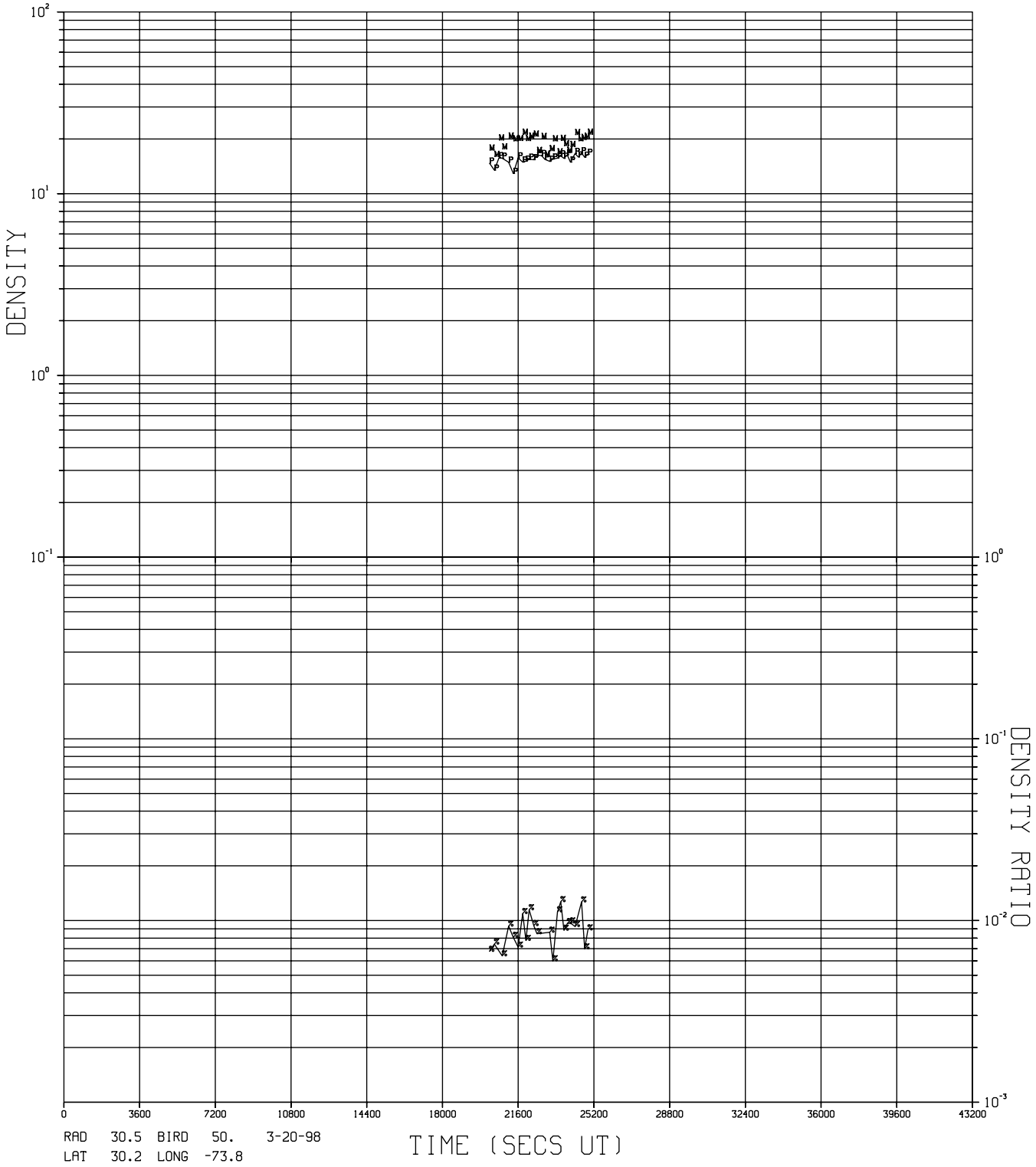
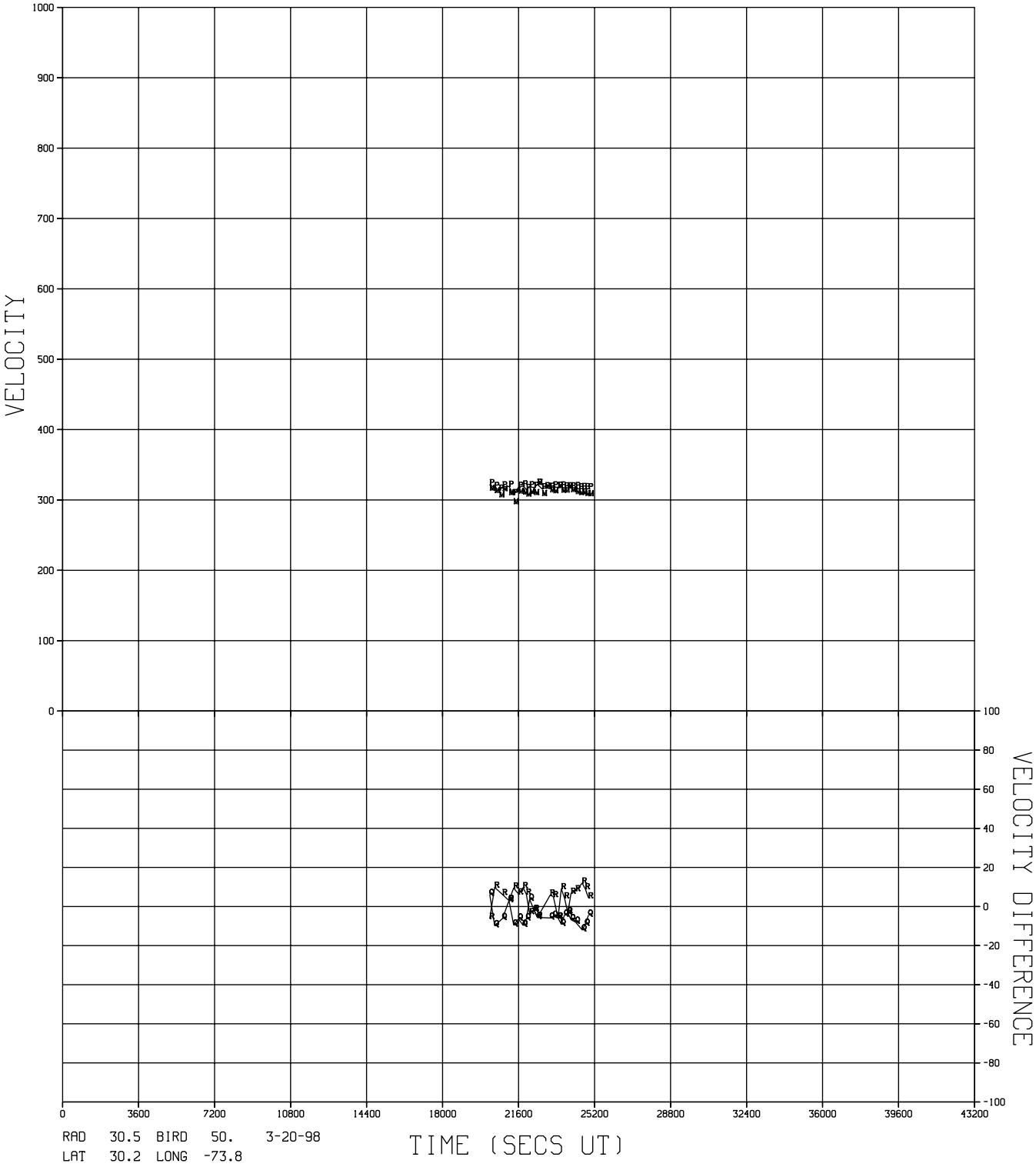
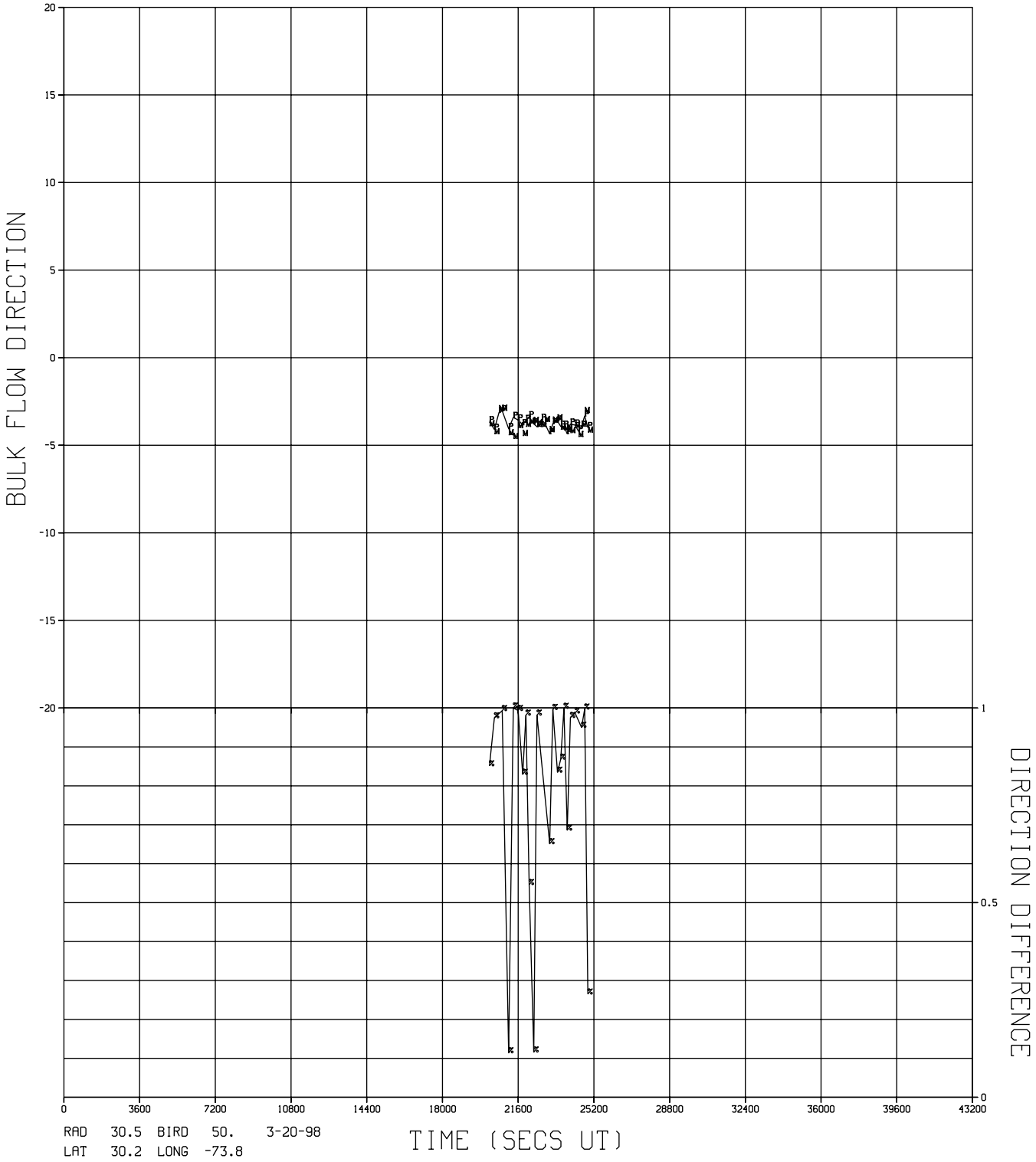
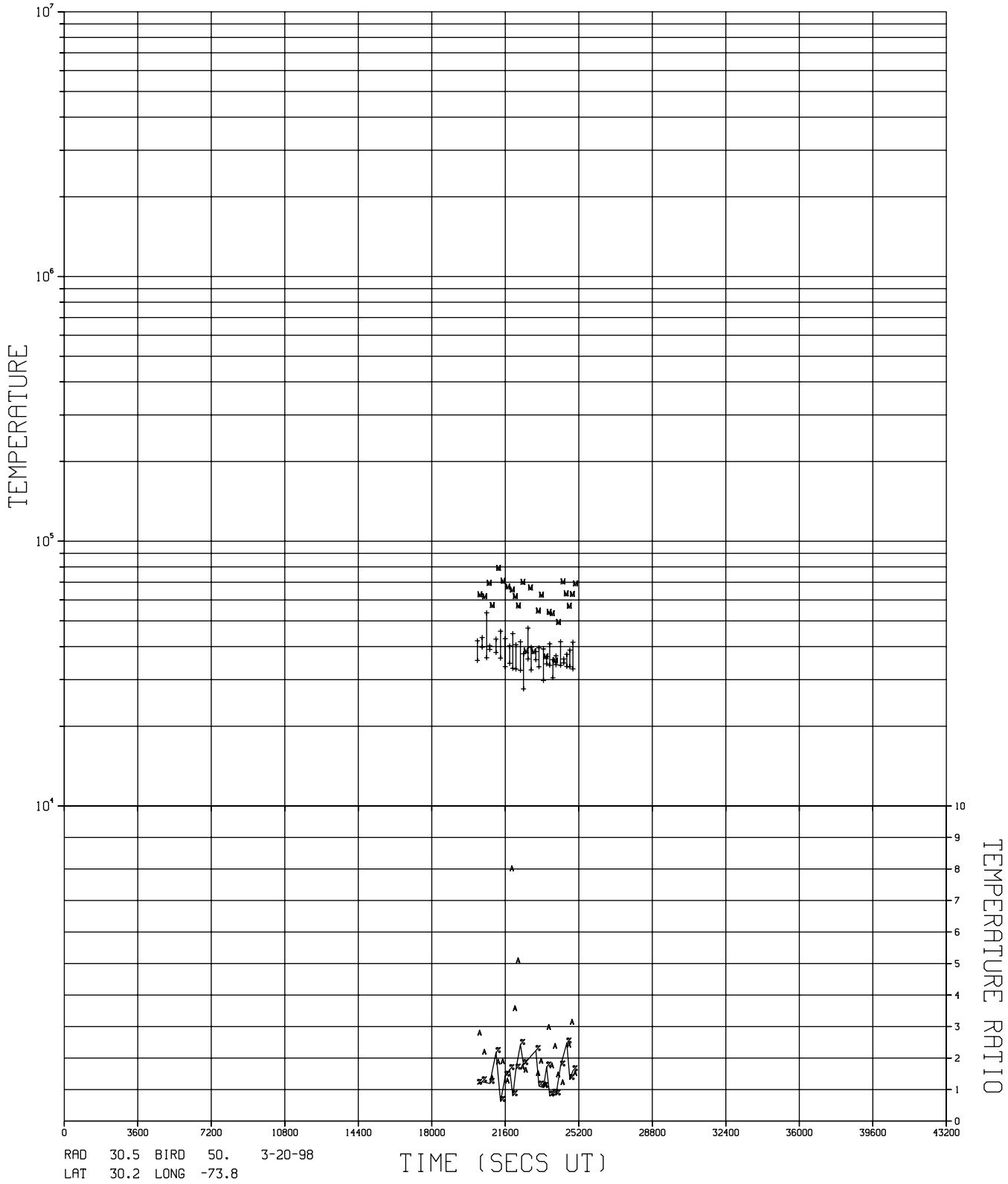
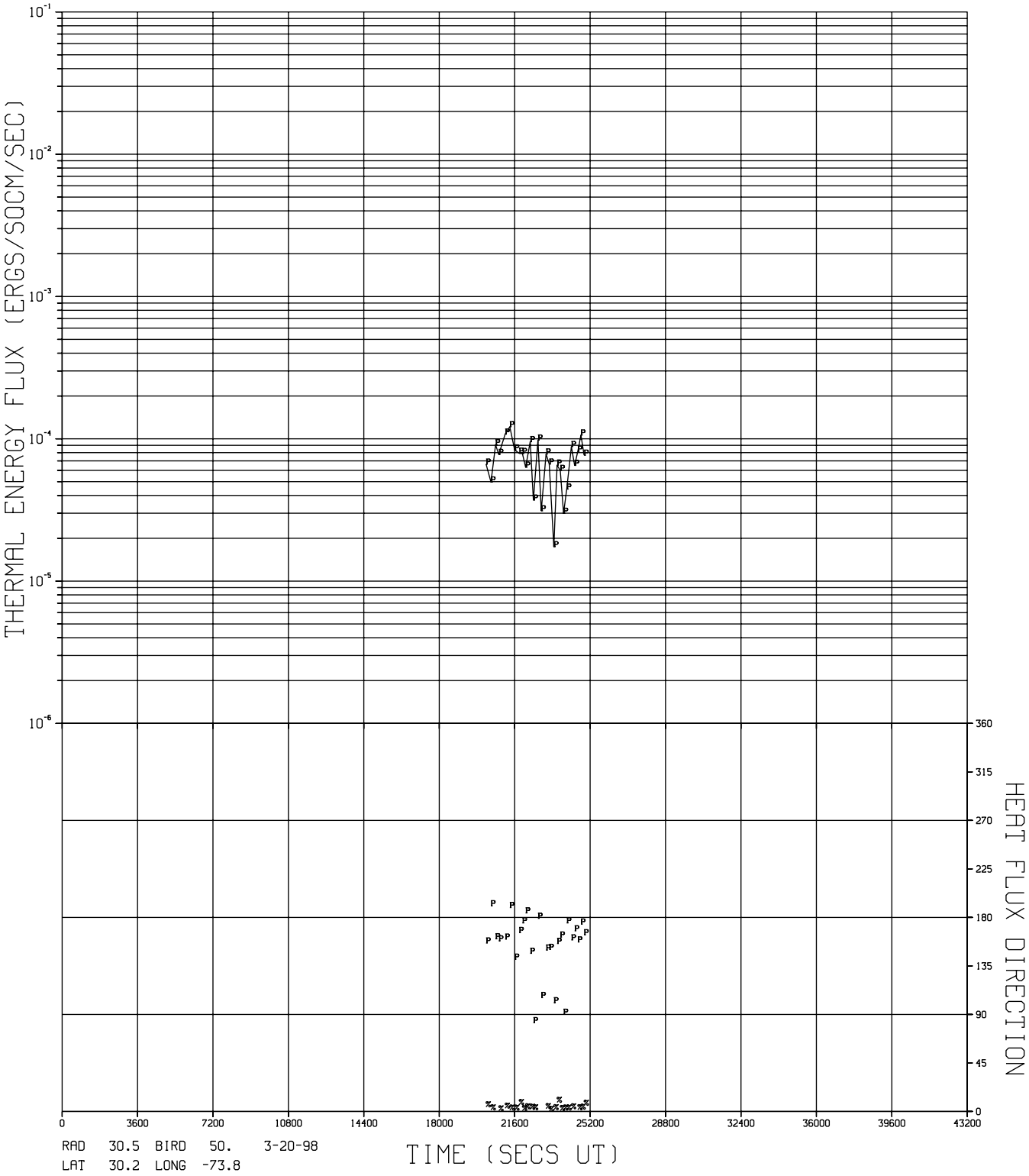
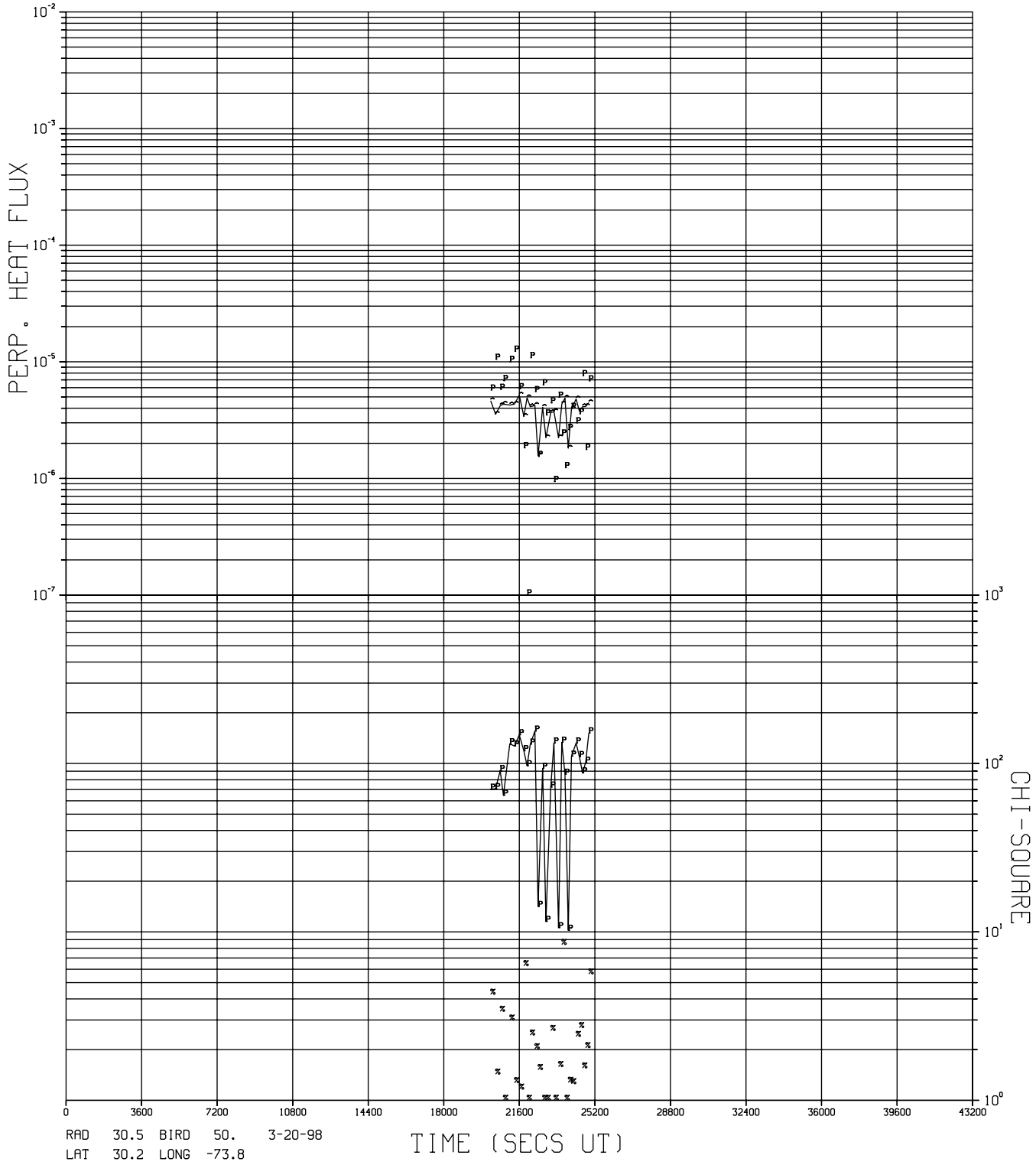

DENSITY
DENSITY RATIO
TIME (SECS UT)
RAD 30.5 BIRD 50. 3-20-98
LAT 30.2 LONG -73.8

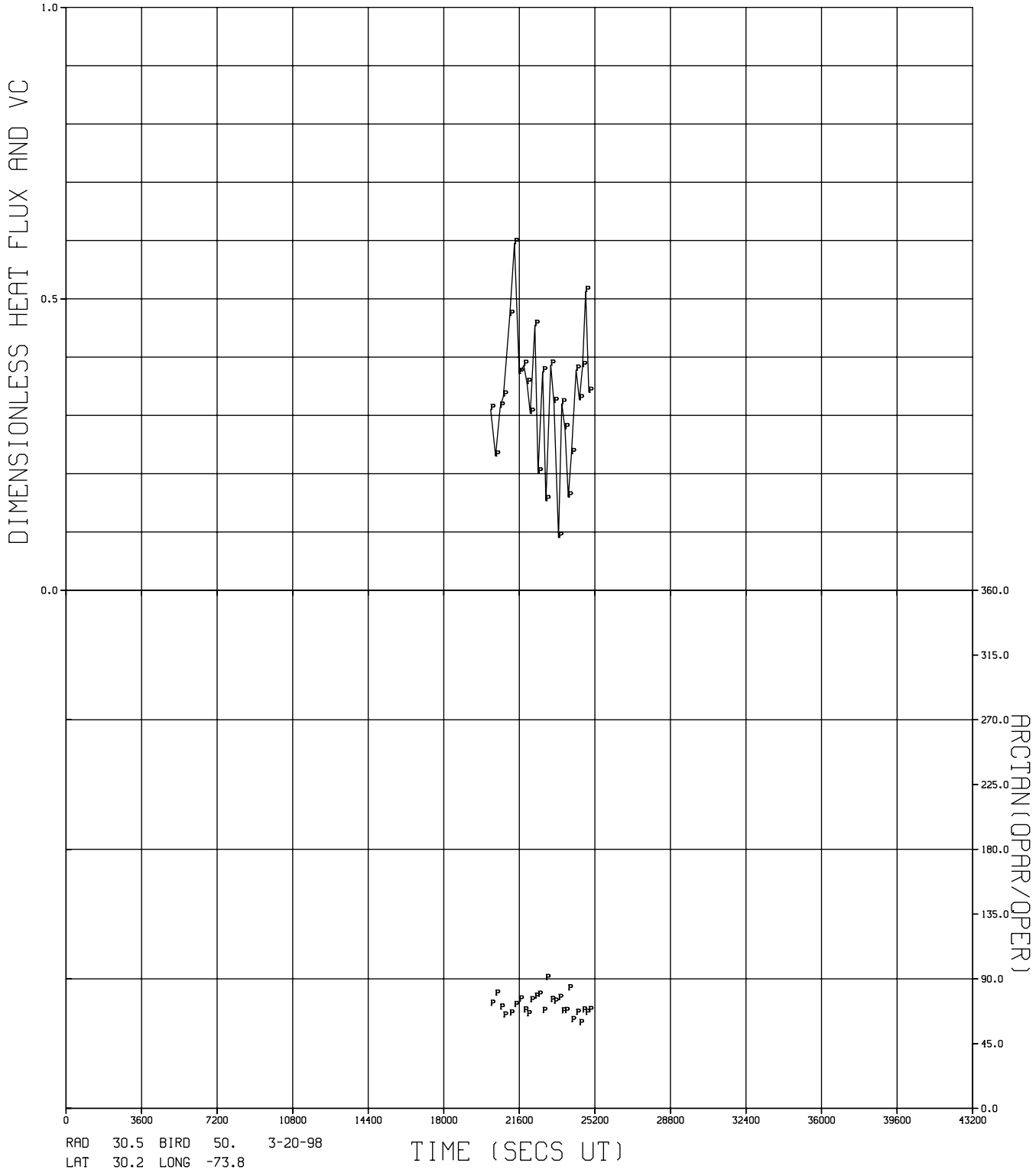

VELOCITY
VELOCITY DIFFERENCE
TIME (SECS UT)
1000
900
800
700
600
500
400
300
200
100
0
100
80
60
40
20
0
-20
-40
-60
-80
-100
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
RAD 30.5 BIRD 50. 3-20-98
LAT 30.2 LONG -73.8

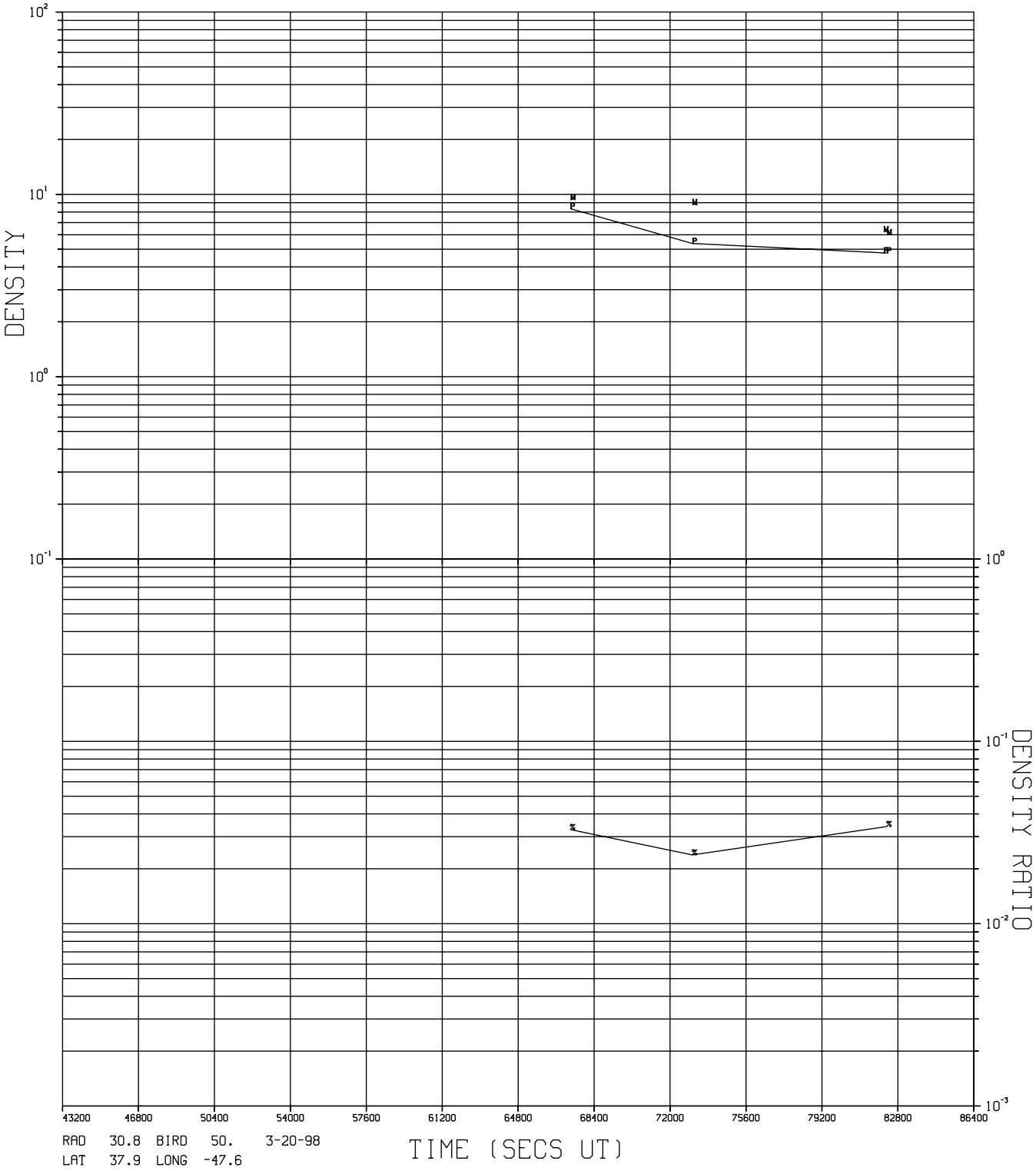

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
RAD 30.5 BIRD 50. 3-20-98
LAT 30.2 LONG -73.8

