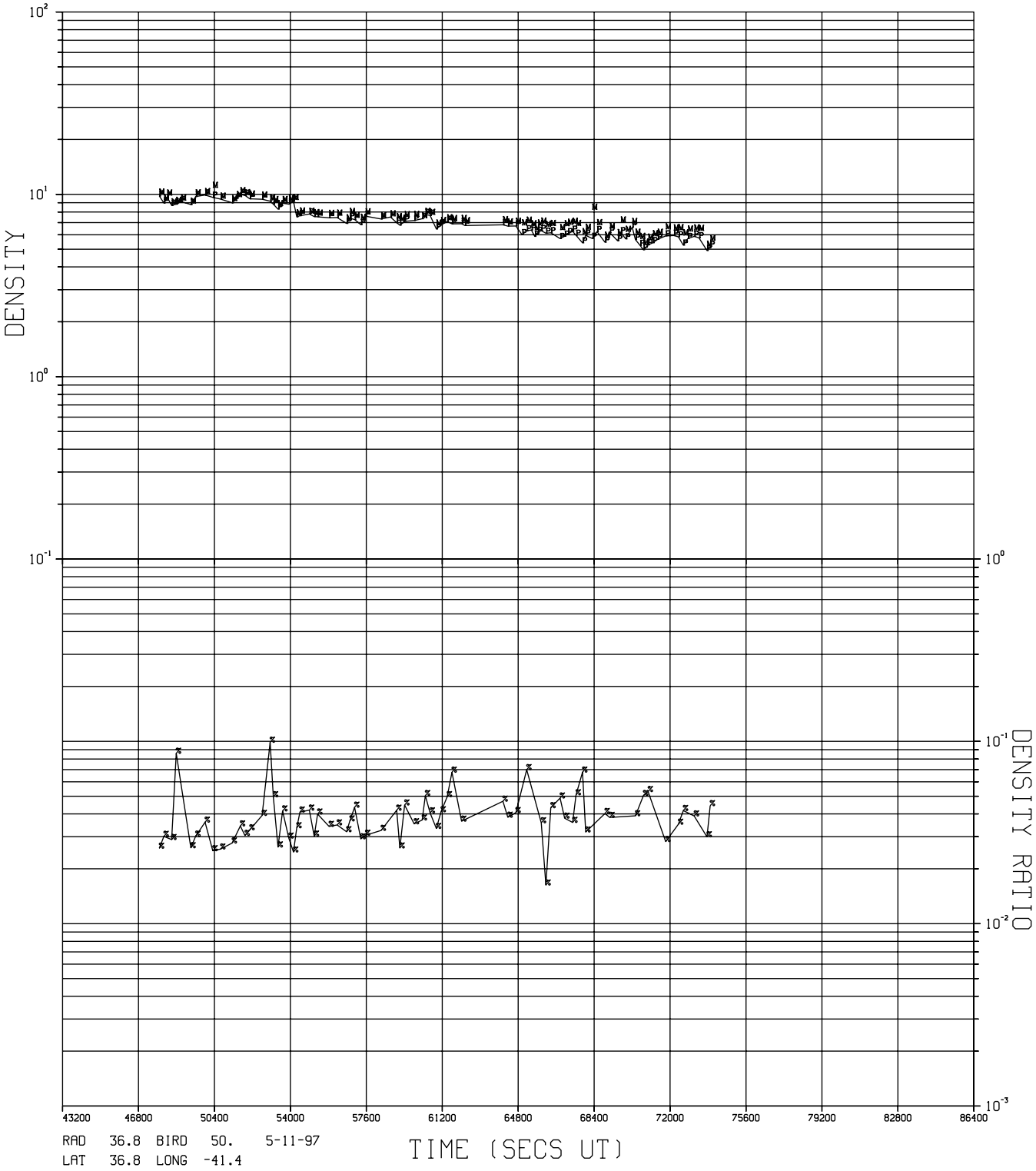
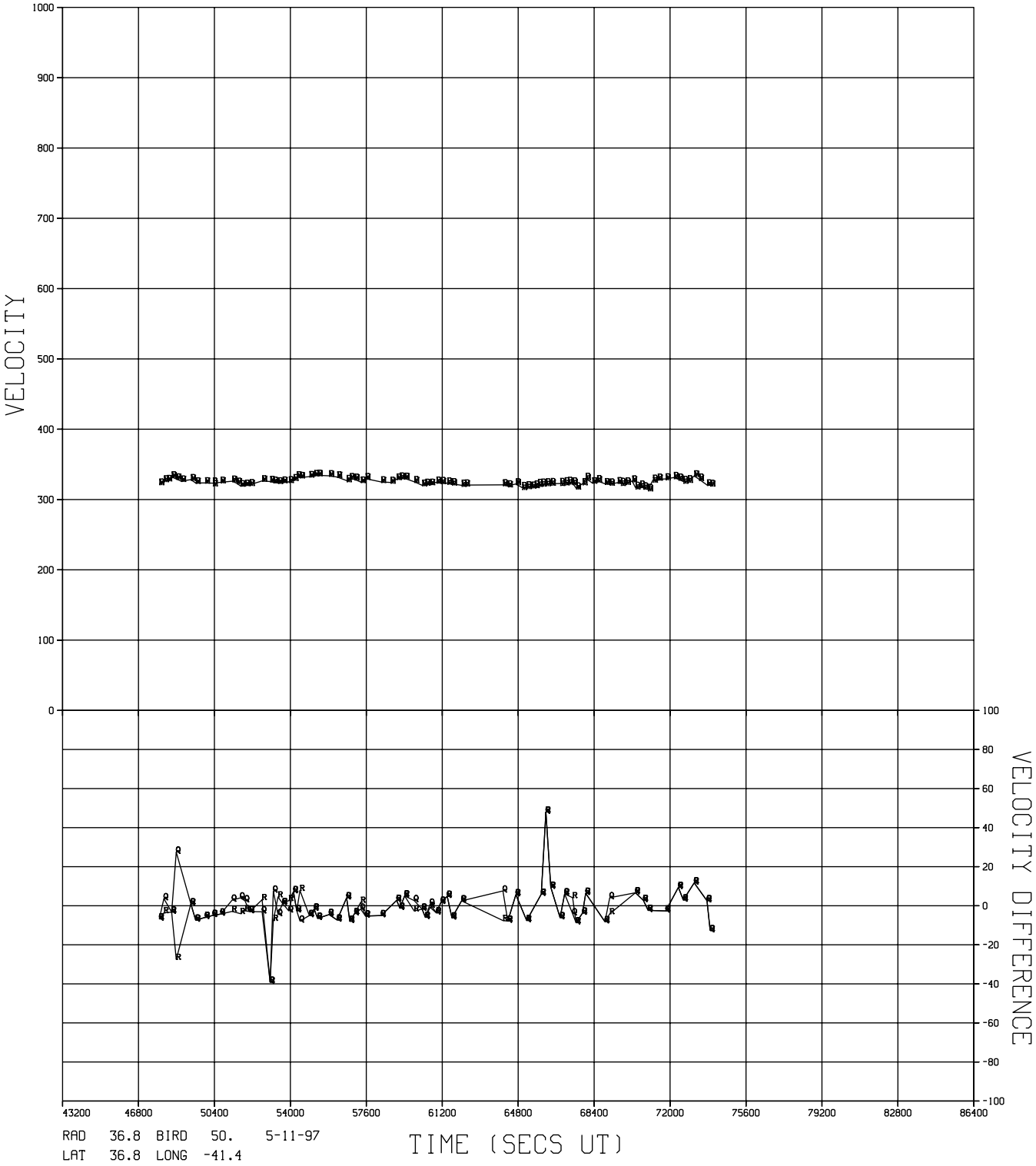
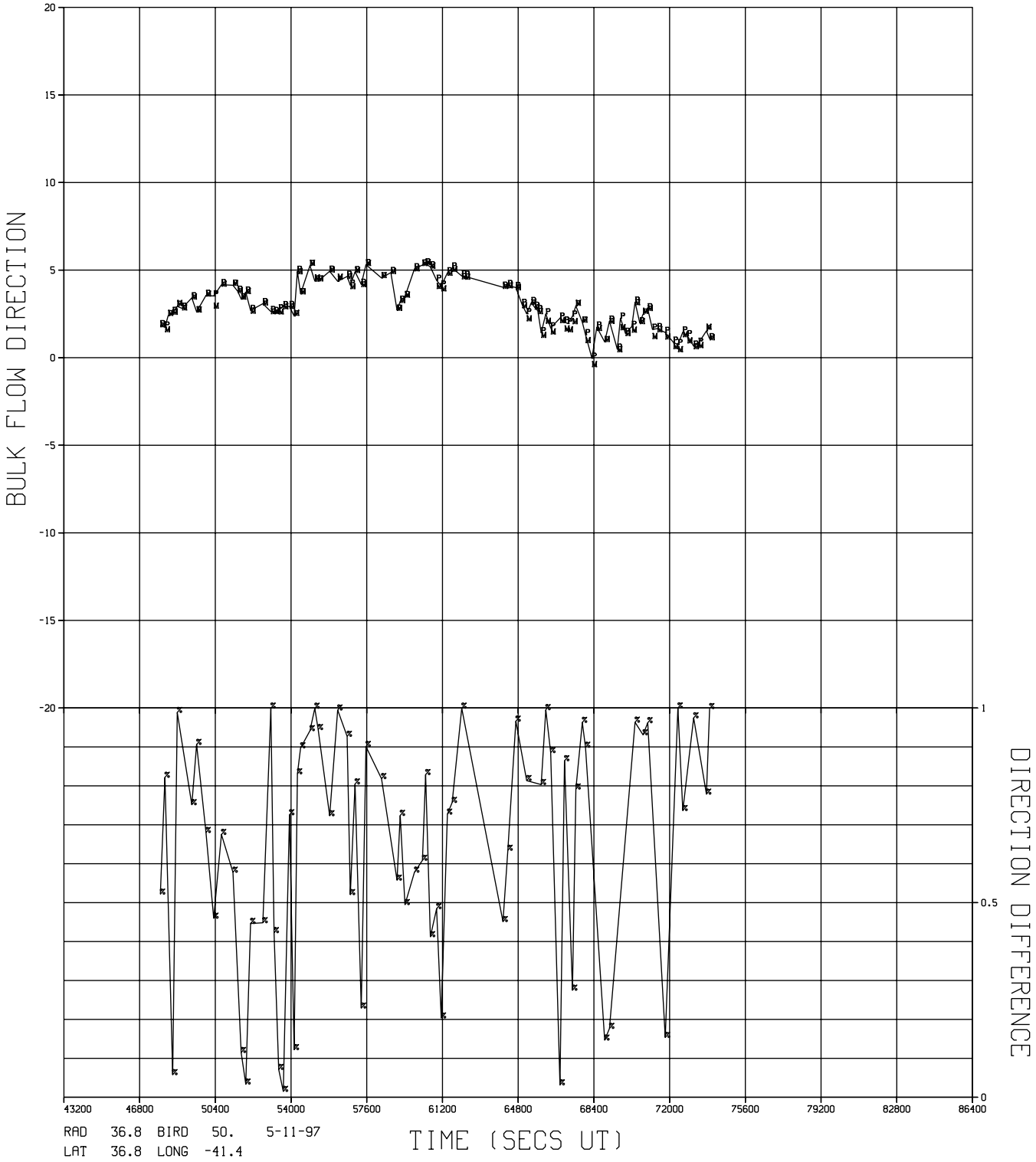
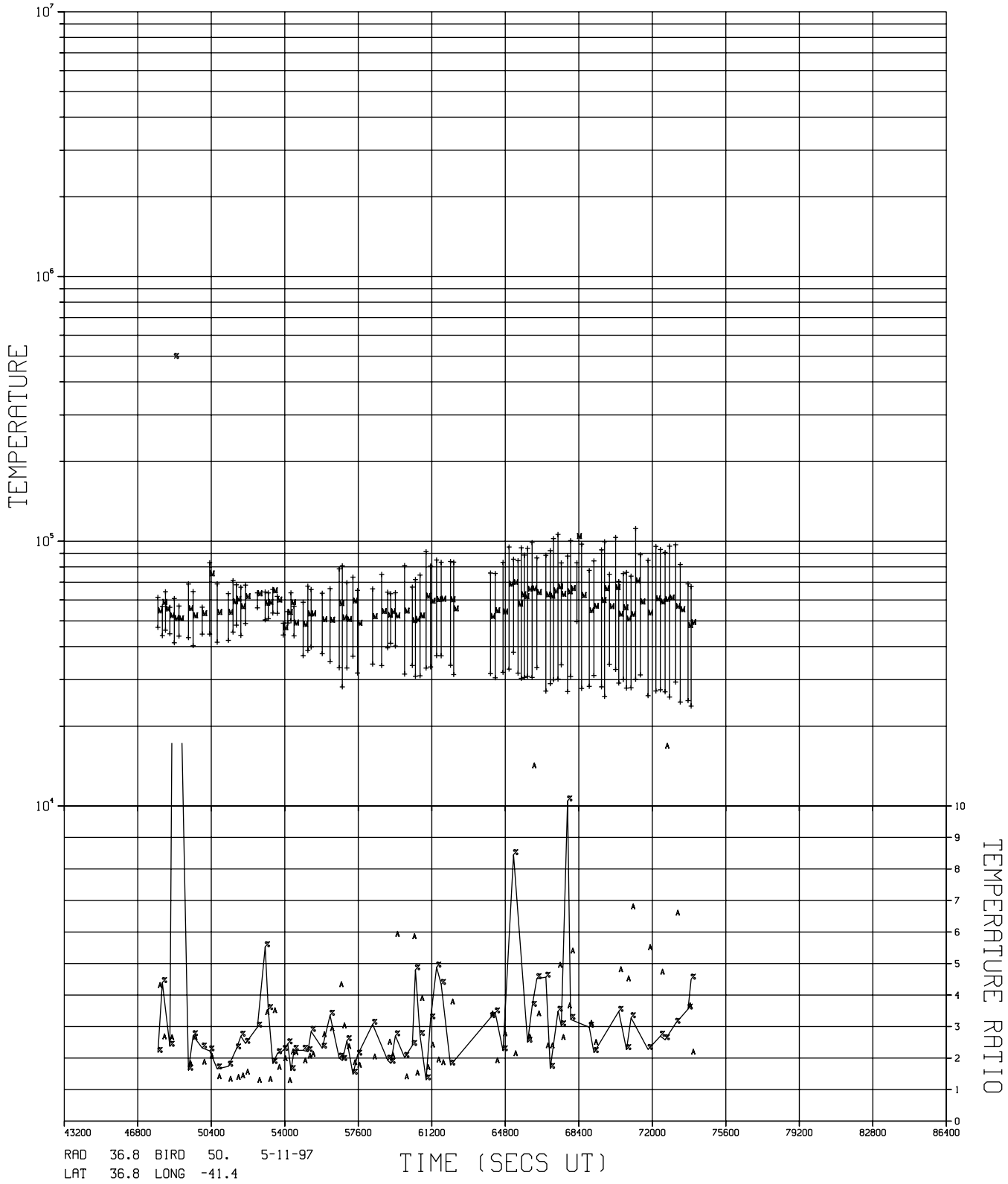
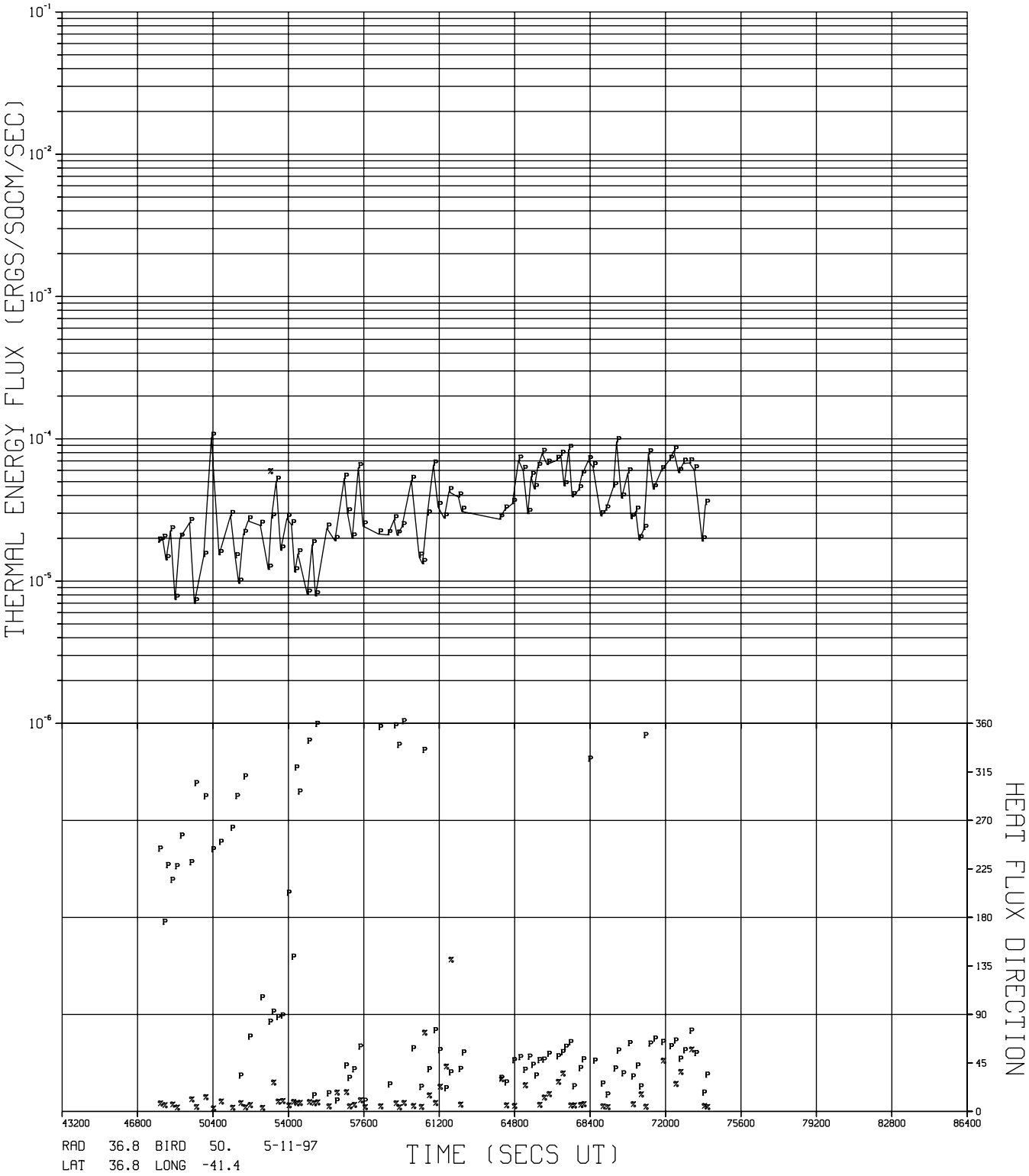
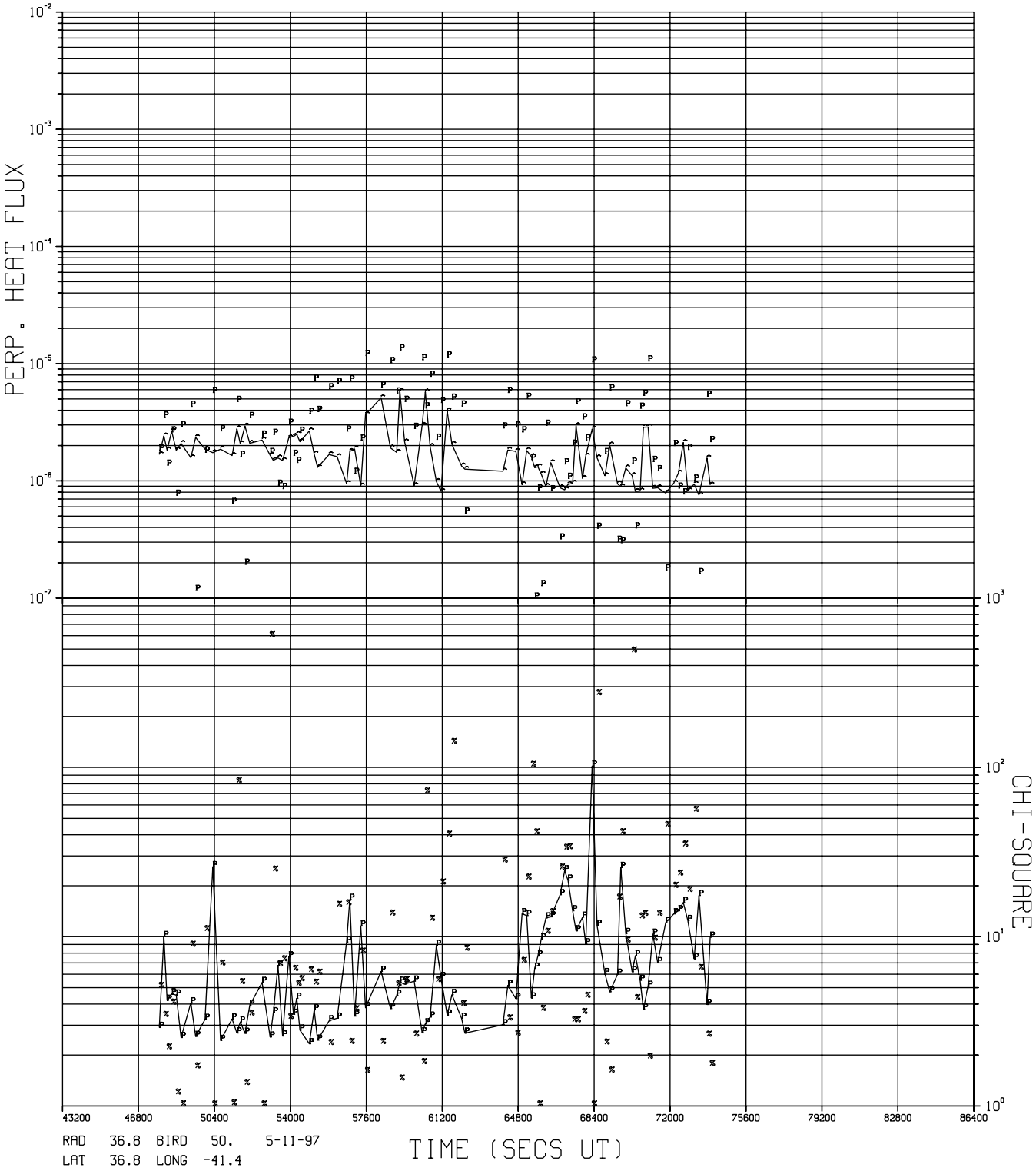

DENSITY
DENSITY RATIO
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 36.8 BIRD 50. 5-11-97
LAT 36.8 LONG -41.4

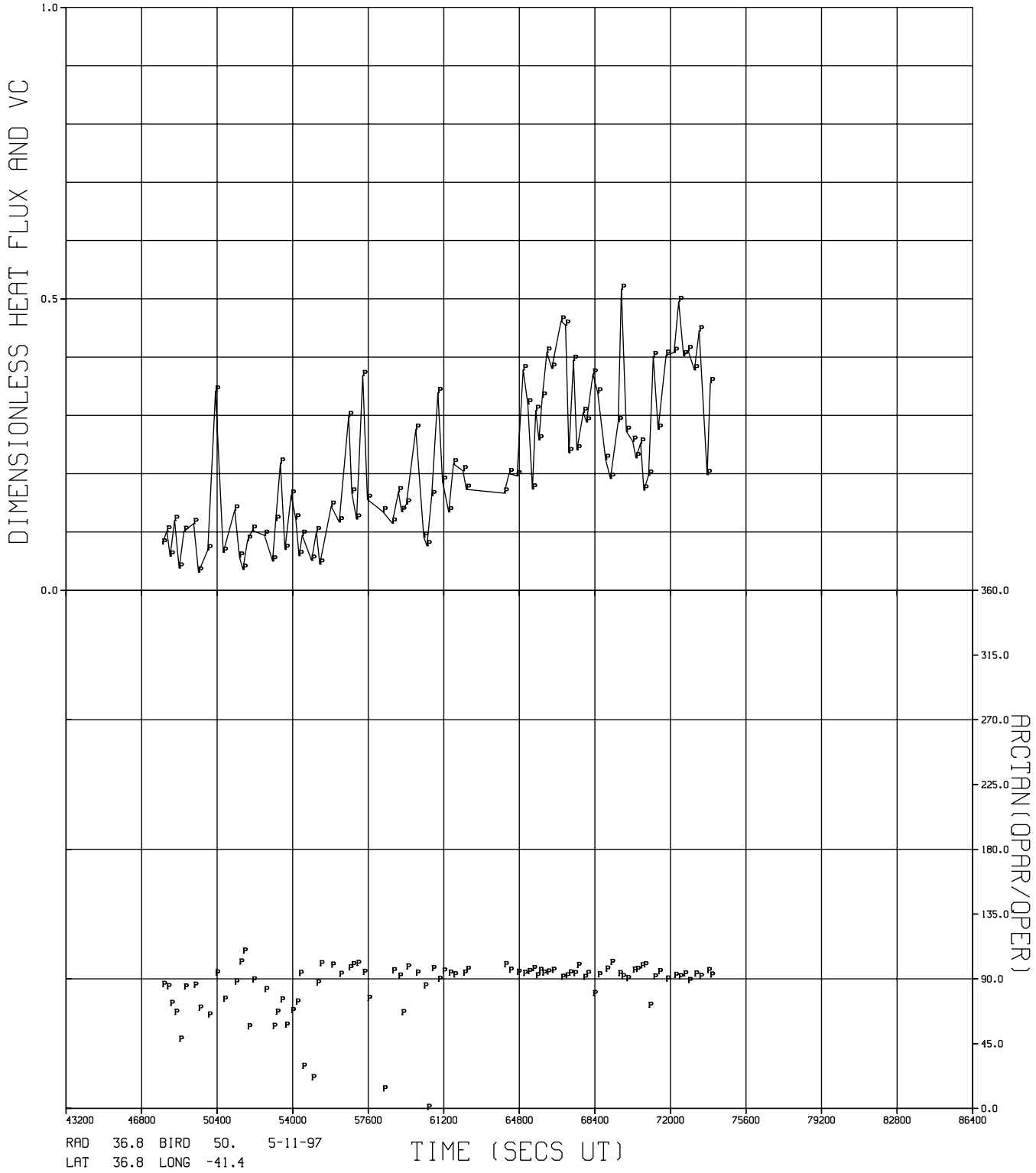

VELOCITY
1000
900
800
700
600
500
400
300
200
100
0
VELOCITY DIFFERENCE
100
80
60
40
20
0
-20
-40
-60
-80
-100
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
TIME (SECS UT)
RAD 36.8 BIRD 50. 5-11-97
LAT 36.8 LONG -41.4

