

BRITISH GEOLOGICAL SURVEY

Geomagnetic Bulletin 15

Magnetic Results 1982

Eskdalemuir, Hartland and Lerwick Observatories

British Geological Survey

Geomagnetic Bulletin 15

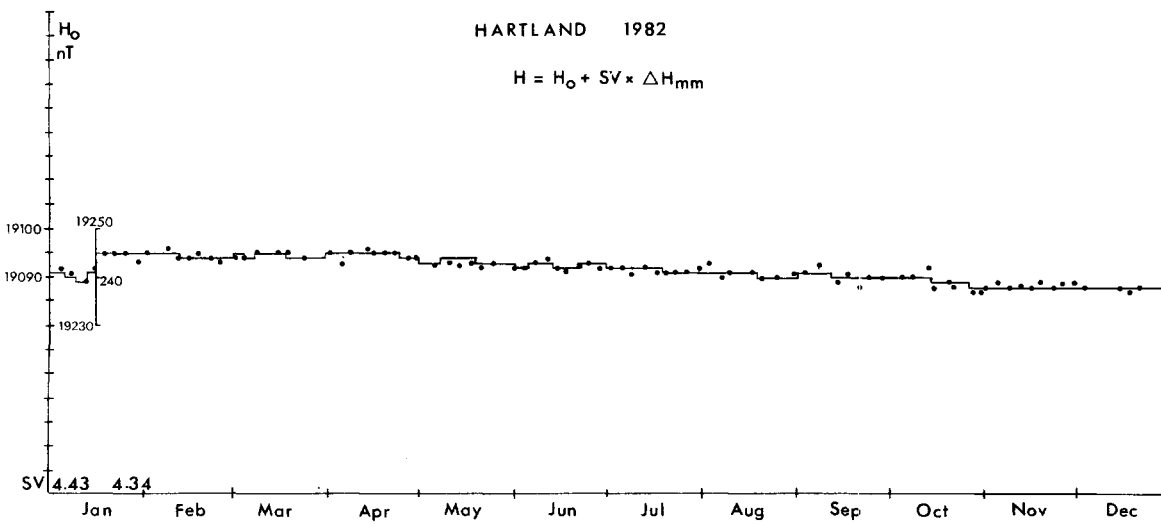
Magnetic Results 1982

CORRECTION

Page 45, centre For 19450 440 19430 read 19250 240 19230

A correct version of the diagram appears below

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BRITISH GEOLOGICAL SURVEY
Natural Environment Research Council

Geomagnetic Bulletin 15

Magnetic Results 1982

Eskdalemuir, Hartland and Lerwick Observatories

GEOMAGNETIC BULLETINS

- 1 Hartland Observatory magnetic results 1965, 1966 and 1967
- 2 Magnetic results 1968, Eskdalemuir, Hartland and Lerwick Observatories
- 3 Magnetic results 1969. Eskdalemuir, Hartland and Lerwick Observatories
- 4 Magnetic results 1970. Eskdalemuir, Hartland and Lerwick Observatories
- 5 Magnetic results 1971. Eskdalemuir, Hartland and Lerwick Observatories
- 6 Annual mean values of the geomagnetic elements since 1941
- 7 Magnetic results 1972. Eskdalemuir, Hartland and Lerwick Observatories
- 8 Spherical harmonic models of the geomagnetic field
- 9 Magnetic results 1973–77. Eskdalemuir, Hartland and Lerwick Observatories
- 10 Annual mean values of the geomagnetic elements
- 11 Magnetic results 1978–79. Eskdalemuir, Hartland and Lerwick Observatories
- 12 A bibliographic guide to the production of local and regional magnetic charts
- 13 Magnetic results 1980. Eskdalemuir, Hartland and Lerwick Observatories
- 14 Magnetic results 1981. Eskdalemuir, Hartland and Lerwick Observatories
- 15 Magnetic results 1982. Eskdalemuir, Hartland and Lerwick Observatories

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Bibliographic reference

BRITISH GEOLOGICAL SURVEY. 1984. Geomagnetic Results 1982: Eskdalemuir, Hartland and Lerwick Observatories. *Geomagn. Bull. Br. Geol. Surv.*, No. 15.

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Magnetic Results 1982: Eskdalemuir, Hartland and Lerwick Observatories

INTRODUCTION

This bulletin contains magnetic results from the Observatories at Eskdalemuir, Hartland and Lerwick for 1982.

Reduction of results

Units SI units are used in this bulletin. Field values are expressed in terms of flux density. The unit used, the nano-tesla, is equal to one gamma (e.m.u.).

Nomenclature The following customary symbols are used for the components of the magnetic field.

| | | | |
|----------|----------------------|----------|-----------------|
| <i>D</i> | declination | <i>X</i> | north intensity |
| <i>H</i> | horizontal intensity | <i>Y</i> | east intensity |
| <i>Z</i> | vertical intensity | <i>I</i> | inclination |
| <i>F</i> | total intensity | | |

Computation The observatory magnetograms are hand-scaled at the observatories. The tabulated hourly ordinates are punched onto cards at Edinburgh. The computations are carried out on a PDP 11/70 computer.

Tables In general the tables are self-explanatory. The hourly values of horizontal and vertical intensity are tabulated in units of 1 nT. The hourly values of declination are expressed in units of $\frac{1}{10}$ minute of arc.

The lower limit for $K = 9$ is 500 nT at Hartland, 750 nT at Eskdalemuir and 1000 nT at Lerwick. All three observatories contribute to K_p ; Hartland is also an AA index observatory.

Magnetograms Microfilm of the 1982 magnetograms have been sent to the four World Data Centres at Boulder, Moscow, Copenhagen and Kyoto. Copies may be obtained from these centres.

Computer generated magnetograms have been prepared throughout 1982 using the one minute values of H , D , and Z derived from a digitally recording fluxgate magnetometer system at each observatory. A monthly booklet containing these magnetograms, preliminary hourly values, and K indices is available on request from:

Geomagnetism Research Group
British Geological Survey
Murchison House
West Mains Road
Edinburgh EH9 3LA

Telephone 031-667 1000
Telex 727343 SEISED G

World Digital Data Centre WDDC-C1, which is centred at the above address, holds the following hourly values for the UK observatories on the magnetic tape.

| | |
|-------------|---------|
| Eskdalemuir | 1911-82 |
| Lerwick | 1926-82 |
| Abinger | 1926-56 |
| Hartland | 1956-82 |

REFERENCES

- 1 Reports of the Observatory Department for 1908 and 1909. National Physical Laboratory, Teddington
- 2 Summaries of Results of Geophysical and Meteorological Observations in . . . 1910 . . . Eskdalemuir Observatory. Meteorological Office, London (1911).
- 3 British Meteorological and Magnetic Year Books, Part 4, for 1911 to 1921. HMSO, London.
- 4 The Observatories' Year Books for 1922 to 1967. Meteorological Office, HMSO, London.
- 5 Magnetic Results 1957 (Abinger and Hartland), Royal Observatory Bulletin 21. HMSO, London (1963).
- 6 Magnetic Results 1958, 1959-61, 1962-64 (Hartland), Royal Observatory Bulletins 40, 146 and 153. HMSO, London.
- 7 Hartland Observatory Magnetic Results 1965-67, Geomagnetic Bulletin of the Institute of Geological Sciences 1. NERC, London (1969).
- 8 Magnetic Results 1968 to 1972, Eskdalemuir, Hartland and Lerwick Observatories, IGS Geomagnetic Bulletins 2 to 5, 7, 9, and 11. NERC, London
- 9 J. Crichton. Eskdalemuir Observatory. Meteorological Magazine, London, Vol. 79, 337 (1950).
- 10 M. J. Blackwell. Eskdalemuir Observatory—The first fifty years. Meteorological Magazine, London, Vol. 87, 129 (1958).
- 11 H. F. Finch. Geomagnetic measurement. Journal of the Royal Naval Scientific Service, Vol. 26-31 (January 1960).
- 12 W. G. Harper. Lerwick Observatory. Meteorological Magazine, London, Vol. 79, 309 (1950).

| | HARTLAND | ESKDALEMUIR | LERWICK |
|---|--|--|---|
| Two-letter code | HA | ES | LE |
| Three-letter code | HAD | ESK | LER |
| Geographic latitude | 50° 59' .7 N | 55° 19' ' N | 60° 8' N |
| Geographic longitude | 355° 31' .0 E | 356° 48' E | 358° 49' E |
| Geomagnetic latitude | 54° .6 | 58° .5 | 62° .5 |
| Geomagnetic longitude | 79° .0 | 82° .9 | 88° .6 |
| Height above msl | 95 metres | 245 metres | 85 metres |
| Variometers (La Cour) | | | |
| Normal | 15 mm/hr | 15 mm/hr | 20 mm/hr |
| Insensitive | 15 mm/hr | 20 mm/hr | 20 mm/hr |
| Absolute magnetometers | | | |
| <i>H</i> | PVM | PVM, Schuster-Smith | PVM |
| <i>D</i> | Hybrid theodolite | Kew declinometer | Kew declinometer |
| <i>Z</i> | PVM, Dye Coil | PVM | PVM |
| <i>F</i> | PVM | PVM | PVM |
| Micropulsation instruments | A 3-component rubidium vapour magnetometer, which records at 2½-second intervals on cassette tape, is operated at all three observatories. The measured components are magnetic NE, NW, and Z. | | |
| Automatic instruments | An EDA FM100B fluxgate magnetometer monitors <i>H</i> , <i>D</i> , and <i>Z</i> at each observatory. The data are recorded at 30-second intervals on cassette tape. At Hartland and Lerwick a proton <i>F</i> value is recorded at the start of each 10-minute data block. Standby systems with an extended dynamic range are installed at Hartland and Lerwick. | | |
| Indices | | | |
| Lower limit for K ₉ | 500 nT | 750 nT | 1000 nT |
| Contribution to | K _p , AA | K _p | K _p |
| Address from which data can be obtained | Geomagnetism Research Group British Geological Survey Murchison House West Mains Road Edinburgh EH9 3LA | | |
| Form of reduced data | a) 35mm microfilm of magnetograms sent to world data centres b) hourly values published annually, also available on magnetic tape c) minute values (Lerwick only) available on magnetic tape. d) provisional data published monthly | | |
| Observatory description | Site plans are included in IGS Bulletin 9 | | |
| Address | Hartland Observatory Hartland Bideford Devon EX39 6BH | Eskdalemuir Observatory Langholm Dumfriesshire DG13 0QW | Lerwick Observatory Geomagnetism Research Group Lerwick Shetland ZE1 0RR |
| Telephone | Hartland (02374) 364 | Eskdalemuir (05416) 283 | Lerwick (0595) 2239 |
| Officer in Charge | Mr A. M. Allen | Mr A. C. J. Greenwood | Mr J. S. McNab |

ESKDALEMUIR

ESKDALEMUIR

HORIZONTAL INTENSITY

1982 JANUARY 17000 GAMMAS PLUS TABULAR QUANTITIES (UNIT 1 GAMMA)

Table with columns: U.T., 0-24, MEAN, SUM. Rows 1-30 for various days (1-10, 11-20, 21-30) and summary rows (MEAN, MEAN Q, MEAN D).

ESKDALEMUIR

HORIZONTAL INTENSITY

1982 FEBRUARY 17000 GAMMAS PLUS TABULAR QUANTITIES (UNIT 1 GAMMA)

Table with columns: U.T., 0-24, MEAN, SUM. Rows 1-30 for various days (1-10, 11-20, 21-30) and summary rows (MEAN, MEAN Q, MEAN D).

Table 2

ESKDALEMUIR

HORIZONTAL INTENSITY

1982

MARCH

17000 GAMMAS PLUS TABULAR QUANTITIES (UNIT 1 GAMMA)

Table with columns U.T., Ø, 1-24, MEAN, and SUM. Rows include daily data for 1982 March and monthly mean values.

ESKDALEMUIR

HORIZONTAL INTENSITY

1982

APRIL

17000 GAMMAS PLUS TABULAR QUANTITIES (UNIT 1 GAMMA)

Table with columns U.T., Ø, 1-24, MEAN, and SUM. Rows include daily data for 1982 April and monthly mean values.

ESKDALEMUIR

VERTICAL INTENSITY

1982 MARCH 45500 GAMMAS PLUS TABULAR QUANTITIES (UNIT 1 GAMMA)

Table with columns: U.T., Ø, 1-24, MEAN, SUM. Data rows for months 1 through 20, and summary rows for MEAN, MEAN Q, and MEAN D.

ESKDALEMUIR

VERTICAL INTENSITY

1982 APRIL 45500 GAMMAS PLUS TABULAR QUANTITIES (UNIT 1 GAMMA)

Table with columns: U.T., Ø, 1-24, MEAN, SUM. Data rows for months 1 through 15, and summary rows for MEAN, MEAN Q, and MEAN D.

ESKDALEMUIR

VERTICAL INTENSITY

1982 MAY 45500 GAMMAS PLUS TABULAR QUANTITIES (UNIT 1 GAMMA)

Table with columns: U.T., 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, MEAN, SUM. Rows include numerical data points and mean values for various U.T. values.

ESKDALEMUIR

VERTICAL INTENSITY

1982 JUNE 45500 GAMMAS PLUS TABULAR QUANTITIES (UNIT 1 GAMMA)

Table with columns: U.T., 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, MEAN, SUM. Rows include numerical data points and mean values for various U.T. values.

ESKDALEMUIR

VERTICAL INTENSITY

1982 JULY 45500 GAMMAS PLUS TABULAR QUANTITIES (UNIT 1 GAMMA)

Table with columns U.T., 0-24, MEAN, and SUM. Rows 1-30 (Q), 31-35 (D), 36-40 (D), 41-45 (D), 46-50 (D), 51-55 (D), 56-60 (D), 61-65 (D), 66-70 (D), 71-75 (D), 76-80 (D), 81-85 (D), 86-90 (D), 91-95 (D), 96-100 (D). Includes MEAN Q and MEAN D rows.

ESKDALEMUIR

VERTICAL INTENSITY

1982 AUGUST 45500 GAMMAS PLUS TABULAR QUANTITIES (UNIT 1 GAMMA)

Table with columns U.T., 0-24, MEAN, and SUM. Rows 1-5 (D), 6-10 (D), 11-15 (D), 16-20 (D), 21-25 (D), 26-30 (D), 31-35 (D), 36-40 (D), 41-45 (D), 46-50 (D), 51-55 (D), 56-60 (D), 61-65 (D), 66-70 (D), 71-75 (D), 76-80 (D), 81-85 (D), 86-90 (D), 91-95 (D), 96-100 (D). Includes MEAN Q and MEAN D rows.

ESKDALEMUIR

VERTICAL INTENSITY

1982 SEPTEMBER 45500 GAMMAS PLUS TABULAR QUANTITIES (UNIT 1 GAMMA)

Table with columns U.T., 0-24, MEAN, and SUM. Rows include data for days 1-30 and summary rows for MEAN, MEAN Q, and MEAN D.

ESKDALEMUIR

VERTICAL INTENSITY

1982 OCTOBER 45500 GAMMAS PLUS TABULAR QUANTITIES (UNIT 1 GAMMA)

Table with columns U.T., 0-24, MEAN, and SUM. Rows include data for days 1-31 and summary rows for MEAN, MEAN Q, and MEAN D.

Table 3

ESKDALEMUIR

VERTICAL INTENSITY

1982 NOVEMBER 45500 GAMMAS PLUS TABULAR QUANTITIES (UNIT 1 GAMMA)

Table with columns U.T., 0, 1-24, MEAN, SUM. Rows 1-30 and MEAN, MEAN Q, MEAN D.

ESKDALEMUIR

VERTICAL INTENSITY

1982 DECEMBER 45500 GAMMAS PLUS TABULAR QUANTITIES (UNIT 1 GAMMA)

Table with columns U.T., 0, 1-24, MEAN, SUM. Rows 1-30 and MEAN, MEAN Q, MEAN D.

TABLE 4 K INDICES FOR THE YEAR 1982 From D, H combined

Table with 13 columns (DATE, JANUARY-DECEMBER) and 31 rows of K index data.

ESKDALEMUIR 1982

TABLE 5 MEAN MONTHLY AND ANNUAL VALUES OF GEOMAGNETIC ELEMENTS

Table for Table 5: ALL DAYS, with columns D, I, H, X, Y, Z, T and rows for months and Year.

INTERNATIONAL QUIET DAYS

DISTURBED DAYS

Table for Table 5: INTERNATIONAL QUIET DAYS and DISTURBED DAYS, with columns D, H, Z and rows for months and Year.

ESKDALEMUIR

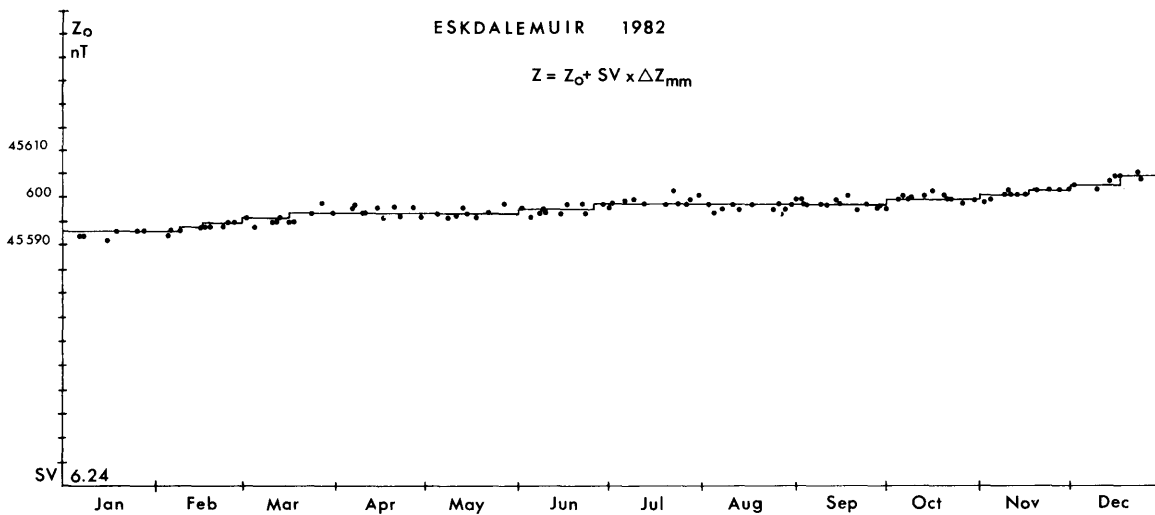
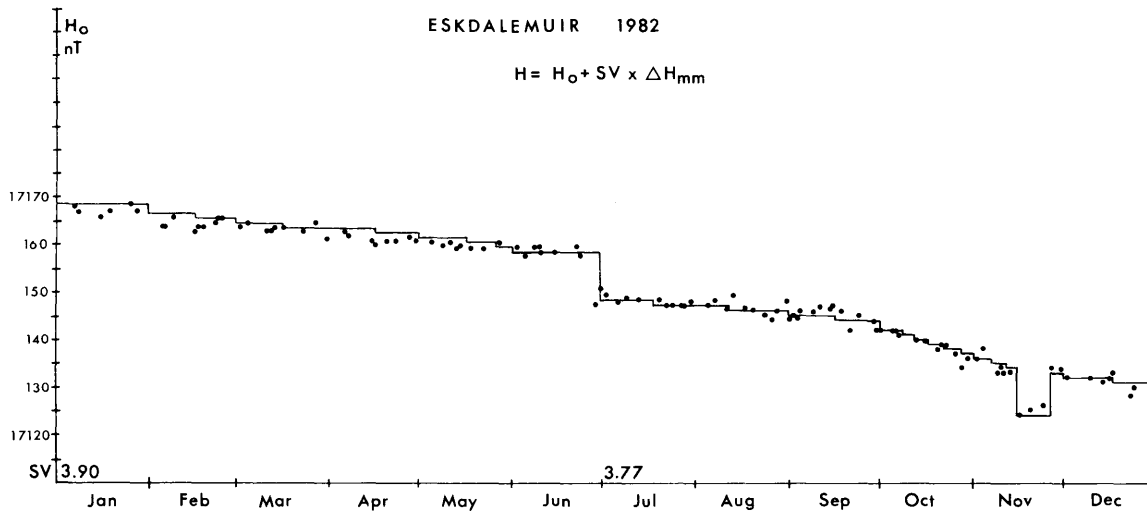
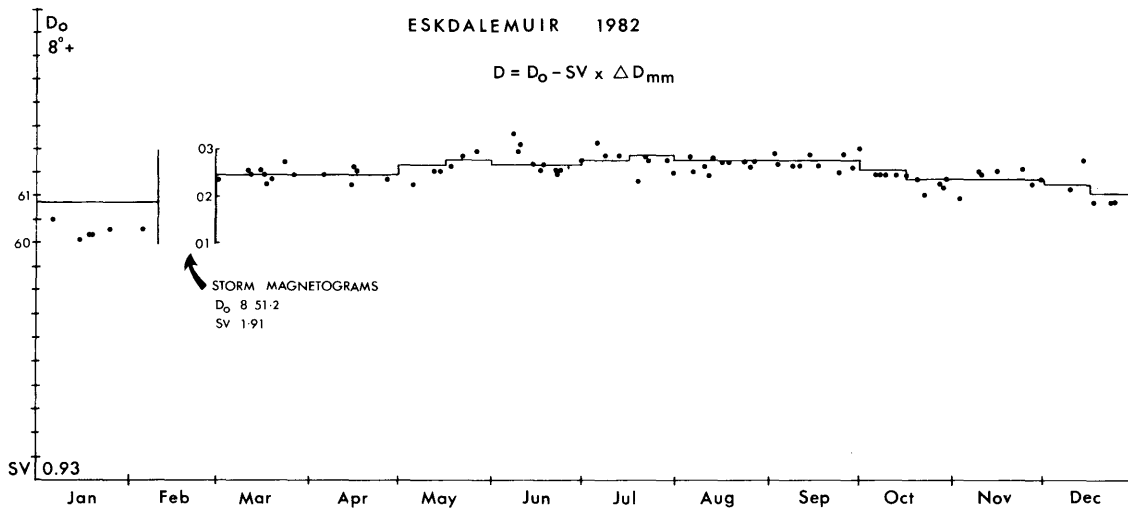
TABLE 6 ADOPTED BASELINE VALUES 1982

Table for Table 6: Declination and Horizontal intensity, with columns for Interval starting and values for months.

Table for Table 6: Vertical intensity, with columns for Interval starting and values for months.

TABLE 7 ADOPTED SCALE VALUES 1982

Table for Table 7: ADOPTED SCALE VALUES, with columns D, H, Z and values for Jan and Jul.



Eskdalemuir 1982 Observed and allocated baseline values D_0 , H_0 and Z_0

TABLE 8 ANNUAL VALUES OF GEOMAGNETIC ELEMENTS

ESKDALEMUIR

| Year | D | I | H | X | Y | Z | T |
|------|----------|---------|-------|-------|--------|-------|-------|
| 1908 | -18 33.3 | 69 37.3 | 16821 | 15947 | - 5353 | 45283 | 48306 |
| 1909 | -18 30.1 | 69 38.8 | 16826 | 15956 | - 5339 | 45360 | 48380 |
| 1910 | -18 23.3 | 69 37.8 | 16826 | 15967 | - 5307 | 45317 | 48340 |
| 1911 | -18 12.4 | 69 37.1 | 16836 | 15993 | - 5260 | 45317 | 48343 |
| 1912 | -18 3.9 | 69 37.2 | 16836 | 16006 | - 5221 | 45318 | 48344 |
| 1913 | -17 54.9 | 69 37.3 | 16811 | 15996 | - 5171 | 45254 | 48276 |
| 1914 | -17 45.3 | 69 36.1 | 16793 | 15993 | - 5121 | 45159 | 48180 |
| 1915 | -17 35.9 | 69 36.9 | 16774 | 15990 | - 5072 | 45142 | 48158 |
| 1916 | -17 26.1 | 69 37.6 | 16744 | 15975 | - 5017 | 45088 | 48097 |
| 1917 | -17 17.1 | 69 38.6 | 16720 | 15965 | - 4968 | 45061 | 48063 |
| 1918 | -17 8.1 | 69 39.0 | 16703 | 15962 | - 4921 | 45034 | 48032 |
| 1919 | -16 58.7 | 69 39.6 | 16700 | 15972 | - 4877 | 45049 | 48045 |
| 1920 | -16 48.7 | 69 39.5 | 16693 | 15980 | - 4828 | 45026 | 48021 |
| 1921 | -16 37.3 | 69 40.3 | 16681 | 15984 | - 4771 | 45025 | 48016 |
| 1922 | -16 25.8 | 69 40.0 | 16666 | 15985 | - 4714 | 44974 | 47963 |
| 1923 | -16 13.8 | 69 38.8 | 16661 | 15997 | - 4657 | 44915 | 47906 |
| 1924 | -16 1.2 | 69 38.7 | 16657 | 16010 | - 4597 | 44898 | 47889 |
| 1925 | -15 48.4 | 69 39.3 | 16650 | 16020 | - 4535 | 44902 | 47890 |
| 1926 | -15 35.3 | 69 40.3 | 16632 | 16020 | - 4469 | 44896 | 47878 |
| 1927 | -15 22.7 | 69 40.2 | 16615 | 16020 | - 4406 | 44843 | 47822 |
| 1928 | -15 10.5 | 69 41.2 | 16602 | 16024 | - 4346 | 44849 | 47823 |
| 1929 | -14 58.9 | 69 41.9 | 16586 | 16022 | - 4287 | 44832 | 47802 |
| 1930 | -14 47.1 | 69 43.2 | 16568 | 16019 | - 4228 | 44834 | 47797 |
| 1931 | -14 34.8 | 69 43.7 | 16565 | 16032 | - 4170 | 44850 | 47812 |
| 1932 | -14 23.7 | 69 45.0 | 16553 | 16033 | - 4115 | 44867 | 47823 |
| 1933 | -14 12.1 | 69 45.2 | 16539 | 16033 | - 4058 | 44839 | 47792 |
| 1934 | -14 0.6 | 69 45.9 | 16531 | 16039 | - 4002 | 44845 | 47795 |
| 1935 | -13 48.8 | 69 47.0 | 16520 | 16042 | - 3944 | 44861 | 47806 |
| 1936 | -13 37.4 | 69 48.4 | 16512 | 16047 | - 3889 | 44894 | 47834 |
| 1937 | -13 26.9 | 69 49.8 | 16501 | 16049 | - 3837 | 44920 | 47855 |
| 1938 | -13 17.1 | 69 50.7 | 16499 | 16057 | - 3791 | 44953 | 47885 |
| 1939 | -13 7.3 | 69 51.1 | 16502 | 16071 | - 3746 | 44977 | 47909 |
| 1940 | -12 57.9 | 69 51.8 | 16503 | 16082 | - 3703 | 45008 | 47938 |
| 1941 | -12 48.2 | 69 52.5 | 16503 | 16093 | - 3657 | 45037 | 47965 |
| 1942 | -12 39.8 | 69 51.9 | 16513 | 16111 | - 3620 | 45039 | 47971 |
| 1943 | -12 31.2 | 69 52.7 | 16511 | 16118 | - 3579 | 45064 | 47994 |
| 1944 | -12 23.0 | 69 52.5 | 16518 | 16134 | - 3542 | 45076 | 48007 |
| 1945 | -12 14.5 | 69 52.6 | 16522 | 16146 | - 3503 | 45093 | 48025 |
| 1946 | -12 5.9 | 69 54.0 | 16512 | 16145 | - 3461 | 45120 | 48046 |
| 1947 | -11 57.1 | 69 53.9 | 16520 | 16162 | - 3421 | 45140 | 48068 |
| 1948 | -11 48.9 | 69 53.2 | 16532 | 16182 | - 3385 | 45144 | 48076 |
| 1949 | -11 40.9 | 69 52.8 | 16544 | 16201 | - 3350 | 45158 | 48093 |
| 1950 | -11 33.2 | 69 52.0 | 16564 | 16228 | - 3317 | 45180 | 48121 |
| 1951 | -11 25.5 | 69 51.1 | 16581 | 16252 | - 3284 | 45193 | 48139 |
| 1952 | -11 18.0 | 69 50.0 | 16601 | 16279 | - 3253 | 45203 | 48155 |
| 1953 | -11 11.0 | 69 48.7 | 16625 | 16309 | - 3224 | 45213 | 48173 |
| 1954 | -11 3.4 | 69 47.6 | 16647 | 16338 | - 3193 | 45228 | 48194 |
| 1955 | -10 56.3 | 69 46.9 | 16665 | 16362 | - 3162 | 45250 | 48221 |
| 1956 | -10 49.7 | 69 47.0 | 16674 | 16377 | - 3133 | 45277 | 48250 |
| 1957 | -10 43.6 | 69 46.0 | 16695 | 16403 | - 3107 | 45296 | 48275 |
| 1958 | -10 38.0 | 69 45.0 | 16719 | 16432 | - 3085 | 45320 | 48306 |
| 1959 | -10 32.1 | 69 44.1 | 16742 | 16460 | - 3061 | 45344 | 48336 |
| 1960 | -10 26.3 | 69 43.4 | 16761 | 16484 | - 3037 | 45370 | 48367 |
| 1961 | -10 20.9 | 69 41.8 | 16792 | 16519 | - 3016 | 45385 | 48392 |
| 1962 | -10 15.7 | 69 39.8 | 16825 | 16556 | - 2997 | 45396 | 48414 |
| 1963 | -10 10.2 | 69 38.6 | 16850 | 16585 | - 2975 | 45413 | 48438 |
| 1964 | -10 5.3 | 69 36.9 | 16880 | 16619 | - 2957 | 45427 | 48462 |
| 1965 | -10 0.8 | 69 35.4 | 16907 | 16649 | - 2940 | 45440 | 48483 |
| 1966 | - 9 56.4 | 69 34.5 | 16928 | 16674 | - 2922 | 45460 | 48509 |
| 1967 | - 9 52.1 | 69 33.8 | 16949 | 16698 | - 2905 | 45486 | 48541 |
| 1968 | - 9 48.6 | 69 32.5 | 16979 | 16731 | - 2893 | 45514 | 48578 |
| 1969 | - 9 45.4 | 60 30.9 | 17013 | 16767 | - 2883 | 45542 | 48616 |
| 1970 | - 9 41.6 | 69 29.6 | 17046 | 16803 | - 2870 | 45576 | 48659 |
| 1971 | - 9 36.8 | 69 27.8 | 17084 | 16844 | - 2853 | 45604 | 48699 |
| 1972 | - 9 31.5 | 69 26.7 | 17112 | 16876 | - 2832 | 45635 | 48738 |
| 1973 | - 9 25.2 | 69 25.5 | 17141 | 16910 | - 2805 | 45664 | 48775 |
| 1974 | - 9 17.4 | 69 24.5 | 17169 | 16944 | - 2772 | 45696 | 48815 |
| 1975 | - 9 9.8 | 69 23.0 | 17200 | 16981 | - 2739 | 45719 | 48847 |
| 1976 | - 9 1.1 | 69 21.8 | 17227 | 17014 | - 2700 | 45741 | 48877 |
| 1977 | - 8 51.2 | 69 20.6 | 17249 | 17044 | - 2655 | 45755 | 48899 |
| 1978 | - 8 40.5 | 69 20.5 | 17260 | 17063 | - 2603 | 45780 | 48926 |
| 1979 | - 8 30.5 | 69 19.6 | 17277 | 17087 | - 2556 | 45788 | 48939 |
| 1980 | - 8 21.3 | 69 18.5 | 17294 | 17110 | - 2513 | 45788 | 48945 |
| 1981 | - 8 11.2 | 69 19.2 | 17291 | 17114 | - 2462 | 45806 | 48961 |
| 1982 | - 8 1.3 | 69 19.4 | 17292 | 17123 | - 2413 | 45820 | 48975 |

HARTLAND

HARTLAND

DECLINATION WEST

1982 JANUARY

7 DEGS PLUS TABULAR QUANTITIES (UNIT 0.1 MINS)

Table with columns U T, 0-24, MEAN, SUM. Rows 1-30, including D, Q, and MEAN D rows.

HARTLAND

DECLINATION WEST

1982 FEBRUARY

7 DEGS PLUS TABULAR QUANTITIES (UNIT 0.1 MINS)

Table with columns U T, 0-24, MEAN, SUM. Rows 1-30, including D, Q, and MEAN D rows.

Table 1

HARTLAND

DECLINATION WEST

1982

MARCH

7 DEGS PLUS TABULAR QUANTITIES (UNIT 0.1 MINS)

Table with columns: U.T., 0-24, MEAN, SUM. Rows include days 1-10 (D/Q), 11-15 (Q), 16-20 (Q), 21-25 (D), 26-30 (Q), 31, and summary rows (MEAN, MEAN Q, MEAN D).

HARTLAND

DECLINATION WEST

1982

APRIL

7 DEGS PLUS TABULAR QUANTITIES (UNIT 0.1 MINS)

Table with columns: U.T., 0-24, MEAN, SUM. Rows include days 1-5 (D), 6-10 (Q), 11-15 (D/Q), 16-20 (Q), 21-25 (D), 26-30 (Q), and summary rows (MEAN, MEAN Q, MEAN D).

HARTLAND

DECLINATION WEST

1982 NOVEMBER

7 DEGS PLUS TABULAR QUANTITIES (UNIT 0.1 MINS)

Table with columns: U.T., 0-24, MEAN, SUM. Rows include dates 1-30 and summary rows for MEAN, MEAN Q, and MEAN D.

HARTLAND

DECLINATION WEST

1982 DECEMBER

7 DEGS PLUS TABULAR QUANTITIES (UNIT 0.1 MINS)

Table with columns: U T, 0-24, MEAN, SUM. Rows include dates 1-30 and summary rows for MEAN, MEAN Q, and MEAN D.

HARTLAND

HORIZONTAL INTENSITY

1982 NOVEMBER

19000 GAMMAS PLUS TABULAR QUANTITIES (UNIT 1 GAMMA)

| U T | Ø | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN | SUM |
|--------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
| 1 | D | 310 | 317 | 319 | 337 | 336 | 339 | 335 | 334 | 326 | 301 | 289 | 284 | 263 | 270 | 282 | 311 | 301 | 309 | 315 | 317 | 347 | 314 | 326 | 326 | 313 | 7508 |
| 2 | D | 329 | 334 | 330 | 336 | 339 | 347 | 341 | 341 | 336 | 321 | 294 | 274 | 294 | 289 | 298 | 297 | 295 | 329 | 298 | 293 | 290 | 309 | 338 | 326 | 316 | 7578 |
| 3 | | 310 | 315 | 342 | 346 | 342 | 346 | 338 | 329 | 319 | 303 | 287 | 280 | 275 | 281 | 306 | 312 | 320 | 329 | 335 | 338 | 339 | 341 | 341 | 340 | 321 | 7714 |
| 4 | Q | 339 | 338 | 338 | 338 | 342 | 348 | 352 | 360 | 355 | 341 | 323 | 313 | 313 | 320 | 317 | 317 | 326 | 340 | 344 | 335 | 336 | 333 | 341 | 345 | 335 | 8054 |
| 5 | | 360 | 351 | 348 | 348 | 349 | 356 | 362 | 367 | 363 | 353 | 346 | 323 | 319 | 326 | 331 | 329 | 345 | 346 | 351 | 350 | 359 | 362 | 360 | 358 | 348 | 8362 |
| 6 | | 359 | 362 | 358 | 354 | 354 | 361 | 373 | 369 | 347 | 345 | 338 | 335 | 330 | 331 | 330 | 328 | 323 | 342 | 352 | 355 | 356 | 359 | 359 | 355 | 349 | 8375 |
| 7 | Q | 353 | 348 | 350 | 350 | 351 | 351 | 360 | 358 | 347 | 332 | 321 | 320 | 325 | 331 | 340 | 345 | 349 | 351 | 358 | 361 | 358 | 359 | 358 | 357 | 347 | 8333 |
| 8 | | 359 | 355 | 356 | 360 | 360 | 361 | 364 | 365 | 368 | 359 | 348 | 345 | 350 | 356 | 371 | 373 | 384 | 356 | 327 | 348 | 362 | 361 | 361 | 358 | 358 | 8607 |
| 9 | Q | 361 | 358 | 358 | 358 | 367 | 370 | 364 | 364 | 358 | 348 | 338 | 333 | 339 | 351 | 355 | 359 | 360 | 362 | 363 | 363 | 365 | 368 | 368 | 365 | 358 | 8595 |
| 10 | | 355 | 357 | 356 | 354 | 356 | 359 | 365 | 364 | 358 | 347 | 336 | 340 | 336 | 330 | 345 | 340 | 344 | 354 | 347 | 333 | 345 | 349 | 347 | 338 | 348 | 8355 |
| 11 | | 348 | 351 | 357 | 367 | 358 | 358 | 357 | 356 | 352 | 348 | 325 | 319 | 330 | 333 | 341 | 333 | 346 | 354 | 353 | 358 | 352 | 354 | 350 | 347 | 348 | 8347 |
| 12 | | 344 | 366 | 358 | 353 | 355 | 358 | 355 | 356 | 350 | 338 | 318 | 308 | 315 | 331 | 340 | 344 | 349 | 348 | 344 | 360 | 353 | 346 | 351 | 351 | 345 | 8291 |
| 13 | | 361 | 376 | 349 | 351 | 343 | 347 | 353 | 354 | 351 | 328 | 307 | 321 | 331 | 334 | 340 | 337 | 346 | 358 | 358 | 341 | 342 | 351 | 355 | 353 | 345 | 8287 |
| 14 | | 353 | 361 | 353 | 355 | 358 | 358 | 360 | 358 | 346 | 329 | 330 | 328 | 327 | 333 | 335 | 331 | 337 | 349 | 354 | 353 | 360 | 358 | 364 | 363 | 348 | 8353 |
| 15 | | 356 | 351 | 347 | 359 | 353 | 358 | 363 | 361 | 354 | 337 | 312 | 320 | 331 | 333 | 331 | 340 | 322 | 329 | 350 | 358 | 358 | 350 | 346 | 351 | 344 | 8270 |
| 16 | | 351 | 352 | 352 | 350 | 355 | 353 | 355 | 353 | 358 | 351 | 336 | 331 | 331 | 335 | 345 | 346 | 351 | 356 | 360 | 361 | 358 | 360 | 366 | 356 | 351 | 8422 |
| 17 | Q | 351 | 355 | 355 | 358 | 361 | 366 | 368 | 370 | 364 | 356 | 345 | 338 | 338 | 346 | 353 | 361 | 366 | 373 | 370 | 364 | 351 | 341 | 344 | 352 | 356 | 8546 |
| 18 | | 351 | 345 | 342 | 350 | 366 | 370 | 362 | 365 | 368 | 361 | 348 | 343 | 345 | 331 | 321 | 315 | 306 | 316 | 346 | 351 | 351 | 351 | 351 | 358 | 346 | 8313 |
| 19 | | 365 | 351 | 346 | 345 | 350 | 351 | 355 | 358 | 356 | 348 | 339 | 330 | 334 | 340 | 344 | 340 | 336 | 350 | 357 | 349 | 345 | 353 | 355 | 358 | 348 | 8355 |
| 20 | Q | 359 | 360 | 360 | 358 | 358 | 361 | 362 | 360 | 358 | 355 | 348 | 340 | 337 | 338 | 343 | 348 | 352 | 356 | 362 | 353 | 358 | 360 | 360 | 371 | 355 | 8517 |
| 21 | | 369 | 358 | 359 | 356 | 365 | 380 | 375 | 381 | 375 | 355 | 341 | 334 | 324 | 325 | 341 | 335 | 325 | 334 | 324 | 298 | 275 | 283 | 283 | 281 | 336 | 8076 |
| 22 | | 261 | 261 | 283 | 321 | 288 | 301 | 302 | 302 | 318 | 311 | 301 | 292 | 296 | 308 | 322 | 331 | 335 | 336 | 333 | 337 | 340 | 340 | 340 | 339 | 312 | 7498 |
| 23 | | 340 | 341 | 341 | 343 | 345 | 348 | 351 | 350 | 344 | 339 | 337 | 341 | 348 | 352 | 348 | 351 | 316 | 288 | 292 | 249 | 238 | 264 | 266 | 279 | 321 | 7711 |
| 24 | D | 298 | 308 | 304 | 310 | 317 | 318 | 319 | 319 | 318 | 318 | 329 | 330 | 298 | 274 | 256 | 258 | 247 | 202 | 205 | 202 | 224 | 269 | 285 | 268 | 282 | 6776 |
| 25 | D | 234 | 242 | 248 | 258 | 260 | 258 | 267 | 278 | 250 | 253 | 269 | 278 | 261 | 275 | 268 | 287 | 295 | 311 | 297 | 311 | 319 | 323 | 331 | 322 | 279 | 6695 |
| 26 | | 323 | 325 | 323 | 331 | 347 | 335 | 331 | 331 | 311 | 301 | 288 | 293 | 299 | 304 | 311 | 271 | 310 | 324 | 330 | 337 | 338 | 333 | 323 | 330 | 318 | 7649 |
| 27 | | 333 | 333 | 332 | 346 | 343 | 348 | 349 | 341 | 332 | 322 | 316 | 305 | 288 | 294 | 314 | 320 | 329 | 325 | 335 | 335 | 336 | 337 | 340 | 342 | 329 | 7895 |
| 28 | | 359 | 407 | 357 | 341 | 343 | 357 | 347 | 341 | 340 | 337 | 329 | 316 | 312 | 310 | 319 | 318 | 330 | 323 | 303 | 323 | 342 | 344 | 338 | 347 | 337 | 8083 |
| 29 | D | 349 | 338 | 333 | 338 | 340 | 344 | 350 | 355 | 357 | 343 | 334 | 320 | 331 | 322 | 304 | 316 | 309 | 311 | 295 | 261 | 316 | 322 | 312 | 319 | 326 | 7819 |
| 30 | | 318 | 326 | 330 | 328 | 339 | 335 | 338 | 331 | 330 | 328 | 322 | 320 | 322 | 322 | 321 | 334 | 338 | 345 | 346 | 348 | 348 | 350 | 348 | 346 | 334 | 8013 |
| MEAN | | 339 | 341 | 339 | 343 | 345 | 348 | 349 | 349 | 344 | 334 | 323 | 318 | 318 | 321 | 326 | 328 | 330 | 334 | 333 | 331 | 335 | 338 | 340 | 340 | 335 | 8046 |
| MEAN Q | | 353 | 352 | 352 | 352 | 356 | 359 | 361 | 362 | 356 | 346 | 335 | 329 | 330 | 337 | 342 | 346 | 351 | 356 | 359 | 355 | 354 | 352 | 354 | 358 | 350 | 8407 |
| MEAN D | | 304 | 308 | 307 | 316 | 318 | 321 | 322 | 325 | 317 | 307 | 303 | 297 | 289 | 286 | 282 | 294 | 289 | 292 | 282 | 277 | 299 | 307 | 318 | 312 | 303 | 7272 |

HARTLAND

HORIZONTAL INTENSITY

1982 DECEMBER

19000 GAMMAS PLUS TABULAR QUANTITIES (UNIT 1 GAMMA)

| U T | Ø | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN | SUM |
|-----|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
| 1 | Q | 344 | 345 | 346 | 346 | 348 | 351 | 352 | 351 | 347 | 341 | 334 | 331 | 329 | 332 | 335 | 340 | 342 | 347 | 349 | 350 | 352 | 353 | 352 | 351 | 344 | 8268 |
| 2 | Q | 351 | 350 | 351 | 351 | 355 | 359 | 357 | 357 | 355 | 348 | 341 | 342 | 337 | 332 | 335 | 346 | 350 | 352 | 358 | 358 | 356 | 355 | 355 | 356 | 350 | 8404 |
| 3 | | 356 | 354 | 357 | 357 | 359 | 363 | 368 | 374 | 371 | 367 | 358 | 347 | 349 | 336 | 322 | 328 | 322 | 330 | 348 | 352 | 354 | 353 | 350 | 347 | 351 | 8422 |
| 4 | | 344 | 350 | 359 | 348 | 348 | 350 | 355 | 359 | 360 | 359 | 354 | 348 | 346 | 349 | 351 | 353 | 360 | 361 | 361 | 364 | 370 | 357 | 336 | 331 | 353 | 8473 |
| 5 | | 321 | 316 | 314 | 311 | 322 | 331 | 331 | 335 | 337 | 339 | 335 | 328 | 326 | 328 | 331 | 338 | 343 | 346 | 347 | 347 | 353 | 352 | 351 | 351 | 334 | 8033 |
| 6 | Q | 348 | 346 | 343 | 348 | 348 | 349 | 353 | 357 | 358 | 355 | 351 | 345 | 349 | 349 | 348 | 350 | 355 | 360 | 362 | 365 | 365 | 365 | 362 | 361 | 354 | 8492 |
| 7 | | 361 | 357 | 359 | 363 | 362 | 355 | 378 | 381 | 380 | 374 | 371 | 369 | 365 | 347 | 315 | 303 | 301 | 306 | 309 | 260 | 276 | 280 | 383 | 283 | 335 | 8038 |
| 8 | | 300 | 295 | 317 | 325 | 329 | 338 | 337 | 324 | 321 | 319 | 303 | 288 | 290 | 294 | 298 | 309 | 308 | 288 | 283 | 279 | 299 | 317 | 322 | 322 | 308 | 7405 |
| 9 | | 327 | 323 | 323 | 325 | 326 | 337 | 340 | 339 | 336 | 322 | 320 | 321 | 319 | 278 | 302 | 332 | 339 | 339 | 345 | 345 | 347 | 348 | 346 | 353 | 330 | 7932 |
| 10 | D | 349 | 349 | 350 | 350 | 356 | 354 | 338 | 373 | 356 | 328 | 313 | 330 | 314 | 298 | 324 | 339 | 316 | 327 | 330 | 293 | 308 | 328 | 338 | 331 | 333 | 7993 |
| 11 | | 322 | 312 | 310 | 318 | 328 | 329 | 333 | 337 | 338 | 340 | 335 | 327 | 321 | 321 | 324 | 319 | 302 | 321 | 307 | 315 | 329 | 318 | 312 | 319 | 322 | 7737 |
| 12 | | 319 | 324 | 326 | 336 | 338 | 342 | 339 | 340 | 343 | 338 | 328 | 310 | 311 | 325 | 329 | 330 | 330 | 337 | 346 | 355 | 352 | 351 | 345 | 346 | 335 | 8040 |
| 13 | Q | 344 | 344 | 343 | 344 | 347 | 350 | 350 | 349 | 351 | 349 | 343 | 344 | 349 | 348 | 343 | 343 | 351 | 350 | 350 | 357 | 354 | 349 | 353 | 353 | 348 | 8358 |
| 14 | | 350 | 348 | 349 | 349 | 356 | 358 | 355 | 352 | 350 | 348 | 343 | 342 | 343 | 343 | 343 | 348 | 352 | 356 | 361 | 363 | 366 | 358 | 333 | 342 | 350 | 8408 |
| 15 | | 342 | 345 | 346 | 341 | 344 | 359 | 366 | 361 | 363 | 360 | 359 | 360 | 354 | 346 | 350 | 356 | 362 | 370 | 370 | 371 | 370 | 366 | 366 | 364 | 358 | 8591 |
| 16 | | 363 | 365 | 365 | 367 | 370 | 371 | 371 | 366 | 369 | 365 | 360 | 349 | 344 | 338 | 335 | 316 | 305 | 311 | 302 | 309 | 318 | 310 | 335 | 339 | 343 | 8243 |
| 17 | D | 340 | 338 | 339 | 336 | 357 | 337 | 354 | 345 | 259 | 351 | 357 | 336 | 300 | 290 | 291 | 294 | 320 | 317 | 328 | 301 | 294 | 321 | 322 | 327 | 323 | 7754 |
| 18 | D | 308 | 337 | 328 | 318 | 317 | 323 | 331 | 332 | 333 | 270 | 277 | 310 | 318 | 313 | 294 | 304 | 293 | 316 | 326 | 310 | 328 | 346 | 342 | 344 | 317 | 7618 |
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

HARTLAND

VERTICAL INTENSITY

1982 JANUARY 43500 GAMMAS PLUS TABULAR QUANTITIES (UNIT 1 GAMMA)

| U.T | Ø | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN | SUM |
|--------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
| 1 | | 278 | 277 | 276 | 277 | 278 | 277 | 279 | 279 | 281 | 276 | 271 | 271 | 270 | 272 | 277 | 281 | 294 | 286 | 286 | 286 | 287 | 286 | 284 | 281 | 279 | 6710 |
| 2 | | 279 | 277 | 276 | 276 | 278 | 278 | 279 | 280 | 281 | 276 | 271 | 270 | 270 | 272 | 277 | 286 | 286 | 290 | 295 | 296 | 300 | 301 | 298 | 291 | 282 | 6783 |
| 3 | D | 286 | 280 | 278 | 276 | 276 | 271 | 275 | 279 | 278 | 276 | 272 | 271 | 271 | 270 | 276 | 281 | 295 | 288 | 286 | 293 | 308 | 291 | 293 | 289 | 281 | 6759 |
| 4 | | 285 | 279 | 279 | 279 | 280 | 281 | 282 | 284 | 283 | 276 | 274 | 273 | 274 | 277 | 280 | 285 | 288 | 287 | 288 | 291 | 290 | 289 | 289 | 286 | 282 | 6779 |
| 5 | | 280 | 279 | 279 | 279 | 280 | 278 | 278 | 280 | 281 | 280 | 277 | 278 | 270 | 267 | 271 | 277 | 276 | 277 | 277 | 279 | 280 | 280 | 280 | 280 | 277 | 6663 |
| 6 | | 279 | 277 | 275 | 271 | 270 | 270 | 270 | 272 | 275 | 276 | 278 | 278 | 276 | 279 | 282 | 280 | 277 | 276 | 278 | 279 | 285 | 285 | 284 | 277 | 6642 | |
| 7 | | 283 | 285 | 283 | 280 | 278 | 276 | 275 | 273 | 274 | 274 | 274 | 271 | 270 | 273 | 276 | 280 | 284 | 279 | 279 | 280 | 288 | 287 | 287 | 288 | 279 | 6697 |
| 8 | | 287 | 286 | 278 | 274 | 271 | 271 | 271 | 271 | 271 | 271 | 267 | 264 | 261 | 267 | 274 | 277 | 279 | 278 | 278 | 282 | 278 | 279 | 282 | 283 | 275 | 6600 |
| 9 | Q | 283 | 284 | 283 | 283 | 278 | 277 | 276 | 274 | 274 | 274 | 271 | 268 | 267 | 272 | 280 | 285 | 286 | 286 | 284 | 287 | 288 | 288 | 288 | 288 | 280 | 6724 |
| 10 | | 288 | 288 | 288 | 286 | 285 | 284 | 281 | 278 | 276 | 273 | 269 | 268 | 267 | 267 | 275 | 281 | 283 | 282 | 279 | 278 | 278 | 284 | 285 | 285 | 279 | 6708 |
| 11 | | 279 | 279 | 277 | 278 | 276 | 275 | 274 | 272 | 269 | 262 | 261 | 266 | 266 | 265 | 270 | 275 | 279 | 279 | 279 | 280 | 279 | 275 | 274 | 272 | 273 | 6561 |
| 12 | Q | 273 | 274 | 274 | 274 | 274 | 275 | 274 | 273 | 270 | 265 | 267 | 268 | 265 | 269 | 274 | 277 | 277 | 278 | 277 | 276 | 274 | 272 | 271 | 271 | 272 | 6542 |
| 13 | Q | 270 | 270 | 270 | 271 | 271 | 271 | 271 | 270 | 269 | 267 | 265 | 262 | 260 | 264 | 270 | 272 | 271 | 271 | 272 | 272 | 272 | 271 | 270 | 269 | 269 | 6461 |
| 14 | Q | 268 | 267 | 268 | 269 | 270 | 270 | 270 | 271 | 269 | 269 | 267 | 262 | 255 | 260 | 264 | 264 | 264 | 265 | 268 | 269 | 269 | 268 | 269 | 268 | 267 | 6403 |
| 15 | | 265 | 265 | 267 | 265 | 264 | 265 | 267 | 269 | 270 | 269 | 260 | 255 | 254 | 261 | 267 | 270 | 275 | 275 | 277 | 283 | 283 | 284 | 280 | 276 | 269 | 6466 |
| 16 | | 272 | 270 | 269 | 270 | 270 | 271 | 272 | 272 | 270 | 268 | 268 | 262 | 260 | 260 | 279 | 281 | 281 | 283 | 294 | 297 | 290 | 290 | 285 | 286 | 276 | 6620 |
| 17 | | 282 | 277 | 275 | 273 | 273 | 277 | 278 | 279 | 276 | 268 | 270 | 271 | 268 | 273 | 275 | 278 | 283 | 285 | 283 | 283 | 282 | 280 | 278 | 277 | 277 | 6644 |
| 18 | | 276 | 274 | 273 | 272 | 273 | 274 | 275 | 275 | 275 | 267 | 267 | 266 | 264 | 267 | 274 | 277 | 275 | 274 | 277 | 296 | 296 | 297 | 274 | 282 | 276 | 6620 |
| 19 | Q | 280 | 279 | 277 | 277 | 277 | 278 | 278 | 279 | 282 | 278 | 277 | 274 | 268 | 270 | 273 | 275 | 274 | 274 | 276 | 276 | 277 | 276 | 276 | 275 | 276 | 6626 |
| 20 | | 275 | 274 | 272 | 273 | 272 | 272 | 272 | 272 | 273 | 273 | 271 | 270 | 266 | 265 | 268 | 273 | 273 | 272 | 273 | 276 | 275 | 275 | 275 | 275 | 272 | 6536 |
| 21 | | 274 | 273 | 273 | 273 | 272 | 270 | 268 | 268 | 268 | 264 | 263 | 263 | 256 | 257 | 263 | 263 | 263 | 265 | 272 | 274 | 273 | 276 | 273 | 273 | 268 | 6437 |
| 22 | D | 277 | 278 | 278 | 274 | 270 | 263 | 257 | 263 | 267 | 272 | 274 | 276 | 273 | 277 | 282 | 283 | 286 | 298 | 284 | 293 | 302 | 308 | 293 | 282 | 279 | 6710 |
| 23 | D | 286 | 283 | 278 | 266 | 268 | 267 | 268 | 266 | 266 | 266 | 263 | 262 | 262 | 267 | 277 | 284 | 283 | 283 | 282 | 287 | 293 | 286 | 278 | 273 | 275 | 6594 |
| 24 | | 266 | 265 | 269 | 274 | 273 | 273 | 273 | 269 | 265 | 266 | 269 | 273 | 269 | 268 | 279 | 284 | 287 | 285 | 283 | 286 | 283 | 287 | 286 | 278 | 275 | 6610 |
| 25 | | 273 | 275 | 278 | 278 | 277 | 278 | 278 | 278 | 276 | 274 | 273 | 271 | 272 | 273 | 278 | 279 | 276 | 277 | 277 | 276 | 276 | 277 | 274 | 274 | 276 | 6618 |
| 26 | | 275 | 276 | 277 | 276 | 275 | 275 | 274 | 274 | 274 | 264 | 262 | 264 | 263 | 264 | 272 | 275 | 276 | 277 | 277 | 279 | 286 | 283 | 278 | 275 | 274 | 6571 |
| 27 | | 273 | 272 | 273 | 274 | 274 | 271 | 269 | 271 | 272 | 273 | 267 | 259 | 256 | 264 | 269 | 274 | 279 | 283 | 284 | 283 | 283 | 284 | 287 | 274 | 273 | 6568 |
| 28 | | 266 | 266 | 270 | 264 | 266 | 270 | 274 | 271 | 268 | 266 | 261 | 263 | 270 | 269 | 274 | 278 | 279 | 279 | 280 | 282 | 281 | 279 | 278 | 276 | 272 | 6530 |
| 29 | | 274 | 276 | 277 | 278 | 278 | 279 | 280 | 278 | 277 | 271 | 265 | 263 | 259 | 261 | 267 | 268 | 269 | 267 | 270 | 280 | 279 | 278 | 276 | 277 | 273 | 6547 |
| 30 | D | 273 | 268 | 268 | 262 | 264 | 266 | 273 | 272 | 274 | 268 | 267 | 261 | 263 | 267 | 277 | 287 | 293 | 290 | 289 | 289 | 287 | 283 | 282 | 278 | 275 | 6601 |
| 31 | D | 277 | 272 | 271 | 264 | 258 | 257 | 256 | 259 | 261 | 262 | 259 | 261 | 264 | 264 | 289 | 301 | 332 | 333 | 332 | 321 | 310 | 301 | 296 | 292 | 283 | 6792 |
| MEAN | | 277 | 276 | 275 | 274 | 273 | 273 | 273 | 273 | 273 | 270 | 268 | 267 | 265 | 268 | 275 | 278 | 281 | 281 | 282 | 284 | 285 | 284 | 281 | 279 | 276 | 6615 |
| MEAN Q | | 275 | 275 | 274 | 275 | 274 | 274 | 273 | 273 | 273 | 271 | 269 | 267 | 263 | 267 | 272 | 275 | 274 | 275 | 275 | 276 | 276 | 275 | 275 | 274 | 273 | 6551 |
| MEAN D | | 280 | 276 | 275 | 268 | 267 | 265 | 266 | 268 | 269 | 269 | 267 | 266 | 267 | 269 | 280 | 287 | 298 | 298 | 295 | 297 | 300 | 294 | 288 | 283 | 279 | 6692 |

