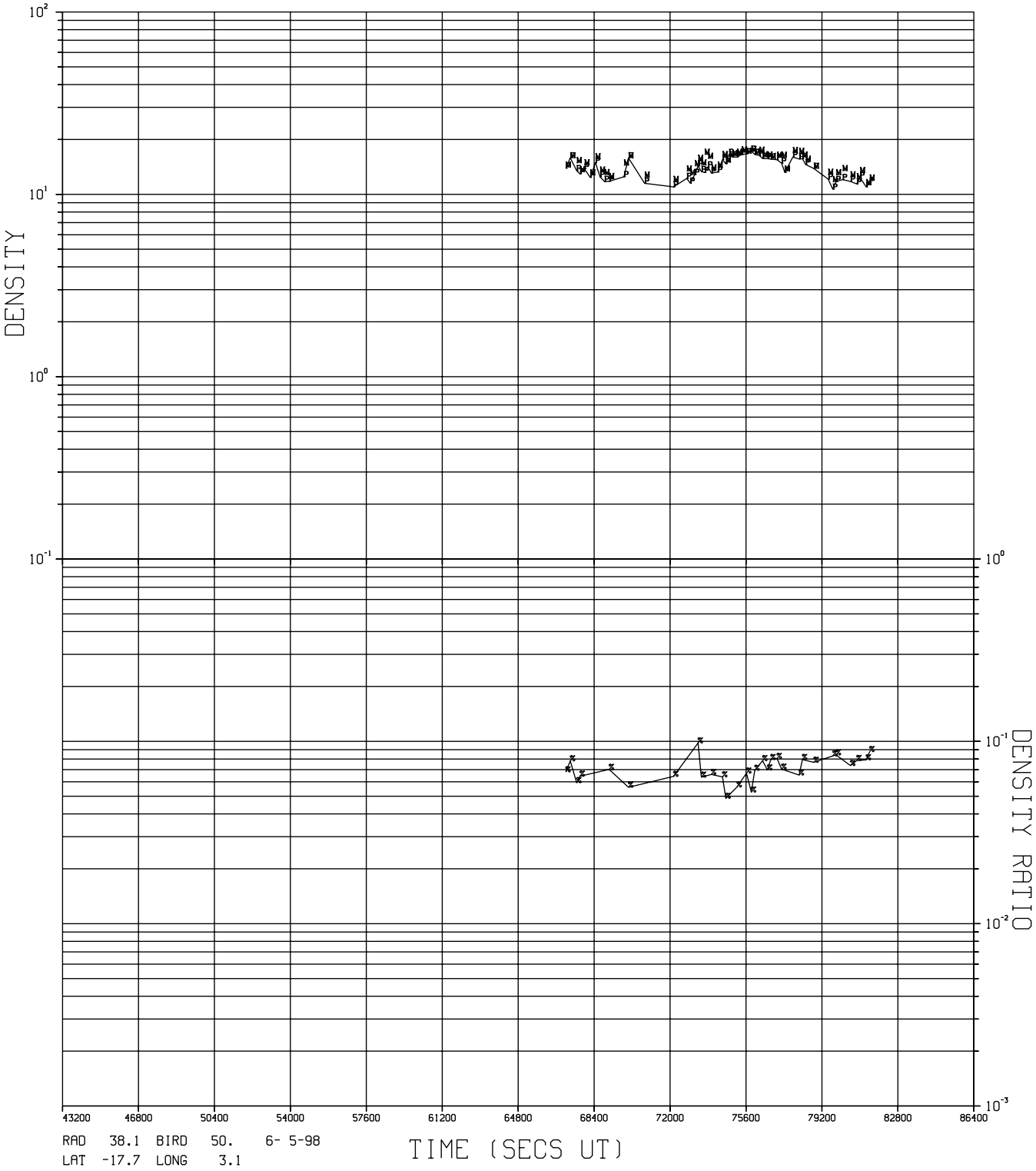
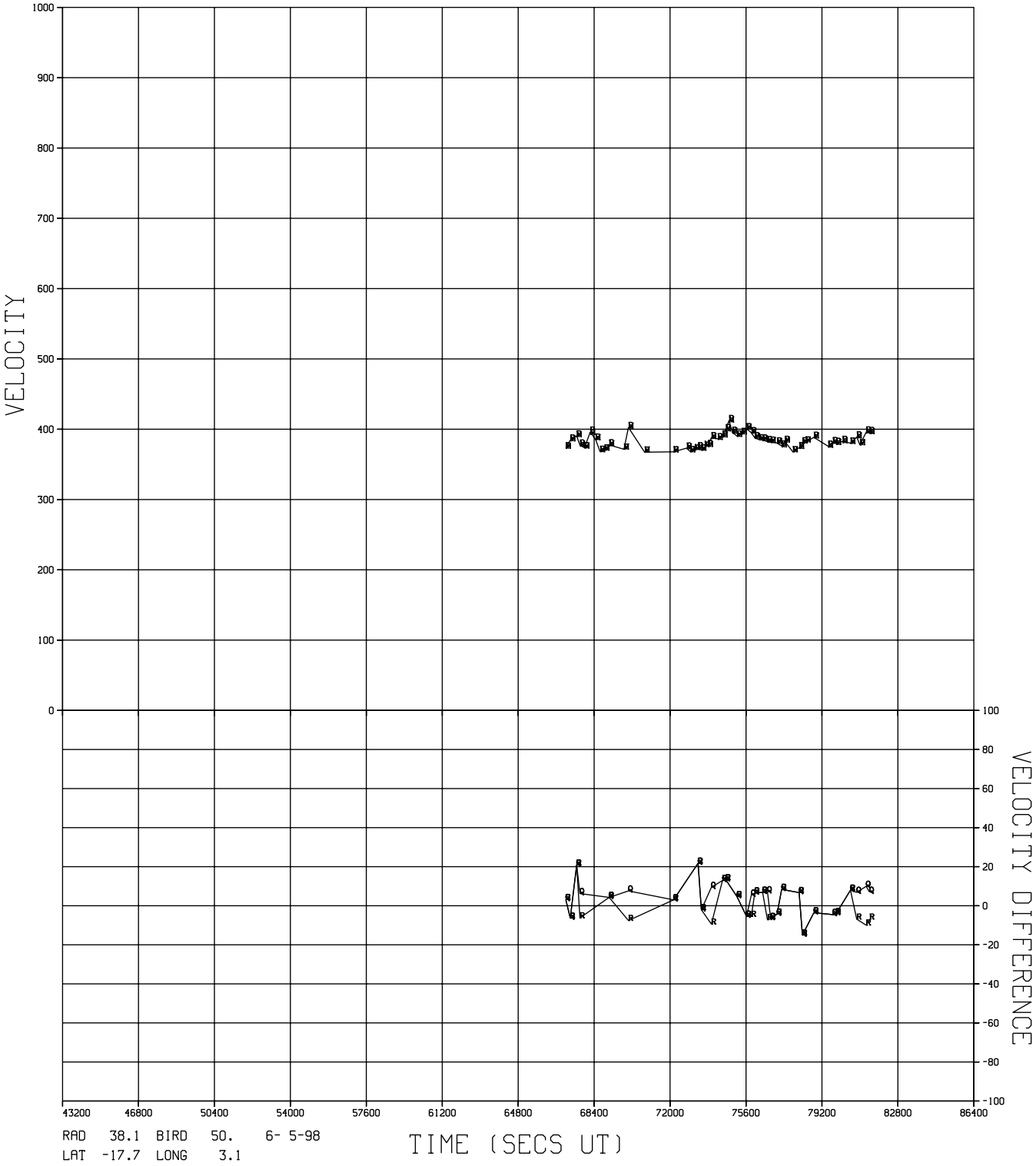
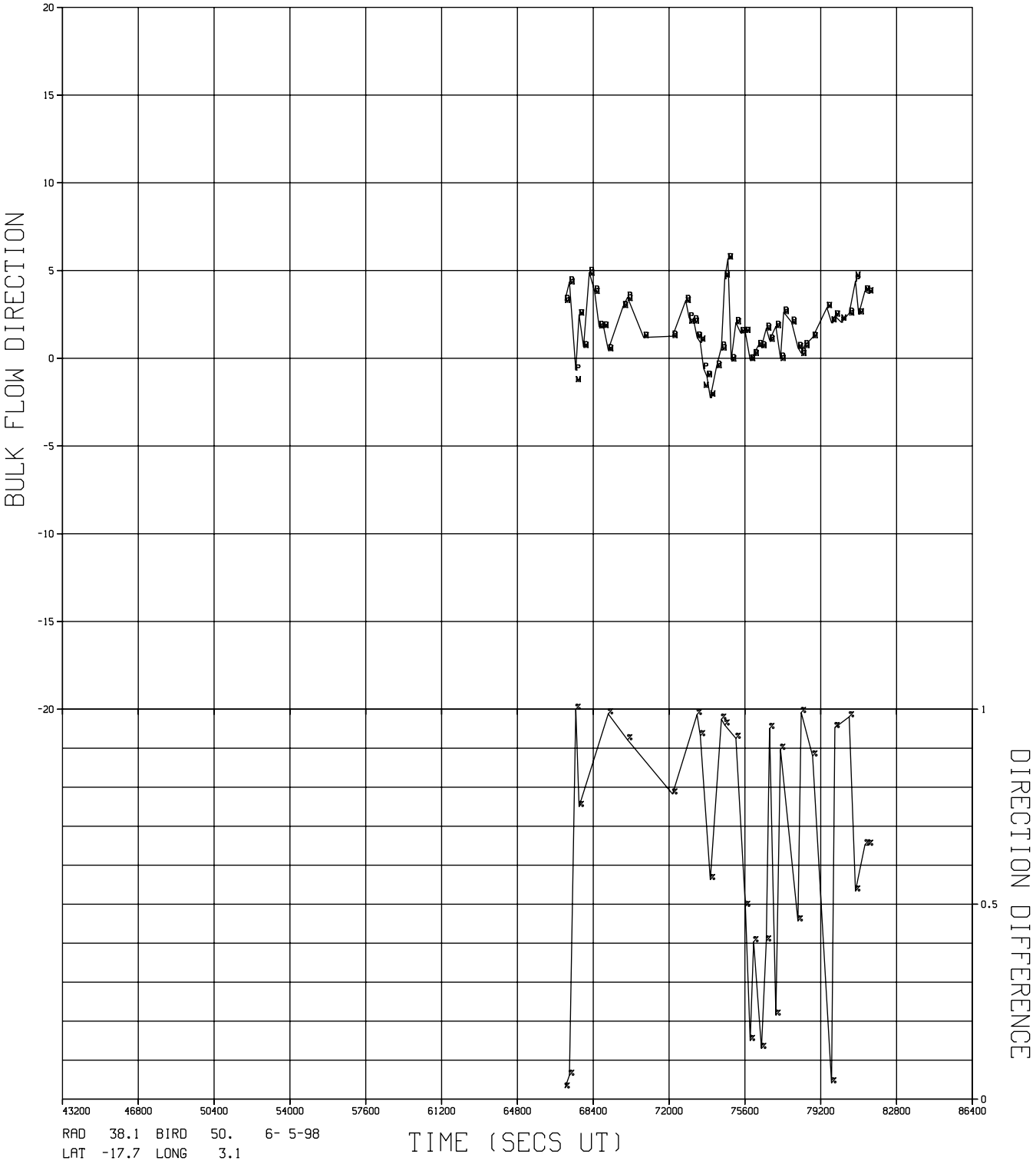
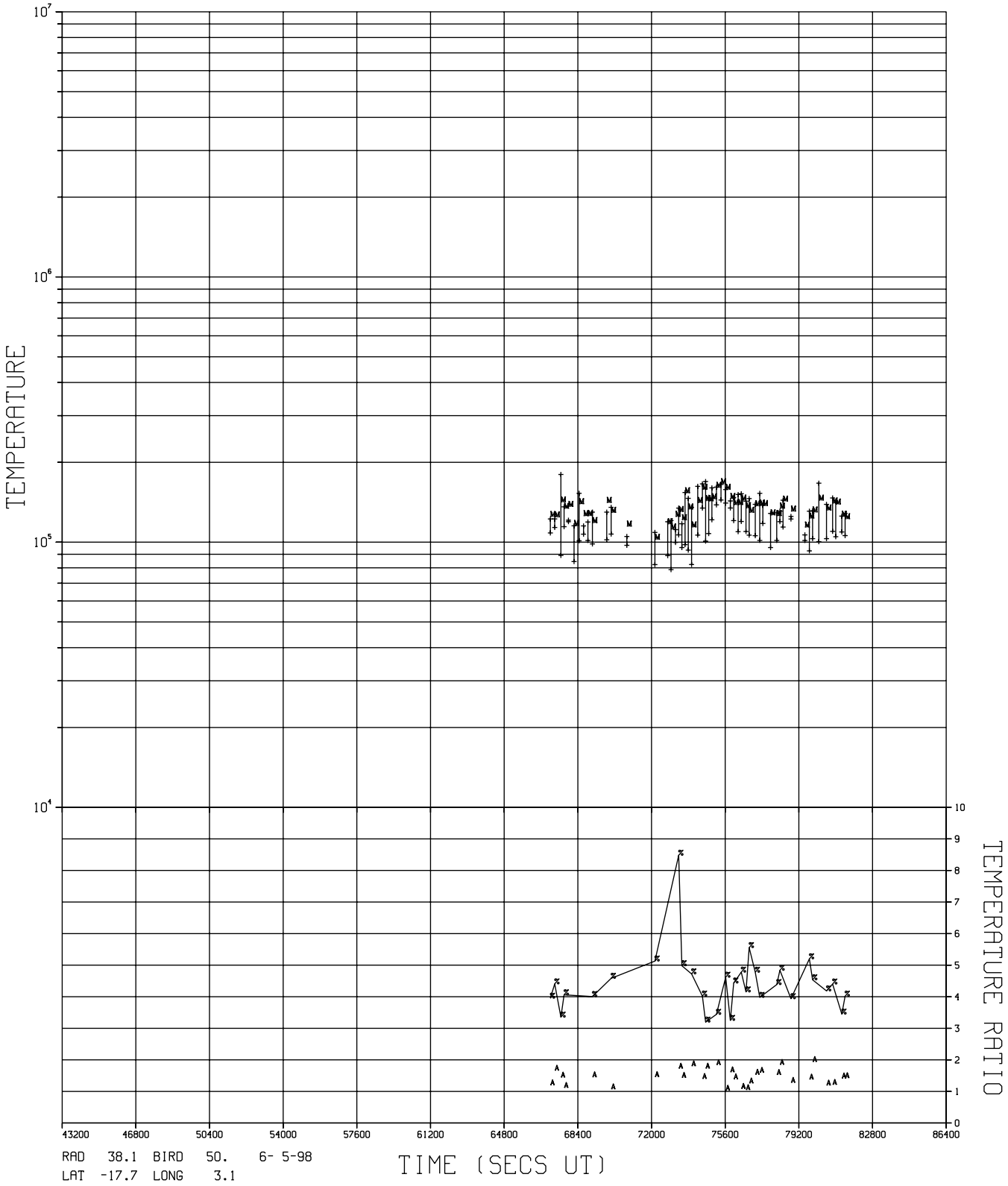
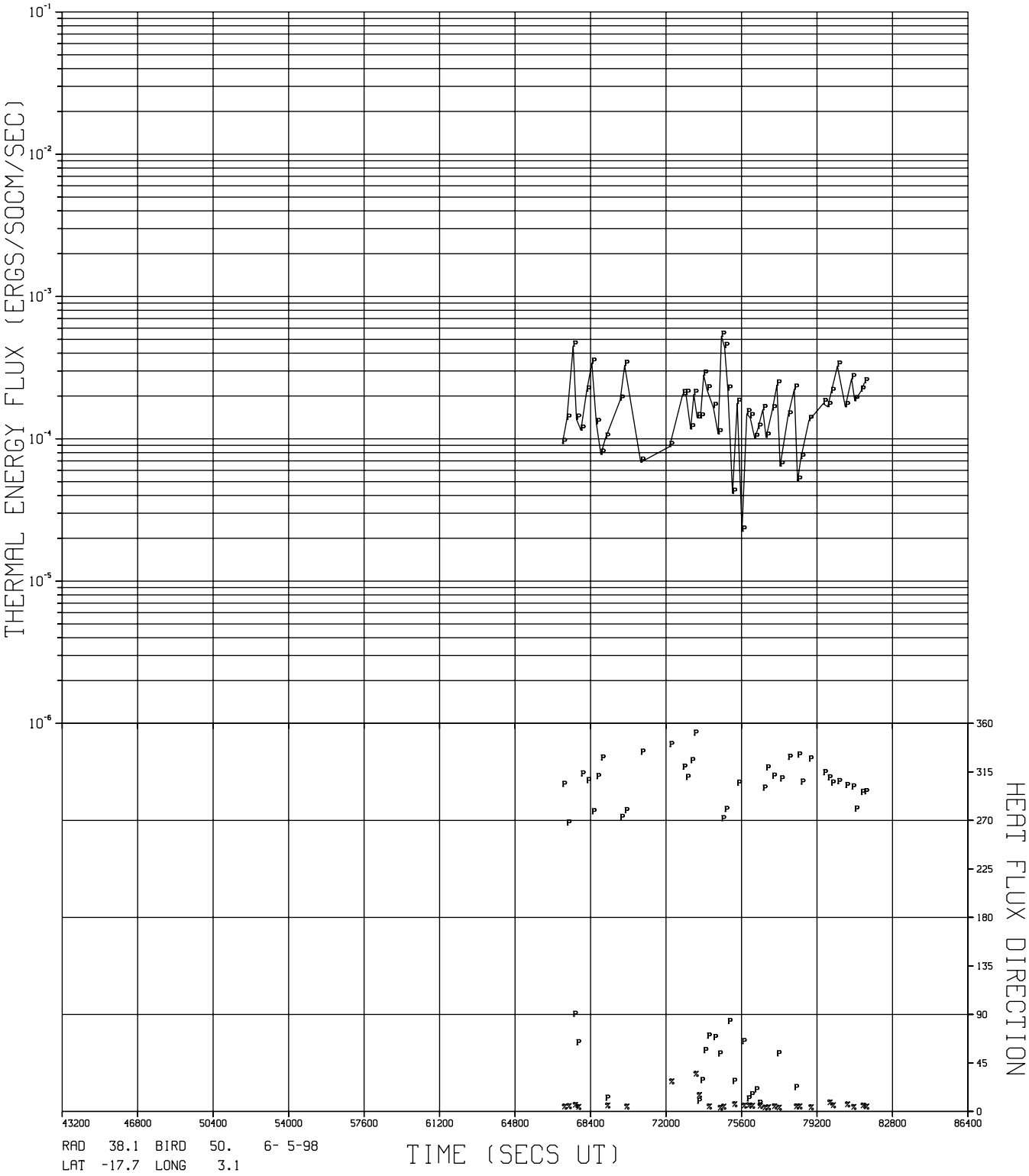
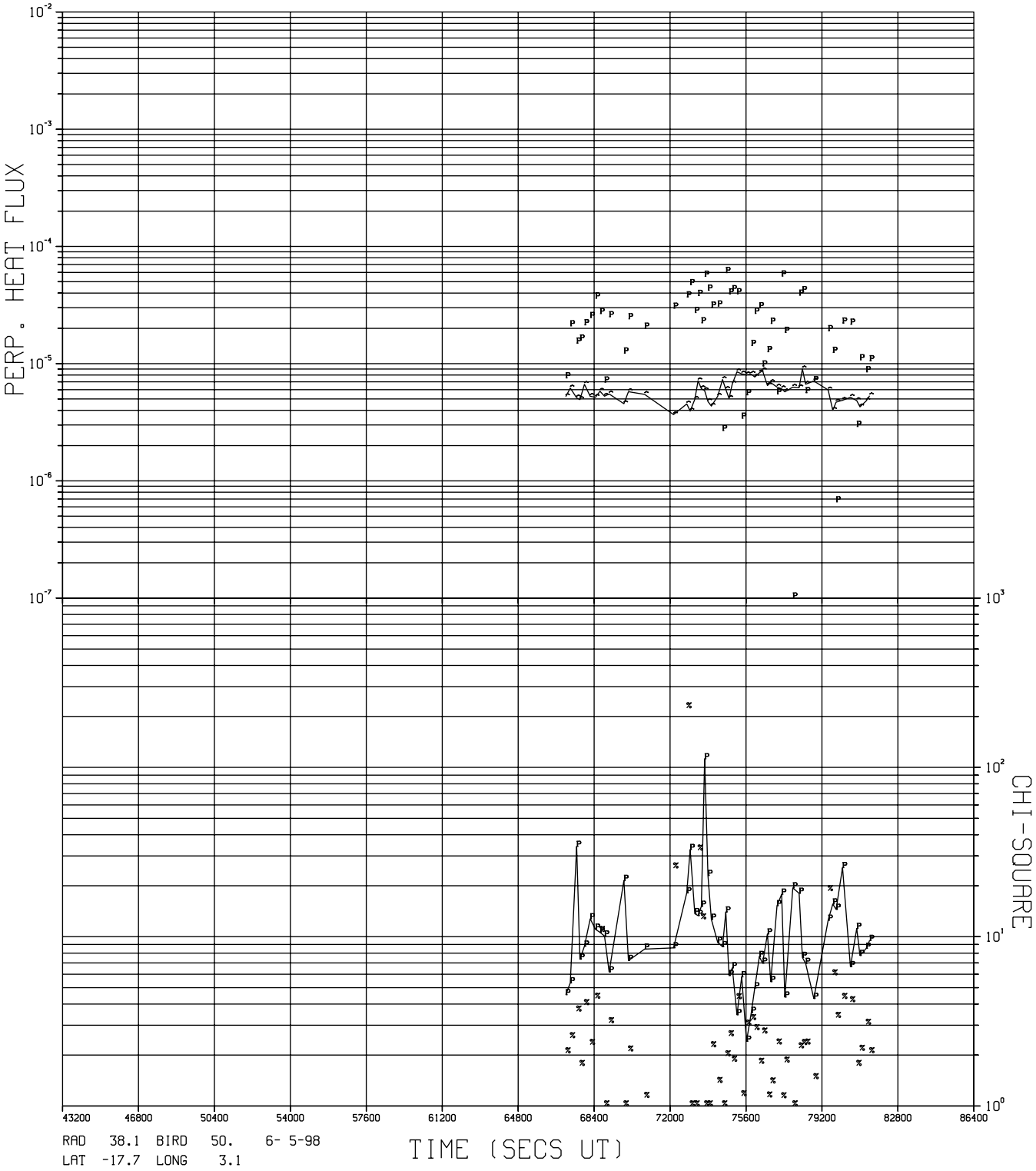

DENSITY
DENSITY RATIO
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 38.1 BIRD 50. 6- 5-98
LAT -17.7 LONG 3.1

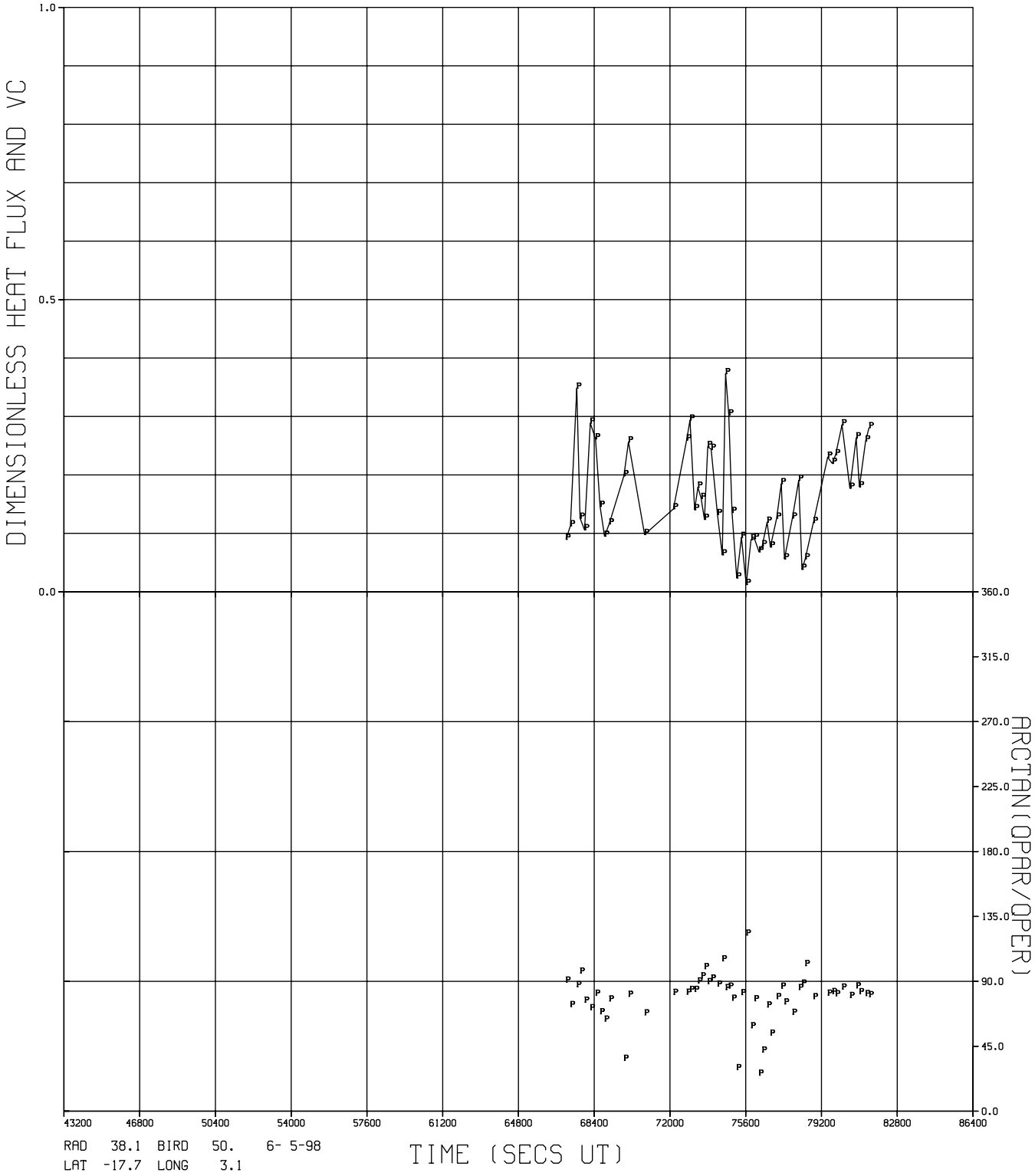

VELOCITY
1000
900
800
700
600
500
400
300
200
100
0
VELOCITY DIFFERENCE
100
80
60
40
20
0
-20
-40
-60
-80
-100
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 38.1 BIRD 50. 6- 5-98
LAT -17.7 LONG 3.1
TIME (SECS UT)

