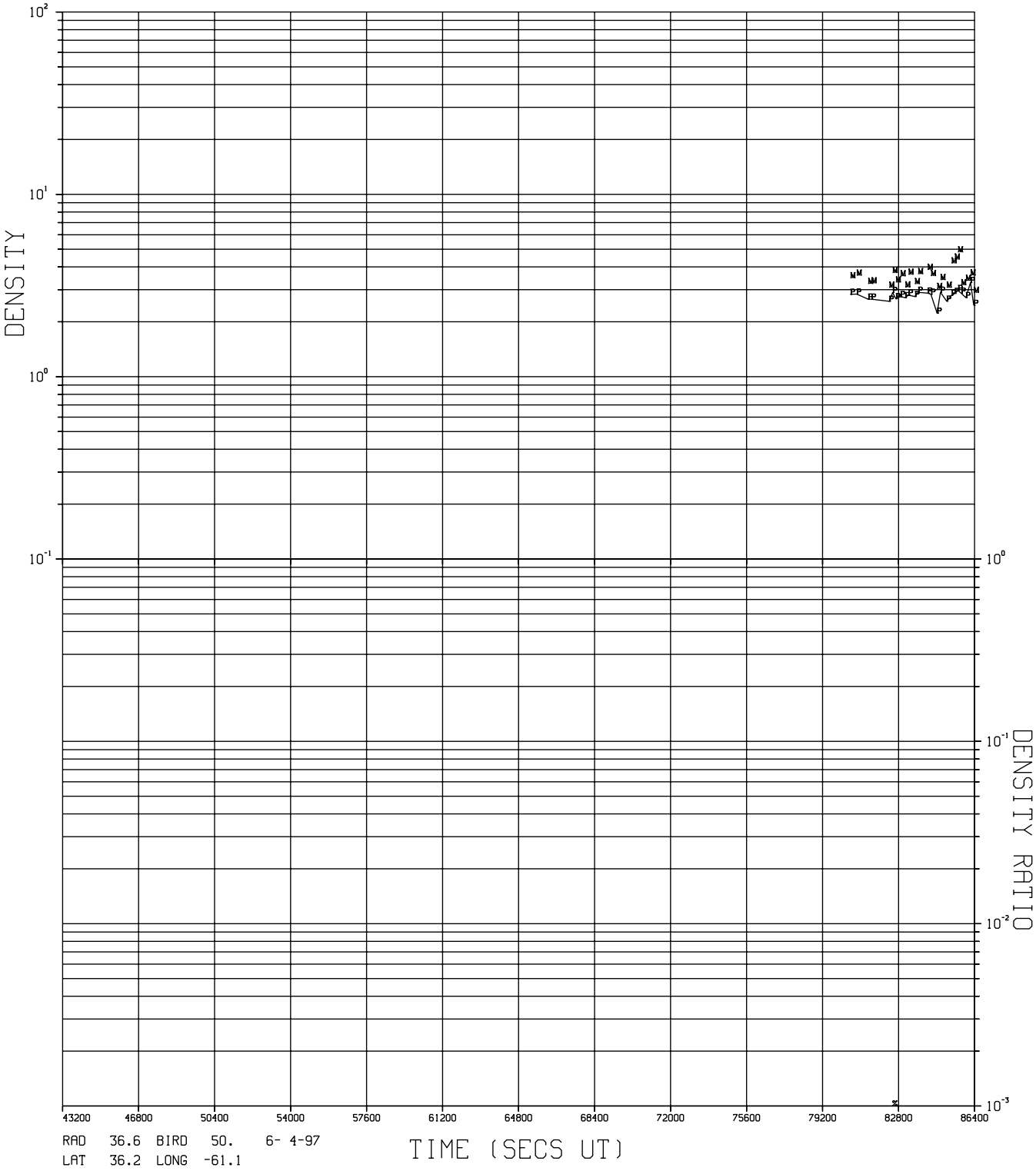
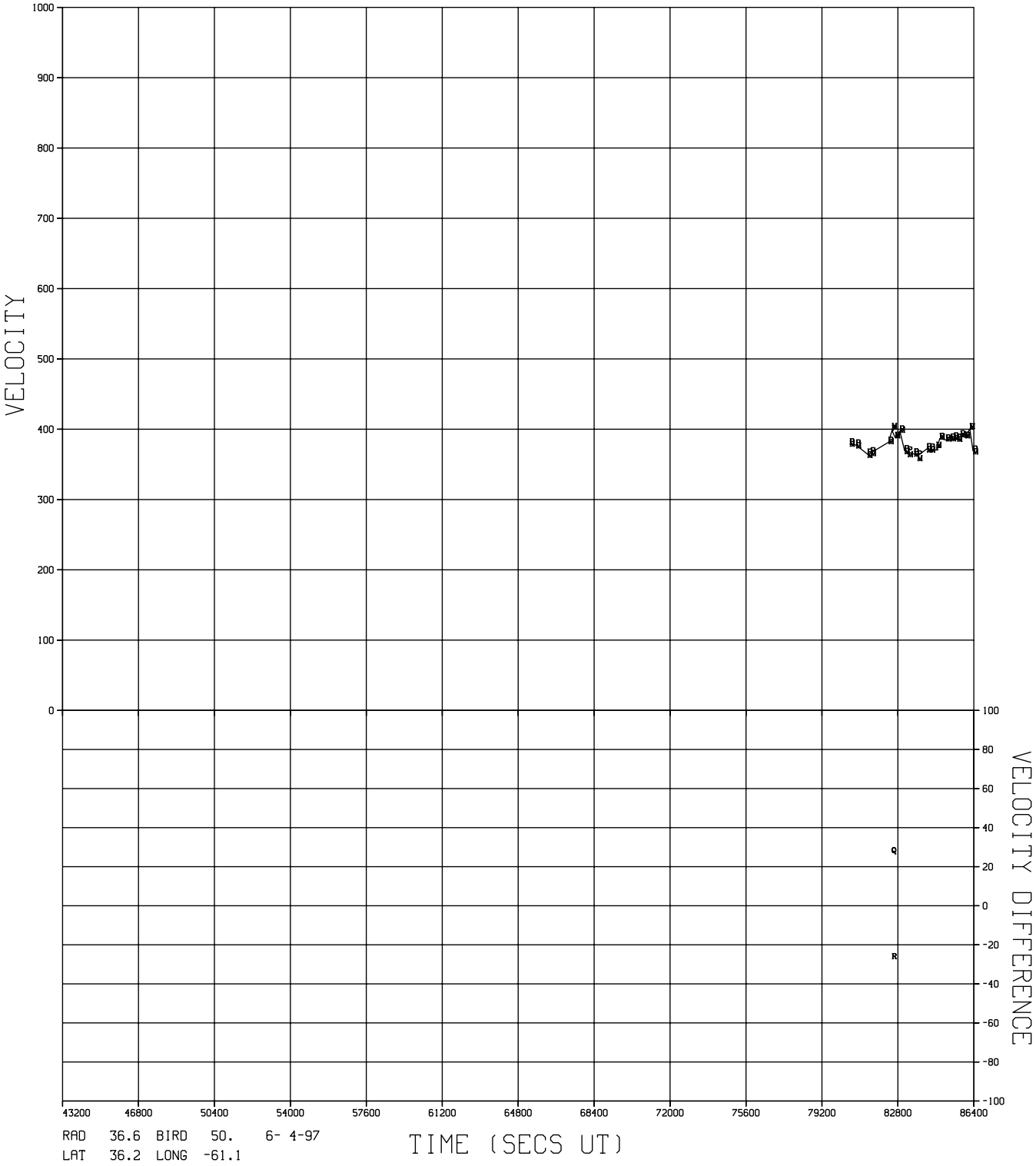
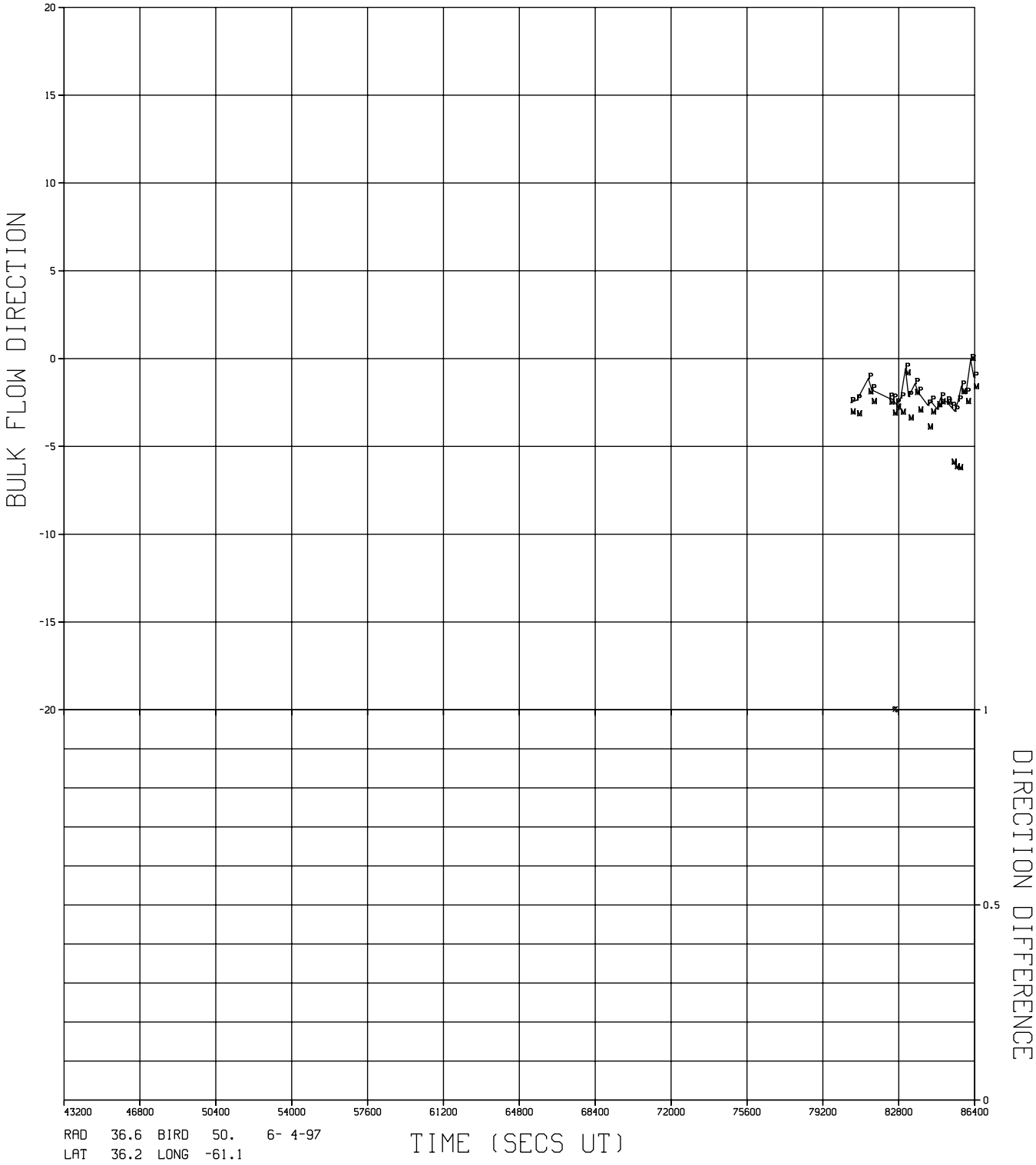
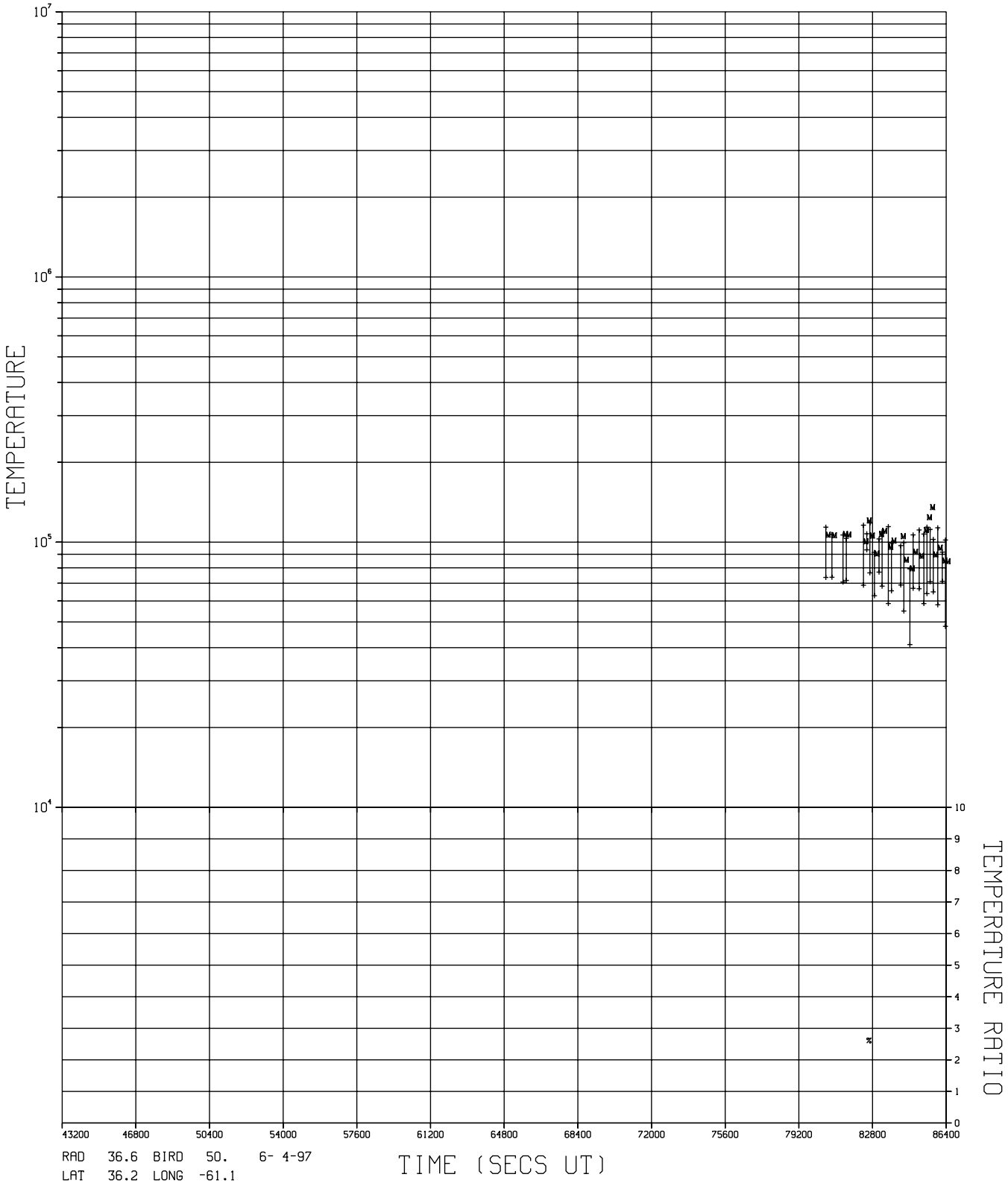
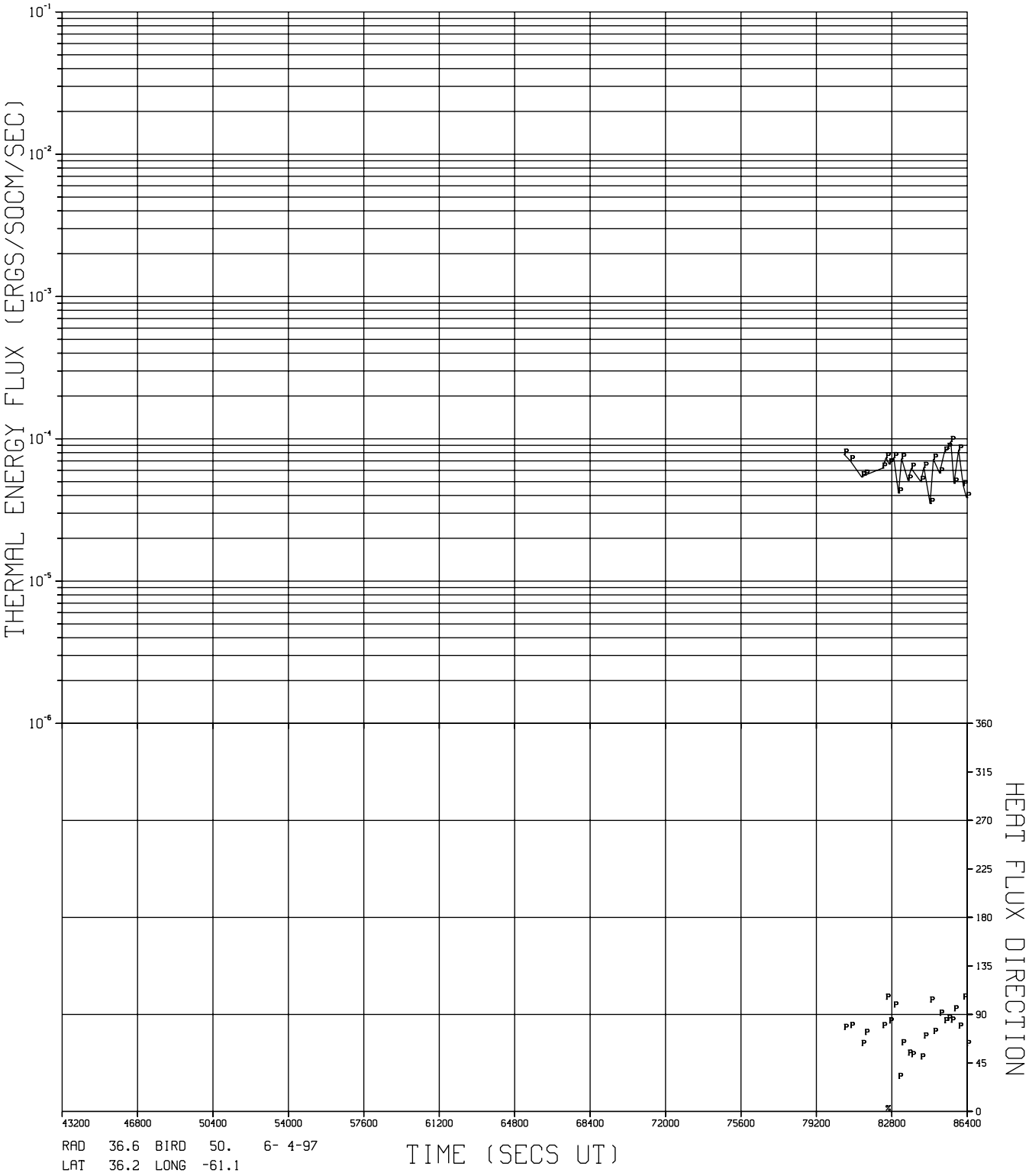
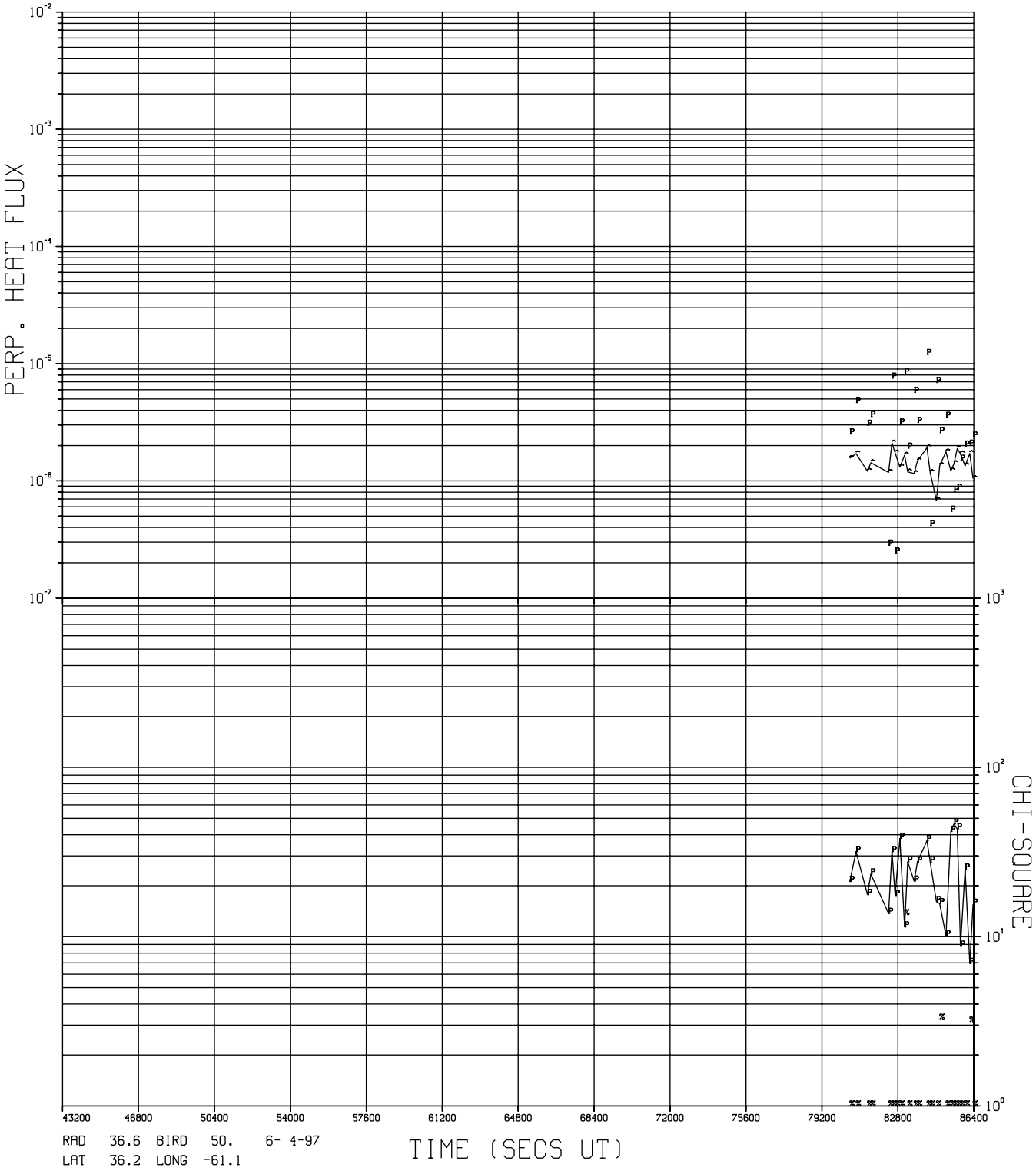

DENSITY
DENSITY RATIO
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 36.6 BIRD 50. 6- 4-97
LAT 36.2 LONG -61.1

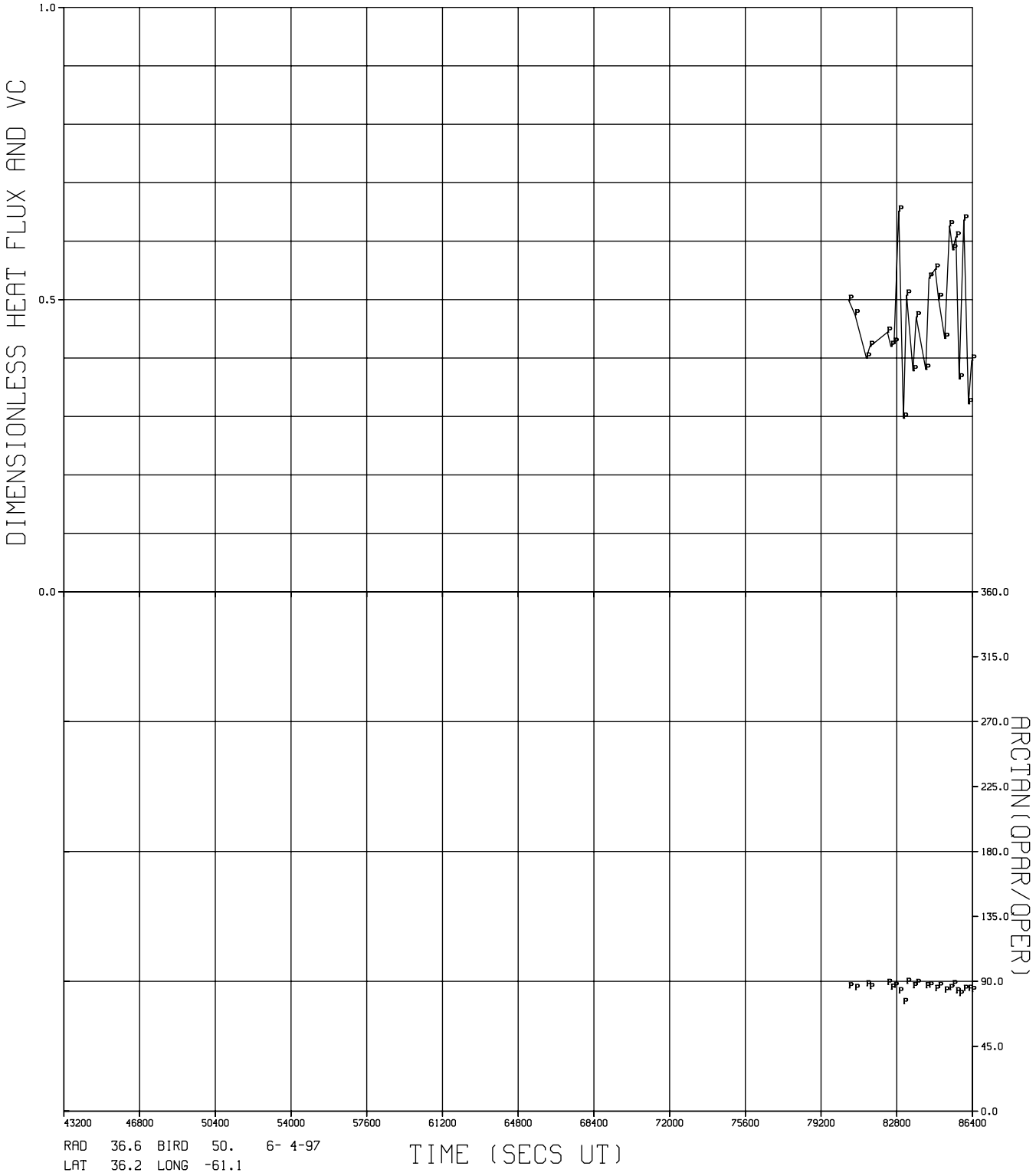

VELOCITY
1000
900
800
700
600
500
400
300
200
100
0
VELOCITY DIFFERENCE
100
80
60
40
20
0
-20
-40
-60
-80
-100
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 36.6 BIRD 50. 6- 4-97
LAT 36.2 LONG -61.1
TIME (SECS UT)

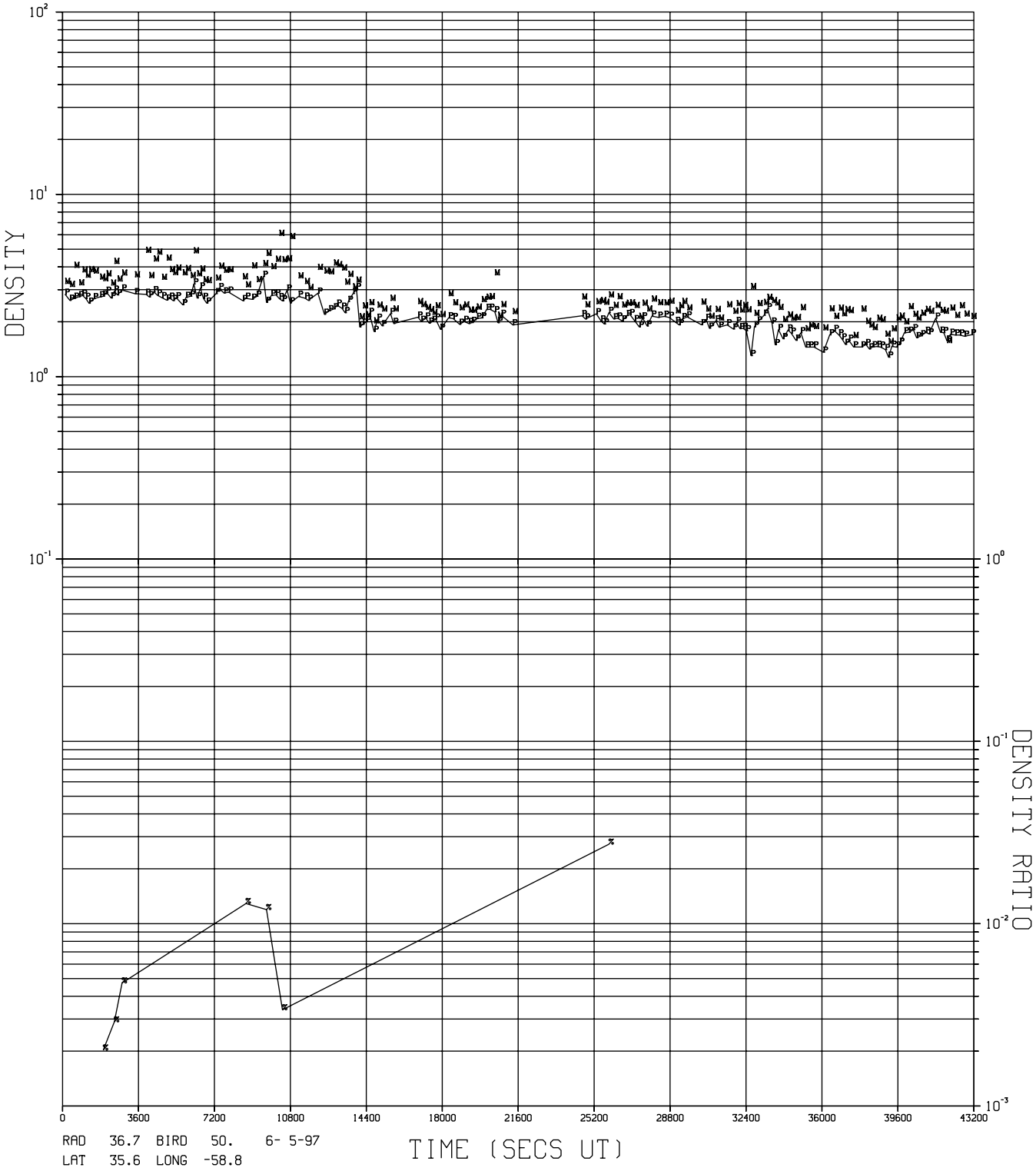

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 36.6 BIRD 50. 6- 4-97
LAT 36.2 LONG -61.1

