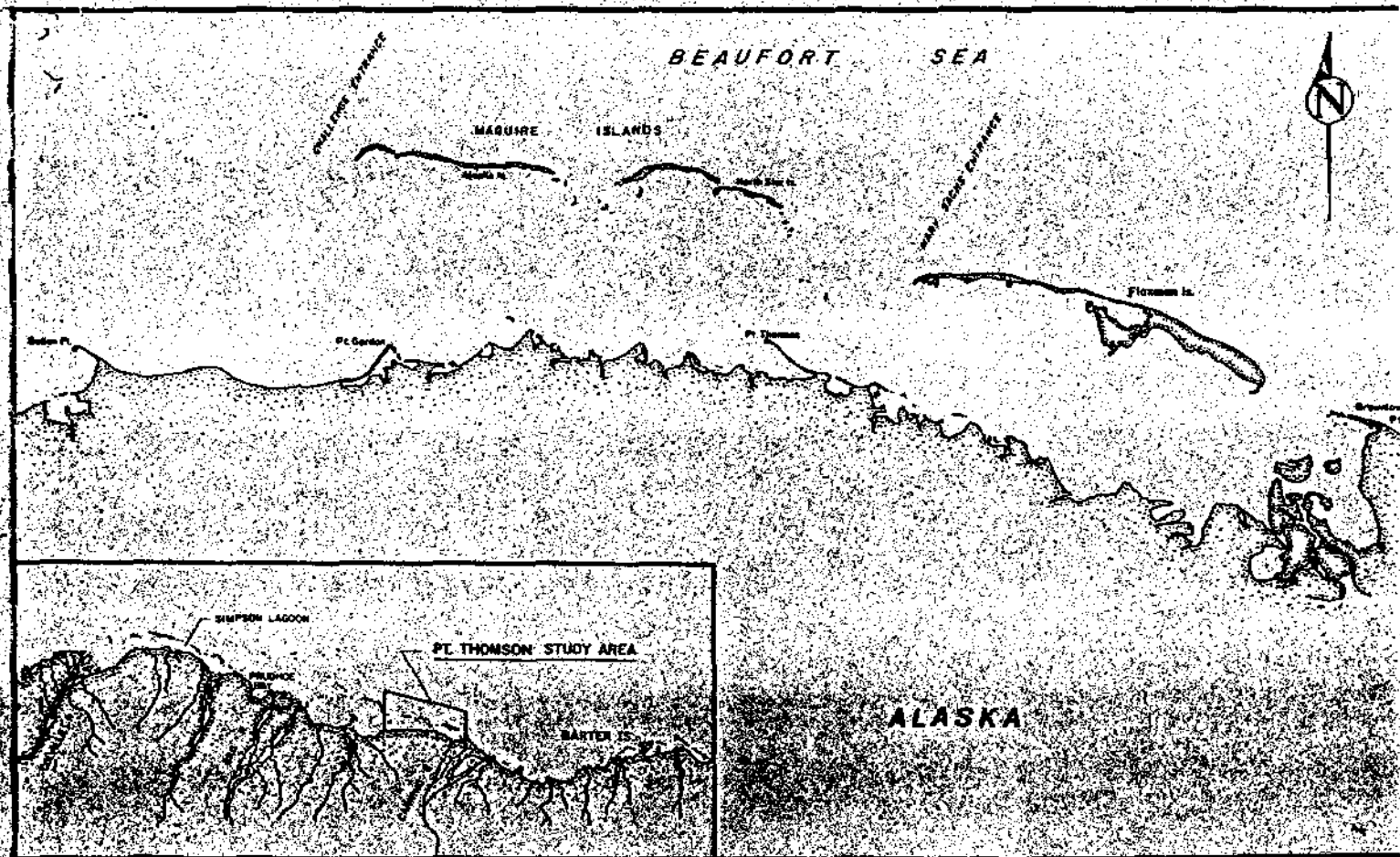


OCEANOGRAPHIC ENGINEERING SERVICES POINT THOMSON DEVELOPMENT PROJECT Agreement Number PTD-8204



VOLUME 2
PART 1

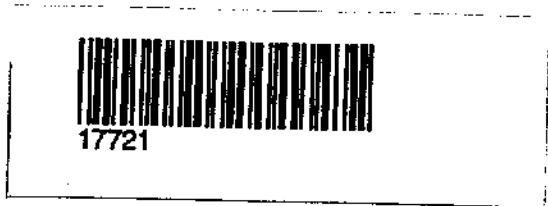
Prepared for:
Exxon Company U.S.A.
1800 Avenue of the Stars
Los Angeles, California

Prepared by:
Kinetic Laboratories, Inc.
519 West Eighth Avenue
Anchorage, Alaska

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Appendix A: Meteorological Results

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Appendix A: Meteorological Results

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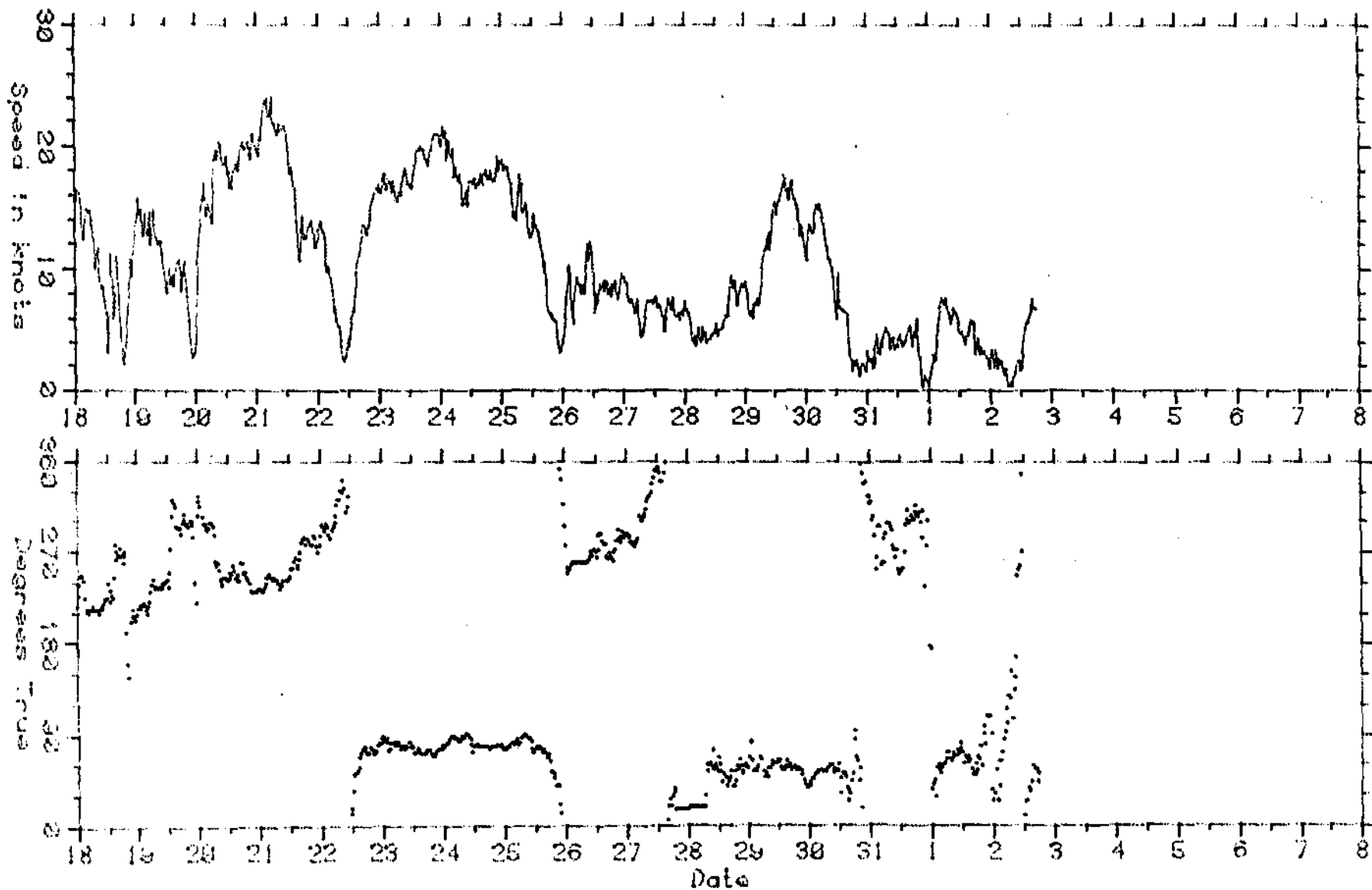


FIGURE A1 . SPEED AND DIRECTION DATA
CHALLENGE ISLAND WIND
0000, 18 AUGUST TO 1738, 2 SEPTEMBER, 1982

A-4

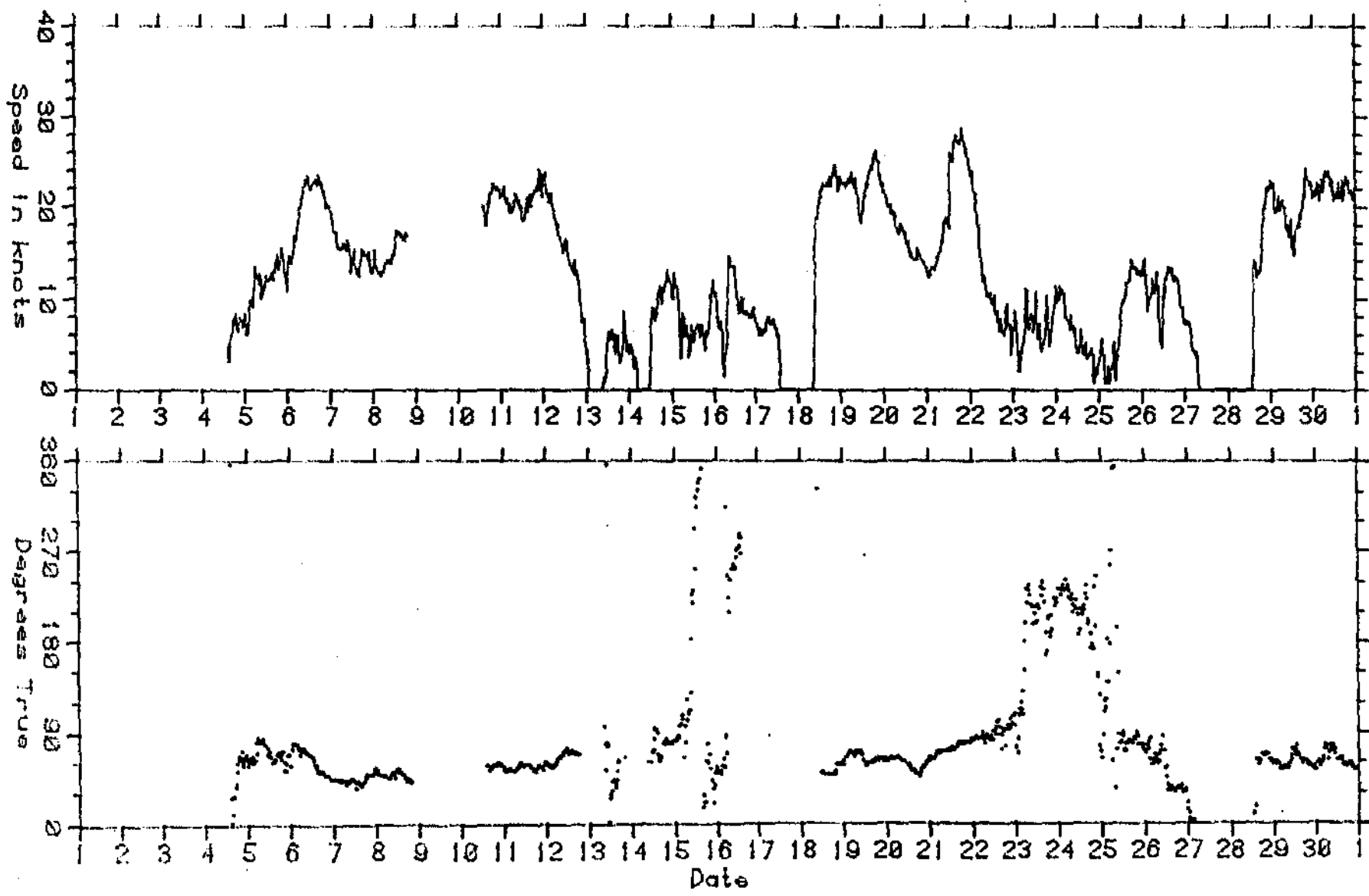


FIGURE A1 . SPEED AND DIRECTION DATA
CHALLENGE ISLAND WIND
1400, 4 SEPTEMBER TO 2300, 30 SEPTEMBER, 1982

A-5

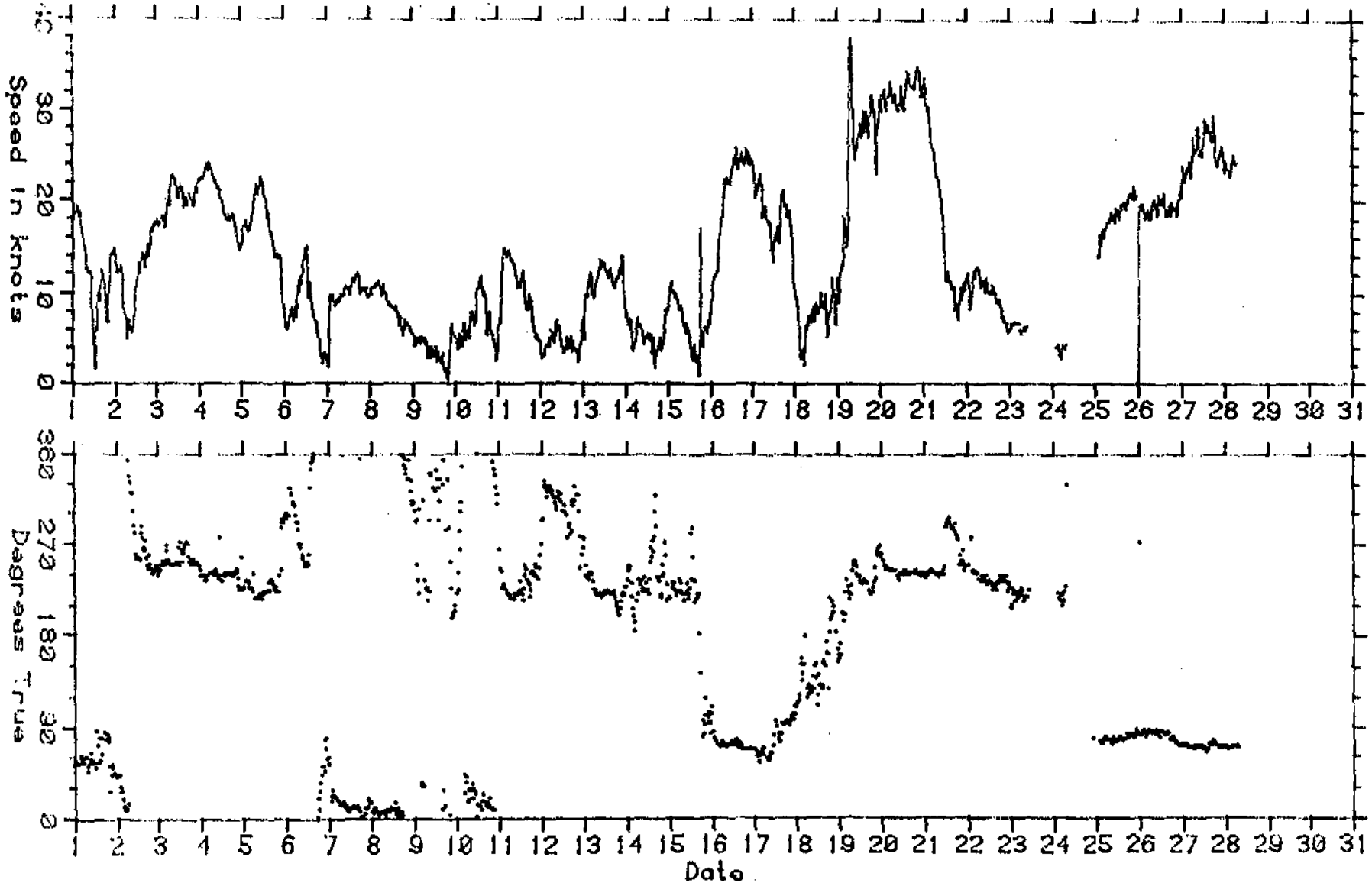


FIGURE A1, SPEED AND DIRECTION DATA
CHALLENGE ISLAND WIND
0000, 1 OCTOBER TO 0700, 30 OCTOBER, 1982

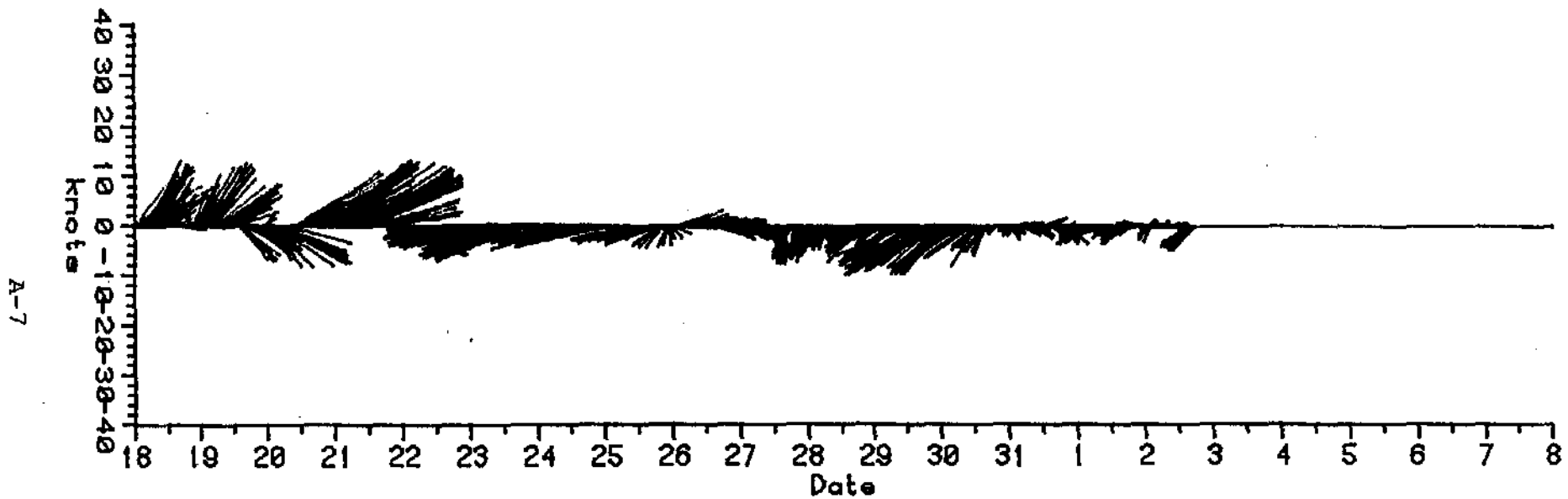


FIGURE A2

VECTOR STICK PLOT
 CHALLENGE ISLAND WIND
 0008, 18 AUGUST TO 1738, 2 SEPTEMBER, 1982



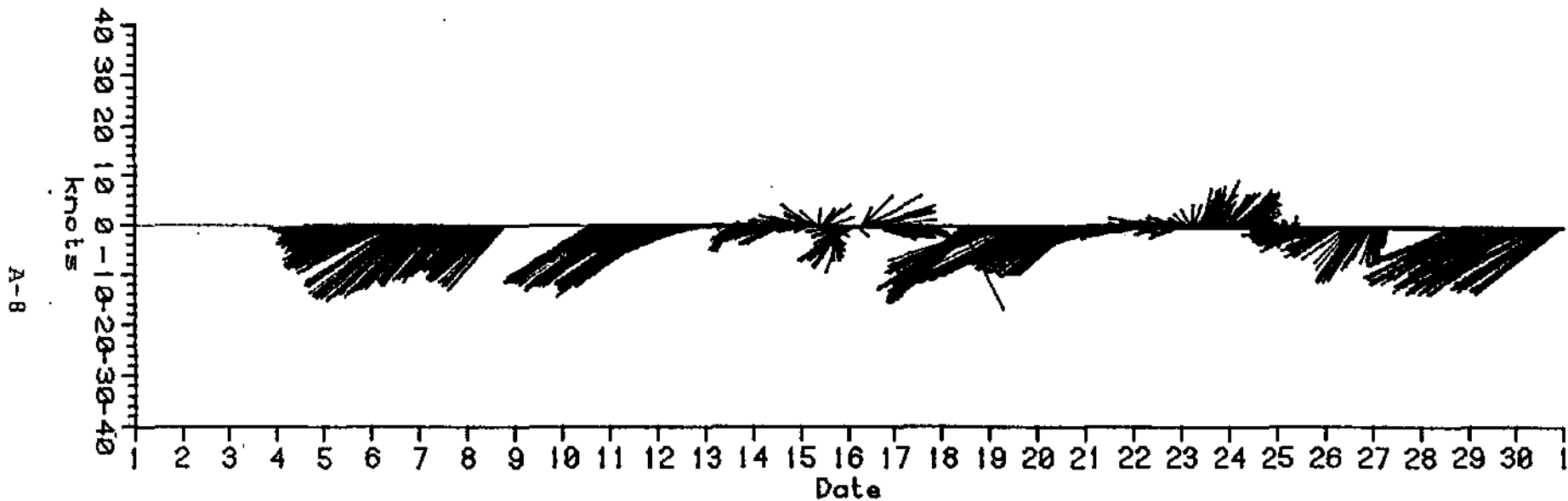


FIGURE A2

VECTOR STICK PLOT
 CHALLENGE ISLAND WIND
 1400, 4 SEPTEMBER TO 2300, 30 SEPTEMBER, 1982



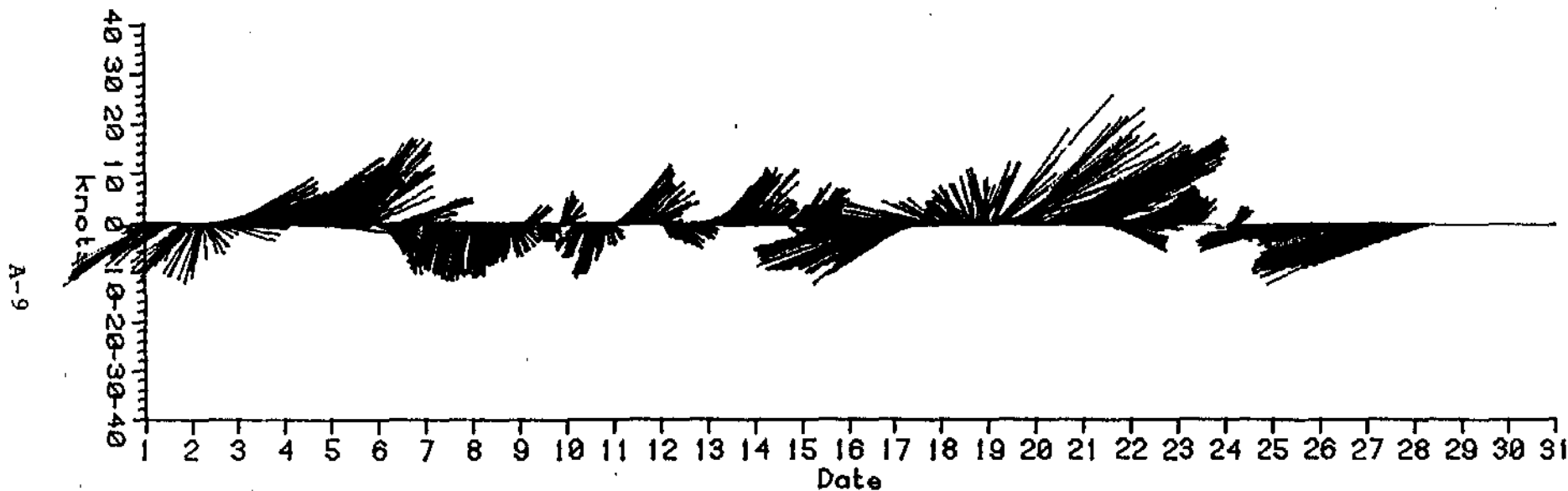


FIGURE A2

VECTOR STICK PLOT
 CHALLENGE ISLAND WIND
 0000, 1 OCTOBER TO 0700, 28 OCTOBER, 1982



Mean N 1.38
Mean E 0.62
Axis bearing 71.2
Correlation 0.486
Mean Prin. 1.19
Var Prin. 96.2
Mean Orth. 0.97
Var Orth. 18.8

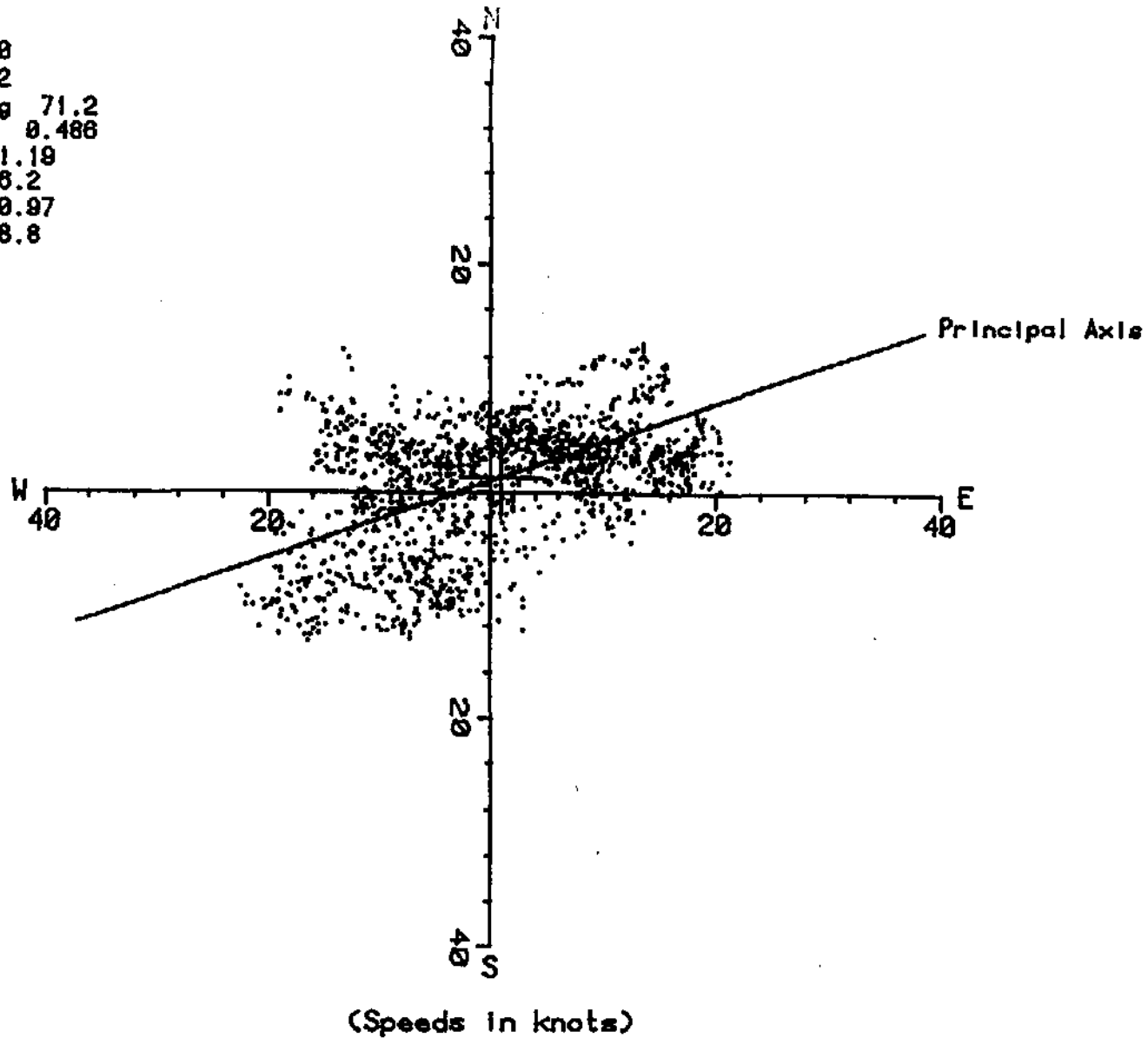


FIGURE A3

POLAR PLOT - SPEED AND DIRECTION DATA
CHALLENGE ISLAND WIND

0008, 28 JULY TO 1738, 3 SEPTEMBER, 1982

Mean N 2.20
Mean E 3.99
Axis bearing 63.6
Correlation 0.773
Mean Prin. 4.56
Var Prin. 201.1
Mean Orth. 0.19
Var Orth. 17.8

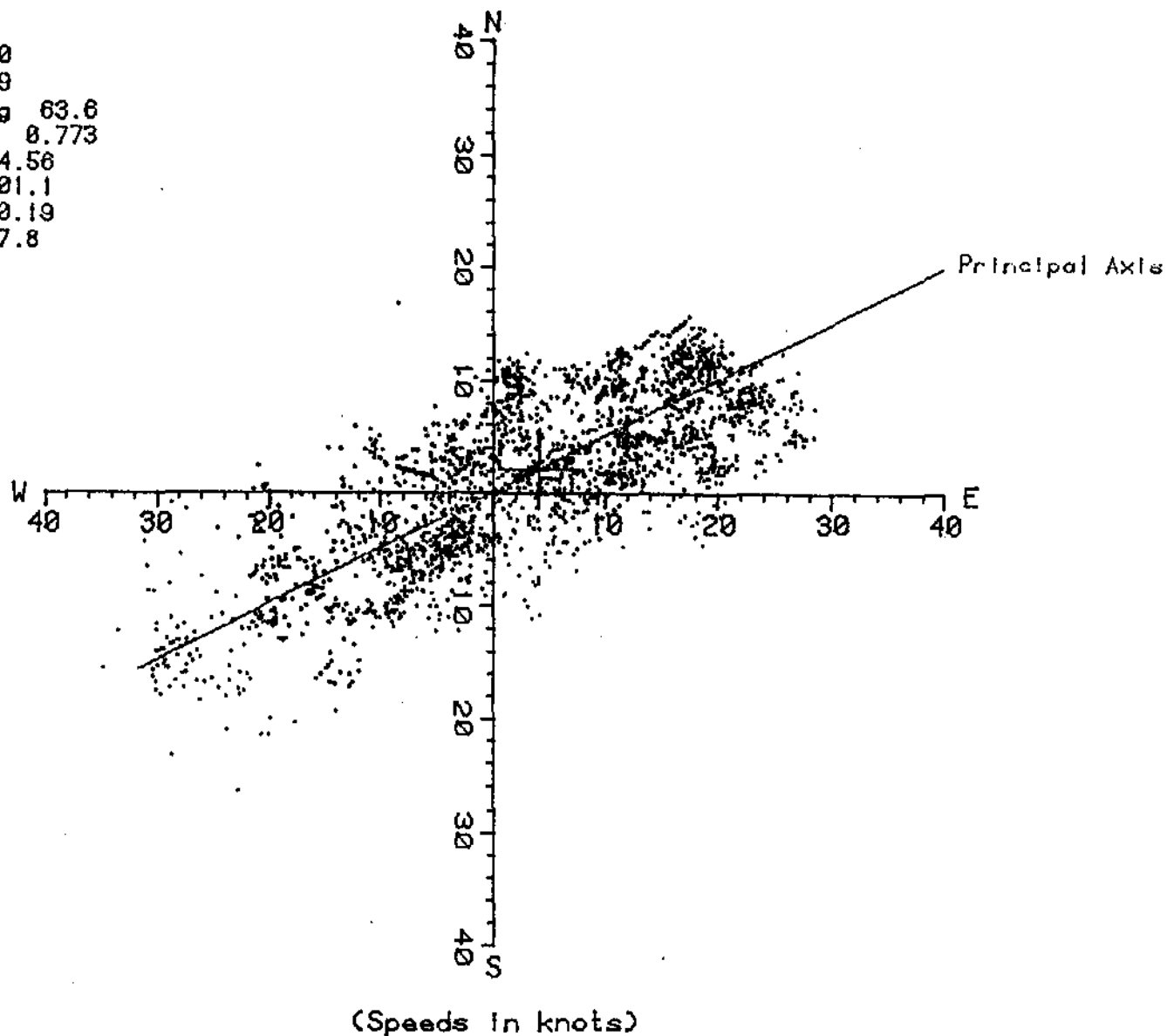


FIGURE A3

POLAR PLOT - SPEED AND DIRECTION DATA
CHALLENGE ISLAND WIND
1400, 4 SEPTEMBER TO 0700, 28 OCTOBER, 1982

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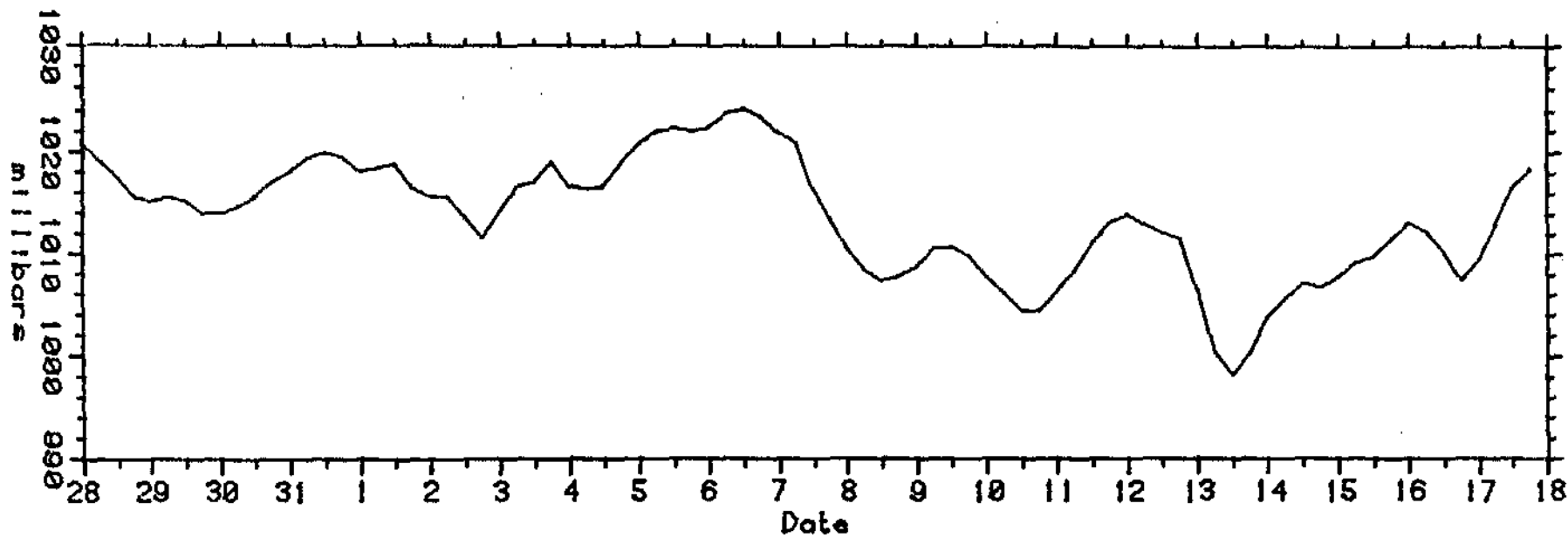


FIGURE A4. BAROMETRIC PRESSURE
CHALLENGE ISLAND BAROGRAPH
0000, 28 JULY TO 1800, 17 AUGUST, 1982

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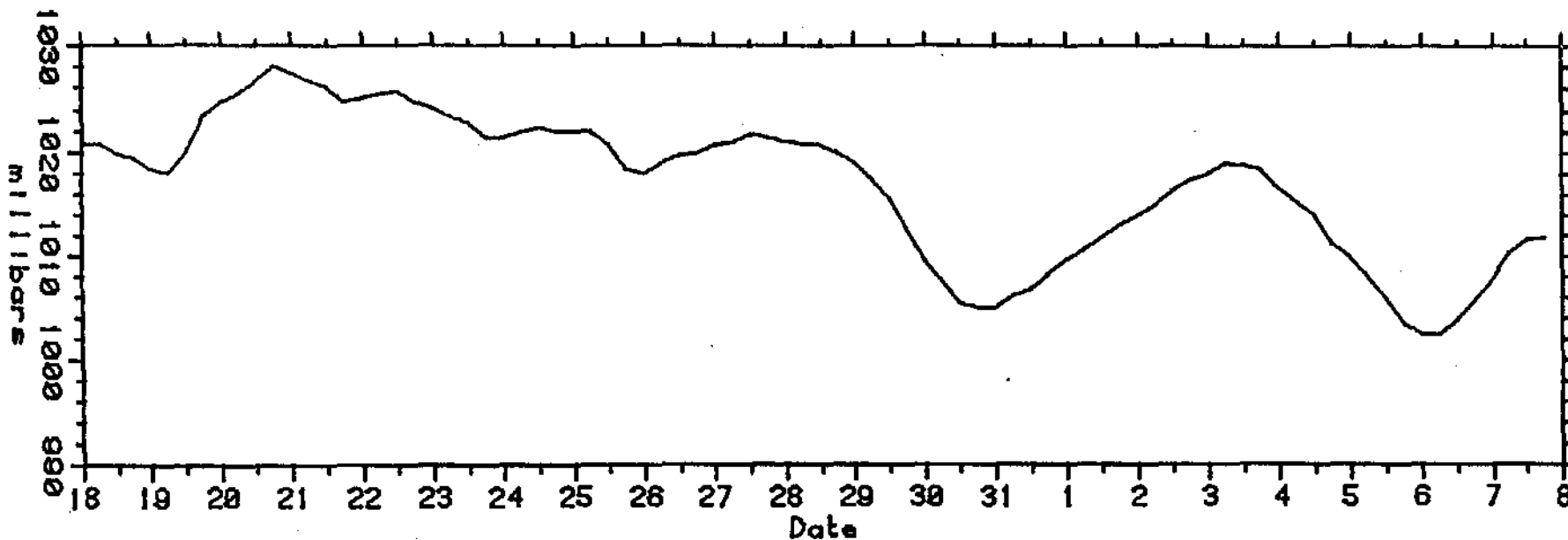
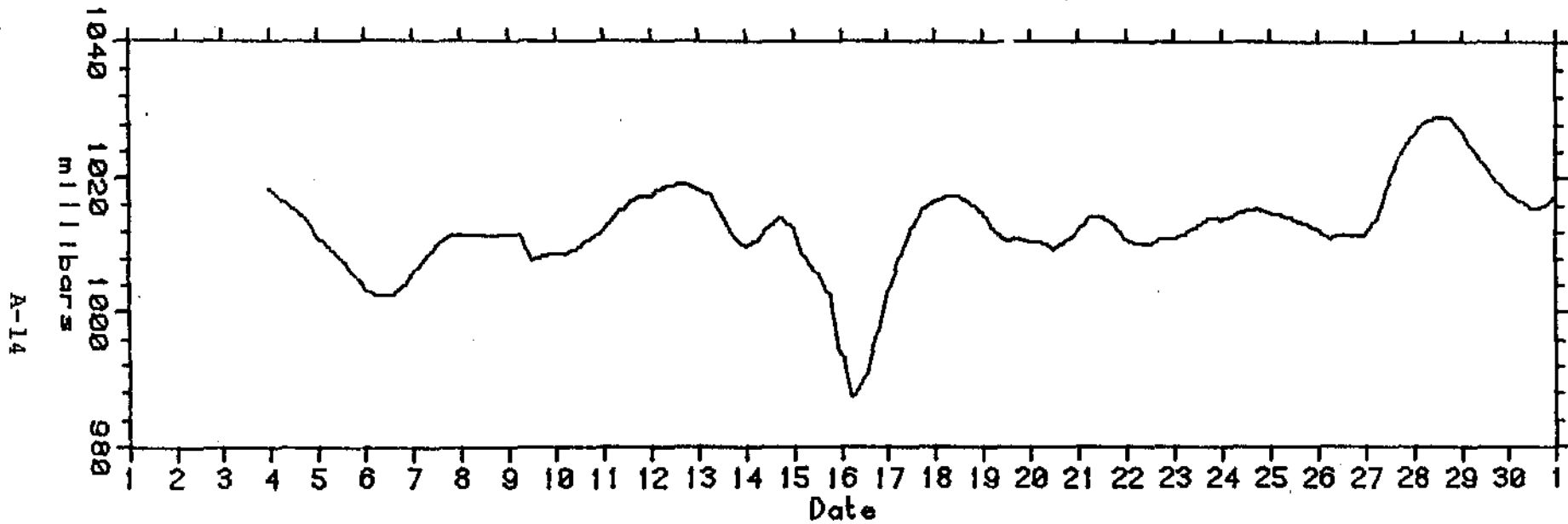


FIGURE A4, BAROMETRIC PRESSURE
CHALLENGE ISLAND BAROGRAPH
0000, 18 AUGUST TO 1800, 7 SEPTEMBER, 1982



A-14

FIGURE A4. BAROMETRIC PRESSURE
CHALLENGE ISLAND WEATHER STATION
0000, 4 SEPTEMBER TO 2300, 30 SEPTEMBER, 1982

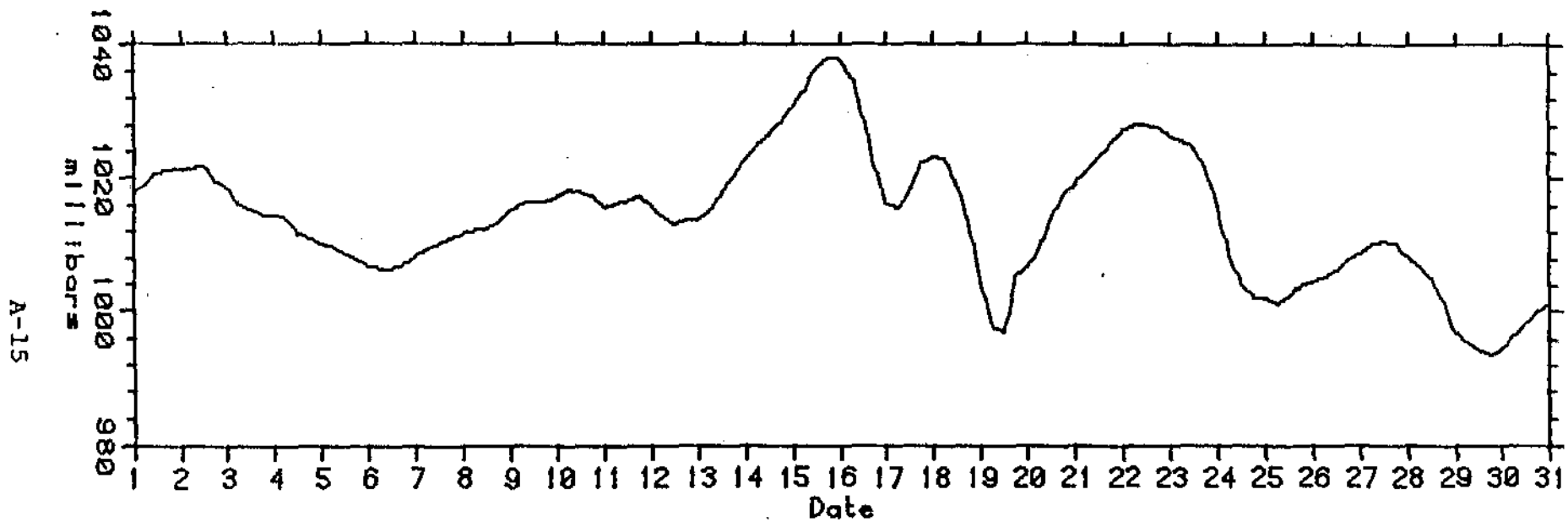


FIGURE A4, BAROMETRIC PRESSURE
CHALLENGE ISLAND WEATHER STATION
0000, 1 OCTOBER TO 2300, 30 OCTOBER, 1982

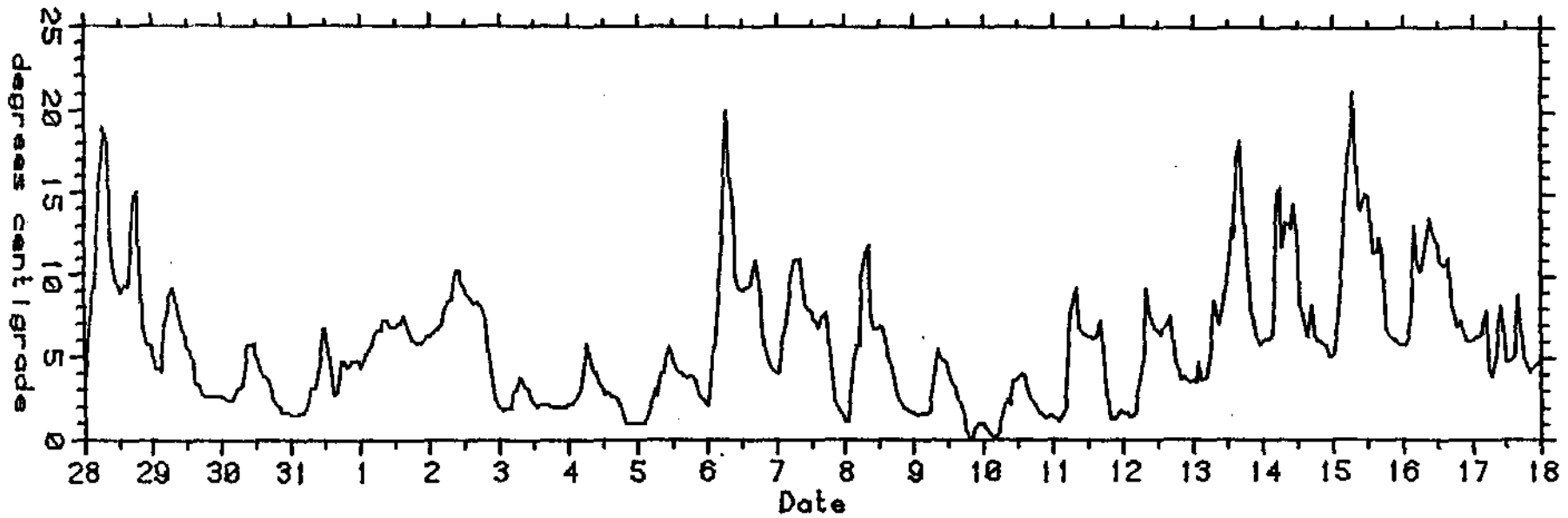


FIGURE A5 AIR TEMPERATURE
CHALLENGE ISLAND BAROGRAPH
0000, 28 JULY TO 2300, 17 AUGUST, 1982

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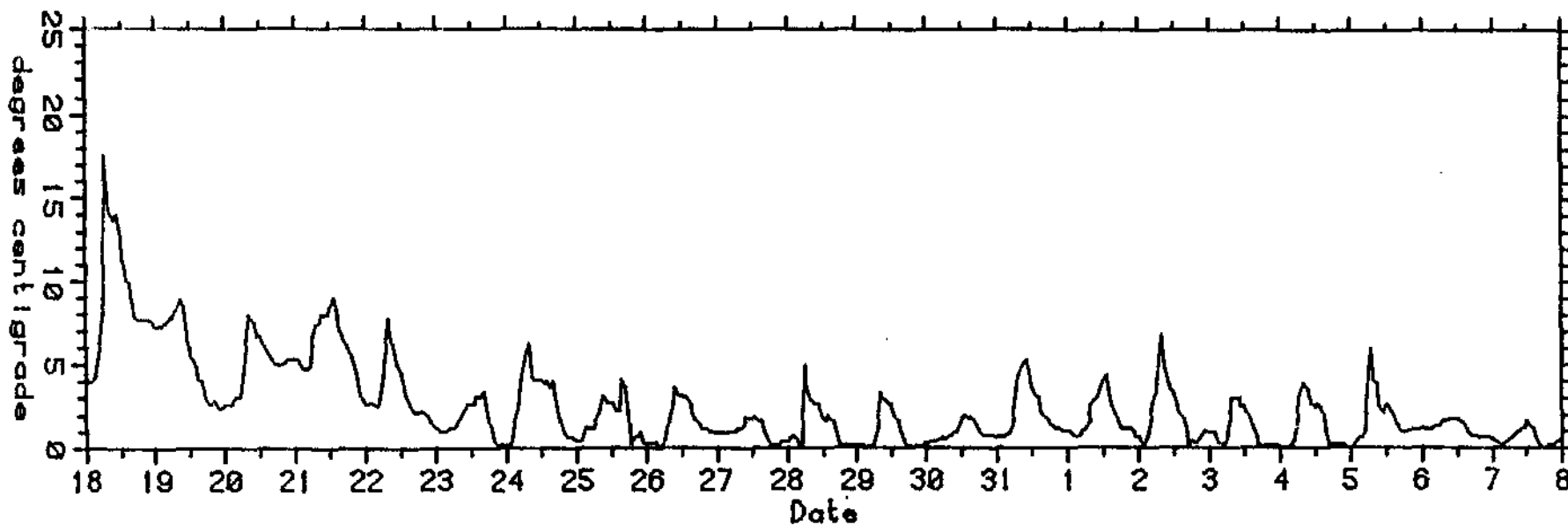
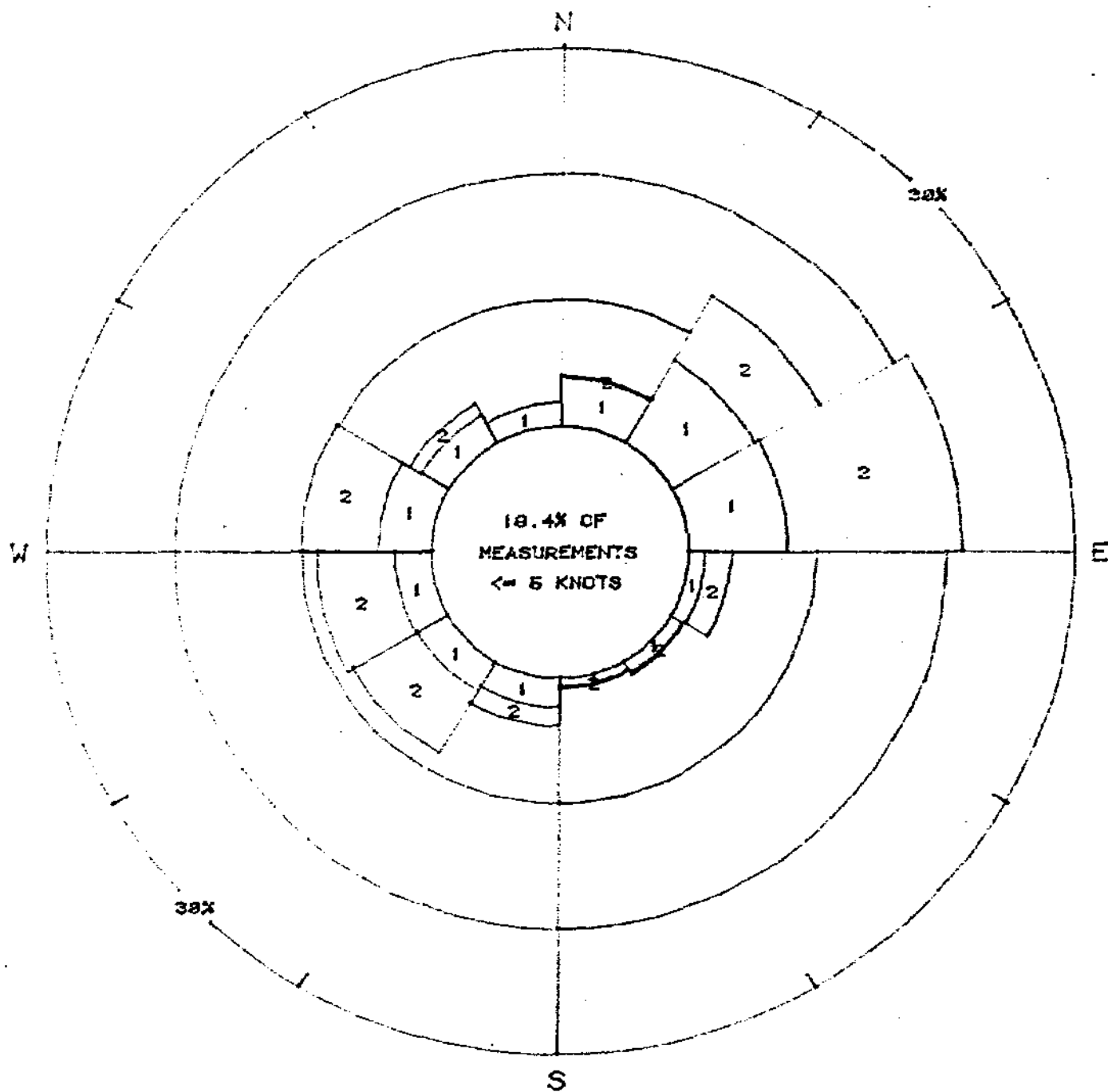


FIGURE A5, AIR TEMPERATURE
CHALLENGE ISLAND BAROGRAPH
0000, 18 AUGUST TO 2300, 7 SEPTEMBER, 1982



| | | | |
|---|---------------|---|-------------|
| 1 | 5 - 10 KNOTS | 3 | >= 25 KNOTS |
| 2 | 12 - 25 KNOTS | | |

FIGURE A6 . ROSE DIAGRAM
 1/2 HR. AVERAGE WIND
 CHALLENGE ISLAND
 0008, 28 JULY TO 1738, 3 SEPTEMBER, 1982

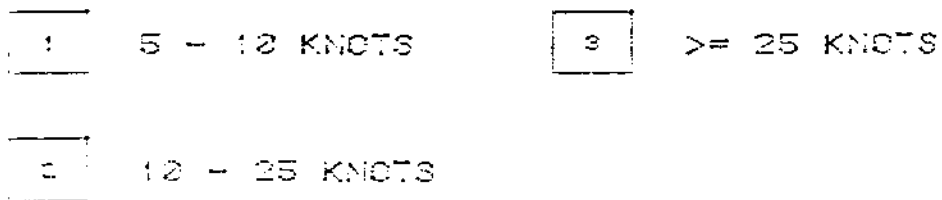
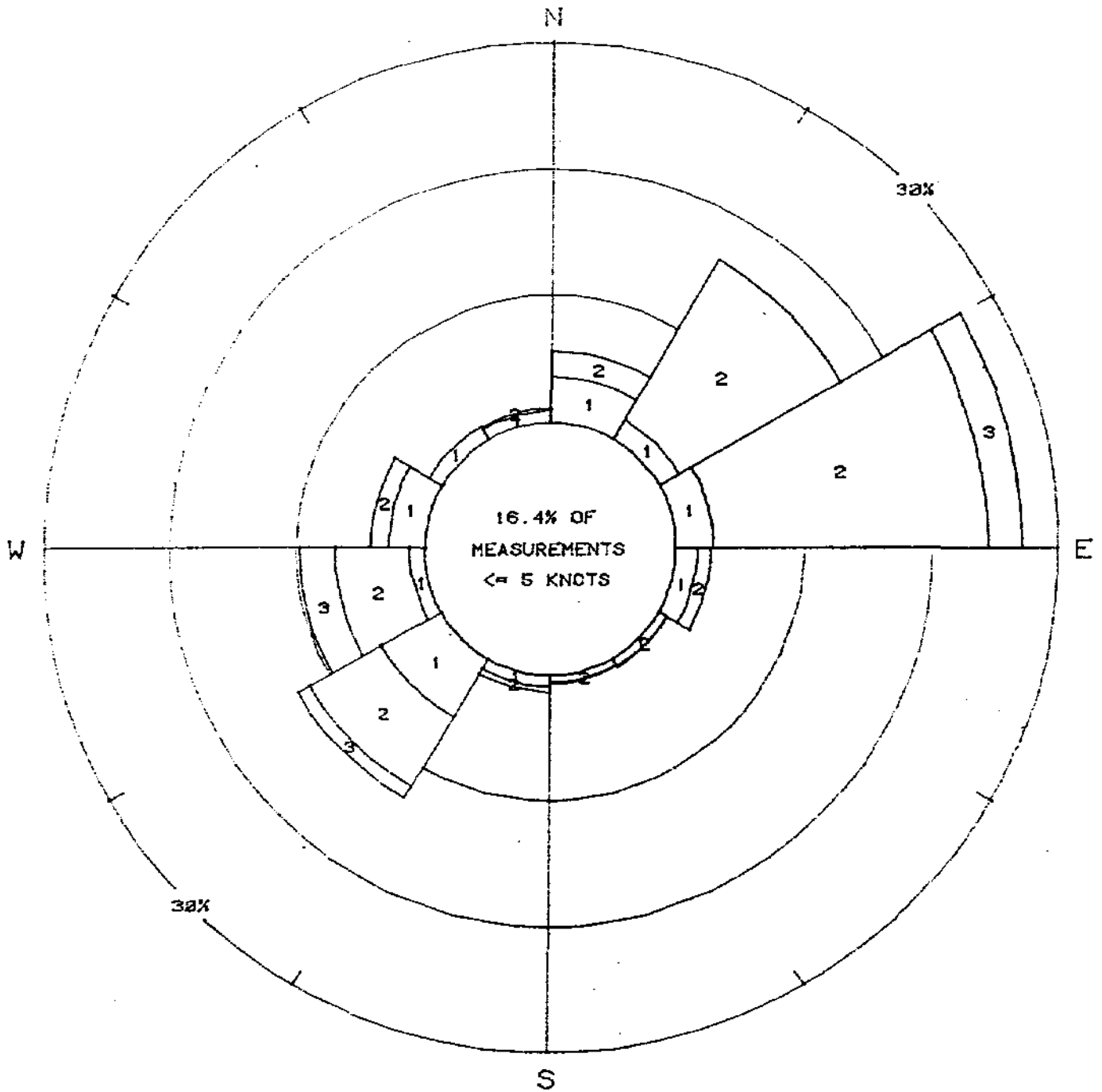


FIGURE A6 . ROSE DIAGRAM
 WIND
 CHALLENGE ISLAND WEATHER STATION
 1400, 4 SEPTEMBER TO 0700, 28 OCTOBER, 19

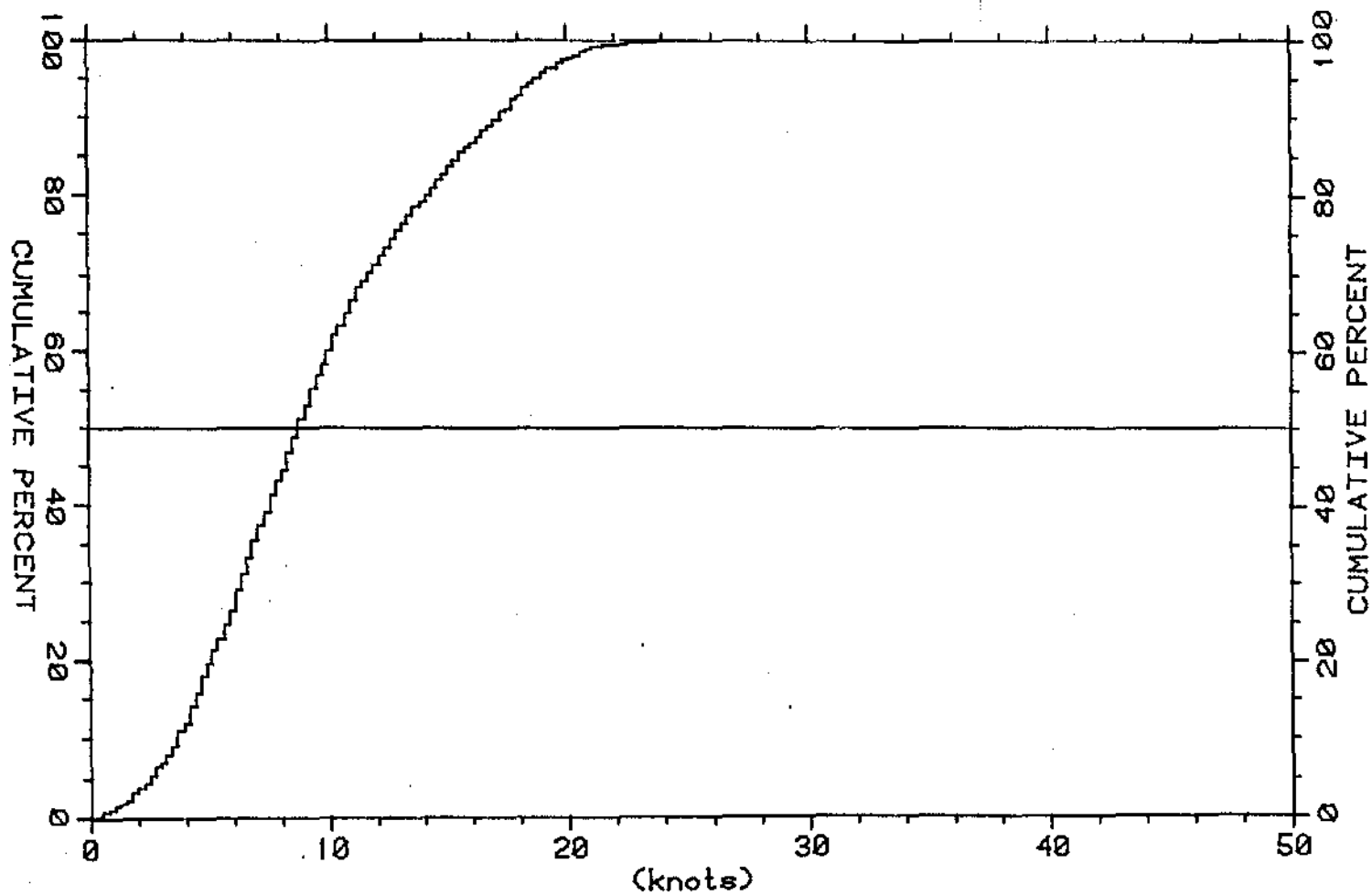


FIGURE A7. CUMULATIVE PROBABILITY PLOT
1/2 HR AVERAGE WIND
CHALLENGE ISLAND WEATHER STATION
0208, 24 JULY TO 1738, 2 SEPTEMBER, 1982
1967 DATA POINTS

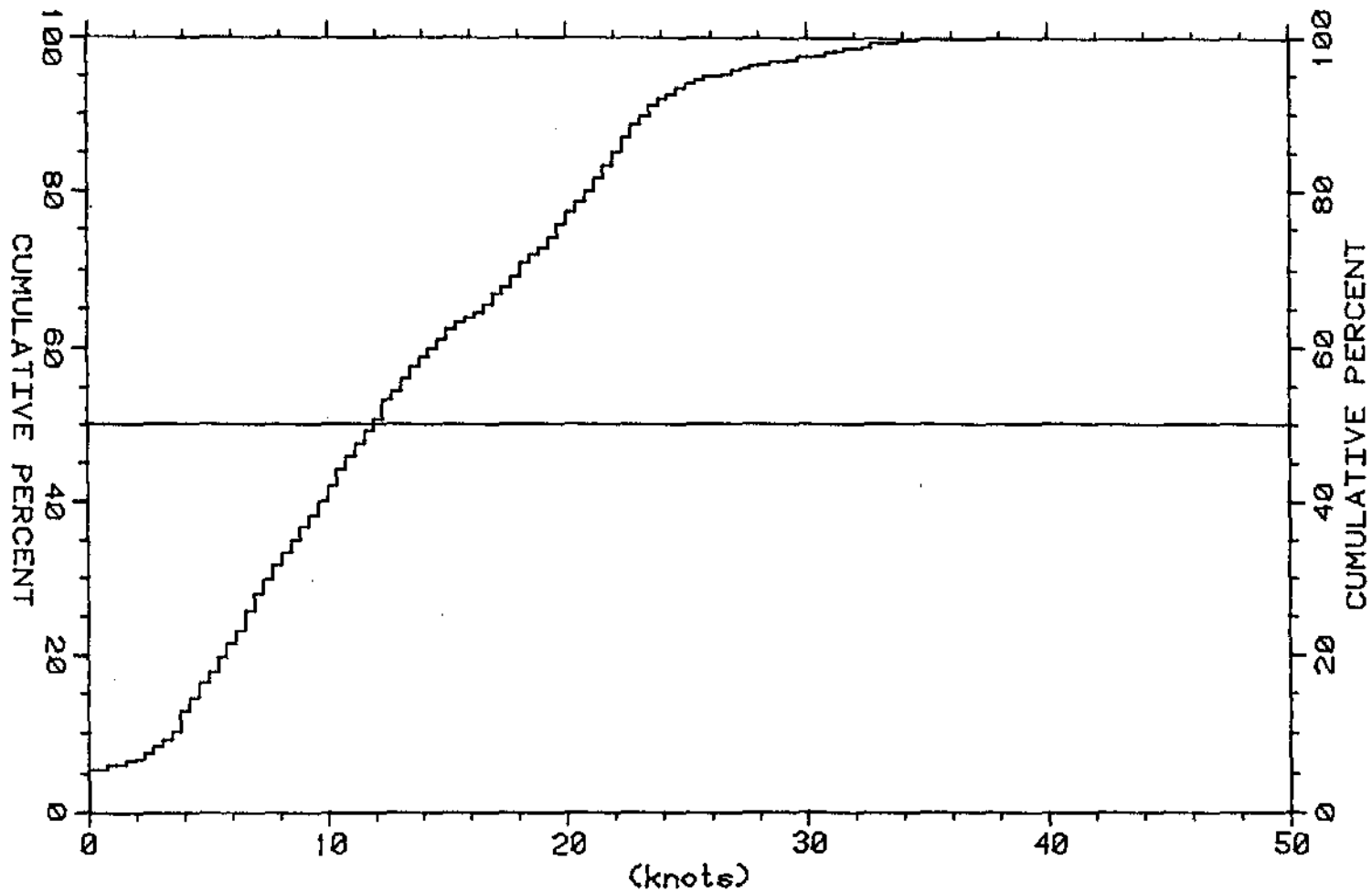


FIGURE A7 CUMULATIVE PROBABILITY PLOT
WIND
CHALLENGE ISLAND WEATHER STATION
1400, 4 SEPTEMBER TO 0700, 28 OCTOBER, 1982
2423 DATA POINTS

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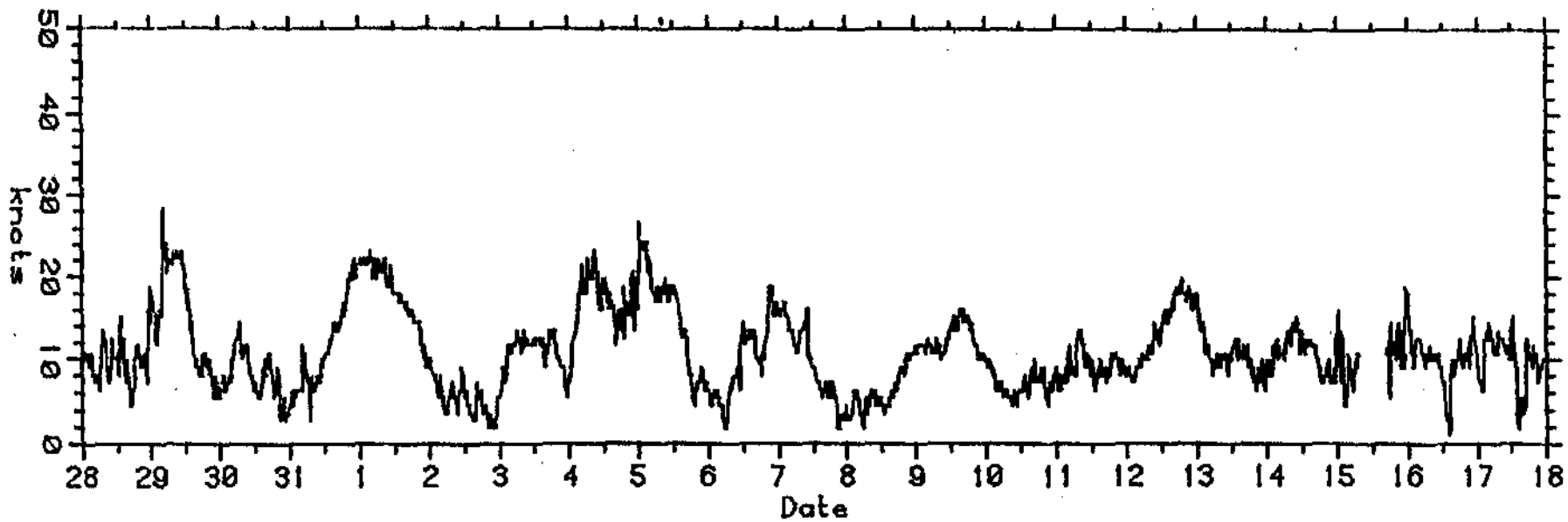


FIGURE A8

WIND GUST SPEED
CHALLENGE ISLAND WEATHER STATION
0000, 28 JULY TO 2300, 17 AUGUST, 1982

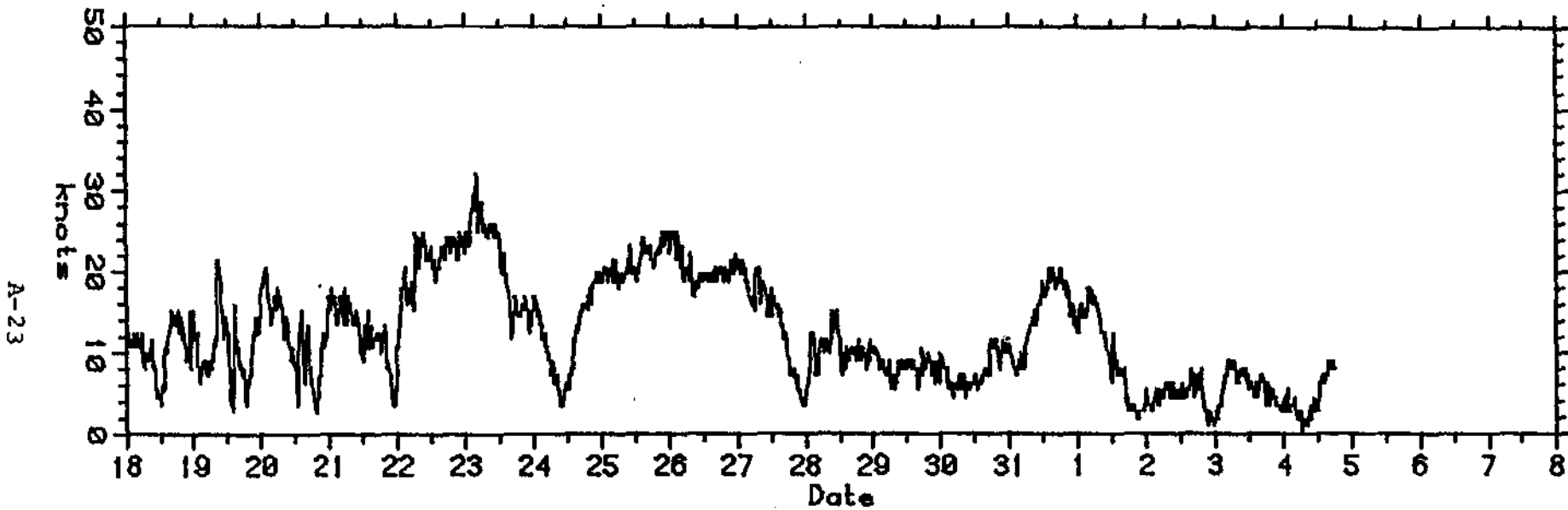


FIGURE A8

WIND GUST SPEED
CHALLENGE ISLAND WEATHER STATIONN
0000, 18 AUGUST TO 1800, 4 SEPTEMBER, 1982

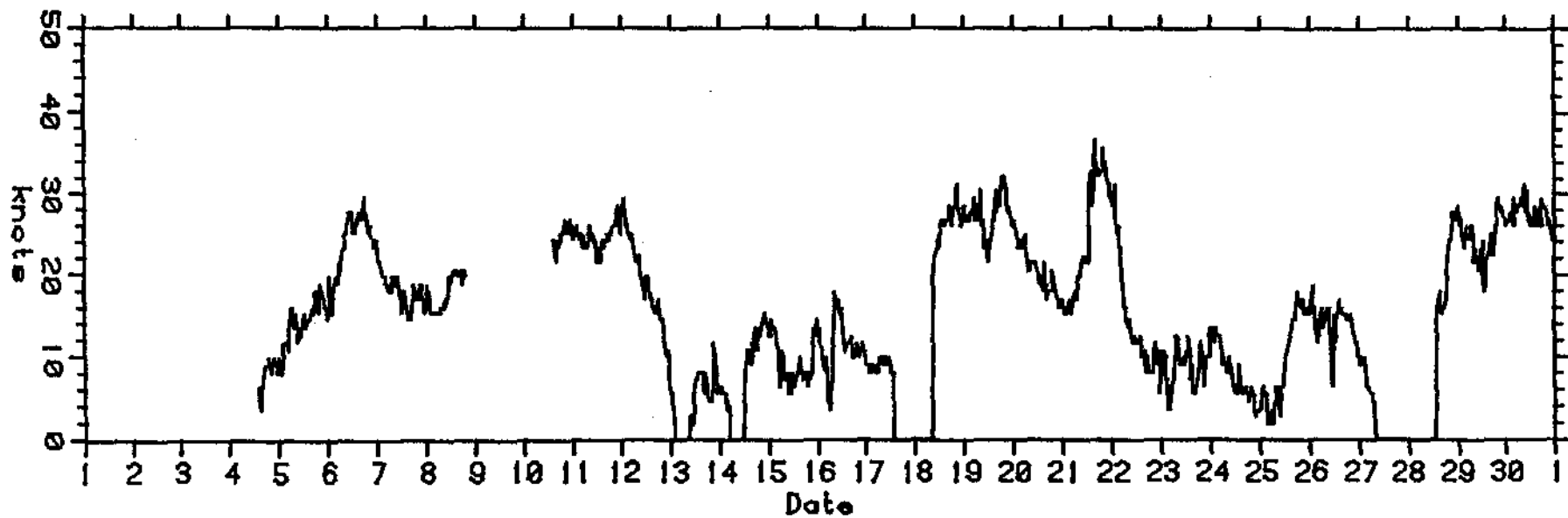


FIGURE A8 WIND GUST SPEED
CHALLENGE ISLAND WEATHER STATION
1400, 4 SEPTEMBER TO 2300, 30 SEPTEMBER, 1982

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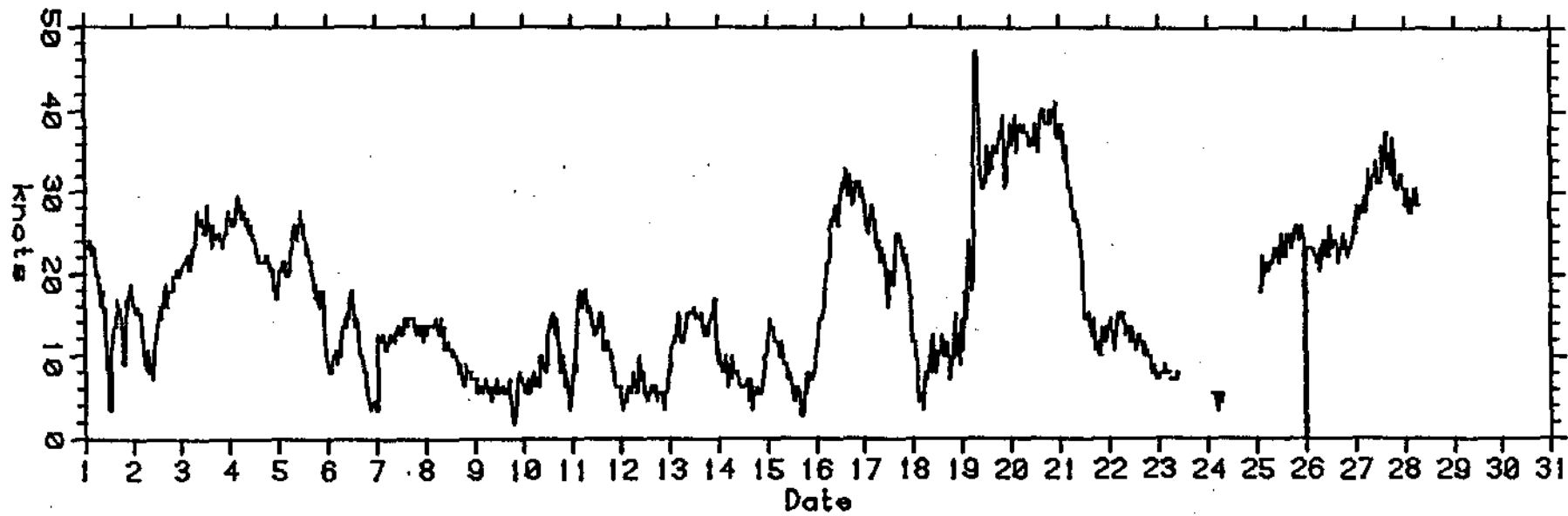


FIGURE A8

WIND GUST SPEED
CHALLENGE ISLAND WEATHER STATION
0000, 1 OCTOBER TO 0700, 28 OCTOBER, 1982

TABLE A1.

WIND SPEED PERSISTENCE - CHALLENGE ISLAND WEATHER STATION
0208, 24 JULY TO 1738, 2 SEPTEMBER, 1982

PERCENT DURATION

HOURS, DAYS DURATION

| knots | >3h | >6h | >12h | >18h | >24h | >36h | >2d | >4d | >6d | >8d | >10d | >12d | TOTAL SAMPLES |
|-------|------|------|------|------|------|------|-----|-----|-----|-----|------|------|------------------|
| >5 | 83.9 | 72.3 | 53.4 | 39.7 | 29.1 | 16.6 | 8.8 | | | | | | 1565 |
| >10 | 72.0 | 58.8 | 42.5 | 33.5 | 26.1 | 14.2 | 7.3 | | | | | | 805 |
| >15 | 70.6 | 58.0 | 42.3 | 31.5 | 24.3 | 11.7 | 4.5 | | | | | | 333 |
| >20 | 45.3 | 22.6 | | | | | | | | | | | 53 |
| >25 | | | | | | | | | | | | | 0 |
| >30 | | | | | | | | | | | | | 0 |
| >35 | | | | | | | | | | | | | 0 |
| >40 | | | | | | | | | | | | | 0 |
| >45 | | | | | | | | | | | | | 0 |
| >50 | | | | | | | | | | | | | 0 |

largest screened value = 24.18 knots
total time period spanned (hours) = 975.5
sample interval (hours) = .5
total possible samples = 1952
actual samples = 1927

TABLE A1.

WIND SPEED PERSISTENCE - CHALLENGE ISLAND WEATHER STATION
 1400, 4 SEPTEMBER TO 0700, 28 OCTOBER, 1982

PERCENT DURATION

HOURS, DAYS DURATION

| knots | >3h | >6h | >12h | >18h | >24h | >36h | >2d | >4d | >6d | >8d | >10d | >12d | TOTAL SAMPLES |
|-------|------|------|------|------|------|------|------|-----|-----|-----|------|------|------------------|
| >5 | 88.9 | 82.0 | 69.6 | 59.5 | 52.0 | 40.8 | 30.1 | 5.8 | | | | | 2025 |
| >10 | 85.2 | 76.5 | 66.0 | 58.1 | 51.2 | 38.3 | 24.9 | 0.4 | | | | | 1455 |
| >15 | 89.4 | 81.0 | 65.1 | 50.1 | 38.1 | 19.5 | 5.5 | | | | | | 944 |
| >20 | 77.6 | 63.4 | 40.6 | 25.6 | 16.0 | 6.3 | 1.7 | | | | | | 591 |
| >25 | 70.1 | 54.1 | 27.8 | 19.4 | 11.8 | | | | | | | | 158 |
| >30 | 40.7 | 20.3 | | | | | | | | | | | 59 |
| >35 | | | | | | | | | | | | | 3 |
| >40 | | | | | | | | | | | | | 0 |
| >45 | | | | | | | | | | | | | 0 |
| >50 | | | | | | | | | | | | | 0 |

largest screened value = 38.07 knots
 total time period spanned (hours) = 1289
 sample interval (hours) = .5
 total possible samples = 2579
 actual samples = 2423

TABLE A2.

Air Temperature Frequency Distribution
Challenge Island, 0000, 24 July to 2300, 31 August 1982

| <u>Degrees C</u> | <u>Total Samples</u> |
|------------------|----------------------|
| >-10 | 936 |
| >- 5 | 936 |
| > 0 | 936 |
| > 5 | 431 |
| > 10 | 104 |
| > 15 | 19 |
| > 20 | 2 |

TABLE A3

AIR TEMPERATURE PERSISTENCE - CHALLENGE ISLAND
0000, 24 JULY TO 2300, 31 AUGUST, 1982

PERCENT DURATION

HOURS, DAYS DURATION

| deg C. | >3h | >6h | >12h | >18h | >24h | >36h | >2d | >4d | >6d | >8d | >10d | >12d | TOTAL SAMPLES |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------------------|
| >-10 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 936 |
| >-5 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 936 |
| >0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 936 |
| >5 | 84.0 | 72.9 | 54.1 | 41.7 | 34.5 | 24.0 | 16.8 | | | | | | 431 |
| >10 | 55.8 | 29.8 | 3.8 | | | | | | | | | | 104 |
| >15 | 5.3 | | | | | | | | | | | | 19 |
| >20 | | | | | | | | | | | | | 2 |

largest screened value = 21.2 deg C.
total time period spanned (hours) = 935
sample interval (hours) = 1
total possible samples = 936
actual samples = 936

A-31

TABLE A4.

BAROMETRIC PRESSURE PERSISTENCE - CHALLENGE ISLAND
0000, 4 SEPTEMBER, TO 0600, 1 NOVEMBER, 1982

PERCENT DURATION

HOURS, DAYS DURATION

| mbar | >3h | >6h | >12h | >18h | >24h | >36h | >2d | >4d | >6d | >8d | >10d | >12d | TOTAL SAMPLES |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------------------|
| >990 | 99.8 | 99.6 | 99.1 | 98.7 | 98.2 | 97.3 | 96.4 | 92.6 | 88.5 | 84.0 | 79.1 | 73.9 | 1391 |
| >1000 | 99.3 | 98.6 | 97.2 | 95.8 | 94.4 | 91.6 | 88.7 | 78.3 | 69.5 | 60.1 | 51.5 | 45.3 | 1316 |
| >1010 | 97.3 | 94.5 | 89.0 | 84.1 | 79.2 | 71.1 | 64.1 | 43.7 | 34.4 | 24.5 | 15.3 | 6.8 | 996 |
| >1013 | 96.2 | 92.4 | 85.0 | 78.5 | 73.2 | 63.0 | 54.0 | 31.9 | 18.4 | 7.3 | 0.6 | | 713 |
| >1020 | 93.9 | 87.8 | 75.6 | 63.4 | 52.8 | 34.6 | 19.9 | | | | | | 246 |
| >1025 | 93.2 | 86.4 | 72.7 | 59.1 | 45.5 | 21.2 | 7.6 | | | | | | 132 |
| >1030 | 92.1 | 84.2 | 68.4 | 52.6 | 36.8 | 5.3 | | | | | | | 38 |
| >1035 | 85.7 | 71.4 | 42.9 | 14.3 | | | | | | | | | 21 |

largest screened value = 1037.93 mbar
total time period spanned (hours) = 1399
sample interval (hours) = 1
total possible samples = 1400
actual samples = 1399

TABLE A5.
 CHALLENGE ISLAND WIND
 0208, 24 JULY TO 1738, 2 SEPTEMBER, 1982

Frequencies:

| Bearing Range | Speed Range (knots) | | | | | | total |
|------------------|---------------------|---------------|----------------|----------------|----------------|------------|-------|
| | 0.00 5.00 | 5.00 10.00 | 10.00 15.00 | 15.00 20.00 | 20.00 25.00 | > 25.00 | |
| 0 30 ! | 46 | 69 | 3 | 0 | 0 | 0 | 118 |
| 30- 60 ! | 37 | 139 | 58 | 50 | 0 | 0 | 284 |
| 60- 90 ! | 33 | 153 | 113 | 114 | 13 | 0 | 426 |
| 90-120 ! | 18 | 36 | 22 | 16 | 0 | 0 | 92 |
| 120-150 ! | 12 | 24 | 4 | 2 | 1 | 0 | 43 |
| 150-180 ! | 14 | 15 | 3 | 0 | 0 | 0 | 32 |
| 180-210 ! | 11 | 56 | 28 | 0 | 0 | 0 | 95 |
| 210-240 ! | 25 | 60 | 75 | 29 | 13 | 0 | 202 |
| 240-270 ! | 35 | 60 | 52 | 37 | 20 | 0 | 204 |
| 270-300 ! | 41 | 76 | 81 | 26 | 5 | 0 | 229 |
| 300-330 ! | 57 | 47 | 21 | 6 | 0 | 0 | 131 |
| 330-360 ! | 34 | 36 | 0 | 1 | 0 | 0 | 71 |
| total ! | 363 | 771 | 460 | 281 | 52 | 0 | 1927 |

Percentages:

| Bearing Range | Speed Range (knots) | | | | | | total |
|------------------|---------------------|---------------|----------------|----------------|----------------|------------|-------|
| | 0.00 5.00 | 5.00 10.00 | 10.00 15.00 | 15.00 20.00 | 20.00 25.00 | > 25.00 | |
| 0 30 ! | 2.4 | 3.6 | 0.2 | 0.0 | 0.0 | 0.0 | 6.1 |
| 30- 60 ! | 1.9 | 7.2 | 3.0 | 2.6 | 0.0 | 0.0 | 14.7 |
| 60- 90 ! | 1.7 | 7.9 | 5.9 | 5.9 | 0.7 | 0.0 | 22.1 |
| 90-120 ! | 0.9 | 1.9 | 1.1 | 0.8 | 0.0 | 0.0 | 4.8 |
| 120-150 ! | 0.6 | 1.2 | 0.2 | 0.1 | 0.1 | 0.0 | 2.2 |
| 150-180 ! | 0.7 | 0.8 | 0.2 | 0.0 | 0.0 | 0.0 | 1.7 |
| 180-210 ! | 0.6 | 2.9 | 1.5 | 0.0 | 0.0 | 0.0 | 4.9 |
| 210-240 ! | 1.3 | 3.1 | 3.9 | 1.5 | 0.7 | 0.0 | 10.5 |
| 240-270 ! | 1.8 | 3.1 | 2.7 | 1.9 | 1.0 | 0.0 | 10.6 |
| 270-300 ! | 2.1 | 3.9 | 4.2 | 1.3 | 0.3 | 0.0 | 11.9 |
| 300-330 ! | 3.0 | 2.4 | 1.1 | 0.3 | 0.0 | 0.0 | 6.8 |
| 330-360 ! | 1.8 | 1.9 | 0.0 | 0.1 | 0.0 | 0.0 | 3.7 |
| total ! | 18.8 | 40.0 | 23.9 | 14.6 | 2.7 | 0.0 | 100.0 |

largest screened speed = 24.18 knots
 total time period spanned (hours) = 975.5
 sample interval (hours) = .5
 total possible observations = 1952
 actual observations = 1927

TABLE A5.

CHALLENGE ISLAND WIND
0208, 24 JULY TO 1738, 2 SEPTEMBER, 1982

Row Percents:

| Bearing Range | Speed Range (knots) | | | | | | > 25.00 | total |
|------------------|---------------------|---------------|----------------|----------------|----------------|-------|------------|-------|
| | 0.00 5.00 | 5.00 10.00 | 10.00 15.00 | 15.00 20.00 | 20.00 25.00 | 25.00 | | |
| 0 30 ! | 39.0 | 58.5 | 2.5 | 0.0 | 0.0 | 0.0 | 100.0 | |
| 30- 60 ! | 13.0 | 48.9 | 20.4 | 17.6 | 0.0 | 0.0 | 100.0 | |
| 60- 90 ! | 7.7 | 35.9 | 26.5 | 26.8 | 3.1 | 0.0 | 100.0 | |
| 90-120 ! | 19.6 | 39.1 | 23.9 | 17.4 | 0.0 | 0.0 | 100.0 | |
| 120-150 ! | 27.9 | 55.8 | 9.3 | 4.7 | 2.3 | 0.0 | 100.0 | |
| 150-180 ! | 43.8 | 46.9 | 9.4 | 0.0 | 0.0 | 0.0 | 100.0 | |
| 180-210 ! | 11.6 | 58.9 | 29.5 | 0.0 | 0.0 | 0.0 | 100.0 | |
| 210-240 ! | 12.4 | 29.7 | 37.1 | 14.4 | 6.4 | 0.0 | 100.0 | |
| 240-270 ! | 17.2 | 29.4 | 25.5 | 18.1 | 9.8 | 0.0 | 100.0 | |
| 270-300 ! | 17.9 | 33.2 | 35.4 | 11.4 | 2.2 | 0.0 | 100.0 | |
| 300-330 ! | 43.5 | 35.9 | 16.0 | 4.6 | 0.0 | 0.0 | 100.0 | |
| 330-360 ! | 47.9 | 50.7 | 0.0 | 1.4 | 0.0 | 0.0 | 100.0 | |
| total ! | 18.8 | 40.0 | 23.9 | 14.6 | 2.7 | 0.0 | 100.0 | |

Column Percents:

| Bearing Range | Speed Range (knots) | | | | | | > 25.00 | total |
|------------------|---------------------|---------------|----------------|----------------|----------------|-------|------------|-------|
| | 0.00 5.00 | 5.00 10.00 | 10.00 15.00 | 15.00 20.00 | 20.00 25.00 | 25.00 | | |
| 0 30 ! | 12.7 | 8.9 | 0.7 | 0.0 | 0.0 | 0.0 | 6.1 | |
| 30- 60 ! | 10.2 | 18.0 | 12.6 | 17.8 | 0.0 | 0.0 | 14.7 | |
| 60- 90 ! | 9.1 | 19.8 | 24.6 | 40.6 | 25.0 | 0.0 | 22.1 | |
| 90-120 ! | 5.0 | 4.7 | 4.8 | 5.7 | 0.0 | 0.0 | 4.8 | |
| 120-150 ! | 3.3 | 3.1 | 0.9 | 0.7 | 1.9 | 0.0 | 2.2 | |
| 150-180 ! | 3.9 | 1.9 | 0.7 | 0.0 | 0.0 | 0.0 | 1.7 | |
| 180-210 ! | 3.0 | 7.3 | 6.1 | 0.0 | 0.0 | 0.0 | 4.9 | |
| 210-240 ! | 6.9 | 7.8 | 16.3 | 10.3 | 25.0 | 0.0 | 10.5 | |
| 240-270 ! | 9.6 | 7.8 | 11.3 | 13.2 | 38.5 | 0.0 | 10.6 | |
| 270-300 ! | 11.3 | 9.9 | 17.6 | 9.3 | 9.6 | 0.0 | 11.9 | |
| 300-330 ! | 15.7 | 6.1 | 4.6 | 2.1 | 0.0 | 0.0 | 6.8 | |
| 330-360 ! | 9.4 | 4.7 | 0.0 | 0.4 | 0.0 | 0.0 | 3.7 | |
| total ! | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 0.0 | 100.0 | |

largest screened speed = 24.18 knots
total time period spanned (hours) = 975.5
sample interval (hours) = .5
total possible observations = 1952
actual observations = 1927

TABLE A5.

CHALLENGE ISLAND WIND
1400, 4 SEPTEMBER TO 0700, 28 OCTOBER, 1982

Row Percents:

| Bearing Range | Speed Range (knots) | | | | | | | | | total |
|------------------|---------------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|------------|-------|
| | 0.00 5.00 | 5.00 10.00 | 10.00 15.00 | 15.00 20.00 | 20.00 25.00 | 25.00 30.00 | 30.00 35.00 | 35.00 40.00 | > 40.00 | |
| 0 30 ! | 36.7 | 40.4 | 22.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| 30- 60 ! | 9.2 | 9.2 | 23.3 | 21.8 | 36.6 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| 60- 90 ! | 6.5 | 10.2 | 23.4 | 23.6 | 26.4 | 9.8 | 0.0 | 0.0 | 0.0 | 100.0 |
| 90-120 ! | 10.4 | 55.8 | 13.0 | 14.3 | 6.5 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| 120-150 ! | 45.2 | 51.6 | 3.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| 150-180 ! | 38.5 | 50.0 | 11.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| 180-210 ! | 35.2 | 42.6 | 22.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| 210-240 ! | 11.5 | 35.7 | 25.3 | 10.2 | 8.8 | 4.7 | 3.6 | 0.3 | 0.0 | 100.0 |
| 240-270 ! | 8.9 | 10.2 | 19.9 | 17.9 | 18.3 | 6.5 | 17.5 | 0.8 | 0.0 | 100.0 |
| 270-300 ! | 37.7 | 42.6 | 16.0 | 0.6 | 3.1 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| 300-330 ! | 55.2 | 44.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| 330-360 ! | 42.2 | 48.9 | 6.7 | 2.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| total ! | 16.4 | 23.5 | 21.1 | 14.6 | 17.9 | 4.1 | 2.3 | 0.1 | 0.0 | 100.0 |

Column Percents:

| Bearing Range | Speed Range (knots) | | | | | | | | | total |
|------------------|---------------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|------------|-------|
| | 0.00 5.00 | 5.00 10.00 | 10.00 15.00 | 15.00 20.00 | 20.00 25.00 | 25.00 30.00 | 30.00 35.00 | 35.00 40.00 | > 40.00 | |
| 0 30 ! | 20.1 | 15.4 | 9.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 9.0 |
| 30- 60 ! | 10.6 | 7.4 | 20.9 | 28.3 | 38.8 | 0.0 | 0.0 | 0.0 | 0.0 | 18.9 |
| 60- 90 ! | 11.1 | 12.1 | 30.9 | 45.0 | 41.1 | 66.7 | 0.0 | 0.0 | 0.0 | 27.8 |
| 90-120 ! | 2.0 | 7.5 | 2.0 | 3.1 | 1.2 | 0.0 | 0.0 | 0.0 | 0.0 | 3.2 |
| 120-150 ! | 3.5 | 2.8 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.3 |
| 150-180 ! | 2.5 | 2.3 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.1 |
| 180-210 ! | 4.8 | 4.0 | 2.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.2 |
| 210-240 ! | 10.6 | 22.8 | 18.0 | 10.5 | 7.4 | 17.2 | 23.2 | 33.3 | 0.0 | 15.0 |
| 240-270 ! | 5.5 | 4.4 | 9.6 | 12.5 | 10.4 | 16.2 | 76.8 | 66.7 | 0.0 | 10.2 |
| 270-300 ! | 15.3 | 12.1 | 5.1 | 0.3 | 1.2 | 0.0 | 0.0 | 0.0 | 0.0 | 6.7 |
| 300-330 ! | 9.3 | 5.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.8 |
| 330-360 ! | 4.8 | 3.9 | 0.6 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.9 |
| total ! | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 0.0 | 100.0 |

largest screened speed = 38.07 knots
total time period spanned (hours) = 1289
sample interval (hours) = .5
total possible observations = 2579
actual observations = 2423

TABLE A5.
 CHALLENGE ISLAND WIND
 1400, 4 SEPTEMBER TO 0700, 28 OCTOBER, 1982

Frequencies:

| Bearing Range | Speed Range (knots) | | | | | | | | | total |
|------------------|---------------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|------------|-------|
| | 0.00 5.00 | 5.00 10.00 | 10.00 15.00 | 15.00 20.00 | 20.00 25.00 | 25.00 30.00 | 30.00 35.00 | 35.00 40.00 | > 40.00 | |
| 0 30 ! | 80 | 88 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | 218 |
| 30- 60 ! | 42 | 42 | 107 | 100 | 168 | 0 | 0 | 0 | 0 | 459 |
| 60- 90 ! | 44 | 69 | 158 | 159 | 178 | 66 | 0 | 0 | 0 | 674 |
| 90-120 ! | 8 | 43 | 10 | 11 | 5 | 0 | 0 | 0 | 0 | 77 |
| 120-150 ! | 14 | 16 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 31 |
| 150-180 ! | 10 | 13 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 26 |
| 180-210 ! | 19 | 23 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 54 |
| 210-240 ! | 42 | 130 | 92 | 37 | 32 | 17 | 13 | 1 | 0 | 364 |
| 240-270 ! | 22 | 25 | 49 | 44 | 45 | 16 | 43 | 2 | 0 | 246 |
| 270-300 ! | 61 | 69 | 26 | 1 | 5 | 0 | 0 | 0 | 0 | 162 |
| 300-330 ! | 37 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 67 |
| 330-360 ! | 19 | 22 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 45 |
| total ! | 398 | 570 | 511 | 353 | 433 | 99 | 56 | 3 | 0 | 2423 |

Percentages:

| Bearing Range | Speed Range (knots) | | | | | | | | | total |
|------------------|---------------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|------------|-------|
| | 0.00 5.00 | 5.00 10.00 | 10.00 15.00 | 15.00 20.00 | 20.00 25.00 | 25.00 30.00 | 30.00 35.00 | 35.00 40.00 | > 40.00 | |
| 0 30 ! | 3.3 | 3.6 | 2.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 9.0 |
| 30- 60 ! | 1.7 | 1.7 | 4.4 | 4.1 | 6.9 | 0.0 | 0.0 | 0.0 | 0.0 | 18.9 |
| 60- 90 ! | 1.8 | 2.8 | 6.5 | 6.6 | 7.3 | 2.7 | 0.0 | 0.0 | 0.0 | 27.8 |
| 90-120 ! | 0.3 | 1.8 | 0.4 | 0.5 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 3.2 |
| 120-150 ! | 0.6 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.3 |
| 150-180 ! | 0.4 | 0.5 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.1 |
| 180-210 ! | 0.8 | 0.9 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.2 |
| 210-240 ! | 1.7 | 5.4 | 3.8 | 1.5 | 1.3 | 0.7 | 0.5 | 0.0 | 0.0 | 15.0 |
| 240-270 ! | 0.9 | 1.0 | 2.0 | 1.8 | 1.9 | 0.7 | 1.8 | 0.1 | 0.0 | 10.2 |
| 270-300 ! | 2.5 | 2.8 | 1.1 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 6.7 |
| 300-330 ! | 1.5 | 1.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.8 |
| 330-360 ! | 0.8 | 0.9 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.9 |
| total ! | 16.4 | 23.5 | 21.1 | 14.6 | 17.9 | 4.1 | 2.3 | 0.1 | 0.0 | 100.0 |

largest screened speed = 38.07 knots
 total time period spanned (hours) = 1289
 sample interval (hours) = .5
 total possible observations = 2579
 actual observations = 2423

A-36

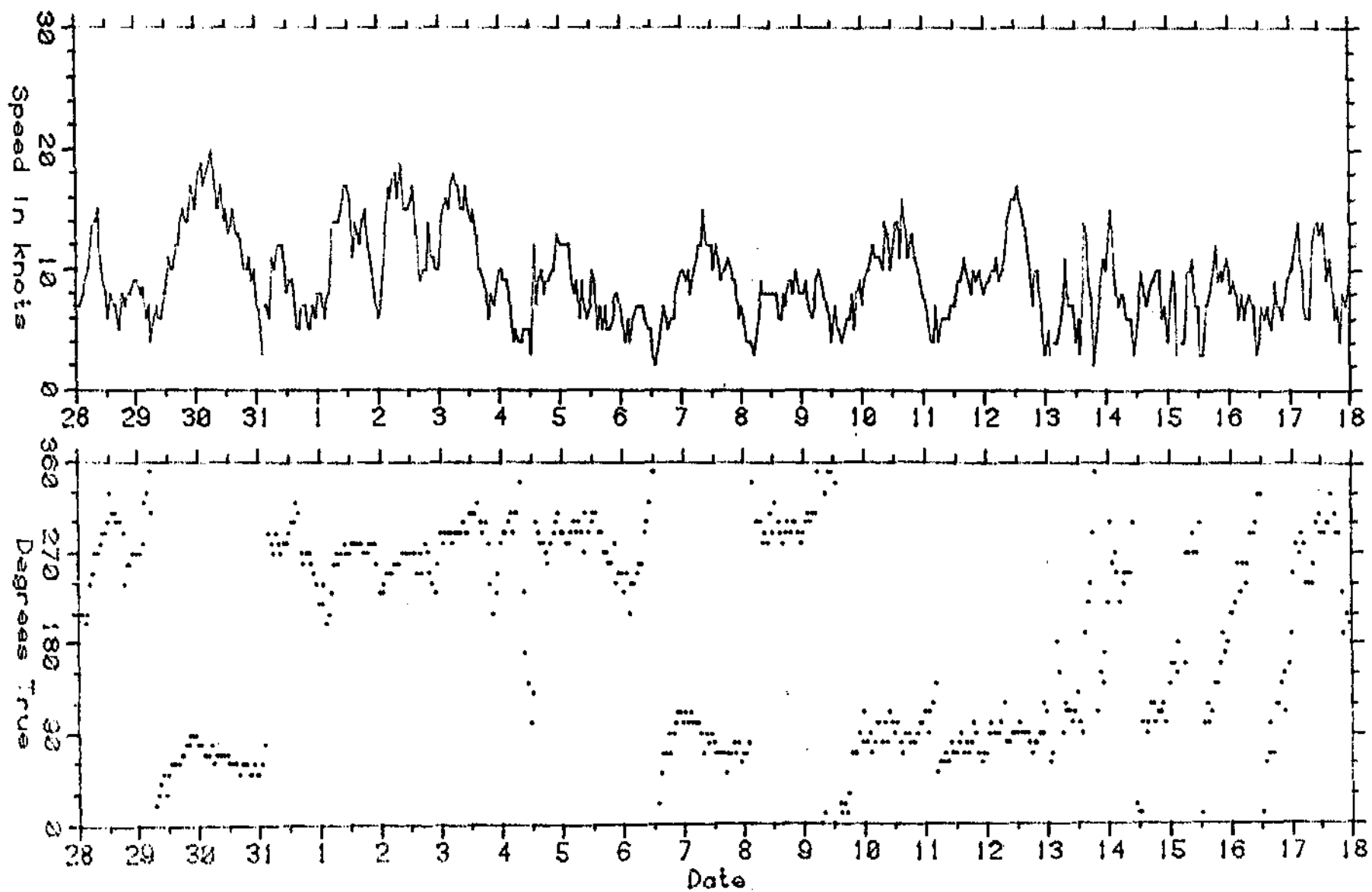


FIGURE A9 . SPEED AND DIRECTION DATA
BARTER ISLAND WIND
0000, 28 JULY TO 2300, 17 AUGUST, 1982

A-37

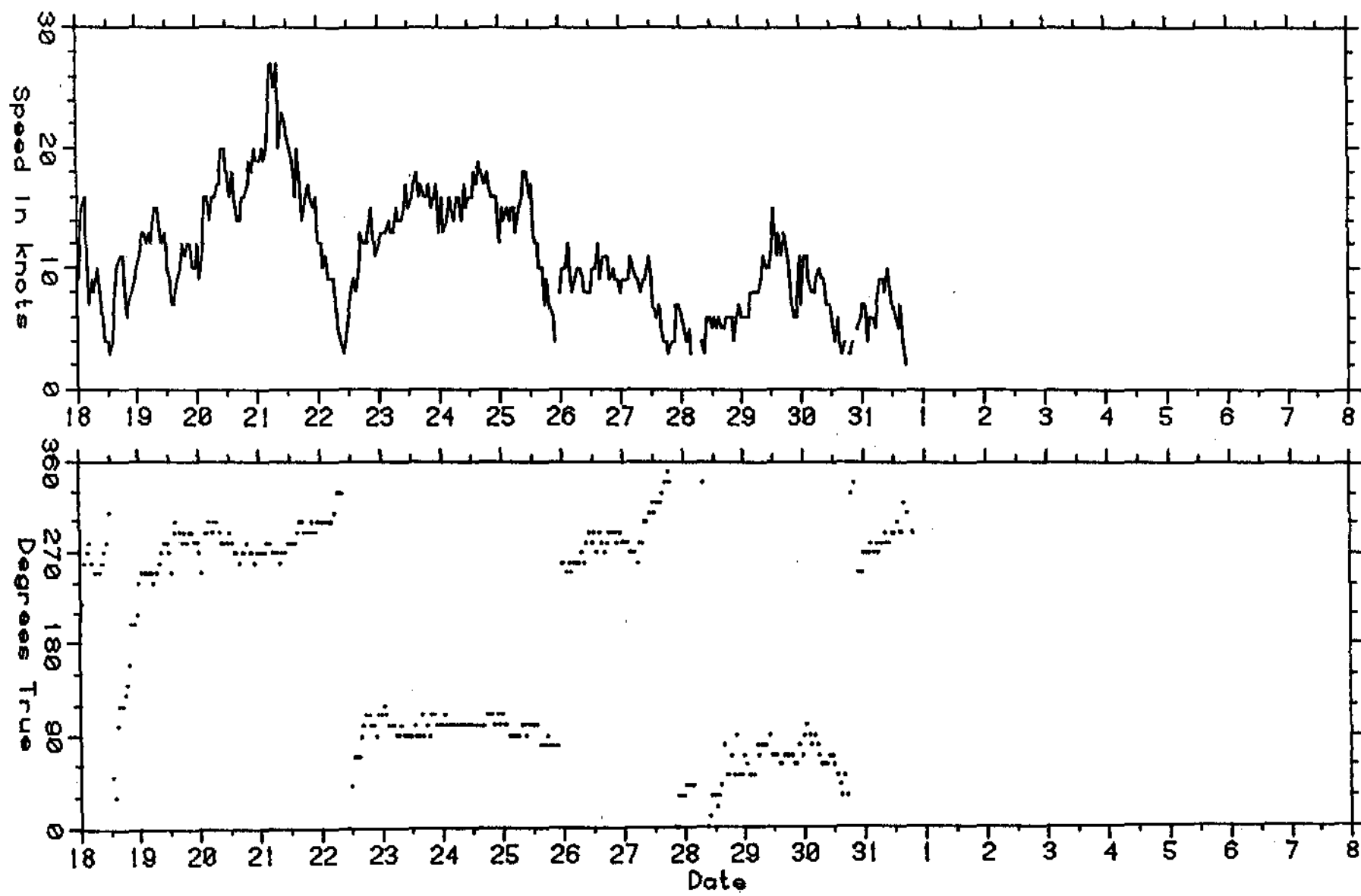


FIGURE A9 SPEED AND DIRECTION DATA
BARTER ISLAND WIND
0000, 18 AUGUST TO 2300, 31 AUGUST, 1982

A-38

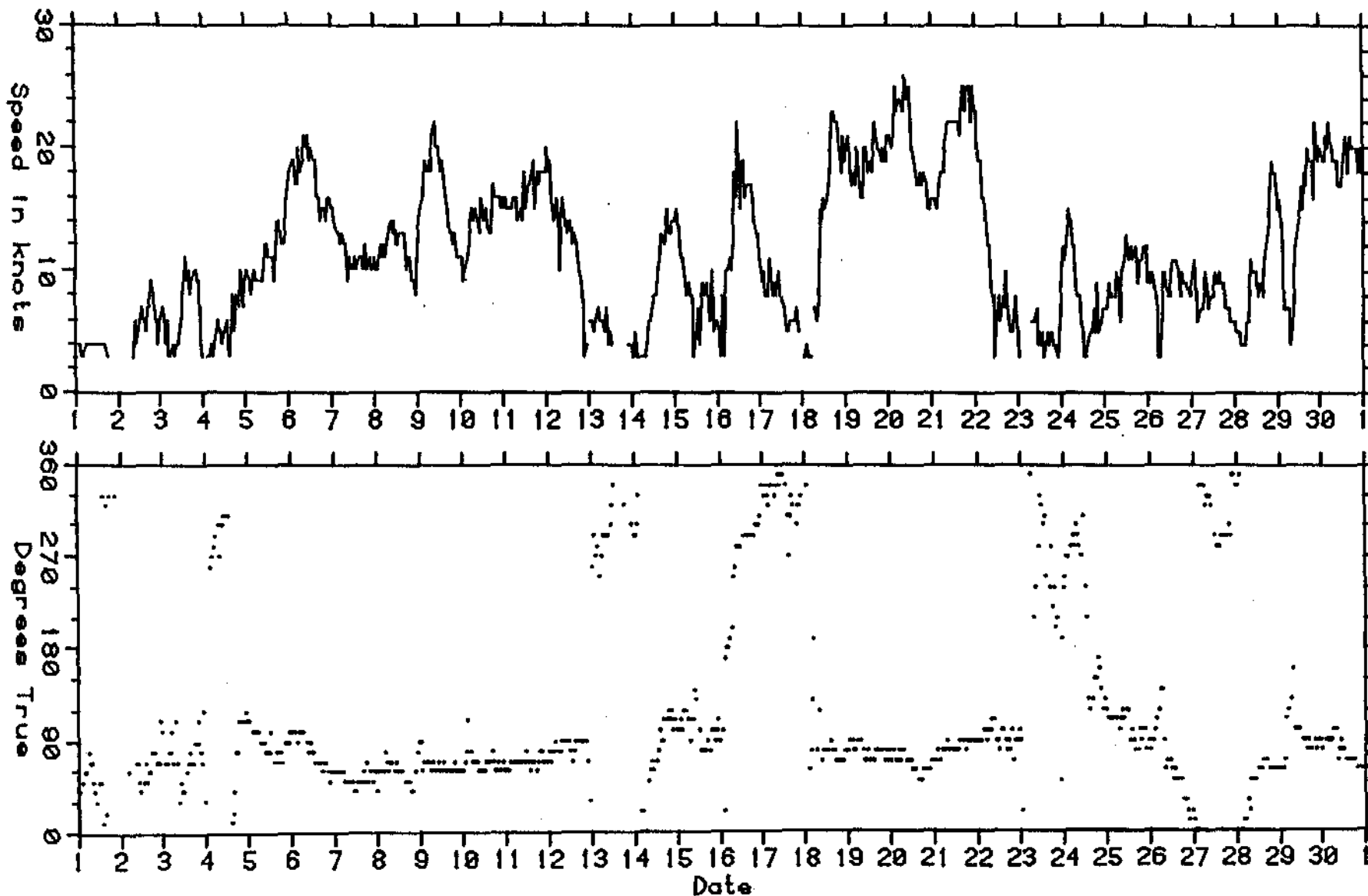


FIGURE A9

SPEED AND DIRECTION DATA
BARTER ISLAND WIND
0000, 1 SEPTEMBER TO 2300, 30 SEPTEMBER, 1982

A-39

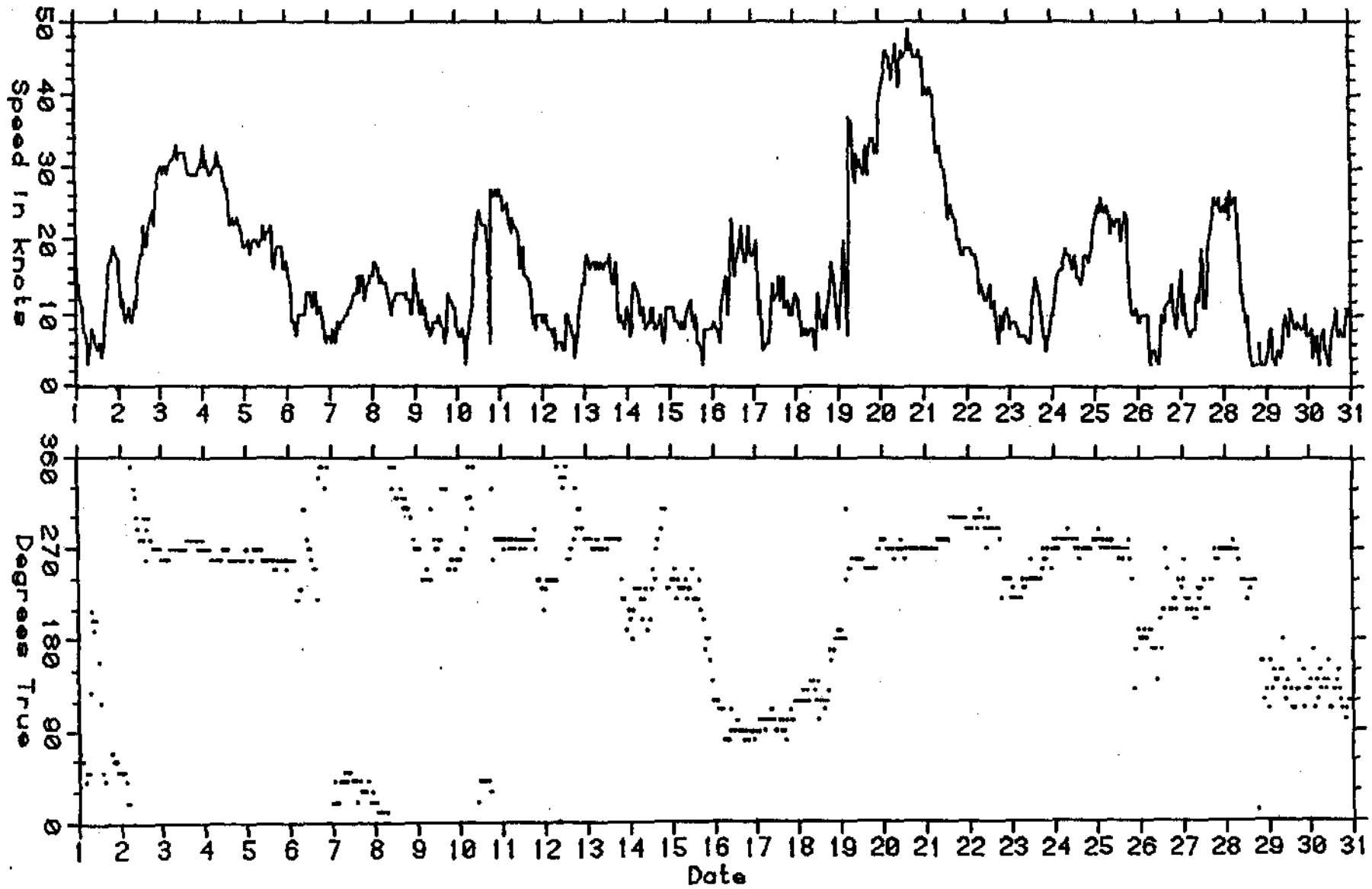


FIGURE A9 SPEED AND DIRECTION DATA
BARTER ISLAND WIND
0000, 1 OCTOBER TO 2300, 30 OCTOBER, 1982

A-40

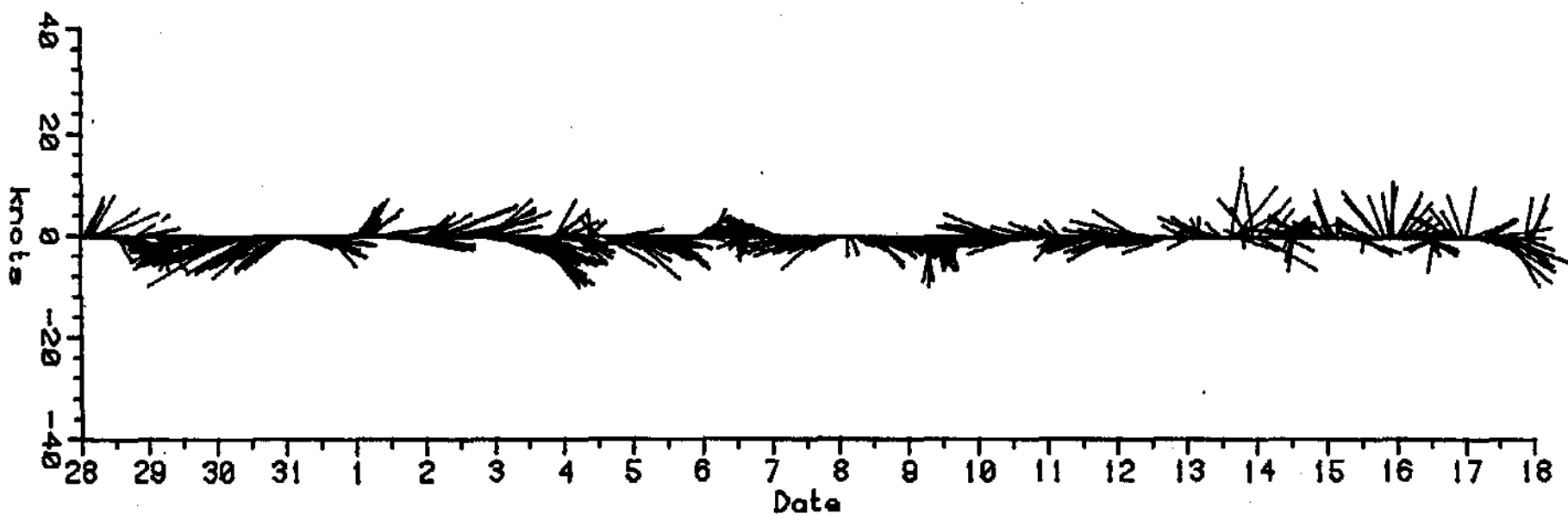


FIGURE A10. VECTOR STICK PLOT
BARTER ISLAND WIND
0000, 28 JULY TO 2300, 17 AUGUST, 1982



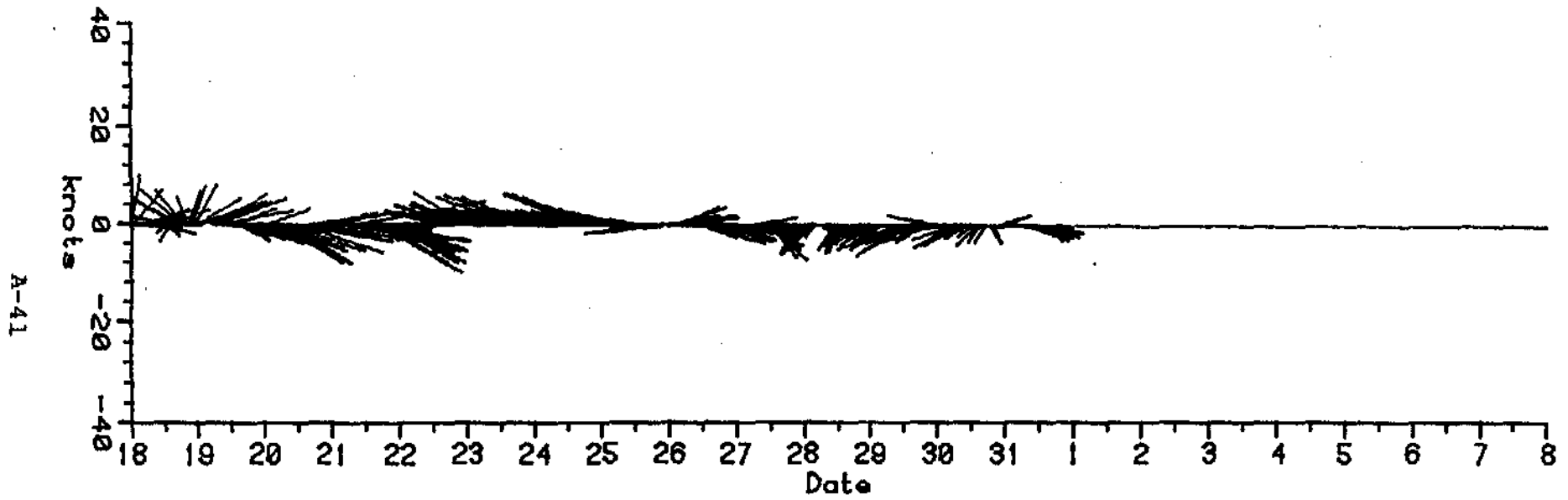


FIGURE A10, VECTOR STICK PLOT
BARTER ISLAND WIND
0000, 18 AUGUST TO 2300, 31 AUGUST, 1982



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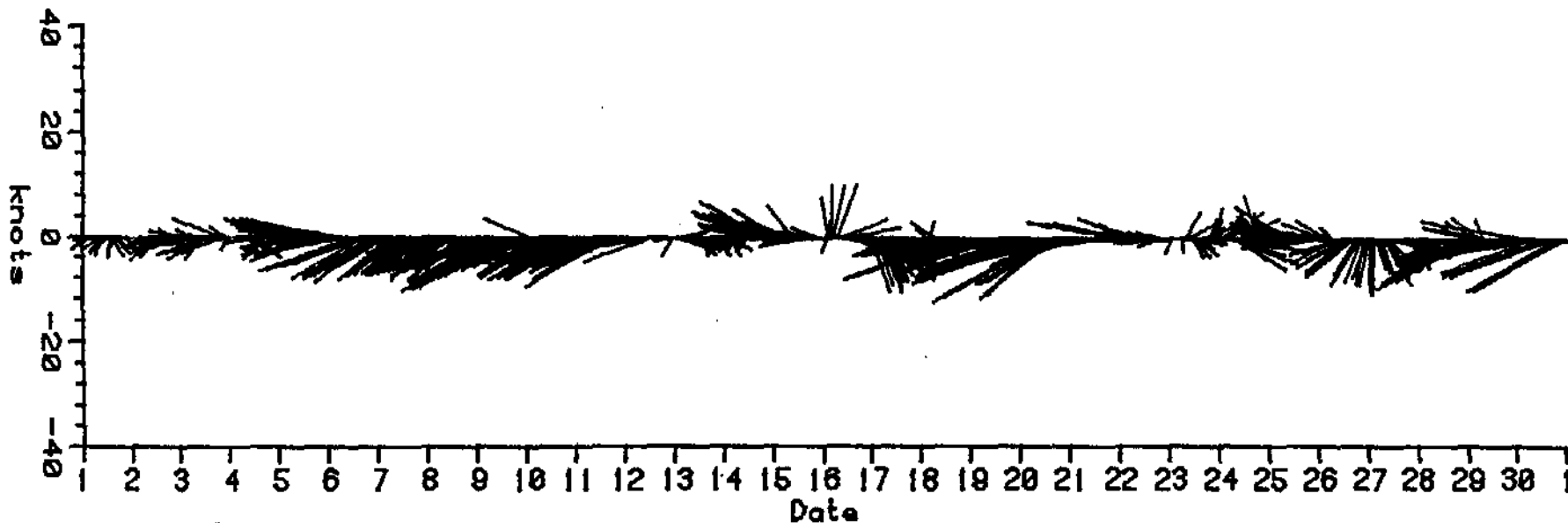


FIGURE A10

VECTOR STICK PLOT
BARTER ISLAND WIND
0000, 1 SEPTEMBER TO 2300, 30 SEPTEMBER, 1982



A-43

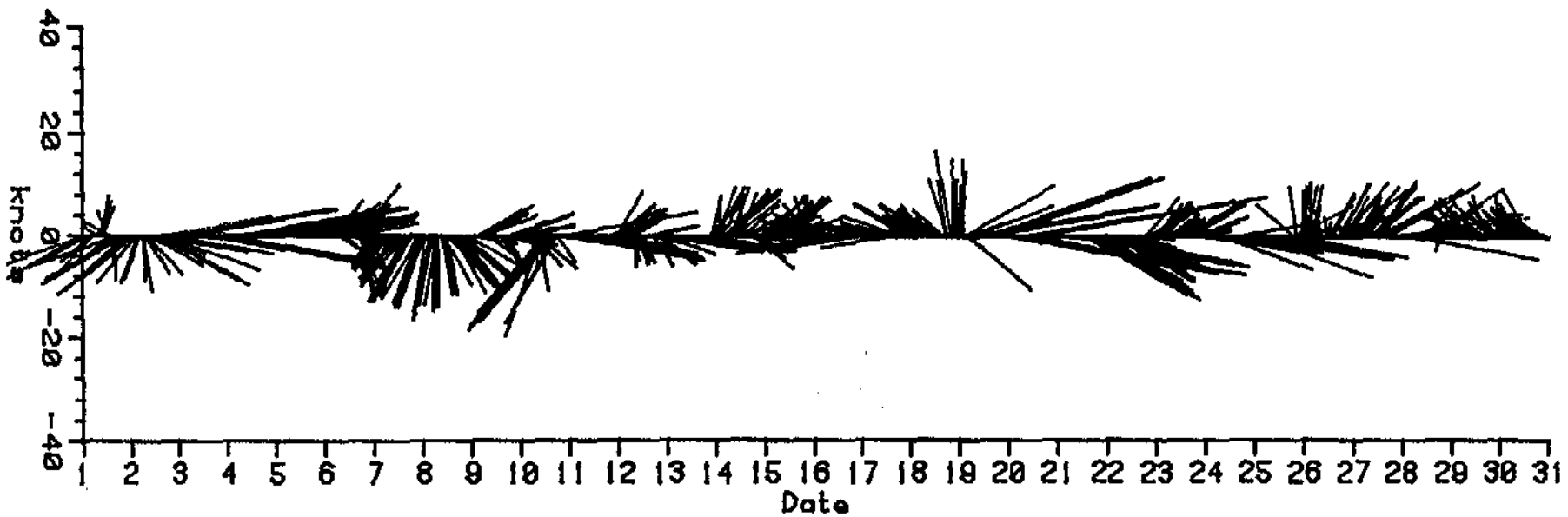
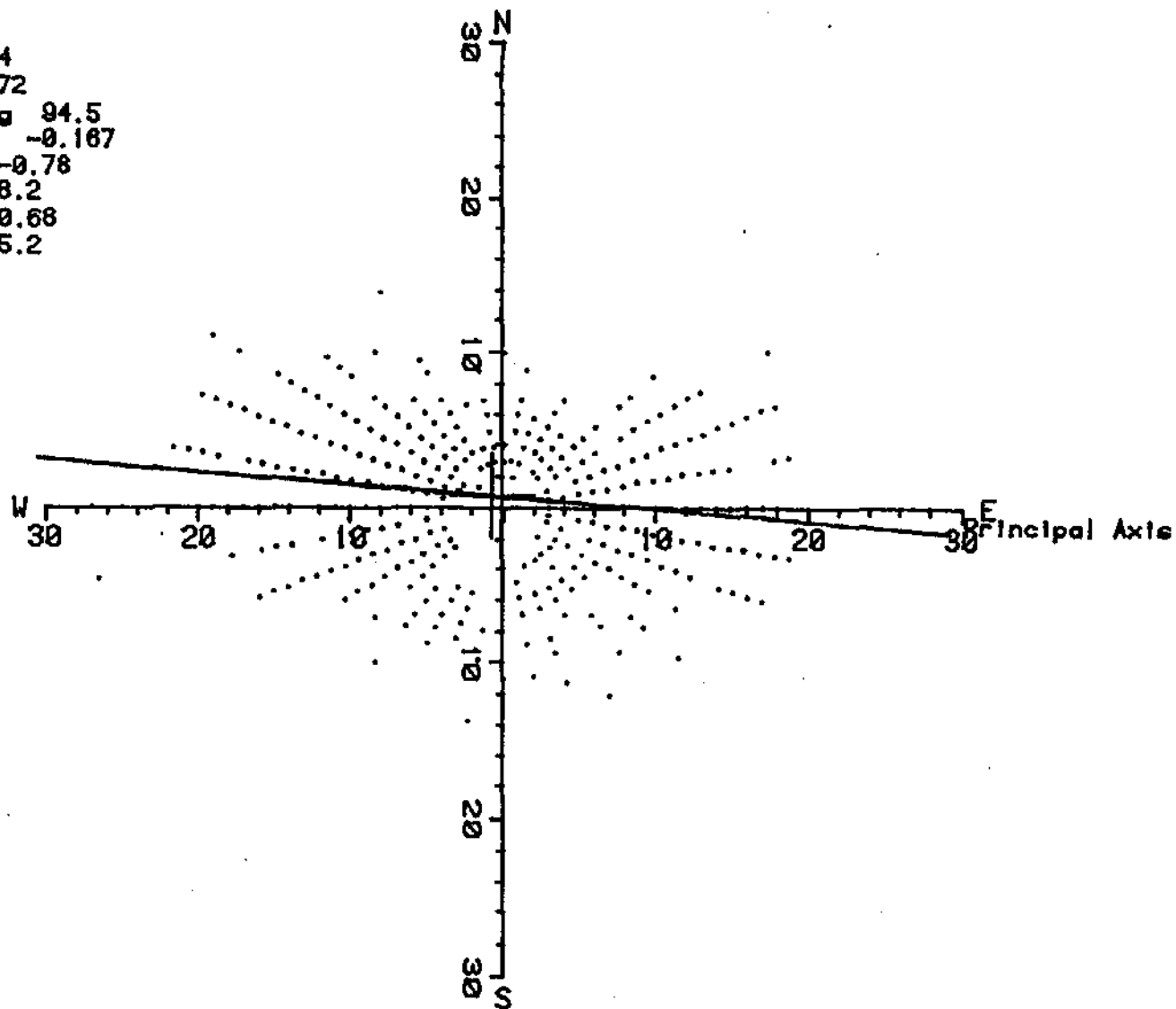


FIGURE A10

VECTOR STICK PLOT
BARTER ISLAND WIND
0000, 1 OCTOBER TO 2300, 30 OCTOBER, 1982



Mean N 8.74
Mean E -8.72
Axis bearing 94.5
Correlation -0.167
Mean Prin. -0.78
Var Prin. 98.2
Mean Orth. 0.68
Var Orth. 15.2

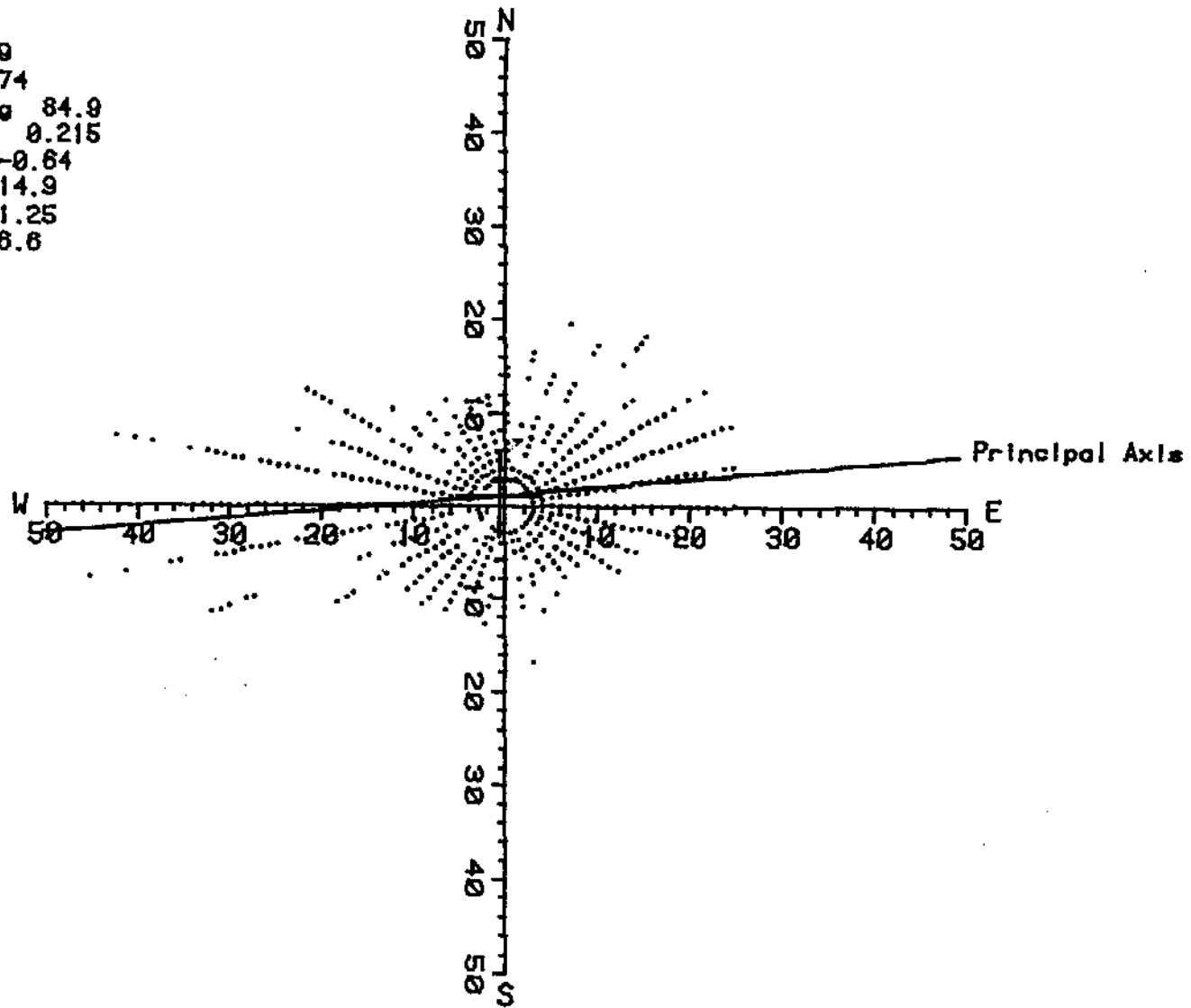


(Speeds in knots)

FIGURE A11.

