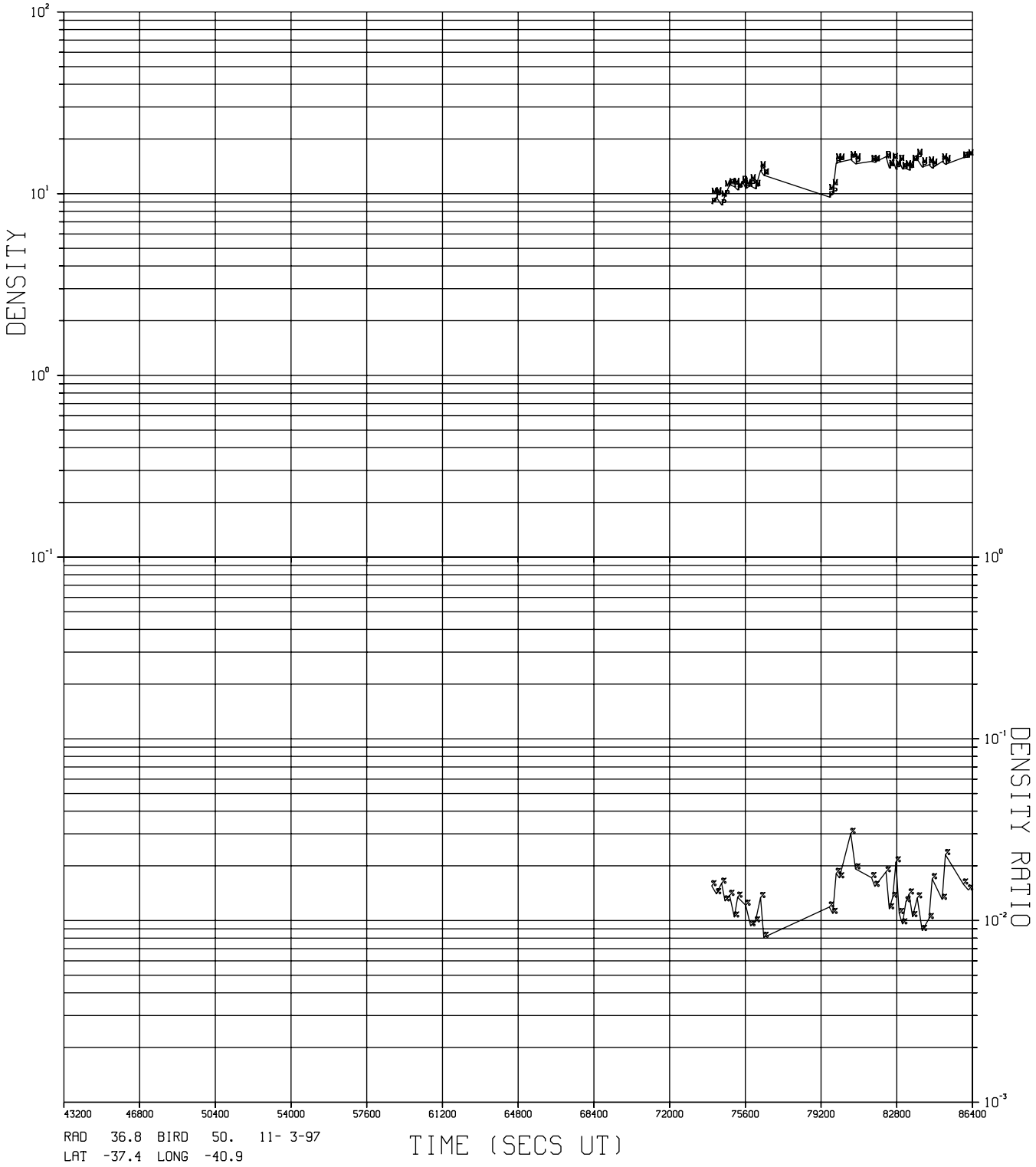
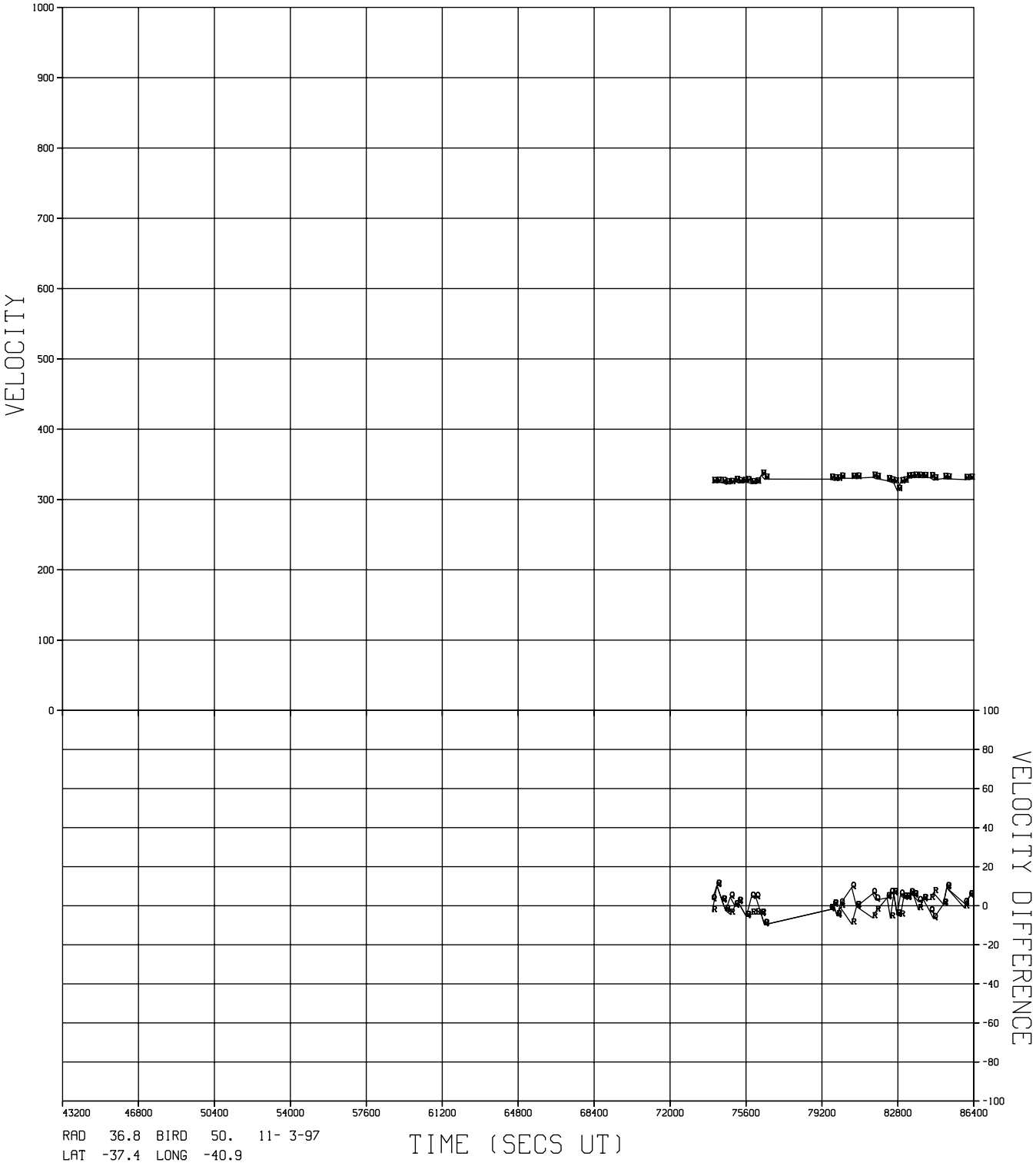
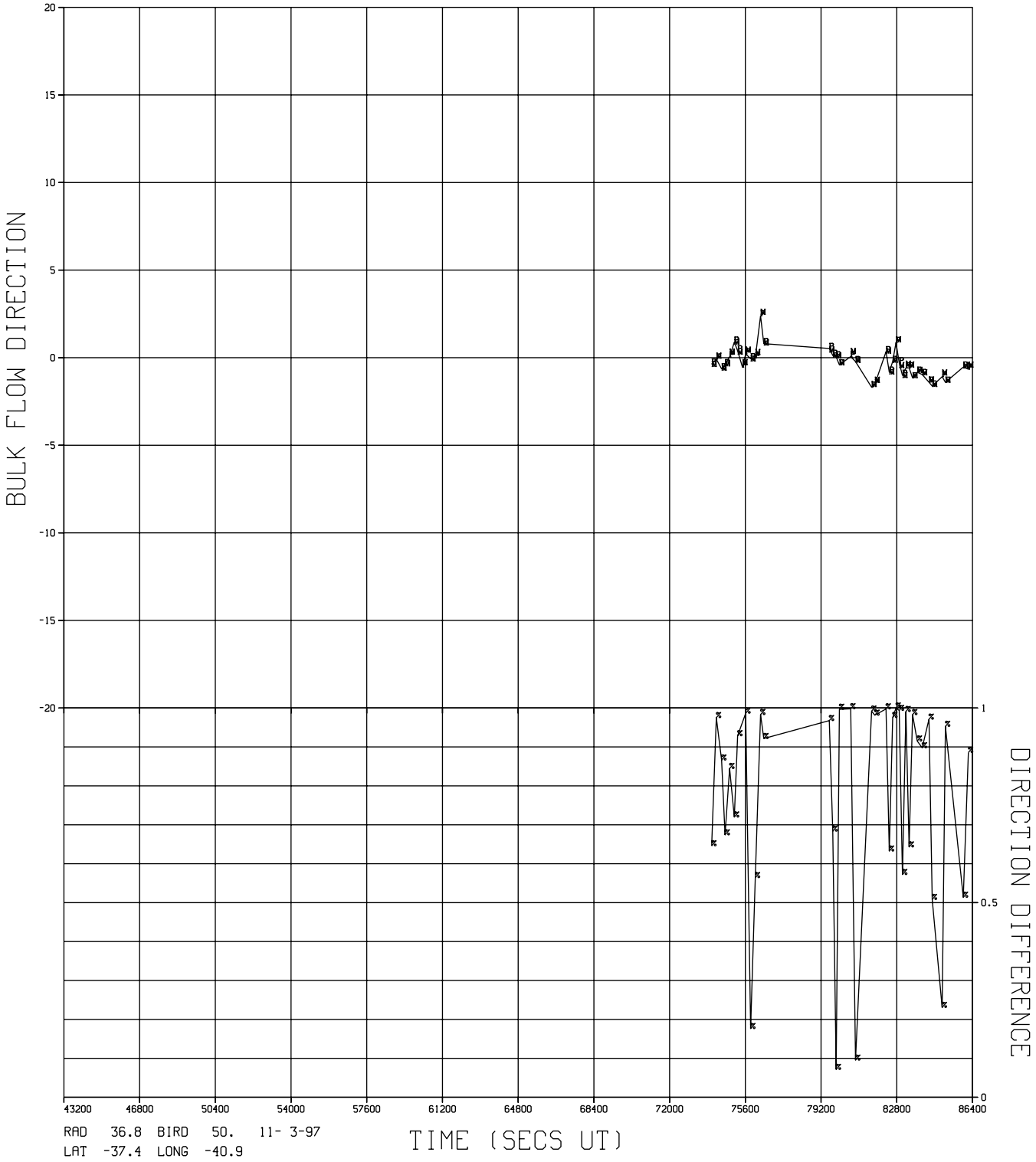
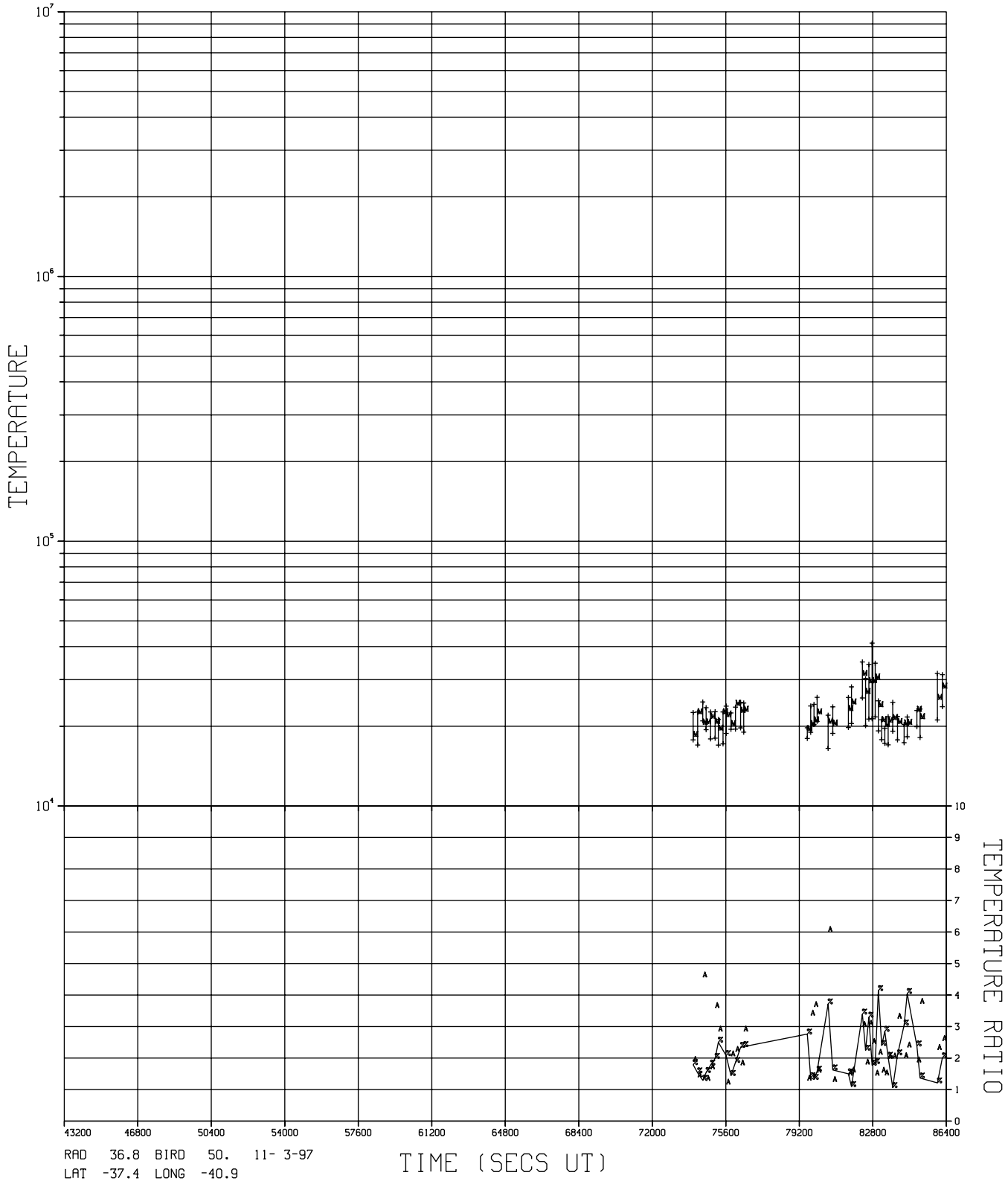
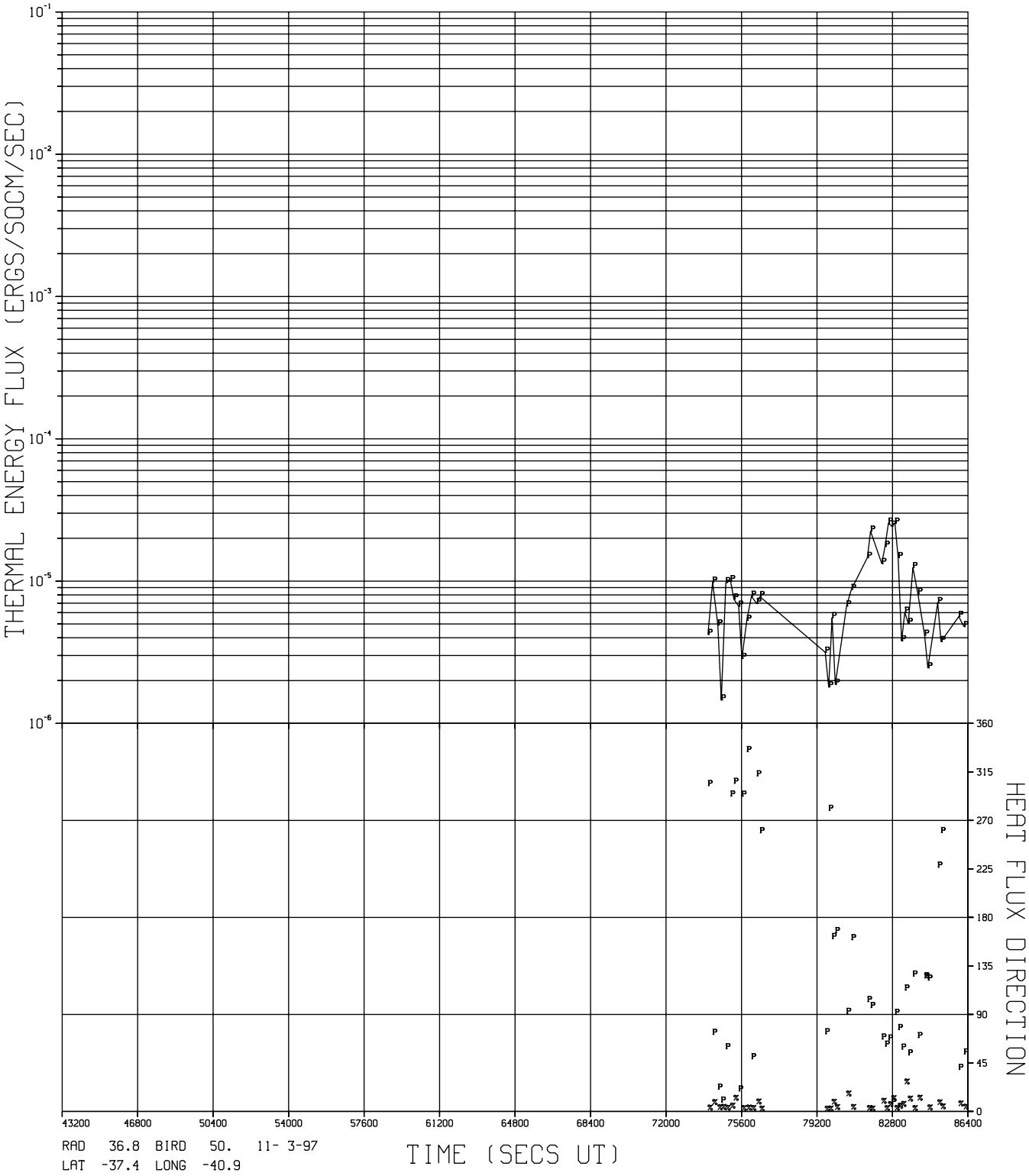
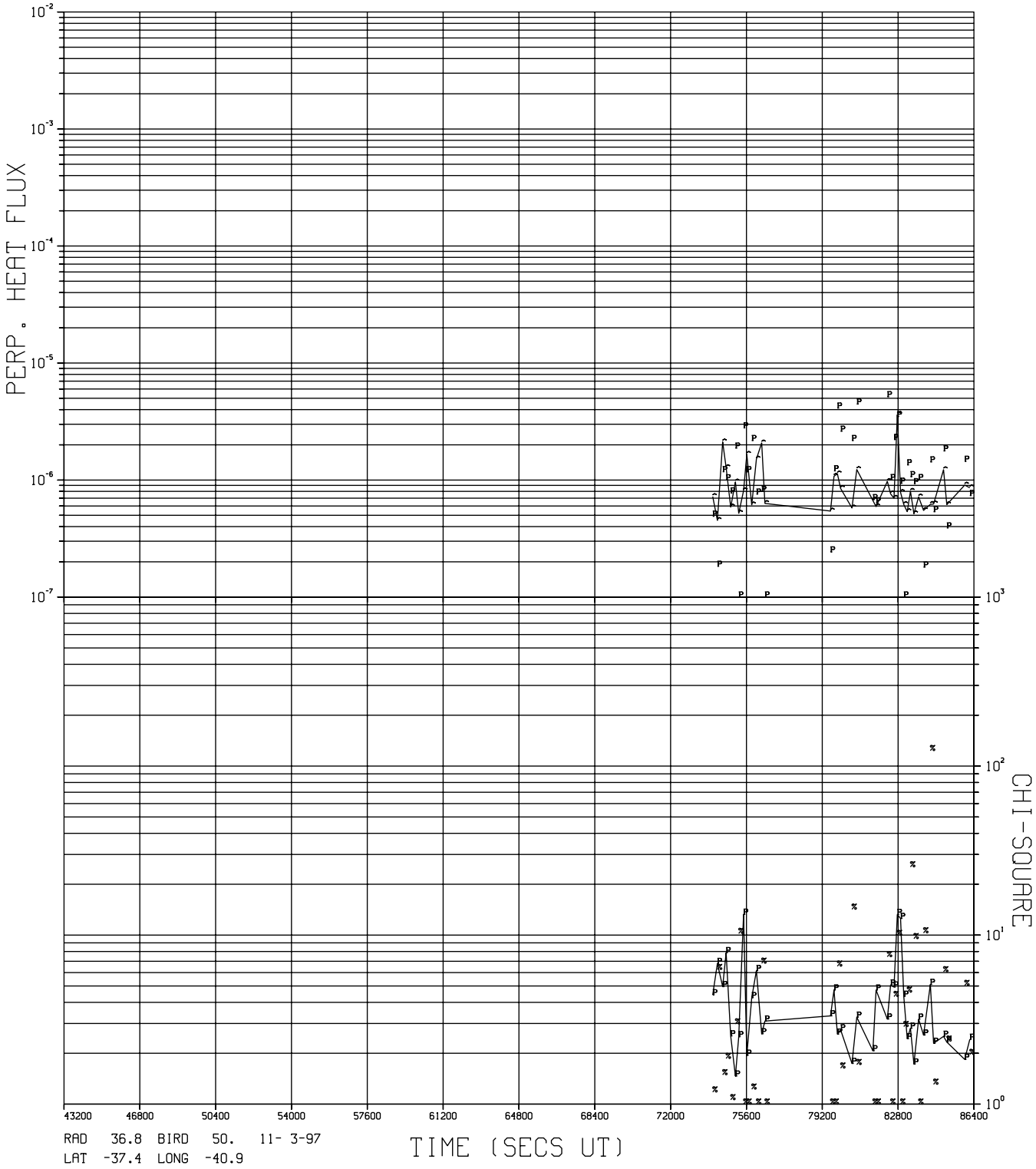

DENSITY
DENSITY RATIO
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 36.8 BIRD 50. 11- 3-97
LAT -37.4 LONG -40.9

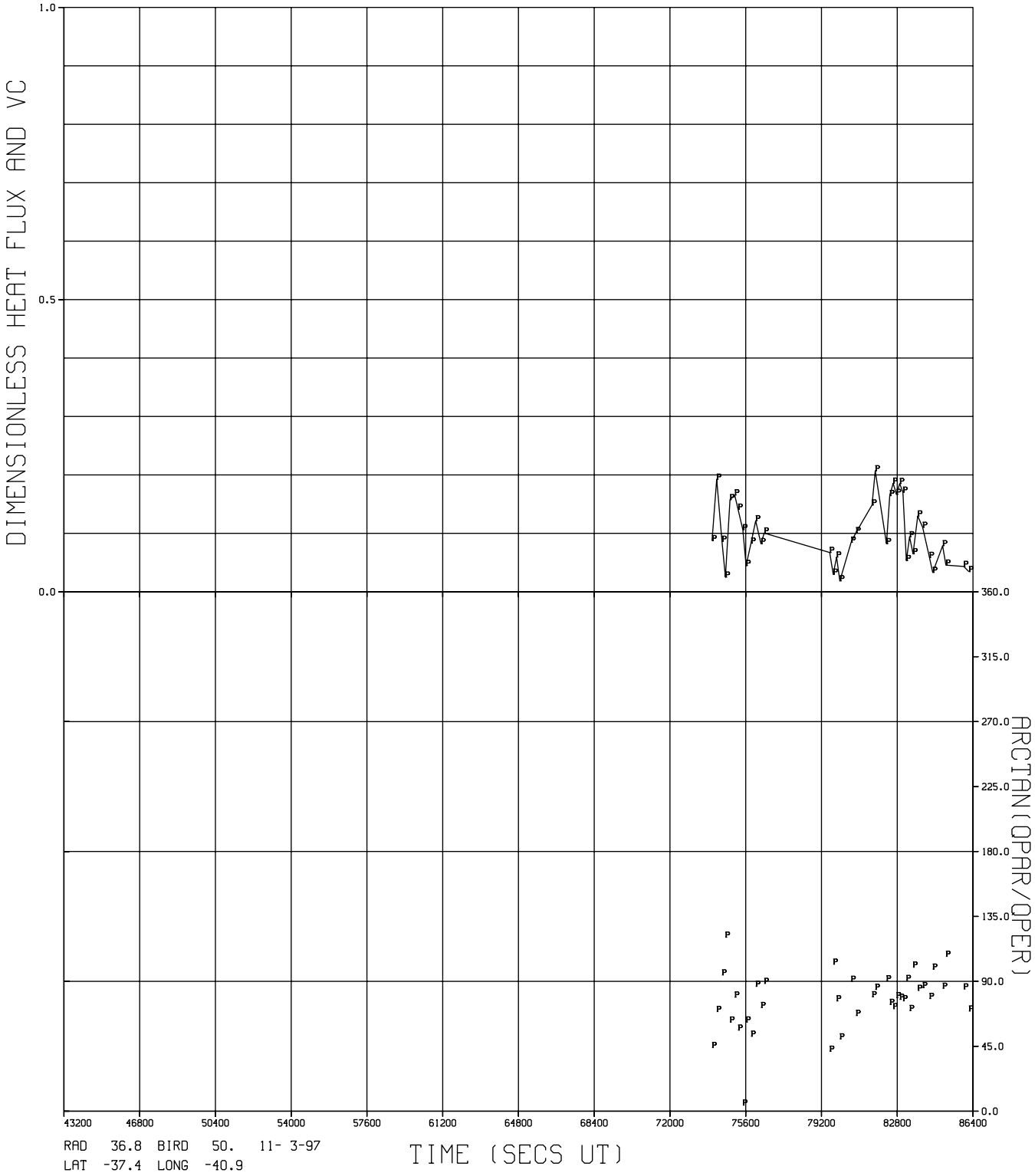

VELOCITY
1000
900
800
700
600
500
400
300
200
100
0
VELOCITY DIFFERENCE
100
80
60
40
20
0
-20
-40
-60
-80
-100
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
TIME (SECS UT)
RAD 36.8 BIRD 50. 11- 3-97
LAT -37.4 LONG -40.9

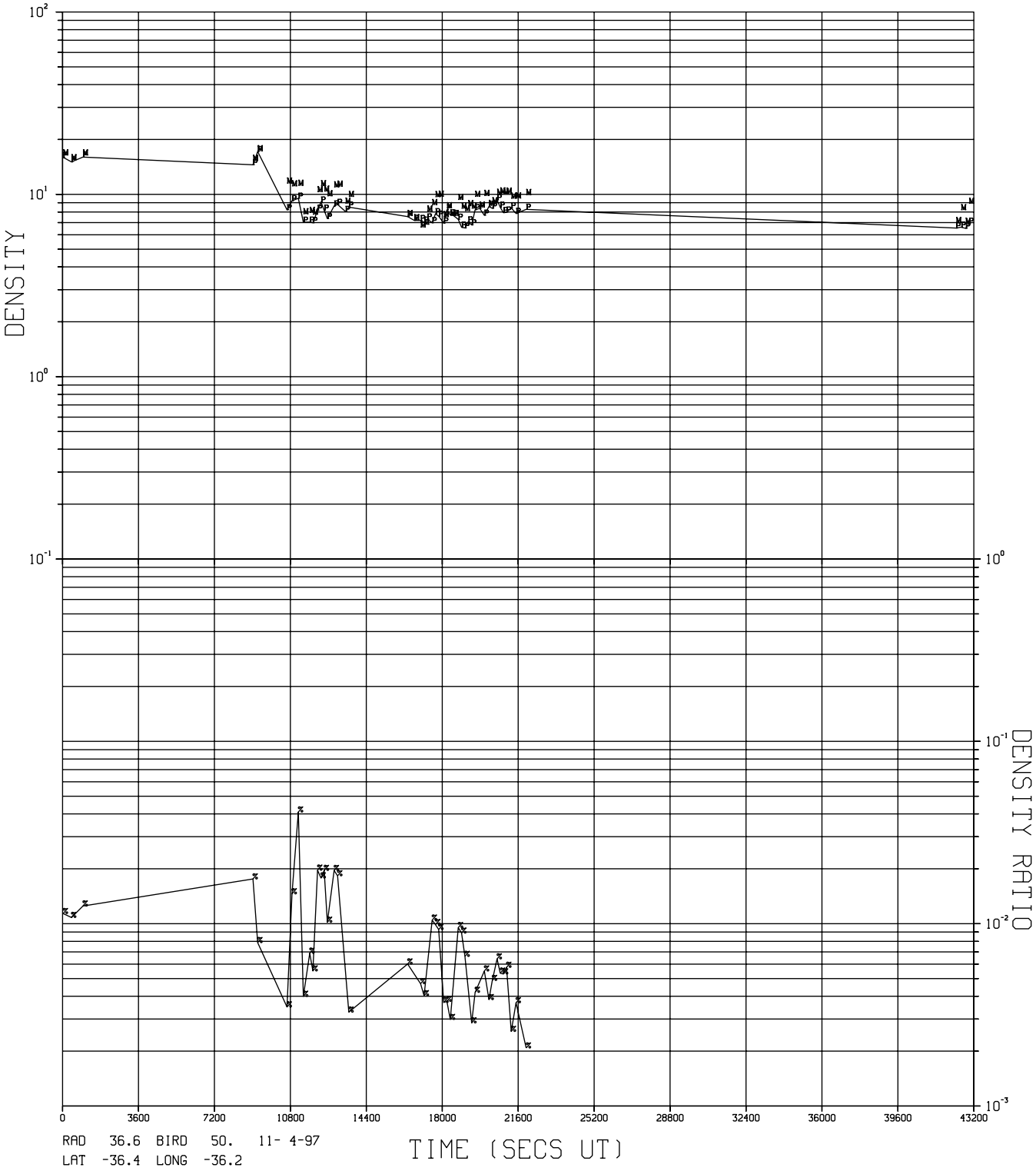

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 36.8 BIRD 50. 11- 3-97
LAT -37.4 LONG -40.9

