REPORT UAG - 29

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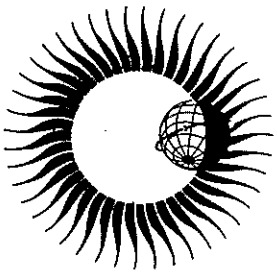
## for
## Solar-Terrestrial Physics

# AURORAL ELECTROJET MAGNETIC ACTIVITY INDICES AE (11) FOR 1968



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# Solar-Terrestrial Physics

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by


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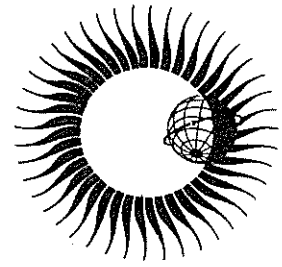
Boulder, Colorado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# AURORAL ELECTROJET MAGNETIC ACTIVITY INDICES, AE(11), FOR 1968

by

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## ABSTRACT

The Auroral Electrojet index (AE) is discussed and a detailed description is given of the derivation of 11-station 2.5-min AE indices for 1968. Tables are given of hourly average indices for each day of the year, of the stations making the main contribution to the hourly indices, and of the average monthly quiet-time level of horizontal field (H) at each magnetic observatory. Graphs of the index variations are included for each day.

## SECTION I

### 1. Introduction

The Auroral Electrojet Index, AE, is designed to provide a global, quantitative measure of auroral zone magnetic activity produced by enhanced ionospheric currents flowing below and within the auroral oval. Ideally it is the total range of deviation at an instant of time from quiet day values of the horizontal magnetic field (H) around the auroral oval. Defined and developed by Davis and Sugiura (1966), AE has been usefully employed both qualitatively and quantitatively as a correlative index in studies of substorm morphology, behavior of communication satellites of radio propagation in high and middle latitudes, and of the coupling between the interplanetary magnetic field and the earth's magnetosphere. For these various uses AE possesses advantages over other geomagnetic indices or at least shares their advantageous properties, in particular:

(i) it can be derived on an instantaneous basis or from averages of variations computed over any selected interval;

(ii) it is a quantitative index which, in general, is directly related to the processes producing the observed magnetic variations;

(iii) its method of derivation is relatively simple, digital, and objective and is well suited to present computer processing techniques; and

(iv) it may be used to study either individual events or statistical aggregates.

These indices are derived in response to indications of need as voiced by the scientific user community in journal articles, at meetings, in resolutions of national and international groups, and in personal communications. This report is one means of communicating a summary of the derived indices for a year and is the second such compilation published by the World Data Center A for Solar-Terrestrial Physics (Allen, 1972). Listings or digital magnetic tapes of detailed 2.5-min indices and microfilm of the daily graphs of variations can be obtained from WDC-A for Solar-Terrestrial Physics, NOAA, Boulder, Colorado 80302, U.S.A.

### 1.1 Prior Derivations of AE

Auroral electrojet indices (AU, AL, AE, and AO) have been derived for years before 1968 and these are available in some of the formats described above. For years 1957 through 1964 they were calculated and published on a systematic basis by the Geophysical Institute of the University of Alaska (T. N. Davis *et al.*, 1967, 1968). These values are hourly indices only, since they were based upon the standard tabulations of hourly-average scalings of H taken from magnetograms. The group of observatories used were in both the northern and southern hemispheres and changed from time to time.

For the period from September 1964 through December 1968, the indices were derived at the NASA Goddard Spaceflight Center from 2.5-min digital H values (King 1971). The stations whose magnetograms were used for these derivations changed as new observatories became operational and were incorporated into the network, or as blocks of stations were deleted because their magnetograms were not available in time. For the last third of 1964 and the first half of 1965 magnetograms from eleven northern hemisphere stations were used to derive AE; however indices for following years were derived from fewer stations until for the last two months of 1968, records from only three stations were used. These indices were recognized as "preliminary" at best and it was expected that the missing data would be added to the derivations as they became available. The present data report is the first step in this direction.

## 1.2 Definition and Computation of AE

AE was originally derived from digitized 2.5-min horizontal magnetic field records from a group of seven auroral zone magnetic observatories (Davis and Sugiura, 1966). A quiet-time H level was adopted for each contributing observatory on an event-by-event basis and this value was subtracted from the instantaneous H values. The result was a time series of deviations from undisturbed H levels, $\pm \Delta H(t)$. Superposition of the seven time series upon a common zero level produced a set of interwoven lines bounded by an upper and lower envelope formed by connecting extreme $\Delta H$ values. The amplitudes of the upper and lower envelopes were designated AU and AL, respectively, and at any instant the range between them, AU minus AL, was defined as AE for that time. In general, AU is a function of the current flowing in the eastward auroral electrojet while AL is similarly related to the westward auroral electrojet current. A secondary index, AO, is defined as the mean of AU and AL and reflects the high-latitude effects of the ring current and of zonal currents whether flowing in the ionosphere or magnetosphere. All indices, AU, AL, AE, and AO, are given in units of gammas (1 gamma = 1 nanotesla).

## 1.3 Observatory Selection for 1968 AE (11)

Records from eleven northern hemisphere observatories were used in the derivation of AE indices for 1968, AE(11) in our nomenclature. These are the same stations used for the 1970 derivation and they are given in Table 1 along with their abbreviations, geographic coordinates, geomagnetic coordinates, and the time of Local Geomagnetic Midnight (LGM) for each site. Also, their locations are shown in Figure 1 on a map of the northern hemisphere centered on the geomagnetic pole (extended geocentric dipole axis); the geomagnetic coordinates of the grid are indicated.

TABLE 1

Observatories Used for the Derivation of 1968 AE(11)

| | Observatory | Abbreviation | Geographic Coord. N. Lat.° | E. Long.° | Geomagnetic Coord. N. Lat.° | E. Long.° | LGM* UT |
|---|---|---|---|---|---|---|---|
| 1. | Leirvogur | LR | 64.18 | 338.30 | 70.22 | 71.04 | 2351 |
| 2. | Narssarssuaq | NAS | 61.20 | 314.16 | 71.21 | 36.79 | 0210 |
| 3. | Great Whale River | GWR | 55.27 | 282.22 | 66.58 | 347.36 | 0526 |
| 4. | Fort Churchill | FC | 58.80 | 265.90 | 68.70 | 322.77 | 0704 |
| 5. | College | CO | 64.87 | 212.17 | 64.63 | 256.52 | 1133 |
| 6. | Barrow | BW | 71.30 | 203.25 | 68.54 | 241.15 | 1235 |
| 7. | Cape Wellen # | UE | 66.17 | 190.17 | 61.79 | 237.10 | 1250 |
| 8. | Tixie Bay # | TI | 71.58 | 129.00 | 60.44 | 191.41 | 1551 |
| 9. | Cape Chelyuskin | CC | 77.72 | 104.28 | 66.26 | 176.46 | 1650 |
| 10. | Dixon Island # | DI | 73.55 | 80.57 | 63.02 | 161.57 | 1748 |
| 11. | Abisko | AI | 68.40 | 18.90 | 66.04 | 115.08 | 2052 |

*Local Geomagnetic Midnight (LGM) at equinox
Geomagnetic coordinates and time calculated for inclined dipole field

#Sometimes given as: Cape Uelen, Tiksi Bay, and Dikson Island, respectively.

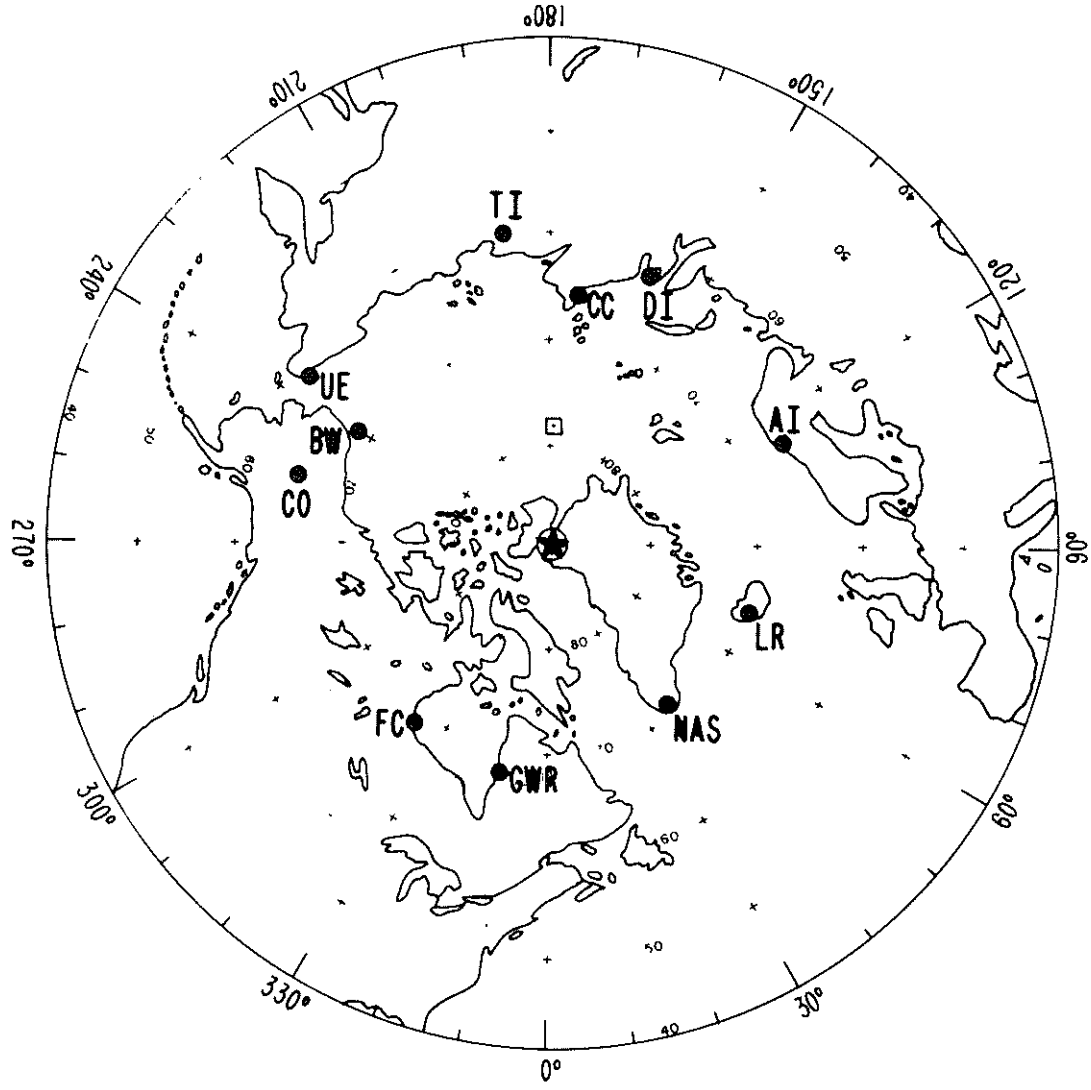


Figure 1 Observatories whose records were used in the derivation of 1968 AE(11) are shown as filled circles. Their abbreviations correspond to the list given in Table 1. The map is a polar equal-area projection centered on the north geomagnetic pole (extended geocentric dipole axis). The north geographic pole is indicated by the square.

Only geomagnetic coordinates are shown. Geomagnetic latitude is indicated by the concentric rings of plus signs (+) every 10°. Geomagnetic longitude is given by the outer ring of values every 30° with hatch-marks every 10°.

The network of stations selected for 1968 and 1970 AE derivations represents an attempt to achieve a relatively uniform longitude distribution of stations and a range of latitude coverage providing reasonable assurance of detection of even small events localized in spatial extent and of short duration and of larger events when the auroral oval is greatly expanded. It is, of course, a compromise between the desire to use as much data as possible and the high cost of digitizing magnetograms. We have tried to restrict the derivations to using data from established observatories so that indices for different years will be comparable, and timely availability of station records was a factor when there were several nearby observatories in one area.

Because we have encountered periods of one or more months during which one or two observatories were not operating and because the number of observatories used for future derivations may change, we have chosen to designate the number of contributing observatories parenthetically following the index letters, e.g. AE(11). The daily graphs of variations in 2.5-min AU, AL, AE, and AO indices which are a part of this report (Section III) show in the upper right corner the number of stations contributing to the derivations during that month, such as AE(10) or AE(11). Checking the average monthly quiet-time H values given in Section II will confirm which stations were active and which were not included during each month of 1968. Shorter intervals of lost records from critically located observatories are not indicated.

Analysis of the 1970 AE(11) index data indicates that an optimum station distribution would include stations lying equatorward of the instantaneous auroral oval during the evening hours which most often supply AU (about 1800 LGT) and others lying under the auroral oval during the early morning hours following local geomagnetic midnight when most AL values are supplied (about 0300 LGT).

The apparent longitude gaps between Fort Churchill (FC) and Barrow (BW) and between Barrow (BW) and Tixie Bay (TI) may subsequently be filled by the creation of new observatories. At that time the AE network will be supplemented by inclusion of data from these locations, resulting in AE(12) or AE(13). It should be noted that AE(12) or AE(13) for any instant can only be greater, not smaller than, AE(11).

### 1.4 Computation of AE Indices

The same technique of computation used for 1970 AE(11) and described in UAG-22 (Allen, 1972) has been followed with the 1968 derivation. Briefly, a constant quiet-time reference level for each month is computed for each station. The value used is the mean of all 2.5-min H values for the 5 Quiet Days of that station-month. No attempt is made to remove high-latitude Sq effects in deriving the reference level although low amplitude AU and AL indices have been noted to peak on quiet days at UT times when high-latitude Sq contributions are probably present. Some month-end discontinuities may arise due to steps in the monthly reference level at different stations but these are considered negligible relative to the amplitude of effects generally studied with AE indices.

Monthly quiet-time station reference levels of H are subtracted from the 2.5-min H values of each station for that month and the resulting eleven H-deviation time series are compared. The extreme deviations are identified at each 2.5-min interval and designated AU (most positive) and AL (most negative) for that time. AE and AO are computed according to their definitions. These are the basic AE data. In addition, hourly averages of all indices are computed. The 2.5-min indices, as well as the H-deviations, are recorded on digital magnetic tape to be available upon request.

Daily graphs of all four 2.5-min indices (AU, AL, AE, and AO) are produced on 35mm microfilm and are reproduced in this report (Section III). Monthly summaries (Section II) are derived which contain hourly average values of the indices, daily averages, and averages by hour of the UT-day for all days, for the 5 Quiet Days, and for the 5 Disturbed Days. Simple statistics are kept on the frequency and time of contribution of extreme values by each station and these are the basis for the listings of stations supplying AU and AL by hour for each month. Brief comments are given at the beginning of Sections II and III to describe the reproduced data and graphs.

## 2. Problems in Derivation of AE

Users of these indices should be aware of the following types of problems:

(i) those inherent in the method of derivation of the indices;

(ii) those arising from observatory procedures and the magnetograms; and

(iii) those produced by the digitizing process.

## 2.1 Inherent Problems

At an AE observatory an increased deviation from quiet time H may be the same for either an enhanced electrojet current or for a constant current which moves closer to the fixed observatory. Given the limited number of contributing observatories and using an index based exclusively upon variations in the H component, it is impossible to distinguish between these two alternatives unless the event is of a sufficient magnitude and duration to be monitored at several observatories.

Low amplitude electrojet variations of short duration occurring over those sectors between widely separated observatories may result in imperfectly recorded AE events. During quiet times it is known that the auroral oval contracts about the geomagnetic pole and during large disturbances that it may expand equatorward, extending well below the high-latitude ring of stations selected for deriving AE. Thus, times of low AE may not guarantee a total absence of magnetic activity over the polar cap and during large magnetic storms the indices are of questionable reliability.

## 2.2 Data and Recording Problems

The operating problems which may arise at an auroral zone magnetic observatory are technical and logistical. Difficulties in transmitting data may affect the timeliness with which records are made available, and inability to replace injured observatory staff at one station resulted in data loss for five weeks of 1970. However, those observatory problems which most often affect the derivation of AE are any which change the baseline of the H trace during a month, any which change the H scale values, and any setting of the H trace on the magnetogram which permits it to move off the edge of the photographic paper during times of moderate or large excursions.

The technique of deriving AE is such that the baseline is subtracted out and is not a source of significant error provided it remains approximately constant throughout the month or else its changes are known so that they can be included in computing the reference level and 2.5-min H values. For most months and most observatories there appears to be adequate stability so that arbitrary baselines can be assumed even if no quantitative measurements are available. However, some instances of baseline drift have been encountered in every year of data already processed. For earlier years such as 1968, final adopted baselines are often available and are used but for some observatories we have had to assume that older baselines were adequate and to hope that the presence of short-term drift during a month would be detected so that the subject magnetograms could be excluded from the derivation. Although this problem was probably greatest for years before 1968, continuing baseline stability problems have been encountered in special index derivations performed for parts of 1971 and 1972.

A few of the magnetograms processed in the derivation of 1968 AE(11) had irregularly spaced time-marks arising from erratic time drives in the magnetographs. Such records cause unique processing problems for our semi-automatic digitizing equipment. At other times the magnetograms appear to have been left on the recording drum more than one day so that a complex network of overlapping traces results. Some magnetograms are produced as records of variations recorded by electronic or atomic magnetometers. When these instruments are equipped with automatic range-changing electronics to compensate for the great range of deviations during disturbed times, it is difficult to track the number of range changes during the largest events and sometimes these systems require a manual resetting which is not always documented on the magnetograms or accompanying information sheets.

The most serious recording problem which affects the derivation of AE is any that causes loss of a recorded H-trace when no back-up record is available. Sometimes the H and other traces simply fade away even though geomagnetic conditions are quiet. However, usually loss of H is associated with higher levels of activity and such loss generally occurs at a time of maximum deviation when the disturbed record at that observatory would be the most important in the derivation of AU or AL. If the H-trace is located too near either edge of the magnetogram, even moderate magnetic activity can send it off the edge. Not all observatory variometers are equipped with secondary H-mirrors to protect against such loss of record. Most frequently the H-trace is lost during very disturbed conditions of magnetic storms when it may either be off the magnetogram or so mixed with the other traces that it cannot be distinguished for purposes of digitization. During such times unless there exists a low sensitivity storm magnetogram from the same observatory, the data are lost.

When the H trace is suddenly lost at a critical station that was supplying AU or AL, then the station supplying the next most extreme H-deviation at that instant becomes the key to the index. Sometimes after a few minutes the more extreme deviation record is again available and the critically located station again becomes the key to the affected index. This sequence of events may have the effect of placing a large, bay-like feature in the AU or AL trace. Such an artificial event changes the character of the derived AE index but may not be apparent in the AE variations graph. A perfect example is to be seen in the AU trace for 21 July 1970 beginning around 1330 UT (cf. UAG-22) and such characteristically shaped spurious events have been dubbed "missing data effects" (mde). Suspected mde's in the 1968 indices can be checked best by reference to the original magnetograms of the critical stations as listed in Section II.

Practically all problems arising from missing data could be eliminated by the following steps: suitable adjustment of the H trace on the magnetogram, use of variometers having secondary mirrors, and (most importantly) operation of low-sensitivity auxiliary storm magnetographs. Availability of these auxiliary storm magnetograms even during quiet times would also help in detecting and correcting the records during times of baseline drift on the normal magnetograph systems.

### 2.3 Digitizing Process Problems

Quality control of the digitizing process has proved to be more difficult than expected. A list of errata for Report UAG-22 (AE(11) for 1970) is included at the end of this report and it illustrates the fact that not all errors were caught before publication. Despite thorough quality control steps, we cannot be sure there are no accidental errors in the data in this report for 1968 or in the archived 2.5-min values.

Our first attempts to derive 1970 AE demonstrated that the plotting of continuous AU and AL traces was an excellent but expensive form of quality control over both the curve-following step and the application of calibration data. Since then, the quality control programs have been considerably supplemented and now involve extensive use of computer graphics. Immediately after completing the semi-automatic magnetogram curve-following process, synthesized magnetograms are plotted from the raw millimeter variations data recorded on digital magnetic tape. These plots are examined for unnatural appearing discontinuities typical of use of an incorrect baseline, selection of the wrong trace, etc. Reruns are performed on the curve-following equipment to correct detected errors and the corrected variations values are combined with calibration data to produce digital H values. Another set of synthesized magnetograms are then produced and compared with the original magnetogram copies.

Only after passing these visual tests and other computer examinations are the data submitted to the AE derivation program.

In spite of these quality control efforts, we expect that some errors will escape notice and be published or otherwise distributed. We request that anyone detecting questionable values in 1968 AE(11) or AE indices of other times please communicate with WDC-A concerning this matter. As necessary, corrections will be distributed to the user community on either a case-by-case basis or in future UAG reports in this series.

## 3. Acknowledgements

In the earlier Report UAG-22, the helpful support and advice given by many administrators and scientists was greatfully acknowledged. Our initial indebtedness to that group has not decreased but has enlarged as many of the same individuals have similarly contributed to the work of deriving the AE indices for 1968. This is especially true of the scientist-users who have encountered errors and brought them to our attention. We also wish to collectively acknowledge the help of those who have communicated with us concerning the importance of these indices in their work. Such continuing contact provides a basis for evaluation of this data product, suggests ways in which it may be improved, and documents the importance of the effort and money dedicated to this program. The data used in deriving AE indices are the responsibility of many people. From the staffs at the high-latitude observatories and those concerned with different stages of processing to the final availability of magnetograms and calibration data from the World Data Center system, each is essential. In particular, we wish to acknowledge the excellent work that has been done by the operators of the curve-following magnetogram digitization equipment. They have developed proficiency in their work and have willingly cooperated in the implementation of additional quality-control procedures.

## REFERENCES


| | | |
|---|---|---|
| ALLEN, J. H. | 1972 | Auroral Electrojet Magnetic Activity Indices (AE) For 1970, World Data Center A for Solar-Terrestrial Physics, Report UAG-22. |
| DAVIS, T. N. and M. SUGIURA | 1966 | Auroral Electrojet Activity Index AE and Its Universal Time Variations, JGR, 71, 785-801. |
| DAVIS, T. N., Y. S. WONG and C. ECHOLS | 1967, 1968 | AE-Index, Sci. Rept. Univ. Alaska, UAG, R-192-200. |
| KING, J. H. | 1971 | The NSSDC Handbook of Correlative Data, NSSDC, 71-05, 84-85. |

## SECTION II

## TABLES

### Table of Monthly Quiet-Time H Reference Values

The monthly quiet-time H reference values are given for each observatory. These values are the base from which H-deviations were derived and they were computed as the average of all 2.5-min digitized H values from the internationally adopted 5 Quiet Days of each month. The given values are in gamma units and are absolute in the sense that they include the applied scale value and provisional baseline used for each observatory's magnetograms. While subsequent changes in adopted baselines may shift the reference values slightly, they should not affect the derived indices because the method of derivation eliminates the H baseline value provided it is constant for the month (see discussion in Section I).

### Tables of Hourly Mean Indices

These tables contain monthly listings of average hourly indices: AE, AL, AU, and AO. These hourly values were computed as the mean of the 2.5-min instantaneous values. The first hour of each day covers the data interval from 0000-0100 UT. All times are given in Universal Time and the indices are given in gammas. Occasionally, hourly values of AE or AU may require four digits and eliminate the space between successive values. AE is always positive and AU is positive most of the time but may become negative during the main phase period of large storms when H is depressed globally by an enhanced ring current. Sometimes AU may be negative as a result of missing data effects (See Section I). AL is almost always negative and seldom exceeds three digits; however, during large magnetic disturbances there occur bays which may cause hourly AL to be more negative than -1000γ. AO is usually negative, but is rarely less than -999γ (three hours during 1968).

### Tables of Observatories Supplying Hourly AU and AL

As described above, the hourly average indices are computed from the 2.5-min instantaneous indices derived for that hour. Each pair of instantaneous values of AU and AL arises from H-deviations at only two stations and the station-pair contributing these extremes may change from one 2.5-min interval to the next. In order to associate a single station with values of hourly AU or AL some convention must be adopted as a basis for selection. We have chosen to designate the station having the maximum average H-deviation during an hour as the source of hourly AU. Likewise, the station having the most negative H-deviation is designated as the source of hourly AL. Within a disturbed hour it is common for one station pair to be the most frequent contributors of AU and AL and also to provide the greatest average deviations in H. However, there are times when this does not hold. This is the case during an hour which is quiet until near the end or which has only the first few values disturbed. Here the table will list the stations which provide AU and AL for the short disturbed portion of the hour rather than the stations providing AU and AL for the longer undisturbed portion of the hour.

These tables serve to illustrate the nonuniform frequency of contribution of AU and AL for different stations of the network. Also, they illustrate the systematic grouping in Universal Time of the time of most frequent station contribution of AU and AL.

TABLE OF MONTHLY QUIET-TIME H REFERENCE VALUES

UNITS: GAMMAS

| OBSERVATORY | YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ABISKO | 1968 | 11718 | 11716 | 11713 | 11717 | 11719 | 11731 | 11724 | 11725 | 11716 | 11722 | 11718 | 11731 |
| BARROW | 1968 | 9684 | 9699 | 9697 | 9689 | 9714 | 9703 | 9723 | 9718 | 9713 | 9716 | 9710 | 9706 |
| CAPE CHELYUSKIN | 1968 | 3399 | 3407 | 3412 | 3422 | 3430 | 3433 | 3436 | 3430 | 3421 | 3428 | 3416 | 3428 |
| COLLEGE | 1968 | 12897 | 12896 | 12897 | 12900 | 12910 | 12907 | 12915 | 12913 | 12908 | 12911 | 12913 | 12918 |
| DIXON ISLAND | 1968 | 6399 | 6394 | 6402 | 6417 | 6414 | 6425 | 6420 | 6424 | 6414 | 6425 | 6412 | 6419 |
| FORT CHURCHILL | 1968 | 6950 | 6951 | 6943 | 6971 | 6986 | 6963 | 6968 | 6970 | 6959 | 6943 | 6949 | 6948 |
| GREAT WHALE RIVER | 1968 | 9823 | 9831 | 9838 | 9856 | 9861 | 9863 | 9875 | 9886 | 9879 | 9878 | 9889 | 9895 |
| LEIRVOGUR | 1968 | 12108 | 12113 | 12114 | 12104 | 12113 | 12125 | 12114 | 12128 | 12121 | 12119 | 12125 | 12132 |
| NARSSARSSUAQ | 1968 | 11611 | 11613 | 11609 | 11668 | 11626 | 11629 | 11616 | 11626 |  | 11640 | 11635 | 11645 |
| TIXIE BAY | 1968 |  |  | 7654 |  | 7644 | 7643 | 7670 | 7685 | 7668 | 7697 | 7684 | 7687 |
| CAPE WELLEN | 1968 | 14115 | 14119 | 14122 | 14122 |  | 14132 | 14135 | 14137 | 14132 | 14130 | 14124 | 14130 |

JANUARY 1968 AE INDICES VALUES ARE EXPRESSED IN GAMMAS

| | UT | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| D | 1 | 340 | 514 | 559 | 451 | 487 | 383 | 365 | 370 | 320 | 286 | 314 | 562 | 524 | 435 | 469 | 560 | 385 | 116 | 106 | 177 | 213 | 187 | 187 | 146 | 352 |
| D | 2 | 86 | 78 | 159 | 213 | 281 | 323 | 391 | 634 | 729 | 621 | 463 | 837 | 266 | 457 | 565 | 541 | 494 | 484 | 270 | 379 | 383 | 282 | 241 | 171 | 390 |
| | 3 | 275 | 223 | 166 | 108 | 132 | 187 | 217 | 227 | 100 | 74 | 58 | 58 | 81 | 65 | 143 | 119 | 89 | 114 | 144 | 102 | 39 | 57 | 119 | 208 | 129 |
| Q | 4 | 113 | 88 | 69 | 37 | 38 | 49 | 38 | 46 | 68 | 114 | 190 | 209 | 125 | 79 | 49 | 48 | 56 | 148 | 320 | 262 | 223 | 328 | 248 | 495 | 143 |
| | 5 | 159 | 90 | 109 | 134 | 144 | 143 | 133 | 119 | 142 | 102 | 68 | 101 | 63 | 72 | 265 | 440 | 111 | 71 | 51 | 91 | 205 | 179 | 268 | 134 | 141 |
| D | 6 | 127 | 240 | 315 | 195 | 90 | 88 | 114 | 100 | 113 | 186 | 140 | 136 | 118 | 250 | 718 | 636 | 481 | 382 | 360 | 215 | 249 | 231 | 195 | 119 | 242 |
| | 7 | 177 | 198 | 159 | 138 | 235 | 71 | 90 | 85 | 84 | 88 | 126 | 155 | 127 | 139 | 137 | 119 | 172 | 153 | 49 | 41 | 31 | 70 | 161 | 137 | 123 |
| Q | 8 | 112 | 107 | 67 | 54 | 67 | 97 | 72 | 69 | 70 | 113 | 227 | 135 | 102 | 83 | 60 | 248 | 288 | 86 | 40 | 45 | 34 | 35 | 32 | 39 | 95 |
| Q | 9 | 29 | 32 | 31 | 36 | 46 | 35 | 25 | 34 | 47 | 48 | 39 | 40 | 47 | 66 | 53 | 104 | 142 | 228 | 99 | 67 | 42 | 43 | 37 | 43 | 59 |
| Q | 10 | 66 | 62 | 53 | 91 | 61 | 93 | 124 | 119 | 104 | 143 | 146 | 155 | 166 | 346 | 223 | 197 | 72 | 40 | 75 | 129 | 74 | 73 | 60 | 54 | 114 |
| | 11 | 44 | 45 | 74 | 75 | 67 | 69 | 57 | 62 | 62 | 51 | 83 | 96 | 97 | 243 | 330 | 400 | 284 | 495 | 553 | 362 | 289 | 446 | 266 | 205 | 198 |
| | 12 | 192 | 96 | 104 | 151 | 192 | 92 | 136 | 137 | 117 | 195 | 115 | 101 | 269 | 170 | 200 | 466 | 485 | 259 | 518 | 602 | 472 | 253 | 89 | 172 | 233 |
| | 13 | 125 | 40 | 35 | 95 | 103 | 247 | 181 | 166 | 241 | 169 | 371 | 272 | 217 | 272 | 256 | 226 | 84 | 89 | 104 | 74 | 206 | 438 | 335 | 279 | 193 |
| | 14 | 274 | 259 | 154 | 164 | 199 | 183 | 227 | 154 | 184 | 217 | 211 | 196 | 151 | 94 | 73 | 96 | 108 | 72 | 204 | 537 | 432 | 291 | 298 | 158 | 206 |
| | 15 | 153 | 172 | 143 | 107 | 136 | 107 | 117 | 107 | 129 | 194 | 178 | 157 | 375 | 444 | 263 | 193 | 411 | 242 | 447 | 457 | 430 | 329 | 342 | 284 | 247 |
| | 16 | 275 | 87 | 60 | 59 | 75 | 102 | 106 | 155 | 147 | 108 | 92 | 109 | 74 | 131 | 238 | 138 | 284 | 603 | 636 | 295 | 191 | 123 | 265 | 131 | 187 |
| | 17 | 87 | 87 | 105 | 194 | 302 | 121 | 240 | 259 | 478 | 260 | 175 | 237 | 234 | 142 | 120 | 400 | 220 | 159 | 182 | 331 | 437 | 253 | 101 | 191 | 221 |
| | 18 | 376 | 347 | 143 | 131 | 76 | 197 | 301 | 248 | 162 | 107 | 159 | 307 | 251 | 208 | 251 | 202 | 66 | 78 | 90 | 55 | 50 | 47 | 42 | 37 | 164 |
| | 19 | 35 | 41 | 54 | 50 | 85 | 208 | 215 | 317 | 375 | 235 | 194 | 320 | 99 | 87 | 163 | 265 | 693 | 627 | 417 | 222 | 181 | 252 | 492 | 549 | 257 |
| D | 20 | 405 | 326 | 252 | 267 | 159 | 93 | 144 | 319 | 230 | 183 | 620 | 333 | 314 | 251 | 416 | 150 | 91 | 100 | 175 | 420 | 167 | 45 | 41 | 46 | 231 |
| | 21 | 52 | 64 | 48 | 56 | 119 | 289 | 384 | 230 | 259 | 302 | 231 | 228 | 218 | 285 | 211 | 78 | 241 | 132 | 73 | 51 | 167 | 192 | 77 | 72 | 169 |
| | 22 | 135 | 52 | 38 | 62 | 212 | 95 | 166 | 77 | 68 | 73 | 229 | 145 | 137 | 117 | 198 | 398 | 623 | 223 | 205 | 106 | 145 | 137 | 70 | 36 | 157 |
| | 23 | 82 | 166 | 182 | 113 | 50 | 155 | 373 | 266 | 167 | 74 | 36 | 73 | 68 | 63 | 49 | 64 | 234 | 214 | 217 | 171 | 514 | 205 | 66 | 53 | 152 |
| | 24 | 77 | 110 | 71 | 33 | 35 | 32 | 61 | 164 | 219 | 251 | 168 | 205 | 445 | 258 | 124 | 254 | 286 | 135 | 265 | 561 | 452 | 226 | 176 | 116 | 197 |
| Q | 25 | 66 | 119 | 122 | 52 | 60 | 75 | 67 | 41 | 53 | 75 | 95 | 152 | 130 | 94 | 230 | 193 | 51 | 51 | 42 | 132 | 141 | 190 | 31 | 31 | 96 |
| | 26 | 38 | 65 | 76 | 141 | 82 | 54 | 67 | 108 | 246 | 132 | 49 | 115 | 230 | 282 | 309 | 961 | 836 | 294 | 103 | 57 | 49 | 45 | 52 | 66 | 186 |
| | 27 | 42 | 78 | 58 | 175 | 112 | 81 | 112 | 194 | 199 | 73 | 37 | 51 | 45 | 167 | 65 | 85 | 236 | 194 | 358 | 336 | 228 | 352 | 570 | 406 | 178 |
| | 28 | 363 | 428 | 252 | 149 | 89 | 40 | 21 | 18 | 24 | 34 | 42 | 42 | 60 | 196 | 283 | 181 | 409 | 456 | 366 | 472 | 334 | 263 | 290 | 388 | 217 |
| D | 29 | 495 | 419 | 377 | 430 | 371 | 237 | 239 | 155 | 122 | 125 | 143 | 145 | 107 | 82 | 111 | 31 | 53 | 86 | 454 | 453 | 293 | 464 | 291 | 355 | 252 |
| | 30 | 285 | 313 | 238 | 289 | 275 | 352 | 302 | 92 | 35 | 43 | 113 | 111 | 121 | 100 | 76 | 97 | 260 | 180 | 92 | 81 | 62 | 52 | 88 | 80 | 156 |
| | 31 | 137 | 204 | 277 | 223 | 220 | 85 | 102 | 171 | 231 | 202 | 91 | 69 | 91 | 71 | 245 | 210 | 103 | 39 | 43 | 43 | 29 | 29 | 37 | 75 | 126 |
| | MEAN | 169 | 157 | 147 | 144 | 148 | 141 | 167 | 169 | 178 | 157 | 168 | 189 | 173 | 185 | 222 | 261 | 269 | 211 | 228 | 236 | 218 | 197 | 180 | 170 | 187 |
| 5Q | MEAN | 77 | 82 | 58 | 54 | 54 | 70 | 65 | 62 | 68 | 99 | 139 | 138 | 114 | 134 | 123 | 158 | 122 | 111 | 115 | 127 | 103 | 134 | 82 | 132 | 101 |
| 5D | MEAN | 291 | 315 | 334 | 311 | 278 | 225 | 251 | 316 | 303 | 280 | 336 | 403 | 266 | 295 | 456 | 384 | 301 | 234 | 273 | 323 | 261 | 242 | 191 | 167 | 293 |

FEBRUARY 1968 AE INDICES VALUES ARE EXPRESSED IN GAMMAS

| | UT | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 65 | 41 | 38 | 31 | 56 | 96 | 207 | 106 | 97 | 117 | 66 | 73 | 187 | 147 | 138 | 123 | 61 | 86 | 300 | 340 | 53 | 169 | 162 | 274 | 126 |
| | 2 | 344 | 259 | 111 | 89 | 54 | 40 | 54 | 68 | 211 | 416 | 204 | 183 | 256 | 477 | 389 | 336 | 312 | 614 | 258 | 396 | 512 | 350 | 489 | 342 | 282 |
| | 3 | 446 | 91 | 105 | 62 | 69 | 93 | 139 | 384 | 282 | 159 | 253 | 205 | 119 | 150 | 427 | 646 | 643 | 271 | 117 | 271 | 111 | 204 | 329 | 239 | 242 |
| | 4 | 126 | 280 | 287 | 203 | 406 | 413 | 402 | 474 | 459 | 495 | 633 | 330 | 253 | 255 | 161 | 186 | 163 | 89 | 74 | 46 | 73 | 49 | 51 | 36 | 248 |
| | 5 | 34 | 40 | 38 | 36 | 34 | 38 | 36 | 41 | 87 | 95 | 103 | 135 | 90 | 148 | 261 | 176 | 211 | 160 | 261 | 470 | 421 | 267 | 284 | 199 | 153 |
| Q | 6 | 115 | 56 | 61 | 48 | 26 | 19 | 18 | 34 | 35 | 43 | 34 | 45 | 47 | 43 | 42 | 32 | 51 | 60 | 36 | 48 | 38 | 32 | 31 | 30 | 43 |
| Q | 7 | 27 | 26 | 27 | 21 | 15 | 23 | 25 | 23 | 19 | 22 | 25 | 26 | 41 | 44 | 41 | 45 | 121 | 85 | 75 | 56 | 172 | 143 | 158 | 170 | 60 |
| | 8 | 174 | 162 | 139 | 88 | 153 | 47 | 60 | 71 | 111 | 149 | 100 | 265 | 385 | 339 | 253 | 359 | 210 | 246 | 374 | 489 | 207 | 463 | 484 | 267 | 233 |
| | 9 | 346 | 429 | 313 | 308 | 385 | 368 | 341 | 355 | 330 | 484 | 485 | 446 | 538 | 438 | 219 | 166 | 178 | 214 | 367 | 490 | 493 | 366 | 412 | 388 | 369 |
| D | 10 | 327 | 321 | 264 | 147 | 283 | 320 | 248 | 219 | 234 | 683 | 436 | 314 | 301 | 214 | 78 | 48 | 456 | 837 | 1005 | 711 | 269 | 177 | 493 | 512 | 371 |
| D | 11 | 403 | 372 | 450 | 405 | 639 | 476 | 572 | 514 | 441 | 425 | 961 | 815 | 996 | 710 | 706 | 730 | 417 | 436 | 180 | 126 | 473 | 555 | 373 | 384 | 523 |
| | 12 | 336 | 392 | 352 | 189 | 192 | 242 | 223 | 276 | 84 | 75 | 207 | 317 | 269 | 132 | 126 | 135 | 107 | 235 | 203 | 90 | 52 | 41 | 42 | 36 | 181 |
| | 13 | 33 | 35 | 32 | 31 | 84 | 205 | 333 | 345 | 391 | 292 | 332 | 321 | 756 | 299 | 105 | 154 | 705 | 434 | 61 | 46 | 36 | 48 | 45 | 44 | 215 |
| Q | 14 | 98 | 105 | 30 | 25 | 19 | 21 | 23 | 23 | 27 | 39 | 36 | 31 | 38 | 36 | 32 | 44 | 33 | 31 | 29 | 34 | 45 | 48 | 167 | 75 | 45 |
| D | 15 | 46 | 100 | 119 | 75 | 219 | 214 | 250 | 223 | 379 | 287 | 839 | 500 | 2772 | 2991 | 635 | 483 | 438 | 800 | 377 | 159 | 119 | 144 | 271 | 212 | 436 |
| | 16 | 113 | 147 | 109 | 99 | 172 | 156 | 310 | 224 | 122 | 209 | 440 | 497 | 494 | 253 | 279 | 471 | 120 | 122 | 307 | 174 | 145 | 75 | 78 | 305 | 226 |
| | 17 | 204 | 89 | 77 | 84 | 103 | 149 | 279 | 310 | 288 | 393 | 284 | 472 | 656 | 333 | 384 | 343 | 139 | 181 | 306 | 348 | 412 | 741 | 300 | 295 | 299 |
| | 18 | 234 | 143 | 60 | 56 | 59 | 74 | 131 | 362 | 625 | 762 | 614 | 480 | 488 | 622 | 422 | 185 | 360 | 717 | 553 | 262 | 203 | 296 | 182 | 252 | 339 |
| | 19 | 471 | 363 | 305 | 349 | 284 | 235 | 192 | 170 | 104 | 104 | 93 | 106 | 75 | 81 | 101 | 79 | 83 | 82 | 83 | 71 | 73 | 64 | 66 | 60 | 154 |
| D | 20 | 50 | 179 | 123 | 66 | 71 | 115 | 313 | 705 | 740 | 599 | 242 | 797 | 913 | 579 | 712 | 419 | 560 | 418 | 483 | 537 | 461 | 599 | 384 | 517 | 441 |
| | 21 | 372 | 423 | 348 | 404 | 331 | 218 | 254 | 229 | 331 | 558 | 349 | 368 | 229 | 270 | 464 | 469 | 496 | 414 | 361 | 415 | 354 | 647 | 409 | 264 | 374 |
| | 22 | 116 | 108 | 89 | 134 | 210 | 386 | 181 | 104 | 128 | 187 | 258 | 342 | 174 | 123 | 111 | 287 | 385 | 294 | 98 | 104 | 95 | 82 | 80 | 76 | 173 |
| | 23 | 73 | 72 | 70 | 62 | 86 | 165 | 183 | 120 | 62 | 71 | 67 | 81 | 90 | 92 | 107 | 107 | 285 | 217 | 83 | 84 | 172 | 151 | 82 | 76 | 111 |
| | 24 | 79 | 61 | 72 | 120 | 178 | 225 | 278 | 165 | 166 | 144 | 126 | 137 | 65 | 62 | 89 | 166 | 110 | 73 | 80 | 96 | 56 | 28 | 30 | 38 | 110 |
| Q | 25 | 38 | 33 | 80 | 41 | 32 | 33 | 161 | 157 | 121 | 83 | 38 | 38 | 58 | 80 | 78 | 139 | 170 | 130 | 89 | 304 | 67 | 38 | 37 | 38 | 87 |
| Q | 26 | 29 | 39 | 65 | 57 | 75 | 37 | 22 | 20 | 31 | 42 | 44 | 39 | 51 | 54 | 47 | 40 | 50 | 56 | 65 | 90 | 303 | 171 | 249 | 341 | 84 |
| | 27 | 154 | 52 | 43 | 33 | 41 | 102 | 83 | 33 | 72 | 61 | 44 | 52 | 75 | 66 | 115 | 219 | 129 | 84 | 245 | 473 | 681 | 522 | 483 | 361 | 176 |
| D | 28 | 314 | 233 | 324 | 117 | 102 | 131 | 142 | 152 | 150 | 169 | 184 | 209 | 787 | 819 | 729 | 949 | 573 | 512 | 426 | 472 | 363 | 269 | 479 | 267 | 370 |
| | 29 | 167 | 298 | 415 | 327 | 323 | 307 | 240 | 333 | 239 | 201 | 328 | 415 | 254 | 212 | 78 | 126 | 391 | 192 | 300 | 444 | 218 | 64 | 70 | 172 | 255 |
| | MEAN | 184 | 171 | 157 | 128 | 162 | 171 | 197 | 215 | 220 | 254 | 270 | 277 | 309 | 323 | 287 | 264 | 274 | 279 | 248 | 264 | 230 | 235 | 232 | 216 | 232 |
| 5Q | MEAN | 61 | 52 | 53 | 38 | 33 | 27 | 50 | 51 | 47 | 46 | 35 | 36 | 47 | 51 | 48 | 60 | 85 | 72 | 59 | 106 | 125 | 86 | 128 | 131 | 64 |
| 5D | MEAN | 228 | 241 | 256 | 162 | 263 | 251 | 305 | 363 | 389 | 433 | 532 | 527 | 655 | 924 | 772 | 526 | 489 | 601 | 494 | 401 | 337 | 349 | 400 | 378 | 428 |

MARCH 1958 AE INDICES VALUES ARE EXPRESSED IN GAMMAS

| | UT | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 235 | 314 | 151 | 141 | 114 | 122 | 178 | 121 | 140 | 178 | 184 | 356 | 415 | 442 | 429 | 723 | 752 | 387 | 155 | 92 | 92 | 67 | 56 | 43 | 245 |
| | 2 | 40 | 48 | 91 | 299 | 230 | 122 | 181 | 268 | 262 | 222 | 262 | 295 | 149 | 218 | 326 | 295 | 222 | 305 | 199 | 131 | 417 | 343 | 280 | 301 | 229 |
| | 3 | 210 | 152 | 96 | 66 | 74 | 87 | 78 | 285 | 419 | 306 | 269 | 461 | 460 | 411 | 437 | 225 | 407 | 662 | 741 | 706 | 546 | 432 | 432 | 311 | 345 |
| | 4 | 260 | 266 | 147 | 118 | 242 | 195 | 212 | 352 | 376 | 606 | 734 | 548 | 399 | 284 | 338 | 521 | 646 | 623 | 440 | 532 | 493 | 469 | 534 | 527 | 411 |
| | 5 | 467 | 294 | 112 | 156 | 366 | 222 | 138 | 140 | 361 | 648 | 638 | 644 | 597 | 677 | 329 | 171 | 86 | 116 | 236 | 295 | 460 | 370 | 399 | 340 | 344 |
| | 6 | 143 | 97 | 77 | 85 | 52 | 58 | 88 | 185 | 229 | 155 | 213 | 224 | 206 | 134 | 101 | 122 | 110 | 117 | 258 | 192 | 208 | 352 | 270 | 128 | 159 |
| Q | 7 | 99 | 80 | 94 | 163 | 157 | 56 | 52 | 105 | 241 | 182 | 164 | 138 | 100 | 153 | 155 | 78 | 140 | 165 | 121 | 196 | 152 | 210 | 177 | 111 | 137 |
| Q | 8 | 135 | 176 | 74 | 84 | 78 | 72 | 52 | 55 | 56 | 47 | 50 | 126 | 76 | 48 | 47 | 52 | 74 | 153 | 135 | 125 | 184 | 338 | 188 | 89 | 105 |
| Q | 9 | 52 | 51 | 99 | 65 | 106 | 69 | 32 | 56 | 82 | 130 | 116 | 58 | 52 | 51 | 48 | 35 | 41 | 73 | 89 | 95 | 78 | 64 | 69 | 151 | 73 |
| | 10 | 229 | 152 | 115 | 117 | 334 | 434 | 274 | 183 | 170 | 104 | 81 | 92 | 280 | 331 | 493 | 639 | 361 | 313 | 279 | 304 | 288 | 242 | 156 | 62 | 251 |
| | 11 | 56 | 59 | 118 | 86 | 237 | 324 | 318 | 338 | 227 | 188 | 82 | 52 | 41 | 34 | 31 | 30 | 29 | 35 | 24 | 33 | 65 | 133 | 155 | 103 | 117 |
| | 12 | 72 | 53 | 45 | 50 | 53 | 50 | 44 | 47 | 48 | 66 | 209 | 493 | 416 | 316 | 349 | 196 | 236 | 355 | 453 | 614 | 586 | 371 | 197 | 87 | 225 |
| Q | 13 | 74 | 79 | 171 | 117 | 199 | 83 | 41 | 51 | 78 | 64 | 54 | 40 | 40 | 36 | 33 | 38 | 37 | 34 | 29 | 38 | 47 | 44 | 76 | 171 | 70 |
| D | 14 | 355 | 258 | 240 | 213 | 111 | 135 | 129 | 134 | 183 | 298 | 510 | 324 | 230 | 403 | 468 | 533 | 435 | 687 | 321 | 365 | 384 | 535 | 633 | 354 | 343 |
| D | 15 | 275 | 256 | 180 | 127 | 238 | 354 | 520 | 574 | 510 | 349 | 550 | 482 | 769 | 613 | 213 | 122 | 221 | 489 | 690 | 609 | 543 | 696 | 286 | 200 | 411 |
| D | 16 | 308 | 354 | 308 | 395 | 426 | 486 | 326 | 401 | 309 | 402 | 316 | 434 | 898 | 838 | 170 | 89 | 88 | 116 | 202 | 326 | 151 | 501 | 711 | 553 | 380 |
| | 17 | 230 | 197 | 122 | 130 | 437 | 337 | 177 | 169 | 183 | 95 | 117 | 174 | 281 | 253 | 110 | 72 | 55 | 119 | 143 | 245 | 172 | 139 | 188 | 255 | 183 |
| | 18 | 149 | 97 | 252 | 151 | 293 | 215 | 170 | 229 | 319 | 236 | 137 | 106 | 113 | 85 | 74 | 112 | 245 | 362 | 107 | 64 | 46 | 63 | 69 | 93 | 158 |
| | 19 | 62 | 87 | 97 | 113 | 73 | 63 | 161 | 377 | 418 | 338 | 463 | 420 | 242 | 230 | 325 | 160 | 270 | 513 | 313 | 156 | 72 | 80 | 60 | 72 | 215 |
| | 20 | 65 | 121 | 297 | 557 | 177 | 55 | 37 | 57 | 49 | 66 | 323 | 868 | 416 | 445 | 346 | 126 | 87 | 62 | 57 | 179 | 119 | 138 | 250 | 237 | 214 |
| | 21 | 96 | 113 | 200 | 163 | 135 | 150 | 136 | 183 | 117 | 161 | 83 | 72 | 100 | 216 | 479 | 364 | 174 | 195 | 386 | 262 | 56 | 48 | 56 | 54 | 167 |
| Q | 22 | 68 | 125 | 100 | 58 | 37 | 63 | 119 | 70 | 50 | 49 | 76 | 178 | 338 | 246 | 151 | 165 | 144 | 55 | 64 | 105 | 92 | 102 | 55 | 59 | 107 |
| | 23 | 68 | 63 | 59 | 64 | 58 | 50 | 31 | 56 | 60 | 65 | 62 | 122 | 179 | 186 | 132 | 234 | 84 | 43 | 105 | 223 | 314 | 526 | 586 | 242 | 151 |
| D | 24 | 226 | 155 | 157 | 189 | 244 | 467 | 568 | 520 | 432 | 595 | 315 | 346 | 517 | 406 | 480 | 440 | 378 | 423 | 338 | 308 | 614 | 499 | 158 | 153 | 373 |
| | 25 | 213 | 364 | 479 | 333 | 250 | 308 | 420 | 347 | 447 | 242 | 140 | 159 | 594 | 429 | 166 | 131 | 406 | 324 | 353 | 524 | 395 | 427 | 448 | 157 | 336 |
| | 26 | 157 | 130 | 145 | 144 | 158 | 229 | 256 | 242 | 148 | 265 | 783 | 638 | 529 | 358 | 315 | 402 | 381 | 408 | 572 | 338 | 153 | 215 | 428 | 556 | 331 |
| | 27 | 527 | 469 | 344 | 249 | 296 | 470 | 510 | 359 | 242 | 386 | 353 | 162 | 146 | 107 | 237 | 473 | 514 | 251 | 455 | 626 | 723 | 535 | 533 | 438 | 392 |
| | 28 | 258 | 185 | 216 | 339 | 430 | 214 | 249 | 355 | 336 | 213 | 186 | 215 | 338 | 202 | 204 | 187 | 188 | 160 | 378 | 340 | 248 | 444 | 451 | 191 | 272 |
| | 29 | 186 | 248 | 470 | 686 | 508 | 433 | 304 | 409 | 452 | 615 | 598 | 552 | 377 | 431 | 473 | 273 | 101 | 241 | 427 | 272 | 188 | 176 | 647 | 677 | 406 |
| D | 30 | 463 | 608 | 396 | 330 | 362 | 566 | 744 | 385 | 205 | 95 | 99 | 293 | 283 | 159 | 172 | 697 | 1142 | 1069 | 830 | 685 | 718 | 356 | 224 | 111 | 458 |
| | 31 | 109 | 117 | 60 | 128 | 55 | 184 | 155 | 335 | 373 | 151 | 128 | 163 | 177 | 359 | 469 | 212 | 244 | 617 | 836 | 772 | 595 | 503 | 530 | 757 | 335 |
| | MEAN | 190 | 187 | 178 | 191 | 211 | 215 | 216 | 238 | 243 | 242 | 268 | 298 | 315 | 294 | 261 | 255 | 268 | 306 | 314 | 315 | 297 | 304 | 300 | 245 | 256 |
| 5Q | MEAN | 86 | 102 | 108 | 97 | 115 | 69 | 59 | 67 | 101 | 94 | 92 | 108 | 121 | 107 | 87 | 74 | 87 | 96 | 88 | 112 | 111 | 152 | 113 | 116 | 98 |
| 5D | MEAN | 325 | 330 | 258 | 251 | 276 | 402 | 457 | 403 | 328 | 348 | 358 | 376 | 539 | 484 | 301 | 376 | 453 | 557 | 476 | 459 | 482 | 517 | 402 | 274 | 393 |

APRIL 1958 AE INDICES VALUES ARE EXPRESSED IN GAMMAS

| | UT | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| D | 1 | 554 | 711 | 423 | 487 | 437 | 349 | 239 | 366 | 534 | 360 | 310 | 338 | 506 | 481 | 391 | 492 | 180 | 373 | 615 | 368 | 303 | 574 | 264 | 174 | 410 |
| | 2 | 406 | 309 | 162 | 167 | 68 | 152 | 367 | 309 | 174 | 103 | 200 | 310 | 166 | 144 | 285 | 243 | 91 | 190 | 345 | 670 | 526 | 535 | 507 | 610 | 293 |
| | 3 | 320 | 255 | 237 | 314 | 373 | 132 | 286 | 293 | 315 | 319 | 369 | 304 | 248 | 491 | 461 | 315 | 175 | 77 | 86 | 70 | 54 | 78 | 220 | 479 | 261 |
| | 4 | 515 | 486 | 480 | 382 | 329 | 299 | 248 | 309 | 241 | 203 | 254 | 271 | 225 | 244 | 343 | 273 | 278 | 201 | 125 | 109 | 95 | 113 | 261 | 282 | 274 |
| D | 5 | 295 | 309 | 241 | 277 | 272 | 341 | 345 | 296 | 213 | 181 | 107 | 152 | 73 | 75 | 207 | 451 | 431 | 469 | 1089 | 1214 | 581 | 430 | 349 | 324 | 363 |
| D | 6 | 140 | 102 | 188 | 330 | 130 | 324 | 185 | 813 | 860 | 461 | 351 | 464 | 589 | 454 | 332 | 306 | 554 | 726 | 301 | 244 | 470 | 322 | 350 | 237 | 385 |
| | 7 | 96 | 114 | 128 | 247 | 247 | 136 | 129 | 321 | 340 | 221 | 321 | 227 | 153 | 286 | 381 | 184 | 77 | 62 | 59 | 39 | 40 | 63 | 45 | 69 | 166 |
| Q | 8 | 92 | 81 | 152 | 195 | 175 | 159 | 66 | 74 | 62 | 115 | 113 | 149 | 256 | 118 | 51 | 81 | 96 | 71 | 63 | 59 | 47 | 42 | 44 | 39 | 100 |
| Q | 9 | 44 | 43 | 35 | 28 | 28 | 33 | 40 | 42 | 50 | 51 | 54 | 70 | 66 | 62 | 64 | 70 | 71 | 70 | 73 | 60 | 56 | 60 | 139 | 89 | 58 |
| | 10 | 99 | 155 | 136 | 112 | 124 | 181 | 285 | 250 | 223 | 172 | 174 | 176 | 167 | 103 | 84 | 71 | 127 | 229 | 459 | 198 | 123 | 149 | 136 | 80 | 167 |
| | 11 | 79 | 138 | 155 | 269 | 177 | 83 | 144 | 238 | 174 | 171 | 219 | 277 | 171 | 81 | 64 | 90 | 67 | 63 | 60 | 55 | 46 | 56 | 43 | 49 | 124 |
| | 12 | 43 | 39 | 40 | 34 | 46 | 49 | 56 | 60 | 66 | 56 | 69 | 72 | 74 | 90 | 97 | 67 | 96 | 121 | 220 | 249 | 123 | 334 | 591 | 495 | 133 |
| | 13 | 212 | 209 | 182 | 565 | 391 | 210 | 116 | 95 | 129 | 251 | 511 | 504 | 447 | 360 | 310 | 498 | 722 | 538 | 387 | 203 | 262 | 639 | 326 | 178 | 344 |
| D | 14 | 252 | 177 | 410 | 430 | 324 | 417 | 137 | 57 | 55 | 56 | 252 | 757 | 610 | 224 | 121 | 266 | 465 | 486 | 385 | 266 | 92 | 102 | 209 | 351 | 288 |
| | 15 | 111 | 93 | 46 | 40 | 43 | 72 | 139 | 85 | 206 | 411 | 397 | 157 | 204 | 302 | 333 | 386 | 394 | 434 | 472 | 359 | 280 | 290 | 440 | 456 | 256 |
| | 16 | 321 | 333 | 225 | 298 | 337 | 225 | 93 | 104 | 290 | 319 | 251 | 181 | 148 | 143 | 166 | 153 | 135 | 74 | 116 | 130 | 338 | 827 | 467 | 329 | 250 |
| | 17 | 207 | 108 | 56 | 71 | 223 | 217 | 313 | 304 | 237 | 292 | 560 | 307 | 111 | 258 | 316 | 141 | 253 | 461 | 600 | 208 | 80 | 177 | 253 | 130 | 245 |
| | 18 | 118 | 232 | 212 | 136 | 117 | 319 | 318 | 279 | 203 | 366 | 295 | 331 | 210 | 53 | 91 | 154 | 185 | 200 | 300 | 169 | 122 | 117 | 90 | 164 | 199 |
| Q | 19 | 65 | 74 | 85 | 90 | 94 | 109 | 109 | 117 | 132 | 133 | 139 | 142 | 145 | 133 | 107 | 95 | 151 | 121 | 74 | 63 | 60 | 78 | 76 | 81 | 103 |
| Q | 20 | 79 | 79 | 71 | 61 | 52 | 56 | 52 | 48 | 47 | 38 | 46 | 48 | 72 | 61 | 49 | 47 | 56 | 61 | 44 | 41 | 34 | 41 | 40 | 47 | 53 |
| Q | 21 | 45 | 42 | 36 | 38 | 44 | 47 | 66 | 61 | 70 | 87 | 103 | 129 | 270 | 236 | 132 | 82 | 46 | 53 | 45 | 47 | 49 | 53 | 58 | 74 | 80 |
| | 22 | 153 | 159 | 157 | 129 | 128 | 119 | 239 | 451 | 500 | 234 | 80 | 60 | 63 | 87 | 232 | 383 | 350 | 222 | 156 | 312 | 392 | 315 | 367 | 283 | 232 |
| | 23 | 418 | 625 | 359 | 437 | 485 | 511 | 485 | 158 | 106 | 234 | 122 | 148 | 239 | 181 | 198 | 136 | 110 | 147 | 352 | 511 | 467 | 353 | 313 | 404 | 312 |
| | 24 | 405 | 260 | 317 | 506 | 506 | 422 | 113 | 66 | 81 | 105 | 188 | 179 | 143 | 85 | 130 | 272 | 217 | 262 | 186 | 109 | 86 | 111 | 93 | 63 | 204 |
| | 25 | 63 | 48 | 41 | 30 | 30 | 67 | 115 | 115 | 132 | 77 | 63 | 61 | 46 | 60 | 131 | 248 | 353 | 269 | 62 | 130 | 363 | 656 | 563 | 621 | 181 |
| D | 26 | 661 | 487 | 350 | 228 | 258 | 427 | 467 | 384 | 353 | 214 | 290 | 509 | 544 | 474 | 634 | 717 | 336 | 235 | 470 | 806 | 774 | 570 | 562 | 547 | 471 |
| | 27 | 609 | 292 | 118 | 270 | 205 | 90 | 114 | 341 | 708 | 479 | 121 | 47 | 59 | 115 | 111 | 101 | 174 | 111 | 316 | 574 | 501 | 279 | 232 | 120 | 254 |
| | 28 | 150 | 355 | 522 | 358 | 575 | 285 | 269 | 176 | 121 | 161 | 340 | 95 | 92 | 80 | 147 | 318 | 208 | 186 | 277 | 320 | 438 | 466 | 593 | 445 | 291 |
| | 29 | 529 | 397 | 405 | 290 | 395 | 345 | 449 | 494 | 489 | 260 | 192 | 125 | 364 | 392 | 316 | 391 | 445 | 194 | 97 | 81 | 298 | 440 | 682 | 567 | 360 |
| | 30 | 260 | 131 | 98 | 113 | 48 | 45 | 82 | 206 | 331 | 289 | 169 | 83 | 55 | 46 | 83 | 150 | 244 | 302 | 223 | 86 | 83 | 266 | 363 | 223 | 166 |
| | MEAN | 245 | 228 | 203 | 231 | 222 | 207 | 202 | 230 | 248 | 214 | 222 | 222 | 217 | 197 | 212 | 239 | 236 | 234 | 269 | 258 | 239 | 285 | 289 | 267 | 234 |
| 5Q | MEAN | 65 | 64 | 78 | 82 | 79 | 81 | 67 | 68 | 72 | 85 | 91 | 108 | 162 | 122 | 81 | 75 | 84 | 75 | 60 | 54 | 49 | 55 | 71 | 66 | 79 |
| 5D | MEAN | 380 | 357 | 324 | 350 | 284 | 372 | 275 | 383 | 403 | 254 | 262 | 444 | 464 | 342 | 337 | 446 | 393 | 458 | 572 | 580 | 444 | 400 | 347 | 327 | 383 |

MAY 1968 AE INDICES VALUES ARE EXPRESSED IN GAMMAS

| | UT | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 253 | 122 | 54 | 65 | 85 | 48 | 47 | 68 | 141 | 190 | 186 | 243 | 214 | 327 | 520 | 742 | 374 | 632 | 686 | 367 | 477 | 721 | 466 | 544 | 316 |
| | 2 | 294 | 355 | 289 | 172 | 346 | 229 | 188 | 231 | 259 | 528 | 562 | 382 | 252 | 258 | 305 | 93 | 61 | 63 | 55 | 43 | 67 | 82 | 84 | 149 | 223 |
| | 3 | 171 | 358 | 157 | 276 | 459 | 529 | 272 | 128 | 118 | 185 | 136 | 147 | 258 | 153 | 144 | 242 | 152 | 73 | 56 | 51 | 57 | 71 | 88 | 81 | 182 |
| Q | 4 | 75 | 92 | 151 | 116 | 45 | 63 | 50 | 100 | 130 | 145 | 106 | 113 | 87 | 79 | 69 | 99 | 192 | 235 | 183 | 76 | 137 | 54 | 66 | 67 | 105 |
| Q | 5 | 46 | 51 | 35 | 82 | 53 | 71 | 57 | 74 | 47 | 78 | 200 | 144 | 69 | 105 | 103 | 90 | 133 | 136 | 75 | 52 | 74 | 45 | 54 | 51 | 80 |
| Q | 6 | 49 | 42 | 36 | 51 | 52 | 55 | 51 | 47 | 39 | 50 | 55 | 79 | 70 | 83 | 61 | 57 | 44 | 73 | 66 | 64 | 59 | 63 | 60 | 72 | 57 |
| D | 7 | 63 | 85 | 99 | 94 | 267 | 749 | 660 | 643 | 511 | 858 | 674 | 369 | 831 | 1019 | 1243 | 704 | 661 | 429 | 180 | 174 | 294 | 495 | 376 | 390 | 495 |
| | 8 | 247 | 140 | 74 | 99 | 54 | 136 | 108 | 93 | 87 | 126 | 267 | 266 | 94 | 74 | 45 | 78 | 149 | 271 | 297 | 312 | 208 | 157 | 253 | 272 | 163 |
| D | 9 | 338 | 543 | 672 | 713 | 525 | 421 | 391 | 381 | 347 | 365 | 572 | 592 | 662 | 676 | 701 | 645 | 722 | 668 | 642 | 680 | 705 | 586 | 425 | 308 | 553 |
| | 10 | 230 | 176 | 112 | 325 | 356 | 132 | 140 | 149 | 133 | 134 | 156 | 151 | 134 | 100 | 87 | 98 | 101 | 111 | 83 | 92 | 81 | 89 | 121 | 125 | 142 |
| | 11 | 133 | 154 | 378 | 428 | 178 | 223 | 369 | 410 | 574 | 430 | 268 | 237 | 154 | 210 | 278 | 154 | 202 | 147 | 128 | 137 | 161 | 225 | 308 | 483 | 265 |
| D | 12 | 603 | 601 | 537 | 577 | 430 | 641 | 463 | 210 | 185 | 277 | 732 | 543 | 402 | 417 | 293 | 303 | 287 | 271 | 323 | 352 | 709 | 585 | 273 | 329 | 431 |
| | 13 | 277 | 486 | 208 | 162 | 276 | 272 | 233 | 188 | 197 | 363 | 601 | 358 | 250 | 261 | 178 | 270 | 421 | 461 | 248 | 269 | 273 | 166 | 158 | 112 | 279 |
| | 14 | 125 | 258 | 361 | 259 | 135 | 139 | 183 | 108 | 85 | 99 | 231 | 277 | 306 | 358 | 389 | 264 | 131 | 191 | 350 | 334 | 134 | 101 | 118 | 136 | 211 |
| | 15 | 205 | 220 | 258 | 197 | 163 | 333 | 393 | 438 | 267 | 164 | 197 | 88 | 50 | 48 | 54 | 75 | 108 | 114 | 111 | 107 | 129 | 212 | 345 | 318 | 192 |
| | 16 | 274 | 313 | 321 | 257 | 434 | 187 | 333 | 348 | 268 | 247 | 346 | 524 | 569 | 569 | 649 | 672 | 686 | 610 | 562 | 504 | 373 | 293 | 286 | 298 | 413 |
| | 17 | 70 | 78 | 176 | 355 | 420 | 322 | 490 | 354 | 306 | 361 | 381 | 243 | 183 | 224 | 557 | 395 | 524 | 729 | 738 | 399 | 313 | 564 | 224 | 163 | 357 |
| | 18 | 156 | 141 | 232 | 220 | 210 | 181 | 285 | 422 | 399 | 229 | 175 | 214 | 167 | 65 | 194 | 796 | 952 | 711 | 531 | 300 | 136 | 390 | 425 | 224 | 323 |
| | 19 | 144 | 112 | 174 | 256 | 163 | 65 | 94 | 243 | 463 | 196 | 108 | 173 | 334 | 230 | 167 | 230 | 481 | 486 | 533 | 446 | 460 | 647 | 289 | 124 | 276 |
| D | 20 | 300 | 685 | 719 | 459 | 478 | 197 | 371 | 528 | 651 | 618 | 614 | 490 | 376 | 320 | 149 | 248 | 397 | 423 | 157 | 103 | 237 | 352 | 536 | 558 | 415 |
| D | 21 | 480 | 474 | 341 | 202 | 113 | 86 | 111 | 351 | 378 | 323 | 241 | 247 | 430 | 563 | 664 | 979 | 962 | 1020 | 859 | 789 | 704 | 678 | 731 | 462 | 508 |
| | 22 | 463 | 528 | 716 | 701 | 525 | 585 | 508 | 328 | 265 | 153 | 250 | 277 | 203 | 208 | 201 | 228 | 339 | 382 | 196 | 64 | 61 | 56 | 352 | 249 | 327 |
| | 23 | 104 | 334 | 341 | 74 | 65 | 46 | 66 | 70 | 131 | 174 | 300 | 267 | 218 | 276 | 199 | 250 | 470 | 686 | 763 | 452 | 342 | 481 | 568 | 704 | 308 |
| | 24 | 753 | 678 | 690 | 488 | 260 | 351 | 570 | 567 | 292 | 284 | 367 | 260 | 367 | 197 | 138 | 139 | 186 | 258 | 342 | 427 | 168 | 315 | 214 | 301 | 359 |
| | 25 | 268 | 93 | 62 | 74 | 93 | 83 | 111 | 79 | 188 | 383 | 374 | 275 | 94 | 85 | 118 | 407 | 530 | 299 | 308 | 354 | 452 | 248 | 177 | 123 | 220 |
| Q | 26 | 115 | 198 | 299 | 320 | 386 | 191 | 85 | 54 | 75 | 121 | 195 | 106 | 112 | 154 | 112 | 128 | 128 | 65 | 56 | 67 | 90 | 120 | 103 | 97 | 141 |
| Q | 27 | 81 | 67 | 73 | 88 | 93 | 98 | 92 | 95 | 94 | 84 | 91 | 96 | 73 | 58 | 55 | 54 | 49 | 73 | 106 | 126 | 76 | 76 | 138 | 164 | 88 |
| | 28 | 115 | 88 | 87 | 76 | 92 | 134 | 129 | 127 | 82 | 68 | 61 | 62 | 74 | 79 | 73 | 124 | 283 | 277 | 452 | 534 | 283 | 266 | 249 | 201 | 167 |
| | 29 | 226 | 347 | 410 | 452 | 495 | 433 | 431 | 515 | 582 | 481 | 328 | 184 | 232 | 245 | 281 | 435 | 537 | 514 | 507 | 214 | 204 | 181 | 136 | 138 | 355 |
| | 30 | 158 | 144 | 268 | 440 | 133 | 65 | 109 | 420 | 593 | 306 | 121 | 140 | 101 | 349 | 455 | 204 | 128 | 108 | 68 | 113 | 234 | 499 | 311 | 337 | 242 |
| | 31 | 280 | 320 | 411 | 394 | 202 | 112 | 107 | 103 | 337 | 339 | 250 | 438 | 507 | 274 | 92 | 122 | 293 | 469 | 233 | 112 | 131 | 138 | 112 | 107 | 245 |
| | MEAN | 229 | 267 | 282 | 273 | 245 | 232 | 242 | 254 | 265 | 270 | 295 | 258 | 254 | 260 | 277 | 301 | 345 | 354 | 319 | 262 | 253 | 289 | 260 | 248 | 272 |
| 5Q | MEAN | 73 | 90 | 119 | 131 | 126 | 96 | 67 | 74 | 77 | 96 | 129 | 108 | 82 | 96 | 80 | 86 | 109 | 116 | 97 | 77 | 87 | 72 | 84 | 90 | 94 |
| 5D | MEAN | 357 | 478 | 474 | 409 | 363 | 419 | 399 | 423 | 414 | 488 | 567 | 448 | 540 | 599 | 610 | 576 | 606 | 562 | 432 | 420 | 530 | 539 | 468 | 409 | 480 |

JUNE 1958 AE INDICES VALUES ARE EXPRESSED IN GAMMAS

| | UT | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 115 | 198 | 109 | 97 | 252 | 179 | 107 | 96 | 183 | 388 | 398 | 223 | 421 | 271 | 426 | 470 | 524 | 491 | 705 | 512 | 252 | 206 | 455 | 570 | 319 |
| | 2 | 450 | 461 | 456 | 497 | 682 | 607 | 475 | 306 | 203 | 227 | 267 | 256 | 189 | 227 | 362 | 277 | 138 | 195 | 493 | 588 | 440 | 458 | 450 | 358 | 378 |
| | 3 | 321 | 416 | 262 | 146 | 217 | 255 | 322 | 250 | 167 | 149 | 305 | 402 | 347 | 338 | 251 | 369 | 627 | 616 | 144 | 168 | 218 | 396 | 229 | 230 | 298 |
| | 4 | 277 | 328 | 353 | 190 | 153 | 213 | 74 | 141 | 346 | 267 | 133 | 142 | 199 | 183 | 257 | 314 | 272 | 322 | 323 | 187 | 288 | 196 | 519 | 381 | 252 |
| Q | 5 | 201 | 116 | 75 | 77 | 227 | 248 | 171 | 83 | 61 | 79 | 81 | 132 | 76 | 115 | 124 | 102 | 135 | 284 | 247 | 147 | 191 | 167 | 84 | 57 | 137 |
| Q | 6 | 40 | 32 | 34 | 42 | 38 | 59 | 124 | 78 | 49 | 86 | 147 | 252 | 372 | 377 | 180 | 159 | 87 | 63 | 43 | 39 | 77 | 60 | 78 | 77 | 108 |
| | 7 | 54 | 132 | 171 | 213 | 204 | 227 | 427 | 457 | 346 | 213 | 261 | 456 | 520 | 258 | 100 | 283 | 554 | 377 | 260 | 122 | 71 | 59 | 71 | 58 | 246 |
| | 8 | 91 | 97 | 68 | 82 | 233 | 210 | 140 | 158 | 144 | 143 | 113 | 162 | 175 | 125 | 107 | 444 | 637 | 500 | 201 | 409 | 250 | 158 | 177 | 191 | 209 |
| | 9 | 110 | 79 | 84 | 72 | 422 | 358 | 300 | 149 | 96 | 91 | 76 | 80 | 82 | 74 | 67 | 53 | 125 | 266 | 552 | 541 | 568 | 725 | 641 | 445 | 252 |
| D | 10 | 550 | 735 | 710 | 725 | 760 | 848 | 920 | 930 | 933 | 474 | 408 | 746 | 930 | 433 | 433 | 576 | 418 | 188 | 150 | 148 | 343 | 688 | 1184 | 855 | 629 |
| D | 11 | 993 | 1195 | 1107 | 968 | 1088 | 796 | 260 | 473 | 897 | 823 | 702 | 705 | 419 | 258 | 655 | 775 | 303 | 137 | 267 | 599 | 806 | 468 | 476 | 700 | 661 |
| D | 12 | 607 | 558 | 655 | 797 | 910 | 676 | 762 | 732 | 790 | 741 | 997 | 755 | 929 | 781 | 990 | 750 | 934 | 915 | 715 | 718 | 571 | 587 | 529 | 352 | 740 |
| D | 13 | 302 | 497 | 752 | 883 | 1005 | 821 | 888 | 781 | 1092 | 1181 | 953 | 970 | 1275 | 1150 | 1141 | 1258 | 1163 | 1100 | 903 | 845 | 850 | 673 | 339 | 267 | 879 |
| D | 14 | 321 | 318 | 206 | 161 | 132 | 202 | 279 | 482 | 1094 | 1160 | 919 | 655 | 991 | 797 | 745 | 775 | 305 | 333 | 560 | 372 | 281 | 346 | 276 | 271 | 499 |
| | 15 | 180 | 66 | 55 | 64 | 118 | 155 | 259 | 377 | 290 | 154 | 220 | 290 | 192 | 125 | 69 | 51 | 110 | 204 | 128 | 257 | 209 | 90 | 207 | 287 | 174 |
| | 16 | 152 | 70 | 88 | 55 | 74 | 43 | 58 | 61 | 85 | 168 | 329 | 454 | 391 | 287 | 220 | 393 | 432 | 451 | 419 | 432 | 493 | 861 | 472 | 531 | 292 |
| | 17 | 412 | 455 | 113 | 329 | 248 | 542 | 859 | 697 | 729 | 650 | 625 | 176 | 86 | 153 | 137 | 54 | 88 | 103 | 129 | 204 | 231 | 184 | 203 | 86 | 312 |
| | 18 | 129 | 198 | 192 | 136 | 155 | 111 | 343 | 594 | 506 | 244 | 183 | 336 | 320 | 304 | 234 | 140 | 465 | 684 | 703 | 752 | 461 | 305 | 187 | 396 | 337 |
| | 19 | 348 | 526 | 487 | 330 | 765 | 623 | 508 | 586 | 475 | 426 | 411 | 324 | 295 | 192 | 441 | 221 | 401 | 480 | 419 | 304 | 633 | 638 | 624 | 447 | 454 |
| | 20 | 297 | 183 | 166 | 139 | 259 | 272 | 105 | 103 | 93 | 74 | 58 | 63 | 72 | 68 | 57 | 79 | 92 | 94 | 58 | 79 | 116 | 147 | 103 | 69 | 119 |
| Q | 21 | 55 | 43 | 31 | 27 | 34 | 35 | 32 | 35 | 45 | 54 | 68 | 70 | 67 | 57 | 44 | 43 | 49 | 46 | 46 | 49 | 49 | 45 | 61 | 59 | 48 |
| | 22 | 60 | 58 | 50 | 65 | 115 | 280 | 546 | 680 | 771 | 750 | 733 | 780 | 579 | 369 | 112 | 99 | 74 | 72 | 82 | 100 | 209 | 334 | 318 | 132 | 307 |
| | 23 | 161 | 177 | 233 | 342 | 297 | 368 | 433 | 556 | 372 | 278 | 190 | 172 | 154 | 97 | 159 | 214 | 132 | 68 | 88 | 102 | 133 | 182 | 162 | 191 | 219 |
| Q | 24 | 118 | 81 | 76 | 82 | 61 | 86 | 75 | 64 | 63 | 93 | 101 | 74 | 95 | 67 | 43 | 43 | 33 | 39 | 38 | 56 | 91 | 97 | 72 | 56 | 71 |
| Q | 25 | 64 | 70 | 59 | 60 | 53 | 52 | 53 | 121 | 78 | 68 | 63 | 49 | 49 | 46 | 33 | 37 | 94 | 94 | 73 | 110 | 88 | 62 | 65 | 183 | 72 |
| | 26 | 403 | 572 | 150 | 60 | 51 | 63 | 67 | 60 | 57 | 75 | 139 | 234 | 281 | 287 | 179 | 255 | 218 | 121 | 92 | 103 | 133 | 285 | 409 | 192 | 187 |
| | 27 | 130 | 157 | 134 | 99 | 275 | 313 | 251 | 231 | 109 | 142 | 306 | 239 | 512 | 238 | 161 | 202 | 258 | 225 | 154 | 230 | 238 | 308 | 280 | 245 | 227 |
| | 28 | 341 | 326 | 95 | 62 | 42 | 60 | 83 | 96 | 89 | 79 | 89 | 107 | 110 | 182 | 170 | 151 | 247 | 227 | 215 | 231 | 225 | 248 | 99 | 147 | 155 |
| | 29 | 173 | 159 | 70 | 111 | 172 | 157 | 165 | 76 | 67 | 68 | 64 | 62 | 55 | 56 | 73 | 143 | 298 | 269 | 143 | 358 | 628 | 336 | 548 | 377 | 193 |
| | 30 | 138 | 212 | 602 | 478 | 350 | 348 | 166 | 192 | 235 | 173 | 161 | 133 | 153 | 254 | 177 | 196 | 221 | 336 | 307 | 420 | 442 | 414 | 474 | 588 | 299 |
| | MEAN | 253 | 284 | 256 | 246 | 313 | 307 | 308 | 322 | 349 | 317 | 317 | 317 | 345 | 272 | 272 | 298 | 314 | 310 | 289 | 306 | 320 | 324 | 326 | 293 | 302 |
| 5Q | MEAN | 96 | 68 | 55 | 58 | 83 | 96 | 91 | 76 | 59 | 76 | 92 | 115 | 132 | 132 | 85 | 77 | 80 | 105 | 89 | 80 | 99 | 86 | 72 | 86 | 87 |
| 5D | MEAN | 555 | 663 | 636 | 707 | 779 | 669 | 622 | 680 | 961 | 876 | 796 | 766 | 909 | 684 | 793 | 827 | 625 | 535 | 519 | 536 | 570 | 552 | 561 | 489 | 682 |

JULY 1958 AE INDICES VALUES ARE EXPRESSED IN GAMMAS

| | UT | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 450 | 382 | 375 | 492 | 409 | 310 | 373 | 380 | 407 | 201 | 261 | 311 | 375 | 355 | 233 | 144 | 126 | 114 | 302 | 251 | 138 | 85 | 192 | 277 | 289 |
| | 2 | 230 | 467 | 267 | 151 | 118 | 152 | 209 | 332 | 475 | 551 | 401 | 258 | 167 | 217 | 260 | 237 | 244 | 195 | 188 | 187 | 69 | 113 | 220 | 478 | 258 |
| D | 3 | 293 | 355 | 578 | 212 | 443 | 710 | 561 | 618 | 743 | 138 | 266 | 171 | 180 | 176 | 162 | 104 | 96 | 179 | 185 | 287 | 348 | 141 | 126 | 136 | 301 |
| | 4 | 194 | 162 | 146 | 221 | 341 | 249 | 365 | 746 | 678 | 344 | 220 | 236 | 309 | 249 | 124 | 142 | 185 | 167 | 259 | 565 | 316 | 230 | 148 | 99 | 279 |
| | 5 | 212 | 332 | 245 | 313 | 239 | 66 | 57 | 72 | 232 | 544 | 313 | 113 | 181 | 96 | 75 | 167 | 266 | 149 | 172 | 147 | 89 | 84 | 75 | 75 | 180 |
| | 6 | 99 | 143 | 247 | 206 | 153 | 276 | 244 | 155 | 170 | 348 | 415 | 246 | 165 | 112 | 99 | 91 | 77 | 82 | 116 | 161 | 216 | 110 | 79 | 74 | 170 |
| | 7 | 57 | 78 | 114 | 103 | 106 | 210 | 413 | 476 | 532 | 484 | 198 | 97 | 56 | 36 | 50 | 147 | 177 | 137 | 129 | 74 | 89 | 73 | 89 | 65 | 166 |
| | 8 | 95 | 84 | 111 | 185 | 232 | 384 | 324 | 307 | 305 | 493 | 226 | 193 | 108 | 73 | 55 | 92 | 67 | 100 | 86 | 88 | 158 | 124 | 73 | 58 | 168 |
| Q | 9 | 47 | 72 | 66 | 84 | 191 | 359 | 311 | 278 | 134 | 150 | 86 | 101 | 70 | 52 | 46 | 78 | 94 | 68 | 71 | 74 | 86 | 88 | 115 | 165 | 120 |
| D | 10 | 225 | 182 | 183 | 322 | 666 | 673 | 545 | 424 | 436 | 714 | 633 | 594 | 947 | 1072 | 259 | 111 | 153 | 229 | 635 | 746 | 587 | 456 | 789 | 655 | 510 |
| | 11 | 469 | 389 | 501 | 369 | 280 | 235 | 348 | 286 | 192 | 117 | 127 | 146 | 191 | 123 | 140 | 260 | 282 | 339 | 414 | 506 | 515 | 459 | 639 | 678 | 334 |
| | 12 | 658 | 569 | 563 | 286 | 216 | 123 | 55 | 51 | 49 | 50 | 47 | 53 | 62 | 79 | 44 | 155 | 359 | 175 | 73 | 44 | 43 | 60 | 61 | 58 | 164 |
| D | 13 | 60 | 95 | 114 | 101 | 325 | 354 | 303 | 171 | 70 | 57 | 60 | 46 | 35 | 36 | 38 | 41 | 455 | 884 | 1017 | 990 | 800 | 761 | 585 | 549 | 331 |
| D | 14 | 630 | 1042 | 936 | 800 | 618 | 195 | 97 | 123 | 87 | 58 | 168 | 274 | 175 | 119 | 137 | 144 | 150 | 250 | 624 | 460 | 157 | 156 | 193 | 162 | 326 |
| | 15 | 115 | 273 | 343 | 233 | 212 | 239 | 97 | 42 | 57 | 59 | 134 | 161 | 35 | 41 | 30 | 20 | 31 | 64 | 177 | 158 | 217 | 225 | 237 | 261 | 144 |
| | 16 | 337 | 278 | 93 | 93 | 164 | 408 | 95 | 56 | 112 | 157 | 118 | 64 | 53 | 105 | 280 | 103 | 447 | 438 | 130 | 114 | 74 | 78 | 107 | 124 | 168 |
| | 17 | 95 | 73 | 56 | 52 | 39 | 74 | 73 | 52 | 70 | 94 | 190 | 265 | 475 | 199 | 57 | 41 | 49 | 51 | 123 | 203 | 326 | 205 | 92 | 134 | 129 |
| | 18 | 190 | 276 | 406 | 516 | 441 | 183 | 221 | 105 | 63 | 86 | 150 | 356 | 334 | 368 | 461 | 277 | 120 | 199 | 173 | 93 | 82 | 53 | 67 | 165 | 224 |
| | 19 | 129 | 109 | 129 | 322 | 346 | 187 | 169 | 221 | 177 | 276 | 189 | 281 | 177 | 76 | 119 | 180 | 302 | 90 | 52 | 125 | 278 | 639 | 465 | 534 | 232 |
| Q | 20 | 420 | 150 | 90 | 83 | 62 | 49 | 42 | 40 | 40 | 48 | 53 | 46 | 42 | 44 | 50 | 51 | 55 | 69 | 93 | 120 | 134 | 157 | 98 | 113 | 90 |
| | 21 | 123 | 113 | 52 | 69 | 59 | 57 | 43 | 106 | 157 | 91 | 75 | 105 | 208 | 255 | 129 | 114 | 134 | 261 | 596 | 178 | 120 | 208 | 454 | 439 | 173 |
| D | 22 | 313 | 457 | 359 | 161 | 196 | 410 | 302 | 395 | 675 | 756 | 777 | 538 | 274 | 240 | 200 | 284 | 167 | 248 | 467 | 429 | 360 | 274 | 262 | 191 | 365 |
| | 23 | 221 | 121 | 139 | 400 | 393 | 437 | 365 | 599 | 436 | 68 | 161 | 157 | 158 | 155 | 137 | 322 | 174 | 75 | 95 | 64 | 103 | 110 | 125 | 182 | 219 |
| Q | 24 | 77 | 60 | 56 | 55 | 54 | 135 | 239 | 214 | 97 | 91 | 87 | 71 | 100 | 91 | 108 | 94 | 66 | 81 | 96 | 134 | 106 | 94 | 87 | 73 | 99 |
| | 25 | 57 | 81 | 94 | 78 | 118 | 173 | 278 | 151 | 88 | 108 | 120 | 132 | 89 | 78 | 175 | 188 | 112 | 182 | 136 | 94 | 86 | 119 | 98 | 92 | 122 |
| | 26 | 91 | 80 | 136 | 282 | 303 | 167 | 67 | 128 | 135 | 366 | 387 | 256 | 186 | 280 | 121 | 165 | 210 | 346 | 266 | 450 | 280 | 538 | 541 | 463 | 260 |
| | 27 | 510 | 491 | 378 | 388 | 385 | 278 | 294 | 230 | 329 | 307 | 231 | 332 | 321 | 348 | 221 | 155 | 90 | 103 | 121 | 223 | 209 | 145 | 120 | 123 | 264 |
| | 28 | 295 | 239 | 215 | 200 | 254 | 119 | 49 | 42 | 47 | 60 | 142 | 151 | 97 | 63 | 155 | 309 | 361 | 260 | 395 | 359 | 145 | 88 | 97 | 273 | 184 |
| Q | 29 | 331 | 316 | 253 | 88 | 120 | 273 | 119 | 54 | 70 | 59 | 53 | 68 | 59 | 43 | 93 | 70 | 65 | 126 | 102 | 141 | 98 | 77 | 105 | 97 | 120 |
| | 30 | 88 | 90 | 74 | 110 | 52 | 49 | 66 | 59 | 63 | 49 | 47 | 51 | 49 | 40 | 93 | 131 | 147 | 121 | 155 | 102 | 332 | 323 | 207 | 175 | 111 |
| Q | 31 | 175 | 200 | 89 | 90 | 124 | 132 | 90 | 208 | 90 | 52 | 141 | 277 | 137 | 111 | 102 | 92 | 78 | 75 | 57 | 89 | 84 | 109 | 86 | 60 | 115 |
| | MEAN | 235 | 251 | 243 | 228 | 247 | 247 | 220 | 230 | 233 | 225 | 209 | 198 | 188 | 172 | 137 | 145 | 172 | 189 | 242 | 247 | 214 | 206 | 214 | 227 | 213 |
| 5Q | MEAN | 210 | 160 | 111 | 80 | 110 | 190 | 160 | 159 | 86 | 80 | 84 | 113 | 82 | 68 | 80 | 77 | 72 | 84 | 84 | 112 | 102 | 105 | 98 | 102 | 109 |
| 5D | MEAN | 304 | 430 | 448 | 319 | 450 | 468 | 362 | 346 | 402 | 345 | 381 | 325 | 322 | 329 | 159 | 137 | 204 | 358 | 586 | 582 | 450 | 358 | 391 | 339 | 367 |

AUGUST 1958 AE INDICES VALUES ARE EXPRESSED IN GAMMAS

| | UT | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q | 1 | 63 | 63 | 71 | 80 | 89 | 86 | 63 | 93 | 299 | 281 | 221 | 68 | 70 | 74 | 88 | 148 | 171 | 116 | 79 | 63 | 85 | 99 | 84 | 61 | 109 |
| Q | 2 | 58 | 78 | 78 | 74 | 81 | 60 | 66 | 76 | 71 | 110 | 166 | 352 | 152 | 133 | 112 | 60 | 66 | 45 | 43 | 72 | 115 | 82 | 86 | 103 | 98 |
| | 3 | 111 | 155 | 261 | 543 | 674 | 283 | 265 | 436 | 512 | 273 | 154 | 212 | 132 | 91 | 70 | 102 | 208 | 280 | 149 | 115 | 133 | 119 | 104 | 81 | 228 |
| | 4 | 93 | 82 | 93 | 66 | 75 | 140 | 72 | 59 | 47 | 51 | 46 | 55 | 50 | 39 | 38 | 27 | 39 | 38 | 39 | 47 | 66 | 98 | 56 | 128 | 64 |
| | 5 | 94 | 123 | 87 | 89 | 412 | 139 | 58 | 53 | 82 | 337 | 518 | 187 | 360 | 405 | 292 | 331 | 365 | 84 | 54 | 46 | 84 | 207 | 211 | 247 | 203 |
| | 6 | 102 | 151 | 256 | 562 | 437 | 185 | 249 | 116 | 109 | 160 | 129 | 128 | 176 | 144 | 133 | 116 | 40 | 151 | 342 | 320 | 327 | 175 | 106 | 189 | 201 |
| | 7 | 382 | 534 | 501 | 192 | 142 | 386 | 293 | 205 | 257 | 234 | 179 | 450 | 551 | 341 | 276 | 247 | 306 | 86 | 88 | 127 | 94 | 81 | 161 | 208 | 263 |
| | 8 | 440 | 509 | 431 | 127 | 437 | 304 | 334 | 522 | 250 | 60 | 55 | 57 | 74 | 157 | 115 | 67 | 53 | 107 | 60 | 70 | 199 | 187 | 272 | 317 | 217 |
| | 9 | 385 | 342 | 357 | 131 | 101 | 138 | 240 | 79 | 62 | 59 | 75 | 83 | 174 | 69 | 61 | 108 | 200 | 590 | 258 | 340 | 414 | 191 | 371 | 314 | 214 |
| | 10 | 182 | 208 | 119 | 85 | 68 | 151 | 306 | 144 | 109 | 307 | 265 | 109 | 56 | 59 | 63 | 93 | 179 | 206 | 52 | 63 | 196 | 286 | 293 | 252 | 160 |
| | 11 | 240 | 450 | 278 | 180 | 189 | 318 | 270 | 75 | 59 | 60 | 70 | 63 | 45 | 52 | 39 | 38 | 92 | 93 | 60 | 109 | 59 | 47 | 45 | 50 | 124 |
| | 12 | 128 | 270 | 96 | 57 | 47 | 85 | 102 | 100 | 72 | 65 | 146 | 123 | 89 | 62 | 78 | 148 | 126 | 64 | 93 | 270 | 226 | 64 | 76 | 51 | 110 |
| | 13 | 48 | 53 | 56 | 63 | 42 | 53 | 57 | 62 | 59 | 62 | 60 | 61 | 70 | 72 | 136 | 278 | 366 | 459 | 198 | 239 | 474 | 224 | 343 | 500 | 168 |
| D | 14 | 631 | 381 | 375 | 375 | 300 | 387 | 505 | 459 | 654 | 423 | 530 | 536 | 438 | 282 | 405 | 168 | 145 | 409 | 711 | 416 | 274 | 415 | 738 | 534 | 437 |
| D | 15 | 264 | 205 | 247 | 518 | 676 | 394 | 283 | 599 | 400 | 753 | 348 | 399 | 557 | 643 | 582 | 715 | 727 | 555 | 562 | 270 | 414 | 548 | 408 | 370 | 477 |
| D | 16 | 500 | 354 | 127 | 86 | 574 | 495 | 365 | 420 | 257 | 263 | 244 | 136 | 172 | 379 | 649 | 991 | 821 | 951 | 607 | 370 | 893 | 782 | 180 | 181 | 450 |
| D | 17 | 693 | 358 | 245 | 653 | 663 | 437 | 216 | 393 | 214 | 709 | 300 | 362 | 858 | 1199 | 1081 | 1005 | 723 | 366 | 331 | 255 | 366 | 417 | 108 | 322 | 511 |
| | 18 | 304 | 113 | 141 | 356 | 642 | 518 | 285 | 465 | 547 | 424 | 383 | 273 | 327 | 454 | 579 | 553 | 306 | 359 | 371 | 274 | 403 | 422 | 267 | 335 | 379 |
| | 19 | 550 | 341 | 230 | 226 | 181 | 195 | 214 | 241 | 396 | 509 | 435 | 262 | 95 | 76 | 90 | 112 | 314 | 509 | 276 | 93 | 88 | 74 | 68 | 64 | 235 |
| | 20 | 91 | 83 | 79 | 73 | 47 | 39 | 55 | 69 | 146 | 112 | 117 | 114 | 128 | 101 | 250 | 385 | 411 | 228 | 93 | 115 | 178 | 128 | 127 | 187 | 140 |
| | 21 | 134 | 113 | 113 | 107 | 203 | 162 | 132 | 251 | 109 | 53 | 81 | 60 | 60 | 75 | 58 | 45 | 65 | 69 | 120 | 131 | 75 | 65 | 60 | 95 | 102 |
| | 22 | 61 | 41 | 37 | 36 | 39 | 40 | 49 | 52 | 60 | 58 | 93 | 250 | 184 | 75 | 61 | 65 | 62 | 60 | 56 | 67 | 72 | 126 | 462 | 541 | 110 |
| | 23 | 342 | 331 | 329 | 420 | 592 | 304 | 126 | 190 | 303 | 250 | 214 | 207 | 163 | 180 | 132 | 147 | 153 | 237 | 242 | 416 | 410 | 247 | 342 | 274 | 273 |
| D | 24 | 182 | 277 | 222 | 85 | 215 | 550 | 616 | 320 | 515 | 504 | 370 | 493 | 132 | 103 | 202 | 181 | 211 | 234 | 253 | 193 | 180 | 344 | 192 | 139 | 280 |
| | 25 | 123 | 91 | 58 | 55 | 49 | 67 | 59 | 47 | 49 | 49 | 42 | 31 | 32 | 37 | 34 | 40 | 74 | 76 | 32 | 154 | 178 | 123 | 89 | 74 | 69 |
| | 26 | 47 | 46 | 43 | 58 | 59 | 41 | 49 | 64 | 150 | 176 | 65 | 45 | 58 | 159 | 234 | 154 | 70 | 51 | 125 | 87 | 65 | 71 | 80 | 83 | 87 |
| | 27 | 68 | 84 | 185 | 143 | 36 | 32 | 59 | 100 | 58 | 108 | 162 | 116 | 45 | 50 | 55 | 52 | 42 | 42 | 61 | 114 | 86 | 41 | 39 | 45 | 76 |
| Q | 28 | 65 | 68 | 56 | 45 | 94 | 117 | 49 | 53 | 69 | 73 | 63 | 59 | 51 | 46 | 47 | 59 | 52 | 35 | 53 | 107 | 137 | 75 | 54 | 51 | 66 |
| Q | 29 | 48 | 55 | 48 | 49 | 45 | 39 | 50 | 53 | 63 | 70 | 67 | 59 | 69 | 95 | 62 | 72 | 46 | 30 | 31 | 62 | 73 | 71 | 63 | 55 | 57 |
| Q | 30 | 53 | 100 | 128 | 59 | 57 | 46 | 44 | 63 | 82 | 76 | 57 | 47 | 74 | 49 | 39 | 39 | 41 | 50 | 54 | 61 | 59 | 65 | 53 | 39 | 60 |
| | 31 | 46 | 82 | 104 | 159 | 203 | 130 | 56 | 64 | 63 | 67 | 155 | 409 | 648 | 631 | 858 | 954 | 888 | 593 | 302 | 427 | 331 | 165 | 151 | 154 | 318 |
| | MEAN | 211 | 198 | 176 | 186 | 241 | 204 | 180 | 191 | 198 | 217 | 187 | 187 | 196 | 204 | 223 | 242 | 237 | 231 | 187 | 177 | 218 | 195 | 184 | 195 | 203 |
| 5Q | MEAN | 61 | 73 | 78 | 61 | 73 | 70 | 54 | 68 | 117 | 122 | 115 | 117 | 83 | 79 | 70 | 76 | 75 | 55 | 52 | 73 | 94 | 78 | 68 | 62 | 78 |
| 5D | MEAN | 454 | 315 | 243 | 343 | 486 | 453 | 397 | 438 | 408 | 530 | 358 | 385 | 431 | 521 | 584 | 612 | 525 | 503 | 493 | 301 | 425 | 501 | 325 | 309 | 431 |

SEPTEMBER 1968 AE INDICES VALUES ARE EXPRESSED IN GAMMAS

| | UT | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 148 | 197 | 319 | 230 | 379 | 272 | 209 | 163 | 160 | 353 | 535 | 381 | 497 | 362 | 181 | 131 | 179 | 160 | 93 | 49 | 48 | 87 | 100 | 157 | 225 |
| | 2 | 185 | 134 | 83 | 65 | 53 | 42 | 99 | 90 | 307 | 418 | 766 | 435 | 324 | 342 | 205 | 182 | 262 | 294 | 364 | 203 | 99 | 152 | 139 | 211 | 227 |
| | 3 | 185 | 245 | 158 | 92 | 117 | 99 | 263 | 149 | 168 | 289 | 249 | 290 | 174 | 93 | 83 | 180 | 604 | 208 | 41 | 268 | 287 | 457 | 128 | 112 | 206 |
| | 4 | 343 | 142 | 112 | 295 | 334 | 140 | 85 | 106 | 99 | 252 | 315 | 653 | 553 | 407 | 521 | 433 | 204 | 83 | 107 | 214 | 144 | 145 | 288 | 66 | 252 |
| | 5 | 39 | 76 | 100 | 121 | 249 | 410 | 428 | 189 | 114 | 224 | 208 | 258 | 334 | 202 | 78 | 96 | 115 | 146 | 84 | 113 | 260 | 218 | 312 | 336 | 196 |
| | 6 | 420 | 206 | 236 | 123 | 198 | 286 | 423 | 330 | 115 | 48 | 38 | 54 | 77 | 132 | 95 | 200 | 238 | 402 | 78 | 64 | 279 | 742 | 531 | 463 | 241 |
| | 7 | 317 | 154 | 53 | 49 | 46 | 61 | 47 | 57 | 64 | 76 | 59 | 87 | 97 | 59 | 74 | 119 | 347 | 251 | 421 | 574 | 641 | 428 | 468 | 531 | 212 |
| D | 8 | 612 | 884 | 525 | 589 | 556 | 533 | 728 | 755 | 568 | 1032 | 681 | 879 | 909 | 698 | 760 | 887 | 733 | 690 | 390 | 138 | 90 | 66 | 58 | 84 | 577 |
| | 9 | 446 | 340 | 358 | 193 | 281 | 210 | 66 | 59 | 115 | 123 | 138 | 258 | 252 | 41 | 106 | 126 | 159 | 240 | 220 | 128 | 96 | 63 | 59 | 62 | 172 |
| | 10 | 103 | 152 | 200 | 173 | 82 | 38 | 48 | 59 | 49 | 69 | 115 | 298 | 151 | 130 | 120 | 284 | 328 | 187 | 75 | 42 | 53 | 110 | 117 | 120 | 129 |
| | 11 | 193 | 230 | 210 | 94 | 271 | 142 | 68 | 64 | 89 | 89 | 71 | 71 | 88 | 78 | 54 | 47 | 47 | 69 | 130 | 53 | 52 | 57 | 57 | 49 | 99 |
| | 12 | 42 | 42 | 94 | 234 | 192 | 160 | 225 | 422 | 449 | 394 | 460 | 418 | 457 | 437 | 982 | 605 | 429 | 454 | 548 | 493 | 271 | 270 | 394 | 470 | 373 |
| D | 13 | 531 | 598 | 508 | 395 | 450 | 575 | 455 | 323 | 154 | 135 | 277 | 805 | 710 | 570 | 573 | 757 | 703 | 556 | 726 | 454 | 128 | 192 | 453 | 386 | 476 |
| D | 14 | 446 | 592 | 670 | 749 | 236 | 88 | 343 | 576 | 417 | 634 | 764 | 569 | 856 | 844 | 344 | 512 | 535 | 349 | 195 | 217 | 498 | 626 | 220 | 204 | 479 |
| D | 15 | 323 | 433 | 597 | 526 | 480 | 277 | 336 | 338 | 305 | 161 | 187 | 512 | 486 | 345 | 441 | 902 | 446 | 574 | 710 | 324 | 174 | 198 | 214 | 411 | 404 |
| | 16 | 309 | 243 | 279 | 546 | 380 | 286 | 256 | 211 | 199 | 230 | 267 | 157 | 185 | 182 | 145 | 200 | 61 | 121 | 180 | 100 | 118 | 137 | 100 | 55 | 206 |
| | 17 | 112 | 121 | 159 | 66 | 133 | 76 | 93 | 180 | 222 | 101 | 171 | 121 | 131 | 101 | 61 | 25 | 58 | 104 | 177 | 93 | 55 | 42 | 39 | 36 | 103 |
| Q | 18 | 32 | 29 | 51 | 55 | 80 | 87 | 33 | 33 | 52 | 50 | 50 | 48 | 47 | 55 | 76 | 136 | 172 | 208 | 134 | 84 | 80 | 57 | 81 | 160 | 79 |
| | 19 | 112 | 47 | 102 | 296 | 641 | 238 | 266 | 429 | 279 | 616 | 169 | 48 | 60 | 30 | 65 | 198 | 126 | 50 | 46 | 47 | 42 | 54 | 54 | 69 | 170 |
| | 20 | 66 | 94 | 191 | 448 | 111 | 34 | 37 | 36 | 36 | 35 | 37 | 32 | 28 | 29 | 33 | 28 | 36 | 36 | 97 | 180 | 159 | 131 | 61 | 49 | 84 |
| | 21 | 78 | 46 | 35 | 45 | 78 | 286 | 339 | 209 | 82 | 46 | 35 | 56 | 275 | 399 | 166 | 413 | 685 | 238 | 47 | 155 | 165 | 49 | 50 | 43 | 168 |
| | 22 | 171 | 187 | 66 | 35 | 36 | 39 | 41 | 89 | 101 | 89 | 62 | 177 | 400 | 386 | 269 | 187 | 107 | 53 | 64 | 72 | 321 | 458 | 568 | 230 | 175 |
| D | 23 | 165 | 335 | 628 | 640 | 268 | 101 | 183 | 220 | 331 | 590 | 232 | 104 | 134 | 377 | 877 | 938 | 275 | 128 | 59 | 51 | 41 | 34 | 59 | 46 | 284 |
| Q | 24 | 58 | 29 | 24 | 24 | 23 | 17 | 18 | 24 | 27 | 39 | 40 | 41 | 35 | 30 | 36 | 42 | 46 | 35 | 49 | 284 | 165 | 41 | 40 | 38 | 50 |
| Q | 25 | 30 | 27 | 30 | 29 | 22 | 18 | 24 | 26 | 32 | 39 | 37 | 40 | 48 | 36 | 43 | 66 | 97 | 66 | 31 | 35 | 44 | 56 | 54 | 51 | 41 |
| Q | 26 | 46 | 66 | 40 | 47 | 34 | 32 | 51 | 139 | 163 | 51 | 44 | 48 | 56 | 62 | 89 | 248 | 234 | 102 | 46 | 42 | 49 | 47 | 38 | 34 | 75 |
| Q | 27 | 33 | 31 | 23 | 51 | 105 | 103 | 40 | 36 | 35 | 43 | 54 | 60 | 88 | 58 | 45 | 51 | 55 | 83 | 36 | 30 | 32 | 41 | 36 | 36 | 50 |
| | 28 | 39 | 35 | 70 | 36 | 35 | 27 | 32 | 62 | 69 | 123 | 112 | 270 | 169 | 122 | 179 | 194 | 280 | 134 | 138 | 289 | 193 | 198 | 74 | 60 | 123 |
| | 29 | 69 | 168 | 162 | 59 | 96 | 345 | 209 | 149 | 135 | 141 | 119 | 52 | 52 | 46 | 74 | 137 | 201 | 207 | 324 | 273 | 403 | 256 | 64 | 68 | 159 |
| | 30 | 58 | 45 | 38 | 40 | 28 | 27 | 27 | 40 | 44 | 46 | 121 | 148 | 129 | 85 | 76 | 180 | 299 | 67 | 45 | 303 | 558 | 315 | 323 | 416 | 144 |
| | MEAN | 190 | 198 | 204 | 212 | 200 | 168 | 182 | 185 | 166 | 218 | 214 | 246 | 260 | 225 | 228 | 283 | 269 | 210 | 189 | 179 | 185 | 191 | 173 | 168 | 206 |
| 5Q | MEAN | 40 | 36 | 34 | 41 | 53 | 51 | 33 | 52 | 62 | 44 | 45 | 47 | 55 | 48 | 58 | 109 | 121 | 99 | 59 | 95 | 74 | 48 | 50 | 64 | 59 |
| 5D | MEAN | 415 | 568 | 586 | 580 | 398 | 315 | 409 | 442 | 355 | 510 | 428 | 574 | 619 | 567 | 599 | 799 | 538 | 459 | 416 | 237 | 186 | 223 | 201 | 226 | 444 |

