects |
| 10 17 45 | A : HRB B : COI C : NGK BDV* GCK* | 01 1345-1420 WNG BDV+ TEN 17 1228-1234 BDV 21 1359-1407 NAG |
| 16 13 20 | A : HRB* B : NAG* BJI SPT*LNP C : WNG GCK* MMB COI HTY TEN HYB ETT | |
| REPORTING OBSERVATORIES (up to the 3 rd of June 1997) : SOD DOB NUR WNG NGK BDV CLF HRB NAG GCK MMB EBR COI BJI SPT FRD KAK HTY KNY QUE TEN LNP HYB ETT HER CNB | | |

| | FIVE INTERNATIONAL QUIETEST DAYS | | | | | FIVE INTERNATIONAL MOST DISTURBED DAYS | | | | |
|------------|----------------------------------|----|----|----|----|--|----|----|-----|-----|
| April 1997 | 28 | 15 | 26 | 27 | 29 | 11 | 17 | 21 | 22* | 16* |

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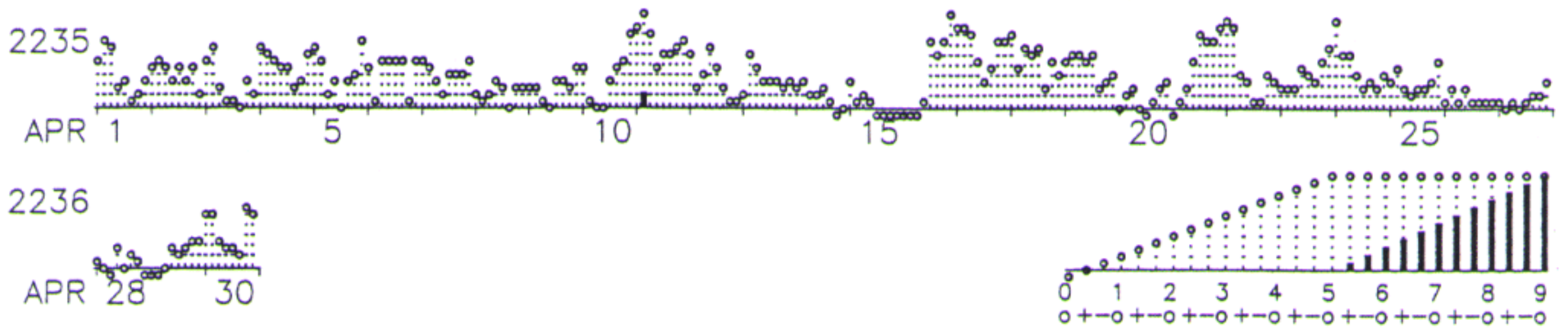
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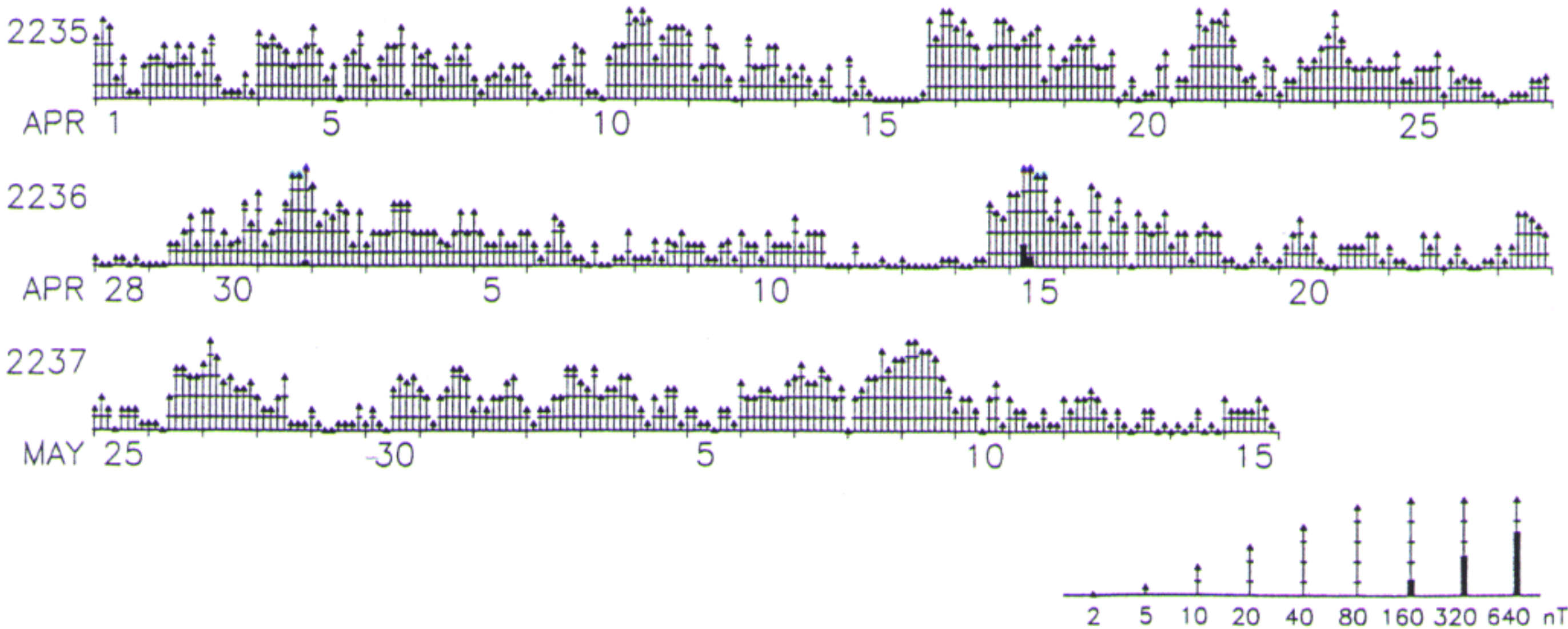
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| APRIL 1997 | | Geomagnetic Indices (provisional) | | | | | | | | | | | | Daily Average and Sum | | | | |
|------------|----|-----------------------------------|----|----|------------|--|-------|--------|-------|-------|-------|-------|-------|-----------------------|----|---------|----|-----|
| | aa | | | | quiet days | am and Km for each three hour interval | | | | | | | | Am Σ Km | | Ap Σ Kp | | |
| | N | S | am | pm | | D | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| 1 | 22 | 24 | 36 | 10 | 23 | | 26 3- | 42 4- | 36 3+ | 9 1+ | 12 2- | 5 1- | 7 1o | 12 2- | 19 | 16o | 11 | 17- |
| 2 | 19 | 17 | 17 | 18 | 18 | | 18 2+ | 23 3- | 20 2+ | 11 2- | 18 2+ | 11 2- | 17 2+ | 7 1o | 16 | 16+ | 9 | 17o |