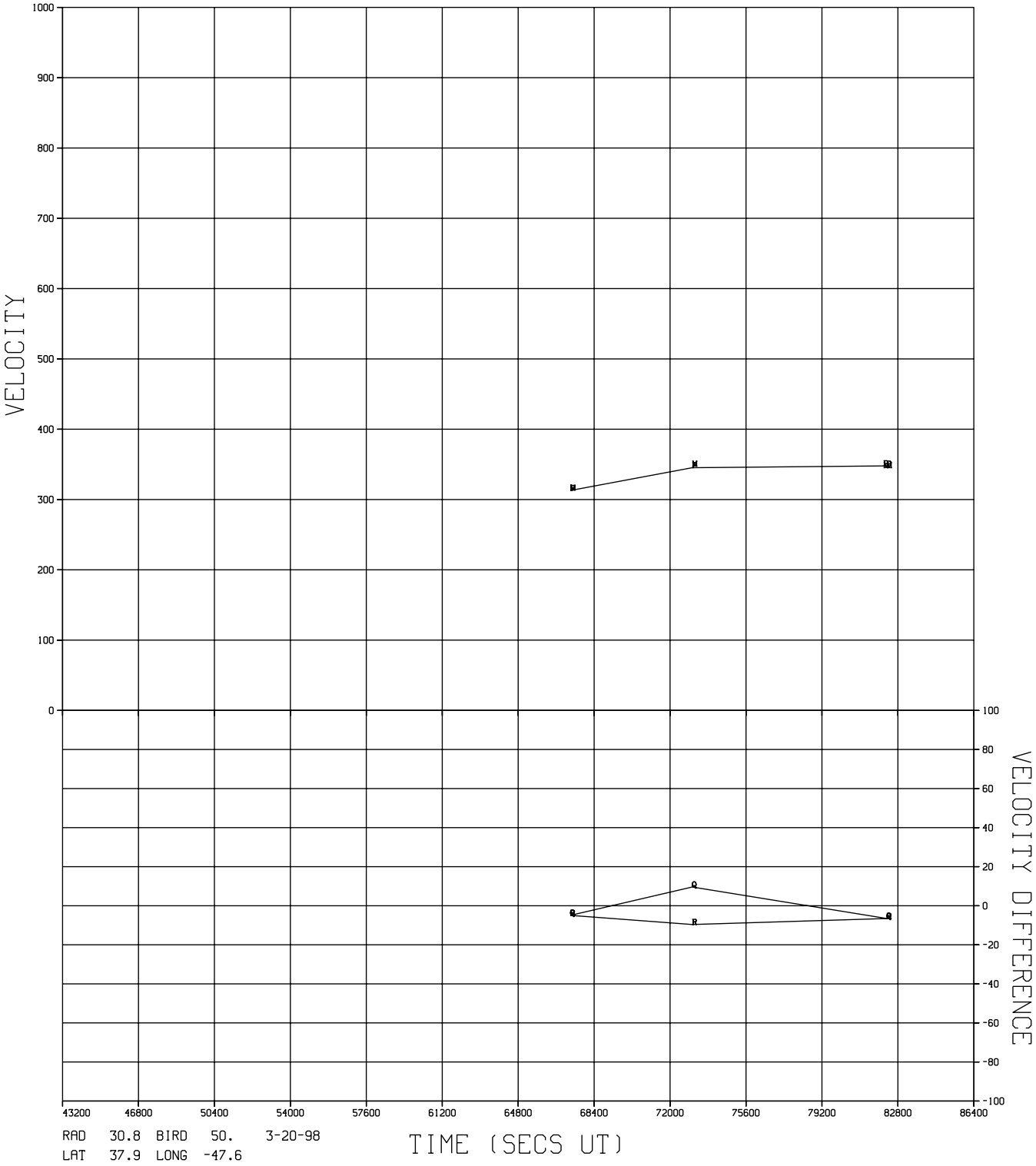

TEMPERATURE
10^7
10^6
10^5
10^4
TEMPERATURE RATIO
0
1
2
3
4
5
6
7
8
9
10
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
TIME (SECS UT)
RAD 30.5 BIRD 50. 3-20-98
LAT 30.2 LONG -73.8

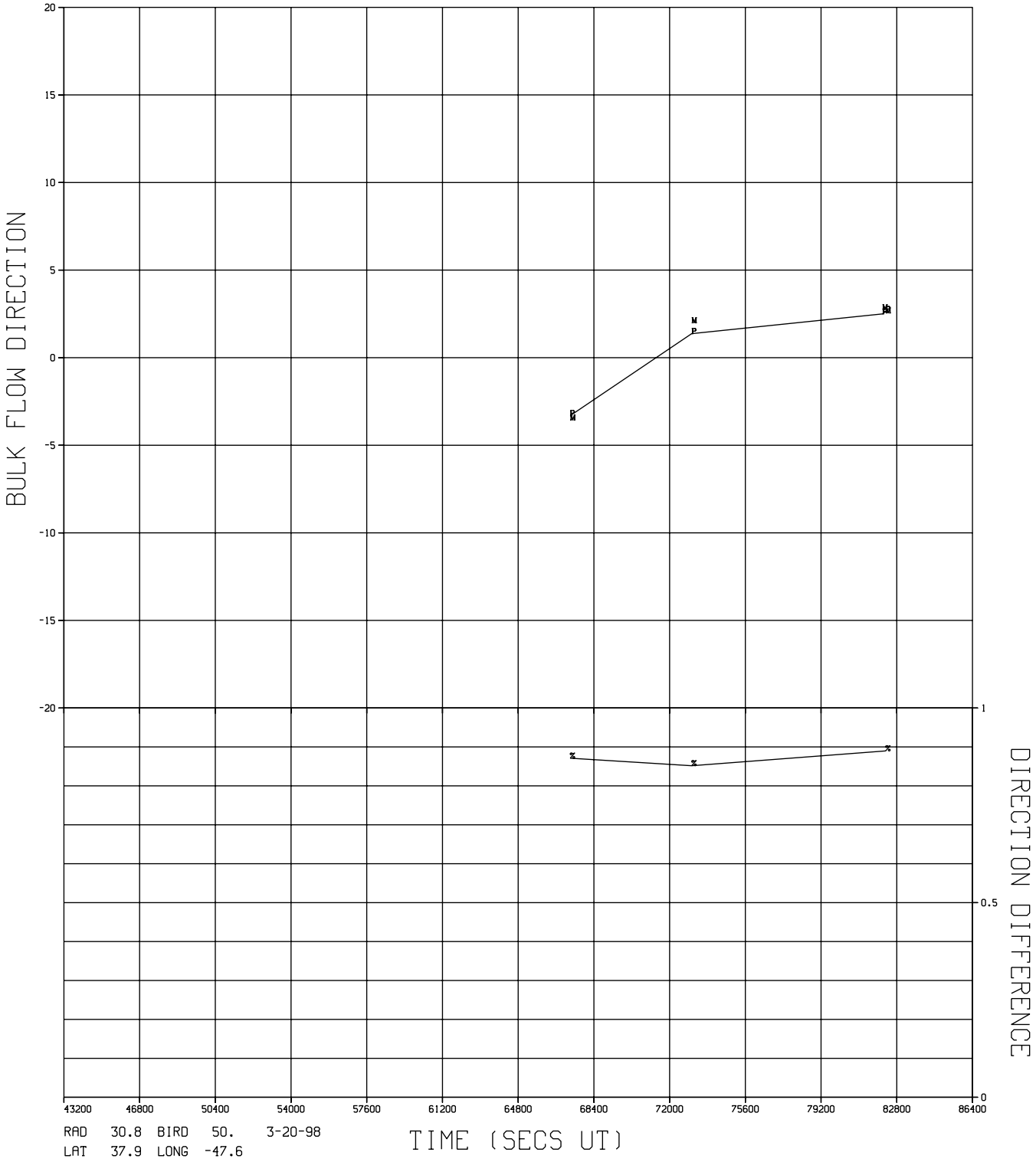

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 30.5 BIRD 50. 3-20-98
LAT 30.2 LONG -73.8

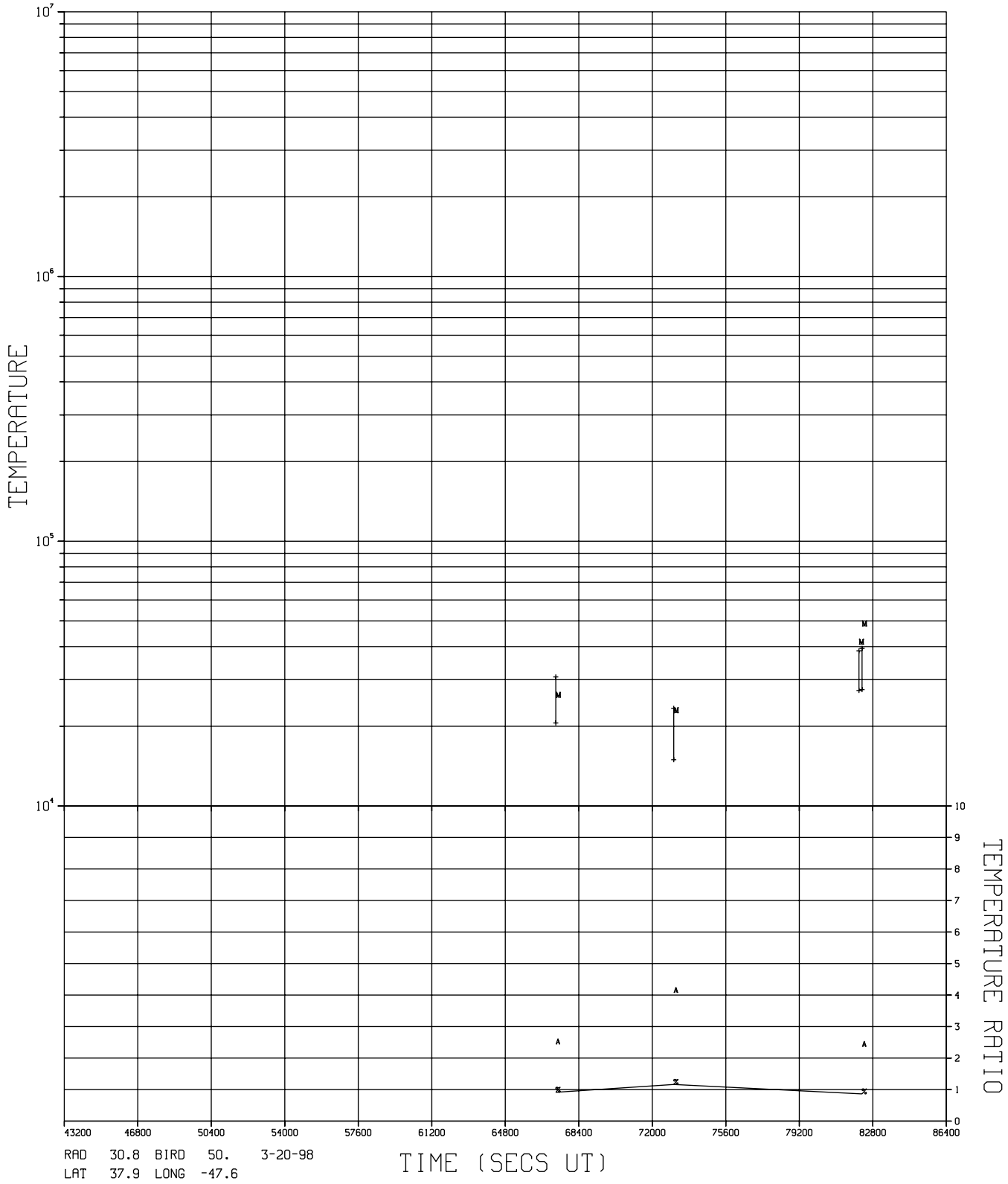

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
RAD 30.5 BIRD 50. 3-20-98
LAT 30.2 LONG -73.8

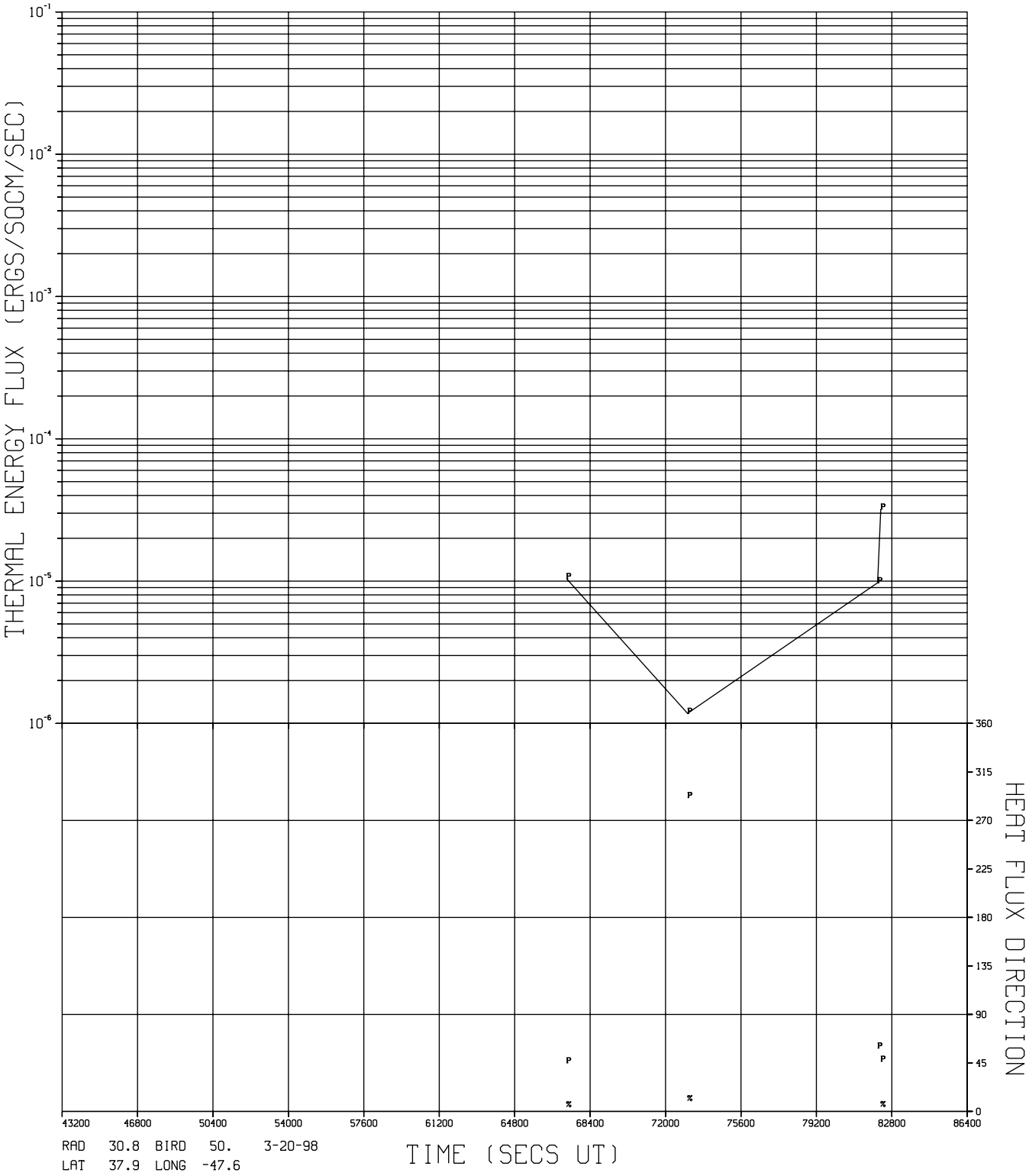

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
TIME (SECS UT)
RAD 30.5 BIRD 50. 3-20-98
LAT 30.2 LONG -73.8

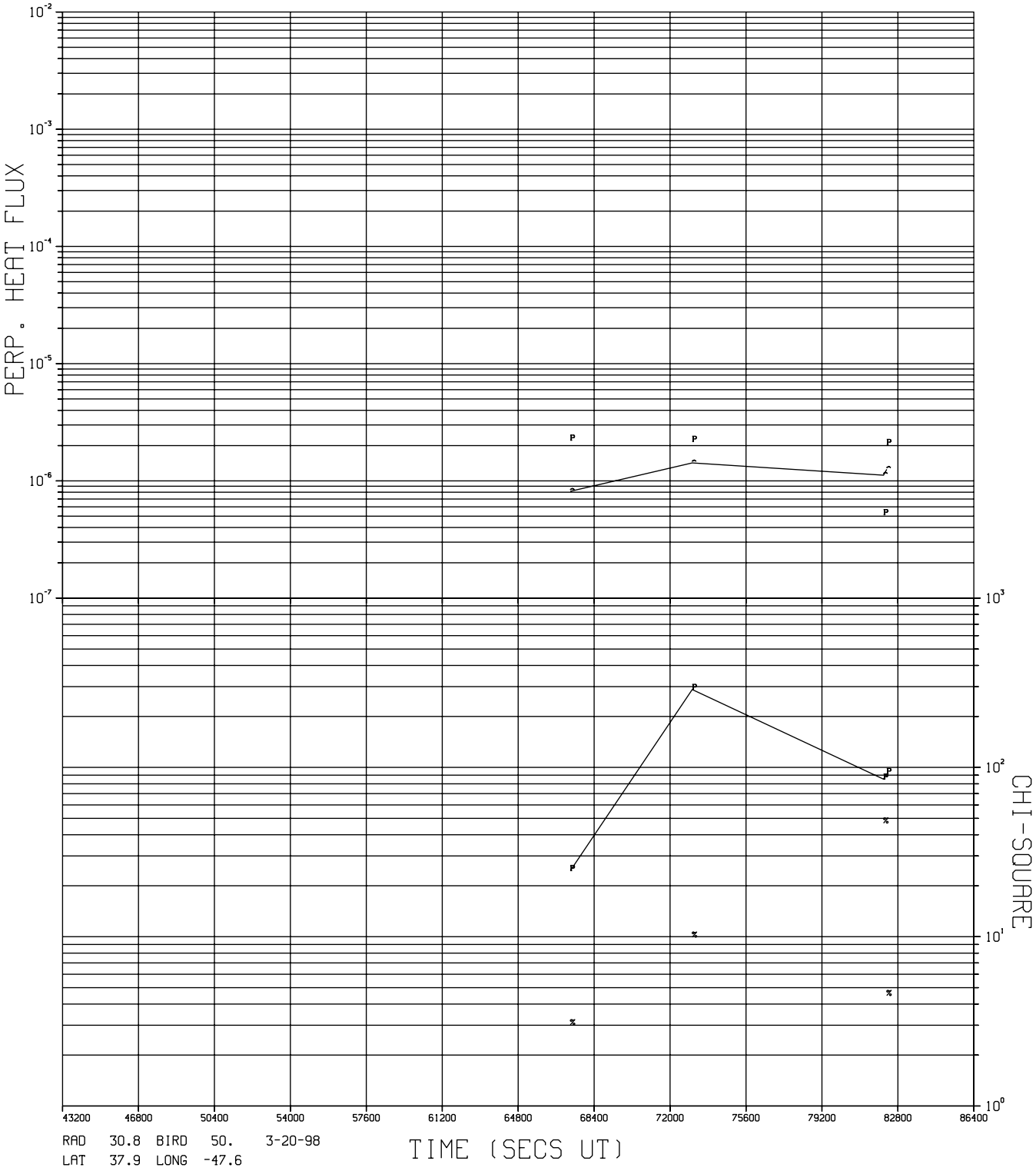

DENSITY
DENSITY RATIO
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 30.8 BIRD 50. 3-20-98
LAT 37.9 LONG -47.6

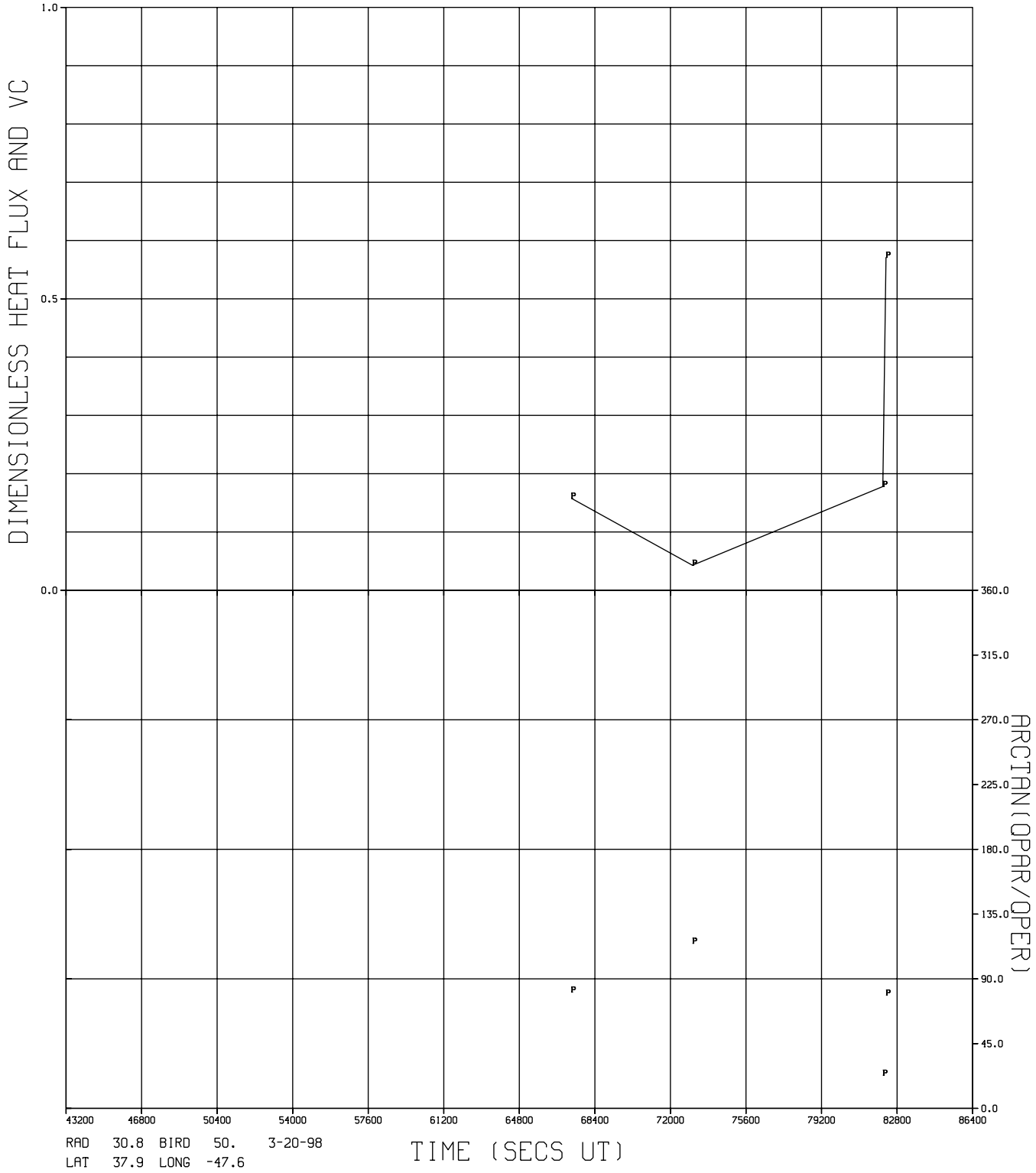

VELOCITY
1000
900
800
700
600
500
400
300
200
100
0
VELOCITY DIFFERENCE
100
80
60
40
20
0
-20
-40
-60
-80
-100
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 30.8 BIRD 50. 3-20-98
LAT 37.9 LONG -47.6
TIME (SECS UT)

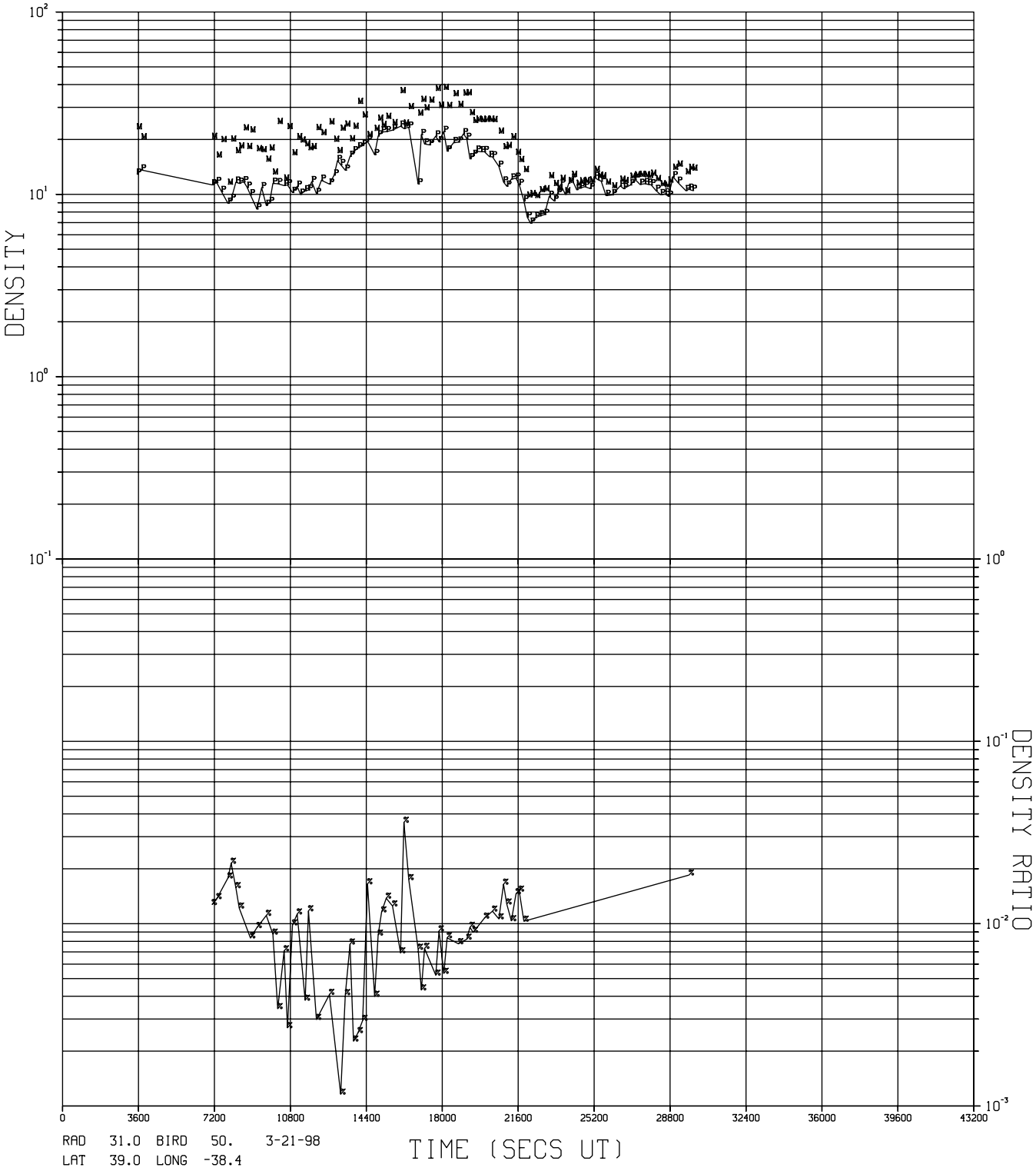

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 30.8 BIRD 50. 3-20-98
LAT 37.9 LONG -47.6

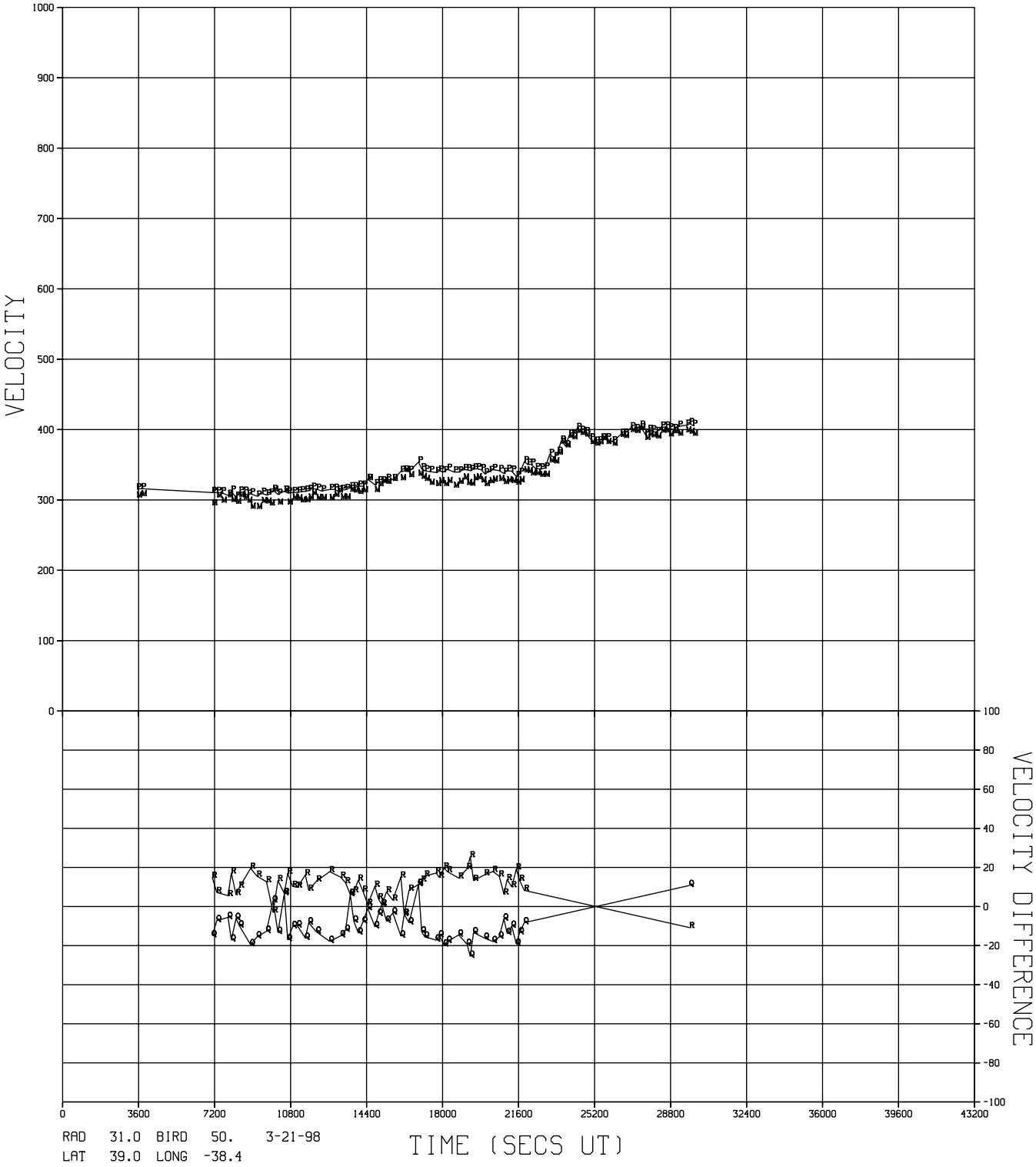

TEMPERATURE
10^7
10^6
10^5
10^4
TEMPERATURE RATIO
0
1
2
3
4
5
6
7
8
9
10
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 30.8 BIRD 50. 3-20-98
LAT 37.9 LONG -47.6
TIME (SECS UT)