OCTOBER 1958 AE INDICES VALUES ARE EXPRESSED IN GAMMAS

| | UT | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 556 | 436 | 364 | 464 | 82 | 81 | 59 | 62 | 140 | 343 | 279 | 70 | 70 | 117 | 227 | 101 | 208 | 533 | 737 | 514 | 345 | 436 | 392 | 405 | 293 |
| D | 2 | 439 | 995 | 422 | 105 | 439 | 848 | 792 | 146 | 82 | 2921 | 1046 | 879 | 593 | 700 | 908 | 604 | 312 | 187 | 486 | 283 | 116 | 225 | 298 | 401 | 483 |
| | 3 | 413 | 942 | 753 | 414 | 345 | 559 | 483 | 657 | 745 | 700 | 354 | 114 | 94 | 161 | 98 | 84 | 86 | 88 | 83 | 77 | 84 | 84 | 78 | 85 | 316 |
| | 4 | 108 | 99 | 96 | 96 | 89 | 85 | 83 | 76 | 76 | 84 | 72 | 59 | 56 | 53 | 62 | 173 | 269 | 248 | 123 | 83 | 78 | 78 | 77 | 71 | 100 |
| Q | 5 | 55 | 51 | 46 | 47 | 52 | 45 | 129 | 209 | 265 | 258 | 86 | 49 | 70 | 96 | 42 | 44 | 29 | 18 | 22 | 33 | 45 | 43 | 37 | 36 | 75 |
| | 6 | 37 | 44 | 58 | 60 | 54 | 59 | 66 | 88 | 142 | 118 | 120 | 161 | 105 | 68 | 44 | 98 | 121 | 70 | 65 | 208 | 136 | 70 | 96 | 112 | 92 |
| | 7 | 263 | 208 | 239 | 329 | 123 | 121 | 160 | 116 | 50 | 51 | 98 | 45 | 43 | 44 | 46 | 43 | 41 | 152 | 598 | 634 | 427 | 407 | 167 | 196 | 192 |
| | 8 | 445 | 204 | 78 | 102 | 88 | 128 | 124 | 95 | 115 | 96 | 126 | 189 | 137 | 117 | 101 | 218 | 204 | 42 | 59 | 208 | 196 | 131 | 183 | 172 | 148 |
| | 9 | 347 | 355 | 460 | 238 | 90 | 46 | 43 | 36 | 37 | 44 | 47 | 40 | 38 | 33 | 189 | 255 | 243 | 275 | 76 | 65 | 122 | 235 | 404 | 341 | 169 |
| | 10 | 263 | 266 | 91 | 53 | 48 | 83 | 185 | 144 | 110 | 196 | 127 | 42 | 53 | 47 | 87 | 92 | 45 | 34 | 33 | 23 | 24 | 26 | 31 | 37 | 89 |
| Q | 11 | 42 | 38 | 39 | 46 | 47 | 44 | 29 | 101 | 72 | 39 | 43 | 39 | 41 | 61 | 40 | 29 | 26 | 30 | 25 | 30 | 39 | 48 | 57 | 54 | 44 |
| D | 12 | 196 | 521 | 473 | 580 | 693 | 545 | 271 | 382 | 628 | 625 | 451 | 576 | 379 | 300 | 617 | 336 | 281 | 670 | 943 | 594 | 727 | 469 | 431 | 445 | 506 |
| D | 13 | 466 | 432 | 419 | 233 | 420 | 274 | 414 | 467 | 462 | 696 | 468 | 466 | 563 | 347 | 604 | 467 | 460 | 480 | 202 | 175 | 222 | 298 | 545 | 441 | 418 |
| | 14 | 374 | 250 | 354 | 353 | 362 | 326 | 169 | 248 | 293 | 162 | 79 | 177 | 503 | 308 | 232 | 454 | 447 | 216 | 283 | 294 | 188 | 255 | 259 | 108 | 279 |
| | 15 | 68 | 52 | 39 | 45 | 48 | 56 | 72 | 111 | 167 | 211 | 168 | 46 | 46 | 56 | 89 | 191 | 154 | 191 | 81 | 31 | 72 | 100 | 47 | 35 | 91 |
| | 16 | 29 | 36 | 62 | 120 | 81 | 116 | 197 | 306 | 266 | 116 | 53 | 58 | 53 | 132 | 261 | 341 | 102 | 43 | 32 | 31 | 31 | 37 | 27 | 35 | 107 |
| | 17 | 126 | 206 | 195 | 135 | 63 | 73 | 46 | 83 | 156 | 116 | 120 | 60 | 46 | 107 | 268 | 307 | 108 | 62 | 86 | 87 | 303 | 357 | 202 | 267 | 149 |
| | 18 | 215 | 121 | 183 | 184 | 73 | 55 | 48 | 164 | 294 | 176 | 102 | 124 | 87 | 61 | 40 | 34 | 50 | 90 | 66 | 42 | 50 | 62 | 181 | 257 | 115 |
| | 19 | 166 | 131 | 68 | 63 | 56 | 40 | 33 | 57 | 99 | 63 | 44 | 90 | 337 | 63 | 47 | 44 | 38 | 31 | 86 | 368 | 588 | 325 | 200 | 351 | 141 |
| | 20 | 136 | 67 | 45 | 53 | 44 | 23 | 83 | 274 | 343 | 280 | 188 | 176 | 58 | 218 | 73 | 54 | 222 | 288 | 60 | 24 | 24 | 23 | 21 | 19 | 117 |
| Q | 21 | 22 | 20 | 20 | 29 | 31 | 28 | 35 | 24 | 56 | 85 | 84 | 42 | 44 | 37 | 40 | 40 | 35 | 44 | 23 | 30 | 35 | 36 | 35 | 26 | 38 |
| Q | 22 | 21 | 20 | 23 | 24 | 36 | 39 | 28 | 29 | 37 | 42 | 42 | 39 | 42 | 38 | 38 | 47 | 46 | 46 | 43 | 31 | 40 | 42 | 46 | 36 | 36 |
| Q | 23 | 29 | 27 | 29 | 30 | 30 | 28 | 25 | 27 | 29 | 33 | 39 | 45 | 47 | 58 | 52 | 60 | 52 | 102 | 118 | 35 | 32 | 25 | 24 | 24 | 42 |
| | 24 | 29 | 25 | 24 | 29 | 41 | 42 | 50 | 61 | 73 | 89 | 71 | 109 | 76 | 58 | 71 | 175 | 153 | 416 | 723 | 549 | 160 | 78 | 49 | 47 | 133 |
| | 25 | 37 | 34 | 40 | 52 | 167 | 150 | 166 | 97 | 218 | 604 | 655 | 463 | 271 | 282 | 247 | 78 | 61 | 42 | 47 | 91 | 128 | 186 | 126 | 55 | 179 |
| | 26 | 62 | 41 | 59 | 39 | 32 | 39 | 34 | 68 | 194 | 263 | 184 | 68 | 51 | 43 | 42 | 37 | 36 | 39 | 103 | 187 | 188 | 112 | 108 | 297 | 97 |
| | 27 | 145 | 51 | 39 | 41 | 32 | 46 | 94 | 261 | 245 | 56 | 41 | 49 | 61 | 69 | 162 | 93 | 67 | 73 | 214 | 180 | 66 | 38 | 45 | 60 | 93 |
| | 28 | 75 | 34 | 32 | 33 | 33 | 35 | 198 | 119 | 42 | 36 | 37 | 41 | 43 | 42 | 86 | 132 | 60 | 38 | 51 | 49 | 48 | 59 | 168 | 336 | 76 |
| D | 29 | 434 | 271 | 112 | 82 | 129 | 110 | 134 | 70 | 52 | 96 | 105 | 77 | 243 | 158 | 192 | 253 | 426 | 1154 | 664 | 473 | 480 | 219 | 118 | 105 | 259 |
| | 30 | 118 | 194 | 145 | 120 | 72 | 72 | 70 | 67 | 68 | 247 | 509 | 463 | 409 | 642 | 528 | 247 | 173 | 185 | 118 | 144 | 310 | 257 | 326 | 487 | 249 |
| D | 31 | 515 | 401 | 470 | 487 | 544 | 437 | 660 | 835 | 814 | 511 | 656 | 882 | 310 | 845 | 1237 | 465 | 808 | 685 | 575 | 870 | 445 | 366 | 162 | 149 | 589 |
| | MEAN | 203 | 212 | 177 | 151 | 143 | 149 | 161 | 177 | 205 | 217 | 209 | 185 | 160 | 173 | 218 | 181 | 173 | 212 | 220 | 208 | 185 | 165 | 159 | 177 | 184 |
| 5Q | MEAN | 34 | 31 | 31 | 35 | 39 | 37 | 49 | 78 | 92 | 91 | 59 | 43 | 49 | 58 | 42 | 44 | 38 | 48 | 46 | 32 | 38 | 39 | 40 | 35 | 47 |
| 5D | MEAN | 422 | 524 | 379 | 297 | 445 | 443 | 454 | 380 | 408 | 444 | 545 | 576 | 418 | 470 | 712 | 425 | 457 | 635 | 574 | 479 | 398 | 315 | 311 | 308 | 451 |

NOVEMBER 1958 AE INDICES VALUES ARE EXPRESSED IN GAMMAS

| | UT | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| D | 1 | 421 | 654 | 340 | 183 | 107 | 133 | 82 | 93 | 81 | 122 | 2321 | 045 | 1907 | 863 | 820 | 472 | 618 | 348 | 520 | 711 | 503 | 602 | 518 | 483 | 494 |
| D | 2 | 707 | 879 | 655 | 507 | 650 | 595 | 659 | 608 | 615 | 682 | 685 | 703 | 887 | 869 | 1022 | 780 | 753 | 511 | 186 | 221 | 479 | 655 | 807 | 757 | 662 |
| D | 3 | 657 | 836 | 347 | 126 | 179 | 258 | 493 | 493 | 200 | 172 | 114 | 99 | 594 | 651 | 529 | 732 | 442 | 465 | 535 | 286 | 324 | 404 | 222 | 125 | 387 |
| D | 4 | 130 | 199 | 122 | 132 | 203 | 482 | 394 | 572 | 520 | 433 | 460 | 433 | 939 | 660 | 600 | 226 | 75 | 90 | 78 | 299 | 426 | 256 | 95 | 62 | 329 |
| | 5 | 42 | 69 | 107 | 162 | 44 | 44 | 69 | 170 | 246 | 257 | 212 | 237 | 286 | 134 | 84 | 102 | 79 | 49 | 42 | 46 | 140 | 189 | 37 | 29 | 120 |
| | 6 | 42 | 44 | 40 | 81 | 71 | 30 | 42 | 50 | 25 | 45 | 71 | 124 | 53 | 47 | 82 | 85 | 60 | 110 | 402 | 247 | 229 | 126 | 315 | 483 | 121 |
| | 7 | 386 | 426 | 446 | 344 | 401 | 437 | 607 | 385 | 362 | 362 | 371 | 417 | 292 | 650 | 255 | 82 | 59 | 54 | 65 | 50 | 43 | 44 | 49 | 41 | 276 |
| | 8 | 25 | 27 | 23 | 30 | 41 | 99 | 244 | 415 | 306 | 440 | 495 | 455 | 330 | 289 | 786 | 632 | 433 | 293 | 85 | 171 | 235 | 211 | 341 | 436 | 285 |
| D | 9 | 353 | 519 | 495 | 430 | 530 | 323 | 150 | 285 | 456 | 678 | 637 | 291 | 413 | 530 | 669 | 356 | 378 | 190 | 189 | 266 | 91 | 60 | 68 | 55 | 351 |
| | 10 | 72 | 53 | 88 | 202 | 216 | 113 | 126 | 104 | 206 | 234 | 252 | 603 | 601 | 178 | 127 | 425 | 525 | 492 | 242 | 187 | 240 | 211 | 182 | 304 | 249 |
| | 11 | 364 | 398 | 344 | 293 | 212 | 216 | 208 | 332 | 503 | 281 | 495 | 576 | 430 | 484 | 207 | 135 | 73 | 54 | 54 | 46 | 48 | 34 | 40 | 76 | 246 |
| Q | 12 | 103 | 74 | 41 | 24 | 36 | 32 | 26 | 25 | 19 | 22 | 37 | 91 | 108 | 67 | 36 | 39 | 110 | 75 | 40 | 20 | 23 | 28 | 27 | 27 | 47 |
| | 13 | 25 | 25 | 52 | 59 | 44 | 23 | 17 | 20 | 48 | 69 | 198 | 142 | 123 | 87 | 67 | 54 | 122 | 82 | 92 | 169 | 332 | 323 | 96 | 52 | 97 |
| Q | 14 | 31 | 29 | 19 | 21 | 28 | 26 | 26 | 25 | 31 | 29 | 31 | 34 | 45 | 40 | 43 | 47 | 81 | 50 | 76 | 62 | 55 | 130 | 74 | 47 | 45 |
| Q | 15 | 38 | 33 | 32 | 42 | 49 | 54 | 40 | 22 | 28 | 27 | 32 | 32 | 37 | 41 | 38 | 38 | 47 | 65 | 25 | 22 | 19 | 25 | 40 | 49 | 36 |
| | 16 | 45 | 59 | 48 | 54 | 36 | 22 | 24 | 28 | 31 | 66 | 39 | 58 | 126 | 256 | 213 | 222 | 257 | 307 | 225 | 172 | 133 | 271 | 143 | 80 | 121 |
| | 17 | 82 | 58 | 132 | 114 | 78 | 76 | 107 | 255 | 133 | 154 | 80 | 104 | 350 | 547 | 568 | 767 | 717 | 449 | 715 | 723 | 530 | 474 | 454 | 386 | 338 |
| | 18 | 283 | 471 | 413 | 369 | 647 | 586 | 451 | 480 | 430 | 784 | 355 | 171 | 64 | 51 | 75 | 81 | 235 | 423 | 532 | 370 | 236 | 227 | 458 | 266 | 352 |
| | 19 | 154 | 202 | 180 | 238 | 260 | 268 | 200 | 226 | 151 | 117 | 188 | 242 | 439 | 287 | 109 | 203 | 81 | 51 | 52 | 57 | 52 | 63 | 46 | 47 | 163 |
| | 20 | 39 | 40 | 50 | 40 | 62 | 82 | 73 | 62 | 104 | 590 | 407 | 376 | 412 | 600 | 1072 | 760 | 413 | 327 | 327 | 290 | 96 | 52 | 68 | 71 | 267 |
| | 21 | 50 | 95 | 42 | 49 | 57 | 47 | 24 | 26 | 39 | 15 | 29 | 45 | 67 | 135 | 112 | 92 | 362 | 454 | 374 | 171 | 94 | 137 | 282 | 184 | 124 |
| | 22 | 81 | 42 | 47 | 37 | 26 | 25 | 25 | 54 | 46 | 85 | 77 | 35 | 57 | 158 | 163 | 80 | 41 | 32 | 98 | 127 | 130 | 193 | 255 | 132 | 85 |
| | 23 | 87 | 93 | 89 | 218 | 157 | 67 | 55 | 43 | 36 | 39 | 59 | 59 | 121 | 39 | 35 | 39 | 36 | 29 | 27 | 19 | 17 | 24 | 25 | 34 | 60 |
| | 24 | 37 | 40 | 29 | 37 | 20 | 48 | 59 | 21 | 29 | 30 | 51 | 55 | 53 | 37 | 45 | 57 | 61 | 57 | 172 | 84 | 54 | 41 | 63 | 58 | 52 |
| | 25 | 178 | 132 | 122 | 70 | 69 | 85 | 78 | 78 | 60 | 128 | 138 | 107 | 160 | 363 | 323 | 134 | 82 | 52 | 122 | 442 | 144 | 60 | 94 | 89 | 138 |
| | 26 | 54 | 48 | 87 | 64 | 50 | 35 | 40 | 48 | 42 | 77 | 96 | 100 | 90 | 91 | 220 | 291 | 264 | 246 | 223 | 200 | 85 | 91 | 167 | 117 | 118 |
| | 27 | 190 | 253 | 246 | 153 | 105 | 88 | 89 | 64 | 70 | 55 | 147 | 82 | 102 | 80 | 86 | 220 | 154 | 104 | 185 | 325 | 427 | 420 | 147 | 113 | 163 |
| | 28 | 103 | 83 | 89 | 84 | 66 | 56 | 36 | 34 | 58 | 130 | 319 | 450 | 197 | 78 | 52 | 41 | 50 | 86 | 347 | 186 | 77 | 103 | 111 | 123 | 123 |
| Q | 29 | 100 | 54 | 31 | 50 | 54 | 40 | 26 | 26 | 37 | 47 | 49 | 60 | 39 | 53 | 190 | 230 | 101 | 51 | 23 | 25 | 24 | 16 | 21 | 18 | 57 |
| Q | 30 | 18 | 15 | 14 | 26 | 22 | 17 | 14 | 16 | 25 | 31 | 29 | 37 | 96 | 109 | 38 | 28 | 51 | 122 | 39 | 56 | 109 | 52 | 81 | 151 | 50 |
| | MEAN | 163 | 198 | 151 | 141 | 151 | 147 | 149 | 169 | 165 | 207 | 213 | 242 | 314 | 282 | 289 | 248 | 225 | 191 | 203 | 202 | 180 | 184 | 178 | 163 | 199 |
| 5Q | MEAN | 58 | 41 | 27 | 33 | 38 | 34 | 26 | 23 | 28 | 31 | 36 | 51 | 65 | 62 | 69 | 76 | 78 | 73 | 41 | 37 | 46 | 50 | 49 | 58 | 47 |
| 5D | MEAN | 454 | 617 | 394 | 276 | 334 | 358 | 356 | 410 | 374 | 417 | 426 | 514 | 948 | 715 | 728 | 513 | 453 | 321 | 302 | 357 | 365 | 395 | 342 | 296 | 445 |

DECEMBER 1958 AE INDICES VALUES ARE EXPRESSED IN GAMMAS

| | UT | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 126 | 124 | 94 | 132 | 242 | 108 | 31 | 76 | 131 | 288 | 337 | 435 | 510 | 397 | 557 | 462 | 309 | 479 | 199 | 107 | 92 | 75 | 70 | 73 | 227 |
| | 2 | 68 | 65 | 53 | 51 | 47 | 43 | 84 | 108 | 117 | 101 | 285 | 223 | 265 | 277 | 140 | 192 | 215 | 351 | 257 | 112 | 78 | 162 | 94 | 87 | 145 |
| D | 3 | 108 | 81 | 116 | 271 | 513 | 365 | 104 | 123 | 220 | 309 | 300 | 305 | 524 | 631 | 485 | 498 | 580 | 451 | 485 | 427 | 426 | 417 | 557 | 299 | 358 |
| D | 4 | 348 | 315 | 54 | 47 | 43 | 69 | 279 | 487 | 518 | 487 | 498 | 616 | 498 | 371 | 255 | 532 | 731 | 194 | 338 | 477 | 284 | 187 | 256 | 152 | 335 |
| D | 5 | 167 | 55 | 132 | 263 | 382 | 182 | 124 | 186 | 588 | 752 | 570 | 322 | 681 | 273 | 497 | 339 | 140 | 355 | 335 | 751 | 522 | 533 | 501 | 418 | 378 |
| | 6 | 314 | 250 | 295 | 245 | 498 | 344 | 265 | 150 | 201 | 336 | 191 | 102 | 83 | 48 | 61 | 86 | 59 | 39 | 37 | 44 | 151 | 91 | 71 | 111 | 170 |
| Q | 7 | 83 | 77 | 42 | 33 | 25 | 29 | 47 | 78 | 94 | 65 | 62 | 177 | 260 | 112 | 128 | 213 | 303 | 320 | 77 | 61 | 114 | 138 | 153 | 148 | 118 |
| | 8 | 127 | 158 | 209 | 175 | 251 | 213 | 304 | 291 | 565 | 267 | 230 | 291 | 320 | 521 | 216 | 110 | 50 | 85 | 356 | 418 | 222 | 196 | 339 | 228 | 256 |
| | 9 | 90 | 113 | 140 | 69 | 84 | 72 | 65 | 32 | 38 | 92 | 123 | 123 | 147 | 142 | 128 | 184 | 237 | 176 | 286 | 371 | 362 | 164 | 173 | 345 | 157 |
| | 10 | 291 | 134 | 146 | 261 | 373 | 275 | 350 | 405 | 352 | 271 | 264 | 385 | 268 | 51 | 33 | 33 | 32 | 52 | 38 | 67 | 176 | 274 | 131 | 92 | 198 |
| | 11 | 56 | 106 | 91 | 94 | 109 | 78 | 68 | 60 | 60 | 48 | 61 | 50 | 43 | 37 | 64 | 153 | 440 | 194 | 484 | 502 | 181 | 160 | 133 | 121 | 141 |
| | 12 | 115 | 194 | 374 | 295 | 229 | 119 | 99 | 55 | 54 | 40 | 45 | 40 | 54 | 92 | 258 | 135 | 59 | 54 | 160 | 274 | 141 | 74 | 60 | 65 | 129 |
| | 13 | 97 | 100 | 71 | 48 | 39 | 44 | 23 | 25 | 26 | 32 | 65 | 55 | 36 | 25 | 82 | 258 | 342 | 384 | 381 | 199 | 201 | 69 | 57 | 58 | 113 |
| Q | 14 | 43 | 39 | 44 | 39 | 34 | 31 | 44 | 74 | 94 | 85 | 80 | 56 | 61 | 119 | 139 | 67 | 42 | 42 | 49 | 31 | 34 | 24 | 24 | 25 | 55 |
| | 15 | 24 | 27 | 40 | 60 | 59 | 79 | 147 | 142 | 127 | 58 | 44 | 63 | 44 | 44 | 46 | 109 | 148 | 93 | 53 | 129 | 403 | 310 | 79 | 38 | 99 |
| | 16 | 41 | 51 | 79 | 56 | 200 | 276 | 157 | 118 | 144 | 130 | 118 | 155 | 122 | 324 | 203 | 104 | 127 | 218 | 94 | 72 | 439 | 263 | 144 | 103 | 156 |
| Q | 17 | 170 | 210 | 78 | 47 | 55 | 85 | 93 | 145 | 100 | 79 | 73 | 75 | 80 | 54 | 28 | 38 | 42 | 32 | 69 | 41 | 19 | 23 | 25 | 31 | 71 |
| | 18 | 41 | 77 | 96 | 95 | 53 | 38 | 52 | 35 | 38 | 89 | 134 | 192 | 120 | 148 | 371 | 232 | 81 | 68 | 115 | 298 | 237 | 195 | 164 | 96 | 128 |
| | 19 | 123 | 199 | 93 | 66 | 47 | 158 | 137 | 201 | 112 | 101 | 86 | 142 | 382 | 71 | 33 | 69 | 57 | 302 | 288 | 54 | 37 | 110 | 293 | 221 | 141 |
| Q | 20 | 56 | 46 | 49 | 42 | 75 | 60 | 92 | 101 | 39 | 39 | 36 | 34 | 33 | 44 | 32 | 33 | 34 | 30 | 21 | 22 | 29 | 23 | 24 | 32 | 43 |
| | 21 | 119 | 133 | 105 | 44 | 38 | 54 | 60 | 72 | 89 | 61 | 96 | 430 | 342 | 137 | 103 | 75 | 287 | 347 | 117 | 140 | 362 | 358 | 446 | 416 | 185 |
| | 22 | 368 | 287 | 178 | 148 | 102 | 94 | 76 | 86 | 80 | 107 | 83 | 87 | 49 | 122 | 155 | 118 | 112 | 459 | 171 | 52 | 19 | 22 | 22 | 22 | 126 |
| D | 23 | 24 | 41 | 54 | 58 | 71 | 76 | 115 | 69 | 155 | 111 | 198 | 136 | 157 | 354 | 449 | 183 | 129 | 534 | 391 | 244 | 265 | 388 | 335 | 216 | 198 |
| | 24 | 184 | 137 | 90 | 103 | 137 | 141 | 73 | 99 | 118 | 31 | 23 | 26 | 39 | 124 | 211 | 360 | 319 | 104 | 26 | 15 | 54 | 94 | 278 | 384 | 132 |
| D | 25 | 69 | 37 | 174 | 584 | 709 | 590 | 376 | 151 | 150 | 84 | 93 | 48 | 44 | 55 | 34 | 55 | 91 | 129 | 137 | 33 | 81 | 50 | 166 | 70 | 167 |
| Q | 26 | 37 | 37 | 31 | 33 | 26 | 52 | 21 | 33 | 24 | 21 | 29 | 20 | 21 | 22 | 29 | 28 | 29 | 22 | 18 | 18 | 23 | 22 | 25 | 22 | 27 |
| | 27 | 25 | 77 | 75 | 217 | 73 | 136 | 357 | 272 | 429 | 573 | 714 | 507 | 447 | 433 | 168 | 134 | 138 | 78 | 63 | 25 | 49 | 89 | 39 | 44 | 215 |
| | 28 | 64 | 58 | 37 | 33 | 42 | 30 | 77 | 71 | 43 | 30 | 79 | 91 | 102 | 180 | 41 | 202 | 106 | 82 | 206 | 71 | 66 | 60 | 112 | 83 | 82 |
| | 29 | 43 | 27 | 52 | 41 | 44 | 34 | 26 | 25 | 55 | 130 | 166 | 151 | 288 | 254 | 161 | 217 | 399 | 474 | 286 | 248 | 245 | 482 | 355 | 187 | 183 |
| | 30 | 119 | 117 | 202 | 140 | 104 | 89 | 87 | 96 | 135 | 288 | 137 | 248 | 494 | 278 | 93 | 37 | 59 | 156 | 199 | 237 | 290 | 61 | 101 | 141 | 163 |
| | 31 | 222 | 287 | 174 | 148 | 95 | 25 | 23 | 26 | 45 | 41 | 68 | 72 | 55 | 40 | 66 | 232 | 295 | 573 | 530 | 514 | 321 | 357 | 362 | 121 | 196 |
| | MEAN | 122 | 118 | 112 | 127 | 155 | 129 | 124 | 126 | 159 | 166 | 171 | 182 | 212 | 186 | 170 | 177 | 193 | 222 | 202 | 195 | 191 | 176 | 180 | 144 | 164 |
| 5Q | MEAN | 80 | 82 | 49 | 39 | 43 | 51 | 59 | 86 | 70 | 58 | 56 | 72 | 91 | 70 | 71 | 76 | 90 | 89 | 47 | 35 | 44 | 46 | 50 | 52 | 63 |
| 5D | MEAN | 143 | 106 | 106 | 245 | 344 | 256 | 200 | 203 | 326 | 349 | 332 | 285 | 381 | 337 | 344 | 321 | 334 | 333 | 337 | 386 | 316 | 315 | 363 | 231 | 287 |

JANUARY 1968 AL INDICES AL INTENSITY IS 0 PLUS TABULAR VALUES, IN GAMMAS

| | UT | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| D | 1 | -292 | -408 | -446 | -335 | -309 | -226 | -232 | -197 | -180 | -165 | -216 | -509 | -369 | -309 | -305 | -390 | -198 | -53 | -55 | -121 | -134 | -127 | -109 | -77 | -240 |
| D | 2 | -25 | -18 | -58 | -113 | -172 | -198 | -305 | -542 | -662 | -579 | -356 | -716 | -205 | -358 | -419 | -412 | -390 | -304 | -116 | -271 | -247 | -169 | -157 | -101 | -287 |
| | 3 | -170 | -114 | -116 | -41 | -61 | -110 | -123 | -99 | -27 | -24 | -33 | -35 | -52 | -35 | -78 | -70 | -51 | -87 | -120 | -85 | -19 | -34 | -91 | -160 | -76 |
| Q | 4 | -56 | -9 | -11 | -6 | -5 | -8 | -10 | -17 | -26 | -50 | -122 | -124 | -76 | -33 | -20 | -21 | -37 | -119 | -223 | -121 | -72 | -235 | -196 | -341 | -81 |
| | 5 | -55 | -26 | -39 | -26 | -34 | -35 | -55 | -41 | -68 | -19 | -17 | -47 | -19 | -36 | -201 | -306 | -57 | -14 | -7 | -40 | -118 | -95 | -187 | -87 | -68 |
| D | 6 | -64 | -165 | -216 | -38 | -1 | -7 | -43 | -45 | -57 | -103 | -60 | -87 | -78 | -203 | -600 | -510 | -334 | -226 | -218 | -125 | -140 | -137 | -82 | -22 | -148 |
| | 7 | -93 | -120 | -69 | -68 | -16 | -1 | -36 | -29 | -35 | -46 | -68 | -94 | -87 | -99 | -66 | -96 | -105 | -41 | -27 | -23 | -17 | -45 | -140 | -198 | -64 |
| Q | 8 | -71 | -34 | -3 | 6 | -12 | -38 | -21 | -24 | -38 | -59 | -176 | -60 | -30 | -45 | -32 | -181 | -247 | -39 | -21 | -21 | -10 | -12 | -11 | -13 | -50 |
| Q | 9 | -5 | -3 | -2 | -2 | -5 | -8 | -5 | -7 | -10 | -14 | -10 | -14 | -22 | -47 | -23 | -51 | -104 | -193 | -78 | -46 | -20 | -14 | -8 | -12 | -29 |
| Q | 10 | -19 | -13 | -4 | -16 | -9 | -11 | -26 | -31 | -24 | -39 | -46 | -37 | -75 | -239 | -191 | -67 | -23 | -15 | -45 | -96 | -35 | -33 | -16 | -9 | -43 |
| | 11 | -8 | -11 | -39 | -26 | -10 | -8 | -10 | -7 | -8 | -10 | -44 | -38 | -17 | -142 | -226 | -185 | -83 | -270 | -309 | -191 | -143 | -314 | -128 | -37 | -94 |
| | 12 | -35 | -23 | -57 | -84 | -41 | -32 | -40 | -59 | -21 | -74 | -35 | -56 | -182 | -78 | -119 | -354 | -315 | -145 | -386 | -330 | -283 | -85 | -26 | -112 | -124 |
| | 13 | -79 | -8 | -12 | -42 | -60 | -188 | -123 | -89 | -98 | -87 | -294 | -193 | -139 | -162 | -140 | -134 | -32 | -41 | -75 | -42 | -132 | -309 | -208 | -134 | -118 |
| | 14 | -139 | -141 | -75 | -94 | -138 | -107 | -119 | -72 | -56 | -67 | -122 | -139 | -60 | -37 | -46 | -67 | -57 | -27 | -144 | -423 | -270 | -139 | -222 | -63 | -116 |
| | 15 | -53 | -65 | -58 | -38 | -25 | -7 | -37 | -25 | -39 | -63 | -54 | -87 | -192 | -231 | -158 | -133 | -299 | -143 | -298 | -261 | -312 | -250 | -290 | -149 | -136 |
| | 16 | -188 | -13 | -16 | -19 | -33 | -43 | -49 | -71 | -77 | -41 | -32 | -62 | -32 | -65 | -140 | -55 | -180 | -467 | -461 | -15 | -77 | -56 | -211 | -85 | -104 |
| | 17 | -33 | -29 | -39 | -125 | -233 | -65 | -132 | -134 | -360 | -150 | -104 | -170 | -172 | -77 | -80 | -340 | -142 | -90 | -103 | -228 | -345 | -159 | -46 | -112 | -147 |
| | 18 | -330 | -271 | -35 | -29 | -4 | -66 | -164 | -103 | -61 | -49 | -95 | -217 | -130 | -102 | -193 | -138 | -29 | -48 | -48 | -23 | -14 | -9 | -7 | -7 | -91 |
| | 19 | -4 | -7 | -20 | -16 | -47 | -142 | -151 | -193 | -185 | -117 | -103 | -257 | -22 | -30 | -103 | -213 | -556 | -458 | -224 | -106 | -72 | -175 | -341 | -351 | -162 |
| D | 20 | -382 | -193 | -141 | -139 | -97 | -58 | -77 | -248 | -149 | -111 | -427 | -197 | -214 | -204 | -324 | -54 | -41 | -68 | -137 | -329 | -119 | -6 | -6 | -9 | -152 |
| | 21 | -18 | -25 | -12 | -16 | -66 | -209 | -308 | -162 | -158 | -205 | -137 | -149 | -167 | -206 | -119 | -48 | -211 | -87 | -34 | -24 | -125 | -141 | -39 | -32 | -113 |
| | 22 | -103 | -31 | -11 | -24 | -166 | -61 | -122 | -29 | -12 | -25 | -143 | -57 | -63 | -56 | -173 | -315 | -519 | -144 | -145 | -50 | -88 | -83 | -22 | -5 | -102 |
| | 23 | -48 | -139 | -161 | -67 | -22 | -101 | -278 | -153 | -61 | -25 | -14 | -45 | -35 | -32 | -26 | -35 | -204 | -186 | -189 | -113 | -432 | -167 | -24 | -13 | -107 |
| | 24 | -24 | -65 | -33 | 1 | -7 | -5 | -15 | -105 | -149 | -172 | -78 | -147 | -377 | -204 | -64 | -234 | -212 | -90 | -208 | -469 | -363 | -138 | -115 | -67 | -139 |
| Q | 25 | -11 | -83 | -76 | -12 | -13 | -36 | -37 | -5 | -13 | -29 | -46 | -84 | -67 | -57 | -202 | -165 | -22 | -17 | -18 | -111 | -114 | -150 | -6 | -5 | -57 |
| | 26 | -13 | -53 | -59 | -112 | -35 | -25 | -26 | -61 | -148 | -58 | -15 | -57 | -193 | -204 | -233 | -741 | -601 | -149 | -48 | -22 | -5 | -10 | -19 | -44 | -122 |
| | 27 | -25 | -44 | -39 | -148 | -74 | -52 | -54 | -126 | -134 | -13 | -9 | -16 | -17 | -141 | -47 | -65 | -212 | -166 | -295 | -238 | -122 | -255 | -467 | -295 | -126 |
| | 28 | -290 | -392 | -263 | -109 | -34 | -12 | -8 | -3 | -11 | -18 | -23 | -22 | -35 | -135 | -243 | -146 | -354 | -347 | -212 | -337 | -138 | -127 | -174 | -305 | -153 |
| D | 29 | -473 | -372 | -306 | -316 | -202 | -64 | -81 | -45 | -51 | -52 | -82 | -95 | -64 | -39 | -57 | -15 | -32 | -53 | -330 | -305 | -161 | -361 | -209 | -289 | -169 |
| | 30 | -247 | -233 | -167 | -183 | -167 | -139 | -116 | -8 | -1 | -11 | -52 | -53 | -38 | -70 | -43 | -42 | -228 | -135 | -42 | -23 | -12 | -15 | -17 | -16 | -87 |
| | 31 | -85 | -164 | -234 | -165 | -180 | -23 | -21 | -54 | -148 | -123 | -23 | -21 | -45 | -39 | -200 | -160 | -57 | -13 | -5 | -9 | -8 | -6 | -6 | -35 | -76 |
| | MEAN | -103 | -105 | -89 | -77 | -74 | -67 | -91 | -91 | -98 | -64 | -93 | -124 | -107 | -120 | -154 | -185 | -191 | -137 | -149 | -148 | -134 | -124 | -115 | -100 | -116 |
| 5Q MEAN | | -32 | -23 | -19 | -6 | -9 | -20 | -20 | -17 | -22 | -38 | -80 | -64 | -54 | -84 | -76 | -97 | -87 | -77 | -77 | -79 | -50 | -89 | -47 | -76 | -52 |
| 5D MEAN | | -232 | -231 | -233 | -168 | -156 | -109 | -147 | -215 | -220 | -202 | -228 | -321 | -186 | -223 | -341 | -276 | -199 | -141 | -172 | -230 | -160 | -160 | -113 | -100 | -199 |

FEBRUARY 1968 AL INDICES

AL INTENSITY IS 0 PLUS TABULAR VALUES, IN GAMMAS

| | UT | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | -25 | -12 | -8 | -4 | -23 | -71 | -157 | -14 | -17 | -14 | -13 | -23 | -111 | -50 | -36 | -41 | -9 | -48 | -209 | -211 | -13 | -74 | -81 | -193 | -61 |
| | 2 | -247 | -106 | -19 | -15 | -5 | -2 | -12 | -29 | -138 | -330 | -97 | -114 | -178 | -270 | -281 | -229 | -208 | -448 | -165 | -253 | -377 | -284 | -314 | -268 | -183 |
| | 3 | -258 | -32 | -33 | -7 | -16 | -37 | -76 | -284 | -178 | -76 | -161 | -112 | -39 | -106 | -369 | -491 | -466 | -171 | -63 | -208 | -61 | -124 | -207 | -98 | -153 |
| | 4 | -32 | -195 | -234 | -119 | -295 | -278 | -230 | -277 | -242 | -433 | -428 | -170 | -168 | -169 | -107 | -154 | -108 | -39 | -44 | -20 | -42 | -23 | -27 | -20 | -161 |
| | 5 | -16 | -17 | -13 | -8 | -8 | -14 | -18 | -16 | -50 | -43 | -49 | -95 | -72 | -122 | -219 | -115 | -185 | -140 | -227 | -401 | -345 | -166 | -188 | -114 | -110 |
| Q | 6 | -47 | -21 | -27 | -9 | -4 | -4 | -6 | -21 | -16 | -19 | -10 | -33 | -34 | -34 | -32 | -21 | -34 | -41 | -29 | -38 | -23 | -18 | -20 | -16 | -23 |
| Q | 7 | -13 | -12 | -13 | -7 | 0 | -7 | -7 | -5 | -5 | -7 | -11 | -8 | -18 | -25 | -24 | -22 | -86 | -56 | -35 | -19 | -105 | -15 | -54 | -108 | -28 |
| | 8 | -86 | -108 | -44 | -18 | -48 | -12 | -17 | -23 | -50 | -91 | -56 | -230 | -318 | -248 | -183 | -270 | -140 | -200 | -264 | -340 | -101 | -324 | -345 | -156 | -153 |
| | 9 | -250 | -327 | -236 | -224 | -314 | -253 | -206 | -189 | -227 | -350 | -384 | -356 | -391 | -285 | -102 | -96 | -145 | -159 | -235 | -315 | -325 | -207 | -355 | -247 | -257 |
| D | 10 | -187 | -233 | -181 | -91 | -114 | -161 | -113 | -90 | -138 | -532 | -327 | -175 | -227 | -147 | -35 | -13 | -257 | -782 | -744 | -520 | -181 | -64 | -513 | -579 | -267 |
| D | 11 | -250 | -276 | -309 | -271 | -427 | -296 | -490 | -459 | -405 | -301 | -794 | -559 | -692 | -441 | -441 | -436 | -181 | -220 | -83 | -56 | -361 | -403 | -257 | -315 | -363 |
| | 12 | -262 | -326 | -271 | -128 | -92 | -125 | -108 | -95 | -10 | -23 | -131 | -217 | -146 | -80 | -79 | -86 | -52 | -157 | -137 | -62 | -17 | -18 | -22 | -20 | -111 |
| | 13 | -18 | -19 | -18 | -16 | -70 | -154 | -238 | -239 | -280 | -203 | -258 | -223 | -620 | -196 | -50 | -80 | -499 | -304 | -3 | -9 | -11 | -19 | -19 | -20 | -149 |
| Q | 14 | -51 | -71 | -12 | -7 | -8 | -6 | -7 | -4 | -6 | -14 | -17 | -19 | -22 | -17 | -15 | -11 | -9 | -5 | -4 | -9 | -15 | -23 | -117 | -40 | -21 |
| D | 15 | -17 | -77 | -93 | -48 | -188 | -190 | -208 | -177 | -299 | -142 | -650 | -234 | -145 | -2039 | -1379 | -285 | -241 | -596 | -287 | -92 | -61 | -89 | -230 | -171 | -331 |
| | 16 | -53 | -60 | -62 | -54 | -133 | -105 | -236 | -182 | -81 | -145 | -357 | -398 | -413 | -184 | -213 | -395 | -82 | -80 | -252 | -131 | -103 | -51 | -53 | -243 | -169 |
| | 17 | -164 | -46 | -38 | -34 | -60 | -102 | -217 | -250 | -208 | -291 | -181 | -321 | -518 | -238 | -274 | -212 | -57 | -135 | -195 | -236 | -323 | -611 | -196 | -193 | -212 |
| | 18 | -169 | -89 | -26 | -27 | -33 | -36 | -75 | -274 | -466 | -539 | -386 | -283 | -406 | -463 | -304 | -89 | -229 | -490 | -421 | -147 | -92 | -213 | -131 | -193 | -233 |
| | 19 | -429 | -285 | -231 | -230 | -141 | -124 | -73 | -87 | -27 | -23 | -24 | -21 | -9 | -36 | -31 | -32 | -33 | -29 | -21 | -15 | -14 | -11 | -15 | -16 | -82 |
| D | 20 | -31 | -152 | -82 | -21 | -38 | -81 | -264 | -607 | -532 | -333 | -122 | -625 | -772 | -373 | -436 | -231 | -302 | -212 | -316 | -399 | -340 | -490 | -329 | -409 | -314 |
| | 21 | -312 | -306 | -222 | -292 | -217 | -121 | -166 | -134 | -218 | -397 | -270 | -271 | -160 | -189 | -375 | -385 | -367 | -281 | -223 | -288 | -225 | -434 | -291 | -130 | -260 |
| | 22 | -41 | -18 | -39 | -83 | -101 | -288 | -92 | -24 | -18 | -78 | -93 | -268 | -55 | -25 | -51 | -232 | -337 | -235 | -10 | -5 | -3 | -3 | -3 | -9 | -88 |
| | 23 | -12 | -15 | -19 | -11 | -50 | -128 | -91 | -41 | -2 | -13 | -17 | -24 | -29 | -27 | -22 | -64 | -248 | -187 | -7 | -2 | -124 | -116 | -30 | -21 | -54 |
| | 24 | -47 | -35 | -47 | -97 | -147 | -182 | -206 | -90 | -118 | -83 | -78 | -91 | -44 | -42 | -56 | -119 | -79 | -44 | -58 | -82 | -40 | -13 | -17 | -22 | -77 |
| Q | 25 | -21 | -17 | -51 | -14 | -3 | -18 | -120 | -113 | -86 | -38 | -23 | -26 | -41 | -52 | -52 | -89 | -121 | -96 | -51 | -240 | -38 | -14 | -14 | -17 | -56 |
| Q | 26 | -11 | -20 | -44 | -37 | -52 | -17 | -8 | -7 | -11 | -21 | -25 | -27 | -35 | -37 | -29 | -19 | -24 | -27 | -32 | -40 | -204 | -82 | -156 | -225 | -50 |
| | 27 | -74 | -25 | -17 | -8 | -18 | -84 | -53 | -10 | -46 | -30 | -23 | -28 | -32 | -36 | -62 | -175 | -71 | -54 | -53 | -219 | -472 | -283 | -295 | -193 | -98 |
| D | 28 | -138 | -110 | -242 | -14 | 5 | -1 | 1 | -3 | -3 | -3 | -22 | -73 | -679 | -640 | -486 | -472 | -159 | -210 | -306 | -344 | -308 | -167 | -443 | -214 | -210 |
| | 29 | -138 | -245 | -294 | -210 | -167 | -106 | -101 | -209 | -150 | -132 | -221 | -230 | -163 | -116 | -50 | -94 | -319 | -142 | -206 | -287 | -102 | -29 | -41 | -134 | -162 |
| | MEAN | -117 | -112 | -101 | -73 | -95 | -104 | -124 | -136 | -139 | -162 | -180 | -181 | -225 | -231 | -201 | -171 | -174 | -193 | -161 | -172 | -153 | -151 | -163 | -151 | -153 |
| | 5QMEAN | -29 | -28 | -29 | -15 | -13 | -10 | -30 | -30 | -25 | -20 | -17 | -23 | -30 | -33 | -30 | -32 | -55 | -45 | -30 | -69 | -77 | -30 | -72 | -81 | -36 |
| | 5OMEAN | -125 | -170 | -181 | -89 | -152 | -146 | -215 | -267 | -275 | -262 | -383 | -333 | -503 | -728 | -561 | -287 | -228 | -404 | -347 | -282 | -250 | -243 | -354 | -338 | -297 |

MARCH 1968 AL INDICES — AL INTENSITY IS 0 PLUS TABULAR VALUES, IN GAMMAS

| | UT | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | -167 | -169 | -62 | -92 | -69 | -62 | -101 | -67 | -91 | -98 | -122 | -203 | -209 | -270 | -312 | -524 | -535 | -192 | -72 | -39 | -43 | -43 | -39 | -33 | -151 |
| | 2 | -29 | -32 | -34 | -233 | -181 | -55 | -79 | -193 | -196 | -113 | -181 | -210 | -100 | -132 | -231 | -194 | -151 | -205 | -122 | -61 | -280 | -226 | -153 | -153 | -148 |
| | 3 | -83 | -31 | -23 | -24 | -34 | -49 | -36 | -150 | -238 | -180 | -163 | -232 | -203 | -215 | -298 | -136 | -230 | -517 | -590 | -458 | -283 | -239 | -256 | -103 | -199 |
| | 4 | -135 | -127 | -47 | -53 | -151 | -66 | -83 | -220 | -249 | -347 | -351 | -224 | -166 | -127 | -213 | -325 | -363 | -380 | -249 | -348 | -302 | -260 | -388 | -271 | -227 |
| | 5 | -199 | -118 | -26 | -43 | -228 | -111 | -41 | -69 | -229 | -483 | -478 | -475 | -385 | -480 | -194 | -95 | -37 | -68 | -143 | -144 | -302 | -152 | -155 | -184 | -202 |
| | 6 | -98 | -43 | -30 | -39 | -23 | -31 | -33 | -109 | -129 | -92 | -109 | -137 | -119 | -92 | -76 | -85 | -69 | -71 | -163 | -98 | -92 | -233 | -143 | -59 | -91 |
| Q | 7 | -52 | -23 | -53 | -101 | -115 | -29 | -17 | -51 | -150 | -76 | -90 | -53 | -61 | -107 | -69 | -36 | -95 | -124 | -73 | -125 | -94 | -106 | -102 | -47 | -77 |
| Q | 8 | -59 | -81 | -13 | -30 | -34 | -22 | -10 | -13 | -11 | -12 | -19 | -66 | -30 | -14 | -19 | -27 | -38 | -113 | -77 | -43 | -87 | -216 | -58 | -20 | -46 |
| Q | 9 | -11 | -17 | -48 | -15 | -66 | -26 | -7 | -14 | -34 | -73 | -42 | -17 | -16 | -21 | -20 | -16 | -19 | -45 | -47 | -54 | -39 | -31 | -24 | -62 | -32 |
| | 10 | -104 | -48 | -30 | -47 | -217 | -222 | -72 | -43 | -51 | -24 | -10 | -27 | -185 | -251 | -429 | -472 | -264 | -206 | -151 | -137 | -120 | -106 | -106 | -23 | -139 |
| | 11 | -24 | -18 | -58 | -63 | -136 | -242 | -151 | -126 | -73 | -75 | -21 | -28 | -25 | -21 | -18 | -13 | -15 | -18 | -8 | -8 | -16 | -77 | -113 | -71 | -59 |
| | 12 | -41 | -32 | -25 | -29 | -30 | -31 | -29 | -27 | -26 | -21 | -129 | -286 | -266 | -247 | -263 | -111 | -163 | -217 | -264 | -410 | -385 | -194 | -59 | -24 | -138 |
| Q | 13 | -13 | -30 | -132 | -89 | -162 | -58 | -18 | -15 | -31 | -30 | -24 | -20 | -19 | -14 | -12 | -15 | -13 | -15 | -9 | -9 | -13 | -14 | -37 | -102 | -37 |
| D | 14 | -246 | -138 | -121 | -104 | -24 | 3 | 3 | -8 | -26 | -136 | -268 | -129 | -104 | -253 | -271 | -254 | -196 | -457 | -167 | -156 | -202 | -343 | -457 | -248 | -179 |
| D | 15 | -181 | -153 | -120 | -82 | -157 | -254 | -310 | -377 | -323 | -194 | -375 | -299 | -594 | -416 | -122 | -66 | -138 | -337 | -544 | -474 | -364 | -529 | -199 | -118 | -280 |
| D | 16 | -207 | -299 | -204 | -301 | -245 | -343 | -229 | -252 | -158 | -231 | -176 | -279 | -722 | -599 | -56 | -53 | -50 | -77 | -149 | -256 | -63 | -367 | -574 | -438 | -264 |
| | 17 | -121 | -122 | -48 | -60 | -306 | -223 | -128 | -87 | -100 | -45 | -66 | -102 | -226 | -191 | -72 | -48 | -38 | -83 | -111 | -183 | -106 | -76 | -138 | -203 | -120 |
| | 18 | -87 | -33 | -213 | -108 | -232 | -166 | -105 | -129 | -234 | -154 | -81 | -48 | -62 | -55 | -37 | -69 | -188 | -282 | -70 | -19 | -9 | -20 | -25 | -53 | -103 |
| | 19 | -26 | -45 | -58 | -92 | -58 | -41 | -113 | -303 | -314 | -208 | -302 | -332 | -172 | -105 | -247 | -107 | -182 | -375 | -214 | -62 | -22 | -34 | -27 | -35 | -145 |
| | 20 | -32 | -80 | -243 | -446 | -111 | -22 | -14 | -24 | -17 | -25 | -184 | -677 | -265 | -304 | -226 | -64 | -49 | -27 | -30 | -124 | -87 | -74 | -201 | -175 | -146 |
| | 21 | -53 | -72 | -172 | -123 | -105 | -114 | -72 | -121 | -68 | -100 | -44 | -42 | -55 | -145 | -349 | -284 | -141 | -149 | -279 | -190 | -26 | -21 | -22 | -25 | -116 |
| Q | 22 | -36 | -81 | -71 | -33 | -16 | -32 | -96 | -44 | -25 | -24 | -36 | -113 | -257 | -186 | -97 | -125 | -120 | -30 | -34 | -72 | -50 | -57 | -20 | -23 | -70 |
| | 23 | -28 | -26 | -25 | -24 | -39 | -21 | -13 | -14 | -25 | -20 | -25 | -59 | -93 | -118 | -59 | -163 | -45 | -15 | -48 | -133 | -212 | -302 | -383 | -128 | -84 |
| D | 24 | -94 | -63 | -66 | -119 | -167 | -336 | -387 | -347 | -263 | -295 | -162 | -167 | -372 | -270 | -306 | -250 | -177 | -207 | -175 | -170 | -396 | -304 | -16 | -23 | -214 |
| | 25 | -42 | -209 | -324 | -222 | -87 | -156 | -142 | -164 | -275 | -120 | -47 | -43 | -423 | -290 | -65 | -48 | -305 | -201 | -195 | -288 | -201 | -205 | -245 | -48 | -181 |
| | 26 | -28 | -32 | -29 | -29 | -52 | -121 | -192 | -156 | -59 | -138 | -601 | -424 | -326 | -175 | -187 | -232 | -199 | -275 | -382 | -207 | -19 | -41 | -213 | -340 | -186 |
| | 27 | -390 | -367 | -234 | -167 | -131 | -254 | -208 | -198 | -79 | -238 | -221 | -69 | -43 | -30 | -138 | -318 | -372 | -117 | -240 | -414 | -460 | -235 | -269 | -218 | -225 |
| | 28 | -67 | -28 | -48 | -188 | -363 | -77 | -101 | -242 | -229 | -73 | -24 | -67 | -203 | -88 | -27 | -30 | -31 | -19 | -213 | -186 | -56 | -189 | -253 | -40 | -118 |
| | 29 | -25 | -43 | -348 | -540 | -346 | -273 | -162 | -257 | -310 | -382 | -319 | -311 | -233 | -262 | -293 | -158 | -31 | -135 | -307 | -193 | -84 | -48 | -342 | -391 | -242 |
| D | 30 | -306 | -517 | -293 | -193 | -198 | -342 | -476 | -202 | -75 | -40 | -35 | -211 | -206 | -95 | -80 | -488 | -945 | -757 | -535 | -435 | -436 | -153 | -84 | -33 | -297 |
| | 31 | -43 | -62 | -57 | -76 | -27 | -116 | -85 | -232 | -281 | -70 | -50 | -82 | -77 | -197 | -304 | -125 | -158 | -419 | -615 | -532 | -362 | -260 | -337 | -530 | -212 |
| | MEAN | -98 | -101 | -104 | -121 | -133 | -126 | -113 | -137 | -141 | -133 | -153 | -175 | -201 | -186 | -164 | -159 | -173 | -198 | -202 | -195 | -168 | -166 | -175 | -136 | -152 |
| 5Q | MEAN | -35 | -46 | -63 | -54 | -79 | -33 | -30 | -27 | -50 | -43 | -42 | -54 | -77 | -68 | -43 | -44 | -57 | -65 | -48 | -61 | -57 | -85 | -48 | -51 | -52 |
| 5D | MEAN | -207 | -234 | -161 | -160 | -158 | -254 | -280 | -237 | -169 | -179 | -203 | -217 | -400 | -327 | -167 | -222 | -301 | -367 | -314 | -299 | -292 | -339 | -266 | -172 | -247 |

APRIL 1968 AL INDICES AL INTENSITY IS 0 PLUS TABULAR VALUES, IN GAMMAS

| | UT | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| D | 1 | -43 | -62 | -29 | -30 | -23 | -20 | -12 | -21 | -38 | -23 | -17 | -19 | -29 | -31 | -25 | -34 | -9 | -23 | -48 | -24 | -15 | -41 | -16 | -10 | -27 |
| | 2 | -31 | -19 | -8 | -11 | -3 | -7 | -25 | -17 | -6 | -4 | -9 | -20 | -7 | -8 | -18 | -16 | -4 | -13 | -25 | -53 | -36 | -37 | -32 | -43 | -19 |
| | 3 | -18 | -16 | -13 | -19 | -22 | -7 | -13 | -13 | -17 | -22 | -20 | -14 | -13 | -30 | -31 | -16 | -11 | -2 | -1 | -1 | -1 | -3 | -3 | -33 | -15 |
| | 4 | -31 | -37 | -35 | -26 | -22 | -18 | -13 | -9 | -13 | -8 | -10 | -12 | -12 | -17 | -21 | -18 | -16 | -12 | -4 | -3 | -3 | -6 | -19 | -15 | -16 |
| D | 5 | -14 | -18 | -15 | -16 | -13 | -13 | -12 | -10 | -7 | -6 | -5 | -6 | -3 | -3 | -11 | -30 | -29 | -22 | -73 | -89 | -45 | -20 | -18 | -24 | -21 |
| D | 6 | -8 | -5 | -12 | -19 | -7 | -14 | -6 | -59 | -67 | -33 | -22 | -33 | -45 | -32 | -22 | -20 | -31 | -47 | -14 | -8 | -35 | -21 | -26 | -17 | -25 |
| | 7 | -4 | -6 | -7 | -15 | -17 | -5 | -6 | -20 | -22 | -11 | -20 | -16 | -10 | -20 | -28 | -12 | -4 | -13 | -1 | -1 | -1 | -3 | -1 | -2 | -10 |
| Q | 8 | -5 | -4 | -12 | -15 | -14 | -11 | -3 | -2 | -3 | -3 | -2 | -7 | -21 | -9 | -3 | -6 | -7 | -3 | -2 | -1 | -1 | -1 | -2 | -2 | -6 |
| Q | 9 | -3 | -3 | -2 | -2 | -2 | -2 | -2 | -2 | -3 | -3 | -3 | -3 | -4 | -3 | -3 | -2 | -3 | -2 | -1 | -0 | -1 | -2 | -7 | -4 | -2 |
| | 10 | -5 | -8 | -8 | -5 | -4 | -3 | -13 | -11 | -8 | -6 | -7 | -9 | -9 | -5 | -4 | -3 | -5 | -13 | -31 | -10 | -3 | -5 | -9 | -4 | -8 |
| | 11 | -3 | -7 | -11 | -20 | -9 | -1 | -3 | -10 | -4 | -5 | -13 | -16 | -9 | -3 | -2 | -3 | -1 | -1 | -0 | -0 | -0 | -1 | -1 | -2 | -5 |
| | 12 | -2 | -2 | -2 | -1 | -1 | -2 | -2 | -3 | -2 | -2 | -1 | -2 | -1 | -0 | -1 | -0 | 0 | -1 | -13 | -11 | -4 | -21 | -38 | -30 | -6 |
| | 13 | -14 | -14 | -7 | -37 | -20 | -8 | -3 | -3 | -4 | -11 | -32 | -33 | -21 | -24 | -20 | -31 | -46 | -28 | -21 | -5 | -11 | -41 | -20 | -10 | -19 |
| D | 14 | -14 | -11 | -31 | -32 | -20 | -25 | -7 | -2 | -3 | -2 | -12 | -60 | -46 | -12 | -7 | -12 | -26 | -27 | -19 | -13 | -3 | -3 | -14 | -26 | -17 |
| | 15 | -7 | -3 | -1 | -2 | -2 | -3 | -7 | -3 | -7 | -31 | -29 | -11 | -11 | -20 | -21 | -25 | -22 | -29 | -32 | -20 | -13 | -18 | -33 | -35 | -16 |
| | 16 | -22 | -23 | -15 | -19 | -22 | -16 | -4 | -4 | -17 | -23 | -15 | -7 | -8 | -7 | -10 | -9 | -10 | -2 | -5 | -4 | -21 | -62 | -32 | -22 | -16 |
| | 17 | -14 | -6 | -2 | -4 | -3 | -14 | -2 | -17 | -6 | -15 | -37 | -13 | -15 | -16 | -23 | -4 | -9 | -16 | -23 | -10 | -1 | -9 | -18 | -6 | -15 |
| | 18 | -7 | -17 | -15 | -5 | -5 | -19 | -23 | -16 | -7 | -10 | -14 | -19 | -11 | -3 | -3 | -10 | -14 | -11 | -19 | -7 | -5 | -5 | -3 | -11 | -11 |
| Q | 19 | -2 | -2 | -1 | -1 | -1 | -2 | -2 | -2 | -2 | -3 | -3 | -3 | -4 | -3 | -2 | -4 | -7 | -6 | -1 | -0 | -0 | -1 | -2 | -2 | -2 |
| Q | 20 | -2 | -2 | -2 | -1 | -1 | -2 | -2 | -2 | -3 | -2 | -2 | -2 | -4 | -4 | -2 | -2 | -2 | -1 | -0 | -0 | -1 | -2 | -2 | -2 | -2 |
| Q | 21 | -2 | -2 | -1 | -1 | -2 | -3 | -3 | -3 | -3 | -3 | -3 | -4 | -14 | -15 | -8 | -5 | -2 | -1 | -0 | -0 | -1 | -1 | -1 | -1 | -3 |
| | 22 | -7 | -8 | -7 | -8 | -4 | -3 | -10 | -25 | -21 | -10 | -3 | -2 | -3 | -3 | -16 | -24 | -24 | -13 | -4 | -16 | -23 | -15 | -14 | -11 | -11 |
| | 23 | -30 | -48 | -22 | -26 | -32 | -27 | -20 | -5 | -3 | -15 | -4 | -5 | -14 | -7 | -10 | -8 | -7 | -6 | -20 | -28 | -24 | -32 | -22 | -16 | -15 |
| | 24 | -30 | -16 | -21 | -33 | -28 | -18 | -2 | -5 | -2 | -2 | -5 | -7 | -5 | -3 | -7 | -18 | -9 | -21 | -8 | -2 | -2 | -4 | -2 | -2 | -10 |
| | 25 | -2 | -2 | -2 | -1 | -1 | -4 | -6 | -3 | -5 | -2 | -2 | -2 | -2 | -3 | -6 | -17 | -28 | -18 | -1 | -3 | -21 | -37 | -27 | -29 | -9 |
| D | 26 | -42 | -31 | -20 | -9 | -7 | -13 | -25 | -20 | -13 | -7 | -10 | -33 | -43 | -31 | -33 | -37 | -19 | -11 | -25 | -47 | -50 | -33 | -41 | -32 | -27 |
| | 27 | -46 | -15 | -3 | -13 | -11 | -3 | -2 | -17 | -48 | -36 | -5 | -1 | -2 | -4 | -3 | -5 | -10 | -4 | -12 | -37 | -26 | -17 | -15 | -7 | -14 |
| | 28 | -5 | -25 | -38 | -20 | -37 | -16 | -17 | -5 | -4 | -5 | -21 | -3 | -2 | -2 | -7 | -22 | -13 | -8 | -13 | -15 | -21 | -6 | -30 | -16 | -15 |
| | 29 | -22 | -13 | -12 | -8 | -23 | -20 | -26 | -33 | -35 | -12 | -4 | -4 | -24 | -24 | -19 | -24 | -29 | -9 | -3 | -2 | -15 | -28 | -42 | -33 | -19 |
| | 30 | -15 | -7 | -6 | -5 | -1 | -2 | -1 | -8 | -20 | -13 | -6 | -3 | -1 | -1 | -3 | -8 | -17 | -21 | -11 | -1 | -2 | -15 | -25 | -12 | -9 |
| | MEAN | -13 | -14 | -12 | -14 | -12 | -10 | -10 | -12 | -13 | -11 | -11 | -12 | -13 | -11 | -12 | -14 | -14 | -13 | -15 | -14 | -13 | -16 | -17 | -15 | -13 |
| 5Q MEAN | | -3 | -3 | -4 | -4 | -4 | -4 | -3 | -2 | -3 | -3 | -3 | -4 | -9 | -7 | -4 | -4 | -4 | -3 | -1 | -0 | -1 | -1 | -3 | -2 | -3 |
| 5D MEAN | | -24 | -26 | -22 | -21 | -15 | -19 | -12 | -21 | -26 | -14 | -13 | -30 | -33 | -22 | -20 | -27 | -23 | -26 | -36 | -36 | -29 | -34 | -26 | -22 | -23 |

MAY 1968 AL INDICES AL INTENSITY IS 0 PLUS TABULAR VALUES, IN GAMMAS

| | UT | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | -142 | -59 | -26 | -24 | -69 | -37 | -41 | -48 | -90 | -144 | -121 | -141 | -132 | -213 | -371 | -559 | -256 | -453 | -476 | -186 | -242 | -404 | -350 | -428 | -209 |
| | 2 | -212 | -235 | -192 | -131 | -167 | -120 | -66 | -130 | -132 | -295 | -364 | -246 | -170 | -152 | -205 | -47 | -16 | -11 | -23 | -7 | -10 | -22 | -30 | -57 | -127 |
| | 3 | -108 | -327 | -74 | -130 | -201 | -351 | -164 | -54 | -60 | -104 | -71 | -69 | -144 | -81 | -78 | -161 | -85 | -31 | -22 | -13 | -11 | -23 | -34 | -39 | -101 |
| Q | 4 | -33 | -50 | -132 | -106 | -34 | -47 | -32 | -53 | -87 | -93 | -68 | -70 | -60 | -56 | -60 | -74 | -131 | -171 | -121 | -40 | -69 | -31 | -28 | -25 | -70 |
| Q | 5 | -23 | -32 | -23 | -59 | -40 | -48 | -45 | -52 | -35 | -30 | -108 | -102 | -44 | -58 | -67 | -47 | -88 | -85 | -31 | -15 | -36 | -24 | -28 | -28 | -48 |
| Q | 6 | -26 | -24 | -20 | -28 | -32 | -39 | -41 | -32 | -24 | -24 | -27 | -37 | -36 | -38 | -18 | -27 | -8 | -28 | -16 | -23 | -21 | -30 | -30 | -43 | -28 |
| D | 7 | -32 | -40 | -40 | -37 | -100 | -536 | -532 | -494 | -400 | -569 | -384 | -330 | -735 | -696 | -801 | -394 | -321 | -201 | -48 | -54 | -137 | -291 | -186 | -265 | -318 |
| | 8 | -176 | -53 | -34 | -54 | -38 | -97 | -86 | -69 | -63 | -65 | -161 | -170 | -48 | -54 | -38 | -56 | -94 | -177 | -190 | -216 | -140 | -91 | -166 | -165 | -104 |
| D | 9 | -246 | -429 | -509 | -509 | -337 | -300 | -202 | -203 | -220 | -218 | -316 | -403 | -402 | -388 | -411 | -373 | -333 | -368 | -293 | -309 | -444 | -316 | -168 | -119 | -326 |
| | 10 | -120 | -81 | -50 | -132 | -238 | -98 | -89 | -114 | -107 | -113 | -129 | -125 | -94 | -66 | -50 | -64 | -65 | -64 | -55 | -45 | -48 | -42 | -46 | -54 | -87 |
| | 11 | -55 | -108 | -241 | -244 | -118 | -111 | -151 | -67 | -313 | -310 | -124 | -110 | -78 | -124 | -190 | -103 | -110 | -54 | -44 | -32 | -66 | -123 | -193 | -352 | -143 |
| D | 12 | -517 | -438 | -412 | -408 | -217 | -379 | -264 | -92 | -77 | -124 | -475 | -355 | -224 | -228 | -116 | -104 | -73 | -51 | -75 | -64 | -330 | -296 | -63 | -92 | -228 |
| | 13 | -144 | -460 | -150 | -65 | -171 | -217 | -165 | -109 | -82 | -163 | -332 | -235 | -180 | -173 | -122 | -188 | -207 | -274 | -117 | -110 | -147 | -87 | -80 | -63 | -169 |
| | 14 | -70 | -220 | -298 | -180 | -86 | -93 | -80 | -73 | -56 | -52 | -152 | -152 | -221 | -267 | -289 | -182 | -84 | -124 | -254 | -236 | -64 | -55 | -51 | -54 | -142 |
| | 15 | -108 | -127 | -220 | -112 | -93 | -163 | -232 | -261 | -127 | -60 | -119 | -34 | -25 | -34 | -40 | -44 | -57 | -57 | -61 | -54 | -54 | -97 | -222 | -205 | -109 |
| | 16 | -198 | -209 | -217 | -172 | -259 | -89 | -183 | -217 | -155 | -72 | -161 | -318 | -410 | -350 | -371 | -356 | -397 | -305 | -269 | -225 | -95 | -43 | -30 | -37 | -214 |
| | 17 | -36 | -36 | -81 | -139 | -197 | -145 | -282 | -139 | -97 | -152 | -167 | -74 | -37 | -100 | -289 | -241 | -297 | -438 | -504 | -170 | -87 | -258 | -128 | -75 | -174 |
| | 18 | -79 | -102 | -194 | -148 | -116 | -105 | -118 | -239 | -240 | -106 | -104 | -137 | -37 | -11 | -87 | -511 | -680 | -418 | -291 | -123 | -42 | -255 | -256 | -122 | -190 |
| | 19 | -79 | -62 | -82 | -150 | -113 | -34 | -33 | -108 | -323 | -138 | -60 | -97 | -193 | -158 | -99 | -115 | -225 | -156 | -269 | -188 | -154 | -396 | -176 | -51 | -144 |
| D | 20 | -163 | -542 | -571 | -252 | -254 | -69 | -144 | -342 | -467 | -417 | -387 | -306 | -249 | -211 | -83 | -118 | -232 | -270 | -52 | -37 | -102 | -166 | -348 | -378 | -257 |
| D | 21 | -323 | -283 | -137 | -96 | -54 | -37 | -34 | -169 | -246 | -179 | -101 | -115 | -243 | -350 | -415 | -591 | -570 | -704 | -592 | -505 | -491 | -445 | -413 | -192 | -304 |
| | 22 | -279 | -324 | -564 | -492 | -331 | -429 | -313 | -171 | -146 | -51 | -147 | -186 | -140 | -135 | -121 | -147 | -244 | -242 | -116 | -21 | -31 | -30 | -186 | -147 | -208 |
| | 23 | -65 | -225 | -229 | -41 | -33 | -23 | -39 | -36 | -49 | -73 | -87 | -90 | -59 | -166 | -132 | -159 | -321 | -461 | -517 | -238 | -112 | -205 | -369 | -545 | -178 |
| | 24 | -557 | -451 | -476 | -260 | -103 | -205 | -349 | -388 | -210 | -155 | -225 | -155 | -191 | -84 | -83 | -55 | -121 | -139 | -188 | -268 | -43 | -106 | -78 | -151 | -210 |
| | 25 | -120 | -24 | -14 | -14 | -51 | -51 | -35 | -30 | -83 | -212 | -201 | -139 | -40 | -36 | -68 | -278 | -356 | -188 | -147 | -175 | -210 | -103 | -61 | -33 | -111 |
| Q | 26 | -38 | -44 | -127 | -156 | -198 | -102 | -31 | -13 | -22 | -44 | -96 | -41 | -33 | -60 | -43 | -89 | -107 | -38 | -20 | -20 | -32 | -42 | -34 | -30 | -61 |
| Q | 27 | -17 | -10 | -11 | -21 | -23 | -28 | -31 | -36 | -32 | -29 | -25 | -22 | -12 | -9 | -12 | -9 | -1 | -6 | -39 | -60 | -20 | -33 | -54 | -83 | -26 |
| | 28 | -42 | -34 | -32 | -40 | -30 | -43 | -98 | -92 | -56 | -40 | -35 | -39 | -49 | -54 | -55 | -76 | -166 | -180 | -227 | -293 | -123 | -117 | -114 | -70 | -88 |
| | 29 | -72 | -163 | -240 | -224 | -187 | -152 | -180 | -248 | -240 | -201 | -139 | -96 | -112 | -120 | -152 | -220 | -157 | -154 | -220 | -88 | -77 | -25 | -30 | -59 | -148 |
| | 30 | -99 | -73 | -128 | -175 | -71 | -33 | -39 | -205 | -342 | -149 | -49 | -95 | -43 | -233 | -337 | -109 | -41 | -46 | -13 | -34 | -79 | -293 | -166 | -150 | -125 |
| | 31 | -207 | -244 | -259 | -271 | -145 | -82 | -78 | -44 | -188 | -246 | -155 | -253 | -319 | -197 | -49 | -74 | -136 | -236 | -98 | -31 | -60 | -57 | -59 | -59 | -148 |
| | MEAN | -141 | -178 | -187 | -157 | -132 | -138 | -135 | -140 | -154 | -149 | -164 | -153 | -155 | -158 | -170 | -180 | -193 | -198 | -174 | -125 | -116 | -145 | -135 | -135 | -155 |
| 5Q | MEAN | -27 | -32 | -63 | -74 | -65 | -53 | -36 | -37 | -40 | -44 | -65 | -54 | -37 | -44 | -41 | -49 | -67 | -66 | -45 | -33 | -36 | -32 | -35 | -42 | -47 |
| 5D | MEAN | -256 | -346 | -334 | -260 | -192 | -264 | -235 | -260 | -282 | -301 | -333 | -302 | -371 | -375 | -365 | -316 | -306 | -319 | -212 | -194 | -303 | -303 | -236 | -209 | -287 |

JUNE 1968 AL INDICES AL INTENSITY IS 0 PLUS TABULAR VALUES, IN GAMMAS

| | UT | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | -33 | -100 | -69 | -58 | -184 | -111 | -58 | -40 | -64 | -217 | -213 | -58 | -243 | -184 | -282 | -310 | -271 | -243 | -456 | -248 | -95 | -73 | -227 | -434 | -178 |
| | 2 | -285 | -311 | -267 | -268 | -416 | -387 | -253 | -137 | -52 | -88 | -155 | -140 | -98 | -130 | -243 | -192 | -96 | -77 | -281 | -328 | -227 | -193 | -205 | -245 | -210 |
| | 3 | -211 | -252 | -139 | -76 | -96 | -143 | -163 | -111 | -51 | -46 | -91 | -232 | -181 | -191 | -152 | -206 | -406 | -420 | -61 | -57 | -74 | -249 | -107 | -109 | -159 |
| | 4 | -179 | -235 | -220 | -139 | -96 | -144 | -45 | -48 | -182 | -165 | -71 | -70 | -126 | -87 | -167 | -238 | -156 | -162 | -194 | -70 | -134 | -72 | -287 | -211 | -146 |
| Q | 5 | -77 | -53 | -37 | -28 | -122 | -158 | -126 | -42 | -32 | -35 | -34 | -73 | -40 | -55 | -83 | -71 | -84 | -189 | -141 | -73 | -101 | -100 | -33 | -25 | -76 |
| Q | 6 | -16 | -14 | -16 | -21 | -26 | -30 | -65 | -48 | -32 | -39 | -73 | -129 | -221 | -251 | -106 | -111 | -59 | -45 | -20 | -20 | -46 | -40 | -47 | -39 | -63 |
| | 7 | -23 | -56 | -80 | -101 | -86 | -61 | -230 | -263 | -142 | -75 | -95 | -247 | -313 | -145 | -38 | -146 | -291 | -192 | -134 | -36 | -8 | -10 | -20 | -17 | -117 |
| | 8 | -34 | -26 | -15 | -50 | -110 | -91 | -56 | -48 | -48 | -44 | -50 | -43 | -85 | -57 | -39 | -249 | -268 | -213 | -35 | -153 | -53 | -37 | -52 | -69 | -80 |
| | 9 | -24 | -26 | -50 | -24 | -193 | -194 | -118 | -54 | -43 | -27 | -32 | -40 | -31 | -20 | -19 | -15 | -61 | -144 | -311 | -296 | -306 | -379 | -399 | -248 | -127 |
| D | 10 | -310 | -573 | -476 | -486 | -355 | -464 | -541 | -527 | -418 | -206 | -145 | -440 | -624 | -236 | -206 | -327 | -249 | -86 | -48 | -61 | -140 | -381 | -826 | -650 | -366 |
| D | 11 | -493 | -736 | -682 | -465 | -760 | -435 | -132 | -174 | -562 | -507 | -440 | -385 | -237 | -83 | -289 | -490 | -166 | -46 | -133 | -331 | -566 | -287 | -271 | -463 | -381 |
| D | 12 | -385 | -362 | -355 | -455 | -616 | -367 | -346 | -457 | -428 | -450 | -603 | -555 | -508 | -388 | -626 | -428 | -468 | -454 | -321 | -303 | -252 | -318 | -276 | -158 | -412 |
| D | 13 | -176 | -319 | -465 | -613 | -604 | -537 | -610 | -410 | -629 | -740 | -630 | -564 | -743 | -713 | -643 | -831 | -720 | -697 | -523 | -448 | -460 | -384 | -124 | -45 | -526 |
| D | 14 | -127 | -224 | -116 | -43 | -34 | -58 | -127 | -202 | -667 | -664 | -525 | -387 | -607 | -415 | -383 | -399 | -142 | -206 | -340 | -224 | -112 | -163 | -157 | -164 | -270 |
| | 15 | -90 | -23 | -23 | -15 | -44 | -68 | -77 | -255 | -194 | -66 | -118 | -166 | -104 | -62 | -38 | -19 | -42 | -111 | -71 | -134 | -122 | -38 | -82 | -142 | -88 |
| | 16 | -71 | -26 | -38 | -28 | -32 | -31 | -43 | -42 | -38 | -49 | -143 | -261 | -203 | -201 | -131 | -254 | -294 | -286 | -227 | -147 | -193 | -509 | -255 | -251 | -156 |
| | 17 | -262 | -315 | -38 | -137 | -125 | -284 | -530 | -323 | -401 | -329 | -379 | -104 | -55 | -118 | -113 | -32 | -46 | -45 | -63 | -119 | -128 | -90 | -90 | -35 | -173 |
| | 18 | -61 | -118 | -135 | -99 | -91 | -43 | -194 | -394 | -386 | -138 | -100 | -213 | -203 | -165 | -174 | -61 | -259 | -380 | -437 | -439 | -205 | -170 | -85 | -198 | -198 |
| | 19 | -216 | -384 | -296 | -193 | -498 | -410 | -315 | -369 | -285 | -278 | -258 | -231 | -189 | -105 | -276 | -122 | -281 | -309 | -255 | -151 | -381 | -401 | -408 | -271 | -287 |
| | 20 | -187 | -89 | -80 | -84 | -131 | -183 | -50 | -42 | -28 | -28 | -26 | -34 | -37 | -29 | -25 | -42 | -52 | -53 | -21 | -35 | -63 | -80 | -51 | -29 | -62 |
| Q | 21 | -22 | -19 | -17 | -16 | -23 | -25 | -25 | -25 | -32 | -32 | -36 | -36 | -20 | -16 | -8 | -11 | -19 | -17 | -12 | 2 | -2 | -10 | -18 | -21 | -19 |
| | 22 | -21 | -13 | -19 | -26 | -28 | -147 | -306 | -368 | -461 | -439 | -386 | -462 | -355 | -234 | -52 | -30 | -25 | -27 | -30 | -42 | -81 | -159 | -174 | -48 | -164 |
| | 23 | -71 | -78 | -133 | -245 | -175 | -200 | -260 | -312 | -195 | -132 | -103 | -87 | -71 | -17 | -110 | -165 | -94 | -33 | -41 | -42 | -53 | -68 | -76 | -69 | -118 |
| Q | 24 | -32 | -25 | -33 | -36 | -29 | -57 | -41 | -28 | -32 | -40 | -38 | -32 | -29 | -21 | -17 | -16 | -8 | -10 | -10 | -22 | -44 | -51 | -33 | -15 | -29 |
| Q | 25 | -18 | -23 | -19 | -22 | -35 | -33 | -27 | -49 | -38 | -39 | -32 | -23 | -29 | -26 | -15 | -21 | -30 | -41 | -20 | -62 | -28 | -17 | -21 | -62 | -30 |
| | 26 | -190 | -419 | -53 | -15 | -21 | -39 | -40 | -40 | -31 | -33 | -48 | -77 | -146 | -132 | -51 | -135 | -126 | -20 | -21 | -29 | -27 | -109 | -232 | -78 | -88 |
| | 27 | -44 | -54 | -53 | -30 | -152 | -177 | -115 | -111 | -44 | -42 | -91 | -67 | -347 | -144 | -69 | -79 | -149 | -154 | -57 | -87 | -110 | -151 | -134 | -124 | -108 |
| | 28 | -231 | -229 | -43 | -29 | -25 | -30 | -41 | -46 | -38 | -39 | -35 | -30 | -37 | -85 | -93 | -120 | -186 | -118 | -102 | -116 | -107 | -130 | -41 | -50 | -83 |
| | 29 | -58 | -72 | -27 | -46 | -79 | -109 | -80 | -45 | -38 | -44 | -38 | -30 | -30 | -27 | -32 | -79 | -178 | -132 | -51 | -151 | -397 | -178 | -234 | -187 | -98 |
| | 30 | -41 | -73 | -410 | -334 | -153 | -174 | -80 | -66 | -135 | -72 | -48 | -52 | -64 | -169 | -106 | -136 | -134 | -206 | -131 | -207 | -250 | -189 | -268 | -391 | -162 |
| | MEAN | -133 | -175 | -147 | -139 | -178 | -173 | -170 | -168 | -191 | -170 | -168 | -176 | -199 | -150 | -153 | -178 | -179 | -171 | -152 | -148 | -159 | -168 | -174 | -162 | -166 |
| 5Q | MEAN | -33 | -27 | -24 | -25 | -47 | -61 | -57 | -38 | -33 | -37 | -43 | -59 | -68 | -74 | -46 | -46 | -40 | -60 | -41 | -35 | -44 | -44 | -30 | -32 | -43 |
| 5D | MEAN | -298 | -443 | -419 | -412 | -474 | -372 | -351 | -354 | -541 | -513 | -469 | -466 | -544 | -367 | -429 | -495 | -349 | -298 | -273 | -273 | -306 | -307 | -331 | -296 | -391 |

JULY 1968 AL INDICES — AL INTENSITY IS 0 PLUS TABULAR VALUES, IN GAMMAS

| | UT | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | -247 | -227 | -200 | -277 | -217 | -174 | -157 | -210 | -263 | -92 | -129 | -189 | -226 | -196 | -125 | -94 | -76 | -62 | -185 | -147 | -60 | -34 | -85 | -146 | -159 |
| | 2 | -108 | -307 | -141 | -59 | -64 | -80 | -97 | -178 | -209 | -292 | -259 | -142 | -81 | -98 | -187 | -117 | -152 | -122 | -110 | -101 | -23 | -39 | -86 | -288 | -139 |
| D | 3 | -138 | -226 | -414 | -97 | -225 | -424 | -346 | -387 | -461 | -50 | -138 | -84 | -104 | -92 | -46 | -16 | -8 | -92 | -61 | -122 | -162 | -58 | -53 | -38 | -160 |
| | 4 | -82 | -89 | -65 | -158 | -203 | -146 | -193 | -437 | -386 | -187 | -117 | -119 | -174 | -165 | -46 | -79 | -99 | -87 | -120 | -335 | -182 | -96 | -56 | -31 | -153 |
| | 5 | -107 | -221 | -182 | -176 | -146 | -26 | -17 | -20 | -97 | -278 | -167 | -54 | -85 | -36 | -22 | -76 | -147 | -48 | -62 | -56 | -37 | -14 | -20 | -17 | -88 |
| | 6 | -28 | -52 | -167 | -137 | -68 | -183 | -123 | -47 | -44 | -175 | -196 | -131 | -61 | -29 | -40 | -31 | -18 | -9 | -34 | -67 | -90 | -34 | -25 | -34 | -77 |
| | 7 | -26 | -36 | -70 | -44 | -38 | -81 | -234 | -281 | -275 | -266 | -83 | -39 | -33 | -17 | -21 | -83 | -112 | -39 | -49 | -23 | -30 | -25 | -38 | -26 | -82 |
| | 8 | -38 | -37 | -45 | -150 | -164 | -232 | -212 | -159 | -169 | -270 | -125 | -91 | -49 | -9 | -17 | -44 | -27 | -6 | -25 | -21 | -69 | -51 | -28 | -25 | -86 |
| Q | 9 | -18 | -33 | -30 | -39 | -119 | -225 | -188 | -128 | -78 | -73 | -26 | -40 | -23 | -17 | -19 | -41 | -48 | -23 | -19 | -23 | -30 | -27 | -33 | -46 | -56 |
| D | 10 | -80 | -67 | -100 | -117 | -332 | -271 | -262 | -190 | -187 | -373 | -326 | -285 | -615 | -645 | -153 | -64 | -68 | -112 | -438 | -480 | -321 | -151 | -486 | -372 | -271 |
| | 11 | -294 | -195 | -294 | -216 | -167 | -101 | -182 | -180 | -82 | -31 | -27 | -51 | -114 | -70 | -93 | -180 | -190 | -213 | -203 | -254 | -274 | -244 | -306 | -371 | -181 |
| | 12 | -397 | -424 | -359 | -165 | -139 | -60 | -22 | -31 | -34 | -32 | -32 | -27 | -24 | -25 | -9 | -50 | -254 | -110 | -27 | -26 | -28 | -36 | -34 | -27 | -99 |
| D | 13 | -33 | -51 | -44 | -56 | -157 | -250 | -185 | -95 | -54 | -41 | -45 | -35 | -24 | -18 | -26 | -22 | -325 | -572 | -552 | -568 | -520 | -434 | -367 | -351 | -201 |
| D | 14 | -353 | -683 | -687 | -498 | -423 | -107 | -34 | -69 | -55 | -43 | -112 | -148 | -102 | -61 | -86 | -75 | -62 | -128 | -393 | -285 | -70 | -68 | -89 | -86 | -197 |
| | 15 | -52 | -136 | -229 | -104 | -138 | -164 | -72 | -24 | -45 | -38 | -56 | -100 | -12 | -20 | -13 | -9 | -13 | -21 | -68 | -66 | -110 | -126 | -141 | -138 | -79 |
| | 16 | -210 | -204 | -48 | -29 | -69 | -252 | -61 | -40 | -44 | -109 | -80 | -32 | -23 | -44 | -203 | -39 | -224 | -224 | -29 | -29 | -28 | -38 | -47 | -51 | -90 |
| | 17 | -38 | -35 | -34 | -38 | -33 | -41 | -41 | -28 | -30 | -31 | -106 | -135 | -294 | -136 | -7 | -11 | -14 | -16 | -43 | -102 | -179 | -112 | -32 | -48 | -66 |
| | 18 | -67 | -159 | -242 | -297 | -261 | -102 | -90 | -47 | -37 | -39 | -79 | -229 | -210 | -209 | -309 | -150 | -30 | -104 | -108 | -19 | -9 | -7 | -18 | -59 | -120 |
| | 19 | -64 | -37 | -48 | -185 | -207 | -117 | -98 | -87 | -87 | -146 | -62 | -161 | -108 | -47 | -54 | -98 | -223 | -21 | 2 | -30 | -101 | -400 | -251 | -300 | -122 |
| Q | 20 | -278 | -91 | -60 | -55 | -39 | -32 | -24 | -23 | -22 | -30 | -36 | -32 | -27 | -17 | -20 | -22 | -24 | -28 | -39 | -52 | -67 | -69 | -36 | -34 | -48 |
| | 21 | -50 | -64 | -28 | -35 | -35 | -38 | -24 | -41 | -93 | -39 | -29 | -39 | -92 | -145 | -64 | -41 | -77 | -99 | -325 | -61 | -31 | -78 | -274 | -230 | -85 |
| D | 22 | -160 | -320 | -211 | -61 | -46 | -145 | -177 | -202 | -386 | -452 | -428 | -310 | -121 | -167 | -94 | -149 | -94 | -120 | -290 | -278 | -183 | -137 | -141 | -80 | -198 |
| | 23 | -100 | -48 | -106 | -247 | -208 | -149 | -185 | -326 | -227 | -11 | -49 | -70 | -80 | -67 | -51 | -197 | -63 | -9 | -28 | -9 | -31 | -54 | -67 | -90 | -103 |
| Q | 24 | -40 | -37 | -36 | -36 | -21 | -76 | -152 | -133 | -51 | -26 | -43 | -40 | -38 | -31 | -34 | -40 | -25 | -23 | -27 | -50 | -59 | -52 | -47 | -43 | -48 |
| | 25 | -31 | -39 | -42 | -34 | -49 | -89 | -162 | -75 | -25 | -27 | -51 | -62 | -26 | -25 | -75 | -108 | -50 | -92 | -44 | -26 | -30 | -44 | -46 | -37 | -54 |
| | 26 | -41 | -39 | -58 | -142 | -239 | -122 | -17 | -47 | -42 | -139 | -229 | -137 | -118 | -152 | -62 | -88 | -142 | -211 | -108 | -223 | -140 | -222 | -325 | -249 | -137 |
| | 27 | -355 | -333 | -233 | -230 | -202 | -127 | -169 | -198 | -152 | -161 | -102 | -182 | -192 | -255 | -126 | -102 | -45 | -40 | -58 | -133 | -106 | -55 | -58 | -55 | -149 |
| | 28 | -158 | -147 | -126 | -104 | -132 | -59 | -23 | -29 | -23 | -22 | -78 | -77 | -32 | -11 | -72 | -201 | -243 | -145 | -235 | -183 | -60 | -32 | -46 | -173 | -101 |
| Q | 29 | -207 | -199 | -172 | -38 | -68 | -181 | -86 | -22 | -20 | -26 | -26 | -29 | -37 | -28 | -41 | -44 | -20 | -58 | -35 | -62 | -34 | -29 | -64 | -70 | -67 |
| | 30 | -53 | -56 | -41 | -85 | -20 | -35 | -37 | -35 | -30 | -27 | -24 | -25 | -26 | -17 | -44 | -79 | -102 | -62 | -72 | -27 | -185 | -192 | -81 | -71 | -59 |
| Q | 31 | -80 | -151 | -69 | -36 | -96 | -99 | -54 | -102 | -36 | -11 | -47 | -173 | -85 | -61 | -75 | -63 | -42 | -37 | -20 | -34 | -40 | -50 | -42 | -31 | -64 |
| | MEAN | -127 | -153 | -149 | -127 | -140 | -135 | -120 | -122 | -121 | -114 | -107 | -105 | -104 | -94 | -72 | -78 | -97 | -95 | -123 | -126 | -106 | -97 | -110 | -117 | -114 |
| | 5Q MEAN | -125 | -102 | -73 | -41 | -69 | -123 | -101 | -82 | -41 | -33 | -36 | -63 | -42 | -31 | -38 | -42 | -32 | -34 | -28 | -48 | -46 | -45 | -44 | -45 | -57 |
| | 5D MEAN | -153 | -269 | -291 | -166 | -237 | -239 | -201 | -189 | -229 | -192 | -210 | -172 | -193 | -197 | -81 | -65 | -111 | -205 | -347 | -347 | -251 | -170 | -227 | -185 | -205 |

AUGUST 1968 AL INDICES AL INTENSITY IS 0 PLUS TABULAR VALUES, IN GAMMAS

| | UT | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q | 1 | -37 | -43 | -46 | -47 | -50 | -60 | -25 | -30 | -202 | -193 | -149 | -35 | -33 | -28 | -31 | -96 | -122 | -62 | -36 | -19 | -33 | -44 | -35 | -31 | -62 |
| Q | 2 | -31 | -39 | -43 | -49 | -45 | -36 | -35 | -37 | -30 | -28 | -52 | -201 | -81 | -49 | -43 | -33 | -39 | -21 | -19 | -21 | -43 | -39 | -32 | -38 | -45 |
| | 3 | -46 | -64 | -189 | -321 | -380 | -156 | -92 | -259 | -230 | -75 | -43 | -121 | -36 | -20 | -2 | -15 | -96 | -147 | -42 | -33 | -34 | -30 | -43 | -32 | -104 |
| | 4 | -43 | -43 | -46 | -31 | -27 | -117 | -37 | -19 | -22 | -28 | -25 | -28 | -24 | -17 | -10 | -5 | -11 | -3 | -4 | -14 | -28 | -47 | -28 | -54 | -30 |
| | 5 | -44 | -79 | -37 | -48 | -243 | -88 | -24 | -27 | -30 | -167 | -293 | -109 | -236 | -278 | -161 | -174 | -217 | -25 | 3 | 0 | -21 | -80 | -125 | -148 | -110 |
| | 6 | -44 | -81 | -163 | -396 | -287 | -122 | -87 | -52 | -35 | -57 | -36 | -60 | -93 | -72 | -74 | -67 | -13 | -50 | -153 | -135 | -181 | -106 | -42 | -78 | -103 |
| | 7 | -255 | -415 | -367 | -126 | -79 | -293 | -213 | -120 | -103 | -120 | -78 | -278 | -353 | -236 | -178 | -167 | -200 | -40 | -34 | -68 | -44 | -34 | -67 | -99 | -165 |
| | 8 | -318 | -371 | -316 | -55 | -318 | -169 | -155 | -275 | -167 | -17 | -23 | -27 | -27 | -89 | -64 | -38 | -16 | -36 | -13 | -30 | -101 | -96 | -155 | -172 | -127 |
| | 9 | -194 | -201 | -223 | -56 | -57 | -72 | -158 | -61 | -28 | -33 | -36 | -37 | -117 | -36 | -20 | -58 | -69 | -397 | -167 | -164 | -268 | -137 | -175 | -188 | -122 |
| | 10 | -91 | -138 | -64 | -51 | -35 | -102 | -227 | -95 | -42 | -168 | -142 | -63 | -28 | -35 | -38 | -53 | -120 | -148 | -27 | -33 | -110 | -188 | -186 | -142 | -97 |
| | 11 | -100 | -258 | -180 | -78 | -103 | -166 | -160 | -24 | -19 | -29 | -35 | -32 | -22 | -21 | -18 | -17 | -43 | -33 | -12 | -54 | -20 | -22 | -28 | -27 | -63 |
| | 12 | -47 | -179 | -64 | -34 | -28 | -33 | -75 | -67 | -28 | -31 | -53 | -68 | -55 | -32 | -46 | -97 | -94 | -25 | -26 | -145 | -130 | -30 | -36 | -25 | -60 |
| | 13 | -25 | -31 | -32 | -26 | -30 | -40 | -31 | -32 | -27 | -36 | -38 | -38 | -33 | -30 | -59 | -172 | -201 | -286 | -96 | -88 | -233 | -113 | -149 | -304 | -90 |
| D | 14 | -385 | -204 | -264 | -230 | -160 | -227 | -325 | -261 | -354 | -212 | -310 | -324 | -252 | -155 | -229 | -89 | -81 | -186 | -478 | -248 | -131 | -239 | -464 | -301 | -255 |
| D | 15 | -130 | -110 | -166 | -314 | -432 | -182 | -139 | -377 | -277 | -491 | -150 | -215 | -362 | -366 | -361 | -419 | -441 | -337 | -322 | -147 | -220 | -350 | -262 | -241 | -285 |
| D | 16 | -393 | -227 | -61 | -58 | -371 | -356 | -192 | -212 | -112 | -131 | -155 | -86 | -89 | -222 | -470 | -713 | -427 | -550 | -381 | -203 | -555 | -492 | -90 | -82 | -276 |
| D | 17 | -573 | -250 | -141 | -459 | -461 | -258 | -93 | -214 | -92 | -461 | -165 | -239 | -629 | -849 | -685 | -608 | -364 | -205 | -214 | -124 | -217 | -289 | -55 | -204 | -326 |
| | 18 | -229 | -72 | -105 | -241 | -484 | -374 | -148 | -281 | -352 | -295 | -278 | -110 | -181 | -313 | -399 | -394 | -163 | -225 | -244 | -163 | -266 | -287 | -135 | -194 | -247 |
| | 19 | -403 | -211 | -159 | -143 | -136 | -145 | -142 | -128 | -259 | -329 | -284 | -167 | -41 | -38 | -41 | -51 | -145 | -307 | -142 | -35 | -36 | -31 | -34 | -28 | -143 |
| | 20 | -43 | -41 | -47 | -39 | -30 | -31 | -24 | -27 | -80 | -49 | -70 | -61 | -71 | -55 | -150 | -264 | -289 | -144 | -30 | -54 | -79 | -61 | -84 | -122 | -81 |
| | 21 | -76 | -65 | -55 | -61 | -145 | -122 | -69 | -154 | -81 | -25 | -35 | -35 | -33 | -49 | -39 | -32 | -43 | -44 | -86 | -86 | -43 | -37 | -32 | -43 | -62 |
| | 22 | -40 | -30 | -26 | -25 | -27 | -25 | -29 | -26 | -35 | -36 | -39 | -138 | -104 | -41 | -40 | -46 | -27 | -32 | -37 | -33 | -33 | -50 | -260 | -330 | -63 |
| | 23 | -180 | -190 | -231 | -252 | -317 | -123 | -27 | -99 | -134 | -98 | -67 | -80 | -94 | -109 | -90 | -89 | -106 | -137 | -135 | -201 | -193 | -113 | -177 | -129 | -140 |
| D | 24 | -66 | -158 | -76 | -25 | -73 | -368 | -409 | -154 | -276 | -290 | -221 | -310 | -61 | -45 | -138 | -147 | -149 | -145 | -147 | -84 | -73 | -239 | -94 | -60 | -159 |
| | 25 | -55 | -43 | -35 | -28 | -26 | -28 | -27 | -30 | -32 | -34 | -27 | -20 | -26 | -27 | -26 | -29 | -37 | -38 | -14 | -83 | -129 | -74 | -41 | -38 | -39 |
| | 26 | -33 | -33 | -27 | -26 | -32 | -25 | -28 | -34 | -77 | -122 | -30 | -25 | -32 | -103 | -181 | -113 | -55 | -27 | -90 | -55 | -35 | -34 | -37 | -38 | -54 |
| | 27 | -33 | -38 | -125 | -90 | -14 | -16 | -20 | -59 | -30 | -31 | -58 | -57 | -21 | -27 | -34 | -35 | -26 | -19 | -20 | -54 | -61 | -25 | -22 | -20 | -39 |
| Q | 28 | -23 | -30 | -27 | -22 | -45 | -77 | -19 | -24 | -29 | -42 | -37 | -36 | -29 | -25 | -27 | -36 | -28 | -23 | -27 | -67 | -96 | -38 | -30 | -28 | -36 |
| Q | 29 | -29 | -28 | -24 | -24 | -25 | -24 | -24 | -23 | -36 | -41 | -43 | -32 | -28 | -58 | -36 | -51 | -29 | -21 | -20 | -34 | -37 | -40 | -36 | -32 | -32 |
| Q | 30 | -25 | -40 | -47 | -30 | -28 | -27 | -23 | -24 | -33 | -40 | -29 | -20 | -36 | -21 | -19 | -19 | -22 | -24 | -28 | -28 | -23 | -29 | -25 | -17 | -27 |
| | 31 | -11 | -27 | -52 | -94 | -94 | -48 | -8 | -20 | -24 | -30 | -41 | -216 | -365 | -380 | -432 | -545 | -474 | -291 | -144 | -261 | -192 | -64 | -85 | -74 | -166 |
| | MEAN | -130 | -121 | -112 | -112 | -148 | -126 | -99 | -105 | -106 | -121 | -93 | -104 | -116 | -123 | -134 | -151 | -134 | -130 | -103 | -89 | -118 | -111 | -99 | -107 | -116 |
| 5Q MEAN | | -30 | -36 | -37 | -34 | -39 | -45 | -25 | -28 | -66 | -69 | -62 | -65 | -41 | -36 | -31 | -47 | -48 | -30 | -26 | -34 | -47 | -38 | -32 | -29 | -40 |
| 5D MEAN | | -311 | -190 | -146 | -216 | -299 | -278 | -232 | -247 | -222 | -317 | -200 | -229 | -279 | -327 | -377 | -395 | -292 | -285 | -308 | -161 | -239 | -322 | -193 | -178 | -260 |

SEPTEMBER 1968 AL INDICES AL INTENSITY IS 0 PLUS TABULAR VALUES, IN GAMMAS

| | UT | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | -71 | -139 | -220 | -111 | -196 | -89 | -113 | -106 | -85 | -169 | -345 | -238 | -322 | -259 | -117 | -61 | -102 | -65 | -28 | -2 | -3 | -11 | -24 | -90 | -124 |
| | 2 | -129 | -69 | -21 | -20 | -12 | -6 | -72 | -43 | -191 | -265 | -530 | -234 | -173 | -247 | -107 | -86 | -158 | -172 | -205 | -84 | -27 | -69 | -55 | -91 | -128 |
| | 3 | -81 | -115 | -104 | -13 | -48 | -32 | -100 | -33 | -45 | -131 | -113 | -123 | -73 | -25 | -29 | -96 | -395 | -126 | -14 | -144 | -150 | -345 | -71 | -33 | -102 |
| | 4 | -244 | -102 | -48 | -207 | -246 | -61 | -12 | -34 | -7 | -86 | -132 | -400 | -359 | -266 | -347 | -279 | -127 | -37 | -54 | -145 | -90 | -68 | -212 | -25 | -159 |
| | 5 | -7 | -26 | -43 | -67 | -105 | -280 | -259 | -74 | -30 | -135 | -117 | -171 | -221 | -147 | -31 | -45 | -68 | -85 | -24 | -55 | -191 | -122 | -185 | -214 | -113 |
| | 6 | -297 | -112 | -140 | -92 | -83 | -175 | -273 | -210 | -57 | -18 | -22 | -24 | -22 | -86 | -34 | -110 | -139 | -272 | -32 | -13 | -122 | -511 | -336 | -344 | -147 |
| | 7 | -192 | -34 | -18 | -12 | -12 | -14 | -12 | -16 | -18 | -22 | -21 | -33 | -33 | -23 | -35 | -52 | -247 | -160 | -269 | -306 | -304 | -239 | -395 | -460 | -122 |
| D | 8 | -482 | -717 | -365 | -379 | -350 | -290 | -490 | -513 | -423 | -774 | -377 | -585 | -564 | -319 | -356 | -656 | -594 | -504 | -211 | -47 | -32 | -16 | -21 | -28 | -379 |
| | 9 | -368 | -287 | -277 | -132 | -198 | -161 | -27 | -20 | -39 | -43 | -66 | -196 | -194 | -15 | -45 | -87 | -103 | -171 | -130 | -73 | -45 | -26 | -32 | -30 | -115 |
| | 10 | -57 | -117 | -154 | -145 | -63 | -20 | -26 | -34 | -23 | -19 | -29 | -221 | -101 | -74 | -53 | -200 | -229 | -132 | -46 | -11 | -25 | -63 | -55 | -50 | -81 |
| | 11 | -120 | -180 | -195 | -72 | -189 | -108 | -47 | -24 | -51 | -56 | -29 | -39 | -61 | -27 | -23 | -24 | -27 | -39 | -103 | -25 | -20 | -28 | -27 | -26 | -64 |
| | 12 | -20 | -14 | -61 | -202 | -133 | -82 | -95 | -268 | -260 | -219 | -250 | -151 | -253 | -275 | -597 | -294 | -193 | -201 | -335 | -338 | -151 | -77 | -182 | -311 | -207 |
| D | 13 | -449 | -432 | -368 | -244 | -192 | -286 | -249 | -152 | -46 | -42 | -125 | -531 | -431 | -333 | -332 | -487 | -490 | -387 | -538 | -356 | -55 | -106 | -364 | -254 | -303 |
| D | 14 | -346 | -429 | -494 | -632 | -141 | -22 | -175 | -397 | -266 | -434 | -523 | -369 | -607 | -629 | -241 | -360 | -378 | -265 | -109 | -127 | -363 | -473 | -145 | -115 | -335 |
| D | 15 | -237 | -316 | -499 | -353 | -322 | -158 | -171 | -172 | -155 | -52 | -91 | -338 | -315 | -247 | -266 | -675 | -328 | -386 | -525 | -200 | -101 | -128 | -142 | -348 | -272 |
| | 16 | -242 | -164 | -223 | -423 | -274 | -185 | -130 | -110 | -117 | -130 | -166 | -85 | -129 | -119 | -106 | -163 | -27 | -91 | -141 | -68 | -77 | -105 | -57 | -27 | -140 |
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| Q | 18 | -21 | -20 | -18 | -18 | -59 | -71 | -6 | -10 | -23 | -29 | -32 | -32 | -27 | -25 | -30 | -88 | -127 | -155 | -85 | -15 | -13 | -18 | -28 | -102 | -44 |
| | 19 | -79 | -16 | -51 | -212 | -431 | -104 | -113 | -248 | -142 | -410 | -84 | -18 | -29 | -17 | -41 | -139 | -94 | -28 | -22 | -17 | -12 | -26 | -29 | -30 | -100 |
| | 20 | -15 | -44 | -122 | -304 | -69 | -14 | -21 | -16 | -17 | -11 | -14 | -13 | -10 | -13 | -17 | -18 | -23 | -20 | -56 | -114 | -107 | -68 | -24 | -19 | -48 |
| | 21 | -45 | -19 | -12 | -9 | -41 | -235 | -264 | -92 | -30 | -23 | -17 | -23 | -144 | -263 | -95 | -284 | -537 | -159 | -13 | -65 | -84 | -16 | -9 | -9 | -102 |
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| Q | 24 | -34 | -15 | -6 | -3 | -5 | -6 | -10 | -13 | -20 | -26 | -25 | -25 | -27 | -21 | -30 | -31 | -31 | -19 | -22 | -221 | -134 | -19 | -15 | -15 | -32 |
| Q | 25 | -13 | -12 | -16 | -18 | -11 | -10 | -13 | -15 | -19 | -29 | -27 | -29 | -31 | -21 | -25 | -45 | -72 | -51 | -19 | -13 | -25 | -38 | -35 | -31 | -26 |
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| Q | 27 | -12 | -11 | -5 | -8 | -58 | -51 | -11 | -11 | -15 | -22 | -31 | -30 | -42 | -32 | -25 | -28 | -31 | -64 | -16 | -12 | -15 | -18 | -13 | -5 | -24 |
| | 28 | -5 | -8 | -38 | -12 | -10 | -4 | -5 | -20 | -30 | -77 | -64 | -208 | -78 | -57 | -93 | -128 | -204 | -74 | -50 | -203 | -104 | -143 | -26 | -12 | -69 |
| | 29 | -13 | -126 | -111 | -10 | -51 | -257 | -136 | -63 | -47 | -66 | -63 | -25 | -23 | -15 | -19 | -52 | -137 | -138 | -212 | -155 | -298 | -206 | -22 | -28 | -95 |
| | 30 | -20 | -11 | -8 | -7 | -9 | -8 | -10 | -12 | -9 | -14 | -62 | -85 | -93 | -50 | -26 | -133 | -248 | -34 | -6 | -187 | -431 | -201 | -179 | -237 | -87 |
| | MEAN | -129 | -135 | -142 | -143 | -120 | -93 | -101 | -102 | -87 | -128 | -122 | -149 | -161 | -141 | -135 | -190 | -186 | -136 | -116 | -104 | -109 | -116 | -106 | -105 | -127 |
| 5Q | MEAN | -21 | -20 | -12 | -13 | -29 | -30 | -10 | -27 | -36 | -25 | -26 | -28 | -32 | -24 | -28 | -75 | -87 | -71 | -33 | -56 | -43 | -24 | -22 | -33 | -34 |
| 5D | MEAN | -318 | -434 | -447 | -429 | -235 | -155 | -237 | -270 | -216 | -344 | -251 | -376 | -399 | -363 | -368 | -585 | -397 | -326 | -281 | -150 | -114 | -148 | -139 | -154 | -298 |

OCTOBER 1968 AL INDICES

AL INTENSITY IS 0 PLUS TABULAR VALUES, IN GAMMAS

| | UT | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | -395 | -350 | -166 | -184 | -30 | -49 | -39 | -26 | -62 | -194 | -161 | -20 | -32 | -60 | -184 | -64 | -109 | -348 | -433 | -254 | -158 | -317 | -234 | -219 | -170 |
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| Q | 5 | -19 | -20 | -18 | -15 | -17 | -25 | -86 | -160 | -174 | -165 | -46 | -19 | -48 | -79 | -24 | -26 | -28 | -16 | -13 | -15 | -22 | -23 | -22 | -19 | -46 |
| | 6 | -18 | -19 | -35 | -27 | -25 | -24 | -12 | -1 | -39 | -35 | -27 | -27 | -39 | -30 | -22 | -65 | -81 | -49 | -34 | -132 | -90 | -24 | -47 | -76 | -42 |
| | 7 | -224 | -162 | -174 | -269 | -41 | -44 | -75 | -58 | -23 | -32 | -89 | -36 | -30 | -30 | -28 | -39 | -21 | -69 | -452 | -488 | -253 | -273 | -100 | -123 | -131 |
| | 8 | -374 | -140 | -27 | -61 | -67 | -93 | -78 | -52 | -96 | -68 | -92 | -143 | -88 | -73 | -59 | -179 | -175 | -18 | -24 | -155 | -158 | -77 | -126 | -115 | -106 |
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| Q | 11 | -18 | -16 | -20 | -25 | -24 | -18 | -10 | -73 | -50 | -19 | -22 | -21 | -23 | -44 | -26 | -16 | -14 | -12 | -9 | -10 | -16 | -23 | -26 | -24 | -23 |
| D | 12 | -146 | -500 | -401 | -425 | -467 | -336 | -75 | -165 | -271 | -358 | -330 | -426 | -248 | -227 | -389 | -211 | -166 | -521 | -854 | -365 | -560 | -310 | -388 | -386 | -355 |
| D | 13 | -326 | -269 | -328 | -152 | -299 | -162 | -278 | -326 | -355 | -508 | -334 | -344 | -451 | -277 | -476 | -385 | -372 | -406 | -135 | -129 | -154 | -225 | -447 | -346 | -312 |
| | 14 | -296 | -158 | -236 | -235 | -234 | -214 | -62 | -125 | -185 | -85 | -38 | -133 | -407 | -199 | -176 | -387 | -360 | -156 | -183 | -230 | -122 | -186 | -196 | -42 | -194 |
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| | 19 | -107 | -78 | -19 | -21 | -21 | -12 | -8 | -15 | -61 | -31 | -17 | -51 | -276 | -10 | -14 | -27 | -21 | -16 | -43 | -255 | -429 | -179 | -103 | -228 | -85 |
| | 20 | -73 | -21 | -16 | -19 | -15 | -9 | -12 | -208 | -270 | -212 | -117 | -90 | -32 | -158 | -34 | -26 | -163 | -217 | -38 | -9 | -11 | -11 | -8 | -7 | -74 |
| Q | 21 | -8 | -7 | -6 | -13 | -13 | -10 | -17 | -12 | -35 | -60 | -54 | -21 | -24 | -25 | -30 | -32 | -29 | -35 | -15 | -18 | -20 | -23 | -20 | -10 | -22 |
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| | 26 | -27 | -12 | -33 | -15 | -7 | -9 | -6 | -42 | -160 | -182 | -89 | -25 | -20 | -20 | -20 | -19 | -17 | -18 | -72 | -116 | -57 | -10 | -13 | -113 | -46 |
| | 27 | -43 | -1 | 0 | -7 | -3 | -9 | -39 | -172 | -166 | -9 | -8 | -17 | -16 | -22 | -98 | -62 | -44 | -44 | -172 | -135 | -34 | -14 | -14 | -28 | -48 |
| | 28 | -38 | -7 | -7 | -5 | -4 | -8 | -152 | -78 | -6 | -5 | -7 | -10 | -15 | -17 | -36 | -86 | -26 | -7 | -15 | -11 | -12 | -12 | -102 | -237 | -38 |
| D | 29 | -312 | -110 | -26 | -17 | -43 | -31 | -59 | -3 | 3 | -12 | -22 | -13 | -125 | -102 | -114 | -111 | -240 | -925 | -456 | -316 | -362 | -131 | -87 | -43 | -152 |
| | 30 | -26 | -24 | -15 | -17 | -24 | -31 | -23 | -26 | -30 | -186 | -437 | -346 | -355 | -533 | -415 | -188 | -145 | -135 | -91 | -100 | -244 | -187 | -259 | -422 | -177 |
| D | 31 | -402 | -283 | -404 | -414 | -480 | -352 | -488 | -523 | -597 | -260 | -456 | -761 | -126 | -616 | -1300 | -466 | -685 | -755 | -597 | -953 | -487 | -323 | -60 | -53 | -493 |
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| | SQMEAN | -12 | -11 | -12 | -14 | -15 | -15 | -27 | -54 | -57 | -56 | -32 | -22 | -29 | -43 | -29 | -30 | -28 | -34 | -29 | -14 | -17 | -19 | -19 | -14 | -26 |
| | SDMEAN | -308 | -370 | -281 | -213 | -312 | -284 | -268 | -217 | -252 | -263 | -411 | -460 | -285 | -342 | -575 | -314 | -333 | -541 | -467 | -384 | -322 | -218 | -241 | -228 | -329 |