POLAR PLOT - SPEED AND DIRECTION DATA
BARTER ISLAND WIND
0000, 25 JULY TO 2300, 31 AUGUST, 1982

Mean N 1.19
Mean E -0.74
Axis bearing 84.9
Correlation 0.215
Mean Prin. -0.64
Var Prin. 214.9
Mean Orth. 1.25
Var Orth. 26.6



(Speeds in knots)

FIGURE A11. POLAR PLOT - SPEED AND DIRECTION DATA
BARTER ISLAND WIND
0000, 1 SEPTEMBER TO 2300, 31 OCTOBER, 1982

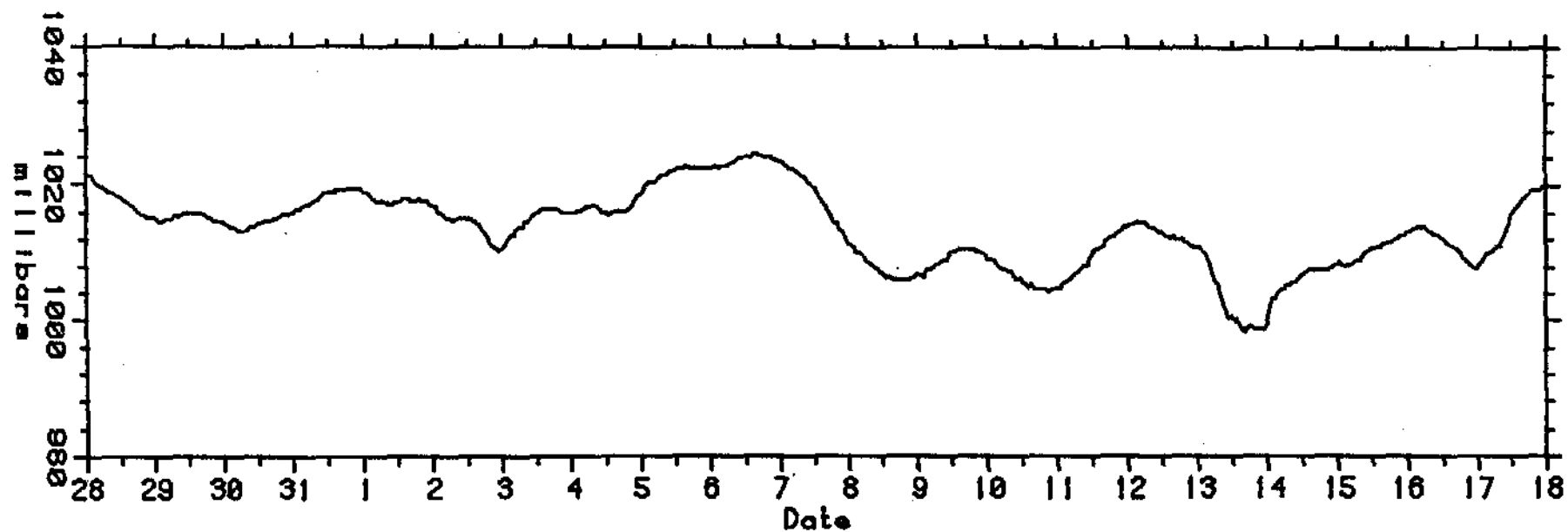


FIGURE A12

BAROMETRIC PRESSURE
BARTER ISLAND
0000, 28 JULY TO 2300, 17 AUGUST, 1982

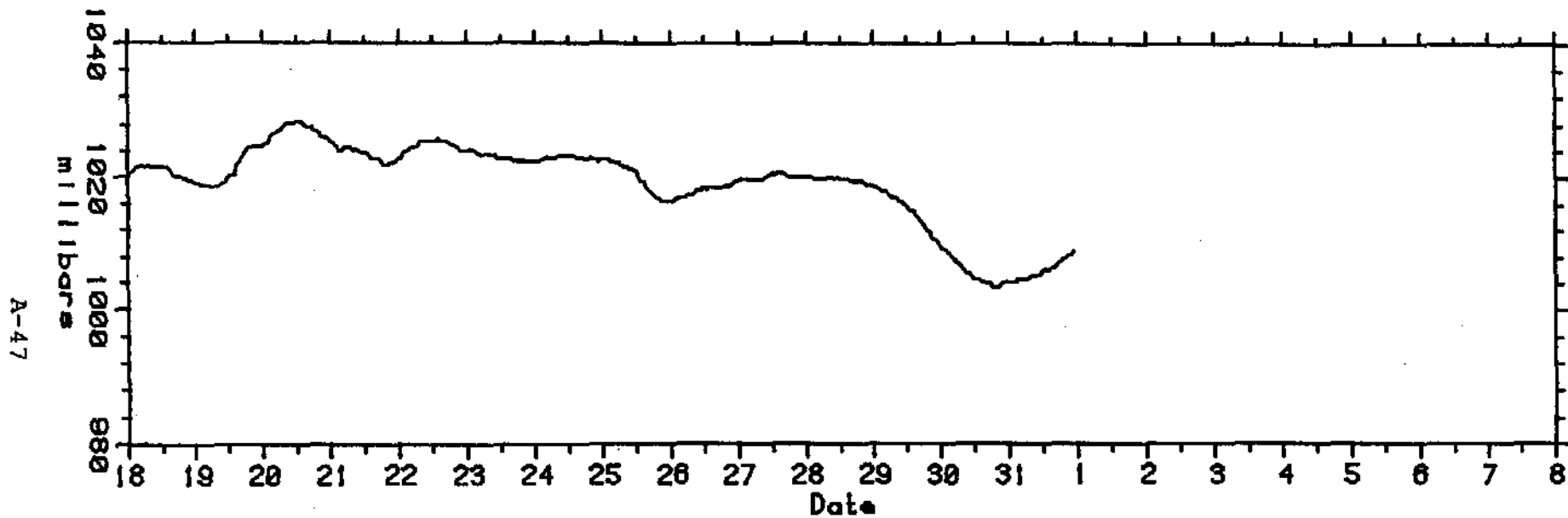


FIGURE A12 BAROMETRIC PRESSURE
BARTER ISLAND
0000, 18 AUGUST TO 2300, 31 AUGUST, 1982

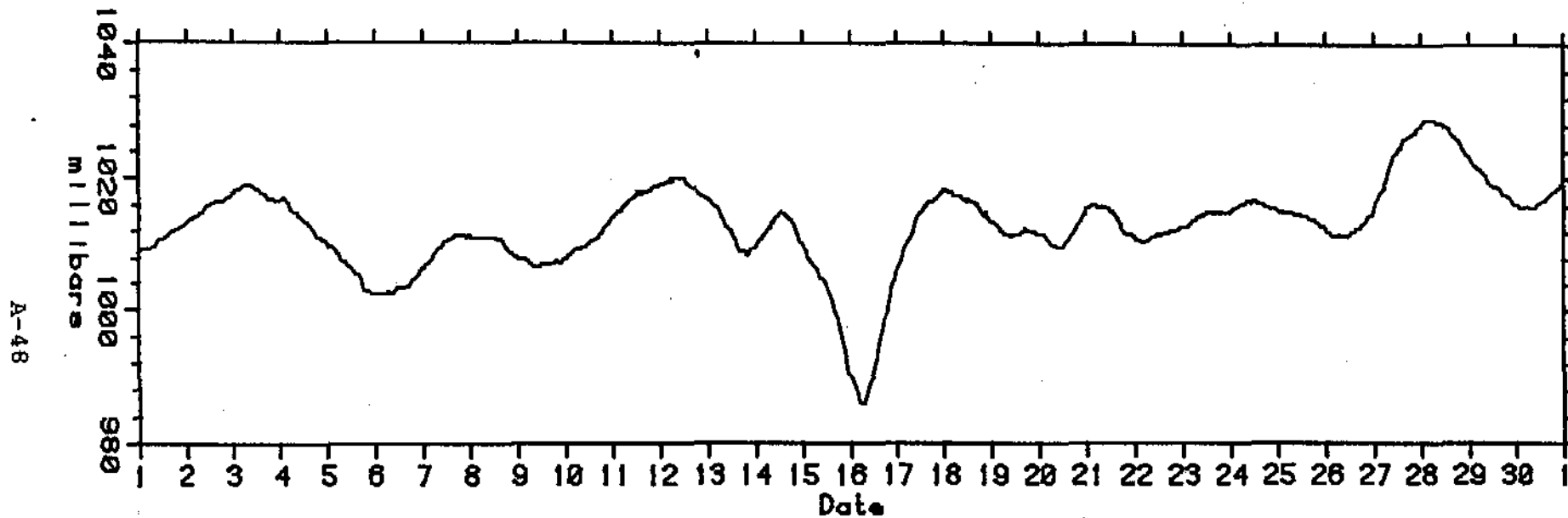


FIGURE A12

BAROMETRIC PRESSURE
BARTER ISLAND

0000, 1 SEPTEMBER TO 2300, 30 SEPTEMBER, 1982

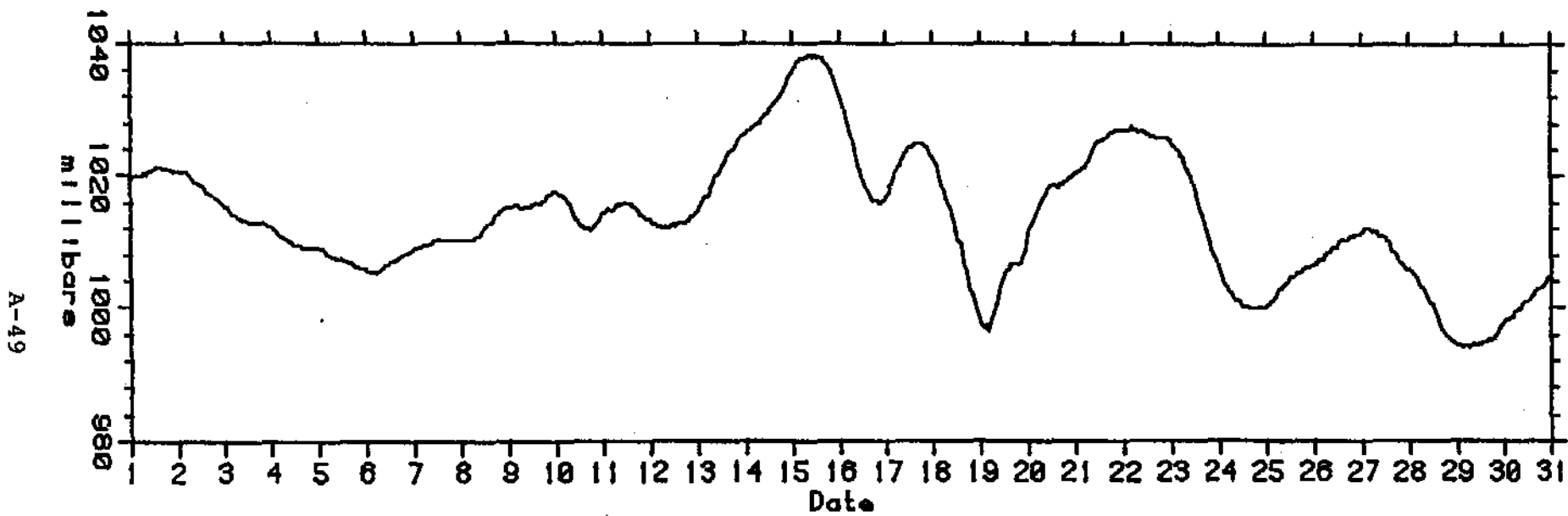


FIGURE A12

BAROMETRIC PRESSURE
BARTER ISLAND

0000, 1 OCTOBER TO 2300, 30 OCTOBER, 1982

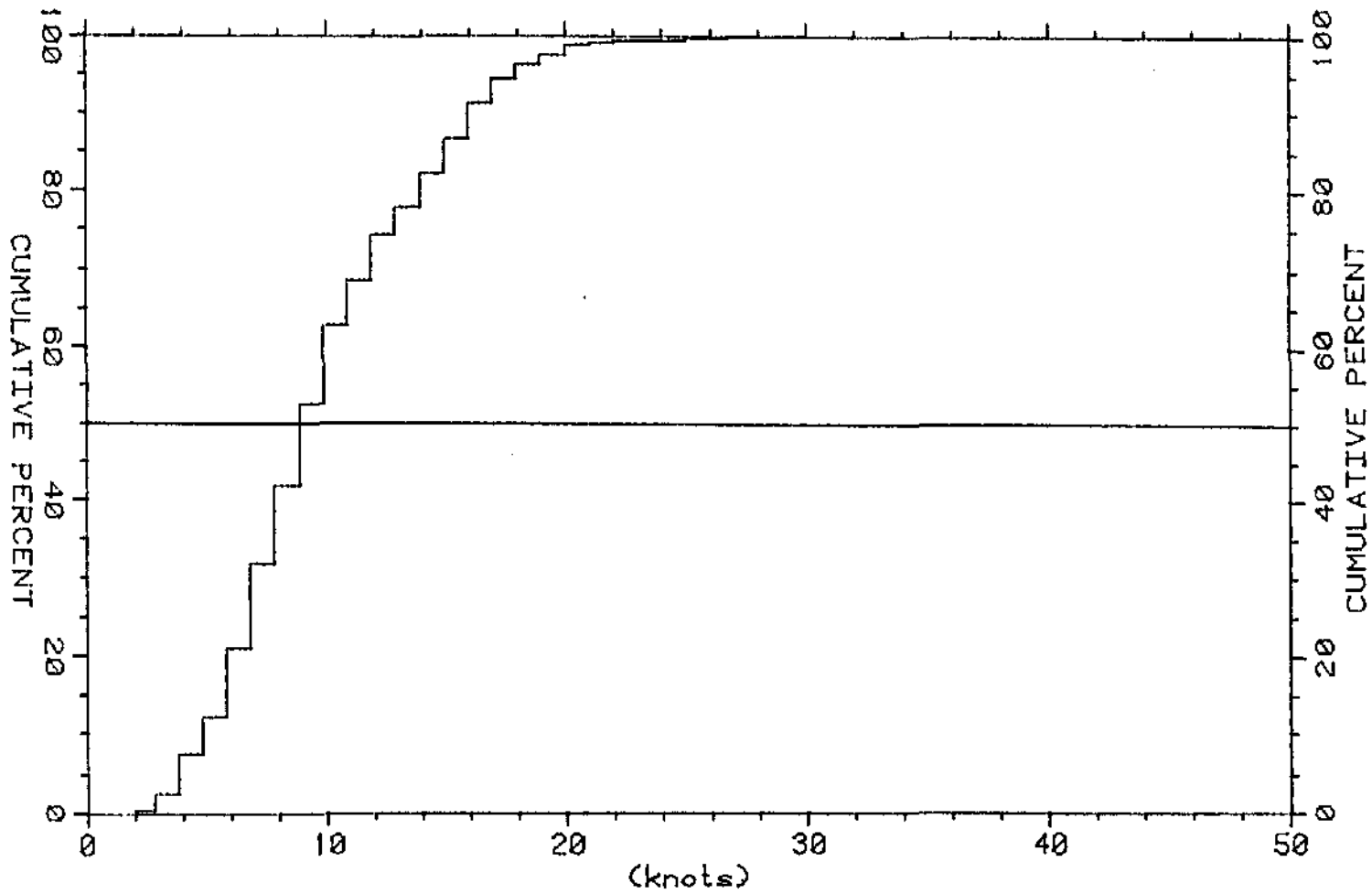


FIGURE A13. CUMULATIVE PROBABILITY PLOT
WIND SPEED
BARTER ISLAND
0000, 25 JULY TO 2300, 31 AUGUST, 1982
898 DATA POINTS

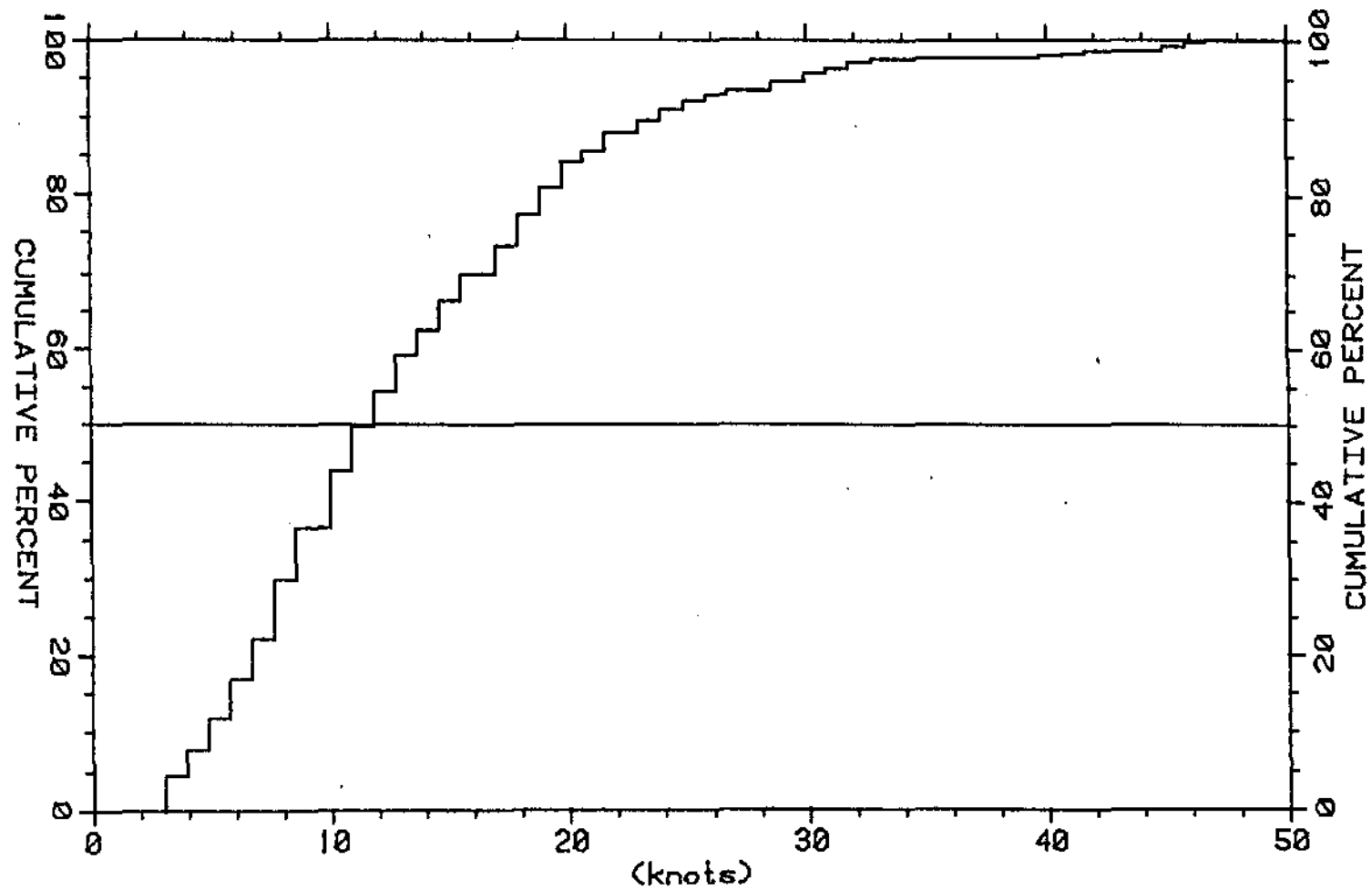


FIGURE A13

CUMULATIVE PROBABILITY PLOT

WIND

BARTER ISLAND

0000, 1 SEPTEMBER TO 2300, 31 OCTOBER, 1982

1430 DATA POINTS

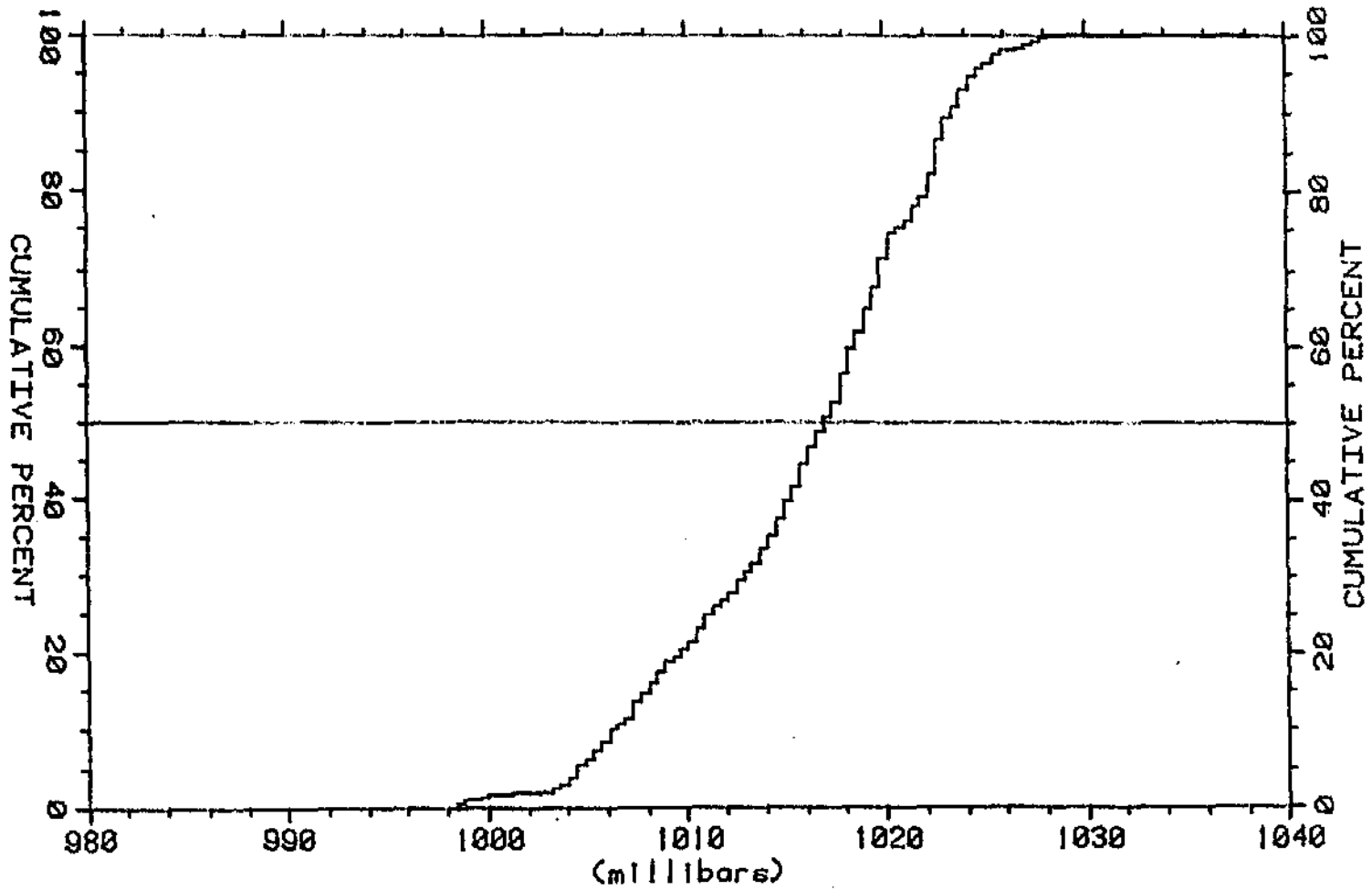


FIGURE A14. CUMULATIVE PROBABILITY PLOT
BAROMETRIC PRESSURE
BARTER ISLAND
0000, 25 JULY TO 2300, 31 AUGUST, 1982
912 DATA POINTS

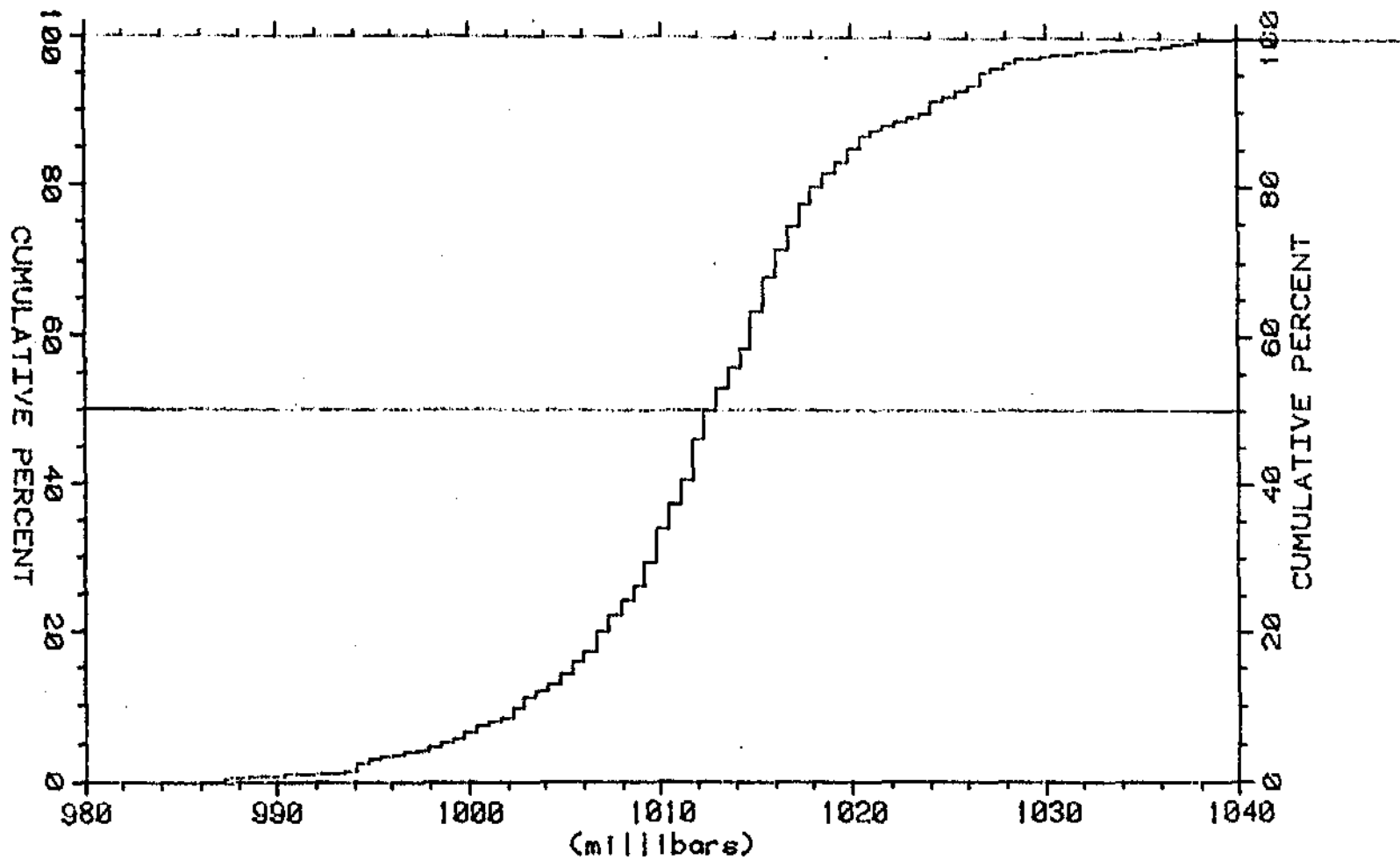
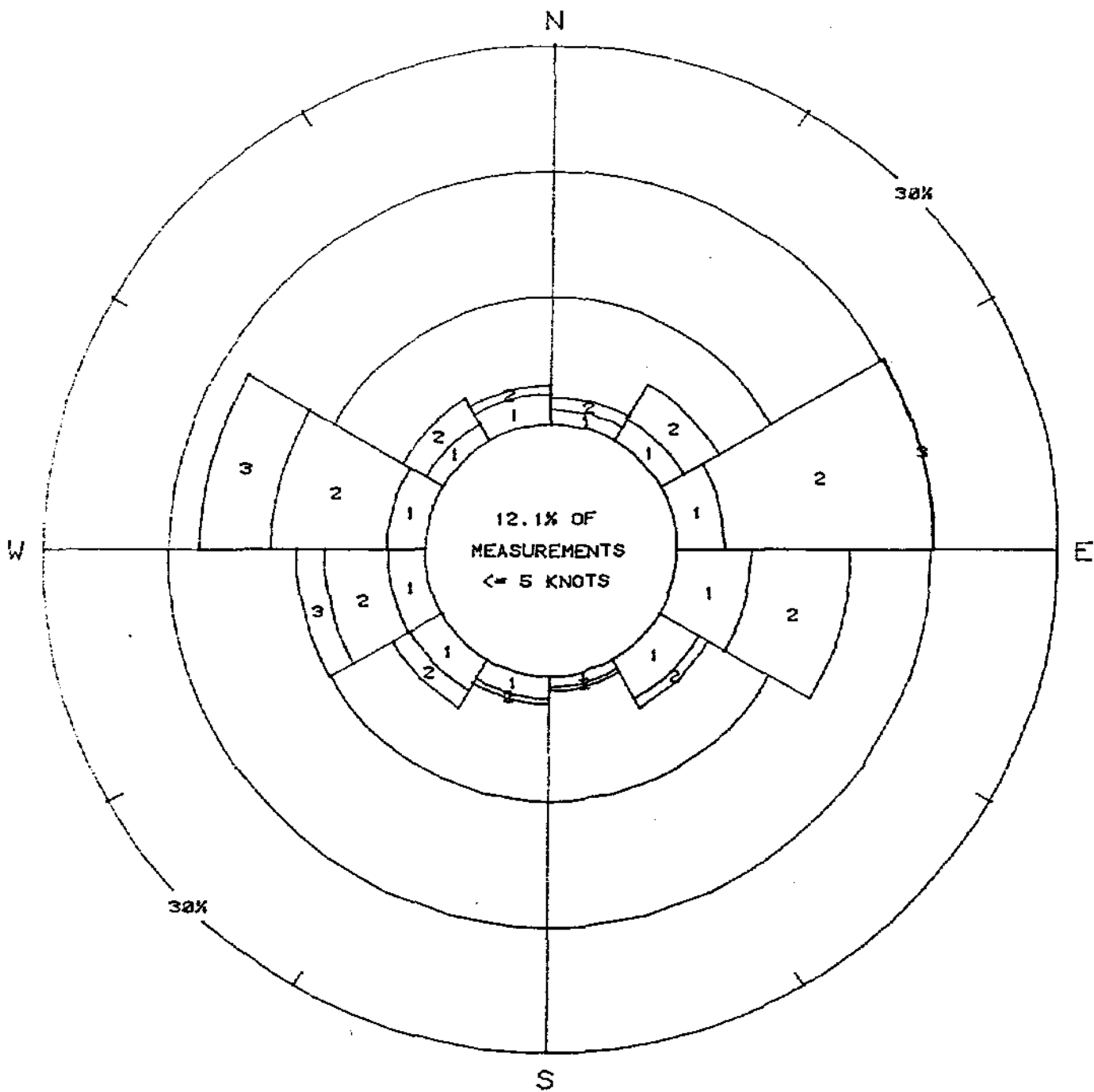


FIGURE A14 . CUMULATIVE PROBABILITY PLOT
BAROMETRIC PRESSURE
BARTER ISLAND
0000, 1 SEPTEMBER TO 2300, 31 OCTOBER, 1982
1464 DATA POINTS



- | | | | |
|---|---------------|---|-------------|
| 1 | 5 - 10 KNOTS | 3 | >= 25 KNOTS |
| 2 | 10 - 25 KNOTS | | |

FIGURE A16 . ROSE DIAGRAM
 WIND
 BARTER ISLAND
 0000, 1 SEPTEMBER TO 2300, 31 OCTOBER 198

TABLE A6.

WIND SPEED PERSISTENCE - BARTER ISLAND
0000, 25 JULY TO 2300, 31 AUGUST, 1982

| knots | PERCENT DURATION | | | | | | | | | | | TOTAL SAMPLES | |
|-------|------------------|------|------|------|------|------|------|-----|-----|-----|------|------------------|------|
| | >3h | >6h | >12h | >18h | >24h | >36h | >2d | >4d | >6d | >8d | >10d | | >12d |
| >5 | 88.7 | 80.1 | 65.8 | 54.7 | 44.5 | 25.9 | 17.8 | 0.3 | | | | | 829 |
| >10 | 68.3 | 53.1 | 35.4 | 26.4 | 20.0 | 12.2 | 6.6 | | | | | | 426 |
| >15 | 59.1 | 38.4 | 10.7 | 3.8 | | | | | | | | | 159 |
| >20 | 40.9 | 18.2 | | | | | | | | | | | 22 |
| >25 | 25.0 | | | | | | | | | | | | 4 |
| >30 | | | | | | | | | | | | | 0 |
| >35 | | | | | | | | | | | | | 0 |
| >40 | | | | | | | | | | | | | 0 |
| >45 | | | | | | | | | | | | | 0 |
| >50 | | | | | | | | | | | | | 0 |

largest screened value = 27 knots
total time period spanned (hours) = 911
sample interval (hours) = 1
total possible samples = 912
actual samples = 898

TABLE A6.

WIND SPEED PERSISTENCE - BARTER ISLAND
0000, 1 SEPTEMBER TO 2300, 31 OCTOBER, 1982

| knots | PERCENT DURATION | | | | | | | | | | | TOTAL SAMPLES | |
|-------|------------------|------|------|------|------|------|------|------|------|-----|------|------------------|------|
| | >3h | >6h | >12h | >18h | >24h | >36h | >2d | >4d | >6d | >8d | >10d | | >12d |
| >5 | 91.8 | 86.6 | 77.3 | 70.6 | 64.8 | 55.1 | 46.8 | 29.7 | 18.5 | 6.8 | 1.0 | | 1317 |
| >10 | 81.7 | 71.2 | 56.8 | 46.0 | 36.9 | 24.6 | 15.6 | | | | | | 906 |
| >15 | 82.9 | 72.3 | 55.1 | 42.6 | 36.3 | 26.8 | 19.7 | | | | | | 537 |
| >20 | 72.8 | 59.9 | 43.4 | 30.1 | 25.0 | 16.2 | 7.4 | | | | | | 272 |
| >25 | 75.8 | 67.2 | 57.0 | 47.7 | 38.3 | 19.5 | 5.5 | | | | | | 128 |
| >30 | 70.7 | 54.7 | 40.0 | 32.0 | 24.0 | 8.0 | | | | | | | 75 |
| >35 | 85.3 | 76.5 | 58.8 | 41.2 | 23.5 | | | | | | | | 34 |
| >40 | 90.0 | 80.0 | 60.0 | 40.0 | 20.0 | | | | | | | | 30 |
| >45 | 57.9 | 36.8 | 5.3 | | | | | | | | | | 19 |
| >50 | | | | | | | | | | | | | 0 |

largest screened value = 49 knots
total time period spanned (hours) = 1463
sample interval (hours) = 1
total possible samples = 1464
actual samples = 1430

TABLE A7.

AIR TEMPERATURE PERSISTENCE - BARTER ISLAND
0000, 25 JULY TO 2300, 31 AUGUST, 1982

PERCENT DURATION

HOURS, DAYS DURATION

| deg C | >3h | >6h | >12h | >18h | >24h | >36h | >2d | >4d | >6d | >8d | >10d | >12d | TOTAL SAMPLES |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------------------|
| >-10 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 912 |
| >-5 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 912 |
| >0 | 97.3 | 95.2 | 92.5 | 90.3 | 88.1 | 85.0 | 81.8 | 71.3 | 61.8 | 52.5 | 41.9 | 29.5 | 861 |
| >5 | 82.3 | 72.0 | 57.0 | 46.0 | 38.0 | 26.3 | 18.3 | 1.7 | | | | | 300 |
| >10 | 65.6 | 40.0 | 8.9 | | | | | | | | | | 90 |
| >15 | | | | | | | | | | | | | 9 |
| >20 | | | | | | | | | | | | | 0 |

largest screened value = 18.33 deg C
total time period spanned (hours) = 912
sample interval (hours) = 1
total possible samples = 913
actual samples = 912

TABLE A7.

AIR TEMPERATURE PERSISTENCE - BARTER ISLAND
0000, 1 SEPTEMBER TO 2300, 31 OCTOBER, 1982

PERCENT DURATION

HOURS, DAYS DURATION

| deg C | >3h | >6h | >12h | >18h | >24h | >36h | >2d | >4d | >6d | >8d | >10d | >12d | TOTAL SAMPLES |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------------------|
| >-10 | 98.6 | 97.4 | 95.2 | 93.4 | 91.8 | 89.4 | 87.0 | 81.8 | 77.0 | 72.1 | 67.3 | 62.6 | 998 |
| >-5 | 97.9 | 96.4 | 94.7 | 93.3 | 91.8 | 89.3 | 87.9 | 82.0 | 76.1 | 70.2 | 64.3 | 58.5 | 816 |
| >0 | 88.5 | 80.1 | 67.2 | 56.9 | 47.3 | 32.8 | 22.3 | 0.7 | | | | | 408 |
| >5 | 50.0 | 8.3 | | | | | | | | | | | 12 |
| >10 | | | | | | | | | | | | | 1 |
| >15 | | | | | | | | | | | | | 0 |
| >20 | | | | | | | | | | | | | 0 |

largest screened value = 10.56 deg C
total time period spanned (hours) = 1464
sample interval (hours) = 1
total possible samples = 1465
actual samples = 1464

TABLE A8.

BAROMETRIC PRESSURE PERSISTENCE - BARTER ISLAND
0000, 1 SEPTEMBER TO 2300, 31 OCTOBER, 1982

PERCENT DURATION

HOURS, DAYS DURATION

| mbar | >3h | >6h | >12h | >18h | >24h | >36h | >2d | >4d | >6d | >8d | >10d | >12d | TOTAL SAMPLES |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------------------|
| >990 | 99.8 | 99.6 | 99.2 | 98.7 | 98.3 | 97.5 | 96.6 | 92.9 | 89.0 | 84.8 | 80.2 | 75.3 | 1453 |
| >1000 | 99.1 | 98.2 | 96.4 | 94.6 | 92.8 | 89.2 | 85.6 | 72.7 | 65.4 | 59.8 | 54.2 | 48.0 | 1376 |
| >1010 | 97.4 | 94.7 | 89.3 | 84.0 | 78.6 | 70.7 | 63.6 | 40.2 | 31.4 | 21.7 | 12.5 | 4.8 | 1025 |
| >1013 | 95.1 | 90.5 | 81.5 | 73.2 | 65.2 | 51.5 | 39.8 | 14.6 | 2.5 | | | | 731 |
| >1020 | 92.2 | 84.8 | 72.4 | 60.1 | 48.1 | 31.7 | 16.9 | | | | | | 243 |
| >1025 | 92.9 | 85.8 | 71.7 | 57.5 | 43.3 | 19.7 | 8.7 | | | | | | 127 |
| >1030 | 92.1 | 84.2 | 68.4 | 52.6 | 36.8 | 5.3 | | | | | | | 38 |
| >1035 | 87.0 | 73.9 | 47.8 | 21.7 | | | | | | | | | 23 |

largest screened value = 1038.2 mbar
total time period spanned (hours) = 1463
sample interval (hours) = 1
total possible samples = 1464
actual samples = 1464

TABLE A9.
 BARTER ISLAND WIND
 0000, 25 JULY TO 2300, 30 AUGUST, 1982

Frequencies:

| Bearing Range | Speed Range (knots) | | | | | | | total |
|------------------|---------------------|---------------|----------------|----------------|----------------|----------------|------------|-------|
| | 0.00 5.00 | 5.00 10.00 | 10.00 15.00 | 15.00 20.00 | 20.00 25.00 | 25.00 30.00 | > 30.00 | |
| 0 30 ! | 20 | 14 | 0 | 0 | 0 | 0 | 0 | 34 |
| 30- 60 ! | 11 | 35 | 12 | 1 | 0 | 0 | 0 | 59 |
| 60- 90 ! | 11 | 76 | 58 | 20 | 0 | 0 | 0 | 165 |
| 90-120 ! | 6 | 52 | 39 | 28 | 0 | 0 | 0 | 125 |
| 120-150 ! | 6 | 12 | 6 | 0 | 0 | 0 | 0 | 24 |
| 150-180 ! | 4 | 12 | 4 | 0 | 0 | 0 | 0 | 20 |
| 180-210 ! | 0 | 19 | 1 | 0 | 0 | 0 | 0 | 20 |
| 210-240 ! | 5 | 30 | 4 | 0 | 0 | 0 | 0 | 39 |
| 240-270 ! | 11 | 66 | 36 | 22 | 2 | 3 | 0 | 140 |
| 270-300 ! | 10 | 106 | 47 | 38 | 5 | 0 | 0 | 206 |
| 300-330 ! | 16 | 26 | 8 | 1 | 0 | 0 | 0 | 51 |
| 330-360 ! | 10 | 5 | 0 | 0 | 0 | 0 | 0 | 15 |
| total ! | 110 | 453 | 215 | 110 | 7 | 3 | 0 | 898 |

Percentages:

| Bearing Range | Speed Range (knots) | | | | | | | total |
|------------------|---------------------|---------------|----------------|----------------|----------------|----------------|------------|-------|
| | 0.00 5.00 | 5.00 10.00 | 10.00 15.00 | 15.00 20.00 | 20.00 25.00 | 25.00 30.00 | > 30.00 | |
| 0 30 ! | 2.2 | 1.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.8 |
| 30- 60 ! | 1.2 | 3.9 | 1.3 | 0.1 | 0.0 | 0.0 | 0.0 | 6.6 |
| 60- 90 ! | 1.2 | 8.5 | 6.5 | 2.2 | 0.0 | 0.0 | 0.0 | 18.4 |
| 90-120 ! | 0.7 | 5.8 | 4.3 | 3.1 | 0.0 | 0.0 | 0.0 | 13.9 |
| 120-150 ! | 0.7 | 1.3 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 2.7 |
| 150-180 ! | 0.4 | 1.3 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 2.2 |
| 180-210 ! | 0.0 | 2.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 2.2 |
| 210-240 ! | 0.6 | 3.3 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 4.3 |
| 240-270 ! | 1.2 | 7.3 | 4.0 | 2.4 | 0.2 | 0.3 | 0.0 | 15.6 |
| 270-300 ! | 1.1 | 11.8 | 5.2 | 4.2 | 0.6 | 0.0 | 0.0 | 22.9 |
| 300-330 ! | 1.8 | 2.9 | 0.9 | 0.1 | 0.0 | 0.0 | 0.0 | 5.7 |
| 330-360 ! | 1.1 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.7 |
| total ! | 12.2 | 50.4 | 23.9 | 12.2 | 0.8 | 0.3 | 0.0 | 100.0 |

largest screened speed = 27 knots
 total time period spanned (hours) = 911
 sample interval (hours) = 1
 total possible observations = 912
 actual observations = 898

TABLE A9.
 BARTER ISLAND WIND
 0000, 25 JULY TO 2300, 30 AUGUST, 1982

Row Percents:

| Bearing Range | Speed Range (knots) | | | | | | | | total |
|------------------|---------------------|---------------|----------------|----------------|----------------|----------------|------------|-----|-------|
| | 0.00 5.00 | 5.00 10.00 | 10.00 15.00 | 15.00 20.00 | 20.00 25.00 | 25.00 30.00 | > 30.00 | | |
| 0 30 ! | 58.8 | 41.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| 30- 60 ! | 18.6 | 59.3 | 20.3 | 1.7 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| 60- 90 ! | 6.7 | 46.1 | 35.2 | 12.1 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| 90-120 ! | 4.8 | 41.6 | 31.2 | 22.4 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| 120-150 ! | 25.0 | 50.0 | 25.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| 150-180 ! | 20.0 | 60.0 | 20.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| 180-210 ! | 0.0 | 95.0 | 5.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| 210-240 ! | 12.8 | 76.9 | 10.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| 240-270 ! | 7.9 | 47.1 | 25.7 | 15.7 | 1.4 | 2.1 | 0.0 | 0.0 | 100.0 |
| 270-300 ! | 4.9 | 51.5 | 22.8 | 18.4 | 2.4 | 0.0 | 0.0 | 0.0 | 100.0 |
| 300-330 ! | 31.4 | 51.0 | 15.7 | 2.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| 330-360 ! | 66.7 | 33.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| total ! | 12.2 | 50.4 | 23.9 | 12.2 | 0.8 | 0.3 | 0.0 | 0.0 | 100.0 |

Column Percents:

| Bearing Range | Speed Range (knots) | | | | | | | | total |
|------------------|---------------------|---------------|----------------|----------------|----------------|----------------|------------|-----|-------|
| | 0.00 5.00 | 5.00 10.00 | 10.00 15.00 | 15.00 20.00 | 20.00 25.00 | 25.00 30.00 | > 30.00 | | |
| 0 30 ! | 18.2 | 3.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.8 |
| 30- 60 ! | 10.0 | 7.7 | 5.6 | 0.9 | 0.0 | 0.0 | 0.0 | 0.0 | 6.6 |
| 60- 90 ! | 10.0 | 16.8 | 27.0 | 18.2 | 0.0 | 0.0 | 0.0 | 0.0 | 18.4 |
| 90-120 ! | 5.5 | 11.5 | 18.1 | 25.5 | 0.0 | 0.0 | 0.0 | 0.0 | 13.9 |
| 120-150 ! | 5.5 | 2.6 | 2.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.7 |
| 150-180 ! | 3.6 | 2.6 | 1.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.2 |
| 180-210 ! | 0.0 | 4.2 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.2 |
| 210-240 ! | 4.5 | 6.6 | 1.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.3 |
| 240-270 ! | 10.0 | 14.6 | 16.7 | 20.0 | 28.6 | 100.0 | 0.0 | 0.0 | 15.6 |
| 270-300 ! | 9.1 | 23.4 | 21.9 | 34.5 | 71.4 | 0.0 | 0.0 | 0.0 | 22.9 |
| 300-330 ! | 14.5 | 5.7 | 3.7 | 0.9 | 0.0 | 0.0 | 0.0 | 0.0 | 5.7 |
| 330-360 ! | 9.1 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.7 |
| total ! | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 0.0 | 0.0 | 100.0 |

largest screened speed = 27 knots
 total time period spanned (hours) = 911
 sample interval (hours) = 1
 total possible observations = 912
 actual observations = 898

TABLE A9.

BAETER ISLAND WIND
0000, 1 SEPTEMBER TO 2300, 31 OCTOBER, 1982

quencies:

| ring nqe | Speed Range (knots) | | | | | | | | | | | total |
|-------------|---------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|---|-------|
| | 0.00 | 5.00 | 10.00 | 15.00 | 20.00 | 25.00 | 30.00 | 35.00 | 40.00 | 45.00 | > | |
| 30 ! | 20 | 20 | 16 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 61 |
| - 60 ! | 19 | 39 | 64 | 42 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 172 |
| - 90 ! | 16 | 61 | 78 | 105 | 47 | 1 | 0 | 0 | 0 | 0 | 0 | 308 |
| -120 ! | 19 | 85 | 40 | 11 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 156 |
| -150 ! | 19 | 33 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 53 |
| -180 ! | 16 | 17 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 39 |
| -210 ! | 9 | 26 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 44 |
| -240 ! | 7 | 58 | 28 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 99 |
| -270 ! | 6 | 28 | 31 | 40 | 37 | 36 | 19 | 6 | 14 | 10 | 0 | 227 |
| -300 ! | 14 | 33 | 29 | 47 | 21 | 15 | 7 | 1 | 2 | 0 | 0 | 169 |
| -330 ! | 18 | 35 | 11 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 65 |
| -360 ! | 10 | 19 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 37 |
| otal ! | 173 | 454 | 320 | 256 | 116 | 52 | 26 | 7 | 16 | 10 | 0 | 1430 |

centages:

| ring nqe | Speed Range (knots) | | | | | | | | | | | total |
|-------------|---------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-----|-------|
| | 0.00 | 5.00 | 10.00 | 15.00 | 20.00 | 25.00 | 30.00 | 35.00 | 40.00 | 45.00 | > | |
| 30 ! | 1.4 | 1.4 | 1.1 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.3 |
| - 60 ! | 1.3 | 2.7 | 4.5 | 2.9 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 12.0 |
| - 90 ! | 1.1 | 4.3 | 5.5 | 7.3 | 3.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 21.5 |
| -120 ! | 1.3 | 5.9 | 2.8 | 0.8 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 10.9 |
| -150 ! | 1.3 | 2.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.7 |
| -180 ! | 1.1 | 1.2 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.7 |
| -210 ! | 0.6 | 1.8 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.1 |
| -240 ! | 0.5 | 4.1 | 2.0 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 6.9 |
| -270 ! | 0.4 | 2.0 | 2.2 | 2.8 | 2.6 | 2.5 | 1.3 | 0.4 | 1.0 | 0.7 | 0.0 | 15.9 |
| -300 ! | 1.0 | 2.3 | 2.0 | 3.3 | 1.5 | 1.0 | 0.5 | 0.1 | 0.1 | 0.0 | 0.0 | 11.8 |
| -330 ! | 1.3 | 2.4 | 0.8 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.5 |
| -360 ! | 0.7 | 1.3 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.6 |
| otal ! | 12.1 | 31.7 | 22.4 | 17.9 | 8.1 | 3.6 | 1.8 | 0.5 | 1.1 | 0.7 | 0.0 | 100.0 |

grest screened speed = 49 knots
 al time period spanned (hours) = 1463
 ple interval (hours) = 1
 al possible observations = 1464
 ual observations = 1430

TABLE A9.

BARTER ISLAND WIND
0000, 1 SEPTEMBER TO 2300, 31 OCTOBER, 1982

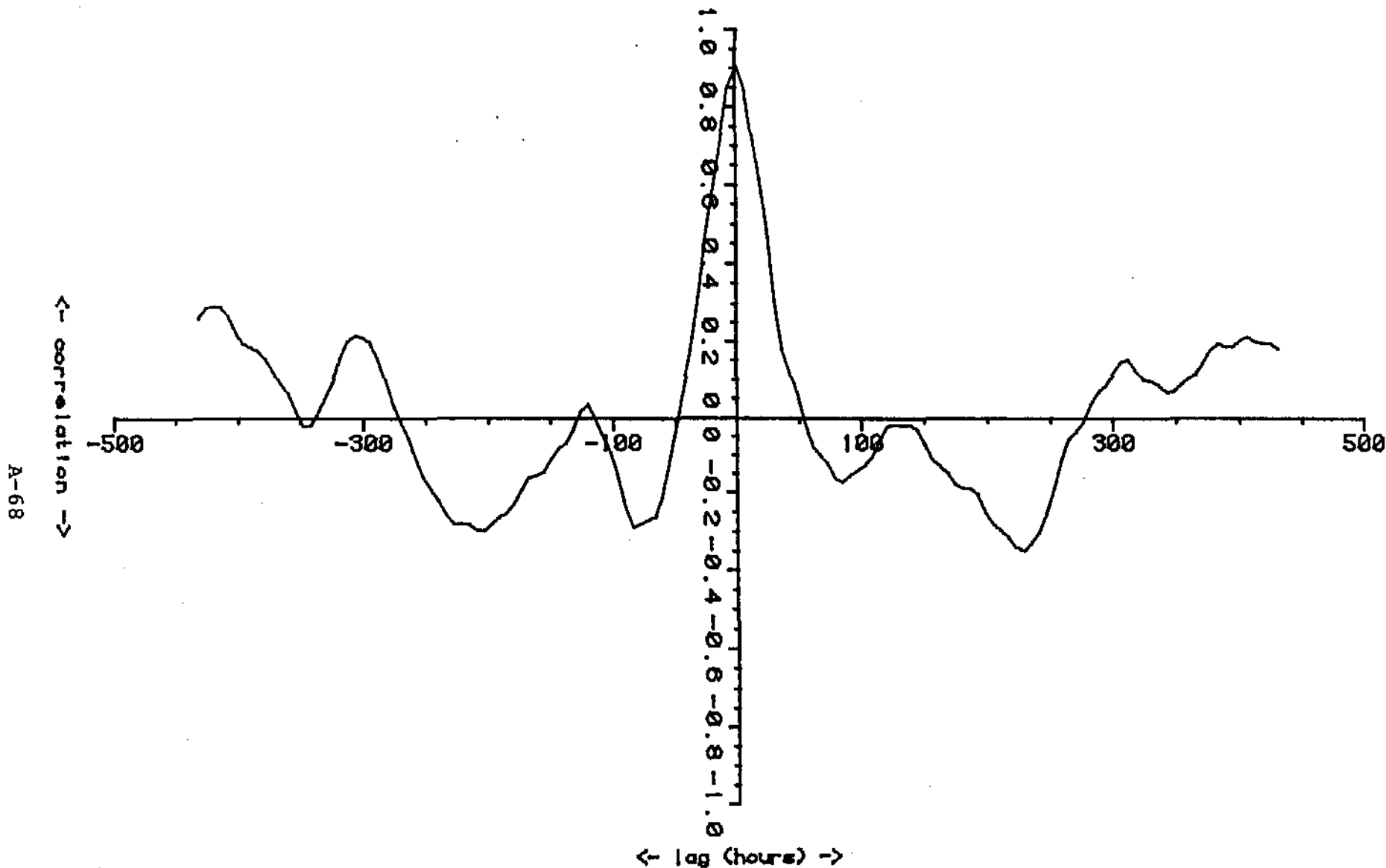
* Percents:

| Dirng range | Speed Range (knots) | | | | | | | | | | | total |
|----------------|---------------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|------------|-------|
| | 0.00 5.00 | 5.00 10.00 | 10.00 15.00 | 15.00 20.00 | 20.00 25.00 | 25.00 30.00 | 30.00 35.00 | 35.00 40.00 | 40.00 45.00 | 45.00 50.00 | > 50.00 | |
|) 30 ! | 32.8 | 32.8 | 26.2 | 6.6 | 1.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
|)- 60 ! | 11.0 | 22.7 | 37.2 | 24.4 | 4.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
|)- 90 ! | 5.2 | 19.8 | 25.3 | 34.1 | 15.3 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
|)-120 ! | 12.2 | 54.5 | 25.6 | 7.1 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
|)-150 ! | 35.8 | 62.3 | 1.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
|)-180 ! | 41.0 | 43.6 | 12.8 | 2.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
|)-210 ! | 20.5 | 59.1 | 20.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
|)-240 ! | 7.1 | 58.6 | 28.3 | 5.1 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
|)-270 ! | 2.6 | 12.3 | 13.7 | 17.6 | 16.3 | 15.9 | 8.4 | 2.6 | 6.2 | 4.4 | 0.0 | 100.0 |
|)-300 ! | 8.3 | 19.5 | 17.2 | 27.8 | 12.4 | 8.9 | 4.1 | 0.6 | 1.2 | 0.0 | 0.0 | 100.0 |
|)-330 ! | 27.7 | 53.8 | 16.9 | 1.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
|)-360 ! | 27.0 | 51.4 | 21.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| total ! | 12.1 | 31.7 | 22.4 | 17.9 | 8.1 | 3.6 | 1.8 | 0.5 | 1.1 | 0.7 | 0.0 | 100.0 |

Column Percents:

| Dirng range | Speed Range (knots) | | | | | | | | | | | total |
|----------------|---------------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|------------|-------|
| | 0.00 5.00 | 5.00 10.00 | 10.00 15.00 | 15.00 20.00 | 20.00 25.00 | 25.00 30.00 | 30.00 35.00 | 35.00 40.00 | 40.00 45.00 | 45.00 50.00 | > 50.00 | |
|) 30 ! | 11.6 | 4.4 | 5.0 | 1.6 | 0.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.3 |
|)- 60 ! | 11.0 | 8.6 | 20.0 | 16.4 | 6.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 12.0 |
|)- 90 ! | 9.2 | 13.4 | 24.4 | 41.0 | 40.5 | 1.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 21.5 |
|)-120 ! | 11.0 | 18.7 | 12.5 | 4.3 | 0.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 10.9 |
|)-150 ! | 11.0 | 7.3 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.7 |
|)-180 ! | 9.2 | 3.7 | 1.6 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.7 |
|)-210 ! | 5.2 | 5.7 | 2.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.7 |
|)-240 ! | 4.0 | 12.8 | 8.8 | 2.0 | 0.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 6.9 |
|)-270 ! | 3.5 | 6.2 | 9.7 | 15.6 | 31.9 | 69.2 | 73.1 | 85.7 | 87.5 | 100.0 | 0.0 | 15.1 |
|)-300 ! | 8.1 | 7.3 | 9.1 | 18.4 | 18.1 | 28.8 | 26.9 | 14.3 | 12.5 | 0.0 | 0.0 | 11.8 |
|)-330 ! | 10.4 | 7.7 | 3.4 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.1 |
|)-360 ! | 5.8 | 4.2 | 2.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.6 |
| total ! | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 0.0 | 100.0 |

request screened speed = 49 knots
total time period spanned (hours) = 1463
sample interval (hours) = 1
total possible observations = 1464
actual observations = 1430



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FIGURE A17.

CROSS CORRELATIONS
 BARTER ISLAND WIND (72 DEG. COMP.) VS. LAGGED CHALLENGE
 ISLAND WIND (72 DEG. COMP.) ($\Delta T=6$ HR) (FILTERED DATA)
 0004, 25 JULY TO 1804, 31 AUGUST, 1982

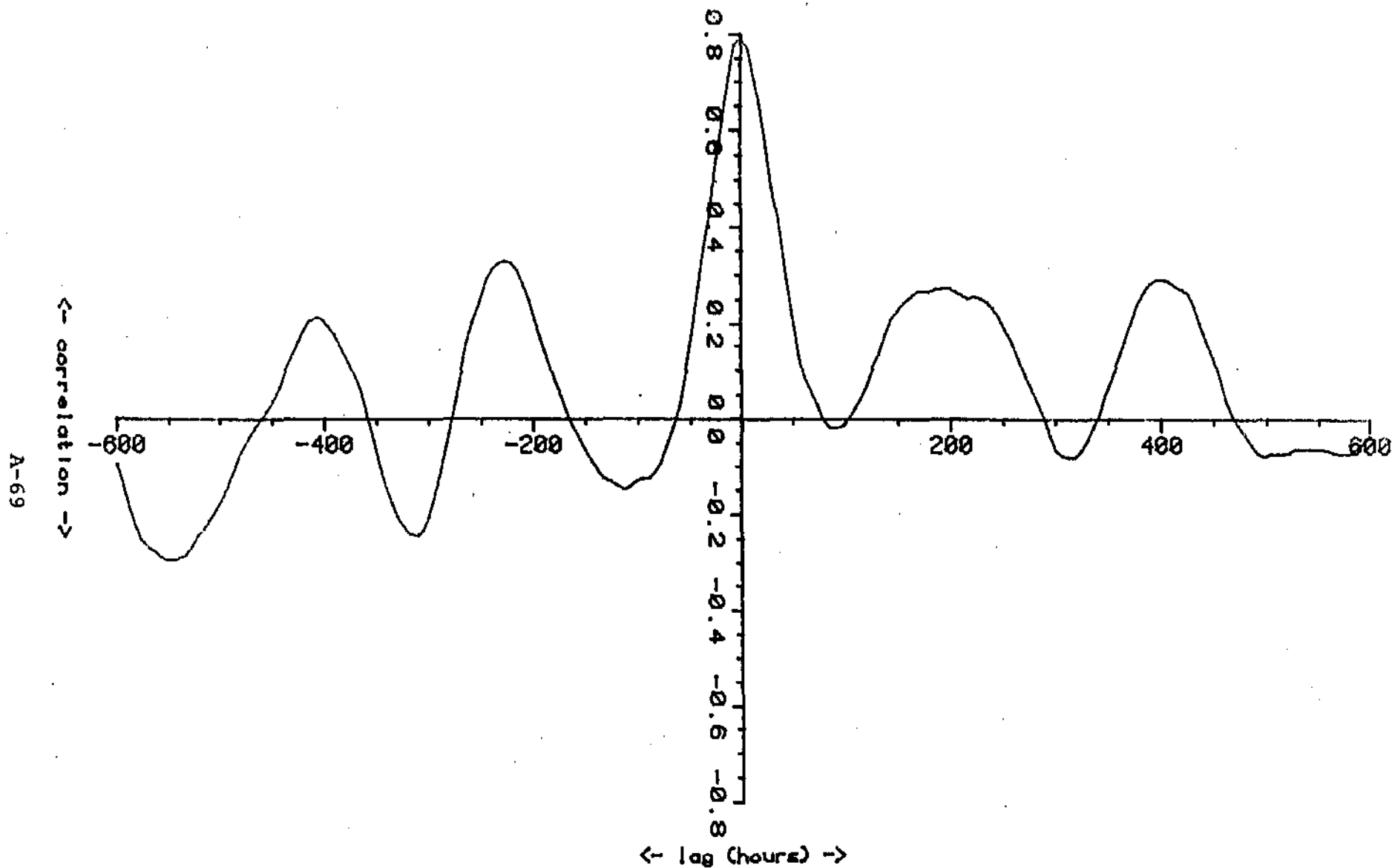


FIGURE A13.

CROSS CORRELATIONS

BARTER ISLAND WIND (64 DEG. COMP.) VS. LAGGED CHALLENGE
 ISLAND WIND (64 DEG. COMP.) ($\Delta T=6$ HR) (FILTERED DATA)
 1400, 4 SEPTEMBER TO 0200, 28 OCTOBER, 1982

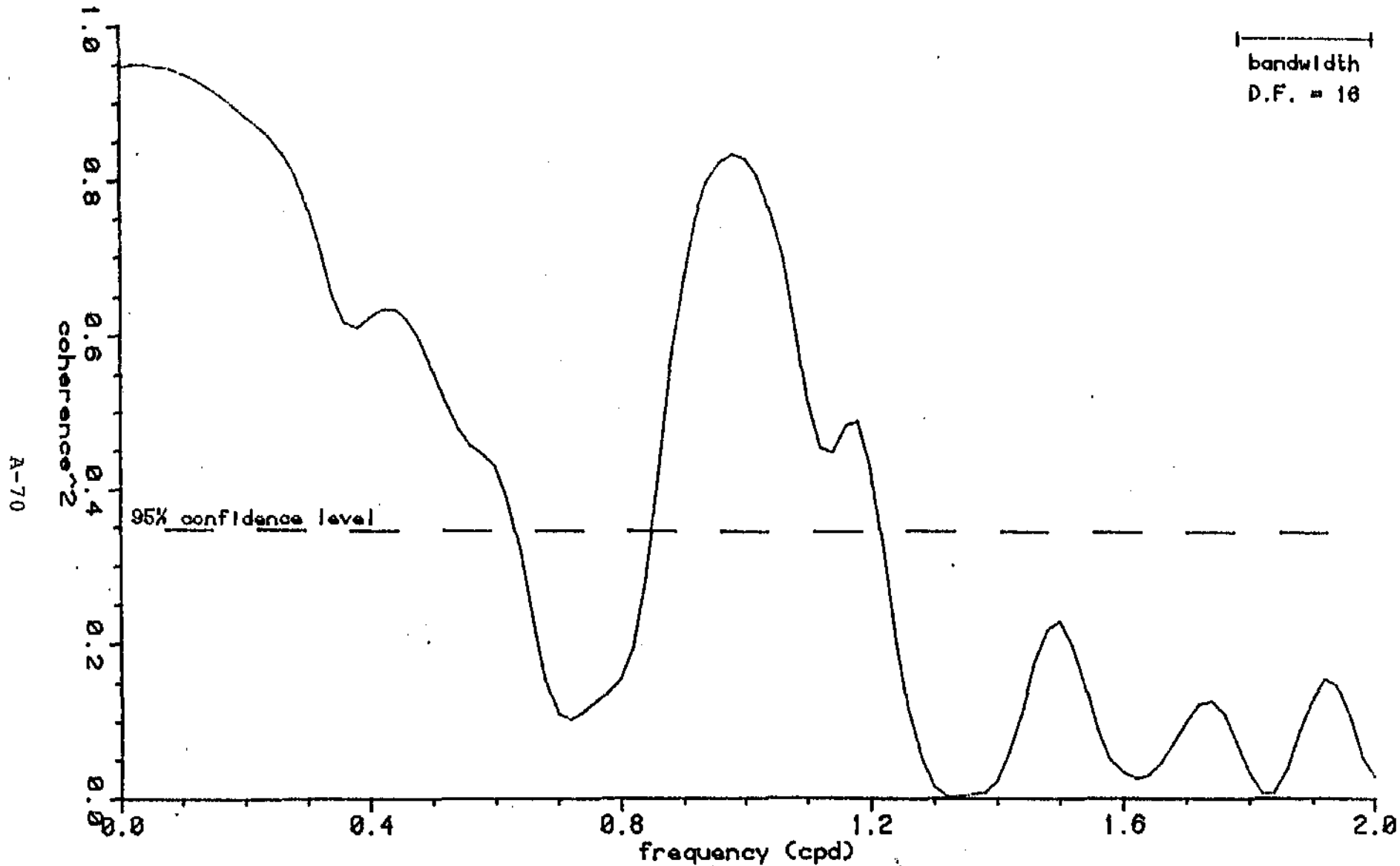


FIGURE A19

SQUARED COHERENCE SPECTRUM
 BARTER ISLAND WIND (72 DEG. COMP.) VS. LAGGED CHALLENGE
 ISLAND WIND (72 DEG. COMP.) ($\Delta T=6$ HR) (FILTERED DATA)
 0004, 25 JULY TO 1804, 31 AUGUST, 1982

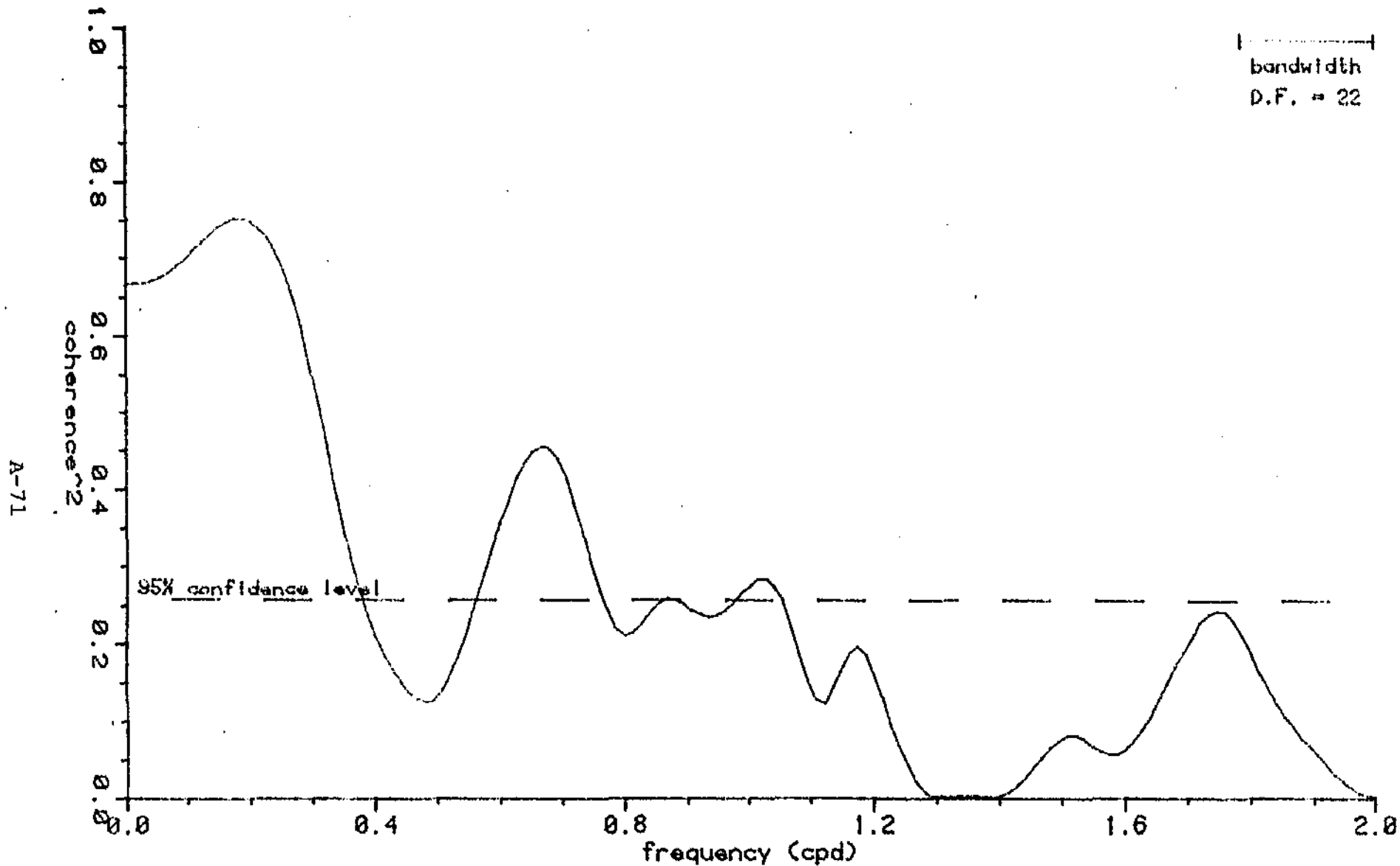


FIGURE A20

SQUARED COHERENCE SPECTRUM
 BARTER ISLAND WIND (64 DEG. COMP.) VS. LAGGED CHALLENGE
 ISLAND WIND (64 DEG. COMP.) ($\Delta T=6$ HR) (FILTERED DATA)
 1400, 4 SEPTEMBER TO 0200, 28 OCTOBER, 1982

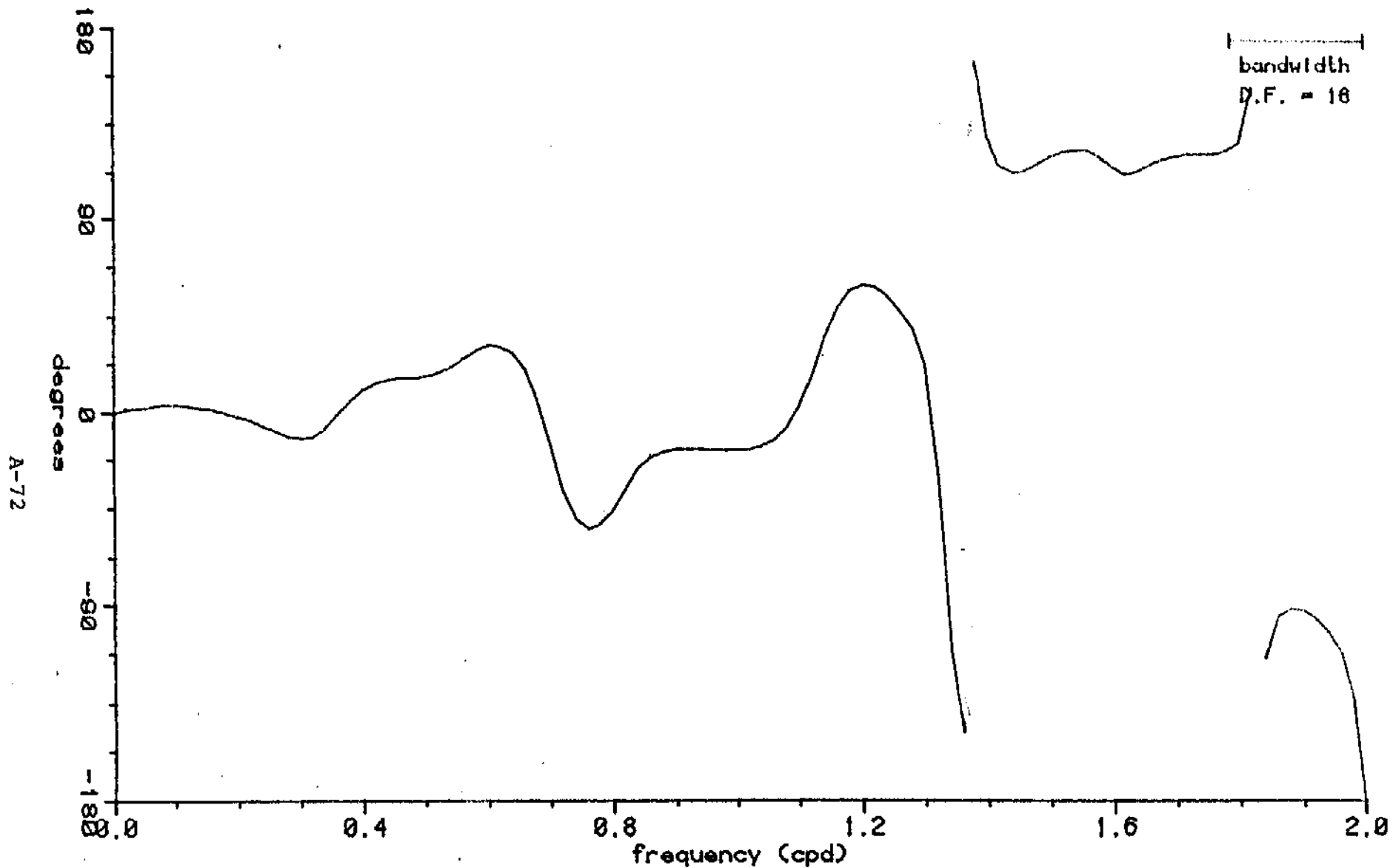


FIGURE A21,

PHASE SPECTRUM

BARTER ISLAND WIND (72 DEG. COMP.) VS LAGGED CHALLENGE
ISLAND WIND (72 DEG. COMP.) ($\Delta T=6$ HR) (FILTERED DATA)

0004, 25 JULY TO 1804, 31 AUGUST, 1982

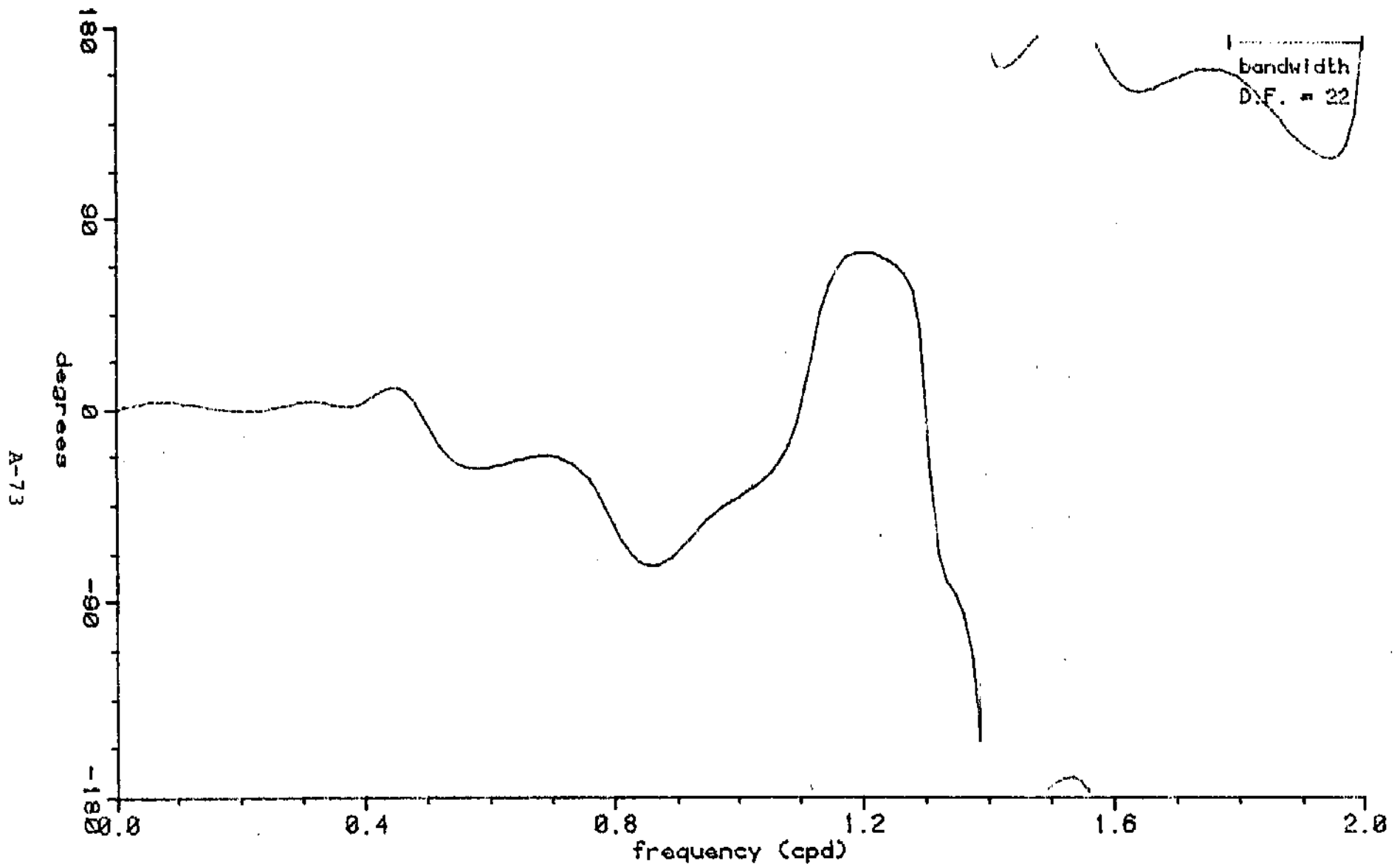


FIGURE A22

PHASE SPECTRUM

BARTER ISLAND WIND (64 DEG. COMP.) VS. LAGGED CHALLENGE ISLAND WIND (64 DEG. COMP.) (T=6 HR) (FILTERED DATA) 1400, 4 SEPTEMBER TO 0200, 28 OCTOBER, 1982

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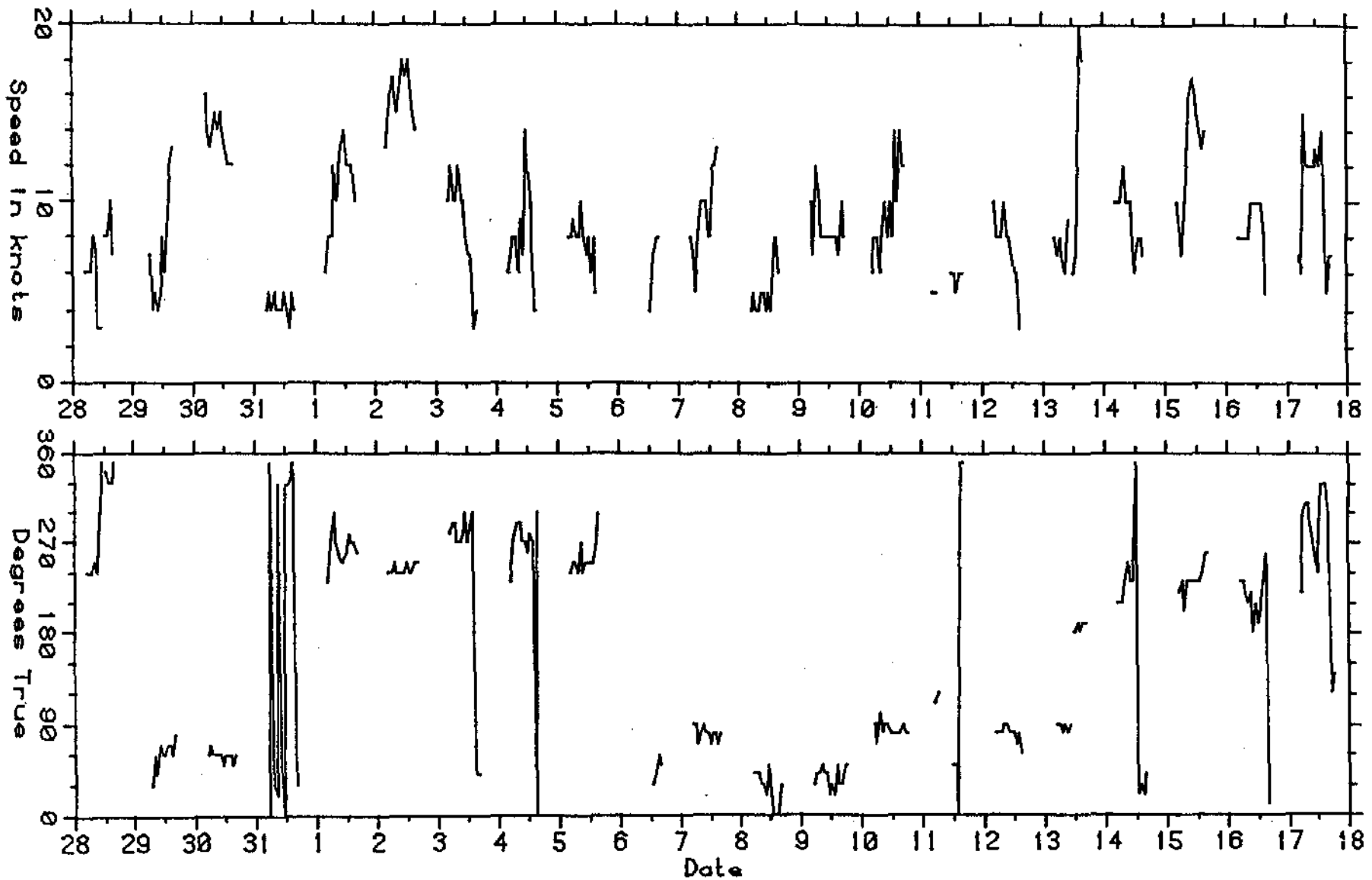


FIGURE A23

SPEED AND DIRECTION DATA
POINT BARROW WIND
0000, 28 JULY TO 2300, 17 AUGUST, 1982

A-75

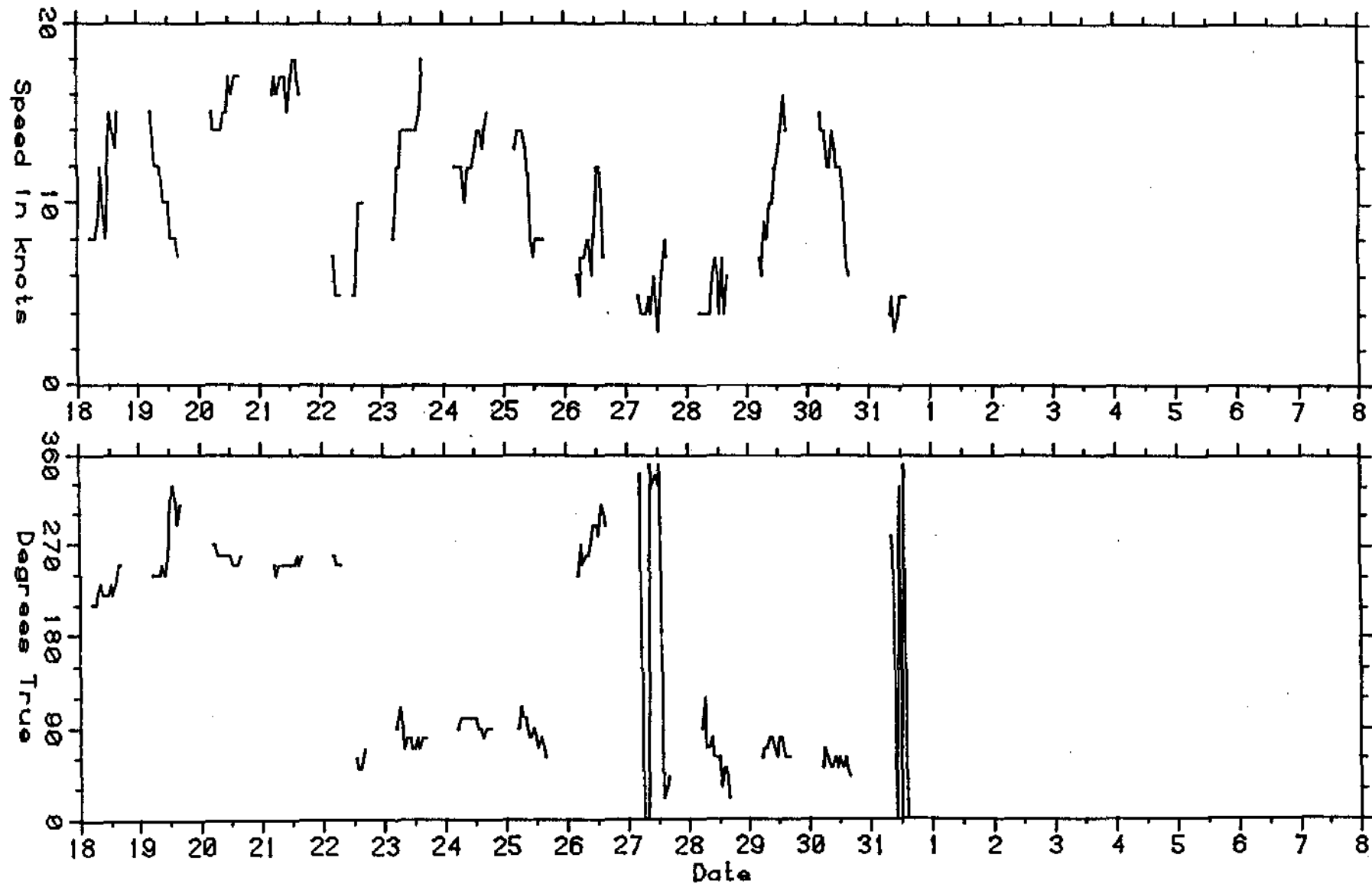


FIGURE A23 SPEED AND DIRECTION DATA
POINT BARROW WIND
0000, 18 AUGUST TO 1400, 31 AUGUST, 1982

A-76

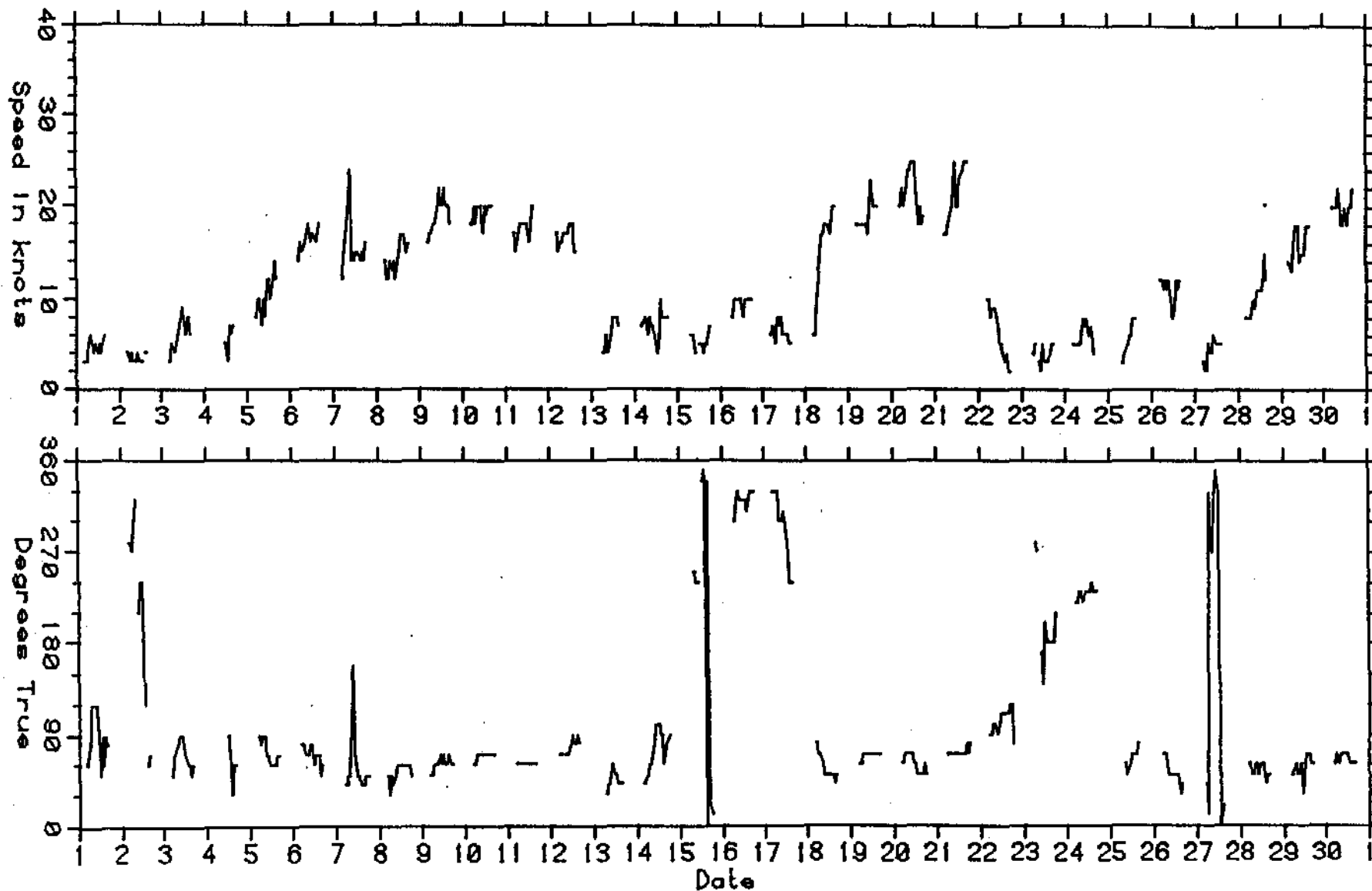


FIGURE A23. SPEED AND DIRECTION DATA
POINT BARROW WIND
0000, 1 SEPTEMBER TO 2300, 30 SEPTEMBER, 1982

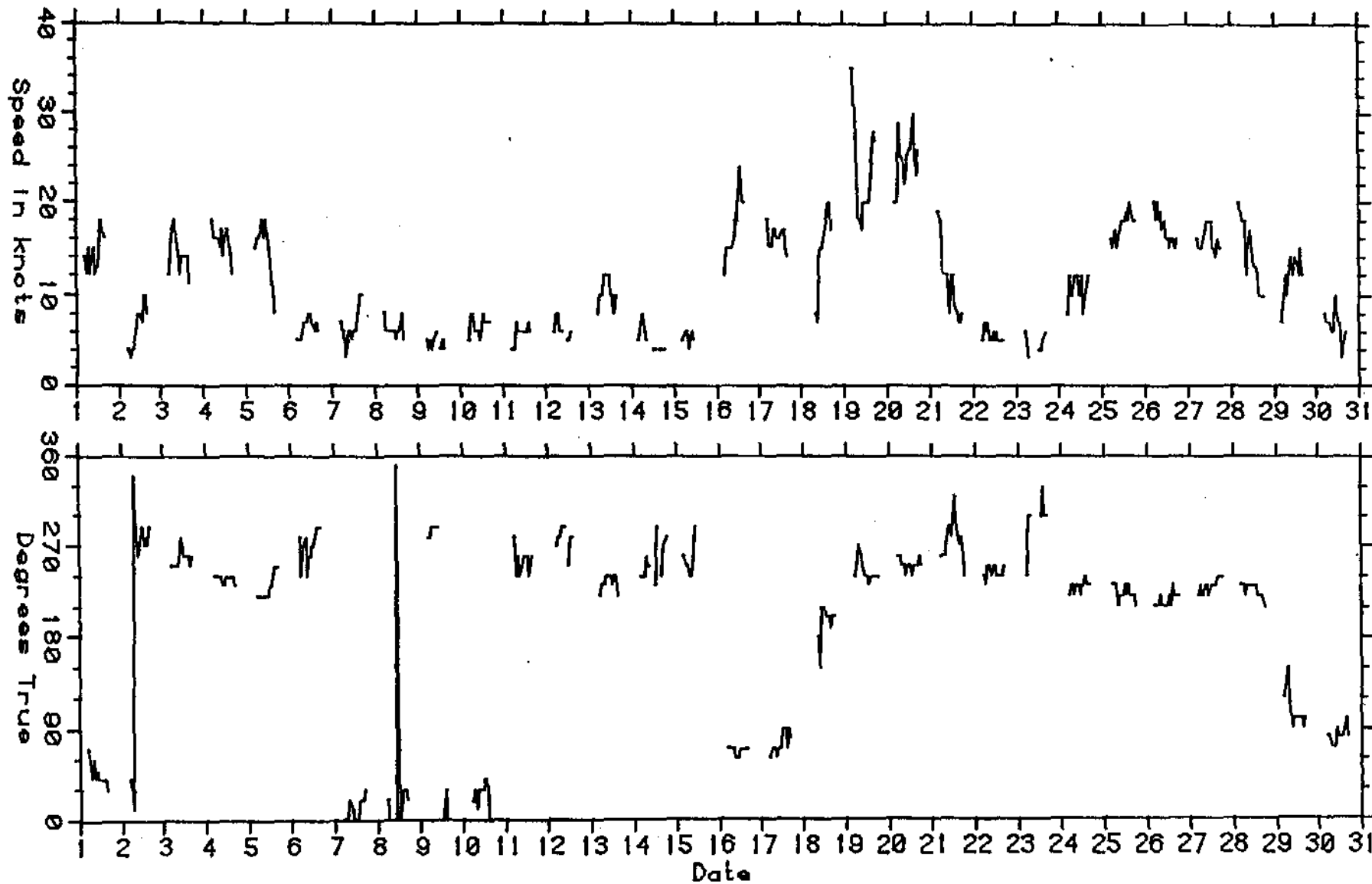


FIGURE A23. SPEED AND DIRECTION DATA
 POINT BARROW WIND
 0000, 1 OCTOBER TO 2300, 30 OCTOBER, 1982

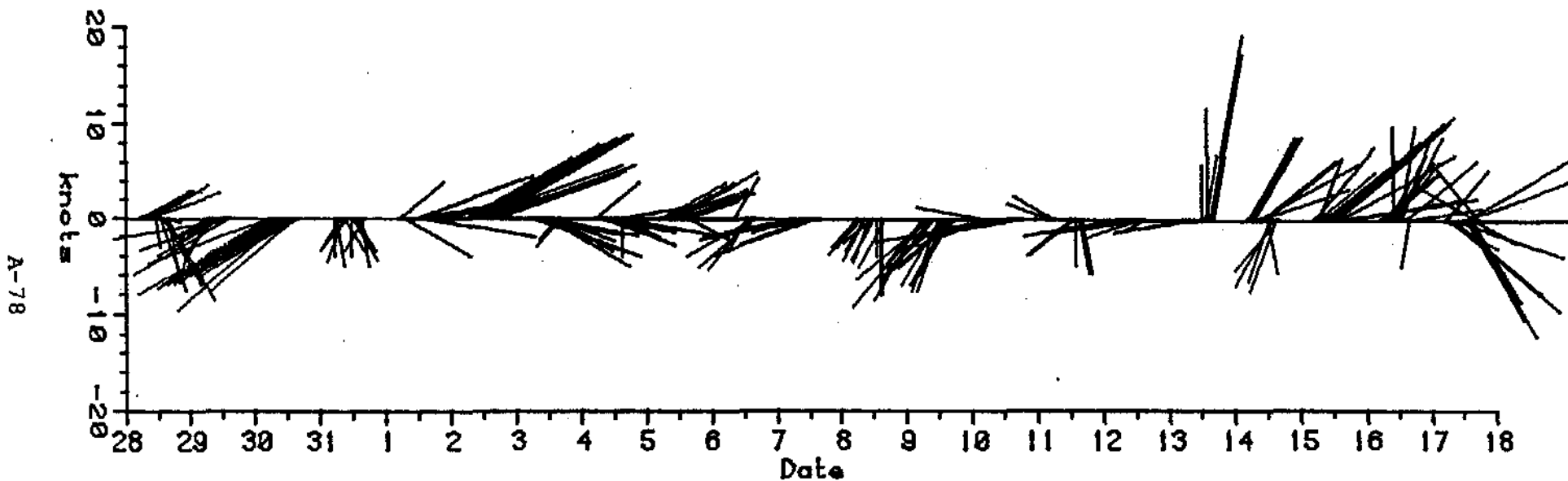


FIGURE A24

VECTOR STICK PLOT
POINT BARROW WIND
0000, 28 JULY TO 2300, 17 AUGUST, 1982



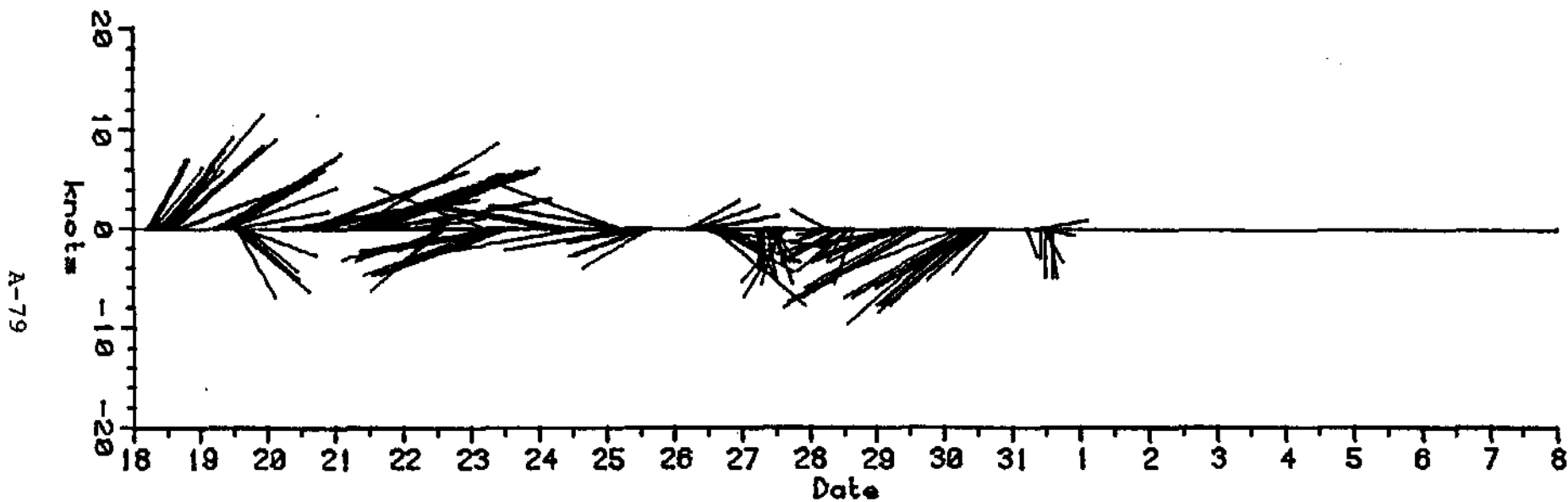


FIGURE A24

VECTOR STICK PLOT
POINT BARROW WIND
0000, 18 AUGUST TO 1400, 31 AUGUST, 1982



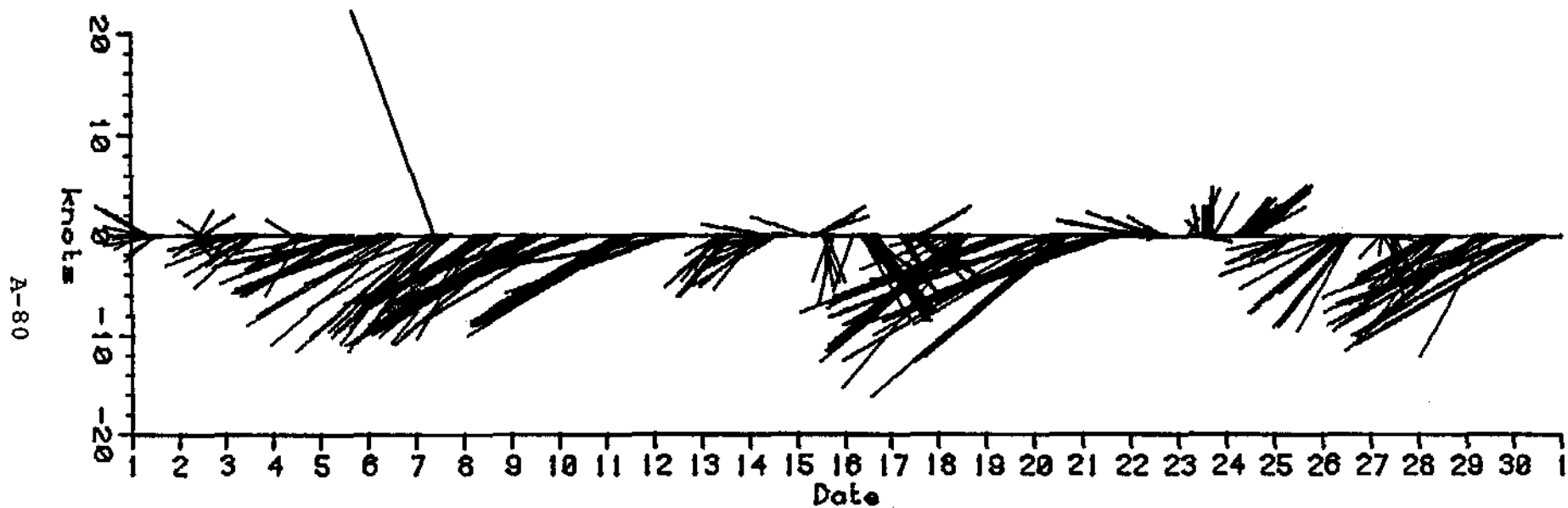


FIGURE A24

VECTOR STICK PLOT
POINT BARROW WIND
0500, 1 SEPTEMBER TO 2300, 30 SEPTEMBER, 1982



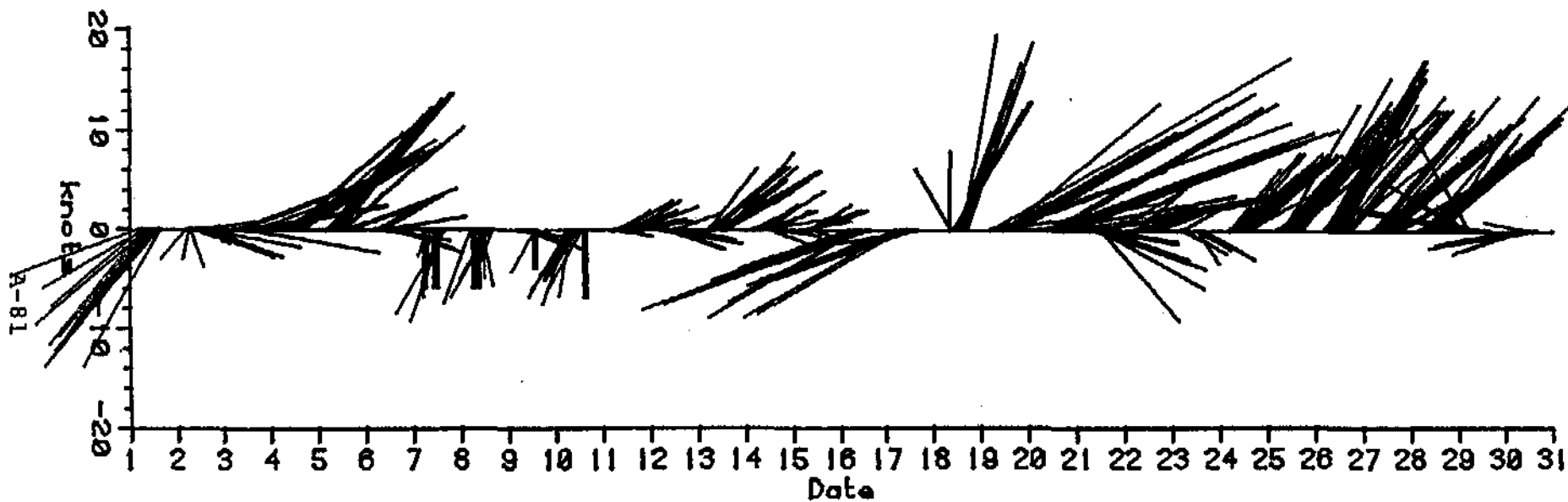
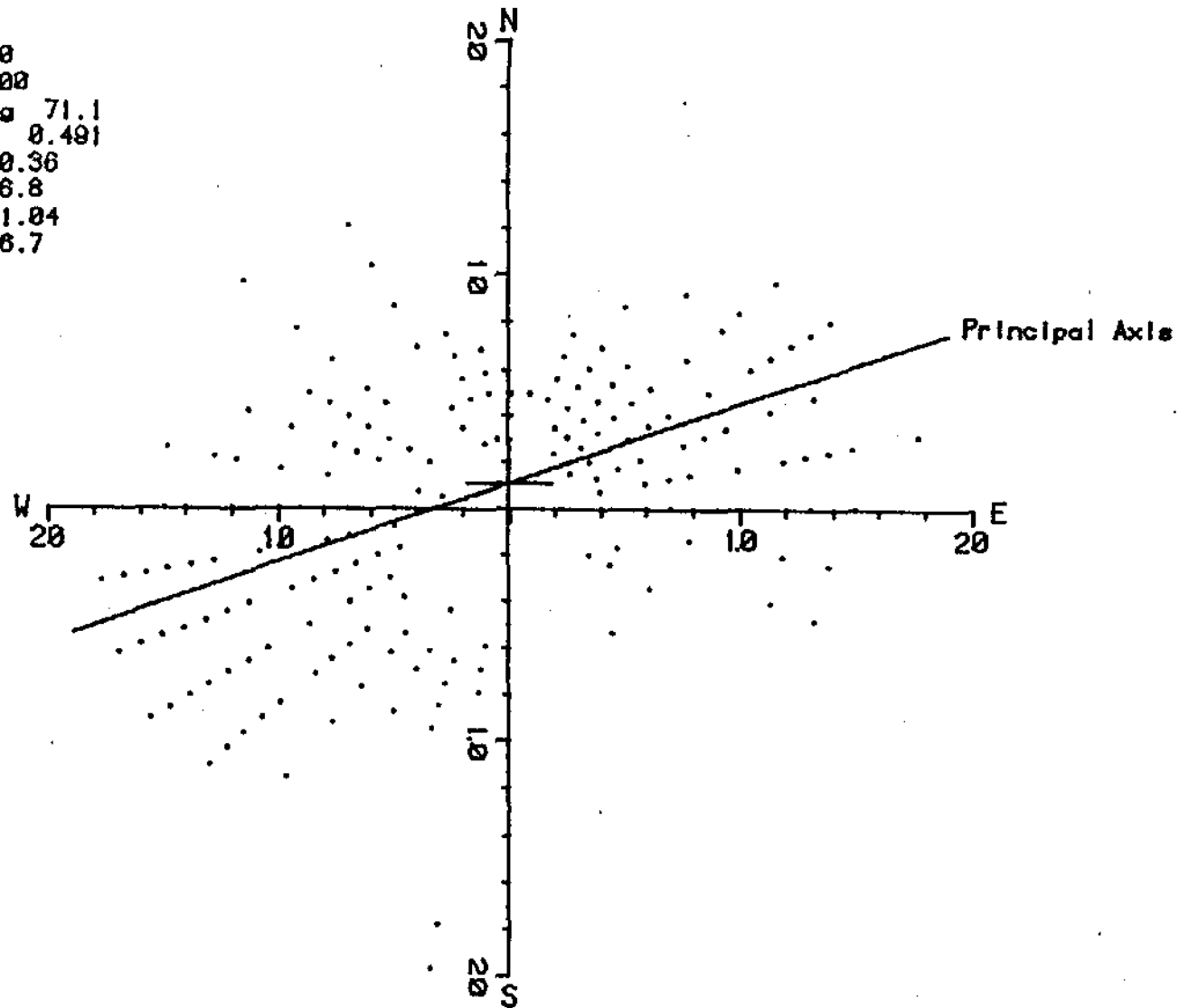


FIGURE A24

VECTOR STICK PLOT
POINT BARROW WIND
0000, 1 OCTOBER TO 2300, 30 OCTOBER, 1982



Mean N 1.18
Mean E -0.00
Axis bearing 71.1
Correlation 0.491
Mean Prin. 0.36
Var Prin. 86.8
Mean Orth. 1.04
Var Orth. 16.7

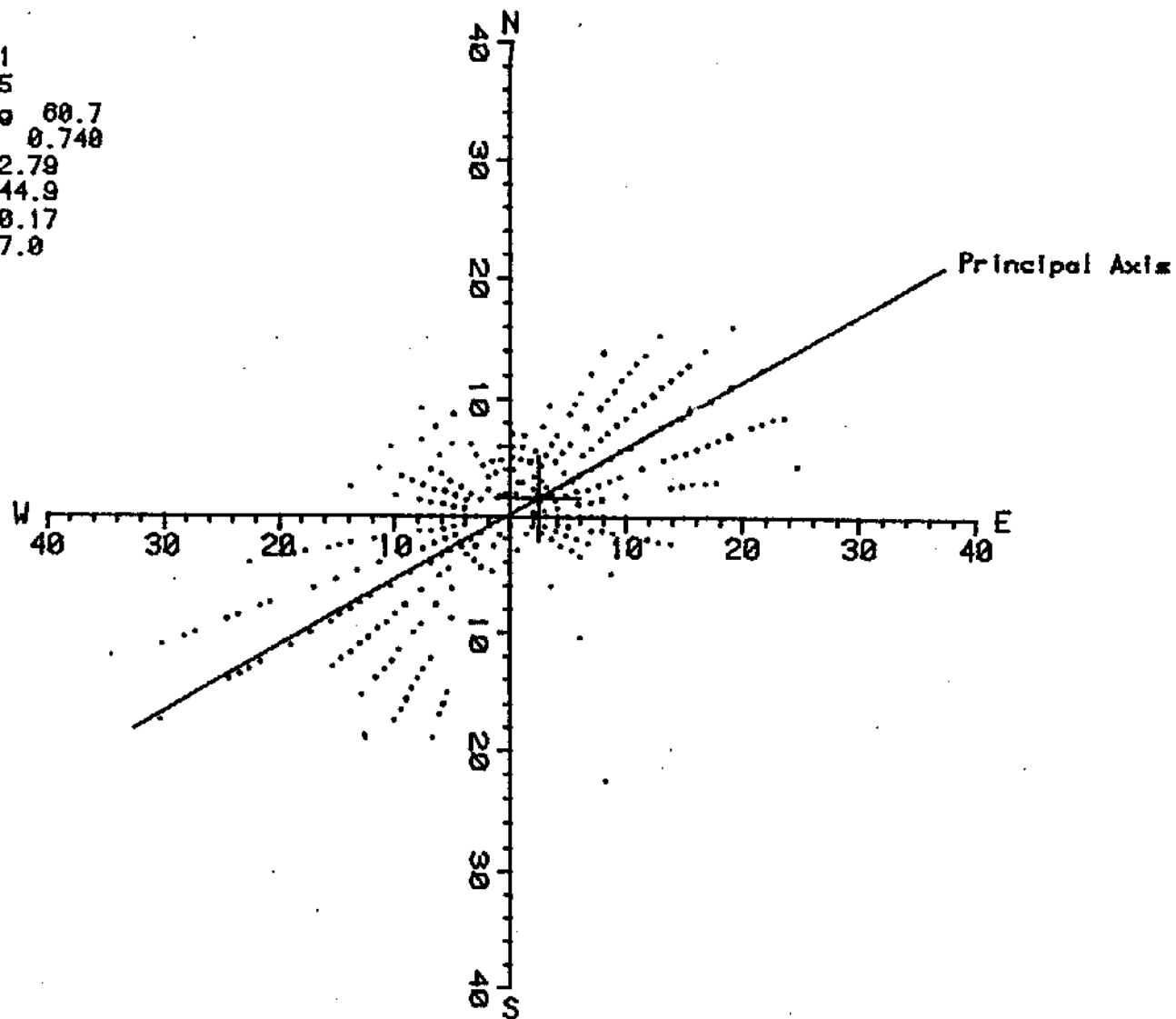


(Speeds in knots)

FIGURE A25.

POLAR PLOT - SPEED AND DIRECTION DATA
POINT BARROW WIND
0500, 25 JULY TO 1400, 31 AUGUST, 1982

Mean N 1.51
Mean E 2.35
Axis bearing 60.7
Correlation 0.740
Mean Prin. 2.79
Var Prin. 144.9
Mean Orth. 0.17
Var Orth. 17.0



(Speeds In knots)

FIGURE A25.

