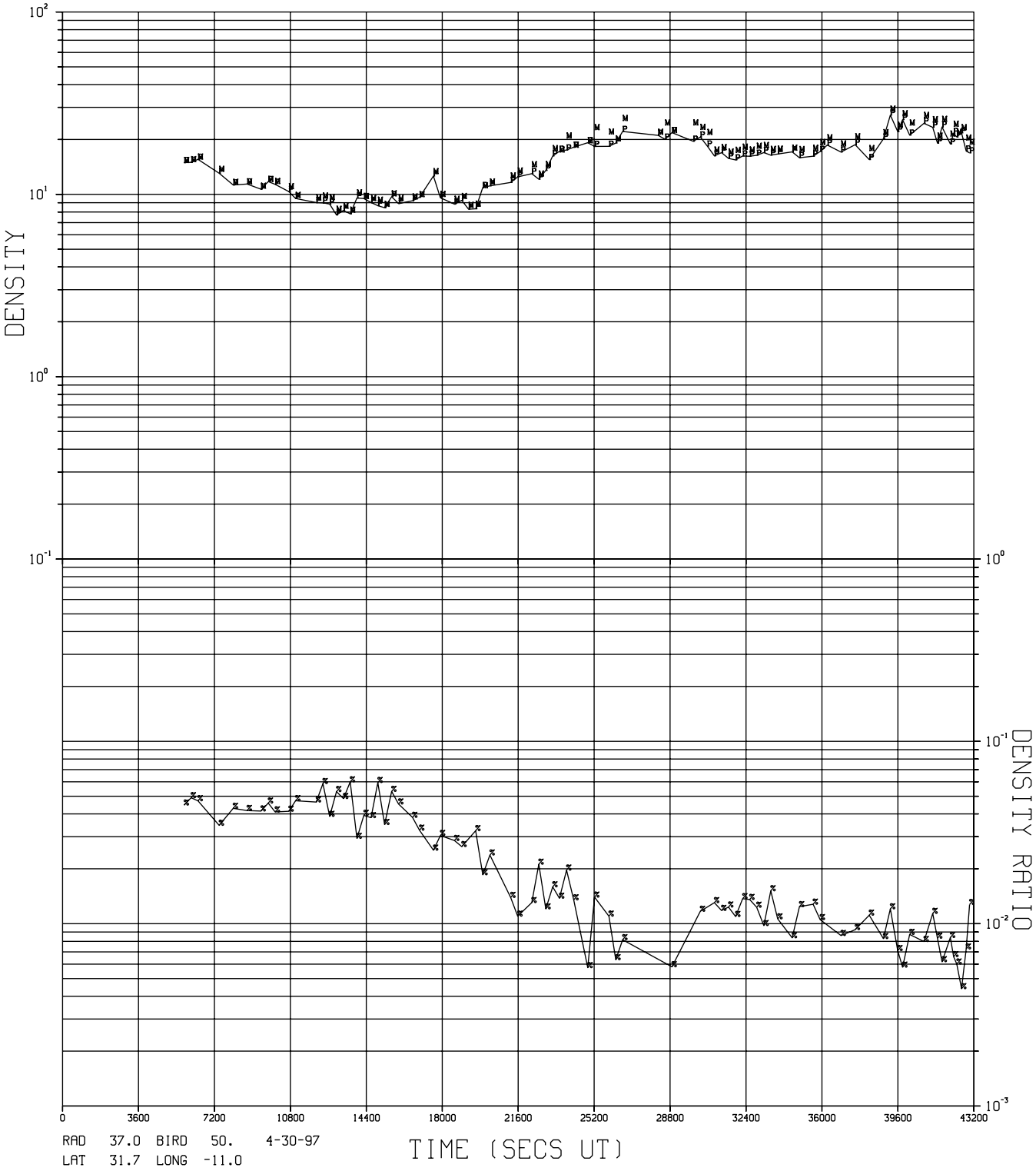
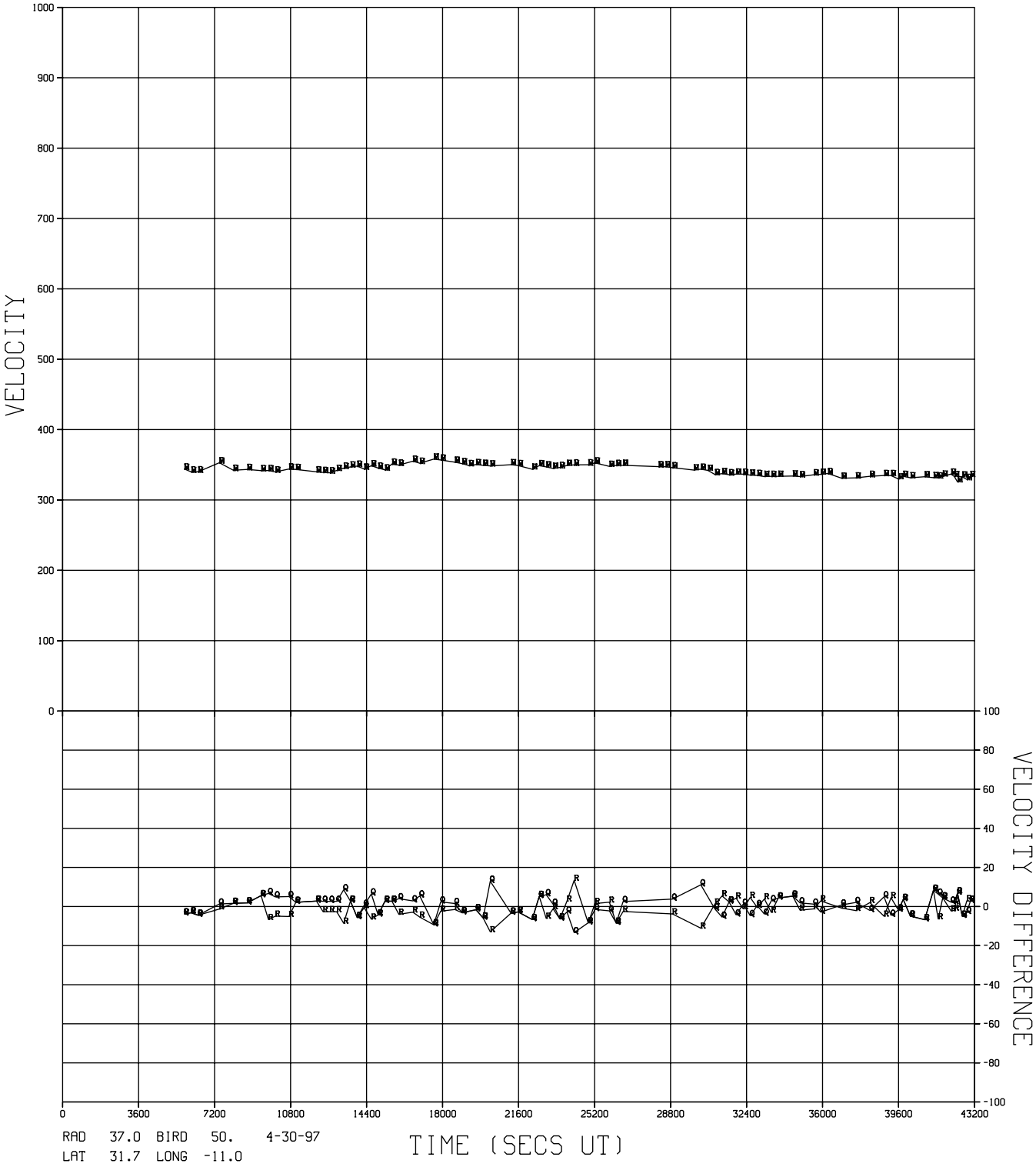
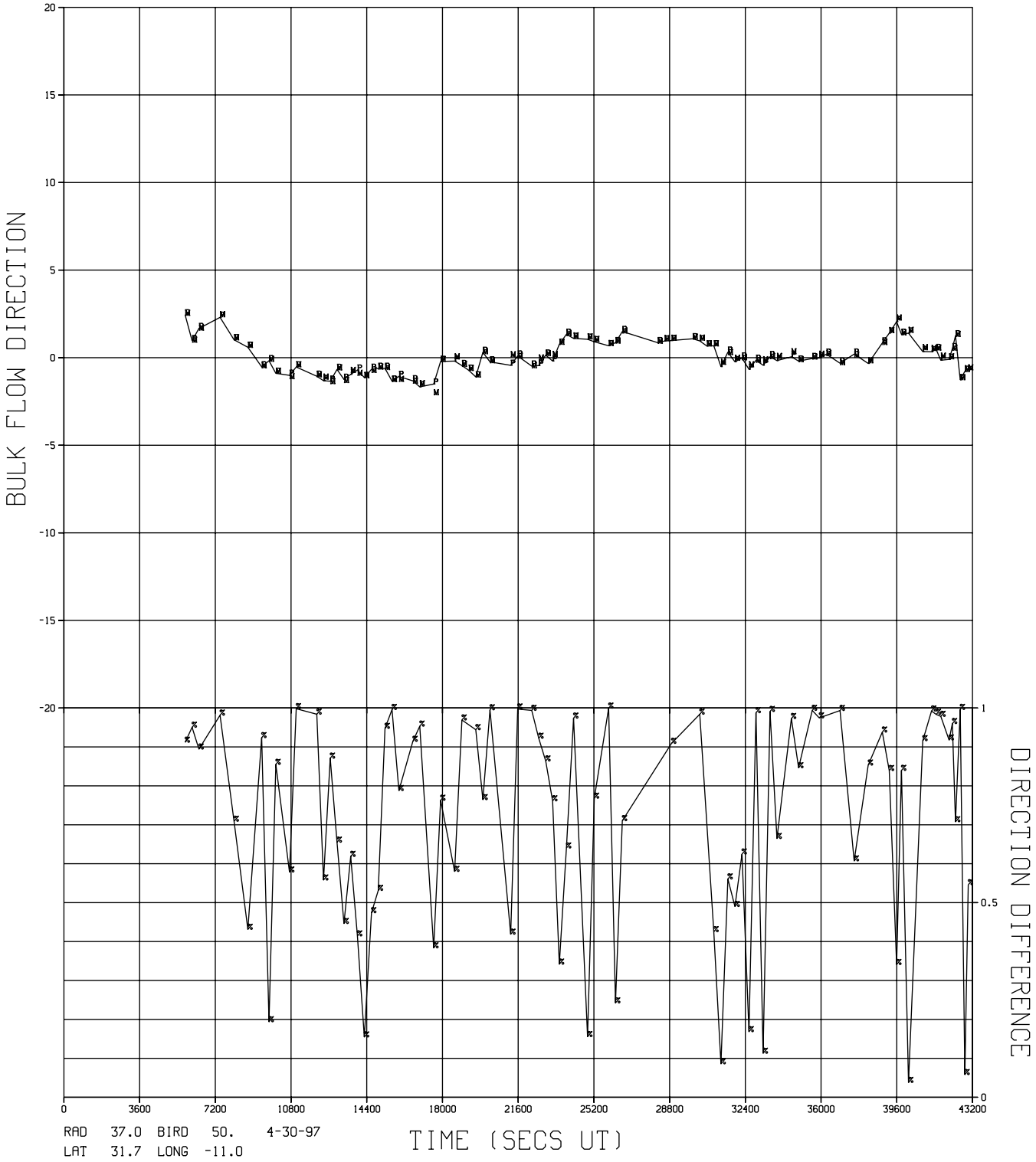
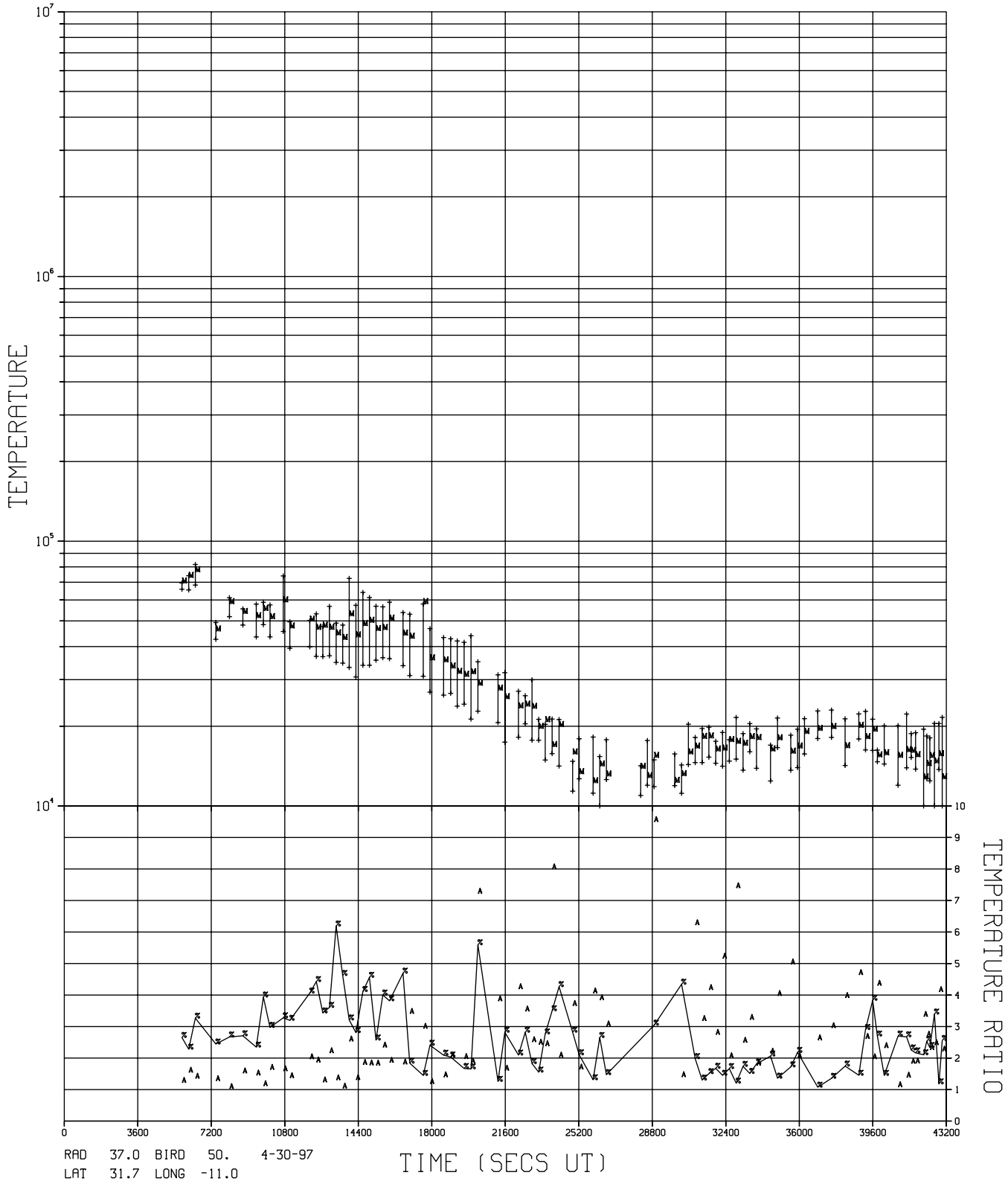
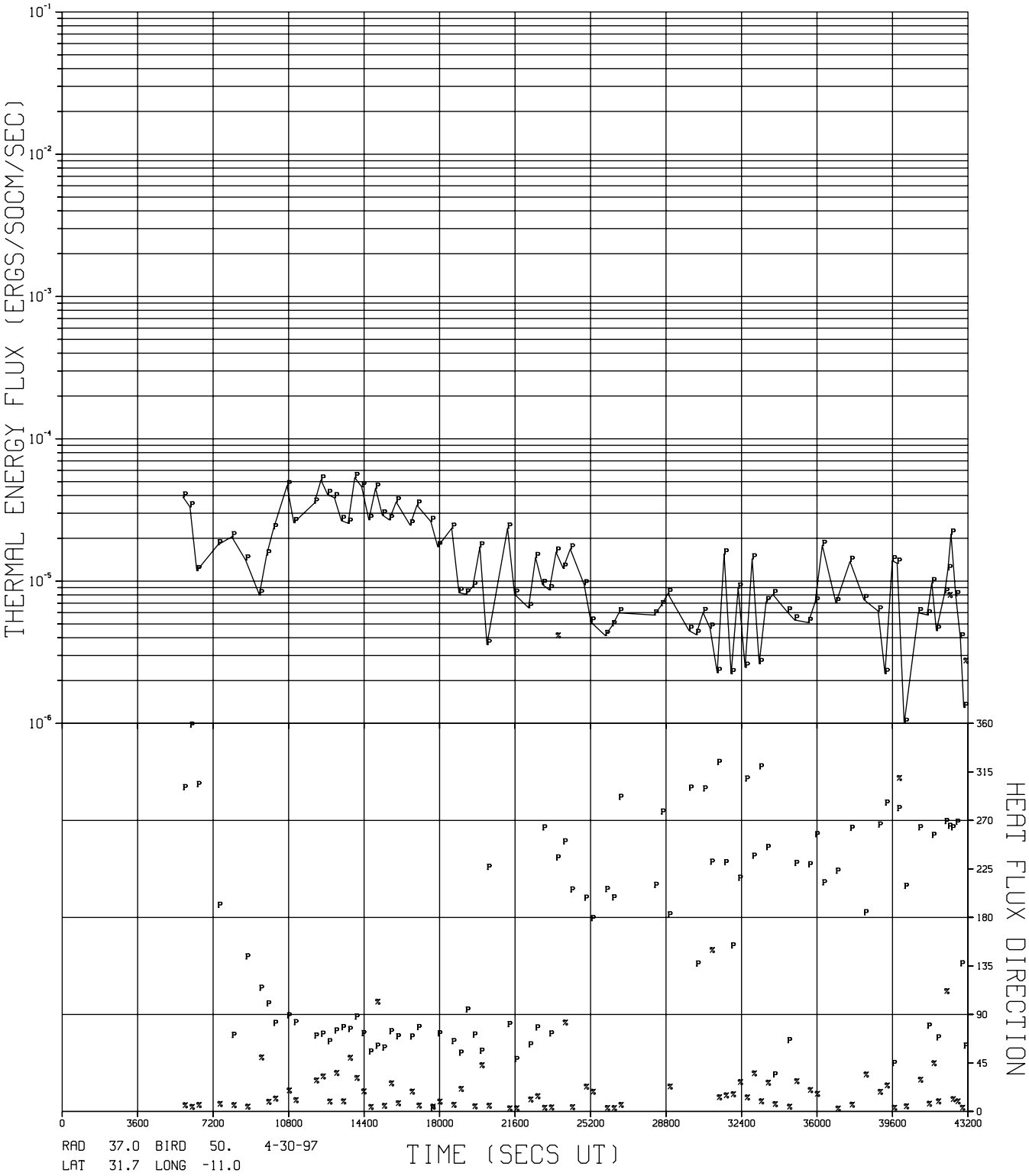
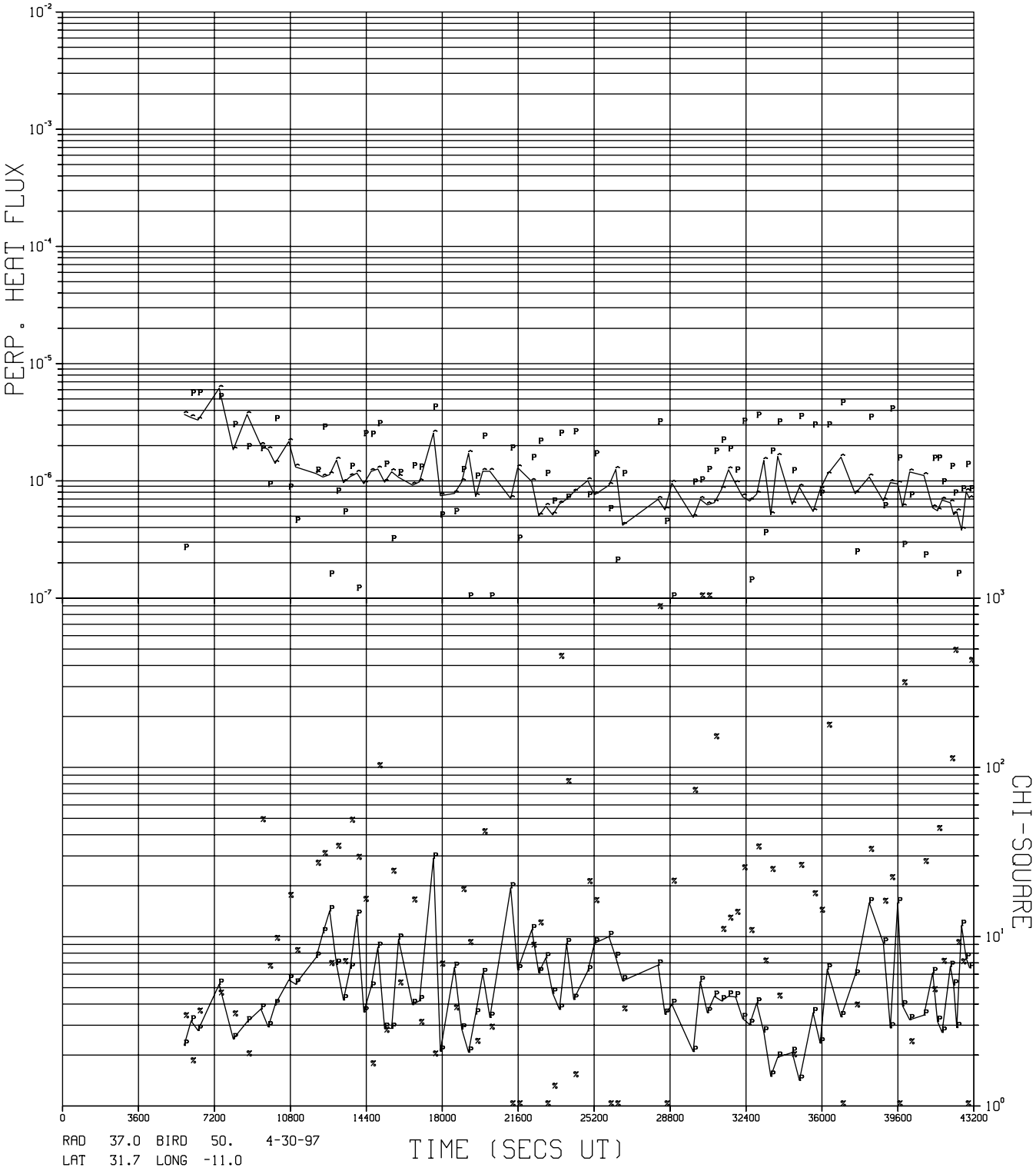