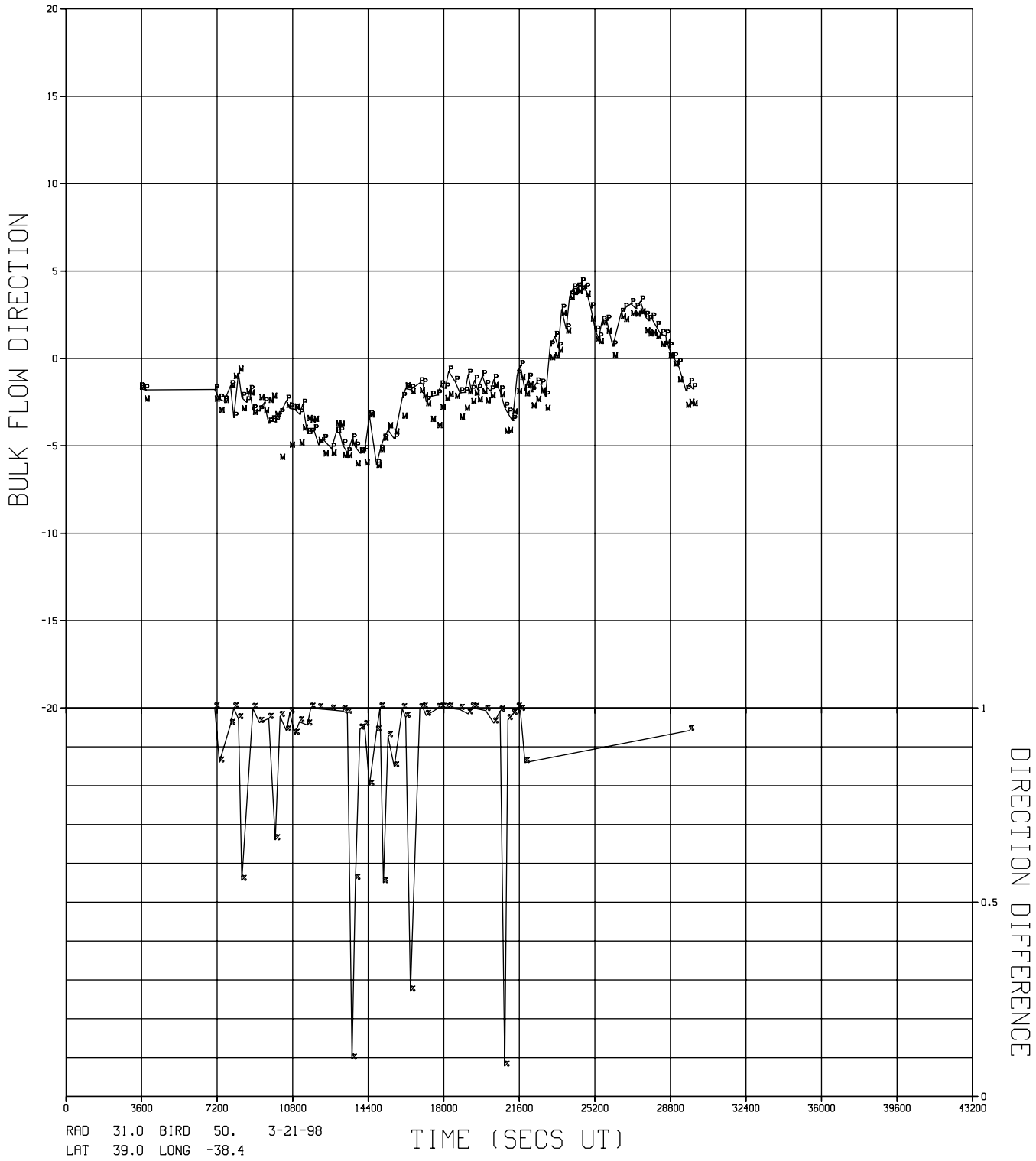

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 30.8 BIRD 50. 3-20-98
LAT 37.9 LONG -47.6

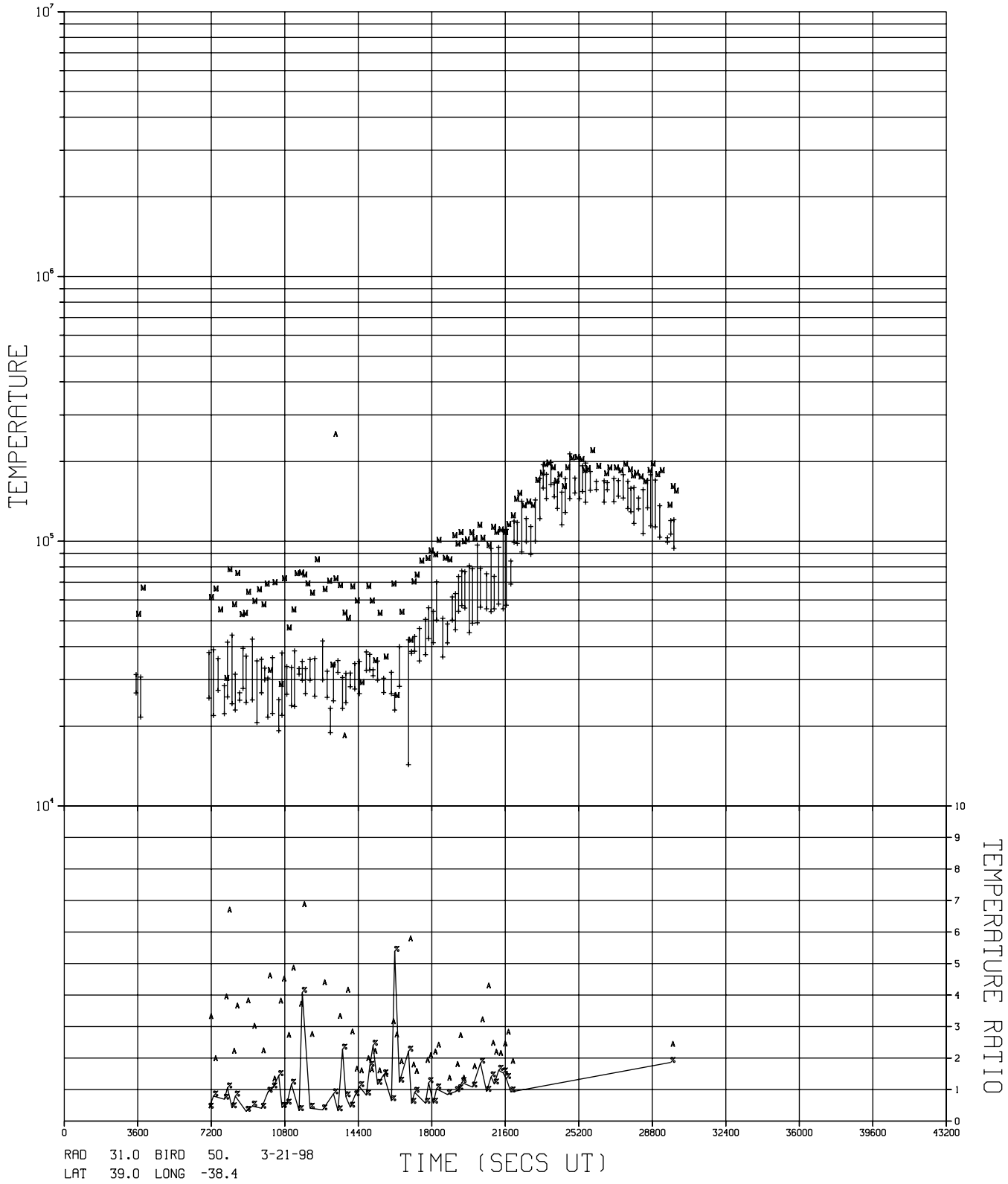

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 30.8 BIRD 50. 3-20-98
LAT 37.9 LONG -47.6

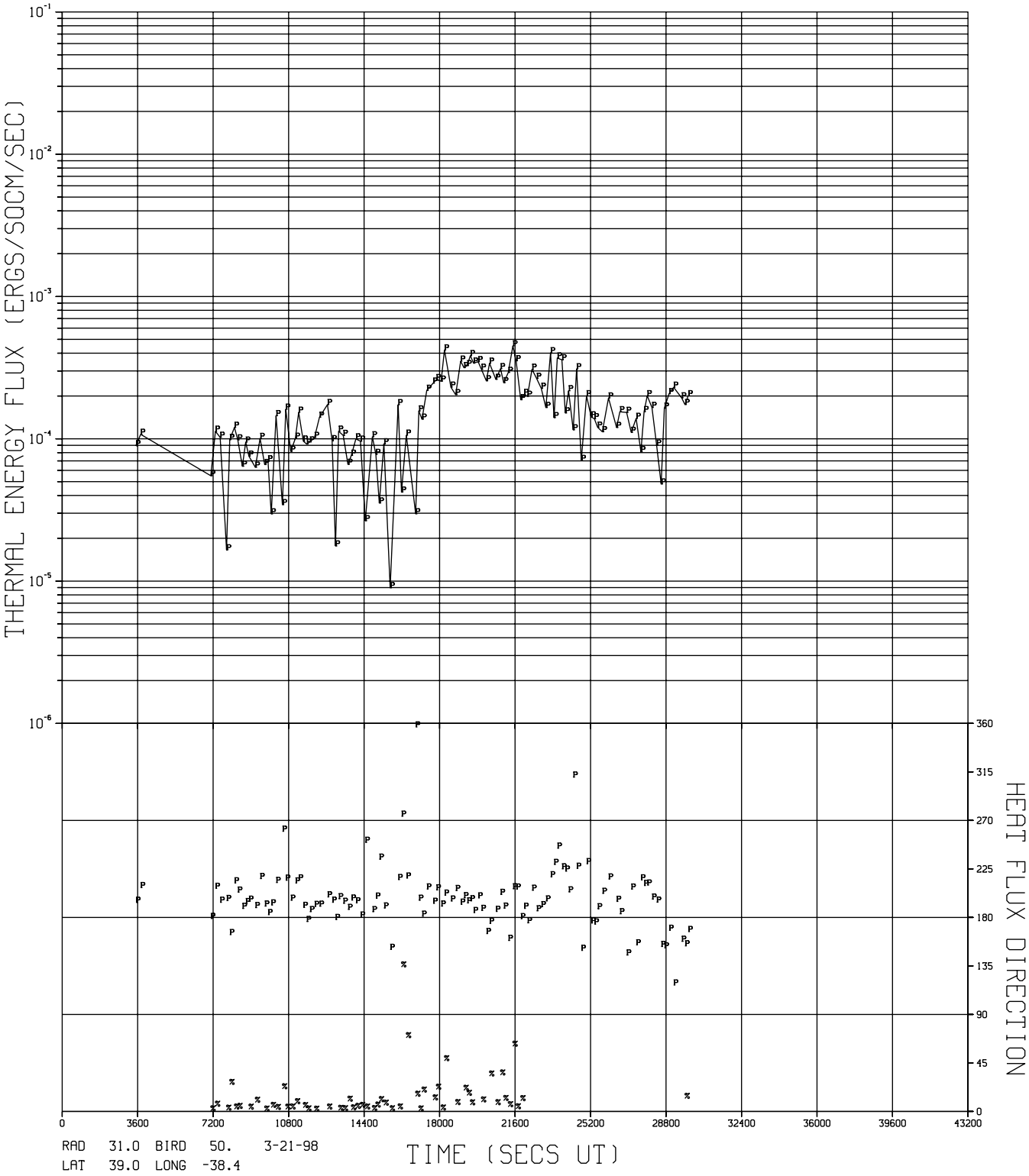

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
TIME (SECS UT)
RAD 30.8 BIRD 50. 3-20-98
LAT 37.9 LONG -47.6

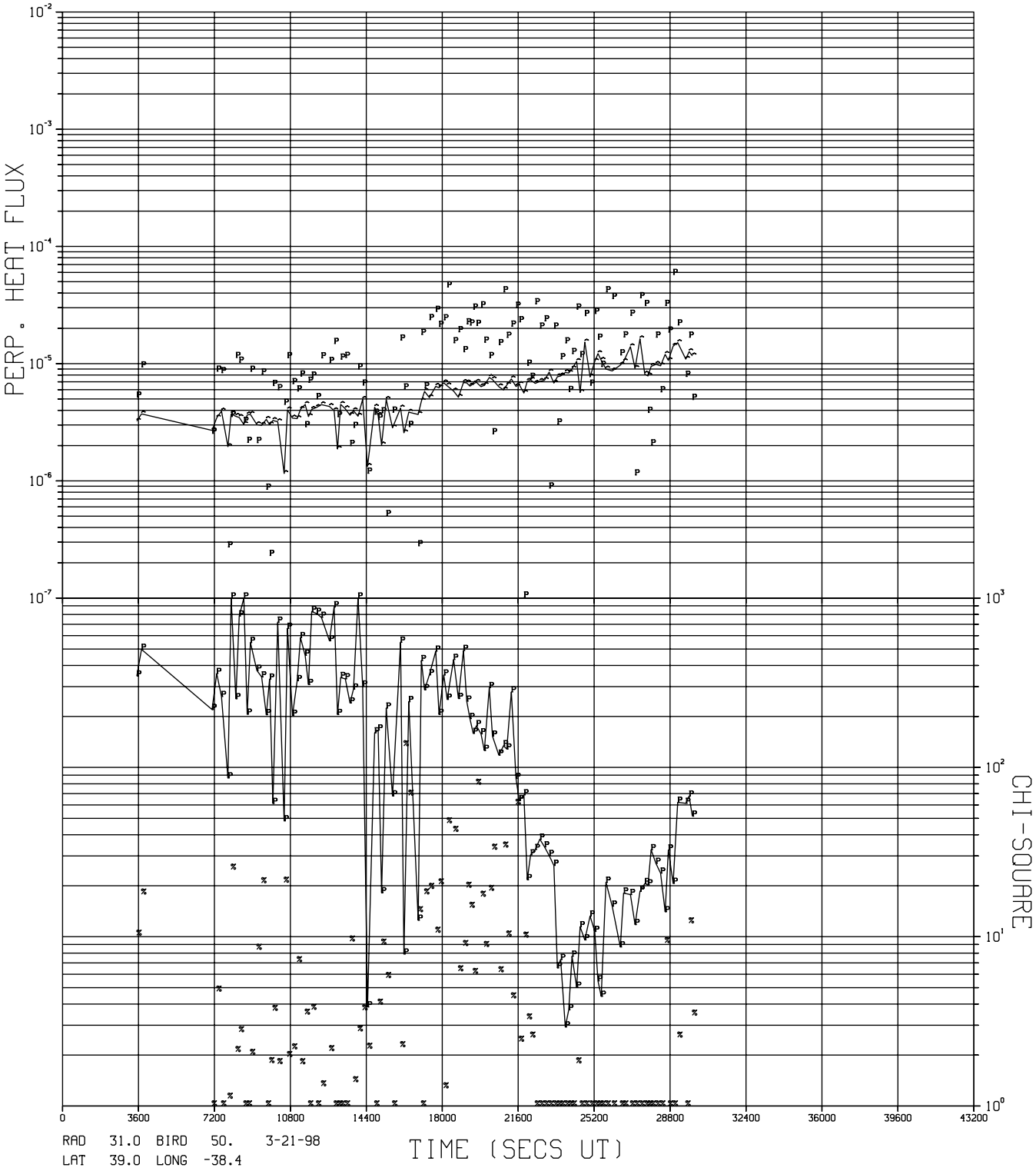

DENSITY
DENSITY RATIO
TIME (SECS UT)
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
RAD 31.0 BIRD 50. 3-21-98
LAT 39.0 LONG -38.4

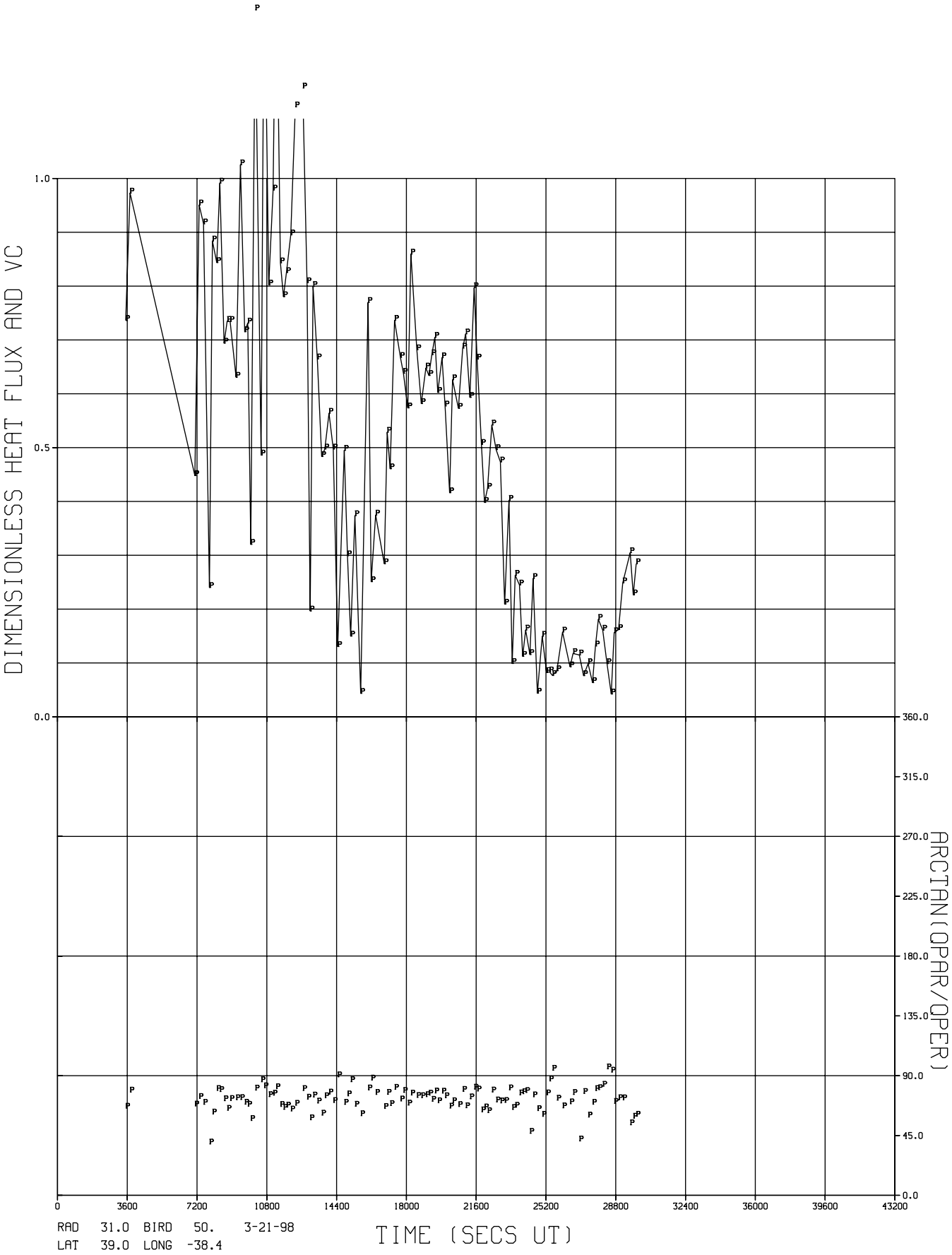

VELOCITY
VELOCITY DIFFERENCE
TIME (SECS UT)
RAD 31.0 BIRD 50. 3-21-98
LAT 39.0 LONG -38.4

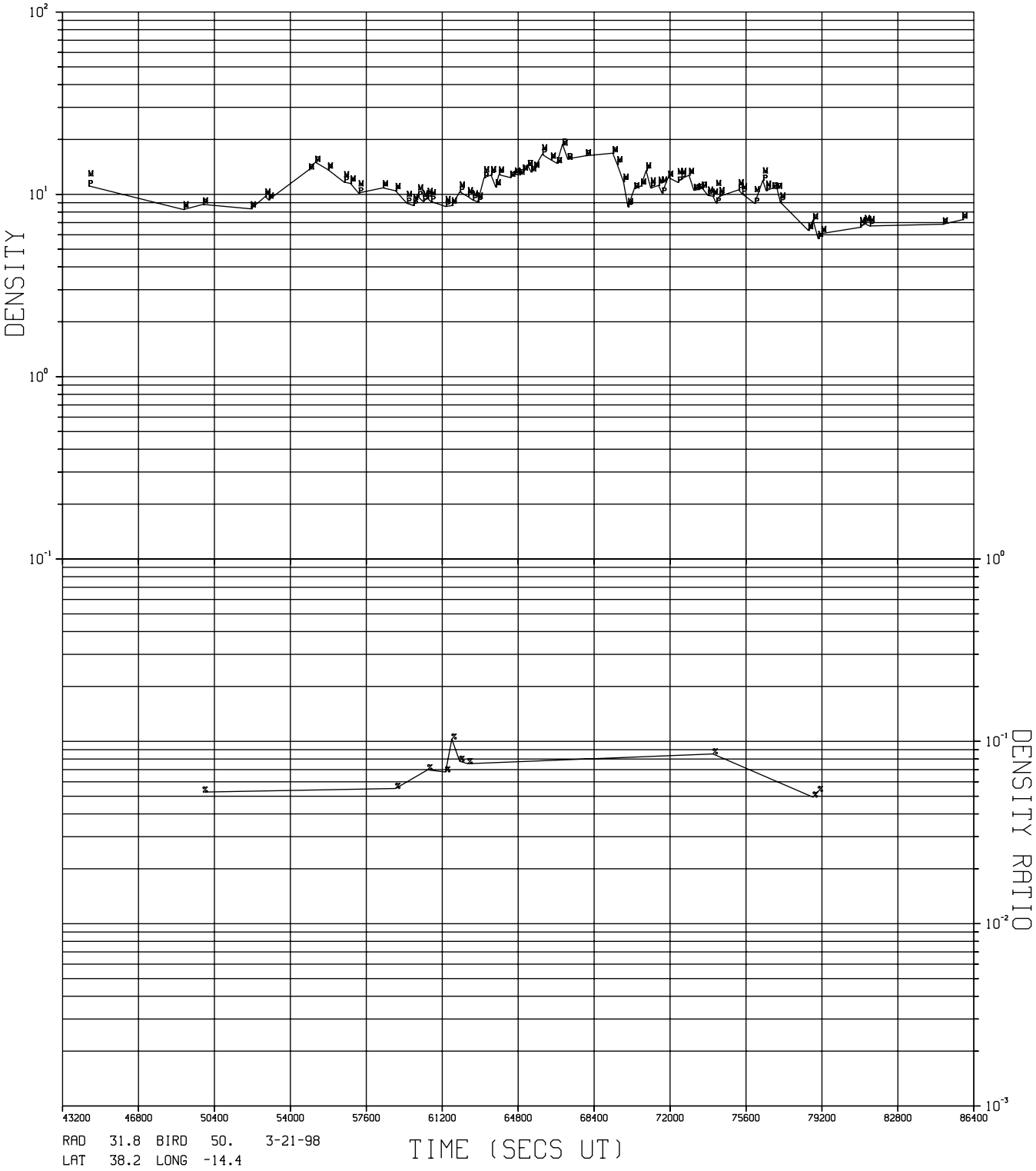

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
RAD 31.0 BIRD 50. 3-21-98
LAT 39.0 LONG -38.4

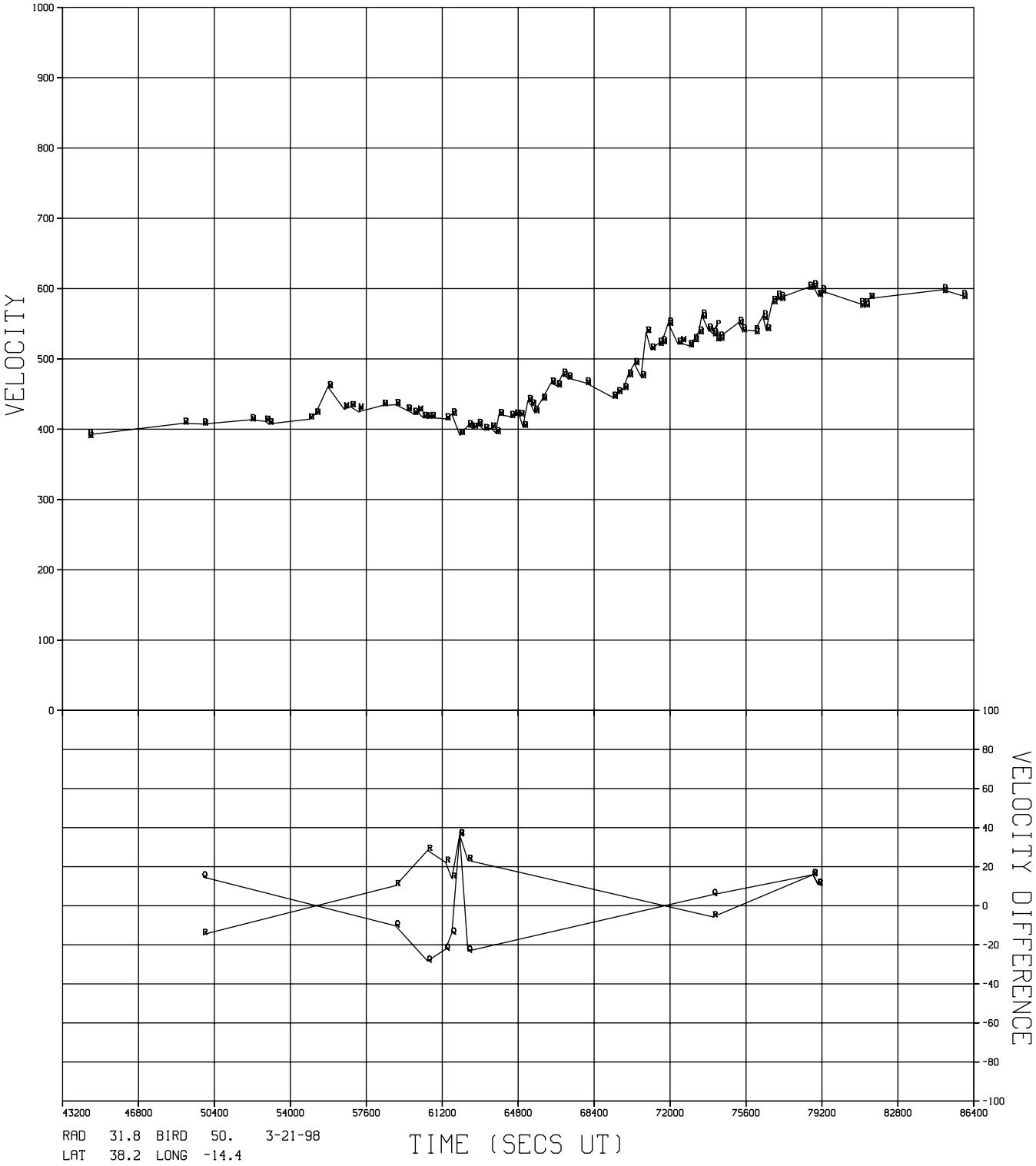

TEMPERATURE
TEMPERATURE RATIO
TIME (SECS UT)
RAD 31.0 BIRD 50. 3-21-98
LAT 39.0 LONG -38.4

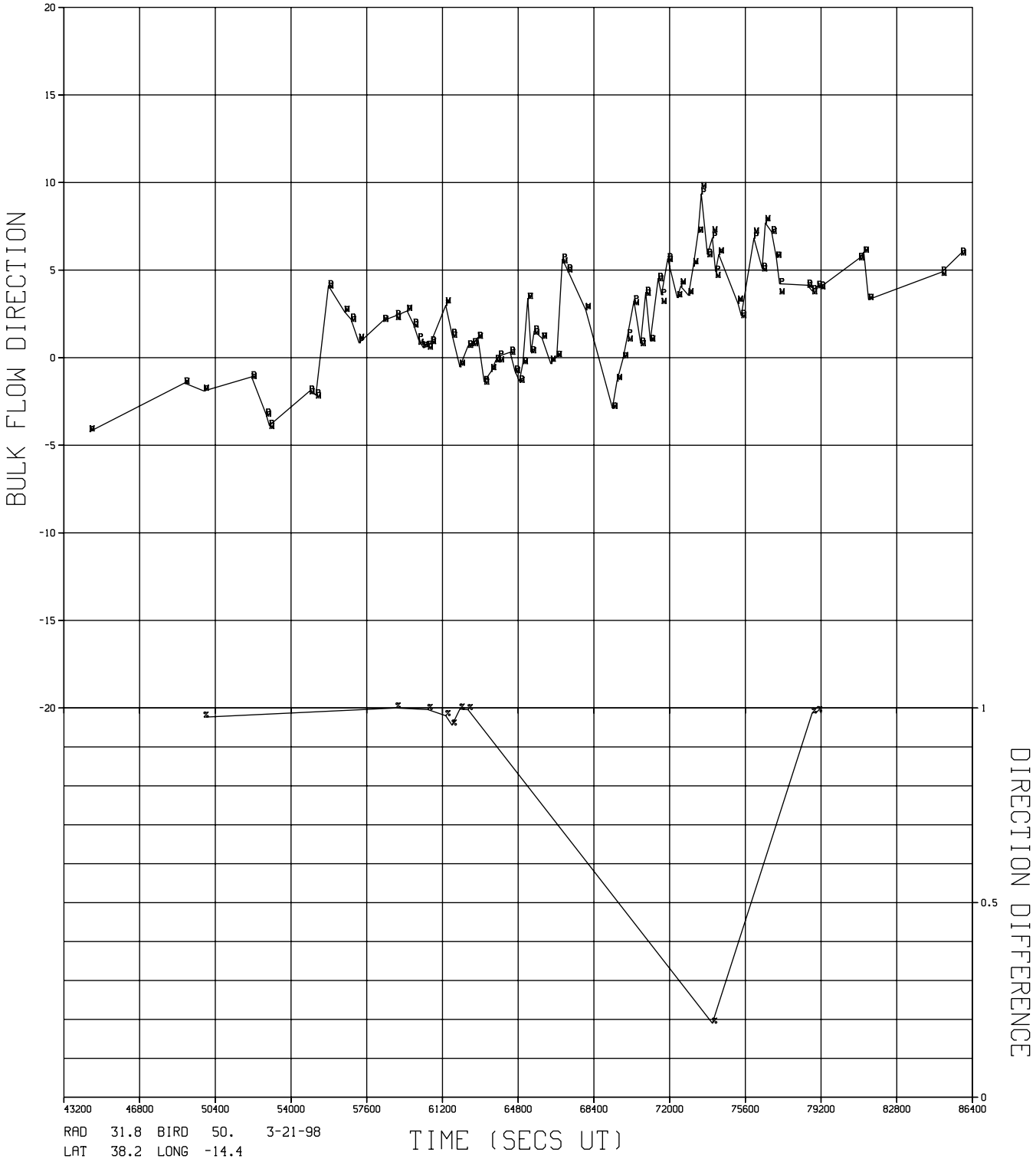

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 31.0 BIRD 50. 3-21-98
LAT 39.0 LONG -38.4