POLAR PLOT - SPEED AND DIRECTION DATA
POINT BARROW WIND
0500, 1 SEPTEMBER TO 1400, 31 OCTOBER, 1982

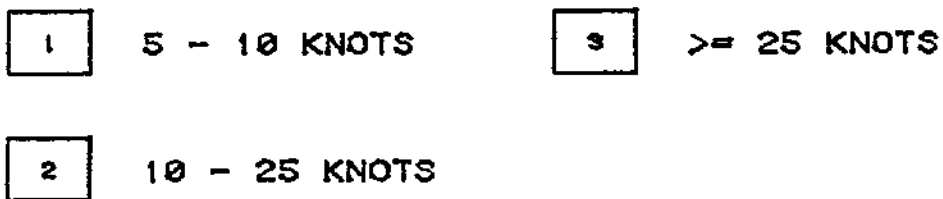
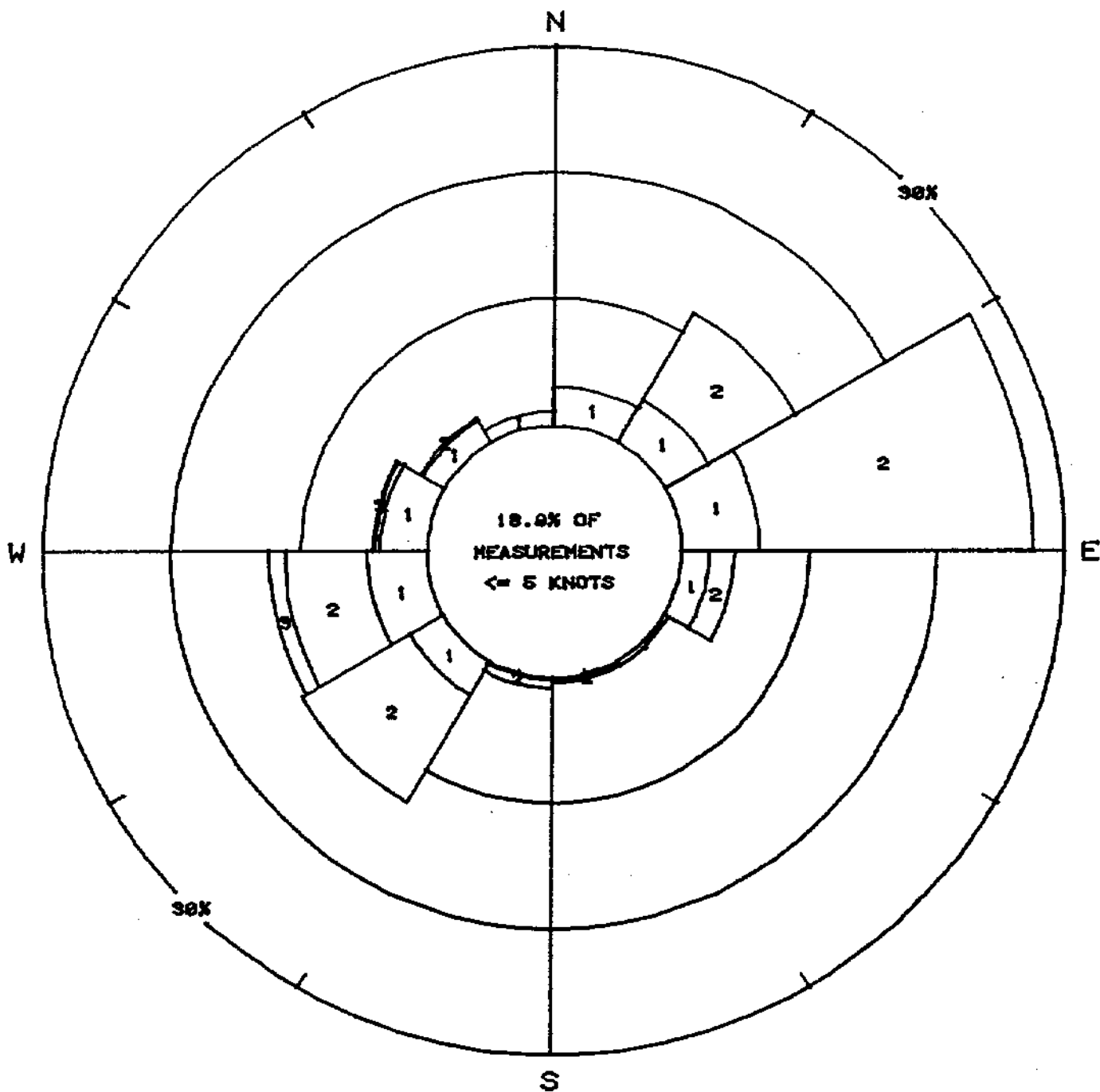


FIGURE A26 . ROSE DIAGRAM
 WIND
 POINT BARROW
 500, 1 SEPTEMBER TO 1400, 31 OCTOBER 1982

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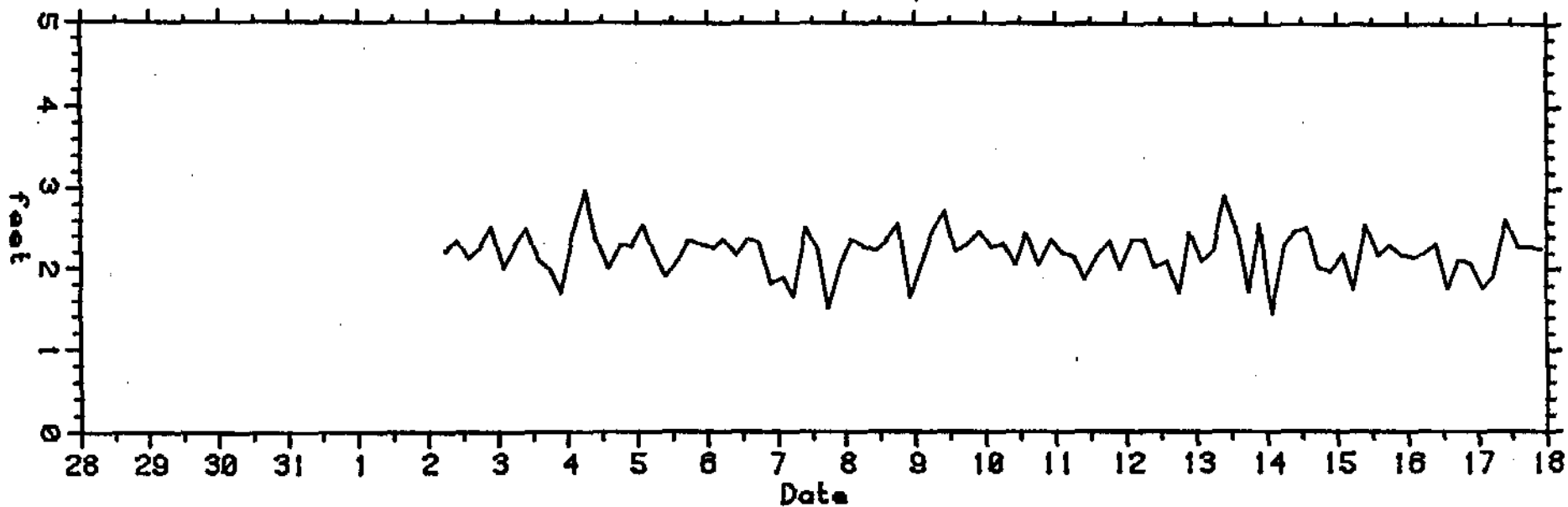


FIGURE B1 MAXIMUM WAVE HEIGHT
POINT THOMSON STATION Q
0550, 2 AUGUST TO 2150, 17 AUGUST, 1982

R-3

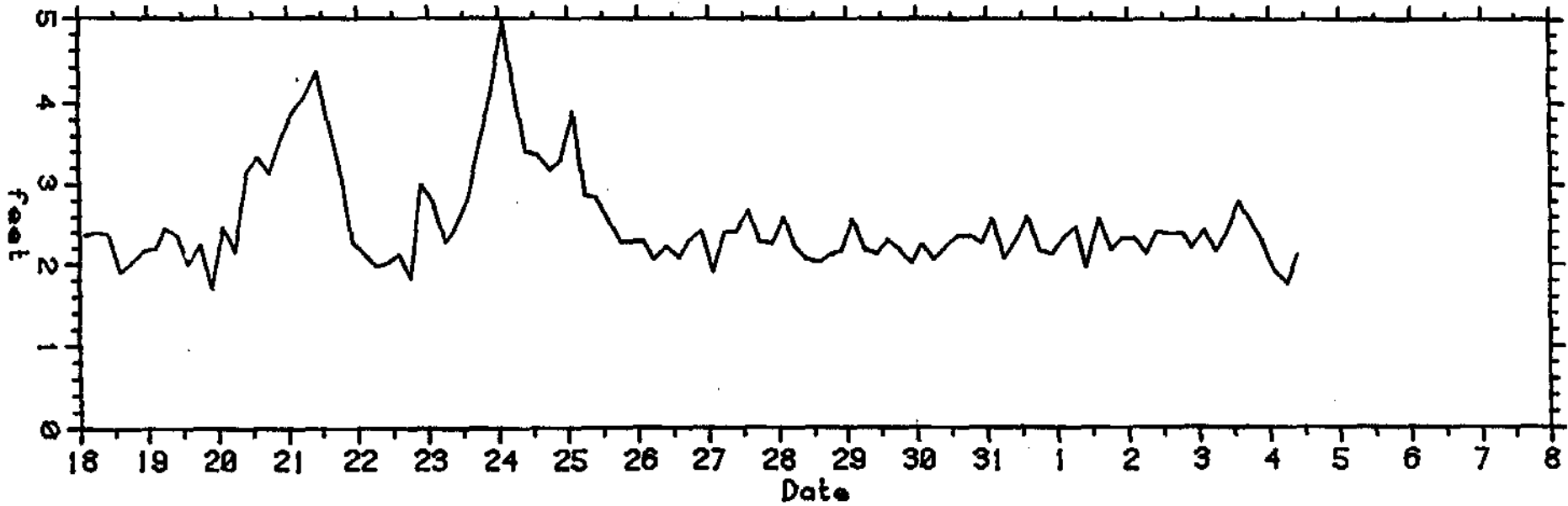


FIGURE B1, MAXIMUM WAVE HEIGHT
POINT THOMSON STATION Q
0150, 18 AUGUST TO 0950, 4 SEPTEMBER, 1982

B-4

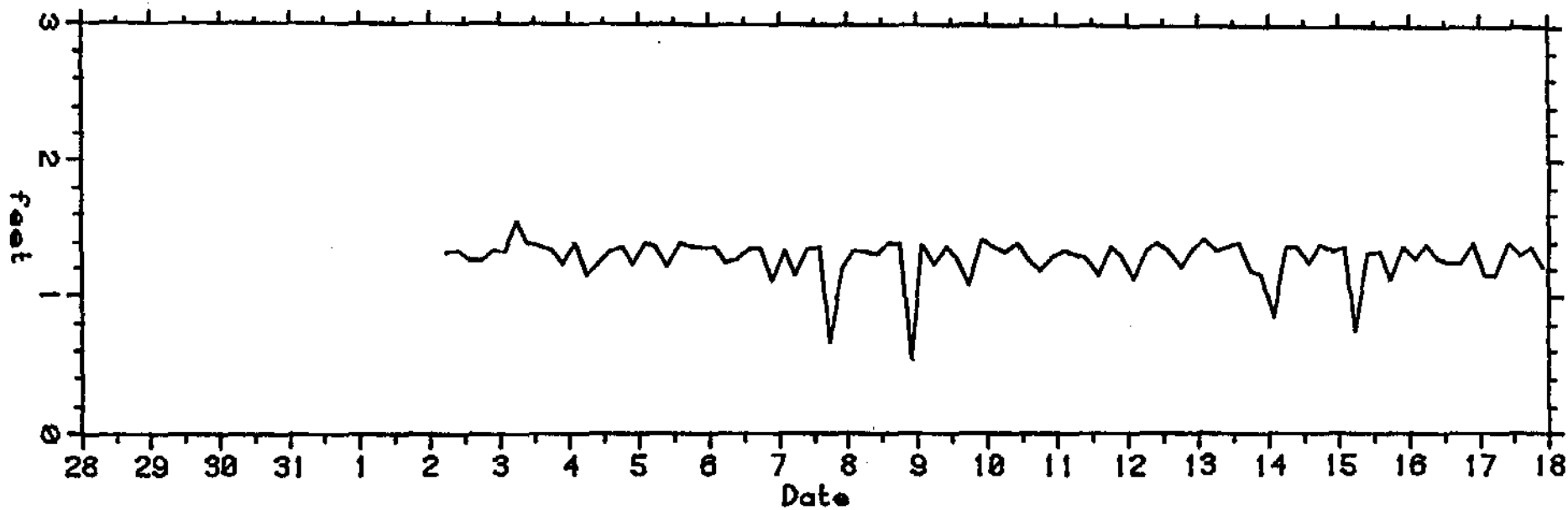


FIGURE B2

SIGNIFICANT WAVE HEIGHT
POINT THOMSON STATION Q
0550, 2 AUGUST TO 2150, 17 AUGUST, 1982

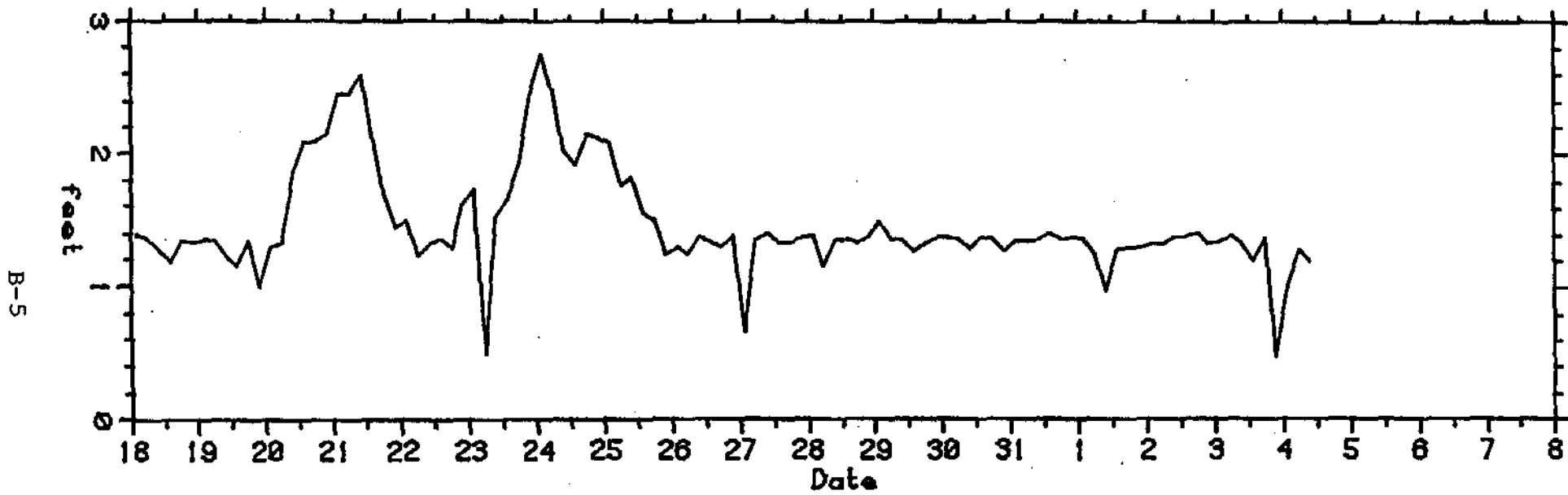


FIGURE B2 SIGNIFICANT WAVE HEIGHT
POINT THOMSON STATION Q
0150, 18 AUGUST TO 0950, 4 SEPTEMBER, 1982

B-6

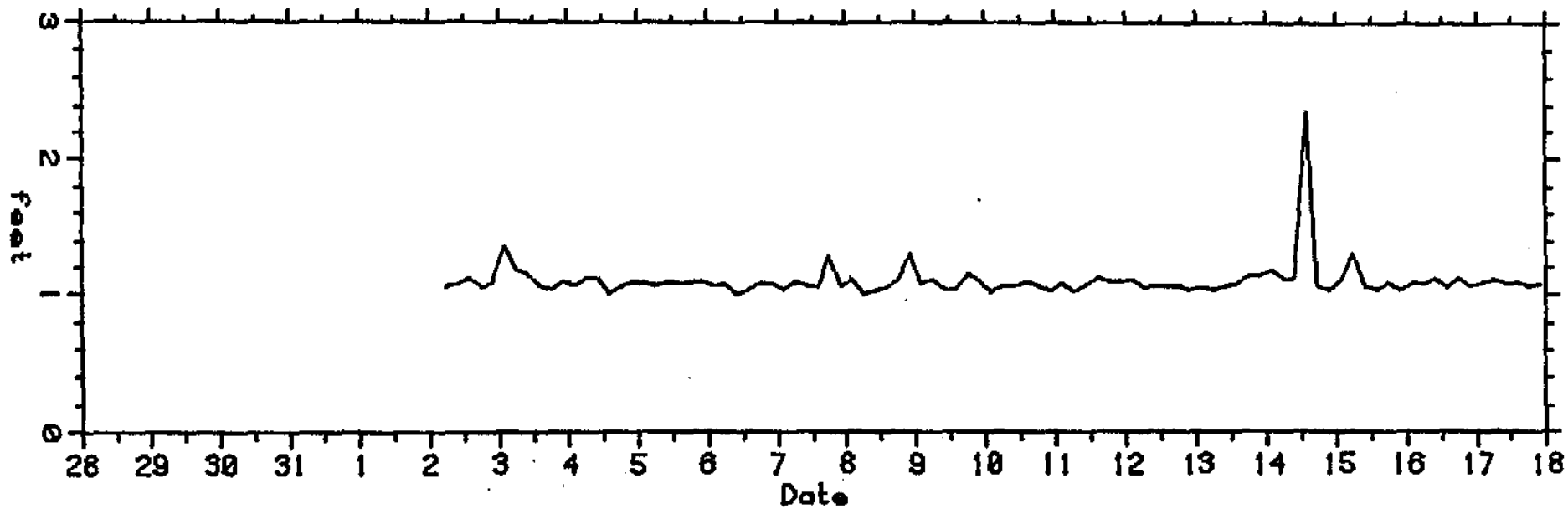


FIGURE B3

SPECTRAL SIGNIFICANT WAVE HEIGHT
POINT THOMSON STATION Q
0550, 2 AUGUST TO 2150, 17 AUGUST, 1982

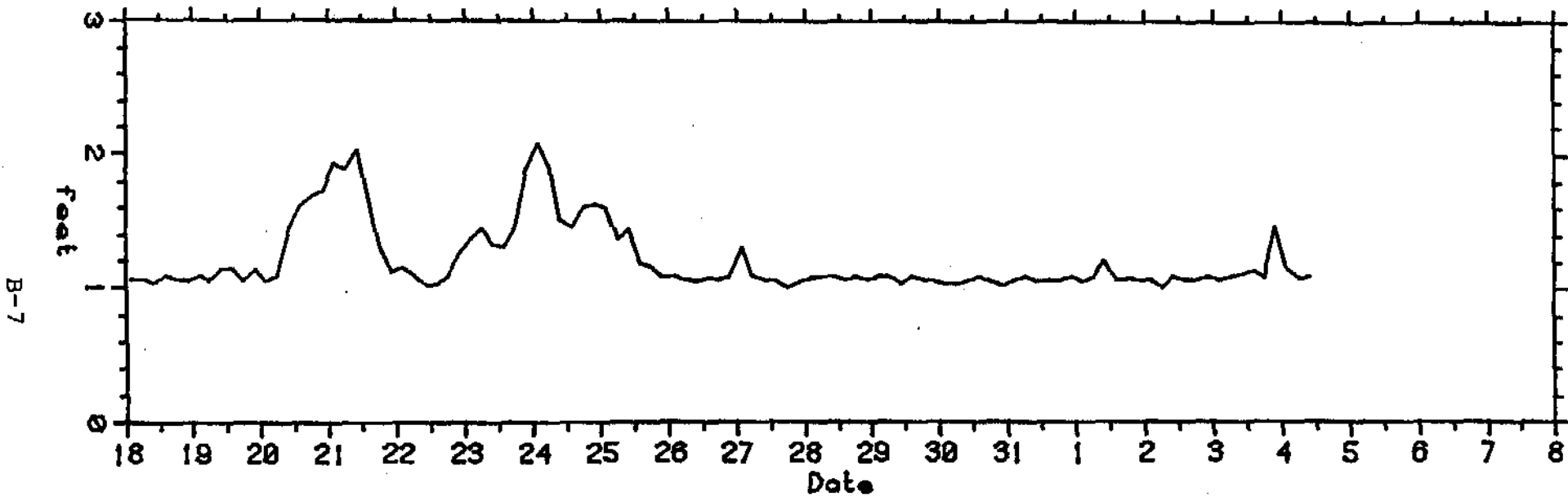


FIGURE B3

SPECTRAL SIGNIFICANT WAVE HEIGHT
POINT THOMSON STATION Q
0150, 18 AUGUST TO 0950, 4 SEPTEMBER, 1982

B-8

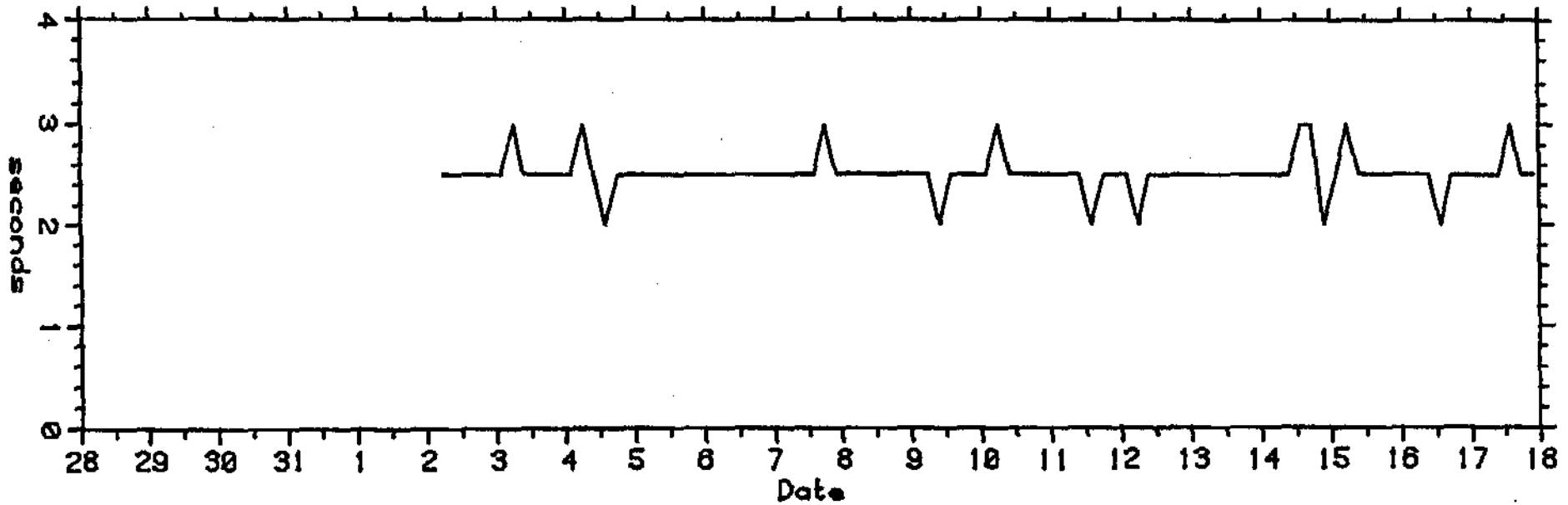


FIGURE B4, MAXIMUM WAVE PERIOD
POINT THOMSON STATION Q
0550, 2 AUGUST TO 2150, 17 AUGUST, 1982

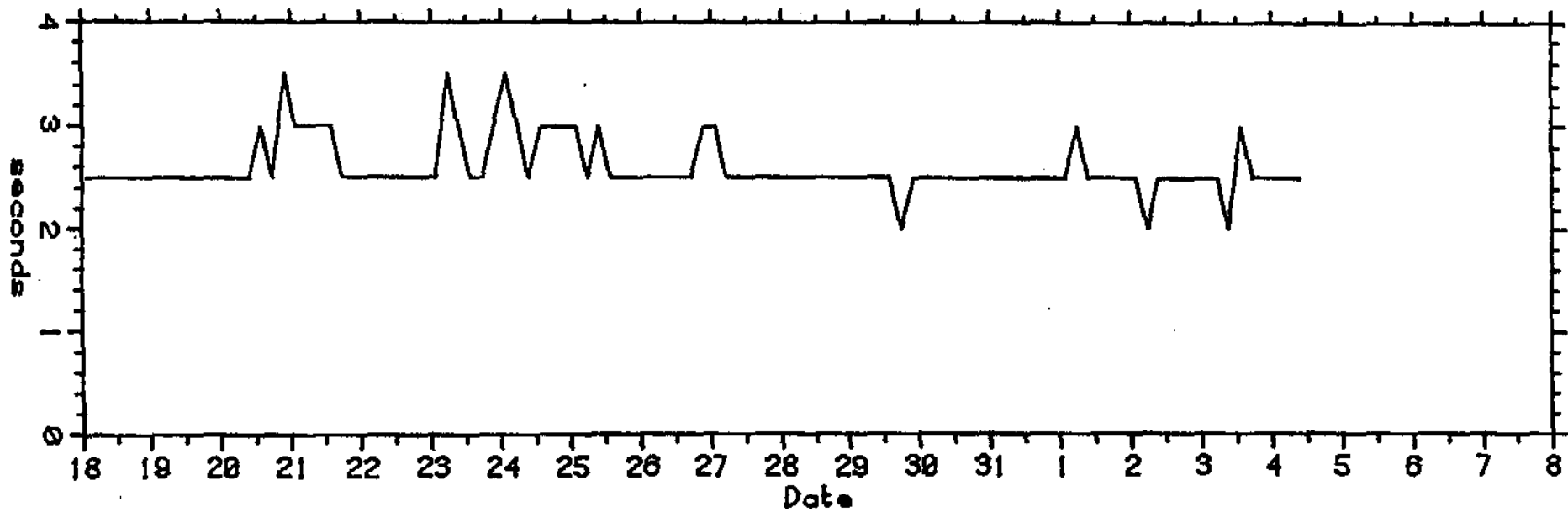


FIGURE B4

MAXIMUM WAVE PERIOD
POINT THOMSON STATION Q
0150, 18 AUGUST, TO 0950, 4 SEPTEMBER, 1982

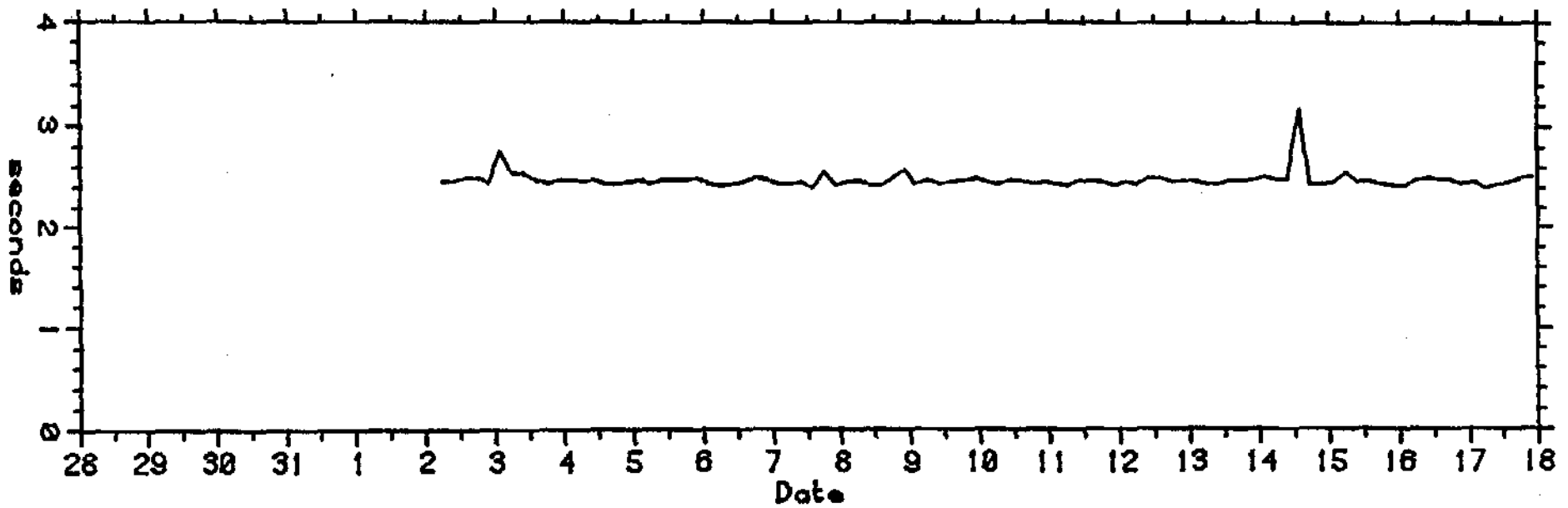


FIGURE B5, SIGNIFICANT WAVE PERIOD
POINT THOMSON STATION Q
0550, 2 AUGUST TO 2150, 17 AUGUST, 1982

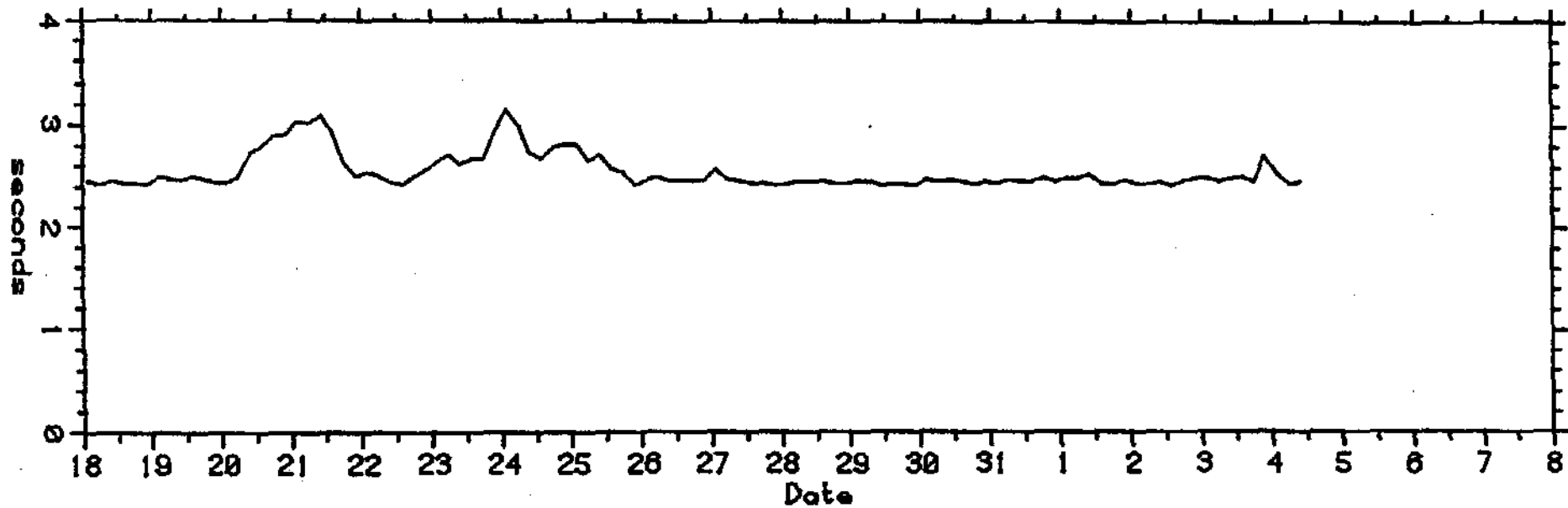


FIGURE B5

SIGNIFICANT WAVE PERIOD
POINT THOMSON STATION Q
0150, 18 AUGUST TO 0950, 4 SEPTEMBER, 1982

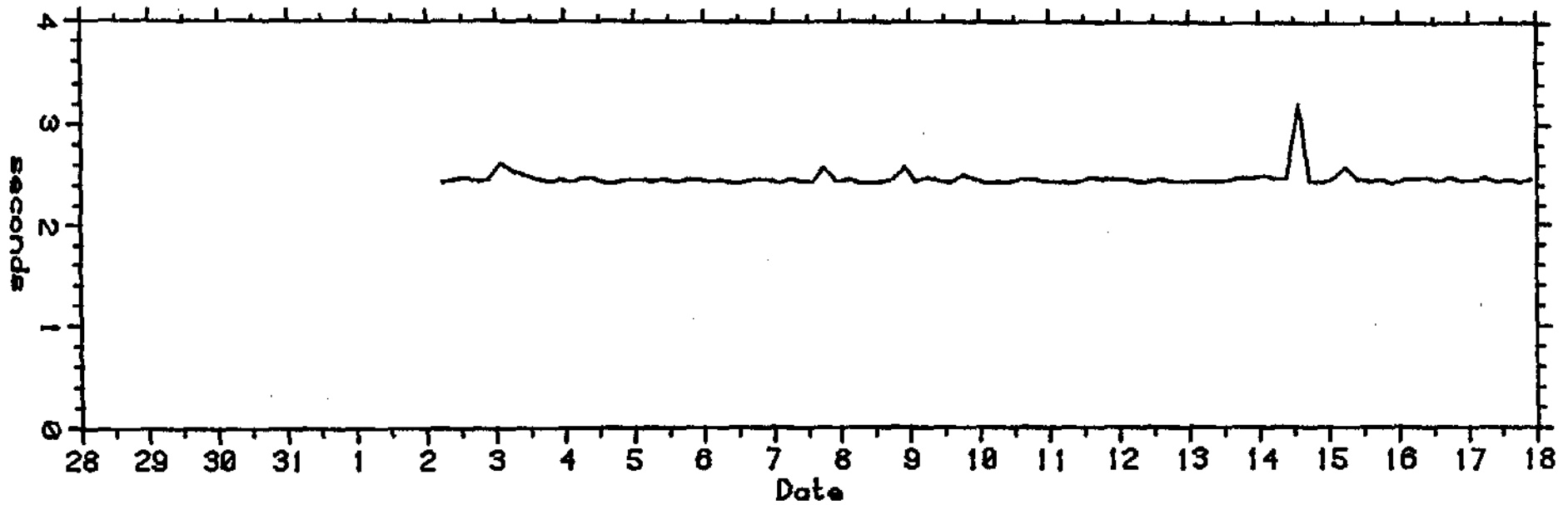


FIGURE B6, SPECTRAL SIGNIFICANT WAVE PERIOD
POINT THOMSON STATION Q
0550, 2 AUGUST TO 2150, 17 AUGUST, 1982

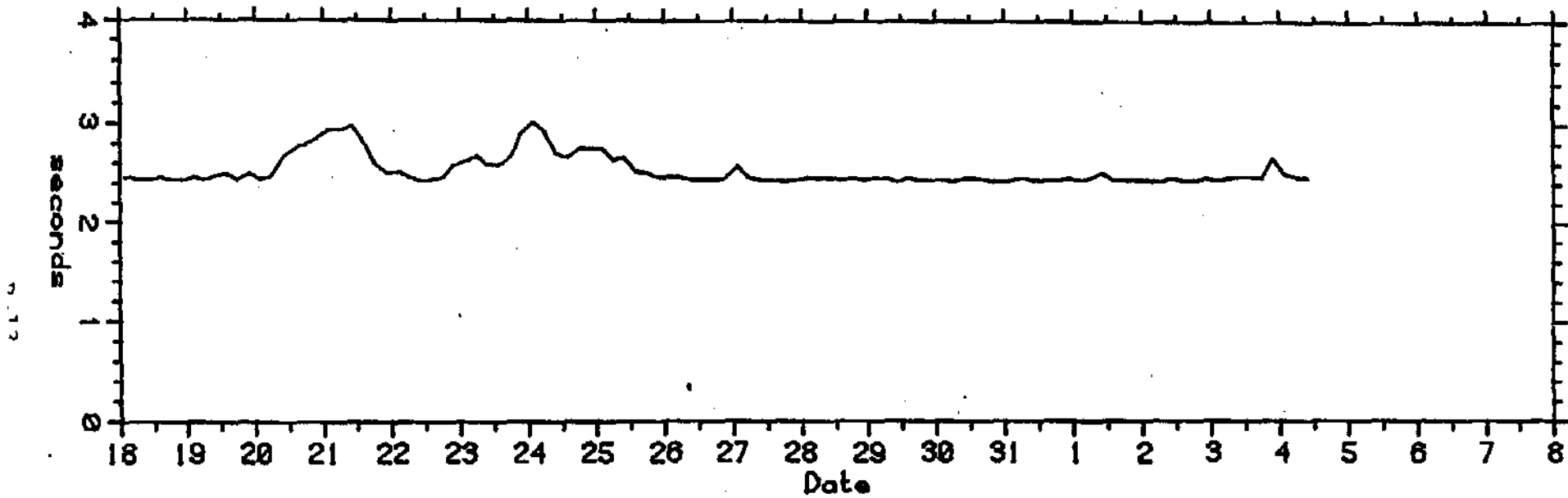


FIGURE B6, SPECTRAL SIGNIFICANT WAVE PERIOD
POINT THOMSON STATION Q
0150, 18 AUGUST TO 0950, 4 SEPTEMBER, 1982

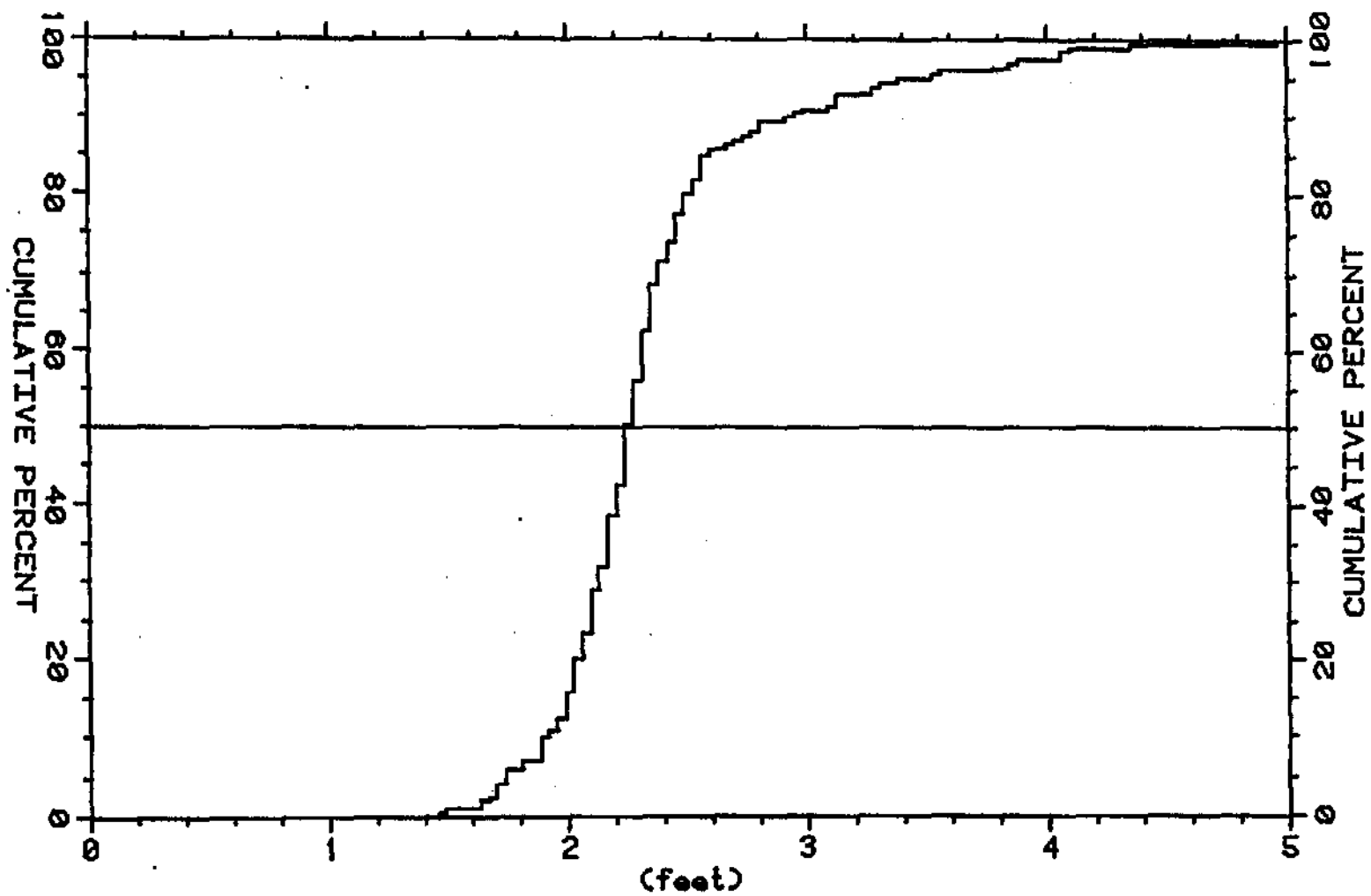


FIGURE B7. CUMULATIVE PROBABILITY PLOT
 H(CMAX)
 PT. THOMSON STATION Q
 0550, 2 AUGUST TO 0950, 4 SEPTEMBER, 1982
 200 DATA POINTS

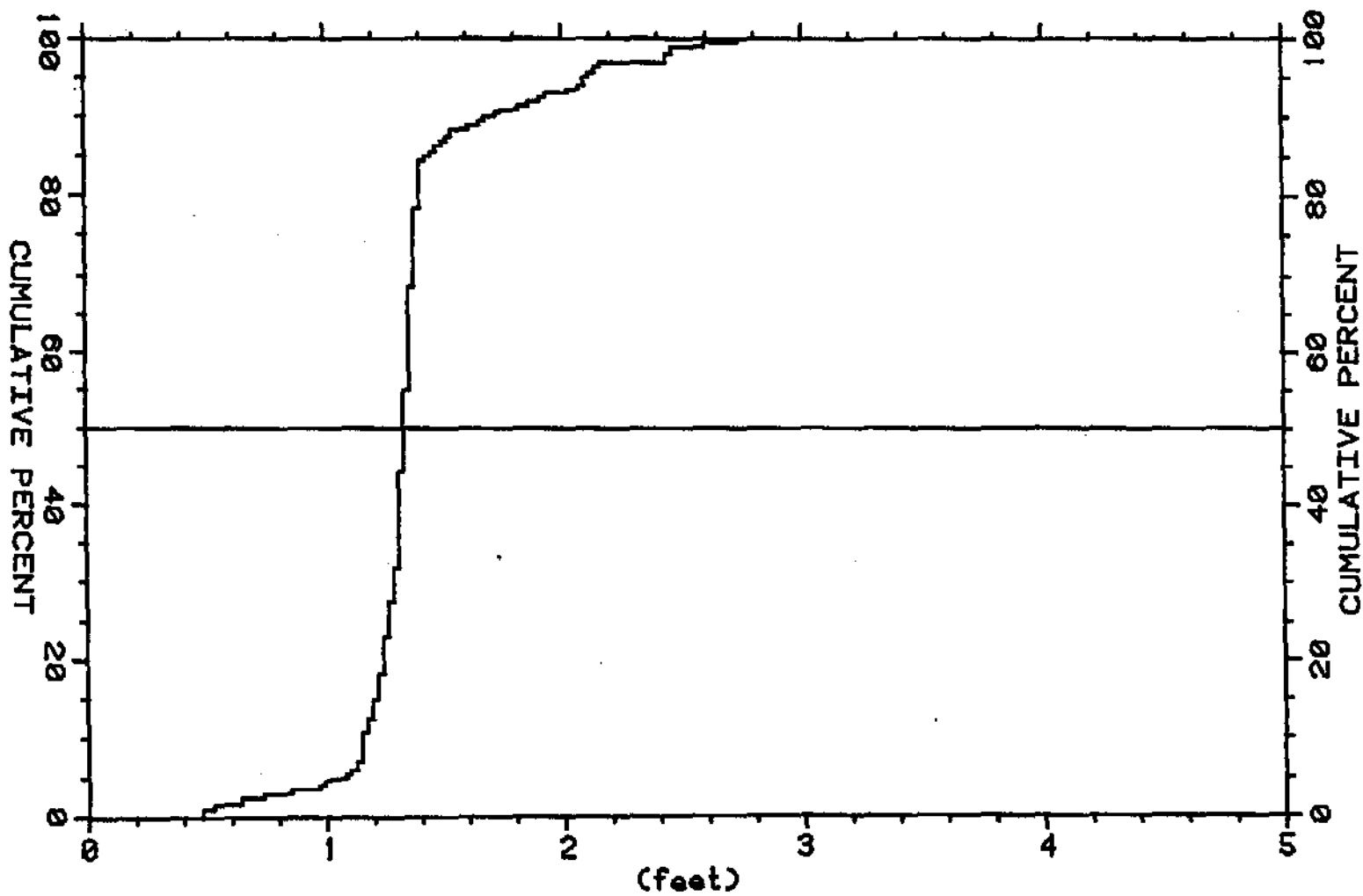


FIGURE B8 CUMULATIVE PROBABILITY PLOT
SIGNIFICANT WAVE HEIGHT
POINT THOMSON STATION Q
0550, 2 AUGUST TO 0950, 4 SEPTEMBER, 1982
200 DATA POINTS

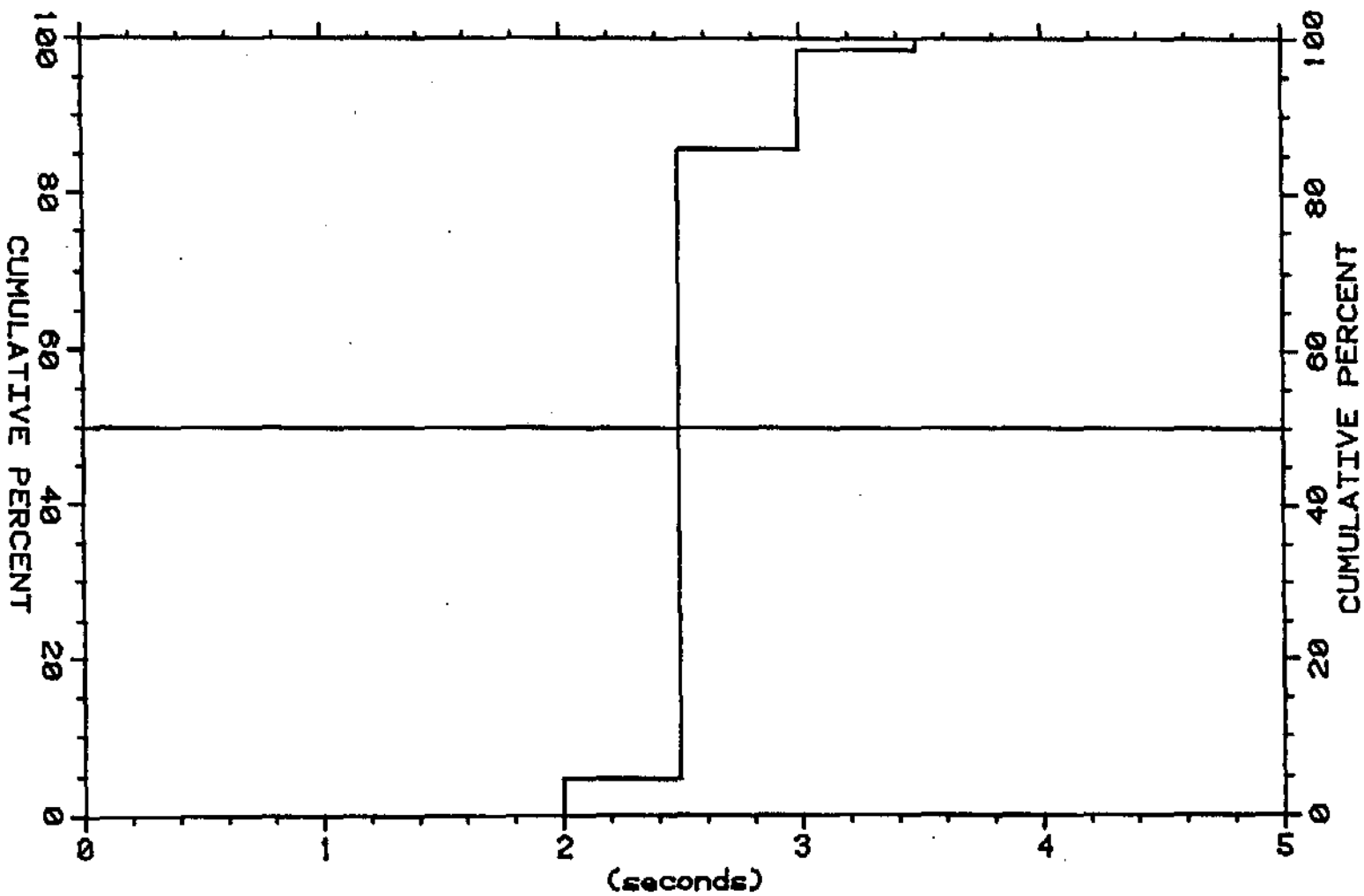


FIGURE B9 CUMULATIVE PROBABILITY PLOT
 MAXIMUM WAVE PERIOD
 POINT THOMSON STATION Q
 0550, 2 AUGUST TO 0950, 4 SEPTEMBER, 1982
 200 DATA POINTS

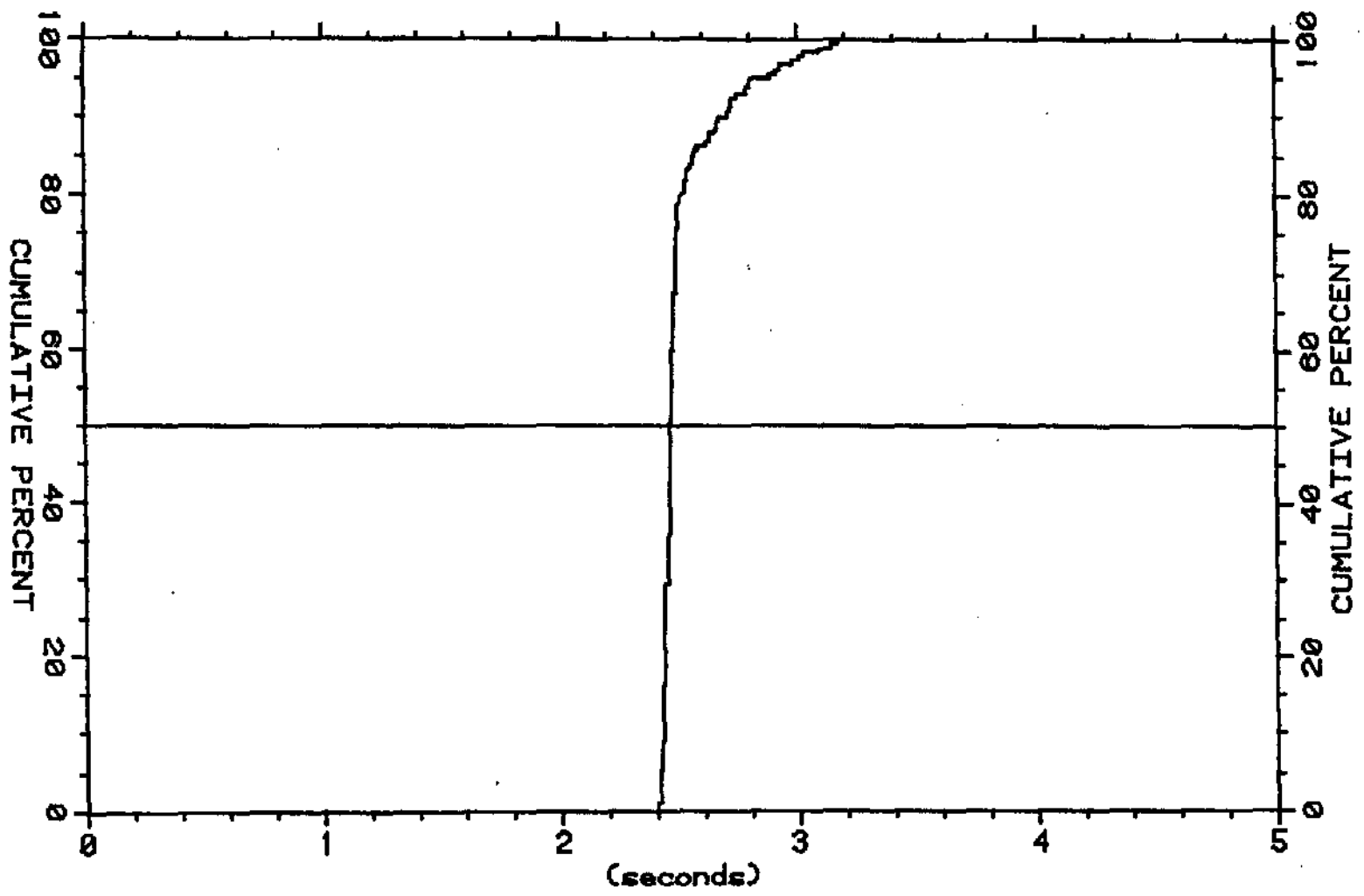
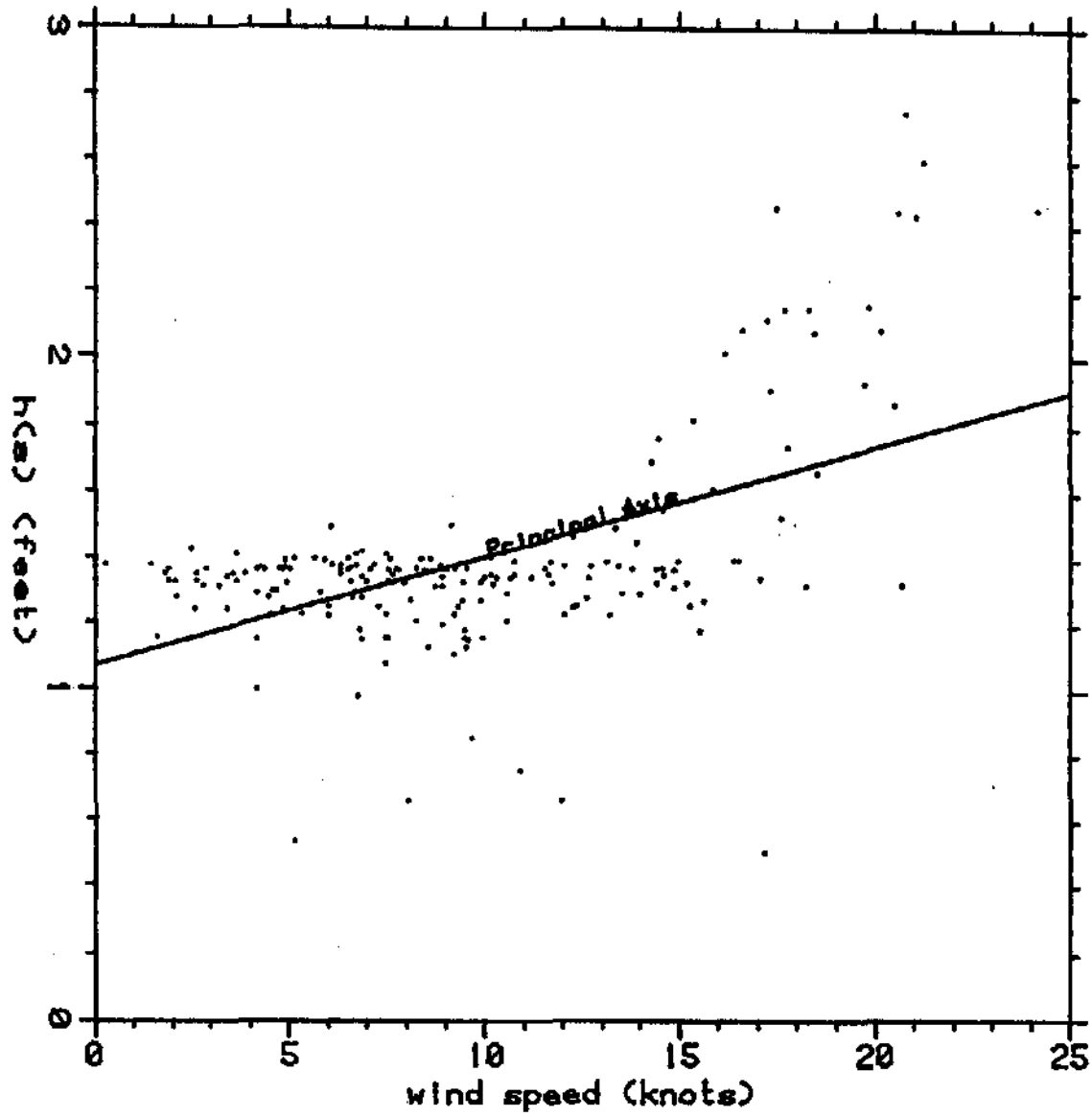


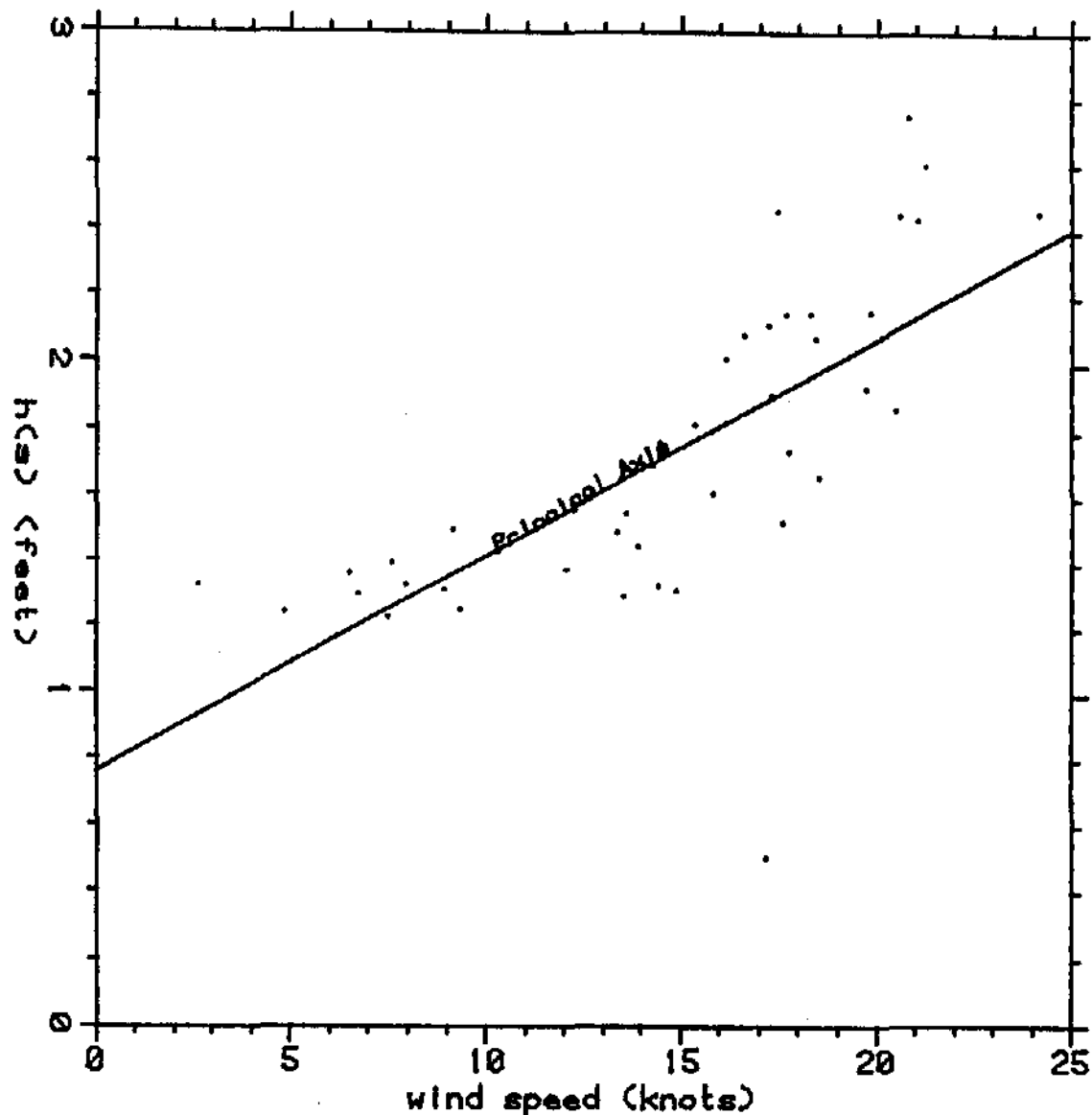
FIGURE B10 CUMULATIVE PROBABILITY PLOT
 SIGNIFICANT WAVE PERIOD
 POINT THOMSON STATION Q
 0550, 2 AUGUST TO 0950, 4 SEPTEMBER, 1982
 200 DATA POINTS

R-18



Statistics:
190 data points
time interval = 4.000 hours
Wind speed:
Mean = 9.58
Std. Dev. = 5.20
H(s):
Mean = 1.39
Std. Dev. = 0.32
Covariance = 0.90
Correlation = 0.546
Principal axis:
Slope = 0.033
Intercept = 1.073

FIGURE B11 SCATTER PLOT
WIND SPEED VS. H(S)
CHALLENGE ISLAND WEATHER STATION VS. PT. THOMSON STATION Q
0544, 2 AUGUST TO 1744, 2 SEPTEMBER, 1982



Statistics:

42 data points
 time interval = 4.000 hours

Wind speed:

Mean = 14.87
 Std. Dev. = 5.15

HCS):

Mean = 1.74
 Std. Dev. = 0.47

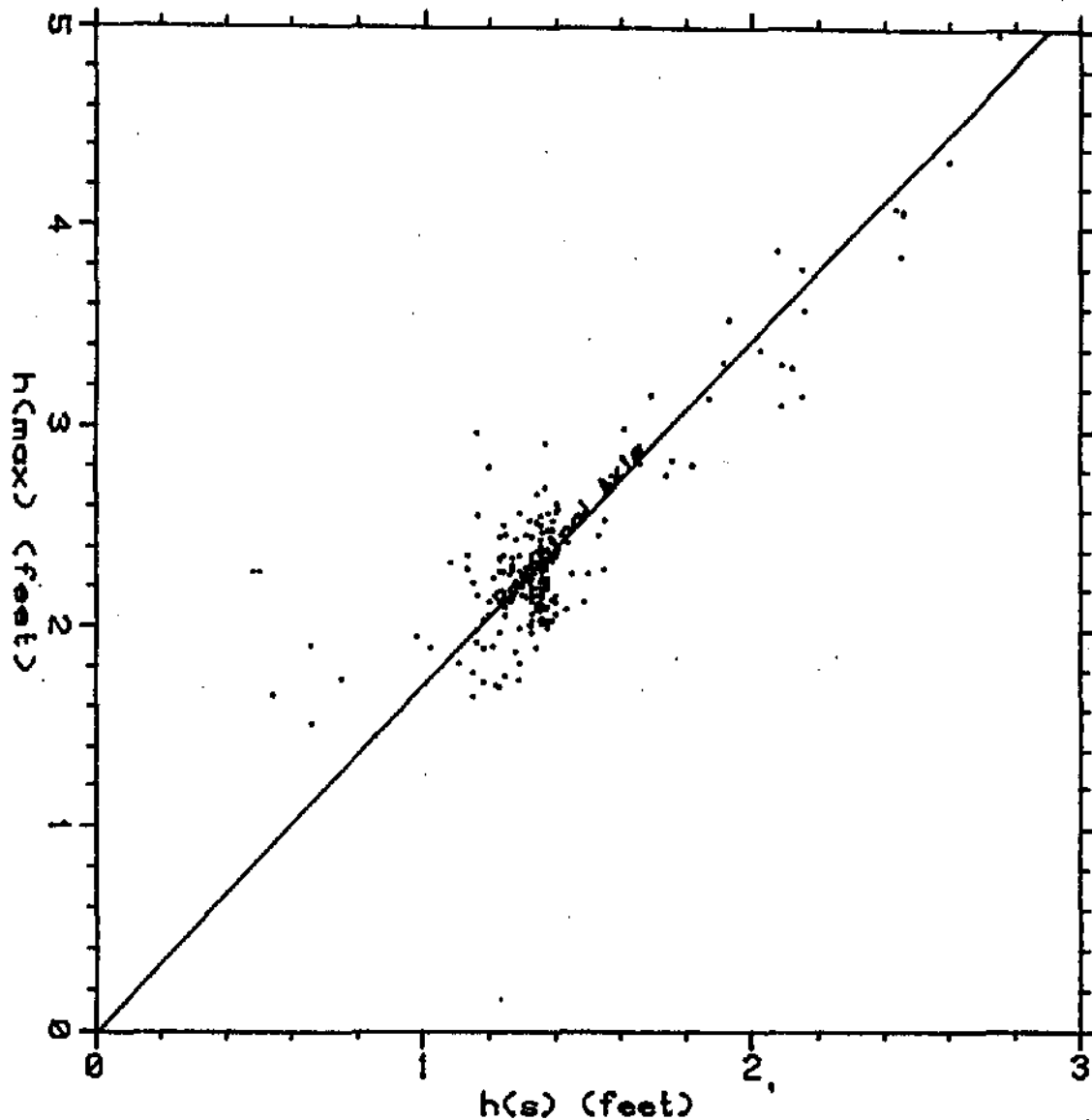
Covariance = 1.74

Correlation = 0.713

Principal axis:

Slope = 0.066
 Intercept = 0.759

FIGURE B12, SCATTER PLOT
 WIND SPEED VS. HCS)
 CHALLENGE ISLAND WEATHER STATION VS. PT. THOMSON STATION Q
 0144, 20 AUGUST TO 2144, 26 AUGUST, 1982



Statistics:

200 data points
 time interval = 4.000 hours

$H(s)$:

Mean = 1.38
 Std. Dev. = 0.32

$H(max)$:

Mean = 2.37
 Std. Dev. = 0.51

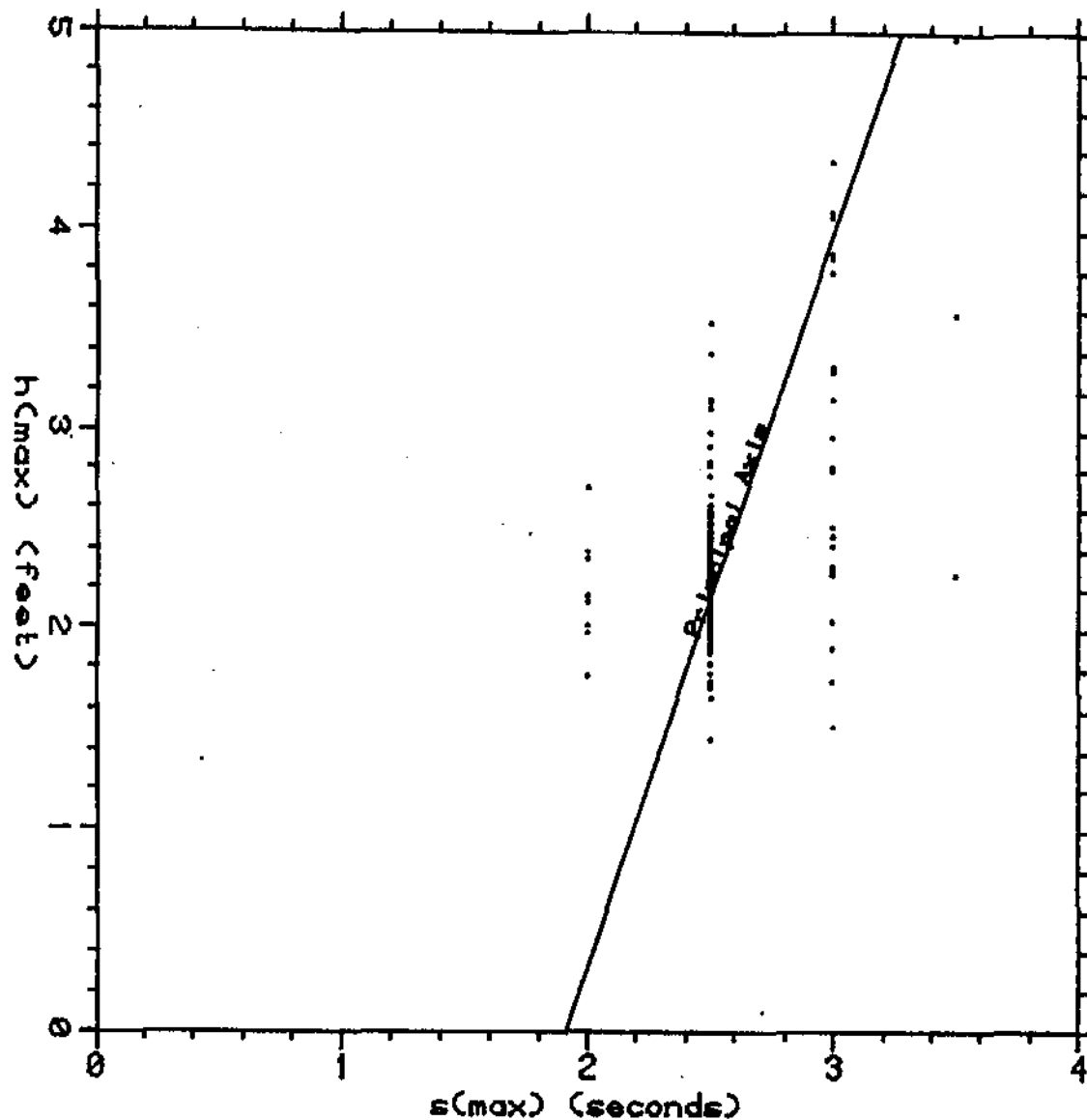
Covariance = 0.14

Correlation = 0.853

Principal axis:

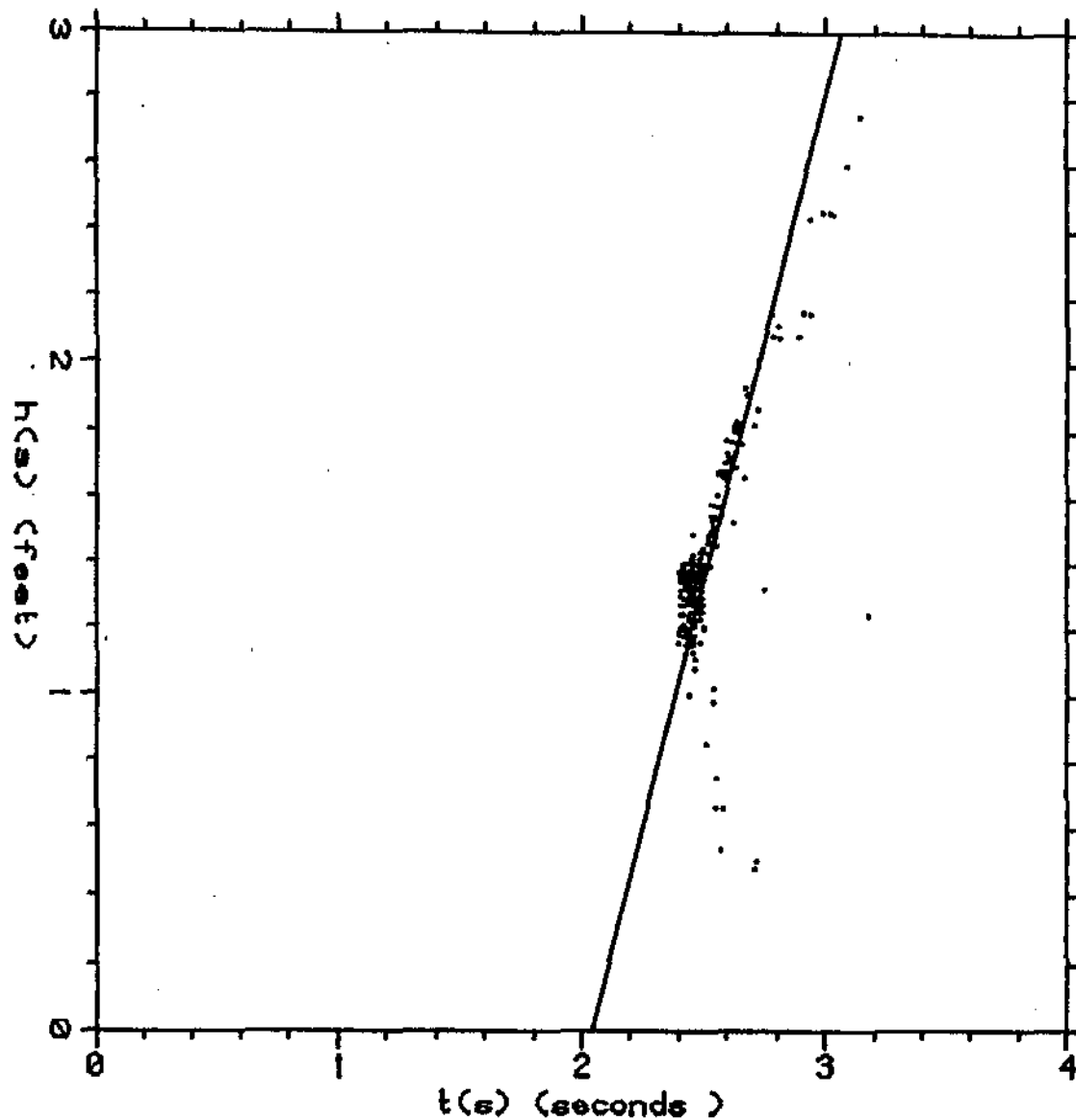
Slope = 1.726
 Intercept = -0.015

FIGURE B13 SCATTER PLOT
 $H(S)$ VS. $H(MAX)$
 POINT THOMSON STATION Q
 0550, 2 AUGUST TO 0950, 4 SEPTEMBER, 1982



Statistics:
 200 data points
 time interval = 4.000 hours
 $S(\max)$:
 Mean = 2.56
 Std. Dev. = 0.23
 $H(\max)$:
 Mean = 2.37
 Std. Dev. = 0.51
 Covariance = 0.06
 Correlation = 0.503
 Principal axis:
 Slope = 3.658
 Intercept = -6.976

FIGURE B14, SCATTER PLOT
 $T(S)$ VS. $H(\max)$
 POINT THOMSON STATION Q
 0550, 2 AUGUST TO 0950, 4 SEPTEMBER, 1982



Statistics:

200 data points
time interval = 4.000 hours

$T(s)$:

Mean = 2.51
Std. Dev. = 0.14

$H(s)$:

Mean = 1.38
Std. Dev. = 0.32

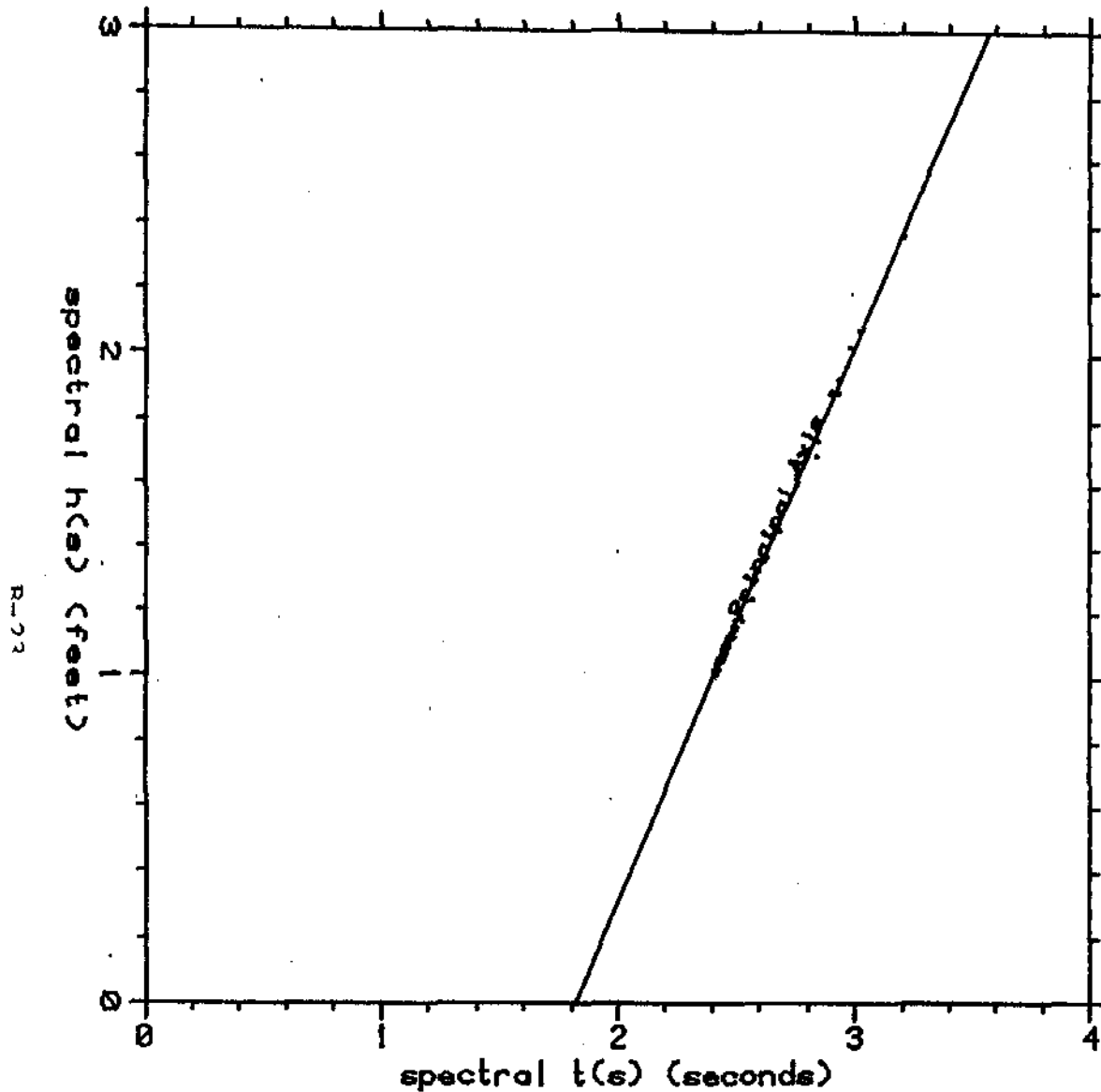
Covariance = 0.03

Correlation = 0.684

Principal axis:

Slope = 2.937
Intercept = -5.997

FIGURE B15 SCATTER PLOT
 $T(S)$ VS. $H(S)$
POINT THOMSON STATION Q
0550, 2 AUGUST TO 0950, 4 SEPTEMBER, 1982



Statistics:

200 data points
 time interval = 4.000 hours

Spectral t(s):

Mean = 2.49

Std. Dev. = 0.13

Spectral h(s):

Mean = 1.16

Std. Dev. = 0.22

Covariance = 0.03

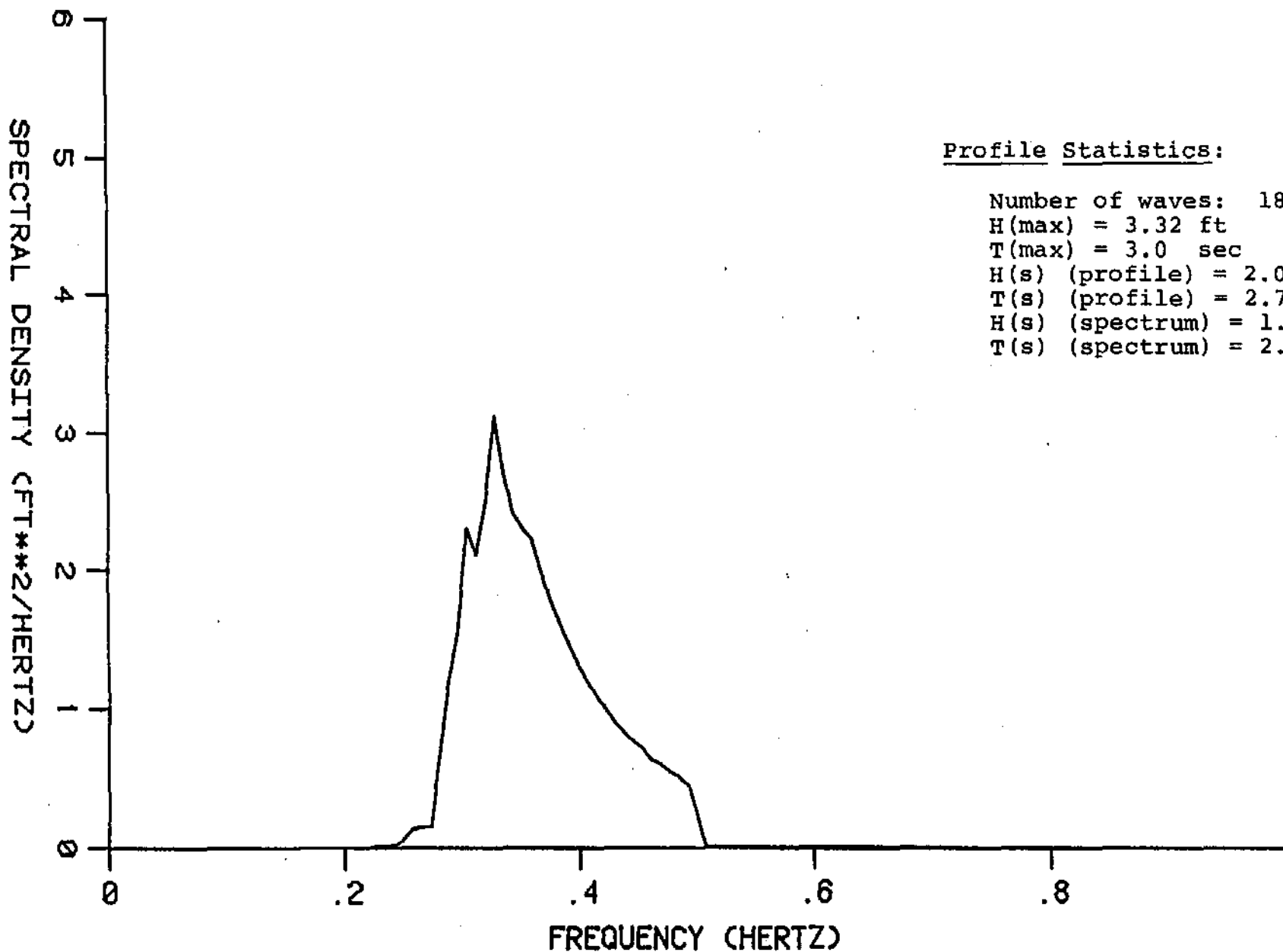
Correlation = 0.998

Principal axis:

Slope = 1.727

Intercept = -3.149

FIGURE B16. SCATTER PLOT
 SPECTRAL T(S) VS. SPECTRAL H(S)
 POINT THOMSON STATION Q
 0550, 2 AUGUST TO 0950, 4 SEPTEMBER, 1982

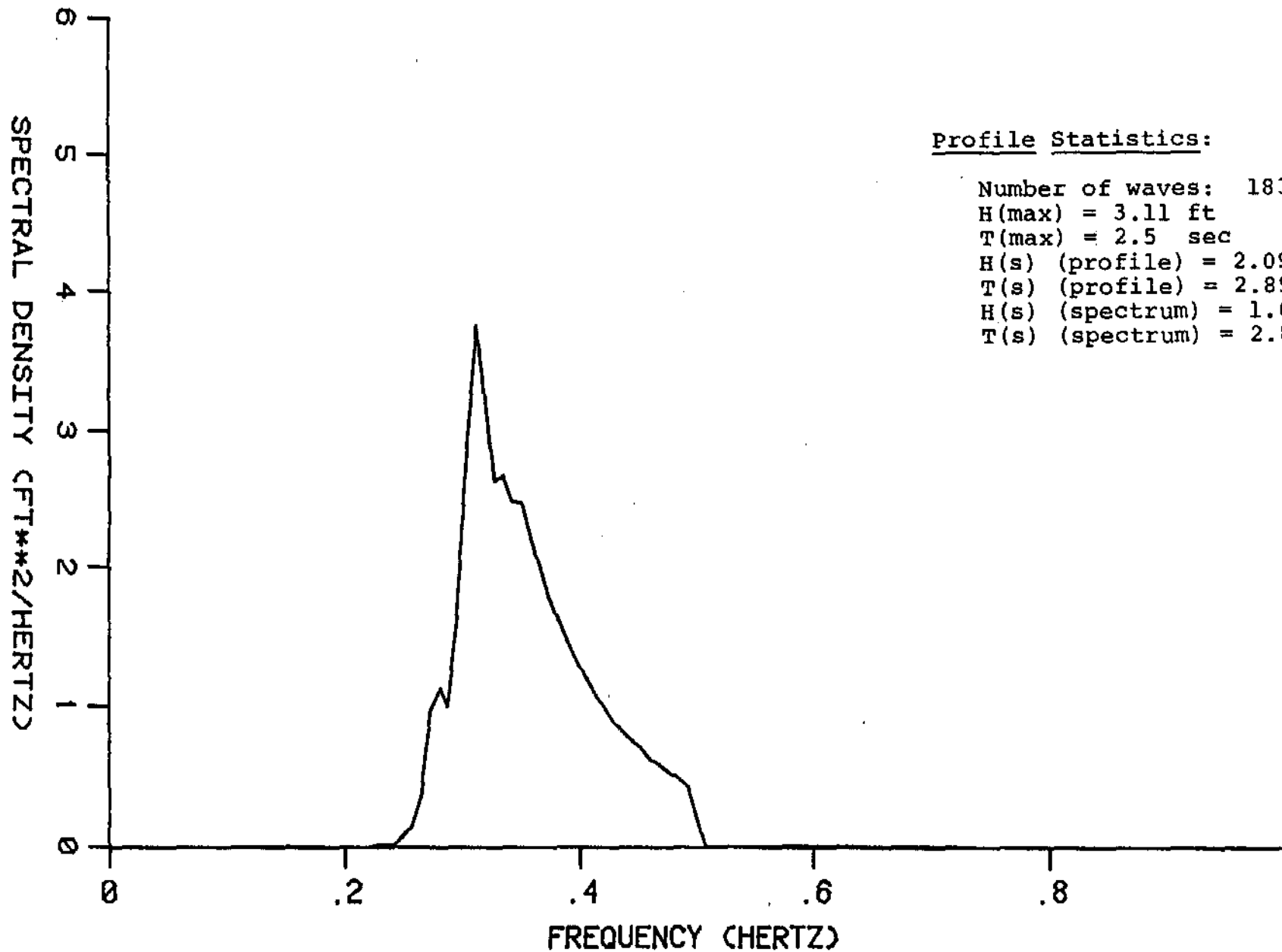


Profile Statistics:

Number of waves: 183
H(max) = 3.32 ft
T(max) = 3.0 sec
H(s) (profile) = 2.09 ft
T(s) (profile) = 2.79 sec
H(s) (spectrum) = 1.61 ft
T(s) (spectrum) = 2.76 sec

FIGURE B17.

SURFACE WAVE SPECTRUM
PT. THOMSON STATION Q
1350, 20 AUGUST, 1982



Profile Statistics:

Number of waves: 183
H(max) = 3.11 ft
T(max) = 2.5 sec
H(s) (profile) = 2.09 ft
T(s) (profile) = 2.89 sec
H(s) (spectrum) = 1.68 ft
T(s) (spectrum) = 2.80 sec

FIGURE B18 .

SURFACE WAVE SPECTRUM
PT. THOMSON STATION Q
1750, 20 AUGUST, 1982

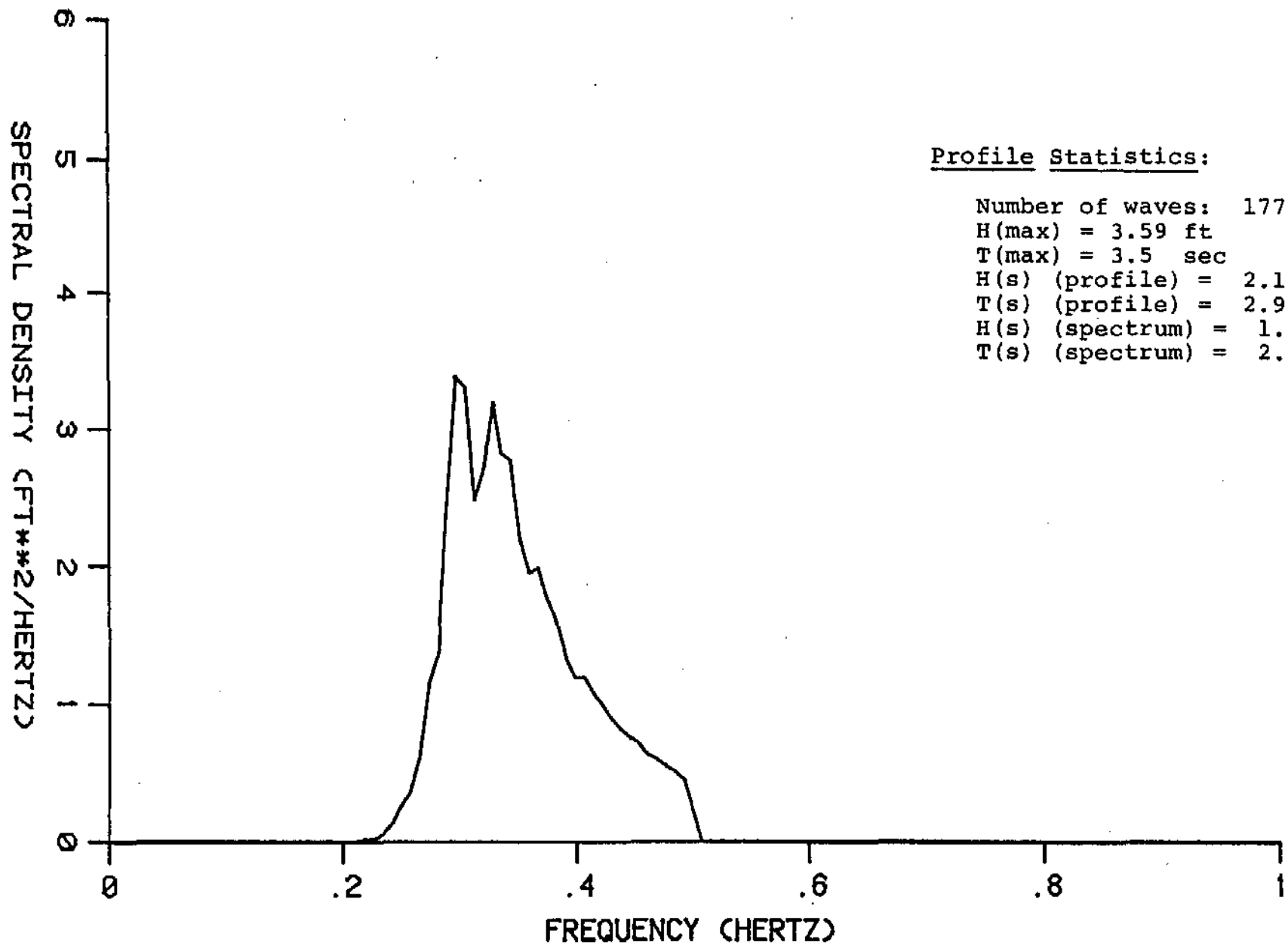


FIGURE B19.

SURFACE WAVE SPECTRUM
PT. THOMSON STATION Q
2150, 20 AUGUST, 1982

B-27

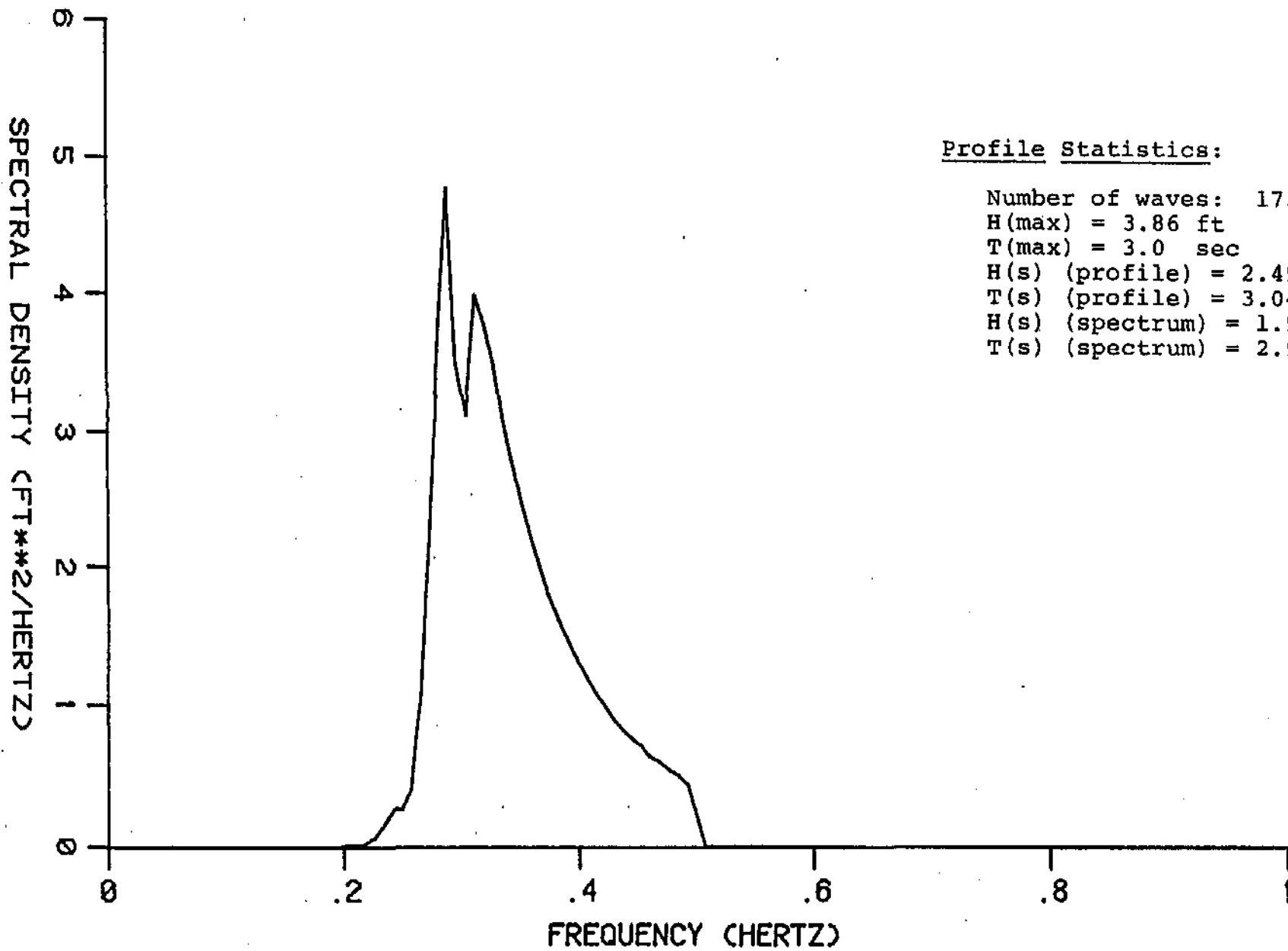


FIGURE B20

SURFACE WAVE SPECTRUM
PT. THOMSON STATION Q
0150, 21 AUGUST, 1982

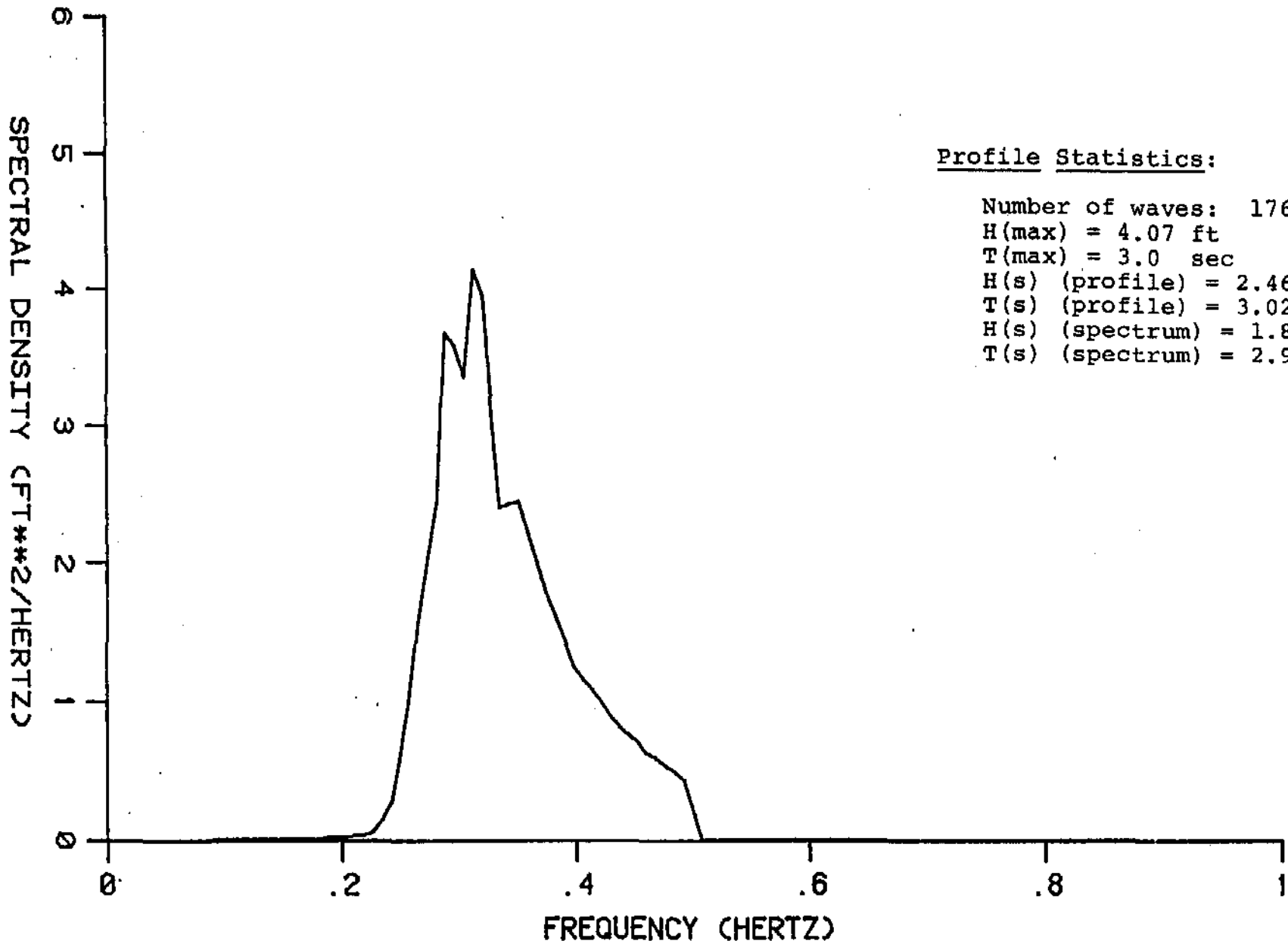


FIGURE B21.

SURFACE WAVE SPECTRUM
PT. THOMSON STATION Q
0550, 21 AUGUST, 1982

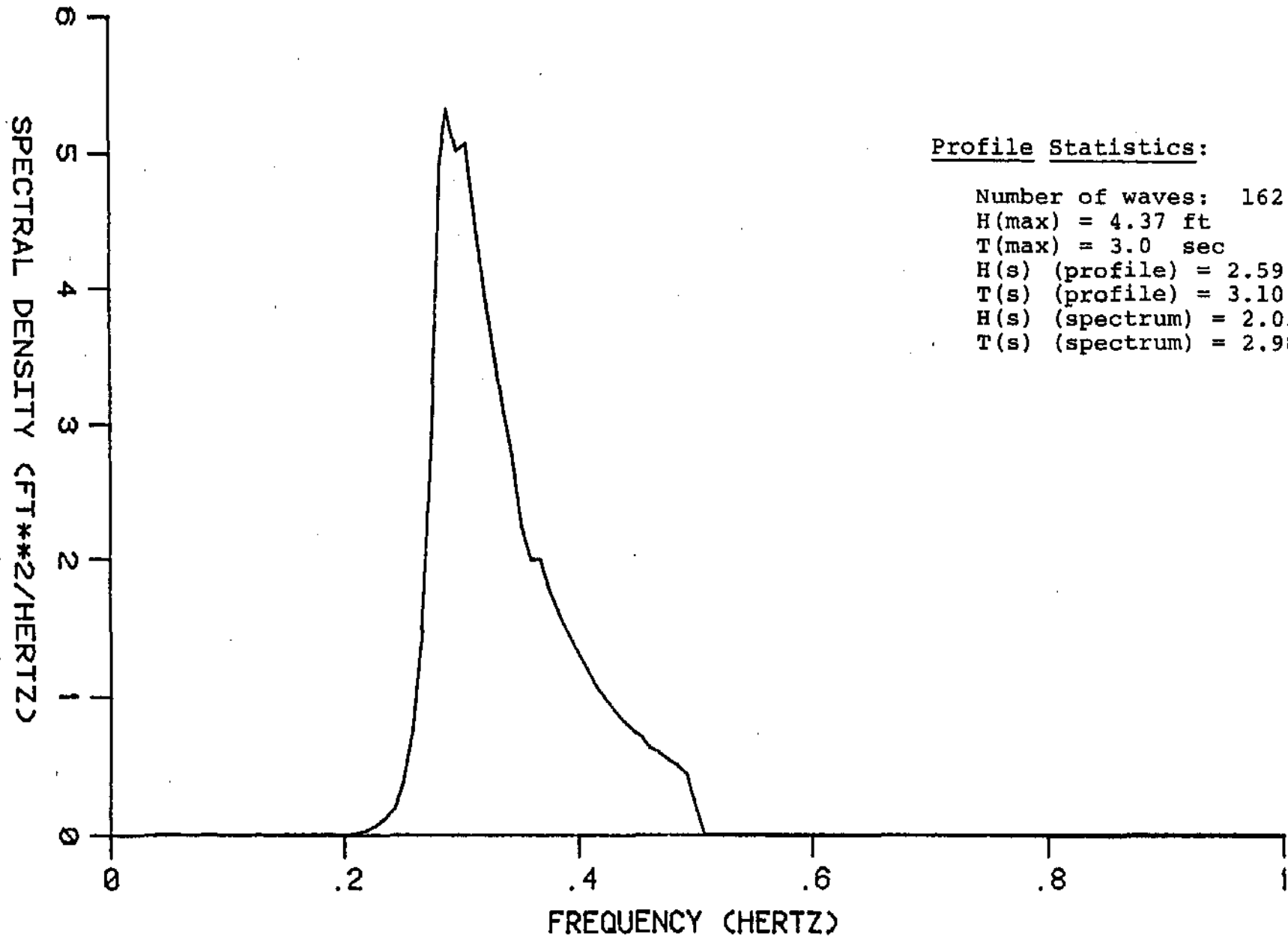
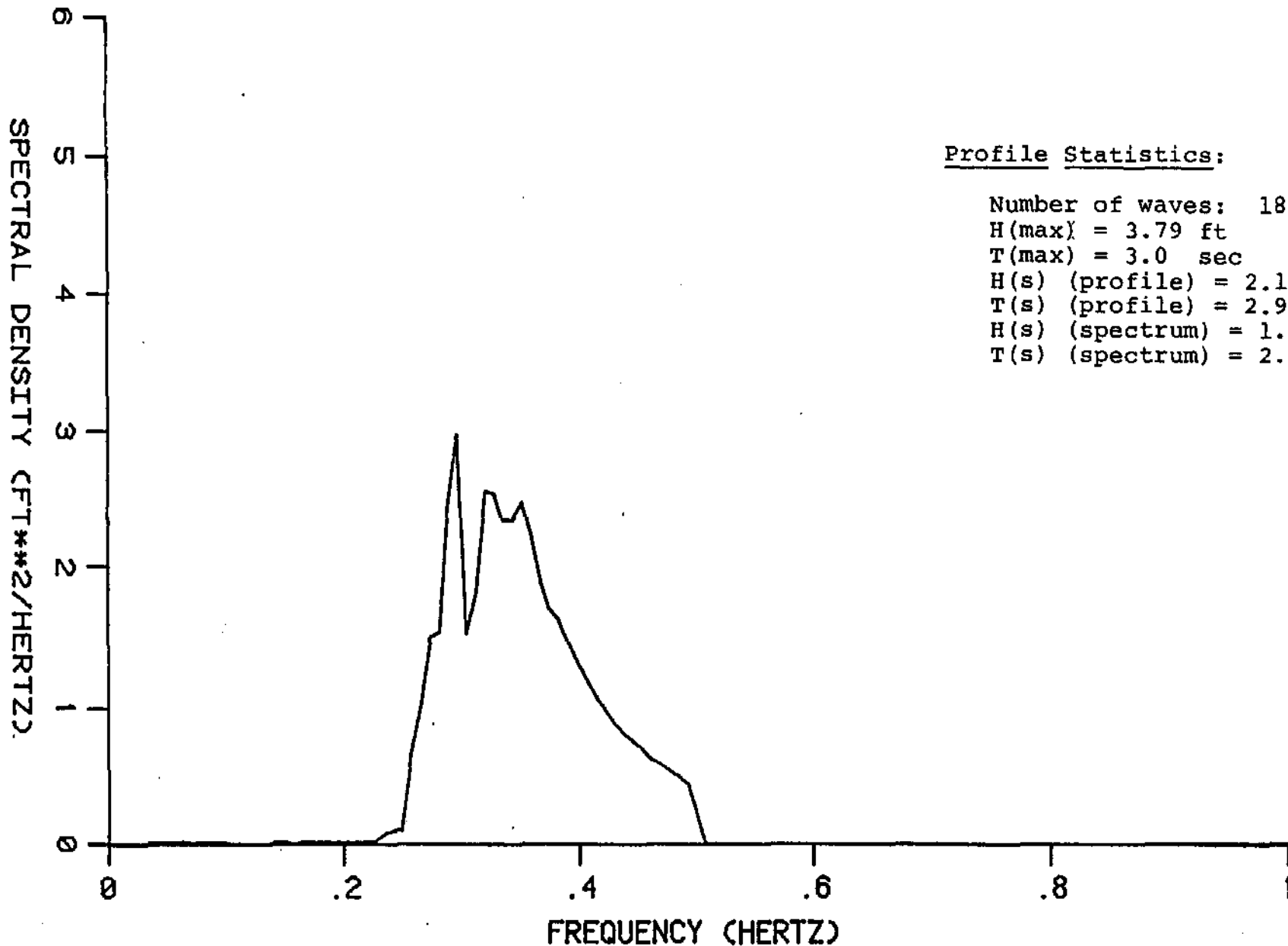


FIGURE B22

SURFACE WAVE SPECTRUM
PT. THOMSON STATION Q
0950, 21 AUGUST, 1982



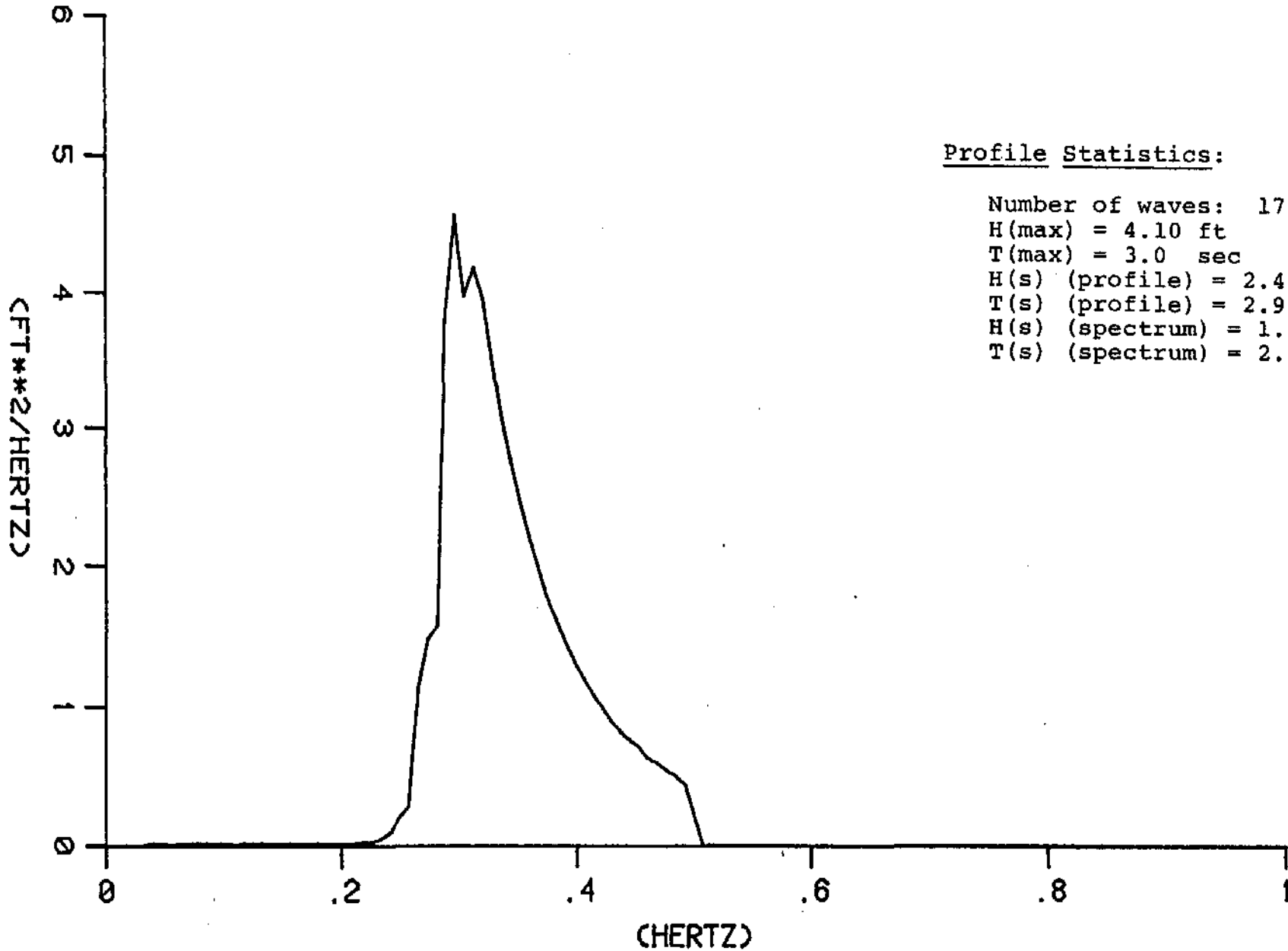
Profile Statistics:

Number of waves: 181
H(max) = 3.79 ft
T(max) = 3.0 sec
H(s) (profile) = 2.15 ft
T(s) (profile) = 2.94 sec
H(s) (spectrum) = 1.69 ft
T(s) (spectrum) = 2.84 sec

FIGURE B23

SURFACE WAVE SPECTRUM
PT. THOMSON STATION Q
1350, 21 AUGUST, 1982

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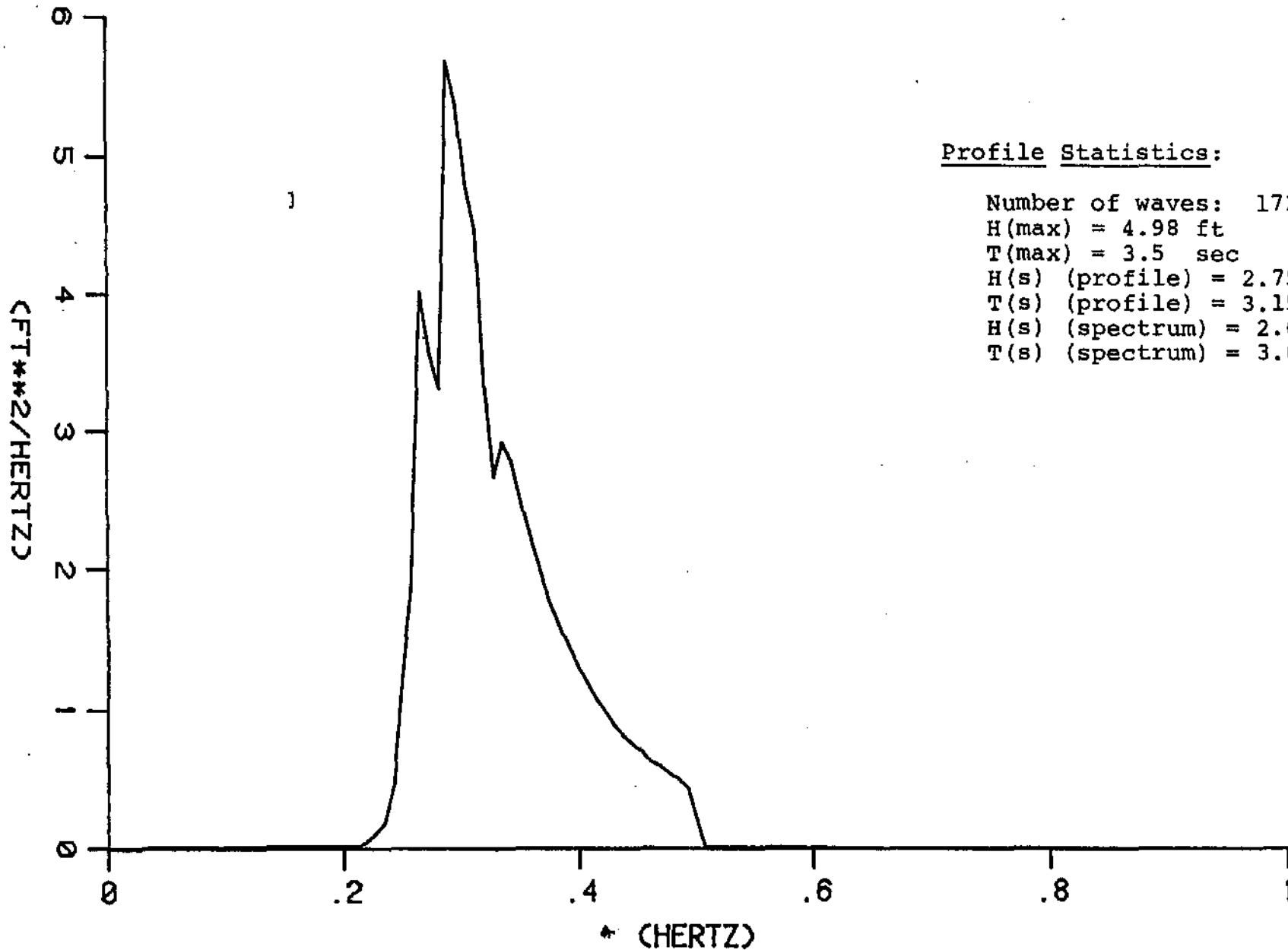


Profile Statistics:

Number of waves: 177
H(max) = 4.10 ft
T(max) = 3.0 sec
H(s) (profile) = 2.44 ft
T(s) (profile) = 2.94 sec
H(s) (spectrum) = 1.89 ft
T(s) (spectrum) = 2.90 sec

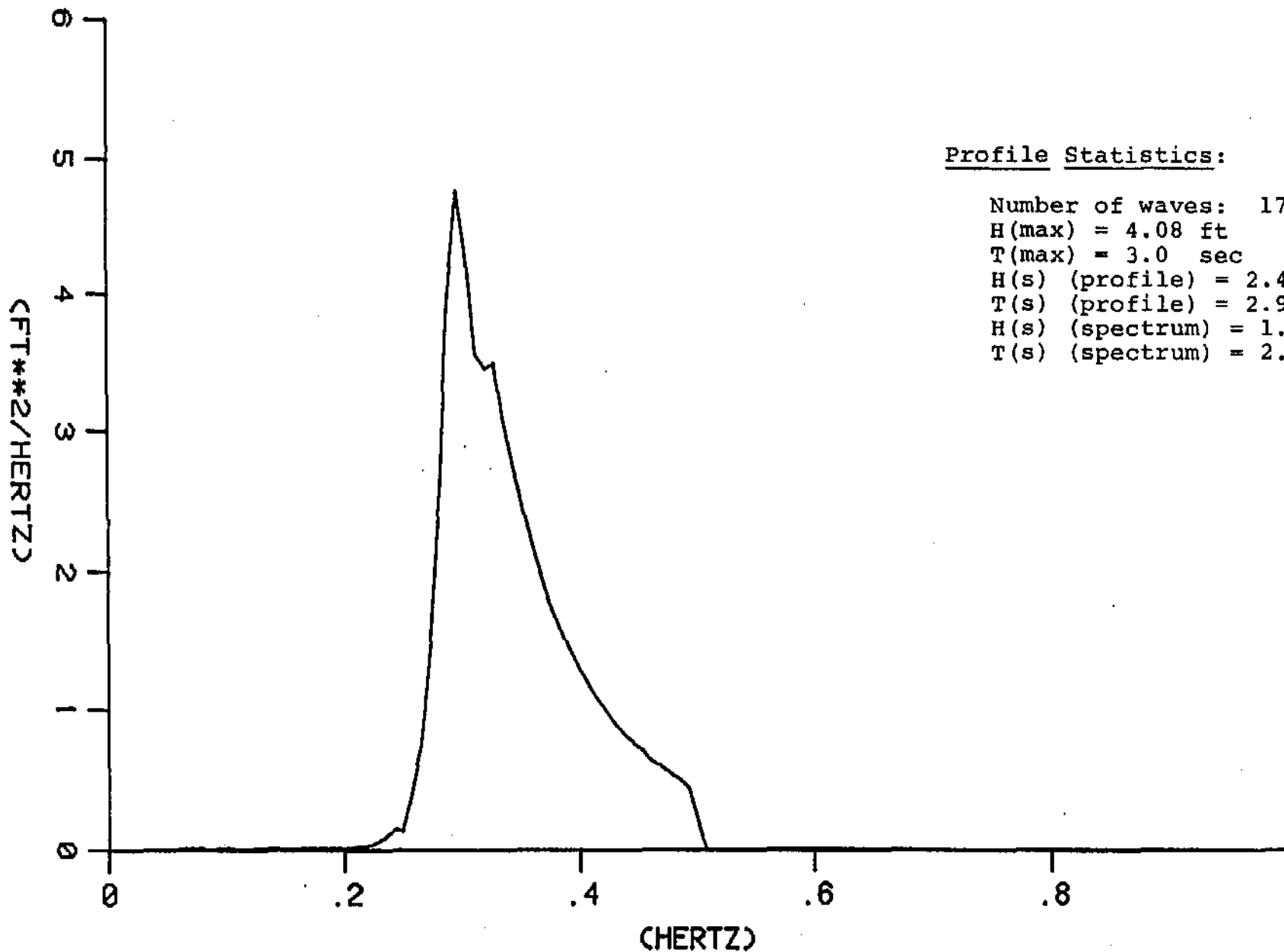
FIGURE B24.

SURFACE WAVE SPECTRUM
PT. THOMSON STATION Q
(2150, 23 AUGUST, 1982)

FIGURE B25

SURFACE WAVE SPECTRUM
PT. THOMSON STATION Q
(0150, 24 AUGUST, 1982)

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Profile Statistics:

Number of waves: 176
H(max) = 4.08 ft
T(max) = 3.0 sec
H(s) (profile) = 2.46 ft
T(s) (profile) = 2.99 sec
H(s) (spectrum) = 1.90 ft
T(s) (spectrum) = 2.91 sec

FIGURE B26.

SURFACE WAVE SPECTRUM
PT. THOMSON STATION Q
(0550, 24 AUGUST, 1982)

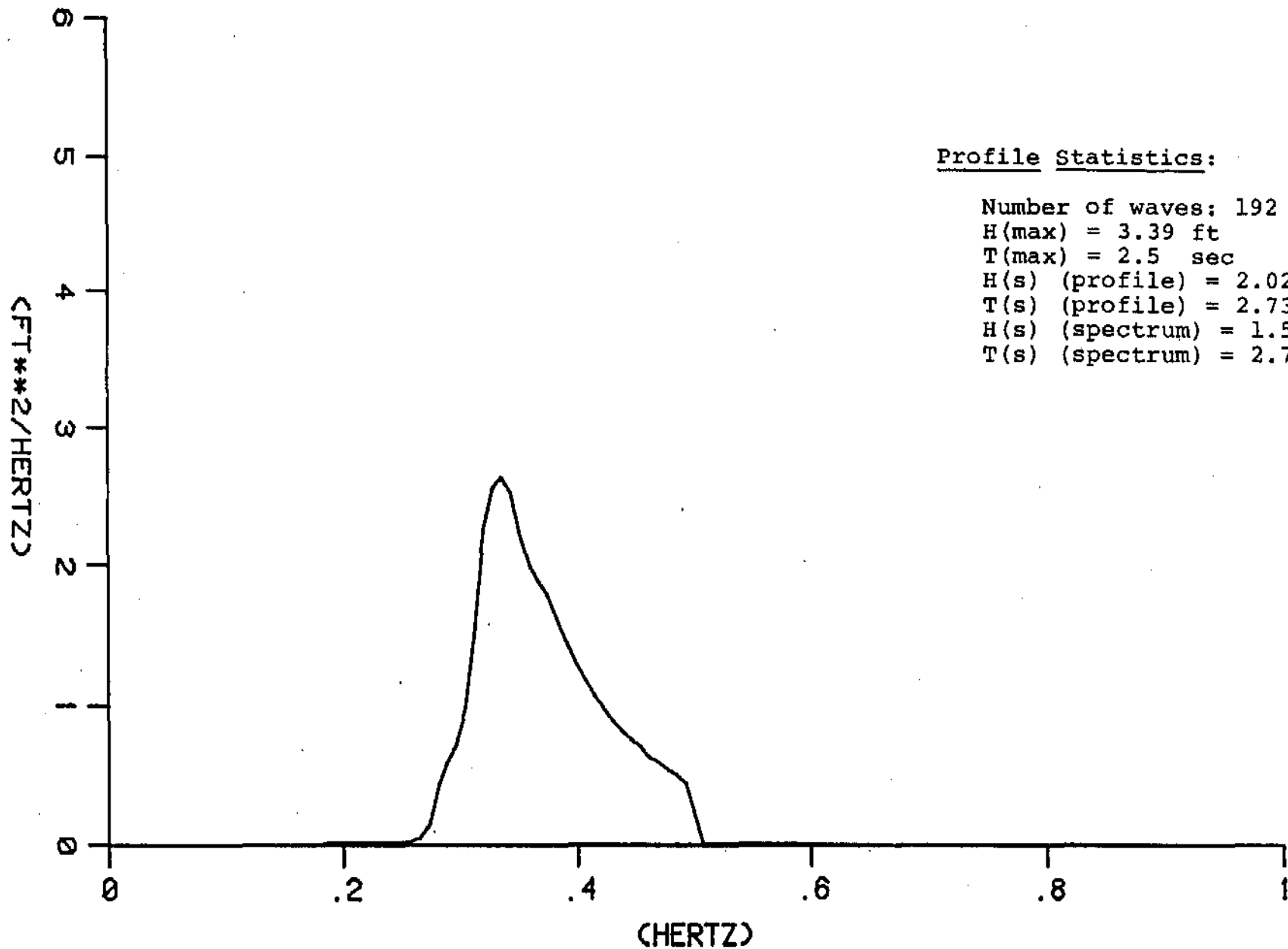


FIGURE B27.

SURFACE WAVE SPECTRUM
PT. THOMSON STATION Q
(0950, 24 AUGUST, 1982)

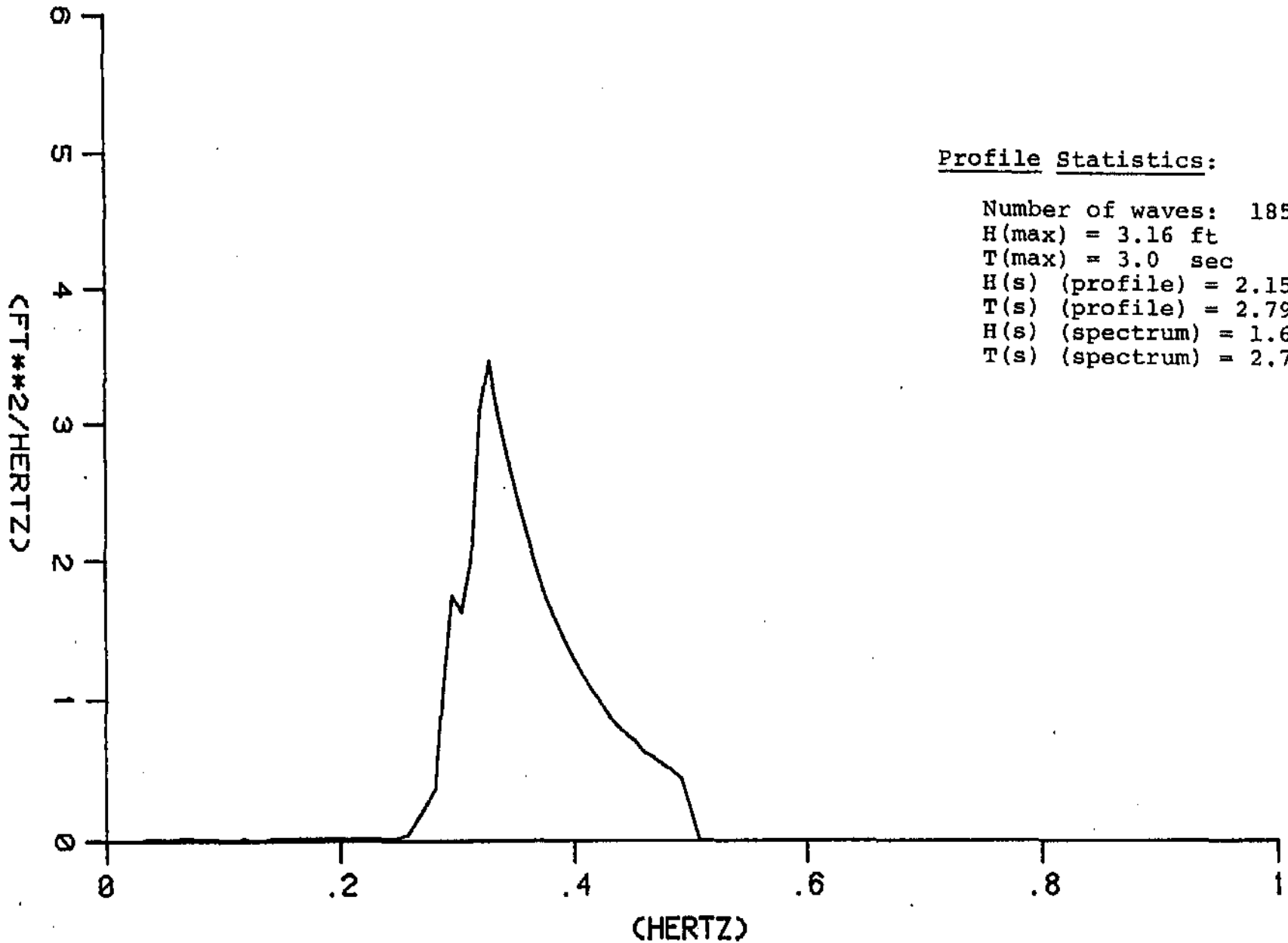
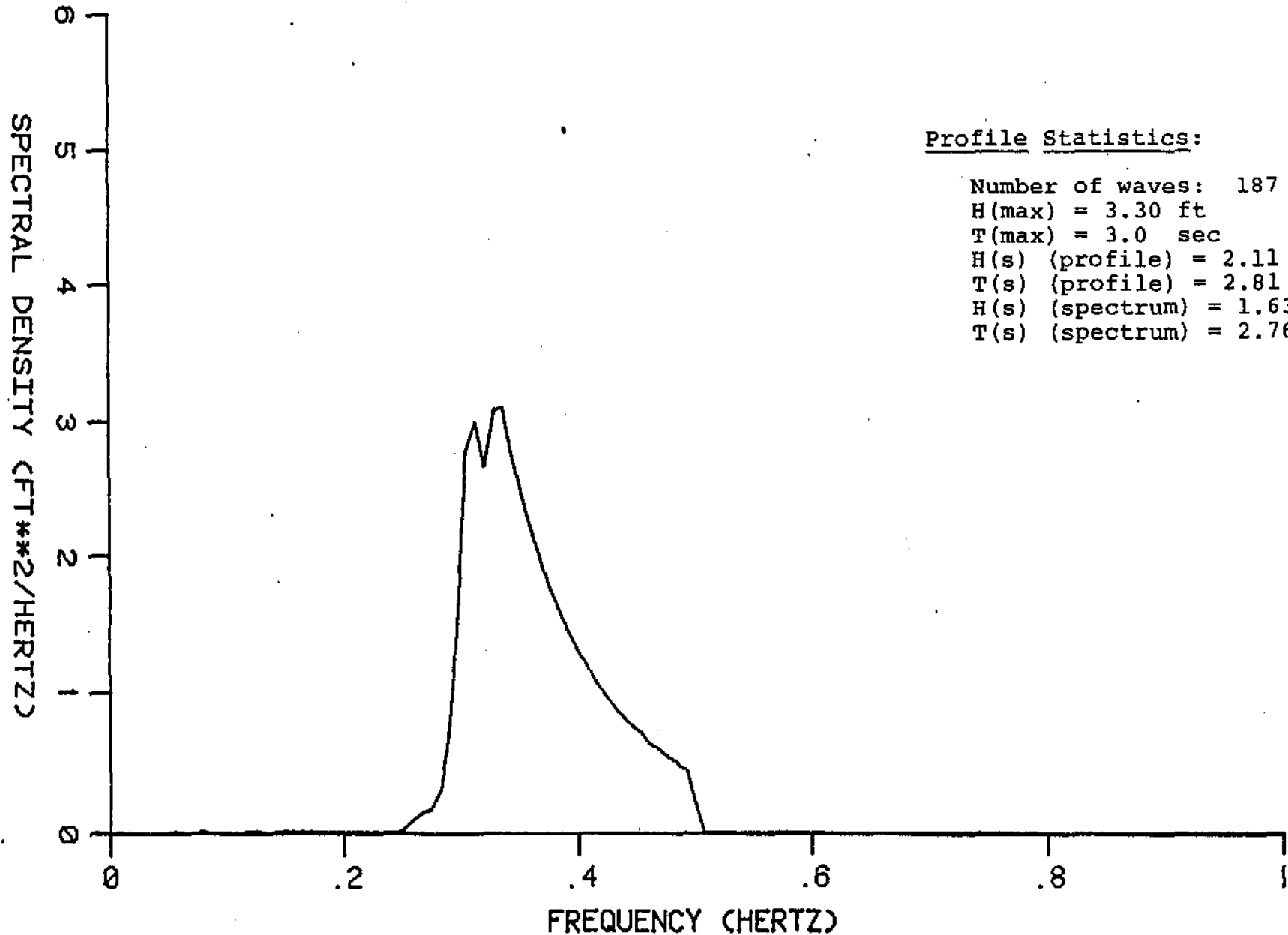


FIGURE B28.

SURFACE WAVE SPECTRUM
PT. THOMSON STATION Q
(1750, 24 AUGUST, 1982)



Profile Statistics:

Number of waves: 187
H(max) = 3.30 ft
T(max) = 3.0 sec
H(s) (profile) = 2.11 ft
T(s) (profile) = 2.81 sec
H(s) (spectrum) = 1.63 ft
T(s) (spectrum) = 2.76 sec

FIGURE B29

SURFACE WAVE SPECTRUM
PT. THOMSON STATION Q
2150, 24 AUGUST, 1982

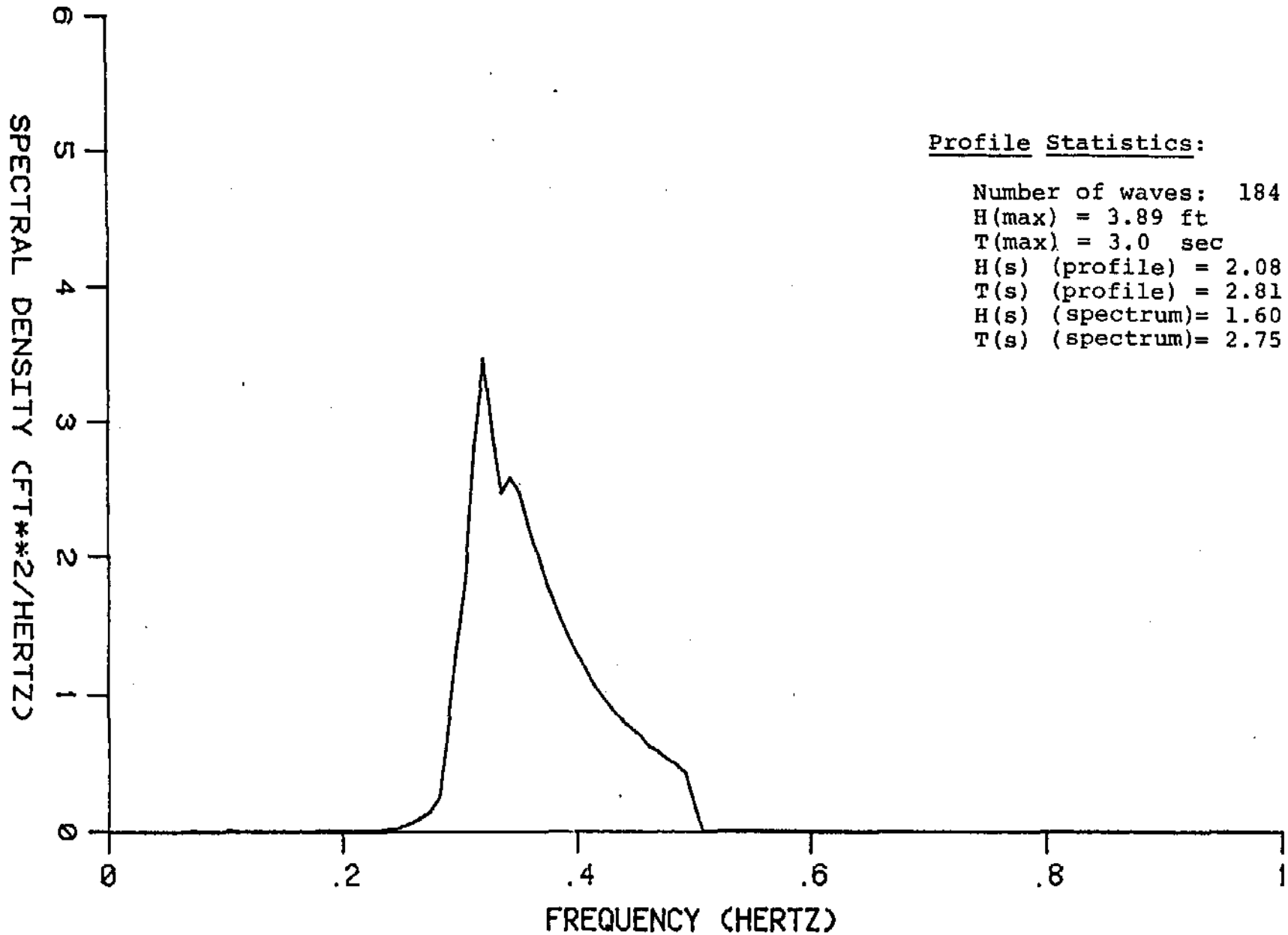


FIGURE B30 .