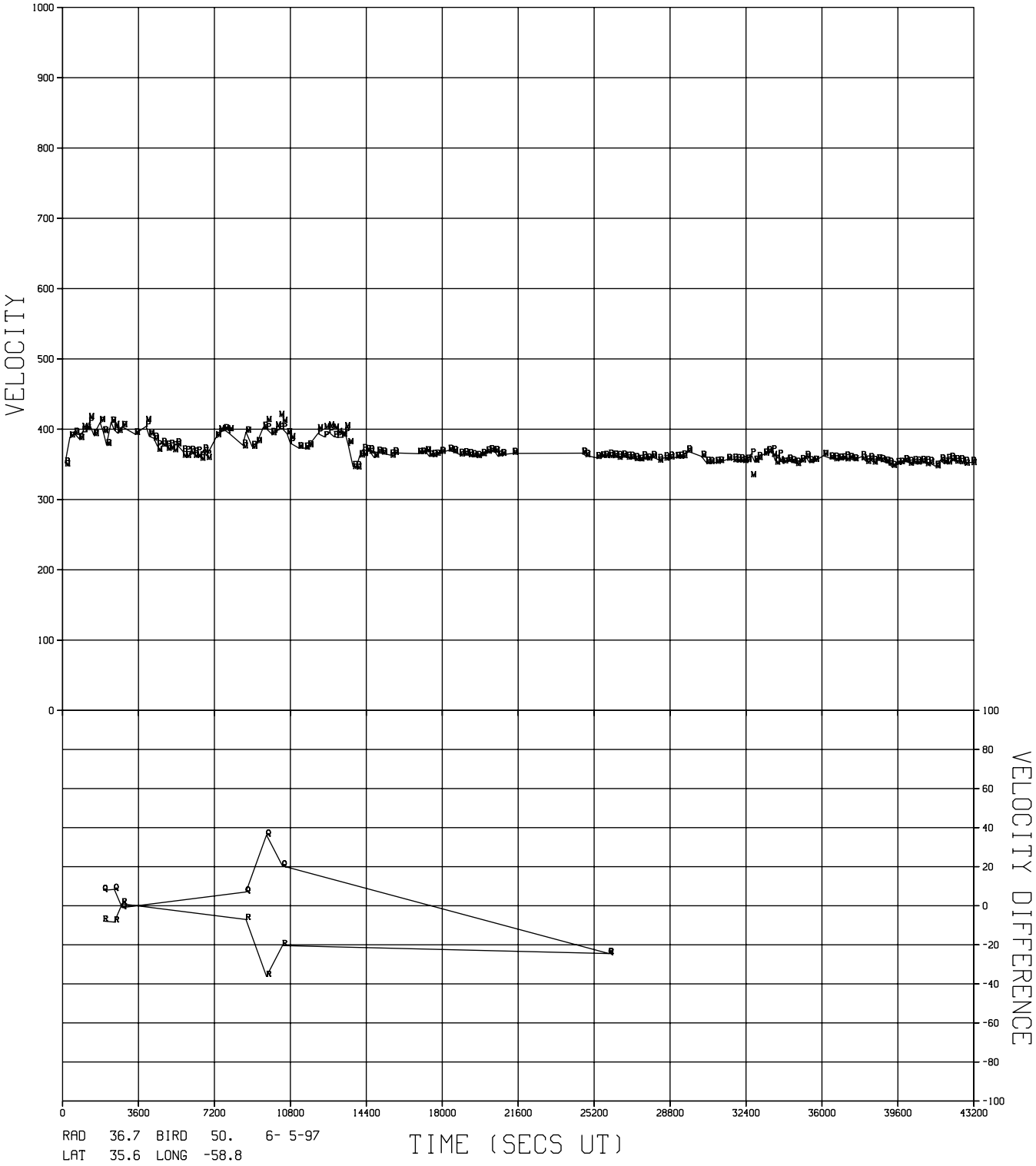

TEMPERATURE
10^7
10^6
10^5
10^4
TEMPERATURE RATIO
0
1
2
3
4
5
6
7
8
9
10
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
TIME (SECS UT)
RAD 36.6 BIRD 50. 6- 4-97
LAT 36.2 LONG -61.1

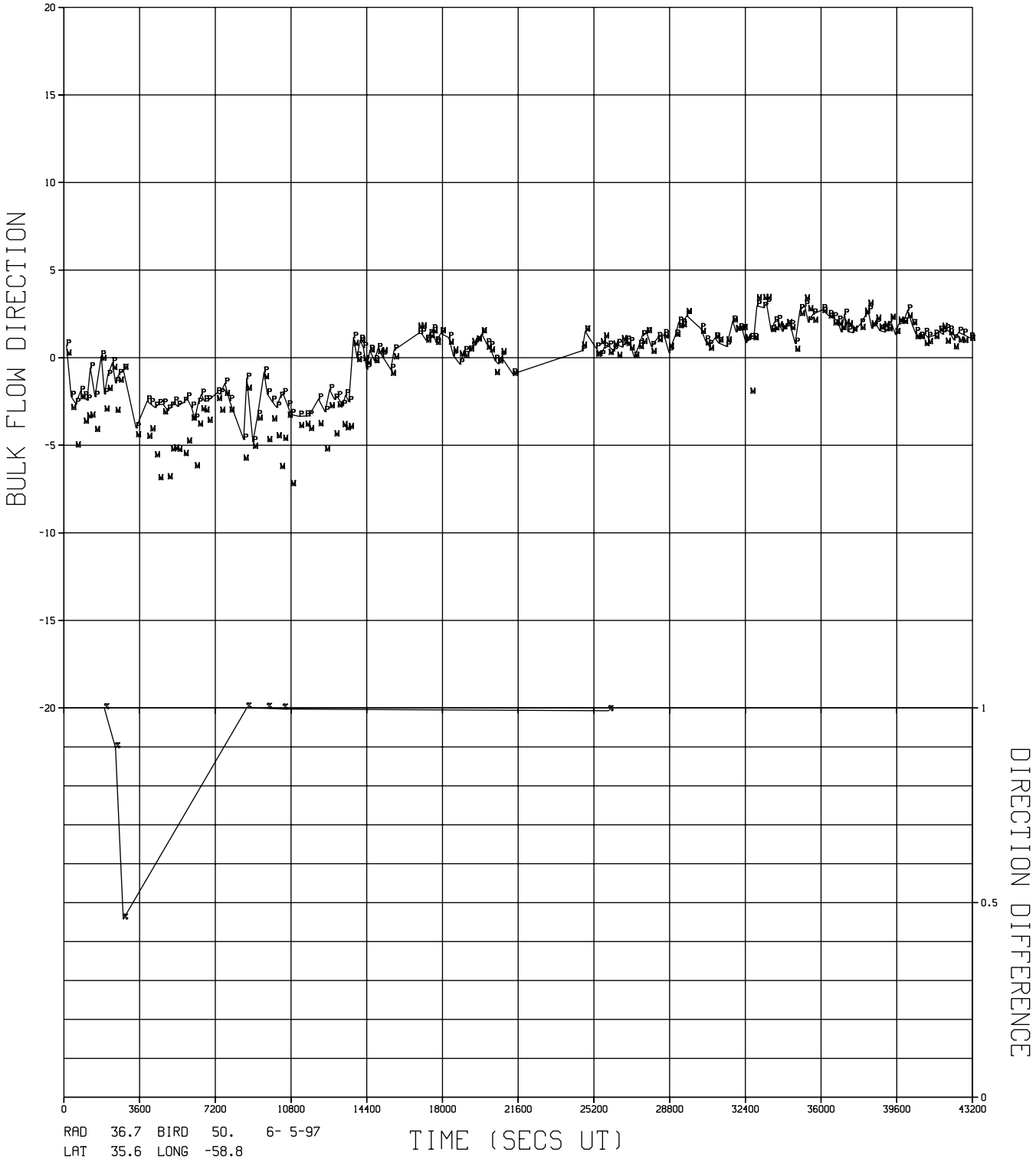

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 36.6 BIRD 50. 6- 4-97
LAT 36.2 LONG -61.1

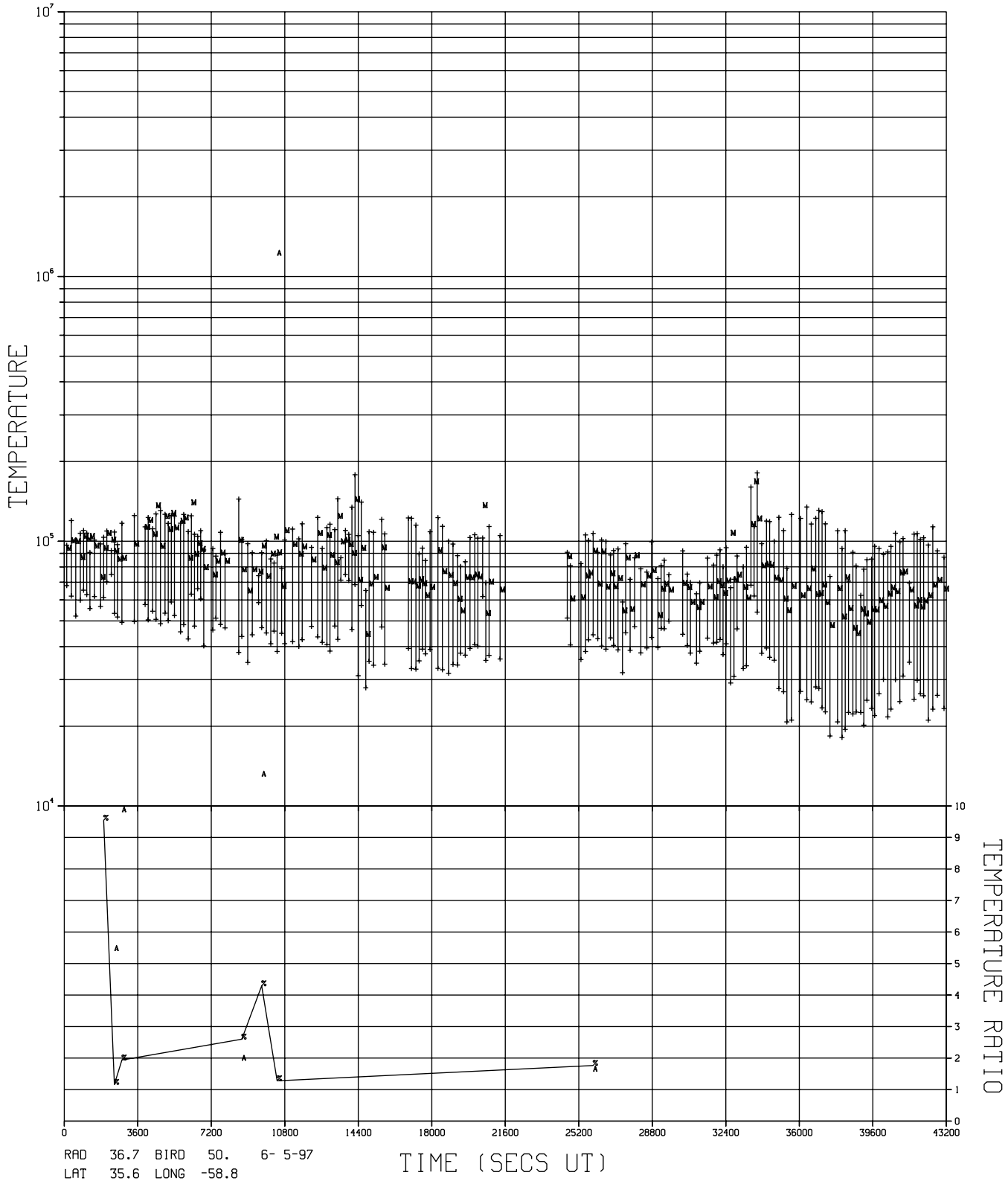

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
RAD 36.6 BIRD 50. 6- 4-97
LAT 36.2 LONG -61.1

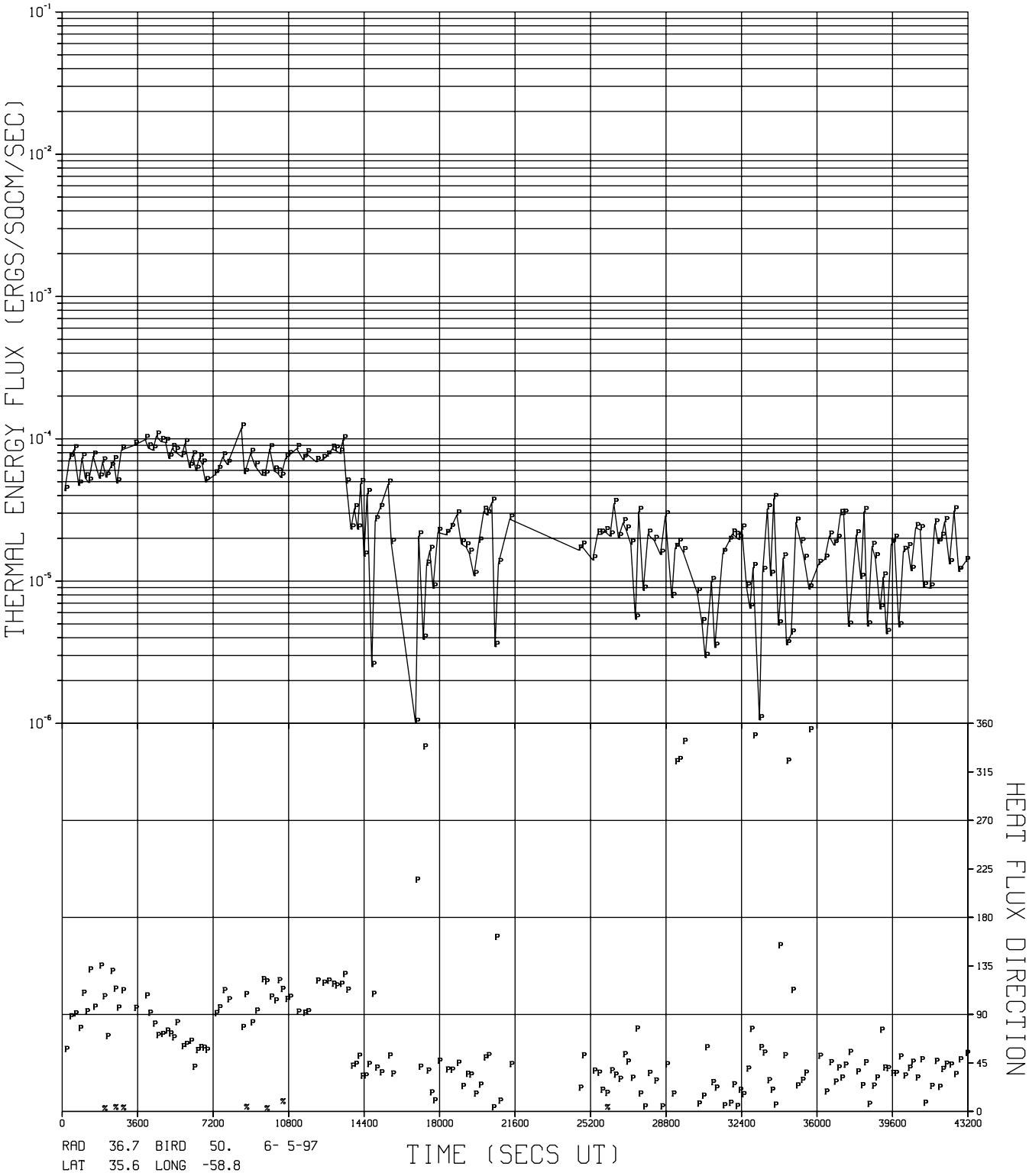

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
TIME (SECS UT)
RAD 36.6 BIRD 50. 6- 4-97
LAT 36.2 LONG -61.1

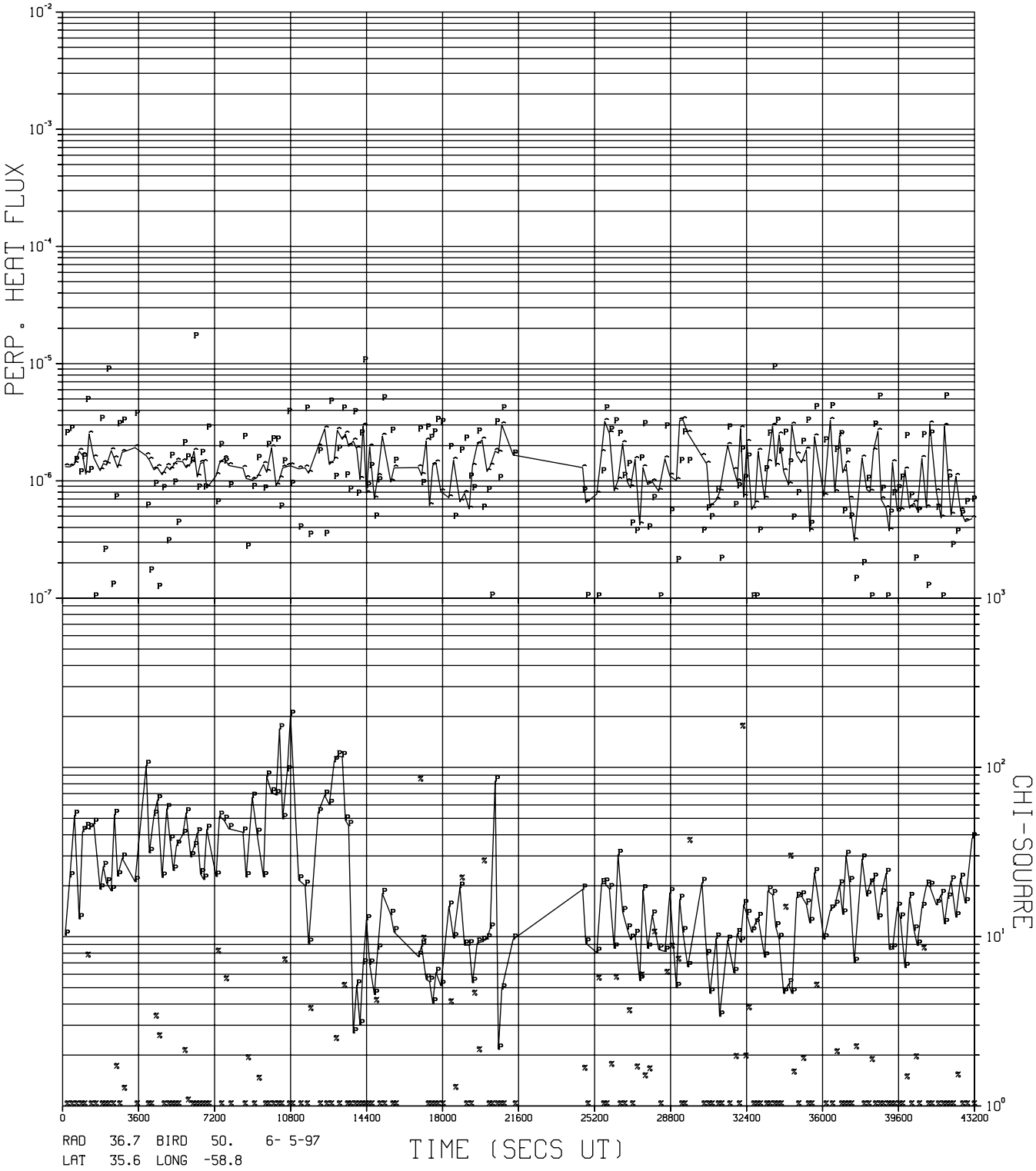

DENSITY
DENSITY RATIO
TIME (SECS UT)
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
RAD 36.7 BIRD 50. 6- 5-97
LAT 35.6 LONG -58.8

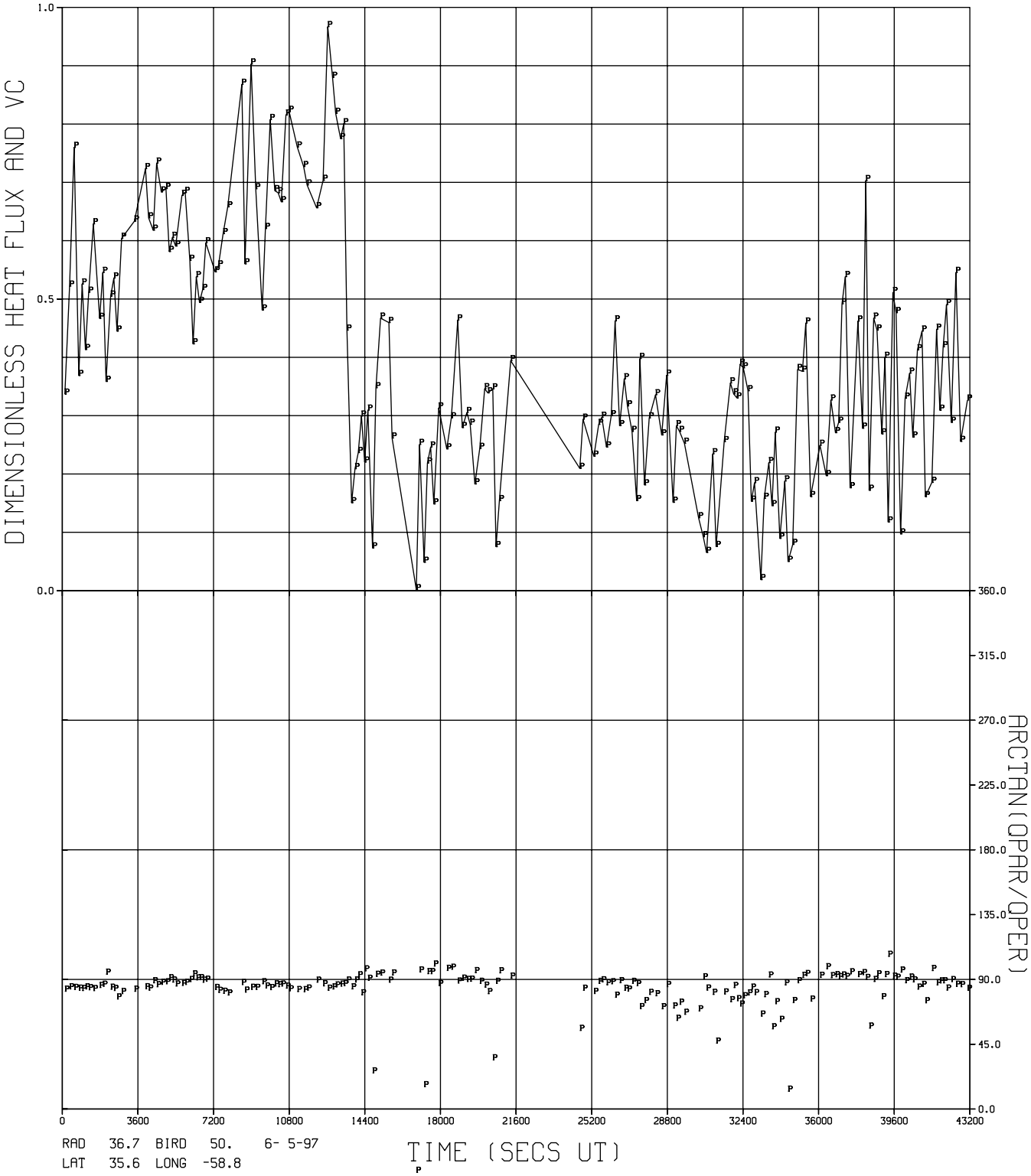

VELOCITY
VELOCITY DIFFERENCE
TIME (SECS UT)
RAD 36.7 BIRD 50. 6- 5-97
LAT 35.6 LONG -58.8


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 36.7 BIRD 50. 6- 5-97
LAT 35.6 LONG -58.8

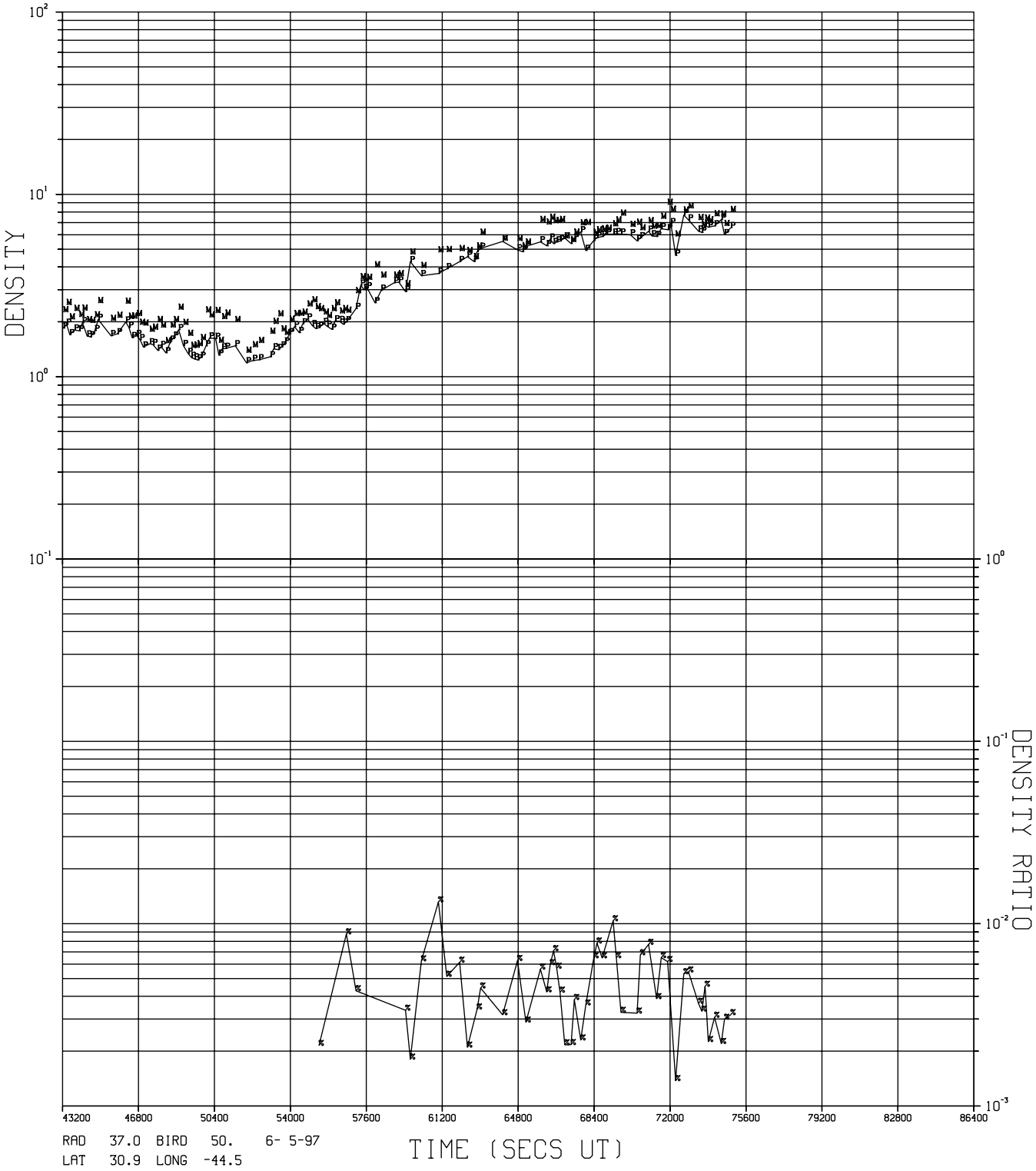

TEMPERATURE
TEMPERATURE RATIO
TIME (SECS UT)
RAD 36.7 BIRD 50. 6- 5-97
LAT 35.6 LONG -58.8

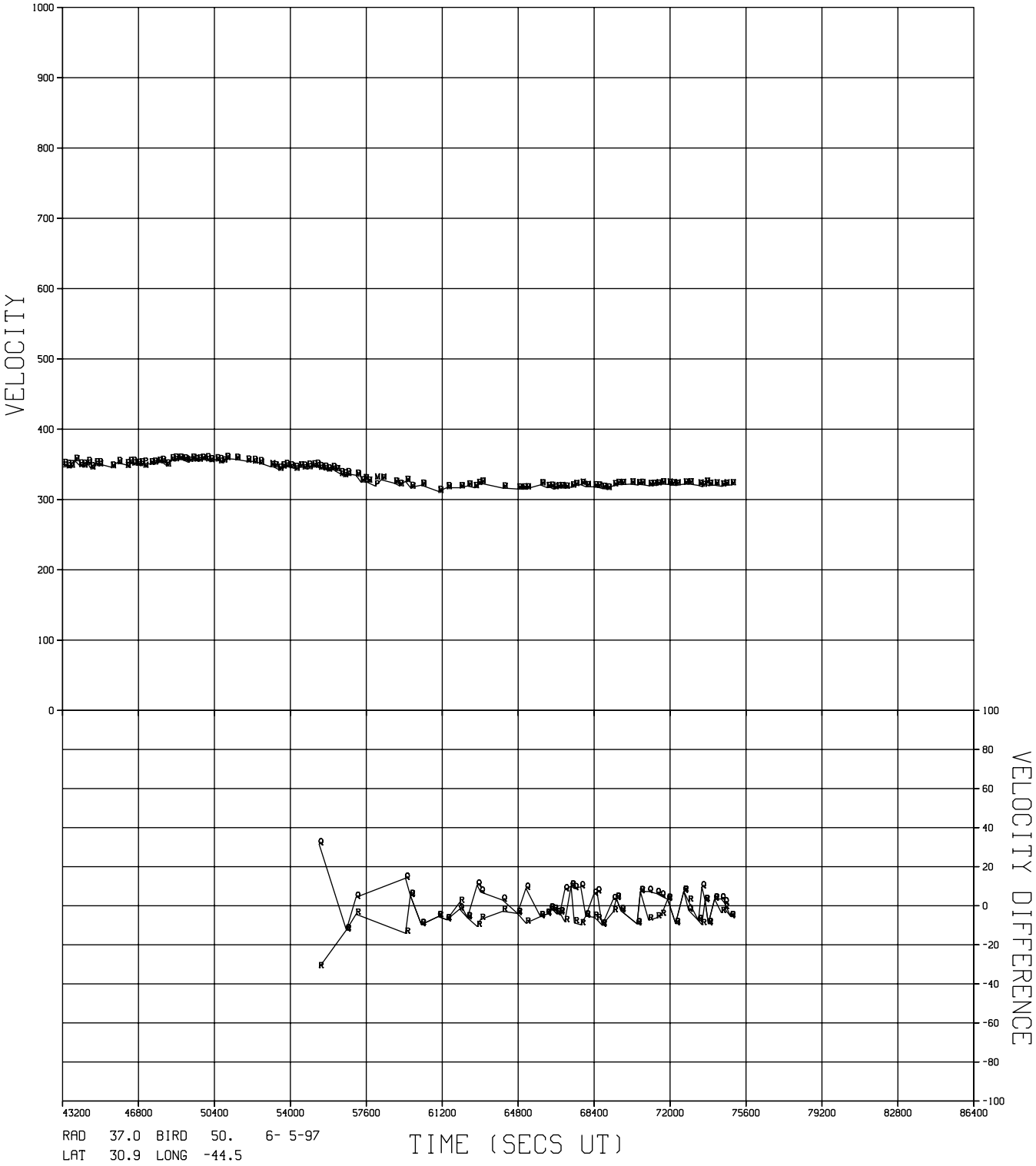

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 36.7 BIRD 50. 6- 5-97
LAT 35.6 LONG -58.8