NOVEMBER 1968 AL INDICES

AL INTENSITY IS 0 PLUS TABULAR VALUES, IN GAMMAS

| | UT | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| D | 1 | -327 | -543 | -271 | -94 | -53 | -63 | -55 | -70 | -61 | -67 | -143 | -827 | -2089 | -894 | -726 | -339 | -319 | -159 | -404 | -539 | -364 | -741 | -486 | -461 | -417 |
| D | 2 | -534 | -819 | -495 | -293 | -324 | -325 | -379 | -312 | -432 | -497 | -488 | -519 | -682 | -658 | -809 | -546 | -505 | -394 | -101 | -119 | -284 | -373 | -539 | -522 | -456 |
| D | 3 | -382 | -659 | -220 | -25 | -61 | -126 | -295 | -340 | -130 | -116 | -68 | -65 | -517 | -526 | -405 | -523 | -312 | -328 | -398 | -188 | -230 | -318 | -191 | -103 | -272 |
| D | 4 | -108 | -179 | -84 | -101 | -172 | -377 | -284 | -404 | -370 | -299 | -360 | -319 | -767 | -491 | -326 | -84 | -7 | -52 | -36 | -191 | -324 | -177 | -32 | -30 | -232 |
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| Q | 12 | -72 | -54 | -24 | -11 | -16 | -24 | -19 | -14 | -9 | -7 | -10 | -56 | -87 | -56 | -25 | -29 | -102 | -71 | -36 | -15 | -13 | -18 | -13 | -13 | -33 |
| | 13 | -10 | -10 | -33 | -35 | -20 | -3 | -1 | -4 | -10 | -17 | -135 | -84 | -36 | -17 | -19 | -31 | -80 | -59 | -55 | -83 | -173 | -135 | -12 | -13 | -45 |
| Q | 14 | -13 | -10 | -6 | -1 | 0 | -1 | -4 | -1 | -5 | -11 | -11 | -15 | -20 | -22 | -21 | -32 | -61 | -32 | -51 | -33 | -20 | -85 | -37 | -7 | -21 |
| Q | 15 | -13 | -6 | -9 | -12 | -28 | -20 | -19 | -6 | -6 | -9 | -14 | -16 | -22 | -14 | -14 | -27 | -28 | -46 | -10 | -8 | -11 | -15 | -15 | -17 | -17 |
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| | 20 | -19 | -13 | -14 | -10 | -8 | -5 | -9 | -5 | -9 | -311 | -215 | -198 | -202 | -409 | -692 | -360 | -159 | -139 | -238 | -132 | -27 | -12 | -12 | -12 | -134 |
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| | 27 | -91 | -179 | -181 | -67 | -28 | -2 | 9 | -4 | -25 | -26 | -88 | -33 | -65 | -53 | -58 | -159 | -115 | -78 | -136 | -213 | -322 | -269 | -78 | -51 | -96 |
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DECEMBER 1968 AL INDICES AL INTENSITY IS 0 PLUS TABULAR VALUES, IN GAMMAS

| | UT | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | -70 | -78 | -34 | -53 | -180 | -52 | -11 | -39 | -92 | -219 | -298 | -323 | -358 | -290 | -410 | -364 | -204 | -384 | -152 | -36 | -9 | -23 | -15 | -12 | -154 |
| | 2 | -11 | -10 | -11 | -21 | -15 | -15 | -30 | -55 | -73 | -64 | -238 | -184 | -197 | -202 | -97 | -156 | -167 | -286 | -191 | -76 | -38 | -99 | -42 | -51 | -97 |
| D | 3 | -80 | -41 | -70 | -204 | -426 | -219 | -42 | -49 | -140 | -263 | -217 | -208 | -378 | -404 | -281 | -298 | -372 | -260 | -296 | -345 | -332 | -281 | -474 | -221 | -246 |
| D | 4 | -268 | -223 | 3 | -6 | -16 | -27 | -202 | -403 | -424 | -351 | -377 | -489 | -330 | -275 | -179 | -350 | -495 | -114 | -235 | -394 | -191 | -118 | -177 | -96 | -239 |
| D | 5 | -93 | -13 | -69 | -192 | -294 | -118 | -37 | -93 | -448 | -561 | -366 | -209 | -614 | -208 | -353 | -261 | -94 | -266 | -247 | -541 | -330 | -367 | -393 | -353 | -272 |
| | 6 | -259 | -149 | -146 | -116 | -255 | -160 | -111 | -76 | -98 | -244 | -119 | -28 | -38 | -28 | -37 | -65 | -47 | -35 | -35 | -31 | -108 | -58 | -51 | -71 | -99 |
| Q | 7 | -32 | -42 | -19 | -12 | -12 | -16 | -24 | -59 | -52 | -29 | -34 | -124 | -193 | -69 | -103 | -172 | -251 | -239 | -48 | -43 | -86 | -112 | -118 | -107 | -83 |
| | 8 | -77 | -97 | -106 | -45 | -111 | -109 | -212 | -204 | -424 | -162 | -167 | -204 | -215 | -459 | -133 | -73 | -26 | -54 | -280 | -314 | -146 | -107 | -248 | -159 | -172 |
| | 9 | -33 | -46 | -26 | -10 | -42 | -37 | -28 | -15 | -15 | -51 | -68 | -71 | -108 | -102 | -75 | -166 | -201 | -140 | -195 | -196 | -183 | -73 | -100 | -257 | -93 |
| | 10 | -235 | -67 | -37 | -107 | -195 | -88 | -123 | -214 | -212 | -137 | -141 | -223 | -174 | -15 | -22 | -28 | -28 | -28 | -21 | -44 | -108 | -223 | -87 | -43 | -108 |
| | 11 | -26 | -71 | -52 | -31 | -28 | -20 | -18 | -17 | -17 | -20 | -28 | -23 | -23 | -25 | -37 | -102 | -384 | -129 | -332 | -349 | -55 | -32 | -51 | -68 | -81 |
| | 12 | -98 | -129 | -228 | -166 | -103 | -55 | -24 | -22 | -25 | -23 | -23 | -28 | -28 | -52 | -161 | -69 | -14 | -34 | -134 | -240 | -110 | -45 | -37 | -41 | -79 |
| | 13 | -65 | -50 | -22 | -10 | -10 | -13 | -9 | -11 | -12 | -12 | -33 | -33 | -20 | -18 | -59 | -211 | -302 | -292 | -274 | -125 | -109 | -34 | -30 | -30 | -74 |
| Q | 14 | -14 | -16 | -16 | -13 | -8 | -9 | -16 | -48 | -66 | -46 | -13 | -28 | -33 | -79 | -89 | -34 | -32 | -29 | -39 | -24 | -23 | -18 | -17 | -17 | -30 |
| | 15 | -10 | -8 | -10 | -24 | -13 | -28 | -80 | -70 | -17 | -12 | -11 | -25 | -15 | -11 | -17 | -63 | -93 | -48 | -26 | -78 | -289 | -134 | -24 | -12 | -47 |
| | 16 | -4 | -4 | -25 | -31 | -110 | -157 | -53 | -52 | -32 | -20 | -62 | -42 | -55 | -210 | -95 | -43 | -69 | -178 | -63 | -33 | -343 | -118 | -54 | -42 | -79 |
| Q | 17 | -86 | -88 | -14 | -5 | -12 | -35 | -39 | -39 | -21 | -17 | -23 | -16 | -33 | -20 | -5 | -16 | -23 | -16 | -56 | -27 | -3 | 1 | -1 | -7 | -25 |
| | 18 | -13 | -35 | -66 | -30 | -1 | -2 | -14 | -9 | -6 | -39 | -72 | -125 | -70 | -81 | -229 | -137 | -23 | -20 | -57 | -205 | -149 | -72 | -22 | -22 | -62 |
| | 19 | -57 | -99 | -24 | -6 | -4 | -59 | -88 | -109 | -24 | -37 | -38 | -84 | -265 | -12 | -4 | -44 | -41 | -255 | -235 | -5 | -11 | -66 | -217 | -164 | -81 |
| Q | 20 | -13 | -10 | -4 | -4 | -12 | -22 | -46 | -48 | -8 | -5 | -9 | -12 | -12 | -22 | -12 | -15 | -16 | -12 | -6 | -10 | -17 | -6 | -7 | -12 | -14 |
| | 21 | -83 | -93 | -62 | -13 | -5 | -10 | -19 | -46 | -46 | -22 | -45 | -235 | -194 | -60 | -20 | -28 | -176 | -199 | -32 | -51 | -244 | -275 | -419 | -259 | -110 |
| | 22 | -183 | -129 | -134 | -86 | -26 | -51 | -14 | -36 | -35 | -41 | -31 | -42 | -20 | -84 | -132 | -84 | -89 | -383 | -128 | 0 | -4 | -5 | -9 | -10 | -73 |
| D | 23 | -3 | -13 | -10 | -4 | -8 | -15 | -45 | -18 | -74 | -50 | -88 | -26 | -77 | -227 | -383 | -100 | -63 | -462 | -315 | -115 | -120 | -286 | -239 | -107 | -119 |
| | 24 | -53 | -44 | -10 | -44 | -95 | -86 | -18 | -47 | -71 | -3 | -2 | -9 | -19 | -88 | -168 | -289 | -262 | -60 | -4 | -7 | -32 | -70 | -227 | -291 | -84 |
| D | 25 | -16 | -10 | -123 | -553 | -573 | -406 | -173 | -35 | -32 | -40 | -21 | -5 | -9 | -22 | -13 | -28 | -59 | -75 | -92 | -8 | -48 | -23 | -127 | -41 | -106 |
| Q | 26 | -11 | -15 | -8 | -7 | -5 | -35 | -8 | -11 | -11 | -9 | -14 | -9 | -6 | -8 | -16 | -19 | -20 | -14 | -13 | -7 | -9 | -10 | -8 | -6 | -12 |
| | 27 | -7 | -55 | -56 | -177 | -39 | -103 | -312 | -226 | -356 | -419 | -457 | -300 | -366 | -356 | -104 | -93 | -116 | -65 | -58 | -15 | -27 | -52 | -22 | -26 | -159 |
| | 28 | -43 | -41 | -20 | -20 | -33 | -18 | -62 | -45 | -28 | -12 | -54 | -76 | -65 | -135 | -22 | -170 | -80 | -59 | -189 | -58 | -52 | -41 | -97 | -60 | -62 |
| | 29 | -23 | -7 | -35 | -27 | -34 | -22 | -15 | -15 | -33 | -97 | -126 | -111 | -232 | -186 | -117 | -186 | -305 | -362 | -165 | -117 | -177 | -389 | -265 | -93 | -131 |
| | 30 | -60 | -87 | -181 | -100 | -63 | -55 | -66 | -65 | -86 | -208 | -90 | -188 | -393 | -144 | -38 | -17 | -42 | -135 | -156 | -184 | -207 | -27 | -55 | -96 | -114 |
| | 31 | -175 | -221 | -124 | -108 | -56 | -7 | -6 | -6 | -13 | -11 | -35 | -42 | -26 | -21 | -49 | -192 | -208 | -355 | -316 | -263 | -165 | -256 | -295 | -35 | -124 |
| | MEAN | -71 | -64 | -56 | -72 | -90 | -66 | -63 | -79 | -96 | -104 | -106 | -114 | -147 | -126 | -112 | -125 | -139 | -161 | -142 | -127 | -120 | -110 | -127 | -91 | -104 |
| 5Q | MEAN | -31 | -34 | -12 | -8 | -10 | -23 | -27 | -39 | -32 | -21 | -19 | -38 | -55 | -40 | -45 | -51 | -68 | -62 | -32 | -22 | -28 | -29 | -30 | -30 | -33 |
| 5D | MEAN | -94 | -63 | -54 | -192 | -263 | -157 | -100 | -121 | -224 | -253 | -214 | -187 | -282 | -227 | -242 | -207 | -217 | -235 | -237 | -281 | -204 | -215 | -282 | -164 | -196 |

JANUARY 1968 AU INDICES VALUES ARE EXPRESSED IN GAMMAS

| | UT | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| D | 1 | 49 | 105 | 113 | 116 | 178 | 156 | 132 | 172 | 140 | 121 | 98 | 53 | 155 | 126 | 164 | 169 | 187 | 64 | 51 | 56 | 79 | 60 | 77 | 69 | 112 |
| D | 2 | 62 | 60 | 111 | 100 | 110 | 125 | 86 | 92 | 67 | 41 | 107 | 120 | 61 | 99 | 146 | 129 | 104 | 180 | 151 | 108 | 135 | 114 | 84 | 70 | 103 |
| | 3 | 106 | 109 | 49 | 67 | 71 | 76 | 94 | 128 | 73 | 50 | 24 | 23 | 29 | 30 | 65 | 48 | 38 | 26 | 24 | 17 | 20 | 23 | 28 | 48 | 53 |
| Q | 4 | 57 | 78 | 58 | 31 | 33 | 41 | 28 | 29 | 42 | 64 | 68 | 85 | 48 | 46 | 29 | 28 | 19 | 29 | 97 | 141 | 151 | 93 | 52 | 154 | 63 |
| | 5 | 104 | 64 | 71 | 108 | 110 | 109 | 77 | 78 | 74 | 83 | 51 | 54 | 45 | 36 | 64 | 134 | 54 | 58 | 44 | 51 | 87 | 84 | 81 | 47 | 74 |
| D | 6 | 53 | 75 | 99 | 158 | 89 | 80 | 72 | 54 | 56 | 83 | 80 | 49 | 40 | 48 | 118 | 126 | 147 | 157 | 142 | 90 | 108 | 94 | 113 | 97 | 93 |
| | 7 | 85 | 78 | 90 | 70 | 217 | 70 | 55 | 55 | 49 | 42 | 58 | 61 | 40 | 40 | 71 | 23 | 67 | 112 | 22 | 18 | 14 | 25 | 21 | 29 | 59 |
| Q | 8 | 40 | 73 | 65 | 59 | 56 | 59 | 51 | 45 | 31 | 55 | 51 | 75 | 71 | 38 | 28 | 67 | 41 | 47 | 19 | 24 | 24 | 23 | 21 | 26 | 45 |
| Q | 9 | 24 | 28 | 29 | 33 | 41 | 26 | 20 | 27 | 37 | 35 | 29 | 26 | 25 | 19 | 30 | 54 | 38 | 34 | 20 | 20 | 22 | 30 | 29 | 31 | 29 |
| Q | 10 | 48 | 48 | 49 | 75 | 52 | 83 | 96 | 88 | 80 | 103 | 100 | 118 | 91 | 107 | 122 | 131 | 49 | 25 | 30 | 33 | 39 | 40 | 45 | 44 | 71 |
| | 11 | 36 | 34 | 35 | 50 | 57 | 62 | 47 | 55 | 53 | 41 | 39 | 58 | 80 | 100 | 104 | 215 | 201 | 224 | 244 | 171 | 146 | 132 | 138 | 168 | 104 |
| | 12 | 156 | 67 | 47 | 67 | 152 | 60 | 96 | 77 | 96 | 121 | 80 | 44 | 88 | 92 | 82 | 113 | 170 | 114 | 132 | 272 | 189 | 168 | 64 | 60 | 109 |
| | 13 | 46 | 32 | 22 | 53 | 44 | 59 | 58 | 77 | 144 | 82 | 78 | 79 | 78 | 110 | 116 | 91 | 52 | 48 | 30 | 32 | 74 | 129 | 127 | 144 | 75 |
| | 14 | 134 | 128 | 82 | 70 | 62 | 76 | 108 | 82 | 127 | 150 | 89 | 87 | 91 | 57 | 27 | 29 | 51 | 45 | 60 | 113 | 163 | 151 | 76 | 95 | 90 |
| | 15 | 109 | 108 | 93 | 71 | 111 | 100 | 79 | 82 | 90 | 132 | 124 | 71 | 183 | 213 | 105 | 60 | 112 | 99 | 149 | 196 | 118 | 79 | 52 | 134 | 111 |
| | 16 | 87 | 69 | 42 | 40 | 43 | 59 | 57 | 84 | 70 | 67 | 59 | 47 | 43 | 66 | 98 | 83 | 105 | 136 | 175 | 280 | 114 | 66 | 54 | 47 | 83 |
| | 17 | 54 | 58 | 56 | 69 | 69 | 56 | 108 | 75 | 118 | 111 | 72 | 67 | 62 | 65 | 41 | 60 | 78 | 69 | 79 | 103 | 91 | 95 | 55 | 78 | 75 |
| | 18 | 45 | 77 | 108 | 102 | 72 | 131 | 117 | 145 | 101 | 58 | 64 | 89 | 121 | 106 | 58 | 65 | 37 | 30 | 42 | 32 | 36 | 38 | 35 | 30 | 72 |
| | 19 | 31 | 34 | 34 | 34 | 37 | 66 | 63 | 124 | 191 | 118 | 90 | 63 | 78 | 57 | 60 | 52 | 137 | 169 | 193 | 117 | 109 | 77 | 151 | 198 | 95 |
| D | 20 | 104 | 133 | 111 | 128 | 62 | 43 | 67 | 72 | 81 | 72 | 193 | 136 | 100 | 47 | 92 | 95 | 49 | 32 | 38 | 90 | 48 | 39 | 35 | 37 | 79 |
| | 21 | 35 | 39 | 36 | 39 | 52 | 79 | 75 | 68 | 101 | 97 | 93 | 79 | 51 | 80 | 92 | 30 | 31 | 44 | 39 | 27 | 42 | 51 | 37 | 39 | 57 |
| | 22 | 31 | 31 | 26 | 37 | 46 | 33 | 44 | 49 | 56 | 48 | 86 | 87 | 74 | 61 | 25 | 83 | 104 | 79 | 60 | 56 | 57 | 54 | 48 | 32 | 54 |
| | 23 | 34 | 27 | 22 | 46 | 29 | 54 | 96 | 113 | 106 | 49 | 22 | 28 | 34 | 30 | 24 | 30 | 30 | 29 | 29 | 57 | 82 | 38 | 42 | 39 | 45 |
| | 24 | 53 | 45 | 38 | 34 | 28 | 28 | 46 | 58 | 70 | 79 | 90 | 58 | 69 | 55 | 60 | 19 | 74 | 45 | 57 | 92 | 88 | 88 | 61 | 49 | 58 |
| Q | 25 | 55 | 36 | 46 | 40 | 48 | 40 | 30 | 36 | 40 | 46 | 50 | 68 | 63 | 37 | 28 | 28 | 29 | 34 | 23 | 21 | 27 | 40 | 25 | 26 | 38 |
| | 26 | 19 | 12 | 17 | 29 | 48 | 29 | 40 | 48 | 98 | 74 | 34 | 58 | 37 | 78 | 76 | 220 | 235 | 145 | 55 | 36 | 44 | 35 | 33 | 22 | 63 |
| | 27 | 17 | 34 | 29 | 27 | 38 | 29 | 59 | 68 | 94 | 60 | 29 | 35 | 28 | 27 | 18 | 20 | 24 | 28 | 63 | 99 | 107 | 97 | 103 | 111 | 52 |
| | 28 | 73 | 36 | 49 | 40 | 55 | 28 | 14 | 16 | 14 | 16 | 20 | 20 | 26 | 61 | 40 | 34 | 55 | 108 | 154 | 136 | 196 | 136 | 116 | 82 | 64 |
| D | 29 | 20 | 47 | 71 | 114 | 169 | 172 | 159 | 111 | 72 | 73 | 61 | 50 | 43 | 42 | 54 | 16 | 21 | 33 | 124 | 147 | 132 | 103 | 82 | 66 | 83 |
| | 30 | 38 | 80 | 71 | 106 | 109 | 213 | 196 | 84 | 35 | 33 | 61 | 58 | 33 | 29 | 33 | 55 | 32 | 45 | 50 | 57 | 50 | 37 | 72 | 64 | 68 |
| | 31 | 52 | 39 | 43 | 58 | 40 | 62 | 81 | 116 | 83 | 79 | 68 | 48 | 46 | 32 | 45 | 50 | 46 | 26 | 38 | 36 | 21 | 23 | 31 | 40 | 50 |
| | MEAN | 60 | 61 | 59 | 67 | 75 | 74 | 76 | 78 | 80 | 74 | 70 | 64 | 66 | 66 | 68 | 76 | 78 | 75 | 79 | 88 | 84 | 73 | 64 | 70 | 72 |
| 5Q | MEAN | 45 | 53 | 49 | 48 | 46 | 50 | 45 | 45 | 46 | 61 | 60 | 74 | 60 | 49 | 47 | 62 | 35 | 34 | 38 | 48 | 53 | 45 | 34 | 56 | 49 |
| 5D | MEAN | 60 | 84 | 101 | 123 | 122 | 115 | 103 | 100 | 83 | 78 | 108 | 82 | 80 | 72 | 115 | 107 | 102 | 93 | 101 | 98 | 100 | 82 | 78 | 68 | 94 |

FEBRUARY 1958 AU INDICES VALUES ARE EXPRESSED IN GAMMAS

| | UT | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 40 | 29 | 30 | 27 | 33 | 25 | 50 | 91 | 80 | 102 | 53 | 49 | 76 | 97 | 101 | 82 | 52 | 38 | 91 | 129 | 40 | 95 | 81 | 81 | 66 |
| | 2 | 96 | 153 | 92 | 75 | 48 | 38 | 41 | 39 | 73 | 87 | 106 | 69 | 78 | 207 | 108 | 106 | 104 | 166 | 93 | 143 | 134 | 65 | 175 | 74 | 99 |
| | 3 | 188 | 59 | 72 | 55 | 53 | 56 | 63 | 100 | 104 | 83 | 92 | 94 | 80 | 45 | 59 | 154 | 177 | 100 | 54 | 63 | 49 | 81 | 122 | 142 | 89 |
| | 4 | 94 | 85 | 53 | 85 | 110 | 135 | 172 | 194 | 217 | 62 | 205 | 160 | 85 | 86 | 54 | 32 | 55 | 50 | 30 | 26 | 31 | 26 | 23 | 16 | 87 |
| | 5 | 18 | 23 | 25 | 28 | 26 | 24 | 18 | 26 | 37 | 52 | 53 | 39 | 19 | 26 | 41 | 61 | 26 | 20 | 34 | 69 | 76 | 101 | 97 | 85 | 43 |
| Q | 6 | 68 | 35 | 34 | 39 | 22 | 14 | 12 | 13 | 19 | 25 | 24 | 13 | 12 | 9 | 11 | 11 | 17 | 19 | 7 | 9 | 15 | 14 | 11 | 14 | 19 |
| Q | 7 | 14 | 14 | 14 | 15 | 14 | 15 | 18 | 18 | 14 | 15 | 14 | 17 | 22 | 19 | 17 | 23 | 35 | 29 | 40 | 36 | 66 | 127 | 104 | 63 | 32 |
| | 8 | 88 | 55 | 95 | 71 | 105 | 35 | 43 | 48 | 61 | 59 | 43 | 36 | 66 | 91 | 70 | 90 | 71 | 45 | 111 | 148 | 106 | 139 | 140 | 111 | 80 |
| | 9 | 95 | 102 | 77 | 83 | 71 | 115 | 135 | 166 | 103 | 134 | 101 | 90 | 147 | 153 | 117 | 70 | 32 | 56 | 131 | 175 | 167 | 160 | 57 | 140 | 112 |
| D | 10 | 140 | 38 | 83 | 56 | 169 | 159 | 135 | 128 | 97 | 151 | 109 | 140 | 74 | 67 | 43 | 35 | 199 | 56 | 261 | 190 | 87 | 113 | -20 | -67 | 104 |
| D | 11 | 153 | 95 | 140 | 134 | 212 | 180 | 82 | 55 | 36 | 124 | 167 | 256 | 304 | 269 | 264 | 294 | 236 | 216 | 97 | 70 | 113 | 152 | 116 | 69 | 160 |
| | 12 | 74 | 67 | 81 | 61 | 99 | 117 | 115 | 181 | 74 | 51 | 77 | 99 | 123 | 51 | 47 | 49 | 55 | 78 | 65 | 28 | 35 | 23 | 19 | 16 | 70 |
| | 13 | 15 | 15 | 14 | 15 | 14 | 51 | 96 | 106 | 112 | 89 | 74 | 98 | 136 | 103 | 55 | 74 | 206 | 130 | 58 | 36 | 26 | 29 | 27 | 24 | 67 |
| Q | 14 | 47 | 34 | 18 | 17 | 12 | 14 | 15 | 19 | 20 | 25 | 19 | 12 | 16 | 20 | 17 | 33 | 24 | 25 | 25 | 24 | 30 | 25 | 50 | 35 | 24 |
| D | 15 | 29 | 24 | 25 | 27 | 31 | 24 | 42 | 46 | 80 | 145 | 189 | 266 | 131 | 260 | 255 | 198 | 197 | 204 | 90 | 68 | 58 | 56 | 40 | 41 | 105 |
| | 16 | 60 | 87 | 47 | 45 | 40 | 51 | 74 | 42 | 41 | 64 | 83 | 99 | 80 | 69 | 66 | 76 | 38 | 43 | 55 | 43 | 42 | 24 | 25 | 62 | 57 |
| | 17 | 39 | 43 | 39 | 50 | 43 | 47 | 62 | 60 | 80 | 103 | 103 | 151 | 138 | 95 | 109 | 131 | 82 | 46 | 110 | 112 | 89 | 130 | 105 | 102 | 86 |
| | 18 | 65 | 54 | 35 | 29 | 26 | 37 | 56 | 88 | 159 | 223 | 227 | 197 | 82 | 159 | 118 | 97 | 131 | 227 | 132 | 115 | 110 | 83 | 50 | 59 | 107 |
| | 19 | 42 | 78 | 74 | 113 | 124 | 97 | 78 | 76 | 50 | 40 | 24 | 26 | 16 | 20 | 32 | 14 | 14 | 13 | 16 | 9 | 9 | 8 | 8 | 9 | 41 |
| D | 20 | 19 | 27 | 41 | 46 | 33 | 34 | 49 | 99 | 208 | 266 | 120 | 172 | 141 | 206 | 246 | 189 | 258 | 206 | 167 | 138 | 121 | 109 | 55 | 108 | 127 |
| | 21 | 60 | 117 | 125 | 112 | 114 | 97 | 88 | 95 | 113 | 161 | 79 | 97 | 70 | 81 | 89 | 84 | 130 | 133 | 138 | 127 | 129 | 213 | 159 | 135 | 114 |
| | 22 | 60 | 52 | 30 | 47 | 62 | 78 | 73 | 52 | 58 | 74 | 79 | 67 | 80 | 51 | 27 | 55 | 48 | 59 | 51 | 43 | 36 | 25 | 21 | 18 | 52 |
| | 23 | 19 | 17 | 18 | 19 | 20 | 32 | 59 | 40 | 33 | 24 | 16 | 16 | 20 | 18 | 29 | 34 | 36 | 31 | 34 | 29 | 44 | 34 | 25 | 28 | 28 |
| | 24 | 32 | 26 | 25 | 23 | 31 | 44 | 72 | 75 | 49 | 61 | 48 | 45 | 21 | 20 | 34 | 46 | 30 | 30 | 22 | 13 | 16 | 15 | 13 | 16 | 34 |
| Q | 25 | 17 | 16 | 29 | 28 | 29 | 15 | 41 | 44 | 35 | 45 | 15 | 12 | 17 | 28 | 26 | 50 | 49 | 34 | 38 | 65 | 29 | 24 | 23 | 21 | 30 |
| Q | 26 | 19 | 19 | 20 | 21 | 22 | 20 | 14 | 13 | 20 | 21 | 20 | 11 | 16 | 17 | 19 | 21 | 25 | 29 | 32 | 51 | 99 | 89 | 94 | 116 | 35 |
| | 27 | 80 | 37 | 25 | 24 | 19 | 18 | 30 | 24 | 26 | 32 | 21 | 24 | 42 | 31 | 53 | 44 | 58 | 30 | 191 | 254 | 209 | 239 | 188 | 168 | 78 |
| D | 28 | 176 | 123 | 82 | 92 | 75 | 87 | 88 | 93 | 99 | 98 | 98 | 118 | 108 | 179 | 243 | 370 | 304 | 299 | 120 | 129 | 55 | 103 | 35 | 53 | 134 |
| | 29 | 30 | 52 | 121 | 117 | 156 | 201 | 139 | 124 | 89 | 70 | 106 | 186 | 90 | 97 | 28 | 32 | 73 | 50 | 94 | 157 | 115 | 35 | 29 | 38 | 93 |
| | MEAN | 65 | 56 | 54 | 54 | 63 | 64 | 68 | 74 | 75 | 86 | 82 | 92 | 79 | 89 | 82 | 88 | 95 | 85 | 82 | 86 | 74 | 81 | 65 | 61 | 75 |
| 5Q | MEAN | 33 | 24 | 23 | 24 | 20 | 16 | 20 | 21 | 22 | 26 | 18 | 13 | 17 | 19 | 18 | 28 | 30 | 27 | 28 | 37 | 48 | 56 | 56 | 50 | 28 |
| 5D | MEAN | 103 | 71 | 74 | 71 | 104 | 97 | 79 | 84 | 104 | 157 | 137 | 190 | 152 | 196 | 210 | 217 | 239 | 196 | 147 | 119 | 87 | 107 | 45 | 41 | 126 |

MARCH 1968 AU INDICES VALUES ARE EXPRESSED IN GAMMAS

| | UT | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 69 | 144 | 89 | 49 | 45 | 60 | 77 | 54 | 48 | 80 | 62 | 153 | 206 | 172 | 116 | 199 | 217 | 195 | 83 | 53 | 49 | 24 | 17 | 10 | 95 |
| | 2 | 11 | 15 | 57 | 67 | 49 | 67 | 102 | 69 | 66 | 109 | 81 | 85 | 49 | 86 | 95 | 101 | 71 | 100 | 77 | 70 | 137 | 117 | 127 | 148 | 82 |
| | 3 | 127 | 132 | 73 | 42 | 40 | 38 | 42 | 136 | 180 | 126 | 106 | 228 | 257 | 195 | 139 | 89 | 177 | 146 | 151 | 248 | 266 | 193 | 176 | 208 | 146 |
| | 4 | 125 | 139 | 100 | 65 | 91 | 129 | 129 | 132 | 128 | 259 | 383 | 324 | 233 | 157 | 125 | 196 | 284 | 243 | 191 | 184 | 191 | 208 | 146 | 256 | 184 |
| | 5 | 268 | 176 | 86 | 113 | 138 | 111 | 96 | 71 | 132 | 166 | 160 | 169 | 212 | 197 | 134 | 75 | 49 | 48 | 93 | 150 | 158 | 218 | 244 | 156 | 143 |
| | 6 | 46 | 54 | 48 | 46 | 29 | 27 | 55 | 76 | 100 | 64 | 104 | 87 | 88 | 42 | 24 | 37 | 42 | 46 | 94 | 94 | 115 | 118 | 127 | 69 | 68 |
| Q | 7 | 47 | 57 | 41 | 62 | 41 | 27 | 35 | 54 | 91 | 106 | 73 | 85 | 39 | 46 | 86 | 42 | 45 | 41 | 49 | 71 | 58 | 104 | 75 | 64 | 60 |
| Q | 8 | 76 | 95 | 61 | 54 | 44 | 50 | 42 | 42 | 45 | 35 | 31 | 60 | 47 | 35 | 28 | 25 | 36 | 40 | 58 | 82 | 97 | 123 | 130 | 69 | 59 |
| Q | 9 | 41 | 34 | 51 | 50 | 40 | 43 | 25 | 42 | 49 | 58 | 74 | 41 | 35 | 30 | 28 | 19 | 23 | 27 | 42 | 40 | 39 | 33 | 45 | 89 | 42 |
| | 10 | 125 | 104 | 86 | 70 | 117 | 212 | 202 | 140 | 119 | 80 | 70 | 65 | 95 | 80 | 64 | 167 | 97 | 107 | 128 | 167 | 168 | 136 | 51 | 39 | 112 |
| | 11 | 32 | 41 | 60 | 24 | 101 | 82 | 167 | 212 | 155 | 113 | 61 | 24 | 16 | 13 | 13 | 17 | 15 | 16 | 15 | 26 | 48 | 56 | 42 | 31 | 58 |
| | 12 | 31 | 21 | 19 | 21 | 23 | 19 | 16 | 20 | 22 | 45 | 79 | 208 | 150 | 69 | 86 | 86 | 72 | 138 | 189 | 205 | 202 | 177 | 138 | 64 | 88 |
| Q | 13 | 56 | 49 | 39 | 28 | 38 | 25 | 23 | 36 | 47 | 34 | 30 | 20 | 22 | 22 | 20 | 23 | 24 | 19 | 20 | 30 | 34 | 30 | 39 | 69 | 32 |
| D | 14 | 108 | 120 | 119 | 110 | 87 | 137 | 131 | 126 | 157 | 162 | 241 | 195 | 126 | 150 | 197 | 279 | 239 | 230 | 153 | 207 | 182 | 192 | 176 | 106 | 164 |
| D | 15 | 93 | 102 | 60 | 45 | 80 | 100 | 210 | 197 | 187 | 155 | 175 | 183 | 175 | 197 | 92 | 56 | 83 | 152 | 146 | 135 | 179 | 167 | 87 | 83 | 131 |
| D | 16 | 101 | 55 | 104 | 95 | 181 | 143 | 97 | 149 | 151 | 170 | 140 | 155 | 176 | 240 | 114 | 36 | 38 | 39 | 54 | 70 | 88 | 134 | 137 | 115 | 116 |
| | 17 | 108 | 75 | 75 | 70 | 132 | 114 | 49 | 82 | 83 | 50 | 50 | 73 | 55 | 62 | 38 | 24 | 17 | 36 | 32 | 62 | 66 | 63 | 49 | 52 | 63 |
| | 18 | 63 | 64 | 39 | 51 | 60 | 49 | 65 | 99 | 85 | 82 | 56 | 58 | 51 | 30 | 37 | 43 | 57 | 79 | 37 | 45 | 37 | 42 | 44 | 39 | 55 |
| | 19 | 36 | 42 | 39 | 21 | 15 | 21 | 48 | 77 | 104 | 130 | 161 | 89 | 70 | 125 | 78 | 53 | 88 | 138 | 100 | 95 | 50 | 46 | 33 | 37 | 71 |
| | 20 | 33 | 41 | 53 | 111 | 66 | 32 | 23 | 32 | 32 | 41 | 139 | 191 | 151 | 141 | 119 | 62 | 39 | 35 | 27 | 55 | 32 | 64 | 49 | 62 | 68 |
| | 21 | 33 | 41 | 28 | 39 | 30 | 36 | 64 | 62 | 48 | 60 | 39 | 30 | 45 | 72 | 130 | 80 | 33 | 47 | 107 | 72 | 30 | 27 | 34 | 29 | 51 |
| Q | 22 | 32 | 44 | 29 | 25 | 21 | 32 | 23 | 26 | 25 | 25 | 40 | 66 | 81 | 60 | 54 | 41 | 25 | 25 | 29 | 34 | 42 | 46 | 35 | 36 | 37 |
| | 23 | 40 | 37 | 34 | 40 | 19 | 29 | 18 | 42 | 35 | 45 | 37 | 63 | 86 | 68 | 74 | 70 | 39 | 27 | 56 | 90 | 102 | 224 | 203 | 114 | 66 |
| D | 24 | 132 | 103 | 101 | 71 | 77 | 131 | 181 | 173 | 169 | 299 | 154 | 179 | 144 | 136 | 174 | 190 | 200 | 216 | 163 | 138 | 218 | 195 | 142 | 130 | 159 |
| | 25 | 171 | 155 | 135 | 110 | 163 | 152 | 279 | 183 | 172 | 122 | 93 | 116 | 171 | 139 | 101 | 82 | 102 | 123 | 158 | 236 | 194 | 223 | 203 | 108 | 155 |
| | 26 | 129 | 98 | 116 | 115 | 107 | 108 | 64 | 86 | 89 | 127 | 182 | 215 | 203 | 184 | 128 | 170 | 182 | 133 | 190 | 131 | 133 | 175 | 215 | 215 | 146 |
| | 27 | 137 | 101 | 110 | 81 | 164 | 215 | 302 | 160 | 163 | 148 | 133 | 93 | 104 | 77 | 98 | 154 | 143 | 135 | 215 | 212 | 263 | 301 | 265 | 220 | 166 |
| | 28 | 191 | 157 | 157 | 152 | 67 | 138 | 147 | 113 | 107 | 140 | 161 | 148 | 135 | 114 | 177 | 157 | 157 | 141 | 164 | 154 | 192 | 255 | 199 | 151 | 154 |
| | 29 | 161 | 200 | 121 | 146 | 163 | 159 | 142 | 152 | 141 | 233 | 279 | 241 | 144 | 169 | 180 | 115 | 70 | 106 | 120 | 79 | 103 | 128 | 305 | 286 | 164 |
| D | 30 | 158 | 91 | 103 | 137 | 164 | 223 | 268 | 183 | 130 | 55 | 64 | 82 | 78 | 64 | 92 | 209 | 197 | 312 | 295 | 250 | 282 | 204 | 140 | 78 | 161 |
| | 31 | 66 | 56 | 24 | 52 | 28 | 66 | 70 | 103 | 91 | 81 | 78 | 81 | 99 | 162 | 165 | 88 | 86 | 198 | 221 | 241 | 233 | 244 | 193 | 227 | 123 |
| | MEAN | 92 | 86 | 74 | 70 | 78 | 90 | 103 | 101 | 102 | 110 | 114 | 123 | 114 | 108 | 97 | 96 | 95 | 108 | 112 | 120 | 129 | 138 | 125 | 108 | 104 |
| 5Q | MEAN | 50 | 56 | 44 | 44 | 37 | 35 | 30 | 40 | 51 | 52 | 50 | 54 | 45 | 39 | 43 | 30 | 31 | 30 | 40 | 51 | 54 | 67 | 65 | 65 | 46 |
| 5D | MEAN | 118 | 96 | 97 | 92 | 118 | 147 | 177 | 166 | 159 | 168 | 155 | 159 | 140 | 157 | 134 | 154 | 151 | 190 | 162 | 160 | 190 | 178 | 136 | 102 | 146 |

APRIL 1968 AU INDICES VALUES ARE EXPRESSED IN GAMMAS

| | UT | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| D | 1 | 123 | 86 | 125 | 185 | 207 | 145 | 111 | 151 | 151 | 122 | 138 | 145 | 207 | 162 | 133 | 145 | 85 | 139 | 131 | 128 | 152 | 155 | 102 | 71 | 137 |
| | 2 | 93 | 116 | 75 | 47 | 34 | 71 | 113 | 126 | 97 | 44 | 91 | 99 | 81 | 50 | 98 | 73 | 32 | 51 | 89 | 139 | 163 | 157 | 186 | 171 | 96 |
| | 3 | 141 | 88 | 104 | 118 | 144 | 55 | 144 | 163 | 142 | 90 | 164 | 139 | 101 | 172 | 137 | 140 | 57 | 40 | 64 | 42 | 29 | 44 | 90 | 146 | 106 |
| | 4 | 196 | 107 | 127 | 114 | 100 | 118 | 109 | 169 | 108 | 108 | 136 | 131 | 84 | 57 | 108 | 85 | 107 | 71 | 64 | 54 | 48 | 45 | 65 | 129 | 102 |
| D | 5 | 148 | 129 | 98 | 107 | 135 | 211 | 220 | 187 | 128 | 106 | 38 | 67 | 20 | 21 | 80 | 146 | 135 | 248 | 352 | 308 | 130 | 222 | 160 | 79 | 144 |
| D | 6 | 53 | 45 | 62 | 139 | 52 | 174 | 120 | 223 | 185 | 123 | 124 | 128 | 134 | 133 | 104 | 105 | 237 | 253 | 157 | 156 | 118 | 107 | 90 | 66 | 129 |
| | 7 | 47 | 49 | 55 | 86 | 69 | 82 | 64 | 114 | 114 | 98 | 111 | 62 | 46 | 77 | 96 | 61 | 34 | 48 | 49 | 31 | 29 | 34 | 29 | 48 | 64 |
| Q | 8 | 33 | 34 | 33 | 45 | 32 | 50 | 33 | 47 | 31 | 70 | 68 | 69 | 41 | 19 | 12 | 11 | 22 | 25 | 24 | 30 | 25 | 21 | 18 | 10 | 33 |
| Q | 9 | 11 | 11 | 6 | 5 | 6 | 9 | 12 | 14 | 17 | 21 | 23 | 30 | 22 | 22 | 20 | 15 | 14 | 15 | 26 | 31 | 36 | 38 | 65 | 49 | 22 |
| | 10 | 47 | 67 | 54 | 56 | 77 | 139 | 147 | 135 | 125 | 92 | 86 | 67 | 52 | 29 | 24 | 22 | 58 | 89 | 144 | 97 | 84 | 94 | 43 | 39 | 78 |
| | 11 | 44 | 66 | 42 | 68 | 84 | 69 | 110 | 129 | 128 | 119 | 88 | 111 | 64 | 30 | 25 | 54 | 40 | 37 | 38 | 41 | 30 | 36 | 25 | 29 | 63 |
| | 12 | 20 | 13 | 17 | 14 | 30 | 25 | 28 | 28 | 40 | 32 | 44 | 41 | 47 | 46 | 44 | 54 | 46 | 58 | 82 | 132 | 71 | 121 | 208 | 196 | 60 |
| | 13 | 68 | 53 | 105 | 189 | 184 | 124 | 72 | 44 | 69 | 135 | 189 | 169 | 220 | 112 | 103 | 187 | 256 | 249 | 176 | 143 | 147 | 227 | 127 | 78 | 143 |
| D | 14 | 108 | 59 | 95 | 105 | 115 | 161 | 60 | 28 | 23 | 28 | 124 | 156 | 139 | 92 | 39 | 138 | 197 | 216 | 188 | 132 | 60 | 65 | 66 | 84 | 103 |
| | 15 | 37 | 64 | 28 | 17 | 22 | 38 | 68 | 47 | 129 | 97 | 93 | 36 | 88 | 101 | 121 | 132 | 172 | 140 | 153 | 158 | 145 | 105 | 109 | 98 | 92 |
| | 16 | 99 | 97 | 70 | 99 | 114 | 61 | 49 | 57 | 116 | 85 | 94 | 94 | 50 | 60 | 64 | 59 | 28 | 47 | 59 | 86 | 120 | 204 | 145 | 109 | 86 |
| | 17 | 67 | 46 | 27 | 26 | 78 | 90 | 137 | 115 | 107 | 136 | 183 | 114 | 46 | 93 | 85 | 59 | 115 | 179 | 180 | 99 | 63 | 82 | 69 | 61 | 94 |
| | 18 | 47 | 59 | 61 | 80 | 62 | 126 | 83 | 110 | 103 | 143 | 133 | 123 | 85 | 21 | 40 | 51 | 45 | 82 | 109 | 91 | 64 | 67 | 58 | 52 | 79 |
| Q | 19 | 43 | 53 | 69 | 78 | 77 | 88 | 86 | 90 | 104 | 100 | 101 | 103 | 104 | 95 | 82 | 61 | 73 | 57 | 57 | 55 | 54 | 63 | 54 | 53 | 75 |
| Q | 20 | 54 | 54 | 50 | 45 | 33 | 31 | 27 | 22 | 15 | 16 | 20 | 22 | 30 | 20 | 16 | 17 | 22 | 31 | 23 | 24 | 19 | 20 | 16 | 18 | 27 |
| Q | 21 | 19 | 19 | 19 | 20 | 19 | 15 | 18 | 30 | 32 | 45 | 55 | 71 | 109 | 77 | 45 | 22 | 19 | 30 | 39 | 39 | 37 | 34 | 42 | 55 | 38 |
| | 22 | 77 | 73 | 78 | 49 | 82 | 89 | 128 | 195 | 289 | 125 | 45 | 34 | 33 | 49 | 70 | 134 | 101 | 82 | 112 | 147 | 161 | 163 | 220 | 164 | 113 |
| | 23 | 116 | 137 | 131 | 168 | 161 | 235 | 279 | 99 | 70 | 85 | 80 | 93 | 100 | 102 | 93 | 53 | 38 | 81 | 149 | 228 | 224 | 196 | 176 | 175 | 136 |
| | 24 | 100 | 96 | 100 | 170 | 217 | 237 | 87 | 55 | 56 | 78 | 128 | 87 | 73 | 42 | 57 | 83 | 96 | 119 | 103 | 86 | 62 | 66 | 67 | 43 | 96 |
| | 25 | 34 | 20 | 18 | 19 | 16 | 16 | 41 | 66 | 61 | 53 | 34 | 33 | 20 | 23 | 56 | 75 | 69 | 85 | 48 | 91 | 152 | 282 | 290 | 323 | 80 |
| D | 26 | 239 | 169 | 153 | 131 | 126 | 173 | 261 | 247 | 208 | 144 | 184 | 172 | 108 | 153 | 303 | 338 | 144 | 124 | 217 | 332 | 266 | 234 | 143 | 225 | 200 |
| | 27 | 144 | 141 | 82 | 135 | 86 | 53 | 87 | 153 | 219 | 118 | 62 | 28 | 22 | 53 | 66 | 43 | 65 | 67 | 193 | 196 | 240 | 108 | 76 | 51 | 104 |
| | 28 | 92 | 112 | 136 | 152 | 205 | 125 | 93 | 118 | 80 | 109 | 130 | 60 | 68 | 53 | 70 | 91 | 71 | 106 | 144 | 165 | 222 | 266 | 288 | 283 | 135 |
| | 29 | 303 | 237 | 283 | 204 | 194 | 142 | 180 | 163 | 132 | 137 | 142 | 78 | 117 | 152 | 121 | 148 | 152 | 98 | 65 | 60 | 144 | 154 | 253 | 232 | 165 |
| | 30 | 109 | 53 | 38 | 31 | 29 | 24 | 64 | 119 | 127 | 151 | 105 | 49 | 36 | 34 | 41 | 59 | 67 | 89 | 112 | 68 | 56 | 107 | 107 | 94 | 74 |
| | MEAN | 90 | 81 | 78 | 90 | 93 | 99 | 101 | 108 | 107 | 94 | 100 | 87 | 78 | 72 | 78 | 89 | 87 | 99 | 112 | 113 | 105 | 117 | 113 | 108 | 96 |
| 5Q | MEAN | 32 | 34 | 35 | 39 | 33 | 39 | 35 | 41 | 40 | 50 | 53 | 59 | 61 | 47 | 35 | 25 | 30 | 32 | 34 | 36 | 34 | 35 | 39 | 37 | 39 |
| 5D | MEAN | 134 | 98 | 105 | 133 | 127 | 173 | 154 | 167 | 139 | 105 | 122 | 134 | 122 | 112 | 132 | 174 | 160 | 196 | 209 | 211 | 145 | 157 | 112 | 105 | 143 |

MAY 1968 AU INDICES VALUES ARE EXPRESSED IN GAMMAS

| | UT | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 111 | 64 | 28 | 41 | 16 | 11 | 6 | 20 | 51 | 46 | 65 | 102 | 82 | 114 | 148 | 183 | 118 | 178 | 210 | 180 | 235 | 317 | 116 | 116 | 107 |
| | 2 | 83 | 119 | 37 | 40 | 179 | 110 | 122 | 101 | 127 | 233 | 199 | 136 | 83 | 106 | 99 | 46 | 45 | 53 | 32 | 36 | 56 | 60 | 54 | 92 | 96 |
| | 3 | 63 | 30 | 83 | 146 | 258 | 178 | 108 | 74 | 58 | 82 | 65 | 79 | 114 | 72 | 66 | 81 | 67 | 42 | 34 | 38 | 47 | 49 | 54 | 42 | 80 |
| Q | 4 | 42 | 43 | 19 | 10 | 11 | 16 | 18 | 47 | 43 | 52 | 38 | 43 | 27 | 23 | 8 | 25 | 61 | 64 | 62 | 36 | 68 | 23 | 38 | 42 | 36 |
| Q | 5 | 24 | 19 | 11 | 24 | 13 | 23 | 13 | 22 | 12 | 48 | 91 | 42 | 24 | 47 | 37 | 43 | 45 | 51 | 43 | 37 | 39 | 21 | 25 | 23 | 32 |
| Q | 6 | 23 | 18 | 16 | 24 | 20 | 17 | 11 | 15 | 15 | 26 | 28 | 43 | 34 | 46 | 43 | 30 | 36 | 45 | 50 | 41 | 37 | 33 | 30 | 28 | 30 |
| D | 7 | 30 | 45 | 59 | 57 | 166 | 213 | 128 | 149 | 112 | 288 | 290 | 39 | 96 | 323 | 443 | 309 | 340 | 228 | 132 | 119 | 158 | 204 | 190 | 125 | 177 |
| | 8 | 71 | 88 | 40 | 46 | 16 | 38 | 22 | 23 | 25 | 60 | 106 | 96 | 46 | 20 | 7 | 22 | 55 | 94 | 107 | 96 | 67 | 66 | 87 | 106 | 59 |
| D | 9 | 92 | 114 | 163 | 204 | 188 | 121 | 189 | 178 | 127 | 147 | 257 | 189 | 260 | 289 | 290 | 271 | 389 | 300 | 349 | 370 | 261 | 270 | 257 | 189 | 228 |
| | 10 | 110 | 94 | 62 | 193 | 118 | 34 | 51 | 35 | 26 | 21 | 28 | 27 | 40 | 34 | 38 | 34 | 36 | 47 | 28 | 46 | 33 | 46 | 75 | 71 | 55 |
| | 11 | 78 | 47 | 137 | 184 | 60 | 112 | 219 | 343 | 261 | 121 | 144 | 127 | 76 | 86 | 88 | 51 | 92 | 93 | 84 | 105 | 96 | 103 | 115 | 131 | 123 |
| D | 12 | 80 | 156 | 125 | 169 | 213 | 217 | 174 | 104 | 104 | 153 | 257 | 189 | 178 | 189 | 177 | 200 | 214 | 219 | 249 | 288 | 370 | 289 | 210 | 237 | 198 |
| | 13 | 133 | 26 | 58 | 97 | 105 | 55 | 48 | 79 | 115 | 200 | 269 | 124 | 71 | 88 | 57 | 83 | 214 | 187 | 131 | 160 | 126 | 79 | 78 | 50 | 110 |
| | 14 | 55 | 38 | 62 | 71 | 48 | 46 | 103 | 35 | 30 | 47 | 79 | 125 | 85 | 90 | 100 | 82 | 47 | 68 | 95 | 99 | 70 | 46 | 67 | 81 | 70 |
| | 15 | 97 | 93 | 48 | 85 | 70 | 170 | 162 | 177 | 140 | 104 | 79 | 54 | 25 | 14 | 13 | 31 | 51 | 58 | 50 | 52 | 75 | 115 | 123 | 113 | 83 |
| | 16 | 76 | 104 | 104 | 85 | 175 | 97 | 110 | 132 | 100 | 160 | 185 | 206 | 159 | 208 | 254 | 316 | 289 | 305 | 293 | 278 | 278 | 250 | 256 | 261 | 195 |
| | 17 | 34 | 41 | 95 | 216 | 223 | 178 | 208 | 215 | 209 | 209 | 214 | 170 | 146 | 124 | 268 | 155 | 227 | 291 | 234 | 203 | 210 | 306 | 96 | 88 | 182 |
| | 18 | 78 | 39 | 38 | 72 | 93 | 76 | 166 | 183 | 158 | 122 | 71 | 77 | 79 | 55 | 107 | 285 | 273 | 294 | 240 | 177 | 94 | 135 | 169 | 102 | 133 |
| | 19 | 65 | 51 | 92 | 106 | 50 | 30 | 60 | 135 | 140 | 58 | 48 | 76 | 141 | 72 | 68 | 115 | 256 | 329 | 264 | 258 | 306 | 251 | 113 | 73 | 132 |
| D | 20 | 137 | 143 | 148 | 208 | 224 | 127 | 227 | 186 | 184 | 201 | 226 | 185 | 127 | 109 | 66 | 130 | 165 | 153 | 105 | 66 | 135 | 186 | 188 | 180 | 159 |
| D | 21 | 157 | 191 | 204 | 106 | 59 | 49 | 76 | 183 | 132 | 143 | 140 | 131 | 186 | 212 | 249 | 388 | 393 | 316 | 268 | 285 | 213 | 233 | 317 | 270 | 204 |
| | 22 | 185 | 203 | 151 | 208 | 194 | 156 | 195 | 158 | 119 | 102 | 104 | 92 | 63 | 73 | 80 | 81 | 95 | 140 | 80 | 43 | 30 | 26 | 166 | 102 | 119 |
| | 23 | 39 | 109 | 112 | 33 | 32 | 24 | 26 | 35 | 83 | 101 | 213 | 177 | 159 | 110 | 67 | 91 | 150 | 224 | 246 | 214 | 230 | 276 | 200 | 159 | 130 |
| | 24 | 196 | 227 | 214 | 227 | 157 | 145 | 221 | 179 | 82 | 129 | 142 | 106 | 176 | 113 | 55 | 84 | 65 | 118 | 155 | 158 | 125 | 210 | 136 | 151 | 149 |
| | 25 | 148 | 69 | 47 | 60 | 42 | 33 | 76 | 49 | 105 | 171 | 173 | 135 | 53 | 49 | 50 | 129 | 174 | 112 | 161 | 179 | 242 | 144 | 116 | 91 | 109 |
| Q | 26 | 77 | 153 | 172 | 163 | 188 | 88 | 54 | 41 | 53 | 77 | 99 | 65 | 79 | 94 | 63 | 39 | 21 | 27 | 37 | 47 | 58 | 77 | 69 | 67 | 80 |
| Q | 27 | 63 | 57 | 53 | 67 | 70 | 70 | 62 | 60 | 62 | 55 | 66 | 73 | 61 | 48 | 44 | 44 | 49 | 67 | 67 | 57 | 56 | 43 | 84 | 81 | 61 |
| | 28 | 73 | 54 | 55 | 36 | 62 | 91 | 32 | 35 | 27 | 28 | 26 | 22 | 25 | 25 | 18 | 48 | 117 | 97 | 225 | 241 | 160 | 149 | 134 | 131 | 80 |
| | 29 | 154 | 183 | 170 | 228 | 308 | 281 | 251 | 266 | 342 | 280 | 188 | 87 | 120 | 125 | 128 | 215 | 380 | 360 | 287 | 126 | 127 | 155 | 106 | 80 | 206 |
| | 30 | 59 | 71 | 140 | 266 | 62 | 32 | 70 | 215 | 252 | 157 | 72 | 45 | 58 | 116 | 118 | 95 | 87 | 62 | 55 | 79 | 155 | 206 | 145 | 187 | 117 |
| | 31 | 72 | 75 | 152 | 122 | 56 | 30 | 29 | 59 | 150 | 93 | 95 | 186 | 188 | 77 | 43 | 49 | 157 | 233 | 135 | 81 | 71 | 81 | 53 | 48 | 97 |
| | MEAN | 87 | 89 | 96 | 116 | 112 | 93 | 104 | 114 | 111 | 120 | 131 | 105 | 99 | 102 | 106 | 121 | 152 | 157 | 145 | 135 | 136 | 144 | 125 | 113 | 117 |
| 5Q | MEAN | 46 | 58 | 56 | 58 | 60 | 43 | 32 | 37 | 37 | 52 | 64 | 53 | 45 | 52 | 39 | 36 | 42 | 51 | 52 | 44 | 52 | 39 | 49 | 48 | 48 |
| 5D | MEAN | 99 | 130 | 140 | 149 | 170 | 145 | 159 | 160 | 132 | 186 | 234 | 147 | 169 | 224 | 245 | 260 | 300 | 243 | 221 | 226 | 227 | 236 | 232 | 200 | 193 |

JUNE 1958 AU INDICES VALUES ARE EXPRESSED IN GAMMAS

| | UT | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 82 | 98 | 40 | 39 | 68 | 68 | 49 | 56 | 119 | 171 | 184 | 165 | 178 | 86 | 144 | 160 | 253 | 248 | 249 | 264 | 157 | 133 | 227 | 135 | 141 |
| | 2 | 165 | 151 | 198 | 230 | 266 | 220 | 222 | 199 | 151 | 139 | 112 | 117 | 90 | 97 | 120 | 85 | 41 | 118 | 212 | 260 | 213 | 265 | 245 | 113 | 168 |
| | 3 | 110 | 163 | 123 | 70 | 121 | 112 | 160 | 139 | 116 | 104 | 213 | 170 | 166 | 147 | 99 | 164 | 221 | 196 | 83 | 111 | 144 | 147 | 122 | 120 | 138 |
| | 4 | 98 | 93 | 133 | 51 | 57 | 69 | 29 | 92 | 165 | 103 | 62 | 72 | 73 | 96 | 90 | 76 | 116 | 161 | 130 | 116 | 154 | 124 | 233 | 170 | 107 |
| Q | 5 | 124 | 53 | 38 | 49 | 105 | 89 | 45 | 41 | 29 | 44 | 47 | 59 | 36 | 60 | 41 | 31 | 51 | 95 | 106 | 74 | 90 | 67 | 51 | 32 | 61 |
| Q | 6 | 24 | 18 | 17 | 21 | 12 | 29 | 59 | 30 | 18 | 47 | 73 | 123 | 151 | 126 | 74 | 49 | 28 | 18 | 23 | 19 | 31 | 19 | 32 | 37 | 45 |
| | 7 | 31 | 76 | 91 | 112 | 118 | 166 | 198 | 194 | 205 | 138 | 166 | 209 | 207 | 113 | 62 | 138 | 262 | 185 | 126 | 86 | 64 | 49 | 51 | 41 | 129 |
| | 8 | 56 | 71 | 53 | 32 | 122 | 119 | 85 | 110 | 97 | 99 | 63 | 119 | 90 | 68 | 69 | 195 | 369 | 287 | 168 | 256 | 197 | 121 | 126 | 122 | 129 |
| | 9 | 85 | 53 | 34 | 47 | 229 | 164 | 182 | 95 | 53 | 63 | 44 | 40 | 52 | 53 | 48 | 38 | 64 | 122 | 241 | 246 | 262 | 346 | 242 | 197 | 125 |
| D | 10 | 240 | 161 | 233 | 238 | 405 | 384 | 378 | 403 | 515 | 268 | 264 | 306 | 307 | 197 | 227 | 248 | 169 | 102 | 102 | 87 | 202 | 307 | 359 | 205 | 263 |
| D | 11 | 501 | 459 | 425 | 503 | 328 | 361 | 128 | 300 | 335 | 316 | 261 | 320 | 182 | 176 | 366 | 286 | 137 | 90 | 133 | 269 | 239 | 180 | 205 | 237 | 281 |
| D | 12 | 222 | 206 | 300 | 342 | 295 | 309 | 416 | 275 | 362 | 291 | 395 | 200 | 420 | 393 | 364 | 321 | 466 | 461 | 394 | 414 | 319 | 269 | 253 | 194 | 328 |
| D | 13 | 126 | 178 | 287 | 271 | 401 | 284 | 277 | 372 | 463 | 442 | 323 | 406 | 532 | 437 | 498 | 427 | 444 | 403 | 380 | 396 | 389 | 289 | 215 | 222 | 353 |
| D | 14 | 194 | 95 | 90 | 119 | 99 | 144 | 152 | 280 | 427 | 496 | 394 | 268 | 384 | 382 | 362 | 376 | 163 | 127 | 221 | 148 | 169 | 183 | 120 | 106 | 229 |
| | 15 | 89 | 42 | 42 | 51 | 74 | 87 | 183 | 122 | 95 | 87 | 103 | 123 | 88 | 63 | 31 | 32 | 69 | 93 | 57 | 123 | 87 | 51 | 126 | 145 | 86 |
| | 16 | 80 | 44 | 50 | 27 | 41 | 12 | 15 | 20 | 47 | 119 | 185 | 193 | 189 | 86 | 88 | 139 | 138 | 165 | 192 | 285 | 300 | 352 | 217 | 280 | 136 |
| | 17 | 150 | 140 | 75 | 192 | 123 | 258 | 329 | 374 | 328 | 321 | 246 | 72 | 31 | 35 | 25 | 22 | 41 | 57 | 67 | 85 | 103 | 94 | 113 | 51 | 139 |
| | 18 | 68 | 80 | 57 | 37 | 63 | 68 | 149 | 200 | 120 | 106 | 84 | 123 | 117 | 138 | 61 | 79 | 206 | 304 | 266 | 313 | 256 | 135 | 102 | 198 | 139 |
| | 19 | 132 | 142 | 188 | 137 | 267 | 213 | 193 | 217 | 190 | 148 | 153 | 94 | 106 | 87 | 165 | 100 | 120 | 171 | 164 | 153 | 253 | 237 | 216 | 176 | 168 |
| | 20 | 110 | 93 | 86 | 55 | 128 | 89 | 54 | 61 | 65 | 46 | 32 | 29 | 35 | 39 | 32 | 37 | 39 | 41 | 37 | 44 | 53 | 68 | 52 | 40 | 57 |
| Q | 21 | 32 | 24 | 15 | 9 | 11 | 11 | 7 | 10 | 13 | 22 | 32 | 34 | 47 | 41 | 36 | 32 | 30 | 29 | 34 | 51 | 48 | 35 | 43 | 39 | 29 |
| | 22 | 39 | 45 | 42 | 39 | 87 | 133 | 239 | 312 | 310 | 312 | 347 | 318 | 224 | 135 | 61 | 69 | 49 | 45 | 52 | 58 | 128 | 176 | 144 | 84 | 144 |
| | 23 | 90 | 99 | 100 | 98 | 122 | 168 | 174 | 244 | 177 | 146 | 88 | 85 | 84 | 80 | 49 | 49 | 38 | 35 | 47 | 60 | 80 | 114 | 86 | 122 | 101 |
| Q | 24 | 86 | 56 | 43 | 46 | 32 | 29 | 35 | 36 | 31 | 54 | 62 | 42 | 66 | 46 | 26 | 27 | 25 | 29 | 29 | 34 | 48 | 47 | 39 | 41 | 42 |
| Q | 25 | 46 | 47 | 40 | 38 | 19 | 19 | 26 | 72 | 41 | 29 | 30 | 27 | 20 | 20 | 19 | 16 | 64 | 53 | 54 | 47 | 60 | 45 | 44 | 121 | 42 |
| | 26 | 214 | 153 | 96 | 45 | 30 | 24 | 27 | 19 | 26 | 42 | 92 | 157 | 135 | 155 | 128 | 121 | 91 | 101 | 72 | 73 | 106 | 175 | 176 | 114 | 99 |
| | 27 | 86 | 102 | 81 | 69 | 124 | 135 | 137 | 120 | 66 | 99 | 216 | 172 | 165 | 94 | 91 | 122 | 109 | 71 | 96 | 143 | 128 | 158 | 146 | 122 | 119 |
| | 28 | 110 | 98 | 51 | 33 | 17 | 30 | 42 | 50 | 51 | 40 | 54 | 76 | 73 | 97 | 77 | 32 | 60 | 109 | 114 | 115 | 119 | 119 | 59 | 97 | 72 |
| | 29 | 115 | 87 | 43 | 65 | 92 | 47 | 85 | 32 | 29 | 24 | 26 | 32 | 25 | 29 | 42 | 64 | 120 | 138 | 92 | 207 | 231 | 159 | 314 | 190 | 95 |
| | 30 | 97 | 139 | 192 | 144 | 197 | 174 | 86 | 126 | 100 | 101 | 113 | 82 | 89 | 85 | 71 | 60 | 87 | 130 | 176 | 213 | 192 | 225 | 205 | 197 | 137 |
| | MEAN | 120 | 109 | 109 | 107 | 135 | 134 | 139 | 153 | 158 | 147 | 149 | 141 | 145 | 122 | 119 | 120 | 136 | 139 | 137 | 158 | 161 | 156 | 152 | 132 | 137 |
| 5Q | MEAN | 62 | 42 | 31 | 33 | 36 | 35 | 34 | 38 | 26 | 39 | 49 | 57 | 64 | 59 | 39 | 31 | 40 | 45 | 49 | 45 | 55 | 43 | 42 | 54 | 44 |
| 5D | MEAN | 257 | 220 | 267 | 295 | 306 | 296 | 270 | 326 | 420 | 363 | 327 | 300 | 365 | 317 | 363 | 332 | 276 | 237 | 246 | 263 | 264 | 246 | 230 | 193 | 291 |

JULY 1968 AU INDICES VALUES ARE EXPRESSED IN GAMMAS

| | UT | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 203 | 155 | 175 | 215 | 192 | 136 | 216 | 170 | 145 | 109 | 131 | 122 | 149 | 159 | 108 | 50 | 50 | 51 | 117 | 105 | 78 | 51 | 107 | 131 | 130 |
| | 2 | 122 | 160 | 125 | 93 | 54 | 72 | 112 | 154 | 266 | 259 | 142 | 116 | 86 | 119 | 73 | 119 | 92 | 73 | 79 | 86 | 46 | 74 | 134 | 190 | 119 |
| D | 3 | 155 | 139 | 164 | 115 | 218 | 285 | 215 | 231 | 281 | 88 | 128 | 87 | 76 | 84 | 116 | 88 | 88 | 87 | 124 | 164 | 186 | 83 | 73 | 98 | 141 |
| | 4 | 111 | 74 | 61 | 63 | 138 | 103 | 172 | 309 | 292 | 158 | 103 | 117 | 135 | 84 | 79 | 64 | 87 | 81 | 138 | 229 | 134 | 133 | 93 | 69 | 126 |
| | 5 | 105 | 111 | 63 | 137 | 93 | 40 | 40 | 52 | 135 | 265 | 146 | 59 | 96 | 60 | 53 | 91 | 118 | 101 | 110 | 91 | 52 | 70 | 55 | 59 | 92 |
| | 6 | 71 | 91 | 59 | 69 | 85 | 93 | 122 | 108 | 126 | 174 | 219 | 114 | 104 | 83 | 59 | 60 | 59 | 73 | 83 | 94 | 126 | 76 | 55 | 40 | 93 |
| | 7 | 31 | 42 | 44 | 60 | 68 | 129 | 179 | 195 | 258 | 219 | 116 | 58 | 22 | 20 | 30 | 64 | 65 | 98 | 80 | 51 | 59 | 48 | 51 | 39 | 84 |
| | 8 | 57 | 47 | 67 | 34 | 67 | 152 | 111 | 149 | 136 | 224 | 101 | 102 | 59 | 64 | 38 | 48 | 41 | 94 | 61 | 67 | 88 | 74 | 46 | 33 | 82 |
| Q | 9 | 29 | 39 | 37 | 46 | 72 | 134 | 123 | 149 | 56 | 77 | 60 | 62 | 47 | 36 | 27 | 37 | 45 | 46 | 53 | 51 | 56 | 61 | 81 | 119 | 64 |
| D | 10 | 145 | 115 | 83 | 205 | 334 | 402 | 283 | 234 | 249 | 341 | 307 | 309 | 332 | 427 | 106 | 47 | 85 | 117 | 196 | 266 | 266 | 305 | 303 | 283 | 239 |
| | 11 | 176 | 195 | 207 | 154 | 113 | 133 | 166 | 106 | 109 | 86 | 100 | 95 | 76 | 52 | 46 | 80 | 92 | 126 | 211 | 253 | 241 | 215 | 333 | 307 | 153 |
| | 12 | 261 | 145 | 204 | 120 | 78 | 62 | 33 | 20 | 15 | 18 | 15 | 26 | 39 | 54 | 35 | 105 | 105 | 65 | 46 | 15 | 14 | 24 | 26 | 31 | 65 |
| D | 13 | 29 | 43 | 71 | 45 | 168 | 104 | 119 | 76 | 16 | 17 | 15 | 11 | 11 | 18 | 12 | 20 | 129 | 312 | 465 | 423 | 279 | 327 | 218 | 198 | 130 |
| D | 14 | 272 | 358 | 309 | 301 | 196 | 87 | 63 | 55 | 33 | 15 | 56 | 126 | 73 | 58 | 51 | 69 | 88 | 122 | 231 | 175 | 88 | 88 | 104 | 75 | 129 |
| | 15 | 64 | 136 | 113 | 129 | 74 | 74 | 25 | 18 | 12 | 21 | 78 | 62 | 22 | 21 | 18 | 12 | 18 | 43 | 109 | 92 | 99 | 99 | 96 | 123 | 65 |
| | 16 | 127 | 74 | 45 | 64 | 95 | 157 | 35 | 16 | 68 | 48 | 38 | 32 | 30 | 61 | 77 | 64 | 223 | 215 | 101 | 85 | 46 | 40 | 60 | 73 | 78 |
| | 17 | 57 | 37 | 22 | 14 | 6 | 33 | 32 | 24 | 41 | 62 | 84 | 130 | 180 | 63 | 50 | 30 | 35 | 36 | 80 | 100 | 148 | 93 | 61 | 86 | 63 |
| | 18 | 123 | 118 | 163 | 219 | 179 | 81 | 132 | 58 | 27 | 48 | 71 | 127 | 124 | 160 | 153 | 127 | 90 | 95 | 66 | 74 | 72 | 46 | 49 | 106 | 105 |
| | 19 | 65 | 72 | 81 | 136 | 140 | 70 | 72 | 134 | 90 | 130 | 126 | 121 | 69 | 29 | 65 | 82 | 79 | 69 | 54 | 94 | 178 | 238 | 214 | 233 | 110 |
| Q | 20 | 142 | 60 | 30 | 28 | 23 | 17 | 19 | 17 | 18 | 18 | 17 | 14 | 15 | 28 | 30 | 29 | 31 | 41 | 54 | 68 | 67 | 88 | 62 | 79 | 41 |
| | 21 | 73 | 50 | 24 | 35 | 24 | 19 | 19 | 66 | 63 | 53 | 46 | 65 | 116 | 111 | 65 | 73 | 57 | 163 | 271 | 116 | 88 | 130 | 181 | 209 | 88 |
| D | 22 | 154 | 148 | 158 | 99 | 148 | 264 | 126 | 193 | 290 | 304 | 349 | 229 | 153 | 73 | 106 | 135 | 73 | 128 | 177 | 151 | 177 | 137 | 122 | 111 | 167 |
| | 23 | 111 | 73 | 83 | 153 | 185 | 287 | 179 | 273 | 208 | 57 | 112 | 86 | 78 | 87 | 86 | 125 | 110 | 66 | 67 | 54 | 72 | 56 | 58 | 93 | 115 |
| Q | 24 | 37 | 24 | 20 | 20 | 33 | 58 | 87 | 80 | 47 | 65 | 44 | 31 | 61 | 60 | 74 | 54 | 42 | 58 | 69 | 84 | 47 | 42 | 40 | 30 | 50 |
| | 25 | 36 | 42 | 53 | 44 | 69 | 84 | 115 | 76 | 63 | 82 | 70 | 70 | 63 | 53 | 100 | 80 | 62 | 90 | 92 | 68 | 56 | 75 | 52 | 55 | 69 |
| | 26 | 50 | 41 | 78 | 140 | 64 | 45 | 50 | 82 | 93 | 227 | 158 | 120 | 68 | 128 | 59 | 77 | 68 | 135 | 158 | 226 | 141 | 316 | 216 | 214 | 123 |
| | 27 | 155 | 158 | 145 | 158 | 184 | 151 | 124 | 122 | 177 | 146 | 129 | 150 | 129 | 93 | 95 | 53 | 44 | 63 | 62 | 90 | 103 | 90 | 62 | 68 | 115 |
| | 28 | 137 | 91 | 86 | 96 | 122 | 60 | 27 | 13 | 24 | 38 | 64 | 74 | 65 | 52 | 83 | 109 | 118 | 116 | 161 | 176 | 85 | 56 | 51 | 100 | 84 |
| Q | 29 | 124 | 117 | 81 | 50 | 52 | 92 | 34 | 32 | 50 | 33 | 27 | 39 | 22 | 15 | 52 | 26 | 45 | 69 | 66 | 59 | 64 | 48 | 41 | 27 | 53 |
| | 30 | 35 | 34 | 33 | 25 | 32 | 15 | 29 | 24 | 33 | 22 | 23 | 26 | 23 | 22 | 49 | 53 | 46 | 59 | 83 | 75 | 147 | 131 | 126 | 104 | 52 |
| Q | 31 | 96 | 50 | 19 | 52 | 29 | 33 | 36 | 106 | 55 | 41 | 94 | 104 | 51 | 51 | 27 | 29 | 36 | 38 | 37 | 55 | 44 | 59 | 44 | 29 | 51 |
| | MEAN | 108 | 98 | 94 | 101 | 108 | 112 | 100 | 108 | 112 | 111 | 102 | 93 | 83 | 78 | 65 | 68 | 75 | 95 | 113 | 121 | 108 | 109 | 104 | 110 | 99 |
| 5Q MEAN | | 86 | 58 | 37 | 39 | 42 | 67 | 60 | 77 | 45 | 47 | 48 | 50 | 39 | 38 | 42 | 35 | 40 | 50 | 56 | 63 | 56 | 60 | 54 | 57 | 52 |
| 5D MEAN | | 151 | 161 | 157 | 153 | 213 | 228 | 161 | 158 | 174 | 153 | 171 | 152 | 129 | 132 | 78 | 72 | 93 | 153 | 239 | 236 | 199 | 188 | 164 | 153 | 161 |

AUGUST 1958 AU INDICES VALUES ARE EXPRESSED IN GAMMAS

| | UT | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q | 1 | 25 | 21 | 25 | 33 | 39 | 26 | 39 | 64 | 96 | 88 | 72 | 32 | 37 | 47 | 57 | 52 | 48 | 54 | 44 | 44 | 51 | 55 | 48 | 30 | 47 |
| Q | 2 | 37 | 39 | 35 | 25 | 36 | 24 | 31 | 40 | 41 | 82 | 114 | 151 | 71 | 84 | 69 | 27 | 28 | 24 | 24 | 51 | 67 | 43 | 55 | 65 | 53 |
| | 3 | 65 | 91 | 72 | 222 | 294 | 126 | 173 | 177 | 282 | 198 | 110 | 91 | 96 | 72 | 68 | 88 | 113 | 133 | 108 | 82 | 100 | 89 | 61 | 49 | 123 |
| | 4 | 45 | 38 | 45 | 35 | 48 | 22 | 35 | 40 | 25 | 23 | 21 | 28 | 26 | 22 | 28 | 23 | 28 | 36 | 35 | 33 | 39 | 51 | 28 | 74 | 35 |
| | 5 | 50 | 45 | 51 | 40 | 169 | 50 | 34 | 26 | 52 | 170 | 225 | 78 | 125 | 127 | 131 | 157 | 148 | 59 | 58 | 46 | 64 | 127 | 86 | 99 | 92 |
| | 6 | 58 | 70 | 104 | 166 | 150 | 63 | 162 | 64 | 73 | 103 | 93 | 68 | 83 | 72 | 60 | 49 | 27 | 102 | 190 | 184 | 147 | 69 | 64 | 111 | 97 |
| | 7 | 127 | 119 | 133 | 67 | 63 | 93 | 81 | 85 | 154 | 114 | 101 | 171 | 198 | 105 | 97 | 80 | 107 | 46 | 54 | 59 | 50 | 47 | 94 | 109 | 98 |
| | 8 | 121 | 138 | 113 | 71 | 119 | 135 | 180 | 247 | 84 | 43 | 32 | 30 | 47 | 68 | 51 | 28 | 37 | 71 | 47 | 40 | 98 | 91 | 117 | 145 | 90 |
| | 9 | 191 | 141 | 134 | 75 | 45 | 66 | 82 | 19 | 34 | 27 | 39 | 47 | 58 | 33 | 40 | 50 | 131 | 193 | 91 | 177 | 146 | 84 | 196 | 127 | 93 |
| | 10 | 91 | 70 | 55 | 34 | 33 | 50 | 79 | 49 | 67 | 139 | 123 | 45 | 28 | 25 | 25 | 40 | 59 | 58 | 25 | 33 | 86 | 98 | 107 | 110 | 64 |
| | 11 | 140 | 192 | 98 | 102 | 86 | 152 | 111 | 51 | 40 | 30 | 35 | 31 | 23 | 31 | 21 | 21 | 48 | 61 | 48 | 55 | 39 | 25 | 17 | 23 | 62 |
| | 12 | 81 | 91 | 33 | 23 | 20 | 52 | 27 | 33 | 43 | 34 | 93 | 55 | 33 | 30 | 32 | 51 | 32 | 39 | 67 | 125 | 96 | 34 | 39 | 26 | 50 |
| | 13 | 22 | 22 | 24 | 37 | 12 | 13 | 26 | 29 | 32 | 26 | 22 | 23 | 37 | 43 | 77 | 107 | 165 | 173 | 102 | 151 | 241 | 111 | 194 | 197 | 79 |
| D | 14 | 246 | 177 | 112 | 146 | 140 | 160 | 179 | 180 | 300 | 211 | 220 | 212 | 186 | 127 | 176 | 79 | 64 | 223 | 233 | 168 | 143 | 176 | 274 | 233 | 182 |
| D | 15 | 134 | 96 | 61 | 205 | 244 | 212 | 144 | 222 | 123 | 263 | 198 | 184 | 195 | 277 | 221 | 295 | 286 | 218 | 240 | 123 | 194 | 198 | 146 | 129 | 192 |
| D | 16 | 107 | 127 | 56 | 37 | 202 | 138 | 173 | 208 | 145 | 132 | 89 | 50 | 83 | 157 | 179 | 278 | 395 | 401 | 226 | 167 | 338 | 291 | 89 | 100 | 174 |
| D | 17 | 114 | 108 | 104 | 194 | 201 | 179 | 123 | 179 | 121 | 248 | 135 | 153 | 229 | 350 | 396 | 397 | 359 | 161 | 118 | 131 | 149 | 129 | 53 | 118 | 185 |
| | 18 | 75 | 41 | 36 | 115 | 158 | 144 | 137 | 184 | 195 | 129 | 105 | 163 | 145 | 141 | 180 | 159 | 142 | 134 | 127 | 111 | 137 | 136 | 133 | 141 | 132 |
| | 19 | 147 | 130 | 71 | 83 | 45 | 50 | 73 | 113 | 138 | 180 | 151 | 95 | 53 | 39 | 49 | 61 | 169 | 202 | 135 | 58 | 52 | 42 | 34 | 36 | 92 |
| | 20 | 48 | 42 | 32 | 34 | 17 | 9 | 30 | 42 | 65 | 63 | 47 | 53 | 57 | 46 | 100 | 121 | 122 | 84 | 63 | 61 | 100 | 67 | 43 | 64 | 59 |
| | 21 | 58 | 49 | 57 | 47 | 58 | 40 | 63 | 97 | 29 | 28 | 46 | 26 | 27 | 26 | 18 | 13 | 23 | 25 | 35 | 45 | 32 | 28 | 27 | 52 | 40 |
| | 22 | 21 | 12 | 11 | 11 | 12 | 15 | 20 | 26 | 25 | 22 | 54 | 113 | 80 | 34 | 21 | 18 | 35 | 28 | 19 | 34 | 39 | 76 | 202 | 210 | 47 |
| | 23 | 162 | 141 | 98 | 168 | 274 | 181 | 99 | 91 | 168 | 153 | 147 | 126 | 69 | 71 | 43 | 59 | 47 | 100 | 108 | 215 | 217 | 134 | 165 | 145 | 133 |
| D | 24 | 116 | 119 | 144 | 59 | 143 | 182 | 207 | 166 | 240 | 215 | 149 | 183 | 72 | 58 | 64 | 34 | 61 | 89 | 106 | 110 | 106 | 105 | 98 | 79 | 121 |
| | 25 | 69 | 48 | 23 | 27 | 23 | 39 | 31 | 17 | 17 | 16 | 15 | 11 | 6 | 9 | 8 | 11 | 37 | 38 | 18 | 71 | 49 | 49 | 48 | 37 | 30 |
| | 26 | 13 | 13 | 16 | 32 | 27 | 17 | 20 | 30 | 74 | 54 | 35 | 20 | 26 | 56 | 53 | 40 | 15 | 24 | 36 | 32 | 30 | 37 | 43 | 45 | 33 |
| | 27 | 35 | 46 | 50 | 53 | 22 | 16 | 39 | 41 | 28 | 77 | 104 | 59 | 25 | 23 | 21 | 16 | 17 | 23 | 41 | 60 | 25 | 16 | 17 | 24 | 37 |
| Q | 28 | 36 | 38 | 39 | 23 | 49 | 41 | 30 | 29 | 41 | 31 | 26 | 23 | 23 | 21 | 20 | 23 | 24 | 13 | 25 | 39 | 41 | 37 | 24 | 23 | 30 |
| Q | 29 | 19 | 27 | 24 | 25 | 20 | 15 | 26 | 29 | 27 | 29 | 24 | 27 | 40 | 37 | 26 | 20 | 17 | 10 | 11 | 28 | 36 | 32 | 27 | 23 | 25 |
| Q | 30 | 39 | 60 | 81 | 28 | 29 | 19 | 21 | 39 | 49 | 36 | 28 | 28 | 38 | 28 | 19 | 20 | 19 | 27 | 27 | 33 | 37 | 36 | 28 | 22 | 33 |
| | 31 | 35 | 55 | 52 | 65 | 109 | 82 | 48 | 44 | 39 | 37 | 114 | 193 | 283 | 250 | 426 | 409 | 414 | 302 | 159 | 166 | 139 | 100 | 66 | 80 | 153 |
| | MEAN | 82 | 78 | 65 | 74 | 93 | 78 | 81 | 86 | 92 | 97 | 89 | 83 | 81 | 81 | 90 | 91 | 104 | 102 | 85 | 88 | 100 | 84 | 85 | 88 | 86 |
| 5Q | MEAN | 31 | 37 | 41 | 27 | 35 | 25 | 29 | 40 | 51 | 53 | 53 | 52 | 42 | 43 | 38 | 28 | 27 | 26 | 26 | 39 | 46 | 41 | 36 | 33 | 38 |
| 5D | MEAN | 143 | 125 | 97 | 128 | 186 | 174 | 165 | 191 | 186 | 214 | 158 | 156 | 153 | 194 | 207 | 217 | 233 | 218 | 185 | 140 | 186 | 180 | 132 | 132 | 171 |

SEPTEMBER 1968 AU INDICES VALUES ARE EXPRESSED IN GAMMAS

| | UT | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 77 | 58 | 99 | 120 | 183 | 183 | 96 | 57 | 75 | 184 | 190 | 143 | 176 | 103 | 65 | 70 | 77 | 97 | 68 | 43 | 48 | 78 | 76 | 67 | 102 |
| | 2 | 56 | 66 | 63 | 45 | 41 | 38 | 27 | 47 | 116 | 153 | 236 | 201 | 151 | 96 | 98 | 96 | 105 | 122 | 162 | 120 | 72 | 83 | 84 | 121 | 100 |
| | 3 | 104 | 130 | 54 | 78 | 69 | 67 | 163 | 117 | 124 | 159 | 136 | 166 | 101 | 68 | 54 | 85 | 210 | 83 | 27 | 124 | 138 | 115 | 58 | 80 | 105 |
| | 4 | 98 | 40 | 54 | 89 | 88 | 81 | 76 | 72 | 92 | 165 | 183 | 253 | 194 | 142 | 175 | 154 | 79 | 48 | 56 | 72 | 57 | 79 | 76 | 41 | 103 |
| | 5 | 32 | 50 | 57 | 53 | 144 | 131 | 169 | 115 | 85 | 89 | 92 | 86 | 113 | 55 | 47 | 51 | 48 | 63 | 60 | 61 | 71 | 97 | 128 | 122 | 84 |
| | 6 | 124 | 94 | 96 | 31 | 115 | 111 | 150 | 120 | 60 | 33 | 17 | 30 | 55 | 46 | 61 | 90 | 99 | 130 | 46 | 52 | 158 | 232 | 196 | 120 | 94 |
| | 7 | 126 | 120 | 45 | 37 | 35 | 49 | 37 | 42 | 46 | 54 | 38 | 53 | 64 | 36 | 39 | 67 | 100 | 91 | 152 | 268 | 337 | 189 | 73 | 72 | 90 |
| D | 8 | 131 | 168 | 150 | 210 | 205 | 243 | 237 | 242 | 146 | 258 | 304 | 294 | 344 | 379 | 404 | 231 | 139 | 186 | 178 | 91 | 58 | 50 | 38 | 56 | 198 |
| | 9 | 78 | 52 | 81 | 62 | 83 | 49 | 40 | 40 | 76 | 80 | 72 | 62 | 58 | 26 | 61 | 38 | 56 | 69 | 91 | 56 | 52 | 37 | 27 | 31 | 57 |
| | 10 | 46 | 35 | 46 | 31 | 19 | 21 | 24 | 25 | 26 | 50 | 86 | 77 | 50 | 56 | 67 | 84 | 99 | 56 | 31 | 31 | 30 | 49 | 63 | 70 | 49 |
| | 11 | 73 | 50 | 15 | 22 | 82 | 34 | 22 | 41 | 38 | 33 | 43 | 33 | 27 | 51 | 31 | 23 | 20 | 29 | 29 | 28 | 31 | 29 | 29 | 23 | 35 |
| | 12 | 22 | 29 | 33 | 32 | 59 | 79 | 130 | 154 | 188 | 174 | 211 | 267 | 204 | 162 | 385 | 311 | 236 | 253 | 215 | 157 | 121 | 194 | 211 | 159 | 166 |
| D | 13 | 82 | 167 | 120 | 150 | 258 | 290 | 206 | 171 | 109 | 92 | 152 | 275 | 279 | 238 | 241 | 270 | 213 | 169 | 190 | 99 | 74 | 87 | 90 | 134 | 173 |
| D | 14 | 100 | 163 | 176 | 117 | 96 | 66 | 168 | 179 | 151 | 200 | 241 | 199 | 249 | 215 | 103 | 154 | 158 | 86 | 87 | 91 | 137 | 155 | 76 | 89 | 144 |
| D | 15 | 86 | 117 | 98 | 173 | 158 | 118 | 165 | 166 | 150 | 109 | 96 | 174 | 171 | 98 | 175 | 227 | 118 | 188 | 187 | 124 | 75 | 71 | 72 | 64 | 133 |
| | 16 | 67 | 79 | 56 | 124 | 106 | 101 | 126 | 101 | 82 | 99 | 101 | 72 | 56 | 63 | 39 | 37 | 34 | 32 | 40 | 35 | 44 | 35 | 44 | 28 | 67 |
| | 17 | 42 | 52 | 49 | 50 | 29 | 39 | 38 | 61 | 92 | 41 | 39 | 46 | 41 | 35 | 20 | 10 | 25 | 47 | 34 | 29 | 26 | 26 | 22 | 16 | 38 |
| Q | 18 | 12 | 9 | 7 | 11 | 15 | 16 | 21 | 16 | 28 | 21 | 18 | 16 | 20 | 30 | 47 | 48 | 44 | 53 | 49 | 45 | 41 | 37 | 51 | 58 | 30 |
| | 19 | 33 | 31 | 52 | 84 | 210 | 135 | 153 | 181 | 137 | 206 | 86 | 32 | 32 | 13 | 23 | 59 | 32 | 22 | 24 | 31 | 30 | 28 | 26 | 39 | 71 |
| | 20 | 51 | 51 | 70 | 144 | 43 | 22 | 18 | 20 | 21 | 24 | 23 | 19 | 18 | 16 | 16 | 11 | 13 | 17 | 41 | 68 | 54 | 65 | 36 | 29 | 37 |
| | 21 | 33 | 26 | 23 | 36 | 37 | 81 | 75 | 118 | 54 | 24 | 18 | 33 | 131 | 135 | 72 | 128 | 148 | 79 | 35 | 90 | 83 | 34 | 40 | 34 | 65 |
| | 22 | 81 | 67 | 55 | 31 | 32 | 34 | 31 | 66 | 75 | 60 | 36 | 82 | 142 | 133 | 65 | 53 | 42 | 36 | 40 | 50 | 101 | 184 | 134 | 60 | 70 |
| D | 23 | 87 | 58 | 138 | 103 | 100 | 81 | 85 | 105 | 139 | 172 | 91 | 45 | 54 | 87 | 231 | 193 | 81 | 40 | 35 | 31 | 23 | 16 | 35 | 20 | 85 |
| Q | 24 | 24 | 14 | 19 | 21 | 19 | 12 | 9 | 13 | 7 | 12 | 15 | 16 | 8 | 9 | 6 | 10 | 15 | 16 | 28 | 65 | 31 | 21 | 26 | 24 | 18 |
| Q | 25 | 17 | 15 | 14 | 11 | 11 | 10 | 14 | 14 | 14 | 10 | 10 | 11 | 18 | 15 | 17 | 20 | 25 | 15 | 12 | 22 | 19 | 19 | 18 | 21 | 16 |
| Q | 26 | 22 | 24 | 23 | 28 | 21 | 23 | 41 | 53 | 60 | 31 | 27 | 25 | 24 | 41 | 58 | 66 | 60 | 36 | 24 | 23 | 22 | 19 | 18 | 19 | 33 |
| Q | 27 | 20 | 20 | 18 | 43 | 48 | 52 | 31 | 28 | 23 | 22 | 23 | 30 | 46 | 25 | 20 | 23 | 24 | 20 | 20 | 18 | 17 | 23 | 23 | 30 | 27 |
| | 28 | 33 | 27 | 32 | 24 | 25 | 23 | 29 | 44 | 39 | 46 | 48 | 61 | 91 | 65 | 86 | 66 | 76 | 60 | 89 | 90 | 90 | 55 | 48 | 48 | 54 |
| | 29 | 57 | 42 | 52 | 50 | 45 | 88 | 74 | 86 | 88 | 76 | 57 | 27 | 28 | 32 | 55 | 85 | 65 | 69 | 114 | 119 | 107 | 53 | 42 | 40 | 65 |
| | 30 | 38 | 34 | 30 | 34 | 20 | 19 | 20 | 31 | 37 | 33 | 58 | 62 | 37 | 36 | 50 | 47 | 53 | 33 | 40 | 119 | 131 | 115 | 145 | 179 | 58 |
| | MEAN | 62 | 63 | 52 | 68 | 80 | 77 | 83 | 84 | 79 | 90 | 92 | 96 | 99 | 84 | 94 | 94 | 83 | 75 | 73 | 75 | 76 | 76 | 67 | 63 | 79 |
| 5Q | MEAN | 19 | 16 | 16 | 23 | 23 | 23 | 23 | 25 | 26 | 19 | 19 | 20 | 23 | 24 | 30 | 33 | 34 | 28 | 27 | 35 | 26 | 24 | 27 | 30 | 25 |
| 5D | MEAN | 97 | 135 | 138 | 151 | 163 | 160 | 172 | 173 | 139 | 166 | 177 | 197 | 219 | 203 | 231 | 215 | 142 | 134 | 135 | 87 | 73 | 76 | 62 | 73 | 147 |

OCTOBER 1958 AU INDICES VALUES ARE EXPRESSED IN GAMMAS

| | UT | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 151 | 85 | 138 | 280 | 53 | 32 | 20 | 35 | 78 | 148 | 121 | 50 | 43 | 61 | 44 | 39 | 99 | 185 | 304 | 260 | 187 | 119 | 158 | 186 | 123 |
| D | 2 | 84 | 309 | 177 | 44 | 168 | 299 | 331 | 72 | 41 | 113 | 131 | 124 | 116 | 214 | 311 | 208 | 112 | 89 | 191 | 125 | 68 | 124 | 78 | 89 | 151 |
| | 3 | 120 | 125 | 156 | 144 | 102 | 186 | 181 | 174 | 222 | 155 | 144 | 66 | 51 | 56 | 26 | 24 | 24 | 27 | 31 | 28 | 35 | 35 | 30 | 33 | 91 |
| | 4 | 40 | 36 | 33 | 33 | 28 | 25 | 28 | 26 | 27 | 41 | 29 | 19 | 13 | 8 | 17 | 36 | 66 | 65 | 34 | 32 | 31 | 33 | 33 | 30 | 32 |
| Q | 5 | 35 | 31 | 29 | 32 | 35 | 21 | 48 | 49 | 92 | 96 | 42 | 31 | 23 | 18 | 19 | 17 | 1 | 3 | 9 | 18 | 23 | 19 | 16 | 17 | 30 |
| | 6 | 19 | 26 | 23 | 33 | 29 | 35 | 54 | 87 | 104 | 84 | 93 | 96 | 67 | 38 | 22 | 33 | 40 | 22 | 31 | 76 | 46 | 46 | 50 | 36 | 50 |
| | 7 | 39 | 46 | 55 | 60 | 82 | 79 | 85 | 57 | 27 | 19 | 9 | 9 | 13 | 14 | 18 | 8 | 21 | 85 | 146 | 146 | 174 | 134 | 67 | 73 | 62 |
| | 8 | 71 | 54 | 50 | 41 | 22 | 35 | 48 | 43 | 23 | 32 | 36 | 46 | 51 | 44 | 43 | 40 | 29 | 24 | 35 | 53 | 38 | 54 | 57 | 58 | 43 |
| | 9 | 66 | 83 | 77 | 78 | 57 | 29 | 27 | 16 | 14 | 19 | 18 | 17 | 21 | 21 | 43 | 40 | 64 | 56 | 32 | 34 | 59 | 62 | 88 | 108 | 47 |
| | 10 | 74 | 83 | 68 | 30 | 19 | 22 | 57 | 40 | 43 | 58 | 41 | 23 | 28 | 23 | 20 | 28 | 12 | 12 | 15 | 14 | 14 | 11 | 12 | 20 | 32 |
| Q | 11 | 23 | 22 | 19 | 22 | 24 | 27 | 20 | 30 | 21 | 19 | 21 | 18 | 18 | 16 | 14 | 13 | 12 | 19 | 18 | 22 | 22 | 25 | 31 | 30 | 21 |
| D | 12 | 50 | 21 | 73 | 155 | 226 | 209 | 196 | 217 | 357 | 267 | 121 | 150 | 131 | 73 | 228 | 125 | 115 | 150 | 89 | 229 | 167 | 159 | 43 | 59 | 150 |
| D | 13 | 140 | 163 | 91 | 82 | 120 | 112 | 136 | 141 | 108 | 189 | 134 | 122 | 112 | 70 | 128 | 82 | 88 | 74 | 67 | 46 | 68 | 73 | 98 | 95 | 106 |
| | 14 | 78 | 92 | 118 | 118 | 128 | 112 | 87 | 123 | 108 | 78 | 42 | 44 | 96 | 109 | 56 | 67 | 88 | 61 | 104 | 64 | 66 | 68 | 63 | 66 | 85 |
| | 15 | 47 | 34 | 20 | 30 | 32 | 18 | 37 | 26 | 55 | 79 | 65 | 29 | 25 | 20 | 24 | 33 | 36 | 20 | 19 | 17 | 26 | 40 | 20 | 19 | 32 |
| | 16 | 17 | 23 | 28 | 30 | 16 | 34 | 33 | 82 | 43 | 35 | 27 | 29 | 27 | 42 | 32 | 48 | 36 | 29 | 23 | 26 | 28 | 24 | 20 | 26 | 32 |
| | 17 | 51 | 62 | 83 | 72 | 27 | 52 | 30 | 28 | 66 | 70 | 45 | 25 | 19 | 35 | 72 | 66 | 48 | 37 | 29 | 43 | 112 | 151 | 120 | 127 | 61 |
| | 18 | 124 | 82 | 85 | 94 | 47 | 38 | 38 | 69 | 105 | 97 | 66 | 40 | 33 | 21 | 13 | 12 | 30 | 39 | 32 | 35 | 36 | 36 | 53 | 41 | 53 |
| | 19 | 58 | 54 | 49 | 42 | 35 | 28 | 25 | 42 | 37 | 30 | 28 | 37 | 61 | 36 | 24 | 16 | 17 | 14 | 42 | 113 | 159 | 146 | 97 | 123 | 55 |
| | 20 | 53 | 46 | 29 | 34 | 26 | 13 | 52 | 61 | 73 | 67 | 69 | 83 | 26 | 60 | 39 | 28 | 59 | 72 | 22 | 15 | 13 | 13 | 13 | 12 | 41 |
| Q | 21 | 14 | 13 | 13 | 16 | 17 | 18 | 18 | 12 | 18 | 22 | 28 | 21 | 20 | 11 | 10 | 8 | 6 | 8 | 8 | 12 | 15 | 12 | 16 | 16 | 15 |
| Q | 22 | 16 | 16 | 17 | 19 | 27 | 28 | 16 | 15 | 23 | 23 | 20 | 15 | 16 | 10 | 9 | 7 | 8 | 10 | 15 | 11 | 17 | 20 | 23 | 21 | 17 |
| Q | 23 | 18 | 17 | 19 | 20 | 17 | 18 | 18 | 17 | 18 | 17 | 21 | 21 | 24 | 21 | 18 | 22 | 21 | 29 | 38 | 26 | 28 | 21 | 20 | 21 | 21 |
| | 24 | 23 | 21 | 23 | 23 | 43 | 38 | 42 | 53 | 65 | 79 | 58 | 84 | 64 | 43 | 50 | 69 | 61 | 140 | 253 | 295 | 110 | 57 | 33 | 29 | 73 |
| | 25 | 23 | 22 | 26 | 36 | 85 | 78 | 127 | 73 | 83 | 262 | 331 | 232 | 114 | 35 | 93 | 38 | 41 | 27 | 27 | 33 | 46 | 48 | 33 | 36 | 81 |
| | 26 | 35 | 29 | 27 | 24 | 26 | 30 | 28 | 25 | 32 | 78 | 91 | 42 | 31 | 24 | 22 | 18 | 18 | 20 | 31 | 71 | 131 | 101 | 95 | 184 | 51 |
| | 27 | 102 | 49 | 39 | 34 | 29 | 37 | 55 | 87 | 77 | 47 | 33 | 32 | 45 | 47 | 64 | 31 | 23 | 29 | 43 | 44 | 32 | 25 | 31 | 32 | 44 |
| | 28 | 37 | 27 | 26 | 28 | 28 | 27 | 47 | 42 | 34 | 31 | 30 | 31 | 28 | 25 | 50 | 46 | 34 | 29 | 35 | 37 | 36 | 48 | 66 | 99 | 38 |
| D | 29 | 182 | 161 | 86 | 65 | 86 | 78 | 74 | 67 | 54 | 84 | 81 | 63 | 116 | 56 | 79 | 141 | 186 | 229 | 208 | 157 | 118 | 88 | 31 | 62 | 106 |
| | 30 | 92 | 170 | 129 | 103 | 48 | 41 | 48 | 40 | 37 | 60 | 71 | 113 | 54 | 109 | 112 | 60 | 28 | 51 | 27 | 44 | 66 | 70 | 67 | 65 | 71 |
| D | 31 | 114 | 118 | 65 | 73 | 64 | 85 | 172 | 313 | 217 | 250 | 200 | 122 | 184 | 229 | -62 | -1 | 123 | -70 | -22 | -83 | -42 | 44 | 101 | 95 | 95 |
| | MEAN | 65 | 69 | 63 | 61 | 56 | 61 | 70 | 70 | 74 | 85 | 72 | 59 | 54 | 51 | 53 | 45 | 50 | 51 | 62 | 66 | 62 | 61 | 54 | 62 | 62 |
| 5Q | MEAN | 21 | 20 | 19 | 22 | 24 | 22 | 24 | 25 | 34 | 35 | 26 | 21 | 20 | 15 | 14 | 13 | 10 | 14 | 18 | 18 | 21 | 19 | 21 | 21 | 21 |
| 5D | MEAN | 114 | 154 | 98 | 84 | 133 | 157 | 182 | 162 | 155 | 181 | 133 | 116 | 132 | 128 | 137 | 111 | 125 | 94 | 107 | 95 | 76 | 98 | 70 | 80 | 122 |

NOVEMBER 1958 AU INDICES VALUES ARE EXPRESSED IN GAMMAS

| | UT | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| D | 1 | 94 | 113 | 71 | 89 | 54 | 76 | 32 | 24 | 20 | 55 | 90 | 217 | -101 | -30 | 94 | 133 | 299 | 189 | 116 | 171 | 138 | -139 | 32 | 23 | 78 |
| D | 2 | 174 | 60 | 172 | 215 | 327 | 271 | 283 | 302 | 183 | 186 | 197 | 184 | 205 | 211 | 214 | 233 | 248 | 127 | 84 | 103 | 195 | 282 | 268 | 236 | 207 |
| D | 3 | 275 | 177 | 127 | 102 | 118 | 135 | 199 | 154 | 71 | 56 | 47 | 34 | 77 | 125 | 123 | 209 | 130 | 136 | 137 | 98 | 94 | 86 | 31 | 22 | 115 |
| D | 4 | 24 | 24 | 42 | 41 | 38 | 106 | 117 | 169 | 153 | 135 | 100 | 114 | 172 | 169 | 274 | 142 | 68 | 38 | 42 | 109 | 102 | 78 | 63 | 31 | 98 |
| | 5 | 15 | 25 | 15 | 6 | 24 | 23 | 30 | 23 | 33 | 42 | 71 | 59 | 70 | 49 | 10 | 15 | 10 | -2 | 5 | 9 | 26 | 19 | 6 | 7 | 25 |
| | 6 | 11 | 9 | 8 | 11 | 11 | 13 | 15 | 11 | 8 | 22 | 19 | 27 | 22 | 24 | 20 | 17 | 12 | 27 | 59 | 53 | 71 | 57 | 104 | 82 | 30 |
| | 7 | 108 | 129 | 156 | 99 | 101 | 101 | 237 | 160 | 150 | 140 | 166 | 161 | 93 | 100 | 95 | 70 | 35 | 25 | 30 | 17 | 29 | 29 | 28 | 24 | 95 |
| | 8 | 10 | 12 | 13 | 19 | 21 | 31 | 46 | 156 | 109 | 104 | 183 | 188 | 82 | 63 | 249 | 215 | 172 | 121 | 34 | 70 | 85 | 83 | 78 | 61 | 92 |
| D | 9 | 59 | 53 | 158 | 138 | 217 | 157 | 85 | 139 | 109 | 135 | 250 | 105 | 124 | 145 | 210 | 90 | 117 | 61 | 51 | 70 | 37 | 17 | 25 | 25 | 107 |
| | 10 | 30 | 23 | 30 | 27 | 55 | 40 | 53 | 39 | 55 | 99 | 56 | 85 | 155 | 60 | 43 | 67 | 119 | 169 | 114 | 96 | 123 | 88 | 60 | 70 | 73 |
| | 11 | 94 | 99 | 72 | 112 | 94 | 109 | 100 | 76 | 117 | 105 | 219 | 356 | 134 | 152 | 76 | 54 | 32 | 21 | 38 | 33 | 38 | 21 | 26 | 34 | 92 |
| Q | 12 | 30 | 20 | 18 | 14 | 20 | 8 | 8 | 11 | 10 | 15 | 27 | 36 | 21 | 12 | 12 | 9 | 8 | 4 | 5 | 5 | 9 | 10 | 13 | 14 | 14 |
| | 13 | 15 | 15 | 18 | 25 | 24 | 20 | 16 | 16 | 38 | 52 | 63 | 58 | 87 | 70 | 48 | 23 | 41 | 23 | 37 | 86 | 159 | 188 | 83 | 38 | 52 |
| Q | 14 | 18 | 19 | 13 | 20 | 28 | 25 | 22 | 24 | 26 | 19 | 19 | 19 | 25 | 18 | 22 | 15 | 20 | 18 | 24 | 29 | 35 | 45 | 37 | 40 | 24 |
| Q | 15 | 25 | 27 | 23 | 30 | 21 | 24 | 22 | 15 | 22 | 18 | 19 | 16 | 15 | 16 | 14 | 11 | 19 | 19 | 15 | 14 | 8 | 11 | 25 | 32 | 19 |
| | 16 | 30 | 46 | 42 | 48 | 37 | 27 | 24 | 22 | 24 | 59 | 42 | 61 | 59 | 112 | 98 | 74 | 174 | 191 | 122 | 116 | 82 | 107 | 57 | 60 | 71 |
| | 17 | 53 | 32 | 89 | 107 | 73 | 64 | 75 | 174 | 100 | 84 | 76 | 55 | 127 | 201 | 201 | 235 | 218 | 123 | 94 | 124 | 55 | 3 | 75 | 152 | 108 |
| | 18 | 81 | 44 | 110 | 123 | 155 | 209 | 146 | 230 | 223 | 167 | 228 | 119 | 32 | 17 | 37 | 36 | 75 | 103 | 185 | 193 | 140 | 82 | 86 | 76 | 121 |
| | 19 | 79 | 68 | 85 | 143 | 142 | 137 | 110 | 125 | 58 | 91 | 117 | 81 | 146 | 112 | 45 | 37 | 26 | 19 | 22 | 25 | 25 | 35 | 26 | 27 | 74 |
| | 20 | 21 | 27 | 36 | 30 | 55 | 77 | 64 | 57 | 95 | 279 | 192 | 178 | 210 | 191 | 380 | 400 | 254 | 188 | 89 | 157 | 69 | 40 | 55 | 58 | 133 |
| | 21 | 39 | 71 | 36 | 37 | 37 | 12 | 17 | 16 | 26 | 7 | 15 | 22 | 26 | 31 | 38 | 32 | 51 | 105 | 127 | 66 | 39 | 63 | 80 | 95 | 45 |
| | 22 | 55 | 32 | 40 | 36 | 23 | 21 | 19 | 37 | 20 | 61 | 69 | 26 | 34 | 57 | 64 | 50 | 26 | 19 | 40 | 29 | 41 | 101 | 146 | 87 | 47 |
| | 23 | 69 | 69 | 67 | 103 | 84 | 65 | 52 | 31 | 27 | 25 | 27 | 30 | 26 | 20 | 17 | 16 | 14 | 15 | 16 | 12 | 10 | 13 | 16 | 27 | 35 |
| | 24 | 35 | 36 | 31 | 40 | 25 | 22 | 23 | 26 | 29 | 27 | 34 | 42 | 39 | 32 | 26 | 27 | 39 | 40 | 52 | 48 | 38 | 36 | 47 | 42 | 35 |
| | 25 | 102 | 85 | 103 | 73 | 65 | 74 | 67 | 52 | 53 | 91 | 76 | 47 | 76 | 159 | 151 | 79 | 34 | 29 | 53 | 157 | 43 | 32 | 47 | 62 | 75 |
| | 26 | 45 | 43 | 61 | 53 | 53 | 39 | 39 | 44 | 43 | 62 | 71 | 93 | 82 | 53 | 34 | 36 | 110 | 85 | 97 | 121 | 58 | 60 | 55 | 68 | 63 |
| | 27 | 99 | 74 | 65 | 86 | 77 | 86 | 98 | 60 | 45 | 30 | 59 | 50 | 37 | 27 | 28 | 62 | 40 | 27 | 49 | 112 | 105 | 151 | 70 | 61 | 67 |
| | 28 | 75 | 76 | 89 | 78 | 64 | 57 | 38 | 31 | 47 | 65 | 84 | 182 | 88 | 31 | 21 | 18 | 27 | 46 | 99 | 69 | 47 | 63 | 38 | 36 | 61 |
| Q | 29 | 41 | 30 | 28 | 42 | 29 | 24 | 24 | 24 | 28 | 28 | 25 | 27 | 20 | 15 | 14 | 31 | 27 | 29 | 21 | 22 | 24 | 14 | 16 | 15 | 26 |
| Q | 30 | 15 | 12 | 12 | 17 | 17 | 16 | 14 | 14 | 15 | 16 | 18 | 17 | 24 | 28 | 17 | 9 | 9 | 14 | 20 | 16 | 11 | 11 | 30 | 47 | 17 |
| | MEAN | 61 | 52 | 61 | 65 | 70 | 69 | 69 | 75 | 65 | 76 | 89 | 90 | 74 | 76 | 89 | 82 | 82 | 67 | 63 | 74 | 65 | 56 | 57 | 55 | 70 |
| 5Q | MEAN | 26 | 26 | 19 | 25 | 23 | 19 | 18 | 18 | 20 | 19 | 22 | 23 | 21 | 18 | 16 | 15 | 17 | 17 | 17 | 17 | 17 | 18 | 24 | 30 | 20 |
| 5D | MEAN | 125 | 85 | 114 | 117 | 151 | 149 | 143 | 158 | 107 | 113 | 137 | 131 | 95 | 124 | 183 | 161 | 172 | 110 | 86 | 110 | 113 | 65 | 84 | 67 | 121 |