SURFACE WAVE SPECTRUM
PT. THOMSON STATION Q
0150, 25 AUGUST, 1982

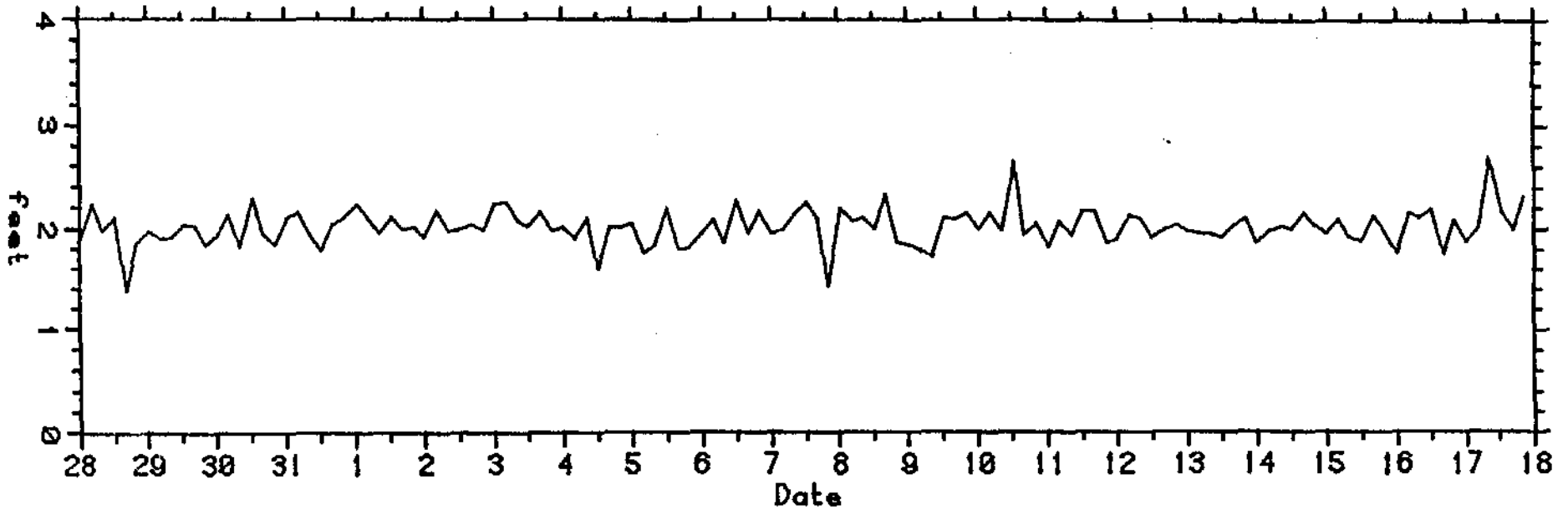


FIGURE B31 MAXIMUM WAVE HEIGHT
POINT THOMSON STATION Y
0015, 28 JULY TO 2015, 17 AUGUST, 1982

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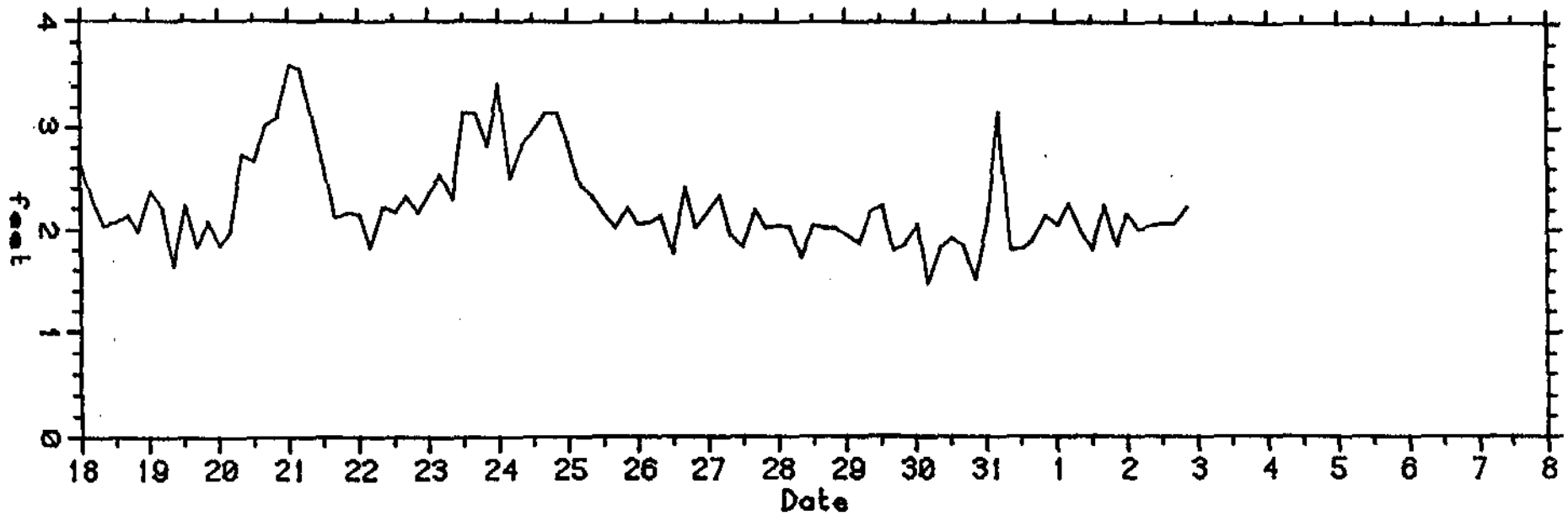


FIGURE B31

MAXIMUM WAVE HEIGHT
POINT THOMSON STATION Y
0015, 18 AUGUST TO 2015, 2 SEPTEMBER, 1982

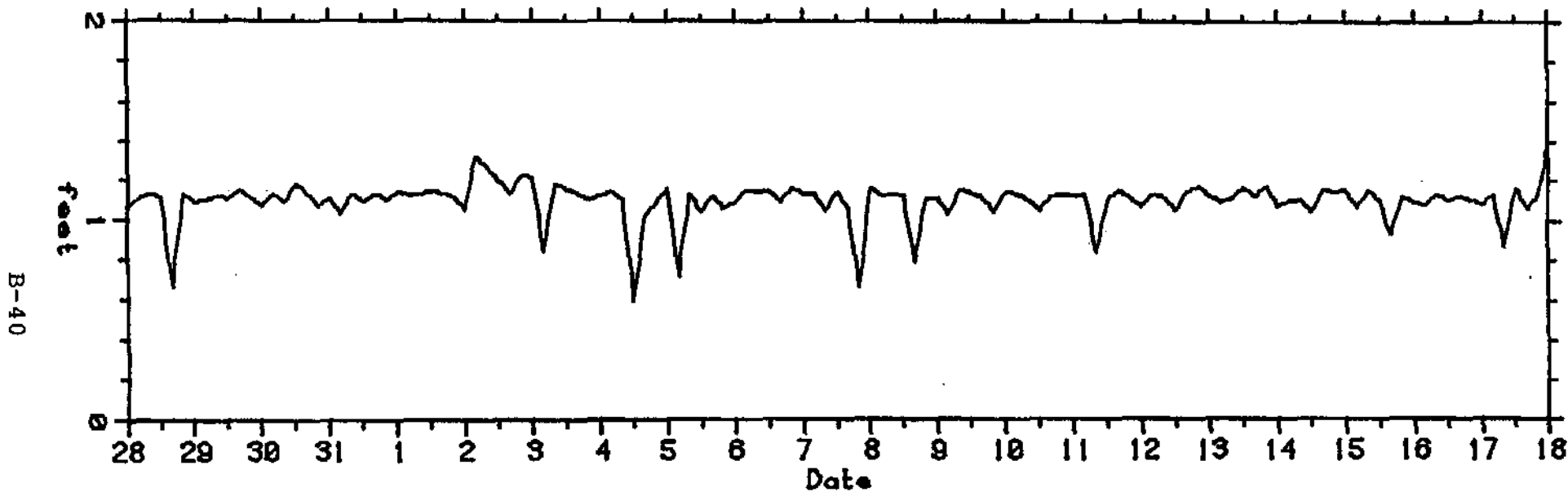


FIGURE B32, SIGNIFICANT WAVE HEIGHT
POINT THOMSON STATION Y
0015, 28 JULY TO 2315, 17 AUGUST, 1982

B-41

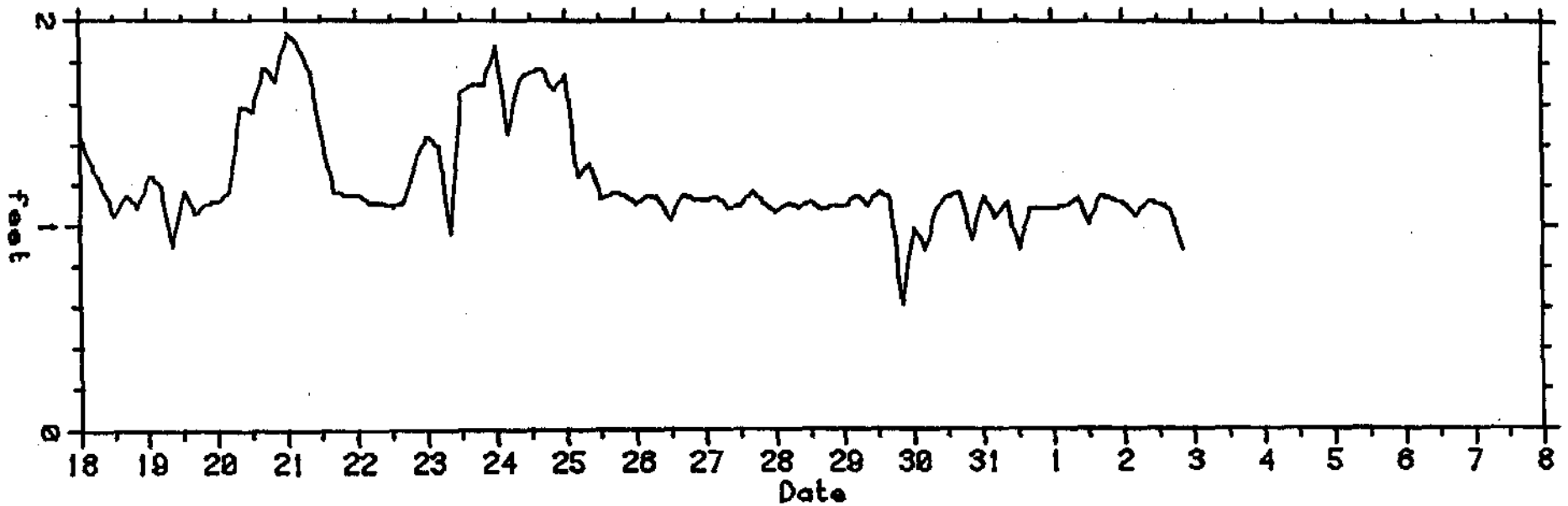


FIGURE B32

SIGNIFICANT WAVE HEIGHT
POINT THOMSON STATION Y
0015, 18 AUGUST TO 2015, 2 SEPTEMBER, 1982

B-42

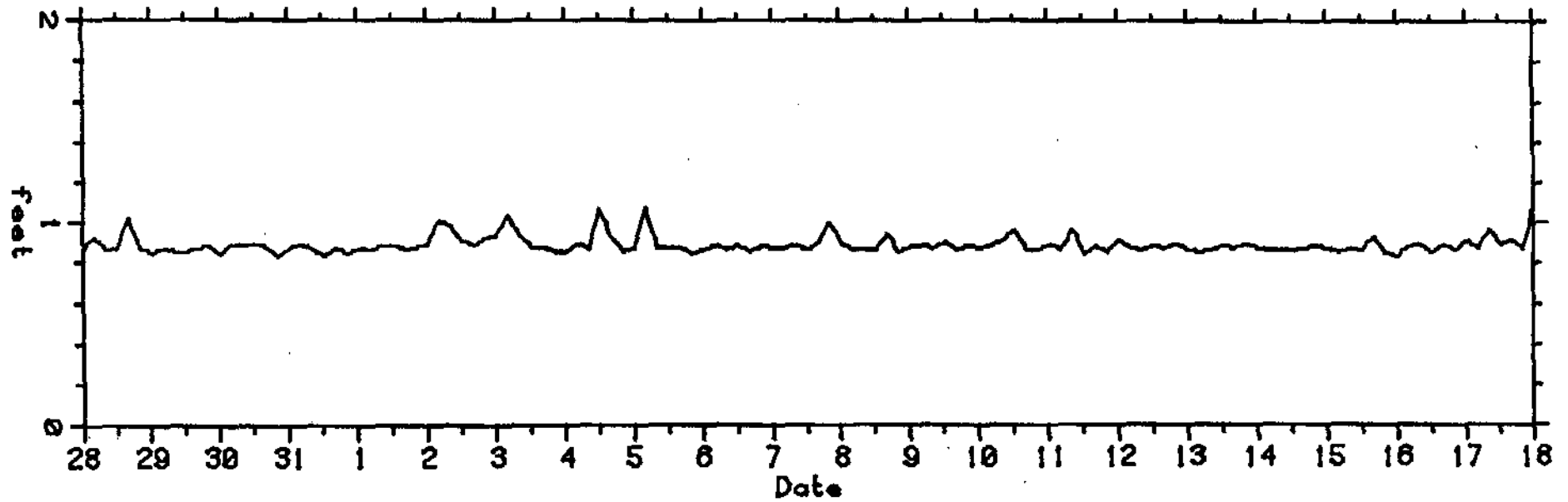


FIGURE B33, SPECTRAL SIGNIFICANT WAVE HEIGHT
POINT THOMSON STATION Y
0015, 28 JULY TO 2315, 17 AUGUST, 1982

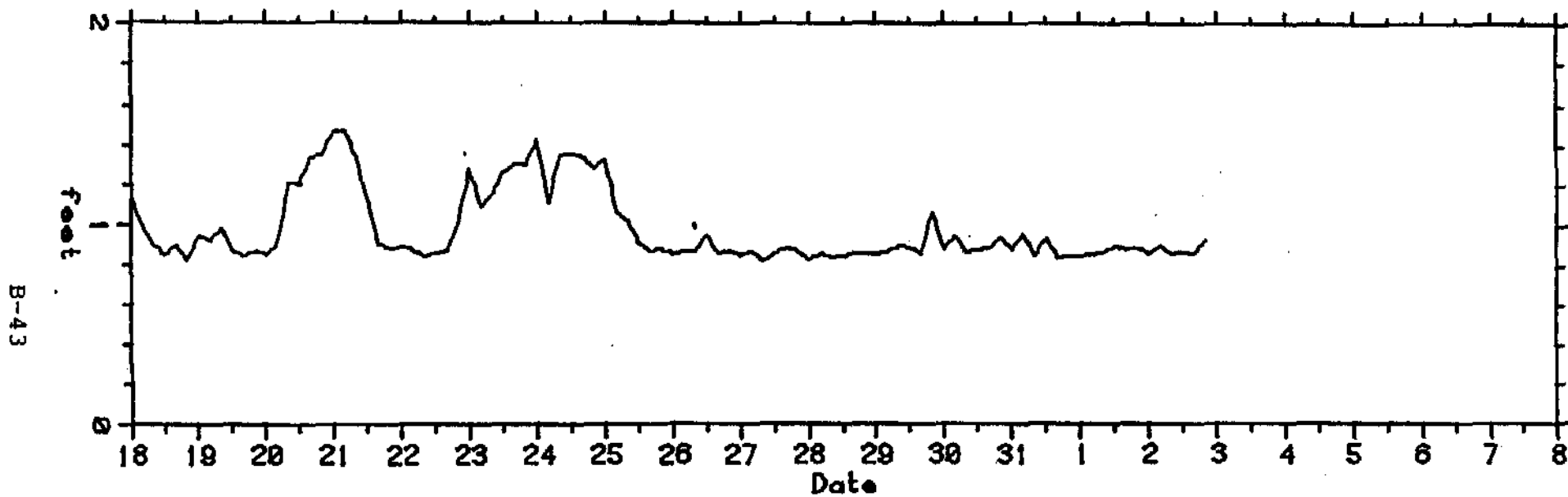


FIGURE B33. SPECTRAL SIGNIFICANT WAVE HEIGHT
POINT THOMSON STATION Y
0015, 18 AUGUST TO 2015, 2 SEPTEMBER, 1982

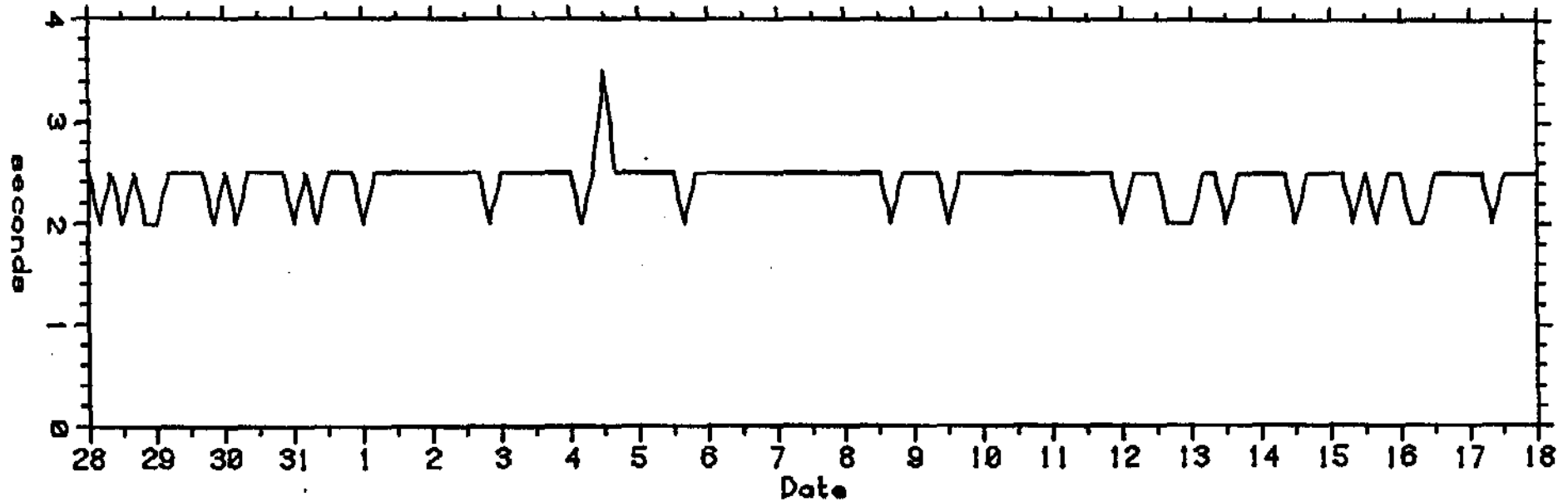


FIGURE B34. MAXIMUM WAVE PERIOD
POINT THOMSON STATION Y
0015, 28 JULY TO 2315, 17 AUGUST, 1982

B-45

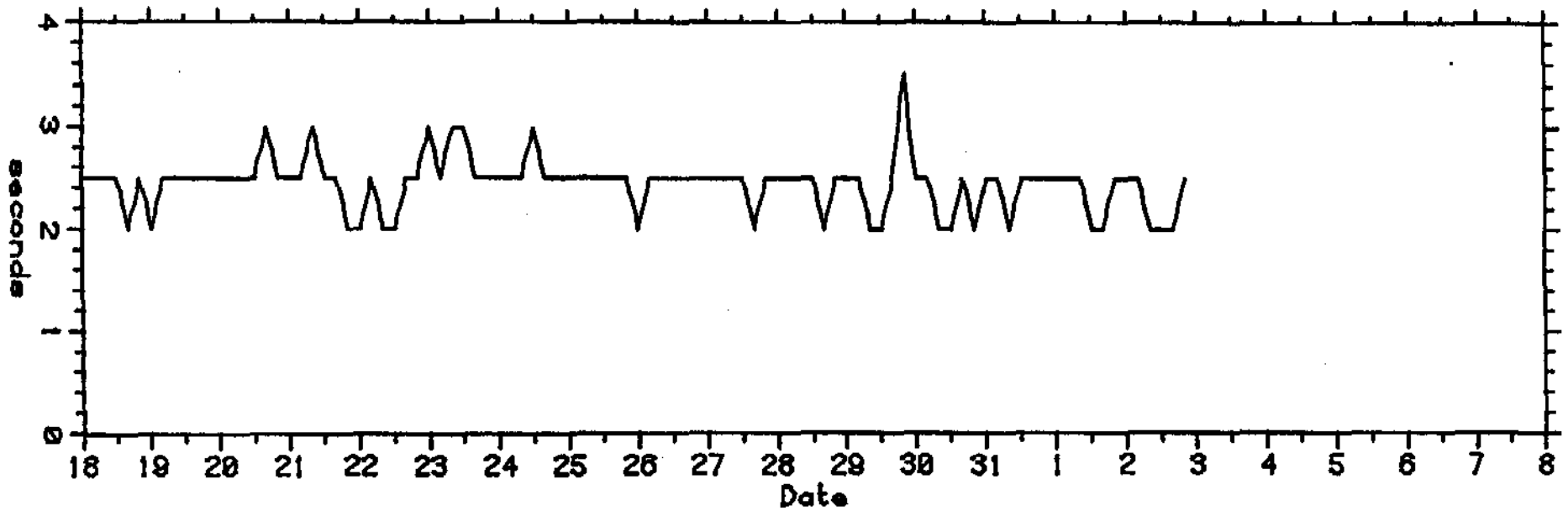


FIGURE B34

MAXIMUM WAVE PERIOD
POINT THOMSON STATION Y
0015, 18 AUGUST TO 2015, 2 SEPTEMBER, 1982

B-46

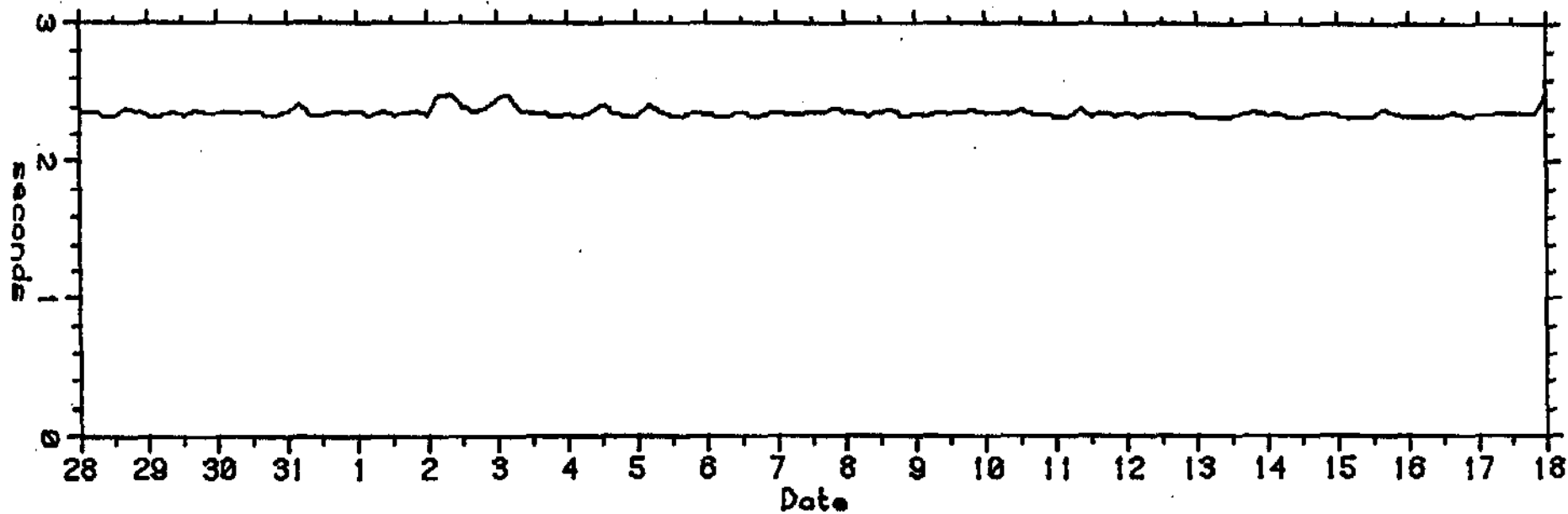


FIGURE B35

SIGNIFICANT WAVE PERIOD
POINT THOMSON STATION Y
0015, 28 JULY TO 2315, 17 AUGUST, 1982

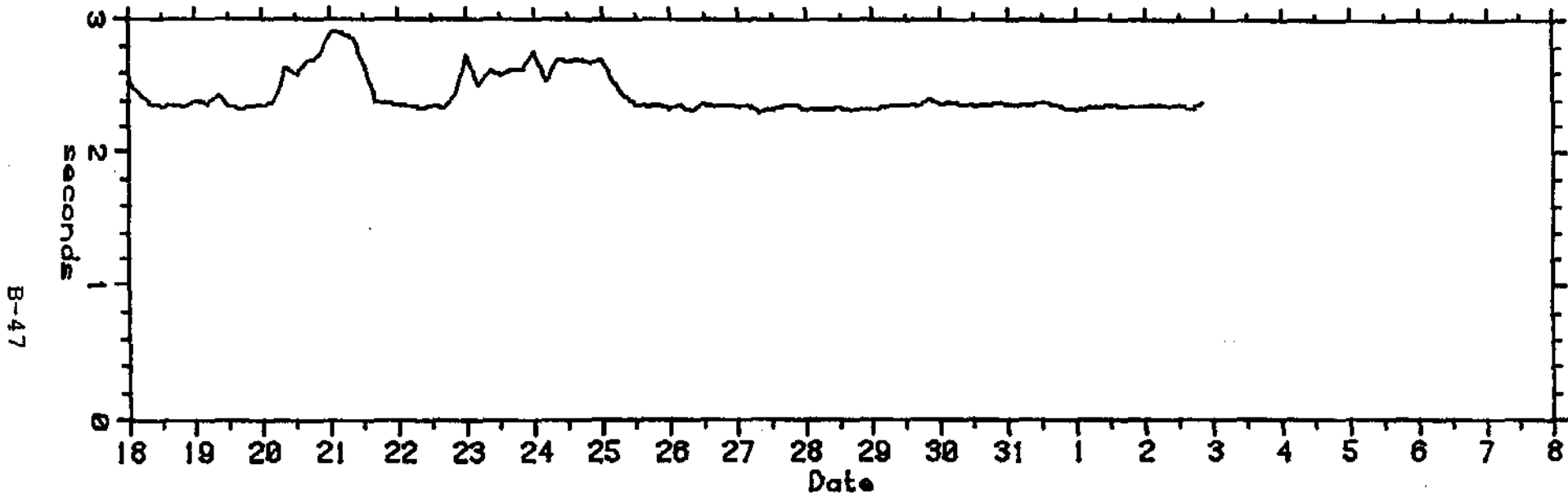


FIGURE B35

SIGNIFICANT WAVE PERIOD
POINT THOMSON STATION Y
0015, 18 AUGUST TO 2015, 2 SEPTEMBER, 1982

B-48

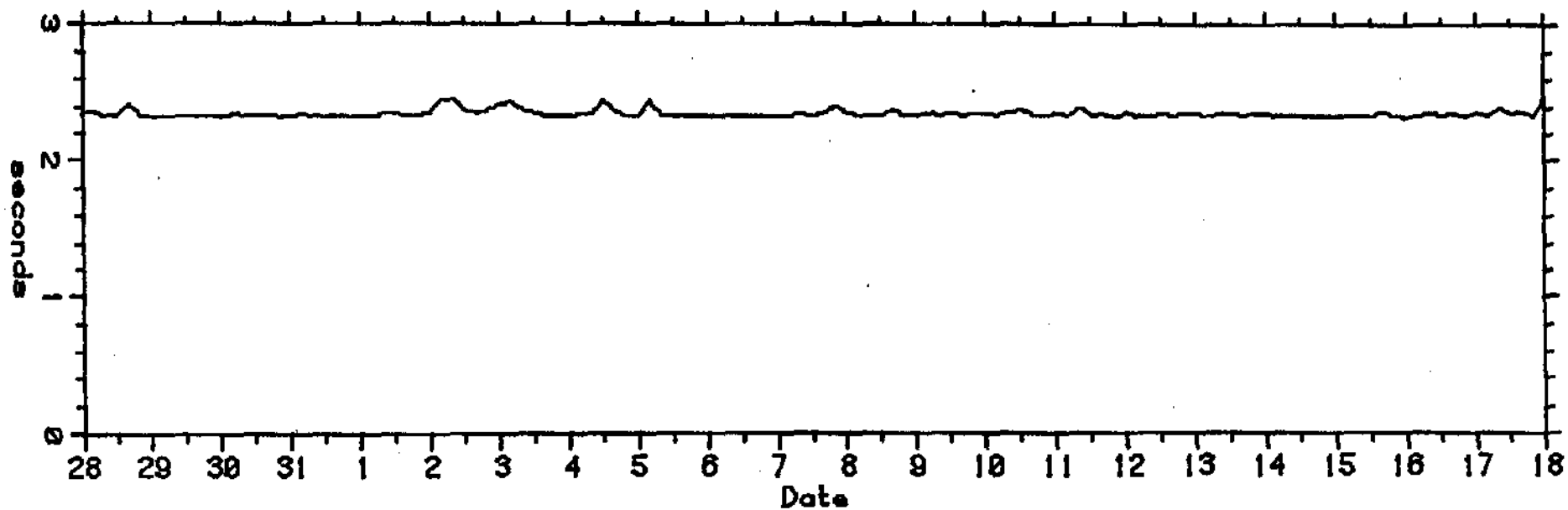


FIGURE B36, SPECTRAL SIGNIFICANT WAVE PERIOD
POINT THOMSON STATION Y
0015, 28 JULY TO 2315, 17 AUGUST, 1982

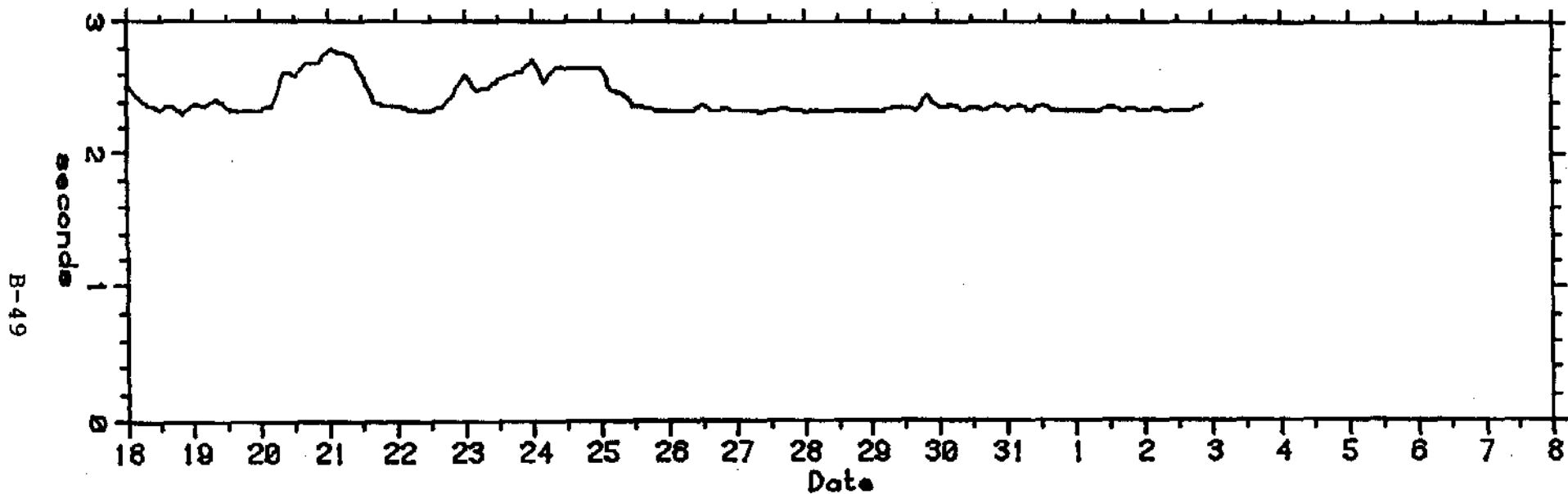


FIGURE B36

SPECTRAL SIGNIFICANT WAVE PERIOD
POINT THOMSON STATION Y
0015, 18 AUGUST TO 2015, 2 SEPTEMBER, 1982

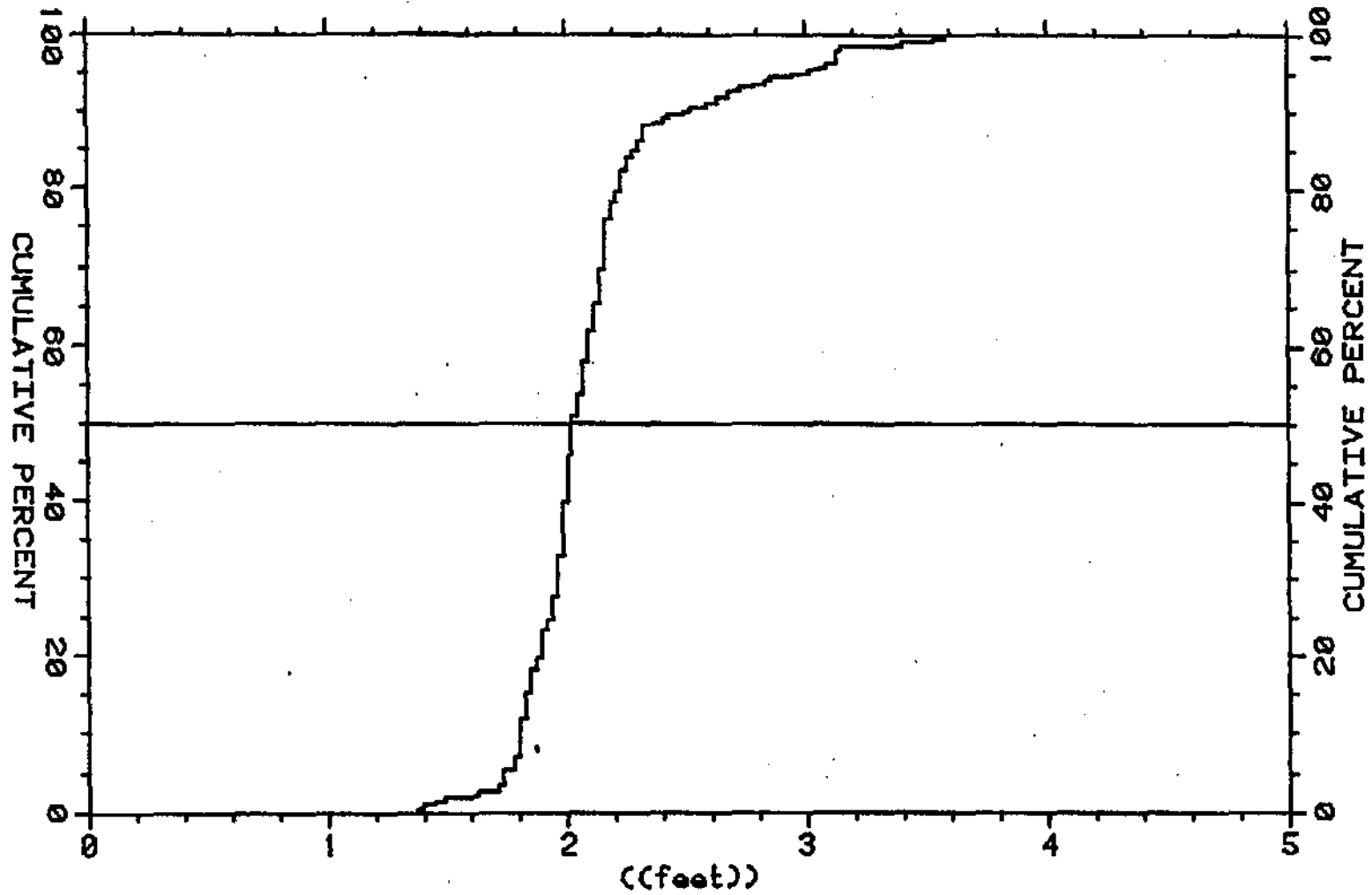


FIGURE B37, CUMULATIVE PROBABILITY PLOT
MAXIMUM WAVE HEIGHT
POINT THOMSON STATION Y
2015, 27 JULY TO 2015, 2 SEPTEMBER, 1982
223 DATA POINTS

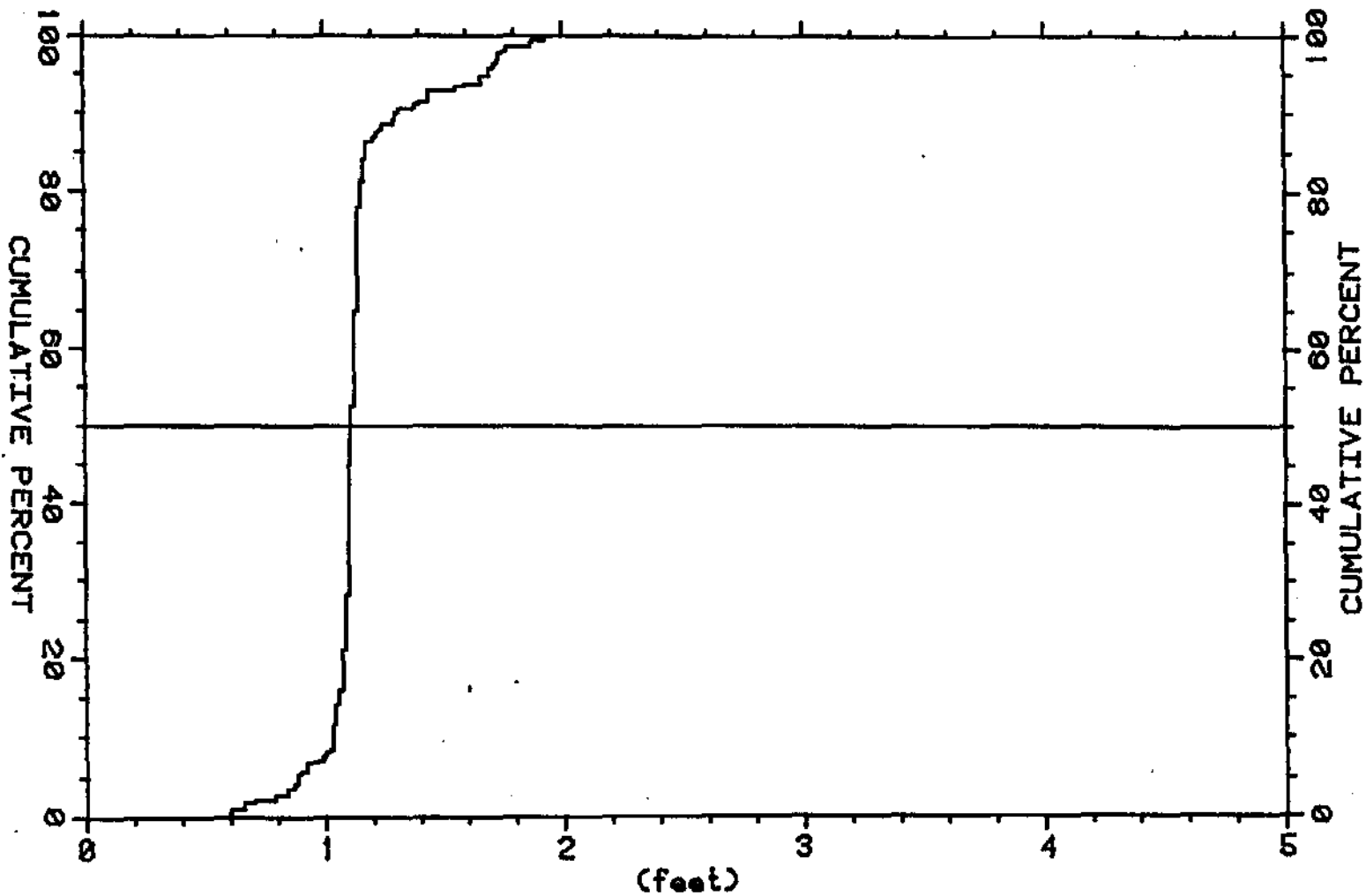
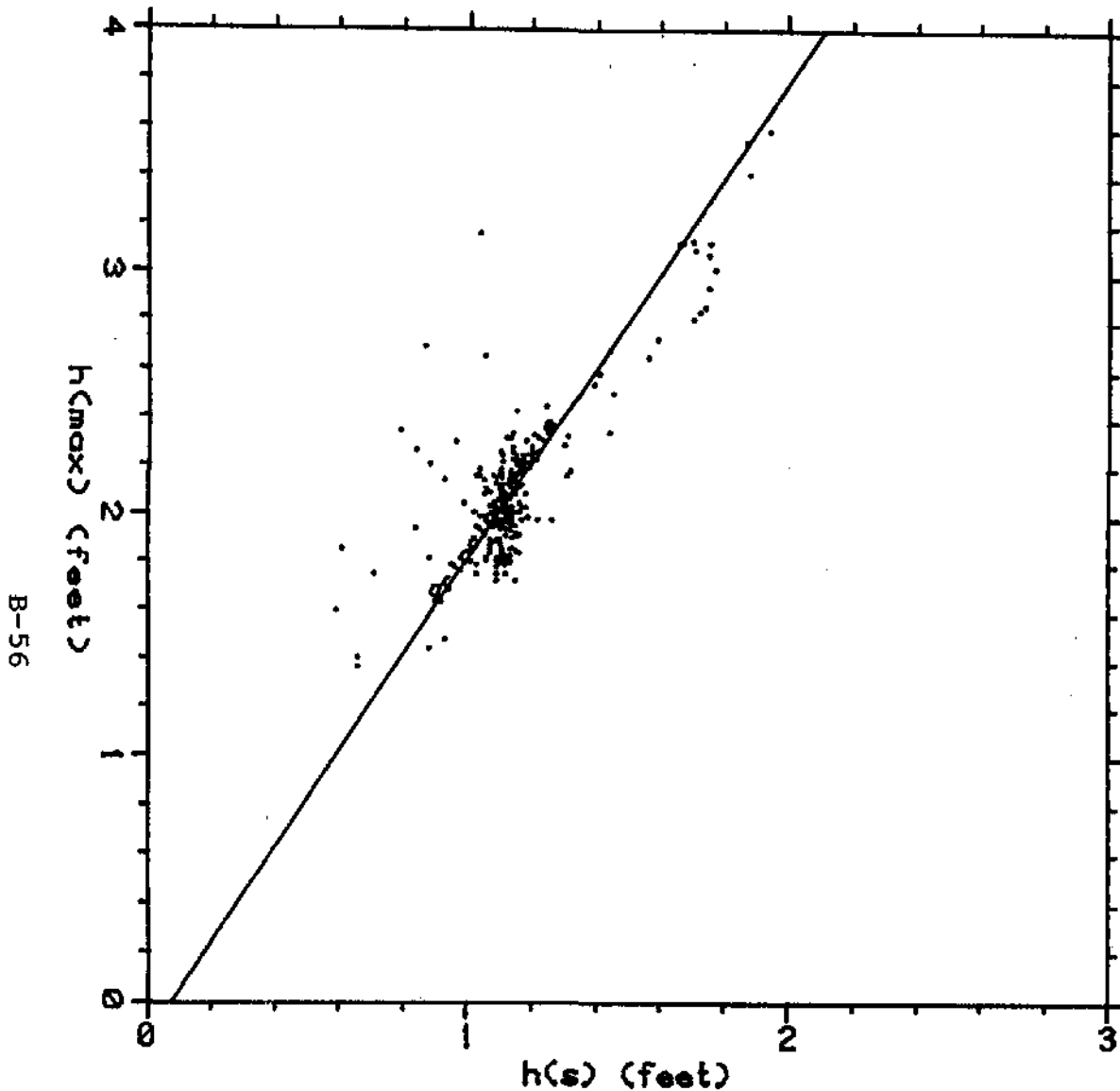


FIGURE B38. CUMULATIVE PROBABILITY PLOT
SIGNIFICANT WAVE HEIGHT
POINT THOMSON STATION Y
2015, 27 JULY TO 2015, 2 SEPTEMBER, 1982
223 DATA POINTS

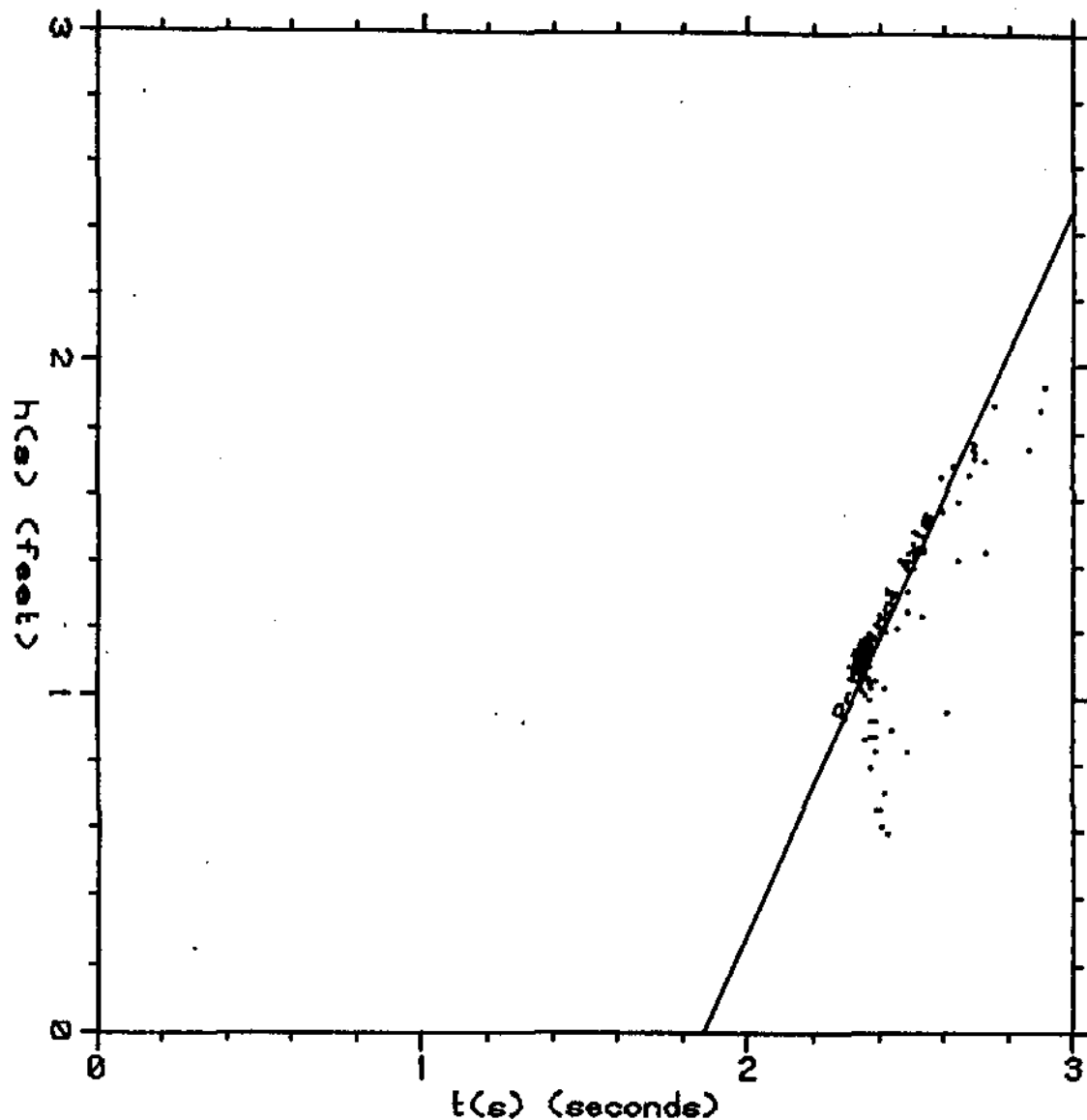


Statistics:
 223 data points
 time interval = 4.000 hours
 H(s):
 Mean = 1.15
 Std. Dev. = 0.20
 H(max):
 Mean = 2.11
 Std. Dev. = 0.35
 Covariance = 0.05
 Correlation = 0.800
 Principal axis:
 Slope = 1.966
 Intercept = -0.147

FIGURE B43

SCATTER PLOT
 HCS) VS. H(MAX)
 POINT THOMSON STATION Y
 2015, 27 JULY TO 2015,2 SEPTEMBER, 1982

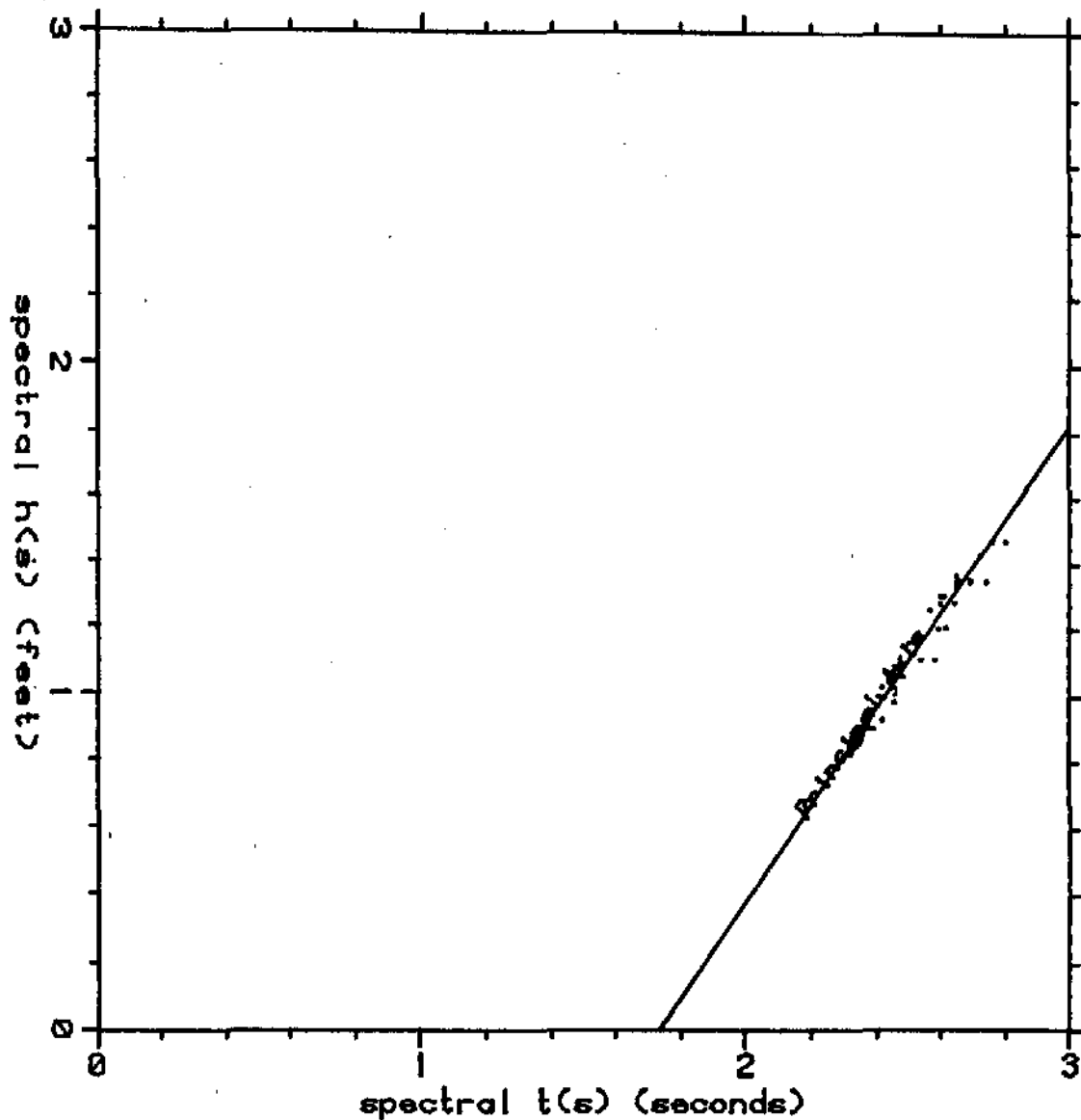
B-58



Statistics:
223 data points
time interval = 4.000 hours
T(s):
Mean = 2.39
Std. Dev. = 0.11
H(s):
Mean = 1.15
Std. Dev. = 0.20
Covariance = 0.02
Correlation = 0.783
Principal axis:
Slope = 2.181
Intercept = -4.067

FIGURE B45, SCATTER PLOT
T(S) VS. H(S)
POINT THOMSON STATION Y
2015, 27 JULY TO 2015, 2 SEPTEMBER, 1982

B-59



Statistics:

223 data points
time interval = 4.000 hours

Spectral t(s):

Mean = 2.38

Std. Dev. = 0.09

Spectral h(s):

Mean = 0.92

Std. Dev. = 0.13

Covariance = 0.01

Correlation = 0.988

Principal axis:

Slope = 1.433

Intercept = -2.484

FIGURE B46.

SCATTER PLOT

SPECTRAL T(S) VS. SPECTRAL H(S)

POINT THOMSON STATION Y

2015, 27 JULY TO 2015, 2 SEPTEMBER, 1982

R-61

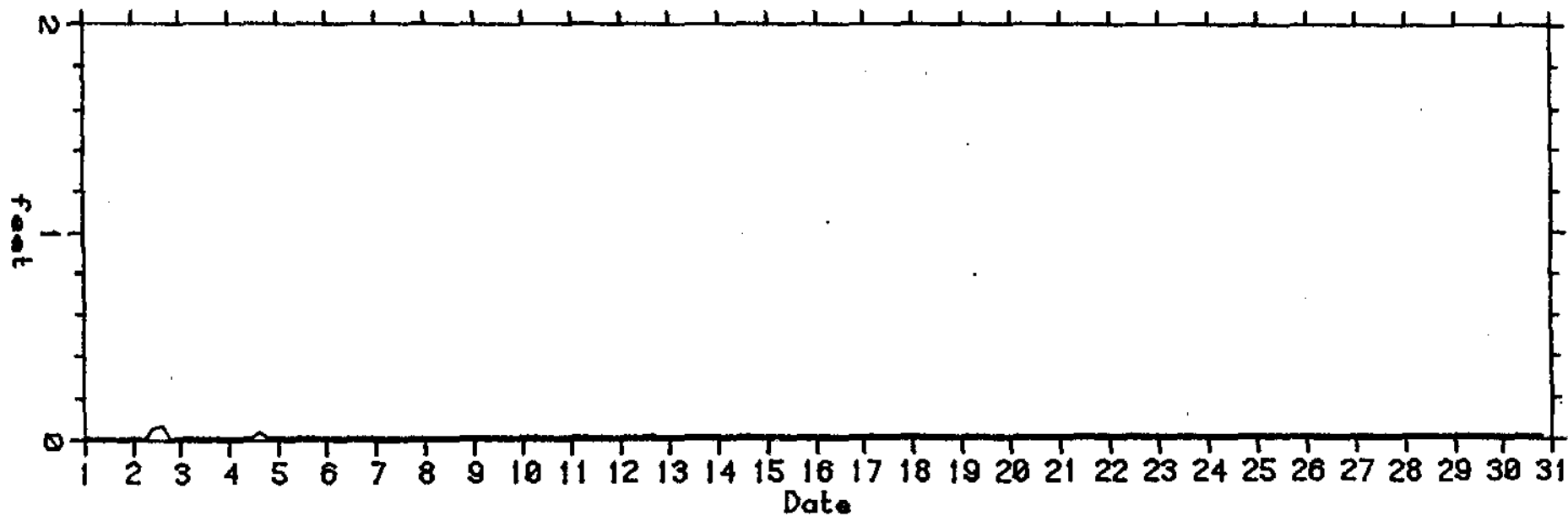


FIGURE B47

MAXIMUM WAVE HEIGHT
POINT THOMSON STATION SP
0210, 1 OCTOBER TO 1810, 30 OCTOBER, 1982

B-62

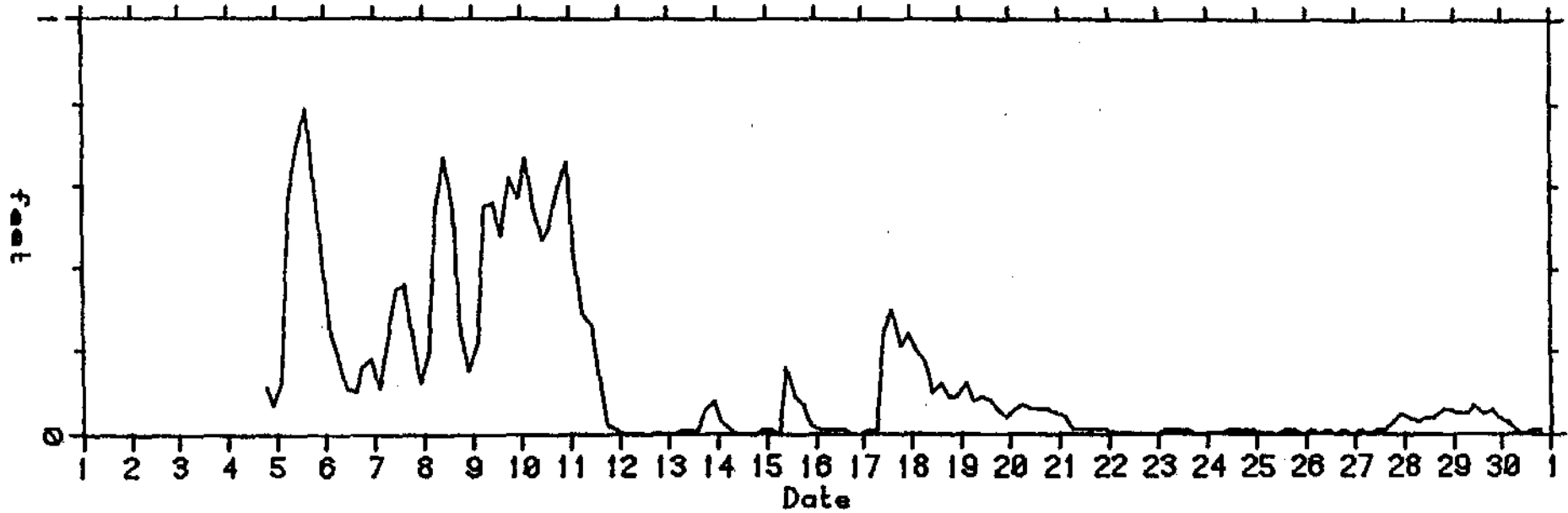


FIGURE B48

SIGNIFICANT WAVE HEIGHT
POINT THOMSON STATION SP
1810, 4 SEPTEMBER TO 1810, 30 SEPTEMBER, 1982

B-63

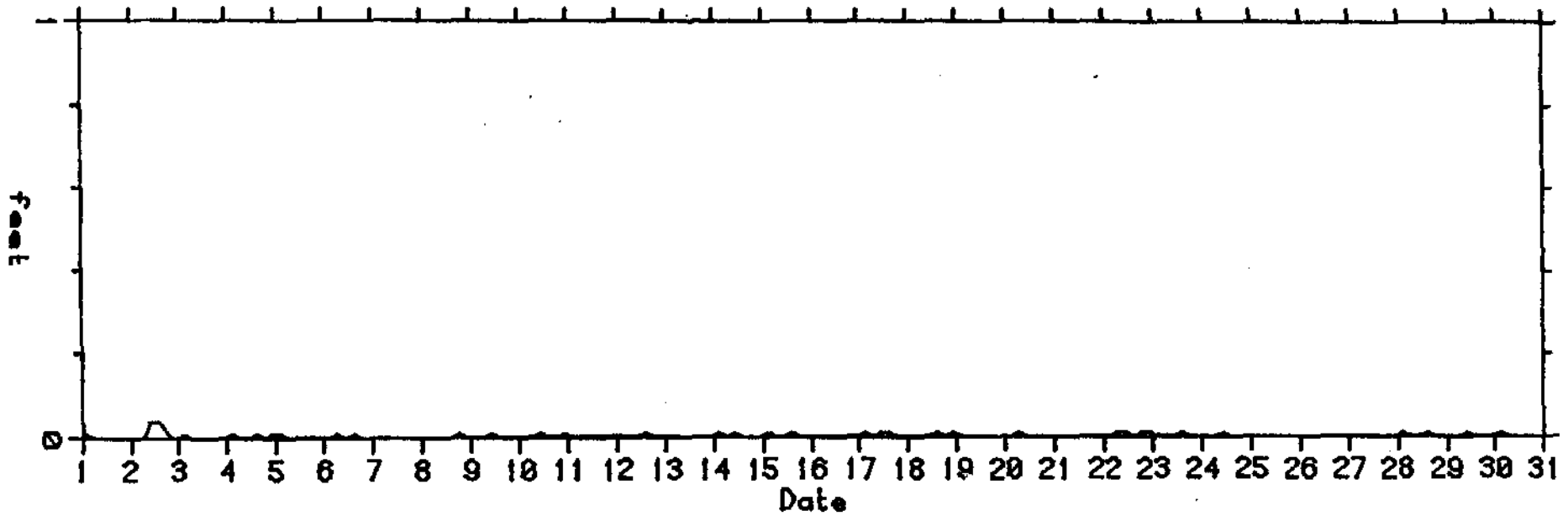


FIGURE B48

SIGNIFICANT WAVE HEIGHT
POINT THOMSON STATION SP
0210, 1 OCTOBER TO 1810, 30 OCTOBER, 1982

B-64

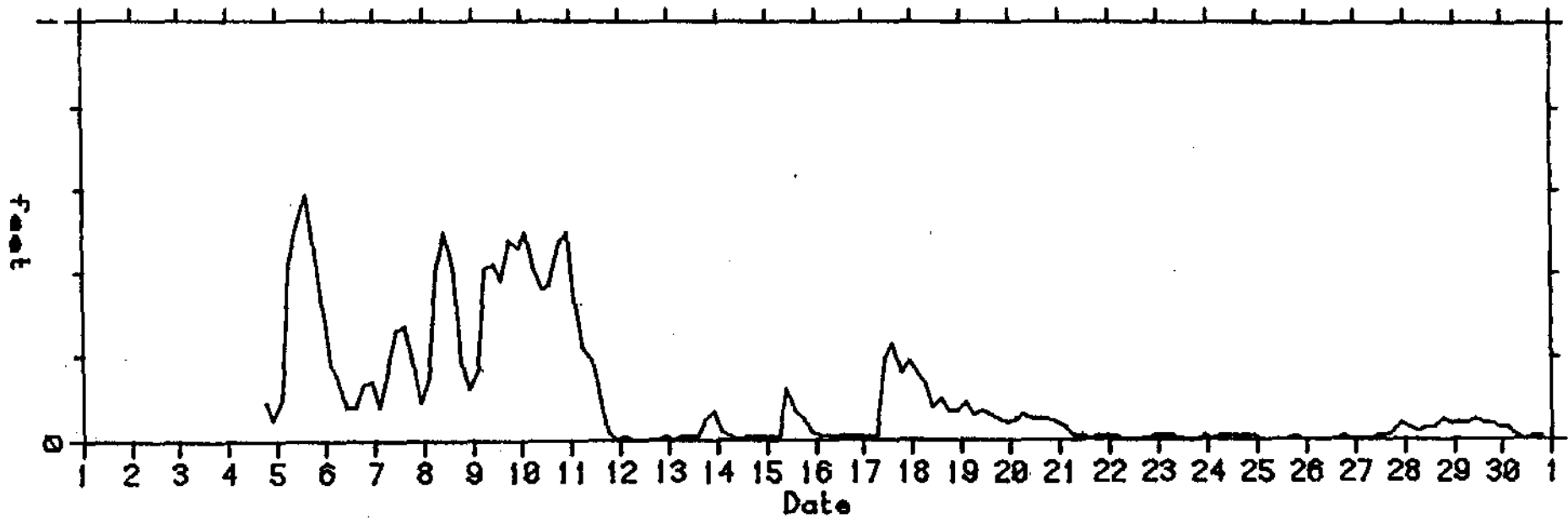


FIGURE B49, SPECTRAL SIGNIFICANT WAVE HEIGHT
POINT THOMSON STATION SP
1810, 4 SEPTEMBER TO 1810, 30 SEPTEMBER, 1982

B-65

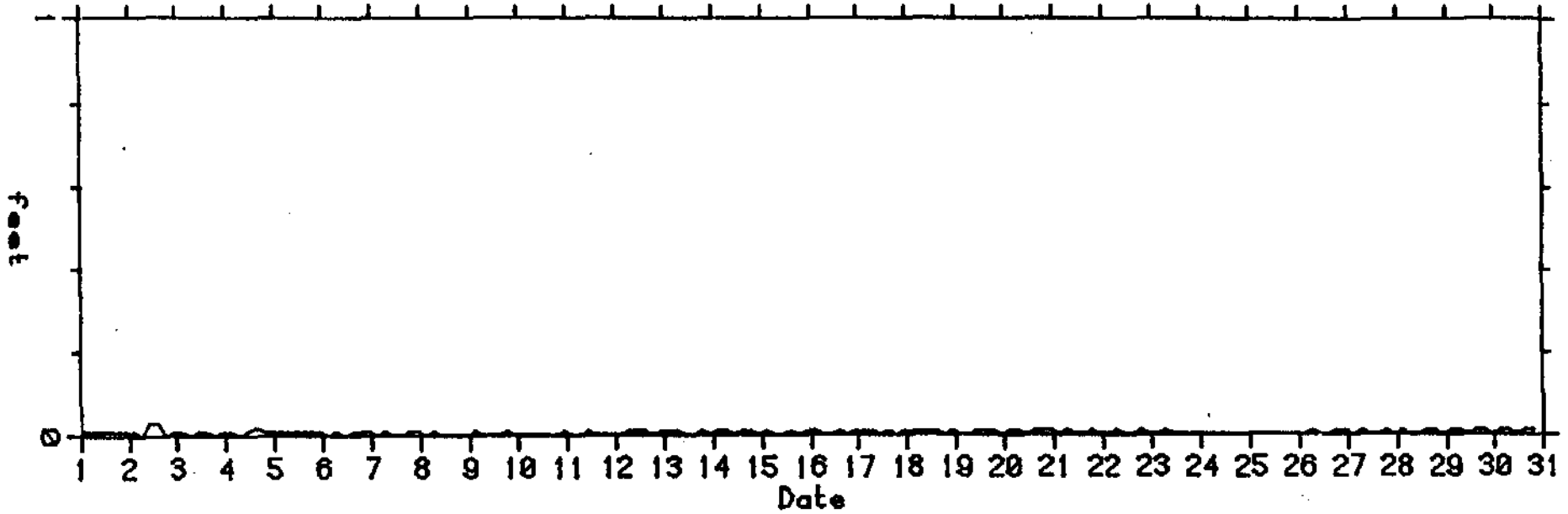
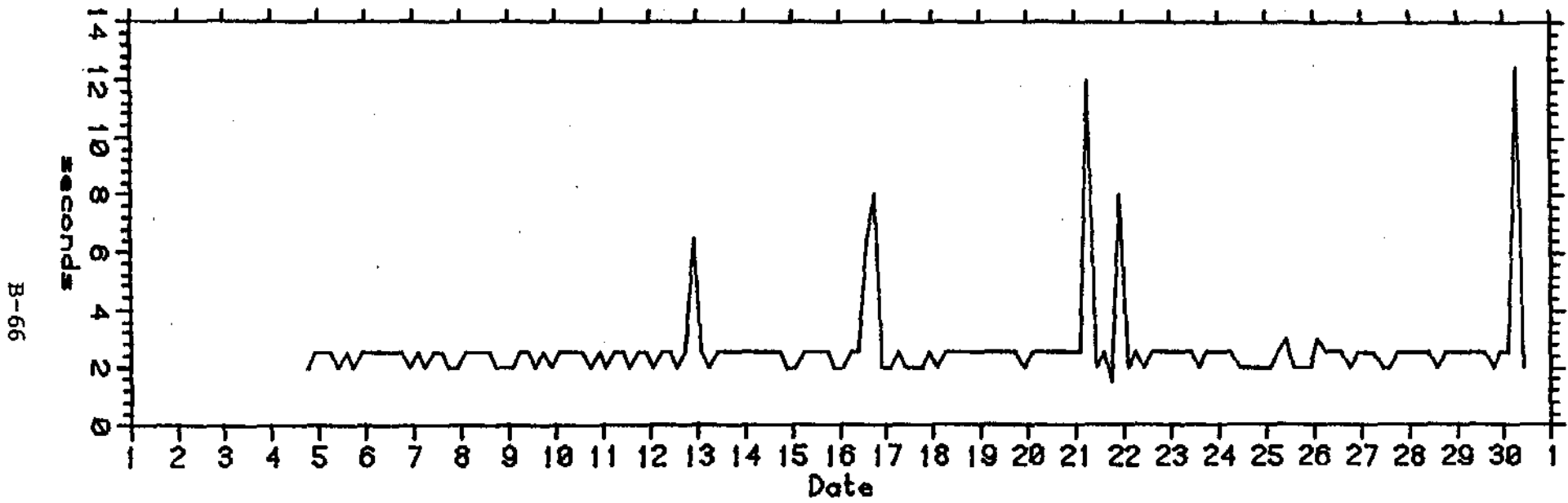


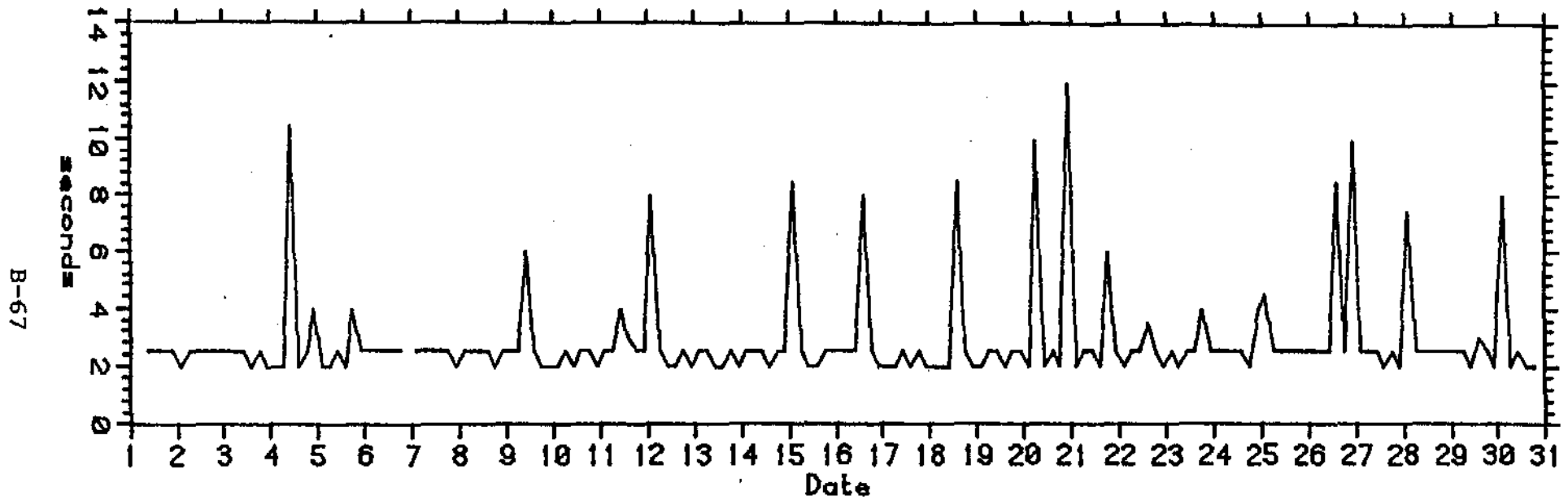
FIGURE B49. SPECTRAL SIGNIFICANT WAVE HEIGHT.
POINT THOMSON STATION SP
0210, 1 OCTOBER TO 1810, 30 OCTOBER, 1982



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FIGURE B50

MAXIMUM WAVE PERIOD
POINT THOMSON STATION SP
1810, 4 SEPTEMBER TO 1810, 30 SEPTEMBER, 1982



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FIGURE B50 MAXIMUM WAVE PERIOD
POINT THOMSON STATION STATION SP
0210, 1 OCTOBER TO 1810, 30 OCTOBER, 1982

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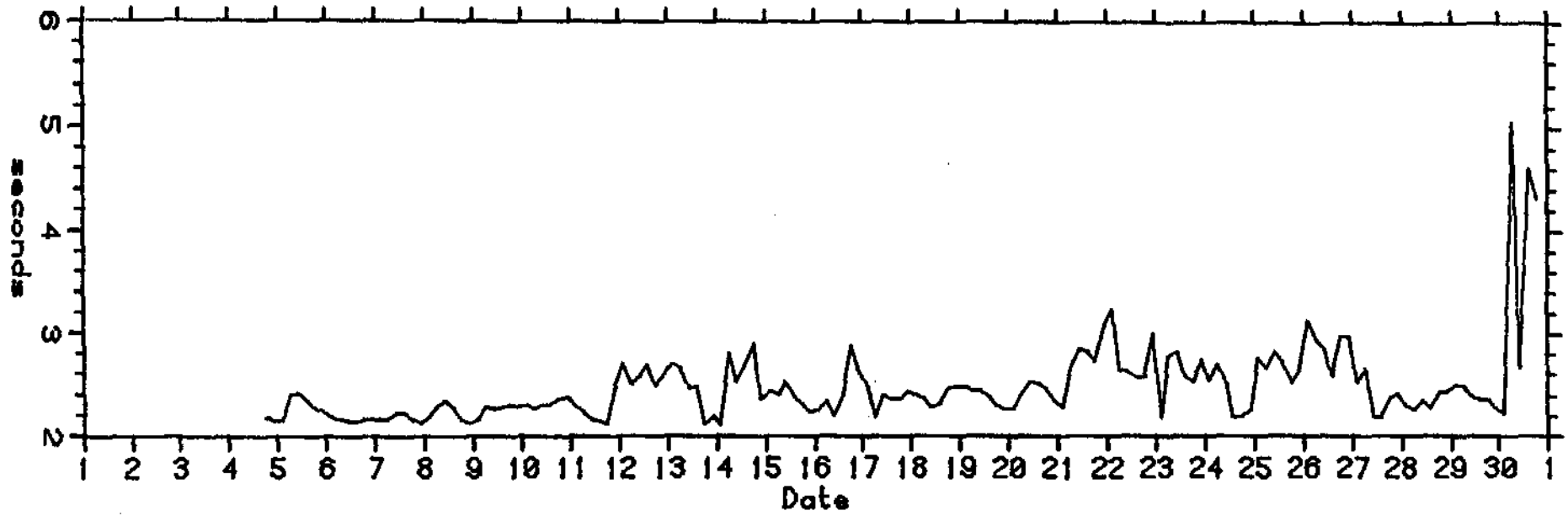


FIGURE B51.

SIGNIFICANT WAVE PERIOD
POINT THOMSON STATION SP
1810, 4 SEPTEMBER, TO 1820, 30 SEPTEMBER, 1982

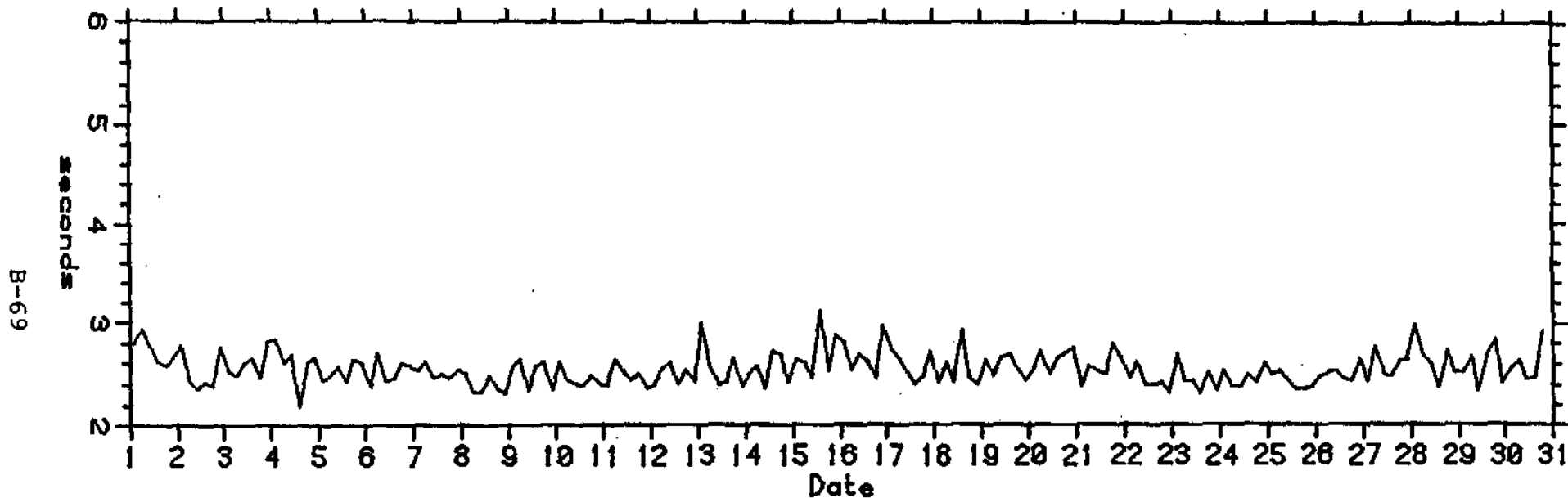


FIGURE B51 . SIGNIFICANT WAVE PERIOD
POINT THOMSON STATION SP
0210, 1 OCTOBER TO 1820, 30 OCTOBER, 1982

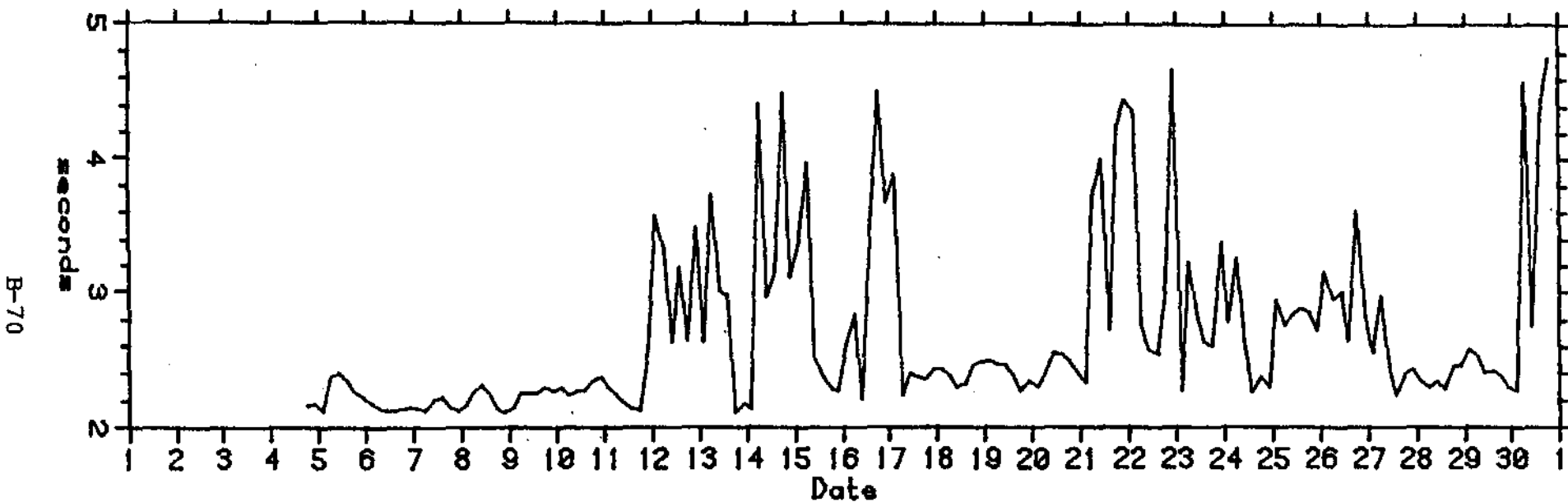


FIGURE B52

SPECTRAL SIGNIFICANT WAVE PERIOD
POINT THOMSON STATION SP
1810, 4 SEPTEMBER TO 1810, 30 SEPTEMBER, 1982

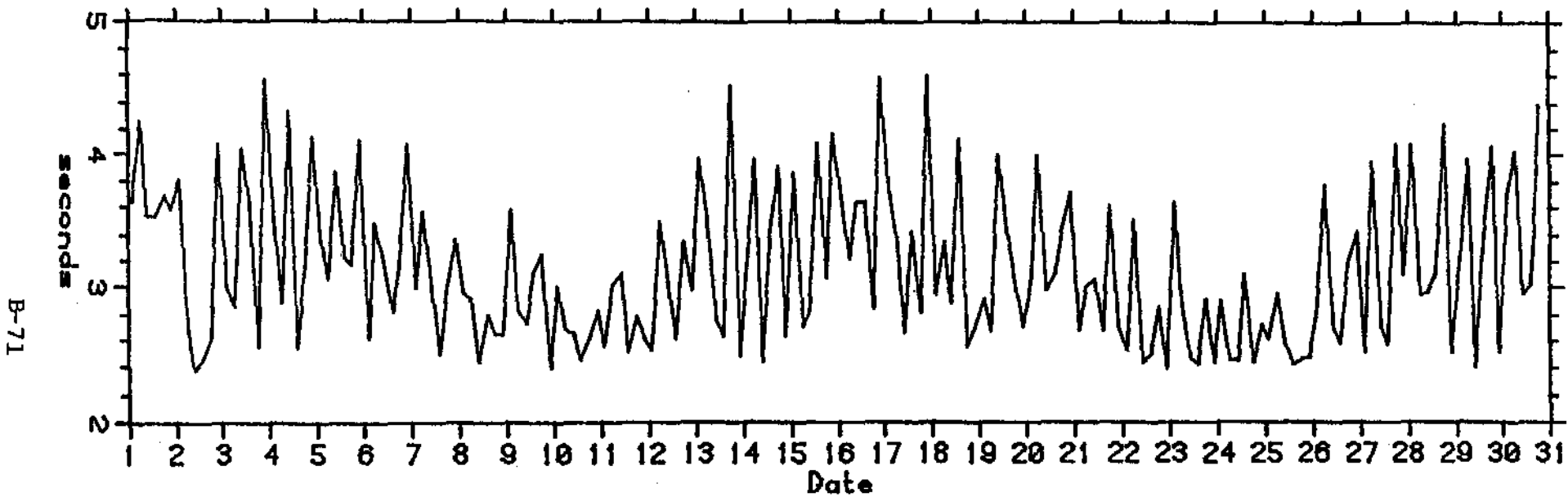


FIGURE B52

SPECTRAL SIGNIFICANT WAVE PERIOD
POINT THOMSON STATION SP
0210, 1 OCTOBER TO 1810, 30 OCTOBER 1982

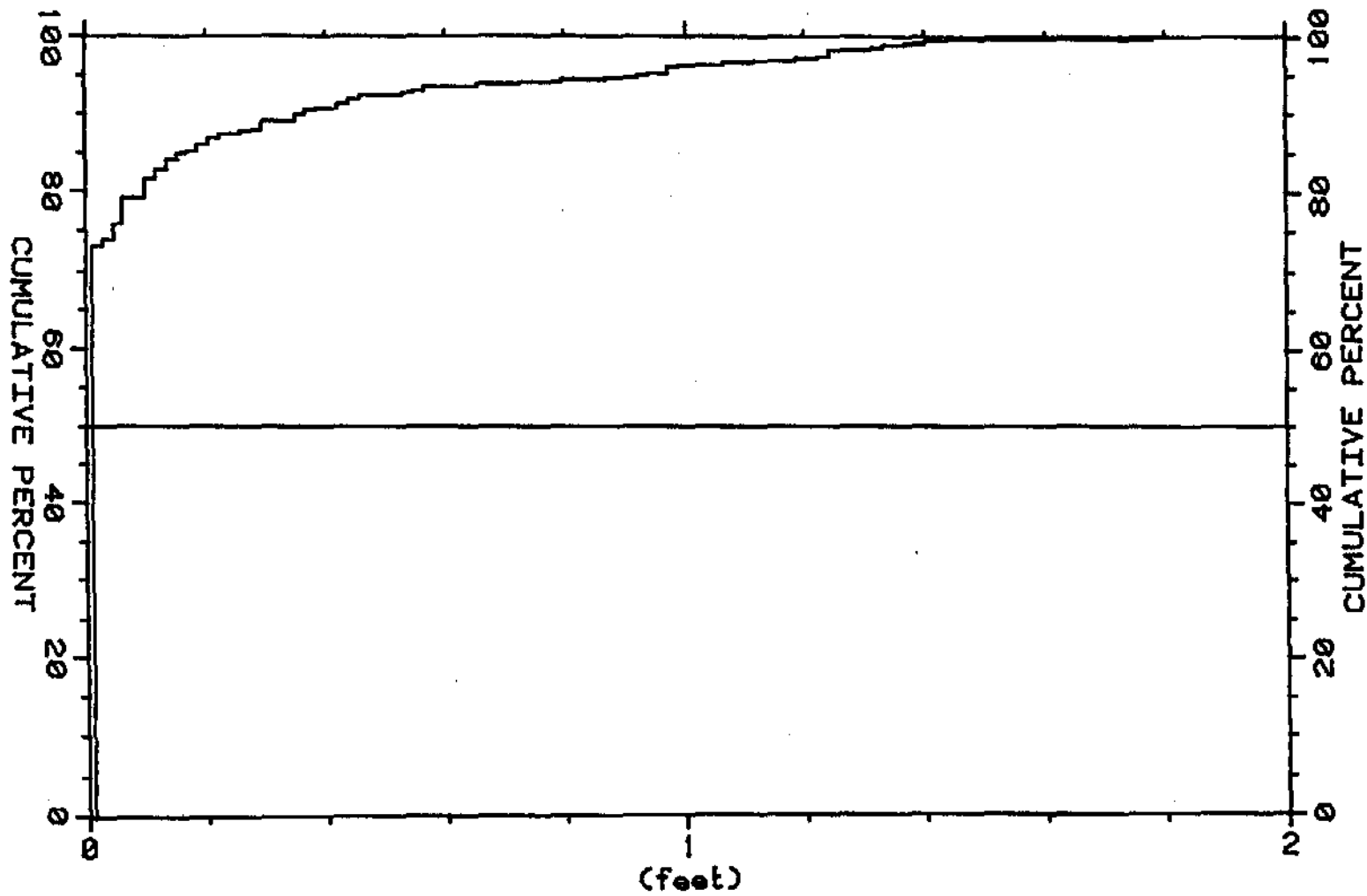


FIGURE B53, CUMULATIVE PROBABILITY PLOT
 MAXIMUM WAVE HEIGHT
 POINT THOMSON STATION SP
 1810, 4 SEPTEMBER TO 0210, 31 OCTOBER, 1982
 339 DATA POINTS

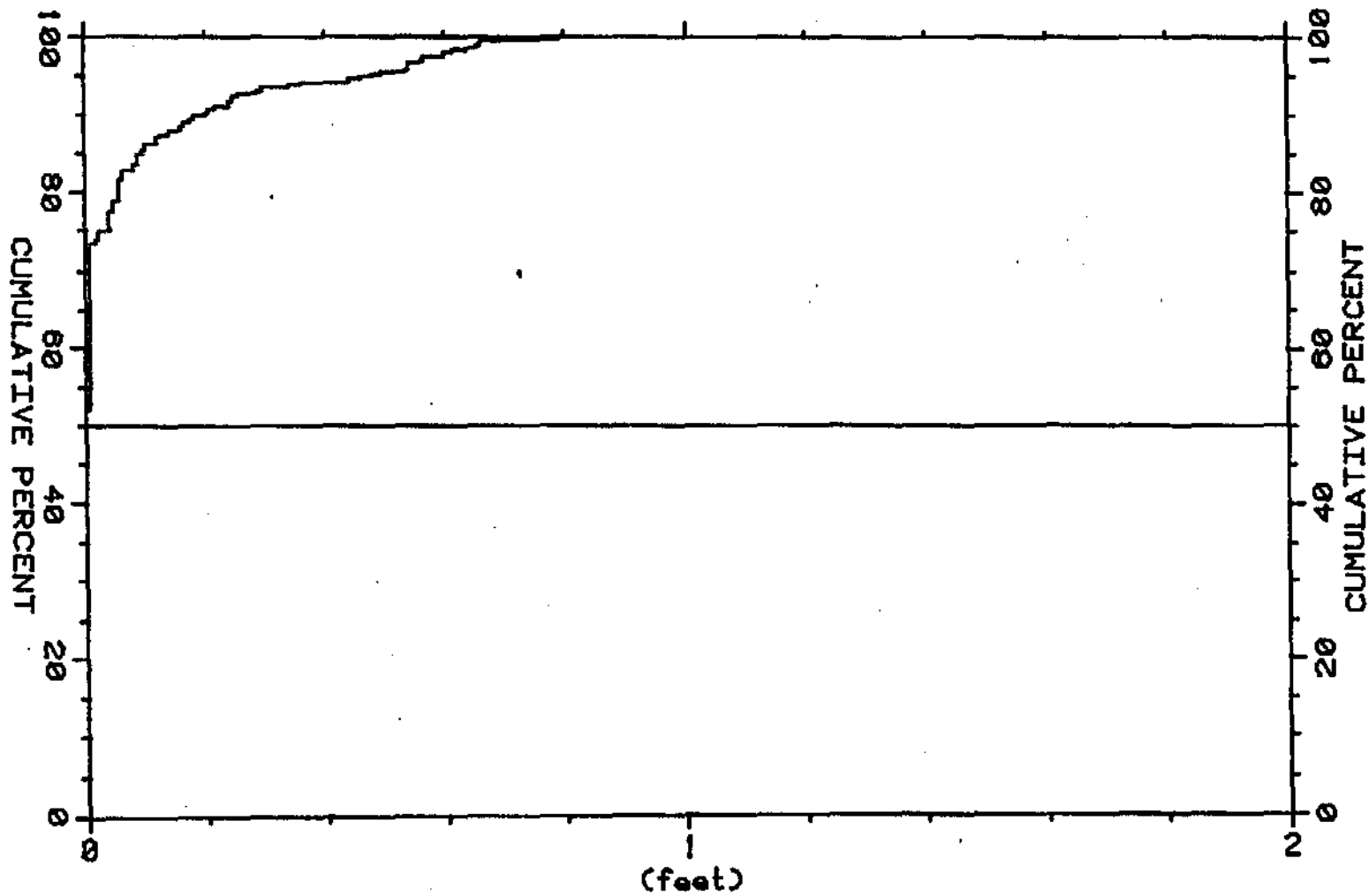


FIGURE B54

CUMULATIVE PROBABILITY PLOT
SIGNIFICANT WAVE HEIGHT
POINT THOMSON STATION SP
1810, 4 SEPTEMBER TO 0210, 31 OCTOBER, 1982
339 DATA POINTS

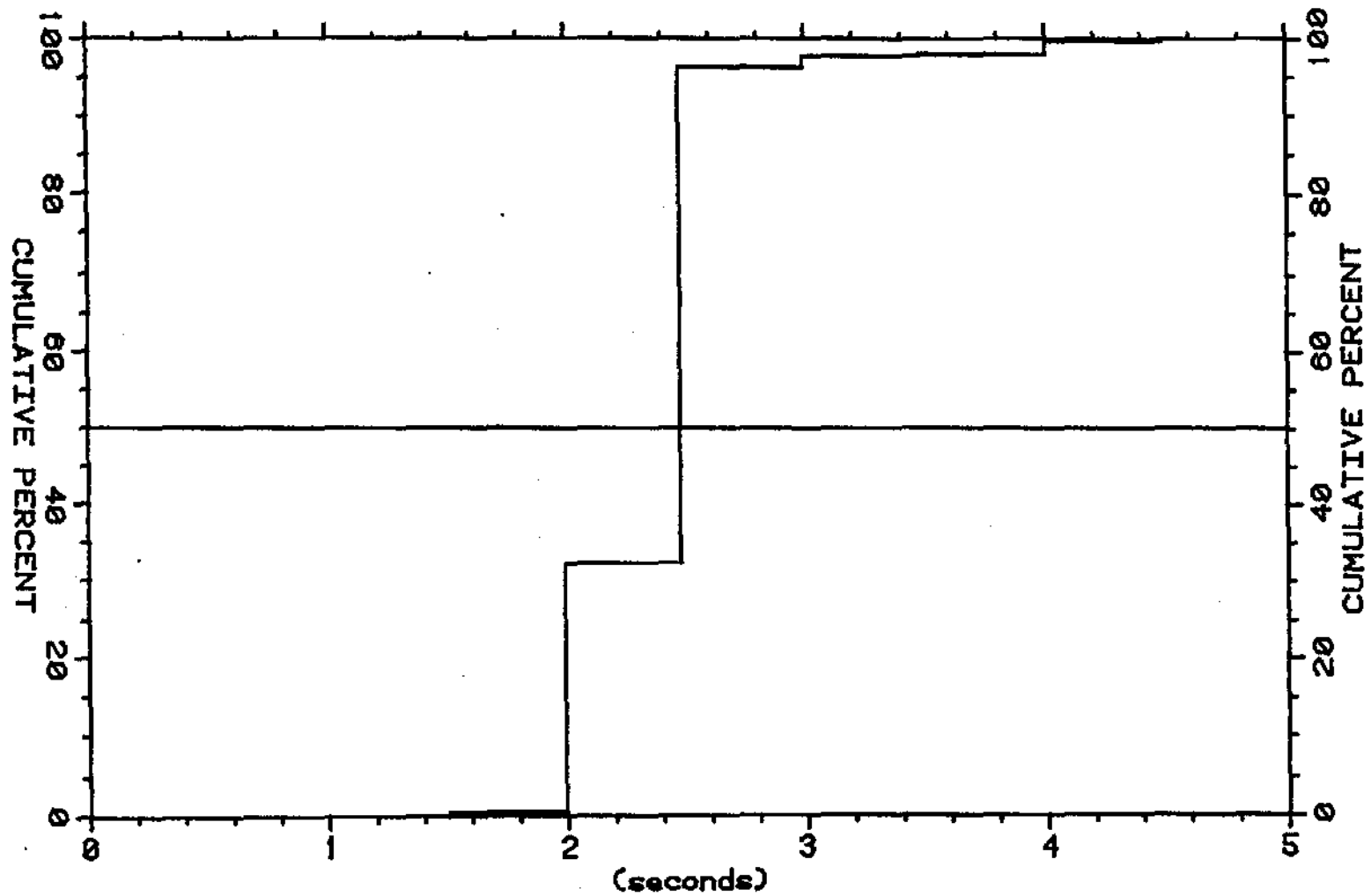


FIGURE B55, CUMULATIVE PROBABILITY PLOT
 MAXIMUM WAVE PERIOD
 POINT THOMSON STATION SP
 1810, 4 SEPTEMBER TO 0210, 31 OCTOBER, 1982
 317 DATA POINTS

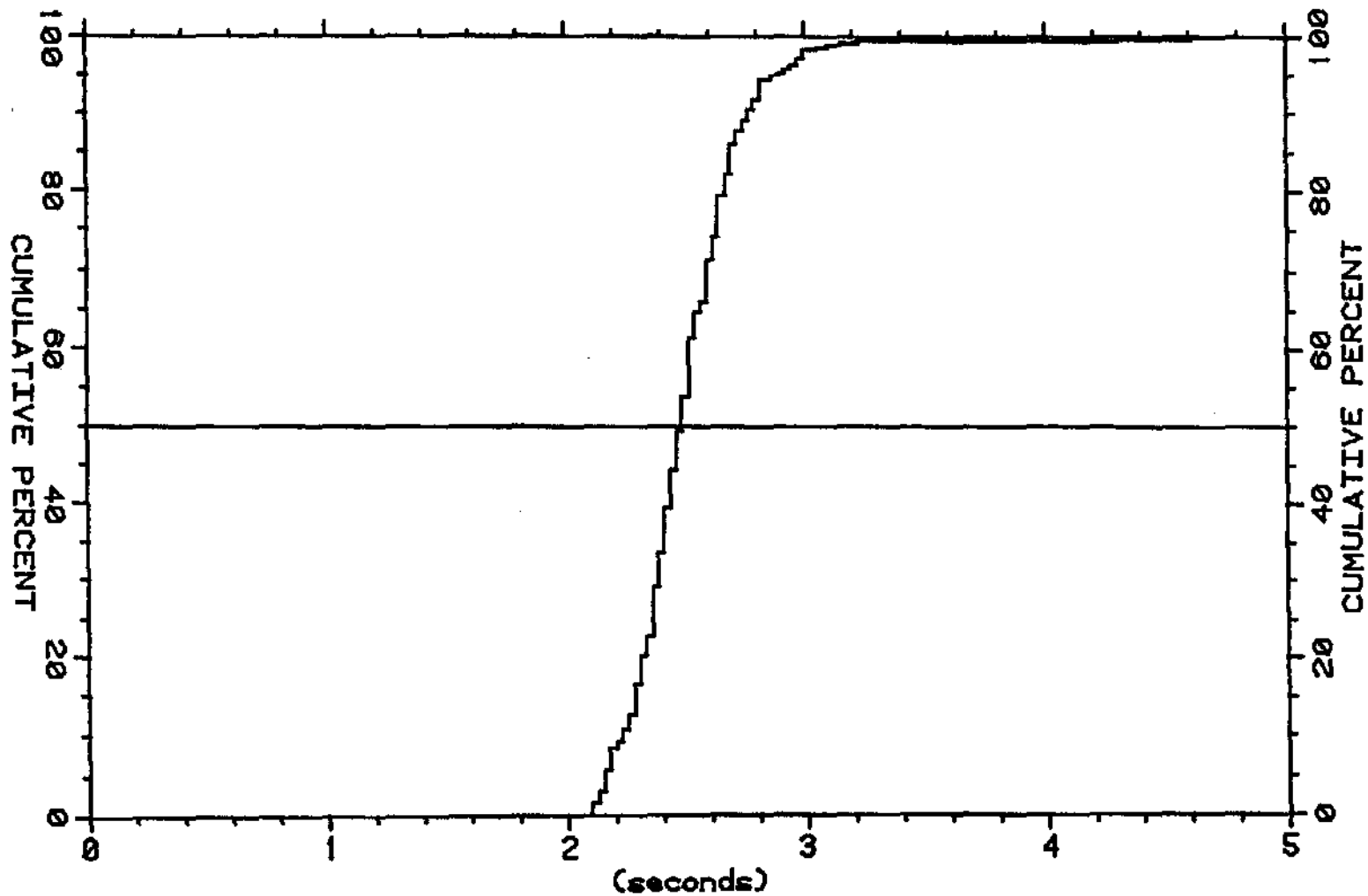
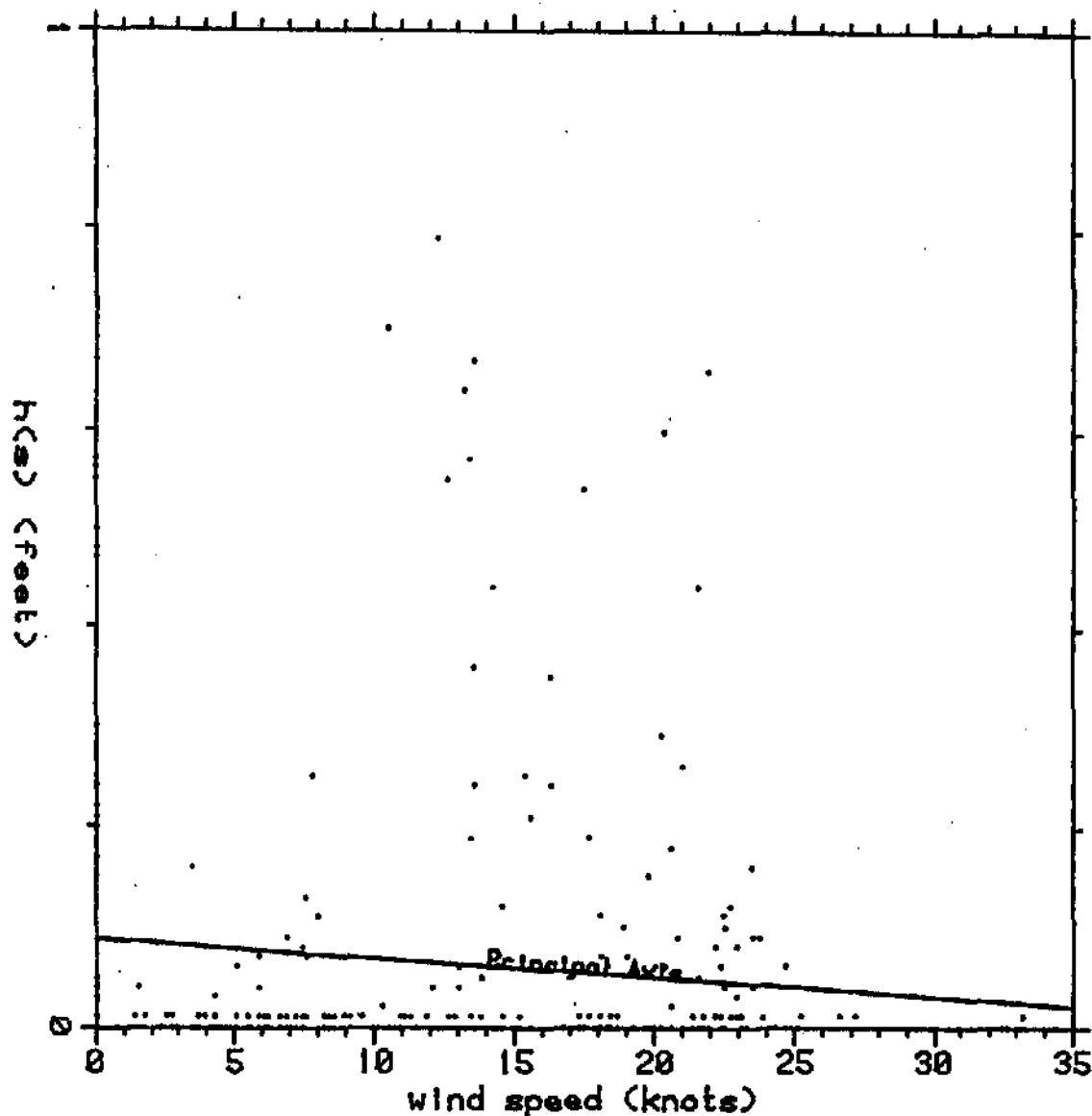


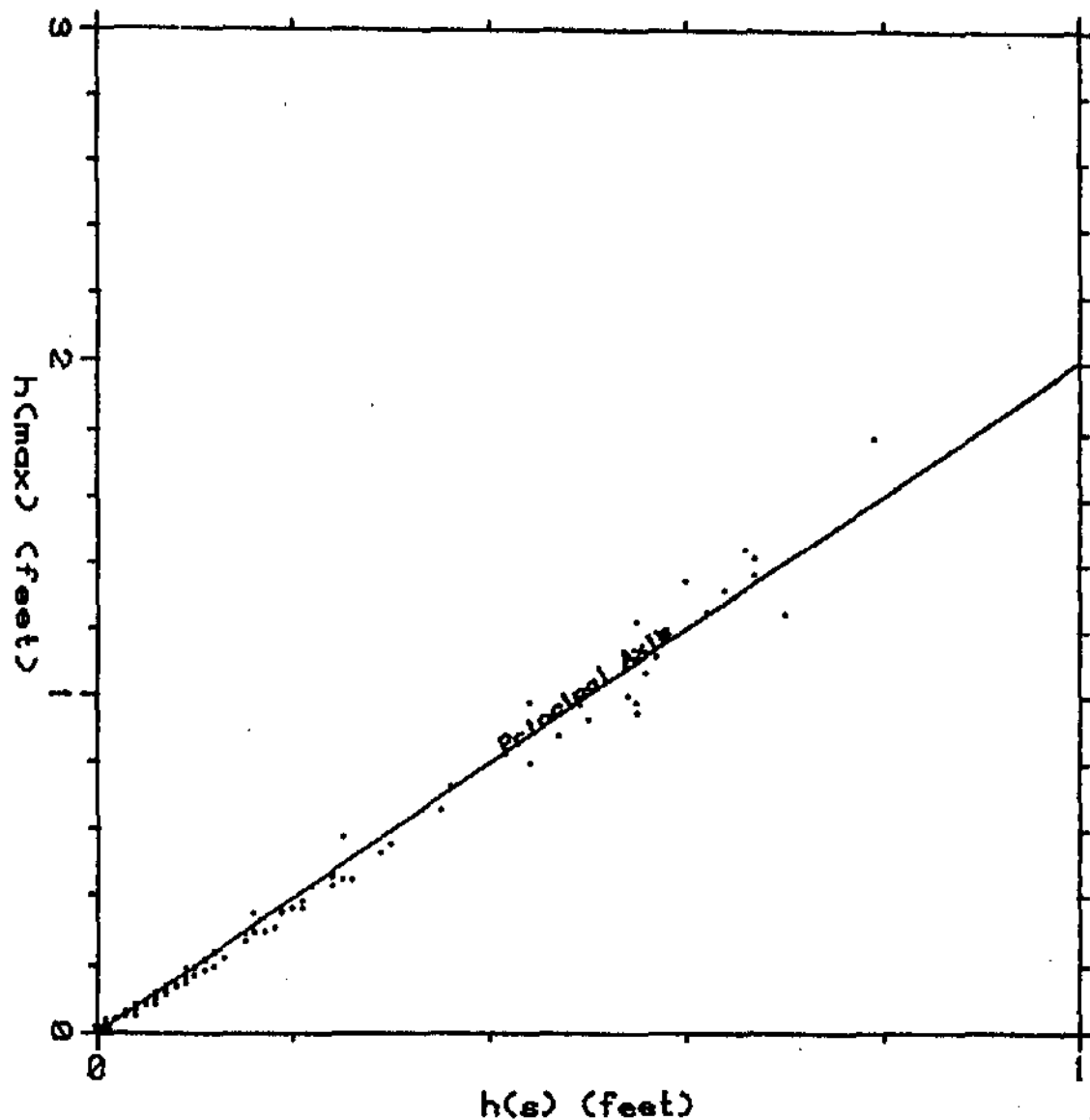
FIGURE B56, CUMULATIVE PROBABILITY PLOT
SIGNIFICANT WAVE PERIOD
POINT THOMSON STATION SP
1810, 4 SEPTEMBER TO 0210, 31 OCTOBER, 1982
338 DATA POINTS



Statistics:
 322 data points
 time interval = 4.000 hours
 Wind speed:
 Mean = 12.47
 Std. Dev. = 8.31
 H(s):
 Mean = 0.06
 Std. Dev. = 0.15
 Covariance = -0.13
 Correlation = -0.104
 Principal axis:
 Slope = -0.002
 Intercept = 0.086

FIGURE B57, SCATTER PLOT
 WIND SPEED VS. H(S)
 CHALLENGE ISLAND WEATHER STATION VS. PT. THOMSON STATION SP
 1805, 4 SEPTEMBER TO 0605, 28 OCTOBER, 1982

B-77



Statistics:

339 data points
time interval = 4.000 hours

$H(s)$:

Mean = 0.06
Std. Dev. = 0.14

$H(max)$:

Mean = 0.12
Std. Dev. = 0.29

Covariance = 0.04
Correlation = 0.995

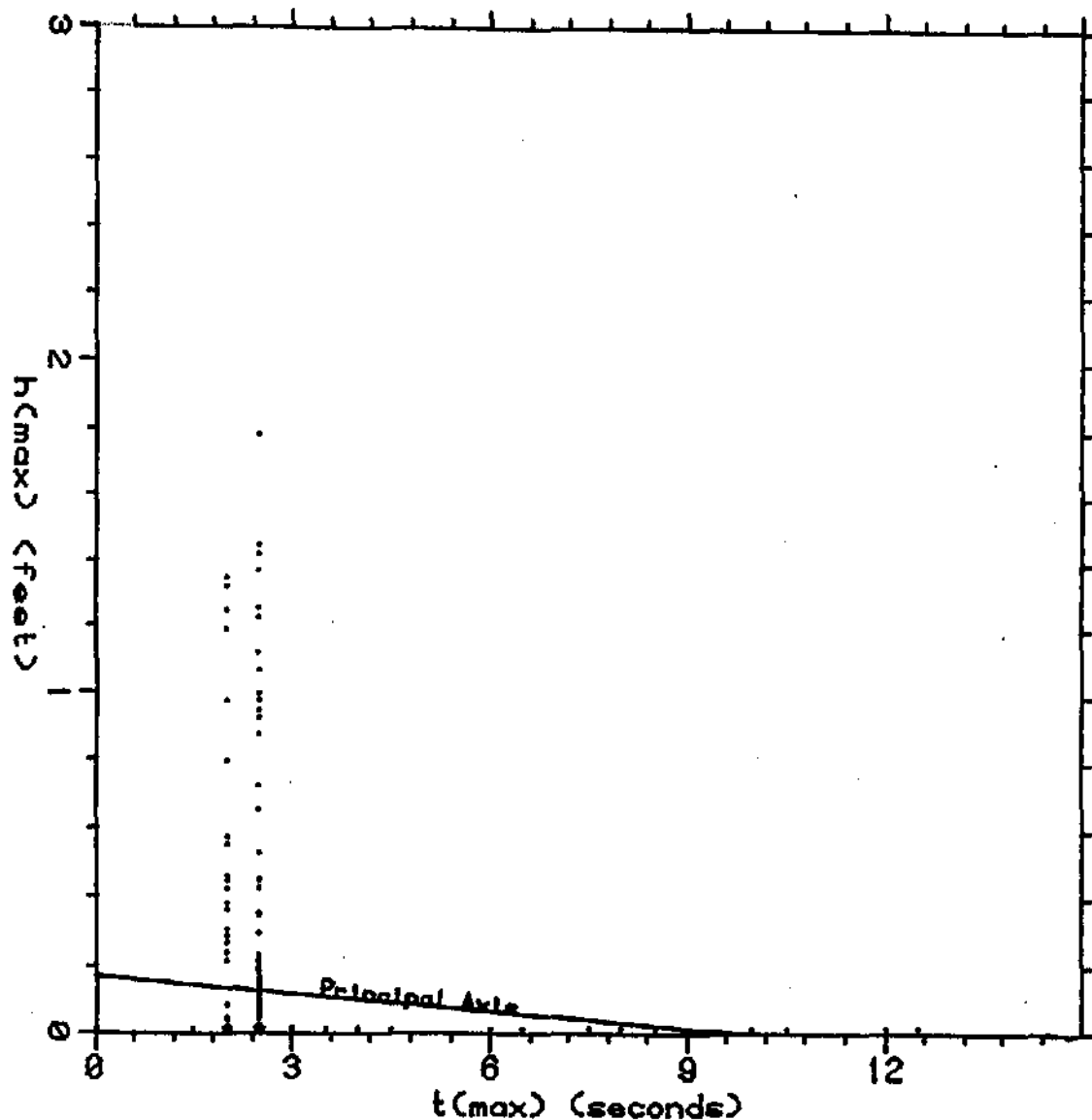
Principal axis:

Slope = 2.012
Intercept = -0.000

FIGURE B58

SCATTER PLOT
 $H(S)$ VS. $H(MAX)$
POINT THOMSON STATION SP
1810, 4 SEPTEMBER TO 0210, 31 OCTOBER, 1982

B-78



Statistics:

339 data points
time interval = 4.000 hours

T(max):

Mean = 2.71

Std. Dev. = 1.58

H(max):

Mean = 0.12

Std. Dev. = 0.29

Covariance = -0.04

Correlation = -0.089

Principal axis:

Slope = -0.017

Intercept = 0.167

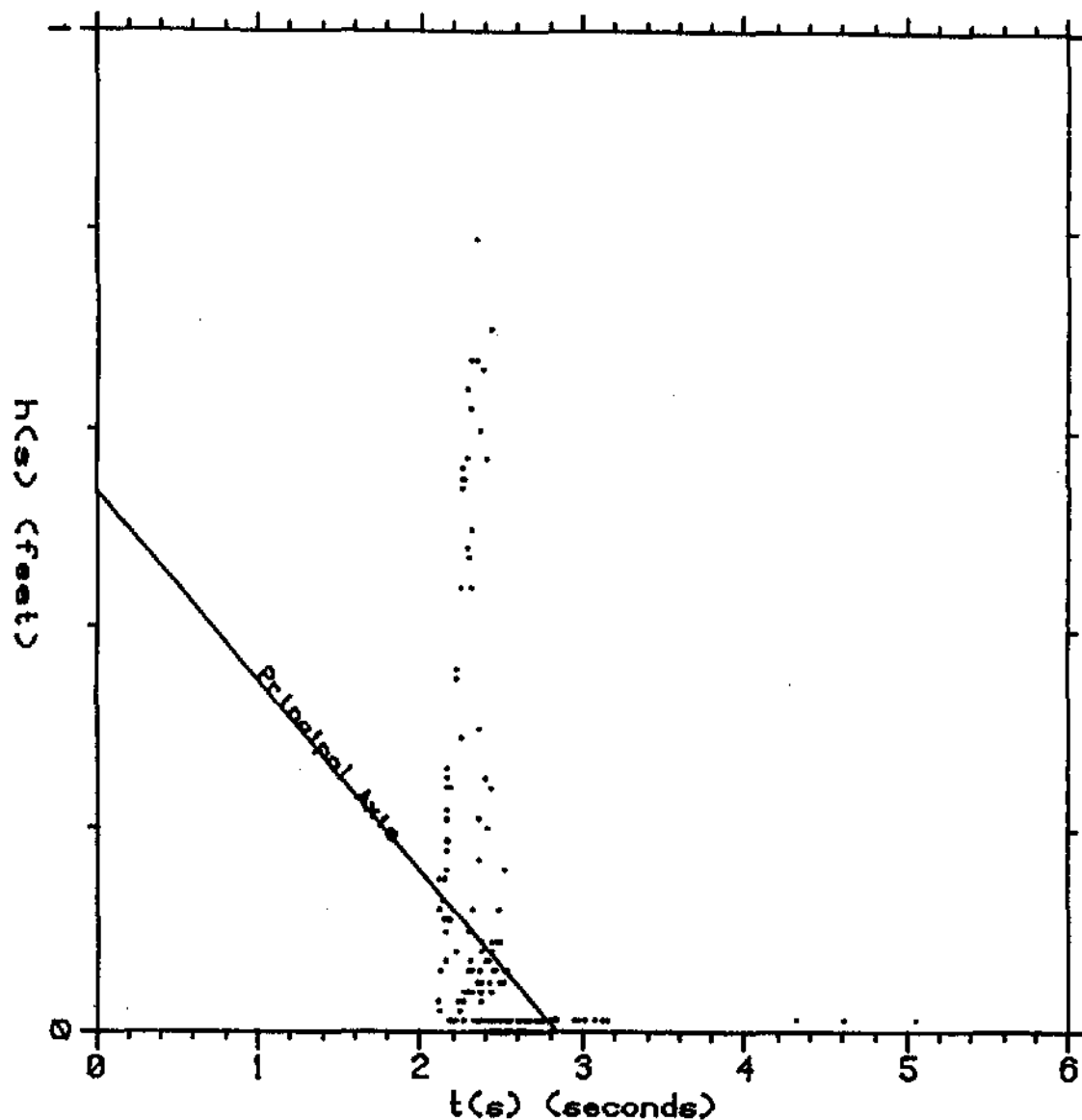
FIGURE B59

SCATTER PLOT

T(MAX) VS. H(MAX)

POINT THOMSON STATION SP

1810, 4 SEPTEMBER TO 0210, 31 OCTOBER, 1982



Statistics:

339 data points
time interval = 4.000 hours

T(s):

Mean = 2.52

Std. Dev. = 0.29

H(s):

Mean = 0.06

Std. Dev. = 0.14

Covariance = -0.01

Correlation = -0.296

Principal axis:

Slope = -0.189

Intercept = 0.536

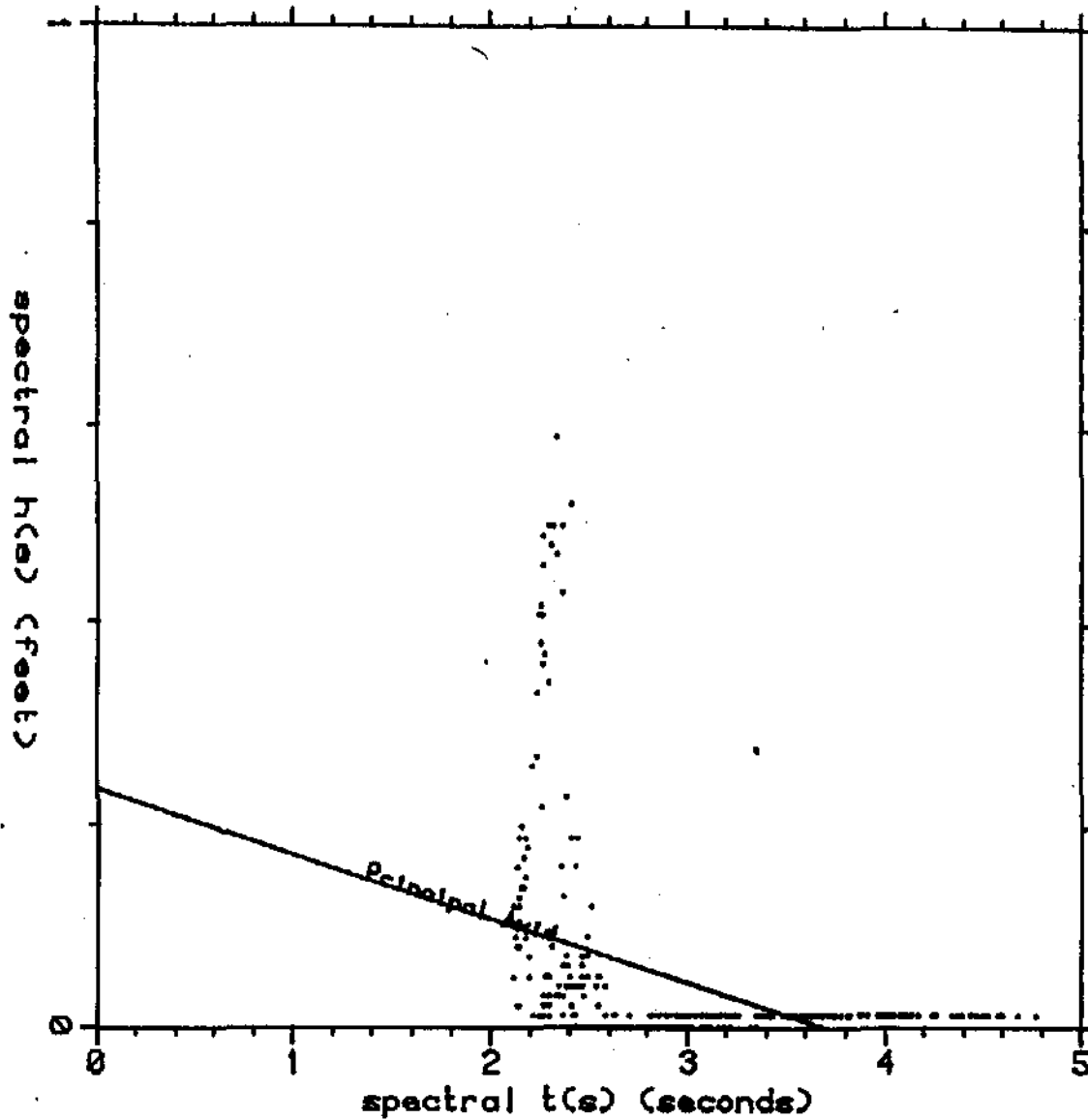
FIGURE B60

SCATTER PLOT
T(S) VS. H(S)

POINT THOMSON STATION SP

1810, 4 SEPTEMBER TO 0210, 31 OCTOBER, 1982

B-80



Statistics:

339 data points
time interval = 4.000 hours

Spectral t(s):

Mean = 2.93

Std. Dev. = 0.65

Spectral h(s):

Mean = 0.05

Std. Dev. = 0.11

Covariance = -0.03

Correlation = -0.371

Principal axis:

Slope = -0.064

Intercept = 0.236

FIGURE B61

SCATTER PLOT

SPECTRAL T(S) VS. SPECTRAL H(S)

POINT THOMSON STATION SP

1810, 4 SEPTEMBER TO 0210, 31 OCTOBER, 1982

Frequencies:

| h (max) range (feet) | | t (max) range (seconds) | | | | | | | | | | | | | | | | | total |
|----------------------|------|-------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-----------|-----|-------|
| | | 2.00 2.10 | 2.10 2.20 | 2.20 2.30 | 2.30 2.40 | 2.40 2.50 | 2.50 2.60 | 2.60 2.70 | 2.70 2.80 | 2.80 2.90 | 2.90 3.00 | 3.00 3.10 | 3.10 3.20 | 3.20 3.30 | 3.30 3.40 | 3.40 3.50 | 3.50 > | | |
| 1.00- | 1.10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1.10- | 1.20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1.20- | 1.30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1.30- | 1.40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1.40- | 1.50 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | |
| 1.50- | 1.60 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | |
| 1.60- | 1.70 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | |
| 1.70- | 1.80 | 1 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 8 | |
| 1.80- | 1.90 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | |
| 1.90- | 2.00 | 1 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 9 | |
| 2.00- | 2.10 | 1 | 0 | 0 | 0 | 0 | 19 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 21 | |
| 2.10- | 2.20 | 3 | 0 | 0 | 0 | 0 | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | |
| 2.20- | 2.30 | 0 | 0 | 0 | 0 | 0 | 33 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 35 | |
| 2.30- | 2.40 | 2 | 0 | 0 | 0 | 0 | 29 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 33 | |
| 2.40- | 2.50 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 15 | |
| 2.50- | 2.60 | 0 | 0 | 0 | 0 | 0 | 14 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 15 | |
| 2.60- | 2.70 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | |
| 2.70- | 2.80 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | |
| 2.80- | 2.90 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 4 | |
| 2.90- | 3.00 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | |
| 3.00- | 3.10 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | |
| 3.10- | 3.20 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 4 | |
| 3.20- | 3.30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 3.30- | 3.40 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 4 | |
| 3.40- | 3.50 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 3.50- | 3.60 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | |
| 3.60- | 3.70 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 3.70- | 3.80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | |
| 3.80- | 3.90 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 2 | |
| 3.90- | 4.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 4.00- | 4.10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 2 | |
| 4.10- | 4.20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | |
| 4.20- | 4.30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 4.30- | 4.40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | |
| 4.40- | 4.50 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 4.50- | 4.60 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 4.60- | 4.70 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 4.70- | 4.80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 4.80- | 4.90 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 4.90- | 5.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | |
| > | 5.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| total | | 9 | 0 | 0 | 0 | 0 | 163 | 0 | 0 | 0 | 0 | 25 | 0 | 0 | 0 | 0 | 3 | 200 | |

total time period spanned (hours) = 796
 sample interval (hours) = 4
 total possible observations = 200
 actual observations = 200

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Table B2. PT. THOMSON STATION Q - SIGNIFICANT WAVE HEIGHT VS. SIGNIFICANT WAVE PERIOD
0550, 2 AUGUST TO 0950, 4 SEPTEMBER, 1982

Frequencies:

| h (s) range (feet) | t (s) range (seconds) | | | | | | | | | | | | | total | |
|--------------------------|-----------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-----------|-------|-----|
| | 2.00 2.10 | 2.10 2.20 | 2.20 2.30 | 2.30 2.40 | 2.40 2.50 | 2.50 2.60 | 2.60 2.70 | 2.70 2.80 | 2.80 2.90 | 2.90 3.00 | 3.00 3.10 | 3.10 3.20 | > 3.20 | | |
| 0.00- 0.10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0.10- 0.20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0.20- 0.30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0.30- 0.40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0.40- 0.50 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 0.50- 0.60 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 0.60- 0.70 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 0.70- 0.80 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 0.80- 0.90 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 0.90- 1.00 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 1.00- 1.10 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 1.10- 1.20 | 0 | 0 | 0 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 |
| 1.20- 1.30 | 0 | 0 | 0 | 0 | 30 | 5 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 36 |
| 1.30- 1.40 | 0 | 0 | 0 | 0 | 92 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 96 |
| 1.40- 1.50 | 0 | 0 | 0 | 0 | 14 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 |
| 1.50- 1.60 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 1.60- 1.70 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 1.70- 1.80 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 1.80- 1.90 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 1.90- 2.00 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 2.00- 2.10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 4 |
| 2.10- 2.20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 0 | 0 | 0 | 0 | 4 |
| 2.20- 2.30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2.30- 2.40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2.40- 2.50 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 4 |
| 2.50- 2.60 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2.60- 2.70 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| 2.70- 2.80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| 2.80- 2.90 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2.90- 3.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 3.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| total | 0 | 0 | 0 | 0 | 152 | 21 | 7 | 8 | 3 | 4 | 2 | 3 | 0 | 0 | 200 |

total time period spanned (hours) = 796
sample interval (hours) = 4
total possible observations = 200
actual observations = 200

Table B3. PT. THOMSON STATION Q - SPECTRAL SIGNIFICANT WAVE HEIGHT VS. SIGNIFICANT PERIOD

0550, 2 AUGUST TO 0950, 4 SEPTEMBER, 1982

Frequencies:

| spec. h(s) range (feet) | spec. t(s) range (seconds) | | | | | | | | | | | | | | | | total |
|-------------------------------|----------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-----------|-------|
| | 2.00 2.10 | 2.10 2.20 | 2.20 2.30 | 2.30 2.40 | 2.40 2.50 | 2.50 2.60 | 2.60 2.70 | 2.70 2.80 | 2.80 2.90 | 2.90 3.00 | 3.00 3.10 | 3.10 3.20 | 3.20 3.30 | 3.30 3.40 | 3.40 3.50 | > 3.50 | |
| 1.00- 1.10 f | 0 | 0 | 0 | 0 | 122 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 122 |
| 1.10- 1.20 f | 0 | 0 | 0 | 0 | 38 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 45 |
| 1.20- 1.30 f | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 1.30- 1.40 f | 0 | 0 | 0 | 0 | 0 | 6 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| 1.40- 1.50 f | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 1.50- 1.60 f | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 1.60- 1.70 f | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 1.70- 1.80 f | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 1.80- 1.90 f | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 1.90- 2.00 f | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 2.00- 2.10 f | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 2 |
| 2.10- 2.20 f | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2.20- 2.30 f | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2.30- 2.40 f | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| 2.40- 2.50 f | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 2.50 f | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| total f | 0 | 0 | 0 | 0 | 160 | 16 | 9 | 5 | 3 | 5 | 1 | 0 | 1 | 0 | 0 | 0 | 200 |

total time period spanned (hours) = 796

sample interval (hours) = 4

total possible observations = 200

actual observations = 200

Table B4. SIGNIFICANT WAVE HEIGHT PERSISTENCE - PT. THOMSON STATION Q
0550, 2 AUGUST TO 0950, 4 SEPTEMBER, 1982

| feet | PERCENT DURATION | | | | | | | | | | | TOTAL SAMPLES | |
|-------|------------------|------|------|------|------|------|------|------|-----|-----|------|------------------|------|
| | >3h | >6h | >12h | >18h | >24h | >36h | >2d | >4d | >6d | >8d | >10d | | >12d |
| >1 | 96.9 | 93.7 | 87.4 | 81.4 | 75.8 | 67.1 | 58.3 | 26.8 | 7.1 | | | | 769 |
| >1.25 | 85.0 | 71.7 | 50.7 | 36.7 | 27.9 | 18.2 | 10.3 | | | | | | 654 |
| >1.5 | 89.3 | 80.6 | 68.9 | 57.3 | 45.6 | 22.3 | 8.7 | | | | | | 103 |
| >1.75 | 92.1 | 84.2 | 68.4 | 52.6 | 36.8 | 10.5 | | | | | | | 76 |
| >2 | 83.6 | 67.3 | 34.5 | 16.4 | 5.5 | | | | | | | | 55 |
| >2.25 | 76.0 | 52.0 | 8.0 | | | | | | | | | | 25 |
| >2.5 | 45.5 | 9.1 | | | | | | | | | | | 11 |
| >2.75 | | | | | | | | | | | | | 1 |

largest screened value = 2.75 feet
total time period spanned (hours) = 796
sample interval (hours) = 1
total possible samples = 797
actual samples = 797

Table B5. SPECTRAL SIGNIFICANT WAVE HEIGHT PERSISTENCE - PT. THOMSON STATION Q
0550, 2 AUGUST TO 0950, 4 SEPTEMBER, 1982

| feet | PERCENT DURATION | | | | | | | | | | | | TOTAL SAMPLES | |
|-------|------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------------------|-----|
| | >3h | >6h | >12h | >18h | >24h | >36h | >2d | >4d | >6d | >8d | >10d | >12d | | |
| >.5 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 797 |
| >.75 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 797 |
| >1 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 797 |
| >1.25 | 80.6 | 71.0 | 61.5 | 52.9 | 42.9 | 22.7 | 12.6 | | | | | | | 124 |
| >1.5 | 81.3 | 64.1 | 35.9 | 18.8 | 9.4 | | | | | | | | | 64 |
| >1.75 | 70.0 | 46.7 | 10.0 | | | | | | | | | | | 30 |
| >2 | | | | | | | | | | | | | | 8 |
| >2.25 | | | | | | | | | | | | | | 1 |

largest screened value = 2.37 feet
total time period spanned (hours) = 796
sample interval (hours) = 1
total possible samples = 797
actual samples = 797

Table B6. PT. THOMSON STATION Y - MAXIMUM WAVE HEIGHT VS. ASSOCIATED PERIOD
2015, 27 JULY TO 2015, 2 SEPTEMBER, 1982

Frequencies:

| h (max) range (feet) | t (max) range (seconds) | | | | | | | | | | | | | | | | | total |
|----------------------------|-------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-----------|---|-------|
| | 2.00 2.10 | 2.10 2.20 | 2.20 2.30 | 2.30 2.40 | 2.40 2.50 | 2.50 2.60 | 2.60 2.70 | 2.70 2.80 | 2.80 2.90 | 2.90 3.00 | 3.00 3.10 | 3.10 3.20 | 3.20 3.30 | 3.30 3.40 | 3.40 3.50 | > 3.50 | | |
| 1.00- 1.10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1.10- 1.20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1.20- 1.30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1.30- 1.40 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1.40- 1.50 | 1 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1.50- 1.60 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1.60- 1.70 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1.70- 1.80 | 2 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | |
| 1.80- 1.90 | 5 | 0 | 0 | 0 | 0 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1.90- 2.00 | 9 | 0 | 0 | 0 | 0 | 31 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | |
| 2.00- 2.10 | 7 | 0 | 0 | 0 | 0 | 35 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 2.10- 2.20 | 13 | 0 | 0 | 0 | 0 | 32 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 2.20- 2.30 | 5 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 2.30- 2.40 | 2 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 2.40- 2.50 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 2.50- 2.60 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 2.60- 2.70 | 1 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 2.70- 2.80 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 2.80- 2.90 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 2.90- 3.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 3.00- 3.10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 3.10- 3.20 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 3.20- 3.30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 3.30- 3.40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 3.40- 3.50 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 3.50- 3.60 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 3.60- 3.70 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| > 3.70 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| total | 45 | 0 | 0 | 0 | 0 | 170 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 2 | |

total time period spanned (hours) = 888
sample interval (hours) = 4
total possible observations = 223
actual observations = 223

Table B7. PT. THOMSON STATION Y SIGNIFICANT WAVE HEIGHT VS. SIGNIFICANT WAVE PERIOD

2015, 27 JULY TO 2015, 2 SEPTEMBER, 1982

Frequencies:

| h (m) range (feet) | t (s) range (seconds) | | | | | | | | | | | total |
|--------------------------|-----------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-----------|-------|
| | 2.00 2.10 | 2.10 2.20 | 2.20 2.30 | 2.30 2.40 | 2.40 2.50 | 2.50 2.60 | 2.60 2.70 | 2.70 2.80 | 2.80 2.90 | 2.90 3.00 | > 3.00 | |
| 0.00- 0.10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0.10- 0.20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0.20- 0.30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0.30- 0.40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0.40- 0.50 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0.50- 0.60 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 0.60- 0.70 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 0.70- 0.80 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 0.80- 0.90 | 0 | 0 | 0 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 0.90- 1.00 | 0 | 0 | 0 | 3 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 5 |
| 1.00- 1.10 | 0 | 0 | 0 | 45 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 46 |
| 1.10- 1.20 | 0 | 0 | 0 | 129 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 130 |
| 1.20- 1.30 | 0 | 0 | 0 | 1 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 5 |
| 1.30- 1.40 | 0 | 0 | 0 | 0 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 5 |
| 1.40- 1.50 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 1 | 0 | 0 | 0 | 4 |
| 1.50- 1.60 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 2 |
| 1.60- 1.70 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 2 |
| 1.70- 1.80 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 | 1 | 0 | 0 | 9 |
| 1.80- 1.90 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 2 |
| 1.90- 2.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| > 2.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| total | 0 | 0 | 0 | 185 | 15 | 6 | 8 | 6 | 1 | 2 | 0 | 223 |

total time period spanned (hours) = 888
 sample interval (hours) = 4
 total possible observations = 223
 actual observations = 223

Table B8. PT. THOMSON STATION Y - SPECTRAL SIGNIFICANT WAVE HEIGHT VS. SIGNIFICANT PERIOD

2015, 27 JULY TO 2015, 2 SEPTEMBER, 1982

Frequencies:

| spec. h(s) range (feet) | spec. t(s) range (feet) | | | | | | | | | | | total |
|-------------------------------|-------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-----------|-------|
| | 2.00 2.10 | 2.10 2.20 | 2.20 2.30 | 2.30 2.40 | 2.40 2.50 | 2.50 2.60 | 2.60 2.70 | 2.70 2.80 | 2.80 2.90 | 2.90 3.00 | > 3.00 | |
| 0.00- 0.10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0.10- 0.20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0.20- 0.30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0.30- 0.40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0.40- 0.50 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0.50- 0.60 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0.60- 0.70 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0.70- 0.80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0.80- 0.90 | 0 | 0 | 0 | 155 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 155 |
| 0.90- 1.00 | 0 | 0 | 0 | 32 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 36 |
| 1.00- 1.10 | 0 | 0 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| 1.10- 1.20 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 4 |
| 1.20- 1.30 | 0 | 0 | 0 | 0 | 0 | 2 | 3 | 0 | 0 | 0 | 0 | 5 |
| 1.30- 1.40 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 1 | 0 | 0 | 0 | 9 |
| 1.40- 1.50 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 3 |
| 1.50- 1.60 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1.60- 1.70 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1.70- 1.80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1.80- 1.90 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1.90- 2.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 2.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| total | 0 | 0 | 0 | 187 | 15 | 6 | 11 | 3 | 1 | 0 | 0 | 223 |

total time period spanned (hours) = 888
 sample interval (hours) = 4
 total possible observations = 223
 actual observations = 223

Table B9. SIGNIFICANT WAVE HEIGHT PERSISTENCE - PT. THOMSON STATION Y
2015, 257 JULY TO 2015, 2 SEPTEMBER, 1982

| feet | PERCENT DURATION | | | | | | | | | | | TOTAL SAMPLES | |
|-------|------------------|------|------|------|------|------|------|------|-----|-----|------|------------------|------|
| | >3h | >6h | >12h | >18h | >24h | >36h | >2d | >4d | >6d | >8d | >10d | | >12d |
| >1 | 94.5 | 89.4 | 79.2 | 71.1 | 64.1 | 51.0 | 39.6 | 12.5 | 1.3 | | | | 820 |
| >1.25 | 82.2 | 66.4 | 48.6 | 37.4 | 26.2 | 5.6 | | | | | | | 107 |
| >1.5 | 86.2 | 72.3 | 44.6 | 20.0 | 6.2 | | | | | | | | 65 |
| >1.75 | 54.2 | 25.0 | | | | | | | | | | | 24 |
| >2 | | | | | | | | | | | | | 0 |
| >2.25 | | | | | | | | | | | | | 0 |

largest screened value = 1.94 feet
total time period spanned (hours) = 888
sample interval (hours) = 1
total possible samples = 889
actual samples = 889

Table B10. SPECTRAL SIGNIFICANT WAVE HEIGHT PERSISTENCE - PT. THOMSON STATION Y
2015, 27 JULY TO 2015, 2 SEPTEMBER, 1982

PERCENT DURATION

HOURS, DAYS DURATION

| feet | >3h | >6h | >12h | >18h | >24h | >36h | >2d | >4d | >6d | >8d | >10d | >12d | TOTAL SAMPLES |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------------------|
| >.5 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 889 |
| >.75 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 889 |
| >1 | 78.0 | 69.5 | 59.3 | 49.2 | 39.0 | 21.2 | 11.0 | | | | | | 118 |
| >1.25 | 81.8 | 65.5 | 32.7 | 5.5 | | | | | | | | | 55 |
| >1.5 | | | | | | | | | | | | | 0 |
| >1.75 | | | | | | | | | | | | | 0 |

largest screened value = 1.47 feet
total time period spanned (hours) = 888
sample interval (hours) = 1
total possible samples = 889
actual samples = 889

Table B11. PT. THOMSON STATION SP - MAXIMUM WAVE HEIGHT VS. ASSOCIATED PERIOD

1810, 4 SEPTEMBER TO 0210, 31 OCTOBER, 1982

Frequencies:

| h (max) range (feet) | t (max) range (seconds) | | | | | | | | | | | | | | | | total |
|----------------------------|-------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-----------|-------|
| | 2.00 2.10 | 2.10 2.20 | 2.20 2.30 | 2.30 2.40 | 2.40 2.50 | 2.50 2.60 | 2.60 2.70 | 2.70 2.80 | 2.80 2.90 | 2.90 3.00 | 3.00 3.10 | 3.10 3.20 | 3.20 3.30 | 3.30 3.40 | 3.40 3.50 | > 3.50 | |
| 0.00- 0.10 | 82 | 0 | 0 | 0 | 0 | 153 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 26 | 265 |
| 0.10- 0.20 | 0 | 0 | 0 | 0 | 0 | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 |
| 0.20- 0.30 | 4 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 0.30- 0.40 | 4 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| 0.40- 0.50 | 3 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 0.50- 0.60 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 0.60- 0.70 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 0.70- 0.80 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 0.80- 0.90 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 0.90- 1.00 | 1 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 1.00- 1.10 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 1.10- 1.20 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 1.20- 1.30 | 1 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 1.30- 1.40 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 1.40- 1.50 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 1.50- 1.60 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1.60- 1.70 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1.70- 1.80 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| > 1.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| total | 101 | 0 | 0 | 0 | 0 | 204 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 26 | 335 |

total time period spanned (hours) = 1352

sample interval (hours) = 4

total possible observations = 339

actual observations = 335

Table B12. PT. THOMSON STATION SP - SIGNIFICANT WAVE HEIGHT VS. SIGNIFICANT WAVE PERIOD
1810, 4 SEPTEMBER TO 0210, 31 OCTOBER, 1982

Frequencies:

| h (s) range (feet) | t (s) range (seconds) | | | | | | | | | | | | | | | | | total |
|--------------------------|-----------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-----------|-----|-------|
| | 2.00 2.10 | 2.10 2.20 | 2.20 2.30 | 2.30 2.40 | 2.40 2.50 | 2.50 2.60 | 2.60 2.70 | 2.70 2.80 | 2.80 2.90 | 2.90 3.00 | 3.00 3.10 | 3.10 3.20 | 3.20 3.30 | 3.30 3.40 | 3.40 3.50 | > 3.50 | | |
| 0.00- 0.10 | 0 | 10 | 13 | 38 | 68 | 52 | 49 | 25 | 15 | 8 | 4 | 2 | 1 | 0 | 0 | 3 | 288 | |
| 0.10- 0.20 | 0 | 12 | 1 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | |
| 0.20- 0.30 | 0 | 6 | 1 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | |
| 0.30- 0.40 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | |
| 0.40- 0.50 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | |
| 0.50- 0.60 | 0 | 0 | 6 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | |
| 0.60- 0.70 | 0 | 0 | 1 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | |
| 0.70- 0.80 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | |
| 0.80- 0.90 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 0.90- 1.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| > 1.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| total | 0 | 28 | 26 | 51 | 74 | 53 | 49 | 25 | 15 | 8 | 4 | 2 | 1 | 0 | 0 | 3 | 339 | |

total time period spanned (hours) = 1352
sample interval (hours) = 4
total possible observations = 339
actual observations = 339

