NATURAL ENVIRONMENT RESEARCH COUNCIL

BRITISH ANTARCTIC SURVEY
(Atmospheric Sciences Division)
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DRUMMOND STREET
EDINBURGH
EH8 9UA

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27 November 1975

Mr. William Paulishak,
World Data Center A for Solar Terrestrial Physics,
NOAA,
Boulder,
Colorado, 80302
U.S.A.

Dear Mr Paulishak,

In the microfilm sent to you on 21st November, on the Argentine Islands Explanatory Notes for 1974, section 10, there is an error. The sample calculation is for 1974 Jan 01 not 1975 as was unfortunately typed on the sheets.

Yours sincerely,

W. M. Sievwright

# BRITISH ANTARCTIC SURVEY

(FORMERLY FALKLAND ISLANDS DEPENDENCIES SURVEY)

## MAGNETIC RECORDS FOR 1974

FROM ARGENTINE ISLANDS A.973

LAT. -65° 15' LONG. 295° 44'
GEOMAGNETIC LATITUDE -53.8°
GEOMAGNETIC LONGITUDE 3.3°

ORIGINAL RECORDS HELD AT:-

BRITISH ANTARCTIC SURVEY
UNIVERSITY DEPARTMENT OF METEOROLOGY
8 DRUMMOND STREET
EDINBURGH EH8 9UA

Phone: (031) 667 1011 Ext. 4382

FROM APRIL 1976 HELD AT:-

BRITISH ANTARCTIC SURVEY
ATMOSPHERIC SCIENCES DIVISION
MADINGLEY ROAD
CAMBRIDGE CB3 OET

ARGENTINE ISLANDS A.973

# EXPLANATORY NOTES 1974

## 1. Instruments

These are standard La Cour Variometers, recording H, D and Z. (An E.D.A. fluxgate magnetometer recording H, D and Z was also operated. The fluxgate record is reproduced only for November 12th; see section 9).

## 2. Time

Charts are changed at Greenwich midnight, so that each chart shows a complete Greenwich day.

The parallax correction for each trace is negligible provided that the relevant moving time mark dots are used.

## 3. Order of Traces, from top to bottom of chart.

| Sensitive | Insensitive |
|---|---|
| H trace | Z trace |
| H baseline | Z baseline |
| T trace | T trace |
| D trace | H trace |
| D baseline | H baseline |
| Z trace | D trace |
| Z baseline | D baseline |

## 7. Scale of Reproduction

To give scale a rule of 50 mm, length is reproduced on each magnetogram.

## 8. Baselines

Baselines at 9°C are quoted. Chart baselines must be calculated using the information given in section 5.

Sensitive

| | | |
|---|---|---|
| H | 22,685 y Jan 01-Jan 18 | 22,587 y Apr 28-May 04 |
| | 22,683 y Jan 19-Feb 06 1500Z | 22,586 y May 05-May 10 |
| | 22,598 y Feb 06-Feb 13 | 22,585 y May 11-May 18 |
| | 22,597 y Feb 14-Feb 20 | 22,584 y May 19-May 26 |
| | 22,596 y Feb 21-Feb 27 | 22,583 y May 27-Jun 03 |
| | 22,595 y Feb 28-Mar 05 | 22,582 y Jun 04-Jun 10 |
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| | 22,593 y Mar 13-Mar 19 | 22,580 y Jul 01-Jul 29 |
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| | 22,591 y Mar 28-Apr 04 | 22,578 y Aug 29-Sep 28 |
| | 22,590 y Apr 05-Apr 12 | 22,577 y Sep 29-Oct 26 |
| | 22,589 y Apr 13-Apr 19 | 22,576 y Oct 27-Nov 12 1200Z |
| | 22,588 y Apr 20-Apr 27 | 22,583 y Nov 12-Dec 31 |
| D | 16° 40.2' Jan 01-Jul 10 1734Z | 16° 39.4'-Jul 10-Dec 31 |
| Z | -35,230 y Jan 01-Jan 09 | -35,235 y Feb 13-Feb 20 |
| | -35,231 y Jan 10-Jan 17 | -35,236 y Feb 21-Feb 28 |
| | -35,232 y Jan 18-Jan 25 | -35,237 y Mar 01-Jul 16 1500Z |
| | -35,233 y Jan 26-Feb 04 | -35,195 y Jul 16-Dec 24 1220Z |
| | -35,234 y Feb 05-Feb 12 | -35,094 y Dec 24-Dec 31 |

Insensitive

## 10. Example of computation of absolute values

1975 Jan 01, 1200Z

$H_o$ etc, baselines (at $T_s$= 9.0°C for H and Z)

c , temperature coefficients in y/°C

s , scale values

n , ordinates in millimetres

$$H = H_o + s_H n_H + c_H(T_s - (T_o + s_T n_T))$$
$$= 22865 + 4.30 \times 5.8 + (-4.0)(9.0 - (24.8 + 0.5 \times -30.7))$$
$$= 22712 \text{ y}$$

$$Z = Z_o + s_Z n_Z + c_Z(T_s - (T_o + s_T n_T))$$
$$= -35230 + (-3.12 \times 14.1) + 2.5(9.0 - (24.8 + 0.5 \times -30.7))$$
$$= -35275 \text{ y}$$

$$D = D_o + s_D n_D$$
$$= 16° 40.18' + 0.92 \times 14.1$$
$$= 16° 53.15' \text{ East}$$

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ARGENTINE ISLANDS A.973

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The parallax correction for each trace is negligible provided that the relevant moving time mark dots are used.

3. Order of Traces, from top to bottom of chart.

| Sensitive | Insensitive |
|---|---|
| H trace | Z trace |
| H baseline | Z baseline |
| T trace | T trace |
| D trace | H trace |
| D baseline | H baseline |
| Z trace | D trace |
| Z baseline | D baseline |

4. Sense of Trace

T increases up the chart
H increases up the chart
D increases easterly up the chart
Z increases (becomes less negative) down the chart.

5. Temperature Coefficients

| | Sensitive | Insensitive |
|---|---|---|
| H | -4.0 γ/°C | +2.0 γ/°C |
| Z | +2.5 γ/°C | -2.5 γ/°C |

(When the coefficient is positive, the ordinate, in gammas, increases with increasing temperature)

T Trace

| | Sensitive | Insensitive |
|---|---|---|
| Scale Value | 0.5°C/mm | 1.4°C/mm |
| Baseline ($H_o$) | 24.8°C Jan 01-Feb 06 1400Z | -62.0°C Jan 01-Aug 16 2000Z |
| | 21.4°C Feb 06-Feb 08 0100Z | -61.0°C Aug 16-Dec 31 |
| | 21.7°C Feb 08-Dec 31 | |

6. Scale Values

| | H γ/mm | D '/mm | Z γ/mm |
|---|---|---|---|
| Sensitive | 4.30 Jan 01-Jan 22 | 0.92 | -3.12 Jan 01-Apr 30 |
| | 4.36 Jan 23-Dec 31 | | -3.07 May 01-Oct 26 |
| | | | -2.95 Oct 27-Dec 24 |
| | | | -2.86 Dec 25-Dec 31 |
| Insensitive | 15.2 | 2.32 | -11.2 |

7. Scale of reproduction

To give scale a rule of 50 mm. length is reproduced on each magnetogram.