DENSITY
DENSITY RATIO
TIME (SECS UT)
RAD 37.0 BIRD 50. 4-30-97
LAT 31.7 LONG -11.0

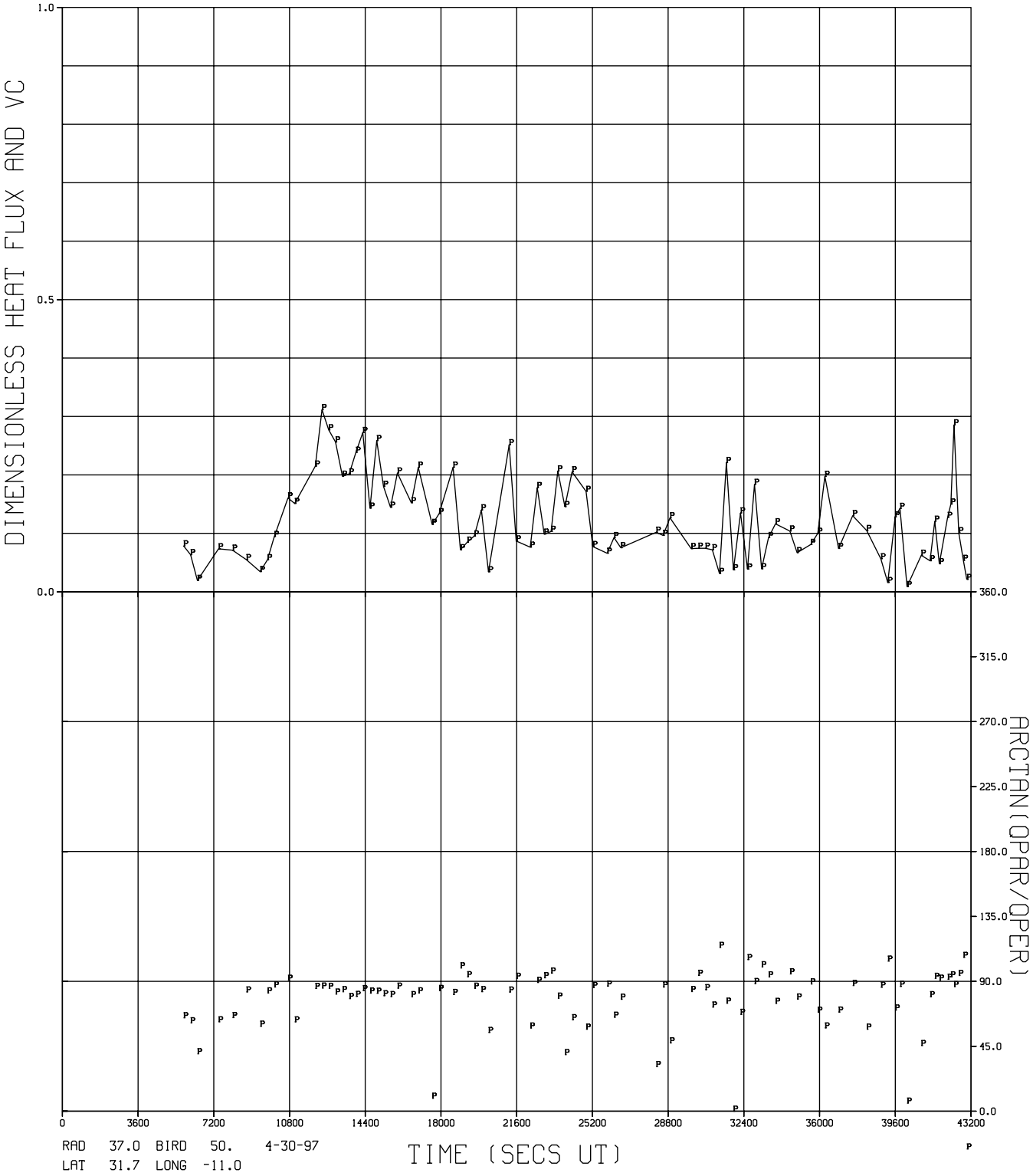

VELOCITY
VELOCITY DIFFERENCE
TIME (SECS UT)
RAD 37.0 BIRD 50. 4-30-97
LAT 31.7 LONG -11.0

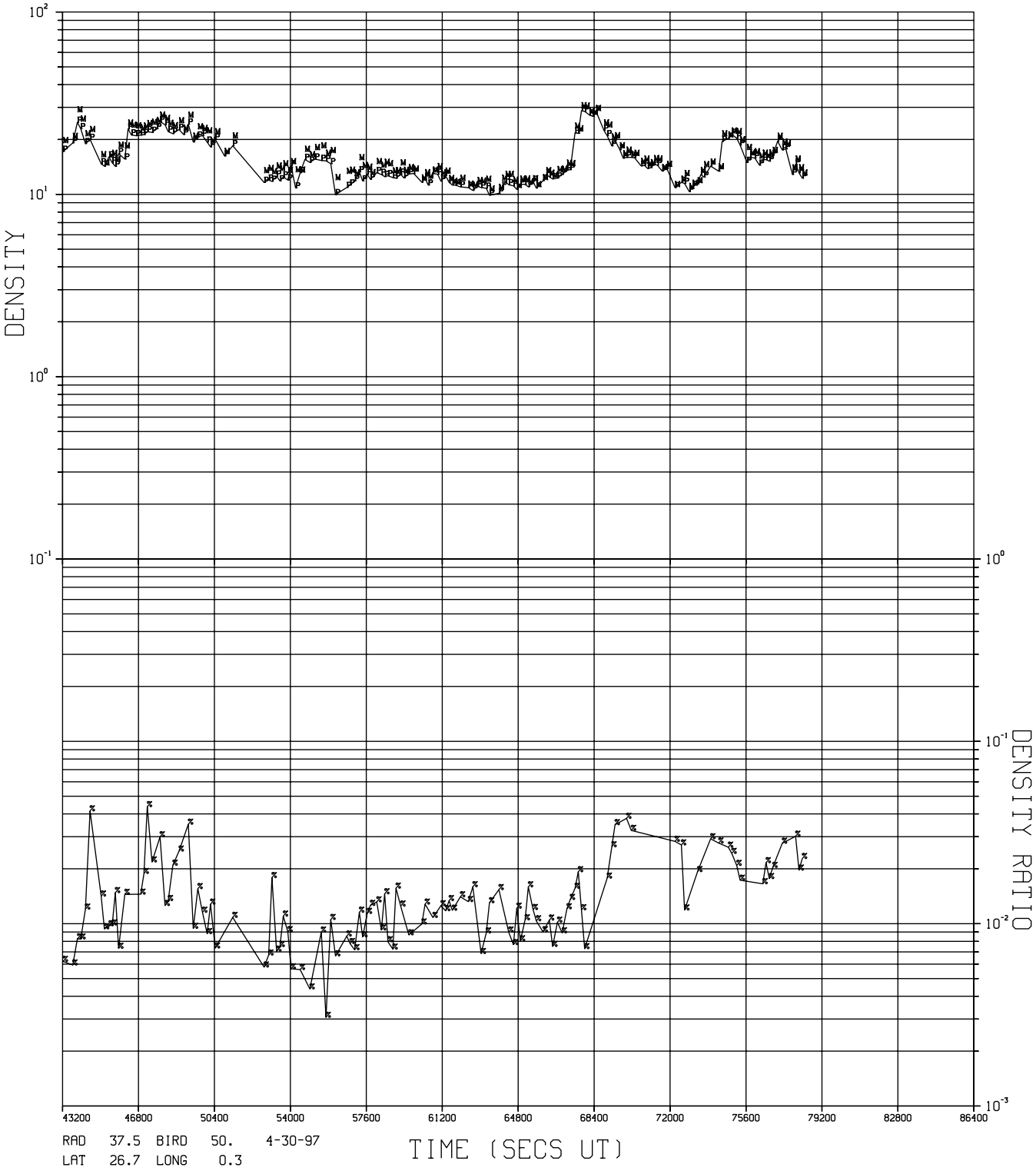

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
RAD 37.0 BIRD 50. 4-30-97
LAT 31.7 LONG -11.0

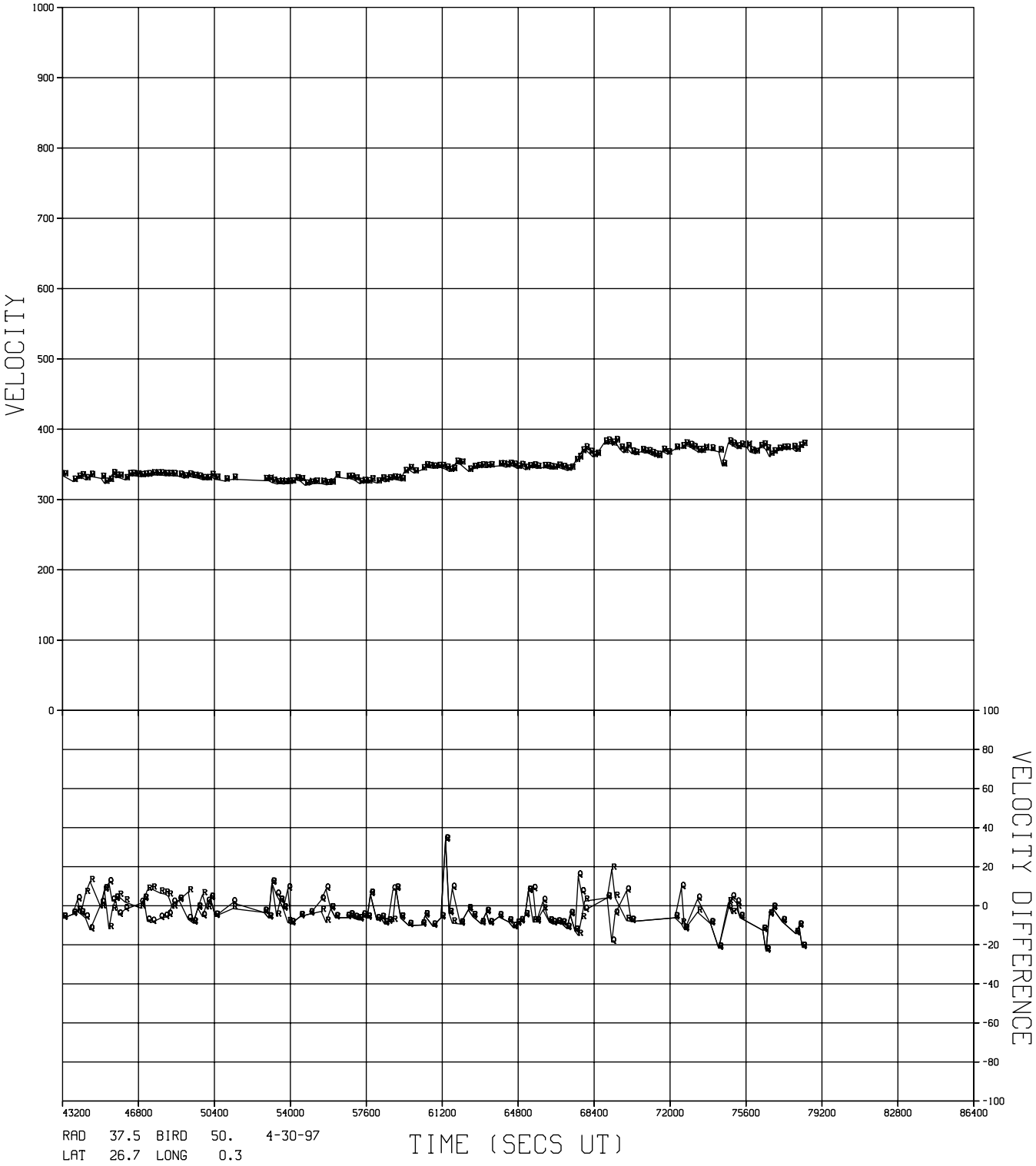

TEMPERATURE
10^7
10^6
10^5
10^4
TEMPERATURE RATIO
0
1
2
3
4
5
6
7
8
9
10
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
TIME (SECS UT)
RAD 37.0 BIRD 50. 4-30-97
LAT 31.7 LONG -11.0

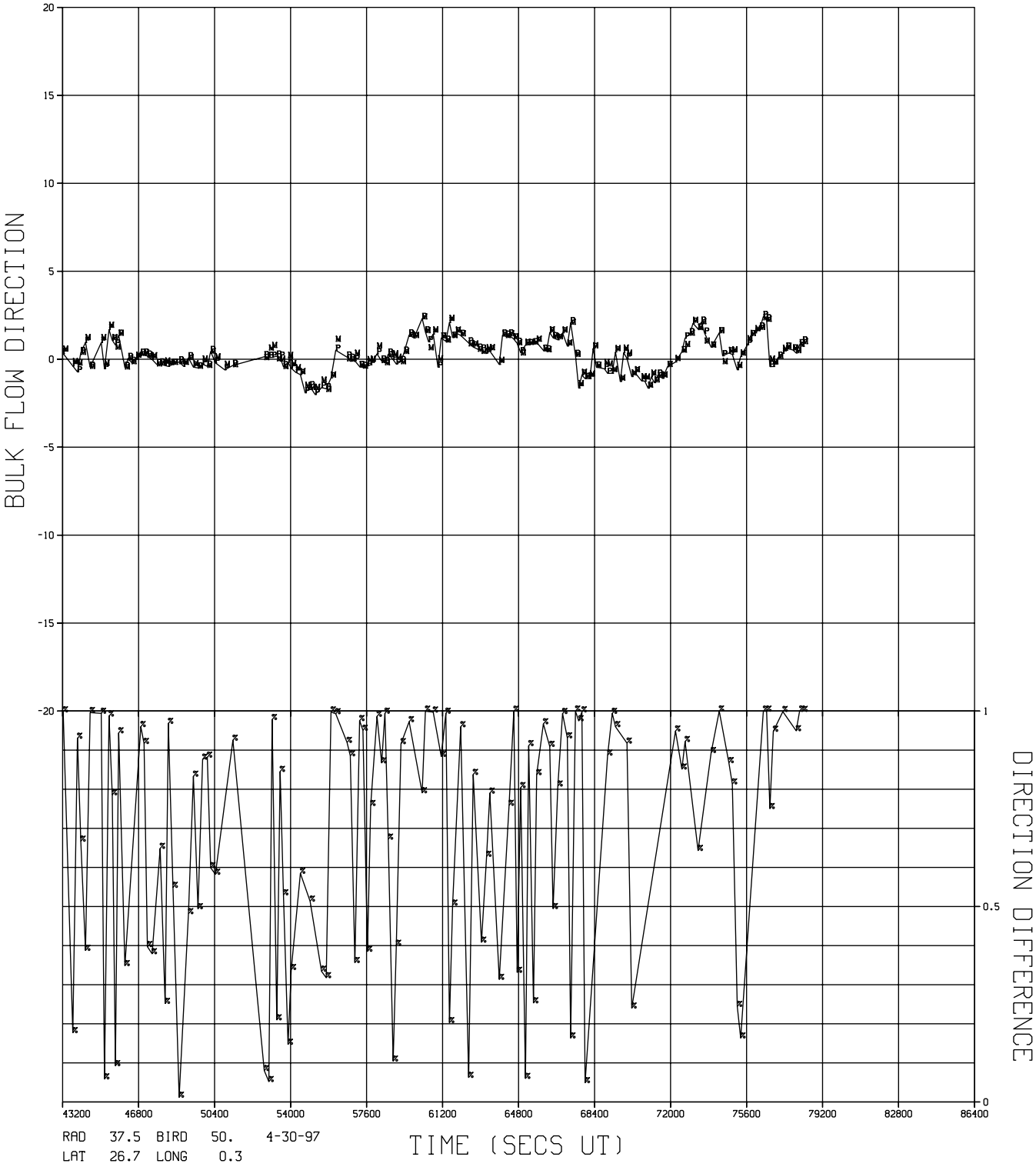

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 37.0 BIRD 50. 4-30-97
LAT 31.7 LONG -11.0

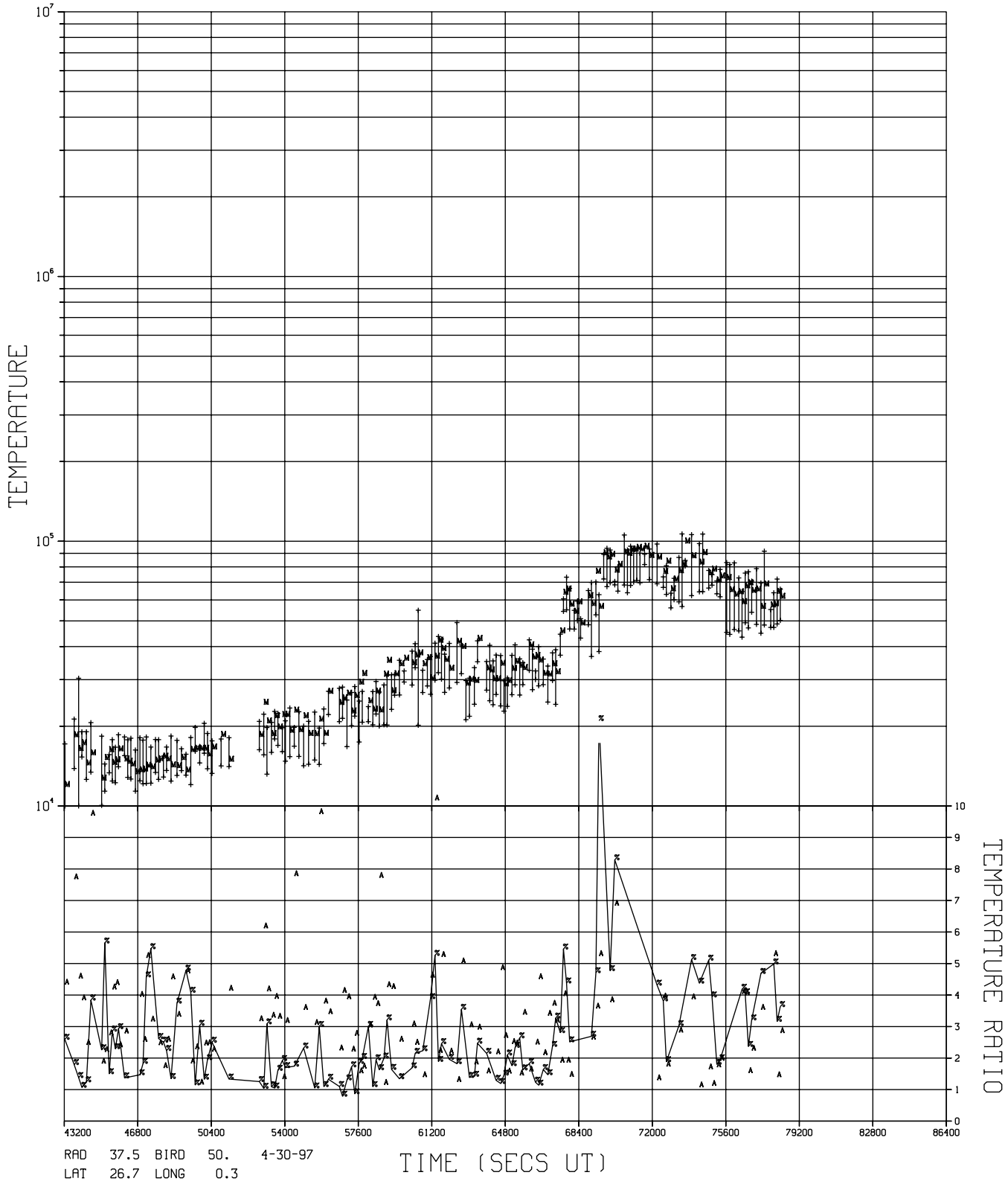

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
RAD 37.0 BIRD 50. 4-30-97
LAT 31.7 LONG -11.0