HARTLAND

VERTICAL INTENSITY

1982 FEBRUARY 43500 GAMMAS PLUS TABULAR QUANTITIES (UNIT 1 GAMMA)

| U.T | Ø | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN | SUM |
|-----|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
| 1 | | 289 | 287 | 287 | 286 | 284 | 282 | 283 | 286 | 290 | 287 | 285 | 278 | 284 | 289 | 292 | 301 | 296 | 300 | 324 | 357 | 351 | 365 | 338 | 310 | 301 | 7231 |
| 2 | D | 301 | 292 | 269 | 269 | 264 | 251 | 260 | 251 | 259 | 272 | 275 | 279 | 287 | 291 | 287 | 290 | 296 | 296 | 298 | 300 | 300 | 302 | 304 | 300 | 283 | 6793 |
| 3 | | 296 | 293 | 290 | 288 | 285 | 284 | 281 | 273 | 279 | 286 | 289 | 296 | 292 | 282 | 290 | 291 | 287 | 290 | 296 | 301 | 297 | 303 | 300 | 293 | 290 | 6962 |
| 4 | D | 292 | 287 | 278 | 273 | 272 | 266 | 258 | 258 | 268 | 270 | 274 | 283 | 287 | 288 | 306 | 315 | 314 | 309 | 312 | 310 | 324 | 319 | 319 | 291 | 290 | 6973 |
| 5 | | 279 | 290 | 274 | 280 | 275 | 275 | 276 | 280 | 281 | 285 | 290 | 293 | 290 | 288 | 288 | 291 | 306 | 317 | 310 | 307 | 308 | 311 | 304 | 303 | 291 | 7001 |
| 6 | | 300 | 299 | 297 | 294 | 289 | 280 | 273 | 274 | 278 | 278 | 280 | 285 | 294 | 291 | 294 | 306 | 322 | 341 | 335 | 341 | 340 | 335 | 326 | 323 | 303 | 7275 |
| 7 | | 315 | 300 | 292 | 285 | 280 | 284 | 288 | 288 | 287 | 283 | 278 | 279 | 279 | 278 | 279 | 288 | 294 | 297 | 296 | 302 | 307 | 304 | 306 | 300 | 291 | 6989 |
| 8 | | 287 | 288 | 293 | 295 | 294 | 293 | 288 | 284 | 284 | 280 | 277 | 276 | 282 | 290 | 293 | 296 | 302 | 307 | 312 | 321 | 330 | 312 | 302 | 302 | 295 | 7088 |
| 9 | Q | 307 | 308 | 303 | 297 | 292 | 289 | 288 | 285 | 283 | 277 | 273 | 274 | 277 | 279 | 283 | 288 | 289 | 289 | 290 | 292 | 290 | 293 | 295 | 297 | 289 | 6938 |
| 10 | | 297 | 296 | 297 | 293 | 290 | 290 | 288 | 287 | 286 | 281 | 272 | 272 | 274 | 282 | 306 | 332 | 349 | 343 | 335 | 335 | 346 | 333 | 316 | 319 | 305 | 7316 |
| 11 | D | 304 | 302 | 297 | 290 | 281 | 280 | 277 | 285 | 281 | 277 | 277 | 277 | 277 | 277 | 292 | 331 | 322 | 307 | 304 | 307 | 312 | 332 | 302 | 292 | 295 | 7083 |
| 12 | | 256 | 277 | 292 | 297 | 301 | 299 | 298 | 299 | 298 | 291 | 282 | 277 | 280 | 286 | 288 | 294 | 302 | 296 | 302 | 320 | 323 | 312 | 302 | 291 | 294 | 7063 |
| 13 | D | 287 | 294 | 307 | 289 | 288 | 287 | 289 | 281 | 280 | 280 | 282 | 282 | 289 | 297 | 314 | 328 | 334 | 336 | 353 | 351 | 346 | 324 | 293 | 304 | 305 | 7315 |
| 14 | | 302 | 301 | 291 | 288 | 284 | 269 | 275 | 270 | 272 | 274 | 282 | 283 | 286 | 294 | 298 | 304 | 311 | 316 | 333 | 346 | 321 | 321 | 323 | 324 | 298 | 7168 |
| 15 | Q | 317 | 308 | 306 | 306 | 305 | 302 | 301 | 296 | 302 | 296 | 292 | 293 | 297 | 306 | 314 | 325 | 317 | 311 | 306 | 302 | 301 | 297 | 296 | 296 | 304 | 7292 |
| 16 | Q | 294 | 294 | 293 | 292 | 292 | 292 | 293 | 295 | 296 | 294 | 286 | 282 | 275 | 282 | 286 | 288 | 291 | 291 | 294 | 293 | 292 | 292 | 292 | 291 | 290 | 6970 |
| 17 | | 290 | 289 | 288 | 288 | 287 | 287 | 283 | 278 | 279 | 277 | 269 | 267 | 264 | 275 | 282 | 296 | 317 | 325 | 326 | 320 | 318 | 305 | 299 | 288 | 291 | 6997 |
| 18 | | 278 | 280 | 276 | 275 | 282 | 283 | 284 | 287 | 29 | | | | | | | | | | | | | | | | | |

HARTLAND

VERTICAL INTENSITY

1982 MARCH 43500 GAMMAS PLUS TABULAR QUANTITIES (UNIT 1 GAMMA)

| U T. | Ø | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN | SUM | |
|--------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| 1 | D | 285 | 285 | 283 | 283 | 284 | 285 | 284 | 284 | 287 | 284 | 276 | 263 | 254 | 257 | 282 | 333 | 327 | 314 | 311 | 309 | 308 | 300 | 293 | 232 | 287 | 6903 | |
| 2 | D | 238 | 213 | 205 | 186 | 196 | 223 | 246 | 255 | 273 | 283 | 293 | 301 | 310 | 353 | 359 | 380 | 366 | 357 | 343 | 333 | 336 | 318 | 313 | 302 | 291 | 6982 | |
| 3 | | 296 | 294 | 296 | 297 | 300 | 302 | 303 | 303 | 301 | 292 | 286 | 275 | 274 | 282 | 294 | 296 | 301 | 305 | 305 | 307 | 311 | 302 | 298 | 297 | 296 | 7117 | |
| 4 | | 297 | 295 | 293 | 292 | 292 | 292 | 292 | 293 | 294 | 286 | 277 | 272 | 265 | 264 | 272 | 283 | 292 | 294 | 292 | 293 | 295 | 295 | 299 | 302 | 288 | 6921 | |
| 5 | | 302 | 296 | 293 | 292 | 291 | 282 | 277 | 283 | 287 | 287 | 284 | 276 | 270 | 268 | 272 | 277 | 287 | 292 | 292 | 293 | 292 | 292 | 292 | 292 | 286 | 6869 | |
| 6 | Q | 291 | 291 | 291 | 290 | 290 | 288 | 286 | 287 | 288 | 286 | 282 | 277 | 269 | 266 | 272 | 277 | 283 | 285 | 286 | 286 | 286 | 287 | 288 | 289 | 284 | 6821 | |
| 7 | Q | 291 | 292 | 292 | 288 | 287 | 286 | 285 | 286 | 287 | 284 | 277 | 269 | 263 | 268 | 275 | 282 | 285 | 285 | 282 | 282 | 282 | 283 | 284 | 287 | 282 | 6782 | |
| 8 | | 289 | 291 | 288 | 286 | 284 | 282 | 282 | 286 | 289 | 284 | 276 | 266 | 262 | 261 | 267 | 281 | 286 | 292 | 293 | 299 | 293 | 296 | 308 | 307 | 285 | 6848 | |
| 9 | | 301 | 291 | 291 | 292 | 292 | 292 | 286 | 286 | 286 | 282 | 271 | 259 | 252 | 255 | 264 | 282 | 303 | 309 | 312 | 306 | 303 | 303 | 297 | 296 | 288 | 6911 | |
| 10 | | 293 | 288 | 282 | 279 | 279 | 277 | 276 | 279 | 278 | 272 | 264 | 257 | 256 | 260 | 269 | 282 | 292 | 292 | 286 | 286 | 285 | 286 | 289 | 291 | 279 | 6698 | |
| 11 | | 287 | 289 | 289 | 287 | 283 | 281 | 274 | 275 | 279 | 276 | 266 | 252 | 249 | 258 | 271 | 282 | 291 | 297 | 297 | 297 | 297 | 297 | 293 | 291 | 281 | 6758 | |
| 12 | | 289 | 290 | 289 | 289 | 288 | 287 | 284 | 285 | 286 | 277 | 267 | 256 | 248 | 249 | 257 | 272 | 287 | 292 | 292 | 298 | 299 | 299 | 297 | 293 | 282 | 6770 | |
| 13 | | 292 | 288 | 274 | 275 | 283 | 282 | 280 | 283 | 278 | 273 | 266 | 263 | 258 | 259 | 265 | 276 | 287 | 292 | 292 | 288 | 293 | 287 | 287 | 284 | 279 | 6703 | |
| 14 | | 283 | 283 | 281 | 282 | 284 | 285 | 286 | 287 | 287 | 278 | 263 | 251 | 243 | 244 | 253 | 266 | 286 | 297 | 306 | 307 | 302 | 297 | 296 | 296 | 281 | 6743 | |
| 15 | Q | 295 | 290 | 284 | 279 | 283 | 284 | 283 | 283 | 283 | 277 | 266 | 256 | 247 | 247 | 255 | 265 | 277 | 285 | 287 | 288 | 287 | 287 | 287 | 288 | 277 | 6663 | |
| 16 | Q | 287 | 287 | 286 | 285 | 282 | 282 | 281 | 284 | 286 | 283 | 273 | 260 | 251 | 253 | 255 | 265 | 276 | 283 | 284 | 285 | 285 | 285 | 285 | 284 | 278 | 6667 | |
| 17 | | 282 | 280 | 281 | 281 | 280 | 279 | 277 | 279 | 278 | 271 | 258 | 245 | 238 | 234 | 238 | 247 | 256 | 265 | 271 | 282 | 278 | 278 | 283 | 285 | 268 | 6446 | |
| 18 | | 278 | 275 | 267 | 263 | 264 | 265 | 265 | 270 | 269 | 266 | 263 | 257 | 256 | 258 | 263 | 272 | 288 | 287 | 283 | 282 | 286 | 278 | 274 | 276 | 271 | 6505 | |
| 19 | | 273 | 268 | 268 | 266 | 270 | 274 | 277 | 282 | 278 | 273 | 263 | 258 | 257 | 257 | 265 | 274 | 283 | 283 | 281 | 279 | 279 | 283 | 283 | 278 | 273 | 6552 | |
| 20 | | 279 | 278 | 278 | 278 | 277 | 276 | 273 | 282 | 283 | 282 | 275 | 269 | 263 | 267 | 273 | 284 | 293 | 295 | 295 | 293 | 287 | 287 | 284 | 279 | 280 | 6730 | |
| 21 | D | 277 | 278 | 279 | 279 | 275 | 273 | 273 | 275 | 279 | 277 | 273 | 265 | 265 | 273 | 281 | 302 | 306 | 303 | 300 | 312 | 303 | 294 | 287 | 278 | 283 | 6807 | |
| 22 | D | 265 | 254 | 247 | 241 | 244 | 253 | 261 | 270 | 277 | 277 | 274 | 264 | 258 | 263 | 270 | 282 | 293 | 303 | 303 | 297 | 293 | 290 | 290 | 287 | 273 | 6556 | |
| 23 | | 287 | 287 | 287 | 286 | 286 | 285 | 284 | 285 | 282 | 273 | 266 | 258 | 253 | 253 | 263 | 275 | 283 | 284 | 283 | 282 | 281 | 281 | 281 | 282 | 278 | 6667 | |
| 24 | | 282 | 283 | 283 | 283 | 282 | 279 | 278 | 282 | 278 | 269 | 258 | 247 | 243 | 243 | 252 | 266 | 280 | 289 | 288 | 286 | 286 | 286 | 283 | 282 | 283 | 274 | 6585 |
| 25 | D | 282 | 270 | 266 | 273 | 276 | 276 | 276 | 279 | 279 | 272 | 264 | 259 | 257 | 268 | 275 | 285 | 294 | 296 | 293 | 285 | 287 | 283 | 278 | 279 | 277 | 6652 | |
| 26 | | 278 | 280 | 279 | 278 | 282 | 282 | 282 | 283 | 279 | 272 | 258 | 250 | 248 | 255 | 264 | 278 | 293 | 297 | 286 | 283 | 279 | 280 | 278 | 273 | 275 | 6617 | |
| 27 | | 274 | 277 | 273 | 273 | 281 | 282 | 282 | 282 | 283 | 281 | 273 | 258 | 247 | 252 | 258 | 268 | 282 | 286 | 286 | 283 | 282 | 282 | 278 | 277 | 277 | 275 | 6595 |
| 28 | Q | 277 | 278 | 278 | 278 | 276 | 275 | 277 | 282 | 283 | 276 | 265 | 253 | 248 | 255 | 267 | 276 | 284 | 285 | 283 | 283 | 280 | 277 | 276 | 275 | 274 | 6587 | |
| 29 | | 275 | 275 | 275 | 276 | 278 | 273 | 275 | 280 | 281 | 283 | 275 | 257 | 247 | 250 | 263 | 276 | 284 | 286 | 283 | 283 | 281 | 280 | 282 | 286 | 275 | 6604 | |
| 30 | | 284 | 283 | 283 | 282 | 278 | 279 | 279 | 286 | 288 | 282 | 268 | 254 | 252 | 262 | 266 | 274 | 284 | 294 | 292 | 286 | 286 | 286 | 287 | 286 | 279 | 6695 | |
| 31 | | 275 | 267 | 271 | 272 | 271 | 272 | 275 | 280 | 282 | 279 | 269 | 255 | 246 | 252 | 262 | 270 | 285 | 304 | 322 | 316 | 311 | 297 | 292 | 287 | 279 | 6712 | |
| MEAN | | 283 | 281 | 278 | 277 | 278 | 278 | 279 | 282 | 283 | 278 | 270 | 261 | 257 | 261 | 269 | 282 | 291 | 294 | 294 | 293 | 292 | 289 | 288 | 285 | 280 | 6723 | |
| MEAN Q | | 288 | 288 | 286 | 284 | 284 | 283 | 282 | 284 | 285 | 281 | 273 | 263 | 256 | 258 | 265 | 273 | 281 | 285 | 284 | 285 | 284 | 284 | 284 | 285 | 279 | 6705 | |
| MEAN D | | 269 | 260 | 256 | 252 | 255 | 262 | 268 | 273 | 279 | 279 | 276 | 270 | 269 | 283 | 293 | 316 | 317 | 315 | 310 | 307 | 305 | 297 | 292 | 276 | 282 | 6779 | |

HARTLAND

VERTICAL INTENSITY

1982 APRIL 43500 GAMMAS PLUS TABULAR QUANTITIES (UNIT 1 GAMMA)

| U T. | Ø | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN | SUM |
|------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
| 1 | | 282 | 282 | 281 | 282 | 284 | 283 | 286 | 292 | 292 | 281 | 268 | 261 | 252 | 256 | 263 | 271 | 276 | 282 | 282 | 282 | 288 | 295 | 277 | 263 | 277 | 6661 |
| 2 | D | 252 | 236 | 237 | 242 | 245 | 252 | 266 | 268 | 269 | 271 | 264 | 254 | 245 | 257 | 280 | 309 | 347 | 346 | 344 | 330 | 327 | 324 | 311 | 290 | 282 | 6766 |
| 3 | D | 282 | 284 | 281 | 274 | 256 | 246 | 258 | 276 | 283 | 272 | 265 | 265 | 269 | 284 | 302 | 325 | 335 | 349 | 336 | 326 | 313 | 293 | 294 | 292 | 7021 | |
| 4 | | 286 | 271 | 273 | 277 | 277 | 275 | 279 | 286 | 290 | 283 | 277 | 272 | 269 | 274 | 282 | 290 | 296 | 304 | 315 | 311 | 303 | 303 | 290 | 290 | 286 | 6873 |
| 5 | | 294 | 286 | 285 | 282 | 272 | 273 | 283 | 292 | 292 | 284 | 276 | 272 | 266 | 271 | 281 | 287 | 292 | 296 | 305 | 303 | 287 | 291 | 295 | 283 | 285 | 6848 |
| 6 | | 285 | 287 | 284 | 285 | 284 | 281 | 282 | 285 | 285 | 282 | 266 | 256 | 260 | 271 | 284 | 293 | 306 | 316 | 306 | 296 | 294 | 293 | 287 | 280 | 285 | 6848 |
| 7 | Q | 277 | 281 | 283 | 286 | 286 | 285 | 289 | 292 | 284 | 272 | 256 | 242 | 242 | 251 | 261 | 275 | 285 | 289 | 287 | 286 | 283 | 282 | 282 | 282 | 276 | 6638 |
| 8 | | 282 | 282 | 283 | 285 | 284 | 285 | 286 | 285 | 277 | 261 | 249 | 242 | 245 | 256 | 275 | 289 | 287 | 288 | 287 | 286 | 292 | 283 | 276 | 277 | 277 | 6642 |
| 9 | | 282 | 281 | 281 | 277 | 281 | 281 | 285 | 286 | 284 | 272 | 258 | 245 | 242 | 246 | 257 | 271 | 281 | 288 | 292 | 296 | 293 | 292 | 287 | 287 | 277 | 6645 |
| 10 | D | 289 | 286 | 285 | 284 | 283 | 281 | 284 | 285 | 279 | 262 | 242 | 239 | 244 | 261 | 306 | 341 | 377 | 376 | 392 | 390 | 365 | 337 | 289 | 296 | 303 | 7273 |
| 11 | D | 304 | 283 | 274 | 265 | 274 | 276 | 266 | 282 | 284 | 275 | 271 | 262 | 258 | 263 | 282 | 296 | 303 | 309 | 319 | 324 | 319 | 297 | 292 | 292 | 286 | 6870 |
| 12 | | 292 | 293 | 293 | 294 | 294 | 295 | 302 | 301 | 293 | 284 | 271 | 258 | 252 | 261 | 279 | 294 | 297 | 300 | 302 | 303 | 297 | 290 | 287 | 287 | 288 | 6919 |
| 13 | | 286 | 286 | 282 | 272 | 276 | 282 | 284 | 286 | 284 | 271 | 256 | 246 | 242 | 247 | 263 | 276 | 283 | 287 | 289 | 287 | 286 | 285 | 286 | 289 | 276 | 6631 |
| 14 | Q | 284 | 285 | 285 | 286 | 285 | 286 | 289 | 289 | 286 | 277 | 265 | 252 | 245 | 249 | 262 | 276 | 283 | 284 | 285 | 283 | 283 | 282 | 282 | 281 | 277 | 6664 |
| 15 | | 281 | 281 | 281 | 281 | 281 | 282 | 283 | 284 | 281 | 272 | 262 | 252 | 249 | 256 | 266 | 276 | 282 | 287 | 286 | 286 | 286 | 291 | 282 | 279 | 277 | 6647 |
| 16 | | 278 | 277 | 277 | 281 | 282 | 284 | 287 | 291 | 289 | 279 | 262 | 255 | 252 | 252 | 266 | 276 | 282 | 291 | 294 | 288 | 286 | 286 | 282 | 281 | 278 | 6683 |
| 17 | | 280 | 277 | 277 | 280 | 281 | 282 | 285 | 282 | 286 | 282 | 276 | 272 | 277 | 283 | 291 | 296 | 301 | 302 | 296 | 292 | 291 | 287 | 287 | 288 | 285 | 6851 |
| 18 | | 287 | 287 | 286 | 287 | 287 | 290 | 291 | 287 | 282 | 275 | 264 | 256 | 252 | 256 | | | | | | | | | | | | |

HARTLAND

VERTICAL INTENSITY

1982 MAY 43500 GAMMAS PLUS TABULAR QUANTITIES (UNIT 1 GAMMA)

| U T | 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 | MEAN | SUM |
|--------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
| 1 | | 270 | 271 | 262 | 271 | 277 | 283 | 284 | 282 | 272 | 266 | 257 | 250 | 251 | 259 | 272 | 284 | 307 | 326 | 320 | 307 | 297 | 292 | 288 | 285 | 280 | 6733 |
| 2 | | 284 | 282 | 266 | 266 | 270 | 272 | 282 | 282 | 274 | 265 | 263 | 255 | 255 | 265 | 284 | 294 | 302 | 307 | 327 | 326 | 308 | 297 | 294 | 284 | 283 | 6804 |
| 3 | D | 283 | 276 | 273 | 263 | 271 | 269 | 262 | 256 | 264 | 261 | 251 | 250 | 259 | 272 | 281 | 297 | 333 | 344 | 344 | 323 | 302 | 292 | 293 | 292 | 284 | 6811 |
| 4 | | 276 | 283 | 286 | 288 | 287 | 287 | 286 | 282 | 276 | 265 | 257 | 261 | 265 | 272 | 287 | 303 | 309 | 297 | 293 | 287 | 284 | 284 | 284 | 285 | 282 | 6784 |
| 5 | | 285 | 285 | 283 | 282 | 278 | 277 | 282 | 281 | 281 | 276 | 270 | 266 | 269 | 276 | 284 | 296 | 300 | 296 | 292 | 291 | 286 | 282 | 282 | 283 | 282 | 6783 |
| 6 | | 284 | 284 | 282 | 282 | 282 | 282 | 281 | 276 | 272 | 267 | 260 | 256 | 256 | 262 | 275 | 284 | 293 | 292 | 291 | 287 | 286 | 285 | 282 | 283 | 278 | 6684 |
| 7 | Q | 283 | 282 | 284 | 283 | 285 | 286 | 286 | 286 | 287 | 280 | 266 | 261 | 259 | 264 | 276 | 286 | 286 | 292 | 291 | 287 | 285 | 283 | 283 | 284 | 281 | 6745 |
| 8 | Q | 284 | 277 | 279 | 276 | 279 | 282 | 281 | 277 | 274 | 267 | 262 | 252 | 249 | 254 | 265 | 274 | 281 | 283 | 285 | 284 | 281 | 278 | 277 | 281 | 274 | 6582 |
| 9 | | 281 | 277 | 272 | 273 | 276 | 273 | 274 | 272 | 266 | 262 | 249 | 235 | 232 | 242 | 254 | 266 | 276 | 282 | 281 | 281 | 278 | 276 | 276 | 276 | 268 | 6430 |
| 10 | | 276 | 276 | 276 | 278 | 282 | 284 | 286 | 284 | 278 | 266 | 253 | 242 | 244 | 254 | 267 | 278 | 283 | 282 | 281 | 277 | 276 | 273 | 272 | 273 | 272 | 6541 |
| 11 | | 272 | 271 | 273 | 277 | 281 | 282 | 285 | 282 | 277 | 272 | 263 | 256 | 250 | 253 | 265 | 273 | 277 | 282 | 282 | 283 | 283 | 282 | 277 | 276 | 274 | 6574 |
| 12 | | 276 | 274 | 276 | 277 | 282 | 285 | 286 | 282 | 277 | 268 | 255 | 249 | 244 | 252 | 264 | 273 | 280 | 282 | 284 | 283 | 281 | 277 | 275 | 274 | 273 | 6556 |
| 13 | | 275 | 275 | 274 | 275 | 277 | 282 | 284 | 283 | 276 | 264 | 248 | 238 | 241 | 244 | 253 | 264 | 273 | 282 | 288 | 289 | 287 | 282 | 277 | 275 | 271 | 6506 |
| 14 | | 275 | 274 | 275 | 276 | 283 | 285 | 283 | 282 | 273 | 263 | 248 | 240 | 243 | 252 | 264 | 272 | 278 | 283 | 284 | 283 | 278 | 276 | 274 | 272 | 271 | 6516 |
| 15 | | 273 | 270 | 266 | 268 | 277 | 283 | 282 | 277 | 273 | 268 | 260 | 252 | 248 | 257 | 268 | 273 | 285 | 292 | 304 | 298 | 288 | 286 | 282 | 278 | 275 | 6608 |
| 16 | | 278 | 277 | 276 | 275 | 283 | 284 | 282 | 274 | 276 | 263 | 258 | 249 | 245 | 252 | 263 | 272 | 280 | 284 | 286 | 286 | 283 | 282 | 282 | 277 | 273 | 6567 |
| 17 | | 275 | 274 | 274 | 272 | 272 | 274 | 276 | 275 | 273 | 263 | 252 | 248 | 246 | 255 | 265 | 275 | 280 | 283 | 282 | 283 | 284 | 284 | 277 | 276 | 271 | 6518 |
| 18 | | 275 | 276 | 272 | 267 | 268 | 268 | 277 | 279 | 279 | 272 | 262 | 258 | 257 | 266 | 273 | 278 | 284 | 288 | 290 | 290 | 285 | 284 | 277 | 267 | 274 | 6592 |
| 19 | | 268 | 272 | 267 | 268 | 274 | 282 | 283 | 282 | 275 | 266 | 263 | 253 | 251 | 258 | 267 | 273 | 277 | 284 | 286 | 285 | 284 | 283 | 283 | 277 | 273 | 6561 |
| 20 | | 276 | 274 | 274 | 278 | 284 | 285 | 284 | 278 | 268 | 257 | 257 | 252 | 251 | 261 | 267 | 275 | 282 | 278 | 277 | 277 | 277 | 275 | 277 | 277 | 272 | 6541 |
| 21 | | 277 | 279 | 279 | 278 | 279 | 283 | 283 | 276 | 268 | 263 | 253 | 242 | 238 | 248 | 257 | 268 | 278 | 283 | 281 | 277 | 278 | 277 | 275 | 274 | 270 | 6494 |
| 22 | Q | 274 | 277 | 278 | 281 | 283 | 283 | 281 | 278 | 276 | 267 | 257 | 247 | 253 | 258 | 267 | 277 | 283 | 282 | 282 | 278 | 277 | 274 | 273 | 275 | 273 | 6561 |
| 23 | Q | 276 | 276 | 277 | 278 | 283 | 286 | 283 | 277 | 267 | 260 | 254 | 247 | 247 | 253 | 263 | 271 | 277 | 281 | 276 | 274 | 270 | 268 | 268 | 270 | 270 | 6482 |
| 24 | Q | 272 | 274 | 276 | 278 | 283 | 285 | 282 | 273 | 258 | 243 | 234 | 227 | 225 | 238 | 256 | 268 | 275 | 276 | 274 | 272 | 271 | 268 | 267 | 267 | 264 | 6342 |
| 25 | | 267 | 269 | 272 | 274 | 276 | 282 | 278 | 270 | 260 | 247 | 235 | 223 | 223 | 237 | 253 | 265 | 269 | 274 | 272 | 271 | 268 | 268 | 267 | 267 | 262 | 6287 |
| 26 | | 263 | 262 | 266 | 272 | 273 | 276 | 278 | 277 | 268 | 257 | 243 | 230 | 226 | 226 | 232 | 243 | 263 | 285 | 294 | 301 | 298 | 288 | 287 | 278 | 266 | 6386 |
| 27 | D | 275 | 274 | 275 | 272 | 277 | 276 | 264 | 256 | 257 | 245 | 245 | 245 | 241 | 254 | 296 | 311 | 326 | 344 | 329 | 329 | 304 | 299 | 292 | 275 | 281 | 6761 |
| 28 | D | 265 | 261 | 257 | 241 | 228 | 228 | 243 | 256 | 258 | 258 | 256 | 246 | 249 | 263 | 291 | 327 | 321 | 326 | 323 | 305 | 297 | 283 | 276 | 285 | 272 | 6543 |
| 29 | D | 275 | 265 | 251 | 254 | 256 | 265 | 277 | 286 | 286 | 284 | 283 | 273 | 267 | 274 | 287 | 297 | 299 | 299 | 309 | 301 | 295 | 294 | 287 | 279 | 281 | 6743 |
| 30 | D | 278 | 278 | 275 | 269 | 277 | 280 | 281 | 278 | 274 | 274 | 268 | 253 | 244 | 243 | 265 | 284 | 297 | 315 | 308 | 305 | 301 | 292 | 285 | 264 | 278 | 6688 |
| 31 | | 258 | 259 | 257 | 254 | 247 | 257 | 259 | 265 | 269 | 268 | 258 | 254 | 255 | 257 | 264 | 277 | 297 | 308 | 308 | 303 | 294 | 284 | 284 | 275 | 271 | 6511 |
| MEAN | | 275 | 274 | 273 | 272 | 275 | 278 | 279 | 276 | 272 | 264 | 256 | 249 | 248 | 256 | 269 | 280 | 289 | 294 | 294 | 291 | 286 | 282 | 280 | 277 | 275 | 6589 |
| MEAN Q | | 278 | 277 | 279 | 279 | 283 | 284 | 283 | 278 | 272 | 263 | 255 | 247 | 247 | 253 | 265 | 275 | 280 | 283 | 282 | 279 | 277 | 274 | 274 | 275 | 273 | 6542 |
| MEAN D | | 275 | 271 | 266 | 260 | 262 | 264 | 265 | 266 | 268 | 264 | 261 | 253 | 252 | 261 | 284 | 303 | 315 | 326 | 323 | 313 | 300 | 292 | 287 | 279 | 280 | 6710 |

HARTLAND

VERTICAL INTENSITY

1982 JUNE 43500 GAMMAS PLUS TABULAR QUANTITIES (UNIT 1 GAMMA)

| U T | 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 | MEAN | SUM |
|-----|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
| 1 | | 273 | 264 | 262 | 269 | 270 | 275 | 284 | 285 | 283 | 276 | 268 | 254 | 247 | 253 | 258 | 267 | 281 | 291 | 304 | 308 | 308 | 298 | 289 | 283 | 277 | 6650 |
| 2 | | 268 | 274 | 263 | 255 | 268 | 278 | 283 | 285 | 285 | 273 | 258 | 249 | 251 | 256 | 268 | 279 | 284 | 287 | 294 | 299 | 297 | 290 | 288 | 284 | 275 | 6616 |
| 3 | Q | 283 | 277 | 275 | 274 | 280 | 284 | 283 | 283 | 281 | 275 | 266 | 258 | 258 | 263 | 268 | 278 | 285 | 289 | 293 | 289 | 287 | 286 | 284 | 283 | 278 | 6682 |
| 4 | Q | 279 | 273 | 276 | 278 | 283 | 282 | 283 | 284 | 279 | 267 | 252 | 244 | 248 | 248 | 263 | 274 | 279 | 284 | 286 | 284 | 283 | 283 | 283 | 280 | 274 | 6575 |
| 5 | Q | 280 | 283 | 284 | 285 | 285 | 285 | 279 | 274 | 264 | 253 | 244 | 237 | 244 | 254 | 263 | 275 | 281 | 284 | 285 | 281 | 279 | 277 | 276 | 279 | 272 | 6531 |
| 6 | | 278 | 277 | 280 | 277 | 275 | 274 | 274 | 269 | 264 | 258 | 247 | 243 | 241 | 246 | 256 | 265 | 269 | 283 | 285 | 285 | 284 | 280 | 278 | 278 | 269 | 6466 |
| 7 | | 278 | 277 | 275 | 276 | 279 | 284 | 284 | 277 | 279 | 277 | 267 | 263 | 264 | 267 | 278 | 289 | 297 | 299 | 299 | 295 | 288 | 284 | 283 | 283 | 281 | 6742 |
| 8 | | 283 | 284 | 284 | 286 | 288 | 289 | 289 | 285 | 276 | 265 | 253 | 238 | 234 | 244 | 258 | 275 | 288 | 294 | 297 | 290 | 287 | 285 | 284 | 280 | 276 | 6636 |
| 9 | | 279 | 276 | 272 | 273 | 277 | 283 | 286 | 284 | 276 | 264 | 256 | 252 | 258 | 264 | 269 | 278 | 285 | 292 | 293 | 288 | 284 | 277 | 276 | 276 | 276 | 6618 |
| 10 | D | 275 | 277 | 275 | 264 | 241 | 227 | 230 | 243 | 254 | 254 | 247 | 237 | 239 | 261 | 291 | 323 | 343 | 317 | 304 | 295 | 287 | 283 | 283 | 283 | 272 | 6533 |
| 11 | D | 278 | 282 | 274 | 263 | 262 | 257 | 267 | 273 | 277 | 272 | 266 | 262 | 257 | 260 | 267 | 282 | 292 | 307 | 324 | 322 | 315 | 303 | 292 | 277 | 280 | 6731 |
| 12 | D | 253 | 263 | 258 | 268 | 276 | 284 | 284 | 284 | 282 | 274 | 265 | 254 | 243 | 244 | 263 | 305 | 325 | 356 | 378 | 364 | 347 | 317 | 296 | 268 | 289 | 6951 |
| 13 | D | 257 | 258 | 248 | 259 | 269 | 277 | 287 | 287 | 290 | 285 | 275 | 263 | 254 | 264 | 273 | 289 | 300 | 314 | 328 | 324 | 316 | 304 | 286 | 275 | 282 | 6782 |
| 14 | | 280 | 284 | 289 | 288 | 288 | 290 | 285 | 280 | 279 | 268 | 269 | 265 | 262 | 264 | 270 | 285 | 292 | 299 | 314 | 322 | 315 | 299 | 294 | 290 | 286 | 6871 |
| 15 | | 287 | 284 | 282 | 282 | 285 | 288 | 285 | 290 | 287 | 285 | 269 | 248 | 241 | 242 | 249 | 264 | 285 | 312 | 302 | 300 | 304 | 298 | 290 | 284 | 281 | 6743 |
| 16 | | 273 | 278 | 284 | 287 | 290 | 295 | 295 | 291 | 287 | 280 | 276 | 268 | 264 | 266 | 274 | 285 | 290 | 294 | 298 | 304 | 297 | 291 | 289 | 288 | 285 | 6844 |
| 17 | Q | 287 | 287 | 286 | 288 | 289 | 290 | 288 | 288 | 286 | 274 | 265 | 257 | 255 | 258 | 269 | 282 | 285 | 290 | 293 | 289 | 284 | 281 | 284 | 285 | 281 | 6740 |
| 18 | Q | 285 | 285 | 285 | 281 | 280 | 280 | 284 | 285 | 278 | 274 | 265 | 255 | 252 | 259 | 268 | | | | | | | | | | | |

HARTLAND

VERTICAL INTENSITY

1982

JULY

43500 GAMMAS PLUS TABULAR QUANTITIES (UNIT 1 GAMMA)

| U T | 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 | MEAN | SUM |
|--------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
| 1 | | 266 | 276 | 280 | 283 | 282 | 284 | 283 | 286 | 280 | 280 | 273 | 270 | 267 | 270 | 273 | 279 | 285 | 291 | 299 | 306 | 300 | 296 | 287 | 278 | 282 | 6774 |
| 2 | Q | 280 | 283 | 281 | 281 | 283 | 283 | 281 | 280 | 280 | 268 | 256 | 250 | 255 | 263 | 269 | 279 | 286 | 290 | 296 | 293 | 291 | 289 | 288 | 286 | 279 | 6691 |
| 3 | Q | 285 | 286 | 286 | 285 | 286 | 288 | 287 | 286 | 285 | 276 | 271 | 263 | 256 | 257 | 268 | 280 | 285 | 285 | 288 | 288 | 286 | 283 | 283 | 282 | 280 | 6725 |
| 4 | Q | 279 | 280 | 282 | 286 | 287 | 289 | 286 | 279 | 273 | 267 | 266 | 260 | 260 | 263 | 270 | 282 | 286 | 287 | 286 | 285 | 280 | 279 | 279 | 280 | 278 | 6671 |
| 5 | Q | 281 | 282 | 284 | 286 | 287 | 289 | 287 | 281 | 276 | 268 | 257 | 246 | 247 | 256 | 269 | 284 | 288 | 288 | 287 | 281 | 276 | 275 | 274 | 276 | 276 | 6625 |
| 6 | | 277 | 278 | 280 | 283 | 286 | 285 | 280 | 274 | 269 | 262 | 255 | 247 | 250 | 251 | 258 | 269 | 283 | 292 | 300 | 300 | 295 | 289 | 282 | 280 | 276 | 6625 |
| 7 | | 278 | 276 | 277 | 271 | 270 | 269 | 268 | 269 | 268 | 271 | 268 | 261 | 262 | 269 | 280 | 296 | 311 | 327 | 328 | 306 | 294 | 287 | 286 | 282 | 282 | 6774 |
| 8 | | 281 | 284 | 285 | 286 | 286 | 281 | 280 | 279 | 270 | 265 | 264 | 257 | 257 | 258 | 266 | 275 | 286 | 296 | 291 | 289 | 288 | 286 | 281 | 277 | 278 | 6668 |
| 9 | | 278 | 275 | 275 | 277 | 280 | 283 | 286 | 287 | 284 | 280 | 268 | 255 | 246 | 248 | 258 | 271 | 286 | 295 | 297 | 296 | 295 | 286 | 280 | 279 | 277 | 6665 |
| 10 | Q | 277 | 275 | 279 | 284 | 281 | 284 | 288 | 289 | 286 | 280 | 272 | 259 | 256 | 253 | 255 | 266 | 275 | 281 | 286 | 289 | 288 | 286 | 283 | 280 | 277 | 6652 |
| 11 | | 280 | 280 | 280 | 281 | 286 | 286 | 281 | 283 | 277 | 259 | 238 | 236 | 229 | 247 | 265 | 283 | 297 | 319 | 336 | 333 | 326 | 314 | 295 | 289 | 283 | 6800 |
| 12 | D | 287 | 281 | 280 | 285 | 289 | 295 | 290 | 286 | 280 | 268 | 253 | 243 | 249 | 276 | 300 | 356 | 361 | 373 | 367 | 347 | 330 | 316 | 300 | 289 | 300 | 7201 |
| 13 | D | 286 | 275 | 265 | 249 | 246 | 259 | 261 | 276 | 280 | 279 | 272 | 270 | 269 | 274 | 283 | 295 | 320 | 359 | 461 | 535 | 473 | 403 | 395 | 50 | 305 | 7335 |
| 14 | D | -75 | 111 | 79 | 222 | 211 | 232 | 238 | 243 | 278 | 301 | 325 | 348 | 342 | 349 | 353 | 369 | 361 | 353 | 365 | 356 | 349 | 323 | 321 | 302 | 277 | 6656 |
| 15 | | 301 | 281 | 279 | 278 | 268 | 279 | 289 | 295 | 298 | 300 | 301 | 303 | 306 | 312 | 310 | 312 | 320 | 328 | 330 | 329 | 329 | 308 | 303 | 299 | 302 | 7258 |
| 16 | D | 292 | 295 | 290 | 290 | 289 | 291 | 298 | 300 | 298 | 289 | 284 | 278 | 277 | 288 | 290 | 302 | 302 | 307 | 307 | 307 | 306 | 301 | 300 | 292 | 294 | 7073 |
| 17 | | 302 | 269 | 277 | 289 | 299 | 302 | 309 | 303 | 299 | 289 | 274 | 262 | 259 | 272 | 282 | 288 | 296 | 300 | 302 | 302 | 302 | 303 | 303 | 299 | 291 | 6982 |
| 18 | | 292 | 277 | 287 | 286 | 288 | 293 | 299 | 295 | 289 | 272 | 269 | 276 | 281 | 286 | 290 | 298 | 307 | 315 | 323 | 313 | 303 | 300 | 300 | 300 | 293 | 7039 |
| 19 | | 294 | 288 | 287 | 291 | 298 | 308 | 312 | 309 | 301 | 291 | 281 | 271 | 272 | 282 | 292 | 303 | 307 | 307 | 305 | 300 | 300 | 300 | 301 | 303 | 296 | 7103 |
| 20 | | 299 | 301 | 299 | 268 | 298 | 258 | 269 | 273 | 273 | 272 | 268 | 255 | 257 | 265 | 280 | 291 | 300 | 308 | 309 | 303 | 299 | 296 | 295 | 298 | 283 | 6794 |
| 21 | | 298 | 299 | 301 | 301 | 305 | 305 | 302 | 298 | 293 | 284 | 274 | 263 | 265 | 273 | 286 | 293 | 297 | 300 | 301 | 302 | 301 | 298 | 292 | 289 | 292 | 7020 |
| 22 | | 289 | 288 | 291 | 297 | 301 | 301 | 299 | 294 | 288 | 284 | 278 | 268 | 262 | 273 | 292 | 302 | 308 | 319 | 313 | 301 | 292 | 290 | 291 | 291 | 292 | 7012 |
| 23 | | 291 | 293 | 289 | 291 | 299 | 302 | 290 | 294 | 290 | 279 | 270 | 268 | 268 | 270 | 283 | 290 | 295 | 309 | 310 | 311 | 304 | 299 | 294 | 293 | 291 | 6988 |
| 24 | D | 293 | 290 | 288 | 274 | 261 | 258 | 257 | 264 | 268 | 259 | 261 | 265 | 269 | 272 | 282 | 299 | 319 | 351 | 356 | 341 | 319 | 311 | 303 | 300 | 290 | 6960 |
| 25 | | 283 | 283 | 288 | 286 | 269 | 282 | 289 | 290 | 289 | 281 | 270 | 262 | 266 | 268 | 279 | 293 | 304 | 313 | 311 | 314 | 308 | 301 | 300 | 300 | 288 | 6929 |
| 26 | | 291 | 279 | 279 | 271 | 282 | 290 | 291 | 288 | 283 | 273 | 273 | 269 | 262 | 263 | 270 | 288 | 291 | 298 | 304 | 305 | 304 | 304 | 303 | 293 | 285 | 6854 |
| 27 | | 288 | 281 | 285 | 286 | 288 | 273 | 263 | 260 | 263 | 272 | 276 | 272 | 262 | 261 | 269 | 283 | 296 | 300 | 303 | 302 | 301 | 301 | 302 | 295 | 282 | 6782 |
| 28 | | 288 | 283 | 278 | 274 | 274 | 280 | 283 | 282 | 283 | 283 | 272 | 269 | 269 | 271 | 279 | 284 | 294 | 300 | 311 | 304 | 299 | 299 | 293 | 285 | 6851 | |
| 29 | | 276 | 271 | 281 | 283 | 289 | 290 | 285 | 284 | 286 | 282 | 277 | 269 | 270 | 269 | 268 | 291 | 290 | 296 | 302 | 299 | 298 | 298 | 295 | 293 | 285 | 6842 |
| 30 | | 291 | 290 | 289 | 290 | 292 | 294 | 290 | 288 | 287 | 282 | 274 | 264 | 262 | 259 | 261 | 272 | 287 | 308 | 310 | 304 | 303 | 299 | 302 | 297 | 287 | 6895 |
| 31 | | 291 | 289 | 283 | 276 | 283 | 279 | 279 | 271 | 272 | 273 | 273 | 269 | 272 | 281 | 292 | 301 | 309 | 313 | 310 | 310 | 305 | 295 | 294 | 289 | 287 | 6899 |
| MEAN | | 275 | 277 | 277 | 280 | 281 | 284 | 284 | 283 | 282 | 277 | 271 | 266 | 265 | 271 | 280 | 293 | 301 | 310 | 316 | 314 | 308 | 300 | 297 | 282 | 286 | 6874 |
| MEAN Q | | 280 | 281 | 282 | 284 | 285 | 287 | 286 | 283 | 280 | 272 | 264 | 256 | 255 | 258 | 266 | 278 | 284 | 286 | 289 | 287 | 284 | 282 | 281 | 281 | 278 | 6671 |
| MEAN D | | 217 | 250 | 240 | 264 | 259 | 267 | 269 | 274 | 281 | 279 | 279 | 281 | 281 | 292 | 302 | 324 | 333 | 349 | 371 | 377 | 355 | 331 | 324 | 247 | 294 | 7046 |

HARTLAND

VERTICAL INTENSITY

1982

AUGUST

43500 GAMMAS PLUS TABULAR QUANTITIES (UNIT 1 GAMMA)

| U.T. | 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 | MEAN | SUM |
|------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
| 1 | | 288 | 284 | 284 | 289 | 289 | 293 | 293 | 294 | 292 | 289 | 283 | 280 | 277 | 279 | 284 | 292 | 298 | 301 | 304 | 305 | 304 | 304 | 296 | 291 | 291 | 6993 |
| 2 | D | 282 | 270 | 280 | 284 | 283 | 284 | 291 | 293 | 290 | 274 | 270 | 267 | 275 | 278 | 293 | 309 | 319 | 333 | 345 | 344 | 319 | 283 | 274 | 283 | 292 | 7023 |
| 3 | | 289 | 285 | 276 | 278 | 281 | 289 | 290 | 290 | 289 | 284 | 273 | 267 | 277 | 289 | 300 | 309 | 319 | 332 | 311 | 301 | 299 | 296 | 283 | 292 | 7016 | |
| 4 | | 288 | 289 | 289 | 292 | 296 | 299 | 300 | 301 | 298 | 291 | 280 | 269 | 279 | 281 | 287 | 299 | 310 | 313 | 315 | 309 | 299 | 294 | 294 | 289 | 294 | 7061 |
| 5 | | 285 | 290 | 292 | 292 | 290 | 295 | 295 | 294 | 283 | 274 | 274 | 272 | 264 | 274 | 288 | 301 | 317 | 320 | 314 | 310 | 300 | 296 | 293 | 288 | 291 | 7001 |
| 6 | | 290 | 290 | 285 | 290 | 294 | 300 | 294 | 291 | 284 | 274 | 262 | 253 | 247 | 254 | 265 | 282 | 300 | 304 | 307 | 320 | 311 | 303 | 300 | 280 | 286 | 6880 |
| 7 | D | 278 | 250 | 271 | 270 | 250 | 236 | 200 | 214 | 262 | 264 | 259 | 274 | 300 | 340 | 360 | 425 | 400 | 359 | 334 | 312 | 303 | 304 | 302 | 301 | 294 | 7068 |
| 8 | Q | 304 | 304 | 305 | 306 | 310 | 311 | 310 | 304 | 300 | 292 | 280 | 267 | 265 | 272 | 281 | 290 | 300 | 303 | 300 | 300 | 298 | 295 | 294 | 294 | 295 | 7085 |
| 9 | | 294 | 295 | 297 | 298 | 300 | 301 | 300 | 296 | 294 | 289 | 287 | 281 | 270 | 264 | 272 | 292 | 311 | 325 | 344 | 340 | 330 | 309 | 299 | 295 | 299 | 7183 |
| 10 | D | 293 | 285 | 272 | 284 | 292 | 292 | 296 | 300 | 297 | 294 | 284 | 273 | 267 | 270 | 282 | 303 | 325 | 332 | 331 | 332 | 320 | 305 | 304 | 300 | 297 | 7133 |
| 11 | | 295 | 294 | 292 | 292 | 297 | 301 | 303 | 301 | 294 | 284 | 278 | 271 | 264 | 263 | 279 | 305 | 349 | 377 | 387 | 352 | 324 | 314 | 309 | 304 | 305 | 7329 |
| 12 | | 300 | 300 | 300 | 301 | 304 | 307 | 303 | 302 | 303 | 300 | 284 | 273 | 267 | 270 | 298 | 316 | 321 | 323 | 324 | 320 | 315 | 304 | 300 | 294 | 301 | 7229 |
| 13 | | 293 | 293 | 291 | 286 | 290 | 298 | 300 | 300 | 296 | 294 | 289 | 280 | 274 | 280 | 290 | 298 | 309 | 309 | 304 | 303 | 302 | 301 | 295 | 295 | 294 | 7070 |
| 14 | Q | 299 | 294 | 294 | 293 | 294 | 300 | 300 | 296 | 292 | 287 | 280 | 269 | 260 | 265 | 277 | 294 | 303 | 300 | 300 | 304 | 300 | 299 | 299 | 297 | 291 | 6996 |
| 15 | Q | 293 | 292 | 291 | 293 | 295 | 300 | 300 | 300 | 300 | 295 | 282 | 270 | 267 | 273 | 282 | 291 | 292 | 293 | 293 | 291 | 291 | 290 | 292 | 292 | 290 | 6958 |
| 16 | Q | 292 | 293 | 293 | 293 | 293 | 295 | 295 | 291 | 283 | 272 | 262 | 255 | 261 | 268 | 275 | 285 | 296 | 294 | 289 | 284 | 286 | 292 | 294 | 295 | 285 | 6836 |
| 17 | | 295 | 294 | 293 | 293 | 295 | 292 | 288 | 286 | 282 | 282 | 275 | 270 | 265 | 261 | 271 | 285 | 291 | 292 | 291 | 293 | 2 | | | | | |