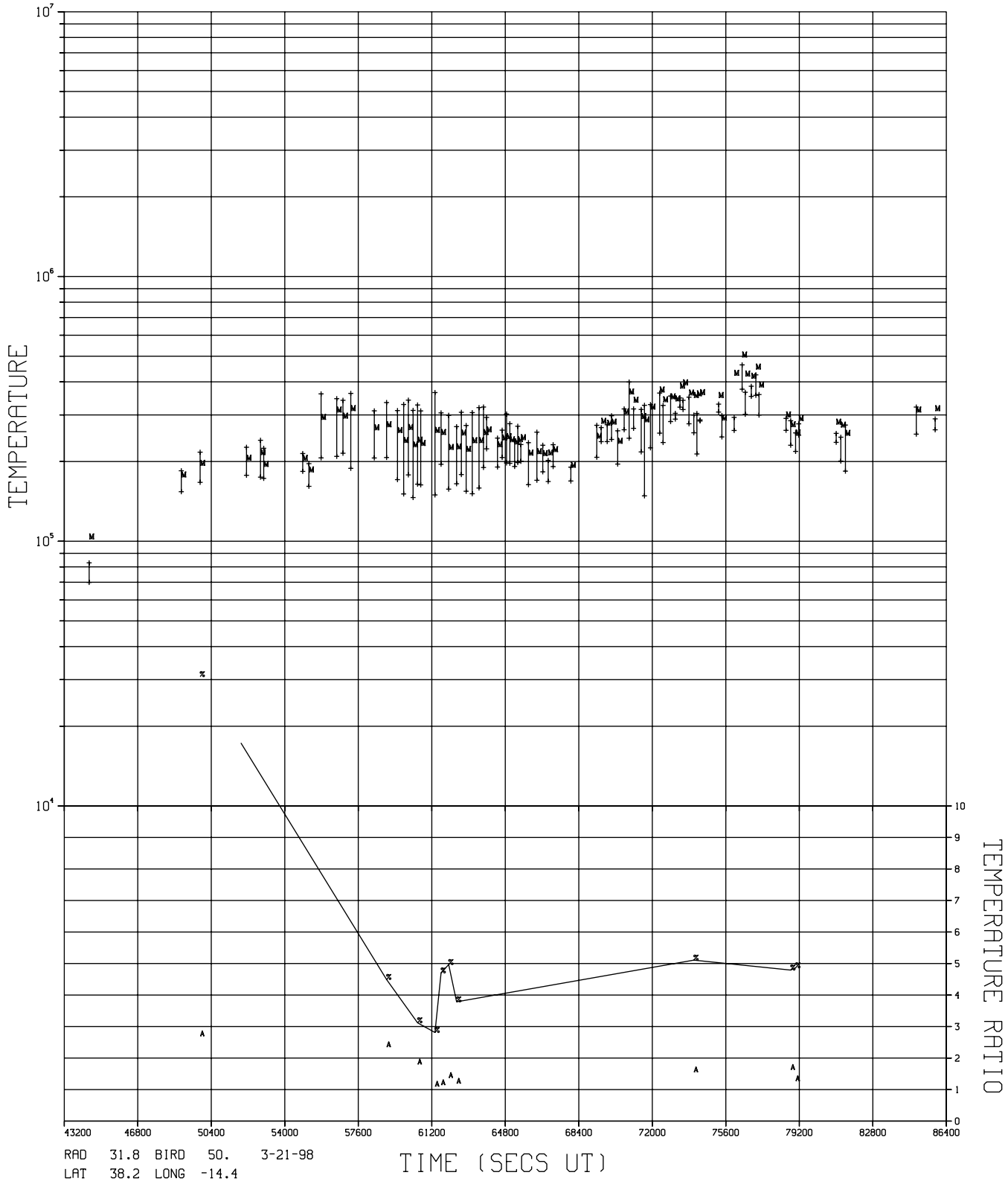

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
RAD 31.0 BIRD 50. 3-21-98
LAT 39.0 LONG -38.4

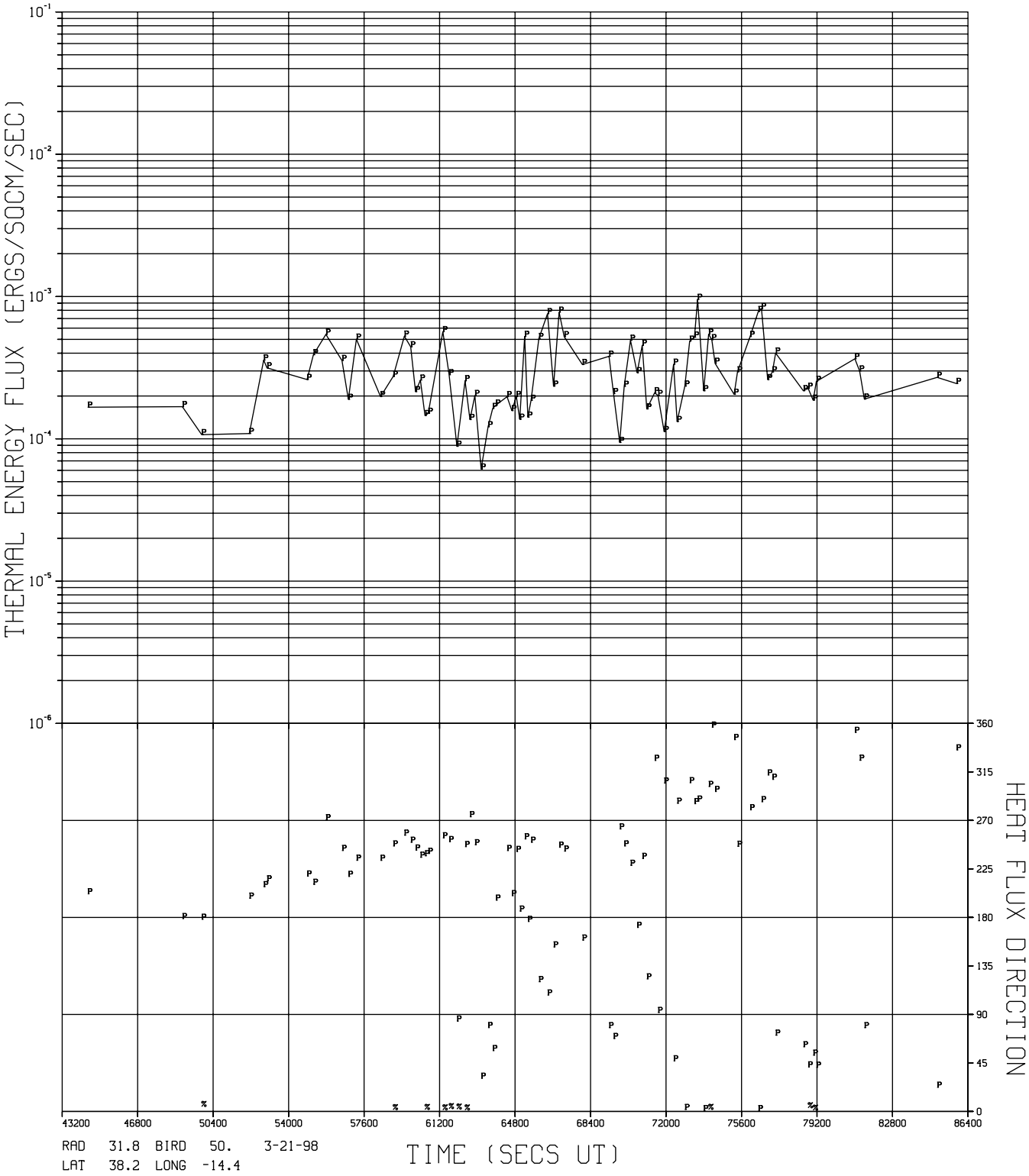

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
TIME (SECS UT)
RAD 31.0 BIRD 50. 3-21-98
LAT 39.0 LONG -38.4

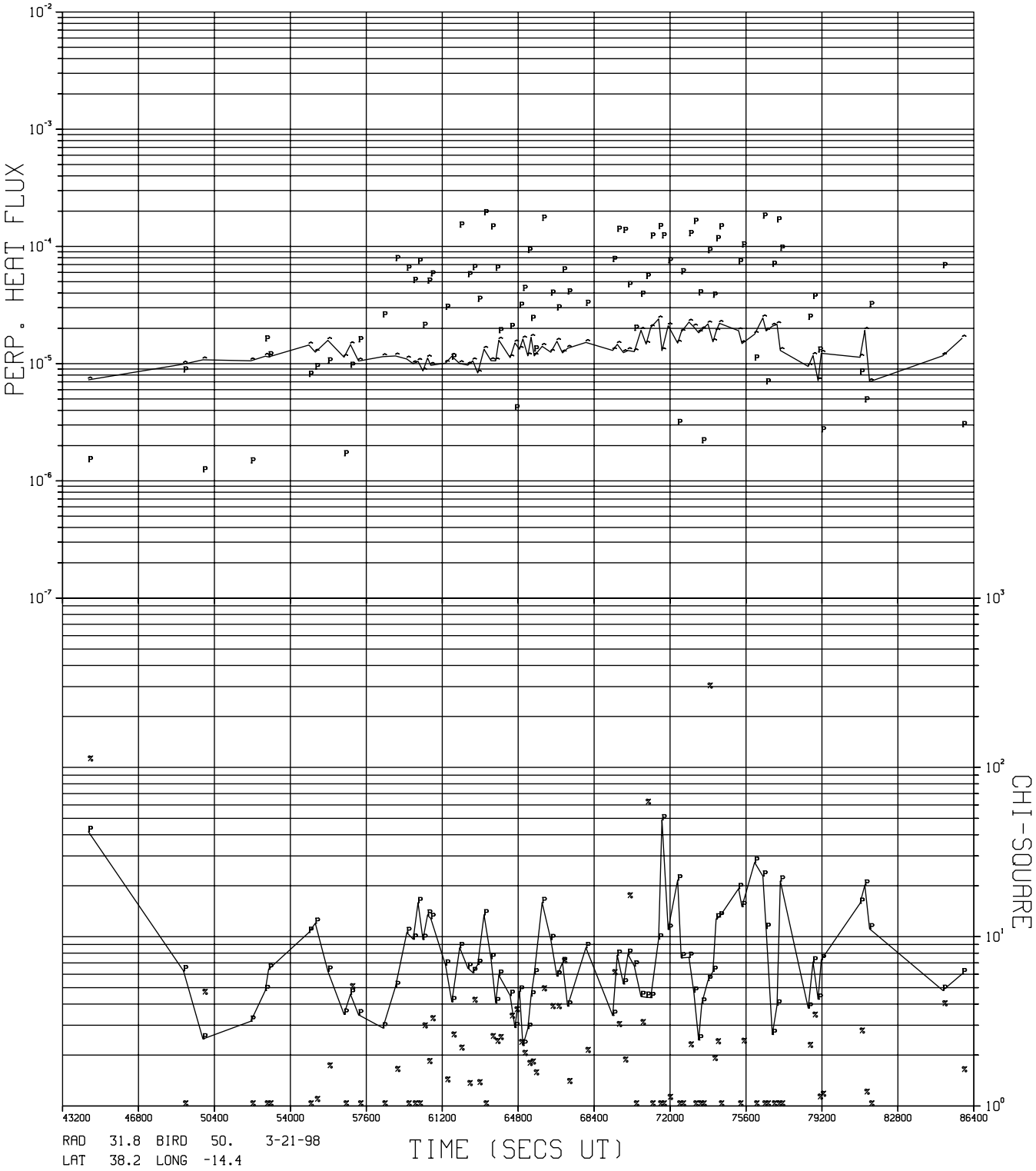

DENSITY
DENSITY RATIO
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 31.8 BIRD 50. 3-21-98
LAT 38.2 LONG -14.4

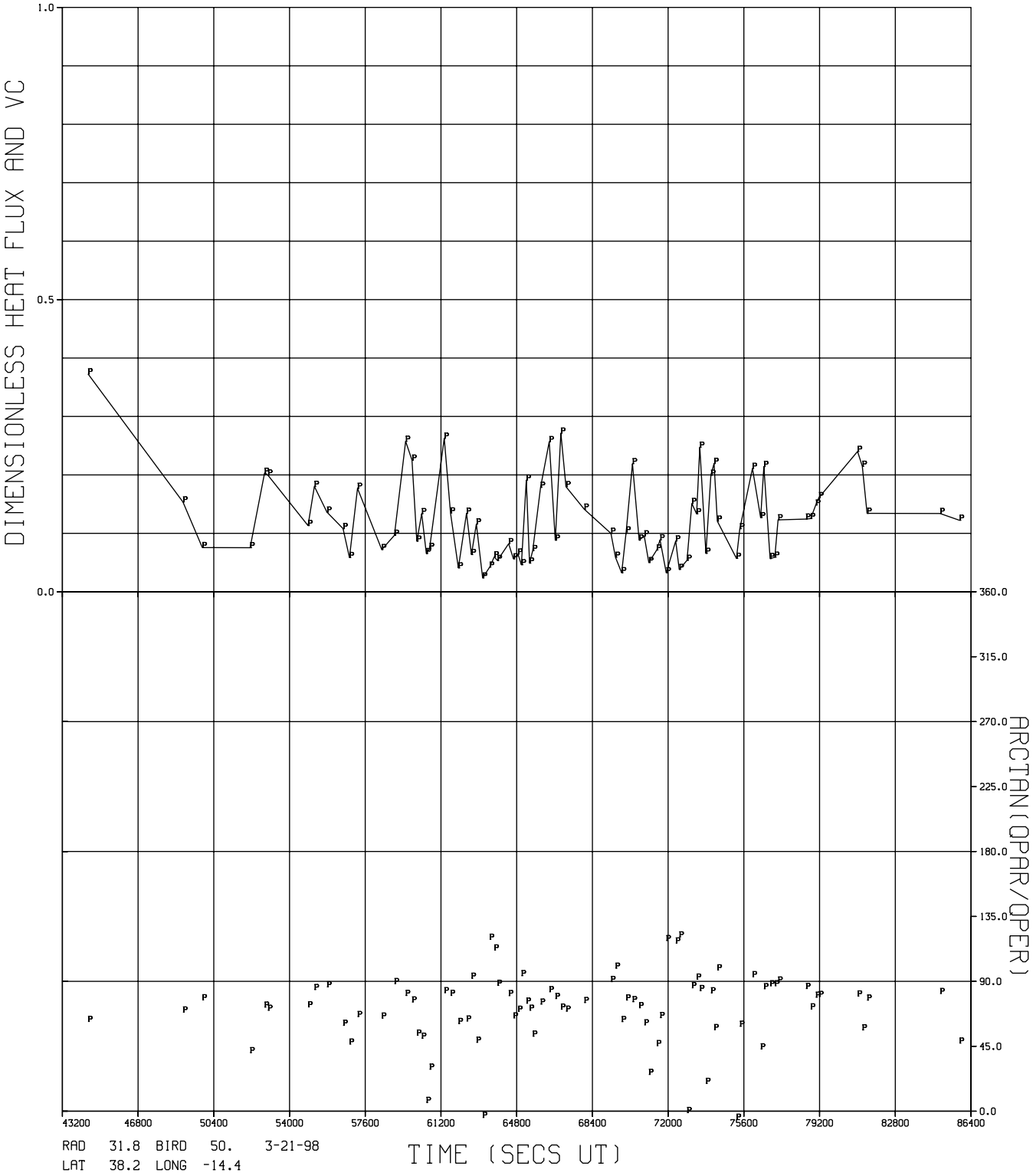

VELOCITY
VELOCITY DIFFERENCE
TIME (SECS UT)
RAD 31.8 BIRD 50. 3-21-98
LAT 38.2 LONG -14.4

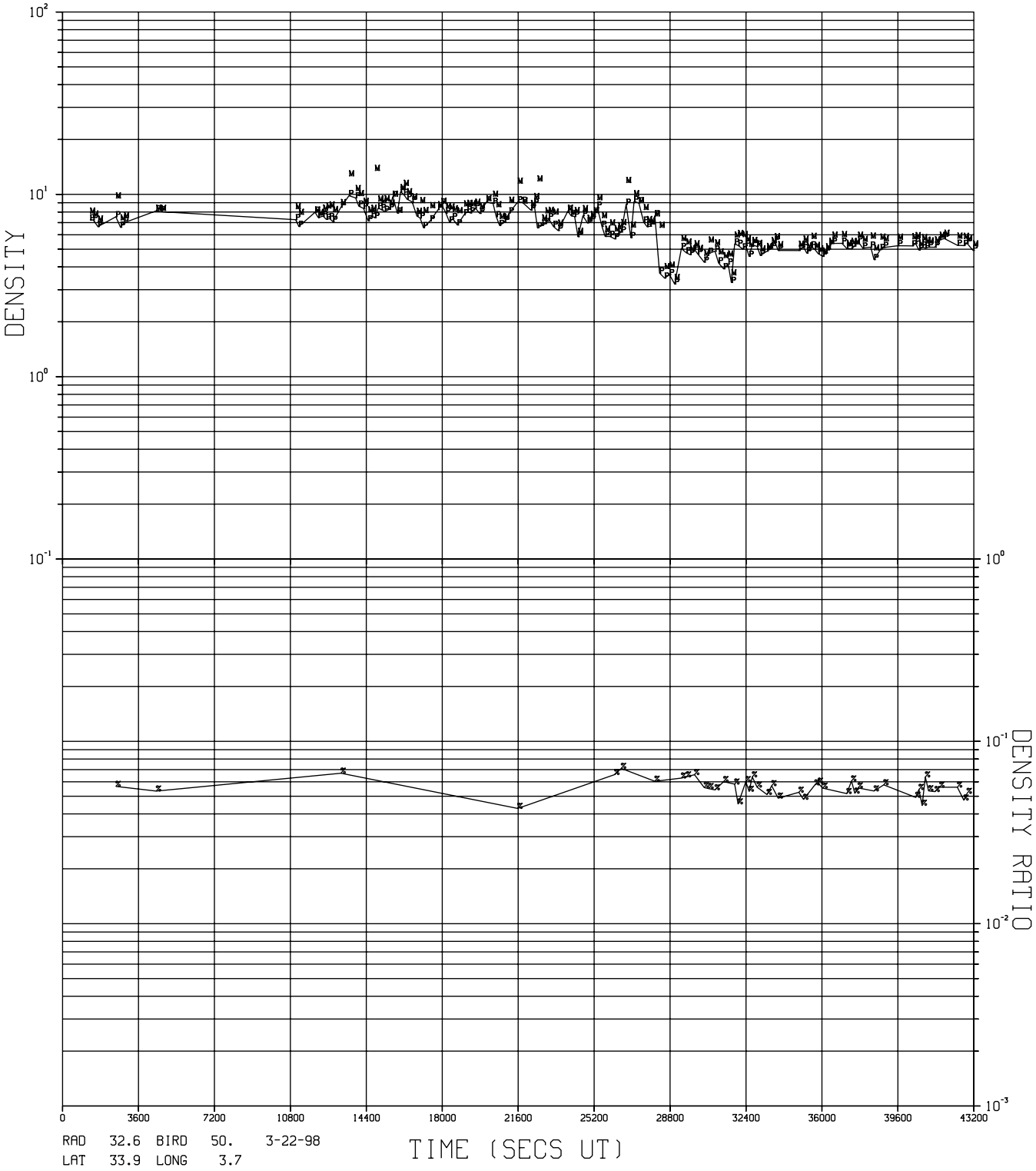

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 31.8 BIRD 50. 3-21-98
LAT 38.2 LONG -14.4

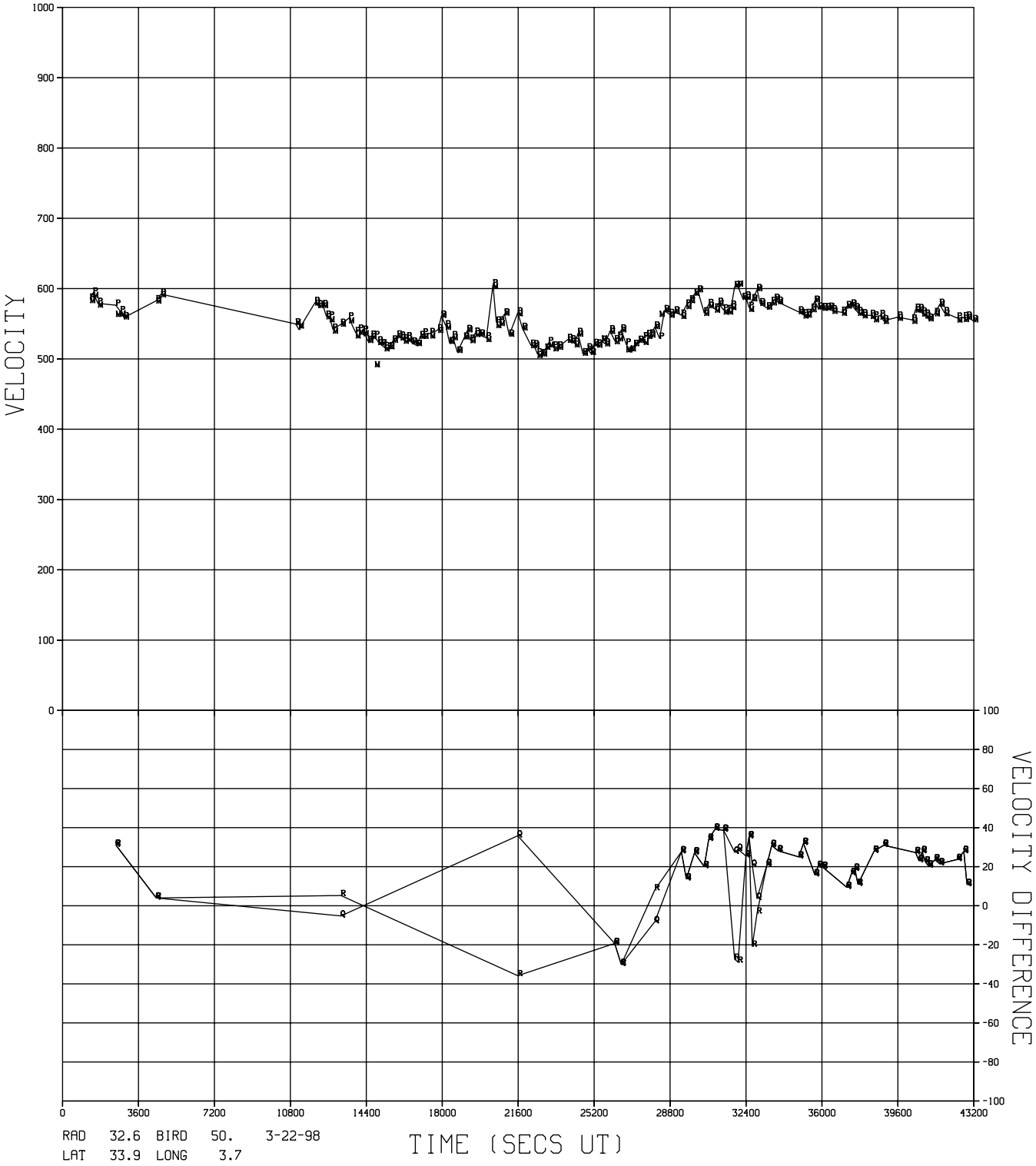

TEMPERATURE
TEMPERATURE RATIO
TIME (SECS UT)
10^7
10^6
10^5
10^4
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 31.8 BIRD 50. 3-21-98
LAT 38.2 LONG -14.4

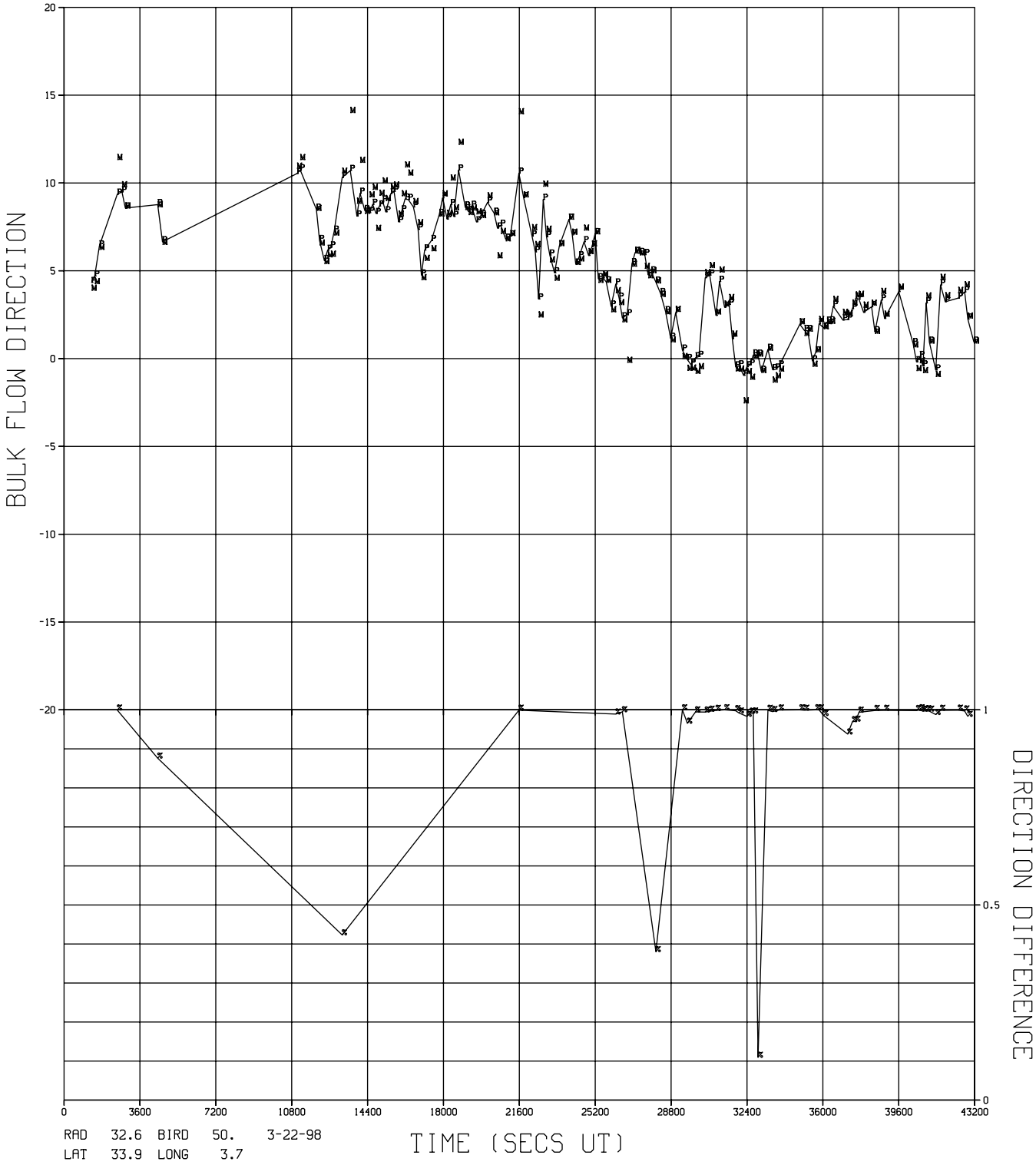

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 31.8 BIRD 50. 3-21-98
LAT 38.2 LONG -14.4

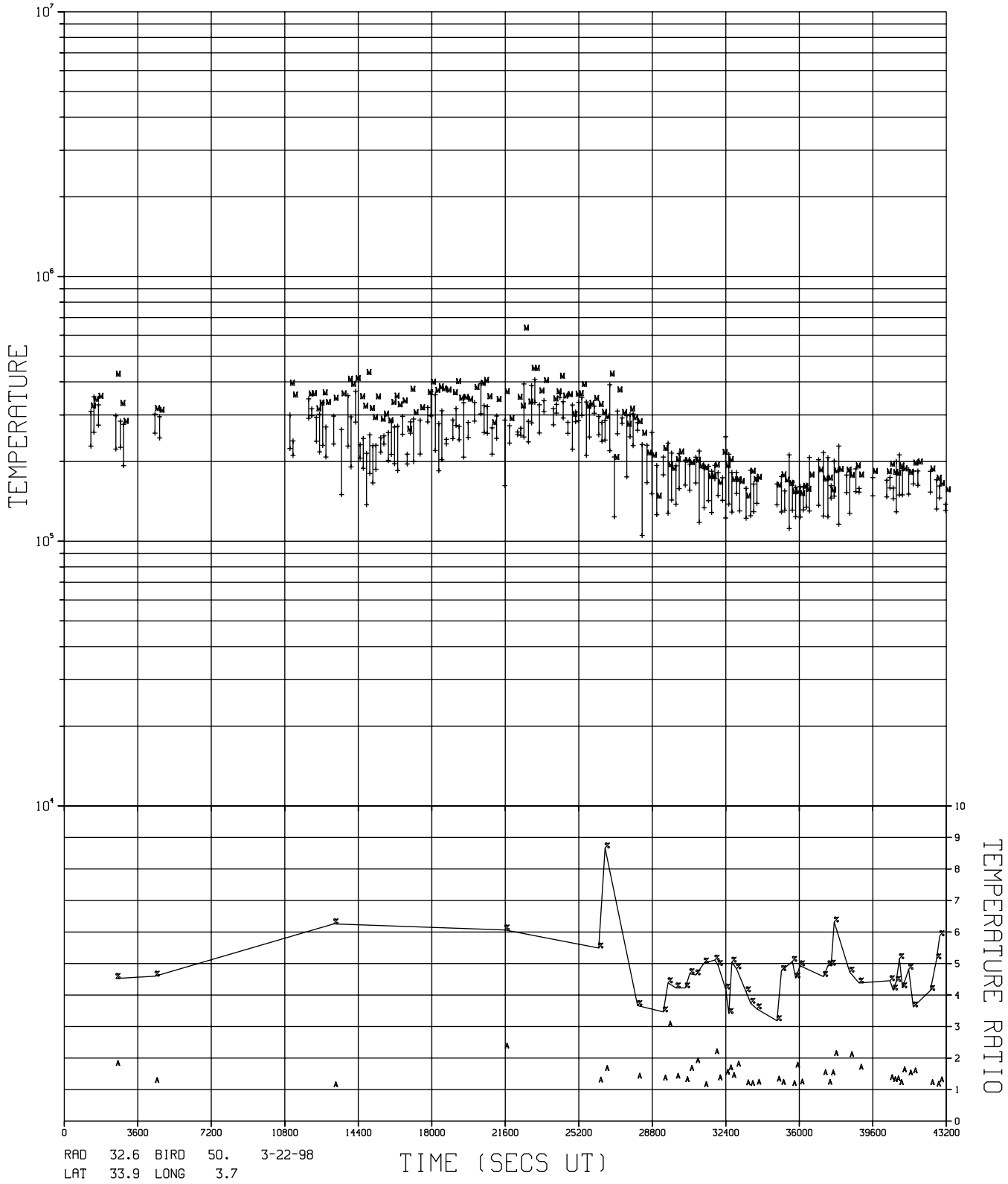

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
RAD 31.8 BIRD 50. 3-21-98
LAT 38.2 LONG -14.4