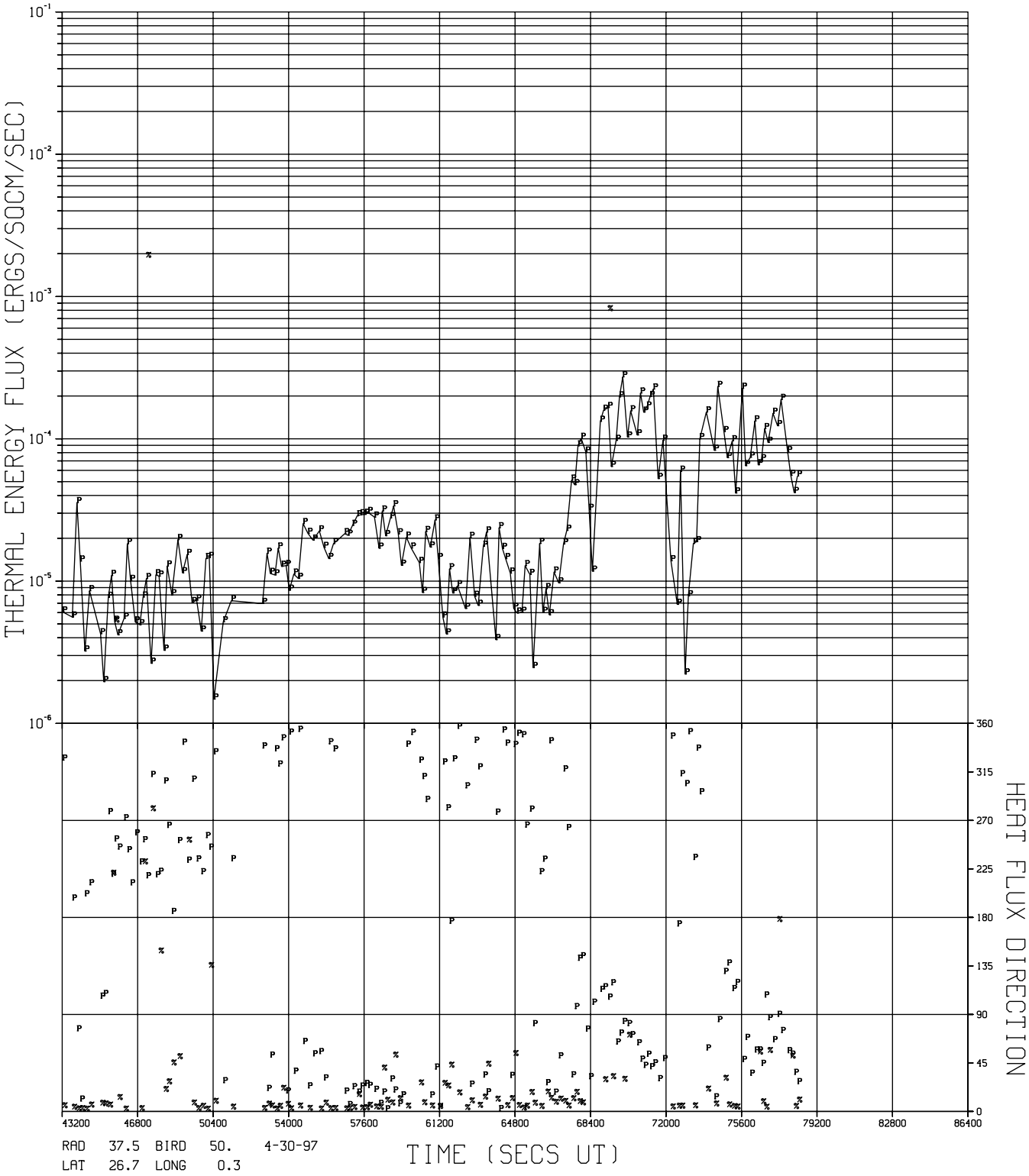

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
TIME (SECS UT)
RAD 37.0 BIRD 50. 4-30-97
LAT 31.7 LONG -11.0

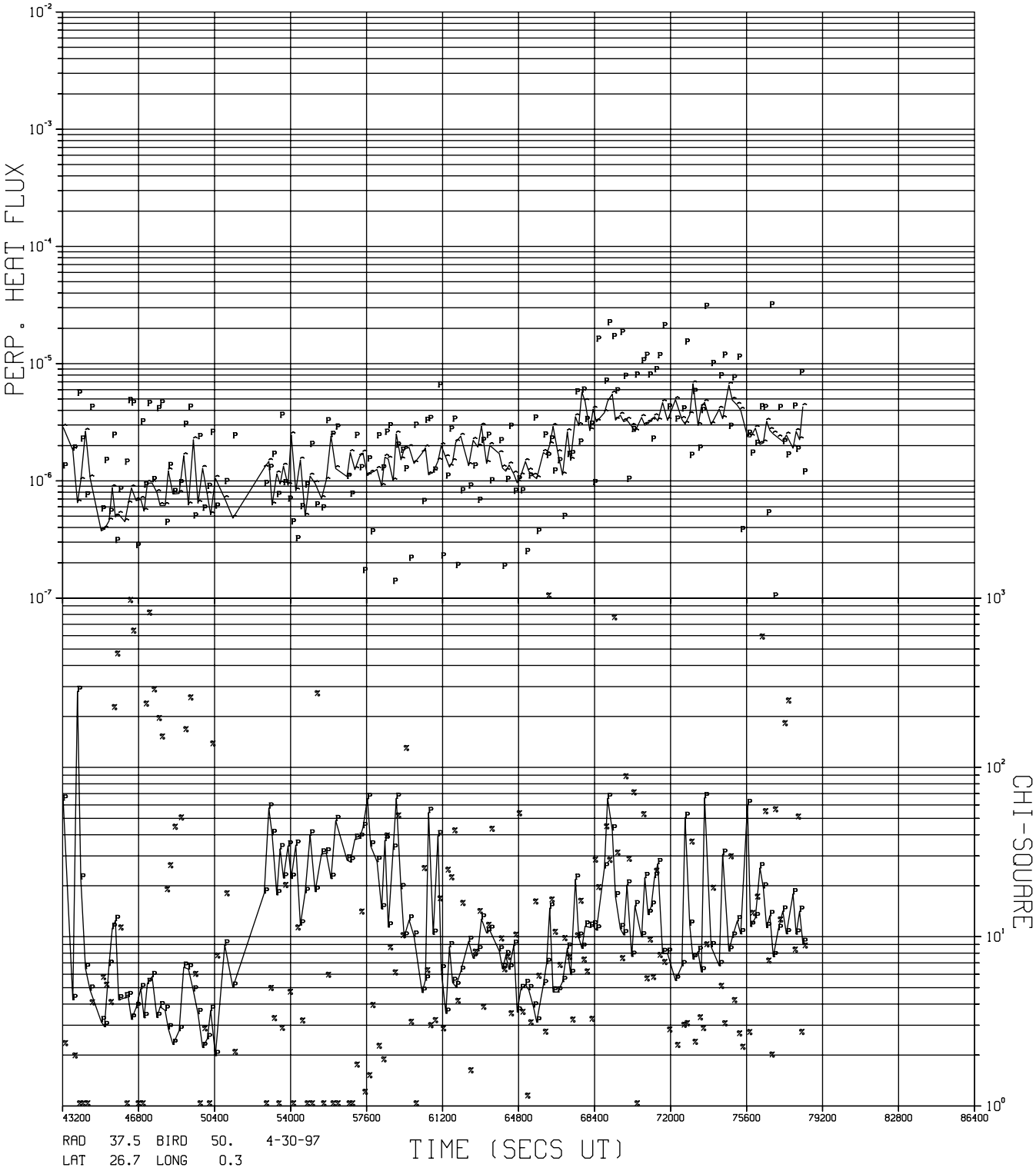

DENSITY
DENSITY RATIO
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 37.5 BIRD 50. 4-30-97
LAT 26.7 LONG 0.3

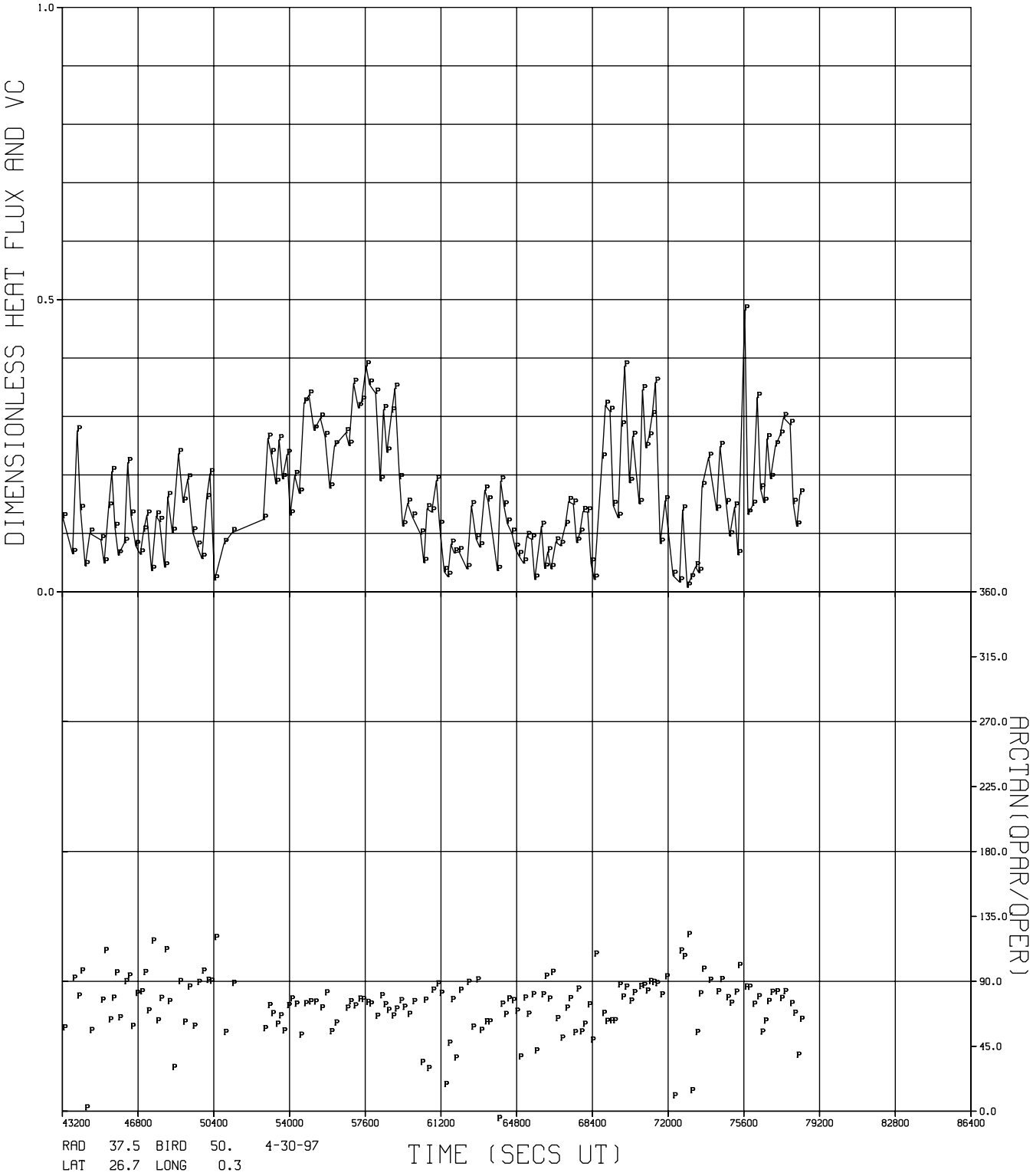

VELOCITY
1000
900
800
700
600
500
400
300
200
100
0
VELOCITY DIFFERENCE
100
80
60
40
20
0
-20
-40
-60
-80
-100
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 37.5 BIRD 50. 4-30-97
LAT 26.7 LONG 0.3
TIME (SECS UT)


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 37.5 BIRD 50. 4-30-97
LAT 26.7 LONG 0.3

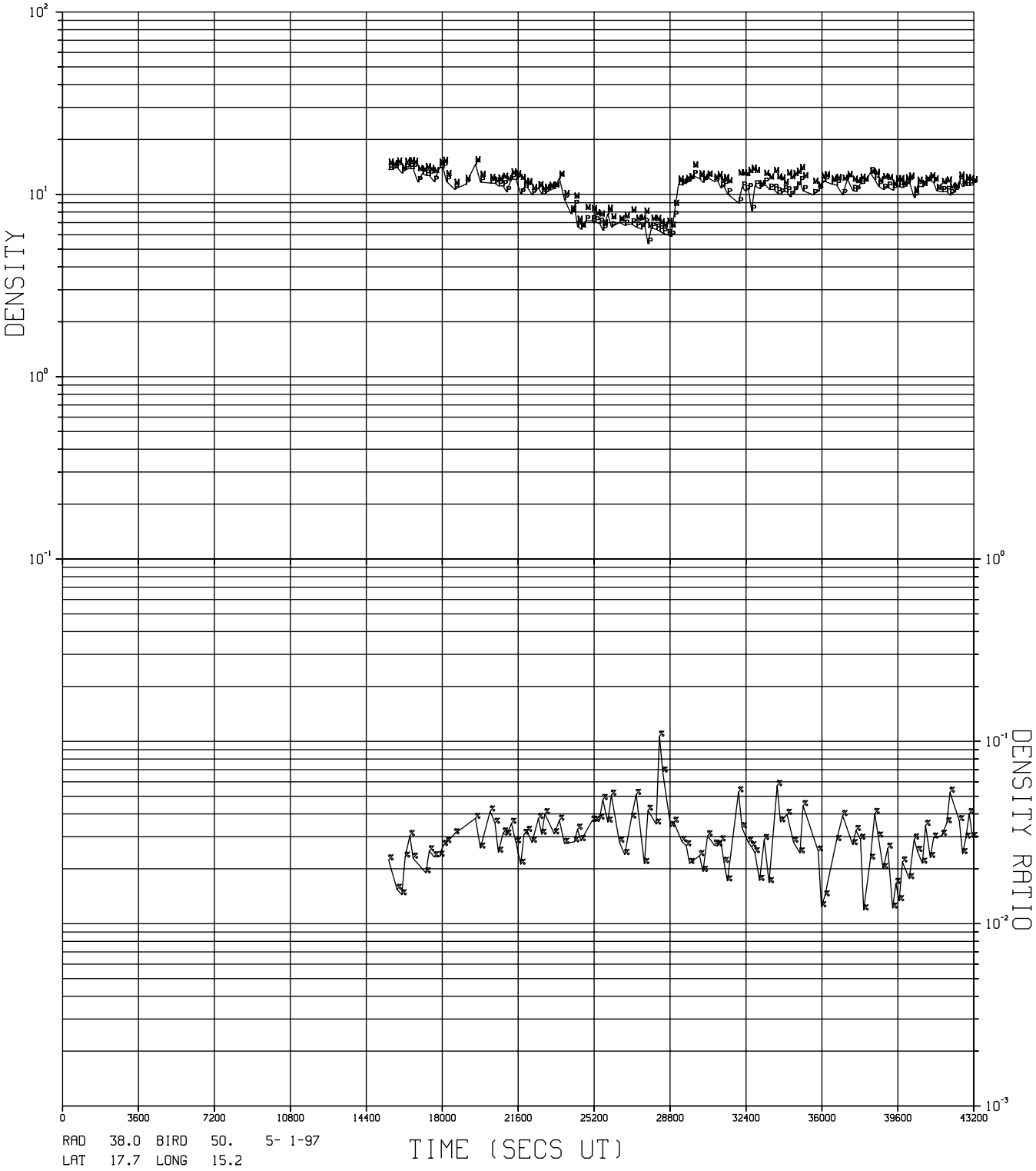

TEMPERATURE
TEMPERATURE RATIO
TIME (SECS UT)
RAD 37.5 BIRD 50. 4-30-97
LAT 26.7 LONG 0.3

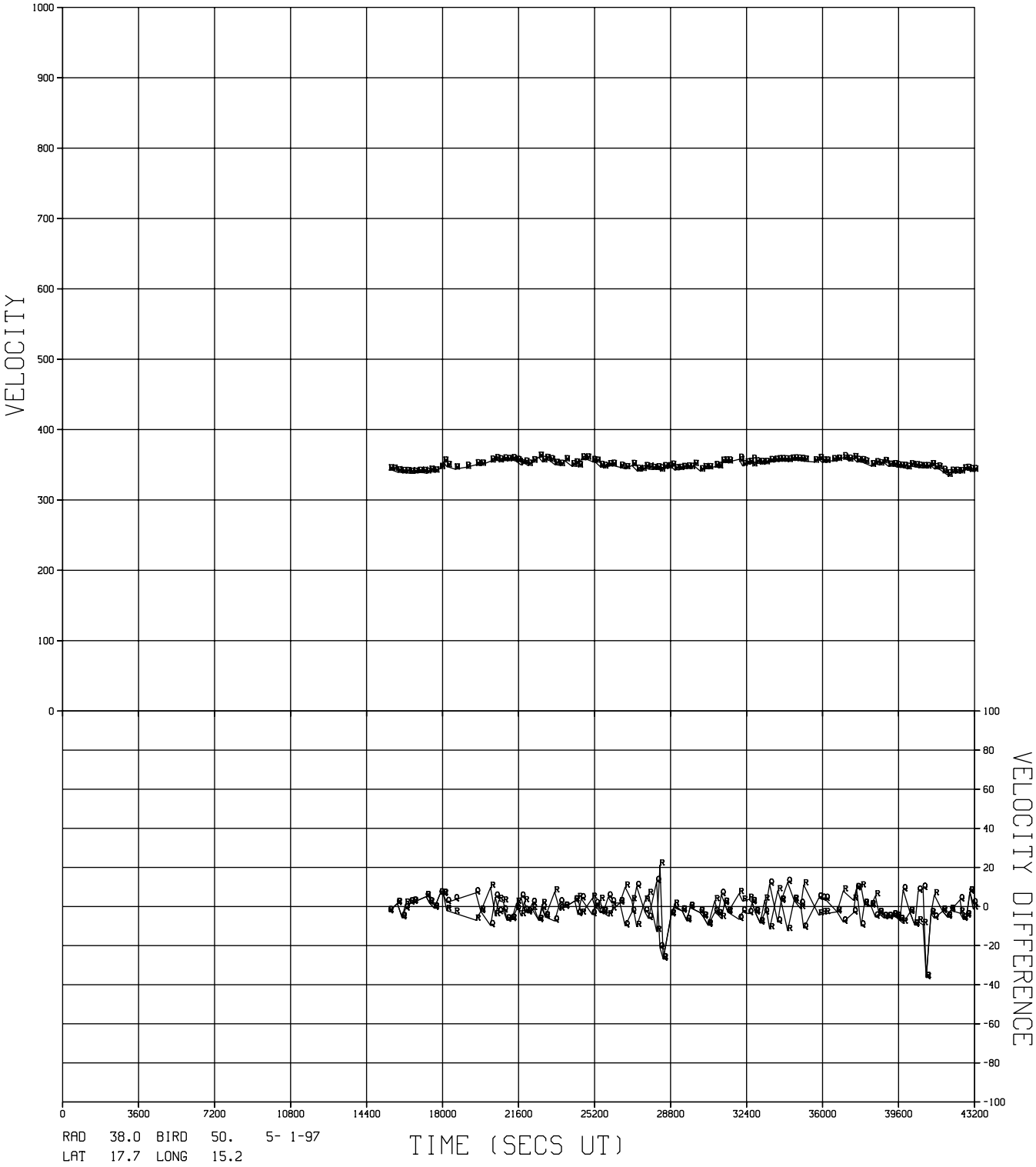

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 37.5 BIRD 50. 4-30-97
LAT 26.7 LONG 0.3

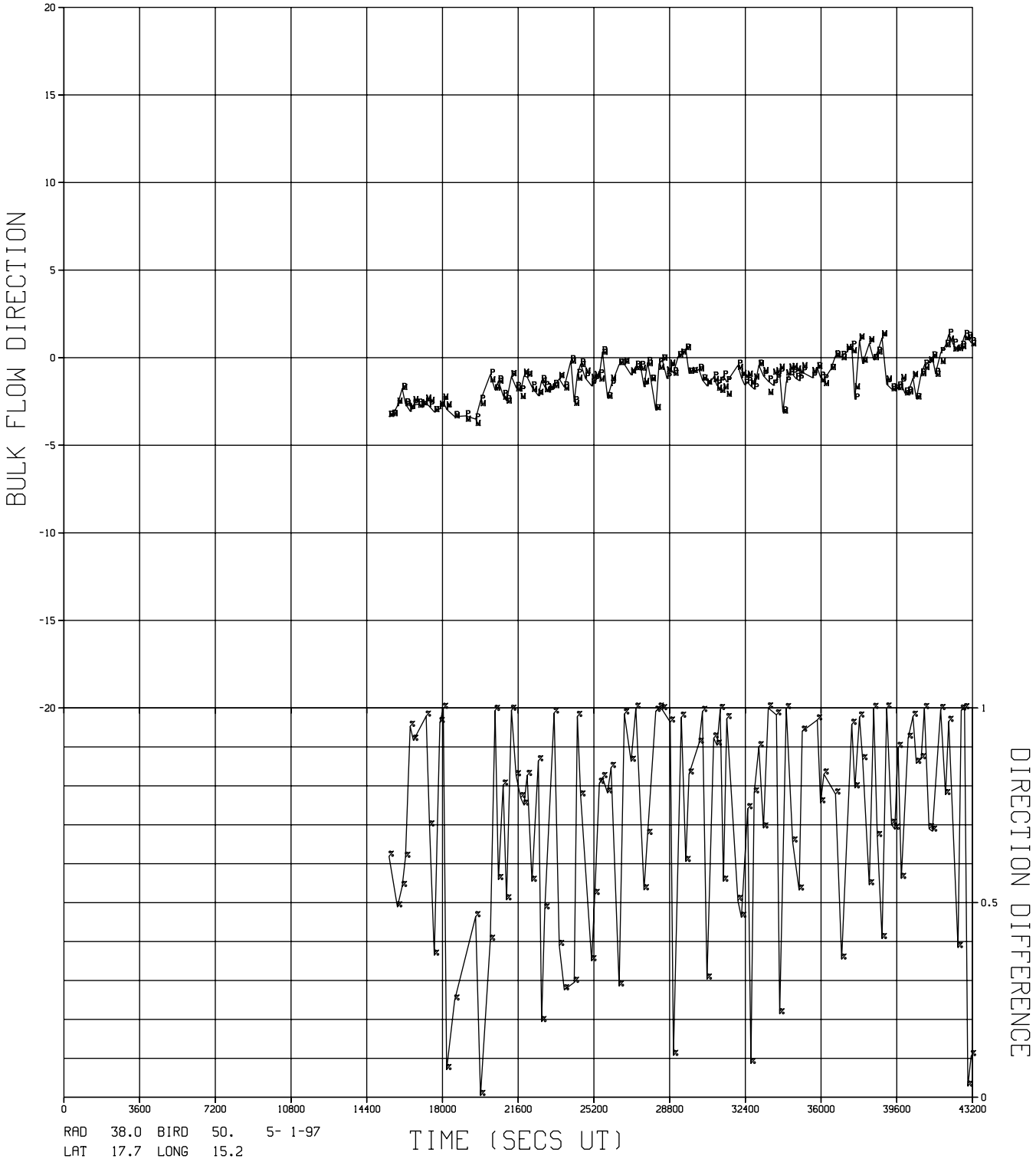

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 37.5 BIRD 50. 4-30-97
LAT 26.7 LONG 0.3