| 3 | 15 | 8 | 16 | 6 | 11 | K | 26 3- | 36 3+ | 8 1+ | 4 1- | 5 1- | 2 0+ | 12 2- | 6 1o | 12 | 12- | 7 | 11+ |
| 4 | 28 | 20 | 29 | 19 | 24 | | 38 3+ | 28 3o | 25 3- | 19 2+ | 20 2+ | 10 1+ | 13 2- | 31 3o | 23 | 20- | 13 | 21o |
| 5 | 27 | 13 | 21 | 19 | 20 | | 34 3+ | 24 3- | 7 1o | 13 2- | 3 0+ | 13 2- | 15 2o | 44 4- | 19 | 16+ | 11 | 18- |
| 6 | 21 | 19 | 15 | 25 | 20 | | 17 2+ | 4 1- | 21 3- | 25 3- | 25 3- | 24 3- | 4 1- | 22 3- | 18 | 17o | 10 | 18- |
| 7 | 22 | 12 | 14 | 20 | 17 | | 25 3- | 17 2+ | 11 2- | 7 1o | 14 2o | 14 2o | 16 2o | 22 3- | 16 | 16+ | 9 | 17o |
| 8 | 9 | 9 | 8 | 11 | 9 | CC | 7 1o | 5 1- | 6 1o | 12 2- | 8 1+ | 3 0+ | 10 1+ | 9 1+ | 8 | 9- | 4 | 8+ |
| 9 | 12 | 8 | 5 | 15 | 10 | CC | 8 1+ | 8 1+ | 4 1- | 3 0+ | 11 2- | 12 2- | 8 1+ | 20 2+ | 9 | 11- | 6 | 11+ |
| 10 | 28 | 16 | 8 | 36 | 22 | | 19 2+ | 5 1- | 2 0+ | 2 0+ | 12 2- | 18 2+ | 26 3- | 59 4o | 18 | 14+ | 13 | 17- |
| 11 | 55 | 41 | 54 | 42 | 48 | | 67 4+ | 128 6- | 59 4o | 20 2+ | 30 3o | 29 3o | 37 3+ | 42 4- | 52 | 29+ | 37 | 33- |
| 12 | 18 | 19 | 26 | 12 | 19 | | 29 3o | 10 1+ | 14 2o | 34 3+ | 18 2+ | 10 1+ | 5 1- | 4 1- | 16 | 15- | 9 | 15+ |
| 13 | 16 | 17 | 16 | 17 | 17 | K | 6 1o | 27 3o | 18 2+ | 13 2- | 13 2- | 13 2- | 9 1+ | 12 2- | 14 | 14+ | 8 | 15o |
| 14 | 7 | 8 | 9 | 6 | 7 | CC | 10 1+ | 12 2- | 7 1o | 6 1o | 9 1+ | 5 1- | 0 0o | 2 0+ | 6 | 7+ | 4 | 9o |
| 15 | 5 | 6 | 9 | 2 | 5 | CC* | 13 2- | 4 1- | 6 1o | 5 1- | 0 0o | 0 0o | 0 0o | 0 0o | 4 | 4o | 2 | 4- |
| 16 | 38 | 28 | 3 | 63 | 33 | | 0 0o | 0 0o | 1 0o | 5 1- | 41 4- | 32 3o | 50 4- | 94 5o | 28 | 16o | 15 | 17o |