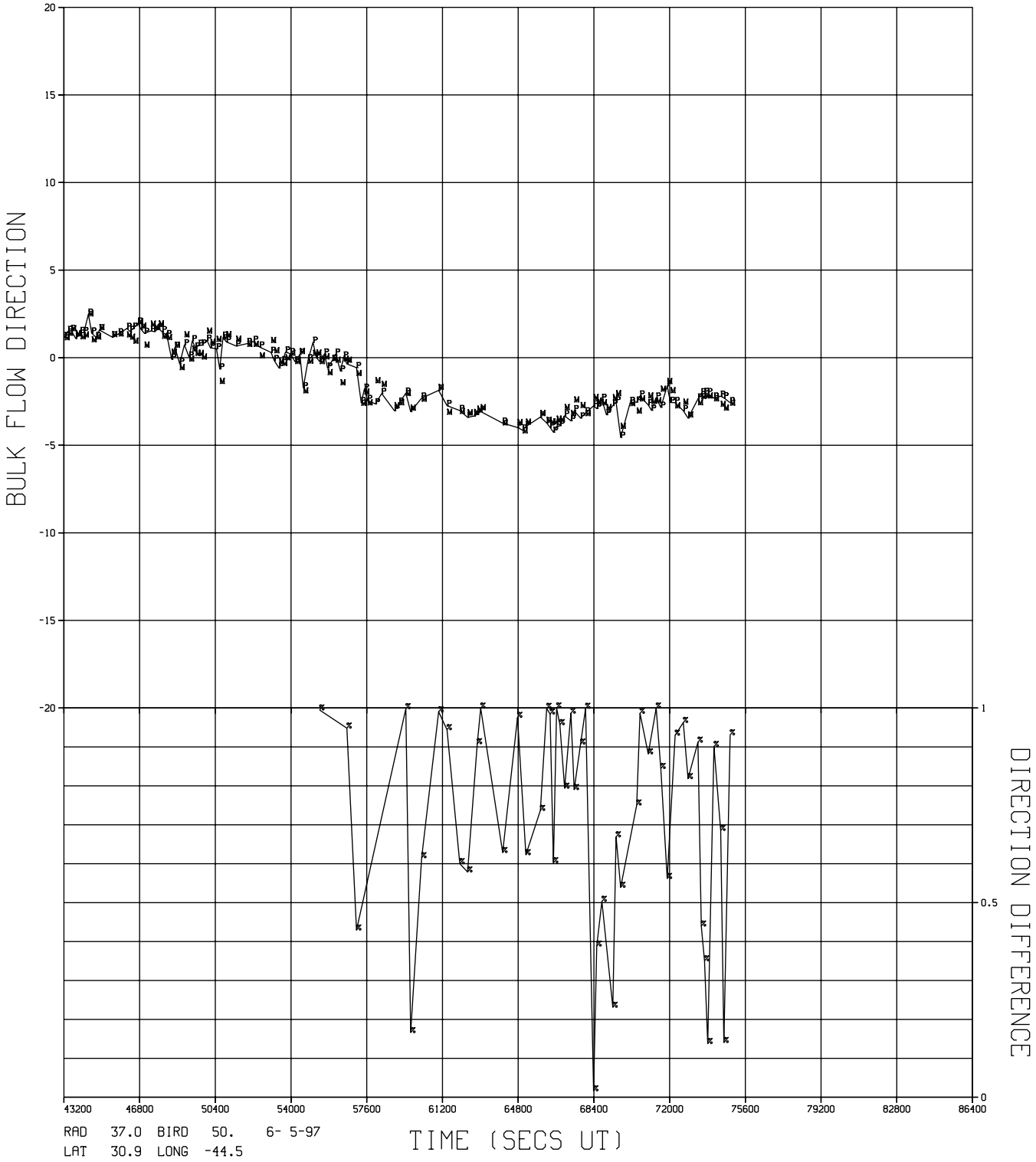

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
RAD 36.7 BIRD 50. 6- 5-97
LAT 35.6 LONG -58.8

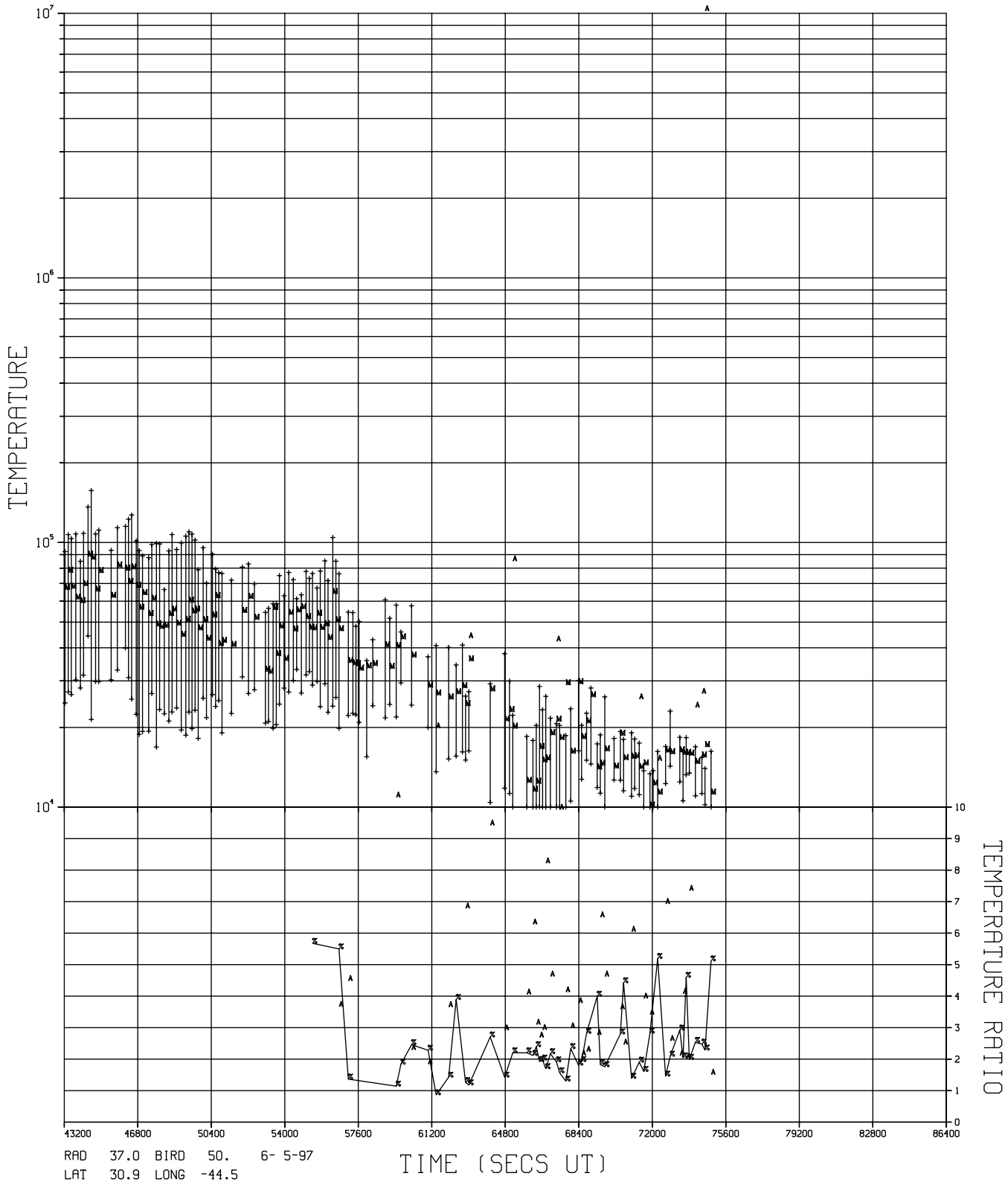


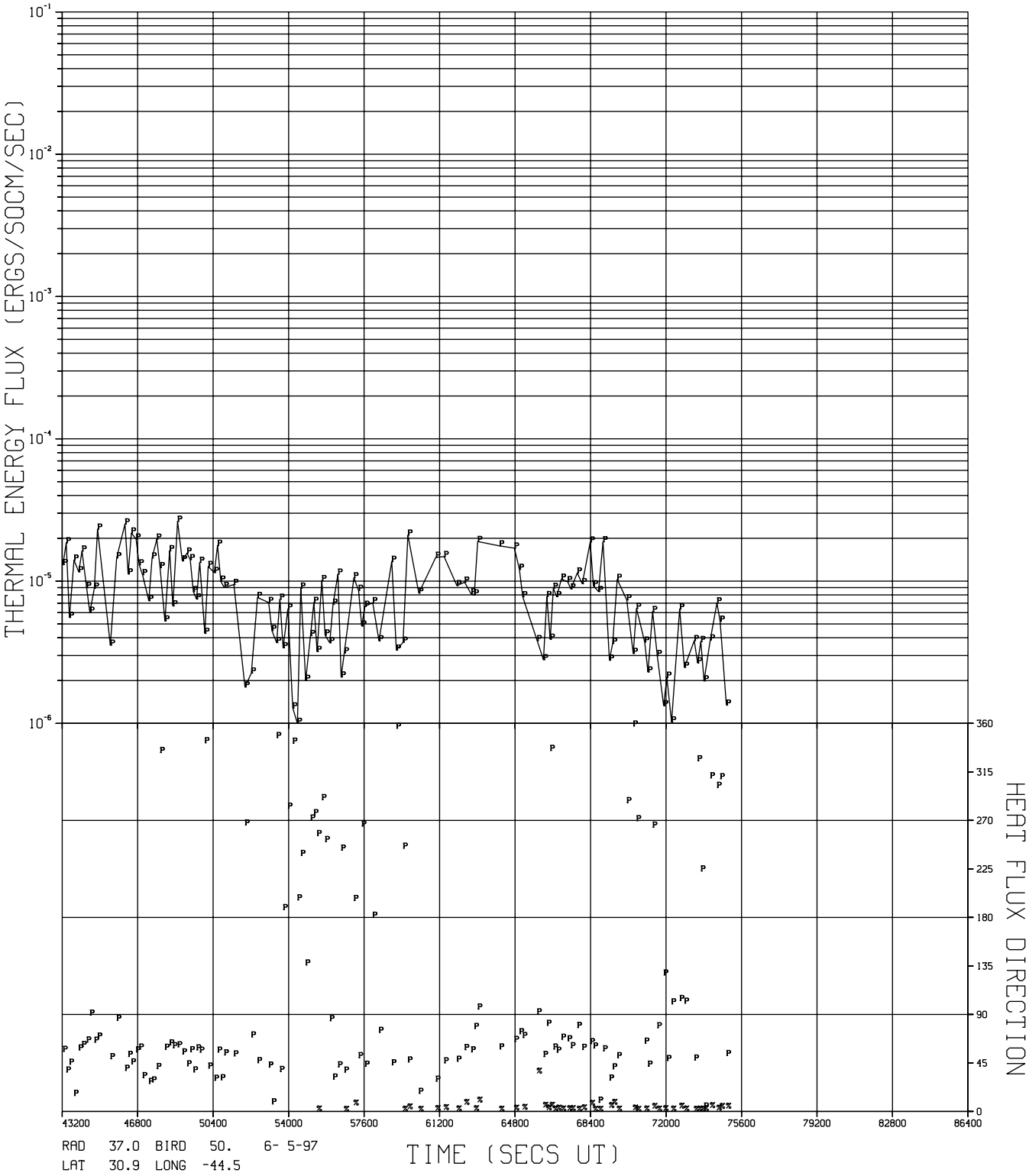
RAD 36.7 BIRD 50. 6- 5-97
LAT 35.6 LONG -58.8

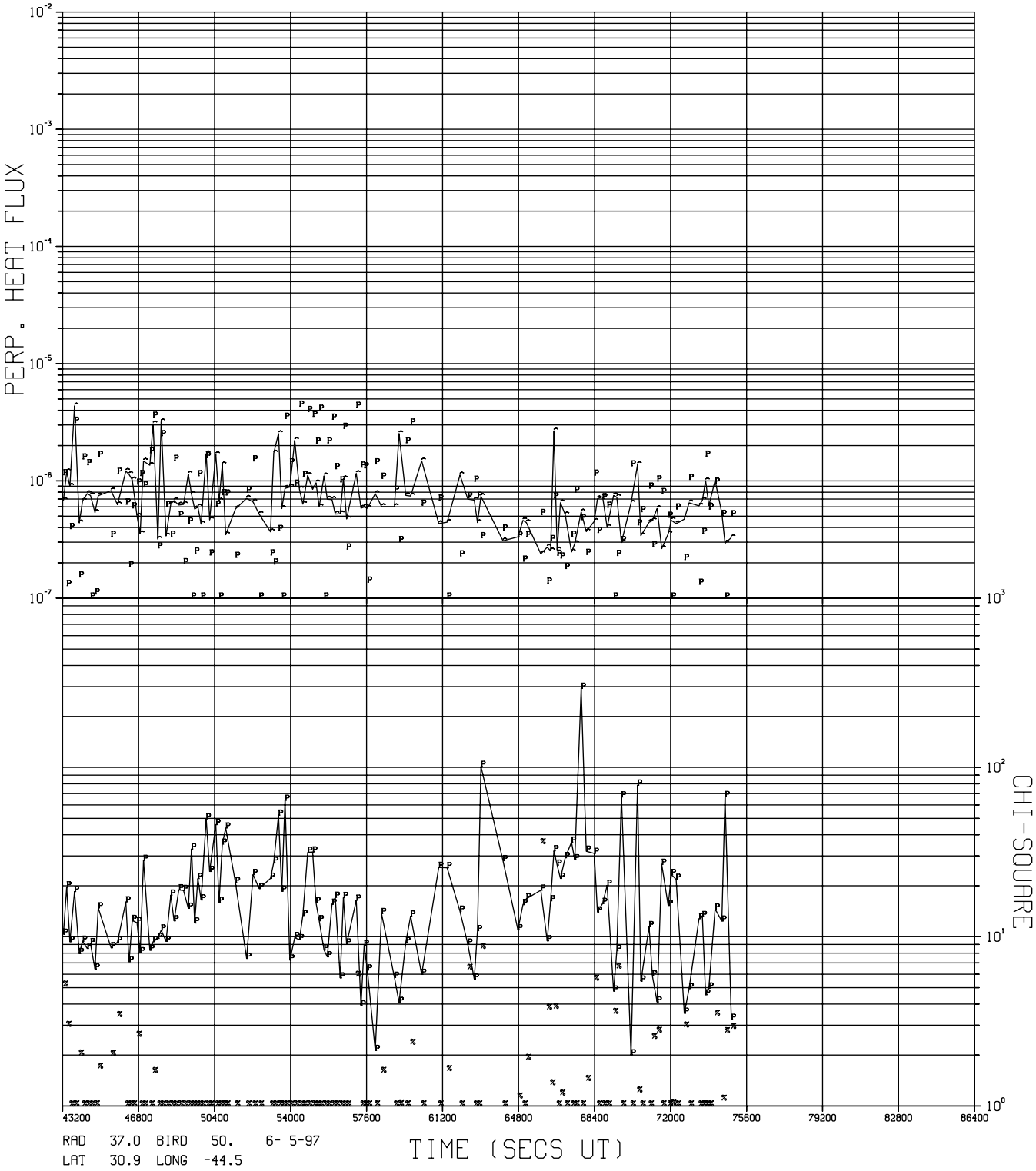

DENSITY
DENSITY RATIO
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 37.0 BIRD 50. 6- 5-97
LAT 30.9 LONG -44.5

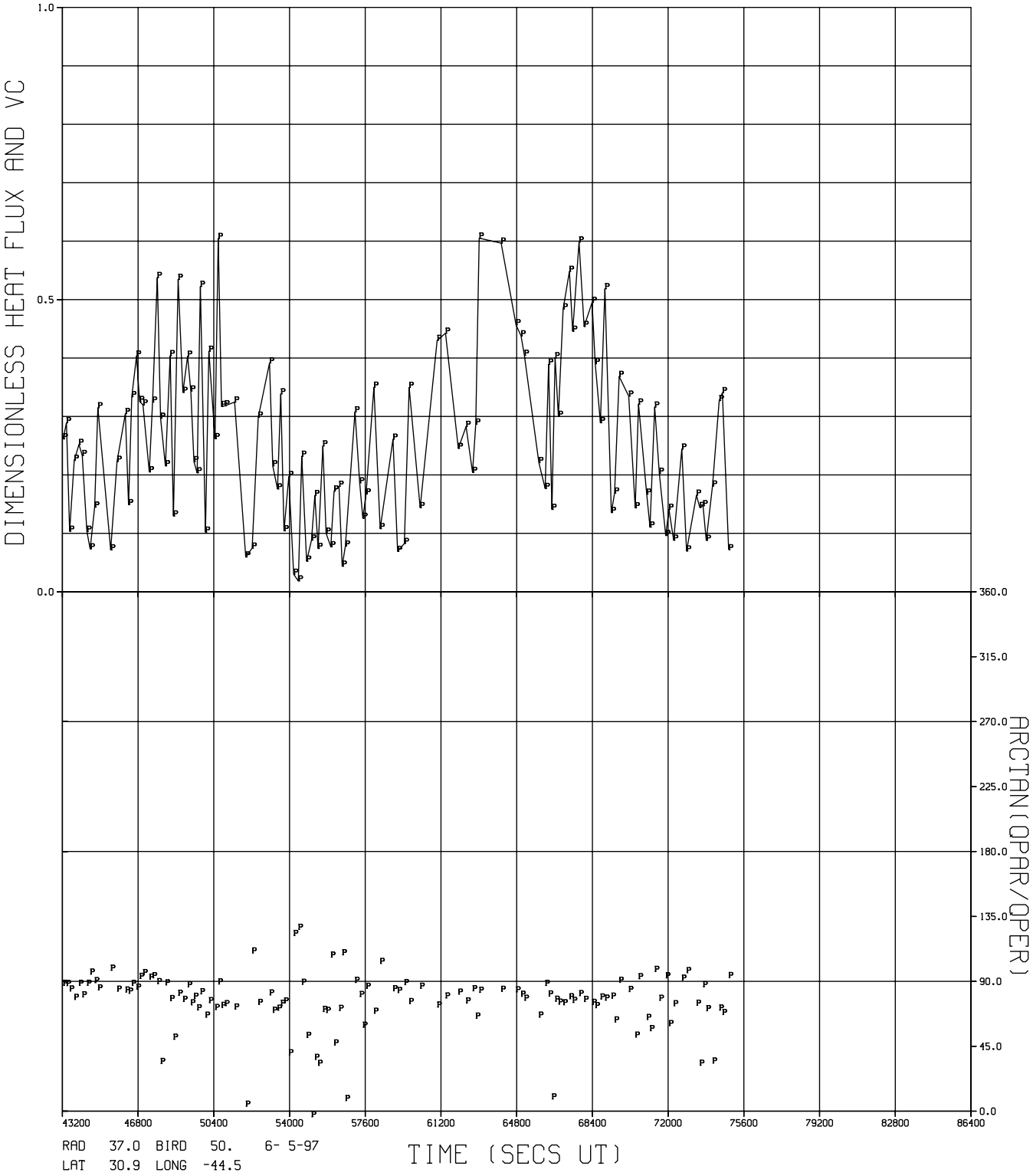

VELOCITY
VELOCITY DIFFERENCE
TIME (SECS UT)
RAD 37.0 BIRD 50. 6- 5-97
LAT 30.9 LONG -44.5

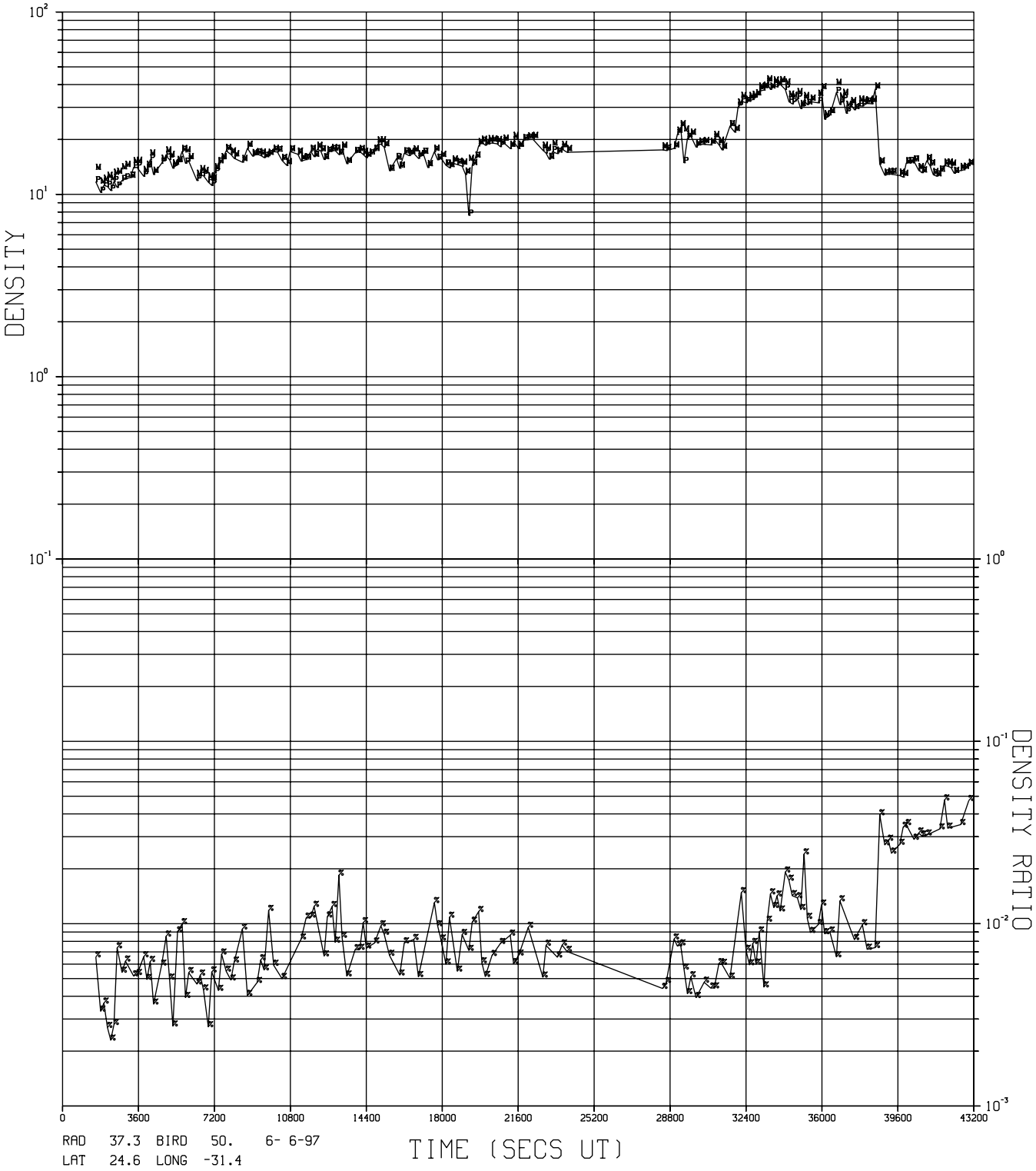

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 37.0 BIRD 50. 6- 5-97
LAT 30.9 LONG -44.5

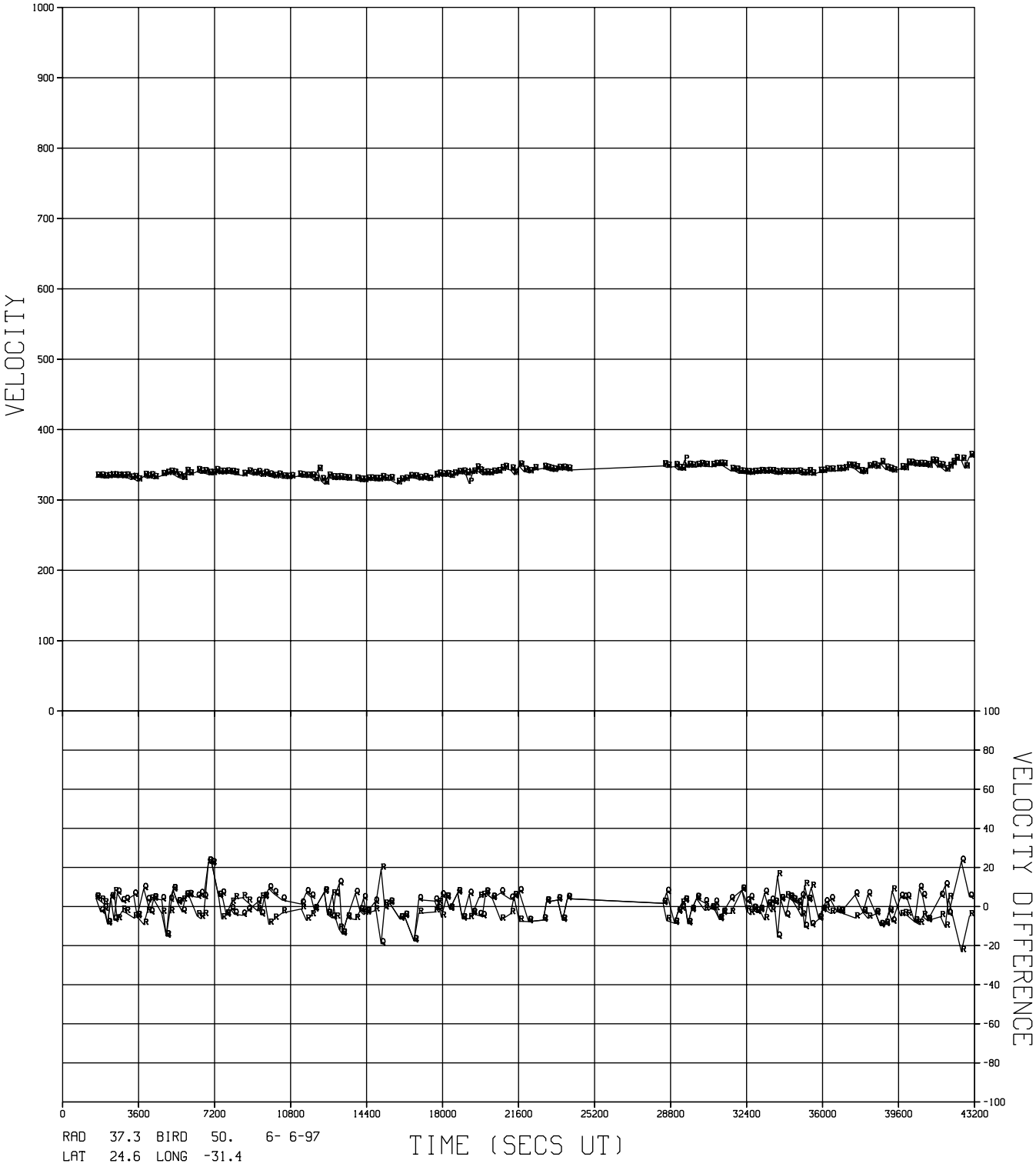

TEMPERATURE
TEMPERATURE RATIO
TIME (SECS UT)
RAD 37.0 BIRD 50. 6- 5-97
LAT 30.9 LONG -44.5

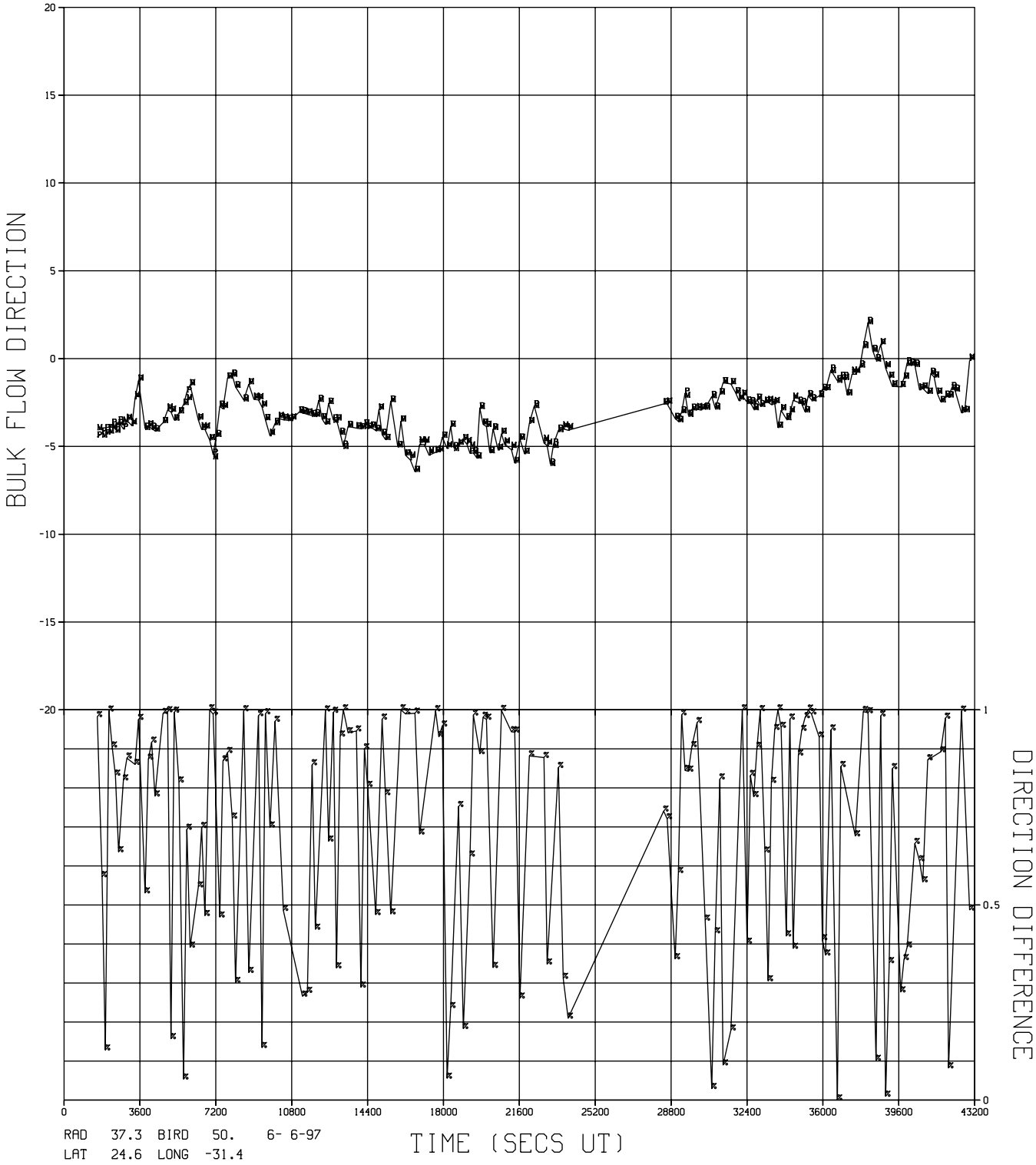

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 37.0 BIRD 50. 6- 5-97
LAT 30.9 LONG -44.5