DECEMBER 1968 AU INDICES VALUES ARE EXPRESSED IN GAMMAS

| | UT | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 56 | 47 | 60 | 79 | 63 | 56 | 20 | 34 | 35 | 66 | 37 | 110 | 149 | 105 | 147 | 99 | 105 | 95 | 47 | 71 | 83 | 52 | 55 | 61 | 72 |
| | 2 | 57 | 55 | 41 | 30 | 32 | 26 | 53 | 50 | 44 | 36 | 46 | 37 | 65 | 74 | 42 | 36 | 48 | 65 | 65 | 35 | 40 | 63 | 52 | 36 | 47 |
| D | 3 | 28 | 40 | 46 | 67 | 87 | 146 | 63 | 74 | 80 | 46 | 82 | 97 | 146 | 227 | 204 | 200 | 208 | 191 | 190 | 82 | 93 | 136 | 83 | 79 | 112 |
| D | 4 | 80 | 92 | 57 | 41 | 27 | 42 | 77 | 78 | 94 | 135 | 120 | 126 | 167 | 95 | 75 | 182 | 237 | 80 | 103 | 83 | 93 | 69 | 79 | 56 | 95 |
| D | 5 | 68 | 42 | 63 | 71 | 88 | 65 | 86 | 93 | 140 | 191 | 203 | 112 | 67 | 64 | 143 | 78 | 46 | 88 | 88 | 210 | 192 | 166 | 108 | 65 | 106 |
| | 6 | 55 | 101 | 150 | 128 | 243 | 184 | 153 | 74 | 103 | 92 | 70 | 72 | 45 | 20 | 24 | 21 | 12 | 4 | 1 | 13 | 42 | 32 | 20 | 40 | 71 |
| Q | 7 | 51 | 35 | 23 | 20 | 13 | 13 | 22 | 25 | 39 | 34 | 26 | 52 | 67 | 43 | 25 | 40 | 52 | 81 | 29 | 17 | 28 | 26 | 35 | 40 | 35 |
| | 8 | 51 | 61 | 103 | 129 | 139 | 104 | 92 | 86 | 141 | 104 | 62 | 84 | 103 | 62 | 82 | 37 | 24 | 31 | 75 | 104 | 75 | 89 | 90 | 69 | 83 |
| | 9 | 57 | 67 | 108 | 58 | 39 | 34 | 36 | 17 | 23 | 39 | 52 | 50 | 39 | 40 | 53 | 18 | 36 | 35 | 91 | 175 | 178 | 91 | 73 | 88 | 62 |
| | 10 | 51 | 57 | 106 | 111 | 166 | 147 | 173 | 147 | 137 | 127 | 123 | 162 | 93 | 35 | 10 | 5 | 5 | 23 | 18 | 23 | 68 | 52 | 43 | 49 | 81 |
| | 11 | 30 | 35 | 39 | 62 | 81 | 58 | 50 | 43 | 43 | 27 | 32 | 26 | 20 | 12 | 28 | 51 | 56 | 65 | 152 | 153 | 127 | 128 | 82 | 53 | 61 |
| | 12 | 18 | 55 | 145 | 126 | 126 | 64 | 75 | 33 | 30 | 17 | 22 | 12 | 26 | 40 | 97 | 66 | 45 | 19 | 26 | 33 | 31 | 28 | 23 | 24 | 50 |
| | 13 | 32 | 51 | 48 | 37 | 29 | 31 | 14 | 14 | 14 | 20 | 31 | 22 | 16 | 8 | 23 | 47 | 40 | 92 | 107 | 74 | 92 | 35 | 26 | 28 | 39 |
| Q | 14 | 29 | 23 | 28 | 26 | 26 | 22 | 28 | 25 | 26 | 38 | 66 | 27 | 26 | 40 | 49 | 33 | 9 | 13 | 9 | 7 | 11 | 6 | 7 | 8 | 24 |
| | 15 | 14 | 20 | 30 | 36 | 46 | 51 | 67 | 72 | 109 | 46 | 33 | 37 | 29 | 32 | 30 | 46 | 55 | 45 | 27 | 52 | 114 | 176 | 55 | 26 | 52 |
| | 16 | 37 | 46 | 54 | 25 | 90 | 118 | 104 | 66 | 111 | 110 | 55 | 113 | 66 | 114 | 108 | 61 | 58 | 41 | 31 | 39 | 96 | 145 | 90 | 61 | 77 |
| Q | 17 | 85 | 122 | 64 | 42 | 43 | 50 | 54 | 107 | 79 | 63 | 49 | 58 | 47 | 34 | 23 | 22 | 18 | 16 | 13 | 14 | 16 | 24 | 24 | 25 | 46 |
| | 18 | 28 | 41 | 30 | 65 | 52 | 36 | 39 | 26 | 32 | 50 | 63 | 67 | 50 | 67 | 142 | 96 | 58 | 48 | 59 | 93 | 88 | 123 | 143 | 74 | 65 |
| | 19 | 66 | 100 | 69 | 59 | 42 | 99 | 49 | 92 | 88 | 65 | 49 | 58 | 118 | 59 | 29 | 25 | 16 | 47 | 53 | 49 | 26 | 44 | 76 | 57 | 60 |
| Q | 20 | 53 | 36 | 45 | 38 | 63 | 38 | 44 | 53 | 31 | 35 | 27 | 23 | 21 | 22 | 20 | 18 | 18 | 18 | 15 | 12 | 13 | 17 | 17 | 19 | 29 |
| | 21 | 36 | 41 | 43 | 31 | 34 | 45 | 42 | 27 | 45 | 40 | 53 | 196 | 149 | 79 | 84 | 47 | 110 | 147 | 85 | 89 | 117 | 83 | 26 | 158 | 75 |
| | 22 | 185 | 159 | 44 | 68 | 76 | 43 | 61 | 50 | 45 | 65 | 53 | 45 | 29 | 37 | 23 | 34 | 24 | 77 | 43 | 52 | 15 | 16 | 14 | 12 | 53 |
| D | 23 | 16 | 27 | 45 | 54 | 63 | 61 | 72 | 51 | 81 | 62 | 111 | 111 | 82 | 130 | 66 | 83 | 66 | 72 | 76 | 129 | 145 | 102 | 96 | 109 | 80 |
| | 24 | 131 | 92 | 73 | 59 | 43 | 55 | 54 | 52 | 48 | 28 | 21 | 18 | 20 | 36 | 44 | 71 | 57 | 44 | 21 | 8 | 21 | 24 | 52 | 93 | 49 |
| D | 25 | 53 | 28 | 51 | 31 | 136 | 185 | 204 | 116 | 119 | 44 | 72 | 44 | 34 | 34 | 21 | 28 | 32 | 54 | 45 | 26 | 34 | 26 | 39 | 30 | 62 |
| Q | 26 | 26 | 22 | 24 | 26 | 21 | 17 | 14 | 21 | 13 | 12 | 15 | 12 | 14 | 14 | 13 | 10 | 9 | 9 | 8 | 13 | 14 | 12 | 17 | 16 | 16 |
| | 27 | 17 | 23 | 19 | 40 | 35 | 35 | 47 | 49 | 74 | 153 | 257 | 209 | 82 | 77 | 66 | 41 | 22 | 14 | 5 | 10 | 21 | 37 | 17 | 18 | 57 |
| | 28 | 16 | 17 | 17 | 13 | 10 | 12 | 18 | 28 | 19 | 19 | 30 | 21 | 39 | 44 | 19 | 33 | 27 | 23 | 16 | 12 | 13 | 19 | 15 | 23 | 21 |
| | 29 | 24 | 20 | 18 | 14 | 11 | 12 | 11 | 11 | 27 | 37 | 45 | 45 | 58 | 70 | 44 | 31 | 94 | 112 | 121 | 131 | 68 | 93 | 90 | 94 | 53 |
| | 30 | 59 | 30 | 21 | 39 | 41 | 34 | 22 | 31 | 49 | 81 | 52 | 62 | 100 | 136 | 58 | 22 | 17 | 22 | 43 | 53 | 83 | 33 | 46 | 45 | 49 |
| | 31 | 48 | 66 | 50 | 40 | 40 | 18 | 17 | 23 | 36 | 32 | 37 | 33 | 33 | 21 | 18 | 40 | 87 | 218 | 214 | 250 | 156 | 101 | 67 | 86 | 72 |
| | MEAN | 50 | 54 | 55 | 54 | 65 | 61 | 60 | 54 | 63 | 62 | 64 | 69 | 65 | 60 | 58 | 52 | 55 | 61 | 61 | 68 | 71 | 66 | 54 | 53 | 60 |
| 5Q | MEAN | 49 | 48 | 37 | 30 | 33 | 28 | 32 | 46 | 38 | 36 | 37 | 34 | 35 | 31 | 26 | 25 | 21 | 27 | 15 | 13 | 16 | 17 | 20 | 22 | 30 |
| 5D | MEAN | 49 | 46 | 52 | 53 | 80 | 100 | 100 | 82 | 103 | 96 | 118 | 98 | 99 | 110 | 102 | 114 | 118 | 97 | 100 | 106 | 111 | 100 | 81 | 68 | 91 |

JANUARY 1958 AO INDICES VALUES ARE EXPRESSED IN GAMMAS

| | UT | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| D | 1 | -121 | -151 | -166 | -109 | -65 | -35 | -50 | -12 | -19 | -22 | -58 | -228 | -107 | -91 | -70 | -110 | -6 | 5 | -2 | -33 | -28 | -34 | -16 | -4 | -64 |
| D | 2 | 18 | 21 | 26 | -7 | -31 | -36 | -109 | -225 | -297 | -269 | -124 | -298 | -72 | -130 | -136 | -141 | -143 | -62 | 16 | -81 | -56 | -27 | -37 | -15 | -92 |
| | 3 | -32 | -2 | -33 | 13 | 5 | -17 | -15 | 15 | 23 | 13 | -5 | -6 | -11 | -2 | -6 | -11 | -6 | -30 | -48 | -34 | 0 | -5 | -31 | -56 | -12 |
| Q | 4 | 1 | 35 | 23 | 12 | 14 | 16 | 8 | 6 | 8 | 7 | -27 | -20 | -14 | 6 | 5 | 3 | -9 | -45 | -62 | 10 | 39 | -70 | -72 | -93 | -9 |
| | 5 | 24 | 19 | 16 | 41 | 38 | 37 | 11 | 18 | 3 | 31 | 17 | 3 | 13 | 0 | -68 | -85 | -1 | 22 | 19 | 6 | -15 | -6 | -53 | -20 | 3 |
| D | 6 | 0 | -45 | -59 | 61 | 43 | 36 | 14 | 4 | -1 | -10 | 10 | -19 | -19 | -77 | -241 | -192 | -94 | -34 | -38 | -18 | -16 | -22 | 15 | 37 | -28 |
| | 7 | -4 | -21 | 11 | 1 | 99 | 34 | 9 | 13 | 7 | -2 | -5 | -17 | -23 | -29 | 2 | -36 | -19 | 35 | -3 | -2 | -2 | -10 | -59 | -39 | -3 |
| Q | 8 | -15 | 19 | 31 | 32 | 22 | 10 | 15 | 11 | -4 | -2 | -62 | 7 | 20 | -4 | -2 | -56 | -103 | 4 | -1 | 2 | 6 | 6 | 4 | 7 | -2 |
| Q | 9 | 9 | 12 | 14 | 15 | 17 | 9 | 7 | 10 | 13 | 10 | 9 | 6 | 1 | -14 | 3 | 1 | -33 | -79 | -29 | -13 | 1 | 8 | 10 | 9 | -0 |
| Q | 10 | 14 | 17 | 23 | 30 | 21 | 36 | 34 | 28 | 28 | 32 | 27 | 40 | 8 | -65 | 10 | 32 | 13 | 4 | -7 | -31 | 2 | 4 | 14 | 17 | 14 |
| | 11 | 13 | 11 | -2 | 12 | 23 | 27 | 19 | 24 | 22 | 15 | -3 | 10 | 31 | -21 | -61 | 15 | 58 | -23 | -32 | -10 | 2 | -91 | 5 | 65 | 5 |
| | 12 | 60 | 19 | -5 | -8 | 55 | 13 | 28 | 9 | 37 | 24 | 23 | -6 | -47 | 7 | -19 | -120 | -73 | -16 | -127 | -29 | -47 | 41 | 19 | -26 | -8 |
| | 13 | -17 | 12 | 5 | 6 | -8 | -64 | -32 | -6 | 23 | -2 | -108 | -57 | -30 | -26 | -12 | -21 | 10 | 3 | -22 | -5 | -29 | -90 | -40 | 5 | -21 |
| | 14 | -2 | -7 | 4 | -12 | -38 | -15 | -5 | 5 | 35 | 41 | -16 | -11 | 15 | 10 | -9 | -19 | -3 | 9 | -42 | -155 | -53 | 6 | -73 | 16 | -13 |
| | 15 | 28 | 21 | 21 | 18 | 42 | 46 | 21 | 29 | 25 | 34 | 34 | -8 | -4 | -9 | -27 | -36 | -93 | -22 | -74 | -32 | -97 | -85 | -119 | -8 | -12 |
| | 16 | -51 | 25 | 12 | 11 | 5 | 8 | 4 | 7 | -3 | 12 | 13 | -7 | 6 | 1 | -21 | 14 | -37 | -165 | -143 | 132 | 18 | 5 | -78 | -19 | -10 |
| | 17 | 11 | 14 | 13 | -28 | -82 | -4 | -12 | -55 | -121 | -19 | -16 | -51 | -55 | -6 | -19 | -140 | -32 | -11 | -12 | -62 | -127 | -32 | 4 | -17 | -36 |
| | 18 | -142 | -97 | 36 | 36 | 34 | 33 | -34 | 21 | 19 | 5 | -15 | -64 | -5 | 2 | -68 | -36 | 4 | -9 | -3 | 4 | 11 | 14 | 14 | 11 | -10 |
| | 19 | 14 | 13 | 7 | 9 | -5 | -38 | -44 | -34 | 3 | 0 | -6 | -97 | 28 | 13 | -21 | -81 | -209 | -144 | -15 | 6 | 18 | -49 | -95 | -76 | -33 |
| D | 20 | -99 | -30 | -15 | -5 | -17 | -3 | -5 | -88 | -34 | -19 | -117 | -30 | -57 | -78 | -116 | 20 | 4 | -18 | -50 | -119 | -35 | 16 | 15 | 14 | -36 |
| | 21 | 8 | 6 | 12 | 10 | -7 | -65 | -116 | -47 | -29 | -54 | -22 | -34 | -58 | -63 | -14 | -9 | -90 | -21 | 2 | 1 | -41 | -45 | -1 | 4 | -28 |
| | 22 | -36 | 0 | 7 | 6 | -60 | -14 | -39 | 10 | 21 | 11 | -28 | 15 | 5 | 2 | -74 | -116 | -208 | -32 | -42 | 3 | -15 | -14 | 13 | 13 | -24 |
| | 23 | -7 | -56 | -69 | -10 | 3 | -24 | -91 | -20 | 22 | 12 | 4 | -9 | -1 | -1 | -1 | -3 | -87 | -78 | -80 | -28 | -174 | -65 | 9 | 13 | -31 |
| | 24 | 14 | -10 | 3 | 17 | 11 | 11 | 15 | -23 | -39 | -46 | 6 | -44 | -154 | -74 | -2 | -107 | -69 | -22 | -75 | -188 | -137 | -25 | -26 | -9 | -41 |
| Q | 25 | 22 | -24 | -15 | 14 | 17 | 2 | -3 | 16 | 13 | 8 | 2 | -8 | -2 | -10 | -87 | -68 | 3 | 8 | 2 | -45 | -44 | -55 | 9 | 10 | -10 |
| | 26 | 0 | -20 | -21 | -41 | 6 | 2 | 7 | -6 | -25 | 8 | 9 | 0 | -78 | -63 | -78 | -260 | -183 | -2 | 4 | 7 | 19 | 13 | 7 | -11 | -29 |
| | 27 | -4 | -5 | -5 | -60 | -18 | -11 | 2 | -29 | -5 | 23 | 10 | 10 | 5 | -57 | -14 | -22 | -94 | -69 | -116 | -69 | -7 | -79 | -182 | -92 | -37 |
| | 28 | -108 | -178 | -77 | -34 | 11 | 8 | 3 | 6 | 1 | -1 | -1 | -1 | -4 | -37 | -101 | -56 | -149 | -119 | -29 | -100 | 29 | 5 | -29 | -111 | -45 |
| D | 29 | -228 | -152 | -117 | -101 | -16 | 54 | 40 | 33 | 10 | 10 | -10 | -22 | -10 | 1 | -2 | 0 | -6 | -10 | -103 | -79 | -14 | -129 | -63 | -111 | -43 |
| | 30 | -105 | -76 | -48 | -38 | -29 | 37 | 45 | 38 | 17 | 11 | 4 | 2 | -28 | -20 | -5 | 6 | -98 | -44 | 4 | 17 | 19 | 10 | 27 | 24 | -10 |
| | 31 | -16 | -62 | -95 | -53 | -70 | 20 | 30 | 31 | -32 | -22 | 22 | 13 | 1 | -3 | -77 | -55 | -6 | 6 | 16 | 14 | 6 | 8 | 12 | 3 | -13 |
| | MEAN | -24 | -23 | -15 | -5 | 1 | 4 | -8 | -7 | -9 | -5 | -14 | -30 | -21 | -27 | -43 | -54 | -57 | -31 | -35 | -30 | -25 | -26 | -26 | -15 | -22 |
| 5Q | MEAN | 6 | 12 | 15 | 21 | 18 | 15 | 12 | 14 | 12 | 11 | -10 | 5 | 3 | -17 | -14 | -18 | -26 | -22 | -19 | -15 | 1 | -21 | -7 | -10 | -1 |
| 5D | MEAN | -86 | -73 | -66 | -32 | -17 | 3 | -22 | -58 | -68 | -62 | -60 | -119 | -53 | -75 | -113 | -85 | -49 | -24 | -35 | -66 | -30 | -39 | -17 | -16 | -53 |

FEBRUARY 1968 AO INDICES VALUES ARE EXPRESSED IN GAMMAS

| | UT | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 7 | 8 | 11 | 11 | 5 | -23 | -53 | 38 | 31 | 44 | 20 | 13 | -17 | 24 | 32 | 21 | 21 | -5 | -58 | -40 | 13 | 11 | 0 | -56 | 2 |
| | 2 | -75 | 23 | 37 | 30 | 21 | 17 | 14 | 5 | -32 | -121 | 4 | -23 | -50 | -31 | -86 | -61 | -51 | -141 | -36 | -55 | -121 | -109 | -69 | -97 | -42 |
| | 3 | -35 | 13 | 19 | 24 | 18 | 9 | -7 | -92 | -37 | 3 | -34 | -9 | 21 | -31 | -155 | -168 | -144 | -35 | -4 | -72 | -6 | -22 | -42 | 22 | -32 |
| | 4 | 31 | -55 | -91 | -17 | -92 | -71 | -29 | -43 | -12 | -185 | -112 | -5 | -41 | -41 | -26 | -61 | -27 | 5 | -7 | 3 | -5 | 1 | -2 | -2 | -37 |
| | 5 | 1 | 3 | 6 | 10 | 9 | 5 | 0 | 5 | -6 | 4 | 2 | -28 | -26 | -48 | -89 | -27 | -79 | -60 | -96 | -166 | -134 | -32 | -45 | -14 | -34 |
| Q | 6 | 10 | 7 | 3 | 15 | 9 | 5 | 3 | -4 | 1 | 3 | 6 | -10 | -11 | -13 | -10 | -5 | -8 | -11 | -11 | -14 | -4 | -2 | -4 | -1 | -2 |
| Q | 7 | 1 | 1 | 1 | 4 | 7 | 4 | 6 | 6 | 4 | 4 | 1 | 5 | 2 | -3 | -3 | 0 | -25 | -14 | 3 | 8 | -20 | 56 | 25 | -22 | 2 |
| | 8 | 1 | -26 | 25 | 26 | 28 | 11 | 13 | 12 | 5 | -16 | -6 | -97 | -126 | -78 | -56 | -90 | -34 | -77 | -76 | -96 | 3 | -92 | -102 | -22 | -36 |
| | 9 | -77 | -112 | -80 | -70 | -121 | -69 | -35 | -12 | -62 | -107 | -141 | -133 | -121 | -66 | 7 | -13 | -56 | -51 | -52 | -70 | -79 | -23 | -149 | -54 | -73 |
| D | 10 | -23 | -72 | -49 | -17 | 27 | -1 | 11 | 19 | -20 | -190 | -109 | -17 | -76 | -40 | 4 | 11 | -29 | -363 | -242 | -165 | -47 | 24 | -266 | -322 | -81 |
| D | 11 | -48 | -90 | -84 | -68 | -107 | -58 | -204 | -202 | -184 | -89 | -314 | -151 | -194 | -85 | -88 | -71 | 27 | -2 | 7 | 7 | -124 | -126 | -70 | -123 | -102 |
| | 12 | -94 | -129 | -95 | -33 | 3 | -4 | 4 | 43 | 32 | 14 | -27 | -59 | -11 | -14 | -16 | -18 | 1 | -39 | -36 | -17 | 9 | 2 | -1 | -2 | -20 |
| | 13 | -1 | -2 | -2 | -1 | -28 | -51 | -71 | -67 | -84 | -56 | -92 | -62 | -241 | -46 | 3 | -3 | -146 | -87 | 27 | 13 | 7 | 5 | 4 | 2 | -41 |
| Q | 14 | -2 | -18 | 3 | 5 | 2 | 4 | 4 | 7 | 7 | 5 | 1 | -3 | -2 | 1 | 1 | 10 | 7 | 10 | 10 | 7 | 7 | 1 | -33 | -3 | 1 |
| D | 15 | 6 | -26 | -34 | -10 | -78 | -82 | -83 | -65 | -109 | 1 | -231 | 16 | -7 | -890 | -562 | -43 | -22 | -196 | -99 | -12 | -1 | -17 | -95 | -65 | -113 |
| | 16 | 3 | 14 | -8 | -4 | -46 | -26 | -81 | -70 | -20 | -40 | -137 | -149 | -166 | -57 | -73 | -160 | -22 | -18 | -98 | -44 | -30 | -14 | -14 | -90 | -56 |
| | 17 | -52 | -1 | 0 | 8 | -8 | -27 | -77 | -95 | -64 | -94 | -39 | -85 | -190 | -71 | -82 | -40 | 12 | -44 | -42 | -62 | -117 | -240 | -45 | -45 | -63 |
| | 18 | -52 | -17 | 4 | 1 | -3 | 1 | -9 | -93 | -153 | -158 | -79 | -43 | -162 | -152 | -93 | 4 | -49 | -131 | -144 | -16 | 9 | -65 | -40 | -67 | -63 |
| | 19 | -193 | -103 | -78 | -61 | -18 | -20 | -18 | -8 | -2 | -11 | -22 | -27 | -21 | -20 | -18 | -25 | -28 | -28 | -25 | -27 | -27 | -24 | -25 | -20 | -35 |
| D | 20 | -6 | -62 | -20 | 12 | -2 | -23 | -107 | -254 | -162 | -33 | -1 | -227 | -315 | -83 | -109 | -21 | -22 | -3 | -74 | -130 | -109 | -190 | -136 | -150 | -93 |
| | 21 | -126 | -94 | -48 | -90 | -51 | -12 | -39 | -19 | -52 | -118 | -95 | -86 | -45 | -53 | -143 | -151 | -118 | -74 | -42 | -80 | -48 | -110 | -46 | 3 | -72 |
| | 22 | 2 | -2 | -14 | -20 | -43 | -115 | -18 | 1 | -6 | -19 | -50 | -104 | -7 | -11 | -28 | -89 | -145 | -88 | 2 | -8 | -12 | -15 | -19 | -20 | -35 |
| | 23 | -18 | -18 | -16 | -12 | -23 | -50 | -33 | -20 | 2 | -12 | -17 | -25 | -24 | -27 | -24 | -19 | -106 | -78 | -7 | -12 | -42 | -42 | -16 | -9 | -27 |
| | 24 | -7 | -5 | -11 | -37 | -58 | -69 | -67 | -7 | -34 | -11 | -15 | -23 | -11 | -11 | -11 | -36 | -24 | -7 | -17 | -34 | -12 | 1 | -2 | -2 | -21 |
| Q | 25 | -2 | -1 | -11 | 7 | 12 | -1 | -39 | -35 | -25 | 3 | -4 | -7 | -12 | -12 | -13 | -19 | -35 | -31 | -6 | -87 | -4 | 5 | 4 | 2 | -13 |
| Q | 26 | 4 | -1 | -12 | -8 | -15 | 2 | 3 | 3 | 4 | 0 | -2 | -8 | -9 | -10 | -5 | 1 | 0 | 1 | 0 | 5 | -53 | 4 | -31 | -54 | -8 |
| | 27 | 3 | 5 | 4 | 8 | -2 | -33 | -11 | 7 | -10 | 1 | -1 | -2 | 5 | -2 | -4 | -65 | -7 | -11 | 69 | 17 | -132 | -22 | -53 | -12 | -10 |
| D | 28 | 19 | 6 | -80 | 34 | 24 | 21 | 16 | 17 | 24 | 14 | 6 | 14 | -285 | -230 | -122 | -104 | 18 | 43 | -93 | -108 | -126 | -32 | -204 | -80 | -50 |
| | 29 | -54 | -36 | -87 | -47 | -6 | 47 | 19 | -42 | -31 | -31 | -57 | -22 | -36 | -10 | -11 | -31 | -123 | -46 | -55 | -65 | 6 | 3 | -6 | -48 | -35 |
| | MEAN | -27 | -29 | -24 | -10 | -18 | -21 | -31 | -33 | -34 | -41 | -53 | -47 | -75 | -73 | -61 | -44 | -42 | -55 | -41 | -46 | -41 | -37 | -51 | -47 | -41 |
| | 5Q MEAN | 2 | -2 | -3 | 5 | 3 | 3 | -5 | -5 | -2 | 3 | 0 | -5 | -6 | -7 | -6 | -3 | -12 | -9 | -1 | -16 | -15 | 13 | -8 | -16 | -4 |
| | 5D MEAN | -10 | -49 | -53 | -10 | -27 | -29 | -73 | -97 | -90 | -59 | -130 | -73 | -175 | -266 | -175 | -46 | -6 | -104 | -100 | -82 | -81 | -68 | -154 | -148 | -88 |

MARCH 1958 AO INDICES VALUES ARE EXPRESSED IN GAMMAS

| | UT | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | -49 | -13 | 13 | -21 | -12 | -1 | -12 | -6 | -21 | -9 | -30 | -25 | -1 | -49 | -98 | -162 | -159 | 1 | 6 | 7 | 3 | -10 | -11 | -11 | -28 |
| | 2 | -9 | -8 | 11 | -83 | -66 | 6 | 11 | -65 | -65 | -2 | -50 | -62 | -25 | -23 | -68 | -46 | -40 | -53 | -22 | 4 | -72 | -55 | -13 | -2 | -33 |
| | 3 | 22 | 50 | 24 | 9 | 3 | -5 | 3 | -7 | -29 | -27 | -29 | -2 | 27 | -10 | -79 | -23 | -27 | -185 | -219 | -105 | -7 | -23 | -40 | 53 | -26 |
| | 4 | -5 | 6 | 26 | 6 | -30 | 32 | 23 | -44 | -60 | -43 | 16 | 50 | 33 | 15 | -44 | -64 | -39 | -68 | -29 | -82 | -55 | -26 | -121 | -8 | -21 |
| | 5 | 34 | 28 | 29 | 35 | -44 | 0 | 27 | 1 | -48 | -158 | -159 | -153 | -86 | -141 | -30 | -10 | 6 | -10 | -25 | 3 | -71 | 33 | 44 | -14 | -30 |
| | 6 | -26 | 6 | 9 | 3 | 3 | -2 | 11 | -16 | -14 | -14 | -2 | -25 | -15 | -25 | -26 | -24 | -13 | -13 | -34 | -2 | 11 | -57 | -8 | 5 | -11 |
| Q | 7 | -2 | 17 | -6 | -19 | -37 | -1 | 9 | 2 | -29 | 15 | -8 | 16 | -11 | -30 | 8 | 3 | -25 | -41 | -12 | -27 | -18 | -1 | -13 | 8 | -8 |
| Q | 8 | 8 | 7 | 24 | 12 | 5 | 14 | 16 | 15 | 16 | 11 | 5 | -4 | 8 | 10 | 5 | -1 | -1 | -36 | -9 | 19 | 5 | -46 | 35 | 24 | 6 |
| Q | 9 | 15 | 9 | 1 | 17 | -13 | 8 | 8 | 14 | 7 | -7 | 16 | 12 | 9 | 4 | 3 | 2 | 2 | -9 | -2 | -7 | 0 | 1 | 11 | 14 | 5 |
| | 10 | 10 | 28 | 28 | 12 | -50 | -5 | 65 | 48 | 33 | 28 | 30 | 19 | -45 | -85 | -182 | -152 | -83 | -49 | -11 | 15 | 24 | 15 | -27 | 8 | -14 |
| | 11 | 4 | 11 | 1 | -19 | -17 | -80 | 8 | 43 | 41 | 19 | 20 | -2 | -4 | -4 | -2 | 2 | 0 | -1 | 3 | 9 | 16 | -10 | -36 | -20 | -1 |
| | 12 | -5 | -5 | -3 | -4 | -4 | -6 | -6 | -3 | -2 | 12 | -25 | -39 | -58 | -89 | -88 | -12 | -45 | -39 | -37 | -102 | -91 | -8 | 40 | 20 | -25 |
| Q | 13 | 19 | 10 | -46 | -31 | -62 | -16 | 2 | 10 | 8 | 2 | 3 | 0 | 1 | 4 | 4 | 4 | 5 | 2 | 5 | 10 | 10 | 8 | 1 | -16 | -3 |
| D | 14 | -59 | -9 | -1 | 3 | 31 | 70 | 67 | 59 | 65 | 13 | -13 | 33 | 11 | -52 | -37 | 12 | 22 | -113 | -7 | 25 | -10 | -75 | -140 | -70 | -8 |
| D | 15 | -44 | -25 | -30 | -18 | -38 | -76 | -49 | -90 | -68 | -20 | -100 | -58 | -210 | -109 | -15 | -5 | -28 | -92 | -199 | -169 | -92 | -181 | -56 | -17 | -75 |
| D | 16 | -53 | -117 | -50 | -103 | -32 | -100 | -66 | -51 | -4 | -30 | -18 | -62 | -273 | -180 | 29 | -9 | -6 | -19 | -47 | -93 | 12 | -116 | -218 | -161 | -74 |
| | 17 | -6 | -23 | 13 | 5 | -87 | -54 | -39 | -3 | -9 | 2 | -8 | -15 | -86 | -64 | -17 | -12 | -10 | -24 | -41 | -60 | -20 | -7 | -44 | -75 | -28 |
| | 18 | -12 | 15 | -87 | -24 | -86 | -58 | -20 | -15 | -74 | -35 | -12 | 5 | -5 | -13 | 0 | -13 | -65 | -101 | -16 | 12 | 14 | 11 | 9 | -7 | -24 |
| | 19 | 5 | -1 | -9 | -35 | -21 | -10 | -32 | -111 | -105 | -39 | -70 | -121 | -51 | 10 | -84 | -27 | -47 | -118 | -57 | 16 | 14 | 6 | 2 | 1 | -37 |
| | 20 | 1 | -19 | -95 | -167 | -23 | 5 | 5 | 4 | 7 | 8 | -22 | -242 | -57 | -82 | -54 | -1 | -5 | 4 | -1 | -35 | -28 | -5 | -76 | -56 | -39 |
| | 21 | -15 | -15 | -71 | -42 | -38 | -39 | -4 | -30 | -10 | -20 | -3 | -6 | -5 | -37 | -109 | -102 | -53 | -51 | -86 | -59 | 2 | 3 | 6 | 2 | -33 |
| Q | 22 | -2 | -18 | -21 | -4 | 2 | 0 | -36 | -9 | 0 | 0 | 2 | -24 | -87 | -63 | -21 | -42 | -47 | -2 | -3 | -19 | -4 | -5 | 7 | 7 | -16 |
| | 23 | 6 | 5 | 4 | 8 | -10 | 4 | 2 | 14 | 5 | 13 | 6 | 2 | -3 | -25 | 8 | -46 | -3 | 6 | 4 | -21 | -55 | -39 | -90 | -7 | -9 |
| D | 24 | 19 | 20 | 17 | -24 | -45 | -102 | -103 | -87 | -47 | 2 | -4 | 6 | -114 | -67 | -66 | -30 | 12 | 5 | -6 | -16 | -89 | -55 | 62 | 53 | -27 |
| | 25 | 64 | -27 | -84 | -56 | 38 | -2 | 68 | 9 | -52 | 1 | 23 | 36 | -126 | -76 | 18 | 17 | -101 | -39 | -18 | -26 | -4 | 9 | -21 | 30 | -13 |
| | 26 | 50 | 33 | 44 | 43 | 27 | -6 | -64 | -35 | 15 | -6 | -209 | -104 | -61 | 5 | -29 | -31 | -8 | -71 | -96 | -38 | 57 | 67 | 1 | -62 | -20 |
| | 27 | -126 | -133 | -61 | -43 | 16 | -19 | 47 | -19 | 42 | -45 | -44 | 12 | 30 | 24 | -20 | -82 | -114 | 9 | -13 | -101 | -98 | 33 | -2 | 1 | -29 |
| | 28 | 62 | 64 | 59 | -18 | -148 | 30 | 23 | -64 | -61 | 33 | 68 | 40 | -34 | 13 | 75 | 63 | 63 | 61 | -24 | -16 | 68 | 33 | -27 | 55 | 17 |
| | 29 | 68 | 75 | -113 | -197 | -91 | -57 | -10 | -52 | -84 | -75 | -20 | -35 | -44 | -47 | -56 | -22 | 19 | -14 | -93 | -57 | 9 | 40 | -18 | -52 | -39 |
| D | 30 | -74 | -213 | -95 | -28 | -17 | -59 | -104 | -10 | 27 | 8 | 14 | -65 | -64 | -15 | 6 | -139 | -374 | -222 | -120 | -92 | -76 | 25 | 28 | 22 | -68 |
| | 31 | 12 | -3 | -6 | -12 | 1 | -26 | -8 | -64 | -95 | 5 | 14 | -1 | 11 | -18 | -69 | -18 | -36 | -111 | -197 | -145 | -65 | -8 | -72 | -151 | -44 |
| | MEAN | -3 | -8 | -15 | -26 | -27 | -18 | -5 | -18 | -20 | -12 | -20 | -26 | -43 | -39 | -33 | -31 | -39 | -45 | -45 | -37 | -20 | -14 | -25 | -14 | -24 |
| | 5Q MEAN | 8 | 5 | -10 | -5 | -21 | 1 | -0 | 6 | 0 | 4 | 4 | 0 | -16 | -15 | -0 | -7 | -13 | -17 | -4 | -5 | -1 | -9 | 8 | 7 | -3 |
| | 5D MEAN | -44 | -69 | -32 | -34 | -20 | -53 | -51 | -36 | -5 | -5 | -24 | -29 | -130 | -85 | -17 | -34 | -75 | -88 | -76 | -69 | -51 | -80 | -65 | -35 | -50 |

APRIL 1968 AO INDICES VALUES ARE EXPRESSED IN GAMMAS

| | UT | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| D | 1 | -153 | -270 | -87 | -59 | -12 | -30 | -9 | -32 | -115 | -58 | -17 | -24 | -45 | -78 | -63 | -101 | -5 | -48 | -177 | -56 | 1 | -132 | -30 | -16 | -67 |
| | 2 | -110 | -38 | -7 | -37 | 0 | -5 | -71 | -28 | 10 | -7 | -10 | -56 | -2 | -22 | -44 | -48 | -13 | -44 | -83 | -196 | -100 | -110 | -68 | -134 | -51 |
| | 3 | -19 | -39 | -15 | -39 | -42 | -11 | 1 | 16 | -15 | -69 | -20 | -13 | -23 | -73 | -94 | -18 | -30 | 2 | 21 | 6 | 2 | 4 | -20 | -93 | -24 |
| | 4 | -51 | -136 | -112 | -77 | -64 | -31 | -15 | 14 | -12 | 6 | 9 | -4 | -29 | -64 | -63 | -51 | -32 | -29 | 1 | 0 | 0 | -12 | -65 | -12 | -35 |
| D | 5 | 1 | -25 | -32 | -31 | -1 | 40 | 47 | 39 | 21 | 16 | -15 | -9 | -16 | -16 | -23 | -79 | -80 | 14 | -193 | -299 | -161 | 8 | -14 | -83 | -37 |
| D | 6 | -17 | -6 | -32 | -26 | -13 | 12 | 27 | -183 | -245 | -107 | -51 | -104 | -160 | -93 | -62 | -48 | -41 | -110 | 6 | 34 | -117 | -54 | -85 | -52 | -64 |
| | 7 | -1 | -8 | -9 | -38 | -54 | 14 | -1 | -47 | -56 | -12 | -49 | -51 | -31 | -66 | -94 | -31 | -5 | 17 | 19 | 11 | 9 | 2 | 6 | 14 | -19 |
| Q | 8 | -13 | -6 | -48 | -52 | -55 | -30 | 0 | 9 | 0 | 12 | 12 | -6 | -87 | -39 | -13 | -30 | -26 | -11 | -8 | 0 | 1 | 0 | -4 | -9 | -17 |
| Q | 9 | -10 | -11 | -11 | -8 | -8 | -8 | -8 | -7 | -8 | -5 | -4 | -5 | -11 | -9 | -12 | -20 | -21 | -20 | -11 | 1 | 8 | 8 | -4 | 4 | -8 |
| | 10 | -2 | -10 | -14 | 0 | 15 | 49 | 4 | 10 | 13 | 5 | -1 | -21 | -31 | -23 | -18 | -13 | -6 | -25 | -85 | -2 | 22 | 19 | -25 | -1 | -6 |
| | 11 | 4 | -3 | -35 | -66 | -4 | 27 | 37 | 10 | 41 | 34 | -21 | -27 | -21 | -11 | -6 | 9 | 7 | 5 | 8 | 13 | 7 | 7 | 3 | 5 | 1 |
| | 12 | -2 | -7 | -3 | -3 | 7 | 1 | 0 | -2 | 7 | 4 | 9 | 5 | 10 | 1 | -5 | 20 | -3 | -3 | -28 | 7 | 9 | -46 | -87 | -52 | -7 |
| | 13 | -38 | -41 | 14 | -93 | -11 | 19 | 14 | -4 | 5 | 10 | -66 | -82 | -3 | -68 | -51 | -62 | -105 | -21 | -17 | 42 | 16 | -93 | -36 | -11 | -28 |
| D | 14 | -18 | -30 | -110 | -110 | -46 | -47 | -9 | 0 | -5 | 0 | -2 | -222 | -165 | -20 | -21 | 5 | -36 | -27 | -4 | -1 | 14 | 14 | -38 | -91 | -40 |
| | 15 | -18 | 17 | 5 | -3 | 1 | 1 | -1 | 5 | 26 | -108 | -105 | -42 | -14 | -50 | -45 | -61 | -25 | -77 | -83 | -22 | 5 | -39 | -111 | -130 | -36 |
| | 16 | -61 | -69 | -42 | -50 | -54 | -51 | 3 | 5 | -29 | -75 | -31 | 3 | -24 | -11 | -19 | -18 | -40 | 9 | 0 | 20 | -49 | -209 | -89 | -56 | -39 |
| | 17 | -36 | -8 | -1 | -9 | -33 | -18 | -20 | -37 | -11 | -11 | -96 | -39 | -10 | -36 | -72 | -11 | -12 | -51 | -120 | -5 | 23 | -7 | -58 | -4 | -28 |
| | 18 | -12 | -57 | -45 | 12 | 4 | -33 | -76 | -29 | 2 | -40 | -15 | -42 | -20 | -6 | -5 | -26 | -47 | -18 | -41 | 7 | 3 | 8 | 13 | -30 | -21 |
| Q | 19 | 10 | 16 | 26 | 33 | 30 | 33 | 31 | 32 | 38 | 33 | 31 | 32 | 31 | 28 | 28 | 13 | -2 | -3 | 19 | 23 | 23 | 24 | 16 | 13 | 23 |
| Q | 20 | 14 | 14 | 14 | 15 | 7 | 3 | 1 | -2 | -8 | -3 | -3 | -2 | -6 | -10 | -8 | -7 | -6 | 0 | 1 | 3 | 3 | 0 | -4 | -5 | 0 |
| Q | 21 | -3 | -2 | 1 | 0 | -3 | -8 | -15 | 0 | -3 | 2 | 3 | 6 | -26 | -41 | -21 | -18 | -4 | 4 | 16 | 15 | 12 | 8 | 13 | 18 | -2 |
| | 22 | 1 | -7 | -1 | -15 | 17 | 29 | 9 | -30 | 39 | 8 | 4 | 4 | 1 | 6 | -46 | -57 | -74 | -28 | 34 | -9 | -34 | 5 | 36 | 23 | -4 |
| | 23 | -93 | -176 | -48 | -50 | -81 | -20 | 37 | 20 | 17 | -32 | 19 | 19 | -20 | 12 | -6 | -15 | -17 | 7 | -27 | -28 | -10 | 19 | 19 | -27 | -20 |
| | 24 | -103 | -34 | -58 | -83 | -36 | 25 | 30 | 22 | 15 | 26 | 33 | -2 | 1 | -1 | -8 | -53 | -12 | -12 | 10 | 31 | 18 | 10 | 20 | 12 | -6 |
| | 25 | 2 | -3 | -3 | 4 | 1 | -17 | -16 | 9 | -5 | 14 | 3 | 2 | -3 | -7 | -9 | -48 | -107 | -50 | 17 | 26 | -30 | -46 | 8 | 12 | -10 |
| D | 26 | -91 | -74 | -27 | 17 | -3 | -40 | 28 | 55 | 31 | 37 | 39 | -82 | -164 | -83 | -14 | -20 | -24 | 6 | -17 | -70 | -121 | -50 | -138 | -48 | -36 |
| | 27 | -160 | -6 | 22 | 0 | -16 | 8 | 30 | -17 | -135 | -122 | 1 | 5 | -7 | -4 | 10 | -8 | -22 | 11 | 34 | -91 | -11 | -31 | -40 | -9 | -23 |
| | 28 | 17 | -70 | -124 | -27 | -83 | -17 | -42 | 30 | 20 | 28 | -40 | 12 | 22 | 13 | -3 | -68 | -33 | 12 | 5 | 5 | 3 | 33 | -8 | 60 | -11 |
| | 29 | 39 | 98 | 80 | 59 | -4 | -31 | -44 | -84 | -113 | 7 | 46 | 15 | -65 | -44 | -37 | -48 | -70 | 1 | 16 | 19 | -5 | -66 | -88 | -52 | -15 |
| | 30 | -21 | -12 | -11 | -26 | 5 | 1 | 23 | 16 | -38 | 6 | 21 | 8 | 9 | 11 | -1 | -16 | -55 | -62 | 0 | 24 | 14 | -26 | -75 | -17 | -9 |
| | MEAN | -32 | -33 | -24 | -25 | -18 | -5 | -0 | -7 | -17 | -13 | -11 | -24 | -30 | -27 | -28 | -31 | -32 | -18 | -23 | -16 | -15 | -25 | -32 | -26 | -21 |
| 5Q | MEAN | -0 | 2 | -4 | -2 | -6 | -2 | 2 | 6 | 4 | 8 | 8 | 5 | -20 | -14 | -5 | -12 | -12 | -6 | 3 | 8 | 9 | 8 | 3 | 4 | -1 |
| 5D | MEAN | -56 | -81 | -58 | -42 | -15 | -13 | 17 | -24 | -63 | -22 | -9 | -88 | -110 | -58 | -37 | -49 | -37 | -33 | -77 | -78 | -77 | -43 | -61 | -58 | -49 |

MAY 1958 AO INDICES VALUES ARE EXPRESSED IN GAMMAS

| | UT | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | -15 | 2 | 1 | 8 | -26 | -13 | -17 | -14 | -20 | -49 | -28 | -19 | -25 | -49 | -111 | -188 | -69 | -137 | -133 | -3 | -4 | -44 | -116 | -156 | -51 |
| | 2 | -64 | -58 | -47 | -45 | 6 | -5 | 27 | -14 | -2 | -31 | -82 | -55 | -43 | -23 | -53 | 0 | 14 | 21 | 4 | 14 | 23 | 19 | 12 | 17 | -15 |
| | 3 | -22 | -148 | 4 | 8 | 28 | -86 | -28 | 10 | -1 | -11 | -3 | 5 | -15 | -4 | -6 | -39 | -9 | 5 | 6 | 13 | 18 | 13 | 10 | 1 | -10 |
| Q | 4 | 4 | -4 | -57 | -48 | -11 | -15 | -6 | -3 | -22 | -20 | -15 | -14 | -17 | -17 | -26 | -24 | -35 | -53 | -30 | -2 | -1 | -4 | 5 | 8 | -17 |
| Q | 5 | 1 | -7 | -6 | -17 | -13 | -12 | -16 | -15 | -11 | 9 | -8 | -30 | -10 | -5 | -15 | -2 | -21 | -17 | 6 | 11 | 2 | -1 | -1 | -3 | -8 |
| Q | 6 | -1 | -3 | -2 | -2 | -6 | -11 | -15 | -9 | -4 | 1 | 1 | 3 | -1 | 4 | 12 | 2 | 13 | 9 | 17 | 9 | 8 | 1 | 0 | -7 | 1 |
| D | 7 | -1 | 3 | 10 | 10 | 33 | -161 | -202 | -172 | -144 | -140 | -47 | -145 | -319 | -186 | -179 | -42 | 9 | 13 | 42 | 32 | 10 | -44 | 2 | -70 | -70 |
| | 8 | -52 | 17 | 3 | -4 | -11 | -29 | -31 | -23 | -19 | -2 | -27 | -37 | -1 | -17 | -15 | -17 | -19 | -41 | -41 | -60 | -36 | -12 | -39 | -29 | -23 |
| D | 9 | -77 | -157 | -173 | -152 | -74 | -89 | -6 | -12 | -46 | -35 | -29 | -107 | -71 | -49 | -60 | -51 | 28 | -34 | 28 | 31 | -92 | -23 | 44 | 34 | -49 |
| | 10 | -5 | 7 | 6 | 30 | -59 | -32 | -19 | -39 | -40 | -46 | -50 | -49 | -27 | -16 | -6 | -15 | -14 | -9 | -14 | 1 | -7 | 2 | 14 | 8 | -16 |
| | 11 | 11 | -30 | -52 | -30 | -29 | 1 | 34 | 137 | -26 | -94 | 10 | 8 | -1 | -19 | -51 | -26 | -9 | 19 | 19 | 36 | 15 | -10 | -39 | -110 | -10 |
| D | 12 | -221 | -145 | -143 | -119 | -2 | -103 | -57 | -1 | 11 | 15 | -109 | -83 | -23 | -19 | 30 | 48 | 70 | 84 | 87 | 112 | 16 | -3 | 73 | 73 | -17 |
| | 13 | -6 | -217 | -46 | 16 | -33 | -81 | -68 | -15 | 17 | 18 | -31 | -55 | -54 | -42 | -32 | -52 | 3 | -43 | 7 | 25 | -11 | -4 | -2 | -6 | -30 |
| | 14 | -7 | -91 | -118 | -58 | -19 | -23 | 11 | -19 | -13 | -2 | -36 | -13 | -68 | -88 | -94 | -49 | -18 | -28 | -79 | -68 | 3 | -4 | 8 | 13 | -36 |
| | 15 | -5 | -17 | -86 | -13 | -11 | 3 | -35 | -42 | 6 | 22 | -19 | 10 | 0 | -10 | -13 | -6 | -3 | 1 | -5 | -1 | 11 | 9 | -49 | -46 | -12 |
| | 16 | -61 | -52 | -56 | -43 | -42 | 3 | -56 | -42 | -34 | 36 | 12 | -56 | -126 | -77 | -70 | -20 | -54 | 0 | 12 | 26 | 91 | 103 | 113 | 112 | -12 |
| | 17 | -1 | 3 | 7 | 38 | 13 | 16 | -37 | 37 | 56 | 28 | 24 | 48 | 54 | 12 | -11 | -43 | -35 | -73 | -135 | 3 | 53 | 24 | -16 | 7 | 3 |
| | 18 | -1 | -32 | -78 | -38 | -12 | -14 | 24 | -28 | -41 | 8 | -16 | -30 | -4 | 22 | 10 | -113 | -203 | -62 | -25 | 27 | 26 | -60 | -43 | -10 | -29 |
| | 19 | -7 | -5 | 5 | -22 | -32 | -2 | 13 | 13 | -91 | -40 | -6 | -10 | -26 | -43 | -15 | 0 | 16 | 86 | -2 | 35 | 76 | -72 | -32 | 11 | -6 |
| D | 20 | -13 | -200 | -212 | -22 | -15 | 29 | 41 | -78 | -141 | -108 | -80 | -60 | -61 | -51 | -8 | 6 | -33 | -59 | 26 | 14 | 16 | 10 | -80 | -99 | -49 |
| D | 21 | -83 | -46 | 33 | 5 | 3 | 6 | 21 | 7 | -57 | -18 | 19 | 8 | -28 | -69 | -82 | -101 | -88 | -194 | -162 | -110 | -139 | -106 | -48 | 39 | -50 |
| | 22 | -47 | -50 | -206 | -142 | -68 | -136 | -59 | -6 | -13 | 25 | -22 | -47 | -38 | -31 | -20 | -32 | -74 | -50 | -18 | 11 | 0 | -2 | -10 | -22 | -44 |
| | 23 | -12 | -58 | -58 | -4 | -1 | 0 | -6 | -1 | 17 | 14 | 63 | 43 | 50 | -28 | -32 | -34 | -85 | -118 | -136 | -12 | 58 | 35 | -84 | -193 | -24 |
| | 24 | -180 | -111 | -131 | -16 | 27 | -30 | -63 | -104 | -64 | -13 | -41 | -25 | -7 | 15 | -14 | 14 | -28 | -10 | -16 | -55 | 41 | 52 | 29 | 0 | -30 |
| | 25 | 14 | 23 | 16 | 23 | -5 | -9 | 21 | 10 | 11 | -20 | -13 | -2 | 6 | 7 | -9 | -74 | -91 | -38 | 7 | 2 | 16 | 20 | 27 | 29 | -1 |
| Q | 26 | 19 | 54 | 22 | 4 | -5 | -7 | 11 | 14 | 15 | 16 | 2 | 12 | 23 | 17 | 7 | -25 | -43 | -6 | 8 | 13 | 13 | 17 | 17 | 18 | 9 |
| Q | 27 | 23 | 23 | 26 | 23 | 23 | 21 | 15 | 12 | 14 | 13 | 20 | 25 | 24 | 19 | 16 | 17 | 24 | 31 | 14 | -6 | 18 | 5 | 15 | -1 | 17 |
| | 28 | 15 | 9 | 11 | -2 | 16 | 24 | -33 | -28 | -14 | -6 | -4 | -8 | -12 | -15 | -18 | -14 | -24 | -41 | -1 | -25 | 18 | 16 | 10 | 30 | -4 |
| | 29 | 41 | 10 | -35 | 2 | 60 | 64 | 36 | 9 | 51 | 39 | 24 | -5 | 4 | 2 | -12 | -3 | 111 | 103 | 33 | 19 | 25 | 65 | 38 | 10 | 29 |
| | 30 | -20 | -1 | 6 | 45 | -4 | 0 | 15 | 5 | -45 | 4 | 11 | -25 | 8 | -59 | -109 | -7 | 23 | 8 | 21 | 23 | 38 | -44 | -10 | 18 | -4 |
| | 31 | -67 | -84 | -53 | -74 | -44 | -26 | -24 | 7 | -19 | -76 | -30 | -33 | -65 | -59 | -3 | -12 | 10 | -2 | 18 | 25 | 5 | 12 | -3 | -6 | -25 |
| | MEAN | -27 | -44 | -45 | -21 | -10 | -23 | -16 | -13 | -22 | -15 | -16 | -24 | -28 | -28 | -32 | -29 | -20 | -20 | -14 | 5 | 10 | -1 | -5 | -11 | -19 |
| 5Q | MEAN | 9 | 13 | -3 | -8 | -2 | -5 | -2 | -0 | -2 | 4 | 0 | -1 | 4 | 4 | -1 | -6 | -12 | -7 | 3 | 5 | 8 | 4 | 7 | 3 | |
| 5D | MEAN | -79 | -109 | -97 | -56 | -11 | -64 | -41 | -51 | -75 | -57 | -49 | -77 | -100 | -75 | -60 | -28 | -3 | -38 | 4 | 16 | -38 | -33 | -2 | -5 | -47 |

JUNE 1958 AO INDICES VALUES ARE EXPRESSED IN GAMMAS

| | UT | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 24 | -1 | -14 | -9 | -58 | -21 | -4 | 8 | 27 | -23 | -14 | 53 | -33 | -49 | -69 | -74 | -9 | 2 | -103 | 8 | 30 | 29 | 0 | -149 | -19 |
| | 2 | -60 | -80 | -34 | -19 | -75 | -83 | -15 | 46 | 49 | 25 | -21 | -11 | -4 | -17 | -61 | -53 | -27 | 20 | -35 | -34 | -7 | 36 | 20 | -66 | -21 |
| | 3 | -50 | -44 | -8 | -3 | 13 | -15 | -2 | 14 | 32 | 29 | 61 | -31 | -7 | -22 | -26 | -21 | -93 | -112 | 11 | 27 | 34 | -51 | 7 | 5 | -11 |
| | 4 | -41 | -71 | -43 | -44 | -19 | -37 | -8 | 22 | -8 | -31 | -4 | 1 | -27 | 4 | -38 | -81 | -20 | 0 | -32 | 23 | 10 | 26 | -27 | -20 | -19 |
| Q | 5 | 24 | 5 | 0 | 11 | -8 | -34 | -40 | 0 | -2 | 4 | 6 | -7 | -2 | 3 | -21 | -20 | -16 | -47 | -18 | 1 | -6 | -16 | 9 | 4 | -7 |
| Q | 6 | 4 | 2 | 0 | 0 | -7 | 0 | -3 | -9 | -7 | 4 | 0 | -3 | -35 | -63 | -16 | -31 | -15 | -14 | 2 | 0 | -7 | -10 | -7 | -1 | -9 |
| | 7 | 4 | 10 | 5 | 5 | 16 | 52 | -16 | -35 | 31 | 31 | 35 | -19 | -53 | -16 | 12 | -4 | -15 | -3 | -4 | 25 | 28 | 20 | 15 | 12 | 6 |
| | 8 | 11 | 22 | 19 | -9 | 6 | 14 | 14 | 31 | 24 | 27 | 7 | 38 | 2 | 5 | 15 | -27 | 50 | 37 | 68 | 51 | 72 | 41 | 37 | 27 | 24 |
| | 9 | 30 | 14 | -8 | 11 | 18 | -15 | 32 | 20 | 5 | 18 | 6 | 0 | 10 | 16 | 15 | 11 | 2 | -11 | -35 | -25 | -22 | -17 | -78 | -26 | -1 |
| D | 10 | -35 | -206 | -121 | -124 | 25 | -40 | -81 | -62 | 49 | 30 | 59 | -67 | -158 | -20 | 10 | -39 | -40 | 8 | 26 | 13 | 31 | -37 | -233 | -222 | -51 |
| D | 11 | 4 | -139 | -128 | 19 | -216 | -37 | -2 | 63 | -113 | -96 | -90 | -32 | -28 | 46 | 38 | -102 | -14 | 22 | 0 | -31 | -163 | -53 | -33 | -113 | -50 |
| D | 12 | -81 | -77 | -27 | -57 | -160 | -29 | 35 | -91 | -33 | -79 | -104 | -177 | -44 | 3 | -131 | -53 | -1 | 3 | 37 | 55 | 33 | -25 | -12 | 18 | -42 |
| D | 13 | -25 | -70 | -89 | -171 | -101 | -126 | -166 | -19 | -83 | -149 | -153 | -79 | -105 | -138 | -72 | -202 | -138 | -147 | -71 | -26 | -35 | -47 | 46 | 88 | -87 |
| D | 14 | 33 | -64 | -13 | 38 | 32 | 43 | 12 | 39 | -120 | -84 | -65 | -59 | -112 | -16 | -11 | -12 | 10 | -39 | -59 | -38 | 29 | 10 | -18 | -29 | -21 |
| | 15 | 0 | 9 | 9 | 18 | 15 | 9 | 53 | -67 | -49 | 10 | -7 | -21 | -8 | 1 | -3 | 6 | 13 | -9 | -7 | -6 | -17 | 7 | 22 | 1 | -1 |
| | 16 | 4 | 9 | 6 | 0 | 4 | -10 | -14 | -11 | 5 | 34 | 21 | -34 | -7 | -58 | -21 | -57 | -78 | -60 | -19 | 69 | 53 | -78 | -19 | 14 | -10 |
| | 17 | -56 | -88 | 19 | 27 | -1 | -14 | -100 | 25 | -37 | -4 | -66 | -16 | -12 | -41 | -44 | -5 | -3 | 6 | 2 | -17 | -13 | 2 | 12 | 8 | -17 |
| | 18 | 4 | -19 | -39 | -31 | -14 | 12 | -23 | -97 | -133 | -16 | -8 | -44 | -43 | -14 | -56 | 9 | -26 | -38 | -85 | -63 | 25 | -17 | 8 | 0 | -30 |
| | 19 | -42 | -121 | -55 | -28 | -115 | -98 | -61 | -76 | -47 | -64 | -52 | -68 | -41 | -9 | -56 | -11 | -80 | -69 | -46 | 1 | -64 | -82 | -96 | -47 | -59 |
| | 20 | -39 | 2 | 3 | -15 | -2 | -47 | 2 | 9 | 18 | 9 | 3 | -3 | -1 | 5 | 3 | -2 | -6 | -6 | 8 | 4 | -5 | -6 | 0 | 5 | -3 |
| Q | 21 | 5 | 2 | -1 | -4 | -6 | -7 | -9 | -7 | -10 | -5 | -2 | -1 | 14 | 12 | 13 | 11 | 6 | 6 | 11 | 26 | 23 | 12 | 13 | 9 | 5 |
| | 22 | 9 | 16 | 11 | 6 | 29 | -7 | -33 | -28 | -75 | -63 | -19 | -72 | -65 | -50 | 4 | 19 | 12 | 9 | 11 | 7 | 23 | 9 | -15 | 18 | -10 |
| | 23 | 10 | 10 | -17 | -73 | -26 | -16 | -43 | -34 | -9 | 6 | -7 | -1 | 6 | 31 | -30 | -58 | -28 | 1 | 3 | 9 | 14 | 22 | 5 | 26 | -8 |
| Q | 24 | 27 | 15 | 5 | 4 | 1 | -14 | -3 | 4 | -1 | 7 | 12 | 5 | 18 | 12 | 5 | 5 | 9 | 9 | 9 | 6 | 2 | -2 | 3 | 12 | 6 |
| Q | 25 | 14 | 12 | 10 | 8 | -8 | -6 | -1 | 12 | 1 | -5 | -1 | 2 | -4 | -3 | 2 | -2 | 17 | 6 | 17 | -7 | 16 | 14 | 12 | 29 | 6 |
| | 26 | 12 | -133 | 21 | 14 | 4 | -7 | -7 | -10 | -3 | 5 | 22 | 40 | -6 | 11 | 38 | -7 | -17 | 41 | 25 | 22 | 39 | 33 | -28 | 18 | 5 |
| | 27 | 21 | 24 | 14 | 19 | -14 | -21 | 11 | 4 | 11 | 28 | 62 | 52 | -91 | -25 | 11 | 21 | -20 | -41 | 19 | 29 | 9 | 3 | 6 | -1 | 5 |
| | 28 | -61 | -65 | 4 | 2 | -4 | 0 | 1 | 2 | 6 | 0 | 9 | 23 | 18 | 6 | -8 | -44 | -63 | -4 | 6 | -1 | 6 | -6 | 9 | 24 | -6 |
| | 29 | 28 | 7 | 8 | 9 | 6 | -31 | 2 | -6 | -5 | -10 | -5 | 1 | -3 | 1 | 5 | -7 | -29 | 3 | 20 | 28 | -83 | -10 | 40 | 2 | -1 |
| | 30 | 28 | 33 | -109 | -95 | 22 | 0 | 3 | 30 | -17 | 14 | 32 | 15 | 12 | -41 | -17 | -38 | -23 | -38 | 23 | 3 | -29 | 18 | -31 | -97 | -13 |
| | MEAN | -6 | -33 | -19 | -16 | -21 | -20 | -16 | -7 | -16 | -12 | -9 | -17 | -27 | -14 | -17 | -29 | -21 | -16 | -7 | 5 | 1 | -6 | -11 | -15. | -15 |
| 5Q | MEAN | 15 | 7 | 3 | 4 | -6 | -12 | -11 | 0 | -4 | 1 | 3 | -1 | -2 | -8 | -3 | -7 | 0 | -8 | 4 | 5 | 6 | -0 | 6 | 11 | |
| 5D | MEAN | -21 | -111 | -76 | -59 | -84 | -38 | -40 | -14 | -60 | -76 | -71 | -83 | -89 | -25 | -33 | -82 | -37 | -31 | -13 | -5 | -21 | -30 | -50 | -52 | -50 |

JULY 1968 AO INDICES VALUES ARE EXPRESSED IN GAMMAS

| | UT | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | -22 | -36 | -12 | -31 | -12 | -19 | 29 | -20 | -59 | 9 | 1 | -34 | -38 | -19 | -8 | -22 | -13 | -5 | -34 | -21 | 9 | 8 | 11 | -7 | -14 |
| | 2 | 7 | -73 | -8 | 17 | -5 | -4 | 8 | -12 | 28 | -17 | -58 | -13 | 3 | 10 | -57 | 1 | -30 | -24 | -16 | -8 | 11 | 17 | 24 | -49 | -10 |
| D | 3 | 9 | -43 | -125 | 9 | -3 | -69 | -66 | -78 | -90 | 19 | -5 | 1 | -14 | -4 | 35 | 36 | 40 | -2 | 31 | 21 | 12 | 12 | 10 | 29 | -10 |
| | 4 | 14 | -7 | -11 | -47 | -32 | -21 | -11 | -64 | -47 | -14 | -7 | -1 | -19 | -40 | 17 | -7 | -6 | -3 | 9 | -53 | -24 | 18 | 19 | 19 | -13 |
| | 5 | -1 | -55 | -59 | -20 | -26 | 7 | 11 | 16 | 19 | -6 | -11 | 2 | 5 | 12 | 15 | 7 | -15 | 26 | 24 | 17 | 7 | 28 | 17 | 21 | 2 |
| | 6 | 21 | 19 | -64 | -34 | 9 | -45 | 0 | 31 | 41 | 0 | 11 | -8 | 21 | 26 | 9 | 14 | 20 | 32 | 24 | 13 | 18 | 21 | 15 | 3 | 8 |
| | 7 | 2 | 3 | -13 | 8 | 15 | 24 | -27 | -42 | -8 | -23 | 16 | 9 | -5 | 1 | 4 | -10 | -24 | 30 | 15 | 14 | 14 | 11 | 6 | 6 | 1 |
| | 8 | 9 | 5 | 11 | -58 | -48 | -40 | -50 | -5 | -16 | -23 | -12 | 6 | 5 | 27 | 10 | 2 | 7 | 44 | 18 | 23 | 9 | 11 | 9 | 4 | -2 |
| Q | 9 | 6 | 3 | 3 | 3 | -23 | -45 | -32 | 10 | -11 | 2 | 17 | 11 | 12 | 9 | 4 | -2 | -2 | 11 | 17 | 14 | 13 | 17 | 24 | 36 | 4 |
| D | 10 | 32 | 24 | -9 | 44 | 1 | 65 | 10 | 22 | 31 | -16 | -9 | 12 | -141 | -109 | -23 | -8 | 8 | 3 | -121 | -107 | -27 | 77 | -91 | -45 | -16 |
| | 11 | -59 | 0 | -44 | -31 | -27 | 16 | -8 | -36 | 13 | 27 | 37 | 22 | -19 | -9 | -23 | -50 | -49 | -43 | 4 | -1 | -16 | -14 | 13 | -32 | -14 |
| | 12 | -68 | -139 | -77 | -22 | -30 | 1 | 5 | -5 | -9 | -7 | -8 | -1 | 7 | 15 | 12 | 28 | -74 | -23 | 9 | -5 | -7 | -6 | -4 | 2 | -17 |
| D | 13 | 0 | -4 | 14 | -6 | 6 | -73 | -33 | -9 | -19 | -12 | -15 | -11 | -6 | 0 | -6 | -1 | -98 | -130 | -43 | -72 | -120 | -54 | -74 | -76 | -35 |
| D | 14 | -43 | -162 | -189 | -98 | -113 | -10 | 14 | -7 | -11 | -14 | -28 | -11 | -14 | -2 | -17 | -3 | 13 | -3 | -81 | -55 | 9 | 10 | 7 | -6 | -34 |
| | 15 | 6 | 0 | -58 | 12 | -32 | -45 | -24 | -3 | -17 | -9 | 10 | -19 | 5 | 0 | 2 | 2 | 2 | 10 | 20 | 13 | -10 | -13 | -22 | -7 | -7 |
| | 16 | -41 | -65 | -2 | 18 | 13 | -48 | -13 | -12 | 12 | -30 | -21 | 0 | 3 | 8 | -63 | 12 | -1 | -5 | 36 | 28 | 9 | 1 | 7 | 11 | -6 |
| | 17 | 9 | 1 | -6 | -12 | -13 | -4 | -5 | -2 | 5 | 15 | -11 | -2 | -57 | -36 | 21 | 9 | 10 | 10 | 19 | -1 | -15 | -9 | 14 | 19 | -2 |
| | 18 | 27 | -20 | -39 | -39 | -41 | -10 | 21 | 6 | -5 | 5 | -4 | -51 | -43 | -24 | -78 | -12 | 30 | -4 | -21 | 27 | 31 | 19 | 15 | 24 | -8 |
| | 19 | 0 | 18 | 16 | -24 | -33 | -23 | -13 | 24 | 1 | -8 | 32 | -20 | -19 | -9 | 6 | -8 | -72 | 24 | 28 | 32 | 38 | -81 | -19 | -33 | -6 |
| Q | 20 | -67 | -15 | -15 | -14 | -8 | -7 | -2 | -3 | -2 | -6 | -9 | -8 | -6 | 5 | 5 | 4 | 3 | 7 | 8 | 8 | 0 | 9 | 13 | 23 | -3 |
| | 21 | 11 | -7 | -2 | 0 | -5 | -9 | -3 | 12 | -15 | 7 | 9 | 13 | 12 | -17 | 0 | 16 | -10 | 32 | -27 | 27 | 28 | 25 | -46 | -11 | 2 |
| D | 22 | -3 | -86 | -26 | 19 | 49 | 59 | -25 | -4 | -48 | -73 | -39 | -40 | 16 | -47 | 6 | -7 | -10 | 4 | -57 | -63 | -3 | 0 | -9 | 15 | -16 |
| | 23 | 1 | 13 | -12 | -47 | -12 | 69 | -3 | -26 | -10 | 23 | 32 | 8 | -1 | 10 | 17 | -36 | 23 | 29 | 19 | 22 | 20 | 1 | -4 | 1 | 6 |
| Q | 24 | -1 | -6 | -8 | -8 | 6 | -9 | -33 | -26 | -2 | 20 | 0 | -5 | 11 | 14 | 19 | 7 | 8 | 17 | 20 | 16 | -6 | -5 | -4 | -6 | 1 |
| | 25 | 2 | 2 | 5 | 5 | 9 | -3 | -23 | 1 | 19 | 27 | 9 | 4 | 18 | 14 | 12 | -14 | 6 | -1 | 24 | 20 | 13 | 15 | 3 | 9 | 7 |
| | 26 | 5 | 1 | 10 | -1 | -87 | -38 | 17 | 17 | 25 | 44 | -35 | -8 | -25 | -12 | -2 | -5 | -37 | -38 | 25 | 1 | 0 | 47 | -54 | -17 | -7 |
| | 27 | -99 | -87 | -43 | -36 | -9 | 12 | -22 | 7 | 13 | -8 | 13 | -16 | -31 | -80 | -15 | -24 | 0 | 11 | 2 | -21 | -2 | 17 | 2 | 6 | -17 |
| | 28 | -11 | -28 | -21 | -4 | -5 | 1 | 2 | -8 | 1 | 8 | -7 | -1 | 16 | 20 | 6 | -46 | -62 | -15 | -37 | -4 | 13 | 12 | 2 | -36 | -9 |
| Q | 29 | -41 | -41 | -46 | 6 | -8 | -44 | -26 | 5 | 15 | 3 | 0 | 5 | -7 | -6 | 5 | -9 | 12 | 5 | 15 | -11 | 14 | 9 | -11 | -21 | -7 |
| | 30 | -9 | -11 | -4 | -30 | 6 | -10 | -4 | -5 | 2 | -2 | 0 | 1 | -2 | 3 | 2 | -13 | -28 | -2 | 6 | 24 | -19 | -30 | 23 | 16 | -4 |
| Q | 31 | 8 | -50 | -25 | 7 | -33 | -33 | -9 | 2 | 9 | 15 | 23 | -34 | -17 | -5 | -24 | -17 | -3 | 1 | 8 | 10 | 2 | 4 | 1 | -1 | -7 |
| | MEAN | -10 | -27 | -28 | -13 | -16 | -11 | -10 | -7 | -4 | -1 | -2 | -6 | -11 | -8 | -4 | -5 | -11 | -0 | -2 | -3 | 1 | 6 | -3 | -3 | -7 |
| 5Q | MEAN | -19 | -22 | -18 | -1 | -13 | -28 | -20 | -2 | 2 | 7 | 6 | -6 | -1 | 3 | 2 | -3 | 4 | 8 | 14 | 7 | 5 | 7 | 5 | 6 | -2 |
| 5D | MEAN | -1 | -54 | -67 | -6 | -12 | -6 | -20 | -15 | -27 | -19 | -19 | -10 | -32 | -32 | -1 | 3 | -9 | -26 | -54 | -55 | -26 | 9 | -31 | -17 | -22 |

AUGUST 1958 AO INDICES VALUES ARE EXPRESSED IN GAMMAS

| | UT | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q | 1 | -6 | -11 | -10 | -7 | -5 | -17 | 7 | 17 | -53 | -53 | -38 | -2 | 2 | 9 | 13 | -22 | -37 | -4 | 4 | 12 | 9 | 5 | 6 | 0 | -8 |
| Q | 2 | 3 | 0 | -4 | -11 | -4 | -5 | -2 | 2 | 6 | 27 | 31 | -25 | -5 | 17 | 13 | -3 | -5 | 2 | 2 | 15 | 9 | 2 | 11 | 13 | 4 |
| | 3 | 9 | 13 | -58 | -49 | -43 | -15 | 41 | -41 | 26 | 61 | 33 | -15 | 30 | 26 | 33 | 36 | 8 | -7 | 33 | 24 | 33 | 29 | 9 | 8 | 9 |
| | 4 | -1 | -2 | -1 | 2 | 10 | -47 | -1 | 11 | 2 | -2 | -2 | 0 | 1 | 2 | 9 | 9 | 9 | 16 | 15 | 10 | 5 | 2 | 0 | 10 | 2 |
| | 5 | 3 | -17 | 7 | -4 | -37 | -19 | 5 | -1 | 11 | 1 | -34 | -16 | -55 | -75 | -15 | -8 | -34 | 17 | 30 | 23 | 21 | 23 | -19 | -24 | -9 |
| | 6 | 6 | -6 | -30 | -115 | -69 | -29 | 37 | 6 | 19 | 23 | 28 | 4 | -5 | 0 | -7 | -9 | 7 | 26 | 18 | 24 | -17 | -18 | 11 | 16 | -3 |
| | 7 | -64 | -148 | -117 | -29 | -8 | -100 | -66 | -17 | 25 | -3 | 11 | -53 | -77 | -65 | -40 | -43 | -46 | 3 | 10 | -5 | 3 | 7 | 13 | 5 | -34 |
| | 8 | -98 | -116 | -102 | 8 | -99 | -16 | 12 | -14 | -41 | 13 | 4 | 2 | 10 | -11 | -7 | -5 | 10 | 17 | 17 | 5 | -1 | -2 | -19 | -13 | -19 |
| | 9 | -2 | -30 | -44 | 10 | -6 | -3 | -38 | -21 | 3 | -3 | 2 | 5 | -29 | -2 | 10 | -4 | 31 | -102 | -38 | 6 | -61 | -11 | 10 | -30 | -14 |
| | 10 | 0 | -34 | -5 | -9 | -1 | -26 | -74 | -23 | 12 | -15 | -9 | -9 | 0 | -5 | -6 | -6 | -30 | -45 | -1 | 1 | -12 | -45 | -39 | -16 | -17 |
| | 11 | 20 | -33 | -40 | 12 | -8 | -7 | -25 | 13 | 10 | 1 | 0 | -1 | 0 | 4 | 1 | 2 | 3 | 14 | 17 | 1 | 9 | 2 | -5 | -2 | -1 |
| | 12 | 17 | -44 | -15 | -5 | -4 | 9 | -24 | -17 | 7 | 1 | 20 | -7 | -11 | -1 | -7 | -23 | -31 | 7 | 21 | -10 | -17 | 2 | 1 | 0 | -5 |
| | 13 | -1 | -4 | -4 | 5 | -9 | -13 | -2 | -1 | 2 | -4 | -8 | -7 | 2 | 7 | 8 | -32 | -18 | -57 | 3 | 32 | 4 | -1 | 22 | -53 | -5 |
| D | 14 | -70 | -13 | -76 | -42 | -10 | -33 | -73 | -50 | -27 | -1 | -45 | -56 | -33 | -14 | -26 | -5 | -9 | 18 | -122 | -40 | 6 | -32 | -95 | -34 | -37 |
| D | 15 | 2 | -7 | -62 | -54 | -93 | 15 | 2 | -77 | -77 | -114 | 24 | -16 | -83 | -45 | -70 | -62 | -77 | -59 | -41 | -12 | -13 | -76 | -58 | -56 | -46 |
| D | 16 | -143 | -50 | 2 | -6 | -84 | -109 | -9 | -2 | 16 | 0 | -33 | -18 | -3 | -32 | -145 | -217 | -16 | -75 | -77 | -18 | -108 | -100 | 0 | 9 | -51 |
| D | 17 | -233 | -70 | -18 | -132 | -130 | -39 | 15 | -18 | 14 | -106 | -15 | -28 | -200 | -249 | -145 | -105 | -3 | -22 | -48 | 4 | -34 | -80 | -1 | -43 | -70 |
| | 18 | -77 | -15 | -34 | -63 | -163 | -115 | -6 | -49 | -78 | -83 | -86 | 26 | -18 | -85 | -109 | -117 | -10 | -46 | -59 | -26 | -64 | -75 | -1 | -26 | -57 |
| | 19 | -127 | -40 | -44 | -30 | -45 | -48 | -34 | -8 | -60 | -74 | -66 | -36 | 6 | 1 | 3 | 5 | 12 | -52 | -4 | 11 | 8 | 5 | 0 | 4 | -26 |
| | 20 | 2 | 1 | -7 | -3 | -6 | -10 | 3 | 7 | -7 | 7 | -11 | -4 | -7 | -5 | -25 | -71 | -84 | -30 | 16 | 4 | 10 | 3 | -20 | -29 | -11 |
| | 21 | -9 | -8 | 1 | -7 | -43 | -41 | -3 | -29 | -26 | 1 | 5 | -4 | -3 | -11 | -11 | -9 | -10 | -9 | -25 | -20 | -5 | -4 | -2 | 4 | -11 |
| | 22 | -9 | -9 | -7 | -7 | -7 | -5 | -5 | 0 | -5 | -7 | 8 | -13 | -12 | -3 | -9 | -14 | 4 | -2 | -9 | 1 | 3 | 13 | -29 | -60 | -8 |
| | 23 | -9 | -25 | -66 | -42 | -21 | 29 | 35 | -4 | 17 | 27 | 40 | 23 | -12 | -19 | -23 | -15 | -29 | -18 | -13 | 7 | 12 | 10 | -6 | 8 | -4 |
| D | 24 | 25 | -19 | 33 | 17 | 35 | -93 | -101 | 6 | -18 | -37 | -36 | -64 | 6 | 6 | -37 | -56 | -44 | -28 | -20 | 13 | 16 | -67 | 2 | 9 | -19 |
| | 25 | 7 | 3 | -5 | 0 | -1 | 5 | 2 | -6 | -7 | -9 | -6 | -5 | -10 | -9 | -9 | -9 | 0 | 0 | 2 | -6 | -40 | -12 | 3 | 0 | -5 |
| | 26 | -10 | -9 | -5 | 3 | -3 | -3 | -4 | -2 | -1 | -34 | 2 | -3 | -3 | -23 | -64 | -36 | -20 | -2 | -27 | -11 | -2 | 1 | 3 | 4 | -10 |
| | 27 | 1 | 4 | -32 | -18 | 4 | 0 | 9 | -9 | -1 | 23 | 23 | 1 | 2 | -2 | -6 | -9 | -4 | 2 | 10 | 3 | -18 | -4 | -2 | 2 | -1 |
| Q | 28 | 4 | 4 | 6 | 0 | 2 | -18 | 5 | 3 | 6 | -5 | -5 | -6 | -3 | -2 | -3 | -6 | -2 | -5 | -1 | -14 | -27 | -1 | -3 | -3 | -3 |
| Q | 29 | -5 | -1 | 0 | 1 | -2 | -5 | 1 | 3 | -4 | -6 | -9 | -3 | 6 | -10 | -5 | -15 | -6 | -5 | -4 | -3 | 0 | -4 | -5 | -5 | -4 |
| Q | 30 | 7 | 10 | 17 | -1 | 0 | -4 | -1 | 8 | 8 | -2 | -1 | 4 | 1 | 3 | 0 | 0 | -1 | 1 | -1 | 2 | 7 | 3 | 1 | 2 | 3 |
| | 31 | 12 | 14 | 0 | -15 | 8 | 17 | 20 | 12 | 7 | 3 | 36 | -11 | -41 | -65 | -3 | -68 | -30 | 6 | 7 | -48 | -26 | 18 | -9 | 3 | -6 |
| | MEAN | -24 | -21 | -23 | -19 | -27 | -24 | -9 | -10 | -7 | -12 | -4 | -11 | -18 | -21 | -22 | -30 | -15 | -14 | -9 | -0 | -9 | -13 | -7 | -10 | -15 |
| 5Q | MEAN | 1 | 0 | 2 | -4 | -2 | -10 | 2 | 7 | -7 | -8 | -4 | -6 | 0 | 3 | 4 | -9 | -10 | -2 | 0 | 2 | -0 | 1 | 2 | 1 | -2 |
| 5D | MEAN | -84 | -32 | -24 | -43 | -56 | -52 | -33 | -28 | -18 | -52 | -21 | -36 | -63 | -67 | -85 | -89 | -30 | -33 | -62 | -11 | -27 | -71 | -30 | -23 | -45 |

SEPTEMBER 1968 AO INDICES VALUES ARE EXPRESSED IN GAMMAS

| | UT | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 3 | -41 | -60 | 4 | -7 | 47 | -9 | -24 | -5 | 7 | -77 | -47 | -73 | -78 | -26 | 4 | -12 | 17 | 21 | 24 | 24 | 34 | 26 | -12 | -11 |
| | 2 | -37 | -2 | 21 | 12 | 14 | 17 | -22 | 2 | -37 | -56 | -147 | -17 | -11 | -75 | -5 | 5 | -26 | -25 | -20 | 18 | 23 | 7 | 14 | 15 | -14 |
| | 3 | 12 | 8 | -25 | 32 | 10 | 18 | 31 | 42 | 39 | 14 | 11 | 21 | 14 | 22 | 12 | -6 | -92 | -21 | 6 | -10 | -6 | -113 | -6 | 23 | 2 |
| | 4 | -73 | -31 | 8 | -59 | -78 | 11 | 33 | 19 | 42 | 39 | 26 | -73 | -82 | -62 | -86 | -62 | -23 | 6 | 2 | -35 | -15 | 6 | -68 | 8 | -23 |
| | 5 | 12 | 12 | 7 | -7 | 19 | -74 | -44 | 21 | 27 | -23 | -12 | -42 | -54 | -46 | 8 | 3 | -9 | -10 | 18 | 4 | -58 | -12 | -28 | -45 | -14 |
| | 6 | -86 | -9 | -22 | -30 | 16 | -32 | -61 | -45 | 2 | 8 | -2 | 3 | 16 | -20 | 14 | -10 | -19 | -71 | 7 | 20 | 18 | -138 | -70 | -111 | -26 |
| | 7 | -33 | 43 | 13 | 13 | 11 | 18 | 13 | 13 | 14 | 16 | 9 | 10 | 15 | 6 | 2 | 7 | -74 | -35 | -59 | -19 | 16 | -25 | -160 | -193 | -16 |
| D | 8 | -175 | -273 | -103 | -84 | -72 | -23 | -126 | -135 | -138 | -258 | -36 | -145 | -110 | 30 | 24 | -212 | -227 | -159 | -16 | 22 | 13 | 17 | 8 | 14 | -90 |
| | 9 | -145 | -117 | -98 | -35 | -57 | -56 | 7 | 10 | 18 | 18 | 3 | -67 | -68 | 5 | 8 | -24 | -23 | -51 | -19 | -8 | 4 | 6 | -2 | 0 | -29 |
| | 10 | -5 | -41 | -54 | -56 | -21 | 2 | 0 | -4 | 2 | 15 | 28 | -72 | -25 | -9 | 7 | -58 | -65 | -37 | -6 | 10 | 3 | -5 | 5 | 9 | -16 |
| | 11 | -23 | -55 | -90 | -24 | -53 | -37 | -12 | 8 | -7 | -12 | 7 | -3 | -17 | 12 | 4 | 0 | -3 | -5 | -36 | 2 | 5 | 0 | 1 | -2 | -15 |
| | 12 | 1 | 7 | -14 | -85 | -37 | -1 | 18 | -57 | -36 | -22 | -19 | 58 | -25 | -56 | -106 | 8 | 22 | 26 | -59 | -90 | -15 | 59 | 14 | -76 | -20 |
| D | 13 | -183 | -132 | -133 | -47 | 33 | 2 | -21 | 9 | 31 | 25 | 13 | -128 | -76 | -47 | -46 | -108 | -138 | -109 | -173 | -128 | 9 | -10 | -137 | -59 | -65 |
| D | 14 | -123 | -133 | -159 | -257 | -22 | 21 | -4 | -109 | -57 | -117 | -141 | -85 | -179 | -207 | -69 | -102 | -109 | -88 | -10 | -18 | -111 | -158 | -34 | -12 | -95 |
| D | 15 | -75 | -99 | -200 | -89 | -82 | -20 | -3 | -3 | -3 | 28 | 3 | -82 | -72 | -75 | -46 | -224 | -105 | -99 | -168 | -38 | -12 | -28 | -34 | -142 | -70 |
| | 16 | -88 | -42 | -83 | -149 | -84 | -41 | -2 | -5 | -17 | -15 | -32 | -6 | -36 | -28 | -34 | -62 | 4 | -28 | -49 | -15 | -15 | -34 | -6 | 1 | -36 |
| | 17 | -14 | -9 | -30 | 17 | -37 | 1 | -8 | -29 | -19 | -10 | -47 | -14 | -24 | -16 | -10 | -3 | -4 | -5 | -55 | -18 | -2 | 5 | 3 | -1 | -14 |
| Q | 18 | -4 | -5 | -18 | -16 | -24 | -28 | 4 | -1 | 2 | -4 | -7 | -8 | -3 | 3 | 8 | -20 | -41 | -51 | -18 | 3 | 1 | 8 | 11 | -22 | -10 |
| | 19 | -23 | 8 | 0 | -64 | -110 | 15 | 20 | -34 | -3 | -102 | 1 | 7 | 1 | -2 | -9 | -40 | -31 | -3 | 1 | 7 | 9 | 1 | -1 | 4 | -15 |
| | 20 | 18 | 4 | -26 | -79 | -13 | 4 | -1 | 2 | 2 | 6 | 4 | 3 | 3 | 1 | -1 | -3 | -4 | -2 | -7 | -22 | -25 | -1 | 6 | 5 | -5 |
| | 21 | -6 | 3 | 6 | 14 | -2 | -62 | -94 | 13 | 13 | 1 | 1 | 5 | -7 | -64 | -11 | -78 | -195 | -40 | 11 | 13 | 1 | 9 | 15 | 12 | -18 |
| | 22 | -5 | -26 | 22 | 13 | 14 | 14 | 10 | 21 | 24 | 15 | 5 | -6 | -58 | -60 | -69 | -40 | -11 | 9 | 8 | 14 | -59 | -45 | -150 | -54 | -17 |
| D | 23 | 5 | -110 | -176 | -217 | -34 | 30 | -7 | -5 | -26 | -124 | -25 | -7 | -13 | -101 | -207 | -276 | -57 | -24 | 6 | 6 | 3 | -1 | 5 | -2 | -57 |
| Q | 24 | -5 | -1 | 6 | 8 | 7 | 3 | 0 | 1 | -6 | -7 | -5 | -4 | -9 | -6 | -12 | -10 | -8 | -2 | 3 | -77 | -51 | 1 | 5 | 4 | -7 |
| Q | 25 | 2 | 1 | -1 | -3 | 0 | 0 | 1 | 1 | -2 | -10 | -8 | -9 | -6 | -3 | -4 | -12 | -23 | -18 | -3 | 4 | -3 | -9 | -8 | -5 | -5 |
| Q | 26 | -1 | -9 | 3 | 4 | 3 | 6 | 15 | -16 | -21 | 5 | 5 | 0 | -3 | 10 | 14 | -58 | -57 | -14 | 1 | 2 | -3 | -5 | -1 | 2 | -5 |
| Q | 27 | 4 | 4 | 6 | 17 | -5 | 1 | 11 | 10 | 5 | 0 | -4 | 0 | 2 | -3 | -2 | -2 | -3 | -21 | 2 | 3 | 1 | 2 | 5 | 12 | 2 |
| | 28 | 14 | 9 | -3 | 6 | 7 | 10 | 13 | 13 | 5 | -15 | -8 | -73 | 6 | 4 | -4 | -31 | -64 | -7 | 20 | -55 | -6 | -44 | 10 | 18 | -7 |
| | 29 | 22 | -42 | -30 | 20 | -3 | -84 | -31 | 12 | 20 | 5 | -3 | 1 | 2 | 8 | 18 | 17 | -36 | -34 | -48 | -18 | -94 | -75 | 10 | 6 | -15 |
| | 30 | 9 | 11 | 11 | 13 | 5 | 5 | 6 | 11 | 14 | 9 | -2 | -11 | -28 | -7 | 12 | -43 | -96 | 0 | 17 | -33 | -148 | -42 | -17 | -29 | -14 |
| | MEAN | -33 | -36 | -41 | -38 | -20 | -8 | -9 | -9 | -4 | -19 | -15 | -26 | -31 | -29 | -21 | -48 | -51 | -30 | -21 | -14 | -16 | -20 | -19 | -21 | -24 |
| 5Q | MEAN | -1 | -2 | -1 | 2 | -4 | -4 | 6 | -1 | -4 | -3 | -4 | -4 | -4 | 0 | 1 | -20 | -26 | -21 | -3 | -13 | -11 | -1 | 2 | -2 | -5 |
| 5D | MEAN | -110 | -149 | -154 | -139 | -35 | 2 | -32 | -49 | -39 | -89 | -37 | -89 | -90 | -80 | -69 | -184 | -127 | -96 | -72 | -31 | -20 | -36 | -38 | -40 | -75 |

OCTOBER 1968 AO INDICES VALUES ARE EXPRESSED IN GAMMAS

| | UT | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | -117 | -132 | 16 | 48 | 13 | -8 | -9 | 4 | 8 | -23 | -19 | 15 | 8 | 3 | -70 | -11 | -4 | -81 | -64 | 3 | 14 | -99 | -38 | -17 | -23 |
| D | 2 | -136 | -188 | -34 | -8 | -51 | -125 | -65 | -1 | 0 | -33 | -392 | -315 | -180 | -136 | -143 | -94 | -44 | -4 | -52 | -17 | 9 | 11 | -71 | -112 | -91 |
| | 3 | -87 | -346 | -220 | -62 | -70 | -93 | -60 | -154 | -151 | -195 | -33 | 10 | 4 | -25 | -23 | -18 | -19 | -17 | -10 | -10 | -6 | -6 | -9 | -10 | -67 |
| | 4 | -13 | -13 | -15 | -15 | -16 | -18 | -13 | -12 | -11 | -1 | -6 | -10 | -14 | -18 | -14 | -50 | -68 | -59 | -27 | -9 | -8 | -5 | -5 | -5 | -18 |
| Q | 5 | 8 | 6 | 5 | 8 | 8 | -1 | -17 | -55 | -40 | -33 | -1 | 6 | -12 | -30 | -2 | -4 | -13 | -6 | -2 | 1 | 0 | -2 | -3 | -1 | -8 |
| | 6 | 0 | 3 | -6 | 3 | 2 | 5 | 21 | 43 | 32 | 25 | 33 | 15 | 14 | 4 | 0 | -15 | -20 | -13 | -2 | -28 | -22 | 11 | 1 | -20 | 4 |
| | 7 | -92 | -57 | -54 | -104 | 20 | 19 | 5 | -1 | 2 | -6 | -40 | -14 | -9 | -8 | -5 | -13 | 0 | 9 | -153 | -171 | -39 | -69 | -17 | -25 | -34 |
| | 8 | -152 | -38 | 11 | -10 | -22 | -29 | -14 | -4 | -35 | -15 | -27 | -48 | -18 | -14 | -8 | -69 | -73 | 3 | 5 | -51 | -60 | -11 | -34 | -28 | -31 |
| | 9 | -107 | -94 | -152 | -41 | 12 | 5 | 6 | -2 | -5 | -3 | -5 | -3 | 2 | 4 | -51 | -87 | -58 | -82 | -6 | 1 | -2 | -55 | -114 | -62 | -37 |
| | 10 | -58 | -50 | 22 | 3 | -5 | -20 | -35 | -32 | -12 | -39 | -22 | 1 | 2 | 0 | -23 | -17 | -10 | -4 | -2 | 2 | 2 | -1 | -3 | 1 | -13 |
| Q | 11 | 2 | 3 | 0 | -1 | 0 | 4 | 5 | -21 | -14 | 0 | -1 | -1 | -2 | -14 | -6 | -1 | 0 | 4 | 5 | 7 | 3 | 1 | 2 | 3 | -1 |
| D | 12 | -48 | -239 | -154 | -135 | -120 | -63 | 61 | 26 | 43 | -45 | -104 | -138 | -58 | -77 | -80 | -42 | -25 | -185 | -383 | -68 | -197 | -75 | -172 | -163 | -102 |
| D | 13 | -93 | -53 | -118 | -35 | -89 | -25 | -71 | -92 | -123 | -159 | -100 | -111 | -169 | -103 | -174 | -151 | -142 | -166 | -33 | -42 | -43 | -76 | -174 | -125 | -103 |
| | 14 | -109 | -33 | -58 | -58 | -53 | -51 | 3 | -1 | -38 | -3 | 2 | -44 | -155 | -45 | -60 | -159 | -136 | -47 | -39 | -82 | -28 | -59 | -66 | 12 | -54 |
| | 15 | 13 | 7 | 0 | 7 | 8 | -10 | 1 | -29 | -28 | -26 | -19 | 6 | 2 | -7 | -20 | -62 | -41 | -76 | -22 | 2 | -10 | -10 | -4 | 1 | -13 |
| | 16 | 2 | 5 | -3 | -30 | -24 | -24 | -65 | -71 | -90 | -22 | 0 | 0 | 0 | -24 | -98 | -122 | -15 | 7 | 6 | 11 | 12 | 6 | 6 | 9 | -22 |
| | 17 | -12 | -40 | -14 | 5 | -5 | 15 | 7 | -13 | -12 | 11 | -15 | -4 | -4 | -18 | -62 | -87 | -6 | 6 | -14 | 0 | -39 | -28 | 19 | -7 | -13 |
| | 18 | 16 | 22 | -7 | 2 | 10 | 11 | 14 | -13 | -41 | 9 | 15 | -22 | -11 | -9 | -7 | -5 | 5 | -6 | -1 | 13 | 10 | 4 | -38 | -88 | -5 |
| | 19 | -24 | -12 | 14 | 10 | 7 | 8 | 8 | 13 | -13 | -2 | 5 | -8 | -107 | 4 | 0 | -6 | -2 | -1 | -1 | -71 | -135 | -17 | -3 | -53 | -16 |
| | 20 | -5 | 13 | 6 | 7 | 3 | 2 | 10 | -76 | -98 | -72 | -25 | -5 | -3 | -49 | 2 | 1 | -52 | -72 | -8 | 3 | 1 | 1 | 3 | 2 | -17 |
| Q | 21 | 3 | 3 | 3 | 1 | 2 | 4 | 1 | 0 | -10 | -20 | -14 | 0 | -2 | -7 | -10 | -11 | -11 | -13 | -3 | -2 | -2 | -6 | -2 | 3 | -4 |
| Q | 22 | 5 | 6 | 5 | 7 | 9 | 9 | 2 | 1 | 5 | 1 | -1 | -4 | -5 | -8 | -10 | -16 | -15 | -12 | -7 | -4 | -2 | -1 | 0 | 3 | -1 |
| Q | 23 | 4 | 4 | 4 | 5 | 2 | 4 | 5 | 3 | 3 | 1 | 1 | -1 | 0 | -7 | -8 | -8 | -5 | -22 | -21 | 8 | 12 | 8 | 8 | 8 | 0 |
| | 24 | 8 | 8 | 11 | 8 | 22 | 17 | 17 | 22 | 28 | 35 | 23 | 30 | 25 | 13 | 15 | -18 | -16 | -67 | -109 | 21 | 30 | 17 | 7 | 5 | 6 |
| | 25 | 4 | 5 | 6 | 10 | 2 | 3 | 43 | 24 | -26 | -39 | 4 | 0 | -21 | -105 | -31 | -1 | 11 | 6 | 4 | -13 | -18 | -45 | -30 | 8 | -8 |
| | 26 | 4 | 8 | -3 | 4 | 9 | 10 | 11 | -9 | -65 | -54 | -1 | 8 | 5 | 2 | 1 | 0 | 0 | 1 | -20 | -22 | 37 | 45 | 41 | 35 | 2 |
| | 27 | 30 | 24 | 19 | 13 | 13 | 14 | 8 | -43 | -45 | 19 | 12 | 8 | 14 | 12 | -17 | -15 | -11 | -8 | -64 | -45 | -1 | 5 | 8 | 2 | -2 |
| | 28 | -1 | 10 | 9 | 11 | 12 | 9 | -52 | -18 | 13 | 13 | 12 | 10 | 7 | 4 | 7 | -20 | 4 | 10 | 10 | 13 | 12 | 18 | -18 | -68 | 0 |
| D | 29 | -65 | 25 | 29 | 24 | 21 | 23 | 7 | 32 | 28 | 36 | 28 | 25 | -6 | -23 | -17 | 14 | -27 | -347 | -124 | -79 | -122 | -22 | -27 | 9 | -23 |
| | 30 | 32 | 73 | 57 | 43 | 12 | 5 | 12 | 7 | 3 | -63 | -183 | -118 | -151 | -212 | -152 | -64 | -59 | -42 | -32 | -28 | -89 | -59 | -95 | -178 | -53 |
| D | 31 | -144 | -82 | -169 | -170 | -208 | -133 | -158 | -105 | -190 | -5 | -128 | -319 | 29 | -194 | -681 | -233 | -281 | -412 | -309 | -517 | -265 | -139 | 20 | 21 | -199 |
| | MEAN | -37 | -37 | -26 | -15 | -15 | -14 | -10 | -19 | -28 | -23 | -32 | -33 | -26 | -35 | -56 | -45 | -37 | -55 | -48 | -38 | -31 | -21 | -26 | -27 | -31 |
| 5Q | MEAN | 4 | 4 | 3 | 4 | 4 | 4 | -1 | -14 | -11 | -10 | -3 | 0 | -4 | -13 | -7 | -8 | -9 | -10 | -6 | 2 | 2 | 0 | 1 | 3 | -3 |
| 5D | MEAN | -97 | -107 | -91 | -65 | -89 | -65 | -45 | -28 | -48 | -41 | -139 | -172 | -77 | -107 | -219 | -101 | -104 | -223 | -180 | -145 | -124 | -60 | -85 | -74 | -104 |

NOVEMBER 1958 AO INDICES VALUES ARE EXPRESSED IN GAMMAS

| | UT | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| D | 1 | -116 | -214 | -99 | -3 | 0 | 9 | -9 | -22 | -20 | -5 | -26 | -305 | -1055 | -462 | -316 | -103 | -10 | 15 | -144 | -184 | -113 | -439 | -227 | -219 | -128 |
| D | 2 | -179 | -379 | -160 | -38 | 2 | -26 | -46 | -2 | -125 | -155 | -146 | -167 | -238 | -223 | -297 | -156 | -129 | -128 | -8 | -8 | -44 | -46 | -135 | -142 | -124 |
| D | 3 | -53 | -241 | -47 | 39 | 28 | 6 | -47 | -93 | -29 | -30 | -10 | -15 | -219 | -200 | -141 | -157 | -91 | -96 | -130 | -45 | -68 | -115 | -80 | -40 | -78 |
| D | 4 | -40 | -75 | -19 | -25 | -63 | -134 | -80 | -117 | -107 | -81 | -130 | -102 | -297 | -161 | -26 | 29 | 30 | -7 | 3 | -41 | -110 | -49 | 15 | 0 | -66 |
| | 5 | -6 | -10 | -39 | -75 | 2 | 2 | -4 | -61 | -90 | -86 | -35 | -59 | -73 | -18 | -32 | -36 | -30 | -26 | -16 | -14 | -44 | -76 | -13 | -7 | -35 |
| | 6 | -10 | -12 | -12 | -29 | -24 | -2 | -6 | -14 | -4 | -1 | -16 | -35 | -4 | 1 | -20 | -25 | -18 | -28 | -142 | -71 | -43 | -6 | -53 | -160 | -31 |
| | 7 | -85 | -84 | -67 | -73 | -99 | -117 | -66 | -32 | -31 | -41 | -20 | -47 | -53 | -225 | -32 | 29 | 5 | -2 | -3 | -8 | 7 | 7 | 4 | 4 | -43 |
| | 8 | -3 | -1 | 1 | 4 | 1 | -18 | -76 | -52 | -43 | -116 | -65 | -40 | -83 | -82 | -144 | -101 | -44 | -25 | -9 | -15 | -32 | -23 | -92 | -157 | -51 |
| D | 9 | -118 | -206 | -89 | -77 | -48 | -4 | 10 | -3 | -119 | -204 | -68 | -41 | -83 | -120 | -125 | -88 | -72 | -33 | -43 | -62 | -8 | -12 | -9 | -3 | -68 |
| | 10 | -6 | -3 | -14 | -73 | -52 | -16 | -9 | -12 | -47 | -18 | -69 | -217 | -145 | -29 | -21 | -146 | -144 | -77 | -7 | 2 | 3 | -18 | -31 | -82 | -51 |
| | 11 | -88 | -99 | -99 | -34 | -12 | 1 | -4 | -89 | -134 | -35 | -28 | 68 | -81 | -90 | -27 | -14 | -5 | -6 | 11 | 10 | 13 | 4 | 6 | -4 | -31 |
| Q | 12 | -21 | -17 | -3 | 1 | 2 | -8 | -5 | -2 | 0 | 4 | 8 | -10 | -33 | -22 | -6 | -10 | -47 | -33 | -15 | -5 | -2 | -4 | 0 | 1 | -9 |
| | 13 | 3 | 3 | -7 | -5 | 2 | 8 | 8 | 6 | 14 | 17 | -36 | -13 | 25 | 26 | 14 | -4 | -19 | -17 | -9 | 1 | -7 | 26 | 35 | 12 | 3 |
| Q | 14 | 2 | 4 | 3 | 9 | 14 | 11 | 8 | 11 | 10 | 4 | 4 | 2 | 3 | -2 | 1 | -8 | -20 | -6 | -13 | -2 | 7 | -20 | 0 | 16 | 2 |
| Q | 15 | 6 | 10 | 7 | 9 | -4 | -3 | 2 | 4 | 8 | 5 | 2 | 0 | -4 | -4 | -4 | -8 | -5 | -14 | 2 | 3 | -1 | -2 | 4 | 7 | 1 |
| | 16 | 8 | 16 | 17 | 21 | 19 | 15 | 11 | 8 | 8 | 26 | 22 | 32 | -4 | -16 | -9 | -37 | 45 | 37 | 10 | 29 | 15 | -29 | -15 | 20 | 10 |
| | 17 | 12 | 3 | -7 | 49 | 34 | 26 | 21 | 47 | 33 | 7 | 35 | 3 | -48 | -72 | -83 | -148 | -141 | -102 | -263 | -237 | -210 | -234 | -152 | -40 | -61 |
| | 18 | -60 | -192 | -96 | -62 | -169 | -83 | -79 | -10 | 8 | -225 | 50 | 33 | 0 | -8 | -1 | -4 | -42 | -108 | -81 | 8 | 22 | -31 | -143 | -57 | -55 |
| | 19 | 2 | -33 | -5 | 24 | 12 | 3 | 10 | 12 | -17 | 32 | 22 | -40 | -73 | -31 | -9 | -64 | -14 | -6 | -4 | -4 | -1 | 4 | 3 | 3 | -7 |
| | 20 | 1 | 7 | 11 | 10 | 23 | 36 | 27 | 26 | 43 | -16 | -11 | -10 | 4 | -109 | -156 | 20 | 47 | 24 | -74 | 12 | 21 | 14 | 21 | 23 | -0 |
| | 21 | 13 | 24 | 15 | 12 | 9 | -11 | 5 | 3 | 7 | 0 | 0 | 0 | -7 | -36 | -17 | -14 | -130 | -122 | -60 | -20 | -8 | -5 | -61 | 3 | -17 |
| | 22 | 15 | 11 | 16 | 17 | 10 | 8 | 6 | 10 | -3 | 18 | 30 | 8 | 6 | -22 | -17 | 10 | 5 | 2 | -8 | -35 | -24 | 5 | 19 | 21 | 5 |
| | 23 | 25 | 22 | 22 | -6 | 6 | 31 | 24 | 9 | 8 | 5 | -2 | 0 | -34 | 1 | 0 | -3 | -4 | 0 | 3 | 2 | 1 | 1 | 3 | 9 | 5 |
| | 24 | 16 | 16 | 17 | 21 | 15 | -2 | -6 | 15 | 14 | 11 | 8 | 14 | 12 | 13 | 3 | -1 | 8 | 11 | -34 | 6 | 11 | 15 | 15 | 13 | 9 |
| | 25 | 13 | 19 | 41 | 38 | 30 | 31 | 28 | 13 | 23 | 27 | 7 | -7 | -4 | -22 | -11 | 12 | -7 | 3 | -8 | -63 | -28 | 2 | 0 | 17 | 6 |
| | 26 | 18 | 19 | 17 | 21 | 28 | 22 | 19 | 20 | 21 | 23 | 23 | 43 | 36 | 7 | -76 | -110 | -22 | -38 | -14 | 21 | 15 | 14 | -29 | 10 | 4 |
| | 27 | 4 | -52 | -58 | 9 | 24 | 42 | 53 | 28 | 10 | 2 | -14 | 8 | -14 | -13 | -15 | -48 | -37 | -25 | -43 | -50 | -109 | -59 | -4 | 5 | -15 |
| | 28 | 23 | 34 | 45 | 35 | 30 | 29 | 19 | 14 | 18 | 0 | -75 | -43 | -11 | -8 | -5 | -3 | 2 | 3 | -74 | -24 | 8 | 11 | -17 | -26 | -1 |
| Q | 29 | -9 | 22 | 12 | 16 | 2 | 4 | 11 | 10 | 9 | 4 | 0 | -4 | 0 | -12 | -81 | -84 | -23 | 3 | 9 | 9 | 12 | 6 | 5 | 6 | -3 |
| Q | 30 | 6 | 5 | 5 | 4 | 6 | 7 | 7 | 6 | 2 | 0 | 3 | -1 | -24 | -26 | -2 | -4 | -16 | -47 | 1 | -12 | -44 | -14 | -11 | -28 | -7 |
| | MEAN | -21 | -47 | -20 | -5 | -6 | -4 | -6 | -9 | -18 | -28 | -18 | -32 | -50 | -66 | -55 | -43 | -31 | -28 | -39 | -27 | -25 | -36 | -31 | -27 | -28 |
| 5Q MEAN | | -3 | 5 | 5 | 8 | 4 | 2 | 5 | 6 | 6 | 3 | 3 | -3 | -12 | -13 | -18 | -23 | -22 | -19 | -3 | -1 | -6 | -7 | -0 | 0 | -3 |
| 5D MEAN | | -101 | -223 | -83 | -21 | -16 | -30 | -34 | -47 | -80 | -95 | -76 | -126 | -178 | -233 | -181 | -95 | -54 | -50 | -64 | -68 | -69 | -132 | -87 | -81 | -93 |

DECEMBER 1968 AO INDICES VALUES ARE EXPRESSED IN GAMMAS

| | UT | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | -7 | -15 | 13 | 13 | -58 | 2 | 4 | -4 | -30 | -78 | -132 | -108 | -106 | -94 | -132 | -132 | -49 | -145 | -52 | 18 | 37 | 14 | 20 | 24 | -42 |
| | 2 | 23 | 23 | 15 | 4 | 8 | 5 | 11 | -4 | -14 | -14 | -96 | -75 | -67 | -64 | -28 | -60 | -59 | -111 | -63 | -20 | 1 | -18 | 5 | -8 | -25 |
| D | 3 | -26 | 0 | -12 | -68 | -169 | -36 | 10 | 12 | -30 | -108 | -67 | -55 | -116 | -88 | -38 | -49 | -82 | -34 | -53 | -131 | -119 | -72 | -195 | -71 | -67 |
| D | 4 | -94 | -65 | 29 | 17 | 6 | 7 | -63 | -165 | -165 | -108 | -129 | -181 | -81 | -91 | -53 | -84 | -129 | -17 | -66 | -155 | -49 | -25 | -49 | -20 | -72 |
| D | 5 | -15 | 14 | -3 | -61 | -103 | -26 | 24 | -1 | -153 | -185 | -82 | -49 | -273 | -73 | -105 | -91 | -24 | -89 | -79 | -165 | -69 | -100 | -142 | -143 | -83 |
| | 6 | -102 | -24 | 2 | 6 | -6 | 12 | 21 | -1 | 2 | -76 | -25 | 21 | 3 | -4 | -6 | -22 | -17 | -15 | -17 | -9 | -33 | -13 | -15 | -15 | -14 |
| Q | 7 | 9 | -3 | 2 | 4 | 0 | -2 | -2 | -14 | -8 | 2 | -5 | -36 | -63 | -13 | -39 | -66 | -100 | -79 | -10 | -13 | -29 | -43 | -41 | -33 | -24 |
| | 8 | -13 | -18 | -2 | 42 | 14 | -2 | -60 | -59 | -141 | -29 | -52 | -61 | -57 | -198 | -25 | -18 | -1 | -11 | -102 | -104 | -35 | -9 | -79 | -44 | -44 |
| | 9 | 12 | 10 | 38 | 23 | -3 | -2 | 4 | 1 | 3 | -7 | -9 | -12 | -35 | -31 | -11 | -74 | -82 | -52 | -52 | -11 | -3 | 9 | -13 | -85 | -16 |
| | 10 | -94 | 0 | 33 | -20 | -21 | 9 | -2 | -55 | -39 | -9 | -9 | -31 | -41 | 10 | -6 | -12 | -11 | -3 | -1 | -10 | -19 | -85 | -22 | 3 | -18 |
| | 11 | 2 | -18 | -7 | 15 | 26 | 19 | 16 | 13 | 13 | 3 | 2 | 1 | -1 | -6 | -5 | -25 | -164 | -32 | -90 | -98 | 36 | 48 | 16 | -8 | -10 |
| | 12 | -40 | -32 | -41 | -21 | 11 | 4 | 25 | 6 | 2 | -3 | -1 | -8 | -2 | -6 | -32 | -2 | 16 | -7 | -54 | -103 | -40 | -8 | -7 | -8 | -15 |
| | 13 | -16 | 0 | 13 | 13 | 9 | 9 | 2 | 1 | 1 | 3 | -2 | -5 | -2 | -5 | -18 | -81 | -131 | -100 | -83 | -25 | -9 | 0 | -2 | -1 | -18 |
| Q | 14 | 7 | 3 | 6 | 6 | 8 | 6 | 5 | -12 | -21 | -5 | 26 | -1 | -4 | -20 | -20 | -1 | -11 | -8 | -15 | -8 | -6 | -6 | -5 | -4 | -3 |
| | 15 | 2 | 6 | 10 | 6 | 16 | 11 | -6 | 1 | 46 | 17 | 11 | 6 | 7 | 10 | 6 | -8 | -19 | -1 | 1 | -13 | -87 | 21 | 16 | 7 | 3 |
| | 16 | 16 | 21 | 15 | -3 | -10 | -19 | 26 | 6 | 39 | 44 | -4 | 35 | 5 | -48 | 6 | 9 | -6 | -68 | -16 | 2 | -123 | 13 | 17 | 9 | -1 |
| Q | 17 | -1 | 17 | 25 | 18 | 15 | 7 | 7 | 34 | 29 | 23 | 13 | 21 | 7 | 7 | 8 | 3 | -3 | 0 | -21 | -6 | 7 | 12 | 12 | 9 | 10 |
| | 18 | 7 | 3 | -18 | 17 | 25 | 17 | 13 | 8 | 12 | 5 | -4 | -29 | -10 | -7 | -43 | -20 | 17 | 14 | 1 | -56 | -30 | 26 | 60 | 26 | 1 |
| | 19 | 4 | 1 | 22 | 26 | 19 | 20 | -19 | -9 | 32 | 14 | 6 | -12 | -73 | 23 | 12 | -10 | -13 | -104 | -90 | 22 | 7 | -11 | -70 | -53 | -11 |
| Q | 20 | 20 | 13 | 20 | 17 | 25 | 8 | -2 | 2 | 11 | 15 | 9 | 5 | 4 | 0 | 4 | 1 | 1 | 3 | 4 | 1 | -2 | 5 | 5 | 3 | 7 |
| | 21 | -23 | -26 | -10 | 9 | 15 | 18 | 12 | -9 | 1 | 9 | 5 | -19 | -22 | 10 | 32 | 9 | -33 | -26 | 26 | 19 | -63 | -96 | -196 | -50 | -17 |
| | 22 | 1 | 15 | -45 | -6 | 24 | -4 | 23 | 7 | 5 | 12 | 11 | 2 | 5 | -23 | -54 | -24 | -32 | -153 | -42 | 26 | 5 | 5 | 2 | 1 | -10 |
| D | 23 | 4 | 7 | 17 | 25 | 27 | 23 | 14 | 17 | 4 | 6 | 12 | 43 | 4 | -47 | -158 | -8 | 2 | -195 | -119 | 7 | 13 | -91 | -72 | 1 | -19 |
| | 24 | 39 | 24 | 28 | 8 | -25 | -15 | 18 | 3 | -11 | 12 | 9 | 4 | 1 | -26 | -62 | -109 | -102 | -8 | 8 | 0 | -6 | -23 | -87 | -99 | -17 |
| D | 25 | 18 | 9 | -36 | -261 | -218 | -110 | 15 | 41 | 43 | 2 | 26 | 19 | 12 | 6 | 4 | 0 | -13 | -11 | -23 | 9 | -7 | 1 | -43 | -6 | -22 |
| Q | 26 | 8 | 4 | 8 | 9 | 8 | -9 | 3 | 5 | 1 | 1 | 0 | 1 | 4 | 3 | -2 | -4 | -5 | -2 | 0 | 4 | 2 | 0 | 4 | 5 | 2 |
| | 27 | 5 | -16 | -18 | -68 | -2 | -33 | -131 | -87 | -140 | -133 | -100 | -44 | -141 | -139 | -17 | -25 | -47 | -25 | -27 | -2 | -3 | -8 | -2 | -4 | -50 |
| | 28 | -16 | -11 | -2 | -4 | -11 | -3 | -20 | -8 | -2 | 3 | -9 | -25 | -12 | -45 | -2 | -68 | -26 | -18 | -86 | -23 | -19 | -11 | -41 | -18 | -20 |
| | 29 | 2 | 6 | -8 | -6 | -11 | -5 | -2 | -1 | -1 | -27 | -38 | -30 | -86 | -57 | -36 | -77 | -105 | -125 | -22 | 7 | -54 | -147 | -88 | 0 | -38 |
| | 30 | -1 | -29 | -80 | -30 | -11 | -11 | -21 | -17 | -19 | -63 | -17 | -62 | -146 | -3 | 12 | 3 | -12 | -56 | -56 | -65 | -62 | 3 | -5 | -25 | -32 |
| | 31 | -63 | -77 | -37 | -34 | -8 | 5 | 6 | 9 | 13 | 12 | 3 | -3 | 5 | 1 | -15 | -76 | -60 | -68 | -51 | -7 | -5 | -77 | -114 | 25 | -26 |
| | MEAN | -11 | -5 | -1 | -10 | -13 | -3 | -2 | -9 | -17 | -21 | -21 | -22 | -41 | -33 | -27 | -36 | -42 | -50 | -40 | -29 | -25 | -22 | -36 | -19 | -22 |
| 5Q | MEAN | 9 | 7 | 12 | 11 | 11 | 2 | 2 | 3 | 2 | 7 | 9 | -2 | -10 | -5 | -10 | -13 | -24 | -17 | -8 | -4 | -6 | -6 | -5 | -4 | -2 |
| 5D | MEAN | -23 | -7 | -1 | -70 | -91 | -28 | 0 | -19 | -60 | -79 | -48 | -45 | -91 | -59 | -70 | -46 | -49 | -69 | -68 | -87 | -46 | -57 | -100 | -48 | -53 |