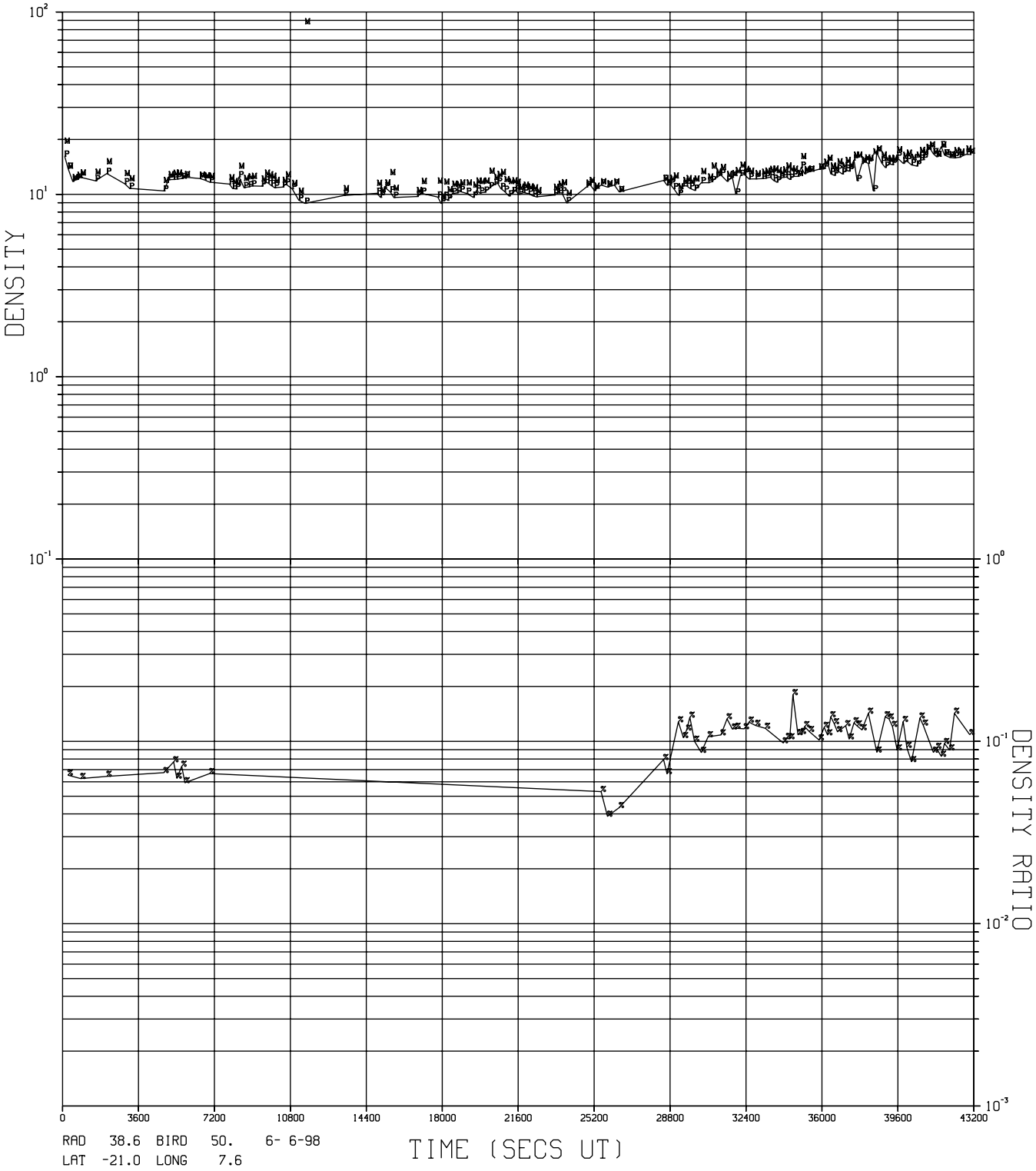

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 38.1 BIRD 50. 6- 5-98
LAT -17.7 LONG 3.1

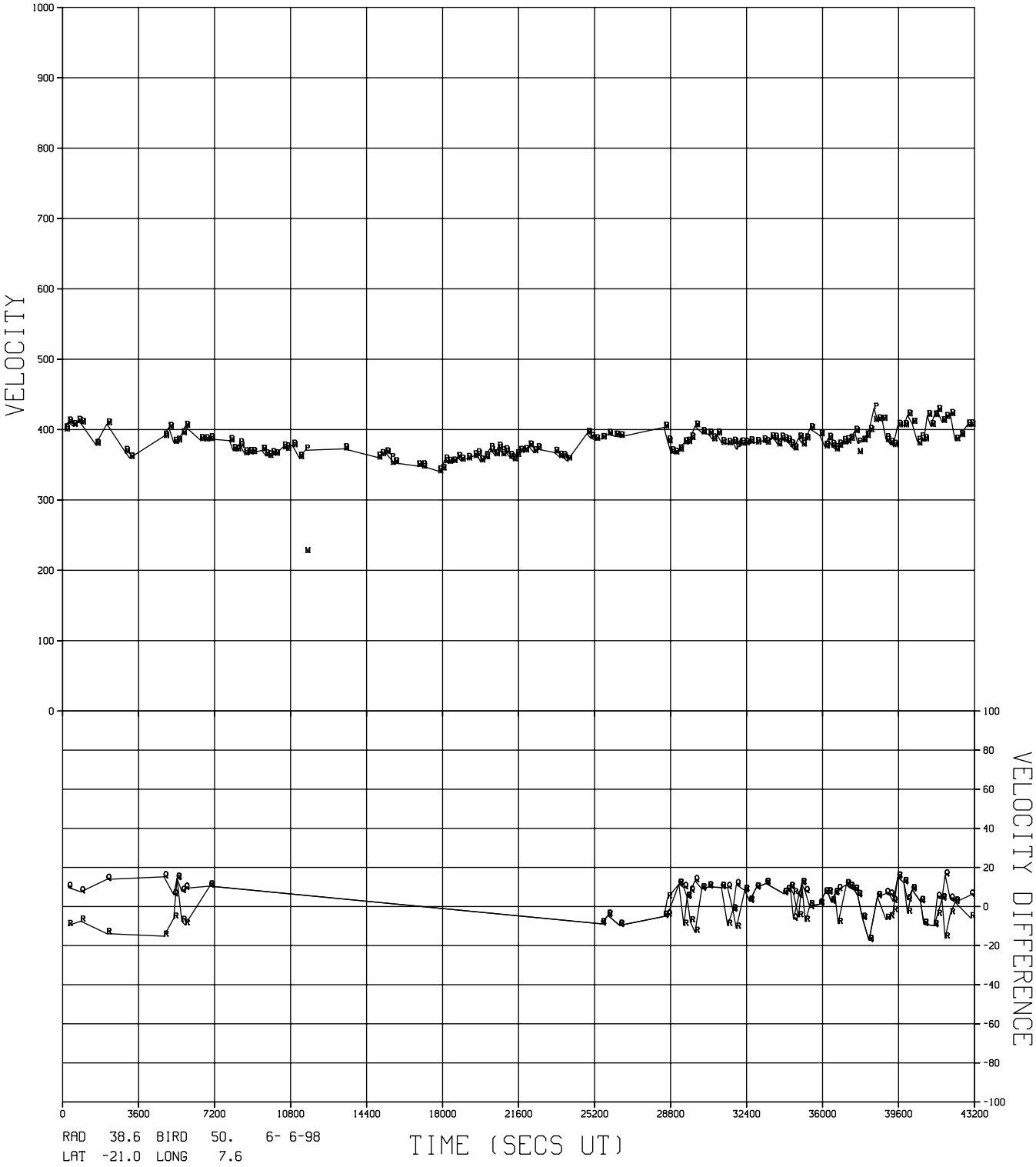

TEMPERATURE
10^7
10^6
10^5
10^4
TEMPERATURE RATIO
0
1
2
3
4
5
6
7
8
9
10
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
TIME (SECS UT)
RAD 38.1 BIRD 50. 6- 5-98
LAT -17.7 LONG 3.1

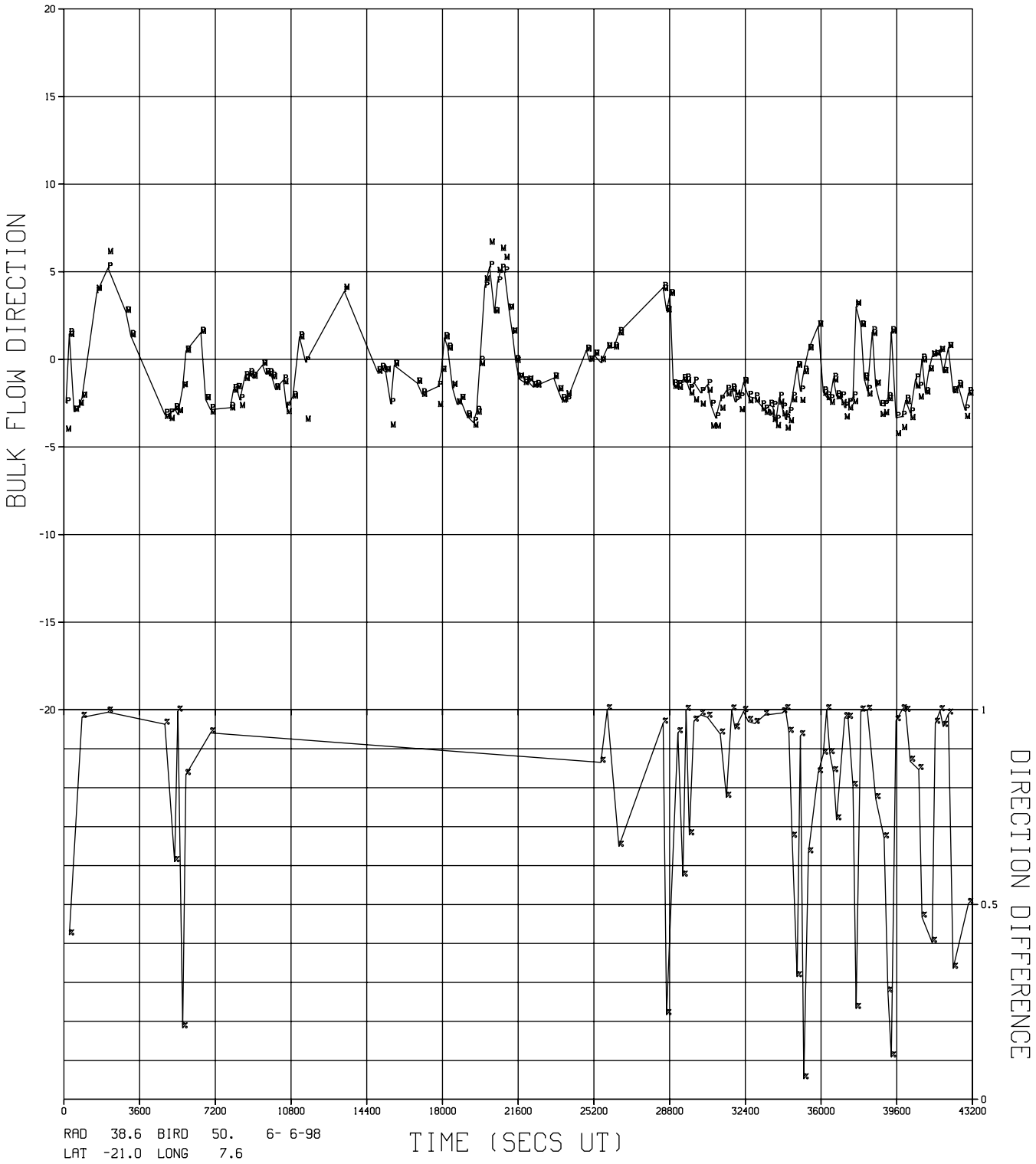

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 38.1 BIRD 50. 6- 5-98
LAT -17.7 LONG 3.1

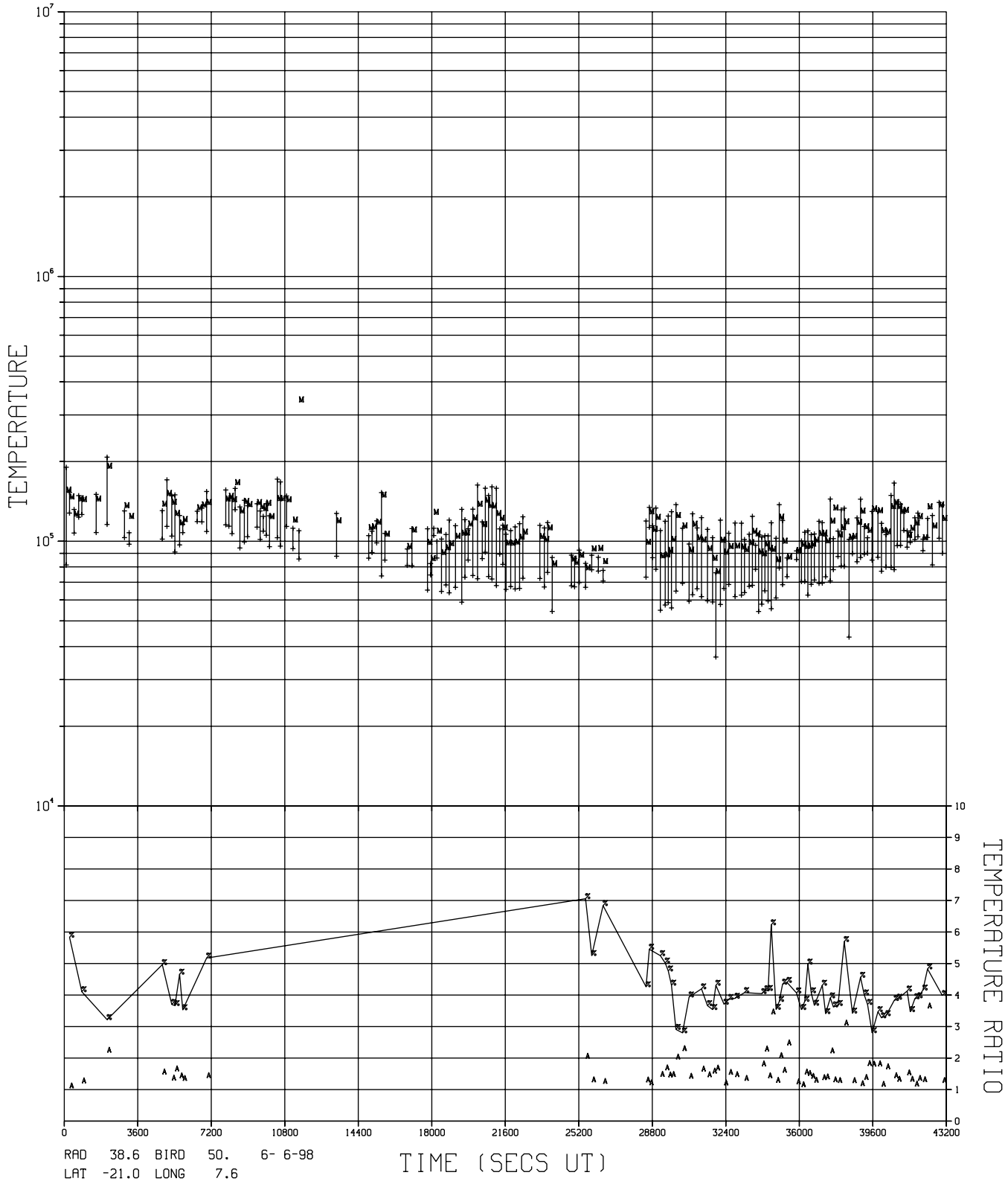

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 38.1 BIRD 50. 6- 5-98
LAT -17.7 LONG 3.1

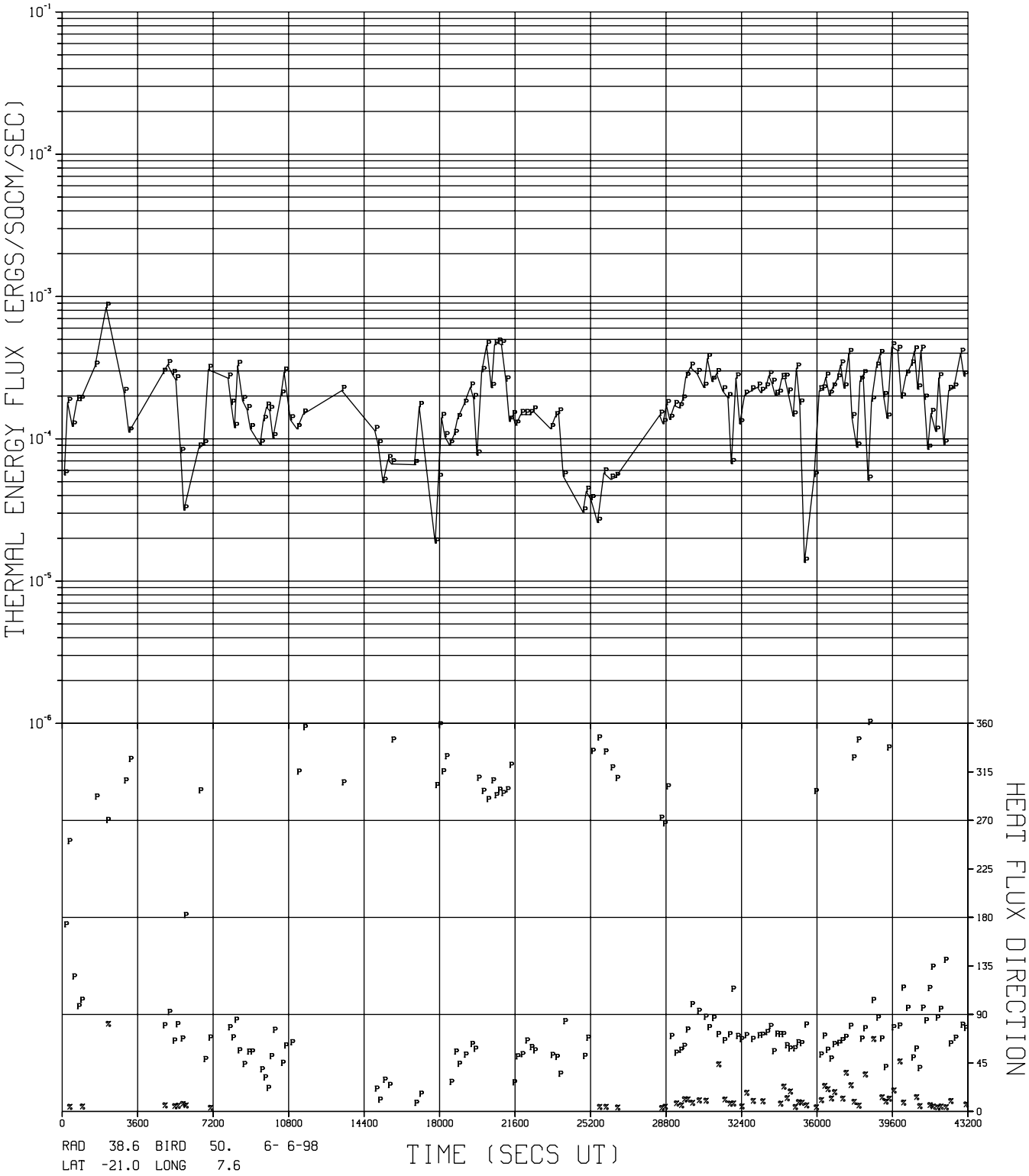

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
TIME (SECS UT)
RAD 38.1 BIRD 50. 6- 5-98
LAT -17.7 LONG 3.1

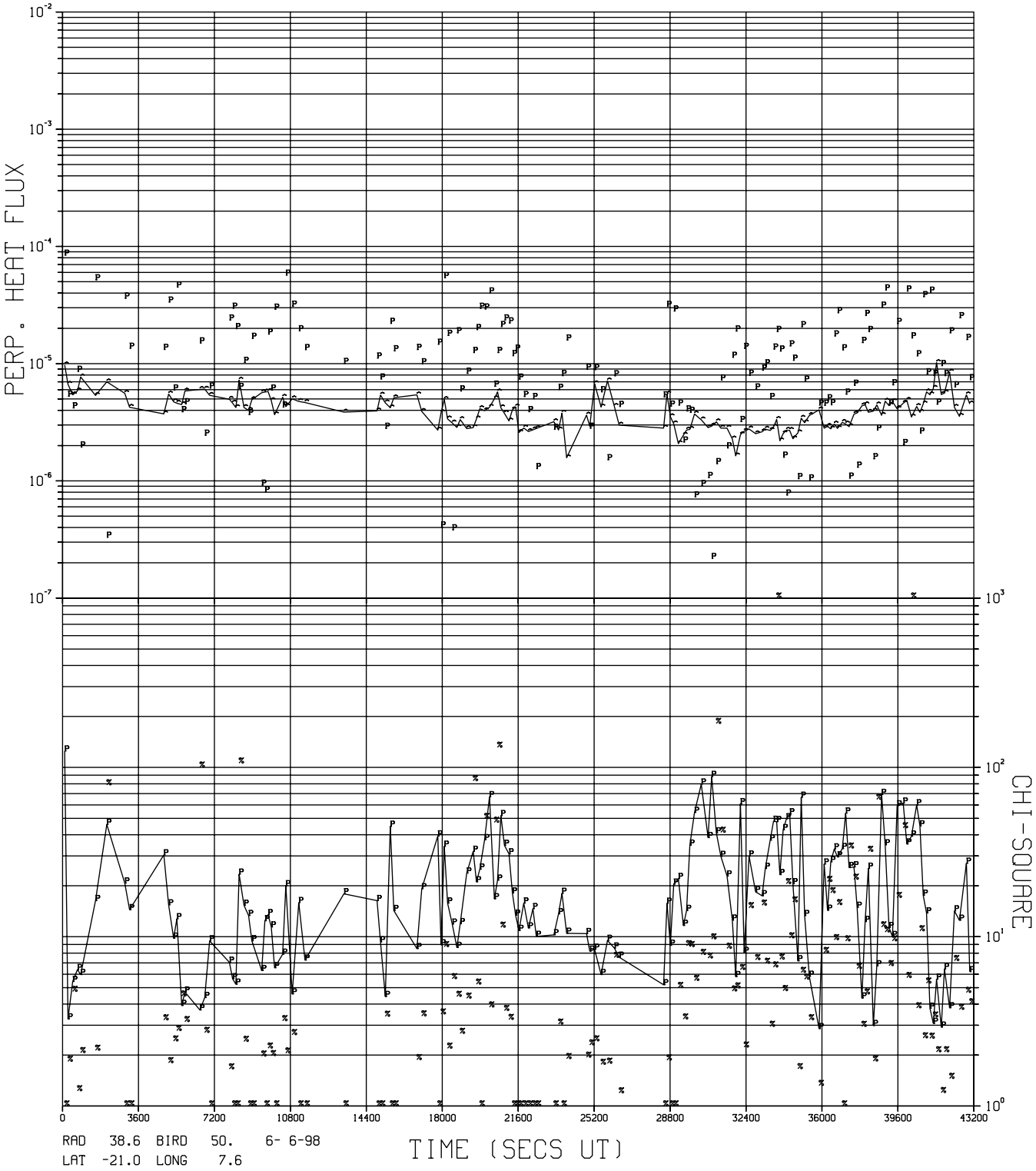

DENSITY
DENSITY RATIO
TIME (SECS UT)
RAD 38.6 BIRD 50. 6- 6-98
LAT -21.0 LONG 7.6

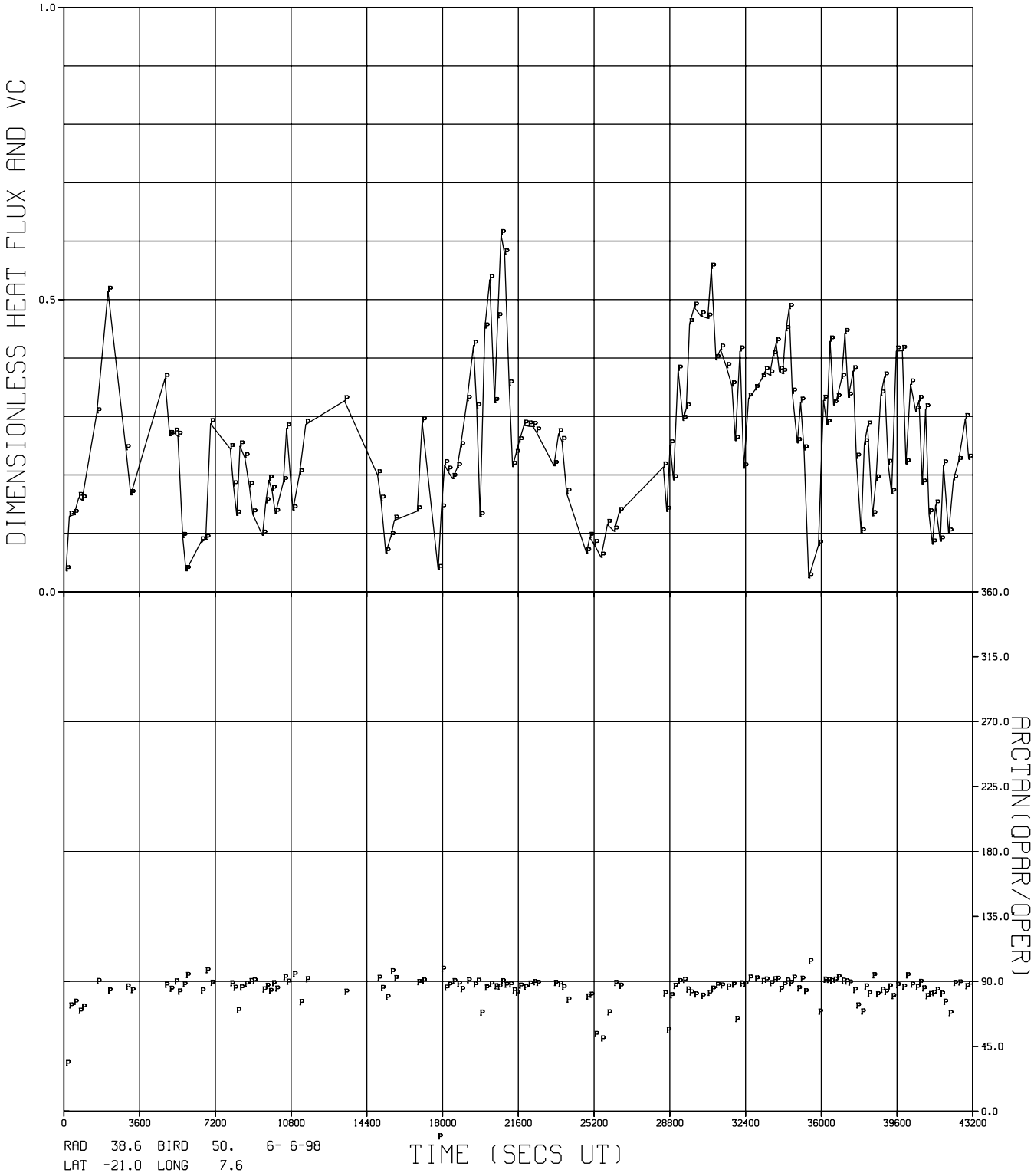

VELOCITY
VELOCITY DIFFERENCE
TIME (SECS UT)
RAD 38.6 BIRD 50. 6- 6-98
LAT -21.0 LONG 7.6

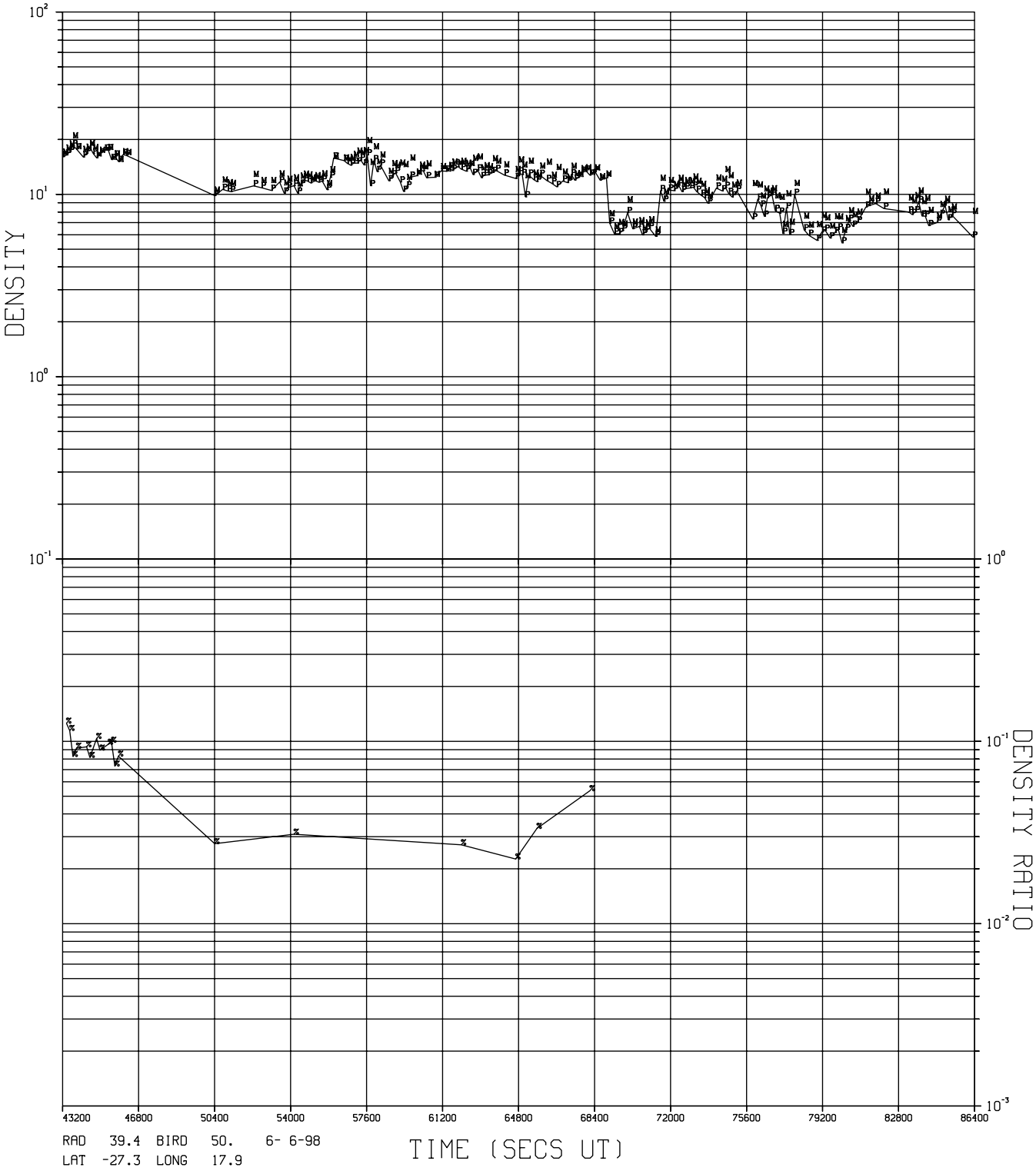

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
RAD 38.6 BIRD 50. 6- 6-98
LAT -21.0 LONG 7.6