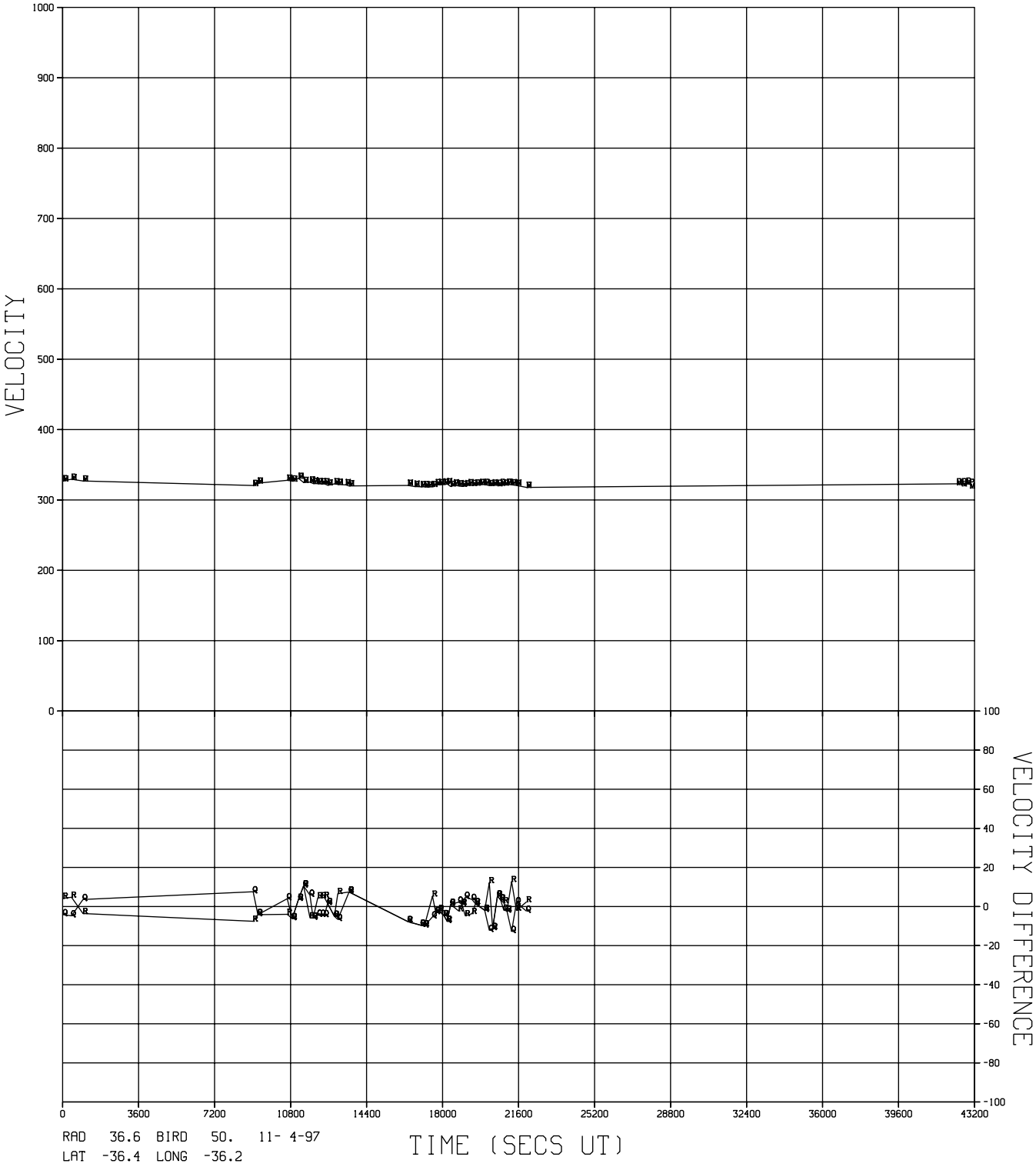

TEMPERATURE
10^7
10^6
10^5
10^4
TEMPERATURE RATIO
0
1
2
3
4
5
6
7
8
9
10
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 36.8 BIRD 50. 11- 3-97
LAT -37.4 LONG -40.9
TIME (SECS UT)

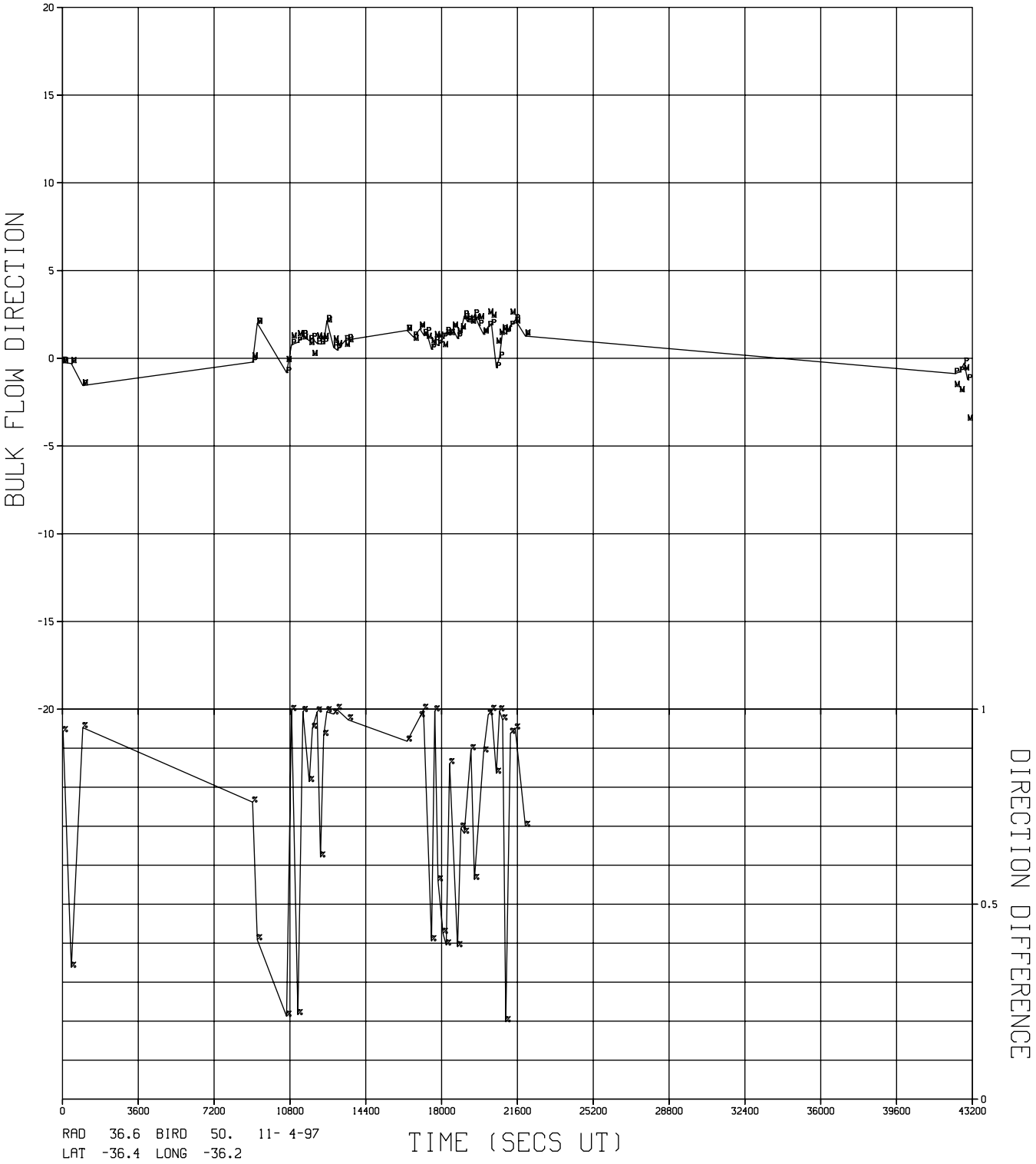

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 36.8 BIRD 50. 11- 3-97
LAT -37.4 LONG -40.9

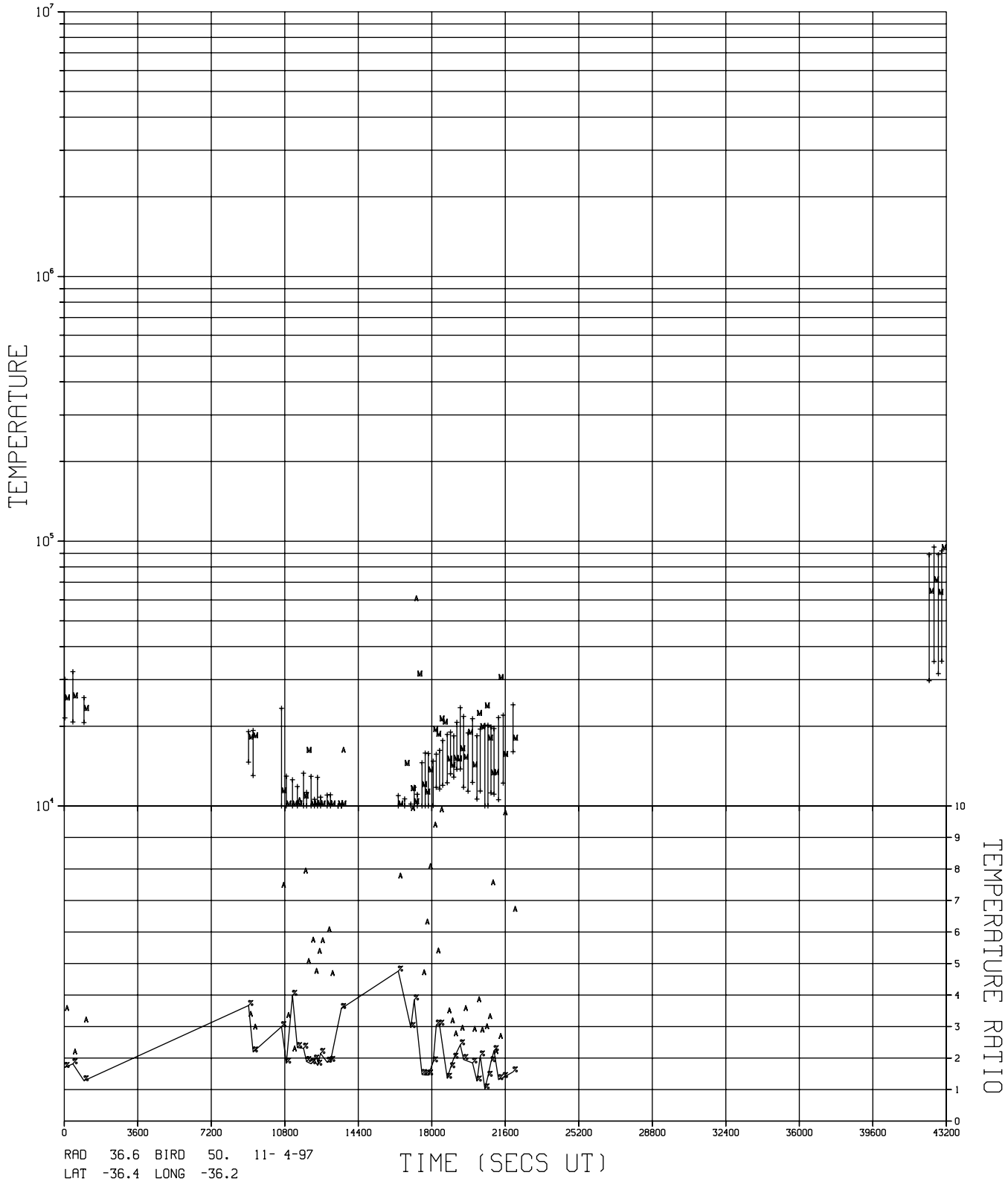

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 36.8 BIRD 50. 11- 3-97
LAT -37.4 LONG -40.9

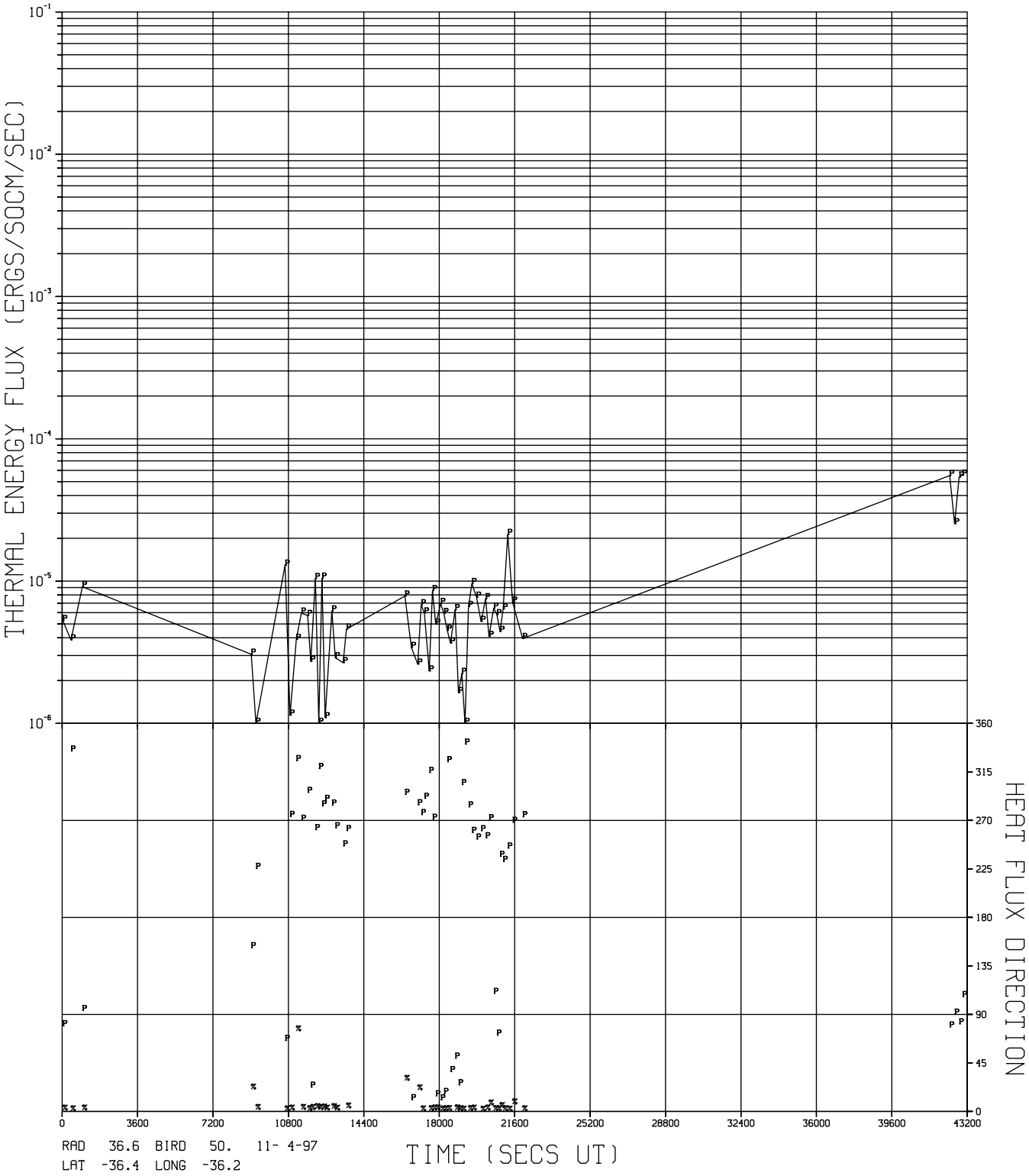

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
TIME (SECS UT)
RAD 36.8 BIRD 50. 11- 3-97
LAT -37.4 LONG -40.9

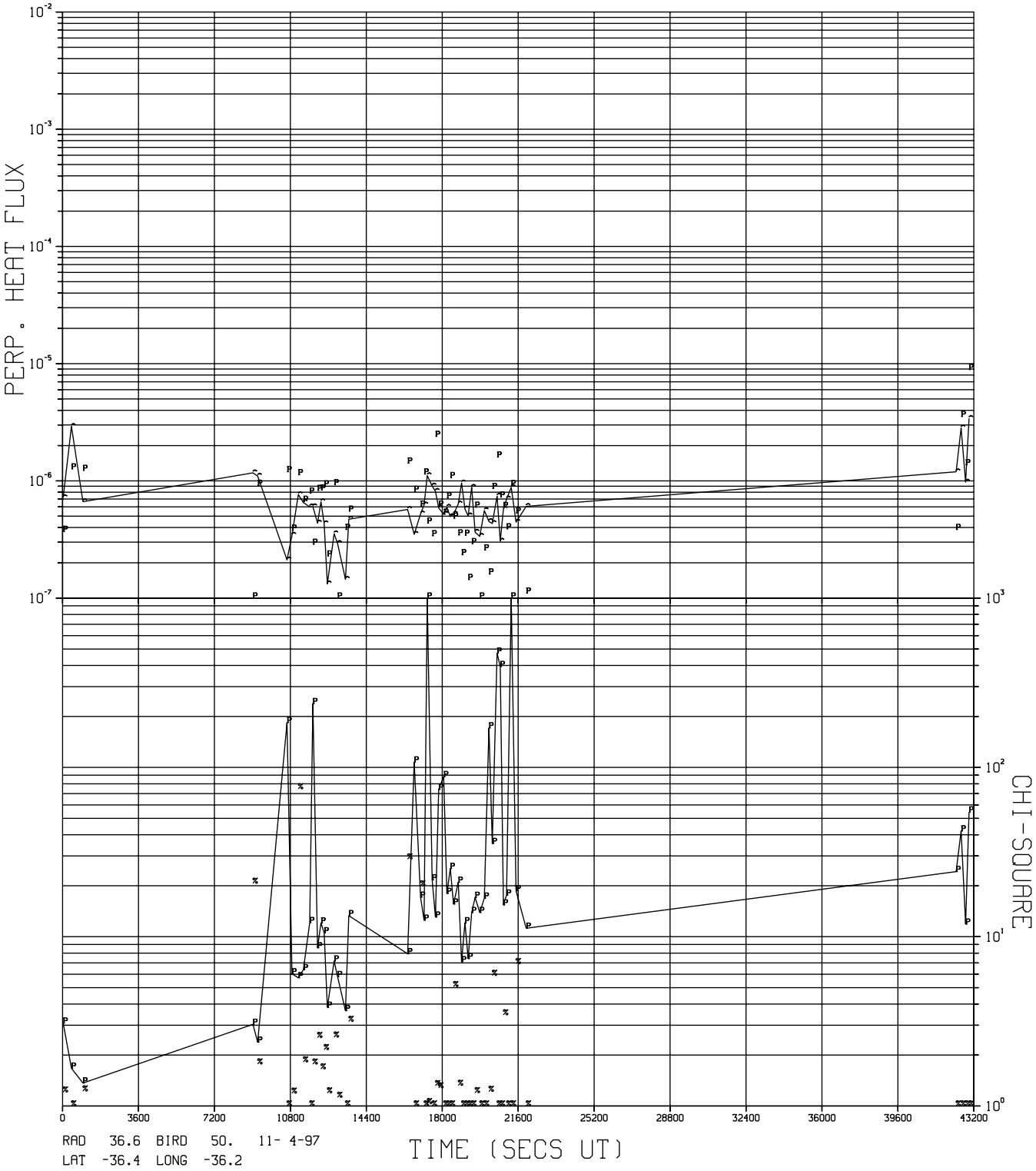

DENSITY
DENSITY RATIO
TIME (SECS UT)
RAD 36.6 BIRD 50. 11- 4-97
LAT -36.4 LONG -36.2

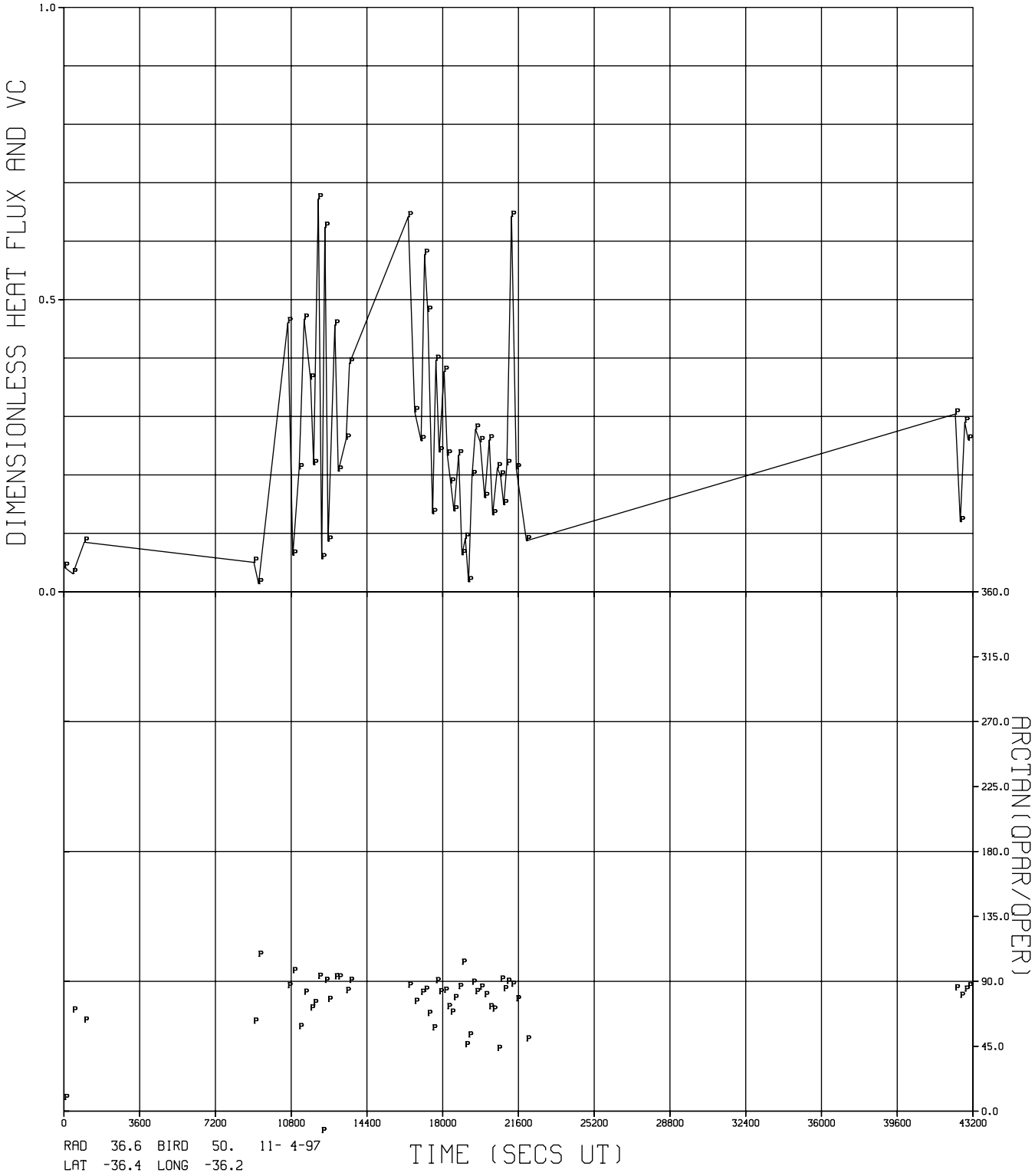

VELOCITY
VELOCITY DIFFERENCE
TIME (SECS UT)
RAD 36.6 BIRD 50. 11- 4-97
LAT -36.4 LONG -36.2

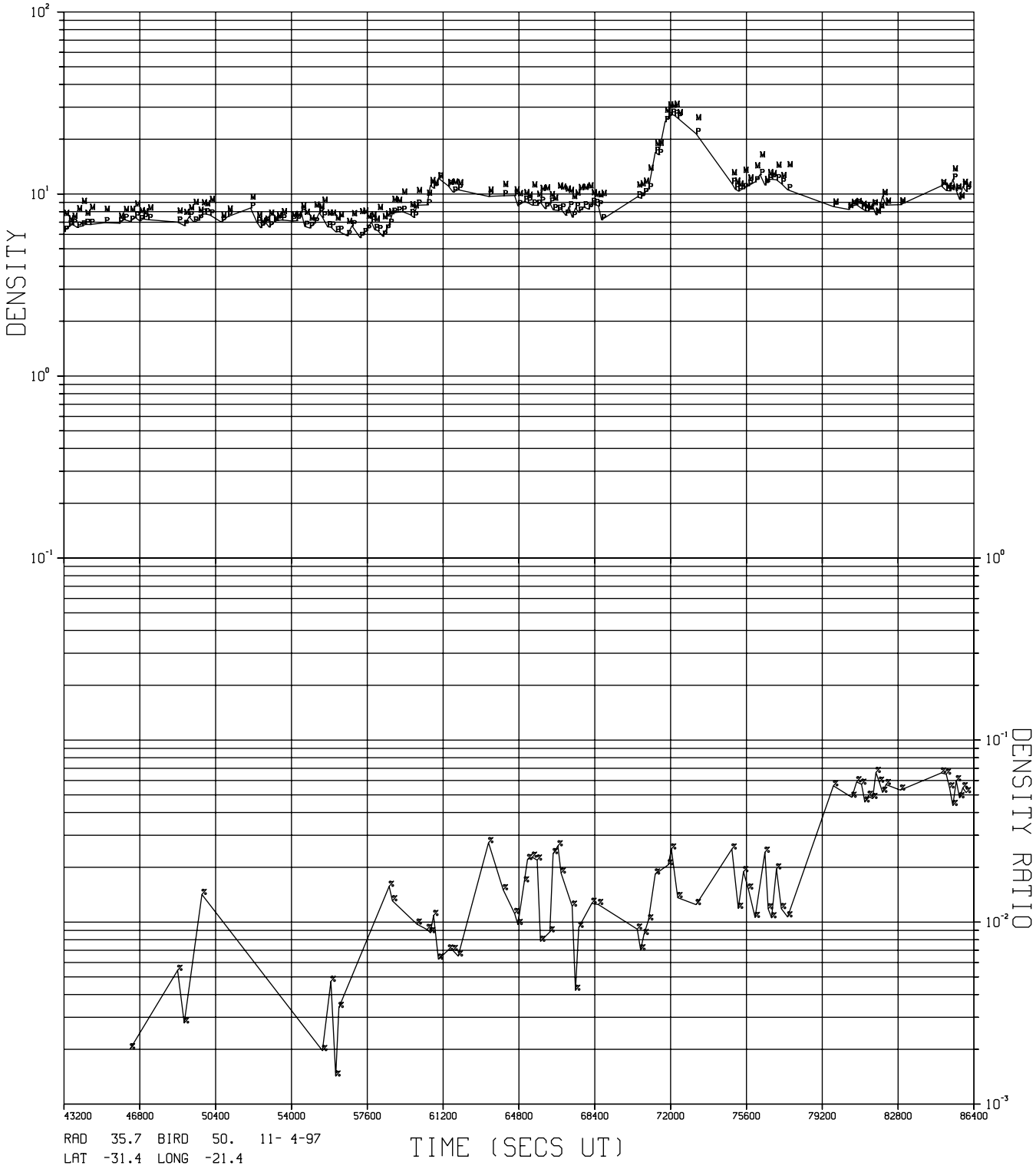

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
RAD 36.6 BIRD 50. 11- 4-97
LAT -36.4 LONG -36.2

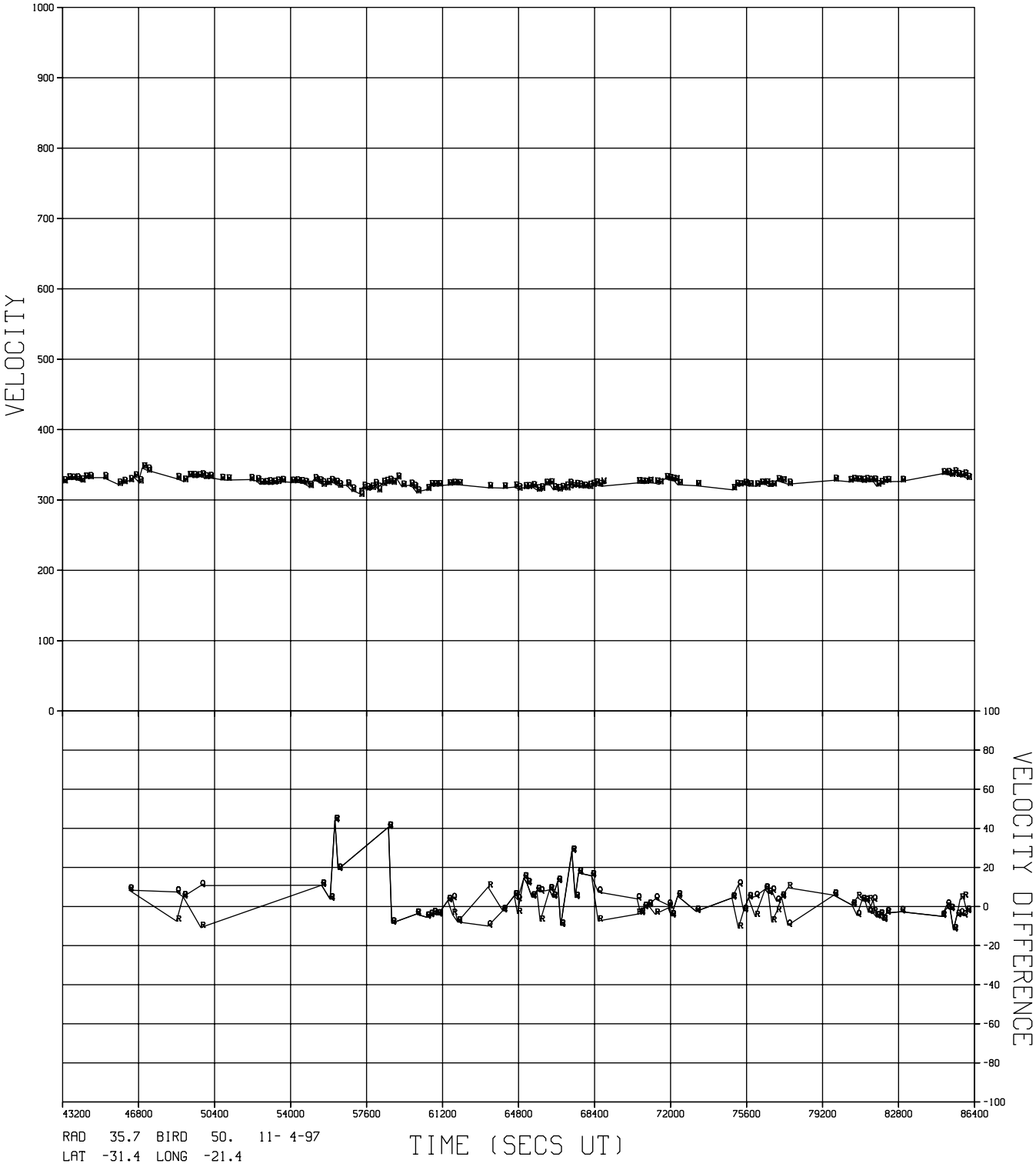

TEMPERATURE
TEMPERATURE RATIO
TIME (SECS UT)
RAD 36.6 BIRD 50. 11- 4-97
LAT -36.4 LONG -36.2


THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 36.6 BIRD 50. 11- 4-97
LAT -36.4 LONG -36.2