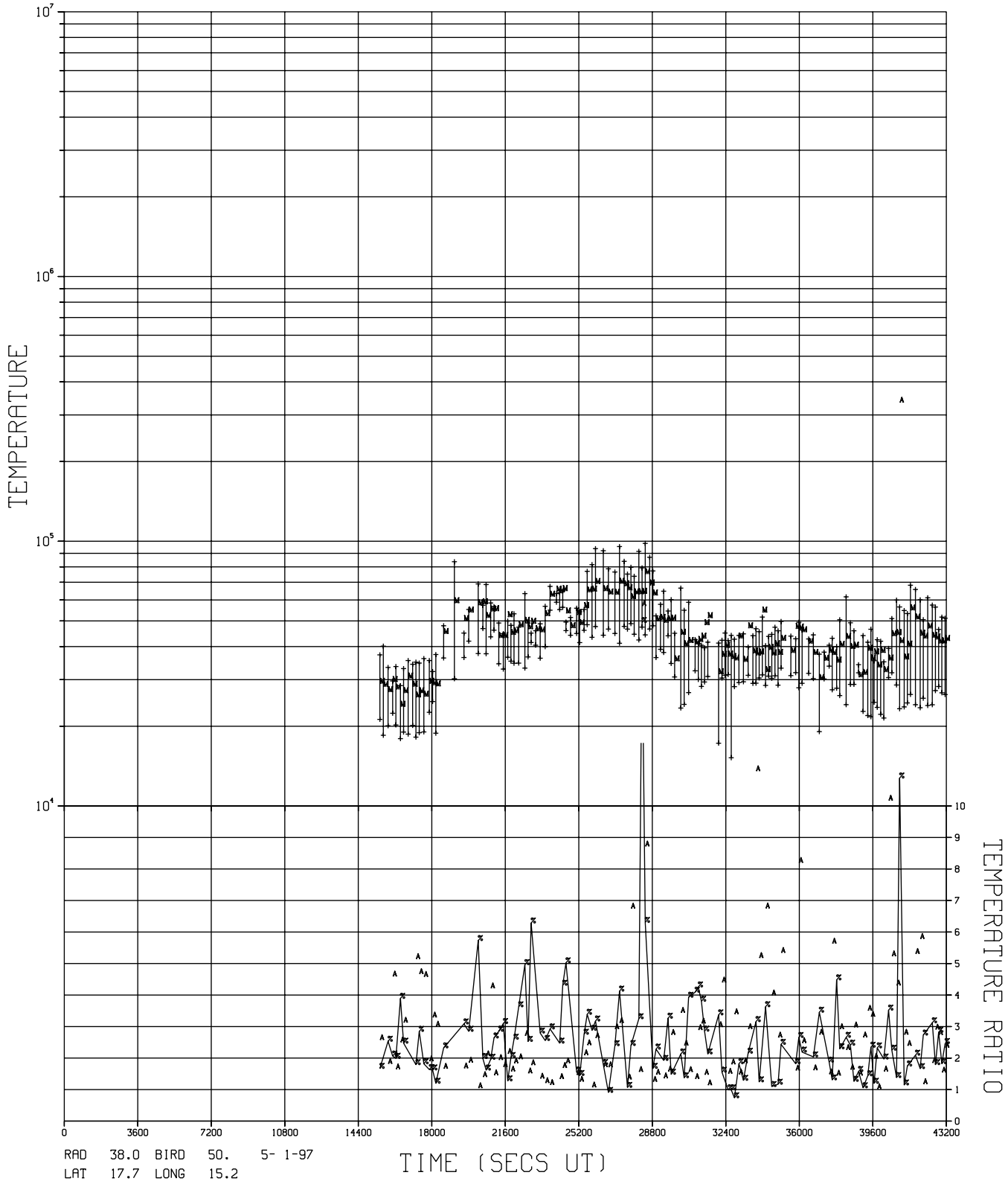


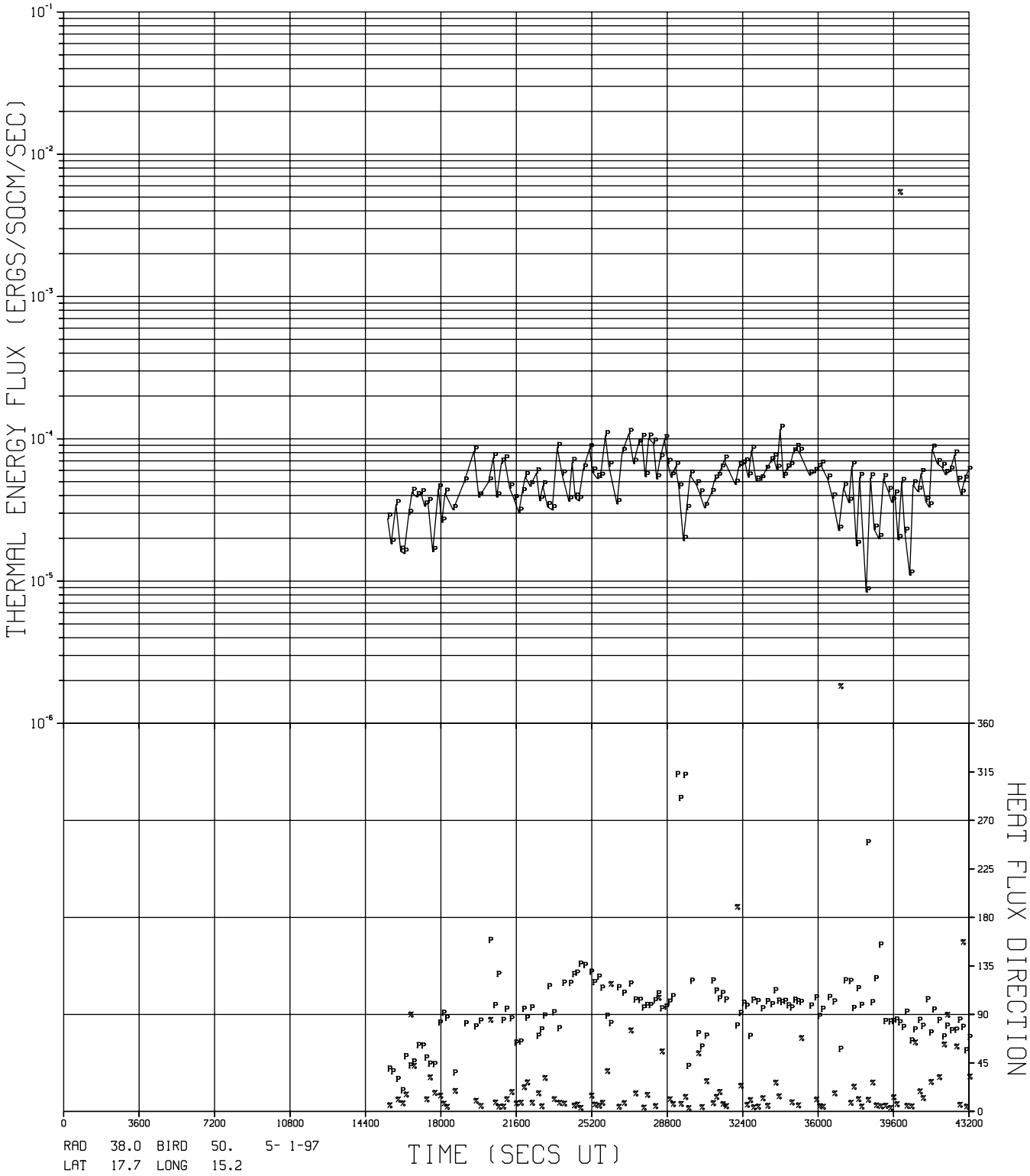
RAD 37.5 BIRD 50. 4-30-97
LAT 26.7 LONG 0.3

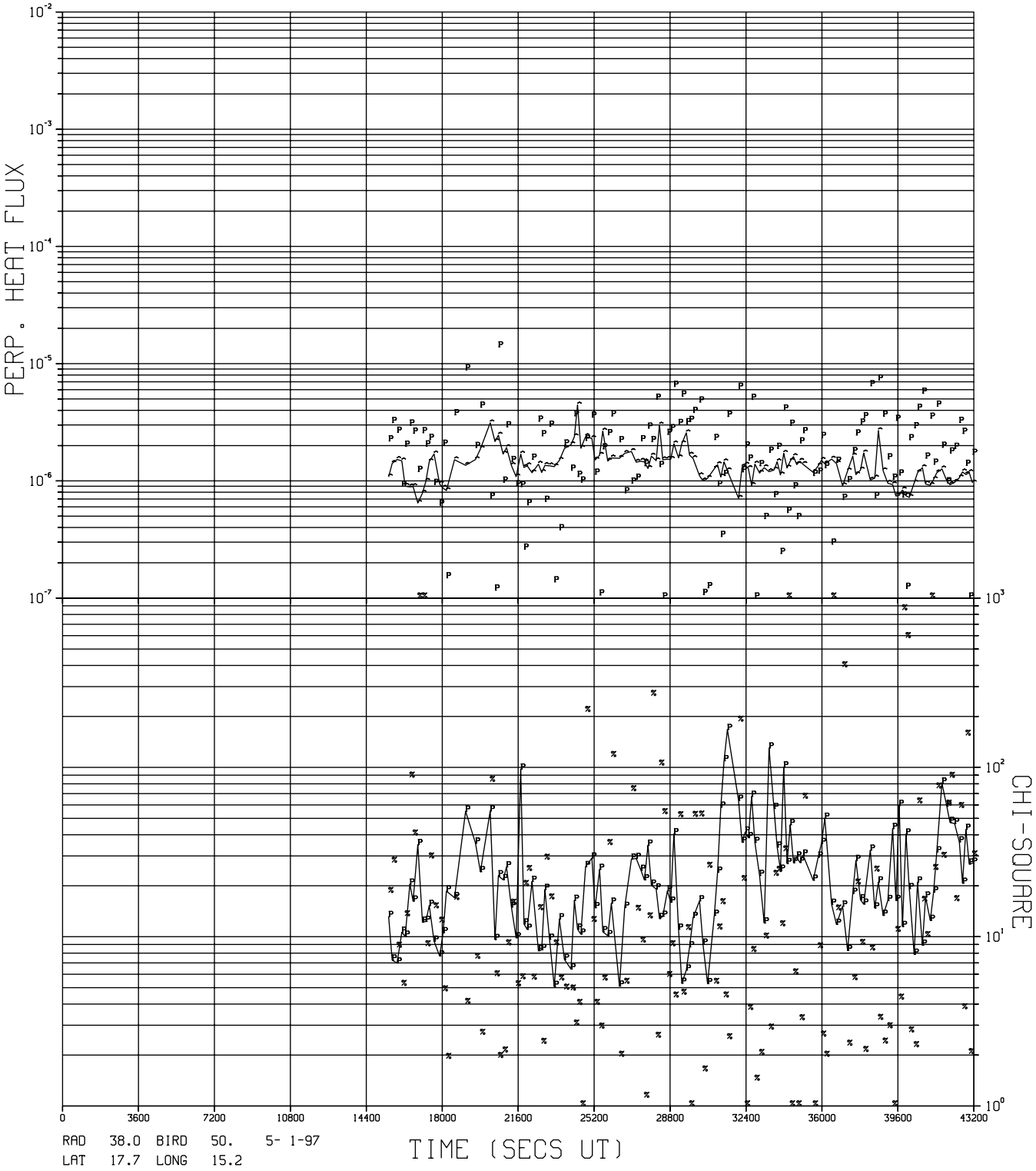

DENSITY
DENSITY RATIO
TIME (SECS UT)
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
RAD 38.0 BIRD 50. 5- 1-97
LAT 17.7 LONG 15.2

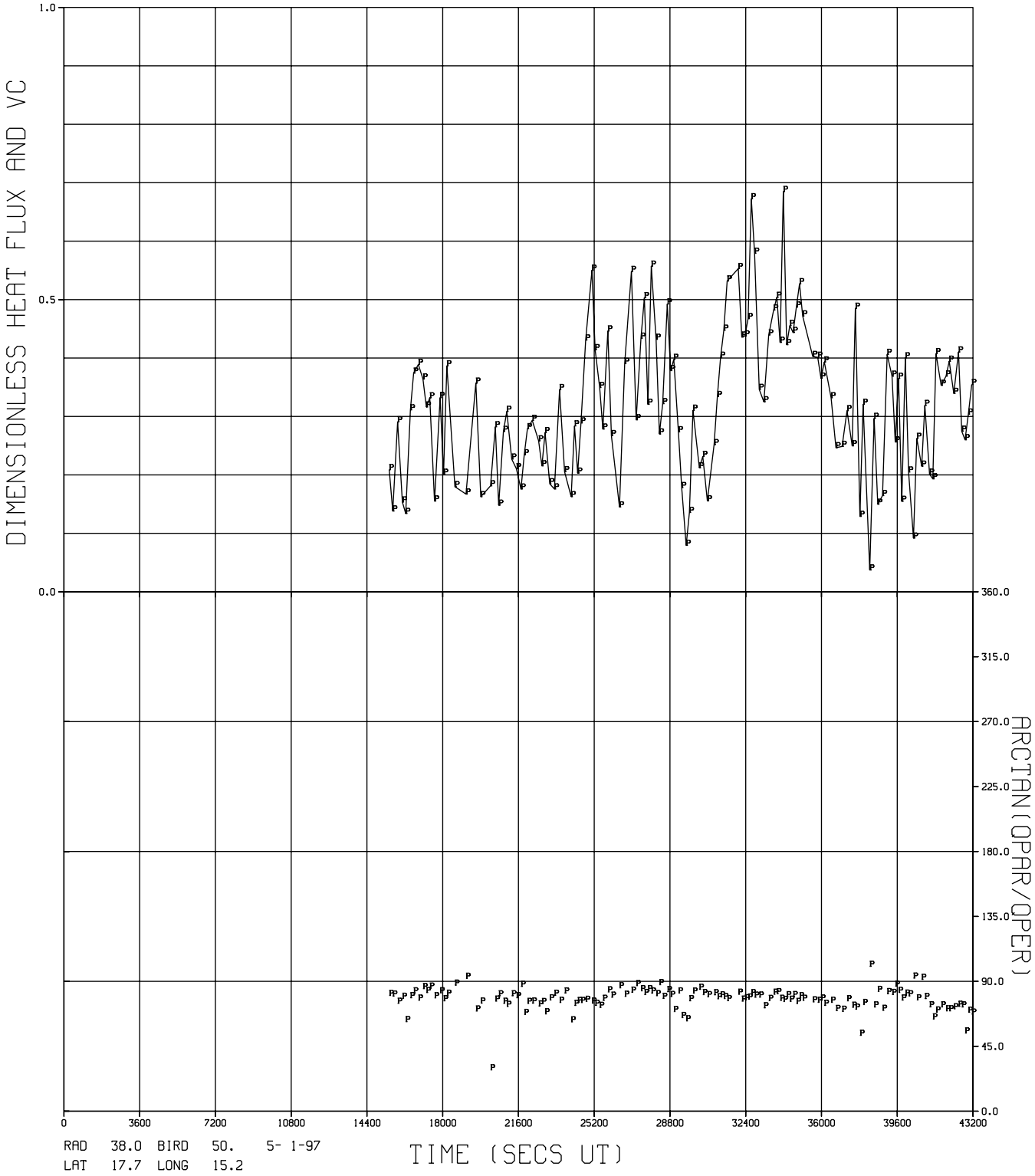

VELOCITY
VELOCITY DIFFERENCE
TIME (SECS UT)
RAD 38.0 BIRD 50. 5- 1-97
LAT 17.7 LONG 15.2

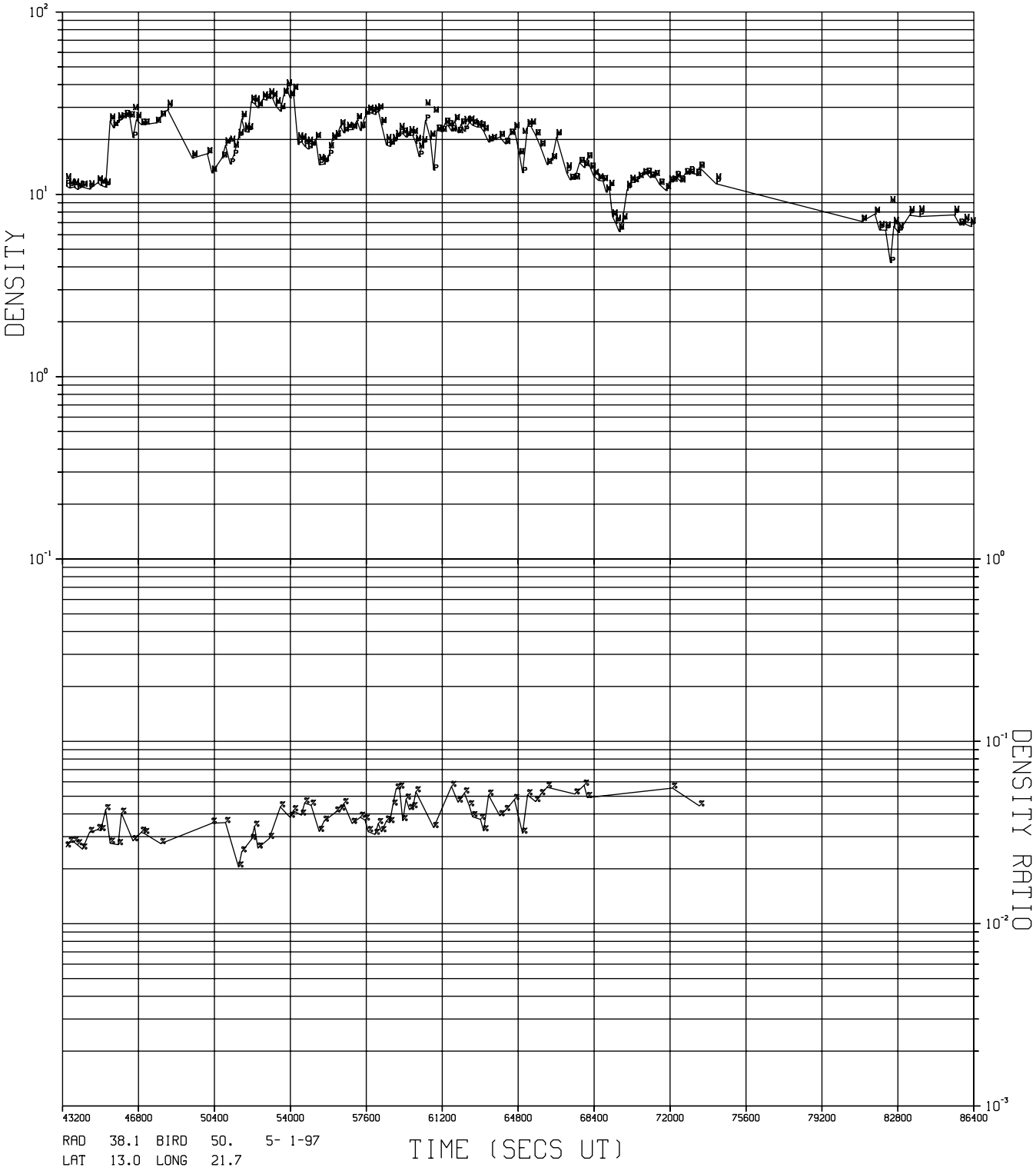

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
RAD 38.0 BIRD 50. 5- 1-97
LAT 17.7 LONG 15.2

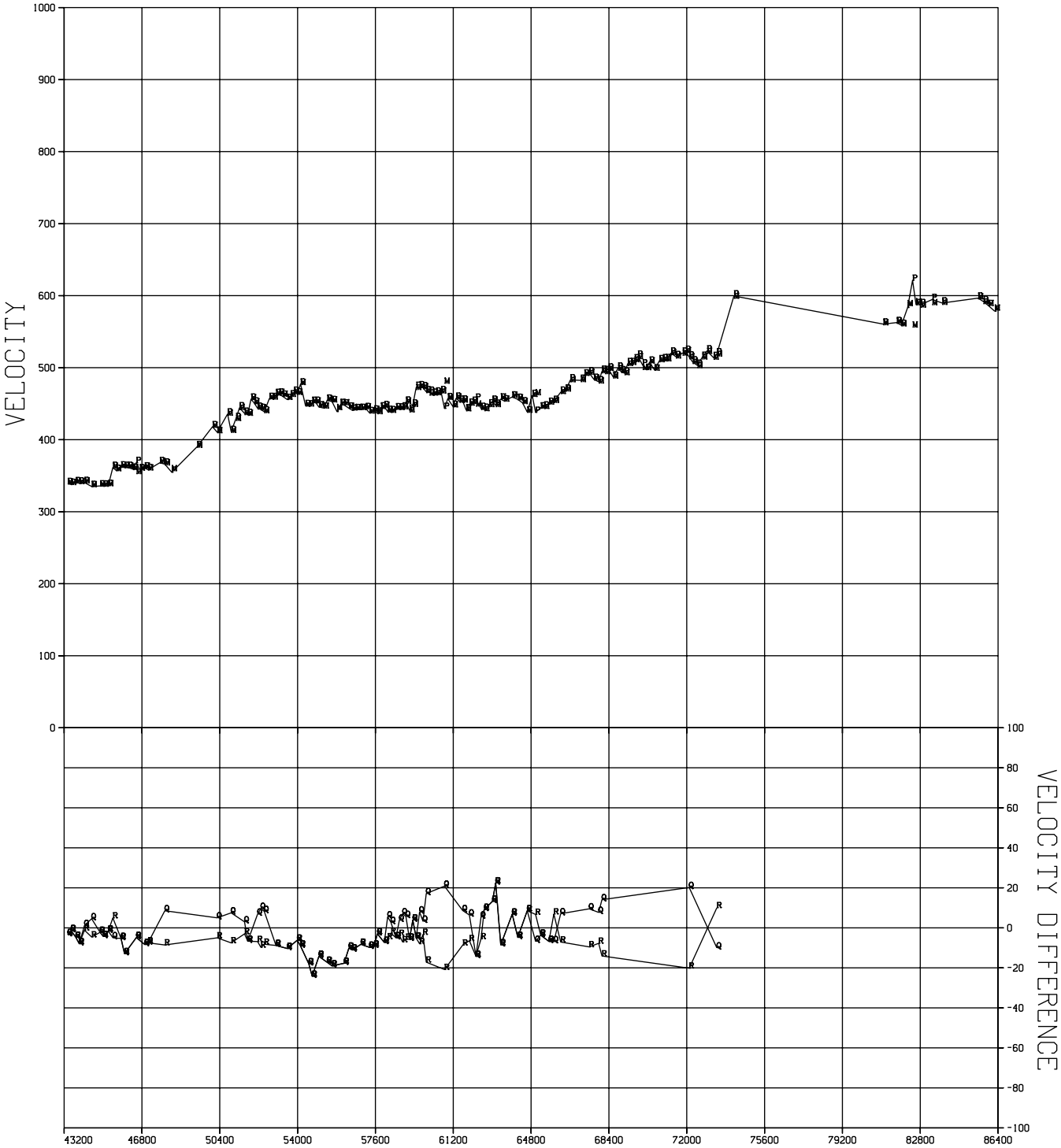

TEMPERATURE
TEMPERATURE RATIO
TIME (SECS UT)
RAD 38.0 BIRD 50. 5- 1-97
LAT 17.7 LONG 15.2


THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 38.0 BIRD 50. 5- 1-97
LAT 17.7 LONG 15.2