## TABLE OF OBSERVATORIES SUPPLYING HOURLY AU AND AL

JANUARY 1968 — AU = MAXIMUM DELTA H

| UT | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | CO | CO | CO | CO | CO | CO | UE | CO | UE | UE | UE | AI | DI | AI | AI | AI | AI | NAS | NAS | NAS | NAS | BW | FC | NAS |
| 2 | BW | BW | BW | BW | BW | BW | CC | UE | AI | AI | AI | AI | AI | AI | AI | LR | LR | LR | LR | GWR | GWR | GWR | GWR | GWR |
| 3 | GWR | BW | BW | BW | BW | BW | BW | BW | BW | BW | BW | CC | DI | DI | DI | DI | DI | BW | BW | FC | BW | LR | FC | FC |
| 4 | LR | LR | BW | BW | BW | BW | BW | BW | BW | CC | CC | CC | CC | CC | CC | BW | AI | AI | AI | LR | LR | LR | GWR | GWR |
| 5 | GWR | FC | BW | GWR | FC | BW | BW | BW | BW | BW | BW | CC | CC | DI | LR | AI | DI | BW | BW | LR | LR | LR | GWR | GWR |
| 6 | GWR | BW | BW | GWR | BW | BW | BW | BW | CC | CO | CC | CC | DI | AI | AI | AI | AI | AI | AI | LR | LR | NAS | NAS | FC |
| 7 | FC | GWR | BW | BW | GWR | FC | BW | CC | CC | CC | CC | CC | CC | DI | DI | AI | AI | DI | AI | BW | FC | FC | FC | FC |
| 8 | FC | NAS | FC | FC | BW | BW | BW | CC | CC | CC | CC | CC | CC | CC | DI | DI | FC | DI | LR | BW | BW | BW | BW | BW |
| 9 | BW | BW | BW | BW | BW | BW | BW | BW | BW | BW | BW | BW | CC | DI | DI | DI | AI | AI | FC | BW | BW | BW | FC | FC |
| 10 | FC | FC | FC | BW | FC | BW | BW | BW | BW | BW | BW | CC | DI | DI | DI | DI | DI | BW | LR | LR | LR | BW | BW | BW |
| 11 | BW | FC | FC | FC | FC | BW | BW | BW | BW | BW | CC | CC | CC | DI | AI | AI | AI | LR | LR | LR | LR | GWR | NAS | GWR |
| 12 | GWR | GWR | BW | BW | GWR | BW | CO | CO | CO | BW | BW | CO | DI | DI | DI | AI | AI | NAS | LR | LR | LR | NAS | LR | GWR |
| 13 | BW | BW | BW | BW | BW | BW | BW | CC | BW | CO | DI | DI | DI | DI | DI | DI | NAS | AI | AI | AI | LR | LR | LR | GWR |
| 14 | GWR | GWR | GWR | BW | BW | BW | BW | CO | CO | BW | DI | DI | DI | DI | DI | AI | DI | DI | LR | LR | LR | LR | GWR | NAS |
| 15 | FC | GWR | GWR | BW | BW | BW | BW | BW | BW | BW | BW | CC | DI | DI | DI | LR | AI | AI | AI | LR | LR | GWR | GWR | GWR |
| 16 | GWR | GWR | BW | BW | BW | BW | BW | BW | CC | CO | CC | CO | DI | DI | DI | DI | NAS | AI | LR | LR | NAS | NAS | BW | BW |
| 17 | BW | BW | BW | BW | BW | BW | BW | CC | CC | CC | CC | DI | DI | DI | AI | AI | AI | AI | LR | LR | NAS | LR | BW | FC |
| 18 | GWR | GWR | BW | BW | BW | BW | BW | BW | BW | CC | CC | DI | DI | DI | DI | DI | NAS | BW | BW | BW | BW | BW | BW | BW |
| 19 | BW | BW | BW | BW | BW | BW | BW | BW | BW | CC | DI | DI | CC | CC | DI | AI | AI | AI | AI | AI | LR | FC | GWR | FC |
| 20 | BW | BW | BW | BW | AI | BW | BW | CC | CC | CC | DI | DI | DI | AI | AI | DI | CO | CC | NAS | NAS | LR | BW | BW | BW |
| 21 | BW | BW | BW | BW | BW | BW | CC | CC | CC | CC | CC | CC | DI | DI | DI | AI | AI | NAS | BW | BW | NAS | NAS | BW | BW |
| 22 | GWR | GWR | BW | BW | BW | BW | BW | BW | BW | CC | CC | CC | CC | DI | LR | AI | AI | AI | NAS | BW | NAS | NAS | BW | NAS |
| 23 | BW | BW | BW | BW | BW | BW | BW | BW | BW | BW | CC | CC | CC | CC | CC | DI | AI | AI | NAS | LR | NAS | FC | BW | BW |
| 24 | CC | BW | CC | CC | BW | BW | BW | BW | CC | CC | BW | CC | DI | DI | DI | NAS | DI | NAS | LR | NAS | NAS | NAS | NAS | BW |
| 25 | BW | BW | BW | BW | BW | BW | CC | CC | CC | CC | CC | CC | CC | CC | DI | DI | CC | BW | CO | NAS | NAS | NAS | NAS | BW |
| 26 | CC | GWR | BW | BW | BW | CC | CC | CC | CC | CC | CC | CC | DI | DI | NAS | LR | LR | AI | CO | CO | AI | NAS | NAS | NAS |
| 27 | CC | FC | FC | BW | BW | CC | BW | CC | CC | BW | CC | CC | CC | DI | CC | NAS | NAS | NAS | LR | NAS | NAS | NAS | GWR | GWR |
| 28 | GWR | BW | GWR | GWR | DI | CC | CC | CC | CC | CC | CC | CC | CC | CC | DI | DI | NAS | AI | AI | NAS | NAS | NAS | NAS | GWR | GWR |
| 29 | CC | BW | CC | CC | CC | BW | BW | BW | CC | CC | CC | CC | DI | DI | DI | DI | DI | NAS | LR | LR | LR | GWR | GWR | GWR |
| 30 | BW | BW | GWR | BW | CC | CC | BW | BW | LR | BW | CC | CC | DI | DI | DI | DI | NAS | AI | AI | AI | LR | BW | LR | LR |
| 31 | FC | GWR | GWR | BW | BW | GWR | BW | BW | CC | CC | CC | CC | CC | DI | DI | DI | DI | DI | BW | BW | FC | FC | FC | NAS |

| IDENTIFICATION | GEOGRAPHIC LAT | GEOGRAPHIC LONG | GEOMAGNETIC LAT | GEOMAGNETIC LONG |
|---|---|---|---|---|
| AI = ABISKO | 68 21.5 | 18 49.4 | 66.0 | 114.9 |
| BW = BARROW | 71 18.2 | -156 44.9 | 68.5 | 241.1 |
| CC = C.CHELYUSKIN | 77 43.0 | 104 17.0 | 66.2 | 176.4 |
| CO = COLLEGE | 64 51.6 | -147 50.2 | 64.6 | 256.5 |
| GWR= GREAT WHALE R. | 55 16.0 | -77 47.0 | 66.5 | 347.4 |
| DI = DIXON ISLAND | 73 32.6 | 80 33.7 | 63.0 | 161.5 |

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|---|---|---|---|---|
| FC = FT.CHURCHILL | 58 48.0 | -94 06.0 | 68.7 | 322.8 |
| LR = LEIRVOGUR | 64 11.0 | -21 42.0 | 70.2 | 71.0 |
| NAS= NASSARSSUAQ | 61 06.0 | -45 12.0 | 71.0 | 37.0 |
| TI = TIXIE BAY | 71 35.0 | 129 00.0 | 60.4 | 191.4 |
| UE = CAPE WELLEN | 66 09.8 | -169 50.1 | 61.7 | 237.0 |

## TABLE OF OBSERVATORIES SUPPLYING HOURLY AU AND AL

JANUARY 1968 — AL = MINIMUM DELTA H

| UT | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | AI | DI | DI | AI | AI | LR | LR | NAS | NAS | GWR | BW | FC | FC | FC | CO | CO | CO | CC | BW | DI | AI | AI | AI | AI |
| 2 | CO | CO | LR | LR | GWR | GWR | GWR | GWR | GWR | GWR | GWR | GWR | NAS | UE | CO | UE | DI | BW | BW | DI | DI | AI | AI | AI |
| 3 | AI | AI | AI | NAS | NAS | NAS | NAS | GWR | NAS | NAS | NAS | NAS | BW | CO | CC | CC | NAS | NAS | NAS | NAS | UE | CC | DI | DI |
| 4 | CO | UE | AI | UE | LR | GWR | LR | LR | GWR | GWR | BW | FC | FC | BW | GWR | GWR | BW | CC | BW | BW | DI | DI | DI | AI |
| 5 | CC | CO | CC | NAS | NAS | NAS | NAS | NAS | GWR | NAS | GWR | FC | NAS | FC | CO | BW | BW | FC | NAS | BW | DI | CC | DI | DI |
| 6 | CC | CO | LR | CC | AI | LR | NAS | NAS | NAS | GWR | FC | FC | FC | CO | CC | BW | BW | BW | BW | BW | AI | DI | DI | CC |
| 7 | DI | CC | CC | CC | DI | AI | NAS | NAS | GWR | GWR | FC | CO | FC | BW | BW | DI | BW | CC | DI | DI | NAS | DI | DI | CC |
| 8 | CC | CO | AI | UE | LR | NAS | NAS | NAS | NAS | BW | BW | BW | FC | BW | NAS | CC | CC | BW | FC | GWR | DI | CO | CO | LR |
| 9 | LR | LR | LR | LR | LR | NAS | NAS | NAS | NAS | NAS | NAS | LR | NAS | BW | GWR | BW | BW | CC | CC | CC | CC | CO | CO | CC |
| 10 | AI | CC | UE | LR | LR | LR | LR | FC | GWR | FC | FC | FC | FC | BW | BW | BW | GWR | GWR | DI | DI | CC | DI | CO | CO |
| 11 | UE | AI | LR | LR | LR | LR | UE | UE | UE | FC | FC | FC | LR | FC | CC | CO | BW | DI | BW | BW | BW | DI | CC | CC |
| 12 | CO | DI | AI | LR | CC | FC | LR | NAS | LR | NAS | NAS | GWR | CO | FC | FC | BW | BW | BW | DI | BW | BW | BW | AI | DI |
| 13 | DI | UE | NAS | LR | LR | NAS | NAS | NAS | NAS | NAS | BW | FC | FC | FC | FC | BW | CC | BW | BW | CC | DI | DI | DI | AI |
| 14 | AI | AI | NAS | LR | LR | NAS | NAS | NAS | GWR | GWR | BW | FC | FC | FC | BW | CC | CC | BW | BW | DI | BW | DI | DI | AI |
| 15 | CO | CC | CC | CC | NAS | NAS | NAS | NAS | FC | FC | FC | FC | FC | FC | FC | BW | BW | BW | BW | BW | BW | DI | DI | DI |
| 16 | AI | CO | LR | NAS | LR | NAS | NAS | NAS | GWR | GWR | GWR | GWR | BW | BW | BW | BW | BW | BW | BW | UE | BW | DI | DI | AI |
| 17 | LR | LR | LR | NAS | NAS | NAS | NAS | NAS | BW | GWR | FC | CO | FC | FC | CO | CC | CC | BW | BW | DI | DI | CC | CC | CC |
| 18 | AI | LR | AI | LR | NAS | LR | NAS | NAS | NAS | FC | FC | CO | CO | CO | CC | CC | DI | DI | DI | FC | FC | FC | UE | UE |
| 19 | UE | LR | NAS | NAS | NAS | NAS | NAS | GWR | GWR | GWR | FC | CO | LR | FC | CO | BW | CC | BW | BW | DI | DI | AI | AI | DI |
| 20 | CC | AI | LR | FC | GWR | FC | GWR | FC | FC | GWR | CO | FC | FC | CO | CO | BW | BW | BW | DI | DI | CC | FC | AI | LR |
| 21 | LR | LR | LR | LR | NAS | NAS | NAS | NAS | GWR | BW | BW | BW | BW | BW | BW | BW | DI | DI | DI | DI | DI | DI | DI | AI |
| 22 | AI | LR | LR | NAS | NAS | GWR | GWR | FC | LR | FC | FC | FC | FC | CO | CO | CO | BW | BW | DI | DI | DI | DI | CC | CO |
| 23 | LR | LR | LR | LR | NAS | FC | GWR | FC | GWR | FC | LR | BW | BW | BW | FC | BW | CC | CC | CC | DI | DI | DI | CC | LR |
| 24 | LR | LR | NAS | LR | LR | LR | FC | FC | FC | FC | FC | FC | BW | BW | BW | CC | BW | BW | DI | DI | DI | AI | AI | AI |
| 25 | LR | NAS | LR | LR | NAS | FC | FC | FC | FC | FC | FC | BW | BW | BW | BW | BW | GWR | GWR | DI | DI | CC | DI | LR | LR |
| 26 | LR | LR | NAS | NAS | NAS | GWR | GWR | GWR | GWR | GWR | AI | BW | BW | BW | CO | CO | BW | UE | DI | GWR | GWR | DI | AI | AI |
| 27 | LR | LR | LR | LR | NAS | NAS | GWR | GWR | GWR | GWR | AI | LR | LR | BW | BW | BW | CC | BW | DI | BW | AI | AI | AI | CC |
| 28 | AI | AI | LR | LR | NAS | FC | FC | FC | LR | FC | FC | LR | FC | BW | BW | BW | BW | BW | BW | BW | DI | DI | DI | AI |
| 29 | AI | AI | AI | LR | LR | NAS | NAS | GWR | GWR | GWR | FC | FC | BW | BW | BW | LR | BW | BW | BW | BW | BW | DI | BW | AI |
| 30 | CC | LR | LR | LR | LR | NAS | GWR | GWR | CO | DI | FC | FC | CO | BW | FC | BW | CC | BW | BW | CC | DI | DI | AI | CO |
| 31 | AI | AI | LR | LR | NAS | AI | NAS | NAS | FC | FC | FC | GWR | FC | CO | CC | CC | BW | CO | LR | GWR | CO | CO | CO | AI |

| IDENTIFICATION | GEOGRAPHIC LAT | GEOGRAPHIC LONG | GEOMAGNETIC LAT | GEOMAGNETIC LONG |
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| BW = BARROW | 71 18.2 | -156 44.9 | 68.5 | 241.1 |
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FEBRUARY 1968 — AU = MAXIMUM DELTA H

| UT | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | NAS | NAS | FC | FC | BW | BW | BW | BW | BW | BW | BW | CC | DI | DI | DI | DI | DI | NAS | NAS | LR | NAS | NAS | NAS | GWR |
| 2 | GWR | FC | FC | FC | CC | GWR | BW | BW | CO | DI | CC | DI | DI | DI | LR | LR | NAS | LR | NAS | LR | GWR | GWR | GWR | GWR |
| 3 | GWR | BW | BW | LR | DI | BW | BW | CC | CO | CO | DI | CC | CC | DI | AI | AI | LR | LR | NAS | LR | AI | NAS | NAS | NAS |
| 4 | FC | BW | GWR | CC | CO | CO | CO | CO | CO | DI | DI | DI | DI | DI | DI | DI | DI | DI | NAS | LR | FC | LR | FC | FC |
| 5 | FC | FC | FC | FC | FC | FC | BW | FC | CC | BW | CC | CC | DI | DI | DI | DI | NAS | AI | NAS | NAS | GWR | NAS | FC | NAS |
| 6 | NAS | NAS | GWR | FC | BW | BW | BW | BW | BW | CC | CC | DI | DI | CC | CC | DI | DI | DI | AI | AI | LR | LR | FC | CC |
| 7 | CC | FC | FC | FC | FC | FC | FC | FC | FC | CC | CC | CC | CC | CC | CC | DI | DI | AI | LR | CC | LR | LR | LR | LR |
| 8 | FC | BW | FC | GWR | BW | BW | CC | BW | CC | CC | CC | CC | DI | DI | DI | AI | FC | AI | LR | LR | LR | GWR | GWR | GWR |
| 9 | GWR | CO | CO | CO | CO | CO | CO | DI | CO | CO | DI | DI | AI | DI | DI | DI | DI | NAS | LR | LR | LR | GWR | GWR | GWR |
| 10 | GWR | BW | GWR | BW | BW | BW | BW | CO | CC | DI | DI | DI | DI | DI | DI | FC | LR | LR | LR | GWR | GWR | FC | GWR | NAS |
| 11 | GWR | CO | BW | CO | CO | CO | DI | DI | DI | AI | AI | AI | AI | AI | AI | AI | LR | LR | NAS | NAS | NAS | GWR | GWR | GWR | GWR |
| 12 | GWR | BW | BW | BW | BW | CO | CO | CO | BW | CC | CC | DI | DI | DI | DI | DI | DI | LR | NAS | NAS | BW | DI | DI | DI |
| 13 | DI | DI | DI | DI | BW | BW | CC | CC | DI | DI | CC | DI | AI | DI | DI | NAS | AI | AI | BW | NAS | BW | BW | BW | BW |
| 14 | CC | GWR | GWR | BW | DI | NAS | BW | BW | BW | BW | BW | DI | CC | CC | CC | FC | BW | BW | BW | BW | BW | NAS | LR | LR |
| 15 | DI | DI | DI | DI | BW | BW | BW | BW | CO | DI | DI | DI | DI | AI | AI | AI | AI | LR | NAS | GWR | NAS | NAS | GWR | BW |
| 16 | BW | BW | BW | BW | BW | BW | BW | BW | CO | CC | DI | DI | DI | AI | AI | LR | NAS | NAS | AI | NAS | BW | BW | NAS | GWR |
| 17 | GWR | NAS | NAS | BW | BW | BW | BW | CC | CC | CC | CC | DI | DI | DI | NAS | DI | DI | NAS | LR | NAS | NAS | GWR | GWR | BW |
| 18 | DI | DI | DI | LR | NAS | CC | CC | DI | DI | DI | DI | DI | AI | AI | AI | LR | AI | LR | NAS | LR | NAS | NAS | NAS | GWR |
| 19 | GWR | BW | BW | BW | BW | BW | CC | CC | LR | LR | CC | CC | CC | DI | DI | DI | DI | DI | CO | CO | AI | DI | DI | DI |
| 20 | GWR | GWR | GWR | GWR | CO | BW | CC | CO | DI | DI | DI | DI | AI | AI | AI | LR | LR | LR | LR | NAS | LR | GWR | GWR | GWR |
| 21 | BW | BW | BW | BW | CC | BW | CC | BW | CC | DI | DI | DI | DI | DI | AI | LR | LR | LR | NAS | NAS | GWR | GWR | NAS | NAS |
| 22 | NAS | DI | DI | BW | BW | BW | CC | BW | BW | CC | CC | DI | CC | CC | DI | LR | AI | NAS | NAS | BW | BW | BW | CC | CC |
| 23 | CC | DI | DI | DI | BW | BW | BW | BW | BW | CC | CC | CC | CC | CC | DI | DI | AI | NAS | DI | BW | NAS | NAS | NAS | NAS |
| 24 | DI | DI | DI | GWR | BW | BW | BW | BW | CO | BW | CC | CC | CC | CC | DI | DI | DI | LR | AI | AI | AI | DI | DI | GWR |
| 25 | DI | DI | FC | FC | FC | AI | BW | BW | BW | BW | BW | CC | CC | CC | DI | DI | DI | LR | AI | LR | NAS | DI | DI | DI |
| 26 | DI | DI | GWR | GWR | GWR | GWR | GWR | BW | BW | BW | BW | CO | CO | CO | CC | CO | DI | NAS | NAS | AI | LR | LR | GWR | GWR |
| 27 | NAS | DI | DI | DI | DI | BW | BW | BW | BW | BW | BW | CC | CC | CC | DI | DI | DI | DI | NAS | NAS | NAS | GWR | GWR | NAS |
| 28 | GWR | BW | BW | GWR | NAS | NAS | NAS | NAS | NAS | NAS | NAS | DI | AI | AI | AI | AI | AI | LR | LR | GWR | CC | GWR | GWR | GWR |
| 29 | BW | BW | BW | BW | CO | CO | CO | CO | CO | CC | DI | DI | DI | DI | DI | LR | AI | LR | LR | LR | LR | DI | GWR | GWR |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | CC | UE | UE | LR | LR | NAS | FC | GWR | NAS | LR | LR | LR | BW | BW | BW | BW | CC | BW | BW | BW | CO | CC | DI | CC |
| 2 | LR | LR | CC | UE | UE | LR | NAS | GWR | GWR | GWR | GWR | BW | BW | BW | CO | BW | BW | BW | BW | BW | BW | DI | AI | DI |
| 3 | CC | CC | CC | UE | GWR | NAS | GWR | GWR | GWR | GWR | BW | CO | FC | BW | CO | BW | BW | BW | BW | DI | DI | AI | DI | CC |
| 4 | AI | NAS | LR | NAS | LR | LR | NAS | NAS | NAS | CO | GWR | GWR | CO | BW | BW | CC | BW | BW | DI | UE | BW | BW | BW | CO |
| 5 | UE | UE | UE | LR | LR | NAS | NAS | NAS | GWR | FC | FC | BW | BW | CC | BW | BW | CC | CC | CC | DI | DI | DI | AI | CC |
| 6 | CC | CC | LR | UE | GWR | GWR | GWR | FC | FC | FC | LR | BW | NAS | NAS | NAS | NAS | GWR | CC | GWR | DI | GWR | CO | CO | CO |
| 7 | UE | UE | UE | UE | UE | GWR | GWR | GWR | AI | AI | AI | AI | LR | LR | NAS | GWR | CC | BW | CC | BW | DI | CC | DI | DI |
| 8 | CC | CC | UE | LR | LR | NAS | GWR | GWR | GWR | GWR | FC | BW | BW | BW | CO | DI | BW | BW | DI | DI | CC | DI | DI | CC |
| 9 | AI | AI | AI | LR | LR | LR | NAS | GWR | NAS | BW | GWR | FC | CO | BW | CC | BW | BW | BW | BW | BW | BW | BW | DI | CC |
| 10 | AI | LR | LR | LR | LR | NAS | NAS | NAS | GWR | BW | BW | FC | FC | BW | BW | GWR | BW | CO | DI | BW | BW | BW | LR | CC |
| 11 | AI | AI | AI | AI | LR | LR | LR | NAS | NAS | GWR | GWR | CO | CO | CO | CO | CO | BW | DI | DI | AI | DI | DI | AI | DI |
| 12 | AI | LR | LR | LR | LR | FC | FC | GWR | DI | GWR | BW | CO | BW | FC | FC | BW | CC | DI | DI | DI | UE | UE | CO | UE |
| 13 | UE | UE | UE | UE | NAS | NAS | NAS | NAS | NAS | GWR | CO | CO | CO | BW | BW | UE | DI | BW | LR | AI | AI | AI | AI | AI |
| 14 | LR | LR | LR | UE | LR | LR | GWR | UE | AI | LR | AI | AI | LR | LR | LR | GWR | GWR | GWR | CO | CO | CO | CO | DI | CC |
| 15 | CC | FC | FC | FC | FC | FC | FC | FC | FC | GWR | CO | GWR | CO | DI | DI | DI | CO | DI | DI | DI | CC | DI | AI | AI |
| 16 | FC | FC | LR | FC | FC | FC | FC | FC | FC | BW | BW | FC | FC | CC | CO | CC | CC | BW | DI | DI | DI | FC | CC | AI |
| 17 | CC | CC | FC | FC | FC | NAS | FC | FC | GWR | BW | FC | FC | BW | FC | CC | BW | BW | BW | DI | DI | AI | AI | AI | AI |
| 18 | LR | LR | FC | FC | FC | FC | NAS | GWR | GWR | GWR | GWR | GWR | CO | UE | CO | CO | DI | DI | BW | BW | AI | AI | AI | AI |
| 19 | AI | LR | LR | LR | FC | NAS | FC | FC | FC | FC | FC | FC | FC | FC | FC | FC | FC | FC | FC | FC | FC | FC | FC | FC |
| 20 | LR | LR | LR | FC | FC | FC | GWR | GWR | GWR | BW | GWR | CO | CO | CO | UE | UE | DI | CC | BW | BW | AI | AI | DI | AI |
| 21 | AI | AI | LR | LR | NAS | NAS | FC | FC | GWR | FC | FC | CO | FC | FC | BW | BW | BW | BW | BW | DI | DI | DI | CC | CC |
| 22 | FC | FC | FC | FC | FC | NAS | FC | FC | FC | FC | FC | BW | FC | FC | FC | CC | CC | CC | FC | FC | FC | FC | FC | FC |
| 23 | FC | FC | FC | FC | FC | NAS | FC | FC | FC | FC | FC | FC | FC | FC | FC | FC | CC | CC | FC | FC | DI | DI | FC | FC |
| 24 | FC | FC | FC | NAS | NAS | FC | GWR | GWR | FC | FC | FC | FC | BW | FC | FC | CC | BW | FC | DI | DI | CC | CO | CO | UE |
| 25 | UE | UE | NAS | UE | UE | NAS | FC | NAS | FC | FC | AI | LR | BW | BW | BW | CC | BW | BW | DI | DI | CC | CO | CO | CO |
| 26 | UE | LR | NAS | NAS | NAS | FC | CC | DI | NAS | AI | AI | LR | LR | LR | LR | GWR | GWR | FC | BW | DI | DI | DI | DI | LR |
| 27 | AI | UE | UE | UE | NAS | FC | FC | FC | FC | FC | AI | FC | FC | FC | FC | BW | BW | FC | FC | DI | DI | BW | DI | AI |
| 28 | CC | LR | LR | AI | FC | FC | FC | FC | FC | FC | FC | FC | FC | CO | CO | CO | FC | FC | UE | UE | BW | UE | UE | AI | AI |
| 29 | AI | LR | LR | LR | LR | LR | GWR | FC | FC | FC | GWR | FC | CO | CC | CC | DI | CC | BW | BW | BW | BW | FC | CC | AI |

| IDENTIFICATION | GEOGRAPHIC LAT | GEOGRAPHIC LONG | GEOMAGNETIC LAT | GEOMAGNETIC LONG |
|---|---|---|---|---|
| AI = ABISKO | 68 21.5 | 18 49.4 | 66.0 | 114.9 |
| BW = BARROW | 71 18.2 | -156 44.9 | 68.5 | 241.1 |
| CC = C.CHELYJSKIN | 77 43.0 | 104 17.0 | 66.2 | 176.4 |
| CO = COLLEGE | 64 51.6 | -147 50.2 | 64.6 | 256.5 |
| GWR= GREAT WHALE R. | 55 16.0 | -77 47.0 | 66.5 | 347.4 |
| DI = DIXON ISLAND | 73 32.6 | 80 33.7 | 63.0 | 161.5 |

| IDENTIFICATION | GEOGRAPHIC LAT | GEOGRAPHIC LONG | GEOMAGNETIC LAT | GEOMAGNETIC LONG |
|---|---|---|---|---|
| FC = FT.CHURCHILL | 58 48.0 | -94 06.0 | 68.7 | 322.8 |
| LR = LEIRVOGUR | 64 11.0 | -21 42.0 | 70.2 | 71.0 |
| NAS= NASSARSSUAQ | 61 06.0 | -45 12.0 | 71.0 | 37.0 |
| TI = TIXIE BAY | 71 35.0 | 129 00.0 | 60.4 | 191.4 |
| UE = CAPE WELLEN | 66 09.8 | -169 50.1 | 61.7 | 237.0 |

## TABLE OF OBSERVATORIES SUPPLYING HOURLY AU AND AL

MARCH 1969 — AU = MAXIMUM DELTA H

| UT | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | GWR | GWR | GWR | BW | GWR | BW | BW | BW | CC | CC | TI | TI | DI | DI | AI | AI | AI | LR | BW | BW | BW | BW | BW | BW |
| 2 | BW | BW | BW | BW | BW | BW | BW | CC | CO | CO | TI | TI | TI | DI | DI | DI | DI | LR | NAS | NAS | GWR | GWR | GWR | GWR |
| 3 | GWR | GWR | GWR | GWR | BW | BW | BW | CC | CC | TI | TI | DI | DI | DI | AI | DI | LR | LR | GWR | LR | GWR | GWR | GWR | GWR |
| 4 | GWR | GWR | GWR | BW | BW | BW | BW | CO | CO | TI | TI | TI | TI | TI | AI | AI | AI | LR | LR | LR | GWR | GWR | GWR | GWR |
| 5 | GWR | GWR | GWR | BW | BW | BW | BW | CC | TI | TI | TI | AI | AI | AI | DI | AI | CO | NAS | NAS | NAS | GWR | NAS | GWR | GWR |
| 6 | GWR | DI | DI | BW | GWR | BW | BW | BW | CO | CC | CC | CC | CC | CC | CC | TI | DI | DI | NAS | NAS | NAS | LR | GWR | NAS | NAS |
| 7 | GWR | GWR | BW | BW | BW | CC | BW | BW | CC | BW | CC | CC | CC | DI | DI | DI | DI | NAS | NAS | NAS | NAS | NAS | FC | FC |
| 8 | GWR | GWR | GWR | FC | FC | BW | BW | BW | BW | BW | BW | CC | CC | CC | CC | DI | DI | DI | NAS | NAS | NAS | NAS | NAS | NAS |
| 9 | NAS | BW | GWR | GWR | BW | BW | BW | BW | BW | BW | BW | BW | CC | CC | CC | DI | DI | NAS | NAS | NAS | NAS | NAS | NAS | FC |
| 10 | GWR | GWR | GWR | BW | BW | BW | BW | BW | BW | CC | CC | CC | TI | DI | NAS | LR | LR | LR | NAS | NAS | NAS | GWR | GWR | GWR |
| 11 | DI | DI | BW | DI | BW | CO | CO | CO | CC | TI | CC | NAS | DI | BW | DI | DI | DI | DI | DI | NAS | NAS | NAS | FC | NAS |
| 12 | DI | DI | FC | FC | FC | FC | FC | BW | BW | BW | DI | DI | DI | DI | AI | AI | AI | LR | NAS | NAS | GWR | GWR | NAS | DI |
| 13 | DI | FC | BW | BW | BW | BW | BW | BW | BW | BW | BW | FC | BW | BW | DI | DI | BW | CC | BW | BW | AI | LR | FC | GWR |
| 14 | GWR | GWR | GWR | FC | BW | BW | BW | BW | CO | TI | TI | TI | DI | DI | AI | AI | AI | LR | NAS | NAS | NAS | GWR | GWR | FC |
| 15 | FC | BW | DI | BW | BW | BW | CC | CC | TI | TI | DI | TI | AI | AI | DI | DI | AI | LR | NAS | GWR | GWR | GWR | FC | FC |
| 16 | FC | DI | BW | BW | BW | BW | BW | CC | CC | CC | DI | DI | AI | DI | DI | LR | LR | LR | NAS | NAS | FC | FC | FC | FC |
| 17 | FC | DI | GWR | BW | BW | BW | BW | CC | CC | CC | CC | CC | DI | DI | DI | DI | CO | NAS | NAS | NAS | NAS | NAS | GWR | FC |
| 18 | FC | BW | FC | GWR | BW | BW | BW | CC | CC | CC | CC | CC | CC | DI | DI | AI | AI | LR | NAS | NAS | GWR | FC | FC | FC |
| 19 | FC | FC | FC | FC | AI | CO | BW | CC | CC | CC | TI | DI | DI | DI | AI | AI | LR | LR | LR | NAS | NAS | NAS | DI | DI |
| 20 | FC | FC | BW | BW | CO | CO | LR | BW | BW | CC | CC | DI | DI | AI | AI | DI | CO | CO | CC | LR | LR | GWR | GWR | GWR |
| 21 | CC | FC | FC | GWR | BW | BW | CC | CC | CC | CC | CC | CC | CC | DI | DI | DI | AI | NAS | NAS | NAS | NAS | TI | DI | DI |
| 22 | FC | FC | FC | FC | FC | BW | BW | BW | TI | TI | CC | CC | DI | DI | DI | LR | AI | FC | FC | FC | FC | FC | FC | FC |
| 23 | FC | FC | FC | FC | DI | FC | BW | TI | BW | BW | CC | CC | CC | DI | DI | DI | DI | CC | LR | LR | FC | GWR | GWR | FC |
| 24 | FC | FC | FC | BW | BW | BW | CO | TI | TI | TI | TI | TI | AI | DI | AI | AI | AI | LR | LR | FC | FC | FC | FC | FC |
| 25 | FC | FC | GWR | BW | BW | CO | CO | CO | TI | CC | CC | CC | DI | DI | DI | FC | FC | FC | NAS | NAS | FC | FC | FC | FC |
| 26 | FC | FC | FC | FC | FC | FC | BW | BW | FC | CC | TI | DI | TI | DI | AI | AI | LR | FC | LR | FC | FC | FC | FC | FC |
| 27 | FC | FC | BW | FC | CO | CO | CO | CO | CC | TI | TI | TI | FC | FC | DI | AI | LR | FC | NAS | FC | FC | FC | FC | FC |
| 28 | FC | FC | FC | FC | BW | FC | FC | CC | CC | FC | FC | DI | FC | FC | FC | FC | FC | FC | FC | FC | FC | FC | FC | FC |
| 29 | FC | FC | BW | BW | BW | FC | CO | CC | TI | TI | TI | TI | FC | AI | AI | AI | NAS | NAS | NAS | NAS | NAS | GWR | GWR | GWR |
| 30 | GWR | BW | GWR | BW | BW | CO | CO | CO | CC | CC | CC | DI | DI | DI | LR | LR | LR | LR | LR | GWR | GWR | GWR | GWR | GWR |
| 31 | GWR | DI | GWR | BW | BW | BW | CC | CC | CO | CC | CC | CC | CC | DI | DI | AI | NAS | NAS | NAS | GWR | GWR | NAS | GWR | GWR |

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| CO = COLLEGE | 64 51.6 | -147 50.2 | 64.6 | 256.5 |
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| NAS= NASSARSSUAQ | 61 06.0 | -45 12.0 | 71.0 | 37.0 |
| TI = TIXIE BAY | 71 35.0 | 129 00.0 | 60.4 | 191.4 |
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## TABLE OF OBSERVATORIES SUPPLYING HOURLY AU AND AL

MARCH 1968 — AL = MINIMUM DELTA H

| UT | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | CC | LR | LR | LR | NAS | NAS | FC | FC | FC | GWR | GWR | GWR | FC | FC | CO | CO | CO | TI | TI | FC | FC | FC | FC | FC |
| 2 | FC | FC | LR | LR | LR | FC | NAS | FC | FC | FC | GWR | FC | FC | FC | BW | BW | BW | BW | BW | TI | DI | AI | DI | CC |
| 3 | AI | AI | LR | NAS | LR | NAS | NAS | NAS | GWR | NAS | BW | CO | FC | FC | FC | BW | BW | BW | BW | BW | TI | TI | AI | AI |
| 4 | AI | LR | CC | LR | LR | NAS | NAS | NAS | GWR | GWR | GWR | GWR | FC | FC | CO | CO | BW | BW | BW | TI | TI | TI | AI | AI |
| 5 | AI | CC | CC | LR | LR | NAS | NAS | NAS | FC | GWR | GWR | GWR | GWR | CO | CO | CO | FC | BW | TI | TI | TI | TI | AI | CC |
| 6 | AI | LR | LR | LR | NAS | FC | FC | FC | GWR | FC | FC | FC | FC | FC | FC | FC | FC | FC | BW | DI | TI | AI | CC | CC |
| 7 | CC | UE | FC | GWR | GWR | NAS | NAS | FC | FC | FC | FC | FC | FC | BW | BW | BW | BW | BW | BW | DI | DI | DI | DI | DI |
| 8 | NAS | LR | UE | NAS | NAS | NAS | GWR | FC | AI | AI | AI | FC | FC | FC | GWR | GWR | BW | CC | BW | BW | DI | DI | CC | CC |
| 9 | TI | LR | LR | TI | NAS | LR | FC | FC | FC | FC | FC | AI | LR | LR | NAS | NAS | GWR | BW | BW | CC | CC | CC | CC | DI |
| 10 | CC | CC | CC | FC | NAS | LR | LR | GWR | GWR | GWR | FC | FC | CO | CO | CO | CO | TI | TI | TI | TI | TI | AI | AI | AI |
| 11 | LR | LR | LR | LR | NAS | LR | LR | NAS | NAS | GWR | AI | CO | CO | LR | CC | LR | FC | FC | FC | CO | CC | DI | DI | CC |
| 12 | LR | LR | CC | CC | CC | CC | CC | CC | CC | GWR | GWR | CO | FC | CO | CO | CO | TI | TI | BW | TI | TI | TI | AI | UE |
| 13 | UE | LR | LR | NAS | GWR | NAS | CC | NAS | GWR | GWR | AI | LR | LR | LR | GWR | GWR | GWR | GWR | GWR | GWR | DI | CO | DI | DI |
| 14 | LR | AI | LR | LR | LR | LR | GWR | GWR | GWR | GWR | GWR | FC | FC | UE | CO | UE | TI | TI | TI | TI | AI | TI | DI | CC |
| 15 | AI | LR | LR | GWR | LR | NAS | NAS | GWR | NAS | GWR | CO | CO | CO | BW | BW | BW | TI | TI | DI | DI | TI | AI | AI | AI |
| 16 | AI | LR | LR | LR | LR | GWR | NAS | NAS | NAS | GWR | CO | CO | CO | BW | CC | BW | TI | TI | TI | DI | DI | AI | AI | AI |
| 17 | AI | LR | LR | LR | GWR | NAS | NAS | GWR | GWR | FC | FC | CO | BW | BW | BW | BW | TI | DI | DI | DI | DI | DI | LR | LR |
| 18 | CC | LR | NAS | NAS | NAS | NAS | NAS | NAS | GWR | FC | FC | FC | CO | BW | BW | BW | TI | TI | DI | DI | CO | CO | CO | LR |
| 19 | AI | LR | LR | NAS | NAS | NAS | GWR | GWR | GWR | GWR | CO | BW | FC | CO | CC | TI | TI | TI | BW | DI | AI | CO | CO | CO |
| 20 | LR | LR | LR | LR | NAS | NAS | DI | GWR | GWR | FC | CO | CO | CO | CO | BW | BW | NAS | FC | DI | DI | DI | DI | DI | AI |
| 21 | LR | NAS | NAS | NAS | NAS | NAS | NAS | GWR | GWR | FC | BW | NAS | BW | BW | BW | CC | BW | DI | DI | DI | CC | CC | CO | CO |
| 22 | LR | LR | NAS | NAS | TI | NAS | GWR | GWR | NAS | FC | FC | BW | BW | BW | BW | BW | BW | BW | DI | DI | DI | CC | CO | CO |
| 23 | NAS | NAS | NAS | NAS | GWR | GWR | DI | GWR | DI | AI | AI | BW | FC | BW | BW | BW | CC | GWR | BW | DI | DI | DI | DI | CC |
| 24 | LR | LR | LR | LR | LR | GWR | GWR | GWR | GWR | CO | CO | GWR | CO | BW | BW | CO | CO | BW | TI | TI | TI | DI | UE | UE |
| 25 | LR | LR | LR | LR | LR | LR | LR | BW | BW | GWR | AI | GWR | BW | BW | BW | GWR | TI | BW | BW | DI | DI | AI | DI | AI |
| 26 | UE | UE | UE | TI | NAS | NAS | NAS | GWR | NAS | GWR | BW | BW | CO | CO | CO | CO | TI | TI | TI | DI | CC | AI | AI | AI |
| 27 | AI | AI | LR | LR | LR | LR | LR | GWR | GWR | BW | BW | BW | BW | CO | CC | CO | BW | BW | BW | TI | TI | TI | AI | AI |
| 28 | LR | UE | LR | LR | LR | LR | NAS | NAS | GWR | NAS | LR | GWR | BW | BW | LR | BW | BW | BW | BW | DI | CC | AI | AI | UE |
| 29 | UE | LR | LR | LR | LR | LR | LR | GWR | NAS | GWR | GWR | GWR | CO | CO | CO | CO | BW | BW | DI | DI | DI | TI | DI | AI |
| 30 | AI | LR | LR | LR | LR | LR | NAS | NAS | GWR | DI | BW | CO | CO | CO | CO | CO | CO | BW | BW | TI | TI | TI | AI | UE |
| 31 | UE | LR | LR | LR | LR | GWR | NAS | GWR | NAS | NAS | BW | CO | GWR | BW | CO | BW | BW | TI | TI | BW | TI | CC | AI | AI |

| IDENTIFICATION | GEOGRAPHIC LAT | GEOGRAPHIC LONG | GEOMAGNETIC LAT | GEOMAGNETIC LONG |
|---|---|---|---|---|
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## TABLE OF OBSERVATORIES SUPPLYING HOURLY AU AND AL

APRIL 1968 — AU = MAXIMUM DELTA H

| UT | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | BW | CO | CO | CO | BW | BW | CO | DI | DI | UE | DI | DI | DI | AI | LR | LR | LR | LR | LR | LR | GWR | GWR | GWR | GWR |
| 2 | BW | BW | BW | BW | BW | BW | BW | BW | BW | BW | CC | CC | CC | AI | AI | DI | CO | LR | LR | GWR | GWR | GWR | GWR | GWR |
| 3 | GWR | BW | BW | BW | BW | BW | BW | CO | CC | DI | DI | CC | DI | DI | AI | LR | LR | CO | BW | BW | BW | NAS | GWR | GWR |
| 4 | GWR | BW | BW | BW | BW | BW | CC | BW | CC | CC | CC | CC | CC | DI | DI | AI | LR | LR | BW | BW | BW | NAS | FC | GWR |
| 5 | GWR | GWR | BW | BW | BW | BW | BW | BW | CC | CC | BW | CC | CC | CC | AI | AI | NAS | NAS | LR | GWR | GWR | BW | BW | BW |
| 6 | BW | BW | BW | BW | BW | CO | CO | DI | DI | CO | UE | DI | DI | DI | AI | AI | LR | NAS | LR | NAS | NAS | NAS | GWR | BW |
| 7 | BW | BW | BW | BW | BW | BW | BW | CC | CC | CC | CC | CC | DI | DI | AI | LR | LR | BW | BW | BW | LR | NAS | NAS | FC |
| 8 | FC | FC | BW | BW | BW | BW | BW | BW | BW | BW | CC | CC | DI | CC | DI | AI | LR | LR | BW | BW | LR | LR | NAS | DI |
| 9 | DI | GWR | LR | LR | LR | BW | BW | BW | BW | BW | BW | CC | CC | CC | BW | CO | CO | BW | LR | LR | LR | LR | NAS | NAS |
| 10 | GWR | GWR | GWR | GWR | BW | BW | BW | BW | BW | BW | CC | CC | CC | CC | DI | LR | LR | LR | LR | LR | LR | LR | LR | GWR |
| 11 | GWR | GWR | BW | BW | BW | BW | BW | CO | CO | CC | CC | DI | DI | CO | UE | LR | CC | LR | LR | LR | LR | LR | LR | LR |
| 12 | DI | DI | LR | LR | BW | BW | BW | BW | BW | BW | CO | CO | CC | CC | CO | CO | CO | LR | LR | LR | LR | GWR | GWR | GWR |
| 13 | BW | BW | BW | BW | BW | BW | BW | BW | BW | CC | DI | DI | DI | DI | AI | AI | LR | LR | LR | NAS | GWR | GWR | GWR | GWR |
| 14 | GWR | BW | BW | BW | BW | BW | BW | BW | BW | CC | CC | DI | DI | DI | LR | LR | AI | NAS | NAS | NAS | NAS | NAS | GWR | GWR |
| 15 | GWR | NAS | NAS | AI | AI | BW | BW | BW | CC | DI | DI | CC | DI | DI | AI | LR | LR | AI | LR | NAS | NAS | GWR | GWR | FC |
| 16 | GWR | FC | BW | BW | BW | BW | BW | BW | CC | CC | CC | CC | DI | DI | DI | DI | DI | LR | LR | NAS | NAS | GWR | GWR | GWR |
| 17 | GWR | GWR | DI | AI | BW | BW | BW | CO | CC | CC | CC | CC | CC | DI | AI | LR | LR | NAS | LR | LR | NAS | NAS | GWR | BW |
| 18 | GWR | BW | BW | BW | BW | BW | BW | CC | CC | CC | CC | CC | CC | CC | DI | LR | LR | NAS | NAS | NAS | NAS | NAS | NAS | FC |
| 19 | FC | FC | FC | FC | FC | FC | FC | FC | FC | FC | FC | FC | FC | FC | FC | FC | FC | FC | FC | FC | FC | FC | FC | FC |
| 20 | FC | FC | FC | FC | FC | FC | FC | BW | CO | UE | BW | CC | CC | CC | CC | NAS | NAS | NAS | LR | LR | AI | AI | NAS | DI |
| 21 | AI | AI | AI | AI | AI | AI | BW | BW | BW | BW | CC | CC | CC | DI | CC | CC | AI | BW | LR | LR | LR | FC | NAS | FC |
| 22 | FC | FC | FC | GWR | GWR | BW | BW | CC | CC | CC | BW | FC | CC | DI | DI | LR | LR | NAS | NAS | NAS | GWR | GWR | GWR | GWR |
| 23 | GWR | BW | BW | BW | BW | CO | CO | CO | CC | CC | CC | CC | DI | DI | DI | DI | NAS | NAS | NAS | NAS | NAS | NAS | FC | GWR |
| 24 | GWR | BW | BW | BW | BW | BW | BW | NAS | BW | CC | CC | CC | CC | DI | AI | AI | NAS | NAS | NAS | NAS | NAS | FC | FC | FC |
| 25 | NAS | DI | DI | GWR | AI | BW | BW | BW | BW | BW | BW | BW | BW | DI | DI | DI | AI | LR | NAS | NAS | FC | FC | FC | FC |
| 26 | GWR | FC | BW | BW | BW | CO | BW | BW | CO | CO | CC | CC | CC | AI | AI | LR | LR | NAS | LR | GWR | GWR | GWR | GWR | GWR |
| 27 | GWR | FC | DI | BW | BW | BW | BW | DI | DI | DI | CC | CO | CC | DI | AI | AI | AI | NAS | NAS | NAS | GWR | GWR | GWR | FC |
| 28 | FC | BW | BW | BW | CO | BW | BW | CC | FC | CC | CC | CC | FC | FC | LR | DI | FC | FC | NAS | FC | FC | FC | FC | FC |
| 29 | FC | FC | FC | FC | FC | BW | FC | CC | DI | CC | CC | CC | CC | DI | AI | LR | LR | NAS | NAS | NAS | NAS | NAS | GWR | GWR |
| 30 | GWR | DI | BW | BW | LR | LR | BW | BW | CC | CC | CC | CC | CC | CC | DI | LR | LR | AI | NAS | NAS | LR | NAS | GWR | FC |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | DI | AI | AI | LR | LR | LR | LR | GWR | GWR | GWR | CO | GWR | CO | CO | CO | BW | BW | BW | DI | DI | AI | DI | CC | CC |
| 2 | LR | LR | LR | FC | GWR | GWR | GWR | FC | FC | FC | FC | BW | FC | FC | CO | BW | FC | DI | DI | DI | DI | DI | DI | AI |
| 3 | AI | AI | LR | LR | LR | GWR | GWR | GWR | GWR | GWR | GWR | FC | FC | FC | FC | CO | DI | DI | FC | FC | FC | UE | DI | DI |
| 4 | CO | AI | AI | AI | LR | LR | LR | NAS | NAS | FC | FC | FC | FC | FC | FC | CO | BW | BW | FC | FC | FC | DI | DI | CC |
| 5 | CC | LR | LR | LR | LR | NAS | NAS | NAS | FC | FC | FC | FC | FC | FC | FC | CO | BW | BW | BW | BW | BW | UE | AI | AI |
| 6 | LR | CC | GWR | LR | NAS | LR | GWR | BW | GWR | GWR | GWR | CO | CO | CO | CO | CO | DI | DI | DI | AI | DI | DI | AI | AI |
| 7 | AI | LR | GWR | GWR | GWR | GWR | GWR | GWR | GWR | FC | CO | CO | CO | CO | CC | BW | BW | GWR | GWR | DI | CC | DI | CO | UE |
| 8 | LR | NAS | NAS | NAS | NAS | NAS | DI | DI | DI | FC | FC | FC | BW | BW | FC | CC | CC | FC | FC | FC | FC | FC | FC | FC |
| 9 | UE | UE | UE | UE | CC | CC | CC | DI | DI | AI | AI | FC | LR | FC | FC | FC | FC | FC | FC | FC | FC | CO | CC | CC |
| 10 | LR | LR | LR | LR | LR | FC | GWR | FC | FC | FC | FC | FC | FC | FC | FC | FC | FC | DI | DI | DI | DI | DI | DI | CC |
| 11 | CC | LR | LR | LR | LR | LR | GWR | GWR | GWR | GWR | GWR | GWR | FC | FC | FC | FC | FC | FC | FC | FC | FC | FC | CO | UE |
| 12 | CO | UE | UE | FC | CC | CC | DI | DI | DI | AI | FC | AI | FC | FC | FC | FC | FC | DI | DI | DI | AI | AI | AI | AI |
| 13 | LR | LR | LR | LR | LR | LR | FC | FC | FC | GWR | GWR | GWR | FC | FC | CO | CO | CO | BW | DI | UE | AI | DI | AI | CC |
| 14 | AI | LR | NAS | NAS | NAS | NAS | NAS | DI | DI | AI | GWR | BW | GWR | FC | FC | FC | CO | BW | BW | DI | UE | DI | AI | AI |
| 15 | LR | UE | UE | CC | CC | FC | GWR | DI | GWR | GWR | GWR | FC | CO | CO | CO | CO | DI | BW | BW | BW | AI | AI | AI | AI |
| 16 | LR | LR | LR | FC | GWR | GWR | GWR | GWR | GWR | BW | BW | FC | FC | FC | BW | BW | BW | DI | DI | DI | DI | DI | AI | LR |
| 17 | LR | LR | UE | GWR | GWR | GWR | GWR | GWR | GWR | CO | CO | FC | FC | CO | CC | BW | BW | BW | BW | BW | UE | AI | AI | AI |
| 18 | LR | NAS | NAS | NAS | NAS | GWR | GWR | GWR | GWR | CO | FC | FC | FC | AI | FC | BW | BW | DI | DI | DI | DI | CC | AI | LR |
| 19 | UE | UE | UE | CC | GWR | CC | DI | DI | AI | AI | AI | AI | LR | LR | LR | GWR | CC | CC | CC | CC | CO | CO | CO | CO |
| 20 | CO | UE | UE | CC | CC | CC | CC | DI | DI | AI | AI | LR | BW | BW | FC | FC | FC | FC | FC | FC | FC | CO | CO | CO |
| 21 | UE | UE | UE | CC | CC | CC | FC | DI | DI | FC | FC | FC | FC | BW | BW | BW | FC | FC | CO | CO | CO | CO | UE | CO |
| 22 | LR | LR | LR | NAS | NAS | NAS | NAS | GWR | NAS | NAS | DI | AI | NAS | FC | CO | BW | BW | BW | BW | DI | DI | DI | CC | CC |
| 23 | AI | LR | LR | LR | LR | LR | NAS | NAS | GWR | BW | CO | GWR | CO | BW | BW | BW | BW | BW | BW | BW | DI | DI | CC | AI |
| 24 | AI | AI | LR | LR | GWR | LR | FC | FC | DI | FC | FC | FC | FC | FC | CC | CC | BW | BW | BW | DI | DI | AI | AI | CO |
| 25 | UE | UE | UE | UE | CC | FC | FC | FC | FC | AI | LR | AI | LR | FC | FC | BW | BW | BW | CO | BW | DI | AI | CC | AI |
| 26 | CC | AI | AI | LR | LR | GWR | GWR | NAS | NAS | NAS | DI | DI | CI | CO | CO | CO | BW | BW | BW | AI | BW | DI | DI | AI |
| 27 | AI | LR | CO | LR | GWR | NAS | NAS | NAS | NAS | GWR | NAS | NAS | FC | FC | FC | CO | BW | BW | BW | BW | AI | AI | AI | AI |
| 28 | LR | LR | LR | LR | LR | NAS | NAS | GWR | GWR | GWR | CO | GWR | DI | GWR | GWR | BW | BW | BW | DI | DI | DI | DI | DI | AI |
| 29 | LR | LR | LR | GWR | GWR | NAS | NAS | GWR | GWR | GWR | FC | CO | CO | CO | CO | CO | BW | BW | CC | CC | DI | DI | CC | AI |
| 30 | LR | LR | GWR | GWR | GWR | CC | NAS | GWR | GWR | GWR | GWR | AI | LR | GWR | FC | BW | BW | BW | BW | FC | CO | DI | DI | CC |

| IDENTIFICATION | GEOGRAPHIC LAT | GEOGRAPHIC LONG | GEOMAGNETIC LAT | GEOMAGNETIC LONG |
|---|---|---|---|---|
| AI = ABISKO | 68 21.5 | 18 49.4 | 66.0 | 114.9 |
| BW = BARROW | 71 18.2 | -156 44.9 | 68.5 | 241.1 |
| CC = C.CHELYUSKIN | 77 43.0 | 104 17.0 | 66.2 | 176.4 |
| CO = COLLEGE | 64 51.6 | -147 50.2 | 64.6 | 256.5 |
| GWR= GREAT WHALE R. | 55 16.0 | -77 47.0 | 66.5 | 347.4 |
| DI = DIXON ISLAND | 73 32.6 | 80 33.7 | 63.0 | 161.5 |

| IDENTIFICATION | GEOGRAPHIC LAT | GEOGRAPHIC LONG | GEOMAGNETIC LAT | GEOMAGNETIC LONG |
|---|---|---|---|---|
| FC = FT.CHURCHILL | 58 48.0 | -94 06.0 | 68.7 | 322.8 |
| LR = LEIRVOGUR | 64 11.0 | -21 42.0 | 70.2 | 71.0 |
| NAS= NASSARSSUAQ | 61 06.0 | -45 12.0 | 71.0 | 37.0 |
| TI = TIXIE BAY | 71 35.0 | 129 00.0 | 60.4 | 191.4 |
| UE = CAPE WELLEN | 66 09.8 | -169 50.1 | 61.7 | 237.0 |

# TABLE OF OBSERVATORIES SUPPLYING HOURLY AU AND AL

MAY 1968 — AU = MAXIMUM DELTA H

| UT | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | GWR | GWR | DI | BW | BW | GWR | AI | BW | BW | BW | CC | CC | CC | DI | AI | AI | NAS | LR | NAS | NAS | GWR | GWR | GWR | GWR |
| 2 | BW | BW | BW | BW | BW | BW | BW | BW | CC | CC | DI | DI | CC | DI | DI | DI | CO | NAS | NAS | NAS | NAS | NAS | NAS | FC |
| 3 | GWR | BW | BW | BW | BW | CC | BW | BW | CC | CC | CC | CC | DI | DI | DI | AI | LR | NAS | LR | NAS | NAS | GWR | GWR | GWR |
| 4 | GWR | GWR | DI | AI | BW | BW | BW | BW | BW | CC | CC | CC | CC | CC | CC | LR | LR | LR | LR | LR | NAS | NAS | GWR | GWR |
| 5 | DI | DI | GWR | GWR | AI | BW | BW | BW | BW | CC | CC | CC | CC | CC | DI | DI | DI | NAS | NAS | NAS | GWR | GWR | GWR | GWR |
| 6 | DI | DI | DI | GWR | AI | AI | CO | NAS | CO | BW | CC | CC | CC | CC | CC | CC | CC | LR | LR | LR | LR | LR | LR | DI |
| 7 | DI | GWR | GWR | AI | BW | CO | CO | DI | DI | DI | DI | DI | LR | AI | AI | AI | NAS | LR | LR | NAS | GWR | GWR | GWR | GWR |
| 8 | GWR | GWR | DI | GWR | GWR | BW | BW | BW | CC | CC | CC | DI | CC | CC | NAS | LR | LR | LR | NAS | NAS | NAS | NAS | FC | FC |
| 9 | FC | BW | BW | BW | BW | CO | CC | CC | CC | DI | DI | DI | AI | AI | AI | AI | LR | LR | LR | GWR | GWR | GWR | GWR | GWR |
| 10 | GWR | GWR | DI | BW | BW | GWR | LR | GWR | GWR | GWR | CC | CC | CC | CC | CC | CO | LR | LR | NAS | LR | LR | NAS | NAS | LR |
| 11 | GWR | BW | BW | BW | BW | BW | CC | CC | CC | DI | CC | CC | DI | DI | DI | AI | LR | LR | NAS | LR | NAS | GWR | GWR | GWR |
| 12 | BW | BW | BW | BW | CO | CC | CO | CO | CC | CC | DI | DI | NAS | NAS | NAS | NAS | NAS | NAS | NAS | NAS | NAS | NAS | NAS | NAS |
| 13 | NAS | BW | BW | NAS | BW | BW | BW | NAS | CC | CC | DI | CC | CC | DI | DI | AI | LR | LR | LR | LR | GWR | GWR | GWR | GWR |
| 14 | GWR | CO | BW | BW | BW | BW | BW | CC | CC | CC | CC | CC | DI | DI | DI | DI | DI | LR | LR | LR | GWR | LR | FC | FC |
| 15 | FC | FC | BW | BW | BW | BW | CC | CC | CC | CO | CC | CC | CC | CO | CO | LR | LR | LR | LR | LR | NAS | NAS | GWR | GWR |
| 16 | GWR | BW | BW | BW | BW | BW | BW | CC | CC | CC | CC | DI | DI | AI | AI | LR | LR | LR | FC | FC | FC | FC | FC | FC |
| 17 | DI | GWR | FC | FC | FC | BW | FC | FC | FC | FC | FC | CC | CC | DI | FC | LR | FC | NAS | LR | LR | GWR | GWR | GWR | GWR |
| 18 | GWR | GWR | BW | BW | BW | BW | BW | CC | CC | CC | CC | CC | TI | BW | LR | LR | LR | LR | NAS | BW | GWR | GWR | GWR | GWR |
| 19 | BW | GWR | BW | BW | BW | BW | BW | BW | CC | CC | CC | CC | DI | DI | CC | LR | LR | LR | NAS | NAS | GWR | GWR | GWR | GWR |
| 20 | FC | BW | BW | BW | CO | BW | BW | CC | DI | DI | DI | DI | DI | DI | DI | LR | LR | NAS | NAS | NAS | NAS | NAS | GWR | GWR |
| 21 | BW | BW | BW | BW | FC | FC | BW | CC | CC | CC | CC | TI | AI | LR | AI | LR | LR | LR | GWR | GWR | GWR | GWR | GWR | FC |
| 22 | FC | BW | CO | CO | BW | TI | TI | CC | CC | CC | CC | CC | CC | CC | DI | AI | NAS | LR | LR | LR | NAS | GWR | GWR | GWR |
| 23 | GWR | BW | BW | GWR | GWR | GWR | GWR | BW | BW | CC | CC | CC | DI | DI | DI | LR | LR | NAS | NAS | GWR | GWR | GWR | GWR | GWR |
| 24 | BW | BW | CO | BW | BW | BW | CC | DI | CC | CC | DI | DI | AI | AI | FC | LR | FC | NAS | NAS | FC | FC | FC | FC | FC |
| 25 | FC | FC | FC | FC | FC | FC | FC | BW | CC | CC | CC | CC | CC | FC | AI | LR | LR | NAS | NAS | NAS | FC | FC | FC | FC |
| 26 | FC | FC | FC | BW | BW | BW | FC | FC | BW | CC | CC | CC | CC | CC | CC | CC | DI | FC | FC | FC | FC | FC | FC | FC |
| 27 | FC | FC | FC | FC | FC | FC | FC | FC | FC | FC | FC | FC | FC | FC | FC | FC | NAS | NAS | NAS | LR | FC | NAS | NAS | NAS |
| 28 | NAS | GWR | GWR | GWR | BW | BW | BW | BW | TI | TI | BW | BW | CO | CO | CO | LR | LR | LR | NAS | NAS | NAS | NAS | NAS | FC |
| 29 | FC | FC | BW | BW | BW | BW | BW | CC | CC | CC | CC | CC | CC | DI | AI | AI | LR | NAS | NAS | NAS | GWR | GWR | GWR | GWR |
| 30 | GWR | GWR | BW | BW | BW | LR | BW | CC | CC | CC | CC | CC | CC | DI | DI | AI | AI | AI | LR | LR | NAS | GWR | FC | FC |
| 31 | GWR | BW | BW | BW | BW | BW | LR | CC | CC | CC | CC | CC | DI | AI | CC | LR | LR | LR | LR | NAS | NAS | NAS | NAS | GWR |

| IDENTIFICATION | GEOGRAPHIC LAT | GEOGRAPHIC LONG | GEOMAGNETIC LAT | GEOMAGNETIC LONG |
|---|---|---|---|---|
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| BW = BARROW | 71 18.2 | -156 44.9 | 68.5 | 241.1 |
| CC = C.CHELYUSKIN | 77 43.0 | 104 17.0 | 66.2 | 176.4 |
| CO = COLLEGE | 64 51.6 | -147 50.2 | 64.6 | 256.5 |
| GWR= GREAT WHALE R. | 55 16.0 | -77 47.0 | 66.5 | 347.4 |
| DI = DIXON ISLAND | 73 32.6 | 80 33.7 | 63.0 | 161.5 |

| IDENTIFICATION | GEOGRAPHIC LAT | GEOGRAPHIC LONG | GEOMAGNETIC LAT | GEOMAGNETIC LONG |
|---|---|---|---|---|
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| LR = LEIRVOGUR | 64 11.0 | -21 42.0 | 70.2 | 71.0 |
| NAS= NASSARSSUAQ | 61 06.0 | -45 12.0 | 71.0 | 37.0 |
| TI = TIXIE BAY | 71 35.0 | 129 00.0 | 60.4 | 191.4 |
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MAY 1968 — AL = MINIMUM DELTA H

| UT | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | LR | LR | BW | NAS | NAS | FC | FC | FC | FC | FC | FC | FC | FC | FC | CO | BW | BW | BW | BW | BW | BW | CC | AI | CC |
| 2 | CC | LR | LR | LR | LR | LR | NAS | GWR | GWR | GWR | GWR | FC | FC | FC | CO | BW | FC | FC | DI | FC | AI | CO | CO | CC |
| 3 | LR | LR | LR | GWR | LR | GWR | NAS | NAS | AI | BW | BW | FC | FC | FC | CO | BW | BW | FC | FC | FC | CO | CC | BW | LR |
| 4 | LR | LR | NAS | NAS | CC | GWR | FC | FC | FC | FC | FC | FC | FC | FC | FC | FC | BW | BW | BW | FC | DI | FC | CC | CC |
| 5 | CO | FC | FC | NAS | CC | FC | FC | DI | DI | FC | FC | FC | FC | FC | FC | FC | BW | BW | FC | FC | CC | CO | BW | BW |
| 6 | FC | BW | BW | CC | CC | CC | CC | DI | DI | AI | FC | FC | FC | FC | NAS | BW | BW | BW | BW | CO | CO | CO | CO | CO |
| 7 | BW | CC | NAS | NAS | LR | LR | LR | LR | NAS | NAS | GWR | GWR | CO | CO | CO | CO | CO | DI | DI | DI | DI | DI | CC | AI |
| 8 | AI | LR | BW | LR | CC | GWR | NAS | NAS | GWR | GWR | GWR | GWR | BW | BW | BW | BW | BW | BW | BW | DI | DI | CC | AI | LR |
| 9 | LR | LR | LR | LR | LR | LR | NAS | NAS | NAS | GWR | GWR | GWR | FC | FC | FC | FC | CO | BW | CO | CO | BW | BW | CC | CC |
| 10 | CC | AI | FC | LR | LR | FC | FC | FC | FC | FC | FC | FC | FC | FC | FC | FC | FC | FC | FC | FC | BW | BW | BW | BW |
| 11 | CC | AI | LR | LR | LR | GWR | NAS | FC | CO | GWR | FC | FC | FC | FC | CO | BW | BW | FC | DI | FC | AI | AI | DI | AI |
| 12 | AI | LR | LR | LR | LR | NAS | GWR | NAS | FC | CO | CO | CO | CO | CO | CO | FC | BW | FC | FC | BW | DI | DI | CC | CC |
| 13 | AI | LR | LR | FC | GWR | GWR | GWR | FC | GWR | GWR | FC | FC | FC | FC | FC | CC | DI | BW | BW | DI | DI | DI | DI | BW |
| 14 | LR | LR | LR | LR | LR | FC | FC | FC | FC | FC | BW | FC | FC | BW | BW | BW | BW | BW | DI | DI | DI | CO | BW | BW |
| 15 | LR | LR | LR | LR | GWR | GWR | GWR | GWR | GWR | GWR | CO | CO | FC | FC | FC | FC | FC | FC | FC | FC | CO | DI | AI | AI |
| 16 | AI | LR | LR | NAS | GWR | GWR | FC | GWR | GWR | FC | GWR | CO | CO | CO | FC | CO | BW | BW | TI | TI | TI | AI | CO | LR |
| 17 | LR | CC | LR | LR | LR | NAS | GWR | GWR | GWR | GWR | GWR | GWR | GWR | CO | CO | BW | BW | BW | BW | BW | BW | AI | DI | CC |
| 18 | LR | LR | LR | NAS | NAS | NAS | FC | GWR | GWR | FC | FC | FC | FC | AI | FC | CO | CO | BW | BW | TI | TI | AI | AI | AI |
| 19 | LR | LR | LR | GWR | GWR | FC | FC | GWR | FC | FC | FC | FC | FC | FC | FC | FC | FC | BW | BW | BW | BW | BW | DI | AI | AI |
| 20 | AI | LR | LR | LR | LR | FC | NAS | GWR | GWR | GWR | GWR | GWR | CO | FC | CO | CO | BW | BW | BW | CO | DI | DI | DI | AI |
| 21 | AI | AI | LR | LR | NAS | CC | DI | NAS | GWR | GWR | GWR | GWR | GWR | FC | FC | CO | BW | BW | BW | TI | TI | TI | DI | CC |
| 22 | AI | AI | LR | LR | LR | LR | NAS | NAS | NAS | FC | CO | CO | FC | FC | FC | FC | BW | BW | BW | CC | CC | CC | DI | AI |
| 23 | CC | LR | LR | NAS | CO | NAS | CC | NAS | GWR | GWR | GWR | GWR | BW | BW | BW | BW | BW | BW | BW | BW | DI | DI | DI | AI |
| 24 | AI | AI | LR | LR | LR | GWR | NAS | NAS | NAS | GWR | GWR | GWR | CO | CO | BW | BW | BW | BW | BW | CC | CC | CC | AI | LR |
| 25 | LR | LR | CO | CC | NAS | NAS | DI | NAS | GWR | FC | FC | FC | NAS | BW | BW | BW | BW | BW | BW | DI | DI | CC | CC | CO |
| 26 | TI | LR | LR | LR | GWR | NAS | CC | AI | NAS | NAS | FC | NAS | NAS | BW | BW | BW | BW | BW | BW | CC | CO | CO | CO | TI |
| 27 | CC | CC | CC | CC | CC | CC | DI | DI | DI | DI | AI | LR | AI | GWR | GWR | GWR | GWR | BW | CC | CC | CC | FC | CC | CC |
| 28 | CC | CC | CC | FC | FC | NAS | FC | FC | FC | FC | FC | FC | FC | FC | FC | FC | BW | BW | DI | DI | CC | CC | CC | CC |
| 29 | CC | LR | LR | LR | LR | NAS | NAS | NAS | NAS | GWR | FC | FC | FC | FC | CO | CO | CO | TI | TI | TI | DI | DI | CC | AI |
| 30 | LR | LR | LR | LR | NAS | FC | FC | FC | FC | FC | FC | BW | FC | FC | FC | BW | BW | BW | CC | FC | BW | DI | CC | CC |
| 31 | AI | AI | LR | LR | LR | FC | FC | FC | GWR | FC | FC | FC | FC | FC | FC | FC | BW | BW | BW | CC | CC | BW | CC | CC |

| IDENTIFICATION | GEOGRAPHIC LAT | GEOGRAPHIC LONG | GEOMAGNETIC LAT | GEOMAGNETIC LONG |
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# TABLE OF OBSERVATORIES SUPPLYING HOURLY AU AND AL

JUNE 1968 — AU = MAXIMUM DELTA H

| UT | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | FC | FC | FC | BW | BW | BW | BW | BW | CC | CC | CC | CC | TI | TI | AI | AI | NAS | LR | NAS | NAS | NAS | FC | FC | GWR |
| 2 | FC | BW | BW | BW | BW | CO | CC | CO | CC | CC | CC | CC | CC | DI | AI | DI | NAS | NAS | NAS | GWR | GWR | FC | GWR | FC |
| 3 | BW | BW | BW | BW | BW | BW | BW | CC | CC | TI | CC | CC | DI | TI | TI | LR | LR | LR | NAS | NAS | NAS | FC | FC | FC |
| 4 | GWR | BW | BW | BW | BW | BW | BW | BW | CC | CC | TI | CC | CC | CC | DI | LR | LR | LR | NAS | NAS | NAS | FC | FC | FC |
| 5 | FC | FC | GWR | BW | BW | BW | BW | BW | BW | BW | BW | CC | CC | CC | CC | NAS | LR | LR | NAS | NAS | NAS | NAS | GWR | FC |
| 6 | DI | DI | FC | FC | FC | BW | BW | BW | BW | CC | CC | CC | DI | AI | CC | CC | CC | NAS | NAS | GWR | GWR | FC | FC | FC |
| 7 | FC | FC | FC | BW | BW | BW | BW | CO | CC | CC | CC | CC | TI | TI | TI | LR | AI | LR | LR | NAS | BW | BW | FC | BW |
| 8 | FC | FC | BW | BW | BW | BW | BW | BW | BW | BW | CC | CC | CC | DI | DI | LR | LR | LR | NAS | NAS | NAS | FC | FC | FC |
| 9 | FC | FC | BW | BW | BW | BW | BW | BW | BW | BW | BW | BW | CC | BW | CC | DI | LR | LR | NAS | NAS | FC | GWR | GWR | FC |
| 10 | FC | BW | BW | BW | BW | CO | CO | TI | DI | CC | CC | DI | AI | AI | AI | AI | LR | NAS | BW | FC | GWR | GWR | GWR | BW |
| 11 | BW | BW | BW | CO | CO | CO | CO | TI | TI | TI | AI | TI | TI | BW | AI | LR | AI | NAS | NAS | GWR | GWR | FC | GWR | FC |
| 12 | GWR | BW | CO | CO | CO | CO | TI | TI | TI | TI | TI | AI | AI | AI | AI | LR | NAS | NAS | NAS | NAS | NAS | GWR | GWR | NAS |
| 13 | NAS | BW | BW | CO | CO | UE | TI | TI | TI | TI | TI | AI | AI | AI | AI | AI | NAS | LR | GWR | GWR | GWR | GWR | NAS | NAS |
| 14 | NAS | NAS | NAS | NAS | BW | BW | BW | TI | TI | TI | TI | TI | AI | AI | LR | LR | LR | LR | LR | LR | GWR | GWR | GWR | FC |
| 15 | FC | FC | BW | BW | BW | BW | BW | CO | BW | CC | CC | CC | CC | CC | CC | CC | LR | LR | LR | LR | LR | LR | FC | FC |
| 16 | FC | FC | FC | GWR | GWR | GWR | BW | BW | BW | CC | CC | DI | DI | DI | AI | LR | LR | LR | LR | GWR | GWR | GWR | FC | FC |
| 17 | GWR | BW | BW | BW | BW | BW | TI | TI | TI | DI | TI | CC | CC | TI | CO | CO | LR | LR | NAS | NAS | NAS | NAS | GWR | GWR |
| 18 | FC | FC | BW | BW | BW | BW | BW | CC | CC | CC | CC | CC | DI | DI | AI | LR | LR | NAS | NAS | GWR | GWR | GWR | FC | FC |
| 19 | FC | BW | BW | BW | BW | BW | BW | CC | CC | CC | DI | DI | DI | DI | AI | LR | NAS | NAS | NAS | GWR | FC | FC | GWR | FC |
| 20 | GWR | GWR | BW | FC | BW | BW | BW | BW | BW | BW | CC | CC | CC | CC | CC | CC | LR | LR | LR | LR | NAS | NAS | NAS | FC |
| 21 | FC | FC | FC | FC | FC | FC | FC | FC | CO | FC | FC | BW | BW | CC | CO | CO | LR | LR | LR | NAS | LR | FC | FC | FC |
| 22 | FC | FC | FC | FC | BW | BW | BW | CC | CC | DI | DI | DI | AI | AI | DI | AI | CO | NAS | NAS | FC | NAS | FC | FC | NAS |
| 23 | FC | FC | BW | BW | BW | BW | BW | BW | CC | CC | CC | DI | CC | CC | CC | DI | DI | LR | NAS | NAS | NAS | NAS | FC | FC |
| 24 | FC | FC | FC | FC | FC | BW | BW | BW | BW | BW | BW | CC | CC | CC | DI | CC | DI | DI | LR | LR | LR | LR | LR | DI |
| 25 | DI | DI | FC | FC | FC | FC | BW | BW | BW | BW | BW | FC | FC | CO | CO | LR | LR | LR | LR | LR | LR | LR | FC | FC |
| 26 | FC | BW | FC | FC | FC | FC | FC | BW | BW | BW | BW | CC | CC | DI | DI | AI | LR | LR | BW | LR | NAS | FC | FC | FC |
| 27 | FC | FC | FC | BW | BW | BW | BW | BW | BW | CC | CC | CC | DI | CC | CC | AI | AI | LR | LR | NAS | NAS | FC | FC | FC |
| 28 | FC | FC | FC | FC | FC | BW | BW | BW | BW | BW | CC | CC | CC | CC | DI | DI | LR | LR | NAS | NAS | NAS | NAS | NAS | FC |
| 29 | FC | FC | FC | BW | BW | BW | BW | FC | FC | GWR | FC | FC | UE | CC | CC | DI | LR | NAS | NAS | NAS | FC | FC | FC | FC |
| 30 | FC | FC | BW | BW | BW | BW | BW | BW | CC | CC | CC | BW | CC | DI | CC | LR | LR | NAS | NAS | GWR | GWR | GWR | GWR | GWR |

| IDENTIFICATION | GEOGRAPHIC LAT | GEOGRAPHIC LONG | GEOMAGNETIC LAT | GEOMAGNETIC LONG |
|---|---|---|---|---|
| AI = ABISKO | 68 21.5 | 18 49.4 | 66.0 | 114.9 |
| BW = BARROW | 71 18.2 | -156 44.9 | 68.5 | 241.1 |
| CC = C.CHELYUSKIN | 77 43.0 | 104 17.0 | 66.2 | 176.4 |
| CO = COLLEGE | 64 51.6 | -147 50.2 | 64.6 | 256.5 |
| GWR= GREAT WHALE R. | 55 16.0 | -77 47.0 | 66.5 | 347.4 |
| DI = DIXON ISLAND | 73 32.6 | 80 33.7 | 63.0 | 161.5 |

| IDENTIFICATION | GEOGRAPHIC LAT | GEOGRAPHIC LONG | GEOMAGNETIC LAT | GEOMAGNETIC LONG |
|---|---|---|---|---|
| FC = FT.CHURCHILL | 58 48.0 | -94 06.0 | 68.7 | 322.8 |
| LR = LEIRVOGUR | 64 11.0 | -21 42.0 | 70.2 | 71.0 |
| NAS= NASSARSSUAQ | 61 06.0 | -45 12.0 | 71.0 | 37.0 |
| TI = TIXIE BAY | 71 35.0 | 129 00.0 | 60.4 | 191.4 |
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## TABLE OF OBSERVATORIES SUPPLYING HOURLY AU AND AL

JUNE 1968 — AL = MINIMUM DELTA H

| UT | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | LR | LR | LR | GWR | GWR | GWR | GWR | DI | GWR | GWR | GWR | FC | CO | BW | FC | CO | BW | TI | BW | TI | DI | DI | AI | AI |
| 2 | LR | AI | LR | LR | LR | LR | LR | NAS | NAS | GWR | FC | FC | FC | CO | CO | BW | BW | BW | BW | BW | DI | DI | DI | AI |
| 3 | CC | LR | LR | LR | NAS | NAS | NAS | NAS | GWR | GWR | CO | FC | CO | FC | CO | BW | BW | BW | CC | DI | DI | DI | DI | LR |
| 4 | LR | LR | LR | LR | GWR | GWR | GWR | GWR | GWR | FC | FC | BW | BW | BW | BW | BW | BW | BW | BW | CC | DI | DI | DI | LR |
| 5 | LR | LR | LR | LR | GWR | GWR | GWR | FC | AI | AI | LR | FC | NAS | BW | BW | BW | BW | BW | BW | CC | DI | DI | UE | UE |
| 6 | UE | BW | BW | NAS | CC | DI | NAS | DI | DI | LR | FC | FC | FC | FC | BW | BW | BW | BW | DI | CO | BW | BW | BW | BW |
| 7 | UE | LR | LR | NAS | LR | LR | NAS | NAS | NAS | GWR | GWR | CO | CO | FC | FC | FC | CO | BW | BW | DI | DI | UE | CC | UE |
| 8 | LR | LR | LR | GWR | NAS | NAS | DI | NAS | GWR | AI | AI | LR | FC | FC | CO | CO | CO | BW | CC | DI | DI | AI | AI | AI |
| 9 | UE | LR | LR | CC | GWR | GWR | NAS | GWR | DI | AI | AI | LR | LR | LR | GWR | FC | BW | BW | BW | BW | DI | DI | DI | AI |
| 10 | AI | LR | LR | LR | LR | NAS | NAS | NAS | CO | GWR | GWR | GWR | GWR | CO | FC | CO | DI | TI | DI | DI | BW | DI | DI | AI |
| 11 | GWR | AI | AI | AI | AI | LR | LR | NAS | GWR | NAS | NAS | GWR | UE | GWR | FC | DI | BW | TI | BW | BW | DI | AI | AI | CC |
| 12 | AI | AI | AI | LR | LR | LR | LR | NAS | NAS | GWR | GWR | GWR | GWR | UE | CO | CO | CO | TI | TI | TI | DI | TI | DI | AI |
| 13 | CC | AI | AI | LR | LR | AI | LR | GWR | NAS | GWR | GWR | GWR | UE | UE | UE | CO | CO | CO | BW | TI | TI | TI | AI | AI |
| 14 | CC | LR | LR | LR | DI | LR | GWR | GWR | GWR | GWR | GWR | GWR | GWR | GWR | CO | BW | BW | BW | BW | TI | TI | DI | AI | AI |
| 15 | AI | LR | LR | LR | GWR | GWR | GWR | GWR | GWR | GWR | CO | CO | FC | BW | BW | GWR | FC | BW | DI | DI | DI | AI | CC | AI |
| 16 | AI | UE | LR | CC | CC | DI | DI | DI | AI | LR | GWR | GWR | CO | FC | CO | BW | BW | BW | BW | DI | DI | DI | AI | AI |
| 17 | AI | AI | LR | LR | GWR | LR | LR | GWR | GWR | GWR | GWR | FC | BW | BW | BW | DI | DI | BW | DI | DI | DI | CC | CC | UE |
| 18 | LR | LR | NAS | NAS | NAS | DI | GWR | GWR | GWR | GWR | BW | CO | FC | FC | CO | FC | DI | TI | BW | TI | TI | DI | DI | AI |
| 19 | LR | LR | LR | LR | LR | NAS | NAS | NAS | GWR | GWR | GWR | FC | FC | BW | BW | BW | BW | BW | BW | DI | DI | DI | CC | AI |
| 20 | AI | LR | LR | NAS | NAS | GWR | NAS | GWR | GWR | DI | LR | NAS | NAS | NAS | BW | BW | BW | BW | DI | CC | DI | CC | CC | UE |
| 21 | UE | UE | UE | CC | CC | CC | CC | DI | LR | AI | LR | LR | LR | NAS | NAS | AI | CC | CC | CC | CO | CO | CO | UE | UE |
| 22 | UE | UE | NAS | NAS | DI | GWR | GWR | GWR | GWR | GWR | GWR | GWR | GWR | CO | FC | FC | DI | DI | DI | DI | DI | AI | AI | AI |
| 23 | LR | LR | NAS | LR | NAS | NAS | GWR | NAS | GWR | GWR | FC | FC | FC | FC | BW | BW | BW | CC | DI | DI | DI | DI | CC | AI |
| 24 | CC | CC | CC | CC | CC | GWR | DI | DI | AI | LR | LR | LR | NAS | NAS | NAS | GWR | GWR | FC | CO | CO | CO | CC | CC | UE |
| 25 | UE | UE | CC | CC | CC | CC | CC | GWR | AI | AI | AI | LR | LR | LR | GWR | GWR | FC | BW | BW | DI | DI | UE | UE | CC |
| 26 | AI | LR | NAS | CC | CC | DI | DI | DI | DI | AI | NAS | FC | FC | FC | FC | BW | BW | CC | DI | DI | DI | AI | AI | AI |
| 27 | LR | LR | LR | CC | GWR | NAS | NAS | GWR | AI | AI | CO | CO | FC | FC | FC | CO | BW | BW | CC | DI | DI | CC | CC | AI |
| 28 | LR | LR | NAS | CC | CC | DI | DI | DI | DI | AI | NAS | NAS | FC | FC | BW | BW | BW | BW | BW | CC | CC | CC | UE | CC |
| 29 | LR | LR | CC | NAS | NAS | NAS | NAS | DI | AI | AI | AI | AI | NAS | NAS | BW | BW | BW | BW | DI | DI | DI | CC | CC | CC |
| 30 | LR | LR | LR | LR | LR | NAS | NAS | NAS | GWR | FC | FC | FC | FC | BW | BW | BW | BW | BW | BW | DI | DI | DI | CC | AI |

| IDENTIFICATION | GEOGRAPHIC LAT | GEOGRAPHIC LONG | GEOMAGNETIC LAT | GEOMAGNETIC LONG |
|---|---|---|---|---|
| AI = ABISKO | 68 21.5 | 18 49.4 | 66.0 | 114.9 |
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| NAS= NASSARSSUAQ | 61 06.0 | -45 12.0 | 71.0 | 37.0 |
| TI = TIXIE BAY | 71 35.0 | 129 00.0 | 60.4 | 191.4 |
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## TABLE OF OBSERVATORIES SUPPLYING HOURLY AU AND AL

JULY 1968 — AU = MAXIMUM DELTA H

| UT | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | FC | FC | BW | BW | BW | BW | BW | CC | CC | CC | CC | DI | DI | DI | DI | AI | LR | NAS | NAS | NAS | NAS | NAS | FC | FC |
| 2 | FC | BW | FC | FC | FC | BW | BW | BW | CC | CC | CC | CC | CC | DI | DI | DI | AI | NAS | NAS | LR | NAS | FC | FC | FC |
| 3 | FC | BW | BW | BW | BW | BW | CC | DI | DI | CO | CC | CC | CC | DI | DI | AI | LR | LR | LR | NAS | NAS | NAS | FC | FC |
| 4 | FC | FC | FC | BW | BW | BW | BW | CC | CC | CC | CC | CC | DI | DI | AI | AI | NAS | NAS | NAS | NAS | NAS | FC | NAS | FC |
| 5 | FC | FC | FC | BW | BW | FC | NAS | BW | CC | CC | CC | CC | CC | CC | DI | LR | AI | AI | LR | NAS | NAS | NAS | FC | FC |
| 6 | FC | FC | FC | BW | BW | BW | BW | BW | BW | CC | CC | CC | CC | CC | DI | AI | LR | LR | NAS | NAS | NAS | NAS | NAS | NAS |
| 7 | FC | FC | FC | BW | BW | BW | BW | CC | CC | CC | CC | CC | GWR | CO | DI | LR | LR | LR | NAS | GWR | NAS | NAS | FC | FC |
| 8 | FC | FC | FC | BW | BW | BW | BW | BW | CC | CC | CC | CC | CC | CC | CC | LR | LR | LR | NAS | NAS | NAS | NAS | NAS | NAS |
| 9 | FC | FC | FC | FC | BW | BW | BW | BW | CC | CC | BW | CC | CC | CC | DI | DI | LR | LR | LR | LR | LR | NAS | NAS | FC |
| 10 | FC | FC | BW | BW | CO | BW | CC | CC | CC | TI | TI | DI | AI | AI | AI | FC | NAS | NAS | NAS | NAS | GWR | FC | GWR | GWR |
| 11 | GWR | BW | BW | BW | BW | BW | BW | BW | CO | CC | CC | CC | CC | CC | CC | LR | LR | LR | LR | NAS | NAS | GWR | FC | FC |
| 12 | FC | BW | BW | BW | BW | LR | LR | LR | GWR | FC | TI | TI | CC | CC | CC | LR | AI | AI | NAS | NAS | NAS | DI | DI | DI |
| 13 | DI | GWR | FC | FC | BW | BW | BW | BW | GWR | GWR | GWR | FC | TI | DI | DI | CC | LR | NAS | GWR | GWR | FC | FC | GWR | GWR |
| 14 | BW | CO | CO | CO | CO | CO | FC | LR | LR | TI | CC | CC | TI | LR | LR | LR | NAS | LR | NAS | NAS | NAS | FC | FC | GWR |
| 15 | FC | FC | FC | BW | BW | BW | BW | LR | NAS | BW | CC | CC | CC | CC | CC | CO | CO | LR | NAS | NAS | NAS | NAS | FC | FC |
| 16 | FC | FC | BW | BW | BW | BW | BW | TI | BW | BW | BW | TI | CC | CC | DI | CC | LR | LR | NAS | NAS | NAS | NAS | NAS | FC |
| 17 | FC | FC | FC | FC | BW | BW | BW | BW | BW | BW | CC | CC | DI | CC | BW | LR | LR | LR | NAS | NAS | NAS | NAS | FC | FC |
| 18 | FC | FC | BW | BW | BW | BW | BW | BW | BW | BW | CC | CC | DI | DI | AI | AI | AI | LR | LR | NAS | NAS | NAS | FC | FC |
| 19 | FC | FC | BW | BW | BW | BW | BW | BW | CC | CC | CC | CC | CC | TI | DI | LR | AI | NAS | NAS | NAS | NAS | GWR | FC | FC |
| 20 | FC | FC | FC | FC | LR | LR | NAS | GWR | GWR | GWR | FC | FC | FC | CC | CC | LR | NAS | LR | NAS | NAS | NAS | NAS | NAS | FC |
| 21 | FC | FC | GWR | FC | FC | LR | LR | BW | BW | BW | BW | CC | CC | CC | DI | DI | DI | LR | LR | NAS | NAS | NAS | FC | FC |
| 22 | FC | FC | BW | FC | BW | BW | BW | CC | DI | DI | TI | DI | DI | DI | LR | AI | LR | LR | LR | LR | GWR | FC | GWR | FC |
| 23 | GWR | FC | BW | BW | BW | BW | CO | CC | CC | CO | CC | CC | CC | CC | DI | AI | LR | NAS | NAS | NAS | NAS | NAS | FC | FC |
| 24 | FC | GWR | GWR | GWR | BW | BW | BW | BW | BW | BW | CC | CC | DI | DI | DI | DI | LR | LR | NAS | NAS | NAS | NAS | NAS | NAS |
| 25 | FC | FC | FC | FC | BW | BW | BW | BW | BW | CC | CC | CC | CC | CC | DI | DI | LR | NAS | NAS | NAS | NAS | NAS | NAS | FC |
| 26 | FC | FC | FC | BW | BW | BW | BW | BW | CC | CC | TI | CC | CC | DI | TI | LR | NAS | LR | NAS | NAS | FC | FC | FC | FC |
| 27 | GWR | FC | BW | BW | BW | BW | BW | BW | CC | CC | CC | DI | DI | DI | LR | NAS | NAS | NAS | NAS | NAS | NAS | NAS | NAS | FC |
| 28 | FC | FC | FC | BW | BW | FC | FC | GWR | GWR | CC | CC | CC | CC | DI | DI | LR | AI | LR | NAS | NAS | GWR | NAS | NAS | FC |
| 29 | FC | FC | FC | FC | BW | BW | BW | TI | TI | TI | TI | CC | TI | TI | CC | CO | CO | LR | LR | NAS | NAS | NAS | FC | FC |
| 30 | FC | FC | FC | GWR | FC | FC | FC | FC | TI | FC | TI | TI | FC | CC | AI | AI | DI | NAS | LR | NAS | NAS | GWR | FC | FC |
| 31 | GWR | GWR | GWR | BW | BW | BW | TI | CC | CC | TI | CC | CC | CC | CC | CC | CC | NAS | NAS | NAS | NAS | NAS | NAS | NAS | GWR |

| IDENTIFICATION | GEOGRAPHIC LAT | GEOGRAPHIC LONG | GEOMAGNETIC LAT | GEOMAGNETIC LONG |
|---|---|---|---|---|
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## TABLE OF OBSERVATORIES SUPPLYING HOURLY AU AND AL

JULY 1968 AL = MINIMUM DELTA H

| UT | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | AI | AI | LR | LR | LR | NAS | NAS | GWR | GWR | GWR | GWR | FC | FC | FC | BW | BW | BW | BW | BW | CC | CC | UE | CC | AI |
| 2 | AI | LR | LR | NAS | NAS | NAS | GWR | GWR | GWR | GWR | GWR | GWR | FC | FC | BW | BW | BW | BW | DI | DI | DI | CC | CC | DI |
| 3 | CC | LR | LR | NAS | NAS | NAS | NAS | GWR | NAS | NAS | FC | FC | FC | CO | BW | FC | GWR | BW | BW | DI | DI | CC | CC | CC |
| 4 | LR | LR | NAS | NAS | NAS | GWR | GWR | GWR | GWR | GWR | GWR | FC | FC | CO | FC | BW | BW | DI | DI | DI | DI | CC | CC | UE |
| 5 | LR | NAS | NAS | LR | NAS | DI | DI | FC | GWR | GWR | FC | FC | FC | BW | CO | CO | BW | BW | BW | BW | CC | CO | CO | UE |
| 6 | TI | CC | NAS | NAS | NAS | GWR | GWR | GWR | GWR | FC | FC | FC | FC | FC | BW | BW | BW | CC | DI | DI | DI | CC | BW | BW |
| 7 | UE | CC | NAS | NAS | NAS | NAS | GWR | GWR | GWR | GWR | FC | FC | AI | LR | CC | CC | BW | BW | CC | CC | CO | CO | BW | UE |
| 8 | NAS | BW | CC | NAS | NAS | GWR | FC | GWR | GWR | GWR | FC | FC | FC | LR | BW | BW | CC | DI | CC | CC | CC | CC | CO | UE |
| 9 | CC | CC | CC | CC | GWR | NAS | NAS | GWR | GWR | CO | FC | FC | AI | BW | BW | BW | BW | BW | CO | CO | CO | UE | UE | UE |
| 10 | AI | AI | LR | LR | LR | LR | NAS | NAS | NAS | GWR | GWR | CO | CO | CO | CO | BW | BW | BW | BW | BW | TI | TI | AI | AI |
| 11 | AI | AI | LR | LR | GWR | NAS | NAS | NAS | GWR | GWR | GWR | CO | CO | BW | BW | BW | BW | BW | BW | CC | CC | CC | DI | AI |
| 12 | AI | AI | LR | LR | GWR | GWR | CO | DI | DI | DI | AI | AI | AI | GWR | GWR | CO | BW | BW | CC | CO | CO | CO | CO | UE |
| 13 | TI | TI | TI | TI | NAS | NAS | FC | FC | DI | CC | AI | AI | AI | NAS | BW | BW | BW | BW | BW | BW | CC | DI | DI | DI |
| 14 | AI | AI | AI | AI | LR | NAS | GWR | GWR | GWR | CO | FC | FC | FC | BW | BW | BW | BW | BW | BW | CC | CC | CC | DI | AI |
| 15 | TI | LR | LR | NAS | NAS | NAS | NAS | DI | DI | AI | FC | BW | AI | NAS | NAS | FC | FC | BW | BW | DI | DI | DI | CC | CC |
| 16 | LR | NAS | NAS | TI | NAS | NAS | NAS | DI | GWR | FC | FC | FC | AI | BW | BW | BW | BW | BW | BW | CC | CC | CC | CO | UE | UE |
| 17 | UE | UE | TI | TI | CC | CC | DI | DI | AI | AI | FC | FC | FC | BW | GWR | GWR | CC | CC | BW | DI | DI | CC | UE | CC |
| 18 | CC | LR | LR | LR | NAS | NAS | NAS | DI | DI | AI | FC | FC | FC | FC | CO | CO | FC | BW | BW | CC | CO | CO | UE | CC |
| 19 | AI | CC | LR | LR | GWR | GWR | GWR | GWR | GWR | GWR | GWR | FC | FC | BW | BW | BW | CC | BW | CC | BW | BW | DI | DI | AI |
| 20 | AI | AI | TI | NAS | GWR | CC | CC | CC | AI | AI | AI | AI | AI | GWR | GWR | GWR | FC | FC | BW | BW | DI | CC | CC | UE |
| 21 | LR | LR | TI | TI | CC | CC | CC | GWR | GWR | FC | AI | FC | FC | FC | BW | BW | BW | TI | BW | CC | UE | DI | DI | CC |
| 22 | AI | LR | LR | NAS | NAS | LR | NAS | NAS | GWR | GWR | GWR | CO | CO | FC | CO | CO | TI | TI | TI | DI | DI | AI | AI | AI |
| 23 | LR | LR | LR | LR | LR | LR | GWR | GWR | GWR | AI | FC | FC | FC | FC | FC | CO | BW | TI | CC | CC | CO | CC | CC | CC |
| 24 | LR | TI | TI | TI | TI | GWR | GWR | FC | FC | AI | FC | FC | FC | FC | BW | BW | FC | FC | BW | CC | CC | UE | UE | UE |
| 25 | TI | TI | NAS | TI | NAS | GWR | GWR | NAS | DI | GWR | FC | FC | FC | BW | FC | BW | BW | BW | CC | CO | BW | BW | CC | UE |
| 26 | CC | CC | CC | FC | NAS | NAS | AI | GWR | GWR | GWR | GWR | FC | FC | CO | BW | BW | CC | BW | BW | TI | DI | AI | AI | CC |
| 27 | AI | LR | LR | LR | NAS | GWR | GWR | NAS | FC | FC | FC | FC | FC | BW | BW | BW | BW | BW | BW | CC | CC | CC | CO | UE |
| 28 | LR | LR | LR | LR | GWR | NAS | BW | DI | DI | LR | FC | BW | BW | BW | BW | BW | BW | BW | BW | DI | AI | CO | CC | LR |
| 29 | LR | LR | LR | CC | GWR | GWR | NAS | DI | AI | AI | AI | FC | BW | BW | BW | BW | GWR | BW | BW | CC | CC | BW | BW | BW |
| 30 | BW | BW | CC | NAS | CC | DI | DI | DI | AI | AI | BW | BW | BW | BW | GWR | BW | BW | BW | BW | BW | DI | DI | CC | CC |
| 31 | LR | LR | NAS | NAS | GWR | NAS | FC | GWR | FC | AI | FC | FC | FC | BW | BW | BW | FC | FC | FC | BW | CO | CO | CO | CO |

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AUGUST 1968 — AU = MAXIMUM DELTA H

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | FC | FC | FC | FC | BW | BW | BW | BW | BW | CC | CC | CC | CC | CC | DI | DI | LR | NAS | NAS | AI | NAS | FC | FC | FC |
| 2 | FC | FC | FC | FC | BW | BW | BW | BW | BW | BW | CC | CC | CC | CC | CC | CC | NAS | NAS | NAS | NAS | NAS | NAS | FC | FC |
| 3 | FC | FC | FC | BW | BW | BW | BW | CC | CC | CC | CC | CC | CC | DI | AI | AI | AI | LR | LR | AI | NAS | NAS | FC | FC |
| 4 | FC | FC | FC | FC | BW | BW | BW | BW | BW | FC | GWR | FC | FC | CO | CO | CO | LR | LR | LR | GWR | NAS | FC | NAS | FC |
| 5 | FC | FC | FC | BW | BW | BW | FC | FC | CC | CC | CC | CC | DI | DI | AI | AI | AI | NAS | BW | AI | NAS | NAS | FC | GWR |
| 6 | FC | FC | BW | BW | BW | BW | BW | CO | CC | CC | CC | TI | TI | TI | DI | LR | LR | NAS | NAS | NAS | GWR | GWR | NAS | FC |
| 7 | FC | CO | FC | FC | CO | CO | CO | CC | CC | CC | CC | DI | DI | DI | DI | AI | LR | NAS | NAS | NAS | NAS | NAS | FC | FC |
| 8 | FC | BW | BW | BW | BW | BW | CC | CC | CC | CO | CC | CC | DI | DI | DI | NAS | NAS | NAS | LR | NAS | NAS | NAS | FC | FC |
| 9 | FC | FC | BW | FC | AI | BW | BW | CO | FC | CC | CC | CC | CC | CC | CC | LR | LR | LR | NAS | NAS | NAS | NAS | FC | FC |
| 10 | FC | FC | FC | GWR | FC | BW | BW | BW | CC | CC | CC | CC | FC | BW | CC | LR | LR | AI | AI | NAS | NAS | NAS | FC | FC |
| 11 | FC | FC | FC | BW | BW | BW | BW | TI | TI | TI | FC | TI | TI | CC | TI | CO | NAS | NAS | NAS | NAS | NAS | NAS | DI | FC |
| 12 | FC | FC | GWR | AI | FC | BW | BW | TI | TI | BW | CC | CC | TI | TI | AI | AI | AI | NAS | NAS | NAS | NAS | DI | FC | DI |
| 13 | DI | FC | FC | FC | CO | UE | TI | TI | TI | TI | TI | TI | CC | CC | AI | AI | LR | LR | AI | NAS | NAS | NAS | FC | FC |
| 14 | FC | FC | BW | BW | BW | BW | BW | CC | TI | TI | TI | TI | DI | DI | AI | AI | AI | LR | LR | LR | LR | FC | FC | FC |
| 15 | FC | FC | BW | BW | CO | BW | BW | CC | CC | DI | CC | TI | DI | AI | LR | LR | LR | LR | LR | LR | GWR | GWR | FC | FC |
| 16 | FC | BW | BW | BW | BW | BW | CO | UE | CC | CC | CC | CC | CC | DI | AI | LR | LR | LR | GWR | LR | GWR | GWR | FC | FC |
| 17 | CO | FC | BW | BW | CO | UE | CO | TI | CC | DI | CC | DI | DI | AI | AI | LR | LR | LR | LR | LR | GWR | GWR | BW | GWR |
| 18 | BW | DI | CO | BW | BW | BW | BW | CC | CC | CC | CC | CC | DI | DI | AI | LR | LR | LR | LR | LR | GWR | FC | FC | FC |
| 19 | FC | FC | BW | BW | BW | BW | BW | CC | CC | CC | CC | CC | CC | TI | DI | LR | LR | LR | LR | FC | FC | FC | FC | FC |
| 20 | FC | FC | FC | BW | GWR | TI | BW | BW | BW | CC | CC | CC | DI | DI | AI | LR | LR | LR | GWR | GWR | FC | FC | FC | FC |
| 21 | FC | FC | FC | FC | BW | BW | BW | BW | TI | TI | CC | CC | CC | CC | TI | TI | LR | LR | LR | LR | LR | FC | FC | FC |
| 22 | DI | DI | FC | FC | FC | FC | TI | TI | TI | TI | CC | CC | CC | CC | CC | LR | LR | LR | LR | LR | LR | FC | FC | FC |
| 23 | FC | FC | BW | BW | BW | BW | BW | CC | CC | CC | CC | CC | CC | DI | DI | DI | LR | LR | LR | GWR | GWR | FC | FC | GWR |
| 24 | GWR | BW | FC | LR | BW | CO | CO | CC | TI | TI | TI | DI | CC | TI | TI | LR | LR | LR | LR | FC | LR | FC | FC | FC |
| 25 | FC | FC | FC | FC | FC | FC | FC | FC | FC | FC | TI | FC | DI | FC | CO | CO | LR | LR | LR | GWR | LR | FC | FC | FC |
| 26 | FC | FC | FC | FC | FC | TI | TI | TI | CC | CC | FC | FC | DI | DI | DI | AI | LR | LR | LR | LR | GWR | FC | FC | FC |
| 27 | FC | FC | BW | BW | FC | UE | TI | BW | TI | CC | CC | CC | TI | TI | CC | TI | CO | LR | LR | LR | LR | DI | FC | FC |
| 28 | FC | FC | FC | FC | BW | BW | FC | FC | TI | BW | TI | TI | TI | TI | TI | TI | DI | TI | LR | LR | LR | LR | LR | DI |
| 29 | FC | FC | FC | FC | FC | UE | TI | TI | TI | TI | TI | TI | CC | CC | TI | TI | LR | LR | TI | GWR | GWR | GWR | GWR | FC |
| 30 | FC | FC | FC | FC | BW | FC | BW | BW | BW | BW | BW | TI | CC | TI | TI | TI | LR | LR | LR | LR | LR | LR | LR | DI |
| 31 | FC | GWR | GWR | BW | BW | BW | FC | GWR | TI | TI | CC | DI | DI | AI | AI | AI | LR | LR | LR | GWR | GWR | FC | FC | FC |

| IDENTIFICATION | GEOGRAPHIC LAT | GEOGRAPHIC LONG | GEOMAGNETIC LAT | GEOMAGNETIC LONG |
|---|---|---|---|---|
| AI = ABISKO | 68 21.5 | 18 49.4 | 66.0 | 114.9 |
| BW = BARROW | 71 18.2 | -156 44.9 | 68.5 | 241.1 |
| CC = C.CHELYJSKIN | 77 43.0 | 104 17.0 | 66.2 | 176.4 |
| CO = COLLEGE | 64 51.6 | -147 50.2 | 64.6 | 256.5 |
| GWR= GREAT WHALE R. | 55 16.0 | -77 47.0 | 66.5 | 347.4 |
| DI = DIXON ISLAND | 73 32.6 | 80 33.7 | 63.0 | 161.5 |

| IDENTIFICATION | GEOGRAPHIC LAT | GEOGRAPHIC LONG | GEOMAGNETIC LAT | GEOMAGNETIC LONG |
|---|---|---|---|---|
| FC = FT.CHURCHILL | 58 48.0 | -94 06.0 | 68.7 | 322.8 |
| LR = LEIRVOGUR | 64 11.0 | -21 42.0 | 70.2 | 71.0 |
| NAS= NASSARSSUAQ | 61 06.0 | -45 12.0 | 71.0 | 37.0 |
| TI = TIXIE BAY | 71 35.0 | 129 00.0 | 60.4 | 191.4 |
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## TABLE OF OBSERVATORIES SUPPLYING HOURLY AU AND AL