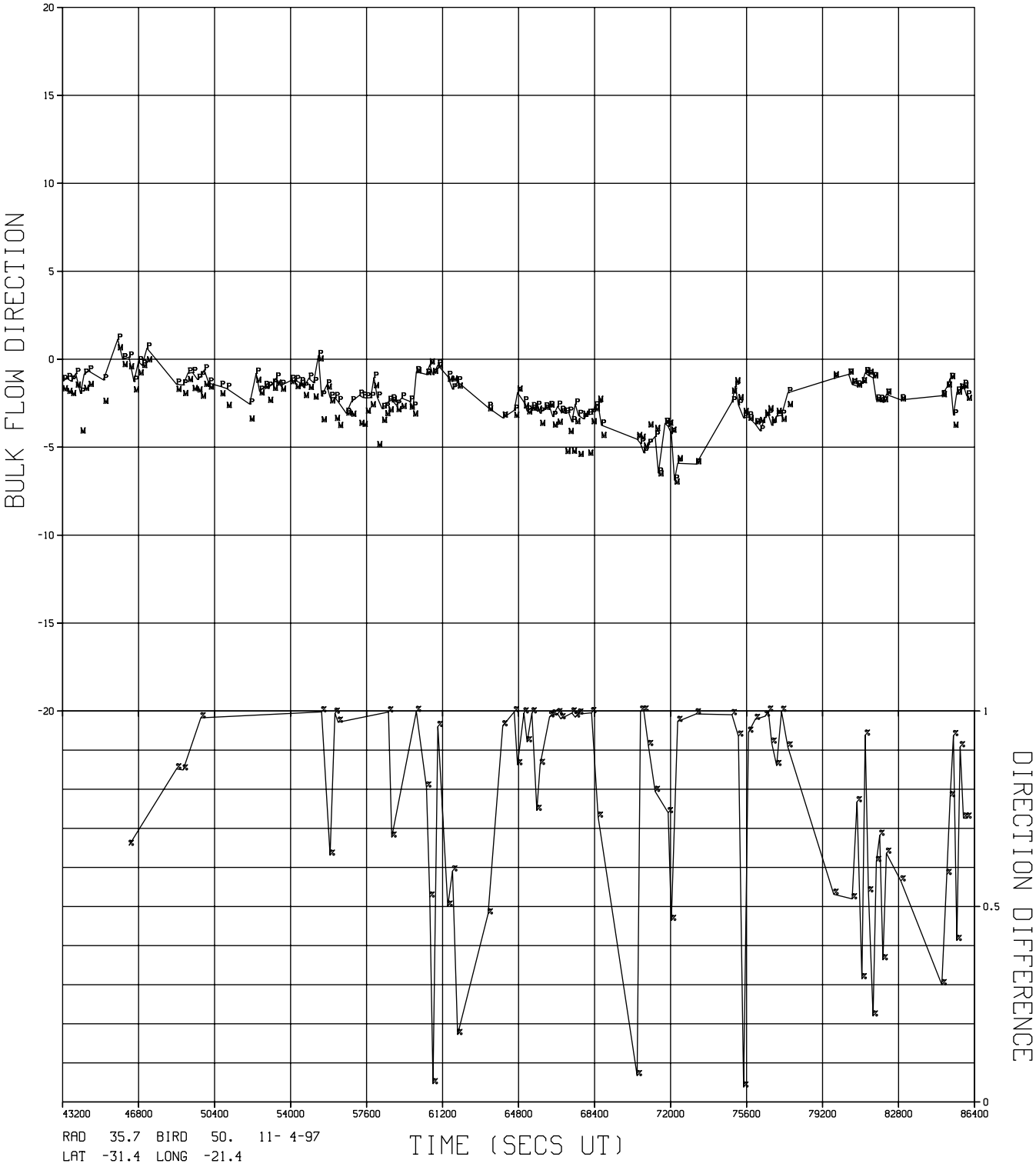

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
RAD 36.6 BIRD 50. 11- 4-97
LAT -36.4 LONG -36.2

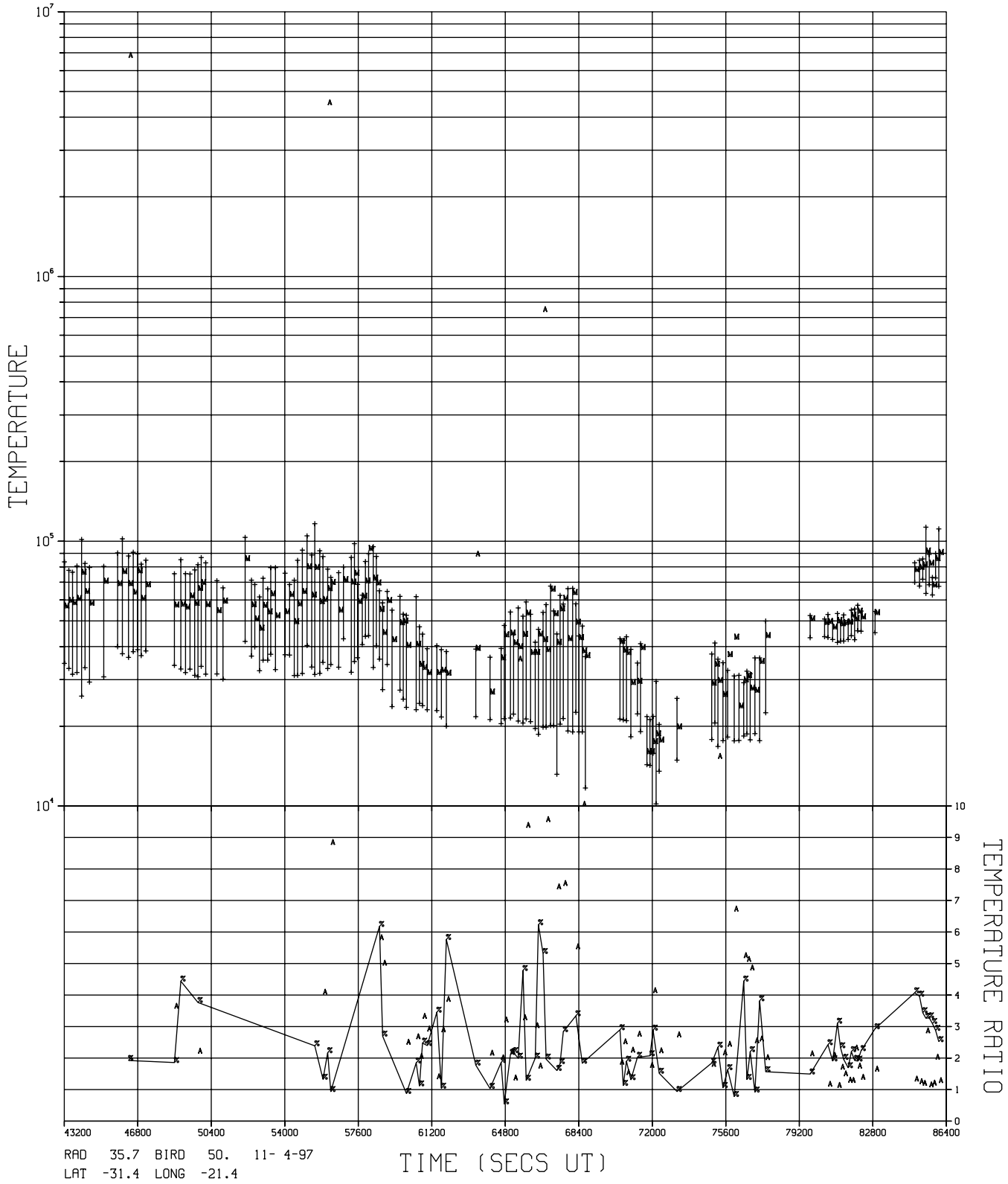

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
TIME (SECS UT)
RAD 36.6 BIRD 50. 11- 4-97
LAT -36.4 LONG -36.2

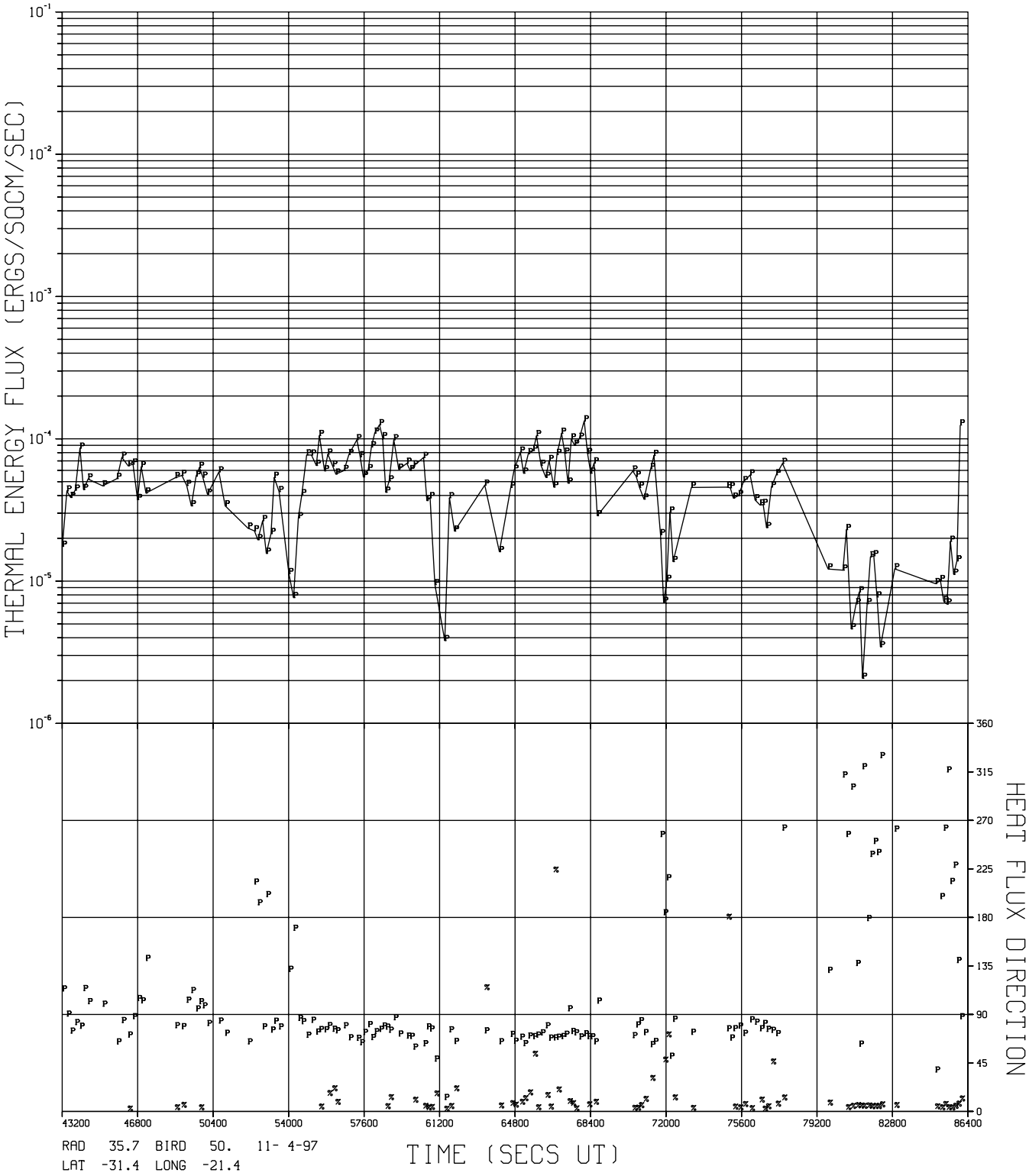

DENSITY
DENSITY RATIO
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 35.7 BIRD 50. 11- 4-97
LAT -31.4 LONG -21.4

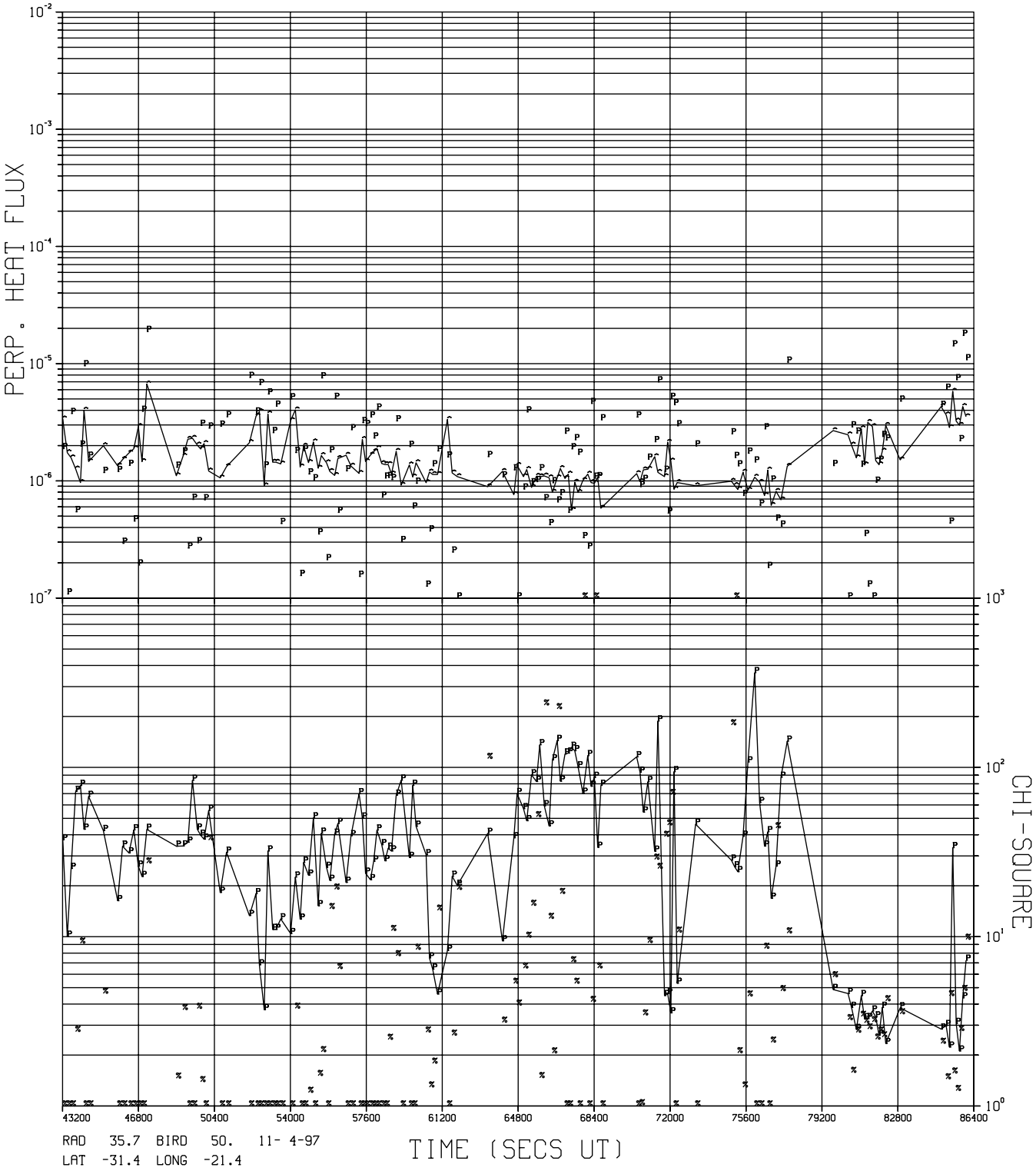


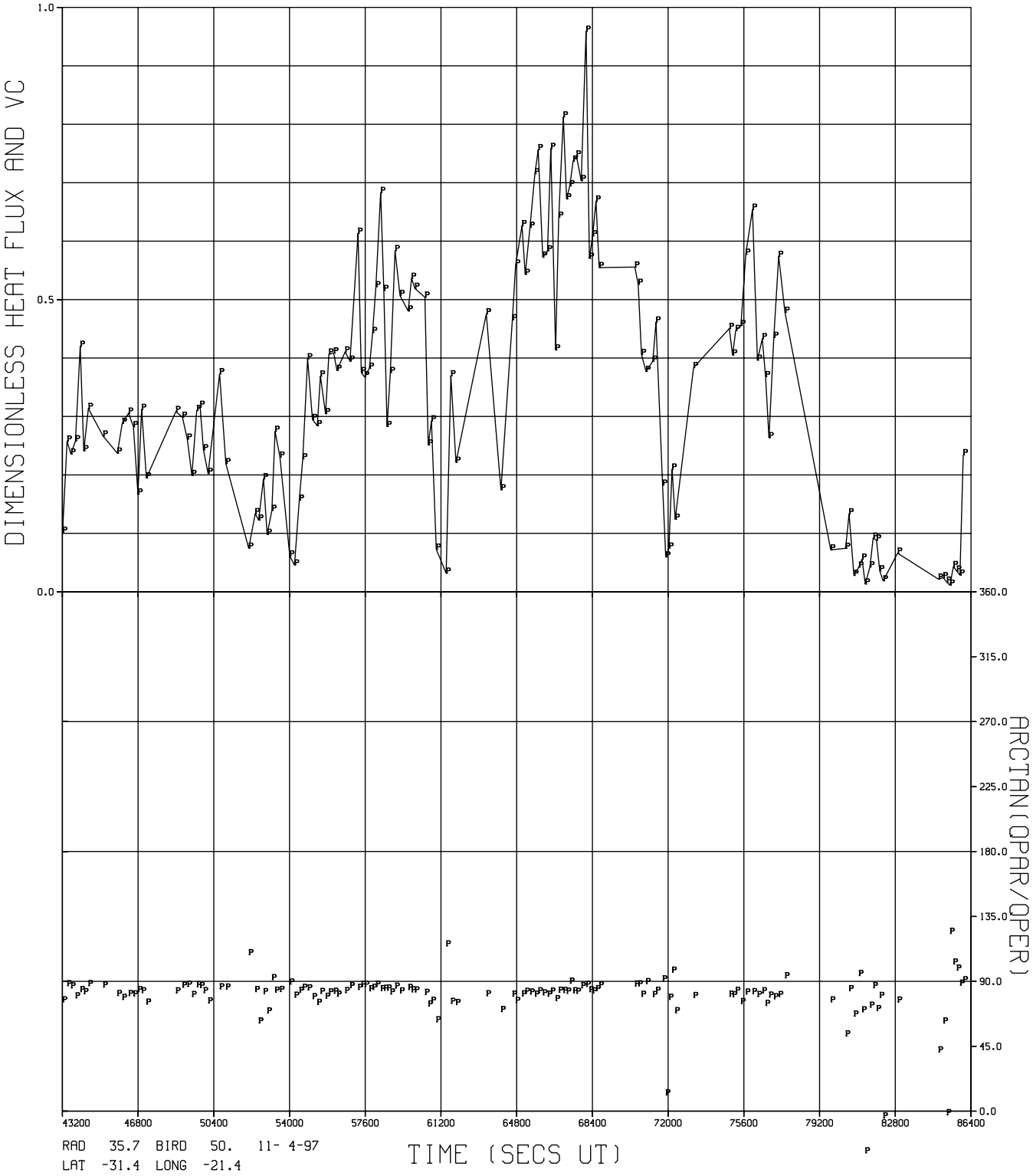
RAD 35.7 BIRD 50. 11- 4-97
LAT -31.4 LONG -21.4

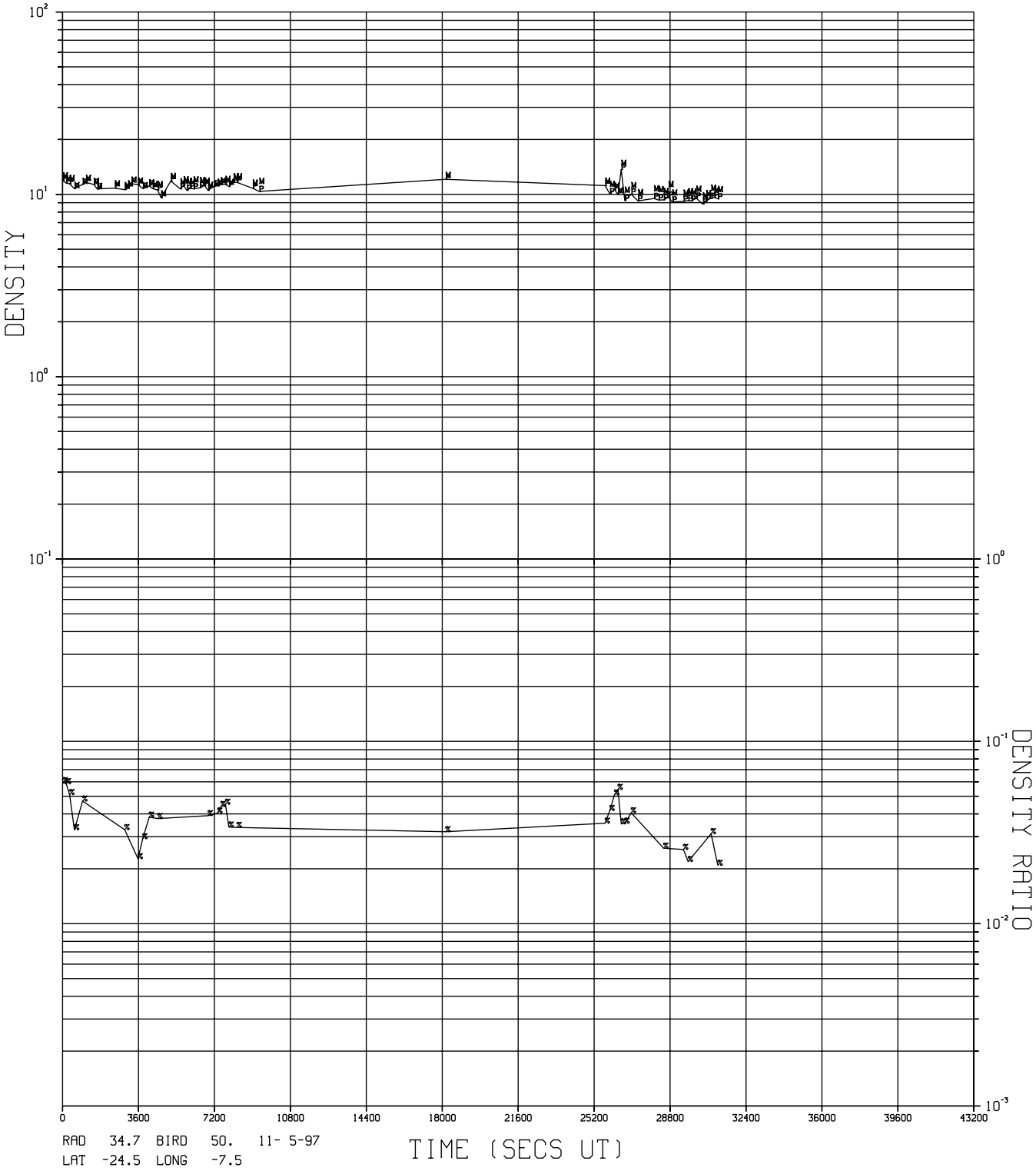

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 35.7 BIRD 50. 11- 4-97
LAT -31.4 LONG -21.4

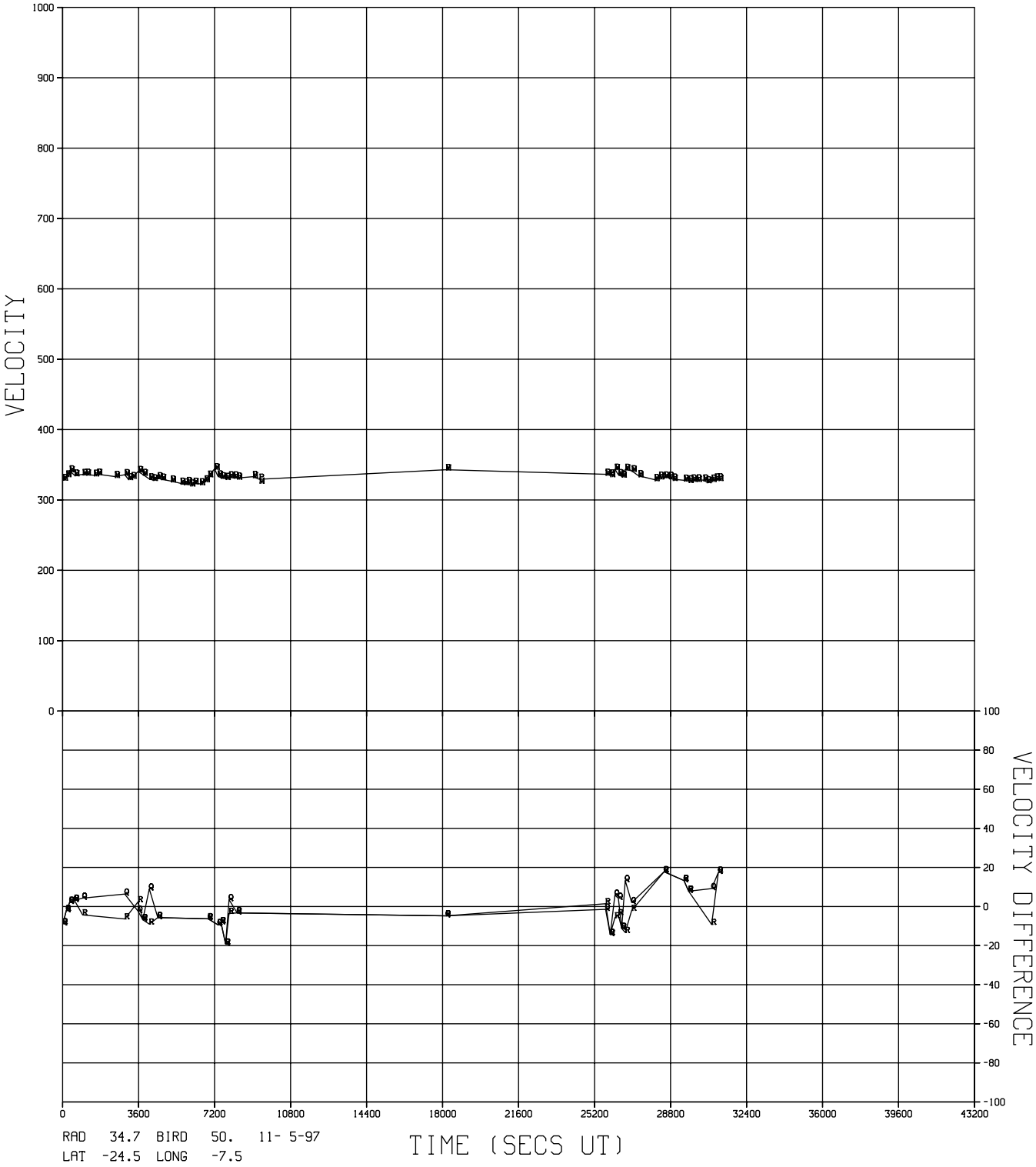

TEMPERATURE
TEMPERATURE RATIO
TIME (SECS UT)
RAD 35.7 BIRD 50. 11- 4-97
LAT -31.4 LONG -21.4

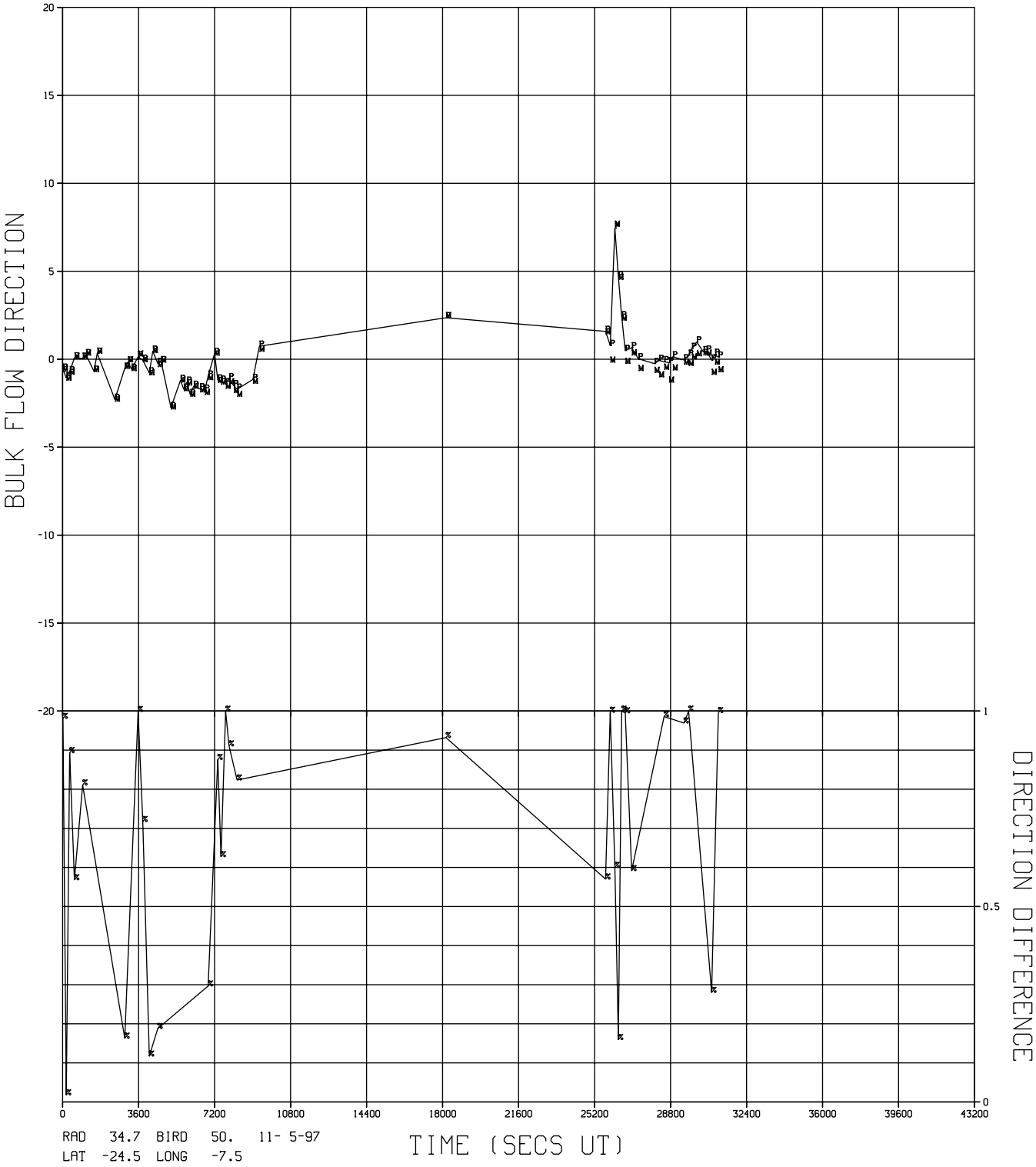

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 35.7 BIRD 50. 11- 4-97
LAT -31.4 LONG -21.4