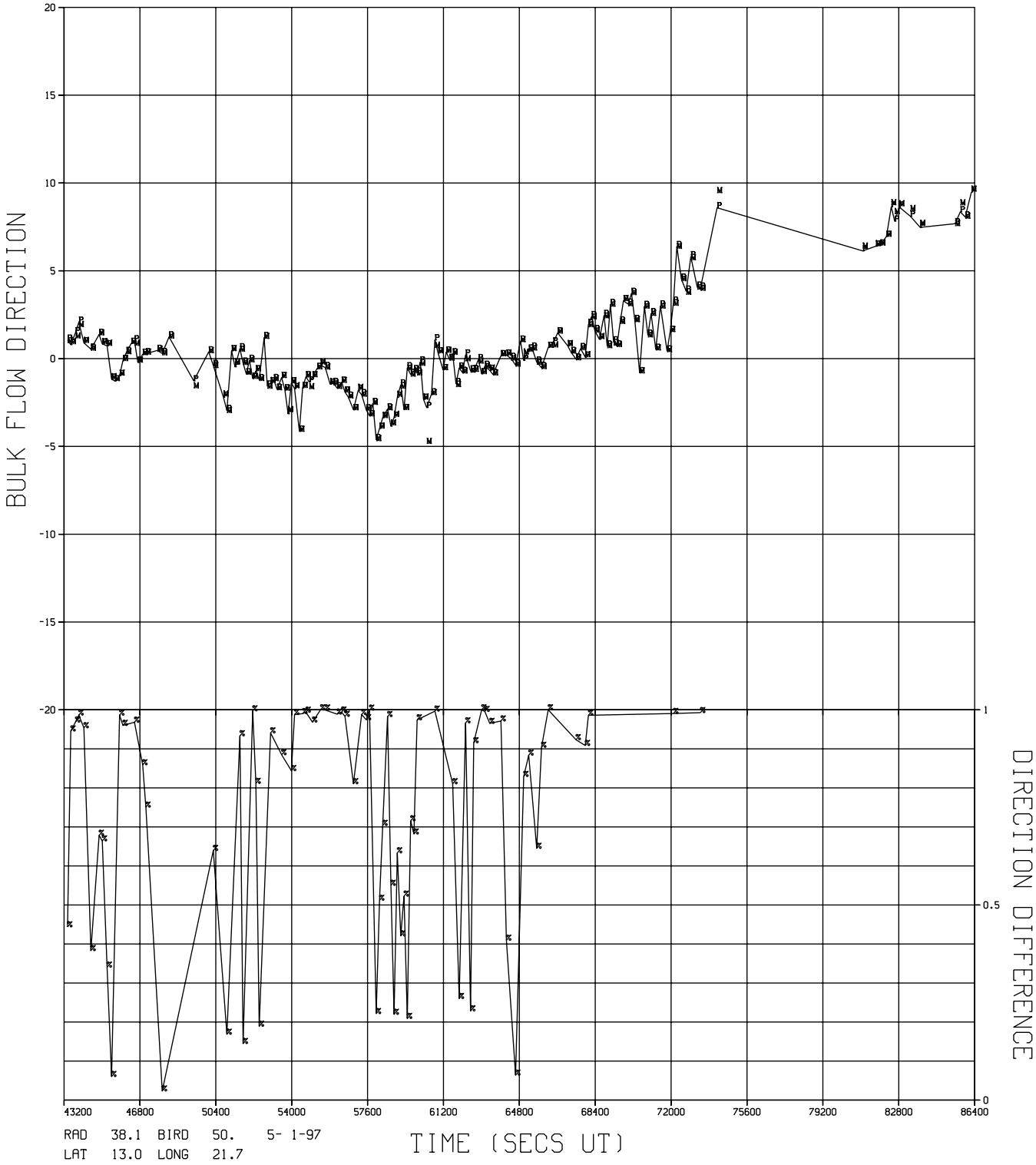

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
RAD 38.0 BIRD 50. 5- 1-97
LAT 17.7 LONG 15.2

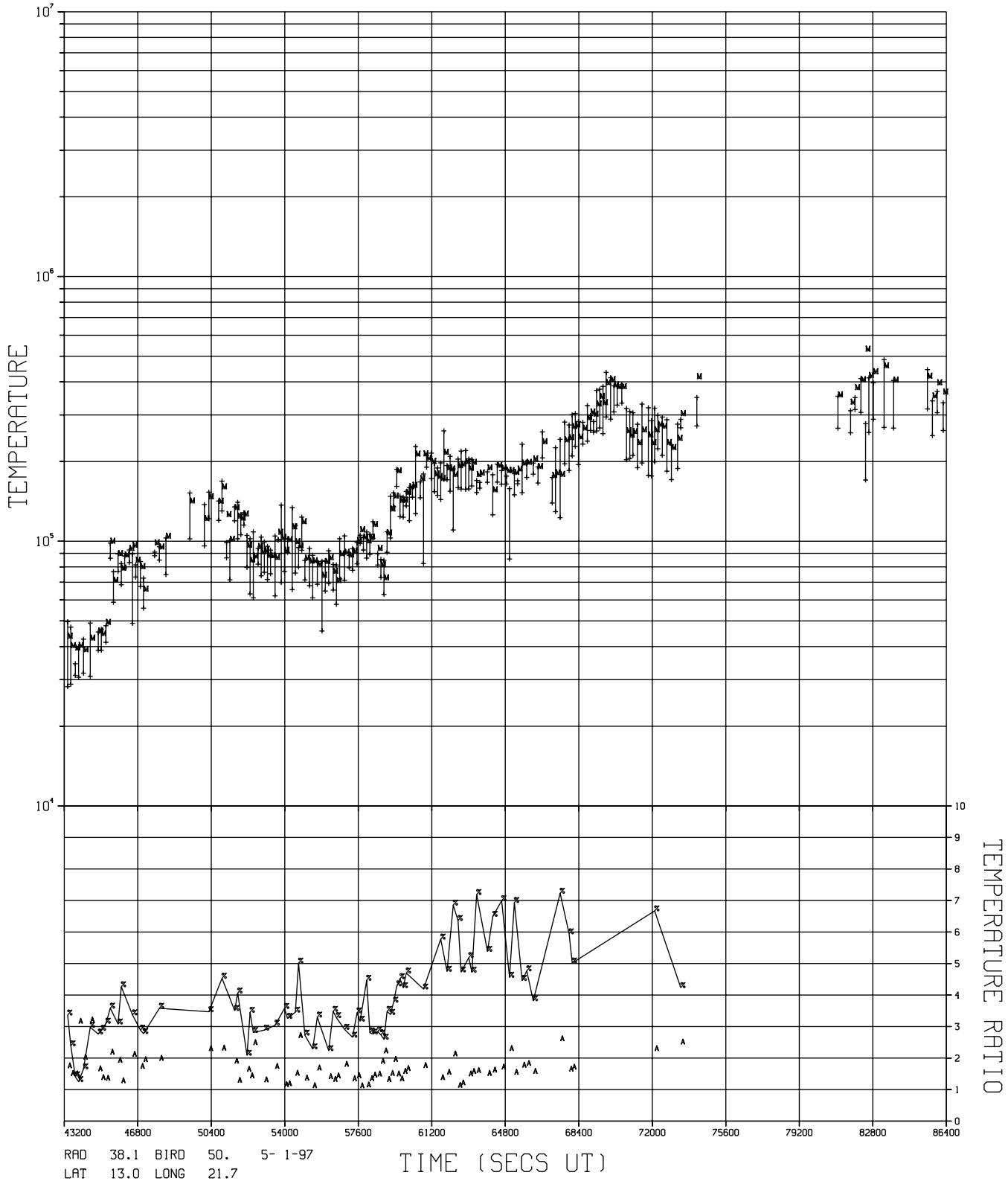

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
TIME (SECS UT)
RAD 38.0 BIRD 50. 5- 1-97
LAT 17.7 LONG 15.2

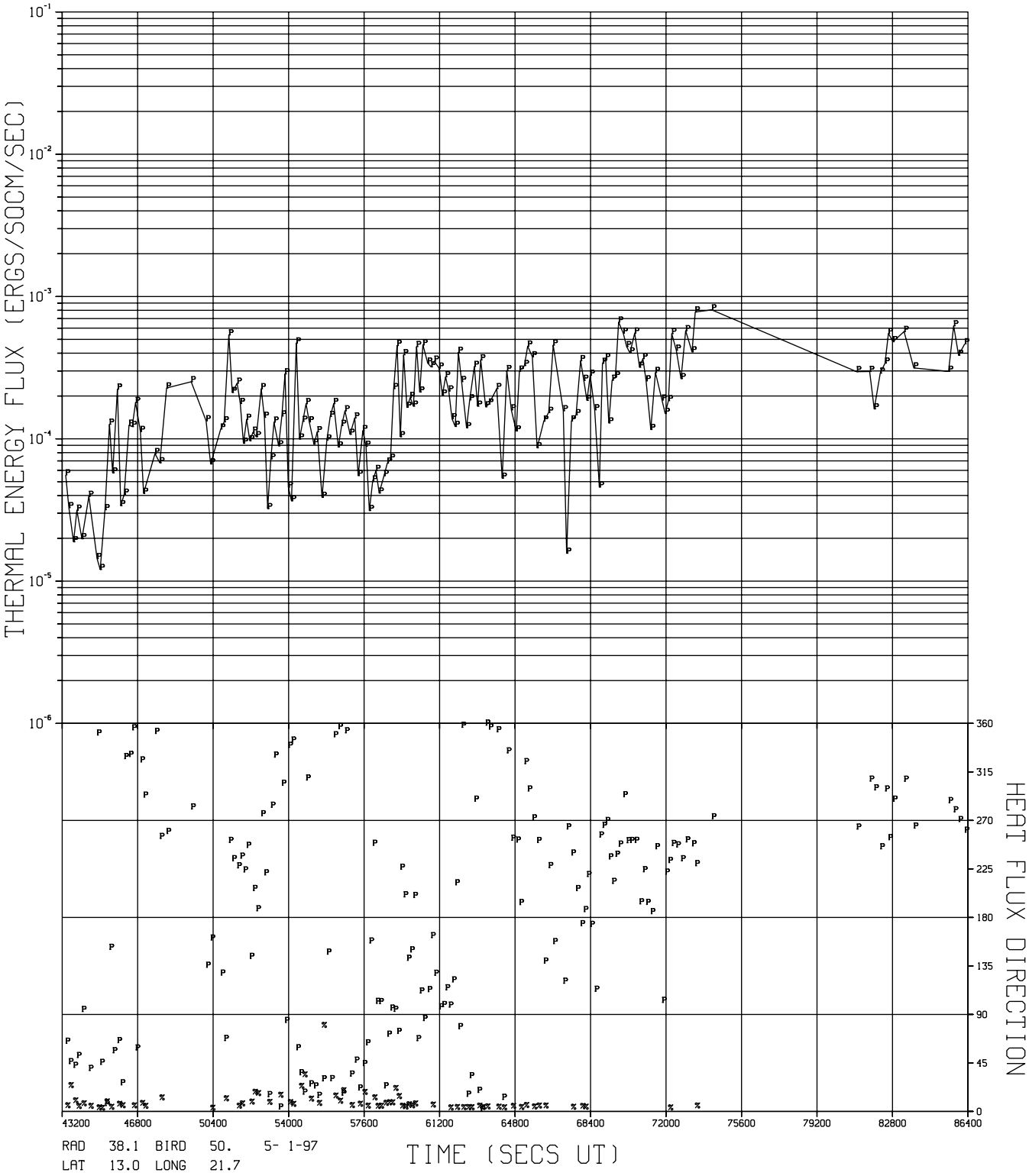

DENSITY
DENSITY RATIO
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 38.1 BIRD 50. 5- 1-97
LAT 13.0 LONG 21.7

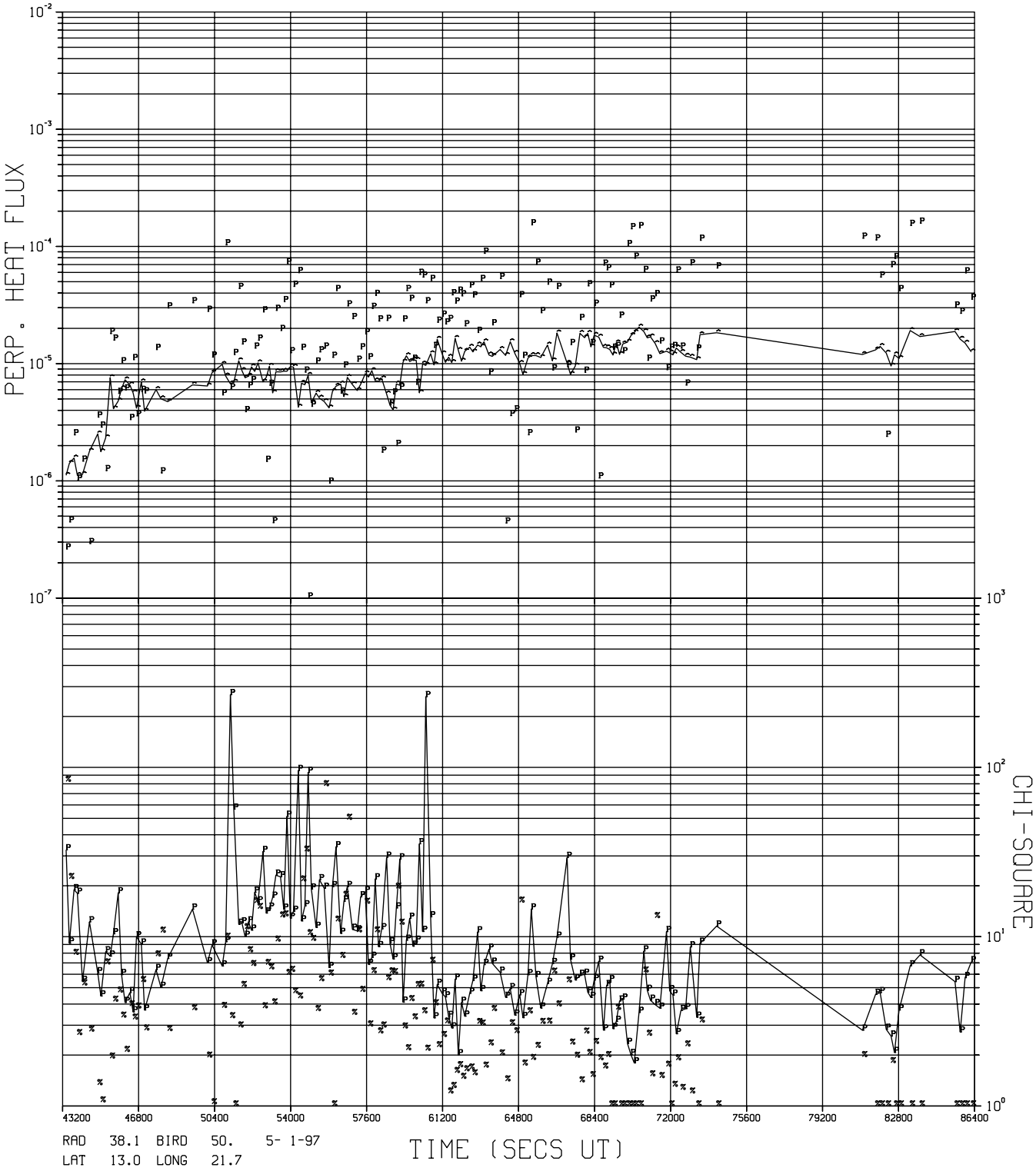


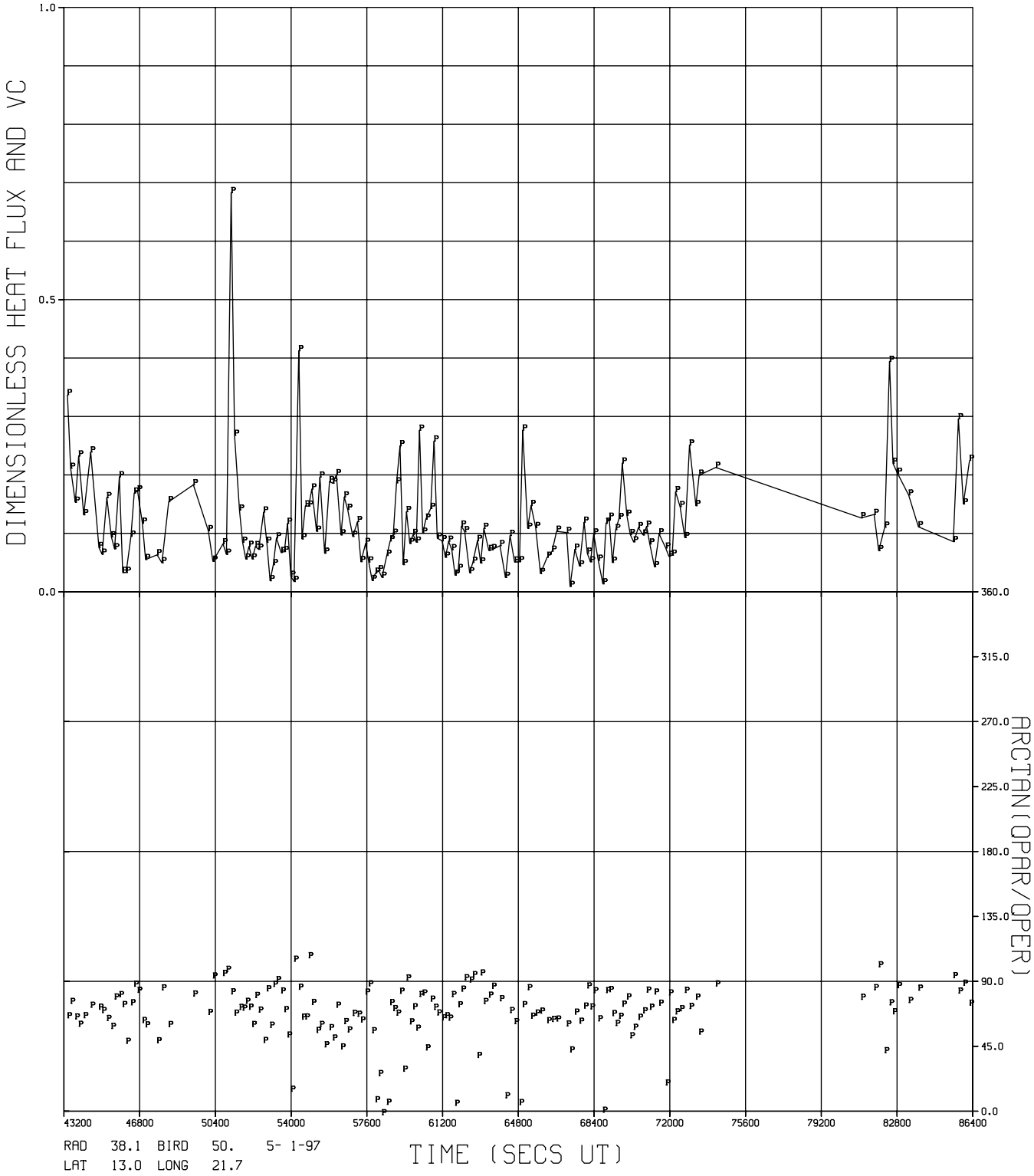
RAD 38.1 BIRD 50. 5- 1-97
LAT 13.0 LONG 21.7


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. 5- 1-97
LAT 13.0 LONG 21.7