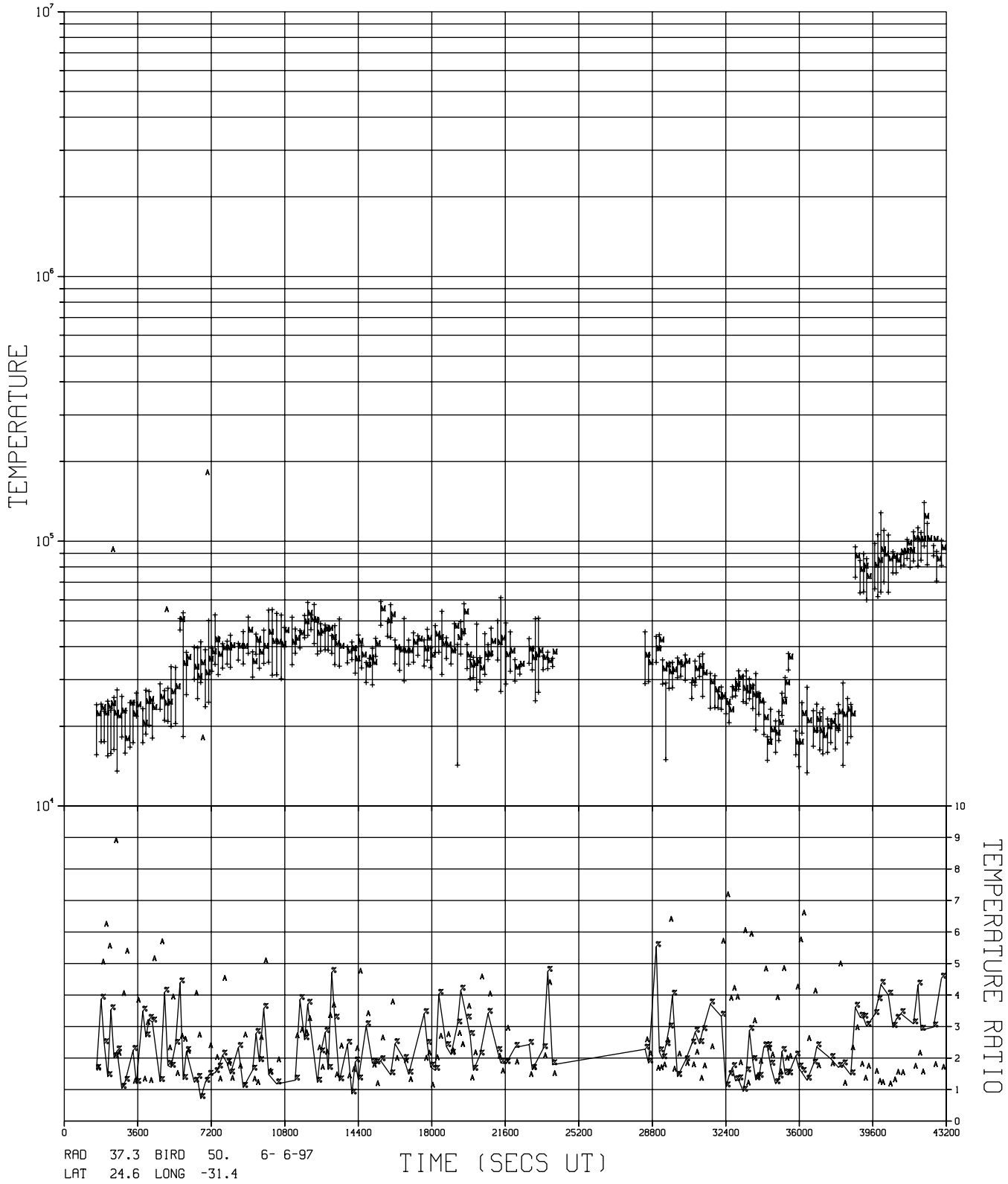

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
RAD 37.0 BIRD 50. 6- 5-97
LAT 30.9 LONG -44.5

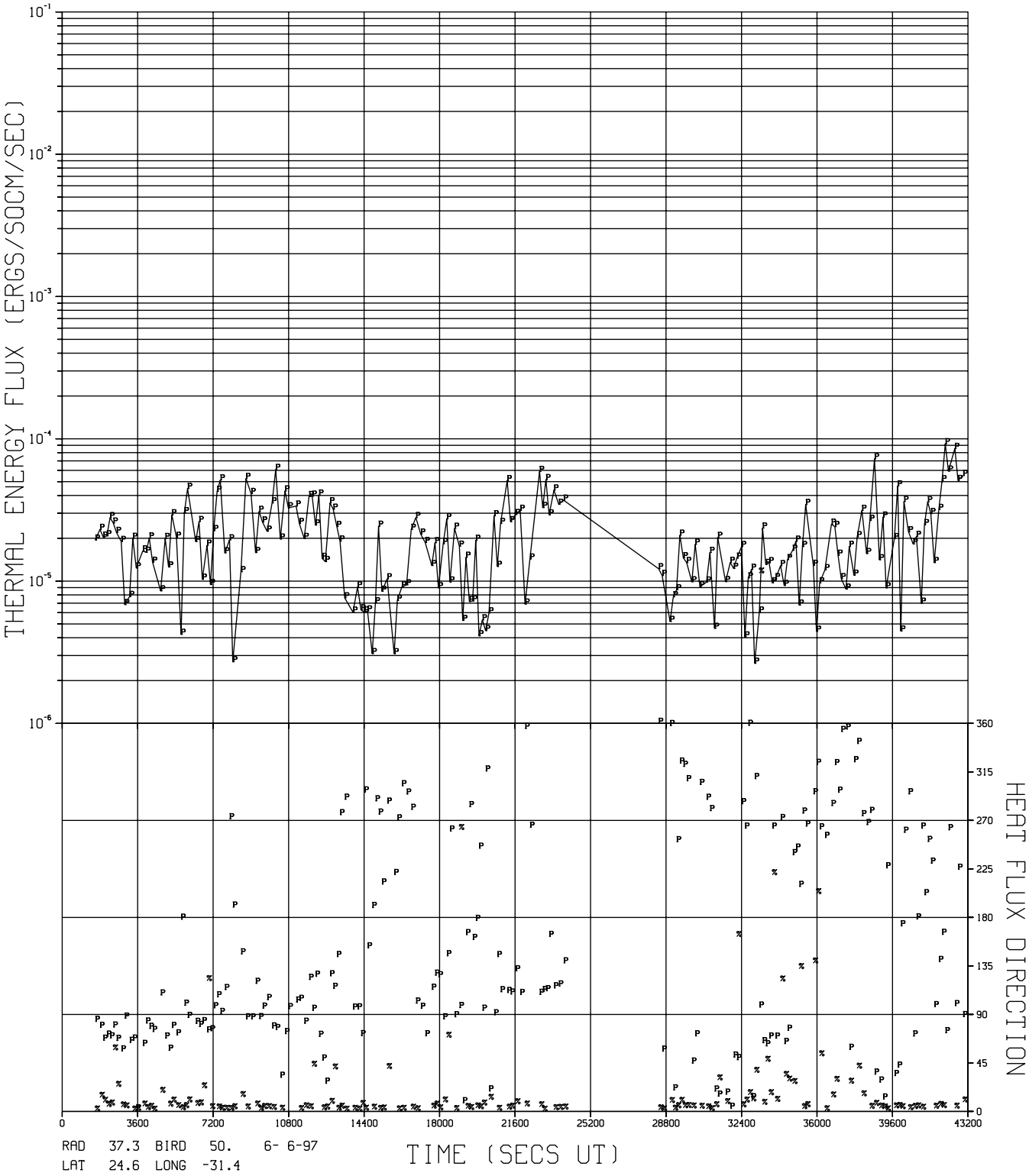

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
TIME (SECS UT)
RAD 37.0 BIRD 50. 6- 5-97
LAT 30.9 LONG -44.5

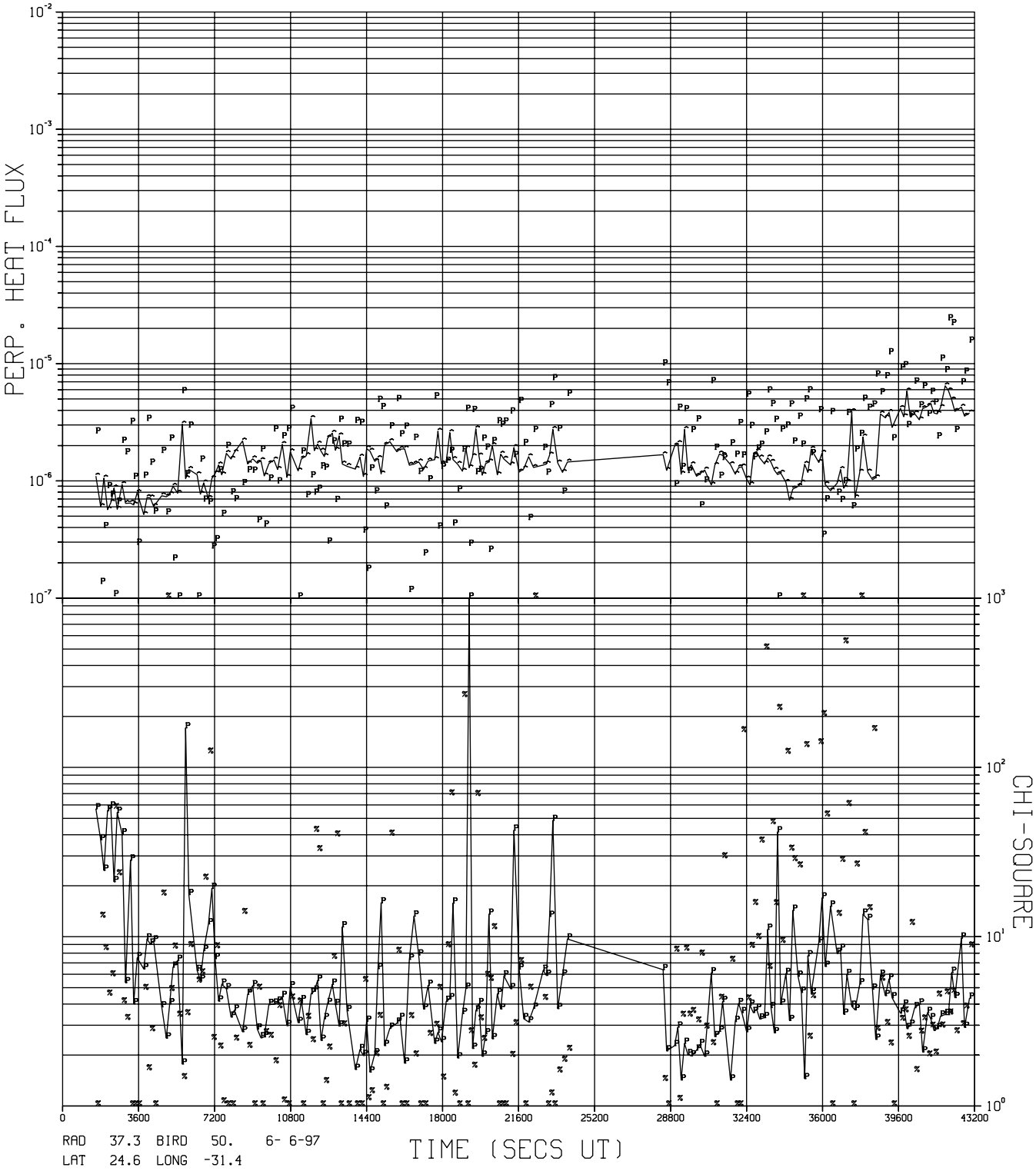

DENSITY
DENSITY RATIO
TIME (SECS UT)
RAD 37.3 BIRD 50. 6- 6-97
LAT 24.6 LONG -31.4

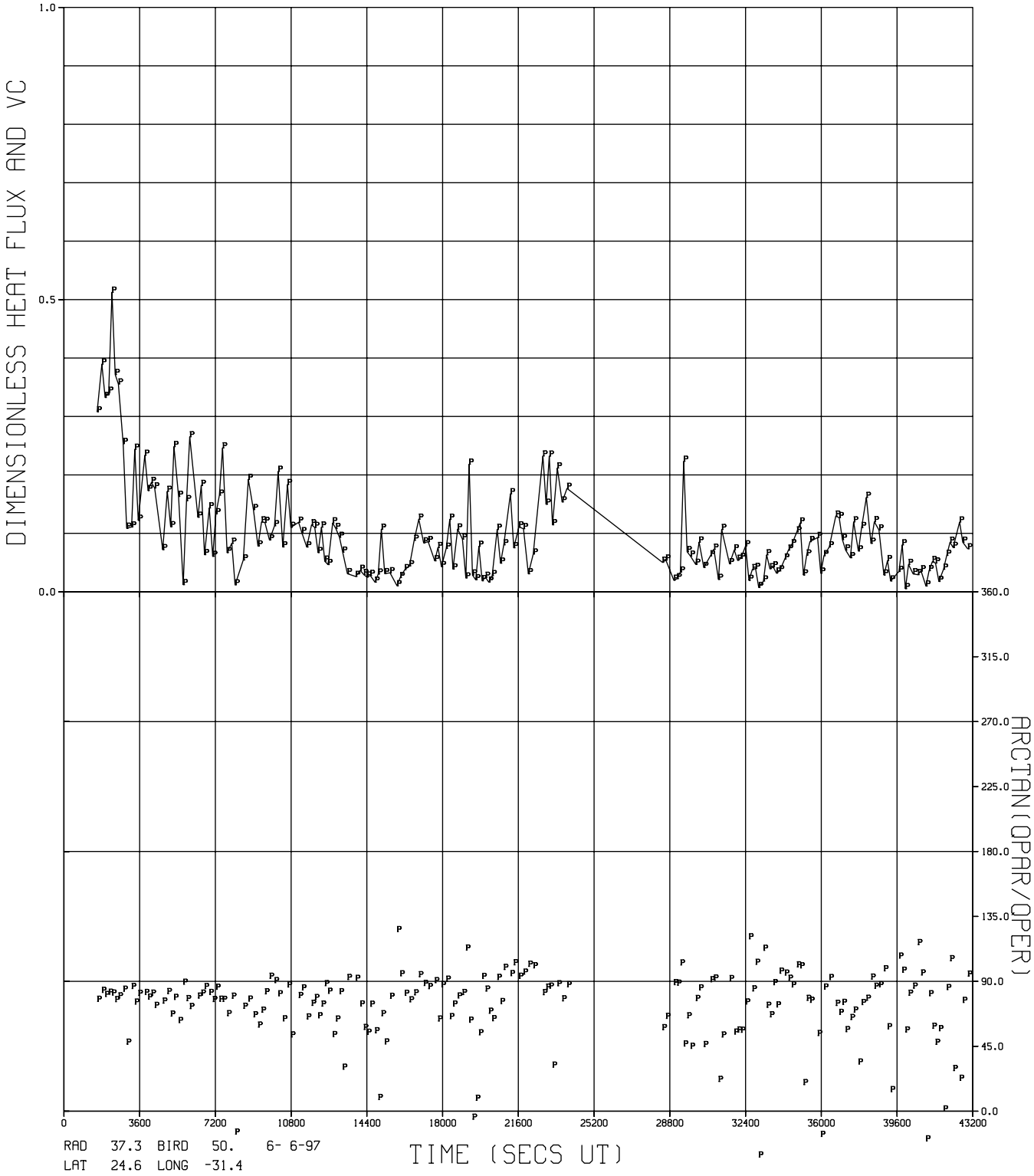

VELOCITY
VELOCITY DIFFERENCE
TIME (SECS UT)
RAD 37.3 BIRD 50. 6- 6-97
LAT 24.6 LONG -31.4

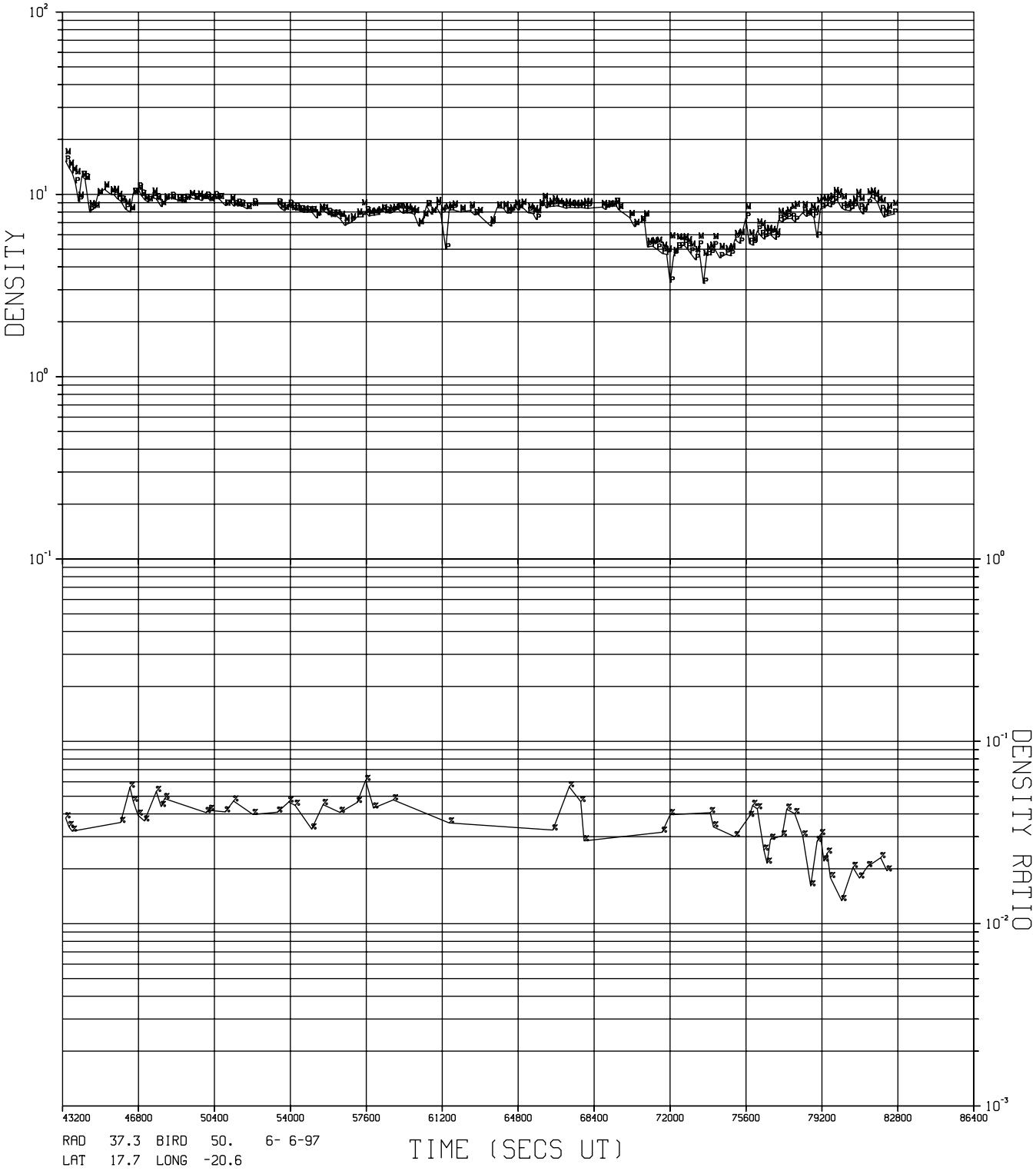

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
RAD 37.3 BIRD 50. 6- 6-97
LAT 24.6 LONG -31.4

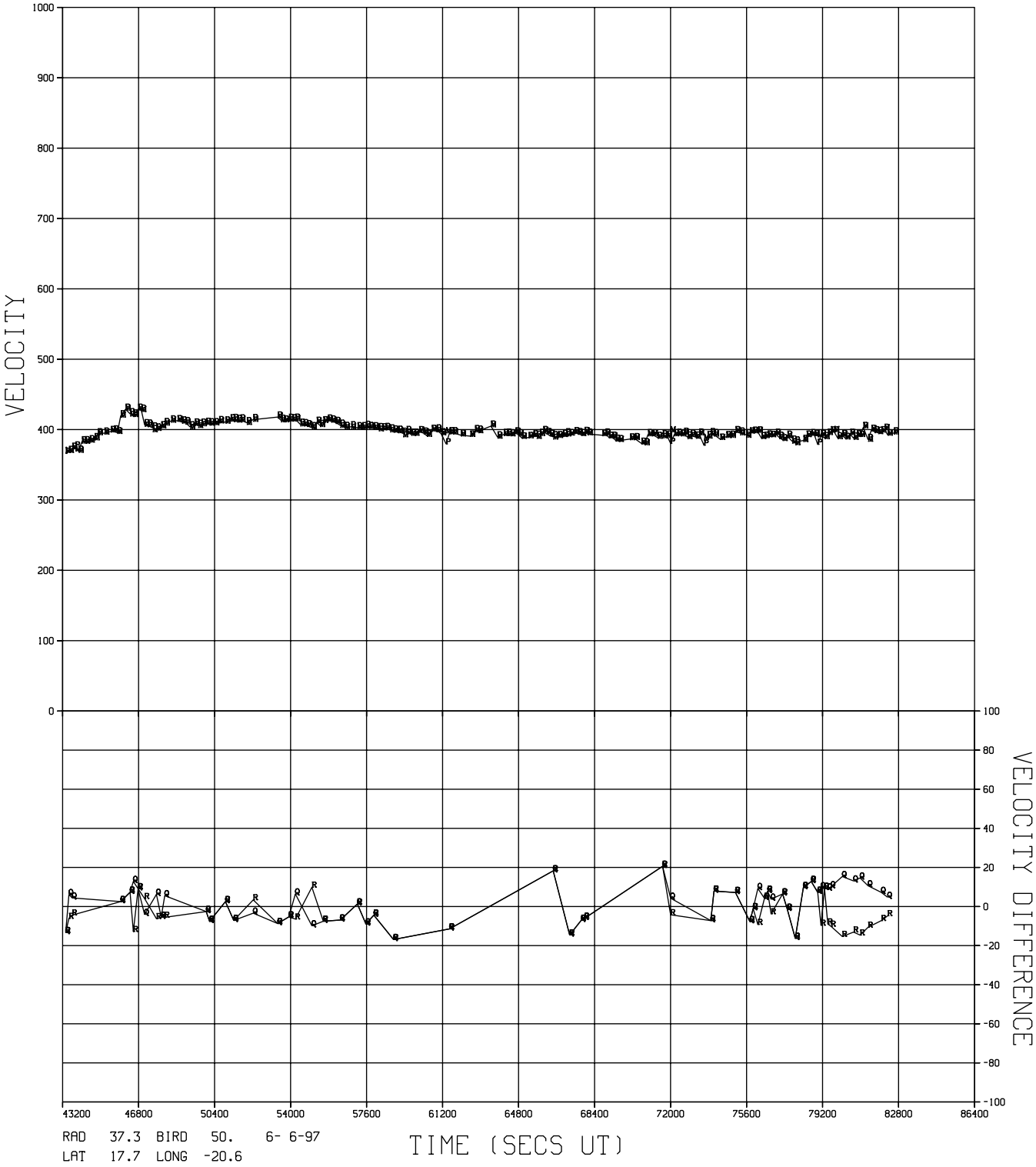

TEMPERATURE
TEMPERATURE RATIO
TIME (SECS UT)
RAD 37.3 BIRD 50. 6- 6-97
LAT 24.6 LONG -31.4

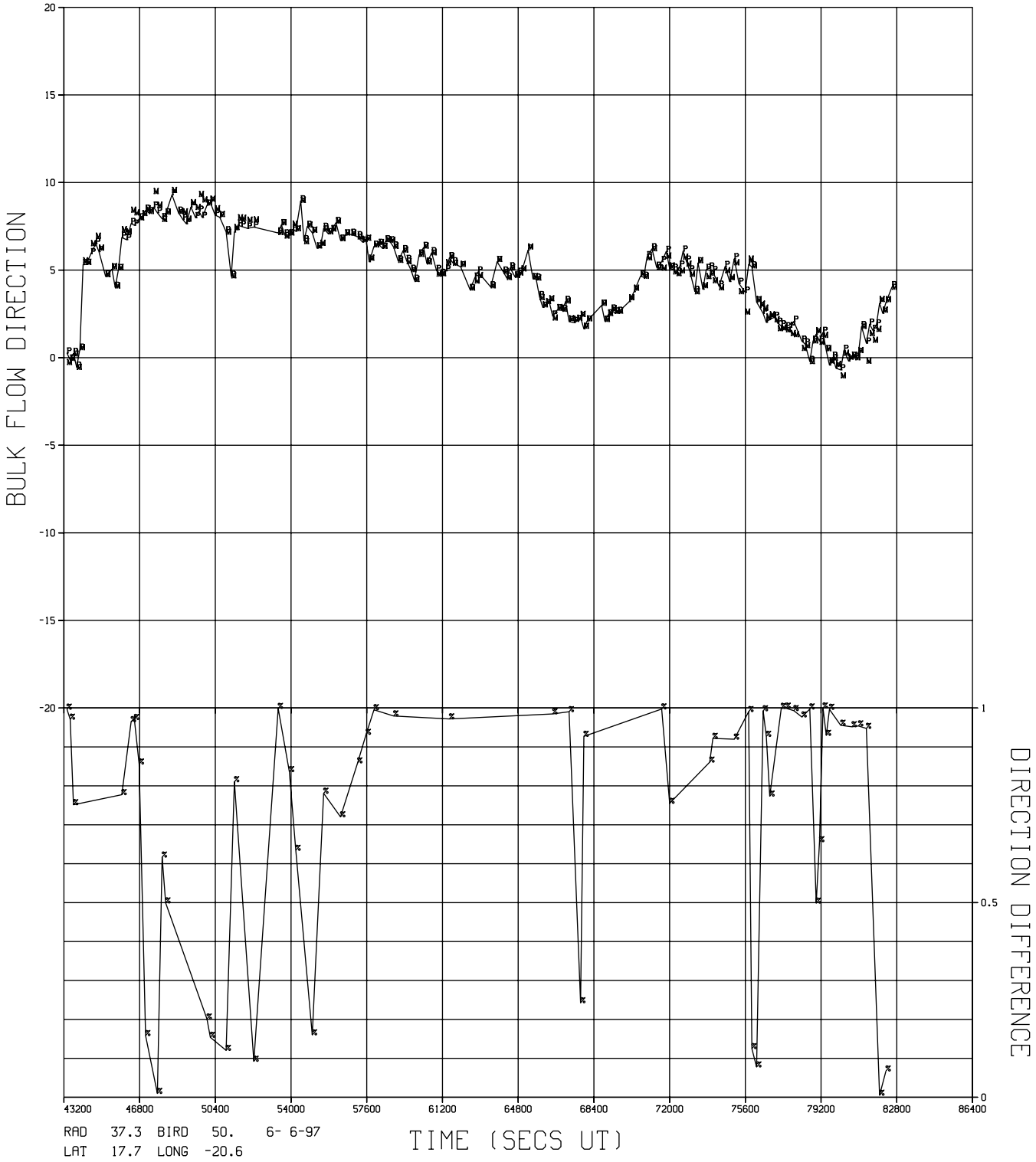

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 37.3 BIRD 50. 6- 6-97
LAT 24.6 LONG -31.4

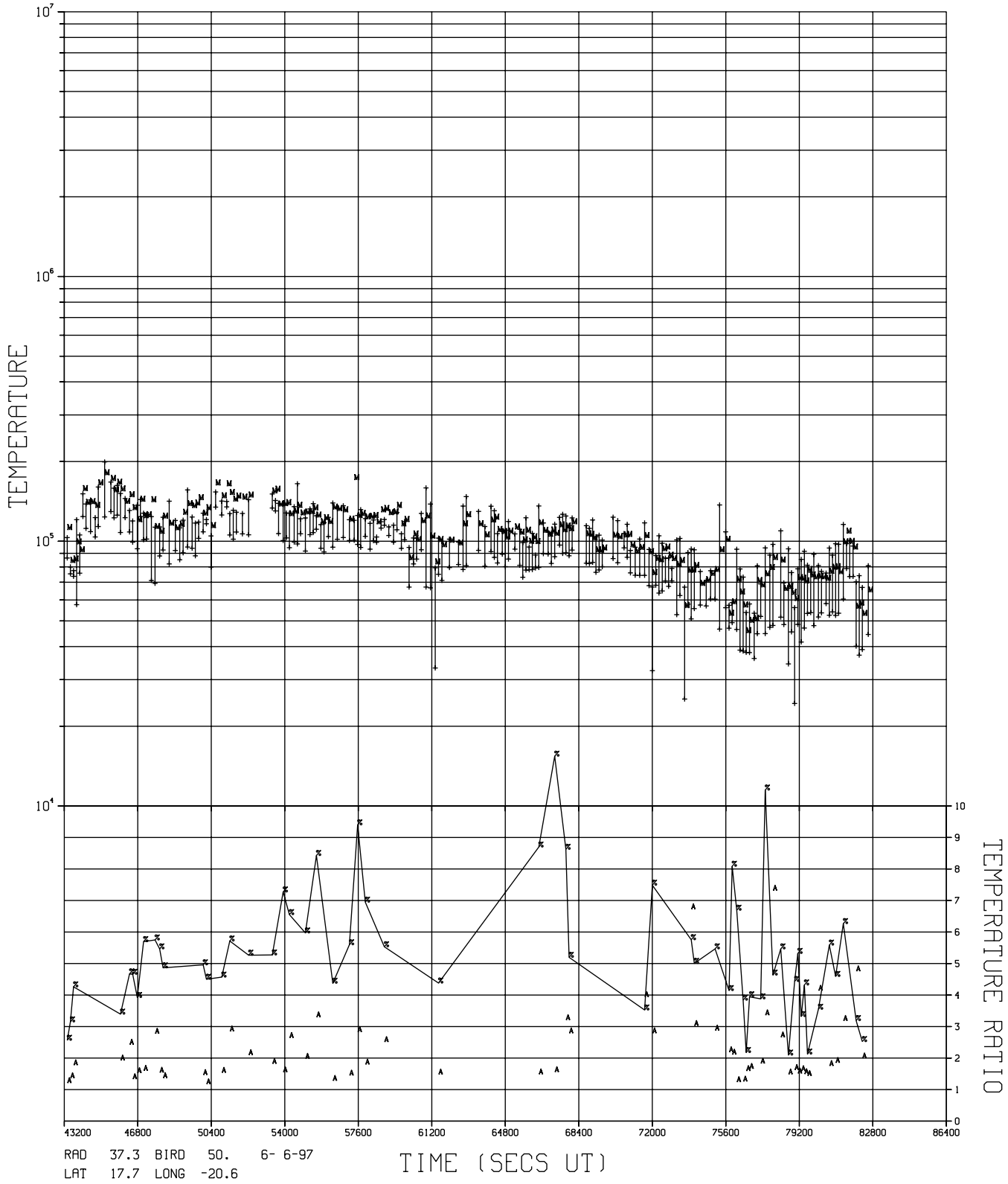

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
RAD 37.3 BIRD 50. 6- 6-97
LAT 24.6 LONG -31.4