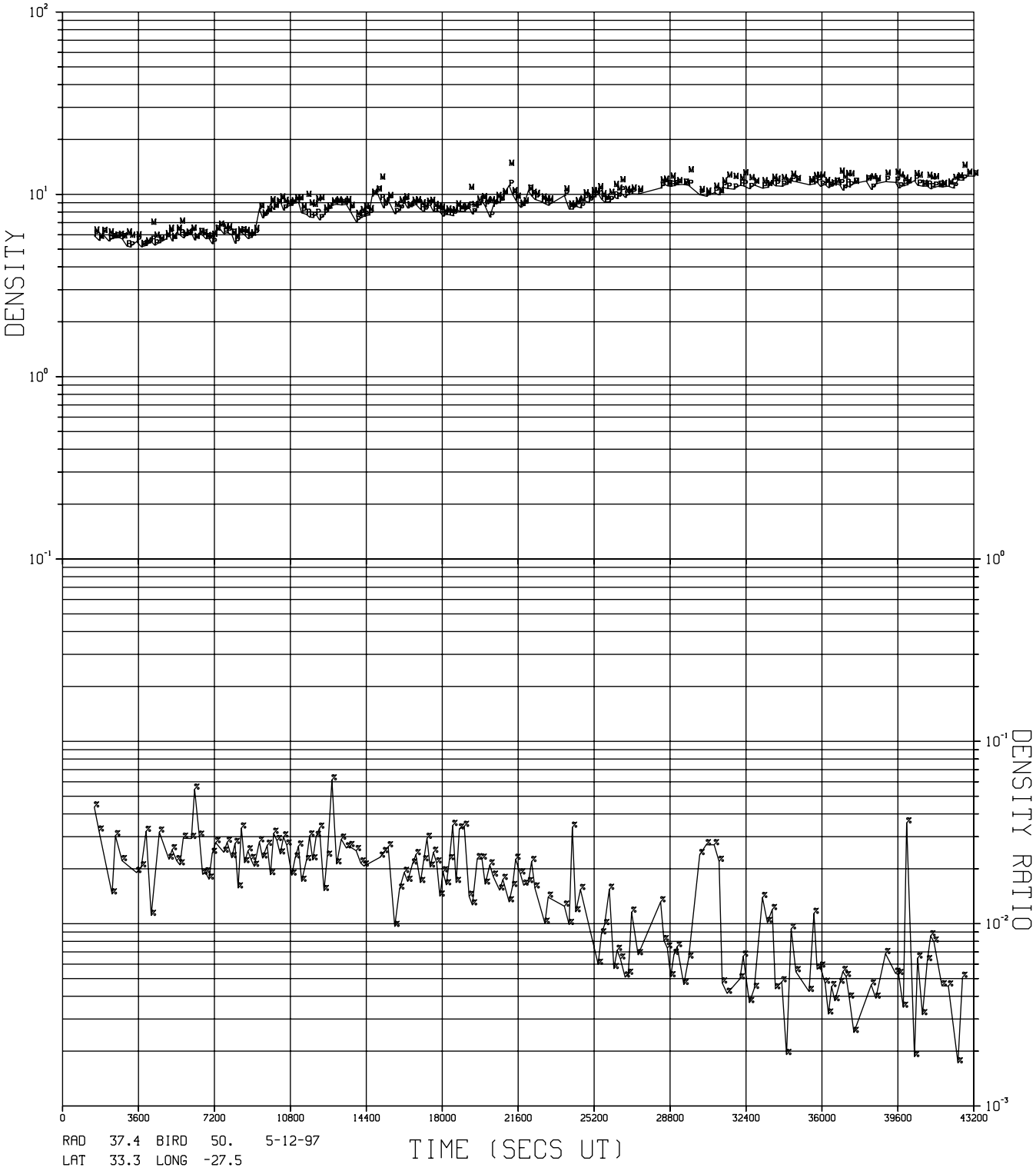

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 36.8 BIRD 50. 5-11-97
LAT 36.8 LONG -41.4

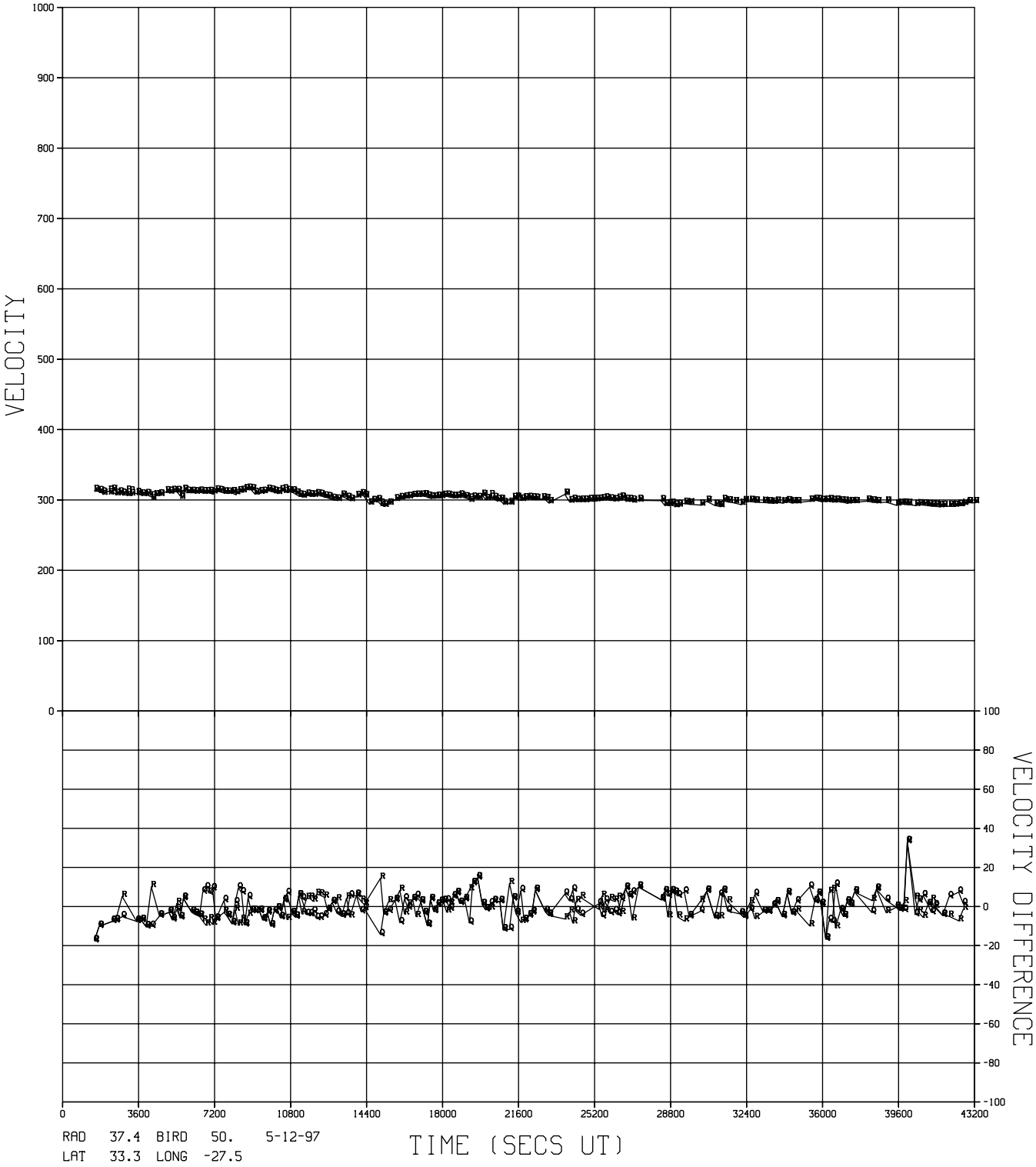

TEMPERATURE
TEMPERATURE RATIO
TIME (SECS UT)
RAD 36.8 BIRD 50. 5-11-97
LAT 36.8 LONG -41.4

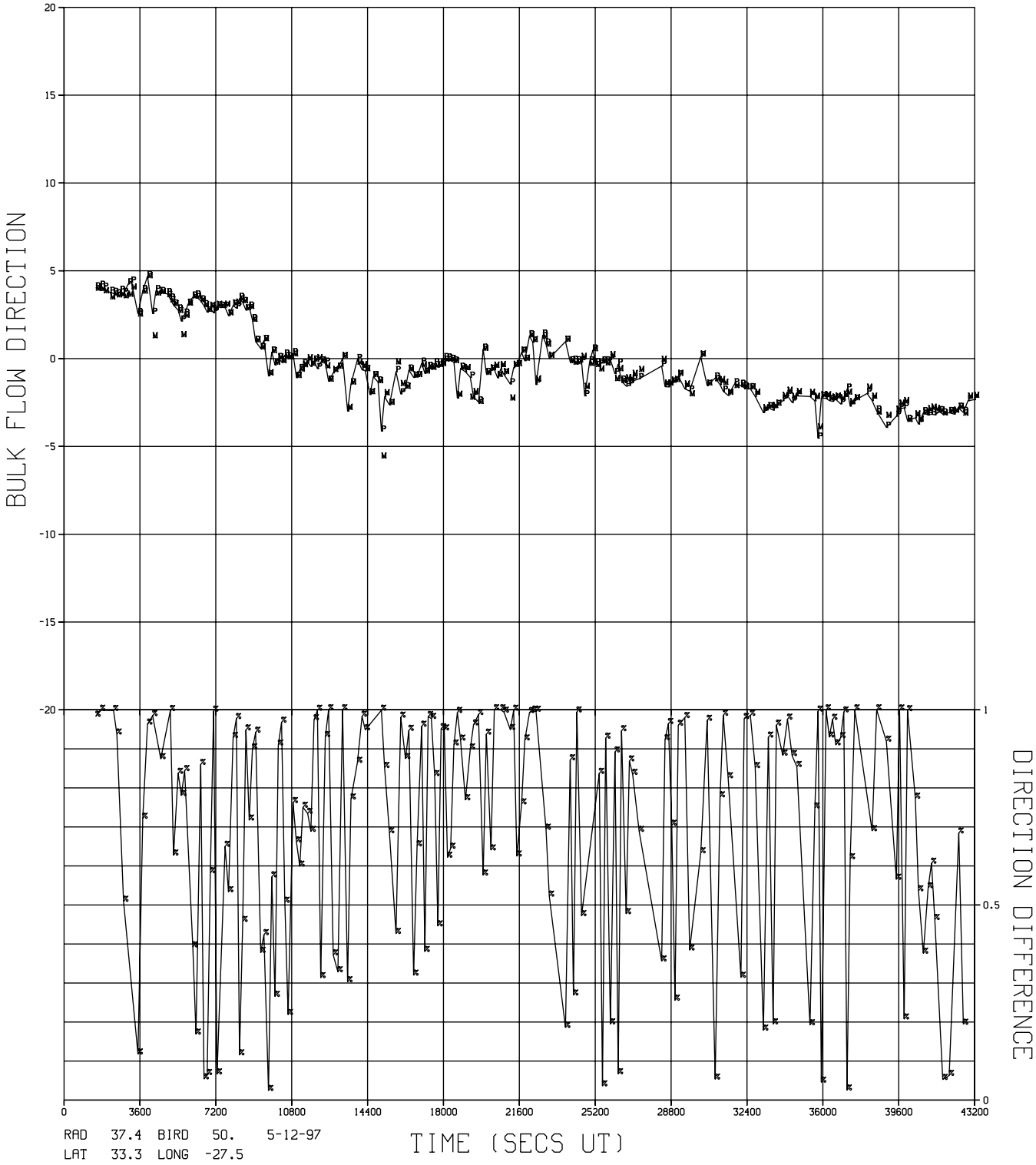

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 36.8 BIRD 50. 5-11-97
LAT 36.8 LONG -41.4

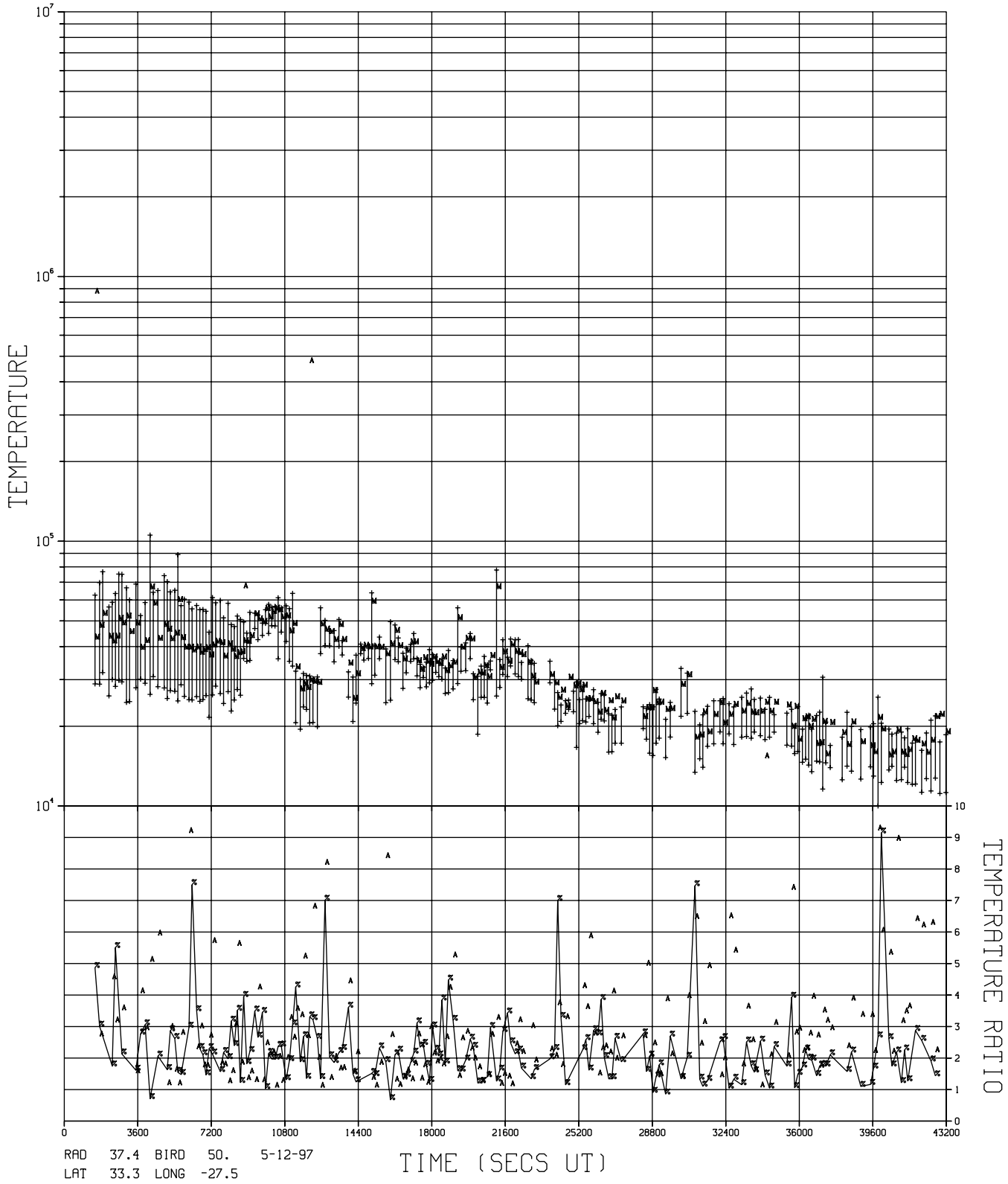

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
RAD 36.8 BIRD 50. 5-11-97
LAT 36.8 LONG -41.4

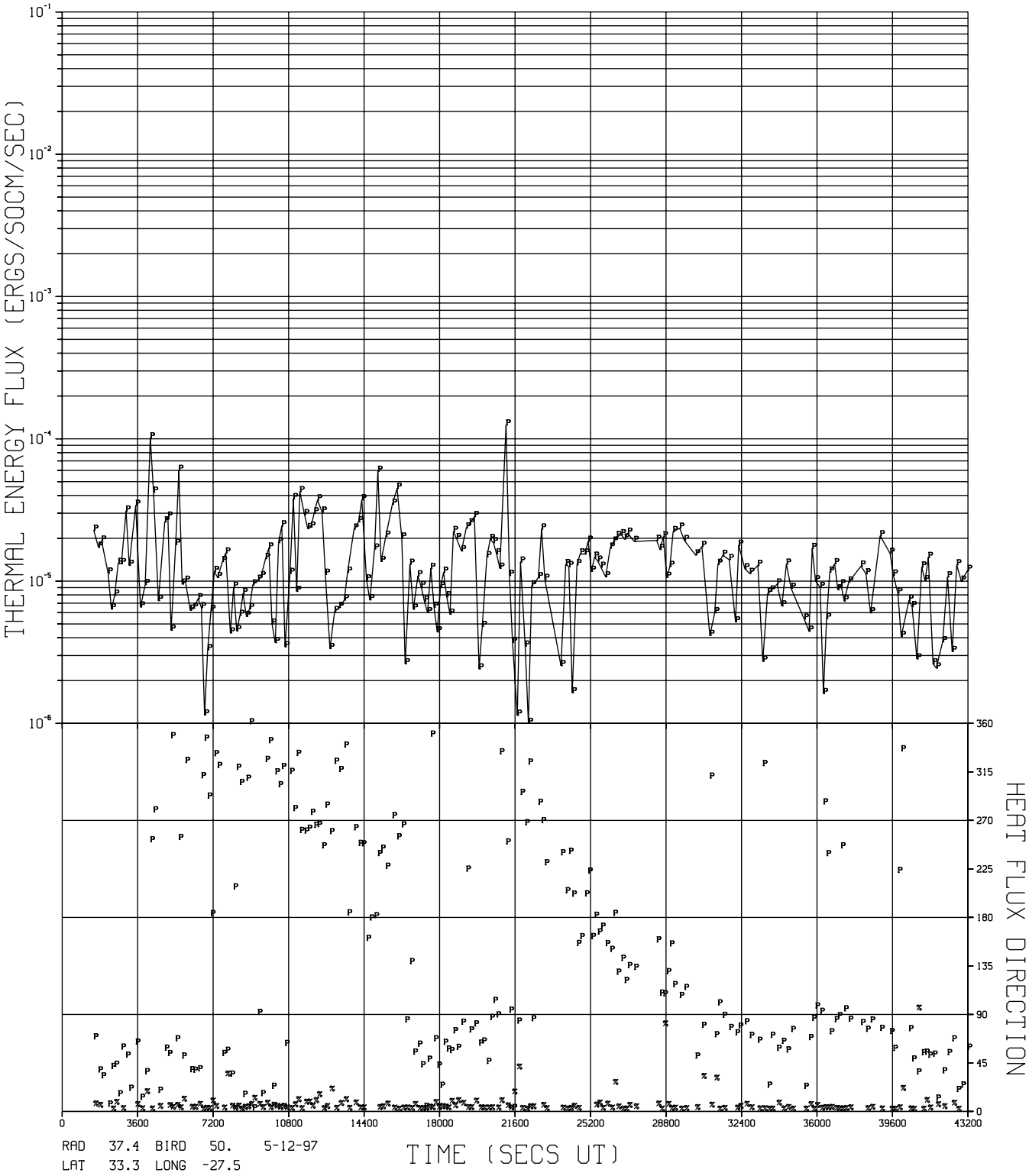

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
TIME (SECS UT)
RAD 36.8 BIRD 50. 5-11-97
LAT 36.8 LONG -41.4

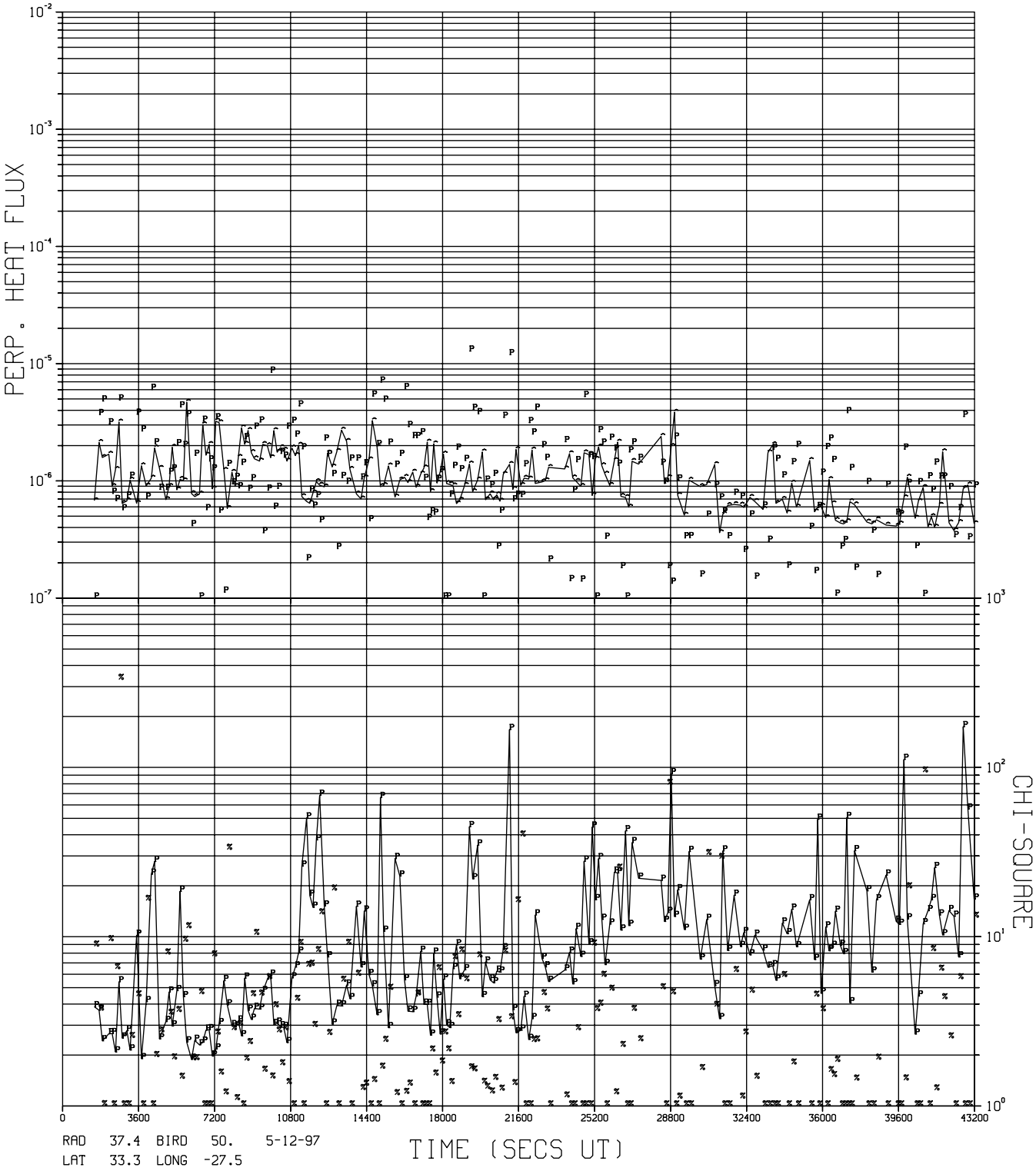

DENSITY
DENSITY RATIO
TIME (SECS UT)
RAD 37.4 BIRD 50. 5-12-97
LAT 33.3 LONG -27.5

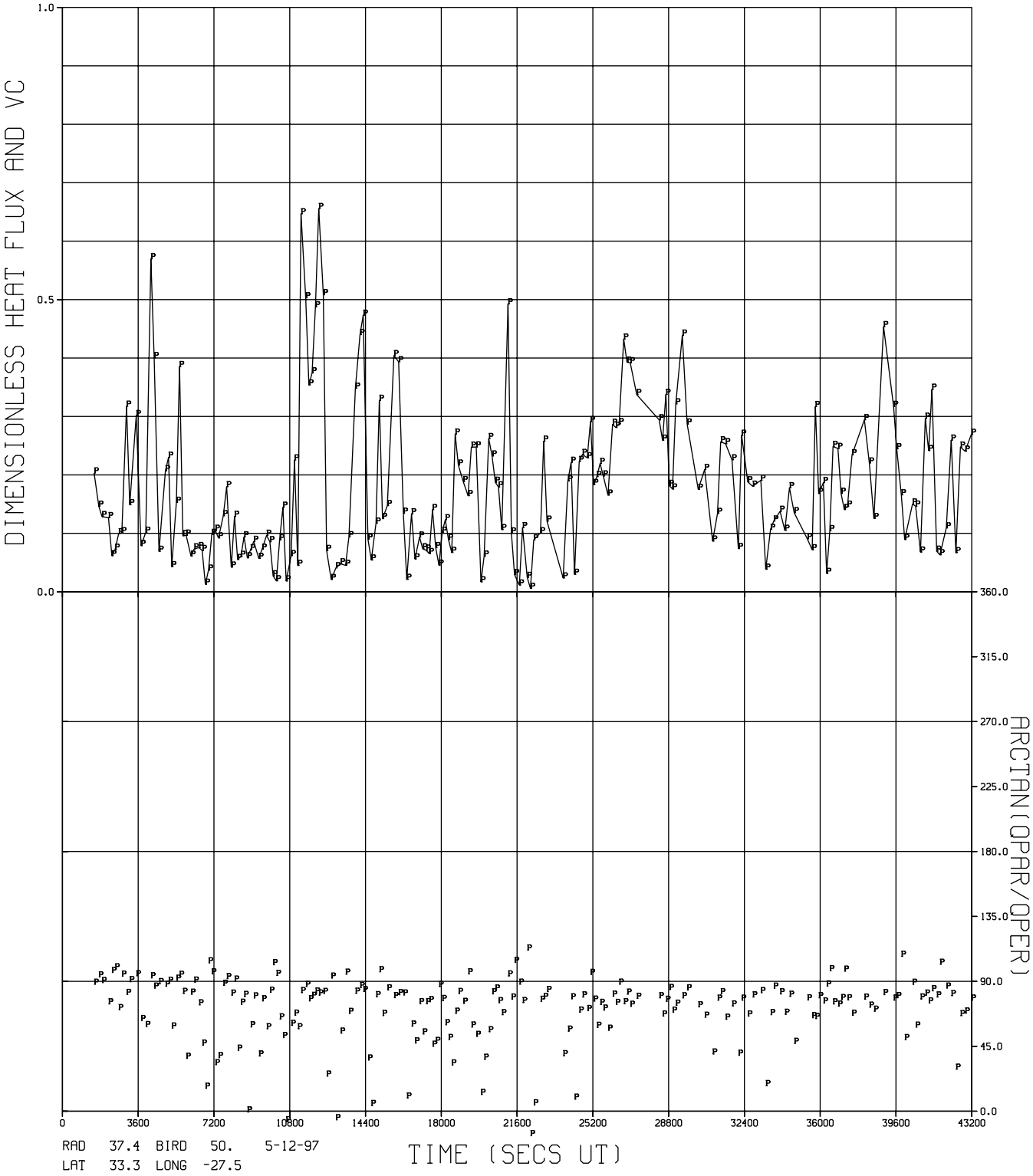

VELOCITY
VELOCITY DIFFERENCE
TIME (SECS UT)
RAD 37.4 BIRD 50. 5-12-97
LAT 33.3 LONG -27.5

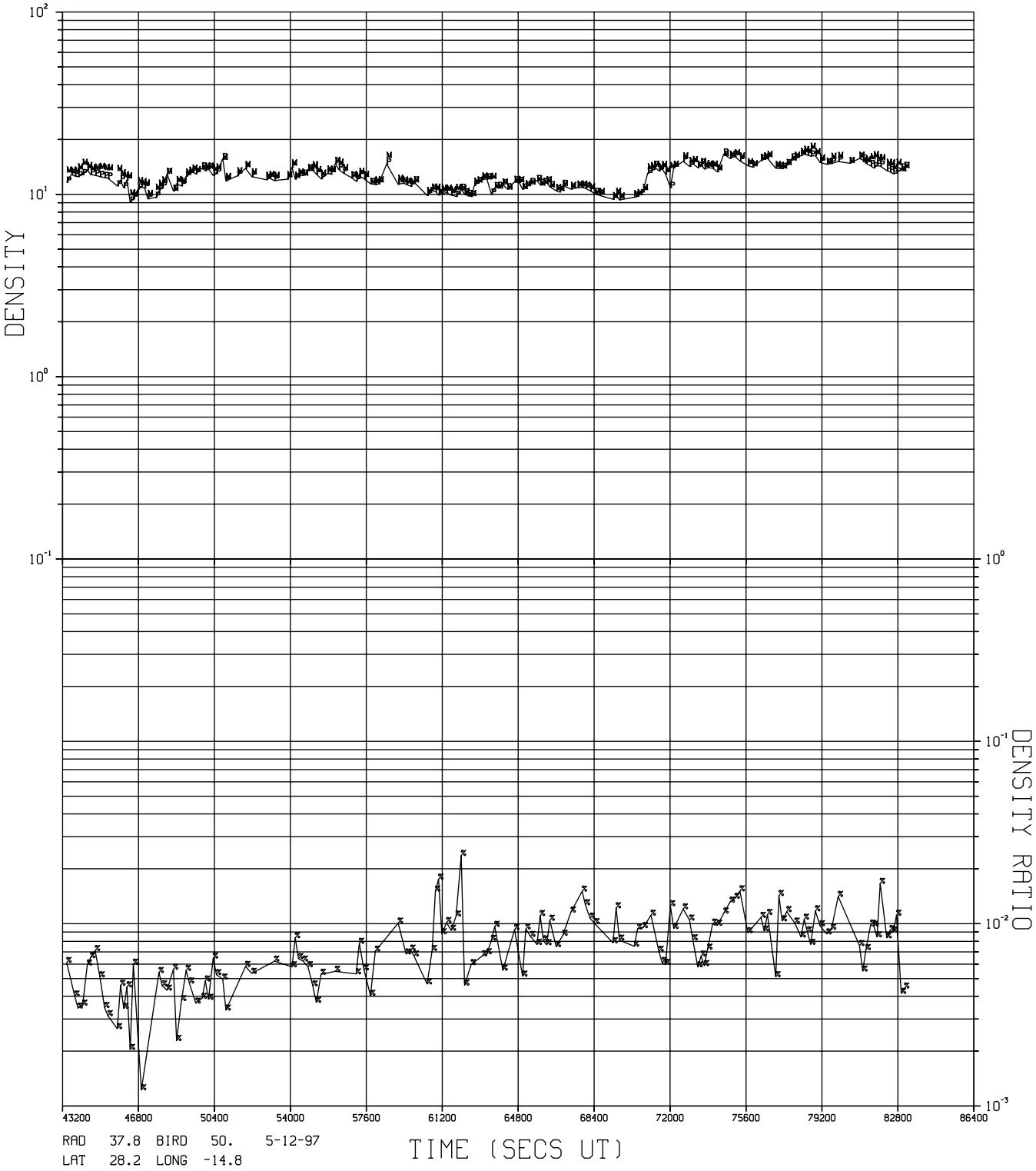

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
RAD 37.4 BIRD 50. 5-12-97
LAT 33.3 LONG -27.5