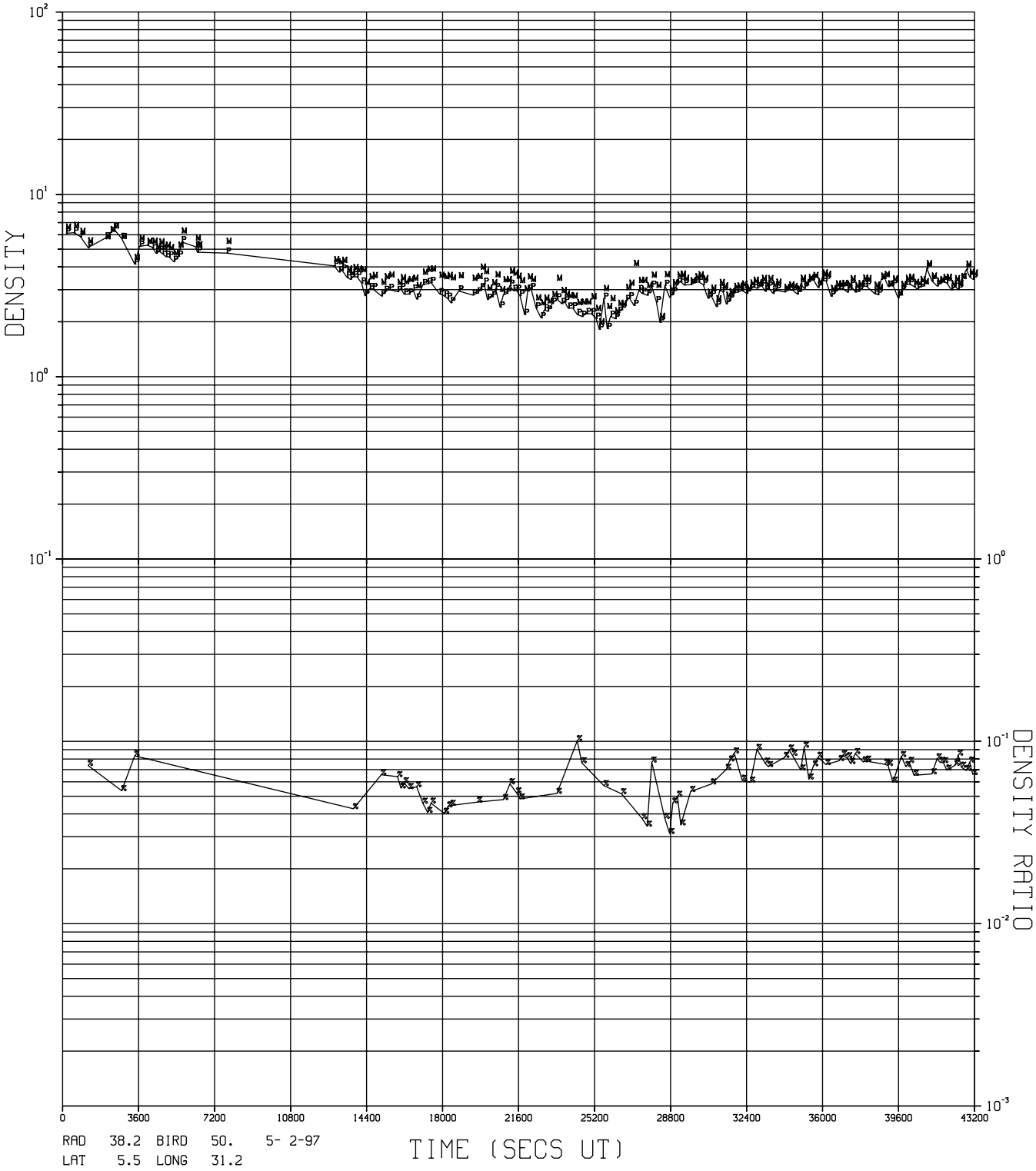

TEMPERATURE
10^7
10^6
10^5
10^4
TEMPERATURE RATIO
0
1
2
3
4
5
6
7
8
9
10
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
TIME (SECS UT)
RAD 38.1 BIRD 50. 5- 1-97
LAT 13.0 LONG 21.7

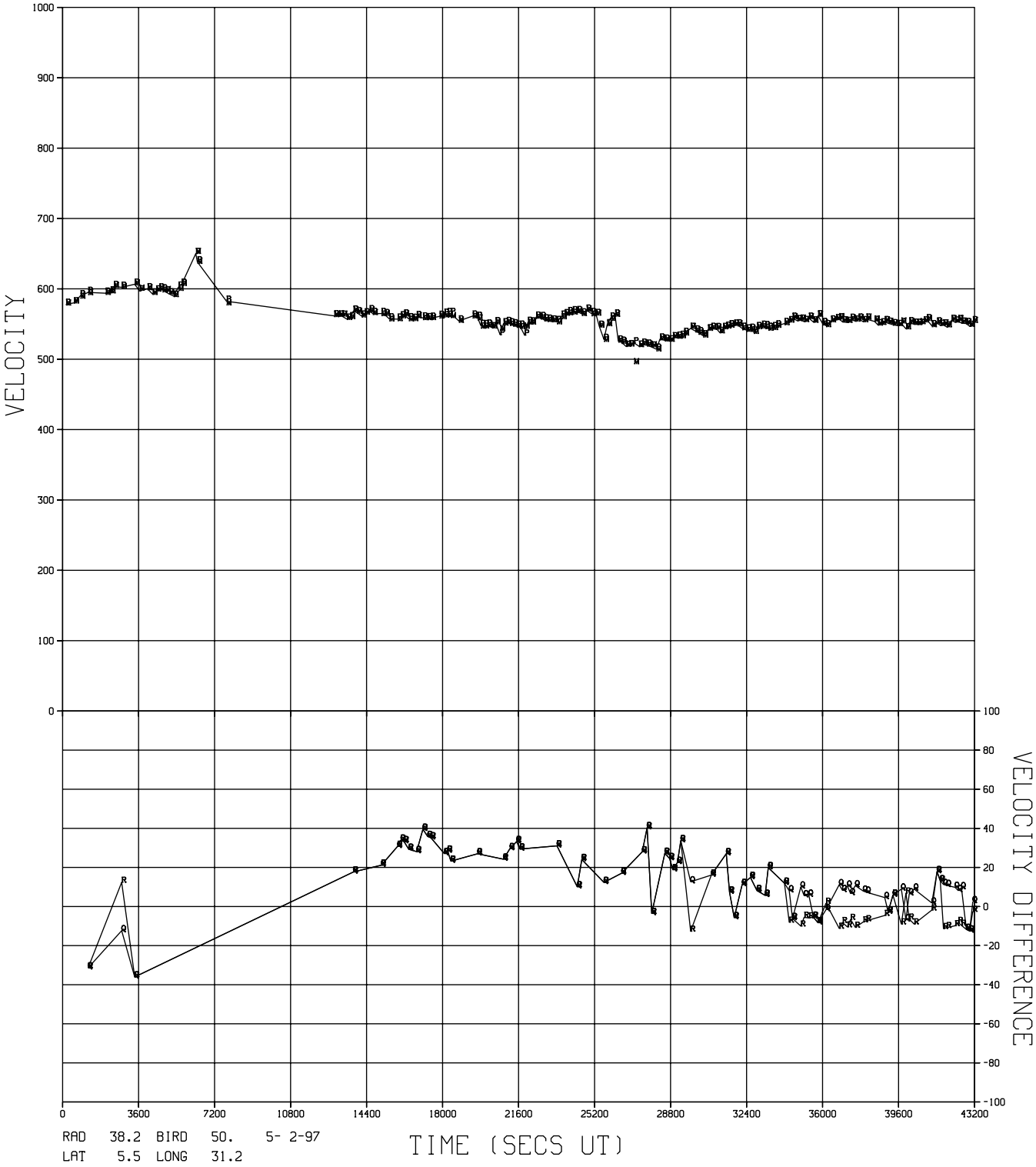

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 38.1 BIRD 50. 5- 1-97
LAT 13.0 LONG 21.7

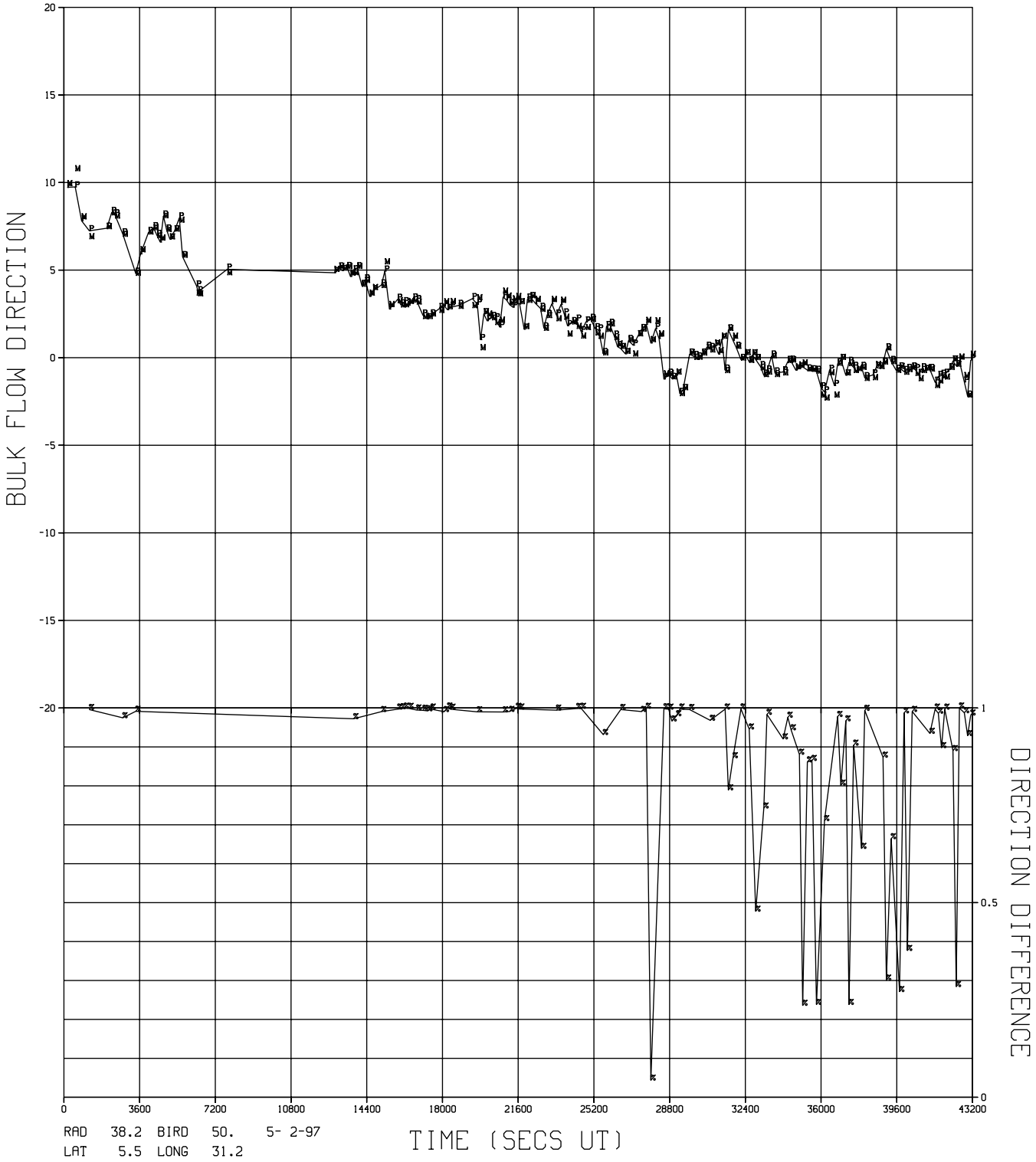

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 38.1 BIRD 50. 5- 1-97
LAT 13.0 LONG 21.7

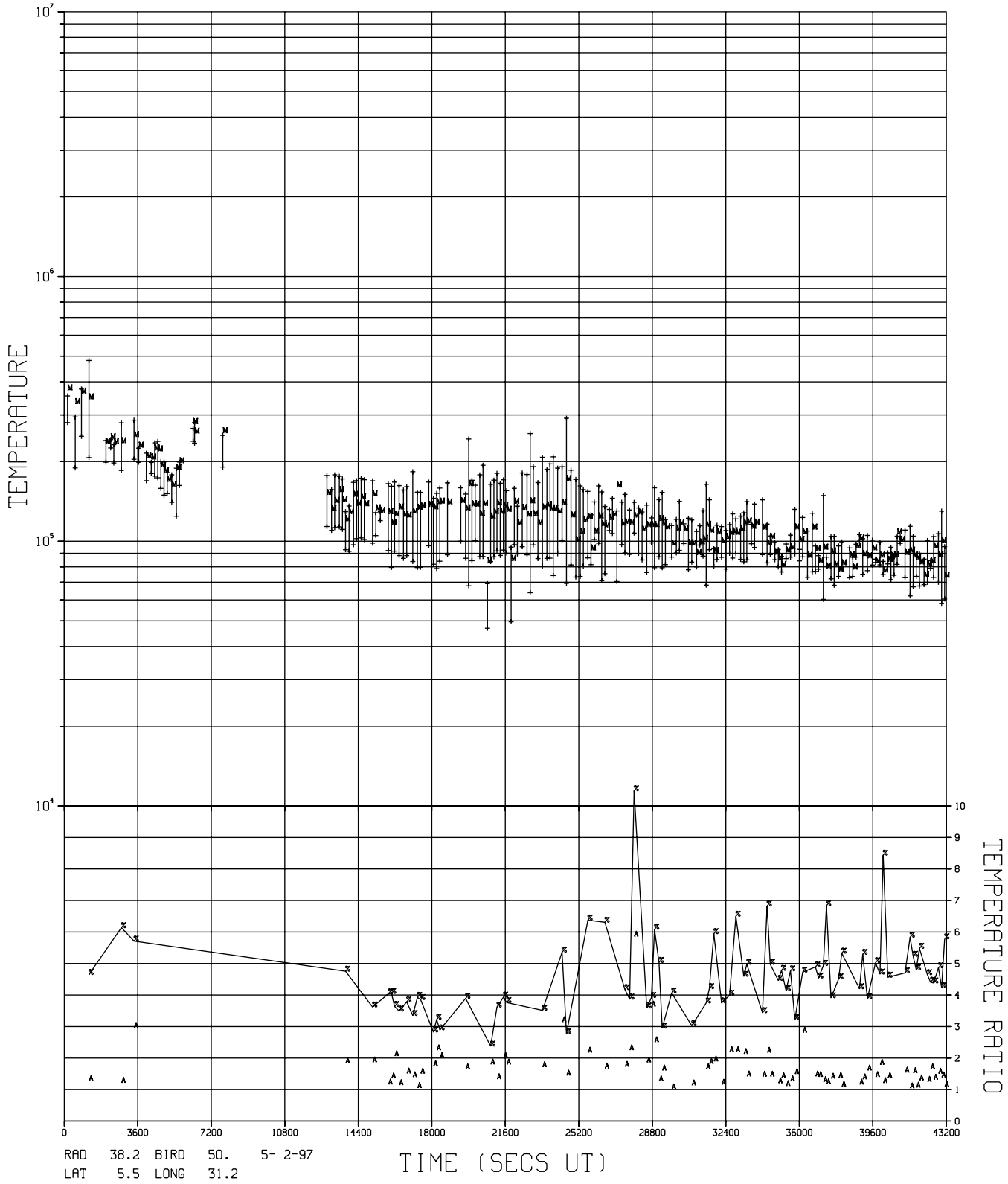


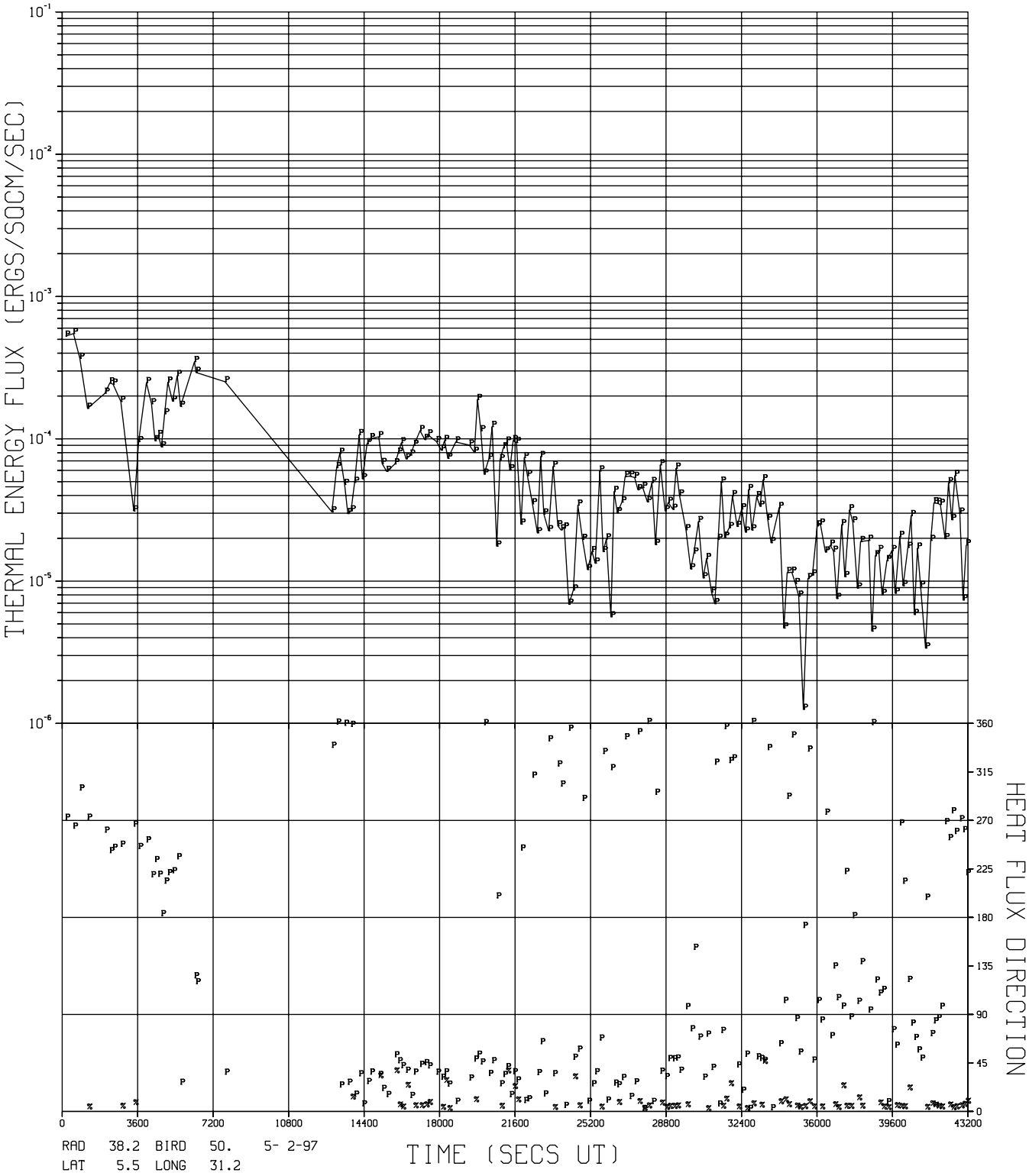
RAD 38.1 BIRD 50. 5- 1-97
LAT 13.0 LONG 21.7

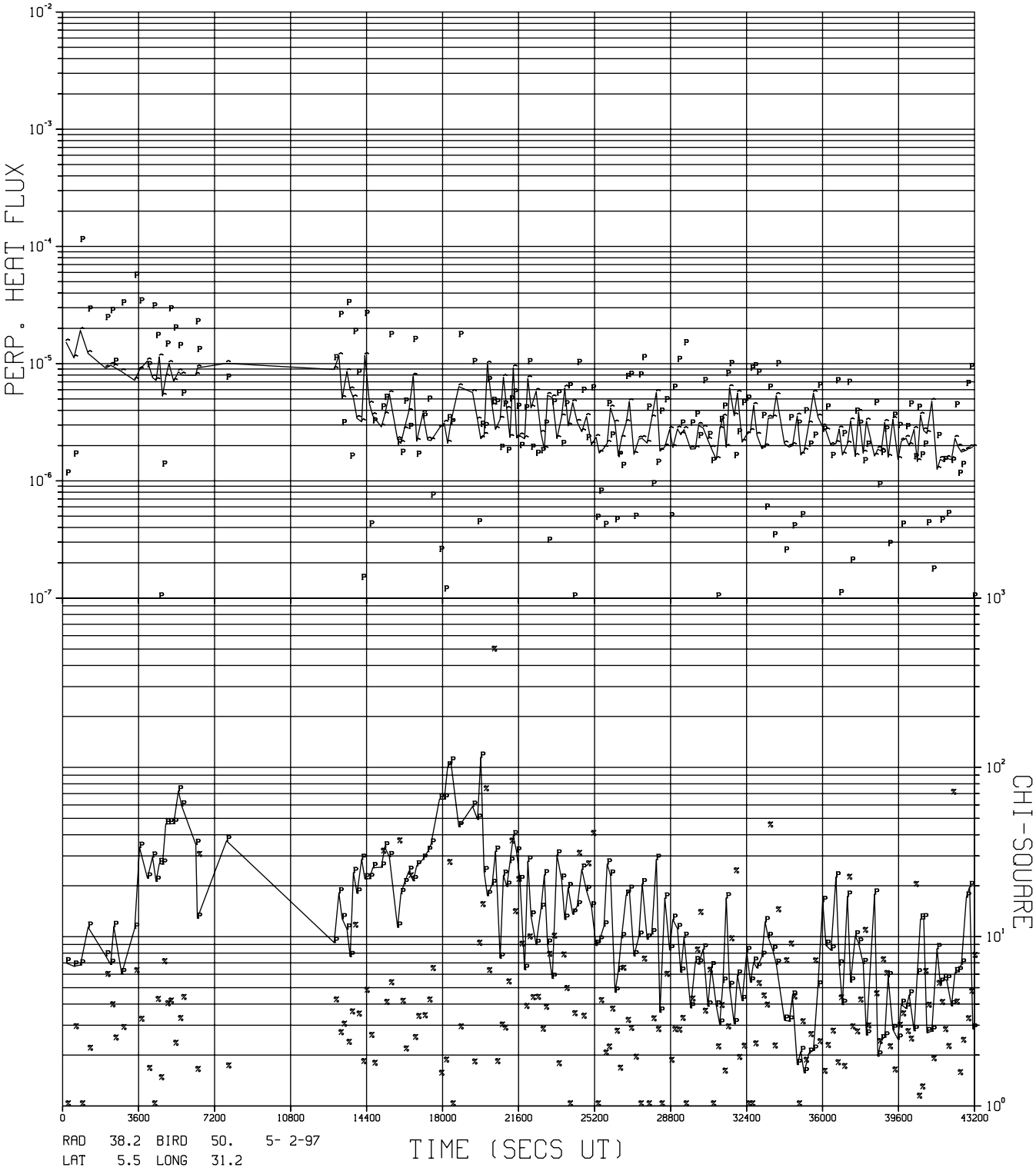

DENSITY
DENSITY RATIO
TIME (SECS UT)
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
RAD 38.2 BIRD 50. 5- 2-97
LAT 5.5 LONG 31.2