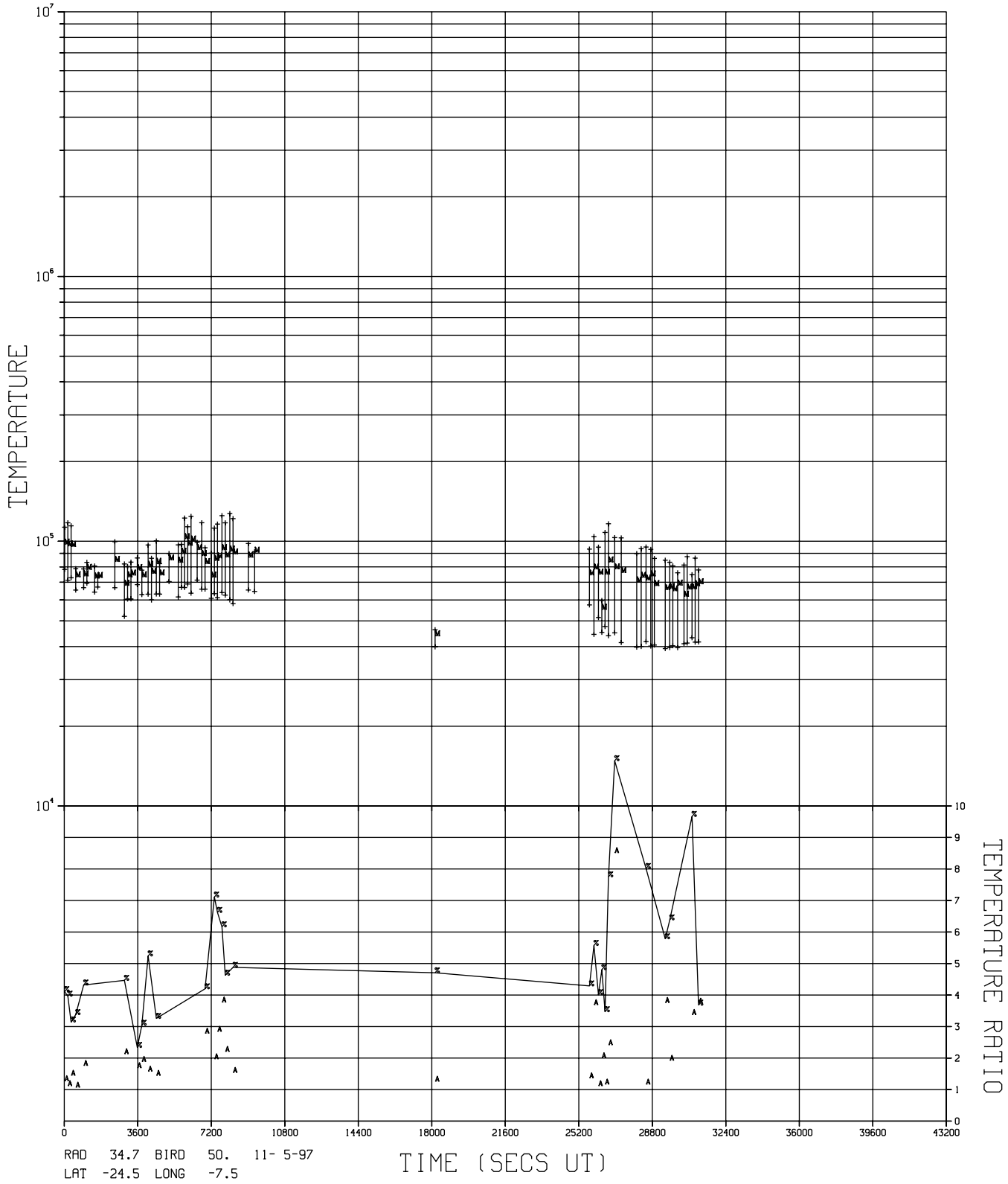

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
RAD 35.7 BIRD 50. 11- 4-97
LAT -31.4 LONG -21.4

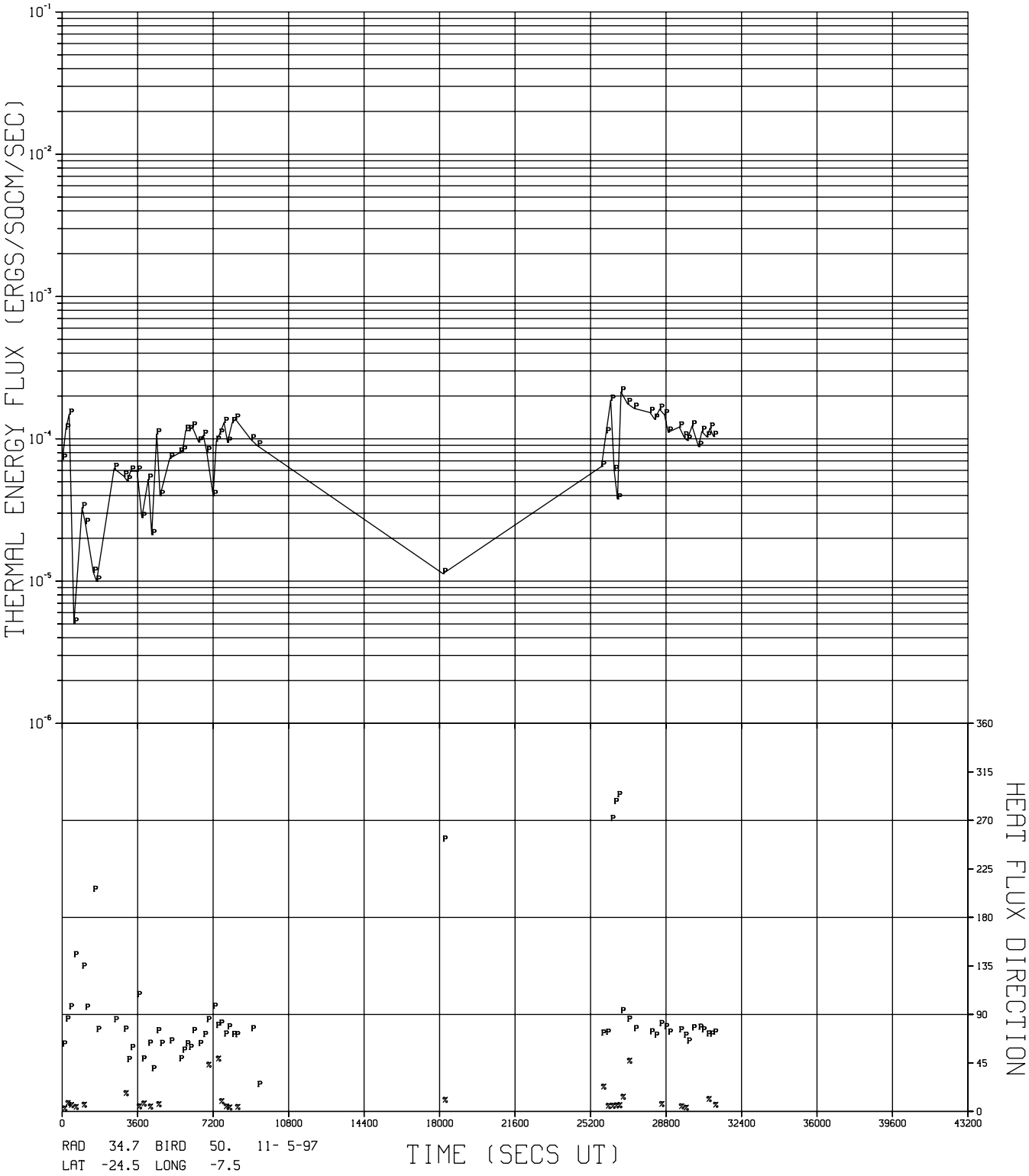

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
TIME (SECS UT)
RAD 35.7 BIRD 50. 11- 4-97
LAT -31.4 LONG -21.4

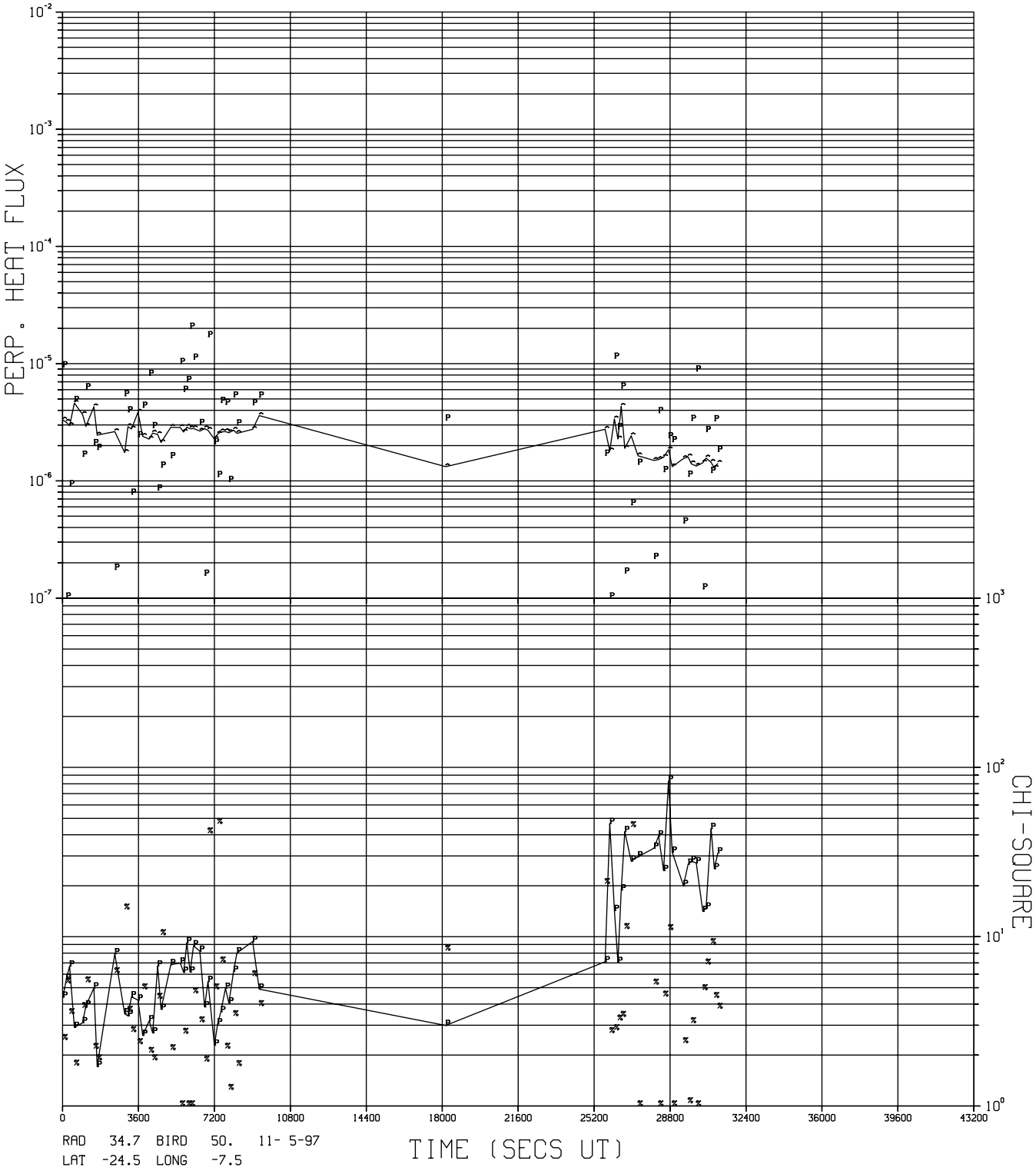

DENSITY
DENSITY RATIO
TIME (SECS UT)
RAD 34.7 BIRD 50. 11- 5-97
LAT -24.5 LONG -7.5

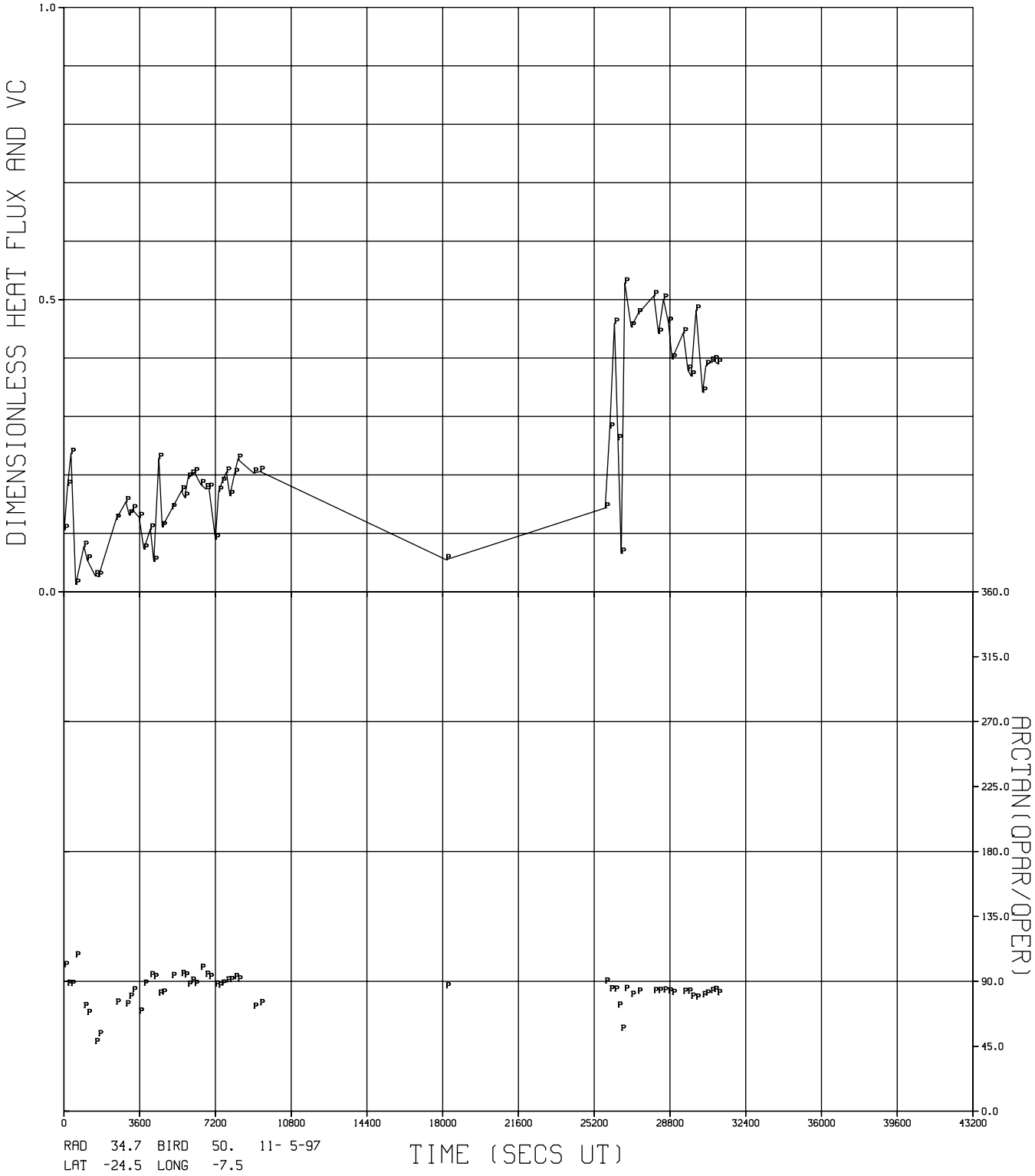

VELOCITY
VELOCITY DIFFERENCE
TIME (SECS UT)
RAD 34.7 BIRD 50. 11- 5-97
LAT -24.5 LONG -7.5

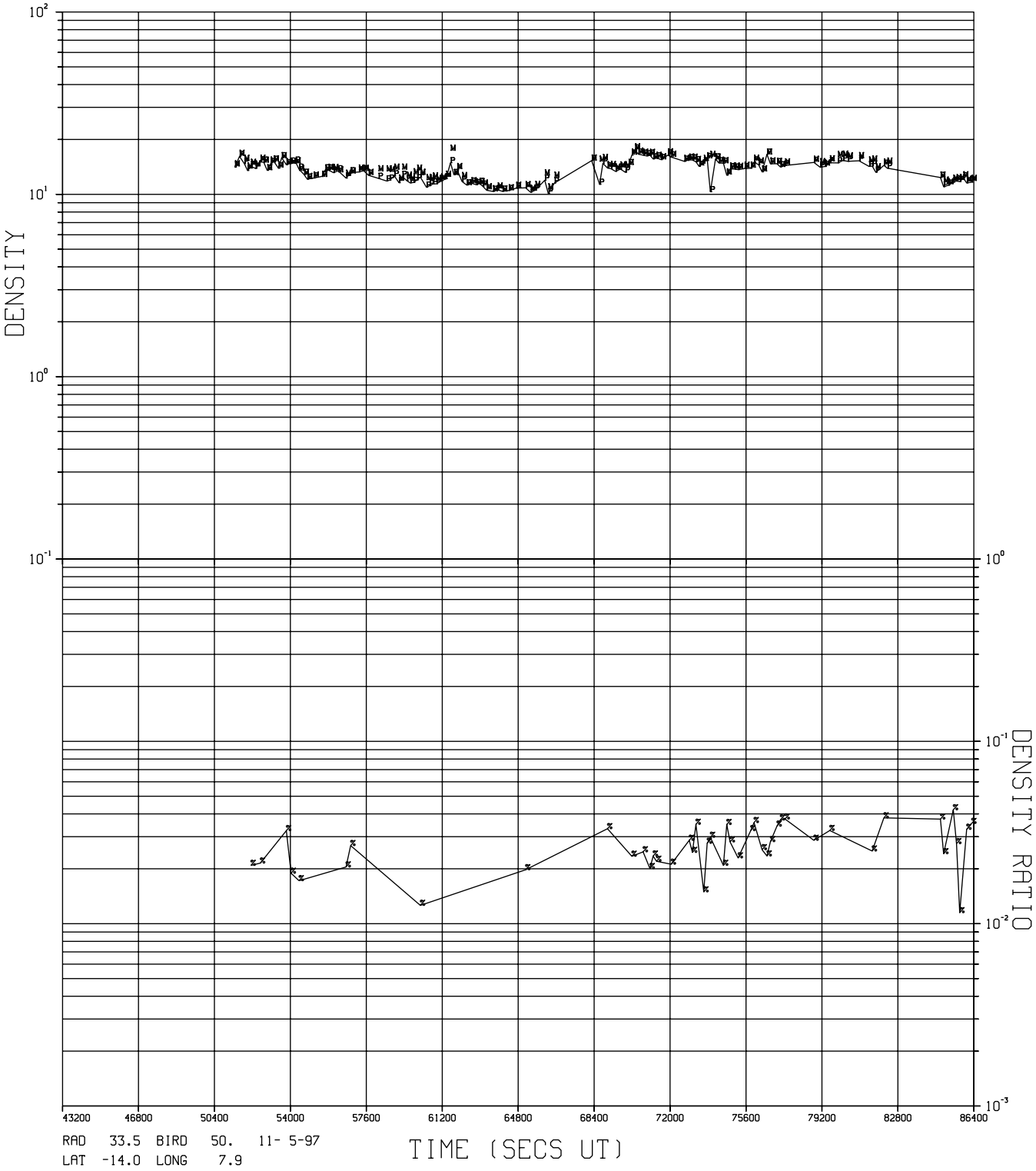

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
RAD 34.7 BIRD 50. 11- 5-97
LAT -24.5 LONG -7.5

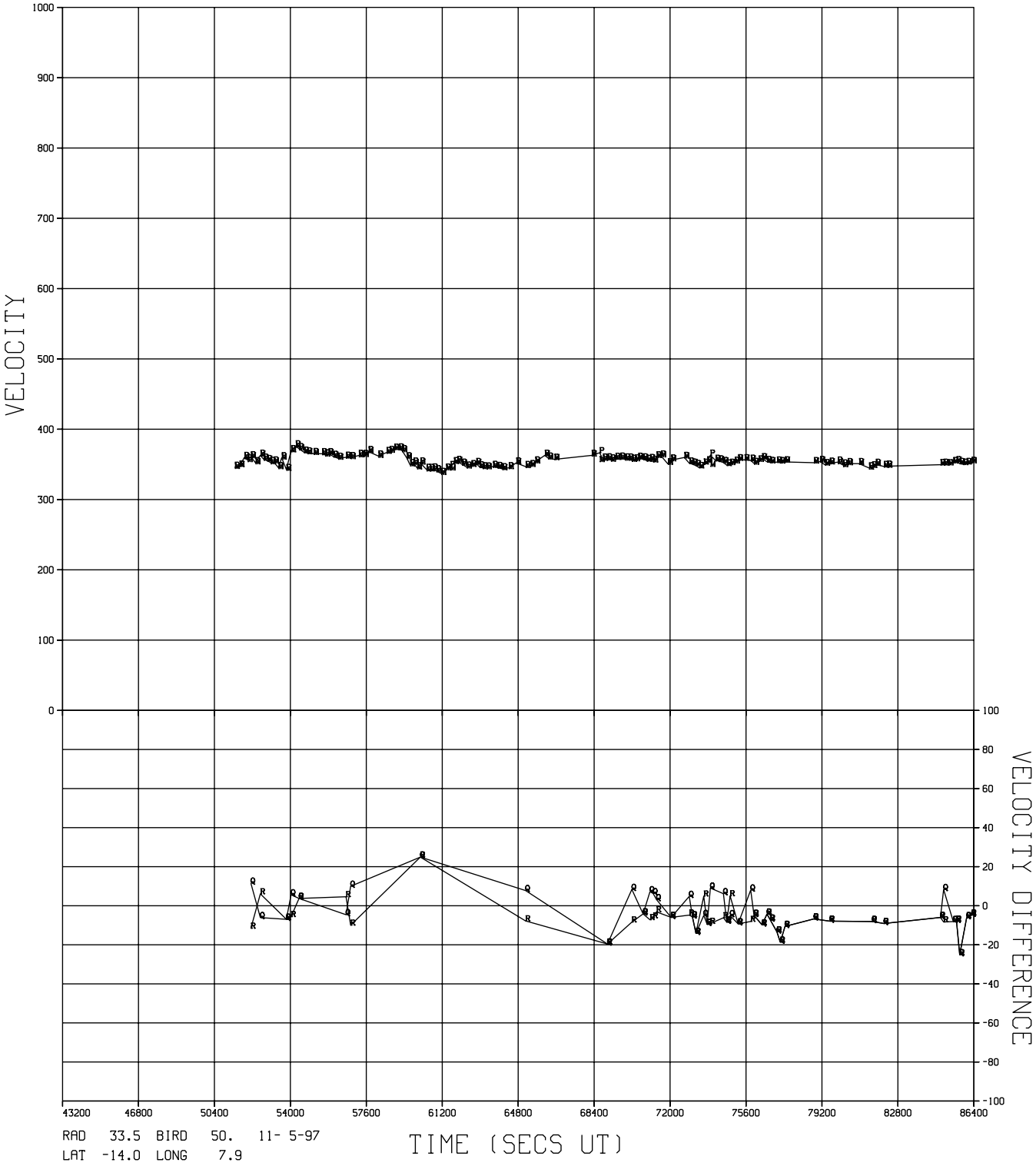

TEMPERATURE
10^7
10^6
10^5
10^4
TEMPERATURE RATIO
0
1
2
3
4
5
6
7
8
9
10
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
TIME (SECS UT)
RAD 34.7 BIRD 50. 11- 5-97
LAT -24.5 LONG -7.5

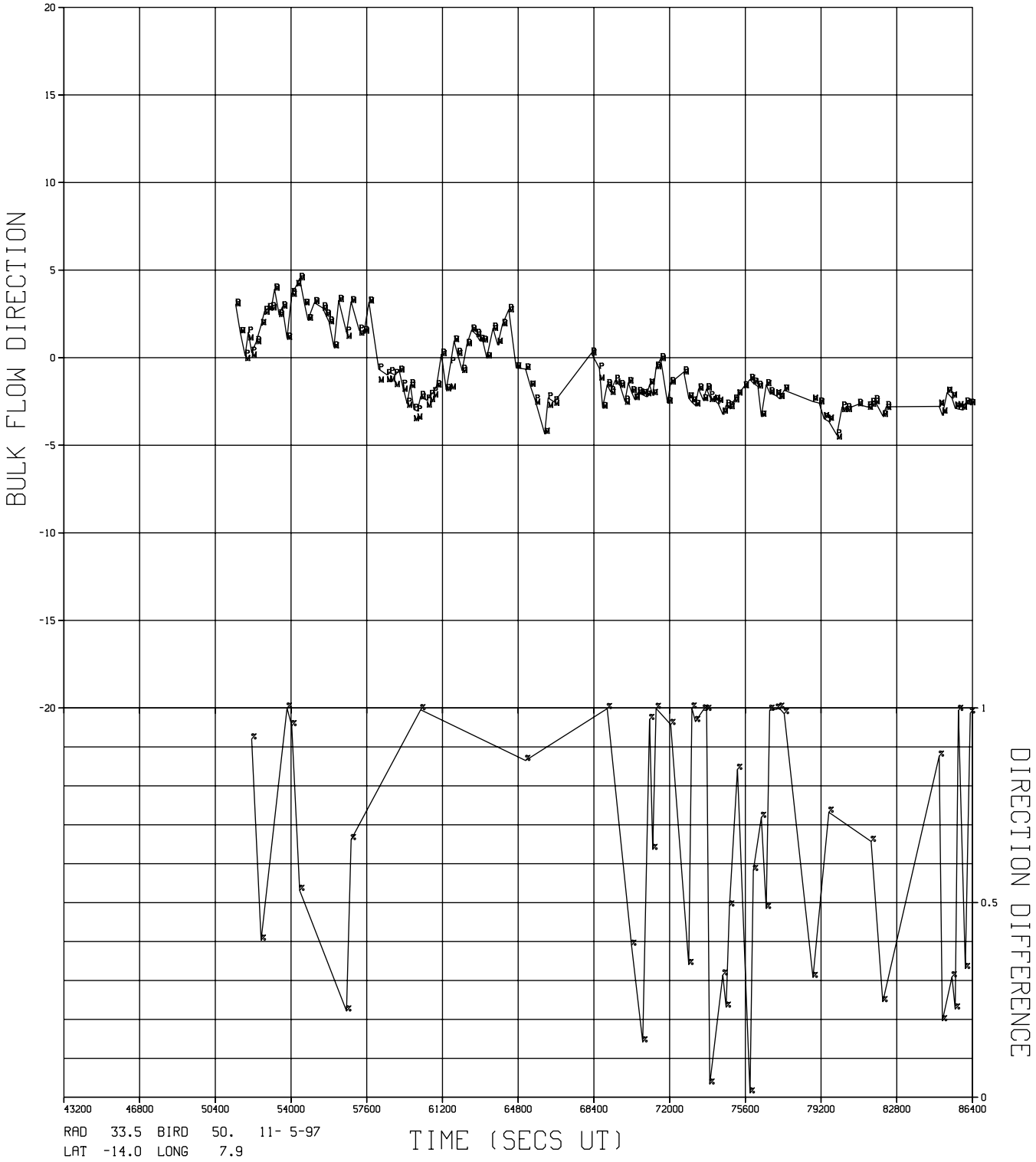

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 34.7 BIRD 50. 11- 5-97
LAT -24.5 LONG -7.5

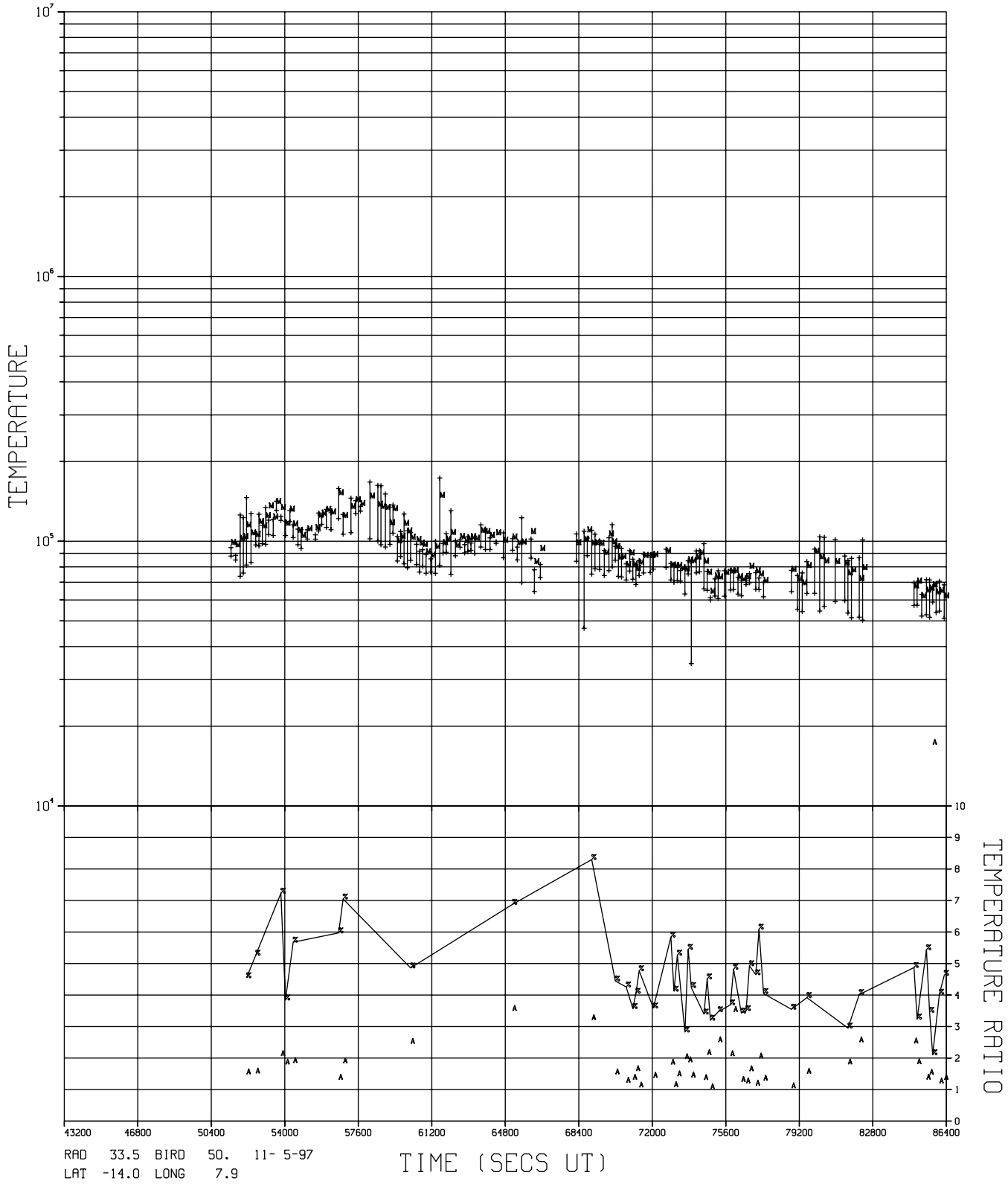

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
RAD 34.7 BIRD 50. 11- 5-97
LAT -24.5 LONG -7.5