Table B13. PT. THOMSON STATION SP - SPECTRAL SIGNIFICANT WAVE HEIGHT VS. SIGNIFICANT PERIOD

1810, 4 SEPTEMBER TO 0210, 31 OCTOBER, 1982

Frequencies:

| spec. h(s) range (feet) | spec. t(s) range (seconds) | | | | | | | | | | | | | | | | total |
|-------------------------------|----------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-----------|-------|
| | 2.00 2.10 | 2.10 2.20 | 2.20 2.30 | 2.30 2.40 | 2.40 2.50 | 2.50 2.60 | 2.60 2.70 | 2.70 2.80 | 2.80 2.90 | 2.90 3.00 | 3.00 3.10 | 3.10 3.20 | 3.20 3.30 | 3.30 3.40 | 3.40 3.50 | > 3.50 | |
| 0.00- 0.10 | 0 | 10 | 10 | 17 | 31 | 24 | 24 | 17 | 18 | 19 | 17 | 12 | 9 | 8 | 8 | 71 | 295 |
| 0.10- 0.20 | 0 | 12 | 0 | 3 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 |
| 0.20- 0.30 | 0 | 1 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 0.30- 0.40 | 0 | 0 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 0.40- 0.50 | 0 | 0 | 7 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| 0.50- 0.60 | 0 | 0 | 0 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 0.60- 0.70 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0.70- 0.80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0.80- 0.90 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0.90- 1.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| > 1.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| total | 0 | 23 | 24 | 29 | 35 | 25 | 24 | 17 | 18 | 19 | 17 | 12 | 9 | 8 | 8 | 71 | 339 |

total time period spanned (hours) = 1352
 sample interval (hours) = 4
 total possible observations = 339
 actual observations = 339

Table B14. SIGNIFICANT WAVE HEIGHT PERSISTENCE - PT. THOMSON STATION SP
1810, 4 SEPTEMBER TO 0210, 31 OCTOBER, 1982

| feet | PERCENT DURATION | | | | | | | | | | | TOTAL SAMPLES | |
|------|------------------|------|------|------|------|------|-----|-----|-----|-----|------|------------------|------|
| | >3h | >6h | >12h | >18h | >24h | >36h | >2d | >4d | >6d | >8d | >10d | | >12d |
| >.25 | 86.6 | 73.2 | 50.9 | 37.5 | 28.6 | 17.9 | 7.1 | | | | | | 112 |
| >.5 | 75.8 | 51.6 | 14.5 | | | | | | | | | | 62 |
| >.75 | 25.0 | | | | | | | | | | | | 4 |
| >1 | | | | | | | | | | | | | 0 |

largest screened value = .79 feet
total time period spanned (hours) = 1352
sample interval (hours) = 1
total possible samples = 1353
actual samples = 1353

Table B15.SPECTRAL SIGNIFICANT WAVE HEIGHT PERSISTENCE - PT. THOMSON STATION SP
 1810, 4 SEPTEMBER TO 0210, 31 OCTOBER, 1982

| feet | PERCENT DURATION | | | | | | | | | | | TOTAL SAMPLES | |
|-------|------------------|------|------|------|------|------|-----|-----|-----|-----|------|------------------|------|
| | >3h | >6h | >12h | >18h | >24h | >36h | >2d | >4d | >6d | >8d | >10d | | >12d |
| >.5 | 50.0 | 25.0 | | | | | | | | | | | 12 |
| >.75 | | | | | | | | | | | | | 0 |
| >1 | | | | | | | | | | | | | 0 |
| >1.25 | | | | | | | | | | | | | 0 |
| >1.5 | | | | | | | | | | | | | 0 |
| >1.75 | | | | | | | | | | | | | 0 |

largest screened value = .59 feet
 total time period spanned (hours) = 1352
 sample interval (hours) = 1
 total possible samples = 1353
 actual samples = 1353

Appendix C: Tide and Storm Surge Results

Appendix C: Tide and Storm Surge Results

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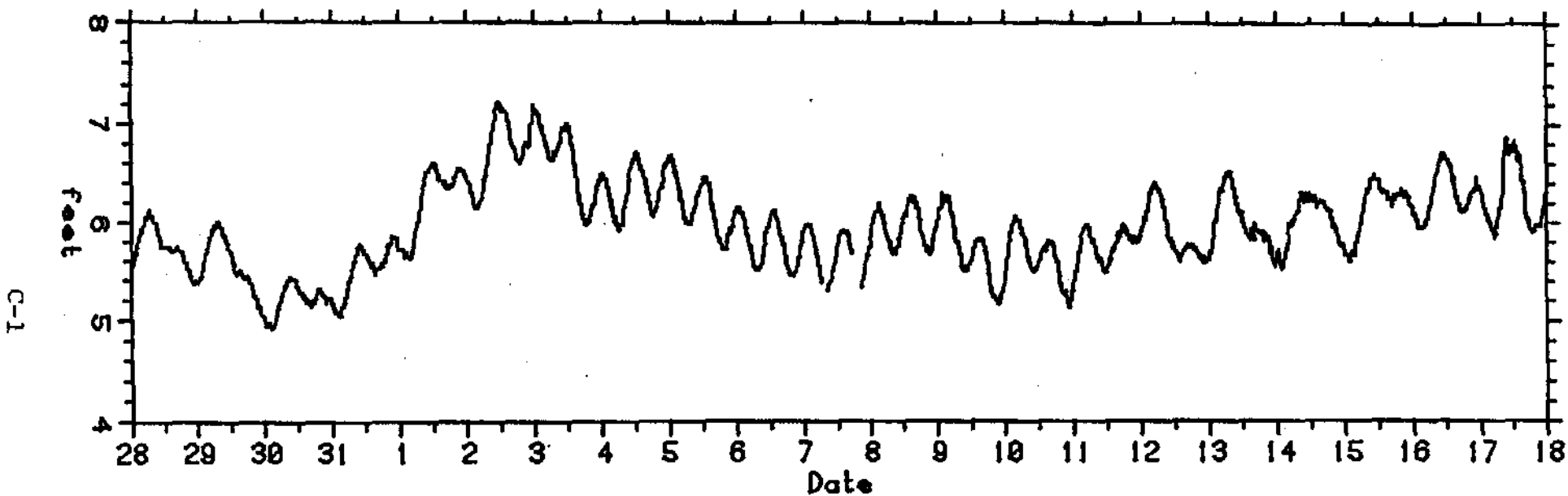


FIGURE C1

WATER DEPTH
POINT THOMSON STATION AA
0004, 29 JULY TO 2349, 17 AUGUST, 1982

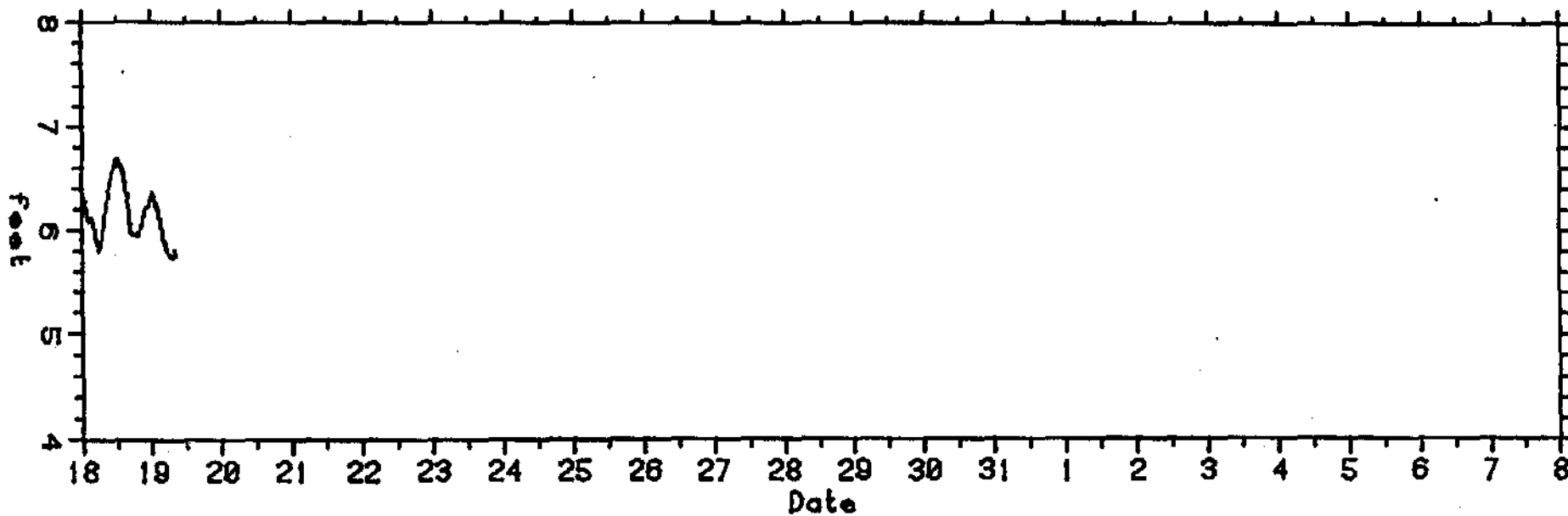


FIGURE C1 WATER DEPTH
POINT THOMSON STATION AA
0004, 18 AUGUST TO 0819, 19 AUGUST, 1982

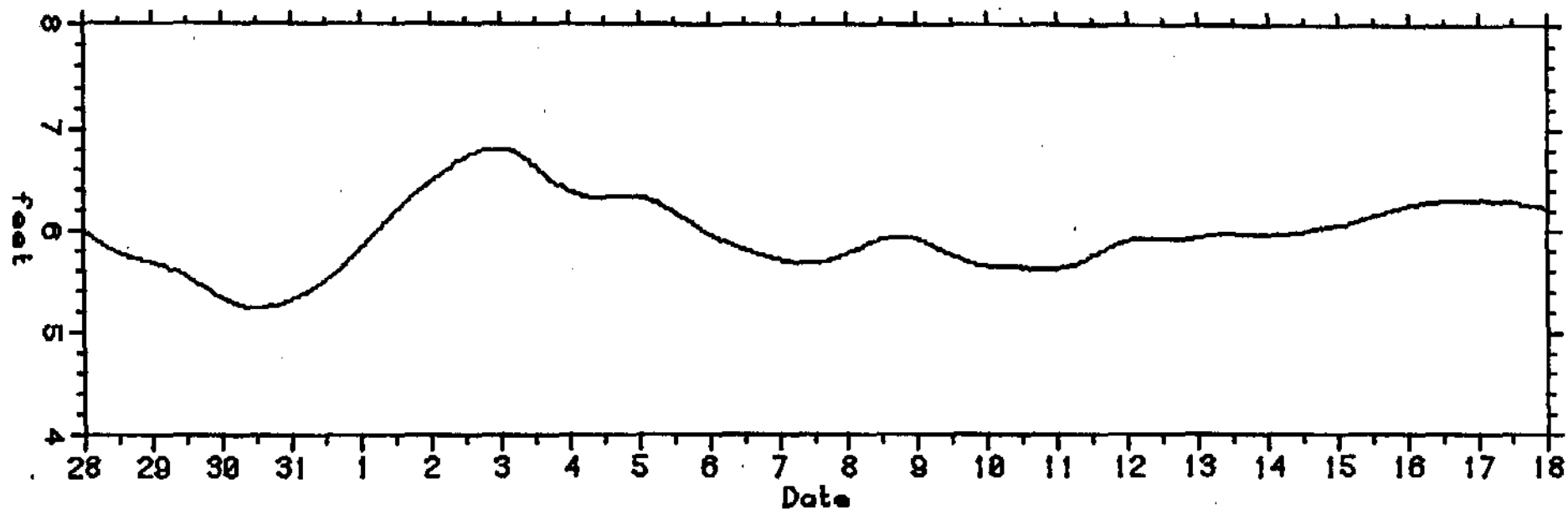


FIGURE C2

DOODSON-FILTERED AVERAGE WATER DEPTH
POINT THOMSON STATION AA
0000, 28 JULY TO 0000, 18 AUGUST, 1982

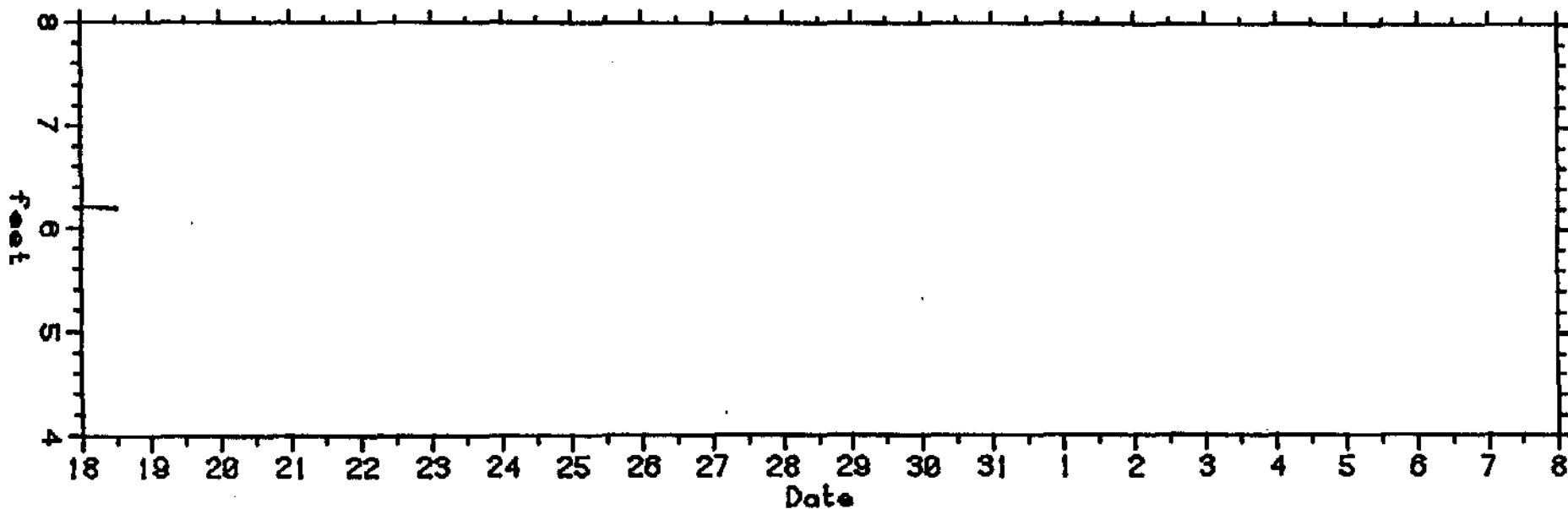


FIGURE C2 DOODSON-FILTERED AVERAGE WATER DEPTH
POINT THOMSON STATION AA
0000, 18 AUGUST TO 1200, 18 AUGUST, 1982

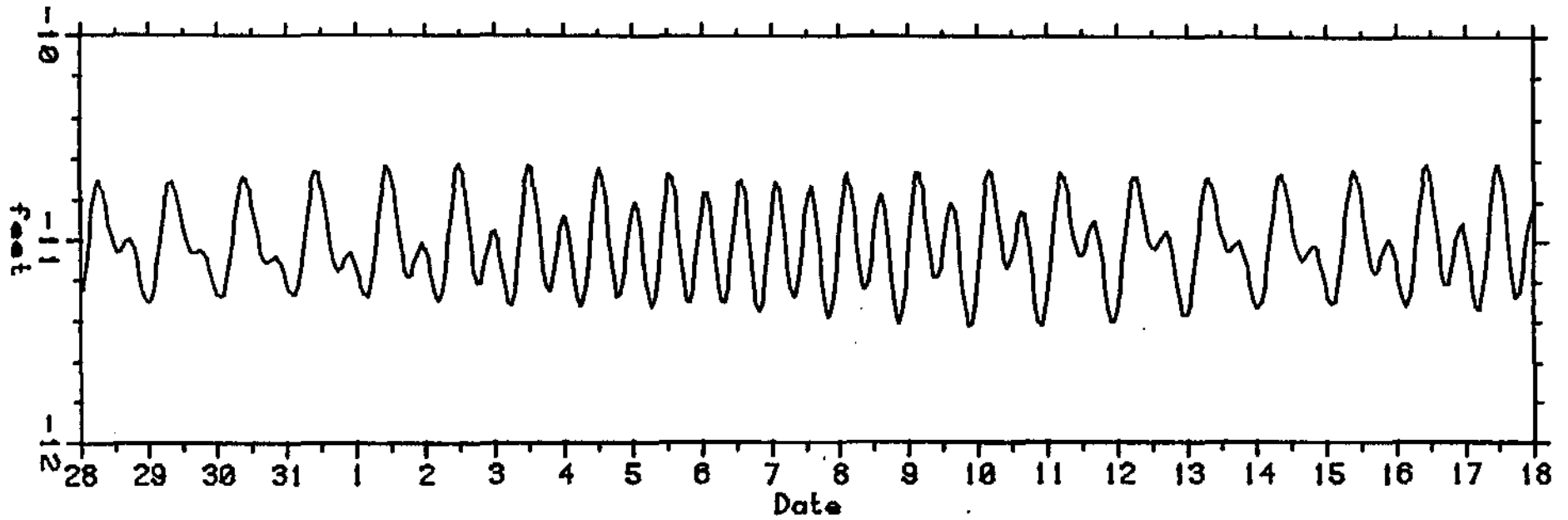


FIGURE C3 TIDE HEIGHTS
POINT THOMSON STATION AA
0059, 28 JULY TO 2359, 17 AUGUST, 1982

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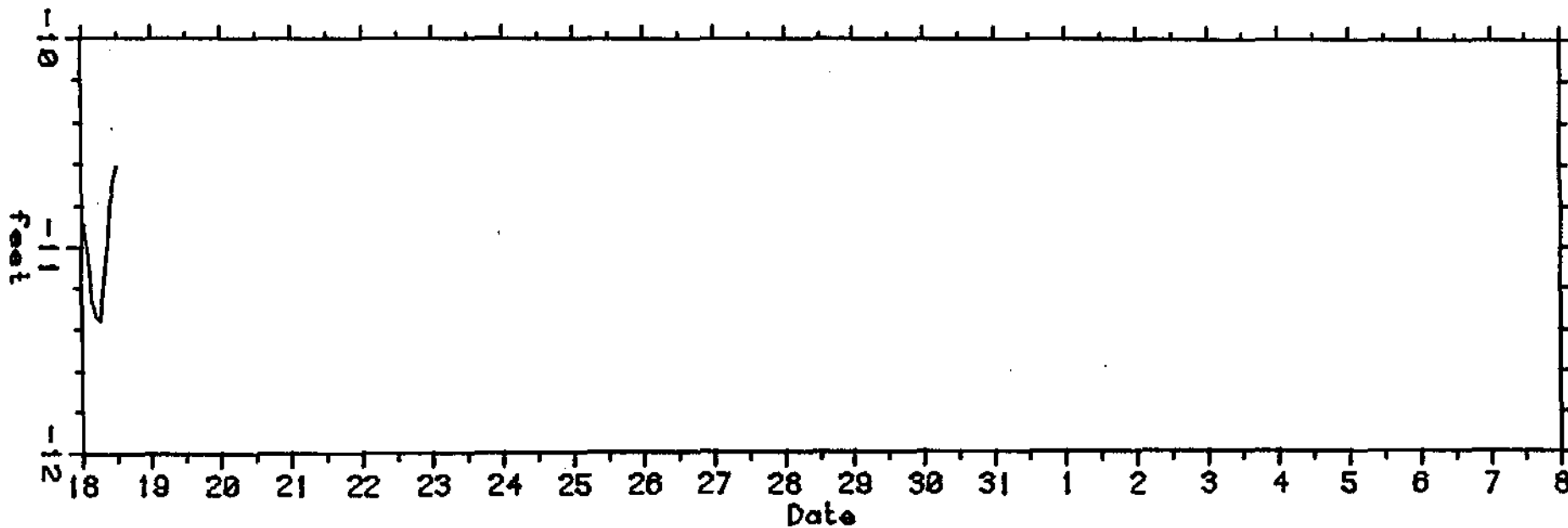


FIGURE C3 TIDE HEIGHTS
POINT THOMSON STATION AA
0059, 18 AUGUST TO 1159, 18 AUGUST, 1982

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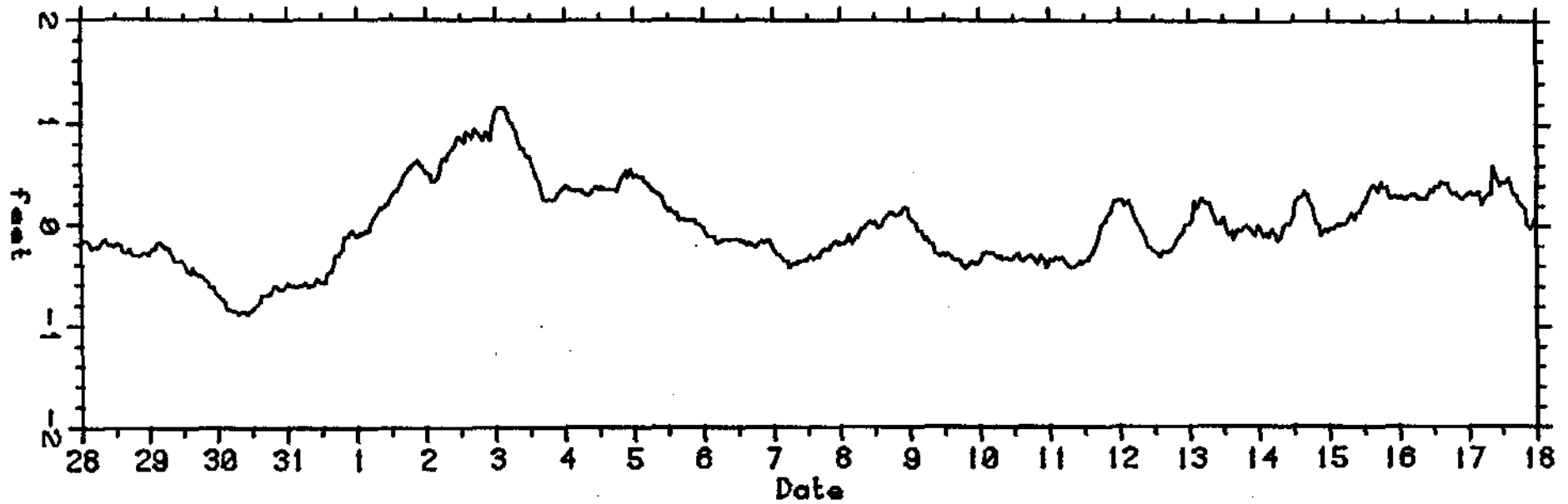


FIGURE C4

SURGE WATER DEPTH (TOTAL - TIDES)
POINT THOMSON STATION AA
0058, 28 JULY TO 2358, 17 AUGUST, 1982

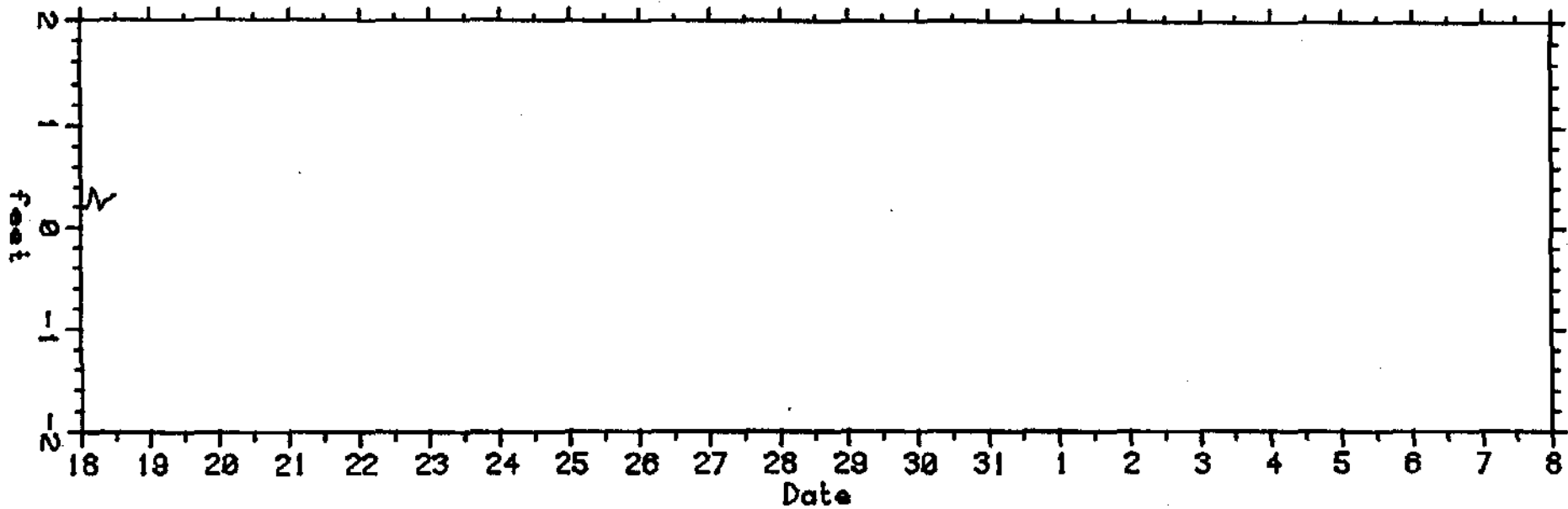


FIGURE C4

SURGE WAVE DEPTH (TOTAL - TIDES)
POINT THOMSON STATION AA
0058, 18 AUGUST TO 1158, 18 AUGUST, 1982

C-9

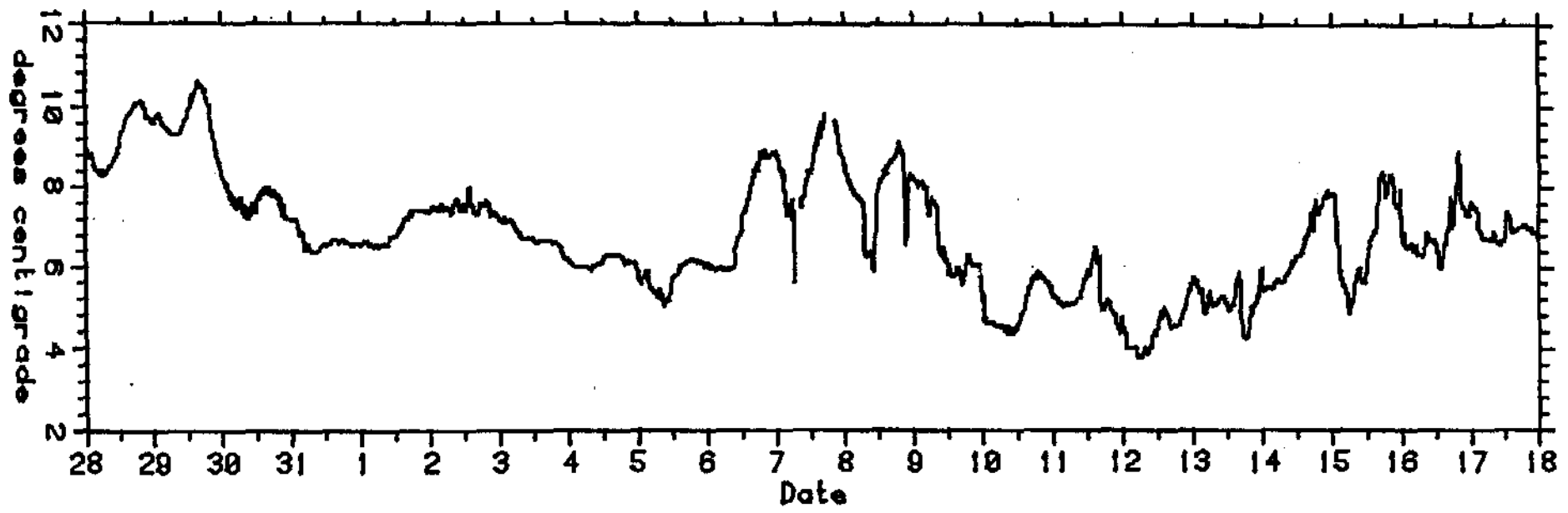


FIGURE C5

TEMPERATURE
POINT THOMSON STATION AA
0004, 29 JULY TO 2349, 17 AUGUST, 1982

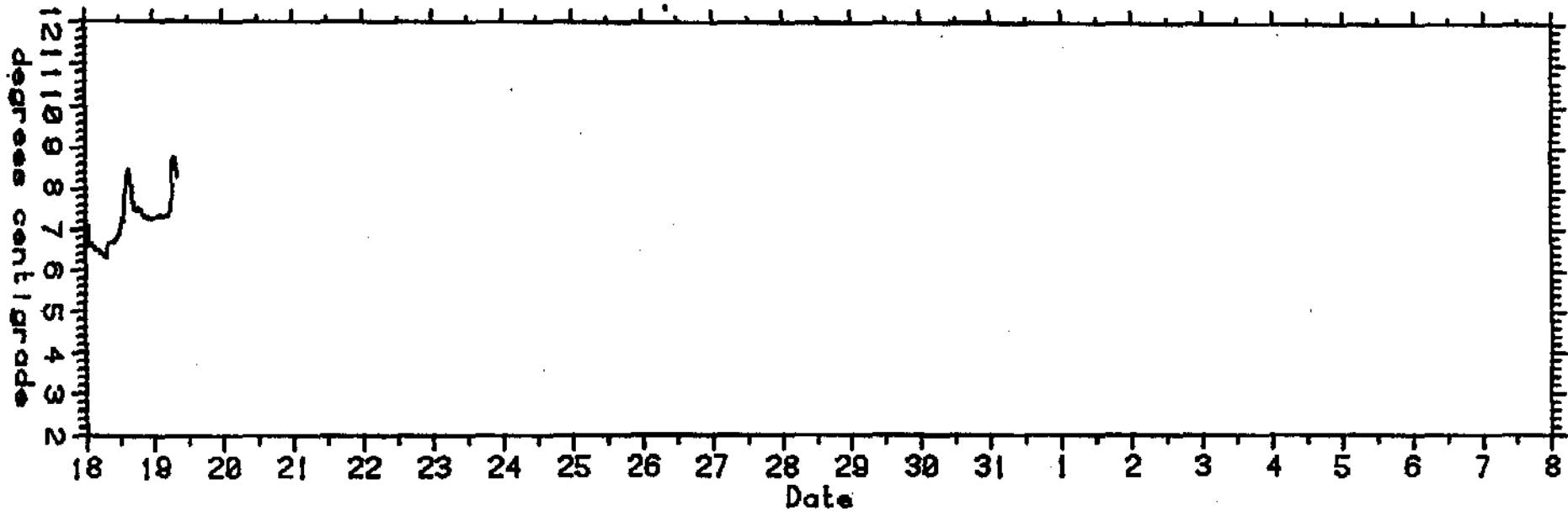


FIGURE C5

TEMPERATURE
POINT THOMSON STATION AA
0004, 18 AUGUST TO 0819, 19 AUGUST, 1982

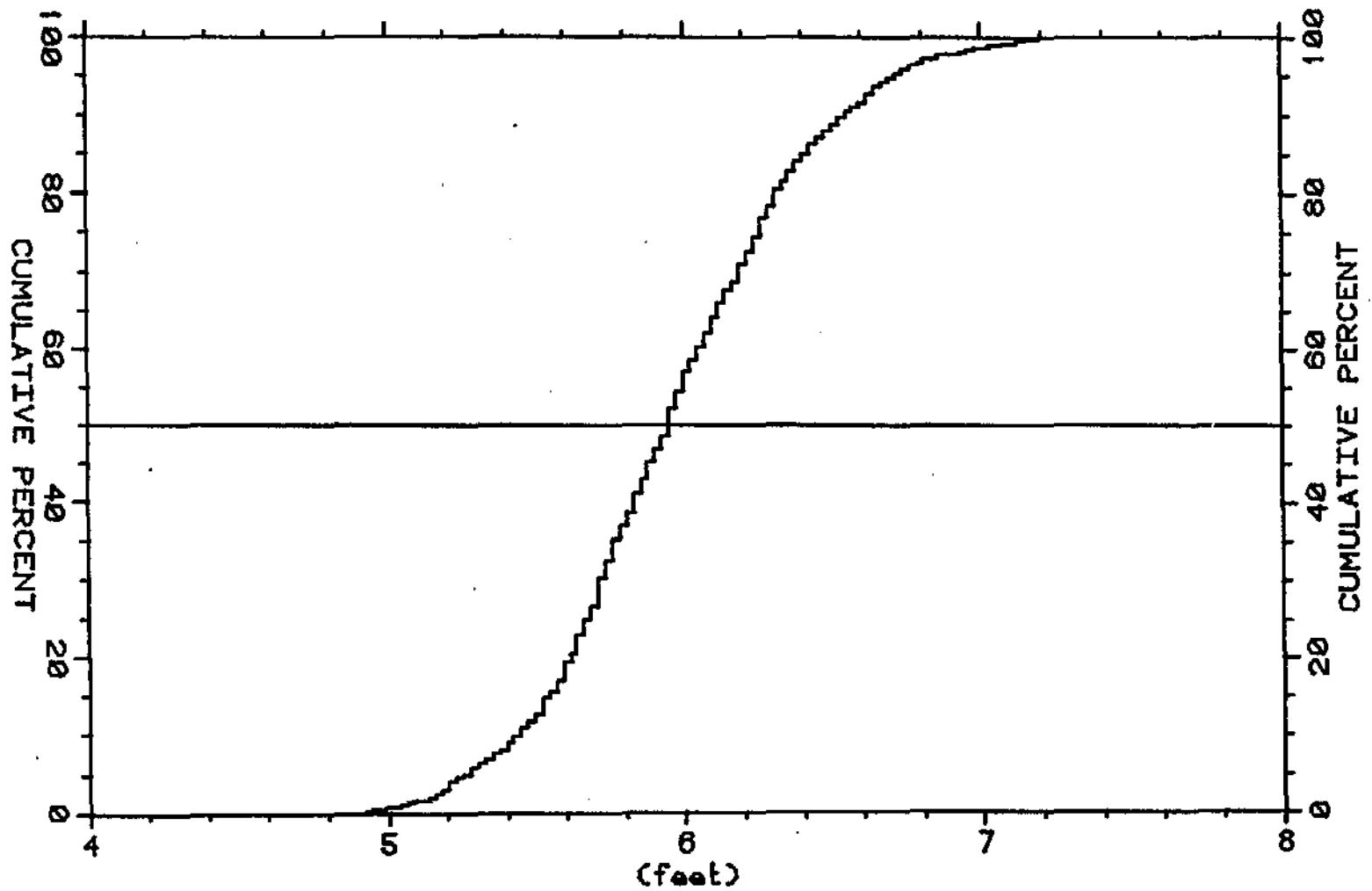


FIGURE C6 CUMULATIVE PROBABILITY PLOT
WATER DEPTH
PT. THOMSON STATION AA
1434, 24 JULY TO 0819, 19 AUGUST, 1982
4944 DATA POINTS

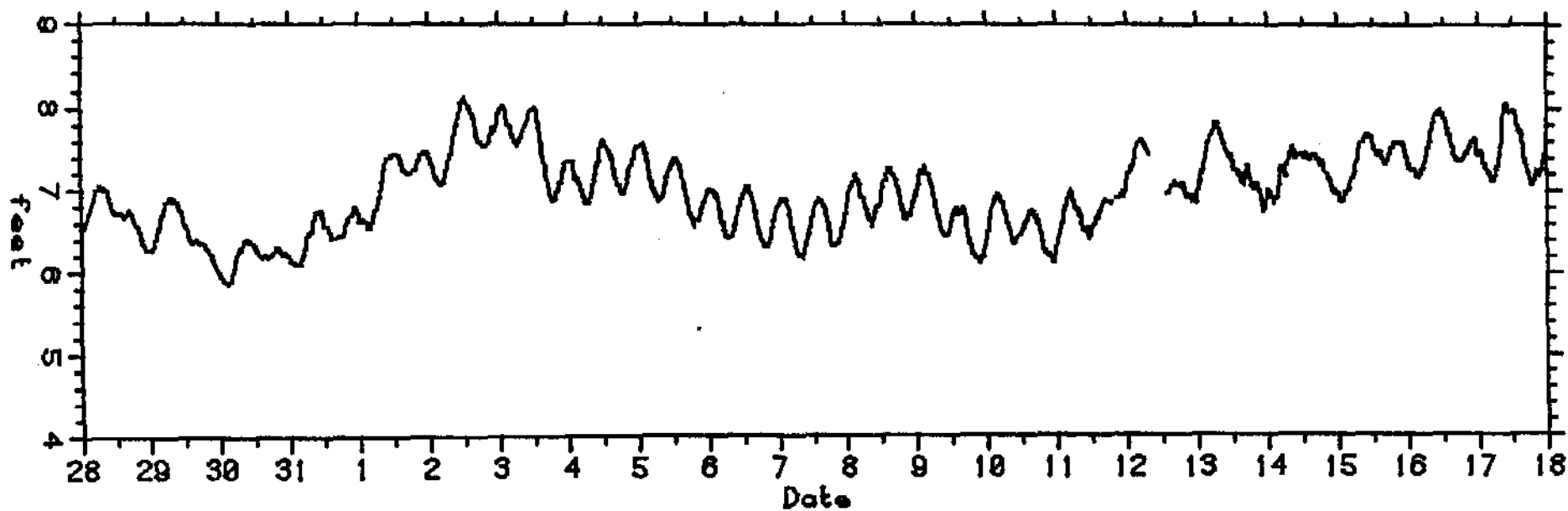


FIGURE C7 WATER DEPTH
POINT THOMSON STATION Z
0013, 28 JULY TO 2358, 17 AUGUST, 1982

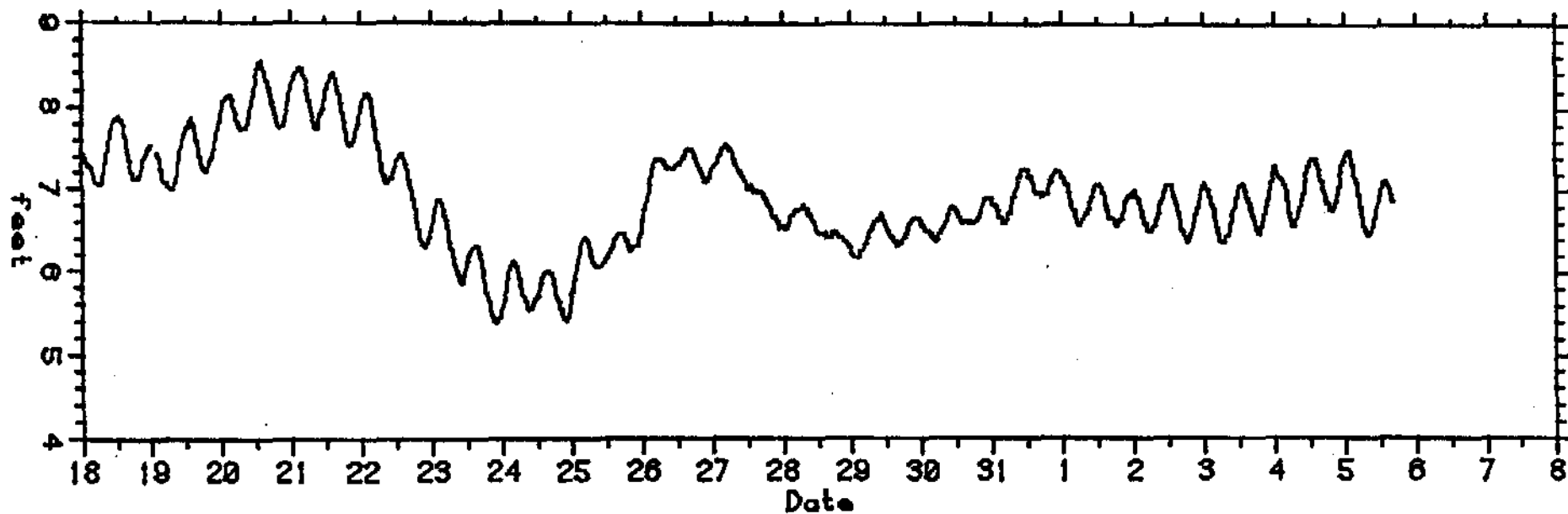


FIGURE C7, WATER DEPTH
POINT THOMSON STATION Z
0013, 18 AUGUST TO 1643, 5 SEPTEMBER, 1982

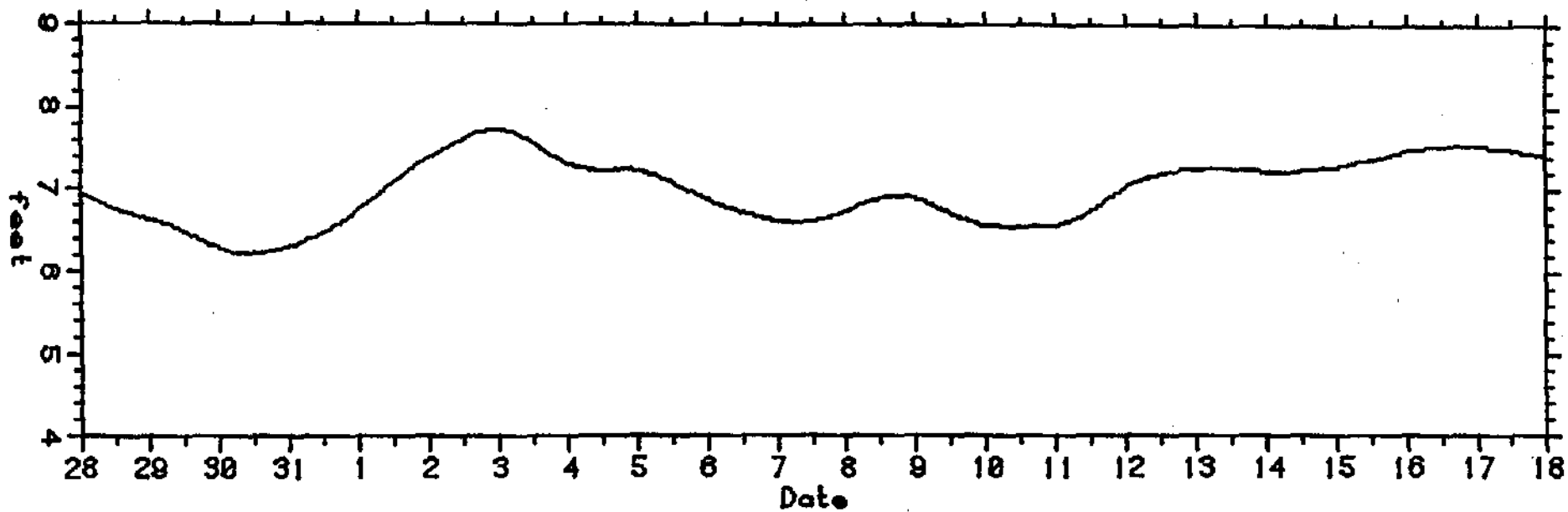


FIGURE C8

DOODSON-FILTERED AVERAGE WATER DEPTH
POINT THOMSON STATION Z
0039, 28 JULY TO 2339, 17 AUGUST, 1982

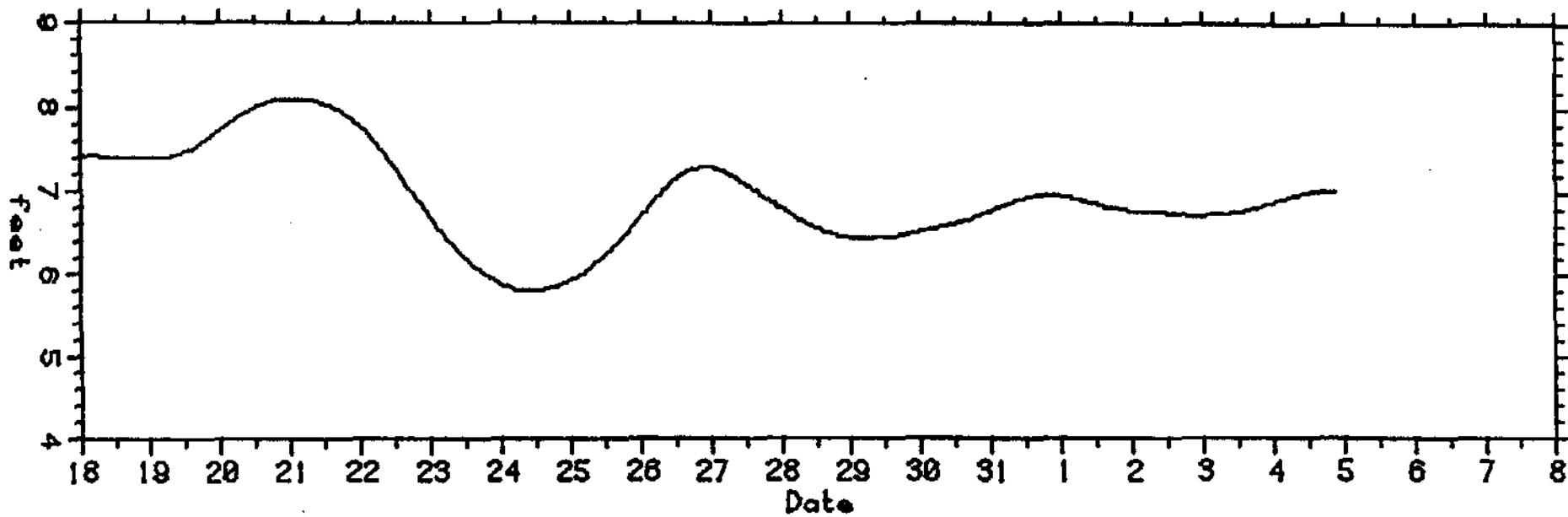


FIGURE C8

DOODSON-FILTERED AVERAGE WATER DEPTH
POINT THOMSON STATION Z
0039, 18 AUGUST TO 2039, 4 SEPTEMBER, 1982

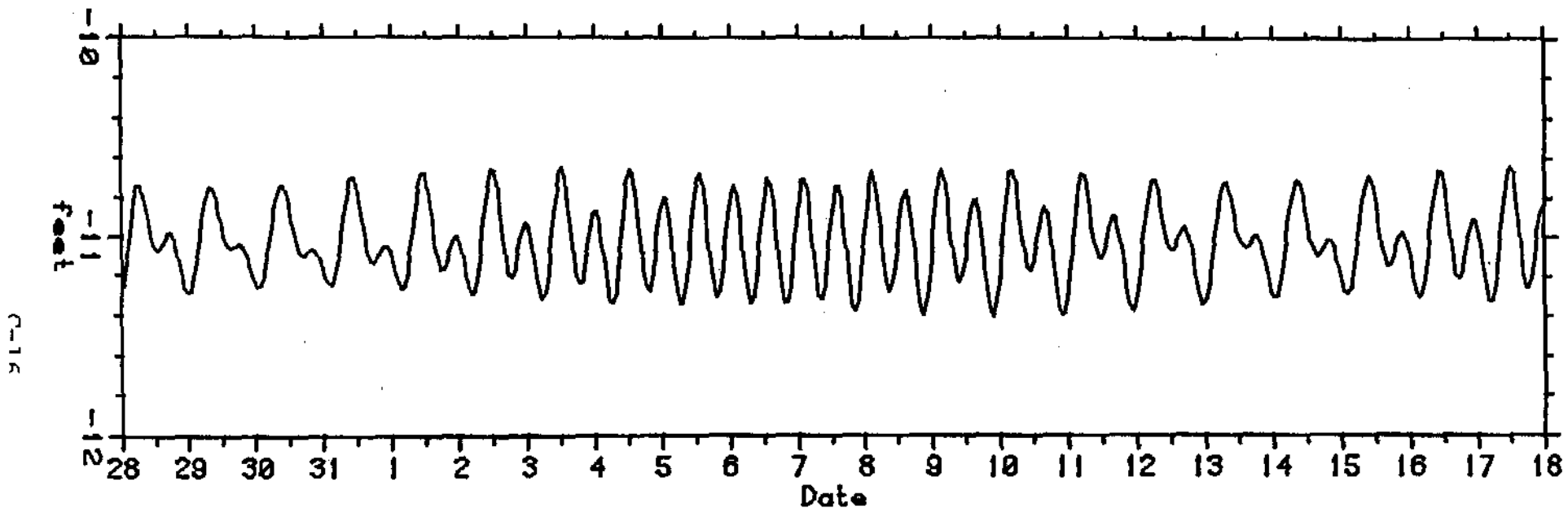


FIGURE C9, TIDE HEIGHTS
POINT THOMSON STATION Z
0038, 29 JULY TO 2338, 17 AUGUST, 1982

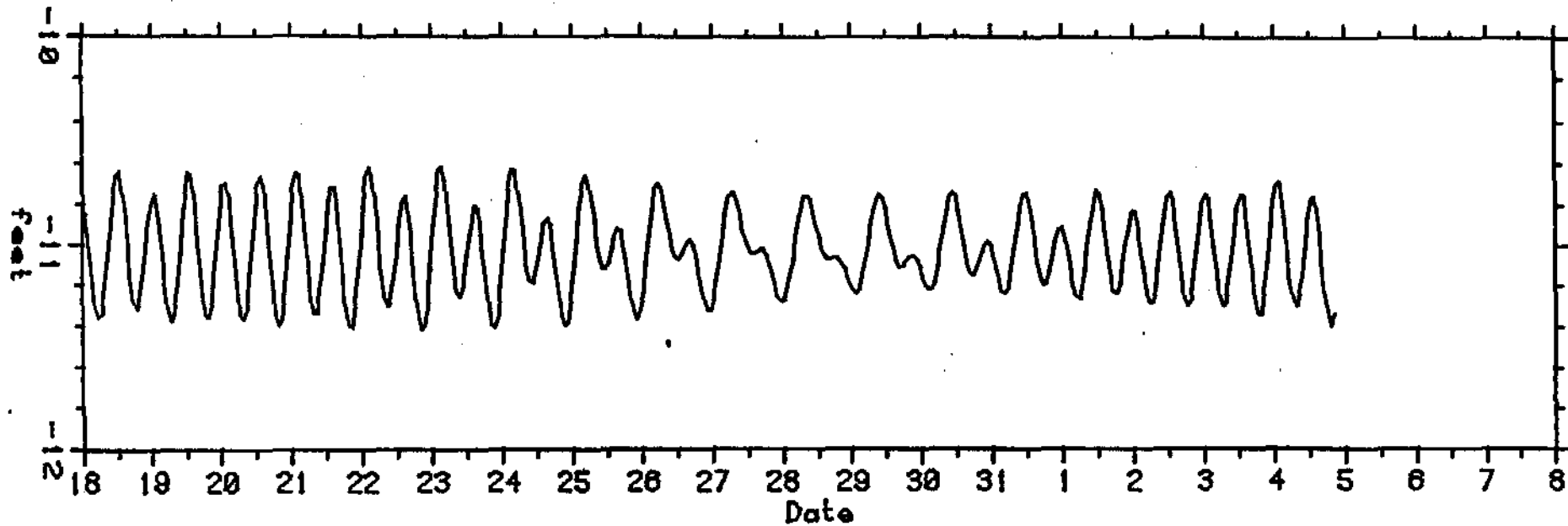


FIGURE C9

TIDE HEIGHTS
POINT THOMSON STATION Z
0038, 18 AUGUST TO 2038, 4 SEPTEMBER, 1982

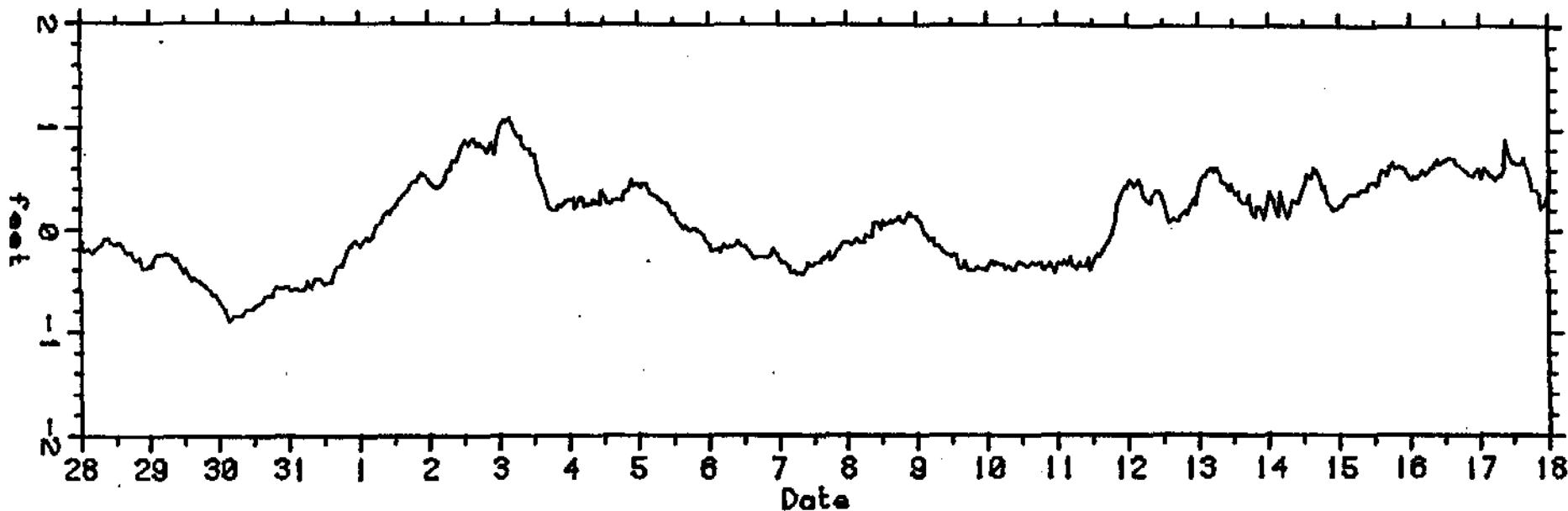


FIGURE C10, SURGE WATER DEPTH (TOTAL - TIDES)
POINT THOMSON STATION Z
0037, 28 JULY TO 2337, 17 AUGUST, 1982

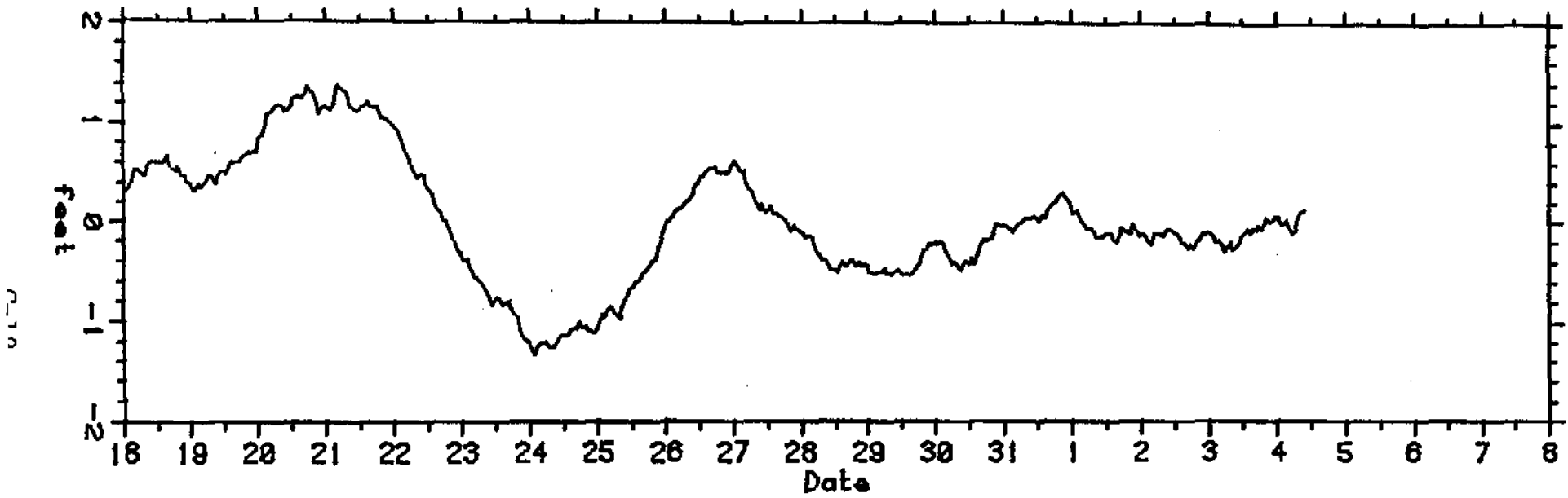


FIGURE C10.

SURGE WATER DEPTH (TOTAL - TIDES)
POINT THOMSON STATION Z
0037, 18 AUGUST TO 2037, 4 SEPTEMBER, 1982

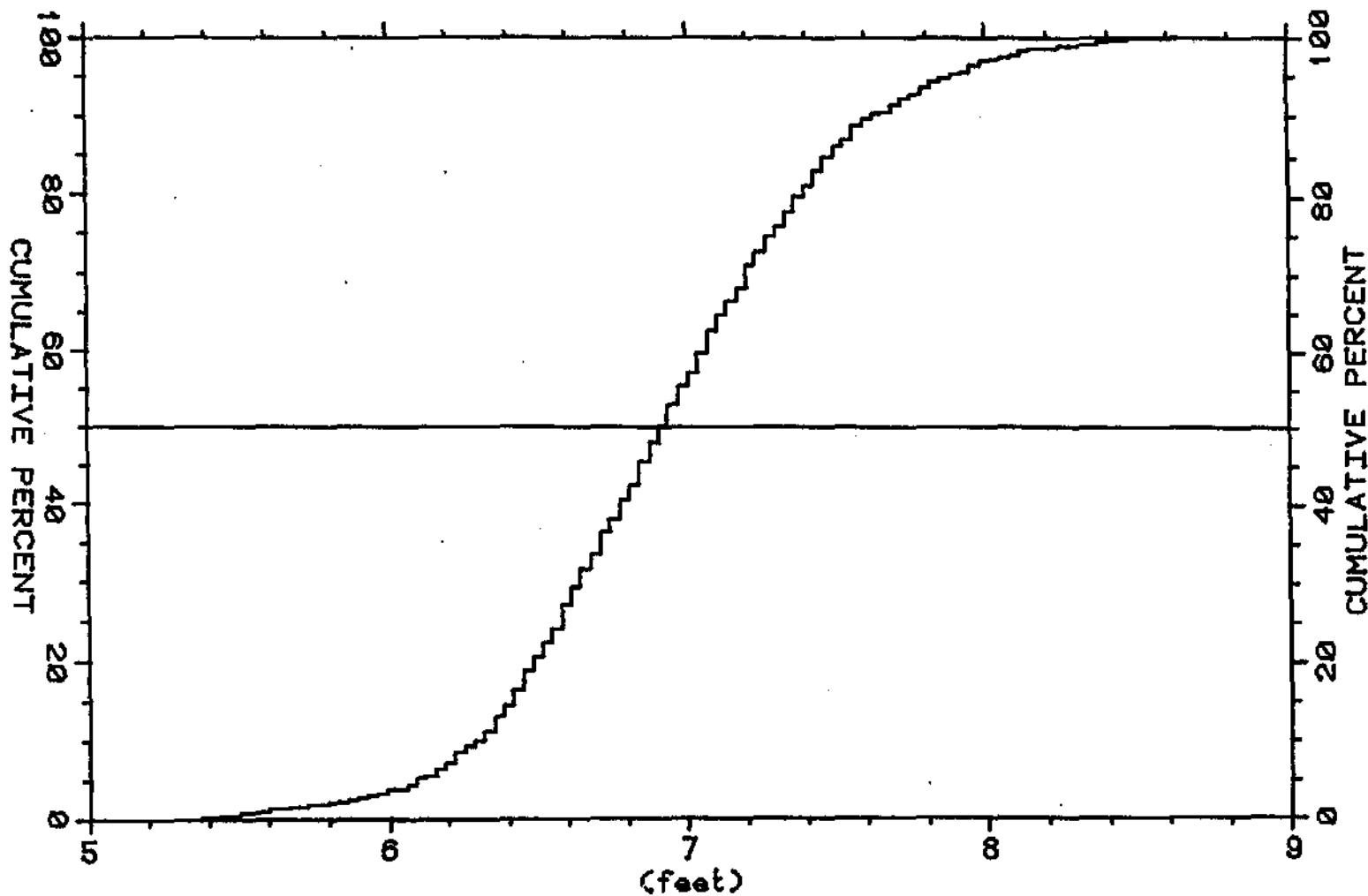


FIGURE C11, CUMULATIVE PROBABILITY PLOT
 WATER DEPTH
 PT. THOMSON STATION Z
 1813, 25 JULY TO 1643, 5 SEPTEMBER, 1982
 8391 DATA POINTS

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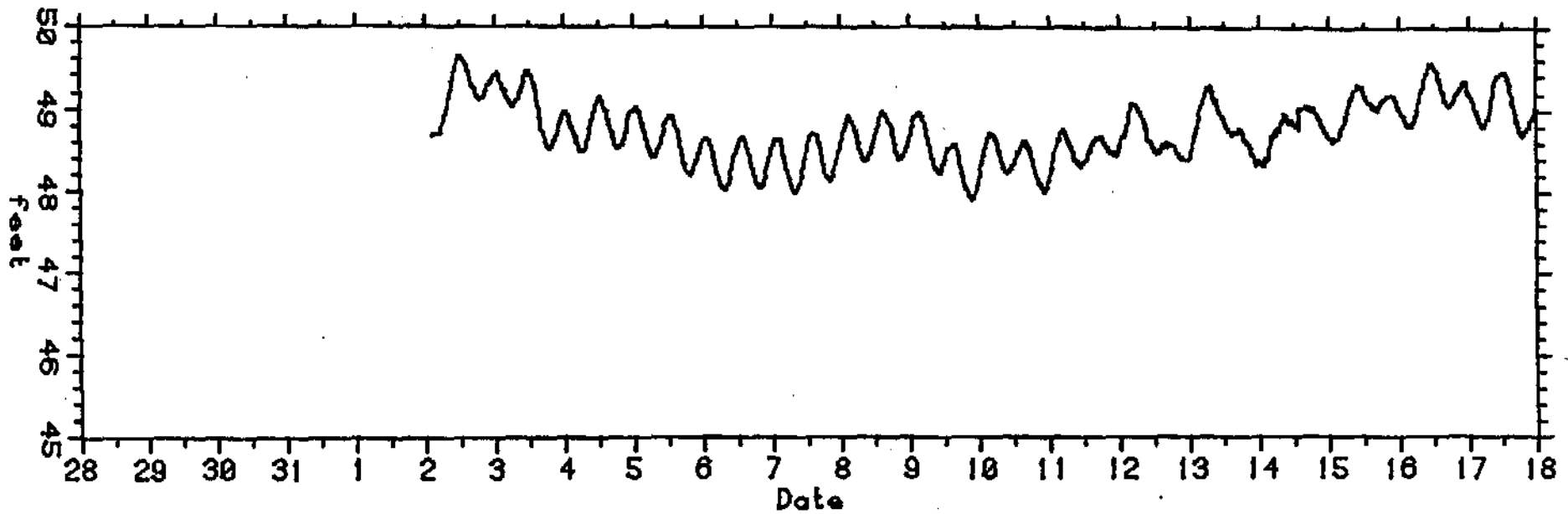


FIGURE C12 WATER DEPTH
POINT THOMSON STATION Q
0237, 2 AUGUST TO 2352, 17 AUGUST, 1982

C-22

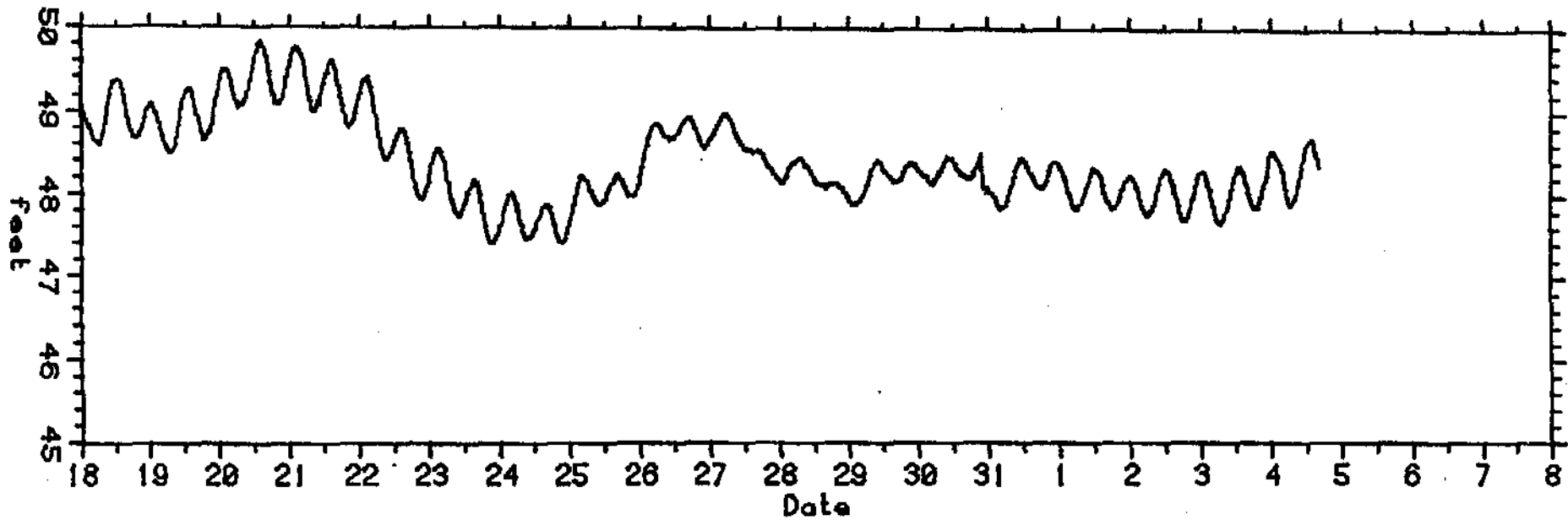


FIGURE C12 WATER DEPTH
POINT THOMSON STATION Q
0007, 18 AUGUST TO 1637, 4 SEPTEMBER, 1982

C-23

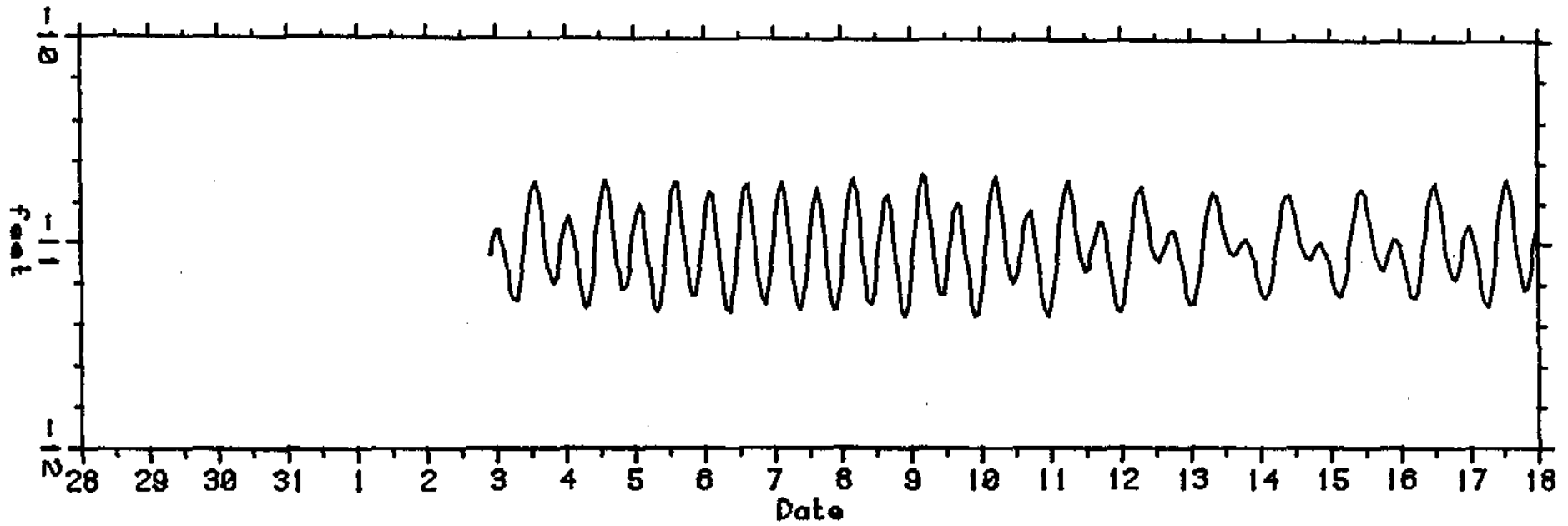
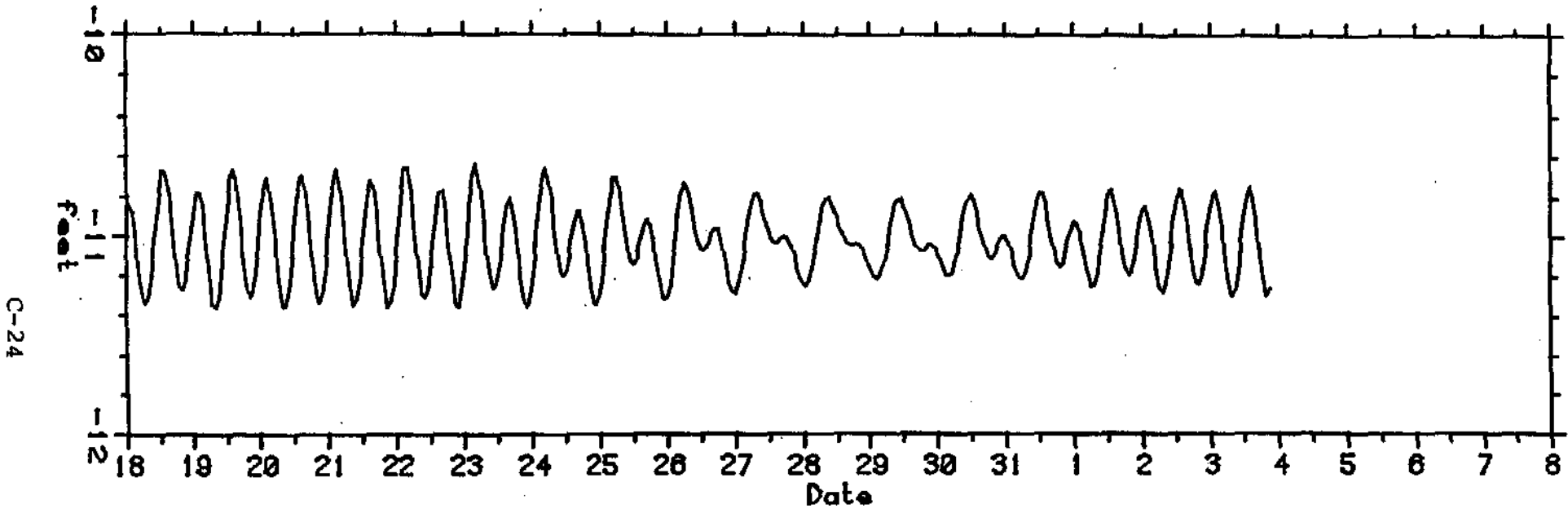


FIGURE C13

TIDE HEIGHTS
POINT THOMSON STATION Q
2203, 2 AUGUST TO 2303, 17 AUGUST, 1982



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FIGURE C13

TIDE HEIGHTS
POINT THOMSON STATION Q
0003, 18 AUGUST TO 2103, 3 SEPTEMBER, 1982

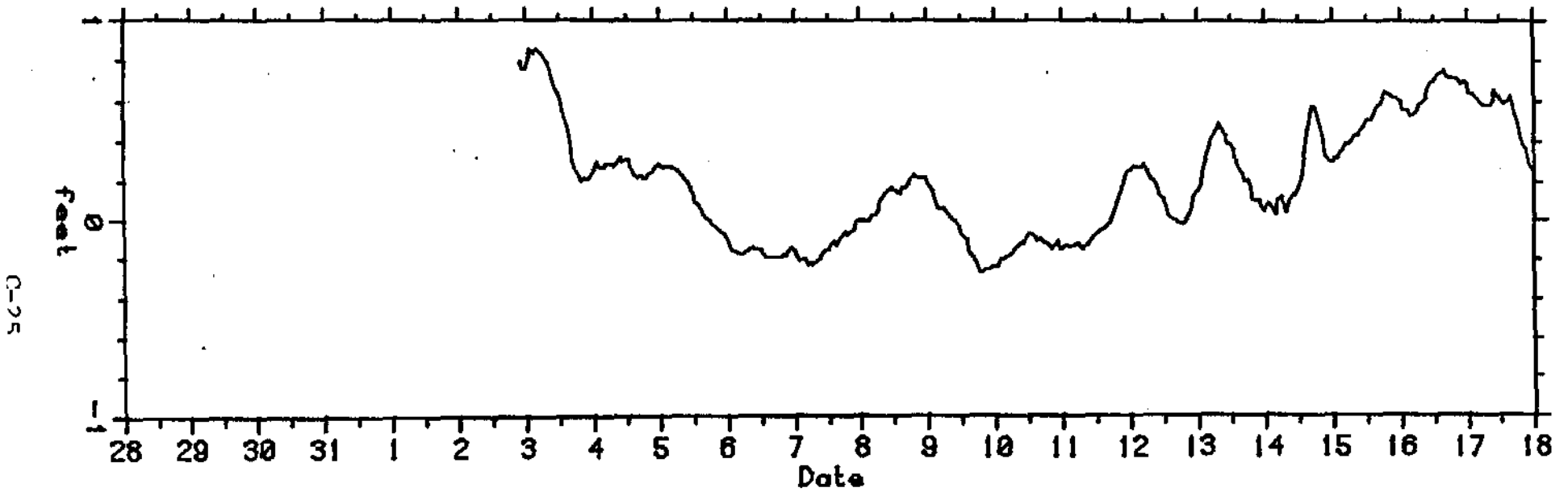


FIGURE C14. SURGE WATER DEPTH (TOTAL - TIDES)
POINT THOMSON STATION Q
2203, 2 AUGUST TO 2303, 17 AUGUST, 1982

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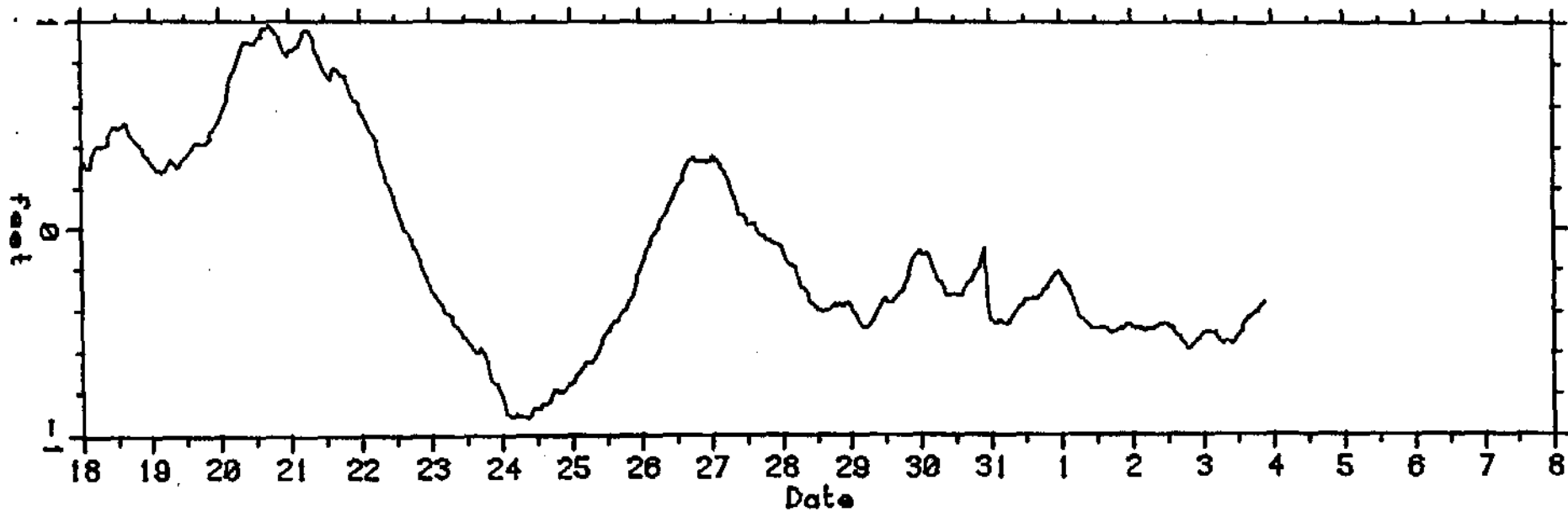


FIGURE C14

SURGE WATER DEPTH (TOTAL - TIDES)
POINT THOMSON STATION Q
0003, 18 AUGUST TO 2103, 3 SEPTEMBER, 1982

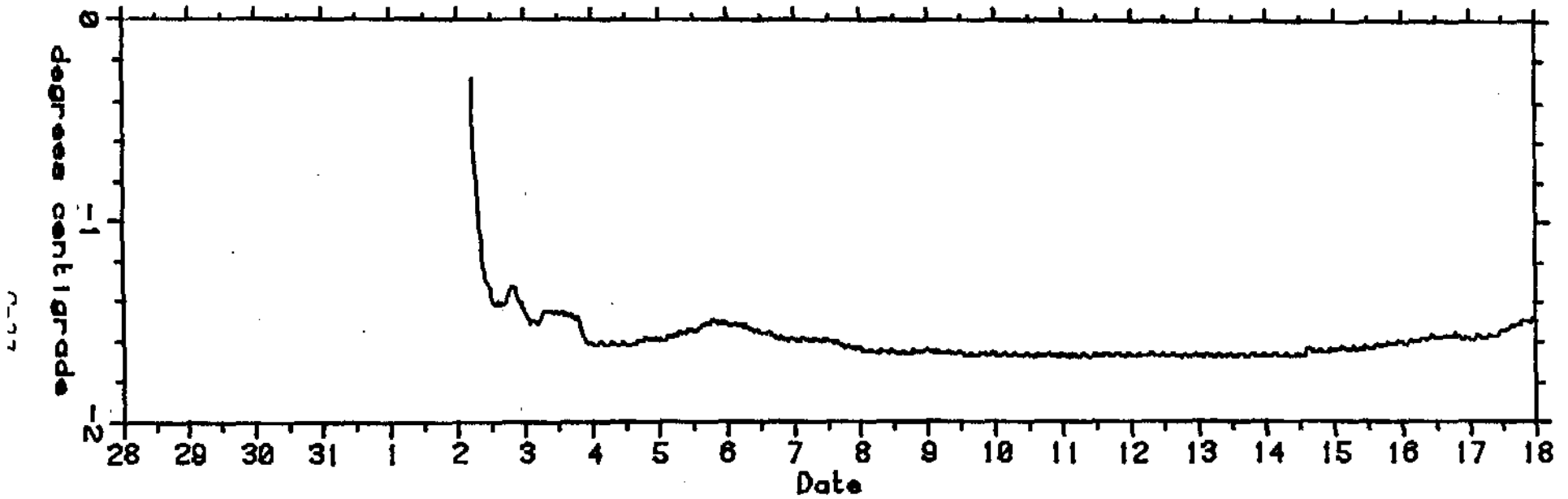


FIGURE C15 TEMPERATURE
POINT THOMSON STATION Q
0237, 2 AUGUST TO 2337, 17 AUGUST, 1982

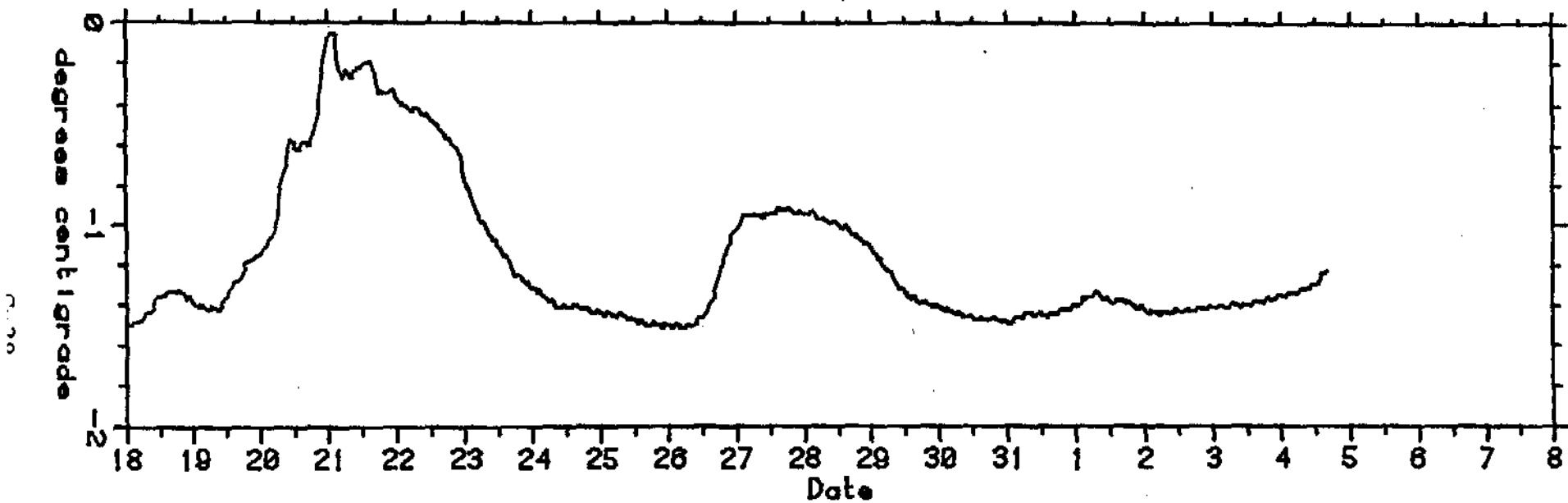


FIGURE C15

TEMPERATURE
POINT THOMSON STATION Q
0007, 18 AUGUST TO 1637, 4 SEPTEMBER, 1982

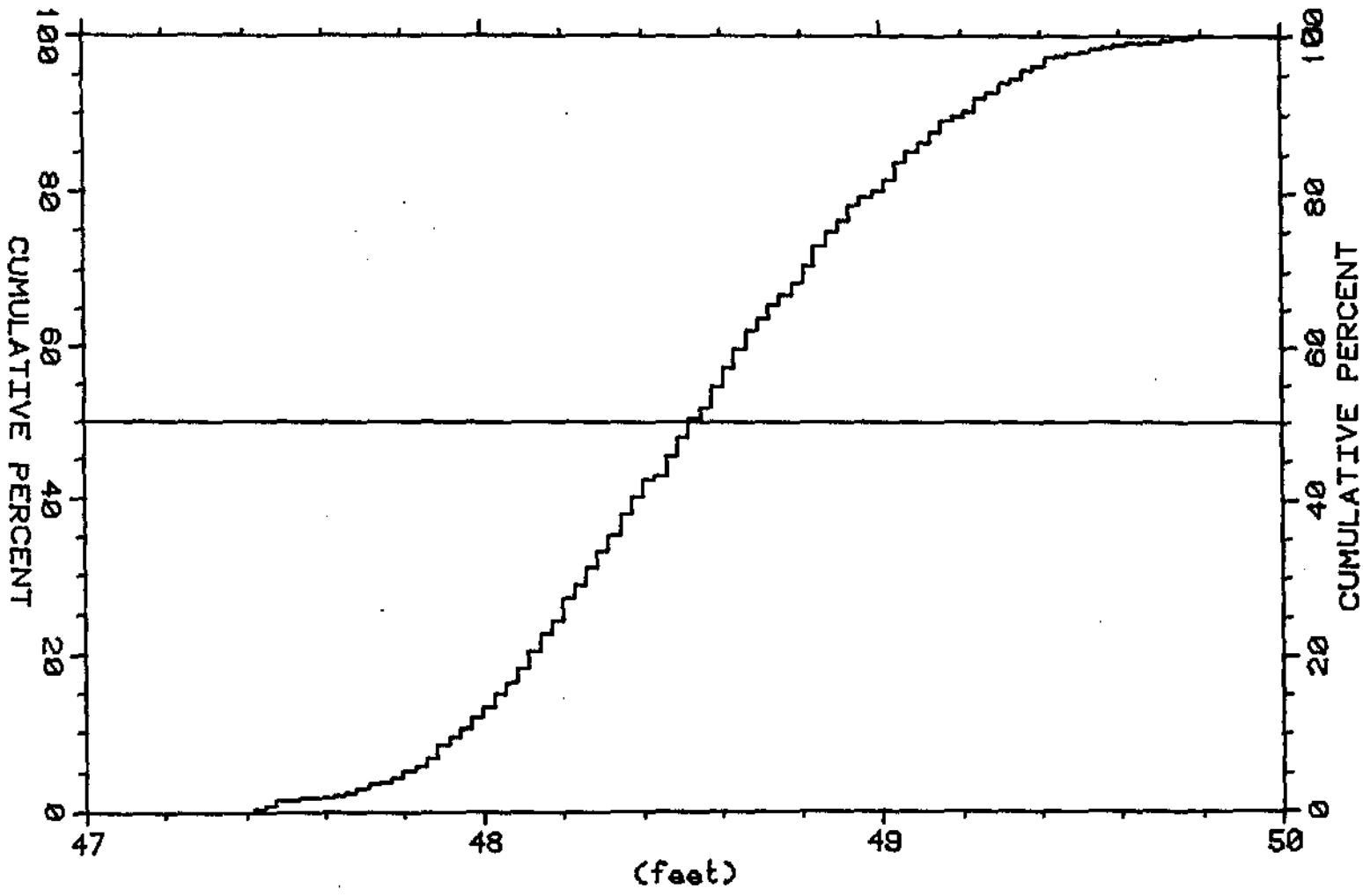


FIGURE C16, CUMULATIVE PROBABILITY PLOT
WATER DEPTH
PT. THOMSON STATION Q
2203, 2 AUGUST TO 2103, 3 SEPTEMBER, 1982
768 DATA POINTS

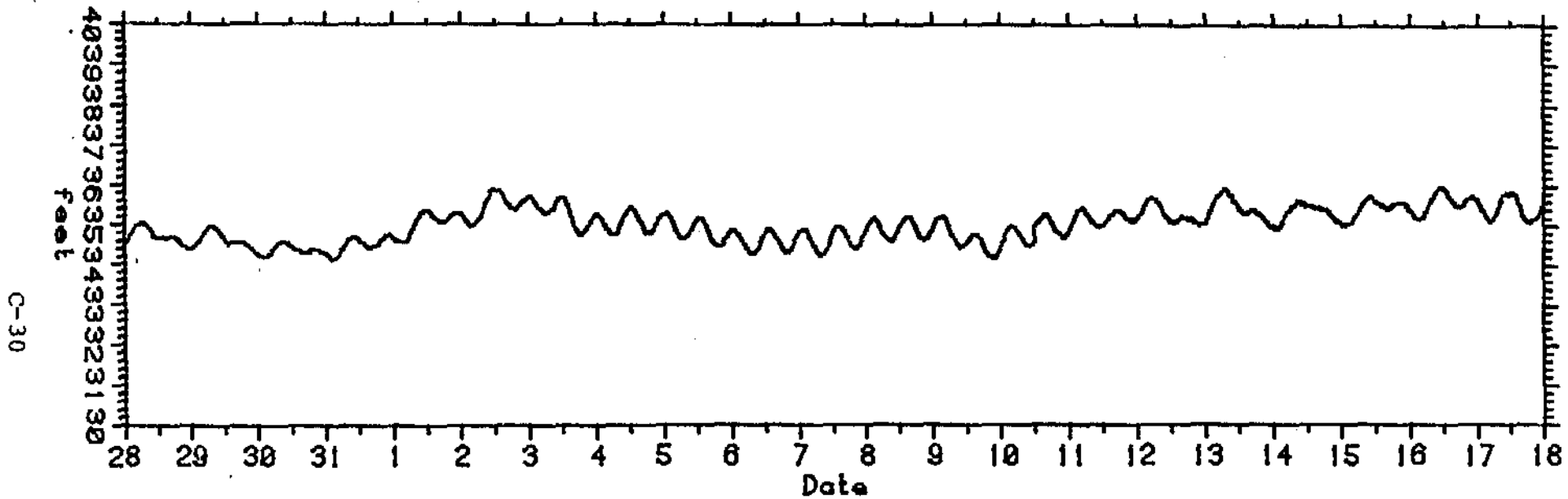


FIGURE C17

WATER DEPTH
POINT THOMSON STATION Y
0008, 28 JULY TO 2353, 17 AUGUST, 1982

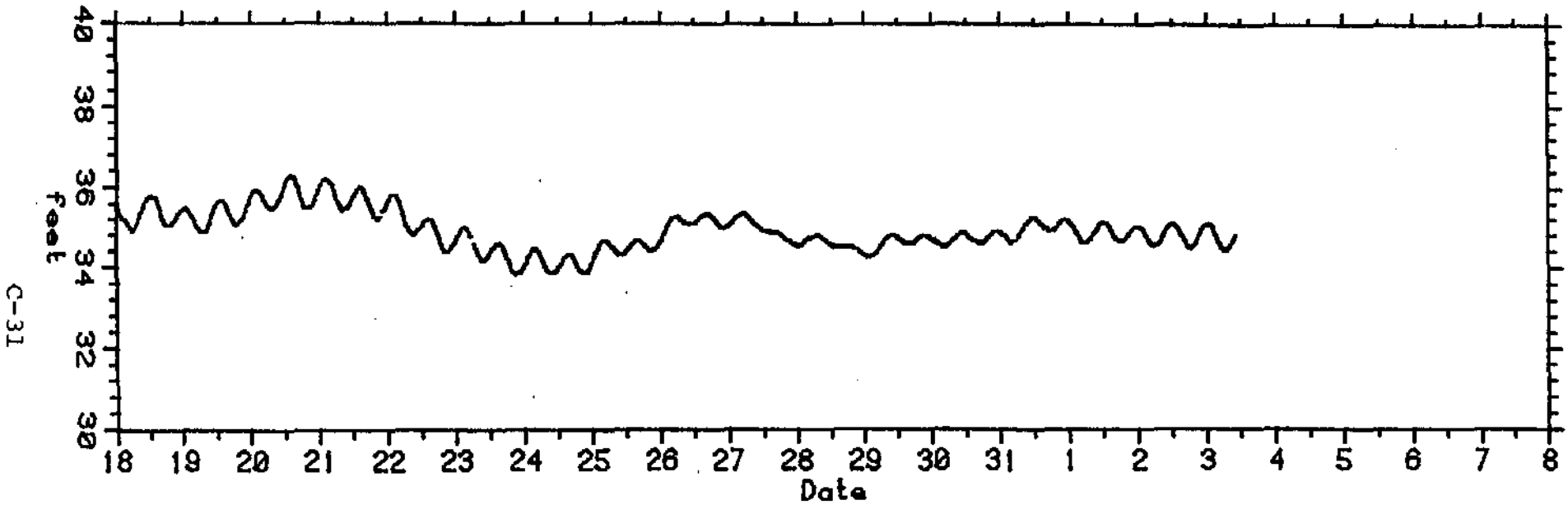


FIGURE C17, WATER DEPTH
POINT THOMSON STATION Y
0008, 18 AUGUST TO 1023, 3 SEPTEMBER, 1982

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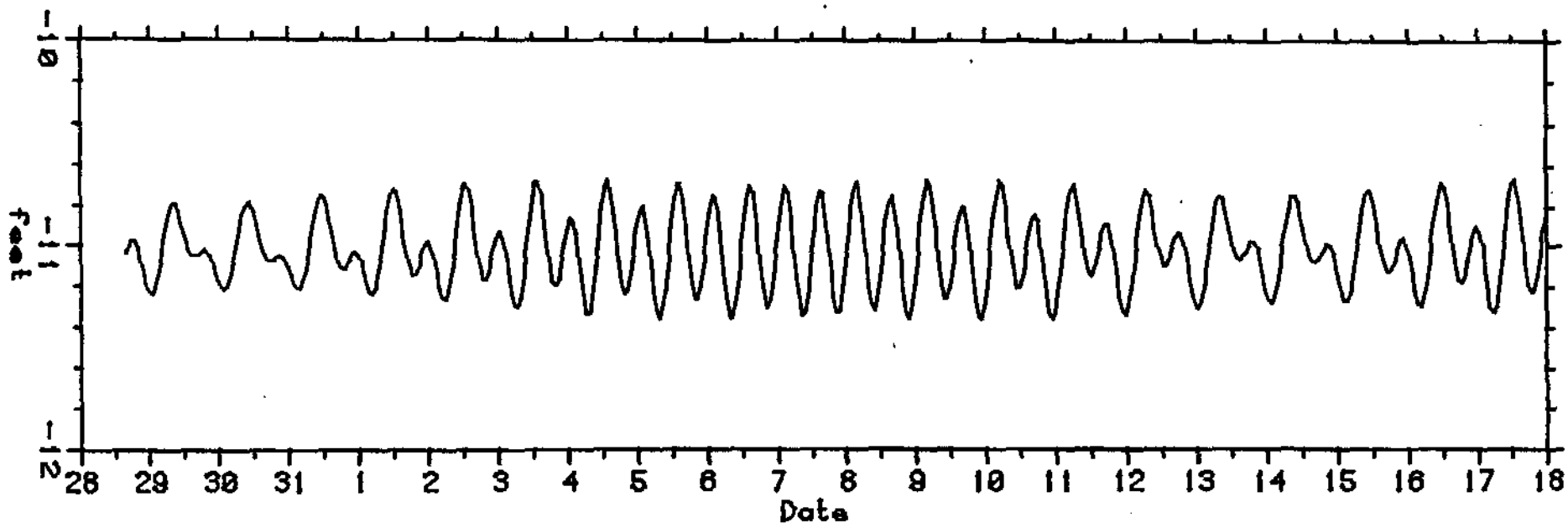


FIGURE C18 TIDE HEIGHTS
PT. THOMSON STATION Y
1548, 28 JULY TO 2348, 17 AUGUST, 1982

C-33

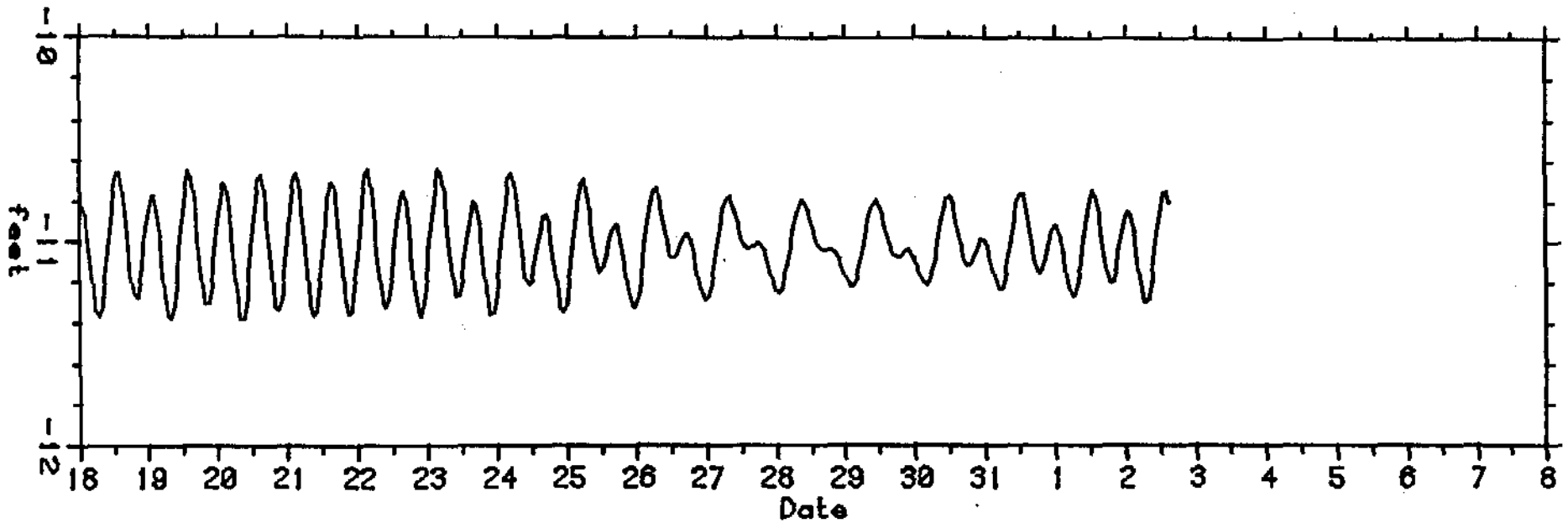


FIGURE C18, TIDE HEIGHTS
POINT THOMSON STATION Y
0048, 18 AUGUST TO 1448, 2 SEPTEMBER, 1982

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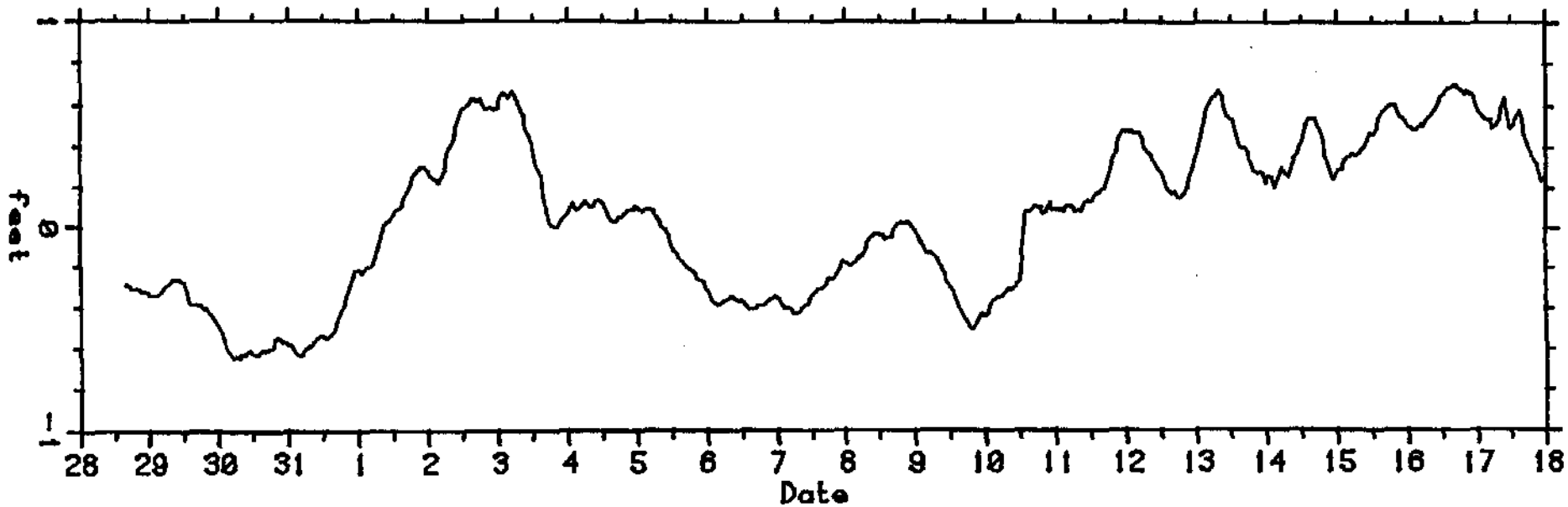


FIGURE C19

SURGE WATER DEPTH (TOTAL - TIDES)
POINT THOMSON STATION Y
1549, 28 JULY TO 2349, 17 AUGUST, 1982

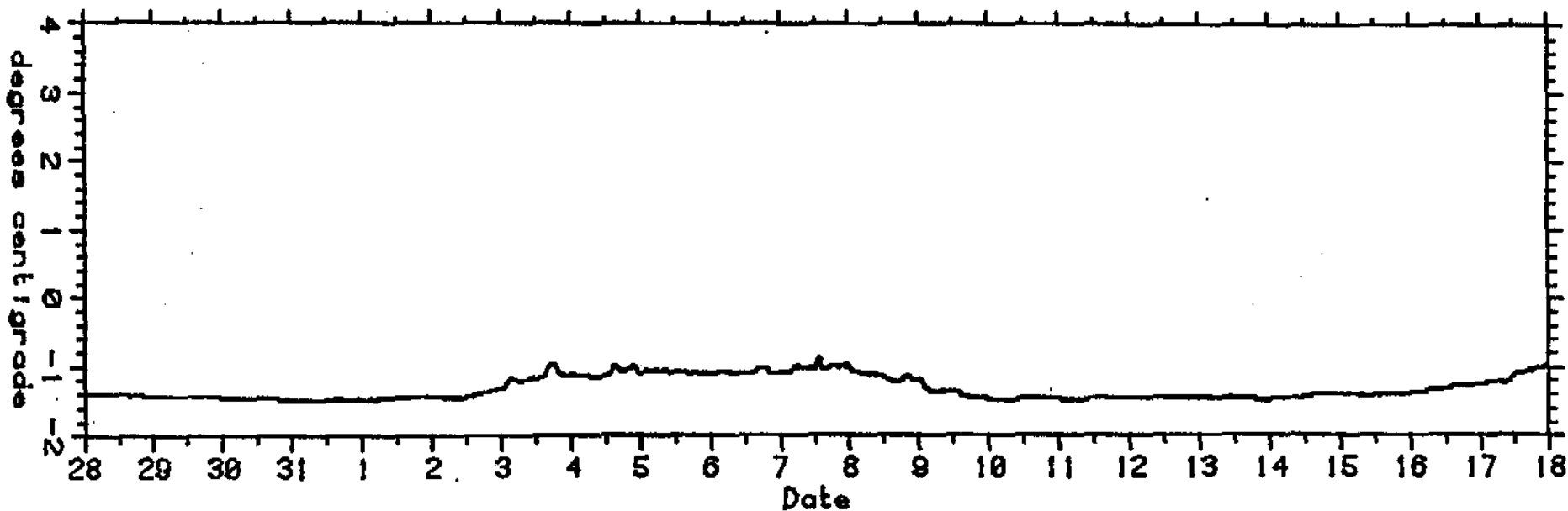


FIGURE C20 TEMPERATURE
POINT THOMSON STATION Y
0008, 28 JULY TO 2353, 17 AUGUST, 1982

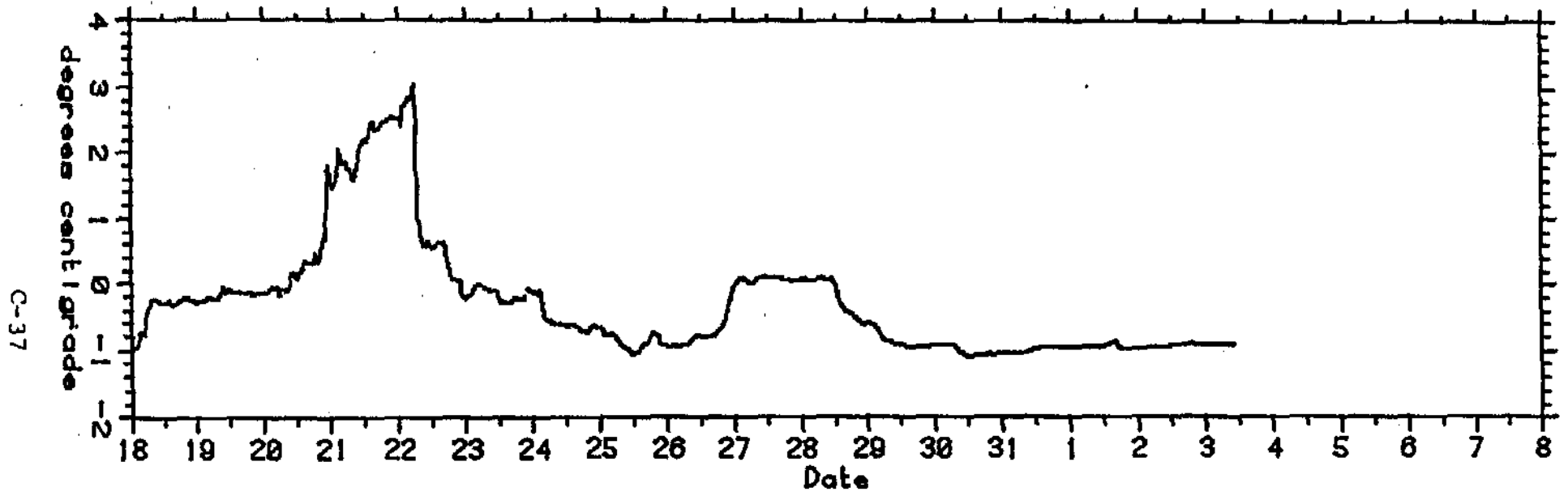


FIGURE C20 TEMPERATURE
POINT THOMSON STATION Y
0008, 18 AUGUST TO 1023, 3 SEPTEMBER, 1982

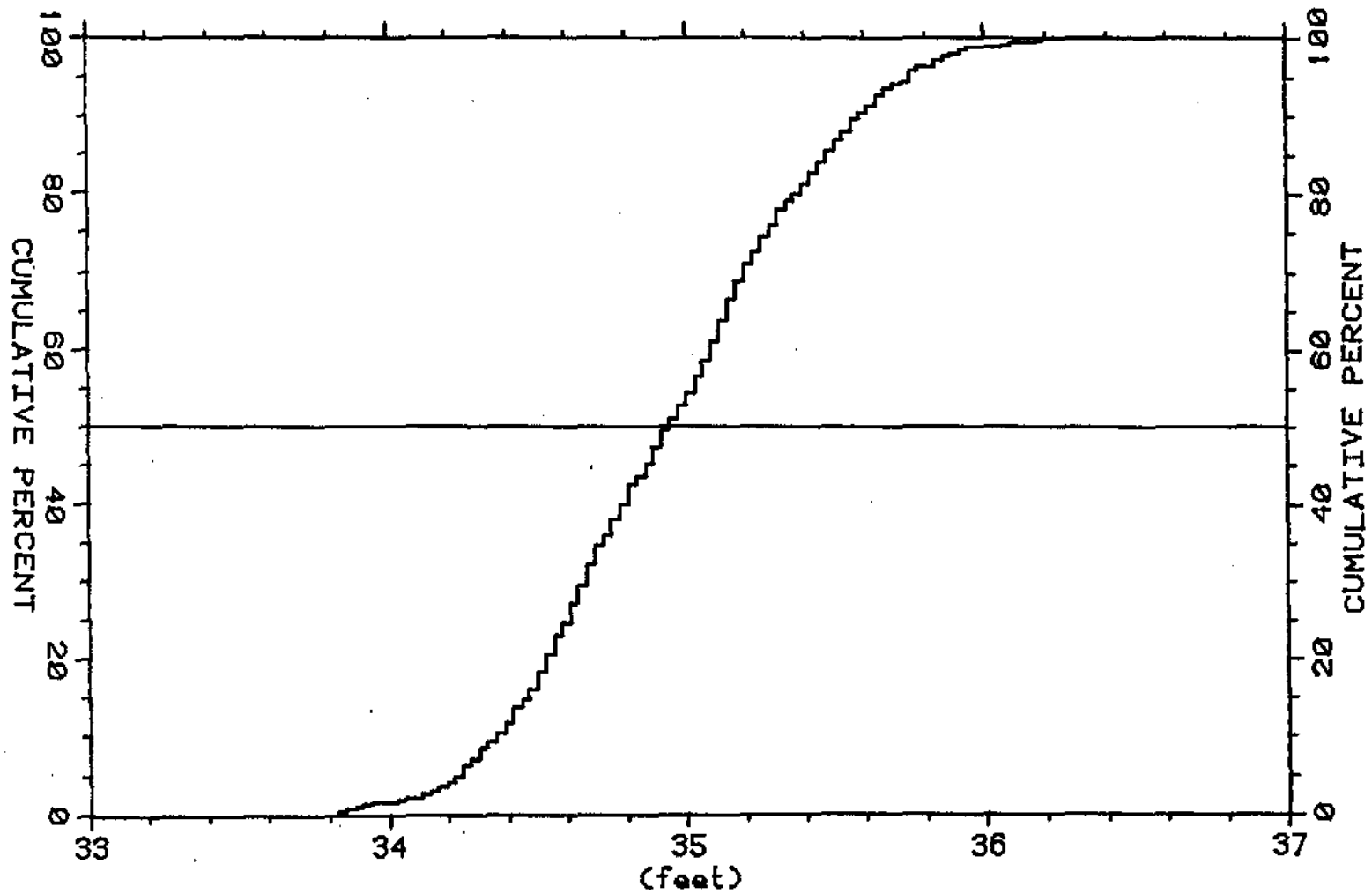


FIGURE C21

CUMULATIVE PROBABILITY PLOT
WATER DEPTH

PT. THOMSON STATION Y

1549, 28 JULY TO 1449, 2 SEPTEMBER, 1982

864 DATA POINTS

C-39

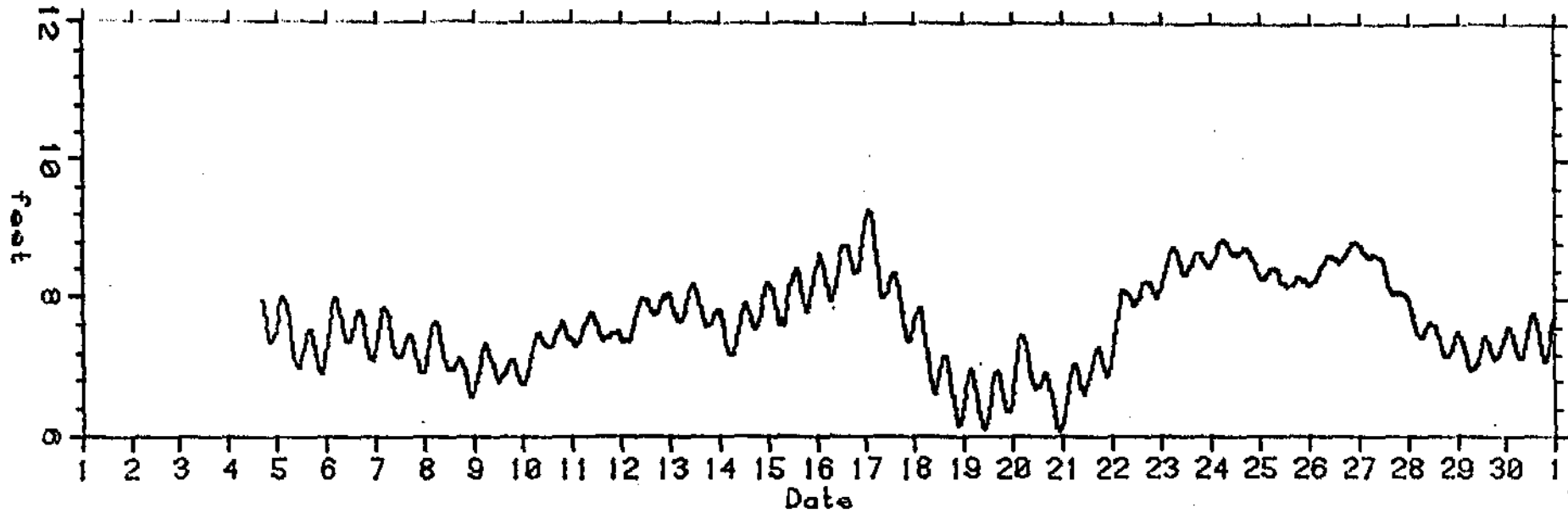


FIGURE C22

WATER DEPTH
POINT THOMSON STATION SP
1610, 4 SEPTEMBER TO 2355, 30 SEPTEMBER, 1982~

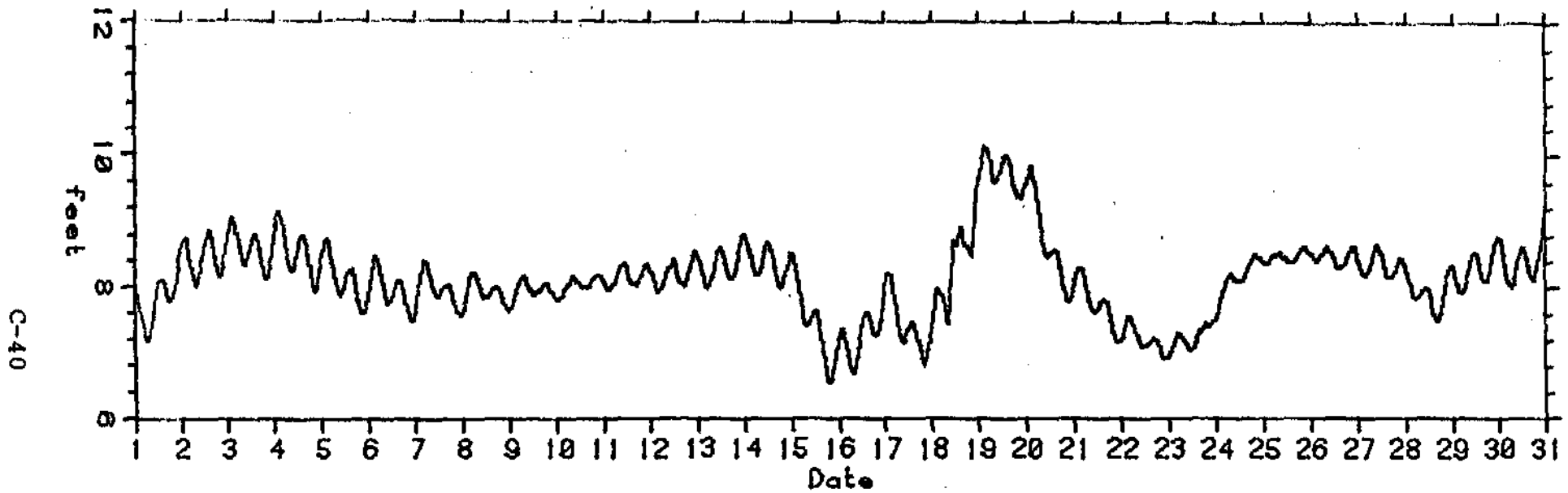


FIGURE C22

WATER DEPTH
POINT THOMSON STATION SP
0010, 1 OCTOBER TO 2355, 30 OCTOBER, 1982

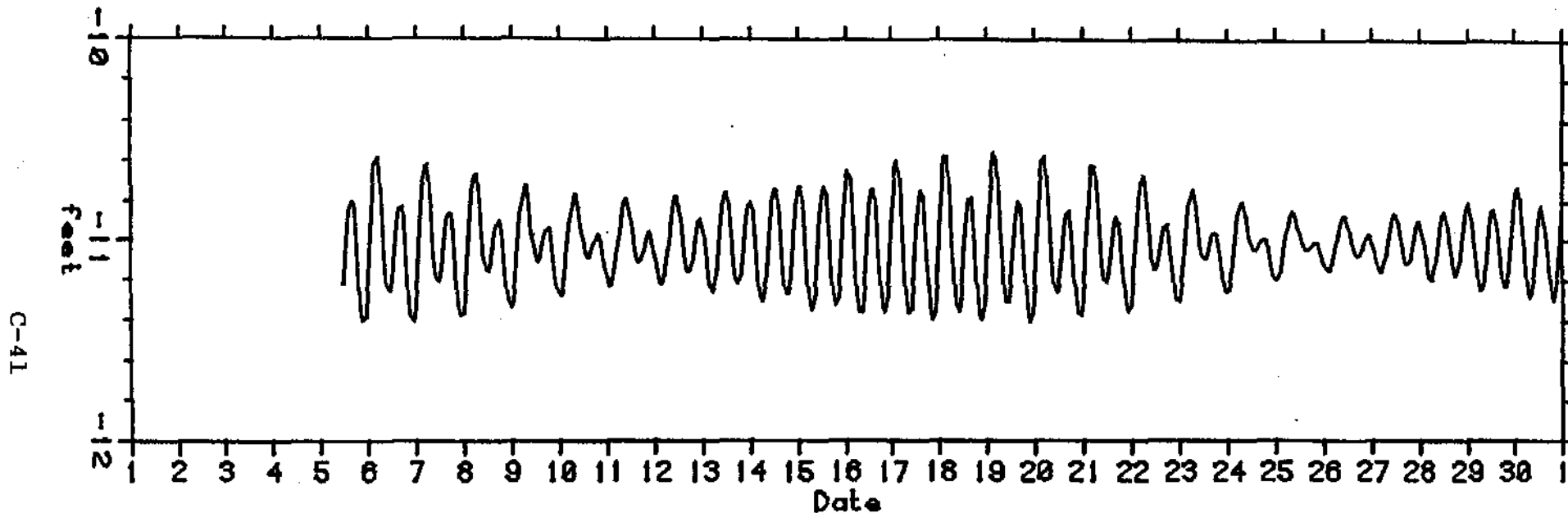


FIGURE C23

TIDE HEIGHTS
POINT THOMSON STATION SP
1136, 5 SEPTEMBER TO 2336, 30 SEPTEMBER, 1982

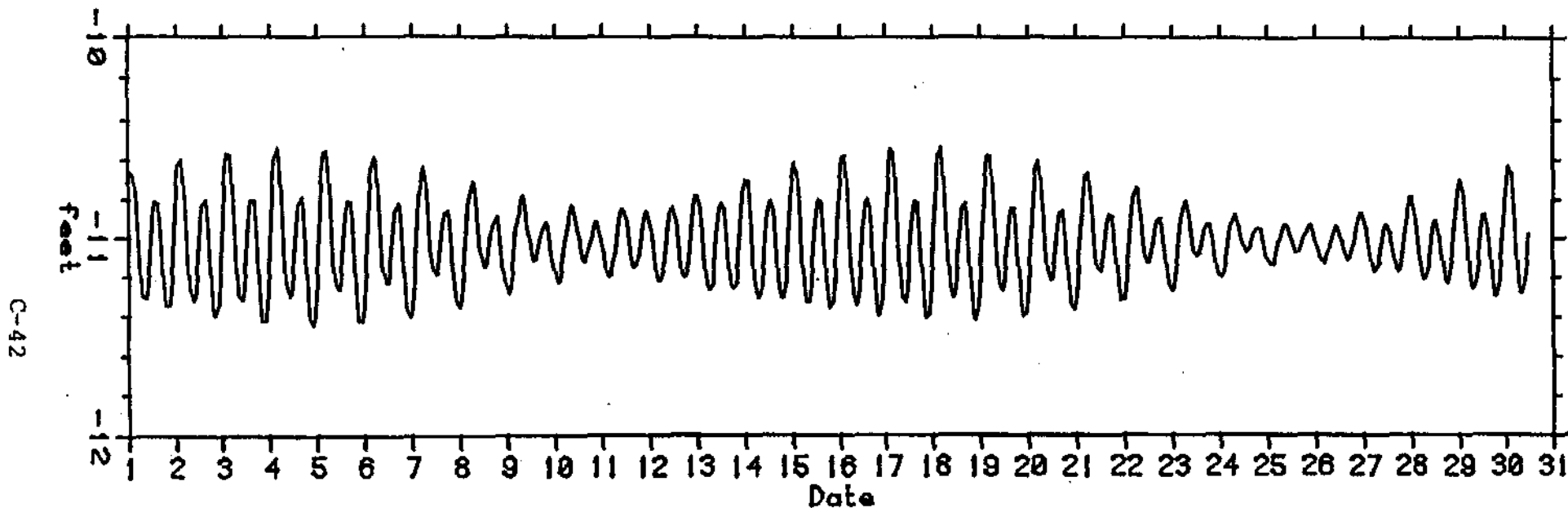


FIGURE C23

TIDE HEIGHTS
POINT THOMSON STATION SP
0036, 1 OCTOBER TO 1136, 30 OCTOBER, 1982

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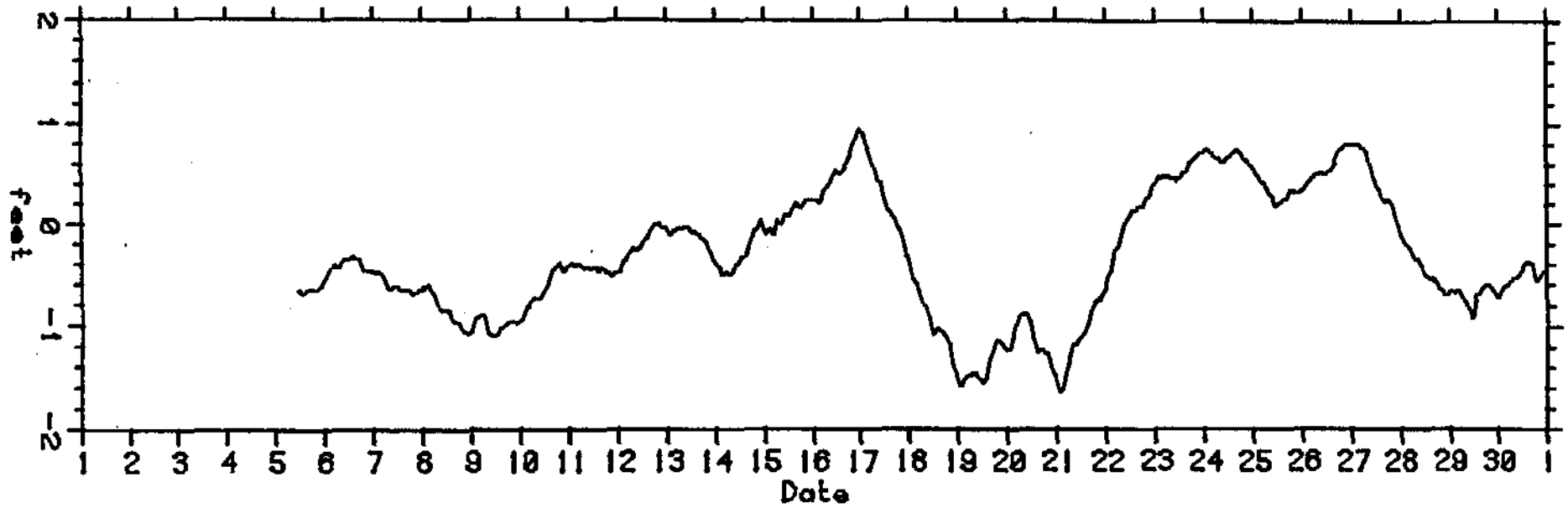


FIGURE C24

SURGE WATER DEPTH (TOTAL - TIDES)
POINT THOMSON STATION SP
1136, 5 SEPTEMBER TO 2336, 30 SEPTEMBER, 1982

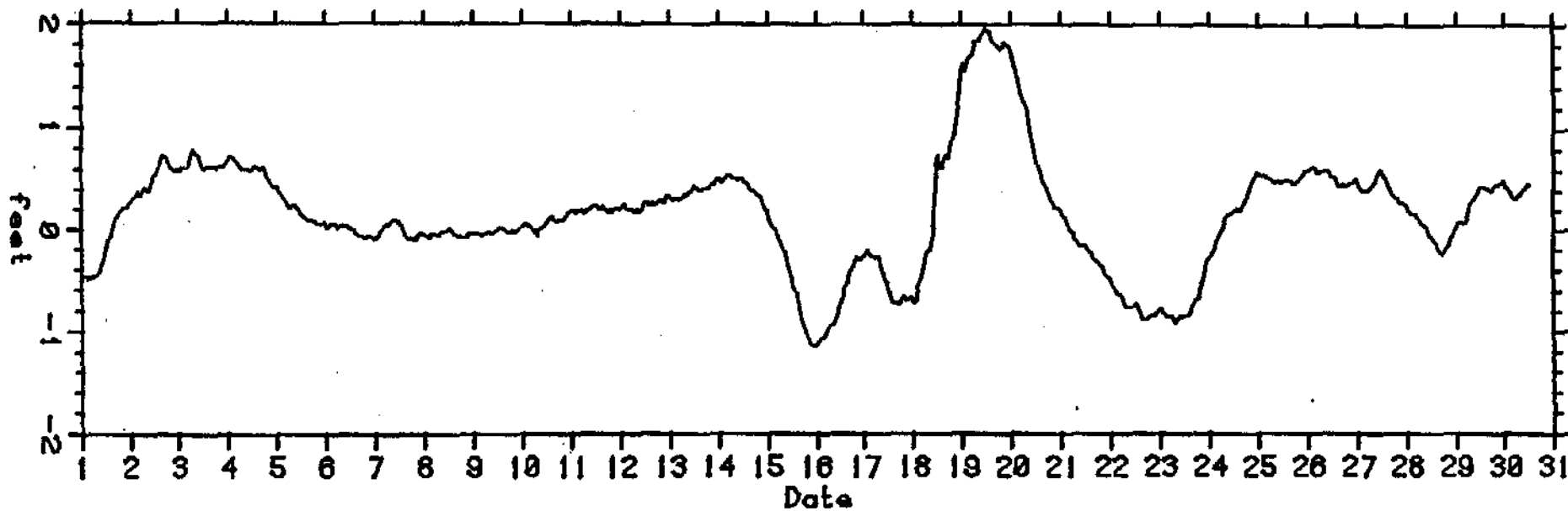


FIGURE C24 SURGE WATER DEPTH (TOTAL - TIDES)
POINT THOMSON STATION SP
0036, 1 OCTOBER TO 1136, 30 OCTOBER, 1982

C-45

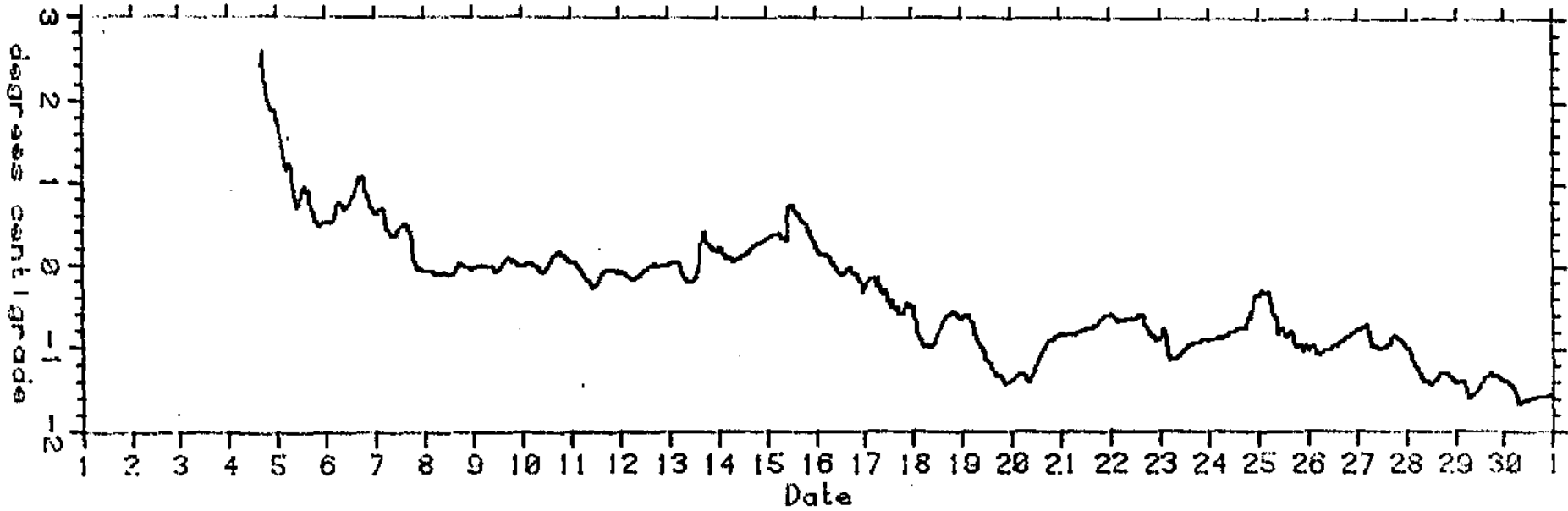


FIGURE C25. TEMPERATURE
POINT THOMSON STATION SP
1610, 1 SEPTEMBER TO 2355, 30 SEPTEMBER, 1982

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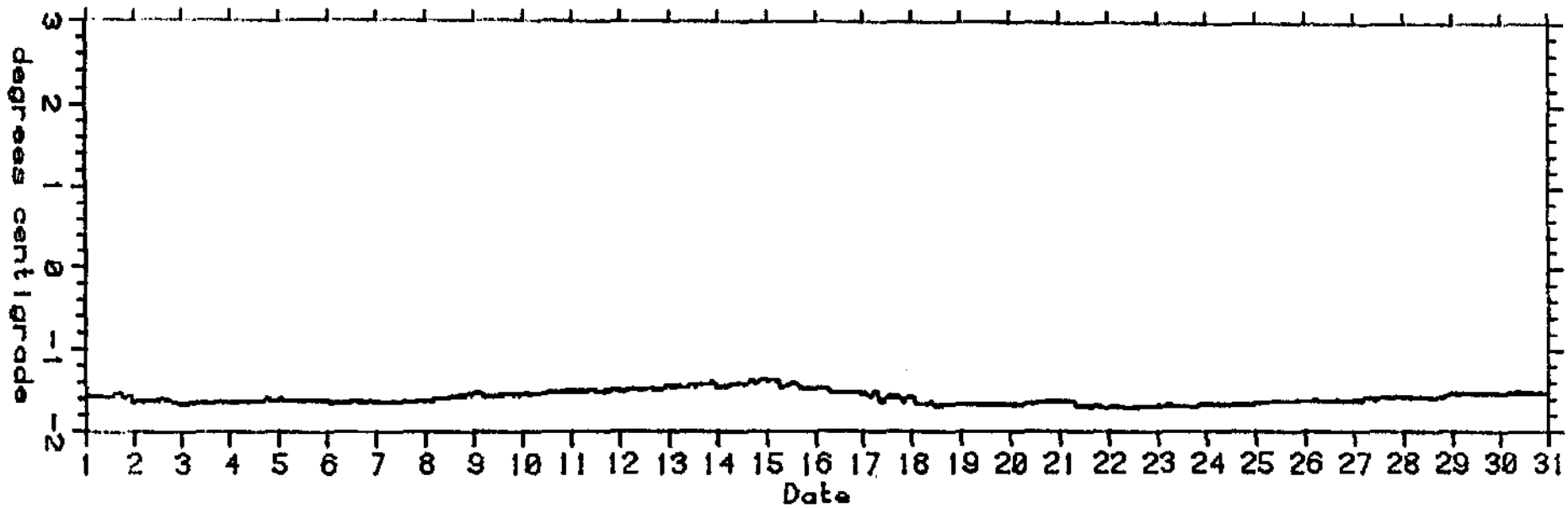


FIGURE C25 TEMPERATURE
POINT THOMSON STATION SP
0010, 1 OCTOBER TO 2355, 30 OCTOBER, 1982

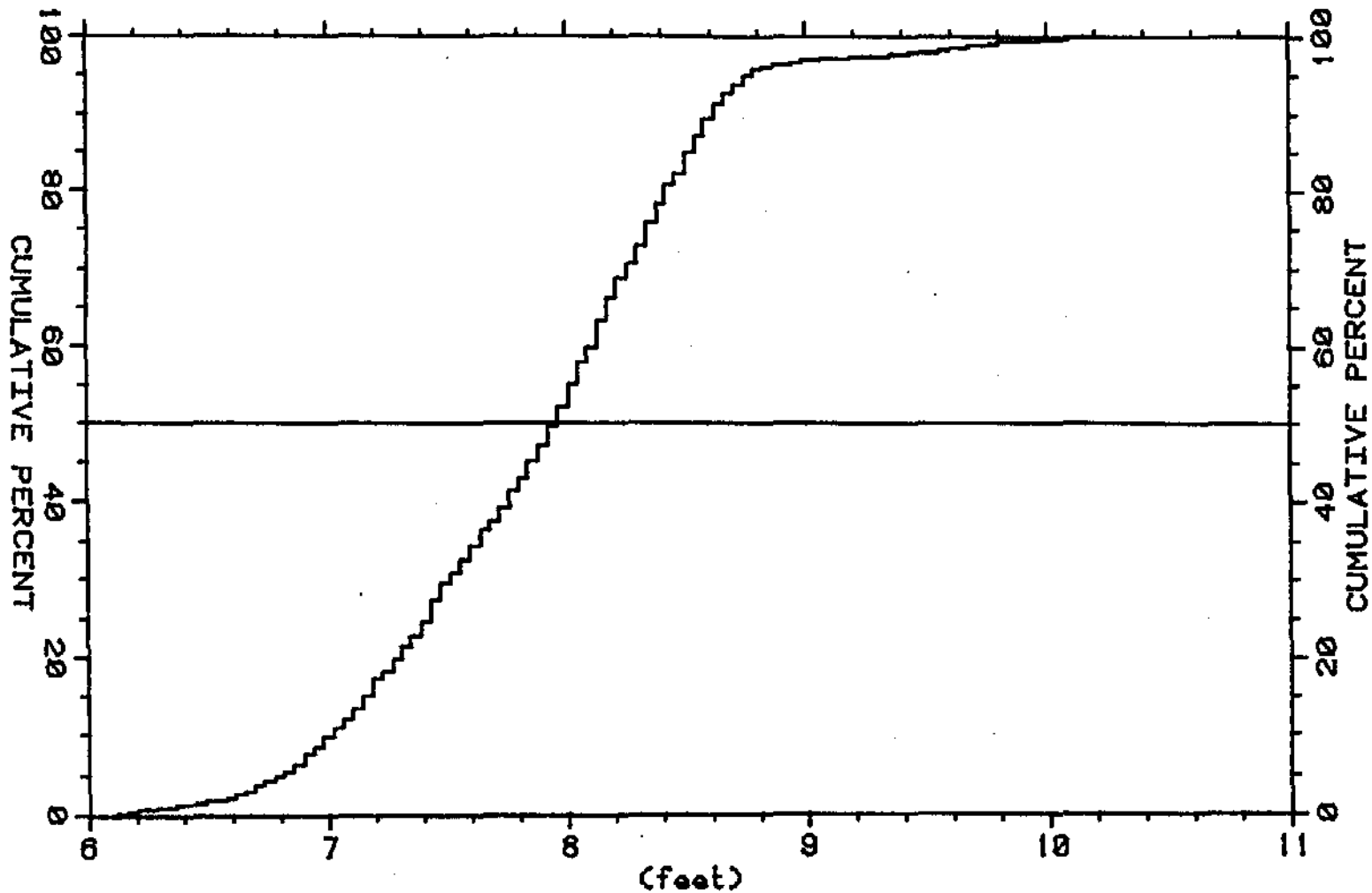


FIGURE C26, CUMULATIVE PROBABILITY PLOT
WATER DEPTH
1136, 5 SEPTEMBER TO 1136, 30 OCTOBER, 1982
PT. THOMSON STATION SP
1323 DATA POINTS

Table C1

Tidal Harmonic Constants

Point Thomson, Station AA.

| Constituent | Frequency (CPD) | Amplitude (ft) | Phase (degrees) Based on: | |
|-------------|--------------------|-------------------|---------------------------------|---------------------------------|
| | | | Start of Time Series | 0000 Hrs. ADT 1 January 1900 |
| O1 | 0.92954 | 0.103 | -125 | 89 |
| K1 | 1.00274 | 0.126 | -343 | 33 |
| N2 | 1.89598 | 0.035 | 230 | 216 |
| M2 | 1.93227 | 0.235 | 179 | 300 |
| S2 | 2.00000 | 0.103 | -244 | 55 |
| M4 | 3.86454 | 0.004 | - 81 | 162 |
| M6 | 5.79682 | 0.002 | - 85 | 28 |

Record Length: 24 days

Start of Time Series: 0959, 25 July 1982 ADT

Days from Century Start: 30156.416

Table C2

Tidal Harmonic Constants

Point Thomson, Station Z .

| Constituent | Frequency (CPD) | Amplitude (ft) | Phase (degrees) Based on: | |
|-------------|--------------------|-------------------|---------------------------------|---------------------------------|
| | | | Start of Time Series | 0000 Hrs. ADT 1 January 1900 |
| O1 | 0.92954 | 0.095 | -177 | 88 |
| K1 | 1.00274 | 0.101 | - 36 | 35 |
| N2 | 1.89598 | 0.028 | 136 | 226 |
| M2 | 1.93227 | 0.233 | -285 | 302 |
| S2 | 2.00000 | 0.106 | 11 | 60 |
| M4 | 3.86454 | 0.002 | 51 | 146 |
| M6 | 5.79682 | 0.002 | 37 | 106 |

Record Length: 41 days

Start of Time Series: 1338, 25 July 1982 ADT

Days from Century Start: 30156.568

Table C3

Tidal Harmonic Constants

Point Thomson, Station Q .

| <u>Constituent</u> | <u>Frequency (CPD)</u> | <u>Amplitude (ft)</u> | <u>Phase (degrees) Based on:</u> | |
|--------------------|----------------------------|---------------------------|--|---|
| | | | <u>Start of Time Series</u> | <u>0000 Hrs. ADT 1 January 1900</u> |
| O1 | 0.92954 | 0.088 | - 83 | 97 |
| K1 | 1.00274 | 0.074 | -151 | 54 |
| N2 | 1.89598 | 0.028 | -122 | 268 |
| M2 | 1.93227 | 0.213 | -306 | 330 |
| S2 | 2.00000 | 0.107 | -207 | 95 |
| M4 | 3.86454 | 0.003 | -282 | 271 |
| M6 | 5.79682 | 0.001 | -282 | 295 |

Record Length: 32 days

Start of Time Series: 2203, 2 August 1982 ADT

Days from Century Start: 30164.919

Table C4

Tidal Harmonic Constants

Point Thomson, Station Y .

| Constituent | Frequency (CPD) | Amplitude (ft) | Phase (degrees) Based on: | |
|-------------|--------------------|-------------------|---------------------------------|---------------------------------|
| | | | Start of Time Series | 0000 Hrs. ADT 1 January 1900 |
| O1 | 0.92954 | 0.090 | -126 | 93 |
| K1 | 1.00274 | 0.073 | - 49 | 58 |
| N2 | 1.89598 | 0.029 | -139 | 261 |
| M2 | 1.93227 | 0.222 | -250 | 328 |
| S2 | 2.00000 | 0.106 | - 27 | 88 |
| M4 | 3.86454 | 0.001 | -124 | 311 |
| M6 | 5.79682 | 0.002 | - 69 | 333 |

Record Length: 36 days

Start of Time Series: 1549, 28 July 1982 ADT

Days from Century Start: 30159.659

Table C5

Tidal Harmonic Constants

Point Thomson, Station SP.

| Constituent | Frequency (CPD) | Amplitude (ft) | Phase (degrees) Based on: | |
|-------------|--------------------|-------------------|---------------------------------|---------------------------------|
| | | | Start of Time Series | 0000 Hrs. ADT 1 January 1900 |
| O1 | 0.92954 | 0.086 | -117 | 134 |
| K1 | 1.00274 | 0.062 | - 44 | 38 |
| N2 | 1.89598 | 0.031 | + 50 | 309 |
| M2 | 1.93227 | 0.226 | -212 | 12 |
| S2 | 2.00000 | 0.119 | -254 | 94 |
| M4 | 3.86454 | 0.001 | - 77 | 12 |
| M6 | 5.79682 | 0.002 | + 80 | 142 |

Record Length: 55 days

Start of Time Series: 1136, 5 September 1982 ADT

Days from Century Start: 30198.483

Appendix D: Coastal Currents Results

Appendix D: Coastal Currents Results

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Figure D1. Vector Stick Plot, Station E;
1/2 Hour Average Current,
Endeco #232; 2122, 29 July
to 0722, 4 September 1982.