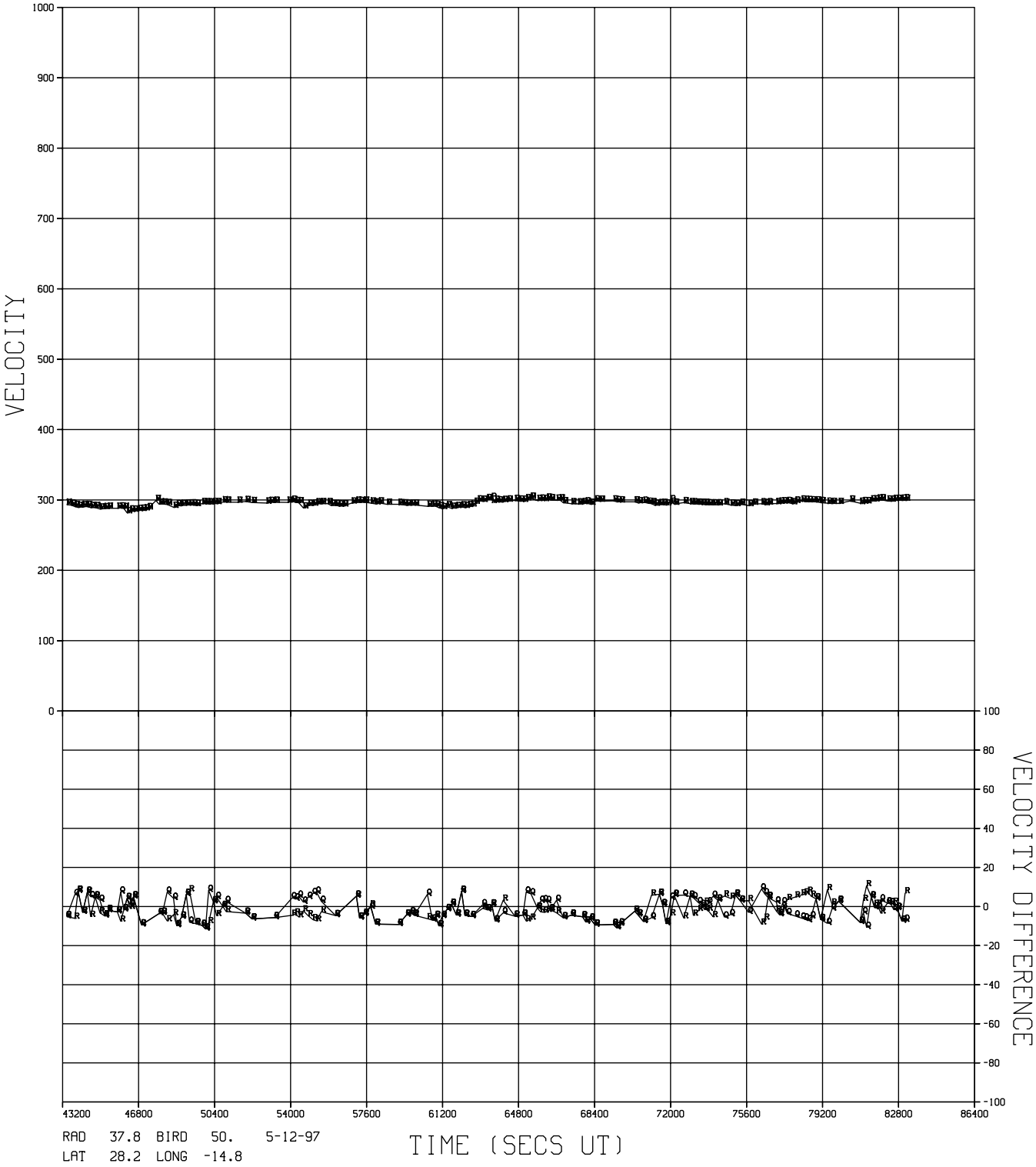

TEMPERATURE
TEMPERATURE RATIO
TIME (SECS UT)
RAD 37.4 BIRD 50. 5-12-97
LAT 33.3 LONG -27.5

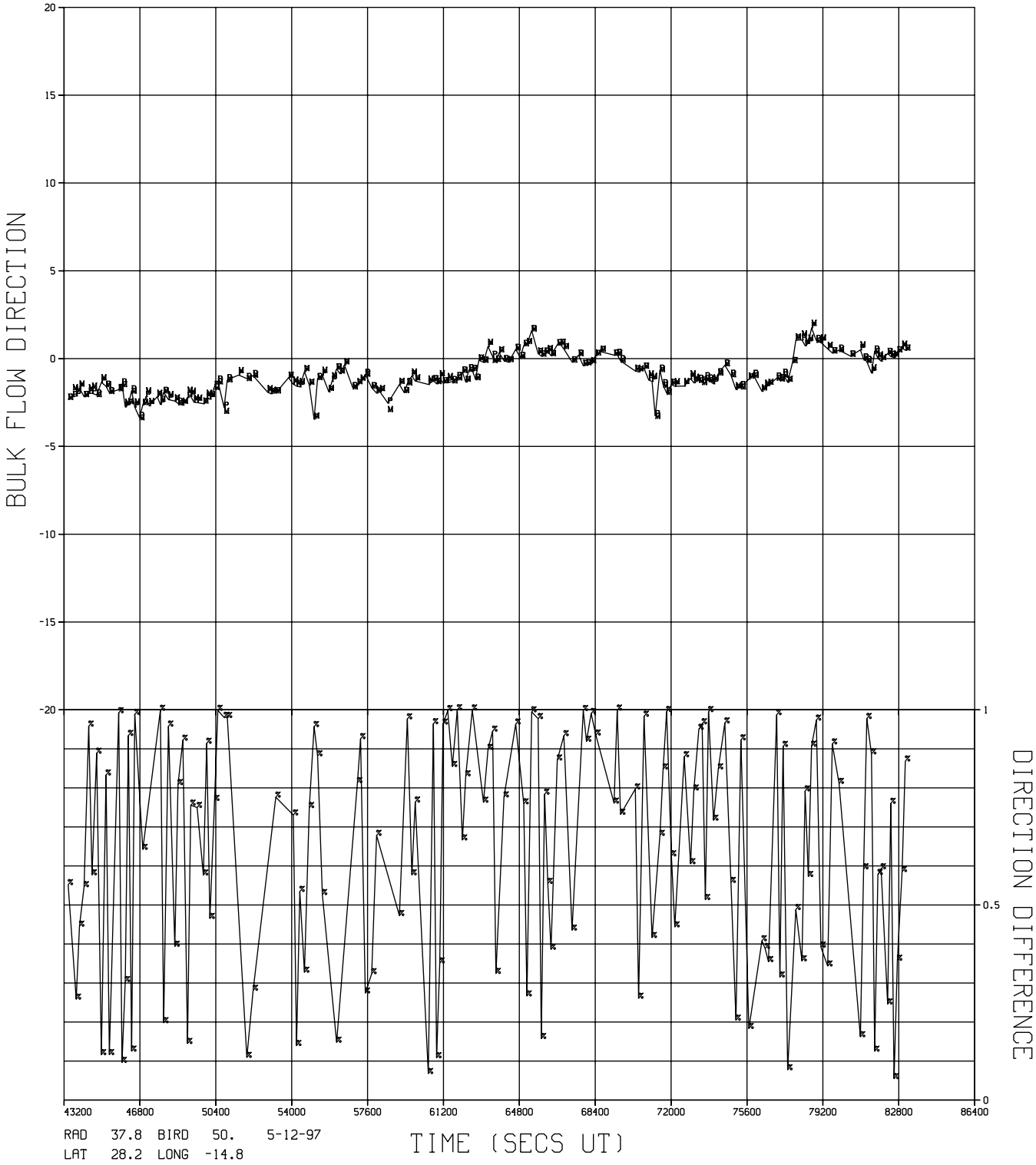

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 37.4 BIRD 50. 5-12-97
LAT 33.3 LONG -27.5

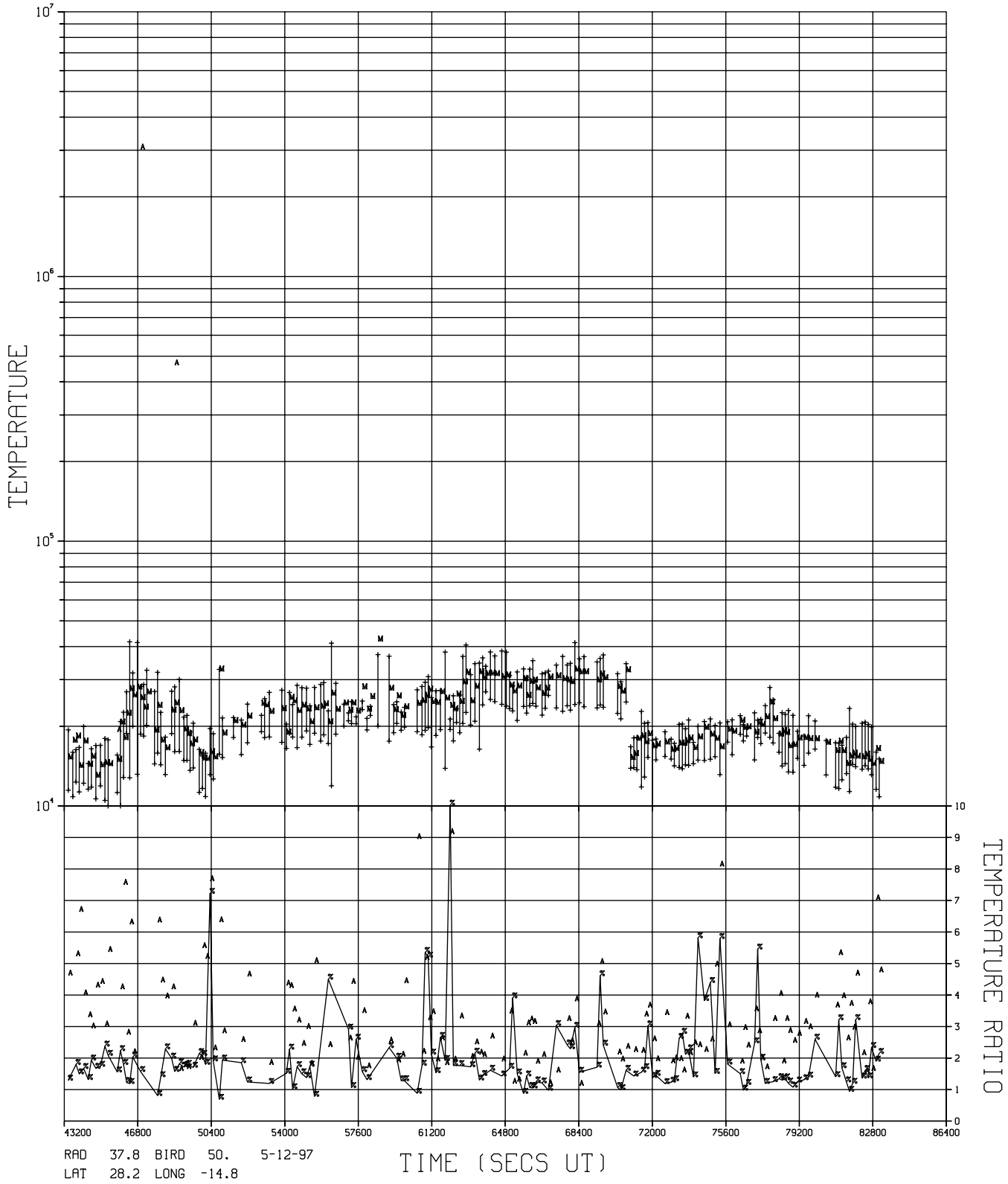

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
RAD 37.4 BIRD 50. 5-12-97
LAT 33.3 LONG -27.5

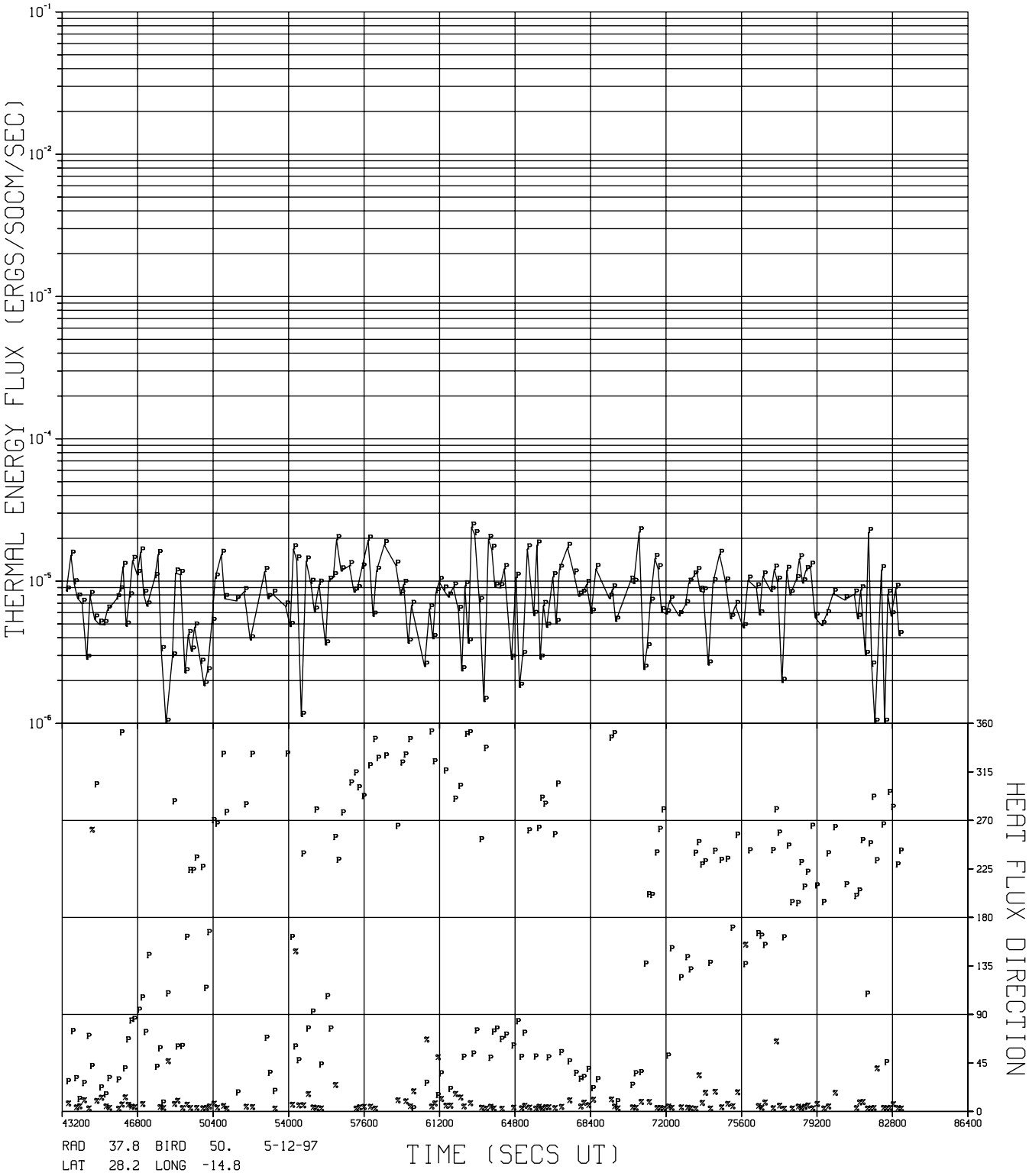

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
TIME (SECS UT)
RAD 37.4 BIRD 50. 5-12-97
LAT 33.3 LONG -27.5

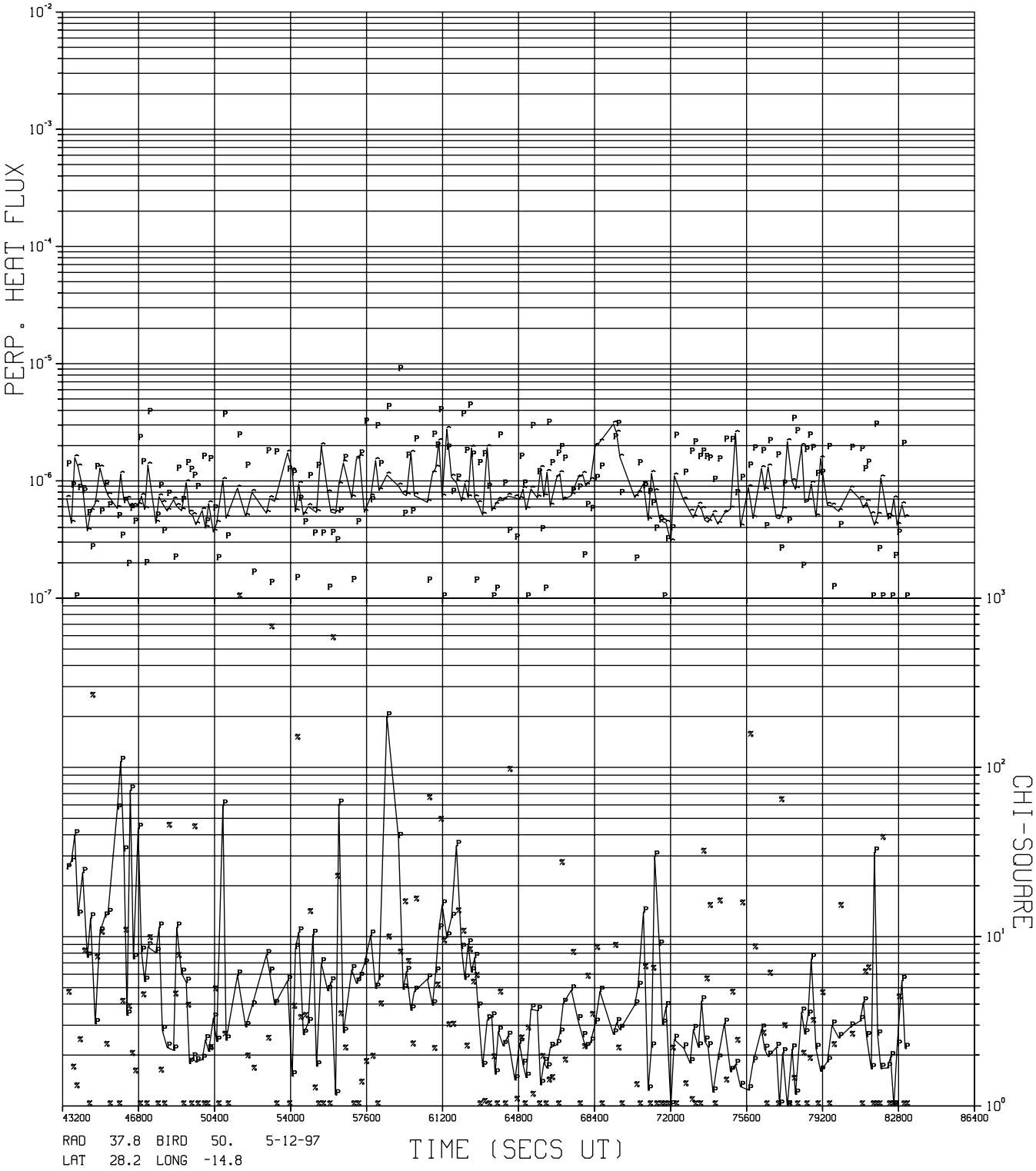

DENSITY
DENSITY RATIO
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 37.8 BIRD 50. 5-12-97
LAT 28.2 LONG -14.8

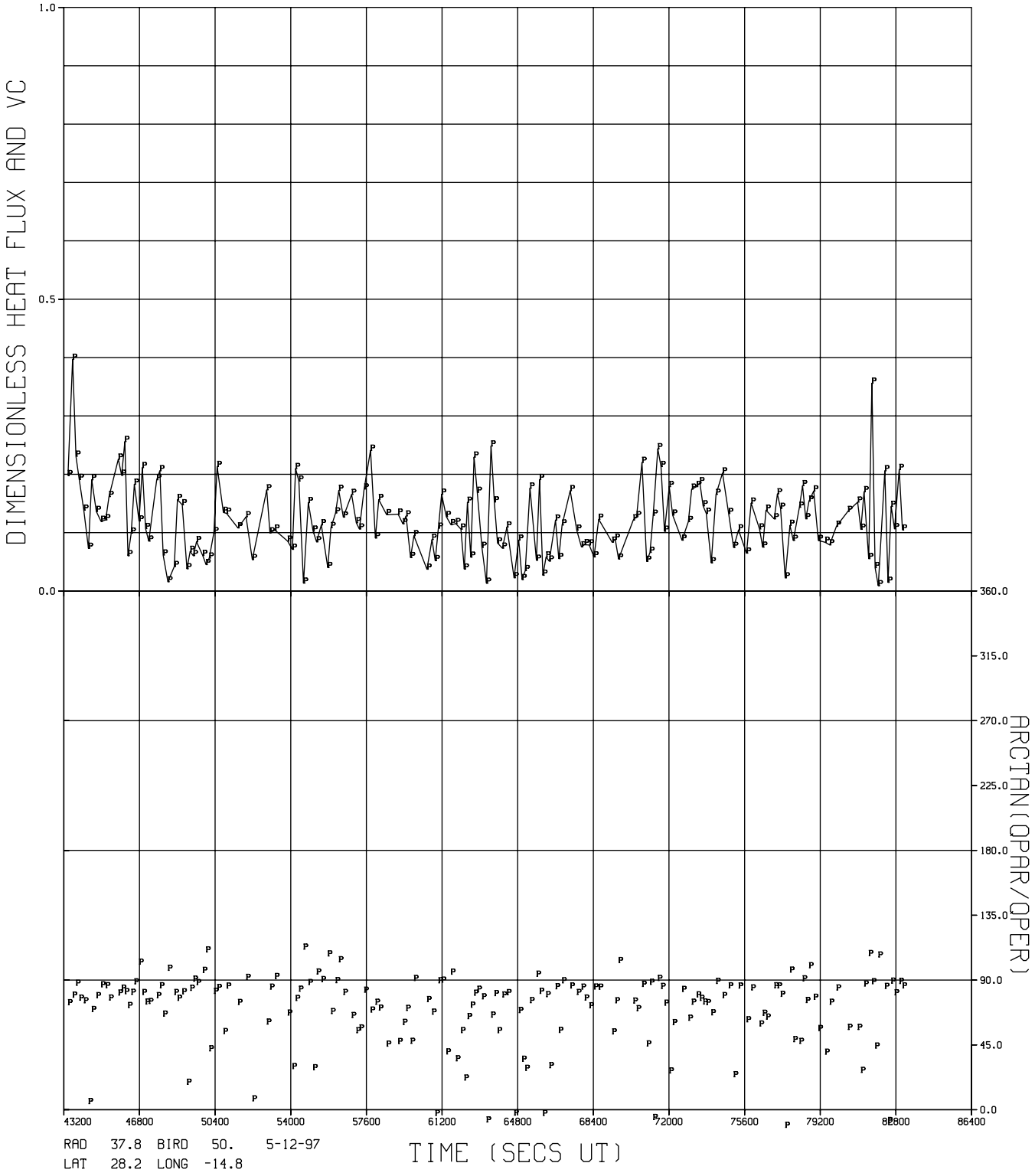

VELOCITY
1000
900
800
700
600
500
400
300
200
100
0
VELOCITY DIFFERENCE
100
80
60
40
20
0
-20
-40
-60
-80
-100
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 37.8 BIRD 50. 5-12-97
LAT 28.2 LONG -14.8
TIME (SECS UT)