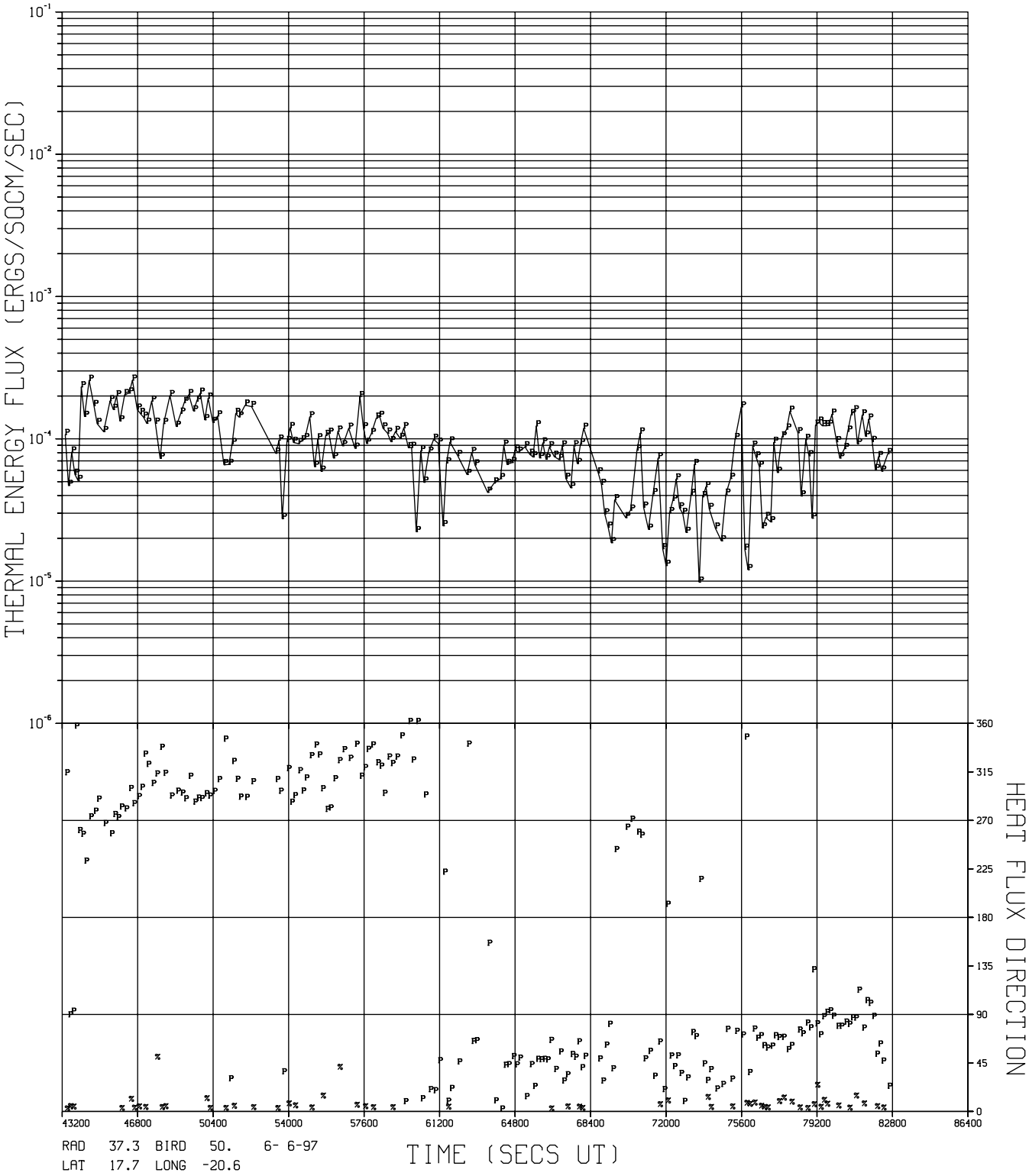

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
TIME (SECS UT)
RAD 37.3 BIRD 50. 6- 6-97
LAT 24.6 LONG -31.4

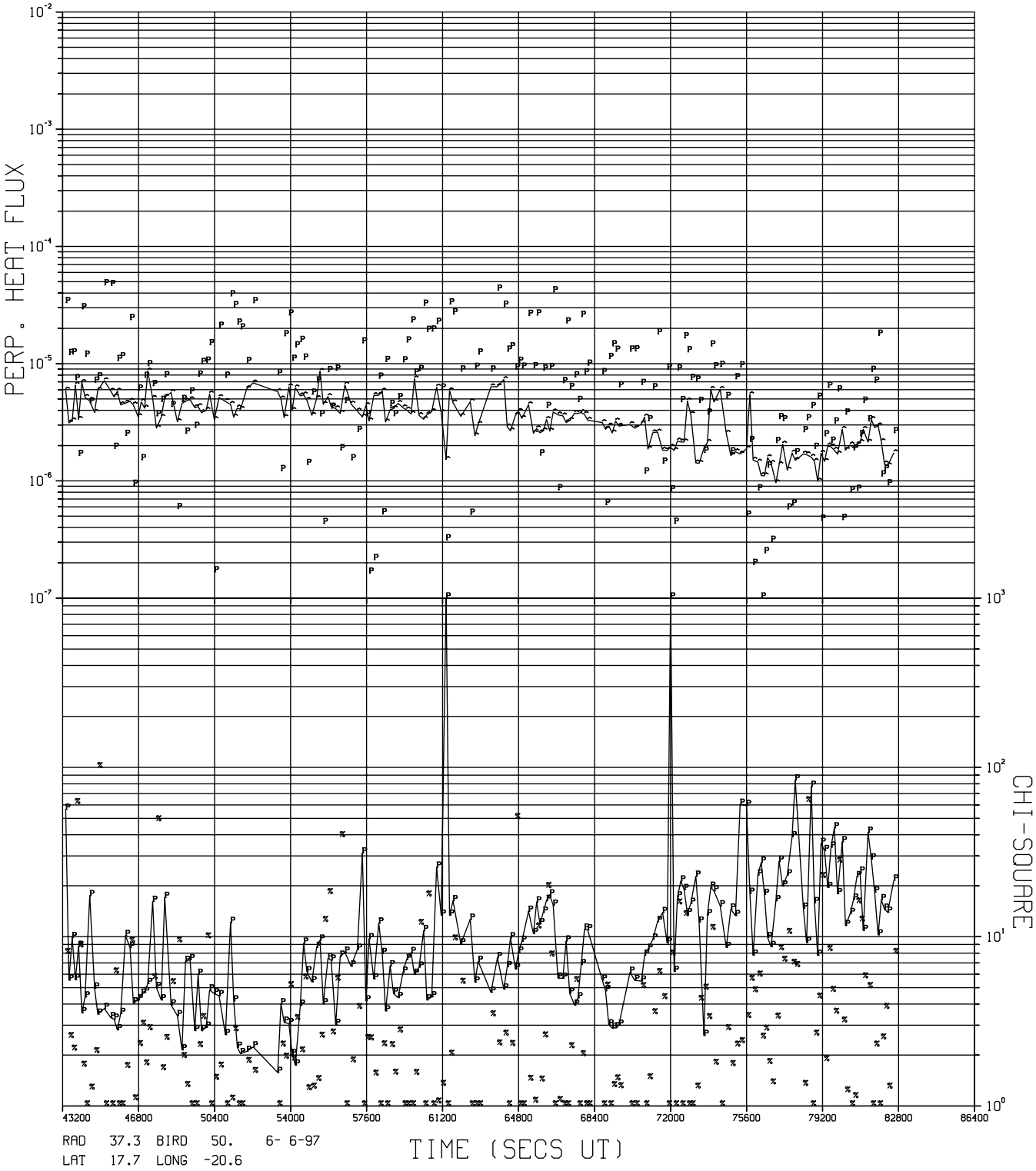

DENSITY
DENSITY RATIO
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 37.3 BIRD 50. 6- 6-97
LAT 17.7 LONG -20.6

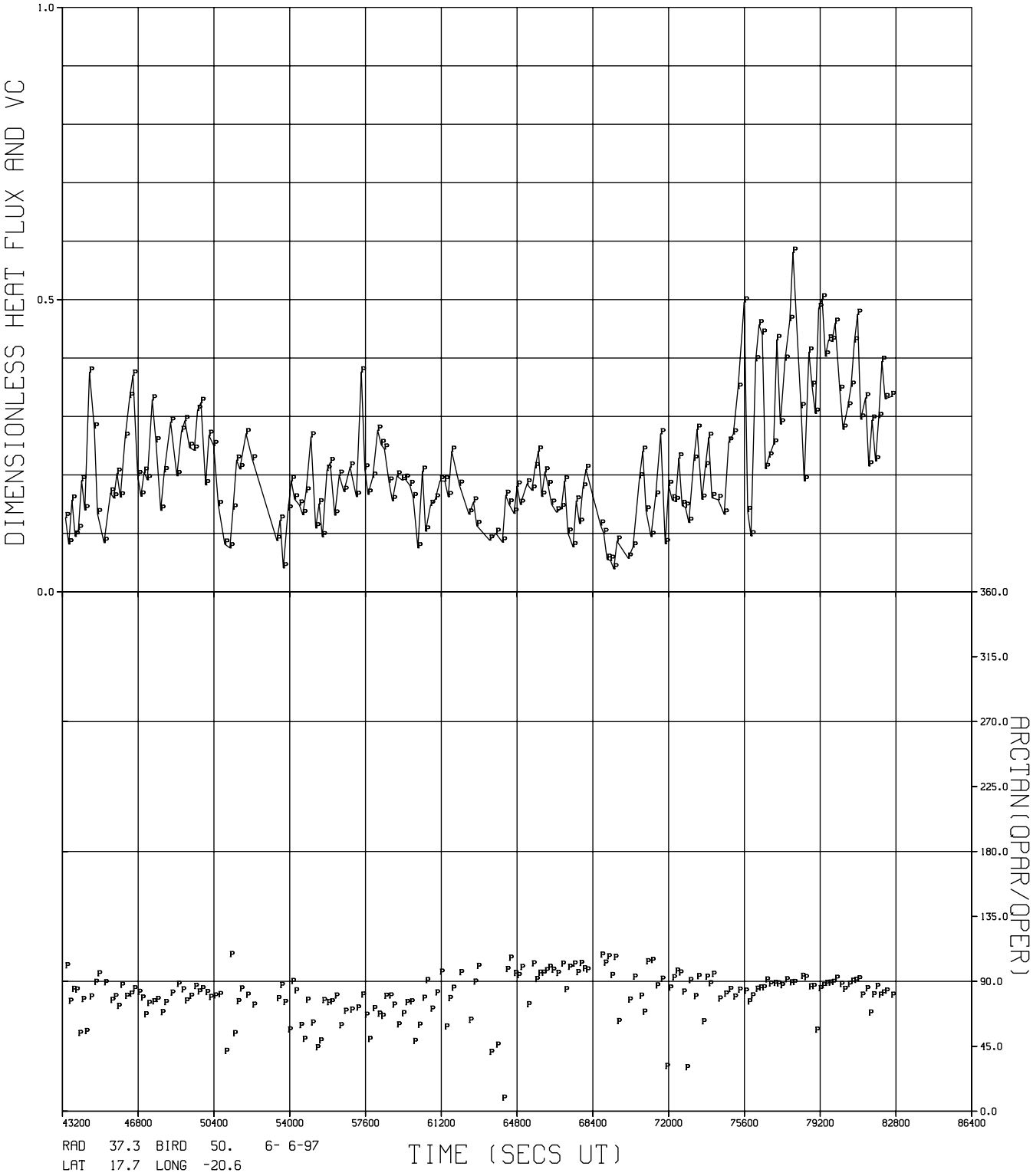

VELOCITY
1000
900
800
700
600
500
400
300
200
100
0
VELOCITY DIFFERENCE
100
80
60
40
20
0
-20
-40
-60
-80
-100
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 37.3 BIRD 50. 6- 6-97
LAT 17.7 LONG -20.6
TIME (SECS UT)

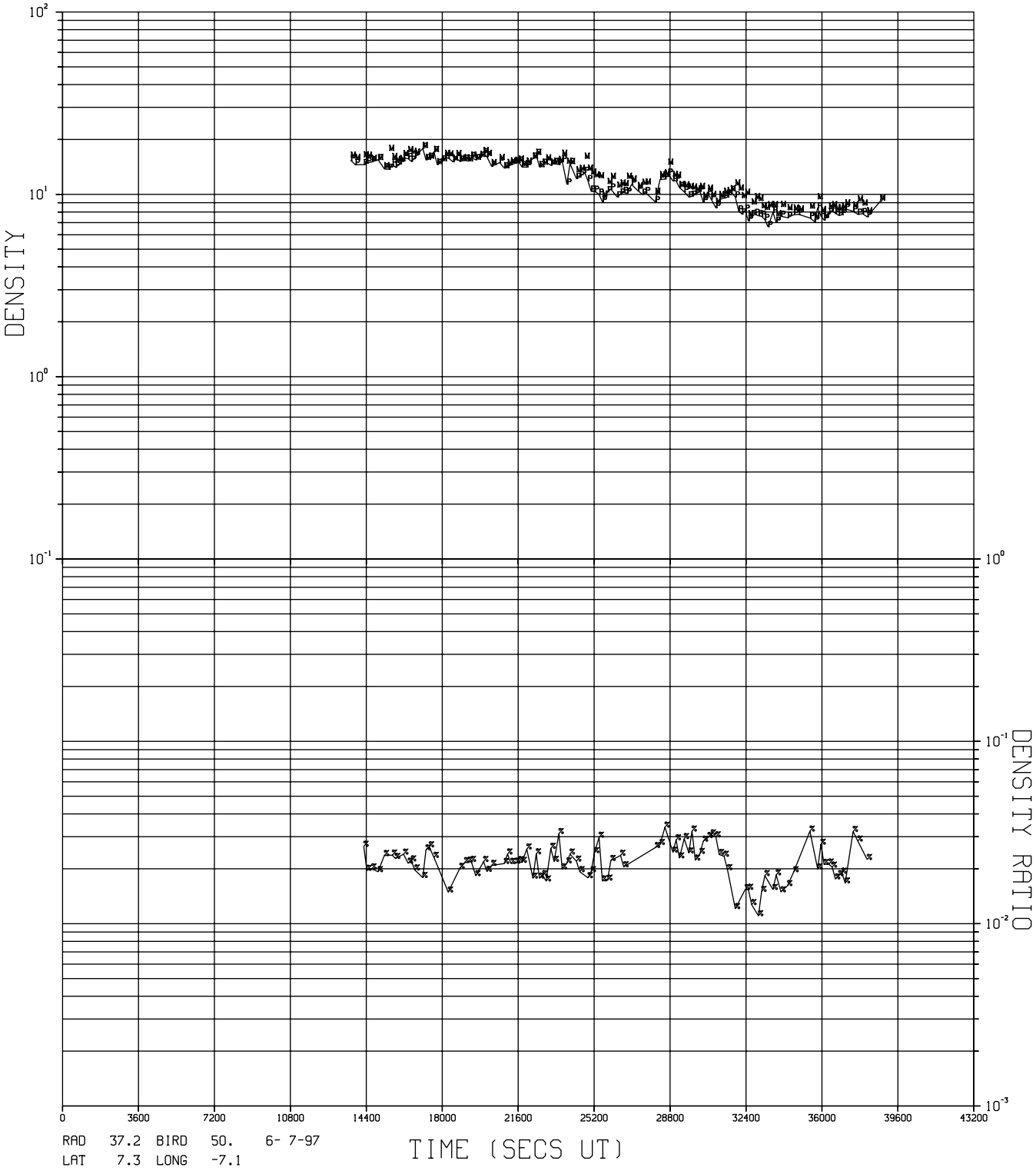

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 37.3 BIRD 50. 6- 6-97
LAT 17.7 LONG -20.6

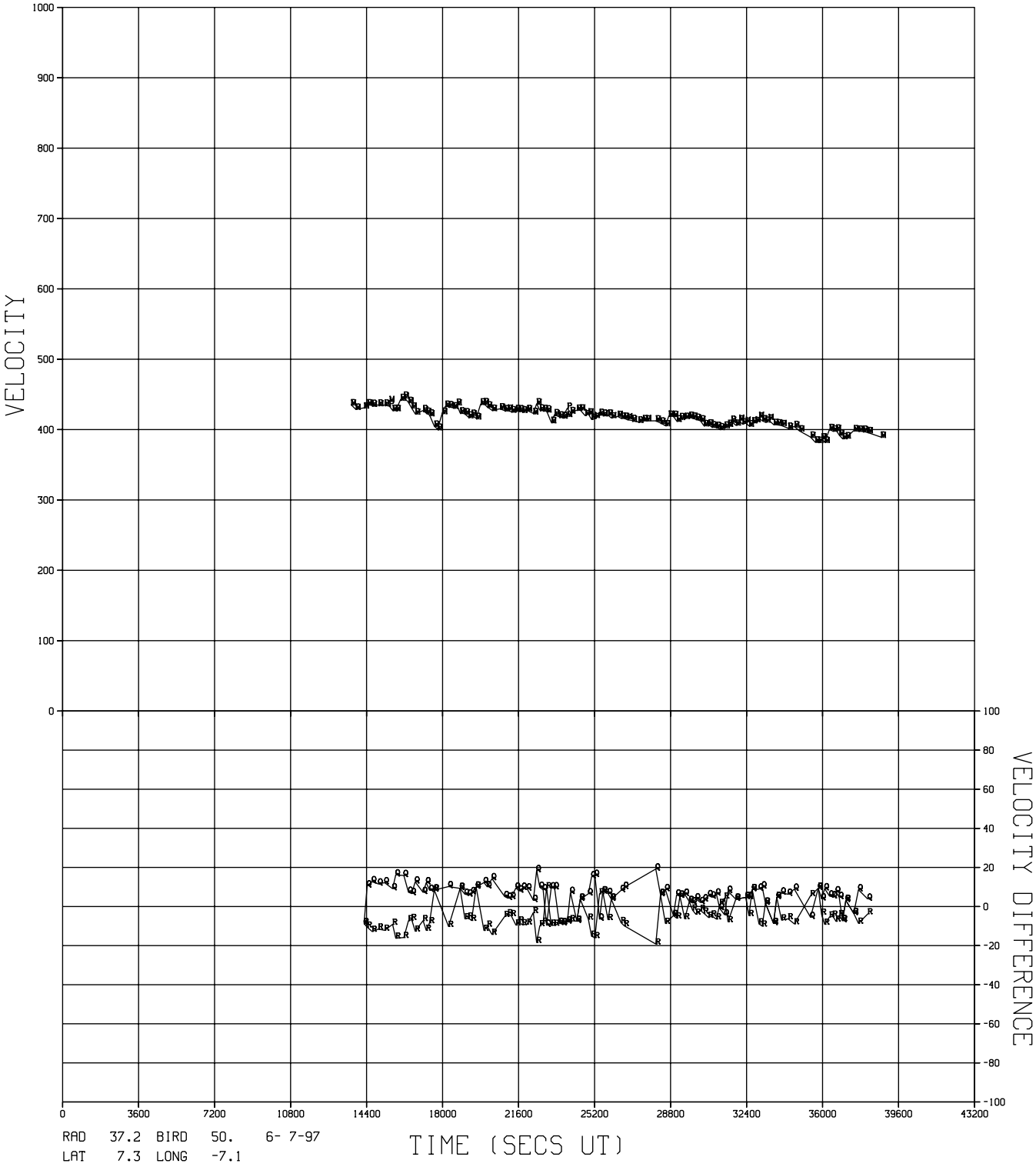

TEMPERATURE
TEMPERATURE RATIO
TIME (SECS UT)
RAD 37.3 BIRD 50. 6- 6-97
LAT 17.7 LONG -20.6

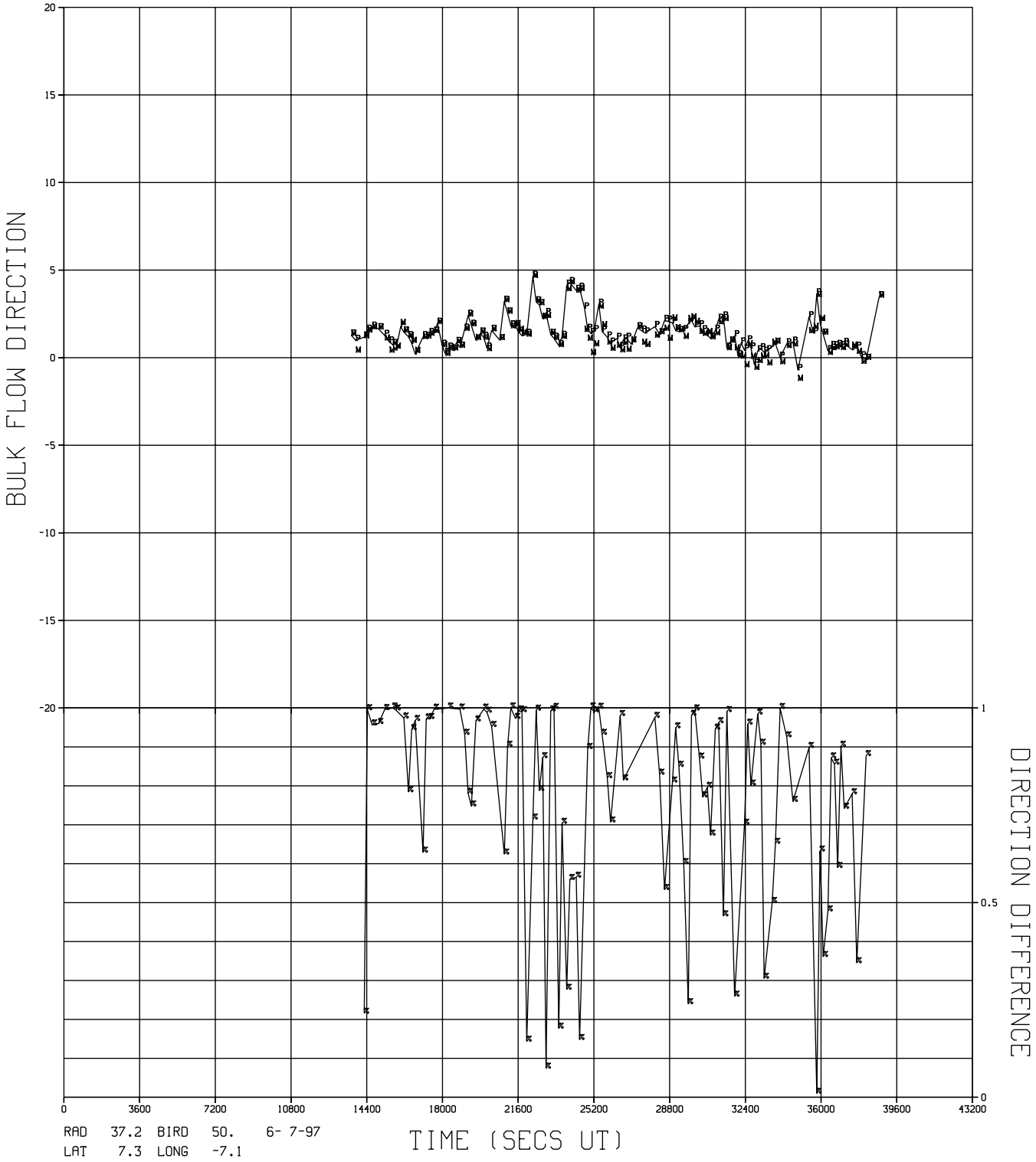

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 37.3 BIRD 50. 6- 6-97
LAT 17.7 LONG -20.6

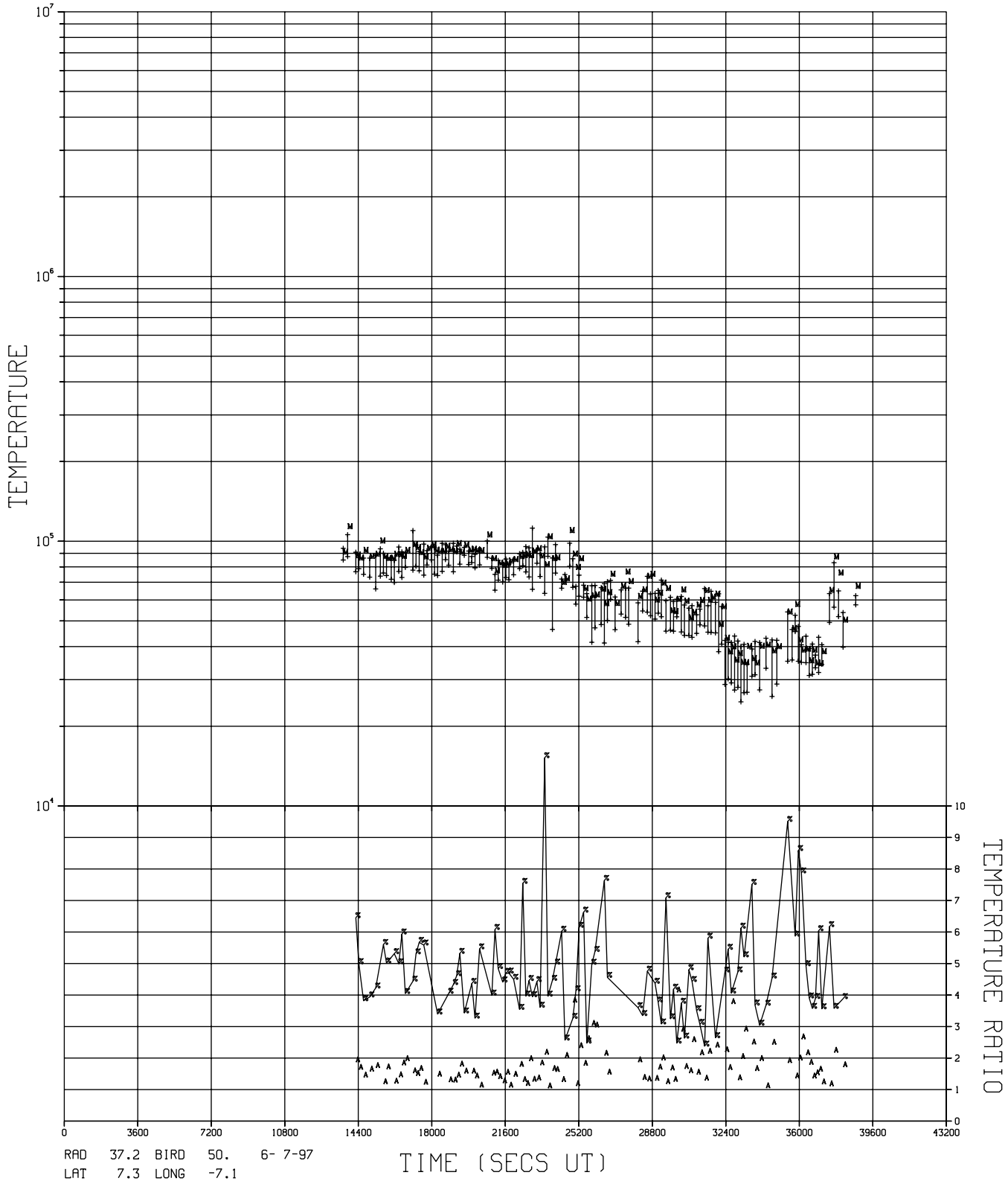

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 37.3 BIRD 50. 6- 6-97
LAT 17.7 LONG -20.6

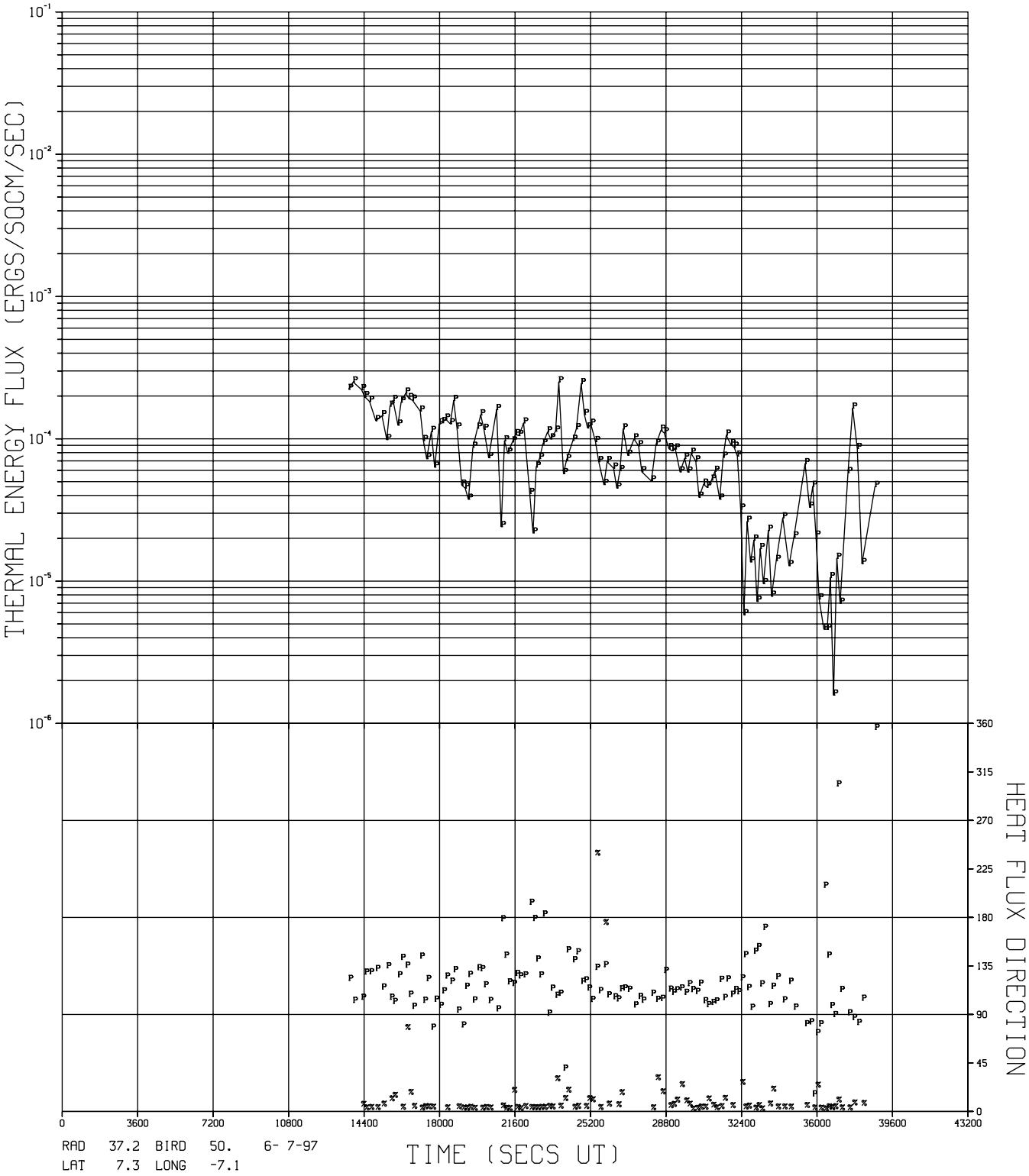

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
TIME (SECS UT)
RAD 37.3 BIRD 50. 6- 6-97
LAT 17.7 LONG -20.6