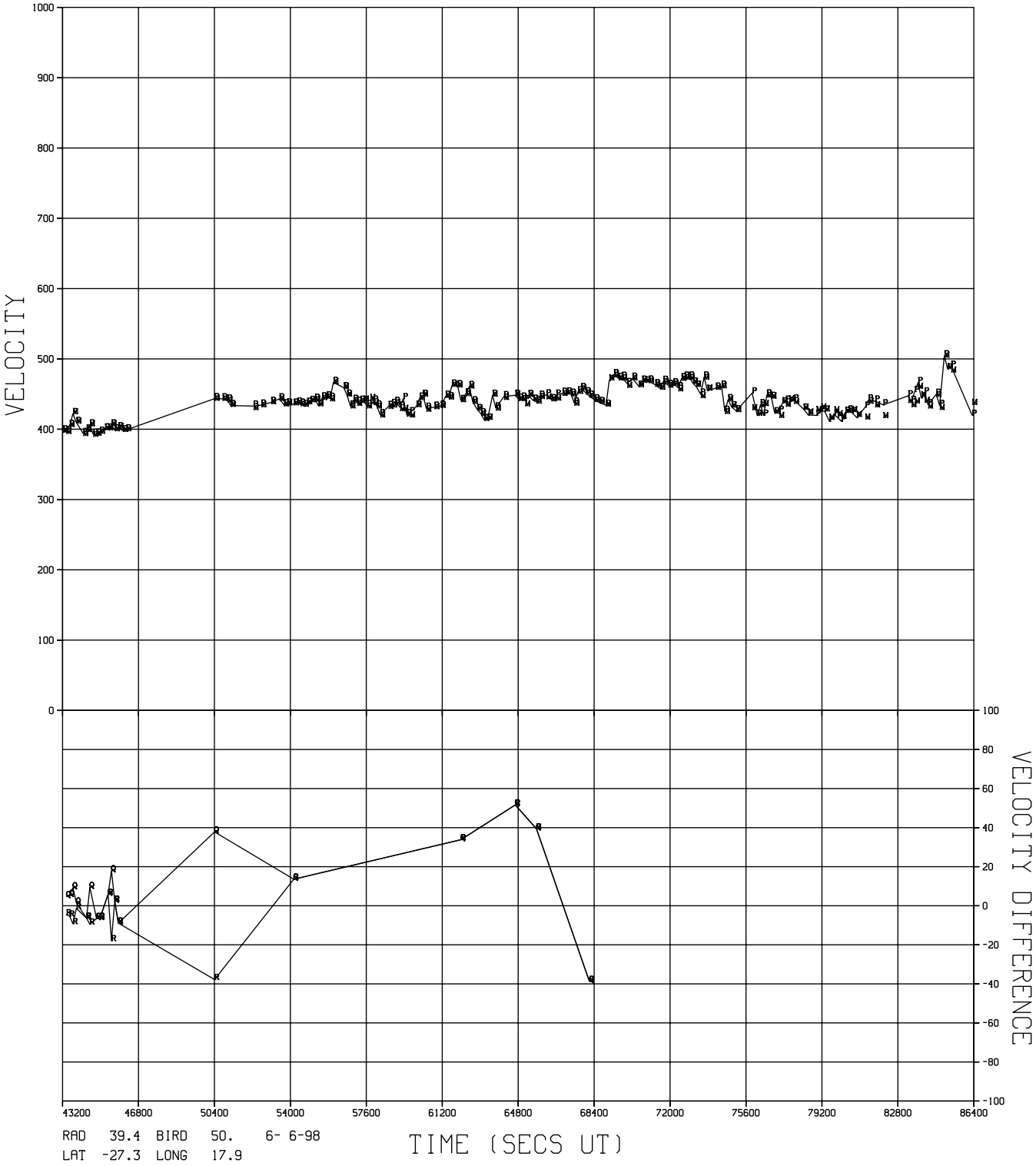

TEMPERATURE
TEMPERATURE RATIO
TIME (SECS UT)
RAD 38.6 BIRD 50. 6- 6-98
LAT -21.0 LONG 7.6

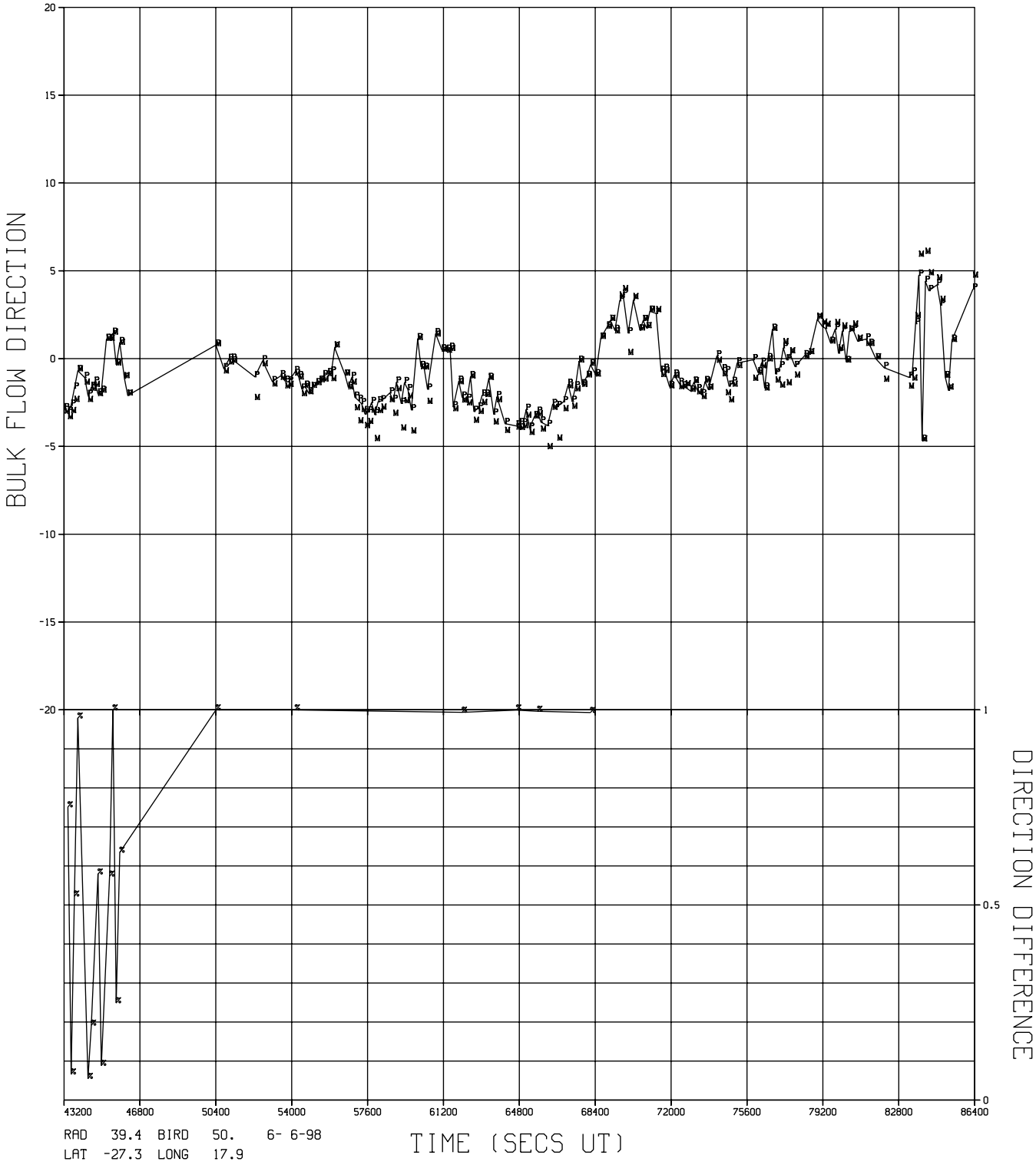

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 38.6 BIRD 50. 6- 6-98
LAT -21.0 LONG 7.6

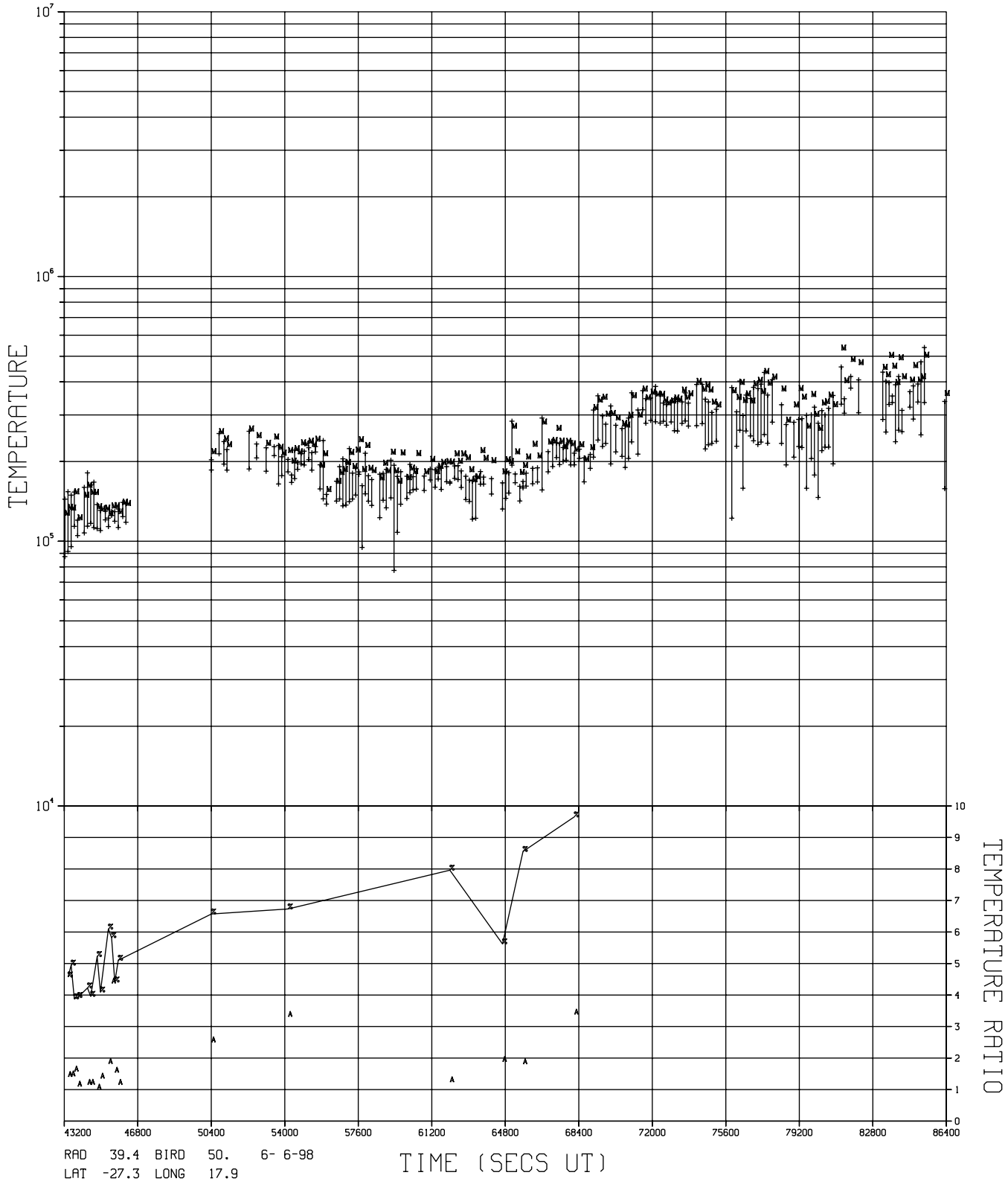

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
RAD 38.6 BIRD 50. 6- 6-98
LAT -21.0 LONG 7.6

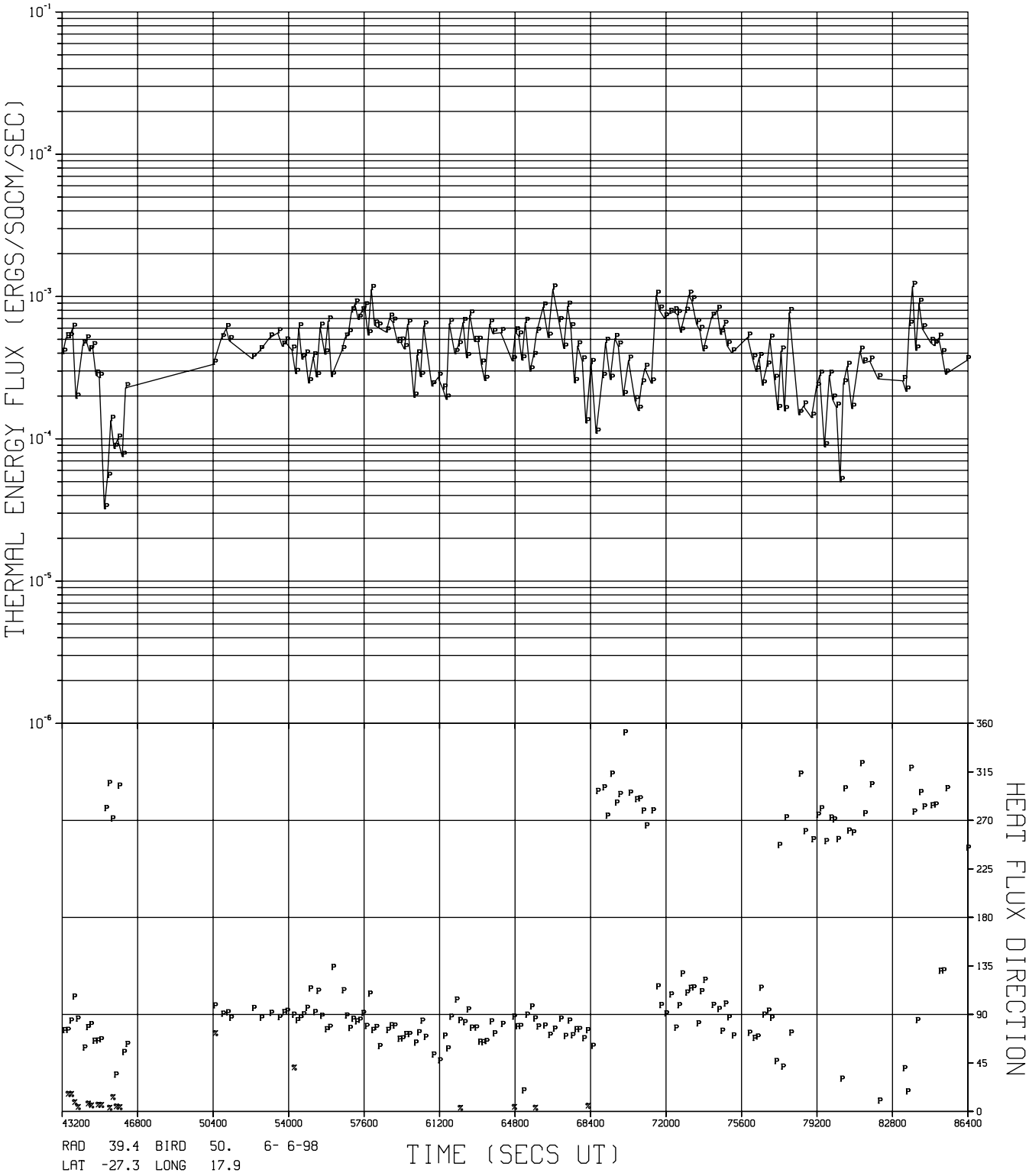

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
TIME (SECS UT)
RAD 38.6 BIRD 50. 6- 6-98
LAT -21.0 LONG 7.6

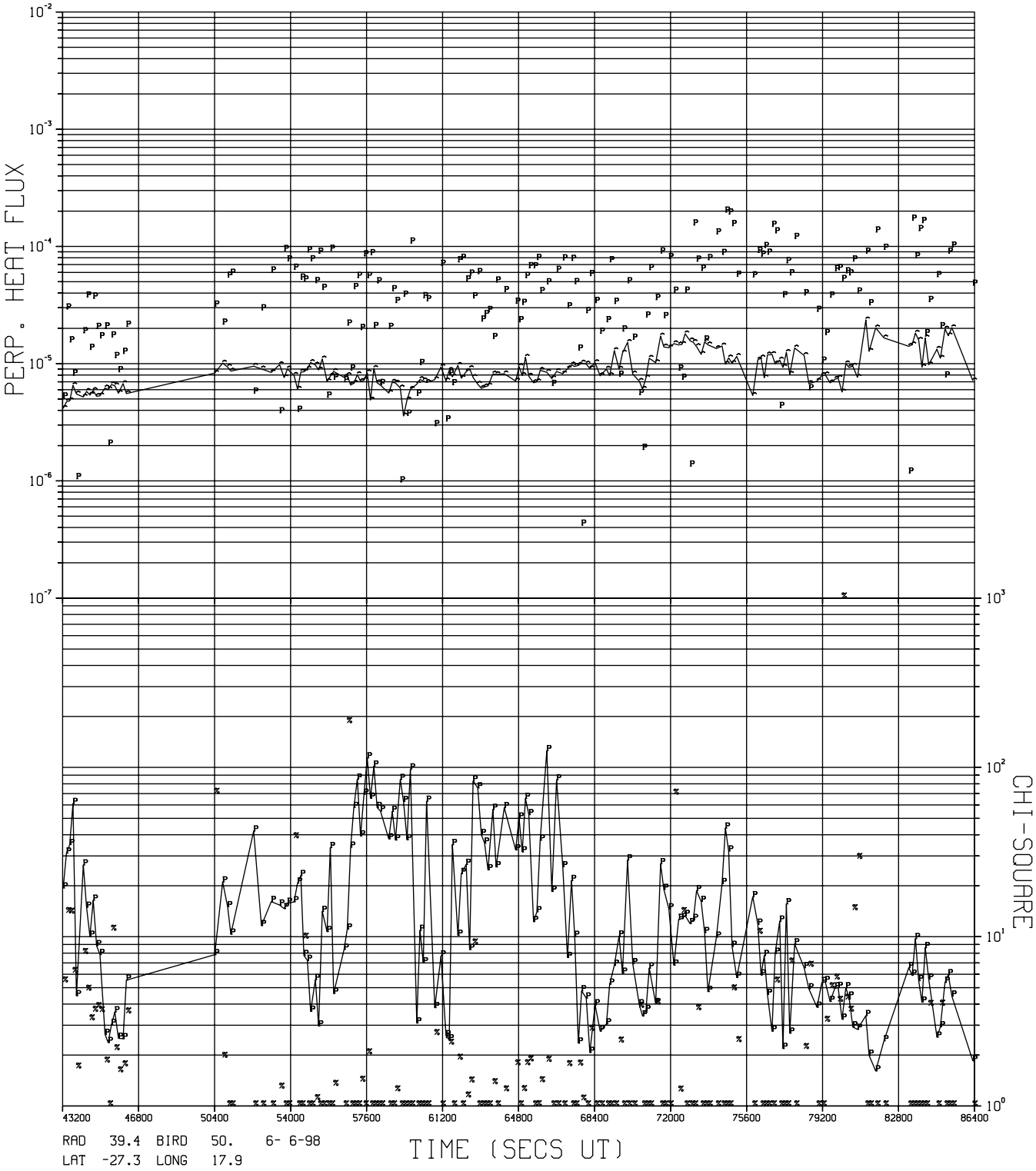

DENSITY
DENSITY RATIO
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 39.4 BIRD 50. 6- 6-98
LAT -27.3 LONG 17.9

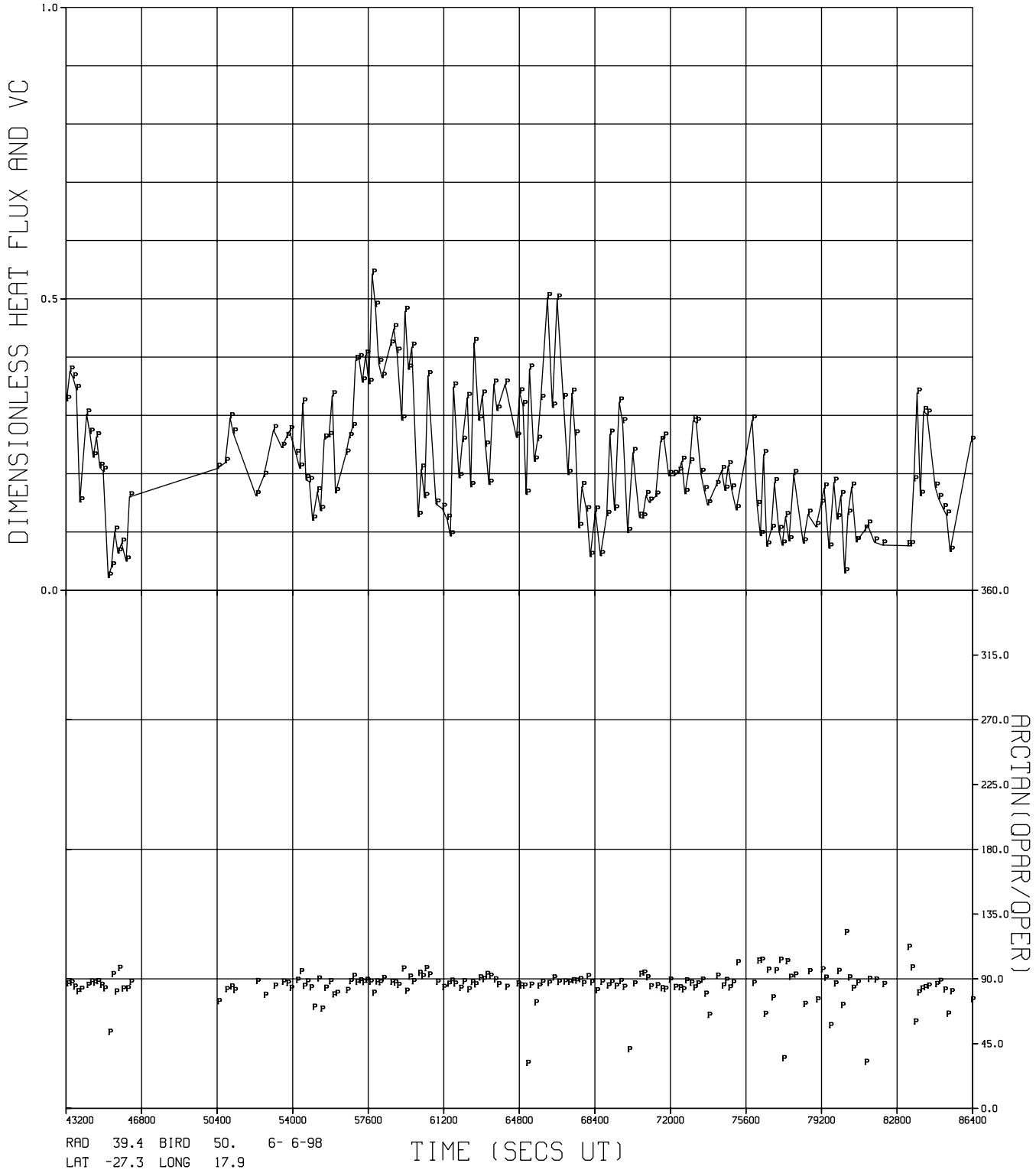

VELOCITY
VELOCITY DIFFERENCE
TIME (SECS UT)
RAD 39.4 BIRD 50. 6- 6-98
LAT -27.3 LONG 17.9

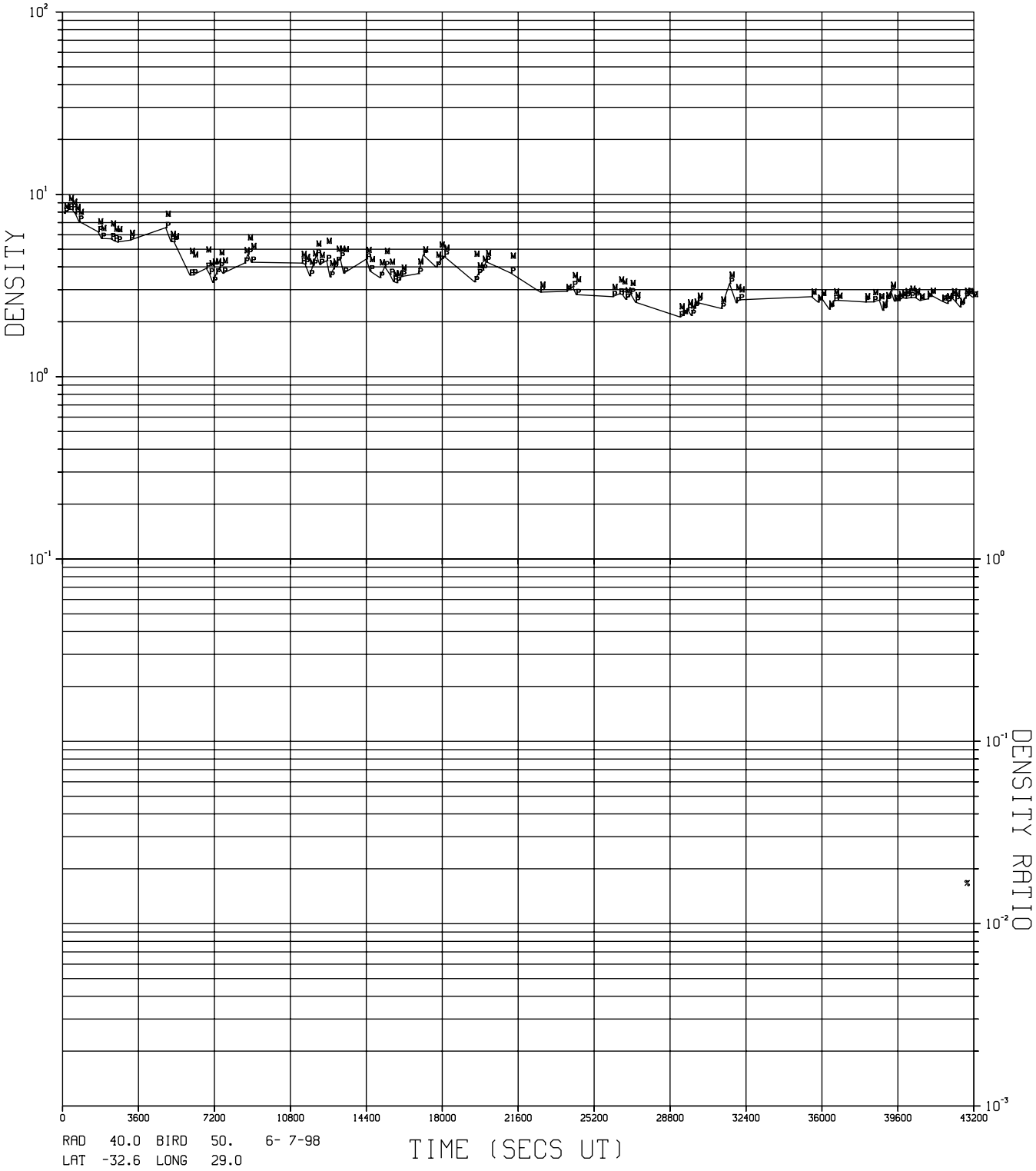

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 39.4 BIRD 50. 6- 6-98
LAT -27.3 LONG 17.9

