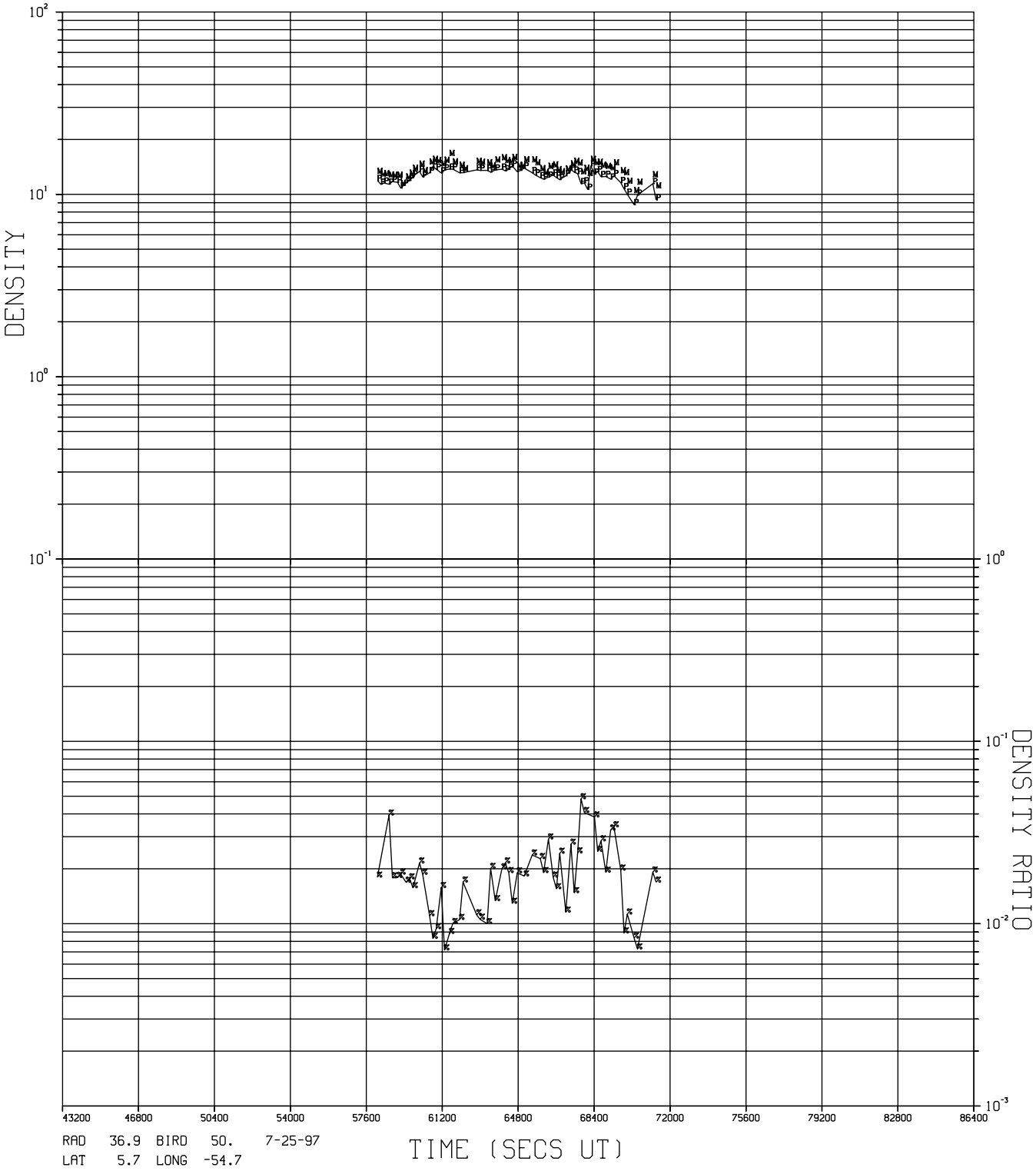
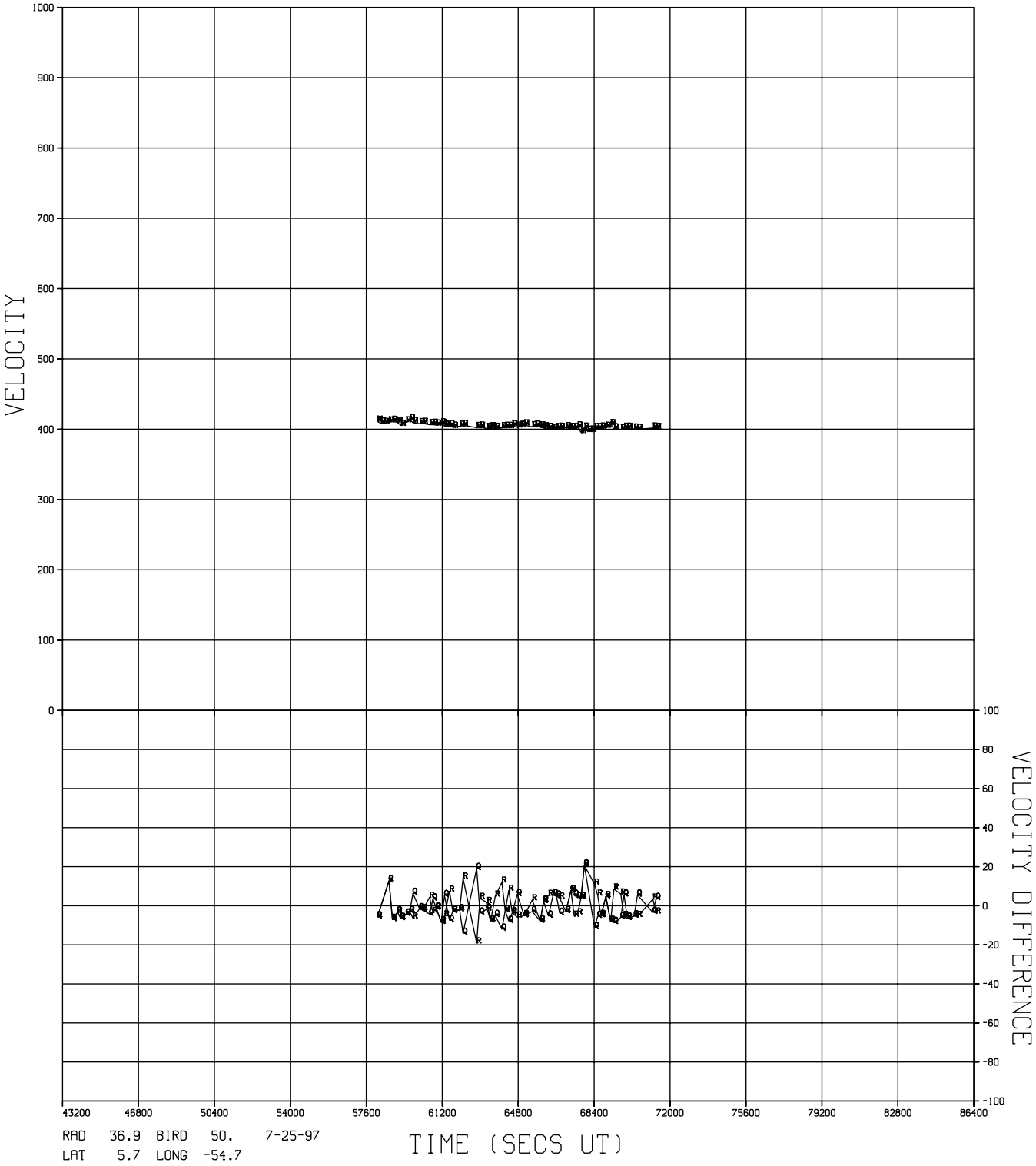
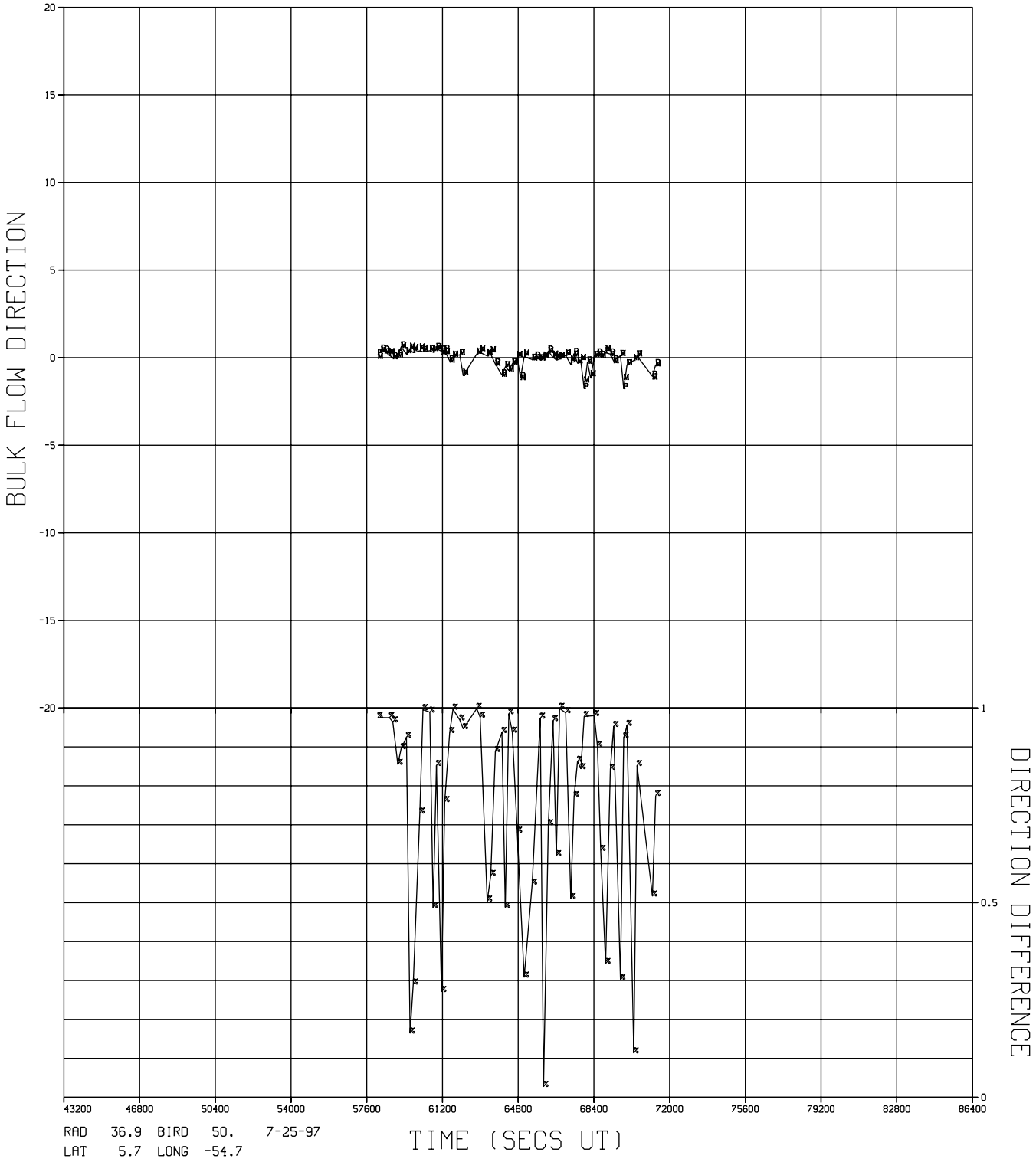
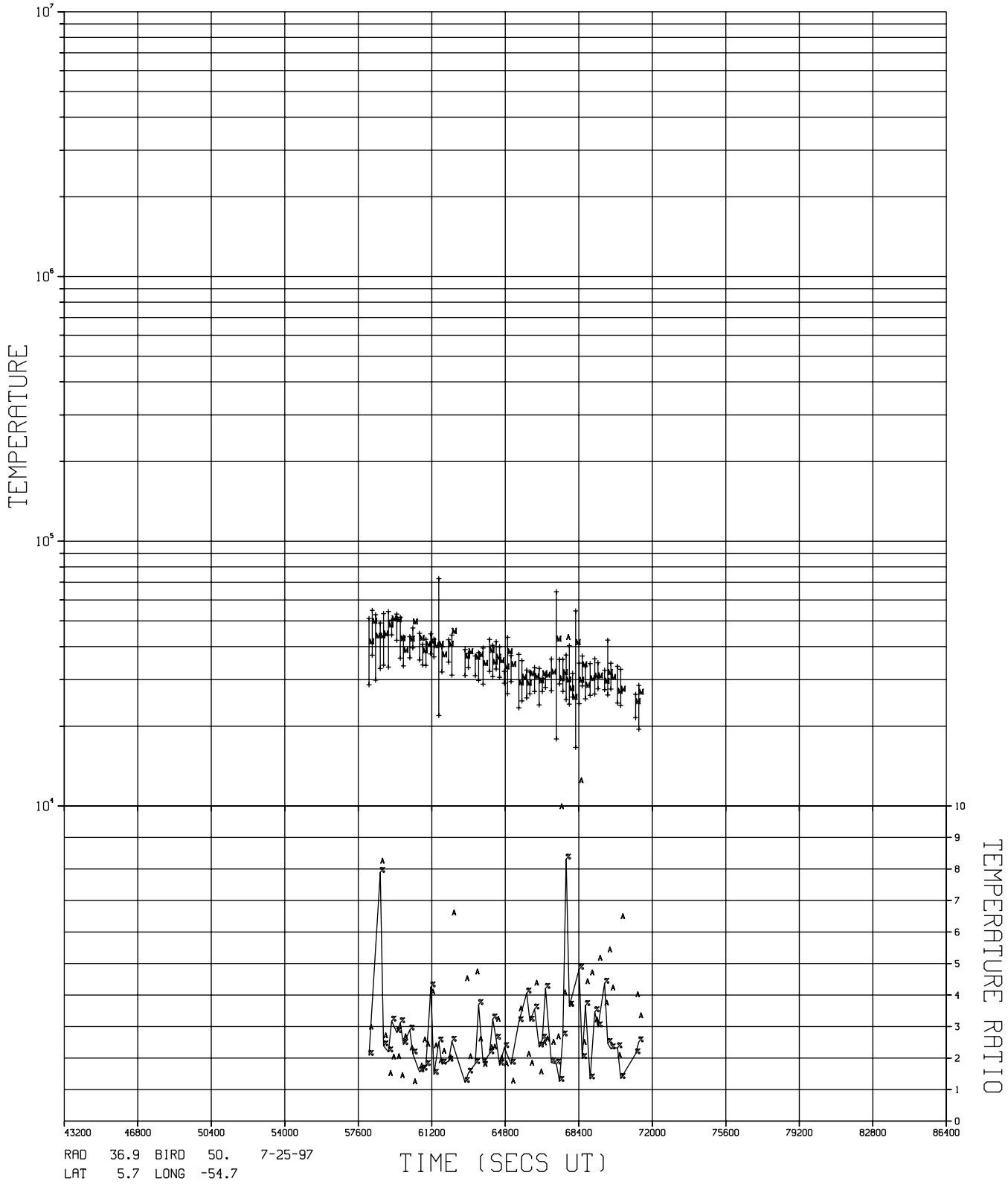
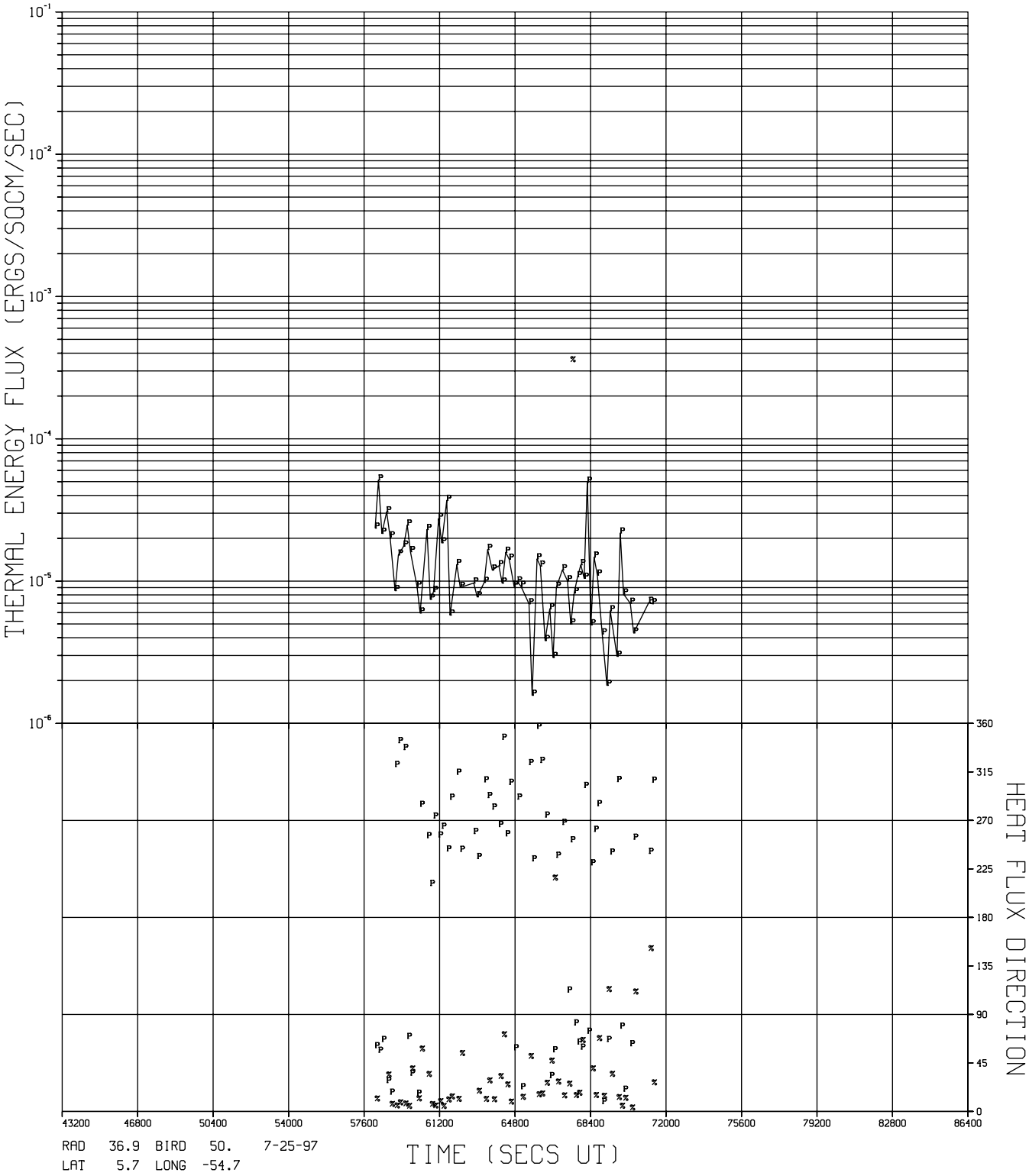
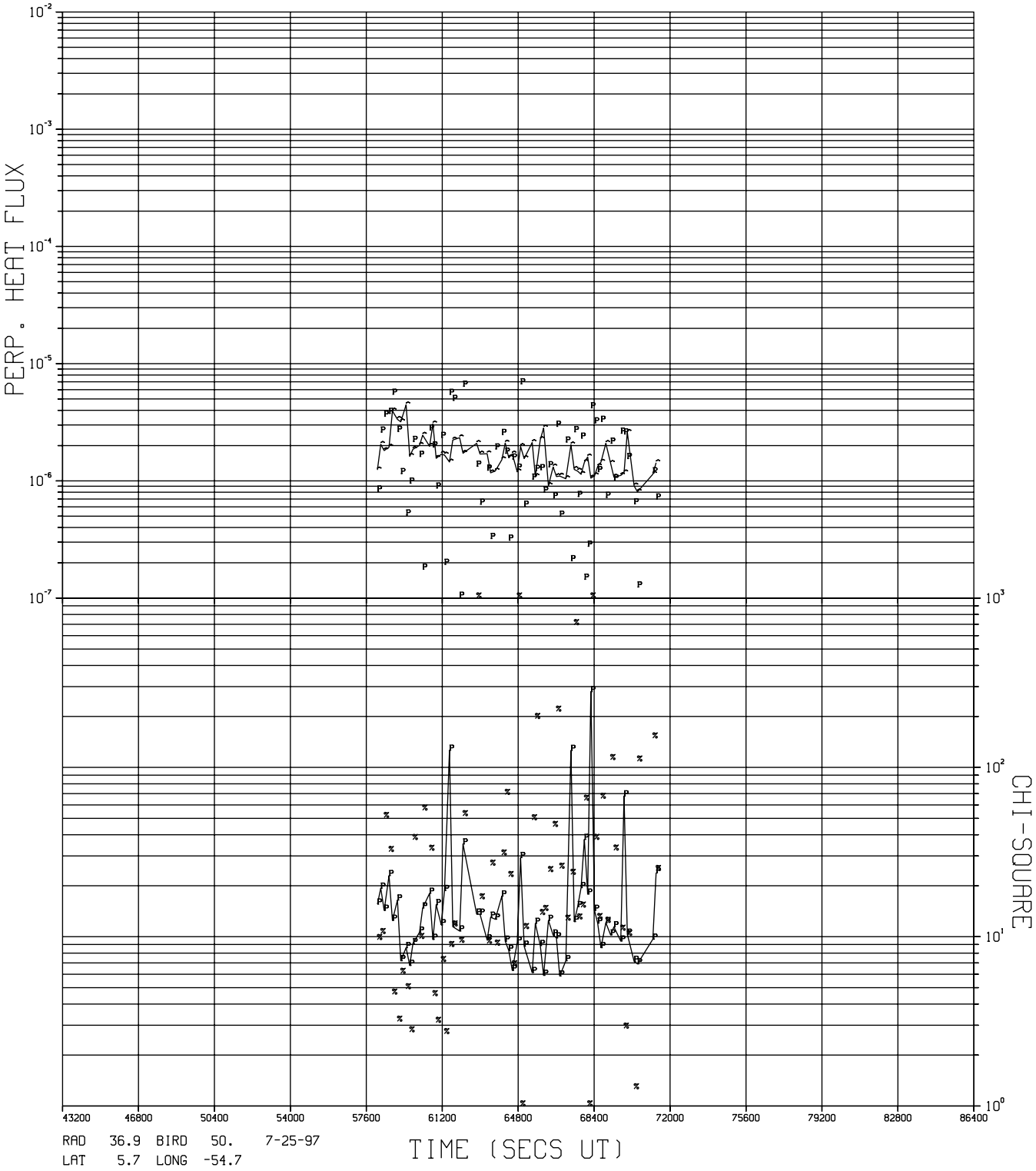

DENSITY
DENSITY RATIO
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 36.9 BIRD 50. 7-25-97
LAT 5.7 LONG -54.7

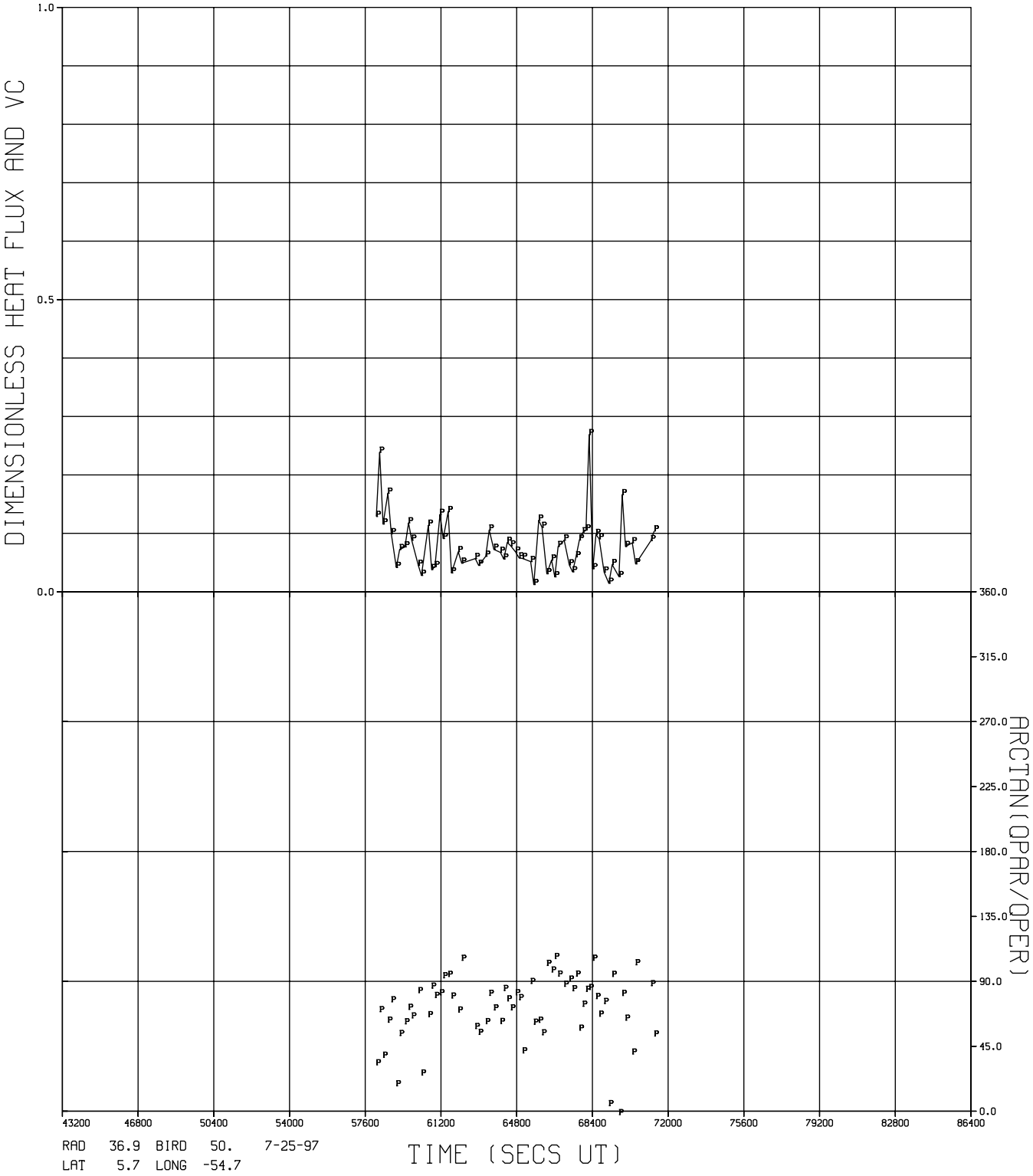

VELOCITY
1000
900
800
700
600
500
400
300
200
100
0
VELOCITY DIFFERENCE
100
80
60
40
20
0
-20
-40
-60
-80
-100
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 36.9 BIRD 50. 7-25-97
LAT 5.7 LONG -54.7
TIME (SECS UT)