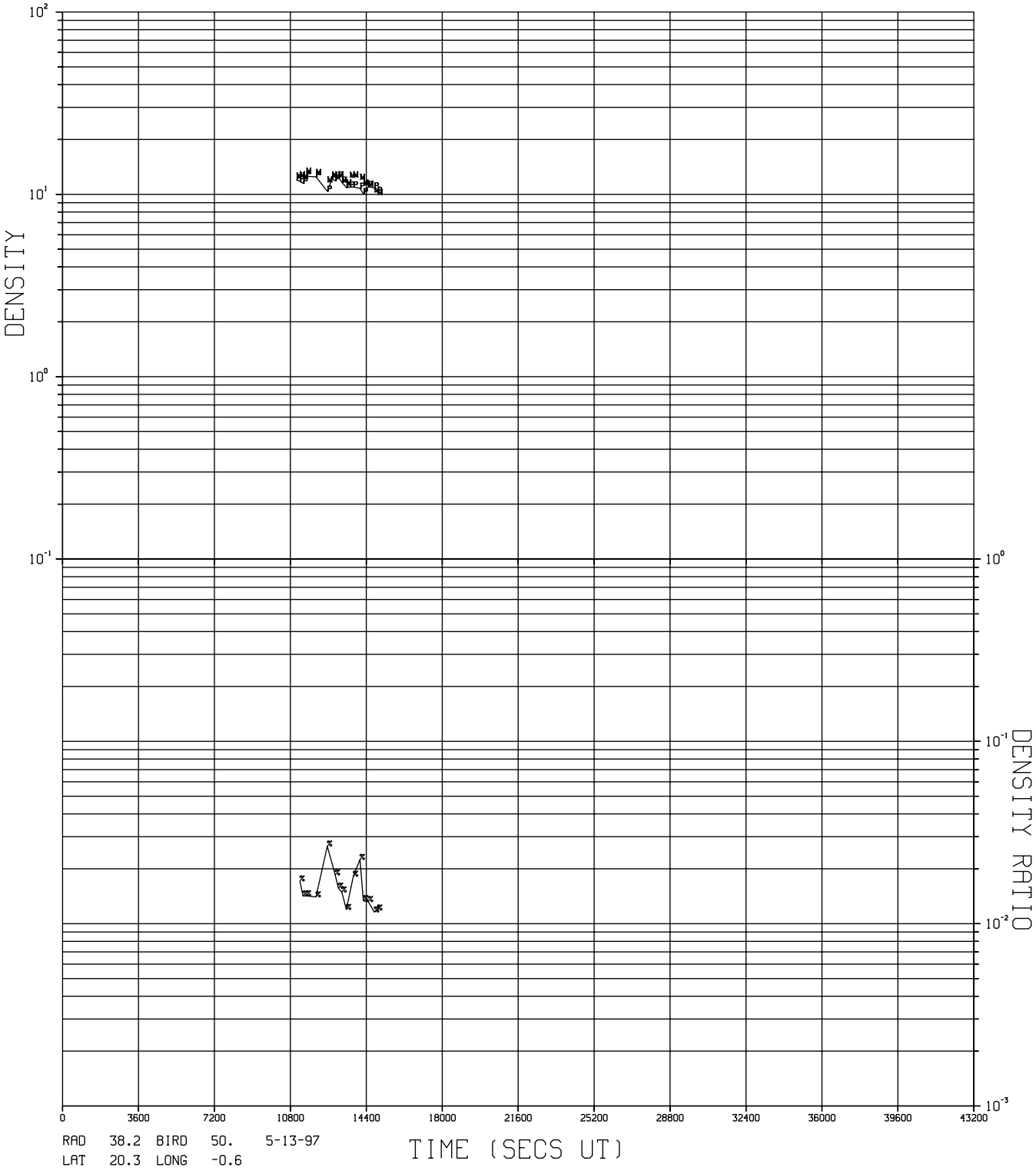

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 37.8 BIRD 50. 5-12-97
LAT 28.2 LONG -14.8

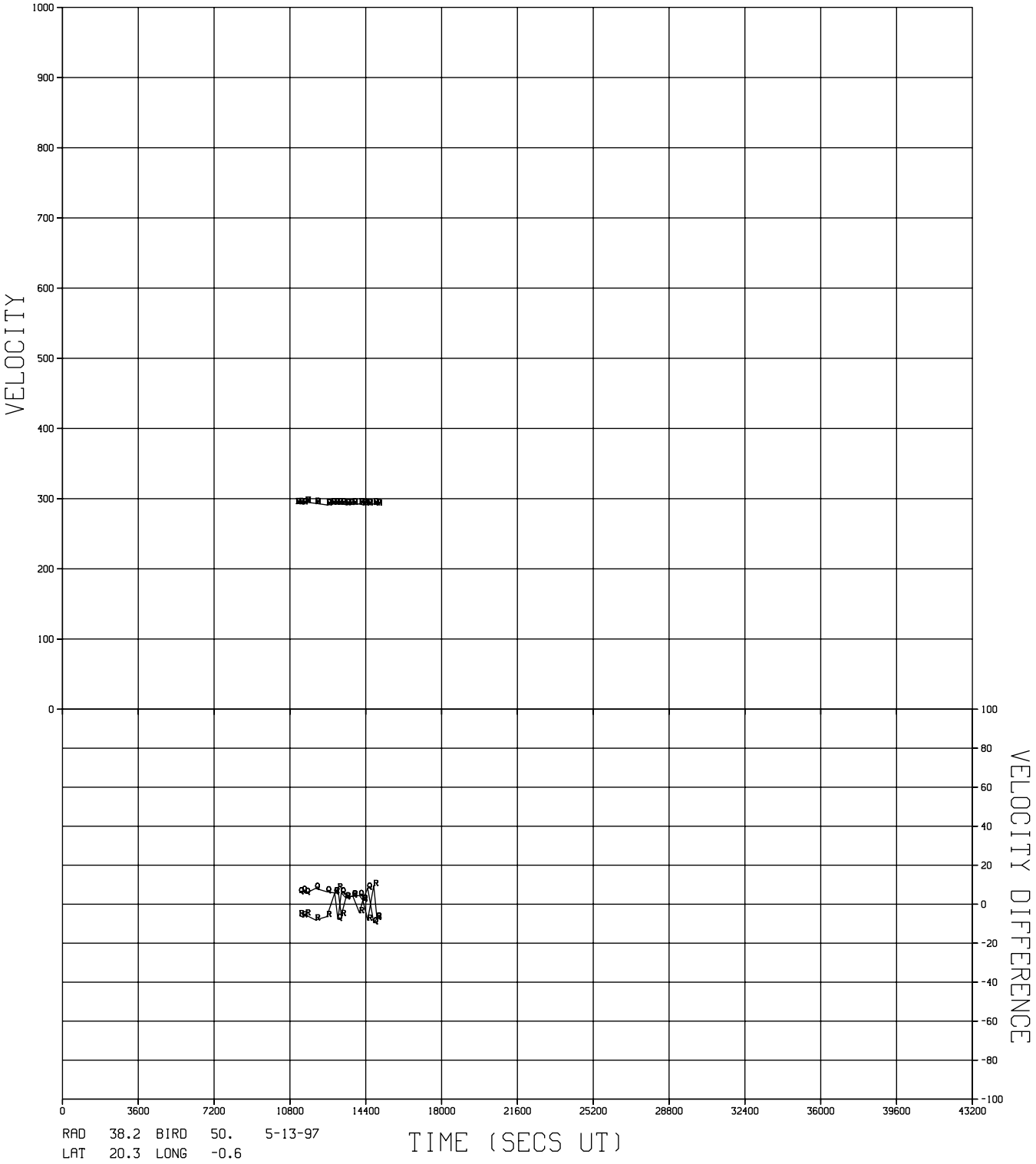

TEMPERATURE
10^7
10^6
10^5
10^4
TEMPERATURE RATIO
0
1
2
3
4
5
6
7
8
9
10
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
TIME (SECS UT)
RAD 37.8 BIRD 50. 5-12-97
LAT 28.2 LONG -14.8

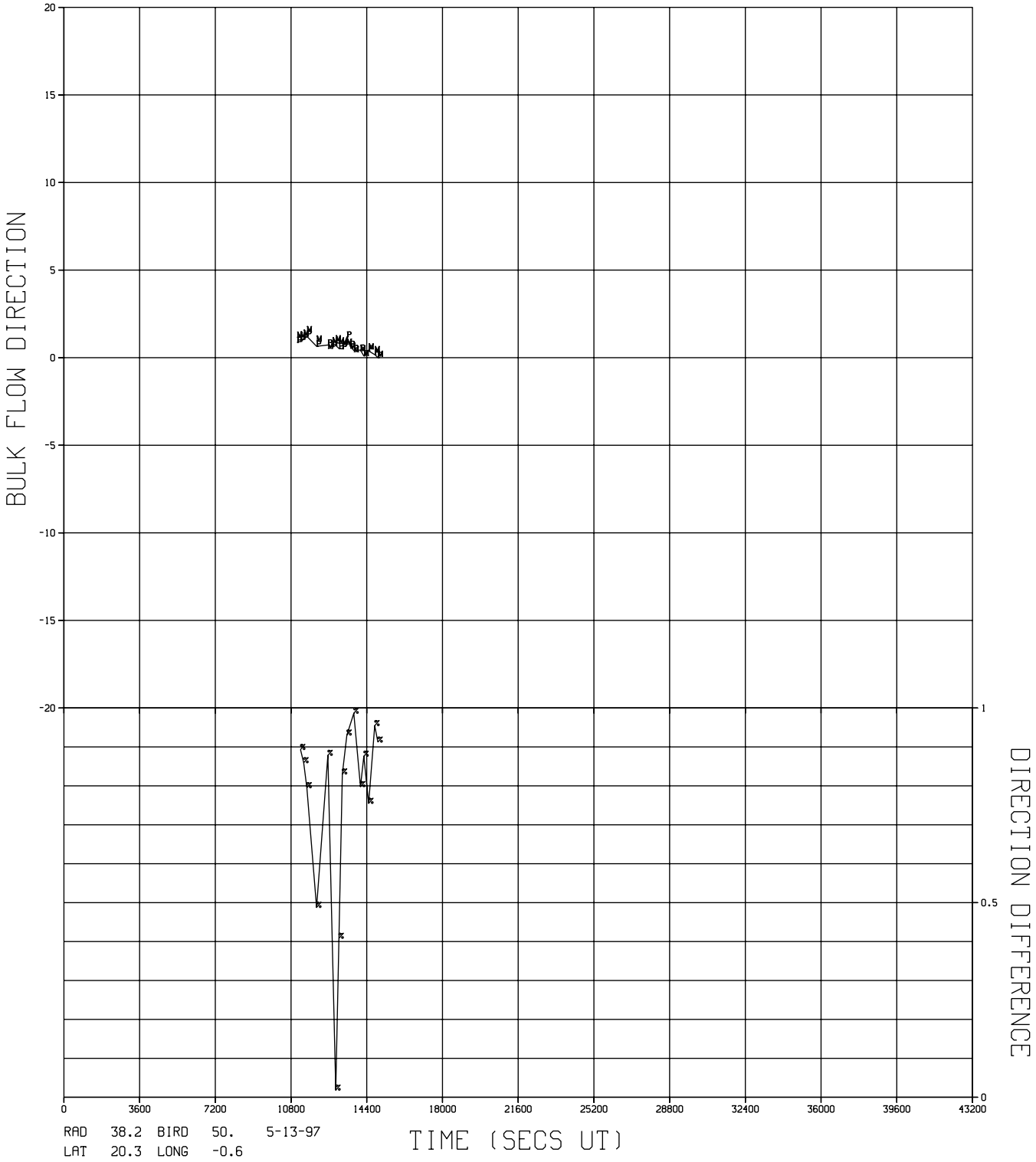

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 37.8 BIRD 50. 5-12-97
LAT 28.2 LONG -14.8

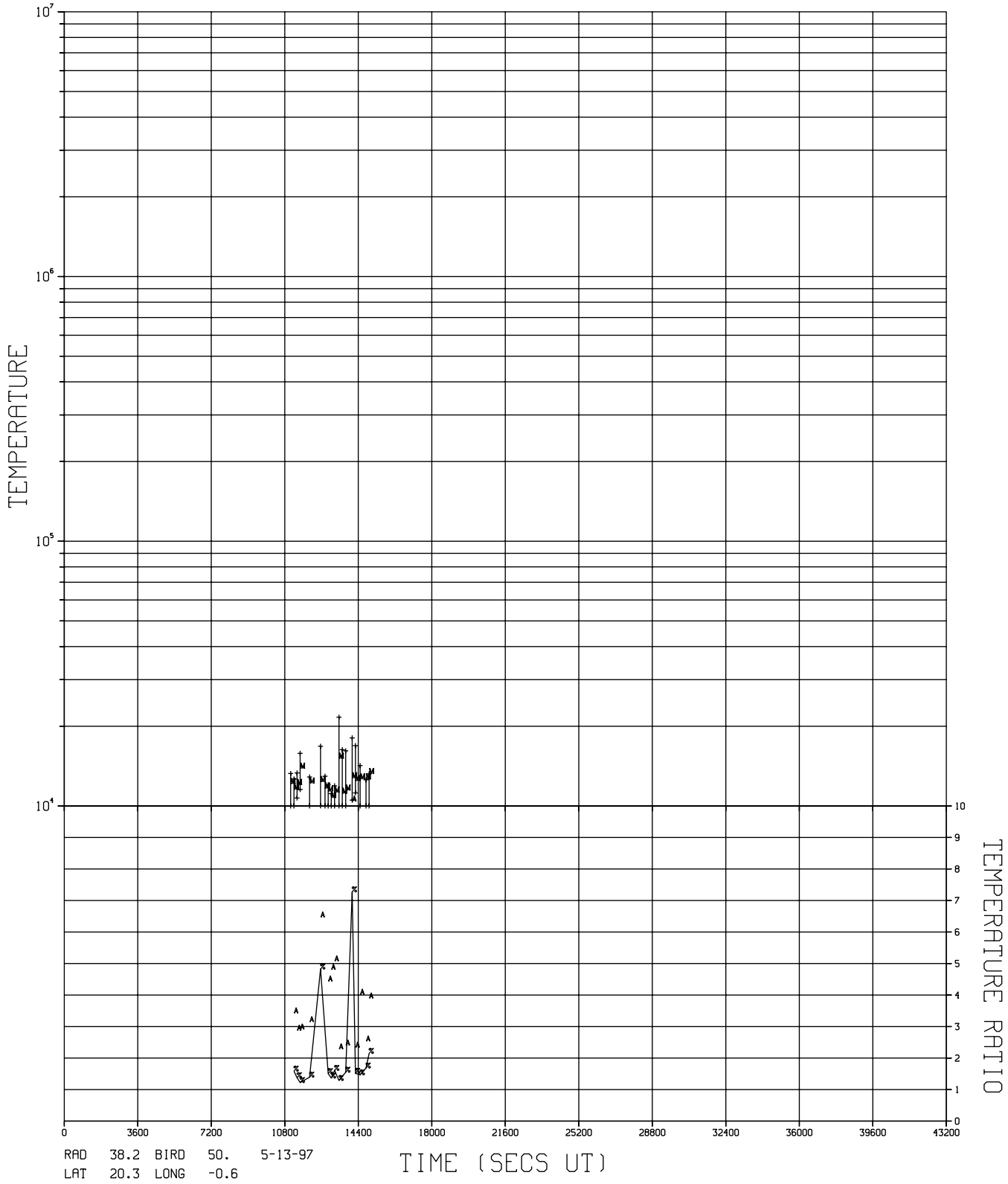

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 37.8 BIRD 50. 5-12-97
LAT 28.2 LONG -14.8

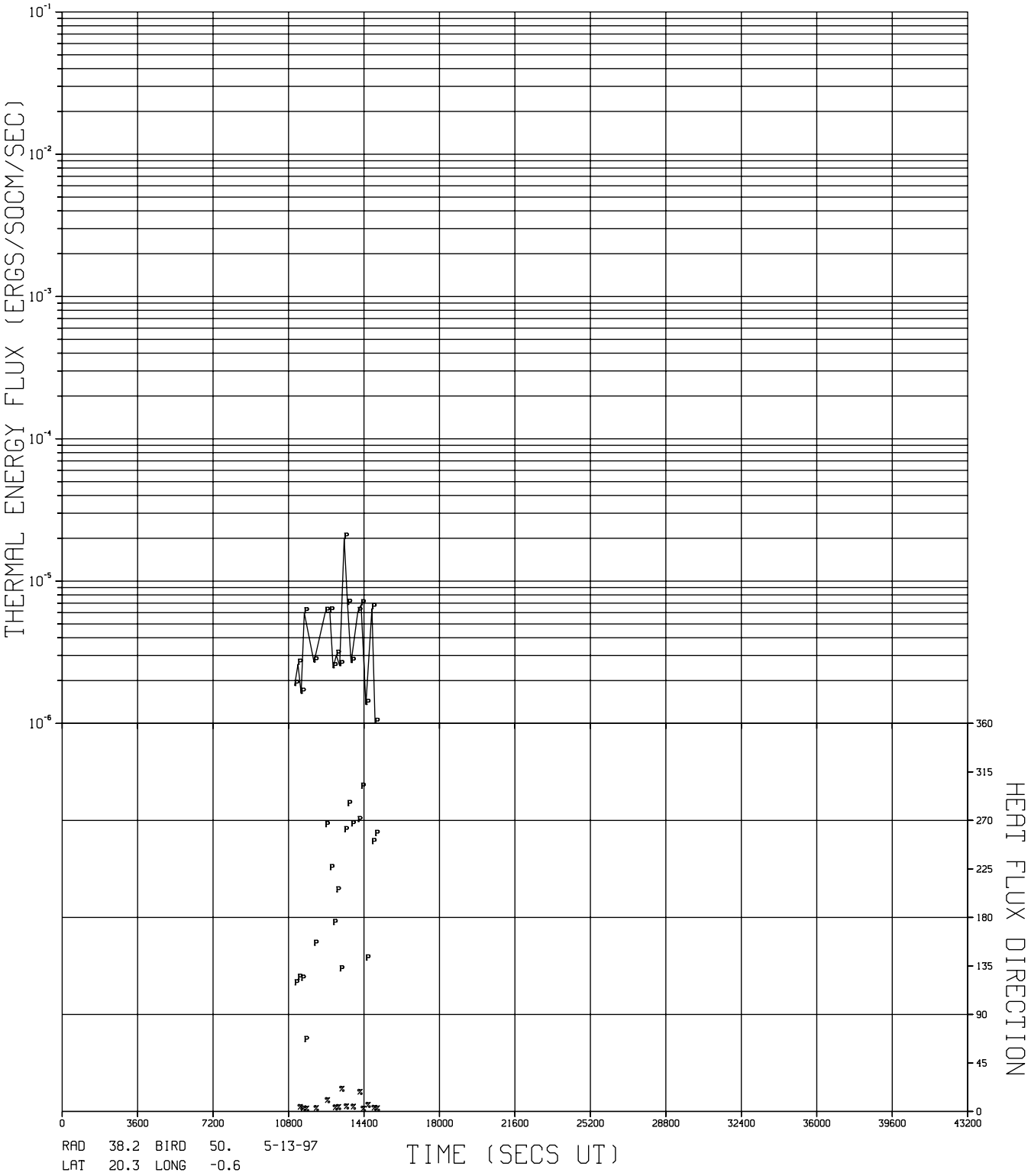

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
TIME (SECS UT)
RAD 37.8 BIRD 50. 5-12-97
LAT 28.2 LONG -14.8

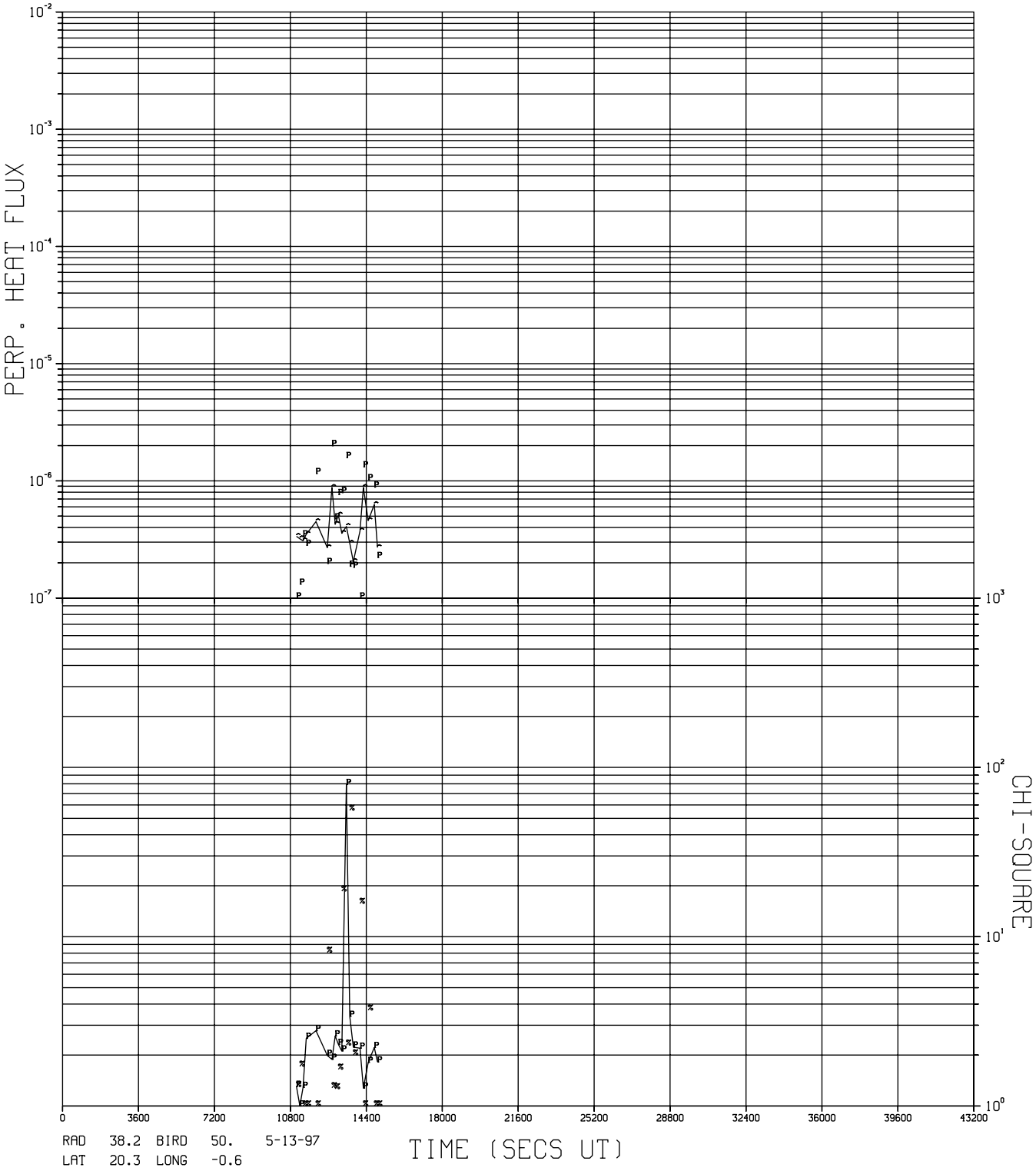

DENSITY
DENSITY RATIO
TIME (SECS UT)
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
RAD 38.2 BIRD 50. 5-13-97
LAT 20.3 LONG -0.6

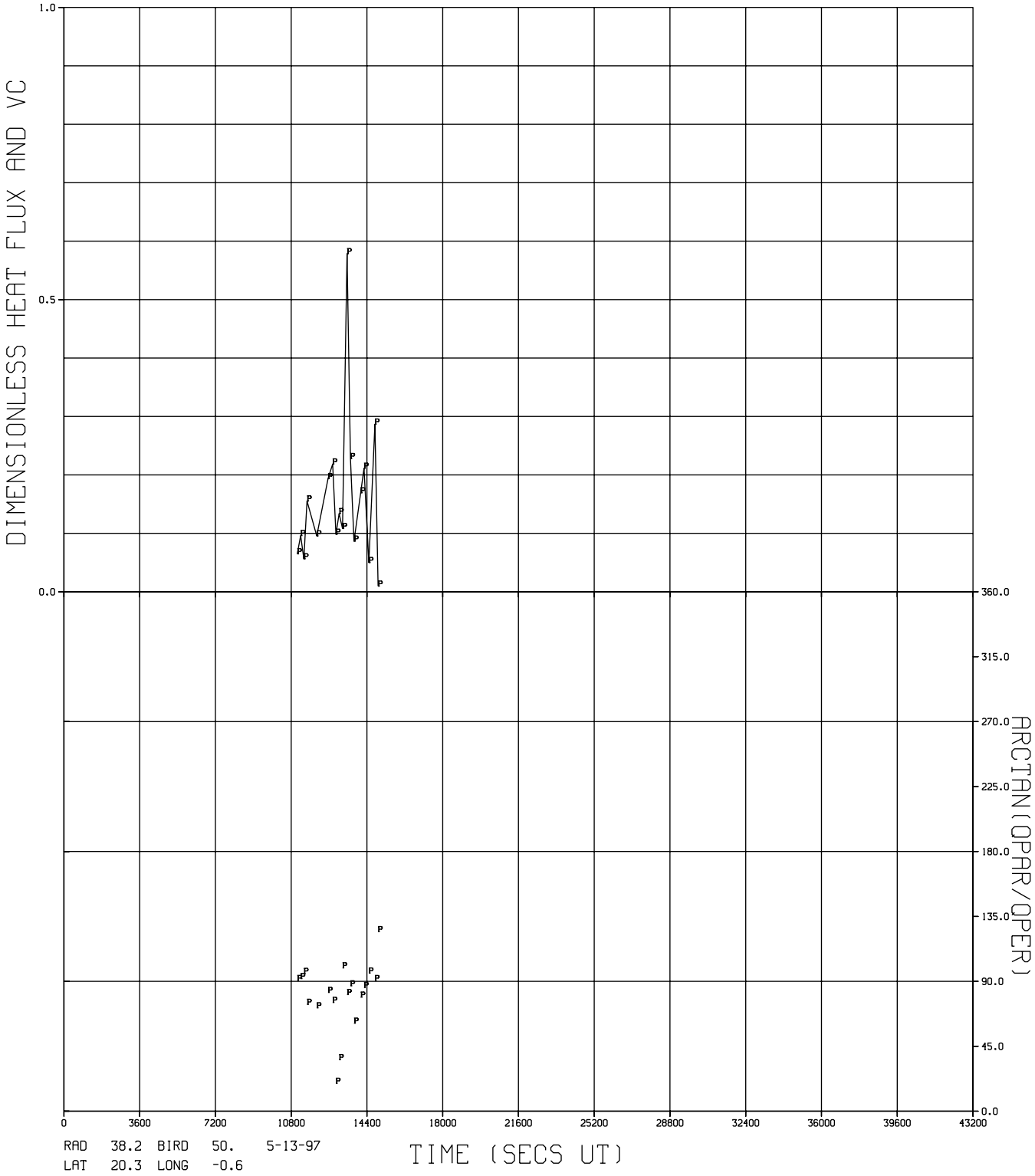

VELOCITY
1000
900
800
700
600
500
400
300
200
100
0
VELOCITY DIFFERENCE
100
80
60
40
20
0
-20
-40
-60
-80
-100
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
TIME (SECS UT)
RAD 38.2 BIRD 50. 5-13-97
LAT 20.3 LONG -0.6