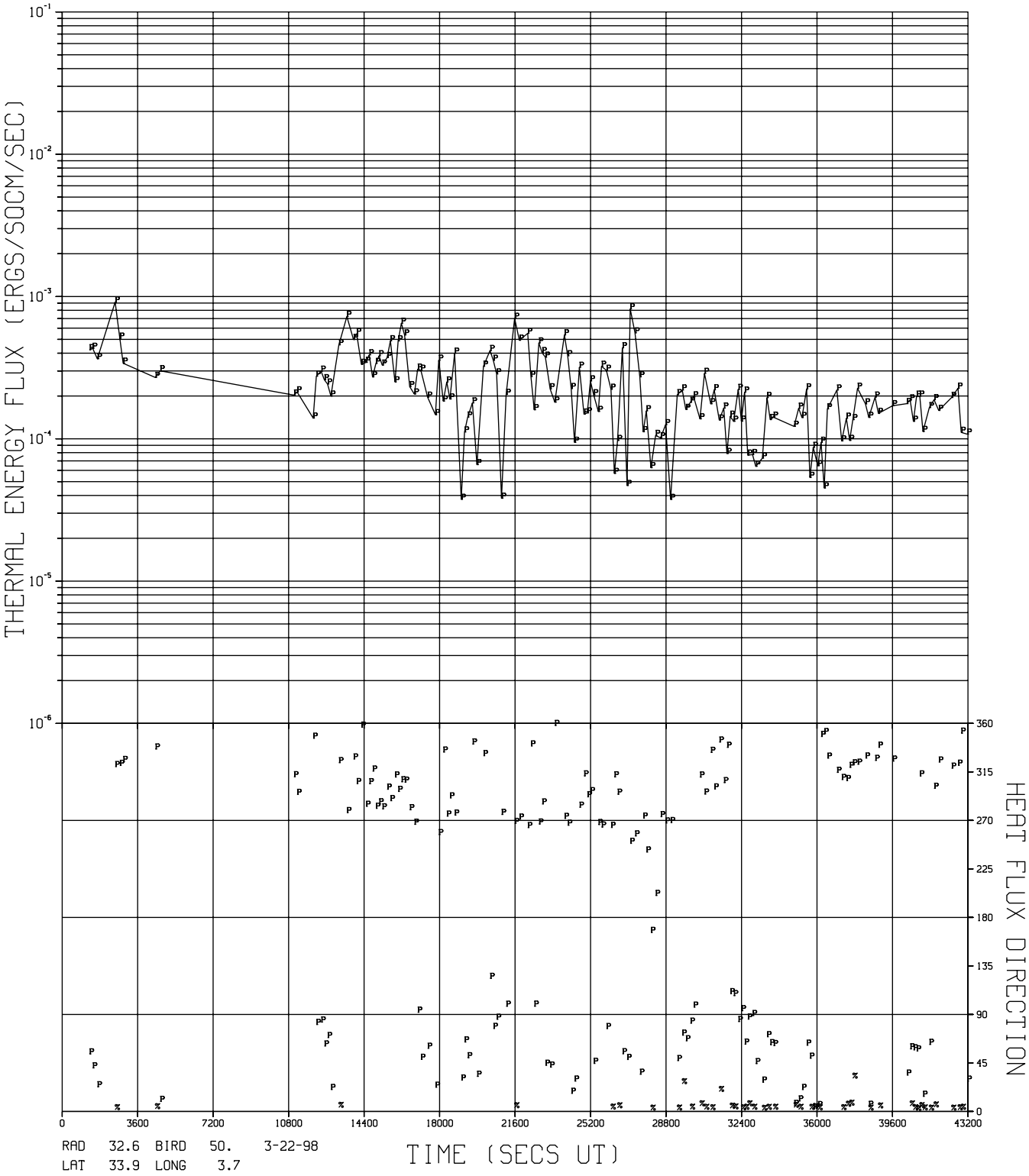

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
TIME (SECS UT)
RAD 31.8 BIRD 50. 3-21-98
LAT 38.2 LONG -14.4

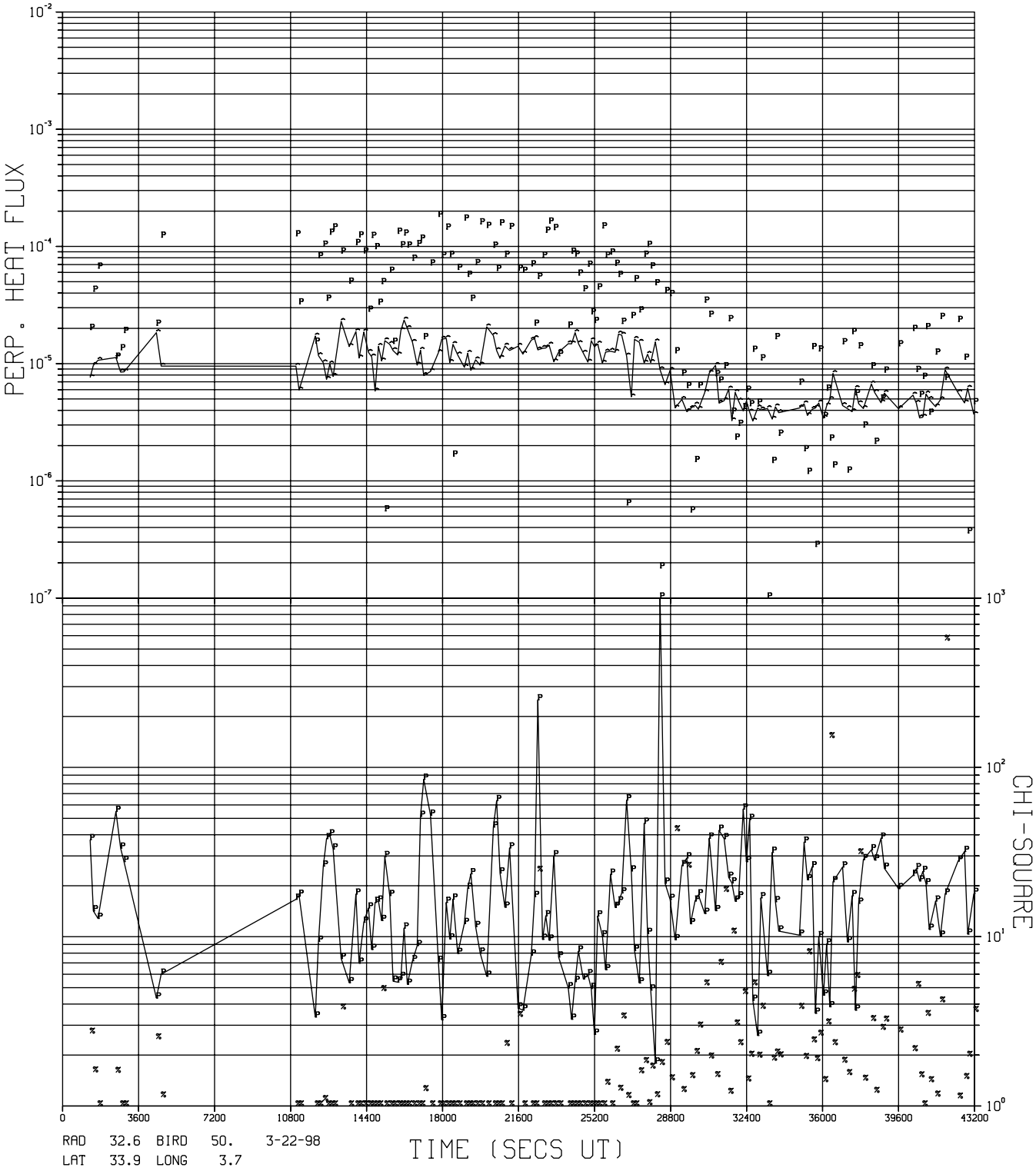

DENSITY
DENSITY RATIO
TIME (SECS UT)
RAD 32.6 BIRD 50. 3-22-98
LAT 33.9 LONG 3.7

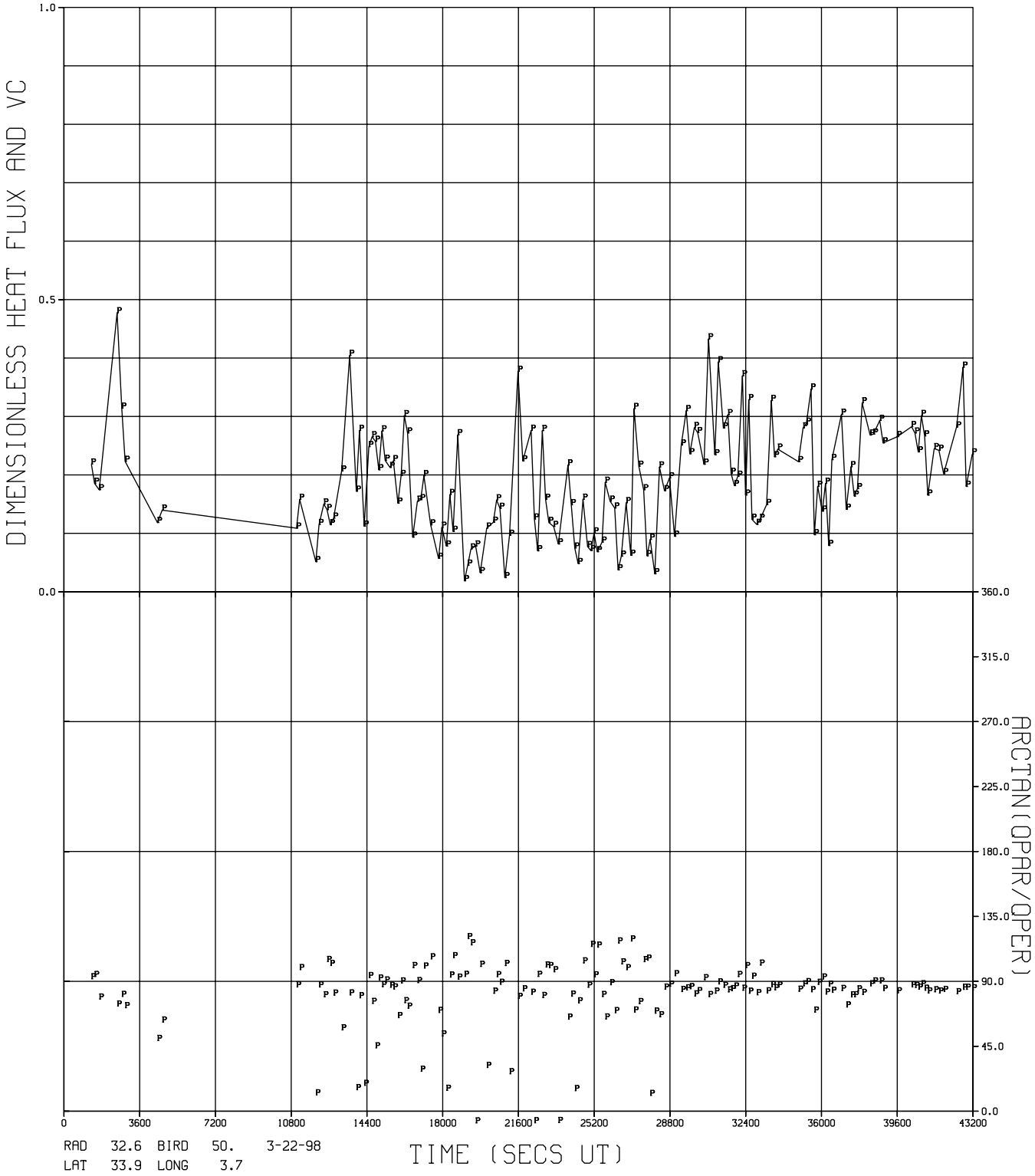

VELOCITY
VELOCITY DIFFERENCE
TIME (SECS UT)
RAD 32.6 BIRD 50. 3-22-98
LAT 33.9 LONG 3.7

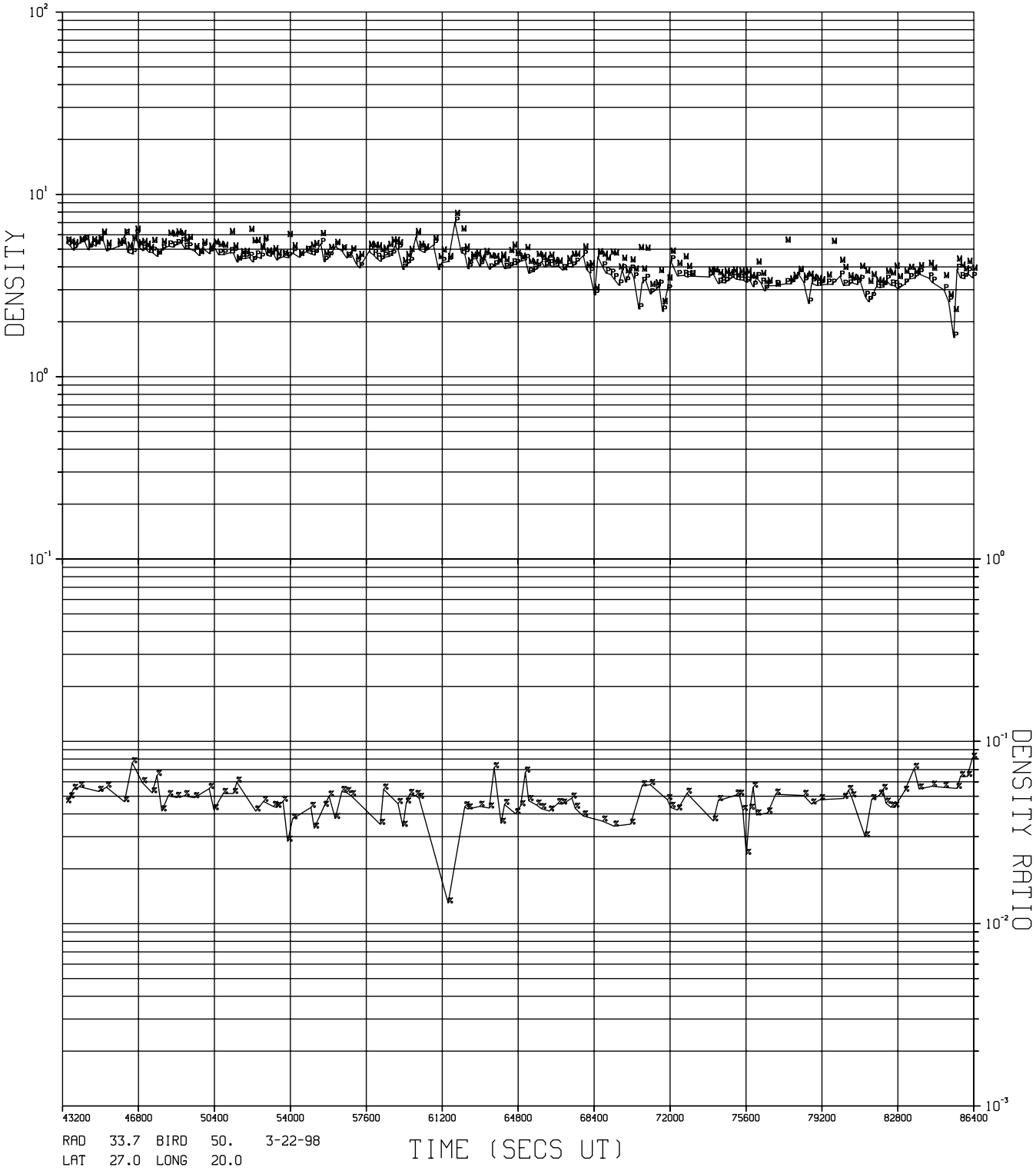

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
RAD 32.6 BIRD 50. 3-22-98
LAT 33.9 LONG 3.7

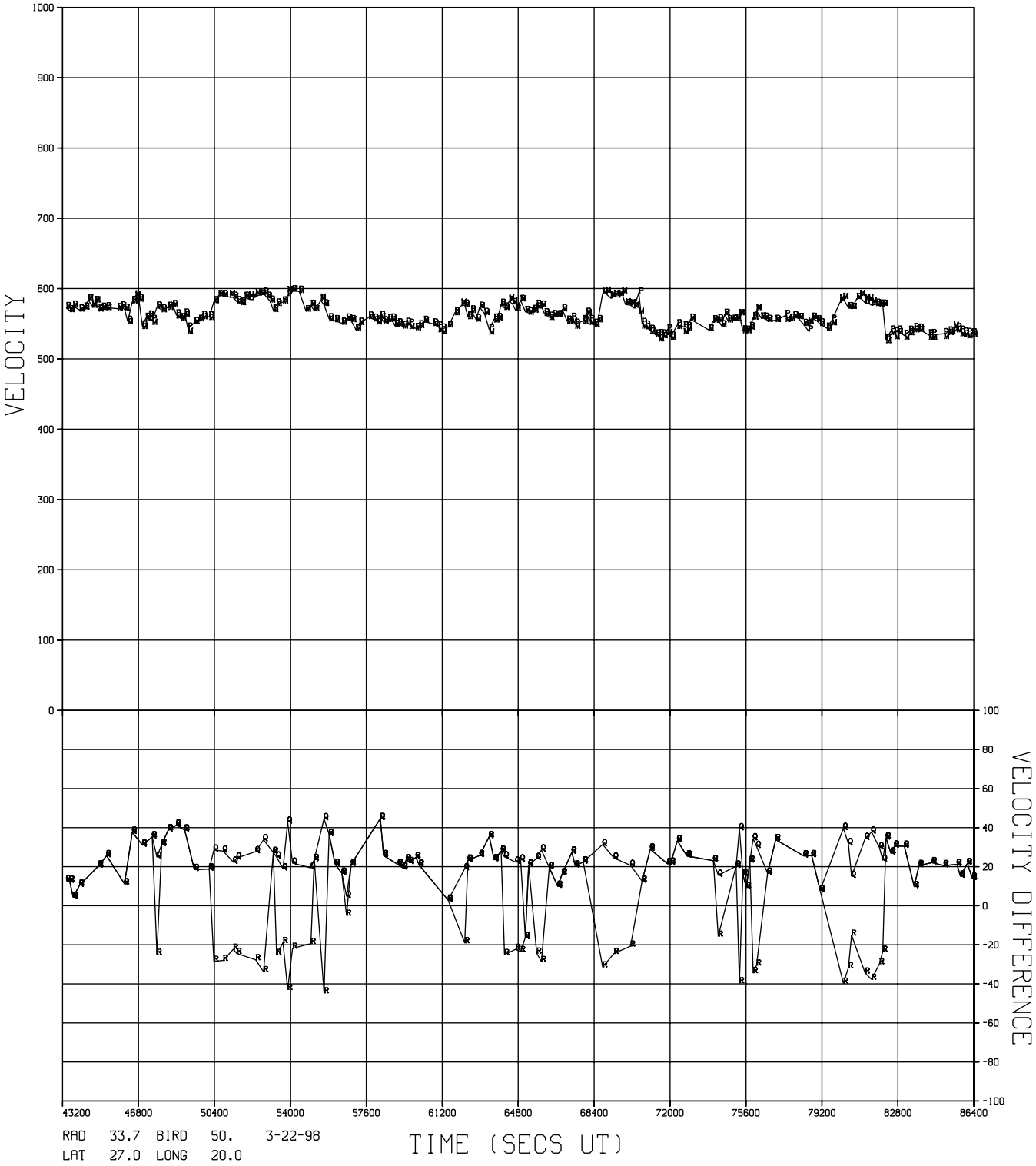

TEMPERATURE
TEMPERATURE RATIO
TIME (SECS UT)
RAD 32.6 BIRD 50. 3-22-98
LAT 33.9 LONG 3.7

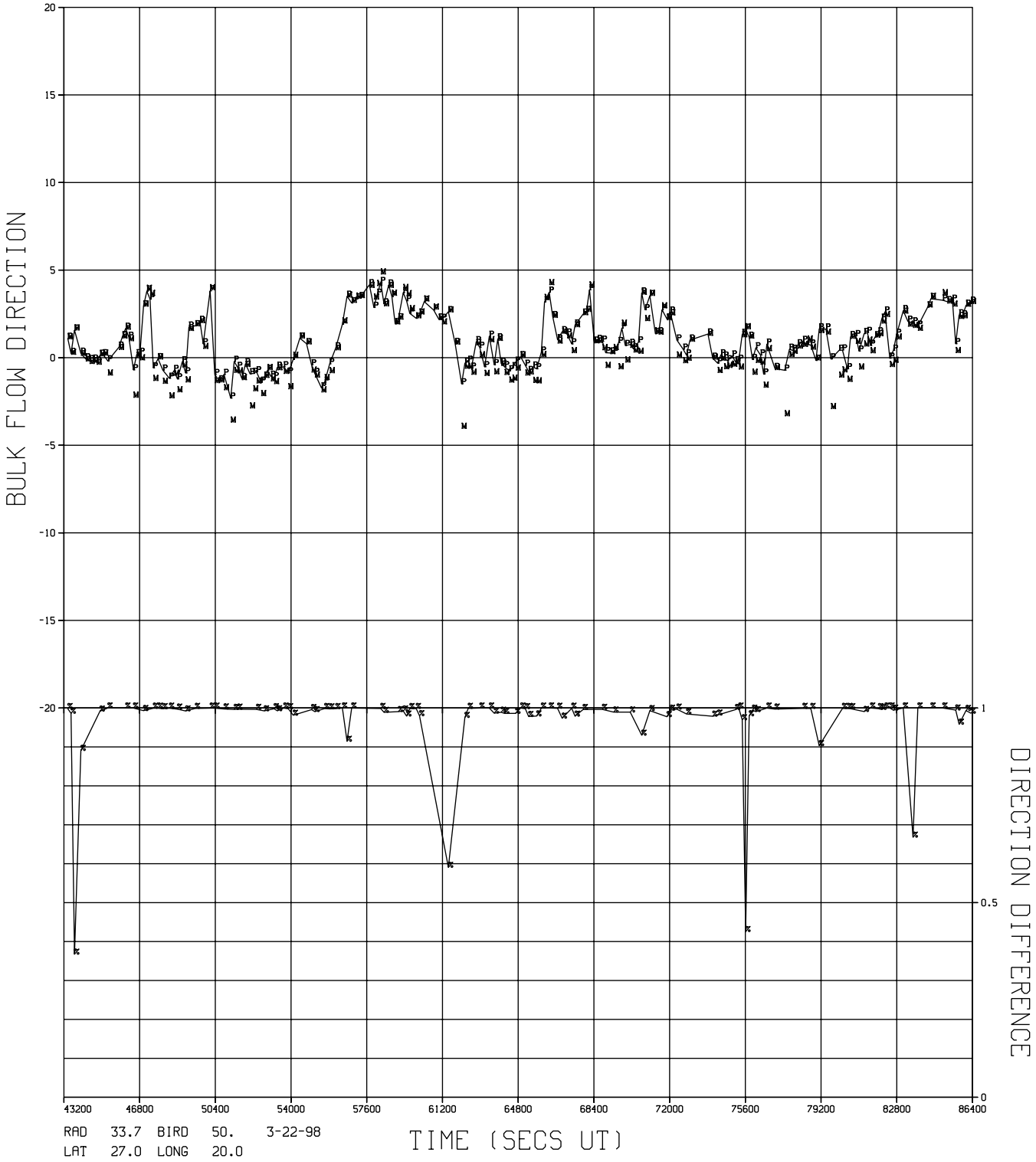

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 32.6 BIRD 50. 3-22-98
LAT 33.9 LONG 3.7

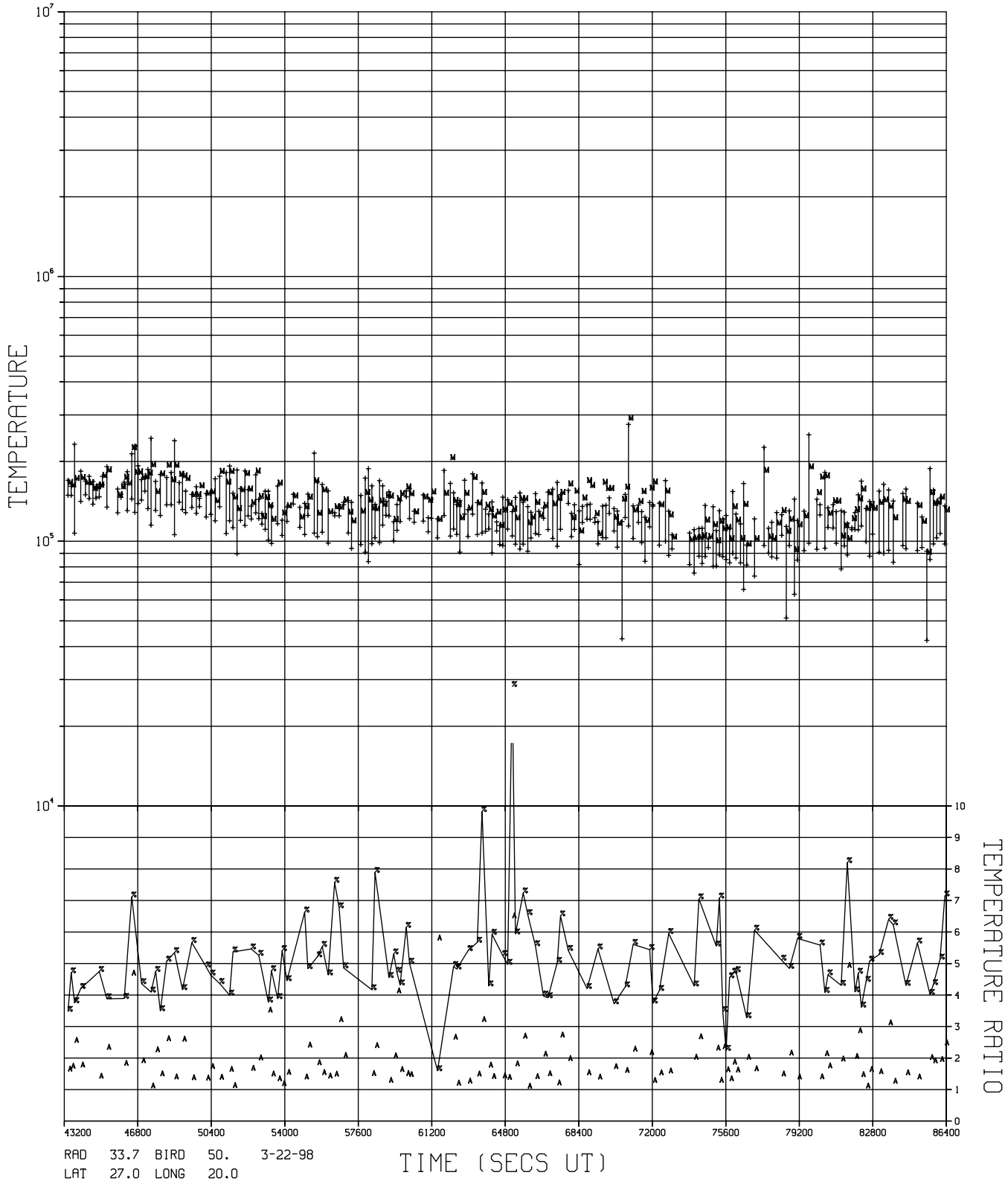

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
RAD 32.6 BIRD 50. 3-22-98
LAT 33.9 LONG 3.7

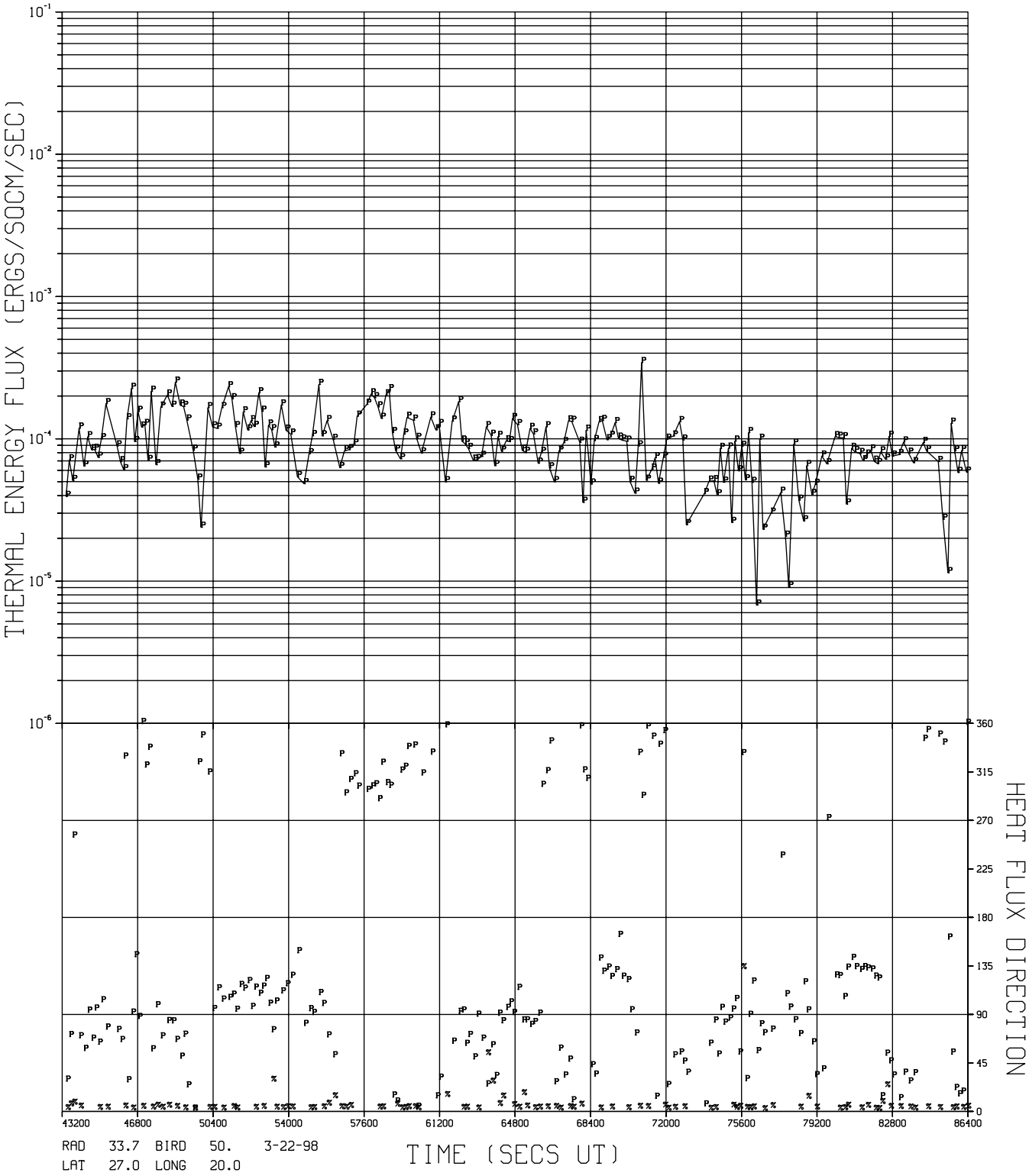

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
TIME (SECS UT)
RAD 32.6 BIRD 50. 3-22-98
LAT 33.9 LONG 3.7