8. Baselines

Baselines at 9°C are quoted. Chart baselines must be calculated using the information given in section 5.

Sensitive

| | | |
|---|---|---|
| H | 22,685 y Jan 01-Jan 18 | 22,587 y Apr 28-May 04 |
| | 22,683 y Jan 19-Feb 06 1500Z | 22,586 y May 05-May 10 |
| | 22,598 y Feb 06-Feb 13 | 22,585 y May 11-May 18 |
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| | -35,234 y Feb 05-Feb 12 | -35,094 y Dec 24-Dec 31 |

Insensitive

| | | |
|---|---|---|
| H | 22,496 y Jan 01-Dec 31 | |
| D | 16° 24.1' Jan 01-Jul 10 | 16° 22.8' Jul 11-Dec 31 |
| Z | -35,188 y Jan 01-Dec 31 | |

9. E.D.A. Fluxgate Magnetometer

For Nov. 12 the chart from this instrument is the only available record. The sense of the traces is as on the La Cour magnetogram. Parallax between time mark and traces is negligible. For each trace, the centre printed line (marked 50 ) of the appropriate third of the chart is taken as the baseline.

| | H | D | Z |
|---|---|---|---|
| Baseline | 22,705 y | 16° 55.7' | -35,199 y |
| Scale Value | 15.4y/mm | 2.14'/mm | 16.5y/mm |

10. Example of computation of absolute values

1975 Jan 01, 1200Z

$H_o$ etc, baselines (at $T_s$ 9.0°C for H and Z)

q , temperature coefficients in γ/°C

s , scale values

n , ordinates in millimetres

$$H = H_o + s_H n_H + q_H(T_s - (T_o + s_T n_T))$$
$$= 22865 + 4.30 \times 5.8 + (-4.0)(9.0 - (24.8 + 0.5 \times -30.7))$$
$$= 22712\ \gamma$$

$$Z = Z_o + s_Z n_Z + q_Z(T_s - (T_o + s_T n_T))$$
$$= -35230 + (-3.12 \times 14.1) + 2.5(9.0 - (24.8 + 0.5 \times -30.7))$$
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$$D = D_o + s_D n_D$$
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7. Scale of Reproduction

To give scale a rule of 50 mm, length is reproduced on each magnetogram.

8. Baselines

Baselines at 9°C are quoted. Chart baselines must be calculated using the information given in section 5.

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| | | |
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| H | 22,685 y Jan 01-Jan 18 | 22,587 y Apr 28-May 04 |
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Insensitive

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| H | 22,496 y Jan 01-Dec 31 | |
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| Scale Value | 15.4y/mm | 2.14'/mm | 16.5y/mm |

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ARGENTINE ISLANDS A.973

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| | Sensitive | Insensitive |
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| Z | +2.5 γ/°C | -2.5 γ/°C |

(When the coefficient is positive, the ordinate, in gammas, increases with increasing temperature)

T Trace

| | Sensitive | Insensitive |
|---|---|---|
| Scale Value | 0.5°C/mm | 1.4°C/mm |
| Baseline ($H_o$) | 24.8°C Jan 01-Feb 06 1400Z | -62.0°C Jan 01-Aug 16 2000Z |
| | 21.4°C Feb 06-Feb 08 0100Z | -61.0°C Aug 16-Dec 31 |
| | 21.7°C Feb 08-Dec 31 | |

6. Scale Values

| | H γ/mm | D '/mm | Z γ/mm |
|---|---|---|---|
| Sensitive | 4.30 Jan 01-Jan 22 | 0.92 | -3.12 Jan 01-Apr 30 |
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| | | | -2.95 Oct 27-Dec 24 |
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7. Scale of Reproduction

To give scale a rule of 50 mm, length is reproduced on each magnetogram.

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| | -35,231 y Jan 10-Jan 17 | -35,236 y Feb 21-Feb 28 |
| | -35,232 y Jan 18-Jan 25 | -35,237 y Mar 01-Jul 16 1500Z |
| | -35,233 y Jan 26-Feb 04 | -35,195 y Jul 16-Dec 24 1220Z |
| | -35,234 y Feb 05-Feb 12 | -35,094 y Dec 24-Dec 31 |

Insensitive

| | | |
|---|---|---|
| H | 22,496 y Jan 01-Dec 31 | |
| D | 16° 24.1' Jan 01-Jul 10 | 16° 22.8' Jul 11-Dec 31 |
| Z | -35,188 y Jan 01-Dec 31 | |

9. E.D.A. Fluxgate Magnetometer

For Nov. 12 the chart from this instrument is the only available record. The sense of the traces is as on the La Cour magnetogram. Parallax between time mark and traces is negligible. For each trace, the centre printed line (marked 50 ) of the appropriate third of the chart is taken as the baseline.

| | H | D | Z |
|---|---|---|---|
| Baseline | 22,705 y | 16° 55.7' | -35,199 y |
| Scale Value | 15.4y/mm | 2.14'/mm | 16.5y/mm |

10. Example of computation of absolute values

1975 Jan 01, 1200Z

$H_o$ etc, baselines (at $T_s$ - 9.0°C for H and Z)

q , temperature coefficients in y/°C

s , scale values

n , ordinates in millimetres

$$H = H_o + s_H n_H + q_H(T_s - (T_o + s_T n_T))$$
$$= 22865 + 4.30 \times 5.8 + (-4.0)(9.0 - (24.8 + 0.5 \times -30.7))$$
$$= 22712 \text{ y}$$

$$Z = Z_o + s_Z n_Z + q_Z(T_s - (T_o + s_T n_T))$$
$$= -35230 + (-3.12 \times 14.1) + 2.5(9.0 - (24.8 + 0.5 \times -30.7))$$
$$= -35275 \text{ y}$$

$$D = D_o + s_D n_D$$
$$= 16° 40.18' + 0.92 \times 14.1$$
$$= 16° 53.15' \text{ East}$$

# BRITISH ANTARCTIC SURVEY

(FORMERLY FALKLAND ISLANDS DEPENDENCIES SURVEY)

## MAGNETIC RECORDS FOR 1974

FROM ARGENTINE ISLANDS A.973

LAT. -65° 15' LONG. 295° 44'
GEOMAGNETIC LATITUDE -53.8°
GEOMAGNETIC LONGITUDE 3.3°

ORIGINAL RECORDS HELD AT:-

BRITISH ANTARCTIC SURVEY
UNIVERSITY DEPARTMENT OF METEOROLOGY
8 DRUMMOND STREET
EDINBURGH EH8 9UA

Phone: (031) 667 1011 Ext. 4382

FROM APRIL 1976 HELD AT:-

BRITISH ANTARCTIC SURVEY
ATMOSPHERIC SCIENCES DIVISION
MADINGLEY ROAD
CAMBRIDGE CB3 OET

# EXPLANATORY NOTES 1974

1. Instruments

These are standard La Cour Variometers, recording H, D and Z. (An E.D.A. fluxgate magnetometer recording H, D and Z was also operated. The fluxgate record is reproduced only for November 12th; see section 9).