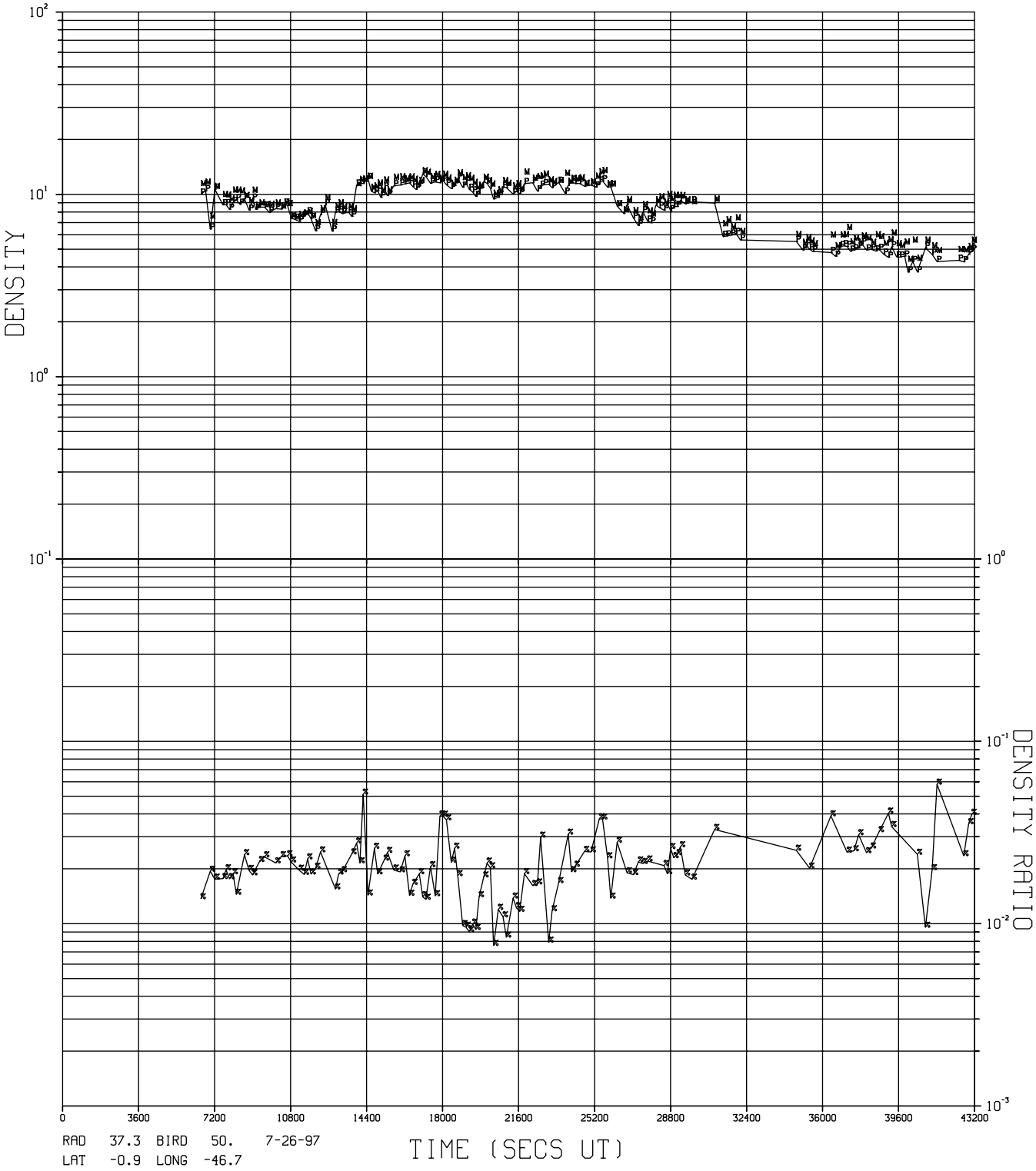

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 36.9 BIRD 50. 7-25-97
LAT 5.7 LONG -54.7

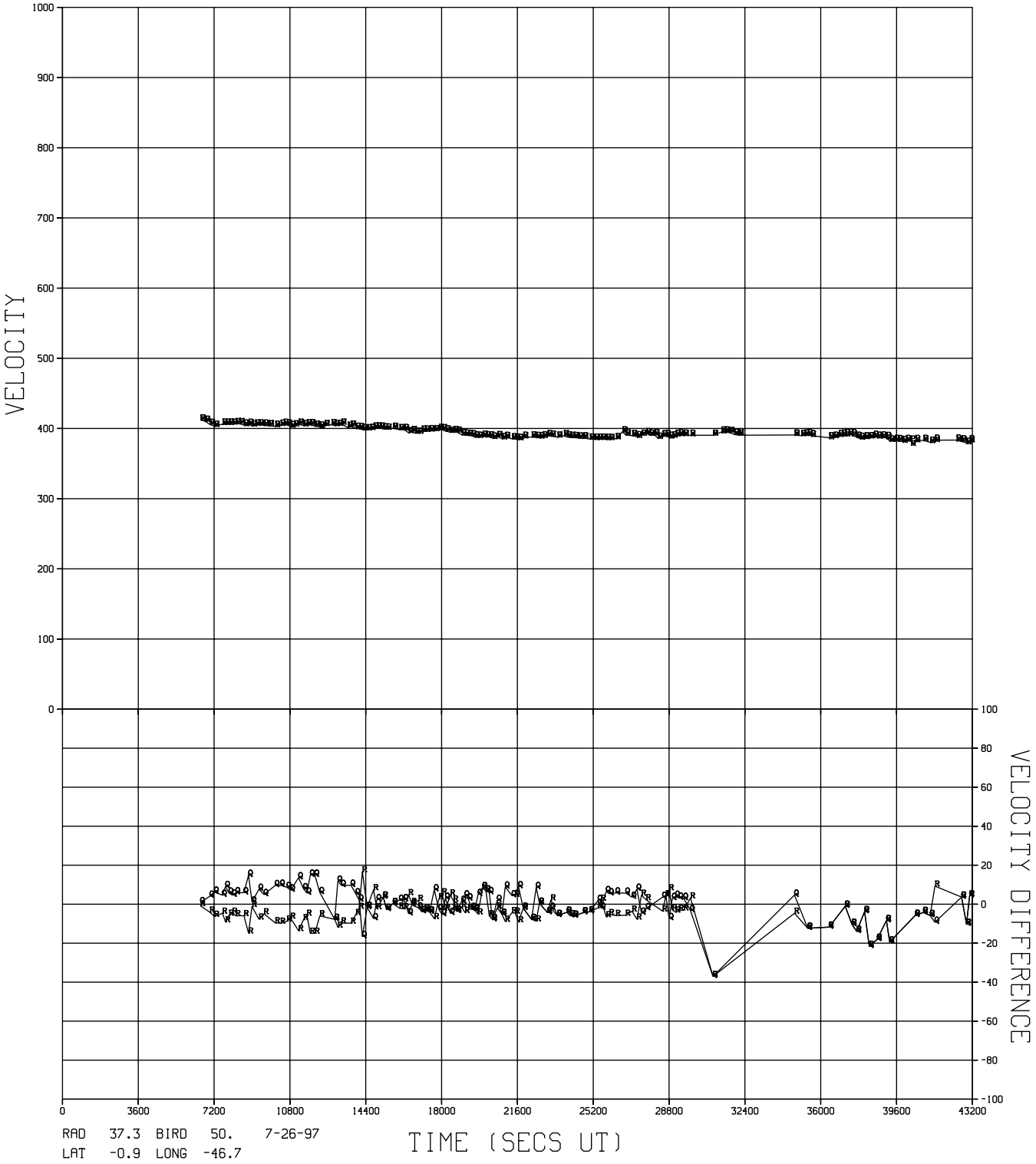

TEMPERATURE
TEMPERATURE RATIO
TIME (SECS UT)
RAD 36.9 BIRD 50. 7-25-97
LAT 5.7 LONG -54.7

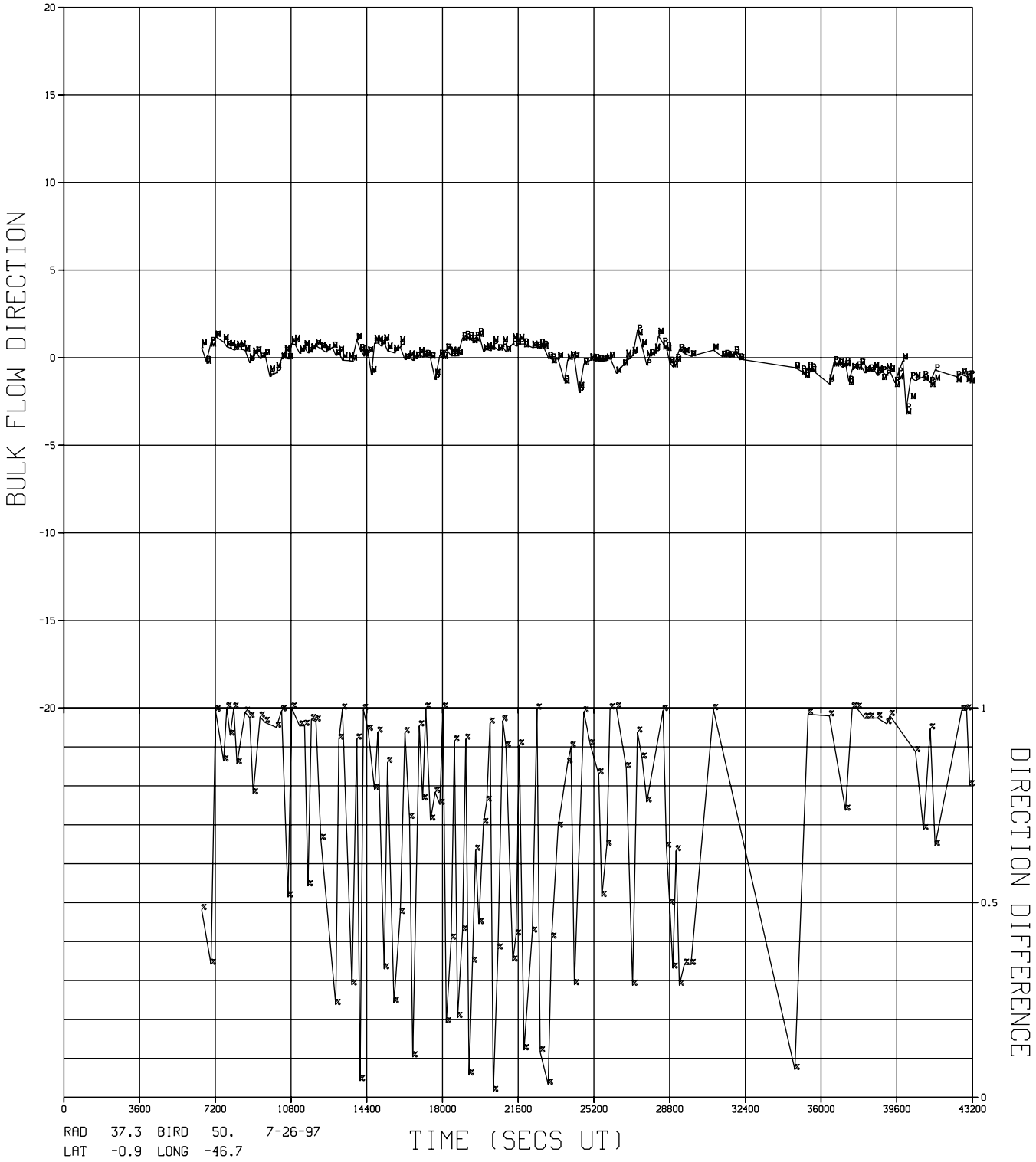

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 36.9 BIRD 50. 7-25-97
LAT 5.7 LONG -54.7

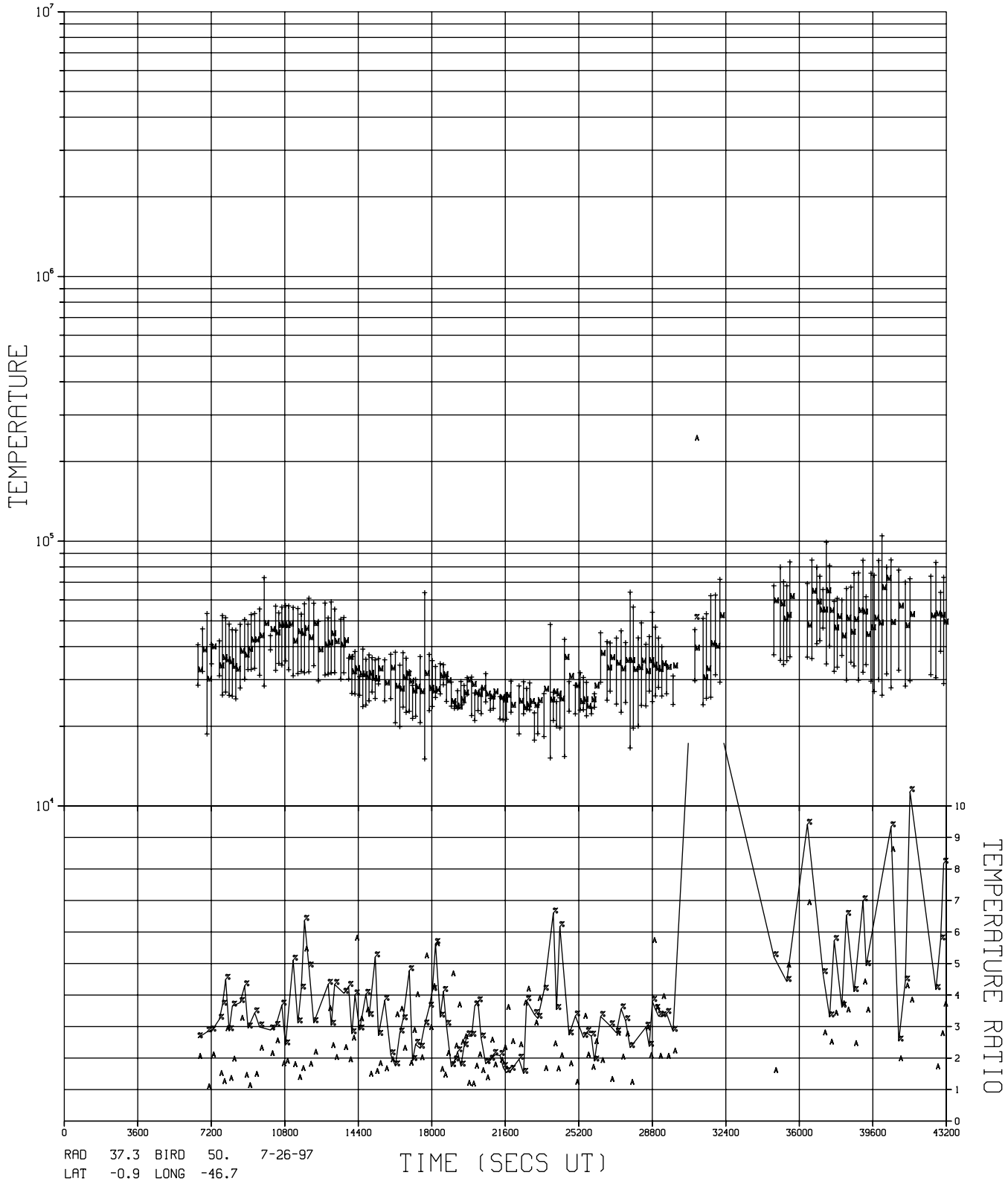

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 36.9 BIRD 50. 7-25-97
LAT 5.7 LONG -54.7

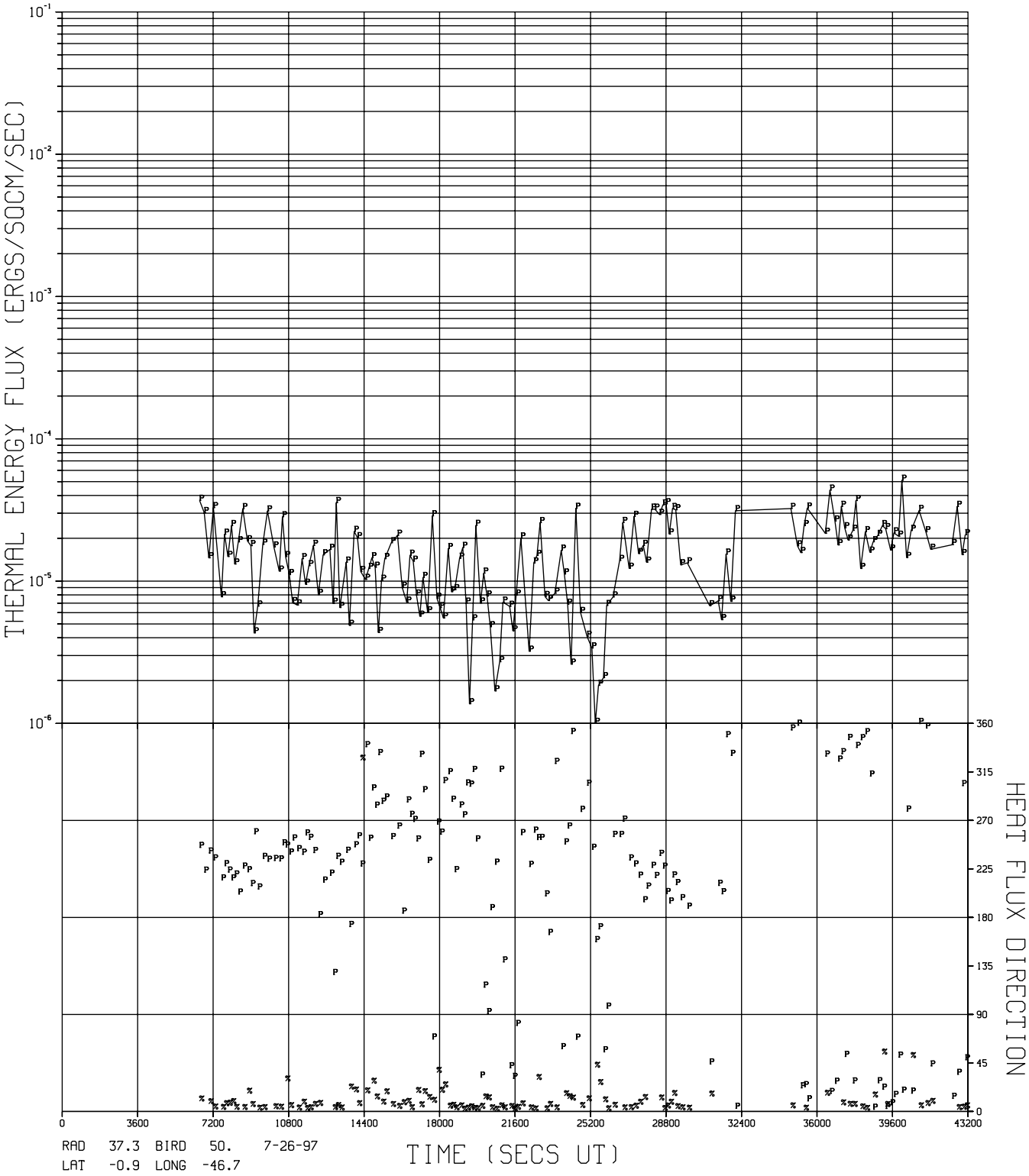

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
TIME (SECS UT)
RAD 36.9 BIRD 50. 7-25-97
LAT 5.7 LONG -54.7

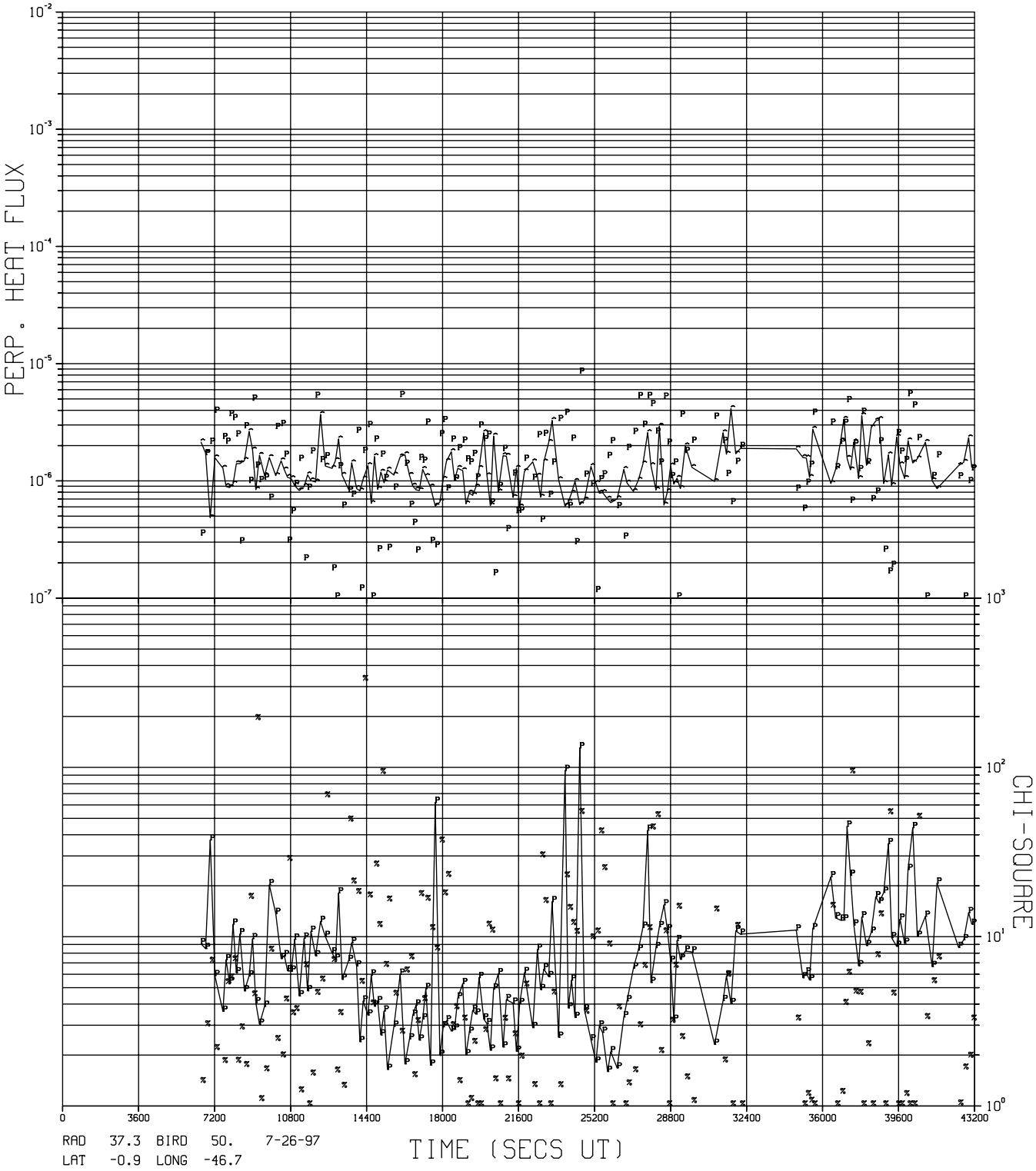

DENSITY
DENSITY RATIO
TIME (SECS UT)
RAD 37.3 BIRD 50. 7-26-97
LAT -0.9 LONG -46.7

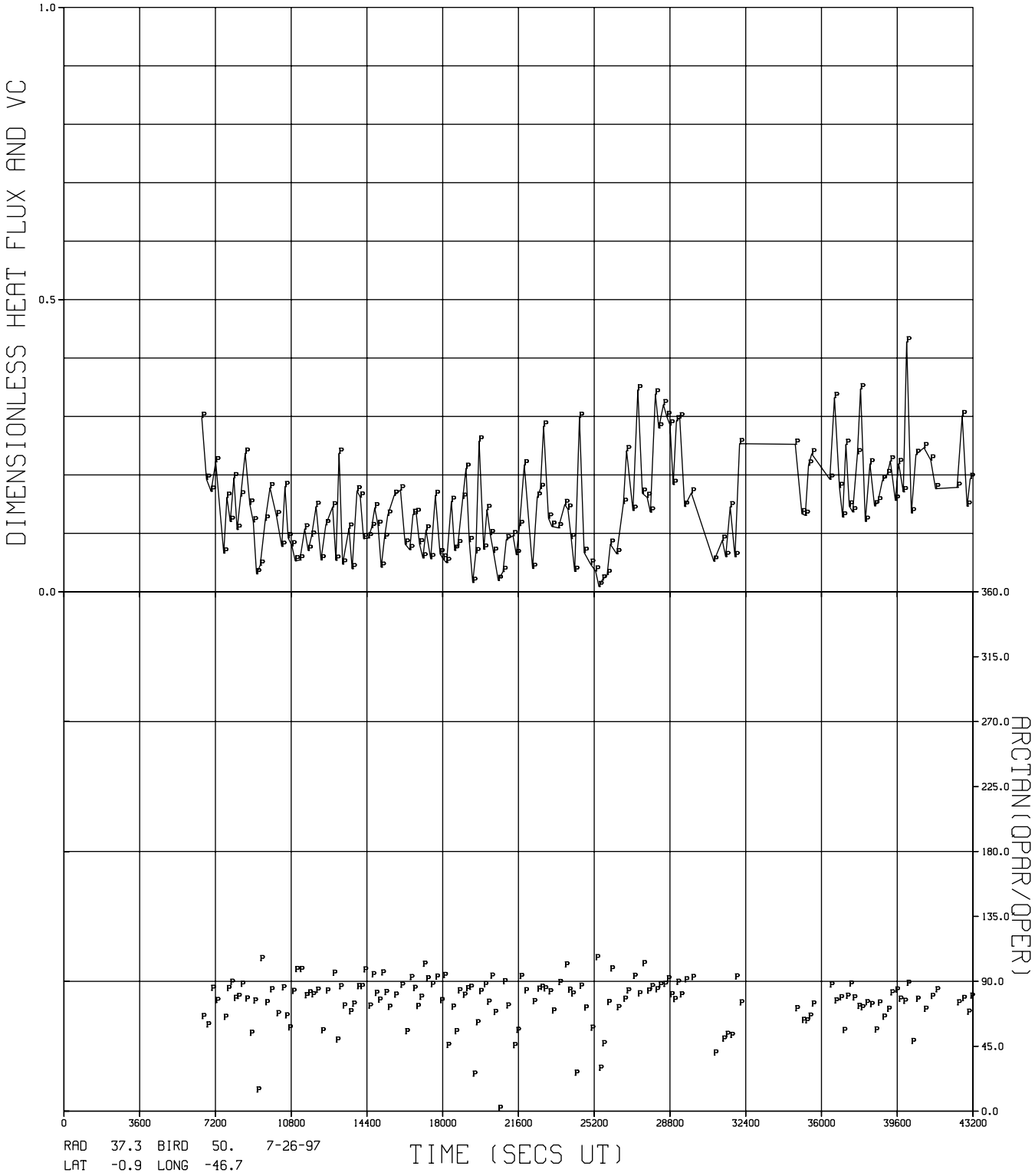

VELOCITY
VELOCITY DIFFERENCE
TIME (SECS UT)
RAD 37.3 BIRD 50. 7-26-97
LAT -0.9 LONG -46.7

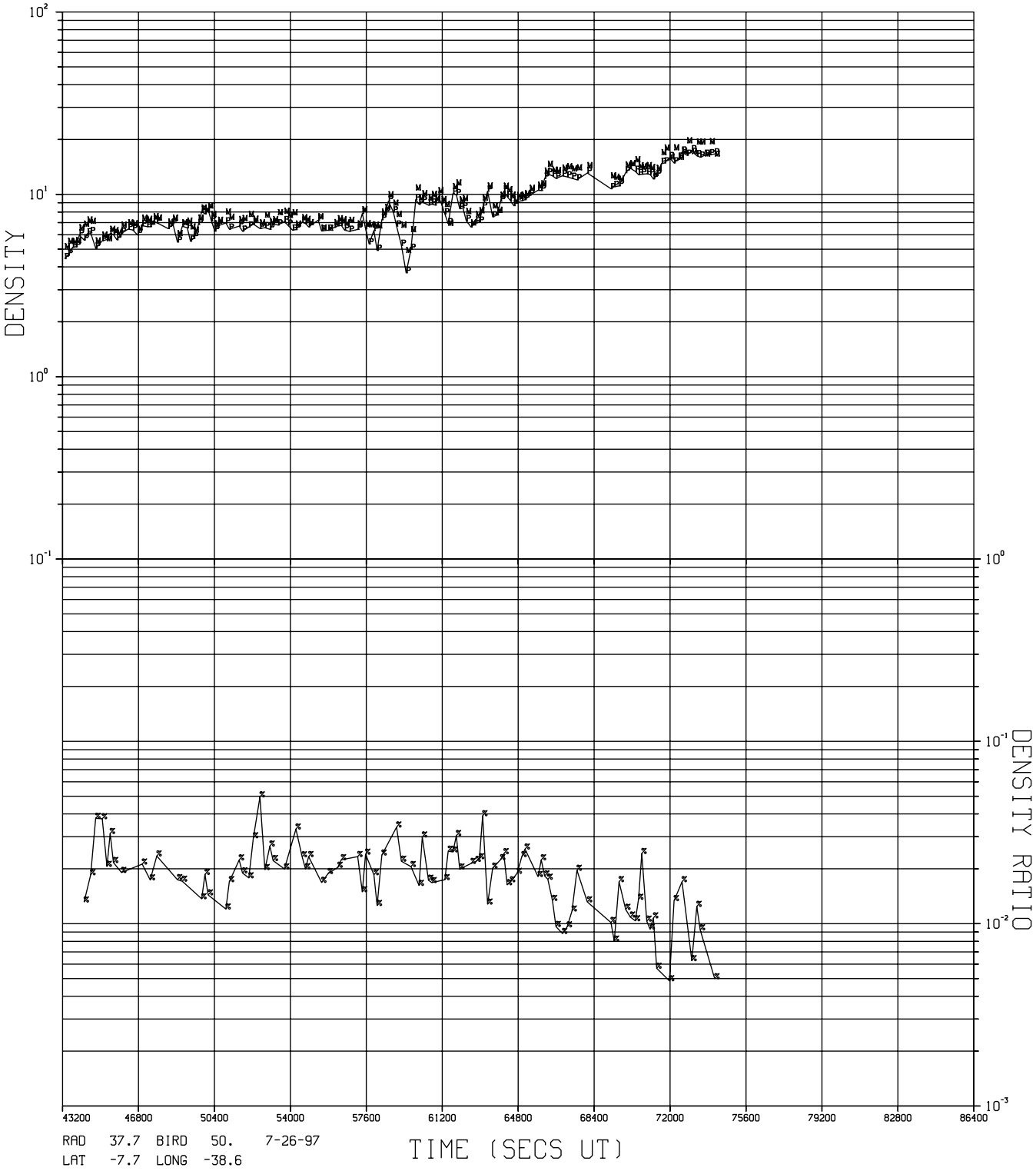

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
RAD 37.3 BIRD 50. 7-26-97
LAT -0.9 LONG -46.7