AUGUST 1968 AL = MINIMUM DELTA H

| UT | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | TI | TI | TI | TI | NAS | GWR | GWR | GWR | FC | FC | FC | NAS | NAS | NAS | GWR | BW | BW | BW | CC | CC | CO | BW | CO | UE |
| 2 | TI | TI | TI | TI | NAS | DI | DI | DI | AI | LR | LR | FC | FC | FC | BW | BW | BW | CC | CC | CO | BW | DI | TI | TI |
| 3 | TI | LR | LR | LR | GWR | NAS | NAS | GWR | NAS | GWR | AI | CO | CO | FC | GWR | FC | TI | BW | BW | BW | DI | AI | AI | LR |
| 4 | LR | NAS | NAS | NAS | DI | GWR | GWR | DI | DI | BW | BW | BW | NAS | NAS | GWR | GWR | CC | TI | CO | CO | CO | BW | CO | CC |
| 5 | LR | LR | TI | TI | GWR | NAS | DI | CC | GWR | GWR | GWR | FC | FC | FC | CO | CO | DI | TI | DI | CO | CO | BW | AI | AI |
| 6 | LR | LR | LR | LR | LR | NAS | NAS | DI | GWR | GWR | LR | FC | FC | CO | BW | BW | BW | BW | BW | DI | DI | TI | TI | AI |
| 7 | AI | LR | LR | LR | LR | GWR | GWR | NAS | GWR | GWR | GWR | CO | FC | FC | BW | TI | TI | TI | DI | DI | DI | CO | AI | CC |
| 8 | AI | LR | LR | LR | GWR | NAS | GWR | GWR | GWR | DI | DI | BW | NAS | FC | CC | BW | FC | BW | TI | DI | DI | DI | CC | CC |
| 9 | CC | LR | LR | LR | NAS | NAS | FC | FC | DI | LR | LR | FC | BW | BW | GWR | BW | BW | BW | BW | BW | DI | CC | CC | DI |
| 10 | CC | NAS | LR | NAS | CC | GWR | GWR | GWR | GWR | BW | FC | BW | LR | GWR | GWR | GWR | BW | BW | CC | CC | DI | DI | CC | CC |
| 11 | LR | LR | LR | LR | NAS | NAS | GWR | GWR | AI | LR | LR | LR | LR | BW | GWR | GWR | BW | BW | BW | DI | CO | CO | CO | UE |
| 12 | CC | LR | CC | CC | CC | DI | GWR | FC | LR | LR | LR | BW | BW | BW | BW | BW | BW | BW | DI | DI | CC | CO | CO | CO |
| 13 | TI | TI | TI | CC | CC | GWR | DI | DI | DI | DI | LR | LR | NAS | NAS | GWR | BW | BW | BW | BW | BW | DI | DI | CC | AI |
| 14 | CC | LR | LR | NAS | LR | GWR | GWR | GWR | NAS | GWR | GWR | CO | CO | FC | CO | TI | BW | BW | BW | BW | DI | AI | AI | AI |
| 15 | AI | LR | LR | LR | LR | LR | GWR | GWR | GWR | CO | GWR | CO | CO | UE | CO | CO | BW | BW | BW | TI | TI | DI | AI | AI |
| 16 | AI | LR | LR | LR | LR | GWR | GWR | GWR | BW | BW | CO | CO | CO | CO | BW | BW | UE | TI | TI | DI | TI | CC | CC | AI |
| 17 | AI | LR | LR | LR | LR | LR | GWR | CO | BW | CO | GWR | CO | CO | CO | BW | CO | UE | TI | DI | TI | AI | AI | CC | CC |
| 18 | LR | LR | LR | LR | LR | GWR | GWR | GWR | GWR | GWR | CO | GWR | CO | CO | CO | BW | TI | DI | DI | DI | AI | DI | CC | AI |
| 19 | LR | LR | LR | LR | FC | GWR | GWR | GWR | FC | GWR | FC | FC | FC | GWR | GWR | GWR | TI | BW | BW | DI | DI | CO | UE | UE |
| 20 | LR | LR | LR | CC | DI | DI | DI | GWR | GWR | AI | FC | FC | CO | BW | CC | BW | BW | DI | CC | DI | DI | DI | CC | DI |
| 21 | LR | CC | LR | LR | GWR | GWR | GWR | GWR | FC | AI | LR | LR | LR | BW | BW | BW | BW | BW | CC | CC | CC | CO | BW | BW |
| 22 | LR | TI | BW | CC | CC | DI | DI | AI | AI | AI | LR | FC | FC | GWR | GWR | BW | BW | BW | BW | BW | BW | DI | AI | LR |
| 23 | LR | LR | LR | LR | GWR | LR | GWR | FC | GWR | GWR | FC | FC | FC | BW | BW | BW | BW | BW | BW | CC | DI | CC | DI | AI |
| 24 | LR | AI | AI | TI | LR | LR | GWR | GWR | CO | CO | GWR | BW | FC | BW | BW | BW | BW | BW | CC | DI | DI | DI | CC | CC |
| 25 | LR | TI | TI | TI | DI | DI | DI | DI | AI | AI | LR | AI | GWR | GWR | GWR | GWR | GWR | BW | FC | BW | CC | CC | CC | CC |
| 26 | TI | TI | CC | CC | CC | CC | DI | AI | FC | FC | LR | LR | GWR | BW | BW | BW | BW | FC | CC | CC | CO | UE | UE | UE |
| 27 | UE | TI | LR | GWR | DI | CC | AI | FC | AI | LR | BW | BW | LR | GWR | GWR | GWR | GWR | FC | BW | DI | DI | CO | UE | UE |
| 28 | TI | TI | TI | CC | GWR | GWR | DI | AI | AI | AI | AI | LR | LR | GWR | GWR | GWR | GWR | FC | BW | CC | CC | CC | CO | UE |
| 29 | TI | TI | TI | CC | CC | CC | DI | AI | AI | AI | AI | LR | LR | BW | BW | BW | CC | FC | CO | CO | CO | CO | UE | UE |
| 30 | UE | LR | CC | CC | CC | CC | DI | DI | AI | AI | LR | AI | LR | LR | GWR | GWR | FC | FC | DI | DI | CO | CO | CC | UE |
| 31 | TI | LR | LR | LR | GWR | LR | DI | DI | AI | AI | LR | GWR | CO | CO | CO | CO | CO | BW | TI | DI | DI | AI | LR | LR |

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|---|---|---|---|---|
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| NAS= NASSARSSUAQ | 61 06.0 | -45 12.0 | 71.0 | 37.0 |
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## TABLE OF OBSERVATORIES SUPPLYING HOURLY AU AND AL

SEPTEMBER 1968 — AU = MAXIMUM DELTA H

| UT | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | FC | BW | BW | BW | BW | BW | BW | BW | CC | CC | DI | CC | DI | DI | AI | AI | AI | LR | LR | BW | FC | FC | FC | FC |
| 2 | FC | FC | FC | FC | FC | FC | BW | BW | CC | CC | DI | DI | TI | DI | DI | LR | LR | LR | LR | GWR | FC | FC | FC | GWR |
| 3 | GWR | FC | DI | GWR | BW | BW | CO | CO | CC | CC | TI | DI | TI | TI | TI | LR | LR | LR | CC | FC | FC | FC | FC | FC |
| 4 | FC | FC | BW | BW | BW | BW | CC | CC | CC | TI | DI | DI | DI | DI | AI | LR | LR | LR | LR | LR | LR | FC | FC | BW |
| 5 | BW | FC | BW | BW | BW | BW | BW | CC | CC | CC | CC | CC | DI | DI | TI | LR | AI | LR | LR | LR | LR | FC | FC | FC |
| 6 | FC | BW | BW | BW | BW | BW | CC | CC | CO | FC | TI | CC | CC | CC | CC | LR | LR | LR | AI | BW | FC | GWR | GWR | GWR |
| 7 | GWR | GWR | DI | AI | BW | BW | BW | TI | TI | BW | CC | CC | CC | TI | TI | LR | LR | LR | LR | LR | GWR | GWR | GWR | CO |
| 8 | CO | CO | CO | CO | CO | UE | TI | UE | UE | AI | TI | AI | AI | AI | AI | LR | LR | LR | LR | LR | BW | BW | FC | FC |
| 9 | FC | BW | BW | BW | BW | BW | TI | TI | CC | CC | CC | TI | DI | CC | DI | AI | LR | LR | LR | FC | GWR | FC | FC | FC |
| 10 | FC | FC | BW | BW | FC | FC | TI | TI | TI | CC | CC | CC | CC | DI | DI | AI | AI | AI | BW | GWR | FC | FC | FC | FC |
| 11 | FC | FC | BW | BW | BW | BW | CO | TI | CC | TI | CC | CC | CC | CC | DI | DI | CC | CC | AI | AI | FC | GWR | GWR | AI |
| 12 | DI | CO | CO | CO | CO | CO | CC | CC | CC | TI | TI | TI | DI | AI | AI | AI | LR | LR | LR | LR | LR | FC | GWR | FC |
| 13 | BW | BW | BW | CO | CO | UE | TI | CO | CO | CC | DI | TI | TI | AI | AI | LR | LR | LR | GWR | GWR | LR | FC | FC | FC |
| 14 | BW | BW | BW | CO | BW | AI | CO | CC | CC | TI | DI | DI | AI | AI | AI | AI | LR | LR | LR | LR | FC | GWR | FC | FC |
| 15 | FC | BW | BW | CO | BW | CC | CC | CC | CO | CO | CC | DI | DI | TI | AI | LR | LR | LR | LR | LR | LR | FC | FC | FC |
| 16 | FC | FC | BW | BW | CC | BW | BW | BW | CC | CC | CC | CC | DI | DI | LR | AI | LR | AI | AI | GWR | FC | GWR | FC | GWR |
| 17 | FC | BW | BW | FC | BW | CC | CC | CC | BW | CC | CC | CC | CC | CC | DI | AI | LR | LR | AI | AI | FC | FC | FC | FC |
| 18 | GWR | DI | FC | FC | AI | AI | GWR | TI | TI | BW | BW | TI | CC | CC | DI | DI | AI | AI | LR | LR | FC | FC | FC | FC |
| 19 | GWR | GWR | BW | BW | BW | BW | CO | CO | TI | TI | CC | CC | CC | CO | LR | DI | DI | DI | GWR | GWR | GWR | FC | GWR | FC |
| 20 | GWR | GWR | BW | BW | FC | GWR | GWR | TI | TI | TI | TI | TI | CC | CC | TI | TI | TI | DI | LR | LR | LR | FC | LR | GWR |
| 21 | GWR | GWR | GWR | GWR | BW | BW | BW | BW | BW | GWR | GWR | CC | DI | DI | DI | AI | LR | LR | CC | LR | LR | LR | LR | FC |
| 22 | FC | GWR | GWR | GWR | FC | GWR | BW | CO | CO | CO | CC | DI | TI | TI | AI | LR | LR | DI | LR | LR | LR | FC | GWR | GWR |
| 23 | BW | BW | BW | CO | CO | BW | BW | BW | CC | TI | CC | CC | DI | AI | AI | AI | AI | AI | BW | BW | BW | BW | FC | BW |
| 24 | FC | BW | DI | BW | BW | CO | FC | FC | BW | BW | BW | BW | CC | CC | CC | DI | LR | CC | LR | LR | LR | FC | BW | CC |
| 25 | FC | LR | LR | LR | LR | LR | BW | BW | TI | BW | BW | BW | CC | CC | DI | DI | DI | AI | DI | CC | CC | GWR | LR | FC |
| 26 | FC | FC | FC | FC | FC | BW | BW | BW | BW | BW | FC | TI | BW | CC | DI | DI | DI | DI | BW | BW | CC | DI | DI | GWR |
| 27 | GWR | FC | FC | BW | BW | BW | BW | LR | BW | BW | BW | CC | CC | CC | DI | BW | BW | BW | BW | BW | BW | BW | BW | BW |
| 28 | FC | FC | FC | BW | FC | FC | BW | BW | BW | BW | CC | CC | CC | DI | DI | DI | LR | AI | LR | LR | FC | FC | LR | FC |
| 29 | FC | FC | GWR | GWR | BW | BW | BW | BW | BW | CC | CC | CC | CC | CC | DI | DI | LR | LR | AI | LR | LR | GWR | FC | FC |
| 30 | DI | DI | FC | FC | FC | FC | FC | BW | BW | BW | CC | CC | TI | TI | DI | AI | LR | CC | CC | LR | LR | GWR | GWR | FC |

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|---|---|---|---|---|
| AI = ABISKO | 68 21.5 | 18 49.4 | 66.0 | 114.9 |
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SEPTEMBER 1968 — AL = MINIMUM DELTA H

| UT | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | LR | LR | LR | LR | GWR | GWR | GWR | GWR | GWR | GWR | FC | FC | FC | FC | FC | TI | CC | OI | OI | OI | OI | OI | LR | LR |
| 2 | LR | LR | LR | CO | CO | CO | GWR | GWR | GWR | GWR | CO | CO | FC | CO | CO | CO | BW | BW | OI | CC | CC | CC | CC | CC |
| 3 | CC | LR | GWR | LR | LR | OI | LR | GWR | GWR | GWR | GWR | GWR | CO | BW | FC | FC | TI | TI | UE | BW | TI | OI | CC | BW |
| 4 | LR | LR | LR | FC | FC | FC | LR | FC | FC | CO | CO | BW | FC | FC | CO | TI | OI | OI | OI | OI | OI | OI | LR | LR |
| 5 | UE | LR | LR | LR | LR | GWR | GWR | GWR | GWR | BW | BW | BW | CO | BW | GWR | BW | OI | OI | BW | OI | OI | OI | CC | AI |
| 6 | LR | LR | LR | GWR | LR | GWR | GWR | GWR | GWR | OI | LR | LR | GWR | BW | GWR | BW | BW | CC | CO | UE | OI | CC | TI | CC |
| 7 | LR | CC | CO | CO | CC | OI | OI | LR | LR | LR | LR | FC | GWR | GWR | GWR | FC | BW | BW | BW | BW | BW | TI | TI | TI |
| 8 | TI | AI | AI | LR | LR | LR | LR | LR | LR | CO | GWR | CO | CO | CO | CO | CO | CO | CO | BW | TI | AI | AI | UE | UE |
| 9 | LR | LR | LR | LR | GWR | GWR | LR | CO | GWR | GWR | GWR | BW | BW | FC | GWR | BW | BW | BW | BW | AI | OI | UE | UE | UE |
| 10 | LR | LR | LR | LR | GWR | OI | GWR | GWR | AI | LR | LR | CO | BW | BW | FC | TI | TI | BW | OI | CO | CO | OI | CC | LR |
| 11 | LR | LR | LR | LR | GWR | GWR | GWR | GWR | BW | BW | LR | BW | BW | BW | GWR | BW | BW | BW | OI | BW | CO | BW | BW | UE |
| 12 | UE | TI | LR | LR | LR | GWR | GWR | GWR | GWR | GWR | GWR | GWR | FC | CO | CO | CO | TI | TI | OI | TI | TI | OI | AI | LR |
| 13 | LR | AI | AI | LR | LR | LR | GWR | GWR | GWR | BW | GWR | CO | GWR | UE | UE | UE | CO | BW | OI | OI | CC | CC | AI | AI |
| 14 | AI | AI | LR | LR | LR | GWR | GWR | GWR | GWR | GWR | BW | CO | CO | CO | CO | OI | OI | OI | TI | OI | OI | OI | AI | AI |
| 15 | LR | LR | AI | LR | GWR | LR | LR | GWR | GWR | GWR | CO | CO | CO | FC | CO | CO | BW | BW | OI | BW | OI | AI | AI | LR |
| 16 | LR | LR | LR | LR | GWR | GWR | GWR | GWR | GWR | GWR | BW | BW | FC | BW | CC | CC | BW | OI | OI | OI | OI | OI | AI | UE |
| 17 | AI | AI | FC | TI | GWR | GWR | FC | GWR | FC | BW | BW | BW | BW | BW | BW | BW | BW | BW | CC | OI | CC | OI | UE | UE |
| 18 | BW | UE | OI | OI | FC | FC | OI | OI | FC | AI | LR | LR | LR | FC | FC | BW | BW | BW | BW | OI | OI | OI | CC | LR |
| 19 | LR | LR | LR | LR | LR | LR | GWR | GWR | GWR | BW | FC | OI | FC | LR | BW | BW | BW | BW | CC | UE | UE | CC | CC | CC |
| 20 | CC | LR | LR | LR | LR | CC | CC | AI | AI | AI | LR | LR | LR | LR | FC | FC | FC | BW | BW | OI | OI | CC | CC | UE |
| 21 | LR | CC | CC | CC | GWR | GWR | GWR | GWR | OI | AI | AI | FC | FC | FC | FC | CO | BW | BW | UE | BW | OI | UE | UE | UE |
| 22 | LR | LR | UE | UE | CC | OI | FC | GWR | AI | AI | FC | FC | FC | FC | CC | TI | BW | FC | CO | CO | OI | AI | OI | CC |
| 23 | LR | LR | LR | LR | LR | GWR | GWR | GWR | GWR | GWR | GWR | FC | CO | CO | CO | BW | FC | CC | FC | AI | AI | AI | TI | AI |
| 24 | AI | AI | TI | TI | TI | TI | CC | AI | AI | AI | AI | AI | LR | GWR | GWR | GWR | FC | FC | CO | OI | CC | CO | UE | UE |
| 25 | UE | TI | TI | TI | TI | CC | OI | OI | AI | AI | AI | LR | LR | LR | GWR | FC | BW | CC | FC | CO | CO | CO | CO | UE |
| 26 | UE | LR | TI | TI | TI | TI | GWR | GWR | FC | AI | AI | LR | LR | LR | GWR | BW | BW | BW | FC | CO | CO | CO | CO | UE |
| 27 | UE | UE | TI | LR | LR | GWR | OI | OI | OI | AI | AI | AI | LR | LR | GWR | GWR | GWR | OI | FC | CO | CO | CO | UE | UE |
| 28 | UE | TI | LR | TI | TI | CC | OI | OI | AI | FC | FC | BW | FC | BW | BW | BW | BW | BW | OI | OI | AI | AI | CO | UE |
| 29 | LR | LR | LR | TI | FC | GWR | GWR | FC | FC | FC | FC | AI | AI | LR | GWR | GWR | BW | BW | OI | TI | OI | OI | CO | CC |
| 30 | UE | UE | UE | TI | TI | TI | OI | OI | AI | AI | FC | FC | FC | BW | GWR | TI | TI | TI | OI | OI | OI | OI | CC | AI |

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| UE = CAPE WELLEN | 66 09.8 | -169 50.1 | 61.7 | 237.0 |

## TABLE OF OBSERVATORIES SUPPLYING HOURLY AU AND AL

OCTOBER 1968 — AU = MAXIMUM DELTA H

| UT | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | FC | FC | BW | BW | BW | LR | FC | BW | CC | UE | TI | CO | CC | DI | DI | DI | LR | LR | LR | NAS | NAS | GWR | GWR | GWR |
| 2 | BW | CO | BW | FC | CO | UE | CO | CO | LR | CC | DI | AI | AI | AI | AI | LR | AI | NAS | NAS | NAS | BW | FC | FC | FC |
| 3 | BW | CO | BW | CO | CO | UE | CO | TI | TI | TI | DI | CO | LR | DI | NAS | NAS | NAS | NAS | NAS | NAS | NAS | NAS | NAS | NAS |
| 4 | NAS | NAS | NAS | NAS | NAS | NAS | NAS | NAS | NAS | NAS | NAS | NAS | FC | NAS | NAS | NAS | NAS | NAS | NAS | NAS | NAS | NAS | NAS | NAS |
| 5 | NAS | NAS | NAS | NAS | NAS | NAS | BW | CC | CC | CC | NAS | NAS | DI | DI | CC | CC | AI | BW | FC | FC | FC | FC | FC | FC |
| 6 | FC | FC | FC | FC | FC | FC | FC | FC | BW | CO | CC | CC | CC | CC | DI | DI | DI | LR | NAS | LR | NAS | FC | FC | FC |
| 7 | FC | FC | GWR | BW | BW | BW | BW | FC | FC | FC | GWR | CC | FC | FC | DI | UE | LR | NAS | NAS | GWR | NAS | FC | FC | FC |
| 8 | FC | FC | FC | FC | BW | BW | BW | BW | BW | BW | CC | CC | CC | DI | DI | AI | AI | BW | NAS | NAS | NAS | NAS | FC | FC |
| 9 | FC | BW | BW | BW | FC | LR | LR | LR | FC | FC | FC | GWR | CC | DI | DI | DI | LR | AI | NAS | BW | NAS | FC | GWR | FC |
| 10 | FC | BW | FC | FC | FC | BW | BW | BW | CC | CC | CC | CC | CC | FC | DI | DI | DI | UE | BW | LR | AI | TI | LR | GWR |
| 11 | GWR | GWR | GWR | GWR | GWR | GWR | GWR | BW | BW | BW | GWR | FC | CC | CC | UE | UE | UE | DI | TI | LR | LR | TI | FC | LR |
| 12 | FC | BW | BW | CO | CO | UE | UE | TI | TI | TI | AI | DI | AI | AI | AI | AI | LR | LR | GWR | GWR | GWR | GWR | FC | BW |
| 13 | CO | CO | BW | GWR | CO | CC | CC | TI | DI | DI | TI | DI | AI | LR | AI | AI | NAS | NAS | NAS | NAS | FC | FC | FC | GWR |
| 14 | BW | BW | BW | BW | BW | BW | CC | CC | CC | CC | CC | DI | DI | DI | LR | AI | LR | NAS | NAS | NAS | NAS | NAS | FC | FC | NAS |
| 15 | NAS | NAS | FC | FC | BW | BW | BW | BW | CC | CC | CC | CC | CC | DI | DI | NAS | LR | NAS | AI | BW | NAS | NAS | FC | FC |
| 16 | FC | FC | FC | GWR | BW | BW | CO | CC | CC | CO | GWR | FC | FC | DI | AI | DI | DI | BW | BW | BW | BW | FC | GWR | GWR |
| 17 | GWR | GWR | GWR | GWR | CO | GWR | GWR | BW | CC | CO | CC | GWR | GWR | DI | DI | LR | DI | LR | NAS | LR | NAS | NAS | NAS | FC |
| 18 | GWR | GWR | GWR | BW | GWR | FC | BW | CC | CO | CO | CC | CC | CC | CC | DI | DI | DI | NAS | AI | CC | BW | NAS | FC | FC |
| 19 | NAS | FC | FC | FC | FC | FC | FC | BW | CO | CO | CC | CC | DI | CO | UE | UE | BW | DI | LR | GWR | GWR | GWR | GWR | GWR |
| 20 | FC | FC | FC | GWR | FC | FC | CC | CO | CO | TI | CC | CC | TI | DI | CC | LR | NAS | AI | AI | GWR | NAS | GWR | GWR | GWR |
| 21 | FC | FC | FC | FC | FC | FC | GWR | UE | BW | CC | CO | GWR | FC | FC | DI | UE | UE | DI | AI | GWR | NAS | GWR | GWR | GWR |
| 22 | GWR | GWR | GWR | FC | FC | FC | FC | BW | FC | BW | FC | GWR | BW | BW | BW | UE | AI | AI | LR | LR | GWR | GWR | NAS | GWR |
| 23 | GWR | GWR | GWR | FC | FC | GWR | GWR | GWR | FC | FC | FC | FC | BW | BW | BW | BW | BW | LR | NAS | DI | LR | BW | BW | GWR |
| 24 | FC | FC | FC | FC | BW | BW | FC | BW | BW | BW | CC | CC | CC | DI | DI | DI | LR | LR | LR | LR | LR | LR | BW | BW |
| 25 | BW | FC | BW | GWR | BW | BW | BW | BW | CO | TI | TI | TI | DI | AI | DI | DI | BW | BW | NAS | NAS | NAS | NAS | FC | FC |
| 26 | FC | FC | FC | FC | FC | FC | FC | BW | CO | CC | CC | CC | FC | TI | TI | TI | TI | NAS | NAS | AI | LR | LR | LR | GWR |
| 27 | GWR | FC | FC | FC | FC | FC | BW | CO | CO | CO | CO | CO | BW | DI | DI | DI | DI | NAS | AI | LR | LR | FC | FC | FC |
| 28 | FC | FC | FC | FC | FC | FC | BW | BW | GWR | FC | TI | FC | FC | DI | TI | DI | TI | TI | TI | TI | TI | TI | FC | GWR |
| 29 | GWR | FC | FC | LR | BW | BW | BW | BW | TI | TI | CO | TI | TI | LR | TI | TI | LR | FC | LR | NAS | GWR | FC | FC | LR |
| 30 | LR | LR | NAS | NAS | BW | TI | TI | TI | TI | TI | TI | TI | AI | AI | AI | LR | NAS | NAS | NAS | TI | FC | FC | FC | BW |
| 31 | BW | BW | BW | TI | TI | DI | TI | TI | TI | DI | AI | AI | LR | LR | AI | CC | FC | LR | LR | NAS | NAS | CO | BW | BW |

| IDENTIFICATION | GEOGRAPHIC LAT | GEOGRAPHIC LONG | GEOMAGNETIC LAT | GEOMAGNETIC LONG |
|---|---|---|---|---|
| AI = ABISKO | 68 21.5 | 18 49.4 | 66.0 | 114.9 |
| BW = BARROW | 71 18.2 | -156 44.9 | 68.5 | 241.1 |
| CC = C.CHELYUSKIN | 77 43.0 | 104 17.0 | 66.2 | 176.4 |
| CO = COLLEGE | 64 51.6 | -147 50.2 | 64.6 | 256.5 |
| GWR= GREAT WHALE R. | 55 16.0 | -77 47.0 | 66.5 | 347.4 |
| DI = DIXON ISLAND | 73 32.6 | 80 33.7 | 63.0 | 161.5 |

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|---|---|---|---|---|
| FC = FT.CHURCHILL | 58 48.0 | -94 06.0 | 68.7 | 322.8 |
| LR = LEIRVOGUR | 64 11.0 | -21 42.0 | 70.2 | 71.0 |
| NAS= NASSARSSUAQ | 61 06.0 | -45 12.0 | 71.0 | 37.0 |
| TI = TIXIE BAY | 71 35.0 | 129 00.0 | 60.4 | 191.4 |
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## TABLE OF OBSERVATORIES SUPPLYING HOURLY AU AND AL

OCTOBER 1968 — AL = MINIMUM DELTA H

| UT | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | AI | AI | AI | LR | TI | TI | TI | GWR | GWR | GWR | GWR | AI | GWR | CO | BW | BW | TI | TI | BW | TI | TI | AI | AI | AI |
| 2 | AI | AI | LR | TI | LR | LR | LR | DI | TI | GWR | CO | GWR | GWR | UE | UE | TI | TI | TI | TI | TI | TI | DI | AI | AI |
| 3 | AI | LR | LR | LR | NAS | LR | NAS | NAS | GWR | GWR | GWR | TI | TI | CC | TI | TI | TI | TI | TI | TI | TI | TI | TI | TI |
| 4 | TI | TI | TI | TI | TI | TI | TI | TI | TI | TI | TI | TI | TI | TI | TI | CO | BW | CC | CC | TI | TI | TI | TI | TI |
| 5 | UE | BW | BW | BW | CC | CC | FC | GWR | GWR | FC | FC | LR | BW | BW | GWR | GWR | GWR | CO | CO | CO | CO | CO | UE | UE |
| 6 | UE | UE | NAS | TI | TI | TI | TI | DI | GWR | AI | AI | BW | LR | NAS | GWR | TI | BW | BW | BW | DI | DI | CO | AI | LR |
| 7 | CO | LR | LR | LR | NAS | FC | NAS | NAS | DI | AI | BW | BW | NAS | NAS | GWR | FC | GWR | BW | DI | TI | BW | AI | AI | LR |
| 8 | LR | NAS | NAS | NAS | NAS | NAS | GWR | GWR | GWR | FC | BW | BW | BW | BW | BW | BW | BW | GWR | DI | DI | DI | CC | AI | AI |
| 9 | LR | LR | LR | LR | NAS | TI | DI | DI | AI | AI | AI | LR | NAS | NAS | CC | BW | BW | DI | TI | DI | DI | AI | AI | AI |
| 10 | LR | LR | NAS | TI | NAS | NAS | FC | FC | FC | BW | FC | LR | BW | BW | BW | BW | NAS | NAS | GWR | GWR | CO | CO | CO | CO |
| 11 | UE | UE | TI | TI | TI | TI | DI | FC | GWR | AI | AI | LR | LR | BW | NAS | GWR | GWR | FC | FC | FC | CO | CO | CO | CO |
| 12 | NAS | LR | LR | LR | LR | LR | NAS | NAS | GWR | GWR | GWR | CO | UE | UE | UE | BW | BW | CO | BW | AI | CC | TI | AI | DI |
| 13 | AI | LR | LR | LR | LR | NAS | NAS | CO | GWR | CO | FC | FC | CO | CC | TI | TI | TI | DI | TI | AI | AI | DI | DI | CC |
| 14 | AI | LR | LR | LR | LR | NAS | NAS | GWR | GWR | GWR | BW | CO | BW | BW | BW | TI | BW | TI | DI | DI | DI | DI | AI | LR |
| 15 | UE | TI | TI | TI | NAS | GWR | GWR | GWR | GWR | GWR | FC | LR | NAS | CC | BW | CC | TI | CC | CC | CO | DI | DI | LR | UE |
| 16 | UE | TI | NAS | NAS | NAS | GWR | GWR | GWR | FC | FC | AI | AI | NAS | BW | BW | BW | BW | FC | FC | DI | CC | CC | CO | UE |
| 17 | LR | LR | LR | NAS | NAS | DI | DI | NAS | NAS | GWR | BW | AI | BW | CC | BW | BW | BW | GWR | DI | DI | DI | DI | CC | CC |
| 18 | AI | AI | NAS | LR | TI | TI | DI | FC | FC | FC | AI | BW | BW | BW | BW | BW | GWR | BW | DI | TI | CC | CC | AI | LR |
| 19 | LR | LR | TI | TI | TI | TI | DI | GWR | GWR | FC | AI | FC | BW | NAS | NAS | GWR | GWR | GWR | BW | TI | DI | TI | AI | LR |
| 20 | AI | CO | TI | TI | NAS | NAS | NAS | GWR | GWR | GWR | FC | FC | BW | CC | BW | GWR | BW | BW | TI | CO | CC | CO | TI | TI |
| 21 | UE | CO | TI | TI | TI | TI | DI | DI | FC | FC | FC | AI | LR | NAS | NAS | GWR | GWR | CC | CC | CO | CO | CO | CO | CO |
| 22 | CO | UE | CC | CC | CC | CC | DI | DI | DI | AI | AI | LR | LR | NAS | NAS | GWR | GWR | FC | CC | CO | CO | CO | CC | UE |
| 23 | UE | TI | TI | TI | TI | TI | DI | DI | DI | AI | AI | LR | LR | NAS | NAS | GWR | GWR | CC | CC | BW | CO | CO | CO | UE |
| 24 | UE | UE | TI | TI | DI | DI | DI | DI | DI | AI | AI | FC | FC | FC | FC | BW | BW | BW | BW | BW | TI | CC | UE | UE |
| 25 | UE | UE | TI | TI | NAS | GWR | GWR | GWR | GWR | FC | FC | FC | FC | CO | CC | CC | GWR | DI | DI | DI | DI | DI | AI | AI |
| 26 | LR | UE | NAS | NAS | TI | DI | DI | GWR | FC | FC | FC | LR | LR | NAS | GWR | GWR | GWR | BW | CC | DI | BW | CO | UE | CC |
| 27 | AI | UE | UE | DI | DI | LR | NAS | GWR | GWR | AI | AI | LR | NAS | GWR | CO | BW | BW | DI | DI | DI | DI | CO | CC | AI |
| 28 | LR | UE | UE | TI | TI | NAS | GWR | NAS | DI | DI | DI | LR | NAS | NAS | BW | BW | CC | FC | BW | DI | DI | BW | AI | AI |
| 29 | AI | LR | CC | BW | LR | DI | GWR | DI | DI | LR | FC | BW | FC | CO | BW | FC | CO | BW | BW | BW | AI | TI | AI | CC |
| 30 | CO | CO | UE | AI | LR | NAS | AI | FC | GWR | BW | BW | FC | UE | BW | DI | BW | BW | BW | DI | AI | AI | AI | AI | AI |
| 31 | AI | LR | LR | LR | LR | NAS | NAS | GWR | GWR | CC | BW | BW | CC | DI | BW | AI | DI | BW | CO | BW | BW | TI | AI | GWR |

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|---|---|---|---|---|
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| CC = C.CHELYUSKIN | 77 43.0 | 104 17.0 | 66.2 | 176.4 |
| CO = COLLEGE | 64 51.6 | -147 50.2 | 64.6 | 256.5 |
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NOVEMBER 1968

AU = MAXIMUM DELTA H

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | CO | CO | BW | BW | CC | CC | FC | BW | BW | NAS | CC | AI | LR | LR | AI | NAS | LR | LR | NAS | FC | GWR | TI | UE | CC |
| 2 | CO | CO | UE | CO | UE | TI | TI | TI | TI | DI | TI | TI | AI | AI | AI | LR | LR | LR | NAS | NAS | FC | FC | BW | CO |
| 3 | CO | CO | CO | CO | BW | TI | CC | CC | CO | NAS | NAS | CC | AI | AI | AI | LR | LR | AI | LR | LR | FC | FC | FC | NAS |
| 4 | DI | BW | BW | DI | BW | CC | CC | TI | TI | TI | TI | DI | AI | AI | LR | AI | BW | NAS | NAS | NAS | GWR | NAS | BW | BW |
| 5 | BW | BW | BW | BW | FC | CC | CC | CC | CO | DI | CC | DI | CC | CC | DI | DI | DI | AI | BW | LR | FC | FC | FC | BW |
| 6 | CO | CO | CC | BW | BW | CC | CC | CC | TI | BW | CC | CC | CC | CC | DI | DI | DI | NAS | NAS | LR | NAS | FC | FC | GWR |
| 7 | BW | BW | BW | BW | CO | UE | TI | CC | CO | TI | TI | DI | TI | AI | DI | BW | BW | NAS | BW | BW | BW | BW | NAS | BW |
| 8 | NAS | BW | BW | BW | BW | BW | BW | BW | CO | TI | TI | TI | TI | AI | AI | AI | LR | LR | NAS | NAS | LR | FC | FC | BW |
| 9 | BW | BW | BW | BW | BW | BW | BW | CC | TI | TI | DI | TI | TI | AI | AI | AI | LR | NAS | NAS | BW | BW | BW | BW | CC |
| 10 | CO | BW | BW | BW | BW | CC | BW | CC | CC | TI | DI | TI | DI | DI | LR | AI | AI | AI | LR | NAS | NAS | LR | FC | FC |
| 11 | BW | BW | BW | BW | BW | BW | CO | CC | DI | TI | TI | TI | AI | AI | LR | DI | NAS | CO | BW | BW | BW | BW | BW | FC |
| 12 | GWR | FO | FC | FC | BW | AI | AI | CC | CO | CC | CC | CC | CC | DI | DI | DI | LR | AI | AI | LR | GWR | FC | TI | FC |
| 13 | TI | CO | FC | GWR | GWR | FC | CC | BW | CC | CC | CC | TI | CC | CC | BW | DI | DI | AI | NAS | LR | LR | NAS | NAS | BW |
| 14 | BW | BW | BW | BW | BW | BW | BW | BW | BW | BW | CC | CC | CC | CC | DI | AI | AI | CC | AI | BW | LR | NAS | NAS | NAS |
| 15 | CO | NAS | BW | CC | BW | TI | BW | BW | BW | CC | CC | CC | CC | CC | CC | CC | DI | DI | DI | CC | CC | GWR | NAS | NAS |
| 16 | NAS | FO | FC | FC | FC | CC | CC | CC | BW | BW | CC | CC | DI | LR | DI | LR | AI | AI | AI | LR | NAS | GWR | BW | LR |
| 17 | LR | GWR | GWR | FC | GWR | GWR | CO | CO | CO | CO | BW | TI | TI | TI | AI | LR | LR | LR | GWR | GWR | GWR | GWR | GWR | GWR |
| 18 | BW | BW | CO | CO | CO | CO | UE | UE | TI | TI | TI | TI | CO | CC | DI | LR | LR | LR | AI | LR | NAS | GWR | GWR | GWR |
| 19 | GWR | BW | BW | BW | BW | BW | BW | BW | CC | BW | CC | DI | DI | DI | DI | LR | LR | LR | LR | BW | BW | NAS | LR | NAS |
| 20 | CO | FO | FC | FC | FC | FC | FC | BW | BW | CC | CC | TI | TI | TI | AI | AI | AI | LR | LR | LR | LR | BW | LR | BW |
| 21 | NAS | NAS | NAS | BW | BW | CC | TI | TI | BW | CC | CC | CC | CC | DI | DI | DI | NAS | AI | LR | LR | NAS | FC | NAS | NAS |
| 22 | NAS | CO | CO | CC | CC | CC | CC | CC | CO | BW | BW | CC | CC | DI | DI | CC | CC | NAS | NAS | NAS | NAS | LR | NAS | NAS |
| 23 | NAS | GWR | GWR | BW | GWR | FC | CC | CC | BW | CC | CC | CC | DI | CO | CC | DI | DI | CC | CC | CC | CC | LR | NAS | NAS |
| 24 | NAS | NAS | GWR | GWR | CO | CO | CO | CC | CC | CC | CC | CC | CC | CC | CC | DI | DI | DI | AI | AI | LR | LR | NAS | NAS |
| 25 | GWR | FO | FC | GWR | BW | GWR | BW | BW | CC | CC | CC | CC | DI | DI | DI | DI | DI | NAS | NAS | NAS | NAS | NAS | NAS | NAS |
| 26 | NAS | NAS | GWR | NAS | BW | BW | BW | BW | BW | CC | CC | BW | CC | CC | AI | AI | AI | LR | LR | LR | LR | FC | FC | LR |
| 27 | FO | GWR | BW | BW | BW | BW | BW | BW | CO | CC | CC | CC | CC | CC | LR | DI | DI | LR | LR | AI | LR | GWR | FC | FC |
| 28 | FO | FO | FC | FC | GWR | GWR | BW | BW | CC | CC | TI | TI | TI | CC | CC | DI | DI | NAS | LR | AI | AI | FC | NAS | BW |
| 29 | BW | BW | BW | BW | BW | BW | BW | BW | BW | BW | CC | CC | CC | DI | AI | DI | DI | BW | BW | BW | BW | BW | CC | BW |
| 30 | CO | BW | CC | CC | CC | CC | CC | CC | CC | BW | BW | CC | CC | CC | CC | CO | CO | NAS | DI | BW | BW | NAS | BW | NAS |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | CO | LR | LR | LR | LR | NAS | NAS | GWR | GWR | UE | FC | CO | CO | CO | CO | DI | TI | CO | AI | AI | AI | DI | AI | LR |
| 2 | DI | AI | AI | AI | GWR | LR | LR | NAS | GWR | FC | GWR | GWR | CC | CO | CO | DI | BW | TI | CC | DI | BW | DI | AI | AI |
| 3 | LR | LR | AI | FC | LR | LR | GWR | GWR | GWR | CO | CO | BW | BW | CO | BW | DI | TI | BW | TI | TI | AI | CC | CC | CC |
| 4 | LR | LR | LR | NAS | NAS | GWR | NAS | GWR | GWR | GWR | CO | UE | CO | CO | CO | UE | GWR | BW | AI | TI | DI | DI | AI | CO |
| 5 | LR | NAS | NAS | NAS | NAS | NAS | GWR | FC | FC | FC | FC | CO | BW | BW | BW | BW | BW | DI | DI | DI | DI | DI | TI | CO |
| 6 | CO | NAS | NAS | NAS | NAS | GWR | CO | FC | AI | AI | BW | BW | NAS | GWR | BW | CC | GWR | DI | DI | CC | DI | CC | DI | AI |
| 7 | AI | AI | LR | LR | LR | NAS | GWR | NAS | NAS | FC | GWR | CO | CO | CC | CC | GWR | GWR | TI | DI | DI | CO | CO | CO | CO |
| 8 | CO | UE | UE | UE | NAS | FC | FC | GWR | GWR | GWR | GWR | FC | FC | CC | CO | TI | TI | TI | FC | DI | DI | DI | AI | AI |
| 9 | AI | LR | LR | LR | LR | NAS | GWR | NAS | GWR | GWR | CO | CO | CO | CO | DI | BW | TI | TI | DI | DI | CC | CO | CO | CO |
| 10 | CO | CO | NAS | NAS | NAS | GWR | GWR | GWR | GWR | GWR | CO | CO | CO | FC | BW | DI | BW | BW | TI | DI | DI | DI | DI | AI |
| 11 | LR | LR | LR | NAS | NAS | NAS | NAS | GWR | GWR | GWR | CO | BW | CO | BW | BW | CC | BW | CO | GWR | AI | CO | UE | UE | AI |
| 12 | CO | NAS | NAS | TI | NAS | GWR | FC | FC | AI | AI | FC | BW | BW | BW | GWR | GWR | CC | CO | CC | CO | CO | CO | CO | CO |
| 13 | UE | LR | NAS | NAS | NAS | CO | CO | DI | FC | FC | FC | FC | FC | NAS | NAS | NAS | CC | CO | BW | BW | DI | DI | CO | CO |
| 14 | CO | UE | UE | NAS | NAS | DI | NAS | NAS | AI | AI | LR | LR | LR | NAS | GWR | GWR | BW | GWR | DI | DI | DI | DI | CC | UE |
| 15 | LR | UE | NAS | NAS | FC | FC | FC | FC | NAS | AI | AI | LR | NAS | NAS | NAS | GWR | GWR | CO | FC | CO | CO | BW | CC | CC |
| 16 | CO | CO | LR | LR | DI | DI | DI | NAS | FC | FC | NAS | NAS | FC | FC | BW | BW | DI | DI | BW | BW | BW | AI | AI | AI |
| 17 | CO | CO | LR | AI | LR | LR | LR | NAS | NAS | BW | FC | FC | CC | FC | FC | FC | BW | CO | BW | TI | TI | CC | TI | CC |
| 18 | CO | LR | AI | LR | LR | LR | NAS | NAS | NAS | BW | GWR | FC | BW | BW | FC | TI | TI | BW | TI | TI | TI | AI | DI | CC |
| 19 | CO | LR | LR | LR | NAS | NAS | GWR | GWR | GWR | GWR | GWR | CO | BW | BW | BW | CC | TI | DI | DI | CC | CO | CO | CO | CO |
| 20 | CO | CO | DI | TI | TI | CO | CO | CO | GWR | FC | FC | FC | FC | BW | CO | FC | UE | UE | TI | TI | TI | CC | AI | AI |
| 21 | AI | AI | LR | NAS | GWR | FC | AI | NAS | NAS | AI | FC | FC | BW | BW | BW | BW | CC | BW | BW | BW | BW | DI | DI | CC |
| 22 | AI | TI | TI | TI | TI | TI | NAS | NAS | FC | FC | AI | NAS | FC | BW | BW | FC | FC | FC | BW | DI | CC | DI | DI | CC |
| 23 | CO | CO | CC | FC | FC | UE | GWR | GWR | DI | FC | FC | FC | BW | BW | GWR | GWR | BW | GWR | BW | BW | BW | BW | BW | BW |
| 24 | BW | BW | BW | AI | AI | FC | GWR | LR | LR | FC | FC | FC | BW | BW | GWR | BW | FC | BW | CC | BW | BW | BW | CC | CC |
| 25 | AI | AI | LR | TI | LR | NAS | LR | FC | GWR | FC | FC | FC | FC | BW | BW | BW | BW | BW | BW | DI | DI | CC | CC | CC |
| 26 | AI | AI | DI | AI | LR | AI | DI | NAS | LR | GWR | GWR | LR | LR | BW | CO | BW | BW | DI | BW | DI | DI | CC | DI | CC |
| 27 | CO | LR | AI | LR | FC | TI | TI | TI | GWR | FC | CO | FC | BW | BW | BW | CC | BW | BW | BW | TI | DI | DI | CC | CC |
| 28 | CO | UE | UE | TI | TI | TI | LR | FC | FC | GWR | FC | FC | FC | FC | FC | BW | BW | BW | BW | BW | TI | DI | AI | AI |
| 29 | AI | LR | GWR | NAS | GWR | FC | TI | TI | FC | FC | BW | BW | LR | BW | CC | CC | CC | TI | GWR | GWR | TI | CO | CO | UE |
| 30 | UE | UE | TI | TI | TI | TI | TI | FC | FC | FC | FC | BW | BW | BW | BW | FC | CC | CC | FC | CC | CC | CC | CC | CC |

| IDENTIFICATION | GEOGRAPHIC LAT | GEOGRAPHIC LONG | GEOMAGNETIC LAT | GEOMAGNETIC LONG |
|---|---|---|---|---|
| AI = ABISKO | 68 21.5 | 18 49.4 | 66.0 | 114.9 |
| BW = BARROW | 71 18.2 | -156 44.9 | 68.5 | 241.1 |
| CC = C.CHELYUSKIN | 77 43.0 | 104 17.0 | 66.2 | 176.4 |
| CO = COLLEGE | 64 51.6 | -147 50.2 | 64.6 | 256.5 |
| GWR= GREAT WHALE R. | 55 16.0 | -77 47.0 | 66.5 | 347.4 |
| DI = DIXON ISLAND | 73 32.6 | 80 33.7 | 63.0 | 161.5 |

| IDENTIFICATION | GEOGRAPHIC LAT | GEOGRAPHIC LONG | GEOMAGNETIC LAT | GEOMAGNETIC LONG |
|---|---|---|---|---|
| FC = FT.CHURCHILL | 58 48.0 | -94 06.0 | 68.7 | 322.8 |
| LR = LEIRVOGUR | 64 11.0 | -21 42 0 | 70.2 | 71.0 |
| NAS= NASSARSSUAQ | 61 06.0 | -45 12.0 | 71.0 | 37.0 |
| TI = TIXIE BAY | 71 35.0 | 129 00 0 | 60.4 | 191.4 |
| UE = CAPE WELLEN | 66 09.8 | -169 50.1 | 61.7 | 237.0 |

## TABLE OF OBSERVATORIES SUPPLYING HOURLY AU AND AL

DECEMBER 1968 — AU = MAXIMUM DELTA H

| UT | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | FC | GWR | GWR | BW | BW | BW | CC | CC | CC | CC | TI | TI | TI | TI | AI | AI | AI | LR | NAS | BW | BW | BW | BW | BW |
| 2 | BW | BW | BW | BW | BW | BW | BW | BW | BW | CC | CC | CC | DI | DI | DI | AI | AI | AI | NAS | NAS | BW | NAS | BW | BW |
| 3 | BW | BW | BW | BW | BW | BW | BW | CC | CC | CC | DI | DI | TI | AI | LR | AI | LR | LR | LR | NAS | NAS | GWR | GWR | FC |
| 4 | BW | BW | BW | BW | BW | CC | CC | UE | DI | DI | DI | AI | DI | DI | AI | AI | LR | AI | NAS | NAS | NAS | FC | GWR | FC |
| 5 | GWR | BW | BW | BW | BW | CC | CC | CC | DI | DI | TI | TI | AI | LR | AI | AI | AI | AI | LR | NAS | NAS | GWR | GWR | GWR |
| 6 | BW | GWR | BW | BW | BW | BW | BW | BW | CC | CC | CC | CC | CC | FC | DI | DI | DI | BW | BW | FC | NAS | NAS | NAS | FC |
| 7 | NAS | FC | FC | FC | FC | FC | CC | BW | BW | BW | CC | CC | CC | CC | DI | DI | AI | LR | CC | LR | AI | NAS | FC | FC |
| 8 | FC | FC | GWR | BW | BW | BW | CC | CC | DI | CC | DI | DI | DI | AI | DI | CC | BW | NAS | LR | LR | NAS | FC | FC | GWR |
| 9 | FC | FC | FC | FC | BW | BW | BW | BW | BW | CC | BW | CC | CC | DI | DI | LR | FC | LR | LR | NAS | NAS | NAS | FC | FC |
| 10 | GWR | BW | BW | BW | BW | BW | BW | CC | CC | CC | DI | TI | TI | CC | BW | AI | AI | NAS | AI | NAS | NAS | NAS | FC | NAS |
| 11 | FC | FC | BW | FC | FC | FC | BW | BW | BW | BW | CC | CC | CC | CC | DI | LR | LR | LR | LR | AI | AI | AI | AI | FC |
| 12 | FC | BW | BW | BW | BW | BW | FC | CC | BW | BW | CC | CC | CC | DI | DI | DI | DI | CC | NAS | NAS | AI | DI | BW | FC |
| 13 | FC | NAS | BW | BW | BW | BW | CC | CC | CC | CC | CC | CC | CC | DI | DI | DI | AI | LR | LR | NAS | LR | LR | FC | FC |
| 14 | CC | BW | BW | BW | BW | BW | BW | BW | BW | CC | BW | CC | CC | DI | DI | DI | DI | BW | BW | LR | GWR | GWR | GWR | CC |
| 15 | FC | FC | FC | FC | FC | BW | BW | BW | BW | BW | BW | CC | CC | FC | CC | DI | DI | DI | DI | AI | LR | LR | NAS | DI |
| 16 | CC | FC | BW | BW | BW | BW | BW | BW | BW | BW | DI | CC | DI | DI | DI | DI | DI | AI | NAS | FC | NAS | NAS | NAS | FC |
| 17 | FC | FC | FC | FC | BW | TI | BW | BW | BW | CC | CC | BW | CC | DI | TI | TI | TI | TI | TI | TI | TI | TI | TI | TI |
| 18 | FC | FC | GWR | FC | FC | TI | BW | TI | TI | CC | CC | CC | CC | DI | TI | DI | DI | FC | NAS | LR | LR | LR | NAS | NAS |
| 19 | GWR | GWR | GWR | BW | BW | BW | CC | BW | BW | CC | CC | TI | DI | CC | FC | NAS | LR | LR | NAS | DI | NAS | LR | AI | LR |
| 20 | NAS | FC | BW | BW | BW | BW | BW | BW | FC | CC | TI | TI | CC | TI | TI | TI | TI | BW | BW | TI | TI | TI | TI | FC |
| 21 | FC | GWR | NAS | LR | CC | CC | CC | TI | CC | CC | TI | DI | DI | DI | TI | TI | AI | AI | AI | NAS | NAS | FC | GWR | GWR |
| 22 | GWR | GWR | GWR | GWR | GWR | TI | CC | CC | CC | CC | CC | TI | TI | DI | DI | DI | NAS | LR | LR | DI | DI | CC | GWR | GWR |
| 23 | FC | FC | FC | GWR | GWR | GWR | GWR | FC | CC | CC | CC | CC | DI | TI | AI | DI | LR | NAS | LR | LR | NAS | FC | FC | LR |
| 24 | LR | GWR | AI | CC | CC | CC | FC | CC | CC | TI | TI | AI | CC | DI | DI | DI | DI | DI | DI | AI | FC | NAS | FC | FC |
| 25 | NAS | TI | CC | GWR | CC | CC | CC | CC | CC | CC | CC | CC | TI | TI | DI | NAS | AI | AI | AI | AI | AI | NAS | GWR | FC |
| 26 | LR | NAS | FC | NAS | NAS | TI | CC | CC | CC | CC | CC | CC | AI | AI | AI | AI | AI | AI | NAS | AI | AI | NAS | AI | FC |
| 27 | FC | FC | FC | GWR | GWR | CC | CC | CC | CC | TI | TI | DI | DI | DI | AI | NAS | CC | CC | CC | FC | FC | FC | FC | FC |
| 28 | FC | FC | FC | FC | AI | CC | CC | CC | CC | CC | CC | CC | TI | DI | FC | DI | NAS | AI | AI | NAS | NAS | NAS | FC | FC |
| 29 | NAS | CC | CC | AI | AI | AI | TI | CC | CC | CC | CC | CC | DI | DI | DI | NAS | AI | LR | NAS | LR | LR | GWR | FC | GWR |
| 30 | FC | FC | CC | CC | CC | CC | CC | CC | CC | CC | CC | TI | DI | DI | DI | CC | AI | AI | AI | LR | LR | NAS | FC | GWR |
| 31 | GWR | FC | FC | FC | FC | FC | GWR | CC | CC | CC | CC | CC | NAS | CC | TI | AI | AI | AI | LR | LR | LR | GWR | GWR | NAS |

| IDENTIFICATION | GEOGRAPHIC LAT | GEOGRAPHIC LONG | GEOMAGNETIC LAT | GEOMAGNETIC LONG |
|---|---|---|---|---|
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| IDENTIFICATION | GEOGRAPHIC LAT | GEOGRAPHIC LONG | GEOMAGNETIC LAT | GEOMAGNETIC LONG |
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| LR = LEIRVOGUR | 64 11.0 | -21 42.0 | 70.2 | 71.0 |
| NAS= NASSARSSUAQ | 61 06.0 | -45 12.0 | 71.0 | 37.0 |
| TI = TIXIE BAY | 71 35.0 | 129 00.0 | 60.4 | 191.4 |
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## TABLE OF OBSERVATORIES SUPPLYING HOURLY AU AND AL

DECEMBER 1968 — AL = MINIMUM DELTA H

| UT | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | CC | CC | NAS | NAS | NAS | NAS | TI | FC | FC | FC | FC | FC | FC | FC | CO | TI | BW | DI | TI | TI | AI | CC | CC | AI |
| 2 | LR | LR | LR | NAS | NAS | FC | FC | FC | GWR | GWR | BW | FC | FC | BW | FC | TI | TI | DI | TI | TI | CC | DI | AI | AI |
| 3 | LR | LR | NAS | LR | NAS | NAS | NAS | GWR | GWR | GWR | GWR | CO | CO | CO | CO | TI | TI | TI | TI | TI | TI | TI | AI | CC |
| 4 | NAS | LR | CO | CO | CO | NAS | GWR | NAS | GWR | GWR | GWR | CO | CO | CO | FC | FC | DI | BW | BW | BW | DI | CC | CC | AI | AI |
| 5 | CC | CO | LR | LR | NAS | NAS | GWR | GWR | GWR | GWR | GWR | GWR | CO | BW | FC | TI | TI | TI | TI | BW | TI | DI | DI | DI | AI |
| 6 | AI | AI | LR | LR | NAS | NAS | NAS | GWR | GWR | BW | BW | FC | BW | BW | BW | CC | CC | CC | CC | TI | DI | DI | CC | CC |
| 7 | CC | TI | TI | TI | TI | TI | TI | FC | FC | FC | FC | BW | BW | BW | BW | BW | BW | TI | CC | CC | DI | DI | CC | CC |
| 8 | CC | LR | LR | NAS | GWR | NAS | NAS | NAS | CO | CO | CO | FC | FC | TI | BW | TI | TI | TI | DI | BW | CC | DI | AI | CC |
| 9 | CC | LR | LR | TI | GWR | GWR | GWR | TI | TI | FC | FC | FC | BW | BW | BW | TI | CC | BW | BW | BW | BW | TI | AI | AI |
| 10 | AI | CC | LR | NAS | NAS | NAS | NAS | NAS | GWR | GWR | GWR | BW | BW | GWR | TI | TI | TI | TI | TI | DI | DI | DI | CC | TI |
| 11 | TI | LR | TI | TI | TI | TI | TI | TI | TI | TI | FC | TI | TI | TI | BW | BW | BW | BW | BW | BW | TI | TI | CC | CC |
| 12 | CC | LR | LR | AI | AI | AI | TI | TI | TI | TI | TI | TI | BW | BW | BW | BW | BW | TI | DI | DI | TI | TI | TI | TI |
| 13 | CC | CC | TI | TI | TI | AI | TI | TI | TI | TI | FC | BW | TI | BW | BW | BW | BW | BW | DI | BW | DI | CC | TI | TI |
| 14 | TI | TI | TI | TI | TI | FC | FC | FC | FC | GWR | GWR | TI | FC | BW | BW | CC | TI | TI | CC | TI | TI | TI | TI | TI |
| 15 | AI | NAS | AI | LR | TI | NAS | NAS | GWR | NAS | NAS | TI | FC | TI | TI | GWR | BW | BW | BW | TI | DI | DI | CC | TI | TI |
| 16 | TI | TI | LR | GWR | GWR | GWR | NAS | NAS | NAS | NAS | FC | CO | FC | CC | BW | CC | BW | BW | BW | BW | DI | CC | CC | CC |
| 17 | CC | CC | CC | LR | LR | NAS | GWR | GWR | GWR | GWR | FC | FC | BW | BW | GWR | GWR | GWR | GWR | CC | CC | CC | LR | CO | CC |
| 18 | CC | LR | LR | LR | LR | NAS | NAS | GWR | NAS | FC | FC | BW | FC | BW | BW | BW | GWR | CC | BW | DI | CC | DI | CC | CC |
| 19 | CC | CC | CC | LR | LR | NAS | NAS | GWR | GWR | FC | FC | FC | CO | FC | DI | BW | BW | TI | BW | CO | CC | DI | DI | CC |
| 20 | CC | LR | AI | LR | LR | NAS | FC | NAS | NAS | AI | FC | AI | LR | BW | GWR | GWR | GWR | FC | CO | CO | DI | CO | CO | CC |
| 21 | AI | CC | CC | CC | AI | LR | NAS | NAS | FC | NAS | FC | CO | CO | FC | CC | CC | CO | CC | TI | TI | DI | DI | DI | NAS |
| 22 | CC | CC | CC | CC | CC | NAS | CO | GWR | GWR | GWR | FC | CO | CO | CO | CC | CC | CO | DI | TI | TI | NAS | CO | CO | CO |
| 23 | CC | CC | DI | DI | DI | LR | NAS | NAS | GWR | GWR | GWR | FC | FC | FC | CO | CC | CC | DI | TI | CC | TI | DI | CC | CC |
| 24 | CC | CC | UE | GWR | GWR | GWR | NAS | GWR | FC | GWR | CO | CO | CO | CC | CC | CC | CC | CC | GWR | GWR | CC | DI | DI | DI |
| 25 | CC | LR | NAS | LR | LR | NAS | NAS | DI | CC | GWR | GWR | UE | CO | CO | CO | TI | DI | TI | DI | CO | DI | DI | AI | AI |
| 26 | CO | CC | DI | DI | DI | NAS | LR | LR | NAS | NAS | NAS | CO | CO | NAS | GWR | GWR | GWR | GWR | FC | CO | CO | CO | CO | CC |
| 27 | CC | LR | LR | NAS | NAS | FC | GWR | NAS | GWR | GWR | GWR | CO | CO | CO | TI | TI | TI | DI | DI | DI | DI | DI | AI | AI |
| 28 | LR | NAS | NAS | DI | DI | DI | FC | GWR | FC | LR | FC | FC | CO | CC | TI | CC | CC | TI | DI | DI | DI | AI | AI | DI |
| 29 | CO | CC | NAS | NAS | NAS | NAS | DI | DI | FC | FC | FC | FC | CO | CO | CC | TI | TI | TI | TI | TI | DI | AI | AI | CC |
| 30 | NAS | LR | NAS | LR | NAS | GWR | GWR | GWR | GWR | GWR | FC | CO | CO | CO | FC | GWR | CC | CC | TI | DI | DI | CC | CC | DI |
| 31 | CC | LR | LR | NAS | NAS | DI | DI | DI | FC | NAS | FC | FC | FC | LR | DI | CO | TI | TI | TI | TI | TI | AI | DI | CC |

| IDENTIFICATION | GEOGRAPHIC LAT | GEOGRAPHIC LONG | GEOMAGNETIC LAT | GEOMAGNETIC LONG |
|---|---|---|---|---|
| AI = ABISKO | 68 21.5 | 18 49.4 | 66.0 | 114.9 |
| BW = BARROW | 71 18.2 | -156 44.9 | 68.5 | 241.1 |
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| NAS= NASSARSSUAQ | 61 06.0 | -45 12.0 | 71.0 | 37.0 |
| TI = TIXIE BAY | 71 35.0 | 129 00.0 | 60.4 | 191.4 |
| UE = CAPE WELLEN | 66 09.8 | -169 50.1 | 61.7 | 237.0 |

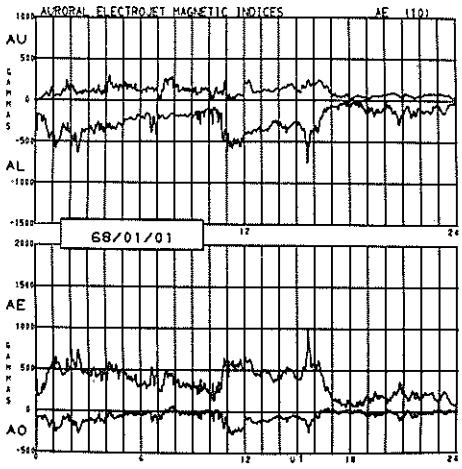
SECTION III

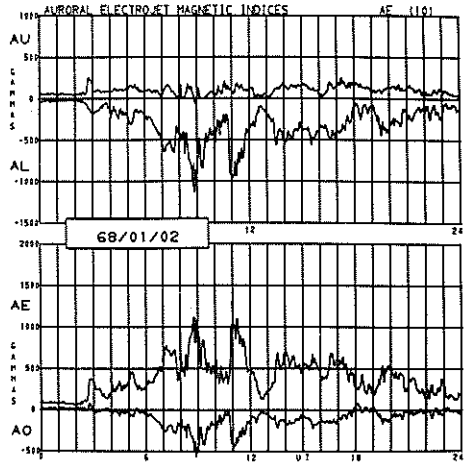
## Graphs of Indices

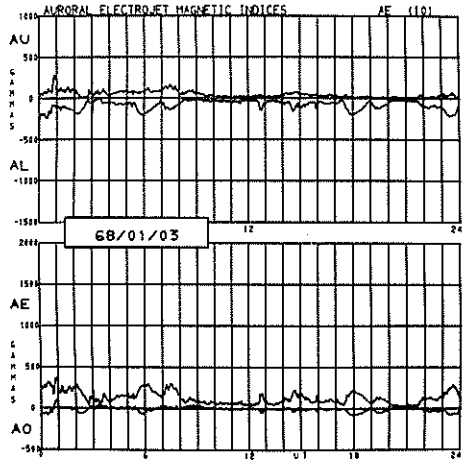
### Daily Graphs of 2.5-min Auroral Electrojet Indices

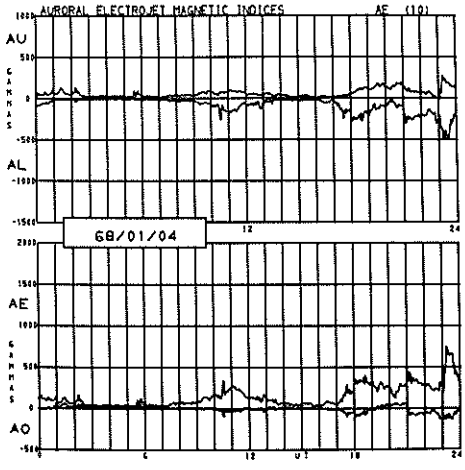
The following graphs are prints of computer drawn plots of variations of the 2.5-min indices AU, AL, AE, and AO for each day of 1968. The dates are given as year/month/day (68/04/12 is 12 April 1968). The number of stations used for index derivations during each month is indicated in the upper right corner as, for example, AE(10). Universal Time is indicated along the horizontal axis. (Note that hour "1" in the tables in Section II refers to the interval 0000-0001 UT on the graphs.)

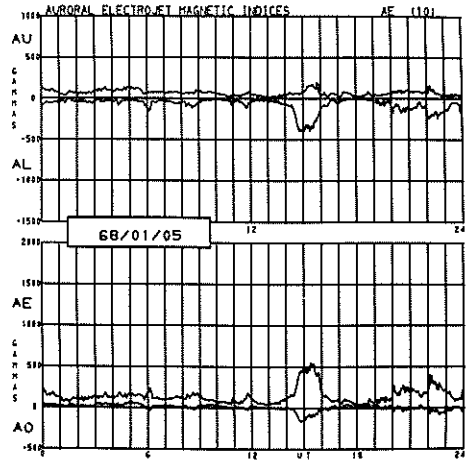
During some very disturbed times (cf. graph for 1 November) the AO trace reached the microfilm frame limit of the plotting area and has been drafted in by hand. Also at such times it is common for the AL and AE traces to overlap and become intermixed, making them difficult to distinguish. It was not practical to change graph scales for such short, disturbed intervals.