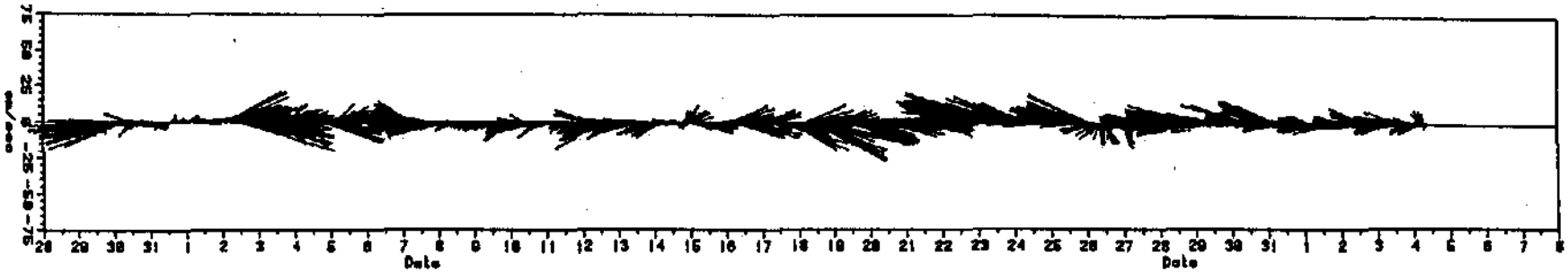


Figure D3 . Vector Stick Plot, Station P;
1/2 Hour Average Current,
Endeco #048; 1545, 29 July to
0845, 4 September 1982.



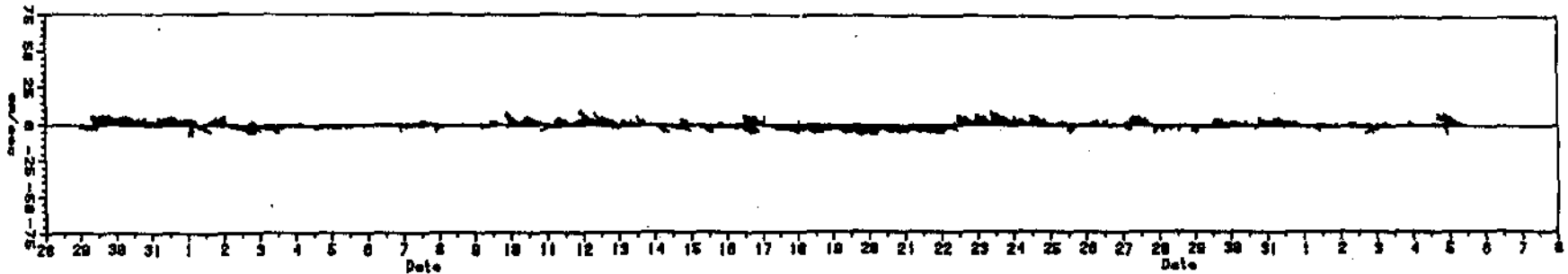


Figure 14. Vector Stick Plot, Station S
(top) - 1/2 Hr. Average Current,
Endeco #175; 2252, 28 July to
1022, 5 September 1982.

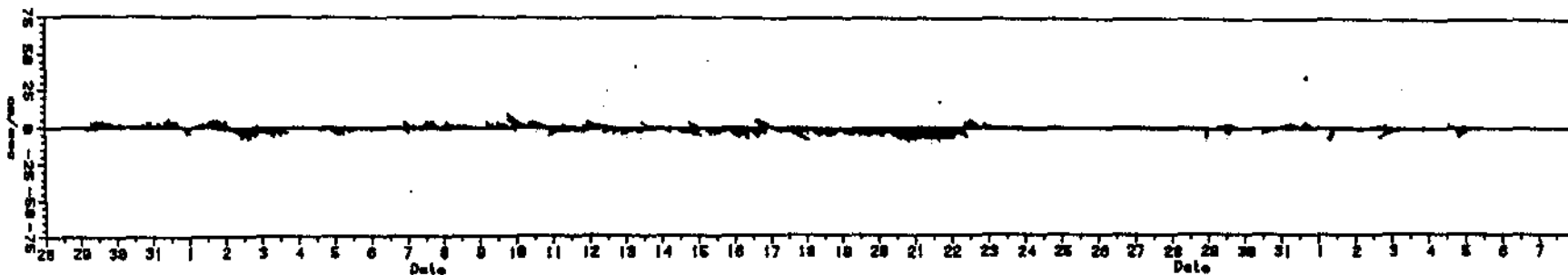


Figure D5. Vector Stick Plot, Station S
(bottom) - 1/2 Hr. Average
Current, Endeco #052, 2242, 28
July to 1012, 5 September 1982.

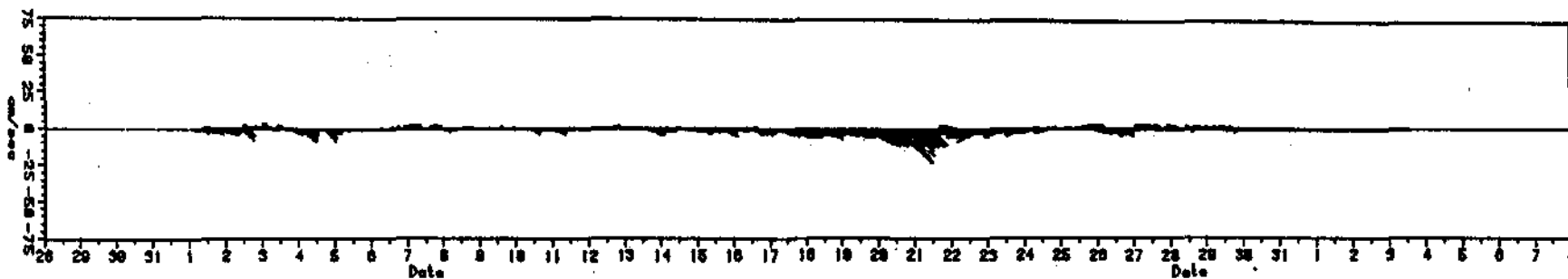


Figure D6 . Vector Stick Plot, Station Q;
1/2 Hr. Average Current, Endeco
#047, 0228, 1 August to 1228,
3 September 1982.



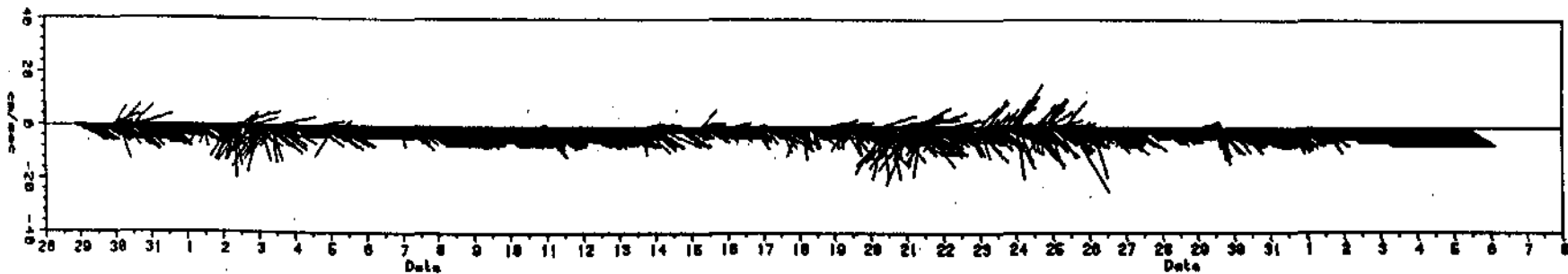


Figure D7 . Vector Stick Plot, Station T;
South of Flaxman Island (7'
Depth), 2020, 28 July , 0950,
5 September 1982.



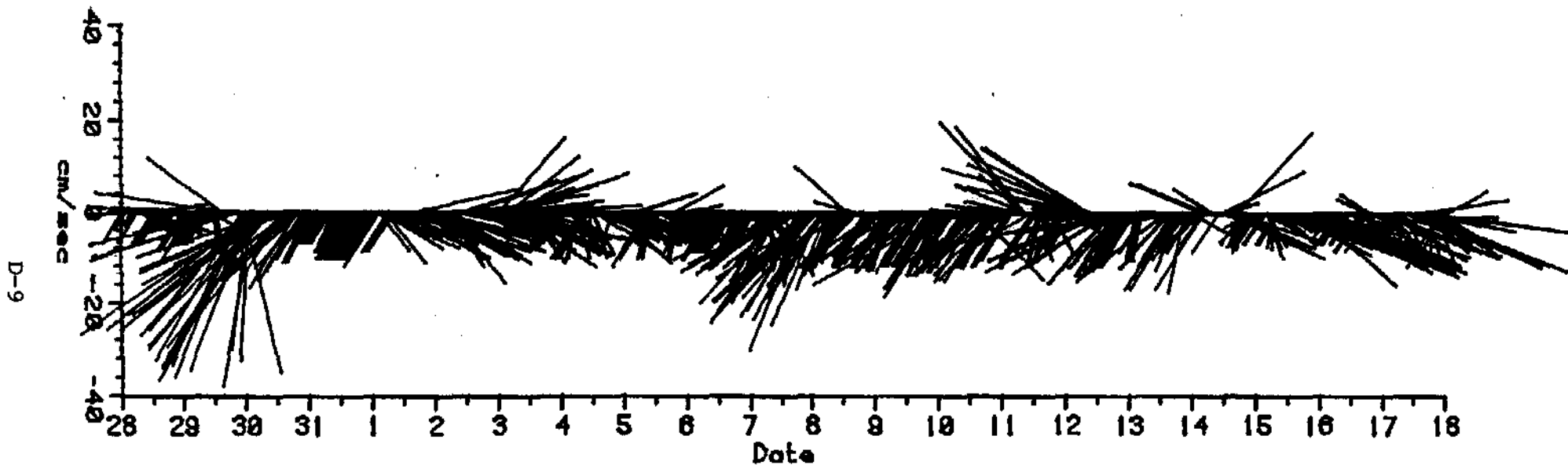


FIGURE D8

VECTOR STICK PLOT
POINT THOMSON STATION D CURRENT
0010, 28 JULY TO 2340, 17 AUGUST, 1982



D-10

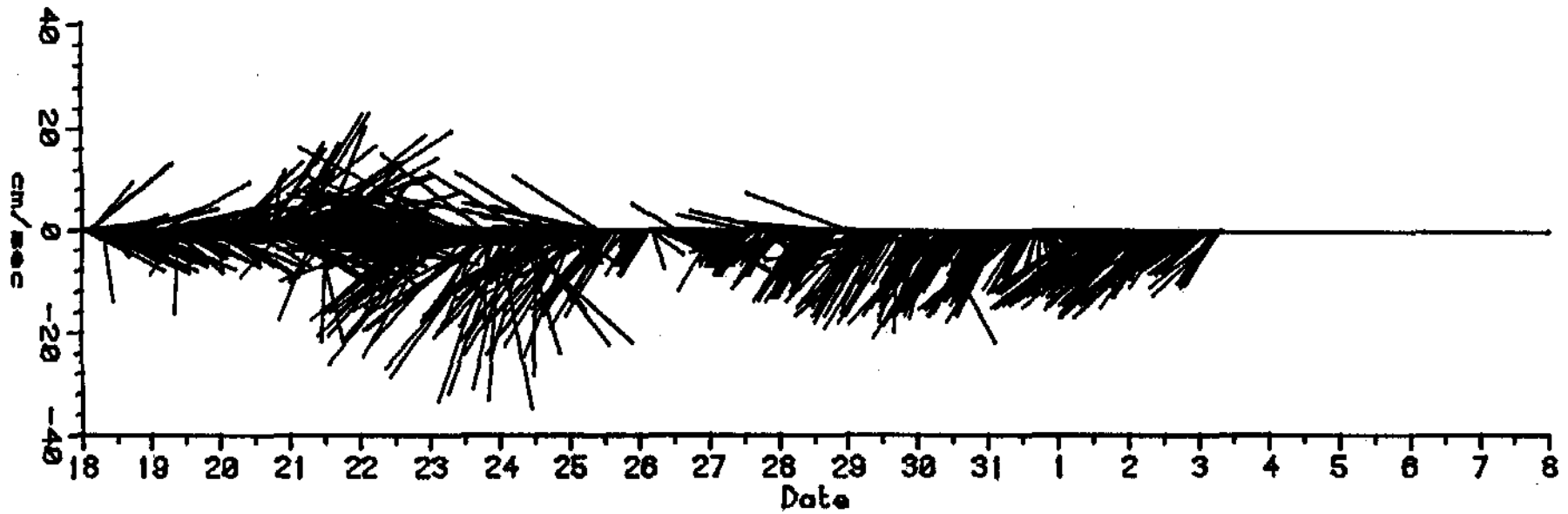


FIGURE D8

VECTOR STICK PLOT
POINT THOMSON STATION D CURRENT
0010, 18 AUGUST TO 0940, 3 SEPTEMBER, 1982



D-11

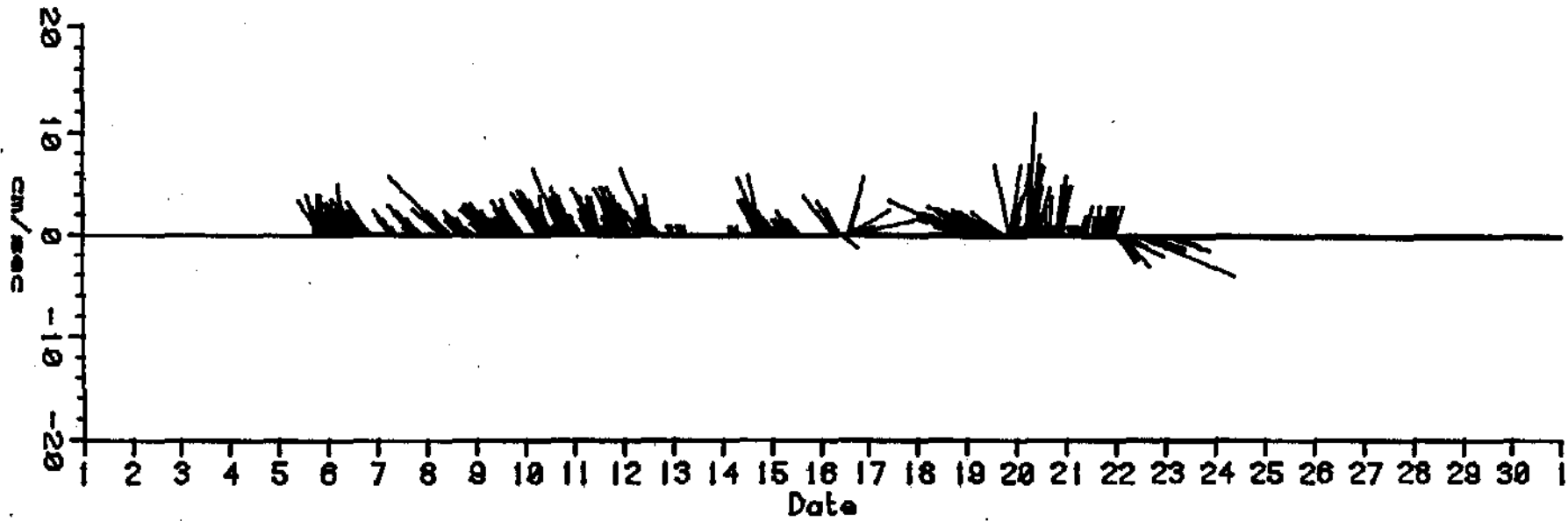


FIGURE D9

VECTOR STICK PLOT
POINT THOMSON STATION SP CURRENT
1600, 5 SEPTEMBER TO 2300, 30 SEPTEMBER, 1982



D-12

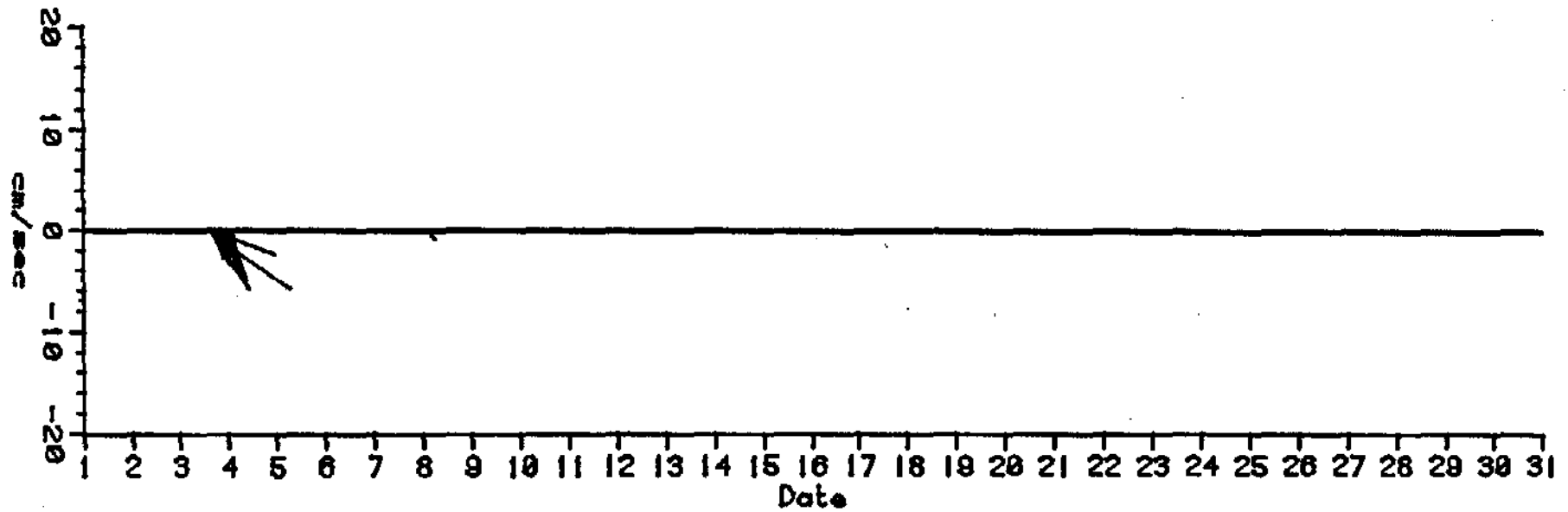


FIGURE D9

VECTOR STICK PLOT
POINT THOMSON STATION SP CURRENT
0000, 1 OCTOBER TO 2300, 30 OCTOBER, 1982



D-13

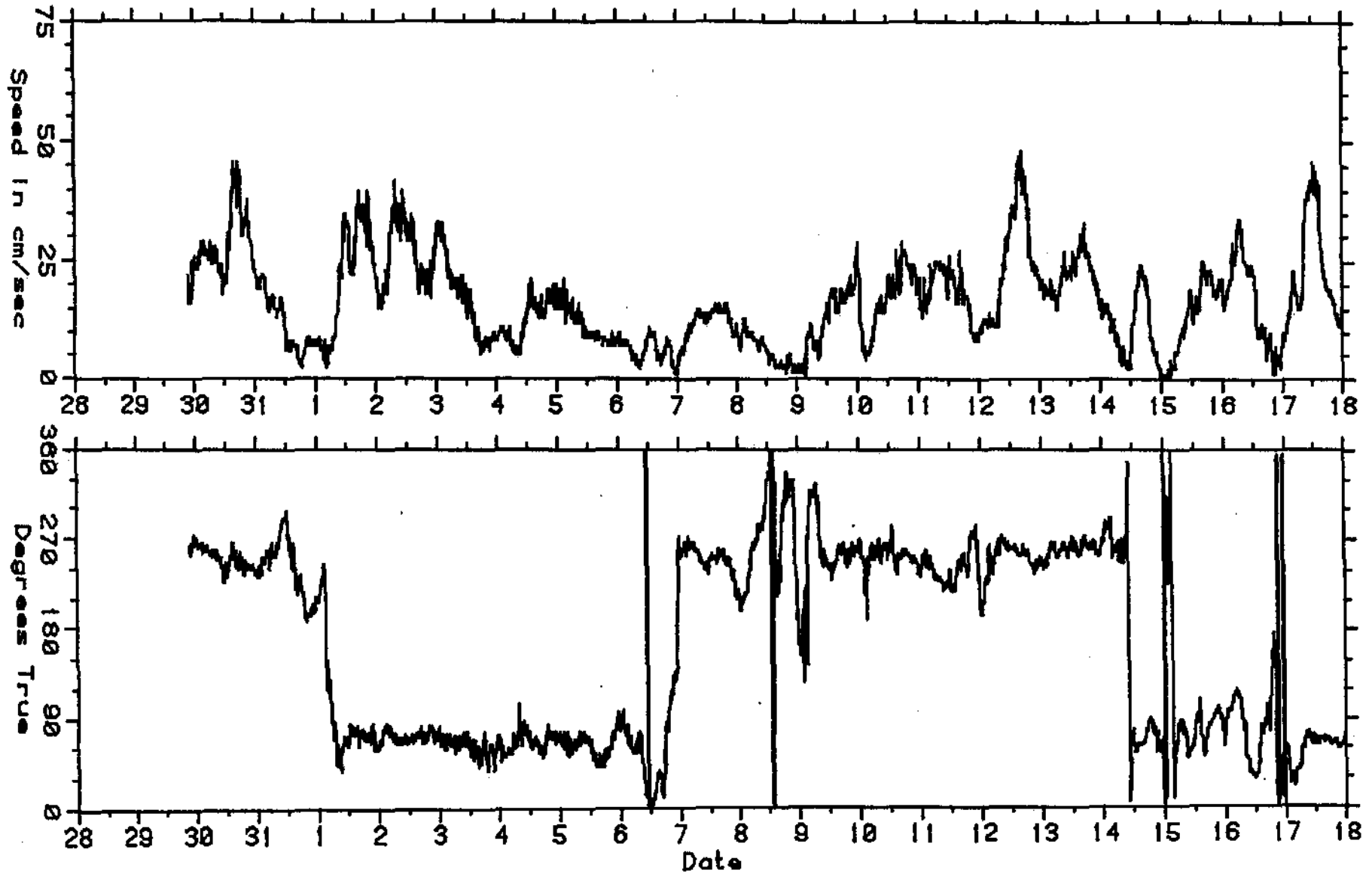
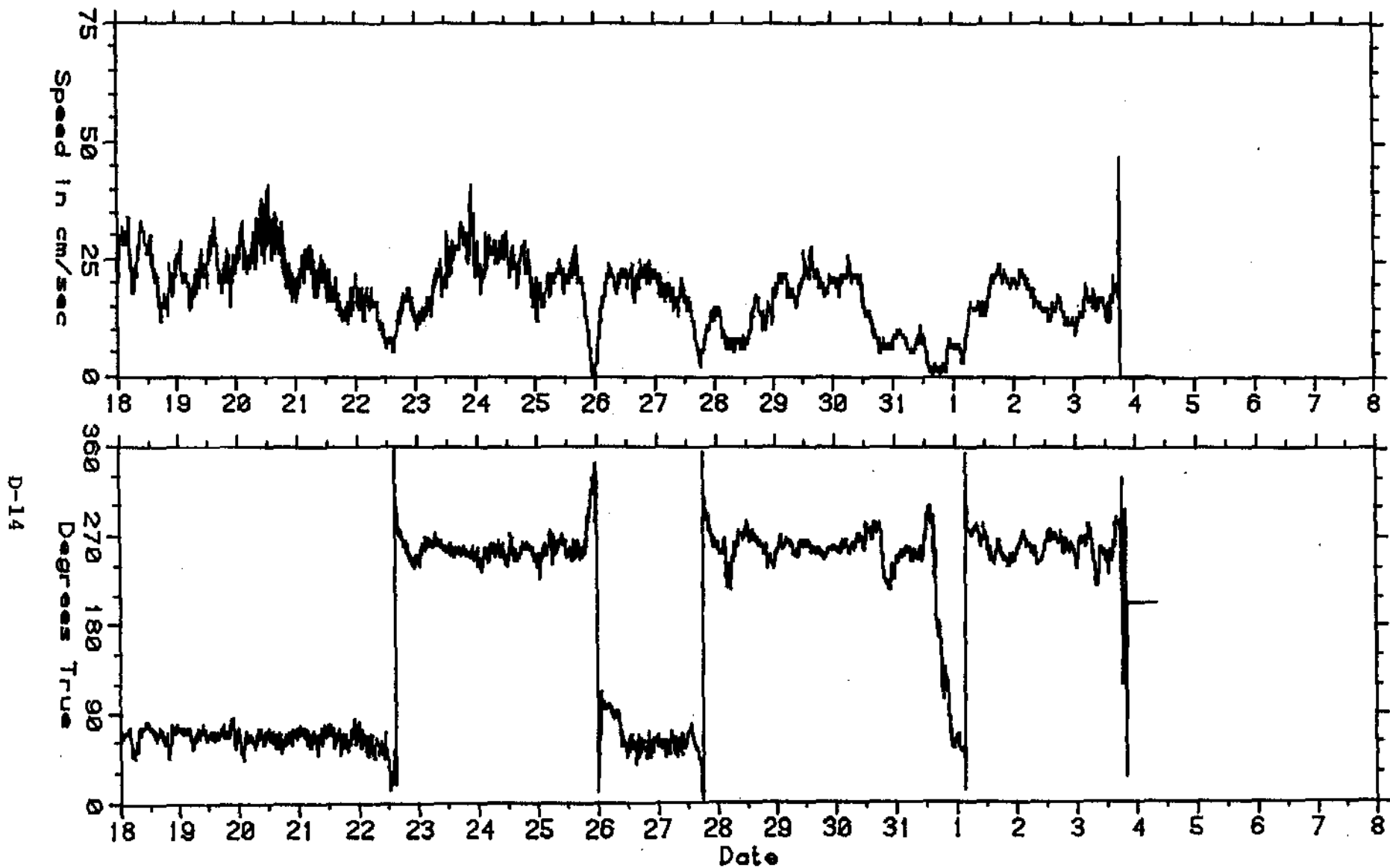


FIGURE D10

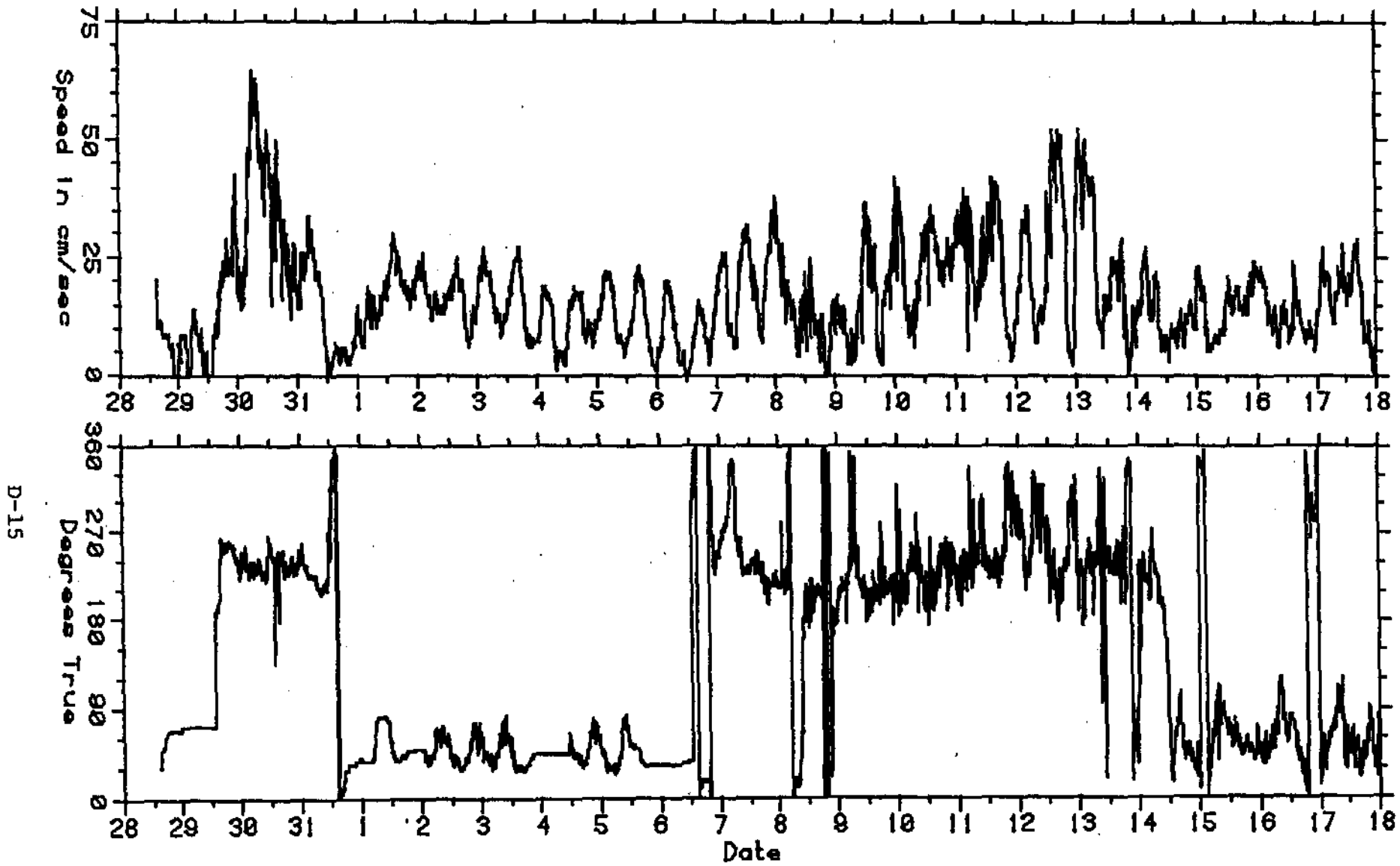
Speed and Direction Data
Station E, South of Alaska Island, Endeco #232
2109, 29 July to 2359, 17 August, 1982



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FIGURE D10

Speed and Direction Data
 Station E, South of Alaska Island, Endeco #232
 0004, 18 August to 0754, 4 September, 1982.



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FIGURE D11 SPEED AND DIRECTION DATA
 STATION 0 - MARY SACHS ENTRANCE - ENDECO #049
 1525, 28 JULY TO 0000, 18 AUGUST, 1982

D-16

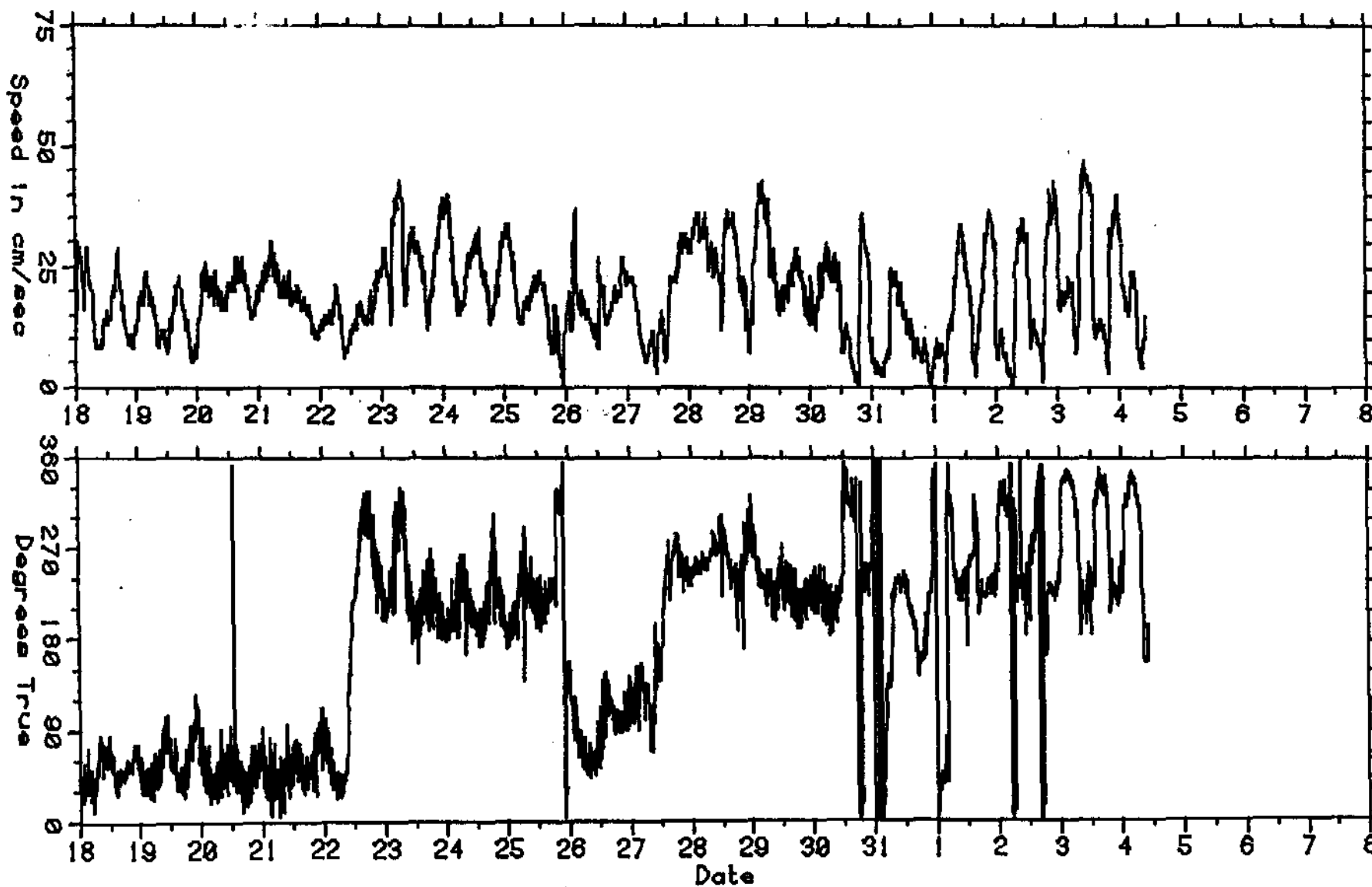
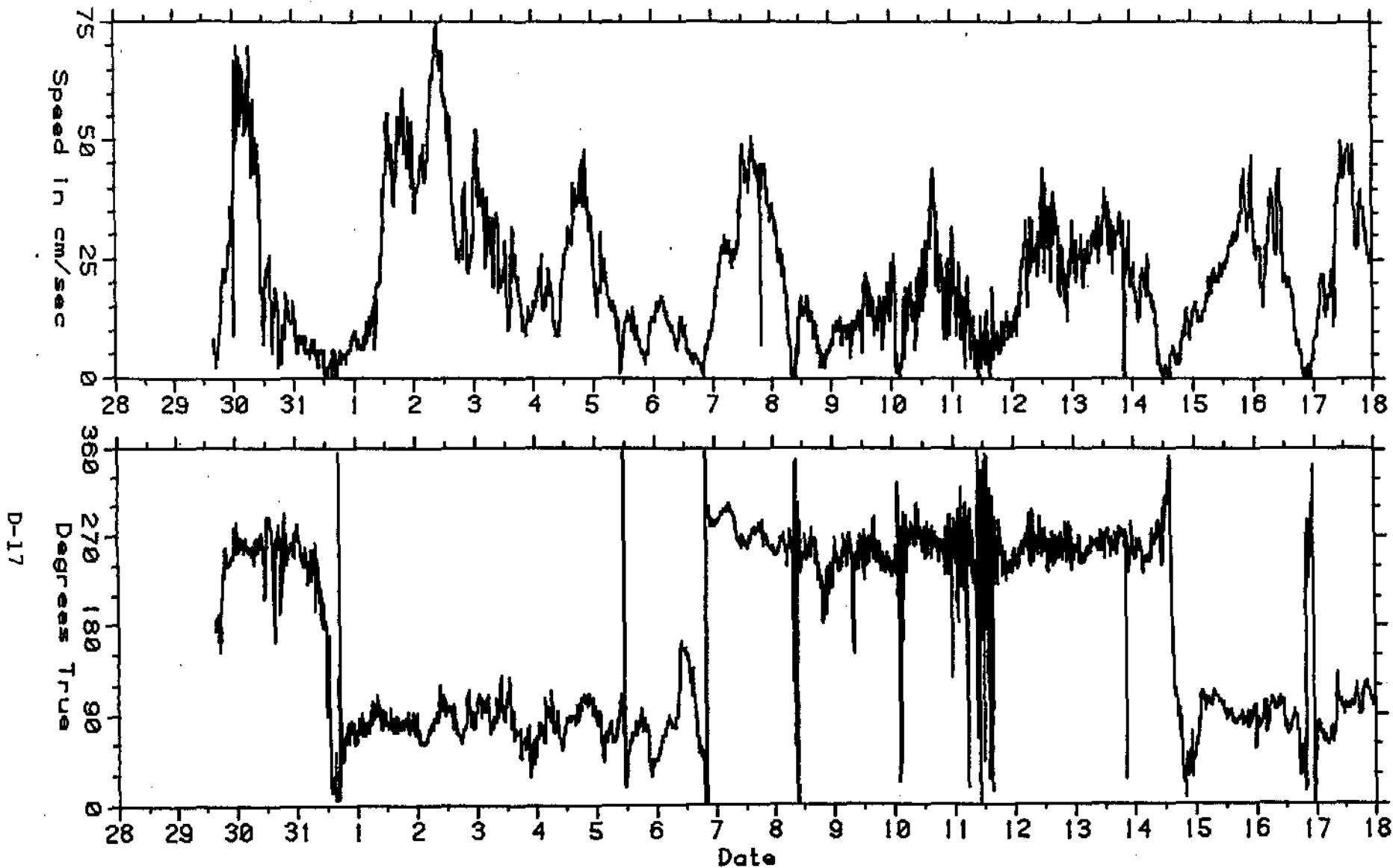


FIGURE D11

SPEED AND DIRECTION DATA
STATION 0 - MARY SACHS ENTRANCE - ENDECO #049
0000, 18 AUGUST TO 1035, 4 SEPTEMBER, 1982



D-17

FIGURE D12

SPEED AND DIRECTION DATA
STATION P - MARY SACHS ENTRANCE - ENDECO #048
1532, 29 JULY TO 2357, 17 AUGUST, 1982

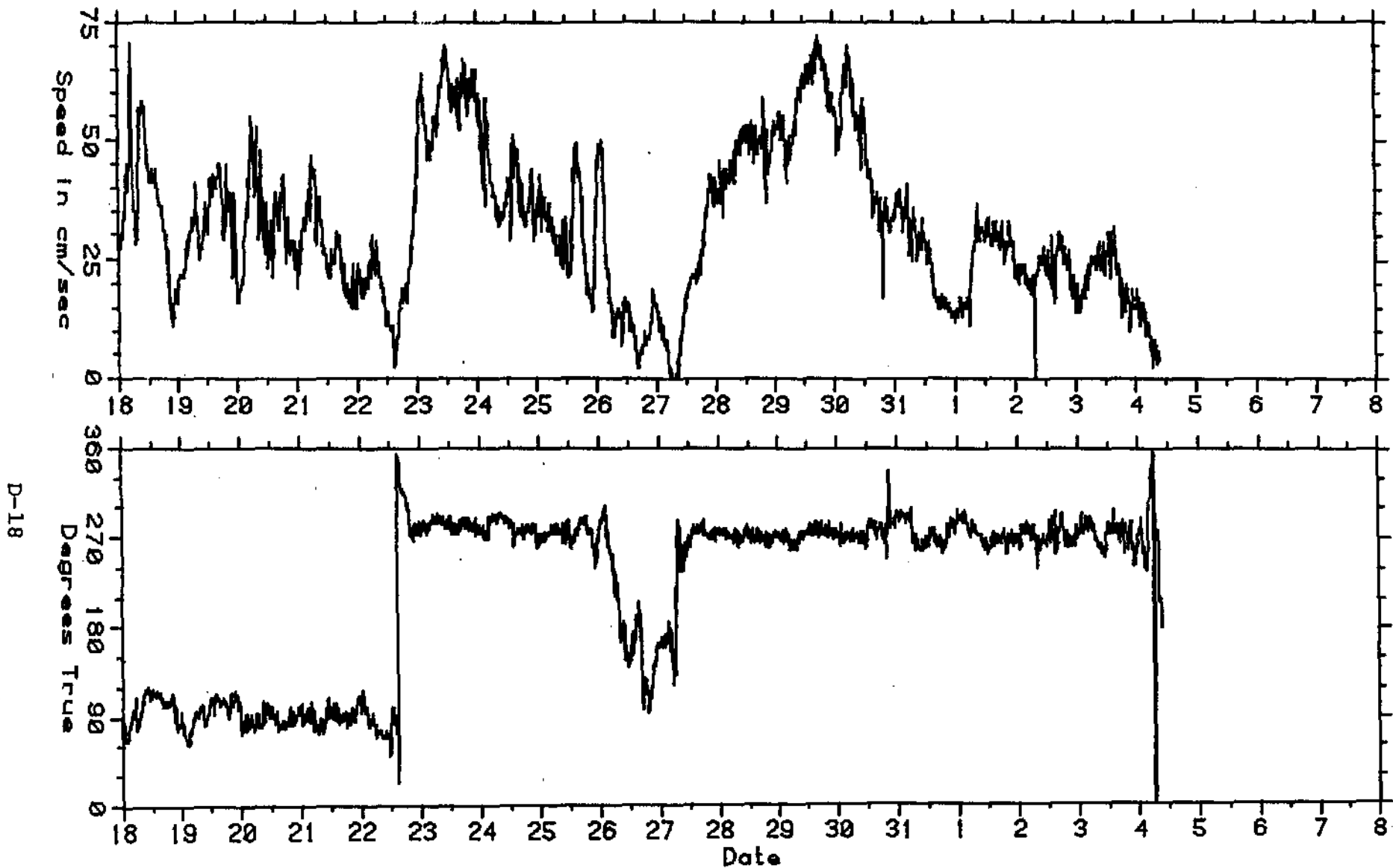


FIGURE D12, SPEED AND DIRECTION DATA
STATION P - MARY SACHS ENTRANCE - ENDECO #048
0002, 18 AUGUST TO 0922, 4 SEPTEMBER, 1982

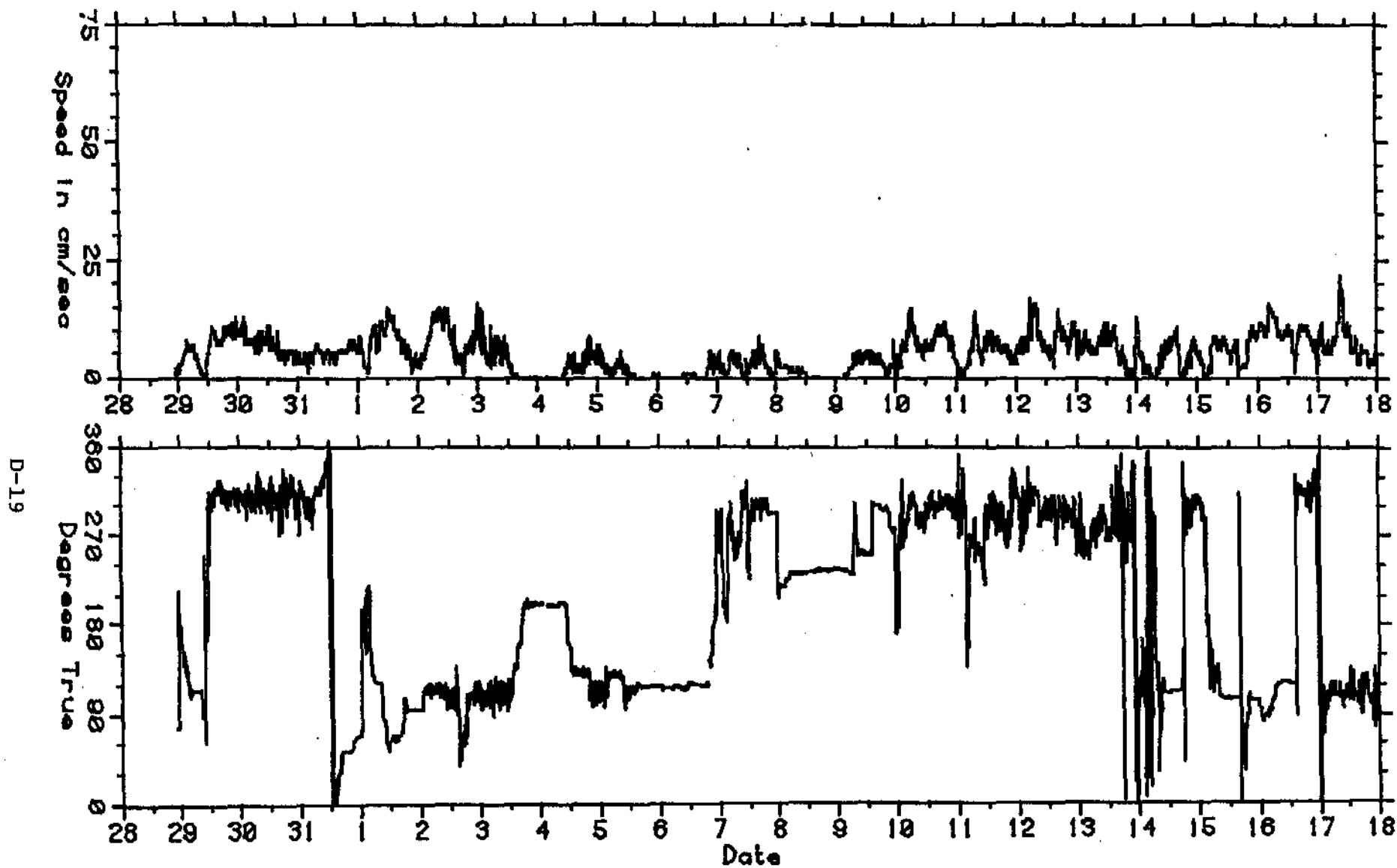


FIGURE D13

Speed and Direction Data
Station S (Top), South of Flaxman Island, Endeco #175
2239, 28 July to 2359, 17 August, 1982.

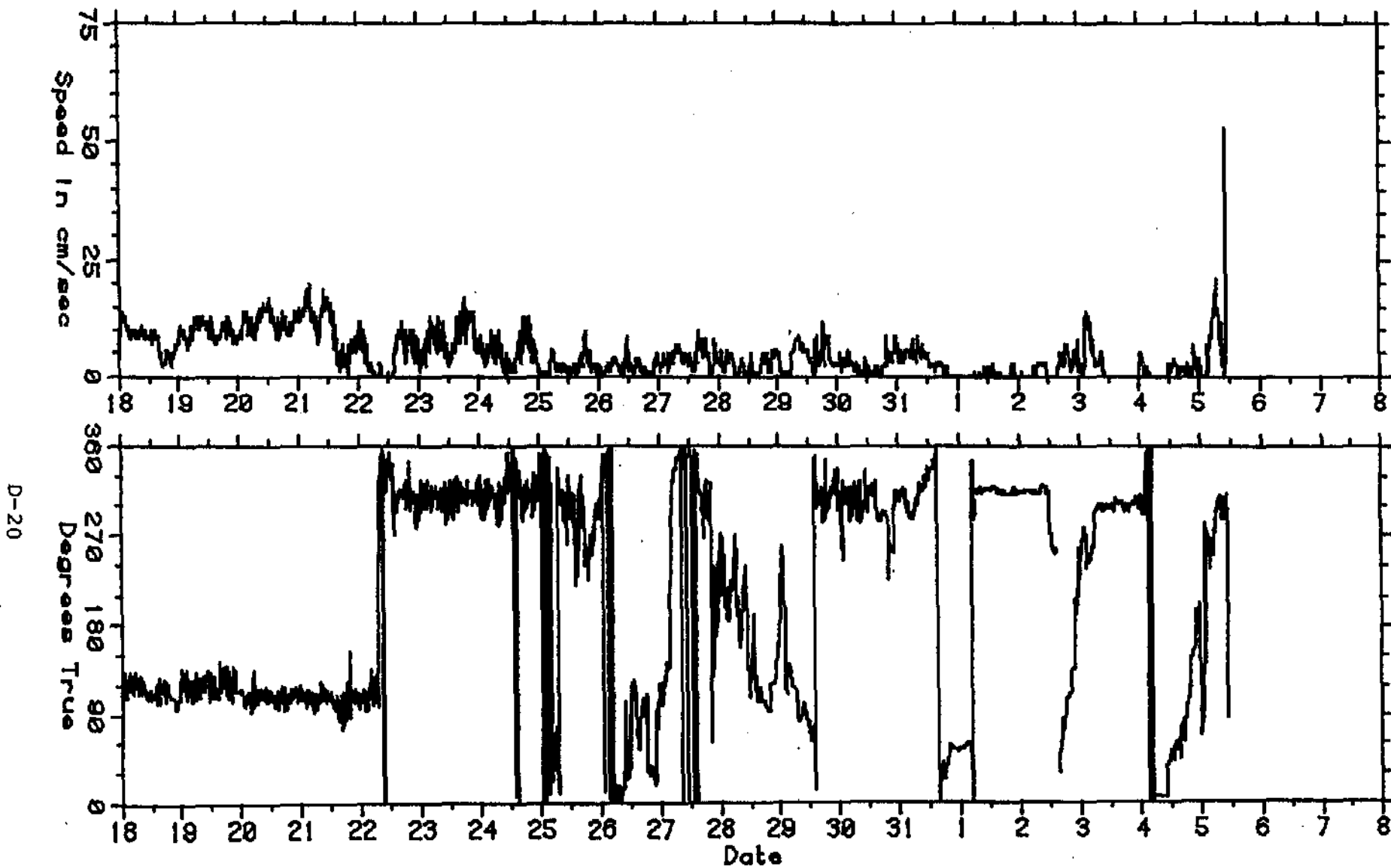


FIGURE D13

SPEED AND DIRECTION DATA
STATION S (TOP) - SOUTH OF FLAXMAN ISLAND - ENDECO #175
0004, 18 JULY TO 1044, 5 SEPTEMBER, 1982

D-21

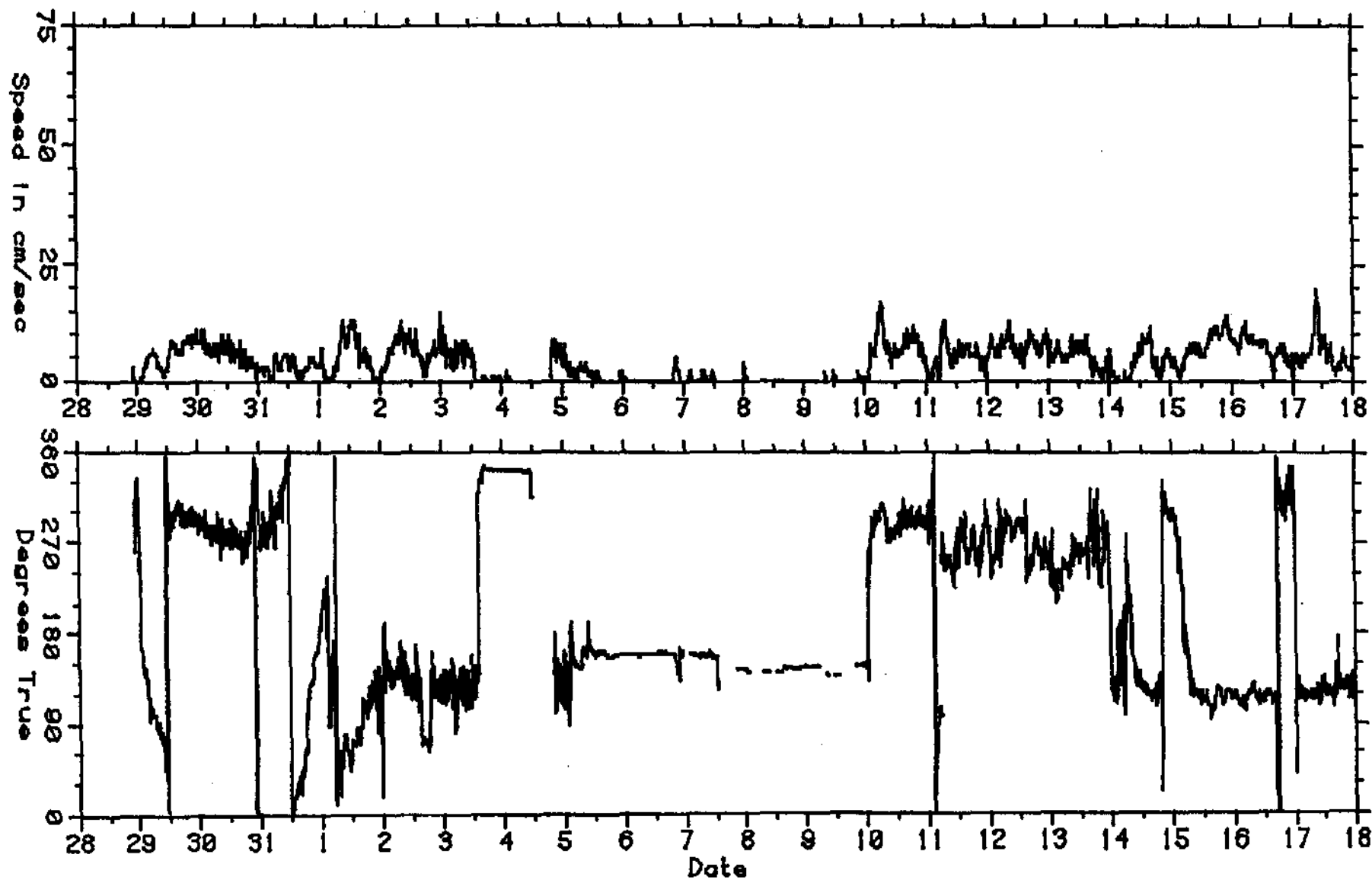


FIGURE D14.

SPEED AND DIRECTION DATA
STATION S (BOTTOM) - SOUTH OF FLAXMAN ISLAND - ENDECO #052
2229, 28 JULY TO 2359, 17 AUGUST, 1982

D-22

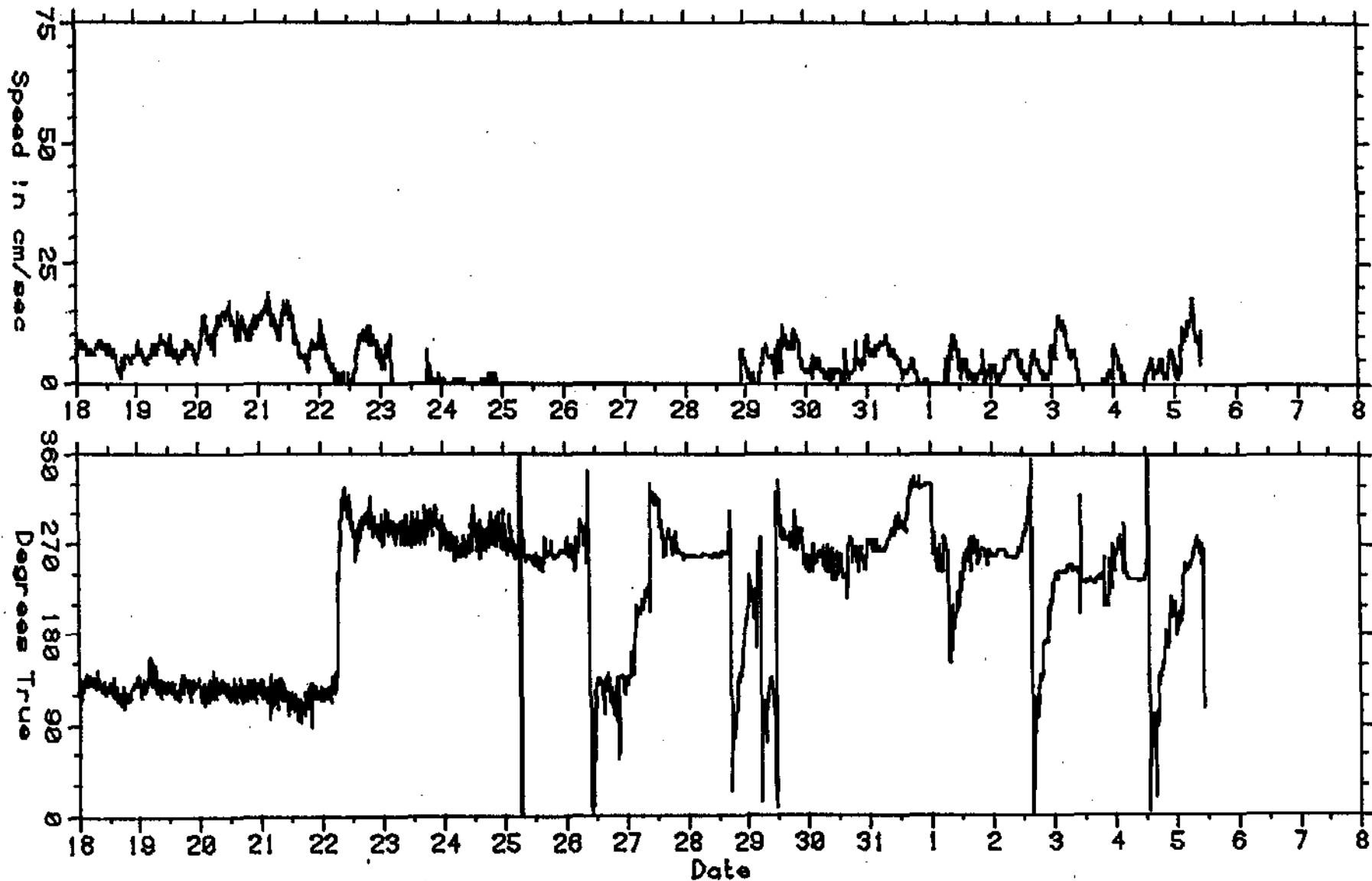


FIGURE D14

SPEED AND DIRECTION DATA
STATION S (BOTTOM) - SOUTH OF FLAXMAN ISLAND - ENDECO #052
0004, 18 AUGUST TO 1039, 5 SEPTEMBER, 1982

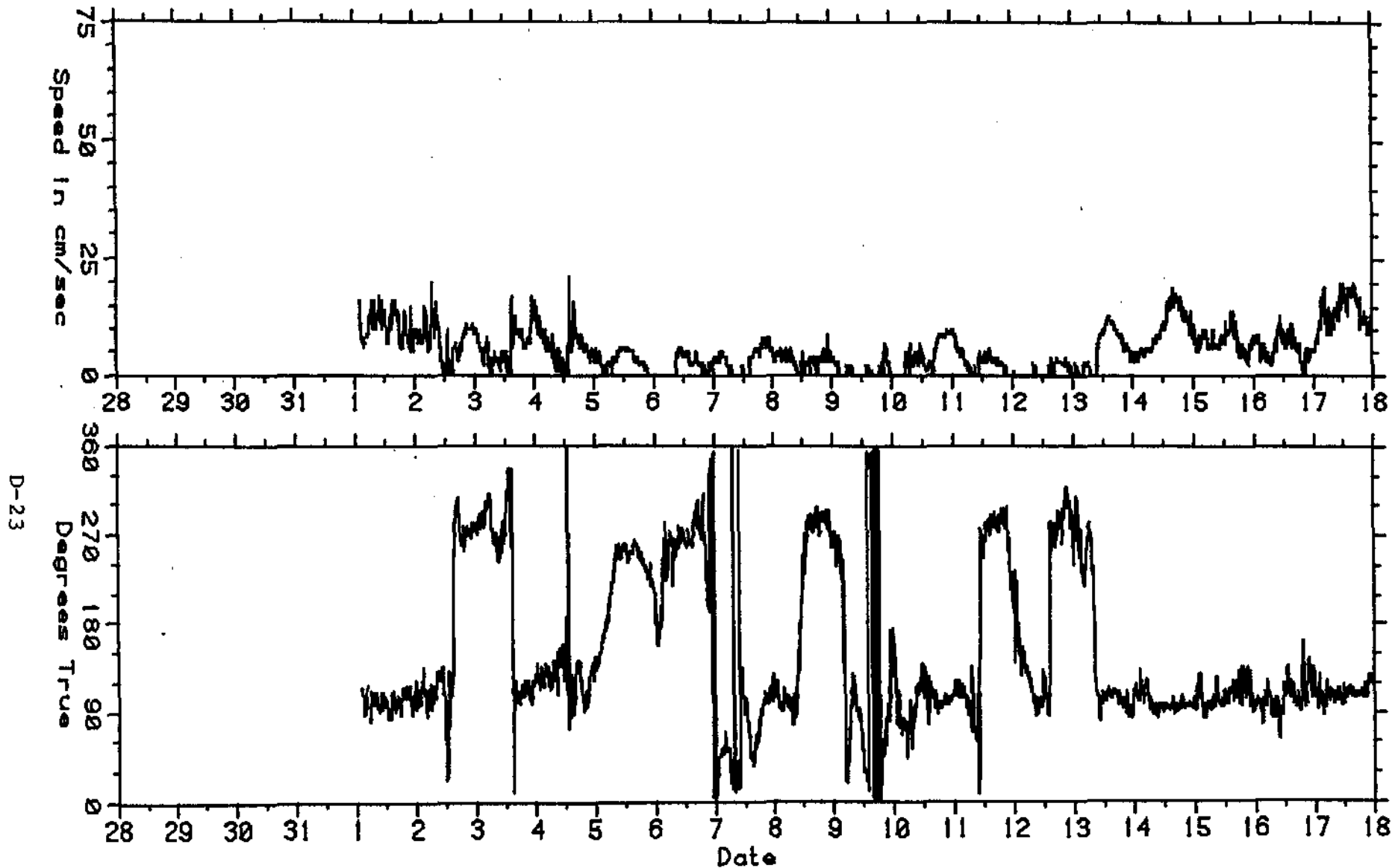


FIGURE D15. SPEED AND DIRECTION DATA
STATION Q - NORTH OF FLAXMAN ISLAND - ENDECO #047
0215, 1 AUGUST TO 0000, 18 AUGUST, 1982

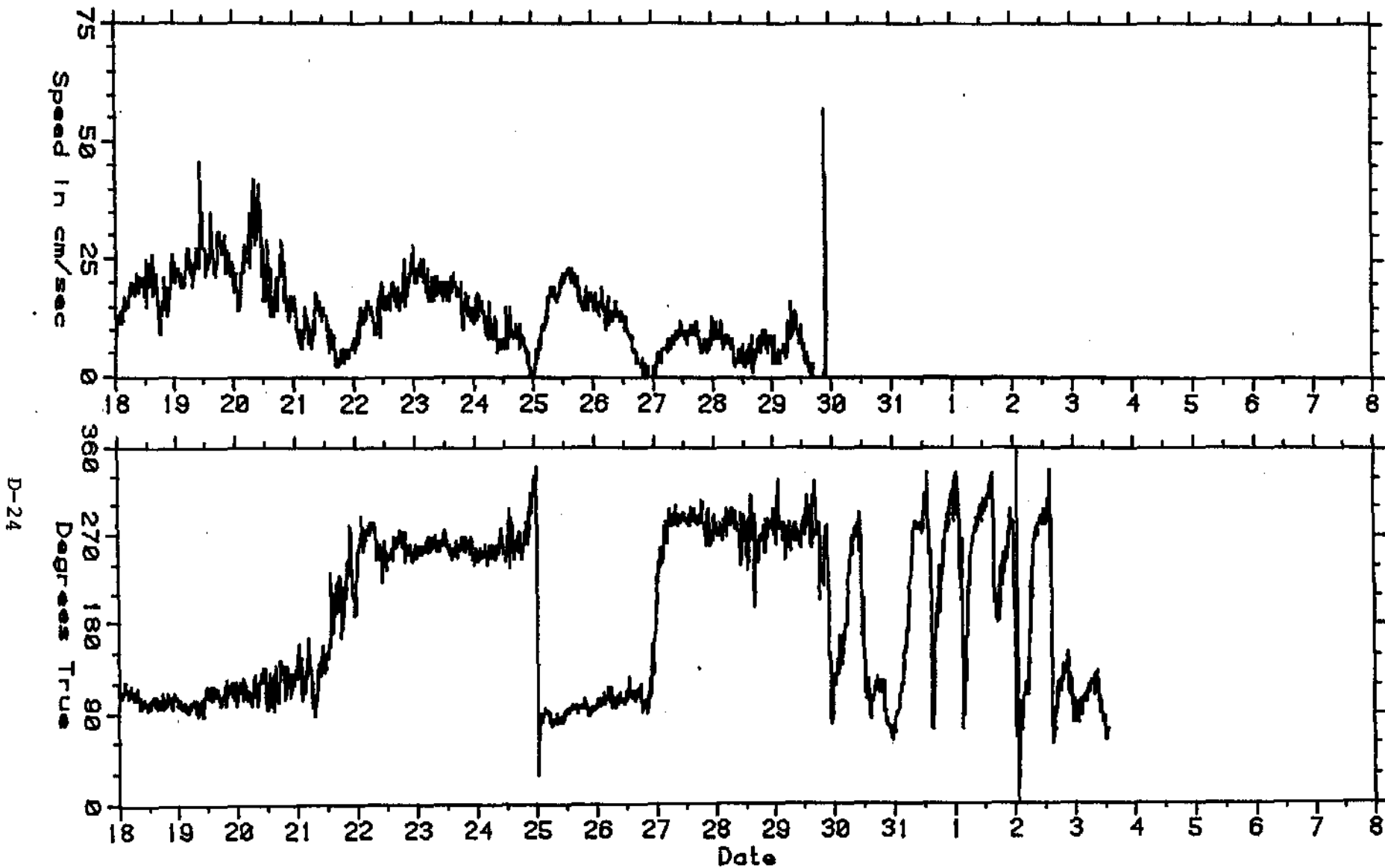


FIGURE D15

SPEED AND DIRECTION DATA
STATION Q - NORTH OF FLAXMAN ISLAND - ENDECO #047
0000, 18 AUGUST TO 1300, 3 SEPTEMBER, 1982

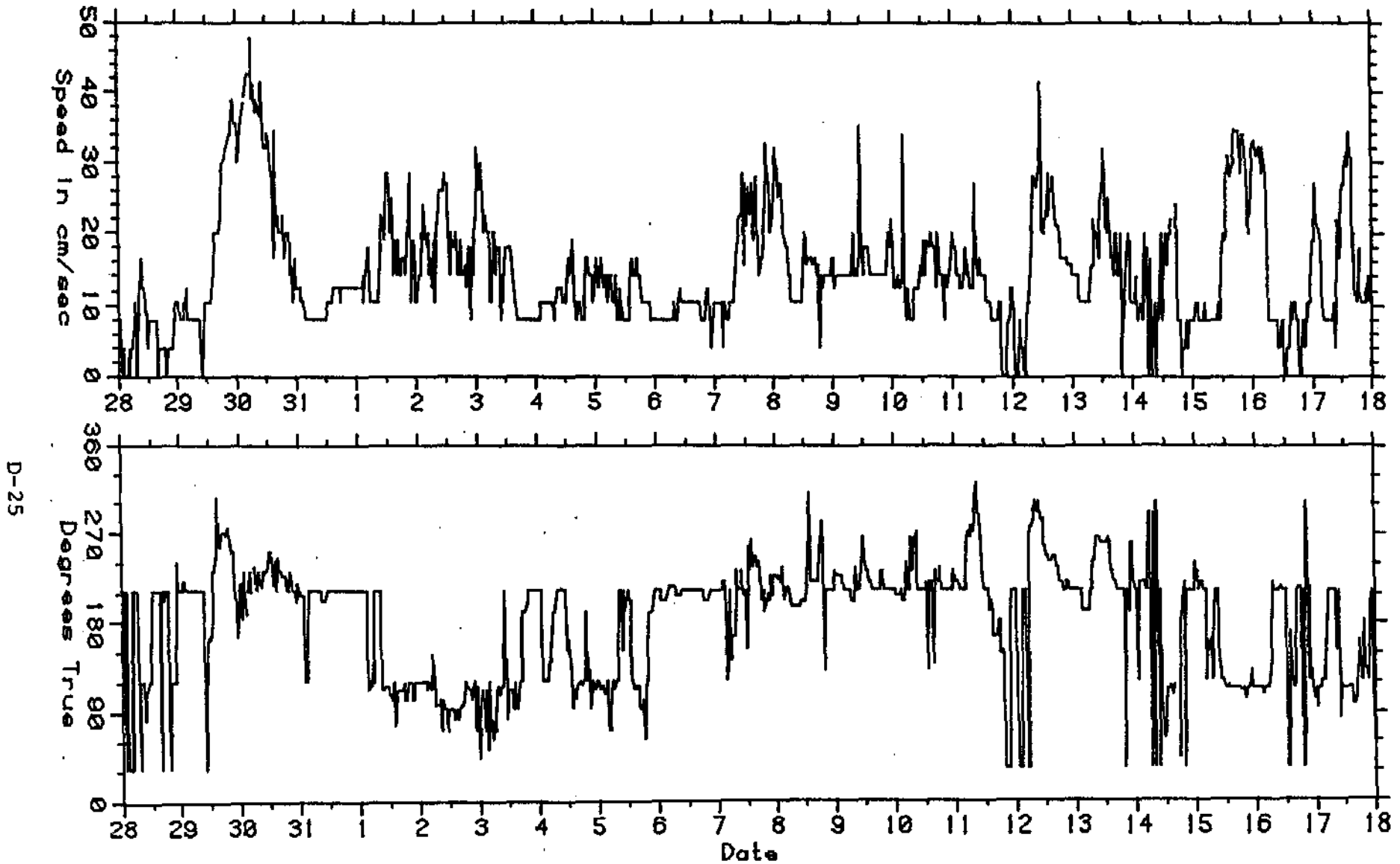


FIGURE D16 . SPEED AND DIRECTION DATA
POINT THOMSON STATION D
0010, 29 JULY TO 2340, 17 AUGUST, 1982

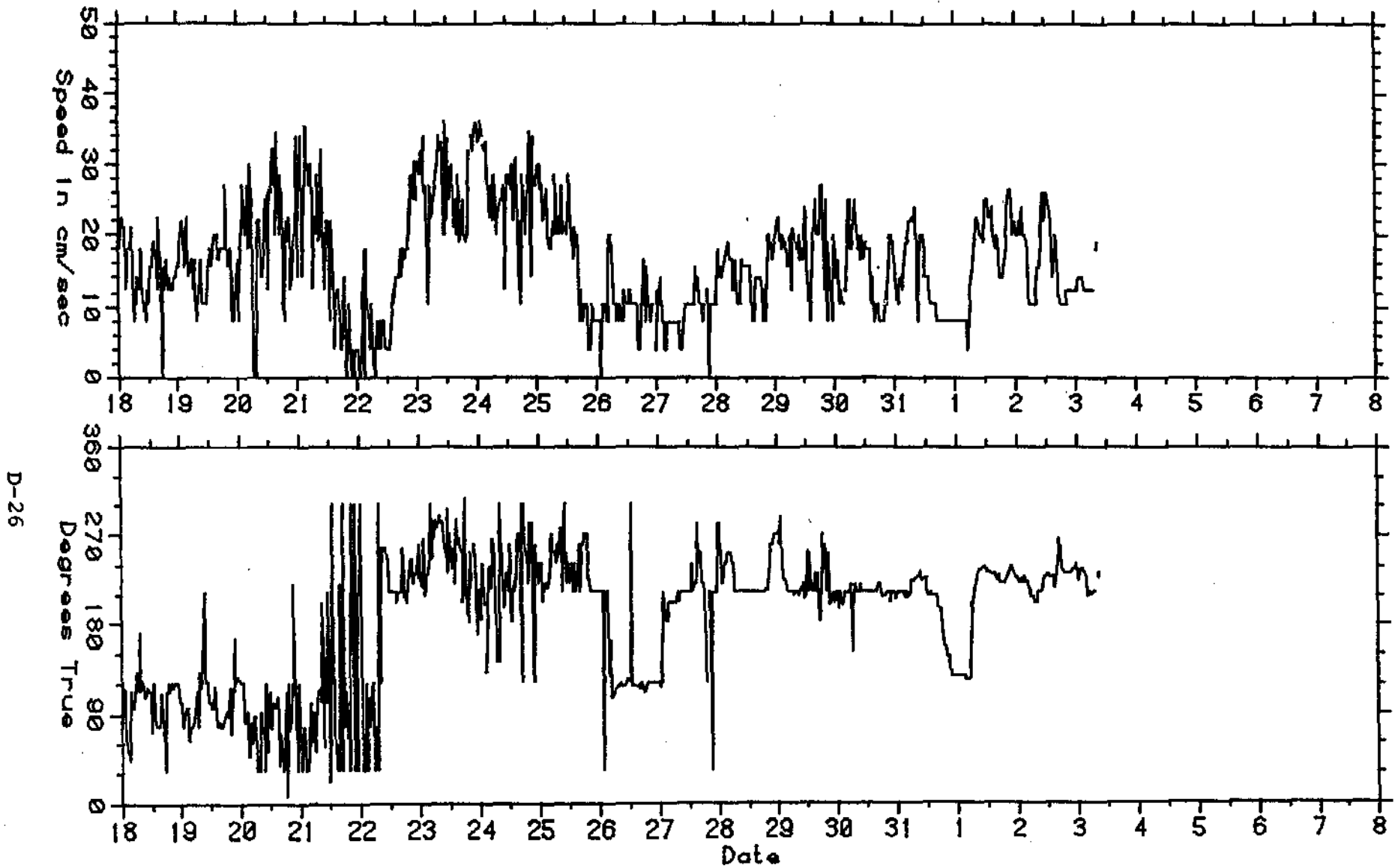


FIGURE D16. SPEED AND DIRECTION DATA
POINT THOMSON STATION D
0010, 18 AUGUST TO 0940, 3 SEPTEMBER, 1982

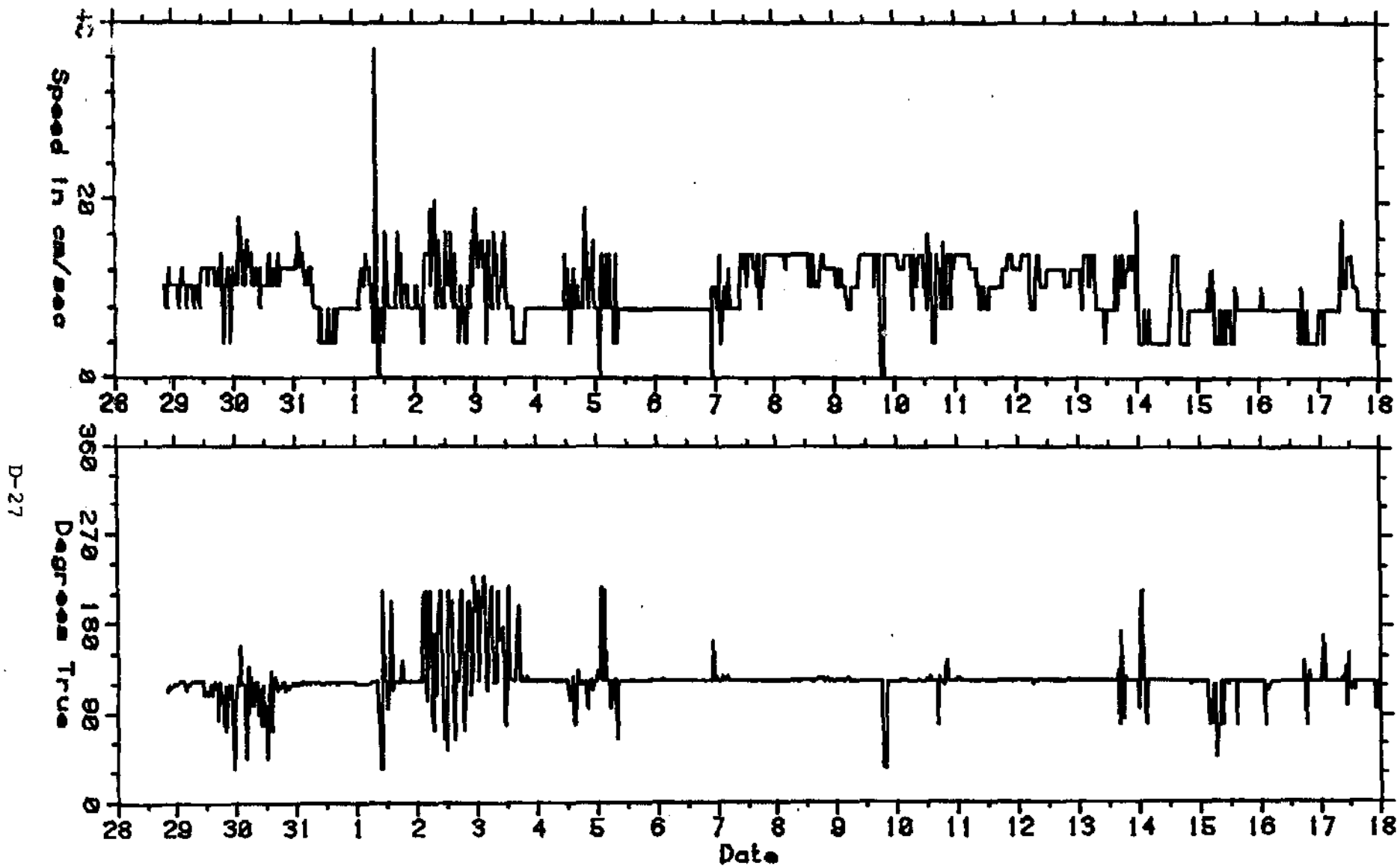


FIGURE D17 SPEED AND DIRECTION DATA
STATION T - SOUTH OF FLAXMAN ISLAND (7' DEPTH)
2020 28 JULY - 2350 17 AUG 1982

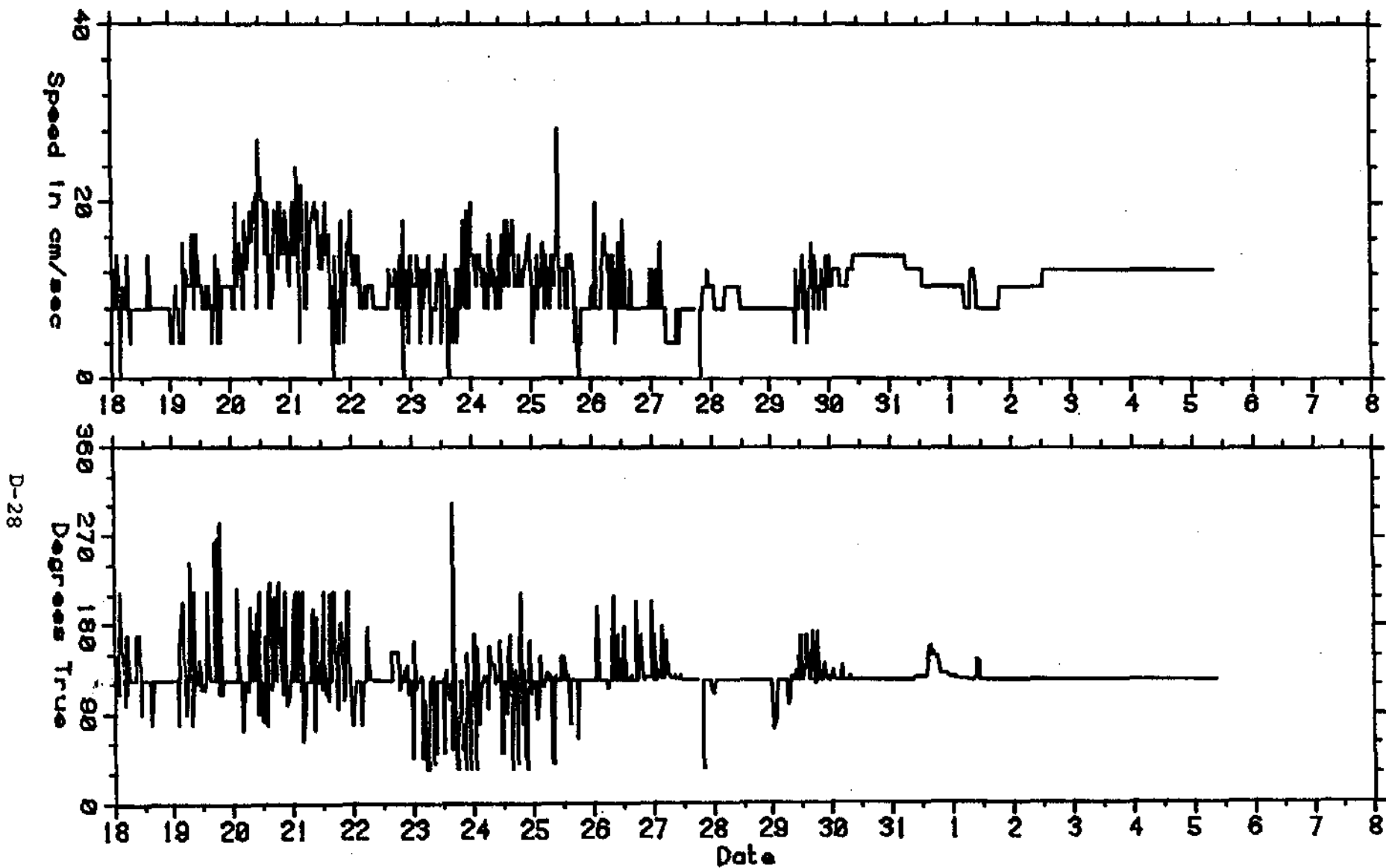


FIGURE D17.

SPEED AND DIRECTION DATA
STATION T - SOUTH OF FLAXMAN ISLAND (7' DEPTH)
0020 18 AUG - 0050 5 SEPT 1982

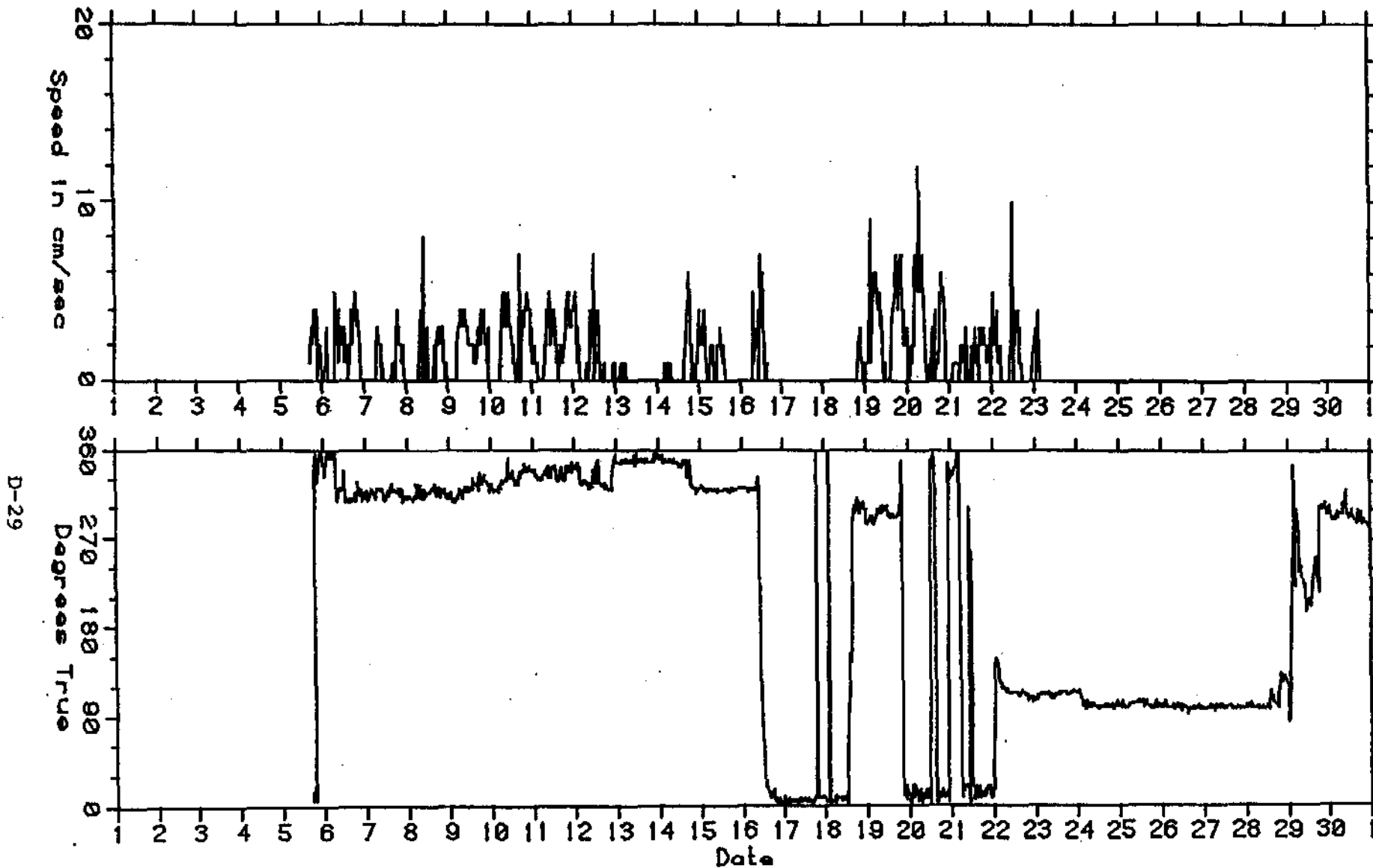


FIGURE D18. SPEED AND DIRECTION DATA
 POINT THOMSON STATION SP
 1600, 5 SEPTEMBER TO 2300, 30 SEPTEMBER, 1982

D-30

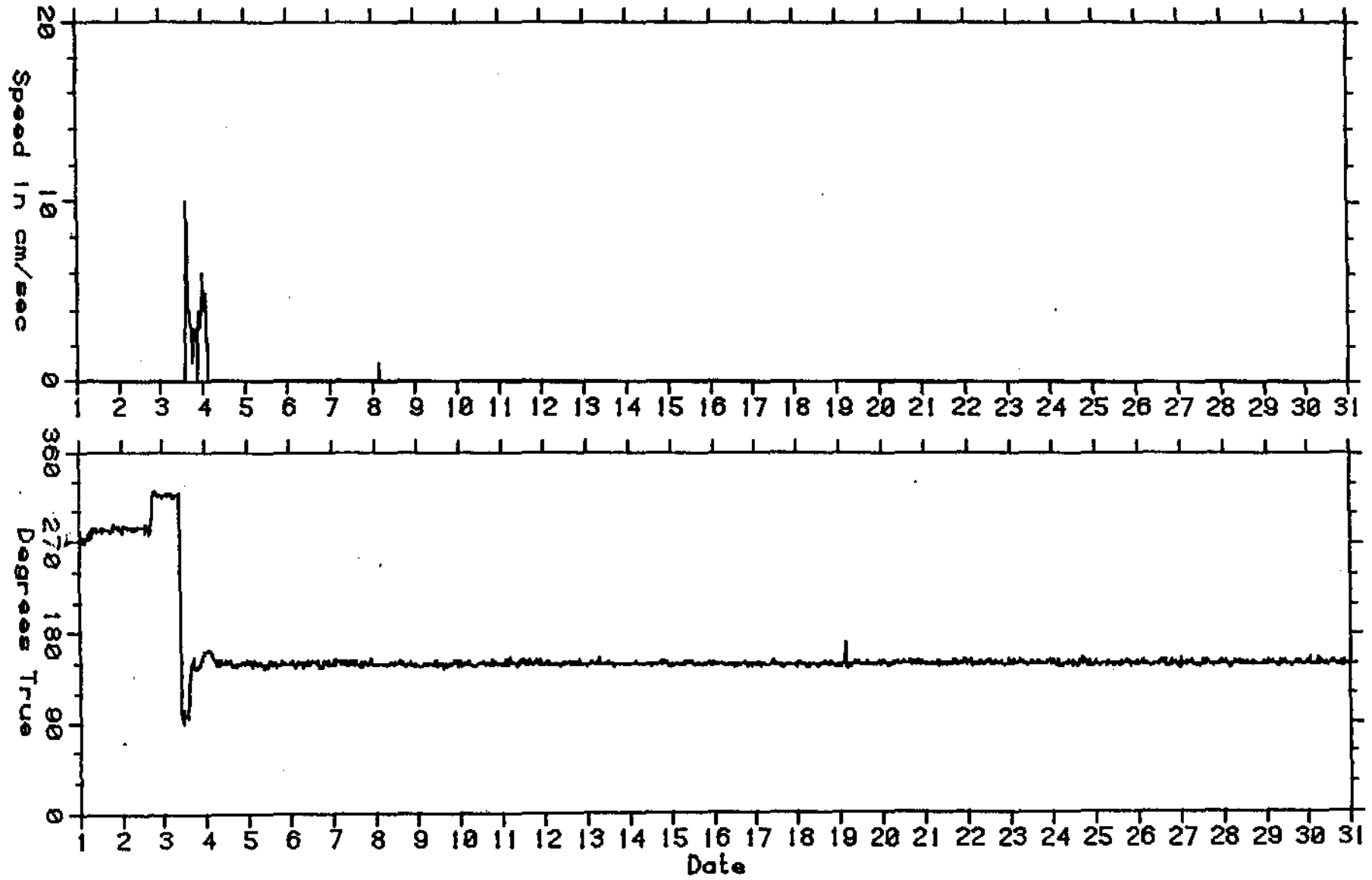


FIGURE D18 SPEED AND DIRECTION DATA
POINT THOMSON STATION SP CURRENNT
0000, 1 OCTOBER TO 2300, 30 OCTOBER, 1982

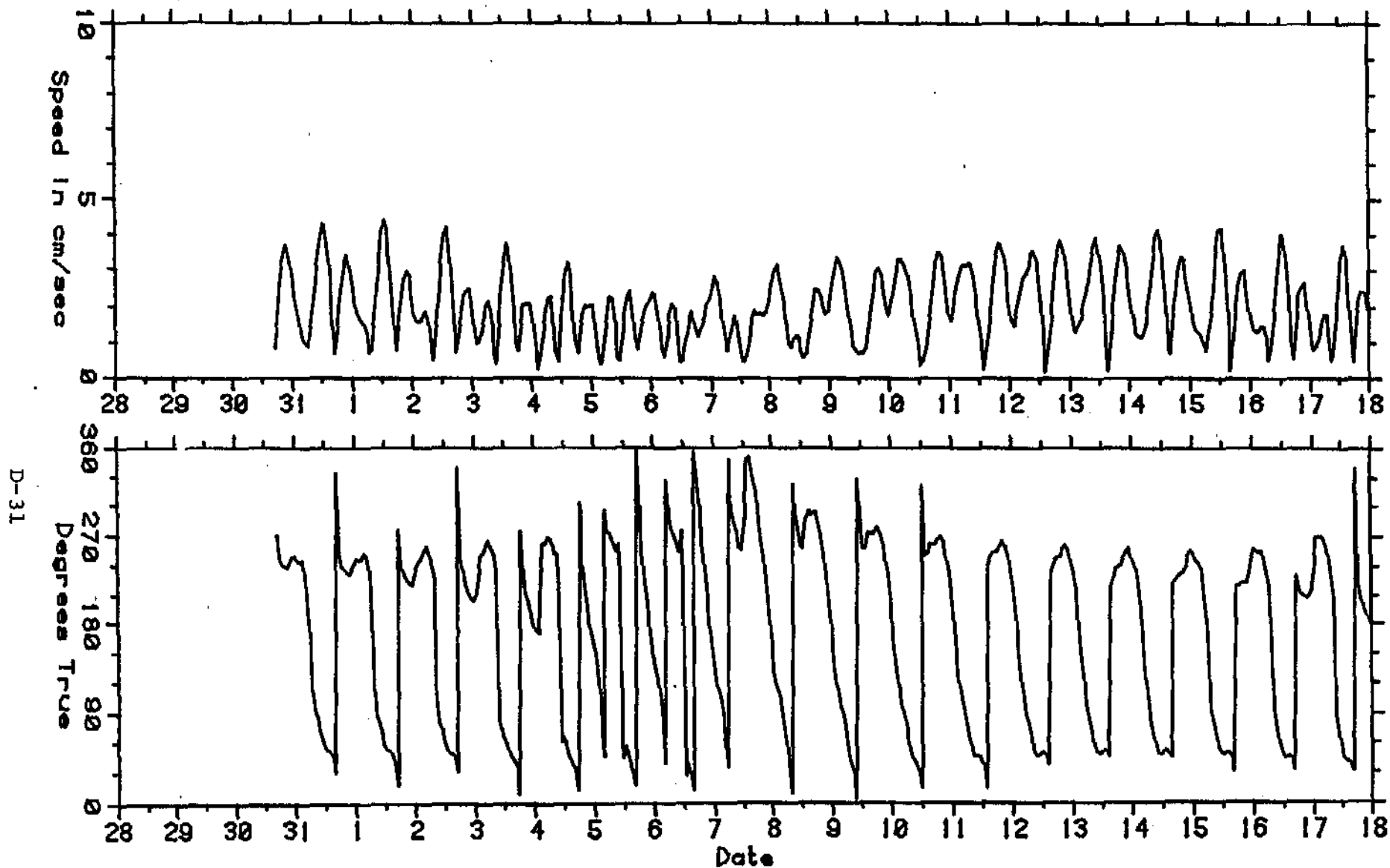
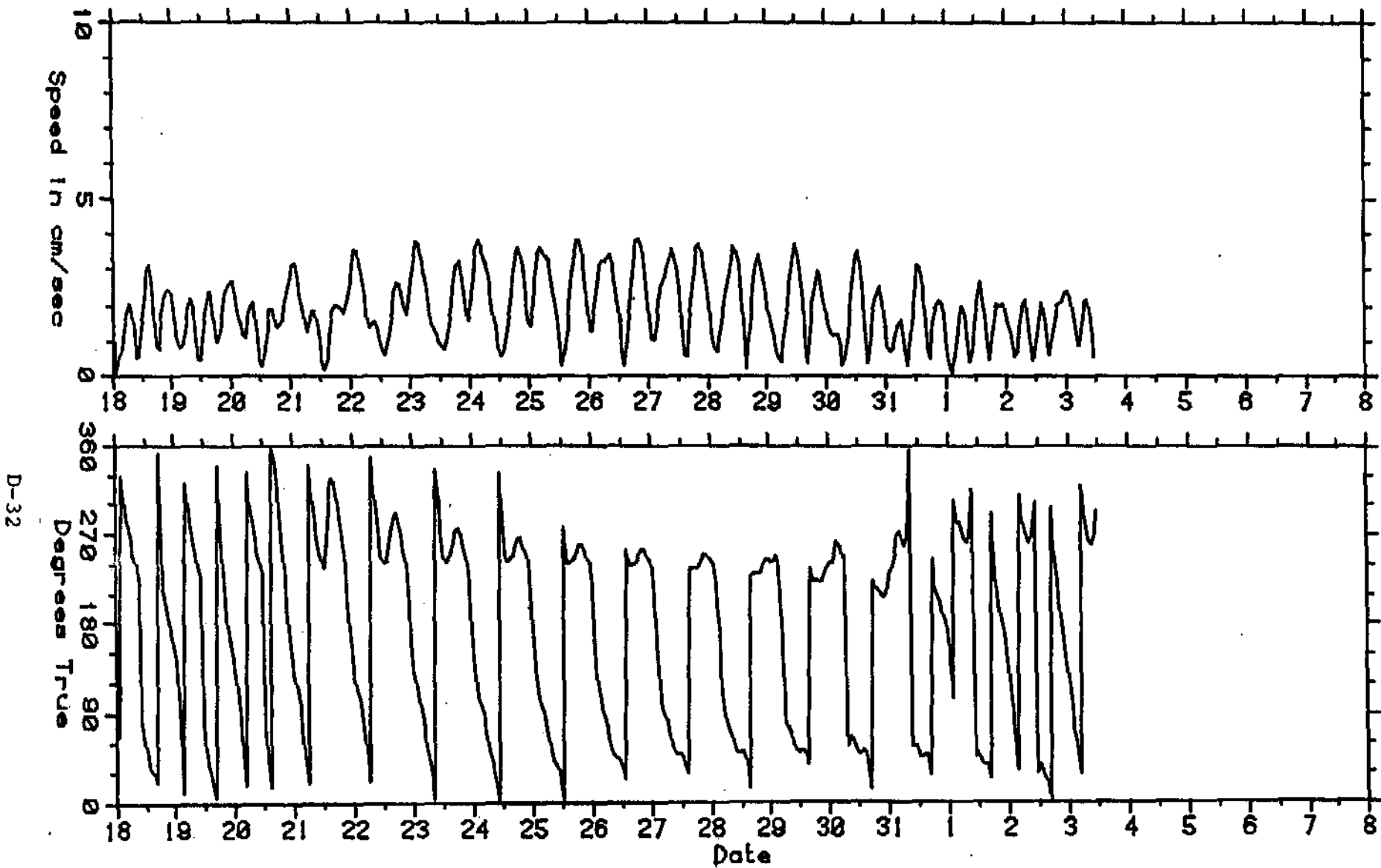


FIGURE D19

SPEED AND DIRECTION DATA
STATION E - LEAST-SQUARES TIDAL CURRENT - ENDECO #232
1637, 30 JULY TO 2337, 17 AUGUST, 1982



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FIGURE D19

SPEED AND DIRECTION DATA
 STATION E - LEAST-SQUARES TIDAL CURRENT - ENDECO # 232
 0037, 18 AUGUST TO 1137, 3 SEPTEMBER, 1982

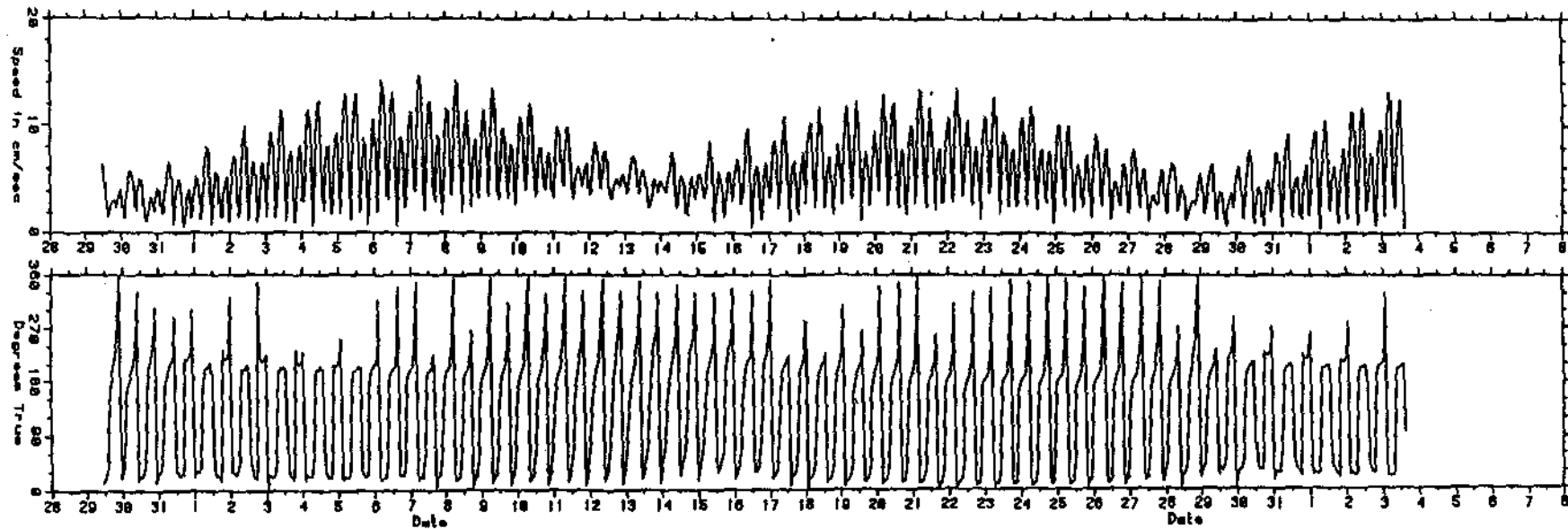


Figure D20. Speed and Direction Data
Station 0, Least-Squares Tidal
Current, Endeco #049, 1053, 29
July to 1453, 3 September 1982.

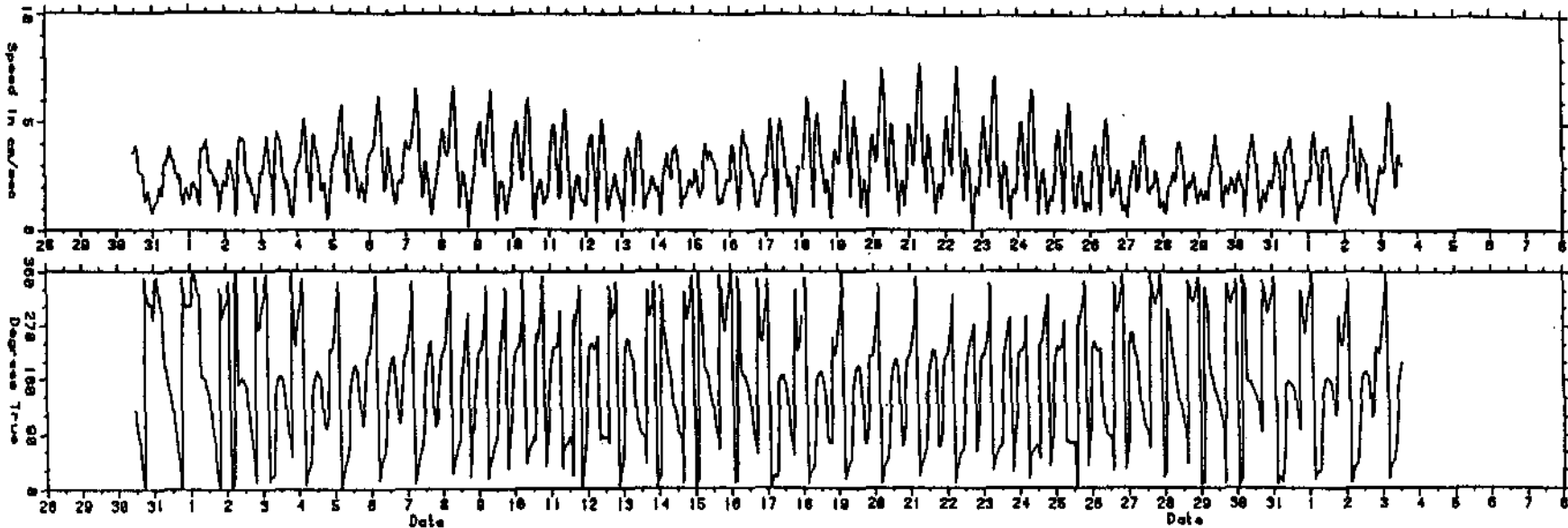


Figure D21 . Speed and Direction Data
Station P, Least-Squares Tidal
Current, Endeco #048, 1100,
30 July to 1300, 3 September
1982.

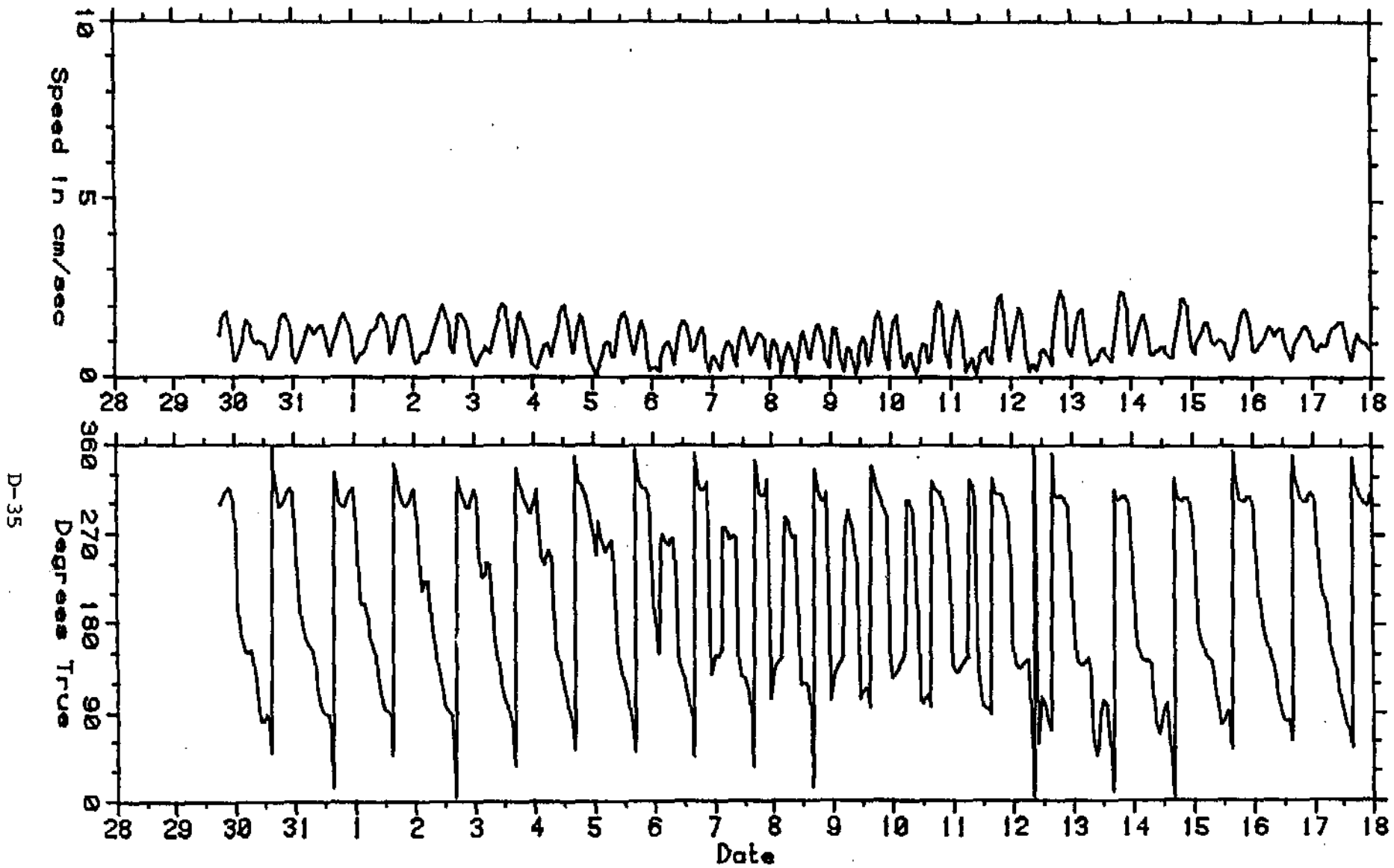


FIGURE D22

SPEED AND DIRECTION DATA
STATION S (TOP) - LEAST-SQUARES TIDAL CURRENT - ENDECO #175
1807, 29 JULY TO 2307, 17 AUGUST, 1982

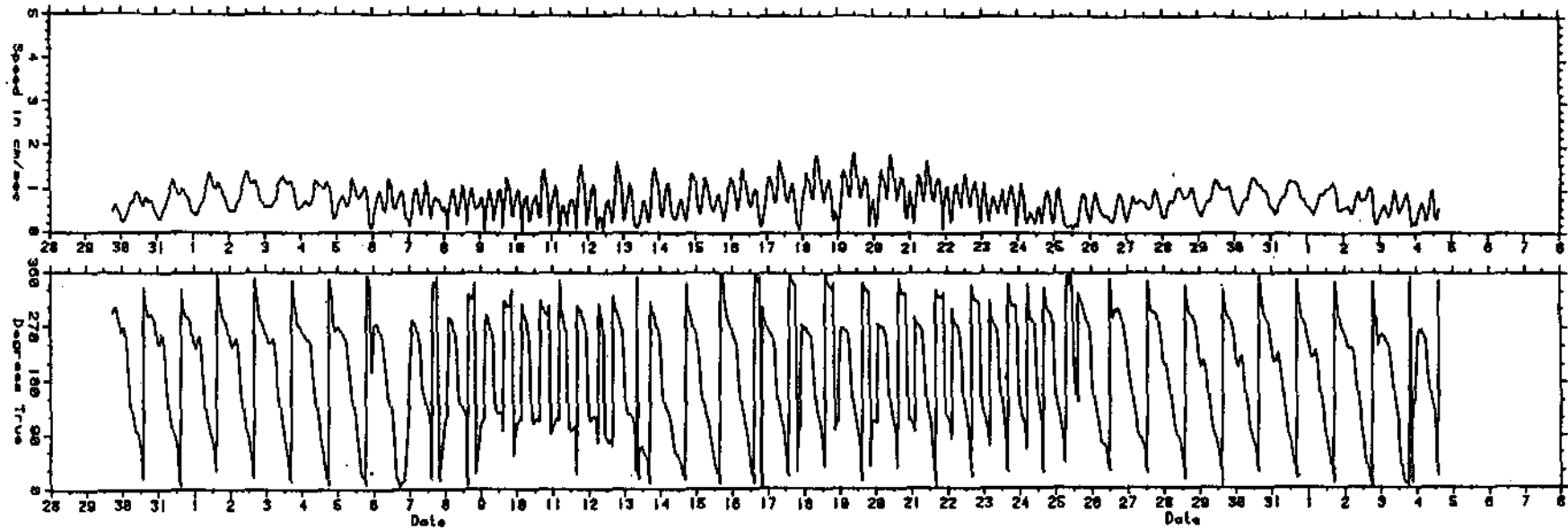


Figure D23. Speed and Direction Data
Station S (Bottom); Least
Squares Tidal Currents, 1757,
29 July to 1457, 4 September
1982.

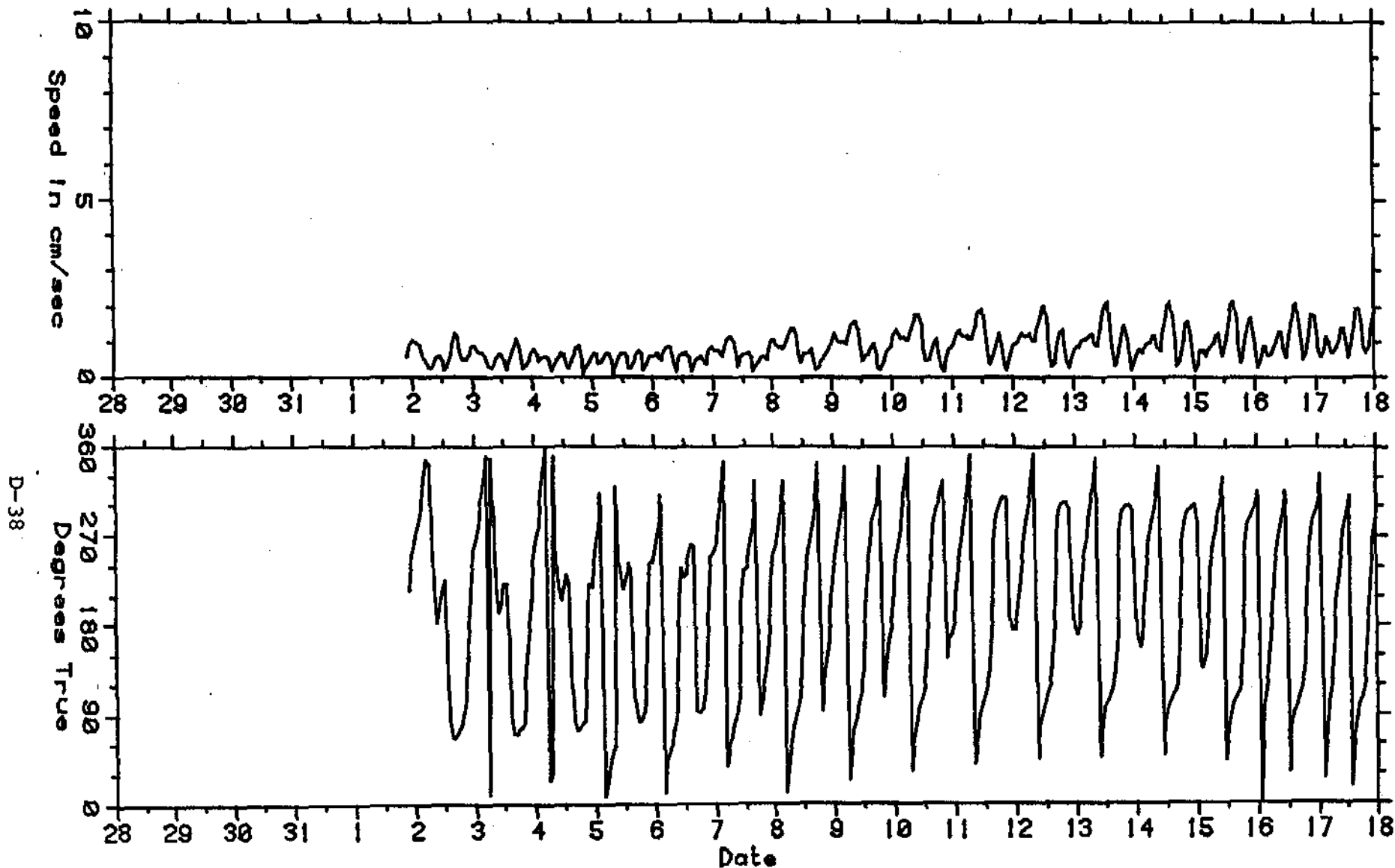


FIGURE D24

SPEED AND DIRECTION DATA
STATION Q - LEAST-SQUARES TIDAL CURRENT - ENDECO #047
2143, 1 AUGUST TO 2343, 17 AUGUST, 1982

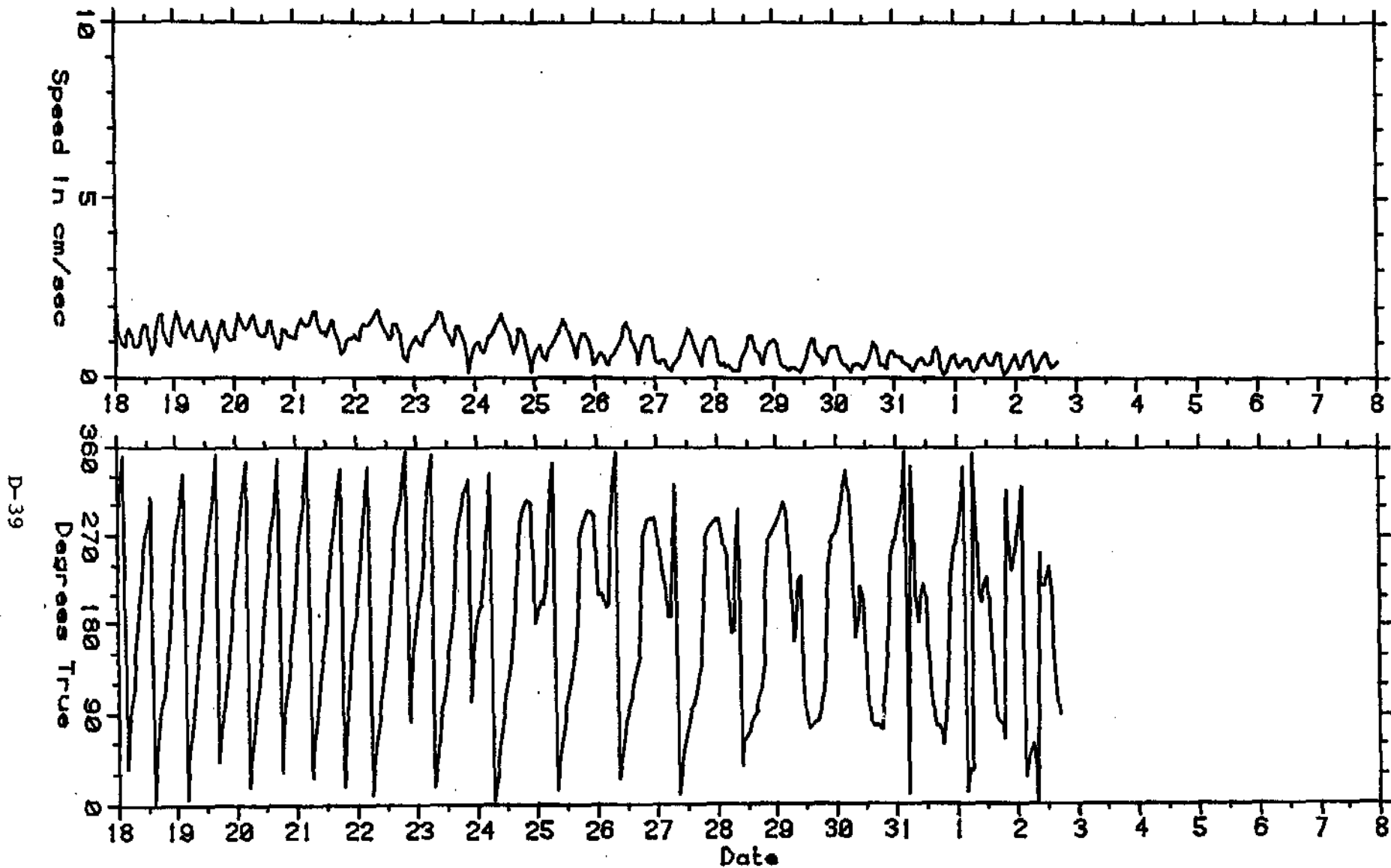


FIGURE D24, SPEED AND DIRECTION DATA
STATION Q - LEAST-SQUARES TIDAL CURRENT - ENDECO #047
0043, 18 AUGUST TO 1643, 2 SEPTEMBER, 1982

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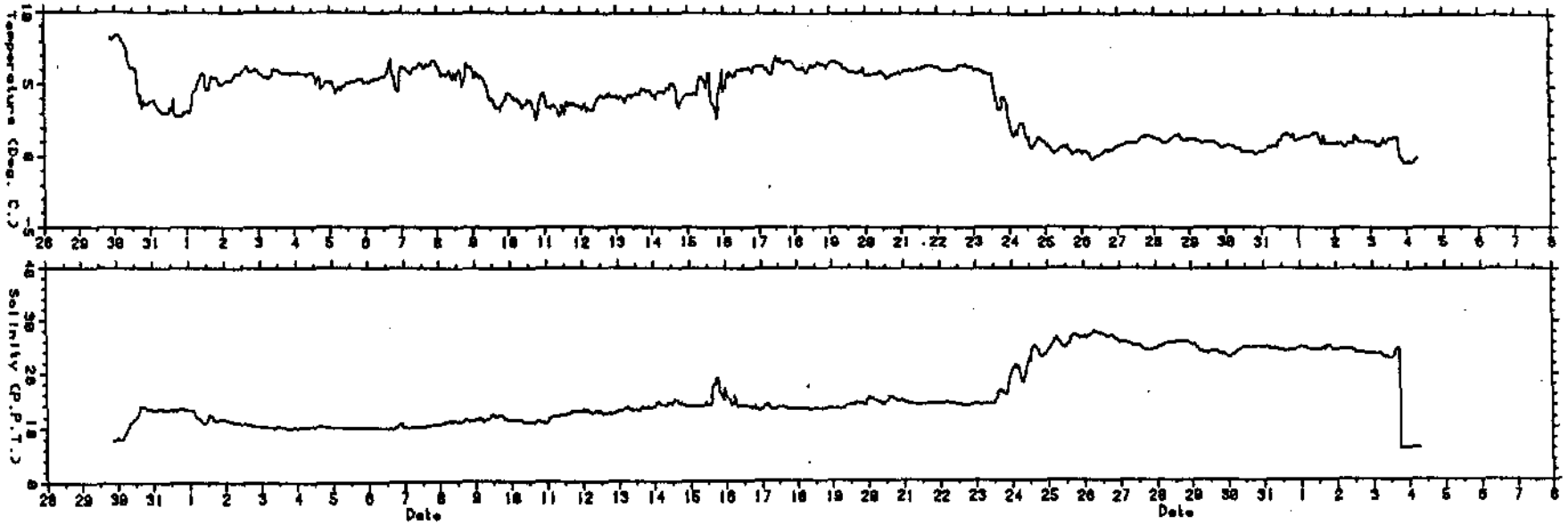


Figure D25. Temperature and Salinity Data
Station E; 1/2 Hr. Averages,
Endeco #232, 2122, 29 July to
0722, 4 September 1982.