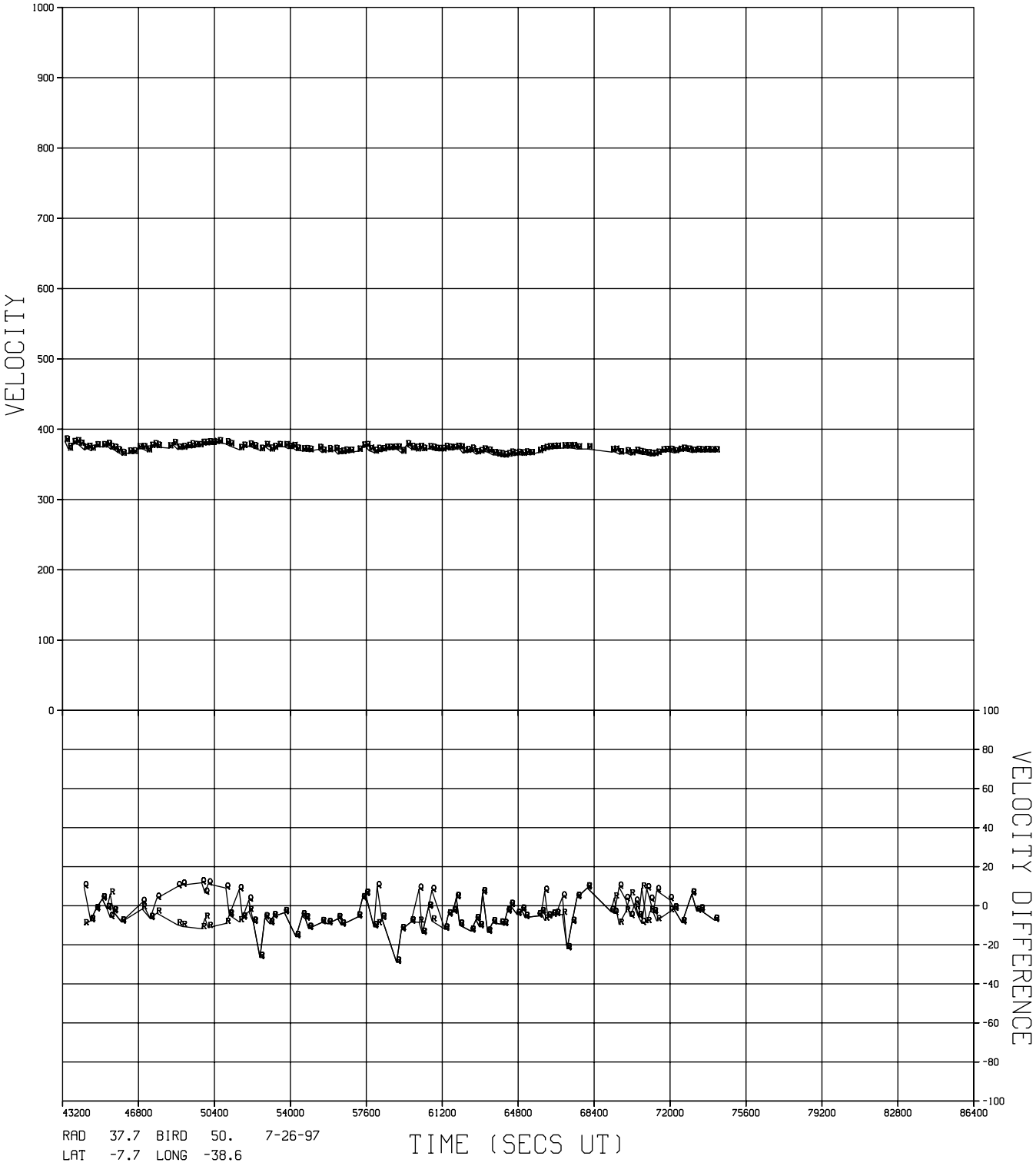

TEMPERATURE
TEMPERATURE RATIO
TIME (SECS UT)
RAD 37.3 BIRD 50. 7-26-97
LAT -0.9 LONG -46.7

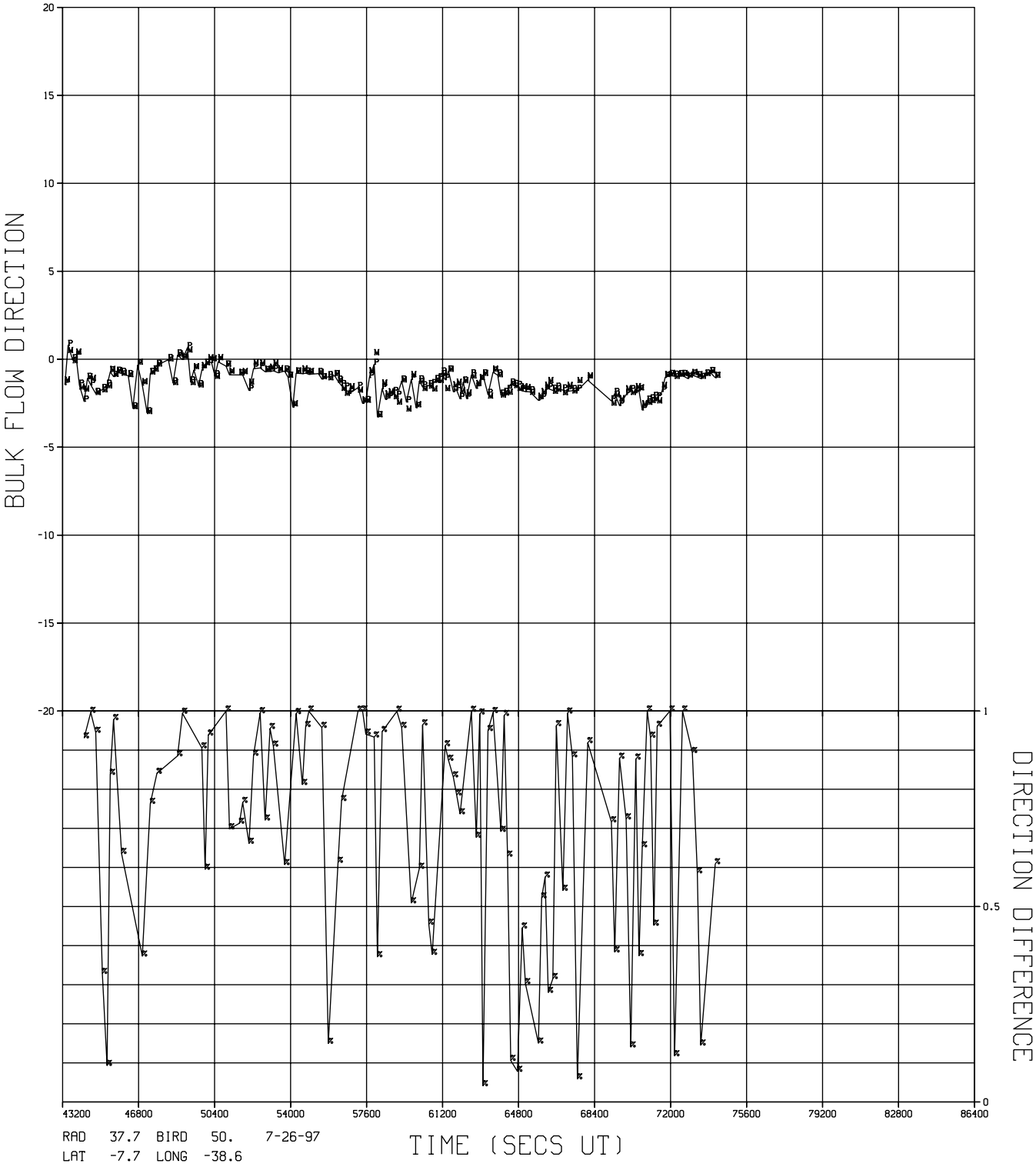

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 37.3 BIRD 50. 7-26-97
LAT -0.9 LONG -46.7

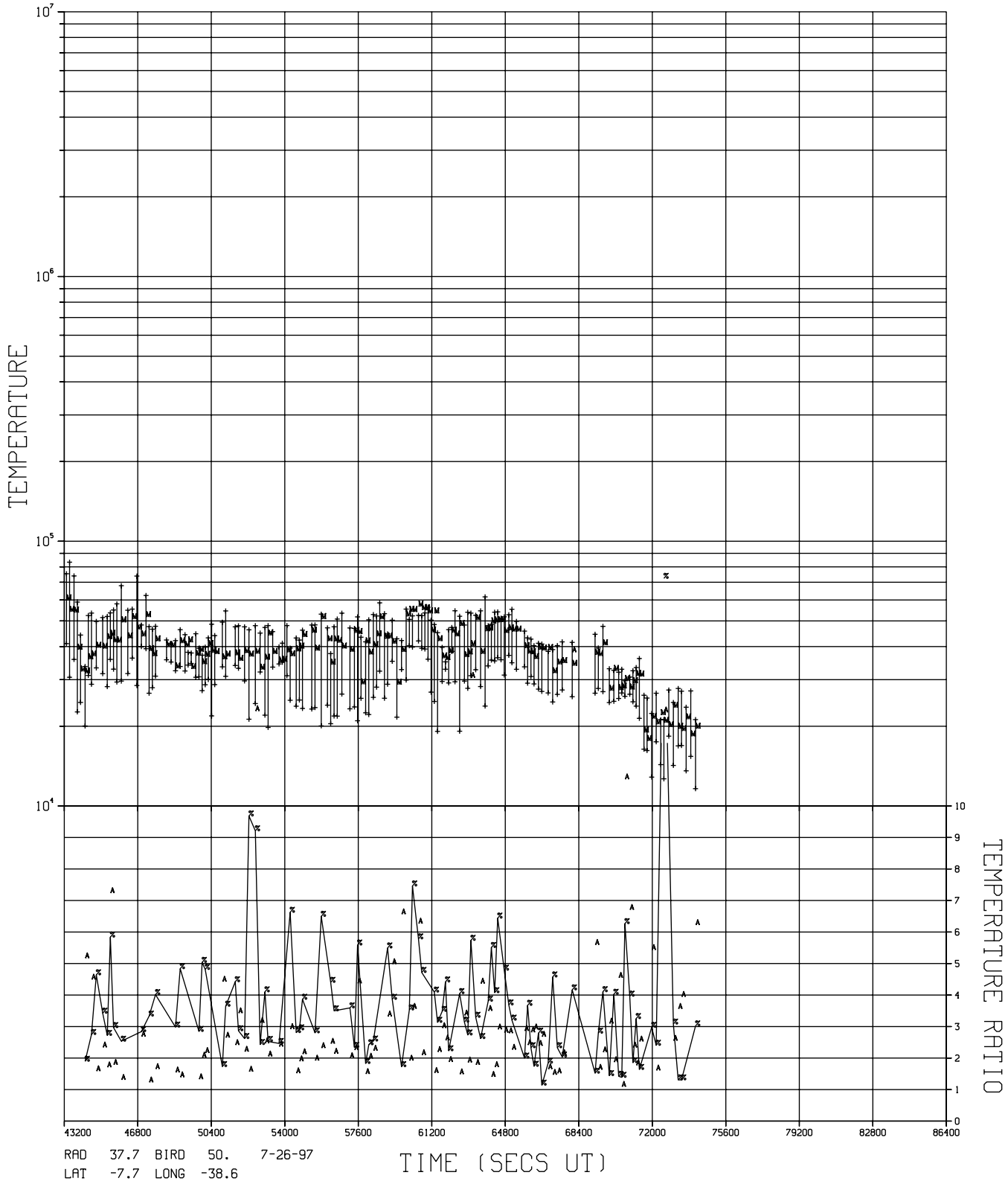

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
RAD 37.3 BIRD 50. 7-26-97
LAT -0.9 LONG -46.7

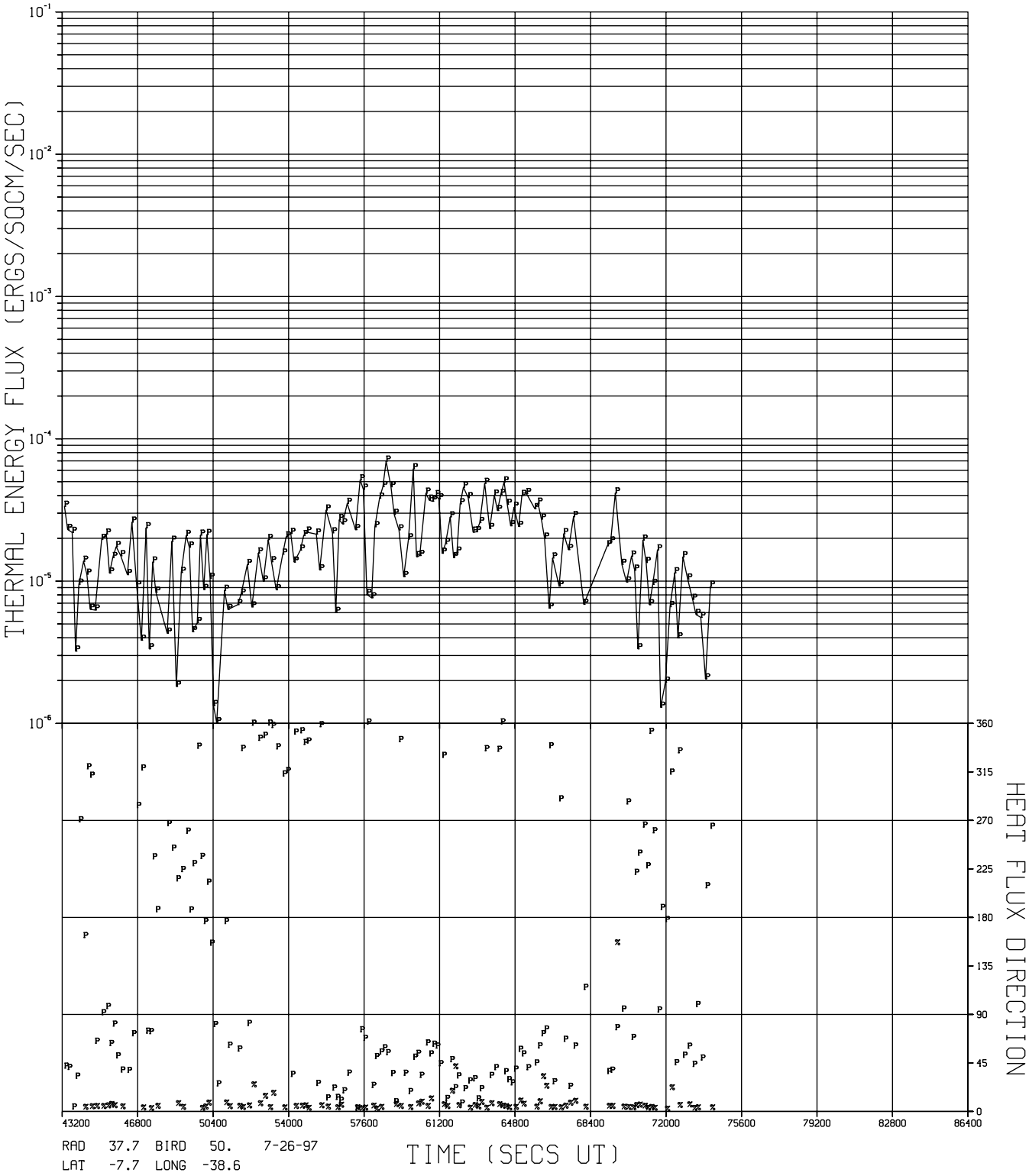

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
TIME (SECS UT)
RAD 37.3 BIRD 50. 7-26-97
LAT -0.9 LONG -46.7

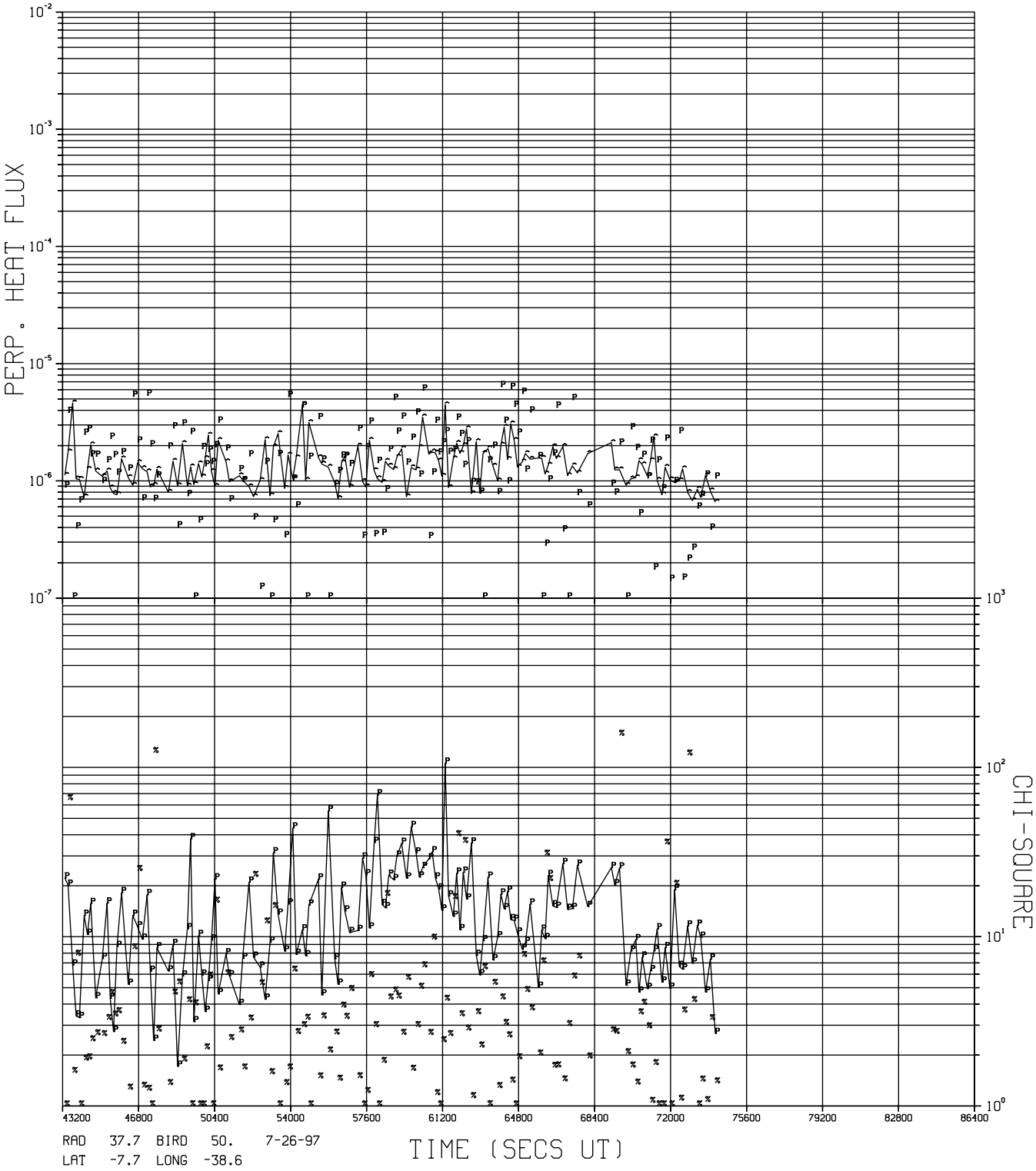

DENSITY
DENSITY RATIO
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 37.7 BIRD 50. 7-26-97
LAT -7.7 LONG -38.6

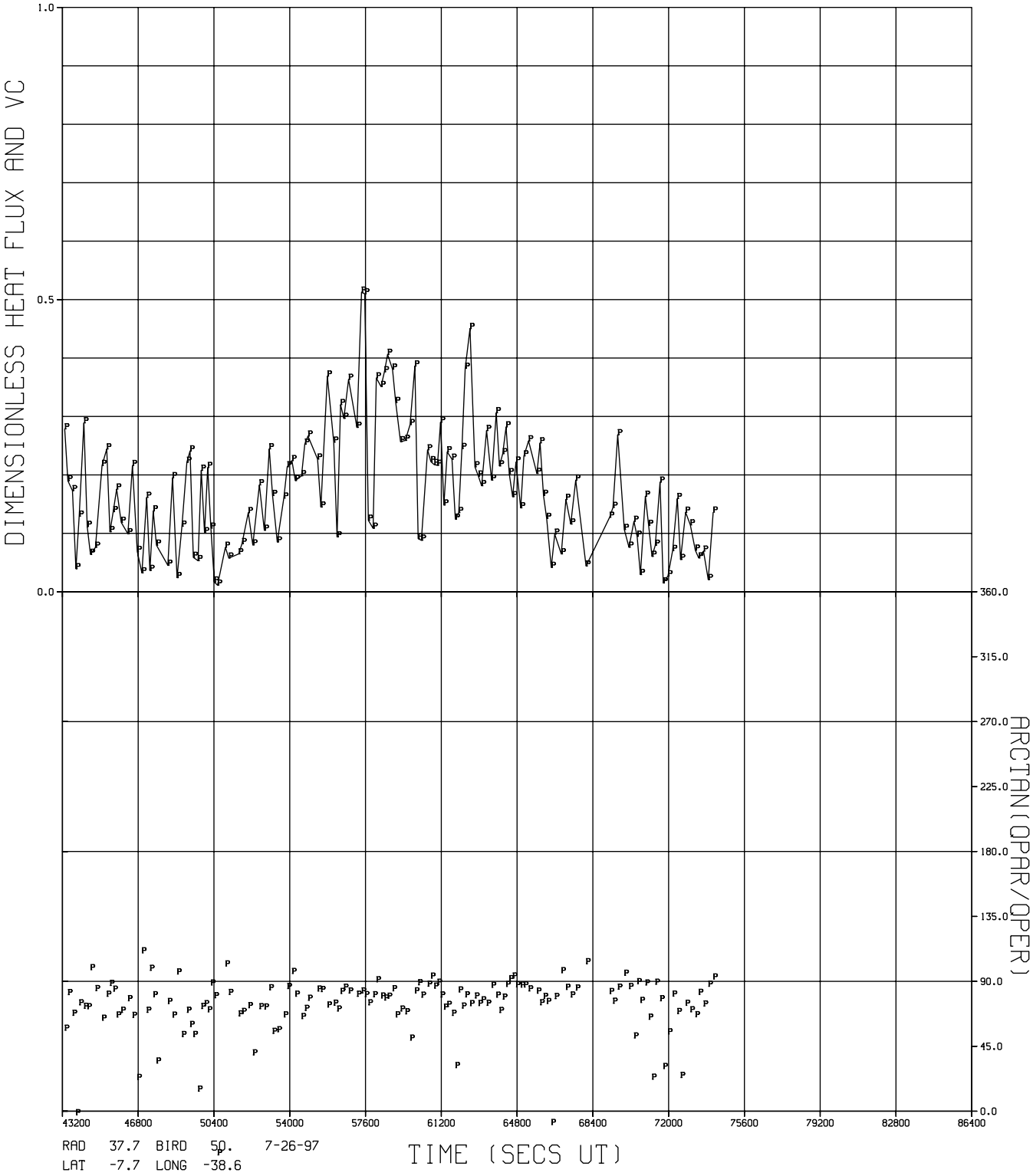

VELOCITY
1000
900
800
700
600
500
400
300
200
100
0
VELOCITY DIFFERENCE
100
80
60
40
20
0
-20
-40
-60
-80
-100
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 37.7 BIRD 50. 7-26-97
LAT -7.7 LONG -38.6
TIME (SECS UT)