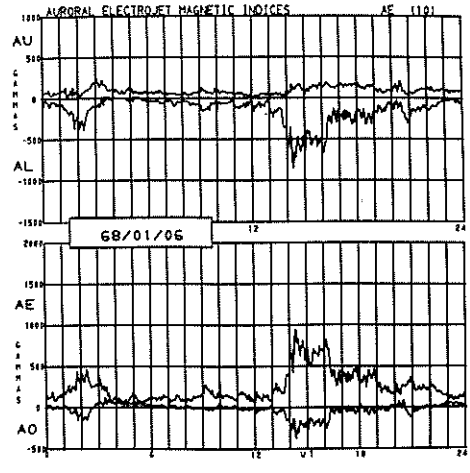

AURORAL ELECTROJET MAGNETIC INDICES
AE (10)
AU
AL
AE
AO
GAMMAS
68/01/01

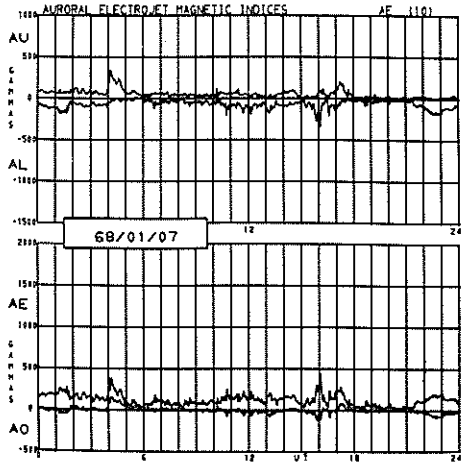

AURORAL ELECTROJET MAGNETIC INDICES
AE (10)
AU
AL
AE
AO
GAMMAS
68/01/02

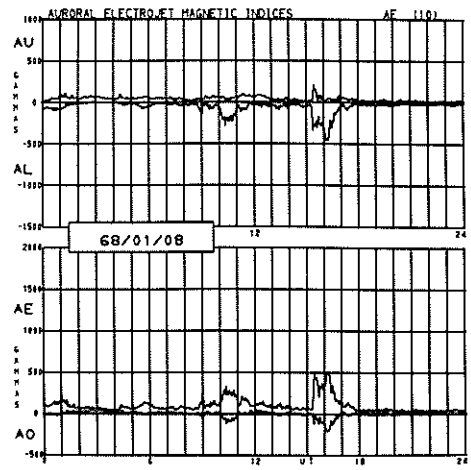

AURORAL ELECTROJET MAGNETIC INDICES
AE (10)
AU
AL
AE
AO
GAMMAS
68/01/03

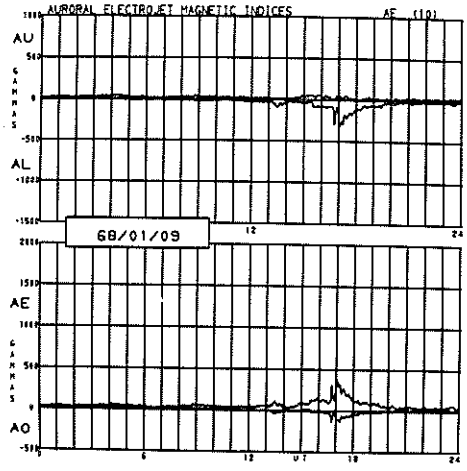

AURORAL ELECTROJET MAGNETIC INDICES
AE (10)
AU
AL
AE
AO
GAMMAS
68/01/04

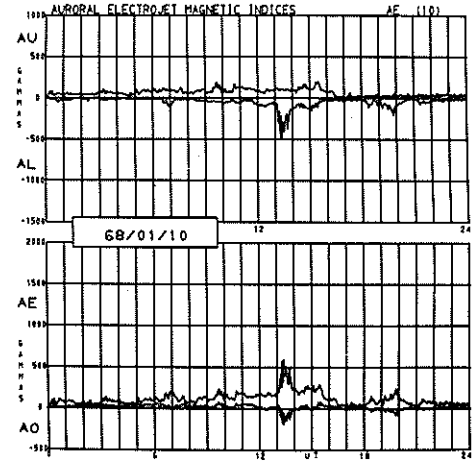

AURORAL ELECTROJET MAGNETIC INDICES
AE (10)
AU
AL
AE
AO
GAMMAS
68/01/05

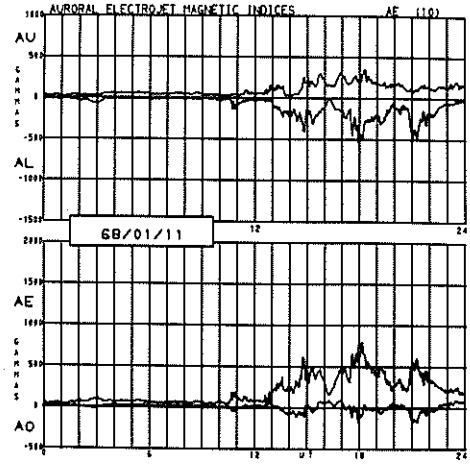

AURORAL ELECTROJET MAGNETIC INDICES
AE (10)
AU
AL
AE
AO
GAMMAS
68/01/06

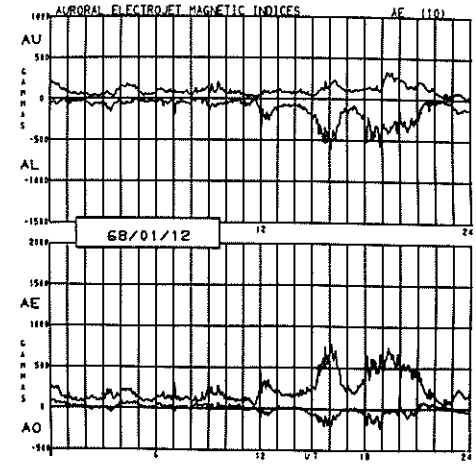

AURORAL ELECTROJET MAGNETIC INDICES
AE (10)
AU
AL
68/01/07
AE
AO
UT

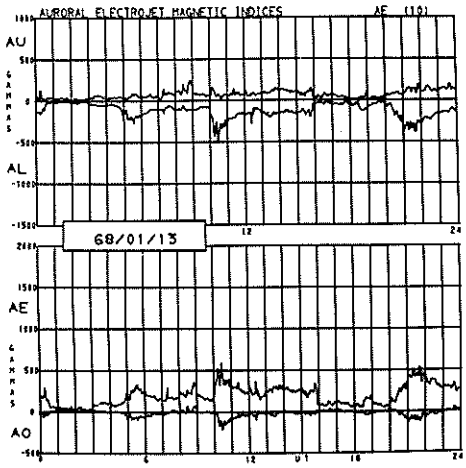

AURORAL ELECTROJET MAGNETIC INDICES
AE (10)
AU
AL
68/01/08
AE
AO
UT

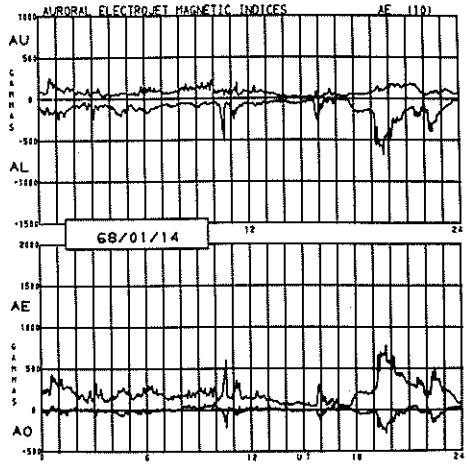

AURORAL ELECTROJET MAGNETIC INDICES
AE (10)
AU
AL
68/01/09
AE
AO
UT


AURORAL ELECTROJET MAGNETIC INDICES
AE (10)
AU
AL
68/01/10
AE
AO
UT


AURORAL ELECTROJET MAGNETIC INDICES
AE (10)
AU
AL
68/01/11
AE
AO
UT


AURORAL ELECTROJET MAGNETIC INDICES
AE (10)
AU
AL
68/01/12
AE
AO
UT


AURORAL ELECTROJET MAGNETIC INDICES
AE (10)
AU
AL
68/01/13
AE
AO
GAMMAS
UT


AURORAL ELECTROJET MAGNETIC INDICES
AE (10)
AU
AL
68/01/14
AE
AO
GAMMAS
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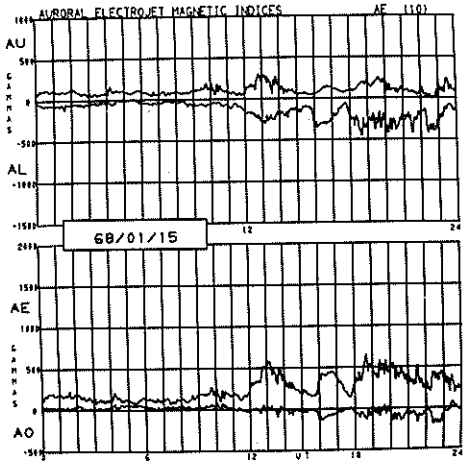
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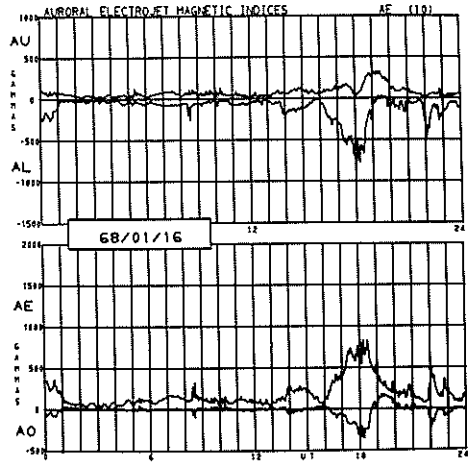
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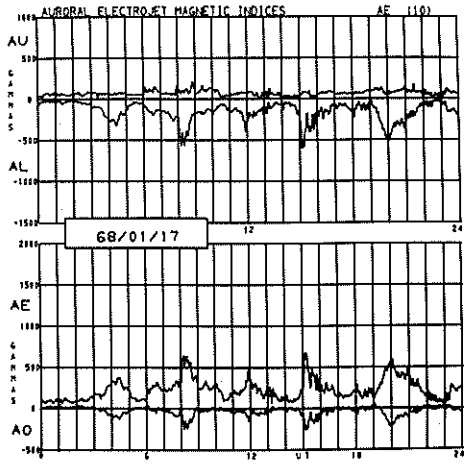
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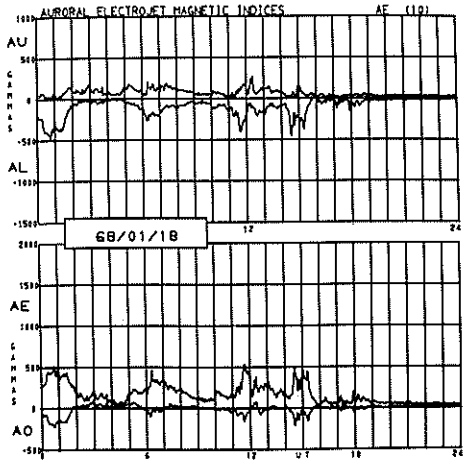
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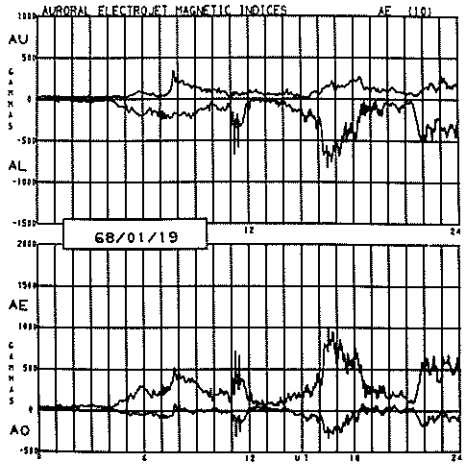
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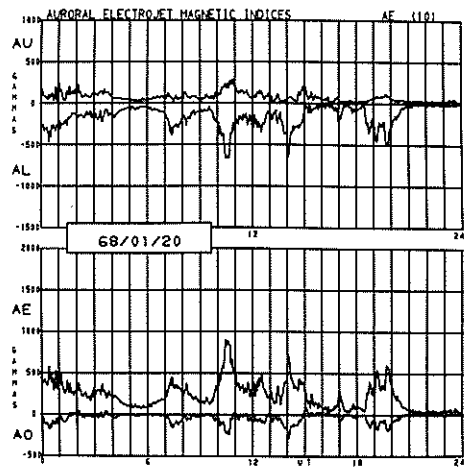
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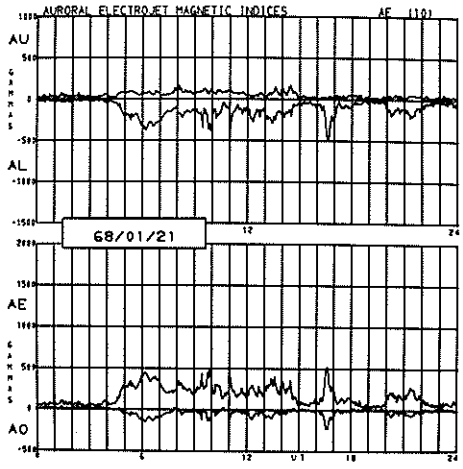
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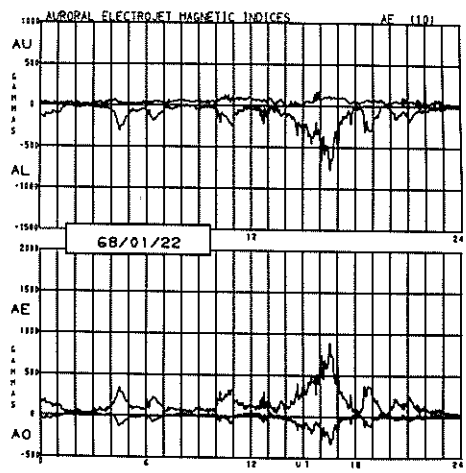
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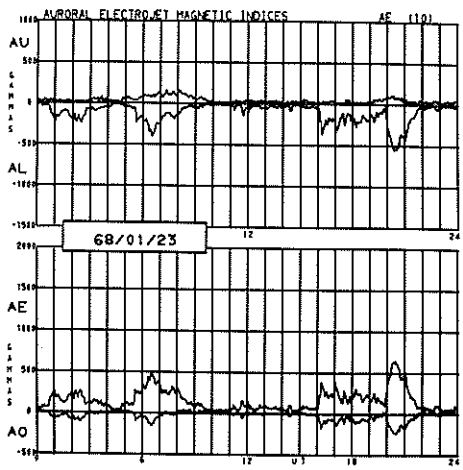
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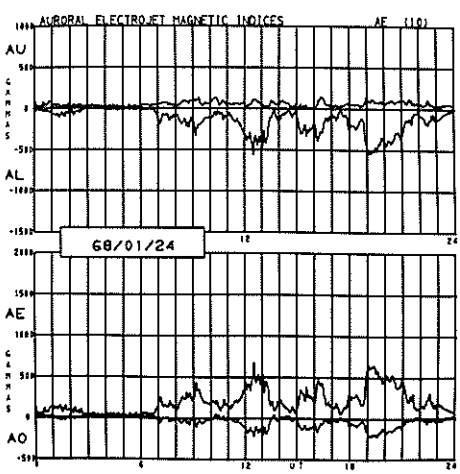
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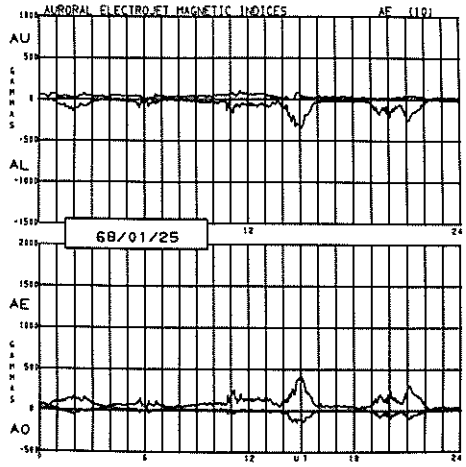
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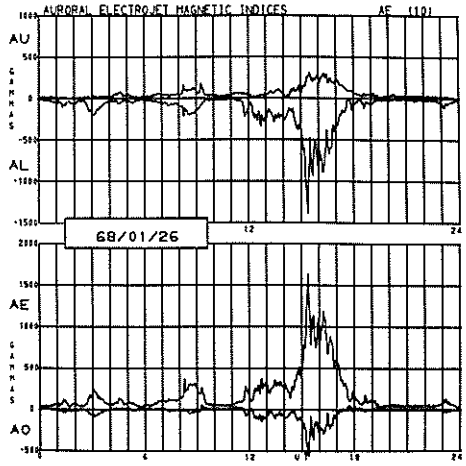
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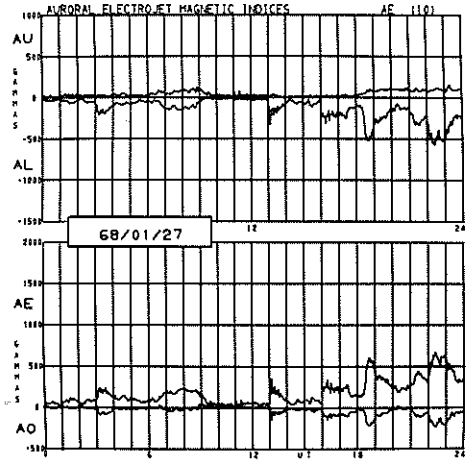
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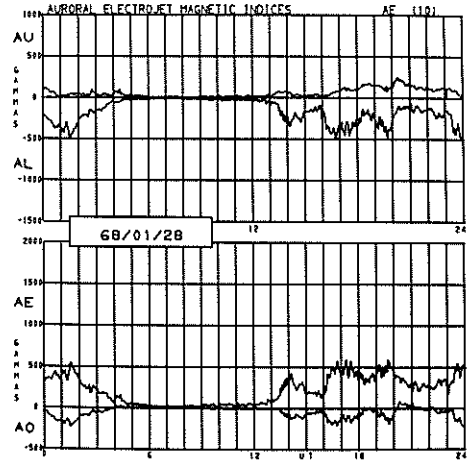
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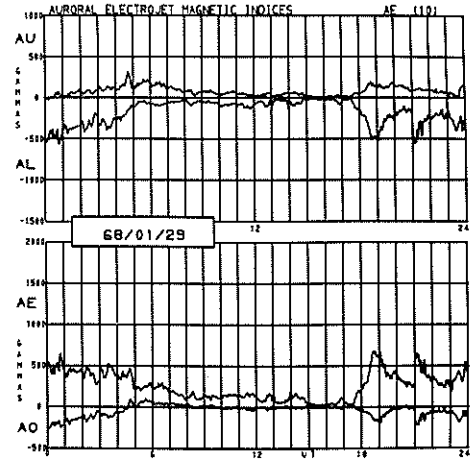
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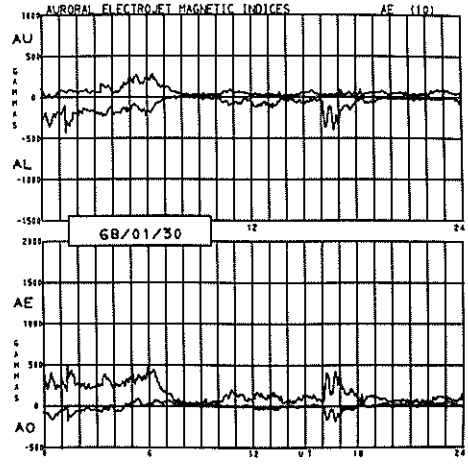
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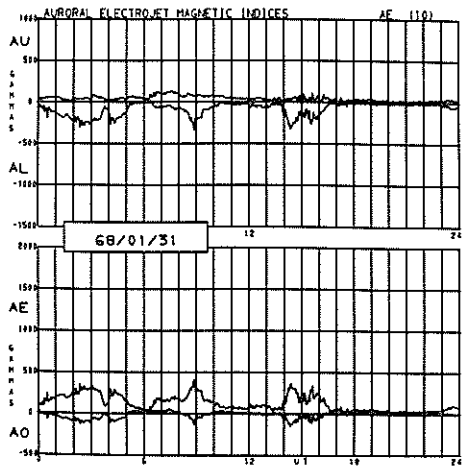
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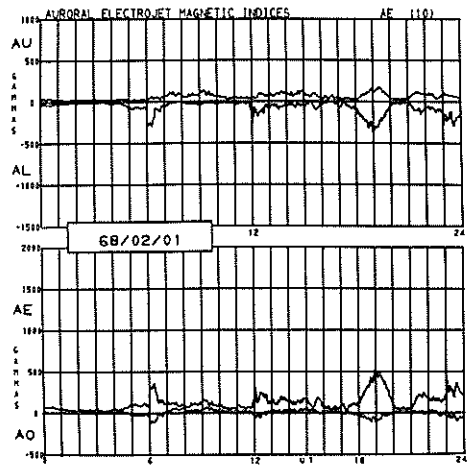
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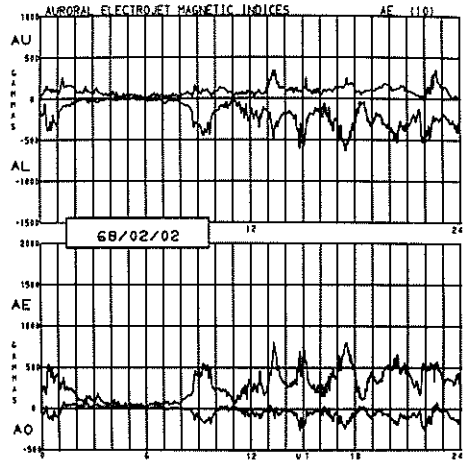
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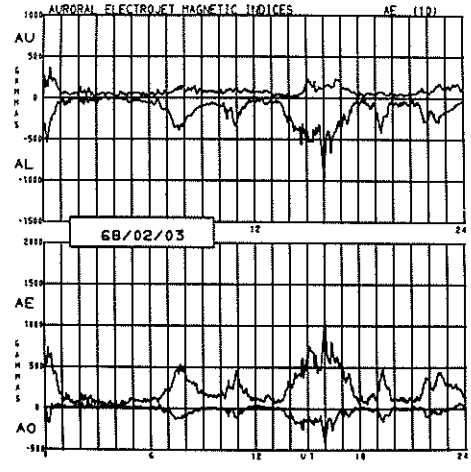
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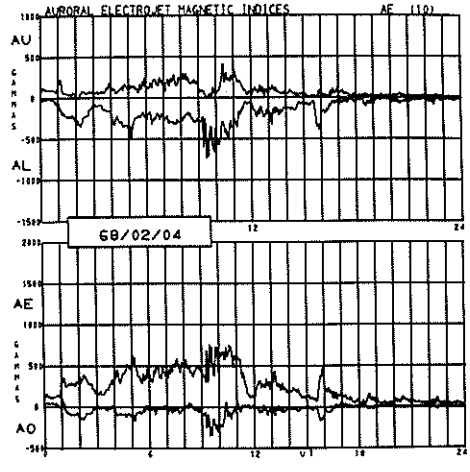
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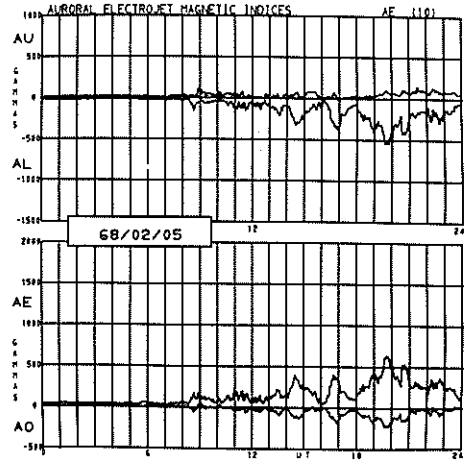
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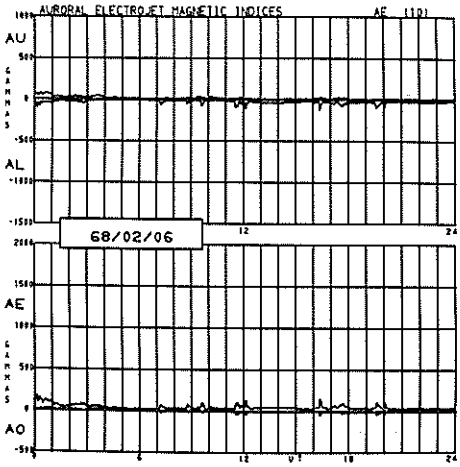
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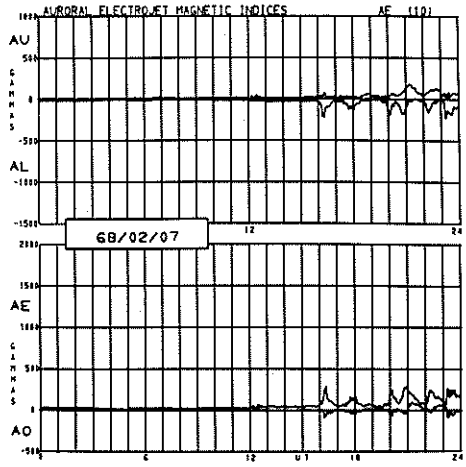
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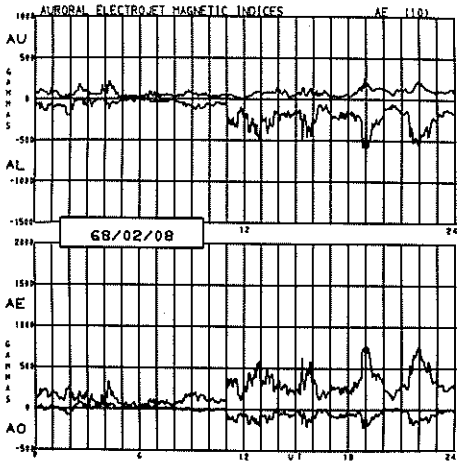
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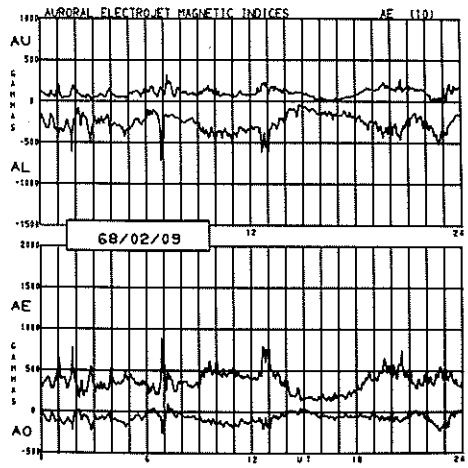
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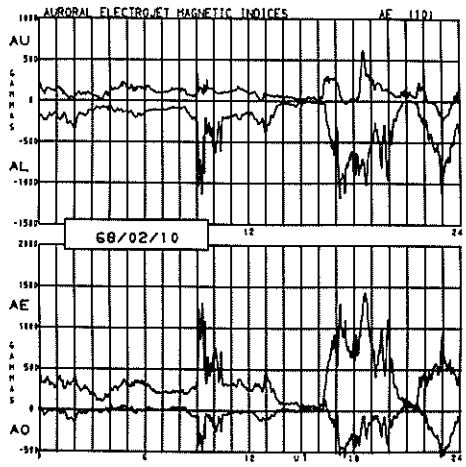
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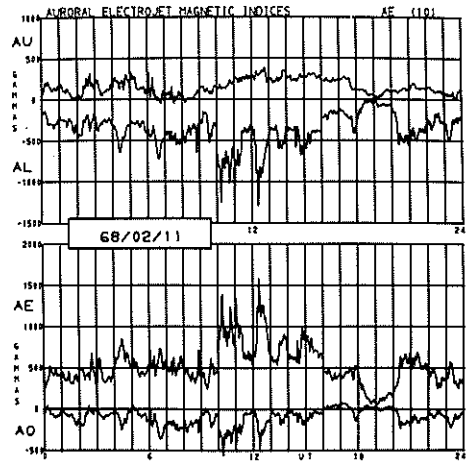
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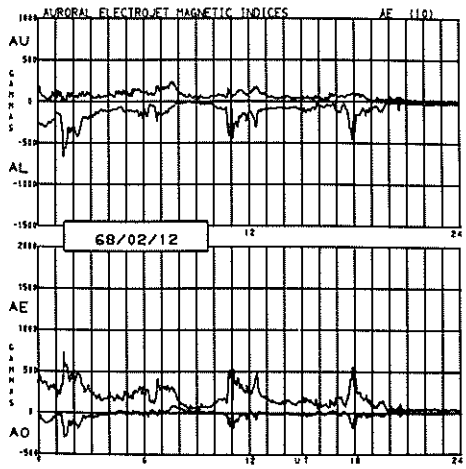
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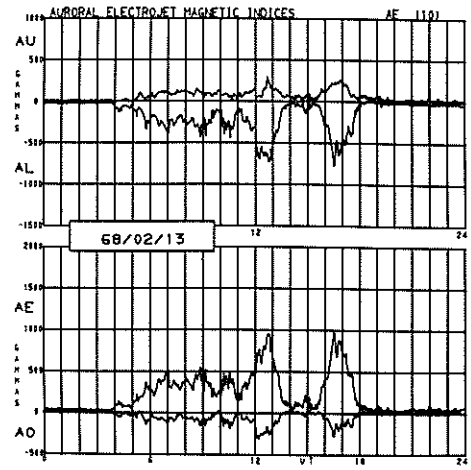
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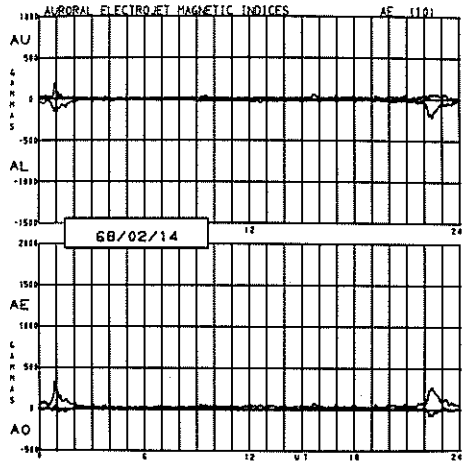
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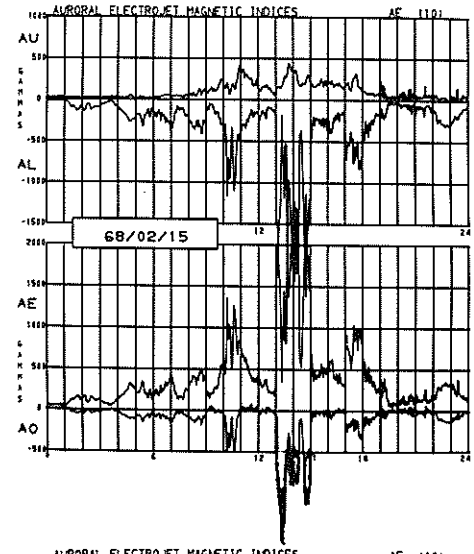
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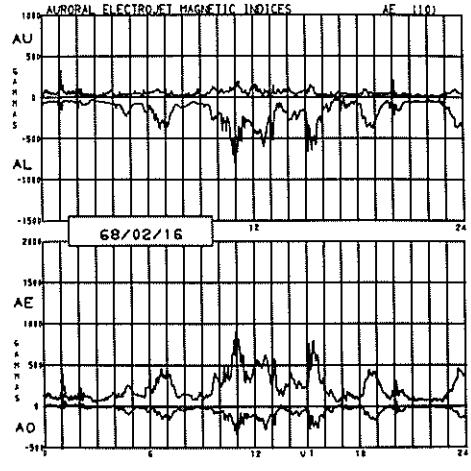
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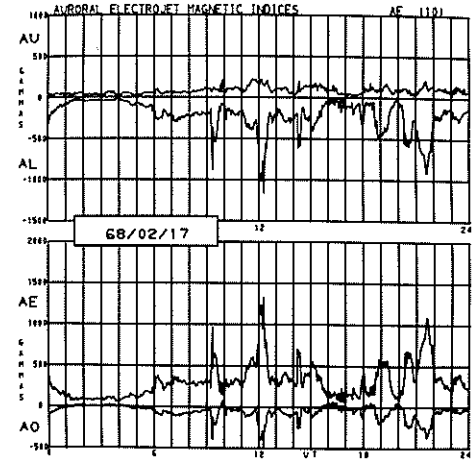
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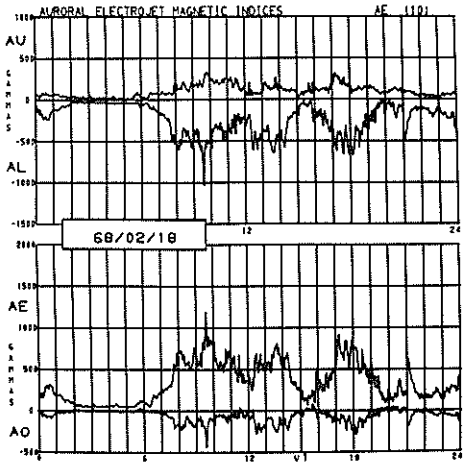
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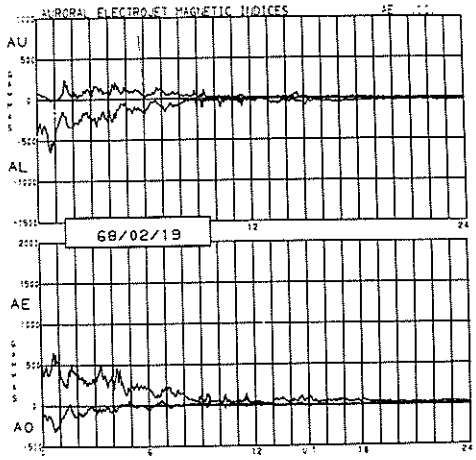
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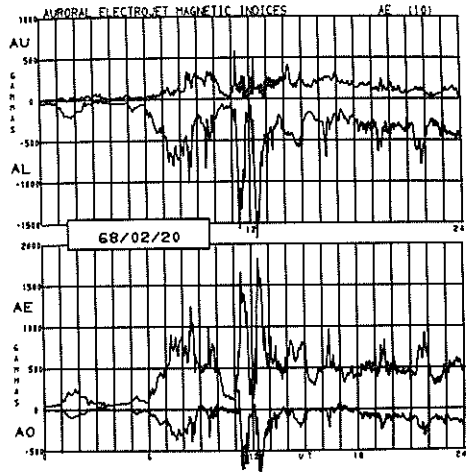
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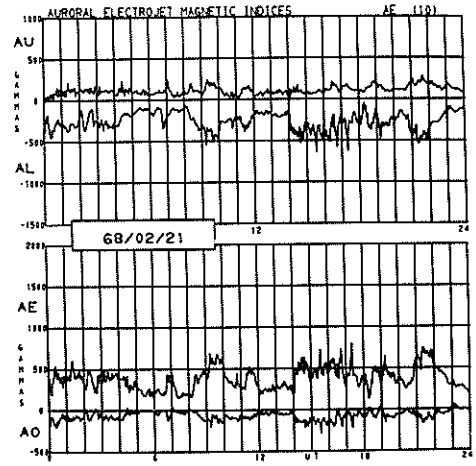
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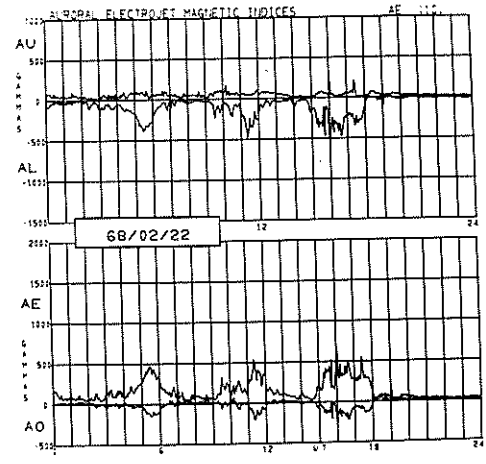
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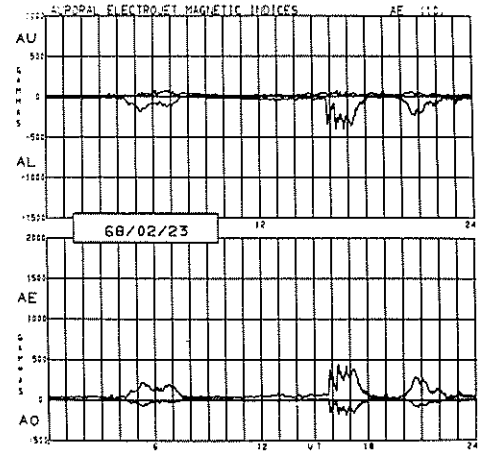
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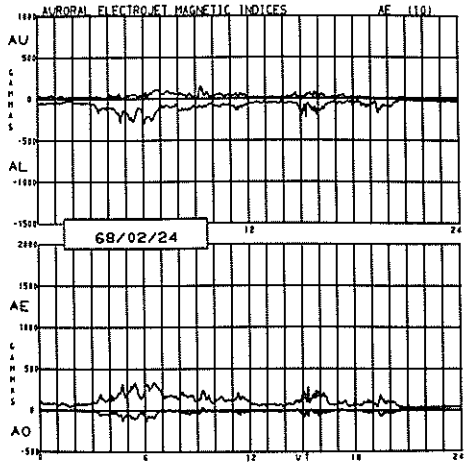
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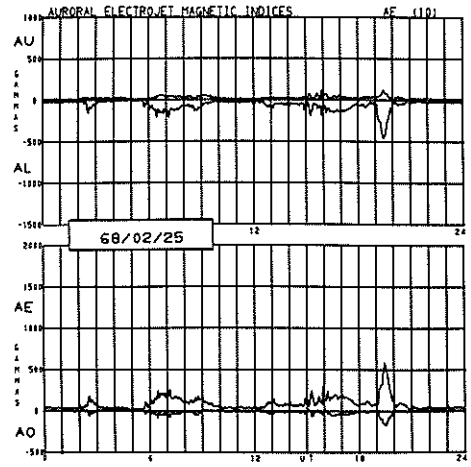
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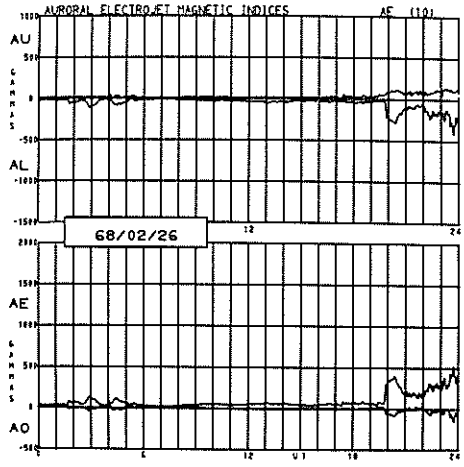
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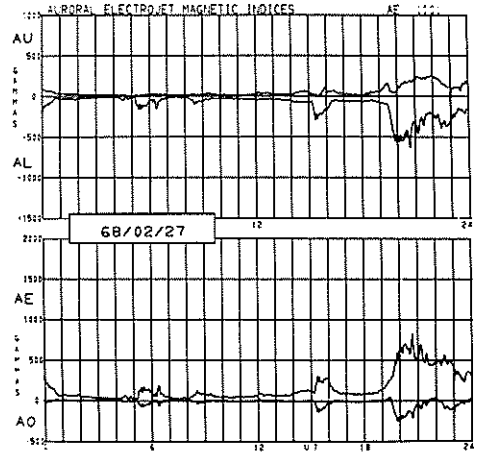
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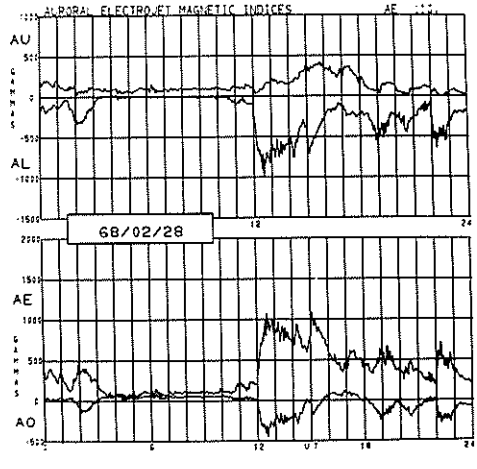
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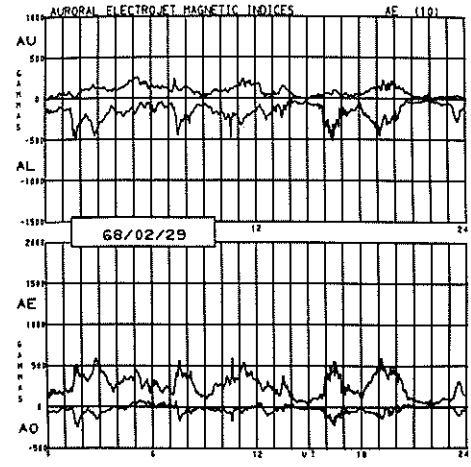
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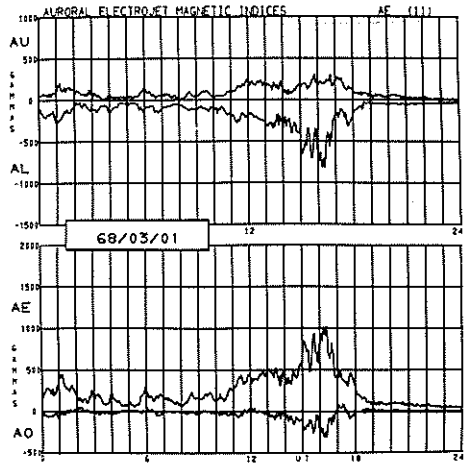
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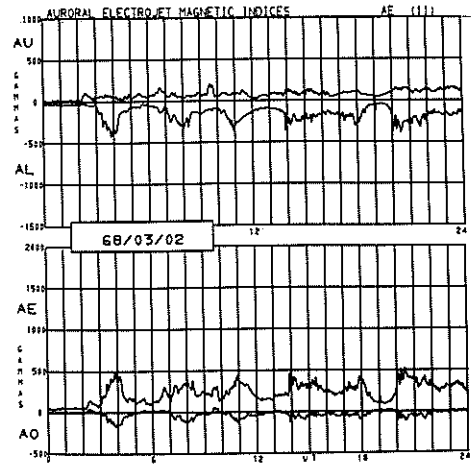
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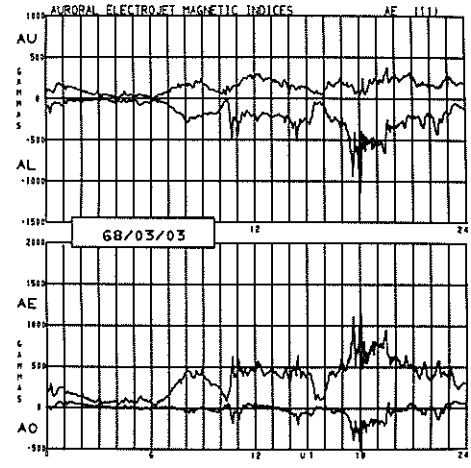
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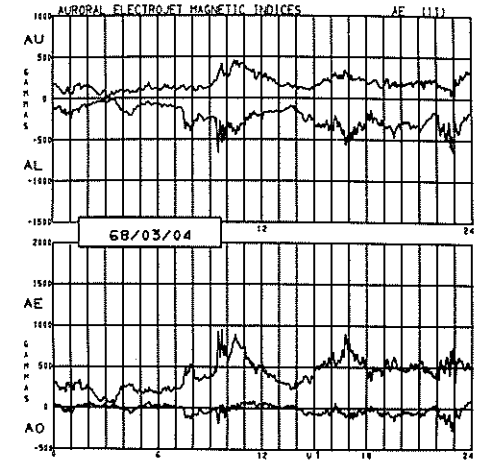
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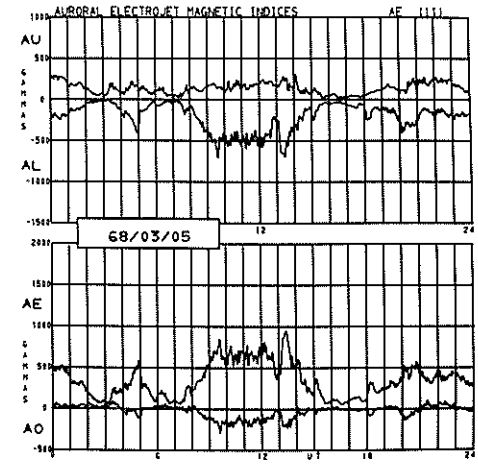
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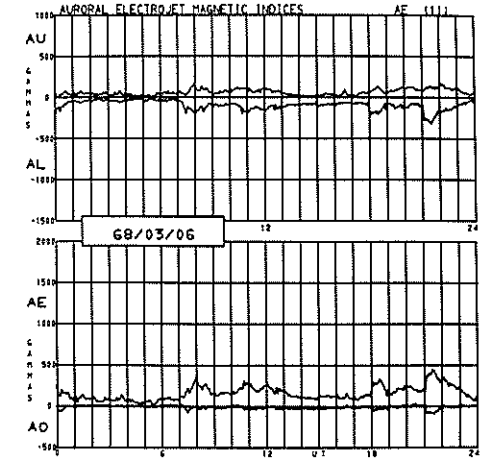
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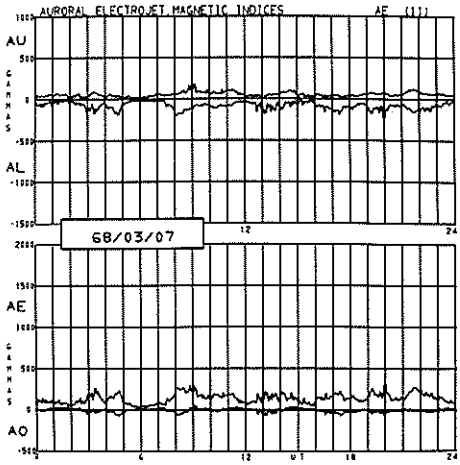
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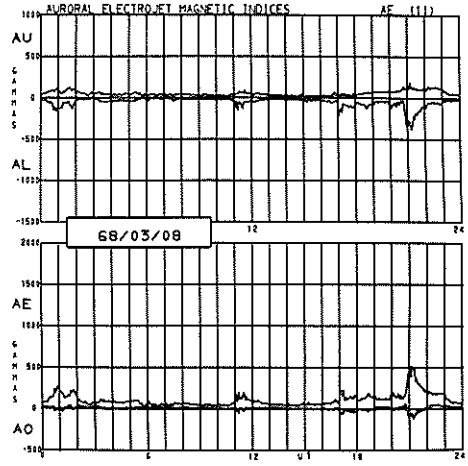
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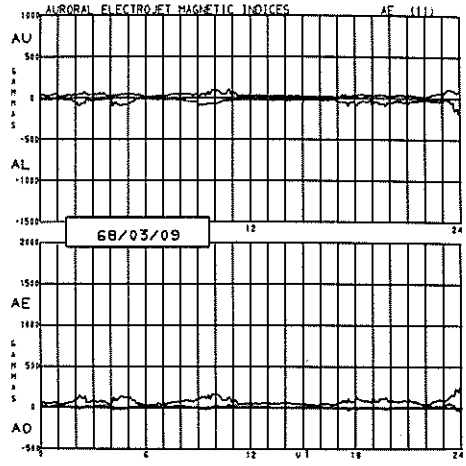
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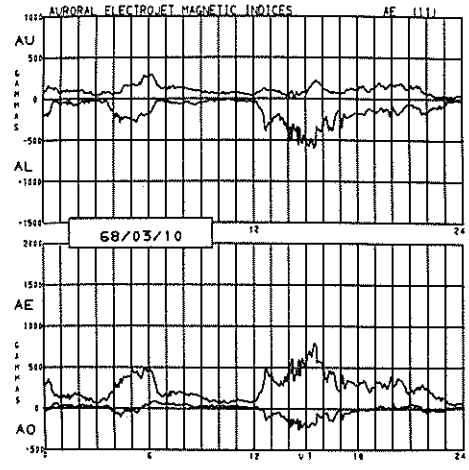
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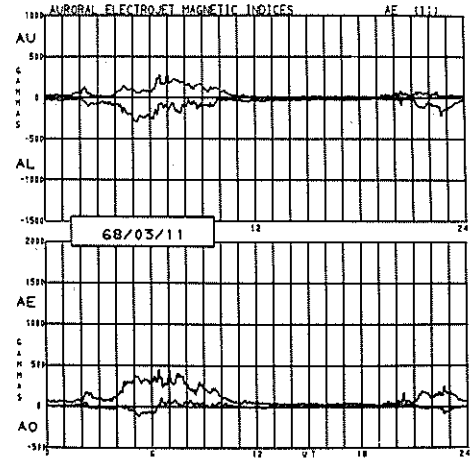
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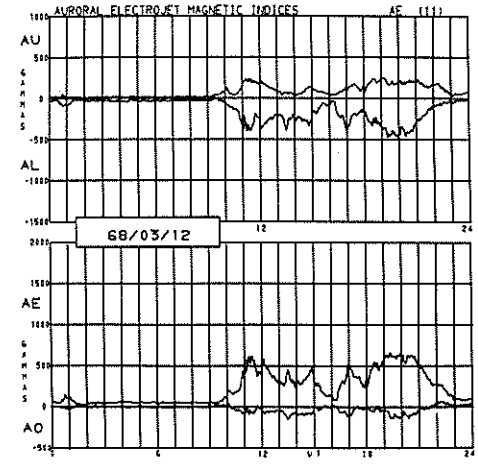
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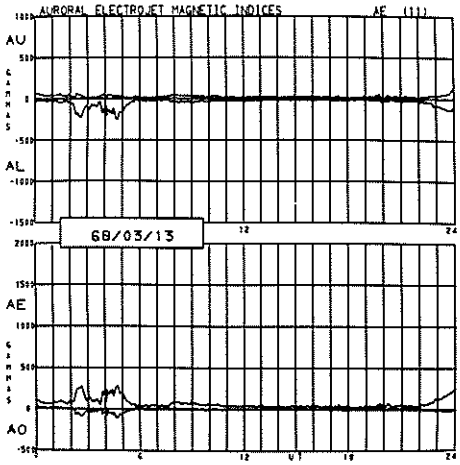
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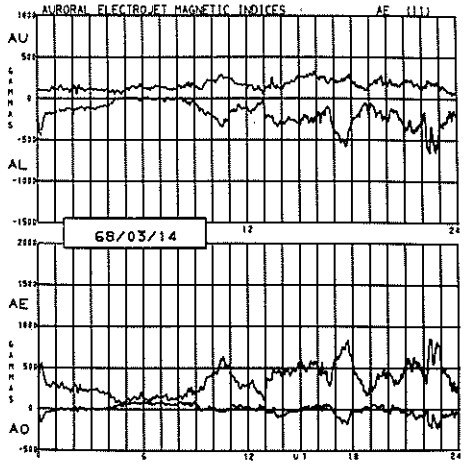
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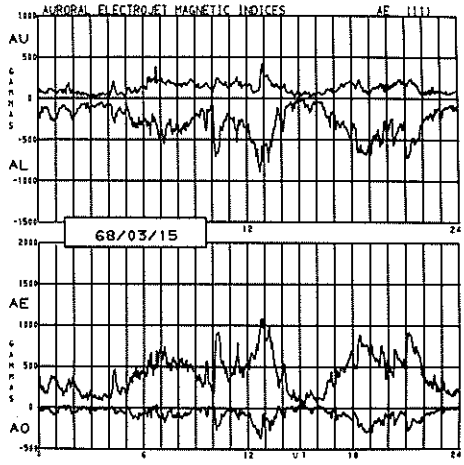
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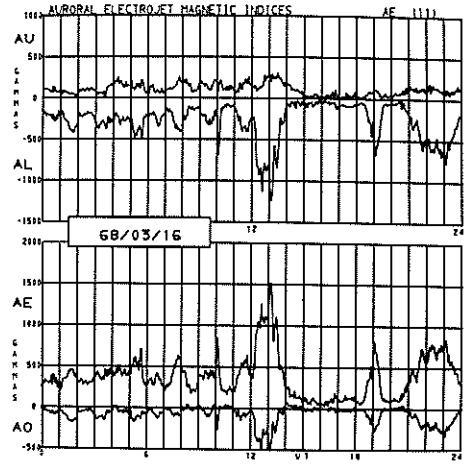
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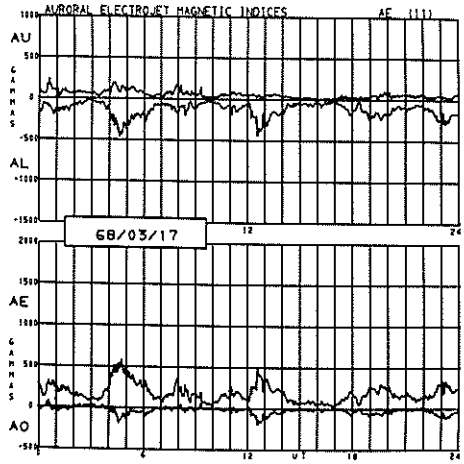
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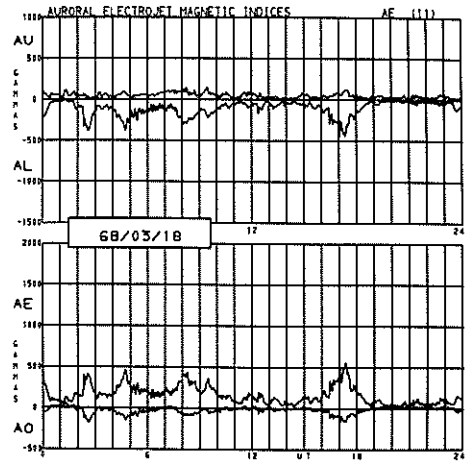
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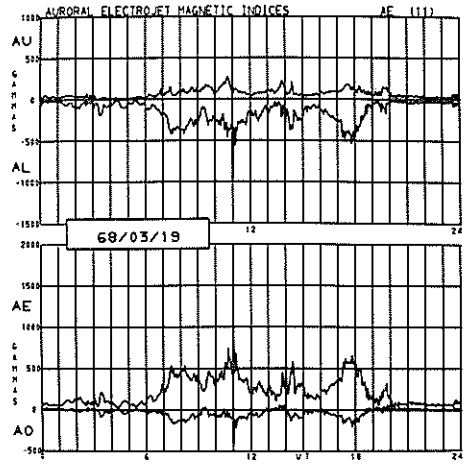
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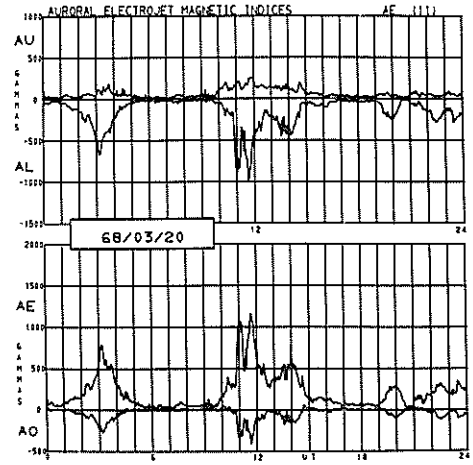
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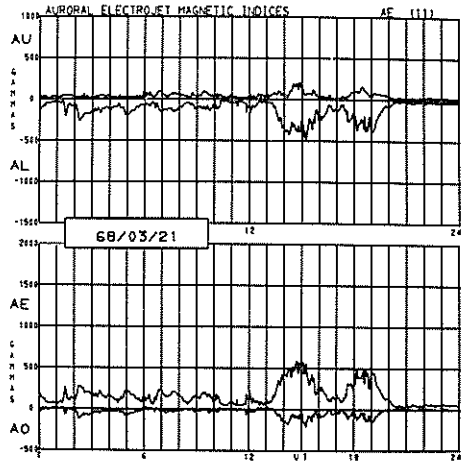
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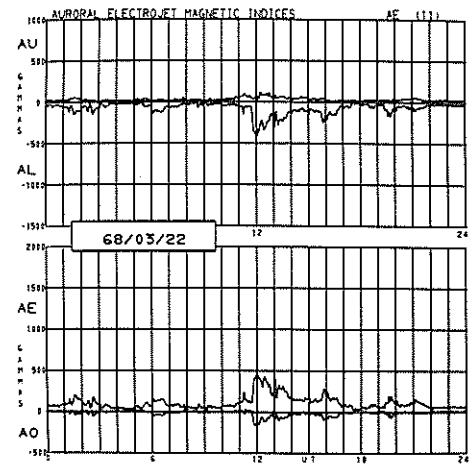
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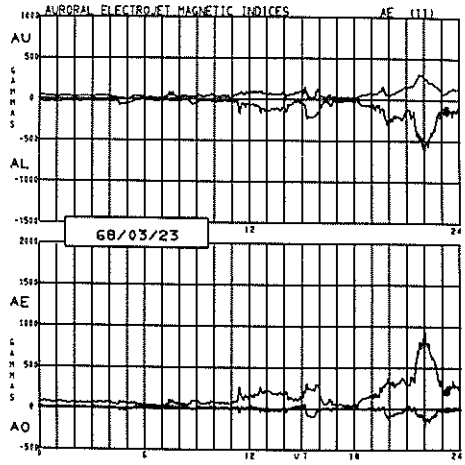
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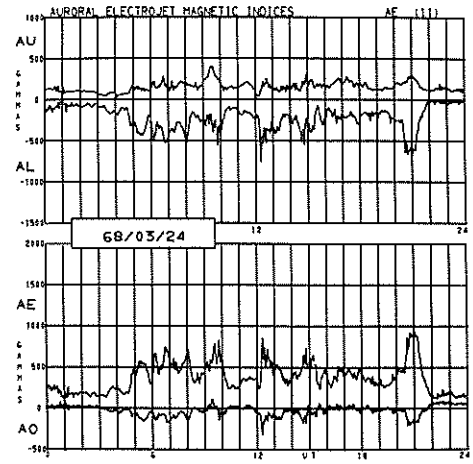
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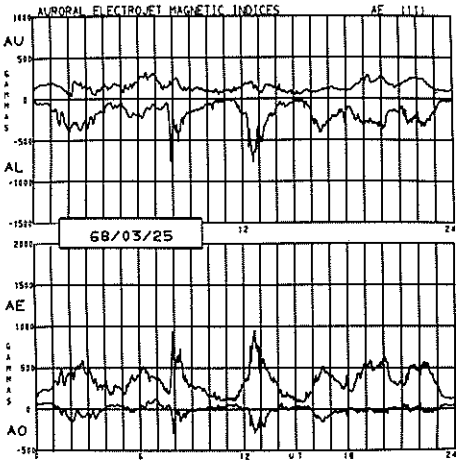
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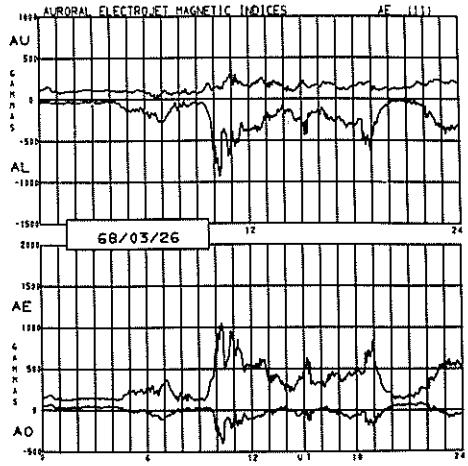
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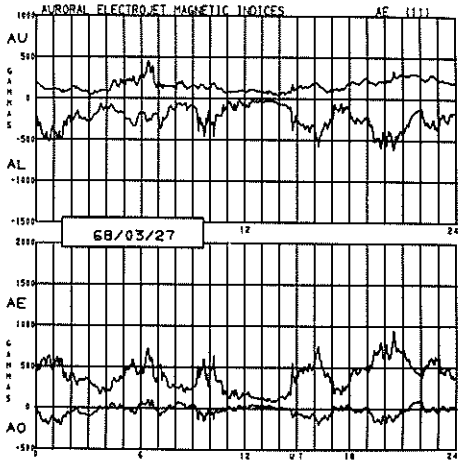
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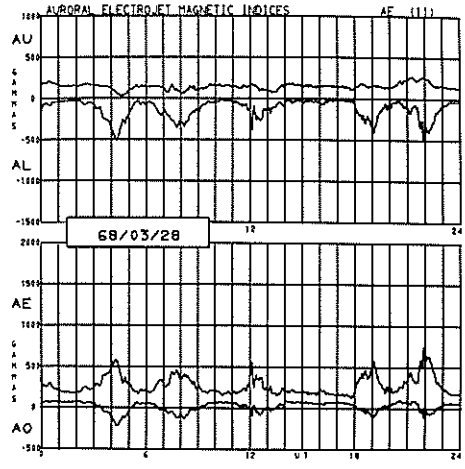
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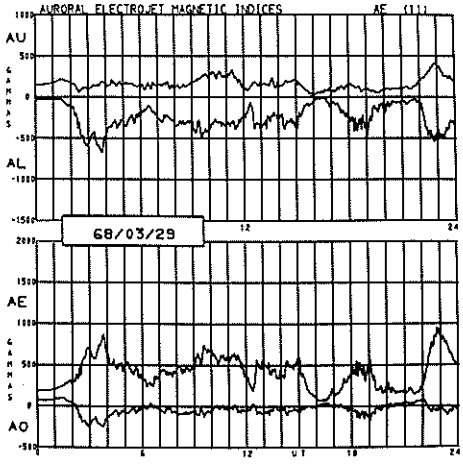
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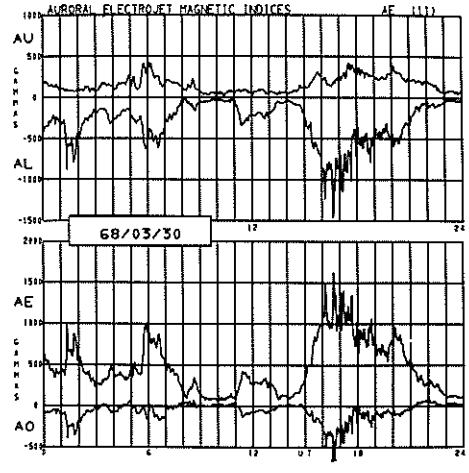
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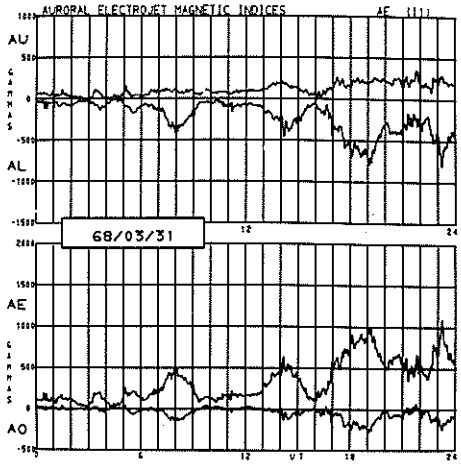
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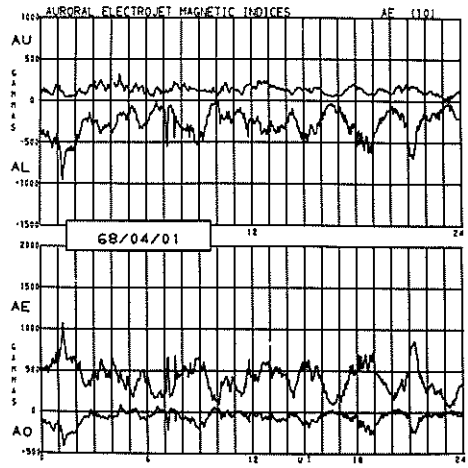
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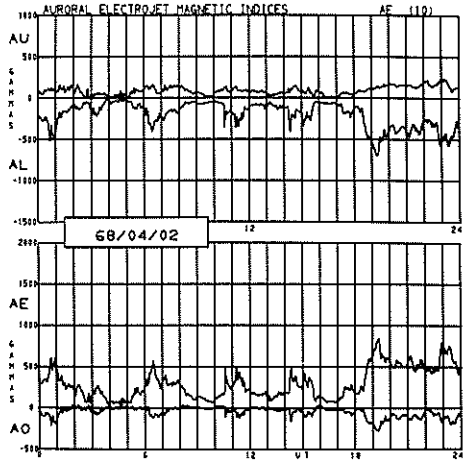
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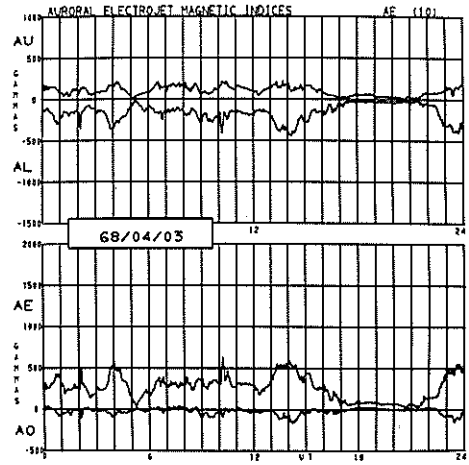
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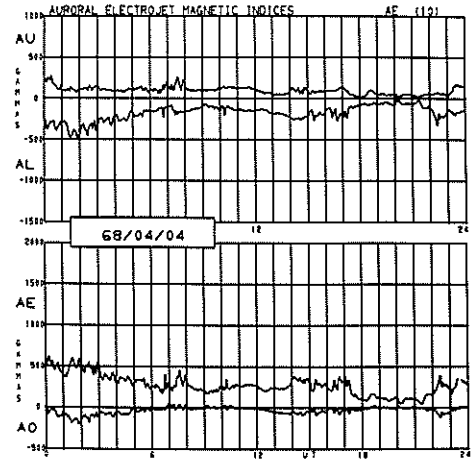
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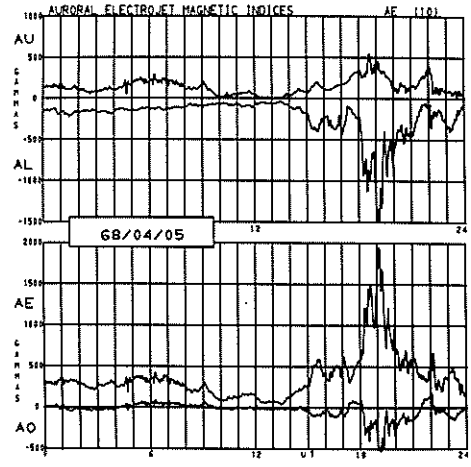
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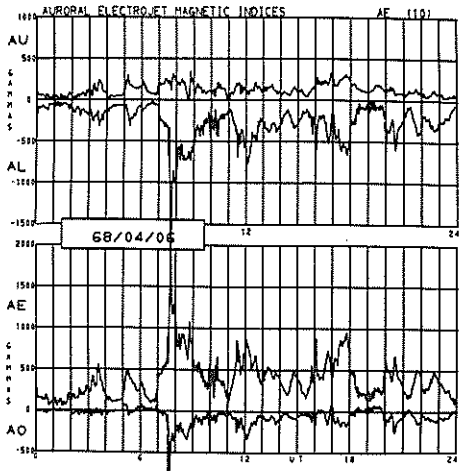
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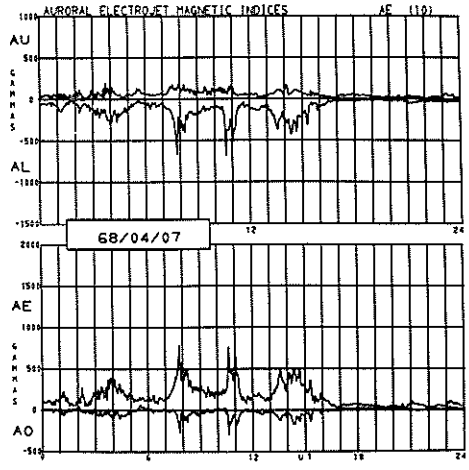
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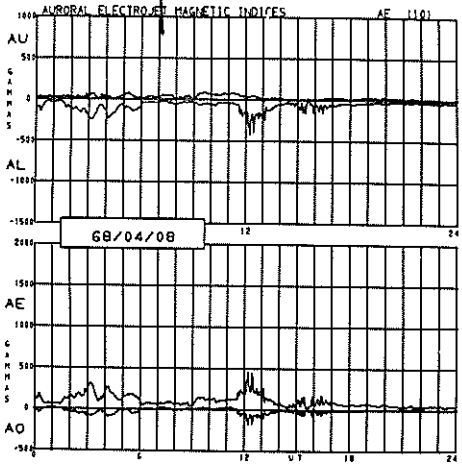
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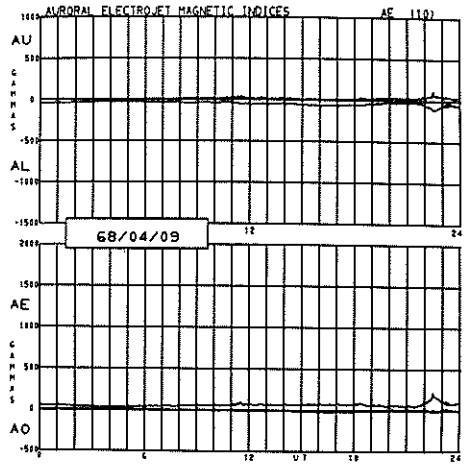
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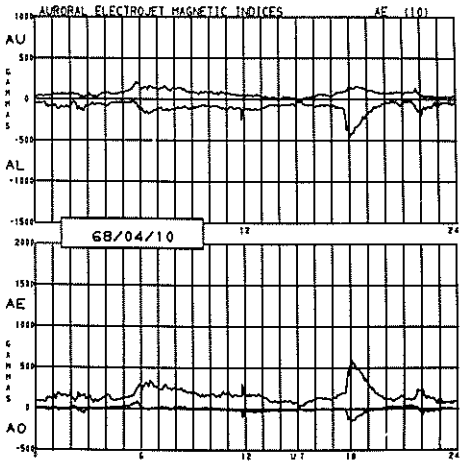
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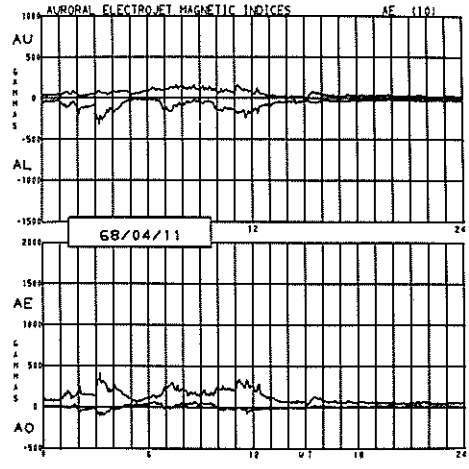
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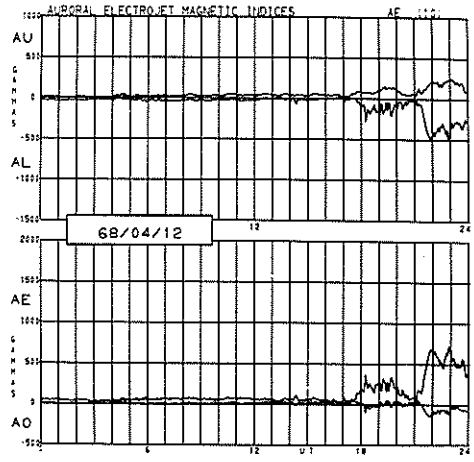
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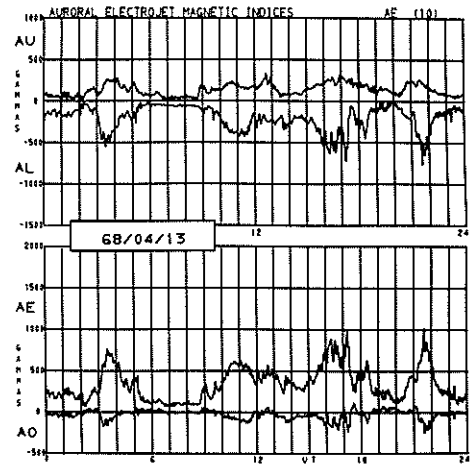
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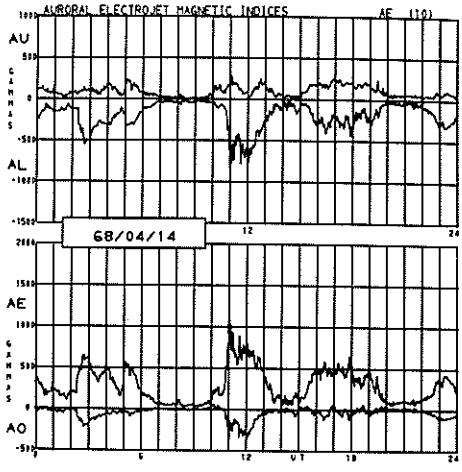
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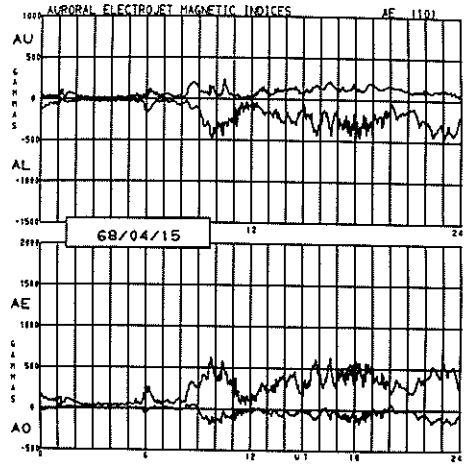
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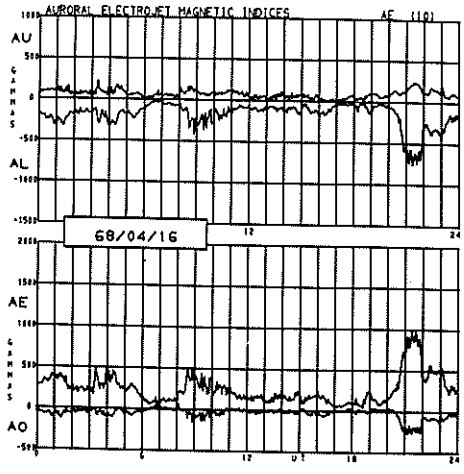
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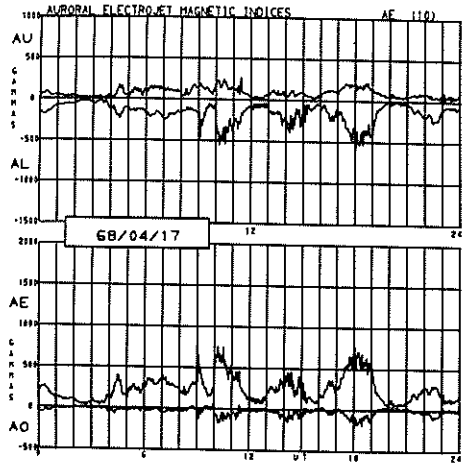
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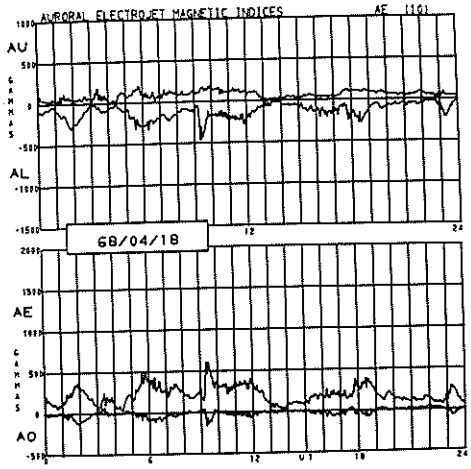
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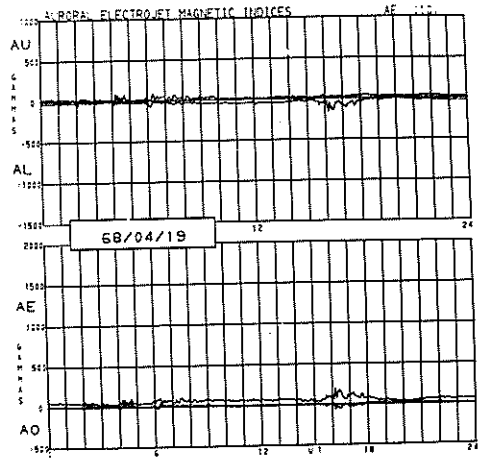
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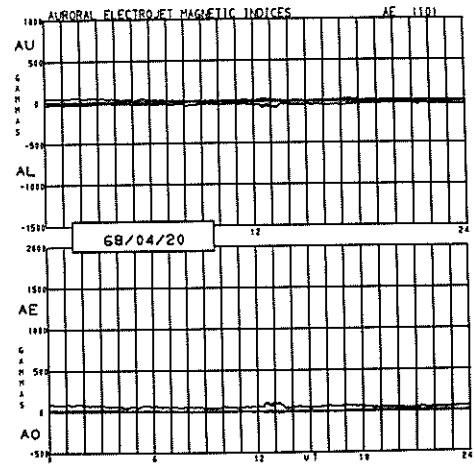
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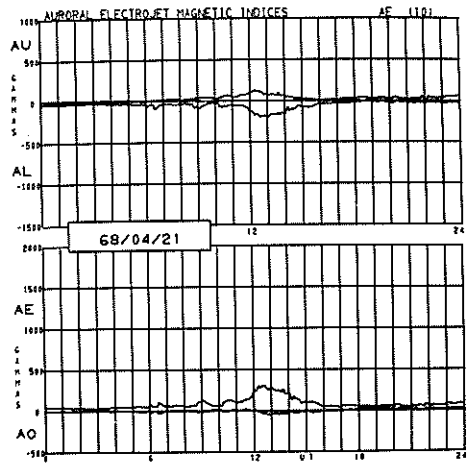
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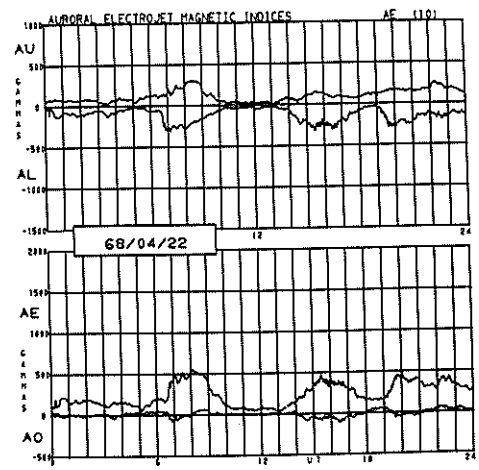
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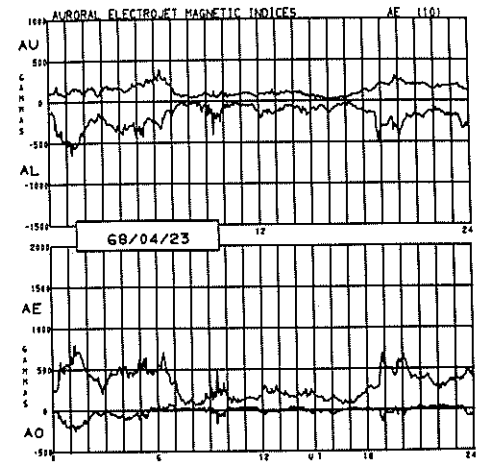
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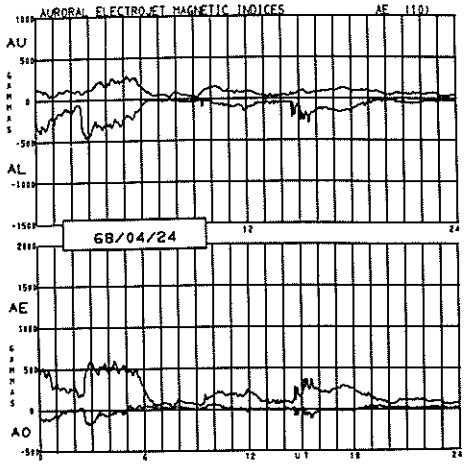
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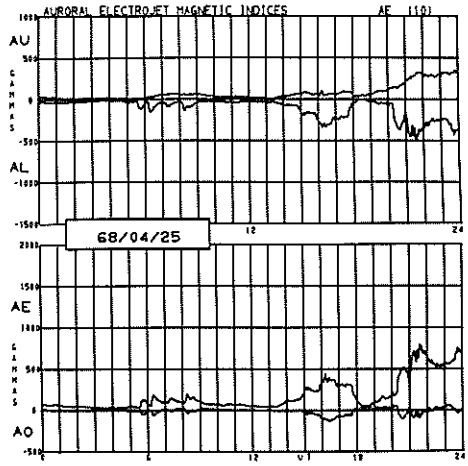
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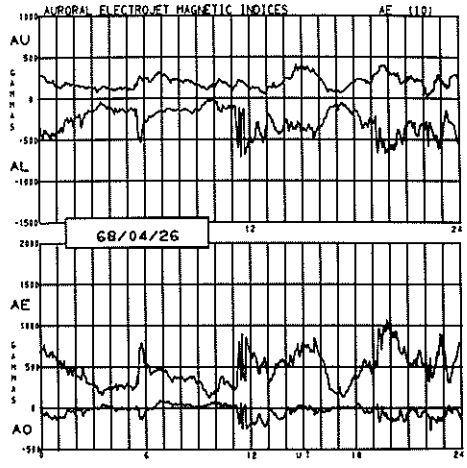
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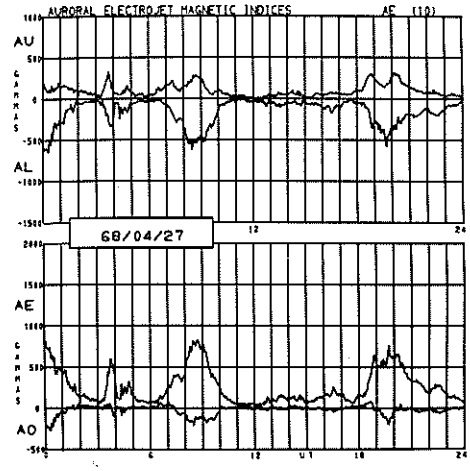
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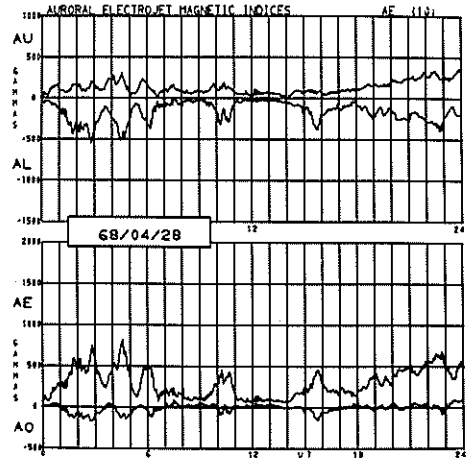
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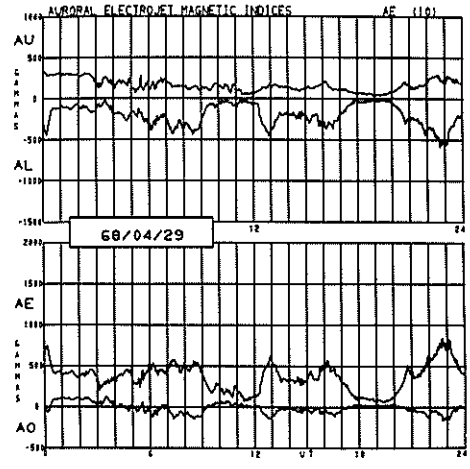
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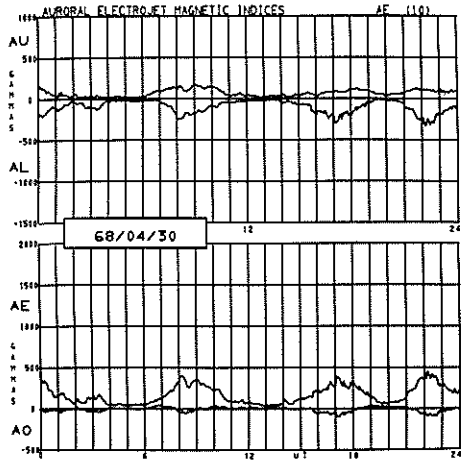
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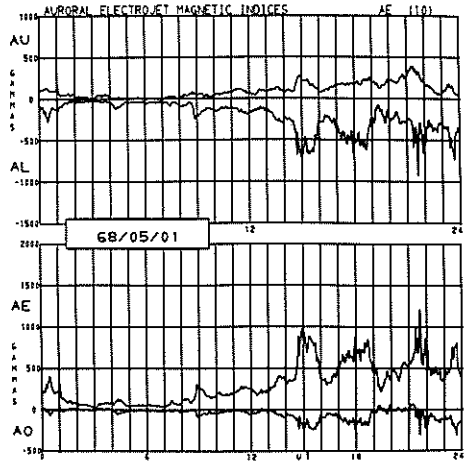
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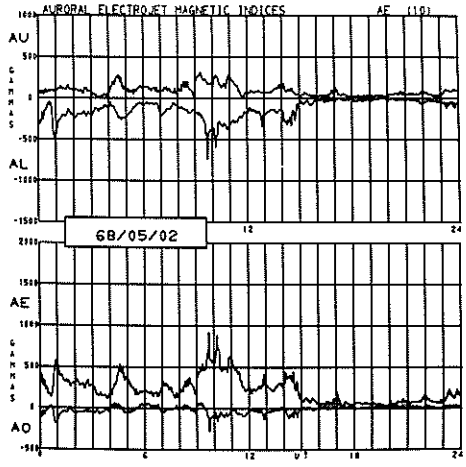
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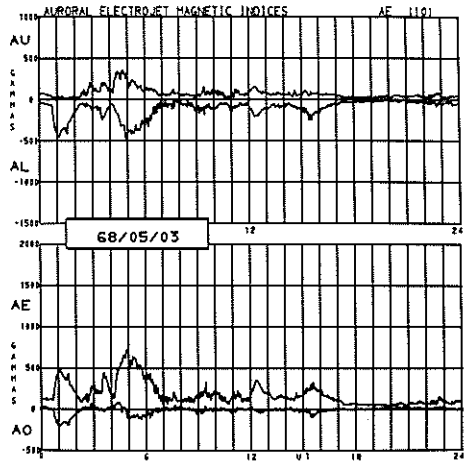
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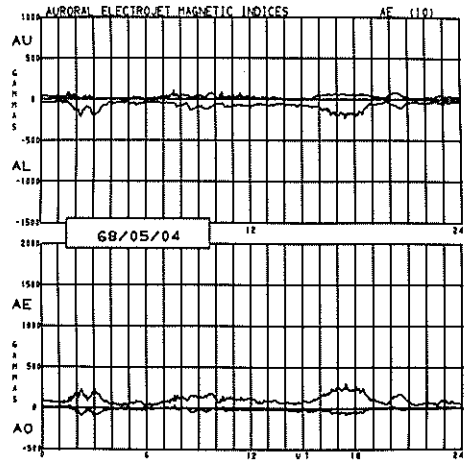
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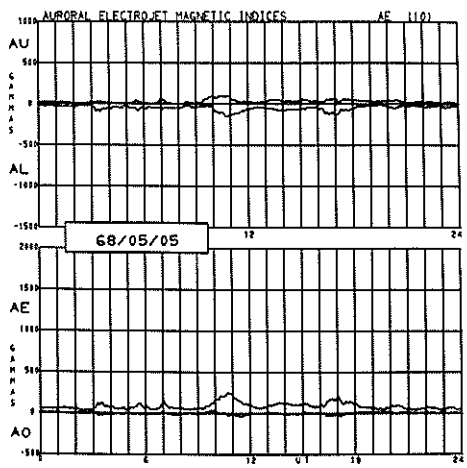
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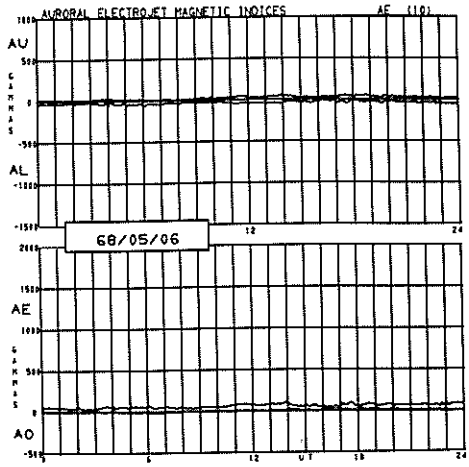
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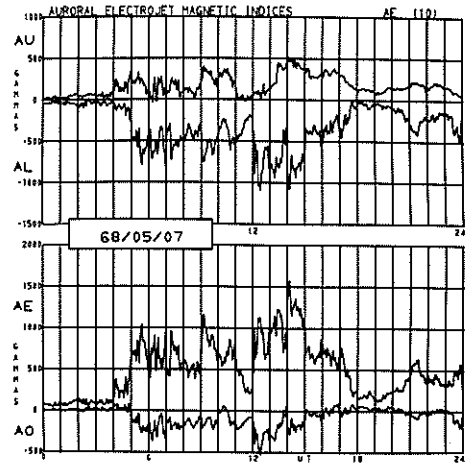
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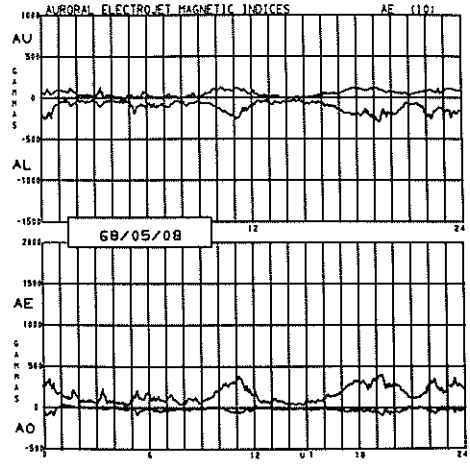
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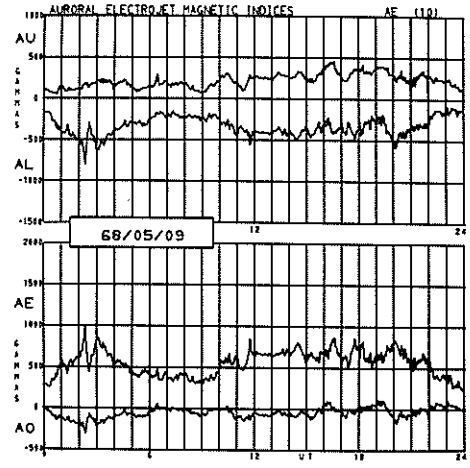
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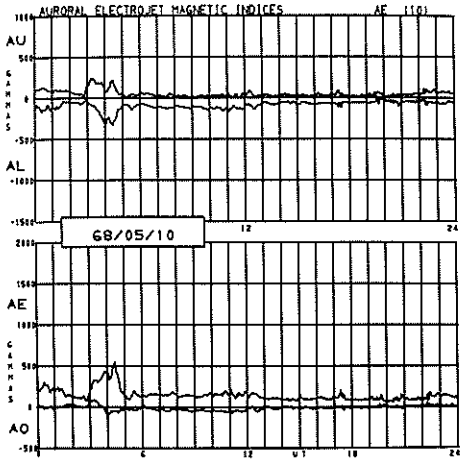
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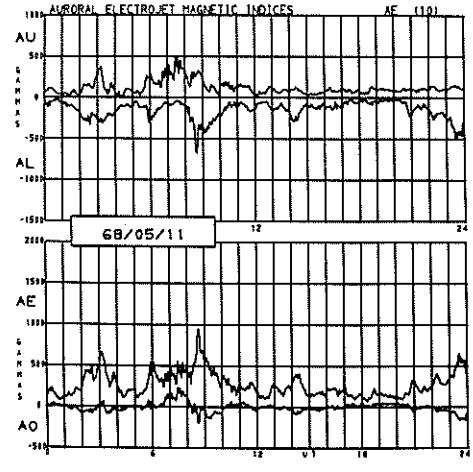
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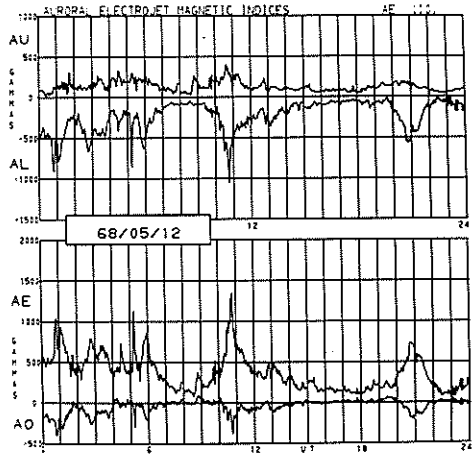
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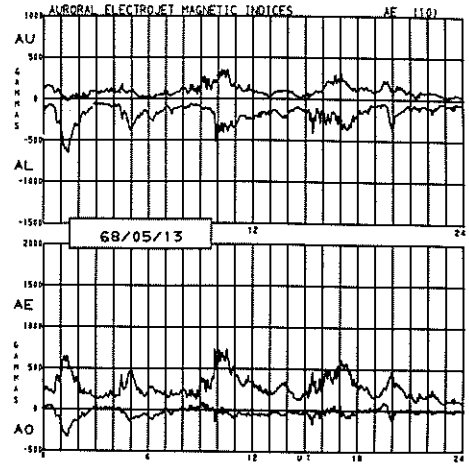
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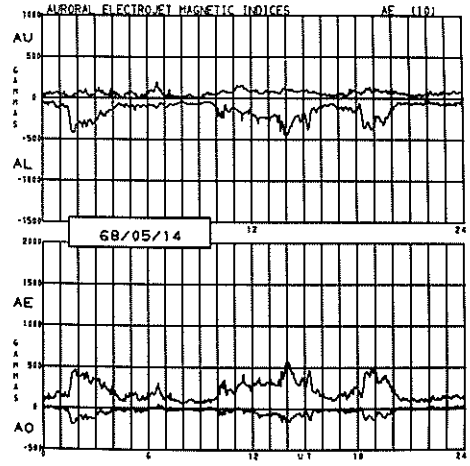
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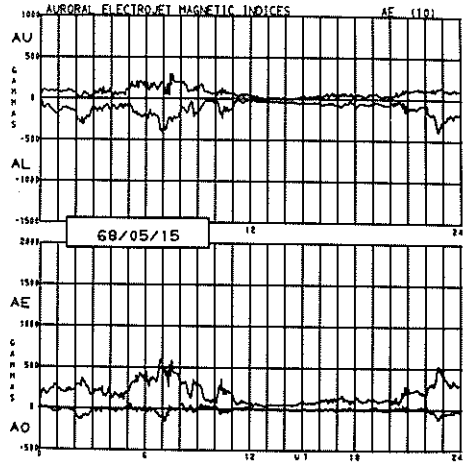
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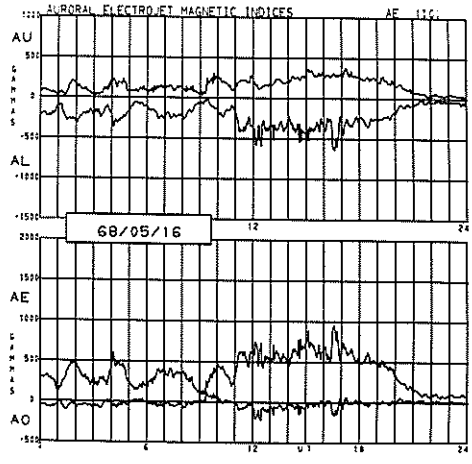
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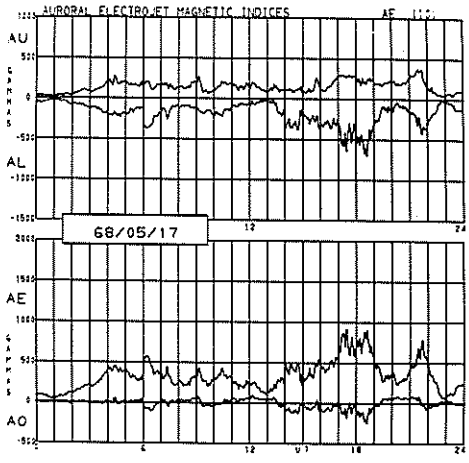
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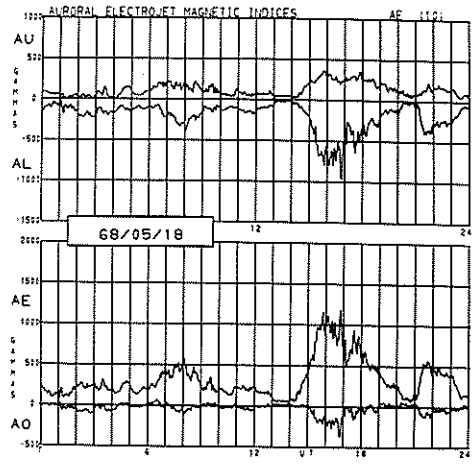
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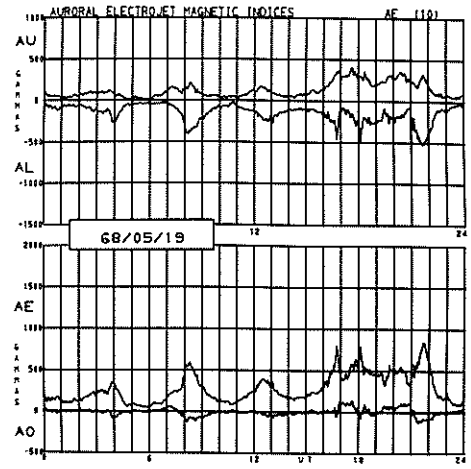
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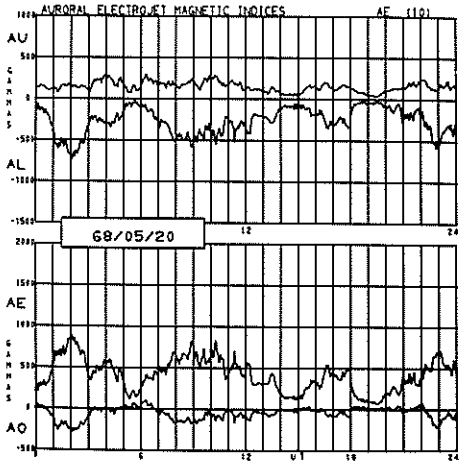
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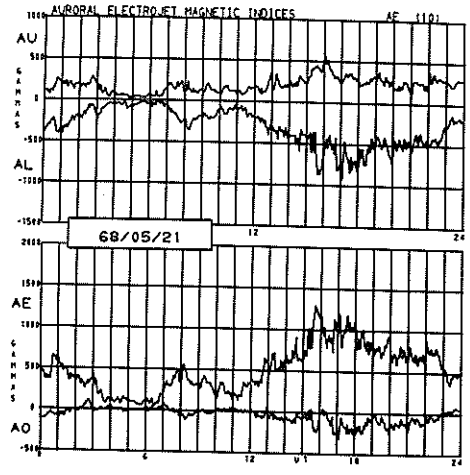
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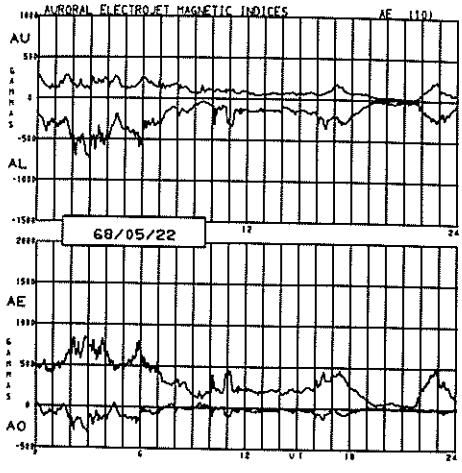
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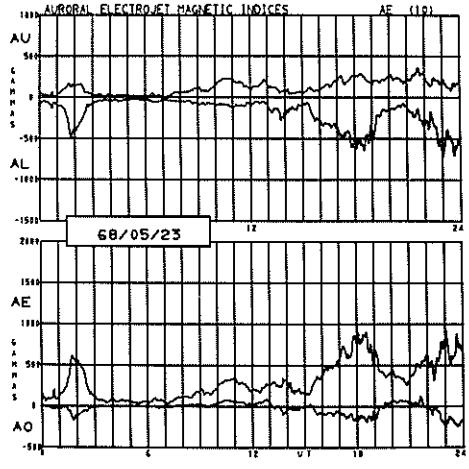
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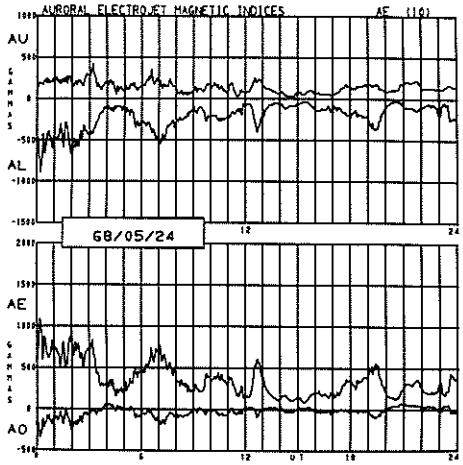
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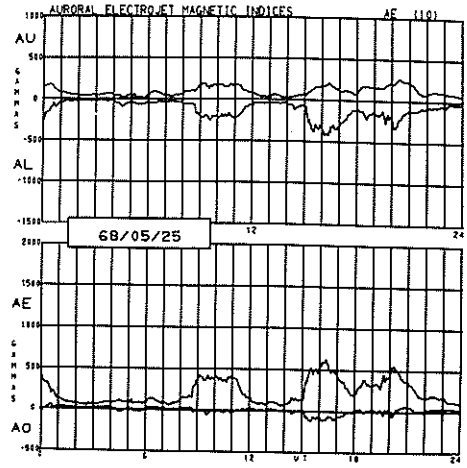
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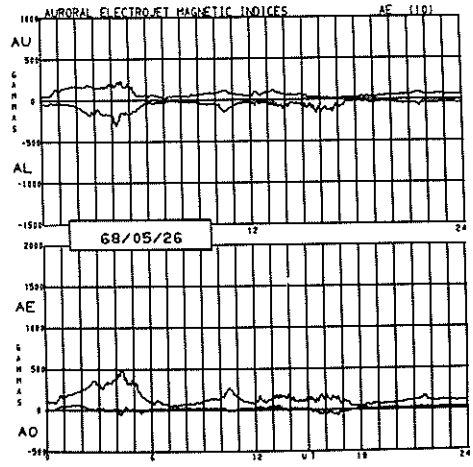
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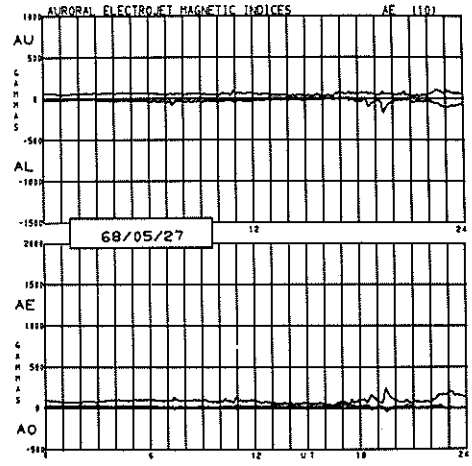
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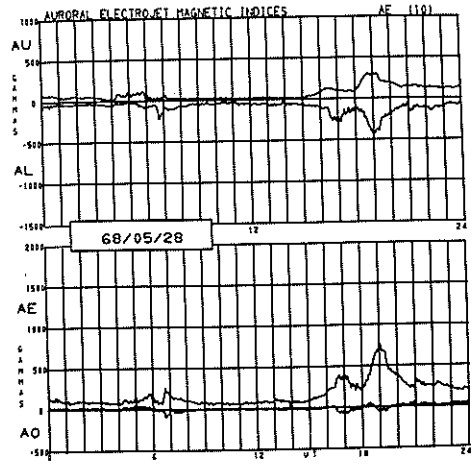
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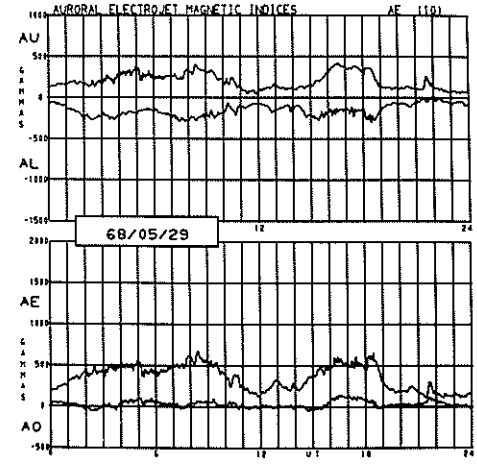
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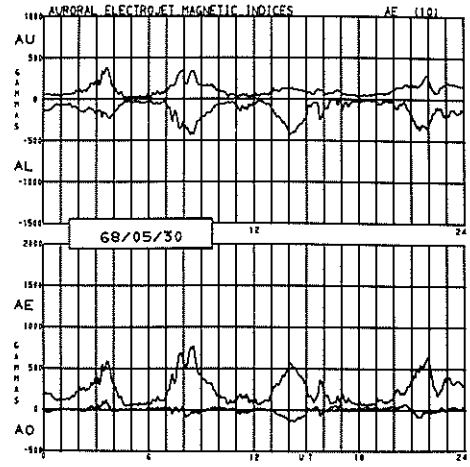
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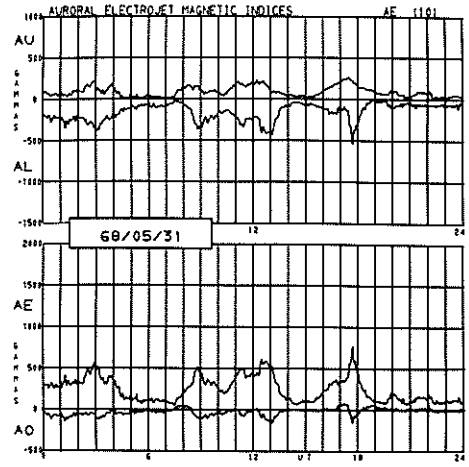
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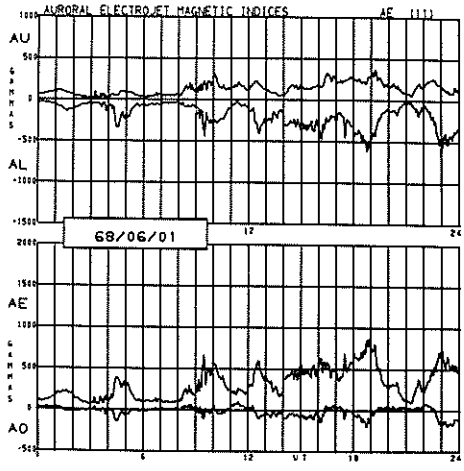
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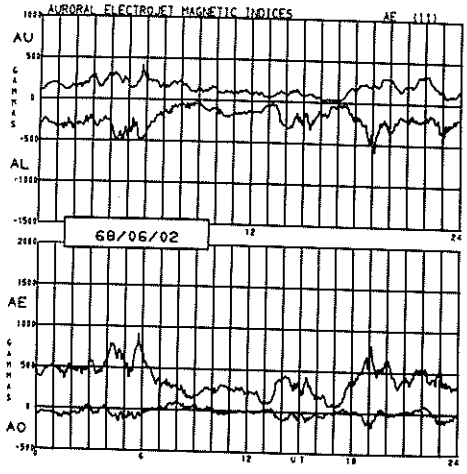
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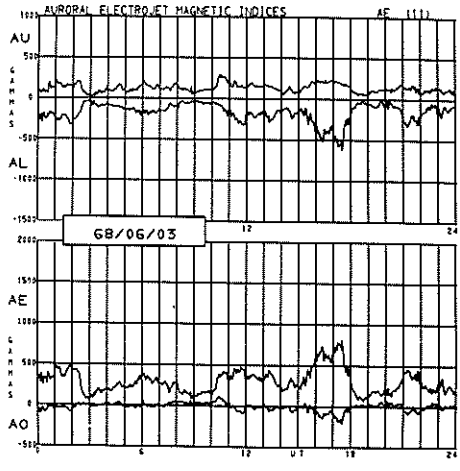
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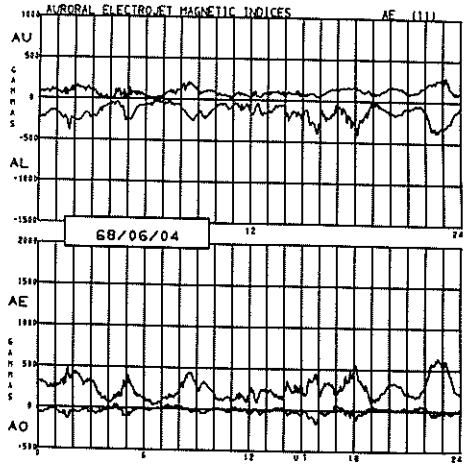
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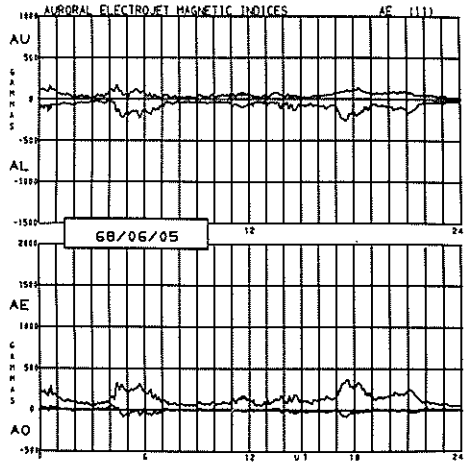
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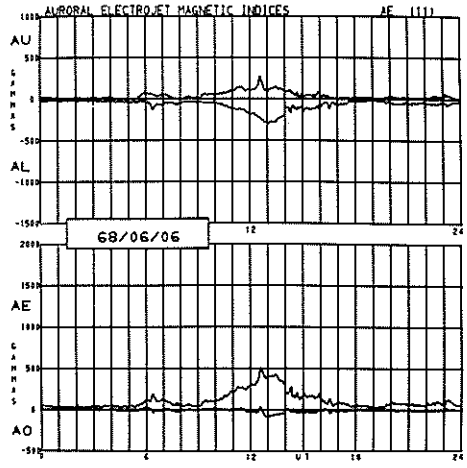
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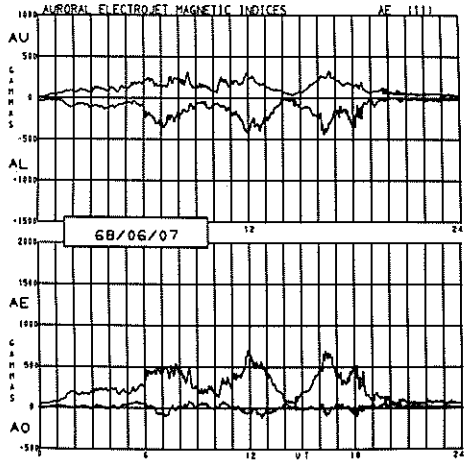
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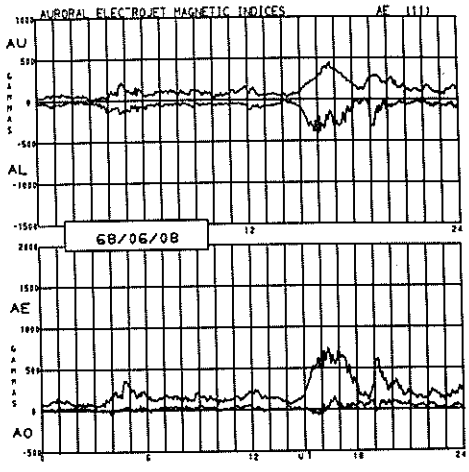
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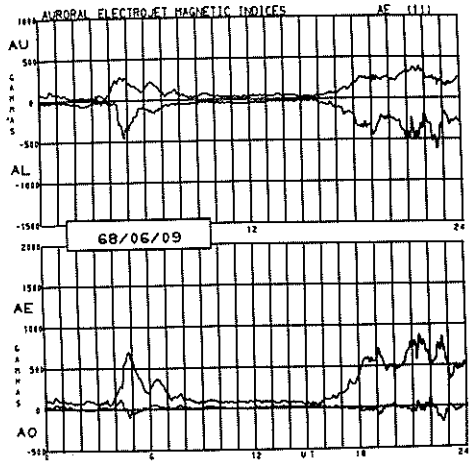
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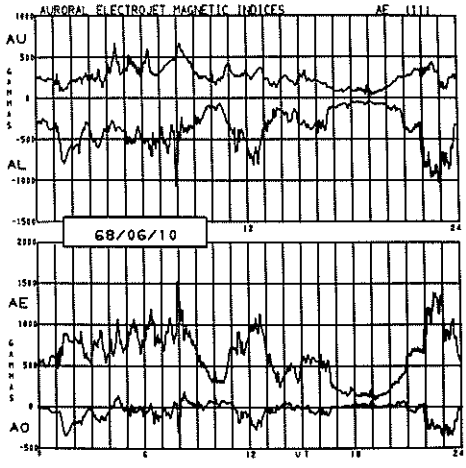
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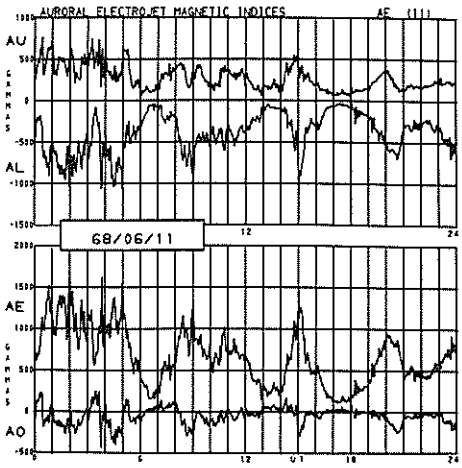
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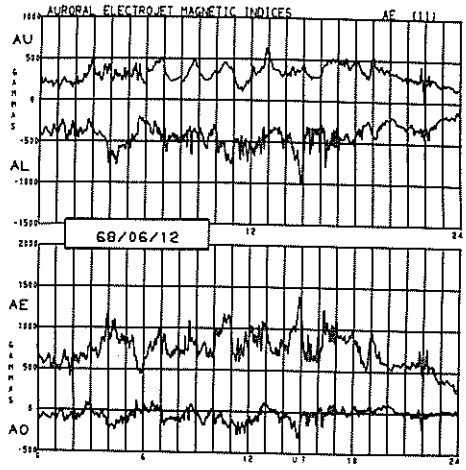
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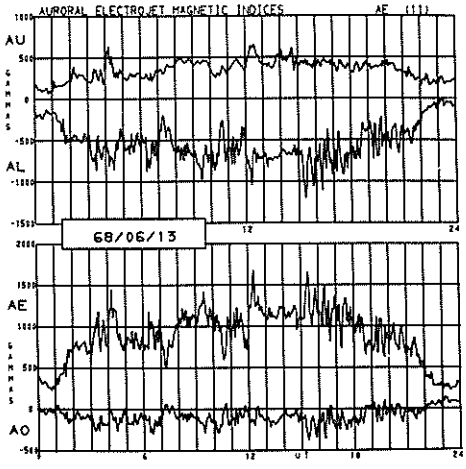
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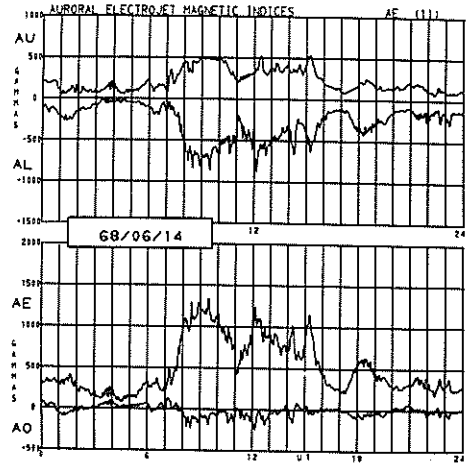
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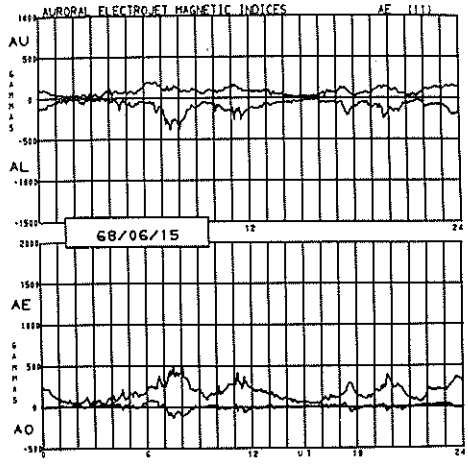
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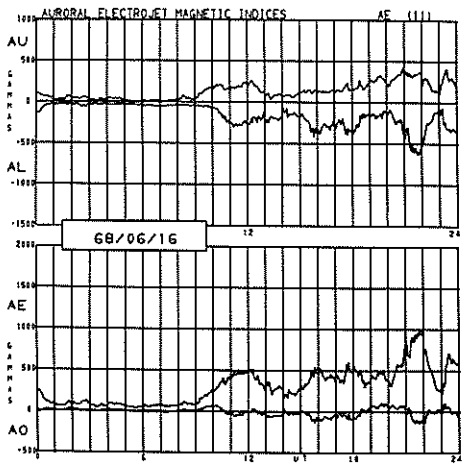
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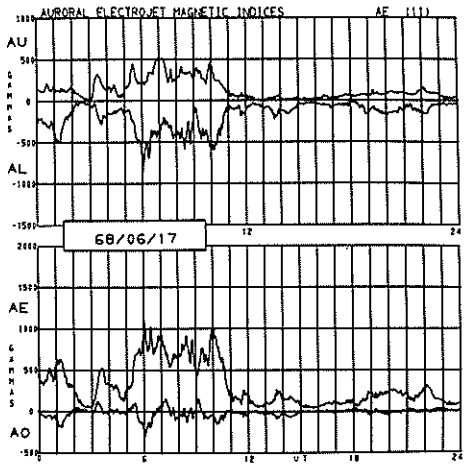
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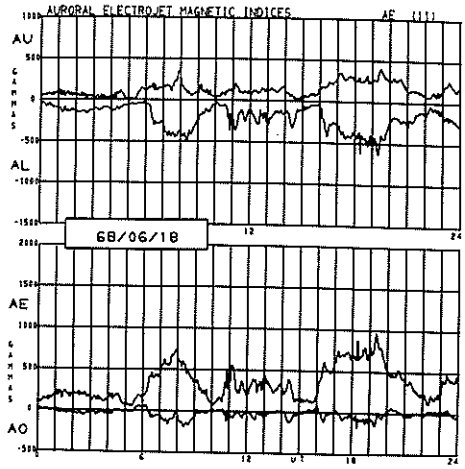
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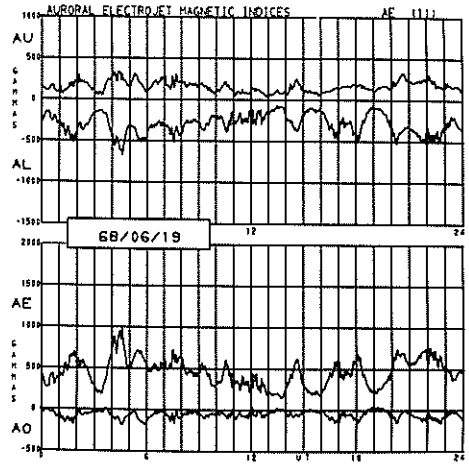
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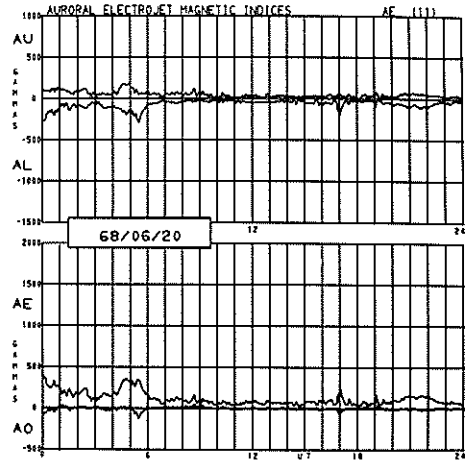
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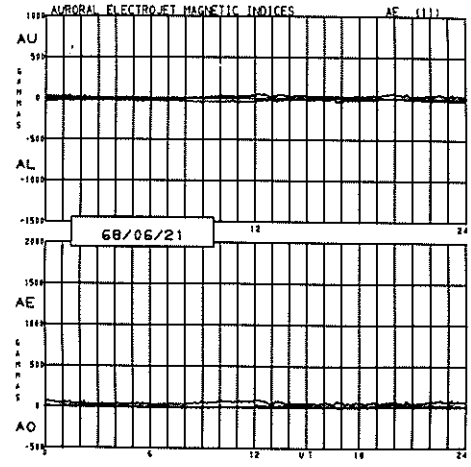
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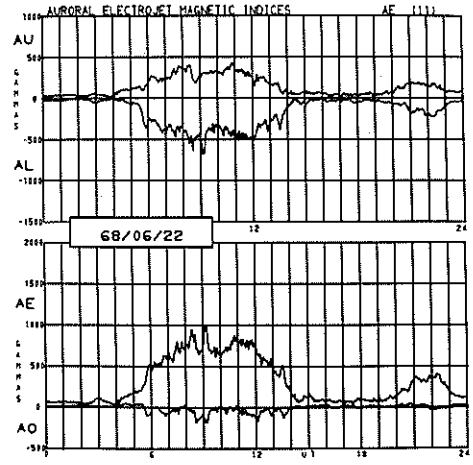
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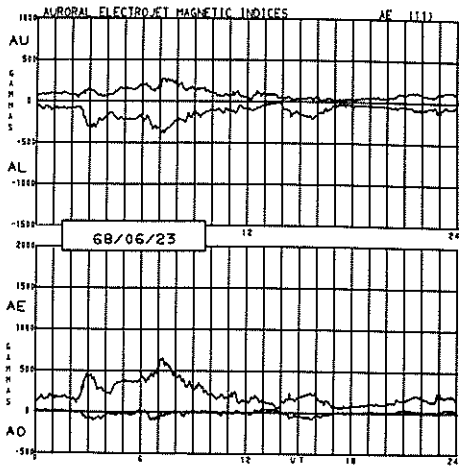
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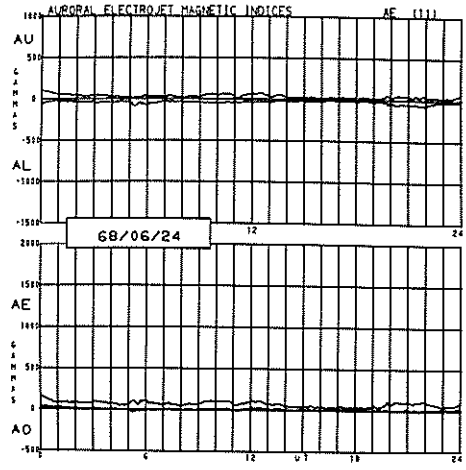
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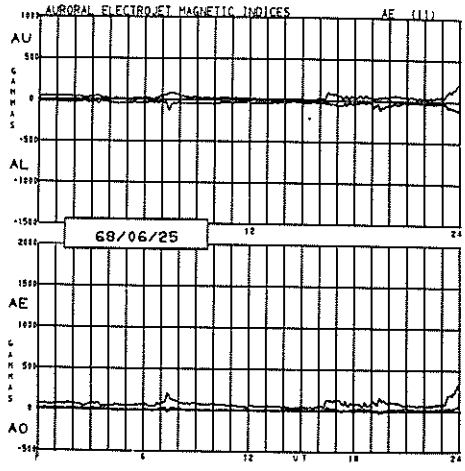
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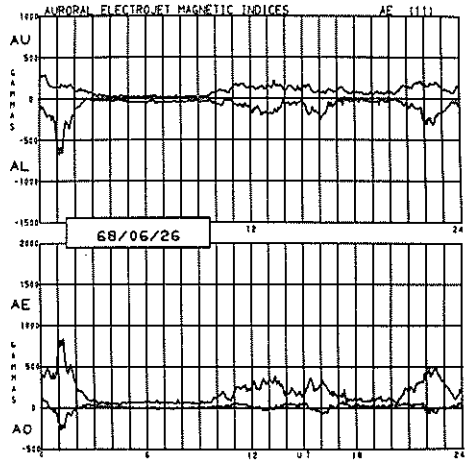
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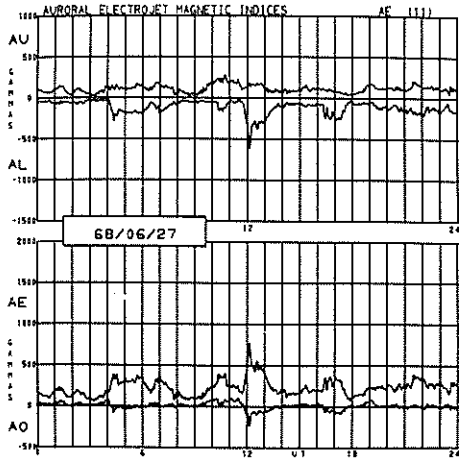
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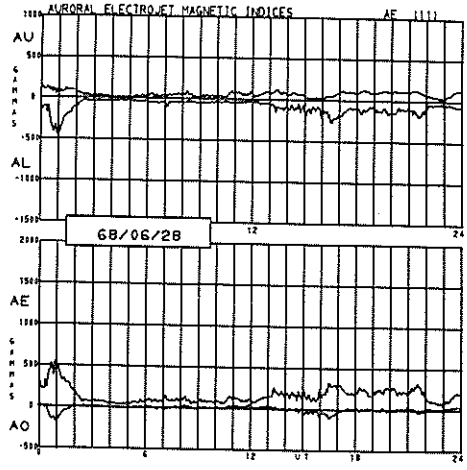
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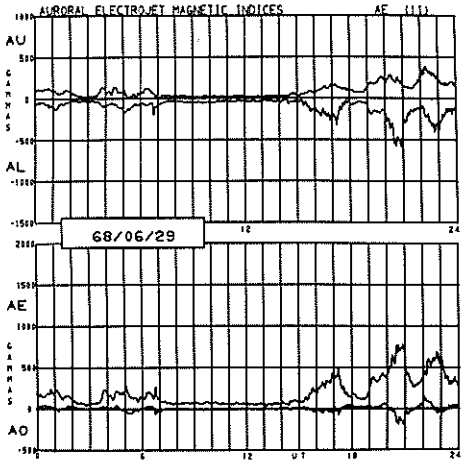
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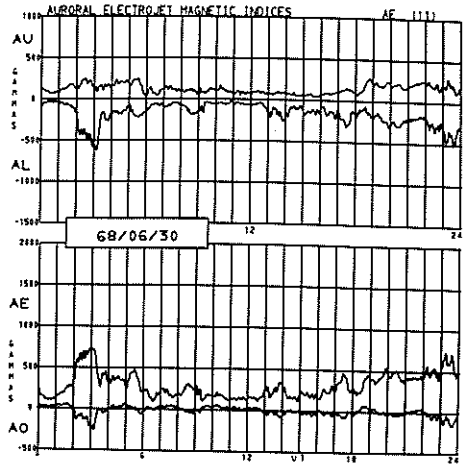
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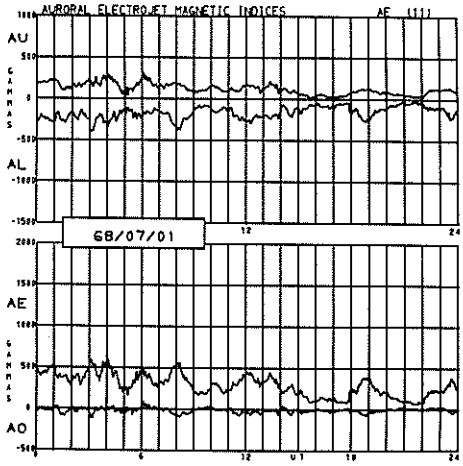
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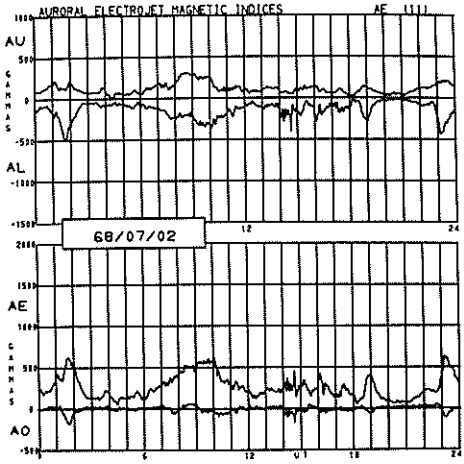
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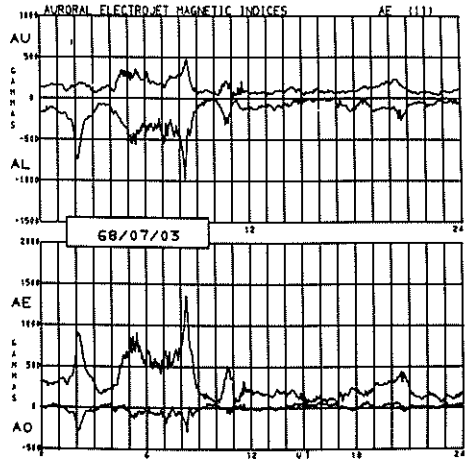
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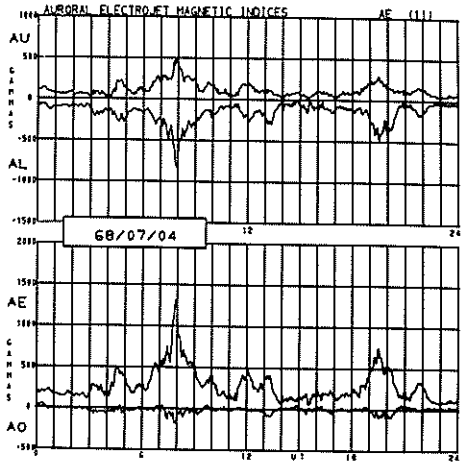
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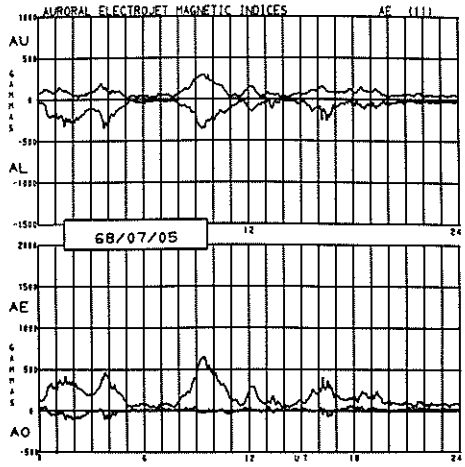
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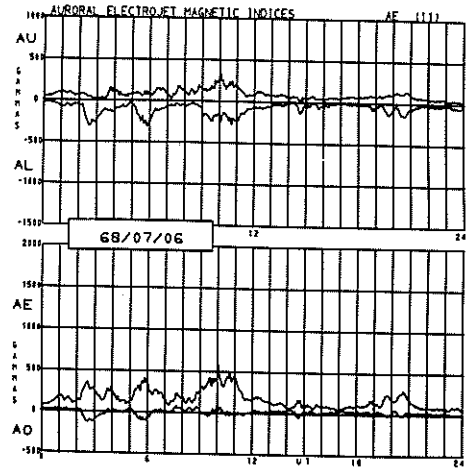
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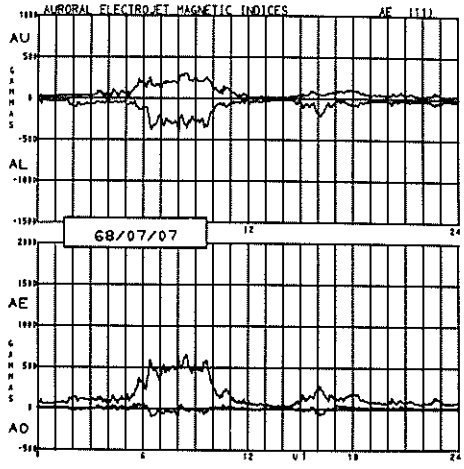
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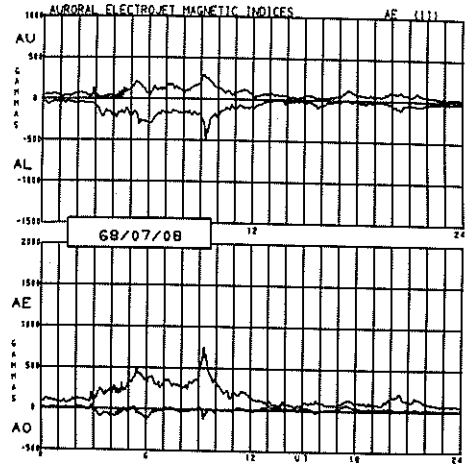
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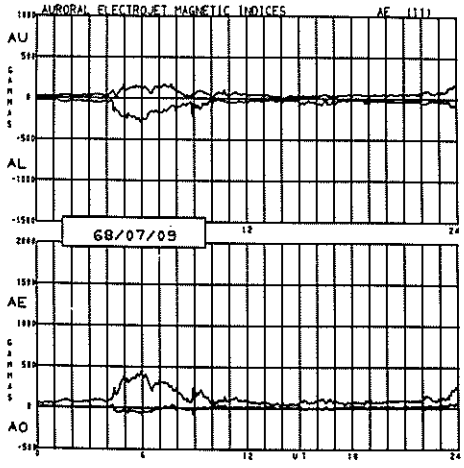
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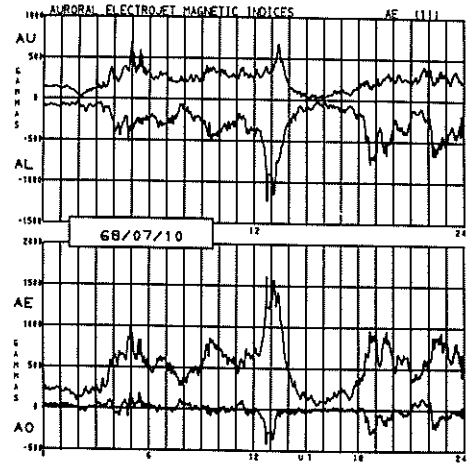
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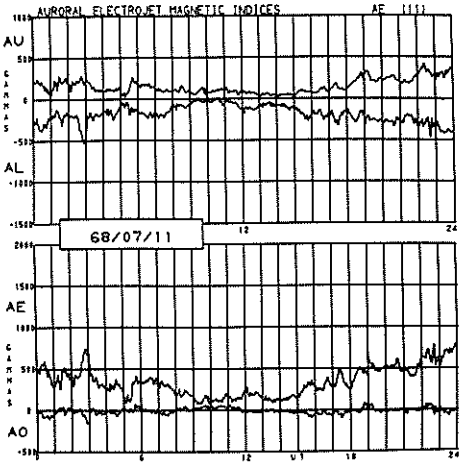
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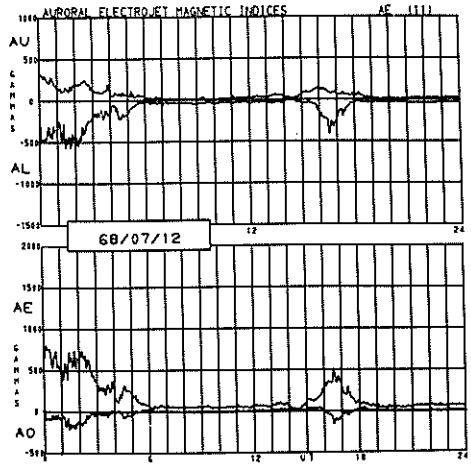
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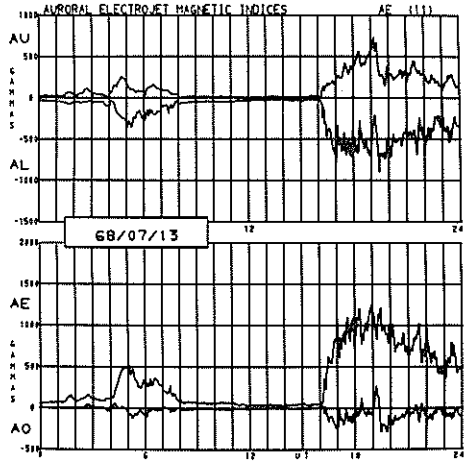
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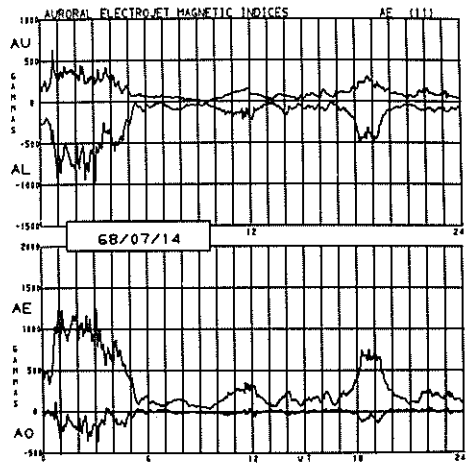
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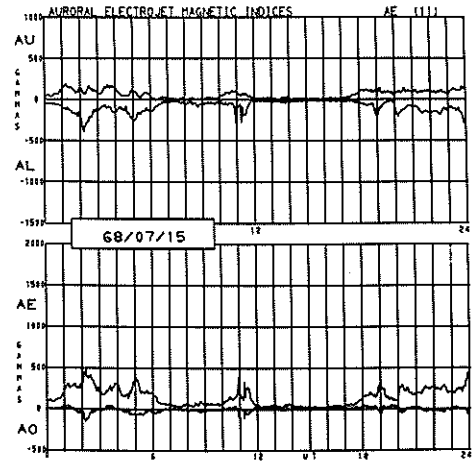
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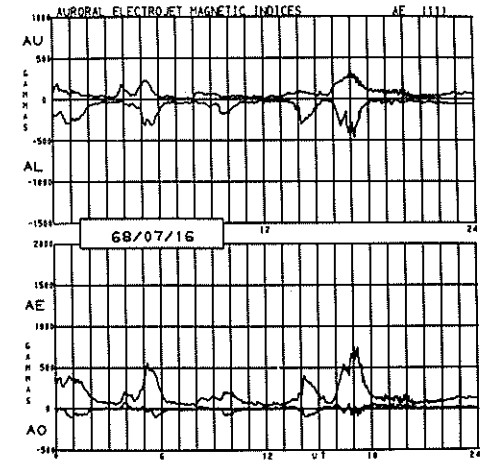
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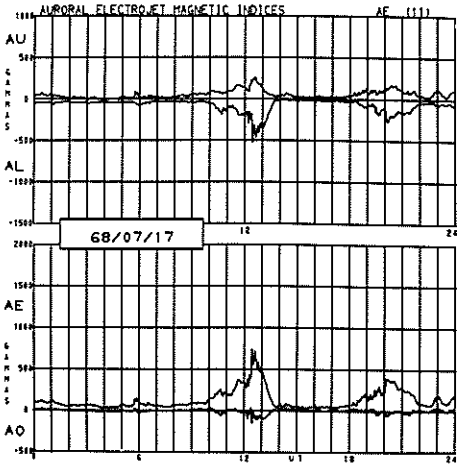
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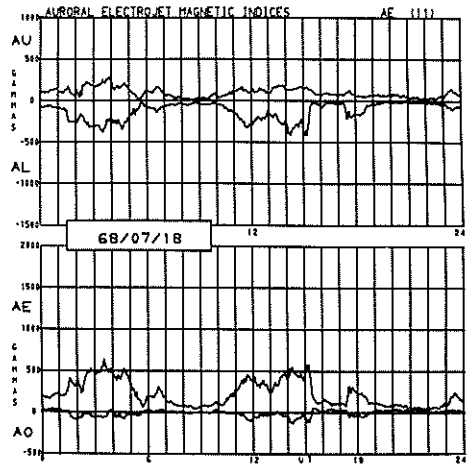
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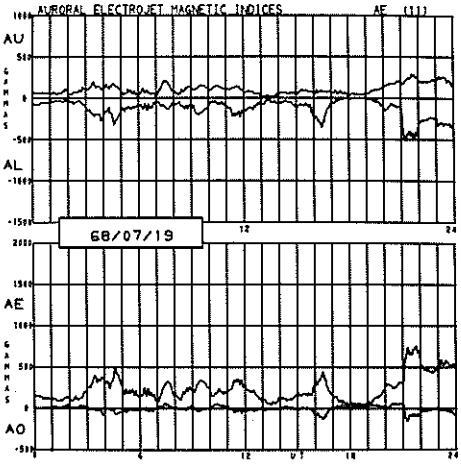
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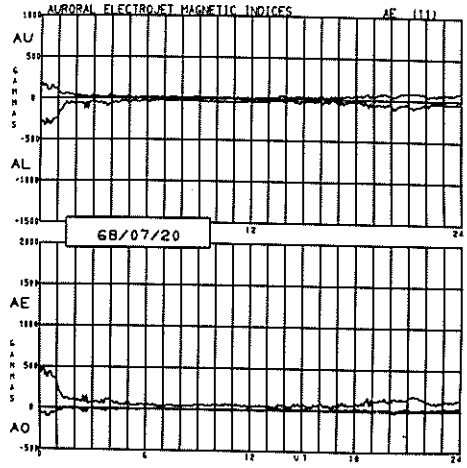
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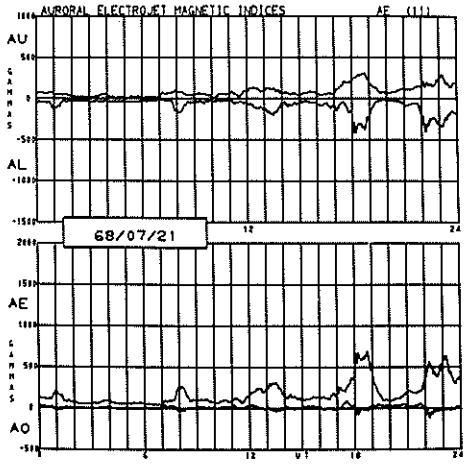
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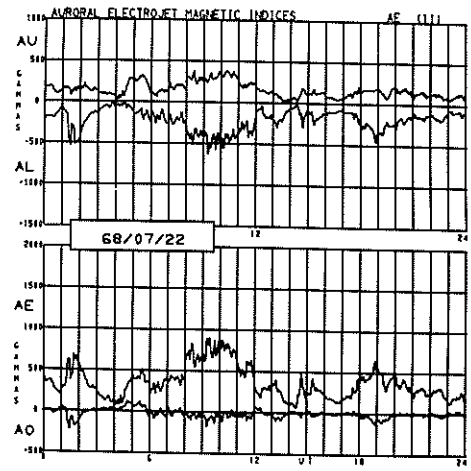
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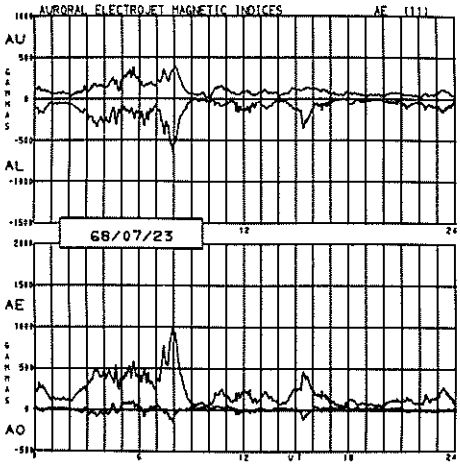
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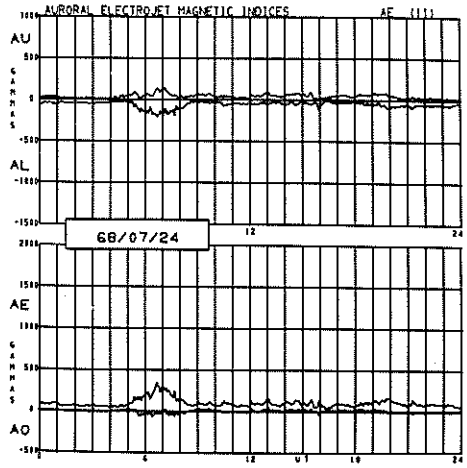
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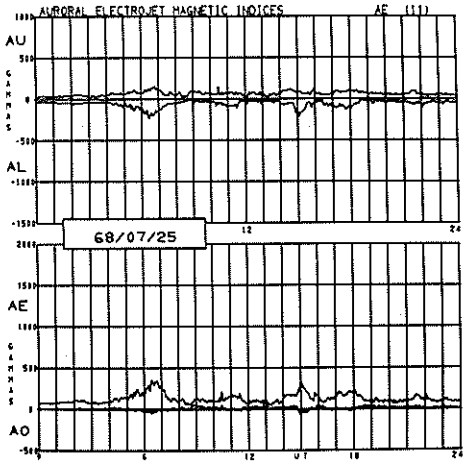
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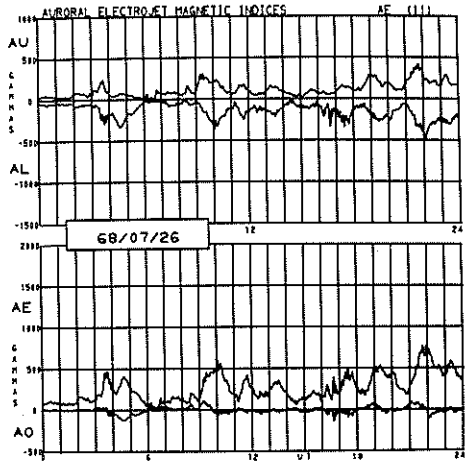
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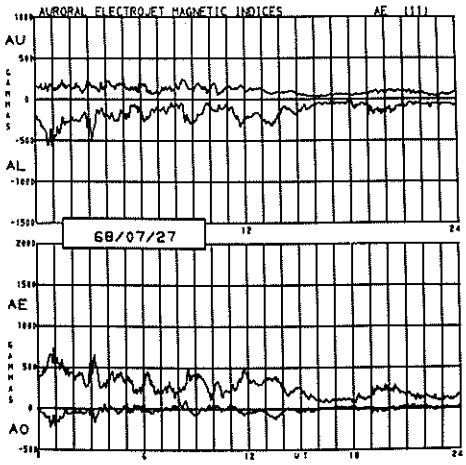
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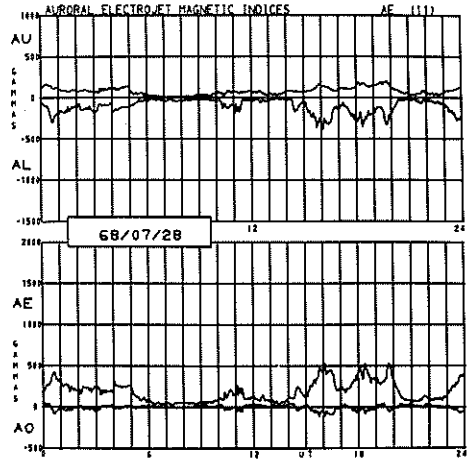
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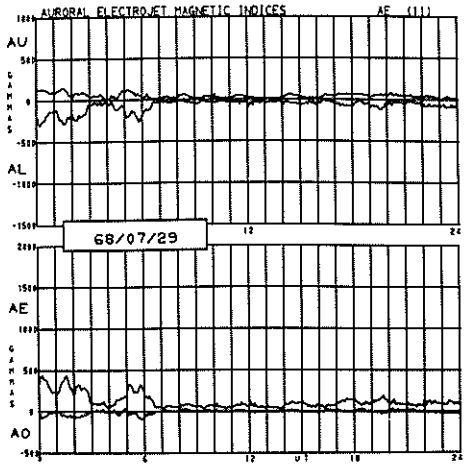
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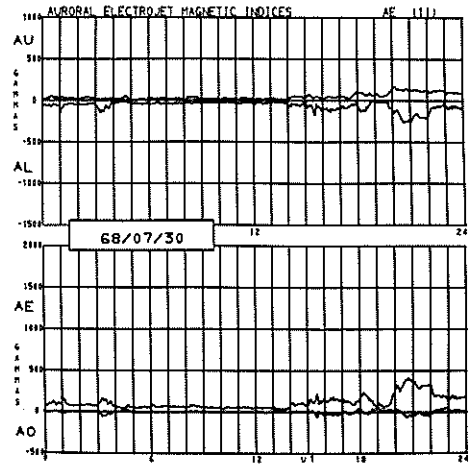
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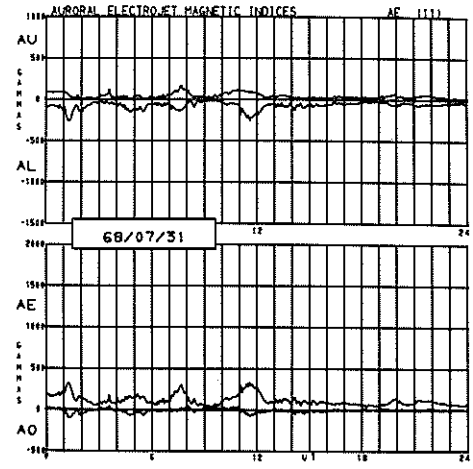
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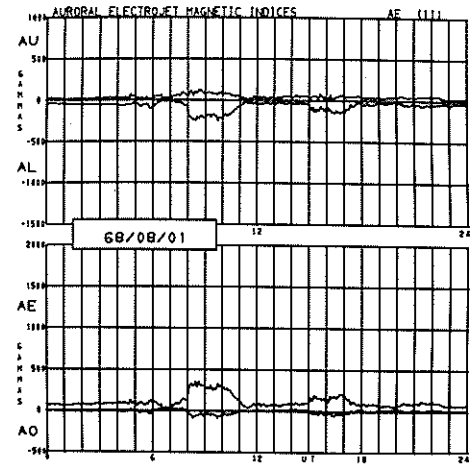
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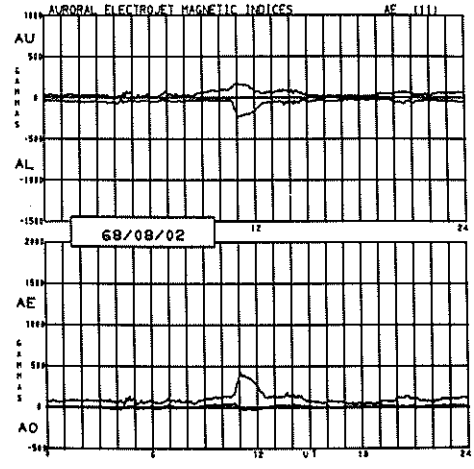
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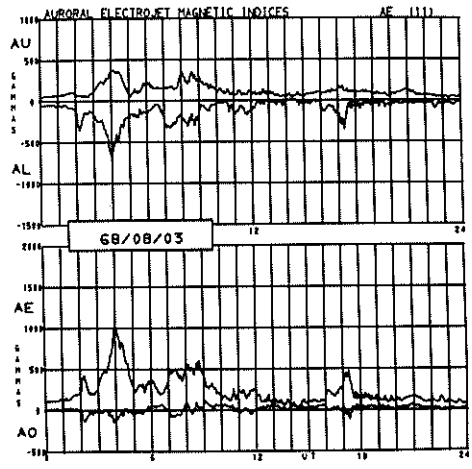
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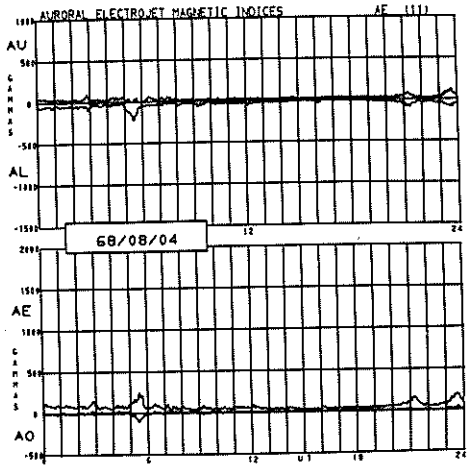
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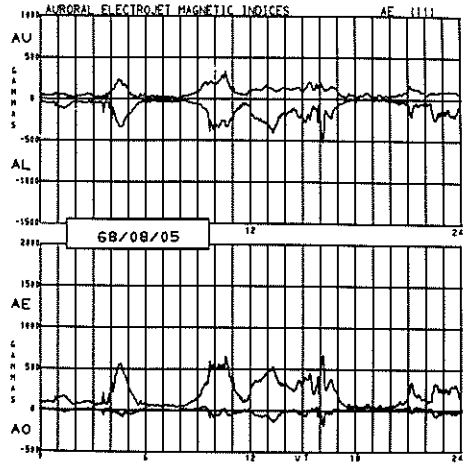
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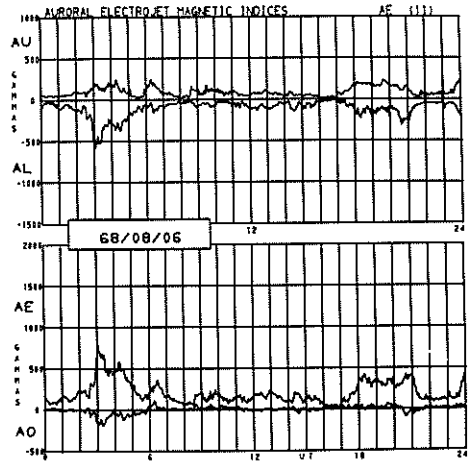
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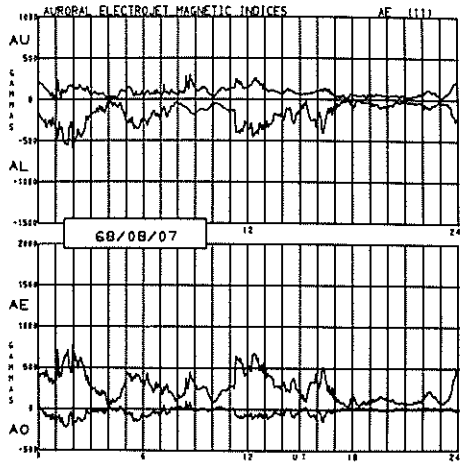
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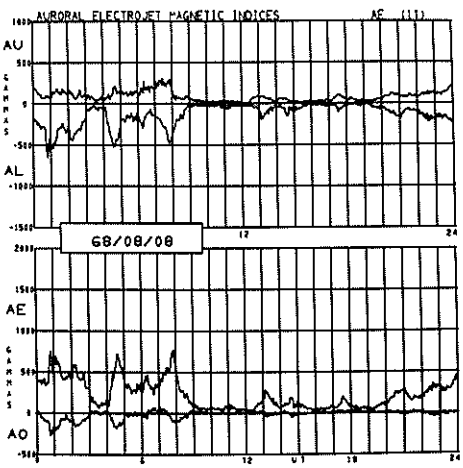
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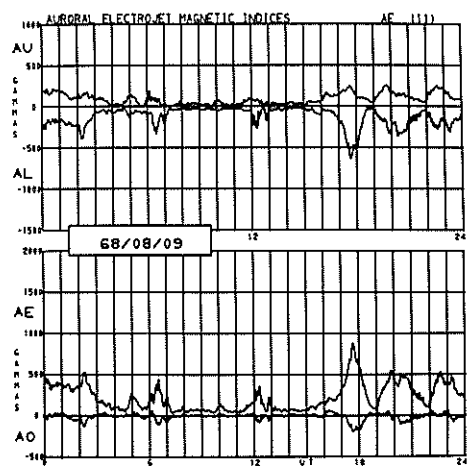
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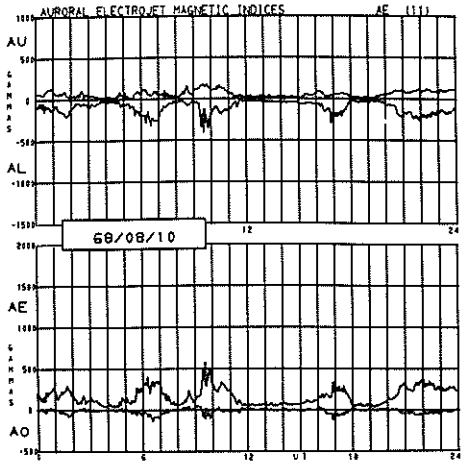
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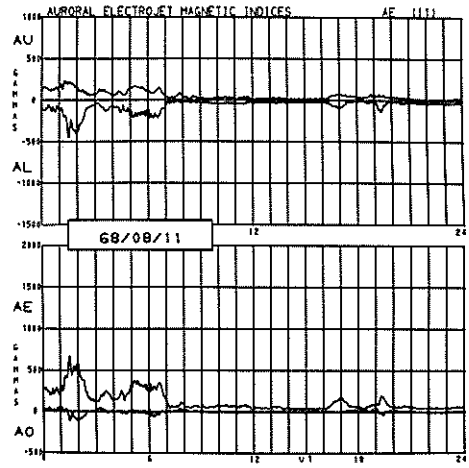
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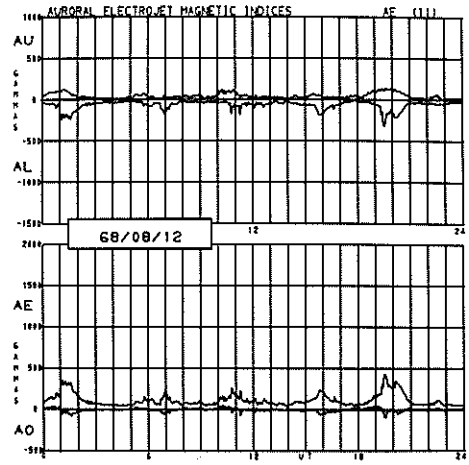
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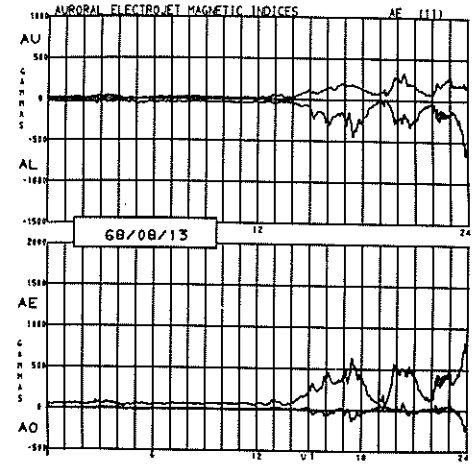
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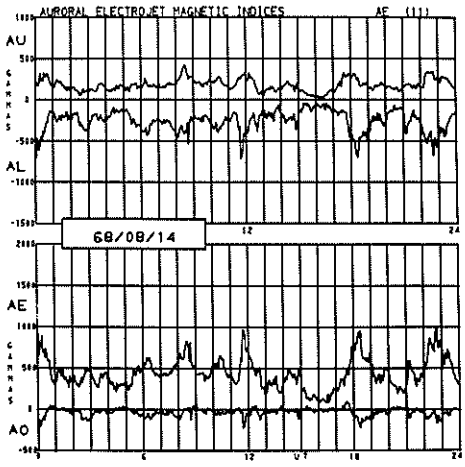
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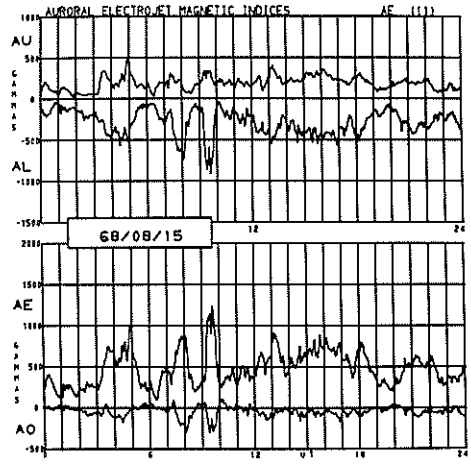
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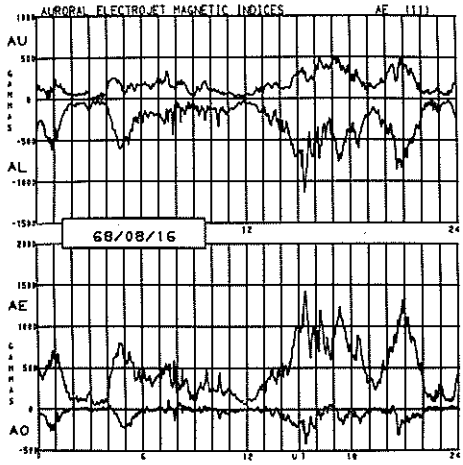
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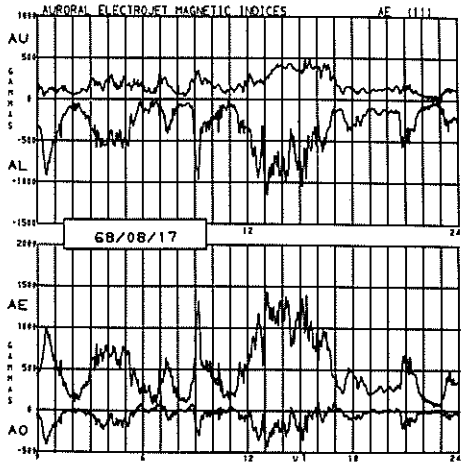
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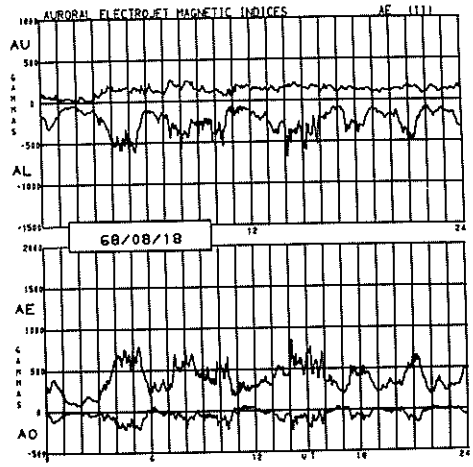
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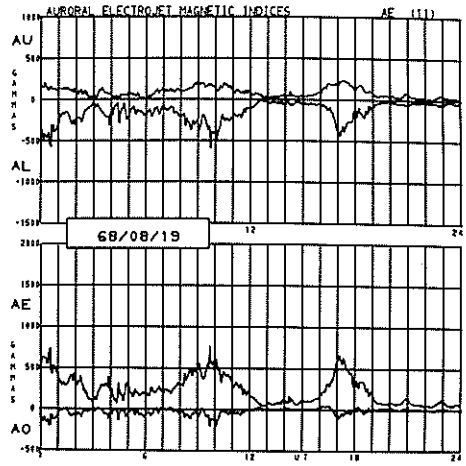
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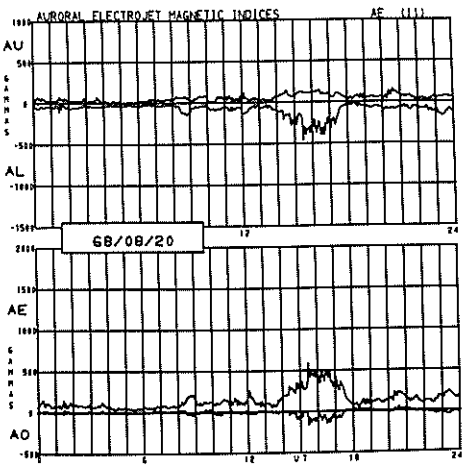
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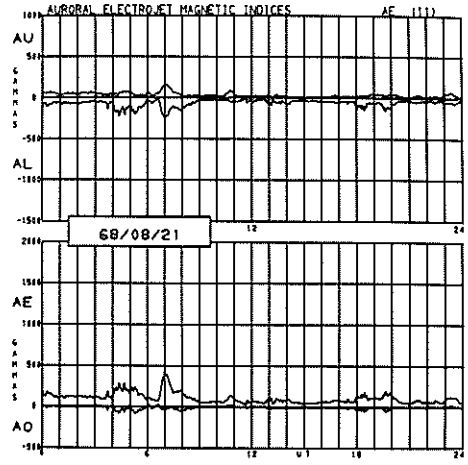
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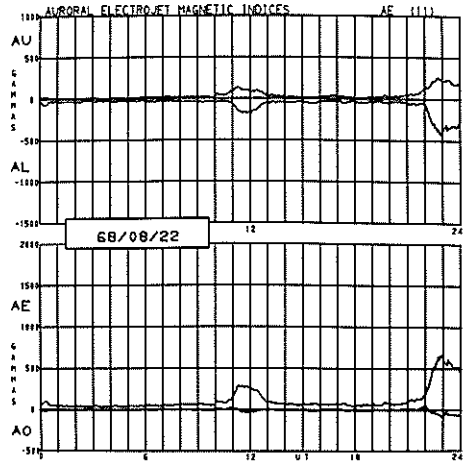
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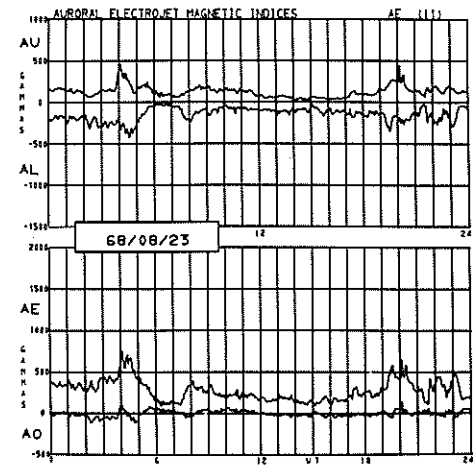
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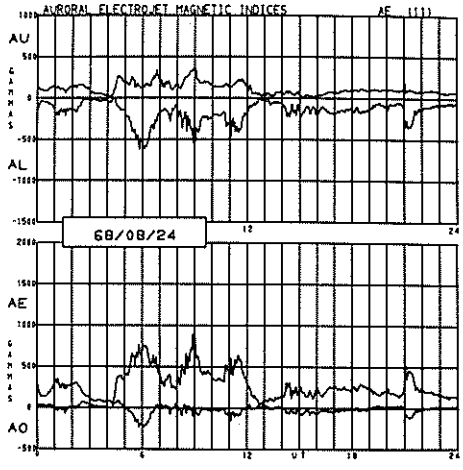
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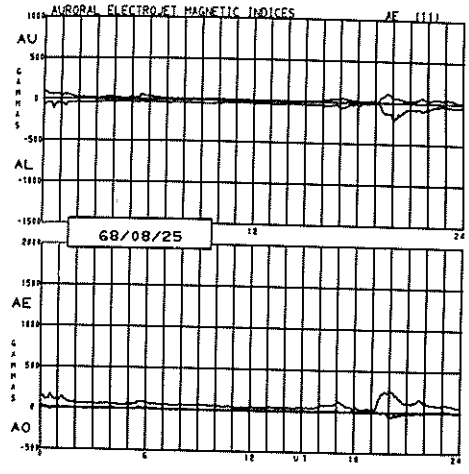
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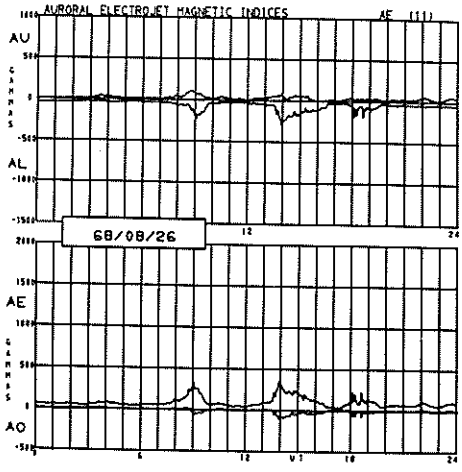
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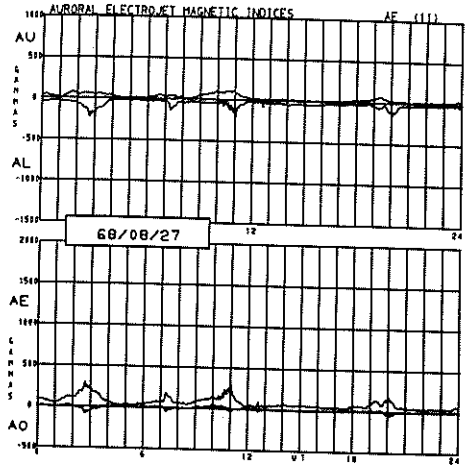
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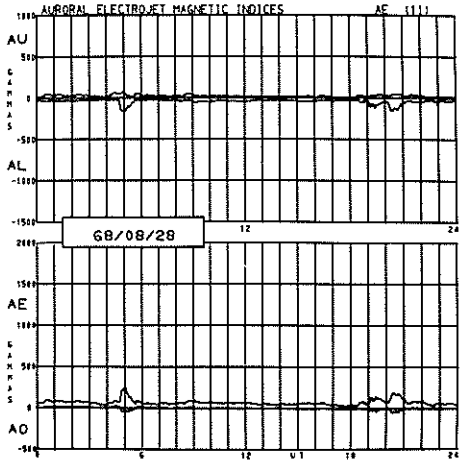
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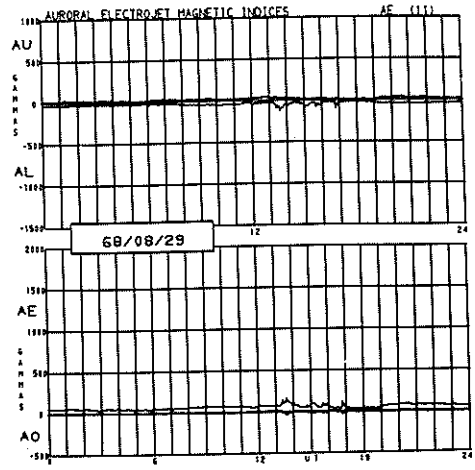
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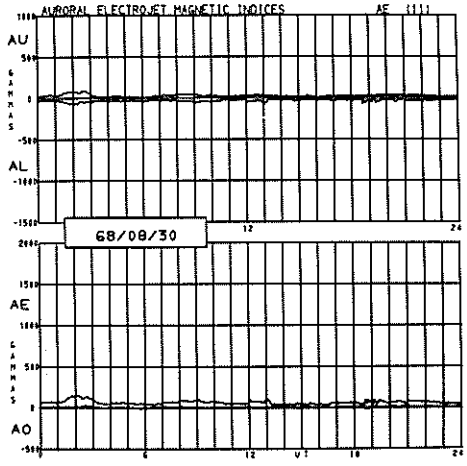
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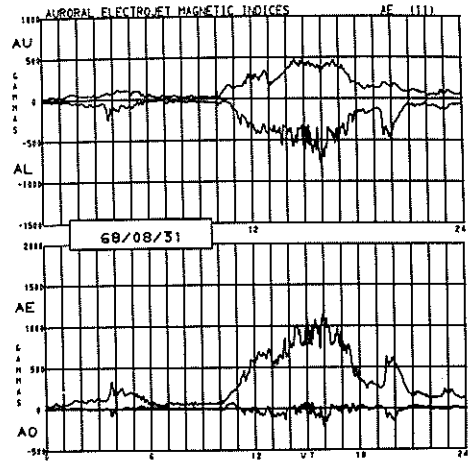
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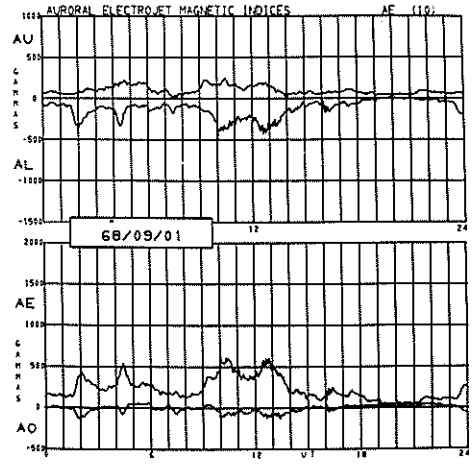
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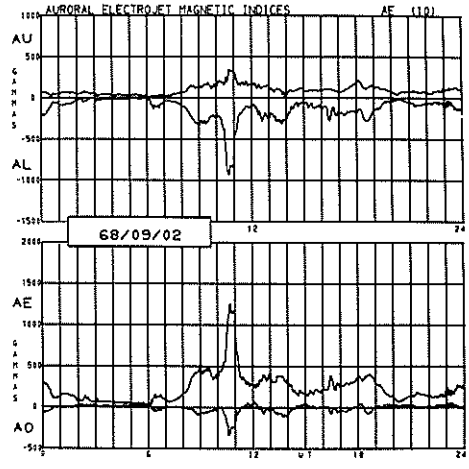
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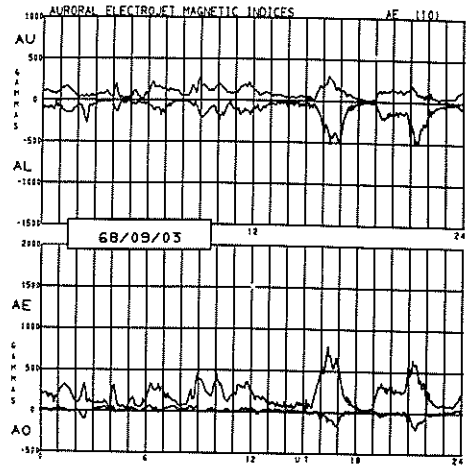
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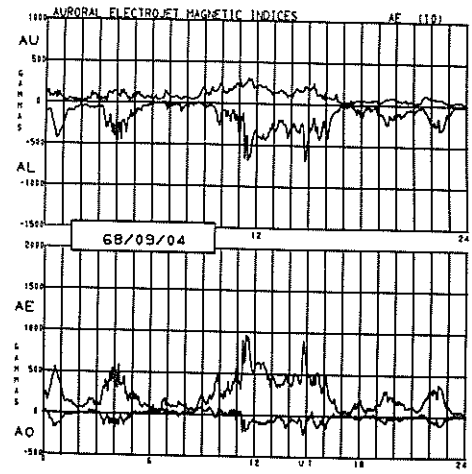
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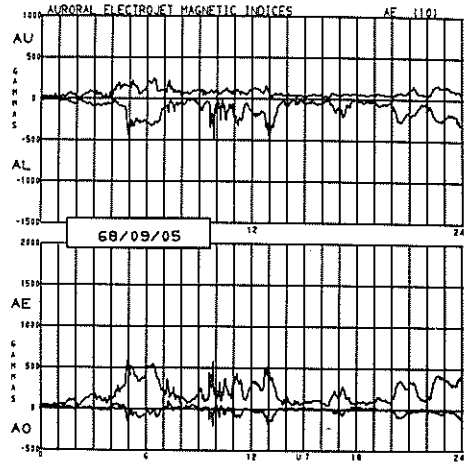
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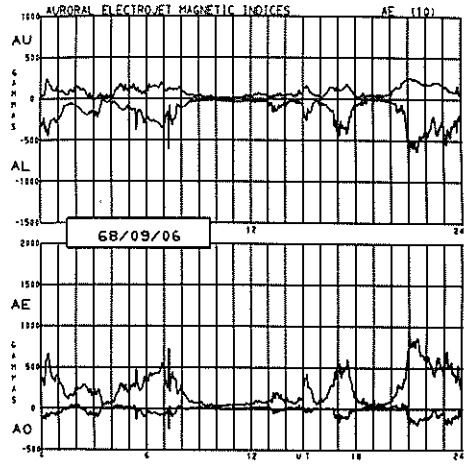
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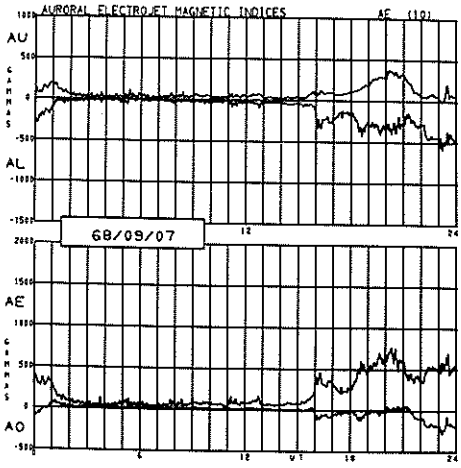
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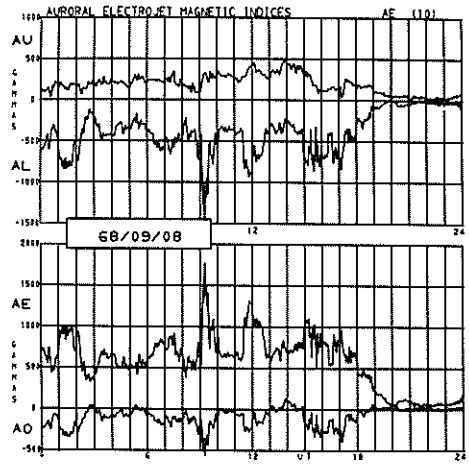
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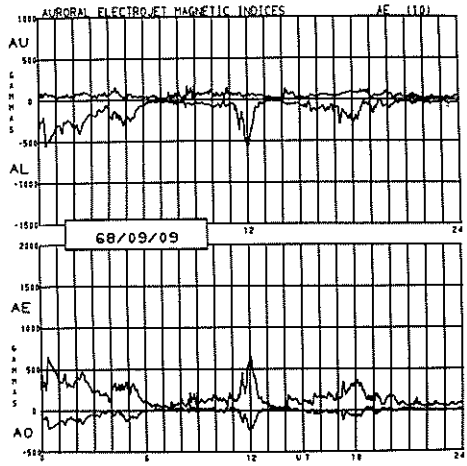
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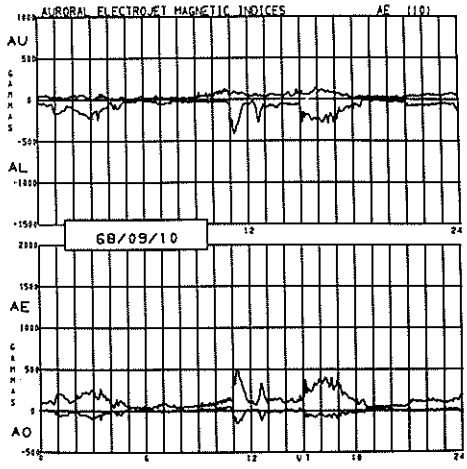
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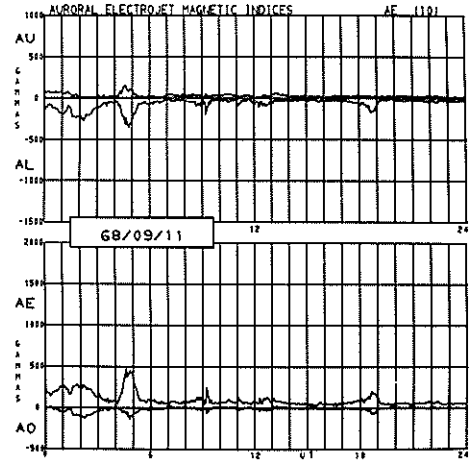
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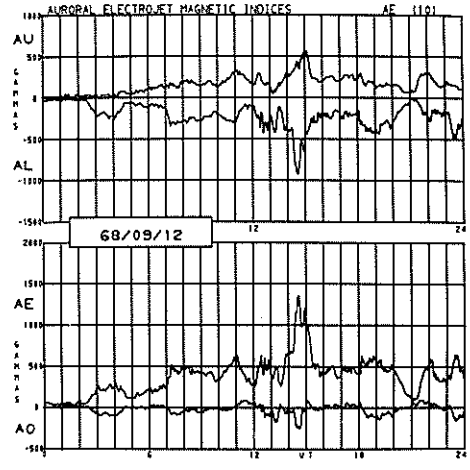
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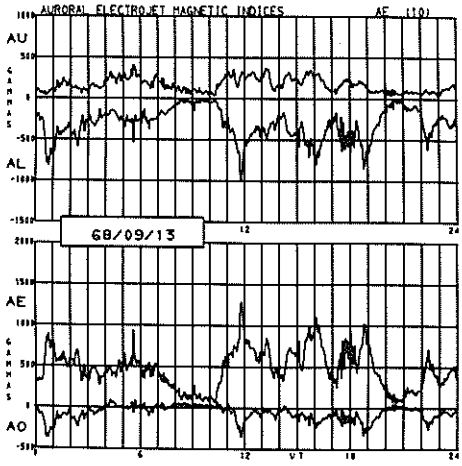
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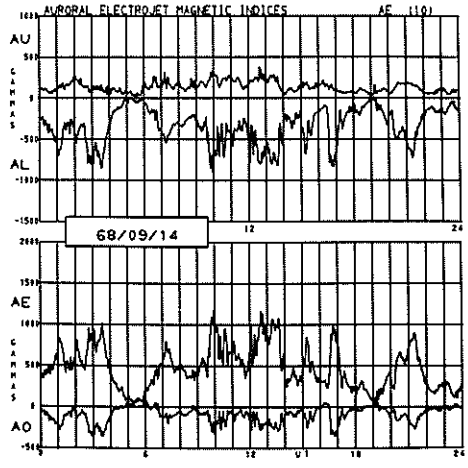
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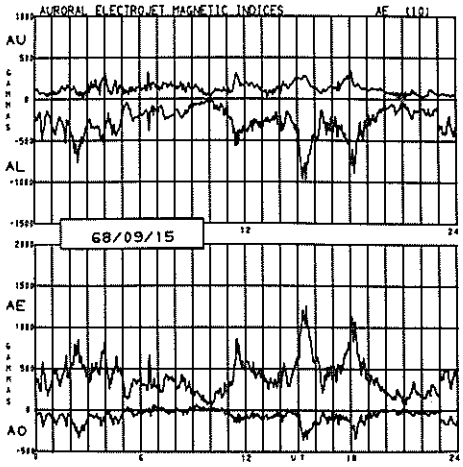
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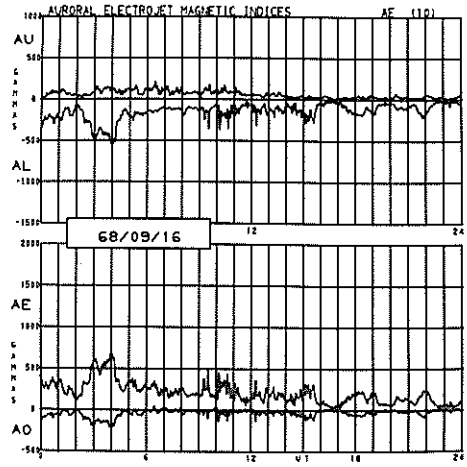
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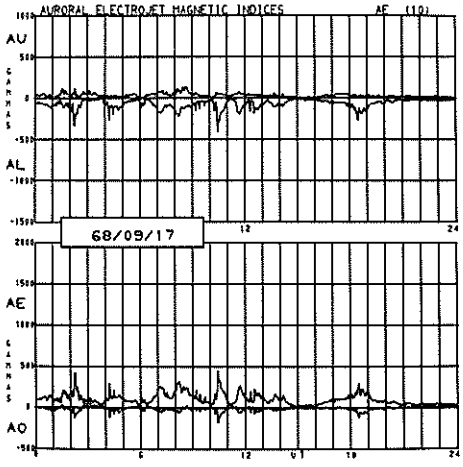
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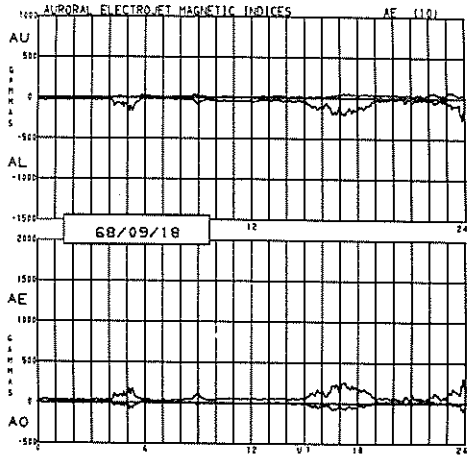
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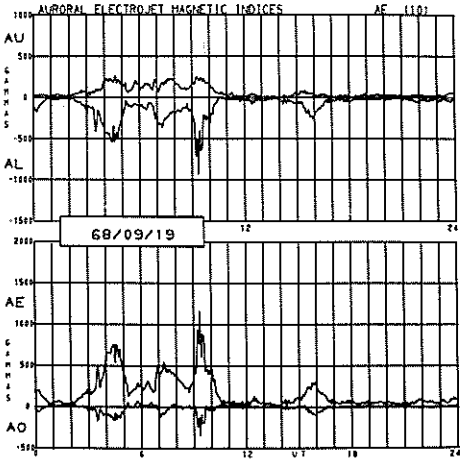
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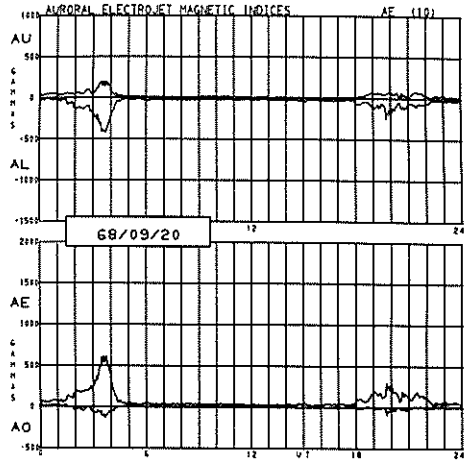
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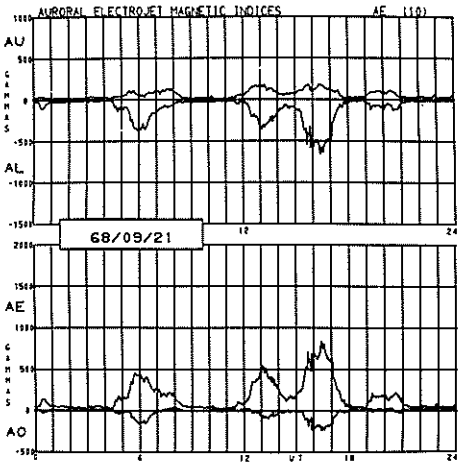
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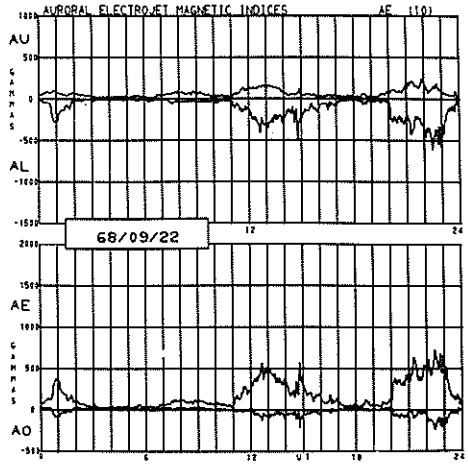
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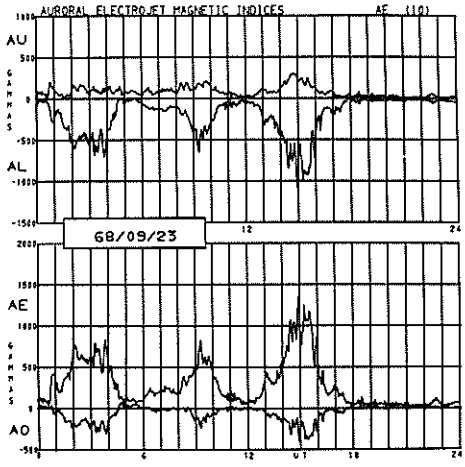
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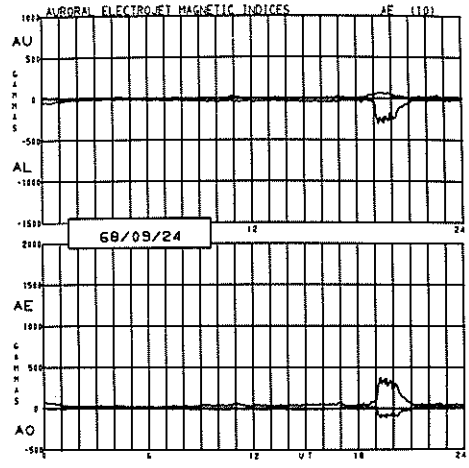
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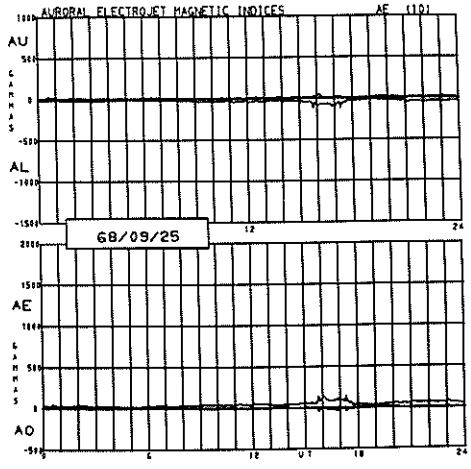
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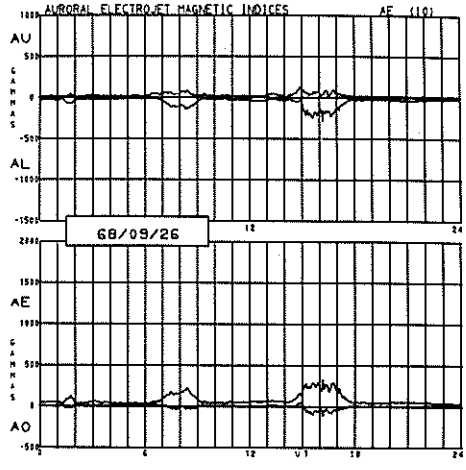
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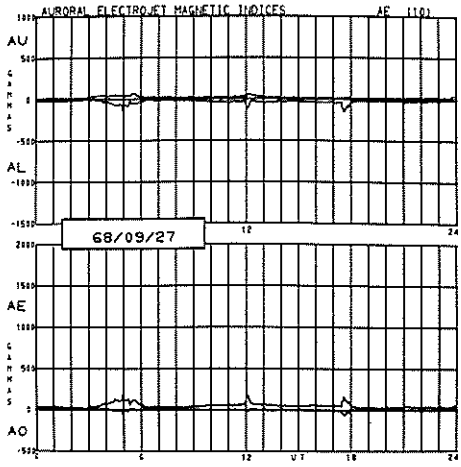
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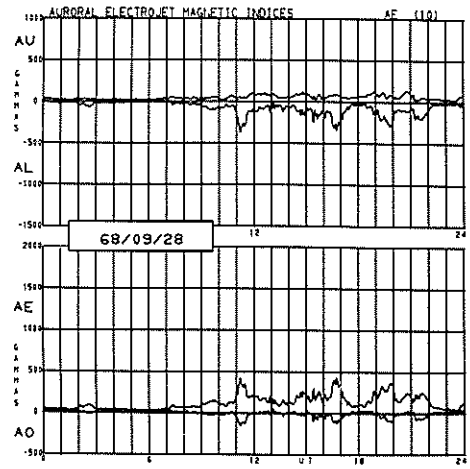
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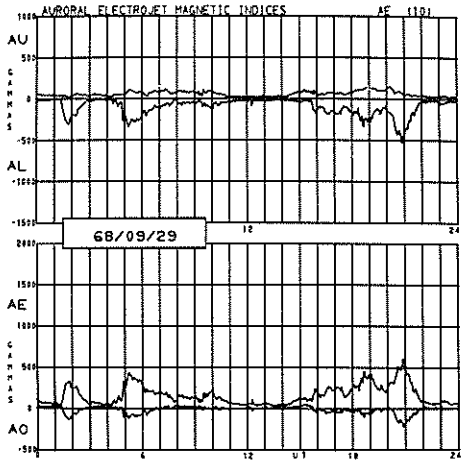
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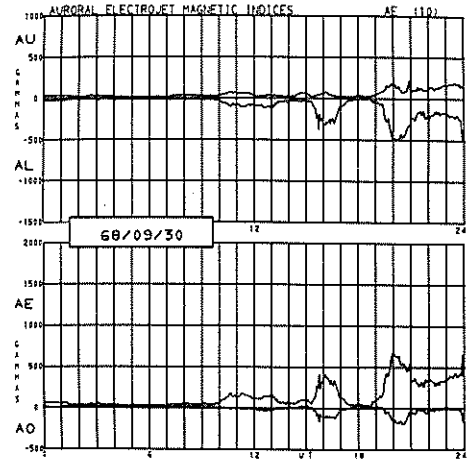
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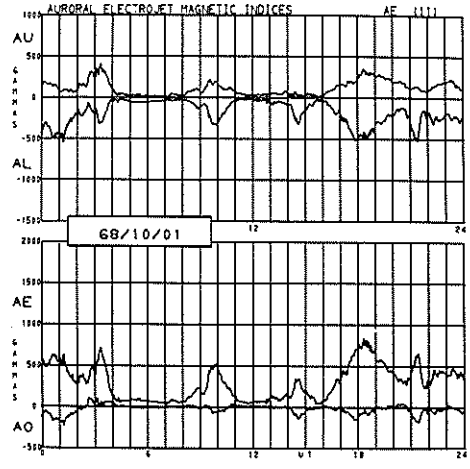
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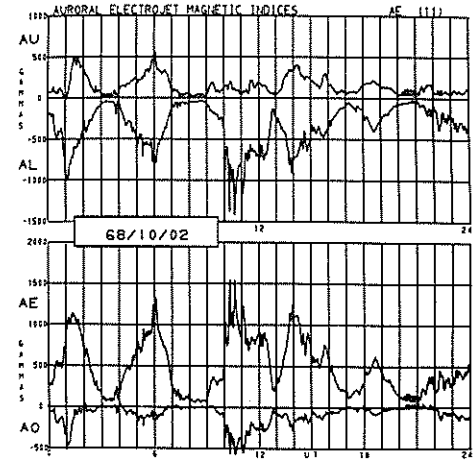
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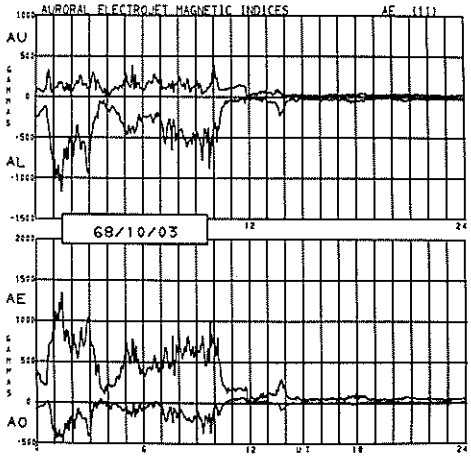
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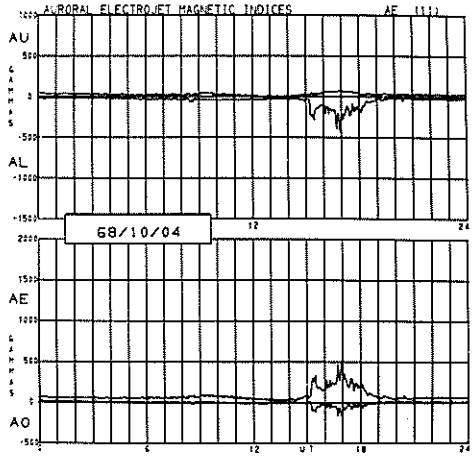
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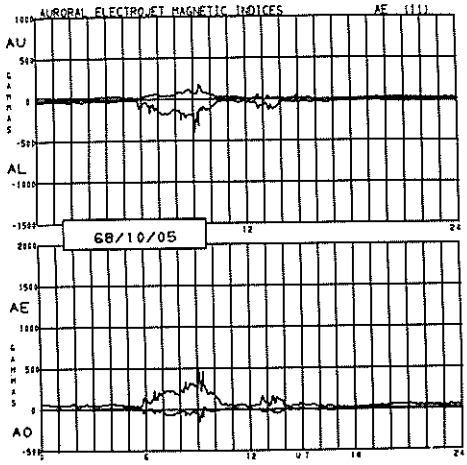
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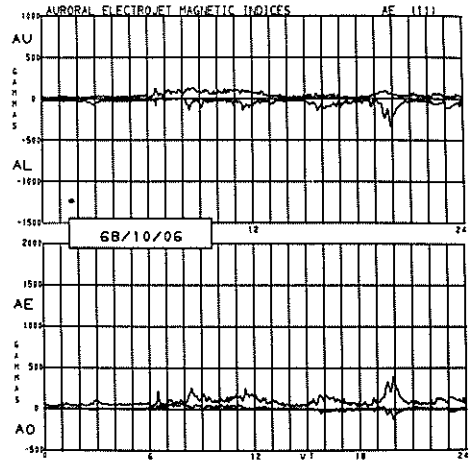
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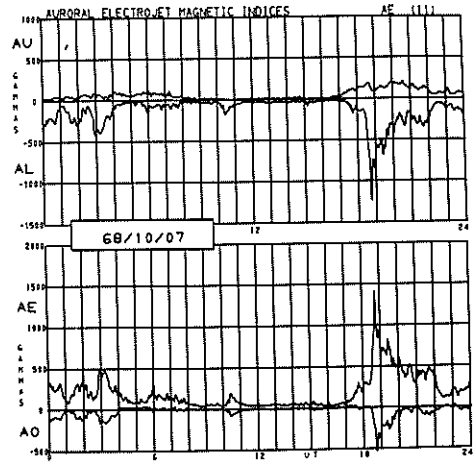
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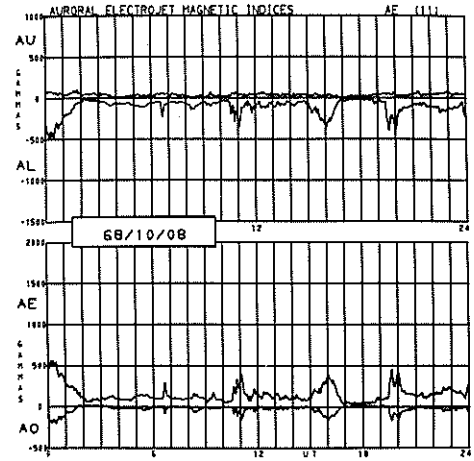
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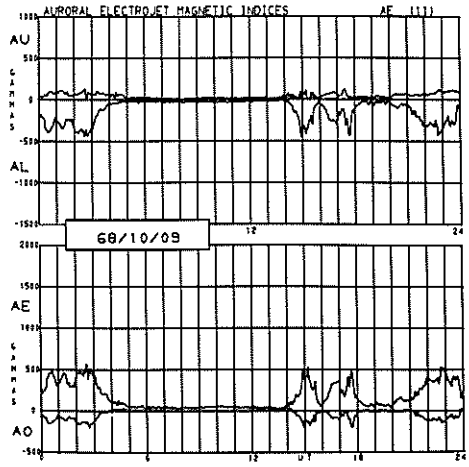
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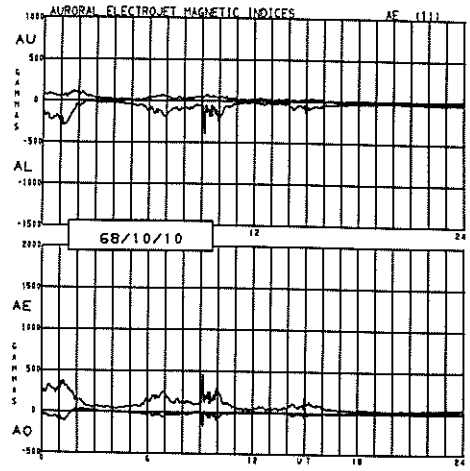
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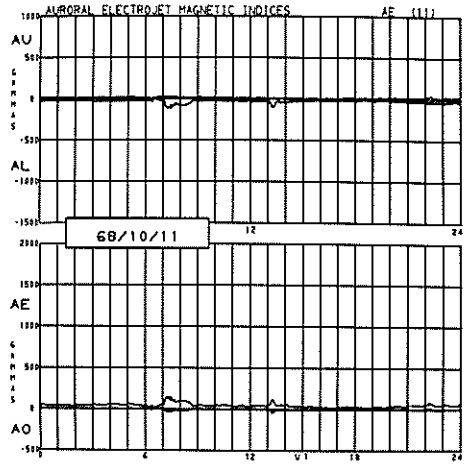
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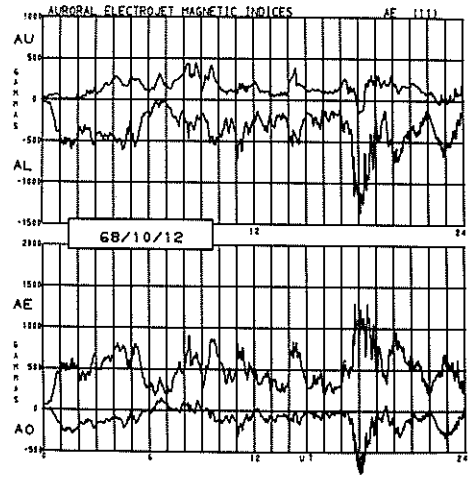
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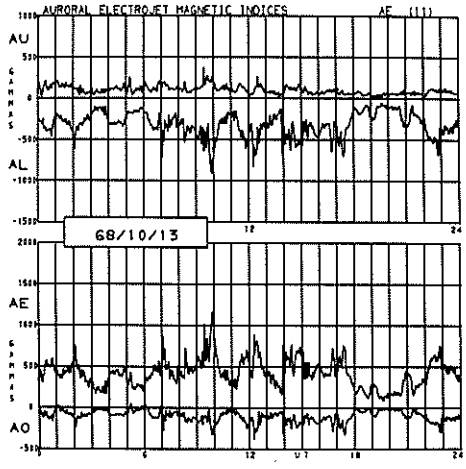
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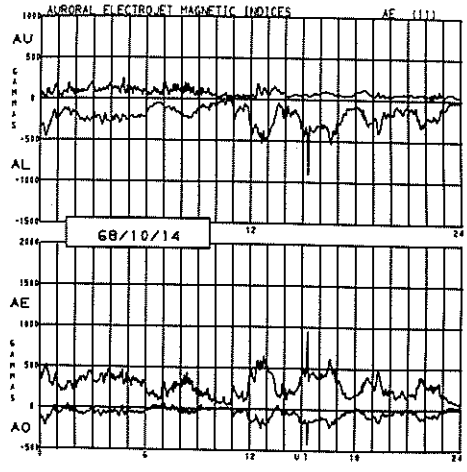
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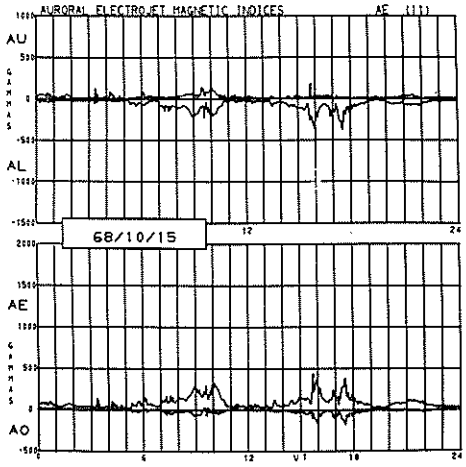
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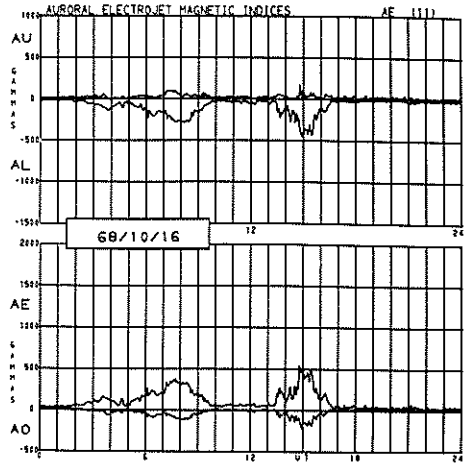
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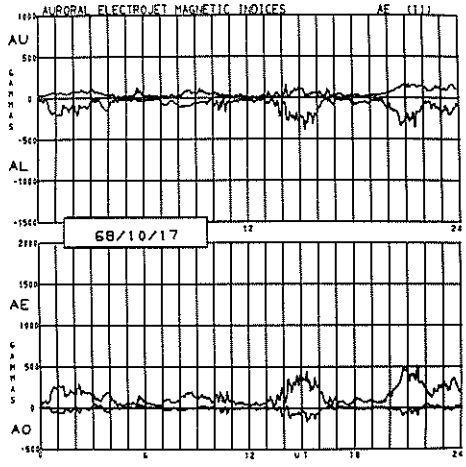
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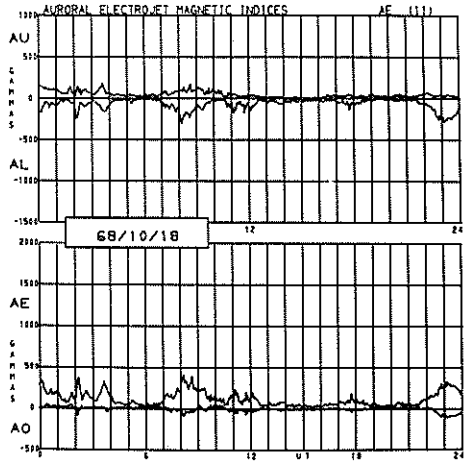
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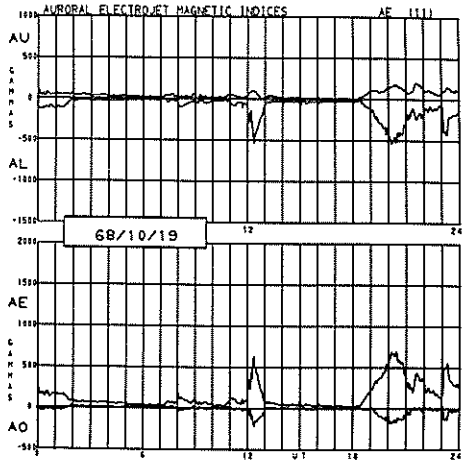
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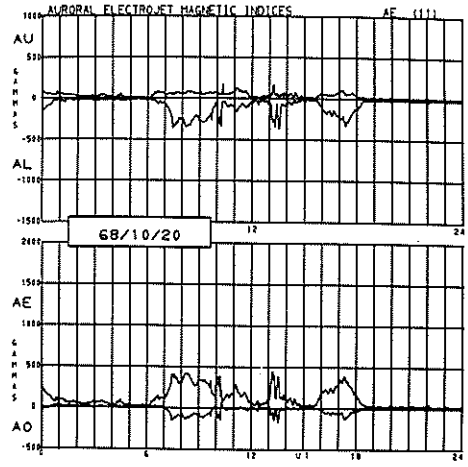
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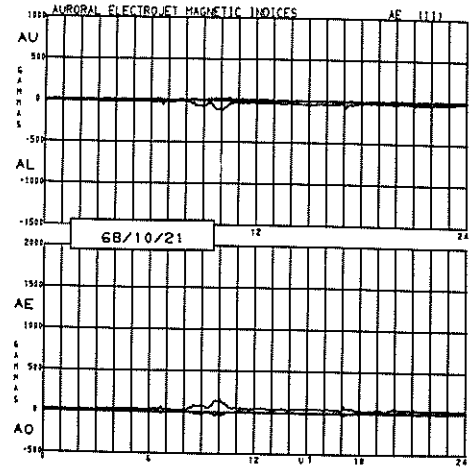
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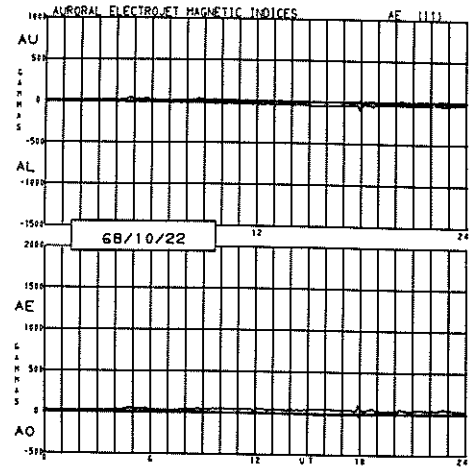
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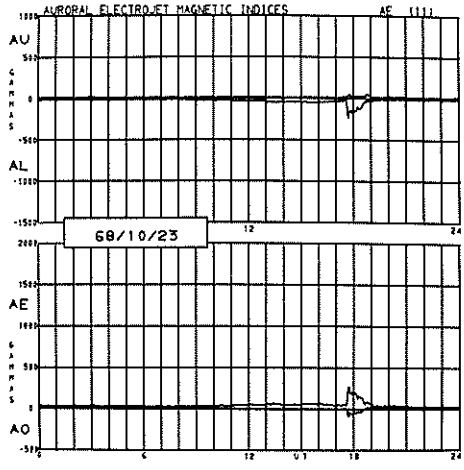
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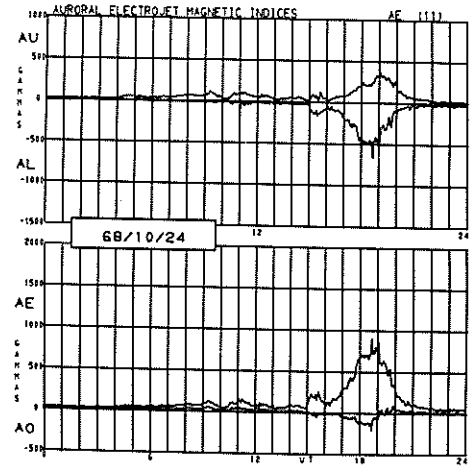
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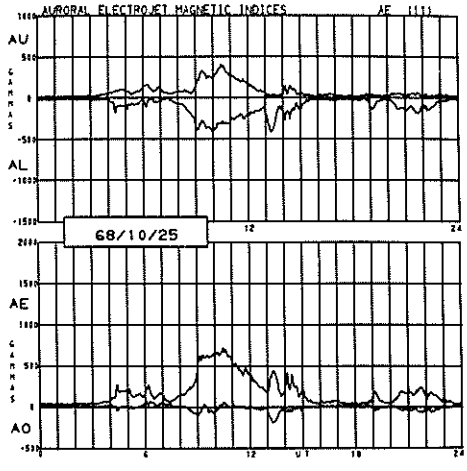
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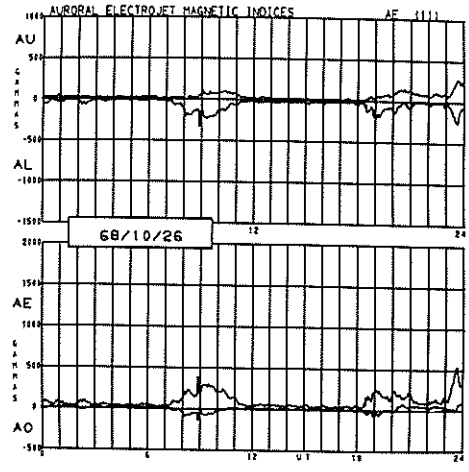
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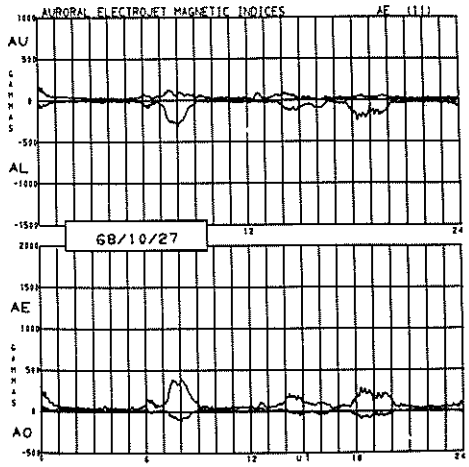
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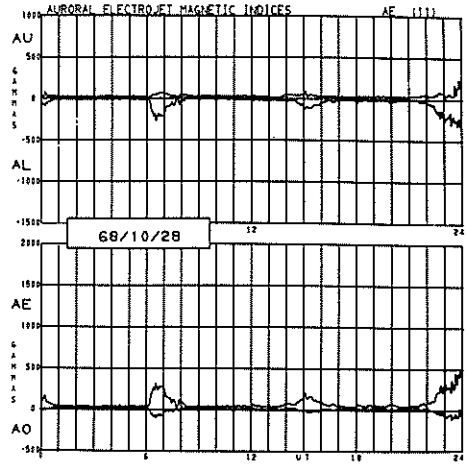
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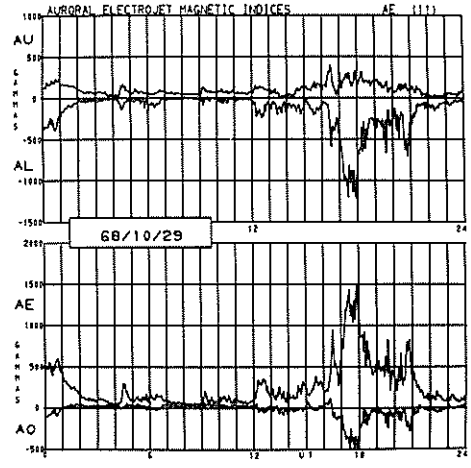
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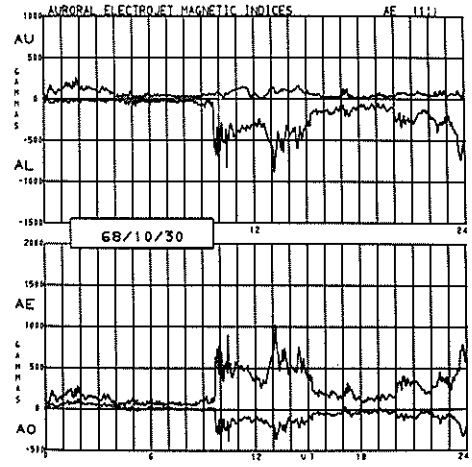
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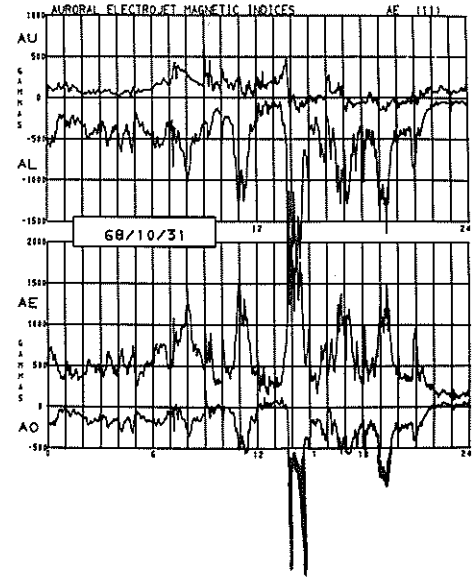
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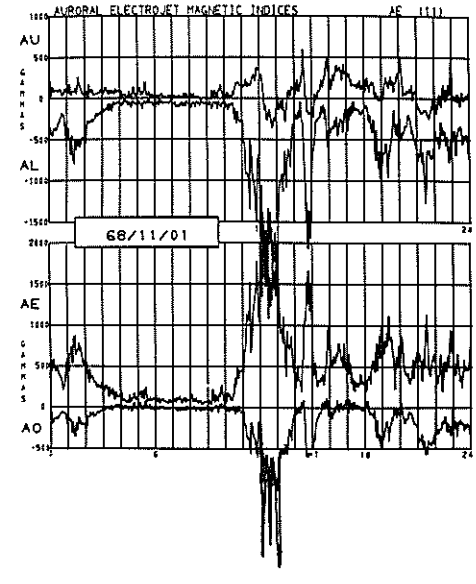
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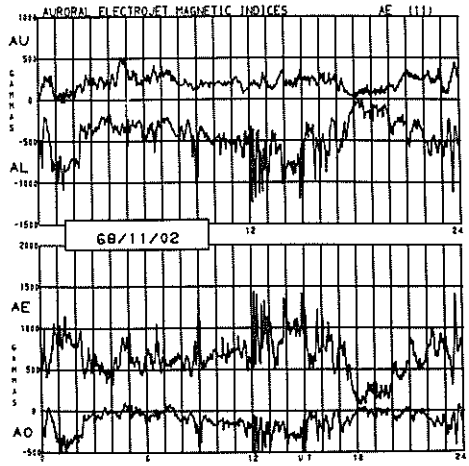
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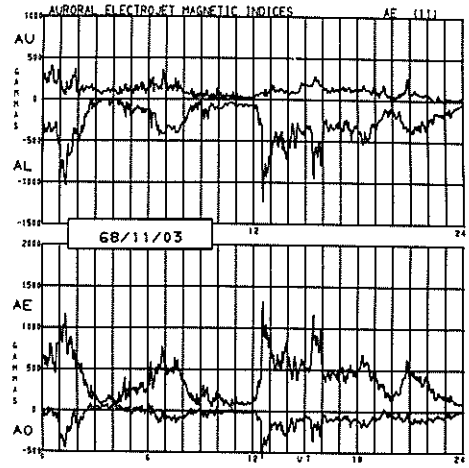
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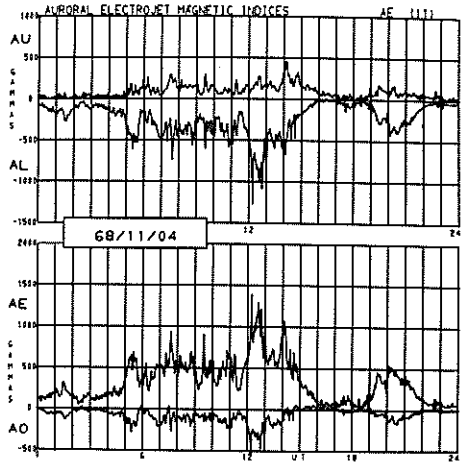
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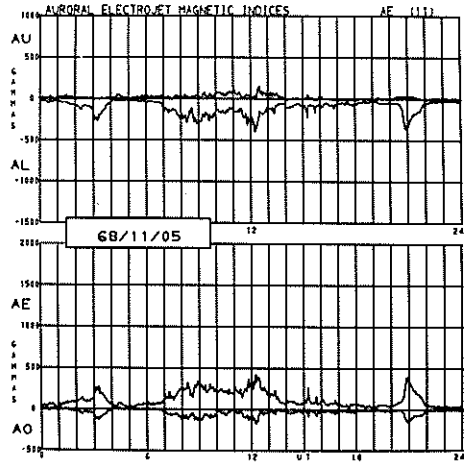
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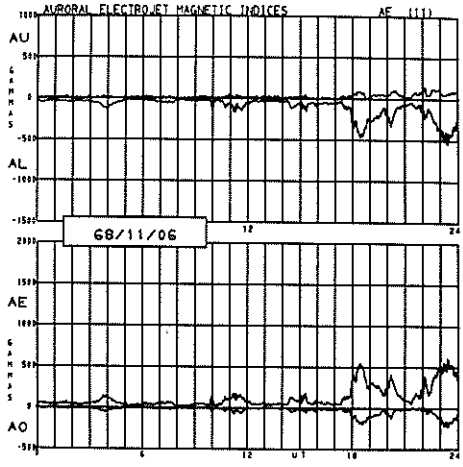
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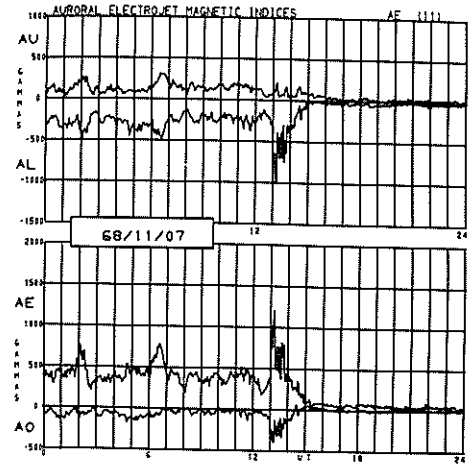
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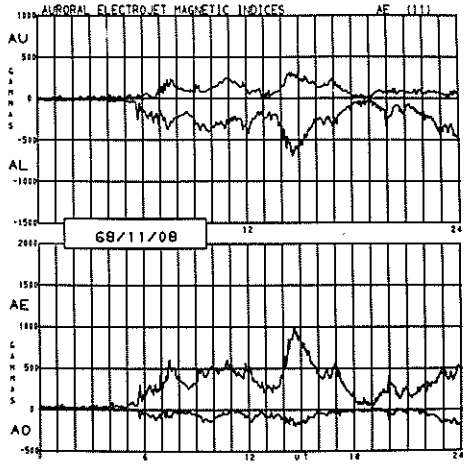
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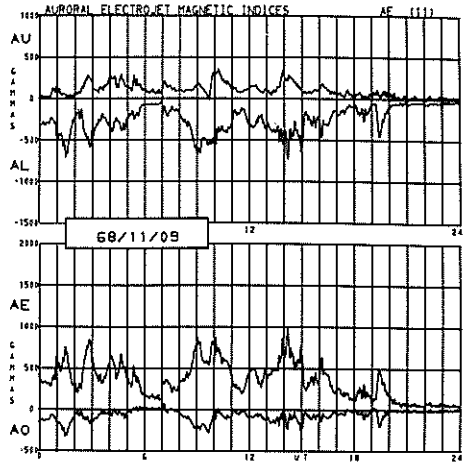
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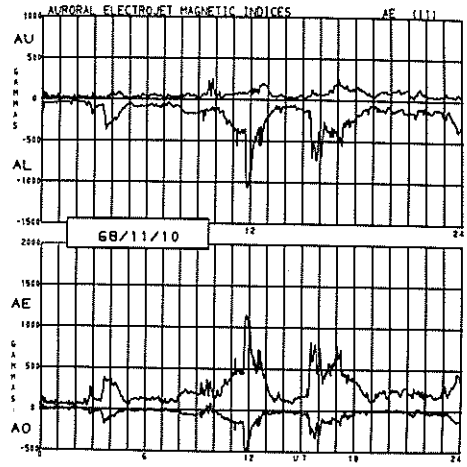
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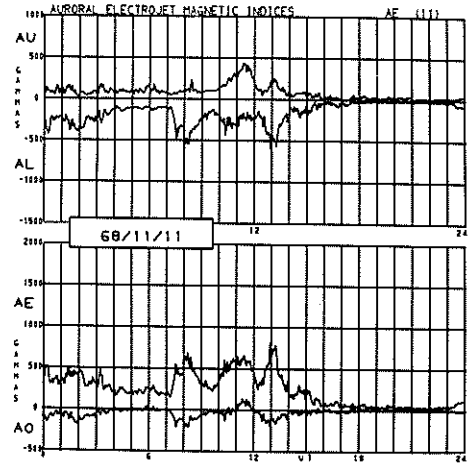
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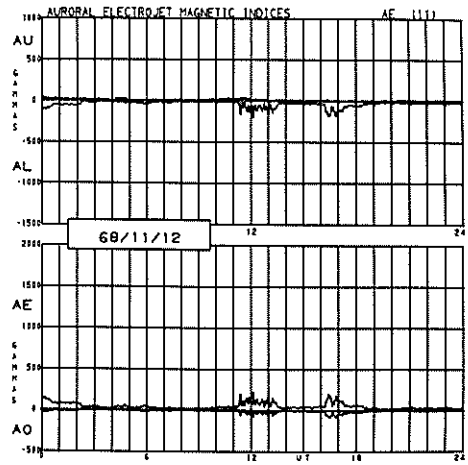
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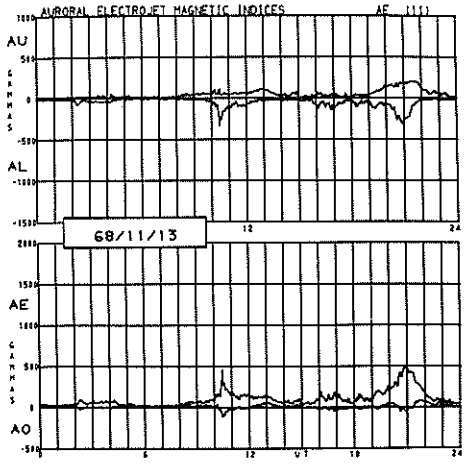
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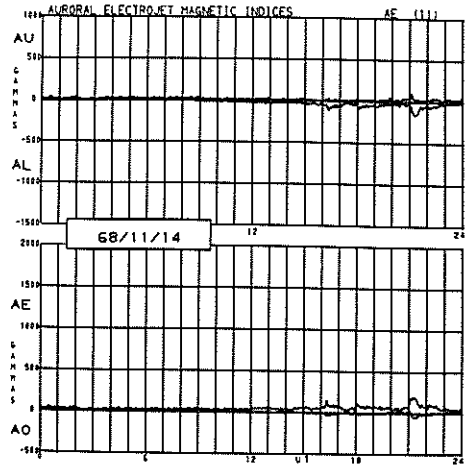
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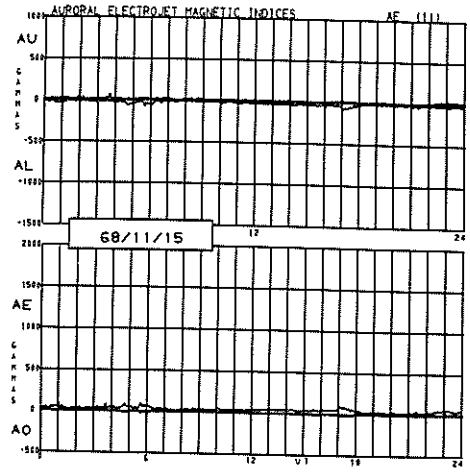
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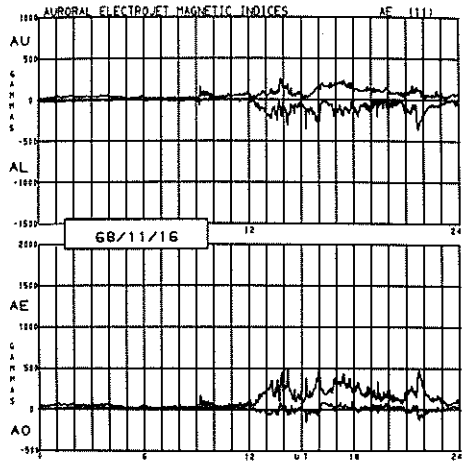
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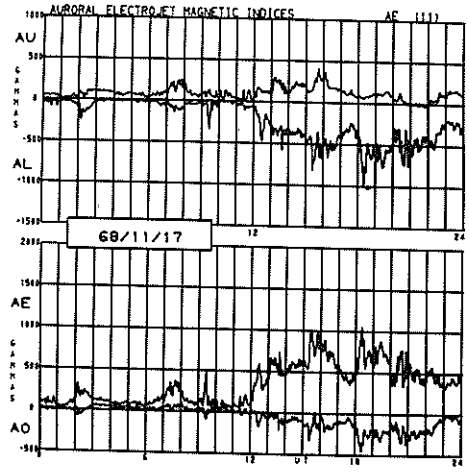
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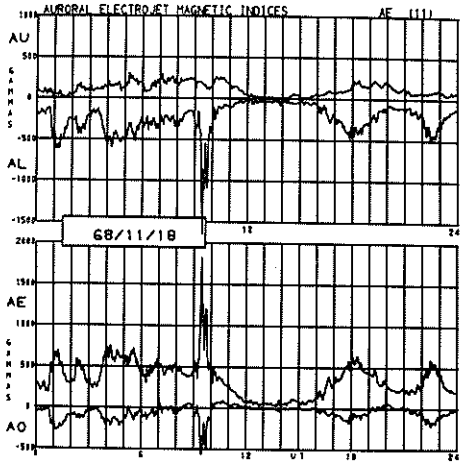
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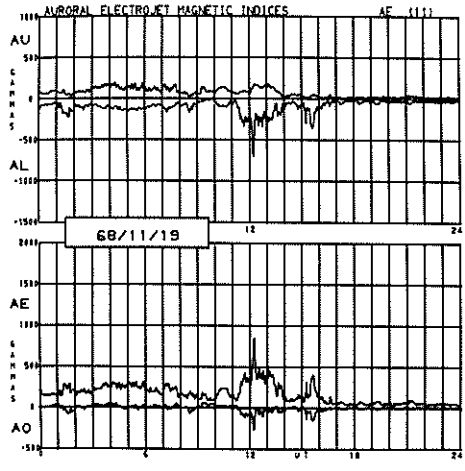
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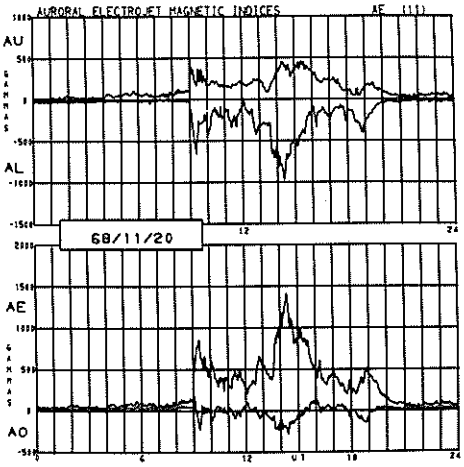
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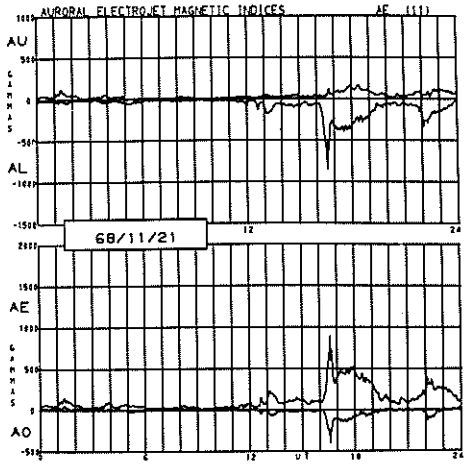
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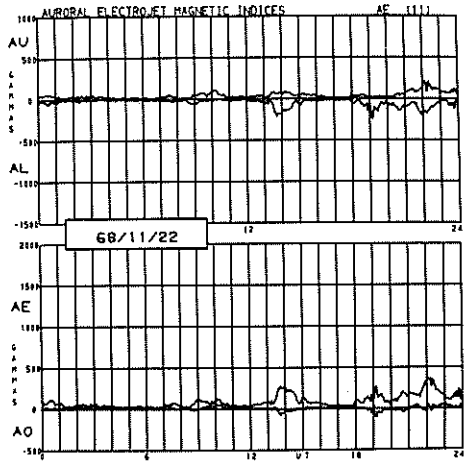
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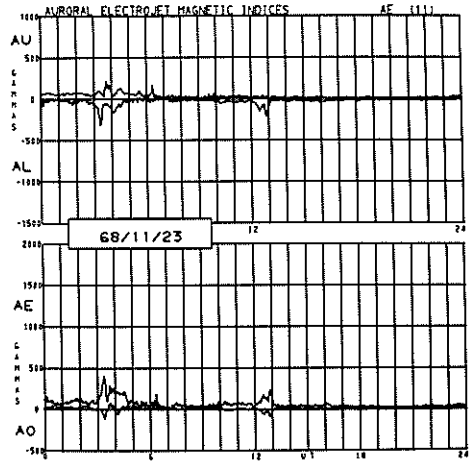
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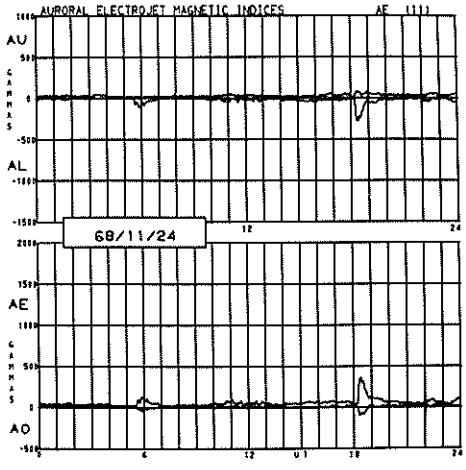
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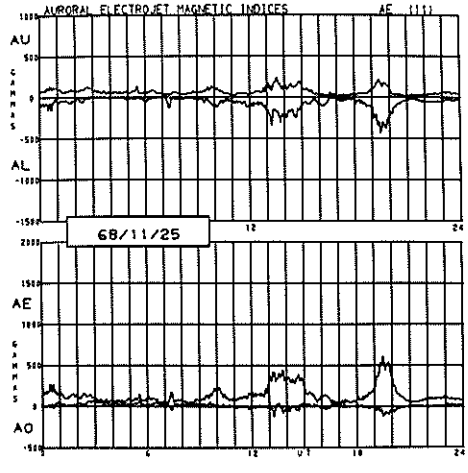
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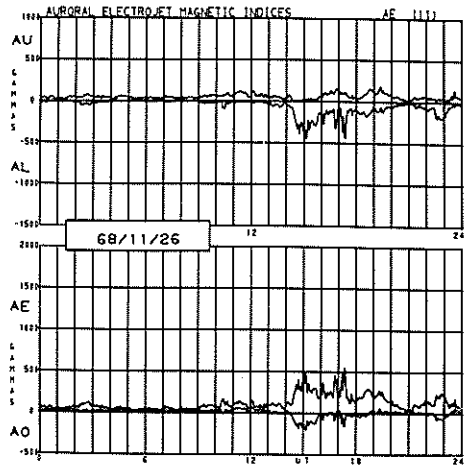
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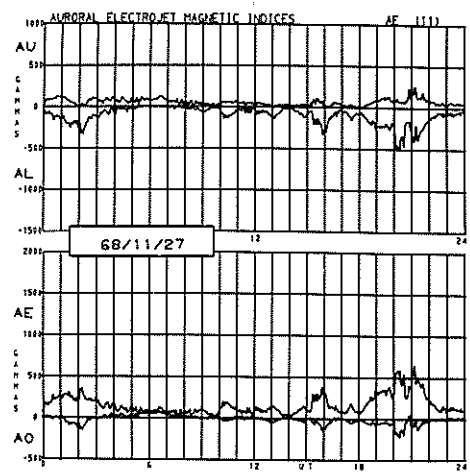
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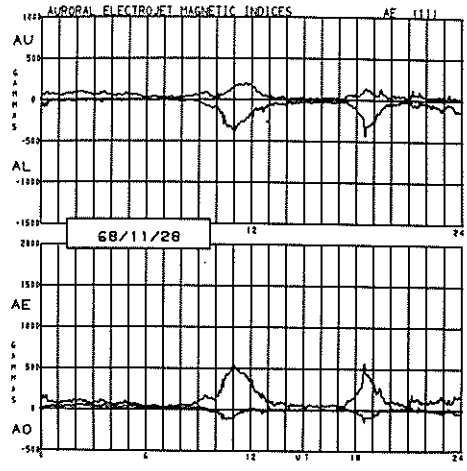
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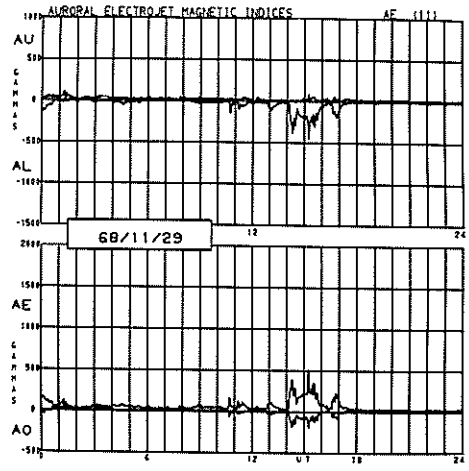
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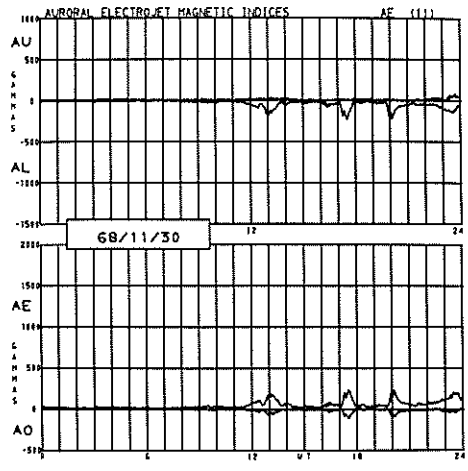
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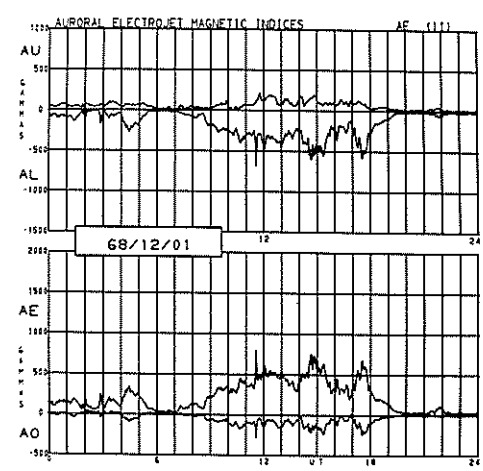
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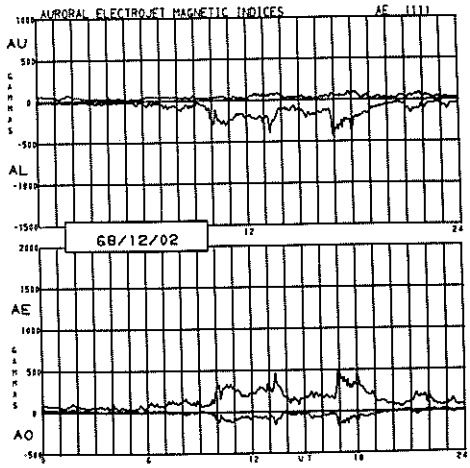
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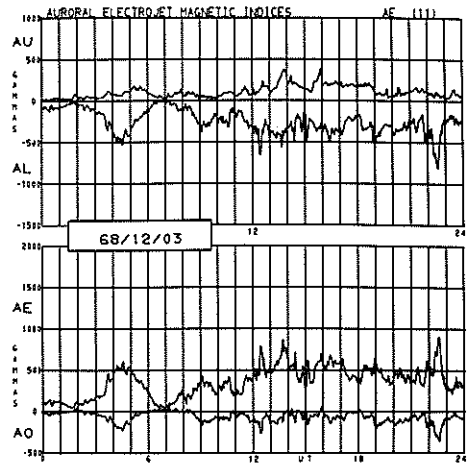
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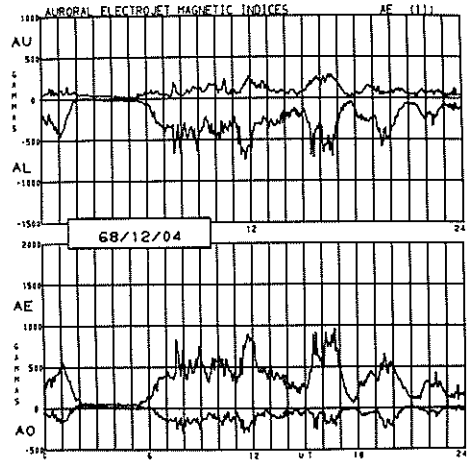
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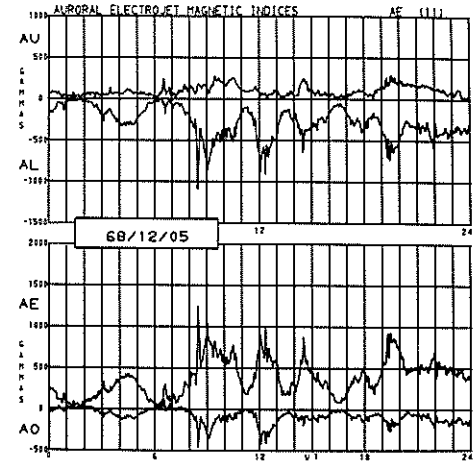
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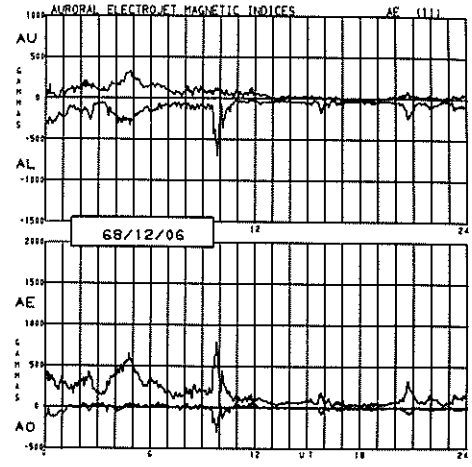
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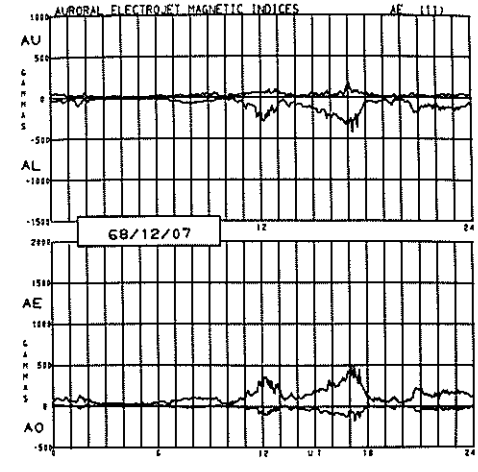
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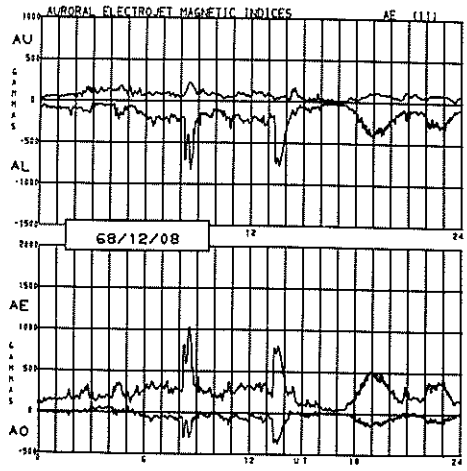
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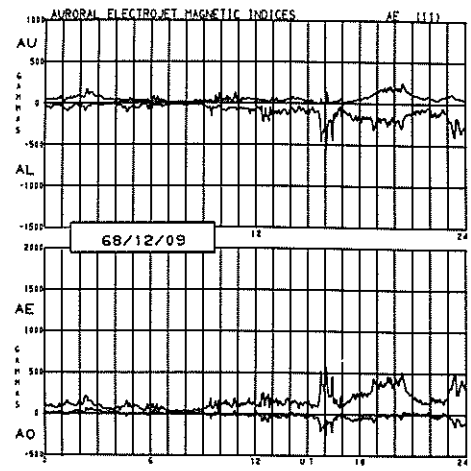
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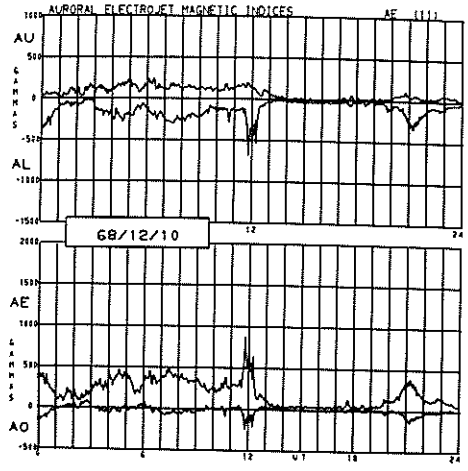
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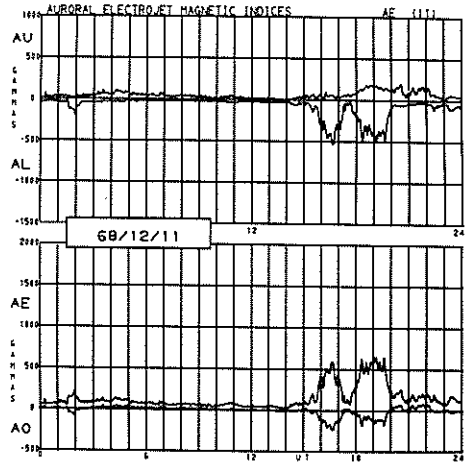
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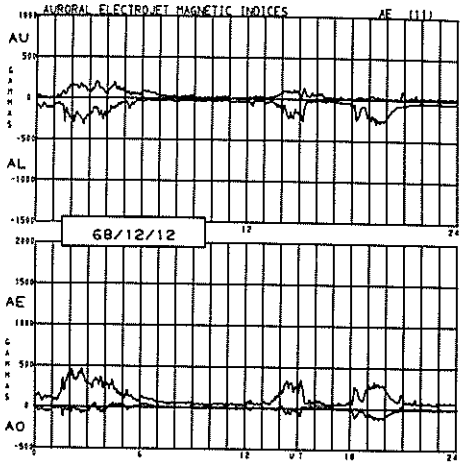
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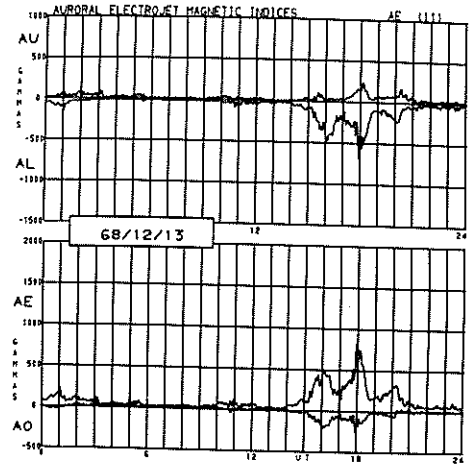
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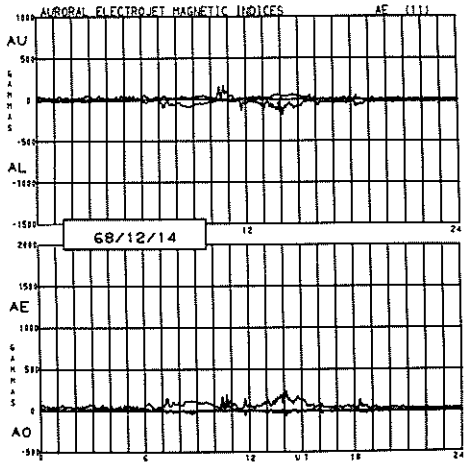
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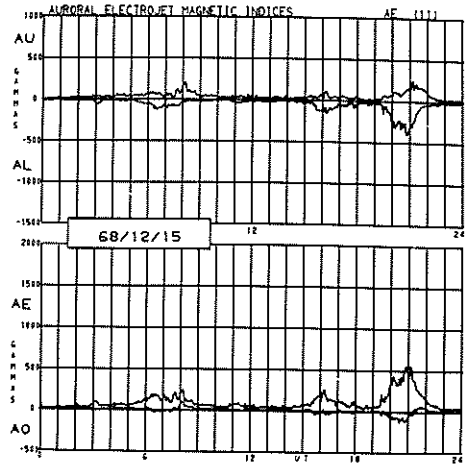
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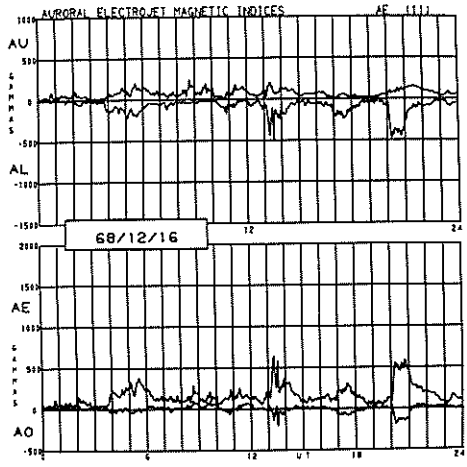
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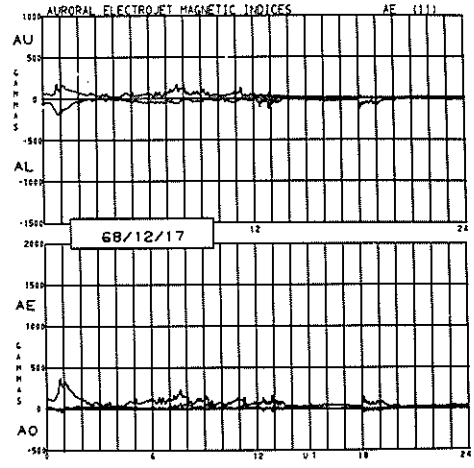
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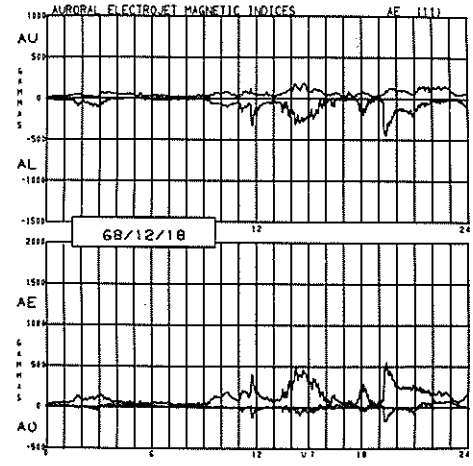
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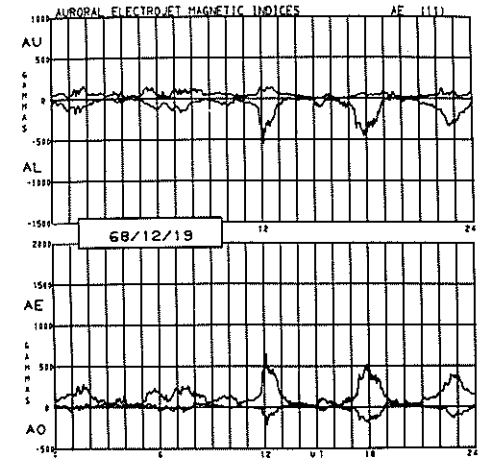
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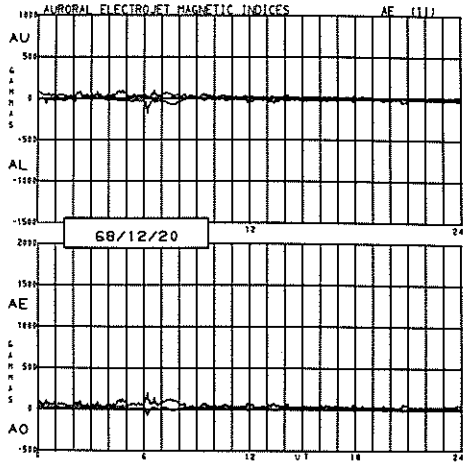
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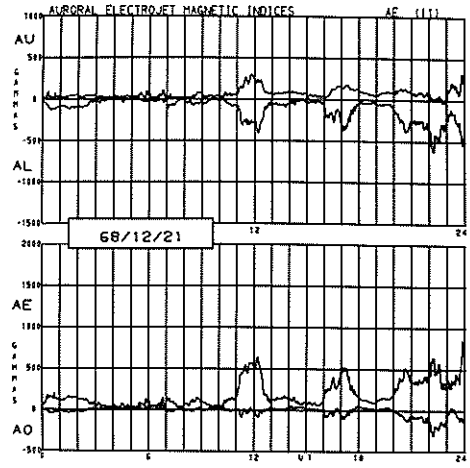
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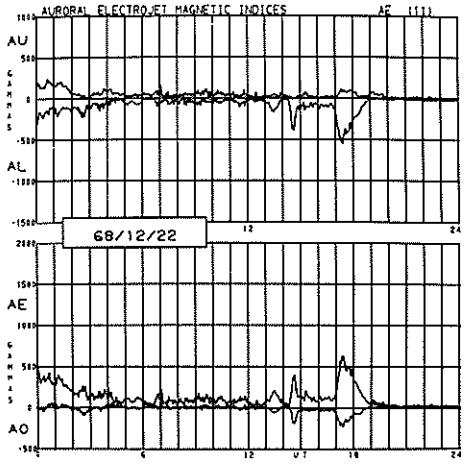
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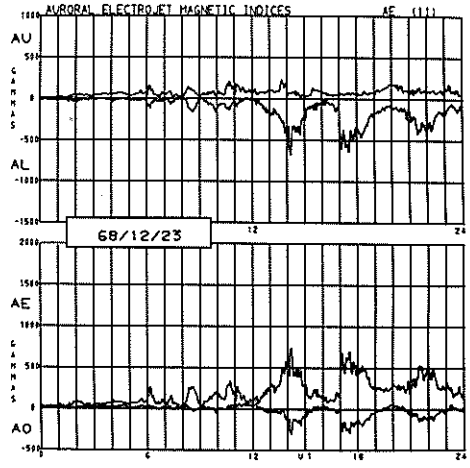
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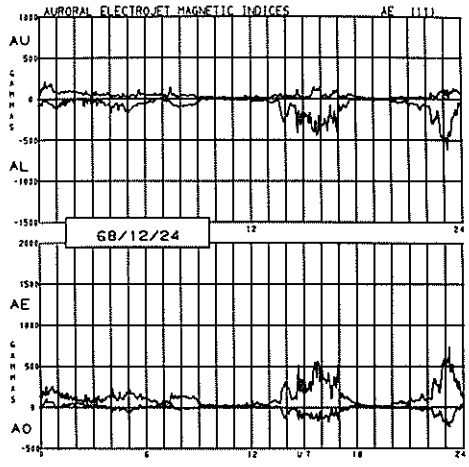
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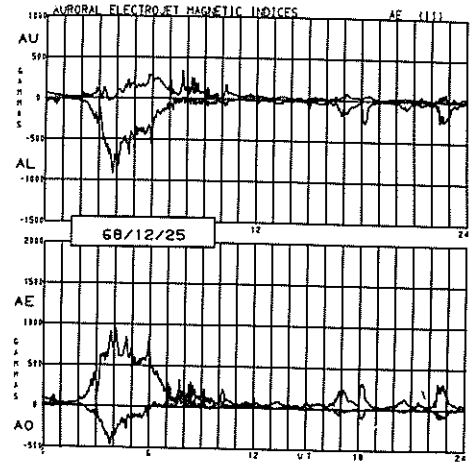
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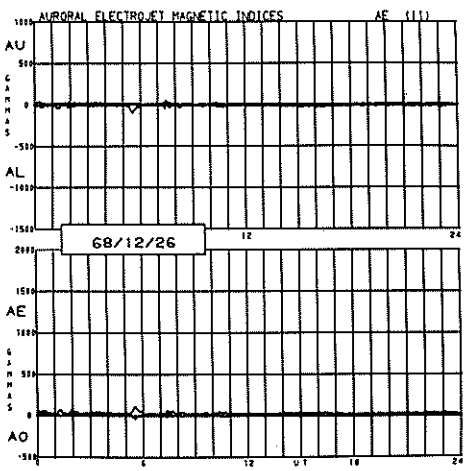
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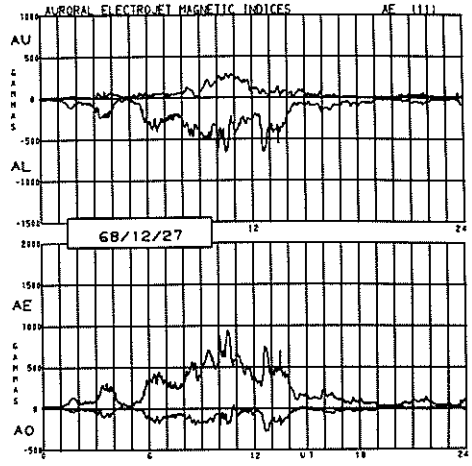
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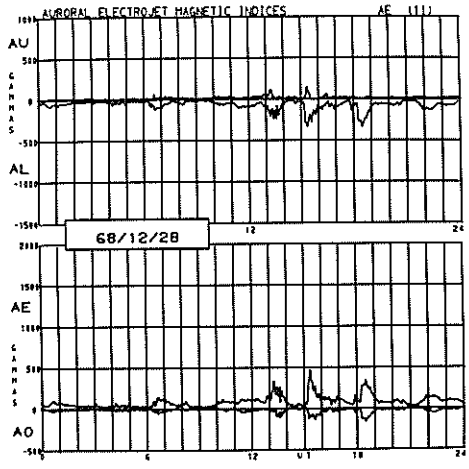
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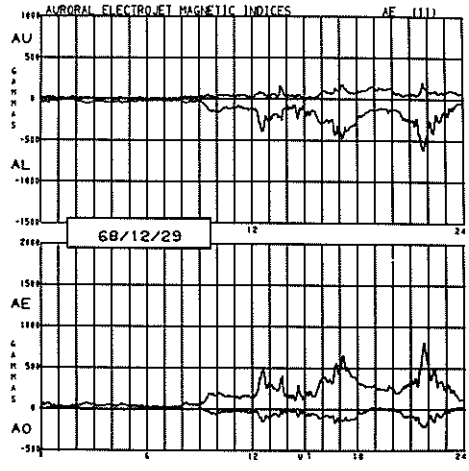
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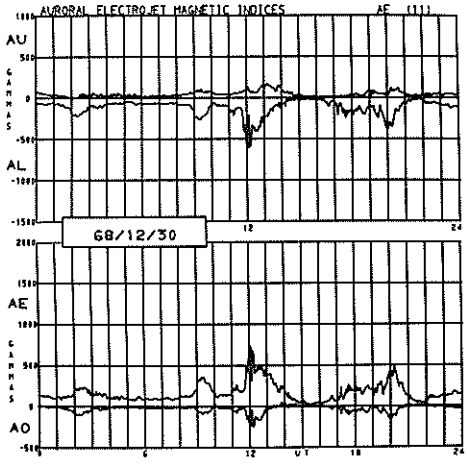
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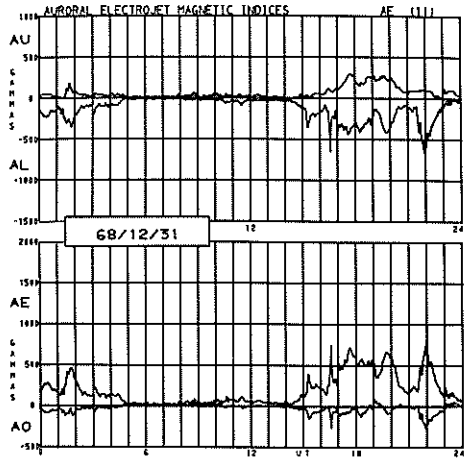
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CORRECTIONS TO REPORT UAG-22, Auroral Electrojet Magnetic Activity Indices (AE) for 1970