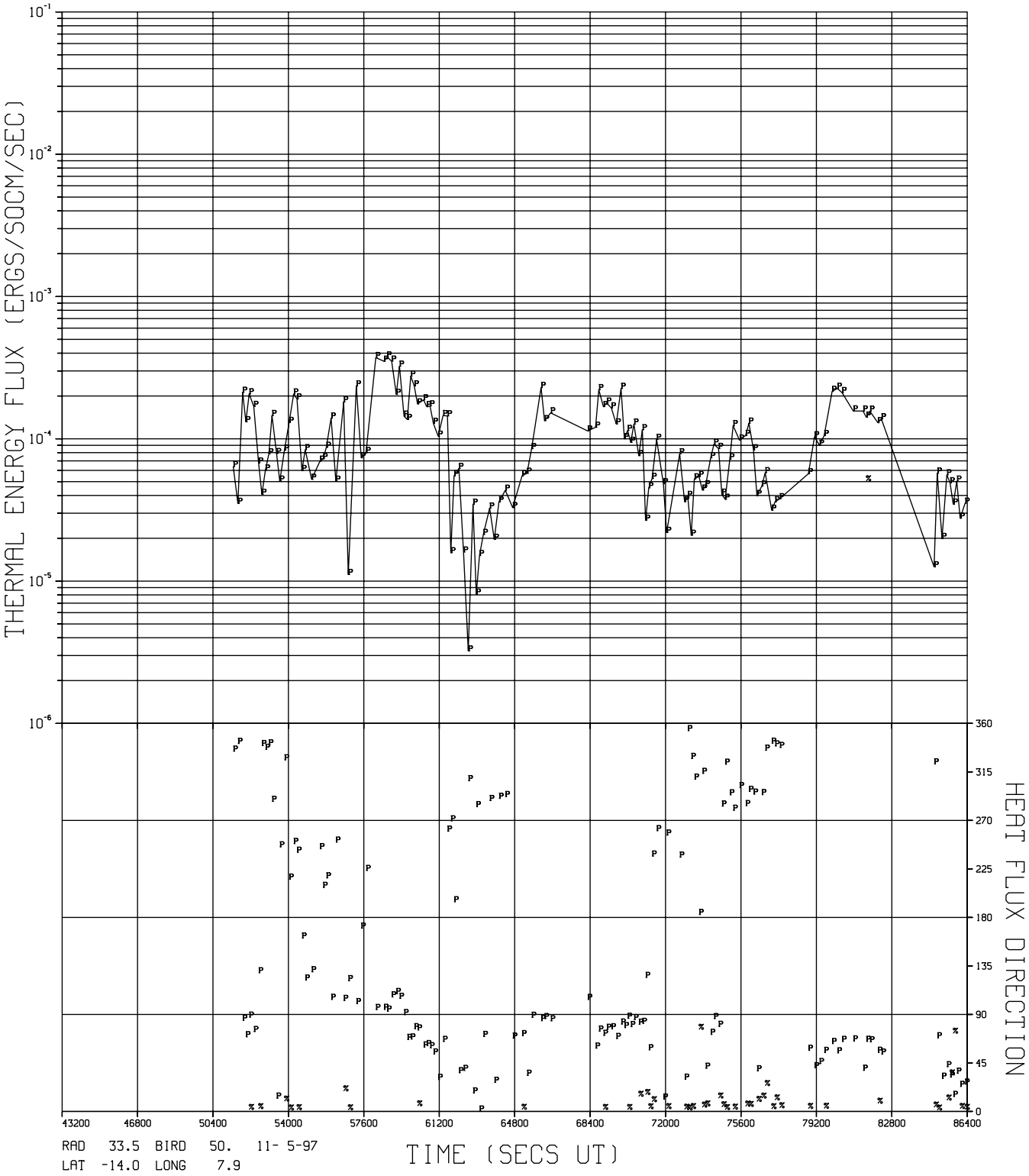

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
TIME (SECS UT)
RAD 34.7 BIRD 50. 11- 5-97
LAT -24.5 LONG -7.5

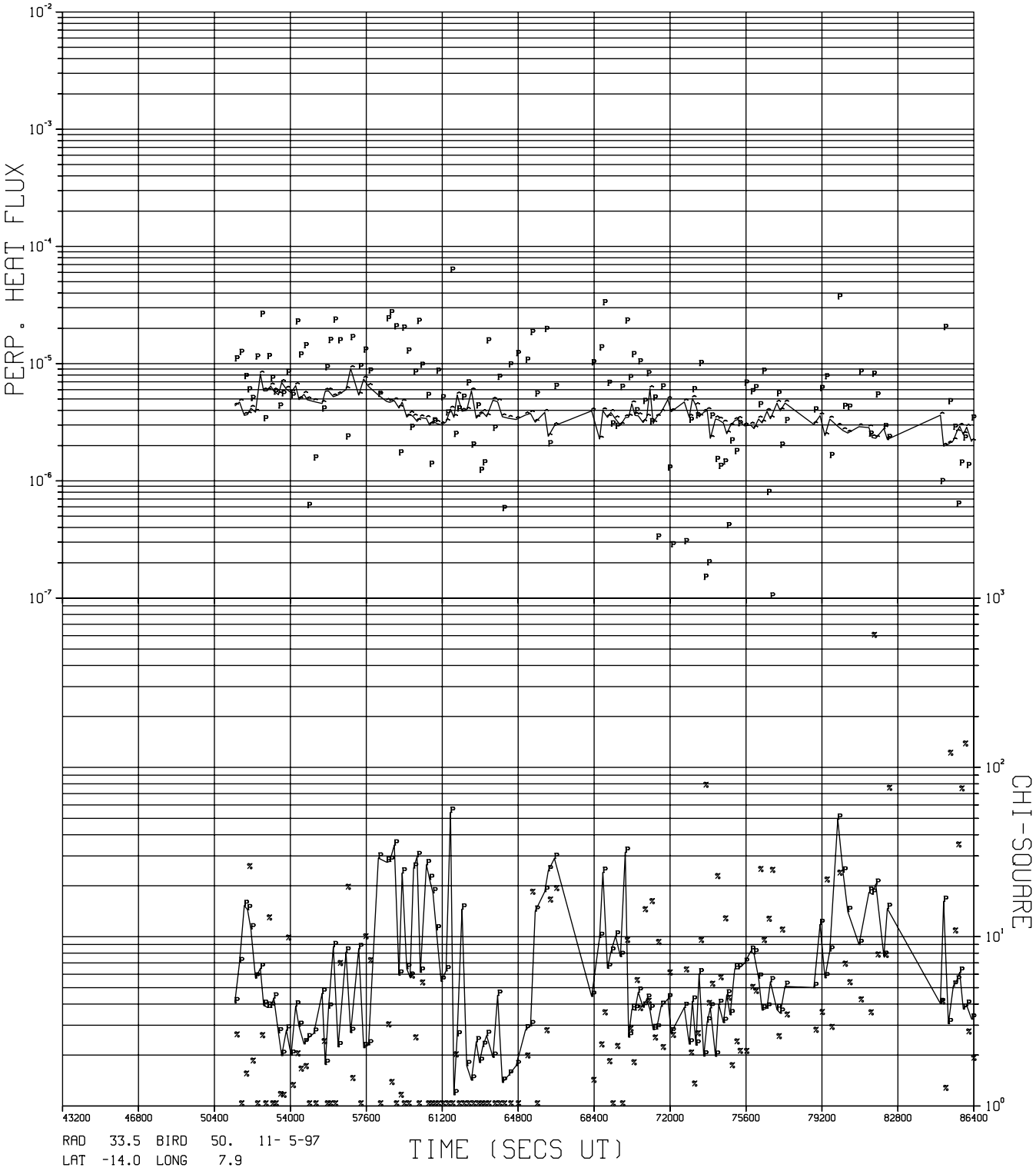

DENSITY
DENSITY RATIO
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 33.5 BIRD 50. 11- 5-97
LAT -14.0 LONG 7.9

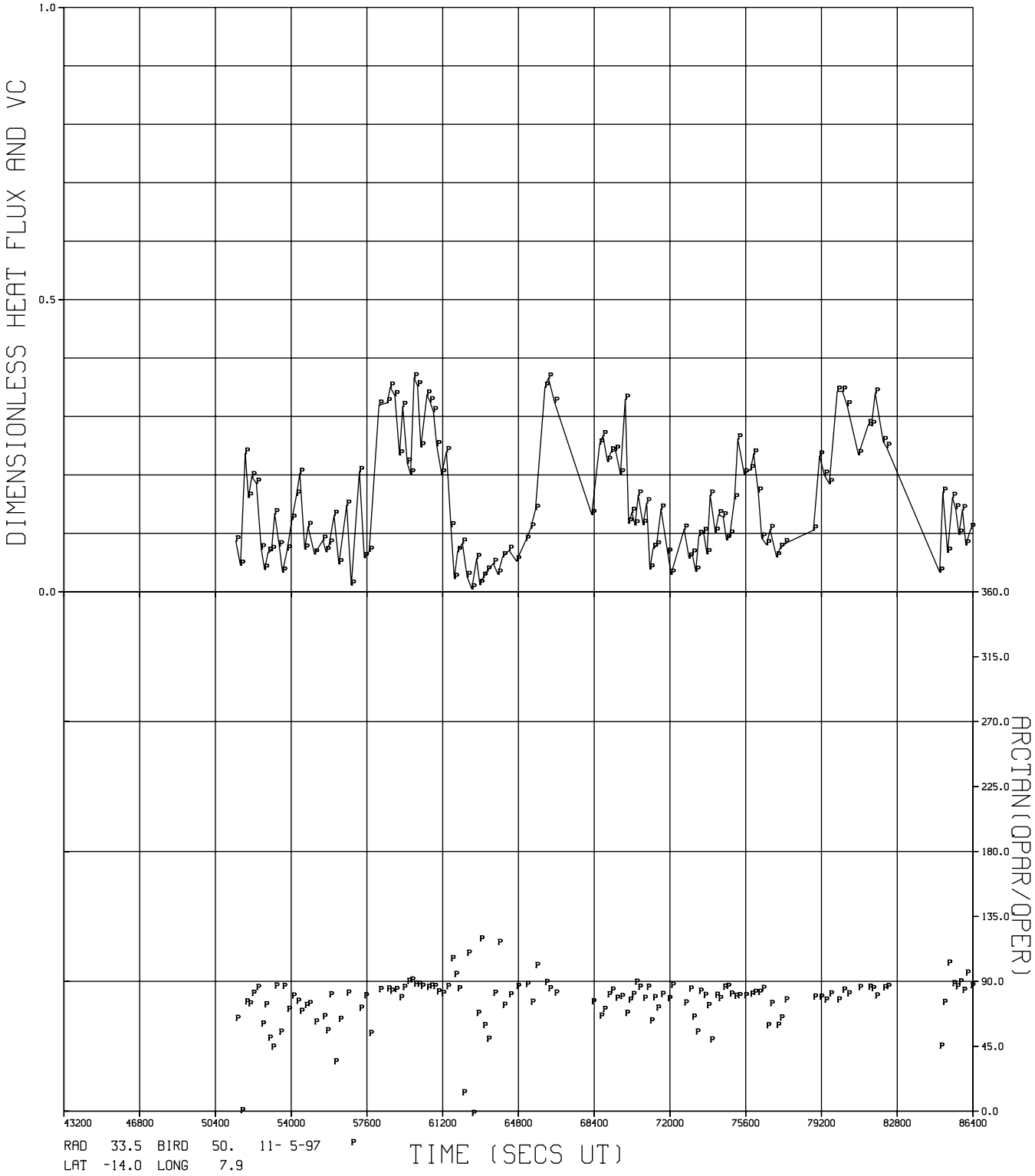

VELOCITY
VELOCITY DIFFERENCE
TIME (SECS UT)
RAD 33.5 BIRD 50. 11- 5-97
LAT -14.0 LONG 7.9

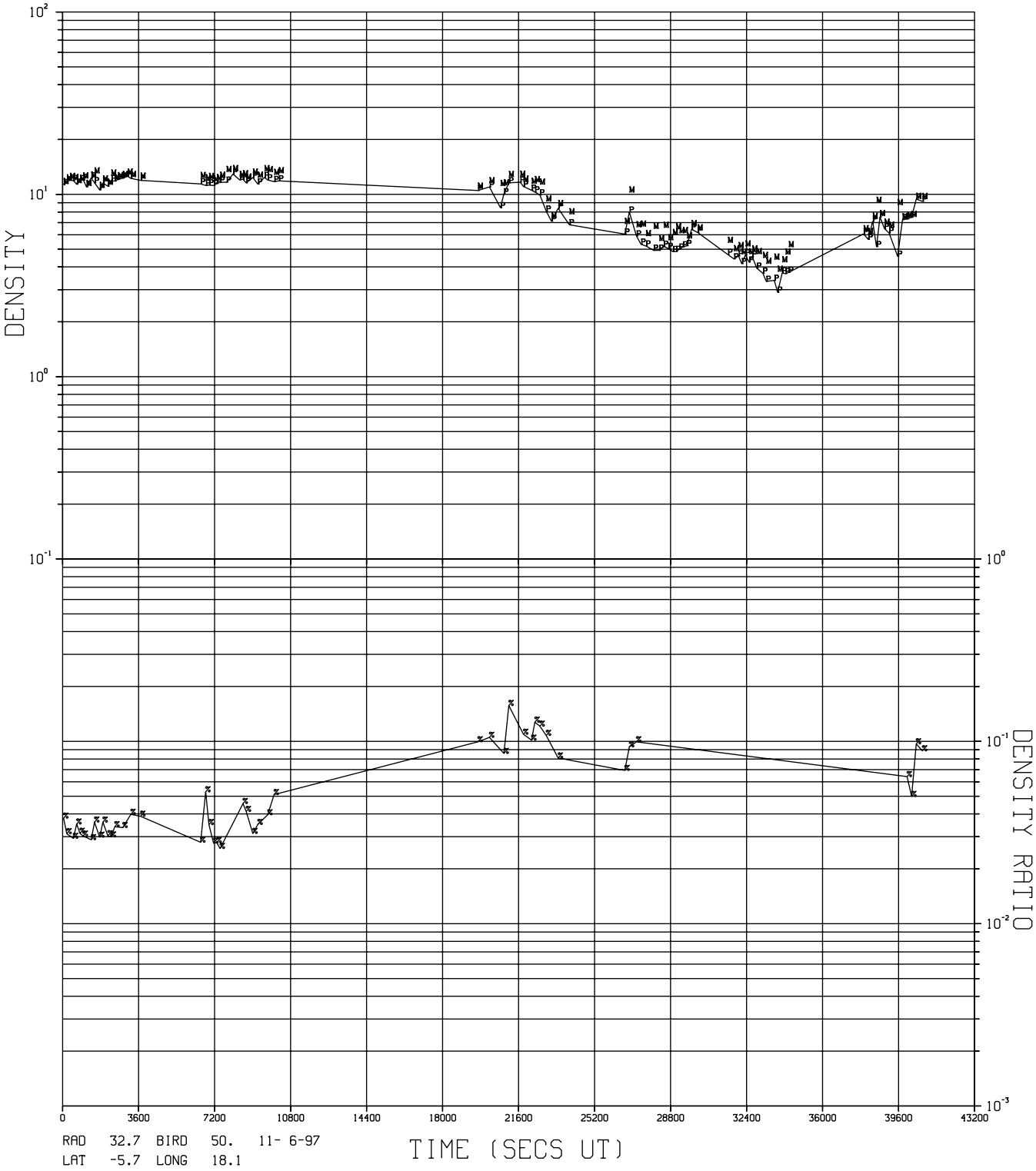

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 33.5 BIRD 50. 11- 5-97
LAT -14.0 LONG 7.9

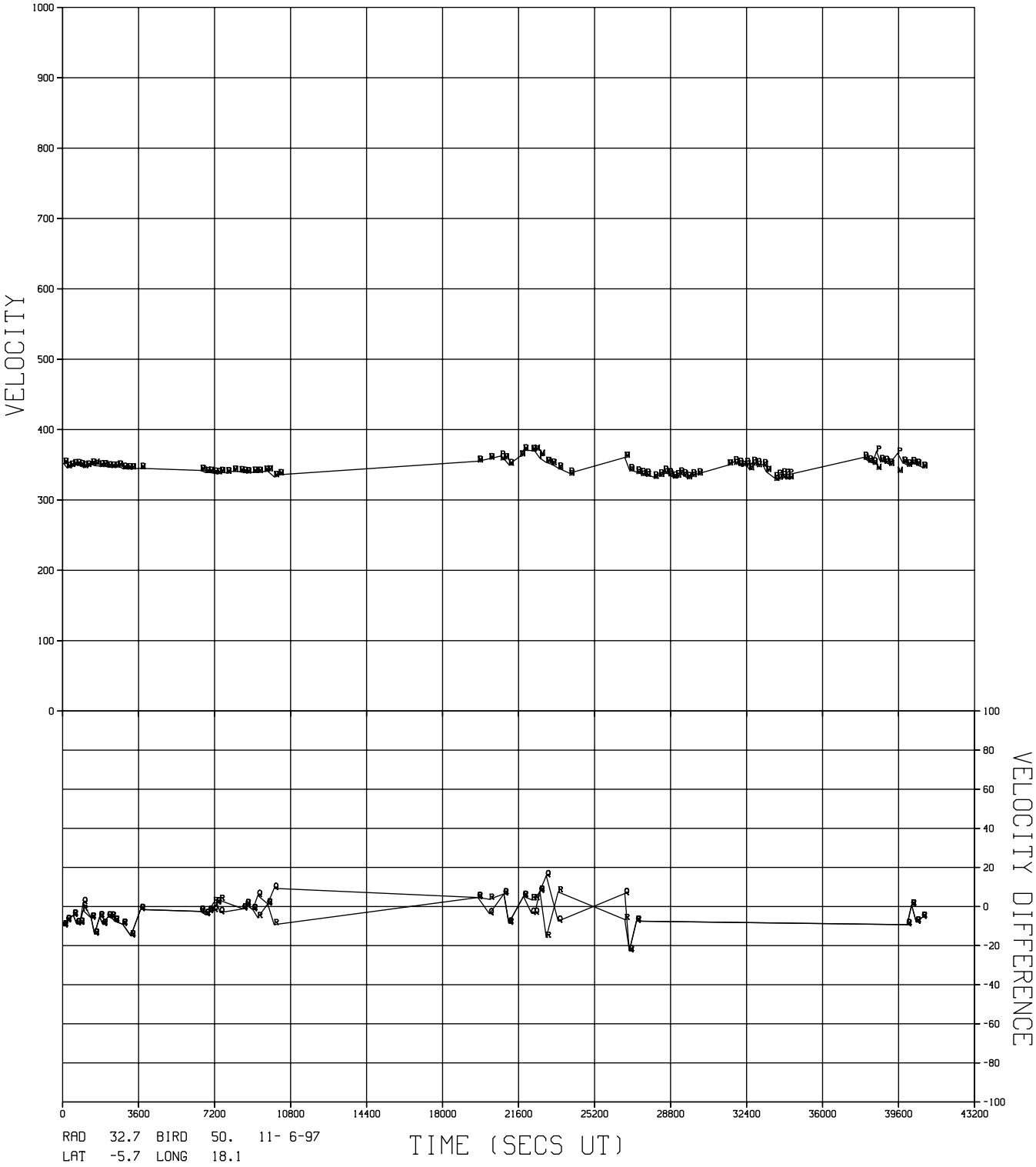

TEMPERATURE
TEMPERATURE RATIO
TIME (SECS UT)
RAD 33.5 BIRD 50. 11- 5-97
LAT -14.0 LONG 7.9

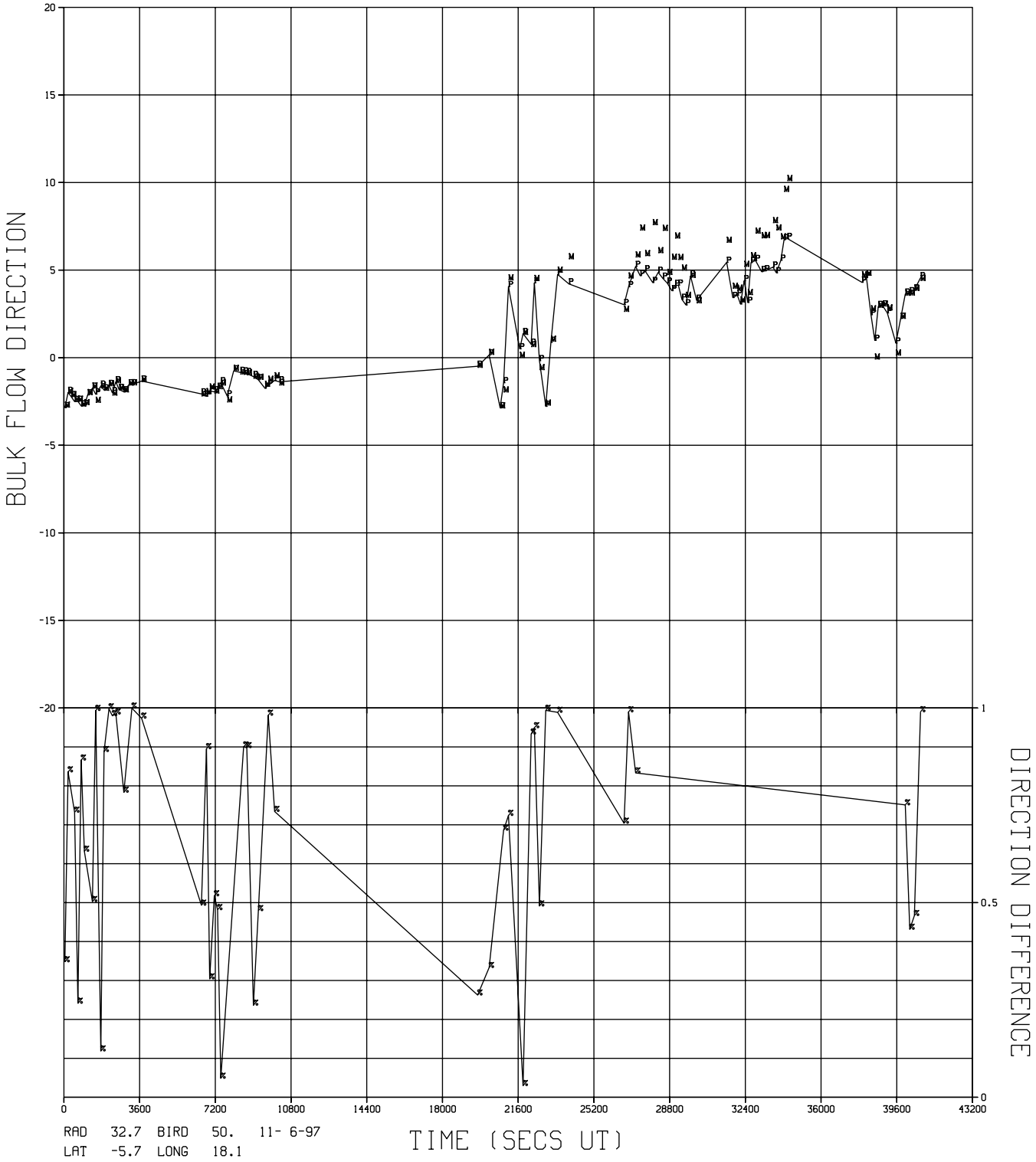

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 33.5 BIRD 50. 11- 5-97
LAT -14.0 LONG 7.9

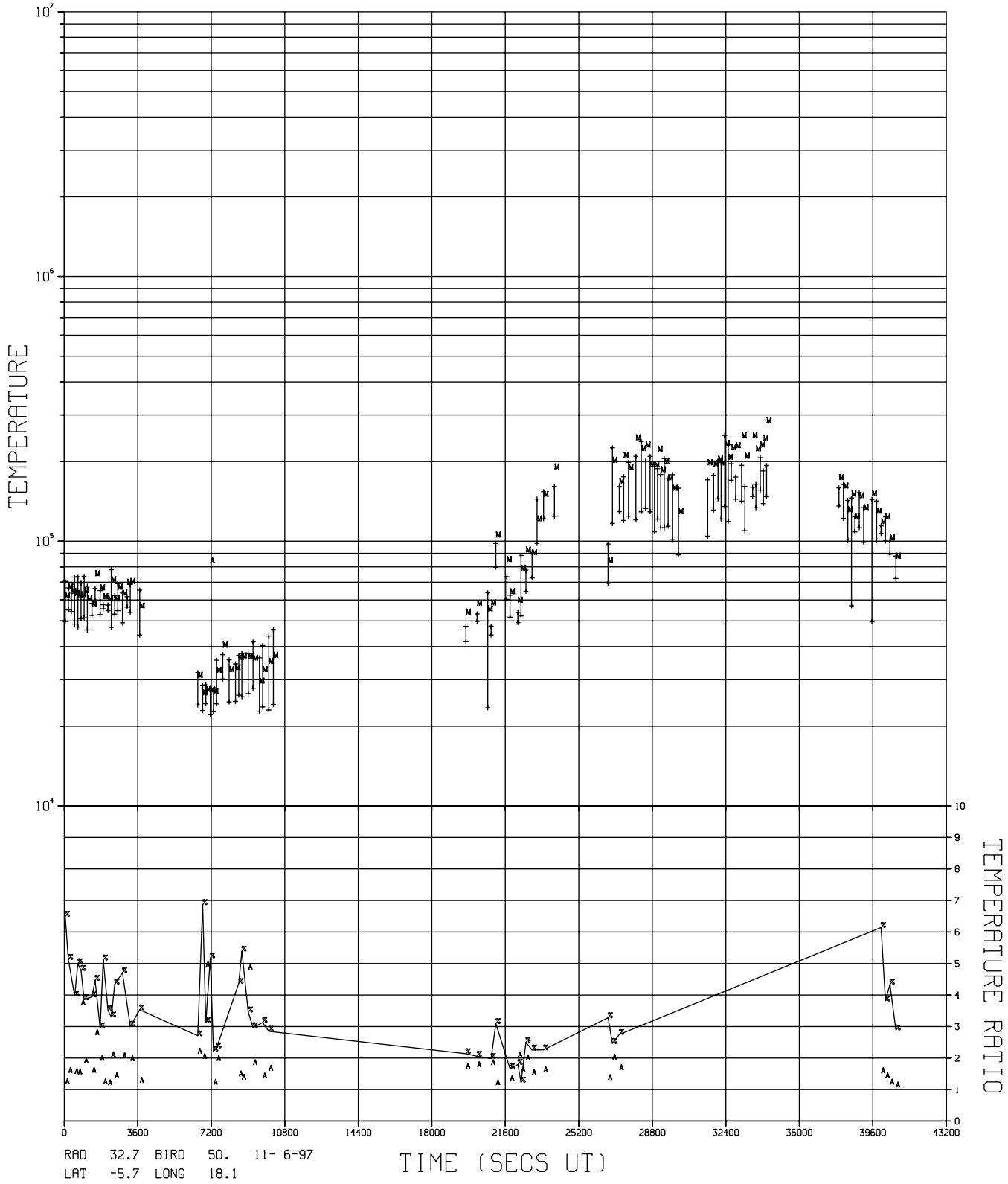

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 33.5 BIRD 50. 11- 5-97
LAT -14.0 LONG 7.9

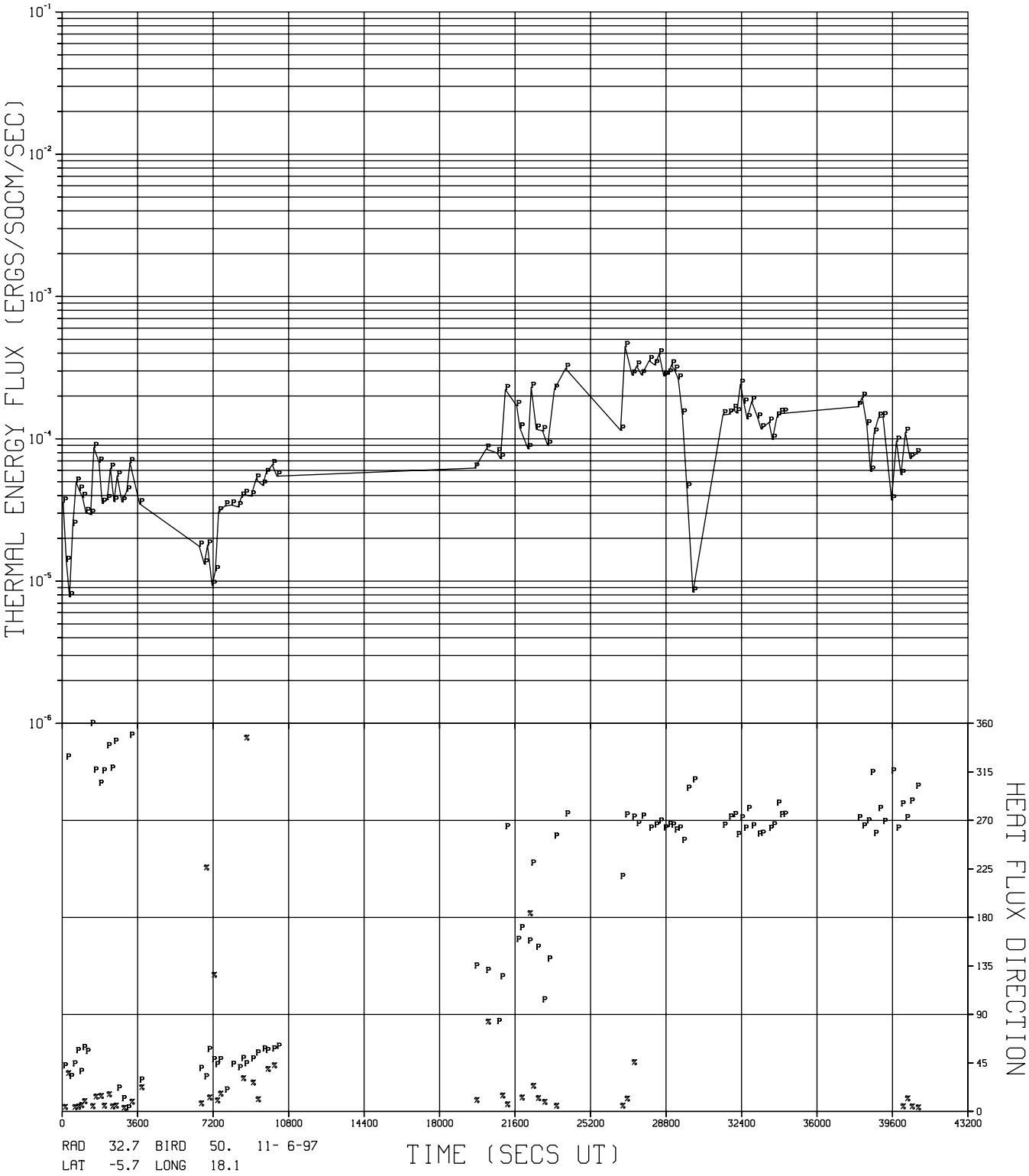

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
TIME (SECS UT)
RAD 33.5 BIRD 50. 11- 5-97
LAT -14.0 LONG 7.9