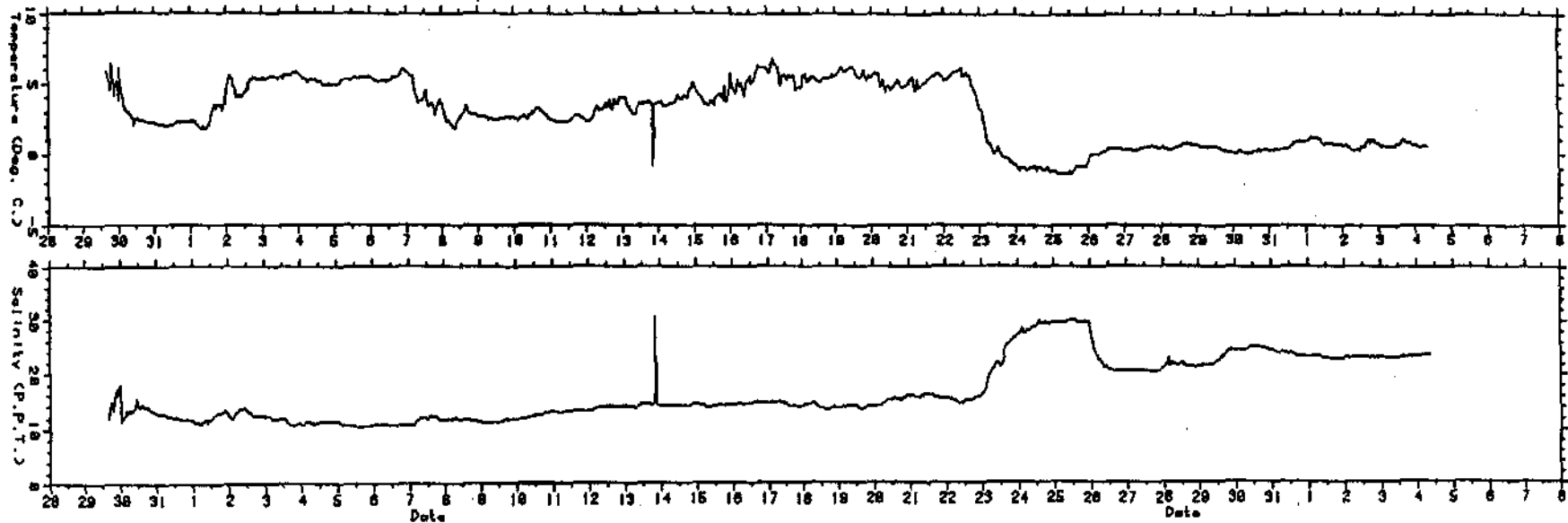


Figure 027. Temperature and Salinity Data
Station P; 1/2 Hr. Averages,
Endeco #048, 1545, 29 July to
0845, 4 September 1982.

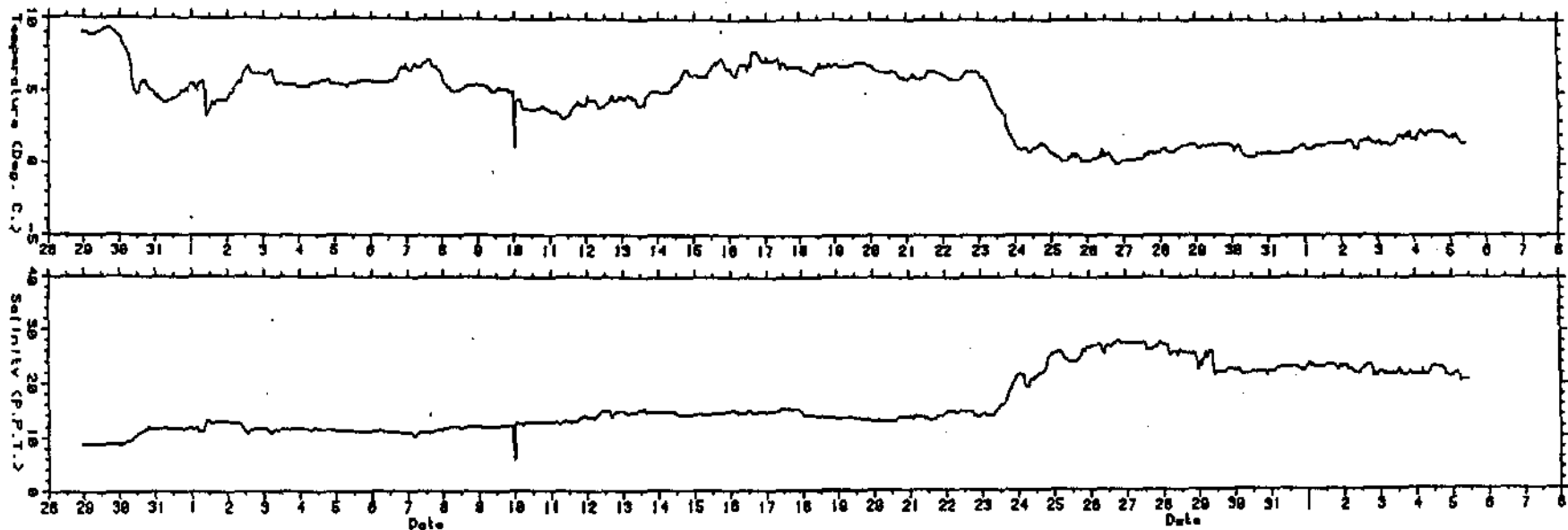


Figure D28. Temperature and Salinity Data
Station S (Top); 1/2 Hr.
Averages, Endeco #175, 2252,
28 July to 1022, 5 September
1982.

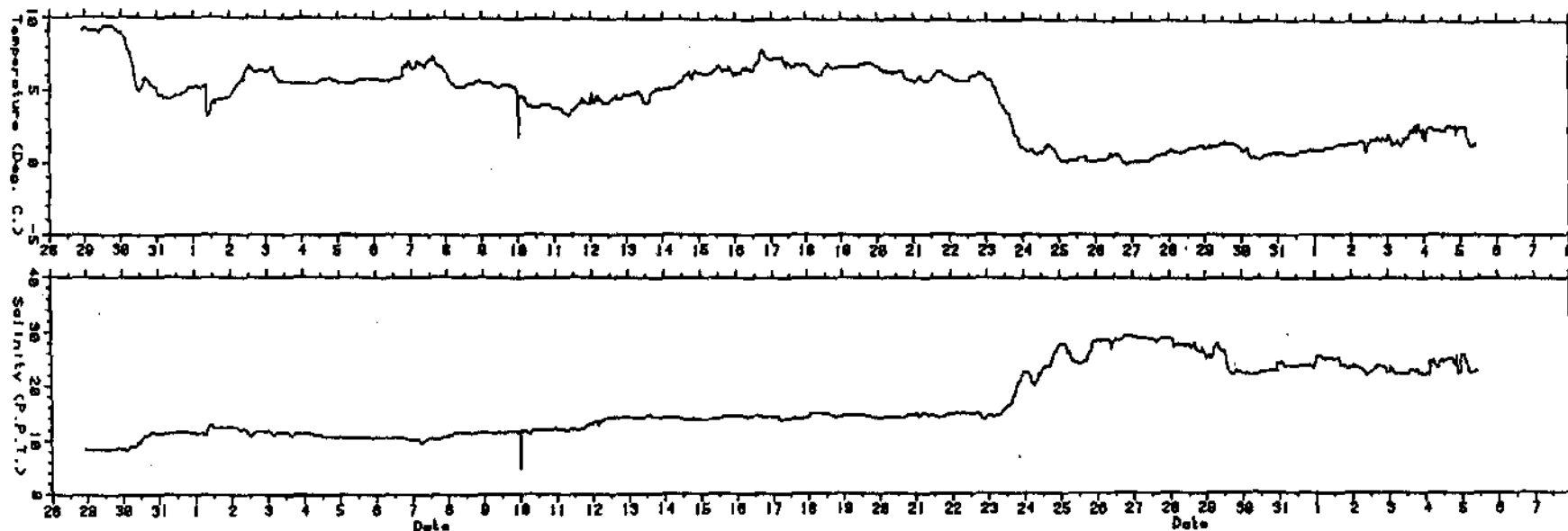


Figure D29. Temperature and Salinity Data
Station S (Bottom); 1/2 Hr.
Averages, Endeco #052, 2242,
28 July to 1012, 5 September
1982.

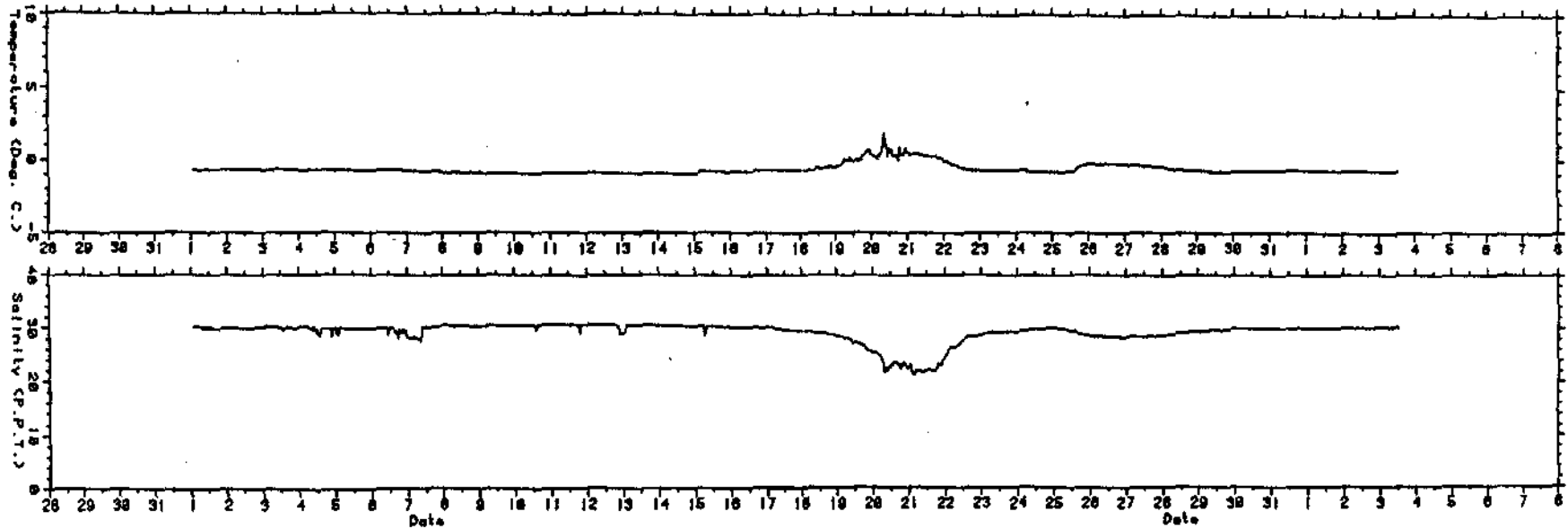


Figure D30. Temperature and Salinity Data
Station Q; 1/2 Hr. Averages,
Endeco #047, 0228, 1 August
to 1228, 3 September, 1982.

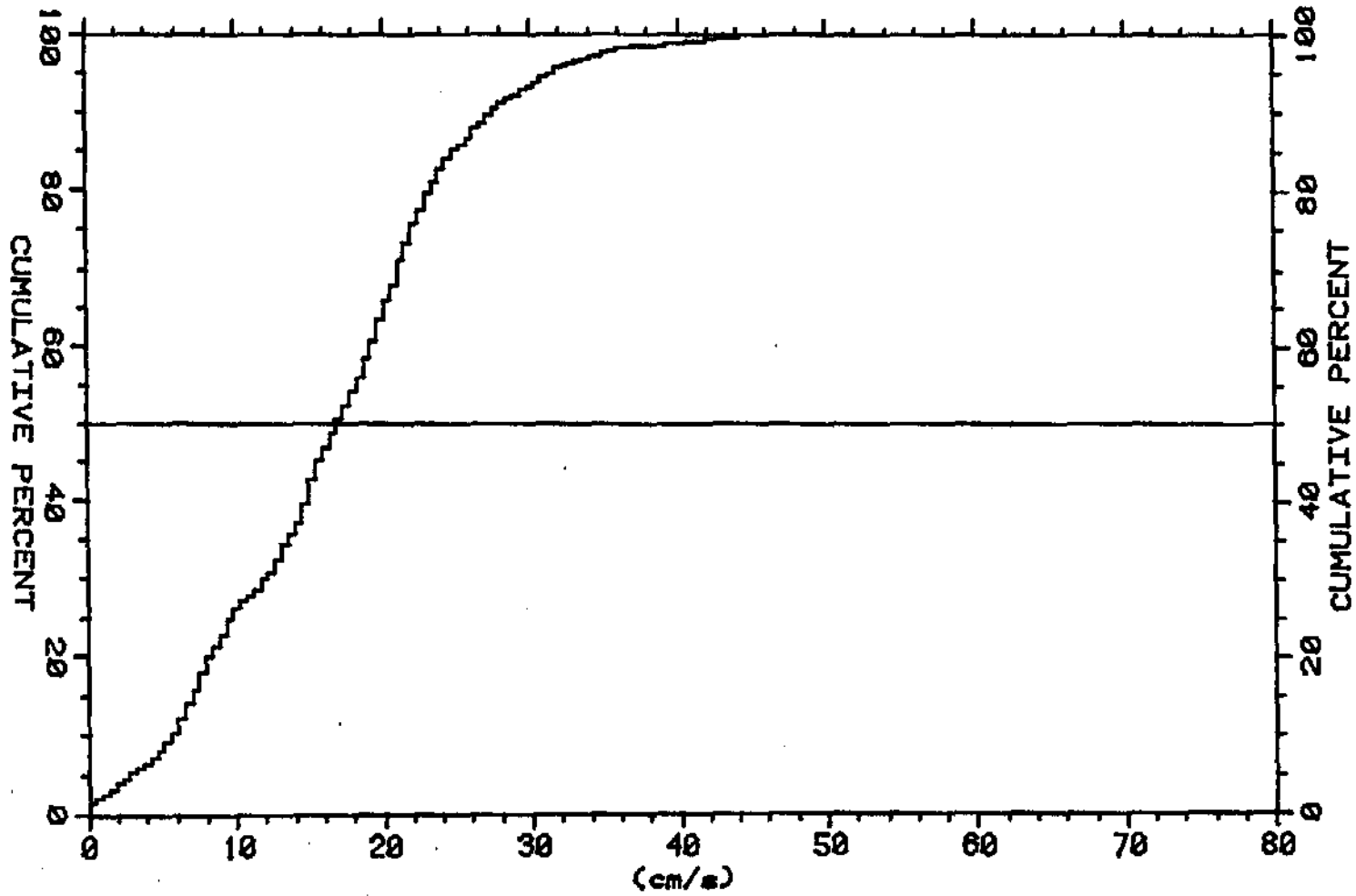


FIGURE D31

CUMULATIVE PROBABILITY PLOT
1/2 HR. AVERAGE CURRENT SPEED
STATION E - ENDECO #232
2122, 29 JULY TO 0722, 4 SEPTEMBER, 1982
1749 DATA POINTS

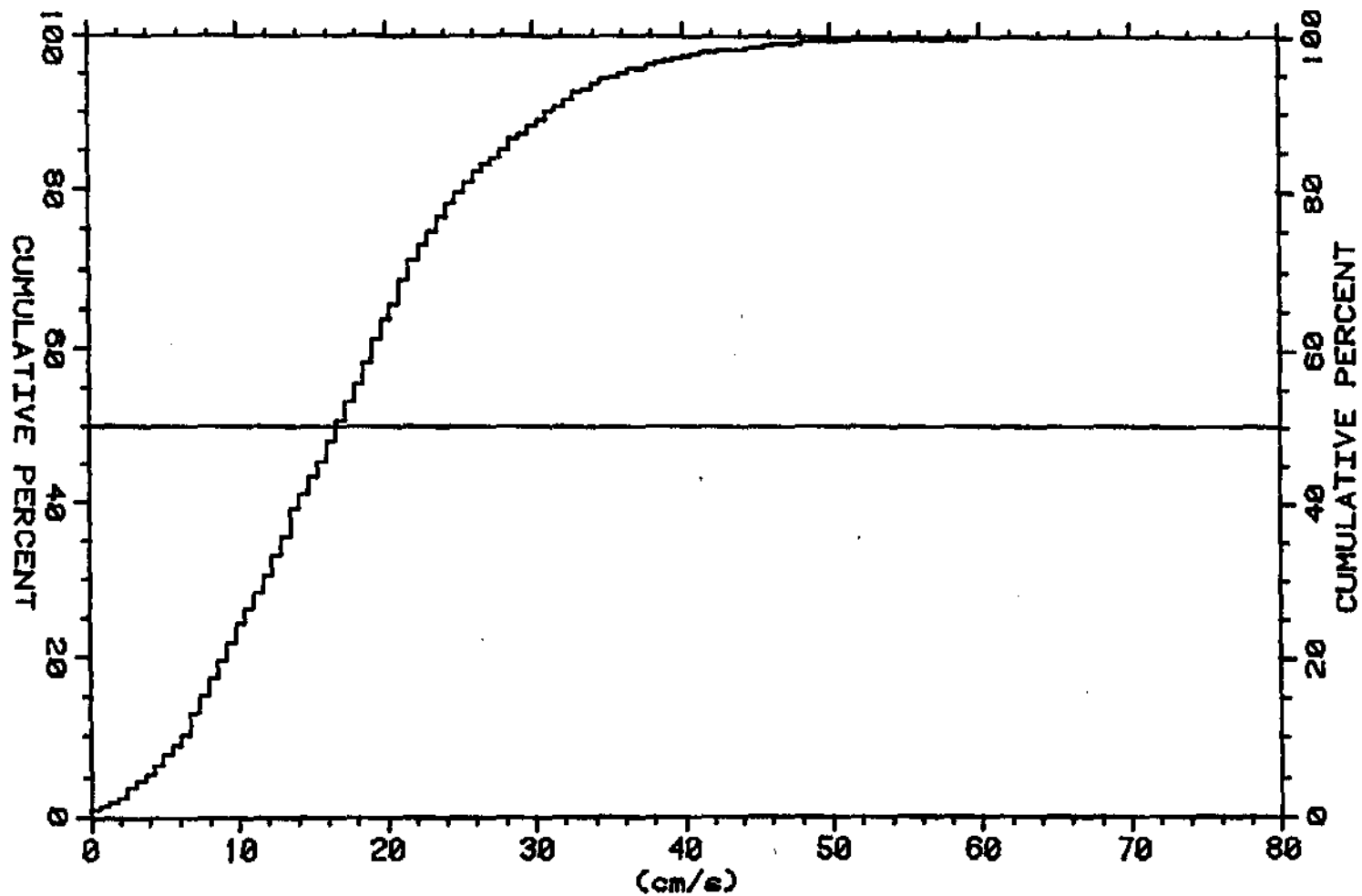


FIGURE D32

CUMULATIVE PROBABILITY PLOT
1/2 HR. AVERAGE CURRENT SPEED
STATION 0 - 1/2 HR. AVERAGE CURRENT SPEED - ENDECO #049
1538, 28 JULY TO 1008, 4 SEPTEMBER, 1982
1814 DATA POINTS

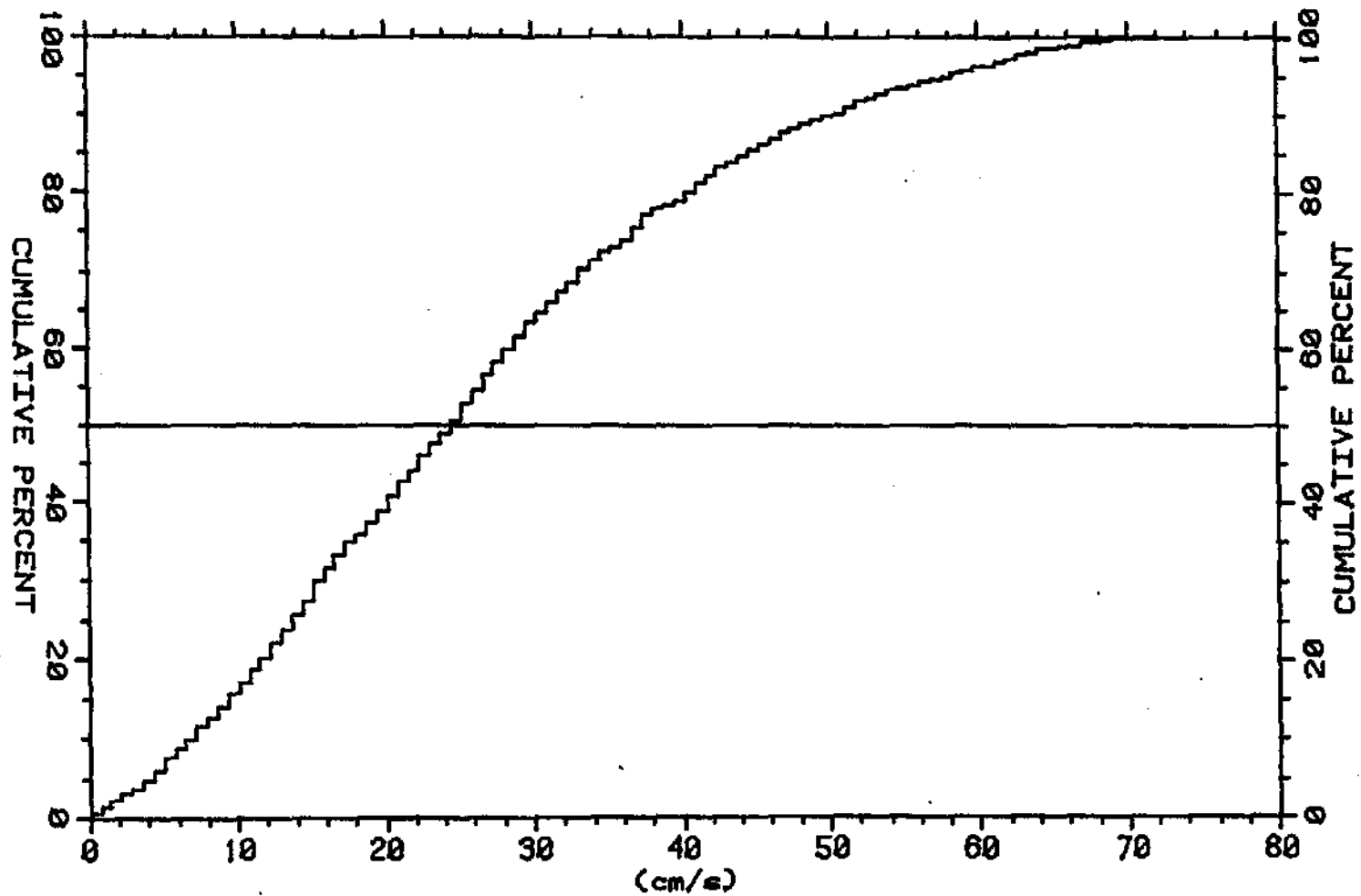


FIGURE D33 CUMULATIVE PROBABILITY PLOT
1/2 HR. AVERAGE CURRENT SPEED
STATION P - ENDECO #048
1545, 29 JULY TO 0845, 4 SEPTEMBER, 1982
1763 DATA POINTS

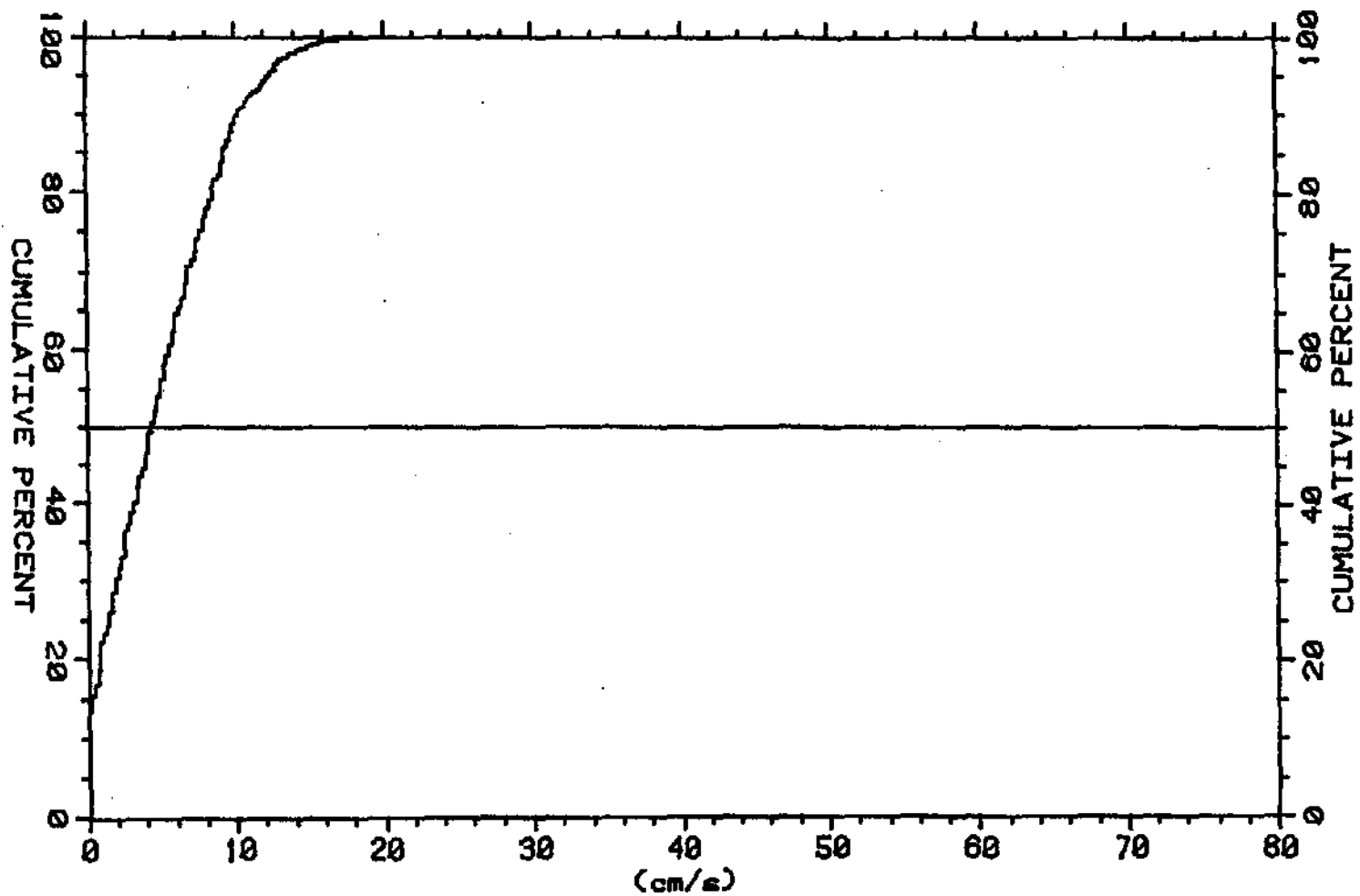


FIGURE D34 CUMULATIVE PROBABILITY PLOT
1/2 HR. AVERAGE CURRENT SPEED
STATION S (TOP) - ENDECO #175
2252, 28 AUGUST TO 1022, 5 SEPTEMBER, 1982
1847 DATA POINTS

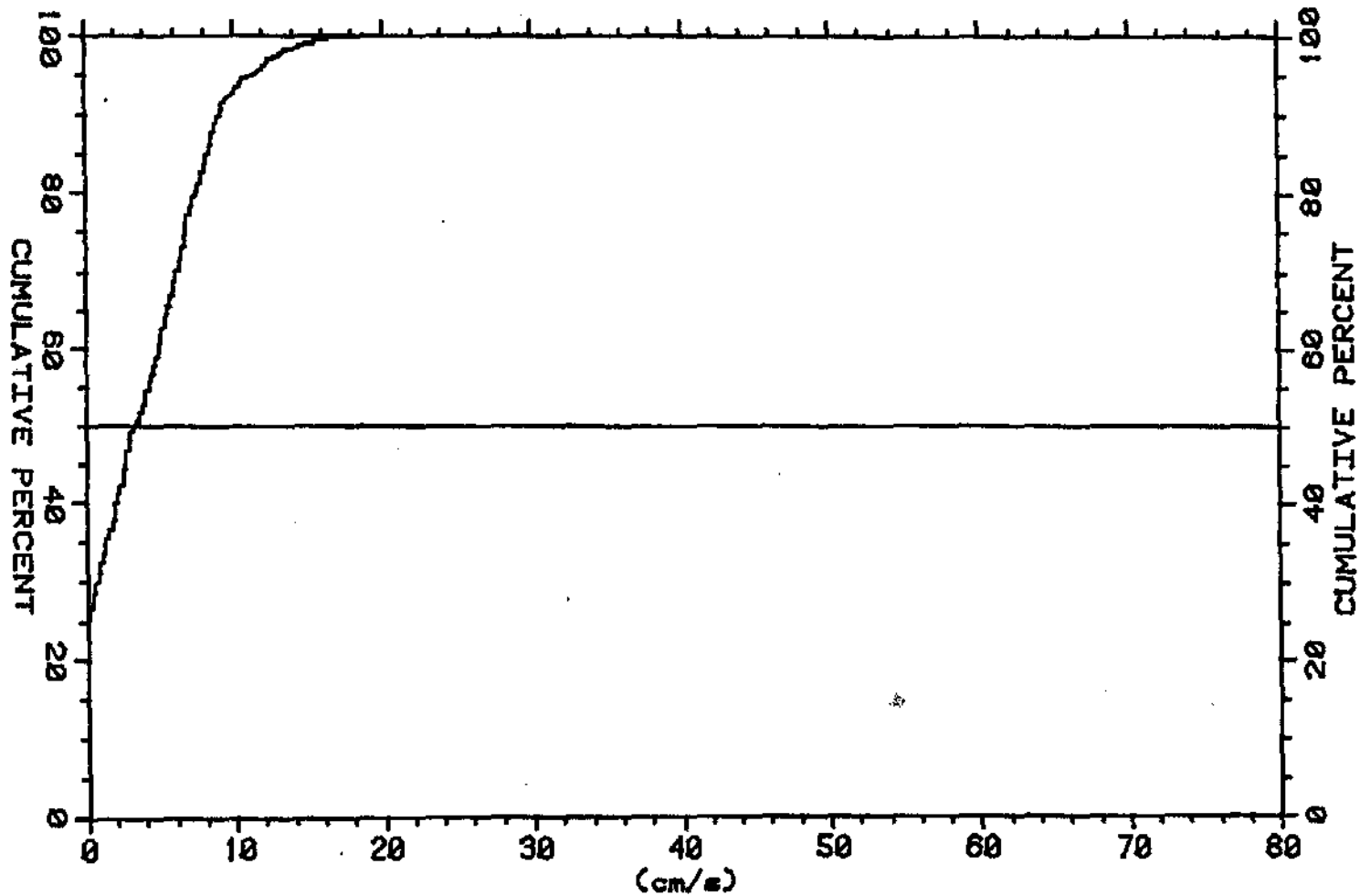


FIGURE D35

CUMULATIVE PROBABILITY PLOT
1/2 HR. AVERAGE CURRENT SPEED
STATION S (BOTTOM) - ENDECO #052
2242, 28 JULY TO 1012, 5 SEPTEMBER, 1982
1848 DATA POINTS

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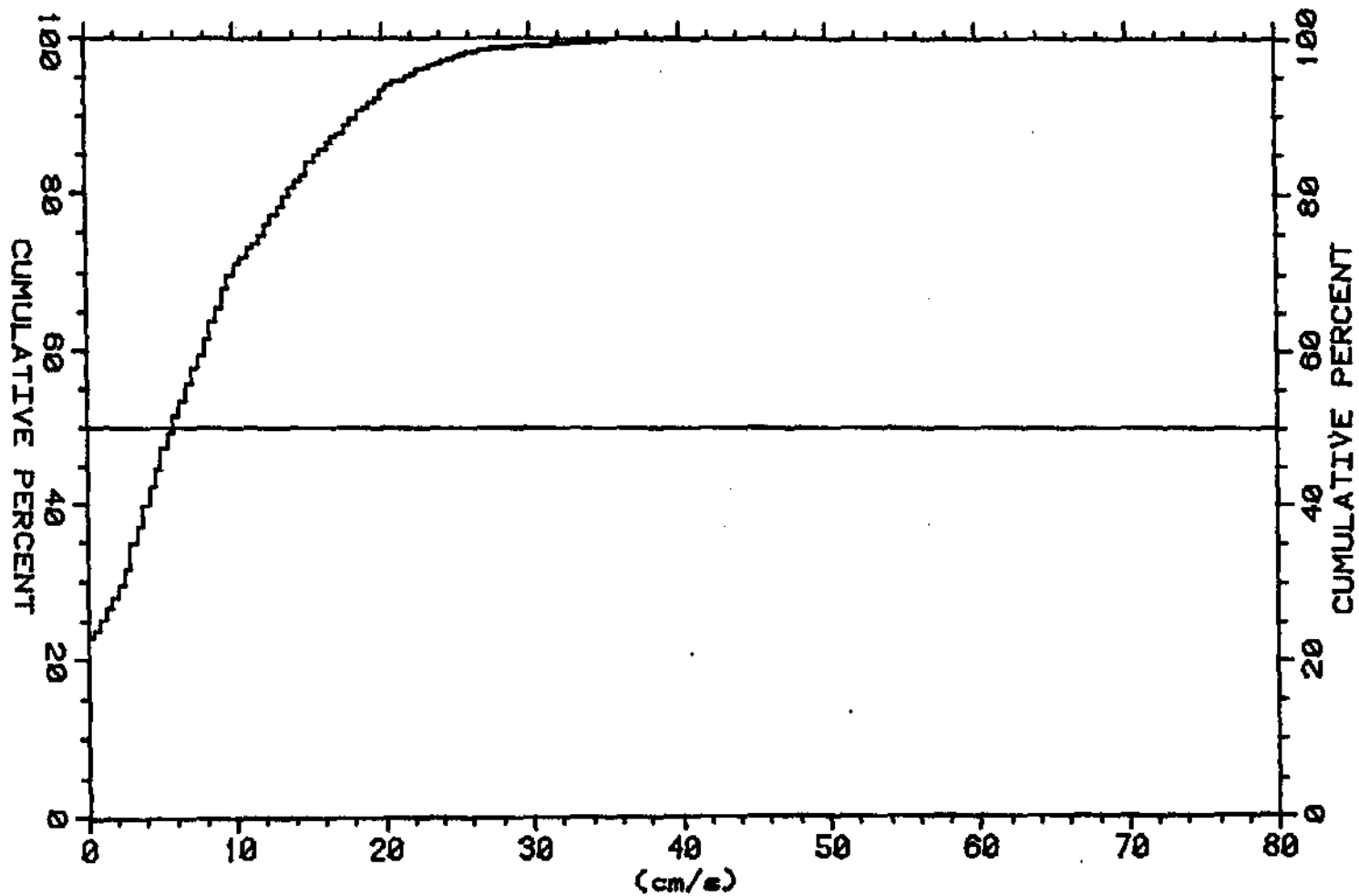


FIGURE D36

CUMULATIVE PROBABILITY PLOT
1/2 HR. AVERAGE CURRENT SPEED
STATION Q - ENDECO #047
0228, 1 AUGUST TO 1228, 3 SEPTEMBER, 1982
1605 DATA POINTS

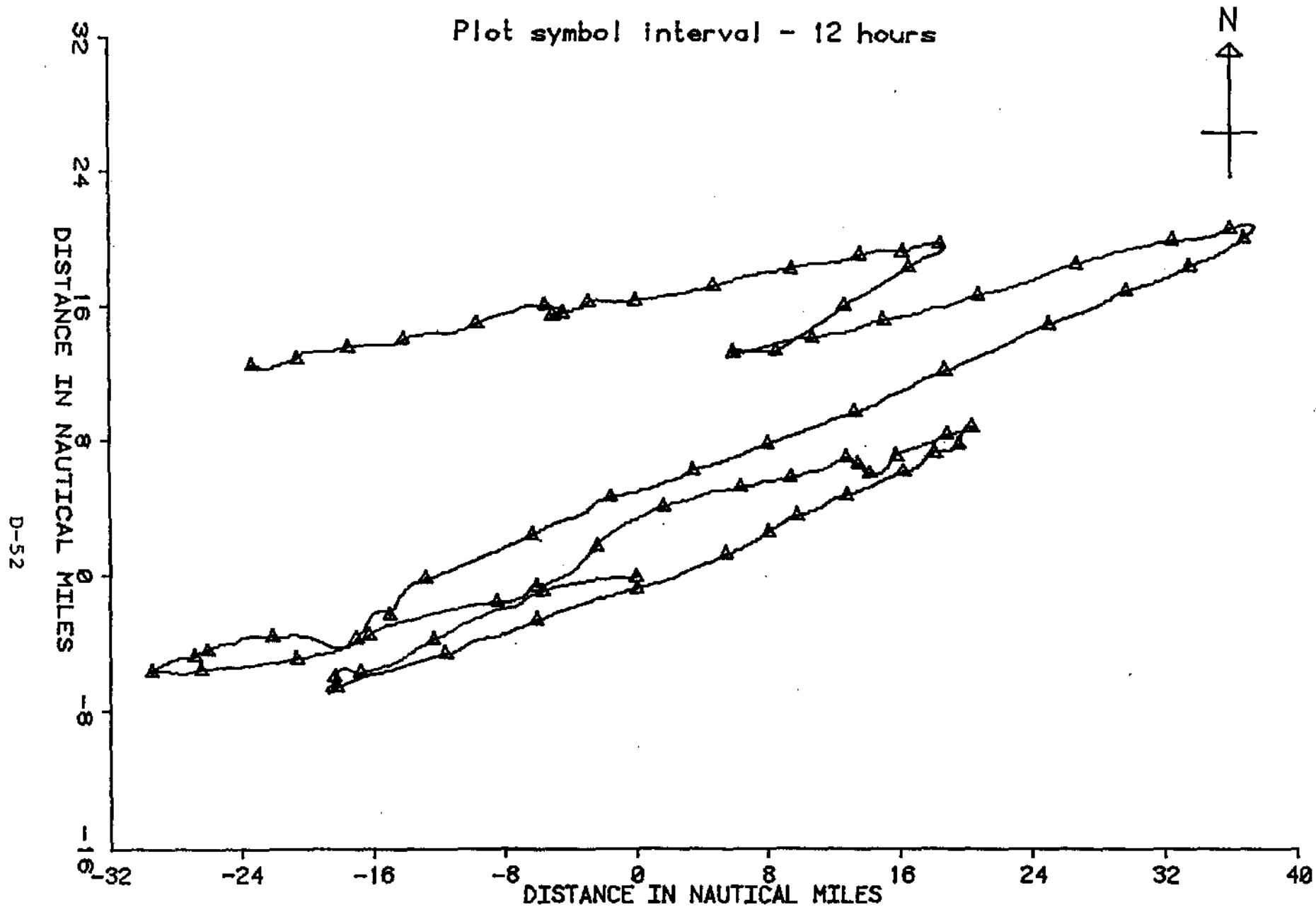
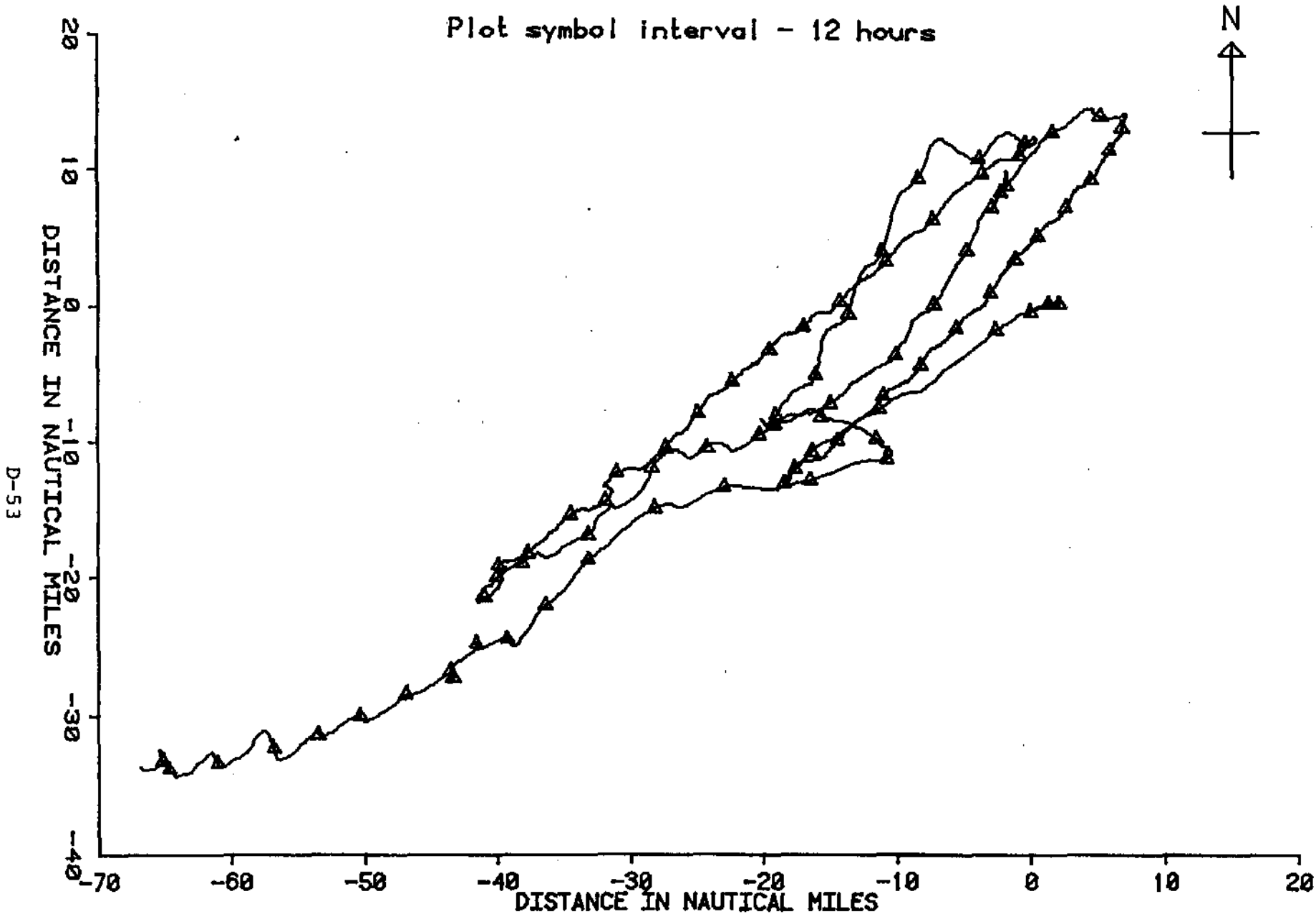


FIGURE D37 PROGRESSIVE VECTOR DIAGRAM
 STATION E - 1/2 HR. AVERAGE CURRENT - ENDECO #232
 2122, 29 JULY TO 0722, 4 SEPTEMBER, 1982



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FIGURE D38

PROGRESSIVE VECTOR DIAGRAM
 STATION 0 - 1/2 HR AVERAGE CURRENT- ENDECO #049
 1538, 28 JULY TO 1008, 4 SEPTEMBER, 1982

Plot symbol interval - 12 hours



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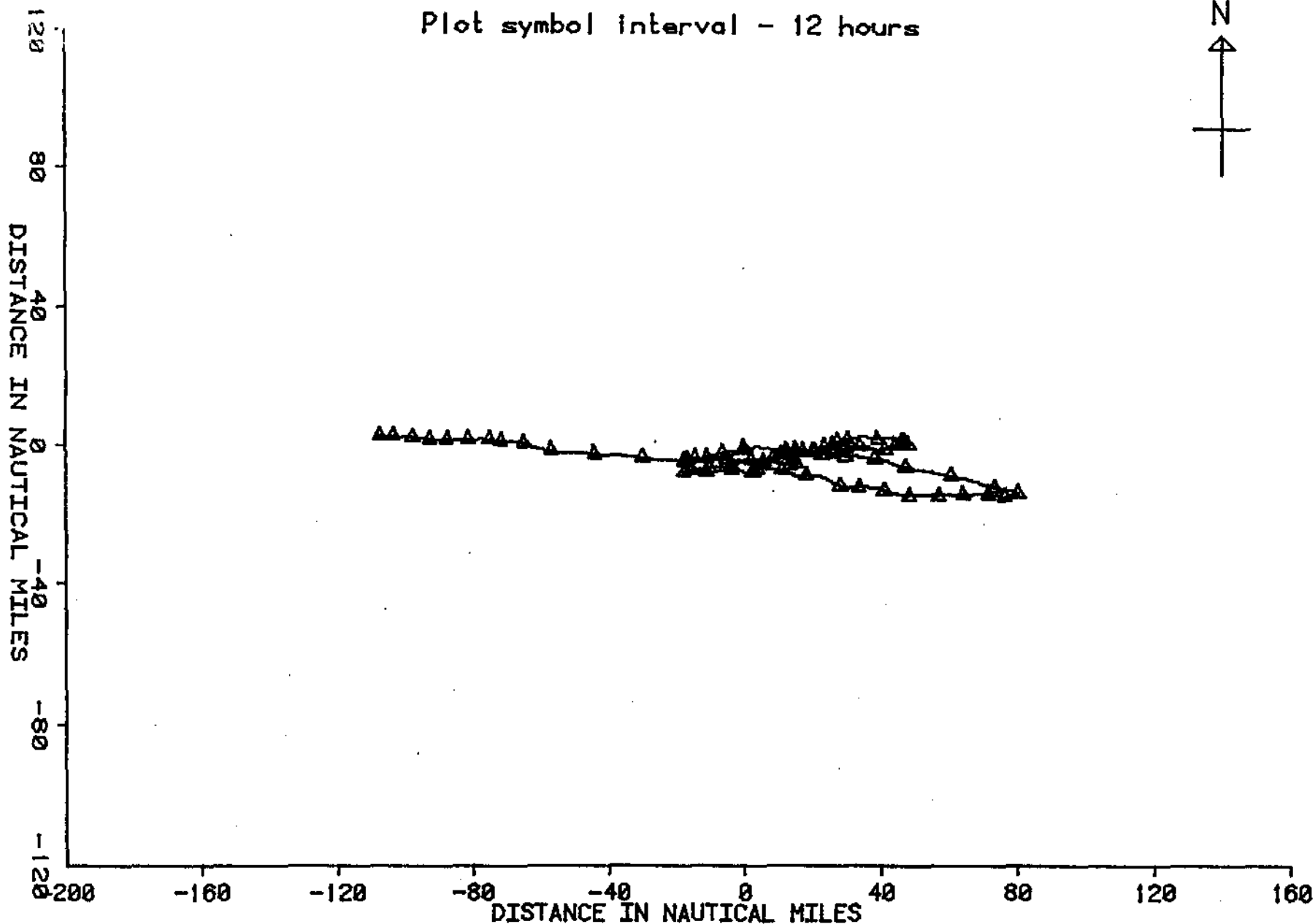


FIGURE D39

PROGRESSIVE VECTOR DIAGRAM
STATION P - 1/2 HR. AVERAGE CURRENT - ENDECO #048
1545, 29 JULY TO 0845, 4 SEPTEMBER, 1982

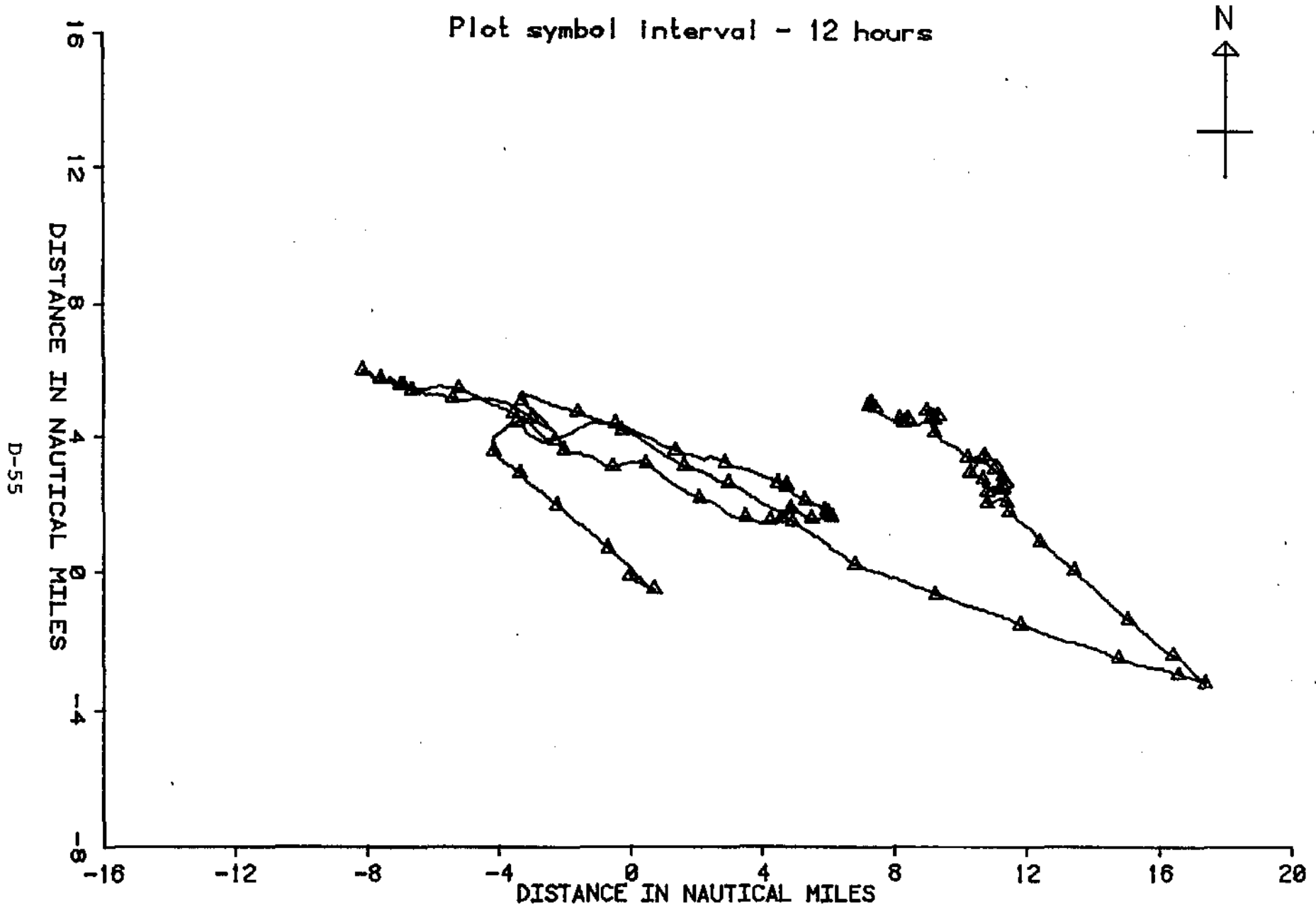
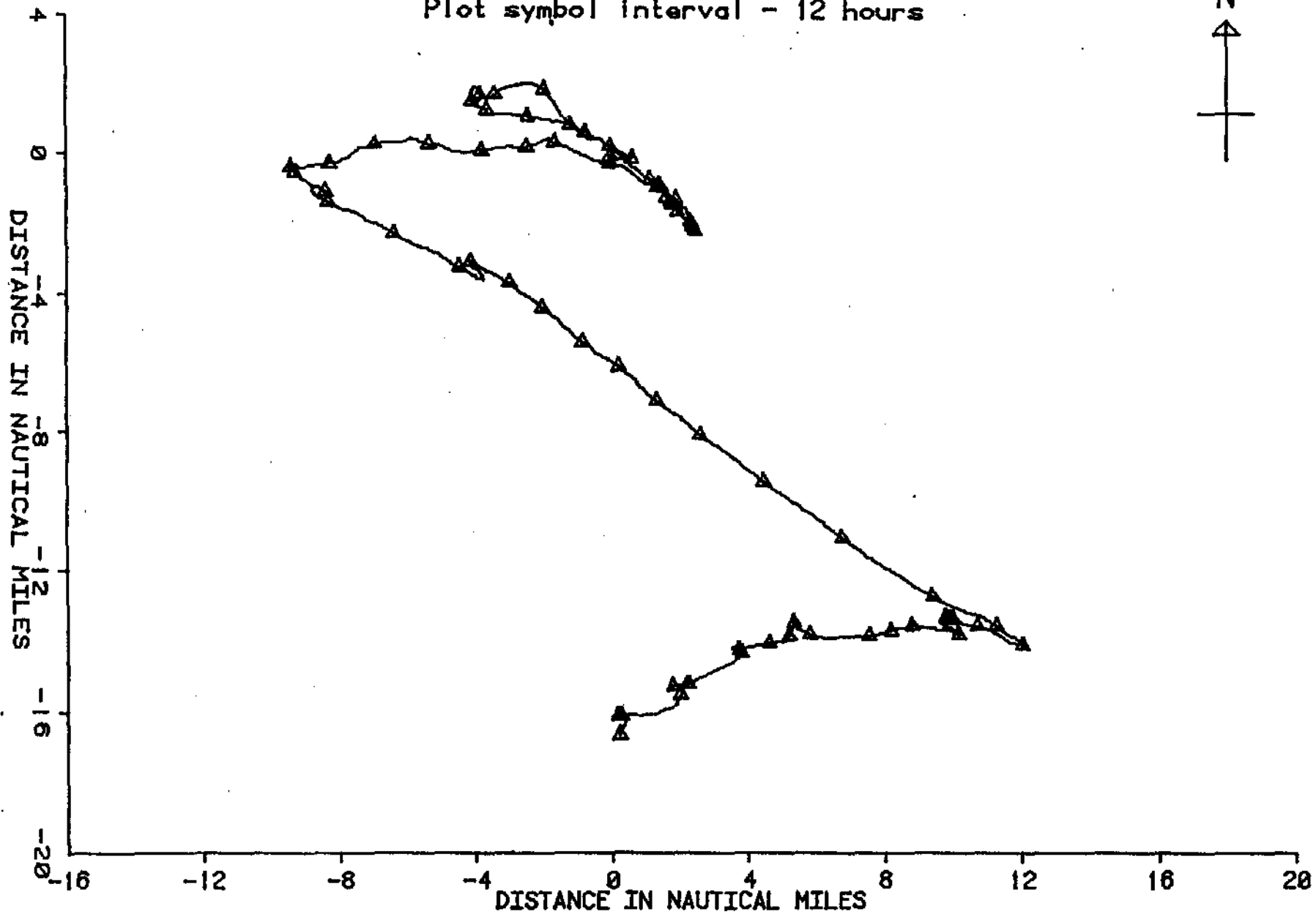


FIGURE D40 PROGRESSIVE VECTOR DIAGRAM
 STATION S (TOP) - 1/2 HR. AVERAGE CURRENT - ENDECO #175
 2252, 28 JULY TO 1022, 5 SEPTEMBER, 1982

Plot symbol interval - 12 hours



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FIGURE 041 PROGRESSIVE VECTOR DIAGRAM
STATION S (BOTTOM) - 1/2 HR. AVERAGE CURRENT - ENDECO #052
2242, 28 JULY TO 1012, 5 SEPTEMBER, 1982

Plot symbol interval - 12 hours

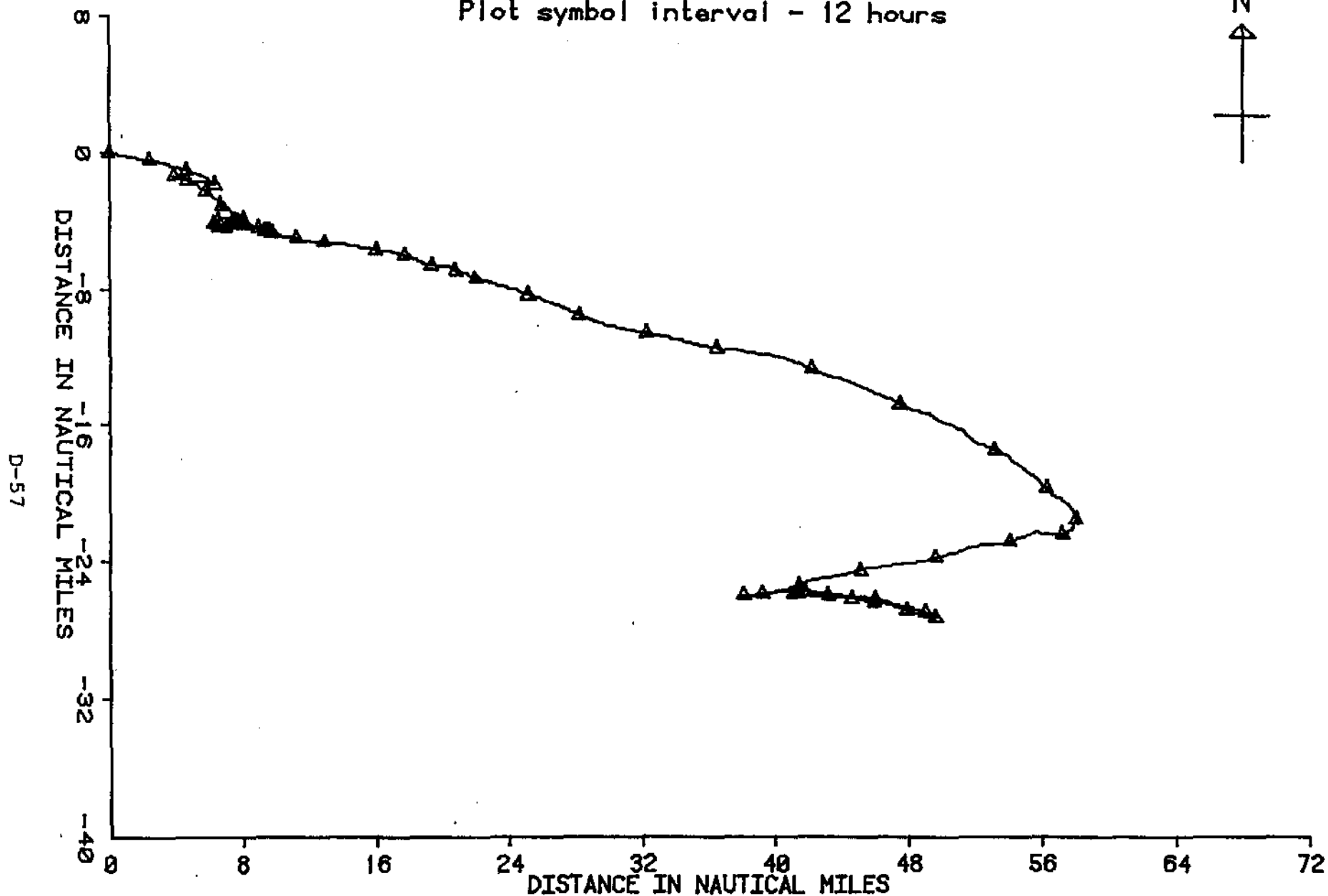
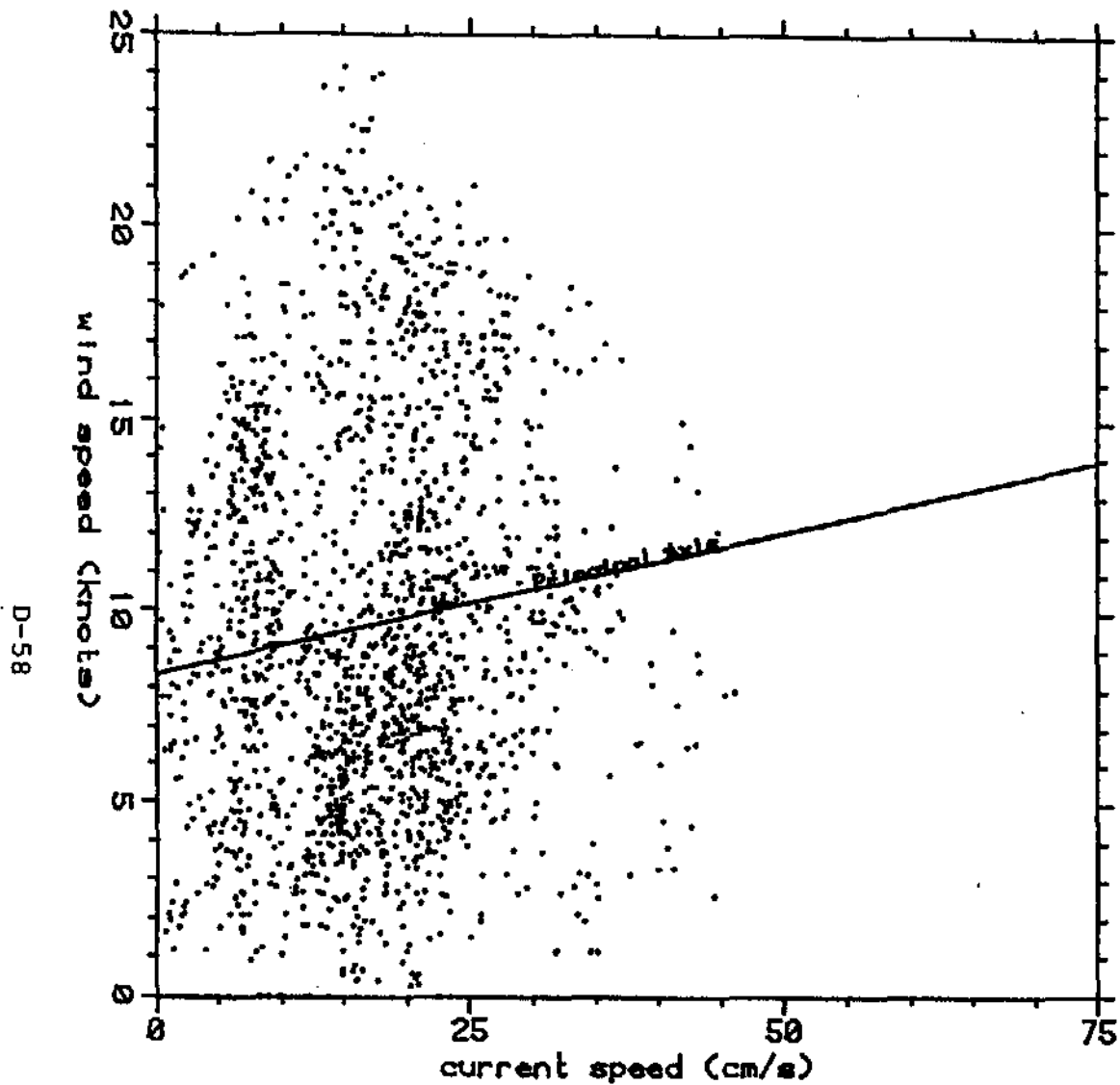
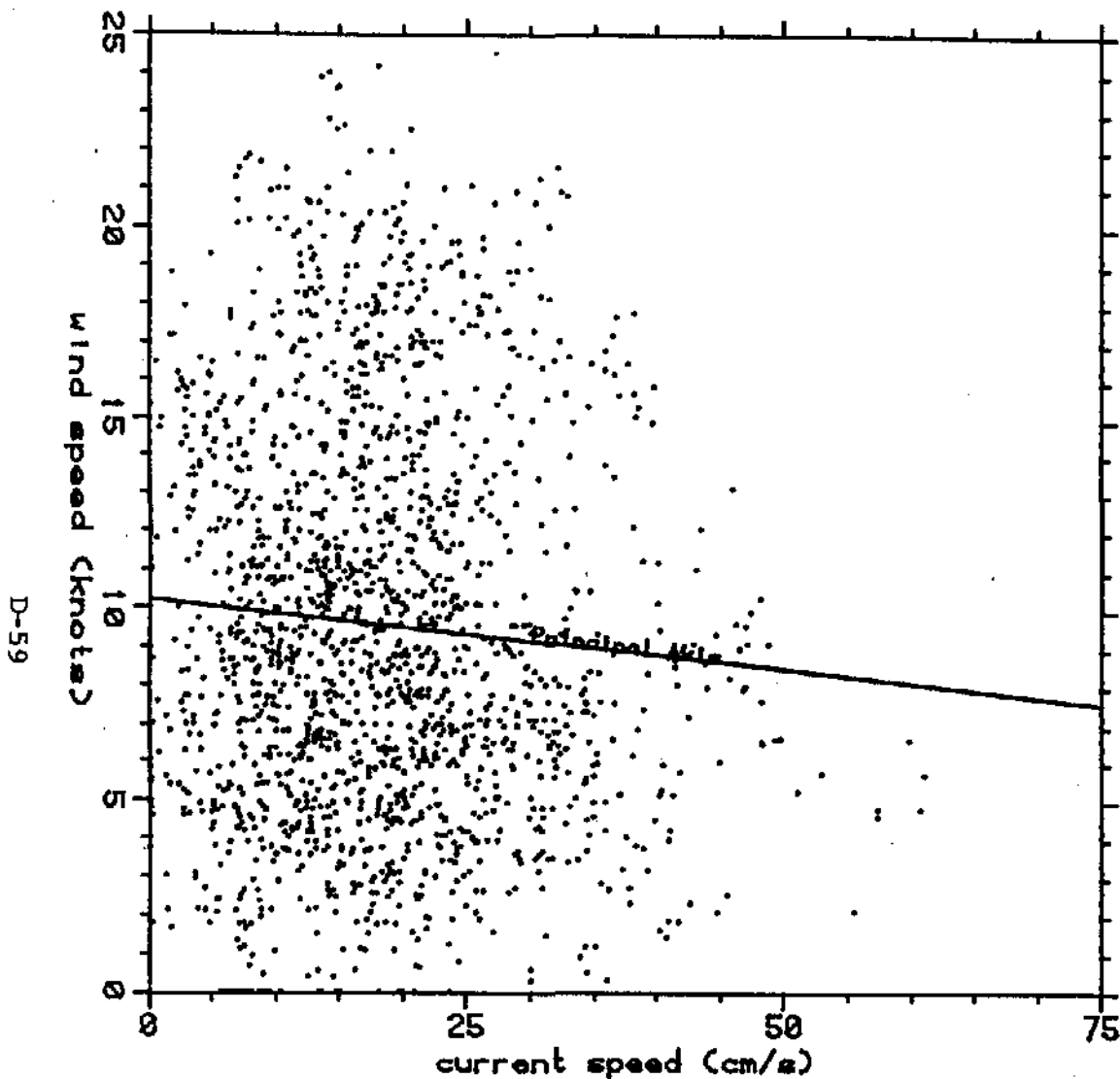


FIGURE D42, PROGRESSIVE VECTOR DIAGRAM
STATION Q - 1/2 HR. AVERAGE CURRENT - ENDECO #047
0228, 1 AUGUST TO 1228, 3 SEPTEMBER, 1982



Statistics:
 1722 data points
 Current speed:
 Mean = 17.13
 Std. Dev. = 8.44
 Wind speed:
 Mean = 9.63
 Std. Dev. = 5.17
 Covariance = 3.37
 Correlation = 0.077
 Principal axis:
 Slope = 0.075
 Intercept = 8.338

FIGURE D43 SCATTER PLOT
 CURRENT SPEED VS. WIND SPEED
 STATION E - 1/2 HR. AVERAGE CURRENT SPEED
 CHALLENGE ISLAND - 1/2 HR. AVERAGE WIND SPEED



Statistics:
 1781 data points
 Current speed:
 Mean = 17.99
 Std. Dev. = 9.83
 Wind speed:
 Mean = 9.53
 Std. Dev. = 5.13
 Covariance = -2.51
 Correlation = -0.050
 Principal axis:
 Slope = -0.036
 Intercept = 10.171

FIGURE D44 SCATTER PLOT
 CURRENT SPEED VS. WIND SPEED
 STATION 0 - 1/2 HR. AVERAGE CURRENT SPEED - ENDECO #049
 CHALLENGE ISLAND - 1/2 HR. AVERAGE WIND SPEED

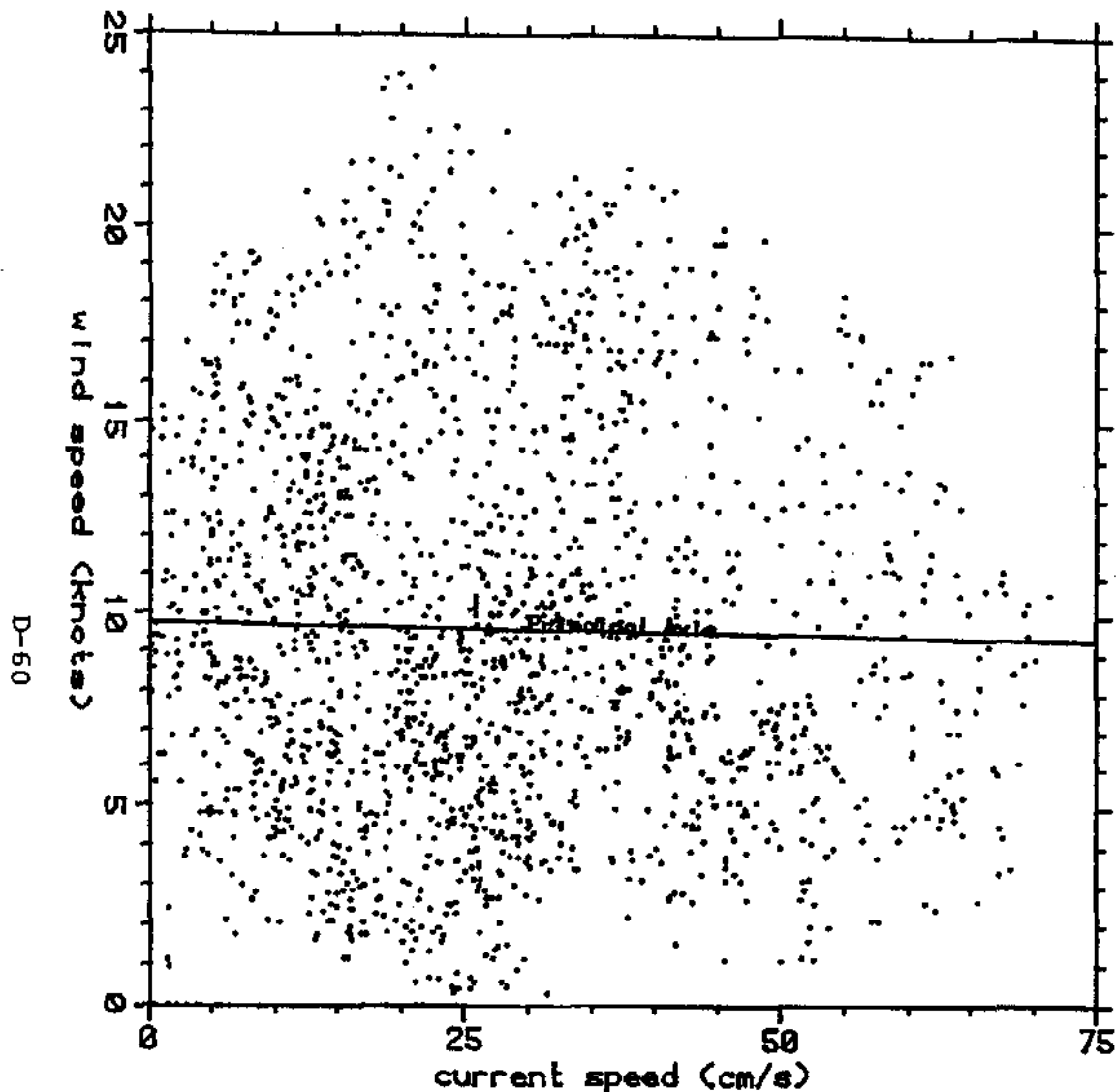


FIGURE D45

SCATTER PLOT
 CURRENT SPEED VS. WIND SPEED
 STATION P - 1/2 HR. AVERAGE CURRENT SPEED
 CHALLENGE ISLAND - 1/2 HR. AVERAGE WIND SPEED

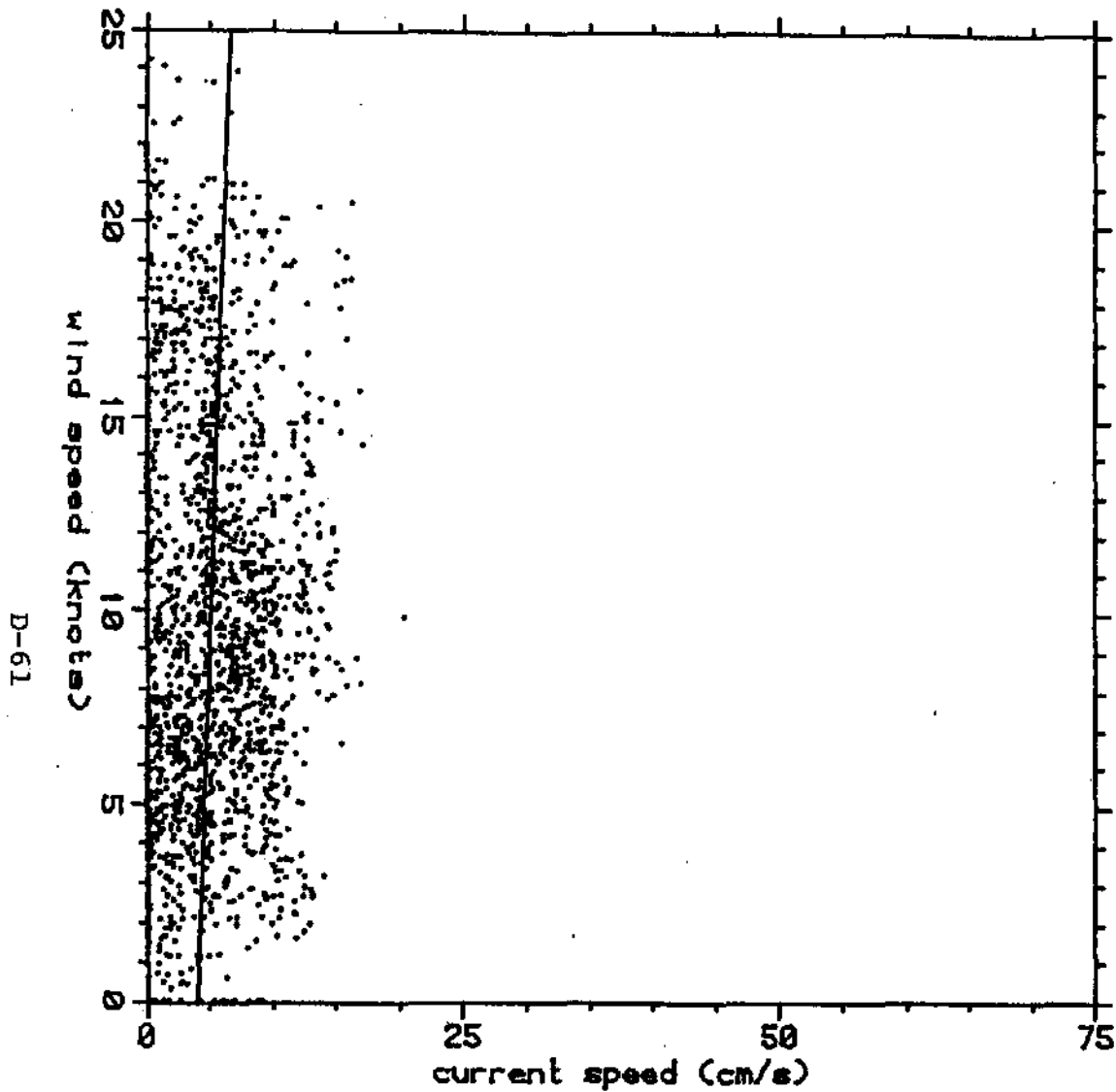
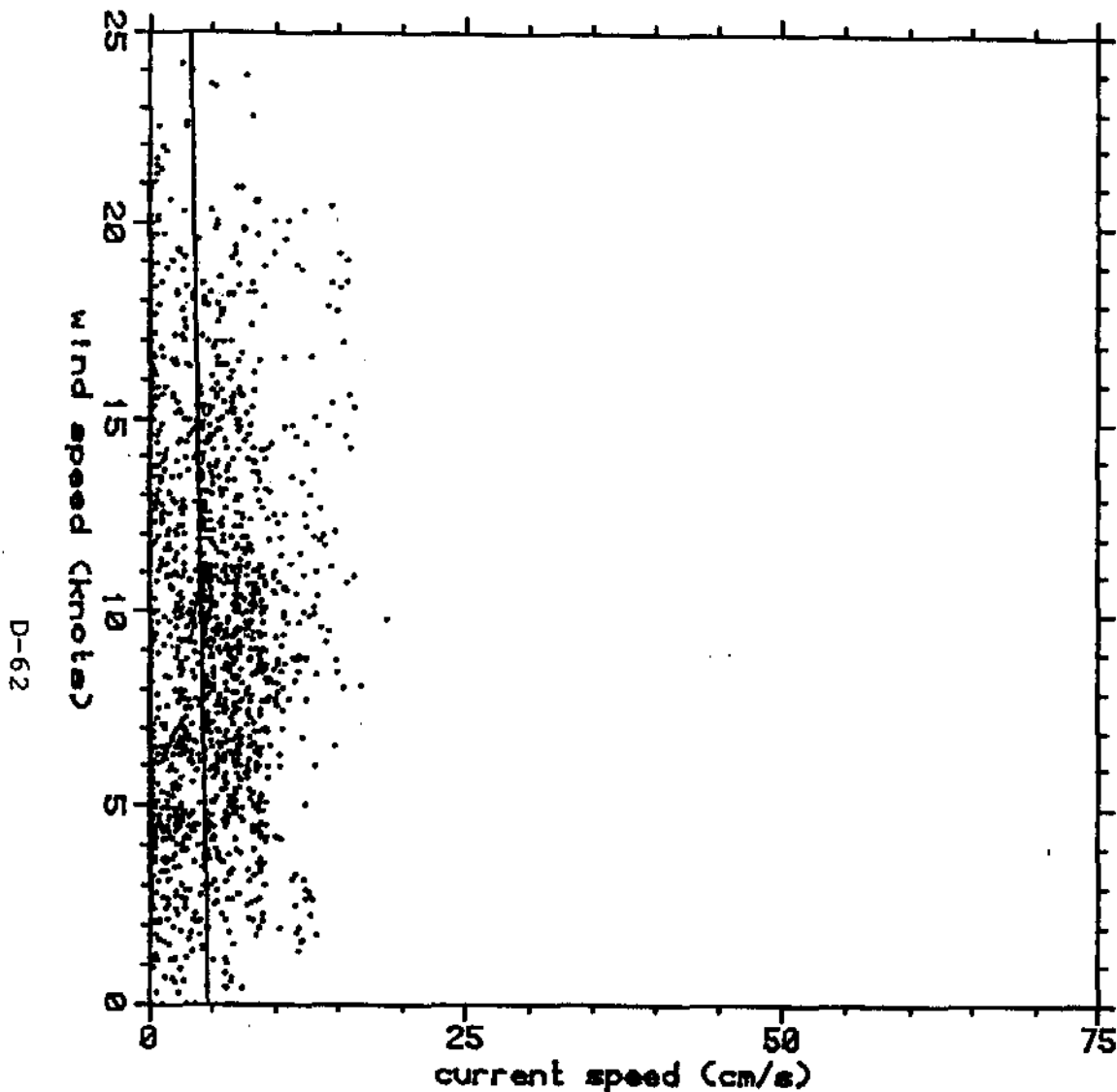
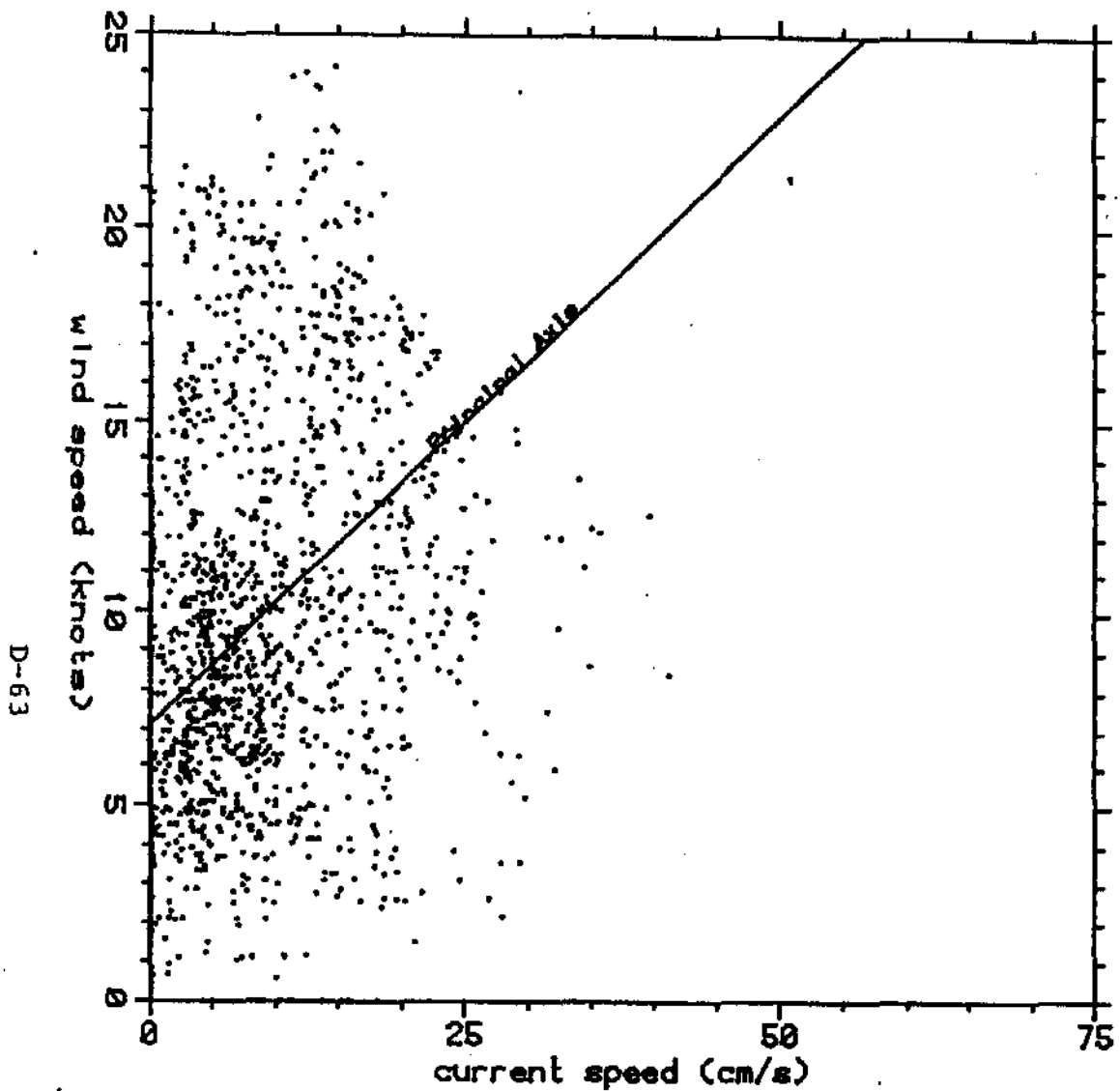


FIGURE D46, SCATTER PLOT
 CURRENT SPEED VS. WIND SPEED
 STATION S (TOP) - 1/2 HR. AVERAGE CURRENT SPEED - ENDECO #175
 CHALLENGE ISLAND - 1/2 HR. AVERAGE WIND SPEED



Statistics:
 1767 data points
 Current speed:
 Mean = 4.12
 Std. Dev. = 3.82
 Wind speed:
 Mean = 9.55
 Std. Dev. = 5.14
 Covariance = -0.64
 Correlation = -0.033
 Principal axis:
 Slope = -18.462
 Intercept = 85.660

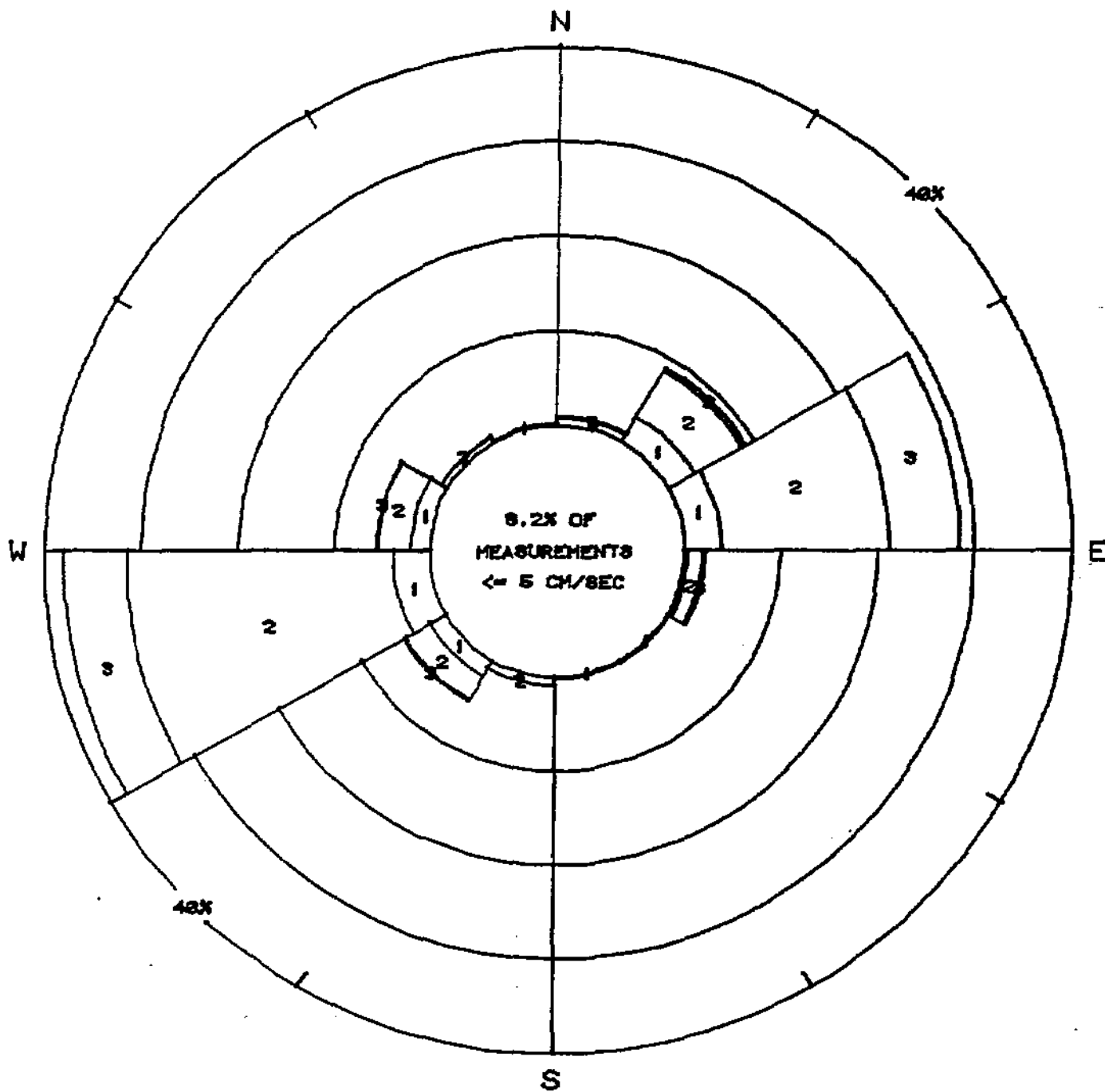
FIGURE D47 SCATTER PLOT
 CURRENT SPEED VS. WIND SPEED
 STATION S (BOTTOM) - 1/2 HR. AVERAGE CURRENT SPEED - ENDECO #01
 CHALLENGE ISLAND - 1/2 HR. AVERAGE WIND SPEED



Statistics:
 1605 data points
 Current speed:
 Mean = 7.63
 Std. Dev. = 7.30
 Wind speed:
 Mean = 9.50
 Std. Dev. = 5.14
 Covariance = 9.44
 Correlation = 0.251
 Principal axis:
 Slope = 0.316
 Intercept = 7.090

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FIGURE D48 SCATTER PLOT
 CURRENT SPEED VS. WIND SPEED
 STATION Q - 1/2 HR. AVERAGE CURRENT SPEED - ENDECO #047
 CHALLENGE ISLAND - 1/2 HR. AVERAGE WIND SPEED



5 - 10 CM/SEC



≥ 25 CM/SEC



10 - 25 CM/SEC

FIGURE D49

ROSE DIAGRAM

1/2 HR. AVERAGE CURRENT

STATION E - ENDECO #232

2122, 29 JULY TO 0722, 4 SEPTEMBER, 1982

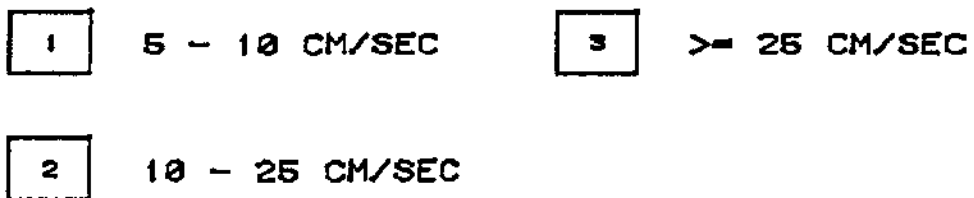
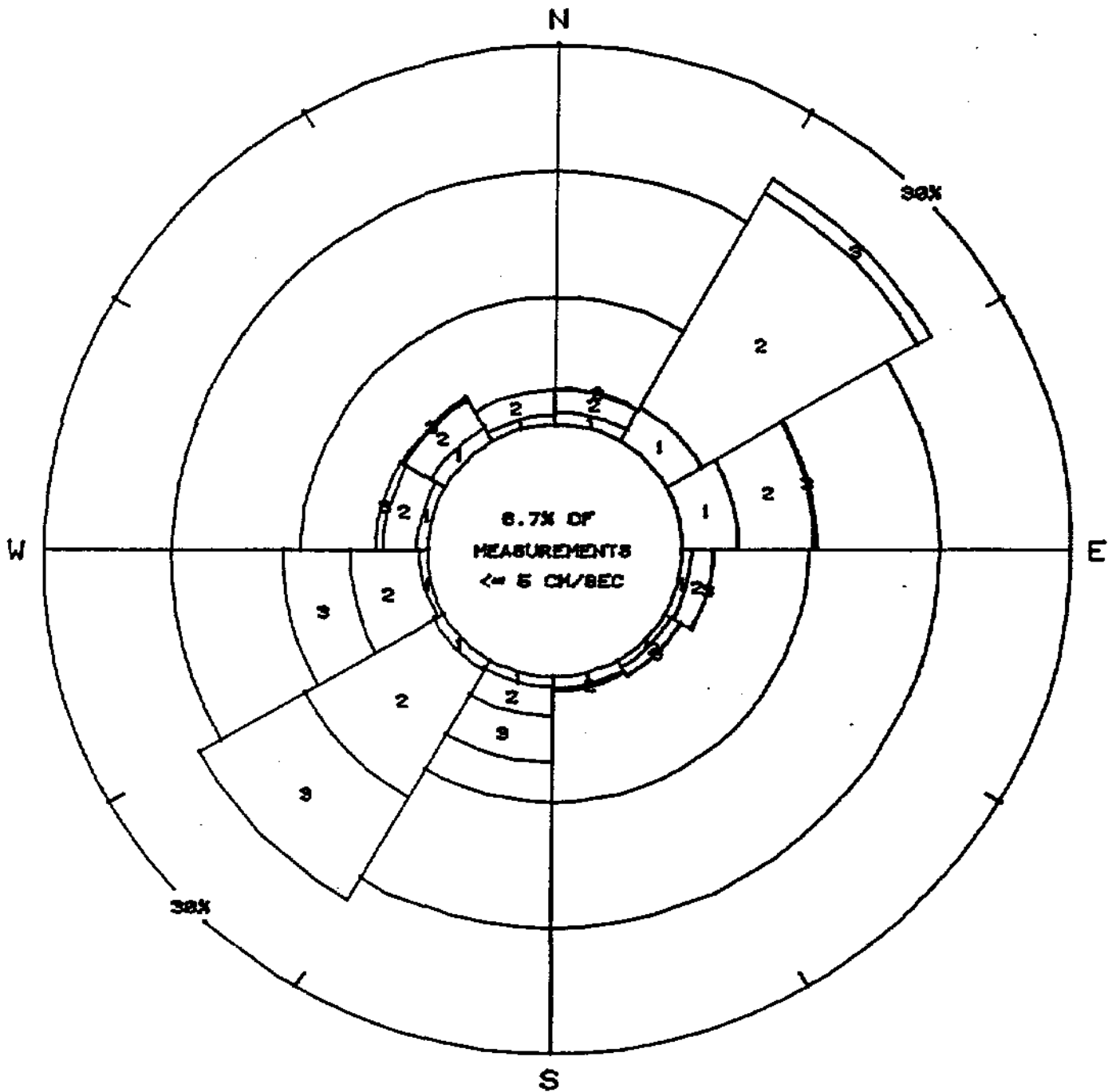


FIGURE D50 . ROSE DIAGRAM
 1/2 HR. AVERAGE CURRENT
 STATION O - ENDECO #049
 1538, 28 JULY TO 1008, 4 SEPTEMBER 1982

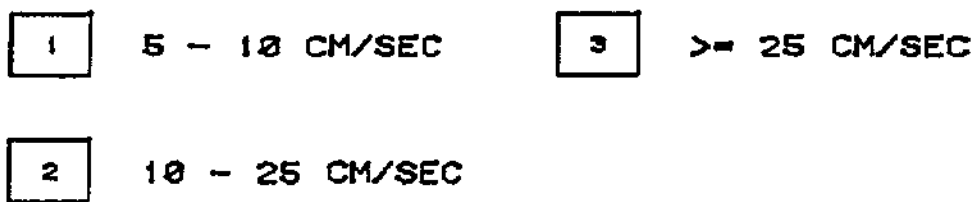
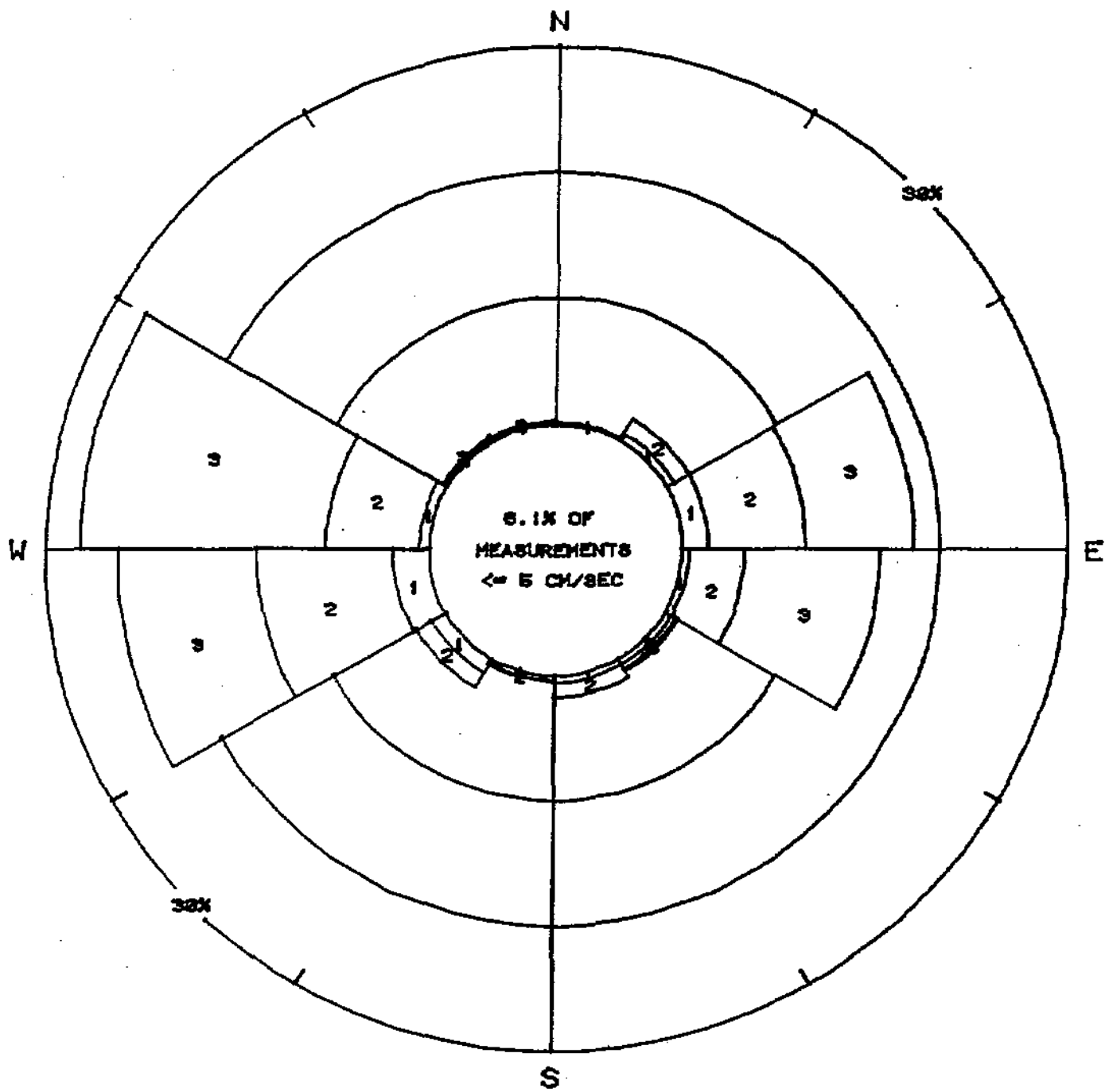


FIGURE D51 . ROSE DIAGRAM
 1/2 HR. AVERAGE CURRENT
 STATION P - ENDECO #048
 1545, 29 JULY, TO 0845, 4 SEPTEMBER, 1982

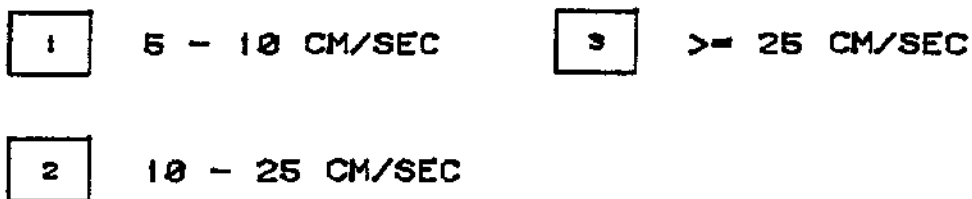
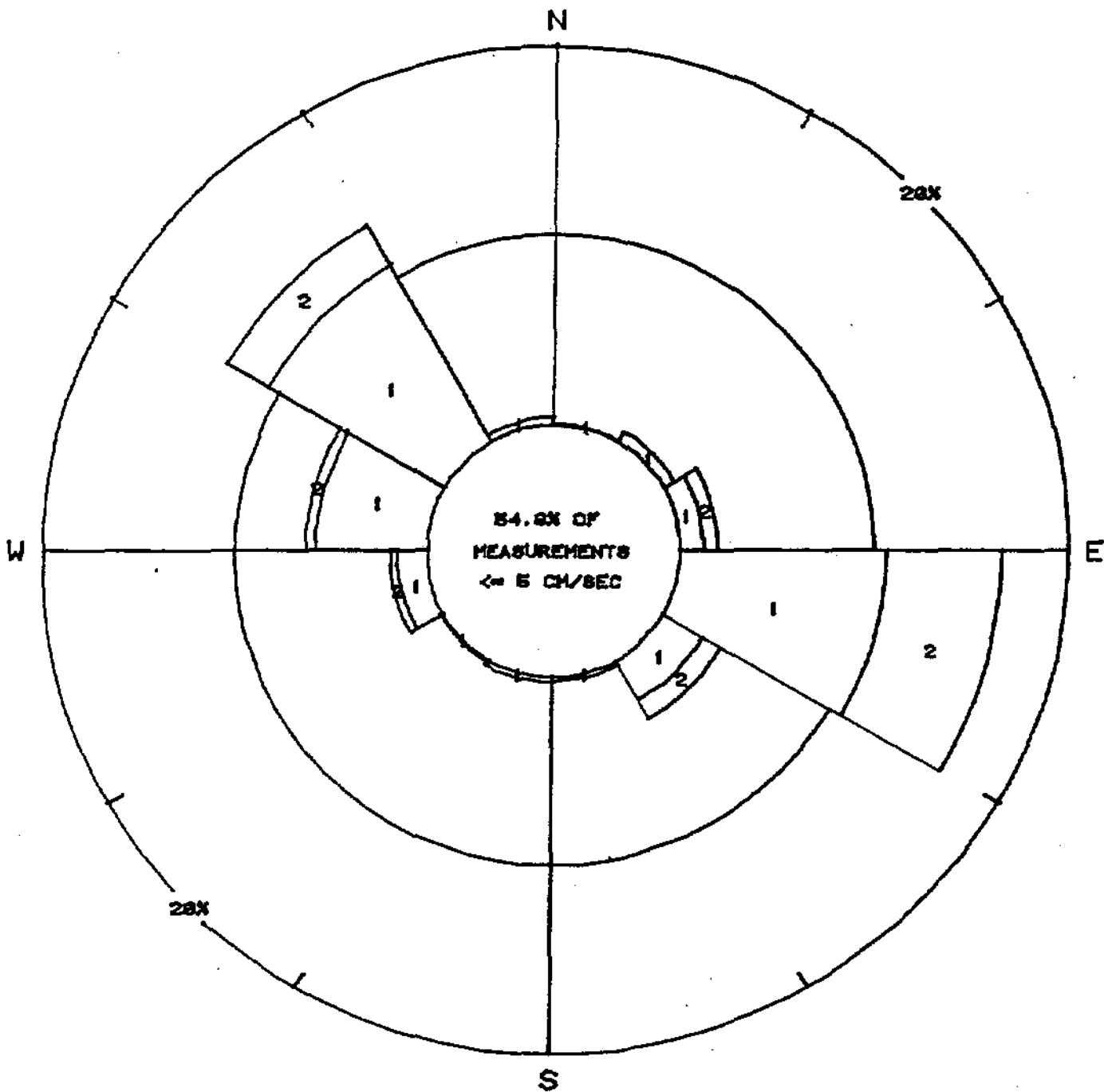


FIGURE D52 . ROSE DIAGRAM
 1/2 HR. AVERAGE CURRENT
 STATION S (TOP) - ENDECO #175
 2252, 28 JULY TO 1022, 5 SEPTEMBER, 1982

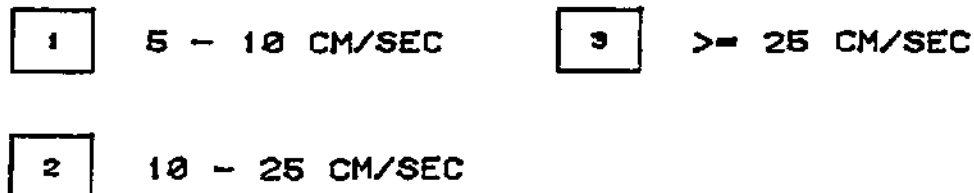
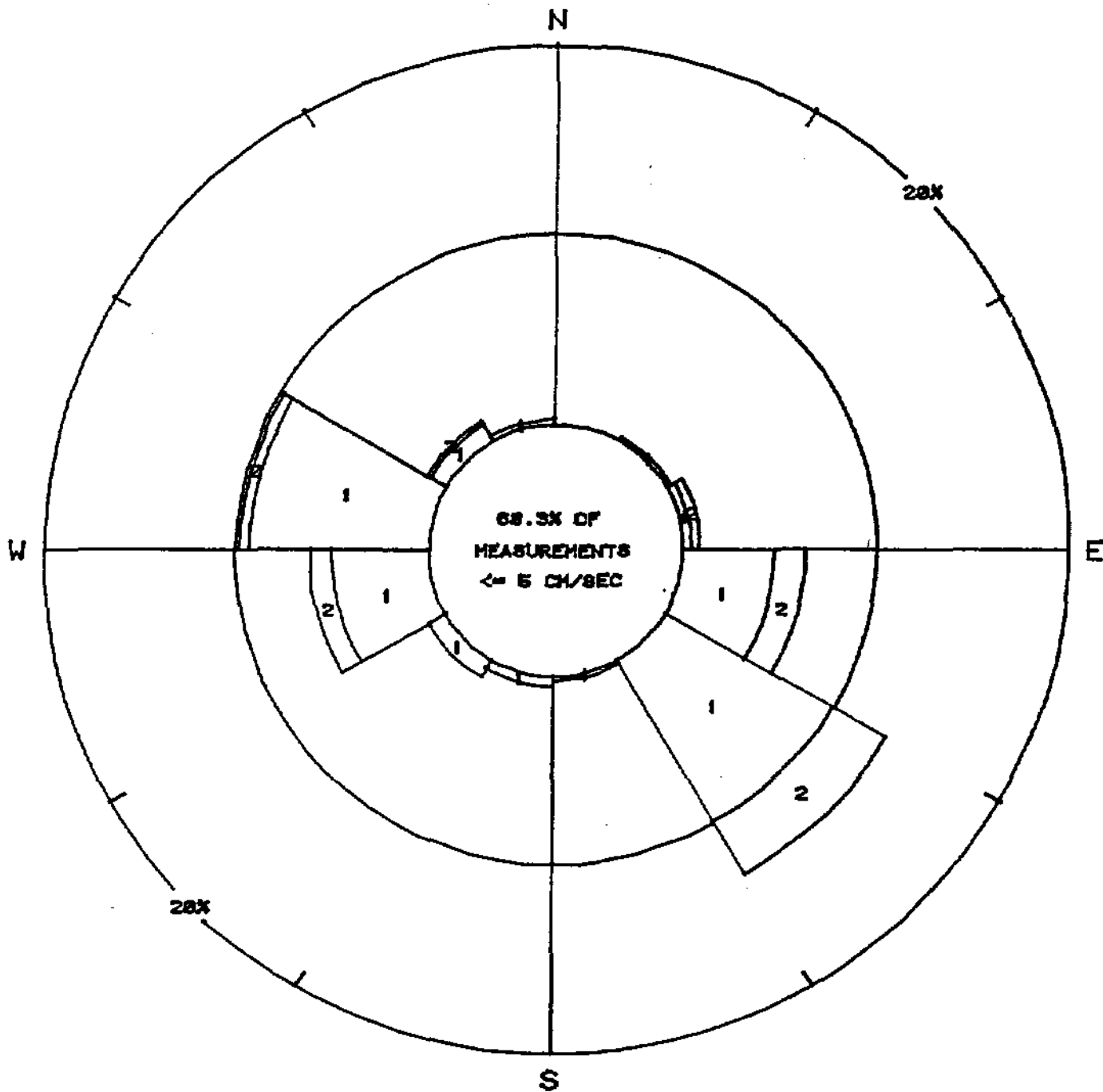


FIGURE D53 . ROSE DIAGRAM
 1/2 HR. AVERAGE CURRENT
 STATION S (BOTTOM) - ENDECO #052
 2242, 28 JULY TO 1012, 5 SEPTEMBER, 1982

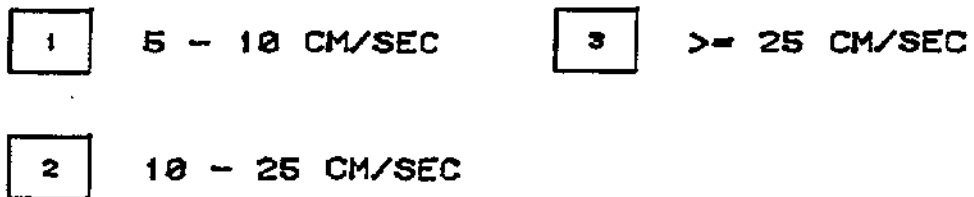
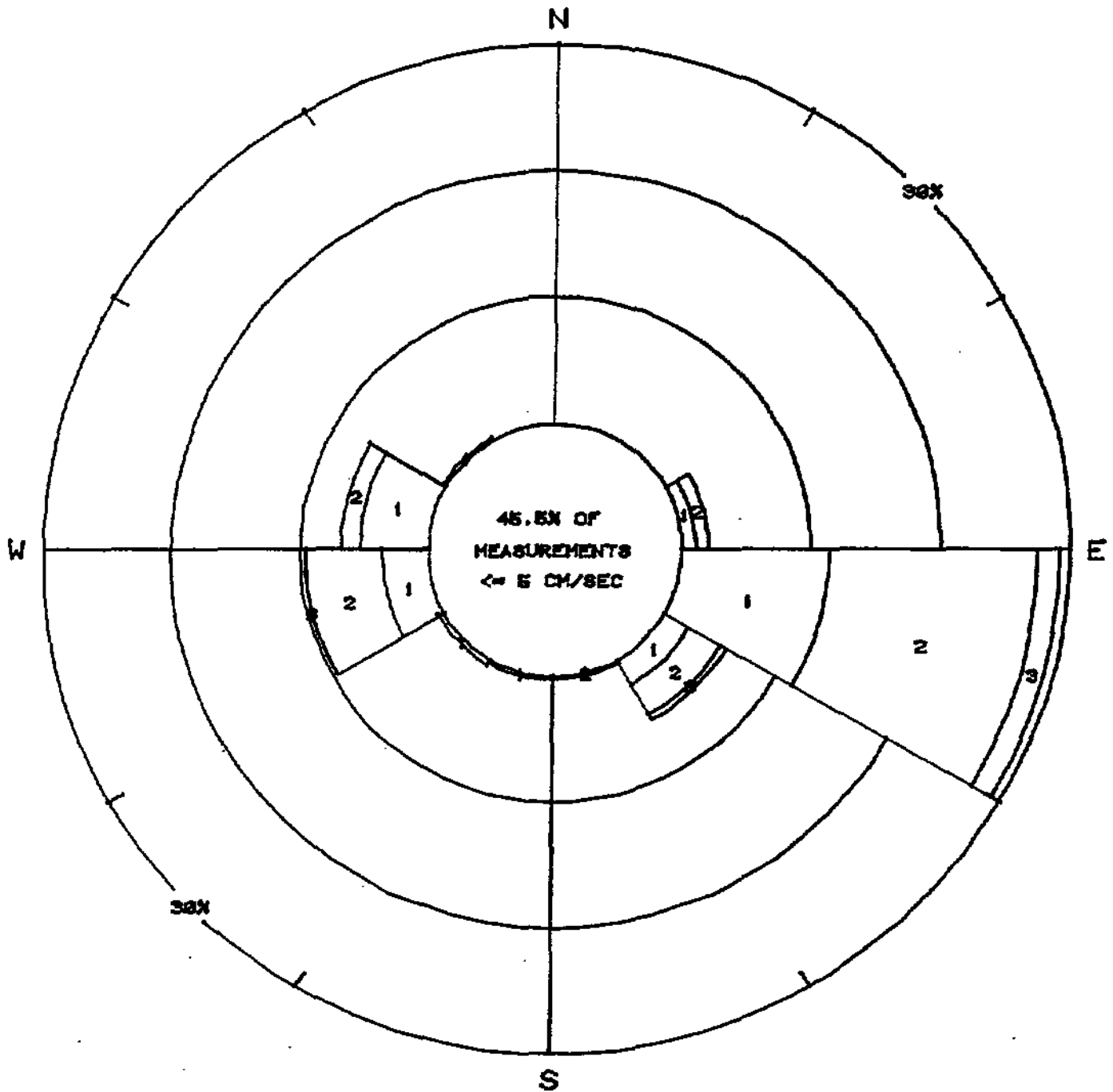
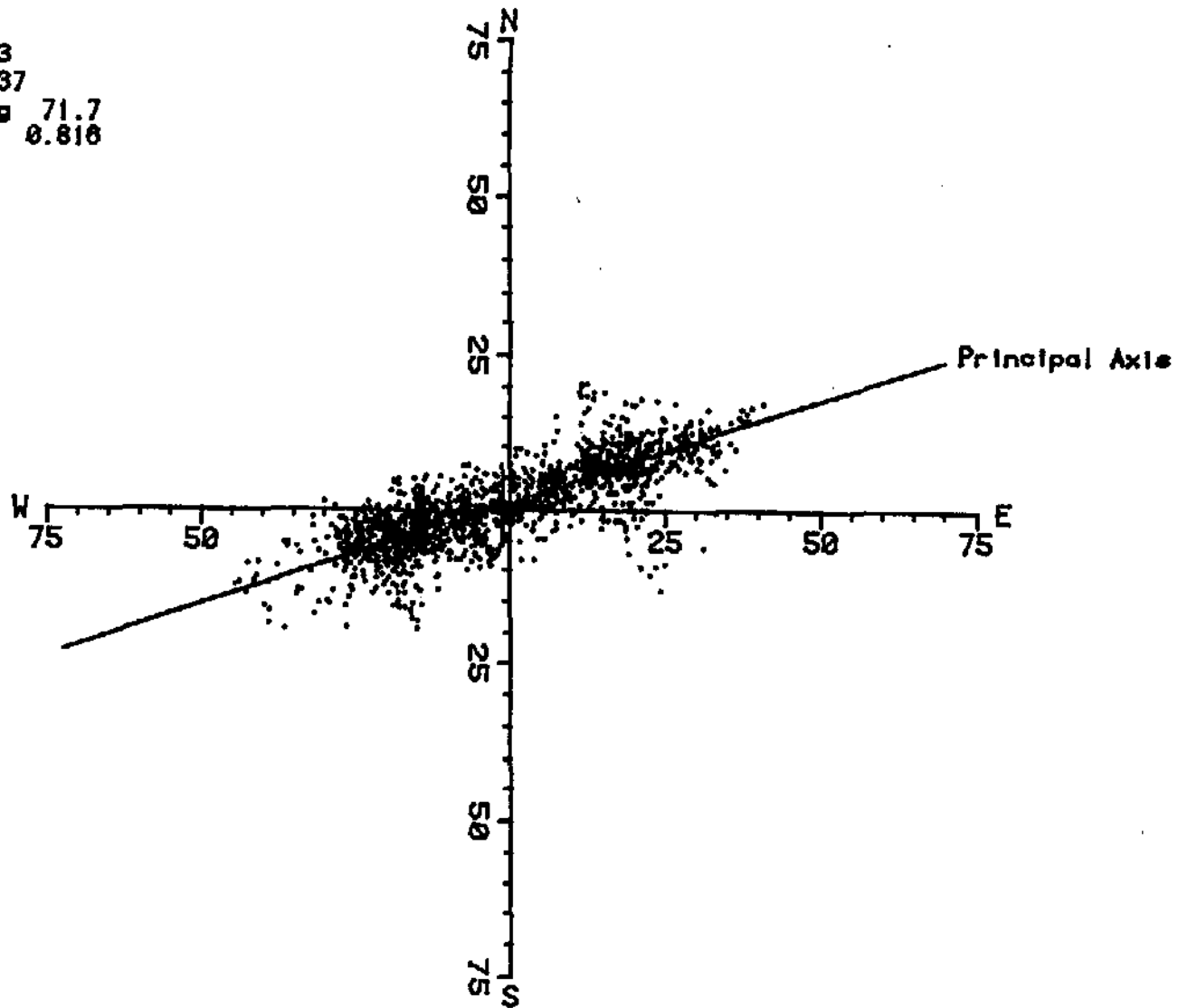


FIGURE D54 . ROSE DIAGRAM
1/2 HR AVERAGE CURRENT
STATION Q - ENDECO #047
0228, 1 AUGUST TO 1228, 3 SEPTEMBER, 1982

Mean N 8.73
Mean E -1.37
Axis bearing 71.7
Correlation 0.818

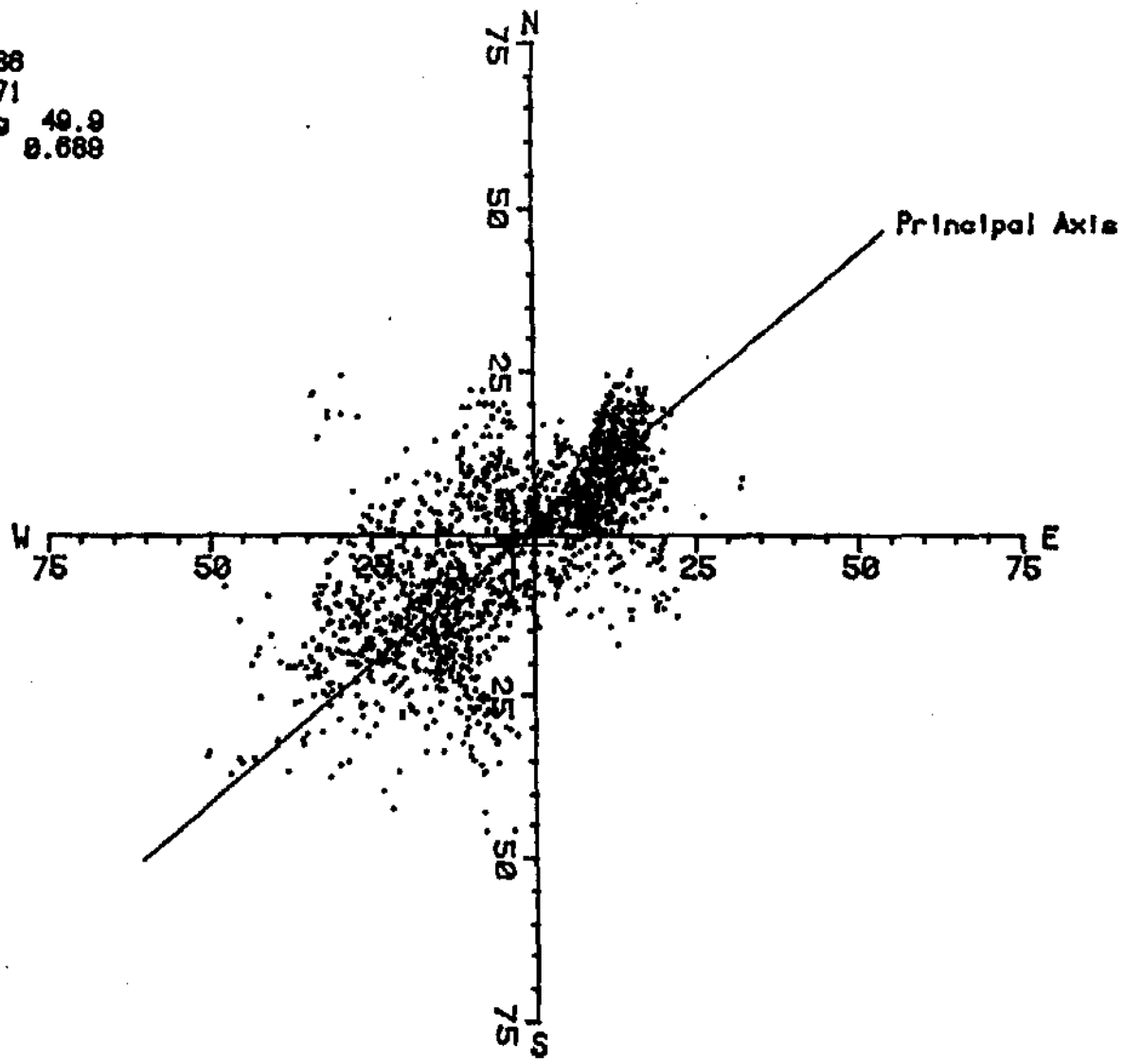


(Speeds in cm/sec)

FIGURE D55

POLAR PLOT - SPEED AND DIRECTION DATA
STATION E - 1/2 HR. AVERAGE CURRENT - ENDECO #232
2122, 29 JULY TO 0722, 4 SEPTEMBER, 1982

Mean N -1.88
Mean E -3.71
Axis bearing 49.9
Correlation 0.689



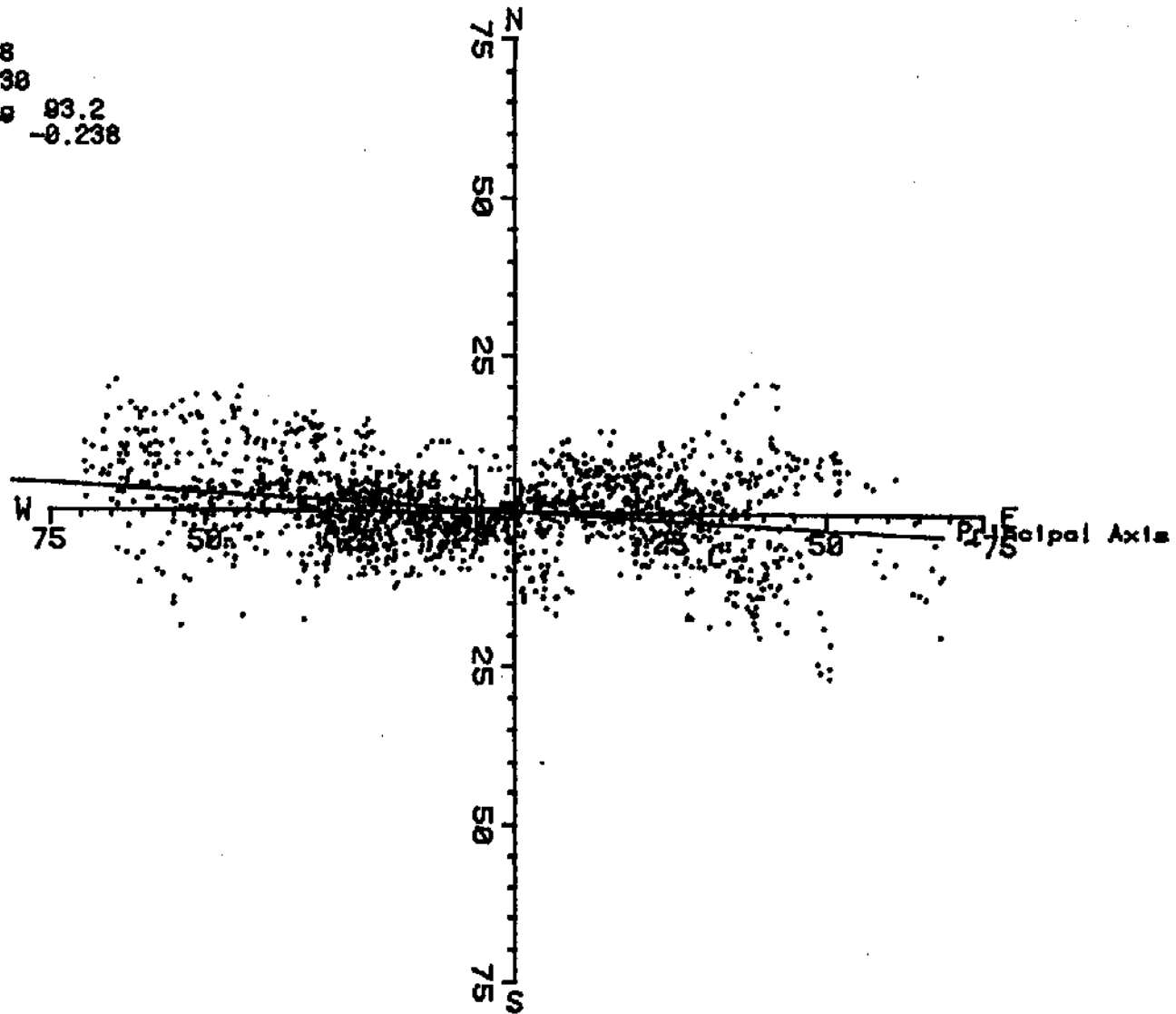
(Speeds in cm/sec)

FIGURE D56

POLAR PLOT - SPEED AND DIRECTION DATA
STATION O - 1/2 HR. AVERAGE CURRENT - ENDECO #049
1538, 28 JULY TO 1008, 4 SEPTEMBER, 1982

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Mean N 0.18
Mean E -0.30
Axis bearing 83.2
Correlation -0.238



(Speeds in cm/sec)

FIGURE D57

POLAR PLOT - SPEED AND DIRECTION DATA
STATION P - 1/2 HR. AVERAGE CURRENT - ENDECO #048
1545, 29 JULY TO 0845, 4 SEPTEMBER, 1982

Mean N 0.28
Mean E 0.40
Axis bearing 114.4
Correlation -0.724

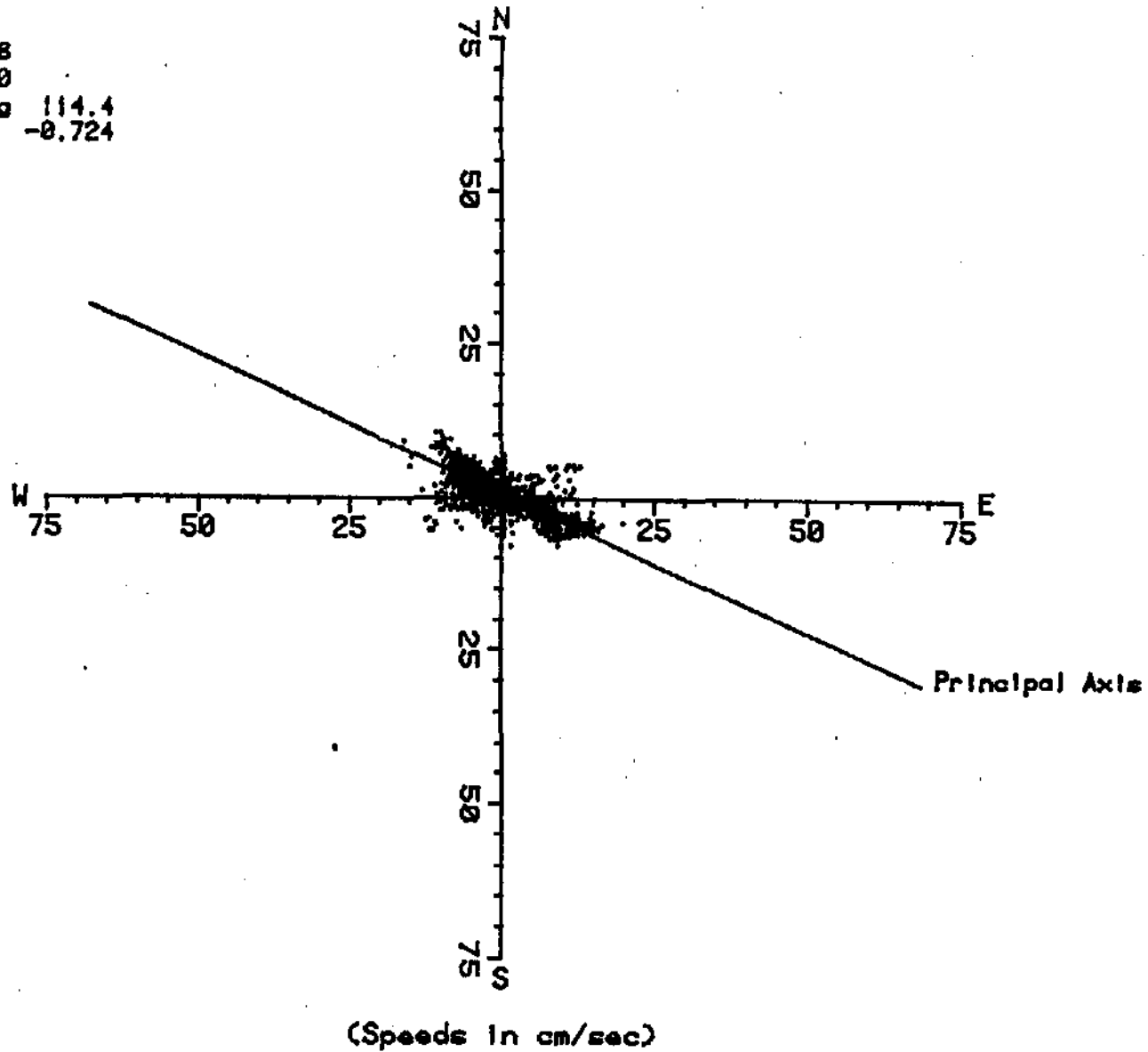
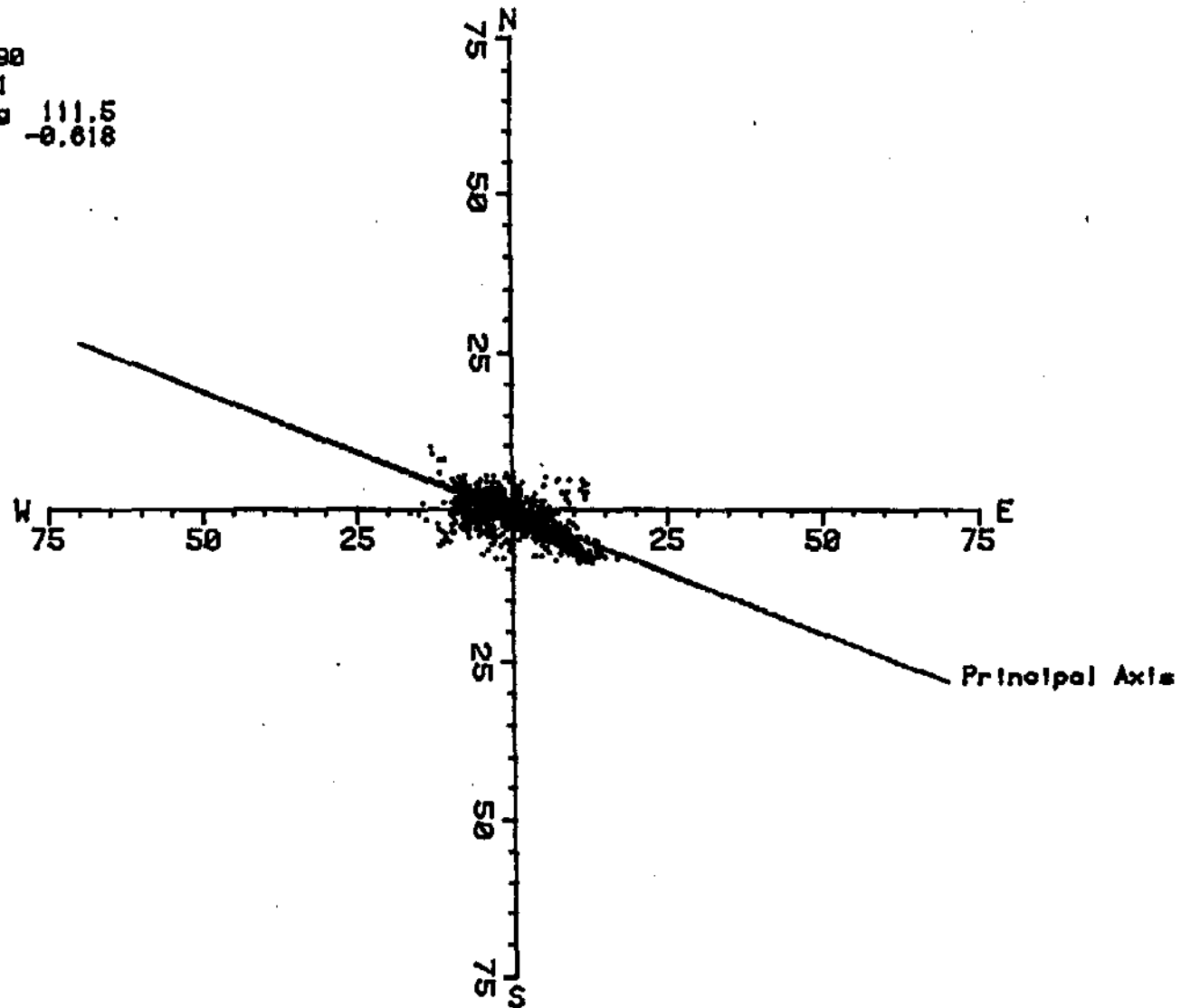


FIGURE D58

POLAR PLOT - SPEED AND DIRECTION DATA
STATION S (TOP) - 1/2 HR. AVERAGE CURRENT - ENDECO #175
2252, 28 JULY TO 1022, 5 SEPTEMBER, 1982

Mean N -0.90
Mean E 0.01
Axis bearing 111.5
Correlation -0.618

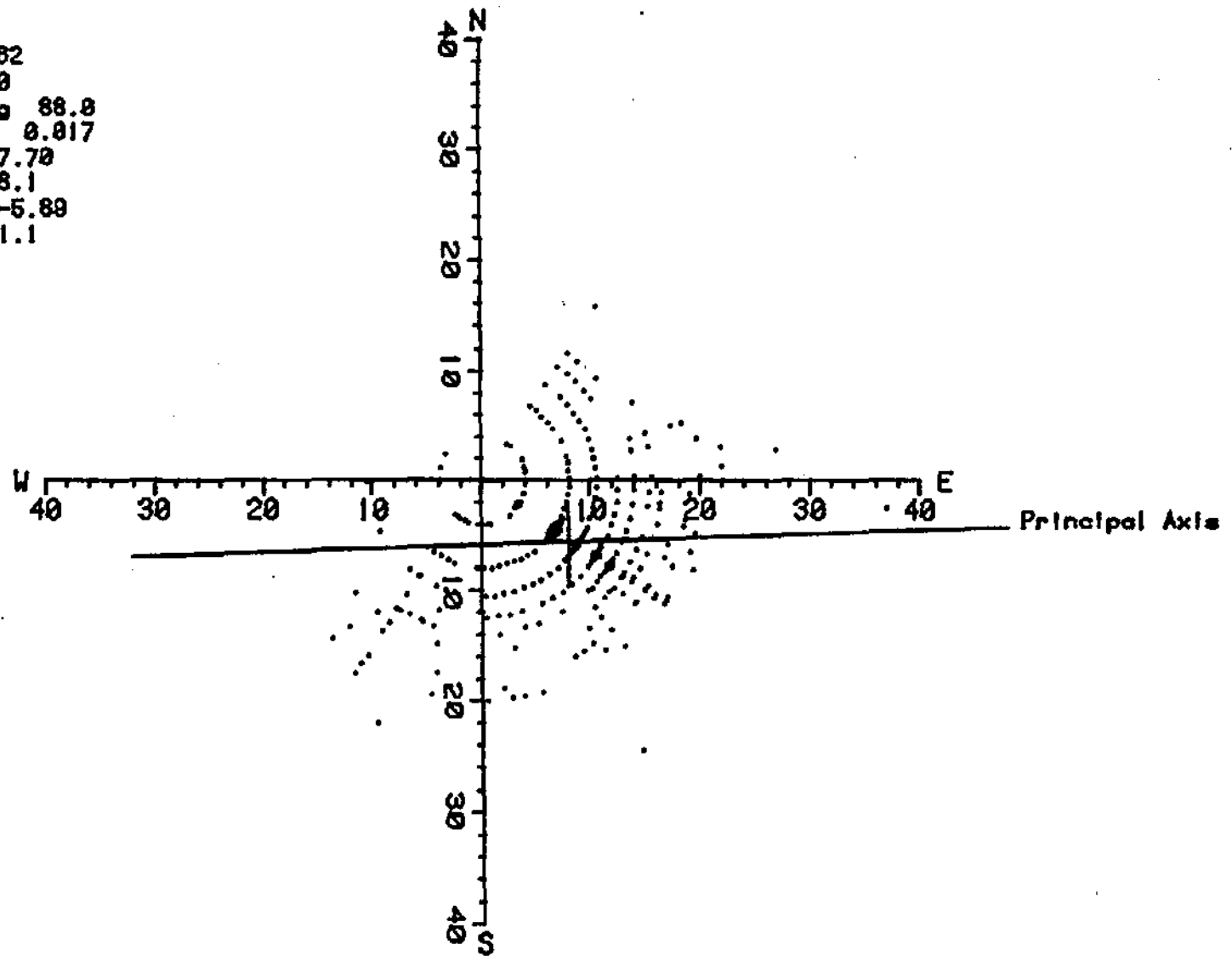


(Speeds in cm/sec)

FIGURE D59

POLAR PLOT - SPEED AND DIRECTION DATA
STATION S (BOTTOM) - 1/2 HR. AVERAGE CURRENT - ENDECO #052
2242, 28 JULY TO 1012, 5 SEPTEMBER, 1982

Mean N -5.62
Mean E 7.90
Axis bearing 88.8
Correlation 0.817
Mean Prin. 7.70
Var Prin. 18.1
Mean Orth. -5.89
Var Orth. 11.1

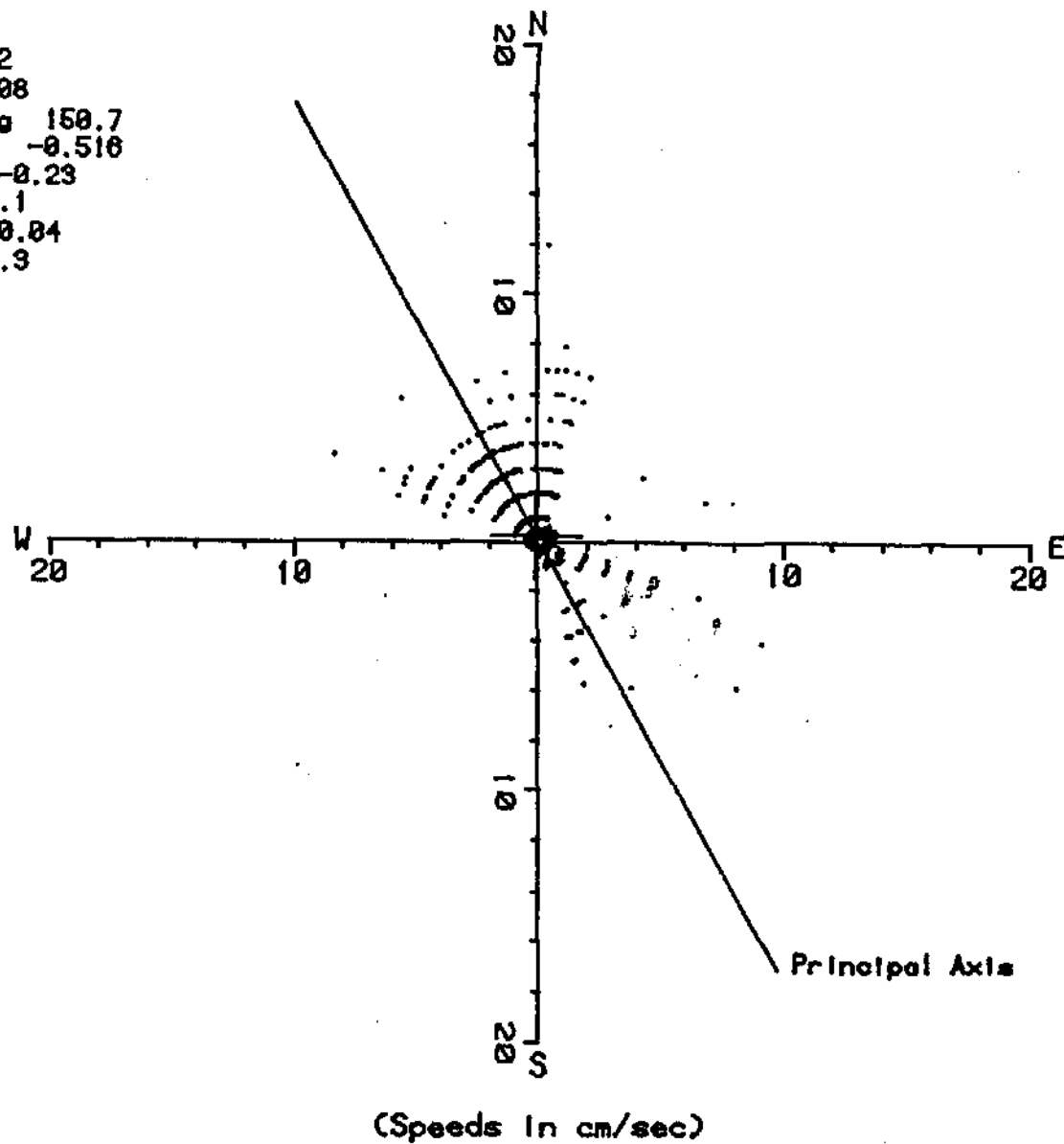


(Speeds in cm/sec)

FIGURE D62

POLAR PLOT - SPEED AND DIRECTION DATA
POINT THOMSON STATION T CURRENT
2020, 28 JULY TO 0950, 5 SEPTEMBER, 1982

Mean N 0.22
Mean E -0.08
Axis bearing 150.7
Correlation -0.516
Mean Prin. -0.23
Var Prin. 1.1
Mean Orth. 0.04
Var Orth. 0.3



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FIGURE D63

POLAR PLOT - SPEED AND DIRECTION DATA
POINT THOMSON STATION SP CURRENT
1600, 5 SEPTEMBER TO 1230, 15 NOVEMBER, 1982

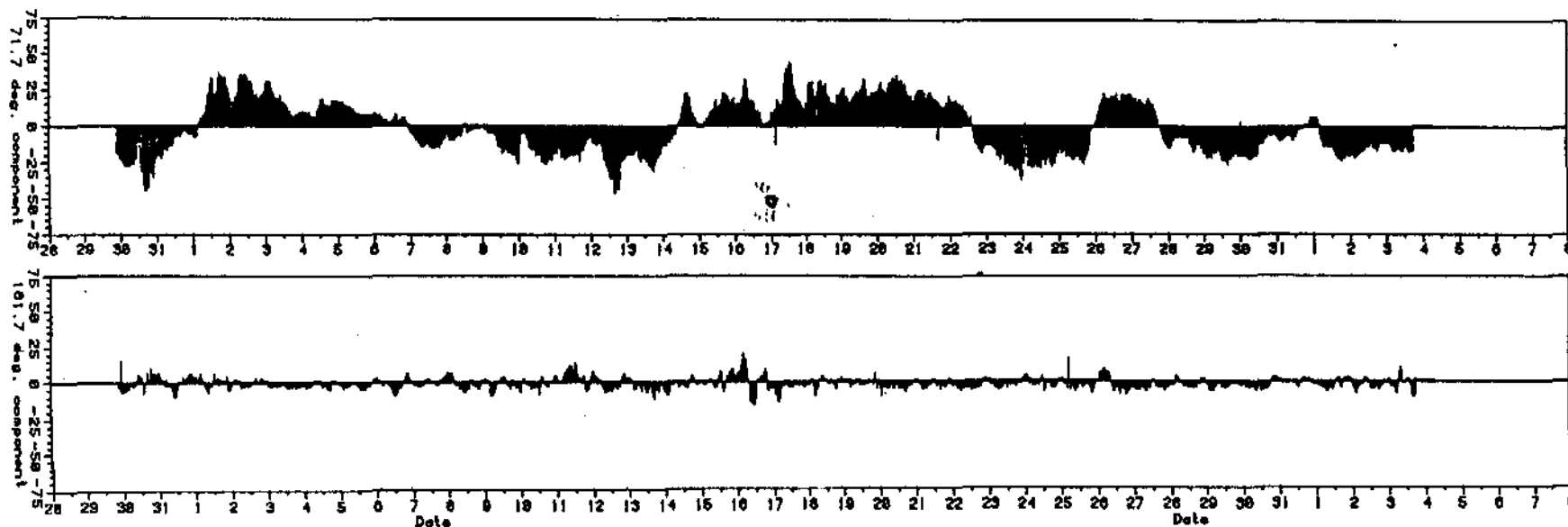


Figure D64. Components Stick Plot
 Station E; 1/2 Hr. Average
 Current Speed, Endeco #232,
 2122, 29 July to 0722, 4
 September, 1982 (speeds in cm/
 sec)

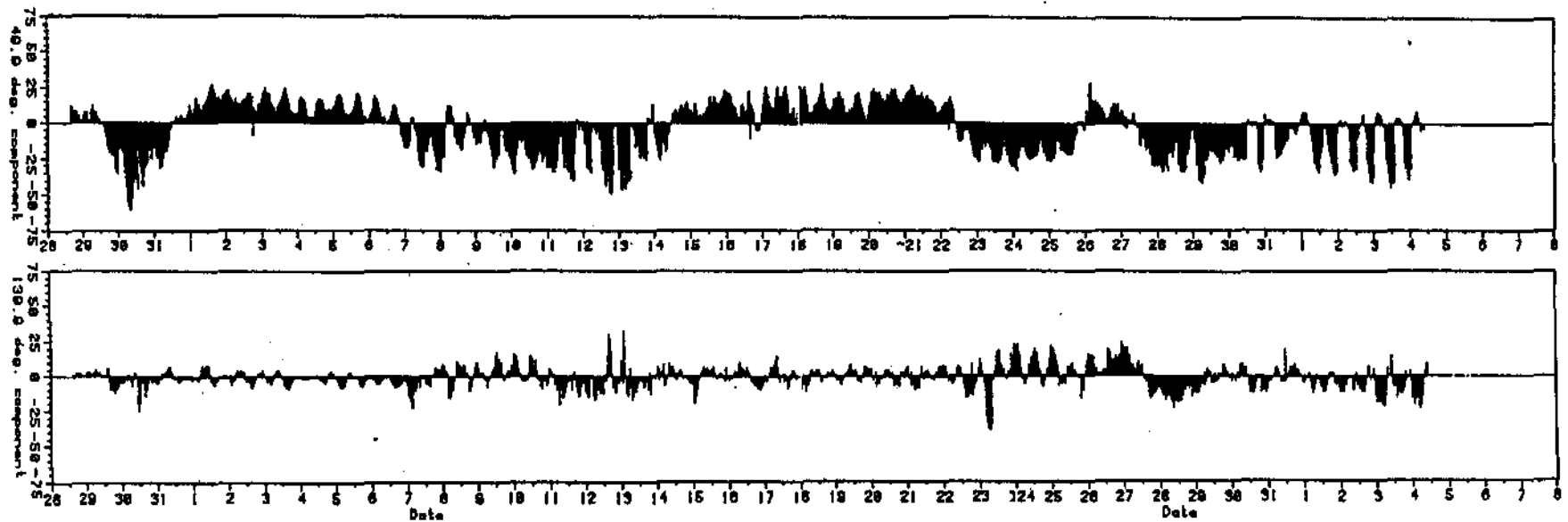


Figure D65. Componetns Stick Plot Station O;
 1/2 Hour Average Current Endeco
 #049, 1538, 28 July to 1008,
 4 September, 1982 (speeds in
 cm/sec).