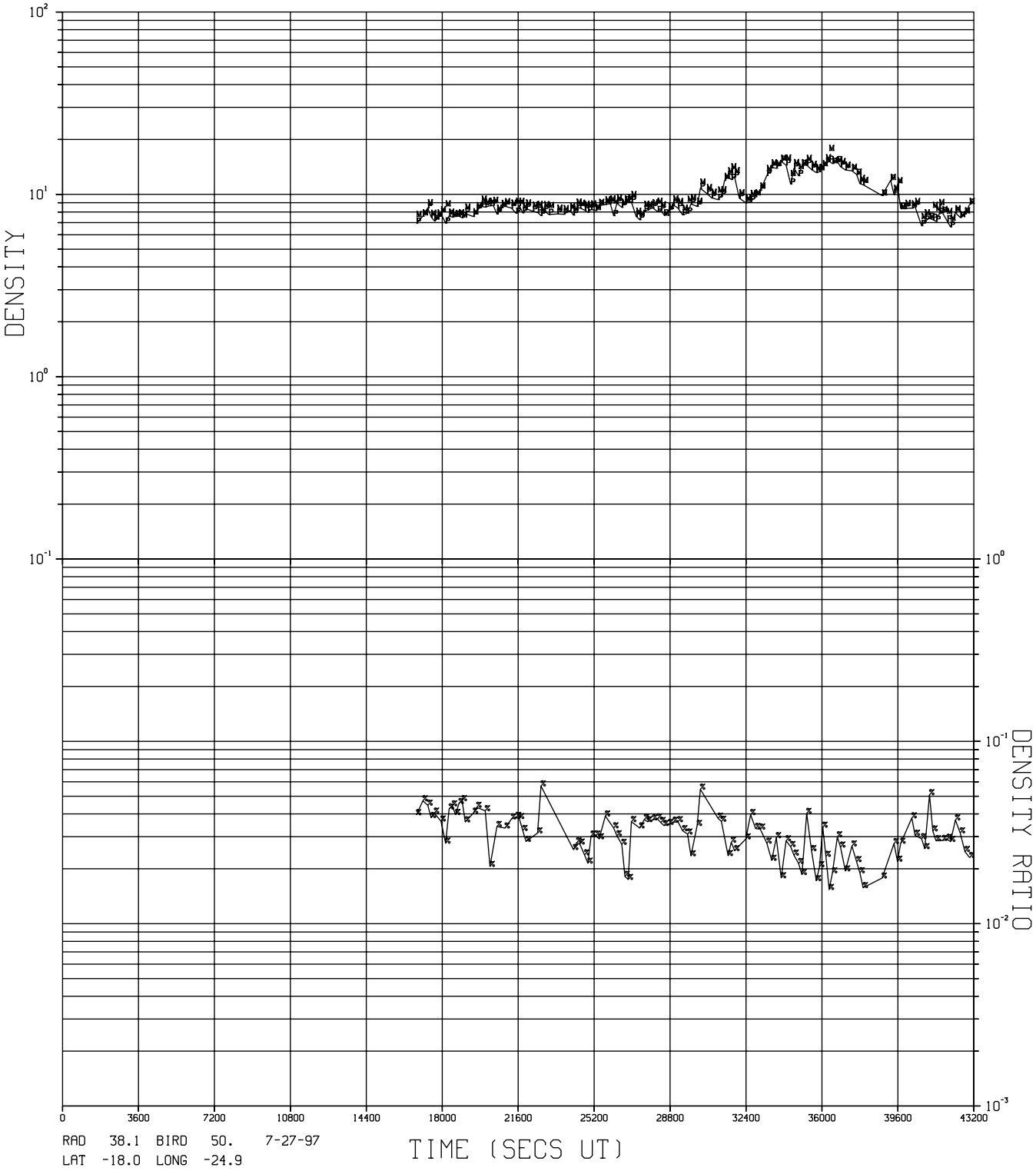

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 37.7 BIRD 50. 7-26-97
LAT -7.7 LONG -38.6

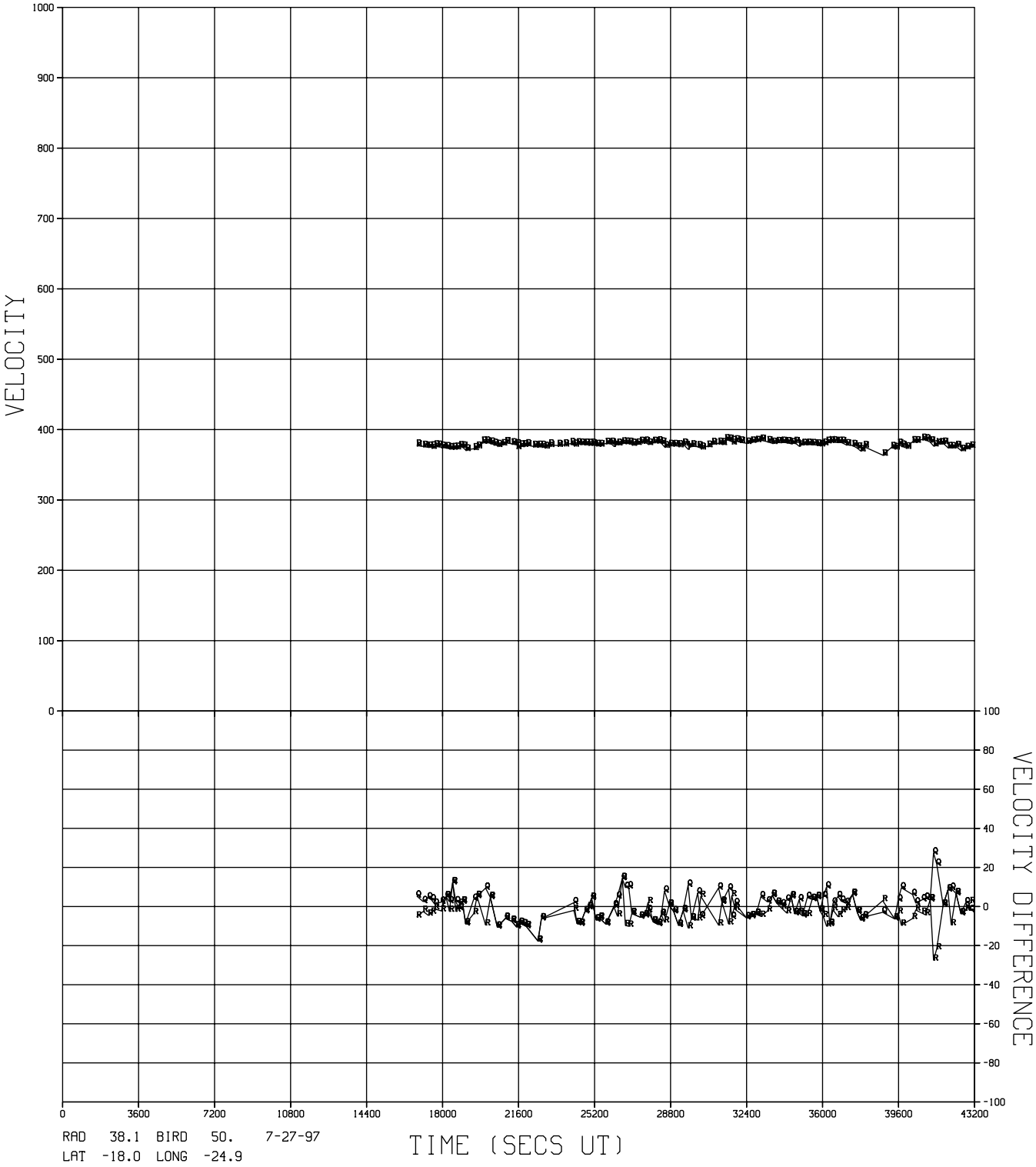

TEMPERATURE
TEMPERATURE RATIO
TIME (SECS UT)
RAD 37.7 BIRD 50. 7-26-97
LAT -7.7 LONG -38.6

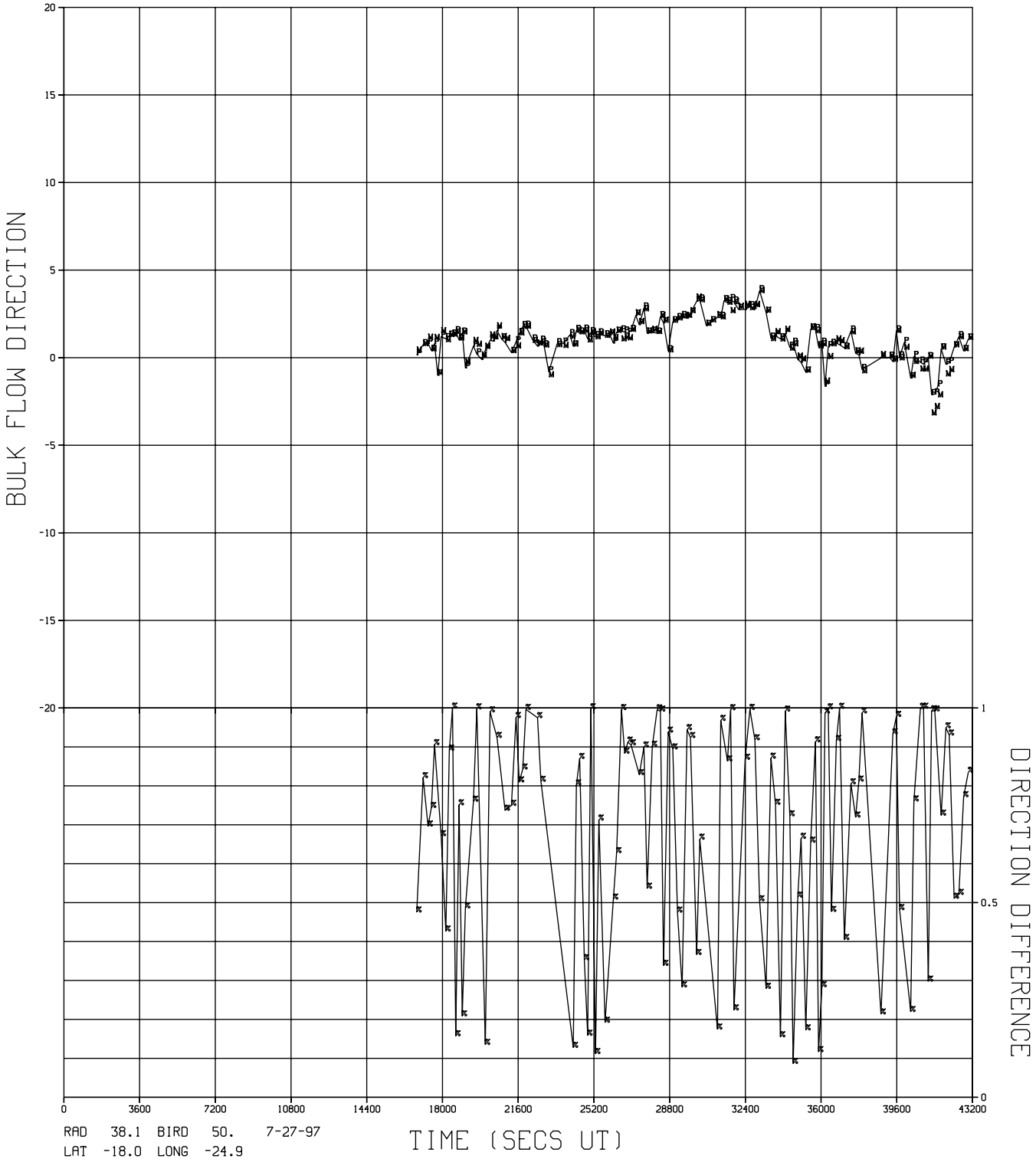

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 37.7 BIRD 50. 7-26-97
LAT -7.7 LONG -38.6

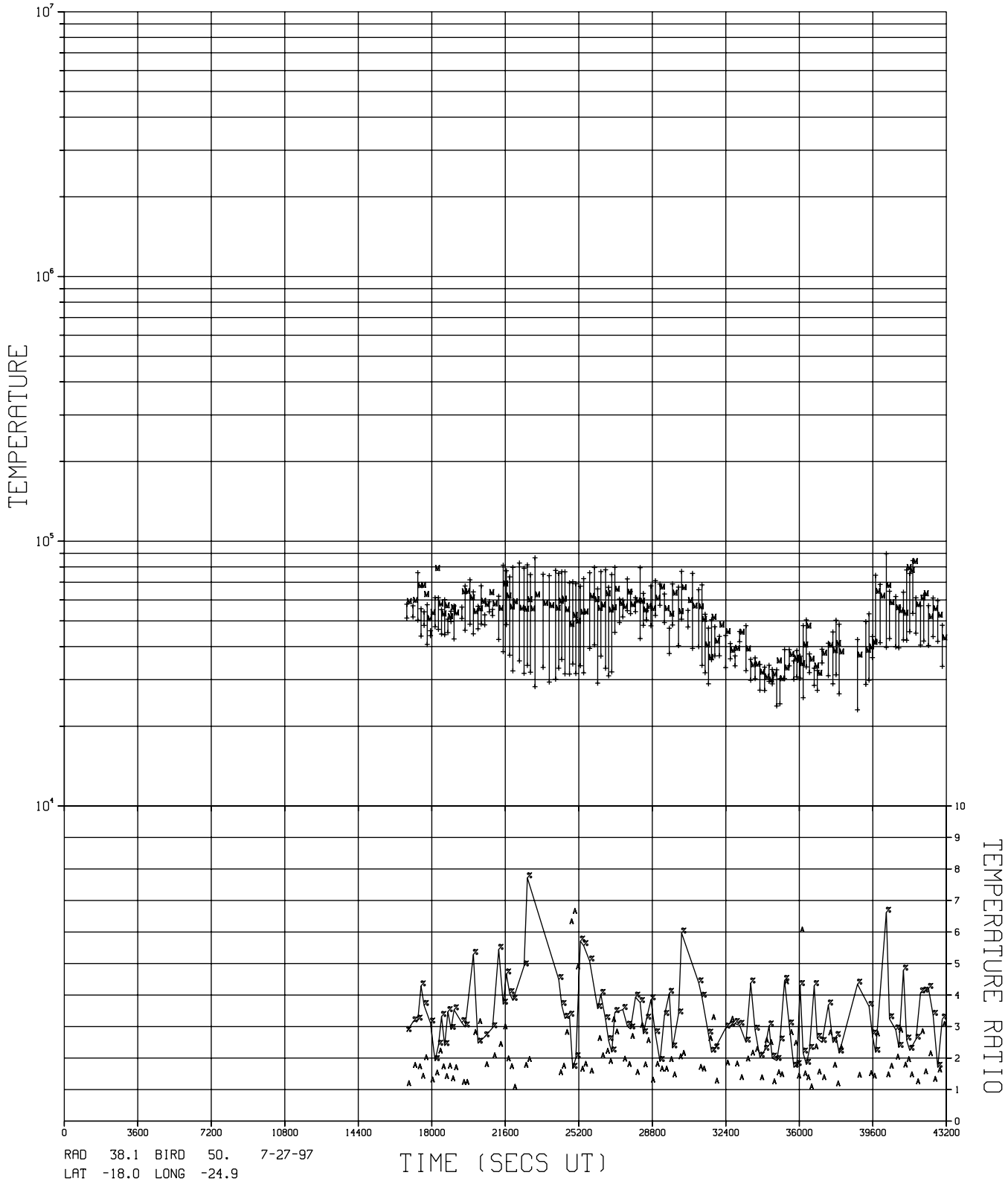

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 37.7 BIRD 50. 7-26-97
LAT -7.7 LONG -38.6

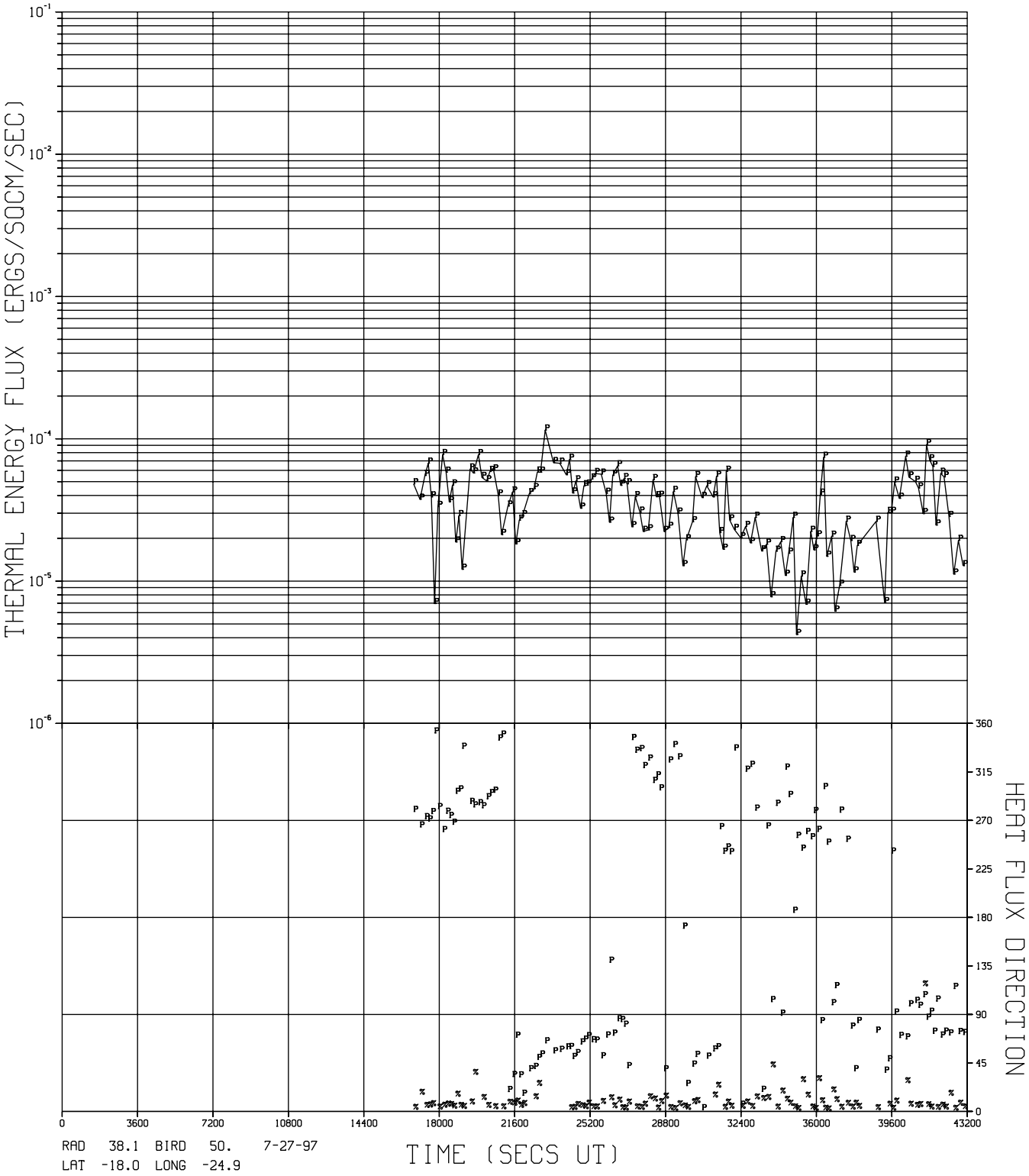

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
TIME (SECS UT)
RAD 37.7 BIRD 50. 7-26-97
LAT -7.7 LONG -38.6

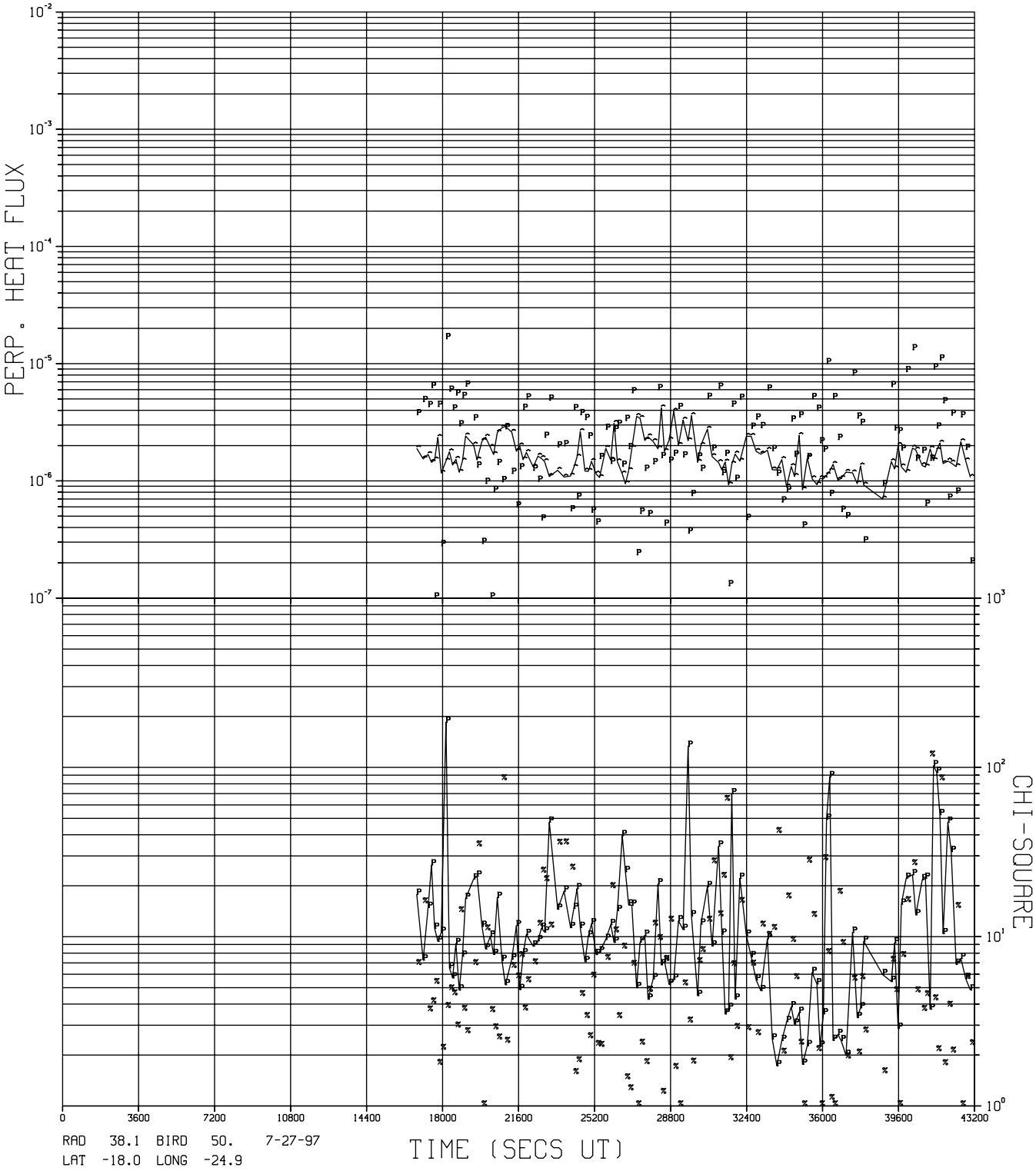

DENSITY
DENSITY RATIO
TIME (SECS UT)
RAD 38.1 BIRD 50. 7-27-97
LAT -18.0 LONG -24.9

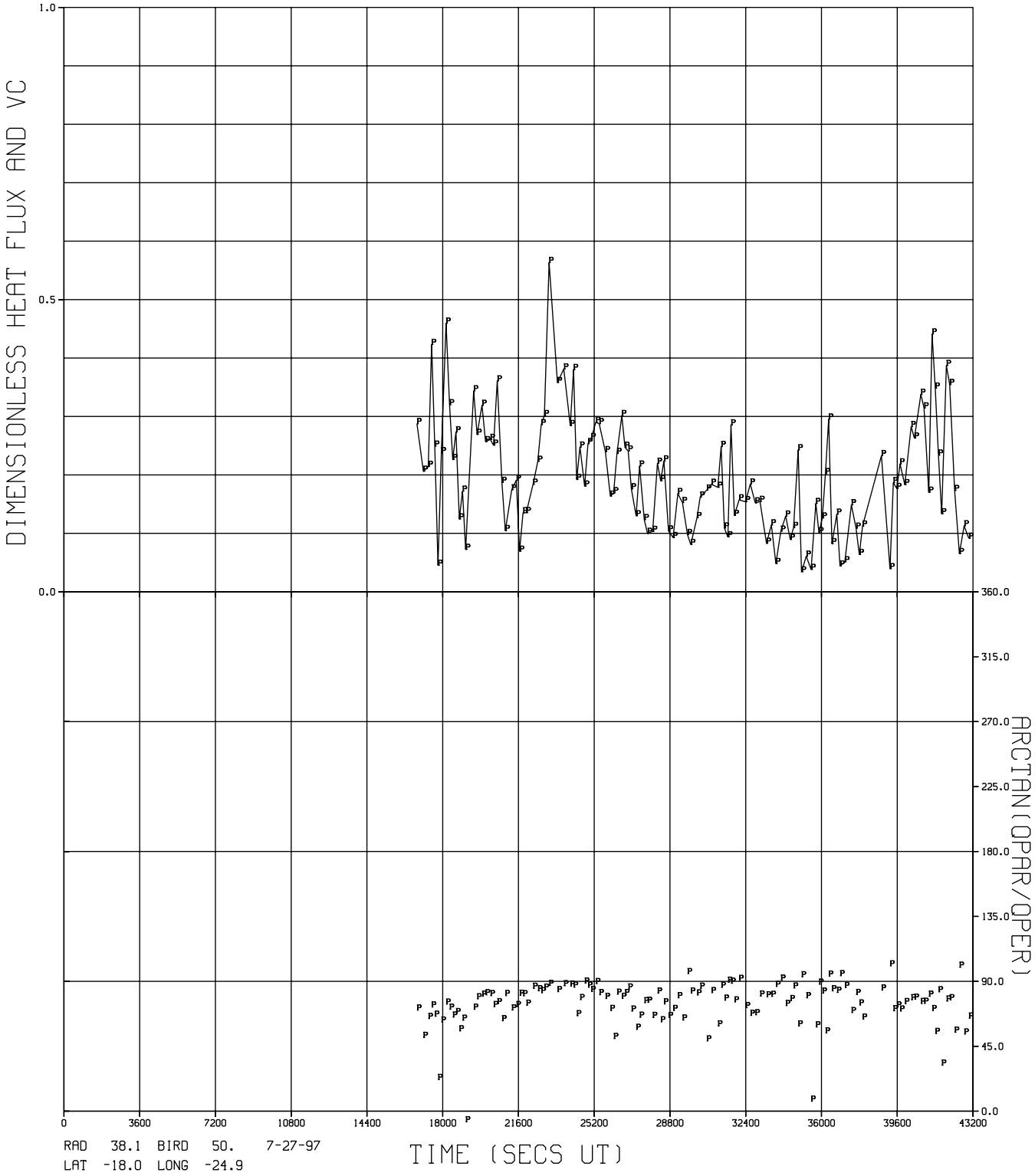

VELOCITY
1000
900
800
700
600
500
400
300
200
100
0
VELOCITY DIFFERENCE
100
80
60
40
20
0
-20
-40
-60
-80
-100
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
RAD 38.1 BIRD 50. 7-27-97
LAT -18.0 LONG -24.9
TIME (SECS UT)