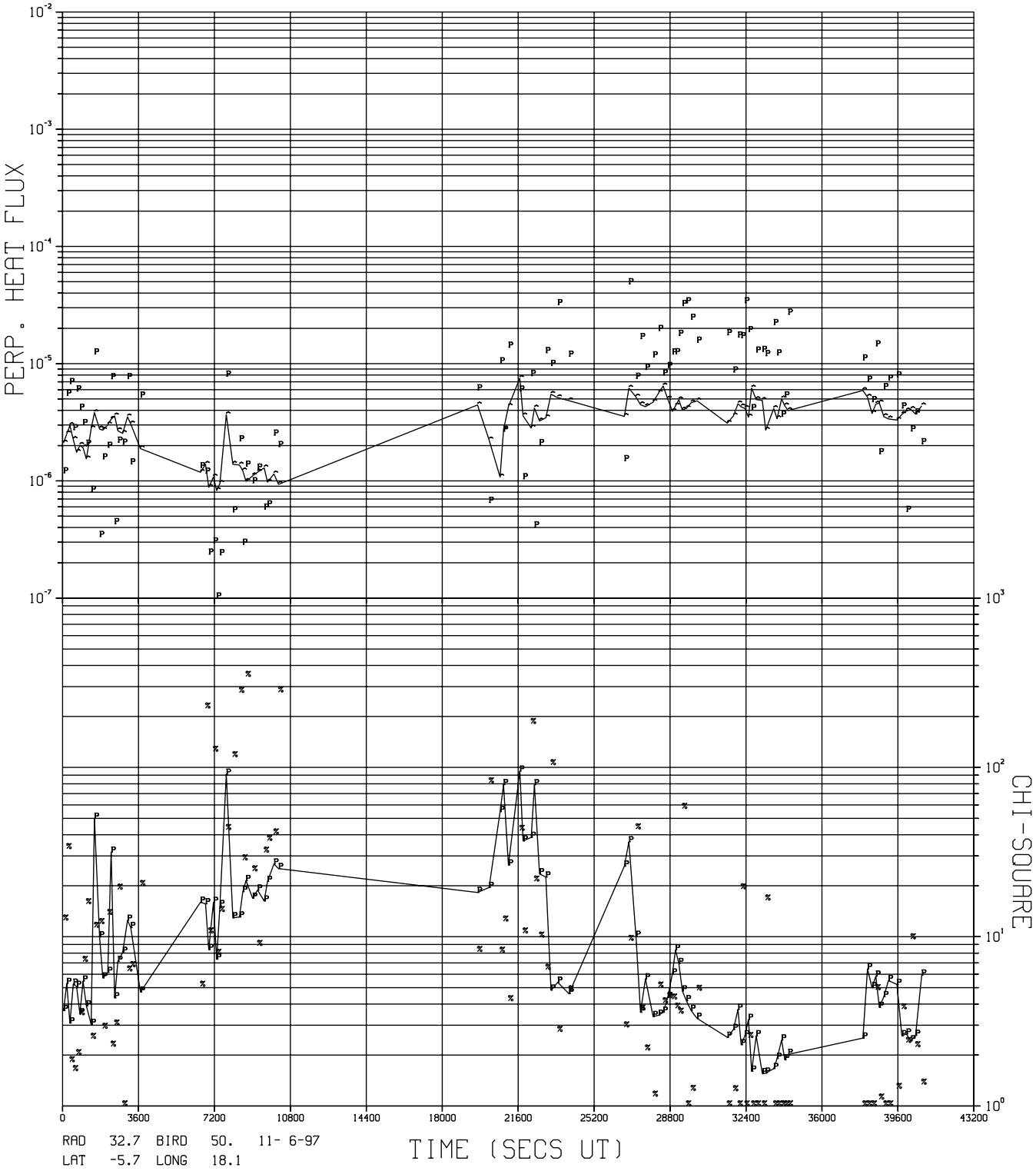

DENSITY
DENSITY RATIO
TIME (SECS UT)
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
RAD 32.7 BIRD 50. 11- 6-97
LAT -5.7 LONG 18.1

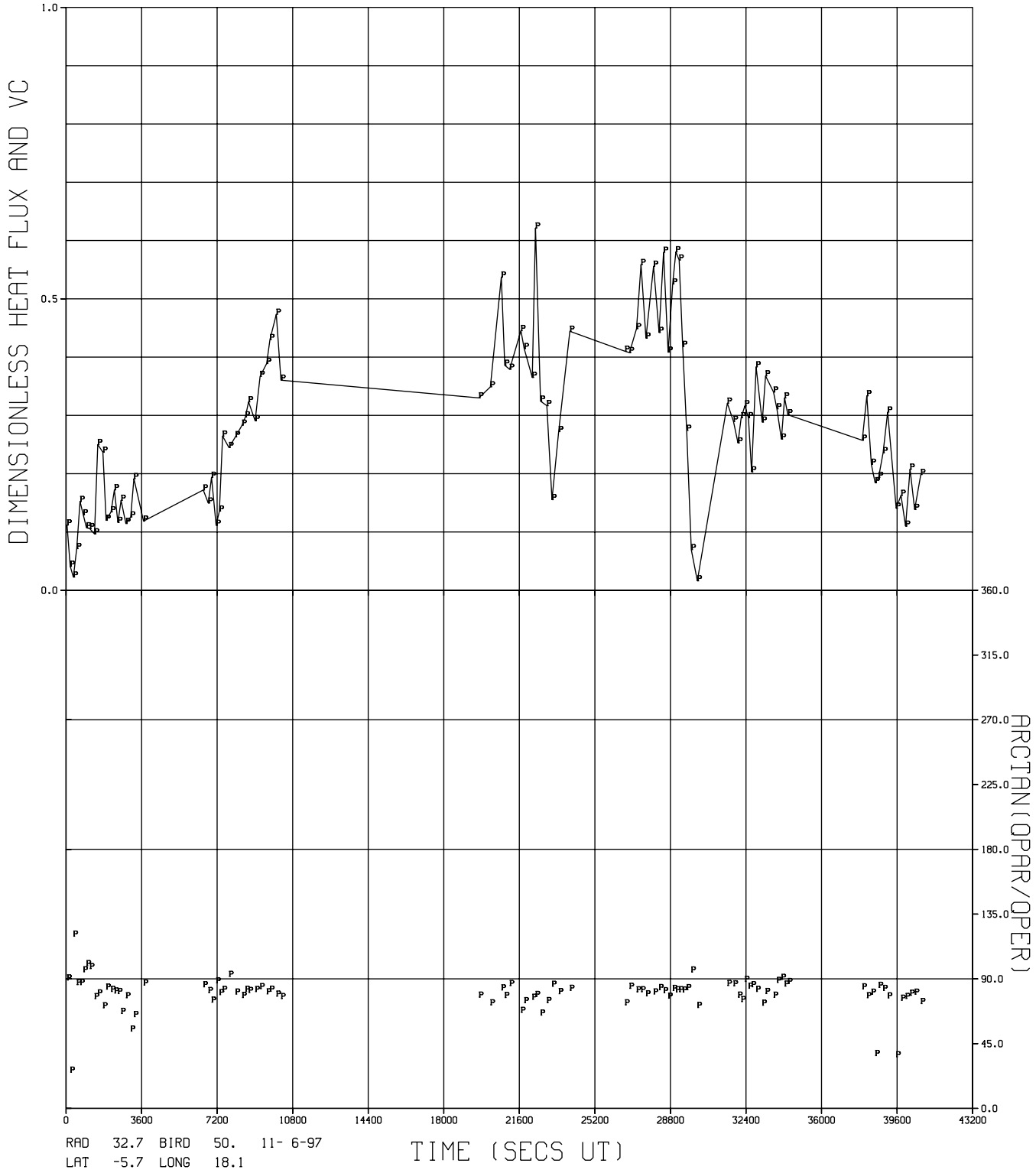

VELOCITY
1000
900
800
700
600
500
400
300
200
100
0
VELOCITY DIFFERENCE
100
80
60
40
20
0
-20
-40
-60
-80
-100
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
TIME (SECS UT)
RAD 32.7 BIRD 50. 11- 6-97
LAT -5.7 LONG 18.1

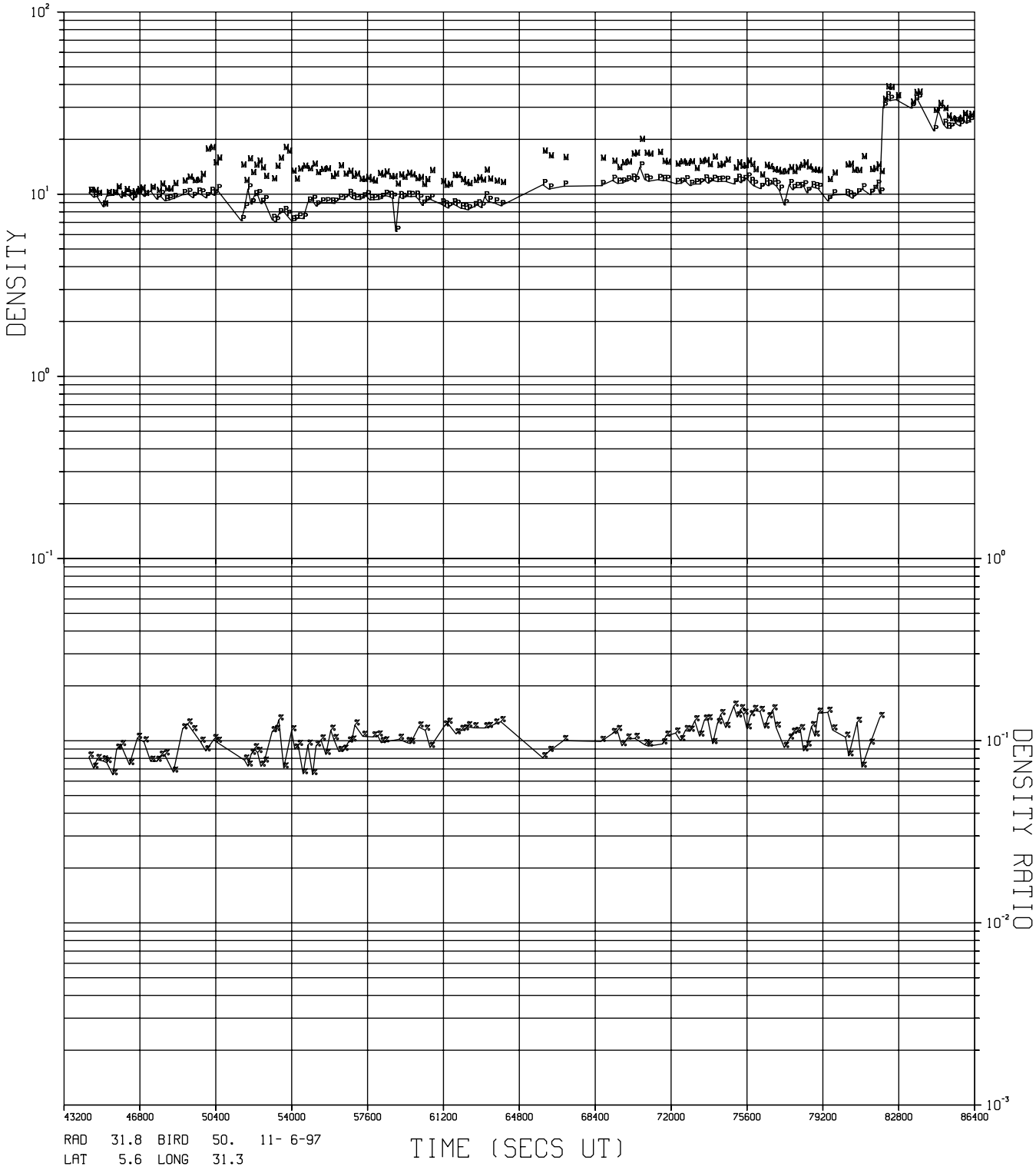

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
RAD 32.7 BIRD 50. 11- 6-97
LAT -5.7 LONG 18.1

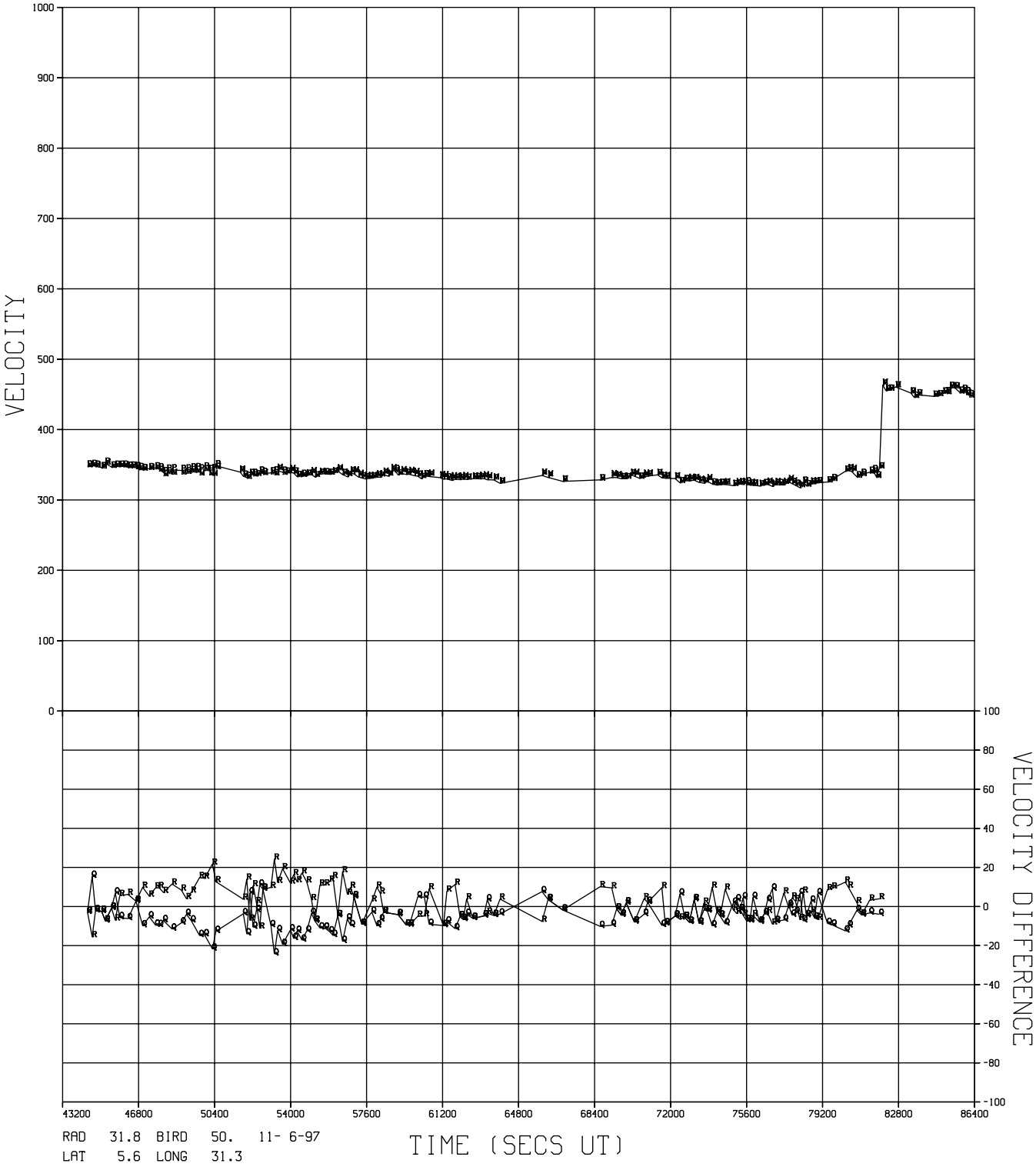

TEMPERATURE
TEMPERATURE RATIO
TIME (SECS UT)
RAD 32.7 BIRD 50. 11- 6-97
LAT -5.7 LONG 18.1

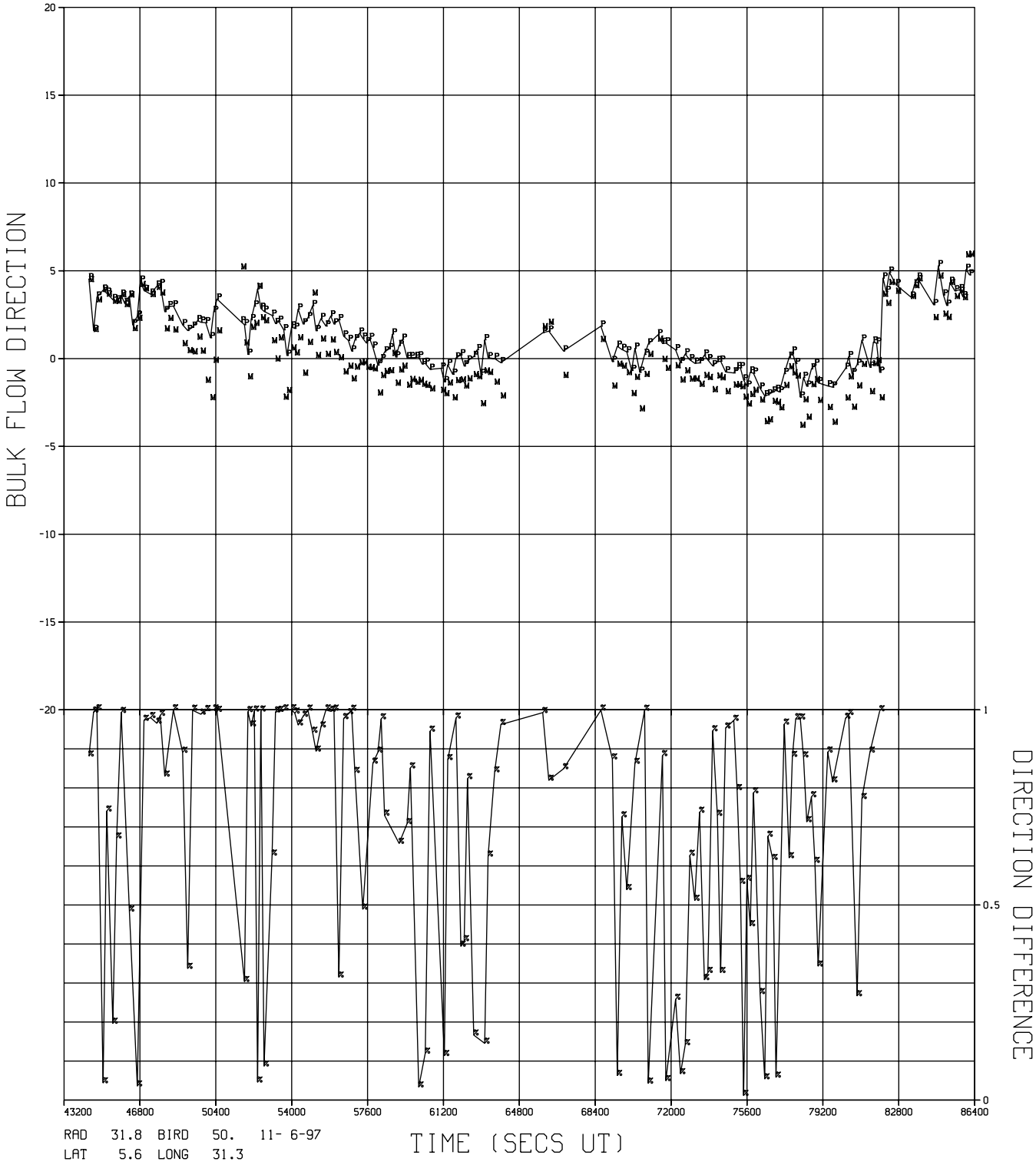

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 32.7 BIRD 50. 11- 6-97
LAT -5.7 LONG 18.1

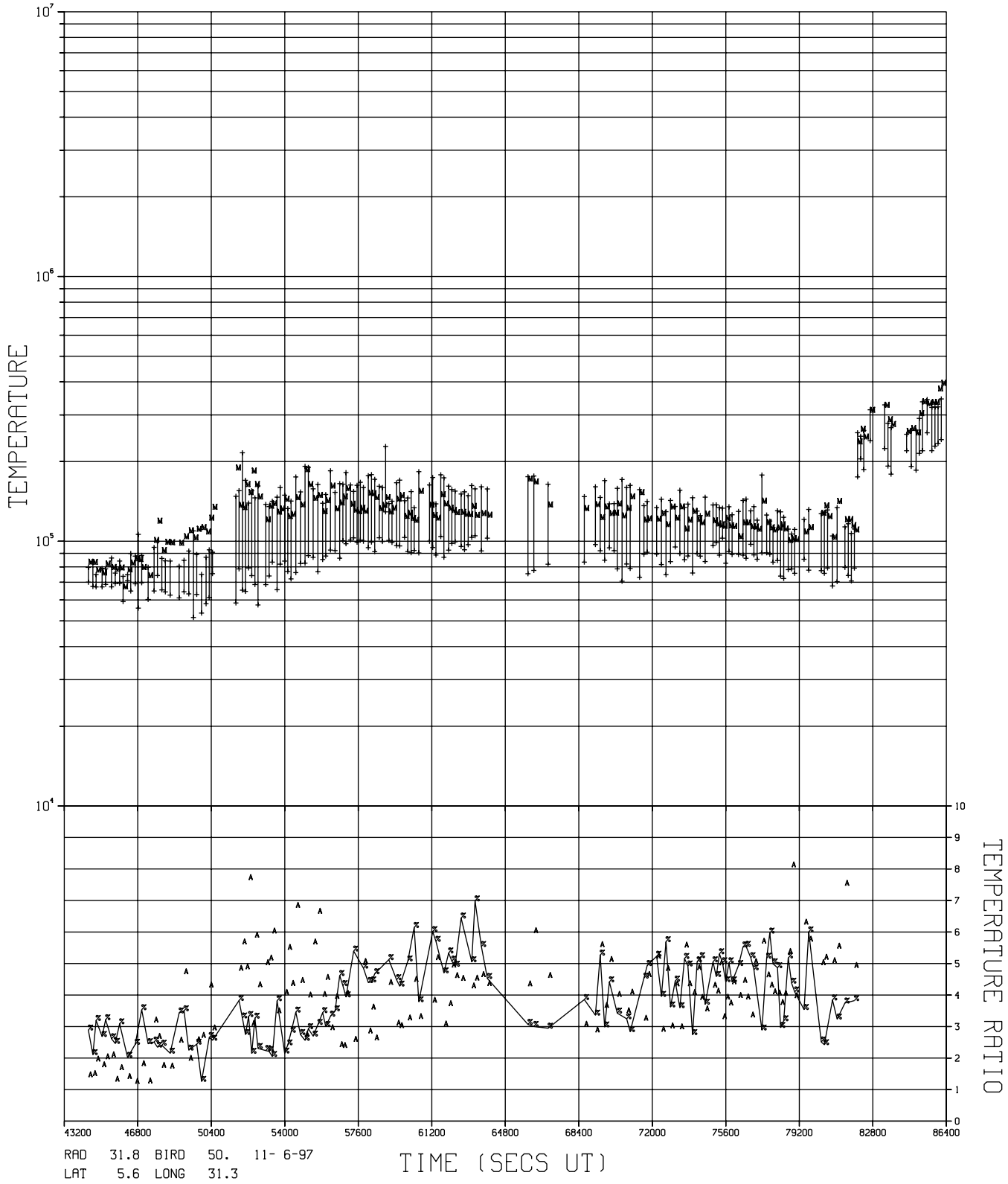

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
RAD 32.7 BIRD 50. 11- 6-97
LAT -5.7 LONG 18.1

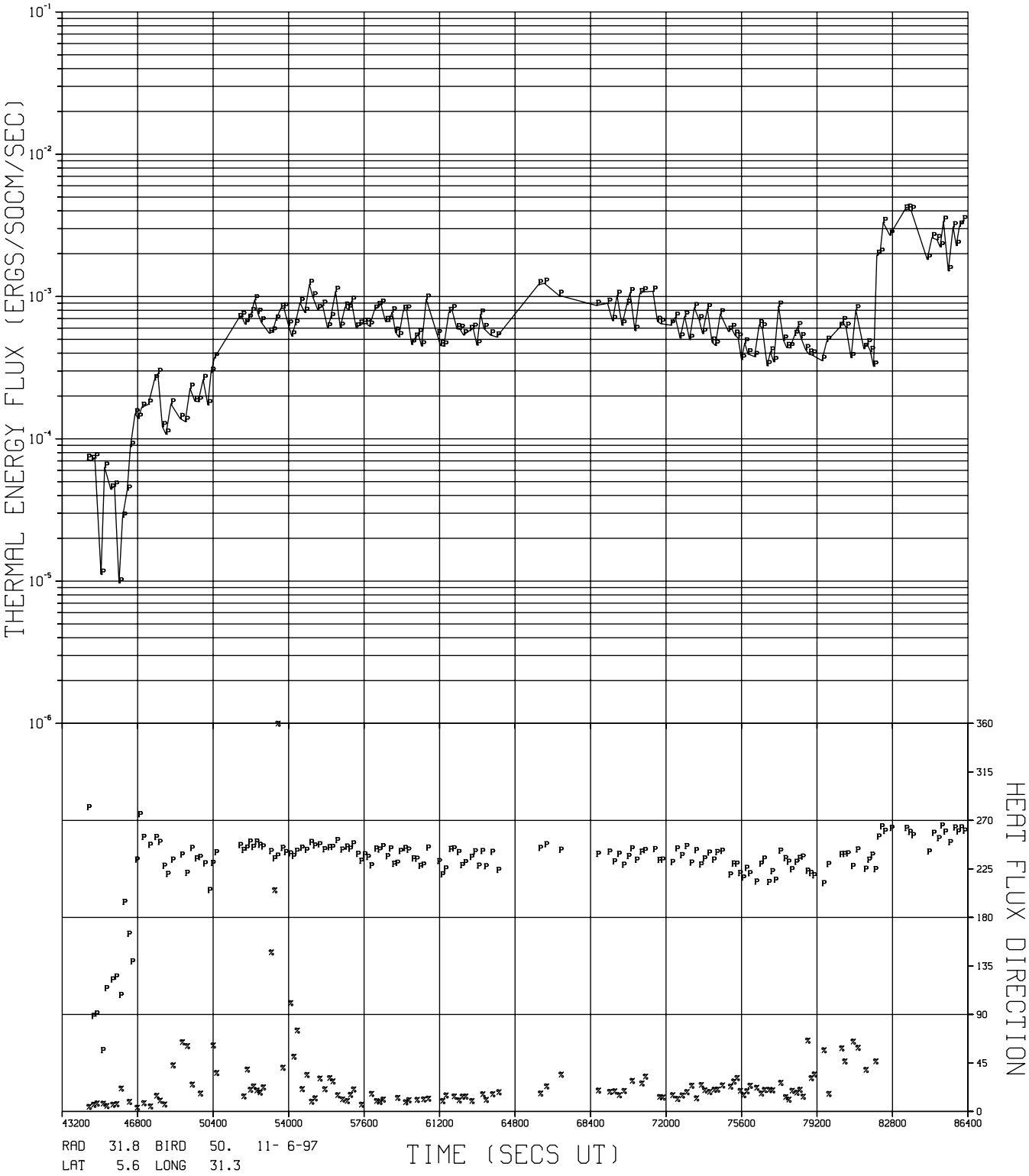

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
TIME (SECS UT)
RAD 32.7 BIRD 50. 11- 6-97
LAT -5.7 LONG 18.1