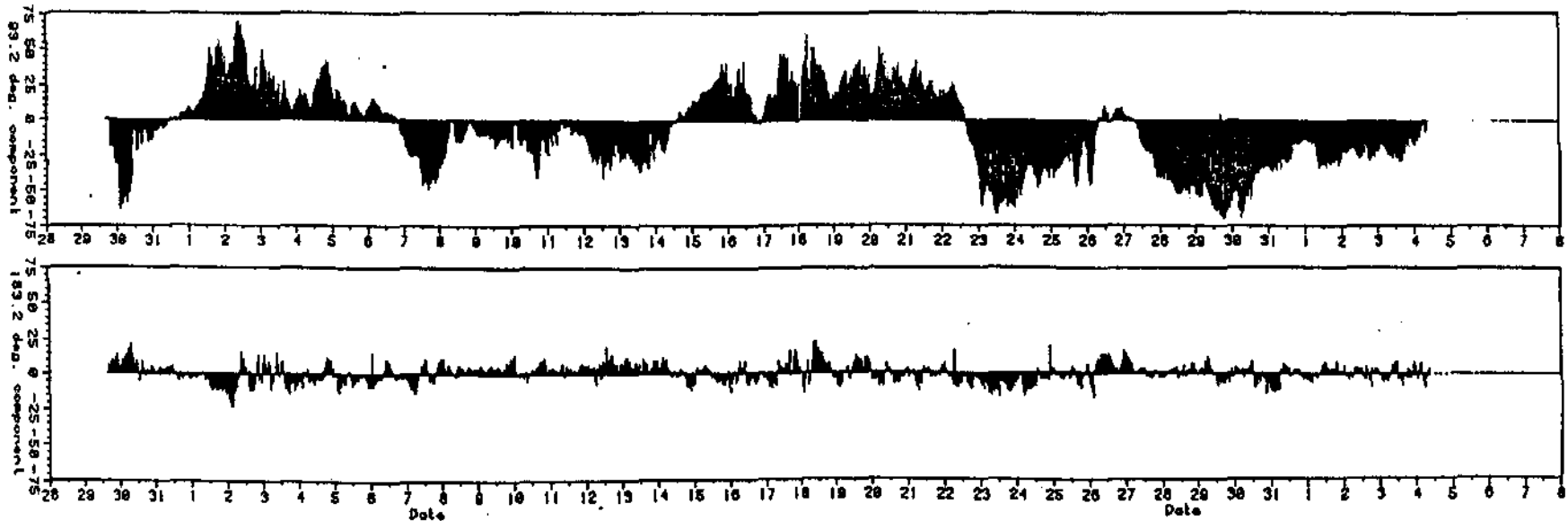


Figure D66. Components Stick Plot
 Station P; 1/2 Hr. Average
 Current Speed, Endeco #048
 1545, 29 July to 0845,
 4 September, 1982.

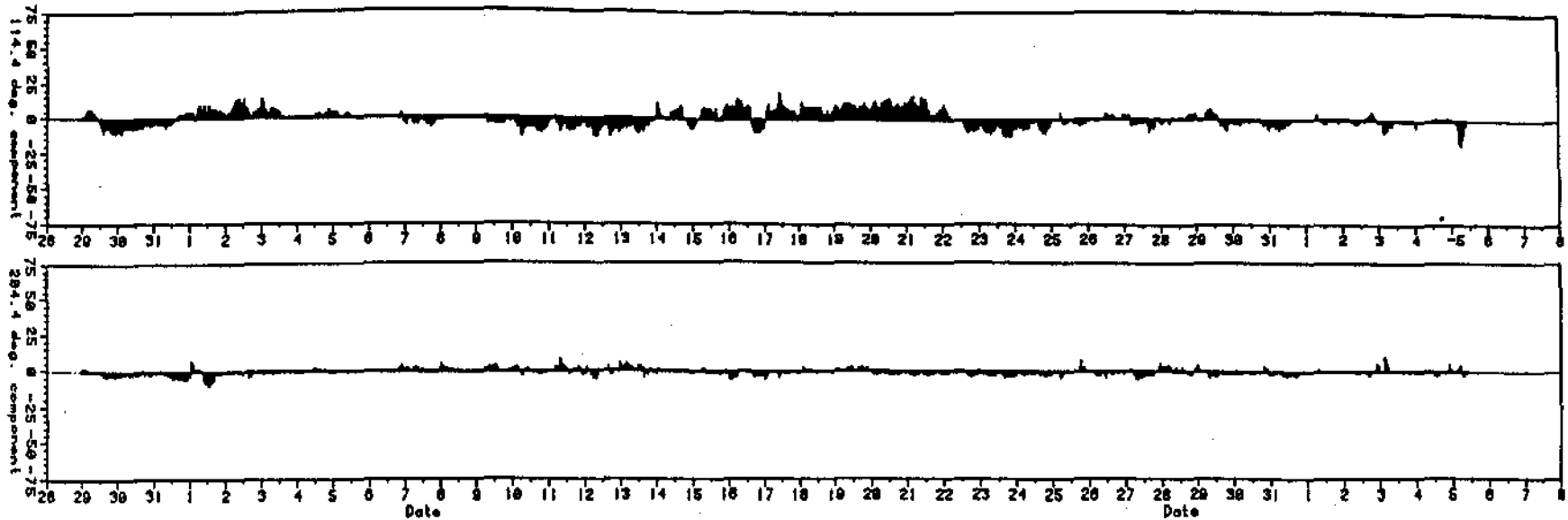


Figure D67. Components Stick Plot
Station S (Top); 1/2 Hr. Average
Current Speed, Endeco #175, 2252,
28 July to 1022, 5 September 1982.
(speeds in cm/sec)

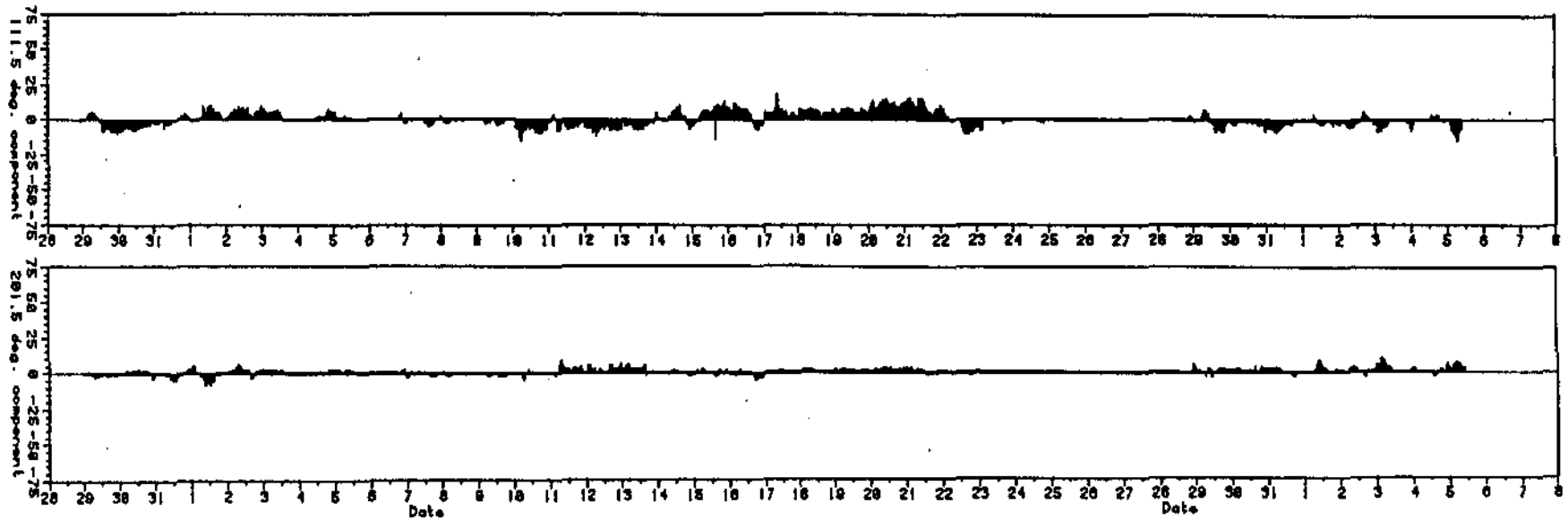


Figure D68. Components Stick Plot
 Station S (Bottom), 1/2 Hr.
 Average Current Speed, Endeco
 #052, 2242, 28 July to 1012,
 5 September 1982.

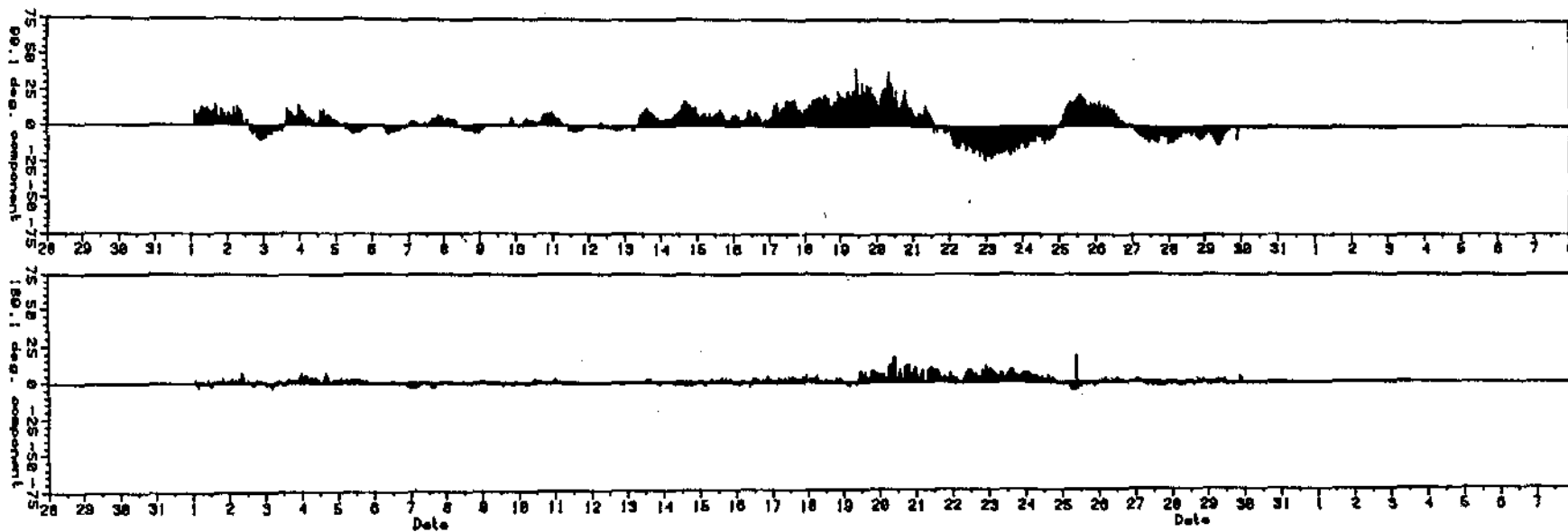


Figure D69. Components Stick Plot
Station Q; 1/2 Hr. Average
Current Speed, Endeco #047,
0228, 1 August, to 1228, 3
September 1982 (speeds in cm/sec).

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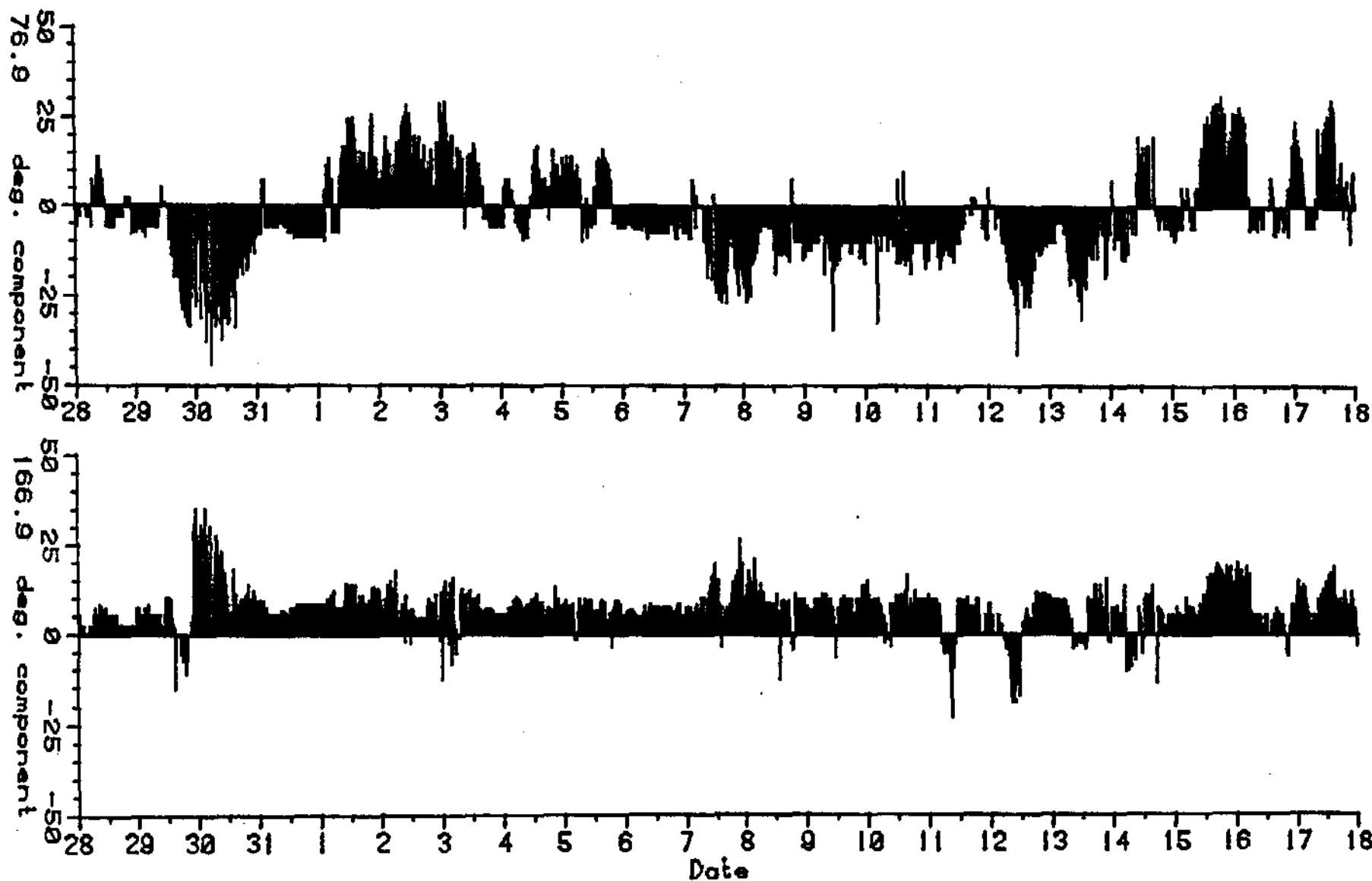


FIGURE D70

COMPONENTS STICK PLOT
POINT THOMSON STATION D CURRENT
0010, 28 JULY TO 2340, 17 AUGUST, 1982
(speeds in cm/sec)

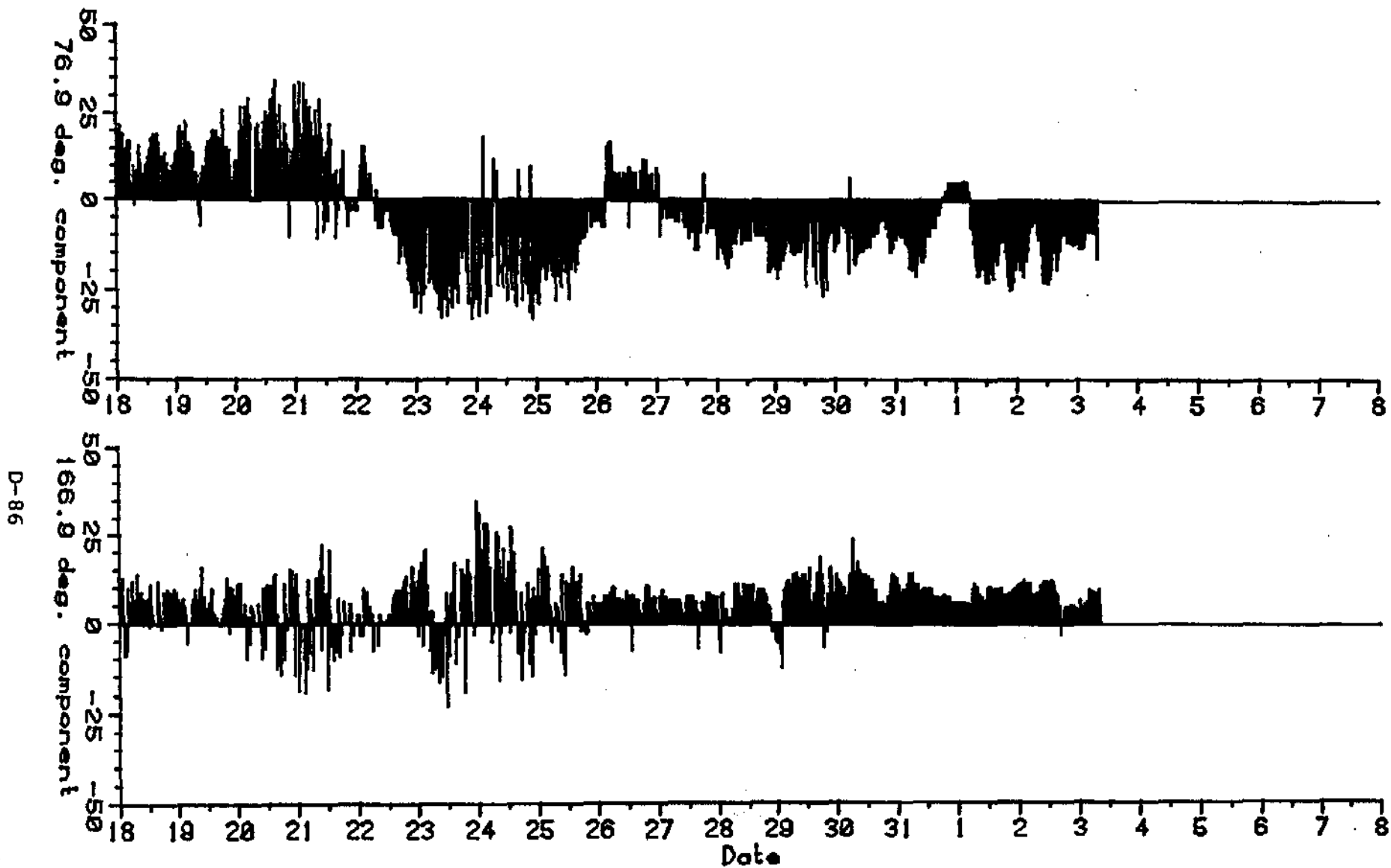
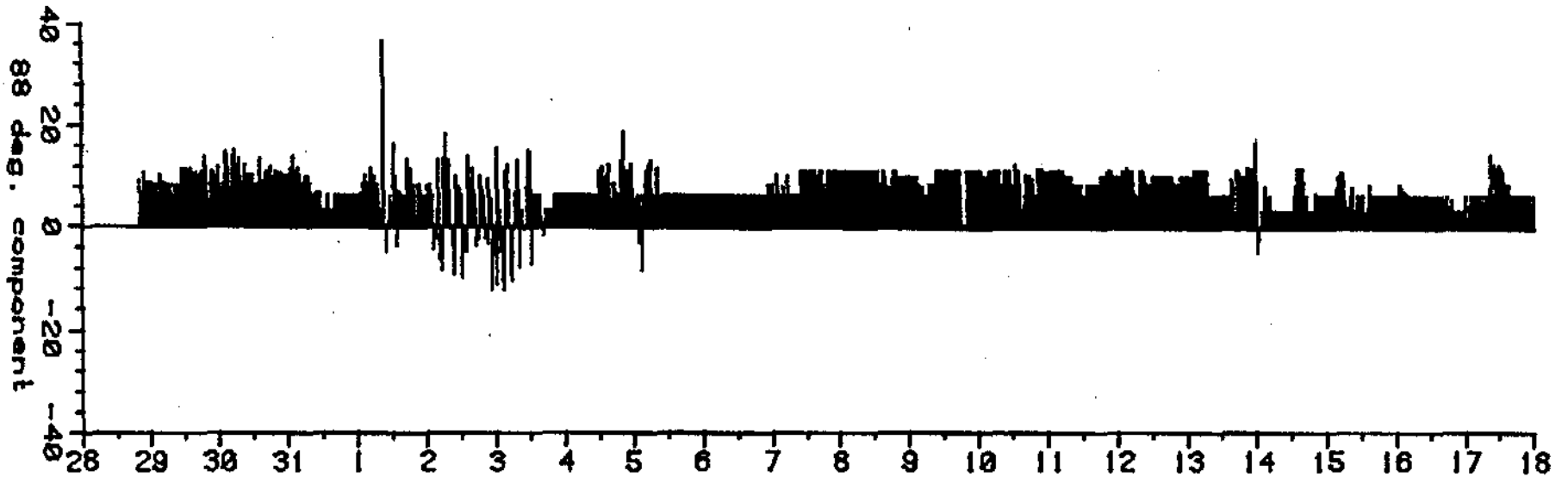


FIGURE D70

COMPONENTS STICK PLOT
POINT THOMSON STATION D CURRENT
0010, 17 AUGUST TO 0940, 3 SEPTEMBER, 1982
(speeds in cm/sec)



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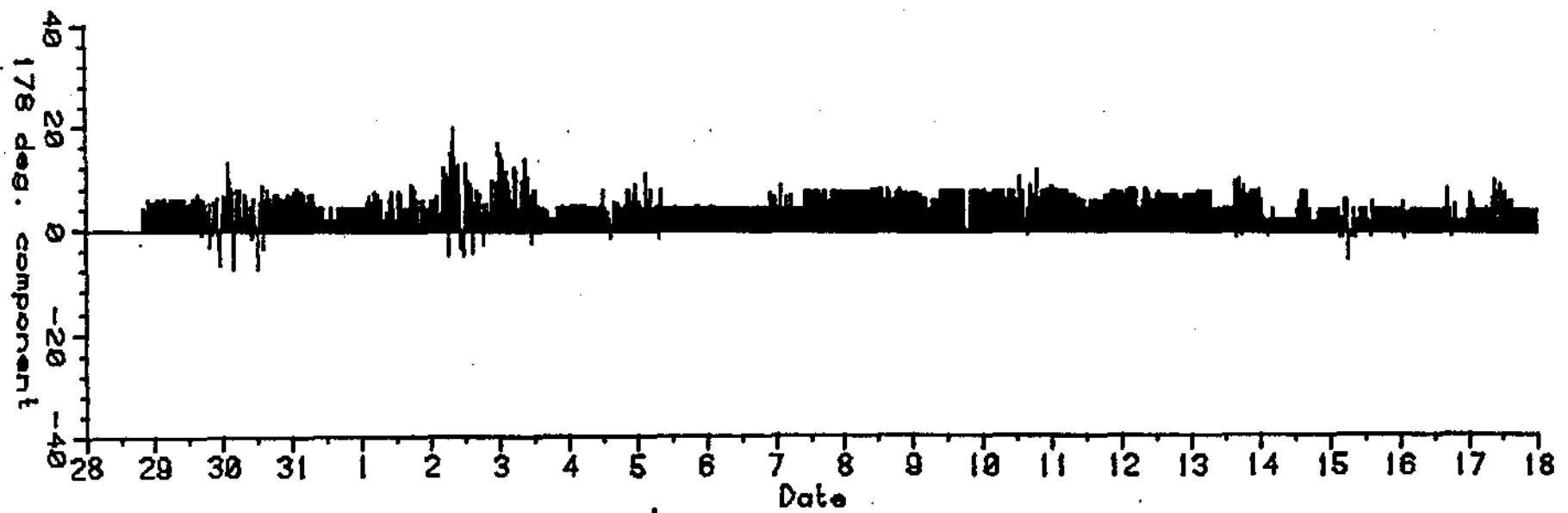
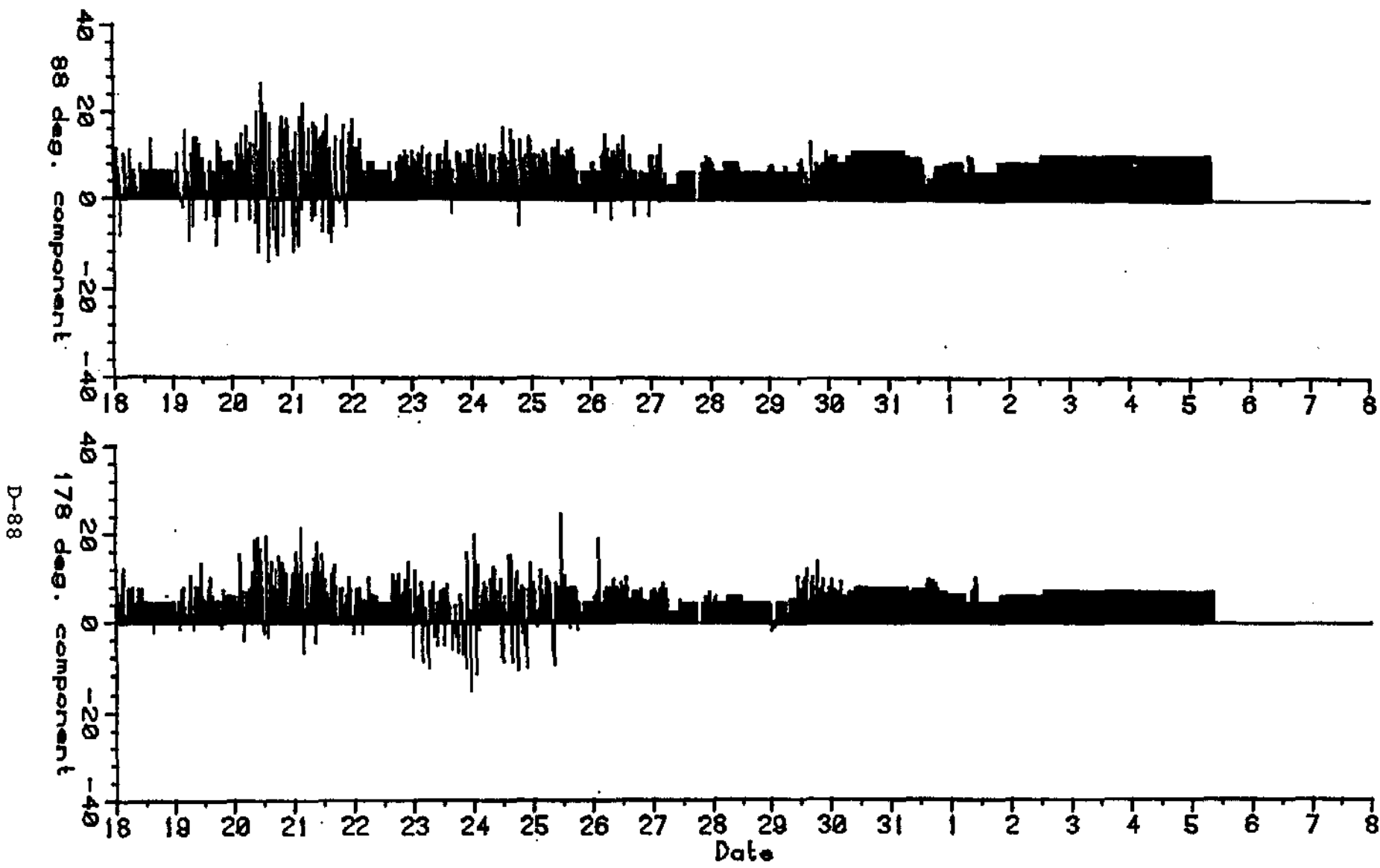


FIGURE D71

COMPONENTS STICK PLOT
POINT THOMSON STATION T CURRENT
2020, 27 JULY TO 2350, 17 AUGUST, 1982
(speeds in cm/sec)



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FIGURE D71

COMPONENTS STICK PLOT
 POINT THOMSON STATION T
 0020, 18 AUGUST TO 0950, 5 SEPTEMBER, 1982
 (speeds in cm/sec)

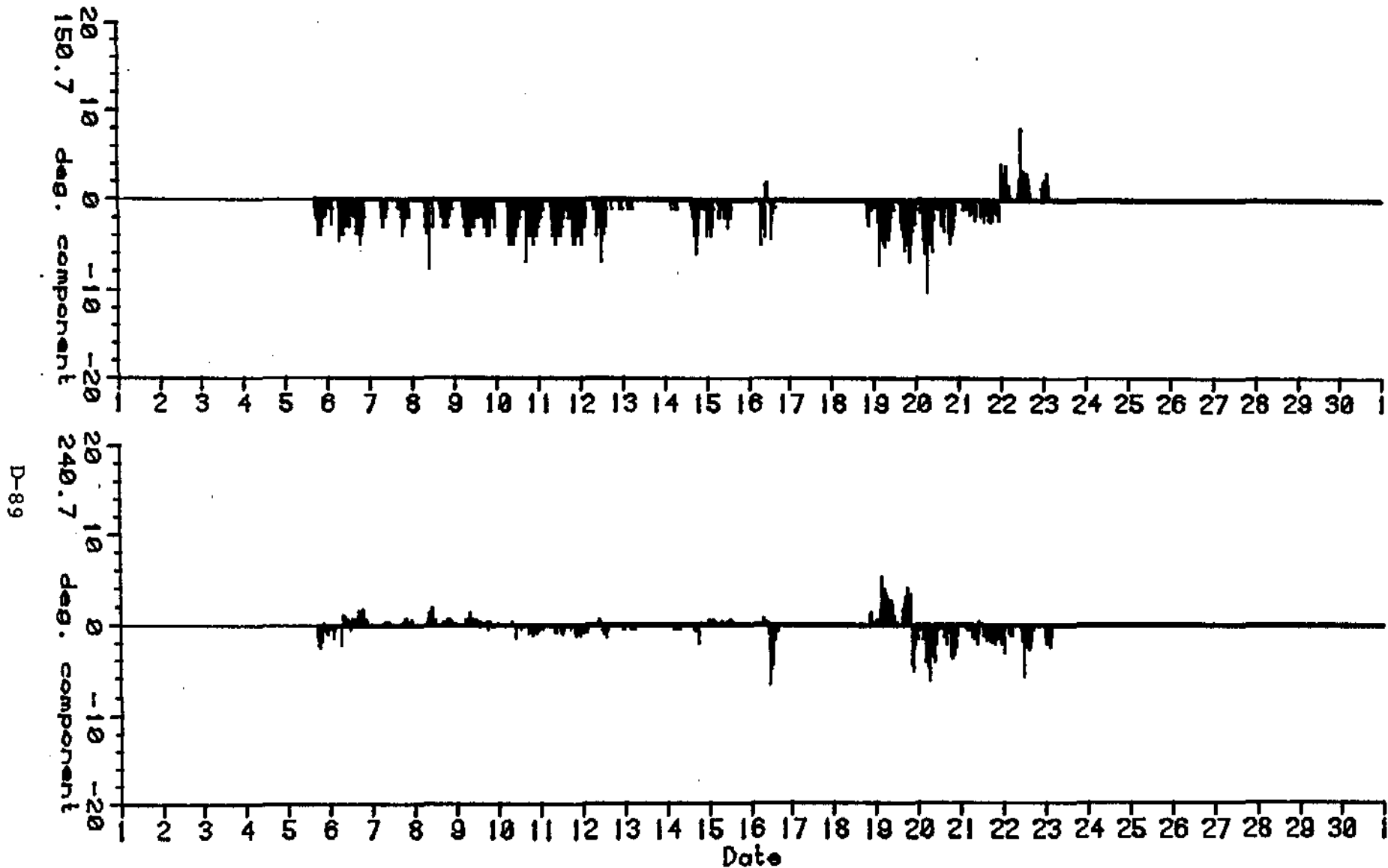


FIGURE D72

COMPONENTS STICK PLOT
POINT THOMSON STATION SP CURRENT
1600, 5 SEPTEMBER TO 2330, 30 SEPTEMBER, 1982
(speeds in cm/sec)

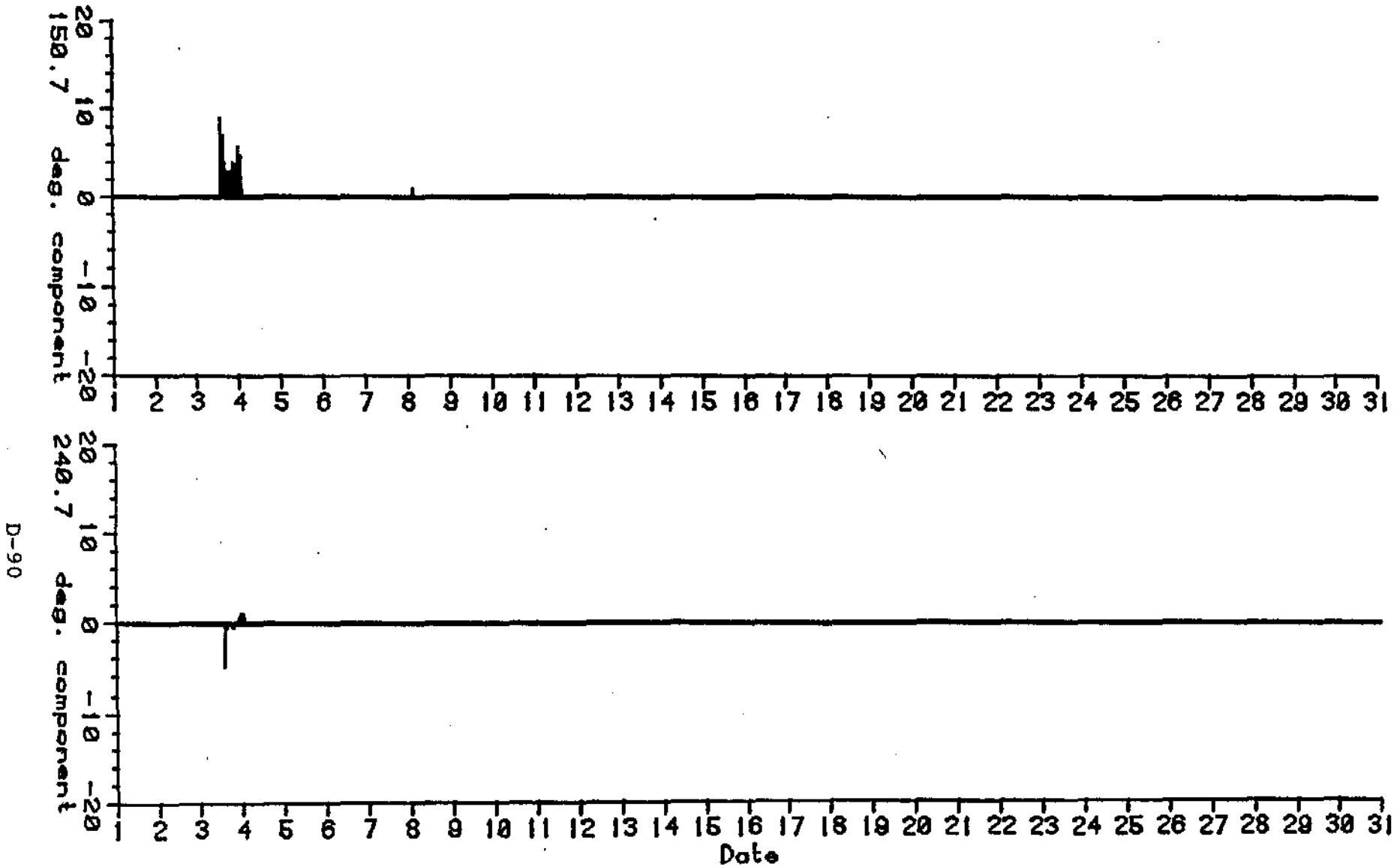


FIGURE D72

COMPONENTS STICK PLOT
POINT THOMSON STATION SP CURRENT
0000, 1 OCTOBER TO 2330, 30 OCTOBER, 1982
(speeds in cm/sec)

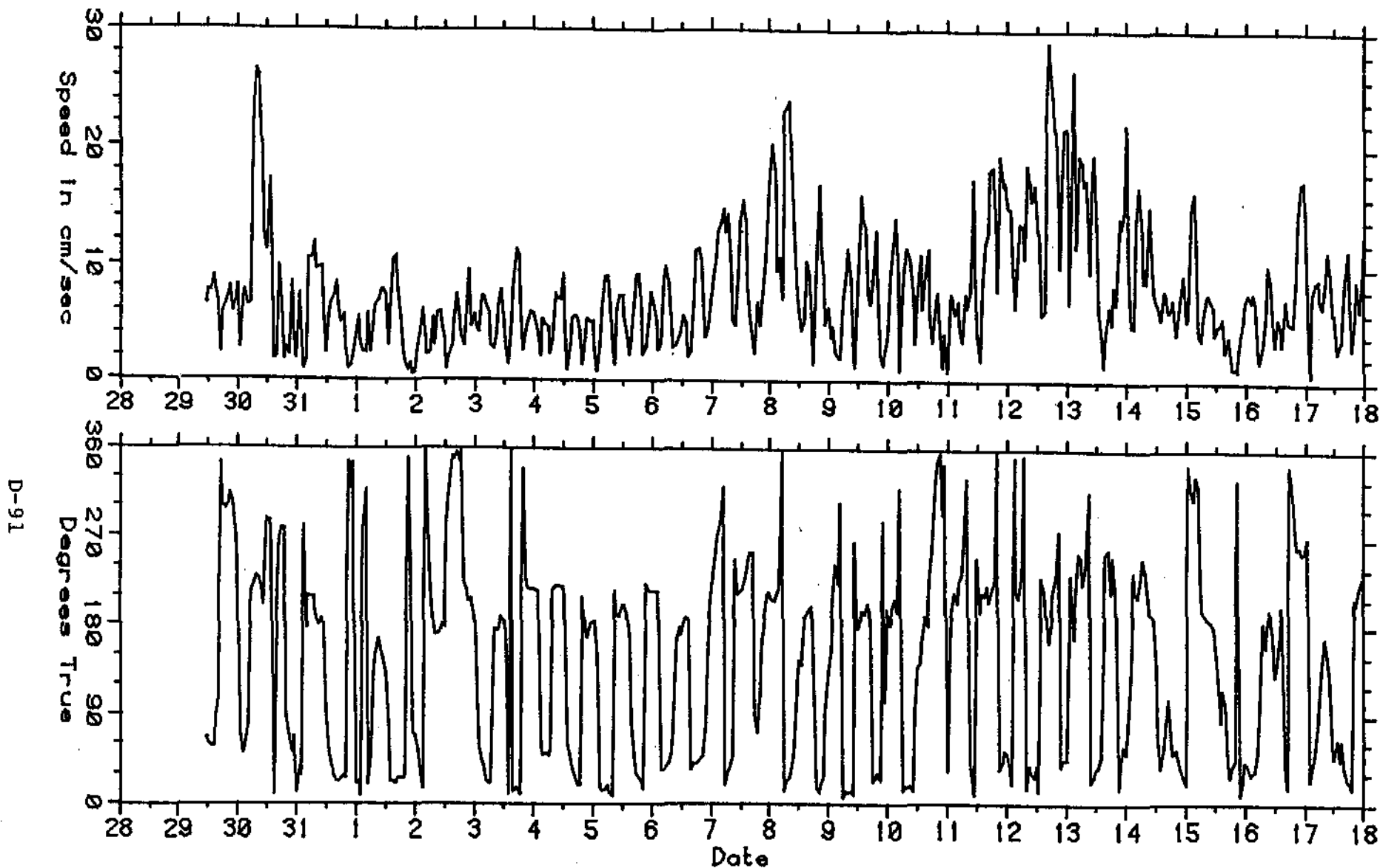


FIGURE D73. SPEED AND DIRECTION DATA
STATION O - DOODSON FILTERED CURRENT - ENDECO #049
1053, 29 JULY TO 2353, 17 AUGUST, 1982

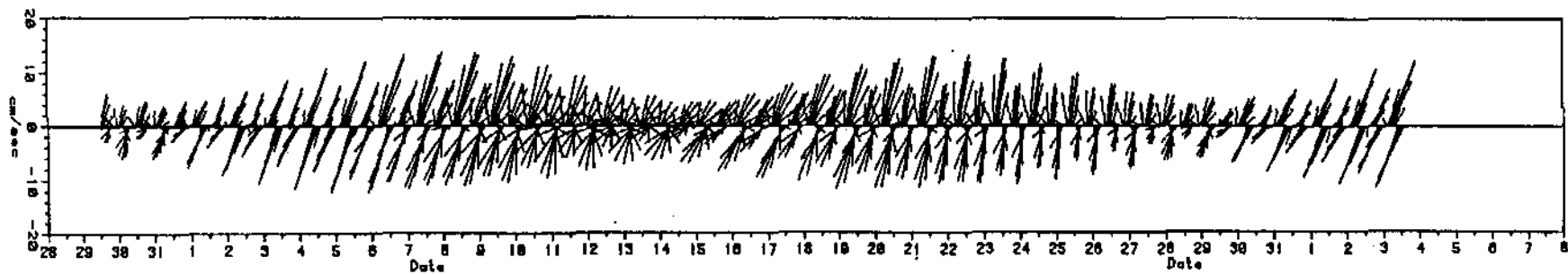
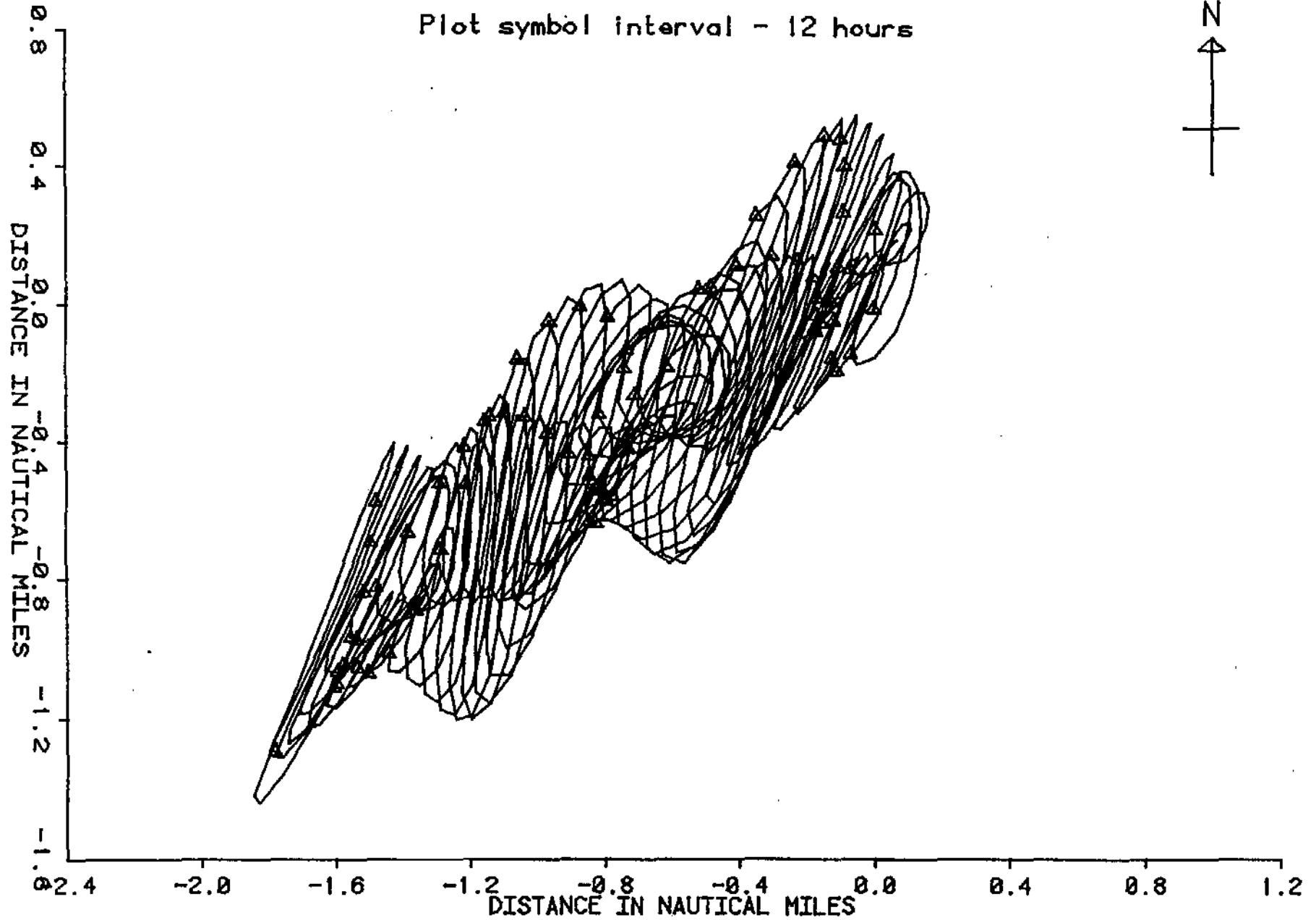


Figure D74. Vector Stick Plot, 1053,
29 July to 1453, 3 September,
1982, Station O; Least-Squares
Tidal Current, Endeco #049.

Plot symbol interval - 12 hours



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FIGURE D75 PROGRESSIVE VECTOR DIAGRAM
STATION 0 - LEAST-SQUARES TIDAL CURRENT - ENDECO #049
1053, 29 JULY TO 1453, 3 SEPTEMBER, 1982

Mean N -0.08
Mean E -0.11
Axis bearing 19.8
Correlation 0.761

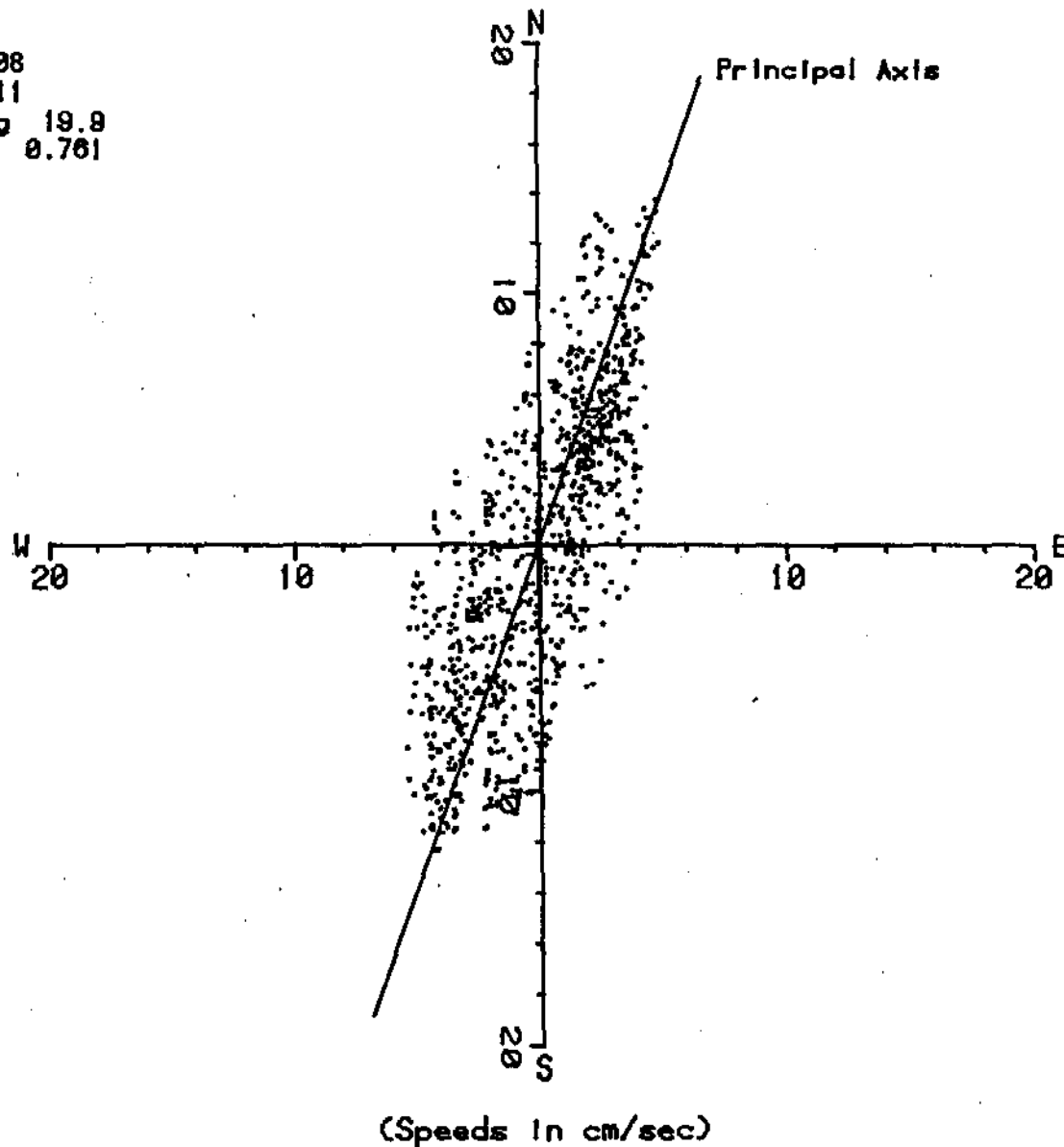


FIGURE D76 . POLAR PLOT - SPEED AND DIRECTION DATA
STATION O - LEAST-SQUARES TIDAL CURRENT - ENDECO #049
1053, 29 JULY TO 1453, 3 SEPTEMBER, 1982

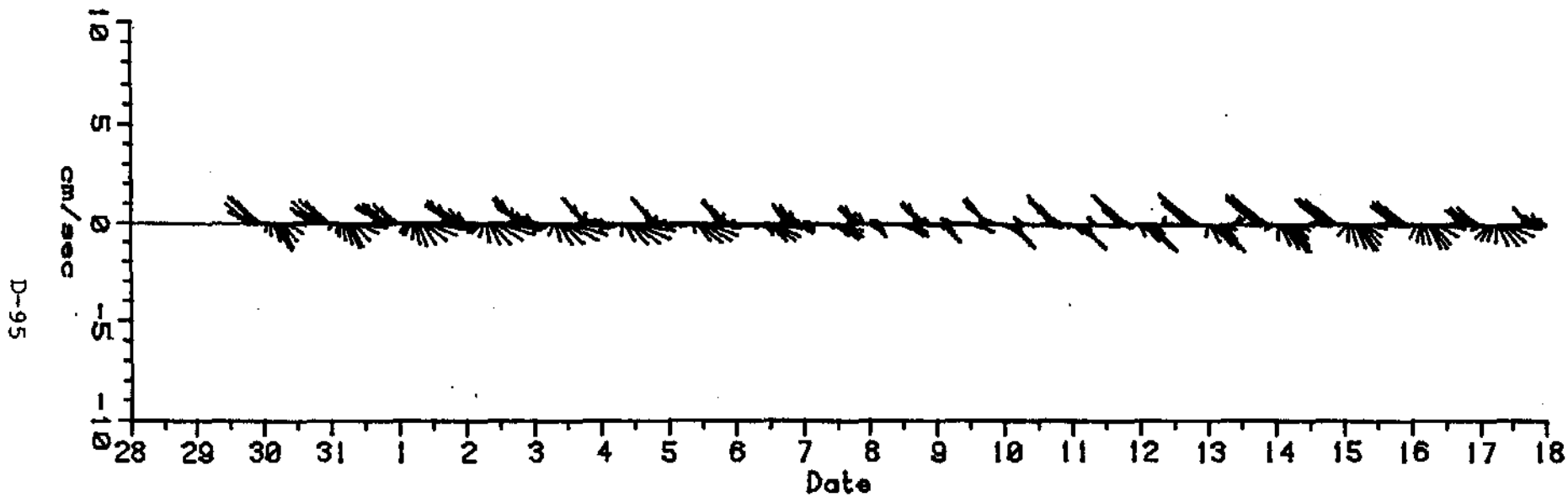


FIGURE D77

VECTOR STICK PLOT
 STATION S (TOP) - LEAST-SQUARES TIDAL CURRENT - ENDECO #175
 1807, 29 JULY TO 2307, 17 AUGUST, 1982



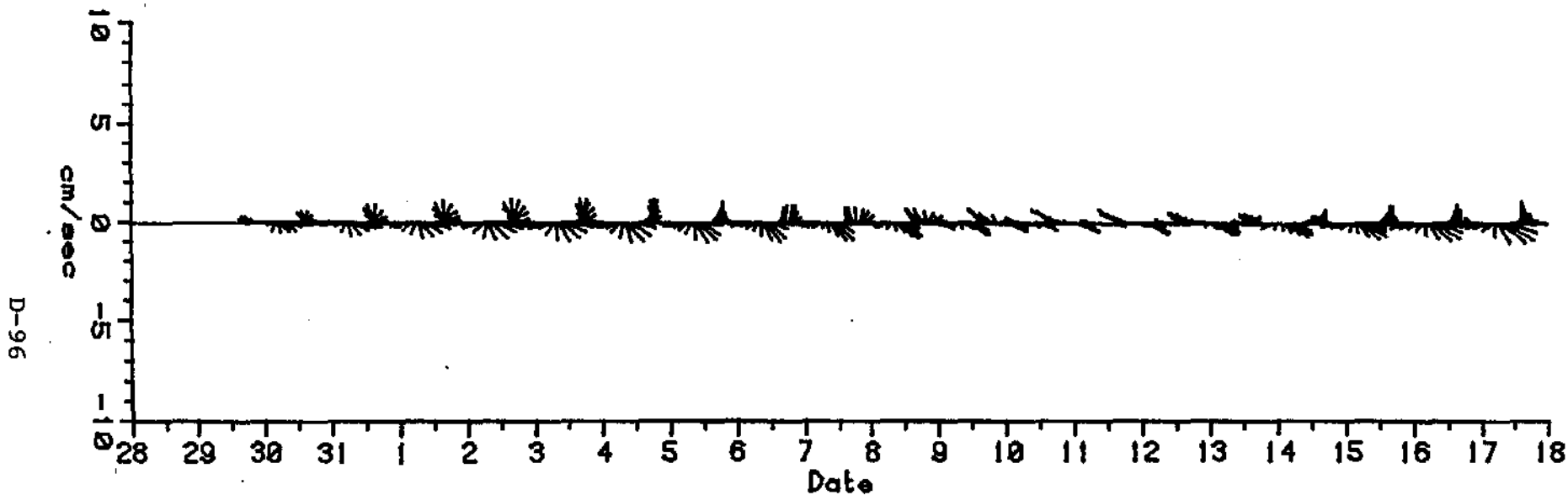


FIGURE D78

VECTOR STICK PLOT

STATION S (BOTTOM) - LEAST-SQUARES TIDAL CURRENT - ENDECO #052

1757, 29 JULY TO 2357, 17 AUGUST, 1982

N
↑

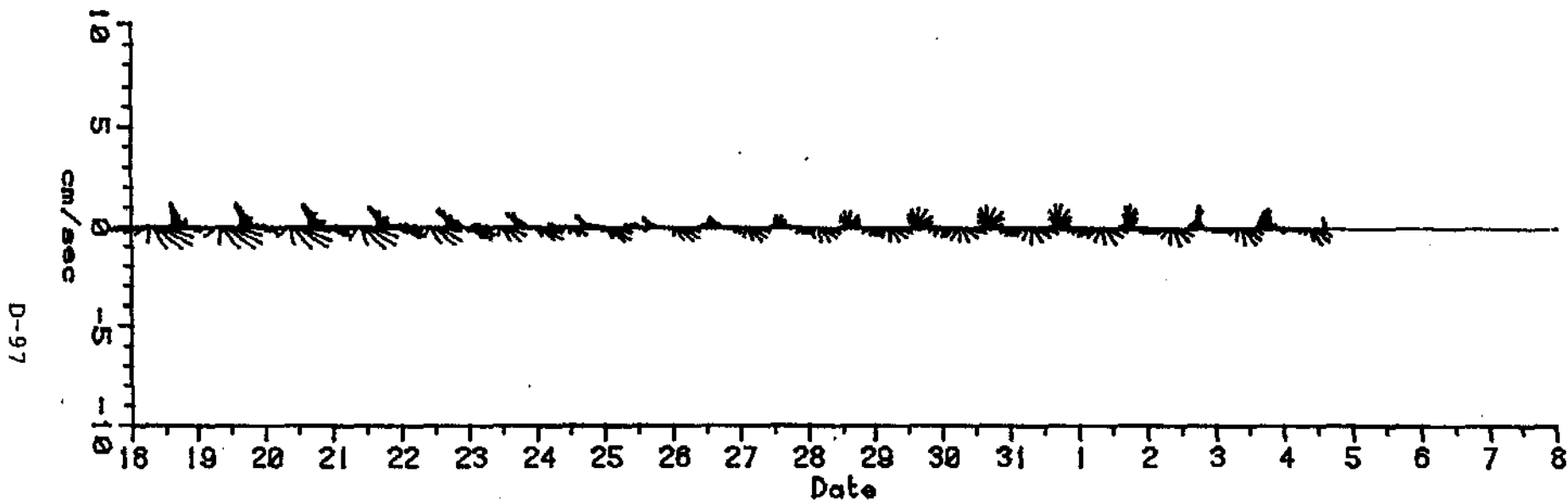


FIGURE D78

VECTOR STICK PLOT

STATION S (BOTTOM) - LEAST-SQUARES TIDAL CURRENT - ENDECO #052
0057, 18 AUGUST TO 1457, 4 SEPTEMBER, 1982



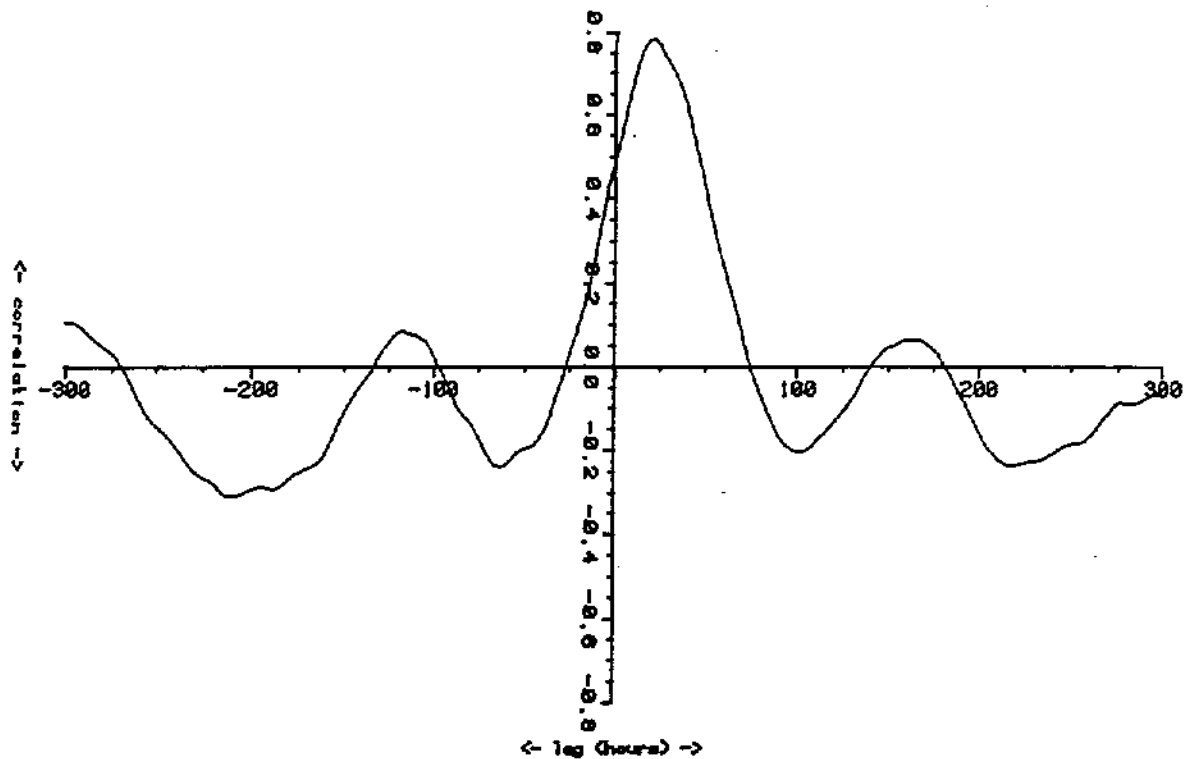


FIGURE D79 CROSS CORRELATIONS
 CHALLENGE ISLAND WIND (71 DEG. COMP.) VS. LAGGED PT. THOMSON
 STATION Q CURRENT (89 DEG. COMP.) (LAT=3 HR)
 8233, 1 AUGUST TO 1733, 2 SEPTEMBER, 1982

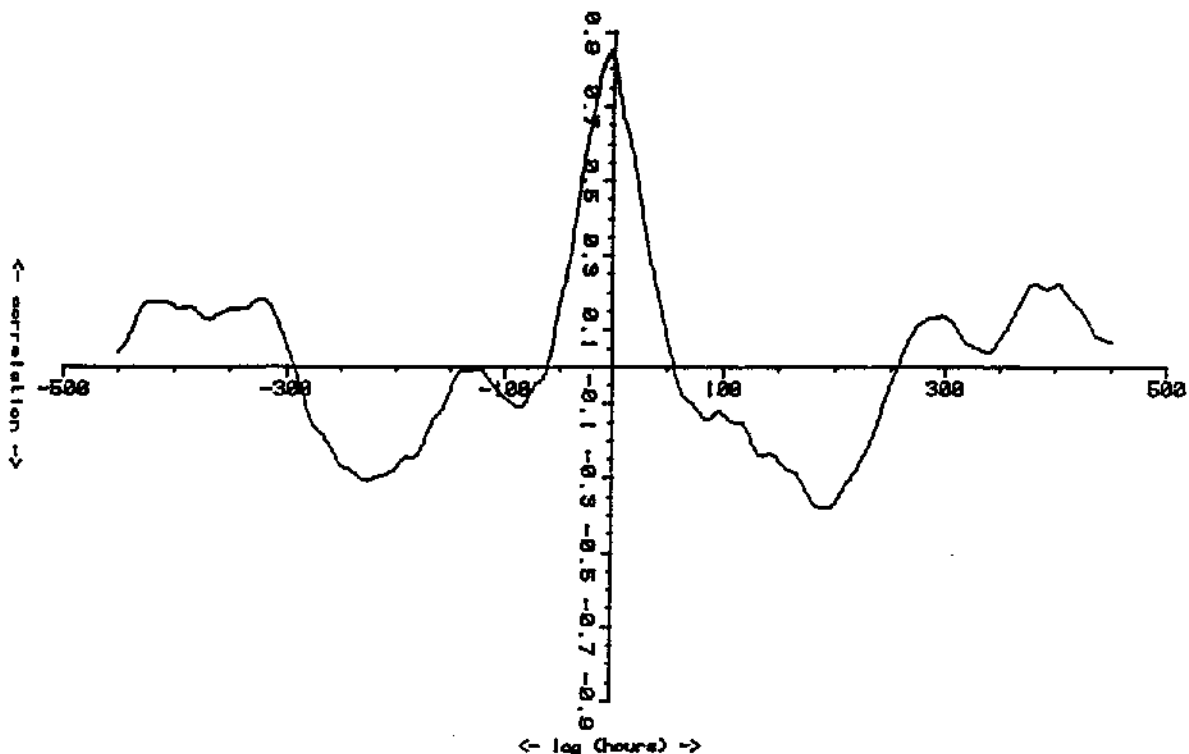


FIGURE D80 CROSS CORRELATIONS
 CHALLENGE ISLAND WIND (72 DEG. COMP.) VS. LAGGED PT. THOMSON
 STATION E CURRENT (72 DEG. COMP.) (LAT=3 HR)
 2115, 29 JULY TO 1814, 2 SEPTEMBER, 1982

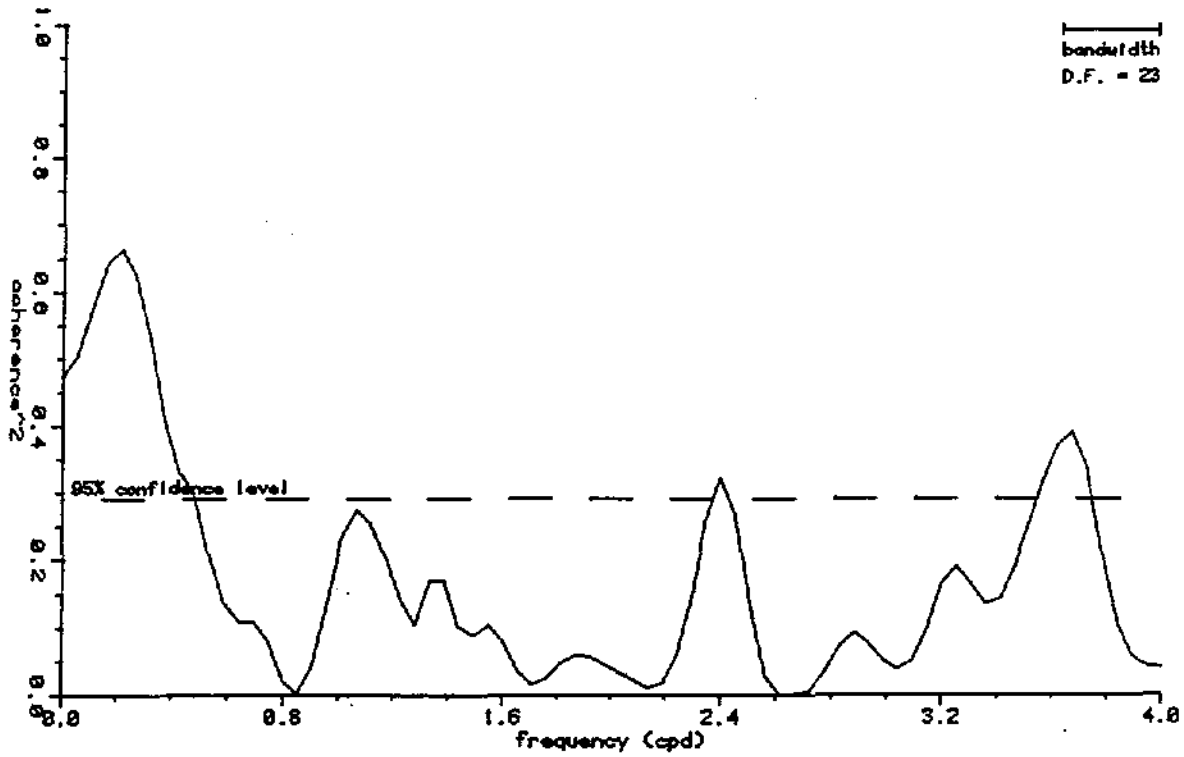


FIGURE D81 SQUARED COHERENCE SPECTRUM
 CHALLENGE ISLAND WIND (71 DEG. COMP.) VS. LAGGED PT. THOMSON
 STATION Q CURRENT (89 DEG. COMP.) ($\Delta T=3$ HR)
 0233, 1 AUGUST, TO 1733, 2 SEPTEMBER, 1982

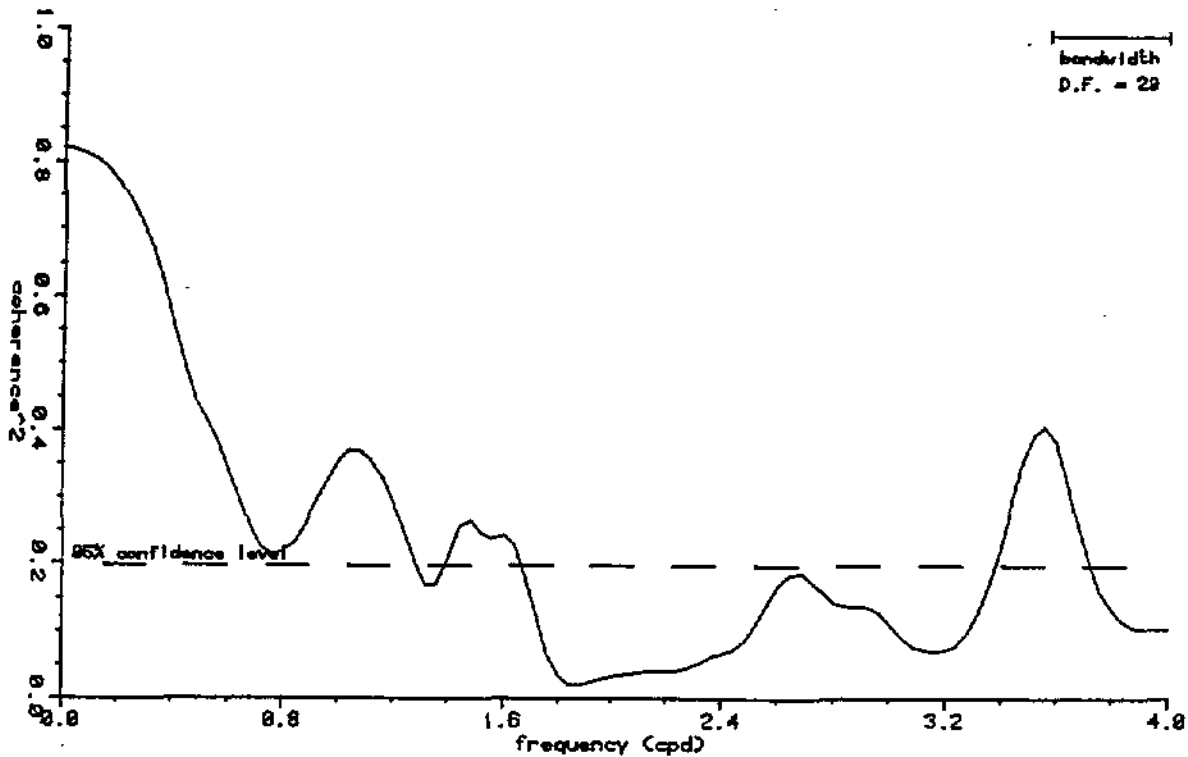


FIGURE D82 SQUARED COHERENCE SPECTRUM
 CHALLENGE ISLAND WIND (72 DEG. COMP.) VS. LAGGED PT. THOMSON
 STATION E CURRENT (72 DEG. COMP.) ($\Delta T=3$ HR)
 2115, 29 JULY TO 1815, 2 SEPTEMBER, 1982

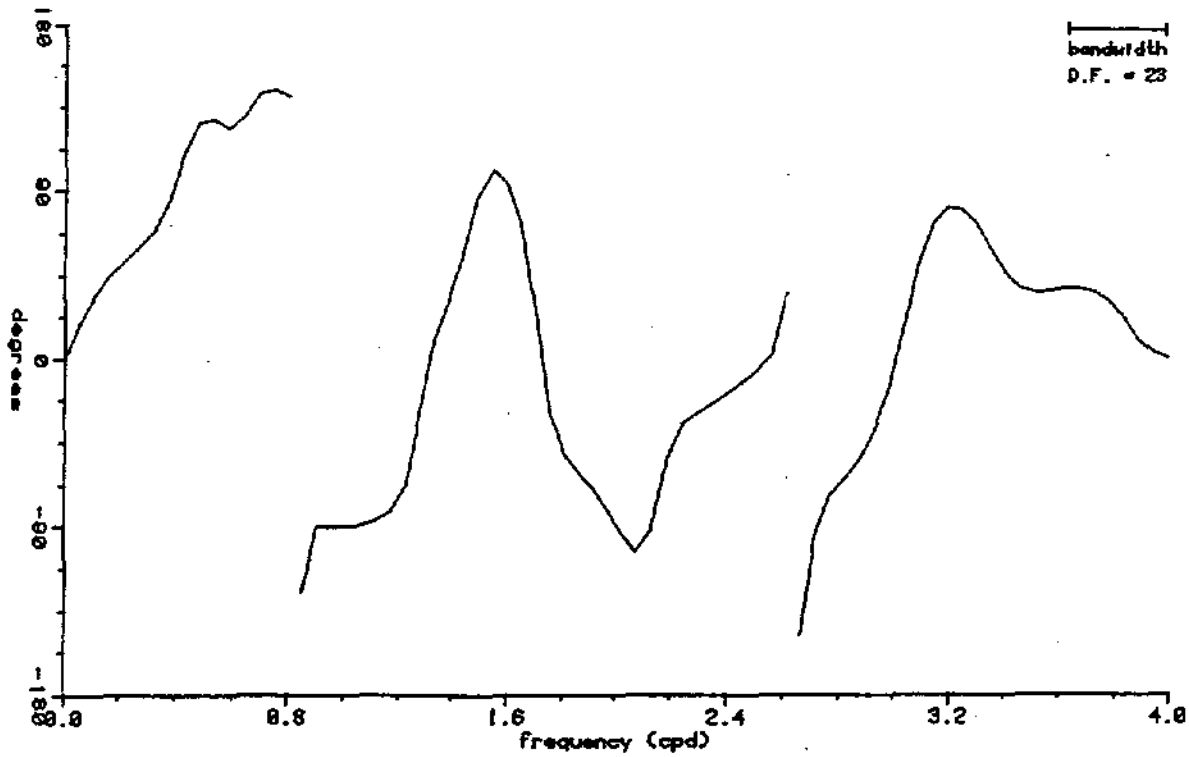


FIGURE 083 PHASE SPECTRUM
 CHALLENGE ISLAND WIND (71 DEG. COMP.) VS. LAGGED PT. THOMSON
 STATION Q CURRENT (89 DEG. COMP.) ($\Delta T=3$ HR)
 0233, 1 AUGUST, TO 1733, 2 SEPTEMBER, 1982

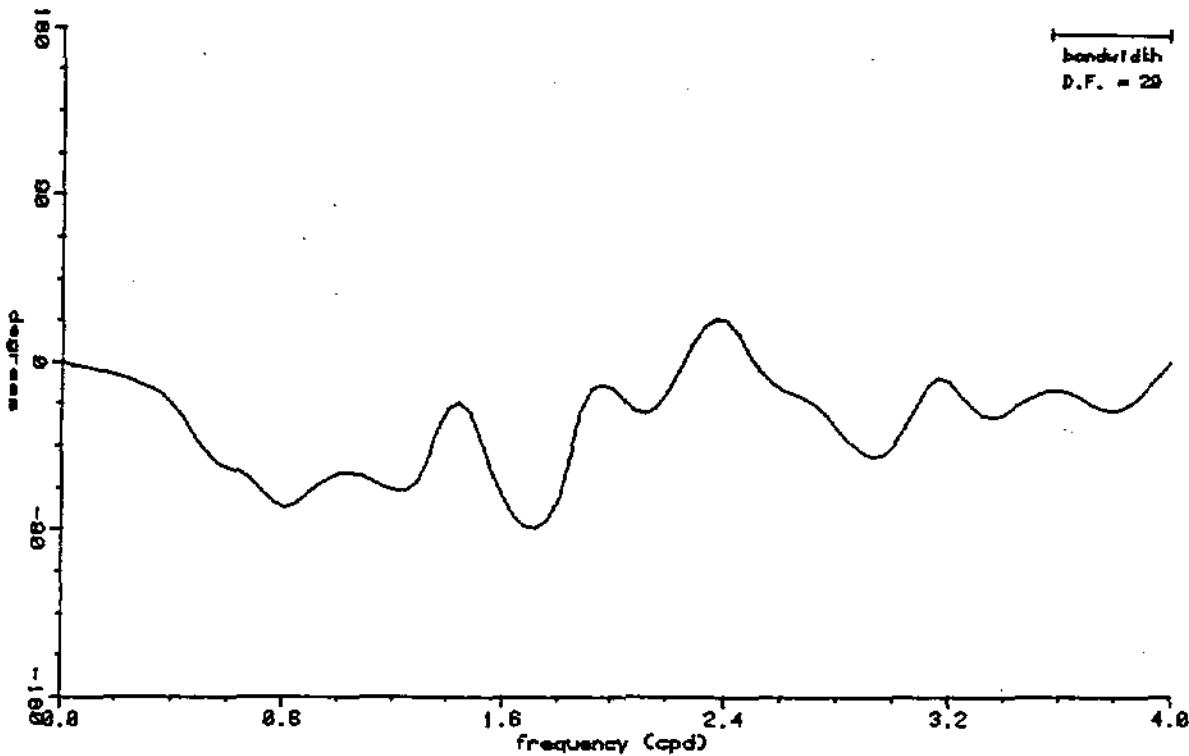


FIGURE 084 PHASE SPECTRUM
 CHALLENGE ISLAND WIND (72 DEG. COMP.) VS. LAGGED PT. THOMSON
 STATION E CURRENT (72 DEG. COMP.) ($\Delta T=3$ HR)
 2115, 29 JULY TO 1814, 2 SEPTEMBER, 1982

TABLE D1

CURRENT SPEED PERSISTENCE - PT. THOMSON STATION E - ENDECO #232
2109, 29 JULY TO 0754, 4 SEPTEMBER, 1982

PERCENT DURATION

HOURS, DAYS DURATION

| cm/s | >6h | >12h | >18h | >24h | >30h | >36h | >2d | >4d | >6d | >8d | >10d | >12d | TOTAL SAMPLES |
|------|------|------|------|------|------|------|------|------|------|-----|------|------|------------------|
| >5 | 86.7 | 78.3 | 71.4 | 65.1 | 58.9 | 52.5 | 45.0 | 20.2 | 10.3 | 3.6 | | | 9747 |
| >10 | 81.2 | 63.2 | 56.3 | 46.8 | 38.1 | 30.8 | 19.8 | 5.6 | | | | | 8003 |
| >15 | 63.4 | 46.1 | 31.6 | 21.9 | 15.3 | 9.6 | 2.8 | | | | | | 6485 |
| >20 | 27.5 | 7.4 | 1.2 | | | | | | | | | | 4139 |
| >25 | 12.8 | | | | | | | | | | | | 1724 |
| >30 | 7.5 | | | | | | | | | | | | 783 |
| >35 | | | | | | | | | | | | | 296 |
| >40 | | | | | | | | | | | | | 130 |
| >45 | | | | | | | | | | | | | 25 |
| >50 | | | | | | | | | | | | | 0 |
| >55 | | | | | | | | | | | | | 0 |
| >60 | | | | | | | | | | | | | 0 |

largest screened value = 48 cm/s
total time period spanned (hours) = 874.75
sample interval (hours) = .833333E-1
total possible samples = 10498
actual samples = 10492

TABLE D2

CURRENT SPEED PERSISTENCE - PT. THOMSON STATION O - ENDECO #049
1525, 28 JULY TO 1035, 4 SEPTEMBER, 1982

PERCENT DURATION

HOURS, DAYS DURATION

| cm/s | >6h | >12h | >18h | >24h | >30h | >36h | >2d | >4d | >6d | >8d | >10d | >12d | TOTAL SAMPLES |
|------|------|------|------|------|------|------|------|------|-----|-----|------|------|------------------|
| >5 | 79.2 | 65.6 | 56.5 | 48.7 | 43.1 | 37.7 | 29.7 | 12.3 | 6.4 | | | | 10281 |
| >10 | 56.7 | 35.0 | 26.1 | 20.3 | 15.3 | 10.8 | 5.7 | | | | | | 8622 |
| >15 | 34.0 | 12.2 | 4.1 | | | | | | | | | | 6604 |
| >20 | 13.0 | 2.1 | 0.5 | | | | | | | | | | 4503 |
| >25 | 7.7 | | | | | | | | | | | | 2440 |
| >30 | 5.1 | | | | | | | | | | | | 1469 |
| >35 | 0.7 | | | | | | | | | | | | 752 |
| >40 | 0.3 | | | | | | | | | | | | 376 |
| >45 | | | | | | | | | | | | | 181 |
| >50 | | | | | | | | | | | | | 72 |
| >55 | | | | | | | | | | | | | 36 |
| >60 | | | | | | | | | | | | | 16 |

largest screened value = 65 cm/s
total time period spanned (hours) = 907.167
sample interval (hours) = .833333E-1
total possible samples = 10887
actual samples = 10887

TABLE D3

CURRENT SPEED PERSISTENCE - PT. THOMSON STATION P - ENDECO =048
1532, 29 JULY TO 0922, 4 SEPTEMBER, 1982

PERCENT DURATION

HOURS, DAYS DURATION

| cm/s | >6h | >12h | >18h | >24h | >30h | >36h | >2d | >4d | >6d | >8d | >10d | >12d | TOTAL SAMPLES |
|------|------|------|------|------|------|------|------|------|-----|-----|------|------|------------------|
| >5 | 84.0 | 72.8 | 64.4 | 58.1 | 52.6 | 47.2 | 37.4 | 13.4 | | | | | 10044 |
| >10 | 76.0 | 65.3 | 58.4 | 52.1 | 46.7 | 41.2 | 32.2 | 12.4 | | | | | 9050 |
| >15 | 70.7 | 57.1 | 46.5 | 39.4 | 33.8 | 28.5 | 21.1 | 1.8 | | | | | 7824 |
| >20 | 64.4 | 45.8 | 32.8 | 25.0 | 20.8 | 16.4 | 10.3 | | | | | | 6584 |
| >25 | 52.2 | 34.5 | 25.6 | 21.3 | 17.2 | 14.1 | 8.7 | | | | | | 5317 |
| >30 | 44.8 | 31.1 | 25.8 | 20.5 | 15.2 | 11.7 | 7.1 | | | | | | 4061 |
| >35 | 45.5 | 33.8 | 26.7 | 19.5 | 13.1 | 9.5 | 4.8 | | | | | | 3028 |
| >40 | 43.6 | 27.1 | 17.3 | 11.1 | 6.3 | 3.2 | | | | | | | 2308 |
| >45 | 40.9 | 24.0 | 15.1 | 6.2 | | | | | | | | | 1618 |
| >50 | 30.4 | 13.4 | 1.4 | | | | | | | | | | 1134 |
| >55 | 24.0 | 6.3 | | | | | | | | | | | 751 |
| >60 | 13.6 | | | | | | | | | | | | 450 |

largest screened value 75 cm/s
total time period spanned hours 881.833
sample interval hours .833333E-1
total possible samples 10583
actual samples 10577

TABLE D4

CURRENT SPEED PERSISTENCE - PT. THOMSON STATION S TOP - ENDECO =175
 2239, 28 JULY TO 1044, 5 SEPTEMBER, 1982

PERCENT DURATION

HOURS, DAYS DURATION

| cm/s | >6h | >12h | >18h | >24h | >30h | >36h | >2d | >4d | >6d | >8d | >10d | >12d | TOTAL SAMPLES |
|------|------|------|------|------|------|------|-----|-----|-----|-----|------|------|---------------|
| >5 | 39.5 | 20.2 | 12.7 | 10.0 | 7.7 | 6.4 | 3.8 | | | | | | 5617 |
| >10 | 6.2 | | | | | | | | | | | | 1675 |
| >15 | | | | | | | | | | | | | 205 |
| >20 | | | | | | | | | | | | | 10 |
| >25 | | | | | | | | | | | | | 1 |
| >30 | | | | | | | | | | | | | 1 |
| >35 | | | | | | | | | | | | | 1 |
| >40 | | | | | | | | | | | | | 1 |
| >45 | | | | | | | | | | | | | 1 |
| >50 | | | | | | | | | | | | | 1 |
| >55 | | | | | | | | | | | | | 0 |
| >60 | | | | | | | | | | | | | 0 |

largest screened value 53 cm/s
 total time period spanned hours 924.083
 sample interval hours .833333E-1
 total possible samples 11090
 actual samples 10968

TABLE D6

CURRENT SPEED PERSISTENCE - PT. THOMSON STATION Q - ENDECO #047
0215, 1 AUGUST TO 1300, 3 SEPTEMBER, 1982

PERCENT DURATION

HOURS, DAYS DURATION

| cm/s | >6h | >12h | >18h | >24h | >30h | >36h | >2d | >4d | >6d | >8d | >10d | >12d | TOTAL SAMPLES |
|------|------|------|------|------|------|------|------|-----|-----|-----|------|------|------------------|
| >5 | 68.0 | 54.4 | 45.5 | 37.8 | 30.4 | 25.3 | 19.0 | 3.7 | | | | | 5622 |
| >10 | 53.9 | 39.9 | 30.0 | 23.1 | 16.2 | 9.7 | 2.8 | | | | | | 3127 |
| >15 | 42.0 | 21.9 | 11.1 | 3.1 | | | | | | | | | 1791 |
| >20 | 21.7 | 6.8 | | | | | | | | | | | 784 |
| >25 | | | | | | | | | | | | | 254 |
| >30 | | | | | | | | | | | | | 88 |
| >35 | | | | | | | | | | | | | 38 |
| >40 | | | | | | | | | | | | | 12 |
| >45 | | | | | | | | | | | | | 2 |
| >50 | | | | | | | | | | | | | 1 |
| >55 | | | | | | | | | | | | | 1 |
| >60 | | | | | | | | | | | | | 0 |

largest screened value = 57 cm/s
total time period spanned (hours) = 802.75
sample interval (hours) = .833333E-1
total possible samples = 9634
actual samples = 9628

TABLE D7

CURRENT SPEED PERSISTENCE - PT. THOMSON STATION D
1810, 27 JULY TO 0940, 3 SEPTEMBER, 1982

| cm/s | PERCENT DURATION | | | | | | | | | | | TOTAL SAMPLES | |
|------|------------------|------|------|------|------|------|------|------|-----|-----|------|------------------|------|
| | >3h | >6h | >12h | >18h | >24h | >36h | >2d | >4d | >6d | >8d | >10d | | >12d |
| >5 | 86.3 | 78.1 | 65.8 | 56.4 | 47.2 | 30.1 | 21.5 | 11.9 | 5.8 | | | | 1667 |
| >10 | 73.3 | 57.4 | 36.9 | 24.4 | 17.6 | 6.3 | 1.8 | | | | | | 1395 |
| >15 | 47.0 | 24.7 | 6.2 | 0.4 | | | | | | | | | 804 |
| >20 | 36.7 | 15.5 | 2.1 | | | | | | | | | | 528 |
| >25 | 23.8 | 6.4 | | | | | | | | | | | 265 |
| >30 | 21.4 | 6.8 | | | | | | | | | | | 117 |
| >35 | 3.6 | | | | | | | | | | | | 28 |
| >40 | | | | | | | | | | | | | 6 |
| >45 | | | | | | | | | | | | | 1 |
| >50 | | | | | | | | | | | | | 0 |
| >55 | | | | | | | | | | | | | 0 |
| >60 | | | | | | | | | | | | | 0 |

largest screened value = 47.6 cm/s
total time period spanned (hours) = 904
sample interval (hours) = .5
total possible samples = 1809
actual samples = 1791

TABLE D8

CURRENT SPEED PERSISTENCE - PT. THOMSON STATION T
2020, 28 JULY TO 0950, 5 SEPTEMBER, 1982

PERCENT DURATION
HOURS, DAYS DURATION

| cm/s | >3h | >6h | >12h | >18h | >24h | >36h | >2d | >4d | >6d | >8d | >10d | >12d | TOTAL SAMPLES |
|------|------|------|------|------|------|------|------|-----|-----|-----|------|------|------------------|
| >5 | 82.9 | 71.3 | 53.3 | 40.9 | 32.8 | 22.9 | 18.3 | 8.7 | 2.5 | | | | 1698 |
| >10 | 58.5 | 43.8 | 29.8 | 23.6 | 19.8 | 13.4 | 8.9 | | | | | | 1089 |
| >15 | 2.9 | | | | | | | | | | | | 104 |
| >20 | | | | | | | | | | | | | 25 |
| >25 | | | | | | | | | | | | | 3 |
| >30 | | | | | | | | | | | | | 1 |
| >35 | | | | | | | | | | | | | 1 |
| >40 | | | | | | | | | | | | | 0 |
| >45 | | | | | | | | | | | | | 0 |
| >50 | | | | | | | | | | | | | 0 |
| >55 | | | | | | | | | | | | | 0 |
| >60 | | | | | | | | | | | | | 0 |

largest screened value = 37 cm/s
total time period spanned (hours) = 926
sample interval (hours) = .5
total possible samples = 1853
actual samples = 1846

TABLE D9

CURRENT SPEED PERSISTENCE - PT. THOMSON STATION SP
 1600, 5 SEPTEMBER TO 1230, 15 NOVEMBER, 1982

PERCENT DURATION

HOURS, DAYS DURATION

| cm/sec | >3h | >6h | >12h | >18h | >24h | >36h | >2d | >4d | >6d | >8d | >10d | >12d | TOTAL SAMPLES |
|--------|-----|-----|------|------|------|------|-----|-----|-----|-----|------|------|------------------|
| >5 | 8.1 | | | | | | | | | | | | 62 |
| >10 | | | | | | | | | | | | | 3 |
| >15 | | | | | | | | | | | | | 0 |
| >20 | | | | | | | | | | | | | 0 |
| >25 | | | | | | | | | | | | | 0 |
| >30 | | | | | | | | | | | | | 0 |
| >35 | | | | | | | | | | | | | 0 |
| >40 | | | | | | | | | | | | | 0 |
| >45 | | | | | | | | | | | | | 0 |
| >50 | | | | | | | | | | | | | 0 |
| >55 | | | | | | | | | | | | | 0 |
| >60 | | | | | | | | | | | | | 0 |

largest screened value = 12 cm/sec
 total time period spanned (hours) = 1701
 sample interval (hours) = .5
 total possible samples = 3403
 actual samples = 3401

TABLE D10

STATIONE - 1/2 NB. AVERAGE CURRENT - ENDECO #232
2122, 29 JULY TO 0722, 3 SEPTEMBER, 1982

Frequencies:

| Bearing Range | Speed Range (cm/sec) | | | | | | | | | | | | | | total |
|---------------|----------------------|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|---------|------|-------|
| | 0.00-5.00 | 5.00-10.00 | 10.00-15.00 | 15.00-20.00 | 20.00-25.00 | 25.00-30.00 | 30.00-35.00 | 35.00-40.00 | 40.00-45.00 | 45.00-50.00 | 50.00-55.00 | 55.00-60.00 | > 60.00 | | |
| 0-30 | 14 | 14 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 31 | |
| 30-60 | 12 | 53 | 28 | 38 | 33 | 7 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 172 | |
| 60-90 | 12 | 66 | 47 | 127 | 129 | 51 | 56 | 15 | 7 | 0 | 0 | 0 | 0 | 510 | |
| 90-120 | 5 | 7 | 5 | 14 | 7 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 44 | |
| 120-150 | 7 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | |
| 150-180 | 7 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | |
| 180-210 | 7 | 14 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | |
| 210-240 | 11 | 33 | 14 | 11 | 26 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 99 | |
| 240-270 | 38 | 68 | 125 | 187 | 170 | 81 | 13 | 9 | 11 | 2 | 0 | 0 | 0 | 704 | |
| 270-300 | 9 | 35 | 35 | 21 | 5 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 107 | |
| 300-330 | 14 | 12 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 27 | |
| 330-360 | 8 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | |
| total | 144 | 313 | 257 | 399 | 371 | 147 | 74 | 24 | 18 | 2 | 0 | 0 | 0 | 1749 | |

Percentages:

| Bearing Range | Speed Range (cm/sec) | | | | | | | | | | | | | | total |
|---------------|----------------------|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|---------|-------|-------|
| | 0.00-5.00 | 5.00-10.00 | 10.00-15.00 | 15.00-20.00 | 20.00-25.00 | 25.00-30.00 | 30.00-35.00 | 35.00-40.00 | 40.00-45.00 | 45.00-50.00 | 50.00-55.00 | 55.00-60.00 | > 60.00 | | |
| 0-30 | 0.8 | 0.8 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.8 | |
| 30-60 | 3.7 | 3.0 | 1.6 | 2.2 | 1.9 | 0.4 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 9.8 | |
| 60-90 | 0.7 | 3.8 | 2.7 | 7.3 | 7.4 | 2.9 | 3.2 | 0.9 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 29.2 | |
| 90-120 | 0.3 | 0.4 | 0.3 | 0.8 | 0.4 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.5 | |
| 120-150 | 0.4 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.6 | |
| 150-180 | 0.4 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.6 | |
| 180-210 | 0.4 | 0.9 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.3 | |
| 210-240 | 0.6 | 1.9 | 0.8 | 0.6 | 1.5 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5.7 | |
| 240-270 | 2.2 | 3.9 | 7.1 | 10.7 | 9.7 | 4.6 | 0.7 | 0.5 | 0.6 | 0.1 | 0.0 | 0.0 | 0.0 | 40.3 | |
| 270-300 | 0.5 | 2.0 | 2.0 | 1.2 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 6.1 | |
| 300-330 | 0.3 | 0.7 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.5 | |
| 330-360 | 0.3 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.7 | |
| total | 8.2 | 17.9 | 14.7 | 22.8 | 21.2 | 8.4 | 4.2 | 1.4 | 1.0 | 0.1 | 0.0 | 0.0 | 0.0 | 100.0 | |

largest screened speed = 46.15 cm/sec
total time period spanned (hours) = 874
sample interval (hours) = .5
total possible observations = 1749
actual observations = 1749

TABLE D11

STATION O - 1/2 HR. AVERAGE CURRENT - ENDECO #049
1538, 28 JULY TO 1008, 4 SEPTEMBER, 1982

Frequencies:

| Bearing Range | Speed Range (cm/sec) | | | | | | | | | | | | | | total |
|------------------|----------------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|------|-------|
| | 0.00 5.00 | 5.00 10.00 | 10.00 15.00 | 15.00 20.00 | 20.00 25.00 | 25.00 30.00 | 30.00 35.00 | 35.00 40.00 | 40.00 45.00 | 45.00 50.00 | 50.00 55.00 | 55.00 60.00 | 60.00 60.00 | > | |
| 0-30 | 12 | 18 | 16 | 7 | 9 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 64 |
| 30-60 | 34 | 57 | 91 | 160 | 103 | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 467 |
| 60-90 | 13 | 80 | 73 | 31 | 5 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 205 |
| 90-120 | 1 | 14 | 11 | 13 | 6 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 46 |
| 120-150 | 2 | 11 | 4 | 7 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 29 |
| 150-180 | 1 | 16 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 |
| 180-210 | 2 | 14 | 20 | 7 | 16 | 35 | 19 | 9 | 1 | 3 | 0 | 0 | 0 | 0 | 125 |
| 210-240 | 8 | 16 | 43 | 70 | 99 | 61 | 53 | 25 | 15 | 9 | 2 | 4 | 2 | 407 | |
| 240-270 | 20 | 10 | 27 | 38 | 36 | 28 | 42 | 12 | 8 | 5 | 0 | 0 | 0 | 226 | |
| 270-300 | 5 | 15 | 16 | 18 | 14 | 8 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 79 | |
| 300-330 | 11 | 23 | 32 | 9 | 3 | 0 | 1 | 2 | 2 | 0 | 0 | 0 | 0 | 83 | |
| 330-360 | 12 | 13 | 13 | 13 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 61 | |
| total | 121 | 287 | 351 | 373 | 305 | 159 | 117 | 50 | 26 | 17 | 2 | 4 | 2 | 1814 | |

Percentages:

| Bearing Range | Speed Range (cm/sec) | | | | | | | | | | | | | | total |
|------------------|----------------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-------|-------|
| | 0.00 5.00 | 5.00 10.00 | 10.00 15.00 | 15.00 20.00 | 20.00 25.00 | 25.00 30.00 | 30.00 35.00 | 35.00 40.00 | 40.00 45.00 | 45.00 50.00 | 50.00 55.00 | 55.00 60.00 | 60.00 60.00 | > | |
| 0-30 | 0.7 | 1.0 | 0.9 | 0.4 | 0.5 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.5 |
| 30-60 | 1.9 | 3.1 | 5.0 | 8.8 | 5.7 | 1.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 25.7 |
| 60-90 | 0.7 | 4.4 | 4.0 | 1.7 | 0.3 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 11.3 |
| 90-120 | 0.1 | 0.8 | 0.6 | 0.7 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.5 |
| 120-150 | 0.1 | 0.6 | 0.2 | 0.4 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.6 |
| 150-180 | 0.1 | 0.9 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.2 |
| 180-210 | 0.1 | 0.8 | 1.1 | 0.4 | 0.9 | 1.9 | 1.0 | 0.4 | 0.1 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 6.9 |
| 210-240 | 0.4 | 0.9 | 2.4 | 3.9 | 5.5 | 3.4 | 2.9 | 1.4 | 0.8 | 0.5 | 0.1 | 0.2 | 0.1 | 22.4 | |
| 240-270 | 1.1 | 0.6 | 1.5 | 2.1 | 2.0 | 1.5 | 2.3 | 0.7 | 0.4 | 0.3 | 0.0 | 0.0 | 0.0 | 12.5 | |
| 270-300 | 0.3 | 0.8 | 0.9 | 1.0 | 0.8 | 0.4 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.4 | |
| 300-330 | 0.6 | 1.3 | 1.8 | 0.5 | 0.2 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 4.6 | |
| 330-360 | 0.7 | 0.7 | 0.7 | 0.7 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.4 | |
| total | 6.7 | 15.8 | 19.3 | 20.6 | 16.8 | 8.8 | 6.4 | 2.8 | 1.4 | 0.9 | 0.1 | 0.2 | 0.1 | 100.0 | |

largest screened speed = 61.05 cm/sec
total time period spanned (hours) = 906.5
sample interval (hours) = .5
total possible observations = 1814
actual observations = 1814

TABLE D 12

STATION P - 1/2 HR. AVERAGE CURRENT - ENDECO #048
1545, 29 JULY TO 0845, 4 SEPTEMBER, 1982

Frequencies:

| Bearing Range | Speed Range (cm/sec) | | | | | | | | | | | | | | total |
|------------------|----------------------|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|------|-------|
| | 0-5.00 | 5.00-10.00 | 10.00-15.00 | 15.00-20.00 | 20.00-25.00 | 25.00-30.00 | 30.00-35.00 | 35.00-40.00 | 40.00-45.00 | 45.00-50.00 | 50.00-55.00 | 55.00-60.00 | 60.00-60.00 | > | |
| 0-30 | 11 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 |
| 30-60 | 14 | 11 | 19 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 48 |
| 60-90 | 12 | 35 | 33 | 54 | 47 | 47 | 27 | 25 | 21 | 14 | 12 | 2 | 2 | 331 | |
| 90-120 | 4 | 10 | 19 | 21 | 37 | 40 | 40 | 34 | 38 | 10 | 6 | 5 | 11 | 275 | |
| 120-150 | 6 | 9 | 3 | 4 | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 26 | |
| 150-180 | 10 | 9 | 17 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | |
| 180-210 | 5 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | |
| 210-240 | 12 | 22 | 14 | 7 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 58 | |
| 240-270 | 17 | 49 | 68 | 56 | 63 | 77 | 43 | 11 | 15 | 23 | 13 | 7 | 6 | 448 | |
| 270-300 | 8 | 14 | 25 | 49 | 54 | 56 | 54 | 42 | 42 | 31 | 33 | 30 | 51 | 489 | |
| 300-330 | 2 | 1 | 1 | 4 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | |
| 330-360 | 7 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | |
| total | 108 | 173 | 202 | 202 | 205 | 221 | 167 | 113 | 116 | 78 | 64 | 44 | 70 | 1763 | |

Percentages:

| Bearing Range | Speed Range (cm/sec) | | | | | | | | | | | | | | total |
|------------------|----------------------|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------|-------|
| | 0-5.00 | 5.00-10.00 | 10.00-15.00 | 15.00-20.00 | 20.00-25.00 | 25.00-30.00 | 30.00-35.00 | 35.00-40.00 | 40.00-45.00 | 45.00-50.00 | 50.00-55.00 | 55.00-60.00 | 60.00-60.00 | > | |
| 0-30 | 3.6 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 | |
| 30-60 | 0.3 | 0.6 | 1.1 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.7 | |
| 60-90 | 0.7 | 2.0 | 1.9 | 3.1 | 2.7 | 2.7 | 1.5 | 1.4 | 1.2 | 0.8 | 0.7 | 0.1 | 0.1 | 18.8 | |
| 90-120 | 3.2 | 0.6 | 1.1 | 1.2 | 2.1 | 2.3 | 2.3 | 1.9 | 2.2 | 0.6 | 0.3 | 0.3 | 0.6 | 15.6 | |
| 120-150 | 0.3 | 0.5 | 0.2 | 0.2 | 0.0 | 0.0 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.5 | |
| 150-180 | 0.6 | 0.5 | 1.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.3 | |
| 180-210 | 0.3 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.7 | |
| 210-240 | 0.7 | 1.2 | 0.8 | 0.4 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.3 | |
| 240-270 | 1.0 | 2.8 | 3.9 | 3.2 | 3.6 | 4.4 | 2.4 | 0.6 | 0.9 | 1.3 | 0.7 | 0.4 | 0.3 | 25.4 | |
| 270-300 | 0.5 | 0.3 | 1.4 | 2.8 | 3.1 | 3.2 | 3.1 | 2.4 | 2.4 | 1.8 | 1.9 | 1.7 | 2.9 | 27.7 | |
| 300-330 | 0.1 | 0.1 | 0.1 | 0.2 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | |
| 330-360 | 0.4 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.7 | |
| total | 6.1 | 9.8 | 11.5 | 11.5 | 11.6 | 12.5 | 9.5 | 5.4 | 6.6 | 4.4 | 3.6 | 2.5 | 4.0 | 100.0 | |

largest screened speed = 71.24 cm/sec
total time period spanned (hours) = 881
sample interval (hours) = .5
total possible observations = 1763
actual observations = 1763

TABLE 13

STATION 5 (POP) - 1/2 HR. AVERAGE CURRENT - ENDECO #175
2252, 28 JULY TO 1022, 4 SEPTEMBER, 1982

Frequencies:

| Bearing Range | Speed Range (cm/sec) | | | | | | | | | | | | | | total |
|---------------|----------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|
| | 0-5 | 5-10 | 10-15 | 15-20 | 20-25 | 25-30 | 30-35 | 35-40 | 40-45 | 45-50 | 50-55 | 55-60 | 60-65 | > 65 | |
| 0-30 | 36 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 37 |
| 30-60 | 45 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 56 |
| 60-90 | 43 | 22 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 76 |
| 90-120 | 136 | 198 | 90 | 18 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 443 |
| 120-150 | 75 | 44 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 139 |
| 150-180 | 22 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26 |
| 180-210 | 24 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 29 |
| 210-240 | 43 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 51 |
| 240-270 | 257 | 28 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 293 |
| 270-300 | 122 | 133 | 6 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 239 |
| 300-330 | 158 | 198 | 44 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 401 |
| 330-360 | 50 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 57 |
| total | 1014 | 628 | 182 | 22 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1847 |

Percentages:

| Bearing Range | Speed Range (cm/sec) | | | | | | | | | | | | | | total |
|---------------|----------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|
| | 0-5 | 5-10 | 10-15 | 15-20 | 20-25 | 25-30 | 30-35 | 35-40 | 40-45 | 45-50 | 50-55 | 55-60 | 60-65 | > 65 | |
| 0-30 | 1.9 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.0 |
| 30-60 | 2.4 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.0 |
| 60-90 | 2.2 | 1.2 | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.1 |
| 90-120 | 7.4 | 10.7 | 4.9 | 1.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 24.0 |
| 120-150 | 4.1 | 2.4 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 7.5 |
| 150-180 | 1.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.4 |
| 180-210 | 1.3 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.6 |
| 210-240 | 2.7 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.8 |
| 240-270 | 13.9 | 1.5 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 15.9 |
| 270-300 | 6.6 | 5.8 | 0.3 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 12.9 |
| 300-330 | 8.6 | 10.7 | 2.4 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 21.7 |
| 330-360 | 2.7 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.1 |
| total | 54.9 | 34.0 | 9.9 | 1.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |

largest screened speed = 20.45 cm/sec
total time period spanned (hours) = 923.5
sample interval (hours) = .5
total possible observations = 1848
actual observations = 1847

TABLE D14

STATION 5 (BOTTOM) - 1/2 HR. AVERAGE CURRENT - ENDECO #052
 2242, 28 JULY TO 1012, 5 SEPTEMBER, 1982

Row Percents:

| Bearing Range | Speed Range (cm/sec) | | | | | | | | | | | | | | total |
|---------------|----------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|-----|-------|
| | 0.00 | 5.00 | 10.00 | 15.00 | 20.00 | 25.00 | 30.00 | 35.00 | 40.00 | 45.00 | 50.00 | 55.00 | > | | |
| 0-30 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| 30-60 | 76.5 | 23.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| 60-90 | 52.9 | 23.5 | 23.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| 90-120 | 23.5 | 56.9 | 13.7 | 5.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| 120-150 | 33.1 | 50.7 | 15.4 | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| 150-180 | 94.4 | 5.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| 180-210 | 59.1 | 40.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| 210-240 | 61.2 | 38.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| 240-270 | 82.9 | 13.9 | 3.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| 270-300 | 35.3 | 61.0 | 3.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| 300-330 | 82.0 | 13.8 | 1.6 | 1.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| 330-360 | 90.4 | 9.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| total | 60.3 | 32.6 | 6.3 | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |

Column Percents:

| Bearing Range | Speed Range (cm/sec) | | | | | | | | | | | | | | total |
|---------------|----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|-----|-------|
| | 0.00 | 5.00 | 10.00 | 15.00 | 20.00 | 25.00 | 30.00 | 35.00 | 40.00 | 45.00 | 50.00 | 55.00 | > | | |
| 0-30 | 1.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.9 |
| 30-60 | 1.2 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.9 |
| 60-90 | 1.6 | 1.3 | 6.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.8 |
| 90-120 | 3.2 | 14.4 | 18.1 | 60.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 8.3 |
| 120-150 | 10.9 | 30.5 | 48.3 | 20.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 19.6 |
| 150-180 | 6.0 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.8 |
| 180-210 | 1.2 | 1.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.2 |
| 210-240 | 2.7 | 3.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.7 |
| 240-270 | 49.6 | 15.4 | 17.2 | 6.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 36.1 |
| 270-300 | 9.1 | 28.5 | 7.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 15.3 |
| 300-330 | 3.0 | 3.0 | 1.7 | 13.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 6.6 |
| 330-360 | 4.2 | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.8 |
| total | 100.0 | 100.0 | 100.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |

largest screened speed = 18.78 cm/sec
 total time period spanned (hours) = 923.5
 sample interval (hours) = .5
 total possible observations = 1848
 actual observations = 1948

TABLE D15

STATION Q - 1/2 HR. AVERAGE CURRENT - ENDECO R047
0220, 1 AUGUST TO 1228, 3 SEPTEMBER, 1982

Frequencies:

| Bearing Range | Speed Range (cm/sec) | | | | | | | | | | | | | | total |
|------------------|----------------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|------------|------|-------|
| | 0.00 5.00 | 5.00 10.00 | 10.00 15.00 | 15.00 20.00 | 20.00 25.00 | 25.00 30.00 | 30.00 35.00 | 35.00 40.00 | 40.00 45.00 | 45.00 50.00 | 50.00 55.00 | 55.00 60.00 | > 60.00 | | |
| 0-30 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | |
| 30-60 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | |
| 60-90 | 19 | 17 | 0 | 11 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 52 | |
| 90-120 | 91 | 184 | 120 | 82 | 56 | 21 | 5 | 1 | 1 | 0 | 0 | 0 | 0 | 561 | |
| 120-150 | 23 | 36 | 26 | 16 | 3 | 3 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 112 | |
| 150-180 | 12 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | |
| 180-210 | 9 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | |
| 210-240 | 15 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | |
| 240-270 | 418 | 57 | 29 | 50 | 18 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 573 | |
| 270-300 | 93 | 86 | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 203 | |
| 300-330 | 13 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | |
| 330-360 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | |
| total | 730 | 397 | 204 | 159 | 78 | 25 | 8 | 3 | 1 | 0 | 0 | 0 | 0 | 1605 | |

Percentages:

| Bearing Range | Speed Range (cm/sec) | | | | | | | | | | | | | | total |
|------------------|----------------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|------------|-------|-------|
| | 0.00 5.00 | 5.00 10.00 | 10.00 15.00 | 15.00 20.00 | 20.00 25.00 | 25.00 30.00 | 30.00 35.00 | 35.00 40.00 | 40.00 45.00 | 45.00 50.00 | 50.00 55.00 | 55.00 60.00 | > 60.00 | | |
| 0-30 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | |
| 30-60 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.1 | |
| 60-90 | 1.2 | 1.1 | 0.2 | 0.7 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.2 | |
| 90-120 | 5.7 | 11.5 | 7.5 | 5.1 | 3.5 | 1.3 | 0.3 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 35.0 | |
| 120-150 | 1.4 | 2.2 | 1.6 | 1.0 | 0.2 | 0.2 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 7.0 | |
| 150-180 | 0.7 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.9 | |
| 180-210 | 0.6 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 | |
| 210-240 | 0.9 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.4 | |
| 240-270 | 26.0 | 3.6 | 1.8 | 3.1 | 1.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 35.7 | |
| 270-300 | 5.9 | 5.4 | 1.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 12.6 | |
| 300-330 | 1.1 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.4 | |
| 330-360 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | |
| total | 45.5 | 24.7 | 12.7 | 9.9 | 4.9 | 1.6 | 0.5 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | |

largest screened speed = 41.12 cm/sec
total time period spanned (hours) = 802
sample interval (hours) = .5
total possible observations = 1605
actual observations = 1605

Table D16 Harmonic Analysis Tidal Currents.

Pt. Thomson Station 0 - Mary Sachs Entrance
1053, 29 July to 1453, 3 September 1982.

| | Frequency (CPD) | Amplitude (cm/sec) | | Phase (degrees) | |
|----|--------------------|--------------------|---------------|-----------------|---------------|
| | | 49°Component | 139°Component | 49°Component | 139°Component |
| O1 | 0.92954 | 1.77 | 1.51 | 70 | 240 |
| K1 | 1.00274 | 0.46 | 0.24 | 296 | 89 |
| N2 | 1.89598 | 1.10 | 0.57 | -115 | -107 |
| M2 | 1.93227 | 7.36 | 4.20 | 34 | 183 |
| S2 | 2.00000 | 2.49 | 2.36 | -130 | -299 |
| M4 | 3.86454 | 0.60 | 0.20 | -28 | -10 |
| M6 | 5.79682 | 0.30 | 0.19 | -90 | -15 |

Table D17 Harmonic Analysis Tidal Currents.

Pt. Thomson Station P - Mary Sachs Entrance
1100, 30 July to 1300, 3 September 1982.

| | Frequency (CPD) | Amplitude (cm/sec) | | Phase (degrees) | |
|----|--------------------|--------------------|----------------|-----------------|----------------|
| | | 93° Component | 183° Component | 93° Component | 183° Component |
| O1 | 0.92954 | 0.49 | 2.32 | 73 | -72 |
| K1 | 1.00274 | 1.68 | 0.83 | 19 | 76 |
| N2 | 1.89598 | 0.30 | 0.61 | -183 | -15 |
| M2 | 1.93227 | 2.23 | 1.72 | 64 | 233 |
| S2 | 2.00000 | 1.12 | 1.31 | -60 | 27 |
| M4 | 3.86454 | 0.26 | 0.23 | 113 | 89 |
| M6 | 5.79682 | 0.22 | 0.38 | -99 | -30 |

Table D18. Harmonic Analysis Tidal Currents.

Pt. Thomson Station S (top) - South of Flaxman Island
1807, 29 July to 1507, 4 September 1982.

| | Frequency (CPD) | Amplitude (cm/sec) | | Phase (degrees) | |
|----|--------------------|--------------------|---------------|-----------------|---------------|
| | | 114°Component | 204°Component | 114°Component | 204°Component |
| O1 | 0.92954 | 0.64 | 0.17 | -202 | 73 |
| K1 | 1.00274 | 0.87 | 0.52 | 232 | 172 |
| N2 | 1.89598 | 0.27 | 0.12 | 56 | -17 |
| M2 | 1.93227 | 0.53 | 0.30 | -22 | 70 |
| S2 | 2.00000 | 0.85 | 0.06 | -140 | -130 |
| M4 | 3.86454 | 0.08 | 0.17 | -58 | -12 |
| M6 | 5.79682 | 0.07 | 0.02 | -158 | -195 |

Table D19. Harmonic Analysis Tidal Currents.

Pt. Thomson Station S (bottom) - South of Flaxman Island
1807, 29 July to 1507, 4 September 1982.

| | Frequency (CPD) | Amplitude (cm/sec) | | Phase (degrees) | |
|----|--------------------|--------------------|---------------|-----------------|---------------|
| | | 111°Component | 201°Component | 111°Component | 201°Component |
| O1 | 0.92954 | 0.43 | 0.37 | -202 | 26 |
| K1 | 1.00274 | 0.51 | 0.44 | -109 | 175 |
| N2 | 1.89598 | 0.43 | 0.11 | 87 | -54 |
| M2 | 1.93227 | 0.46 | 0.15 | -28 | -40 |
| S2 | 2.00000 | 0.44 | 0.12 | 188 | 122 |
| M4 | 3.86454 | 0.11 | 0.11 | -26 | -82 |
| M6 | 5.79682 | 0.04 | 0.02 | -100 | 140 |

Table D20. Harmonic Analysis Tidal Currents.

Pt. Thomson Station Q - North of Flaxman Island
2143, 1 August to 1643, 2 September 1982.

| | Frequency (CPD) | Amplitude (cm/sec) | | Phase (degrees) | |
|----|--------------------|--------------------|---------------|-----------------|---------------|
| | | 0° Component | 90° Component | 0° Component | 90° Component |
| O1 | 0.92954 | 0.13 | 0.45 | -39 | -56 |
| K1 | 1.00274 | 0.16 | 0.49 | 126 | -131 |
| N2 | 1.89598 | 0.45 | 0.52 | -146 | -12 |
| M2 | 1.93227 | 0.53 | 0.85 | -274 | -170 |
| S2 | 2.00000 | 0.26 | 0.194 | -118 | -85 |
| M4 | 3.86454 | 0.03 | 0.08 | -262 | -35 |
| M6 | 5.79682 | 0.03 | 0.11 | -270 | -95 |

Table D21. Harmonic Analysis Tidal Currents;
 Pt. Thomson Station E (south of Akunik Island);
 1637, 30 July to 1137, 3 September 1982.

| | Frequency (CPD) | Amplitude (cm/sec) | | Phase (degrees) | |
|----|--------------------|--------------------|----------------|-----------------|----------------|
| | | 72° Component | 162° Component | 72° Component | 162° Component |
| O1 | 0.92954 | 1.97 | .227 | -90 | -63 |
| K1 | 1.00274 | 1.59 | 1.004 | 259 | 132 |
| N2 | 1.89598 | .038 | .216 | 58 | 155 |
| M2 | 1.93227 | .696 | .986 | -204 | 47 |
| S2 | 2.00000 | .918 | .268 | -74 | 216 |
| M4 | 3.86454 | .104 | .096 | 125 | 185 |
| M6 | 5.79682 | .056 | .145 | 166 | 16 |