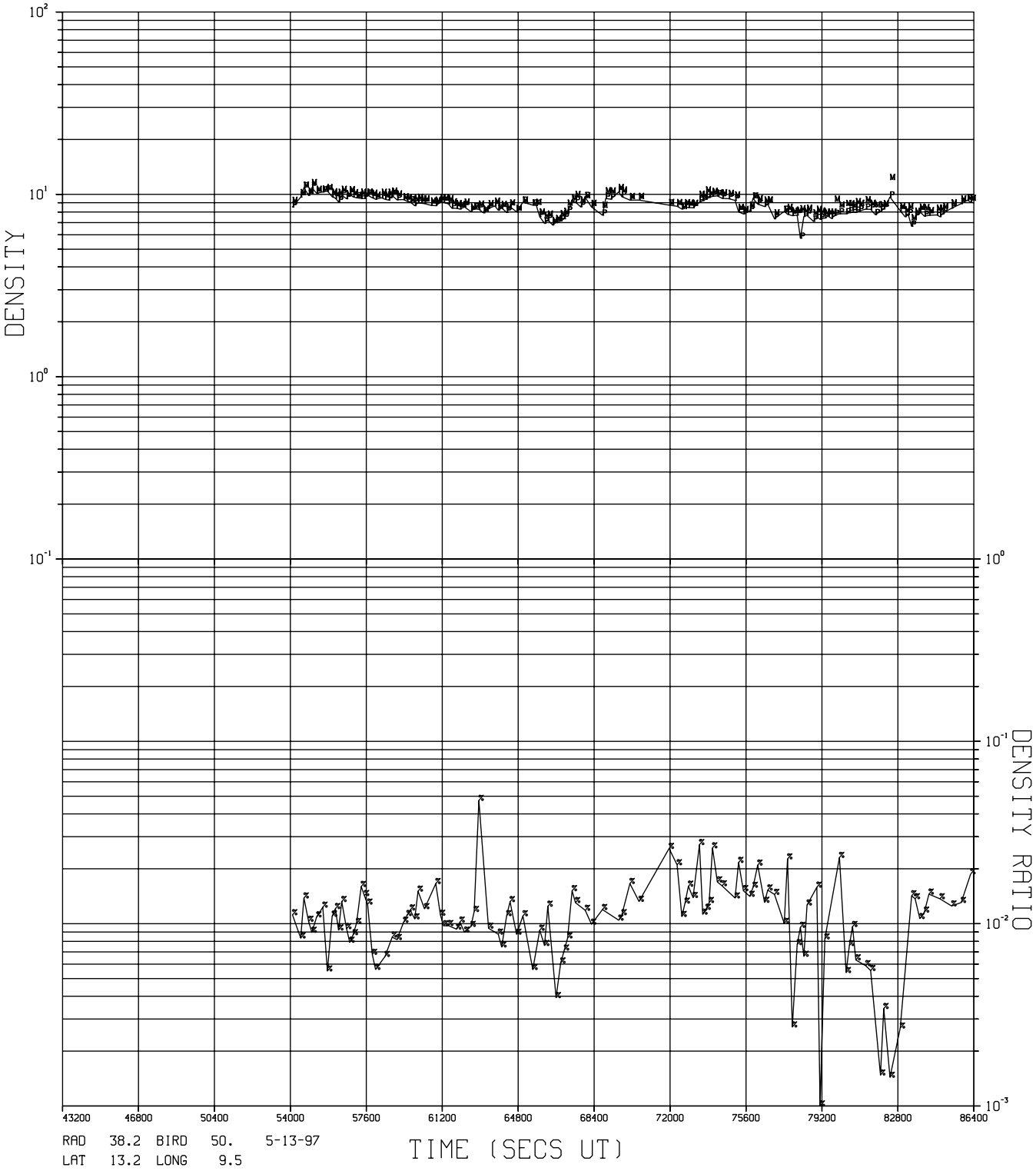

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
RAD 38.2 BIRD 50. 5-13-97
LAT 20.3 LONG -0.6

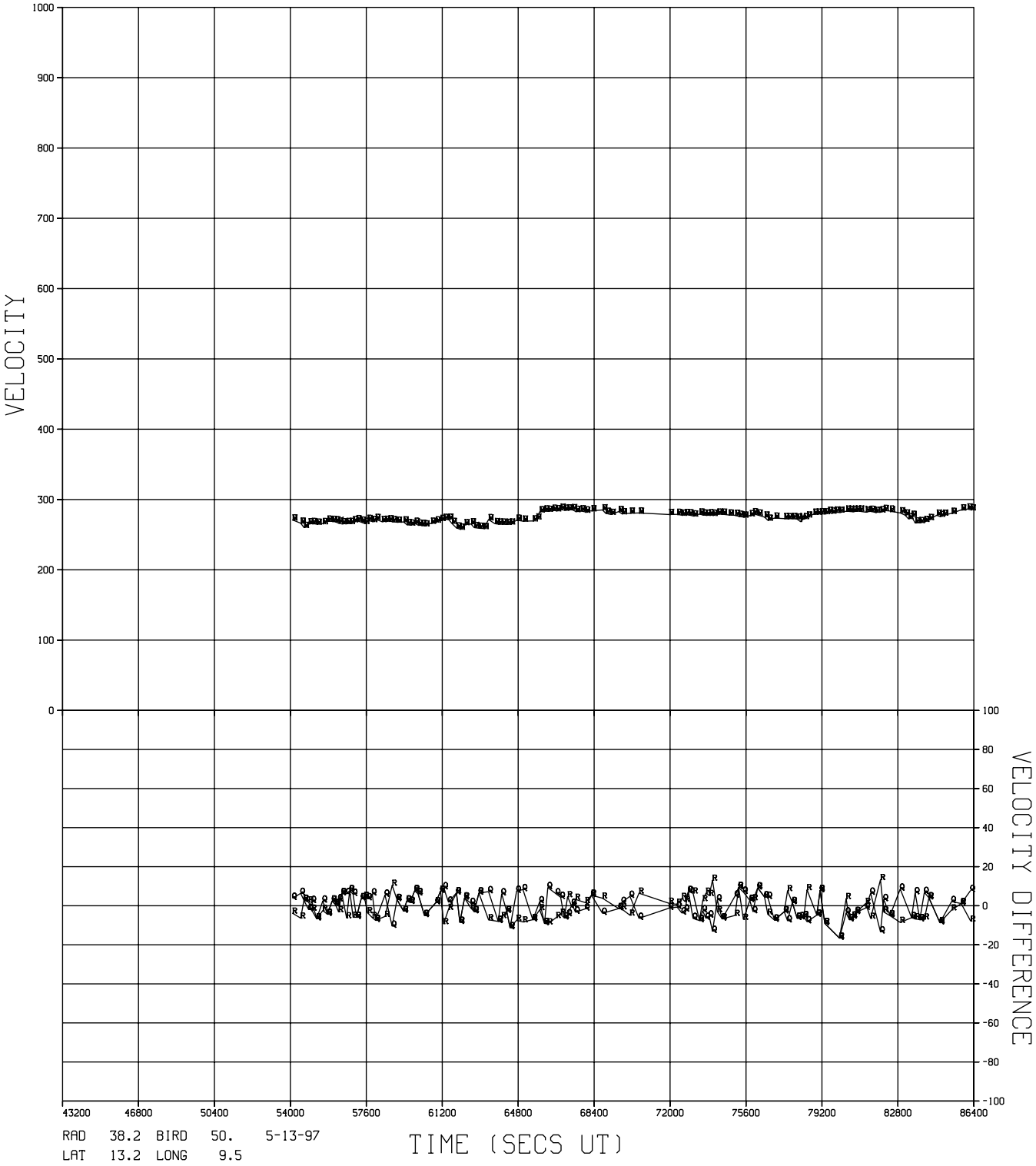

TEMPERATURE
10^7
10^6
10^5
10^4
TEMPERATURE RATIO
0
1
2
3
4
5
6
7
8
9
10
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
TIME (SECS UT)
RAD 38.2 BIRD 50. 5-13-97
LAT 20.3 LONG -0.6

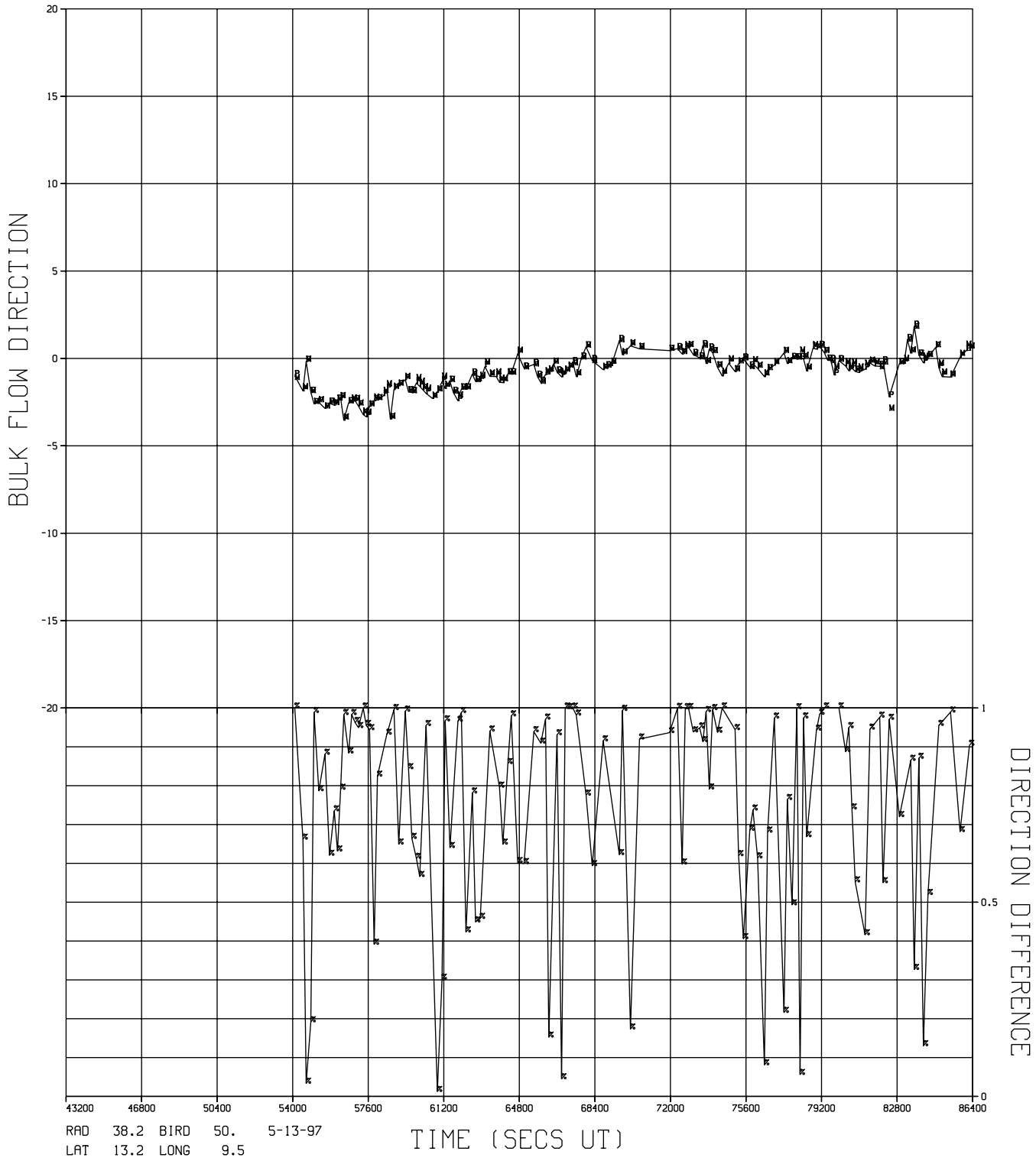

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 38.2 BIRD 50. 5-13-97
LAT 20.3 LONG -0.6

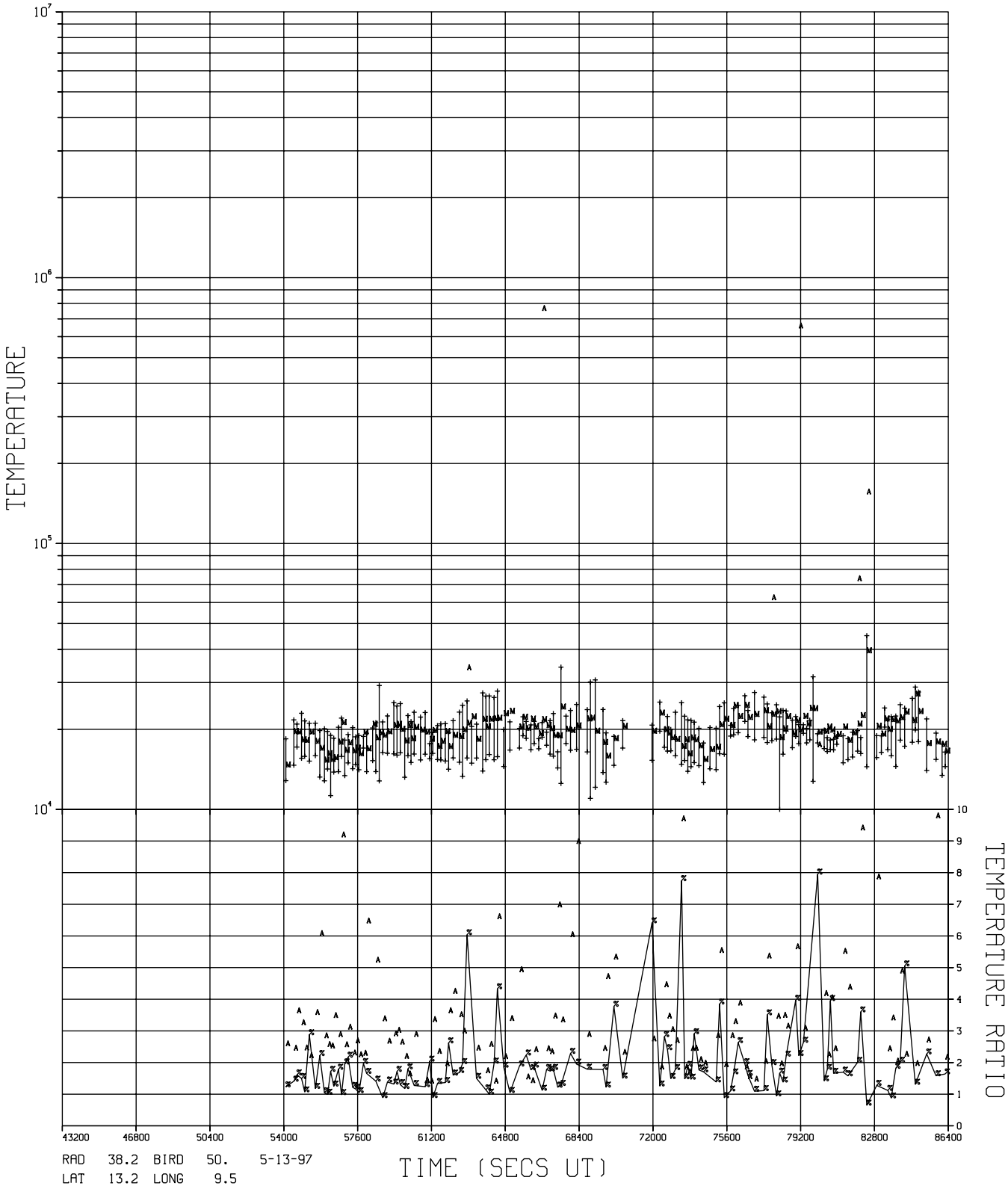

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
RAD 38.2 BIRD 50. 5-13-97
LAT 20.3 LONG -0.6

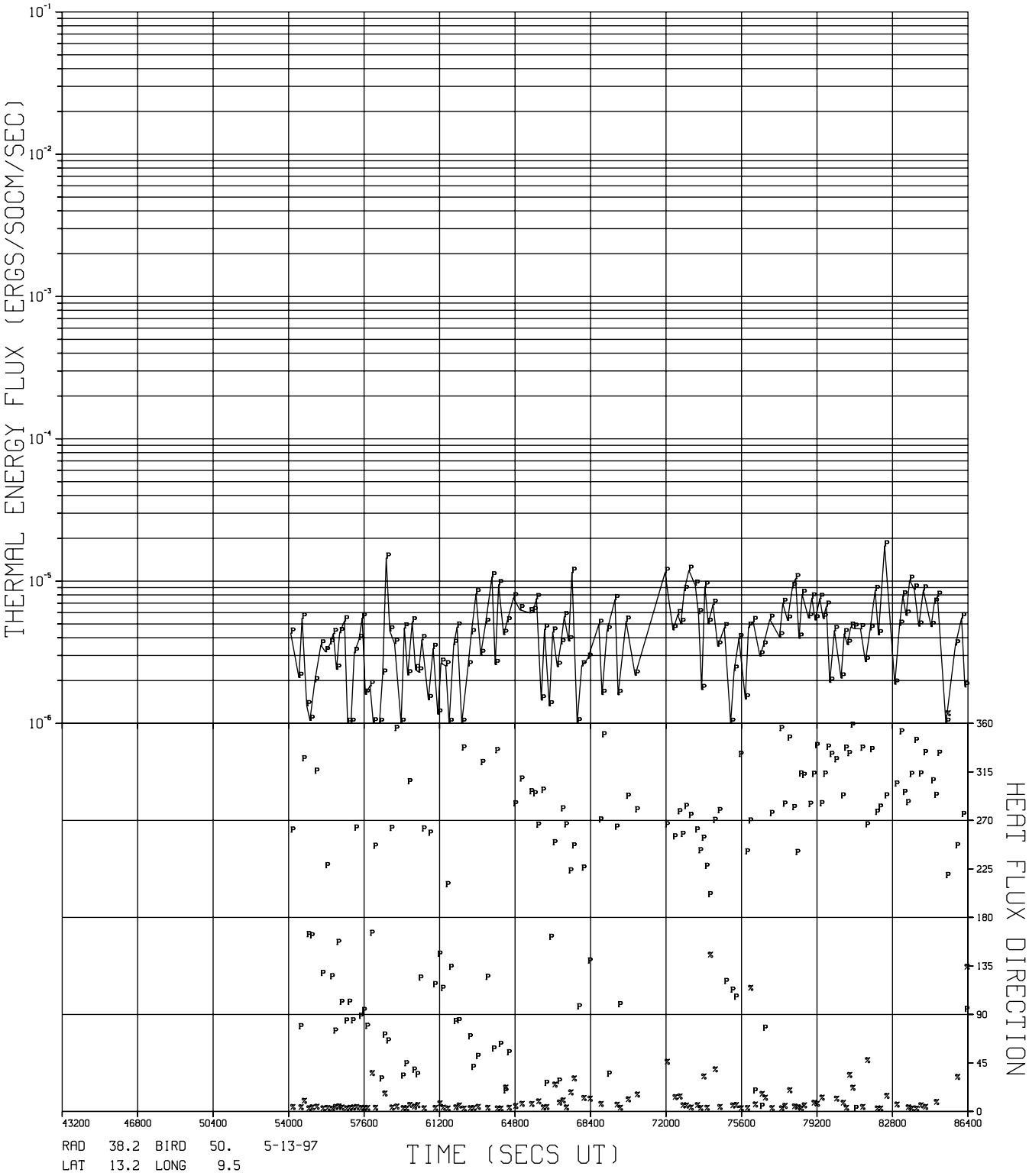

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
TIME (SECS UT)
RAD 38.2 BIRD 50. 5-13-97
LAT 20.3 LONG -0.6

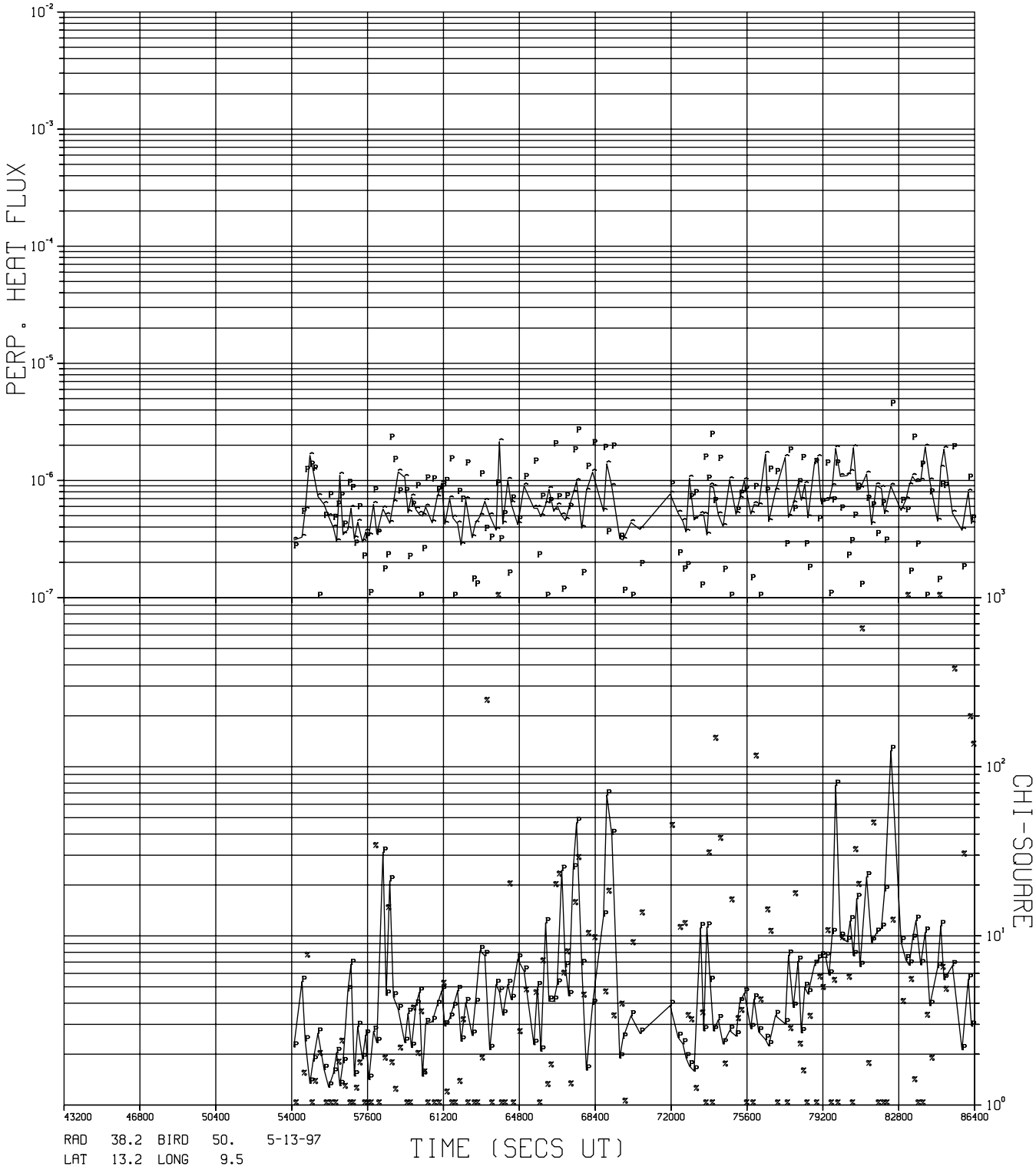

DENSITY
DENSITY RATIO
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 38.2 BIRD 50. 5-13-97
LAT 13.2 LONG 9.5

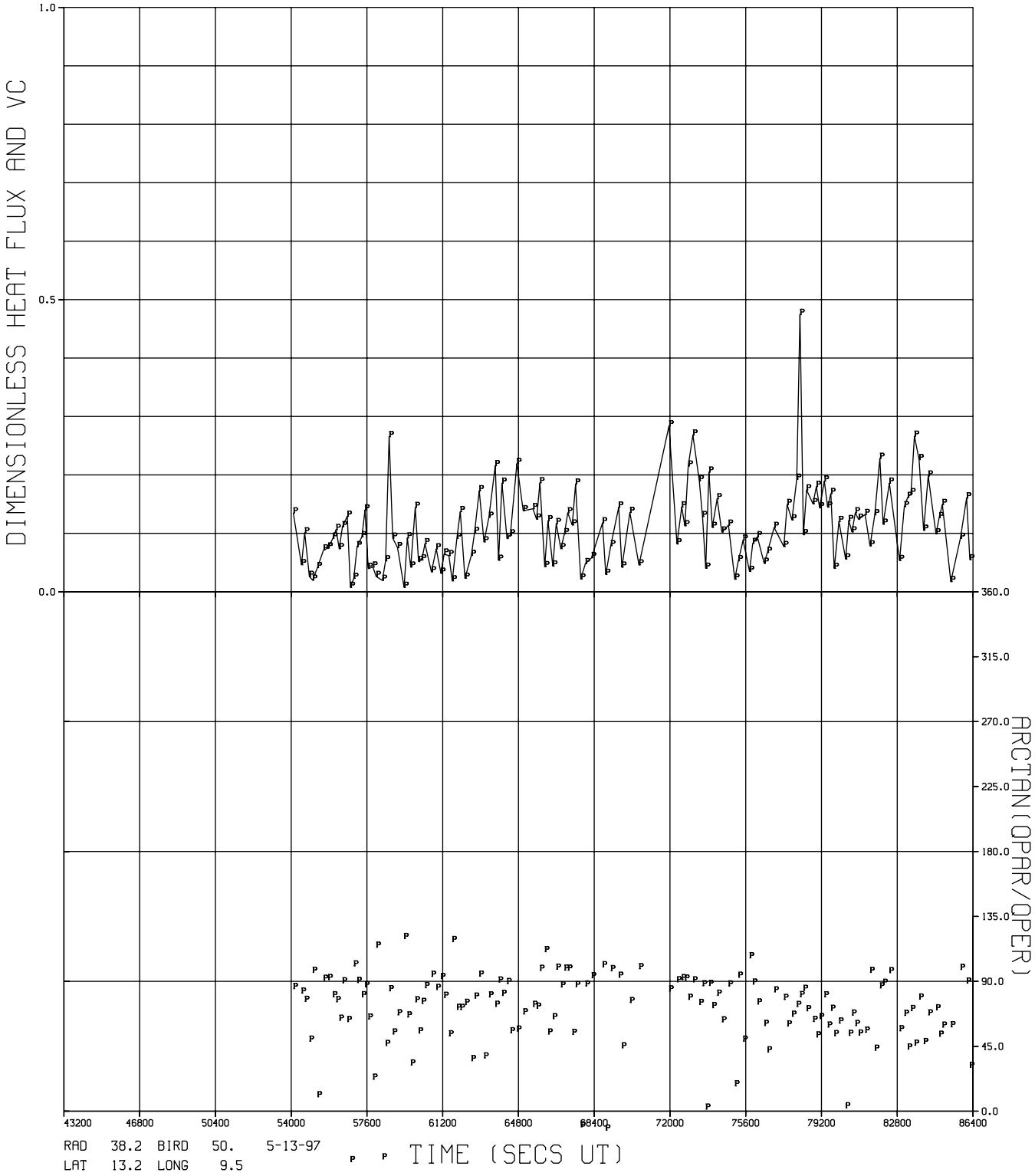

VELOCITY
1000
900
800
700
600
500
400
300
200
100
0
VELOCITY DIFFERENCE
100
80
60
40
20
0
-20
-40
-60
-80
-100
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 38.2 BIRD 50. 5-13-97
LAT 13.2 LONG 9.5
TIME (SECS UT)