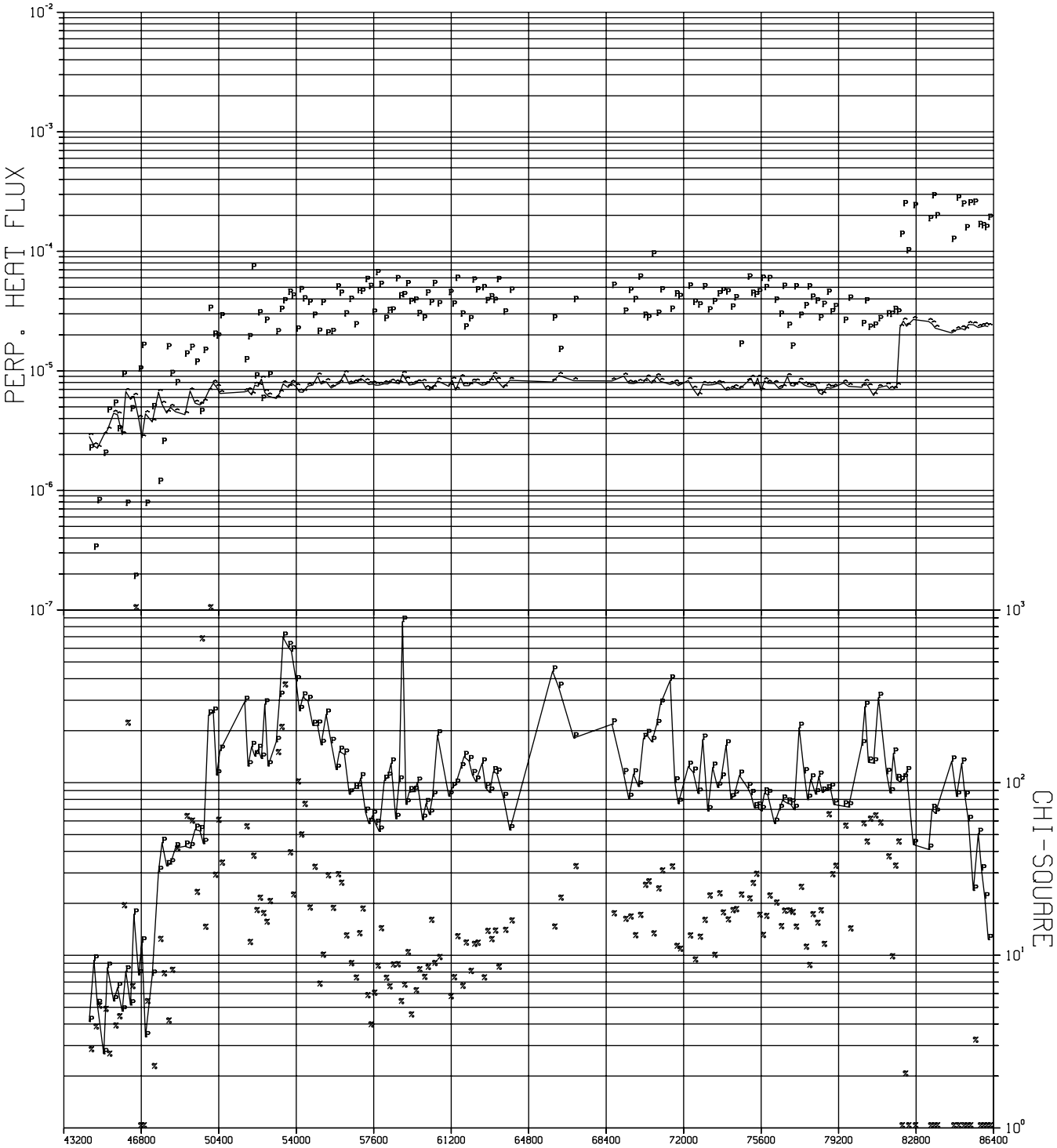

DENSITY
DENSITY RATIO
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 31.8 BIRD 50. 11- 6-97
LAT 5.6 LONG 31.3


VELOCITY
1000
900
800
700
600
500
400
300
200
100
0
VELOCITY DIFFERENCE
100
80
60
40
20
0
-20
-40
-60
-80
-100
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 31.8 BIRD 50. 11- 6-97
LAT 5.6 LONG 31.3
TIME (SECS UT)

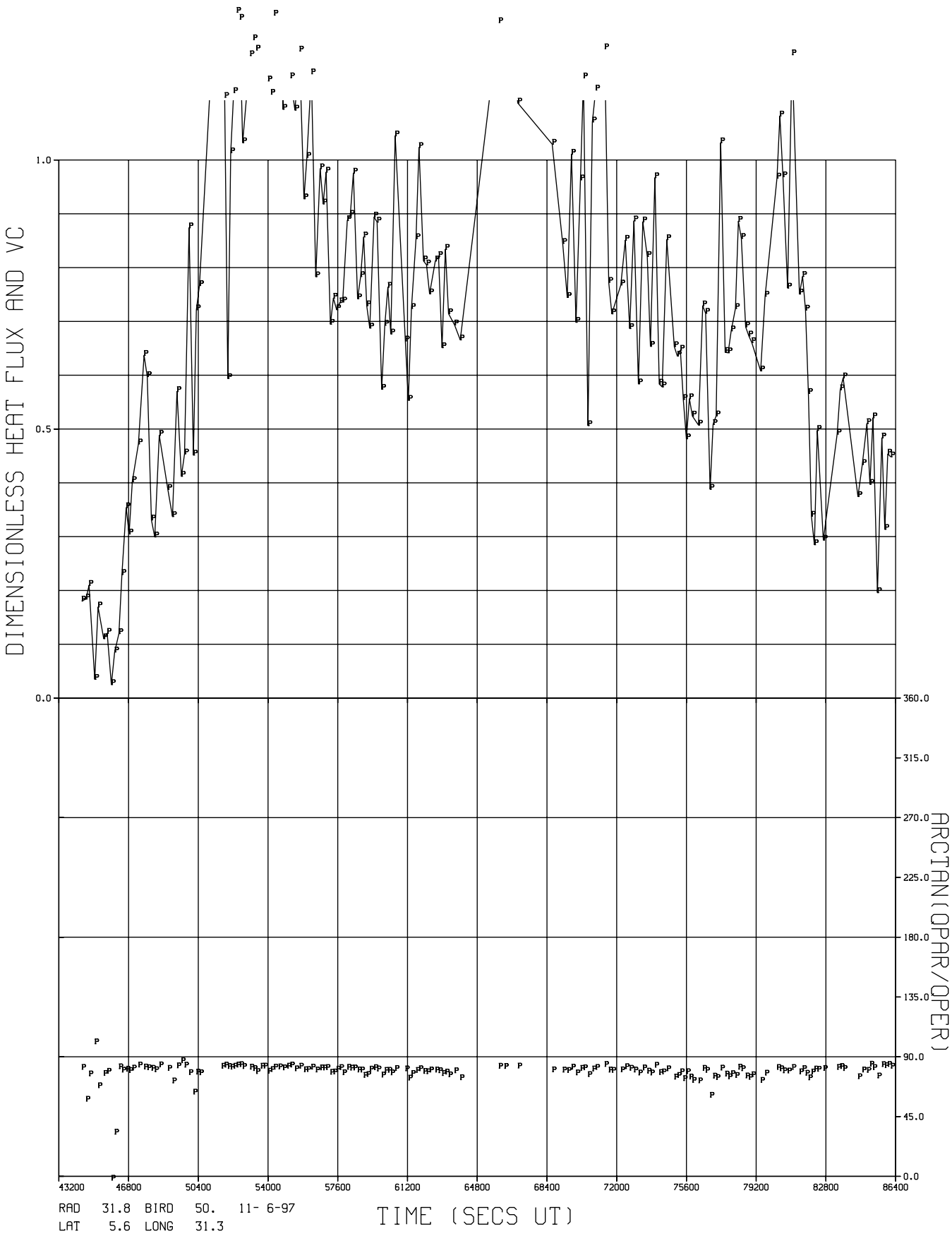

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 31.8 BIRD 50. 11- 6-97
LAT 5.6 LONG 31.3


TEMPERATURE
TEMPERATURE RATIO
TIME (SECS UT)
RAD 31.8 BIRD 50. 11- 6-97
LAT 5.6 LONG 31.3

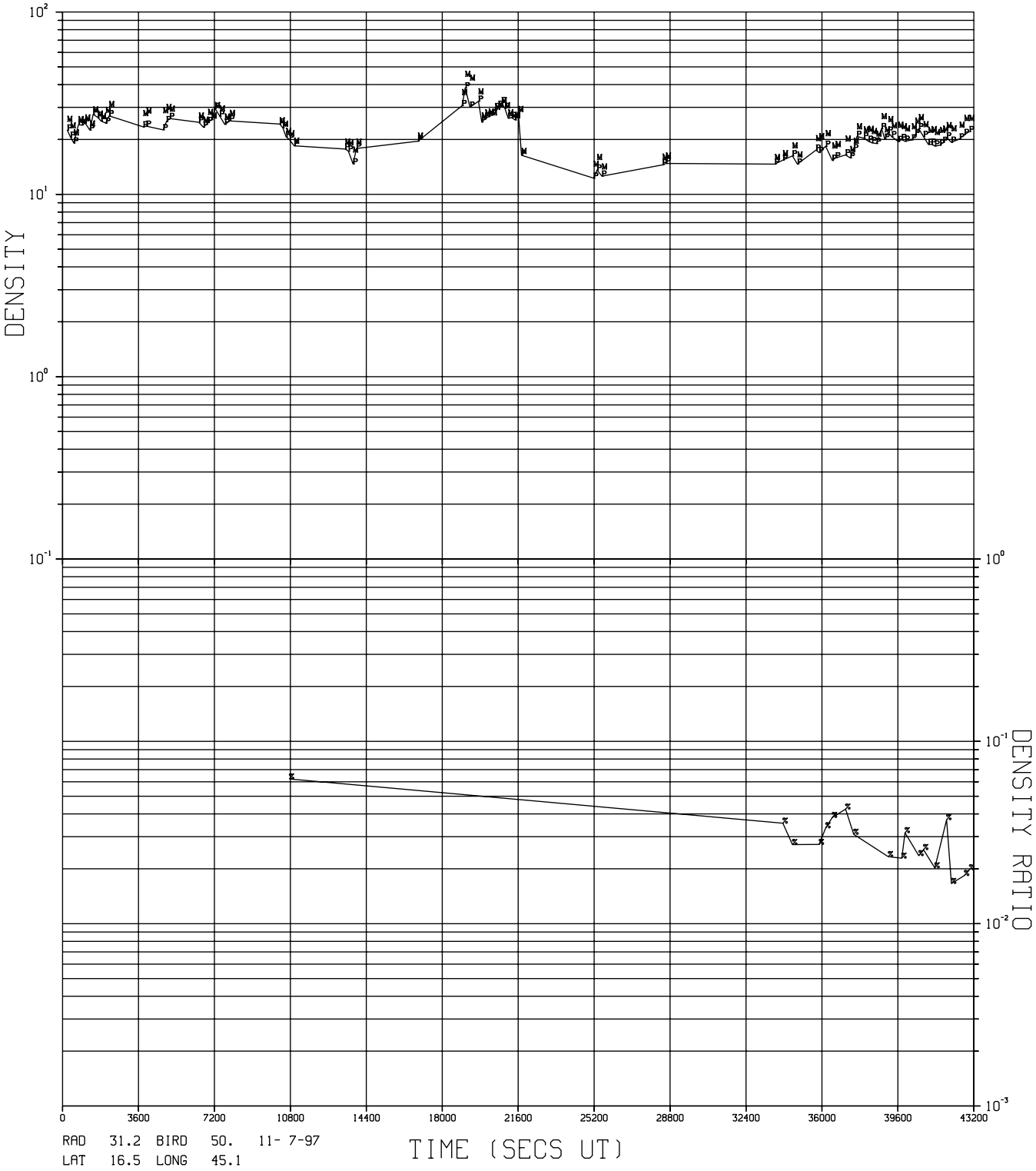

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 31.8 BIRD 50. 11- 6-97
LAT 5.6 LONG 31.3

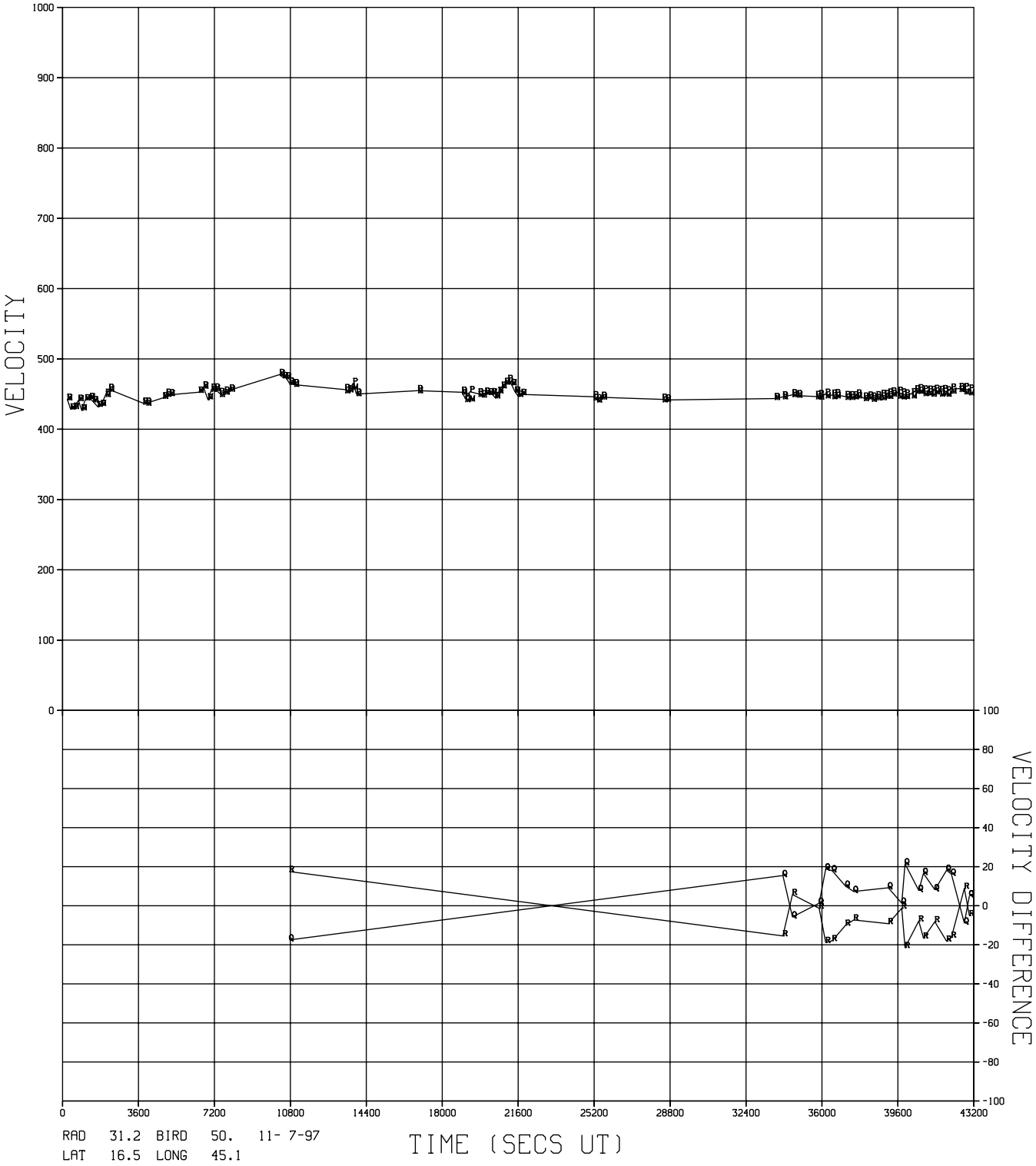


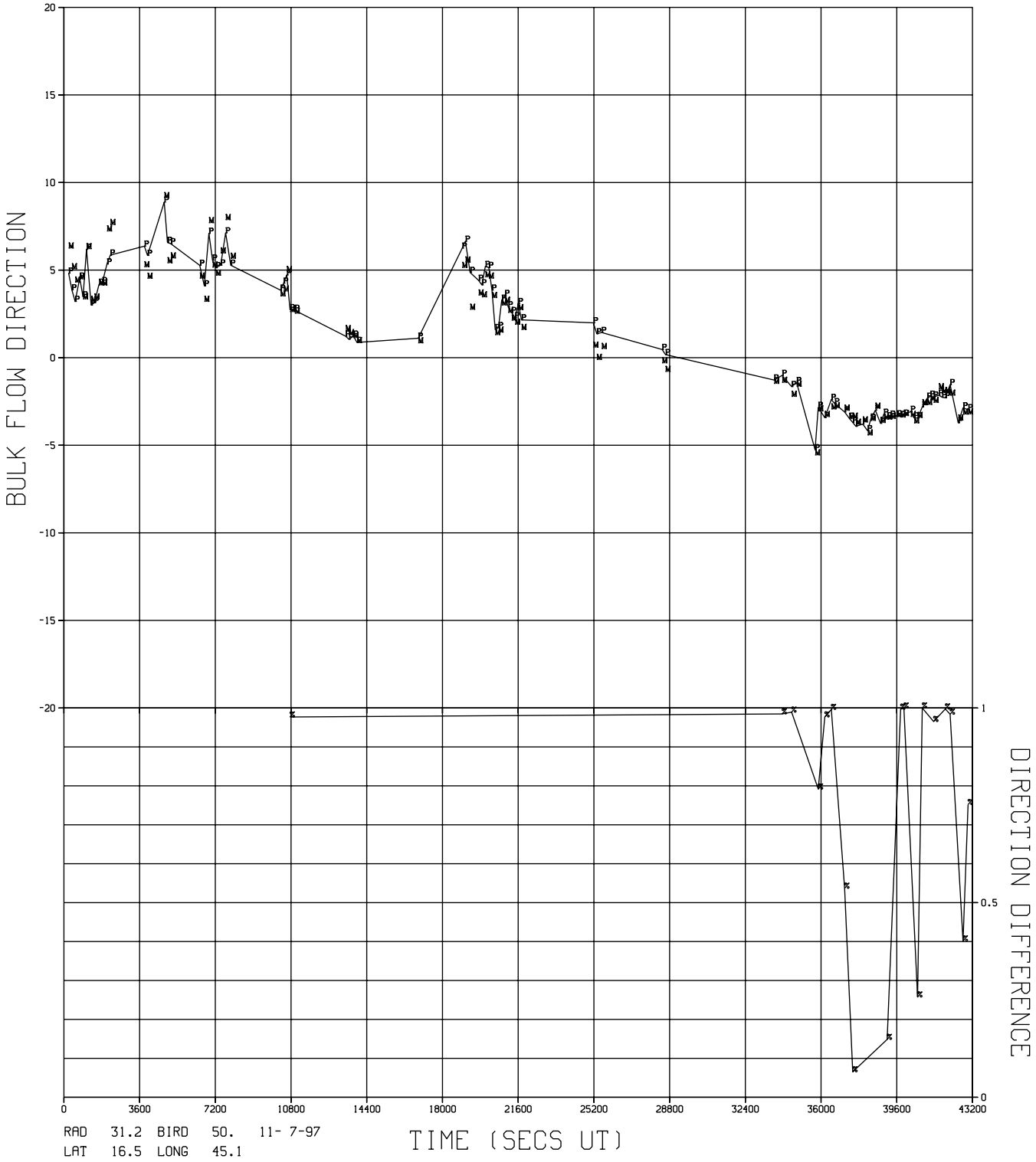
RAD 31.8 BIRD 50. 11- 6-97
LAT 5.6 LONG 31.3

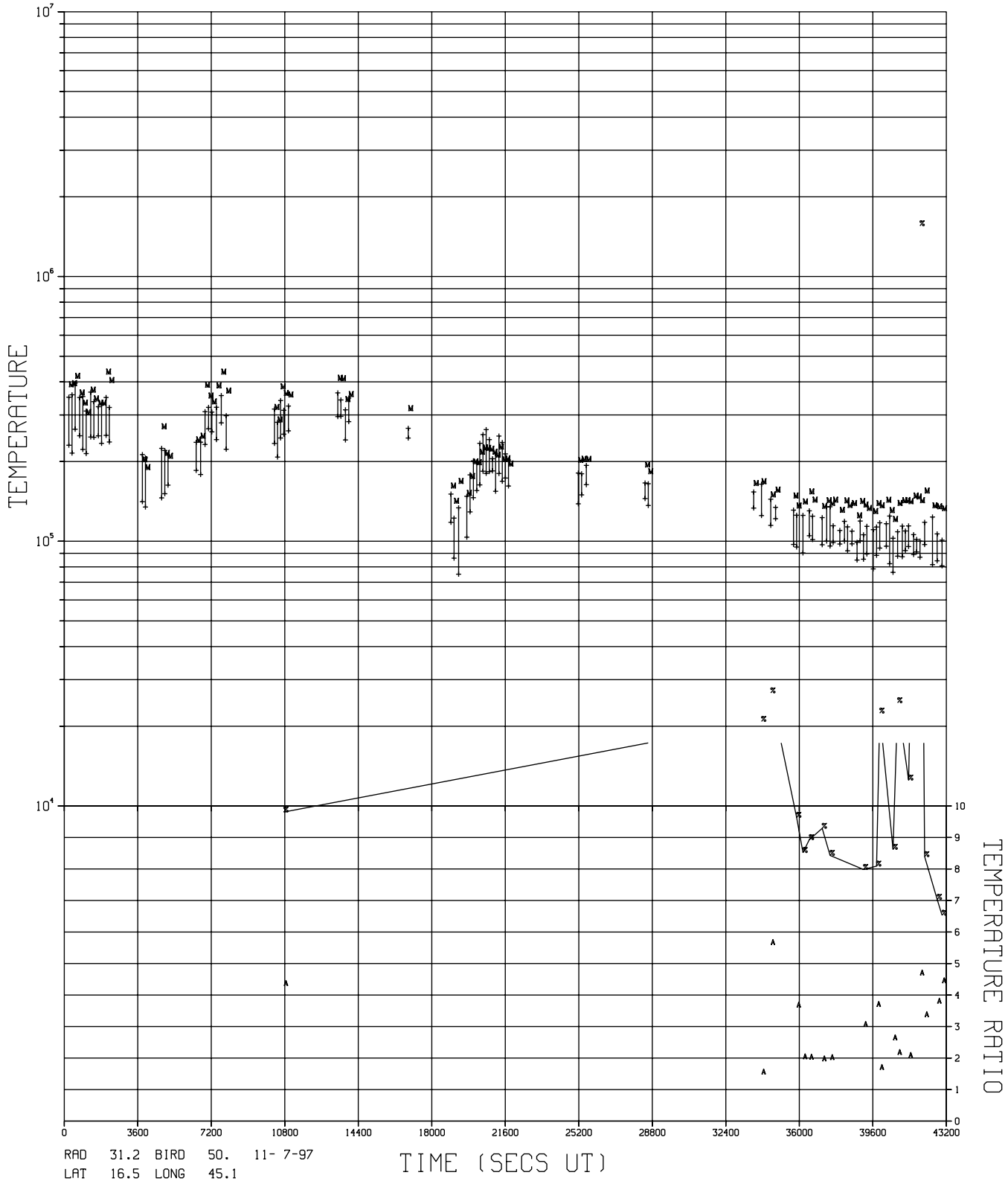


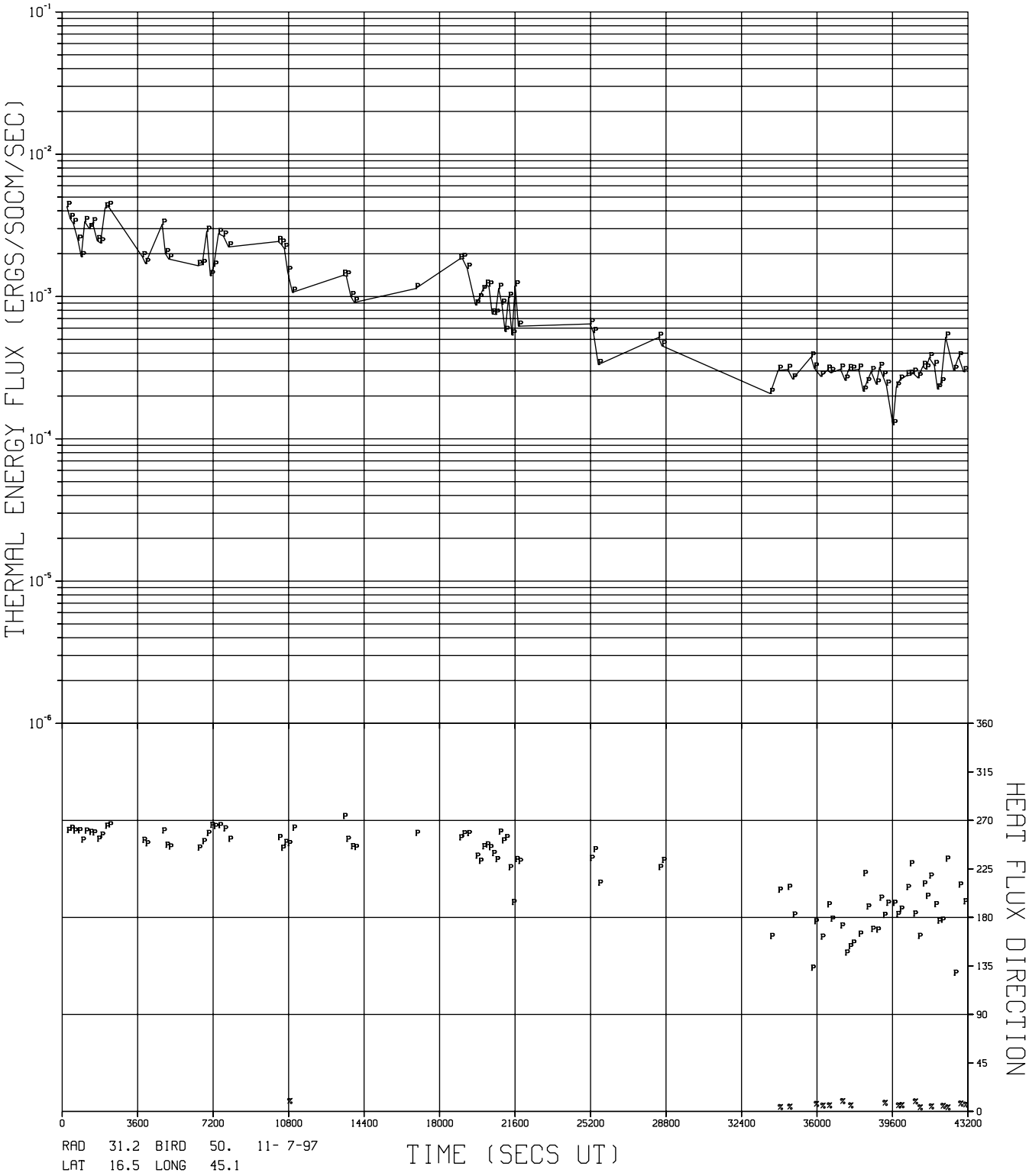
RAD 31.8 BIRD 50. 11- 6-97
LAT 5.6 LONG 31.3