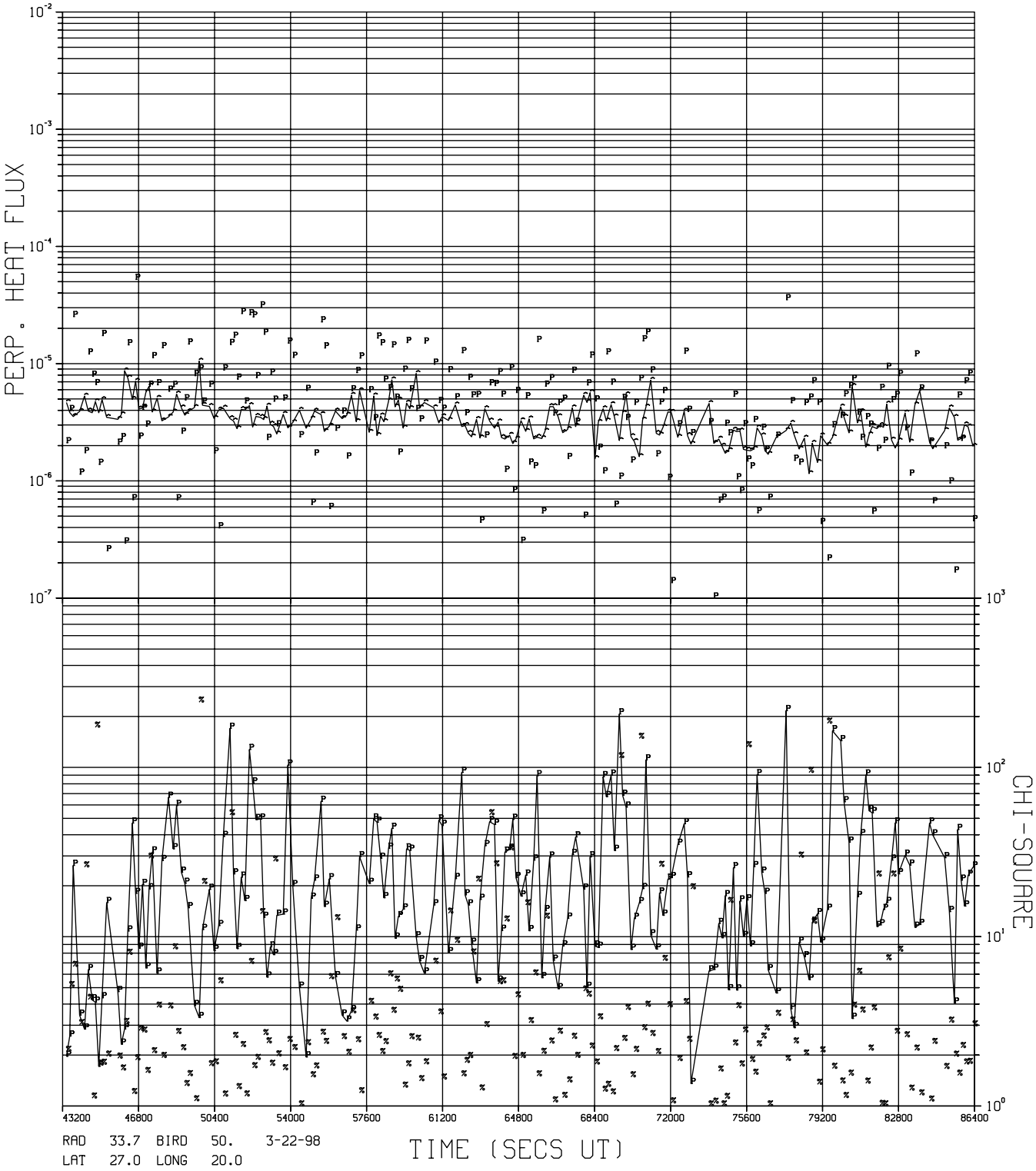

DENSITY
DENSITY RATIO
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 33.7 BIRD 50. 3-22-98
LAT 27.0 LONG 20.0

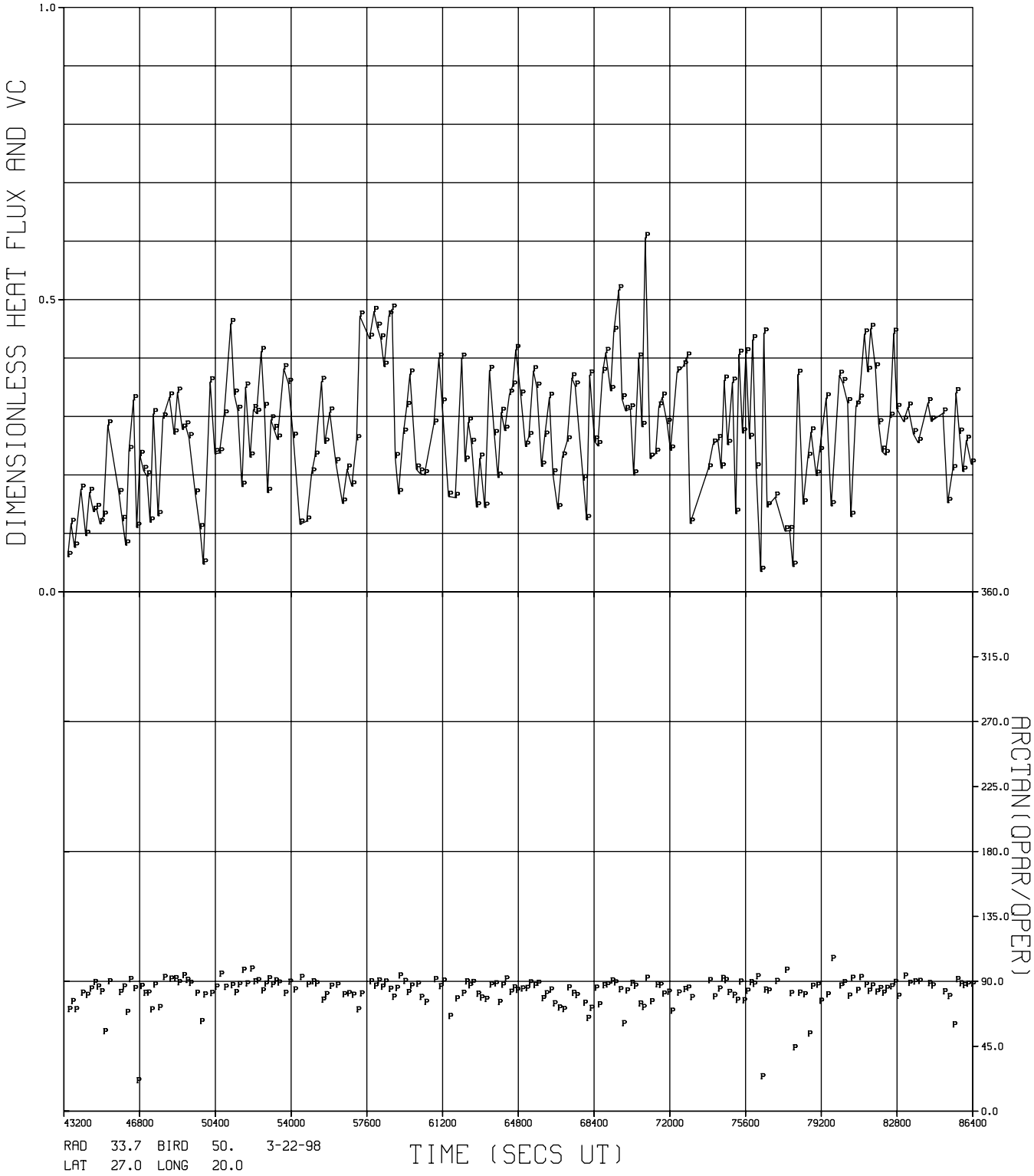

VELOCITY
1000
900
800
700
600
500
400
300
200
100
0
VELOCITY DIFFERENCE
100
80
60
40
20
0
-20
-40
-60
-80
-100
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 33.7 BIRD 50. 3-22-98
LAT 27.0 LONG 20.0
TIME (SECS UT)

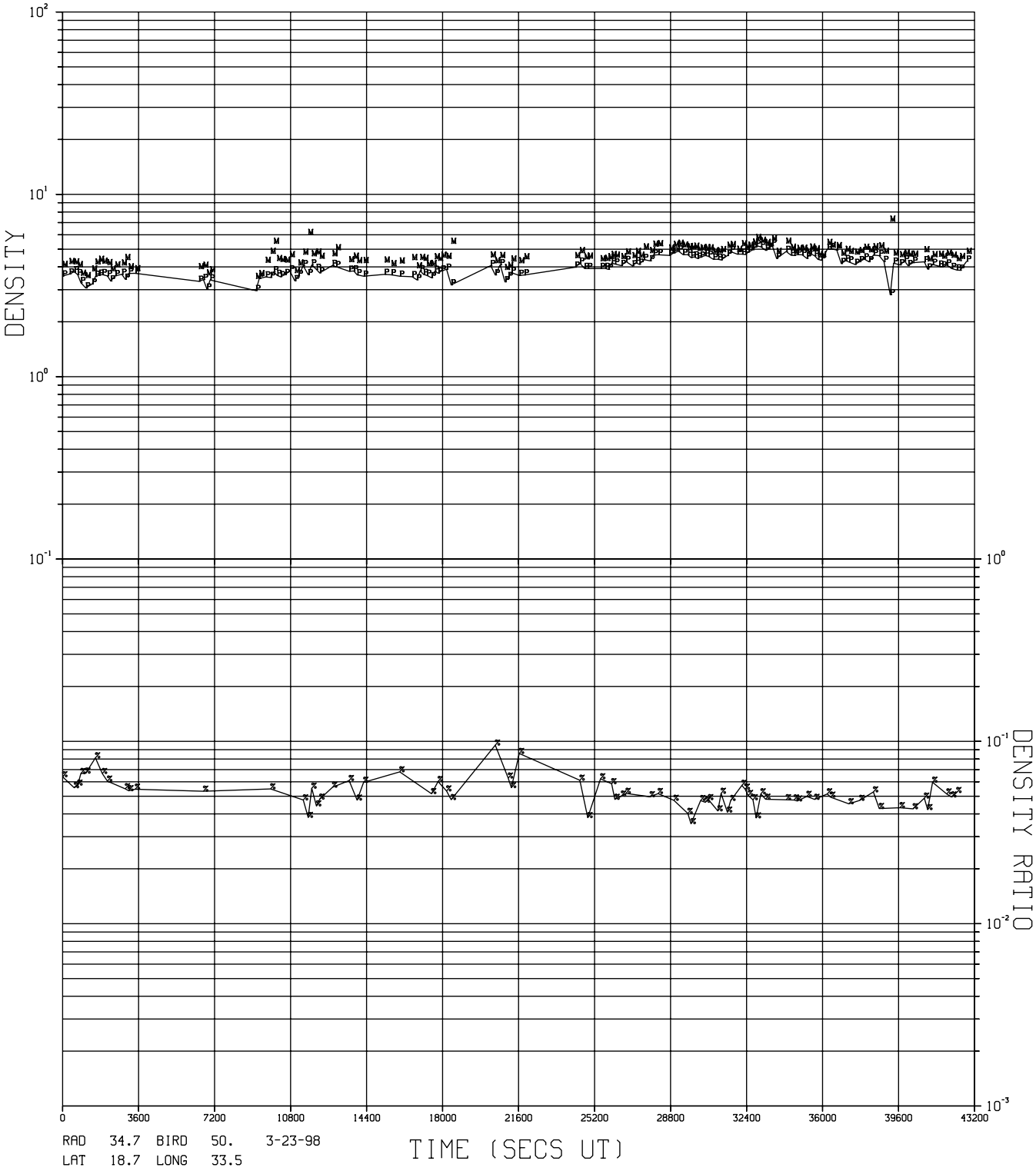

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 33.7 BIRD 50. 3-22-98
LAT 27.0 LONG 20.0

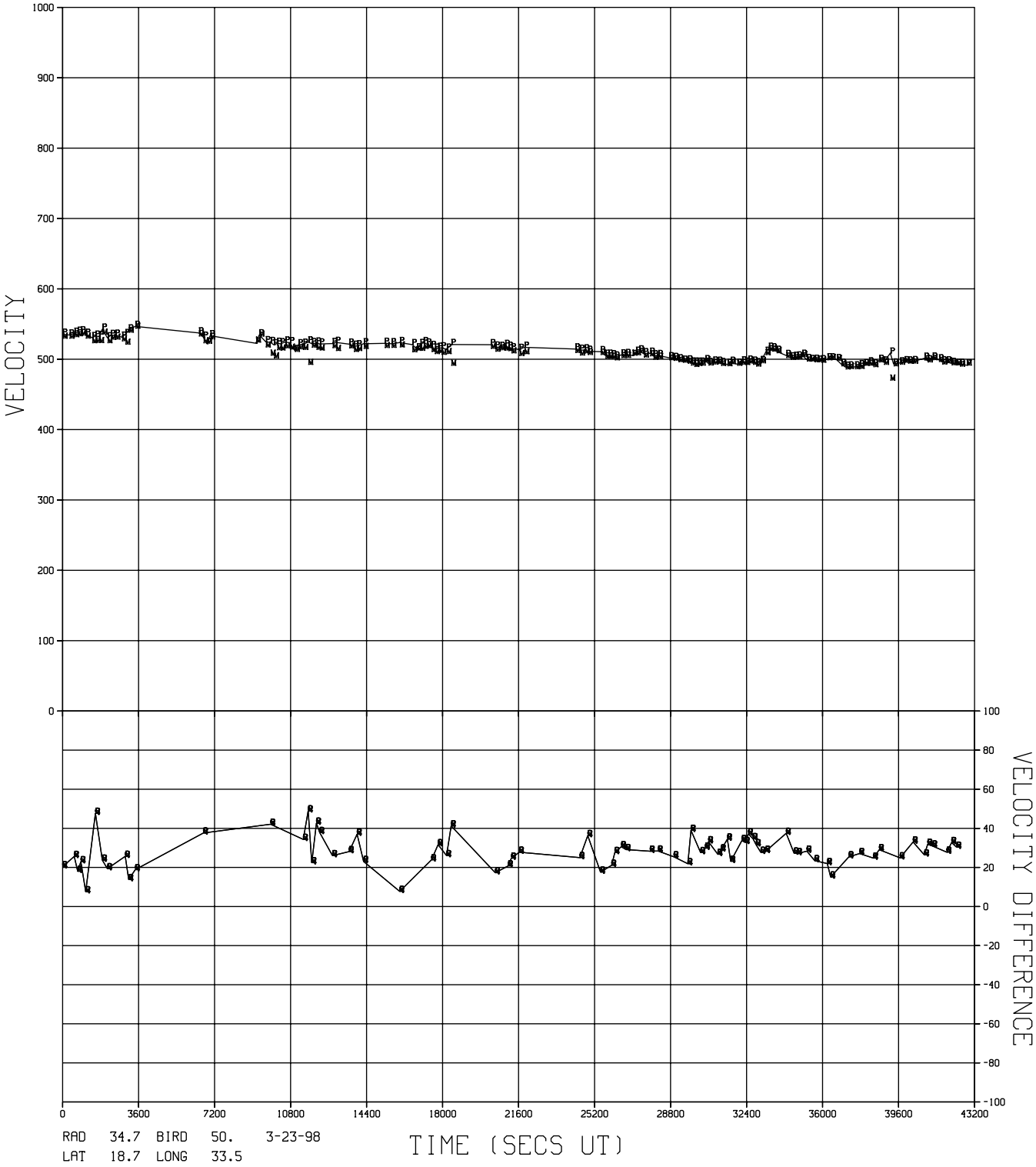

TEMPERATURE
TEMPERATURE RATIO
TIME (SECS UT)
RAD 33.7 BIRD 50. 3-22-98
LAT 27.0 LONG 20.0

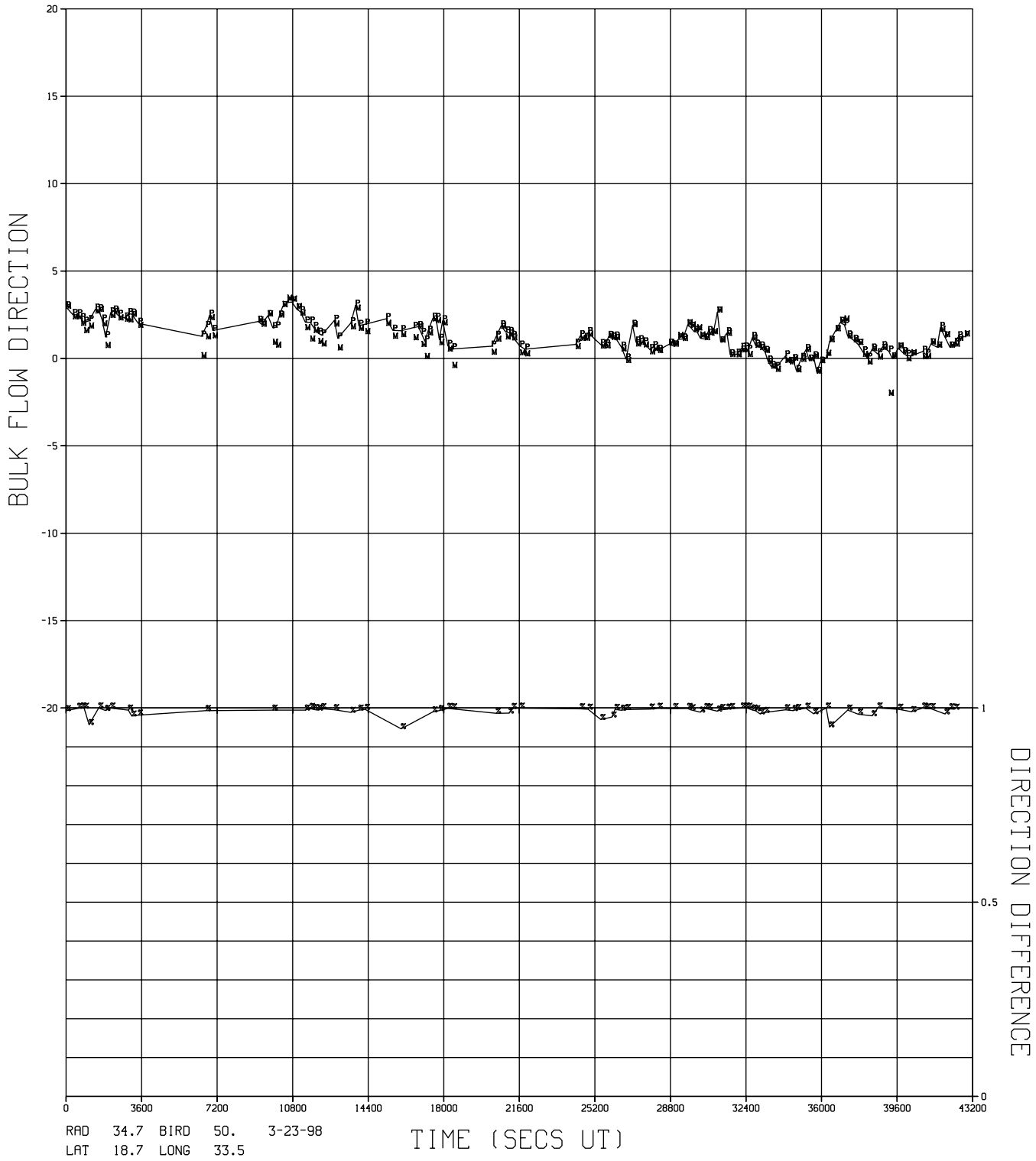

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 33.7 BIRD 50. 3-22-98
LAT 27.0 LONG 20.0

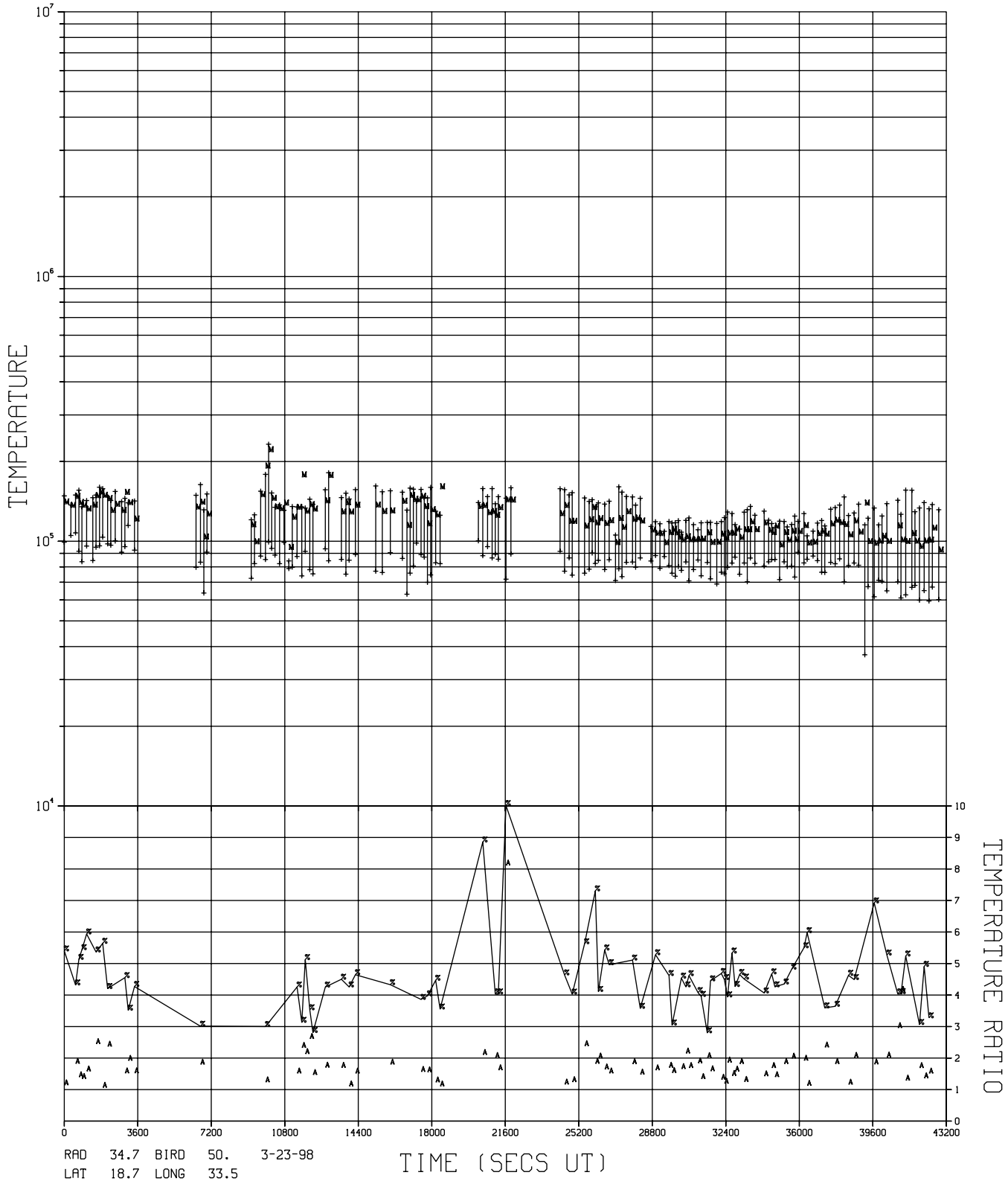

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 33.7 BIRD 50. 3-22-98
LAT 27.0 LONG 20.0

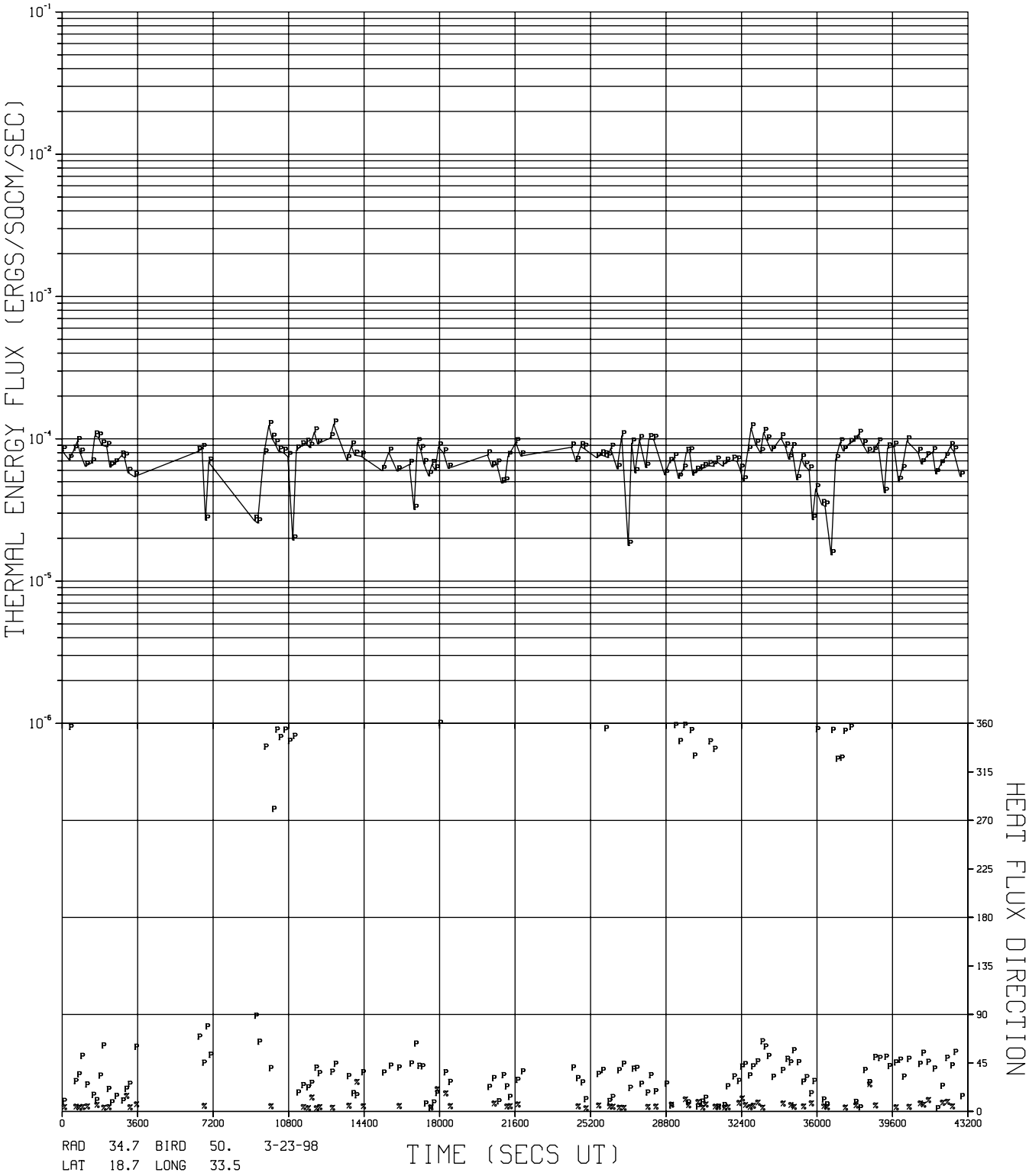

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
TIME (SECS UT)
RAD 33.7 BIRD 50. 3-22-98
LAT 27.0 LONG 20.0