2. Time

Charts are changed at Greenwich midnight, so that each chart shows a complete Greenwich day.

The parallax correction for each trace is negligible provided that the relevant moving time mark dots are used.

3. Order of Traces, from top to bottom of chart.

| Sensitive | Insensitive |
|---|---|
| H trace | Z trace |
| H baseline | Z baseline |
| T trace | T trace |
| D trace | H trace |
| D baseline | H baseline |
| Z trace | D trace |
| Z baseline | D baseline |

4. Sense of Trace

T increases up the chart
H increases up the chart
D increases easterly up the chart
Z increases (becomes less negative) down the chart.

5. Temperature Coefficients

| | Sensitive | Insensitive |
|---|---|---|
| H | -4.0 γ/°C | +2.0 γ/°C |
| Z | +2.5 γ/°C | -2.5 γ/°C |

(When the coefficient is positive, the ordinate, in gammas, increases with increasing temperature)

T Trace

| | Sensitive | Insensitive |
|---|---|---|
| Scale Value | 0.5°C/mm | 1.4°C/mm |
| Baseline ($H_o$) | 24.8°C Jan 01-Feb 06 1400Z | -62.0°C Jan 01-Aug 16 2000Z |
| | 21.4°C Feb 06-Feb 08 0100Z | -61.0°C Aug 16-Dec 31 |
| | 21.7°C Feb 08-Dec 31 | |

6. Scale Values

| | H γ/mm | D '/mm | Z γ/mm |
|---|---|---|---|
| Sensitive | 4.30 Jan 01-Jan 22 | 0.92 | -3.12 Jan 01-Apr 30 |
| | 4.36 Jan 23-Dec 31 | | -3.07 May 01-Oct 26 |
| | | | -2.95 Oct 27-Dec 24 |
| | | | -2.86 Dec 25-Dec 31 |
| Insensitive | 15.2 | 2.32 | -11.2 |

7. Scale of Reproduction

To give scale a rule of 50 mm, length is reproduced on each magnetogram.

8. Baselines

Baselines at 9°C are quoted. Chart baselines must be calculated using the information given in section 5.

Sensitive

| | | |
|---|---|---|
| H | 22,685 y Jan 01-Jan 18 | 22,587 y Apr 28-May 04 |
| | 22,683 y Jan 19-Feb 06 1500Z | 22,586 y May 05-May 10 |
| | 22,598 y Feb 06-Feb 13 | 22,585 y May 11-May 18 |
| | 22,597 y Feb 14-Feb 20 | 22,584 y May 19-May 26 |
| | 22,596 y Feb 21-Feb 27 | 22,583 y May 27-Jun 03 |
| | 22,595 y Feb 28-Mar 05 | 22,582 y Jun 04-Jun 10 |
| | 22,594 y Mar 06-Mar 12 | 22,581 y Jun 11-Jun 30 |
| | 22,593 y Mar 13-Mar 19 | 22,580 y Jul 01-Jul 29 |
| | 22,592 y Mar 20-Mar 27 | 22,579 y Jul 30-Aug 28 |
| | 22,591 y Mar 28-Apr 04 | 22,578 y Aug 29-Sep 28 |
| | 22,590 y Apr 05-Apr 12 | 22,577 y Sep 29-Oct 26 |
| | 22,589 y Apr 13-Apr 19 | 22,576 y Oct 27-Nov 12 1200Z |
| | 22,588 y Apr 20-Apr 27 | 22,583 y Nov 12-Dec 31 |
| D | 16° 40.2' Jan 01-Jul 10 1734Z | 16° 39.4' Jul 10-Dec 31 |
| Z | -35,230 y Jan 01-Jan 09 | -35,235 y Feb 13-Feb 20 |
| | -35,231 y Jan 10-Jan 17 | -35,236 y Feb 21-Feb 28 |
| | -35,232 y Jan 18-Jan 25 | -35,237 y Mar 01-Jul 16 1500Z |
| | -35,233 y Jan 26-Feb 04 | -35,195 y Jul 16-Dec 24 1220Z |
| | -35,234 y Feb 05-Feb 12 | -35,094 y Dec 24-Dec 31 |

Insensitive

| | | |
|---|---|---|
| H | 22,496 y Jan 01-Dec 31 | |
| D | 16° 24.1' Jan 01-Jul 10 | 16° 22.8' Jul 11-Dec 31 |
| Z | -35,188 y Jan 01-Dec 31 | |

9. E.D.A. Fluxgate Magnetometer

For Nov. 12 the chart from this instrument is the only available record. The sense of the traces is as on the La Cour magnetogram. Parallax between time mark and traces is negligible. For each trace, the centre printed line (marked 50) of the appropriate third of the chart is taken as the baseline.

| | H | D | Z |
|---|---|---|---|
| Baseline | 22,705 y | 16° 55.7' | -35,199 y |
| Scale Value | 15.4y/mm | 2.14'/mm | 16.5y/mm |

10. Example of computation of absolute values

1975 Jan 01, 1200Z

$H_o$ etc, baselines (at $T_s$ = 9.0°C for H and Z)

q , temperature coefficients in γ/°C

s , scale values

n , ordinates in millimetres

$$H = H_o + s_H n_H + q_H(T_s - (T_o + s_T n_T))$$
$$= 22865 + 4.30 \times 5.8 + (-4.0)(9.0 - (24.8 + 0.5 \times -30.7))$$
$$= 22712\ \gamma$$

$$Z = Z_o + s_Z n_Z + q_Z(T_s - (T_o + s_T n_T))$$
$$= -35230 + (-3.12 \times 14.1) + 2.5(9.0 - (24.8 + 0.5 \times -30.7))$$
$$= -35275\ \gamma$$

$$D = D_o + s_D n_D$$
$$= 16° 40.18' + 0.92 \times 14.1$$
$$= 16° 53.15' \text{ East}$$

# BRITISH ANTARCTIC SURVEY

(FORMERLY FALKLAND ISLANDS DEPENDENCIES SURVEY)

## MAGNETIC RECORDS FOR 1974

FROM ARGENTINE ISLANDS A.973

LAT. -65° 15' LONG. 295° 44'
GEOMAGNETIC LATITUDE -53.8°
GEOMAGNETIC LONGITUDE 3.3°

ORIGINAL RECORDS HELD AT:-

BRITISH ANTARCTIC SURVEY
UNIVERSITY DEPARTMENT OF METEOROLOGY
8 DRUMMOND STREET
EDINBURGH EH8 9UA

Phone: (031) 667 1011 Ext. 4382

FROM APRIL 1976 HELD AT:-

BRITISH ANTARCTIC SURVEY
ATMOSPHERIC SCIENCES DIVISION
MADINGLEY ROAD
CAMBRIDGE CB3 OET

ARGENTINE ISLANDS A.973

## EXPLANATORY NOTES 1974

1. Instruments

These are standard La Cour Variometers, recording H, D and Z. (An E.D.A. fluxgate magnetometer recording H, D and Z was also operated. The fluxgate record is reproduced only for November 12th; see section 9).