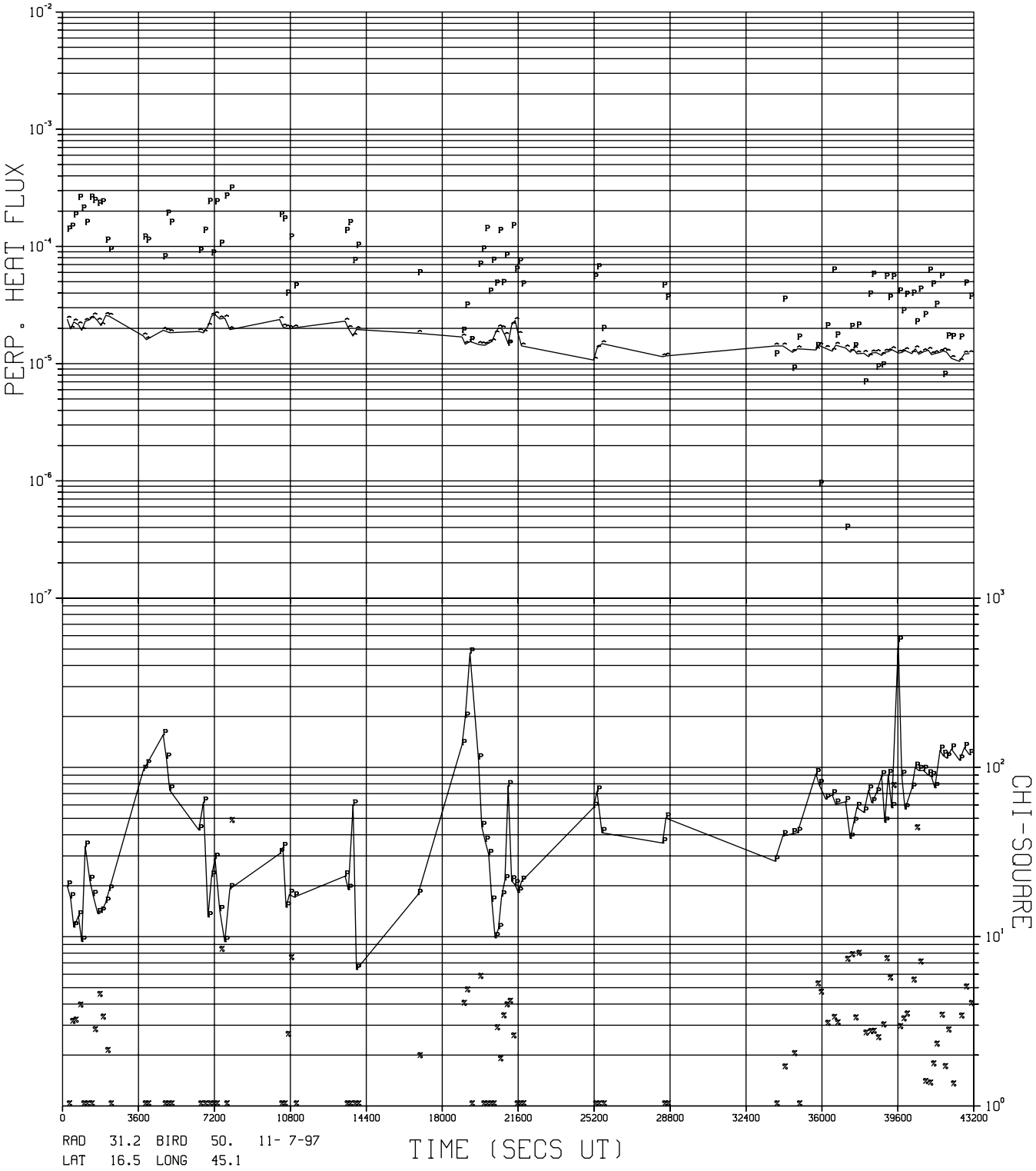

DENSITY
DENSITY RATIO
TIME (SECS UT)
RAD 31.2 BIRD 50. 11- 7-97
LAT 16.5 LONG 45.1

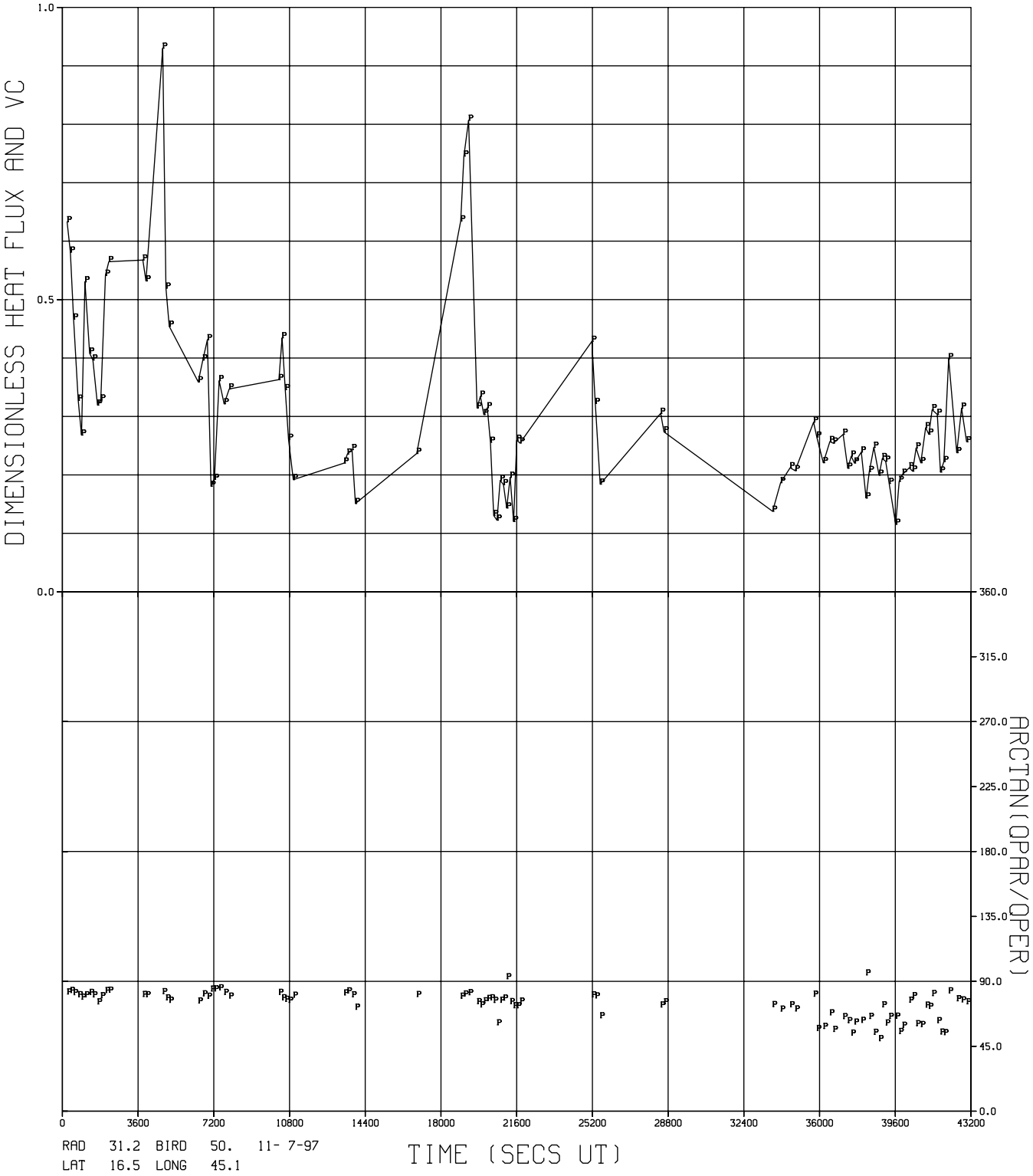

VELOCITY
VELOCITY DIFFERENCE
TIME (SECS UT)
RAD 31.2 BIRD 50. 11- 7-97
LAT 16.5 LONG 45.1

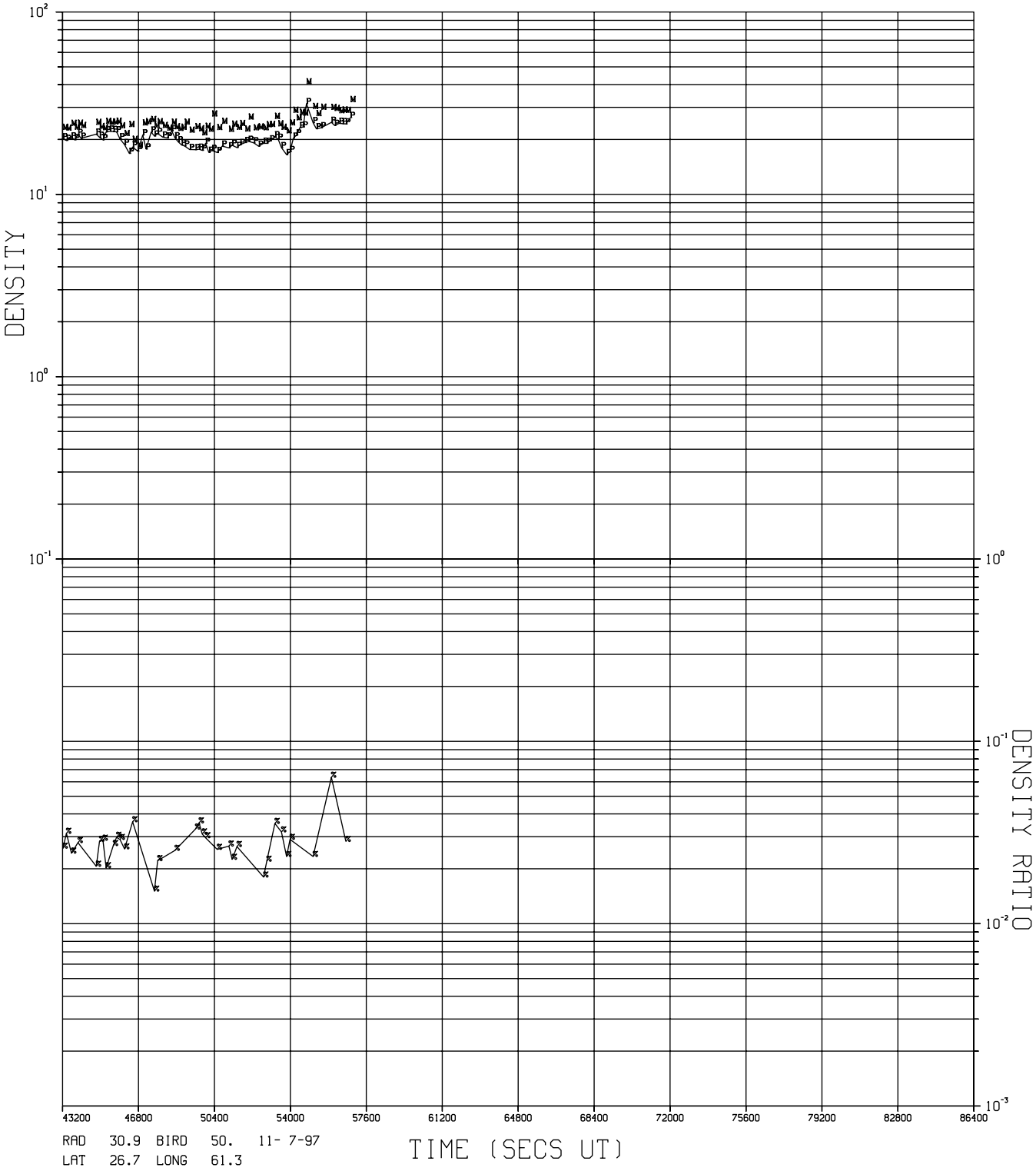

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
RAD 31.2 BIRD 50. 11- 7-97
LAT 16.5 LONG 45.1

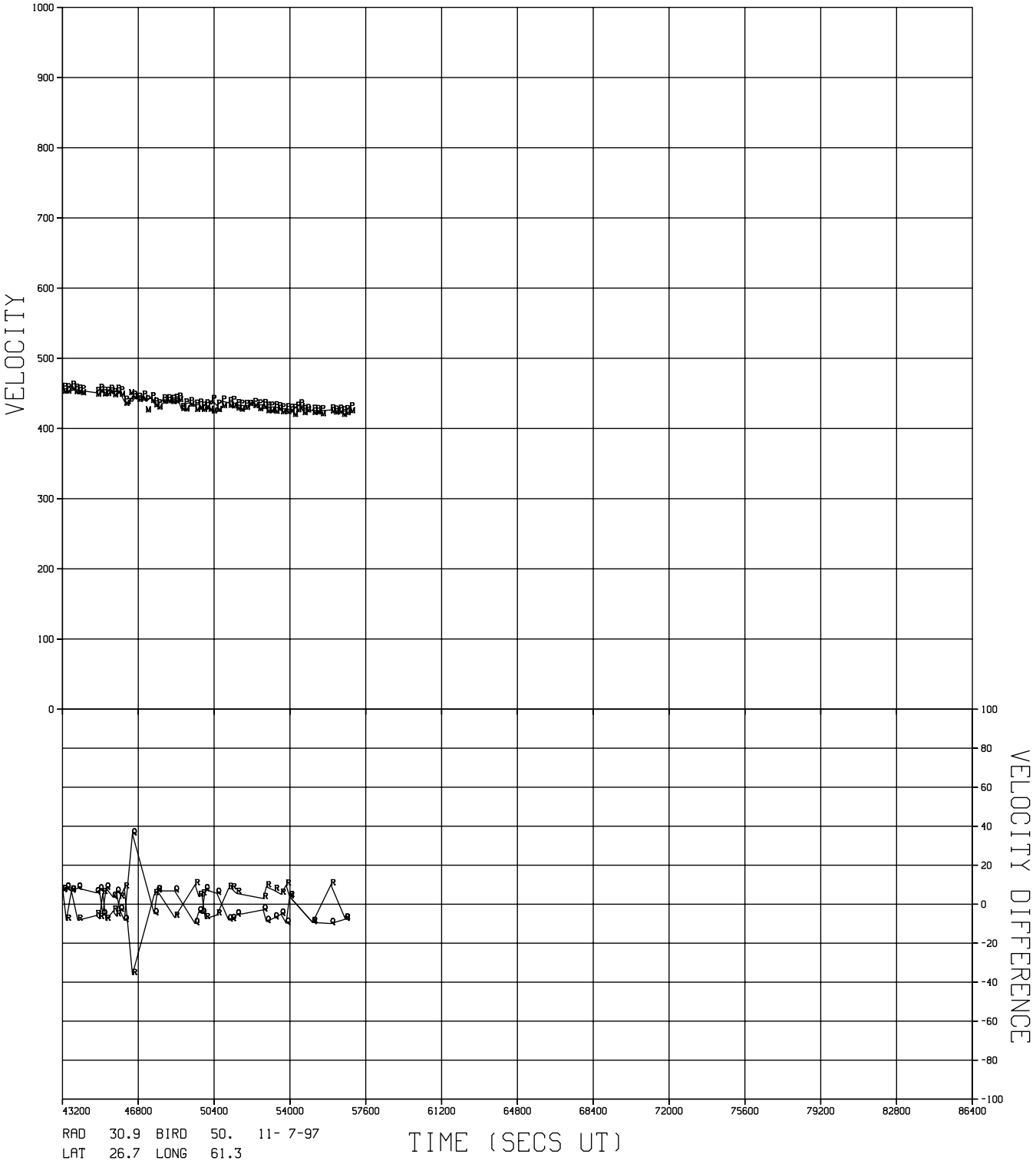

TEMPERATURE
TEMPERATURE RATIO
TIME (SECS UT)
10^7
10^6
10^5
10^4
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
0
1
2
3
4
5
6
7
8
9
10
RAD 31.2 BIRD 50. 11- 7-97
LAT 16.5 LONG 45.1

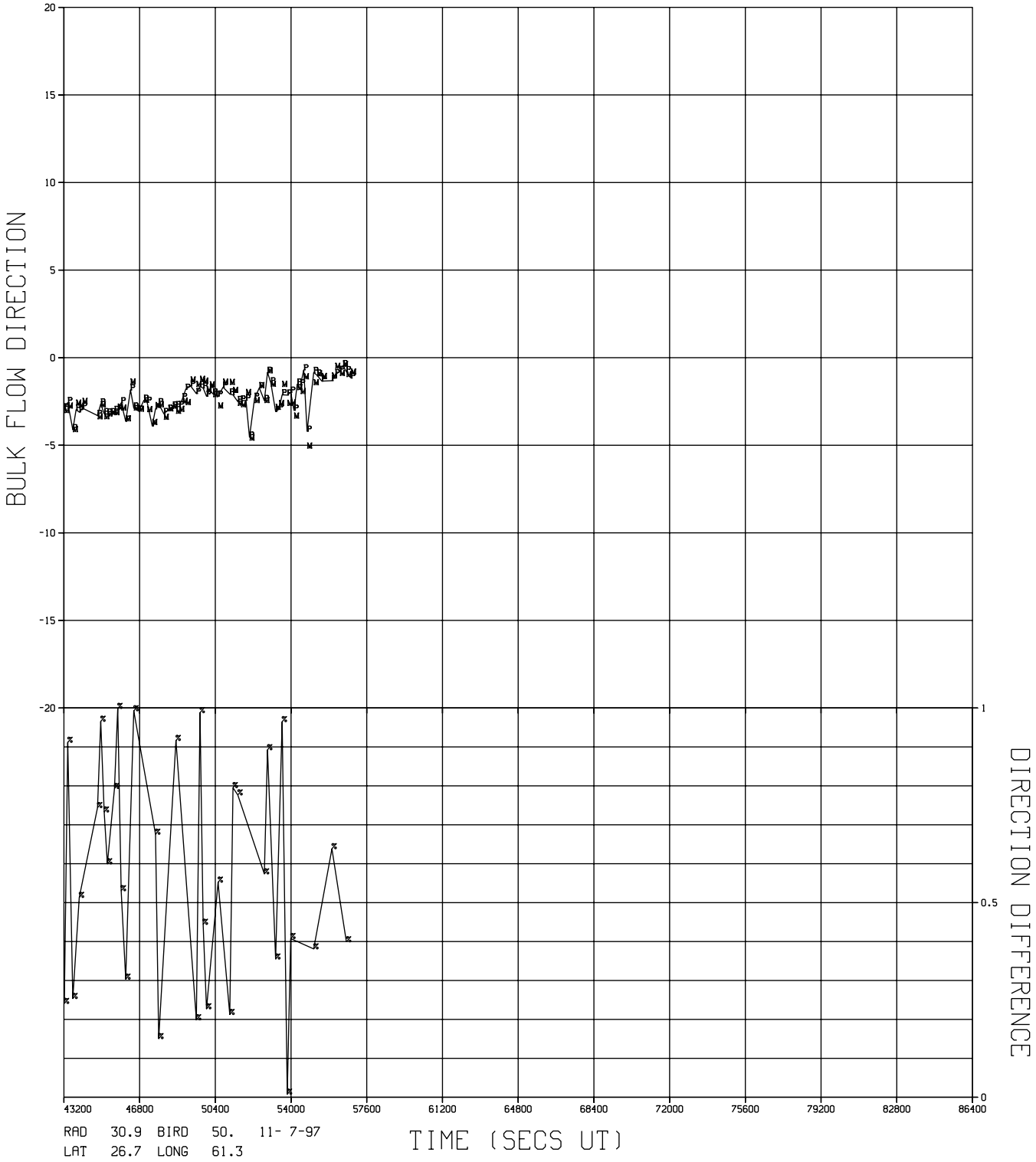

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 31.2 BIRD 50. 11- 7-97
LAT 16.5 LONG 45.1

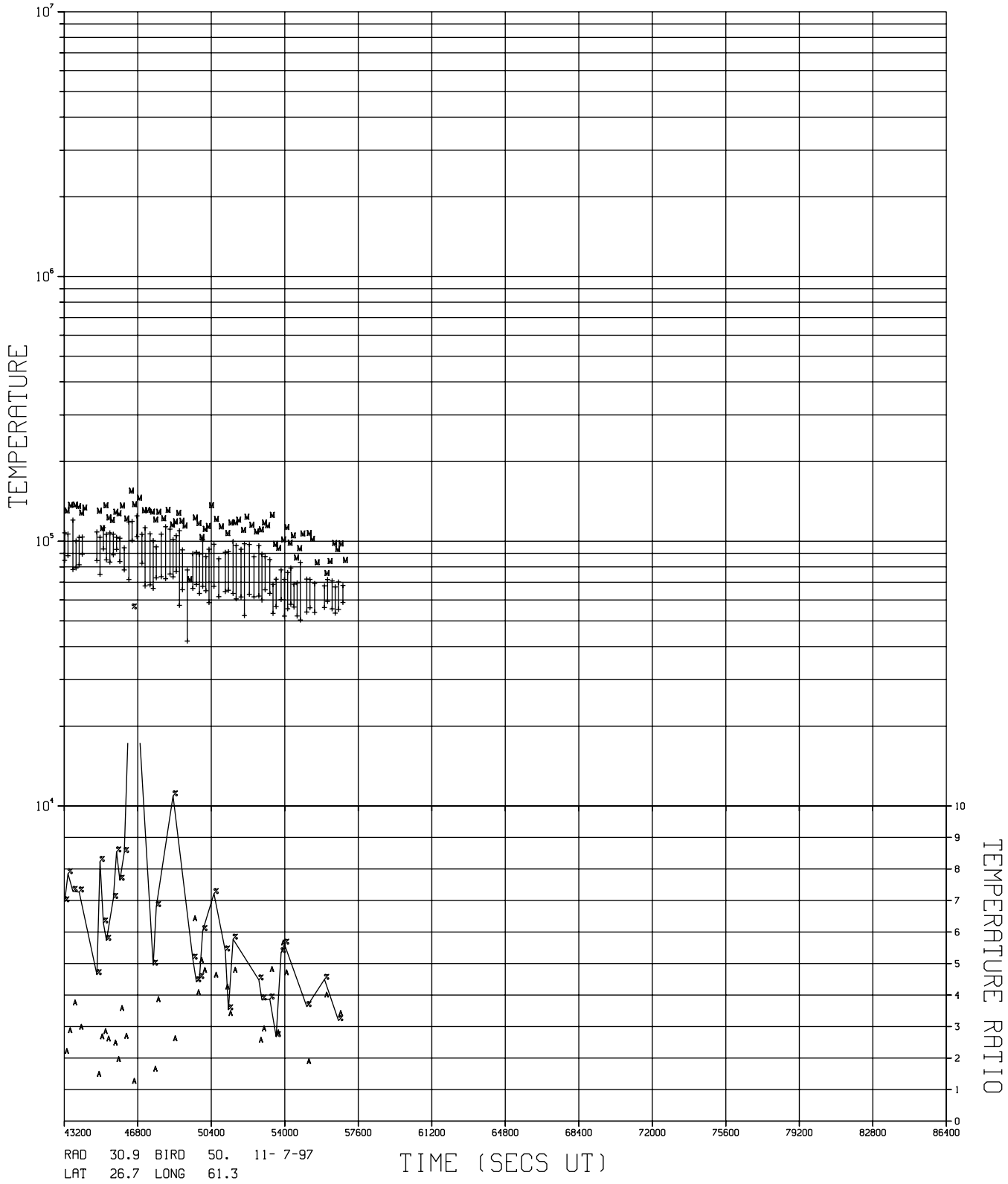

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
RAD 31.2 BIRD 50. 11- 7-97
LAT 16.5 LONG 45.1

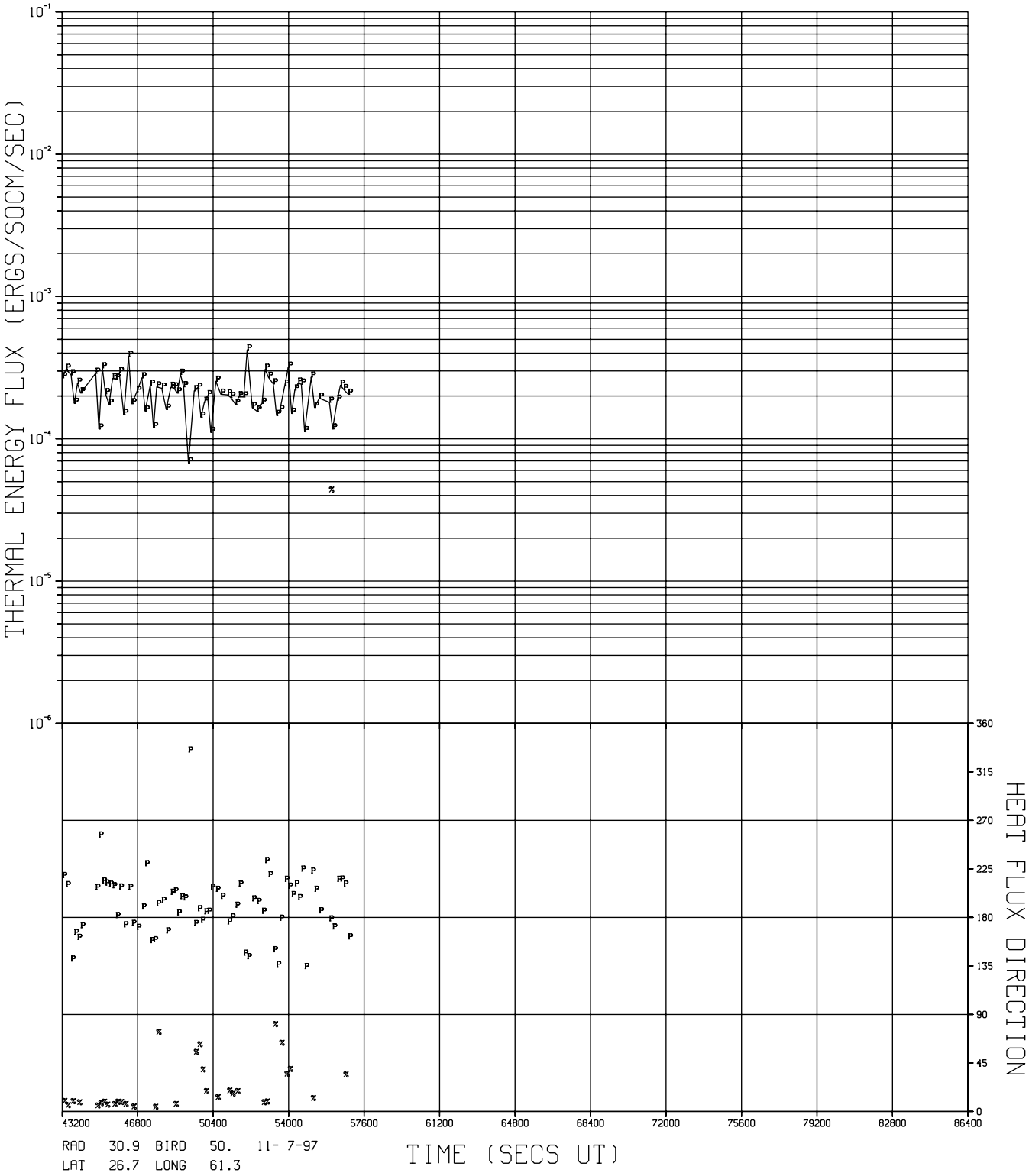

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
TIME (SECS UT)
RAD 31.2 BIRD 50. 11- 7-97
LAT 16.5 LONG 45.1

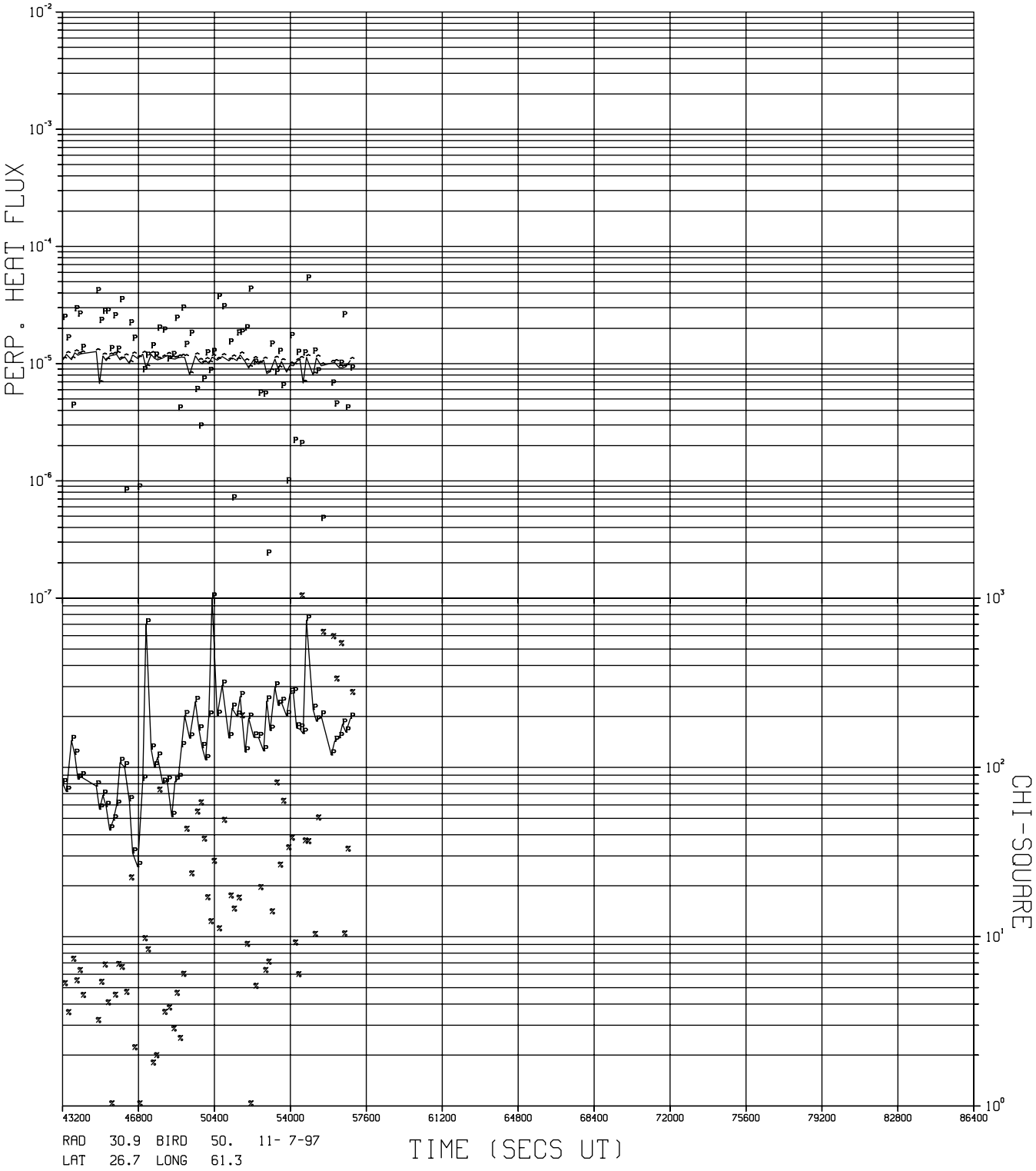

DENSITY
DENSITY RATIO
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 30.9 BIRD 50. 11- 7-97
LAT 26.7 LONG 61.3

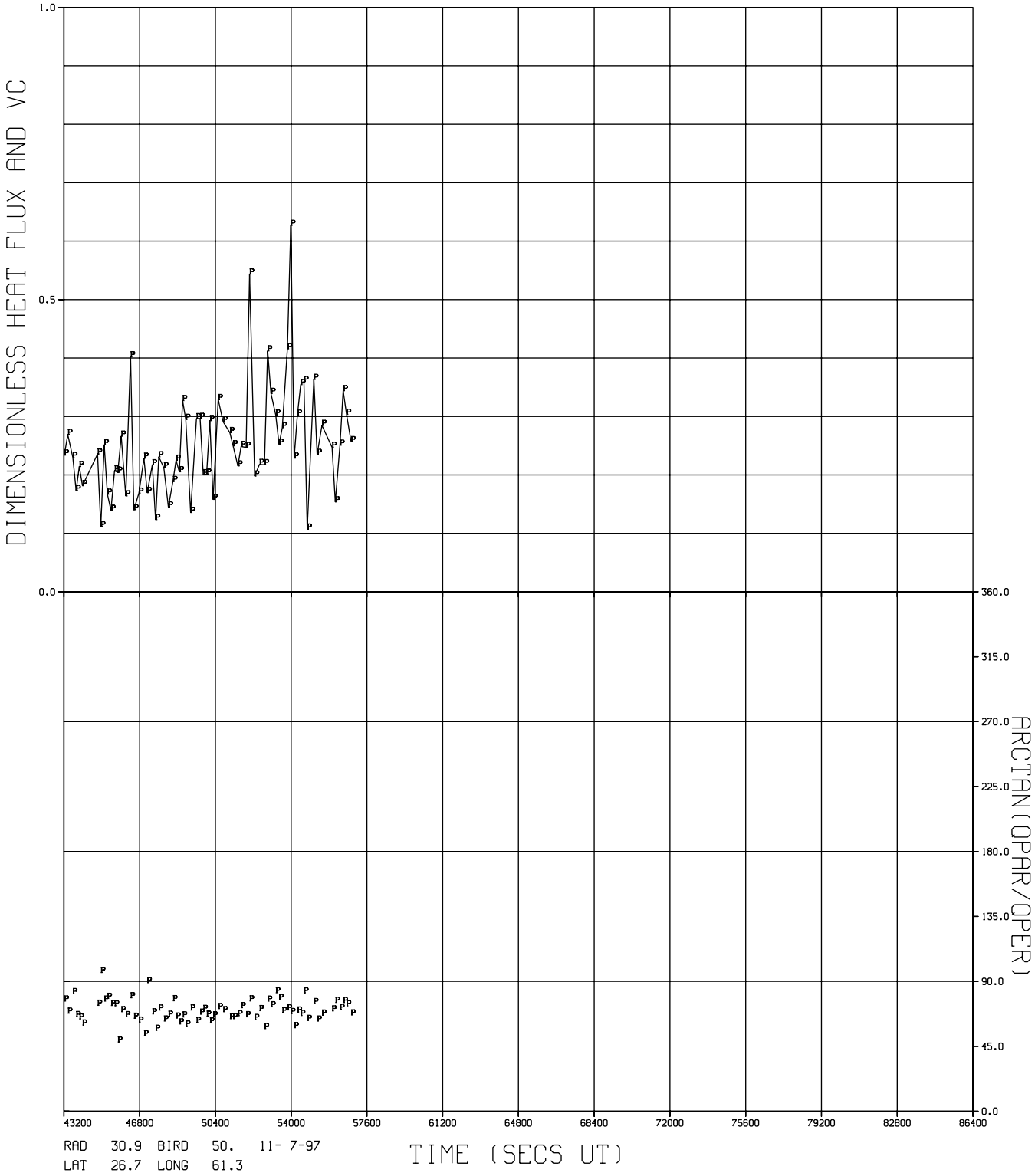

VELOCITY
VELOCITY DIFFERENCE
TIME (SECS UT)
1000
900
800
700
600
500
400
300
200
100
0
100
80
60
40
20
0
-20
-40
-60
-80
-100
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 30.9 BIRD 50. 11- 7-97
LAT 26.7 LONG 61.3


BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 30.9 BIRD 50. 11- 7-97
LAT 26.7 LONG 61.3


TEMPERATURE
TEMPERATURE RATIO
TIME (SECS UT)
RAD 30.9 BIRD 50. 11- 7-97
LAT 26.7 LONG 61.3


THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 30.9 BIRD 50. 11- 7-97
LAT 26.7 LONG 61.3


PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 30.9 BIRD 50. 11- 7-97
LAT 26.7 LONG 61.3


DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
TIME (SECS UT)
RAD 30.9 BIRD 50. 11- 7-97
LAT 26.7 LONG 61.3