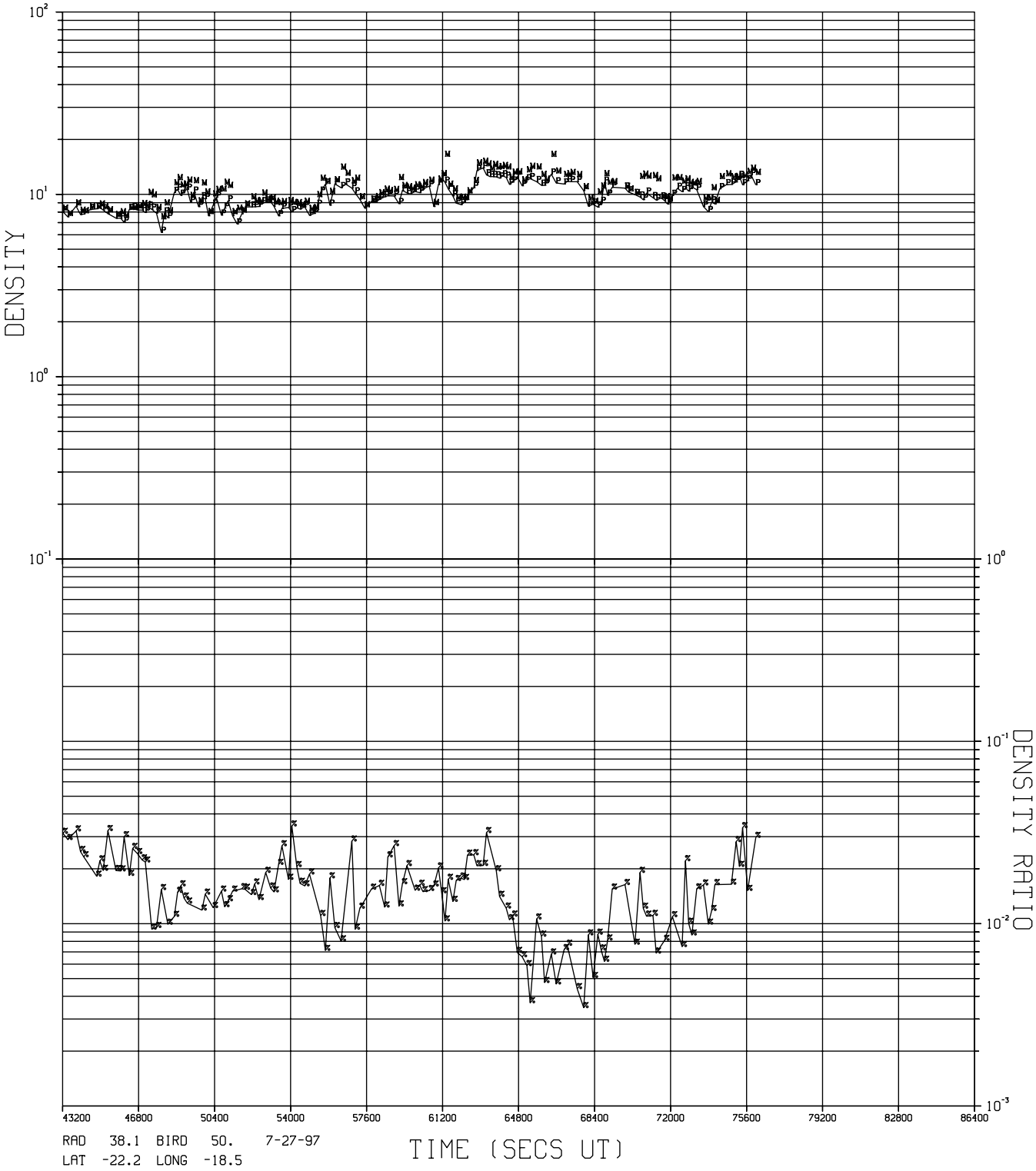

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
RAD 38.1 BIRD 50. 7-27-97
LAT -18.0 LONG -24.9

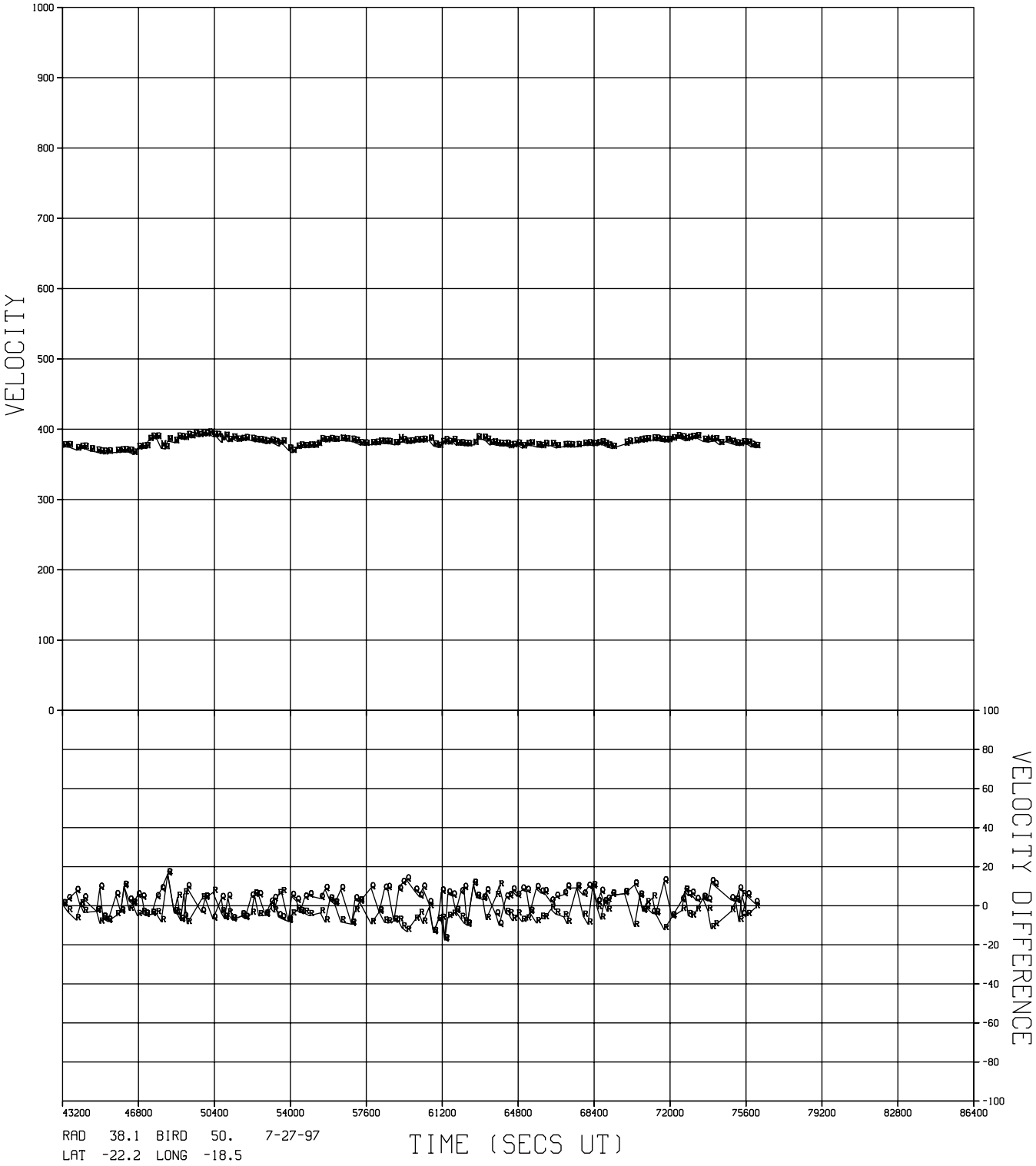

TEMPERATURE
10^7
10^6
10^5
10^4
TEMPERATURE RATIO
0
1
2
3
4
5
6
7
8
9
10
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
TIME (SECS UT)
RAD 38.1 BIRD 50. 7-27-97
LAT -18.0 LONG -24.9

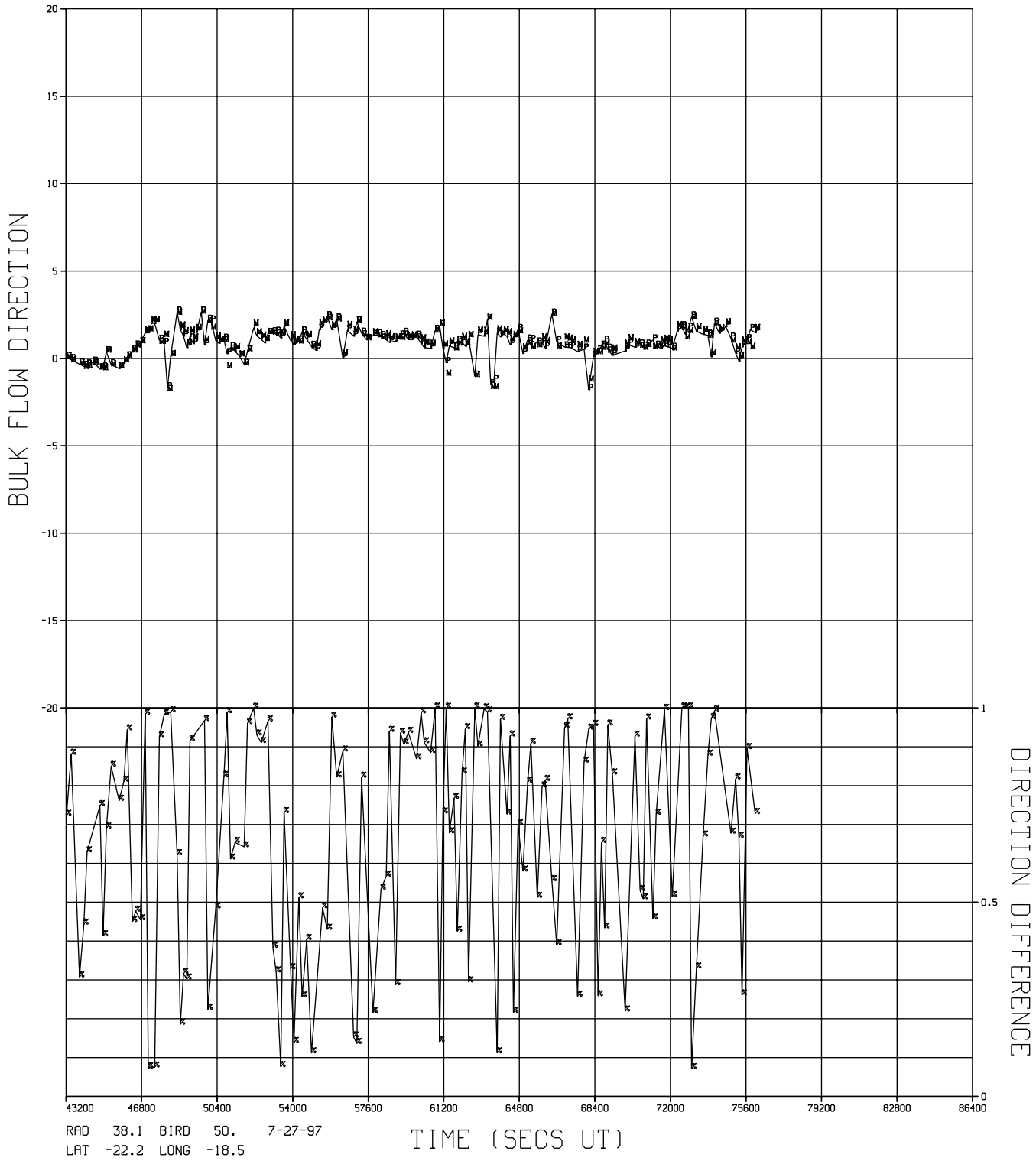

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 38.1 BIRD 50. 7-27-97
LAT -18.0 LONG -24.9

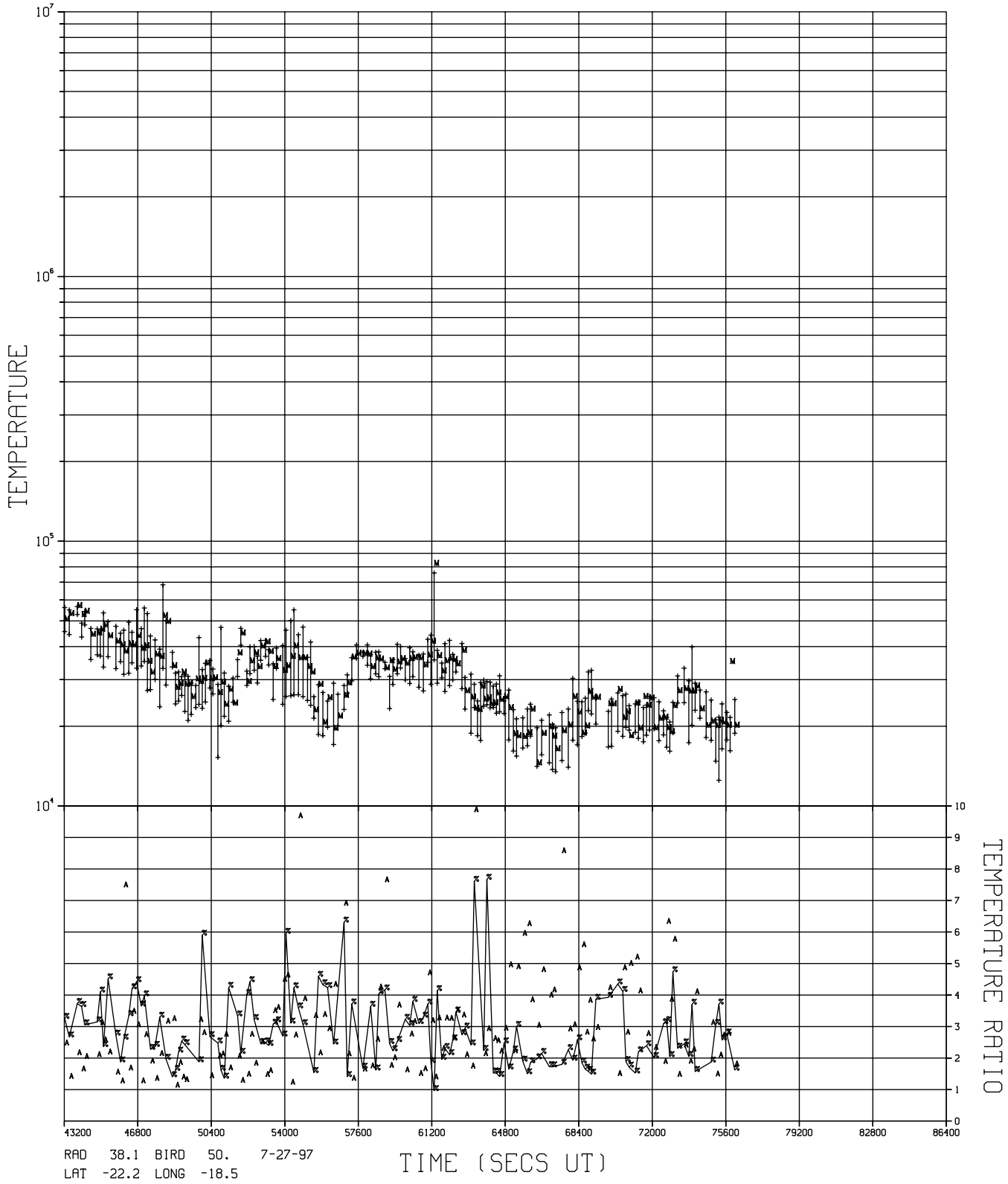

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
RAD 38.1 BIRD 50. 7-27-97
LAT -18.0 LONG -24.9

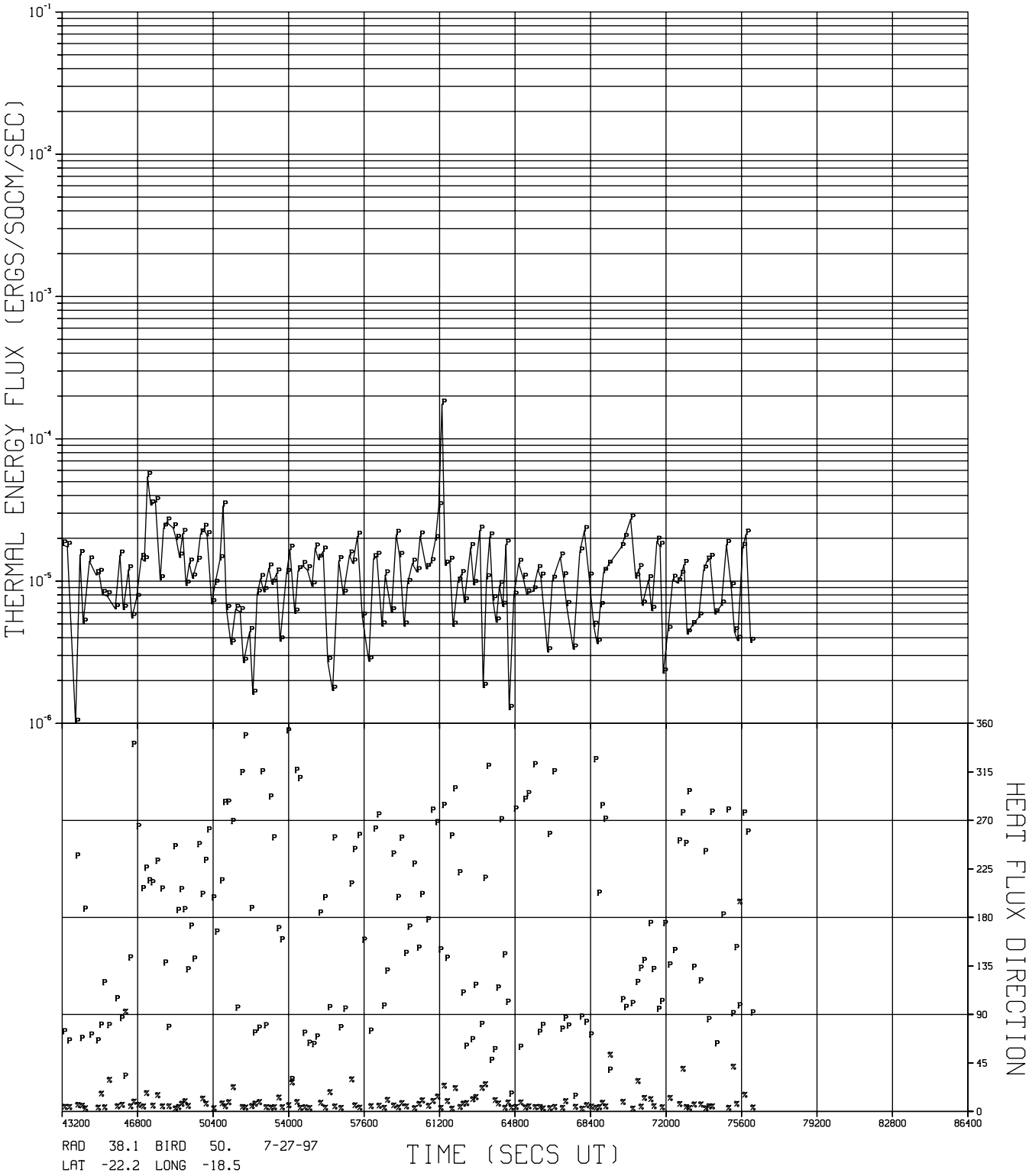

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
RAD 38.1 BIRD 50. 7-27-97
LAT -18.0 LONG -24.9
TIME (SECS UT)

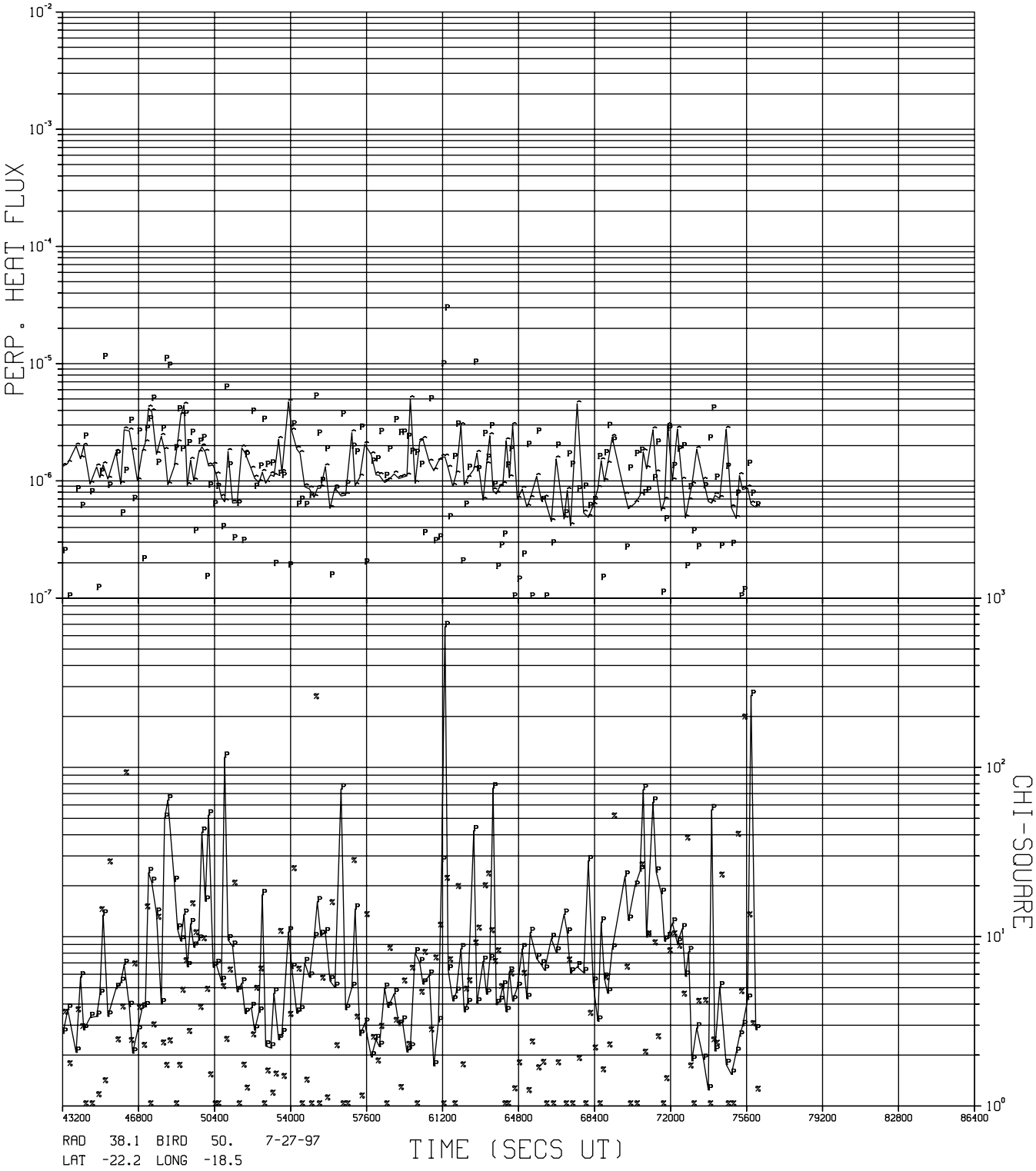

DENSITY
DENSITY RATIO
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 38.1 BIRD 50. 7-27-97
LAT -22.2 LONG -18.5

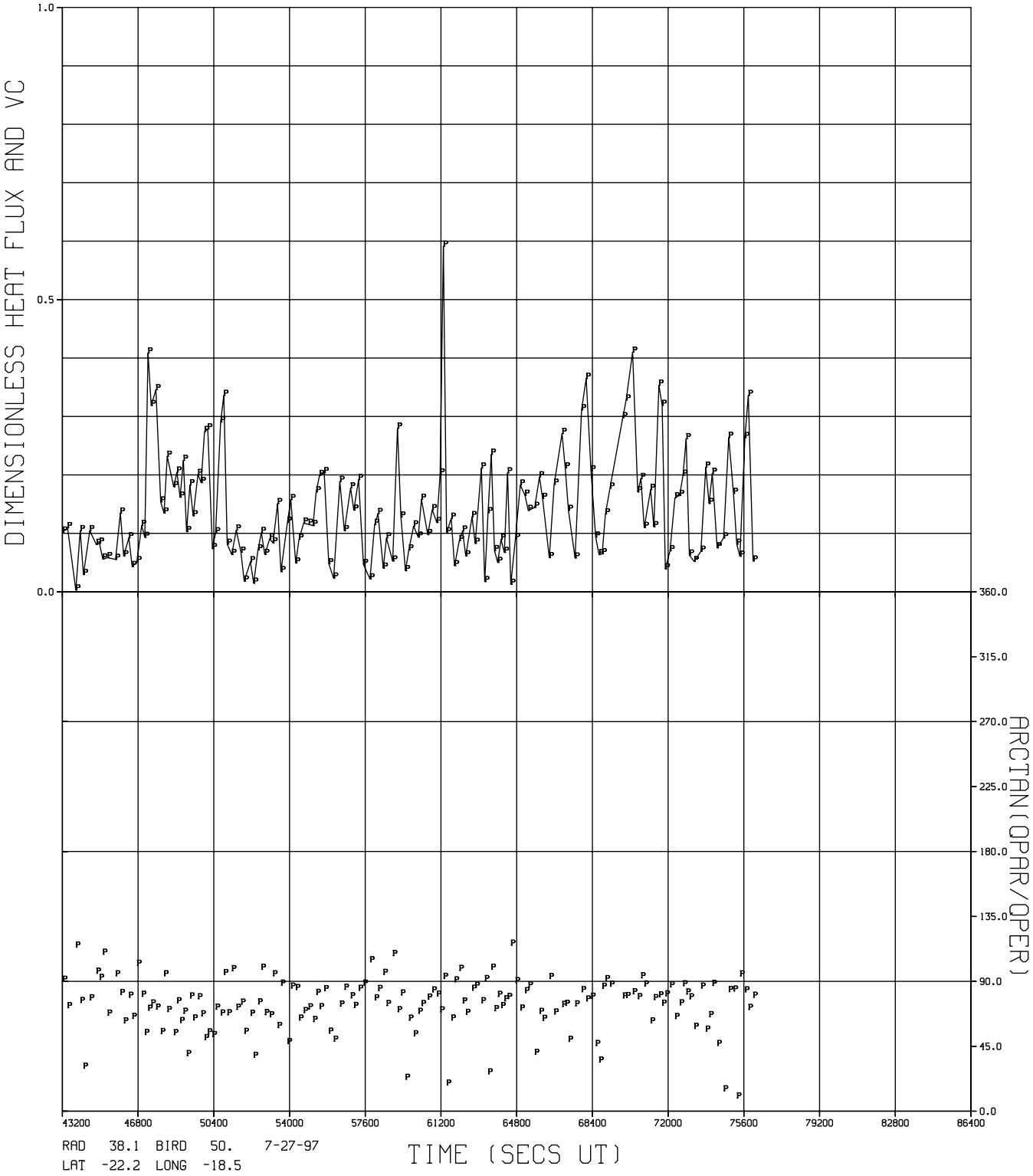

VELOCITY
1000
900
800
700
600
500
400
300
200
100
0
VELOCITY DIFFERENCE
100
80
60
40
20
0
-20
-40
-60
-80
-100
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 38.1 BIRD 50. 7-27-97
LAT -22.2 LONG -18.5
TIME (SECS UT)