HARTLAND

VERTICAL INTENSITY

1982 SEPTEMBER

43500 GAMMAS PLUS TABULAR QUANTITIES (UNIT 1 GAMMA)

| U T | Ø | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN | SUM |
|--------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
| 1 | Q | 285 | 288 | 289 | 290 | 290 | 292 | 292 | 285 | 276 | 268 | 261 | 252 | 245 | 251 | 265 | 283 | 291 | 295 | 292 | 288 | 285 | 284 | 285 | 286 | 280 | 6718 |
| 2 | | 285 | 281 | 277 | 278 | 280 | 283 | 285 | 284 | 281 | 271 | 261 | 256 | 260 | 266 | 282 | 291 | 299 | 300 | 299 | 295 | 291 | 293 | 293 | 282 | 282 | 6773 |
| 3 | | 275 | 281 | 282 | 280 | 276 | 281 | 286 | 285 | 282 | 279 | 268 | 261 | 261 | 266 | 282 | 296 | 304 | 305 | 301 | 295 | 295 | 294 | 291 | 288 | 284 | 6814 |
| 4 | | 289 | 286 | 286 | 286 | 285 | 289 | 286 | 290 | 290 | 276 | 270 | 266 | 270 | 280 | 301 | 312 | 330 | 335 | 320 | 311 | 304 | 289 | 291 | 271 | 292 | 7013 |
| 5 | | 276 | 276 | 277 | 274 | 273 | 274 | 281 | 286 | 282 | 275 | 271 | 269 | 271 | 291 | 301 | 314 | 323 | 312 | 301 | 296 | 296 | 300 | 291 | 265 | 286 | 6875 |
| 6 | D | 210 | 171 | 140 | 103 | 108 | 236 | 236 | 234 | 223 | 238 | 261 | 285 | 323 | 423 | 521 | 488 | 482 | 483 | 463 | 393 | 364 | 343 | 344 | 336 | 308 | 7408 |
| 7 | D | 313 | 290 | 276 | 265 | 265 | 278 | 305 | 314 | 313 | 304 | 303 | 303 | 313 | 332 | 335 | 338 | 366 | 409 | 420 | 354 | 334 | 326 | 322 | 315 | 320 | 7693 |
| 8 | | 311 | 313 | 315 | 316 | 316 | 317 | 323 | 326 | 322 | 310 | 300 | 293 | 291 | 292 | 294 | 298 | 302 | 304 | 307 | 309 | 309 | 306 | 306 | 307 | 308 | 7387 |
| 9 | | 305 | 302 | 301 | 298 | 293 | 295 | 299 | 305 | 303 | 294 | 277 | 266 | 271 | 278 | 291 | 305 | 311 | 320 | 332 | 323 | 330 | 294 | 293 | 293 | 299 | 7179 |
| 10 | Q | 292 | 290 | 294 | 296 | 301 | 303 | 305 | 306 | 303 | 295 | 285 | 276 | 271 | 274 | 283 | 293 | 303 | 302 | 301 | 300 | 302 | 302 | 302 | 302 | 295 | 7081 |
| 11 | | 302 | 300 | 296 | 295 | 294 | 294 | 298 | 300 | 296 | 289 | 278 | 277 | 275 | 281 | 285 | 292 | 300 | 312 | 306 | 307 | 304 | 304 | 304 | 301 | 295 | 7090 |
| 12 | | 292 | 292 | 294 | 295 | 293 | 291 | 293 | 296 | 295 | 288 | 285 | 279 | 275 | 281 | 285 | 291 | 291 | 292 | 295 | 296 | 305 | 301 | 300 | 301 | 292 | 7006 |
| 13 | | 301 | 292 | 294 | 291 | 296 | 299 | 301 | 297 | 297 | 291 | 287 | 277 | 274 | 280 | 288 | 295 | 298 | 296 | 296 | 296 | 298 | 301 | 298 | 297 | 293 | 7040 |
| 14 | | 296 | 297 | 298 | 296 | 293 | 286 | 290 | 291 | 290 | 285 | 281 | 275 | 274 | 276 | 281 | 284 | 282 | 291 | 305 | 315 | 305 | 298 | 295 | 295 | 291 | 6979 |
| 15 | | 298 | 299 | 299 | 298 | 297 | 291 | 292 | 291 | 286 | 281 | 273 | 263 | 261 | 263 | 272 | 285 | 290 | 289 | 290 | 291 | 292 | 293 | 298 | 296 | 287 | 6888 |
| 16 | | 294 | 295 | 293 | 294 | 293 | 293 | 295 | 294 | 291 | 282 | 273 | 268 | 265 | 272 | 282 | 291 | 294 | 293 | 293 | 296 | 298 | 295 | 296 | 298 | 289 | 6938 |
| 17 | Q | 295 | 295 | 298 | 298 | 295 | 294 | 295 | 293 | 290 | 283 | 275 | 272 | 271 | 276 | 285 | 293 | 299 | 301 | 298 | 296 | 295 | 294 | 291 | 291 | 6978 | |
| 18 | | 295 | 295 | 294 | 294 | 290 | 292 | 296 | 297 | 293 | 282 | 273 | 264 | 266 | 272 | 288 | 295 | 296 | 296 | 299 | 306 | 321 | 335 | 321 | 315 | 295 | 7075 |
| 19 | | 311 | 310 | 306 | 301 | 296 | 295 | 294 | 295 | 291 | 282 | 271 | 271 | 270 | 275 | 284 | 296 | 301 | 307 | 315 | 315 | 318 | 306 | 306 | 292 | 296 | 7108 |
| 20 | | 291 | 291 | 295 | 298 | 297 | 295 | 295 | 294 | 292 | 287 | 276 | 270 | 271 | 273 | 288 | 302 | 301 | 307 | 303 | 301 | 298 | 302 | 291 | 272 | 291 | 6990 |
| 21 | D | 282 | 282 | 279 | 274 | 244 | 253 | 270 | 273 | 274 | 265 | 263 | 258 | 253 | 256 | 264 | 276 | 290 | 296 | 307 | 315 | 312 | 275 | 262 | 231 | 273 | 6554 |
| 22 | D | 251 | 185 | 187 | 157 | 145 | 155 | 126 | 179 | 241 | 262 | 285 | 304 | 323 | 321 | 342 | 350 | 344 | 358 | 360 | 332 | 321 | 305 | 288 | 281 | 267 | 6402 |
| 23 | | 291 | 289 | 281 | 285 | 274 | 270 | 280 | 286 | 285 | 282 | 282 | 281 | 272 | 271 | 280 | 295 | 306 | 312 | 313 | 318 | 312 | 304 | 303 | 301 | 290 | 6973 |
| 24 | | 303 | 298 | 296 | 298 | 297 | 295 | 299 | 300 | 291 | 275 | 267 | 266 | 270 | 283 | 301 | 296 | 299 | 301 | 301 | 301 | 301 | 301 | 304 | 297 | 293 | 7034 |
| 25 | | 295 | 294 | 294 | 295 | 295 | 296 | 299 | 302 | 304 | 300 | 292 | 280 | 270 | 268 | 270 | 277 | 285 | 295 | 302 | 313 | 301 | 300 | 298 | 296 | 292 | 7021 |
| 26 | D | 294 | 291 | 288 | 282 | 280 | 281 | 284 | 285 | 288 | 286 | 284 | 285 | 297 | 333 | 396 | 425 | 496 | 485 | 427 | 415 | 374 | 332 | 332 | 315 | 335 | 8055 |
| 27 | | 291 | 268 | 285 | 293 | 300 | 309 | 316 | 325 | 321 | 319 | 315 | 311 | 306 | 302 | 305 | 306 | 317 | 344 | 323 | 324 | 317 | 307 | 301 | 289 | 308 | 7394 |
| 28 | | 286 | 293 | 293 | 294 | 294 | 298 | 301 | 306 | 310 | 308 | 304 | 295 | 290 | 284 | 283 | 288 | 294 | 301 | 301 | 301 | 301 | 301 | 304 | 304 | 297 | 7134 |
| 29 | Q | 304 | 303 | 301 | 300 | 295 | 295 | 299 | 302 | 302 | 299 | 290 | 282 | 281 | 282 | 285 | 292 | 300 | 303 | 305 | 304 | 301 | 302 | 301 | 300 | 297 | 7128 |
| 30 | Q | 300 | 301 | 300 | 299 | 297 | 297 | 301 | 303 | 299 | 293 | 283 | 273 | 270 | 275 | 288 | 302 | 301 | 307 | 303 | 301 | 298 | 302 | 291 | 272 | 291 | 7170 |
| MEAN | | 290 | 285 | 284 | 281 | 278 | 284 | 287 | 291 | 291 | 285 | 280 | 276 | 277 | 285 | 300 | 309 | 317 | 322 | 320 | 314 | 310 | 303 | 301 | 294 | 294 | 7064 |
| MEAN Q | | 295 | 295 | 296 | 297 | 296 | 296 | 298 | 298 | 294 | 288 | 279 | 271 | 268 | 272 | 281 | 293 | 301 | 303 | 302 | 301 | 299 | 299 | 297 | 297 | 292 | 7016 |
| MEAN D | | 270 | 244 | 234 | 216 | 208 | 241 | 244 | 257 | 268 | 271 | 279 | 287 | 302 | 333 | 372 | 375 | 396 | 406 | 395 | 362 | 341 | 316 | 310 | 296 | 301 | 7223 |

HARTLAND

VERTICAL INTENSITY

1982 OCTOBER

43500 GAMMAS PLUS TABULAR QUANTITIES (UNIT 1 GAMMA)

| U T | Ø | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN | SUM |
|-----|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
| 1 | | 302 | 301 | 297 | 294 | 289 | 293 | 297 | 296 | 296 | 295 | 290 | 283 | 282 | 288 | 294 | 298 | 307 | 327 | 337 | 326 | 315 | 309 | 285 | 289 | 299 | 7190 |
| 2 | | 286 | 273 | 281 | 291 | 293 | 292 | 296 | 305 | 303 | 297 | 290 | 285 | 286 | 304 | 311 | 314 | 322 | 326 | 323 | 317 | 315 | 307 | 303 | 302 | 301 | 7222 |
| 3 | | 302 | 294 | 296 | 302 | 303 | 307 | 314 | 316 | 305 | 293 | 291 | 292 | 296 | 301 | 306 | 313 | 312 | 306 | 305 | 305 | 303 | 296 | 302 | 302 | 296 | 7265 |
| 4 | | 297 | 299 | 298 | 299 | 301 | 299 | 297 | 304 | 305 | 297 | 292 | 286 | 286 | 286 | 293 | 305 | 312 | 311 | 309 | 307 | 305 | 302 | 297 | 296 | 299 | 7183 |
| 5 | | 297 | 297 | 295 | 294 | 292 | 293 | 295 | 300 | 303 | 296 | 286 | 275 | 273 | 273 | 281 | 292 | 302 | 304 | 302 | 301 | 298 | 296 | 299 | 296 | 293 | 7040 |
| 6 | | 292 | 286 | 289 | 290 | 289 | 285 | 286 | 291 | 295 | 293 | 283 | 271 | 269 | 271 | 286 | 294 | 297 | 303 | 310 | 321 | 322 | 323 | 317 | 303 | 294 | 7066 |
| 7 | D | 301 | 291 | 282 | 272 | 266 | 260 | 272 | 276 | 293 | 295 | 292 | 284 | 291 | 300 | 312 | 328 | 336 | 336 | 324 | 316 | 315 | 308 | 304 | 303 | 298 | 7157 |
| 8 | | 301 | 288 | 292 | 292 | 282 | 292 | 298 | 304 | 302 | 293 | 285 | 273 | 269 | 271 | 281 | 297 | 311 | 322 | 324 | 329 | 322 | 325 | 310 | 306 | 298 | 7169 |
| 9 | Q | 304 | 301 | 295 | 296 | 297 | 299 | 301 | 302 | 299 | 293 | 284 | 273 | 268 | 272 | 279 | 289 | 293 | 294 | 295 | 296 | 296 | 295 | 296 | 301 | 292 | 7018 |
| 10 | | 297 | 292 | 292 | 293 | 292 | 293 | 294 | 297 | 301 | 295 | 283 | 275 | 268 | 266 | 267 | 275 | 282 | 287 | 292 | 293 | 294 | 305 | 302 | 296 | 289 | 6931 |
| 11 | | 292 | 291 | 292 | 293 | 291 | 291 | 290 | 292 | 292 | 289 | 277 | 265 | 266 | 268 | 272 | 280 | 287 | 289 | 291 | 293 | 304 | 296 | 295 | 293 | 287 | 6889 |
| 12 | | 291 | 289 | 287 | 286 | 287 | 289 | 290 | 294 | 295 | 290 | 283 | 280 | 274 | 274 | 276 | 284 | 291 | 292 | 292 | 302 | 296 | 293 | 294 | 295 | 288 | 6924 |
| 13 | D | 294 | 294 | 286 | 276 | 275 | 281 | 283 | 286 | 291 | 286 | 279 | 273 | 278 | 287 | 303 | 332 | 338 | 346 | 321 | 325 | 325 | 313 | 286 | 281 | 297 | 7139 |
| 14 | D | 286 | 287 | 262 | 259 | 263 | 264 | 268 | 277 | 286 | 291 | 283 | 281 | 288 | 302 | 307 | 319 | 319 | 322 | 326 | 332 | 328 | 323 | 314 | 312 | 296 | 7099 |
| 15 | Q | 308 | 307 | 306 | 303 | 302 | 301 | 302 | 302 | 300 | 294 | 287 | 282 | 281 | 284 | 287 | 294 | 296 | 292 | 292 | 292 | 293 | 295 | 296 | 297 | 295 | 7093 |
| 16 | | 299 | 299 | 297 | 296 | 295 | 293 | 292 | 295 | 292 | 286 | 273 | 272 | 274 | 279 | 285 | 292 | 302 | 302 | 301 | 302 | 304 | 310 | 311 | 302 | 294 | 7053 |
| 17 | | 302 | 298 | 295 | 286 | 288 | 282 | 292 | 295 | 297 | 298 | 292 | 277 | 266 | 266 | 270 | 282 | 295 | 297 | 296 | 298 | 304 | 305 | 303 | 297 | 291 | 6998 |
| 18 | | 299 | 302 | 296 | 295 | 295 | 296 | 297 | 295 | 297 | 294 | 282 | 275 | 274 | 284 | 305 | 319 | 332 | 322 | 306 | 306 | 309 | 300 | 293 | 294 | 298 | 7167 |
| 19 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

HARTLAND

VERTICAL INTENSITY

1982 NOVEMBER 43500 GAMMAS PLUS TABULAR QUANTITIES (UNIT 1 GAMMA)

| U.T. | | 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 | MEAN | SUM |
|--------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
| 1 | D | 303 | 276 | 290 | 292 | 292 | 293 | 293 | 296 | 296 | 293 | 288 | 286 | 296 | 315 | 322 | 347 | 342 | 330 | 328 | 322 | 305 | 301 | 302 | 301 | 304 | 7309 | |
| 2 | D | 299 | 298 | 297 | 296 | 302 | 301 | 297 | 300 | 301 | 296 | 291 | 292 | 295 | 304 | 322 | 335 | 346 | 334 | 331 | 336 | 344 | 331 | 322 | 295 | 311 | 7465 | |
| 3 | | 296 | 295 | 286 | 283 | 275 | 275 | 283 | 285 | 284 | 289 | 292 | 291 | 295 | 304 | 312 | 315 | 315 | 312 | 309 | 305 | 303 | 302 | 301 | 300 | 296 | 7107 | |
| 4 | Q | 301 | 301 | 302 | 302 | 302 | 301 | 301 | 301 | 303 | 298 | 291 | 282 | 279 | 282 | 292 | 303 | 306 | 307 | 305 | 310 | 306 | 305 | 303 | 299 | 299 | 7182 | |
| 5 | | 293 | 292 | 293 | 294 | 295 | 296 | 295 | 294 | 294 | 288 | 277 | 272 | 267 | 277 | 287 | 296 | 303 | 303 | 312 | 302 | 297 | 295 | 293 | 293 | 292 | 7008 | |
| 6 | | 292 | 289 | 287 | 289 | 292 | 292 | 286 | 285 | 289 | 286 | 282 | 273 | 276 | 282 | 286 | 293 | 301 | 302 | 301 | 298 | 297 | 295 | 294 | 293 | 290 | 6960 | |
| 7 | Q | 292 | 292 | 292 | 292 | 294 | 295 | 296 | 296 | 299 | 296 | 291 | 283 | 282 | 284 | 291 | 293 | 293 | 294 | 293 | 294 | 295 | 295 | 295 | 294 | 292 | 7021 | |
| 8 | | 292 | 291 | 291 | 289 | 289 | 289 | 290 | 291 | 291 | 285 | 275 | 272 | 272 | 275 | 276 | 276 | 281 | 286 | 311 | 316 | 306 | 302 | 297 | 296 | 289 | 6939 | |
| 9 | Q | 293 | 292 | 290 | 290 | 287 | 286 | 287 | 289 | 292 | 292 | 285 | 277 | 276 | 280 | 285 | 288 | 287 | 287 | 287 | 289 | 291 | 291 | 291 | 291 | 287 | 6903 | |
| 10 | | 293 | 290 | 286 | 285 | 287 | 287 | 287 | 291 | 292 | 287 | 283 | 275 | 273 | 276 | 282 | 287 | 292 | 292 | 294 | 303 | 304 | 305 | 307 | 309 | 290 | 6967 | |
| 11 | | 306 | 301 | 296 | 289 | 282 | 284 | 284 | 286 | 290 | 283 | 276 | 275 | 276 | 285 | 286 | 292 | 292 | 291 | 293 | 295 | 296 | 301 | 305 | 303 | 290 | 6967 | |
| 12 | | 298 | 295 | 289 | 286 | 286 | 285 | 285 | 291 | 292 | 286 | 286 | 282 | 291 | 296 | 292 | 295 | 293 | 294 | 295 | 296 | 294 | 297 | 296 | 293 | 291 | 6993 | |
| 13 | | 295 | 286 | 286 | 283 | 282 | 286 | 287 | 290 | 292 | 287 | 286 | 282 | 282 | 284 | 293 | 296 | 295 | 292 | 292 | 297 | 303 | 292 | 292 | 292 | 289 | 6952 | |
| 14 | | 292 | 292 | 291 | 291 | 291 | 289 | 287 | 286 | 291 | 285 | 281 | 278 | 276 | 281 | 287 | 295 | 295 | 297 | 294 | 296 | 294 | 292 | 293 | 291 | 289 | 6945 | |
| 15 | | 289 | 291 | 292 | 291 | 291 | 290 | 289 | 287 | 289 | 286 | 284 | 284 | 283 | 287 | 294 | 302 | 304 | 303 | 302 | 298 | 303 | 298 | 295 | 294 | 293 | 7026 | |
| 16 | | 293 | 292 | 292 | 292 | 292 | 293 | 291 | 287 | 287 | 282 | 276 | 273 | 275 | 280 | 287 | 295 | 294 | 293 | 293 | 292 | 292 | 291 | 291 | 286 | 288 | 6919 | |
| 17 | Q | 286 | 286 | 287 | 290 | 289 | 287 | 287 | 286 | 286 | 285 | 282 | 277 | 276 | 281 | 286 | 291 | 287 | 287 | 287 | 291 | 292 | 291 | 297 | 302 | 297 | 287 | 6903 |
| 18 | | 296 | 295 | 294 | 292 | 292 | 290 | 290 | 286 | 284 | 284 | 277 | 277 | 277 | 282 | 295 | 300 | 305 | 313 | 307 | 301 | 296 | 296 | 292 | 286 | 292 | 7007 | |
| 19 | | 287 | 285 | 283 | 284 | 289 | 291 | 292 | 289 | 288 | 283 | 277 | 274 | 275 | 282 | 287 | 291 | 293 | 295 | 295 | 296 | 296 | 302 | 292 | 287 | 288 | 6913 | |
| 20 | Q | 286 | 287 | 286 | 286 | 287 | 288 | 289 | 287 | 286 | 284 | 277 | 273 | 272 | 277 | 282 | 285 | 289 | 292 | 292 | 291 | 292 | 289 | 286 | 288 | 285 | 6851 | |
| 21 | | 278 | 280 | 281 | 282 | 279 | 276 | 274 | 275 | 280 | 278 | 277 | 277 | 274 | 276 | 276 | 282 | 295 | 302 | 302 | 322 | 342 | 343 | 326 | 317 | 291 | 6994 | |
| 22 | | 302 | 303 | 284 | 265 | 257 | 266 | 281 | 287 | 293 | 293 | 293 | 291 | 292 | 292 | 296 | 297 | 301 | 299 | 301 | 301 | 301 | 300 | 297 | 296 | 291 | 6988 | |
| 23 | | 295 | 295 | 294 | 294 | 294 | 294 | 293 | 295 | 297 | 294 | 284 | 277 | 277 | 283 | 287 | 291 | 303 | 361 | 336 | 362 | 357 | 336 | 326 | 316 | 306 | 7341 | |
| 24 | D | 312 | 311 | 309 | 306 | 307 | 307 | 307 | 312 | 306 | 296 | 296 | 294 | 304 | 333 | 362 | 424 | 476 | 515 | 493 | 391 | 372 | 339 | 321 | 299 | 346 | 8303 | |
| 25 | D | 291 | 306 | 315 | 317 | 313 | 303 | 306 | 312 | 316 | 326 | 327 | 318 | 322 | 326 | 342 | 341 | 335 | 336 | 325 | 323 | 321 | 324 | 319 | 311 | 320 | 7675 | |
| 26 | | 309 | 307 | 306 | 301 | 294 | 292 | 297 | 302 | 304 | 302 | 303 | 304 | 305 | 306 | 313 | 336 | 335 | 322 | 315 | 313 | 312 | 323 | 311 | 306 | 309 | 7418 | |
| 27 | | 304 | 303 | 302 | 302 | 299 | 300 | 299 | 299 | 302 | 297 | 293 | 288 | 299 | 312 | 313 | 322 | 315 | 313 | 323 | 309 | 306 | 306 | 305 | 303 | 305 | 7314 | |
| 28 | | 299 | 267 | 273 | 282 | 285 | 287 | 285 | 291 | 294 | 294 | 293 | 293 | 297 | 302 | 305 | 312 | 314 | 312 | 323 | 314 | 310 | 304 | 302 | 293 | 297 | 7131 | |
| 29 | D | 289 | 292 | 293 | 293 | 294 | 295 | 294 | 293 | 293 | 293 | 291 | 290 | 292 | 297 | 312 | 315 | 336 | 336 | 335 | 342 | 327 | 295 | 304 | 310 | 304 | 7311 | |
| 30 | | 306 | 303 | 297 | 296 | 294 | 293 | 296 | 299 | 302 | 302 | 297 | 295 | 295 | 301 | 302 | 303 | 306 | 306 | 302 | 301 | 301 | 297 | 298 | 299 | 299 | 7191 | |
| MEAN | | 296 | 293 | 292 | 291 | 290 | 290 | 291 | 292 | 294 | 291 | 287 | 283 | 285 | 291 | 298 | 307 | 311 | 314 | 313 | 310 | 309 | 305 | 302 | 298 | 297 | 7133 | |
| MEAN Q | | 292 | 292 | 291 | 292 | 292 | 291 | 292 | 292 | 293 | 291 | 285 | 278 | 277 | 281 | 287 | 292 | 292 | 293 | 293 | 295 | 295 | 295 | 295 | 294 | 290 | 6970 | |
| MEAN D | | 299 | 297 | 301 | 301 | 302 | 300 | 299 | 302 | 304 | 303 | 299 | 296 | 302 | 315 | 332 | 352 | 367 | 370 | 362 | 343 | 334 | 318 | 314 | 303 | 317 | 7615 | |

HARTLAND

VERTICAL INTENSITY

1982 DECEMBER 43500 GAMMAS PLUS TABULAR QUANTITIES (UNIT 1 GAMMA)

| U.T. | | 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 | MEAN | SUM |
|------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|-----|
| 1 | Q | 303 | 304 | 304 | 304 | 304 | 302 | 300 | 298 | 298 | 298 | 295 | 294 | 297 | 298 | 299 | 304 | 304 | 304 | 302 | 299 | 298 | 298 | 296 | 296 | 300 | 7199 | |
| 2 | Q | 298 | 298 | 298 | 299 | 299 | 298 | 298 | 296 | 295 | 294 | 289 | 286 | 285 | 289 | 295 | 299 | 301 | 303 | 300 | 297 | 296 | 295 | 296 | 295 | 296 | 7099 | |
| 3 | | 293 | 293 | 294 | 295 | 296 | 296 | 296 | 294 | 289 | 285 | 278 | 274 | 273 | 279 | 293 | 298 | 305 | 309 | 310 | 306 | 304 | 300 | 299 | 303 | 294 | 7062 | |
| 4 | | 298 | 296 | 295 | 294 | 291 | 294 | 295 | 294 | 291 | 287 | 283 | 280 | 282 | 284 | 288 | 294 | 294 | 296 | 297 | 298 | 296 | 298 | 313 | 309 | 293 | 7047 | |
| 5 | | 304 | 304 | 297 | 293 | 295 | 298 | 295 | 295 | 297 | 296 | 288 | 285 | 284 | 284 | 289 | 296 | 298 | 299 | 302 | 304 | 304 | 302 | 301 | 299 | 296 | 7109 | |
| 6 | Q | 299 | 298 | 297 | 296 | 296 | 297 | 297 | 296 | 296 | 294 | 292 | 288 | 286 | 284 | 285 | 291 | 294 | 294 | 296 | 297 | 298 | 297 | 295 | 294 | 294 | 7057 | |
| 7 | | 294 | 293 | 290 | 290 | 289 | 290 | 289 | 287 | 288 | 286 | 279 | 275 | 276 | 278 | 288 | 300 | 308 | 324 | 328 | 384 | 360 | 348 | 336 | 326 | 304 | 7306 | |
| 8 | | 310 | 300 | 297 | 297 | 298 | 298 | 300 | 302 | 305 | 305 | 299 | 299 | 300 | 308 | 330 | 337 | 335 | 345 | 352 | 369 | 352 | 335 | 326 | 319 | 317 | 7618 | |
| 9 | | 315 | 309 | 306 | 306 | 305 | 305 | 306 | 307 | 308 | 306 | 300 | 295 | 293 | 299 | 316 | 308 | 305 | 306 | 307 | 308 | 309 | 308 | 306 | 305 | 306 | 7338 | |
| 10 | D | 300 | 299 | 299 | 299 | 299 | 298 | 295 | 285 | 280 | 285 | 281 | 294 | 292 | 296 | 305 | 305 | 306 | 319 | 323 | 350 | 359 | 342 | 329 | 325 | 307 | 7365 | |
| 11 | | 316 | 316 | 315 | 315 | 306 | 304 | 305 | 305 | 305 | 305 | 300 | 296 | 291 | 295 | 303 | 313 | 317 | 317 | 322 | 325 | 328 | 326 | 319 | 318 | 311 | 7462 | |
| 12 | | 318 | 315 | 314 | 309 | 308 | 305 | 303 | 303 | 301 | 304 | 304 | 303 | 305 | 305 | 307 | 312 | 314 | 315 | 308 | 306 | 305 | 304 | 306 | 306 | 307 | 7380 | |
| 13 | Q | 305 | 305 | 305 | 304 | 303 | 300 | 299 | 297 | 296 | 295 | 294 | 291 | 296 | 297 | 298 | 300 | 302 | 304 | 302 | 301 | 301 | 306 | 300 | 301 | 300 | 7202 | |
| 14 | | 303 | 302 | 304 | 304 | 302 | 298 | 297 | 296 | 296 | 295 | 295 | 299 | 301 | 302 | 300 | 300 | 299 | 298 | 298 | 298 | 297 | 305 | 299 | 295 | 299 | 7184 | |
| 15 | | 295 | 298 | 299 | 298 | 298 | 297 | 296 | 290 | 287 | 287 | 287 | 289 | 290 | 289 | 290 | 294 | 295 | 295 | 294 | 294 | 293 | 292 | 292 | 291 | 293 | 7030 | |
| 16 | | 294 | 293 | 295 | 295 | 295 | 295 | 294 | 289 | 288 | 289 | 290 | 292 | 295 | 299 | 307 | 316 | 319 | 324 | 326 | 325 | 318 | 309 | 308 | 295 | 302 | 7250 | |
| 17 | D | 296 | 293 | 286 | 285 | 276 | 269 | 270 | 278 | 267 | 274 | 267 | 279 | 305 | 325 | 341 | 349 | 337 | 325 | 319 | 319 | 345 | 329 | 327 | 309 | 303 | 7270 | |
| 18 | D | 307 | 305 | 298 | 298 | 299 | 303 | 306 | 305 | 299 | 299 | 300 | 300 | 301 | 307 | 316 | 325 | 331 | 326 | 331 | 332 | 325 | 316 | 310 | 310 | 7440 | | |
| 19 | | 306 | 306 | 302 | 298 | 295 | 292 | | | | | | | | | | | | | | | | | | | | | |

TABLE 8 ANNUAL VALUES OF GEOMAGNETIC ELEMENTS

ABINGER

| Year | D | I | H | X | Y | Z | T |
|------|----------|---------|-------|-------|-------|-------|-------|
| 1925 | -13 22.7 | 66 35.1 | 18597 | 18092 | -4303 | 42946 | 46801 |
| 1926 | -13 10.4 | 66 36.3 | 18581 | 18092 | -4234 | 42947 | 46794 |
| 1927 | -12 58.4 | 66 36.2 | 18575 | 18101 | -4170 | 42932 | 46777 |
| 1928 | -12 47.0 | 66 37.2 | 18564 | 18104 | -4108 | 42941 | 46782 |
| 1929 | -12 35.8 | 66 37.2 | 18555 | 18108 | -4047 | 42918 | 46758 |
| 1930 | -12 24.6 | 66 38.2 | 18542 | 18109 | -3985 | 42924 | 46757 |
| 1931 | -12 13.7 | 66 38.1 | 18543 | 18122 | -3928 | 42923 | 46756 |
| 1932 | -12 2.6 | 66 39.1 | 18536 | 18128 | -3868 | 42940 | 46770 |
| 1933 | -11 51.7 | 66 39.4 | 18532 | 18136 | -3809 | 42942 | 46770 |
| 1934 | -11 41.1 | 66 39.7 | 18533 | 18149 | -3754 | 42955 | 46782 |
| 1935 | -11 30.3 | 66 40.9 | 18527 | 18155 | -3695 | 42981 | 46805 |
| 1936 | -11 20.0 | 66 41.8 | 18524 | 18163 | -3640 | 43007 | 46827 |
| 1937 | -11 10.4 | 66 42.7 | 18522 | 18171 | -3589 | 43031 | 46848 |
| 1938 | -11 1.4 | 66 43.2 | 18522 | 18180 | -3542 | 43050 | 46865 |
| 1939 | -10 51.9 | 66 43.5 | 18528 | 18196 | -3492 | 43074 | 46890 |
| 1940 | -10 43.0 | 66 43.9 | 18533 | 18210 | -3446 | 43099 | 46915 |
| 1941 | -10 33.8 | 66 44.3 | 18539 | 18225 | -3399 | 43128 | 46944 |
| 1942 | -10 24.8 | 66 43.9 | 18554 | 18248 | -3354 | 43146 | 46966 |
| 1943 | -10 16.2 | 66 44.5 | 18556 | 18259 | -3308 | 43172 | 46991 |
| 1944 | -10 7.8 | 66 44.3 | 18566 | 18277 | -3265 | 43189 | 47010 |
| 1945 | -9 59.5 | 66 44.3 | 18573 | 18291 | -3223 | 43207 | 47030 |
| 1946 | -9 51.1 | 66 45.4 | 18569 | 18295 | -3177 | 43235 | 47054 |
| 1947 | -9 43.1 | 66 45.2 | 18577 | 18310 | -3136 | 43246 | 47067 |
| 1948 | -9 35.4 | 66 44.4 | 18593 | 18333 | -3098 | 43255 | 47082 |
| 1949 | -9 27.5 | 66 44.0 | 18607 | 18354 | -3058 | 43273 | 47104 |
| 1950 | -9 19.7 | 66 43.0 | 18628 | 18382 | -3019 | 43288 | 47126 |
| 1951 | -9 12.2 | 66 42.1 | 18648 | 18408 | -2983 | 43305 | 47149 |
| 1952 | -9 4.7 | 66 41.0 | 18670 | 18436 | -2946 | 43316 | 47168 |
| 1953 | -8 57.5 | 66 39.5 | 18695 | 18467 | -2911 | 43321 | 47183 |
| 1954 | -8 50.9 | 66 38.1 | 18720 | 18497 | -2879 | 43332 | 47203 |
| 1955 | -8 43.6 | 66 37.3 | 18738 | 18521 | -2843 | 43348 | 47225 |
| 1956 | -8 36.8 | 66 37.4 | 18750 | 18539 | -2808 | 43376 | 47255 |

HARTLAND

| | | | | | | | |
|------|----------|---------|-------|-------|-------|-------|-------|
| 1957 | -10 17.2 | 66 47.8 | 18627 | 18328 | -3326 | 43451 | 47275 |
| 1958 | -10 11.0 | 66 46.3 | 18655 | 18361 | -3298 | 43465 | 47299 |
| 1959 | -10 5.0 | 66 45.1 | 18681 | 18392 | -3271 | 43484 | 47327 |
| 1960 | -9 58.8 | 66 43.9 | 18707 | 18424 | -3242 | 43504 | 47356 |
| 1961 | -9 53.0 | 66 41.7 | 18744 | 18466 | -3217 | 43512 | 47378 |
| 1962 | -9 46.9 | 66 39.5 | 18779 | 18506 | -3190 | 43517 | 47396 |
| 1963 | -9 40.6 | 66 37.9 | 18807 | 18539 | -3161 | 43528 | 47417 |
| 1964 | -9 35.2 | 66 35.9 | 18840 | 18577 | -3138 | 43535 | 47437 |
| 1965 | -9 30.1 | 66 33.9 | 18872 | 18613 | -3115 | 43540 | 47454 |
| 1966 | -9 25.1 | 66 32.7 | 18897 | 18642 | -3092 | 43554 | 47477 |
| 1967 | -9 20.3 | 66 31.6 | 18923 | 18672 | -3071 | 43573 | 47505 |
| 1968 | -9 15.5 | 66 29.9 | 18956 | 18709 | -3050 | 43592 | 47535 |
| 1969 | -9 11.1 | 66 27.9 | 18994 | 18750 | -3032 | 43611 | 47568 |
| 1970 | -9 6.5 | 66 26.1 | 19033 | 18793 | -3013 | 43636 | 47606 |
| 1971 | -9 1.1 | 66 23.8 | 19075 | 18839 | -2990 | 43655 | 47640 |
| 1972 | -8 55.3 | 66 22.1 | 19110 | 18879 | -2964 | 43676 | 47674 |
| 1973 | -8 48.2 | 66 20.5 | 19144 | 18918 | -2930 | 43697 | 47707 |
| 1974 | -8 40.4 | 66 19.1 | 19175 | 18956 | -2892 | 43719 | 47739 |
| 1975 | -8 32.3 | 66 17.0 | 19212 | 18999 | -2852 | 43733 | 47767 |
| 1976 | -8 23.1 | 66 15.7 | 19240 | 19034 | -2806 | 43749 | 47793 |
| 1977 | -8 13.7 | 66 13.9 | 19271 | 19073 | -2758 | 43758 | 47813 |
| 1978 | -8 3.6 | 66 13.3 | 19286 | 19095 | -2704 | 43773 | 47833 |
| 1979 | -7 53.5 | 66 12.0 | 19309 | 19127 | -2651 | 43778 | 47847 |
| 1980 | -7 43.8 | 66 10.3 | 19330 | 19154 | -2600 | 43768 | 47848 |
| 1981 | -7 33.9 | 66 10.2 | 19335 | 19167 | -2546 | 43777 | 47857 |
| 1982 | -7 24.7 | 66 10.1 | 19342 | 19180 | -2495 | 43787 | 47869 |

LERWICK

LERWICK

DECLINATION WEST

1982 JANUARY

7 DEGS PLUS TABULAR QUANTITIES (UNIT 0.1 MINS)

| U.T. | 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 | MEAN | SUM | |
|--------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| 1 | | 352 | 366 | 374 | 372 | 352 | 362 | 359 | 356 | 342 | 337 | 363 | 378 | 384 | 401 | 399 | 406 | 353 | 410 | 387 | 380 | 370 | 353 | 357 | 348 | 369 | 8861 | |
| 2 | | 359 | 352 | 353 | 352 | 359 | 361 | 349 | 345 | 342 | 341 | 362 | 381 | 397 | 408 | 395 | 365 | 420 | 417 | 379 | 370 | 348 | 335 | 307 | 322 | 363 | 8719 | |
| 3 | D | 347 | 347 | 340 | 330 | 334 | 361 | 370 | 365 | 362 | 362 | 375 | 396 | 402 | 409 | 411 | 409 | 316 | 407 | 416 | 385 | 151 | 292 | 301 | 271 | 352 | 8459 | |
| 4 | | 192 | 271 | 303 | 348 | 362 | 361 | 356 | 356 | 353 | 364 | 373 | 385 | 400 | 399 | 381 | 368 | 378 | 393 | 409 | 373 | 359 | 342 | 306 | 287 | 351 | 8419 | |
| 5 | | 334 | 362 | 361 | 359 | 352 | 354 | 363 | 352 | 351 | 350 | 352 | 362 | 383 | 392 | 385 | 380 | 379 | 376 | 373 | 371 | 365 | 360 | 362 | 363 | 364 | 8741 | |
| 6 | | 363 | 380 | 368 | 375 | 363 | 376 | 360 | 368 | 353 | 384 | 391 | 372 | 380 | 403 | 398 | 386 | 383 | 390 | 385 | 378 | 380 | 341 | 355 | 360 | 374 | 8992 | |
| 7 | | 362 | 345 | 342 | 323 | 325 | 352 | 340 | 357 | 361 | 351 | 360 | 377 | 411 | 410 | 413 | 407 | 380 | 413 | 392 | 397 | 349 | 354 | 331 | 320 | 365 | 8772 | |
| 8 | | 298 | 268 | 298 | 302 | 336 | 343 | 352 | 350 | 343 | 344 | 364 | 375 | 390 | 394 | 398 | 385 | 383 | 398 | 373 | 364 | 362 | 345 | 331 | 341 | 351 | 8437 | |
| 9 | Q | 331 | 322 | 335 | 326 | 350 | 348 | 344 | 344 | 336 | 345 | 345 | 373 | 385 | 406 | 404 | 398 | 390 | 390 | 390 | 370 | 357 | 359 | 344 | 362 | 8682 | | |
| 10 | | 329 | 342 | 342 | 350 | 357 | 356 | 354 | 351 | 345 | 348 | 354 | 372 | 389 | 403 | 398 | 384 | 383 | 383 | 389 | 399 | 380 | 359 | 333 | 344 | 364 | 8744 | |
| 11 | | 348 | 343 | 356 | 365 | 350 | 356 | 351 | 349 | 345 | 359 | 371 | 381 | 386 | 400 | 404 | 401 | 407 | 403 | 406 | 383 | 373 | 362 | 355 | 354 | 371 | 8908 | |
| 12 | Q | 350 | 331 | 327 | 341 | 353 | 360 | 360 | 356 | 354 | 355 | 362 | 373 | 390 | 398 | 383 | 383 | 380 | 379 | 379 | 371 | 365 | 361 | 359 | 353 | 363 | 8723 | |
| 13 | Q | 362 | 369 | 366 | 363 | 371 | 372 | 370 | 364 | 363 | 363 | 370 | 380 | 398 | 394 | 385 | 380 | 381 | 383 | 375 | 372 | 369 | 363 | 363 | 362 | 372 | 8938 | |
| 14 | Q | 362 | 362 | 363 | 366 | 366 | 364 | 364 | 361 | 358 | 354 | 354 | 372 | 385 | 390 | 386 | 387 | 383 | 388 | 381 | 380 | 375 | 371 | 353 | 348 | 369 | 8873 | |
| 15 | | 358 | 362 | 352 | 352 | 323 | 352 | 352 | 361 | 360 | 372 | 379 | 393 | 442 | 453 | 442 | 433 | 389 | 387 | 403 | 371 | 360 | 321 | 318 | 342 | 374 | 8977 | |
| 16 | | 343 | 361 | 364 | 365 | 362 | 363 | 357 | 364 | 369 | 399 | 408 | 403 | 400 | 417 | 386 | 433 | 432 | 430 | 357 | 251 | 317 | 332 | 323 | 200 | 364 | 8736 | |
| 17 | | 284 | 337 | 350 | 357 | 360 | 358 | 354 | 353 | 362 | 398 | 428 | 441 | 434 | 422 | 396 | 373 | 386 | 363 | 371 | 361 | 359 | 354 | 331 | 320 | 371 | 8904 | |
| 18 | | 345 | 336 | 332 | 348 | 344 | 343 | 343 | 341 | 353 | 353 | 370 | 372 | 387 | 404 | 399 | 387 | 381 | 381 | 399 | 266 | 287 | 206 | 282 | 315 | 345 | 8274 | |
| 19 | Q | 334 | 342 | 357 | 352 | 347 | 343 | 342 | 342 | 342 | 346 | 354 | 371 | 373 | 384 | 375 | 371 | 373 | 373 | 373 | 373 | 366 | 365 | 363 | 363 | 363 | 359 | 8614 |
| 20 | | 354 | 366 | 343 | 348 | 356 | 363 | 354 | 342 | 344 | 349 | 354 | 373 | 381 | 391 | 389 | 382 | 380 | 380 | 375 | 357 | 370 | 351 | 348 | 357 | 363 | 8707 | |
| 21 | | 361 | 355 | 351 | 343 | 343 | 342 | 323 | 328 | 329 | 346 | 373 | 375 | 407 | 409 | 409 | 407 | 417 | 453 | 434 | 389 | 381 | 362 | 362 | 352 | 373 | 8951 | |
| 22 | D | 297 | 267 | 289 | 322 | 272 | 325 | 379 | 372 | 368 | 352 | 352 | 371 | 352 | 435 | 435 | 445 | 436 | 277 | 426 | 363 | 311 | 268 | 291 | 298 | 346 | 8303 | |
| 23 | D | 218 | 228 | 234 | 337 | 368 | 363 | 354 | 381 | 352 | 350 | 371 | 383 | 409 | 405 | 424 | 418 | 414 | 395 | 373 | 339 | 202 | 150 | 201 | 292 | 331 | 7961 | |
| 24 | | 344 | 318 | 342 | 333 | 338 | 353 | 352 | 366 | 352 | 353 | 363 | 381 | 388 | 433 | 412 | 425 | 380 | 363 | 363 | 284 | 304 | 306 | 266 | 287 | 350 | 8406 | |
| 25 | | 312 | 325 | 341 | 352 | 371 | 360 | 349 | 339 | 327 | 334 | 343 | 347 | 359 | 383 | 377 | 355 | 371 | 375 | 373 | 369 | 362 | 330 | 358 | 357 | 353 | 8469 | |
| 26 | | 361 | 357 | 351 | 359 | 361 | 362 | 355 | 347 | 334 | 336 | 355 | 372 | 375 | 387 | 383 | 380 | 376 | 380 | 380 | 350 | 307 | 307 | 326 | 337 | 356 | 8538 | |
| 27 | | 354 | 353 | 349 | 357 | 363 | 382 | 375 | 335 | 326 | 332 | 343 | 370 | 398 | 397 | 430 | 424 | 425 | 393 | 379 | 373 | 352 | 308 | 285 | 226 | 359 | 8629 | |
| 28 | | 325 | 334 | 327 | 386 | 359 | 355 | 343 | 337 | 354 | 359 | 407 | 448 | 414 | 416 | 416 | 385 | 370 | 365 | 373 | 361 | 351 | 346 | 333 | 335 | 366 | 8799 | |
| 29 | | 351 | 351 | 352 | 345 | 350 | 340 | 332 | 334 | 324 | 332 | 345 | 352 | 366 | 383 | 400 | 413 | 418 | 423 | 486 | 402 | 364 | 349 | 343 | 302 | 365 | 8757 | |
| 30 | D | 333 | 290 | 108 | 198 | 304 | 345 | 343 | 345 | 341 | 352 | 384 | 385 | 400 | 399 | 413 | 365 | 352 | 361 | 341 | 342 | 341 | 333 | 327 | 321 | 334 | 8023 | |
| 31 | D | 342 | 330 | 277 | 321 | 380 | 382 | 380 | 374 | 366 | 339 | 345 | 322 | 355 | 427 | 448 | 480 | 401 | 407 | 366 | 343 | 334 | 338 | 323 | 328 | 363 | 8708 | |
| MEAN | | 332 | 335 | 331 | 343 | 349 | 357 | 354 | 353 | 349 | 354 | 367 | 379 | 391 | 405 | 402 | 397 | 388 | 388 | 387 | 361 | 341 | 330 | 328 | 325 | 360 | 8646 | |
| MEAN Q | | 348 | 345 | 350 | 350 | 357 | 357 | 356 | 353 | 351 | 353 | 357 | 374 | 386 | 394 | 387 | 384 | 381 | 383 | 380 | 376 | 369 | 363 | 359 | 354 | 365 | 8767 | |
| MEAN D | | 307 | 292 | 250 | 302 | 332 | 355 | 365 | 367 | 358 | 351 | 365 | 371 | 384 | 415 | 426 | 423 | 384 | 369 | 384 | 354 | 268 | 276 | 289 | 302 | 345 | 8289 | |

LERWICK

DECLINATION WEST

1982 FEBRUARY

7 DEGS PLUS TABULAR QUANTITIES (UNIT 0.1 MINS)

| U.T. | 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 | MEAN | SUM |
|------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
| 1 | | 333 | 343 | 350 | 362 | 381 | 388 | 369 | 339 | 317 | 308 | 308 | 320 | 290 | 341 | 408 | 409 | 418 | 424 | 417 | 414 | 411 | 348 | 196 | 326 | 355 | 8520 |
| 2 | D | 333 | 300 | 344 | 235 | 209 | 271 | 353 | 349 | 279 | 339 | 313 | 349 | 356 | 377 | 400 | 393 | 383 | 374 | 372 | 364 | 353 | 349 | 313 | 322 | 334 | 8030 |
| 3 | | 326 | 337 | 343 | 352 | 340 | 315 | 354 | 454 | 349 | 323 | 334 | 332 | 385 | 431 | 417 | 396 | 382 | 381 | 379 | 370 | 370 | 296 | 215 | 195 | 349 | 8376 |
| 4 | D | 182 | 188 | 160 | 197 | 210 | 274 | 357 | 374 | 364 | 372 | 395 | 399 | 388 | 472 | 460 | 446 | 445 | 446 | 402 | 492 | 384 | 252 | 295 | 669 | 359 | 8623 |
| 5 | | 276 | 125 | 330 | -64 | 250 | 270 | 352 | 354 | 369 | 345 | 360 | 373 | 391 | 400 | 407 | 392 | 382 | 383 | 405 | 370 | 346 | 273 | 251 | 282 | 317 | 7622 |
| 6 | | 310 | 335 | 353 | 353 | 334 | 315 | 333 | 317 | 317 | 354 | 369 | 374 | 400 | 428 | 443 | 455 | 446 | 385 | 434 | 400 | 319 | 253 | 270 | 302 | 358 | 8599 |
| 7 | | 296 | 264 | 100 | 224 | 326 | 289 | 299 | 314 | 304 | 317 | 354 | 365 | 382 | 400 | 401 | 415 | 382 | 367 | 404 | 359 | 333 | 317 | 303 | 323 | 326 | 7838 |
| 8 | | 326 | 272 | 290 | 298 | 313 | 321 | 317 | 308 | 316 | 326 | 384 | 400 | 406 | 417 | 425 | 397 | 405 | 402 | 411 | 433 | 335 | 335 | 354 | 325 | 355 | 8516 |
| 9 | Q | 277 | 217 | 246 | 308 | 341 | 346 | 348 | 351 | 341 | 353 | 368 | 372 | 363 | 357 | 378 | 373 | 372 | 381 | 396 | 398 | 408 | 378 | 361 | 335 | 348 | 8368 |
| 10 | | 335 | 296 | 259 | 301 | 347 | 340 | 342 | 348 | 346 | 350 | 376 | 396 | 446 | 479 | 458 | 399 | 397 | 435 | 428 | 433 | 313 | 302 | 499 | 238 | 369 | 8863 |
| 11 | D | 277 | 180 | 206 | 252 | 227 | 296 | 369 | 349 | 337 | 346 | 360 | 389 | 408 | 460 | 507 | 487 | 464 | 455 | 426 | 406 | 369 | 81 | 136 | 103 | 329 | 7890 |
| 12 | | 214 | 344 | 310 | 302 | 313 | 322 | 316 | 317 | 320 | 333 | 366 | 380 | 401 | 428 | 392 | 393 | 374 | 397 | 394 | 262 | 125 | 240 | 258 | 218 | 321 | 7719 |
| 13 | D | 192 | 257 | 117 | 197 | 167 | 186 | 210 | 332 | 326 | 323 | 363 | 374 | 400 | 389 | 434 | 413 | 406 | 442 | 444 | 502 | 299 | 125 | 276 | 296 | 311 | 7470 |
| 14 | | 318 | 288 | 285 | 334 | 318 | 303 | 233 | 322 | 319 | 363 | 344 | 369 | 406 | 421 | 435 | 452 | 332 | 430 | 402 | 515 | 301 | 304 | 288 | 264 | 348 | 8346 |
| 15 | Q | 282 | 309 | 308 | 327 | 320 | 318 | 337 | 373 | 373 | 396 | 406 | 400 | 418 | 436 | 443 | 387 | 364 | 346 | 344 | 345 | 345 | 351 | 345 | 345 | 359 | 8618 |
| 16 | Q | 348 | 337 | 323 | 323 | 328 | 328 | 333 | 322 | 319 | 323 | 336 | 362 | 407 | 409 | 388 | 375 | 369 | 364 | 338 | 349 | 355 | 355 | 353 | 352 | 350 | 8396 |
| 17 | | 349 | 347 | 346 | 350 | 353 | 360 | 375 | 415 | 392 | 368 | 399 | 424 | 478 | 474 | 493 | 459 | 417 | 384 | 323 | 299 | 278 | 251 | 286 | 367 | 374 | 8987 |
| 18 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