| 17 | 39 | 41 | 42 | 39 | 40 | | 66 4+ | 69 4+ | 54 4o | 22 3- | 11 2- | 19 2+ | 50 4- | 50 4- | 43 | 27- | 25 | 29- |
| 18 | 23 | 34 | 35 | 23 | 29 | | 52 4o | 20 2+ | 37 3+ | 32 3o | 39 3+ | 10 1+ | 22 3- | 16 2o | 29 | 22o | 14 | 22o |
| 19 | 22 | 21 | 24 | 19 | 22 | | 24 3- | 32 3o | 28 3o | 25 3- | 30 3o | 9 1+ | 12 2- | 16 2o | 22 | 19+ | 12 | 22- |
| 20 | 10 | 5 | 4 | 11 | 7 | CK | 3 0+ | 7 1o | 10 1+ | 2 0+ | 1 0o | 5 1- | 9 1+ | 13 2- | 6 | 7- | 4 | 8+ |
| 21 | 33 | 38 | 11 | 61 | 36 | | 1 0o | 4 1- | 8 1+ | 22 3- | 55 4o | 43 4- | 45 4- | 64 4+ | 30 | 20+ | 20 | 23- |
| 22 | 25 | 18 | 33 | 11 | 22 | | 84 5- | 61 4+ | 15 2o | 12 2- | 5 1- | 5 1- | 15 2o | 12 2- | 26 | 18- | 15 | 19o |
| 23 | 20 | 11 | 9 | 22 | 16 | | 10 1+ | 10 1+ | 8 1+ | 17 2+ | 15 2o | 12 2- | 24 3- | 36 3+ | 17 | 16o | 9 | 16- |
| 24 | 27 | 21 | 35 | 13 | 24 | | 76 5- | 32 3o | 28 3o | 16 2o | 10 1+ | 12 2- | 8 1+ | 16 2o | 25 | 19o | 11 | 19o |
| 25 | 15 | 11 | 12 | 14 | 13 | CC | 11 2- | 20 2+ | 9 1+ | 6 1o | 9 1+ | 9 1+ | 11 2- | 21 3- | 12 | 13+ | 6 | 13- |
| 26 | 7 | 8 | 9 | 7 | 8 | CC* | 5 1- | 9 1+ | 5 1- | 9 1+ | 5 1- | 4 1- | 5 1- | 5 1- | 6 | 7- | 3 | 6+ |
| 27 | 5 | 6 | 4 | 8 | 6 | CC* | 4 1- | 2 0+ | 4 1- | 2 0+ | 5 1- | 6 1o | 7 1o | 11 2- | 5 | 6+ | 3 | 5+ |
| 28 | 4 | 3 | 4 | 4 | 4 | CC* | 4 1- | 2 0+ | 1 0o | 8 1+ | 3 0+ | 6 1o | 4 1- | 1 0o | 4 | 4+ | 2 | 4+ |
| 29 | 10 | 6 | 4 | 12 | 8 | CC* | 1 0o | 0 0o | 2 0+ | 8 1+ | 7 1o | 9 1+ | 12 2- | 12 2- | 6 | 7+ | 3 | 6o |
| 30 | 19 | 14 | 17 | 16 | 17 | | 28 3o | 29 3o | 13 2- | 10 1+ | 8 1+ | 6 1o | 35 3+ | 27 3o | 20 | 18- | 10 | 17o |