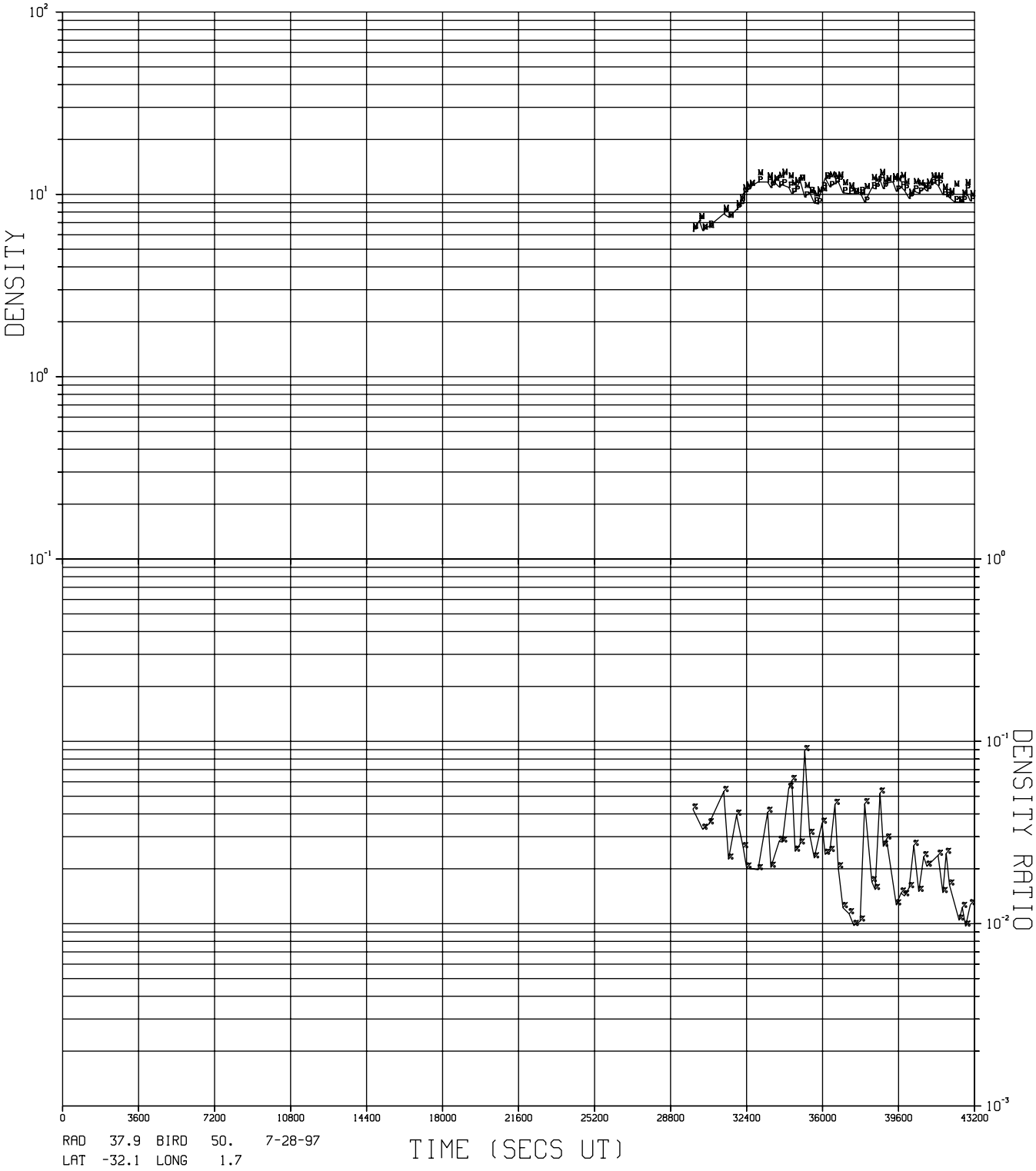

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 38.1 BIRD 50. 7-27-97
LAT -22.2 LONG -18.5

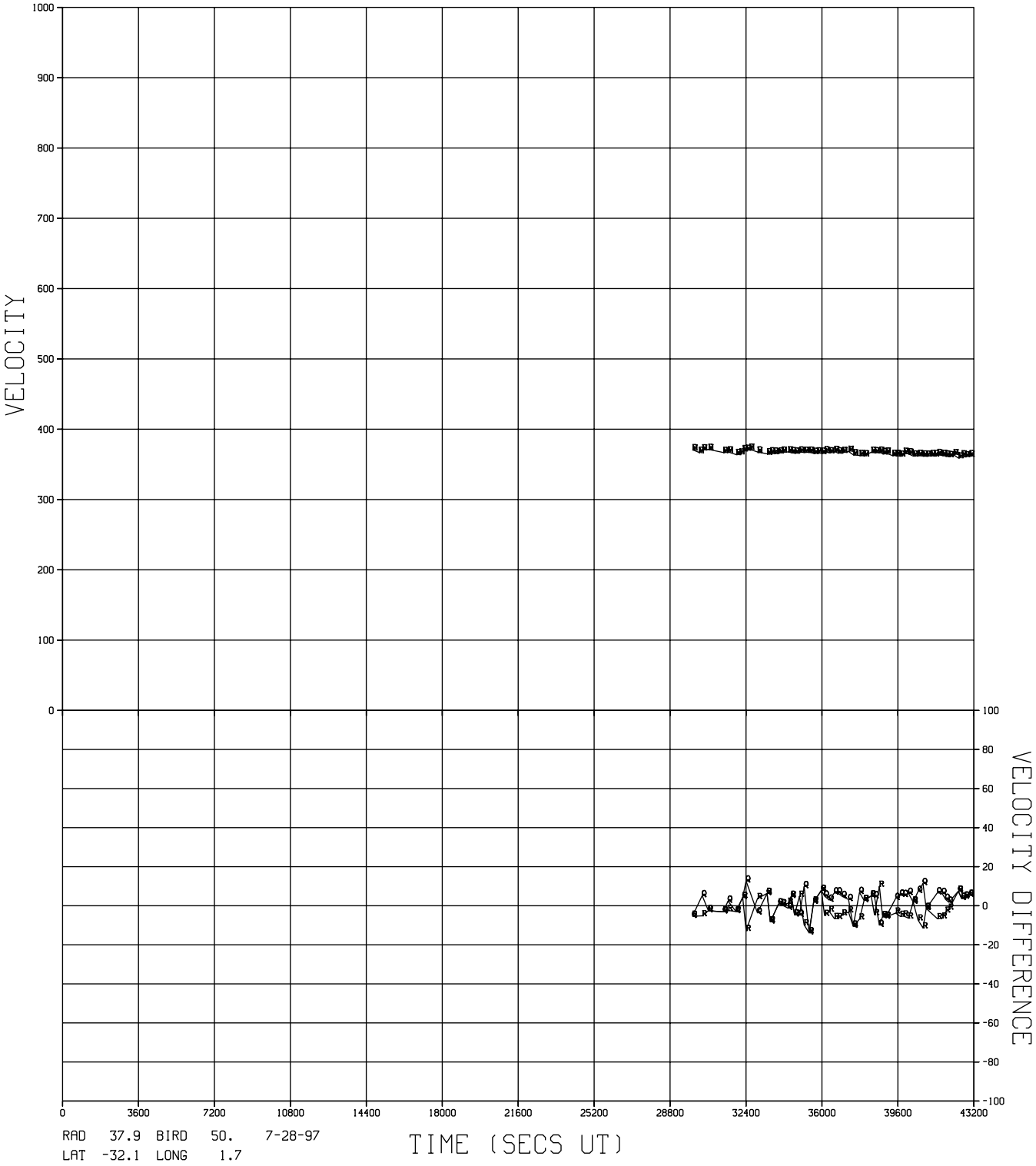

TEMPERATURE
TEMPERATURE RATIO
TIME (SECS UT)
RAD 38.1 BIRD 50. 7-27-97
LAT -22.2 LONG -18.5

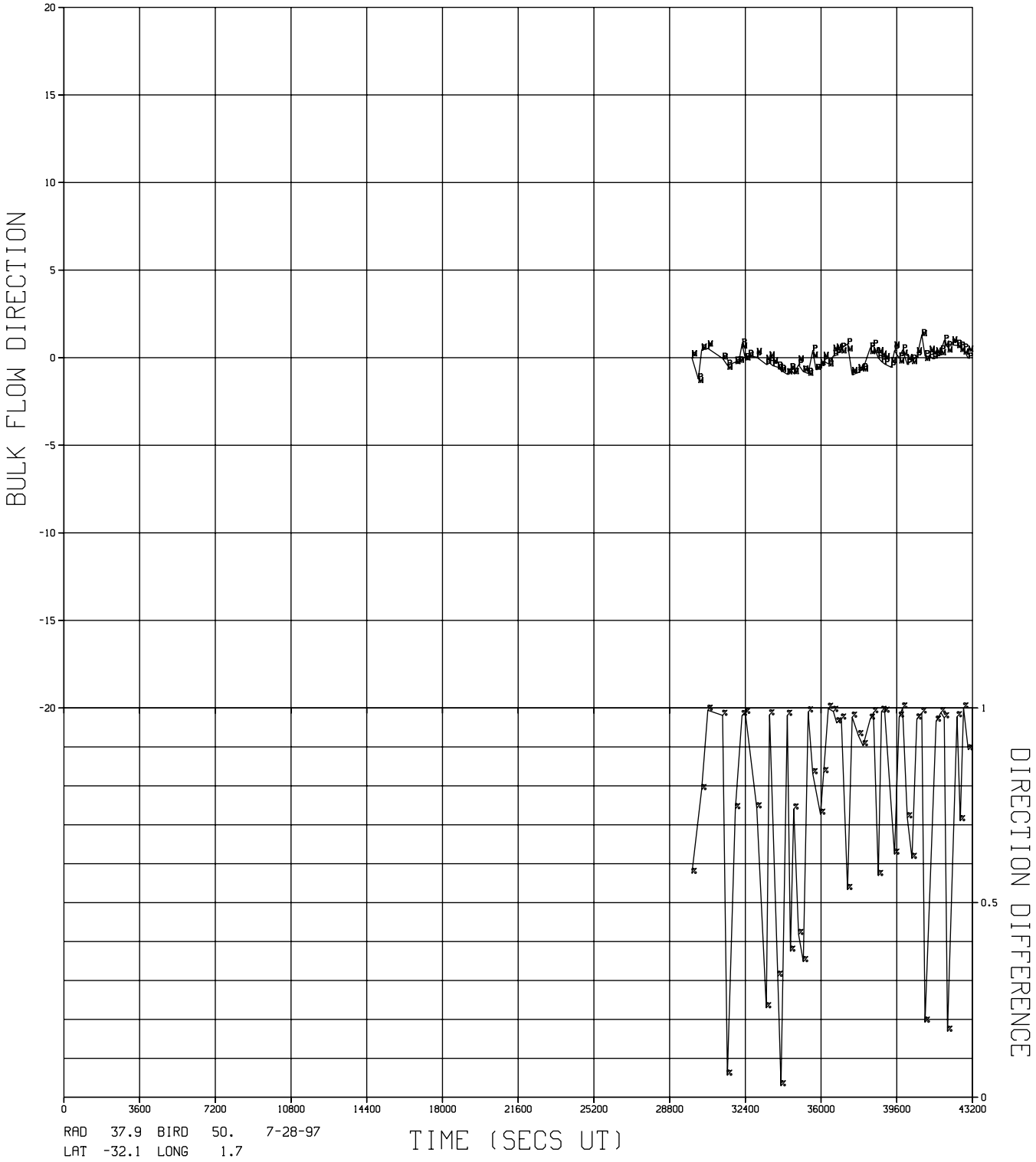

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 38.1 BIRD 50. 7-27-97
LAT -22.2 LONG -18.5

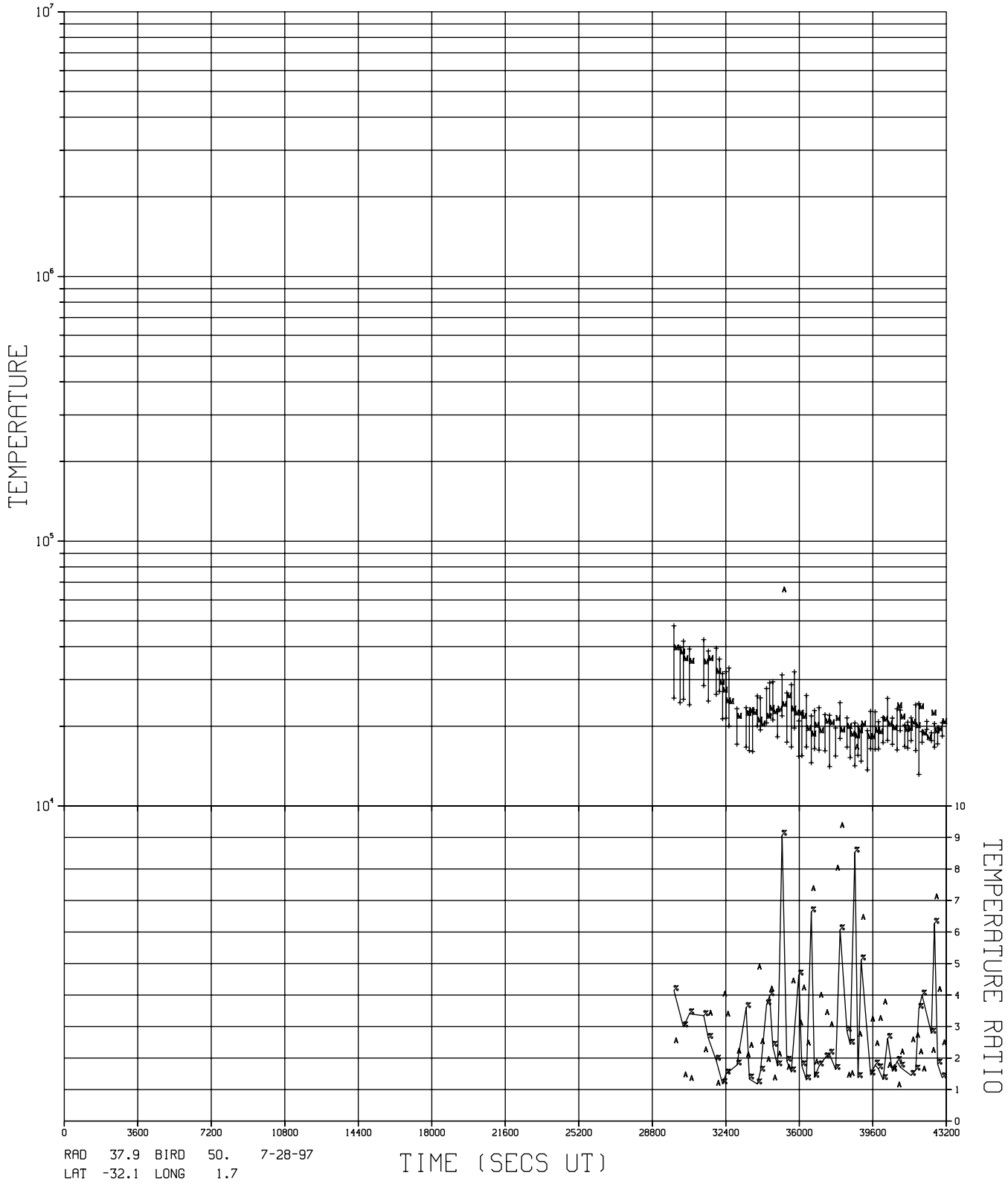

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 38.1 BIRD 50. 7-27-97
LAT -22.2 LONG -18.5

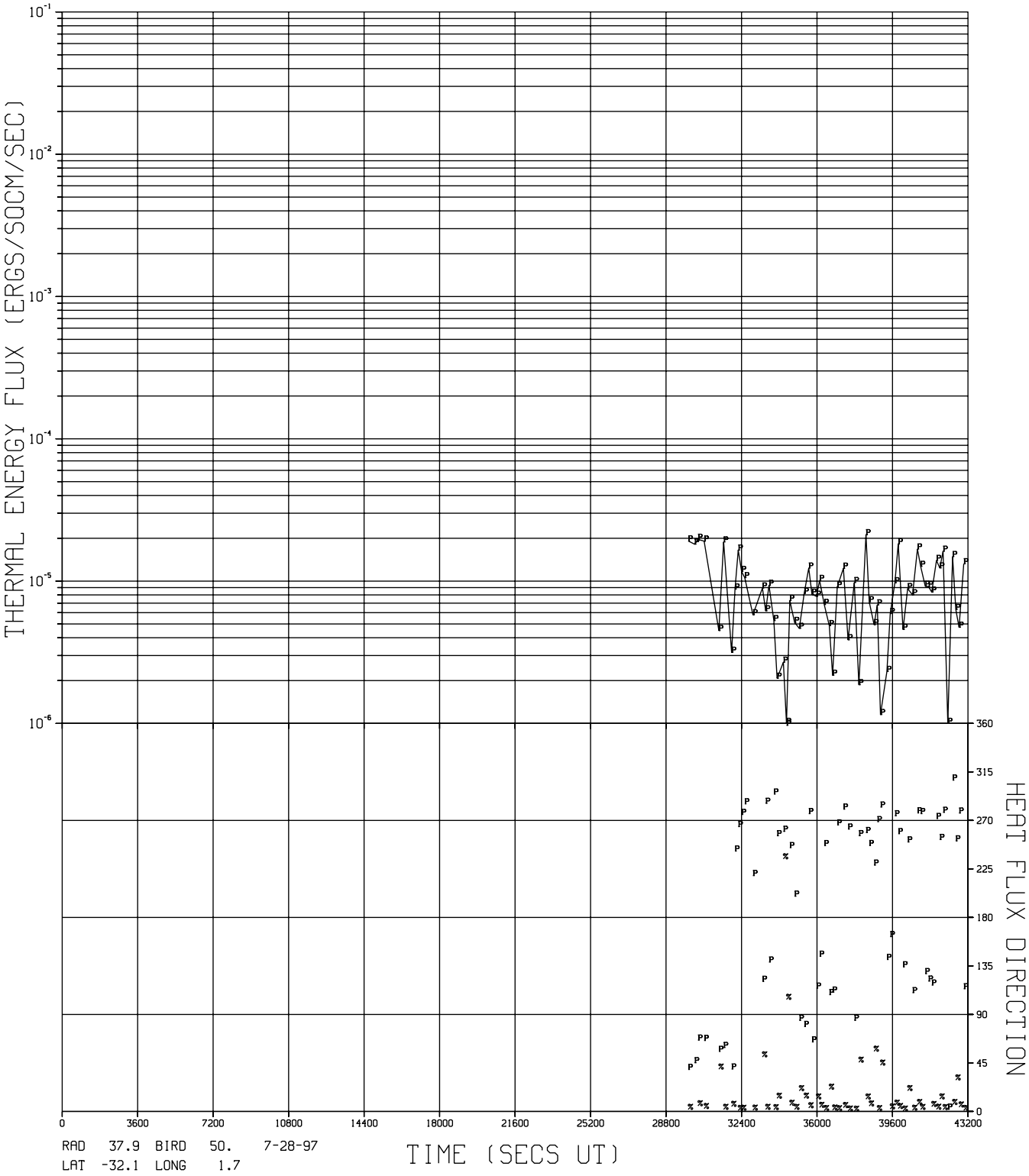

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
TIME (SECS UT)
RAD 38.1 BIRD 50. 7-27-97
LAT -22.2 LONG -18.5

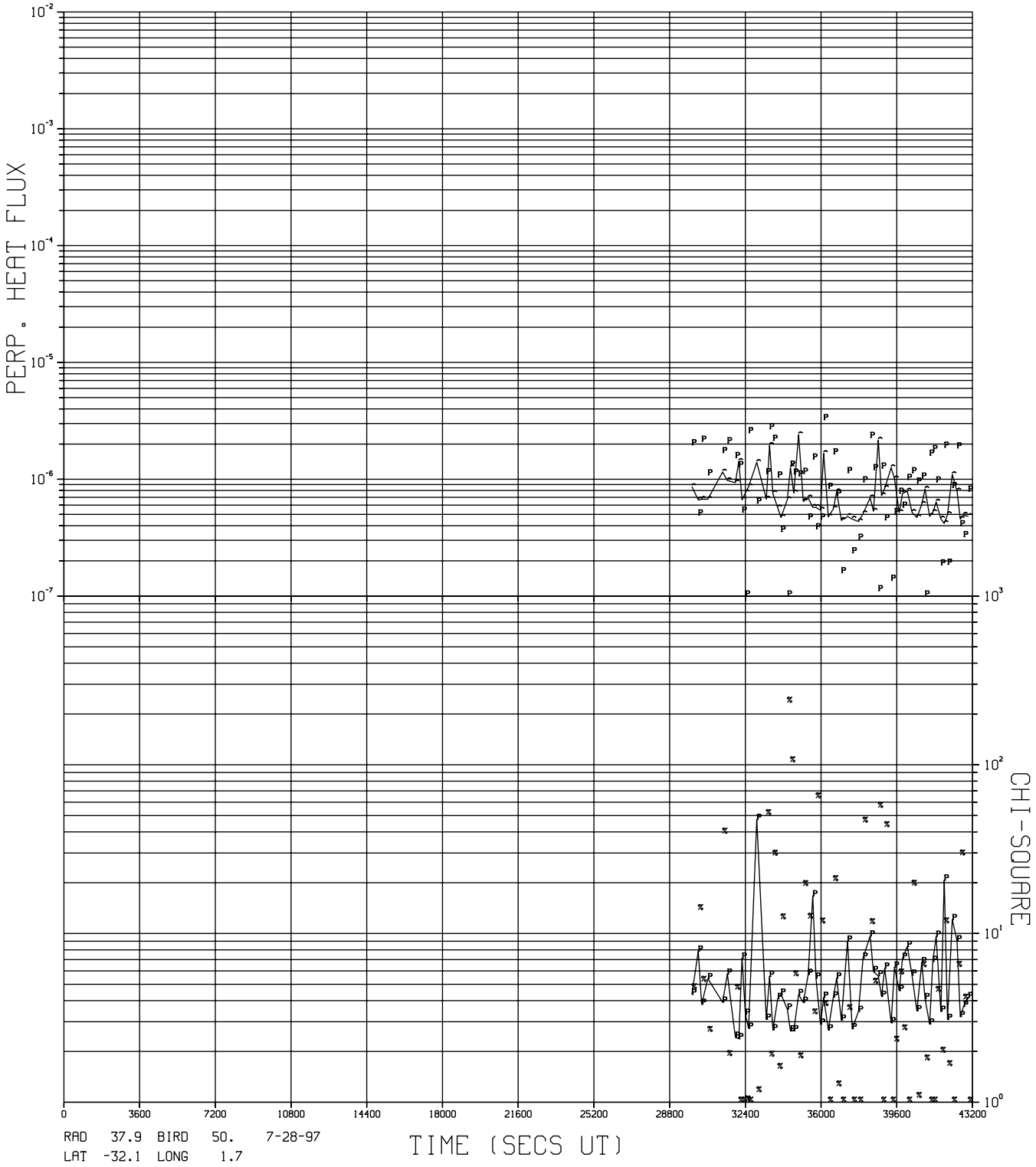

DENSITY
DENSITY RATIO
TIME (SECS UT)
RAD 37.9 BIRD 50. 7-28-97
LAT -32.1 LONG 1.7

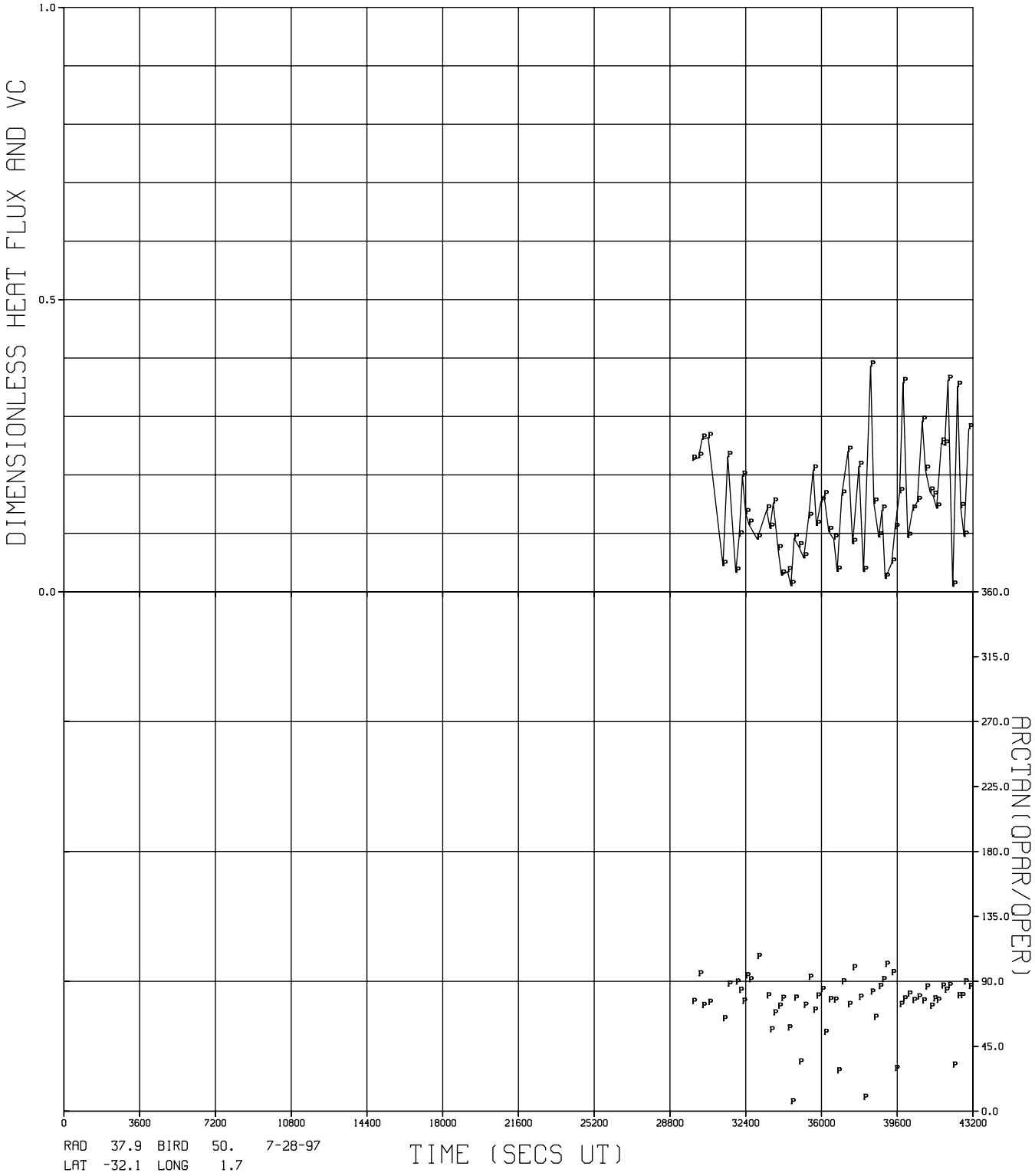

VELOCITY
1000
900
800
700
600
500
400
300
200
100
0
VELOCITY DIFFERENCE
100
80
60
40
20
0
-20
-40
-60
-80
-100
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
TIME (SECS UT)
RAD 37.9 BIRD 50. 7-28-97
LAT -32.1 LONG 1.7