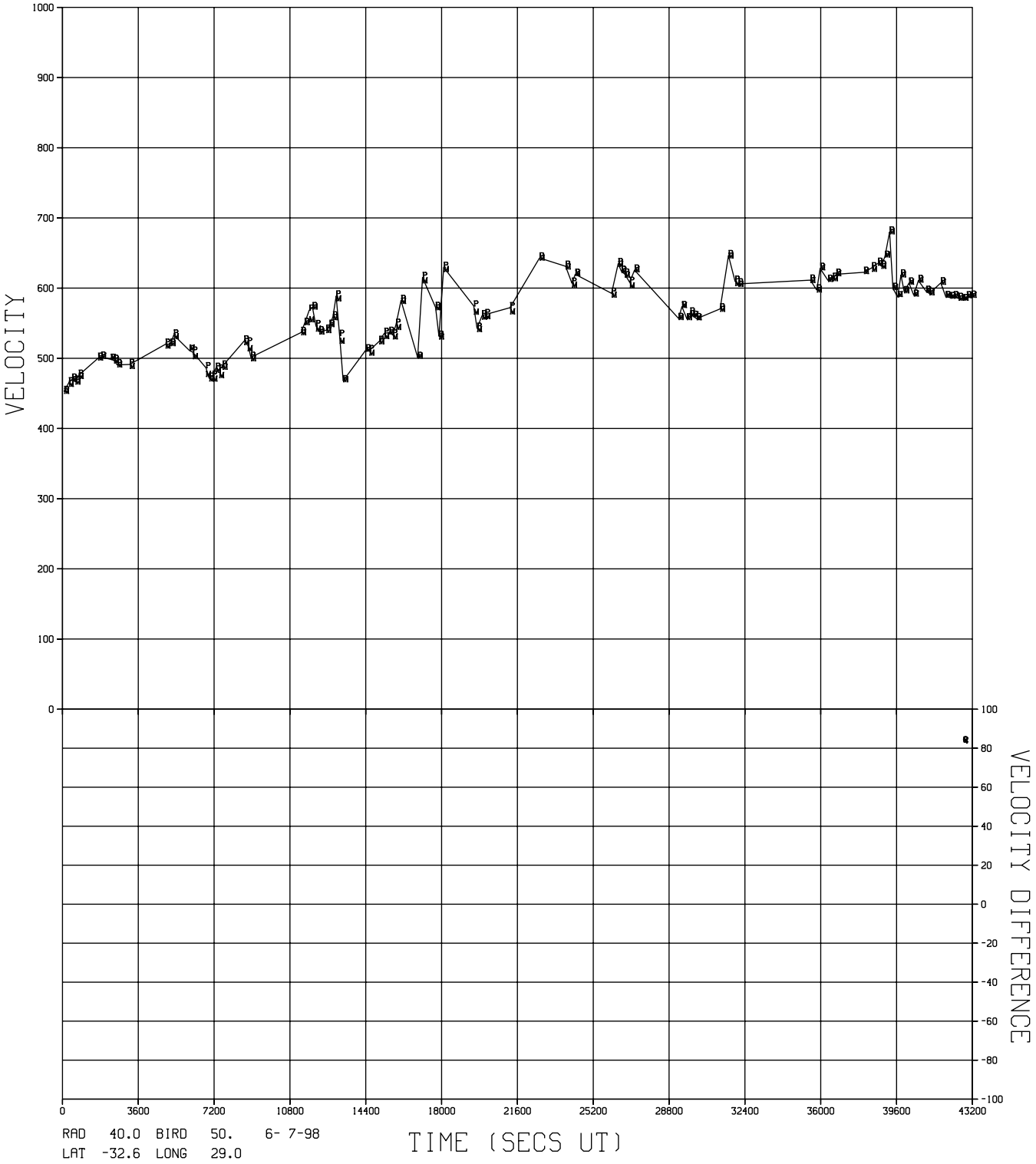

TEMPERATURE
TEMPERATURE RATIO
TIME (SECS UT)
RAD 39.4 BIRD 50. 6- 6-98
LAT -27.3 LONG 17.9

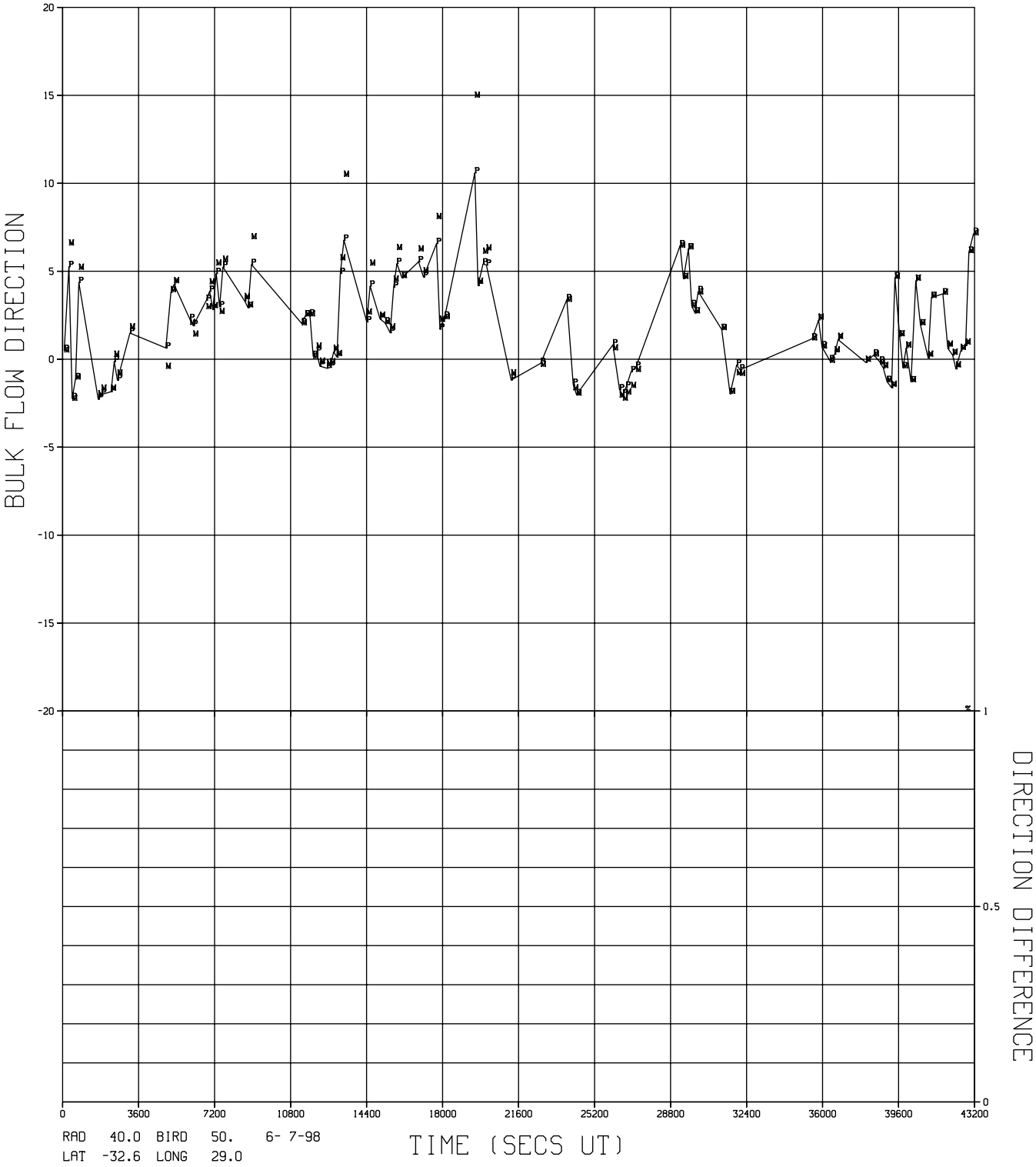

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 39.4 BIRD 50. 6- 6-98
LAT -27.3 LONG 17.9

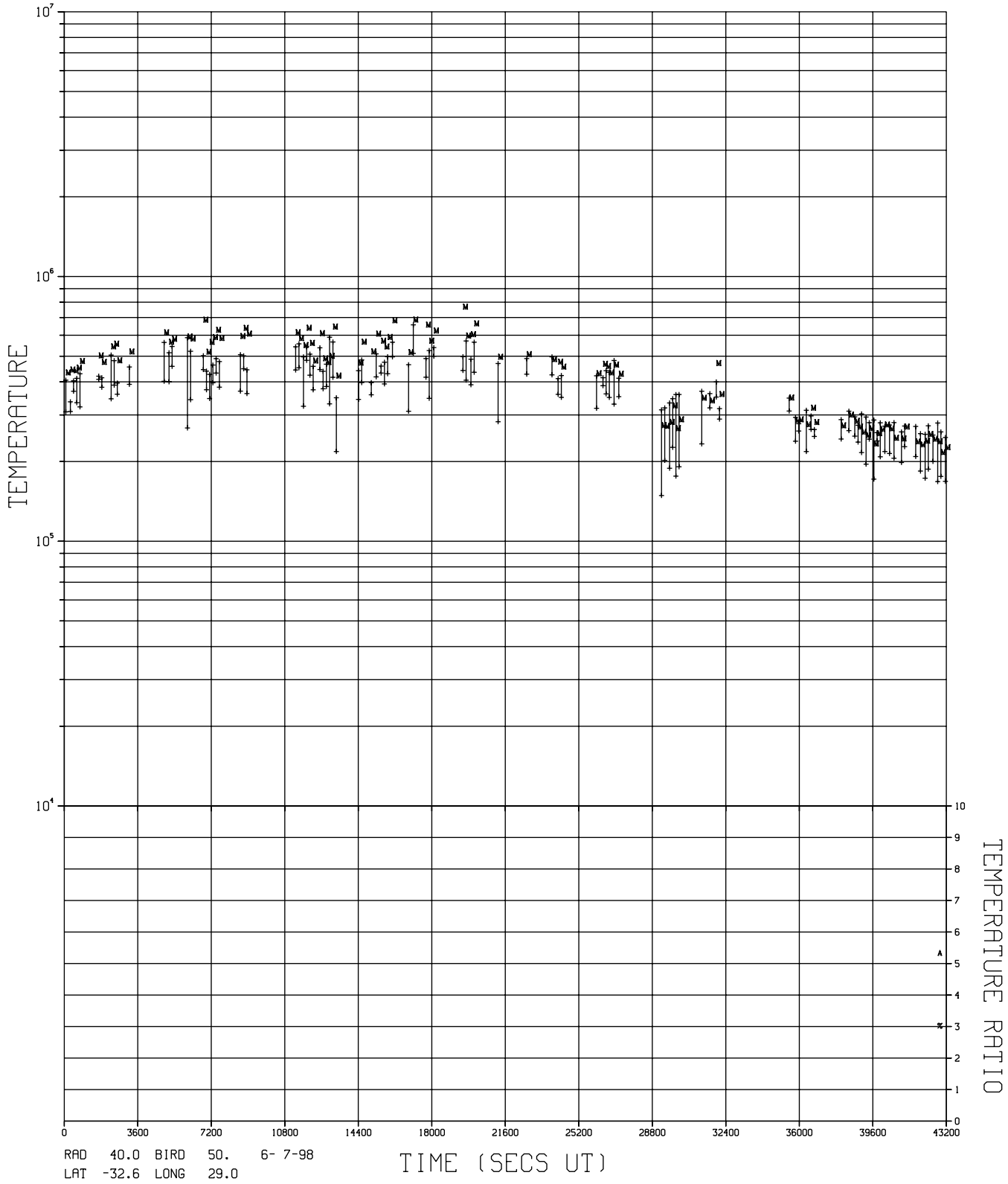

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
RAD 39.4 BIRD 50. 6- 6-98
LAT -27.3 LONG 17.9

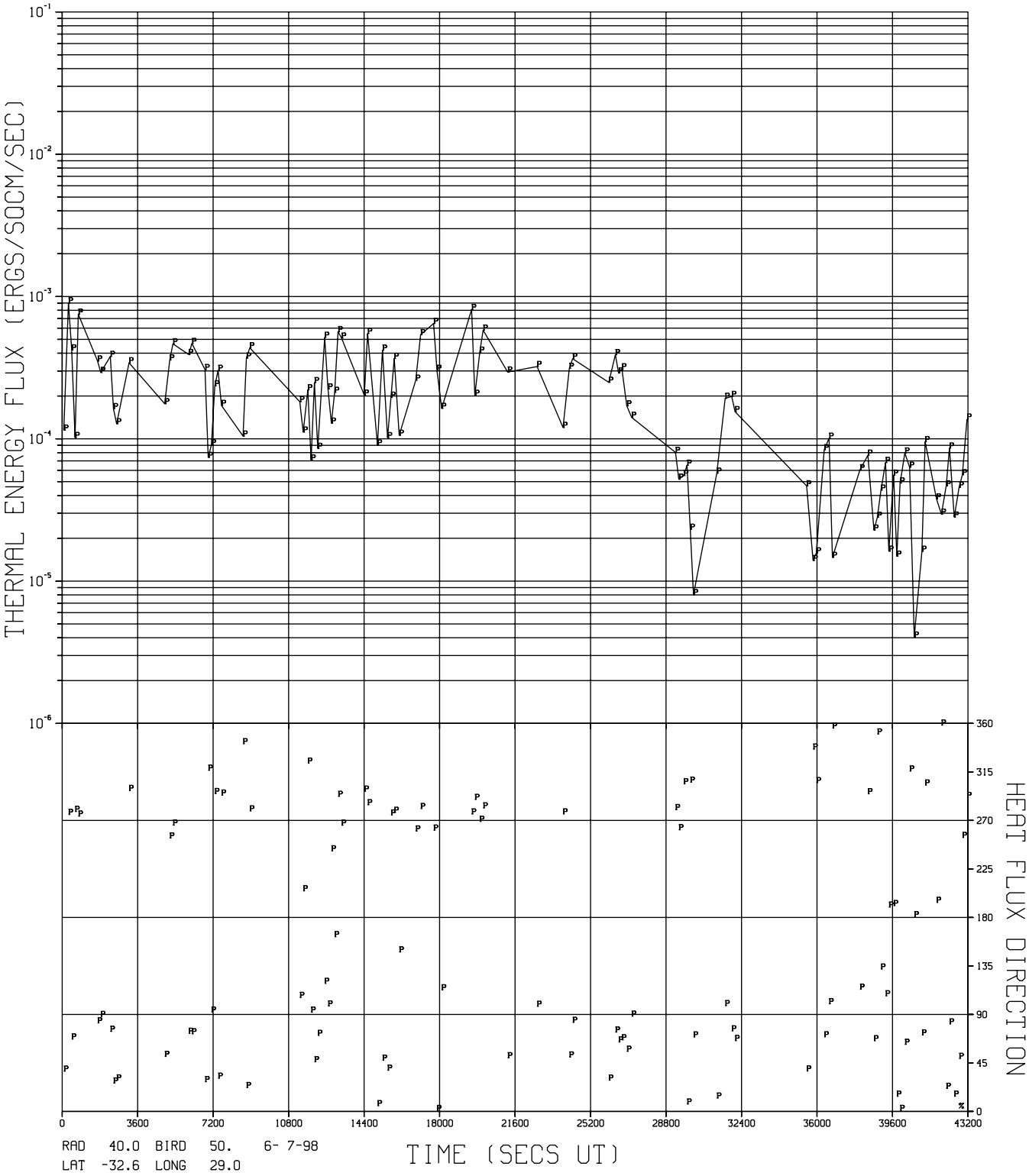

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
TIME (SECS UT)
RAD 39.4 BIRD 50. 6- 6-98
LAT -27.3 LONG 17.9

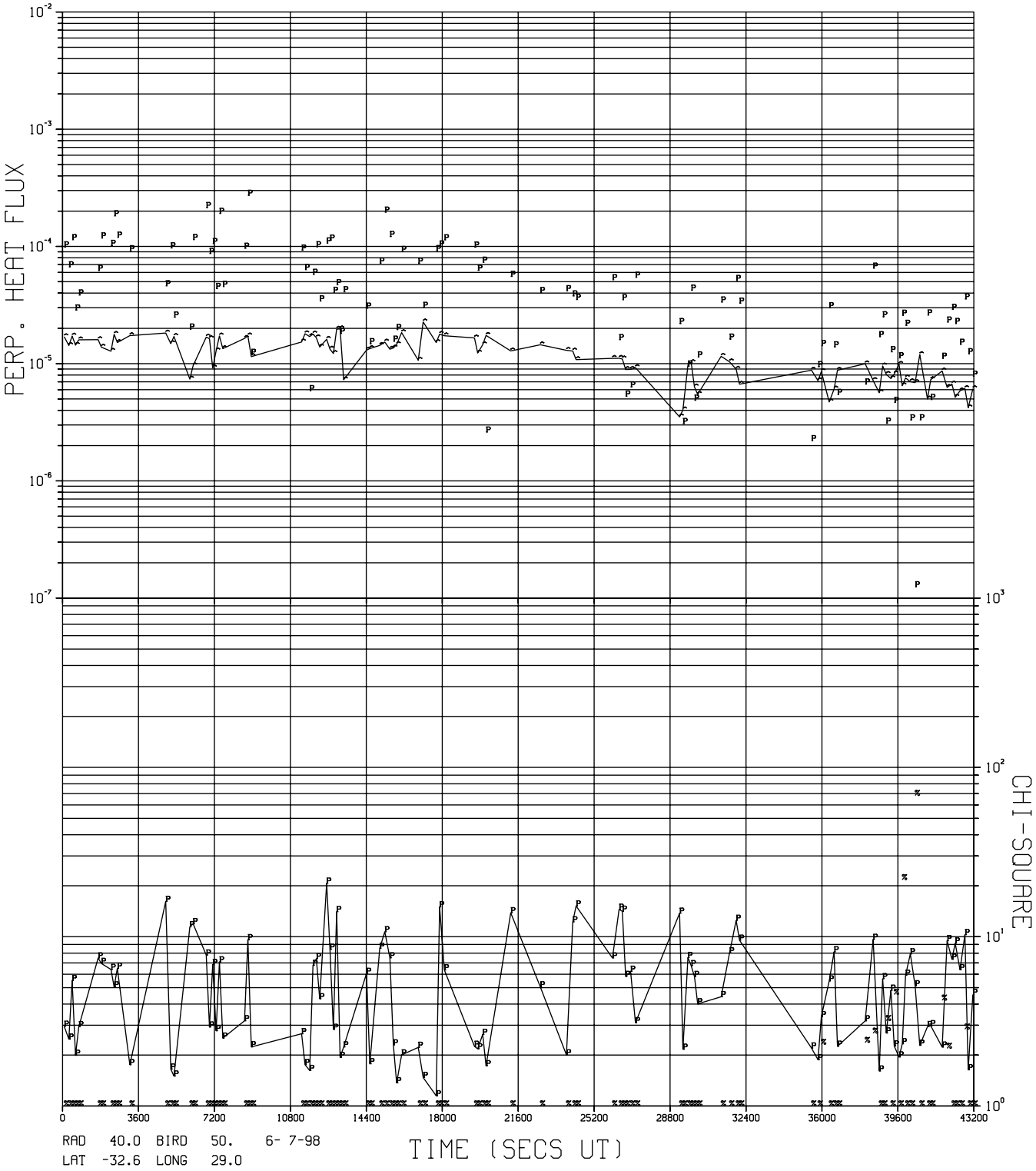

DENSITY
DENSITY RATIO
TIME (SECS UT)
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
RAD 40.0 BIRD 50. 6- 7-98
LAT -32.6 LONG 29.0

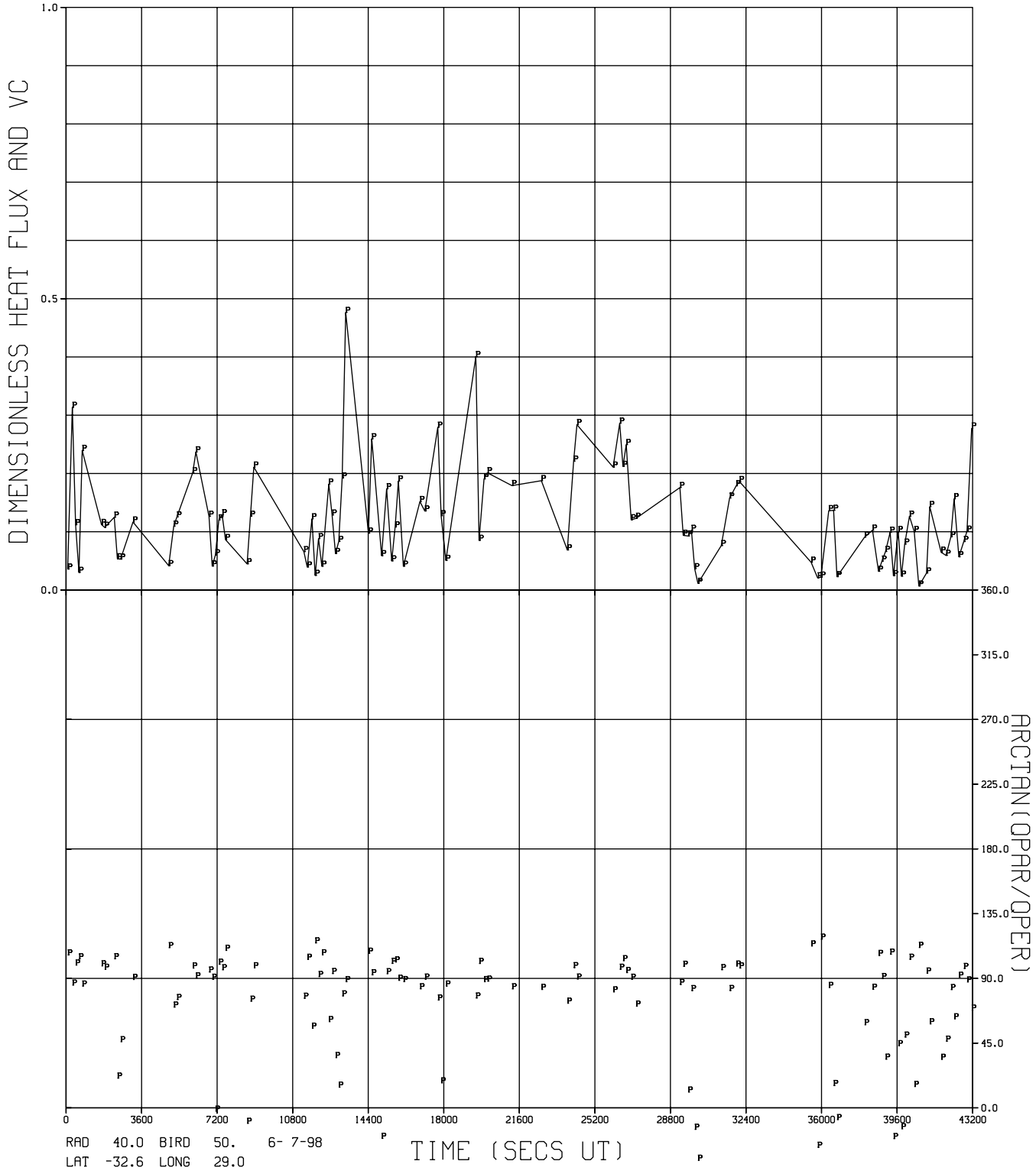

VELOCITY
VELOCITY DIFFERENCE
TIME (SECS UT)
RAD 40.0 BIRD 50. 6- 7-98
LAT -32.6 LONG 29.0

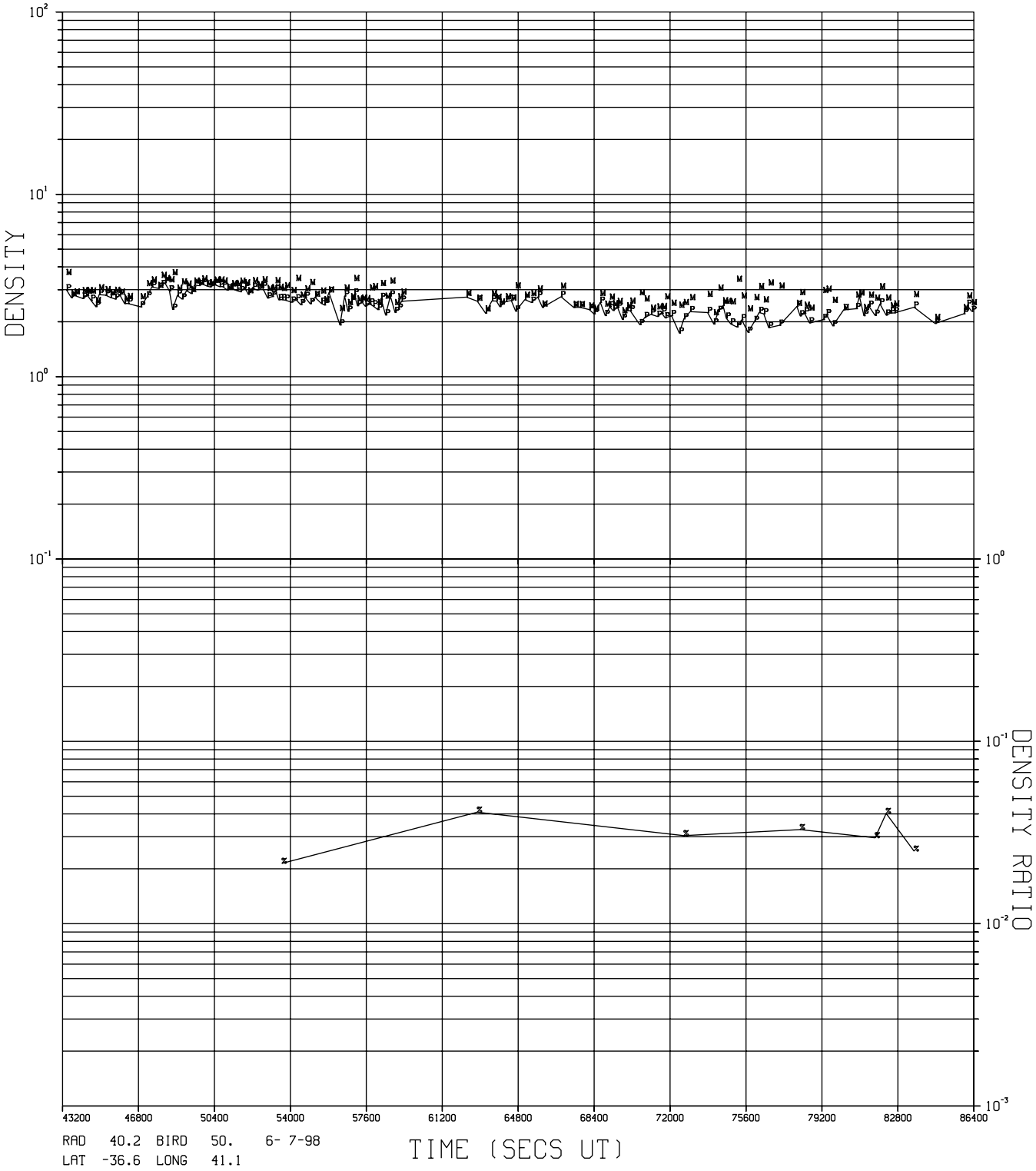

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
RAD 40.0 BIRD 50. 6- 7-98
LAT -32.6 LONG 29.0