2. Time

Charts are changed at Greenwich midnight, so that each chart shows a complete Greenwich day.

The parallax correction for each trace is negligible provided that the relevant moving time mark dots are used.

3. Order of Traces, from top to bottom of chart.

| Sensitive | Insensitive |
|---|---|
| H trace | Z trace |
| H baseline | Z baseline |
| T trace | T trace |
| D trace | H trace |
| D baseline | H baseline |
| Z trace | D trace |
| Z baseline | D baseline |

4. Sense of Trace

T increases up the chart
H increases up the chart
D increases easterly up the chart
Z increases (becomes less-negative) down the chart.

5. Temperature Coefficients

| | Sensitive | Insensitive |
|---|---|---|
| H | -4.0 γ/°C | +2.0 γ/°C |
| Z | +2.5 γ/°C | -2.5 γ/°C |

(When the coefficient is positive, the ordinate, in gammas, increases with increasing temperature)

T Trace

| | Sensitive | Insensitive |
|---|---|---|
| Scale Value | 0.5°C/mm | 1.4°C/mm |
| Baseline ($H_o$) | 24.8°C Jan 01-Feb 06 1400Z | -62.0°C Jan 01-Aug 16 2000Z |
| | 21.4°C Feb 06-Feb 08 0100Z | -61.0°C Aug 16-Dec 31 |
| | 21.7°C Feb 08-Dec 31 | |

6. Scale Values

| | H γ/mm | D '/mm | Z γ/mm |
|---|---|---|---|
| Sensitive | 4.30 Jan 01-Jan 22 | 0.92 | -3.12 Jan 01-Apr 30 |
| | 4.36 Jan 23-Dec 31 | | -3.07 May 01-Oct 26 |
| | | | -2.95 Oct 27-Dec 24 |
| | | | -2.86 Dec 25-Dec 31 |
| Insensitive | 15.2 | 2.32 | -11.2 |

7. Scale of Reproduction

To give scale a rule of 90 mm, length is reproduced on each magnetogram.

8. Baselines

Baselines at 9°C are quoted. Chart baselines must be calculated using the information given in section 5.

Sensitive

| | | |
|---|---|---|
| H | 22,685 y Jan 01-Jan 18 | 22,587 y Apr 28-May 04 |
| | 22,683 y Jan 19-Feb 06 1500Z | 22,586 y May 05-May 10 |
| | 22,598 y Feb 06-Feb 13 | 22,585 y May 11-May 18 |
| | 22,597 y Feb 14-Feb 20 | 22,584 y May 19-May 26 |
| | 22,596 y Feb 21-Feb 27 | 22,583 y May 27-Jun 03 |
| | 22,595 y Feb 28-Mar 05 | 22,582 y Jun 04-Jun 10 |
| | 22,594 y Mar 06-Mar 12 | 22,581 y Jun 11-Jun 30 |
| | 22,593 y Mar 13-Mar 19 | 22,580 y Jul 01-Jul 29 |
| | 22,592 y Mar 20-Mar 27 | 22,579 y Jul 30-Aug 28 |
| | 22,591 y Mar 28-Apr 04 | 22,578 y Aug 29-Sep 28 |
| | 22,590 y Apr 05-Apr 12 | 22,577 y Sep 29-Oct 26 |
| | 22,589 y Apr 13-Apr 19 | 22,576 y Oct 27-Nov 12 1200Z |
| | 22,588 y Apr 20-Apr 27 | 22,583 y Nov 12-Dec 31 |
| D | 16° 40.2' Jan 01-Jul 10 1734Z | 16° 39.4' Jul 10-Dec 31 |
| Z | -35,230 y Jan 01-Jan 09 | -35,235 y Feb 13-Feb 20 |
| | -35,231 y Jan 10-Jan 17 | -35,236 y Feb 21-Feb 28 |
| | -35,232 y Jan 18-Jan 25 | -35,237 y Mar 01-Jul 16 1500Z |
| | -35,233 y Jan 26-Feb 04 | -35,195 y Jul 16-Dec 24 1220Z |
| | -35,234 y Feb 05-Feb 12 | -35,094 y Dec 24-Dec 31 |

Insensitive

| | | |
|---|---|---|
| H | 22,496 y Jan 01-Dec 31 | |
| D | 16° 24.1' Jan 01-Jul 10 | 16° 22.8' Jul 11-Dec 31 |
| Z | -35,188 y Jan 01-Dec 31 | |

9. E.D.A. Fluxgate Magnetometer

For Nov. 12 the chart from this instrument is the only available record. The sense of the traces is as on the La Cour magnetogram. Parallax between time mark and traces is negligible. For each trace, the centre printed line (marked 50 ) of the appropriate third of the chart is taken as the baseline.

| | H | D | Z |
|---|---|---|---|
| Baseline | 22,705 y | 16° 55.7' | -35,199 y |
| Scale Value | 15.4y/mm | 2.14'/mm | 16.5y/mm |

10. Example of computation of absolute values

1975 Jan 01, 1200Z

$H_0$ etc, baselines (at $T_s$ = 9.0°C for H and Z)

q , temperature coefficients in y/°C

s , scale values

n , ordinates in millimetres

$$H = H_o + s_H n_H + q_H(T_s - (T_o + s_T n_T))$$
$$= 22865 + 4.30 \times 5.8 + (-4.0)(9.0 - (24.8 + 0.5 \times -30.7))$$
$$= 22712 \text{ y}$$

$$Z = Z_o + s_Z n_Z + q_Z(T_s - (T_o + s_T n_T))$$
$$= -35230 + (-3.12 \times 14.1) + 2.5(9.0 - (24.8 + 0.5 \times -30.7))$$
$$= -35275 \text{ y}$$

$$D = D_o + s_D n_D$$
$$= 16° 40.18' + 0.92 \times 14.1$$
$$= 16° 53.15' \text{ East}$$