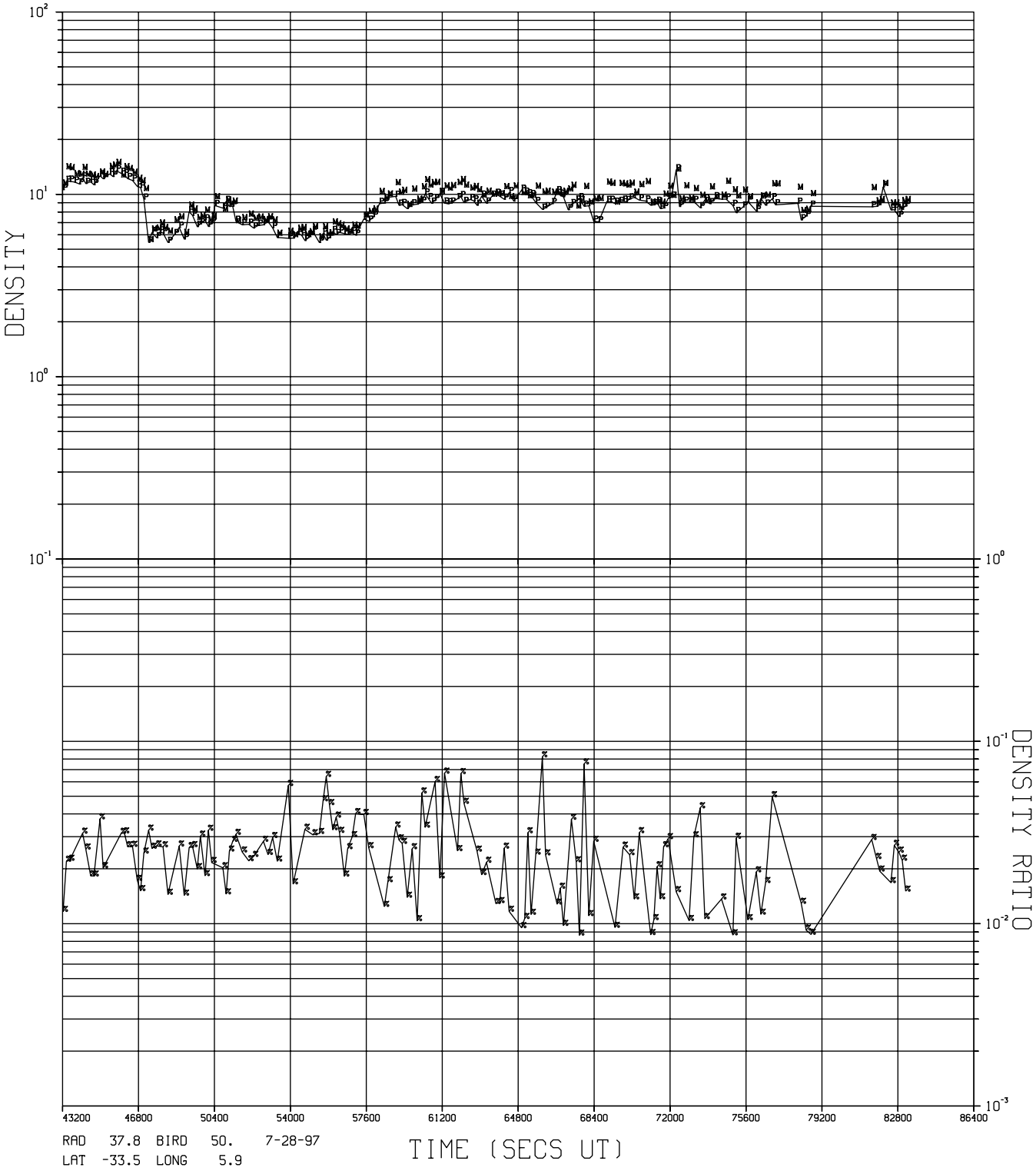

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
RAD 37.9 BIRD 50. 7-28-97
LAT -32.1 LONG 1.7

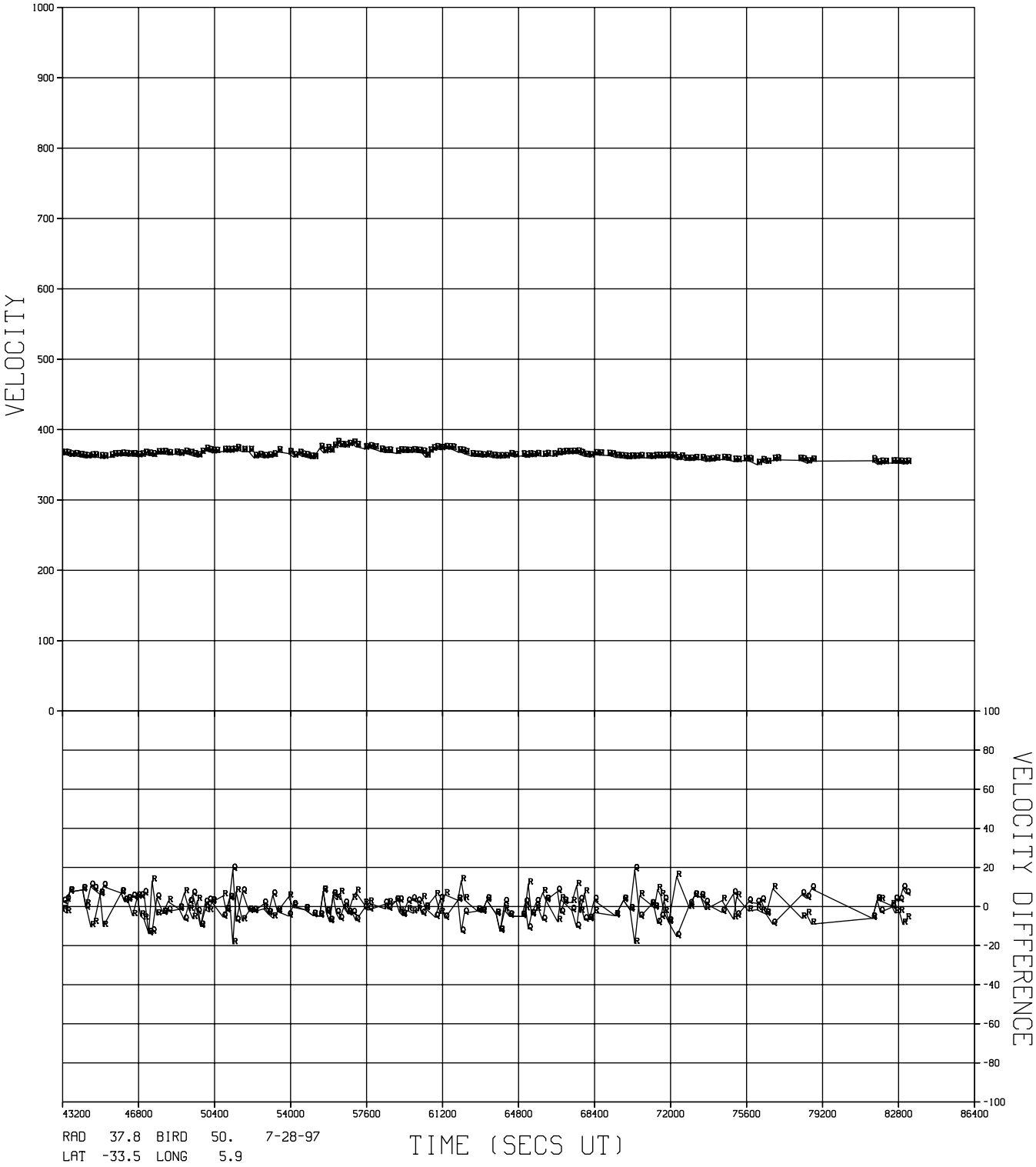

TEMPERATURE
10^7
10^6
10^5
10^4
TEMPERATURE RATIO
0
1
2
3
4
5
6
7
8
9
10
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
RAD 37.9 BIRD 50. 7-28-97
LAT -32.1 LONG 1.7
TIME (SECS UT)

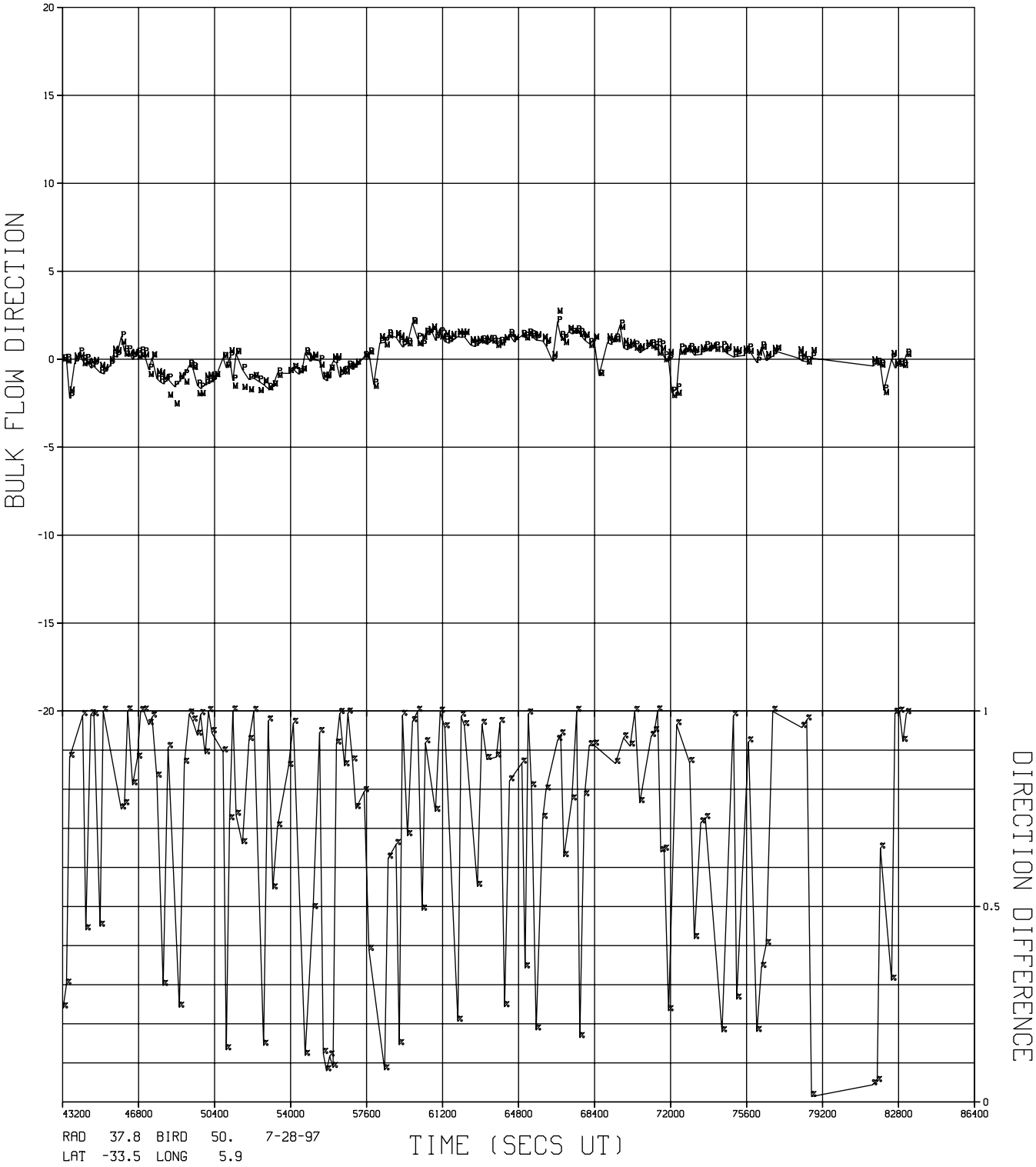

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 37.9 BIRD 50. 7-28-97
LAT -32.1 LONG 1.7

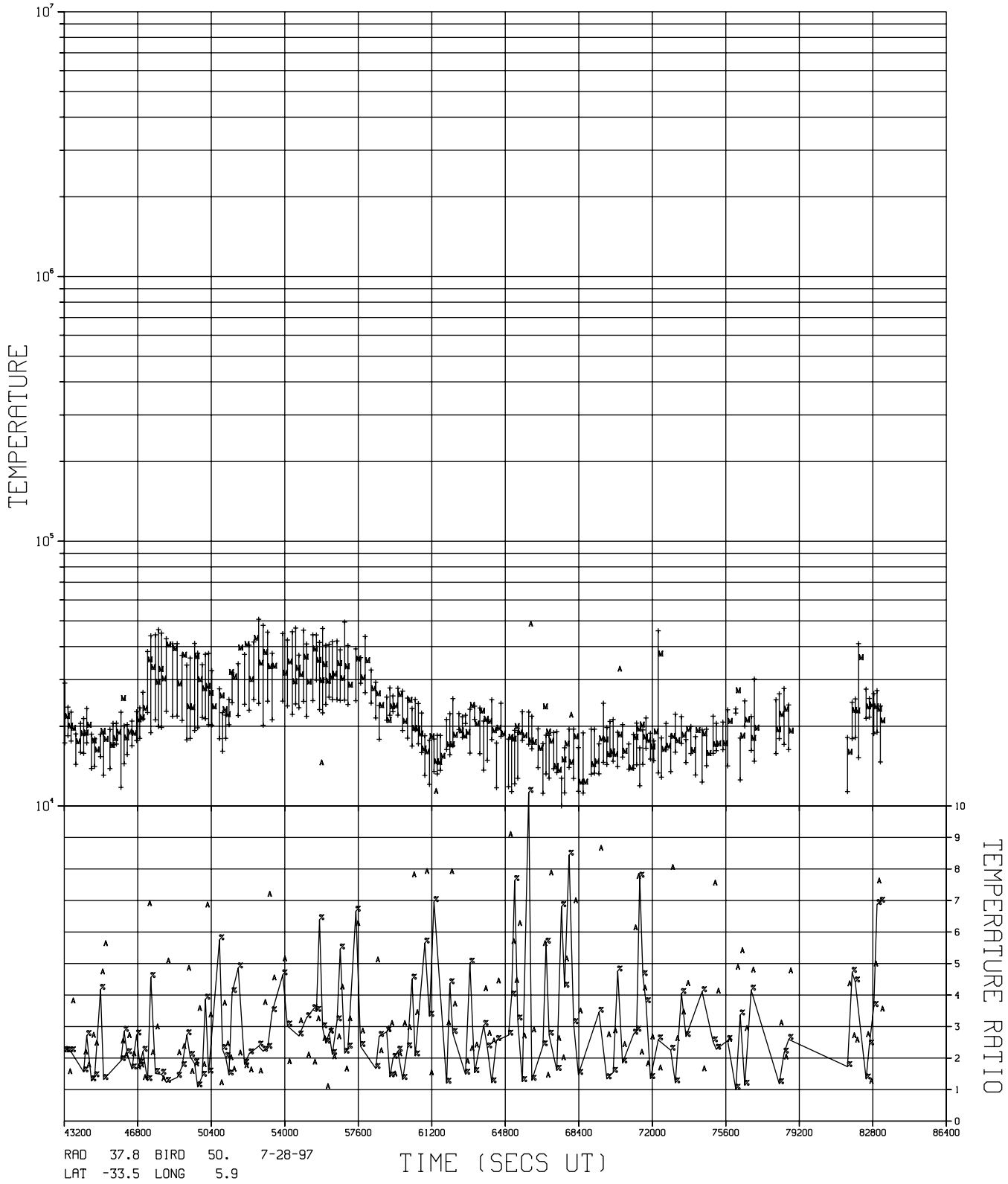

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
RAD 37.9 BIRD 50. 7-28-97
LAT -32.1 LONG 1.7

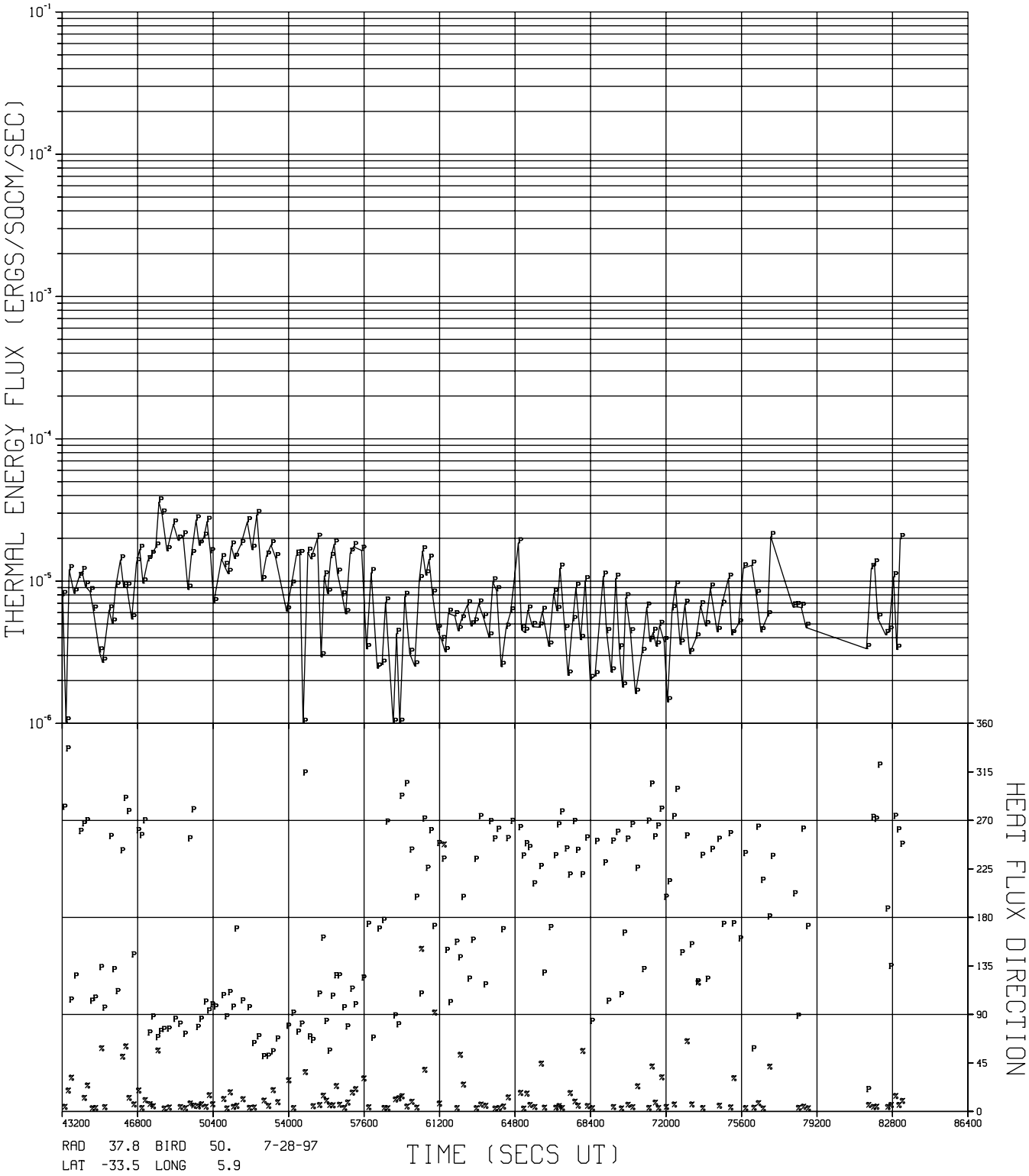

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
RAD 37.9 BIRD 50. 7-28-97
LAT -32.1 LONG 1.7
TIME (SECS UT)

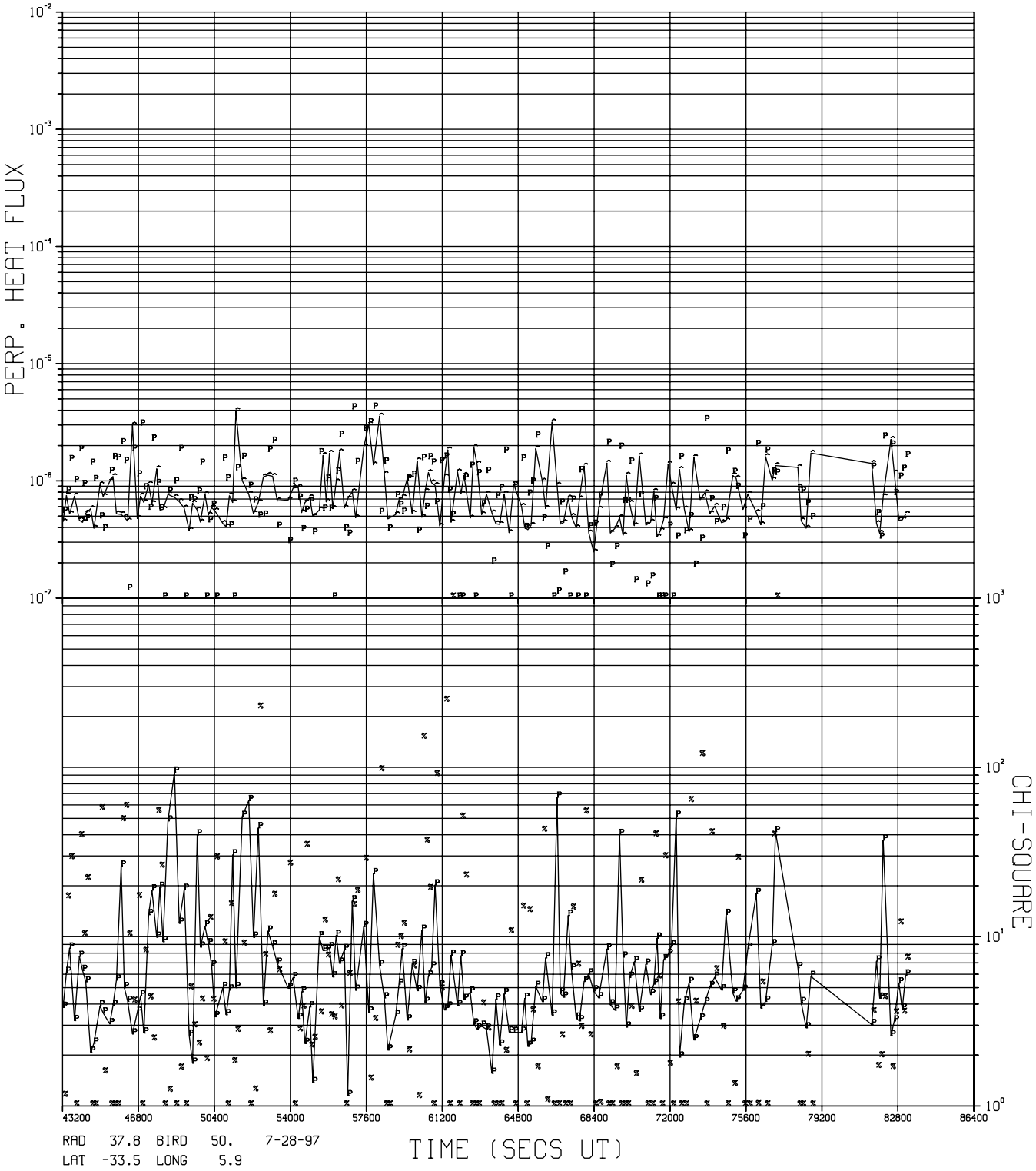

DENSITY
DENSITY RATIO
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 37.8 BIRD 50. 7-28-97
LAT -33.5 LONG 5.9

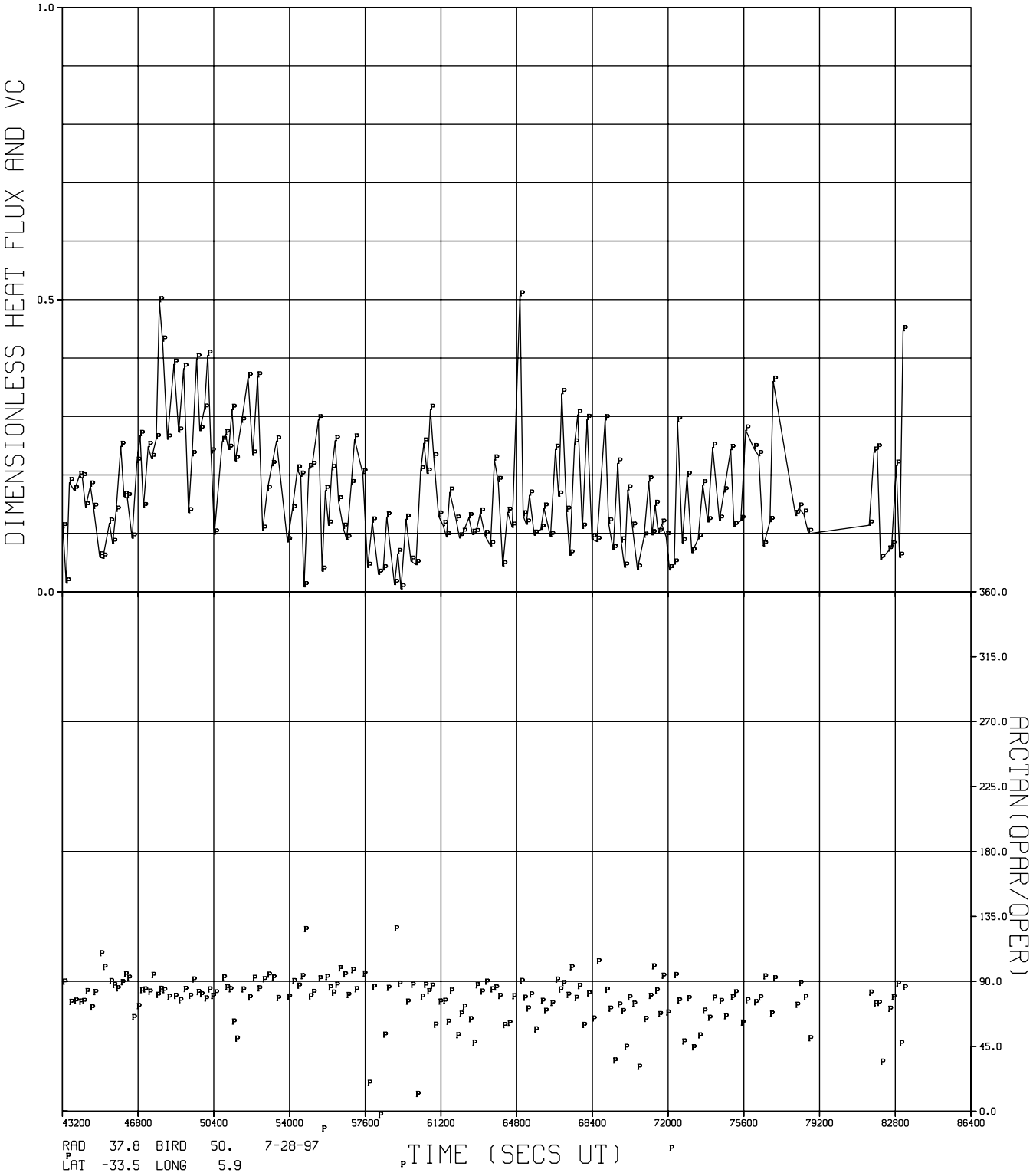

VELOCITY
1000
900
800
700
600
500
400
300
200
100
0
VELOCITY DIFFERENCE
100
80
60
40
20
0
-20
-40
-60
-80
-100
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 37.8 BIRD 50. 7-28-97
LAT -33.5 LONG 5.9
TIME (SECS UT)