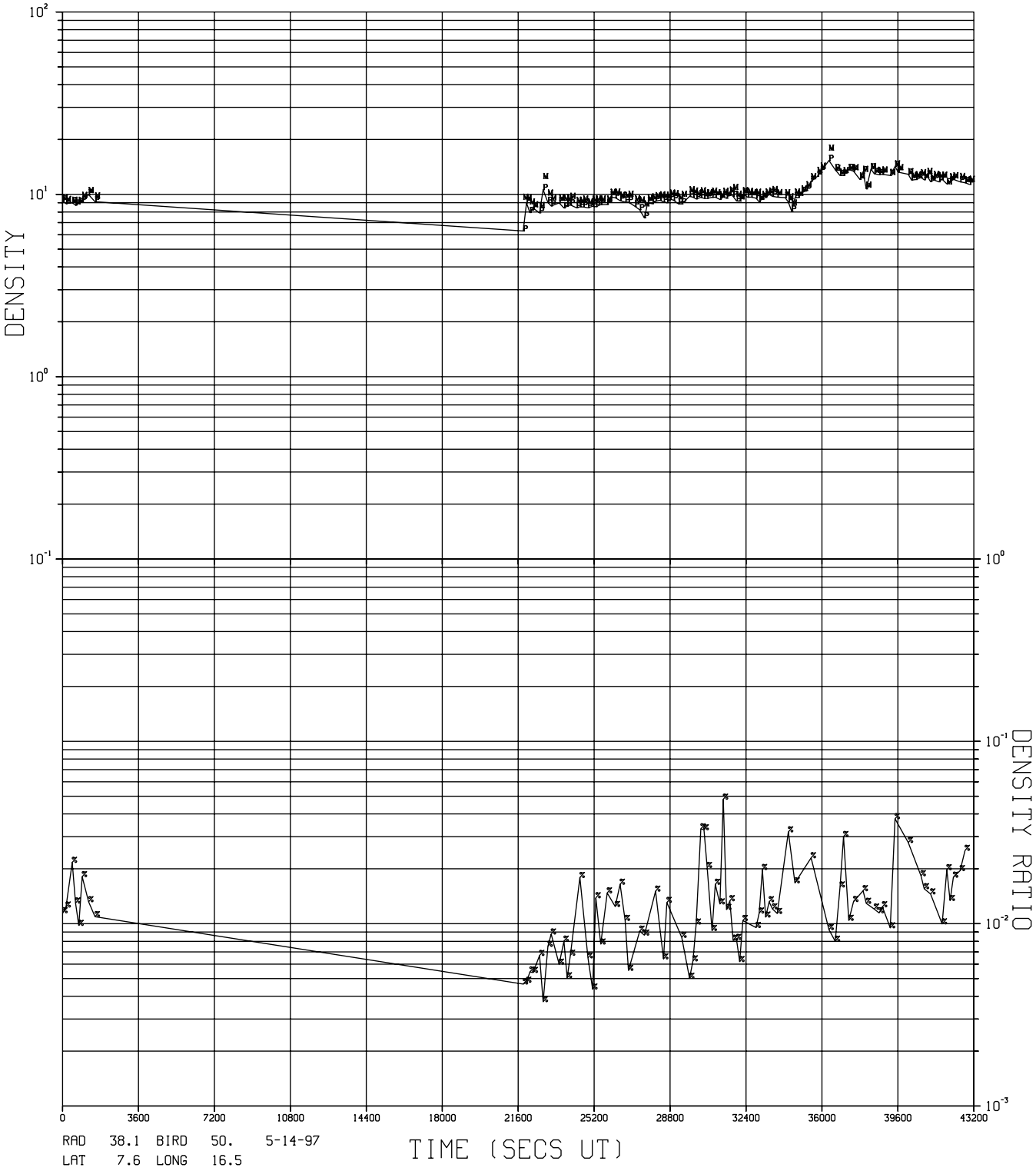

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 38.2 BIRD 50. 5-13-97
LAT 13.2 LONG 9.5

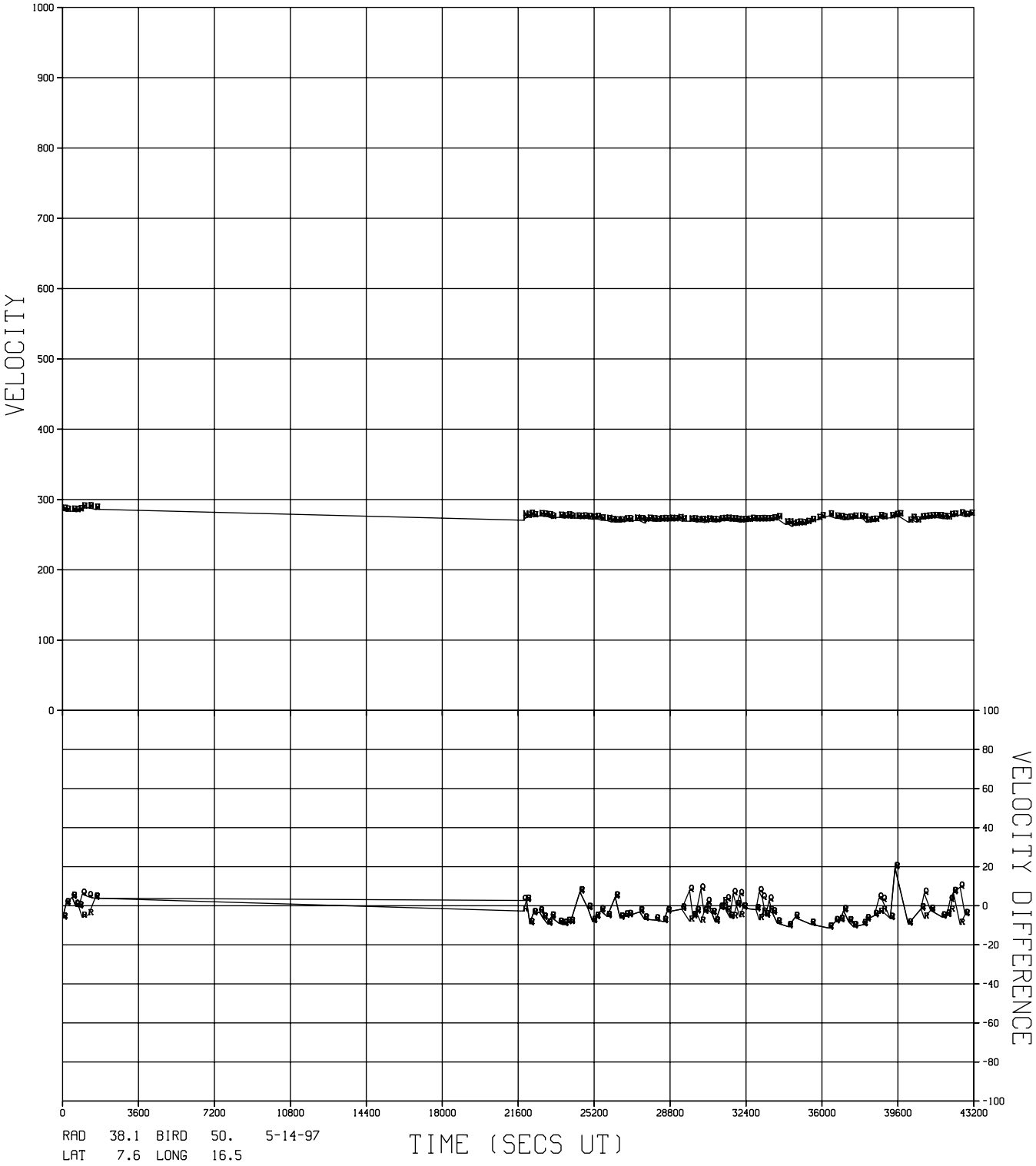

TEMPERATURE
TEMPERATURE RATIO
TIME (SECS UT)
RAD 38.2 BIRD 50. 5-13-97
LAT 13.2 LONG 9.5

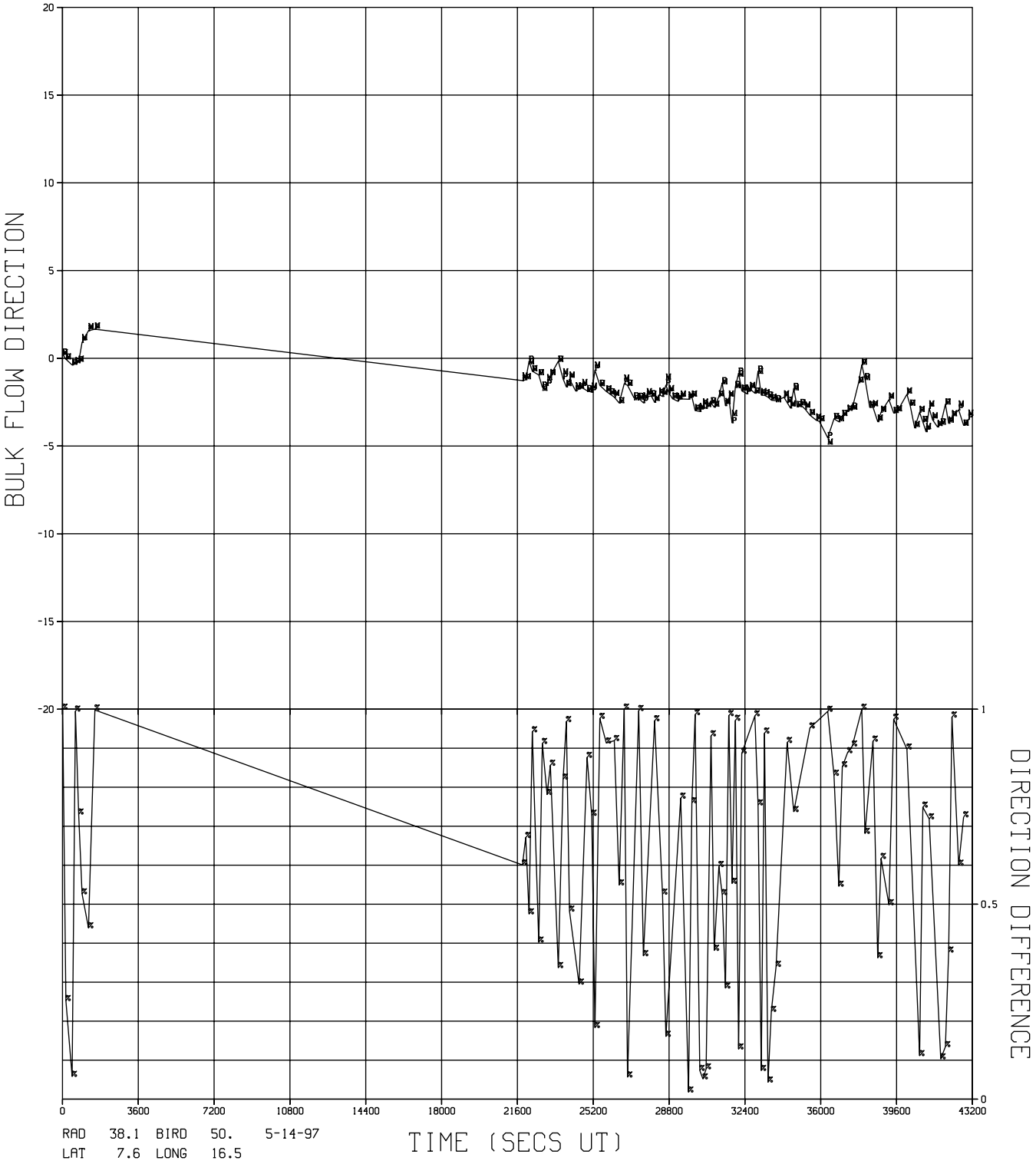

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 38.2 BIRD 50. 5-13-97
LAT 13.2 LONG 9.5

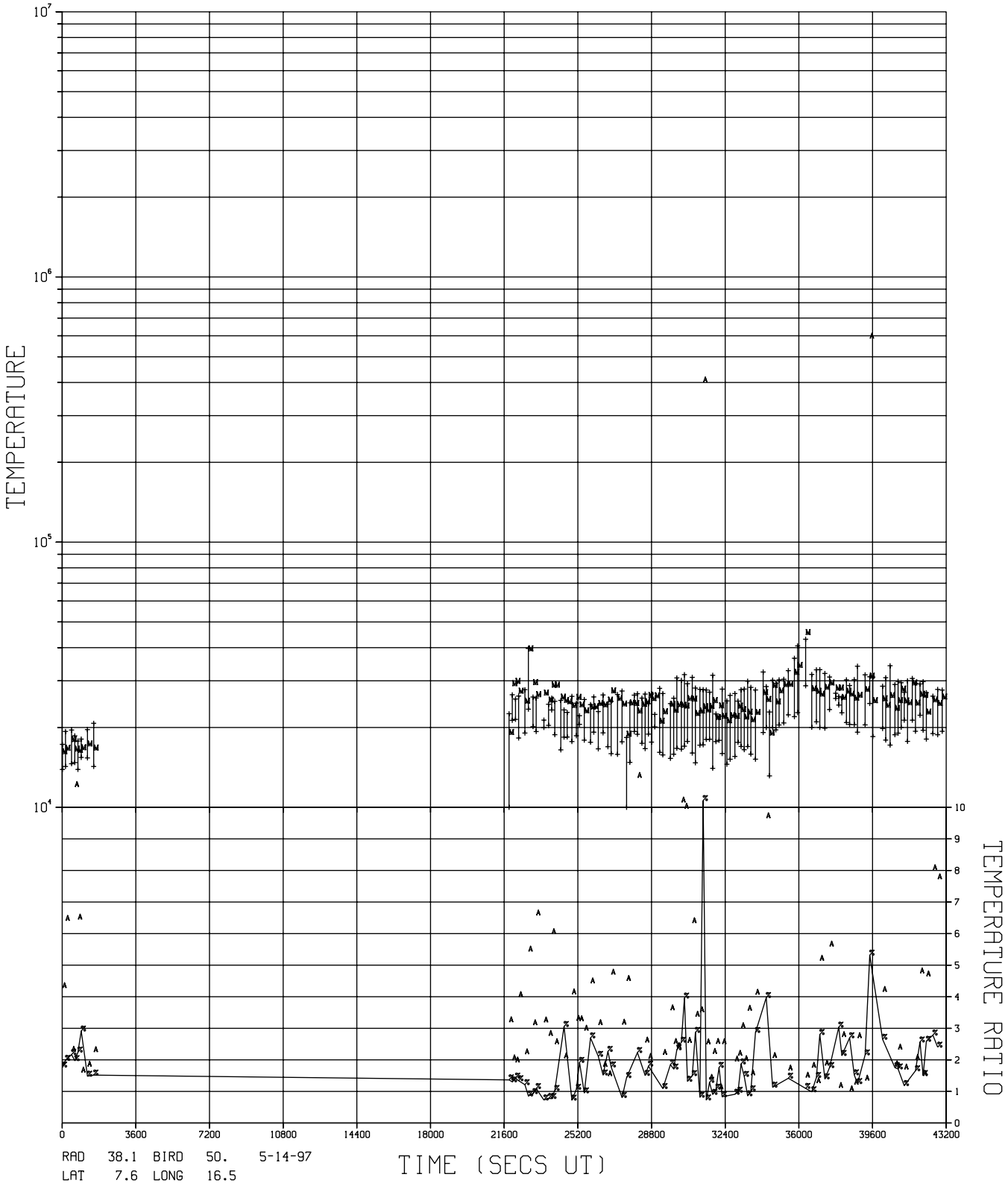

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
RAD 38.2 BIRD 50. 5-13-97
LAT 13.2 LONG 9.5

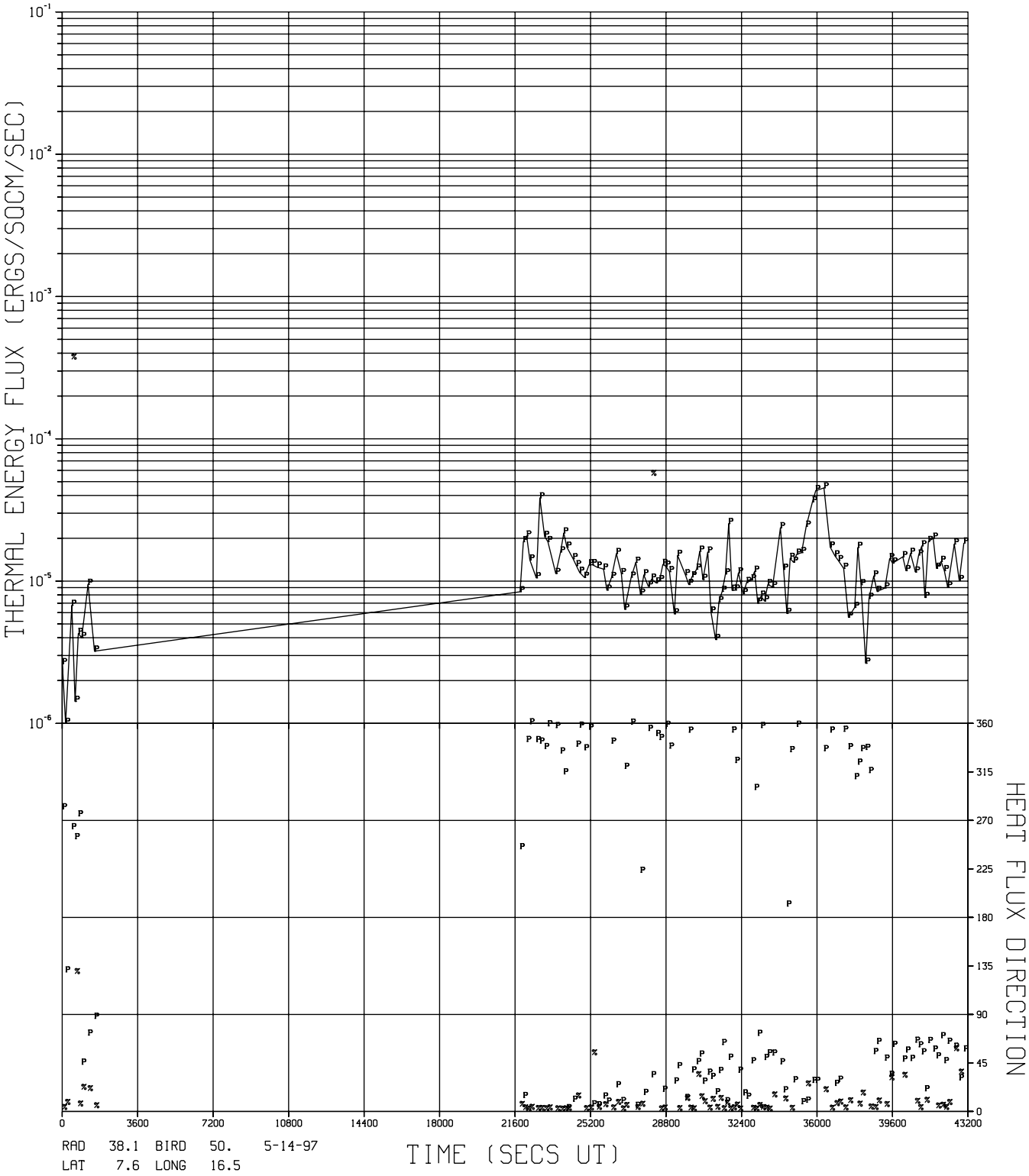

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 38.2 BIRD 50. 5-13-97
LAT 13.2 LONG 9.5
TIME (SECS UT)

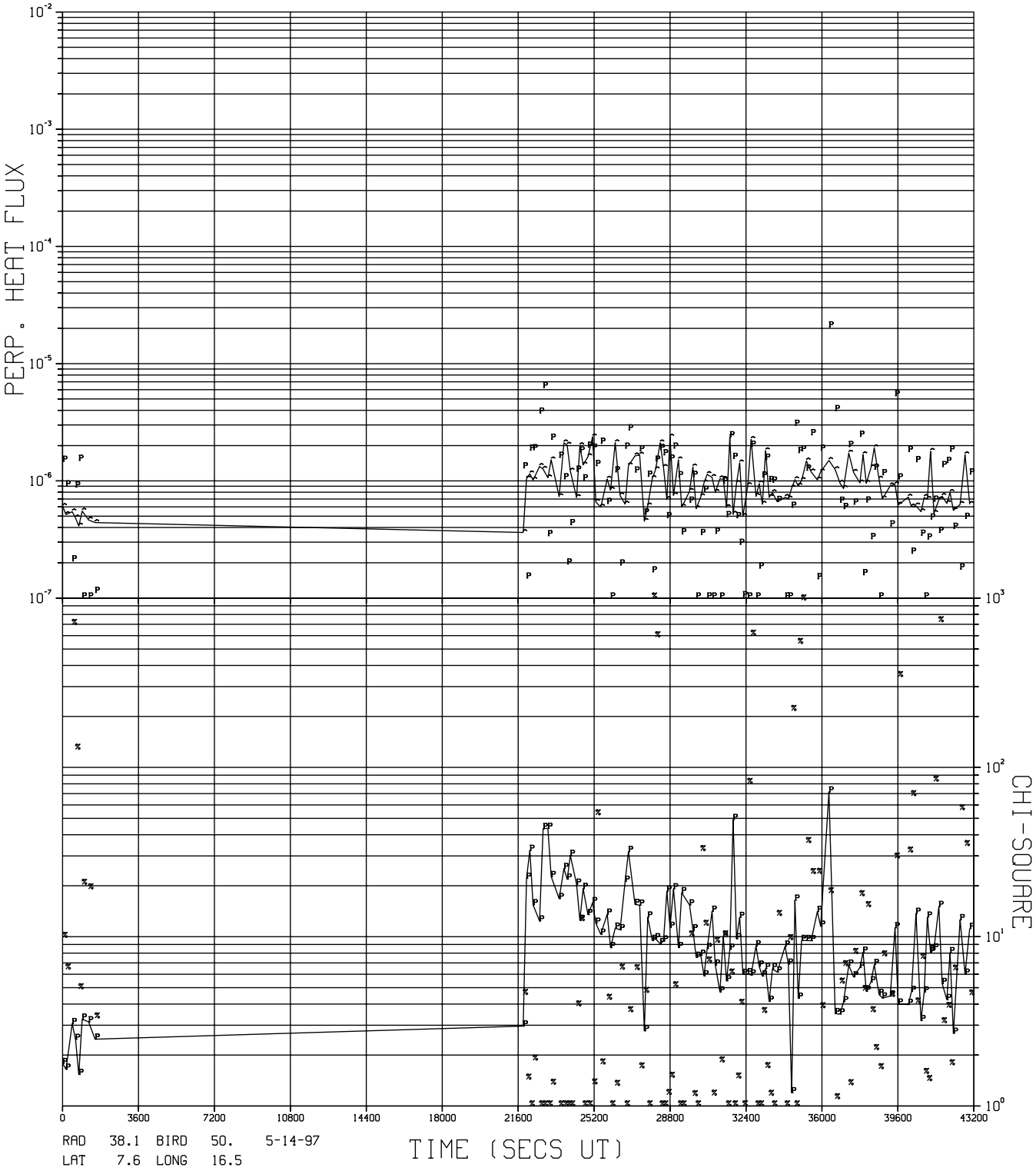

DENSITY
DENSITY RATIO
TIME (SECS UT)
RAD 38.1 BIRD 50. 5-14-97
LAT 7.6 LONG 16.5

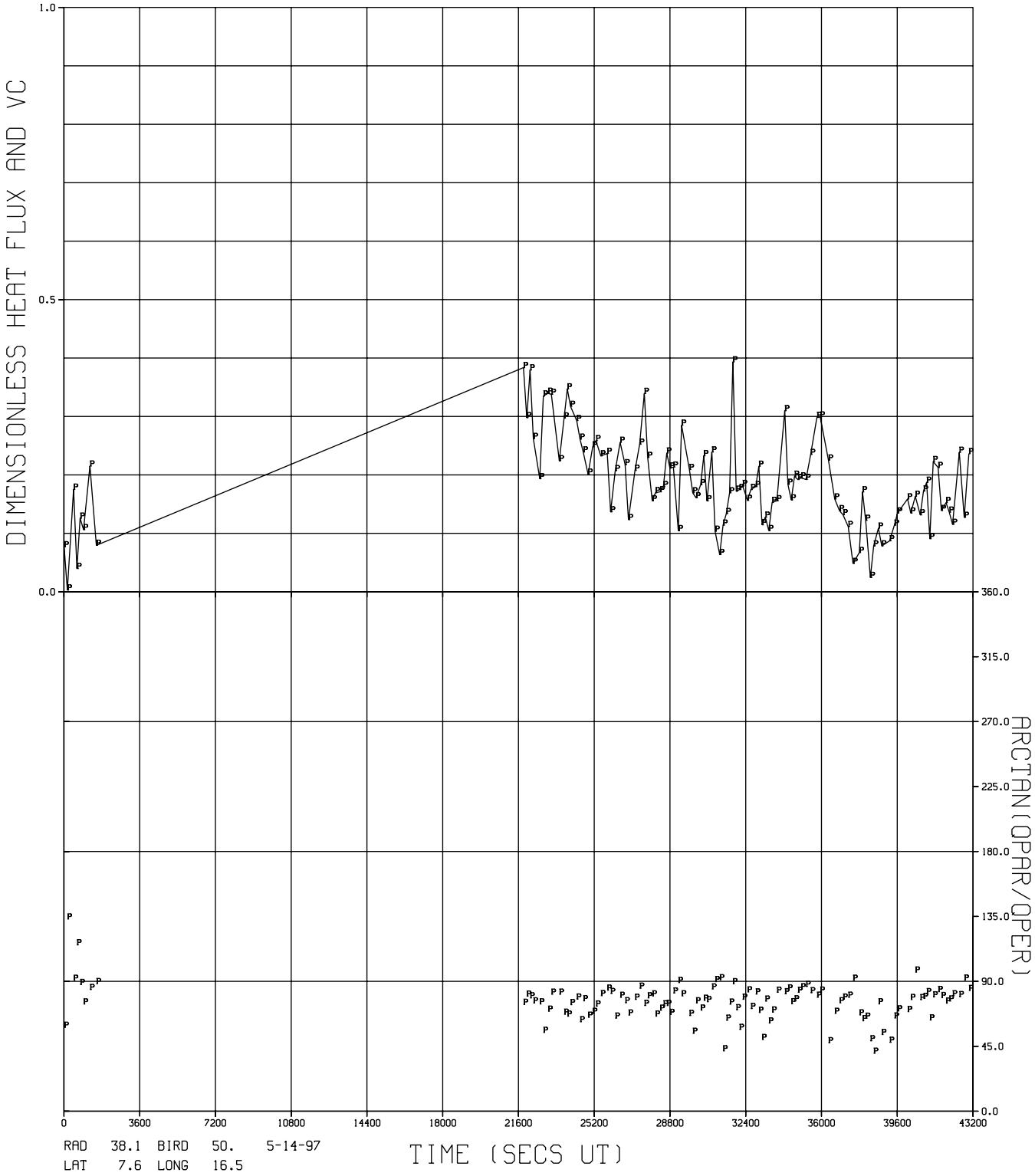

VELOCITY
1000
900
800
700
600
500
400
300
200
100
0
VELOCITY DIFFERENCE
100
80
60
40
20
0
-20
-40
-60
-80
-100
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
RAD 38.1 BIRD 50. 5-14-97
LAT 7.6 LONG 16.5
TIME (SECS UT)