LERWICK

DECLINATION WEST

1982

MARCH

7 DEGS PLUS TABULAR QUANTITIES (UNIT 0.1 MINS)

| U.T. | Ø | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN | SUM |
|--------|---|------|-----|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
| 1 | D | 345 | 338 | 327 | 341 | 337 | 326 | 323 | 347 | 335 | 321 | 325 | 377 | 429 | 508 | 596 | 418 | 417 | 369 | 353 | 303 | 339 | 353 | 146 | 71 | 347 | 8344 |
| 2 | D | -170 | -96 | -158 | -185 | -59 | 266 | 360 | 349 | 413 | 253 | 325 | 357 | 386 | 352 | 358 | 317 | 319 | 303 | 268 | 308 | 147 | 226 | 250 | 294 | 216 | 5183 |
| 3 | | 367 | 281 | 308 | 319 | 327 | 326 | 321 | 311 | 312 | 333 | 348 | 382 | 414 | 416 | 408 | 417 | 414 | 396 | 377 | 344 | 283 | 335 | 343 | 340 | 351 | 8422 |
| 4 | | 333 | 336 | 335 | 333 | 332 | 333 | 328 | 326 | 310 | 319 | 354 | 390 | 399 | 396 | 381 | 382 | 369 | 364 | 364 | 361 | 360 | 355 | 311 | 269 | 347 | 8340 |
| 5 | | 242 | 299 | 330 | 334 | 326 | 382 | 418 | 326 | 327 | 328 | 328 | 358 | 390 | 396 | 384 | 373 | 362 | 344 | 344 | 345 | 344 | 351 | 344 | 353 | 347 | 8328 |
| 6 | Q | 354 | 340 | 335 | 334 | 333 | 327 | 324 | 318 | 309 | 305 | 321 | 345 | 370 | 392 | 401 | 388 | 378 | 374 | 370 | 370 | 373 | 372 | 358 | 351 | 352 | 8442 |
| 7 | Q | 331 | 326 | 324 | 320 | 323 | 318 | 316 | 310 | 302 | 302 | 322 | 351 | 382 | 410 | 406 | 396 | 388 | 373 | 379 | 373 | 366 | 363 | 355 | 337 | 349 | 8373 |
| 8 | | 326 | 281 | 288 | 301 | 310 | 314 | 312 | 299 | 286 | 290 | 307 | 358 | 399 | 443 | 444 | 435 | 451 | 475 | 431 | 394 | 387 | 390 | 283 | 230 | 351 | 8434 |
| 9 | | 535 | 217 | 280 | 303 | 314 | 303 | 311 | 311 | 296 | 295 | 308 | 357 | 433 | 470 | 453 | 448 | 445 | 407 | 371 | 366 | 314 | 222 | 273 | 292 | 347 | 8324 |
| 10 | | 226 | 237 | 244 | 232 | 275 | 335 | 317 | 309 | 299 | 333 | 351 | 388 | 399 | 426 | 401 | 400 | 372 | 354 | 363 | 363 | 363 | 335 | 328 | 290 | 331 | 7940 |
| 11 | | 310 | 318 | 299 | 286 | 330 | 315 | 353 | 331 | 305 | 293 | 313 | 359 | 404 | 414 | 414 | 392 | 384 | 346 | 374 | 392 | 337 | 329 | 326 | 328 | 344 | 8252 |
| 12 | | 335 | 327 | 332 | 314 | 315 | 323 | 319 | 314 | 306 | 308 | 323 | 364 | 396 | 418 | 445 | 441 | 426 | 458 | 410 | 386 | 356 | 323 | 340 | 323 | 358 | 8602 |
| 13 | | 332 | 336 | 349 | 302 | 304 | 300 | 311 | 298 | 313 | 319 | 351 | 374 | 413 | 432 | 438 | 401 | 378 | 369 | 359 | 361 | 295 | 305 | 294 | 274 | 342 | 8208 |
| 14 | | 285 | 290 | 324 | 320 | 329 | 333 | 326 | 303 | 286 | 291 | 323 | 359 | 416 | 411 | 448 | 461 | 433 | 414 | 369 | 296 | 331 | 344 | 326 | 293 | 346 | 8311 |
| 15 | Q | 252 | 273 | 335 | 303 | 286 | 299 | 302 | 306 | 295 | 290 | 312 | 353 | 397 | 414 | 427 | 417 | 399 | 384 | 389 | 376 | 377 | 376 | 335 | 328 | 342 | 8225 |
| 16 | Q | 305 | 299 | 302 | 294 | 298 | 312 | 314 | 304 | 299 | 309 | 329 | 366 | 402 | 413 | 420 | 406 | 389 | 383 | 378 | 387 | 382 | 370 | 361 | 361 | 349 | 8373 |
| 17 | | 332 | 331 | 326 | 327 | 324 | 316 | 319 | 311 | 300 | 304 | 341 | 396 | 446 | 516 | 512 | 493 | 486 | 473 | 444 | 368 | 378 | 375 | 336 | 273 | 376 | 9027 |
| 18 | | 309 | 354 | 318 | 365 | 355 | 343 | 347 | 335 | 345 | 354 | 364 | 393 | 393 | 418 | 418 | 410 | 345 | 355 | 373 | 373 | 300 | 318 | 325 | 329 | 356 | 8539 |
| 19 | | 303 | 283 | 291 | 316 | 320 | 314 | 321 | 324 | 318 | 293 | 344 | 378 | 398 | 410 | 400 | 384 | 359 | 346 | 352 | 350 | 350 | 318 | 321 | 345 | 339 | 8138 |
| 20 | | 345 | 344 | 341 | 340 | 343 | 344 | 395 | 322 | 315 | 309 | 318 | 338 | 379 | 433 | 446 | 410 | 382 | 347 | 319 | 313 | 334 | 314 | 331 | 314 | 349 | 8376 |
| 21 | D | 338 | 347 | 345 | 337 | 364 | 352 | 372 | 341 | 291 | 289 | 310 | 365 | 417 | 427 | 437 | 394 | 389 | 364 | 344 | 212 | 250 | 312 | 347 | 409 | 348 | 8353 |
| 22 | D | 409 | 178 | 205 | 318 | 274 | 266 | 293 | 320 | 318 | 329 | 373 | 401 | 429 | 456 | 476 | 450 | 410 | 371 | 359 | 359 | 366 | 357 | 347 | 344 | 350 | 8408 |
| 23 | | 344 | 344 | 328 | 323 | 316 | 309 | 300 | 294 | 296 | 324 | 367 | 393 | 436 | 441 | 431 | 396 | 368 | 356 | 356 | 354 | 354 | 355 | 354 | 358 | 354 | 8497 |
| 24 | | 348 | 352 | 346 | 341 | 335 | 324 | 314 | 289 | 287 | 300 | 324 | 366 | 397 | 431 | 433 | 424 | 388 | 378 | 330 | 347 | 334 | 365 | 366 | 358 | 353 | 8477 |
| 25 | D | 352 | 382 | 388 | 345 | 314 | 318 | 332 | 337 | 328 | 352 | 379 | 394 | 440 | 409 | 422 | 417 | 373 | 336 | 320 | 355 | 319 | 318 | 354 | 305 | 358 | 8589 |
| 26 | | 336 | 346 | 372 | 354 | 335 | 328 | 316 | 307 | 304 | 306 | 330 | 373 | 403 | 410 | 400 | 383 | 345 | 282 | 365 | 372 | 373 | 355 | 303 | 318 | 346 | 8316 |
| 27 | | 327 | 336 | 397 | 359 | 318 | 315 | 324 | 306 | 301 | 306 | 336 | 380 | 405 | 429 | 428 | 395 | 370 | 362 | 357 | 359 | 363 | 351 | 352 | 345 | 355 | 8521 |
| 28 | Q | 344 | 344 | 337 | 353 | 354 | 310 | 309 | 300 | 283 | 291 | 308 | 343 | 385 | 410 | 388 | 372 | 354 | 348 | 351 | 343 | 345 | 353 | 346 | 354 | 342 | 8225 |
| 29 | | 347 | 352 | 353 | 337 | 308 | 330 | 384 | 334 | 342 | 332 | 324 | 354 | 393 | 408 | 394 | 369 | 358 | 355 | 364 | 357 | 365 | 366 | 350 | 275 | 352 | 8451 |
| 30 | | 294 | 282 | 272 | 272 | 290 | 274 | 274 | 274 | 273 | 282 | 315 | 382 | 455 | 469 | 459 | 470 | 438 | 392 | 372 | 382 | 372 | 363 | 314 | 302 | 344 | 8272 |
| 31 | | 300 | 314 | 244 | 257 | 274 | 294 | 271 | 283 | 295 | 286 | 310 | 374 | 429 | 472 | 471 | 437 | 446 | 408 | 382 | 359 | 328 | 309 | 344 | 258 | 339 | 8145 |
| MEAN | | 314 | 300 | 304 | 303 | 307 | 318 | 327 | 314 | 309 | 308 | 332 | 370 | 408 | 427 | 430 | 410 | 391 | 374 | 364 | 353 | 338 | 338 | 325 | 310 | 345 | 8274 |
| MEAN Q | | 317 | 316 | 327 | 321 | 319 | 313 | 313 | 308 | 298 | 299 | 318 | 352 | 387 | 406 | 408 | 396 | 382 | 372 | 373 | 370 | 369 | 367 | 351 | 346 | 347 | 8328 |
| MEAN D | | 255 | 230 | 221 | 231 | 246 | 306 | 336 | 339 | 337 | 309 | 342 | 379 | 420 | 430 | 458 | 399 | 382 | 349 | 329 | 307 | 284 | 313 | 289 | 285 | 324 | 7776 |

LERWICK

DECLINATION WEST

1982

APRIL

7 DEGS PLUS TABULAR QUANTITIES (UNIT 0.1 MINS)

| U.T. | Ø | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN | SUM |
|------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
| 1 | | 314 | 288 | 317 | 317 | 302 | 311 | 299 | 276 | 271 | 281 | 326 | 362 | 394 | 445 | 451 | 415 | 389 | 362 | 359 | 353 | 296 | 93 | 168 | 185 | 315 | 7574 |
| 2 | D | 168 | 100 | 140 | 205 | 245 | 267 | 228 | 262 | 321 | 288 | 308 | 309 | 414 | 423 | 463 | 490 | 505 | 417 | 370 | 381 | 362 | 326 | 262 | 240 | 312 | 7494 |
| 3 | D | 231 | 153 | 124 | 233 | 262 | 313 | 306 | 261 | 242 | 260 | 310 | 337 | 394 | 428 | 440 | 463 | 501 | 406 | 402 | 367 | 333 | 293 | 351 | 258 | 319 | 7668 |
| 4 | | 316 | 335 | 249 | 217 | 238 | 290 | 313 | 283 | 283 | 308 | 340 | 370 | 418 | 434 | 440 | 435 | 431 | 408 | 371 | 366 | 367 | 273 | 298 | 253 | 335 | 8036 |
| 5 | | 153 | 213 | 226 | 217 | 295 | 293 | 261 | 261 | 286 | 332 | 343 | 363 | 363 | 395 | 380 | 361 | 339 | 330 | 246 | 261 | 344 | 352 | 181 | 307 | 296 | 7102 |
| 6 | | 334 | 328 | 343 | 292 | 271 | 343 | 325 | 311 | 285 | 298 | 342 | 386 | 425 | 449 | 452 | 392 | 398 | 322 | 340 | 349 | 341 | 340 | 333 | 343 | 347 | 8342 |
| 7 | Q | 334 | 323 | 328 | 325 | 319 | 314 | 303 | 281 | 271 | 290 | 383 | 392 | 430 | 445 | 425 | 398 | 379 | 350 | 334 | 343 | 352 | 356 | 350 | 344 | 348 | 8369 |
| 8 | | 343 | 340 | 333 | 325 | 314 | 296 | 282 | 272 | 280 | 320 | 355 | 393 | 431 | 453 | 444 | 381 | 354 | 350 | 331 | 335 | 298 | 293 | 317 | 325 | 340 | 8165 |
| 9 | | 288 | 299 | 306 | 306 | 287 | 296 | 284 | 264 | 263 | 284 | 325 | 373 | 413 | 440 | 443 | 431 | 423 | 380 | 376 | 362 | 369 | 342 | 332 | 314 | 341 | 8200 |
| 10 | D | 267 | 243 | 197 | 219 | 259 | 245 | 243 | 206 | 225 | 258 | 361 | 407 | 425 | 453 | 415 | 441 | 508 | 470 | 706 | 371 | 333 | 351 | 240 | 169 | 334 | 8012 |
| 11 | D | 86 | 119 | 54 | 180 | 247 | 291 | 401 | 312 | 284 | 340 | 375 | 368 | 386 | 407 | 405 | 389 | 366 | 353 | 362 | 331 | 271 | 284 | 316 | 331 | 302 | 7258 |
| 12 | | 330 | 325 | 322 | 317 | 310 | 303 | 264 | 238 | 261 | 270 | 333 | 387 | 422 | 433 | 431 | 378 | 359 | 333 | 325 | 292 | 306 | 349 | 352 | 351 | 333 | 7991 |
| 13 | | 352 | 339 | 354 | 335 | 281 | 282 | 288 | 274 | 260 | 277 | 300 | 348 | 363 | 413 | 402 | 387 | 374 | 363 | 360 | 361 | 361 | 370 | 349 | 300 | 337 | 8093 |
| 14 | Q | 332 | 329 | 326 | 315 | 304 | 297 | 287 | 280 | 295 | 304 | 330 | 362 | 397 | 421 | 415 | 393 | 377 | 362 | 352 | 358 | 361 | 360 | 351 | 342 | 344 | 8250 |
| 15 | | 337 | 339 | 330 | 328 | 315 | 300 | 294 | 288 | 290 | 318 | 351 | 361 | 412 | 435 | 428 | 401 | 371 | 357 | 350 | 351 | 343 | 280 | 308 | 330 | 342 | 8217 |
| 16 | | 330 | 337 | 337 | 314 | 299 | 284 | 272 | 263 | 261 | 272 | 310 | 345 | 389 | 410 | 403 | 386 | 367 | 375 | 331 | 353 | 372 | 330 | 342 | 357 | 335 | 8039 |
| 17 | | 342 | 332 | 324 | 318 | 325 | 314 | 295 | 320 | 291 | 318 | 361 | 410 | 432 | 404 | 377 | 364 | 364 | 337 | 332 | 338 | | | | | | |

LERWICK

DECLINATION WEST

1982 MAY 7 DEGS PLUS TABULAR QUANTITIES (UNIT 0.1 MINS)

| U.T. | 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 | MEAN | SUM |
|--------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|
| 1 | 273 | 232 | 273 | 318 | 256 | 229 | 207 | 215 | 282 | 325 | 355 | 391 | 427 | 455 | 443 | 432 | 418 | 355 | 346 | 351 | 344 | 332 | 338 | 356 | 331 | 7953 | |
| 2 | 344 | 337 | 425 | 356 | 283 | 252 | 273 | 242 | 252 | 325 | 361 | 404 | 421 | 447 | 441 | 447 | 441 | 425 | 381 | 336 | 300 | 334 | 321 | 328 | 353 | 8476 | |
| 3 | D 236 | 225 | 271 | 244 | 248 | 209 | 283 | 310 | 288 | 328 | 356 | 388 | 425 | 426 | 424 | 376 | 368 | 406 | 390 | 336 | 335 | 365 | 344 | 215 | 325 | 7796 | |
| 4 | 316 | 315 | 314 | 306 | 296 | 266 | 251 | 285 | 293 | 291 | 305 | 364 | 385 | 387 | 366 | 387 | 342 | 363 | 355 | 350 | 348 | 337 | 341 | 338 | 329 | 7901 | |
| 5 | 335 | 334 | 363 | 334 | 307 | 326 | 268 | 231 | 230 | 284 | 333 | 351 | 379 | 381 | 399 | 363 | 355 | 348 | 347 | 319 | 312 | 340 | 339 | 335 | 329 | 7913 | |
| 6 | 338 | 355 | 373 | 332 | 322 | 292 | 272 | 253 | 264 | 283 | 319 | 356 | 394 | 405 | 406 | 391 | 363 | 349 | 343 | 337 | 325 | 313 | 330 | 326 | 335 | 8041 | |
| 7 | Q 333 | 317 | 310 | 317 | 317 | 296 | 272 | 253 | 253 | 269 | 300 | 337 | 373 | 390 | 399 | 392 | 381 | 375 | 365 | 355 | 345 | 352 | 344 | 322 | 332 | 7967 | |
| 8 | Q 314 | 310 | 310 | 304 | 278 | 272 | 253 | 243 | 264 | 273 | 300 | 344 | 381 | 401 | 410 | 409 | 390 | 375 | 364 | 355 | 353 | 355 | 345 | 325 | 330 | 7928 | |
| 9 | 324 | 326 | 309 | 274 | 260 | 284 | 308 | 317 | 304 | 331 | 359 | 385 | 425 | 445 | 447 | 424 | 399 | 377 | 365 | 363 | 360 | 361 | 354 | 354 | 352 | 8455 | |
| 10 | 355 | 365 | 344 | 326 | 299 | 293 | 285 | 271 | 272 | 290 | 338 | 380 | 422 | 425 | 414 | 384 | 372 | 359 | 358 | 357 | 359 | 355 | 359 | 358 | 347 | 8340 | |
| 11 | 351 | 344 | 314 | 305 | 290 | 302 | 284 | 272 | 272 | 290 | 317 | 349 | 390 | 417 | 415 | 396 | 372 | 352 | 349 | 352 | 333 | 314 | 334 | 343 | 335 | 8057 | |
| 12 | 338 | 345 | 344 | 316 | 302 | 279 | 272 | 273 | 268 | 282 | 332 | 355 | 372 | 387 | 387 | 381 | 361 | 360 | 355 | 354 | 350 | 346 | 347 | 334 | 335 | 8040 | |
| 13 | 339 | 316 | 310 | 304 | 282 | 279 | 258 | 254 | 263 | 290 | 327 | 344 | 347 | 370 | 381 | 386 | 372 | 355 | 368 | 355 | 344 | 363 | 375 | 373 | 331 | 7955 | |
| 14 | 345 | 352 | 342 | 334 | 290 | 277 | 270 | 269 | 274 | 310 | 360 | 375 | 401 | 403 | 393 | 368 | 352 | 345 | 345 | 355 | 361 | 356 | 361 | 364 | 342 | 8202 | |
| 15 | 344 | 362 | 412 | 294 | 273 | 247 | 256 | 275 | 292 | 300 | 324 | 362 | 373 | 385 | 381 | 380 | 374 | 354 | 347 | 316 | 355 | 346 | 342 | 346 | 335 | 8040 | |
| 16 | 328 | 331 | 340 | 310 | 263 | 243 | 235 | 252 | 274 | 310 | 341 | 352 | 365 | 374 | 373 | 367 | 358 | 354 | 353 | 346 | 362 | 356 | 354 | 337 | 328 | 7878 | |
| 17 | 330 | 339 | 336 | 344 | 314 | 268 | 245 | 256 | 272 | 304 | 335 | 389 | 400 | 401 | 390 | 382 | 367 | 372 | 378 | 372 | 344 | 322 | 365 | 365 | 341 | 8190 | |
| 18 | 373 | 352 | 312 | 285 | 268 | 299 | 264 | 275 | 272 | 295 | 308 | 408 | 426 | 409 | 394 | 372 | 354 | 335 | 349 | 354 | 364 | 361 | 367 | 333 | 338 | 8129 | |
| 19 | 322 | 319 | 372 | 344 | 309 | 251 | 233 | 244 | 256 | 310 | 336 | 363 | 387 | 392 | 377 | 369 | 345 | 328 | 324 | 346 | 351 | 344 | 315 | 345 | 328 | 7882 | |
| 20 | 347 | 336 | 338 | 310 | 273 | 264 | 244 | 261 | 282 | 310 | 346 | 384 | 391 | 372 | 365 | 350 | 346 | 339 | 344 | 355 | 352 | 346 | 337 | 336 | 330 | 7928 | |
| 21 | 324 | 318 | 310 | 301 | 301 | 292 | 283 | 282 | 309 | 309 | 337 | 381 | 426 | 426 | 416 | 396 | 372 | 356 | 352 | 348 | 335 | 333 | 347 | 353 | 342 | 8207 | |
| 22 | Q 328 | 318 | 314 | 300 | 286 | 278 | 280 | 288 | 293 | 311 | 341 | 368 | 391 | 398 | 389 | 368 | 352 | 346 | 343 | 339 | 342 | 347 | 350 | 341 | 334 | 8011 | |
| 23 | Q 337 | 341 | 325 | 288 | 272 | 255 | 241 | 238 | 255 | 286 | 327 | 351 | 368 | 379 | 374 | 360 | 346 | 335 | 333 | 332 | 334 | 336 | 340 | 343 | 320 | 7696 | |
| 24 | Q 340 | 337 | 318 | 305 | 286 | 262 | 247 | 263 | 265 | 300 | 349 | 391 | 424 | 419 | 392 | 376 | 360 | 346 | 355 | 357 | 355 | 346 | 348 | 344 | 337 | 8085 | |
| 25 | 334 | 330 | 325 | 311 | 304 | 273 | 255 | 260 | 284 | 310 | 346 | 380 | 411 | 427 | 416 | 387 | 361 | 351 | 379 | 377 | 369 | 356 | 356 | 343 | 343 | 8245 | |
| 26 | 279 | 279 | 245 | 244 | 255 | 262 | 245 | 249 | 264 | 285 | 315 | 355 | 402 | 447 | 481 | 479 | 455 | 373 | 406 | 335 | 309 | 336 | 297 | 300 | 329 | 7897 | |
| 27 | D 295 | 284 | 278 | 248 | 205 | 227 | 295 | 332 | 256 | 365 | 396 | 391 | 427 | 426 | 365 | 424 | 460 | 416 | 460 | 396 | 391 | 333 | 209 | 256 | 339 | 8135 | |
| 28 | D 315 | 255 | 251 | 265 | 318 | 233 | 255 | 204 | 266 | 320 | 333 | 371 | 415 | 457 | 417 | 408 | 396 | 421 | 407 | 402 | 392 | 375 | 398 | 190 | 336 | 8064 | |
| 29 | D 263 | 273 | 234 | 260 | 315 | 275 | 295 | 265 | 254 | 276 | 300 | 330 | 365 | 369 | 384 | 400 | 380 | 382 | 326 | 368 | 382 | 355 | 331 | 320 | 321 | 7702 | |
| 30 | D 311 | 315 | 307 | 288 | 255 | 244 | 239 | 232 | 275 | 327 | 324 | 359 | 385 | 411 | 361 | 392 | 396 | 355 | 376 | 368 | 355 | 358 | 289 | 288 | 325 | 7810 | |
| 31 | 236 | 251 | 355 | 303 | 220 | 228 | 218 | 256 | 271 | 282 | 328 | 371 | 391 | 399 | 400 | 356 | 321 | 350 | 370 | 375 | 397 | 356 | 337 | 343 | 321 | 7714 | |
| MEAN | 321 | 317 | 322 | 302 | 282 | 266 | 261 | 262 | 272 | 302 | 334 | 369 | 396 | 407 | 400 | 390 | 375 | 363 | 362 | 354 | 350 | 346 | 339 | 328 | 334 | 8020 | |
| MEAN Q | 330 | 325 | 315 | 303 | 288 | 273 | 259 | 257 | 266 | 288 | 323 | 358 | 387 | 397 | 393 | 381 | 366 | 355 | 352 | 348 | 346 | 347 | 345 | 335 | 331 | 7937 | |
| MEAN D | 284 | 270 | 268 | 261 | 268 | 238 | 273 | 269 | 268 | 323 | 342 | 368 | 403 | 418 | 390 | 400 | 400 | 396 | 392 | 374 | 371 | 357 | 314 | 254 | 329 | 7901 | |

LERWICK

DECLINATION WEST

1982 JUNE 7 DEGS PLUS TABULAR QUANTITIES (UNIT 0.1 MINS)

| U.T. | 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 | MEAN | SUM |
|------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|
| 1 | 262 | 308 | 291 | 279 | 288 | 274 | 253 | 252 | 262 | 289 | 316 | 347 | 392 | 403 | 393 | 380 | 372 | 354 | 380 | 348 | 316 | 274 | 296 | 245 | 315 | 7574 | |
| 2 | 293 | 275 | 357 | 271 | 275 | 274 | 252 | 241 | 241 | 276 | 302 | 331 | 385 | 405 | 395 | 395 | 387 | 375 | 356 | 342 | 341 | 330 | 329 | 330 | 323 | 7758 | |
| 3 | Q 337 | 357 | 274 | 319 | 301 | 277 | 276 | 271 | 278 | 295 | 326 | 347 | 378 | 401 | 408 | 402 | 389 | 365 | 371 | 360 | 365 | 327 | 337 | 335 | 337 | 8096 | |
| 4 | Q 338 | 328 | 292 | 287 | 282 | 252 | 257 | 256 | 266 | 279 | 326 | 369 | 397 | 442 | 435 | 408 | 385 | 371 | 367 | 372 | 367 | 366 | 342 | 321 | 337 | 8105 | |
| 5 | Q 302 | 294 | 302 | 284 | 278 | 261 | 239 | 255 | 272 | 298 | 330 | 373 | 398 | 420 | 427 | 407 | 381 | 378 | 375 | 367 | 358 | 353 | 342 | 344 | 335 | 8038 | |
| 6 | 343 | 358 | 323 | 322 | 289 | 299 | 301 | 267 | 281 | 279 | 318 | 358 | 411 | 421 | 421 | 409 | 395 | 366 | 363 | 353 | 357 | 352 | 337 | 335 | 344 | 8258 | |
| 7 | 358 | 347 | 301 | 279 | 273 | 292 | 337 | 347 | 308 | 311 | 325 | 390 | 384 | 404 | 392 | 366 | 355 | 338 | 330 | 329 | 330 | 325 | 320 | 320 | 336 | 8061 | |
| 8 | 310 | 305 | 299 | 285 | 279 | 256 | 238 | 236 | 247 | 272 | 307 | 337 | 370 | 393 | 398 | 412 | 384 | 358 | 339 | 340 | 361 | 353 | 302 | 320 | 321 | 7701 | |
| 9 | 320 | 288 | 319 | 329 | 336 | 300 | 247 | 234 | 266 | 297 | 337 | 366 | 390 | 411 | 425 | 411 | 393 | 377 | 357 | 352 | 352 | 347 | 329 | 313 | 337 | 8096 | |
| 10 | D 322 | 303 | 354 | 367 | 359 | 257 | 262 | 235 | 248 | 267 | 315 | 359 | 388 | 398 | 407 | 412 | 373 | 380 | 361 | 370 | 374 | 362 | 359 | 303 | 339 | 8137 | |
| 11 | D 303 | 308 | 369 | 306 | 295 | 288 | 232 | 255 | 257 | 278 | 304 | 347 | 376 | 394 | 400 | 394 | 394 | 394 | 347 | 360 | 341 | 321 | 305 | 292 | 327 | 7860 | |
| 12 | D 248 | 169 | 276 | 233 | 259 | 235 | 234 | 241 | 241 | 255 | 288 | 337 | 376 | 395 | 412 | 350 | 371 | 430 | 467 | 399 | 352 | 349 | 256 | 302 | 311 | 7475 | |
| 13 | D 244 | 180 | 326 | 237 | 206 | 212 | 210 | 278 | 251 | 267 | 268 | 293 | 348 | 369 | 358 | 344 | 365 | 369 | 387 | 340 | 271 | 222 | 107 | 296 | 281 | 6744 | |
| 14 | 326 | 339 | 311 | 300 | 293 | 273 | 277 | 298 | 301 | 335 | 367 | 366 | 371 | 385 | 394 | 384 | 357 | 358 | 391 | 329 | 338 | 322 | 362 | 348 | 340 | 8165 | |
| 15 | 348 | 304 | 305 | 328 | 278 | 264 | 299 | 258 | 287 | 306 | 316 | 331 | 374 | 376 | 390 | 376 | 381 | 301 | 354 | 367 | 369 | 347 | 334 | 373 | 332 | 7966 | |
| 16 | 342 | 304 | 268 | 257 | 261 | 267 | 243 | 246 | 254 | 278 | 310 | 347 | 387 | 382 | 386 | 378 | 367 | 367 | 365 | 338 | 365 | 364 | 367 | 349 | 324 | 7792 | |
| 17 | Q 337 | 313 | 301 | 281 | 266 | 271 | 278 | 268 | 262 | 292 | 321 | 372 | 389 | 405 | 392 | 366 | 353 | 347 | 355 | 348 | 346 | 343 | 332 | 324 | 327 | 7862 | |
| 18 | Q 310 | 299 | 303 | 312 | 314 | 330 | 310 | 252 | 275 | 307 | 337 | 376 | 407 | 420 | 394 | 382 | 363 | 340 | 333 | 340 | 326 | 359 | 357 | 339 | 337 | 8085 | |
| 19 | 330 | 321 | 322 | 311 | 309 | 302 | 289 | 292 | 312 | 316 | 339 | 384 | 396 | 40 | | | | | | | | | | | | | |

LERWICK

DECLINATION WEST

1982

JULY

7 DEGS PLUS TABULAR QUANTITIES (UNIT 0.1 MINS)

| U T | 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 | MEAN | SUM | |
|--------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| 1 | | 313 | 293 | 277 | 275 | 225 | 268 | 269 | 263 | 257 | 268 | 290 | 313 | 357 | 368 | 368 | 366 | 360 | 366 | 349 | 328 | 331 | 318 | 258 | 286 | 307 | 7366 | |
| 2 | Q | 275 | 304 | 292 | 304 | 245 | 221 | 238 | 266 | 277 | 290 | 317 | 347 | 383 | 403 | 395 | 386 | 374 | 356 | 331 | 341 | 347 | 338 | 323 | 338 | 320 | 7691 | |
| 3 | Q | 311 | 304 | 288 | 289 | 240 | 218 | 213 | 219 | 235 | 269 | 311 | 343 | 381 | 395 | 393 | 384 | 359 | 338 | 334 | 323 | 324 | 336 | 343 | 335 | 312 | 7485 | |
| 4 | Q | 338 | 323 | 295 | 268 | 242 | 232 | 231 | 242 | 250 | 259 | 286 | 322 | 362 | 381 | 380 | 365 | 345 | 328 | 328 | 324 | 324 | 329 | 330 | 333 | 331 | 309 | 7424 |
| 5 | Q | 324 | 329 | 315 | 299 | 273 | 250 | 238 | 249 | 273 | 299 | 340 | 368 | 410 | 431 | 422 | 415 | 400 | 380 | 360 | 365 | 369 | 363 | 354 | 340 | 340 | 8166 | |
| 6 | | 321 | 313 | 304 | 284 | 260 | 238 | 231 | 231 | 228 | 268 | 315 | 340 | 363 | 413 | 422 | 406 | 395 | 387 | 324 | 368 | 377 | 368 | 371 | 322 | 327 | 7849 | |
| 7 | | 317 | 308 | 275 | 368 | 304 | 290 | 298 | 304 | 319 | 304 | 328 | 359 | 374 | 399 | 380 | 473 | 371 | 358 | 335 | 368 | 359 | 349 | 347 | 343 | 339 | 8130 | |
| 8 | | 329 | 320 | 296 | 294 | 301 | 326 | 295 | 265 | 283 | 295 | 306 | 346 | 372 | 391 | 404 | 409 | 395 | 331 | 359 | 349 | 347 | 311 | 313 | 349 | 333 | 7986 | |
| 9 | | 277 | 295 | 324 | 309 | 306 | 286 | 260 | 258 | 283 | 279 | 294 | 352 | 390 | 401 | 410 | 394 | 375 | 359 | 340 | 321 | 299 | 332 | 348 | 359 | 327 | 7851 | |
| 10 | Q | 360 | 339 | 310 | 302 | 330 | 300 | 251 | 256 | 256 | 278 | 302 | 342 | 370 | 380 | 372 | 380 | 382 | 378 | 351 | 358 | 359 | 351 | 339 | 329 | 332 | 7975 | |
| 11 | | 305 | 291 | 284 | 257 | 245 | 230 | 236 | 238 | 250 | 265 | 304 | 388 | 418 | 420 | 419 | 422 | 451 | 406 | 372 | 396 | 368 | 313 | 368 | 377 | 334 | 8023 | |
| 12 | D | 349 | 340 | 324 | 269 | 240 | 231 | 220 | 220 | 240 | 257 | 286 | 277 | 340 | 389 | 375 | 451 | 441 | 468 | 468 | 439 | 386 | 331 | 302 | 286 | 330 | 7929 | |
| 13 | D | 231 | 186 | 105 | 324 | 208 | 261 | 342 | 272 | 262 | 283 | 277 | 301 | 336 | 383 | 374 | 357 | 309 | 613 | 744 | 807 | 707 | 567 | 561 | 363 | 382 | 9169 | |
| 14 | D | 748 | 9 | 399 | 373 | 104 | 58 | 147 | 184 | 120 | 220 | 235 | 275 | 306 | 346 | 337 | 393 | 393 | 510 | 524 | 451 | 391 | 302 | 209 | 178 | 174 | 4172 | |
| 15 | | 83 | 243 | 234 | 260 | 299 | 256 | 228 | 220 | 281 | 261 | 214 | 252 | 322 | 359 | 362 | 349 | 360 | 359 | 333 | 336 | 324 | 369 | 306 | 259 | 286 | 6869 | |
| 16 | D | 271 | 289 | 303 | 269 | 282 | 277 | 242 | 232 | 234 | 164 | 306 | 362 | 386 | 367 | 360 | 335 | 360 | 355 | 360 | 366 | 379 | 401 | 380 | 360 | 318 | 7640 | |
| 17 | | 157 | 169 | 192 | 210 | 231 | 218 | 217 | 221 | 224 | 248 | 277 | 321 | 367 | 356 | 339 | 335 | 338 | 331 | 319 | 318 | 327 | 310 | 287 | 283 | 275 | 6595 | |
| 18 | | 303 | 349 | 227 | 284 | 292 | 262 | 228 | 248 | 214 | 284 | 324 | 334 | 346 | 369 | 395 | 370 | 333 | 319 | 318 | 336 | 340 | 346 | 346 | 331 | 312 | 7498 | |
| 19 | | 349 | 307 | 270 | 284 | 270 | 220 | 206 | 209 | 219 | 269 | 301 | 334 | 349 | 394 | 432 | 394 | 356 | 342 | 338 | 332 | 317 | 315 | 307 | 245 | 306 | 7359 | |
| 20 | | 237 | 260 | 119 | 225 | 197 | 171 | 145 | 197 | 231 | 278 | 325 | 360 | 398 | 385 | 377 | 359 | 341 | 326 | 320 | 329 | 330 | 319 | 316 | 306 | 285 | 6851 | |
| 21 | | 294 | 269 | 262 | 256 | 225 | 227 | 204 | 215 | 223 | 251 | 285 | 322 | 350 | 363 | 397 | 391 | 375 | 359 | 343 | 351 | 315 | 309 | 351 | 324 | 302 | 7261 | |
| 22 | | 313 | 332 | 278 | 258 | 245 | 231 | 231 | 232 | 274 | 309 | 309 | 337 | 385 | 414 | 395 | 394 | 377 | 360 | 331 | 328 | 336 | 329 | 304 | 297 | 316 | 7599 | |
| 23 | | 317 | 289 | 326 | 263 | 244 | 218 | 226 | 235 | 251 | 275 | 297 | 342 | 386 | 425 | 400 | 392 | 396 | 380 | 358 | 343 | 318 | 319 | 319 | 307 | 318 | 7626 | |
| 24 | D | 253 | 268 | 311 | 302 | 277 | 290 | 294 | 274 | 238 | 304 | 348 | 347 | 372 | 415 | 420 | 456 | 430 | 459 | 340 | 365 | 340 | 334 | 309 | 293 | 335 | 8039 | |
| 25 | | 312 | 249 | 242 | 258 | 289 | 223 | 203 | 238 | 234 | 274 | 348 | 314 | 332 | 370 | 374 | 384 | 393 | 376 | 376 | 301 | 322 | 338 | 279 | 256 | 300 | 7215 | |
| 26 | | 209 | 229 | 277 | 297 | 212 | 218 | 213 | 233 | 226 | 240 | 279 | 289 | 325 | 382 | 397 | 421 | 371 | 370 | 374 | 349 | 365 | 346 | 302 | 295 | 301 | 7219 | |
| 27 | | 295 | 255 | 231 | 244 | 258 | 346 | 332 | 280 | 258 | 258 | 293 | 328 | 359 | 371 | 385 | 380 | 359 | 356 | 332 | 331 | 325 | 309 | 243 | 177 | 304 | 7305 | |
| 28 | | 252 | 310 | 299 | 274 | 235 | 188 | 188 | 198 | 204 | 234 | 268 | 304 | 319 | 359 | 361 | 351 | 364 | 346 | 329 | 319 | 329 | 304 | 279 | 298 | 288 | 6912 | |
| 29 | | 313 | 277 | 252 | 260 | 258 | 247 | 299 | 313 | 273 | 260 | 283 | 329 | 329 | 377 | 386 | 338 | 352 | 359 | 334 | 331 | 313 | 290 | 295 | 301 | 307 | 7369 | |
| 30 | | 300 | 295 | 284 | 278 | 267 | 250 | 263 | 284 | 270 | 306 | 327 | 329 | 350 | 369 | 375 | 379 | 389 | 414 | 352 | 351 | 328 | 325 | 254 | 223 | 315 | 7562 | |
| 31 | | 283 | 315 | 312 | 300 | 286 | 243 | 200 | 307 | 329 | 294 | 339 | 342 | 351 | 368 | 360 | 334 | 338 | 331 | 330 | 341 | 337 | 340 | 334 | 332 | 318 | 7646 | |
| MEAN | | 253 | 279 | 249 | 258 | 255 | 242 | 238 | 245 | 249 | 269 | 298 | 330 | 361 | 385 | 386 | 383 | 374 | 378 | 365 | 363 | 353 | 339 | 322 | 304 | 312 | 7478 | |
| MEAN Q | | 322 | 320 | 300 | 292 | 266 | 244 | 234 | 246 | 258 | 279 | 311 | 344 | 381 | 398 | 392 | 386 | 372 | 356 | 341 | 342 | 346 | 344 | 338 | 335 | 323 | 7747 | |
| MEAN D | | 71 | 218 | 129 | 158 | 222 | 223 | 249 | 236 | 219 | 246 | 290 | 312 | 348 | 380 | 373 | 398 | 387 | 481 | 487 | 485 | 441 | 387 | 352 | 296 | 308 | 7388 | |

LERWICK

DECLINATION WEST

1982

AUGUST

7 DEGS PLUS TABULAR QUANTITIES (UNIT 0.1 MINS)

| U.T | 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 | MEAN | SUM |
|-----|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
| 1 | | 303 | 314 | 309 | 284 | 264 | 257 | 258 | 266 | 273 | 274 | 296 | 334 | 369 | 376 | 366 | 354 | 344 | 340 | 329 | 337 | 330 | 279 | 286 | 293 | 310 | 7435 |
| 2 | D | 357 | 329 | 276 | 260 | 275 | 283 | 225 | 228 | 230 | 277 | 257 | 381 | 397 | 421 | 419 | 398 | 403 | 337 | 367 | 321 | 356 | 337 | 320 | 322 | 324 | 7776 |
| 3 | | 339 | 359 | 319 | 257 | 202 | 189 | 232 | 268 | 267 | 294 | 347 | 382 | 401 | 395 | 394 | 367 | 339 | 338 | 257 | 305 | 335 | 342 | 292 | 317 | 314 | 7537 |
| 4 | | 304 | 295 | 302 | 294 | 255 | 237 | 243 | 247 | 266 | 300 | 330 | 372 | 385 | 409 | 418 | 359 | 346 | 354 | 294 | 323 | 352 | 339 | 282 | 306 | 317 | 7612 |
| 5 | | 344 | 287 | 282 | 309 | 295 | 246 | 232 | 228 | 293 | 348 | 369 | 364 | 394 | 404 | 400 | 380 | 344 | 300 | 361 | 318 | 335 | 346 | 330 | 318 | 323 | 7766 |
| 6 | | 319 | 324 | 346 | 289 | 247 | 223 | 239 | 257 | 278 | 300 | 325 | 381 | 396 | 407 | 396 | 372 | 370 | 371 | 352 | 301 | 356 | 368 | 307 | 321 | 327 | 7845 |
| 7 | D | 216 | 97 | 246 | 313 | 272 | 156 | 268 | 127 | 227 | 208 | 270 | 333 | 287 | 349 | 395 | 403 | 314 | 303 | 312 | 331 | 341 | 339 | 327 | 322 | 281 | 6756 |
| 8 | Q | 307 | 273 | 274 | 263 | 240 | 237 | 249 | 259 | 268 | 295 | 321 | 356 | 380 | 368 | 373 | 348 | 335 | 332 | 347 | 340 | 331 | 326 | 311 | 301 | 310 | 7434 |
| 9 | | 291 | 283 | 276 | 274 | 248 | 257 | 286 | 339 | 321 | 332 | 330 | 330 | 367 | 401 | 395 | 383 | 339 | 376 | 374 | 348 | 347 | 338 | 248 | 212 | 320 | 7695 |
| 10 | D | 278 | 295 | 277 | 228 | 235 | 208 | 231 | 191 | 226 | 271 | 297 | 320 | 354 | 359 | 375 | 373 | 302 | 303 | 320 | 281 | 303 | 335 | 298 | 245 | 287 | 6905 |
| 11 | | 231 | 276 | 276 | 307 | 267 | 262 | 251 | 236 | 238 | 257 | 288 | 318 | 358 | 402 | 384 | 380 | 403 | 489 | 325 | 297 | 327 | 318 | 309 | 316 | 313 | 7515 |
| 12 | | 318 | 295 | 312 | 266 | 267 | 272 | 309 | 299 | 289 | 249 | 261 | 307 | 338 | 368 | 293 | 300 | 317 | 330 | 328 | 295 | 246 | 314 | 286 | 330 | 299 | 7189 |
| 13 | | 294 | 293 | 302 | 329 | 265 | 261 | 256 | 245 | 238 | 278 | 293 | 320 | 337 | 354 | 338 | 337 | 321 | 294 | 303 | 316 | 308 | 296 | 320 | 345 | 302 | 7243 |
| 14 | Q | 275 | 293 | 292 | 292 | 281 | 257 | 240 | 229 | 247 | 277 | 287 | 313 | 342 | 347 | 343 | 325 | 315 | 303 | 299 | 297 | 312 | 323 | 319 | 298 | 296 | 7106 |
| 15 | Q | 311 | 307 | 302 | 277 | 266 | 241 | 222 | 220 | 235 | 258 | 295 | 336 | 359 | 366 | 341 | 313 | 309 | 302 | 302 | 302 | 311 | 326 | 311 | 315 | 297 | 7127 |
| 16 | Q | 313 | 309 | 298 | 287 | 266 | 236 | 216 | 216 | 226 | 257 | 307 | 361 | 390 | 398 | 370 | 356 | 329 | 304 | 321 | 331 | 348 | 346 | 312 | 288 | 307 | 7385 |
| 17 | | 271 | 253 | 272 | 262 | 247 | 236 | 184 | 190 | 244 | 287 | 317 | 364 | 393 | 408 | 375 | 347 | 327 | 325 | 335 | 343 | 317 | 346 | | | | |

LERWICK

DECLINATION WEST

1982 SEPTEMBER

7 DEGS PLUS TABULAR QUANTITIES (UNIT 0.1 MINS)

| U T. | 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 | MEAN | SUM |
|--------|---|-----|-----|-----|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
| 1 | Q | 254 | 269 | 280 | 285 | 283 | 265 | 248 | 247 | 239 | 266 | 319 | 362 | 402 | 415 | 385 | 332 | 338 | 321 | 309 | 316 | 325 | 316 | 312 | 307 | 308 | 7395 |
| 2 | | 302 | 321 | 294 | 250 | 224 | 236 | 240 | 255 | 280 | 284 | 332 | 365 | 406 | 395 | 369 | 313 | 314 | 303 | 300 | 308 | 304 | 274 | 248 | 258 | 299 | 7175 |
| 3 | | 256 | 278 | 291 | 317 | 251 | 246 | 237 | 247 | 275 | 271 | 335 | 373 | 426 | 425 | 400 | 430 | 302 | 278 | 275 | 298 | 290 | 272 | 266 | 252 | 304 | 7291 |
| 4 | | 297 | 316 | 294 | 249 | 224 | 266 | 332 | 309 | 272 | 302 | 306 | 398 | 425 | 418 | 381 | 339 | 342 | 302 | 300 | 300 | 286 | 307 | 272 | 284 | 313 | 7521 |
| 5 | | 257 | 218 | 230 | 300 | 290 | 319 | 301 | 326 | 330 | 329 | 347 | 357 | 394 | 358 | 348 | 358 | 337 | 320 | 322 | 319 | 302 | 303 | 232 | 75 | 303 | 7272 |
| 6 | D | -13 | -98 | 109 | -62 | -217 | 102 | 100 | 162 | 31 | 62 | 7 | -42 | 96 | 329 | 553 | 628 | 528 | 479 | 395 | 391 | 216 | 238 | 124 | -57 | 169 | 4061 |
| 7 | D | 128 | 345 | 41 | 4 | 54 | 153 | 197 | 209 | 221 | 190 | 280 | 291 | 367 | 391 | 377 | 381 | 389 | 302 | 283 | 263 | 299 | 302 | 313 | 277 | 252 | 6057 |
| 8 | | 284 | 289 | 289 | 272 | 268 | 258 | 243 | 238 | 238 | 254 | 286 | 321 | 356 | 376 | 374 | 357 | 338 | 331 | 328 | 304 | 306 | 321 | 312 | 299 | 302 | 7242 |
| 9 | | 308 | 267 | 200 | 266 | 276 | 259 | 228 | 199 | 197 | 267 | 304 | 364 | 388 | 398 | 400 | 383 | 350 | 320 | 221 | 284 | 110 | 264 | 283 | 297 | 284 | 6833 |
| 10 | Q | 307 | 306 | 276 | 279 | 256 | 248 | 247 | 238 | 238 | 256 | 292 | 329 | 362 | 361 | 354 | 347 | 325 | 319 | 312 | 320 | 320 | 313 | 304 | 290 | 300 | 7199 |
| 11 | | 265 | 286 | 272 | 273 | 233 | 237 | 238 | 234 | 249 | 276 | 317 | 323 | 383 | 394 | 366 | 349 | 334 | 308 | 324 | 289 | 313 | 287 | 275 | 258 | 295 | 7083 |
| 12 | | 283 | 257 | 229 | 246 | 258 | 257 | 247 | 239 | 248 | 263 | 291 | 313 | 343 | 335 | 325 | 333 | 314 | 306 | 321 | 327 | 242 | 292 | 313 | 248 | 284 | 6830 |
| 13 | | 165 | 100 | 103 | 216 | 250 | 250 | 248 | 249 | 256 | 280 | 312 | 339 | 64 | 347 | 363 | 349 | 308 | 319 | 312 | 314 | 313 | 269 | 308 | 317 | 264 | 6351 |
| 14 | | 267 | 279 | 275 | 275 | 291 | 229 | 225 | 226 | 230 | 247 | 281 | 310 | 324 | 335 | 347 | 329 | 329 | 330 | 313 | 245 | 334 | 259 | 263 | 293 | 285 | 6836 |
| 15 | | 285 | 281 | 270 | 262 | 243 | 287 | 241 | 290 | 233 | 258 | 285 | 323 | 358 | 370 | 368 | 357 | 348 | 334 | 326 | 322 | 312 | 313 | 214 | 212 | 295 | 7092 |
| 16 | | 282 | 272 | 296 | 278 | 258 | 255 | 221 | 232 | 254 | 274 | 305 | 328 | 385 | 396 | 361 | 359 | 348 | 330 | 333 | 320 | 313 | 321 | 285 | 240 | 302 | 7246 |
| 17 | Q | 268 | 288 | 272 | 265 | 271 | 266 | 254 | 238 | 230 | 250 | 327 | 323 | 345 | 348 | 351 | 328 | 328 | 320 | 322 | 318 | 304 | 296 | 293 | 290 | 295 | 7095 |
| 18 | | 271 | 237 | 122 | 63 | 191 | 244 | 237 | 211 | 231 | 259 | 297 | 362 | 364 | 432 | 430 | 395 | 362 | 339 | 355 | 393 | 342 | 188 | 232 | 269 | 284 | 6826 |
| 19 | | 237 | 240 | 239 | 239 | 234 | 214 | 207 | 231 | 232 | 267 | 303 | 342 | 376 | 447 | 417 | 443 | 355 | 365 | 293 | 309 | 291 | 331 | 221 | 264 | 296 | 7101 |
| 20 | | 251 | 262 | 278 | 269 | 256 | 261 | 260 | 249 | 285 | 287 | 306 | 348 | 362 | 379 | 365 | 350 | 346 | 308 | 322 | 318 | 310 | 235 | 152 | 218 | 290 | 6977 |
| 21 | D | 149 | 167 | 291 | 303 | 354 | 278 | 211 | 195 | 227 | 330 | 321 | 333 | 401 | 396 | 386 | 359 | 333 | 333 | 283 | 184 | 158 | 185 | 79 | -20 | 260 | 6236 |
| 22 | D | 88 | 374 | -77 | -278 | 607 | 287 | 692 | 243 | 159 | 154 | 208 | 490 | 494 | 521 | 521 | 323 | 301 | 219 | 146 | 185 | 196 | 230 | 321 | 347 | 281 | 6751 |
| 23 | | 294 | 282 | 289 | 243 | 341 | 321 | 230 | 214 | 236 | 264 | 311 | 339 | 369 | 393 | 397 | 352 | 341 | 333 | 312 | 261 | 215 | 257 | 219 | 207 | 292 | 7016 |
| 24 | | 144 | 211 | 251 | 255 | 262 | 239 | 253 | 268 | 247 | 270 | 318 | 335 | 348 | 378 | 403 | 332 | 353 | 323 | 309 | 304 | 312 | 289 | 273 | 233 | 288 | 6910 |
| 25 | | 269 | 282 | 286 | 275 | 270 | 267 | 258 | 236 | 241 | 248 | 274 | 314 | 349 | 369 | 373 | 364 | 360 | 370 | 395 | 283 | 342 | 316 | 295 | 277 | 304 | 7313 |
| 26 | D | 276 | 290 | 301 | 340 | 316 | 279 | 284 | 342 | 332 | 331 | 340 | 339 | 360 | 198 | 307 | 415 | 648 | 474 | 592 | 322 | 157 | 167 | 129 | 102 | 318 | 7641 |
| 27 | | 34 | 89 | 117 | 188 | 218 | 207 | 240 | 223 | 252 | 249 | 259 | 286 | 294 | 323 | 318 | 339 | 345 | 180 | 329 | 292 | 290 | 295 | 395 | 417 | 257 | 6179 |
| 28 | | 287 | 219 | 203 | 238 | 261 | 260 | 256 | 237 | 233 | 238 | 258 | 288 | 306 | 331 | 339 | 342 | 331 | 313 | 319 | 319 | 314 | 307 | 278 | 269 | 281 | 6746 |
| 29 | Q | 264 | 268 | 268 | 268 | 268 | 270 | 256 | 251 | 268 | 280 | 313 | 334 | 359 | 353 | 349 | 328 | 302 | 278 | 238 | 223 | 272 | 264 | 275 | 278 | 284 | 6827 |
| 30 | Q | 289 | 286 | 285 | 282 | 281 | 277 | 262 | 248 | 267 | 293 | 327 | 355 | 381 | 390 | 370 | 353 | 329 | 324 | 317 | 272 | 271 | 220 | 176 | 232 | 295 | 7087 |
| MEAN | | 235 | 249 | 229 | 222 | 252 | 251 | 256 | 243 | 241 | 260 | 292 | 328 | 353 | 377 | 380 | 366 | 353 | 323 | 317 | 297 | 279 | 274 | 255 | 241 | 286 | 6873 |
| MEAN Q | | 276 | 283 | 276 | 276 | 272 | 265 | 253 | 244 | 248 | 269 | 316 | 341 | 370 | 373 | 362 | 338 | 324 | 312 | 300 | 290 | 298 | 282 | 272 | 279 | 297 | 7119 |
| MEAN D | | 126 | 216 | 133 | 61 | 223 | 220 | 297 | 230 | 194 | 213 | 231 | 282 | 344 | 367 | 429 | 421 | 440 | 361 | 340 | 269 | 205 | 224 | 193 | 130 | 256 | 6149 |

LERWICK

DECLINATION WEST

1982 OCTOBER

7 DEGS PLUS TABULAR QUANTITIES (UNIT 0.1 MINS)

| U T. | 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 | MEAN | SUM |
|------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
| 1 | | 231 | 207 | 206 | 221 | 258 | 263 | 255 | 264 | 287 | 288 | 323 | 362 | 388 | 410 | 432 | 385 | 376 | 392 | 359 | 263 | 279 | 270 | 272 | 130 | 296 | 7121 |
| 2 | | 164 | 157 | 262 | 265 | 276 | 325 | 309 | 257 | 280 | 278 | 336 | 387 | 400 | 370 | 371 | 351 | 314 | 258 | 242 | 276 | 248 | 235 | 261 | 296 | 288 | 6918 |
| 3 | | 291 | 306 | 289 | 289 | 297 | 301 | 309 | 279 | 252 | 269 | 296 | 343 | 366 | 377 | 379 | 357 | 312 | 300 | 298 | 299 | 288 | 252 | 250 | 294 | 304 | 7293 |
| 4 | | 304 | 308 | 311 | 296 | 296 | 293 | 329 | 300 | 263 | 255 | 296 | 351 | 394 | 382 | 375 | 345 | 318 | 307 | 299 | 278 | 278 | 302 | 304 | 307 | 312 | 7491 |
| 5 | | 296 | 302 | 332 | 280 | 305 | 287 | 280 | 279 | 243 | 242 | 268 | 296 | 337 | 370 | 376 | 350 | 330 | 305 | 323 | 325 | 320 | 320 | 278 | 252 | 304 | 7296 |
| 6 | | 287 | 236 | 254 | 251 | 268 | 282 | 295 | 314 | 259 | 258 | 289 | 322 | 369 | 420 | 406 | 414 | 359 | 327 | 321 | 275 | 246 | 254 | 196 | 257 | 298 | 7159 |
| 7 | D | 232 | 177 | 88 | 130 | 220 | 305 | 250 | 305 | 375 | 278 | 255 | 283 | 339 | 348 | 359 | 361 | 342 | 327 | 353 | 332 | 316 | 275 | 290 | 293 | 284 | 6822 |
| 8 | | 248 | 248 | 265 | 269 | 346 | 294 | 280 | 270 | 267 | 285 | 279 | 301 | 321 | 357 | 386 | 367 | 389 | 377 | 371 | 307 | 291 | 179 | 233 | 254 | 299 | 7184 |
| 9 | Q | 242 | 234 | 267 | 279 | 277 | 270 | 269 | 268 | 267 | 279 | 305 | 328 | 343 | 352 | 359 | 362 | 349 | 334 | 330 | 319 | 316 | 313 | 297 | 260 | 301 | 7219 |
| 10 | | 178 | 288 | 279 | 274 | 282 | 279 | 279 | 269 | 251 | 250 | 279 | 320 | 343 | 369 | 393 | 380 | 373 | 356 | 350 | 340 | 339 | 218 | 259 | 288 | 301 | 7236 |
| 11 | | 250 | 278 | 286 | 278 | 284 | 280 | 291 | 278 | 259 | 268 | 295 | 322 | 348 | 362 | 383 | 370 | 370 | 357 | 347 | 347 | 179 | 240 | 261 | 279 | 300 | 7212 |
| 12 | | 296 | 294 | 279 | 287 | 287 | 268 | 278 | 259 | 258 | 266 | 296 | 304 | 325 | 341 | 361 | 359 | 339 | 321 | 331 | 182 | 134 | 150 | 232 | 279 | 280 | 6726 |
| 13 | D | 305 | 295 | 330 | 214 | 215 | 232 | 250 | 259 | 271 | 282 | 305 | 350 | 392 | 424 | 421 | 375 | 382 | 239 | 307 | 282 | 247 | 255 | 133 | 133 | 287 | 6898 |
| 14 | D | 105 | 15 | 167 | 261 | 269 | 350 | 359 | 324 | 323 | 274 | 325 | 357 | 371 | 359 | 360 | 349 | 381 | 365 | 402 | 304 | 296 | 262 | 248 | 270 | 295 | 7096 |
| 15 | Q | 278 | 258 | 259 | 264 | 271 | 275 | 265 | 258 | 253 | 263 | 297 | 337 | 371 | 350 | 332 | 315 | 313 | 314 | 349 | 349 | 328 | 314 | 304 | 287 | 300 | 7204 |
| 16 | | 272 | 268 | 268 | 277 | 287 | 287 | 273 | 273 | 262 | 275 | 309 | 327 | 359 | 364 | 404 | 410 | 380 | 376 | 360 | 327 | 309 | 244 | 202 | 277 | 308 | 7390 |
| 17 | | 270 | 259 | 196 | 261 | 297 | 303 | 278 | 275 | 250 | 262 | 314 | 346 | 356 | 396 | 394 | 356 | 333 | 331 | 312 | 238 | 250 | 182 | 205 | 196 | 286 | 6860 |
| 18 | | 193 | 155 | 271 | 278 | 260 | 269 | 254 | 258 | 246 | 243 | 296 | 329 | 374 | 403 | 350 | 355 | 307 | 296 | 338 | 295 | 205 | 235 | 263 | 268 | 281 | 6741 |
| 19 | | 276 | 284 | 331 | | | | | | | | | | | | | | | | | | | | | | | |