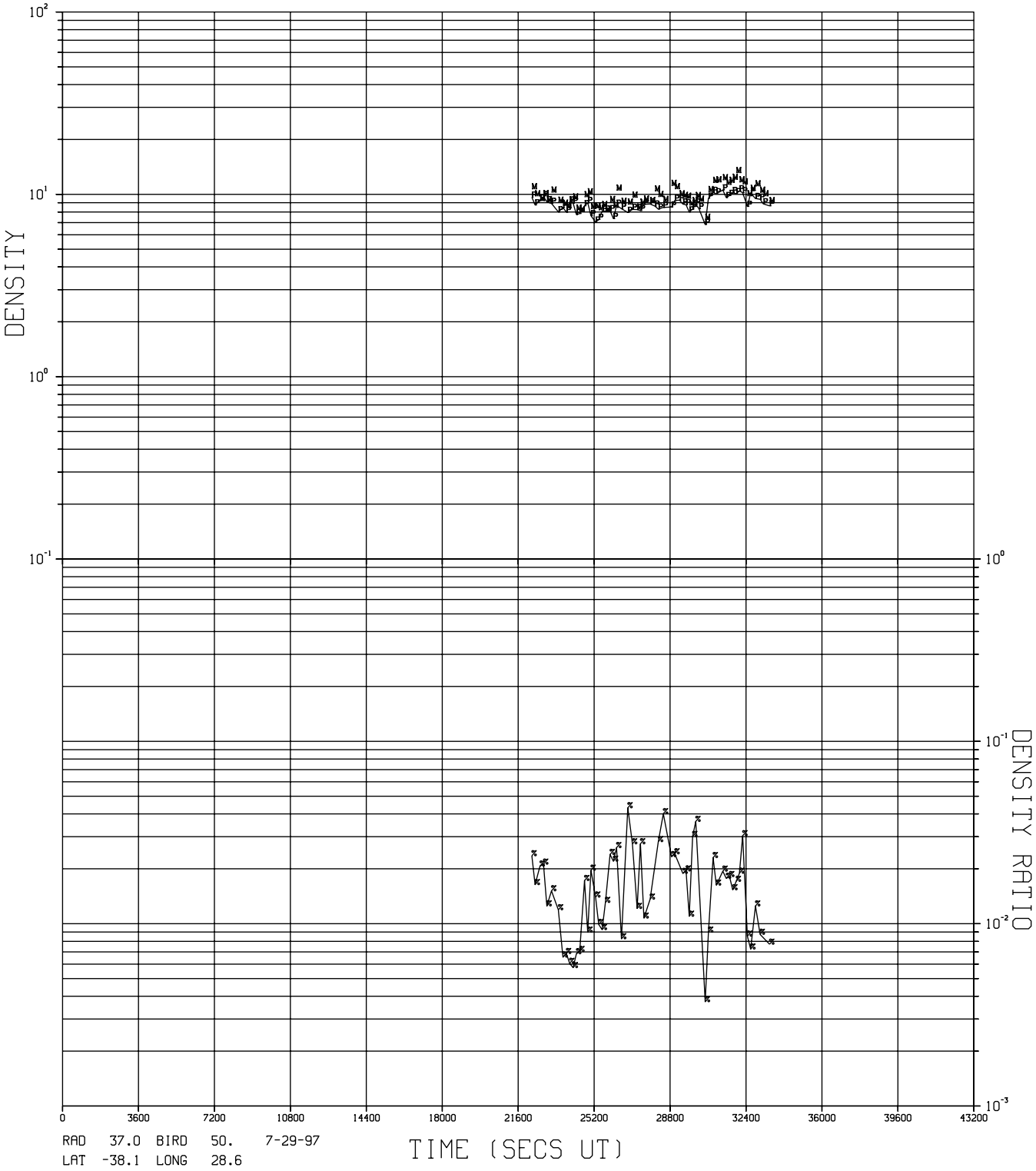

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 37.8 BIRD 50. 7-28-97
LAT -33.5 LONG 5.9

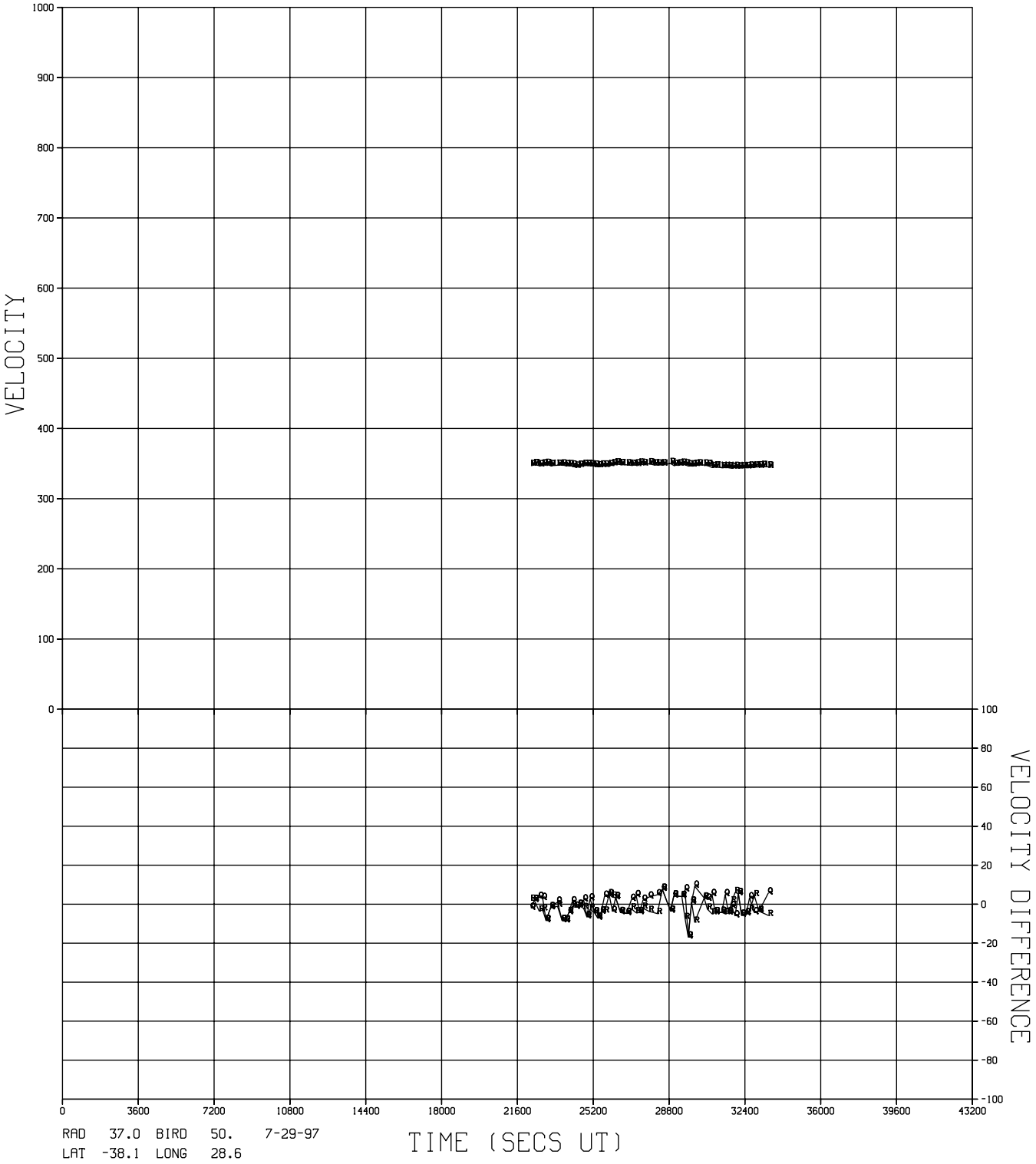

TEMPERATURE
TEMPERATURE RATIO
TIME (SECS UT)
RAD 37.8 BIRD 50. 7-28-97
LAT -33.5 LONG 5.9

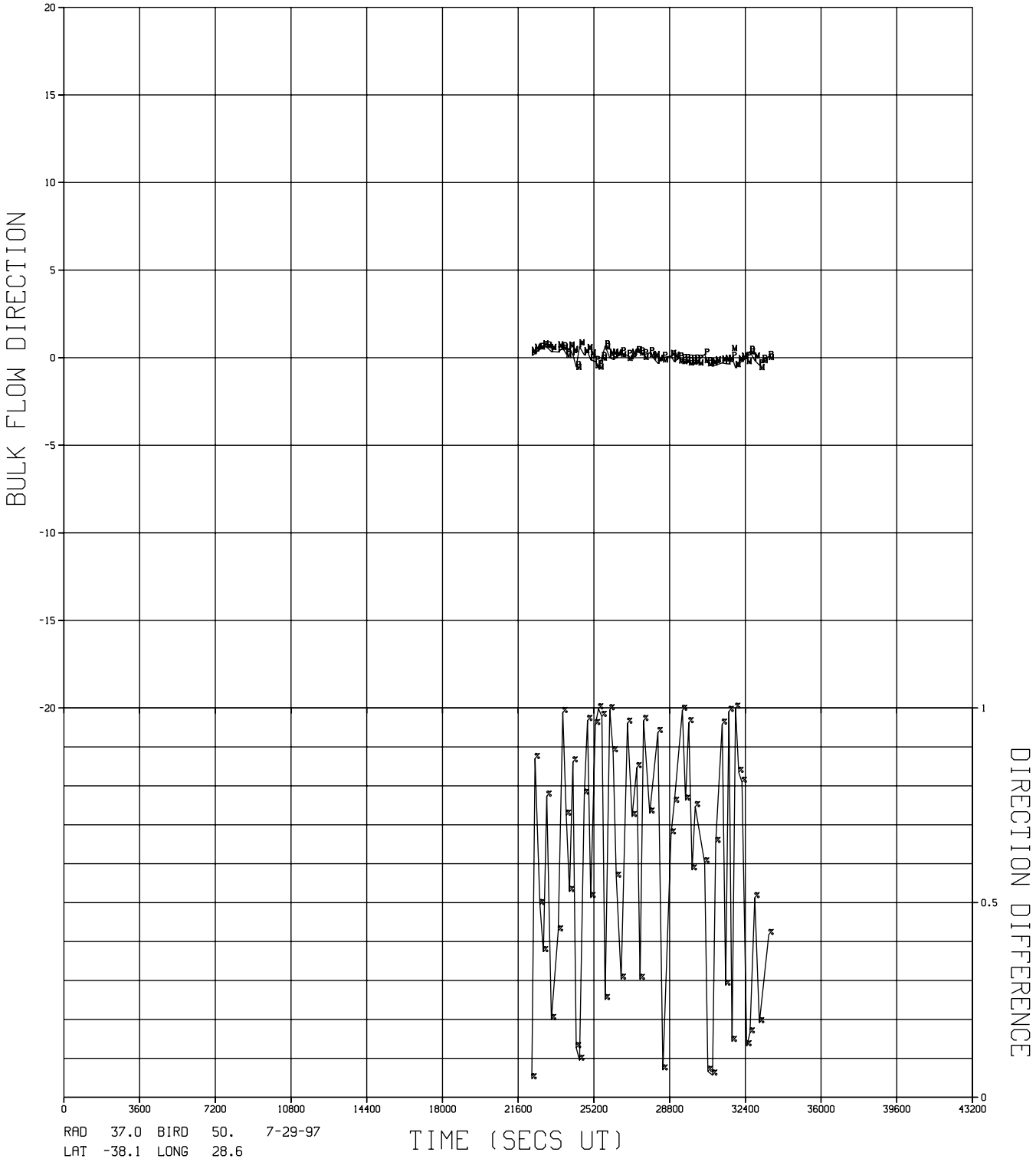

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 37.8 BIRD 50. 7-28-97
LAT -33.5 LONG 5.9

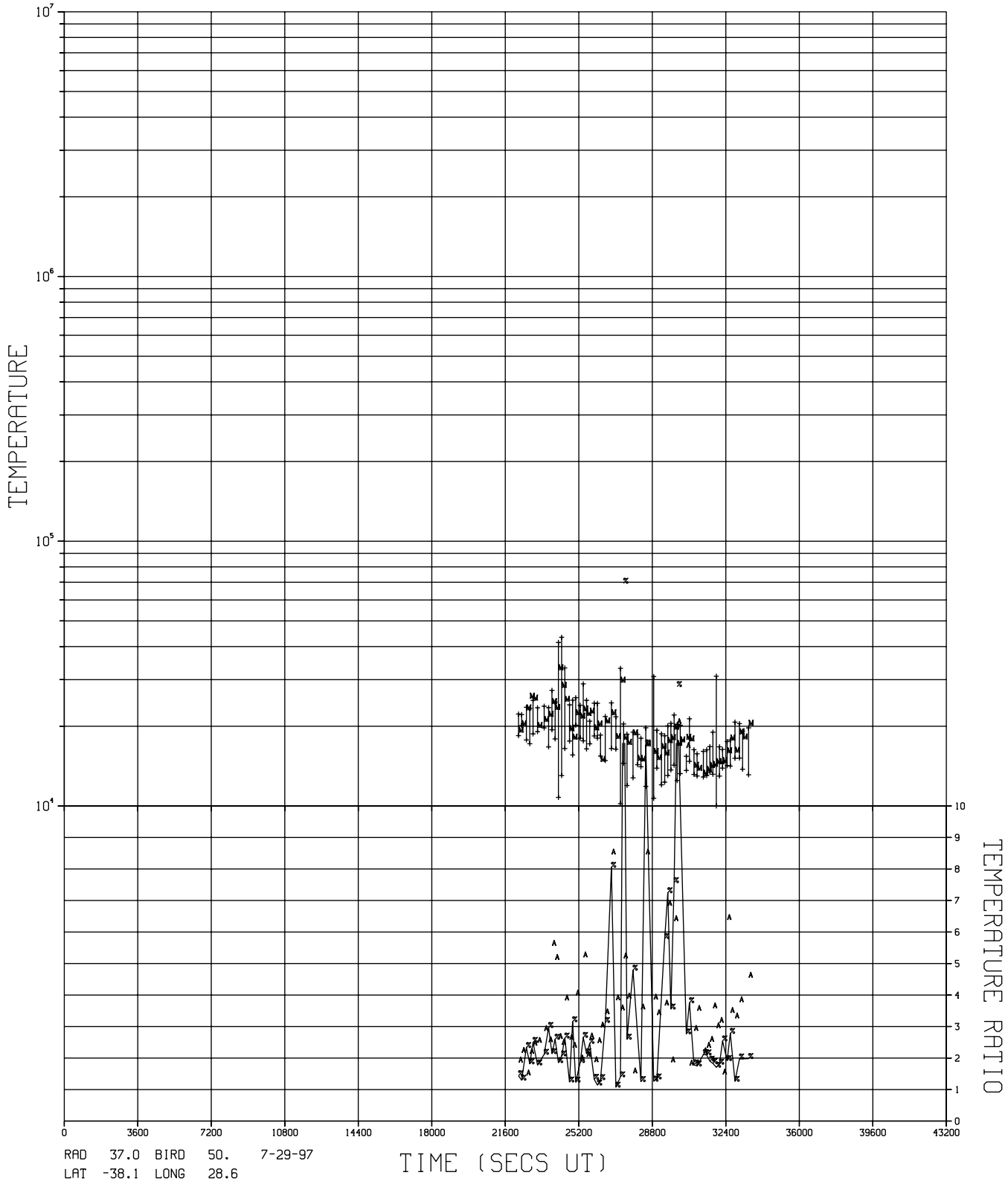

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 37.8 BIRD 50. 7-28-97
LAT -33.5 LONG 5.9

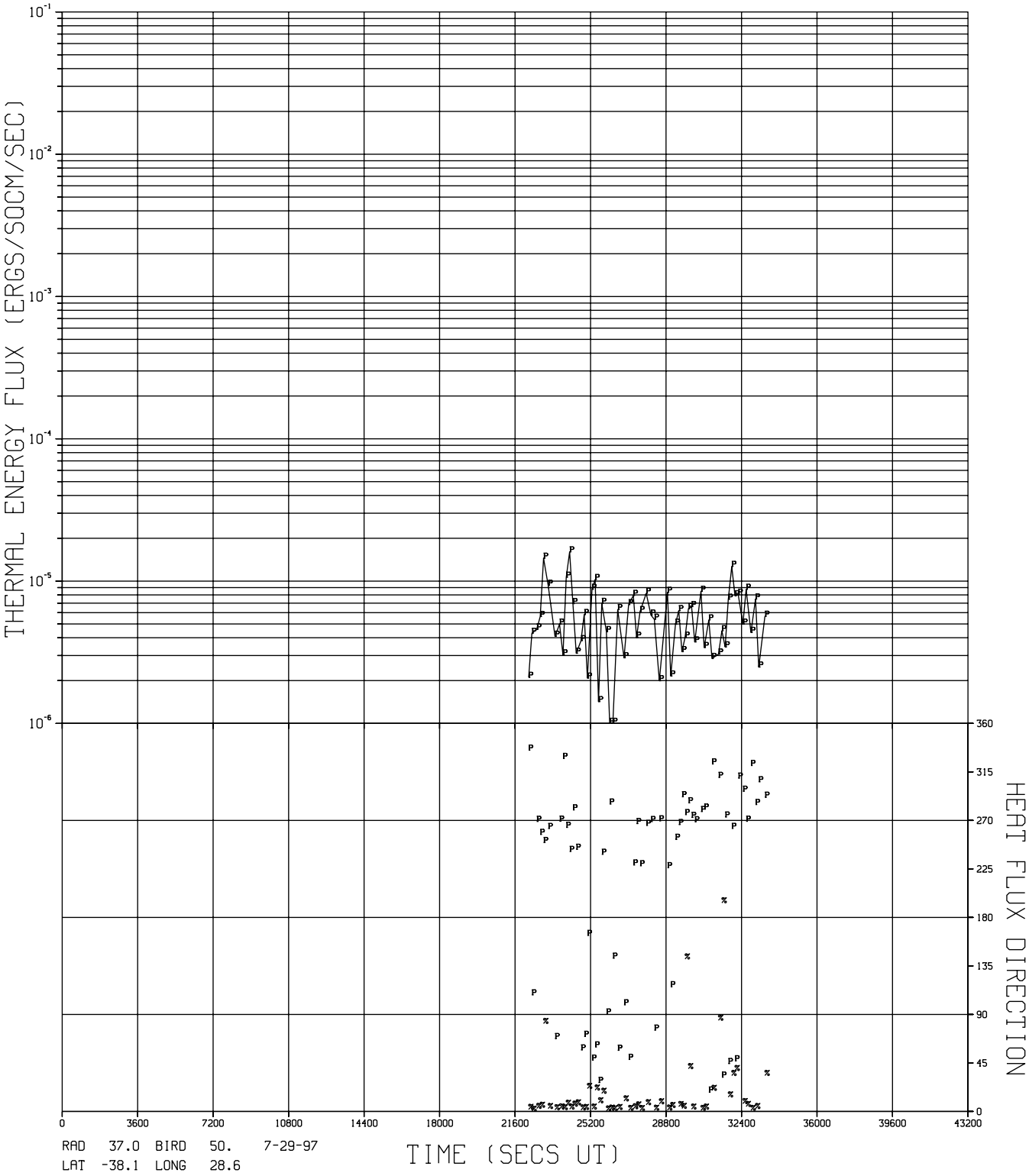

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
TIME (SECS UT)
RAD 37.8 BIRD 50. 7-28-97
LAT -33.5 LONG 5.9

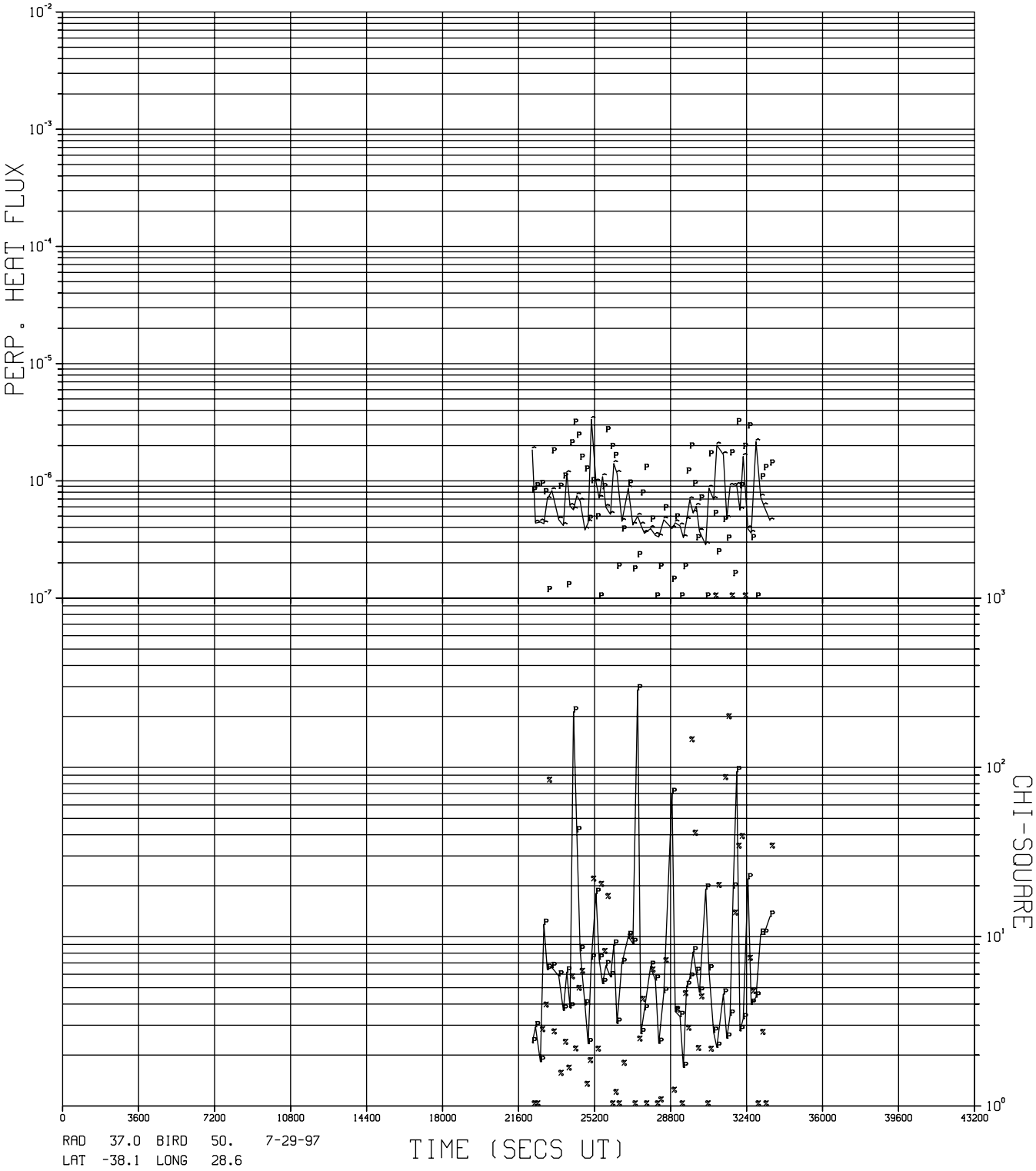

DENSITY
DENSITY RATIO
TIME (SECS UT)
RAD 37.0 BIRD 50. 7-29-97
LAT -38.1 LONG 28.6

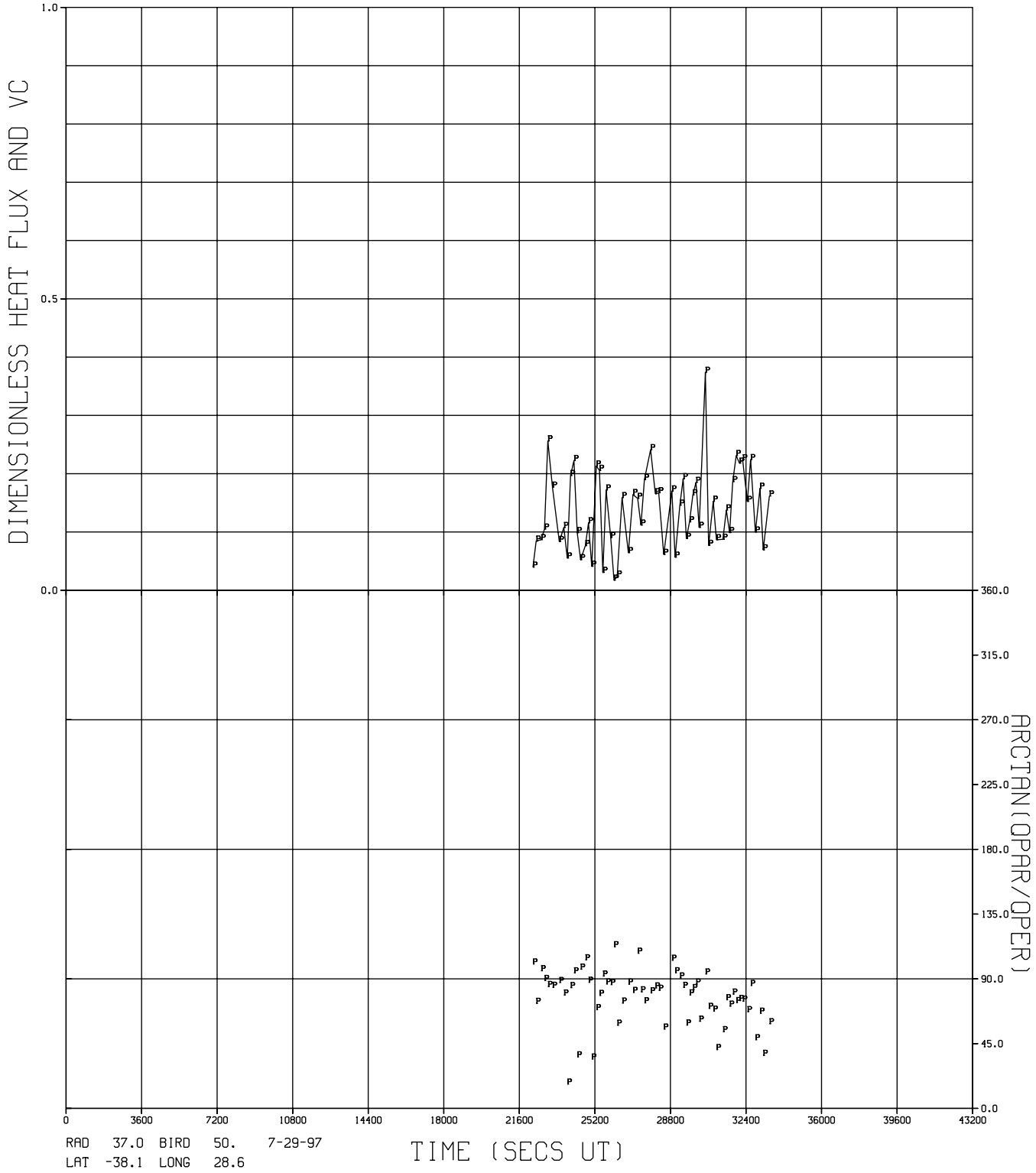

VELOCITY
1000
900
800
700
600
500
400
300
200
100
0
VELOCITY DIFFERENCE
100
80
60
40
20
0
-20
-40
-60
-80
-100
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
RAD 37.0 BIRD 50. 7-29-97
LAT -38.1 LONG 28.6
TIME (SECS UT)


BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
RAD 37.0 BIRD 50. 7-29-97
LAT -38.1 LONG 28.6


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
RAD 37.0 BIRD 50. 7-29-97
LAT -38.1 LONG 28.6
TIME (SECS UT)


THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 37.0 BIRD 50. 7-29-97
LAT -38.1 LONG 28.6


PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
RAD 37.0 BIRD 50. 7-29-97
LAT -38.1 LONG 28.6


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 37.0 BIRD 50. 7-29-97
LAT -38.1 LONG 28.6