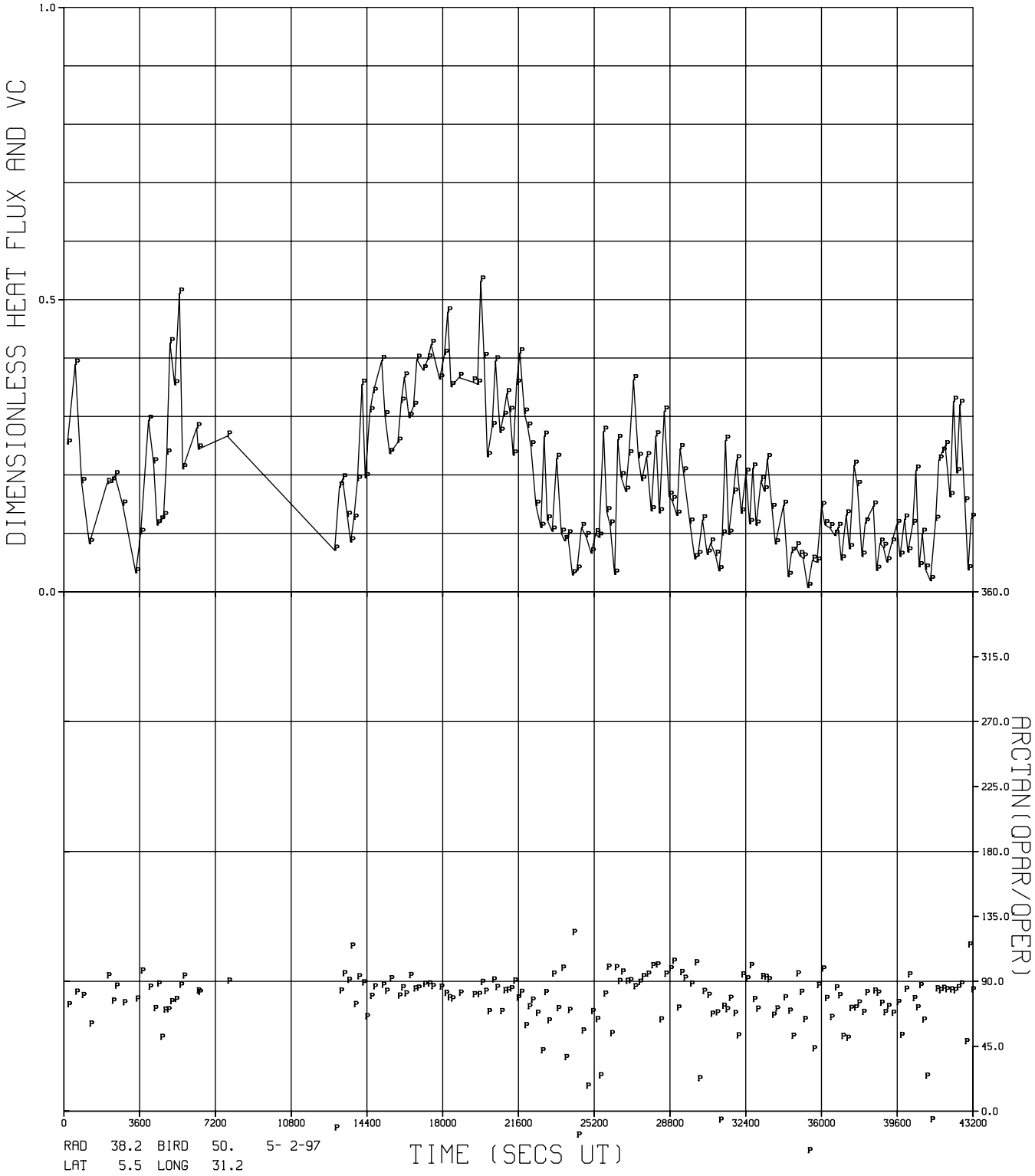

VELOCITY
VELOCITY DIFFERENCE
TIME (SECS UT)
RAD 38.2 BIRD 50. 5- 2-97
LAT 5.5 LONG 31.2

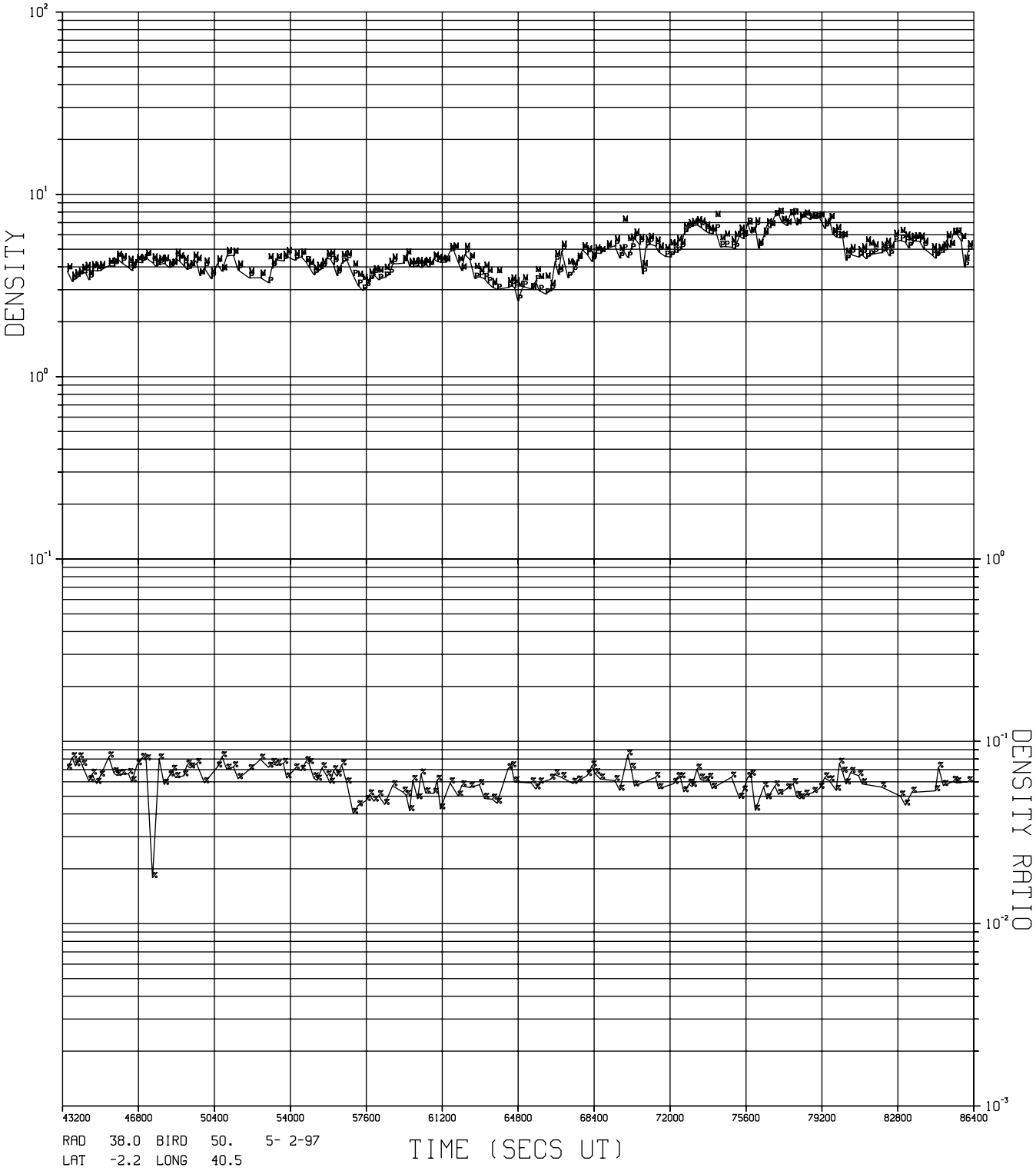

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
RAD 38.2 BIRD 50. 5- 2-97
LAT 5.5 LONG 31.2

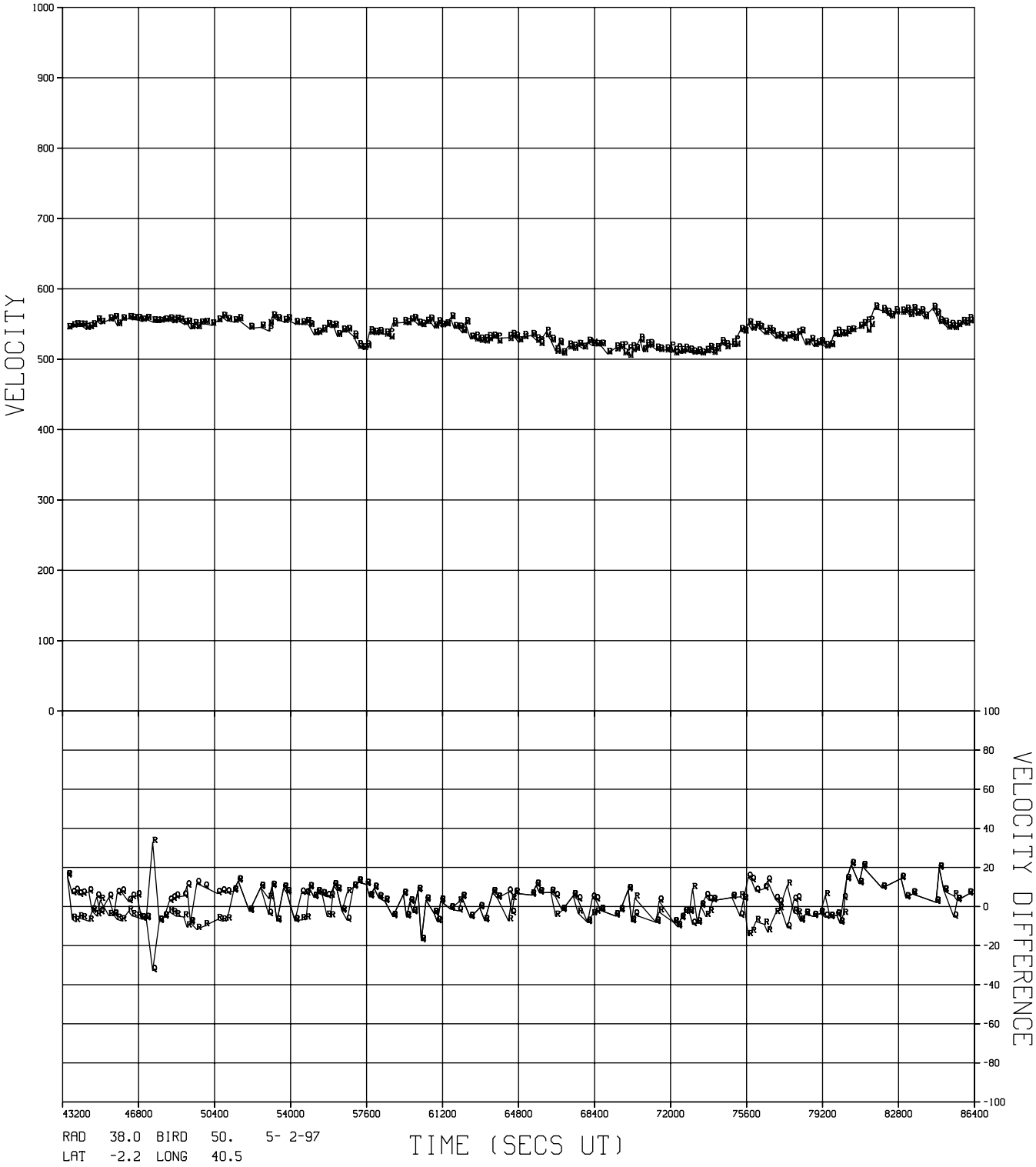

TEMPERATURE
TEMPERATURE RATIO
TIME (SECS UT)
RAD 38.2 BIRD 50. 5- 2-97
LAT 5.5 LONG 31.2

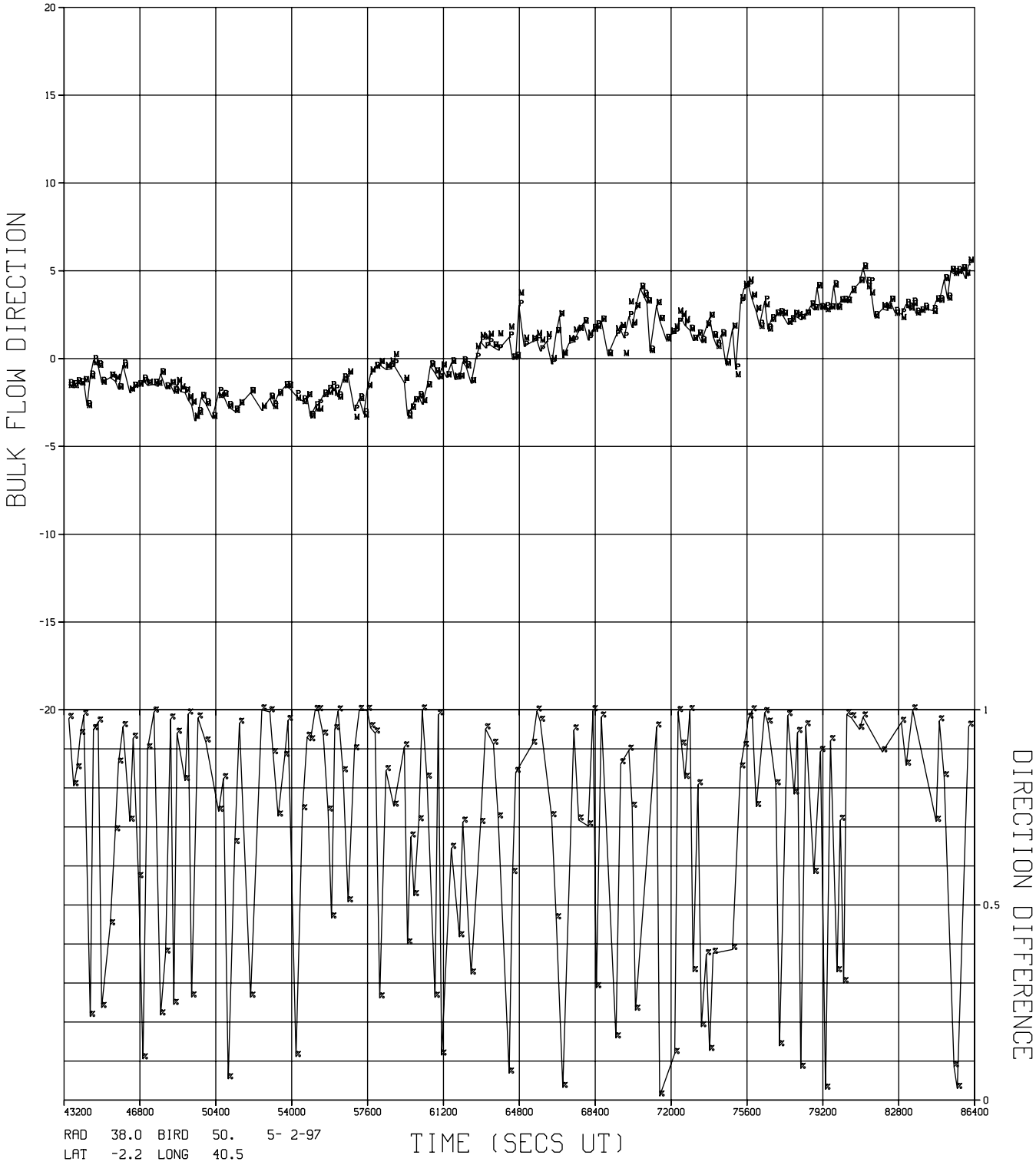

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 38.2 BIRD 50. 5- 2-97
LAT 5.5 LONG 31.2

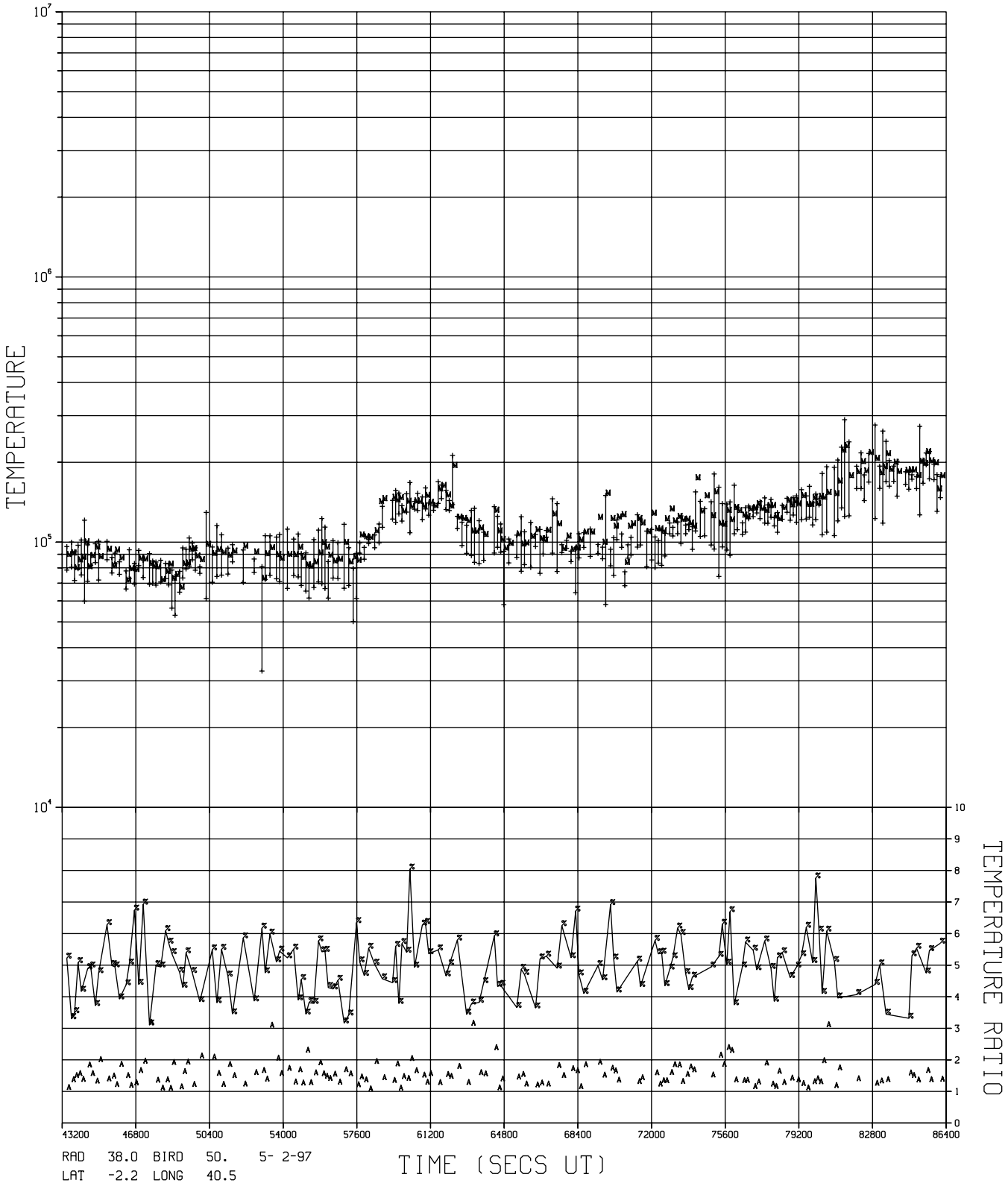

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
RAD 38.2 BIRD 50. 5- 2-97
LAT 5.5 LONG 31.2