# BRITISH ANTARCTIC SURVEY

(FORMERLY FALKLAND ISLANDS DEPENDENCIES SURVEY)

## MAGNETIC RECORDS FOR 1974

FROM ARGENTINE ISLANDS A.973

LAT. -65° 15' LONG. 295° 44'
GEOMAGNETIC LATITUDE -53.8°
GEOMAGNETIC LONGITUDE 3.3°

ORIGINAL RECORDS HELD AT:-

BRITISH ANTARCTIC SURVEY
UNIVERSITY DEPARTMENT OF METEOROLOGY
8 DRUMMOND STREET
EDINBURGH EH8 9UA

Phone: (031) 667 1011 Ext. 4382

FROM APRIL 1976 HELD AT:-

BRITISH ANTARCTIC SURVEY
ATMOSPHERIC SCIENCES DIVISION
MADINGLEY ROAD
CAMBRIDGE CB3 OET

# EXPLANATORY NOTES 1974

1. Instruments

These are standard La Cour Variometers, recording H, D and Z. (An E.D.A. fluxgate magnetometer recording H, D and Z was also operated. The fluxgate record is reproduced only for November 12th; see section 9).

2. Time

Charts are changed at Greenwich midnight, so that each chart shows a complete Greenwich day.

The parallax correction for each trace is negligible provided that the relevant moving time mark dots are used.

3. Order of Traces, from top to bottom of chart.

| Sensitive | Insensitive |
|---|---|
| H trace | Z trace |
| H baseline | Z baseline |
| T trace | T trace |
| D trace | H trace |
| D baseline | H baseline |
| Z trace | D trace |
| Z baseline | D baseline |

4. Sense of Trace

T increases up the chart
H increases up the chart
D increases easterly up the chart
Z increases (becomes less negative) down the chart.

5. Temperature Coefficients

| | Sensitive | Insensitive |
|---|---|---|
| H | -4.0 γ/°C | +2.0 γ/°C |
| Z | +2.5 γ/°C | -2.5 γ/°C |

(When the coefficient is positive, the ordinate, in gammas, increases with increasing temperature)

T Trace

| | Sensitive | Insensitive |
|---|---|---|
| Scale Value | 0.5°C/mm | 1.4°C/mm |
| Baseline ($H_o$) | 24.8°C Jan 01-Feb 06 1400Z | -62.0°C Jan 01-Aug 16 2000Z |
| | 21.4°C Feb 06-Feb 08 0100Z | -61.0°C Aug 16-Dec 31 |
| | 21.7°C Feb 08-Dec 31 | |

6. Scale Values

| | H γ/mm | D '/mm | Z γ/mm |
|---|---|---|---|
| Sensitive | 4.30 Jan 01-Jan 22 | 0.92 | -3.12 Jan 01-Apr 30 |
| | 4.36 Jan 23-Dec 31 | | -3.07 May 01-Oct 26 |
| | | | -2.95 Oct 27-Dec 24 |
| | | | -2.86 Dec 25-Dec 31 |
| Insensitive | 15.2 | 2.32 | -11.2 |

7. Scale of Reproduction

To give scale a rule of 50 mm, length is reproduced on each magnetogram.

8. Baselines

Baselines at 9°C are quoted. Chart baselines must be calculated using the information given in section 5.

Sensitive

| | | |
|---|---|---|
| H | 22,685 y Jan 01-Jan 18 | 22,587 y Apr 28-May 04 |
| | 22,683 y Jan 19-Feb 06 1500Z | 22,586 y May 05-May 10 |
| | 22,598 y Feb 06-Feb 13 | 22,585 y May 11-May 18 |
| | 22,597 y Feb 14-Feb 20 | 22,584 y May 19-May 26 |
| | 22,596 y Feb 21-Feb 27 | 22,583 y May 27-Jun 03 |
| | 22,595 y Feb 28-Mar 05 | 22,582 y Jun 04-Jun 10 |
| | 22,594 y Mar 06-Mar 12 | 22,581 y Jun 11-Jun 30 |
| | 22,593 y Mar 13-Mar 19 | 22,580 y Jul 01-Jul 29 |
| | 22,592 y Mar 20-Mar 27 | 22,579 y Jul 30-Aug 28 |
| | 22,591 y Mar 28-Apr 04 | 22,578 y Aug 29-Sep 28 |
| | 22,590 y Apr 05-Apr 12 | 22,577 y Sep 29-Oct 26 |
| | 22,589 y Apr 13-Apr 19 | 22,576 y Oct 27-Nov 12 1200Z |
| | 22,588 y Apr 20-Apr 27 | 22,583 y Nov 12-Dec 31 |
| D | 16° 40.2' Jan 01-Jul 10 1734Z | 16° 39.4' Jul 10-Dec 31 |
| Z | -35,230 y Jan 01-Jan 09 | -35,235 y Feb 13-Feb 20 |
| | -35,231 y Jan 10-Jan 17 | -35,236 y Feb 21-Feb 28 |
| | -35,232 y Jan 18-Jan 25 | -35,237 y Mar 01-Jul 16 1500Z |
| | -35,233 y Jan 26-Feb 04 | -35,195 y Jul 16-Dec 24 1220Z |
| | -35,234 y Feb 05-Feb 12 | -35,094 y Dec 24-Dec 31 |

Insensitive

| | | |
|---|---|---|
| H | 22,496 y Jan 01-Dec 31 | |
| D | 16° 24.1' Jan 01-Jul 10 | 16° 22.8' Jul 11-Dec 31 |
| Z | -35,188 y Jan 01-Dec 31 | |

9. E.D.A. Fluxgate Magnetometer

For Nov. 12 the chart from this instrument is the only available record. The sense of the traces is as on the La Cour magnetogram. Parallax between time mark and traces is negligible. For each trace, the centre printed line (marked 50 ) of the appropriate third of the chart is taken as the baseline.

| | H | D | Z |
|---|---|---|---|
| Baseline | 22,705 y | 16° 55.7' | -35,199 y |
| Scale Value | 15.4y/mm | 2.14'/mm | 16.5y/mm |

10. Example of computation of absolute values

1975 Jan 01, 1200Z

$H_o$ etc, baselines (at $T_b$ - 9.0°C for H and Z)

q , temperature coefficients in y/°C

s , scale values

n , ordinates in millimetres

$$H = H_o + s_H n_H + q_H(T_s - (T_o + s_T n_T))$$
$$= 22865 + 4.30 \times 5.8 + (-4.0)(9.0 - (24.8 + 0.5 \times -30.7))$$
$$= 22712 \text{ y}$$

$$Z = Z_o + s_Z n_Z + q_Z(T_s - (T_o + s_T n_T))$$
$$= -35230 + (-3.12 \times 14.1) + 2.5(9.0 - (24.8 + 0.5 \times -30.7))$$
$$= -35275 \text{ y}$$

$$D = D_o + s_D n_D$$
$$= 16° 40.18' + 0.92 \times 14.1$$
$$= 16° 53.15' \text{ East}$$