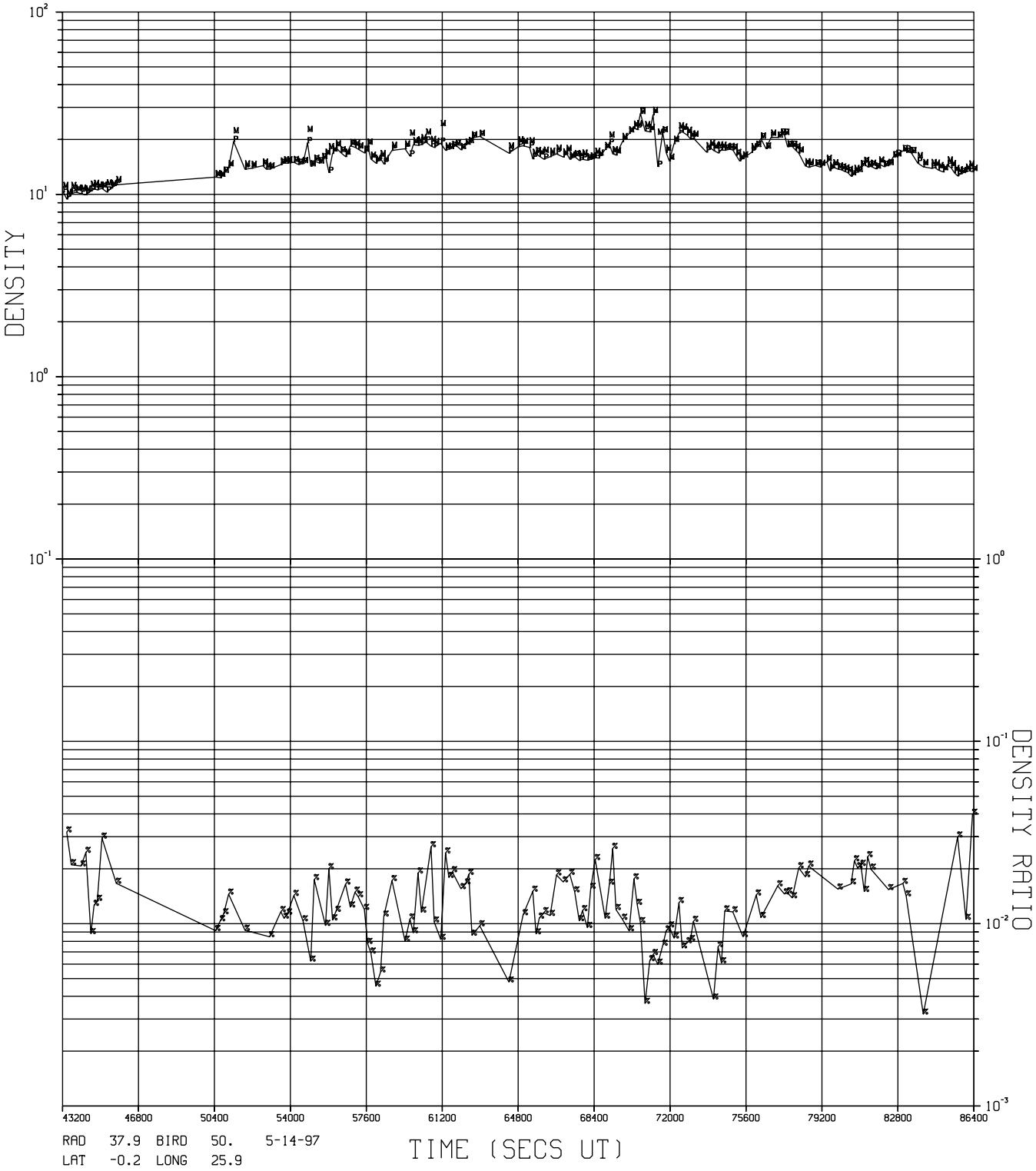

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
RAD 38.1 BIRD 50. 5-14-97
LAT 7.6 LONG 16.5

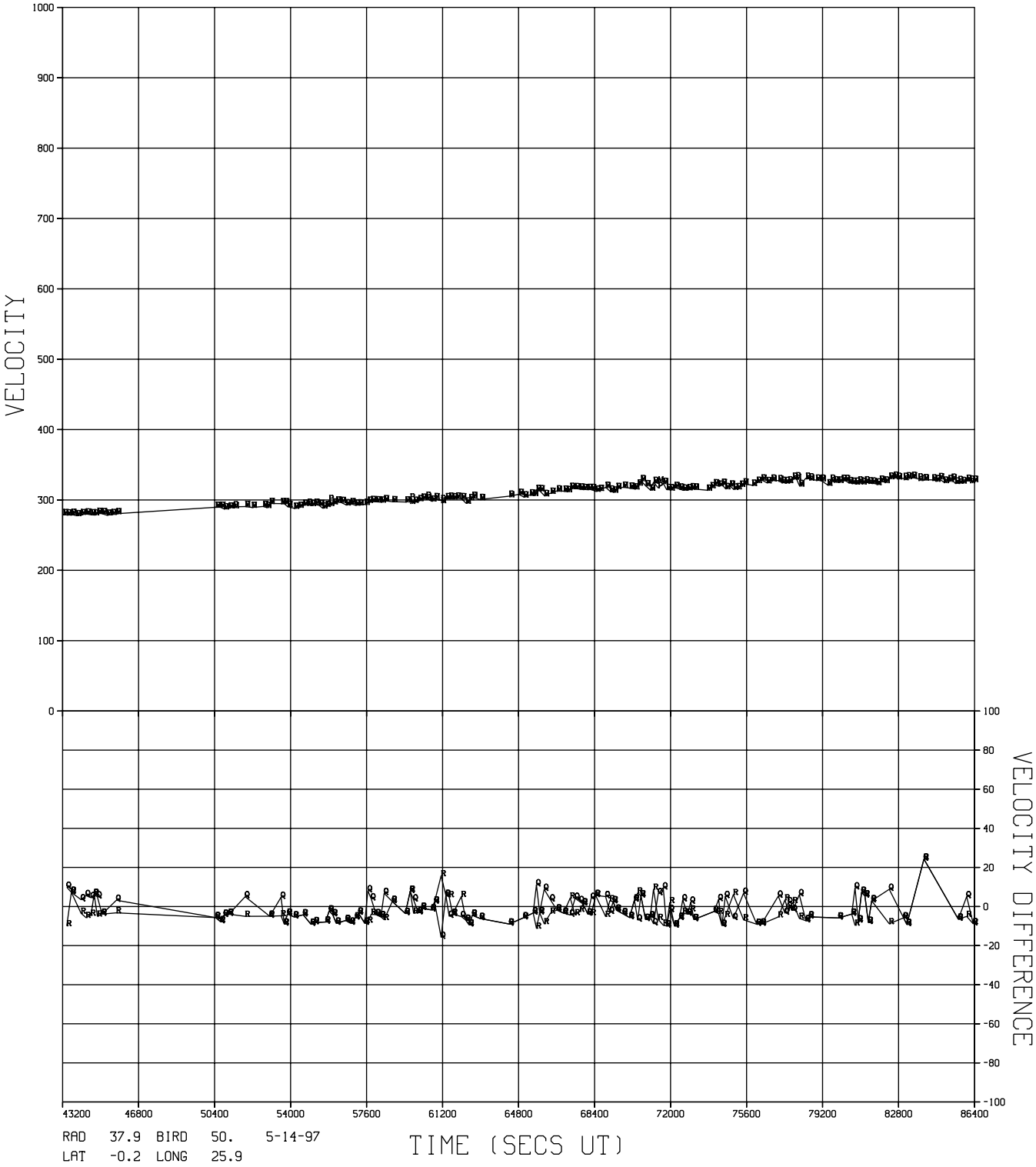

TEMPERATURE
10^7
10^6
10^5
10^4
TEMPERATURE RATIO
0
1
2
3
4
5
6
7
8
9
10
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
TIME (SECS UT)
RAD 38.1 BIRD 50. 5-14-97
LAT 7.6 LONG 16.5

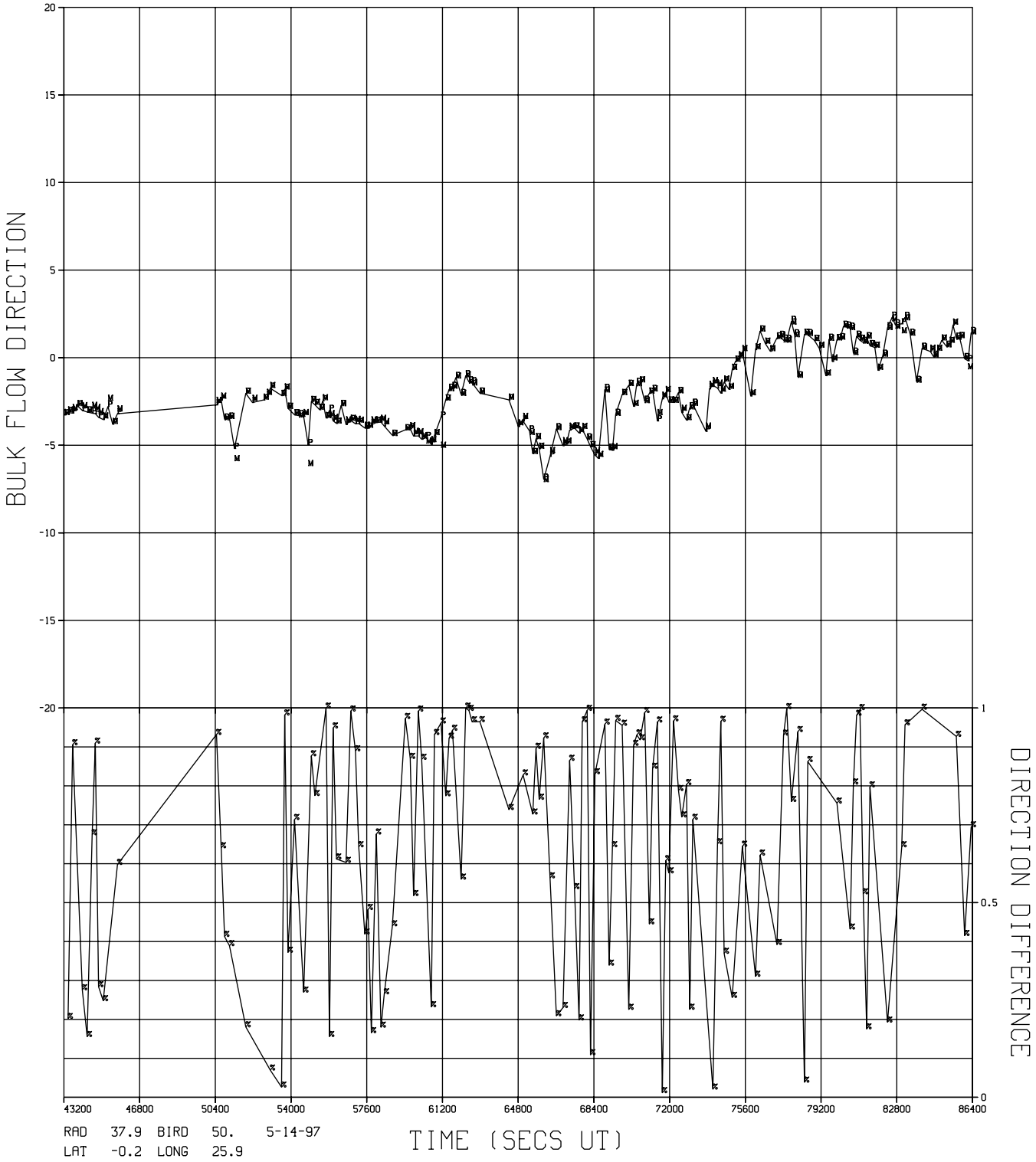

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 38.1 BIRD 50. 5-14-97
LAT 7.6 LONG 16.5

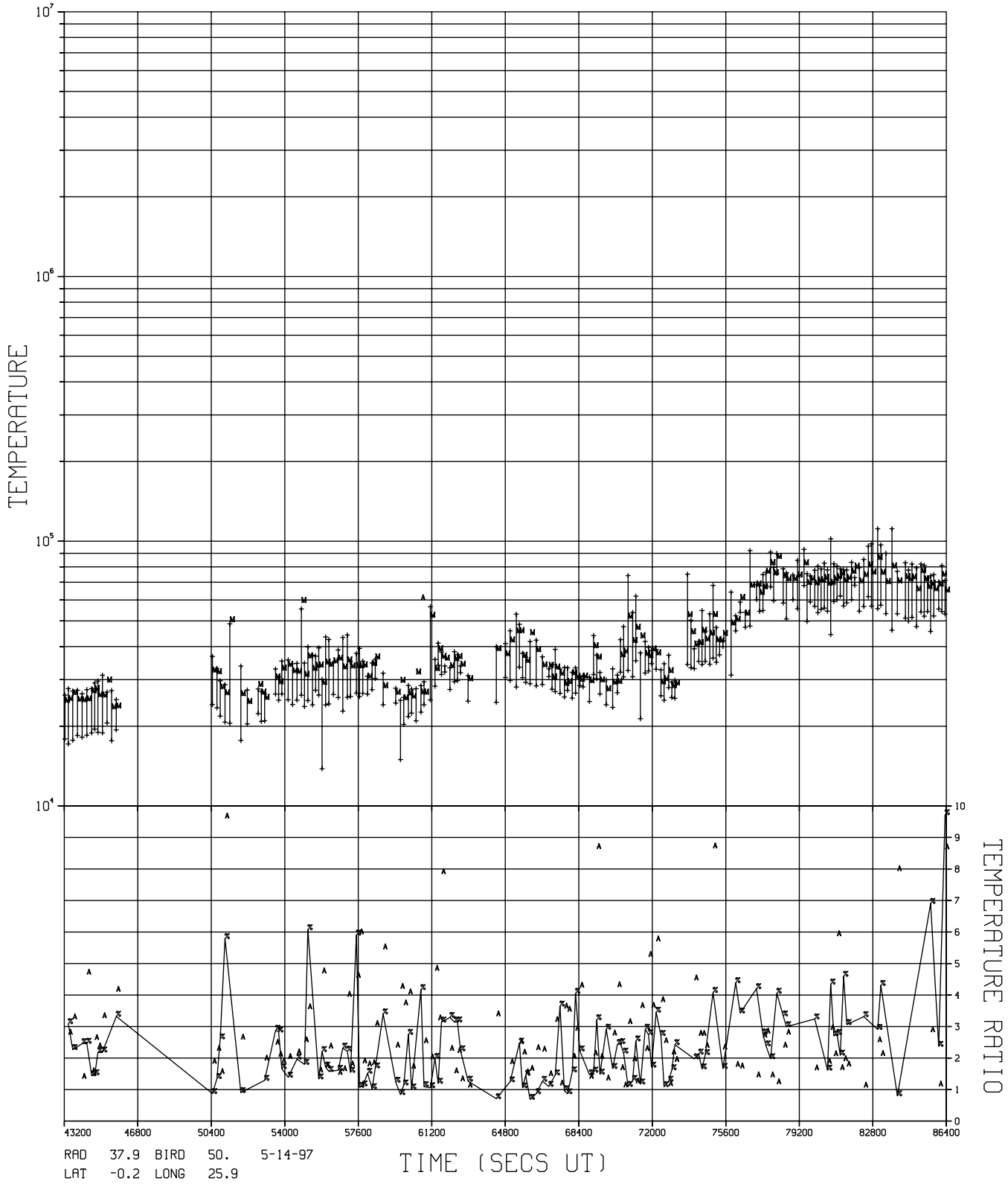

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
RAD 38.1 BIRD 50. 5-14-97
LAT 7.6 LONG 16.5

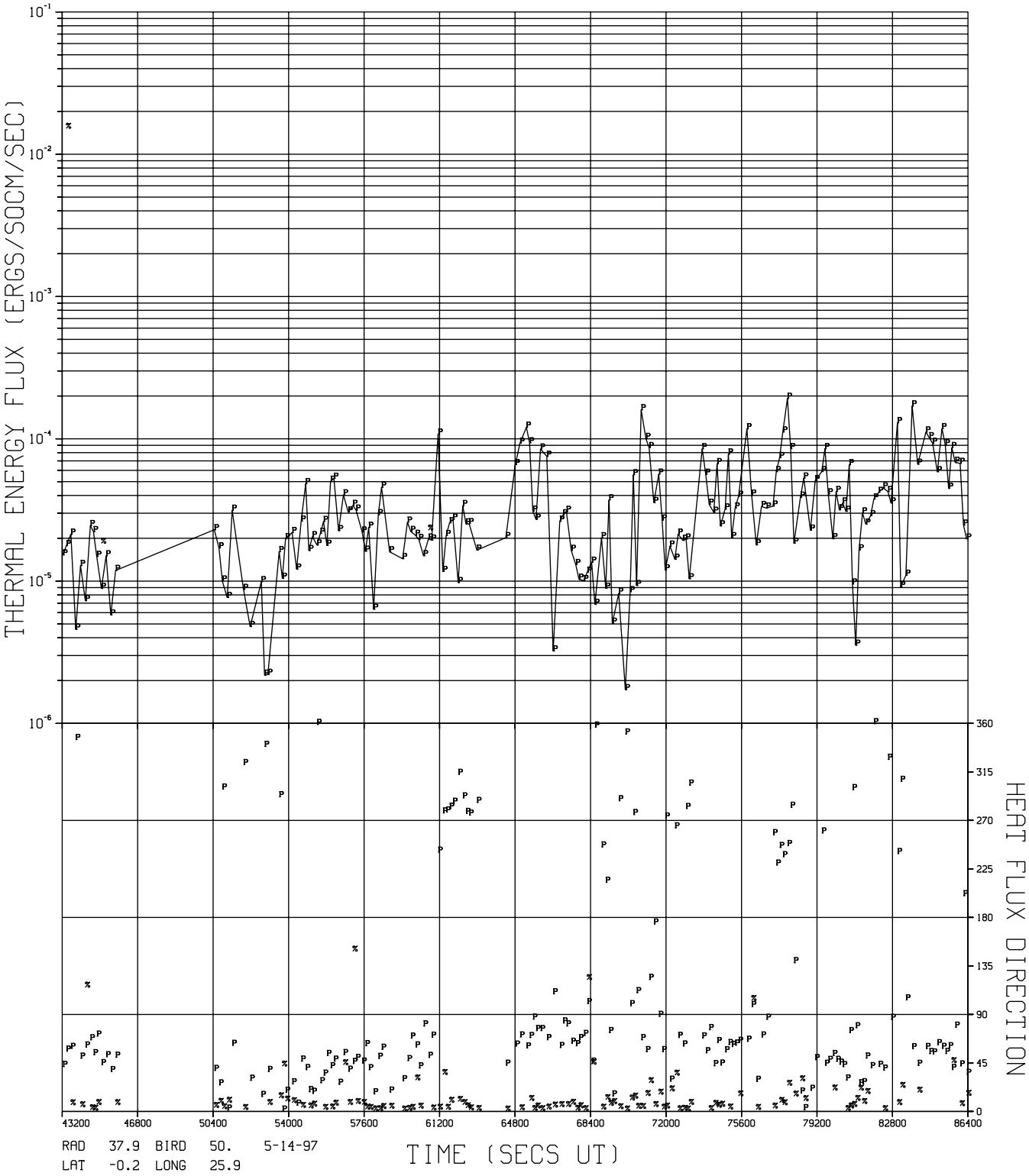

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
TIME (SECS UT)
RAD 38.1 BIRD 50. 5-14-97
LAT 7.6 LONG 16.5

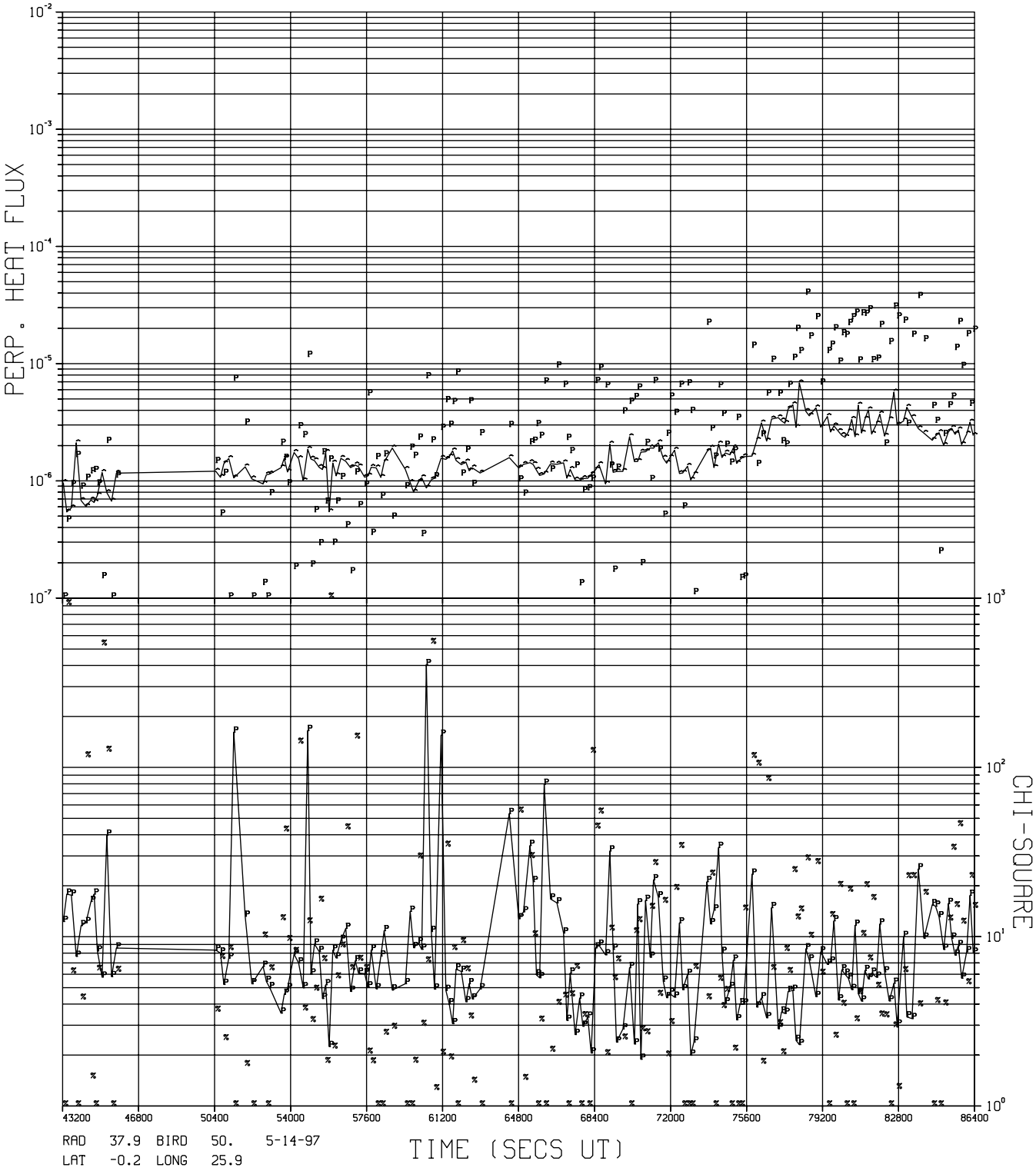

DENSITY
DENSITY RATIO
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 37.9 BIRD 50. 5-14-97
LAT -0.2 LONG 25.9

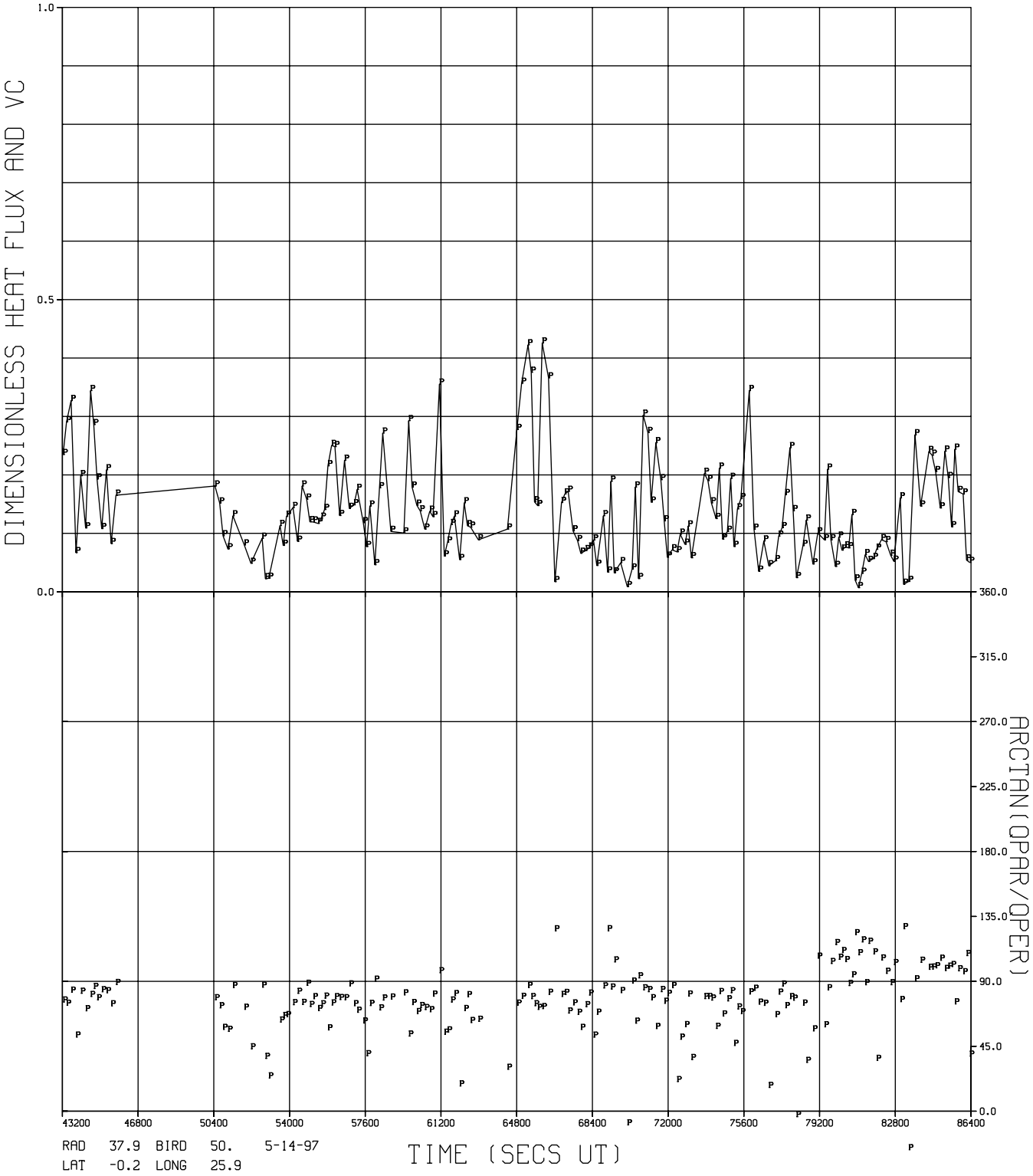

VELOCITY
1000
900
800
700
600
500
400
300
200
100
0
VELOCITY DIFFERENCE
100
80
60
40
20
0
-20
-40
-60
-80
-100
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 37.9 BIRD 50. 5-14-97
LAT -0.2 LONG 25.9
TIME (SECS UT)