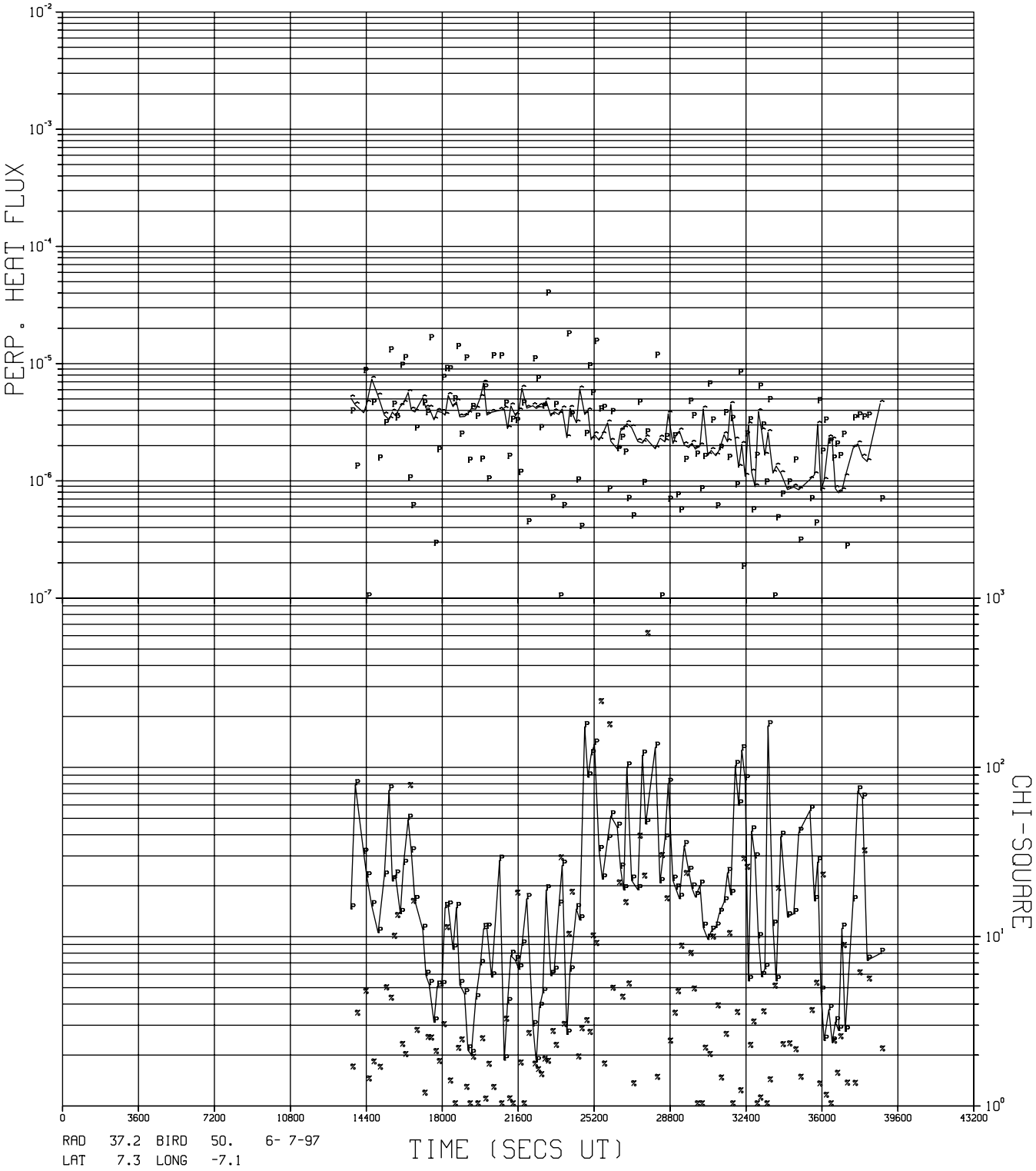

DENSITY
DENSITY RATIO
TIME (SECS UT)
RAD 37.2 BIRD 50. 6- 7-97
LAT 7.3 LONG -7.1

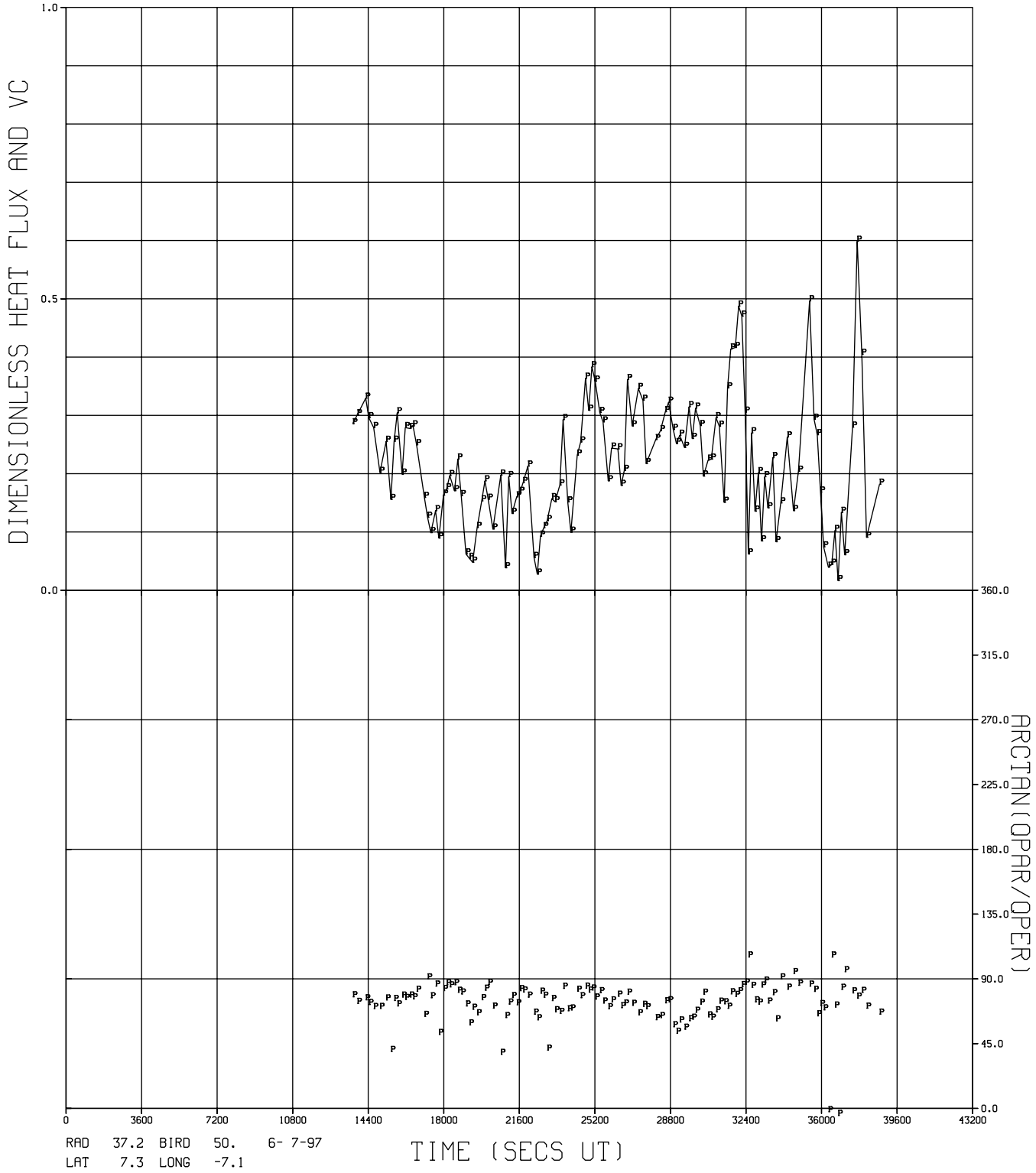

VELOCITY
VELOCITY DIFFERENCE
TIME (SECS UT)
RAD 37.2 BIRD 50. 6- 7-97
LAT 7.3 LONG -7.1

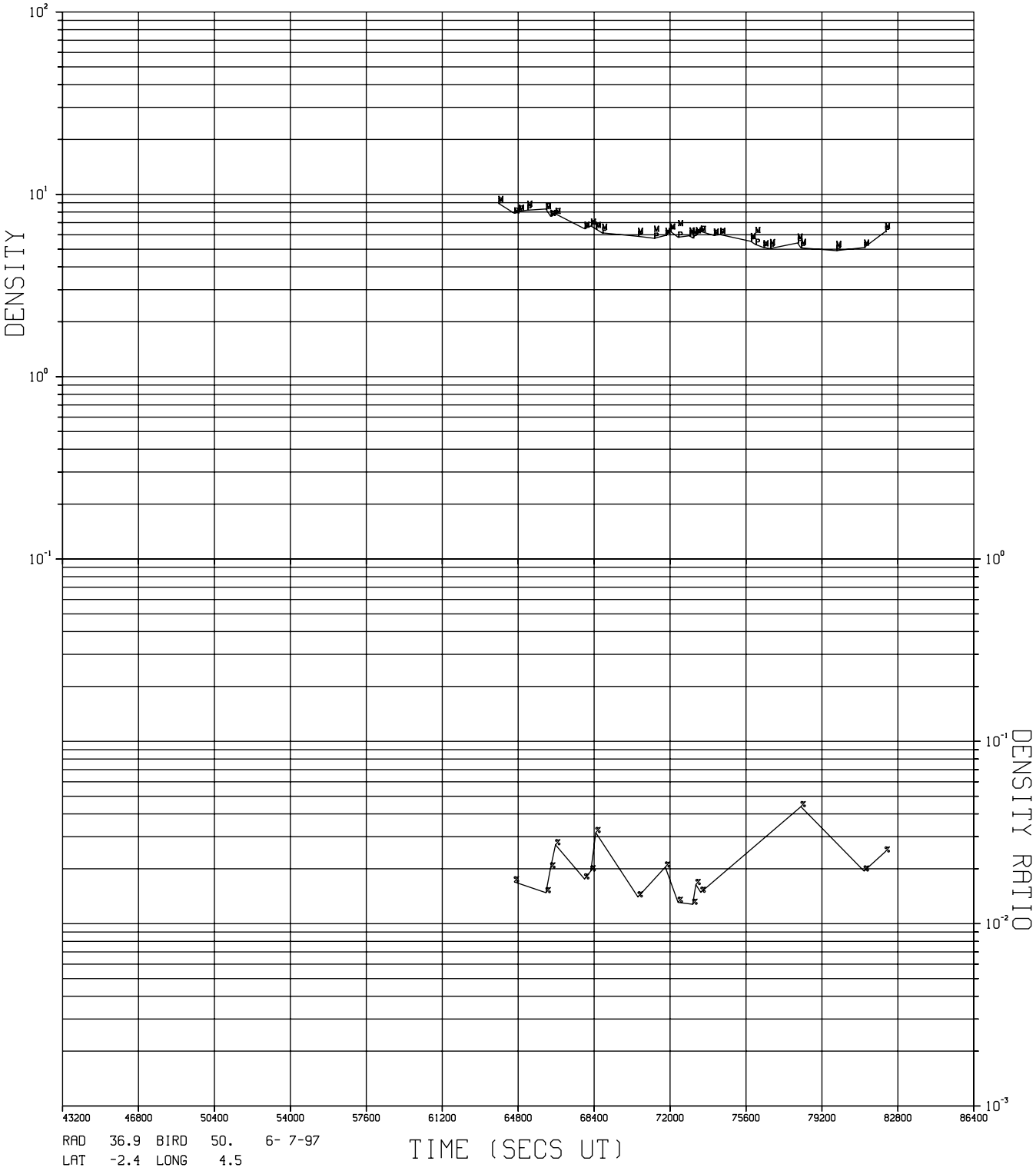

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
RAD 37.2 BIRD 50. 6- 7-97
LAT 7.3 LONG -7.1

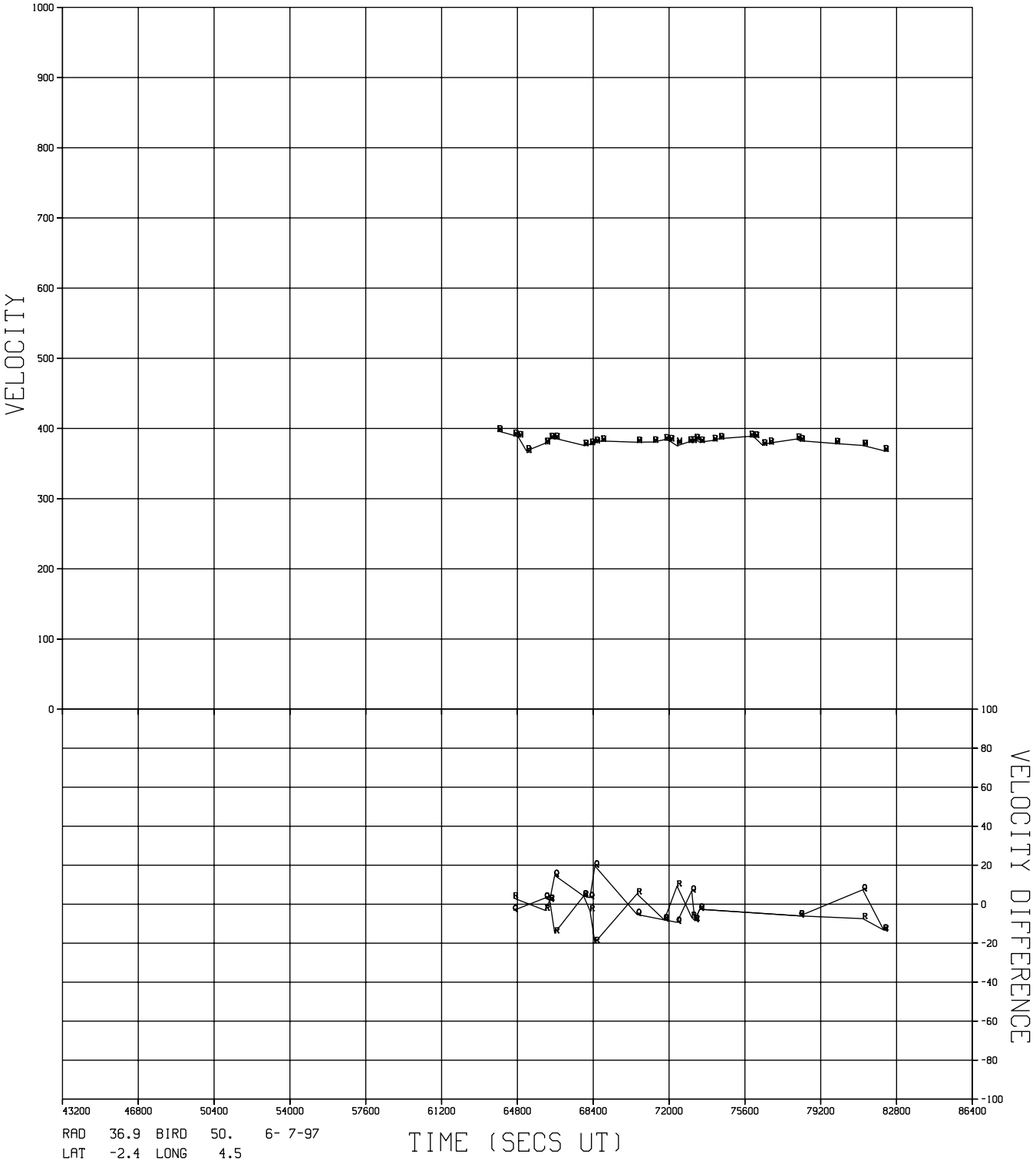

TEMPERATURE
TEMPERATURE RATIO
TIME (SECS UT)
RAD 37.2 BIRD 50. 6- 7-97
LAT 7.3 LONG -7.1

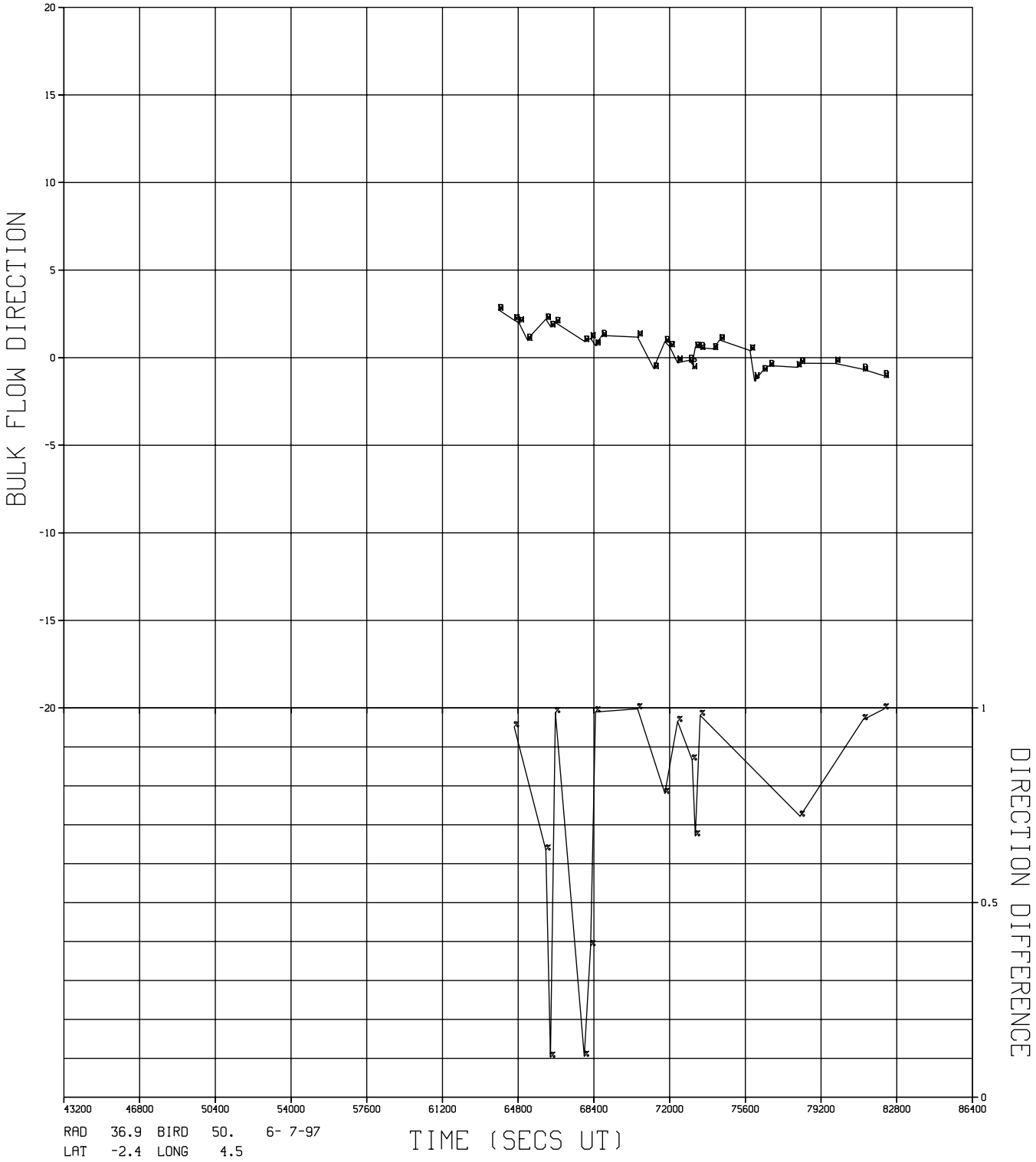

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 37.2 BIRD 50. 6- 7-97
LAT 7.3 LONG -7.1

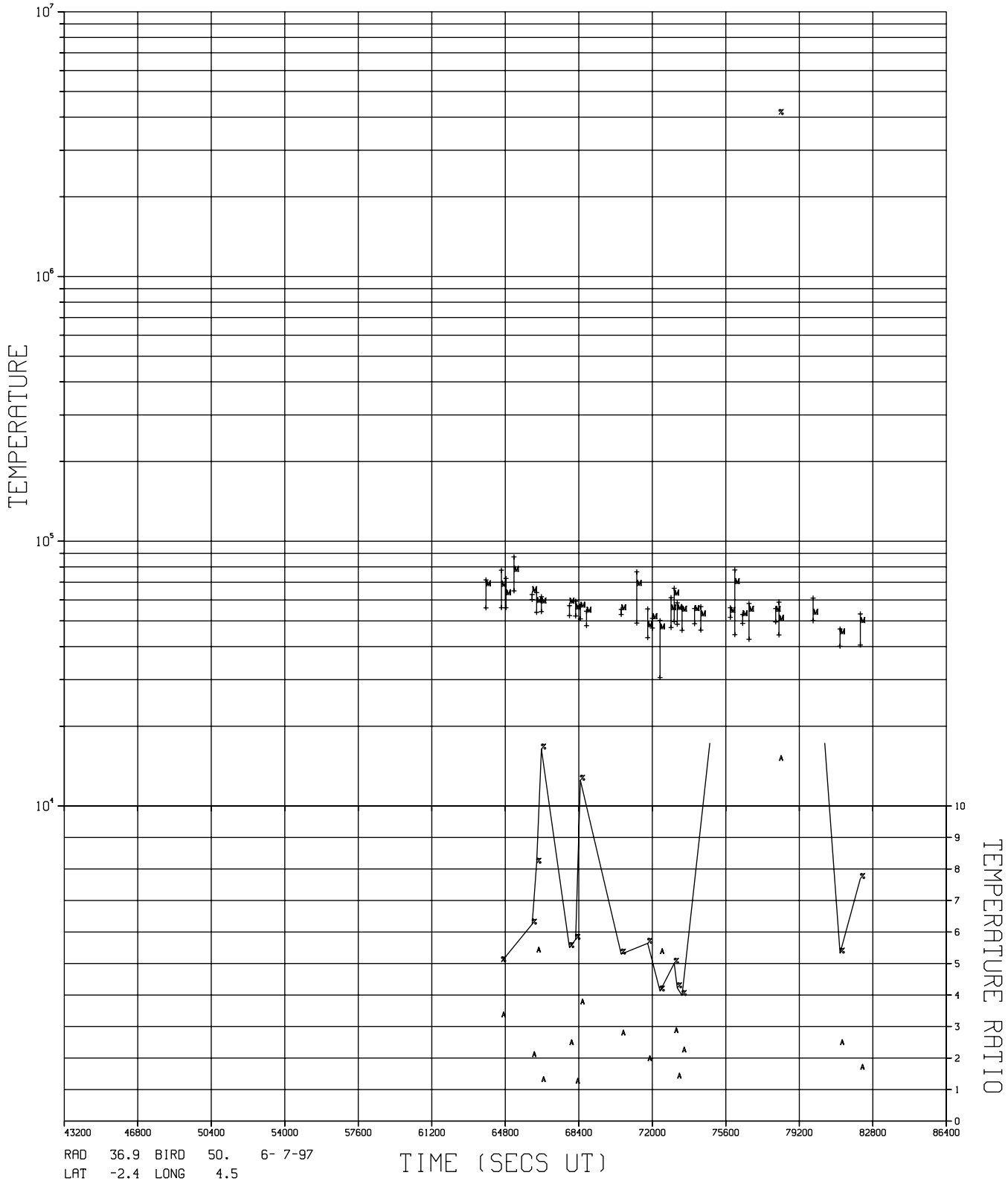

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
RAD 37.2 BIRD 50. 6- 7-97
LAT 7.3 LONG -7.1

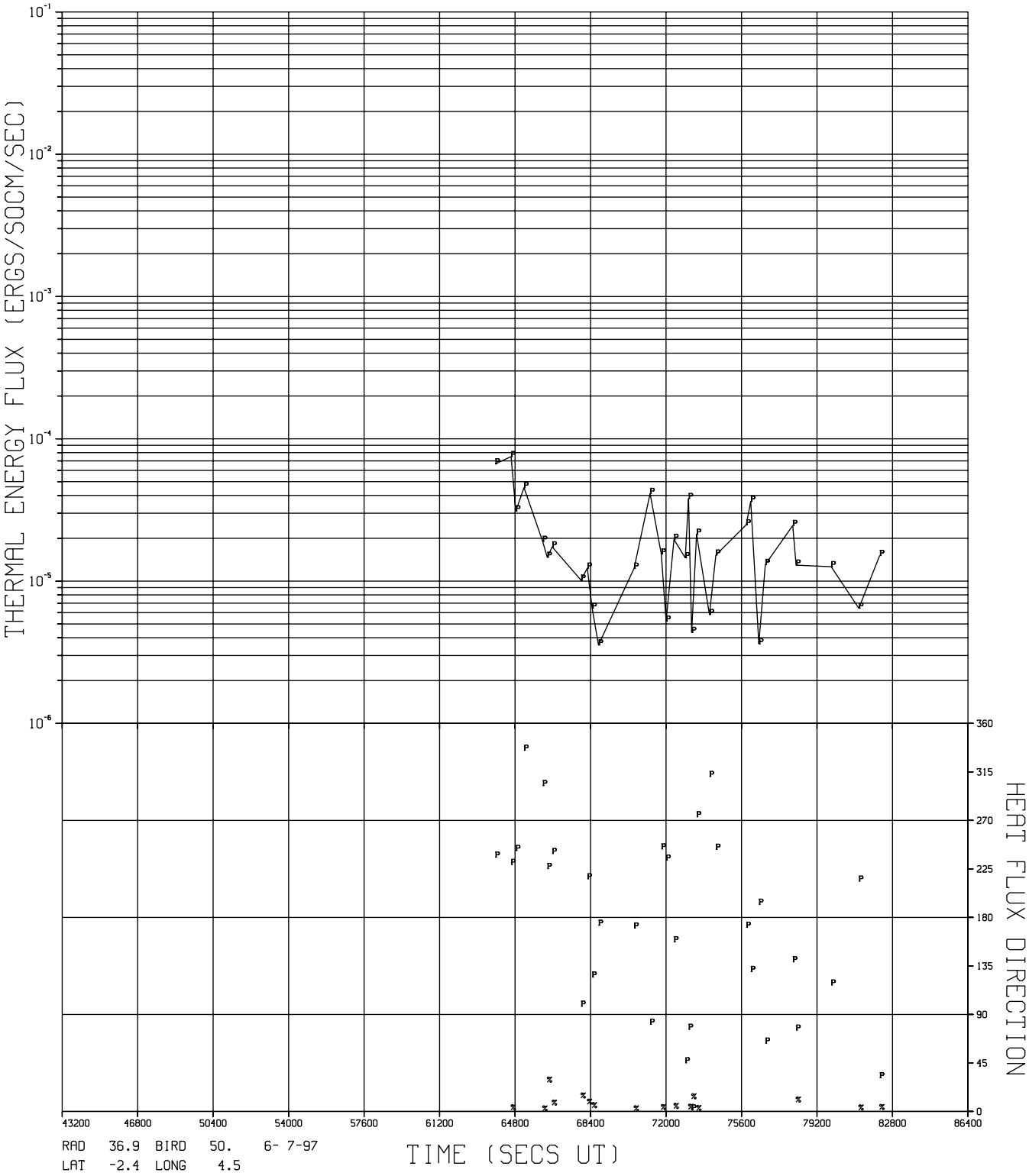

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
TIME (SECS UT)
RAD 37.2 BIRD 50. 6- 7-97
LAT 7.3 LONG -7.1