# BRITISH ANTARCTIC SURVEY

(FORMERLY FALKLAND ISLANDS DEPENDENCIES SURVEY)

## MAGNETIC RECORDS FOR 1974

FROM ARGENTINE ISLANDS A.973

LAT. -65° 15' LONG. 295° 44'
GEOMAGNETIC LATITUDE -53.8°
GEOMAGNETIC LONGITUDE 3.3°

ORIGINAL RECORDS HELD AT:-

BRITISH ANTARCTIC SURVEY
UNIVERSITY DEPARTMENT OF METEOROLOGY
8 DRUMMOND STREET
EDINBURGH EH8 9UA

Phone: (031) 667 1011 Ext. 4382

FROM APRIL 1976 HELD AT:-

BRITISH ANTARCTIC SURVEY
ATMOSPHERIC SCIENCES DIVISION
MADINGLEY ROAD
CAMBRIDGE CB3 OET

# EXPLANATORY NOTES 1974

1. Instruments

These are standard La Cour Variometers, recording H, D and Z. (An E.D.A. fluxgate magnetometer recording H, D and Z was also operated. The fluxgate record is reproduced only for November 12th; see section 9).

2. Time

Charts are changed at Greenwich midnight, so that each chart shows a complete Greenwich day.

The parallax correction for each trace is negligible provided that the relevant moving time mark dots are used.

3. Order of Traces, from top to bottom of chart.

| Sensitive | Insensitive |
|---|---|
| H trace | Z trace |
| H baseline | Z baseline |
| T trace | T trace |
| D trace | H trace |
| D baseline | H baseline |
| Z trace | D trace |
| Z baseline | D baseline |

4. Sense of Trace

T increases up the chart
H increases up the chart
D increases easterly up the chart
Z increases (becomes less negative) down the chart.

5. Temperature Coefficients

| | Sensitive | Insensitive |
|---|---|---|
| H | -4.0 γ/°C | +2.0 γ/°C |
| Z | +2.5 γ/°C | -2.5 γ/°C |

(When the coefficient is positive, the ordinate, in gammas, increases with increasing temperature)

T Trace

| | Sensitive | Insensitive |
|---|---|---|
| Scale Value | 0.5°C/mm | 1.4°C/mm |
| Baseline ($H_o$) | 24.8°C Jan 01-Feb 06 1400Z | -62.0°C Jan 01-Aug 16 2000Z |
| | 21.4°C Feb 06-Feb 08 0100Z | -61.0°C Aug 16-Dec 31 |
| | 21.7°C Feb 08-Dec 31 | |

6. Scale Values

| | H γ/mm | D '/mm | Z γ/mm |
|---|---|---|---|
| Sensitive | 4.30 Jan 01-Jan 22 | 0.92 | -3.12 Jan 01-Apr 30 |
| | 4.36 Jan 23-Dec 31 | | -3.07 May 01-Oct 26 |
| | | | -2.95 Oct 27-Dec 24 |
| | | | -2.86 Dec 25-Dec 31 |
| Insensitive | 15.2 | 2.32 | -11.2 |

7. Scale of Reproduction

To give scale a rule of 50 mm, length is reproduced on each magnetogram.

8. Baselines

Baselines at 9°C are quoted. Chart baselines must be calculated using the information given in section 5.

Sensitive

| | | |
|---|---|---|
| H | 22,685 y Jan 01–Jan 18 | 22,587 y Apr 28–May 04 |
| | 22,683 y Jan 19–Feb 06 1500Z | 22,586 y May 05–May 10 |
| | 22,598 y Feb 06–Feb 13 | 22,585 y May 11–May 18 |
| | 22,597 y Feb 14–Feb 20 | 22,584 y May 19–May 26 |
| | 22,596 y Feb 21–Feb 27 | 22,583 y May 27–Jun 03 |
| | 22,595 y Feb 28–Mar 05 | 22,582 y Jun 04–Jun 10 |
| | 22,594 y Mar 06–Mar 12 | 22,581 y Jun 11–Jun 30 |
| | 22,593 y Mar 13–Mar 19 | 22,580 y Jul 01–Jul 29 |
| | 22,592 y Mar 20–Mar 27 | 22,579 y Jul 30–Aug 28 |
| | 22,591 y Mar 28–Apr 04 | 22,578 y Aug 29–Sep 28 |
| | 22,590 y Apr 05–Apr 12 | 22,577 y Sep 29–Oct 26 |
| | 22,589 y Apr 13–Apr 19 | 22,576 y Oct 27–Nov 12 1200Z |
| | 22,588 y Apr 20–Apr 27 | 22,583 y Nov 12–Dec 31 |
| D | 16° 40.2' Jan 01–Jul 10 1734Z | 16° 39.4' Jul 10–Dec 31 |
| Z | -35,230 y Jan 01–Jan 09 | -35,235 y Feb 13–Feb 20 |
| | -35,231 y Jan 10–Jan 17 | -35,236 y Feb 21–Feb 28 |
| | -35,232 y Jan 18–Jan 25 | -35,237 y Mar 01–Jul 16 1500Z |
| | -35,233 y Jan 26–Feb 04 | -35,195 y Jul 16–Dec 24 1220Z |
| | -35,234 y Feb 05–Feb 12 | -35,094 y Dec 24–Dec 31 |

Insensitive

| | | |
|---|---|---|
| H | 22,496 y Jan 01–Dec 31 | |
| D | 16° 24.1' Jan 01–Jul 10 | 16° 22.8' Jul 11–Dec 31 |
| Z | -35,188 y Jan 01–Dec 31 | |

9. E.D.A. Fluxgate Magnetometer

For Nov. 12 the chart from this instrument is the only available record. The sense of the traces is as on the La Cour magnetogram. Parallax between time mark and traces is negligible. For each trace, the centre printed line (marked 50 ) of the appropriate third of the chart is taken as the baseline.

| | H | D | Z |
|---|---|---|---|
| Baseline | 22,705 y | 16° 55.7' | -35,199 y |
| Scale Value | 15.4y/mm | 2.14'/mm | 16.5y/mm |

10. Example of computation of absolute values

1975 Jan 01, 1200Z

$H_o$ etc, baselines (at $T_s$ = 9.0°C for H and Z)
q , temperature coefficients in γ/°C
s , scale values
n , ordinates in millimetres

$$H = H_o + s_H n_H + q_H(T_s - (T_o + s_T n_T))$$
$$= 22865 + 4.30 \times 5.8 + (-4.0)(9.0 - (24.8 + 0.5 \times -30.7))$$
$$= 22712\ \gamma$$

$$Z = Z_o + s_Z n_Z + q_Z(T_s - (T_o + s_T n_T))$$
$$= -35230 + (-3.12 \times 14.1) + 2.5(9.0 - (24.8 + 0.5 \times -30.7))$$
$$= -35275\ \gamma$$

$$D = D_o + s_D n_D$$
$$= 16° 40.18' + 0.92 \times 14.1$$
$$= 16° 53.15' \text{ East}$$