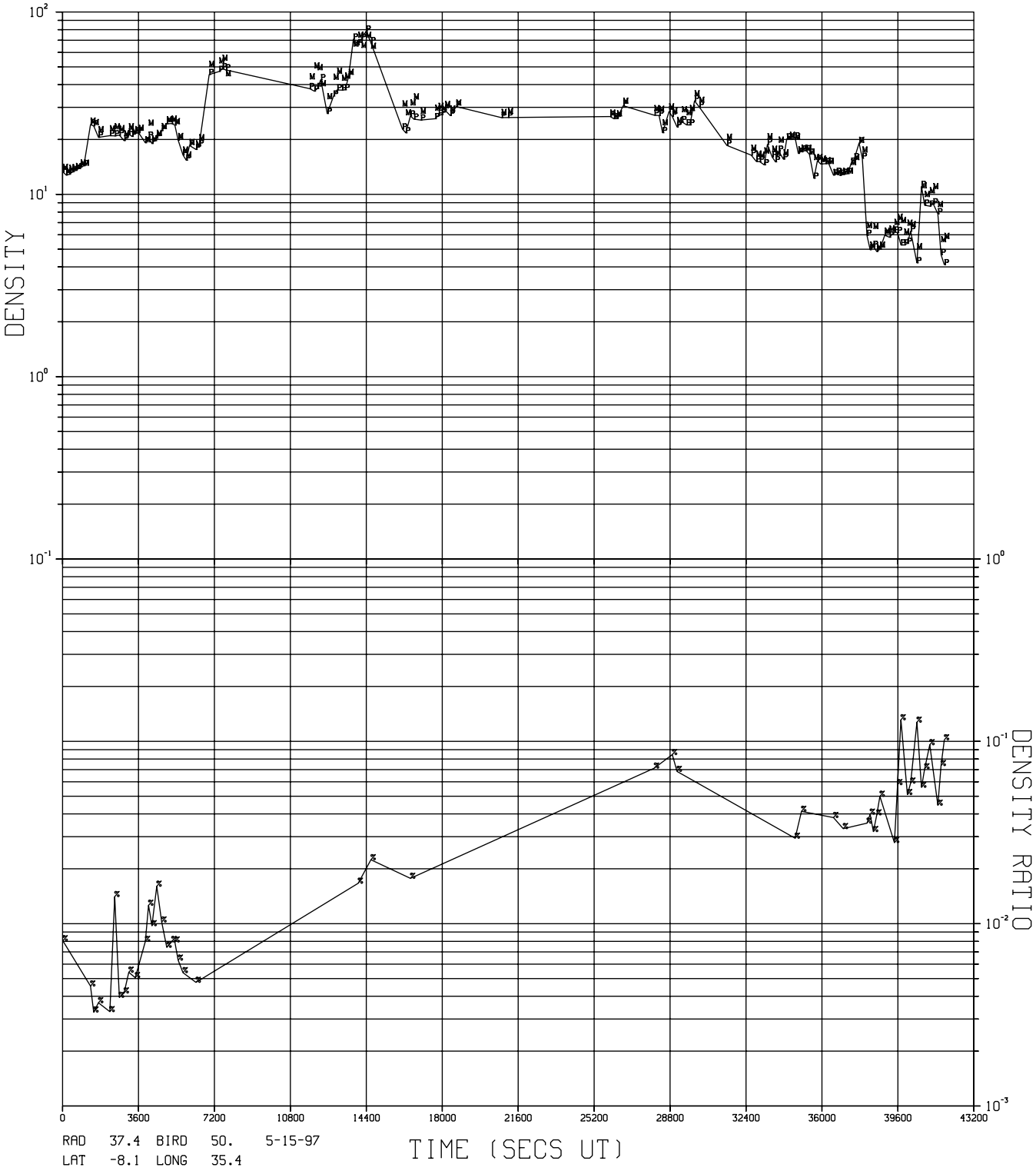

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 37.9 BIRD 50. 5-14-97
LAT -0.2 LONG 25.9

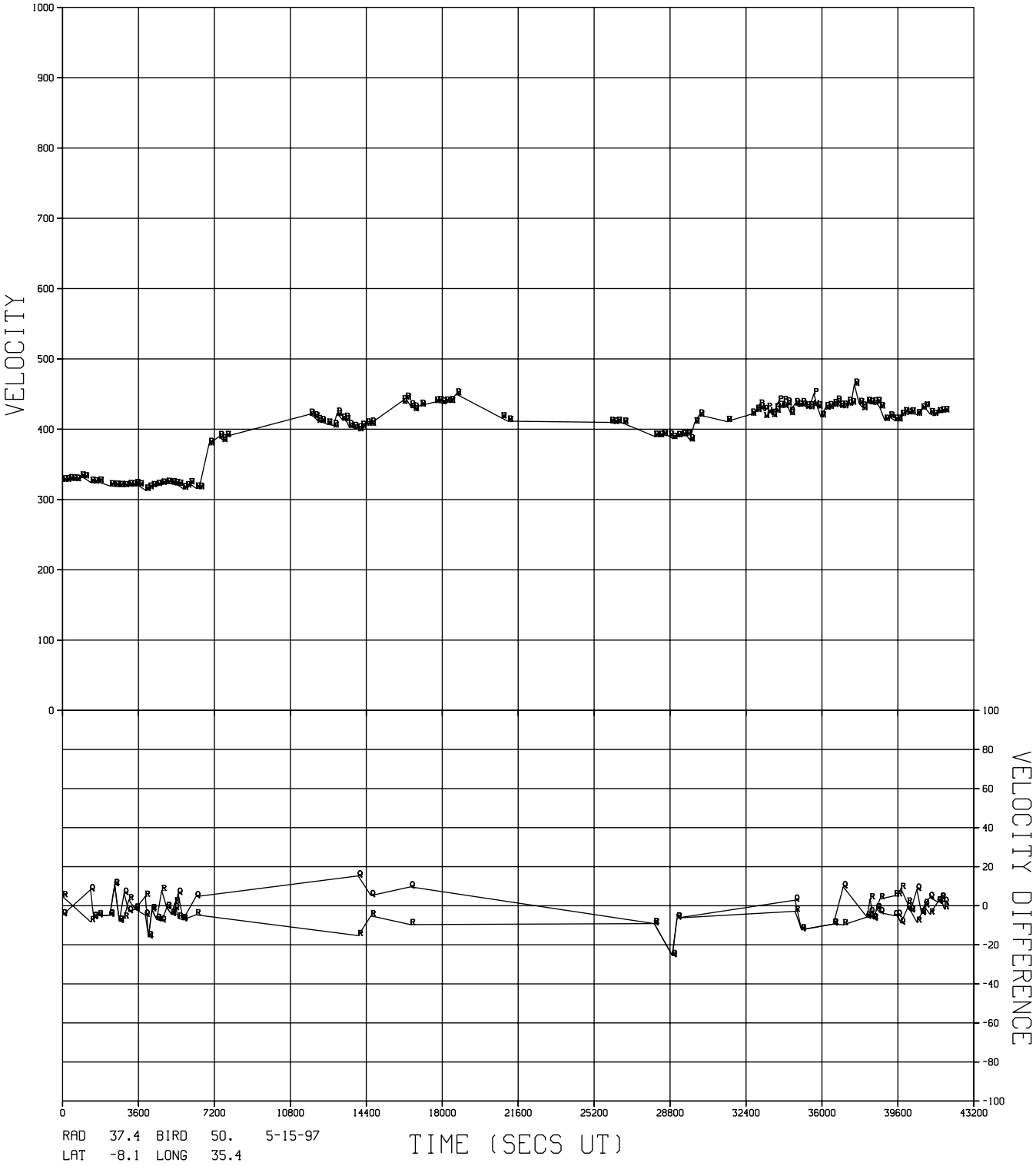

TEMPERATURE
TEMPERATURE RATIO
TIME (SECS UT)
RAD 37.9 BIRD 50. 5-14-97
LAT -0.2 LONG 25.9

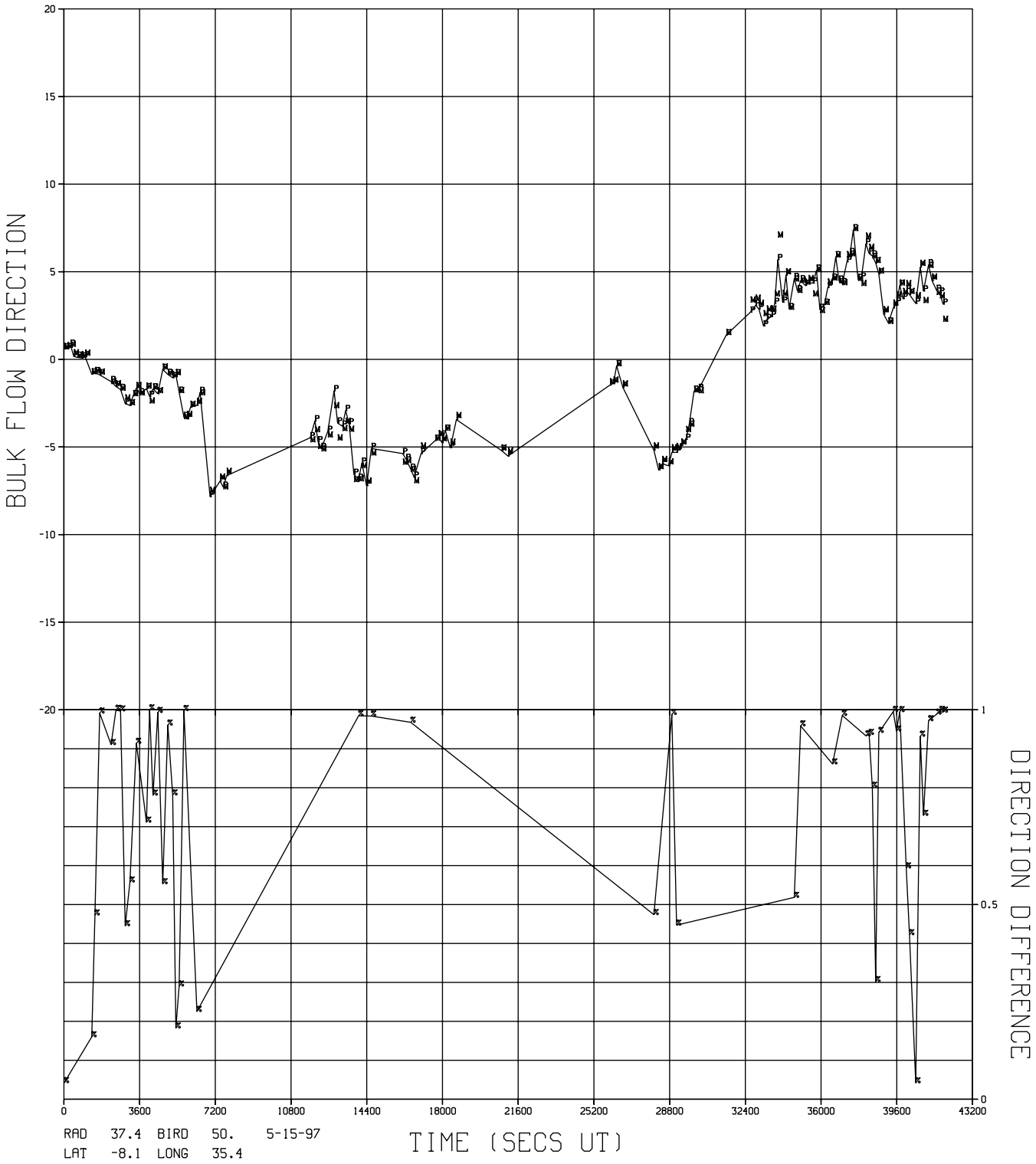

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 37.9 BIRD 50. 5-14-97
LAT -0.2 LONG 25.9

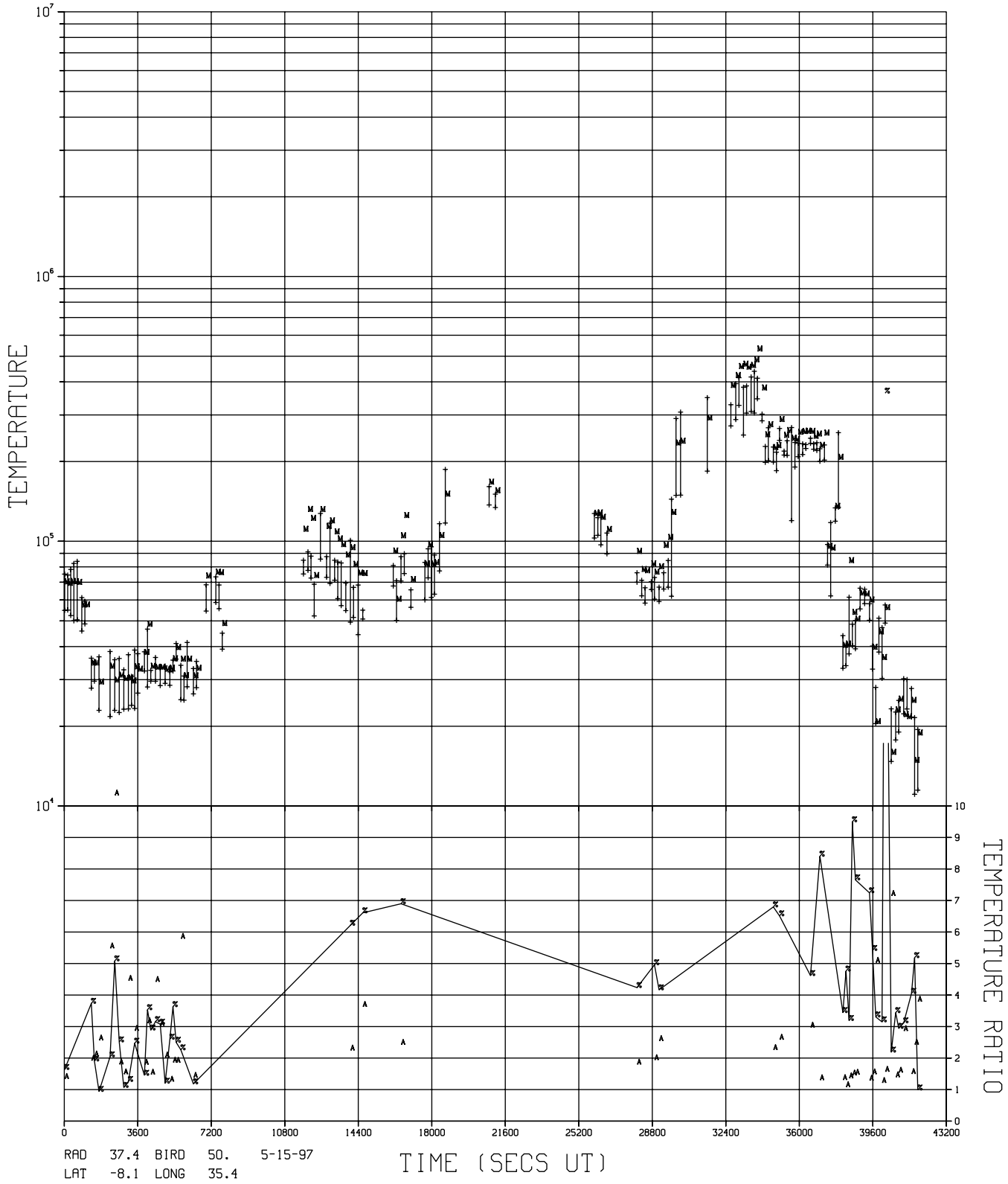

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 37.9 BIRD 50. 5-14-97
LAT -0.2 LONG 25.9

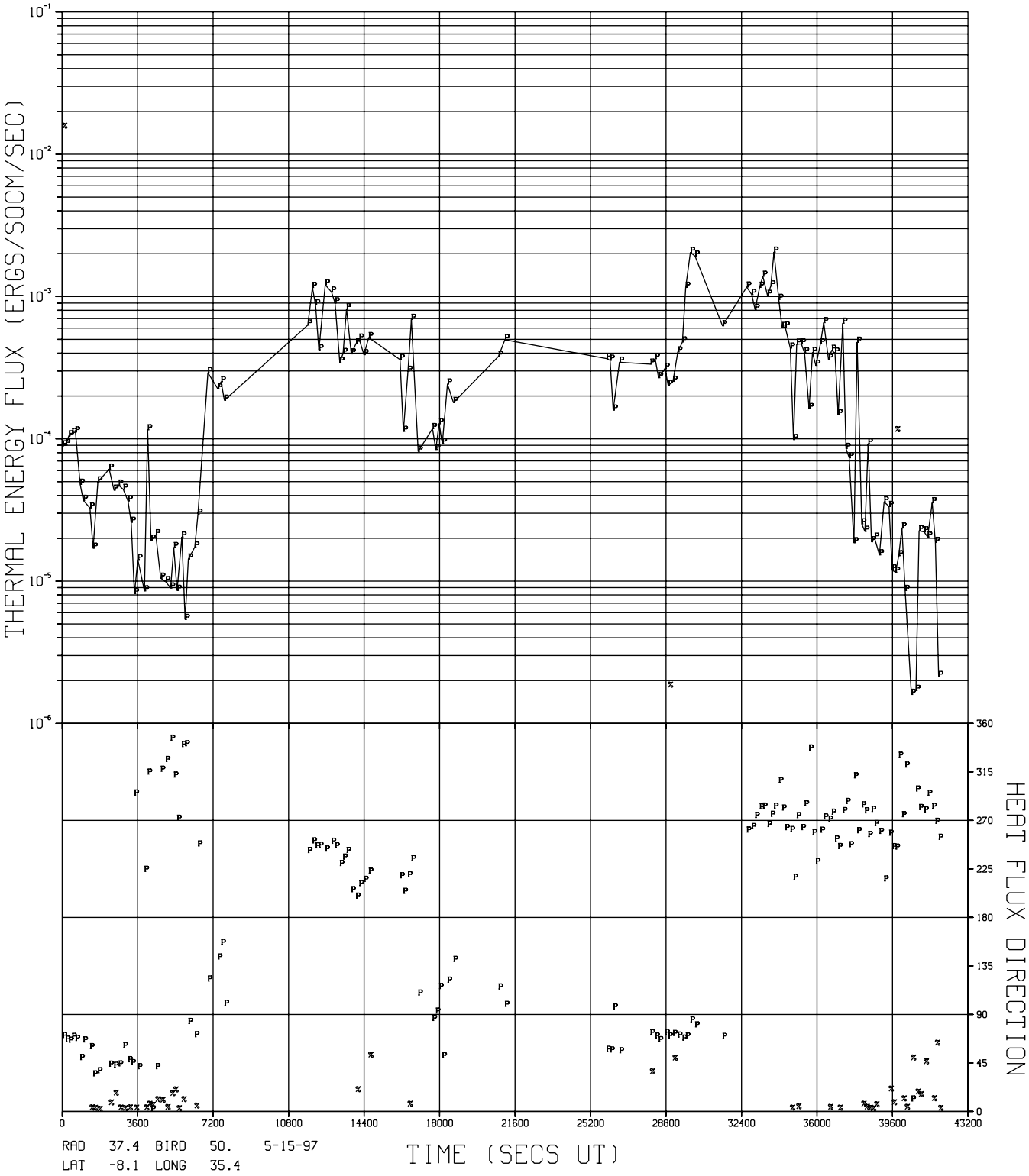

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
TIME (SECS UT)
RAD 37.9 BIRD 50. 5-14-97
LAT -0.2 LONG 25.9

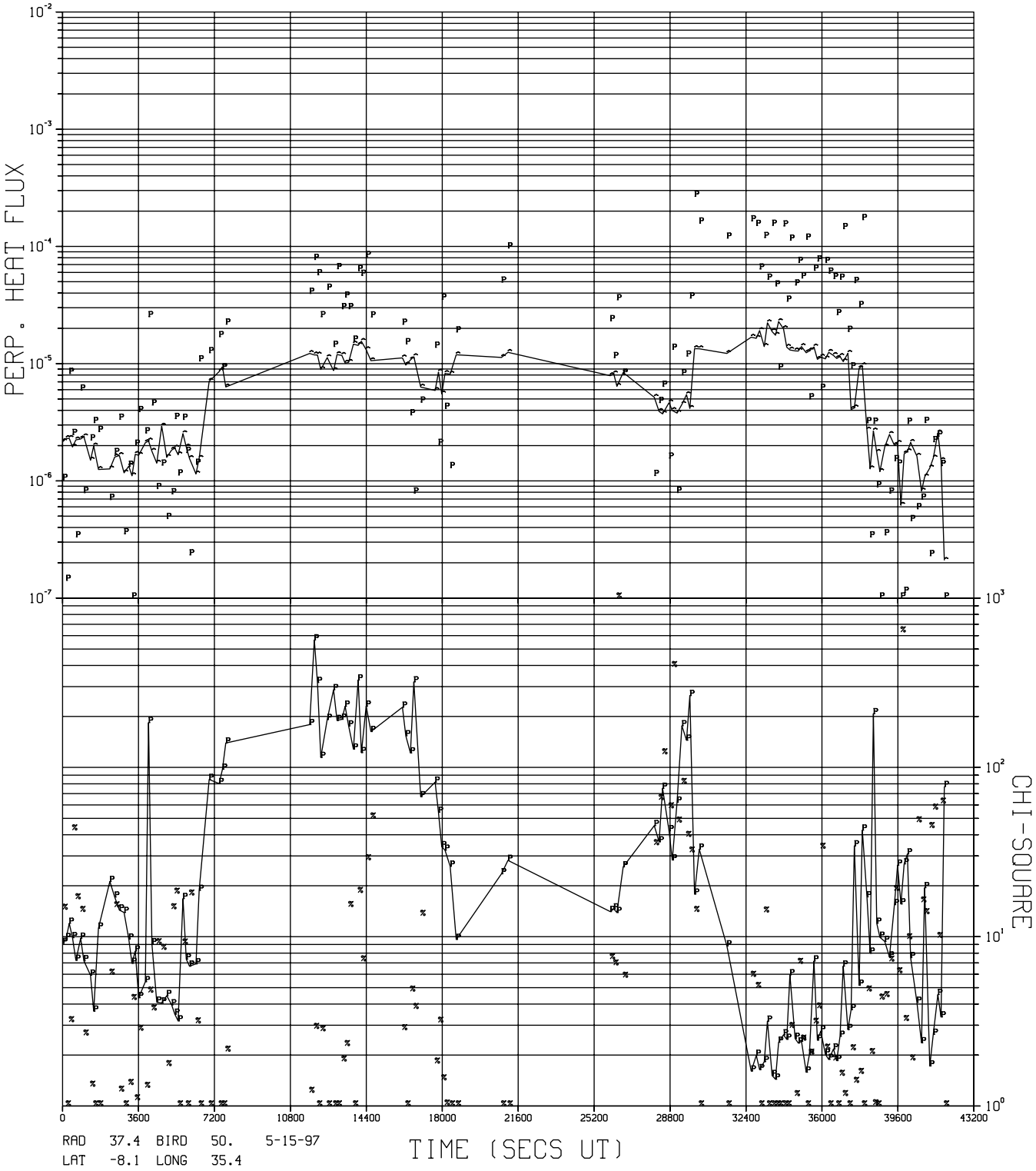

DENSITY
DENSITY RATIO
TIME (SECS UT)
10^2
10^1
10^0
10^{-1}
10^{-2}
10^{-3}
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
RAD 37.4 BIRD 50. 5-15-97
LAT -8.1 LONG 35.4

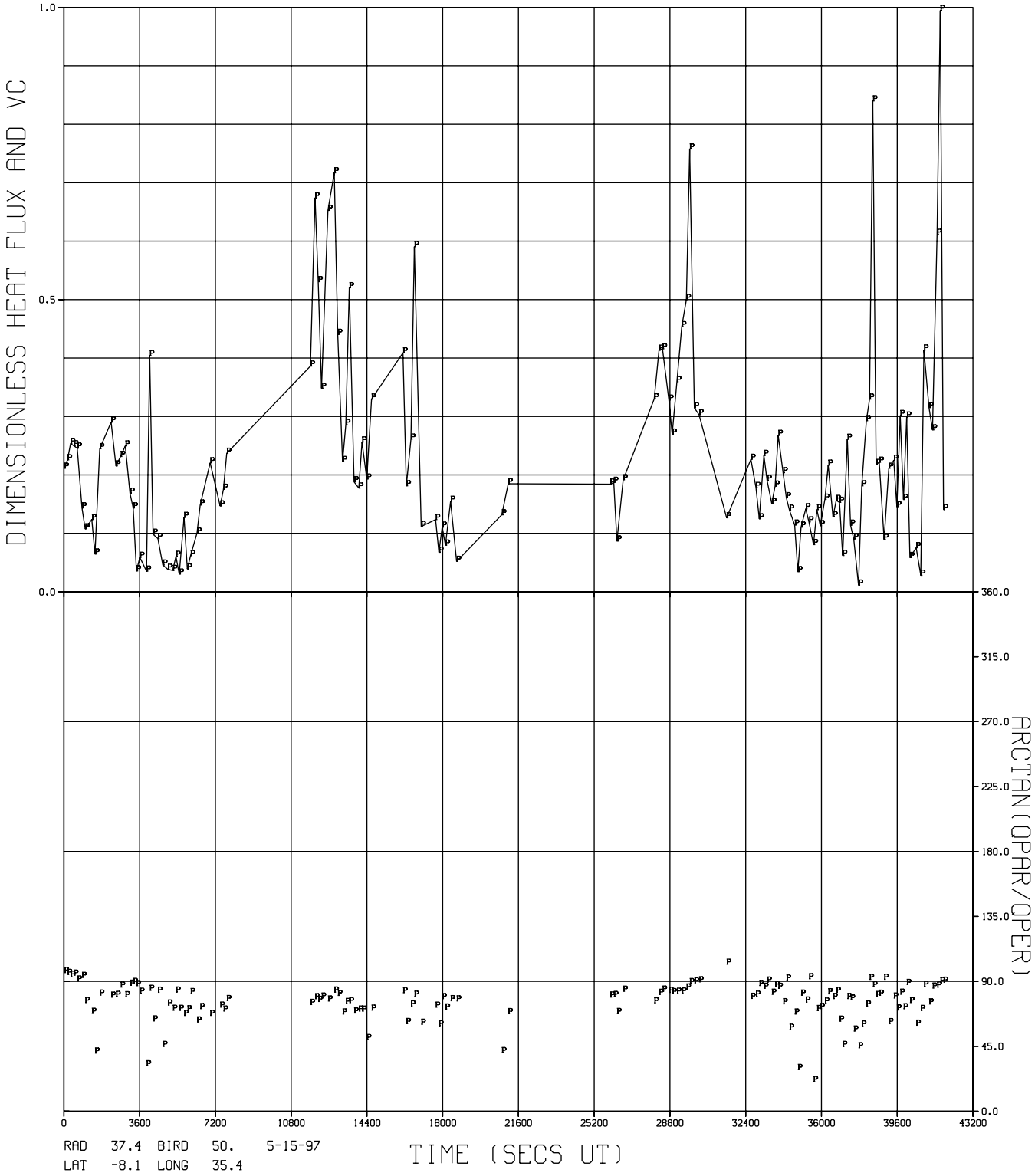

VELOCITY
VELOCITY DIFFERENCE
TIME (SECS UT)
RAD 37.4 BIRD 50. 5-15-97
LAT -8.1 LONG 35.4


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 37.4 BIRD 50. 5-15-97
LAT -8.1 LONG 35.4


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 37.4 BIRD 50. 5-15-97
LAT -8.1 LONG 35.4


THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 37.4 BIRD 50. 5-15-97
LAT -8.1 LONG 35.4


PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
RAD 37.4 BIRD 50. 5-15-97
LAT -8.1 LONG 35.4


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 37.4 BIRD 50. 5-15-97
LAT -8.1 LONG 35.4