LERWICK

DECLINATION WEST

1982 NOVEMBER

7 DEGS PLUS TABULAR QUANTITIES (UNIT 0.1 MINS)

| U T | 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 | MEAN | SUM |
|--------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
| 1 | D | 153 | 78 | 186 | 241 | 270 | 263 | 261 | 269 | 269 | 262 | 324 | 335 | 323 | 332 | 330 | 217 | 284 | 350 | 291 | 219 | 229 | 204 | 218 | 227 | 255 | 6135 |
| 2 | D | 267 | 279 | 261 | 299 | 274 | 276 | 273 | 278 | 265 | 272 | 296 | 306 | 326 | 328 | 357 | 303 | 278 | 428 | 348 | 330 | 206 | 173 | 133 | 152 | 279 | 6708 |
| 3 | | 196 | 238 | 268 | 158 | 231 | 313 | 289 | 293 | 312 | 313 | 317 | 331 | 350 | 322 | 323 | 294 | 286 | 284 | 280 | 279 | 277 | 278 | 276 | 275 | 282 | 6783 |
| 4 | Q | 273 | 277 | 273 | 278 | 280 | 284 | 286 | 287 | 278 | 261 | 273 | 303 | 323 | 352 | 321 | 331 | 305 | 305 | 239 | 241 | 250 | 239 | 237 | 285 | 6846 | |
| 5 | | 271 | 253 | 269 | 277 | 280 | 279 | 278 | 276 | 269 | 268 | 314 | 317 | 340 | 340 | 351 | 337 | 319 | 341 | 214 | 285 | 298 | 293 | 287 | 278 | 293 | 7034 |
| 6 | | 278 | 269 | 279 | 267 | 264 | 282 | 324 | 298 | 277 | 295 | 295 | 324 | 359 | 357 | 350 | 337 | 320 | 311 | 305 | 294 | 295 | 293 | 286 | 285 | 302 | 7244 |
| 7 | Q | 270 | 267 | 261 | 274 | 270 | 270 | 263 | 267 | 261 | 267 | 288 | 311 | 334 | 332 | 324 | 324 | 319 | 312 | 310 | 305 | 294 | 296 | 283 | 270 | 290 | 6972 |
| 8 | | 269 | 271 | 278 | 275 | 276 | 276 | 271 | 274 | 260 | 264 | 290 | 317 | 336 | 353 | 370 | 367 | 405 | 434 | 370 | 305 | 301 | 290 | 281 | 273 | 308 | 7406 |
| 9 | Q | 275 | 284 | 287 | 286 | 314 | 303 | 280 | 271 | 260 | 260 | 268 | 297 | 314 | 330 | 319 | 317 | 310 | 310 | 310 | 304 | 296 | 286 | 286 | 283 | 294 | 7050 |
| 10 | | 249 | 270 | 270 | 285 | 278 | 270 | 275 | 272 | 262 | 275 | 279 | 323 | 336 | 336 | 343 | 348 | 326 | 341 | 346 | 307 | 295 | 268 | 239 | 216 | 292 | 7009 |
| 11 | | 213 | 214 | 202 | 207 | 241 | 260 | 270 | 269 | 270 | 277 | 294 | 287 | 340 | 332 | 361 | 402 | 351 | 332 | 324 | 314 | 297 | 278 | 200 | 178 | 279 | 6713 |
| 12 | | 231 | 251 | 232 | 258 | 270 | 264 | 288 | 282 | 273 | 285 | 287 | 324 | 351 | 324 | 324 | 324 | 316 | 290 | 282 | 269 | 255 | 239 | 278 | 284 | 284 | 6821 |
| 13 | | 278 | 227 | 171 | 183 | 255 | 260 | 260 | 262 | 258 | 269 | 269 | 285 | 314 | 332 | 321 | 324 | 326 | 315 | 323 | 217 | 184 | 286 | 271 | 272 | 269 | 6462 |
| 14 | | 270 | 270 | 270 | 279 | 266 | 264 | 270 | 266 | 260 | 295 | 304 | 297 | 326 | 342 | 363 | 361 | 351 | 312 | 298 | 273 | 270 | 279 | 248 | 253 | 291 | 6987 |
| 15 | | 260 | 261 | 260 | 280 | 265 | 270 | 266 | 263 | 260 | 261 | 267 | 280 | 328 | 332 | 330 | 325 | 344 | 332 | 318 | 294 | 194 | 197 | 241 | 252 | 278 | 6680 |
| 16 | | 260 | 259 | 260 | 277 | 261 | 270 | 266 | 266 | 260 | 260 | 269 | 277 | 323 | 325 | 329 | 328 | 351 | 329 | 316 | 296 | 189 | 203 | 242 | 257 | 278 | 6673 |
| 17 | Q | 268 | 278 | 286 | 287 | 286 | 284 | 278 | 272 | 265 | 263 | 276 | 299 | 317 | 323 | 323 | 320 | 318 | 325 | 323 | 330 | 314 | 280 | 244 | 251 | 292 | 7010 |
| 18 | | 248 | 233 | 248 | 275 | 260 | 286 | 278 | 273 | 279 | 277 | 284 | 307 | 328 | 339 | 324 | 382 | 410 | 333 | 287 | 289 | 279 | 251 | 214 | 288 | 290 | 6972 |
| 19 | | 242 | 206 | 259 | 270 | 278 | 266 | 273 | 270 | 268 | 275 | 288 | 302 | 324 | 332 | 337 | 339 | 337 | 325 | 323 | 313 | 302 | 182 | 250 | 270 | 284 | 6831 |
| 20 | Q | 278 | 279 | 280 | 282 | 282 | 279 | 273 | 269 | 267 | 262 | 276 | 287 | 305 | 321 | 316 | 320 | 305 | 299 | 294 | 293 | 274 | 278 | 273 | 260 | 285 | 6852 |
| 21 | | 214 | 229 | 250 | 269 | 302 | 329 | 296 | 302 | 271 | 265 | 285 | 310 | 351 | 363 | 371 | 384 | 361 | 367 | 431 | 318 | 210 | 122 | 91 | 11 | 279 | 6702 |
| 22 | | -28 | -99 | 70 | 70 | 87 | 172 | 214 | 225 | 239 | 241 | 250 | 265 | 289 | 305 | 310 | 305 | 289 | 305 | 298 | 289 | 278 | 270 | 267 | 263 | 215 | 5174 |
| 23 | | 271 | 272 | 279 | 278 | 278 | 278 | 271 | 262 | 255 | 248 | 270 | 301 | 333 | 355 | 361 | 390 | 487 | 257 | 384 | 170 | 105 | 223 | 201 | 165 | 279 | 6694 |
| 24 | D | 213 | 238 | 250 | 263 | 261 | 251 | 248 | 241 | 229 | 241 | 266 | 260 | 249 | 266 | 254 | 388 | 179 | 492 | 409 | 257 | 252 | 133 | 21 | -50 | 242 | 5811 |
| 25 | D | 93 | 268 | 270 | 262 | 224 | 239 | 252 | 280 | 229 | 239 | 237 | 290 | 283 | 302 | 203 | 269 | 277 | 200 | 239 | 267 | 260 | 229 | 145 | 230 | 241 | 5787 |
| 26 | | 258 | 269 | 258 | 265 | 241 | 270 | 260 | 267 | 270 | 294 | 260 | 277 | 306 | 312 | 324 | 214 | 267 | 296 | 276 | 269 | 260 | 98 | 182 | 255 | 260 | 6248 |
| 27 | | 277 | 279 | 285 | 282 | 268 | 260 | 269 | 277 | 281 | 287 | 281 | 313 | 299 | 285 | 331 | 260 | 299 | 288 | 141 | 216 | 248 | 250 | 263 | 262 | 271 | 6501 |
| 28 | | 263 | 394 | 173 | 207 | 233 | 249 | 278 | 260 | 272 | 269 | 287 | 287 | 301 | 313 | 333 | 323 | 309 | 323 | 216 | 278 | 278 | 269 | 205 | 243 | 274 | 6572 |
| 29 | D | 210 | 177 | 249 | 279 | 275 | 270 | 279 | 279 | 274 | 270 | 285 | 288 | 305 | 333 | 315 | 326 | 357 | 260 | 240 | 256 | 223 | 260 | 226 | 230 | 269 | 6466 |
| 30 | | 260 | 260 | 252 | 280 | 287 | 273 | 269 | 247 | 241 | 241 | 260 | 279 | 307 | 303 | 295 | 296 | 301 | 300 | 287 | 280 | 275 | 271 | 270 | 267 | 275 | 6601 |
| MEAN | | 236 | 242 | 248 | 256 | 262 | 270 | 272 | 271 | 264 | 269 | 281 | 299 | 321 | 327 | 328 | 325 | 324 | 324 | 303 | 279 | 256 | 241 | 227 | 231 | 277 | 6656 |
| MEAN Q | | 273 | 277 | 277 | 281 | 286 | 284 | 276 | 273 | 266 | 263 | 276 | 299 | 319 | 331 | 327 | 320 | 317 | 310 | 308 | 294 | 284 | 278 | 265 | 260 | 289 | 6944 |
| MEAN D | | 187 | 208 | 243 | 269 | 261 | 260 | 263 | 269 | 253 | 257 | 282 | 296 | 297 | 312 | 292 | 301 | 275 | 346 | 305 | 266 | 234 | 200 | 149 | 158 | 258 | 6183 |

LERWICK

DECLINATION WEST

1982 DECEMBER

7 DEGS PLUS TABULAR QUANTITIES (UNIT 0.1 MINS)

| U T | 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 | MEAN | SUM |
|-----|---|-----|-----|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
| 1 | Q | 267 | 275 | 278 | 277 | 275 | 272 | 269 | 261 | 257 | 263 | 273 | 285 | 283 | 291 | 296 | 293 | 288 | 288 | 279 | 276 | 276 | 277 | 278 | 277 | 277 | 6654 |
| 2 | Q | 279 | 281 | 278 | 279 | 285 | 274 | 269 | 261 | 256 | 250 | 261 | 288 | 320 | 328 | 326 | 306 | 298 | 294 | 289 | 288 | 290 | 281 | 250 | 267 | 283 | 6798 |
| 3 | | 277 | 281 | 282 | 270 | 279 | 275 | 276 | 279 | 269 | 271 | 286 | 292 | 324 | 343 | 352 | 391 | 352 | 310 | 291 | 286 | 270 | 265 | 253 | 206 | 291 | 6980 |
| 4 | | 238 | 250 | 215 | 188 | 269 | 268 | 270 | 270 | 271 | 271 | 281 | 297 | 309 | 314 | 315 | 314 | 318 | 312 | 306 | 304 | 296 | 281 | 139 | 79 | 265 | 6375 |
| 5 | | 40 | 33 | 70 | 190 | 231 | 225 | 254 | 259 | 246 | 243 | 259 | 271 | 286 | 301 | 307 | 315 | 309 | 312 | 302 | 288 | 281 | 273 | 261 | 262 | 242 | 5818 |
| 6 | Q | 241 | 240 | 250 | 268 | 265 | 270 | 270 | 267 | 265 | 264 | 274 | 279 | 297 | 306 | 313 | 306 | 306 | 308 | 299 | 298 | 288 | 279 | 279 | 281 | 279 | 6713 |
| 7 | | 272 | 271 | 272 | 278 | 258 | 257 | 261 | 277 | 272 | 276 | 297 | 322 | 341 | 371 | 387 | 413 | 432 | 394 | 400 | 325 | 262 | 234 | 138 | 167 | 299 | 7177 |
| 8 | | 218 | 193 | 233 | 240 | 250 | 276 | 270 | 261 | 247 | 225 | 242 | 294 | 314 | 346 | 321 | 362 | 402 | 408 | 445 | 297 | 270 | 242 | 250 | 244 | 285 | 6850 |
| 9 | | 237 | 250 | 248 | 246 | 244 | 261 | 250 | 243 | 242 | 233 | 247 | 281 | 320 | 318 | 255 | 320 | 313 | 307 | 296 | 271 | 244 | 236 | 252 | 243 | 265 | 6357 |
| 10 | D | 263 | 267 | 276 | 272 | 263 | 239 | 261 | 352 | 287 | 258 | 243 | 227 | 276 | 286 | 320 | 361 | 415 | 380 | 477 | 496 | 311 | 287 | 271 | 241 | 305 | 7329 |
| 11 | | 265 | 221 | 240 | 171 | 235 | 276 | 267 | 257 | 254 | 254 | 266 | 279 | 289 | 298 | 319 | 316 | 329 | 362 | 319 | 342 | 288 | 162 | 215 | 236 | 269 | 6460 |
| 12 | | 231 | 261 | 270 | 288 | 271 | 261 | 277 | 253 | 261 | 268 | 268 | 279 | 305 | 315 | 309 | 292 | 288 | 251 | 288 | 280 | 270 | 269 | 233 | 226 | 271 | 6514 |
| 13 | Q | 242 | 260 | 264 | 262 | 250 | 252 | 259 | 258 | 254 | 261 | 269 | 294 | 297 | 306 | 306 | 294 | 304 | 300 | 297 | 286 | 271 | 217 | 280 | 284 | 273 | 6567 |
| 14 | | 278 | 279 | 271 | 261 | 268 | 267 | 260 | 265 | 269 | 281 | 294 | 288 | 297 | 303 | 306 | 292 | 294 | 288 | 285 | 284 | 271 | 136 | 148 | 199 | 266 | 6384 |
| 15 | | 278 | 241 | 226 | 229 | 243 | 248 | 244 | 245 | 248 | 251 | 280 | 286 | 299 | 309 | 308 | 307 | 306 | 294 | 291 | 283 | 279 | 278 | 278 | 273 | 273 | 6558 |
| 16 | | 277 | 279 | 281 | 282 | 285 | 276 | 284 | 295 | 281 | 270 | 280 | 292 | 331 | 349 | 342 | 286 | 317 | 291 | 243 | 224 | 223 | 239 | 144 | 154 | 272 | 6525 |
| 17 | D | 42 | 77 | 40 | 88 | 158 | 257 | 340 | 250 | 327 | 433 | 335 | 311 | 242 | 297 | 361 | 283 | 268 | 287 | 283 | 359 | 288 | 315 | 251 | 231 | 255 | 6123 |
| 18 | D | 238 | 189 | 173 | 177 | 249 | 253 | 253 | 250 | 297 | 239 | 301 | 322 | 294 | 317 | 370 | 386 | 359 | 303 | 344 | 311 | 253 | 247 | 250 | 261 | 276 | 6636 |
| 19 | | 270 | 262 | 263</ | | | | | | | | | | | | | | | | | | | | | | | |

LERWICK

HORIZONTAL INTENSITY

1982 JANUARY

14500 GAMMAS PLUS TABULAR QUANTITIES (UNIT 1 GAMMA)

| U.T | 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 | MEAN | SUM |
|--------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-------|
| 1 | | 448 | 448 | 445 | 445 | 454 | 456 | 450 | 451 | 443 | 438 | 435 | 433 | 432 | 435 | 439 | 451 | 428 | 435 | 444 | 447 | 449 | 449 | 450 | 454 | 444 | 10659 |
| 2 | | 452 | 457 | 453 | 453 | 454 | 453 | 455 | 449 | 446 | 440 | 435 | 436 | 437 | 440 | 443 | 449 | 439 | 443 | 438 | 428 | 421 | 425 | 425 | 435 | 442 | 10606 |
| 3 | D | 439 | 432 | 442 | 440 | 454 | 454 | 447 | 444 | 439 | 425 | 423 | 426 | 429 | 432 | 434 | 437 | 428 | 443 | 447 | 443 | 430 | 416 | 423 | 420 | 435 | 10447 |
| 4 | | 430 | 436 | 434 | 442 | 445 | 450 | 449 | 448 | 443 | 432 | 426 | 425 | 431 | 431 | 433 | 436 | 427 | 433 | 436 | 433 | 445 | 444 | 454 | 450 | 438 | 10519 |
| 5 | | 443 | 446 | 447 | 448 | 450 | 449 | 448 | 452 | 453 | 442 | 435 | 431 | 429 | 434 | 442 | 447 | 451 | 455 | 456 | 457 | 457 | 456 | 456 | 456 | 447 | 10740 |
| 6 | | 456 | 456 | 463 | 460 | 459 | 473 | 473 | 456 | 449 | 452 | 447 | 440 | 435 | 439 | 445 | 451 | 458 | 460 | 461 | 463 | 455 | 447 | 451 | 454 | 454 | 10903 |
| 7 | | 450 | 446 | 450 | 453 | 453 | 455 | 462 | 462 | 457 | 450 | 451 | 447 | 445 | 443 | 447 | 450 | 439 | 450 | 455 | 449 | 440 | 443 | 451 | 440 | 449 | 10788 |
| 8 | | 447 | 465 | 452 | 448 | 450 | 452 | 450 | 456 | 449 | 443 | 440 | 443 | 443 | 442 | 443 | 445 | 456 | 458 | 455 | 459 | 454 | 453 | 456 | 450 | 450 | 10809 |
| 9 | Q | 454 | 452 | 448 | 452 | 452 | 451 | 452 | 453 | 452 | 447 | 441 | 439 | 445 | 450 | 452 | 452 | 456 | 455 | 453 | 456 | 459 | 460 | 457 | 454 | 452 | 10842 |
| 10 | | 447 | 453 | 456 | 457 | 457 | 458 | 459 | 460 | 460 | 457 | 450 | 446 | 444 | 447 | 451 | 456 | 459 | 464 | 467 | 465 | 462 | 454 | 453 | 456 | 456 | 10938 |
| 11 | | 453 | 455 | 446 | 453 | 460 | 461 | 464 | 464 | 461 | 460 | 462 | 460 | 454 | 453 | 455 | 457 | 457 | 461 | 463 | 463 | 464 | 463 | 460 | 460 | 458 | 11009 |
| 12 | Q | 458 | 456 | 459 | 457 | 456 | 457 | 458 | 459 | 458 | 452 | 452 | 451 | 452 | 455 | 456 | 458 | 460 | 462 | 462 | 463 | 464 | 464 | 462 | 461 | 458 | 10992 |
| 13 | Q | 460 | 462 | 461 | 462 | 464 | 464 | 467 | 468 | 466 | 465 | 462 | 459 | 460 | 463 | 467 | 465 | 465 | 467 | 470 | 470 | 470 | 469 | 464 | 465 | 465 | 11155 |
| 14 | Q | 464 | 463 | 464 | 466 | 466 | 466 | 466 | 467 | 467 | 467 | 463 | 458 | 459 | 456 | 460 | 463 | 467 | 467 | 472 | 473 | 472 | 471 | 466 | 459 | 460 | 11155 |
| 15 | | 460 | 458 | 452 | 457 | 463 | 467 | 470 | 471 | 466 | 460 | 456 | 451 | 450 | 453 | 445 | 439 | 444 | 449 | 447 | 440 | 449 | 445 | 453 | 454 | 454 | 10899 |
| 16 | | 453 | 456 | 458 | 457 | 458 | 457 | 465 | 464 | 437 | 431 | 439 | 439 | 442 | 448 | 438 | 443 | 435 | 440 | 438 | 456 | 431 | 440 | 443 | 439 | 446 | 10707 |
| 17 | | 434 | 437 | 440 | 448 | 453 | 455 | 453 | 453 | 451 | 428 | 423 | 425 | 442 | 445 | 443 | 443 | 439 | 441 | 449 | 454 | 457 | 454 | 453 | 452 | 444 | 10672 |
| 18 | | 458 | 456 | 449 | 449 | 453 | 453 | 455 | 449 | 446 | 445 | 442 | 440 | 442 | 449 | 453 | 450 | 449 | 450 | 439 | 412 | 418 | 418 | 426 | 436 | 443 | 10637 |
| 19 | Q | 442 | 438 | 442 | 444 | 446 | 447 | 448 | 446 | 442 | 440 | 438 | 438 | 436 | 437 | 442 | 443 | 446 | 447 | 453 | 453 | 456 | 459 | 460 | 458 | 446 | 10701 |
| 20 | | 457 | 462 | 452 | 452 | 453 | 454 | 459 | 458 | 456 | 451 | 446 | 443 | 441 | 446 | 455 | 455 | 457 | 460 | 459 | 456 | 460 | 460 | 460 | 459 | 454 | 10911 |
| 21 | | 458 | 456 | 453 | 453 | 457 | 465 | 467 | 470 | 465 | 464 | 463 | 457 | 453 | 460 | 463 | 467 | 470 | 473 | 464 | 456 | 456 | 456 | 460 | 460 | 461 | 11066 |
| 22 | D | 439 | 432 | 429 | 439 | 443 | 456 | 456 | 461 | 449 | 427 | 412 | 412 | 418 | 436 | 434 | 437 | 446 | 460 | 437 | 445 | 457 | 457 | 453 | 434 | 440 | 10569 |
| 23 | D | 460 | 428 | 414 | 387 | 453 | 457 | 459 | 468 | 453 | 443 | 436 | 425 | 421 | 417 | 433 | 449 | 435 | 442 | 448 | 446 | 455 | 451 | 426 | 422 | 438 | 10528 |
| 24 | | 419 | 439 | 446 | 445 | 438 | 448 | 456 | 464 | 455 | 446 | 436 | 440 | 441 | 446 | 433 | 436 | 442 | 453 | 454 | 450 | 443 | 435 | 443 | 470 | 445 | 10678 |
| 25 | | 443 | 444 | 446 | 449 | 446 | 450 | 449 | 453 | 448 | 446 | 442 | 439 | 438 | 444 | 438 | 445 | 454 | 455 | 456 | 456 | 454 | 454 | 453 | 454 | 448 | 10756 |
| 26 | | 453 | 452 | 455 | 456 | 459 | 463 | 464 | 463 | 456 | 446 | 443 | 443 | 442 | 447 | 454 | 455 | 457 | 458 | 460 | 444 | 437 | 442 | 445 | 450 | 452 | 10844 |
| 27 | | 449 | 458 | 456 | 457 | 459 | 456 | 468 | 466 | 459 | 452 | 442 | 429 | 425 | 432 | 448 | 444 | 438 | 439 | 447 | 448 | 444 | 438 | 435 | 452 | 447 | 10741 |
| 28 | | 453 | 455 | 450 | 433 | 455 | 454 | 457 | 460 | 437 | 405 | 395 | 409 | 435 | 441 | 450 | 452 | 452 | 448 | 449 | 448 | 448 | 450 | 451 | 450 | 443 | 10637 |
| 29 | | 450 | 449 | 449 | 449 | 450 | 454 | 457 | 456 | 453 | 449 | 444 | 438 | 440 | 443 | 452 | 457 | 468 | 475 | 477 | 465 | 460 | 458 | 458 | 452 | 454 | 10903 |
| 30 | D | 443 | 424 | 426 | 428 | 451 | 448 | 452 | 453 | 442 | 407 | 396 | 413 | 417 | 423 | 437 | 423 | 441 | 444 | 443 | 450 | 453 | 452 | 450 | 448 | 436 | 10464 |
| 31 | D | 452 | 456 | 447 | 444 | 426 | 477 | 486 | 472 | 464 | 457 | 443 | 414 | 409 | 444 | 551 | 483 | 569 | 509 | 490 | 443 | 429 | 426 | 420 | 419 | 459 | 11030 |
| MEAN | | 449 | 449 | 448 | 448 | 453 | 457 | 459 | 459 | 452 | 444 | 439 | 437 | 438 | 443 | 450 | 450 | 453 | 455 | 455 | 451 | 450 | 449 | 449 | 449 | 449 | 10786 |
| MEAN Q | | 456 | 454 | 455 | 456 | 457 | 457 | 458 | 459 | 457 | 453 | 450 | 449 | 450 | 453 | 456 | 457 | 459 | 461 | 462 | 463 | 464 | 464 | 460 | 460 | 457 | 10970 |
| MEAN D | | 447 | 434 | 432 | 428 | 445 | 458 | 460 | 460 | 449 | 432 | 422 | 418 | 419 | 430 | 458 | 446 | 464 | 460 | 453 | 445 | 445 | 440 | 434 | 429 | 442 | 10608 |

LERWICK

HORIZONTAL INTENSITY

1982 FEBRUARY

14500 GAMMAS PLUS TABULAR QUANTITIES (UNIT 1 GAMMA)

| U.T | 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 | MEAN | SUM | |
|-----|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-------|-------|
| 1 | | 418 | 423 | 425 | 418 | 413 | 420 | 426 | 429 | 426 | 421 | 414 | 428 | 524 | 428 | 430 | 456 | 442 | 500 | 755 | 863 | 642 | 559 | 405 | 400 | 477 | 11465 | |
| 2 | D | 402 | 321 | 289 | 326 | 294 | 333 | 367 | 314 | 377 | 418 | 425 | 428 | 411 | 428 | 428 | 418 | 420 | 408 | 415 | 418 | 418 | 425 | 423 | 425 | 389 | 9331 | |
| 3 | | 422 | 424 | 427 | 431 | 419 | 397 | 398 | 398 | 413 | 420 | 422 | 408 | 421 | 424 | 428 | 433 | 426 | 436 | 434 | 429 | 436 | 412 | 416 | 369 | 418 | 10043 | |
| 4 | D | 333 | 354 | 310 | 359 | 359 | 360 | 385 | 397 | 399 | 370 | 367 | 393 | 405 | 465 | 494 | 482 | 463 | 452 | 456 | 503 | 509 | 355 | 385 | 159 | 396 | 9514 | |
| 5 | | 225 | 159 | 233 | 349 | 356 | 419 | 416 | 421 | 418 | 425 | 432 | 426 | 422 | 429 | 428 | 433 | 468 | 469 | 433 | 435 | 442 | 428 | 406 | 426 | 396 | 9498 | |
| 6 | | 428 | 433 | 429 | 420 | 429 | 440 | 428 | 425 | 420 | 425 | 412 | 413 | 422 | 429 | 436 | 463 | 518 | 664 | 543 | 509 | 460 | 464 | 387 | 377 | 449 | 10774 | |
| 7 | | 418 | 333 | 327 | 10 | 349 | 405 | 417 | 415 | 430 | 426 | 418 | 414 | 413 | 412 | 418 | 435 | 435 | 448 | 447 | 448 | 442 | 436 | 420 | 401 | 396 | 9517 | |
| 8 | | 422 | 436 | 433 | 436 | 434 | 440 | 445 | 446 | 445 | 445 | 429 | 420 | 427 | 424 | 425 | 415 | 421 | 437 | 443 | 457 | 499 | 480 | 440 | 445 | 437 | 439 | 10536 |
| 9 | Q | 426 | 412 | 408 | 425 | 416 | 432 | 436 | 443 | 446 | 447 | 446 | 446 | 439 | 436 | 443 | 443 | 443 | 450 | 455 | 458 | 456 | 458 | 450 | 449 | 440 | 10563 | |
| 10 | | 449 | 449 | 452 | 445 | 446 | 445 | 448 | 456 | 458 | 455 | 456 | 438 | 412 | 455 | 533 | 543 | 653 | 494 | 500 | 521 | 469 | 434 | 423 | 407 | 468 | 11241 | |
| 11 | D | 357 | 400 | 391 | 305 | 333 | 416 | 425 | 433 | 422 | 416 | 415 | 410 | 404 | 427 | 483 | 564 | 461 | 447 | 453 | 495 | 503 | 460 | 247 | 285 | 414 | 9952 | |
| 12 | | 142 | 405 | 421 | 418 | 410 | 417 | 426 | 429 | 430 | 428 | 430 | 426 | 435 | 455 | 434 | 437 | 449 | 452 | 471 | 458 | 381 | 396 | 347 | 360 | 410 | 9857 | |
| 13 | D | 363 | 385 | 418 | 361 | 371 | 382 | 396 | 397 | 401 | 411 | 412 | 405 | 424 | 459 | 563 | 521 | 511 | 675 | 523 | 482 | 394 | 233 | 355 | 413 | 427 | 10255 | |
| 14 | | 429 | 400 | 381 | 416 | 382 | 294 | 399 | 417 | 390 | 408 | 410 | 409 | 445 | 479 | 436 | 440 | 444 | 484 | 550 | 446 | 416 | 418 | 374 | 404 | 419 | 10071 | |
| 15 | Q | 431 | 418 | 418 | 435 | 436 | 436 | 441 | 431 | 431 | 427 | 410 | 415 | 432 | 455 | 454 | 453 | 429 | 431 | 434 | 435 | 438 | 438 | 438 | 438 | 433 | 10404 | |
| 16 | Q | 441 | 438 | 441 | 438 | 442 | 445 | 445 | 441 | 438 | 428 | 419 | 417 | 427 | 434 | 418 | 424 | 432 | 438 | 438 | 448 | 448 | 451 | 451 | 452 | 437 | 10494 | |
| 17 | | 449 | 448 | 448 | 453 | 459 | 465 | 461 | 470 | 461 | 462 | 454 | 438 | 412 | 423 | 456 | 469 | 518 | 510 | 461 | 448 | 44 | | | | | | |

LERWICK

HORIZONTAL INTENSITY

1982 MARCH 14500 GAMMAS PLUS TABULAR QUANTITIES (UNIT 1 GAMMA)

| U.T | Ø | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN | SUM |
|--------|---|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|-------|
| 1 | D | 455 | 455 | 451 | 454 | 465 | 462 | 466 | 459 | 457 | 442 | 428 | 433 | 444 | 482 | 584 | 820 | 526 | 437 | 450 | 431 | 427 | 443 | -90 | -322 | 419 | 10059 |
| 2 | D | -311 | -342 | -156 | -134 | 54 | 193 | 301 | 270 | 332 | 281 | 404 | 435 | 555 | 557 | 550 | 531 | 468 | 448 | 409 | 411 | 396 | 370 | 390 | 359 | 282 | 6771 |
| 3 | | 383 | 417 | 425 | 420 | 419 | 420 | 427 | 425 | 414 | 399 | 386 | 393 | 402 | 416 | 443 | 432 | 435 | 435 | 443 | 442 | 442 | 444 | 447 | 445 | 423 | 10154 |
| 4 | | 444 | 445 | 445 | 447 | 448 | 452 | 456 | 458 | 442 | 432 | 425 | 398 | 398 | 400 | 401 | 425 | 433 | 440 | 439 | 444 | 447 | 446 | 446 | 422 | 434 | 10433 |
| 5 | | 426 | 436 | 445 | 445 | 452 | 441 | 442 | 451 | 443 | 429 | 414 | 411 | 405 | 410 | 417 | 424 | 435 | 442 | 448 | 449 | 449 | 452 | 449 | 448 | 436 | 10463 |
| 6 | Q | 445 | 447 | 448 | 448 | 449 | 451 | 452 | 451 | 445 | 434 | 426 | 418 | 418 | 428 | 435 | 438 | 441 | 449 | 455 | 459 | 458 | 455 | 455 | 455 | 444 | 10660 |
| 7 | Q | 456 | 452 | 453 | 453 | 453 | 455 | 455 | 455 | 453 | 441 | 431 | 426 | 429 | 437 | 446 | 455 | 461 | 457 | 458 | 460 | 463 | 464 | 464 | 459 | 451 | 10836 |
| 8 | | 453 | 461 | 462 | 459 | 458 | 456 | 456 | 456 | 452 | 442 | 432 | 428 | 426 | 435 | 446 | 460 | 473 | 473 | 469 | 483 | 476 | 470 | 445 | 423 | 454 | 10894 |
| 9 | | 366 | 415 | 438 | 441 | 443 | 439 | 444 | 446 | 438 | 432 | 421 | 412 | 419 | 435 | 436 | 469 | 486 | 446 | 454 | 452 | 445 | 418 | 424 | 421 | 435 | 10440 |
| 10 | | 419 | 376 | 386 | 411 | 429 | 427 | 434 | 428 | 414 | 419 | 428 | 418 | 422 | 436 | 438 | 452 | 448 | 453 | 451 | 455 | 459 | 450 | 447 | 445 | 431 | 10345 |
| 11 | | 448 | 446 | 447 | 441 | 434 | 437 | 458 | 457 | 450 | 441 | 431 | 422 | 422 | 420 | 436 | 451 | 455 | 453 | 465 | 460 | 445 | 447 | 449 | 447 | 444 | 10662 |
| 12 | | 448 | 447 | 448 | 455 | 450 | 447 | 448 | 450 | 446 | 437 | 428 | 422 | 419 | 430 | 447 | 464 | 470 | 462 | 449 | 467 | 459 | 454 | 454 | 452 | 448 | 10753 |
| 13 | | 454 | 455 | 363 | 444 | 469 | 466 | 444 | 444 | 428 | 418 | 415 | 412 | 419 | 418 | 429 | 431 | 446 | 456 | 459 | 462 | 461 | 464 | 463 | 454 | 440 | 10574 |
| 14 | | 455 | 440 | 445 | 454 | 452 | 455 | 458 | 456 | 448 | 436 | 427 | 414 | 415 | 426 | 434 | 459 | 467 | 467 | 476 | 458 | 454 | 454 | 453 | 448 | 448 | 10751 |
| 15 | Q | 450 | 443 | 435 | 452 | 454 | 448 | 443 | 441 | 436 | 428 | 420 | 414 | 415 | 421 | 433 | 443 | 455 | 459 | 460 | 463 | 464 | 459 | 454 | 454 | 443 | 10644 |
| 16 | Q | 455 | 449 | 452 | 461 | 455 | 455 | 459 | 460 | 458 | 448 | 438 | 427 | 421 | 419 | 435 | 442 | 451 | 467 | 464 | 466 | 463 | 464 | 465 | 469 | 452 | 10843 |
| 17 | | 469 | 467 | 464 | 463 | 464 | 466 | 464 | 461 | 458 | 451 | 443 | 446 | 445 | 474 | 450 | 458 | 468 | 481 | 483 | 479 | 490 | 486 | 469 | 471 | 465 | 11170 |
| 18 | | 472 | 478 | 485 | 468 | 479 | 473 | 475 | 480 | 471 | 455 | 445 | 435 | 431 | 438 | 447 | 460 | 466 | 462 | 462 | 459 | 476 | 469 | 461 | 457 | 462 | 11104 |
| 19 | | 471 | 449 | 437 | 439 | 456 | 458 | 464 | 457 | 442 | 431 | 422 | 411 | 413 | 421 | 427 | 439 | 451 | 456 | 458 | 460 | 467 | 460 | 459 | 462 | 446 | 10710 |
| 20 | | 461 | 460 | 461 | 461 | 463 | 465 | 463 | 470 | 464 | 441 | 432 | 419 | 426 | 431 | 438 | 444 | 449 | 453 | 463 | 459 | 462 | 459 | 464 | 466 | 453 | 10874 |
| 21 | D | 460 | 456 | 455 | 456 | 447 | 461 | 450 | 448 | 448 | 439 | 436 | 432 | 432 | 438 | 443 | 511 | 465 | 431 | 458 | 451 | 435 | 442 | 452 | 438 | 449 | 10784 |
| 22 | D | 462 | 433 | 366 | 352 | 388 | 438 | 455 | 457 | 436 | 428 | 417 | 415 | 427 | 436 | 436 | 435 | 444 | 462 | 452 | 449 | 453 | 450 | 448 | 450 | 433 | 10389 |
| 23 | | 448 | 449 | 450 | 449 | 451 | 451 | 453 | 443 | 434 | 413 | 398 | 392 | 408 | 412 | 416 | 434 | 436 | 446 | 459 | 461 | 463 | 465 | 465 | 467 | 440 | 10563 |
| 24 | | 465 | 466 | 463 | 464 | 466 | 469 | 471 | 466 | 456 | 445 | 427 | 415 | 423 | 437 | 446 | 464 | 454 | 473 | 468 | 484 | 474 | 475 | 471 | 465 | 458 | 11007 |
| 25 | D | 473 | 453 | 442 | 457 | 466 | 465 | 462 | 453 | 448 | 437 | 423 | 419 | 434 | 431 | 445 | 459 | 452 | 462 | 462 | 461 | 464 | 468 | 467 | 456 | 451 | 10836 |
| 26 | | 459 | 459 | 457 | 459 | 461 | 461 | 462 | 461 | 456 | 443 | 426 | 414 | 421 | 431 | 443 | 459 | 465 | 460 | 462 | 463 | 468 | 472 | 481 | 464 | 454 | 10907 |
| 27 | | 452 | 452 | 429 | 451 | 465 | 470 | 469 | 463 | 455 | 442 | 428 | 429 | 429 | 445 | 449 | 447 | 445 | 453 | 458 | 465 | 468 | 466 | 467 | 467 | 452 | 10864 |
| 28 | Q | 466 | 467 | 467 | 467 | 464 | 476 | 469 | 468 | 455 | 438 | 424 | 414 | 417 | 434 | 440 | 448 | 455 | 458 | 457 | 462 | 464 | 468 | 466 | 465 | 454 | 10909 |
| 29 | | 468 | 467 | 468 | 467 | 475 | 456 | 451 | 456 | 455 | 439 | 419 | 411 | 419 | 422 | 434 | 442 | 451 | 455 | 462 | 463 | 471 | 473 | 463 | 450 | 451 | 10837 |
| 30 | | 451 | 448 | 451 | 441 | 450 | 452 | 453 | 452 | 445 | 432 | 424 | 424 | 434 | 434 | 420 | 442 | 455 | 462 | 455 | 465 | 472 | 465 | 459 | 441 | 447 | 10727 |
| 31 | | 421 | 451 | 452 | 446 | 431 | 453 | 454 | 444 | 436 | 428 | 418 | 421 | 409 | 428 | 426 | 433 | 495 | 510 | 511 | 476 | 455 | 441 | 448 | 442 | 447 | 10729 |
| MEAN | | 424 | 422 | 424 | 429 | 439 | 446 | 450 | 448 | 442 | 430 | 424 | 419 | 426 | 435 | 444 | 464 | 458 | 457 | 459 | 459 | 458 | 455 | 437 | 424 | 441 | 10573 |
| MEAN Q | | 454 | 452 | 451 | 456 | 455 | 457 | 456 | 455 | 449 | 438 | 428 | 420 | 420 | 428 | 438 | 445 | 453 | 458 | 459 | 462 | 462 | 462 | 461 | 460 | 449 | 10779 |
| MEAN D | | 308 | 291 | 312 | 317 | 362 | 404 | 427 | 417 | 424 | 405 | 422 | 427 | 458 | 469 | 492 | 551 | 471 | 446 | 446 | 441 | 434 | 435 | 333 | 276 | 407 | 9768 |

LERWICK

HORIZONTAL INTENSITY

1982 APRIL 14500 GAMMAS PLUS TABULAR QUANTITIES (UNIT 1 GAMMA)

| U.T | Ø | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN | SUM |
|-----|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|------|-------|
| 1 | | 447 | 443 | 442 | 447 | 446 | 447 | 451 | 447 | 439 | 426 | 407 | 405 | 414 | 445 | 444 | 443 | 459 | 462 | 468 | 472 | 483 | 447 | 376 | 235 | 433 | 10395 |
| 2 | D | 365 | 215 | 343 | 354 | 400 | 425 | 431 | 409 | 416 | 423 | 414 | 400 | 422 | 438 | 512 | 648 | 756 | 891 | 515 | 485 | 437 | 386 | 113 | 88 | 428 | 10286 |
| 3 | D | 335 | 342 | 367 | 389 | 364 | 304 | 339 | 405 | 426 | 389 | 387 | 398 | 414 | 494 | 575 | 620 | 621 | 612 | 522 | 468 | 472 | 420 | 376 | 387 | 434 | 10426 |
| 4 | | 378 | 317 | 392 | 407 | 417 | 396 | 431 | 435 | 432 | 409 | 416 | 412 | 426 | 427 | 421 | 442 | 462 | 490 | 507 | 480 | 466 | 438 | 424 | 411 | 426 | 10236 |
| 5 | | 427 | 424 | 439 | 431 | 423 | 428 | 439 | 432 | 407 | 399 | 411 | 400 | 417 | 421 | 437 | 445 | 476 | 490 | 469 | 456 | 460 | 440 | 435 | 433 | 433 | 10403 |
| 6 | | 447 | 441 | 438 | 452 | 453 | 464 | 453 | 429 | 438 | 409 | 404 | 407 | 432 | 452 | 461 | 438 | 494 | 513 | 484 | 467 | 461 | 454 | 454 | 445 | 449 | 10790 |
| 7 | Q | 443 | 445 | 449 | 452 | 453 | 450 | 453 | 446 | 430 | 407 | 397 | 399 | 411 | 428 | 436 | 451 | 459 | 463 | 468 | 467 | 471 | 470 | 465 | 462 | 445 | 10675 |
| 8 | | 466 | 466 | 466 | 466 | 465 | 456 | 446 | 447 | 438 | 417 | 408 | 409 | 427 | 448 | 477 | 459 | 464 | 464 | 461 | 469 | 468 | 474 | 452 | 455 | 453 | 10868 |
| 9 | | 455 | 448 | 443 | 456 | 455 | 456 | 455 | 446 | 438 | 424 | 415 | 414 | 422 | 439 | 455 | 466 | 480 | 471 | 489 | 493 | 472 | 466 | 464 | 457 | 453 | 10879 |
| 10 | D | 459 | 454 | 455 | 445 | 451 | 445 | 442 | 442 | 426 | 401 | 386 | 388 | 406 | 509 | 683 | 734 | 793 | 567 | 528 | 526 | 446 | 340 | -148 | 215 | 449 | 10793 |
| 11 | D | 243 | 163 | 318 | 359 | 405 | 358 | 331 | 372 | 387 | 359 | 372 | 389 | 386 | 386 | 427 | 446 | 423 | 448 | 501 | 493 | 479 | 431 | 442 | 448 | 390 | 9366 |
| 12 | | 448 | 444 | 445 | 441 | 430 | 444 | 452 | 444 | 431 | | | | | | | | | | | | | | | | | |

| LERWICK | | HORIZONTAL INTENSITY | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------|-----|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|-------|
| 1982 | MAY | 14500 GAMMAS PLUS TABULAR QUANTITIES (UNIT 1 GAMMA) | | | | | | | | | | | | | | | | | | | | | | | | | |
| U.T | Ø | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN | SUM |
| 1 | | 417 | 408 | 391 | 454 | 454 | 450 | 422 | 406 | 406 | 404 | 406 | 406 | 431 | 447 | 470 | 551 | 567 | 515 | 478 | 467 | 459 | 456 | 458 | 447 | 10729 | |
| 2 | | 459 | 445 | 358 | 430 | 445 | 430 | 440 | 433 | 416 | 389 | 404 | 425 | 441 | 473 | 513 | 501 | 514 | 499 | 549 | 466 | 423 | 431 | 430 | 448 | 448 | 10762 |
| 3 | D | 422 | 371 | 393 | 349 | 426 | 390 | 394 | 363 | 405 | 406 | 396 | 382 | 384 | 396 | 445 | 520 | 642 | 623 | 526 | 474 | 443 | 434 | 437 | 442 | 436 | 10463 |
| 4 | | 442 | 444 | 448 | 450 | 449 | 437 | 431 | 433 | 425 | 421 | 403 | 406 | 415 | 458 | 501 | 511 | 487 | 455 | 461 | 462 | 460 | 462 | 458 | 458 | 449 | 10777 |
| 5 | | 465 | 460 | 442 | 438 | 428 | 444 | 455 | 441 | 416 | 415 | 408 | 414 | 438 | 462 | 479 | 487 | 485 | 472 | 473 | 479 | 482 | 461 | 458 | 458 | 452 | 10860 |
| 6 | | 457 | 451 | 451 | 451 | 450 | 452 | 448 | 439 | 432 | 432 | 421 | 424 | 427 | 444 | 450 | 472 | 491 | 479 | 477 | 476 | 471 | 463 | 459 | 450 | 453 | 10867 |
| 7 | Q | 458 | 454 | 451 | 447 | 455 | 458 | 454 | 448 | 441 | 426 | 414 | 420 | 431 | 439 | 461 | 470 | 475 | 484 | 487 | 488 | 481 | 473 | 468 | 465 | 456 | 10948 |
| 8 | Q | 475 | 464 | 461 | 460 | 459 | 457 | 455 | 452 | 443 | 434 | 431 | 431 | 443 | 454 | 462 | 472 | 478 | 480 | 483 | 482 | 480 | 478 | 469 | 460 | 11034 | |
| 9 | | 464 | 472 | 474 | 475 | 480 | 468 | 457 | 448 | 439 | 426 | 414 | 414 | 417 | 426 | 443 | 450 | 461 | 468 | 479 | 484 | 475 | 475 | 468 | 468 | 456 | 10945 |
| 10 | | 470 | 473 | 467 | 468 | 471 | 469 | 464 | 451 | 439 | 424 | 416 | 420 | 428 | 436 | 458 | 476 | 482 | 485 | 483 | 486 | 485 | 481 | 482 | 479 | 462 | 11093 |
| 11 | | 467 | 468 | 471 | 473 | 478 | 476 | 472 | 465 | 453 | 436 | 426 | 422 | 427 | 436 | 455 | 452 | 464 | 474 | 480 | 485 | 480 | 474 | 471 | 469 | 461 | 11074 |
| 12 | | 466 | 468 | 470 | 473 | 472 | 471 | 454 | 444 | 434 | 432 | 418 | 415 | 428 | 439 | 450 | 457 | 471 | 477 | 489 | 492 | 480 | 475 | 476 | 473 | 459 | 11024 |
| 13 | | 473 | 471 | 466 | 465 | 469 | 467 | 462 | 449 | 437 | 428 | 421 | 417 | 425 | 436 | 449 | 455 | 483 | 484 | 504 | 493 | 484 | 472 | 473 | 473 | 460 | 11056 |
| 14 | | 470 | 471 | 472 | 473 | 478 | 475 | 471 | 462 | 448 | 436 | 430 | 442 | 452 | 456 | 471 | 474 | 486 | 480 | 492 | 495 | 488 | 481 | 482 | 484 | 469 | 11269 |
| 15 | | 481 | 481 | 464 | 470 | 479 | 479 | 470 | 463 | 455 | 446 | 444 | 424 | 448 | 450 | 453 | 438 | 500 | 493 | 544 | 493 | 485 | 474 | 470 | 471 | 470 | 11275 |
| 16 | | 468 | 471 | 466 | 468 | 470 | 469 | 461 | 446 | 425 | 417 | 421 | 431 | 436 | 437 | 432 | 453 | 485 | 488 | 483 | 486 | 480 | 477 | 478 | 479 | 459 | 11027 |
| 17 | | 474 | 467 | 467 | 447 | 459 | 470 | 465 | 454 | 439 | 417 | 406 | 415 | 443 | 470 | 459 | 457 | 478 | 494 | 486 | 492 | 483 | 482 | 472 | 476 | 461 | 11072 |
| 18 | | 470 | 469 | 470 | 464 | 464 | 460 | 469 | 466 | 451 | 438 | 415 | 387 | 426 | 463 | 475 | 468 | 476 | 483 | 503 | 486 | 481 | 475 | 465 | 459 | 462 | 11083 |
| 19 | | 459 | 450 | 442 | 451 | 462 | 470 | 461 | 448 | 432 | 429 | 419 | 415 | 429 | 436 | 437 | 450 | 465 | 485 | 487 | 499 | 491 | 478 | 469 | 465 | 455 | 10929 |
| 20 | | 453 | 460 | 461 | 464 | 464 | 460 | 457 | 448 | 440 | 423 | 431 | 437 | 442 | 441 | 437 | 450 | 465 | 471 | 480 | 484 | 480 | 475 | 476 | 478 | 457 | 10977 |
| 21 | | 474 | 470 | 466 | 467 | 470 | 472 | 453 | 436 | 426 | 428 | 422 | 432 | 436 | 434 | 443 | 452 | 468 | 473 | 474 | 471 | 471 | 472 | 474 | 478 | 457 | 10962 |
| 22 | Q | 466 | 464 | 463 | 467 | 467 | 465 | 460 | 453 | 439 | 429 | 426 | 436 | 452 | 457 | 464 | 475 | 477 | 478 | 481 | 481 | 477 | 471 | 469 | 465 | 462 | 11082 |
| 23 | Q | 464 | 457 | 457 | 466 | 469 | 460 | 446 | 434 | 426 | 426 | 433 | 443 | 457 | 464 | 474 | 484 | 481 | 483 | 478 | 478 | 478 | 479 | 479 | 479 | 462 | 11085 |
| 24 | Q | 479 | 473 | 470 | 470 | 468 | 465 | 453 | 440 | 433 | 425 | 421 | 423 | 440 | 457 | 467 | 477 | 477 | 482 | 483 | 488 | 490 | 488 | 485 | 483 | 464 | 11137 |
| 25 | | 484 | 486 | 488 | 484 | 476 | 473 | 468 | 453 | 440 | 429 | 430 | 433 | 446 | 454 | 474 | 492 | 477 | 488 | 495 | 490 | 490 | 488 | 495 | 496 | 472 | 11329 |
| 26 | | 485 | 467 | 457 | 464 | 477 | 483 | 477 | 464 | 447 | 429 | 429 | 425 | 446 | 455 | 495 | 490 | 505 | 522 | 556 | 523 | 498 | 485 | 453 | 453 | 474 | 11385 |
| 27 | D | 464 | 462 | 446 | 431 | 450 | 429 | 369 | 391 | 376 | 368 | 372 | 420 | 456 | 490 | 655 | 602 | 650 | 647 | 555 | 529 | 460 | 445 | 340 | 304 | 463 | 11111 |
| 28 | D | 371 | 325 | 365 | 275 | 320 | 331 | 386 | 405 | 395 | 394 | 408 | 410 | 411 | 525 | 629 | 680 | 581 | 575 | 530 | 477 | 476 | 439 | 403 | 434 | 439 | 10545 |
| 29 | D | 437 | 376 | 366 | 388 | 416 | 417 | 443 | 430 | 398 | 395 | 415 | 426 | 470 | 482 | 545 | 536 | 519 | 522 | 550 | 505 | 478 | 455 | 436 | 426 | 451 | 10831 |
| 30 | D | 421 | 450 | 384 | 405 | 453 | 453 | 442 | 415 | 369 | 395 | 395 | 427 | 431 | 453 | 465 | 518 | 524 | 550 | 585 | 522 | 500 | 488 | 462 | 403 | 458 | 10996 |
| 31 | | 349 | 371 | 412 | 406 | 407 | 427 | 405 | 417 | 415 | 424 | 395 | 399 | 432 | 430 | 444 | 473 | 549 | 559 | 515 | 492 | 477 | 461 | 451 | 422 | 439 | 10532 |
| MEAN | | 455 | 449 | 444 | 445 | 454 | 453 | 448 | 439 | 427 | 420 | 417 | 420 | 434 | 451 | 476 | 485 | 502 | 505 | 501 | 488 | 477 | 469 | 461 | 457 | 457 | 10977 |
| MEAN Q | | 468 | 462 | 460 | 462 | 464 | 463 | 456 | 448 | 438 | 428 | 424 | 429 | 439 | 451 | 462 | 472 | 477 | 481 | 483 | 484 | 482 | 478 | 476 | 472 | 461 | 11059 |
| MEAN D | | 423 | 397 | 391 | 370 | 413 | 404 | 407 | 401 | 389 | 392 | 404 | 414 | 435 | 472 | 558 | 572 | 588 | 590 | 537 | 497 | 469 | 447 | 419 | 402 | 450 | 10791 |

| LERWICK | | HORIZONTAL INTENSITY | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------|------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-------|
| 1982 | JUNE | 14500 GAMMAS PLUS TABULAR QUANTITIES (UNIT 1 GAMMA) | | | | | | | | | | | | | | | | | | | | | | | | | |
| U.T | Ø | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN | SUM |
| 1 | | 403 | 374 | 440 | 431 | 416 | 425 | 441 | 430 | 429 | 432 | 426 | 426 | 440 | 439 | 441 | 450 | 495 | 505 | 540 | 516 | 486 | 458 | 440 | 374 | 444 | 10657 |
| 2 | | 374 | 435 | 389 | 390 | 450 | 453 | 440 | 422 | 409 | 411 | 408 | 411 | 428 | 422 | 446 | 472 | 478 | 485 | 494 | 502 | 485 | 472 | 463 | 456 | 441 | 10595 |
| 3 | Q | 441 | 434 | 439 | 431 | 450 | 453 | 446 | 433 | 429 | 421 | 414 | 418 | 436 | 454 | 464 | 483 | 484 | 477 | 490 | 482 | 488 | 493 | 464 | 458 | 453 | 10882 |
| 4 | Q | 444 | 440 | 453 | 445 | 453 | 456 | 448 | 436 | 420 | 405 | 398 | 417 | 439 | 470 | 477 | 464 | 468 | 482 | 486 | 492 | 493 | 485 | 479 | 452 | 454 | 10902 |
| 5 | Q | 455 | 459 | 461 | 464 | 463 | 457 | 441 | 436 | 424 | 412 | 410 | 422 | 432 | 440 | 461 | 456 | 466 | 481 | 489 | 489 | 492 | 487 | 481 | 479 | 456 | 10957 |
| 6 | | 476 | 465 | 472 | 491 | 491 | 476 | 448 | 453 | 459 | 456 | 437 | 431 | 439 | 433 | 444 | 460 | 475 | 492 | 498 | 495 | 504 | 495 | 481 | 484 | 469 | 11255 |
| 7 | | 473 | 457 | 457 | 461 | 465 | 460 | 439 | 412 | 413 | 422 | 406 | 409 | 459 | 455 | 463 | 461 | 458 | 468 | 485 | 485 | 479 | 468 | 468 | 466 | 453 | 10883 |
| 8 | | 463 | 464 | 461 | 460 | 460 | 456 | 451 | 443 | 432 | 419 | 414 | 414 | 416 | 436 | 453 | 504 | 498 | 480 | 495 | 480 | 482 | 483 | 465 | 451 | 457 | 10980 |
| 9 | | 488 | 505 | 499 | 503 | 505 | 492 | 492 | 474 | 453 | 443 | 440 | 443 | 467 | 470 | 450 | 480 | 495 | 502 | 496 | 495 | 494 | 488 | 479 | 480 | 480 | 11533 |
| 10 | D | 488 | 478 | 465 | 396 | 228 | 306 | 289 | 337 | 391 | 417 | 412 | 397 | 401 | 528 | 598 | 703 | 620 | 482 | 464 | 459 | 460 | 458 | 469 | 464 | 446 | 10710 |
| 11 | D | 456 | 460 | 421 | 391 | 415 | 420 | 431 | 426 | 433 | 422 | 415 | 404 | 419 | 449 | 459 | 475 | 517 | 567 | 587 | 550 | 516 | 485 | 458 | 366 | 456 | 10942 |
| 12 | D | 329 | 399 | 395 | 433 | 454 | 460 | 453 | 429 | 419 | 412 | 408 | 397 | 412 | 425 | 491 | 652 | 721 | 791 | 724 | 649 | 583 | 486 | 397 | 204 | 480 | 11523 |
| 13 | D | 300 | 278 | 289 | 367 | 436 | 446 | 443 | 443 | 458 | 451 | 447 | 453 | 427 | 454 | 453 | 495 | 512 | 544 | 555 | 450 | 436 | 427 | 262 | 297 | 422 | 10123 |
| 14 | | 450 | 457 | 462 | 440 | 427 | 434 | 402 | 405 | 393 | 380 | 391 | 405 | 450 | 444 | 462 | 468 | 449 | 470 | 559 | 533 | 508 | 484 | 467 | 461 | 450 | 10801 |
| 15 | | 449 | 445 | 432 | 434 | 446 | 443 | 431 | 409 | 404 | 412 | 412 | 410 | 415 | 426 | 435 | 445 | 527 | 595 | 515 | 509 | 511 | 477 | 451 | 434 | 453 | 10867 |
| 16 | | 419 | 454 | 460 | 468 | 469 | 464 | 454 | 443 | 437 | 433 | 418 | 419 | 435 | 449 | 453 | 481 | 486 | 497 | 501 | 508 | 494 | 477 | 473 | 466 | 461 | 11058 |
| 17 | Q | 464 | 461 | 460 | 459 | 465 | 456 | 446 | 454 | 456 | 442 | 423 | 425 | 439 | 446 | 461 | 476 | 482 | 487 | 489 | 484 | 477 | 472 | 469 | 465 | 461 | 11058 |
| 18 | Q | 465 | 467 | 473 | 474 | 466 | 452 | 455 | 459 | 447 | 436 | 437 | 436 | 443 | | | | | | | | | | | | | |