# BRITISH ANTARCTIC SURVEY

(FORMERLY FALKLAND ISLANDS DEPENDENCIES SURVEY)

## MAGNETIC RECORDS FOR 1974

FROM ARGENTINE ISLANDS A.973

LAT. -65° 15' LONG. 295° 44'
GEOMAGNETIC LATITUDE -53.8°
GEOMAGNETIC LONGITUDE 3.3°

ORIGINAL RECORDS HELD AT:-

BRITISH ANTARCTIC SURVEY
UNIVERSITY DEPARTMENT OF METEOROLOGY
8 DRUMMOND STREET
EDINBURGH EH8 9UA

Phone: (031) 667 1011 Ext. 4382

FROM APRIL 1976 HELD AT:-

BRITISH ANTARCTIC SURVEY
ATMOSPHERIC SCIENCES DIVISION
MADINGLEY ROAD
CAMBRIDGE CB3 OET

# EXPLANATORY NOTES 1914

1. Instruments

These are standard La Cour Variometers, recording H, D and Z. (An E.D.A. fluxgate magnetometer recording H, D and Z was also operated. The fluxgate record is reproduced only for November 12th; see section 9).

2. Time

Charts are changed at Greenwich midnight, so that each chart shows a complete Greenwich day.

The parallax correction for each trace is negligible provided that the relevant moving time mark dots are used.

3. Order of Traces, from top to bottom of chart.

| Sensitive | Insensitive |
|---|---|
| H trace | Z trace |
| H baseline | Z baseline |
| T trace | T trace |
| D trace | H trace |
| D baseline | H baseline |
| Z trace | D trace |
| Z baseline | D baseline |

4. Sense of Trace

T increases up the chart
H increases up the chart
D increases easterly up the chart
Z increases (becomes less negative) down the chart.

5. Temperature Coefficients

| | Sensitive | Insensitive |
|---|---|---|
| H | -4.0 γ/°C | +2.0 γ/°C |
| Z | +2.5 γ/°C | -2.5 γ/°C |

(When the coefficient is positive, the ordinate, in gammas, increases with increasing temperature)

T Trace

| | Sensitive | Insensitive |
|---|---|---|
| Scale Value | 0.5°C/mm | 1.4°C/mm |
| Baseline ($H_o$) | 24.8°C Jan 01–Feb 06 1400Z | -62.0°C Jan 01–Aug 16 2000Z |
| | 21.4°C Feb 06–Feb 08 0100Z | -61.0°C Aug 16–Dec 31 |
| | 21.7°C Feb 08–Dec 31 | |

6. Scale Values

| | H γ/mm | D '/mm | Z γ/mm |
|---|---|---|---|
| Sensitive | 4.30 Jan 01–Jan 22 | 0.92 | -3.12 Jan 01–Apr 30 |
| | 4.36 Jan 23–Dec 31 | | -3.07 May 01–Oct 26 |
| | | | -2.95 Oct 27–Dec 24 |
| | | | -2.86 Dec 25–Dec 31 |
| Insensitive | 15.2 | 2.32 | -11.2 |

7. Scale of Reproduction

To give scale a rule of 50 mm, length is reproduced on each magnetogram.

8. Baselines

Baselines at 9°C are quoted. Chart baselines must be calculated using the information given in section 5.

Sensitive

| | | |
|---|---|---|
| H | 22,685 y Jan 01-Jan 18 | 22,587 y Apr 28-May 04 |
| | 22,683 y Jan 19-Feb 06 1500Z | 22,586 y May 05-May 10 |
| | 22,598 y Feb 06-Feb 13 | 22,585 y May 11-May 18 |
| | 22,597 y Feb 14-Feb 20 | 22,584 y May 19-May 26 |
| | 22,596 y Feb 21-Feb 27 | 22,583 y May 27-Jun 03 |
| | 22,595 y Feb 28-Mar 05 | 22,582 y Jun 04-Jun 10 |
| | 22,594 y Mar 06-Mar 12 | 22,581 y Jun 11-Jun 30 |
| | 22,593 y Mar 13-Mar 19 | 22,580 y Jul 01-Jul 29 |
| | 22,592 y Mar 20-Mar 27 | 22,579 y Jul 30-Aug 28 |
| | 22,591 y Mar 28-Apr 04 | 22,578 y Aug 29-Sep 28 |
| | 22,590 y Apr 05-Apr 12 | 22,577 y Sep 29-Oct 26 |
| | 22,589 y Apr 13-Apr 19 | 22,576 y Oct 27-Nov 12 1200Z |
| | 22,588 y Apr 20-Apr 27 | 22,583 y Nov 12-Dec 31 |
| D | 16° 40.2' Jan 01-Jul 10 1734Z | 16° 39.4' Jul 10-Dec 31 |
| Z | -35,230 y Jan 01-Jan 09 | -35,235 y Feb 13-Feb 20 |
| | -35,231 y Jan 10-Jan 17 | -35,236 y Feb 21-Feb 28 |
| | -35,232 y Jan 18-Jan 25 | -35,237 y Mar 01-Jul 16 1500Z |
| | -35,233 y Jan 26-Feb 04 | -35,195 y Jul 16-Dec 24 1220Z |
| | -35,234 y Feb 05-Feb 12 | -35,094 y Dec 24-Dec 31 |

Insensitive

| | | |
|---|---|---|
| H | 22,496 y Jan 01-Dec 31 | |
| D | 16° 24.1' Jan 01-Jul 10 | 16° 22.8' Jul 11-Dec 31 |
| Z | -35,188 y Jan 01-Dec 31 | |

9. E.D.A. Fluxgate Magnetometer

For Nov. 12 the chart from this instrument is the only available record. The sense of the traces is as on the La Cour magnetogram. Parallax between time mark and traces is negligible. For each trace, the centre printed line (marked 50 ) of the appropriate third of the chart is taken as the baseline.

| | H | D | Z |
|---|---|---|---|
| Baseline | 22,705 y | 16° 55.7' | -35,199 y |
| Scale Value | 15.4y/mm | 2.14'/mm | 16.5y/mm |