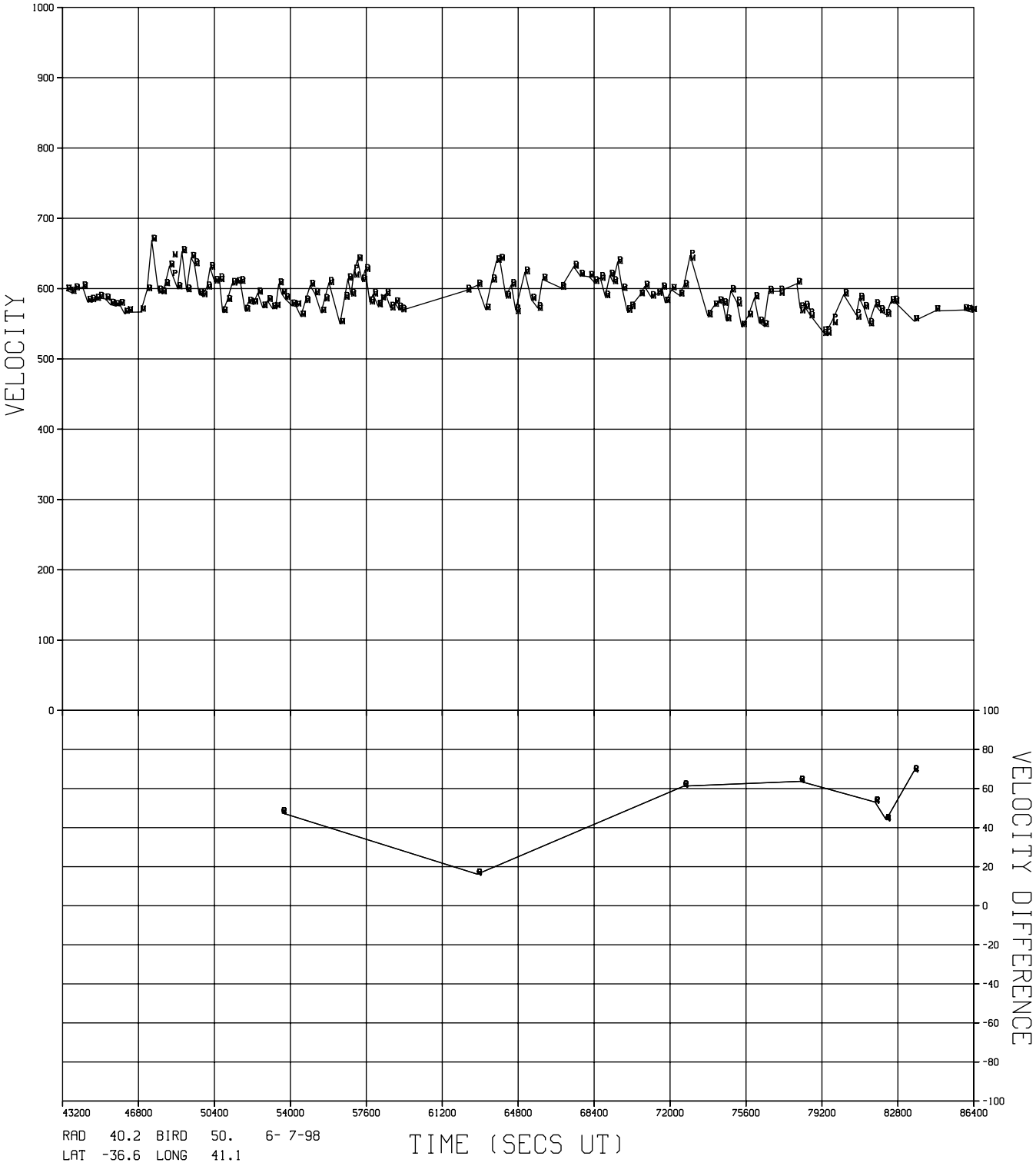

TEMPERATURE
10^7
10^6
10^5
10^4
TEMPERATURE RATIO
0
1
2
3
4
5
6
7
8
9
10
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
TIME (SECS UT)
RAD 40.0 BIRD 50. 6- 7-98
LAT -32.6 LONG 29.0

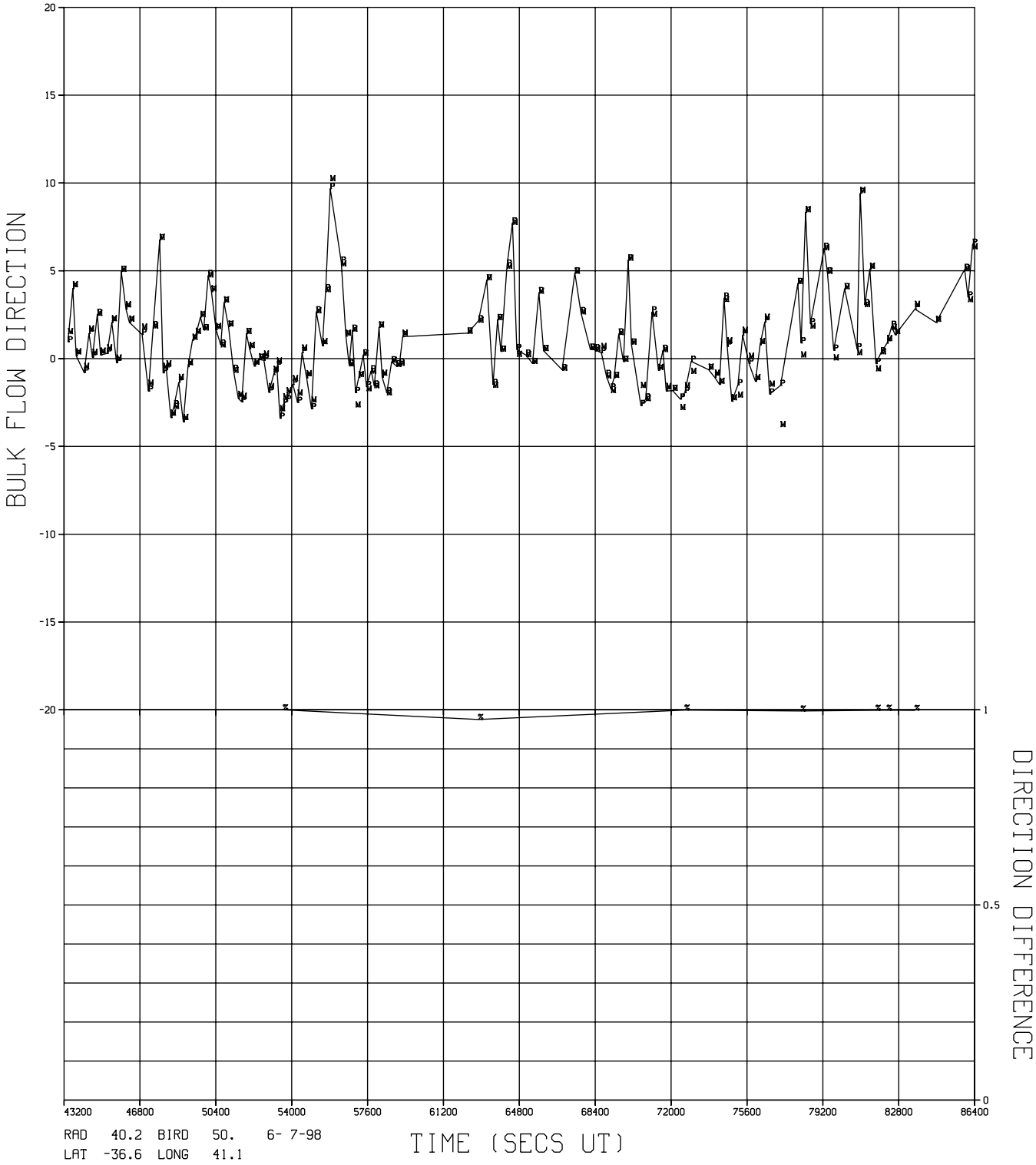

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 40.0 BIRD 50. 6- 7-98
LAT -32.6 LONG 29.0

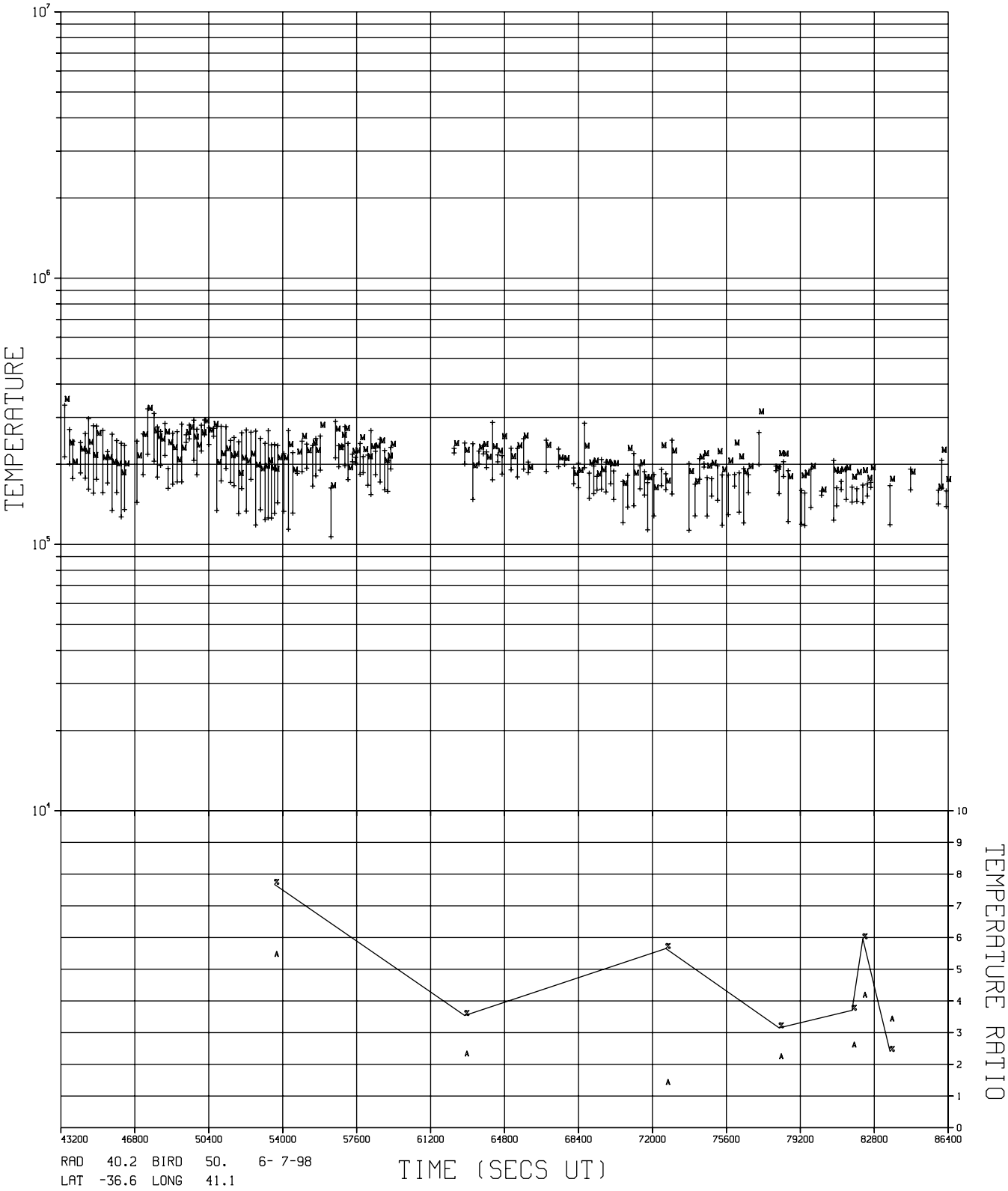

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
RAD 40.0 BIRD 50. 6- 7-98
LAT -32.6 LONG 29.0

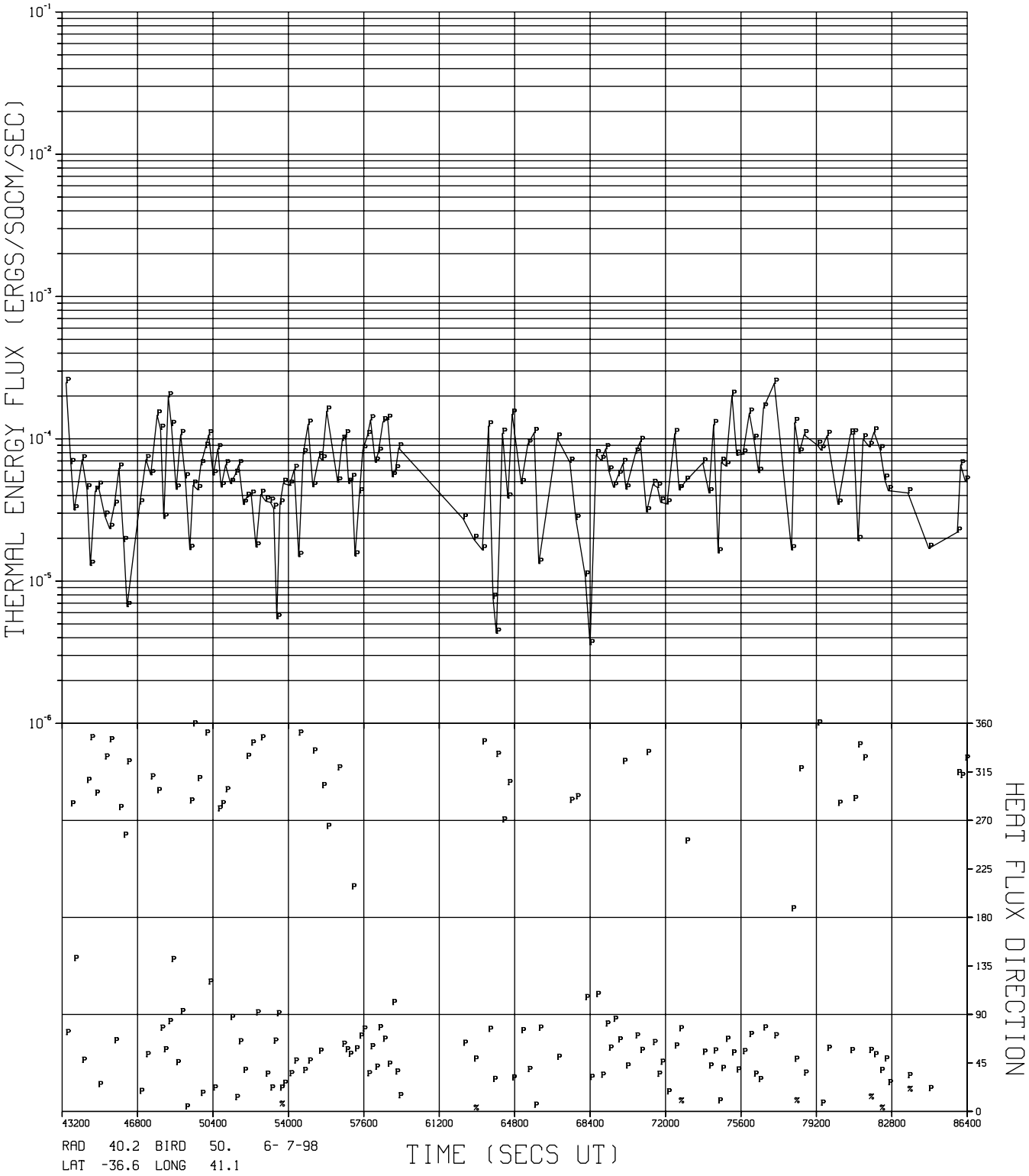

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
TIME (SECS UT)
RAD 40.0 BIRD 50. 6- 7-98
LAT -32.6 LONG 29.0

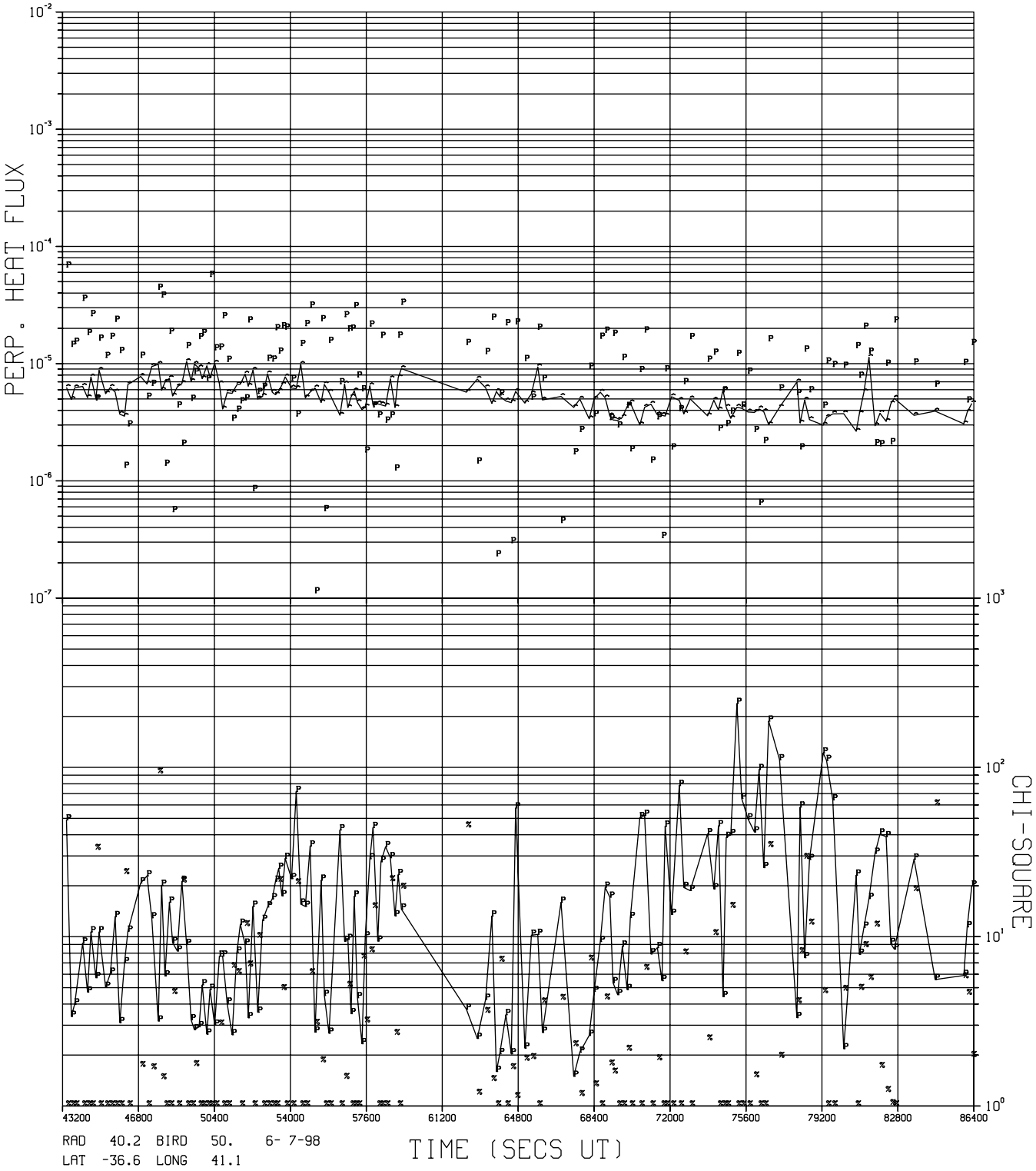

DENSITY
DENSITY RATIO
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 40.2 BIRD 50. 6- 7-98
LAT -36.6 LONG 41.1

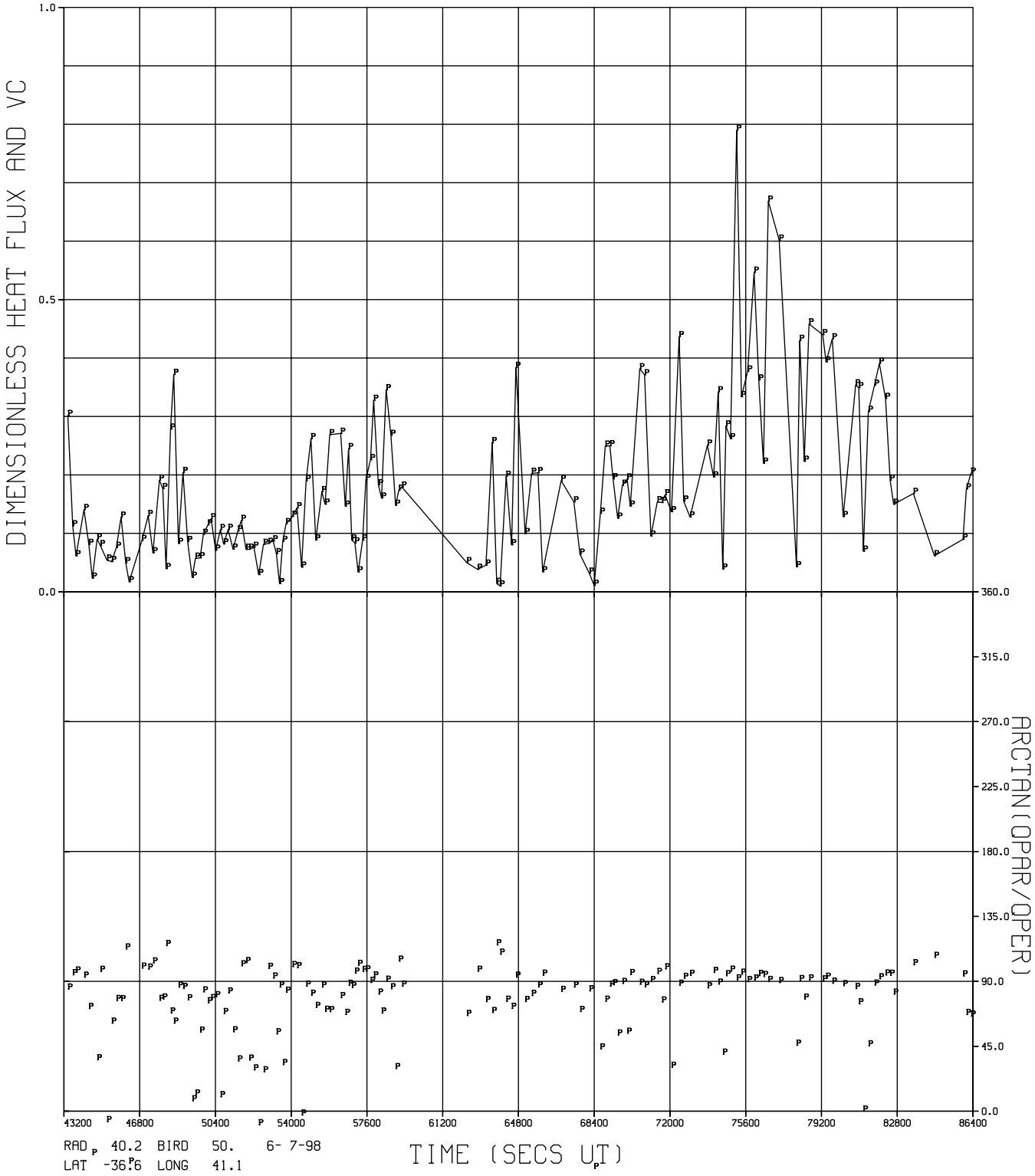

VELOCITY
1000
900
800
700
600
500
400
300
200
100
0
VELOCITY DIFFERENCE
100
80
60
40
20
0
-20
-40
-60
-80
-100
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 40.2 BIRD 50. 6- 7-98
LAT -36.6 LONG 41.1
TIME (SECS UT)