LERWICK

HORIZONTAL INTENSITY

| 1982 | | JULY | | | | | | | | | | | | | | | | | | | | | | | | 14500 GAMMAS PLUS TABULAR QUANTITIES (UNIT 1 GAMMA) | | |
|--------|---|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---|-------|-------|
| U T. | Ø | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN | SUM | |
| 1 | | 353 | 457 | 447 | 442 | 416 | 442 | 447 | 446 | 429 | 439 | 428 | 428 | 430 | 434 | 467 | 449 | 460 | 484 | 502 | 516 | 495 | 457 | 451 | 449 | 448 | 10768 | |
| 2 | Q | 450 | 454 | 435 | 433 | 453 | 454 | 454 | 438 | 433 | 439 | 421 | 411 | 415 | 423 | 427 | 440 | 470 | 488 | 497 | 509 | 503 | 492 | 471 | 466 | 464 | 453 | 10886 |
| 3 | Q | 460 | 463 | 452 | 453 | 456 | 457 | 448 | 445 | 437 | 431 | 418 | 420 | 434 | 438 | 449 | 463 | 467 | 471 | 483 | 486 | 483 | 477 | 470 | 464 | 455 | 10925 | |
| 4 | Q | 458 | 459 | 459 | 462 | 465 | 464 | 454 | 444 | 437 | 434 | 432 | 434 | 439 | 452 | 459 | 461 | 469 | 477 | 479 | 479 | 474 | 472 | 468 | 467 | 458 | 10998 | |
| 5 | Q | 466 | 465 | 465 | 466 | 466 | 467 | 462 | 454 | 444 | 439 | 431 | 435 | 462 | 460 | 491 | 496 | 494 | 487 | 488 | 496 | 498 | 498 | 498 | 497 | 472 | 11327 | |
| 6 | | 488 | 478 | 479 | 481 | 480 | 478 | 471 | 496 | 448 | 470 | 436 | 447 | 456 | 471 | 472 | 478 | 506 | 528 | 544 | 526 | 509 | 497 | 480 | 484 | 483 | 11603 | |
| 7 | | 472 | 469 | 484 | 471 | 474 | 474 | 474 | 459 | 458 | 457 | 462 | 463 | 457 | 440 | 474 | 506 | 548 | 563 | 543 | 494 | 476 | 469 | 472 | 471 | 480 | 11530 | |
| 8 | | 471 | 463 | 462 | 467 | 460 | 427 | 453 | 453 | 431 | 423 | 436 | 426 | 437 | 445 | 468 | 489 | 520 | 508 | 498 | 495 | 497 | 488 | 484 | 461 | 465 | 11162 | |
| 9 | | 440 | 416 | 439 | 464 | 466 | 461 | 461 | 447 | 442 | 442 | 427 | 422 | 433 | 440 | 465 | 483 | 495 | 485 | 483 | 493 | 498 | 484 | 475 | 477 | 460 | 11038 | |
| 10 | Q | 467 | 452 | 465 | 466 | 453 | 453 | 457 | 453 | 451 | 442 | 433 | 425 | 440 | 450 | 470 | 474 | 486 | 480 | 488 | 504 | 504 | 490 | 478 | 471 | 464 | 11152 | |
| 11 | | 456 | 462 | 467 | 469 | 464 | 463 | 457 | 460 | 452 | 434 | 388 | 425 | 418 | 510 | 512 | 498 | 565 | 571 | 594 | 585 | 546 | 508 | 493 | 477 | 486 | 11674 | |
| 12 | D | 464 | 458 | 449 | 460 | 460 | 460 | 461 | 453 | 442 | 412 | 426 | 427 | 425 | 543 | 633 | 877 | 653 | 720 | 632 | 533 | 498 | 471 | 444 | 409 | 509 | 12210 | |
| 13 | D | 360 | 297 | 270 | 231 | 303 | 409 | 373 | 410 | 385 | 409 | 402 | 404 | 347 | 349 | 358 | 361 | 460 | 516 | 542 | 485 | 394 | 329 | 340 | 8 | 364 | 8742 | |
| 14 | D | 39 | 150 | 91 | 197 | 226 | 239 | 243 | 239 | 294 | 326 | 365 | 378 | 470 | 494 | 516 | 590 | 528 | 568 | 589 | 512 | 458 | 284 | 345 | 273 | 350 | 8414 | |
| 15 | | 295 | 273 | 276 | 370 | 357 | 383 | 379 | 374 | 356 | 350 | 390 | 435 | 442 | 471 | 444 | 431 | 487 | 515 | 495 | 489 | 496 | 442 | 415 | 383 | 406 | 9748 | |
| 16 | D | 405 | 409 | 388 | 386 | 406 | 417 | 421 | 410 | 390 | 313 | 338 | 399 | 412 | 429 | 430 | 487 | 429 | 464 | 472 | 489 | 486 | 509 | 525 | 380 | 425 | 10194 | |
| 17 | | 440 | 416 | 381 | 421 | 435 | 430 | 421 | 415 | 407 | 400 | 385 | 400 | 419 | 434 | 448 | 421 | 436 | 442 | 447 | 457 | 464 | 453 | 432 | 403 | 425 | 10217 | |
| 18 | | 351 | 344 | 395 | 415 | 402 | 419 | 429 | 416 | 398 | 340 | 361 | 387 | 388 | 414 | 429 | 421 | 458 | 500 | 515 | 483 | 469 | 454 | 460 | 457 | 421 | 10105 | |
| 19 | | 439 | 404 | 427 | 440 | 446 | 455 | 450 | 429 | 409 | 389 | 398 | 426 | 425 | 415 | 499 | 478 | 465 | 456 | 453 | 456 | 468 | 471 | 454 | 448 | 441 | 10600 | |
| 20 | | 452 | 419 | 422 | 385 | 297 | 315 | 365 | 378 | 394 | 405 | 393 | 375 | 392 | 414 | 431 | 441 | 450 | 463 | 469 | 465 | 461 | 447 | 444 | 439 | 413 | 9916 | |
| 21 | | 439 | 439 | 443 | 447 | 442 | 439 | 424 | 410 | 401 | 393 | 391 | 395 | 409 | 425 | 475 | 460 | 448 | 465 | 470 | 493 | 475 | 457 | 454 | 452 | 439 | 10546 | |
| 22 | | 458 | 426 | 450 | 459 | 457 | 450 | 439 | 420 | 410 | 404 | 402 | 407 | 436 | 467 | 464 | 474 | 466 | 514 | 477 | 456 | 451 | 450 | 454 | 452 | 447 | 10743 | |
| 23 | | 449 | 440 | 426 | 445 | 450 | 443 | 436 | 426 | 422 | 410 | 409 | 405 | 419 | 464 | 466 | 444 | 457 | 493 | 482 | 486 | 474 | 466 | 461 | 450 | 447 | 10723 | |
| 24 | D | 452 | 445 | 437 | 409 | 405 | 334 | 358 | 383 | 365 | 355 | 382 | 424 | 429 | 452 | 446 | 538 | 568 | 608 | 554 | 491 | 452 | 441 | 426 | 419 | 440 | 10573 | |
| 25 | | 396 | 418 | 420 | 375 | 323 | 431 | 415 | 392 | 402 | 388 | 392 | 399 | 398 | 442 | 468 | 485 | 503 | 508 | 505 | 495 | 479 | 456 | 436 | 420 | 431 | 10346 | |
| 26 | | 389 | 340 | 387 | 376 | 432 | 440 | 424 | 415 | 411 | 403 | 417 | 432 | 414 | 428 | 444 | 489 | 434 | 457 | 494 | 491 | 500 | 486 | 470 | 443 | 434 | 10416 | |
| 27 | | 422 | 442 | 453 | 446 | 446 | 361 | 362 | 420 | 427 | 428 | 422 | 415 | 405 | 405 | 425 | 464 | 464 | 467 | 481 | 484 | 482 | 466 | 429 | 403 | 434 | 10419 | |
| 28 | | 422 | 419 | 398 | 403 | 424 | 440 | 425 | 433 | 427 | 421 | 414 | 397 | 427 | 444 | 443 | 439 | 500 | 491 | 513 | 475 | 465 | 460 | 460 | 450 | 441 | 10590 | |
| 29 | | 354 | 395 | 449 | 452 | 454 | 447 | 403 | 405 | 435 | 437 | 427 | 438 | 437 | 445 | 426 | 491 | 452 | 464 | 481 | 478 | 468 | 453 | 453 | 455 | 441 | 10599 | |
| 30 | | 457 | 453 | 450 | 454 | 453 | 446 | 425 | 421 | 415 | 415 | 413 | 408 | 422 | 436 | 447 | 456 | 489 | 562 | 480 | 483 | 469 | 464 | 456 | 451 | 451 | 10825 | |
| 31 | | 446 | 439 | 430 | 409 | 447 | 435 | 418 | 401 | 386 | 391 | 387 | 423 | 436 | 422 | 446 | 480 | 473 | 496 | 485 | 477 | 465 | 459 | 461 | 449 | 440 | 10561 | |
| MEAN | | 416 | 415 | 416 | 421 | 423 | 427 | 423 | 421 | 414 | 407 | 407 | 417 | 425 | 444 | 461 | 484 | 488 | 507 | 505 | 492 | 479 | 459 | 453 | 427 | 443 | 10631 | |
| MEAN Q | | 460 | 459 | 455 | 456 | 459 | 459 | 452 | 446 | 442 | 433 | 425 | 426 | 440 | 445 | 462 | 473 | 481 | 482 | 489 | 494 | 490 | 482 | 476 | 473 | 461 | 11059 | |
| MEAN D | | 344 | 352 | 327 | 337 | 360 | 372 | 371 | 379 | 375 | 363 | 383 | 406 | 417 | 453 | 477 | 571 | 528 | 575 | 558 | 502 | 458 | 407 | 416 | 298 | 418 | 10029 | |

LERWICK

HORIZONTAL INTENSITY

| 1982 | | AUGUST | | | | | | | | | | | | | | | | | | | | | | | | 14500 GAMMAS PLUS TABULAR QUANTITIES (UNIT 1 GAMMA) | |
|------|---|--------|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---|-------|
| U T. | Ø | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN | SUM |
| 1 | | 437 | 432 | 443 | 447 | 450 | 437 | 444 | 444 | 431 | 419 | 413 | 415 | 420 | 418 | 438 | 453 | 474 | 481 | 486 | 492 | 484 | 470 | 450 | 427 | 446 | 10705 |
| 2 | D | 364 | 416 | 437 | 457 | 445 | 452 | 467 | 461 | 443 | 410 | 396 | 381 | 413 | 462 | 508 | 492 | 568 | 569 | 592 | 526 | 489 | 289 | 372 | 433 | 452 | 10842 |
| 3 | | 446 | 419 | 399 | 418 | 425 | 427 | 425 | 420 | 406 | 388 | 391 | 402 | 443 | 450 | 507 | 479 | 458 | 515 | 505 | 474 | 464 | 471 | 450 | 454 | 443 | 10636 |
| 4 | | 446 | 441 | 439 | 425 | 444 | 452 | 450 | 439 | 427 | 418 | 418 | 406 | 426 | 456 | 476 | 466 | 489 | 505 | 494 | 493 | 481 | 469 | 462 | 460 | 453 | 10882 |
| 5 | | 456 | 446 | 444 | 444 | 450 | 450 | 444 | 427 | 396 | 396 | 415 | 416 | 427 | 422 | 461 | 474 | 517 | 475 | 479 | 499 | 483 | 471 | 467 | 463 | 451 | 10822 |
| 6 | | 451 | 450 | 434 | 450 | 462 | 458 | 449 | 443 | 433 | 409 | 377 | 381 | 395 | 436 | 430 | 454 | 478 | 493 | 511 | 546 | 524 | 492 | 482 | 442 | 453 | 10876 |
| 7 | D | 234 | -19 | 400 | 333 | 176 | -5 | -168 | 159 | 387 | 354 | 361 | 485 | 655 | 641 | 769 | 921 | 624 | 446 | 420 | 407 | 410 | 417 | 422 | 426 | 385 | 9255 |
| 8 | Q | 430 | 431 | 434 | 436 | 434 | 432 | 425 | 412 | 402 | 398 | 395 | 402 | 424 | 433 | 443 | 441 | 457 | 464 | 467 | 478 | 467 | 461 | 454 | 453 | 436 | 10473 |
| 9 | | 447 | 441 | 446 | 448 | 450 | 443 | 429 | 403 | 417 | 399 | 398 | 409 | 408 | 412 | 415 | 486 | 494 | 537 | 578 | 525 | 488 | 386 | 343 | 412 | 442 | 10614 |
| 10 | D | 422 | 405 | 348 | 439 | 430 | 430 | 416 | 414 | 375 | 389 | 385 | 381 | 400 | 402 | 439 | 500 | 516 | 515 | 506 | 509 | 476 | 453 | 445 | 418 | 434 | 10413 |
| 11 | | 433 | 434 | 412 | 433 | 450 | 449 | 439 | 429 | 415 | 385 | 375 | 370 | 375 | 436 | 426 | 543 | 714 | 729 | 605 | 504 | 455 | 440 | 437 | 439 | 463 | 11127 |
| 12 | | 435 | 436 | 440 | 436 | 439 | 430 | 384 | 411 | 419 | 413 | 405 | 362 | 385 | 436 | 518 | 525 | 490 | 494 | 482 | 460 | 453 | 447 | 435 | 443 | 441 | 10578 |
| 13 | | 437 | 440 | 446 | 422 | 434 | 445 | 434 | 422 | 405 | 403 | 409 | 415 | 415 | 436 | 435 | 456 | 480 | 458 | 461 | 470 | 465 | 459 | 452 | 452 | 439 | 10549 |
| 14 | Q | 450 | 444 | 444 | 438 | 444 | 446 | 440 | 431 | 422 | 410 | 405 | 405 | 410 | 425 | 447 | 478 | 484 | 456 | 468 | 484 | 464 | 461 | 454 | 453 | 444 | 10663 |
| 15 | Q | 450 | 451 | 444 | 445 | 449 | 448 | 442 | 436 | 431 | 418 | 411 | 406 | 406 | 421 | 432 | 443 | 449 | 458 | 470 | 466 | 465 | 466 | 463 | 456 | 443 | 10626 |
| 16 | Q | 452 | 453 | 452 | 452 | 449 | 444 | 445 | 432 | 414 | 403 | 401 | 406 | 418 | 430 | 445 | 472 | 471 | 448 | 457 | 463 | 480 | 467 | 458 | 450 | 444 | 10662 |
| 17 | | 450 | 452 | 452 | 452 | 449 | 440 | 449 | 442 | 439 | 421 | 411 | 408 | 418 | 435 | 435 | 450 | 461 | 463 | 473 | 495 | 480 | 463 | 456 | 441 | 447 | 10735 |
| 18 | | 424 | 443 | 452 | 458 | 447 | 448 | 440 | 42 | | | | | | | | | | | | | | | | | | |

LERWICK

HORIZONTAL INTENSITY

1982 SEPTEMBER

14500 GAMMAS PLUS TABULAR QUANTITIES (UNIT 1 GAMMA)

| U.T. | Ø | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN | SUM |
|--------|---|---------|---------|-----|---------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------|-----|-----|-----|-----|-----|-----|---------|-----|-------|-------|
| 1 | Q | 445 | 444 | 444 | 449 | 453 | 452 | 445 | 433 | 418 | 411 | 409 | 416 | 424 | 423 | 435 | 463 | 468 | 475 | 459 | 465 | 466 | 465 | 464 | 467 | 445 | 10693 |
| 2 | | 464 | 463 | 438 | 450 | 456 | 463 | 449 | 433 | 429 | 419 | 407 | 411 | 433 | 435 | 431 | 445 | 476 | 484 | 491 | 469 | 469 | 459 | 434 | 431 | 447 | 10739 |
| 3 | | 444 | 452 | 463 | 443 | 444 | 461 | 440 | 431 | 418 | 422 | 387 | 382 | 395 | 444 | 443 | 428 | 441 | 457 | 477 | 471 | 463 | 457 | 456 | 456 | 440 | 10575 |
| 4 | | 459 | 453 | 449 | 454 | 452 | 458 | 442 | 459 | 445 | 408 | 374 | 378 | 401 | 442 | 477 | 459 | 508 | 502 | 459 | 456 | 452 | 408 | 458 | 411 | 444 | 10664 |
| 5 | | 428 | 425 | 429 | 407 | 394 | 422 | 394 | 408 | 441 | 380 | 387 | 406 | 442 | 484 | 460 | 517 | 482 | 434 | 438 | 448 | 460 | 452 | 424 | 444 | 432 | 10366 |
| 6 | D | 132 | 125 | 94 | 163 | 39 | 329 | 267 | 267 | 238 | 286 | 303 | 352 | 441 | 474 | 537 | 448 | 436 | 432 | 348 | 295 | 282 | 278 | 295 | 289 | 298 | 7150 |
| 7 | D | 158 | 236 | 189 | 153 | 89 | 336 | 398 | 399 | 383 | 297 | 344 | 389 | 523 | 556 | 449 | 461 | 550 | 652 | 619 | 430 | 418 | 413 | 410 | 430 | 387 | 9282 |
| 8 | | 416 | 418 | 417 | 421 | 424 | 424 | 418 | 411 | 400 | 390 | 381 | 396 | 410 | 420 | 428 | 431 | 429 | 429 | 441 | 438 | 445 | 452 | 442 | 449 | 422 | 10130 |
| 9 | | 459 | 448 | 418 | 415 | 416 | 435 | 436 | 416 | 408 | 390 | 403 | 399 | 395 | 410 | 427 | 465 | 444 | 470 | 488 | 462 | 470 | 446 | 440 | 438 | 433 | 10398 |
| 10 | Q | 449 | 442 | 424 | 435 | 438 | 438 | 439 | 432 | 424 | 411 | 404 | 404 | 408 | 413 | 424 | 449 | 452 | 435 | 440 | 446 | 453 | 451 | 446 | 445 | 433 | 10402 |
| 11 | | 443 | 437 | 441 | 442 | 449 | 444 | 436 | 433 | 424 | 418 | 415 | 404 | 424 | 429 | 413 | 433 | 438 | 465 | 454 | 464 | 455 | 446 | 444 | 451 | 437 | 10502 |
| 12 | | 449 | 443 | 436 | 442 | 435 | 438 | 438 | 431 | 420 | 415 | 413 | 421 | 425 | 429 | 431 | 448 | 434 | 442 | 460 | 472 | 458 | 448 | 451 | 438 | 438 | 10517 |
| 13 | | 400 | 340 | 414 | 441 | 437 | 431 | 422 | 415 | 404 | 399 | 404 | 393 | 441 | 419 | 439 | 435 | 434 | 451 | 448 | 450 | 452 | 446 | 443 | 454 | 425 | 10212 |
| 14 | | 448 | 445 | 443 | 442 | 432 | 432 | 429 | 426 | 421 | 411 | 408 | 405 | 412 | 422 | 431 | 426 | 429 | 462 | 489 | 463 | 449 | 452 | 442 | 442 | 436 | 10461 |
| 15 | | 443 | 444 | 443 | 440 | 435 | 426 | 474 | 435 | 423 | 410 | 404 | 403 | 408 | 419 | 444 | 453 | 449 | 445 | 457 | 454 | 459 | 455 | 460 | 449 | 439 | 10532 |
| 16 | | 446 | 443 | 447 | 449 | 452 | 451 | 448 | 440 | 431 | 418 | 405 | 402 | 421 | 420 | 419 | 444 | 446 | 449 | 466 | 466 | 450 | 451 | 450 | 452 | 440 | 10566 |
| 17 | Q | 446 | 449 | 448 | 446 | 446 | 444 | 438 | 431 | 414 | 407 | 397 | 407 | 415 | 415 | 422 | 420 | 443 | 442 | 448 | 451 | 450 | 450 | 449 | 448 | 434 | 10426 |
| 18 | | 443 | 449 | 429 | 416 | 440 | 440 | 431 | 426 | 409 | 408 | 407 | 407 | 419 | 459 | 455 | 437 | 435 | 452 | 468 | 481 | 475 | 445 | 442 | 449 | 438 | 10522 |
| 19 | | 462 | 435 | 425 | 429 | 421 | 421 | 418 | 417 | 412 | 403 | 395 | 404 | 418 | 463 | 423 | 484 | 432 | 478 | 469 | 460 | 467 | 446 | 456 | 441 | 436 | 10479 |
| 20 | | 446 | 445 | 441 | 443 | 442 | 436 | 413 | 414 | 408 | 400 | 399 | 401 | 407 | 421 | 444 | 459 | 438 | 455 | 453 | 455 | 454 | 469 | 468 | 441 | 435 | 10452 |
| 21 | D | 432 | 403 | 398 | 390 | 370 | 441 | 433 | 394 | 377 | 389 | 401 | 425 | 429 | 409 | 410 | 422 | 450 | 448 | 452 | 453 | 425 | 200 | 325-210 | 378 | 9066 | |
| 22 | D | 272-260 | -11-307 | 128 | -78-318 | 67 | 283 | 252 | 347 | 466 | 458 | 455 | 530 | 530 | 499 | 501 | 476 | 459 | 413 | 350 | 299 | 377 | 258 | 6188 | | | |
| 23 | | 411 | 422 | 376 | 428 | 441 | 396 | 412 | 404 | 397 | 385 | 387 | 387 | 400 | 406 | 415 | 425 | 451 | 447 | 448 | 455 | 451 | 413 | 386 | 399 | 414 | 9942 |
| 24 | | 435 | 425 | 437 | 435 | 450 | 460 | 433 | 411 | 418 | 413 | 404 | 394 | 394 | 408 | 452 | 449 | 429 | 425 | 439 | 441 | 447 | 444 | 452 | 445 | 431 | 10340 |
| 25 | | 445 | 441 | 441 | 443 | 442 | 442 | 442 | 438 | 428 | 415 | 402 | 395 | 400 | 402 | 413 | 421 | 435 | 483 | 472 | 462 | 449 | 462 | 469 | 465 | 438 | 10507 |
| 26 | D | 463 | 468 | 466 | 460 | 472 | 476 | 470 | 455 | 440 | 427 | 418 | 403 | 473 | 789 | 918 | 9781009 | 829 | 701 | 419 | 166 | 338 | 280 | -39 | 511 | 12279 | |
| 27 | | 48 | 20 | 325 | 389 | 393 | 395 | 409 | 393 | 389 | 371 | 385 | 402 | 387 | 408 | 411 | 428 | 449 | 478 | 472 | 448 | 438 | 432 | 429 | 401 | 379 | 9100 |
| 28 | | 346 | 414 | 401 | 406 | 416 | 433 | 434 | 430 | 424 | 419 | 414 | 411 | 407 | 412 | 419 | 432 | 431 | 448 | 444 | 447 | 450 | 457 | 454 | 448 | 425 | 10197 |
| 29 | Q | 439 | 432 | 432 | 445 | 446 | 451 | 449 | 444 | 423 | 409 | 411 | 397 | 393 | 384 | 408 | 422 | 430 | 440 | 441 | 446 | 443 | 443 | 443 | 444 | 430 | 10315 |
| 30 | Q | 443 | 444 | 445 | 446 | 448 | 450 | 449 | 442 | 425 | 407 | 400 | 396 | 394 | 384 | 401 | 442 | 442 | 441 | 450 | 437 | 442 | 405 | 394 | 432 | 427 | 10259 |
| MEAN | | 400 | 381 | 395 | 391 | 400 | 415 | 403 | 408 | 404 | 393 | 394 | 402 | 420 | 442 | 454 | 465 | 470 | 475 | 469 | 449 | 436 | 424 | 423 | 396 | 421 | 10109 |
| MEAN Q | | 444 | 442 | 439 | 444 | 446 | 447 | 444 | 436 | 421 | 409 | 404 | 404 | 407 | 404 | 418 | 439 | 447 | 447 | 448 | 449 | 451 | 443 | 439 | 447 | 434 | 10419 |
| MEAN D | | 291 | 194 | 227 | 172 | 220 | 301 | 250 | 316 | 344 | 330 | 363 | 407 | 465 | 537 | 569 | 568 | 589 | 572 | 519 | 411 | 341 | 316 | 322 | 169 | 366 | 8793 |

LERWICK

HORIZONTAL INTENSITY

1982 OCTOBER

14500 GAMMAS PLUS TABULAR QUANTITIES (UNIT 1 GAMMA)

| U.T. | Ø | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN | SUM |
|------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|-------|
| 1 | | 434 | 439 | 433 | 446 | 445 | 449 | 450 | 433 | 415 | 401 | 397 | 399 | 415 | 428 | 441 | 412 | 462 | 524 | 507 | 433 | 437 | 393 | 108 | 287 | 416 | 9988 |
| 2 | | 270 | 295 | 216 | 422 | 444 | 444 | 440 | 424 | 403 | 394 | 403 | 399 | 417 | 463 | 422 | 410 | 432 | 447 | 444 | 439 | 441 | 432 | 428 | 434 | 407 | 9763 |
| 3 | | 429 | 422 | 439 | 442 | 441 | 441 | 449 | 441 | 433 | 416 | 402 | 403 | 410 | 419 | 422 | 420 | 433 | 442 | 452 | 453 | 445 | 440 | 441 | 442 | 432 | 10377 |
| 4 | | 442 | 442 | 439 | 439 | 443 | 452 | 446 | 449 | 432 | 404 | 397 | 390 | 402 | 390 | 400 | 419 | 423 | 436 | 444 | 441 | 441 | 446 | 449 | 448 | 430 | 10314 |
| 5 | | 445 | 446 | 439 | 446 | 433 | 449 | 459 | 449 | 432 | 419 | 395 | 387 | 391 | 407 | 418 | 432 | 445 | 452 | 449 | 449 | 456 | 454 | 446 | 440 | 435 | 10438 |
| 6 | | 444 | 455 | 450 | 453 | 458 | 469 | 479 | 465 | 445 | 434 | 419 | 403 | 404 | 444 | 450 | 432 | 418 | 447 | 455 | 448 | 394 | 408 | 426 | 434 | 439 | 10534 |
| 7 | D | 413 | 331 | 330 | 406 | 406 | 397 | 374 | 374 | 375 | 391 | 380 | 387 | 403 | 429 | 457 | 497 | 487 | 466 | 426 | 425 | 432 | 434 | 435 | 433 | 412 | 9888 |
| 8 | | 424 | 425 | 431 | 424 | 400 | 446 | 448 | 442 | 429 | 409 | 398 | 399 | 403 | 415 | 446 | 441 | 476 | 495 | 469 | 467 | 442 | 424 | 428 | 432 | 434 | 10413 |
| 9 | Q | 445 | 452 | 444 | 444 | 441 | 443 | 443 | 432 | 428 | 415 | 407 | 404 | 408 | 416 | 425 | 438 | 443 | 449 | 453 | 456 | 457 | 455 | 460 | 437 | 10497 | |
| 10 | | 432 | 443 | 453 | 452 | 453 | 456 | 458 | 455 | 449 | 437 | 429 | 425 | 415 | 418 | 435 | 442 | 452 | 459 | 459 | 460 | 466 | 445 | 449 | 463 | 446 | 10705 |
| 11 | | 452 | 456 | 449 | 450 | 451 | 449 | 459 | 453 | 445 | 435 | 421 | 414 | 410 | 418 | 429 | 439 | 448 | 450 | 456 | 460 | 464 | 456 | 452 | 452 | 444 | 10668 |
| 12 | | 452 | 449 | 452 | 452 | 455 | 459 | 455 | 453 | 440 | 431 | 421 | 414 | 419 | 422 | 432 | 473 | 445 | 449 | 456 | 468 | 462 | 411 | 428 | 445 | 443 | 10643 |
| 13 | D | 443 | 442 | 430 | 439 | 434 | 441 | 441 | 444 | 446 | 428 | 405 | 404 | 415 | 433 | 466 | 570 | 534 | 478 | 425 | 428 | 389 | 296 | 192 | 306 | 422 | 10129 |
| 14 | D | 342 | 309 | 195 | 306 | 406 | 424 | 421 | 400 | 382 | 396 | 397 | 410 | 436 | 444 | 447 | 485 | 484 | 486 | 495 | 451 | 446 | 446 | 432 | 438 | 411 | 9878 |
| 15 | Q | 435 | 435 | 435 | 435 | 436 | 437 | 436 | 435 | 429 | 418 | 405 | 410 | 429 | 428 | 428 | 435 | 442 | 449 | 468 | 454 | 456 | 457 | 456 | 455 | 437 | 10503 |
| 16 | | 452 | 455 | 456 | 450 | 452 | 456 | 452 | 448 | 438 | 428 | 422 | 424 | 433 | 438 | 454 | 454 | 453 | 441 | 452 | 456 | 459 | 446 | 435 | 441 | 445 | 10695 |
| 17 | | 445 | 439 | 399 | 376 | 435 | 444 | 445 | 441 | 432 | 425 | 418 | 408 | 410 | 422 | 435 | 439 | 445 | 452 | 452 | 444 | 455 | 404 | 401 | 440 | 429 | 10306 |
| 18 | | 441 | 439 | 449 | 437 | 434 | 441 | 447 | 443 | 432 | 425 | 418 | 407 | 420 | 425 | 431 | 446 | 452 | 446 | 442 | 437 | 445 | 447 | 444 | 443 | 437 | 10491 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | |

LERWICK

HORIZONTAL INTENSITY

1982 NOVEMBER

14500 GAMMAS PLUS TABULAR QUANTITIES (UNIT 1 GAMMA)

| U-T | | 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 | MEAN | SUM |
|--------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-------|-----|
| 1 | D | 352 | 200 | 385 | 433 | 436 | 439 | 434 | 431 | 419 | 396 | 390 | 404 | 424 | 440 | 447 | 502 | 454 | 460 | 487 | 420 | 400 | 404 | 419 | 418 | 416 | 9994 | |
| 2 | D | 422 | 424 | 415 | 425 | 436 | 443 | 430 | 433 | 435 | 422 | 398 | 385 | 406 | 426 | 454 | 467 | 480 | 534 | 463 | 464 | 451 | 408 | 391 | 342 | 431 | 10354 | |
| 3 | | 396 | 384 | 359 | 383 | 400 | 420 | 428 | 410 | 397 | 406 | 397 | 407 | 412 | 427 | 430 | 424 | 429 | 430 | 433 | 435 | 437 | 439 | 439 | 438 | 415 | 9960 | |
| 4 | Q | 437 | 436 | 436 | 437 | 440 | 443 | 444 | 449 | 442 | 433 | 420 | 411 | 410 | 419 | 418 | 427 | 436 | 441 | 445 | 437 | 427 | 428 | 437 | 437 | 433 | 10390 | |
| 5 | | 453 | 444 | 445 | 446 | 447 | 451 | 445 | 455 | 447 | 436 | 425 | 412 | 412 | 416 | 432 | 435 | 450 | 447 | 453 | 444 | 452 | 453 | 450 | 450 | 441 | 10600 | |
| 6 | | 452 | 453 | 448 | 447 | 448 | 450 | 457 | 456 | 436 | 433 | 423 | 426 | 430 | 426 | 429 | 435 | 430 | 442 | 448 | 450 | 451 | 451 | 448 | 444 | 442 | 10613 | |
| 7 | Q | 443 | 439 | 443 | 445 | 447 | 450 | 453 | 452 | 460 | 431 | 422 | 419 | 425 | 428 | 434 | 441 | 446 | 447 | 453 | 455 | 452 | 453 | 453 | 452 | 443 | 10643 | |
| 8 | | 450 | 447 | 449 | 451 | 452 | 453 | 456 | 458 | 457 | 449 | 440 | 441 | 445 | 454 | 460 | 462 | 479 | 470 | 536 | 461 | 455 | 455 | 453 | 450 | 457 | 10983 | |
| 9 | Q | 454 | 449 | 447 | 450 | 454 | 457 | 454 | 450 | 451 | 440 | 433 | 429 | 431 | 440 | 445 | 450 | 450 | 454 | 457 | 457 | 457 | 458 | 459 | 458 | 449 | 10784 | |
| 10 | | 445 | 440 | 447 | 444 | 447 | 449 | 454 | 454 | 447 | 434 | 421 | 427 | 426 | 423 | 438 | 437 | 438 | 450 | 447 | 440 | 446 | 450 | 443 | 446 | 441 | 10593 | |
| 11 | | 450 | 447 | 436 | 449 | 450 | 450 | 449 | 443 | 439 | 420 | 413 | 436 | 428 | 436 | 440 | 441 | 450 | 450 | 451 | 450 | 451 | 447 | 441 | 442 | 442 | 10617 | |
| 12 | | 433 | 440 | 444 | 443 | 443 | 447 | 444 | 446 | 443 | 433 | 409 | 403 | 419 | 431 | 436 | 443 | 446 | 442 | 436 | 456 | 446 | 442 | 447 | 443 | 438 | 10515 | |
| 13 | | 447 | 441 | 436 | 443 | 440 | 444 | 447 | 445 | 440 | 422 | 404 | 420 | 426 | 433 | 461 | 439 | 446 | 453 | 435 | 435 | 436 | 441 | 448 | 447 | 439 | 10547 | |
| 14 | | 447 | 452 | 447 | 449 | 451 | 451 | 450 | 450 | 436 | 416 | 426 | 424 | 430 | 433 | 440 | 444 | 436 | 442 | 447 | 447 | 450 | 451 | 460 | 451 | 443 | 10630 | |
| 15 | | 447 | 443 | 438 | 447 | 445 | 448 | 452 | 450 | 444 | 430 | 409 | 419 | 430 | 435 | 437 | 452 | 437 | 431 | 444 | 451 | 452 | 440 | 440 | 444 | 440 | 10565 | |
| 16 | | 446 | 443 | 440 | 441 | 444 | 443 | 443 | 438 | 440 | 434 | 421 | 420 | 421 | 430 | 438 | 443 | 447 | 450 | 450 | 452 | 450 | 447 | 458 | 444 | 441 | 10583 | |
| 17 | Q | 443 | 446 | 447 | 448 | 451 | 456 | 456 | 456 | 450 | 444 | 436 | 433 | 433 | 440 | 447 | 454 | 455 | 464 | 461 | 459 | 458 | 438 | 442 | 452 | 448 | 10769 | |
| 18 | | 447 | 444 | 438 | 444 | 463 | 462 | 453 | 450 | 453 | 445 | 434 | 431 | 438 | 432 | 434 | 433 | 430 | 419 | 439 | 443 | 440 | 442 | 442 | 441 | 441 | 10597 | |
| 19 | | 453 | 436 | 429 | 433 | 442 | 447 | 447 | 444 | 443 | 435 | 426 | 419 | 426 | 433 | 438 | 438 | 436 | 444 | 452 | 447 | 439 | 440 | 442 | 448 | 439 | 10537 | |
| 20 | Q | 450 | 450 | 451 | 447 | 450 | 450 | 450 | 447 | 442 | 438 | 430 | 423 | 423 | 431 | 434 | 440 | 447 | 450 | 454 | 446 | 447 | 450 | 451 | 451 | 444 | 10652 | |
| 21 | | 448 | 447 | 449 | 443 | 446 | 463 | 464 | 469 | 460 | 443 | 430 | 427 | 418 | 418 | 430 | 433 | 434 | 446 | 461 | 481 | 449 | 401 | 310 | 255 | 430 | 10325 | |
| 22 | | 106 | 203 | 133 | 269 | 219 | 308 | 383 | 397 | 421 | 421 | 415 | 413 | 415 | 421 | 427 | 431 | 436 | 438 | 434 | 437 | 437 | 437 | 438 | 370 | 8876 | | |
| 23 | | 433 | 433 | 434 | 438 | 439 | 442 | 443 | 443 | 438 | 433 | 433 | 437 | 443 | 453 | 444 | 462 | 626 | 540 | 515 | 354 | 321 | 299 | 180 | 249 | 422 | 10132 | |
| 24 | D | 389 | 404 | 414 | 417 | 420 | 419 | 419 | 418 | 415 | 422 | 432 | 446 | 461 | 586 | 818 | 952 | 993 | 792 | 429 | 370 | 327 | 120 | 136 | 31 | 459 | 11030 | |
| 25 | D | 202 | 371 | 372 | 354 | 294 | 288 | 363 | 380 | 369 | 391 | 427 | 414 | 393 | 418 | 428 | 424 | 423 | 441 | 401 | 413 | 418 | 418 | 428 | 417 | 385 | 9247 | |
| 26 | | 416 | 419 | 412 | 391 | 413 | 412 | 417 | 430 | 400 | 398 | 399 | 416 | 402 | 405 | 433 | 419 | 437 | 426 | 430 | 434 | 433 | 440 | 419 | 422 | 417 | 10023 | |
| 27 | | 423 | 424 | 424 | 432 | 438 | 443 | 441 | 427 | 412 | 407 | 407 | 408 | 404 | 407 | 430 | 433 | 430 | 433 | 444 | 428 | 433 | 433 | 434 | 435 | 426 | 10230 | |
| 28 | | 430 | 409 | 431 | 442 | 441 | 449 | 437 | 437 | 434 | 430 | 423 | 416 | 414 | 414 | 428 | 432 | 439 | 443 | 410 | 419 | 437 | 406 | 422 | 391 | 426 | 10234 | |
| 29 | D | 408 | 426 | 427 | 428 | 436 | 436 | 443 | 444 | 444 | 433 | 419 | 412 | 426 | 438 | 418 | 440 | 562 | 473 | 507 | 449 | 310 | 216 | 433 | 424 | 427 | 10252 | |
| 30 | | 406 | 389 | 405 | 412 | 422 | 427 | 434 | 428 | 426 | 423 | 422 | 419 | 427 | 427 | 422 | 439 | 438 | 438 | 440 | 441 | 441 | 443 | 441 | 443 | 427 | 10253 | |
| MEAN | | 414 | 416 | 419 | 428 | 428 | 435 | 440 | 440 | 435 | 427 | 420 | 419 | 424 | 434 | 449 | 459 | 471 | 463 | 453 | 439 | 430 | 415 | 417 | 410 | 433 | 10385 | |
| MEAN Q | | 445 | 444 | 445 | 445 | 448 | 451 | 451 | 451 | 449 | 437 | 428 | 423 | 424 | 432 | 436 | 442 | 447 | 451 | 454 | 451 | 448 | 445 | 448 | 450 | 444 | 10645 | |
| MEAN D | | 355 | 365 | 403 | 411 | 404 | 405 | 418 | 421 | 416 | 413 | 413 | 412 | 422 | 462 | 513 | 557 | 582 | 540 | 457 | 423 | 381 | 313 | 361 | 326 | 424 | 10173 | |

LERWICK

HORIZONTAL INTENSITY

1982 DECEMBER

14500 GAMMAS PLUS TABULAR QUANTITIES (UNIT 1 GAMMA)

| U-T | | 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 | MEAN | SUM |
|-----|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|-----|
| 1 | Q | 441 | 441 | 442 | 442 | 443 | 443 | 444 | 443 | 436 | 433 | 428 | 426 | 429 | 435 | 437 | 439 | 441 | 443 | 442 | 443 | 445 | 444 | 445 | 444 | 439 | 10549 | |
| 2 | Q | 443 | 443 | 443 | 444 | 447 | 448 | 447 | 447 | 445 | 438 | 433 | 433 | 433 | 429 | 430 | 439 | 447 | 449 | 450 | 449 | 447 | 447 | 442 | 447 | 442 | 10620 | |
| 3 | | 444 | 442 | 447 | 449 | 451 | 454 | 457 | 461 | 457 | 450 | 442 | 429 | 437 | 430 | 431 | 443 | 426 | 430 | 443 | 446 | 445 | 444 | 441 | 433 | 443 | 10632 | |
| 4 | | 432 | 424 | 434 | 442 | 443 | 444 | 447 | 450 | 449 | 443 | 439 | 438 | 440 | 440 | 444 | 449 | 454 | 456 | 458 | 457 | 460 | 454 | 445 | 398 | 443 | 10640 | |
| 5 | | 371 | 392 | 401 | 402 | 416 | 439 | 433 | 433 | 434 | 432 | 423 | 417 | 415 | 420 | 427 | 437 | 440 | 442 | 447 | 443 | 448 | 445 | 446 | 443 | 427 | 10246 | |
| 6 | Q | 443 | 440 | 436 | 440 | 440 | 441 | 445 | 447 | 447 | 444 | 440 | 434 | 435 | 435 | 439 | 443 | 448 | 452 | 458 | 458 | 458 | 457 | 454 | 451 | 445 | 10685 | |
| 7 | | 450 | 447 | 448 | 451 | 451 | 447 | 471 | 472 | 464 | 459 | 458 | 458 | 463 | 450 | 432 | 458 | 531 | 516 | 590 | 646 | 449 | 372 | 269 | 351 | 458 | 11003 | |
| 8 | | 304 | 301 | 367 | 420 | 426 | 435 | 430 | 413 | 418 | 425 | 421 | 416 | 422 | 450 | 492 | 465 | 501 | 642 | 675 | 567 | 452 | 425 | 417 | 412 | 446 | 10703 | |
| 9 | | 413 | 411 | 412 | 412 | 411 | 429 | 437 | 434 | 428 | 415 | 416 | 412 | 420 | 396 | 412 | 436 | 432 | 434 | 440 | 439 | 440 | 443 | 440 | 444 | 425 | 10208 | |
| 10 | D | 440 | 440 | 441 | 443 | 443 | 443 | 413 | 423 | 417 | 384 | 381 | 421 | 414 | 414 | 444 | 466 | 477 | 533 | 613 | 687 | 548 | 471 | 445 | 437 | 460 | 11038 | |
| 11 | | 409 | 413 | 412 | 407 | 419 | 426 | 427 | 429 | 428 | 432 | 427 | 420 | 413 | 418 | 434 | 446 | 426 | 447 | 455 | 443 | 457 | 404 | 420 | 420 | 426 | 10232 | |
| 12 | | 416 | 427 | 426 | 426 | 430 | 431 | 430 | 433 | 434 | 433 | 430 | 419 | 412 | 423 | 427 | 437 | 436 | 402 | 442 | 444 | 443 | 443 | 437 | 440 | 430 | 10321 | |
| 13 | Q | 436 | 437 | 438 | 434 | 437 | 438 | 439 | 437 | 436 | 430 | 433 | 435 | 434 | 436 | 438 | 449 | 446 | 444 | 447 | 444 | 444 | 440 | 443 | 443 | 438 | 10524 | |
| 14 | | 447 | 443 | 441 | 440 | 447 | 447 | 443 | 441 | 439 | 439 | 440 | 440 | 440 | 442 | 442 | 443 | 444 | 449 | 454 | 454 | 454 | 449 | 399 | 436 | 442 | 10613 | |
| 15 | | 438 | 436 | 443 | 433 | 437 | 453 | 454 | 448 | 449 | 444 | 444 | 452 | 442 | 438 | 444 | 450 | 456 | 460 | 461 | 461 | 459 | 456 | 456 | 454 | 448 | 10768 | |
| 16 | | 454 | 455 | 455 | 457 | 459 | 459 | 456 | 446 | 448 | 443 | 443 | 436 | 438 | 441 | 450 | 432 | 427 | 427 | 417 | 413 | 403 | 398 | 390 | 412 | 436 | 10459 | |
| 17 | D | 416 | 396 | 375 | 407 | 449 | 399 | 420 | 433 | 275 | 389 | 432 | 461 | 479 | 504 | 546 | 458 | 441 | 431 | 434 | 491 | 576 | 482 | 457 | 388 | 439 | 10539 | |
| 18 | D | 383 | 357 | 421 | 399 | 414 | 423 | 409 | 428 | 414 | 347 | 354 | 385 | 420 | 434 | 430 | 447 | 471 | 467 | 473 | 461 | 456 | | | | | | |

LERWICK

VERTICAL INTENSITY

1982 JANUARY

47500 GAMMAS PLUS TABULAR QUANTITIES (UNIT 1 GAMMA)

| U T | Ø | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN | SUM |
|--------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
| 1 | | 375 | 377 | 374 | 366 | 368 | 373 | 377 | 380 | 382 | 386 | 379 | 381 | 379 | 379 | 382 | 387 | 414 | 401 | 395 | 390 | 390 | 390 | 385 | 377 | 383 | 9187 |
| 2 | | 377 | 372 | 376 | 376 | 376 | 376 | 379 | 381 | 381 | 382 | 382 | 378 | 377 | 377 | 386 | 399 | 415 | 417 | 425 | 425 | 442 | 430 | 401 | 386 | 392 | 9416 |
| 3 | D | 365 | 359 | 330 | 346 | 354 | 351 | 364 | 372 | 380 | 389 | 392 | 390 | 386 | 384 | 389 | 397 | 427 | 401 | 401 | 416 | 409 | 380 | 387 | 317 | 378 | 9086 |
| 4 | | 321 | 338 | 361 | 373 | 381 | 382 | 384 | 385 | 390 | 391 | 391 | 390 | 389 | 390 | 395 | 398 | 407 | 410 | 416 | 407 | 398 | 393 | 384 | 368 | 385 | 9242 |
| 5 | | 373 | 376 | 378 | 381 | 379 | 377 | 378 | 379 | 379 | 386 | 389 | 388 | 382 | 383 | 383 | 381 | 380 | 379 | 376 | 378 | 381 | 381 | 382 | 382 | 380 | 9131 |
| 6 | | 379 | 376 | 363 | 364 | 364 | 353 | 351 | 360 | 368 | 368 | 374 | 379 | 384 | 383 | 385 | 384 | 379 | 377 | 376 | 377 | 389 | 394 | 390 | 390 | 375 | 9007 |
| 7 | | 389 | 390 | 381 | 381 | 376 | 375 | 372 | 369 | 370 | 373 | 377 | 378 | 379 | 385 | 387 | 391 | 400 | 388 | 382 | 395 | 401 | 398 | 391 | 398 | 384 | 9226 |
| 8 | | 393 | 376 | 359 | 360 | 363 | 368 | 372 | 372 | 376 | 377 | 376 | 377 | 378 | 381 | 386 | 386 | 382 | 382 | 386 | 385 | 379 | 390 | 391 | 390 | 378 | 9085 |
| 9 | Q | 386 | 385 | 385 | 380 | 376 | 377 | 378 | 377 | 376 | 378 | 381 | 382 | 381 | 382 | 386 | 389 | 386 | 385 | 386 | 386 | 383 | 385 | 384 | 386 | 382 | 9180 |
| 10 | | 392 | 386 | 382 | 380 | 380 | 377 | 376 | 373 | 373 | 372 | 372 | 373 | 372 | 374 | 380 | 381 | 381 | 379 | 377 | 378 | 383 | 394 | 392 | 390 | 380 | 9117 |
| 11 | | 385 | 384 | 386 | 374 | 373 | 373 | 372 | 371 | 370 | 366 | 365 | 367 | 368 | 373 | 379 | 381 | 384 | 384 | 386 | 387 | 382 | 380 | 378 | 377 | 377 | 9045 |
| 12 | Q | 377 | 374 | 373 | 375 | 376 | 377 | 377 | 376 | 373 | 371 | 370 | 370 | 371 | 373 | 379 | 381 | 382 | 380 | 380 | 379 | 377 | 375 | 374 | 373 | 375 | 9013 |
| 13 | Q | 373 | 374 | 373 | 374 | 375 | 373 | 373 | 371 | 373 | 368 | 366 | 366 | 366 | 368 | 371 | 375 | 375 | 374 | 375 | 377 | 375 | 373 | 373 | 371 | 372 | 8934 |
| 14 | Q | 371 | 371 | 371 | 371 | 373 | 373 | 373 | 373 | 371 | 370 | 373 | 369 | 369 | 366 | 367 | 370 | 373 | 373 | 373 | 377 | 373 | 375 | 377 | 376 | 372 | 8928 |
| 15 | | 370 | 370 | 369 | 344 | 349 | 360 | 364 | 368 | 369 | 369 | 369 | 369 | 370 | 377 | 388 | 398 | 394 | 388 | 394 | 407 | 404 | 400 | 390 | 377 | 377 | 9057 |
| 16 | | 371 | 369 | 369 | 371 | 369 | 371 | 368 | 369 | 377 | 375 | 377 | 378 | 375 | 381 | 398 | 408 | 421 | 424 | 447 | 396 | 434 | 405 | 391 | 371 | 388 | 9315 |
| 17 | | 366 | 374 | 361 | 356 | 366 | 375 | 379 | 379 | 379 | 385 | 382 | 382 | 382 | 387 | 389 | 393 | 397 | 399 | 393 | 388 | 384 | 383 | 381 | 379 | 381 | 9139 |
| 18 | | 368 | 362 | 369 | 371 | 369 | 374 | 373 | 377 | 380 | 378 | 377 | 377 | 378 | 378 | 381 | 381 | 382 | 382 | 397 | 455 | 429 | 334 | 314 | 322 | 375 | 9008 |
| 19 | Q | 377 | 378 | 380 | 382 | 380 | 380 | 381 | 381 | 385 | 386 | 382 | 380 | 382 | 385 | 386 | 382 | 382 | 380 | 380 | 381 | 380 | 380 | 378 | 377 | 381 | 9145 |
| 20 | | 377 | 369 | 373 | 374 | 374 | 369 | 369 | 374 | 374 | 374 | 376 | 377 | 376 | 372 | 374 | 377 | 377 | 377 | 377 | 382 | 378 | 379 | 380 | 379 | 375 | 9008 |
| 21 | | 378 | 378 | 379 | 378 | 374 | 363 | 364 | 361 | 362 | 364 | 365 | 369 | 369 | 369 | 370 | 370 | 369 | 378 | 405 | 393 | 387 | 387 | 379 | 374 | 374 | 8985 |
| 22 | D | 365 | 374 | 368 | 343 | 326 | 310 | 323 | 340 | 354 | 368 | 382 | 383 | 395 | 404 | 408 | 408 | 420 | 452 | 430 | 433 | 454 | 469 | 354 | 365 | 384 | 9228 |
| 23 | D | 362 | 365 | 348 | 321 | 335 | 345 | 356 | 359 | 371 | 377 | 378 | 386 | 395 | 402 | 395 | 405 | 407 | 402 | 393 | 405 | 402 | 370 | 350 | 347 | 374 | 8976 |
| 24 | | 297 | 305 | 356 | 365 | 365 | 366 | 369 | 369 | 371 | 374 | 377 | 378 | 377 | 387 | 404 | 412 | 408 | 402 | 396 | 397 | 393 | 399 | 360 | 331 | 373 | 8958 |
| 25 | | 353 | 368 | 375 | 374 | 378 | 377 | 379 | 377 | 377 | 376 | 377 | 378 | 378 | 381 | 391 | 391 | 386 | 383 | 380 | 379 | 379 | 381 | 378 | 378 | 378 | 9074 |
| 26 | | 378 | 379 | 378 | 379 | 377 | 376 | 376 | 375 | 374 | 374 | 374 | 371 | 371 | 376 | 378 | 382 | 379 | 380 | 378 | 396 | 376 | 392 | 387 | 369 | 378 | 9075 |
| 27 | | 355 | 365 | 373 | 375 | 373 | 360 | 356 | 366 | 372 | 371 | 372 | 374 | 376 | 389 | 390 | 401 | 409 | 405 | 399 | 397 | 401 | 397 | 355 | 330 | 377 | 9061 |
| 28 | | 358 | 366 | 359 | 350 | 353 | 372 | 376 | 375 | 379 | 380 | 380 | 369 | 370 | 378 | 379 | 382 | 382 | 383 | 384 | 383 | 383 | 379 | 374 | 377 | 374 | 8971 |
| 29 | | 376 | 378 | 379 | 379 | 380 | 380 | 382 | 381 | 378 | 372 | 374 | 374 | 372 | 373 | 376 | 377 | 374 | 371 | 390 | 405 | 392 | 386 | 379 | 370 | 379 | 9088 |
| 30 | D | 367 | 304 | 273 | 285 | 322 | 347 | 360 | 362 | 371 | 381 | 378 | 383 | 398 | 404 | 405 | 410 | 408 | 398 | 396 | 395 | 388 | 383 | 376 | 369 | 369 | 8863 |
| 31 | D | 363 | 344 | 339 | 318 | 310 | 284 | 319 | 345 | 353 | 360 | 366 | 383 | 399 | 404 | 497 | 477 | 573 | 559 | 532 | 485 | 434 | 410 | 401 | 394 | 402 | 9649 |
| MEAN | | 369 | 367 | 366 | 363 | 365 | 365 | 368 | 371 | 374 | 376 | 377 | 377 | 379 | 382 | 389 | 392 | 398 | 397 | 397 | 398 | 395 | 389 | 378 | 371 | 379 | 9103 |
| MEAN Q | | 377 | 376 | 376 | 376 | 376 | 376 | 376 | 376 | 376 | 375 | 374 | 374 | 374 | 375 | 378 | 379 | 380 | 378 | 379 | 380 | 378 | 378 | 377 | 377 | 377 | 9041 |
| MEAN D | | 364 | 349 | 332 | 323 | 329 | 327 | 344 | 356 | 366 | 375 | 379 | 385 | 395 | 400 | 419 | 419 | 447 | 442 | 430 | 427 | 417 | 402 | 374 | 358 | 382 | 9159 |