10. Example of computation of absolute values

1975 Jan 01, 1200Z

$H_o$ etc, baselines (at $T_s$= 9.0°C for H and Z)

q , temperature coefficients in y/°C

s , scale values

n , ordinates in millimetres

$$H = H_o + s_H n_H + q_H(T_s - (T_o + s_T n_T))$$
$$= 22865 + 4.30 \times 5.8 + (-4.0)(9.0 - (24.8 + 0.5 \times -30.7))$$
$$= 22712 \text{ y}$$

$$Z = Z_o + s_Z n_Z + q_Z(T_s - (T_o + s_T n_T))$$
$$= -35230 + (-3.12 \times 14.1) + 2.5(9.0 - (24.8 + 0.5 \times -30.7))$$
$$= -35275 \text{ y}$$

$$D = D_o + s_D n_D$$
$$= 16° 40.18' + 0.92 \times 14.1$$
$$= 16° 53.15' \text{ East}$$

# BRITISH ANTARCTIC SURVEY

(FORMERLY FALKLAND ISLANDS DEPENDENCIES SURVEY)

## MAGNETIC RECORDS FOR 1974

FROM ARGENTINE ISLANDS A.973

LAT. -65° 15' LONG. 295° 44'
GEOMAGNETIC LATITUDE -53.8°
GEOMAGNETIC LONGITUDE 3.3°

ORIGINAL RECORDS HELD AT:-

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FROM APRIL 1976 HELD AT:-

BRITISH ANTARCTIC SURVEY
ATMOSPHERIC SCIENCES DIVISION
MADINGLEY ROAD
CAMBRIDGE CB3 OET

# EXPLANATORY NOTES 1974

## 1. Instruments

These are standard La Cour Variometers, recording H, D and Z. (An E.D.A. fluxgate magnetometer recording H, D and Z was also operated. The fluxgate record is reproduced only for November 12th; see section 9).

## 2. Time

Charts are changed at Greenwich midnight, so that each chart shows a complete Greenwich day.

The parallax correction for each trace is negligible provided that the relevant moving time mark dots are used.

## 3. Order of Traces, from top to bottom of chart.

| Sensitive | Insensitive |
|---|---|
| H trace | Z trace |
| H baseline | Z baseline |
| T trace | T trace |
| D trace | H trace |
| D baseline | H baseline |
| Z trace | D trace |
| Z baseline | D baseline |

## 4. Sense of Trace

T increases up the chart
H increases up the chart
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Z increases (becomes less negative) down the chart.

## 5. Temperature Coefficients

| | Sensitive | Insensitive |
|---|---|---|
| H | -4.0 γ/°C | +2.0 γ/°C |
| Z | +2.5 γ/°C | -2.5 γ/°C |

(When the coefficient is positive, the ordinate, in gammas, increases with increasing temperature)

T Trace

| | Sensitive | Insensitive |
|---|---|---|
| Scale Value | 0.5°C/mm | 1.4°C/mm |
| Baseline ($H_o$) | 24.8°C Jan 01-Feb 06 1400Z | -62.0°C Jan 01-Aug 16 2000Z |
| | 21.4°C Feb 06-Feb 08 0100Z | -61.0°C Aug 16-Dec 31 |
| | 21.7°C Feb 08-Dec 31 | |

## 6. Scale Values

| | H γ/mm | D '/mm | Z γ/mm |
|---|---|---|---|
| Sensitive | 4.30 Jan 01-Jan 22 | 0.92 | -3.12 Jan 01-Apr 30 |
| | 4.36 Jan 23-Dec 31 | | -3.07 May 01-Oct 26 |
| | | | -2.95 Oct 27-Dec 24 |
| | | | -2.86 Dec 25-Dec 31 |
| Insensitive | 15.2 | 2.32 | -11.2 |

7. Scale of Reproduction

To give scale a rule of 50 mm, length is reproduced on each magnetogram.

8. Baselines

Baselines at 9°C are quoted. Chart baselines must be calculated using the information given in section 5.

Sensitive

| | | |
|---|---|---|
| H | 22,685 γ Jan 01-Jan 18 | 22,587 γ Apr 28-May 04 |
| | 22,683 γ Jan 19-Feb 06 1500Z | 22,586 γ May 05-May 10 |
| | 22,598 γ Feb 06-Feb 13 | 22,585 γ May 11-May 18 |
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| | 22,596 γ Feb 21-Feb 27 | 22,583 γ May 27-Jun 03 |
| | 22,595 γ Feb 28-Mar 05 | 22,582 γ Jun 04-Jun 10 |
| | 22,594 γ Mar 06-Mar 12 | 22,581 γ Jun 11-Jun 30 |
| | 22,593 γ Mar 13-Mar 19 | 22,580 γ Jul 01-Jul 29 |
| | 22,592 γ Mar 20-Mar 27 | 22,579 γ Jul 30-Aug 28 |
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| Z | -35,230 γ Jan 01-Jan 09 | -35,235 γ Feb 13-Feb 20 |
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| | -35,232 γ Jan 18-Jan 25 | -35,237 γ Mar 01-Jul 16 1500Z |
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| | -35,234 γ Feb 05-Feb 12 | -35,094 γ Dec 24-Dec 31 |

Insensitive

| | | |
|---|---|---|
| H | 22,496 γ Jan 01-Dec 31 | |
| D | 16° 24.1' Jan 01-Jul 10 | 16° 22.8' Jul 11-Dec 31 |
| Z | -35,188 γ Jan 01-Dec 31 | |

9. E.D.A. Fluxgate Magnetometer

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| | H | D | Z |
|---|---|---|---|
| Baseline | 22,705 γ | 16° 55.7' | -35,199 γ |
| Scale Value | 15.4γ/mm | 2.14'/mm | 16.5γ/mm |

10. Example of computation of absolute values

1975 Jan 01, 1200Z

$H_o$ etc, baselines (at $T_s$ = 9.0°C for H and Z)

q , temperature coefficients in γ/°C

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$$H = H_o + s_H n_H + q_H(T_s - (T_o + s_T n_T))$$
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$$= -35230 + (-3.12 \times 14.1) + 2.5(9.0 - (24.8 + 0.5 \times -30.7))$$
$$= -35275\ \gamma$$

$$D = D_o + s_D n_D$$
$$= 16° 40.18' + 0.92 \times 14.1$$
$$= 16° 53.15'\ \text{East}$$

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## 6. Scale Values

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| | -35,232 y Jan 18–Jan 25 | -35,237 y Mar 01–Jul 16 1500Z |
| | -35,233 y Jan 26–Feb 04 | -35,195 y Jul 16–Dec 24 1220Z |
| | -35,234 y Feb 05–Feb 12 | -35,094 y Dec 24–Dec 31 |

Insensitive

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|---|---|---|
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1975 Jan 01, 1200Z

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$$= 22865 + 4.30 \times 5.8 + (-4.0)(9.0 - (24.8 + 0.5 \times -30.7))$$
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$$= -35230 + (-3.12 \times 14.1) + 2.5(9.0 - (24.8 + 0.5 \times -30.7))$$
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$$D = D_o + s_D n_D$$
$$= 16° 40.18' + 0.92 \times 14.1$$
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