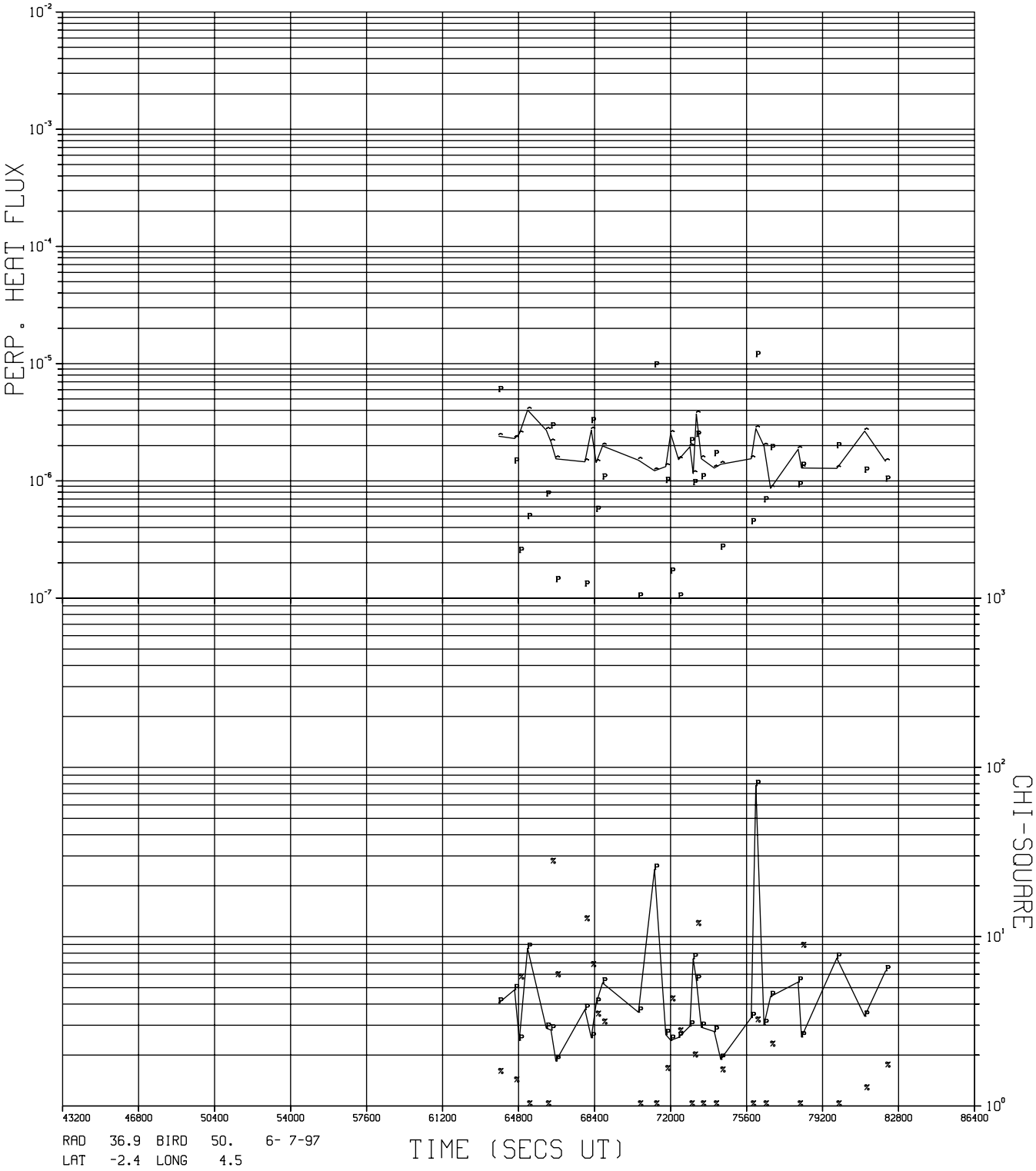

DENSITY
DENSITY RATIO
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 36.9 BIRD 50. 6- 7-97
LAT -2.4 LONG 4.5

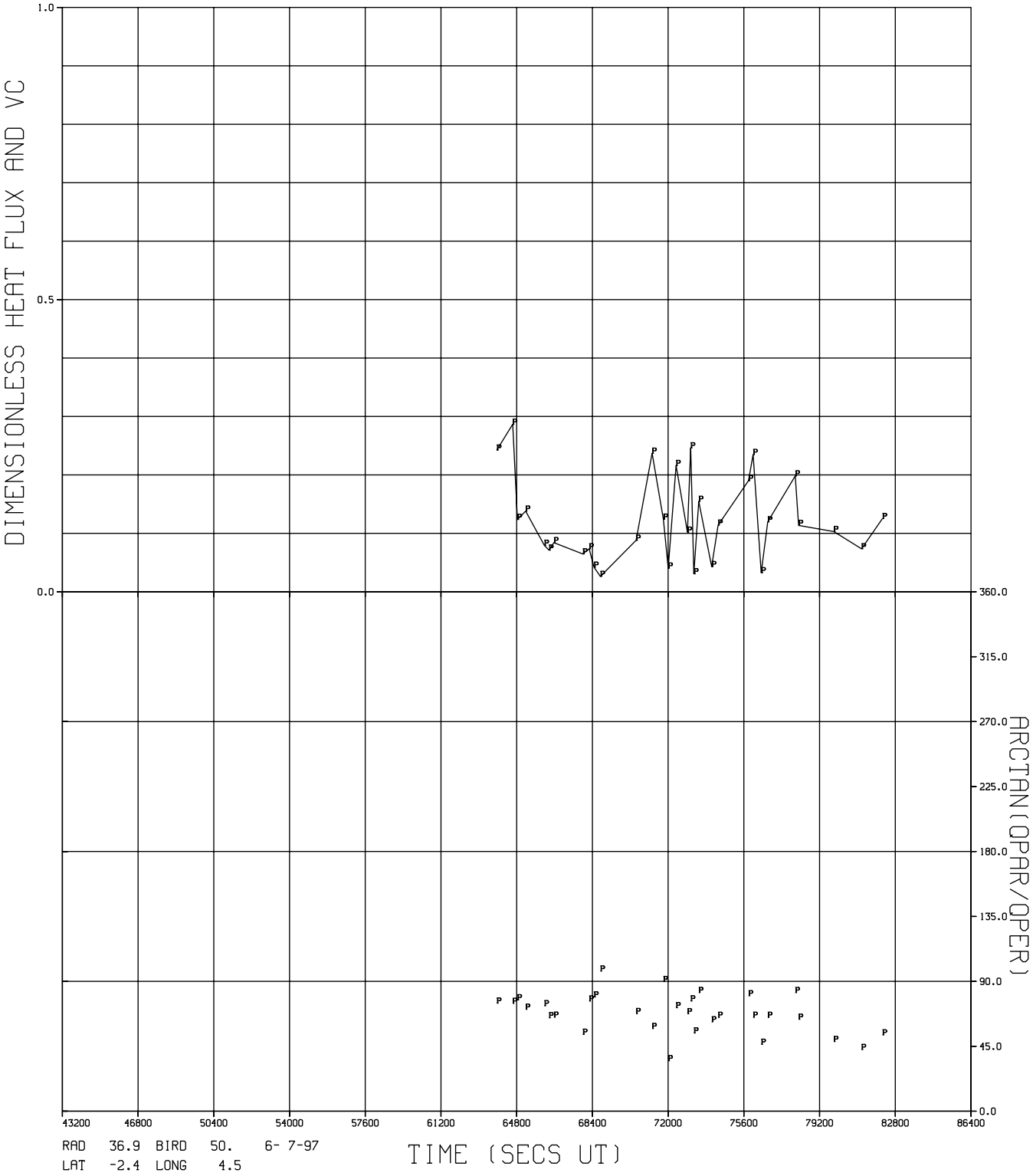

VELOCITY
1000
900
800
700
600
500
400
300
200
100
0
VELOCITY DIFFERENCE
100
80
60
40
20
0
-20
-40
-60
-80
-100
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 36.9 BIRD 50. 6- 7-97
LAT -2.4 LONG 4.5
TIME (SECS UT)

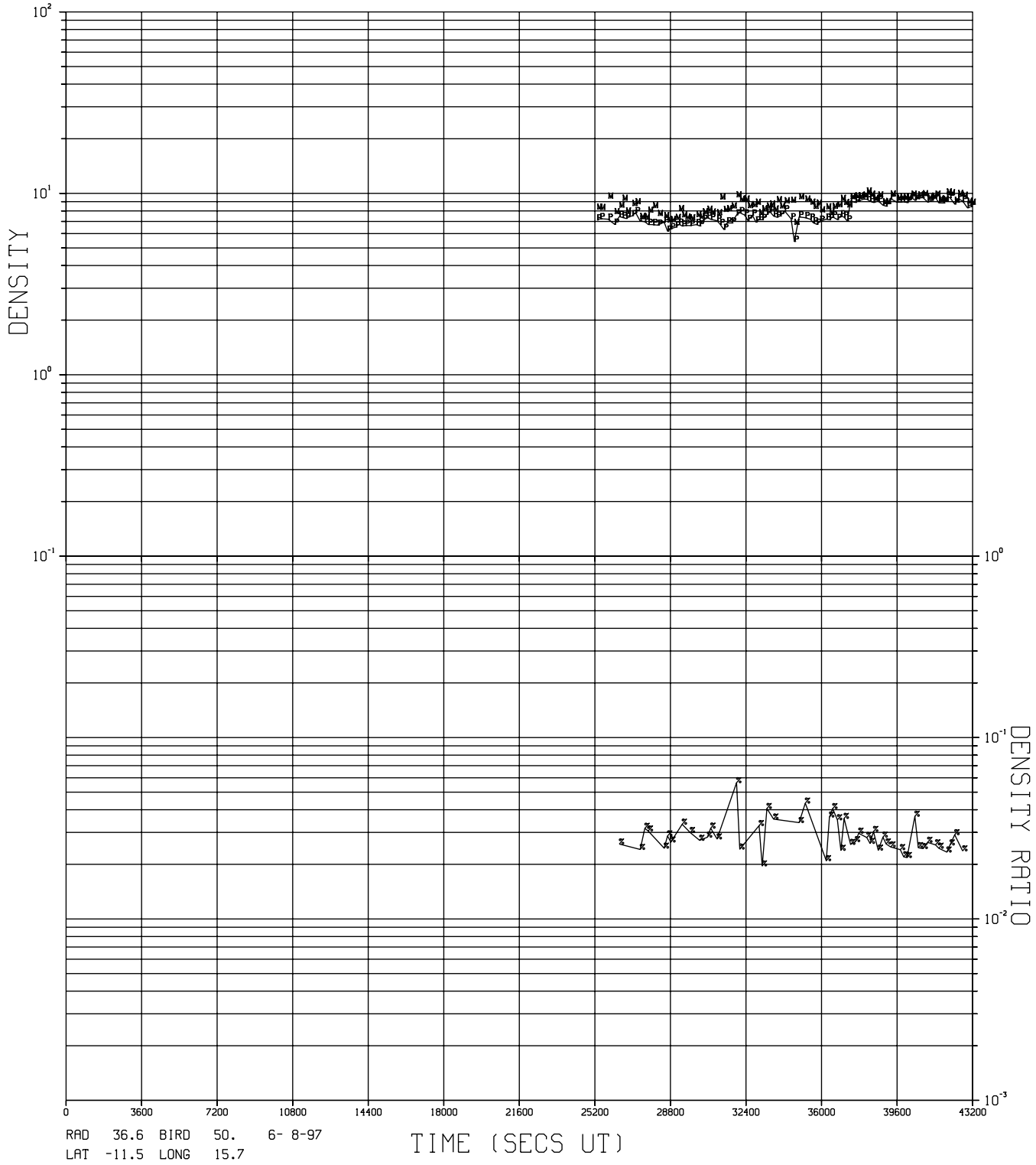

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 36.9 BIRD 50. 6- 7-97
LAT -2.4 LONG 4.5

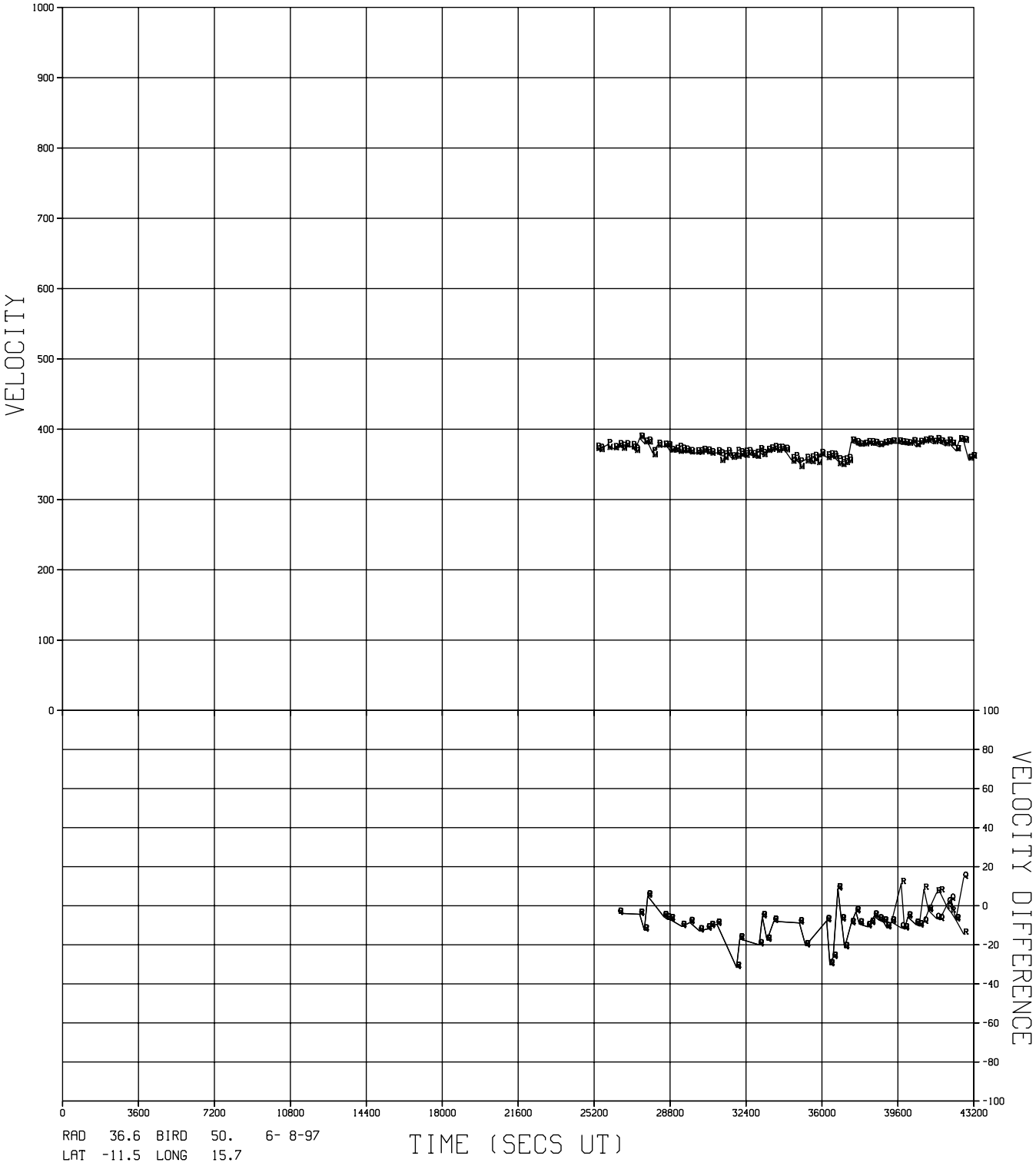

TEMPERATURE
10^7
10^6
10^5
10^4
TEMPERATURE RATIO
0
1
2
3
4
5
6
7
8
9
10
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
TIME (SECS UT)
RAD 36.9 BIRD 50. 6- 7-97
LAT -2.4 LONG 4.5

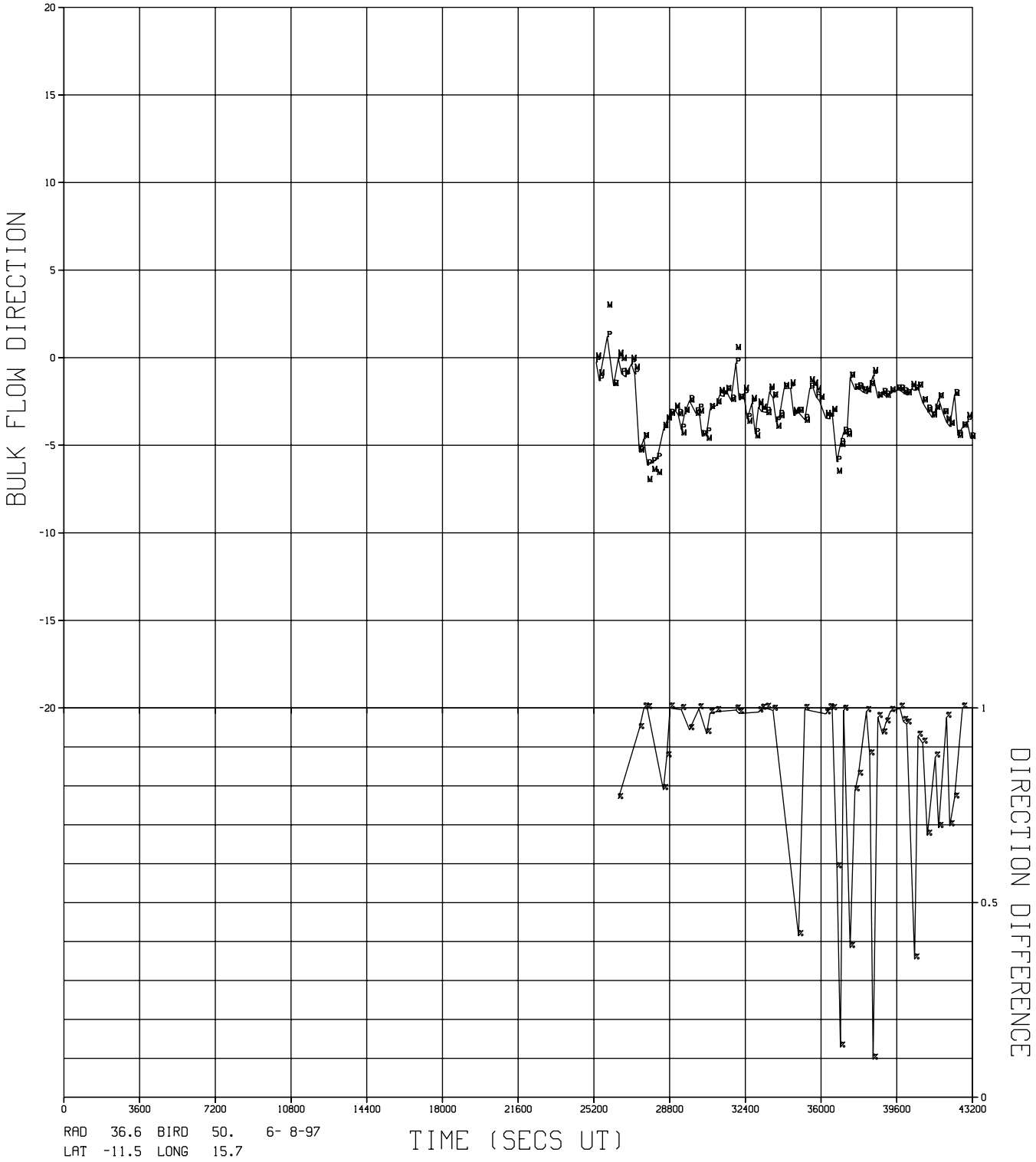

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 36.9 BIRD 50. 6- 7-97
LAT -2.4 LONG 4.5

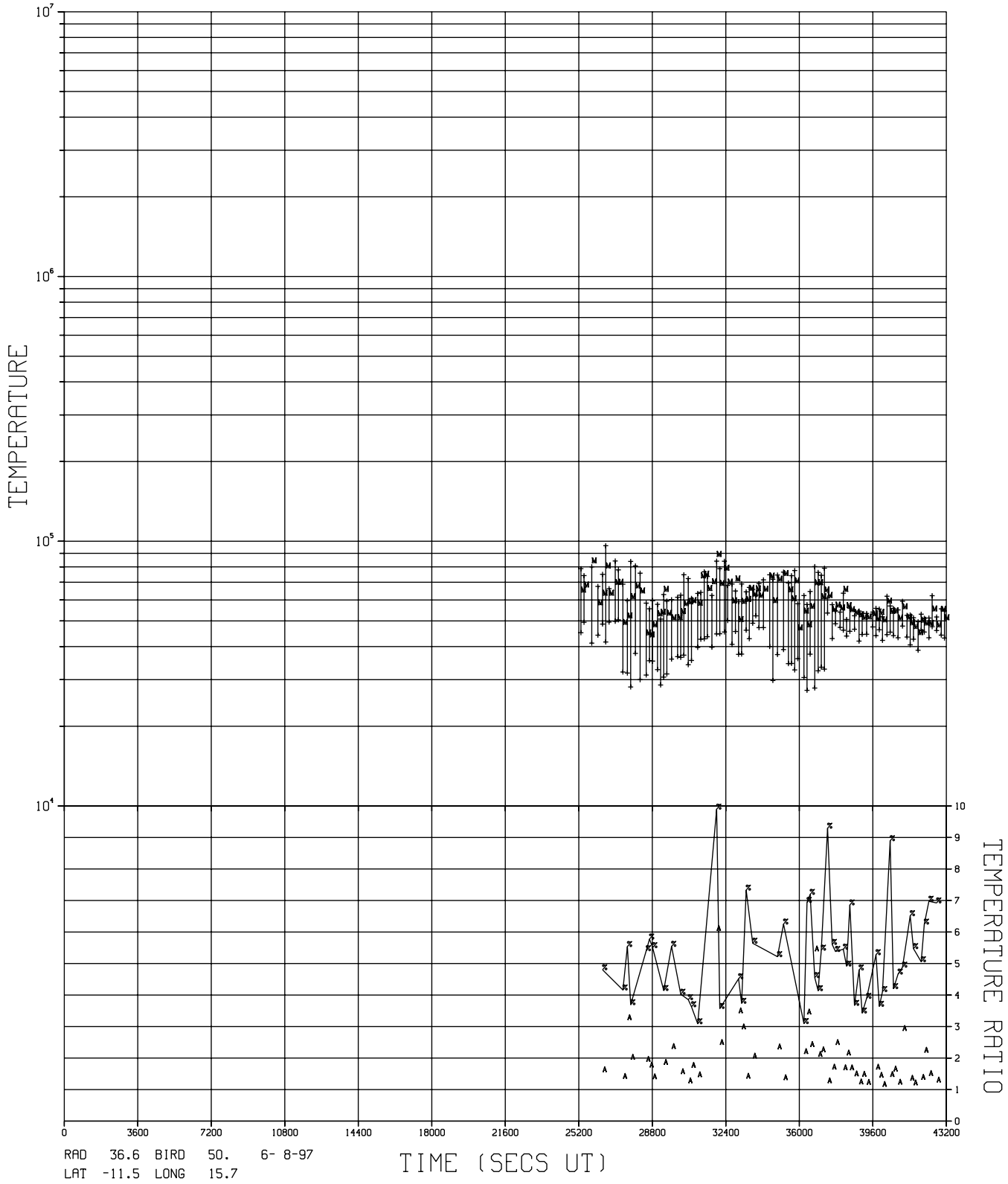

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 36.9 BIRD 50. 6- 7-97
LAT -2.4 LONG 4.5

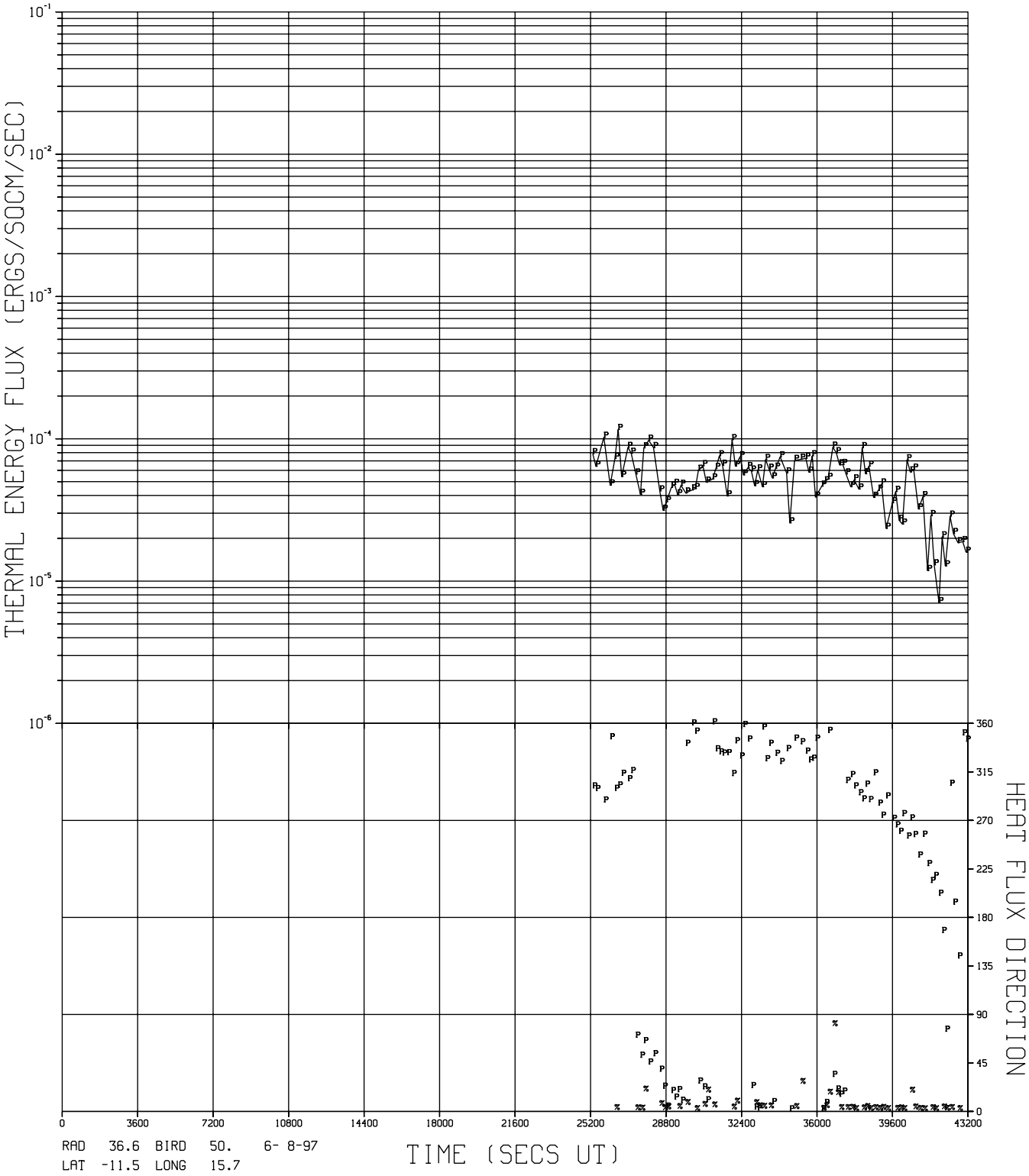

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
TIME (SECS UT)
RAD 36.9 BIRD 50. 6- 7-97
LAT -2.4 LONG 4.5

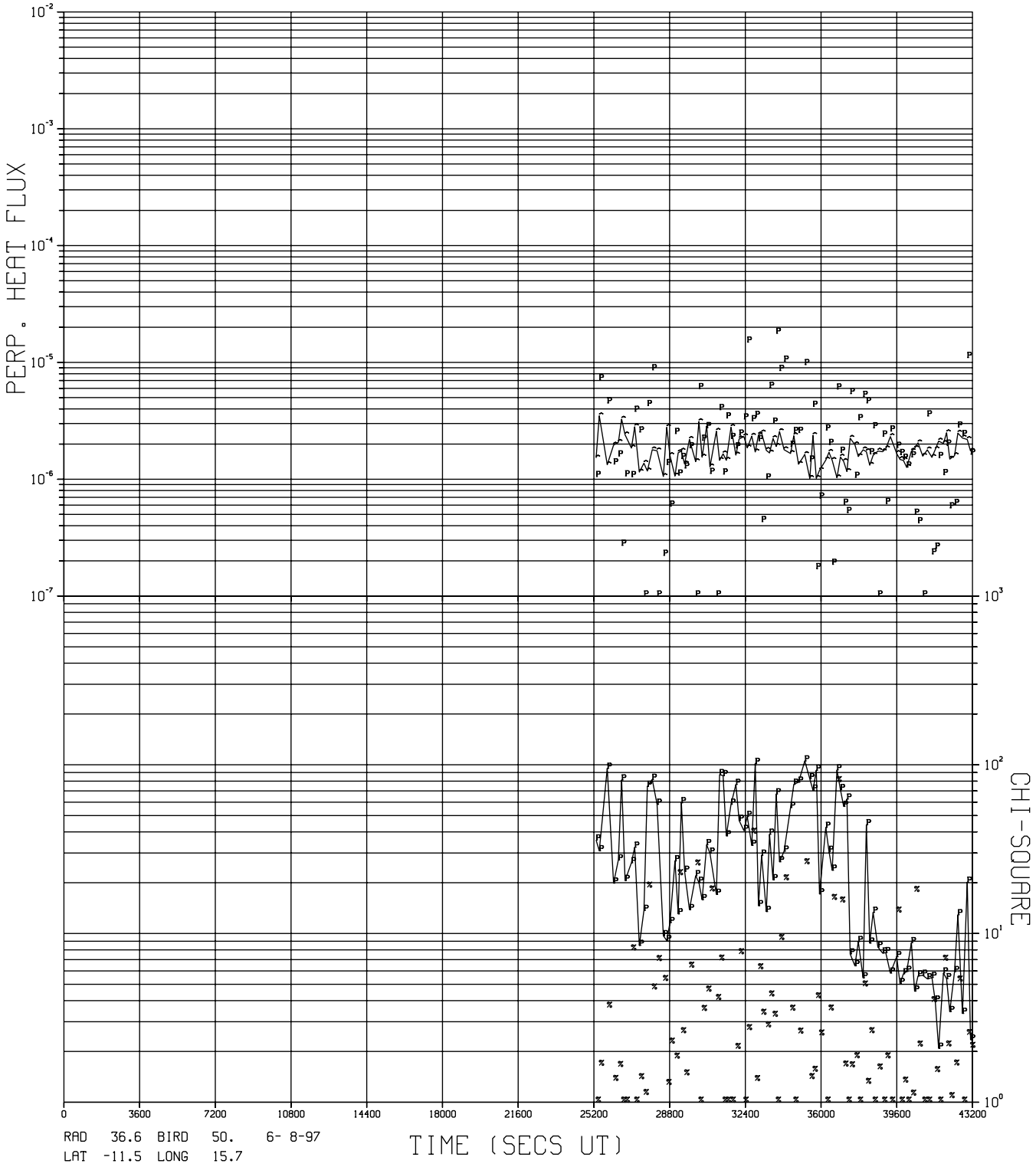

DENSITY
DENSITY RATIO
TIME (SECS UT)
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
RAD 36.6 BIRD 50. 6- 8-97
LAT -11.5 LONG 15.7