LERWICK

VERTICAL INTENSITY

1982 FEBRUARY

47500 GAMMAS PLUS TABULAR QUANTITIES (UNIT 1 GAMMA)

| U T | Ø | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN | SUM |
|-----|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-------|
| 1 | | 386 | 384 | 386 | 379 | 364 | 364 | 365 | 377 | 384 | 386 | 387 | 398 | 446 | 467 | 424 | 413 | 402 | 403 | 536 | 513 | 540 | 488 | 433 | 390 | 417 | 10015 |
| 2 | D | 386 | 338 | 235 | 244 | 241 | 249 | 287 | 268 | 304 | 368 | 367 | 434 | 459 | 486 | 454 | 430 | 416 | 409 | 407 | 409 | 410 | 411 | 411 | 402 | 367 | 8825 |
| 3 | | 398 | 394 | 390 | 387 | 381 | 373 | 364 | 347 | 351 | 381 | 398 | 407 | 403 | 408 | 437 | 407 | 402 | 399 | 420 | 431 | 413 | 399 | 343 | 337 | 390 | 9370 |
| 4 | D | 330 | 285 | 309 | 308 | 300 | 271 | 267 | 301 | 358 | 374 | 385 | 401 | 437 | 484 | 481 | 476 | 447 | 438 | 454 | 489 | 467 | 360 | 396 | 272 | 379 | 9090 |
| 5 | | 272 | 288 | 258 | 256 | 287 | 301 | 338 | 360 | 369 | 382 | 390 | 402 | 410 | 416 | 416 | 420 | 450 | 484 | 470 | 435 | 430 | 382 | 374 | 385 | 374 | 8975 |
| 6 | | 392 | 403 | 400 | 371 | 350 | 329 | 316 | 338 | 364 | 378 | 386 | 411 | 433 | 423 | 438 | 459 | 536 | 489 | 451 | 463 | 458 | 477 | 412 | 415 | 412 | 9892 |
| 7 | | 402 | 293 | 302 | 321 | 316 | 338 | 369 | 374 | 377 | 383 | 395 | 403 | 406 | 404 | 404 | 410 | 408 | 407 | 416 | 442 | 434 | 416 | 402 | 330 | 381 | 9152 |
| 8 | | 291 | 338 | 381 | 390 | 394 | 390 | 381 | 370 | 381 | 383 | 378 | 386 | 401 | 412 | 424 | 429 | 436 | 460 | 489 | 502 | 489 | 434 | 410 | 412 | 406 | 9761 |
| 9 | Q | 418 | 403 | 385 | 386 | 373 | 377 | 390 | 385 | 377 | 377 | 379 | 386 | 392 | 391 | 394 | 398 | 399 | 398 | 399 | 403 | 409 | 416 | 419 | 419 | 394 | 9473 |
| 10 | | 400 | 390 | 389 | 392 | 393 | 393 | 392 | 387 | 387 | 385 | 382 | 395 | 410 | 450 | 531 | 570 | 538 | 542 | 505 | 525 | 493 | 446 | 416 | 410 | 438 | 10521 |
| 11 | D | 333 | 330 | 345 | 326 | 279 | 312 | 339 | 376 | 398 | 400 | 401 | 402 | 411 | 420 | 468 | -21 | 493 | 441 | 431 | 462 | 488 | 404 | 255 | 321 | 367 | 8814 |
| 12 | | 127 | 304 | 368 | 401 | 406 | 397 | 397 | 395 | 392 | 394 | 391 | 390 | 397 | 392 | 392 | 402 | 407 | 401 | 423 | 452 | 359 | 357 | 305 | 257 | 371 | 8906 |
| 13 | D | 269 | 352 | 375 | 310 | 300 | 330 | 331 | 350 | 364 | 389 | 402 | 424 | 438 | 458 | 508 | 500 | 497 | 495 | 511 | 498 | 445 | 339 | 293 | 367 | 397 | 9545 |
| 14 | | 386 | 355 | 328 | 340 | 328 | 276 | 239 | 311 | 313 | 390 | 433 | 424 | 454 | 451 | 441 | 448 | 446 | 475 | 528 | 441 | 368 | 396 | 398 | 402 | 390 | 9371 |
| 15 | Q | 411 | 410 | 402 | 419 | 407 | 398 | 392 | 398 | 411 | 412 | 419 | 432 | 455 | 477 | 488 | 482 | 447 | 424 | 411 | 403 | 402 | 398 | 395 | 394 | 420 | 10087 |
| 16 | Q | 389 | 384 | 377 | 381 | 381 | 386 | 391 | 392 | 395 | 394 | 398 | 400 | 402 | 407 | 407 | 398 | 397 | 395 | 402 | 398 | 396 | 394 | 392 | 392 | 393 | 9448 |
| 17 | | 391 | 388 | 389 | 388 | 384 | 381 | 380 | 363 | 359 | 367 | 376 | 392 | 392 | 389 | 411 | 469 | 551 | 574 | 513 | 479 | 440 | 373 | 373 | 322 | 410 | 9844 |

LERWICK

VERTICAL INTENSITY

1982 MARCH 47500 GAMMAS PLUS TABULAR QUANTITIES (UNIT 1 GAMMA)

| U.T. | Ø | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN | SUM |
|--------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
| 1 | D | 382 | 371 | 376 | 383 | 380 | 383 | 382 | 386 | 388 | 391 | 388 | 377 | 373 | 371 | 392 | 496 | 539 | 498 | 452 | 433 | 419 | 407 | 404 | 376 | 406 | 9747 |
| 2 | D | 333 | 464 | 137 | 102 | 109 | 137 | 262 | 318 | 387 | 444 | 446 | 448 | 476 | 484 | 492 | 494 | 497 | 508 | 481 | 450 | 407 | 370 | 361 | 309 | 371 | 8916 |
| 3 | | 324 | 352 | 381 | 395 | 399 | 404 | 409 | 413 | 413 | 418 | 412 | 401 | 398 | 406 | 429 | 429 | 437 | 439 | 438 | 439 | 427 | 407 | 402 | 401 | 407 | 9773 |
| 4 | | 398 | 394 | 395 | 394 | 394 | 393 | 393 | 395 | 399 | 401 | 398 | 407 | 404 | 399 | 398 | 401 | 407 | 411 | 405 | 402 | 404 | 406 | 411 | 393 | 400 | 9602 |
| 5 | | 372 | 388 | 393 | 396 | 381 | 376 | 345 | 364 | 382 | 390 | 398 | 398 | 398 | 394 | 394 | 398 | 402 | 403 | 398 | 402 | 403 | 398 | 398 | 394 | 390 | 9365 |
| 6 | Q | 391 | 394 | 394 | 394 | 394 | 393 | 390 | 391 | 393 | 393 | 393 | 390 | 390 | 389 | 390 | 395 | 394 | 389 | 389 | 390 | 393 | 394 | 394 | 395 | 392 | 9412 |
| 7 | Q | 398 | 397 | 395 | 394 | 392 | 390 | 387 | 386 | 385 | 384 | 379 | 374 | 376 | 381 | 386 | 388 | 390 | 390 | 387 | 386 | 386 | 387 | 389 | 394 | 387 | 9301 |
| 8 | | 389 | 380 | 375 | 373 | 377 | 379 | 379 | 381 | 382 | 385 | 382 | 376 | 373 | 377 | 386 | 397 | 407 | 421 | 433 | 435 | 395 | 438 | 407 | 390 | 392 | 9417 |
| 9 | | 287 | 337 | 366 | 387 | 394 | 392 | 387 | 388 | 390 | 386 | 382 | 378 | 373 | 380 | 394 | 415 | 467 | 498 | 469 | 444 | 425 | 395 | 385 | 373 | 395 | 9492 |
| 10 | | 335 | 334 | 271 | 300 | 334 | 336 | 351 | 360 | 370 | 364 | 372 | 380 | 385 | 388 | 399 | 403 | 413 | 405 | 394 | 389 | 388 | 396 | 390 | 379 | 368 | 8836 |
| 11 | | 379 | 380 | 365 | 359 | 355 | 348 | 352 | 364 | 379 | 384 | 386 | 386 | 386 | 385 | 386 | 395 | 407 | 415 | 421 | 427 | 431 | 417 | 403 | 400 | 388 | 9310 |
| 12 | | 394 | 394 | 389 | 381 | 386 | 388 | 388 | 387 | 382 | 380 | 377 | 372 | 373 | 373 | 378 | 389 | 416 | 437 | 433 | 431 | 437 | 428 | 407 | 402 | 397 | 9522 |
| 13 | | 396 | 384 | 293 | 321 | 365 | 364 | 376 | 379 | 381 | 373 | 368 | 368 | 371 | 378 | 383 | 391 | 395 | 396 | 398 | 393 | 398 | 386 | 375 | 363 | 375 | 8995 |
| 14 | | 352 | 359 | 358 | 369 | 382 | 386 | 390 | 391 | 389 | 386 | 381 | 380 | 375 | 373 | 378 | 391 | 419 | 434 | 452 | 420 | 425 | 420 | 416 | 405 | 393 | 9431 |
| 15 | Q | 391 | 383 | 363 | 333 | 362 | 377 | 384 | 389 | 382 | 378 | 374 | 373 | 373 | 375 | 379 | 387 | 393 | 398 | 402 | 402 | 398 | 396 | 398 | 395 | 382 | 9185 |
| 16 | Q | 389 | 390 | 385 | 367 | 373 | 376 | 377 | 381 | 382 | 383 | 382 | 381 | 376 | 376 | 376 | 385 | 387 | 389 | 393 | 394 | 394 | 395 | 394 | 382 | 383 | 9207 |
| 17 | | 381 | 383 | 383 | 381 | 382 | 380 | 381 | 379 | 376 | 372 | 368 | 362 | 366 | 359 | 367 | 370 | 378 | 377 | 379 | 388 | 381 | 380 | 390 | 376 | 376 | 9039 |
| 18 | | 370 | 351 | 321 | 338 | 342 | 352 | 360 | 360 | 364 | 365 | 367 | 375 | 376 | 381 | 381 | 386 | 408 | 401 | 390 | 388 | 373 | 357 | 356 | 356 | 367 | 8818 |
| 19 | | 331 | 333 | 329 | 330 | 353 | 369 | 374 | 376 | 374 | 376 | 373 | 378 | 376 | 375 | 382 | 383 | 383 | 382 | 382 | 382 | 382 | 387 | 384 | 378 | 369 | 8873 |
| 20 | | 379 | 379 | 381 | 378 | 379 | 375 | 368 | 364 | 363 | 373 | 376 | 379 | 381 | 393 | 393 | 414 | 415 | 411 | 405 | 408 | 398 | 390 | 380 | 359 | 385 | 9246 |
| 21 | D | 368 | 377 | 381 | 379 | 372 | 359 | 361 | 358 | 371 | 381 | 386 | 385 | 398 | 407 | 420 | 461 | 464 | 436 | 421 | 445 | 409 | 388 | 373 | 316 | 392 | 9416 |
| 22 | D | 226 | 178 | 240 | 202 | 238 | 269 | 332 | 363 | 376 | 383 | 383 | 385 | 396 | 407 | 419 | 427 | 437 | 459 | 458 | 432 | 410 | 401 | 393 | 391 | 358 | 8605 |
| 23 | | 390 | 390 | 389 | 389 | 388 | 385 | 385 | 386 | 386 | 389 | 390 | 386 | 383 | 394 | 391 | 398 | 399 | 393 | 386 | 383 | 382 | 383 | 383 | 380 | 388 | 9308 |
| 24 | | 383 | 382 | 385 | 383 | 382 | 381 | 379 | 379 | 376 | 374 | 377 | 375 | 372 | 370 | 376 | 387 | 406 | 416 | 413 | 406 | 407 | 393 | 388 | 388 | 386 | 9278 |
| 25 | D | 338 | 314 | 331 | 339 | 366 | 370 | 373 | 373 | 372 | 376 | 384 | 391 | 398 | 422 | 418 | 411 | 416 | 418 | 405 | 391 | 390 | 381 | 376 | 374 | 380 | 9127 |
| 26 | | 373 | 381 | 379 | 374 | 377 | 381 | 381 | 381 | 377 | 380 | 379 | 376 | 375 | 380 | 389 | 399 | 419 | 424 | 401 | 389 | 384 | 379 | 349 | 355 | 382 | 9182 |
| 27 | | 371 | 374 | 354 | 347 | 370 | 377 | 378 | 383 | 381 | 379 | 376 | 373 | 373 | 377 | 391 | 395 | 394 | 389 | 389 | 385 | 384 | 382 | 380 | 377 | 378 | 9079 |
| 28 | Q | 381 | 381 | 382 | 378 | 366 | 358 | 367 | 370 | 377 | 377 | 373 | 368 | 363 | 365 | 377 | 382 | 383 | 385 | 386 | 386 | 384 | 378 | 378 | 377 | 376 | 9022 |
| 29 | | 377 | 377 | 375 | 376 | 372 | 367 | 356 | 360 | 379 | 390 | 389 | 376 | 373 | 377 | 382 | 385 | 384 | 381 | 383 | 385 | 382 | 379 | 387 | 393 | 378 | 9085 |
| 30 | | 381 | 375 | 363 | 359 | 337 | 347 | 368 | 376 | 381 | 383 | 384 | 381 | 394 | 411 | 411 | 406 | 410 | 417 | 404 | 393 | 393 | 398 | 394 | 370 | 385 | 9236 |
| 31 | | 290 | 302 | 316 | 335 | 339 | 346 | 360 | 364 | 372 | 378 | 376 | 372 | 376 | 384 | 399 | 398 | 407 | 475 | 518 | 471 | 438 | 401 | 374 | 360 | 381 | 9151 |
| MEAN | | 363 | 367 | 353 | 353 | 359 | 363 | 370 | 376 | 381 | 384 | 384 | 382 | 384 | 388 | 395 | 405 | 415 | 419 | 415 | 409 | 401 | 394 | 388 | 377 | 384 | 9225 |
| MEAN Q | | 390 | 389 | 384 | 373 | 377 | 379 | 381 | 383 | 384 | 383 | 380 | 377 | 376 | 377 | 382 | 387 | 389 | 390 | 391 | 392 | 391 | 390 | 391 | 389 | 384 | 9225 |
| MEAN D | | 329 | 341 | 293 | 281 | 293 | 304 | 342 | 360 | 379 | 395 | 397 | 397 | 408 | 418 | 428 | 458 | 471 | 464 | 443 | 430 | 407 | 389 | 381 | 353 | 382 | 9161 |

LERWICK

VERTICAL INTENSITY

1982 APRIL 47500 GAMMAS PLUS TABULAR QUANTITIES (UNIT 1 GAMMA)

| U.T. | Ø | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN | SUM | |
|------|---|-----|-----|-----|-----|-----|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| 1 | | 369 | 365 | 374 | 377 | 390 | 392 | 392 | 392 | 392 | 386 | 385 | 381 | 303 | 379 | 382 | 385 | 386 | 389 | 386 | 388 | 381 | 356 | 272 | 136 | 367 | 8818 | |
| 2 | D | 166 | 300 | 482 | 183 | 222 | 282 | 339 | 353 | 352 | 367 | 381 | 384 | 388 | 420 | 481 | 531 | 516 | 486 | 467 | 489 | 463 | 300 | 296 | 246 | 376 | 9024 | |
| 3 | D | 254 | 261 | 252 | 255 | 178 | 245 | 304 | 350 | 375 | 391 | 380 | 407 | 411 | 470 | 515 | 533 | 556 | 552 | 496 | 472 | 449 | 380 | 347 | 342 | 382 | 9175 | |
| 4 | | 331 | 256 | 269 | 304 | 338 | 334 | 343 | 373 | 392 | 404 | 407 | 407 | 412 | 424 | 426 | 433 | 433 | 437 | 459 | 429 | 422 | 376 | 321 | 312 | 377 | 9042 | |
| 5 | | 321 | 321 | 324 | 316 | 313 | 342 | 373 | 384 | 381 | 381 | 398 | 402 | 401 | 402 | 402 | 402 | 402 | 402 | 419 | 407 | 400 | 394 | 369 | 359 | 375 | 9015 | |
| 6 | | 381 | 377 | 351 | 366 | 363 | 356 | 365 | 377 | 386 | 396 | 393 | 394 | 403 | 414 | 432 | 434 | 426 | 448 | 433 | 420 | 416 | 406 | 367 | 333 | 393 | 9437 | |
| 7 | Q | 341 | 355 | 378 | 384 | 389 | 391 | 393 | 395 | 391 | 390 | 382 | 376 | 376 | 381 | 384 | 385 | 393 | 401 | 390 | 398 | 390 | 389 | 389 | 387 | 384 | 9228 | |
| 8 | | 386 | 386 | 386 | 386 | 385 | 386 | 382 | 374 | 371 | 374 | 376 | 373 | 373 | 386 | 411 | 426 | 405 | 394 | 399 | 394 | 390 | 345 | 357 | 364 | 383 | 9209 | |
| 9 | | 353 | 358 | 344 | 342 | 365 | 376 | 384 | 385 | 382 | 379 | 375 | 370 | 370 | 372 | 385 | 393 | 401 | 415 | 415 | 422 | 420 | 410 | 397 | 398 | 384 | 9211 | |
| 10 | D | 376 | 359 | 349 | 355 | 356 | 363 | 368 | 359 | 359 | 351 | 346 | 368 | 402 | 462 | 558 | 534 | 479 | 407 | 380 | 519 | 502 | 497 | 395 | 353 | 408 | 9797 | |
| 11 | D | 353 | 239 | 178 | 217 | 309 | 332 | 313 | 342 | 385 | 404 | 399 | 407 | 421 | 420 | 443 | 480 | 478 | 441 | 443 | 465 | 411 | 356 | 382 | 391 | 375 | 9009 | |
| 12 | | 394 | 394 | 398 | 398 | 398 | 387 | 392 | 395 | 396 | 398 | 398 | 401 | 411 | 400 | 416 | 437 | 418 | 408 | 410 | 419 | 407 | 398 | 393 | 389 | 402 | 9655 | |
| 13 | | 382 | 382 | 362 | 288 | 324 | 352 | 369 | 379 | 387 | 384 | 381 | 378 | 376 | 376 | 382 | 392 | 393 | 392 | 395 | 393 | 390 | 386 | 394 | 386 | 376 | 9023 | |
| 14 | Q | 388 | 390 | 392 | 390 | 390 | 389 | 386 | 386 | 384 | 382 | 381 | 376 | 370 | 370 | 380 | 388 | 395 | 393 | 391 | 390 | 386 | 386 | 386 | 386 | 385 | 9255 | |
| 15 | | 385 | 385 | 387 | 387 | 386 | 386 | 386 | 386 | 385 | 388 | 389 | 385 | 381 | 387 | 390 | 390 | 390 | 390 | 390 | 396 | 394 | 395 | 390 | 374 | 373 | 387 | 9285 |
| 16 | | 374 | 378 | 378 | 383 | 381 | 386 | 388 | 390 | 388 | 385 | 382 | 375 | 370 | 372 | 374 | 380 | 383 | 384 | 432 | 420 | 408 | 390 | 384 | 380 | 386 | 9265 | |
| 17 | | 380 | 380 | 387 | 389 | 387 | 387 | 387 | 392 | 393 | 399 | 396 | 401 | 424 | 434 | 437 | 446 | 468 | 430 | 410 | 406 | 400 | 396 | 391 | 391 | 388 | 404 | 9712 |
| 18 | | 389 | 395 | 395 | 395 | 395 | 395</ | | | | | | | | | | | | | | | | | | | | | |

LERWICK

VERTICAL INTENSITY

1982 MAY 47500 GAMMAS PLUS TABULAR QUANTITIES (UNIT 1 GAMMA)

| U T | Ø | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN | SUM |
|--------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
| 1 | | 273 | 279 | 284 | 335 | 362 | 368 | 374 | 369 | 361 | 366 | 375 | 382 | 387 | 396 | 421 | 438 | 468 | 477 | 456 | 430 | 406 | 387 | 378 | 373 | 381 | 9145 |
| 2 | | 372 | 373 | 297 | 285 | 308 | 343 | 365 | 375 | 383 | 381 | 370 | 375 | 377 | 409 | 442 | 468 | 477 | 468 | 459 | 382 | 362 | 369 | 333 | 313 | 378 | 9086 |
| 3 | D | 319 | 292 | 305 | 252 | 314 | 322 | 311 | 344 | 359 | 387 | 392 | 405 | 421 | 442 | 431 | 456 | 450 | 446 | 434 | 410 | 413 | 388 | 363 | 284 | 372 | 8940 |
| 4 | | 322 | 374 | 389 | 391 | 387 | 390 | 387 | 383 | 380 | 378 | 394 | 391 | 380 | 393 | 435 | 447 | 454 | 420 | 397 | 389 | 384 | 378 | 379 | 381 | 392 | 9403 |
| 5 | | 386 | 384 | 383 | 369 | 357 | 345 | 363 | 375 | 380 | 378 | 386 | 389 | 395 | 417 | 423 | 431 | 426 | 412 | 396 | 395 | 391 | 386 | 385 | 387 | 389 | 9339 |
| 6 | | 387 | 387 | 373 | 370 | 374 | 378 | 381 | 382 | 384 | 380 | 384 | 383 | 387 | 392 | 395 | 397 | 404 | 408 | 401 | 395 | 397 | 396 | 390 | 387 | 388 | 9312 |
| 7 | Q | 379 | 380 | 388 | 389 | 384 | 388 | 390 | 388 | 383 | 384 | 383 | 377 | 378 | 387 | 388 | 396 | 400 | 400 | 396 | 399 | 395 | 392 | 388 | 389 | 389 | 9332 |
| 8 | Q | 371 | 363 | 364 | 360 | 366 | 372 | 375 | 378 | 373 | 366 | 366 | 367 | 369 | 372 | 378 | 387 | 397 | 400 | 401 | 396 | 391 | 385 | 382 | 383 | 377 | 9062 |
| 9 | | 375 | 361 | 332 | 349 | 348 | 360 | 365 | 367 | 366 | 363 | 366 | 366 | 366 | 374 | 381 | 392 | 392 | 391 | 388 | 389 | 391 | 386 | 384 | 383 | 372 | 8935 |
| 10 | | 382 | 378 | 378 | 383 | 386 | 388 | 386 | 386 | 378 | 365 | 408 | 366 | 368 | 372 | 378 | 382 | 384 | 389 | 388 | 385 | 385 | 382 | 378 | 372 | 381 | 9147 |
| 11 | | 357 | 357 | 370 | 381 | 383 | 382 | 379 | 379 | 383 | 380 | 383 | 379 | 379 | 384 | 388 | 400 | 401 | 400 | 400 | 392 | 397 | 396 | 391 | 379 | 384 | 9220 |
| 12 | | 380 | 380 | 378 | 380 | 383 | 385 | 388 | 386 | 381 | 372 | 374 | 369 | 366 | 372 | 380 | 385 | 390 | 391 | 391 | 393 | 391 | 387 | 381 | 381 | 382 | 9164 |
| 13 | | 375 | 368 | 372 | 370 | 371 | 376 | 383 | 384 | 379 | 369 | 364 | 362 | 356 | 362 | 370 | 372 | 379 | 392 | 400 | 410 | 404 | 398 | 388 | 383 | 378 | 9087 |
| 14 | | 384 | 382 | 384 | 382 | 383 | 386 | 387 | 388 | 382 | 378 | 374 | 369 | 374 | 370 | 374 | 379 | 388 | 395 | 393 | 392 | 391 | 383 | 380 | 378 | 382 | 9176 |
| 15 | | 376 | 375 | 361 | 355 | 365 | 375 | 376 | 375 | 376 | 375 | 375 | 374 | 369 | 391 | 397 | 412 | 397 | 410 | 418 | 446 | 413 | 401 | 387 | 382 | 386 | 9281 |
| 16 | | 384 | 383 | 379 | 372 | 379 | 381 | 386 | 384 | 383 | 378 | 376 | 375 | 375 | 383 | 384 | 383 | 388 | 406 | 410 | 403 | 396 | 391 | 381 | 366 | 384 | 9226 |
| 17 | | 370 | 375 | 376 | 366 | 349 | 361 | 370 | 371 | 370 | 369 | 366 | 366 | 367 | 370 | 389 | 392 | 384 | 392 | 392 | 387 | 395 | 391 | 384 | 384 | 376 | 9036 |
| 18 | | 380 | 364 | 341 | 328 | 341 | 350 | 360 | 365 | 372 | 372 | 382 | 382 | 382 | 391 | 391 | 396 | 400 | 413 | 413 | 413 | 397 | 387 | 317 | 312 | 373 | 8949 |
| 19 | | 329 | 354 | 350 | 339 | 348 | 362 | 373 | 369 | 376 | 375 | 373 | 374 | 375 | 390 | 397 | 396 | 399 | 400 | 403 | 398 | 397 | 390 | 382 | 369 | 376 | 9018 |
| 20 | | 358 | 356 | 367 | 379 | 384 | 384 | 385 | 384 | 385 | 381 | 375 | 372 | 376 | 387 | 389 | 392 | 392 | 389 | 385 | 381 | 383 | 384 | 383 | 381 | 380 | 9132 |
| 21 | | 384 | 385 | 387 | 384 | 382 | 380 | 385 | 383 | 380 | 372 | 370 | 370 | 379 | 393 | 400 | 398 | 391 | 385 | 391 | 390 | 389 | 385 | 376 | 360 | 383 | 9199 |
| 22 | Q | 369 | 379 | 384 | 385 | 387 | 384 | 385 | 387 | 384 | 380 | 375 | 372 | 373 | 380 | 383 | 383 | 386 | 388 | 388 | 386 | 385 | 383 | 381 | 380 | 382 | 9167 |
| 23 | Q | 381 | 379 | 372 | 373 | 379 | 382 | 383 | 383 | 381 | 374 | 369 | 365 | 365 | 371 | 376 | 379 | 382 | 387 | 384 | 380 | 376 | 376 | 375 | 376 | 377 | 9048 |
| 24 | Q | 376 | 380 | 385 | 386 | 387 | 385 | 380 | 373 | 365 | 355 | 350 | 349 | 352 | 363 | 371 | 383 | 386 | 384 | 381 | 380 | 377 | 376 | 376 | 376 | 374 | 8976 |
| 25 | | 376 | 377 | 380 | 383 | 384 | 382 | 381 | 379 | 371 | 363 | 355 | 350 | 354 | 362 | 364 | 376 | 384 | 383 | 379 | 378 | 378 | 377 | 373 | 341 | 372 | 8930 |
| 26 | | 321 | 333 | 349 | 358 | 360 | 363 | 367 | 369 | 371 | 364 | 358 | 350 | 342 | 345 | 346 | 376 | 401 | 431 | 415 | 432 | 436 | 410 | 384 | 360 | 372 | 8941 |
| 27 | D | 333 | 361 | 365 | 328 | 342 | 355 | 307 | 297 | 322 | 331 | 347 | 350 | 355 | 422 | 508 | 496 | 484 | 407 | 431 | 415 | 370 | 381 | 315 | 585 | 383 | 9207 |
| 28 | D | 236 | 201 | 186 | 152 | 108 | 183 | 267 | 342 | 368 | 371 | 384 | 403 | 409 | 431 | 501 | 504 | 479 | 470 | 474 | 431 | 360 | 325 | 280 | 302 | 340 | 8167 |
| 29 | D | 309 | 241 | 194 | 234 | 277 | 319 | 361 | 377 | 391 | 405 | 393 | 393 | 401 | 432 | 457 | 445 | 442 | 428 | 398 | 391 | 401 | 380 | 362 | 337 | 365 | 8768 |
| 30 | D | 337 | 364 | 334 | 314 | 346 | 364 | 379 | 389 | 396 | 384 | 385 | 396 | 398 | 406 | 440 | 436 | 442 | 449 | 420 | 418 | 403 | 366 | 299 | 235 | 379 | 9100 |
| 31 | | 246 | 254 | 256 | 238 | 220 | 282 | 323 | 361 | 364 | 384 | 399 | 398 | 407 | 401 | 389 | 410 | 414 | 416 | 413 | 401 | 348 | 351 | 354 | 307 | 347 | 8336 |
| MEAN | | 352 | 352 | 347 | 344 | 350 | 360 | 368 | 373 | 375 | 374 | 376 | 375 | 377 | 389 | 402 | 409 | 412 | 411 | 406 | 399 | 391 | 383 | 368 | 365 | 377 | 9058 |
| MEAN Q | | 375 | 376 | 379 | 379 | 381 | 382 | 383 | 382 | 377 | 372 | 369 | 366 | 367 | 375 | 379 | 386 | 390 | 392 | 391 | 388 | 386 | 383 | 381 | 381 | 380 | 9120 |
| MEAN D | | 307 | 292 | 277 | 256 | 277 | 309 | 325 | 350 | 367 | 376 | 380 | 389 | 397 | 427 | 467 | 467 | 459 | 440 | 431 | 413 | 389 | 368 | 324 | 349 | 368 | 8836 |

LERWICK

VERTICAL INTENSITY

1982 JUNE 47500 GAMMAS PLUS TABULAR QUANTITIES (UNIT 1 GAMMA)

| U.T. | Ø | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN | SUM | |
|------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| 1 | | 292 | 256 | 270 | 340 | 342 | 355 | 381 | 390 | 395 | 389 | 389 | 389 | 385 | 386 | 389 | 393 | 403 | 419 | 417 | 420 | 407 | 384 | 360 | 308 | 369 | 8859 | |
| 2 | | 258 | 314 | 261 | 248 | 323 | 356 | 377 | 386 | 394 | 387 | 385 | 384 | 386 | 388 | 387 | 390 | 395 | 400 | 405 | 405 | 402 | 394 | 386 | 371 | 366 | 8782 | |
| 3 | Q | 350 | 320 | 341 | 351 | 374 | 380 | 387 | 391 | 395 | 390 | 383 | 374 | 369 | 377 | 378 | 390 | 393 | 402 | 395 | 391 | 384 | 374 | 374 | 370 | 376 | 9033 | |
| 4 | Q | 350 | 312 | 339 | 352 | 365 | 374 | 384 | 390 | 393 | 385 | 373 | 359 | 359 | 367 | 372 | 382 | 385 | 384 | 386 | 385 | 385 | 386 | 362 | 351 | 370 | 8880 | |
| 5 | Q | 356 | 373 | 382 | 385 | 386 | 382 | 384 | 382 | 378 | 370 | 361 | 352 | 355 | 364 | 375 | 391 | 394 | 387 | 379 | 375 | 376 | 378 | 382 | 382 | 376 | 9029 | |
| 6 | | 381 | 378 | 372 | 364 | 363 | 362 | 357 | 342 | 342 | 341 | 347 | 351 | 352 | 365 | 374 | 378 | 384 | 395 | 397 | 390 | 382 | 385 | 383 | 382 | 369 | 8867 | |
| 7 | | 371 | 345 | 313 | 335 | 368 | 379 | 364 | 348 | 357 | 368 | 384 | 381 | 387 | 395 | 411 | 426 | 427 | 412 | 397 | 395 | 387 | 386 | 382 | 382 | 379 | 9100 | |
| 8 | | 385 | 387 | 388 | 390 | 391 | 390 | 385 | 387 | 385 | 380 | 369 | 361 | 364 | 378 | 390 | 403 | 433 | 437 | 428 | 412 | 395 | 386 | 378 | 362 | 390 | 9364 | |
| 9 | | 366 | 358 | 363 | 366 | 378 | 378 | 382 | 391 | 385 | 378 | 372 | 368 | 372 | 391 | 395 | 395 | 400 | 403 | 399 | 391 | 388 | 383 | 383 | 382 | 382 | 9167 | |
| 10 | D | 379 | 383 | 374 | 384 | 173 | 181 | 247 | 287 | 339 | 367 | 375 | 398 | 418 | 466 | 531 | 538 | 503 | 456 | 428 | 407 | 392 | 388 | 375 | 363 | 377 | 9052 | |
| 11 | D | 374 | 376 | 345 | 255 | 268 | 295 | 354 | 378 | 392 | 390 | 383 | 386 | 383 | 384 | 385 | 395 | 404 | 418 | 437 | 412 | 413 | 406 | 382 | 290 | 371 | 8905 | |
| 12 | D | 160 | 235 | 249 | 296 | 356 | 387 | 392 | 397 | 398 | 396 | 387 | 382 | 377 | 378 | 378 | 428 | 535 | 557 | 529 | 516 | 556 | 339 | 287 | 87 | 375 | 9002 | |
| 13 | D | 161 | 131 | 139 | 216 | 279 | 327 | 377 | 370 | 388 | 400 | 398 | 403 | 420 | 443 | 438 | 466 | 451 | 434 | 429 | 399 | 322 | 292 | 322 | 212 | 300 | 337 | 8099 |
| 14 | | 323 | 372 | 391 | 383 | 370 | 369 | 355 | 366 | 378 | 395 | 390 | 401 | 409 | 407 | 397 | 406 | 424 | 415 | 403 | 430 | 410 | 408 | 404 | 394 | 391 | 9400 | |
| 15 | | 365 | 353 | 373 | 358 | 360 | 373 | 374 | 387 | 396 | 385 | 386 | 379 | 376 | 392 | 417 | 415 | 410 | 435 | 417 | 409 | 410 | 399 | 382 | 351 | 387 | 9302 | |
| 16 | | 305 | 355 | 372 | 386 | 387 | 382 | 390 | 394 | 393 | 393 | 392 | 391 | 392 | 406 | 408 | 412 | 417 | 416 | 419 | 423 | 414 | 409 | 400 | 395 | 394 | 9451 | |
| 17 | Q | 391 | 394 | 393 | 393 | 388 | 387 | 382 | 377 | 379 | 382 | 385 | 380 | 389 | 392 | 396 | 394 | 398 | 398 | 392 | 392 | 391 | 389 | 390 | 390 | 389 | 9342 | |
| 18 | Q | 390 | 388 | 385 | 383 | 379 | 371 | 361 | 369 | 372 | 373 | 374 | 373 | 372 | 37 | | | | | | | | | | | | | |

LERWICK

VERTICAL INTENSITY

1982

JULY

47500 GAMMAS PLUS TABULAR QUANTITIES (UNIT 1 GAMMA)

| U T | Ø | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN | SUM |
|--------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------|-----|------|------|
| 1 | | 253 | 331 | 358 | 373 | 372 | 365 | 360 | 382 | 395 | 391 | 391 | 392 | 391 | 397 | 403 | 418 | 412 | 408 | 413 | 401 | 388 | 373 | 315 | 326 | 375 | 9008 |
| 2 | Q | 356 | 369 | 364 | 363 | 347 | 348 | 363 | 375 | 381 | 382 | 383 | 384 | 387 | 389 | 391 | 391 | 394 | 395 | 399 | 406 | 400 | 397 | 388 | 375 | 380 | 9127 |
| 3 | Q | 378 | 381 | 381 | 378 | 372 | 378 | 385 | 382 | 382 | 386 | 387 | 382 | 378 | 381 | 387 | 386 | 385 | 386 | 382 | 390 | 392 | 388 | 384 | 378 | 383 | 9189 |
| 4 | Q | 369 | 369 | 375 | 382 | 383 | 383 | 381 | 379 | 377 | 374 | 372 | 375 | 378 | 382 | 387 | 391 | 392 | 391 | 389 | 386 | 384 | 384 | 384 | 381 | 381 | 9148 |
| 5 | Q | 382 | 380 | 382 | 383 | 382 | 383 | 377 | 376 | 372 | 367 | 366 | 365 | 365 | 370 | 374 | 386 | 395 | 399 | 397 | 388 | 383 | 381 | 380 | 379 | 379 | 9112 |
| 6 | | 382 | 385 | 385 | 382 | 381 | 375 | 370 | 368 | 364 | 361 | 355 | 353 | 355 | 361 | 363 | 374 | 390 | 424 | 458 | 433 | 420 | 402 | 385 | 372 | 383 | 9198 |
| 7 | | 369 | 348 | 353 | 345 | 304 | 328 | 349 | 366 | 361 | 370 | 375 | 382 | 400 | 403 | 402 | 424 | 467 | 495 | 458 | 427 | 412 | 402 | 392 | 381 | 388 | 9313 |
| 8 | | 385 | 387 | 387 | 380 | 373 | 357 | 348 | 363 | 373 | 369 | 365 | 379 | 380 | 387 | 394 | 398 | 410 | 420 | 409 | 402 | 394 | 397 | 385 | 372 | 384 | 9214 |
| 9 | | 350 | 361 | 341 | 359 | 376 | 385 | 386 | 386 | 388 | 387 | 390 | 384 | 378 | 380 | 377 | 390 | 410 | 416 | 406 | 402 | 404 | 399 | 391 | 383 | 384 | 9229 |
| 10 | Q | 364 | 349 | 380 | 383 | 383 | 350 | 360 | 367 | 372 | 376 | 376 | 370 | 371 | 364 | 376 | 390 | 399 | 401 | 395 | 393 | 398 | 395 | 391 | 387 | 379 | 9090 |
| 11 | | 382 | 378 | 375 | 378 | 379 | 380 | 373 | 371 | 370 | 362 | 359 | 337 | 355 | 354 | 435 | 429 | 508 | 535 | 524 | 506 | 466 | 418 | 403 | 401 | 407 | 9778 |
| 12 | D | 386 | 358 | 337 | 343 | 352 | 376 | 389 | 392 | 392 | 389 | 395 | 405 | 429 | 455 | 454 | 552 | 487 | 480 | 500 | 483 | 457 | 410 | 350 | 334 | 412 | 9905 |
| 13 | D | 273 | 203 | 158 | 147 | 142 | 286 | 300 | 333 | 355 | 358 | 389 | 401 | 426 | 411 | 428 | 432 | 454 | 564 | 195 | 385 | 364 | 655 | 4781067 | 383 | 9204 | |
| 14 | D | 662 | 713 | 690 | 39 | 26 | 239 | 351 | 375 | 385 | 401 | 401 | 428 | 457 | 441 | 457 | 437 | 444 | 432 | 410 | 440 | 437 | 373 | 398 | 311 | 406 | 9747 |
| 15 | | 304 | 244 | 274 | 299 | 316 | 340 | 373 | 405 | 410 | 417 | 426 | 464 | 479 | 486 | 488 | 484 | 444 | 456 | 457 | 441 | 397 | 360 | 344 | 302 | 392 | 9410 |
| 16 | D | 322 | 349 | 331 | 345 | 343 | 356 | 379 | 399 | 405 | 442 | 430 | 408 | 409 | 414 | 419 | 424 | 444 | 421 | 411 | 410 | 411 | 387 | 355 | 326 | 389 | 9340 |
| 17 | | 356 | 186 | 258 | 358 | 409 | 413 | 416 | 416 | 417 | 423 | 419 | 408 | 409 | 428 | 456 | 437 | 412 | 405 | 410 | 413 | 410 | 417 | 405 | 358 | 393 | 9439 |
| 18 | | 319 | 273 | 315 | 342 | 361 | 377 | 396 | 416 | 426 | 419 | 398 | 416 | 439 | 438 | 466 | 441 | 432 | 452 | 450 | 444 | 425 | 419 | 407 | 405 | 403 | 9676 |
| 19 | | 366 | 289 | 312 | 362 | 375 | 391 | 405 | 415 | 417 | 410 | 404 | 399 | 420 | 425 | 419 | 462 | 445 | 427 | 419 | 405 | 401 | 410 | 389 | 367 | 397 | 9534 |
| 20 | | 381 | 367 | 323 | 218 | 181 | 233 | 315 | 367 | 379 | 384 | 392 | 402 | 395 | 400 | 402 | 402 | 400 | 401 | 408 | 406 | 404 | 404 | 403 | 401 | 365 | 8768 |
| 21 | | 402 | 401 | 406 | 407 | 407 | 406 | 401 | 400 | 398 | 392 | 392 | 388 | 393 | 401 | 407 | 428 | 422 | 407 | 408 | 402 | 414 | 410 | 380 | 358 | 401 | 9630 |
| 22 | | 376 | 358 | 380 | 402 | 404 | 404 | 403 | 401 | 401 | 401 | 401 | 397 | 392 | 406 | 439 | 441 | 427 | 415 | 422 | 416 | 407 | 398 | 397 | 397 | 403 | 9685 |
| 23 | | 389 | 388 | 372 | 380 | 396 | 401 | 397 | 391 | 385 | 385 | 383 | 380 | 386 | 396 | 434 | 423 | 409 | 410 | 422 | 419 | 418 | 409 | 400 | 389 | 398 | 9562 |
| 24 | D | 367 | 375 | 350 | 275 | 241 | 255 | 279 | 324 | 358 | 376 | 376 | 382 | 384 | 397 | 410 | 419 | 409 | 367 | 359 | 402 | 449 | 444 | 401 | 362 | 368 | 8841 |
| 25 | | 283 | 324 | 349 | 346 | 255 | 336 | 376 | 388 | 387 | 389 | 394 | 393 | 390 | 389 | 415 | 424 | 422 | 427 | 422 | 418 | 403 | 390 | 388 | 379 | 378 | 9087 |
| 26 | | 282 | 278 | 292 | 260 | 330 | 369 | 382 | 379 | 376 | 383 | 387 | 379 | 379 | 378 | 391 | 425 | 446 | 426 | 407 | 416 | 422 | 430 | 416 | 379 | 375 | 9012 |
| 27 | | 327 | 308 | 352 | 370 | 379 | 330 | 258 | 298 | 344 | 367 | 380 | 386 | 401 | 405 | 405 | 423 | 432 | 410 | 398 | 405 | 405 | 416 | 372 | 317 | 370 | 8888 |
| 28 | | 347 | 331 | 308 | 304 | 300 | 327 | 367 | 383 | 390 | 393 | 396 | 404 | 397 | 396 | 412 | 418 | 415 | 439 | 415 | 419 | 412 | 407 | 403 | 383 | 382 | 9166 |
| 29 | | 281 | 285 | 349 | 367 | 384 | 389 | 381 | 352 | 363 | 376 | 379 | 379 | 405 | 404 | 424 | 428 | 428 | 402 | 402 | 405 | 415 | 414 | 406 | 401 | 384 | 9219 |
| 30 | | 395 | 395 | 394 | 392 | 393 | 395 | 393 | 388 | 394 | 397 | 393 | 394 | 392 | 383 | 390 | 392 | 391 | 427 | 469 | 435 | 427 | 410 | 383 | 376 | 400 | 9598 |
| 31 | | 391 | 383 | 355 | 324 | 351 | 332 | 363 | 370 | 372 | 383 | 388 | 408 | 427 | 423 | 428 | 455 | 450 | 445 | 443 | 424 | 417 | 406 | 379 | 351 | 394 | 9468 |
| MEAN | | 361 | 350 | 354 | 335 | 335 | 354 | 367 | 378 | 384 | 387 | 388 | 391 | 398 | 401 | 414 | 423 | 428 | 428 | 415 | 417 | 411 | 410 | 389 | 390 | 388 | 9308 |
| MEAN Q | | 370 | 370 | 376 | 378 | 373 | 368 | 373 | 376 | 377 | 377 | 377 | 375 | 376 | 377 | 383 | 389 | 393 | 394 | 392 | 393 | 391 | 389 | 385 | 380 | 381 | 9132 |
| MEAN D | | 402 | 400 | 373 | 230 | 221 | 302 | 340 | 365 | 379 | 393 | 398 | 405 | 421 | 424 | 434 | 453 | 464 | 453 | 375 | 424 | 424 | 454 | 396 | 480 | 392 | 9410 |

LERWICK

VERTICAL INTENSITY

1982

AUGUST

47500 GAMMAS PLUS TABULAR QUANTITIES (UNIT 1 GAMMA)

| U T | Ø | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN | SUM |
|-----|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-------|
| 1 | | 358 | 357 | 361 | 373 | 379 | 390 | 389 | 390 | 395 | 401 | 405 | 397 | 401 | 406 | 405 | 404 | 409 | 421 | 441 | 442 | 440 | 413 | 371 | 355 | 396 | 9503 |
| 2 | D | 266 | 245 | 330 | 343 | 368 | 337 | 361 | 376 | 385 | 391 | 401 | 420 | 404 | 434 | 437 | 516 | 520 | 548 | 526 | 496 | 374 | 179 | 214 | 315 | 383 | 9186 |
| 3 | | 339 | 312 | 256 | 293 | 316 | 358 | 381 | 387 | 397 | 406 | 406 | 410 | 416 | 440 | 457 | 487 | 462 | 453 | 491 | 449 | 426 | 401 | 358 | 344 | 393 | 9445 |
| 4 | | 368 | 367 | 389 | 383 | 384 | 392 | 399 | 398 | 400 | 402 | 402 | 402 | 403 | 409 | 426 | 447 | 439 | 438 | 455 | 437 | 418 | 401 | 377 | 367 | 404 | 9703 |
| 5 | | 348 | 361 | 380 | 377 | 358 | 359 | 367 | 379 | 389 | 379 | 379 | 389 | 397 | 405 | 410 | 422 | 448 | 498 | 453 | 427 | 427 | 413 | 382 | 389 | 397 | 9536 |
| 6 | | 384 | 381 | 361 | 365 | 382 | 388 | 393 | 393 | 393 | 394 | 402 | 395 | 388 | 394 | 410 | 413 | 420 | 423 | 426 | 444 | 452 | 437 | 330 | 285 | 394 | 9453 |
| 7 | D | 203 | 178 | 284 | 250 | 154 | 210 | 196 | 222 | 353 | 412 | 458 | 491 | 519 | 508 | 483 | 431 | 527 | 495 | 447 | 423 | 412 | 406 | 401 | 401 | 369 | 8864 |
| 8 | Q | 402 | 408 | 413 | 413 | 415 | 411 | 411 | 410 | 404 | 401 | 404 | 395 | 390 | 401 | 410 | 414 | 409 | 412 | 406 | 401 | 406 | 406 | 402 | 401 | 406 | 9745 |
| 9 | | 401 | 402 | 401 | 402 | 405 | 401 | 398 | 393 | 376 | 392 | 384 | 394 | 393 | 397 | 406 | 414 | 474 | 490 | 524 | 496 | 436 | 356 | 298 | 324 | 406 | 9756 |
| 10 | D | 349 | 287 | 215 | 336 | 360 | 353 | 370 | 389 | 399 | 398 | 410 | 410 | 415 | 424 | 419 | 453 | 500 | 480 | 455 | 461 | 453 | 426 | 394 | 358 | 396 | 9514 |
| 11 | | 363 | 385 | 367 | 384 | 392 | 397 | 402 | 412 | 413 | 417 | 415 | 416 | 402 | 412 | 447 | 462 | 531 | 518 | 510 | 498 | 467 | 444 | 419 | 410 | 428 | 10283 |
| 12 | | 402 | 407 | 403 | 409 | 413 | 408 | 393 | 387 | 397 | 412 | 425 | 435 | 404 | 426 | 475 | 502 | 490 | 470 | 469 | 462 | 426 | 404 | 380 | 375 | 424 | 10174 |
| 13 | | 370 | 378 | 377 | 345 | 346 | 375 | 389 | 396 | 405 | 401 | 401 | 408 | 411 | 408 | 426 | 423 | 428 | 432 | 422 | 413 | 419 | 414 | 408 | 402 | 400 | 9597 |
| 14 | Q | 395 | 397 | 398 | 399 | 389 | 394 | 398 | 401 | 398 | 398 | 398 | 397 | 395 | 398 | 407 | 418 | 430 | 438 | 424 | 423 | 428 | 418 | 414 | 395 | 406 | 9750 |
| 15 | Q | 390 | 390 | 400 | 403 | 405 | 407 | 406 | 405 | 401 | 398 | 394 | 394 | 408 | 402 | 404 | 407 | 403 | 398 | 398 | 402 | 403 | 402 | 398 | 397 | 400 | 9605 |
| 16 | Q | 399 | 402 | 402 | 401 | 396 | 394 | 394 | 398 | 393 | 386 | 385 | 379 | 383 | 389 | 392 | 398 | 411 | 415 | 402 | 393 | 391 | 410 | 400 | 396 | 396 | 9509 |
| 17 | | 383 | 388 | 399 | 399 | 395 | 365 | 352 | 369 | 377 | 389 | 393 | 393 | 389 | 394 | 397 | 394 | 393 | 391 | | | | | | | | |