ROT DAY IN SOLAR ROTATION INTERVAL Three-hour indices Km (provisional) APR 1997



ROT DAY IN SOLAR ROTATION INTERVAL Three-hour indices aa (logscale) APR-JUN 1997

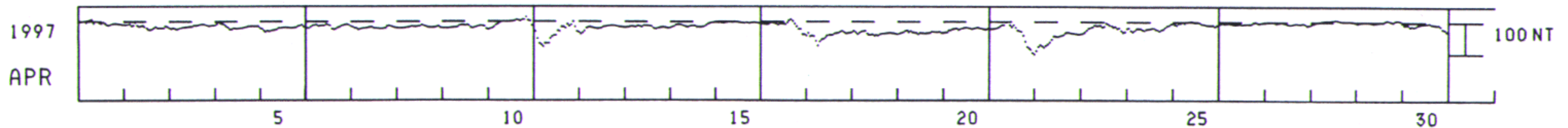


Dst monthly table of hourly indices - April 1997

HOURLY EQUATORIAL DST VALUES (PROVISIONAL)

APRIL 1997

| DAY | UNIT=NT | | | | | | | | | | | | | | | | | | | | | | | | U. T. | |
|-----|---------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-------|--|
| | 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 | -1 | 1 | 0 | -3 | 4 | 6 | 8 | -5 | 1 | 2 | -3 | -5 | -2 | -5 | -10 | -11 | -10 | -7 | -6 | -5 | -7 | -8 | -9 | -10 | | |
| 2 | -9 | -9 | -8 | -13 | -11 | -3 | -11 | -16 | -14 | -11 | -16 | -19 | -24 | -26 | -24 | -19 | -16 | -19 | -19 | -21 | -19 | -14 | -16 | -20 | | |
| 3 | -23 | -20 | -22 | -24 | -22 | -19 | -18 | -18 | -17 | -15 | -15 | -15 | -11 | -12 | -12 | -9 | -7 | -7 | -10 | -12 | -13 | -11 | -11 | -12 | | |
| 4 | -7 | -1 | -5 | -7 | -9 | -14 | -17 | -24 | -24 | -21 | -23 | -23 | -20 | -21 | -21 | -17 | -16 | -13 | -13 | -13 | -13 | -14 | -13 | -20 | | |
| 5 | -23 | -28 | -32 | -28 | -30 | -28 | -27 | -26 | -25 | -20 | -19 | -18 | -17 | -18 | -18 | -19 | -20 | -18 | -17 | -14 | -11 | -10 | -15 | -19 | | |
| 6 | -21 | -19 | -15 | -12 | -9 | -9 | -13 | -11 | -12 | -12 | -7 | -9 | -12 | -22 | -25 | -22 | -18 | -16 | -12 | -10 | -9 | -8 | -10 | -14 | | |
| 7 | -15 | -20 | -21 | -25 | -23 | -20 | -20 | -21 | -18 | -16 | -16 | -19 | -19 | -19 | -22 | -22 | -21 | -20 | -13 | -12 | -13 | -15 | -18 | -20 | | |
| 8 | -21 | -20 | -19 | -19 | -18 | -17 | -15 | -13 | -16 | -15 | -13 | -13 | -10 | -11 | -13 | -15 | -17 | -17 | -18 | -17 | -15 | -14 | -17 | -19 | | |
| 9 | -21 | -20 | -20 | -19 | -18 | -17 | -17 | -16 | -12 | -9 | -10 | -11 | -10 | -12 | -17 | -19 | -17 | -16 | -14 | -11 | -11 | -14 | -22 | -25 | | |
| 10 | -23 | -19 | -15 | -10 | -8 | -3 | 0 | 1 | 1 | 1 | 0 | 1 | 3 | 3 | 8 | 6 | 4 | 8 | 8 | 15 | 5 | 3 | -11 | -15 | | |
| 11 | -31 | -54 | -68 | -74 | -80 | -69 | -69 | -68 | -53 | -48 | -44 | -43 | -29 | -30 | -16 | -16 | -21 | -8 | -13 | -10 | 2 | -15 | -30 | -32 | | |
| 12 | -39 | -36 | -28 | -21 | -17 | -16 | -17 | -19 | -21 | -22 | -20 | -19 | -15 | -14 | -14 | -12 | -11 | -12 | -12 | -14 | -16 | -15 | -15 | -17 | | |
| 13 | -17 | -15 | -15 | -14 | -15 | -15 | -12 | -14 | -15 | -12 | -12 | -11 | -11 | -14 | -19 | -22 | -19 | -17 | -18 | -16 | -17 | -17 | -19 | -18 | | |