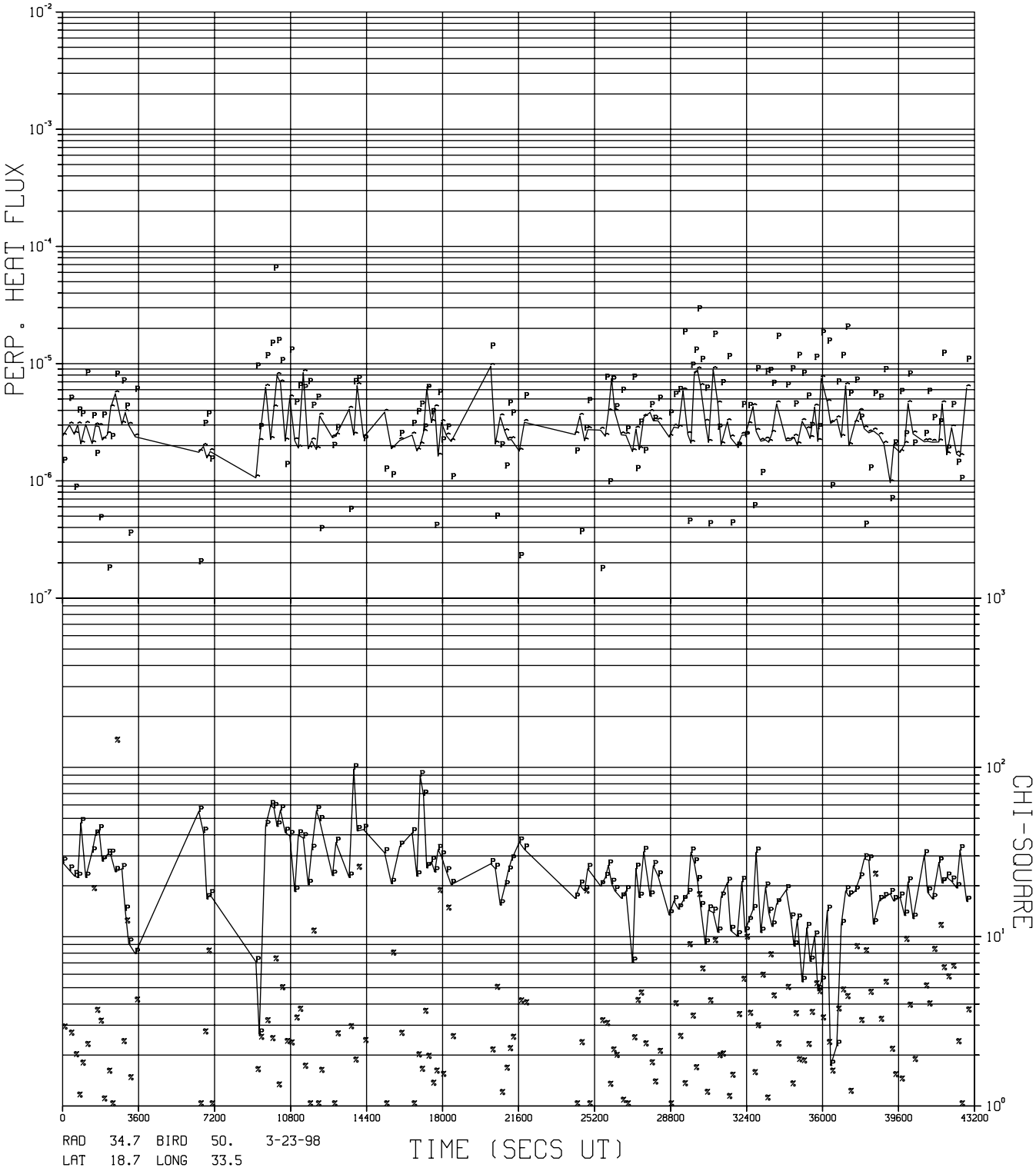

DENSITY
DENSITY RATIO
TIME (SECS UT)
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
RAD 34.7 BIRD 50. 3-23-98
LAT 18.7 LONG 33.5

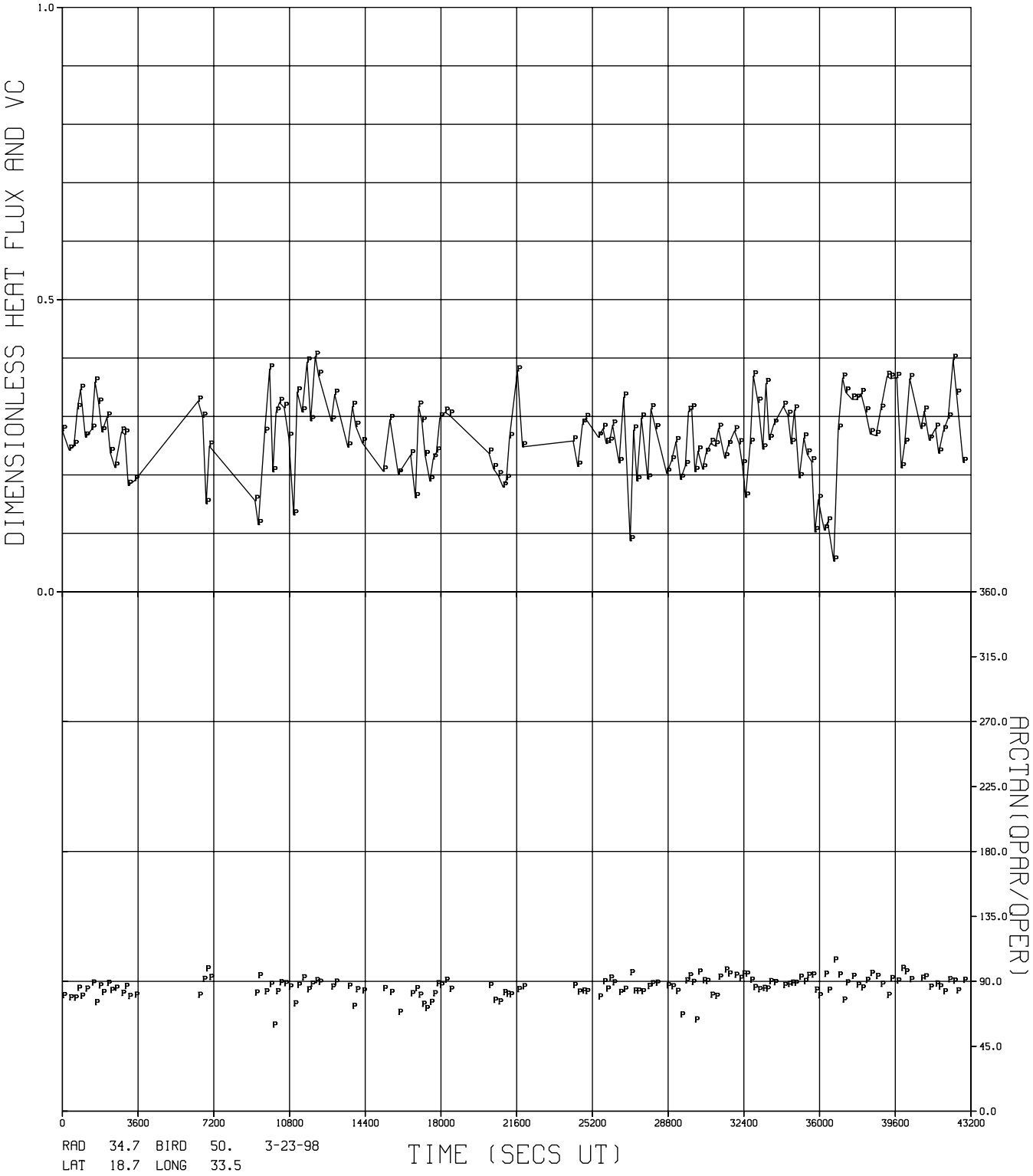

VELOCITY
1000
900
800
700
600
500
400
300
200
100
0
VELOCITY DIFFERENCE
100
80
60
40
20
0
-20
-40
-60
-80
-100
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
TIME (SECS UT)
RAD 34.7 BIRD 50. 3-23-98
LAT 18.7 LONG 33.5

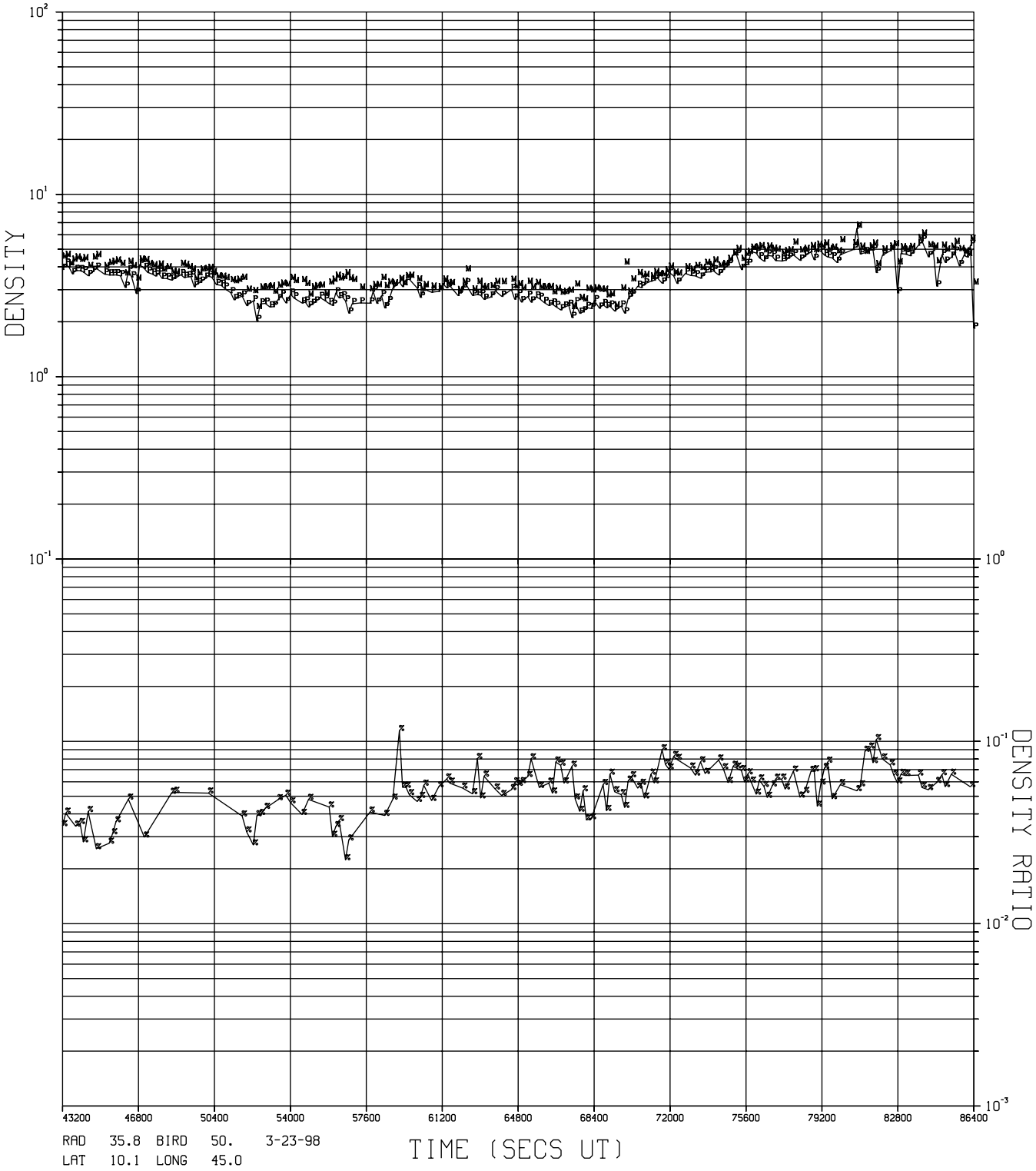

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
RAD 34.7 BIRD 50. 3-23-98
LAT 18.7 LONG 33.5

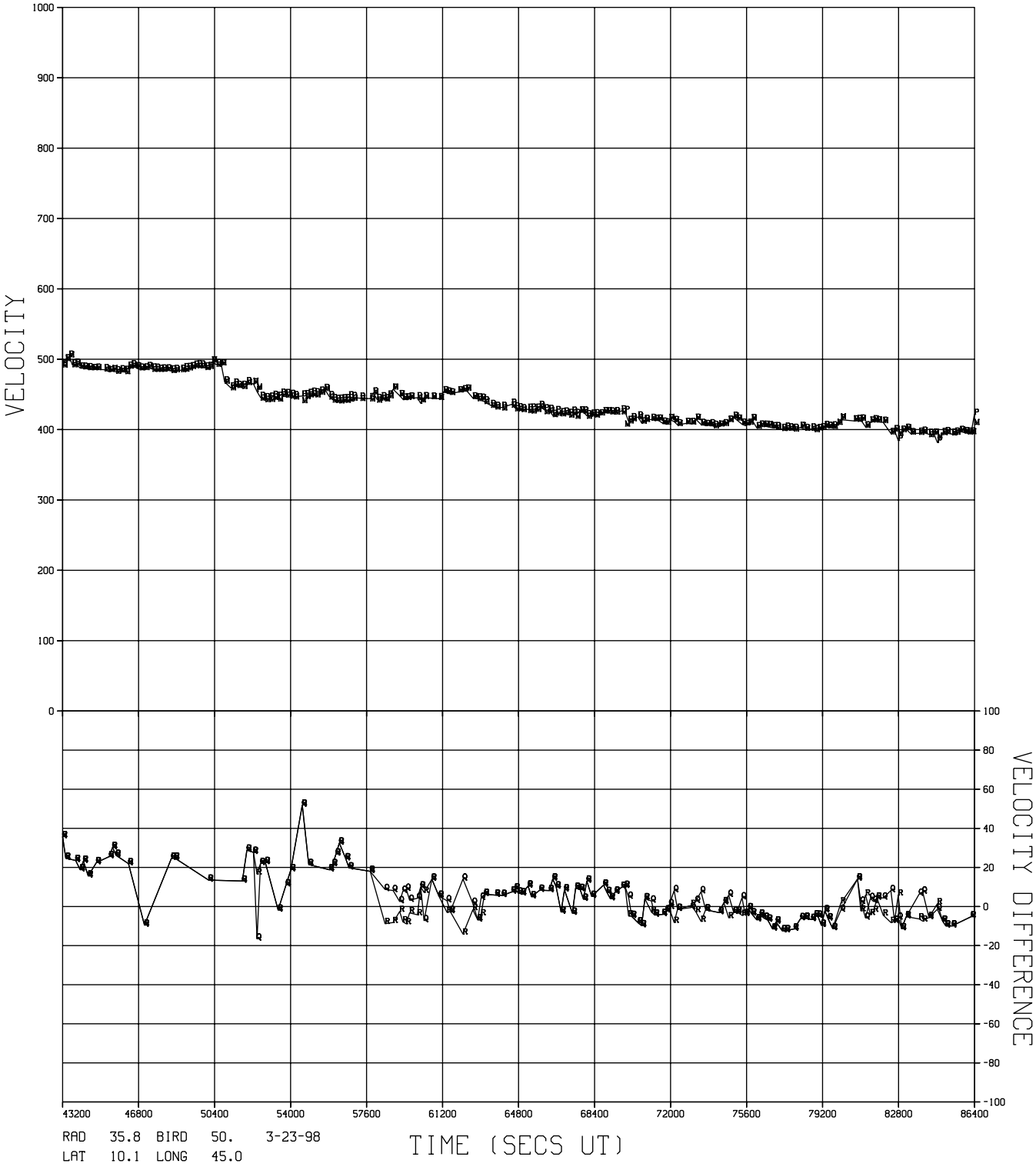

TEMPERATURE
TEMPERATURE RATIO
TIME (SECS UT)
RAD 34.7 BIRD 50. 3-23-98
LAT 18.7 LONG 33.5

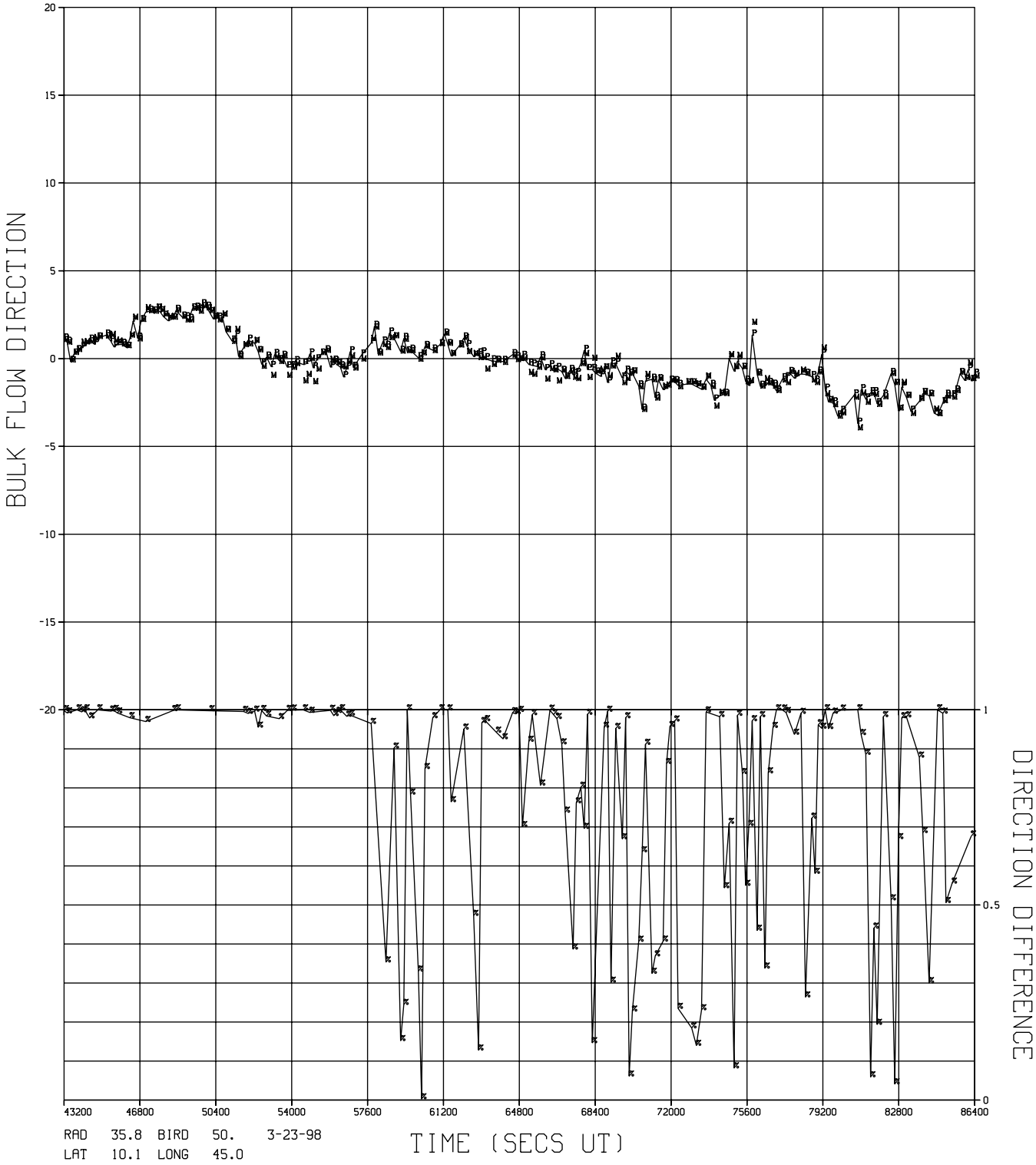

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 34.7 BIRD 50. 3-23-98
LAT 18.7 LONG 33.5

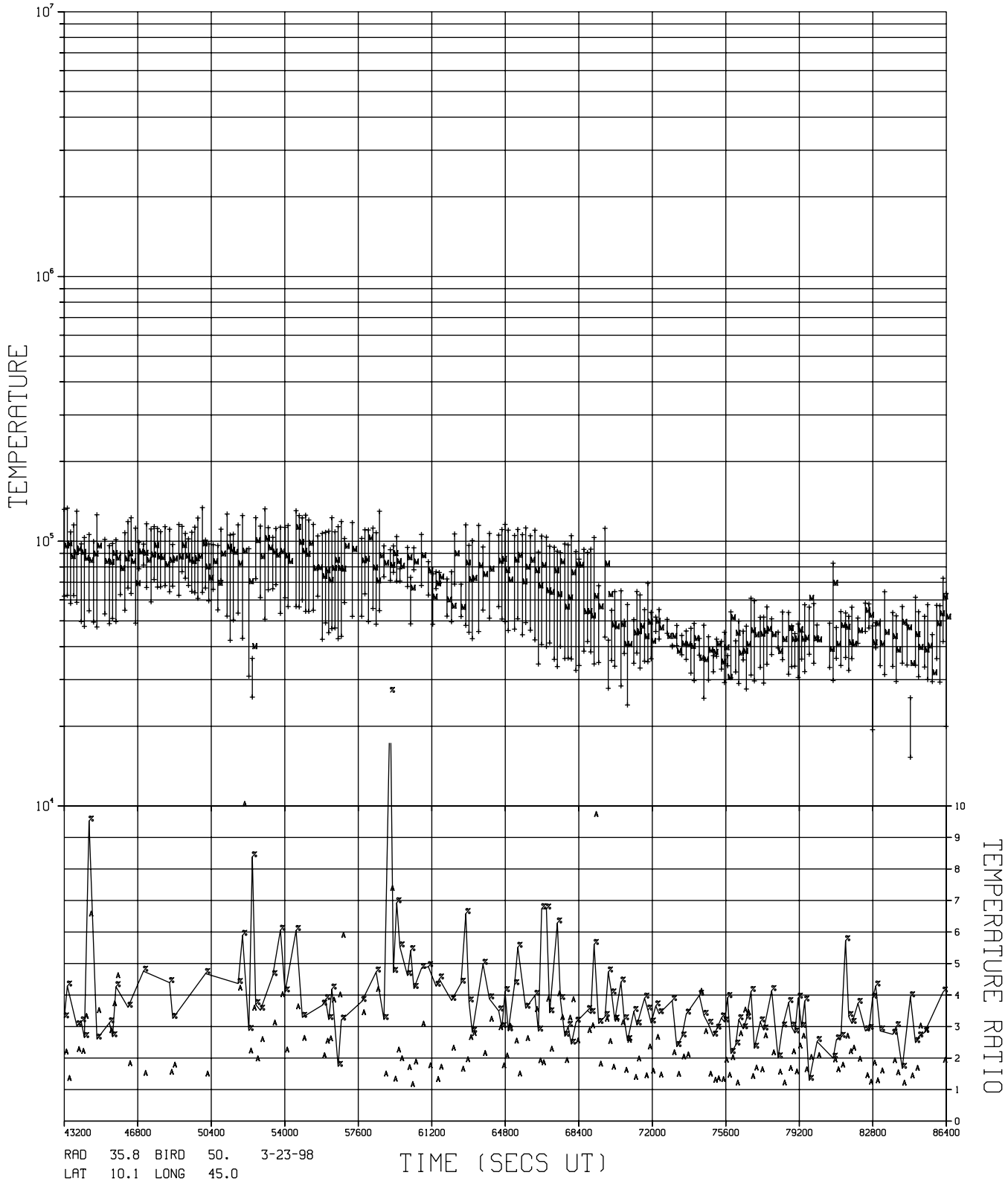

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
RAD 34.7 BIRD 50. 3-23-98
LAT 18.7 LONG 33.5

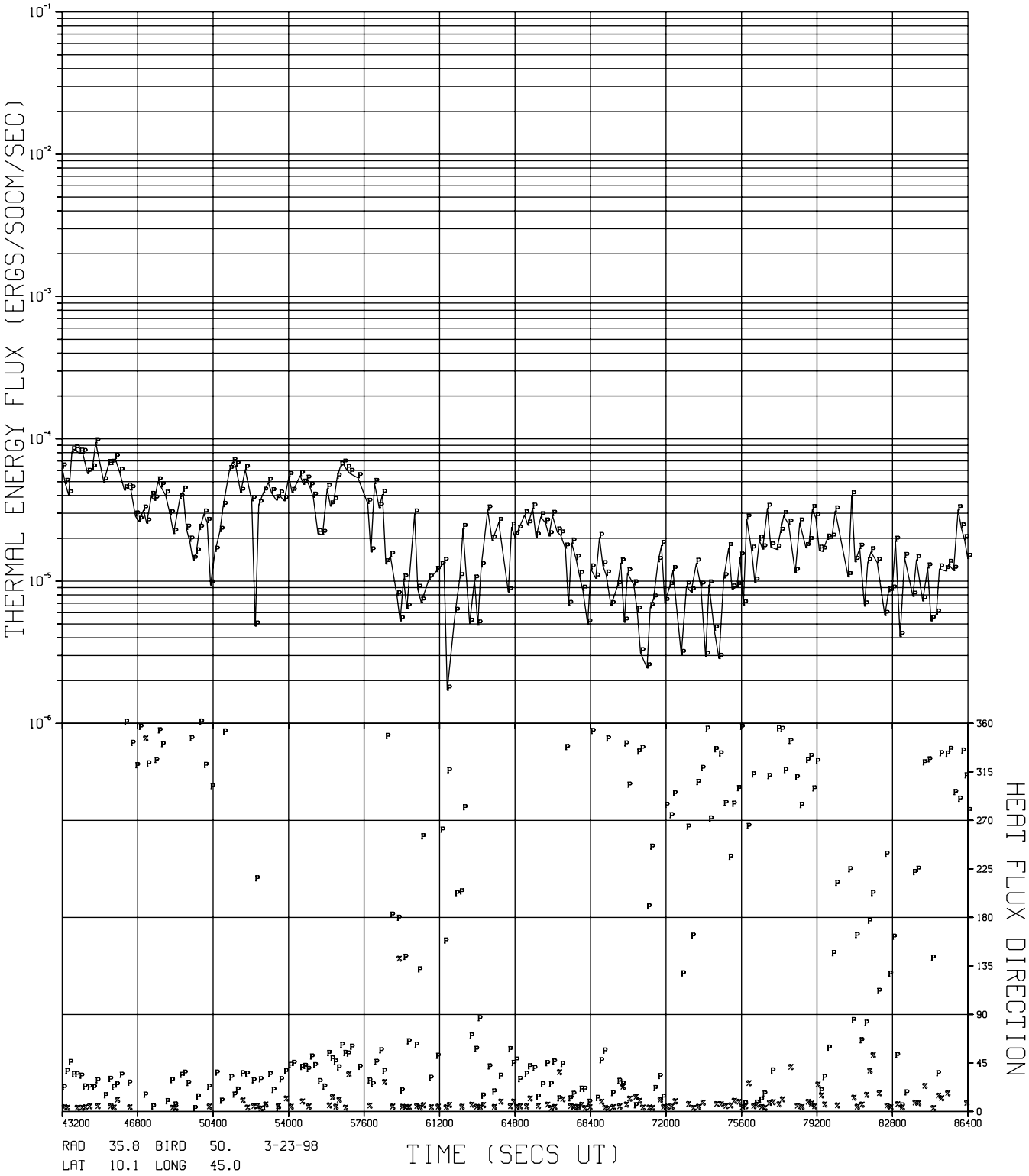

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
TIME (SECS UT)
RAD 34.7 BIRD 50. 3-23-98
LAT 18.7 LONG 33.5

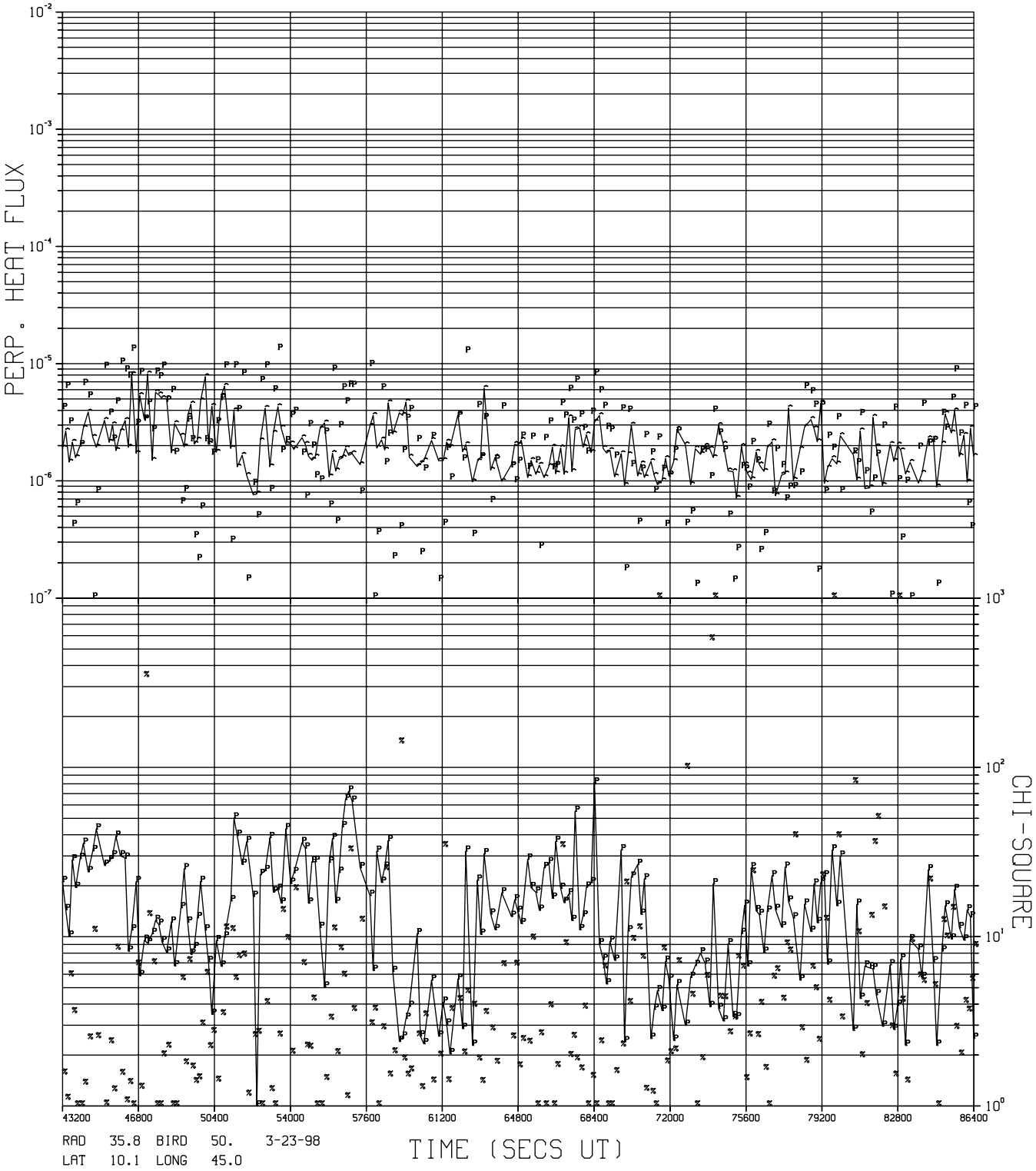

DENSITY
DENSITY RATIO
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 35.8 BIRD 50. 3-23-98
LAT 10.1 LONG 45.0