LERWICK

VERTICAL INTENSITY

1982 SEPTEMBER

47500 GAMMAS PLUS TABULAR QUANTITIES (UNIT 1 GAMMA)

| U.T. | 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 | MEAN | SUM |
|--------|---|-----|-----|------|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-------|
| 1 | Q | 365 | 380 | 388 | 392 | 391 | 393 | 396 | 395 | 392 | 382 | 375 | 373 | 379 | 389 | 401 | 422 | 417 | 423 | 418 | 404 | 394 | 394 | 391 | 388 | 393 | 9442 |
| 2 | | 374 | 353 | 338 | 334 | 356 | 368 | 380 | 383 | 380 | 378 | 382 | 388 | 395 | 409 | 419 | 404 | 408 | 414 | 427 | 425 | 409 | 414 | 373 | 286 | 383 | 9197 |
| 3 | | 356 | 352 | 362 | 352 | 331 | 351 | 371 | 382 | 378 | 378 | 396 | 402 | 405 | 402 | 438 | 441 | 430 | 427 | 422 | 418 | 409 | 400 | 384 | 388 | 390 | 9375 |
| 4 | | 388 | 388 | 370 | 350 | 357 | 373 | 377 | 363 | 371 | 385 | 408 | 413 | 427 | 455 | 508 | 550 | 539 | 525 | 465 | 435 | 392 | 320 | 329 | 300 | 408 | 9788 |
| 5 | | 325 | 294 | 335 | 319 | 290 | 291 | 334 | 339 | 360 | 379 | 386 | 407 | 410 | 469 | 500 | 535 | 519 | 451 | 414 | 402 | 404 | 353 | 321 | 455 | 387 | 9292 |
| 6 | D | 43 | 296 | 607 | 588 | 438 | 148 | 268 | 352 | 350 | 432 | 534 | 542 | 439 | 393 | 189 | 381 | 498 | 308 | 454 | 527 | 410 | 370 | 323 | 292 | 382 | 9182 |
| 7 | D | 228 | 281 | 199 | 288 | 294 | 290 | 377 | 419 | 439 | 476 | 470 | 492 | 503 | 505 | 476 | 471 | 529 | 531 | 426 | 423 | 455 | 423 | 421 | 368 | 407 | 9784 |
| 8 | | 400 | 422 | 430 | 426 | 423 | 428 | 430 | 430 | 430 | 424 | 418 | 404 | 400 | 404 | 409 | 413 | 417 | 418 | 418 | 418 | 416 | 413 | 413 | 413 | 417 | 10017 |
| 9 | | 413 | 364 | 391 | 390 | 374 | 384 | 395 | 408 | 406 | 402 | 395 | 398 | 409 | 411 | 427 | 435 | 453 | 461 | 461 | 455 | 357 | 321 | 353 | 356 | 401 | 9619 |
| 10 | Q | 345 | 355 | 383 | 405 | 405 | 416 | 415 | 417 | 417 | 413 | 409 | 405 | 404 | 404 | 406 | 407 | 426 | 427 | 419 | 413 | 410 | 414 | 417 | 414 | 406 | 9746 |
| 11 | | 409 | 408 | 381 | 383 | 380 | 392 | 399 | 403 | 402 | 398 | 397 | 399 | 395 | 404 | 416 | 413 | 429 | 440 | 434 | 428 | 422 | 410 | 409 | 371 | 405 | 9722 |
| 12 | | 336 | 357 | 378 | 387 | 390 | 373 | 386 | 392 | 395 | 394 | 392 | 391 | 395 | 396 | 400 | 404 | 408 | 402 | 398 | 403 | 433 | 420 | 408 | 367 | 392 | 9405 |
| 13 | | 295 | 294 | 290 | 365 | 403 | 411 | 413 | 413 | 413 | 409 | 405 | 407 | 399 | 400 | 410 | 440 | 430 | 412 | 410 | 406 | 408 | 409 | 407 | 387 | 393 | 9436 |
| 14 | | 391 | 405 | 405 | 402 | 375 | 346 | 379 | 390 | 390 | 395 | 401 | 402 | 400 | 402 | 408 | 408 | 404 | 401 | 426 | 475 | 425 | 381 | 397 | 404 | 400 | 9612 |
| 15 | | 409 | 408 | 406 | 405 | 400 | 387 | 372 | 387 | 393 | 398 | 400 | 398 | 393 | 391 | 392 | 405 | 407 | 406 | 399 | 406 | 402 | 405 | 382 | 387 | 397 | 9538 |
| 16 | | 393 | 393 | 392 | 394 | 396 | 397 | 395 | 392 | 390 | 391 | 392 | 392 | 388 | 396 | 397 | 399 | 399 | 400 | 401 | 415 | 434 | 418 | 400 | 399 | 398 | 9563 |
| 17 | Q | 400 | 407 | 408 | 407 | 406 | 404 | 404 | 400 | 399 | 399 | 402 | 400 | 396 | 400 | 407 | 415 | 410 | 421 | 411 | 410 | 408 | 405 | 401 | 400 | 405 | 9720 |
| 18 | | 396 | 334 | 354 | 324 | 360 | 389 | 401 | 393 | 394 | 391 | 386 | 384 | 385 | 391 | 408 | 420 | 416 | 408 | 409 | 452 | 442 | 409 | 430 | 447 | 397 | 9523 |
| 19 | | 427 | 425 | 412 | 377 | 367 | 363 | 379 | 395 | 404 | 400 | 399 | 390 | 388 | 399 | 420 | 443 | 447 | 443 | 461 | 460 | 448 | 395 | 371 | 334 | 406 | 9747 |
| 20 | | 349 | 377 | 394 | 396 | 399 | 399 | 391 | 396 | 405 | 406 | 408 | 415 | 421 | 418 | 435 | 445 | 427 | 434 | 420 | 412 | 408 | 372 | 294 | 310 | 397 | 9531 |
| 21 | D | 331 | 326 | 325 | 297 | 418 | 304 | 335 | 372 | 370 | 356 | 361 | 357 | 370 | 395 | 401 | 402 | 409 | 426 | 441 | 431 | 391 | 70 | 126 | 136 | 339 | 8150 |
| 22 | D | 93 | -43 | -233 | 179 | -190 | -18 | -15 | 164 | 386 | 512 | 491 | 480 | 479 | 481 | 471 | 469 | 504 | 527 | 489 | 433 | 398 | 355 | 303 | 291 | 292 | 7006 |
| 23 | | 344 | 330 | 296 | 312 | 302 | 291 | 320 | 356 | 374 | 387 | 394 | 398 | 399 | 409 | 416 | 440 | 440 | 441 | 451 | 447 | 401 | 381 | 341 | 323 | 374 | 8993 |
| 24 | | 355 | 363 | 392 | 394 | 398 | 385 | 391 | 407 | 413 | 411 | 411 | 415 | 420 | 424 | 450 | 476 | 441 | 420 | 411 | 411 | 407 | 408 | 398 | 377 | 407 | 9778 |
| 25 | | 390 | 398 | 400 | 402 | 404 | 403 | 405 | 408 | 410 | 411 | 411 | 401 | 398 | 402 | 401 | 401 | 399 | 399 | 451 | 473 | 424 | 412 | 404 | 402 | 408 | 9809 |
| 26 | D | 400 | 393 | 387 | 384 | 356 | 363 | 377 | 380 | 383 | 393 | 405 | 432 | 464 | 538 | 349 | 239 | 180 | 399 | 232 | 406 | 294 | 349 | 353 | 334 | 366 | 8790 |
| 27 | | 330 | 313 | 309 | 319 | 356 | 401 | 413 | 427 | 428 | 429 | 428 | 424 | 422 | 420 | 430 | 430 | 455 | 476 | 456 | 462 | 423 | 390 | 357 | 285 | 399 | 9583 |
| 28 | | 284 | 304 | 342 | 366 | 386 | 395 | 403 | 411 | 415 | 414 | 414 | 414 | 413 | 407 | 402 | 403 | 408 | 410 | 415 | 411 | 408 | 405 | 419 | 418 | 394 | 9467 |
| 29 | Q | 414 | 408 | 395 | 386 | 392 | 394 | 398 | 403 | 411 | 411 | 408 | 411 | 415 | 416 | 411 | 411 | 412 | 417 | 426 | 420 | 410 | 407 | 405 | 403 | 407 | 9784 |
| 30 | Q | 400 | 401 | 402 | 401 | 399 | 398 | 402 | 402 | 404 | 402 | 394 | 395 | 399 | 411 | 428 | 450 | 470 | 481 | 458 | 454 | 425 | 399 | 368 | 376 | 413 | 9919 |
| MEAN | | 346 | 350 | 355 | 371 | 359 | 354 | 370 | 386 | 397 | 405 | 409 | 411 | 410 | 418 | 414 | 426 | 431 | 432 | 424 | 431 | 409 | 381 | 370 | 360 | 392 | 9419 |
| MEAN Q | | 385 | 390 | 395 | 398 | 399 | 401 | 403 | 403 | 405 | 401 | 398 | 397 | 399 | 404 | 411 | 421 | 427 | 434 | 426 | 420 | 409 | 404 | 396 | 396 | 405 | 9722 |
| MEAN D | | 219 | 251 | 257 | 347 | 263 | 217 | 268 | 337 | 386 | 434 | 452 | 461 | 451 | 462 | 377 | 392 | 424 | 438 | 408 | 444 | 390 | 313 | 305 | 284 | 357 | 8580 |

LERWICK

VERTICAL INTENSITY

1982 OCTOBER

47500 GAMMAS PLUS TABULAR QUANTITIES (UNIT 1 GAMMA)

| U.T. | 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 | MEAN | SUM |
|------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-------|
| 1 | | 370 | 357 | 356 | 344 | 369 | 387 | 398 | 404 | 405 | 411 | 418 | 423 | 426 | 428 | 444 | 444 | 440 | 523 | 561 | 484 | 422 | 365 | 147 | 268 | 400 | 9594 |
| 2 | | 252 | 222 | 307 | 352 | 371 | 365 | 374 | 400 | 406 | 418 | 441 | 439 | 455 | 490 | 499 | 459 | 454 | 462 | 462 | 448 | 422 | 407 | 397 | 398 | 404 | 9700 |
| 3 | | 382 | 339 | 376 | 398 | 402 | 404 | 402 | 405 | 408 | 411 | 409 | 413 | 420 | 430 | 437 | 440 | 431 | 422 | 417 | 419 | 424 | 414 | 391 | 392 | 408 | 9786 |
| 4 | | 397 | 399 | 395 | 398 | 402 | 395 | 393 | 395 | 402 | 412 | 419 | 428 | 441 | 450 | 449 | 448 | 429 | 417 | 416 | 426 | 422 | 409 | 405 | 402 | 414 | 9949 |
| 5 | | 400 | 396 | 391 | 361 | 369 | 366 | 379 | 392 | 406 | 410 | 413 | 409 | 405 | 405 | 405 | 409 | 409 | 413 | 418 | 413 | 409 | 406 | 405 | 372 | 398 | 9561 |
| 6 | | 340 | 335 | 363 | 366 | 360 | 353 | 353 | 360 | 374 | 382 | 383 | 391 | 395 | 401 | 431 | 449 | 434 | 418 | 437 | 475 | 397 | 441 | 396 | 366 | 391 | 9400 |
| 7 | D | 368 | 304 | 340 | 363 | 345 | 320 | 322 | 340 | 373 | 406 | 430 | 431 | 440 | 441 | 443 | 483 | 527 | 517 | 460 | 444 | 436 | 424 | 416 | 409 | 407 | 9782 |
| 8 | | 349 | 331 | 372 | 380 | 333 | 370 | 394 | 401 | 412 | 421 | 418 | 412 | 405 | 404 | 416 | 450 | 461 | 502 | 472 | 509 | 456 | 452 | 404 | 397 | 413 | 9921 |
| 9 | Q | 389 | 377 | 388 | 401 | 405 | 407 | 409 | 412 | 412 | 413 | 408 | 405 | 401 | 396 | 400 | 408 | 406 | 404 | 404 | 405 | 404 | 404 | 392 | 402 | 402 | 9656 |
| 10 | | 378 | 380 | 388 | 396 | 398 | 399 | 400 | 402 | 404 | 405 | 401 | 400 | 398 | 394 | 392 | 393 | 396 | 402 | 406 | 405 | 405 | 405 | 379 | 379 | 397 | 9535 |
| 11 | | 388 | 391 | 398 | 396 | 395 | 394 | 385 | 391 | 394 | 396 | 397 | 395 | 398 | 396 | 397 | 401 | 400 | 401 | 399 | 402 | 409 | 394 | 386 | 388 | 395 | 9491 |
| 12 | | 381 | 373 | 374 | 383 | 387 | 388 | 392 | 394 | 400 | 396 | 395 | 400 | 401 | 400 | 407 | 405 | 406 | 406 | 405 | 402 | 369 | 348 | 383 | 401 | 391 | 9389 |
| 13 | D | 402 | 392 | 347 | 292 | 327 | 369 | 378 | 378 | 387 | 396 | 403 | 405 | 415 | 428 | 471 | 522 | 567 | 518 | 462 | 479 | 418 | 346 | 405 | 316 | 409 | 9823 |
| 14 | D | 252 | 218 | 224 | 228 | 266 | 289 | 324 | 361 | 375 | 400 | 416 | 409 | 434 | 450 | 457 | 473 | 491 | 503 | 559 | 542 | 495 | 453 | 429 | 427 | 395 | 9475 |
| 15 | Q | 417 | 406 | 409 | 412 | 413 | 413 | 413 | 414 | 415 | 413 | 412 | 409 | 413 | 417 | 416 | 414 | 412 | 406 | 404 | 419 | 413 | 411 | 413 | 410 | 412 | 9894 |
| 16 | | 410 | 408 | 405 | 410 | 407 | 404 | 404 | 402 | 402 | 402 | 399 | 400 | 399 | 402 | 410 | 430 | 445 | 461 | 448 | 434 | 454 | 446 | 441 | 420 | 418 | 10043 |
| 17 | | 406 | 390 | 337 | 342 | 367 | 402 | 413 | 411 | 409 | 407 | 405 | 407 | 402 | 405 | 420 | 422 | 414 | 416 | 425 | 432 | 431 | 368 | 329 | 361 | 396 | 9521 |
| 18 | | 387 | 384 | 400 | 401 | 395 | 405 | 405 | 405 | 406 | 408 | 407 | 413 | 421 | 442 | 471 | 483 | 505 | 457 | 432 | 439 | 421 | 384 | 390 | 392 | 419 | 10053 |
| 19</ | | | | | | | | | | | | | | | | | | | | | | | | | | | |

LERWICK

VERTICAL INTENSITY

1982 NOVEMBER

47500 GAMMAS PLUS TABULAR QUANTITIES (UNIT 1 GAMMA)

| U T | 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 | MEAN | SUM |
|--------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-------|
| 1 | D | 353 | 271 | 314 | 349 | 375 | 378 | 384 | 394 | 396 | 409 | 413 | 421 | 461 | 490 | 493 | 496 | 500 | 496 | 487 | 447 | 335 | 381 | 387 | 388 | 409 | 9818 |
| 2 | D | 387 | 388 | 387 | 391 | 404 | 403 | 402 | 404 | 407 | 410 | 418 | 430 | 427 | 456 | 481 | 504 | 535 | 469 | 528 | 539 | 488 | 441 | 374 | 289 | 432 | 10362 |
| 3 | | 359 | 353 | 290 | 295 | 293 | 303 | 356 | 388 | 395 | 422 | 457 | 452 | 461 | 470 | 438 | 430 | 423 | 418 | 414 | 410 | 408 | 406 | 406 | 406 | 394 | 9453 |
| 4 | Q | 409 | 409 | 409 | 409 | 409 | 408 | 405 | 400 | 400 | 403 | 408 | 413 | 413 | 412 | 425 | 439 | 433 | 422 | 421 | 433 | 422 | 418 | 405 | 396 | 413 | 9921 |
| 5 | | 357 | 373 | 389 | 397 | 401 | 403 | 400 | 399 | 400 | 402 | 401 | 406 | 408 | 404 | 410 | 422 | 418 | 421 | 432 | 422 | 409 | 404 | 400 | 403 | 403 | 9681 |
| 6 | | 391 | 374 | 383 | 391 | 394 | 392 | 381 | 378 | 388 | 392 | 395 | 397 | 398 | 399 | 405 | 417 | 434 | 425 | 417 | 414 | 413 | 409 | 404 | 401 | 399 | 9592 |
| 7 | Q | 395 | 396 | 393 | 395 | 400 | 401 | 400 | 403 | 407 | 411 | 409 | 408 | 405 | 405 | 403 | 404 | 405 | 405 | 404 | 405 | 409 | 407 | 408 | 406 | 403 | 9684 |
| 8 | | 400 | 400 | 398 | 397 | 397 | 396 | 396 | 396 | 397 | 397 | 397 | 394 | 394 | 392 | 390 | 389 | 391 | 391 | 426 | 541 | 487 | 435 | 418 | 408 | 405 | 9836 |
| 9 | Q | 400 | 400 | 397 | 396 | 389 | 383 | 390 | 392 | 396 | 400 | 401 | 400 | 396 | 393 | 396 | 392 | 392 | 392 | 395 | 396 | 397 | 398 | 398 | 399 | 395 | 9488 |
| 10 | | 398 | 394 | 387 | 394 | 397 | 396 | 393 | 396 | 400 | 404 | 405 | 400 | 400 | 403 | 401 | 407 | 409 | 408 | 421 | 460 | 439 | 431 | 430 | 441 | 409 | 9814 |
| 11 | | 425 | 411 | 380 | 359 | 369 | 383 | 388 | 393 | 397 | 396 | 397 | 398 | 398 | 402 | 411 | 418 | 416 | 413 | 417 | 419 | 420 | 415 | 416 | 409 | 402 | 9650 |
| 12 | | 404 | 372 | 372 | 388 | 389 | 389 | 393 | 394 | 397 | 398 | 404 | 404 | 409 | 414 | 411 | 407 | 407 | 412 | 417 | 404 | 406 | 409 | 407 | 404 | 400 | 9611 |
| 13 | | 387 | 314 | 351 | 347 | 375 | 391 | 391 | 391 | 395 | 395 | 398 | 404 | 404 | 401 | 405 | 404 | 409 | 409 | 401 | 407 | 430 | 428 | 406 | 400 | 394 | 9452 |
| 14 | | 400 | 387 | 391 | 396 | 396 | 396 | 394 | 394 | 394 | 400 | 400 | 398 | 398 | 402 | 403 | 408 | 421 | 426 | 417 | 412 | 413 | 409 | 404 | 398 | 394 | 9657 |
| 15 | | 392 | 395 | 400 | 386 | 392 | 396 | 396 | 396 | 397 | 400 | 409 | 405 | 403 | 404 | 413 | 415 | 438 | 443 | 422 | 415 | 413 | 410 | 406 | 404 | 406 | 9746 |
| 16 | | 401 | 400 | 396 | 398 | 397 | 398 | 395 | 400 | 398 | 398 | 398 | 397 | 398 | 400 | 401 | 404 | 405 | 403 | 402 | 400 | 401 | 402 | 380 | 385 | 398 | 9557 |
| 17 | Q | 393 | 395 | 398 | 398 | 397 | 396 | 395 | 393 | 393 | 393 | 393 | 393 | 393 | 395 | 394 | 397 | 397 | 396 | 401 | 410 | 429 | 447 | 428 | 414 | 401 | 9638 |
| 18 | | 414 | 405 | 410 | 408 | 401 | 400 | 401 | 399 | 393 | 394 | 397 | 397 | 398 | 410 | 430 | 444 | 483 | 484 | 436 | 417 | 410 | 405 | 392 | 379 | 413 | 9907 |
| 19 | | 362 | 367 | 376 | 379 | 393 | 399 | 401 | 399 | 398 | 398 | 398 | 401 | 397 | 399 | 401 | 407 | 416 | 413 | 414 | 423 | 424 | 416 | 399 | 397 | 399 | 9577 |
| 20 | Q | 397 | 397 | 397 | 397 | 398 | 398 | 398 | 398 | 401 | 397 | 393 | 397 | 397 | 396 | 397 | 398 | 401 | 401 | 401 | 407 | 410 | 404 | 398 | 372 | 398 | 9550 |
| 21 | | 341 | 368 | 372 | 376 | 362 | 339 | 351 | 355 | 370 | 381 | 389 | 393 | 396 | 398 | 400 | 413 | 445 | 453 | 491 | 557 | 520 | 441 | 372 | 319 | 400 | 9602 |
| 22 | | 257 | 308 | 338 | 158 | 232 | 254 | 346 | 376 | 394 | 406 | 414 | 419 | 416 | 410 | 406 | 406 | 407 | 410 | 414 | 414 | 411 | 410 | 408 | 406 | 367 | 8820 |
| 23 | | 402 | 404 | 403 | 402 | 401 | 401 | 401 | 401 | 403 | 405 | 395 | 396 | 394 | 400 | 407 | 414 | 476 | 597 | 502 | 504 | 385 | 402 | 419 | 392 | 421 | 10106 |
| 24 | D | 401 | 388 | 422 | 424 | 425 | 423 | 422 | 422 | 423 | 422 | 416 | 426 | 470 | 570 | 390 | 553 | 87 | 39 | 122 | 444 | 452 | 239 | 224 | 247 | 369 | 8851 |
| 25 | D | 295 | 318 | 405 | 404 | 369 | 351 | 382 | 410 | 456 | 470 | 459 | 444 | 458 | 459 | 487 | 465 | 459 | 455 | 441 | 443 | 432 | 416 | 382 | 395 | 419 | 10055 |
| 26 | | 400 | 397 | 396 | 367 | 324 | 363 | 372 | 393 | 410 | 411 | 420 | 436 | 433 | 431 | 441 | 509 | 491 | 446 | 428 | 419 | 419 | 413 | 412 | 401 | 414 | 9932 |
| 27 | | 397 | 397 | 398 | 384 | 387 | 393 | 396 | 401 | 406 | 409 | 409 | 416 | 437 | 451 | 442 | 449 | 437 | 437 | 440 | 422 | 415 | 415 | 407 | 385 | 414 | 9930 |
| 28 | | 352 | 195 | 258 | 346 | 367 | 365 | 372 | 384 | 393 | 398 | 405 | 415 | 427 | 427 | 426 | 442 | 443 | 454 | 475 | 448 | 415 | 370 | 342 | 312 | 384 | 9231 |
| 29 | D | 297 | 336 | 368 | 378 | 390 | 389 | 389 | 391 | 392 | 395 | 397 | 405 | 410 | 425 | 453 | 459 | 526 | 524 | 500 | 478 | 315 | 243 | 377 | 410 | 402 | 9647 |
| 30 | | 401 | 365 | 347 | 368 | 360 | 378 | 391 | 405 | 410 | 410 | 409 | 413 | 415 | 419 | 425 | 417 | 414 | 411 | 407 | 408 | 407 | 406 | 404 | 405 | 400 | 9595 |
| MEAN | | 379 | 369 | 377 | 376 | 379 | 382 | 389 | 395 | 400 | 404 | 407 | 409 | 414 | 421 | 420 | 432 | 424 | 423 | 427 | 436 | 416 | 400 | 393 | 385 | 402 | 9657 |
| MEAN Q | | 399 | 399 | 399 | 399 | 399 | 397 | 398 | 397 | 399 | 401 | 401 | 402 | 401 | 400 | 403 | 406 | 406 | 403 | 404 | 410 | 413 | 415 | 407 | 397 | 402 | 9655 |
| MEAN D | | 347 | 340 | 379 | 389 | 393 | 389 | 396 | 404 | 415 | 421 | 421 | 425 | 445 | 480 | 461 | 495 | 421 | 397 | 416 | 470 | 404 | 344 | 349 | 346 | 406 | 9747 |

LERWICK

VERTICAL INTENSITY

1982 DECEMBER

47500 GAMMAS PLUS TABULAR QUANTITIES (UNIT 1 GAMMA)

| U T | 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 | MEAN | SUM |
|-----|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-------|
| 1 | Q | 407 | 408 | 408 | 407 | 406 | 405 | 404 | 402 | 404 | 404 | 405 | 406 | 406 | 406 | 409 | 410 | 408 | 407 | 407 | 404 | 401 | 400 | 400 | 401 | 405 | 9725 |
| 2 | Q | 403 | 403 | 404 | 404 | 404 | 403 | 402 | 401 | 399 | 400 | 401 | 400 | 398 | 400 | 406 | 407 | 406 | 405 | 403 | 402 | 401 | 401 | 403 | 396 | 402 | 9652 |
| 3 | | 395 | 396 | 391 | 397 | 400 | 399 | 395 | 392 | 392 | 391 | 391 | 393 | 391 | 401 | 418 | 427 | 450 | 441 | 423 | 413 | 409 | 409 | 407 | 410 | 405 | 9731 |
| 4 | | 401 | 379 | 353 | 369 | 385 | 393 | 398 | 398 | 398 | 396 | 396 | 394 | 395 | 395 | 398 | 401 | 401 | 402 | 403 | 402 | 404 | 412 | 440 | 377 | 395 | 9490 |
| 5 | | 341 | 316 | 329 | 360 | 378 | 379 | 390 | 399 | 405 | 405 | 405 | 404 | 404 | 404 | 404 | 404 | 404 | 405 | 408 | 413 | 409 | 409 | 405 | 404 | 391 | 9384 |
| 6 | Q | 401 | 401 | 400 | 398 | 396 | 400 | 400 | 399 | 400 | 401 | 401 | 398 | 395 | 395 | 396 | 400 | 398 | 398 | 400 | 400 | 400 | 404 | 403 | 402 | 399 | 9586 |
| 7 | | 399 | 398 | 396 | 395 | 393 | 395 | 387 | 389 | 390 | 389 | 383 | 380 | 385 | 396 | 429 | 474 | 534 | 530 | 536 | 509 | 503 | 466 | 434 | 372 | 427 | 10262 |
| 8 | | 325 | 309 | 320 | 352 | 376 | 390 | 399 | 403 | 407 | 418 | 432 | 451 | 460 | 487 | 534 | 501 | 540 | 599 | 580 | 538 | 528 | 458 | 436 | 424 | 444 | 10667 |
| 9 | | 396 | 402 | 403 | 403 | 400 | 399 | 407 | 412 | 414 | 420 | 417 | 414 | 415 | 450 | 455 | 421 | 414 | 414 | 417 | 423 | 424 | 411 | 409 | 401 | 414 | 9941 |
| 10 | D | 397 | 399 | 403 | 404 | 402 | 399 | 399 | 348 | 359 | 361 | 374 | 390 | 401 | 416 | 414 | 413 | 511 | 560 | 573 | 600 | 595 | 520 | 455 | 441 | 439 | 10534 |
| 11 | | 399 | 412 | 424 | 409 | 400 | 401 | 409 | 409 | 408 | 408 | 409 | 412 | 417 | 417 | 420 | 436 | 474 | 467 | 488 | 504 | 484 | 417 | 412 | 425 | 427 | 10261 |
| 12 | | 431 | 434 | 437 | 414 | 412 | 405 | 409 | 412 | 409 | 413 | 417 | 430 | 430 | 429 | 425 | 422 | 425 | 430 | 416 | 411 | 409 | 412 | 416 | 409 | 419 | 10057 |
| 13 | Q | 410 | 411 | 410 | 412 | 408 | 404 | 404 | 404 | 403 | 402 | 399 | 395 | 396 | 400 | 409 | 411 | 409 | 412 | 415 | 409 | 412 | 417 | 409 | 409 | 407 | 9770 |
| 14 | | 413 | 414 | 412 | 410 | 400 | 402 | 400 | 401 | 401 | 401 | 402 | 406 | 406 | 411 | 411 | 410 | 407 | 404 | 403 | 400 | 400 | 389 | 368 | 353 | 401 | 9624 |
| 15 | | 386 | 392 | 396 | 401 | 401 | 398 | 394 | 390 | 386 | 383 | 382 | 390 | 396 | 398 | 400 | 400 | 399 | 398 | 397 | 396 | 397 | 397 | 396 | 397 | 394 | 9470 |
| 16 | | 396 | 398 | 398 | 399 | 396 | 397 | 397 | 396 | 392 | 390 | 391 | 395 | 400 | 413 | 427 | 454 | 487 | 475 | 483 | 455 | 420 | 409 | 325 | 309 | 408 | 9802 |
| 17 | D | 306 | 303 | 284 | 282 | 310 | 282 | 298 | 324 | 393 | 312 | 329 | 396 | 471 | 506 | 552 | 501 | 438 | 446 | 442 | 471 | 493 | 509 | 451 | 396 | 395 | 9495 |
| 18 | D | 382 | 295 | 336 | 361 | 382 | 398 | 404 | 404 | 402 | 413 | 417 | 401 | 409 | 425 | 463 | 477 | 514 | 476 | 479 | 533 | 489 | 451 | 429 | 420 | 423 | 10160 |

TABLE 4 K INDICES FOR THE YEAR 1982
From D, H and Z combined

| DATE | JANUARY | FEBRUARY | MARCH | APRIL | MAY | JUNE | JULY | AUGUST | SEPTEMBER | OCTOBER | NOVEMBER | DECEMBER | | | | | | | | | | | | |
|------|---------|----------|-------|-------|------|------|------|--------|-----------|---------|----------|----------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1 | 1101 | 2301 | 1223 | 5476 | 2123 | 6739 | 2121 | 3156 | 4332 | 3542 | 4221 | 2345 | 5323 | 3233 | 2211 | 2334 | 2112 | 2211 | 2211 | 3447 | 7322 | 2563 | 0000 | 0000 |
| 2 | 1000 | 1332 | 6564 | 4412 | 7866 | 5544 | 7532 | 4656 | 5323 | 4354 | 4421 | 2121 | 2321 | 2222 | 4323 | 5676 | 3212 | 3334 | 6333 | 4332 | 2122 | 3655 | 0000 | 0001 |
| 3 | 2211 | 1353 | 2343 | 3324 | 3112 | 2232 | 4553 | 5454 | 4443 | 4554 | 3212 | 2212 | 2101 | 1210 | 3333 | 4433 | 3333 | 4323 | 3221 | 1113 | 4422 | 2100 | 1001 | 1313 |
| 4 | 3101 | 2223 | 5433 | 4367 | 1022 | 2213 | 5332 | 2334 | 3223 | 4410 | 2201 | 2112 | 0000 | 0000 | 2212 | 3333 | 2233 | 4445 | 1232 | 2110 | 0010 | 1232 | 3300 | 0114 |
| 5 | 2011 | 0000 | 7522 | 2424 | 3441 | 1000 | 3323 | 2334 | 2322 | 3230 | 1112 | 1201 | 0000 | 3210 | 2233 | 3433 | 3333 | 4428 | 3312 | 0012 | 2001 | 1230 | 3311 | 0011 |
| 6 | 2221 | 0021 | 2332 | 2766 | 1000 | 0000 | 2322 | 3433 | 2101 | 1211 | 3231 | 2211 | 2012 | 2433 | 3213 | 4243 | 8967 | 8687 | 3222 | 3344 | 1132 | 1100 | 1100 | 0000 |
| 7 | 2211 | 2232 | 5423 | 1234 | 0000 | 0001 | 1010 | 1101 | 1001 | 1000 | 3232 | 3210 | 3332 | 3441 | 8785 | 6721 | 7735 | 5663 | 5542 | 3422 | 1000 | 0001 | 0222 | 3475 |
| 8 | 3211 | 0132 | 5112 | 2142 | 2100 | 1234 | 0011 | 3334 | 2010 | 1111 | 0112 | 2323 | 1322 | 2323 | 1111 | 2121 | 1222 | 2223 | 3421 | 2344 | 0001 | 1351 | 4323 | 3562 |
| 9 | 1100 | 0001 | 3221 | 2122 | 5112 | 2423 | 3210 | 2222 | 2211 | 2111 | 3322 | 3210 | 3221 | 2221 | 1133 | 1455 | 5344 | 3453 | 2111 | 0203 | 1211 | 1100 | 1223 | 3222 |
| 10 | 0000 | 0012 | 3213 | 5644 | 4322 | 2213 | 3322 | 6678 | 1100 | 1111 | 3654 | 6612 | 3311 | 2231 | 5332 | 4333 | 3211 | 1321 | 3113 | 2224 | 2102 | 2223 | 1144 | 3464 |
| 11 | 2200 | 0010 | 4532 | 4648 | 2221 | 1231 | 6444 | 4355 | 2211 | 2222 | 3432 | 2546 | 1114 | 5534 | 3322 | 4651 | 2222 | 3323 | 3112 | 2133 | 3312 | 2323 | 3312 | 2343 |
| 12 | 1000 | 0000 | 8213 | 4356 | 2221 | 1231 | 1212 | 3330 | 1112 | 1221 | 6322 | 5667 | 2114 | 6754 | 1233 | 4433 | 3221 | 1234 | 2122 | 1244 | 3312 | 2323 | 3212 | 2312 |
| 13 | 0000 | 0000 | 5343 | 5677 | 5411 | 1021 | 4521 | 0002 | 1110 | 1221 | 5533 | 5456 | 5633 | 4989 | 2222 | 3223 | 5313 | 3203 | 2321 | 3646 | 3312 | 1142 | 1101 | 0123 |
| 14 | 0000 | 0001 | 4542 | 3465 | 2100 | 2131 | 0010 | 2100 | 1202 | 3210 | 3333 | 3442 | 9765 | 5566 | 2211 | 2332 | 1310 | 2343 | 6533 | 3343 | 2112 | 2223 | 0101 | 0034 |
| 15 | 1301 | 1222 | 3232 | 3300 | 3200 | 0002 | 1112 | 2213 | 3222 | 3431 | 2232 | 3523 | 5334 | 3434 | 1000 | 1111 | 0321 | 3323 | 2211 | 2120 | 1102 | 2333 | 2222 | 1000 |
| 16 | 1021 | 3254 | 1111 | 2010 | 1100 | 0101 | 1111 | 0442 | 1222 | 2211 | 3111 | 3321 | 3334 | 2526 | 0100 | 2322 | 1112 | 3223 | 1122 | 3323 | 1112 | 0023 | 0011 | 1325 |
| 17 | 3211 | 1100 | 0133 | 3455 | 0001 | 3323 | 2232 | 2221 | 1211 | 3322 | 1122 | 3100 | 6323 | 3124 | 2221 | 2134 | 1113 | 1310 | 4422 | 2134 | 0000 | 0113 | 4565 | 4365 |
| 18 | 1100 | 0144 | 4332 | 3245 | 3232 | 3332 | 0020 | 3323 | 3224 | 2223 | 0231 | 1120 | 4233 | 4332 | 3221 | 3324 | 4422 | 3344 | 3222 | 3433 | 2211 | 2313 | 4334 | 3342 |
| 19 | 2000 | 0000 | 3532 | 3343 | 3222 | 1012 | 0111 | 2322 | 3221 | 2222 | 1132 | 4545 | 4234 | 5433 | 2212 | 2231 | 3322 | 4434 | 2221 | 2334 | 3100 | 1024 | 2234 | 3213 |
| 20 | 2110 | 0011 | 3232 | 2244 | 0031 | 2222 | 3233 | 2213 | 2212 | 2211 | 3232 | 3331 | 4543 | 2111 | 3102 | 3223 | 2233 | 3314 | 3223 | 2001 | 0000 | 1023 | 3333 | 6543 |
| 21 | 0112 | 2322 | 3113 | 3123 | 0232 | 2443 | 3233 | 4443 | 1122 | 3211 | 1122 | 3202 | 1121 | 3333 | 3322 | 2321 | 4544 | 4349 | 2221 | 1231 | 3322 | 2356 | 2333 | 3865 |
| 22 | 3322 | 2434 | 3422 | 5577 | 5632 | 3311 | 5421 | 1211 | 1101 | 1100 | 1121 | 4435 | 3121 | 4331 | 2223 | 3444 | 9986 | 5545 | 3200 | 1111 | 6642 | 0100 | 7622 | 3313 |
| 23 | 4421 | 2244 | 6212 | 1445 | 1111 | 3100 | 1012 | 2322 | 1000 | 0100 | 4541 | 3224 | 3222 | 3322 | 2232 | 3323 | 3332 | 2234 | 0010 | 1122 | 0012 | 2777 | 2123 | 3533 |
| 24 | 3222 | 2234 | 5422 | 2216 | 0112 | 1322 | 2101 | 3232 | 0000 | 1110 | 2222 | 2135 | 3434 | 4643 | 3332 | 3231 | 3332 | 4413 | 0000 | 1221 | 3224 | 7787 | 4322 | 2232 |
| 25 | 2111 | 2102 | 3533 | 4343 | 3322 | 3333 | 4445 | 4321 | 0101 | 2323 | 4344 | 2111 | 3532 | 2232 | 2233 | 3324 | 2111 | 2332 | 1220 | 3353 | 7444 | 5443 | 2222 | 2321 |
| 26 | 1000 | 1033 | 4533 | 2256 | 2112 | 1313 | 0001 | 2223 | 2212 | 4434 | 1222 | 3334 | 4423 | 3423 | 3222 | 3223 | 2333 | 7788 | 5334 | 3312 | 2323 | 3414 | 2211 | 1100 |
| 27 | 2212 | 2214 | 2212 | 2112 | 3211 | 2100 | 0132 | 3554 | 3343 | 6545 | 5442 | 3245 | 3552 | 2334 | 3212 | 2222 | 7423 | 3444 | 2122 | 2333 | 1122 | 2341 | 2132 | 2224 |
| 28 | 2323 | 2201 | 2011 | 1241 | 0210 | 0000 | 4322 | 3335 | 4543 | 6545 | 4333 | 3434 | 3333 | 3342 | 1001 | 0234 | 4312 | 0112 | 1012 | 2123 | 5322 | 2344 | 3222 | 2253 |
| 29 | 0000 | 1332 | | 1331 | 1123 | 3323 | 4554 | 4333 | 4343 | 4213 | 3423 | 5232 | 3422 | 3334 | 4443 | 1122 | 2020 | 3442 | 3425 | 3112 | 3675 | 3323 | 2243 | |
| 30 | 5533 | 2211 | | 2212 | 3213 | 5433 | 4434 | 4444 | 4435 | 4553 | 2224 | 2122 | 3523 | 2342 | | 3343 | 0112 | 3223 | 3332 | 3434 | 4222 | 3100 | 3322 | 1232 |
| 31 | 3433 | 5541 | | 4322 | 3443 | | | 4334 | 3443 | | | | 3443 | 3323 | 2231 | 3323 | | | | 3320 | 3465 | | 3200 | 1002 |

LERWICK 1982

TABLE 5 MEAN MONTHLY AND ANNUAL VALUES OF GEOMAGNETIC ELEMENTS

| ALL DAYS | D | I | H | X | Y | Z | T | | |
|-----------|----|------|----|------|-------|-------|-------|-------|-------|
| January | -7 | 36.0 | 72 | 39.6 | 14949 | 14818 | -1977 | 47879 | 50158 |
| February | -7 | 34.1 | 72 | 41.2 | 14928 | 14798 | -1966 | 47889 | 50162 |
| March | -7 | 34.5 | 72 | 40.2 | 14941 | 14811 | -1970 | 47884 | 50161 |
| April | -7 | 33.3 | 72 | 40.2 | 14941 | 14811 | -1964 | 47882 | 50159 |
| May | -7 | 33.4 | 72 | 39.1 | 14957 | 14827 | -1967 | 47877 | 50159 |
| June | -7 | 32.6 | 72 | 39.3 | 14953 | 14824 | -1963 | 47876 | 50157 |
| July | -7 | 31.2 | 72 | 40.2 | 14943 | 14943 | -1956 | 47888 | 50165 |
| August | -7 | 30.6 | 72 | 40.3 | 14944 | 14816 | -1953 | 47894 | 50171 |
| September | -7 | 28.6 | 72 | 41.7 | 14921 | 14794 | -1942 | 47892 | 50163 |
| October | -7 | 29.9 | 72 | 41.1 | 14934 | 14806 | -1949 | 47904 | 50178 |
| November | -7 | 27.7 | 72 | 41.1 | 14933 | 14933 | -1939 | 47902 | 50176 |
| December | -7 | 27.4 | 72 | 40.9 | 14938 | 14812 | -1939 | 47907 | 50182 |
| Year | -7 | 31.6 | 72 | 40.4 | 14940 | 14812 | -1957 | 47890 | 50166 |

INTERNATIONAL QUIET DAYS

| | D | H | Z | |
|-----------|----|------|-------|-------|
| January | -7 | 36.5 | 14957 | 47877 |
| February | -7 | 35.0 | 14939 | 47898 |
| March | -7 | 34.8 | 14949 | 47884 |
| April | -7 | 34.2 | 14947 | 47888 |
| May | -7 | 33.1 | 14961 | 47880 |
| June | -7 | 33.5 | 14958 | 47878 |
| July | -7 | 32.3 | 14961 | 47881 |
| August | -7 | 30.2 | 14943 | 47900 |
| September | -7 | 29.7 | 14934 | 47905 |
| October | -7 | 30.7 | 14942 | 47905 |
| November | -7 | 28.9 | 14944 | 47902 |
| December | -7 | 27.5 | 14942 | 47902 |
| Year | -7 | 32.2 | 14948 | 47892 |

DISTURBED DAYS

| | D | H | Z | |
|-----------|----|------|-------|-------|
| January | -7 | 34.5 | 14942 | 47882 |
| February | -7 | 33.1 | 14912 | 47880 |
| March | -7 | 32.4 | 14907 | 47882 |
| April | -7 | 31.6 | 14926 | 47883 |
| May | -7 | 32.9 | 14950 | 47868 |
| June | -7 | 31.4 | 14946 | 47864 |
| July | -7 | 30.8 | 14918 | 47892 |
| August | -7 | 29.8 | 14931 | 47886 |
| September | -7 | 25.6 | 14866 | 47857 |
| October | -7 | 29.1 | 14920 | 47904 |
| November | -7 | 25.8 | 14924 | 47906 |
| December | -7 | 27.3 | 14931 | 47905 |
| Year | -7 | 30.4 | 14923 | 47884 |

LERWICK

TABLE 6 ADOPTED BASELINE VALUES 1982

Declination

| Interval starting | Interval starting | Interval starting |
|-------------------|-------------------|-------------------|
| Jan 1 8°25.2 | Apr 21 8°24.9 | Jul 1 8°25.0 |
| 5 8°25.3 | 26 8°24.7 | Aug 1 8°24.9 |
| Feb 1 8°25.4 | May 1 8°24.6 | 10 8°24.8 |
| Mar 16 8°25.5 | 5 8°24.5 | Sep 15 8°24.9 |
| Apr 1 8°25.4 | 20 8°24.6 | Dec 25 8°25.0 |
| 5 8°25.3 | Jun 1 8°24.7 | Nov 1 8°25.1 |
| 10 8°25.2 | 5 8°24.8 | Dec 1 8°25.2 |
| 15 8°25.1 | 10 8°24.9 | |

Horizontal intensity

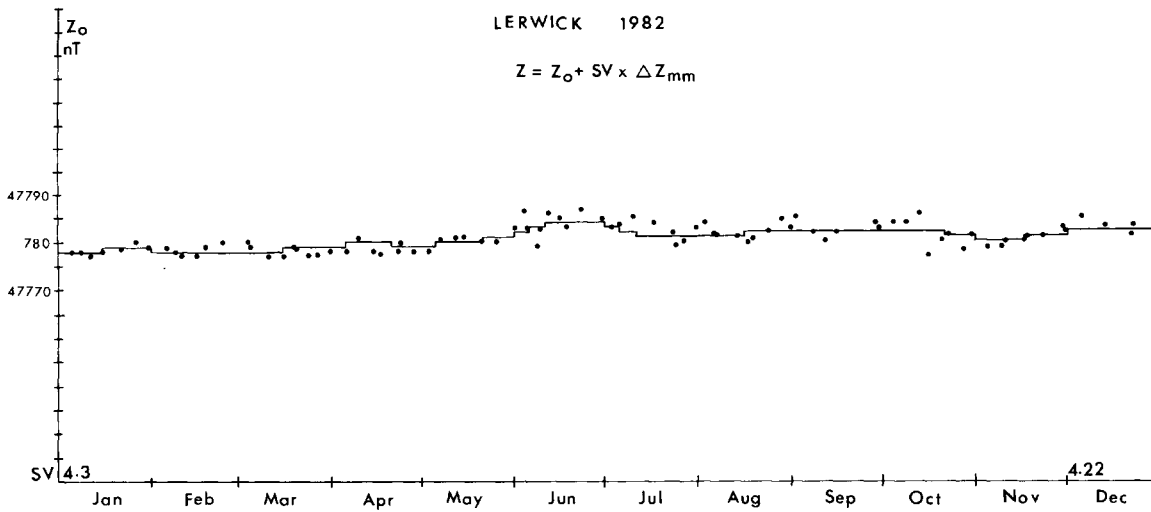
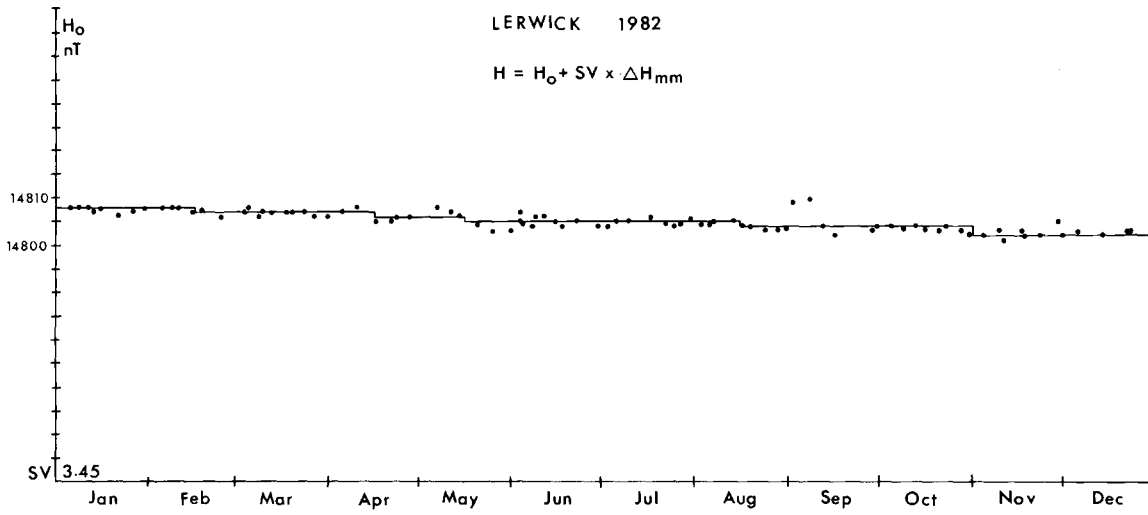
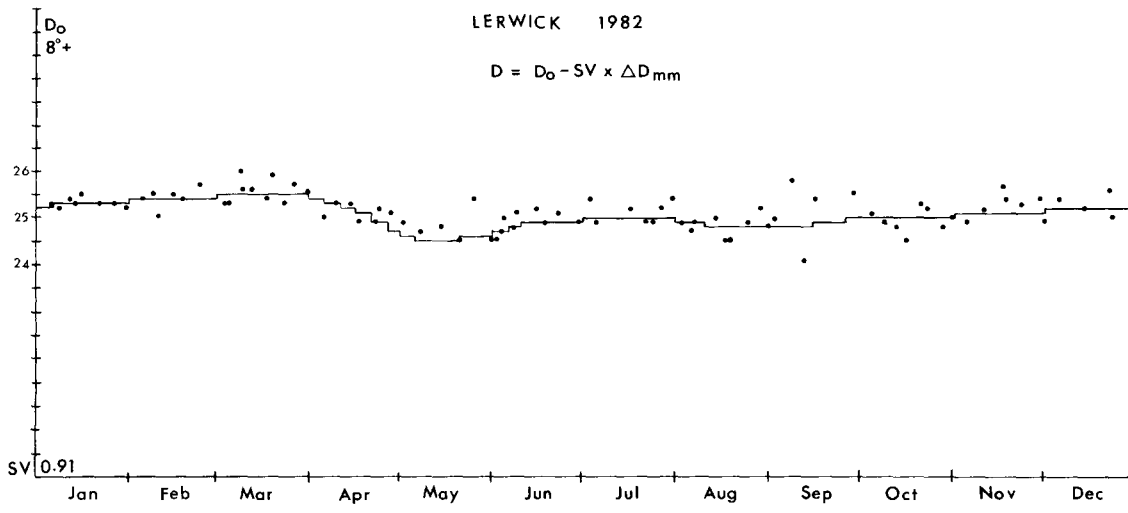
| Interval starting | Interval starting | Interval starting |
|-------------------|-------------------|-------------------|
| Jan 1 14808 | Apr 15 14806 | Aug 15 14804 |
| Feb 15 14807 | May 10 14805 | Nov 1 14802 |

Vertical intensity

| Interval starting | Interval starting | Interval starting |
|-------------------|-------------------|-------------------|
| Jan 1 47778 | Jun 1 47782 | Aug 15 47782 |
| 16 47779 | 5 47783 | Oct 20 47781 |
| Feb 1 47778 | 10 47784 | Nov 1 47780 |
| Apr 15 47779 | Jul 1 47783 | 16 47781 |
| May 5 47780 | 5 47782 | Dec 1 47782 |
| 20 47781 | 10 47781 | |

TABLE 7 ADOPTED SCALE VALUES 1982

| D | H | Z |
|------------|------------|------------|
| /mm | nT/mm | nT/mm |
| Jan 1 0.91 | Jan 1 3.45 | Jan 1 4.30 |
| | | Dec 1 4.22 |



Lerwick 1982 Observed and allocated baseline values D_0 , H_0 and Z_0

TABLE 8 ANNUAL VALUES OF GEOMAGNETIC ELEMENTS

LERWICK

| Year | D | I | H | X | Y | Z | T |
|------|----------|---------|-------|-------|-------|-------|-------|
| 1923 | -15 40.3 | 72 33.7 | 14655 | 14111 | -3959 | 46655 | 48902 |
| 1924 | -15 26.5 | 72 35.7 | 14642 | 14113 | -3899 | 46708 | 48950 |
| 1925 | -15 13.5 | 72 37.2 | 14621 | 14108 | -3840 | 46713 | 48948 |
| 1926 | -14 58.6 | 72 37.1 | 14618 | 14121 | -3778 | 46699 | 48933 |
| 1927 | -14 45.7 | 72 38.1 | 14607 | 14125 | -3722 | 46713 | 48944 |
| 1928 | -14 32.9 | 72 39.4 | 14585 | 14117 | -3664 | 46702 | 48926 |
| 1929 | -14 19.4 | 72 40.3 | 14556 | 14104 | -3601 | 46651 | 48869 |
| 1930 | -14 7.0 | 72 41.6 | 14527 | 14088 | -3543 | 46624 | 48835 |
| 1931 | -13 55.4 | 72 42.3 | 14517 | 14090 | -3493 | 46623 | 48830 |
| 1932 | -13 41.9 | 72 43.5 | 14495 | 14083 | -3433 | 46608 | 48809 |
| 1933 | -13 29.8 | 72 44.6 | 14477 | 14077 | -3379 | 46605 | 48802 |
| 1934 | -13 17.7 | 72 48.0 | 14462 | 14074 | -3326 | 46716 | 48903 |
| 1935 | -13 5.3 | 72 49.4 | 14445 | 14070 | -3271 | 46730 | 48911 |
| 1936 | -12 53.6 | 72 51.2 | 14428 | 14064 | -3220 | 46763 | 48938 |
| 1937 | -12 42.4 | 72 52.8 | 14411 | 14058 | -3170 | 46785 | 48955 |
| 1938 | -12 31.6 | 72 53.9 | 14401 | 14059 | -3124 | 46809 | 48973 |
| 1939 | -12 21.4 | 72 54.9 | 14394 | 14061 | -3080 | 46833 | 48995 |
| 1940 | -12 11.1 | 72 55.8 | 14389 | 14065 | -3037 | 46960 | 49018 |
| 1941 | -12 1.0 | 72 56.8 | 14382 | 14067 | -2994 | 46884 | 49040 |
| 1942 | -11 52.5 | 72 56.8 | 14386 | 14078 | -2960 | 46899 | 49056 |
| 1943 | -11 43.5 | 72 57.8 | 14378 | 14078 | -2922 | 46919 | 49073 |
| 1944 | -11 35.1 | 72 58.1 | 14380 | 14087 | -2888 | 46940 | 49093 |
| 1945 | -11 26.3 | 72 58.8 | 14376 | 14090 | -2851 | 46963 | 49114 |
| 1946 | -11 17.1 | 73 0.2 | 14363 | 14085 | -2811 | 46989 | 49135 |
| 1947 | -11 8.7 | 73 0.5 | 14363 | 14092 | -2776 | 47002 | 49148 |
| 1948 | -11 0.9 | 73 0.1 | 14371 | 14106 | -2746 | 47009 | 49157 |
| 1949 | -10 53.1 | 73 0.2 | 14378 | 14119 | -2715 | 47037 | 49185 |
| 1950 | -10 45.5 | 72 59.5 | 14388 | 14135 | -2686 | 47039 | 49190 |
| 1951 | -10 37.7 | 72 59.1 | 14402 | 14155 | -2656 | 47061 | 49215 |
| 1952 | -10 29.9 | 72 58.6 | 14417 | 14176 | -2627 | 47087 | 49245 |
| 1953 | -10 22.8 | 72 57.8 | 14435 | 14199 | -2601 | 47106 | 49268 |
| 1954 | -10 15.6 | 72 57.3 | 14450 | 14219 | -2574 | 47129 | 49294 |
| 1955 | -10 9.2 | 72 56.9 | 14464 | 14237 | -2550 | 47156 | 49324 |
| 1956 | -10 2.8 | 72 57.3 | 14469 | 14247 | -2524 | 47191 | 49359 |
| 1957 | -9 57.5 | 72 56.8 | 14486 | 14268 | -2505 | 47225 | 49397 |
| 1958 | -9 52.7 | 72 55.8 | 14507 | 14292 | -2489 | 47246 | 49423 |
| 1959 | -9 48.1 | 72 55.3 | 14523 | 14311 | -2472 | 47271 | 49452 |
| 1960 | -9 43.4 | 72 54.9 | 14538 | 14329 | -2455 | 47299 | 49483 |
| 1961 | -9 39.1 | 72 53.5 | 14565 | 14359 | -2442 | 47318 | 49509 |
| 1962 | -9 33.3 | 72 52.1 | 14591 | 14389 | -2422 | 47336 | 49534 |
| 1963 | -9 28.5 | 72 51.3 | 14610 | 14411 | -2405 | 47359 | 49561 |
| 1964 | -9 24.4 | 72 50.2 | 14634 | 14437 | -2392 | 47382 | 49590 |
| 1965 | -9 21.1 | 72 49.2 | 14656 | 14461 | -2382 | 47403 | 49617 |
| 1966 | -9 17.8 | 72 48.7 | 14672 | 14479 | -2370 | 47431 | 49648 |
| 1967 | -9 14.2 | 72 48.3 | 14688 | 14498 | -2358 | 47464 | 49685 |
| 1968 | -9 12.1 | 72 47.4 | 14712 | 14523 | -2353 | 47496 | 49722 |
| 1969 | -9 10.3 | 72 46.2 | 14740 | 14552 | -2349 | 47531 | 49764 |
| 1970 | -9 7.9 | 72 45.4 | 14766 | 14579 | -2343 | 47573 | 49812 |
| 1971 | -9 5.2 | 72 44.1 | 14796 | 14610 | -2337 | 47607 | 49853 |
| 1972 | -8 59.5 | 72 43.3 | 14820 | 14638 | -2316 | 47646 | 49898 |
| 1973 | -8 53.6 | 72 42.4 | 14844 | 14666 | -2295 | 47680 | 49937 |
| 1974 | -8 46.5 | 72 41.8 | 14866 | 14692 | -2268 | 47719 | 49981 |
| 1975 | -8 38.4 | 72 40.9 | 14890 | 14721 | -2237 | 47753 | 50021 |
| 1976 | -8 29.9 | 72 40.1 | 14911 | 14747 | -2204 | 47780 | 50053 |
| 1977 | -8 20.9 | 72 39.5 | 14927 | 14769 | -2167 | 47803 | 50079 |
| 1978 | -8 10.1 | 72 39.8 | 14933 | 14782 | -2122 | 47835 | 50112 |
| 1979 | -8 0.3 | 72 39.3 | 14944 | 14798 | -2081 | 47850 | 50129 |
| 1980 | -7 50.4 | 72 39.0 | 14952 | 14812 | -2039 | 47858 | 50139 |
| 1981 | -7 40.9 | 72 39.7 | 14946 | 14812 | -1998 | 47875 | 50154 |
| 1982 | -7 31.6 | 72 40.4 | 14940 | 14812 | -1957 | 47890 | 50166 |

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