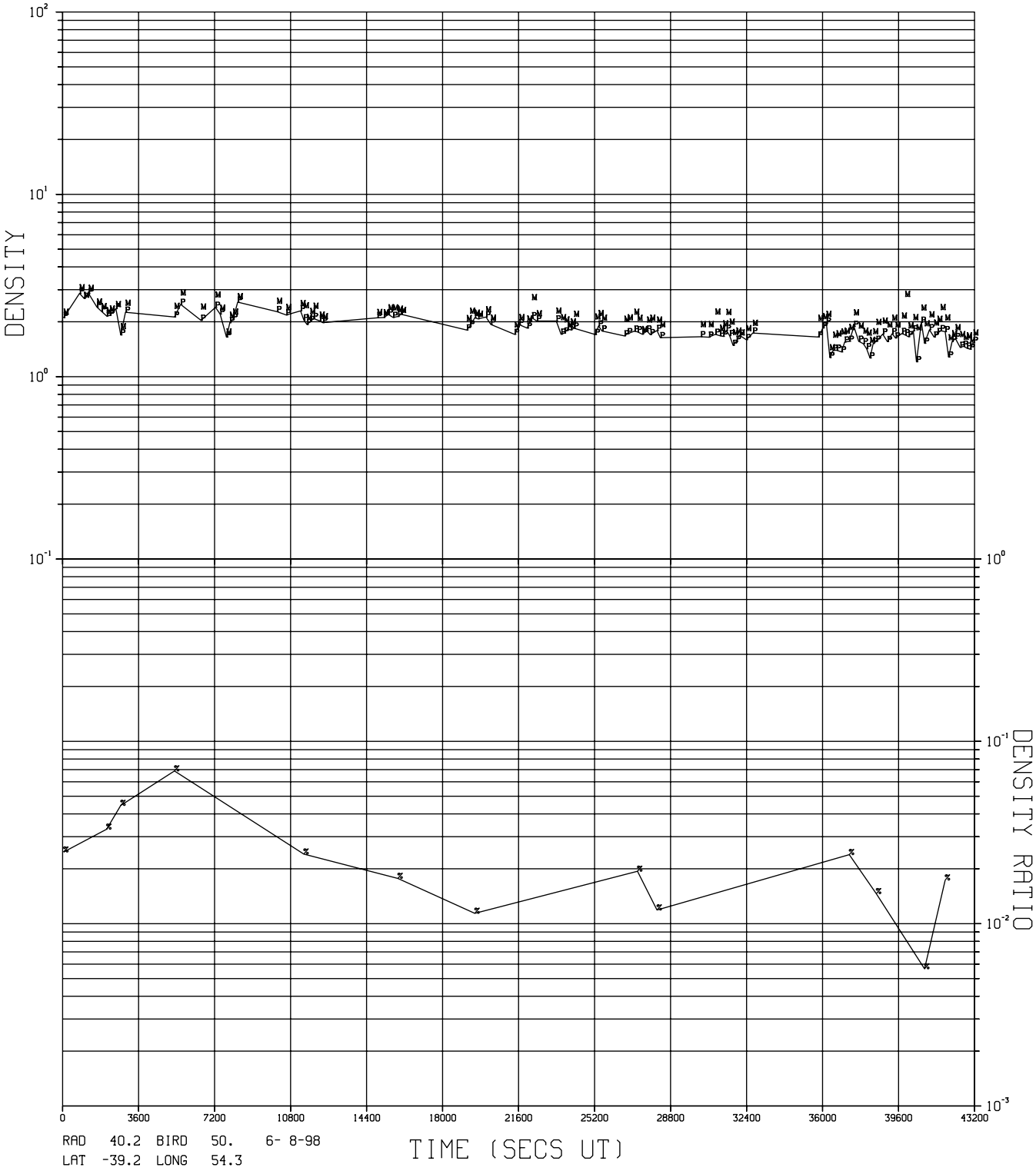

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 40.2 BIRD 50. 6- 7-98
LAT -36.6 LONG 41.1

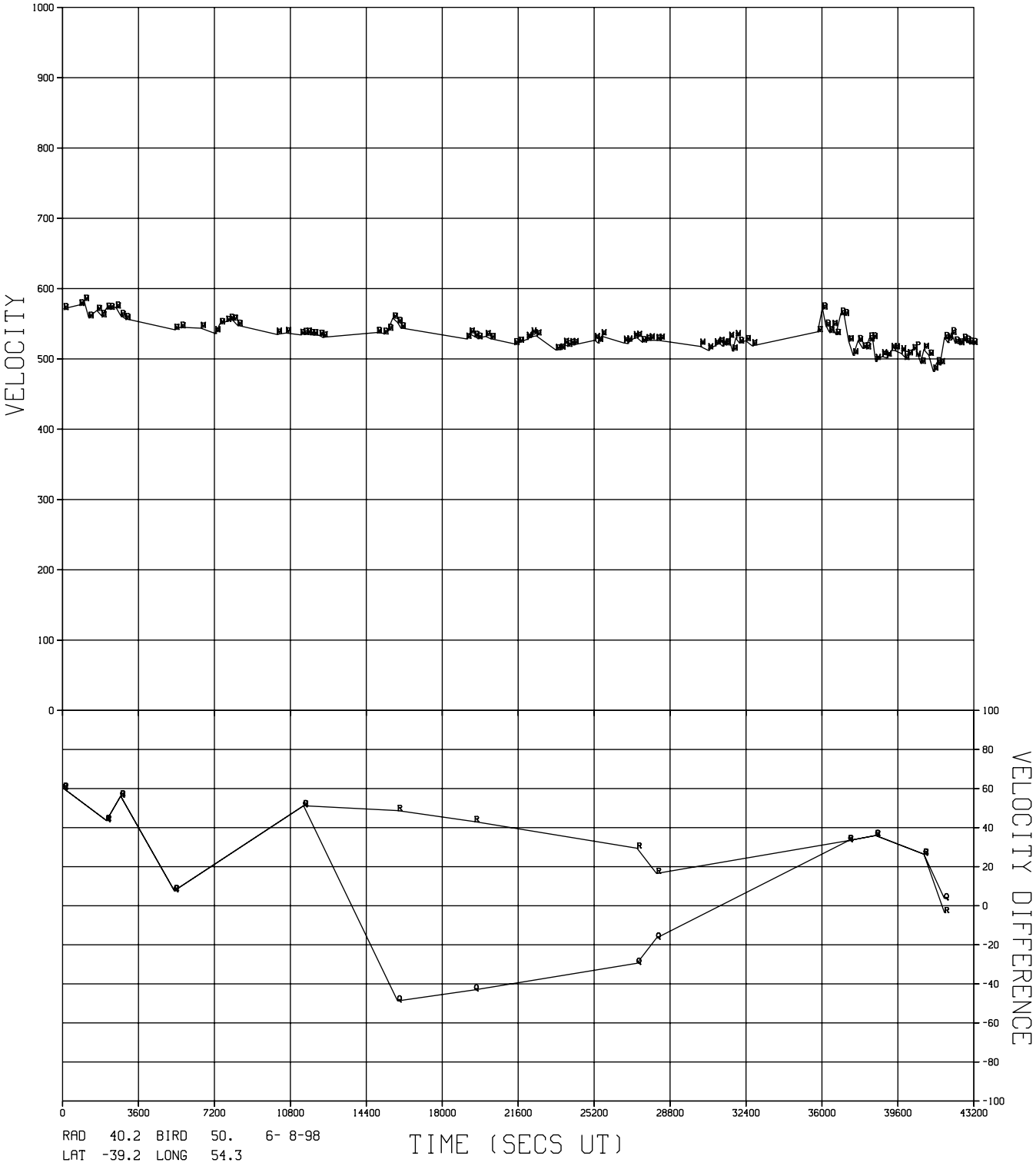

TEMPERATURE
TEMPERATURE RATIO
TIME (SECS UT)
RAD 40.2 BIRD 50. 6- 7-98
LAT -36.6 LONG 41.1

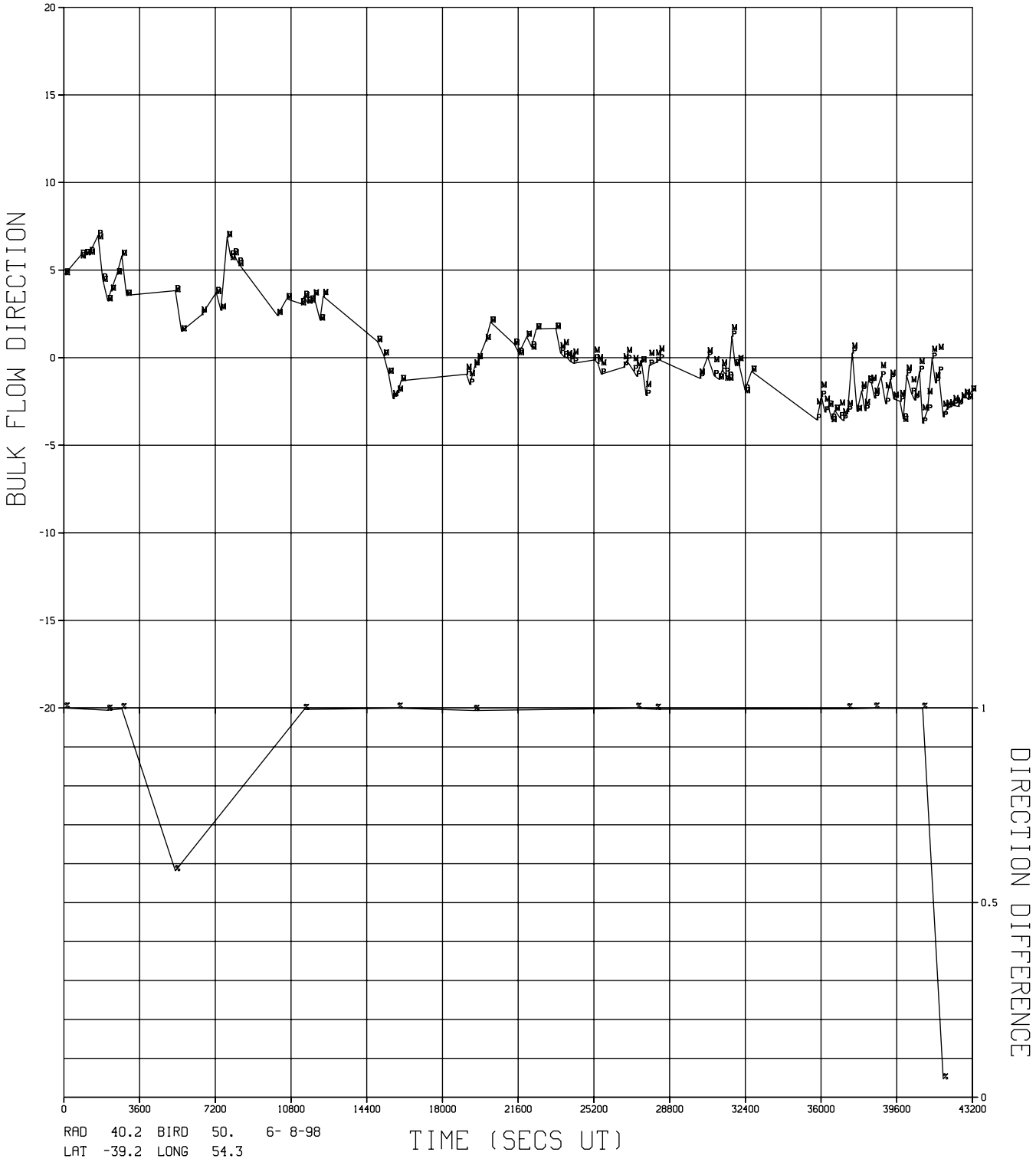

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 40.2 BIRD 50. 6- 7-98
LAT -36.6 LONG 41.1

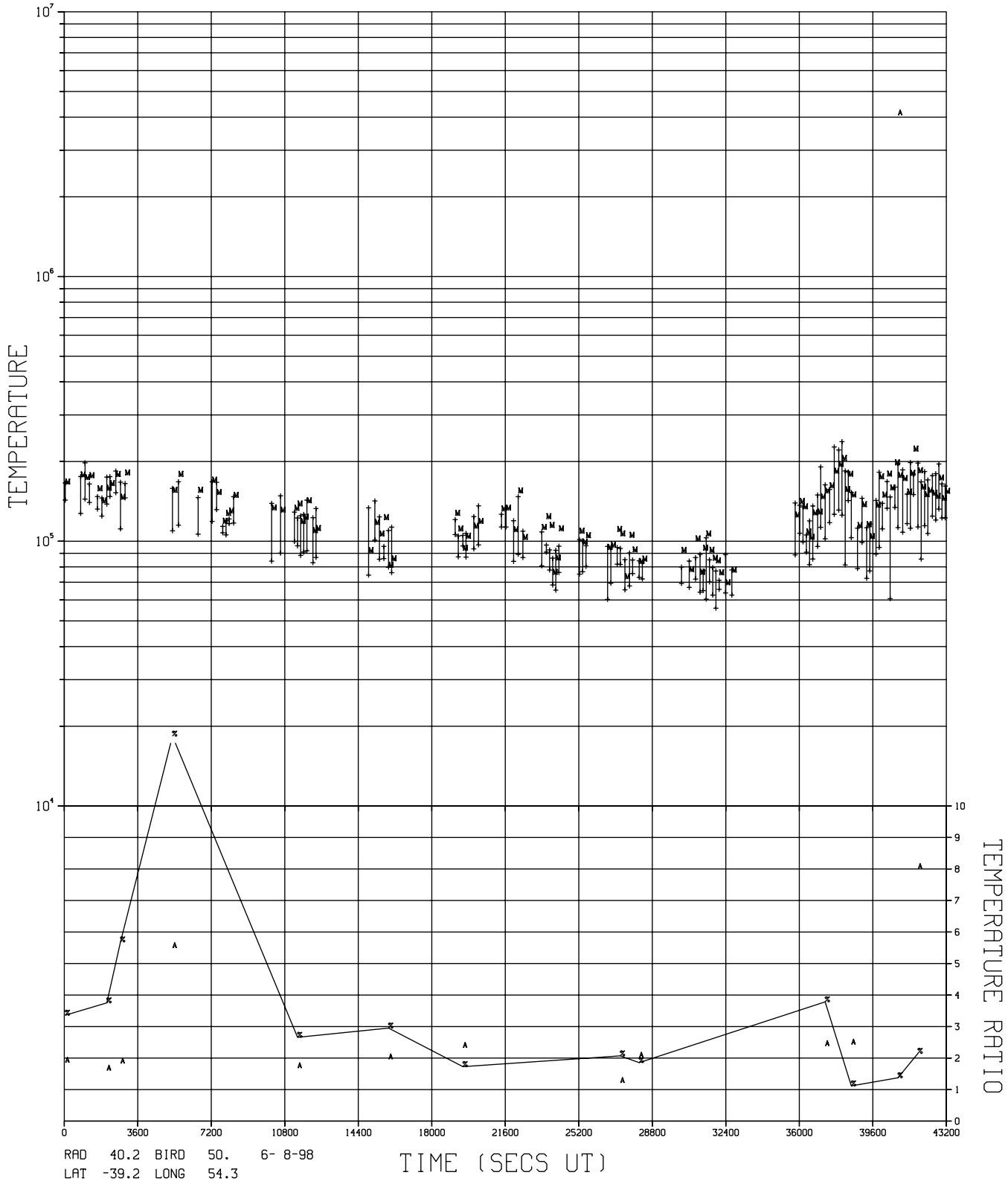

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 40.2 BIRD 50. 6- 7-98
LAT -36.6 LONG 41.1

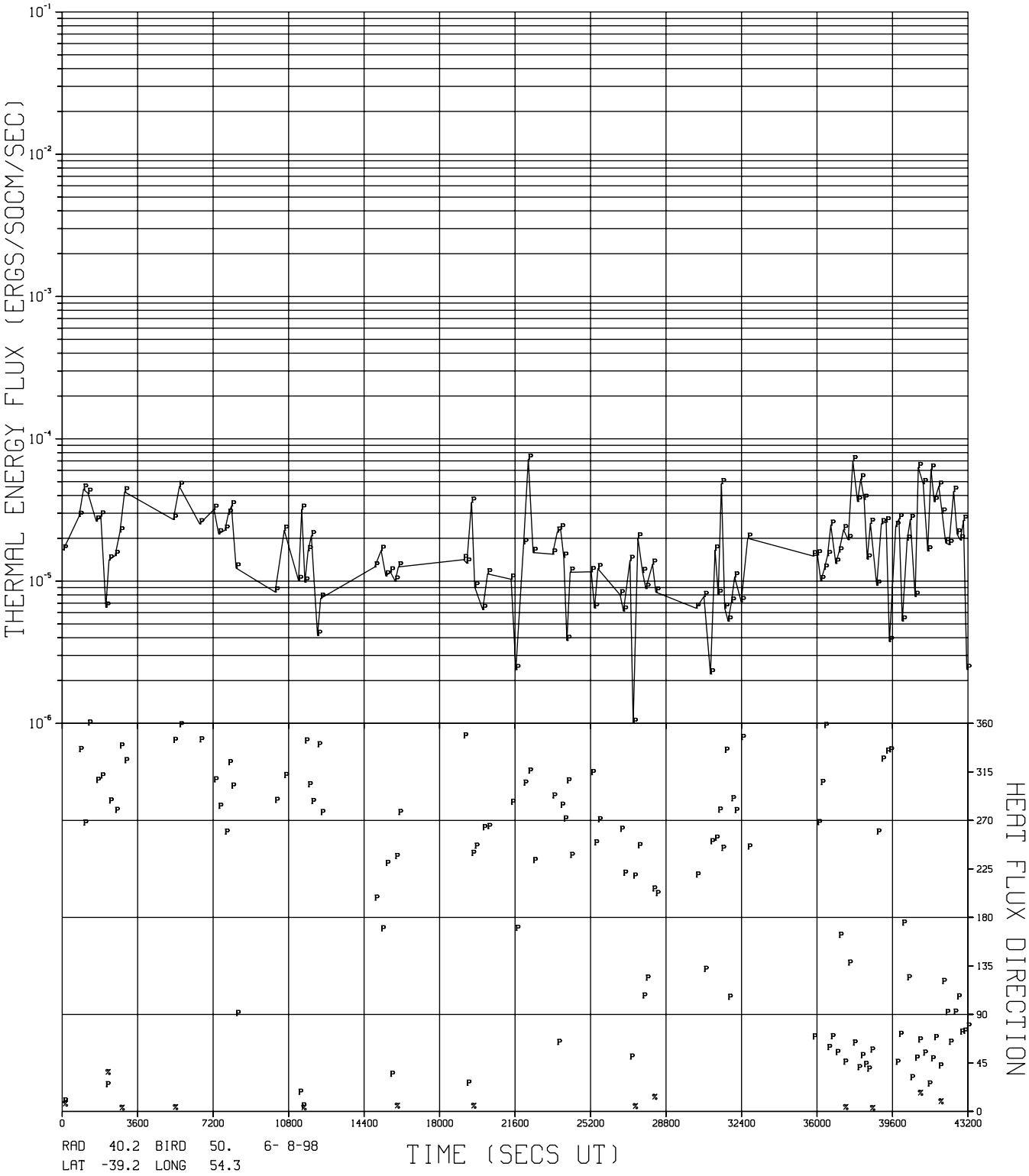

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 40.2 BIRD 50. 6- 7-98
LAT -36.6 LONG 41.1
TIME (SECS UT)

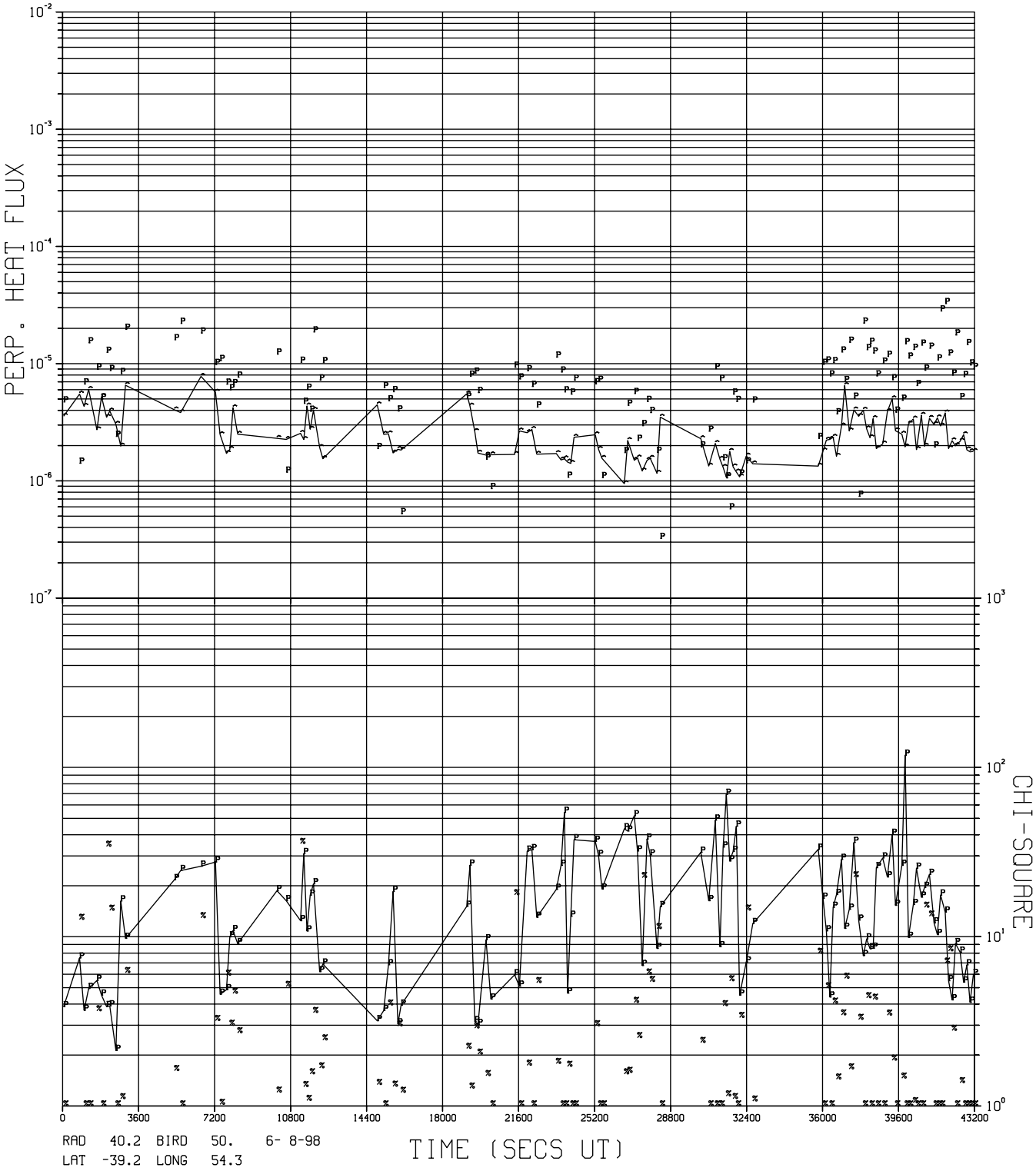

DENSITY
DENSITY RATIO
TIME (SECS UT)
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
RAD 40.2 BIRD 50. 6- 8-98
LAT -39.2 LONG 54.3

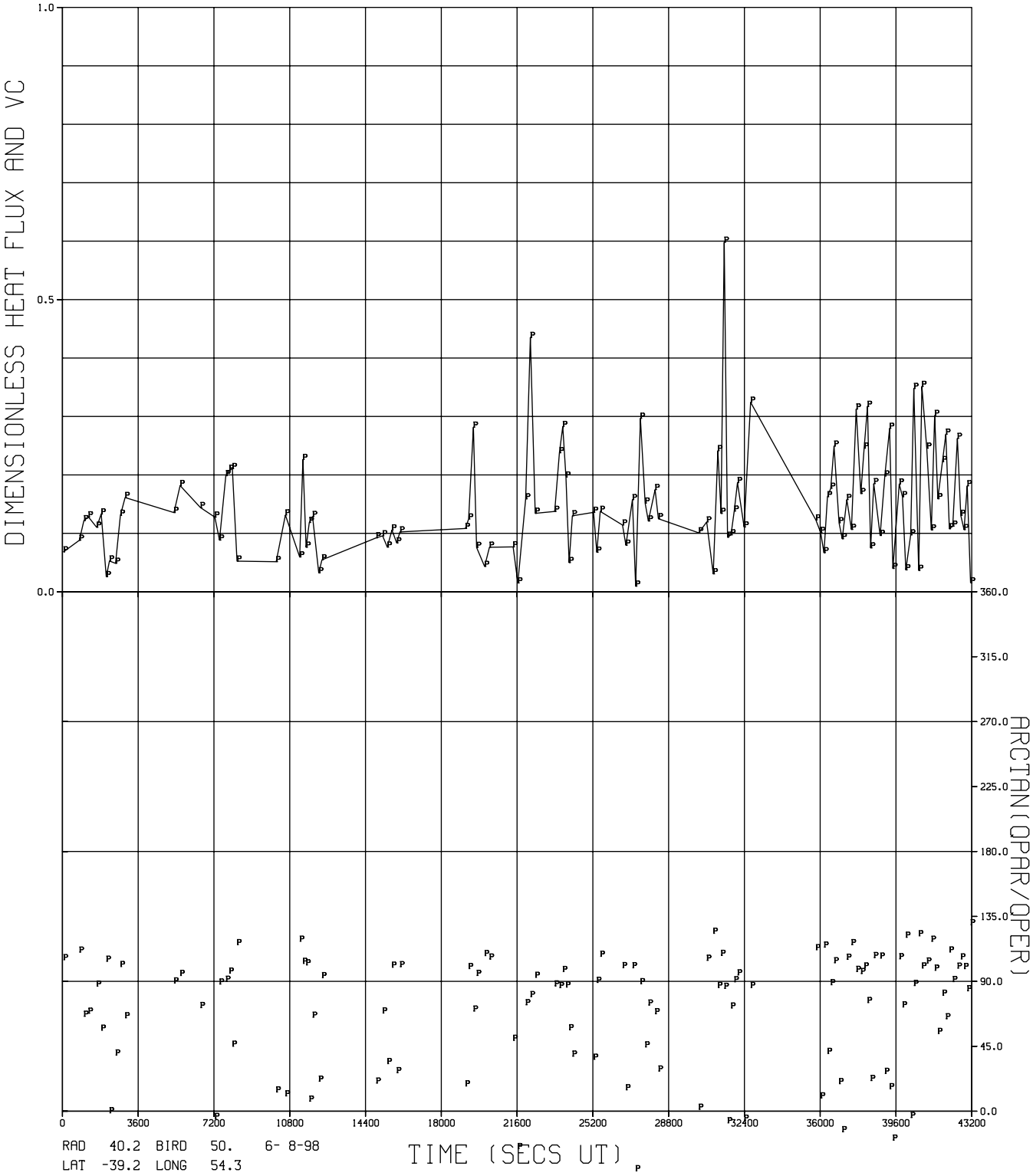

VELOCITY
VELOCITY DIFFERENCE
TIME (SECS UT)
RAD 40.2 BIRD 50. 6- 8-98
LAT -39.2 LONG 54.3

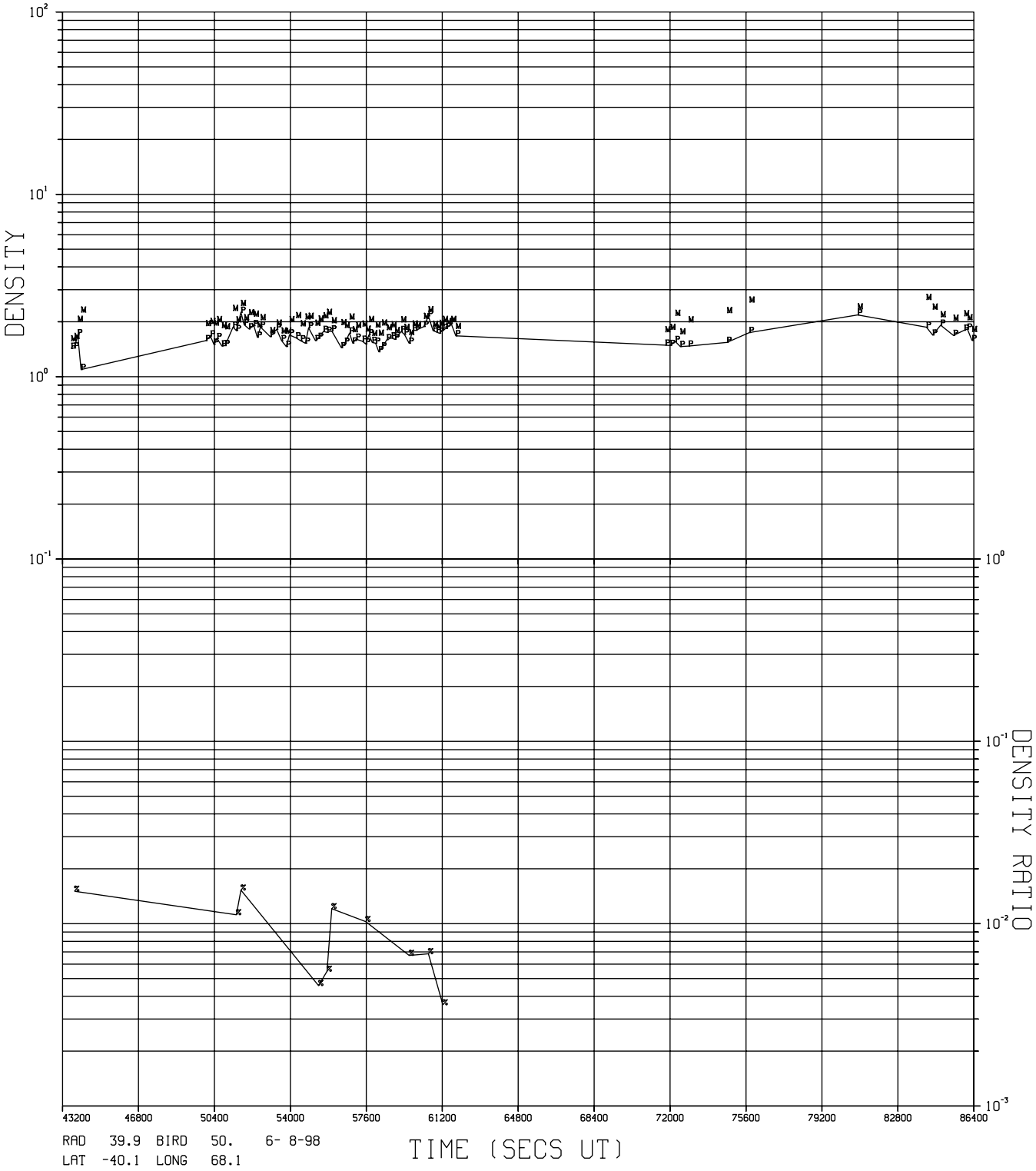

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
RAD 40.2 BIRD 50. 6- 8-98
LAT -39.2 LONG 54.3