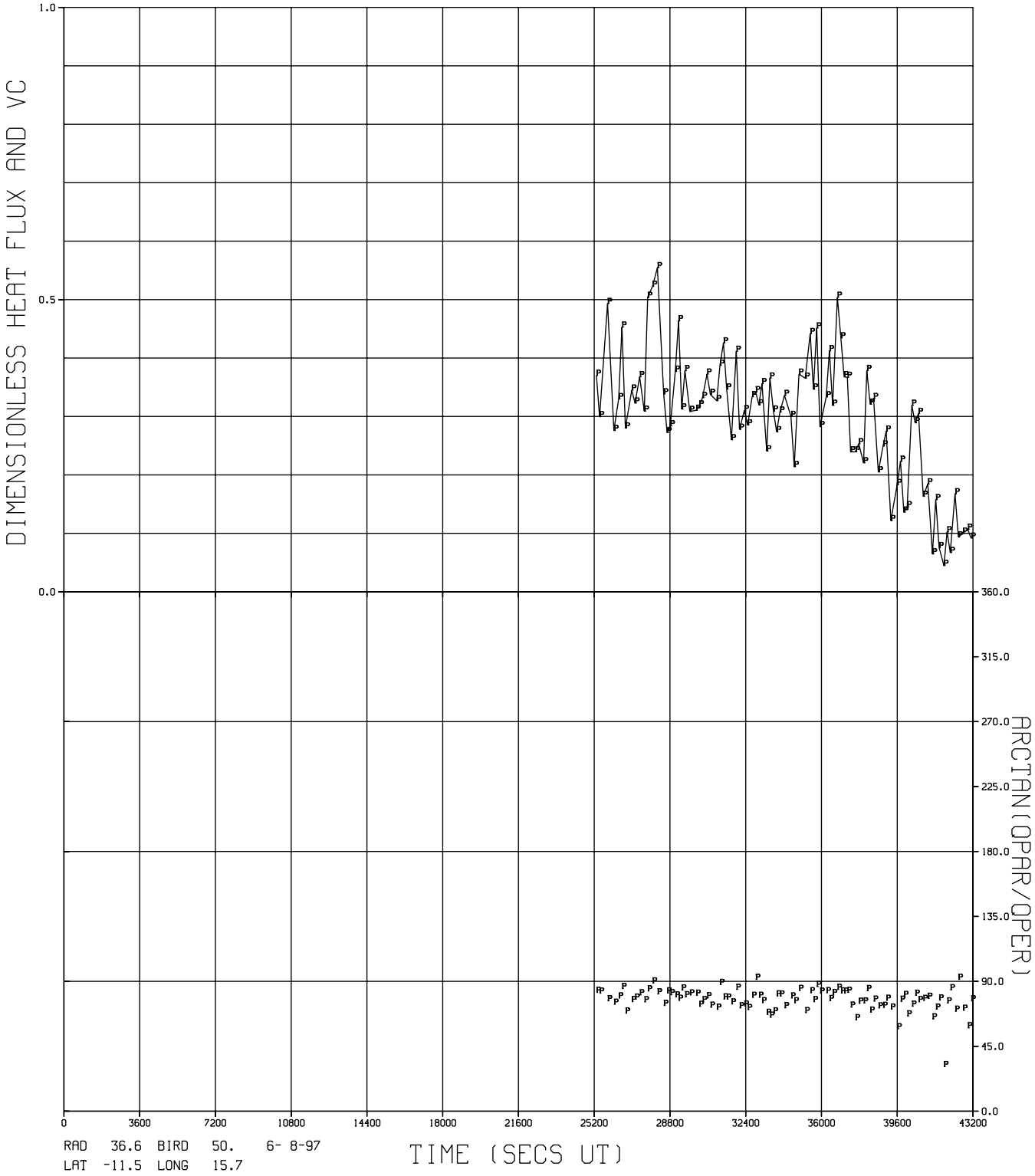

VELOCITY
VELOCITY DIFFERENCE
TIME (SECS UT)
RAD 36.6 BIRD 50. 6- 8-97
LAT -11.5 LONG 15.7

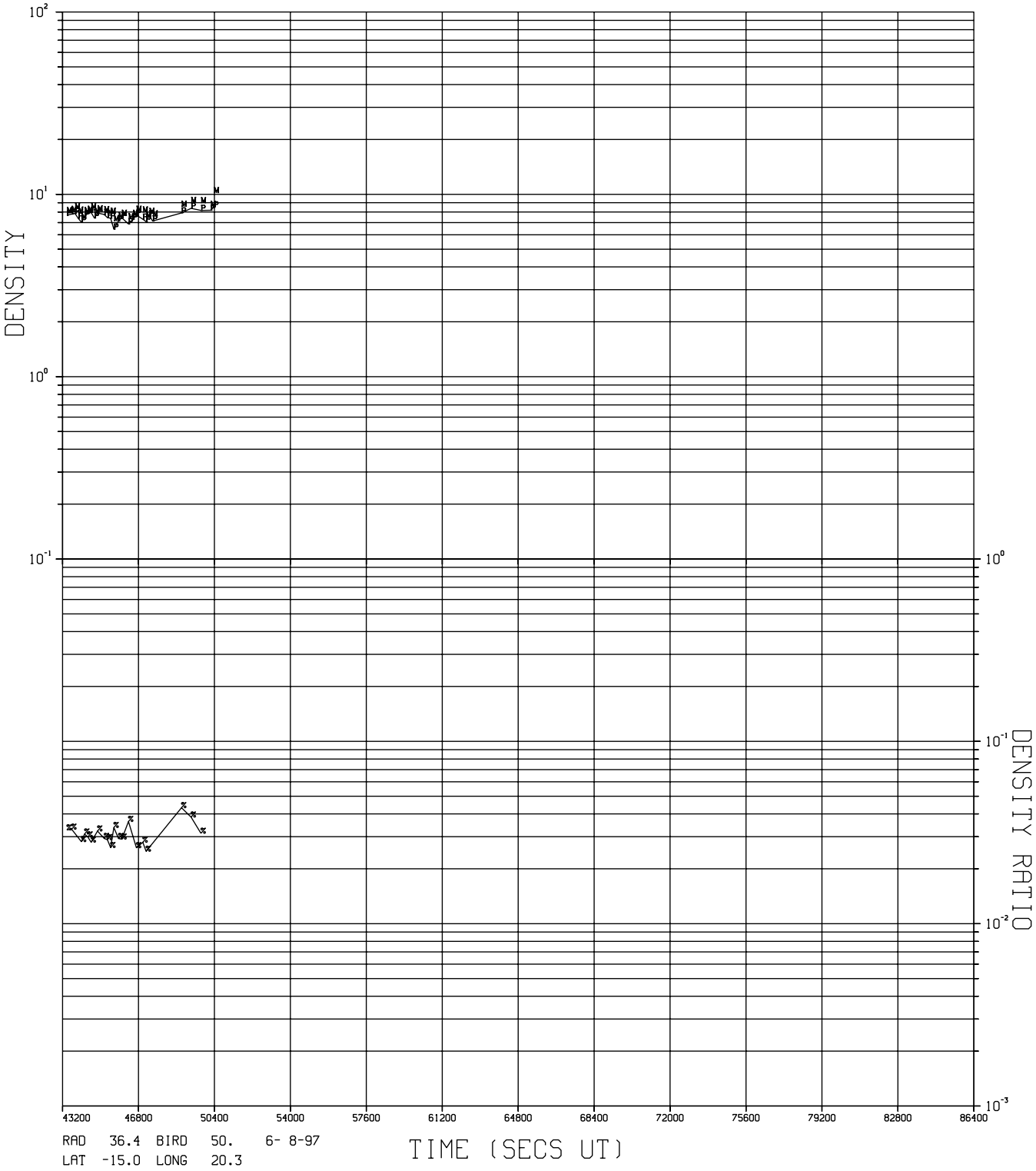

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
RAD 36.6 BIRD 50. 6- 8-97
LAT -11.5 LONG 15.7

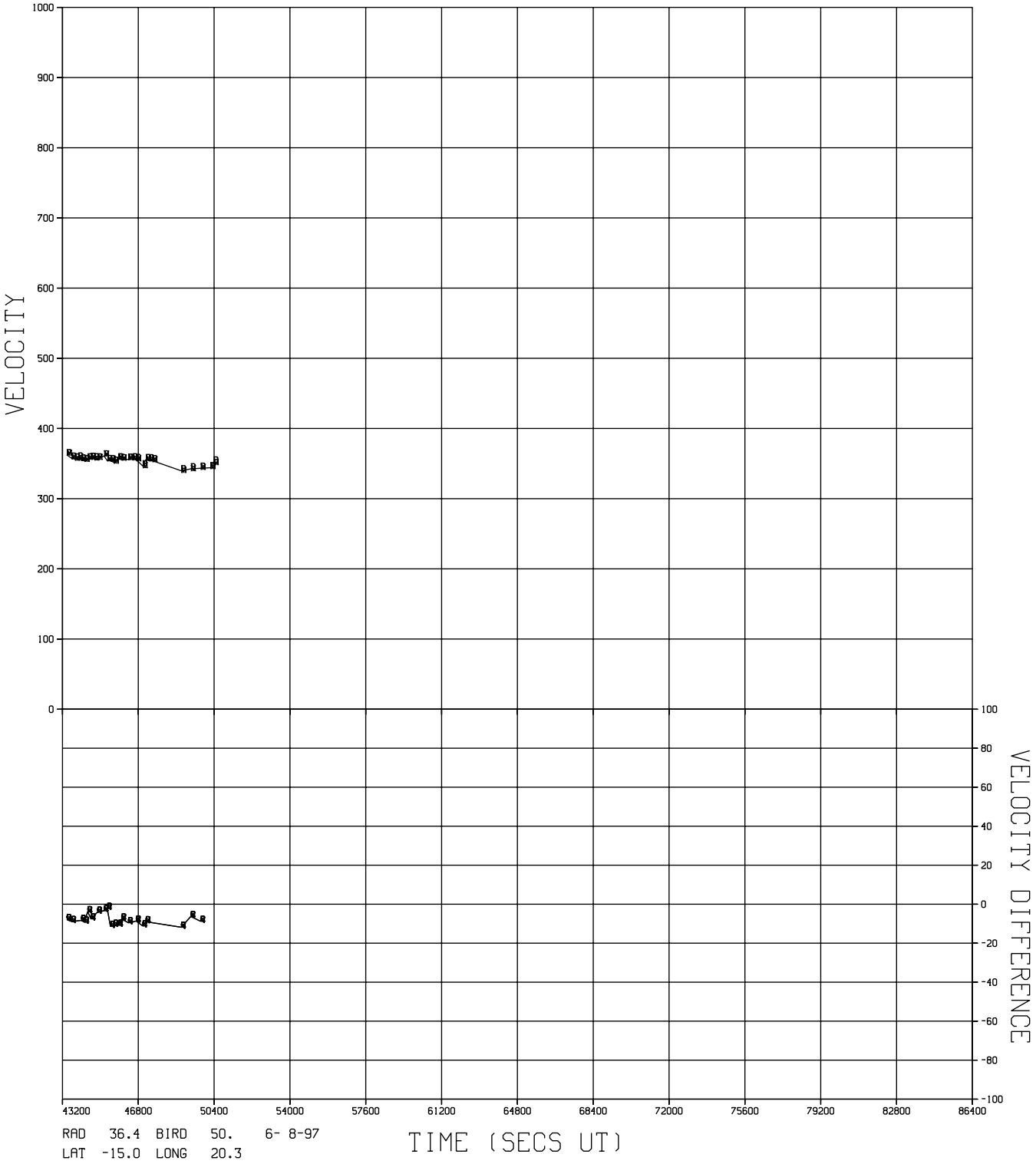

TEMPERATURE
TEMPERATURE RATIO
TIME (SECS UT)
RAD 36.6 BIRD 50. 6- 8-97
LAT -11.5 LONG 15.7


THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 36.6 BIRD 50. 6- 8-97
LAT -11.5 LONG 15.7

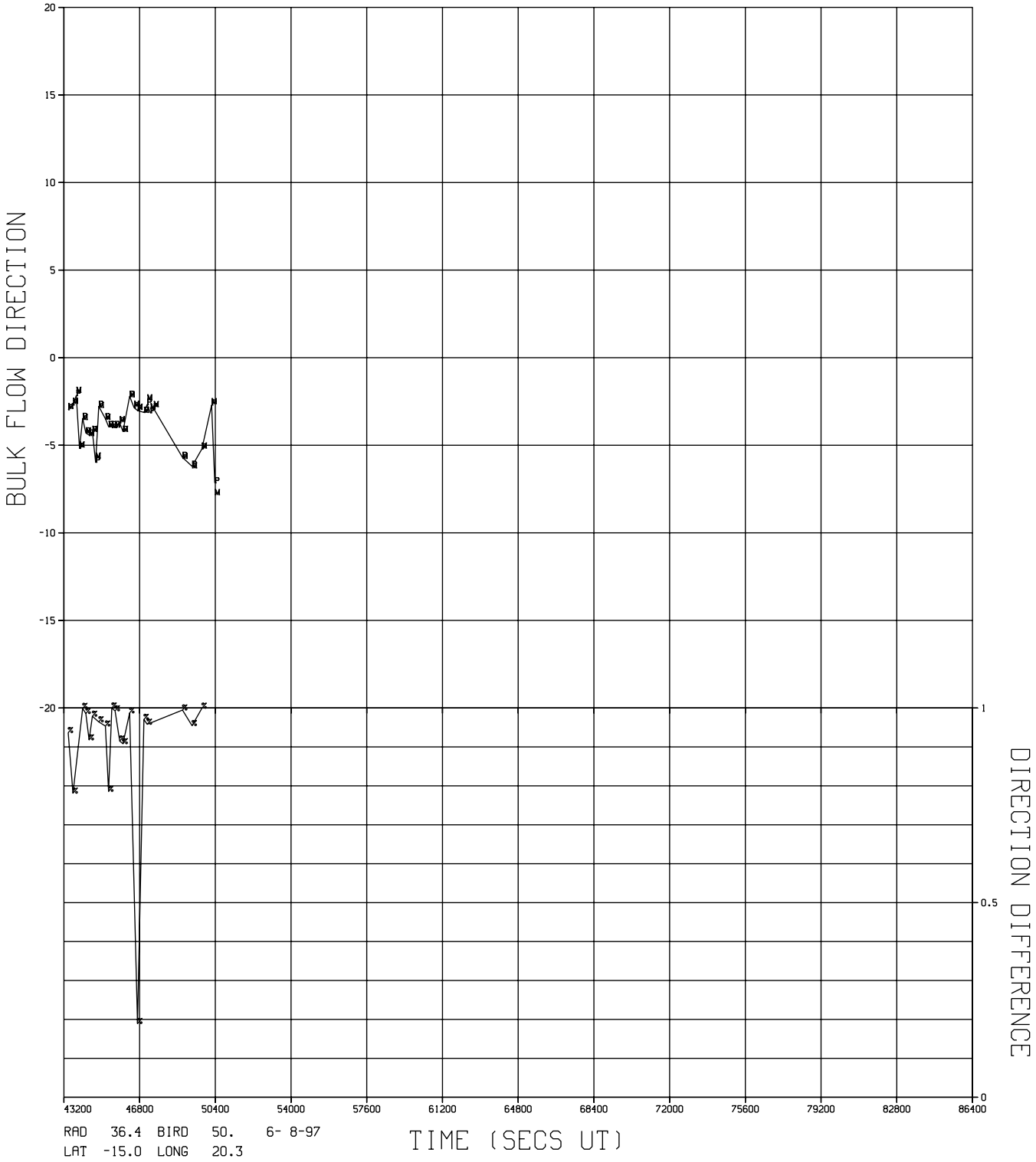

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
RAD 36.6 BIRD 50. 6- 8-97
LAT -11.5 LONG 15.7

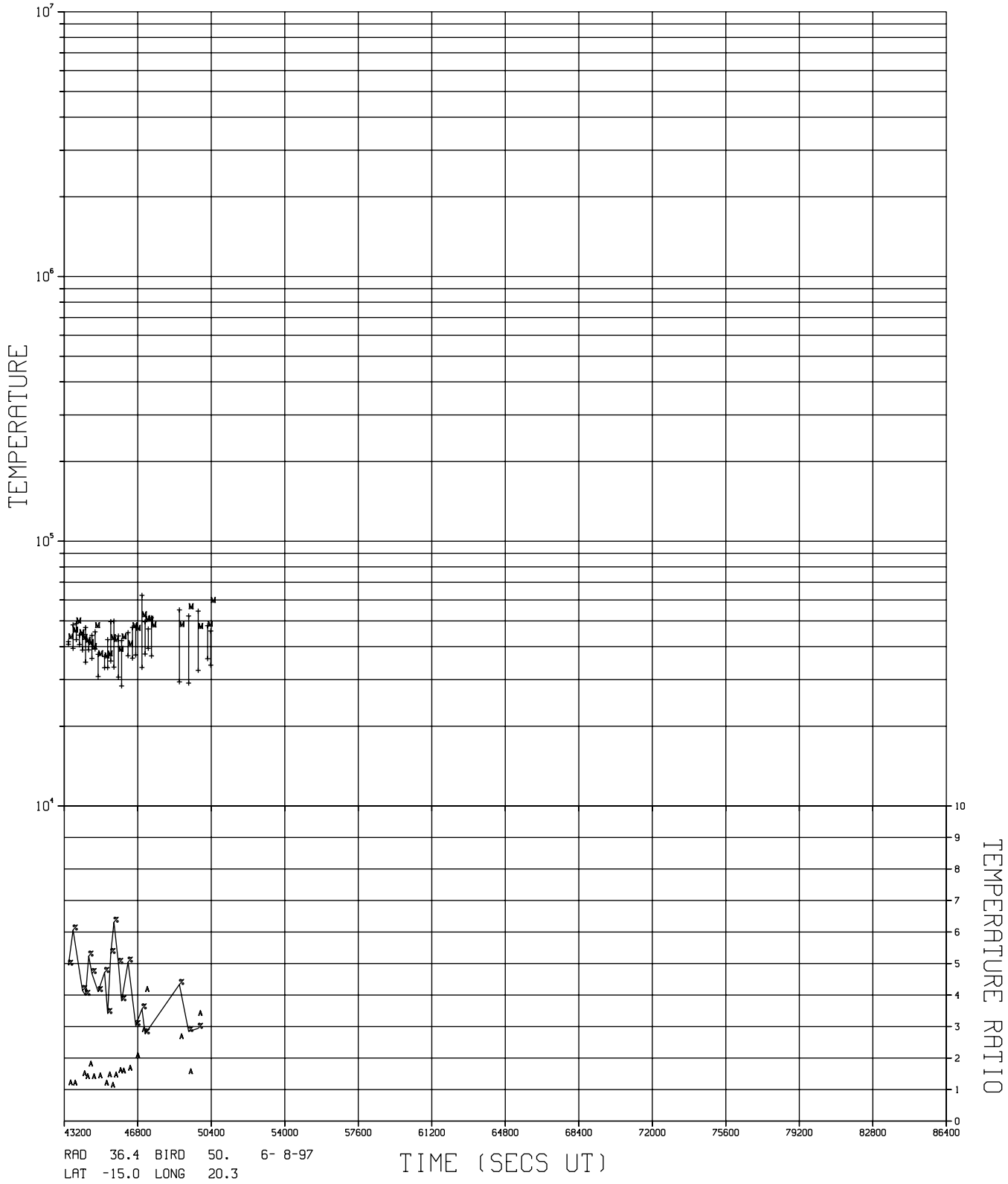

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
TIME (SECS UT)
RAD 36.6 BIRD 50. 6- 8-97
LAT -11.5 LONG 15.7

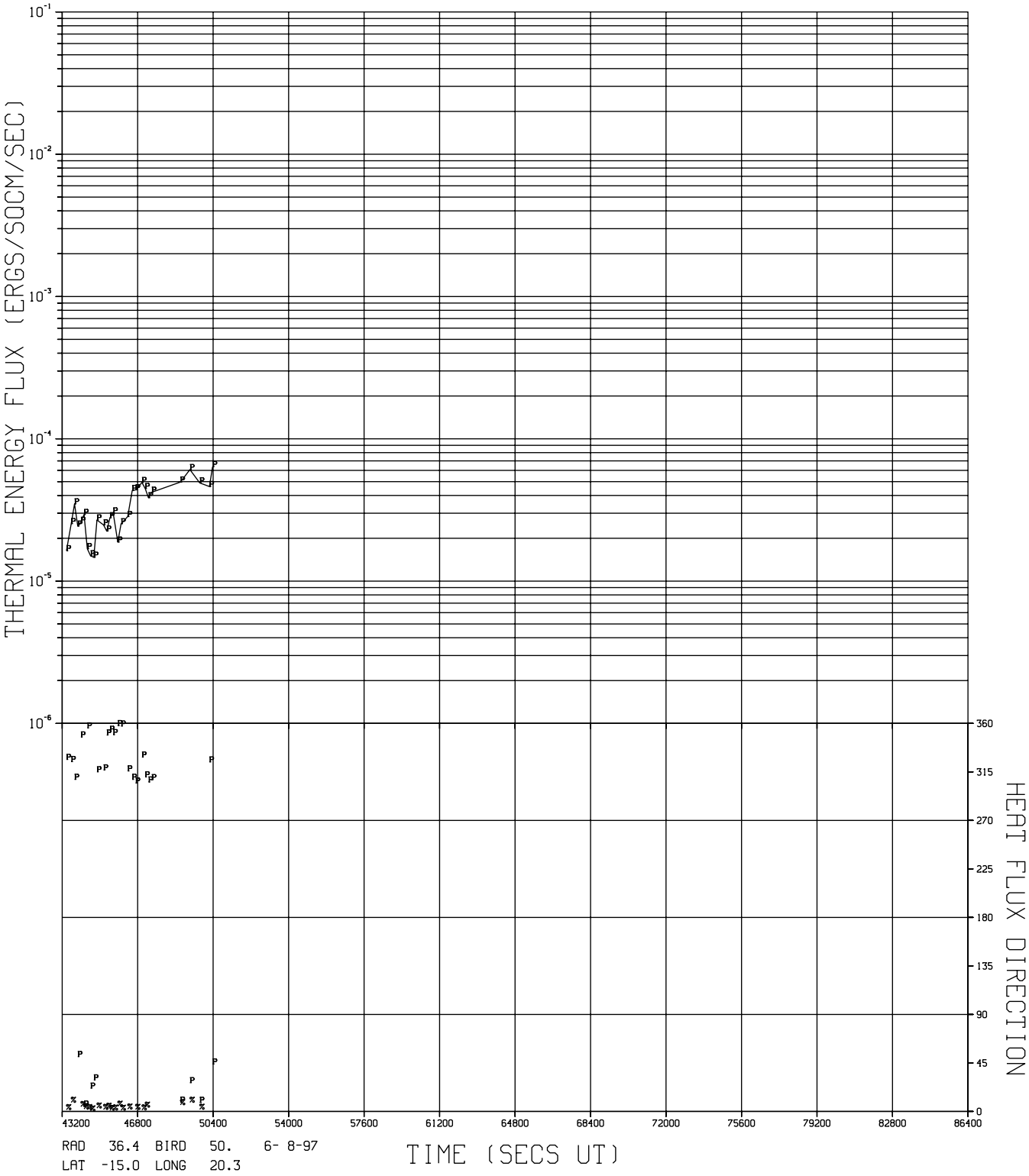

DENSITY
DENSITY RATIO
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 36.4 BIRD 50. 6- 8-97
LAT -15.0 LONG 20.3

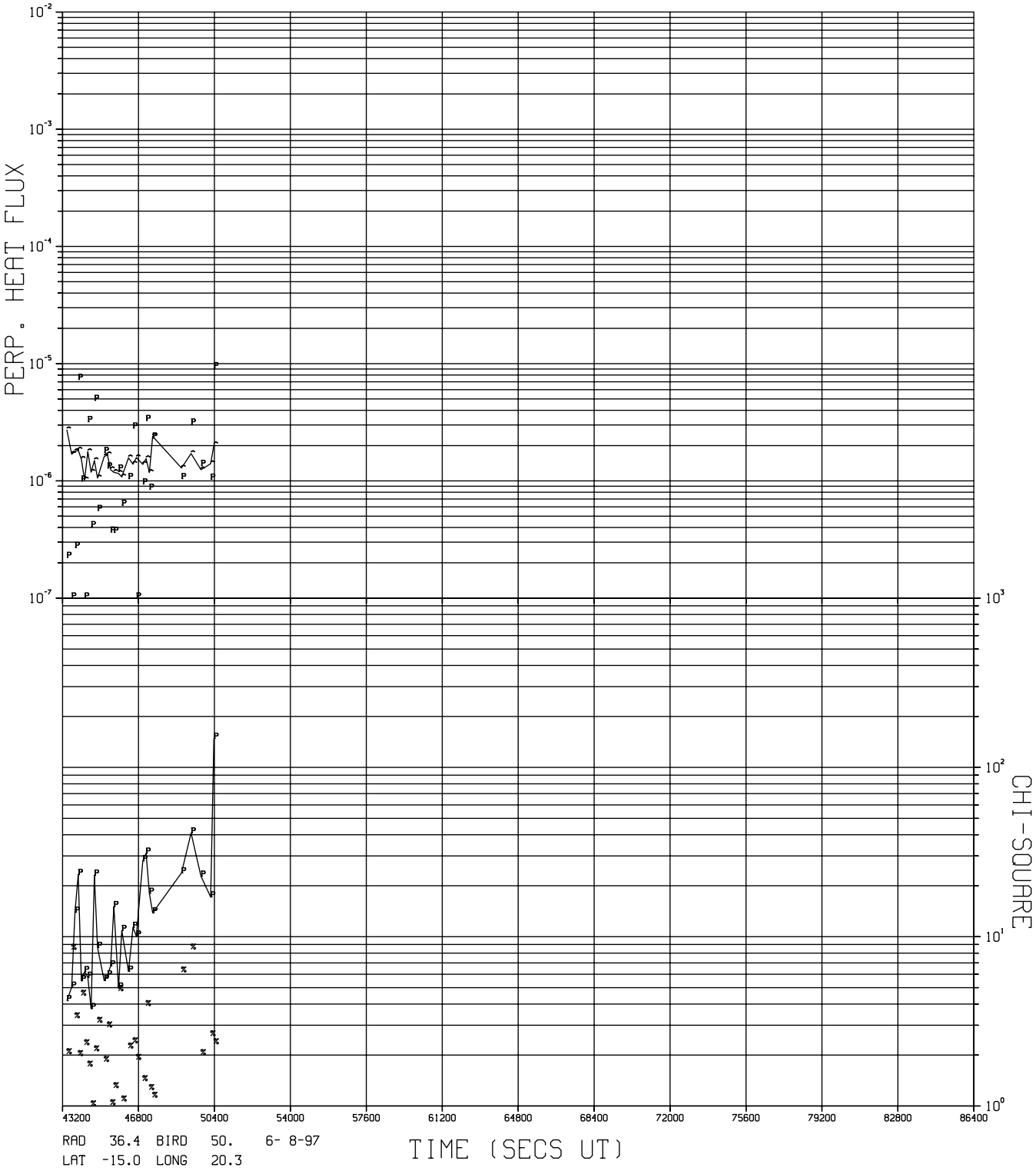


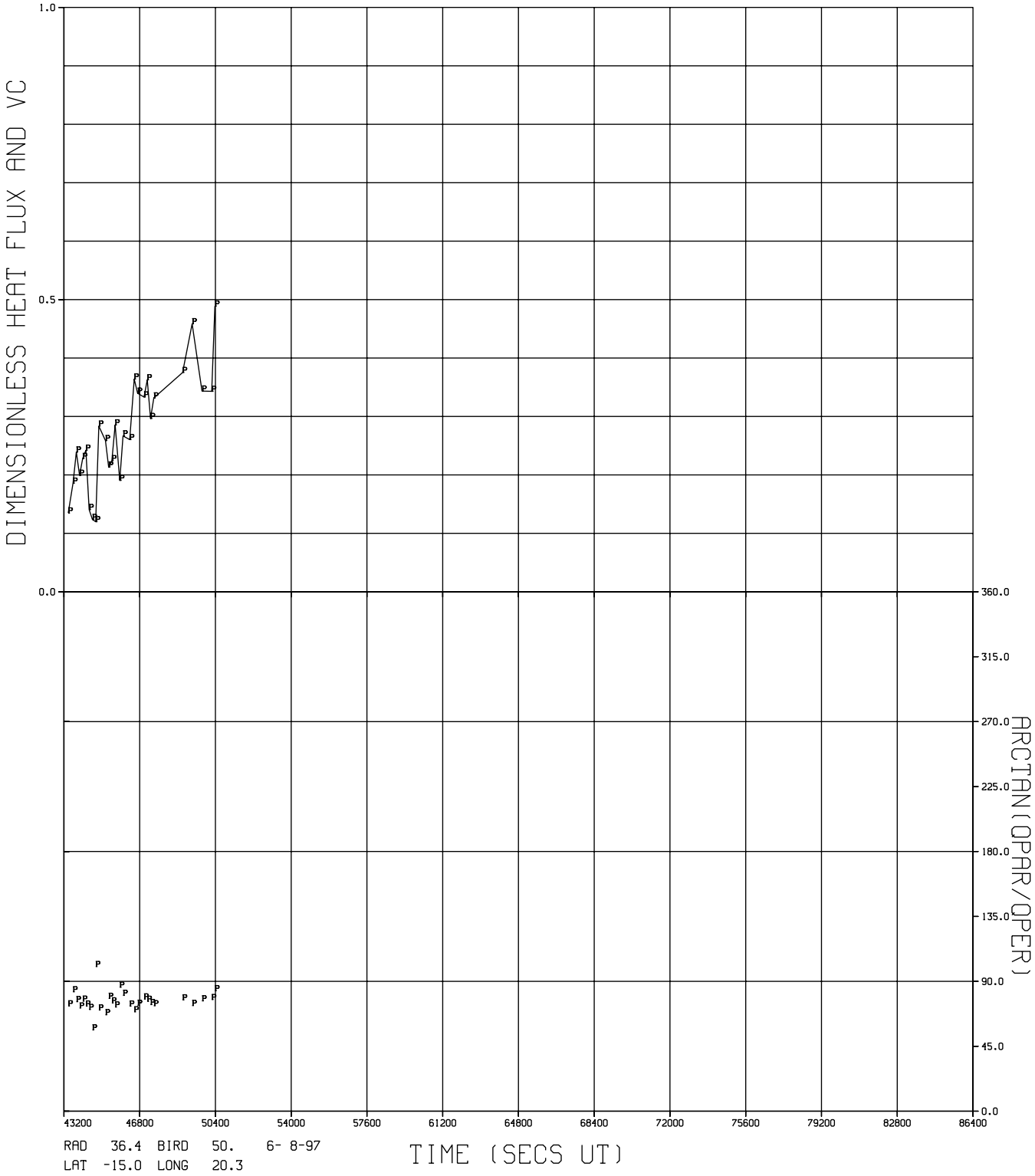
RAD 36.4 BIRD 50. 6- 8-97
LAT -15.0 LONG 20.3


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 36.4 BIRD 50. 6- 8-97
LAT -15.0 LONG 20.3


TEMPERATURE
TEMPERATURE RATIO
TIME (SECS UT)
RAD 36.4 BIRD 50. 6- 8-97
LAT -15.0 LONG 20.3


THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 36.4 BIRD 50. 6- 8-97
LAT -15.0 LONG 20.3


PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
RAD 36.4 BIRD 50. 6- 8-97
LAT -15.0 LONG 20.3


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 36.4 BIRD 50. 6- 8-97
LAT -15.0 LONG 20.3