| 14 | -16 | -14 | -10 | -8 | -8 | -9 | -11 | -14 | -15 | -13 | -11 | -11 | -12 | -16 | -16 | -16 | -16 | -14 | -10 | -5 | -4 | -1 | -2 | -2 | | |
| 15 | -1 | -1 | -2 | -4 | -3 | -2 | 0 | 1 | -1 | 0 | 0 | -1 | -1 | -2 | -3 | -2 | -2 | -3 | -2 | -2 | -1 | -1 | -4 | -6 | | |
| 16 | -6 | -7 | -8 | -7 | -3 | -2 | -3 | -6 | -9 | -6 | -6 | -5 | -7 | -2 | 5 | 10 | 3 | -5 | -13 | -23 | -22 | -39 | -40 | -43 | | |
| 17 | -36 | -45 | -44 | -45 | -61 | -75 | -63 | -55 | -54 | -49 | -44 | -42 | -41 | -41 | -38 | -36 | -34 | -30 | -29 | -33 | -37 | -36 | -35 | -32 | | |
| 18 | -29 | -33 | -39 | -36 | -31 | -28 | -29 | -38 | -41 | -42 | -39 | -44 | -42 | -43 | -40 | -37 | -38 | -38 | -36 | -36 | -34 | -38 | -38 | -40 | | |
| 19 | -38 | -35 | -33 | -29 | -27 | -33 | -29 | -33 | -33 | -35 | -39 | -35 | -36 | -38 | -37 | -36 | -35 | -30 | -30 | -32 | -32 | -31 | -34 | -34 | | |
| 20 | -33 | -32 | -27 | -26 | -23 | -22 | -21 | -24 | -22 | -19 | -17 | -17 | -17 | -20 | -22 | -21 | -20 | -18 | -20 | -21 | -23 | -24 | -22 | -22 | | |
| 21 | -22 | -22 | -22 | -19 | -17 | -13 | -9 | -9 | -2 | 0 | -9 | -15 | -9 | -18 | -27 | -29 | -31 | -43 | -62 | -79 | -84 | -89 | -98 | -102 | | |
| 22 | -93 | -79 | -73 | -78 | -81 | -76 | -70 | -65 | -56 | -46 | -45 | -47 | -46 | -44 | -41 | -36 | -33 | -35 | -36 | -38 | -37 | -39 | -38 | -38 | | |
| 23 | -38 | -33 | -26 | -21 | -18 | -15 | -10 | -11 | -11 | -9 | -16 | -14 | -4 | -6 | -10 | -12 | -15 | -14 | -19 | -18 | -26 | -33 | -31 | -21 | | |
| 24 | -18 | -27 | -30 | -27 | -21 | -20 | -20 | -25 | -26 | -22 | -23 | -20 | -18 | -17 | -22 | -25 | -28 | -24 | -22 | -15 | -11 | -9 | -6 | -4 | | |
| 25 | -8 | -9 | -4 | -3 | 0 | -3 | 0 | 2 | 4 | 4 | 1 | -1 | 0 | -2 | -6 | -5 | -7 | -10 | -9 | -10 | -10 | -13 | -9 | -6 | | |
| 26 | -6 | -4 | -6 | -3 | -4 | -4 | -6 | -7 | -8 | -8 | -6 | -7 | -6 | -5 | -6 | -6 | -5 | -1 | 0 | -2 | -4 | -2 | -1 | -2 | | |
| 27 | 1 | 1 | 0 | 1 | 1 | -3 | -4 | -2 | 0 | -1 | -3 | -5 | -7 | -7 | -5 | -4 | -3 | -5 | -6 | -4 | -6 | -9 | -9 | -8 | | |
| 28 | -6 | -4 | -1 | 1 | 2 | 3 | 5 | 5 | 5 | 6 | 6 | 8 | 8 | 8 | 6 | 4 | 3 | 3 | 4 | 4 | 4 | 4 | 1 | -1 | | |
| 29 | -3 | -1 | 2 | 1 | 1 | 2 | 1 | -1 | -3 | -2 | -2 | 1 | 0 | 1 | 5 | 7 | 6 | 4 | 2 | 5 | 7 | 8 | 5 | -1 | | |
| 30 | -8 | -8 | -8 | -13 | -12 | -14 | -11 | -8 | -5 | -5 | -3 | -3 | -3 | -2 | -6 | -6 | -7 | -7 | -8 | -12 | -19 | -23 | -29 | -28 | | |



Note: The baselines for the observatories were adjusted for secular change for the Provisional Dst values for April 1997.