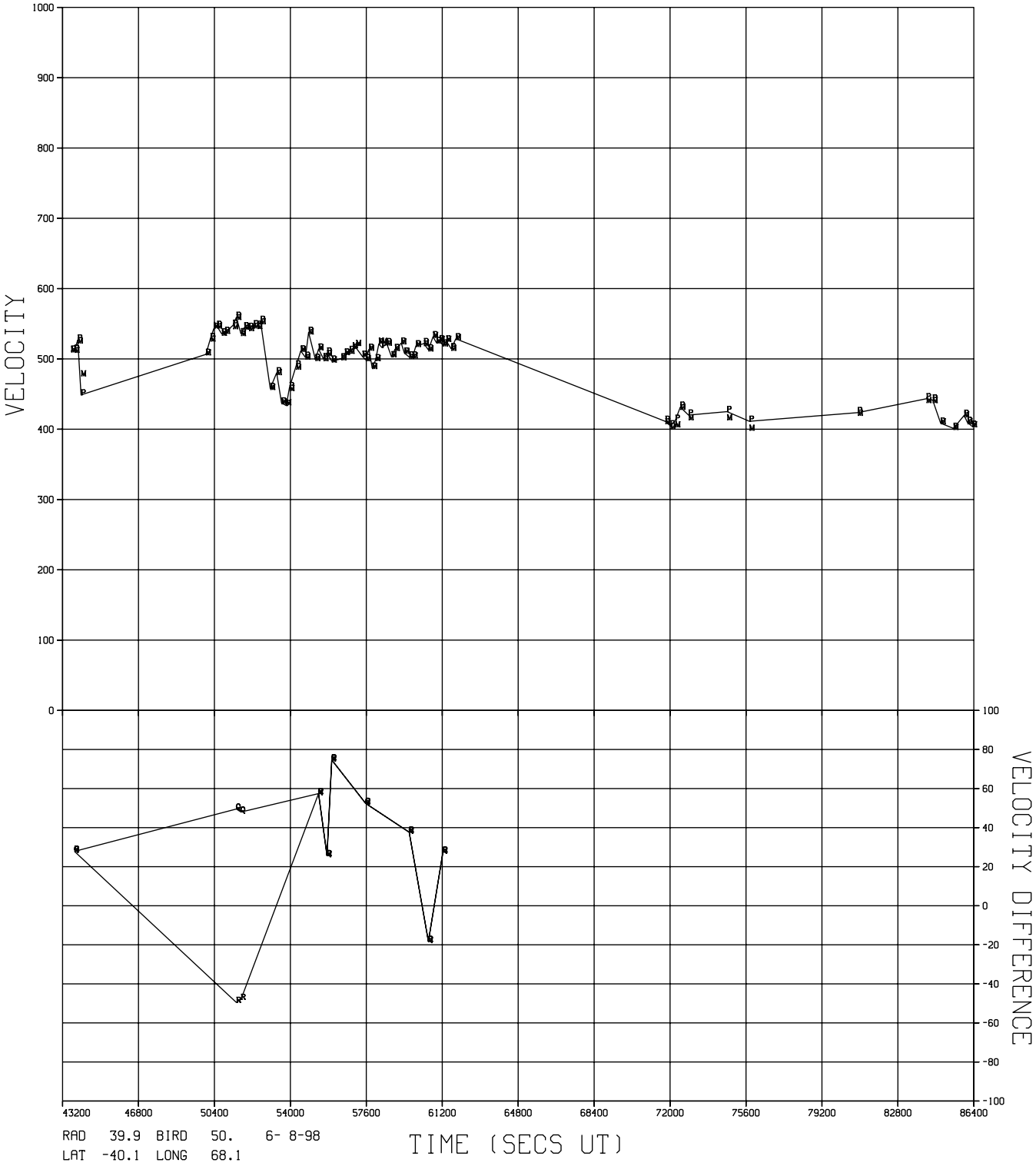

TEMPERATURE
TEMPERATURE RATIO
TIME (SECS UT)
RAD 40.2 BIRD 50. 6- 8-98
LAT -39.2 LONG 54.3

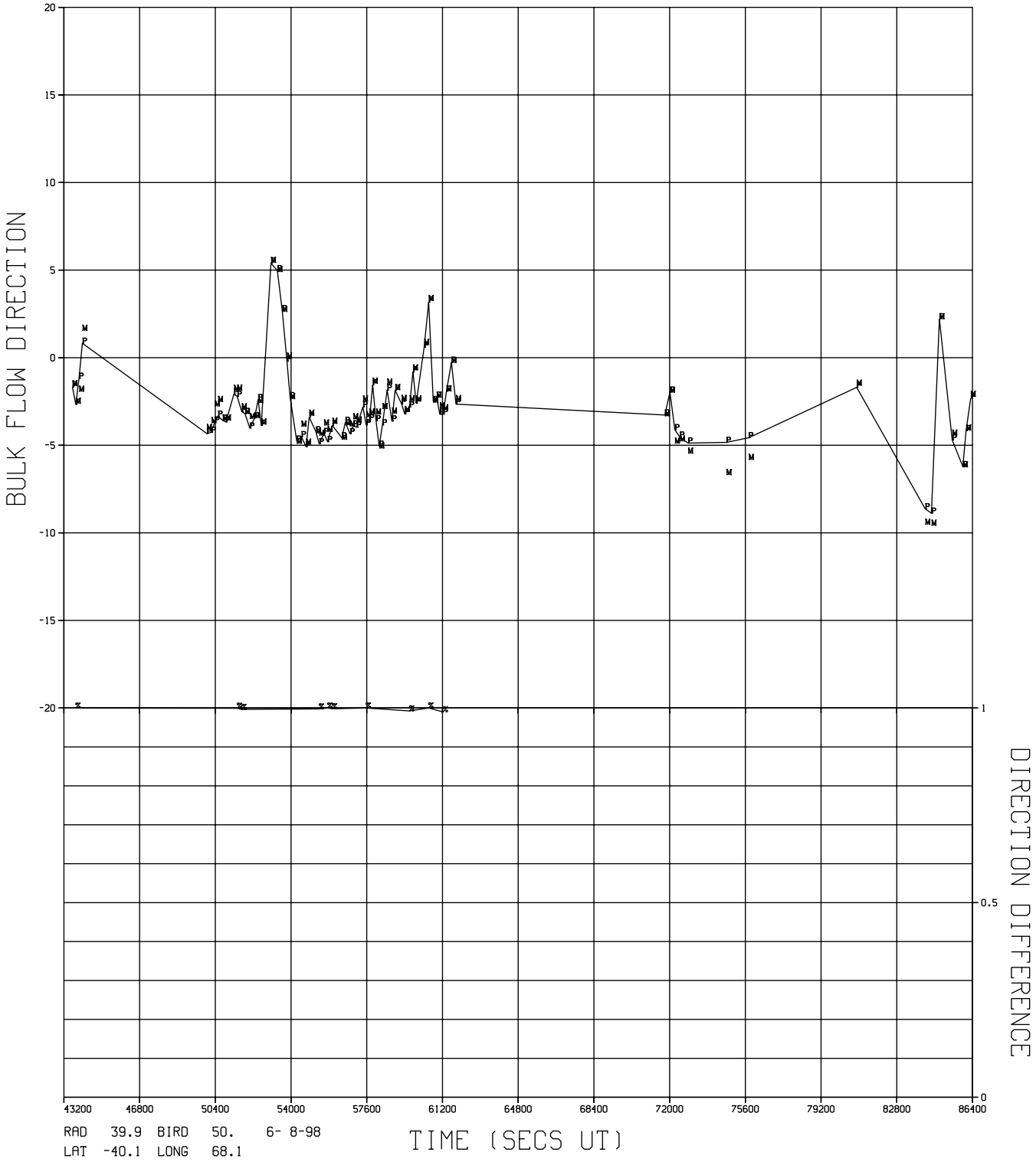

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 40.2 BIRD 50. 6- 8-98
LAT -39.2 LONG 54.3

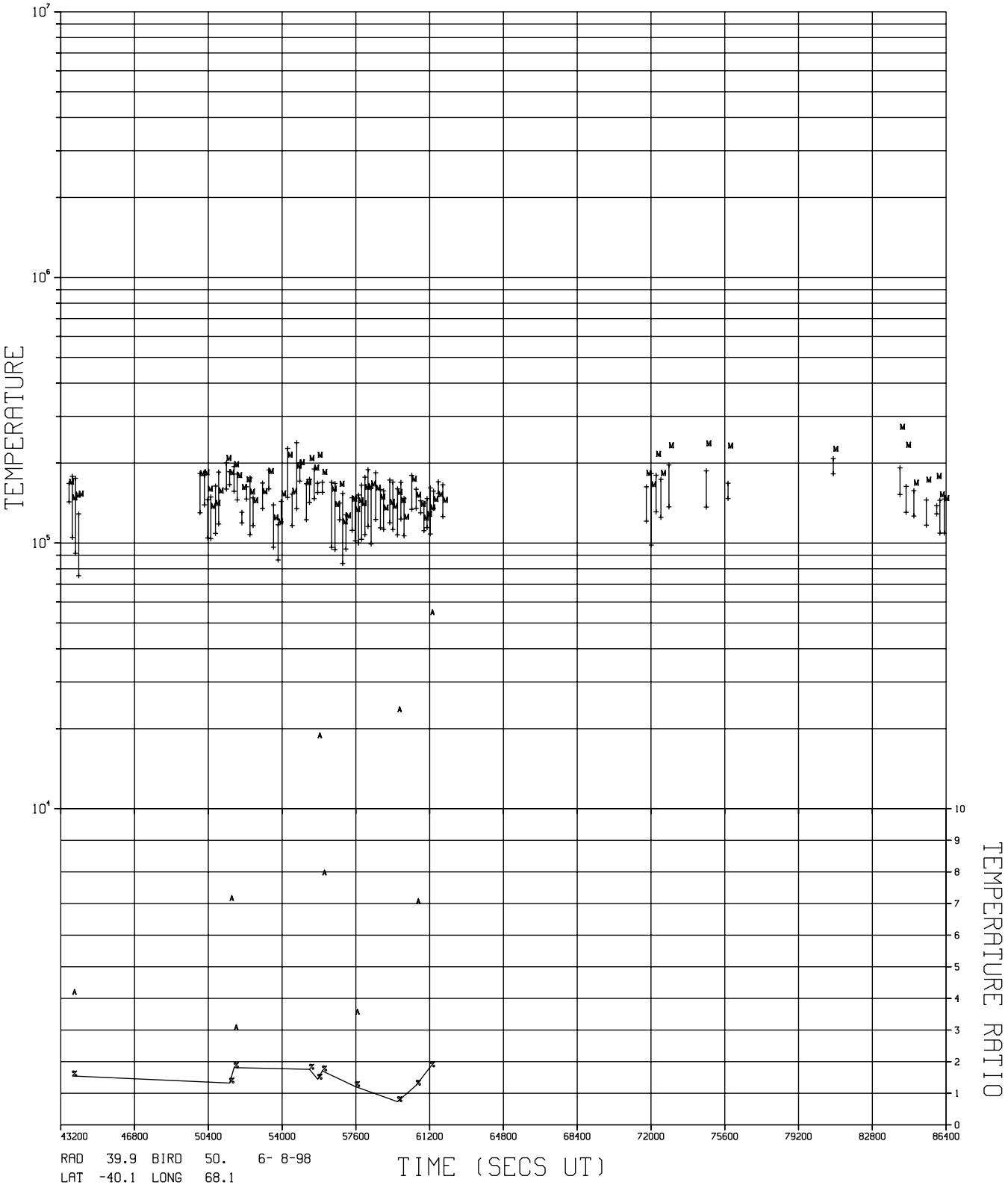

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
RAD 40.2 BIRD 50. 6- 8-98
LAT -39.2 LONG 54.3

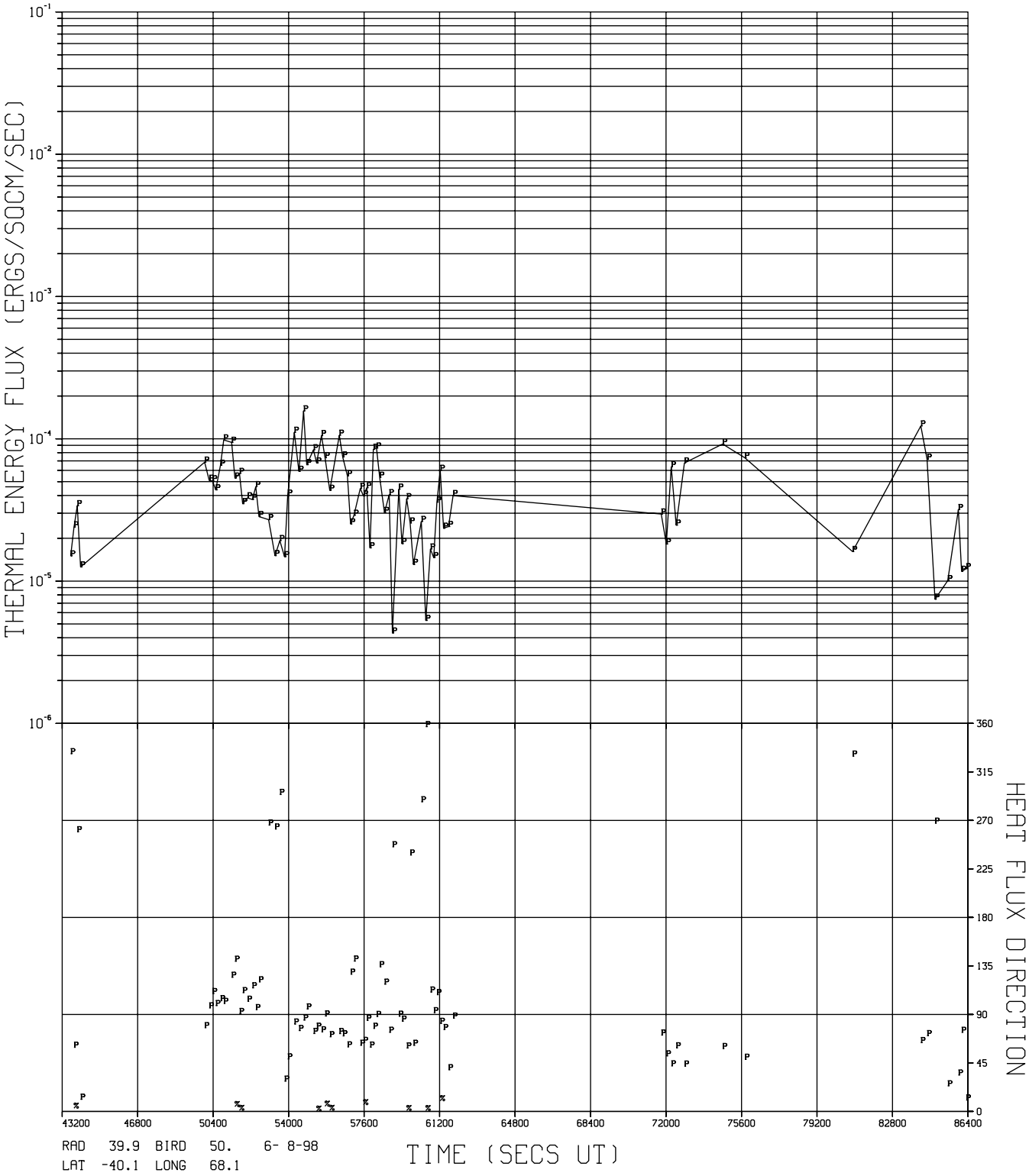

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
TIME (SECS UT)
RAD 40.2 BIRD 50. 6- 8-98
LAT -39.2 LONG 54.3

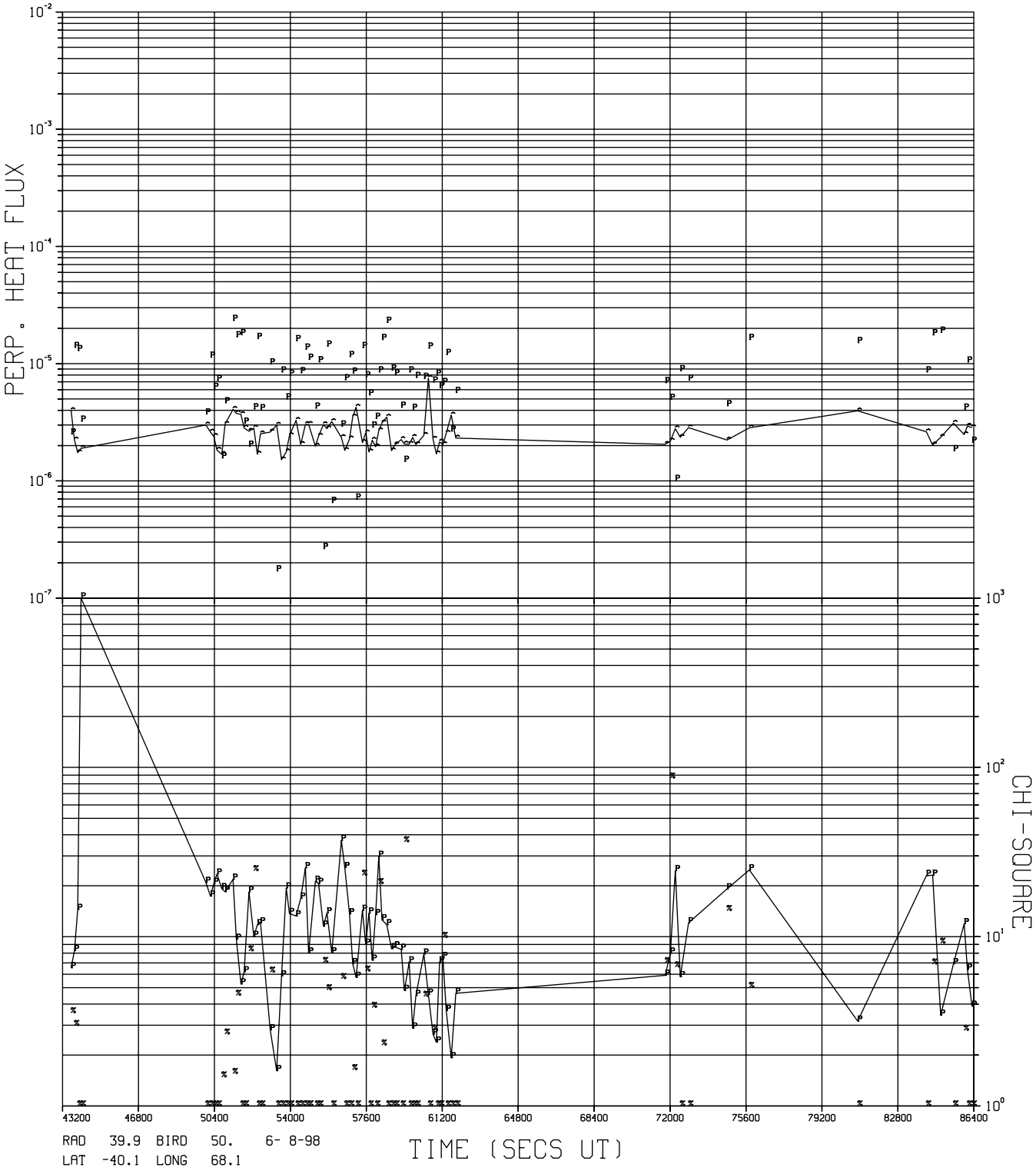

DENSITY
DENSITY RATIO
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 39.9 BIRD 50. 6- 8-98
LAT -40.1 LONG 68.1

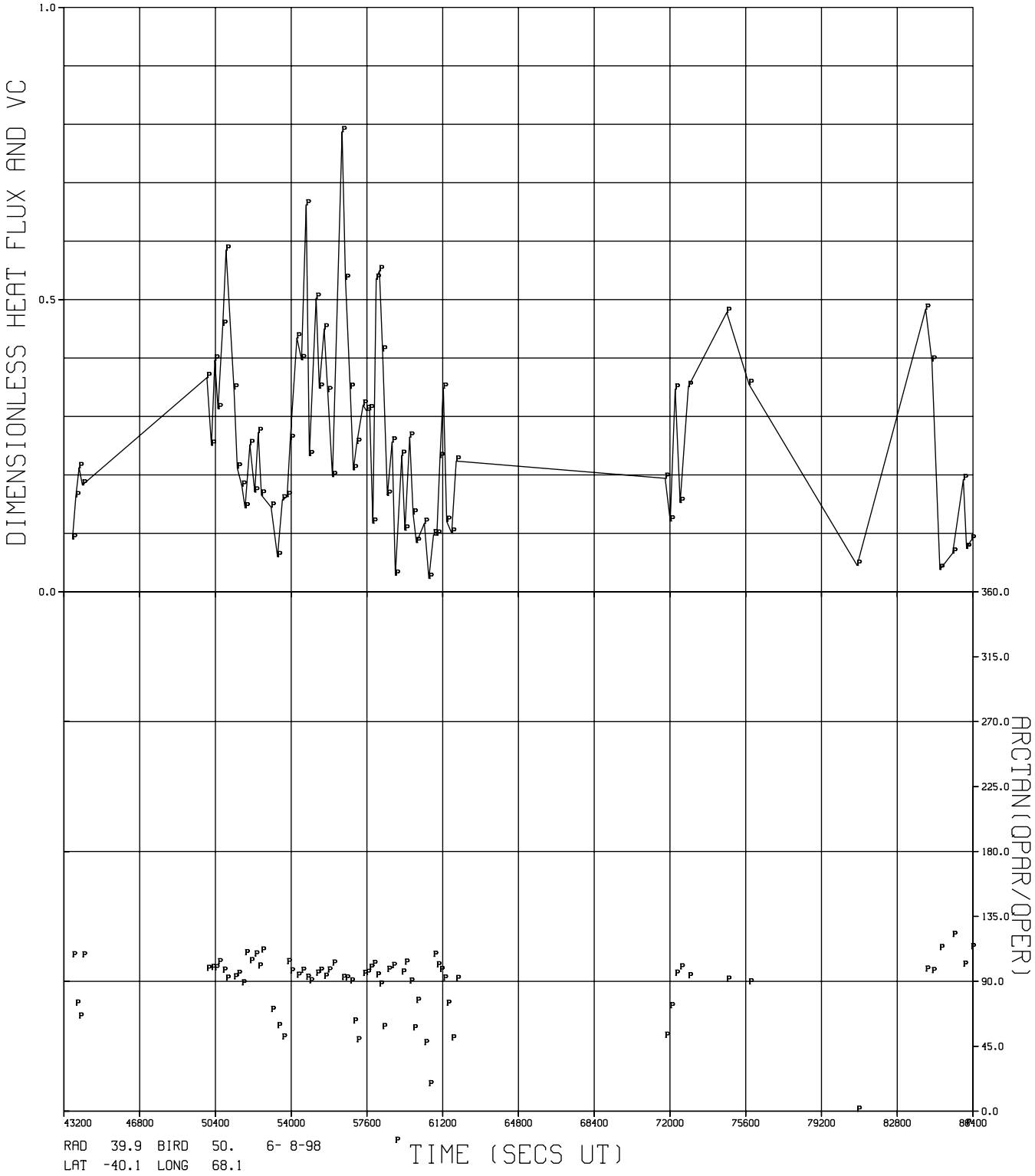

VELOCITY
VELOCITY DIFFERENCE
TIME (SECS UT)
RAD 39.9 BIRD 50. 6- 8-98
LAT -40.1 LONG 68.1

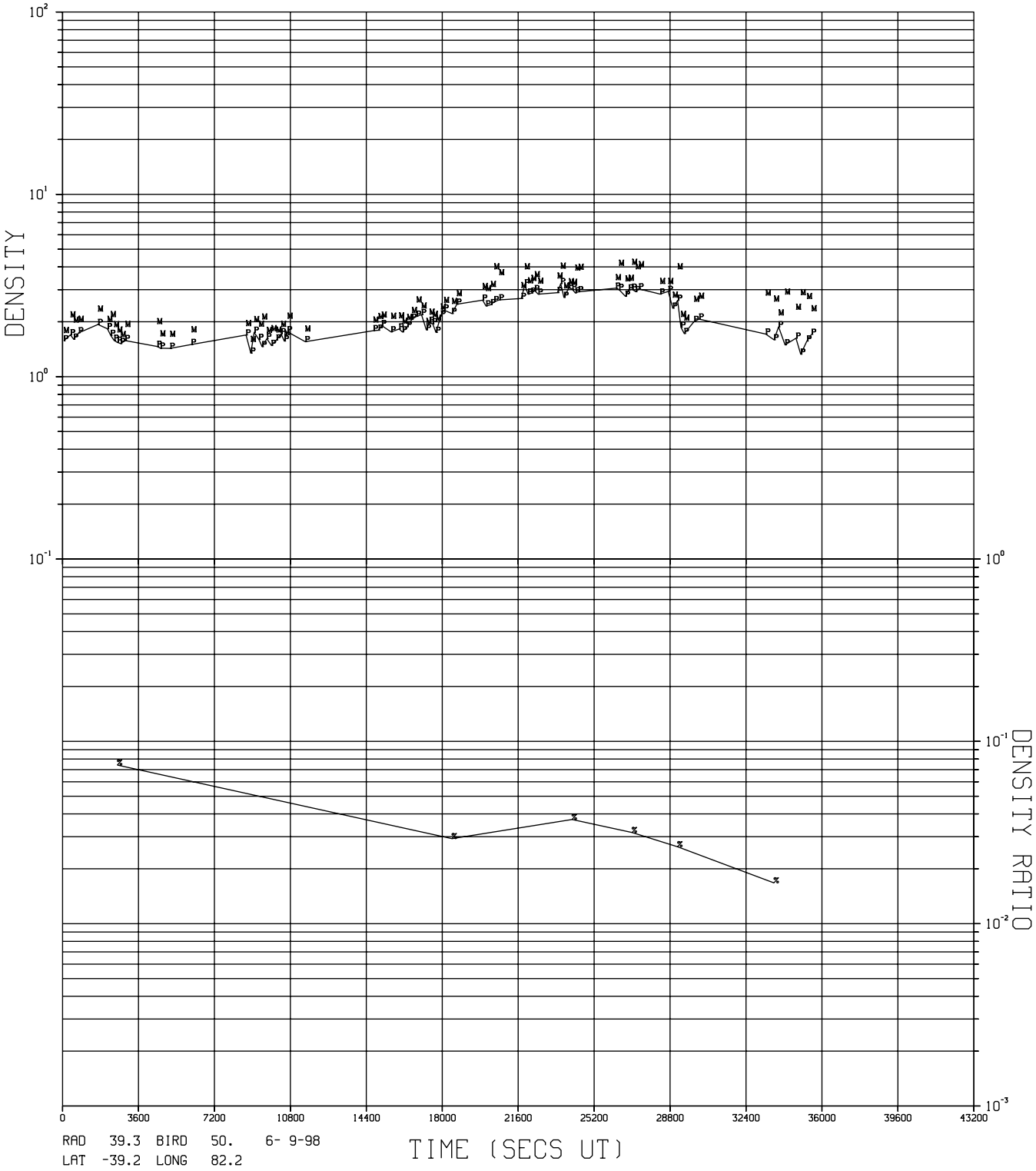

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 39.9 BIRD 50. 6- 8-98
LAT -40.1 LONG 68.1