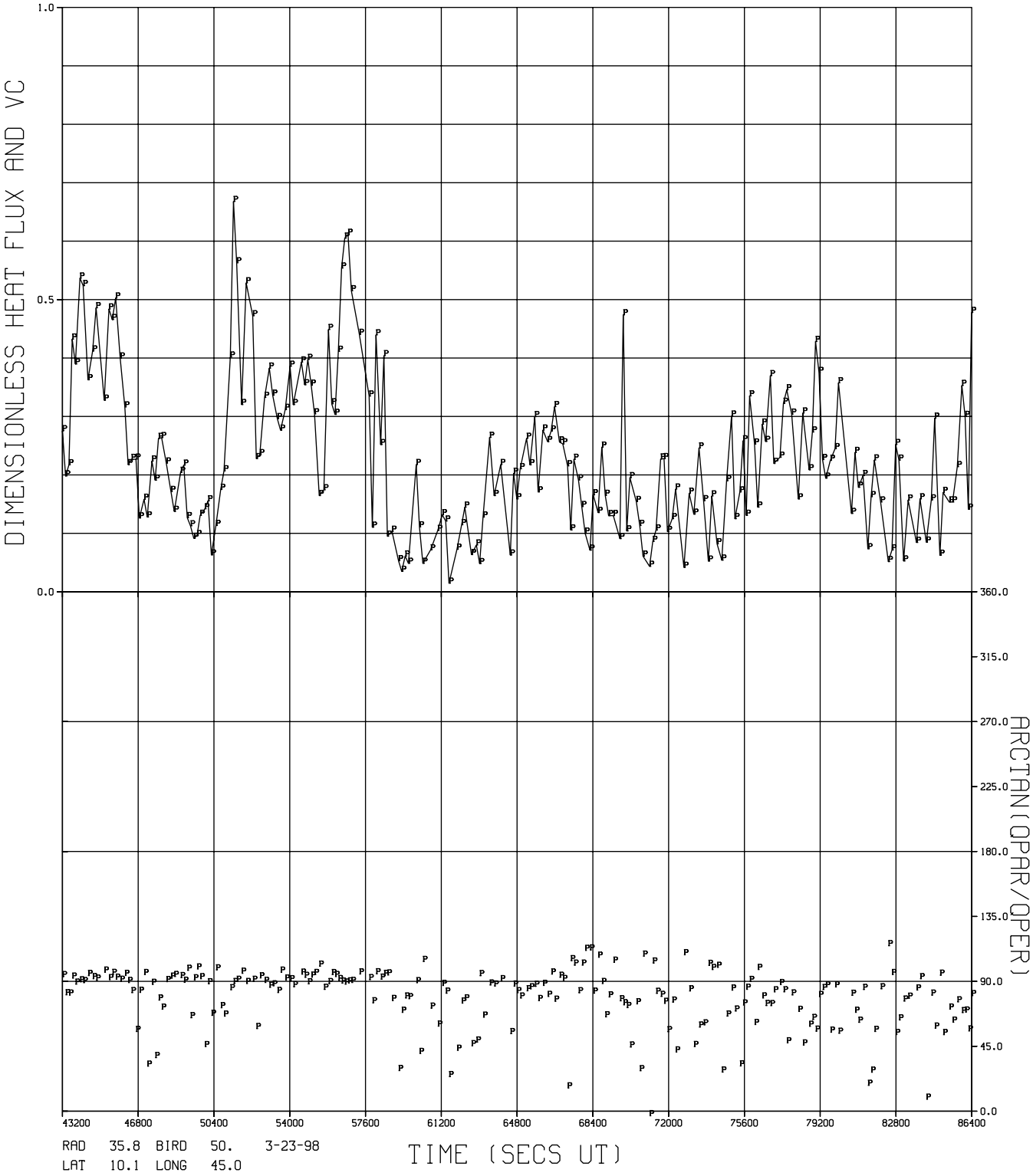

VELOCITY
1000
900
800
700
600
500
400
300
200
100
0
VELOCITY DIFFERENCE
100
80
60
40
20
0
-20
-40
-60
-80
-100
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 35.8 BIRD 50. 3-23-98
LAT 10.1 LONG 45.0
TIME (SECS UT)


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 35.8 BIRD 50. 3-23-98
LAT 10.1 LONG 45.0

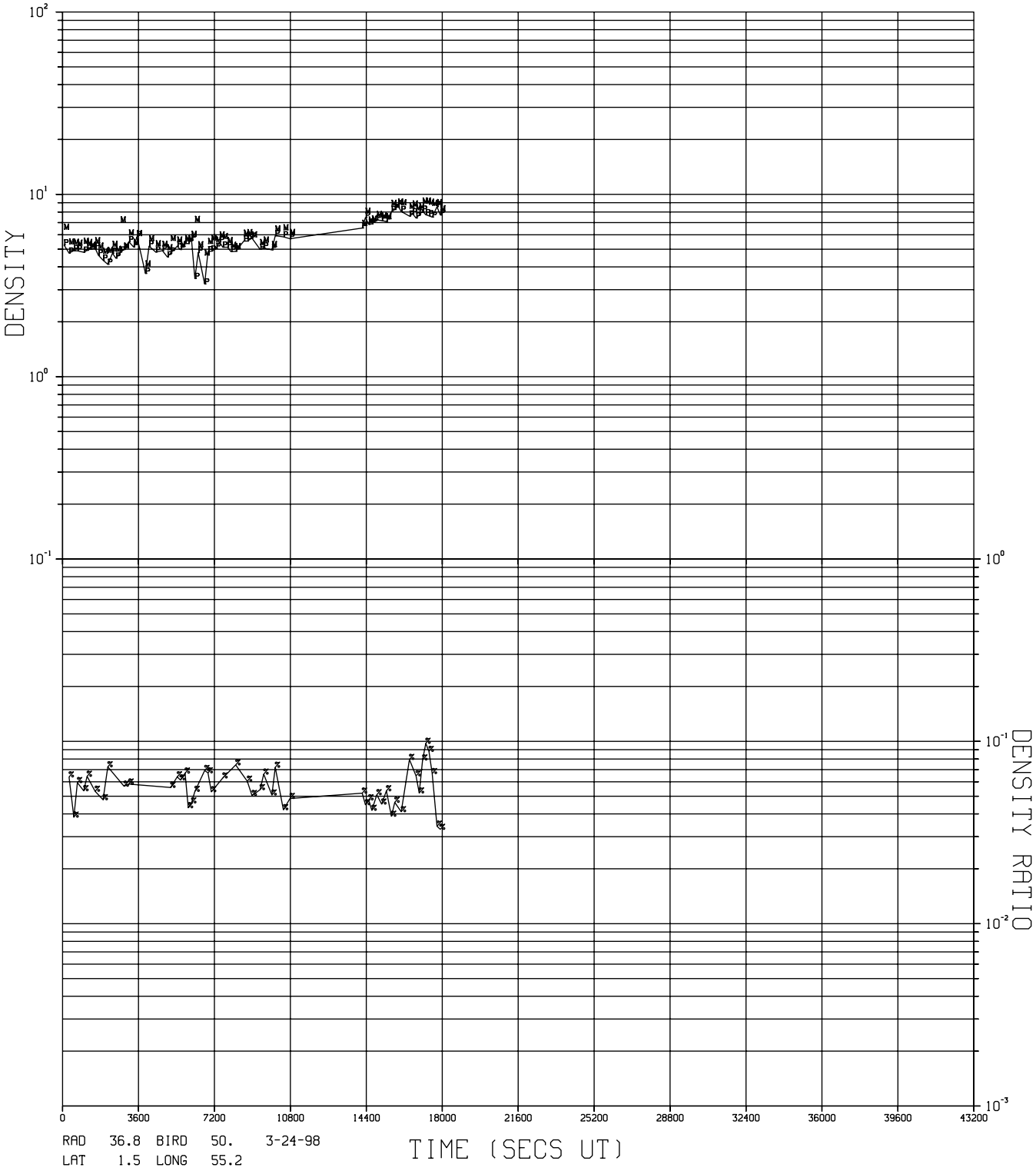

TEMPERATURE
TEMPERATURE RATIO
TIME (SECS UT)
RAD 35.8 BIRD 50. 3-23-98
LAT 10.1 LONG 45.0

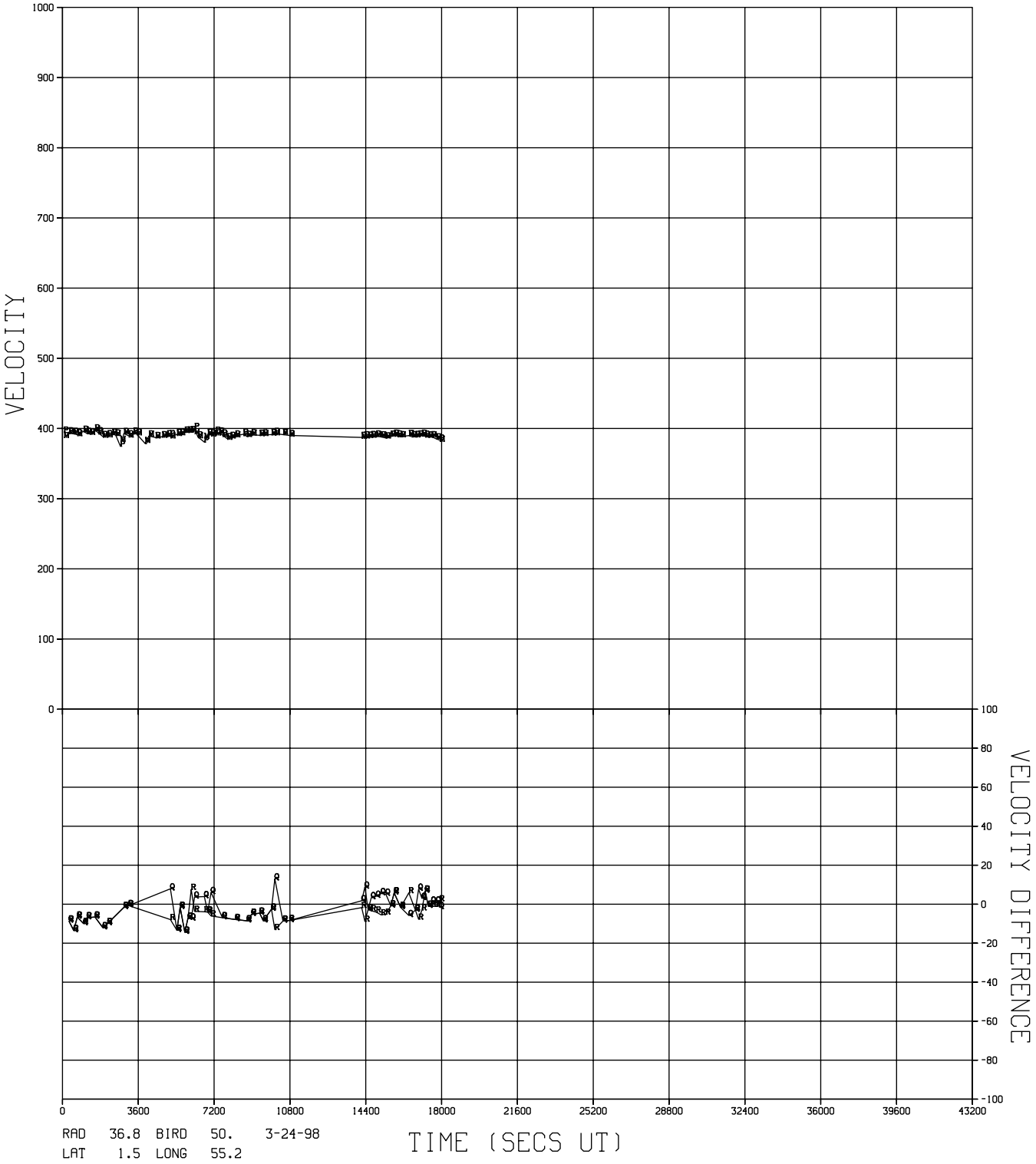

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 35.8 BIRD 50. 3-23-98
LAT 10.1 LONG 45.0

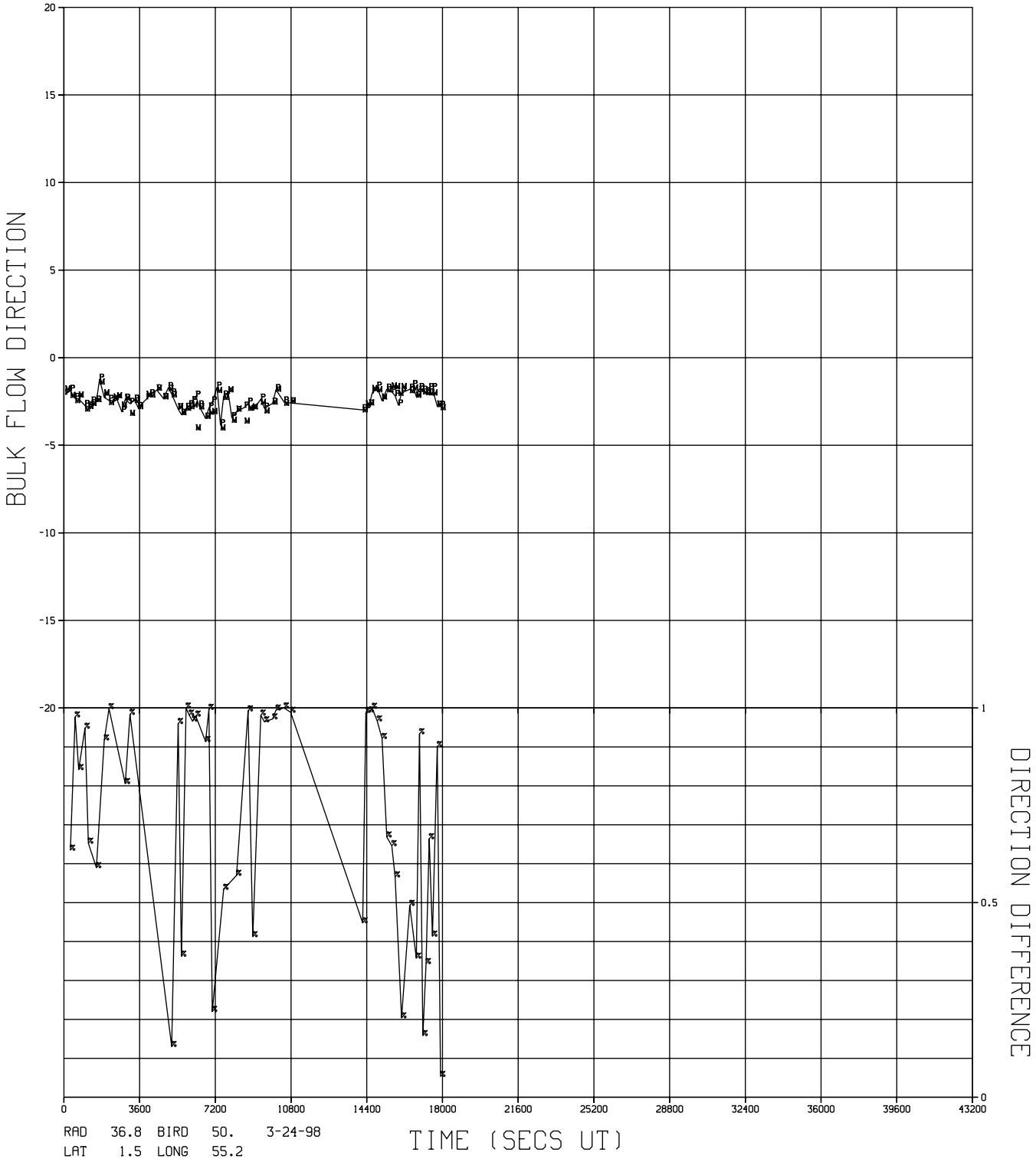

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 35.8 BIRD 50. 3-23-98
LAT 10.1 LONG 45.0

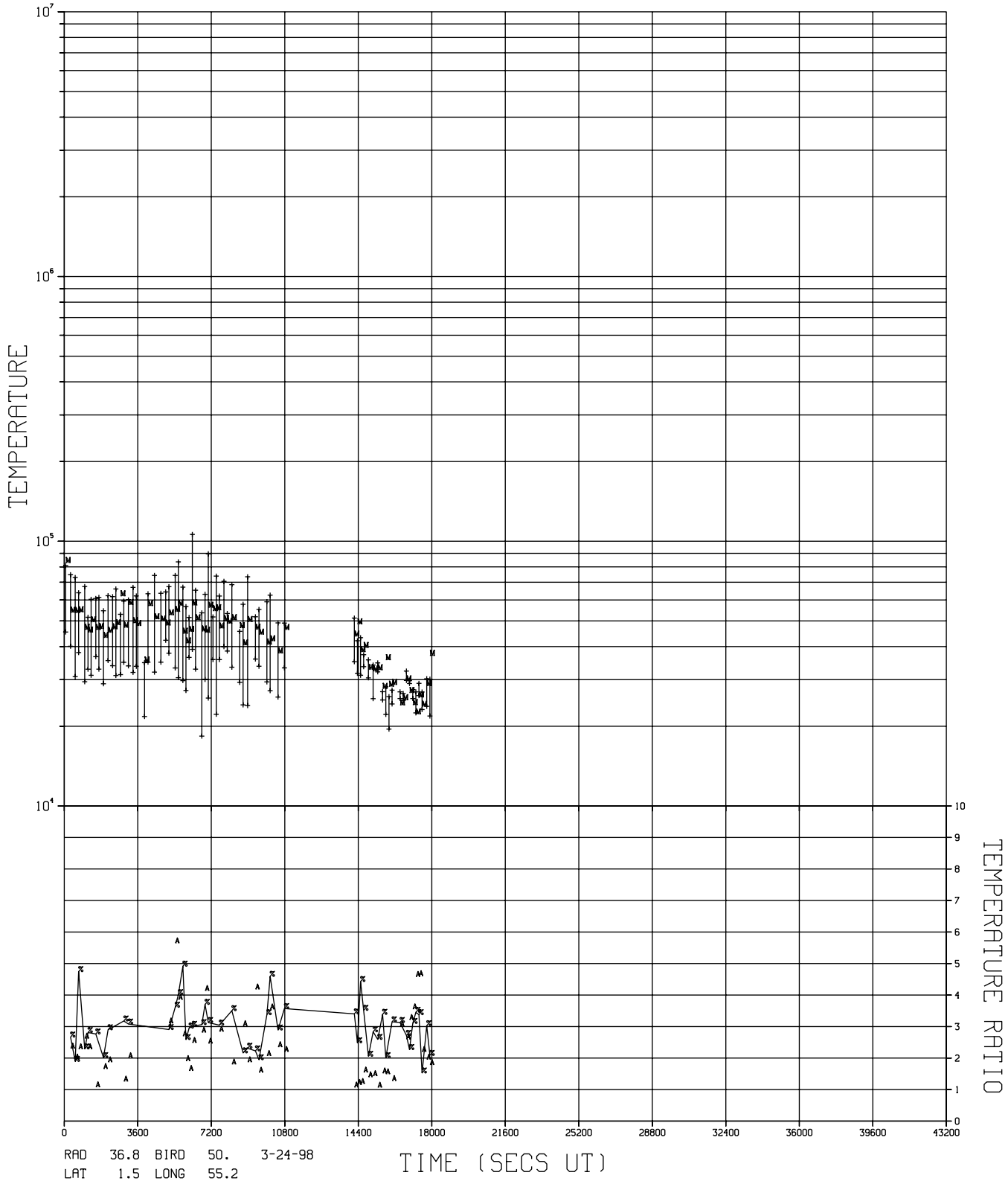


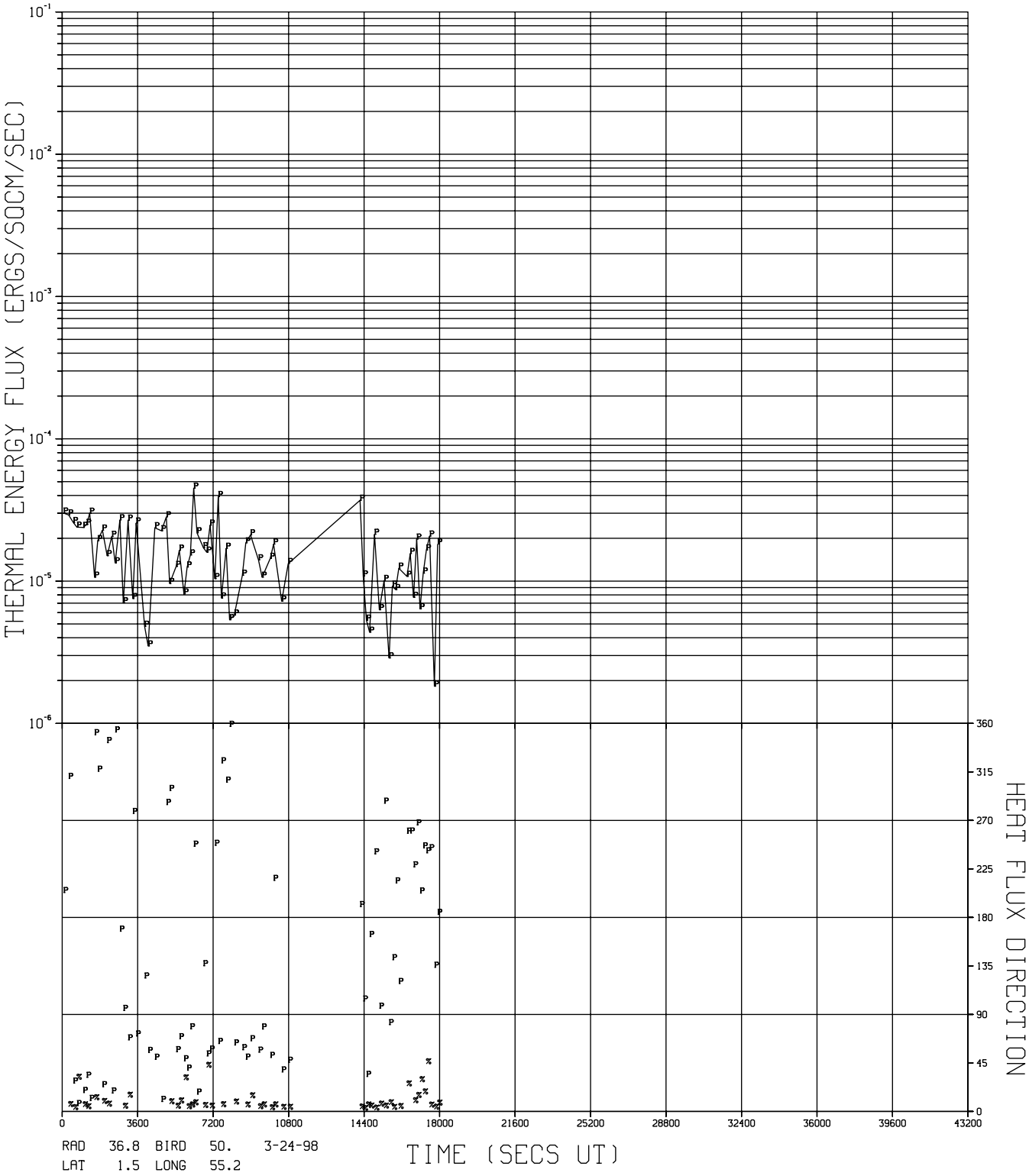
RAD 35.8 BIRD 50. 3-23-98
LAT 10.1 LONG 45.0

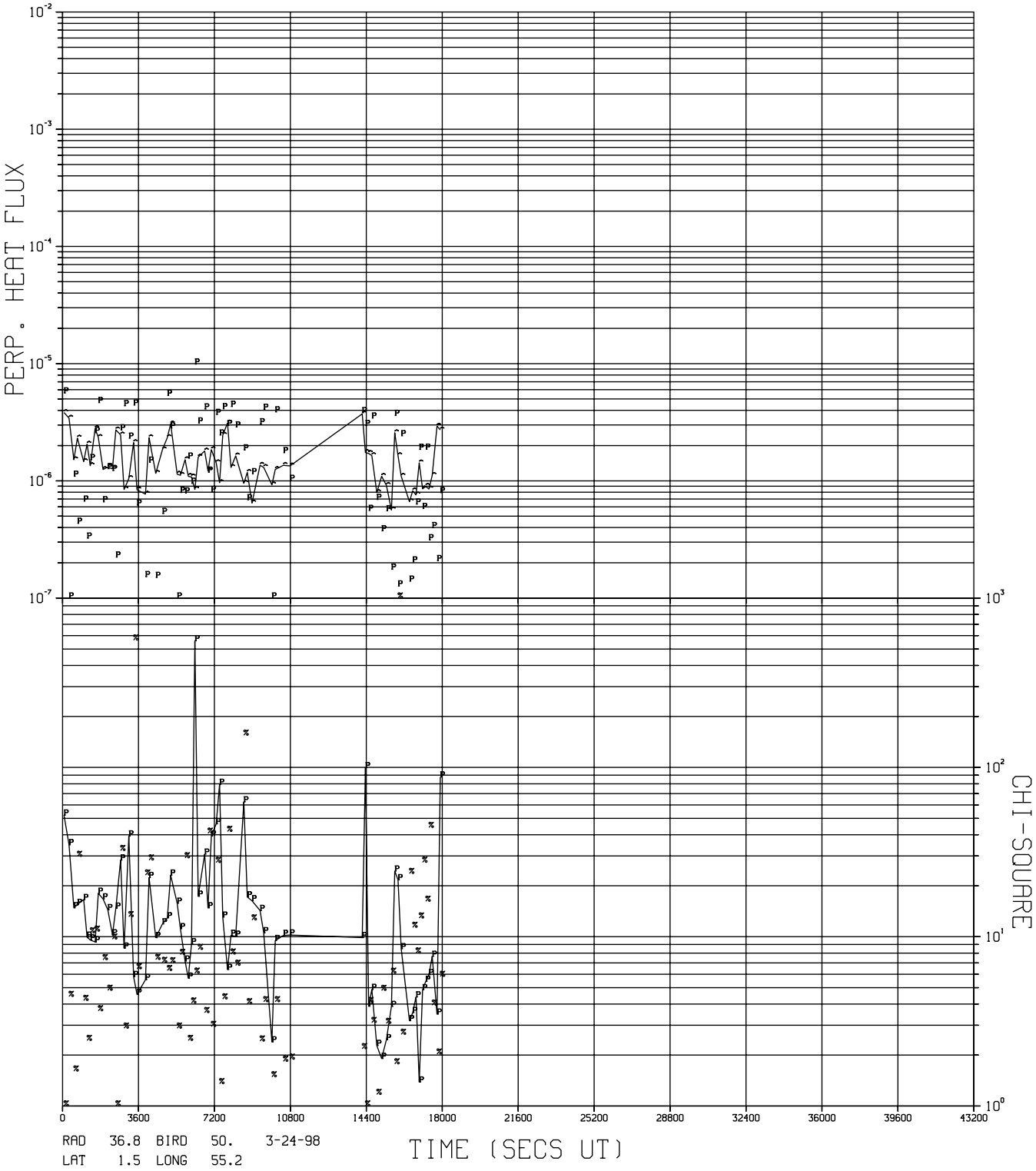

DENSITY
DENSITY RATIO
TIME (SECS UT)
RAD 36.8 BIRD 50. 3-24-98
LAT 1.5 LONG 55.2

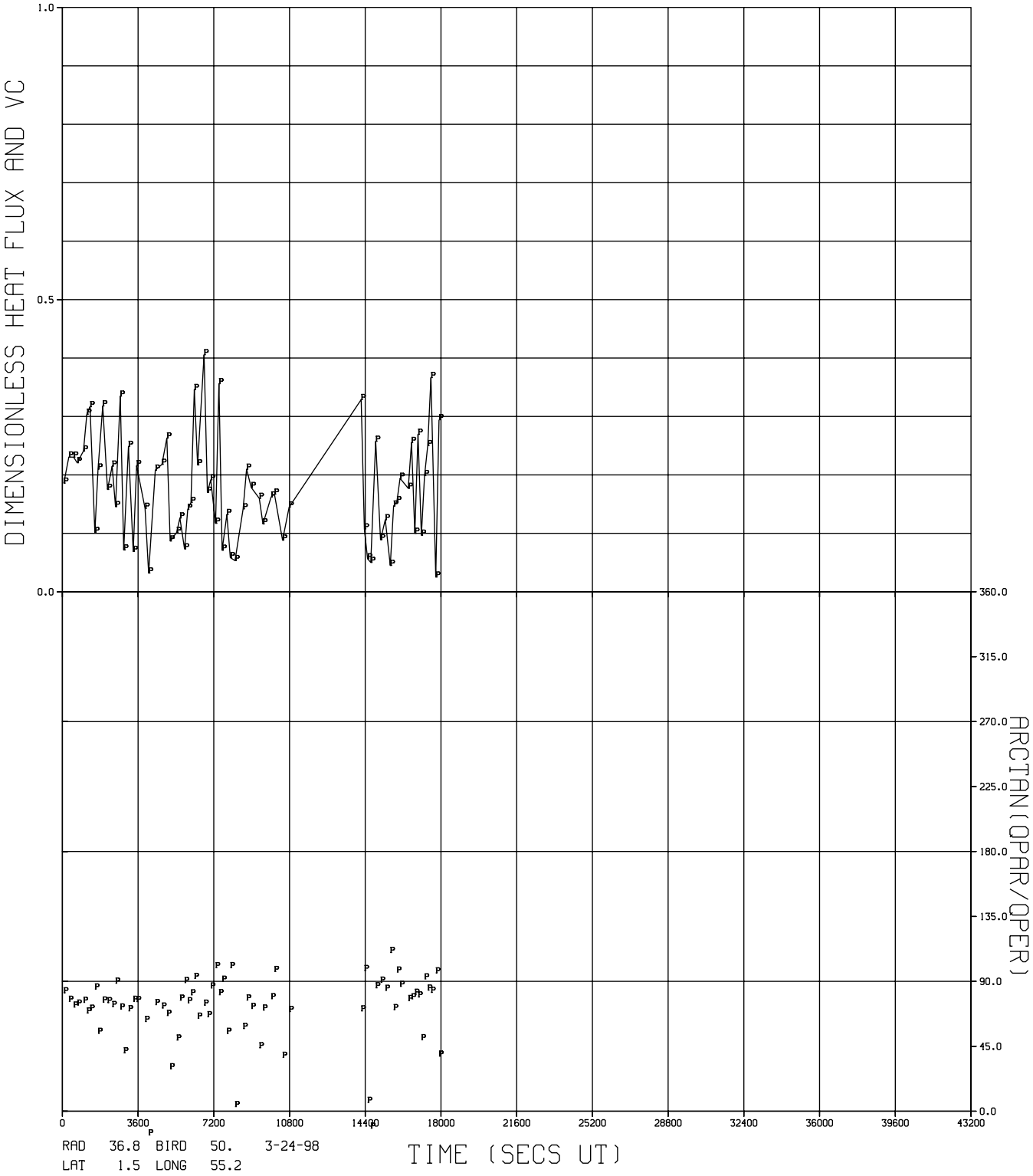

VELOCITY
1000
900
800
700
600
500
400
300
200
100
0
VELOCITY DIFFERENCE
100
80
60
40
20
0
-20
-40
-60
-80
-100
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
RAD 36.8 BIRD 50. 3-24-98
LAT 1.5 LONG 55.2
TIME (SECS UT)


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 36.8 BIRD 50. 3-24-98
LAT 1.5 LONG 55.2


TEMPERATURE
TEMPERATURE RATIO
TIME (SECS UT)
RAD 36.8 BIRD 50. 3-24-98
LAT 1.5 LONG 55.2


THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 36.8 BIRD 50. 3-24-98
LAT 1.5 LONG 55.2


PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
RAD 36.8 BIRD 50. 3-24-98
LAT 1.5 LONG 55.2


DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
TIME (SECS UT)
RAD 36.8 BIRD 50. 3-24-98
LAT 1.5 LONG 55.2