1. The graphs on pages 86-88 are correctly and prominently labeled along their vertical axis: AU, AL, AE, AO. The corresponding labels were inadvertently omitted from the graphs on pages 89-146.

2. On page 92, in the graph for 70/02/10 (10 Feb. 1970), the three hours of record shown for the interval 0420 to 0730 UT should be shifted one hour toward UT-noon. Thus, the two events in AL (also in AE and AO) occurred one hour later than shown. Corrected tabular hourly average values of AE, AL, and AO are given below.

ERRATA FOR 10 FEBRUARY 1970

| | UAG-22 Page | Hour (UT) | 5 | 6 | 7 | 8 | 9 | DAILY MEAN |
|---|---|---|---|---|---|---|---|---|
| AE INDICES | 13 | | 21 | 42 | 39 | 75 | 59 | 108 |
| | | MONTHLY MEAN | 74 | 73 | 69 | 95 | 94 | |
| AL INDICES | 25 | | 2 | -24 | -11 | -44 | -26 | -68 |
| | | MONTHLY MEAN | -39 | -38 | -37 | -53 | -51 | |
| AO INDICES | 49 | | 12 | -3 | 8 | -7 | 4 | -14 |
| | | MONTHLY MEAN | NO CHANGES | | | | | |

3. On page 118, in the graph for 70/07/15 (15 July 1970), the seven hours of AU shown for the interval 1300 to 2000 UT are in error. The values should decrease smoothly from the peak at 1300 UT and connect to the quiet-time values at 2000 UT. AE and AO are similarly in error. Corrected hourly average index values are given below.

ERRATA FOR 15 JULY 1970

| | UAG-22 Page | Hour (UT) | 14 | 15 | 16 | 17 | 18 | 19 | 20 | DAILY MEAN |
|---|---|---|---|---|---|---|---|---|---|---|
| AE INDICES | 18 | | 57 | 48 | 32 | 29 | 35 | 62 | 55 | 117 |
| | | MONTHLY MEAN | 282 | 244 | 228 | 219 | 262 | 266 | 227 | 275 |
| | | 5Q MEAN | 58 | 50 | 61 | 74 | 118 | 85 | 95 | 116 |
| AU INDICES | 42 | | 44 | 32 | 21 | 20 | 22 | 37 | 35 | 54 |
| | | MONTHLY MEAN | 121 | 116 | 105 | 102 | 120 | 128 | 117 | 120 |
| | | 5Q MEAN | 37 | 29 | 34 | 38 | 55 | 48 | 55 | 57 |
| AO INDICES | 54 | | 15 | 8 | 5 | 6 | 3 | 5 | 7 | -4 |
| | | MONTHLY MEAN | -15 | -3 | -6 | -6 | -10 | -4 | 3 | -17 |
| | | 5Q MEAN | 7 | 4 | 3 | 1 | -4 | 6 | 7 | -1 |

4. On page 142, in the graph for 70/12/03 (3 December 1970), the AL values graphed for the hour from 1600 to 1700 UT are partially in error. The small event centered about 1630 UT is correct but the quiet-time values on either side are incorrect. For the 17th UT hour of 3 December 1970 the corrected hourly average indices are: AE = 89, AL = -70, and AO = 26.

5. The page containing the six graphs of indices for days 70/05/19 through 70/05/24 (19 May - 24 May 1970), should have come after page 108. It incorrectly appears as page 115.

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UAG-25 "Observations of Jupiter's Sporadic Radio Emission in the Range 7.6-41 MHz, 9 September 1968 through 9 December 1971", by James W. Warwick, George A. Dulk and David G. Swann, Department of Astro-Geophysics, University of Colorado, February 1973, 35 pages, price 35 cents.

UAG-26 "Data Compilation for the Magnetospherically quiet Periods February 19-23 and November 29 - December 3, 1970", compiled by Helen E. Coffey and J. Virginia Lincoln, World Data Center A for Solar-Terrestrial Physics, May 1973, 129 pages, price 70 cents.

UAG-27 "High Speed Streams in the Solar Wind", by D. S. Intriligator, University of Southern California, Department of Physics, Los Angeles, California, 90007, June 1973, 16 pages, price 15 cents.

UAG-28 "Collected Data Reports on August 1972 Solar-Terrestrial Events", Parts 1, 2 and 3, edited by Helen E. Coffey, World Data Center A for Solar-Terrestrial Physics, July 1973, 932 pages, price (includes Parts 1-3) $4.50.

UAG-29 "Auroral Electrojet Magnetic Activity Indices AE (11) for 1968", by Joe Haskell Allen, Carl C. Abston and Leslie D. Morris, National Geophysical and Solar-Terrestrial Data Center, Environmental Data Service, October 1973, 148 pages.

UAG-30 "Catalog of Data on Solar-Terrestrial Physics", prepared by Environmental Data Service, NOAA, Boulder, Colorado, October 1973, 317 pages.

UAG-31 "Auroral Electrojet Magnetic Activity Indices AE (11) for 1969", by Joe Haskell Allen, Carl C. Abston and Leslie D. Morris, National Geophysical and Solar-Terrestrial Data Center, Environmental Data Service, November 1973, 138 pages.

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