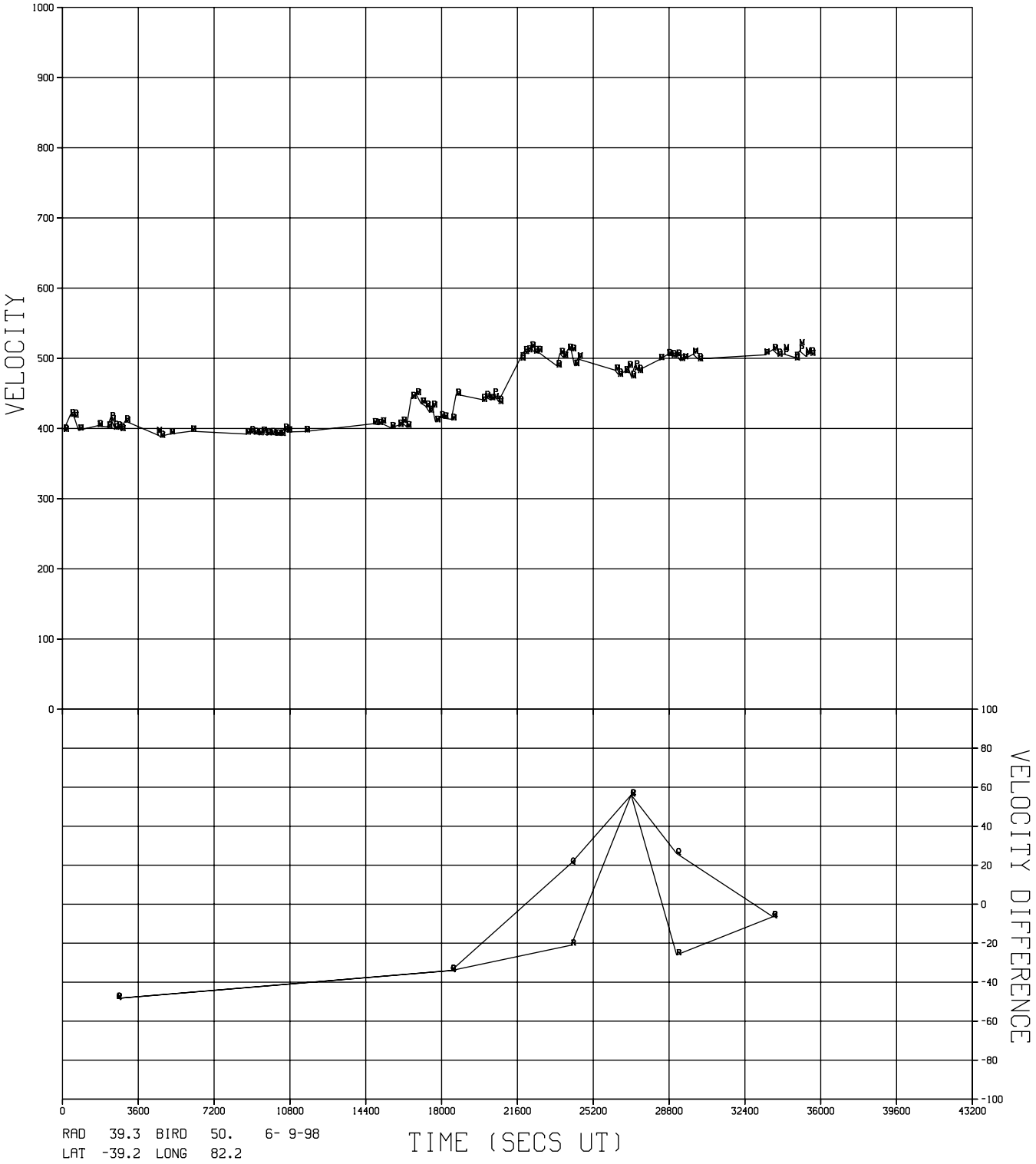

TEMPERATURE
TEMPERATURE RATIO
TIME (SECS UT)
RAD 39.9 BIRD 50. 6- 8-98
LAT -40.1 LONG 68.1

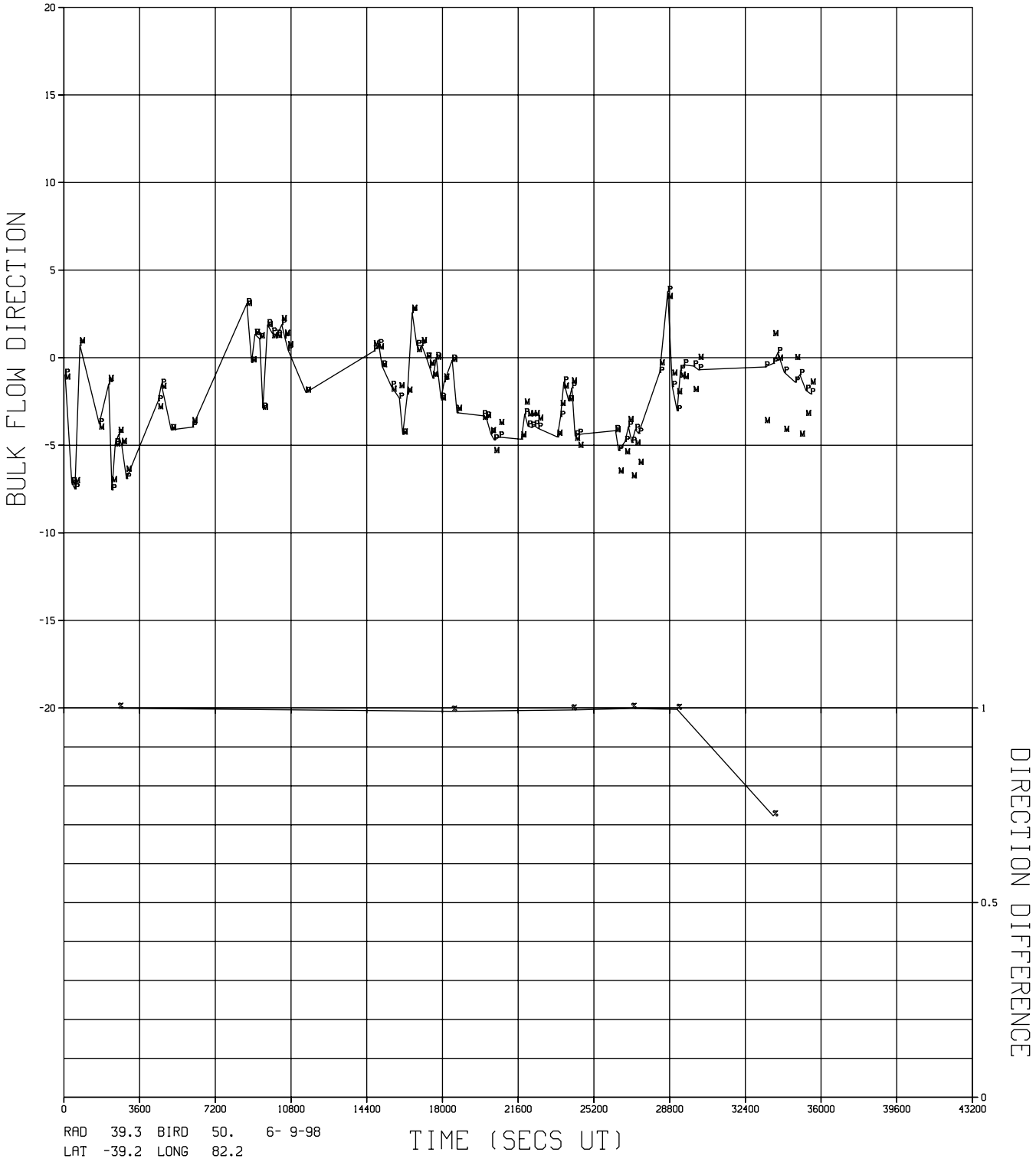

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 39.9 BIRD 50. 6- 8-98
LAT -40.1 LONG 68.1

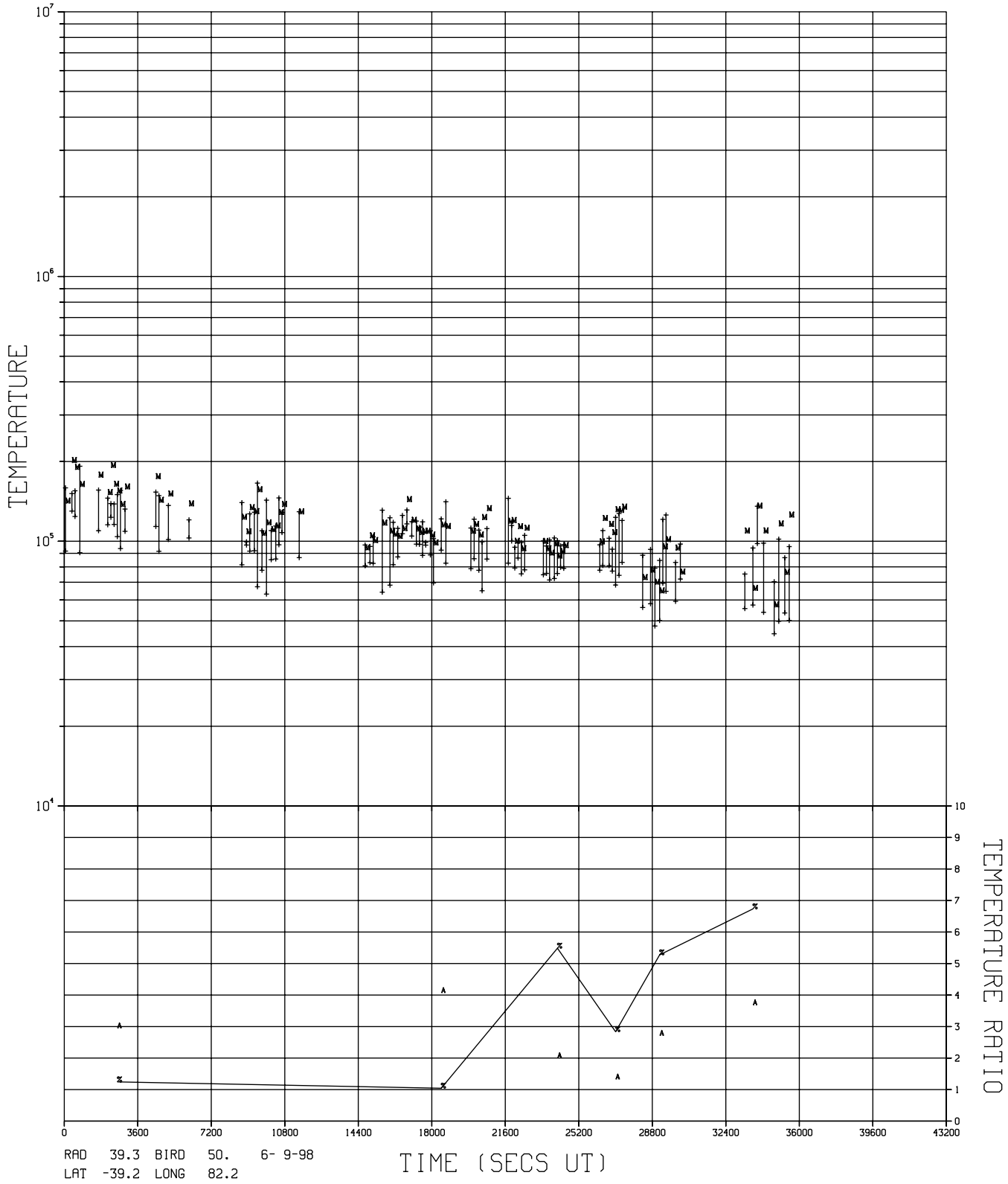

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 39.9 BIRD 50. 6- 8-98
LAT -40.1 LONG 68.1

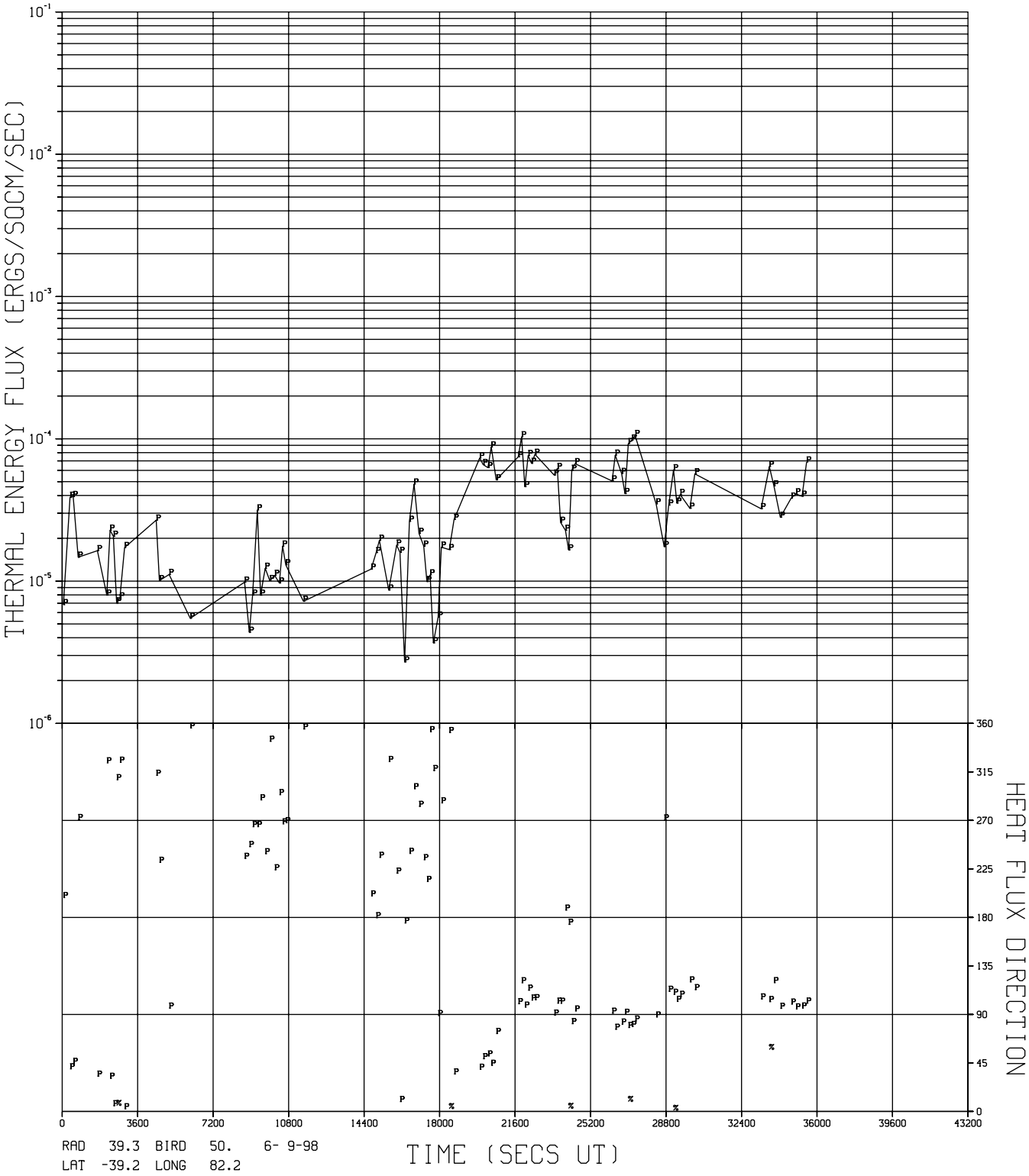

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
TIME (SECS UT)
RAD 39.9 BIRD 50. 6- 8-98
LAT -40.1 LONG 68.1

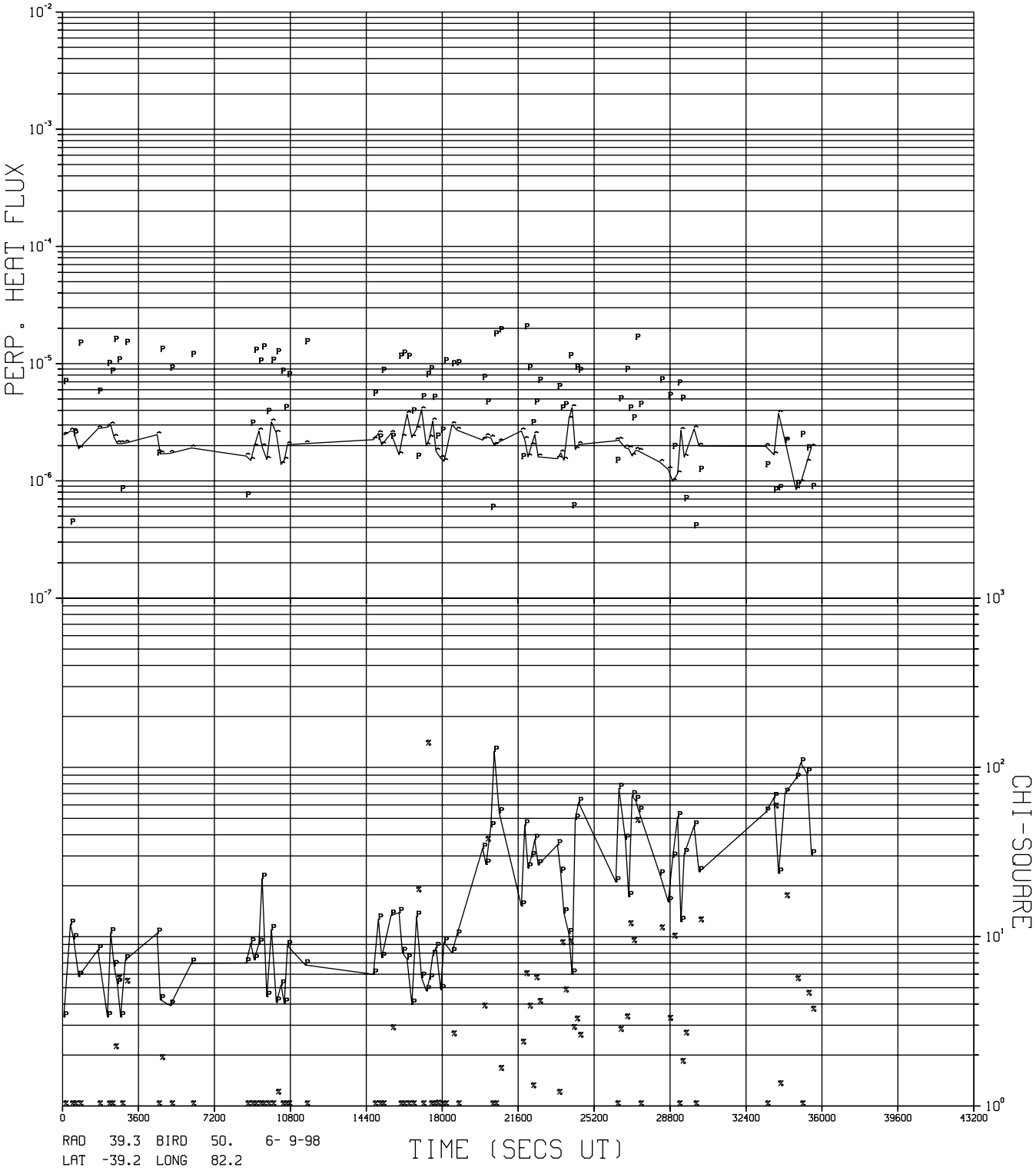

DENSITY
DENSITY RATIO
TIME (SECS UT)
RAD 39.3 BIRD 50. 6- 9-98
LAT -39.2 LONG 82.2

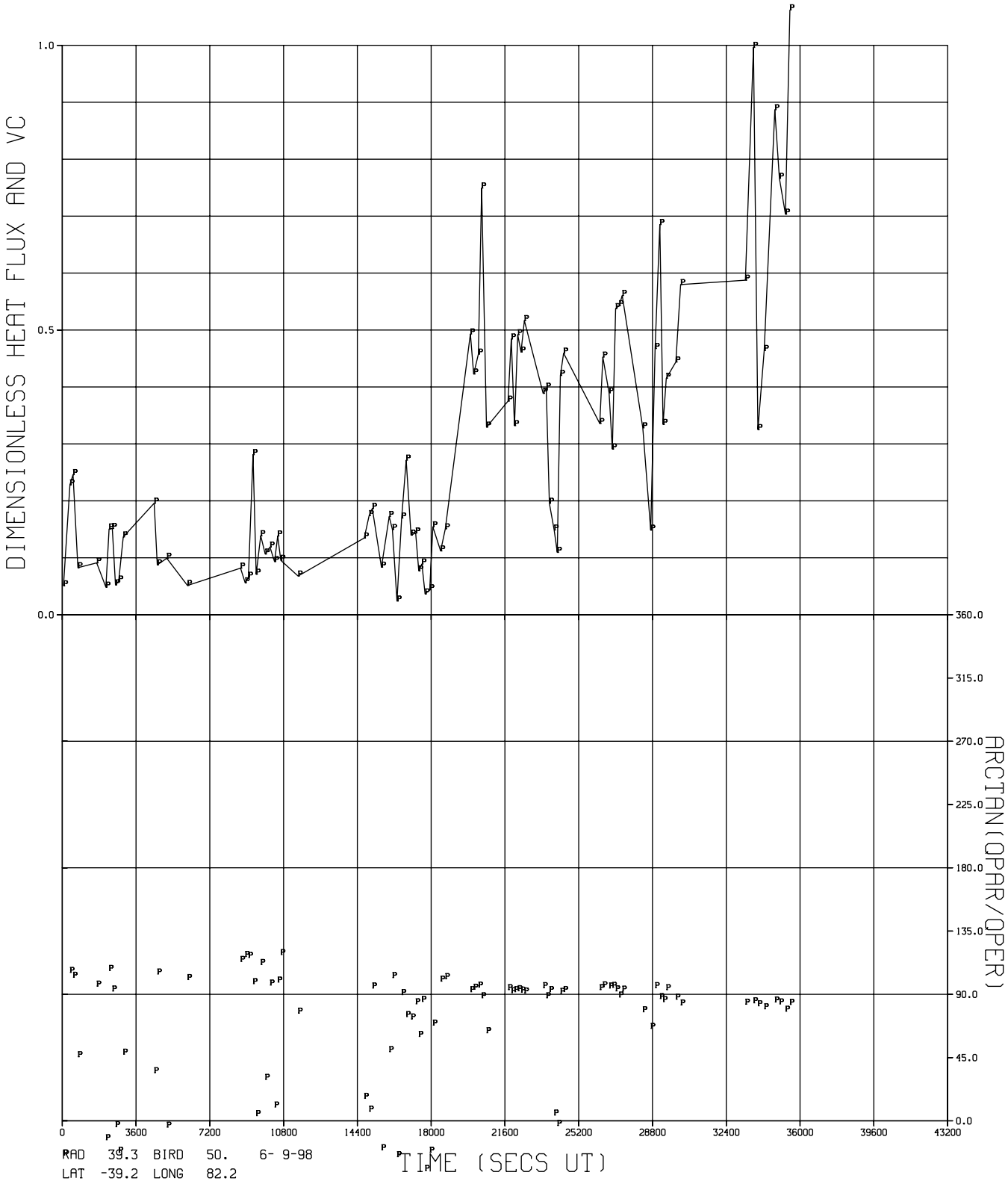

VELOCITY
VELOCITY DIFFERENCE
TIME (SECS UT)
RAD 39.3 BIRD 50. 6- 9-98
LAT -39.2 LONG 82.2


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 39.3 BIRD 50. 6- 9-98
LAT -39.2 LONG 82.2


TEMPERATURE
TEMPERATURE RATIO
TIME (SECS UT)
RAD 39.3 BIRD 50. 6- 9-98
LAT -39.2 LONG 82.2


THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 39.3 BIRD 50. 6- 9-98
LAT -39.2 LONG 82.2


PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
RAD 39.3 BIRD 50. 6- 9-98
LAT -39.2 LONG 82.2


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 39.3 BIRD 50. 6- 9-98
LAT -39.2 LONG 82.2