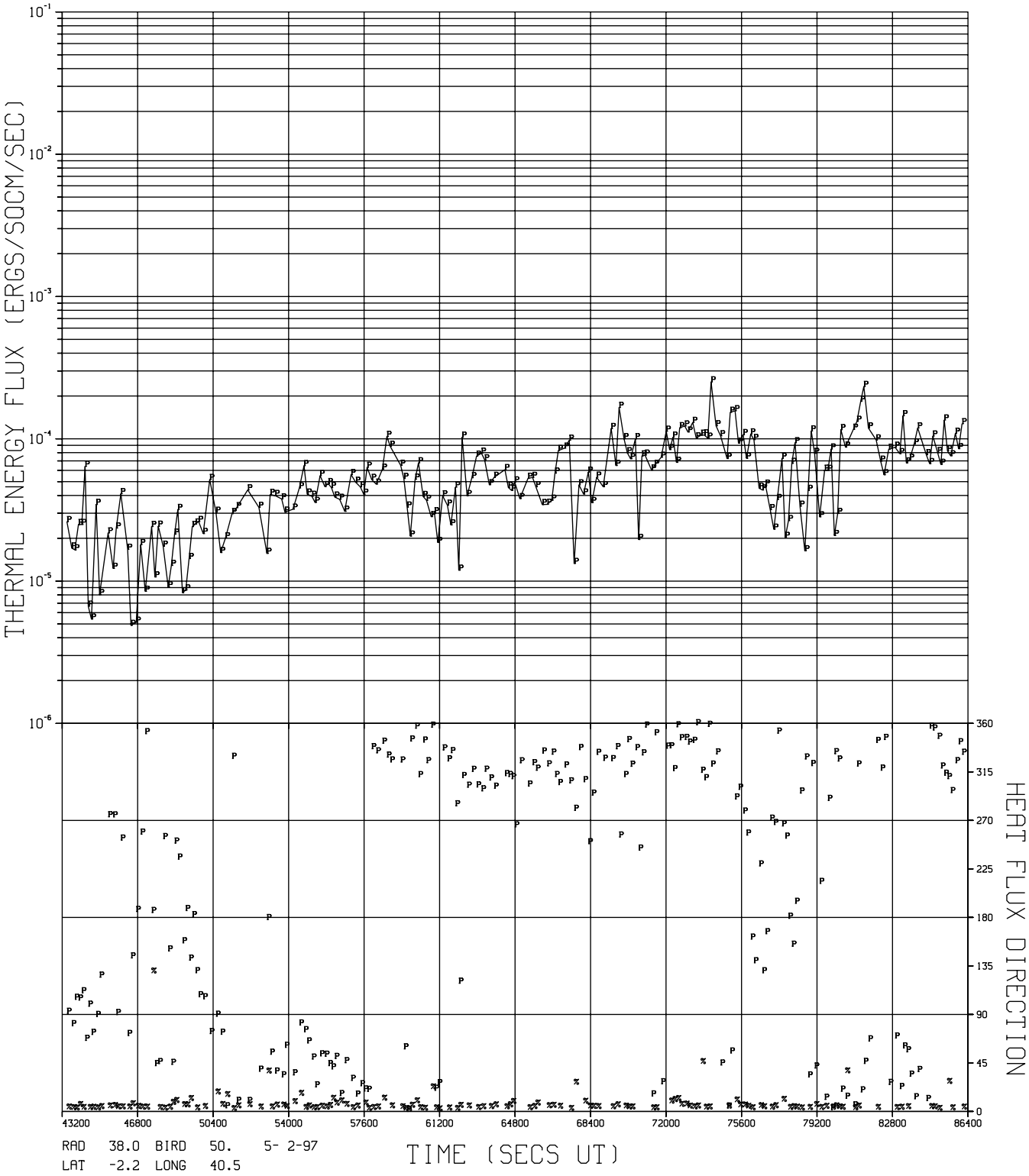

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
TIME (SECS UT)
RAD 38.2 BIRD 50. 5- 2-97
LAT 5.5 LONG 31.2

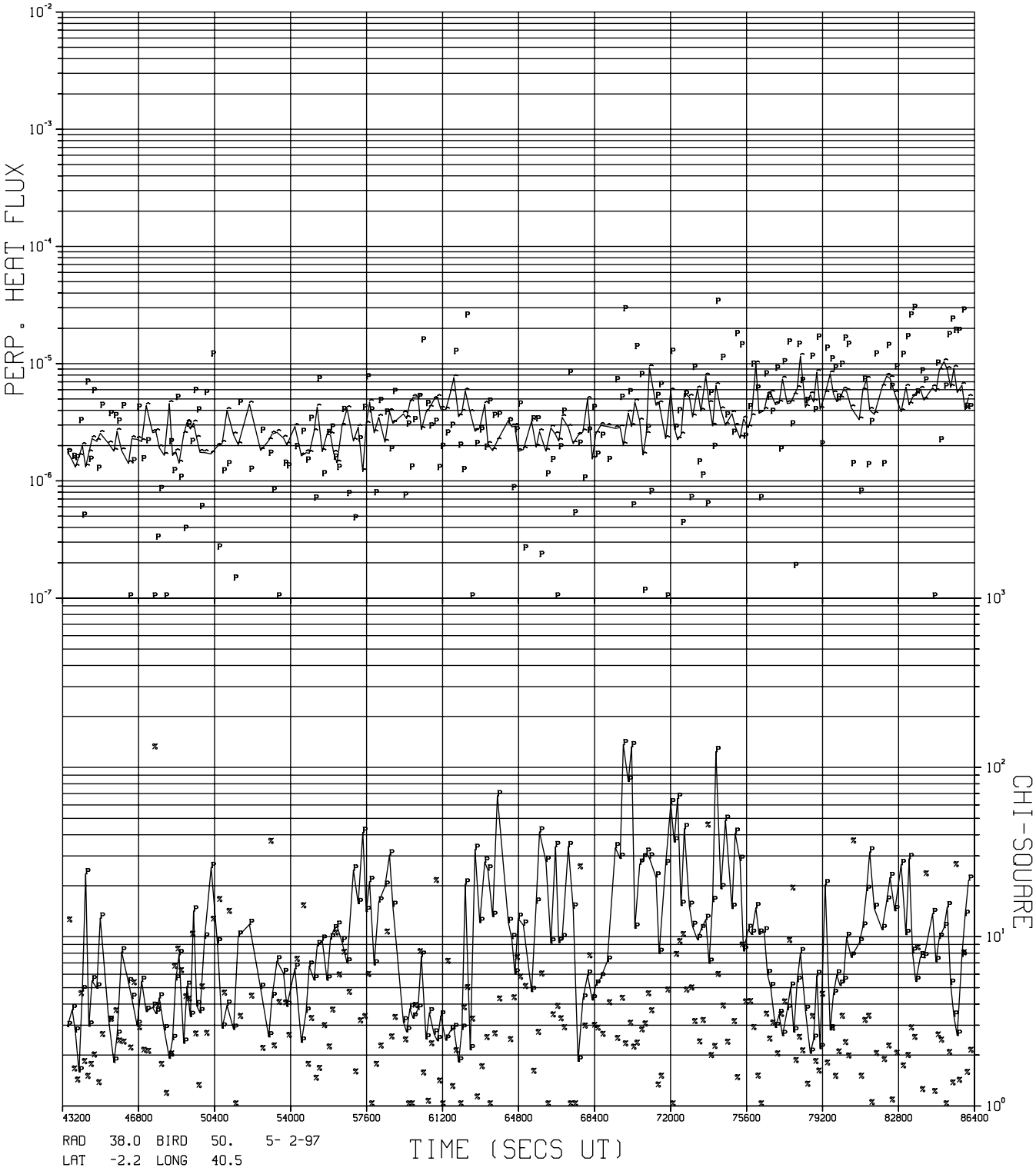

DENSITY
DENSITY RATIO
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 38.0 BIRD 50. 5- 2-97
LAT -2.2 LONG 40.5

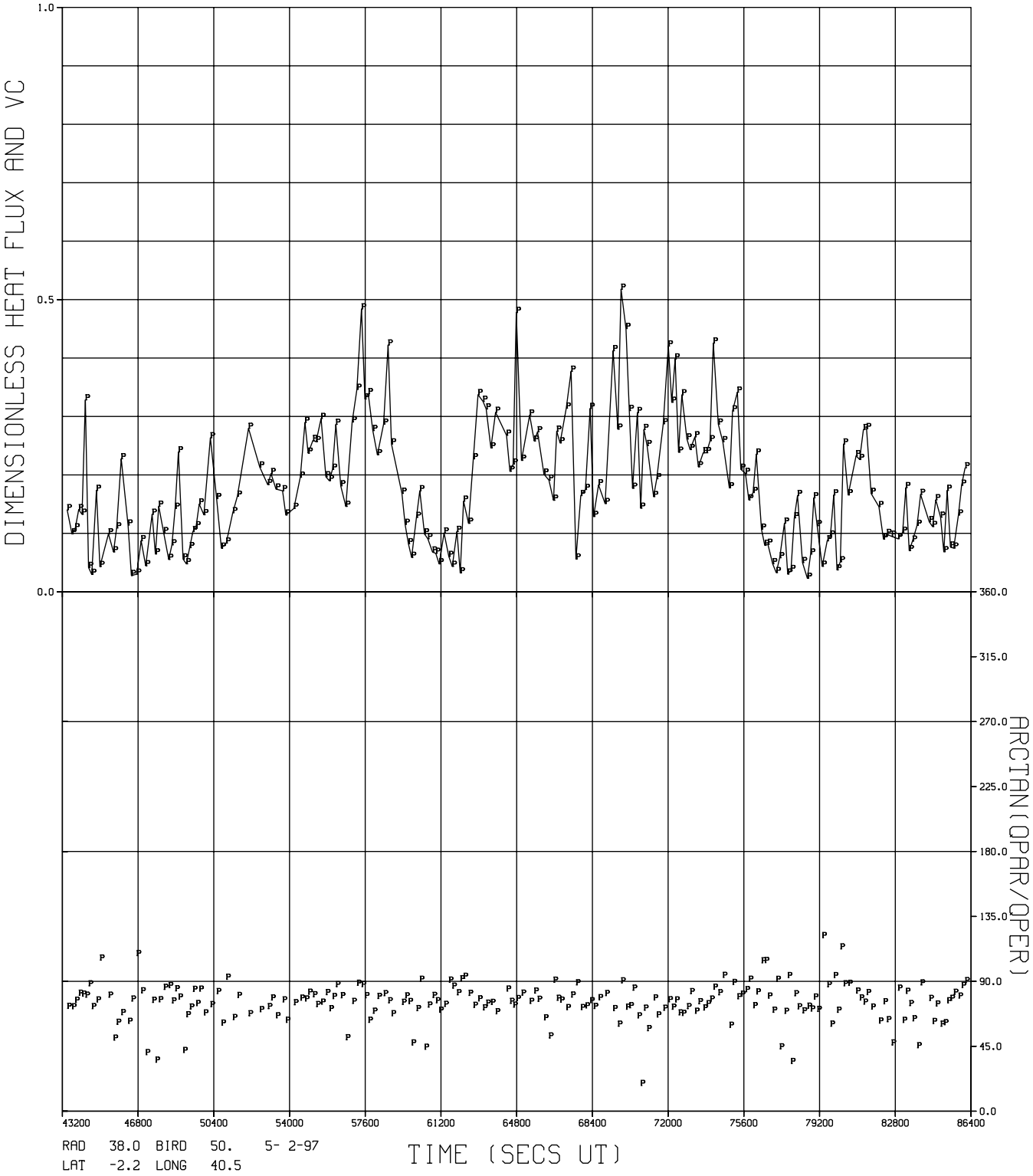

VELOCITY
1000
900
800
700
600
500
400
300
200
100
0
VELOCITY DIFFERENCE
100
80
60
40
20
0
-20
-40
-60
-80
-100
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 38.0 BIRD 50. 5- 2-97
LAT -2.2 LONG 40.5
TIME (SECS UT)

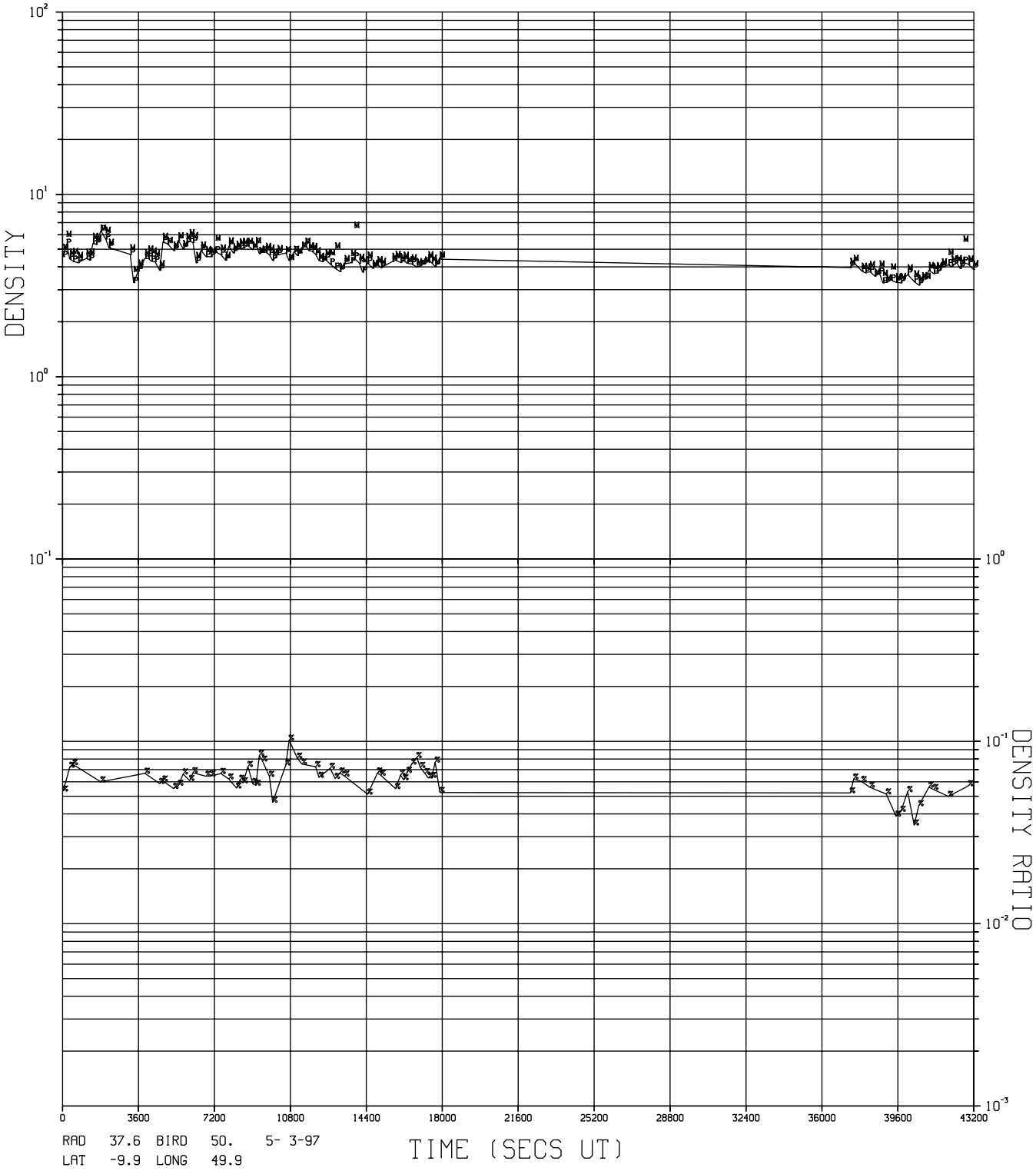

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 38.0 BIRD 50. 5- 2-97
LAT -2.2 LONG 40.5

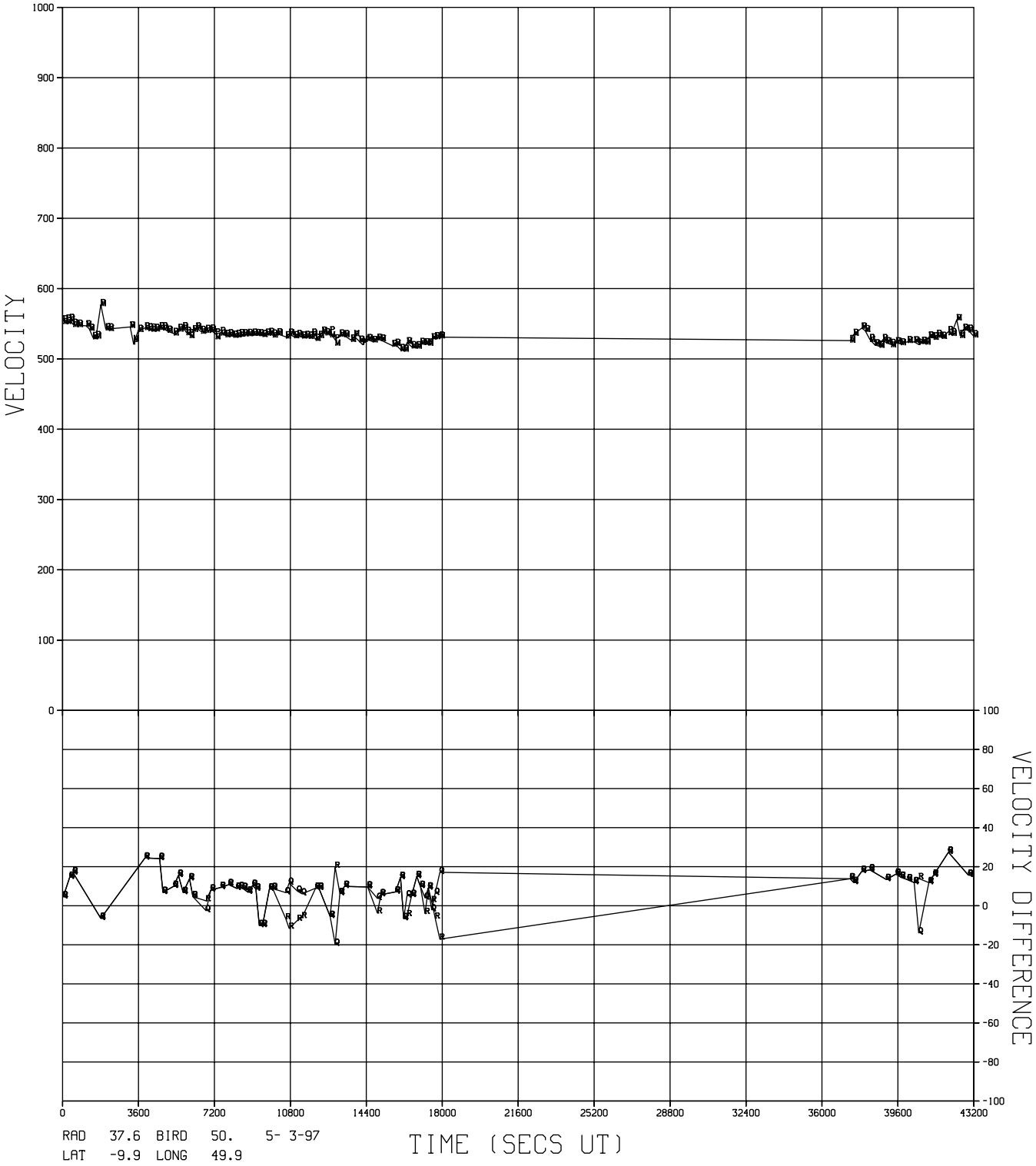

TEMPERATURE
TEMPERATURE RATIO
TIME (SECS UT)
RAD 38.0 BIRD 50. 5- 2-97
LAT -2.2 LONG 40.5

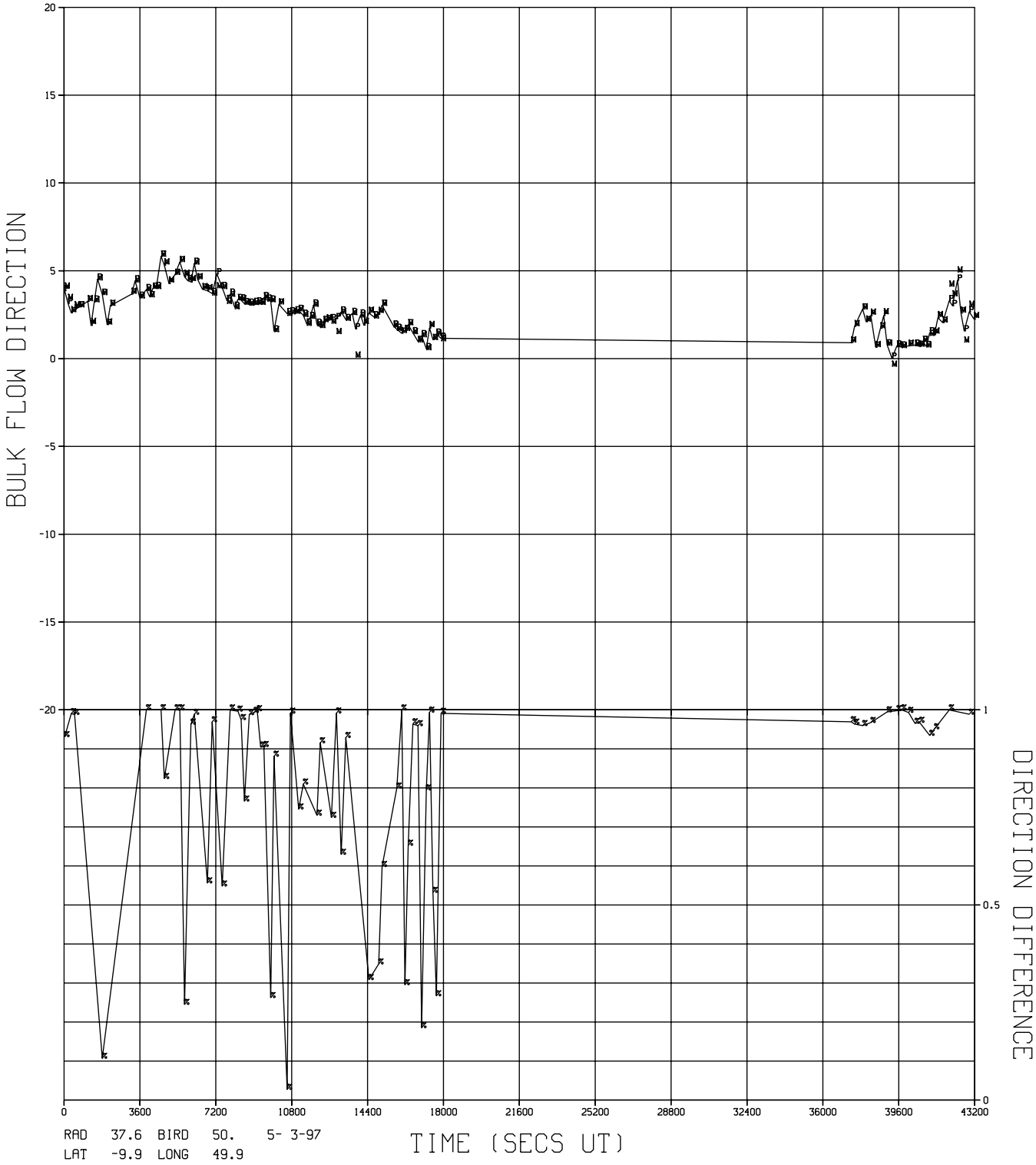

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 38.0 BIRD 50. 5- 2-97
LAT -2.2 LONG 40.5

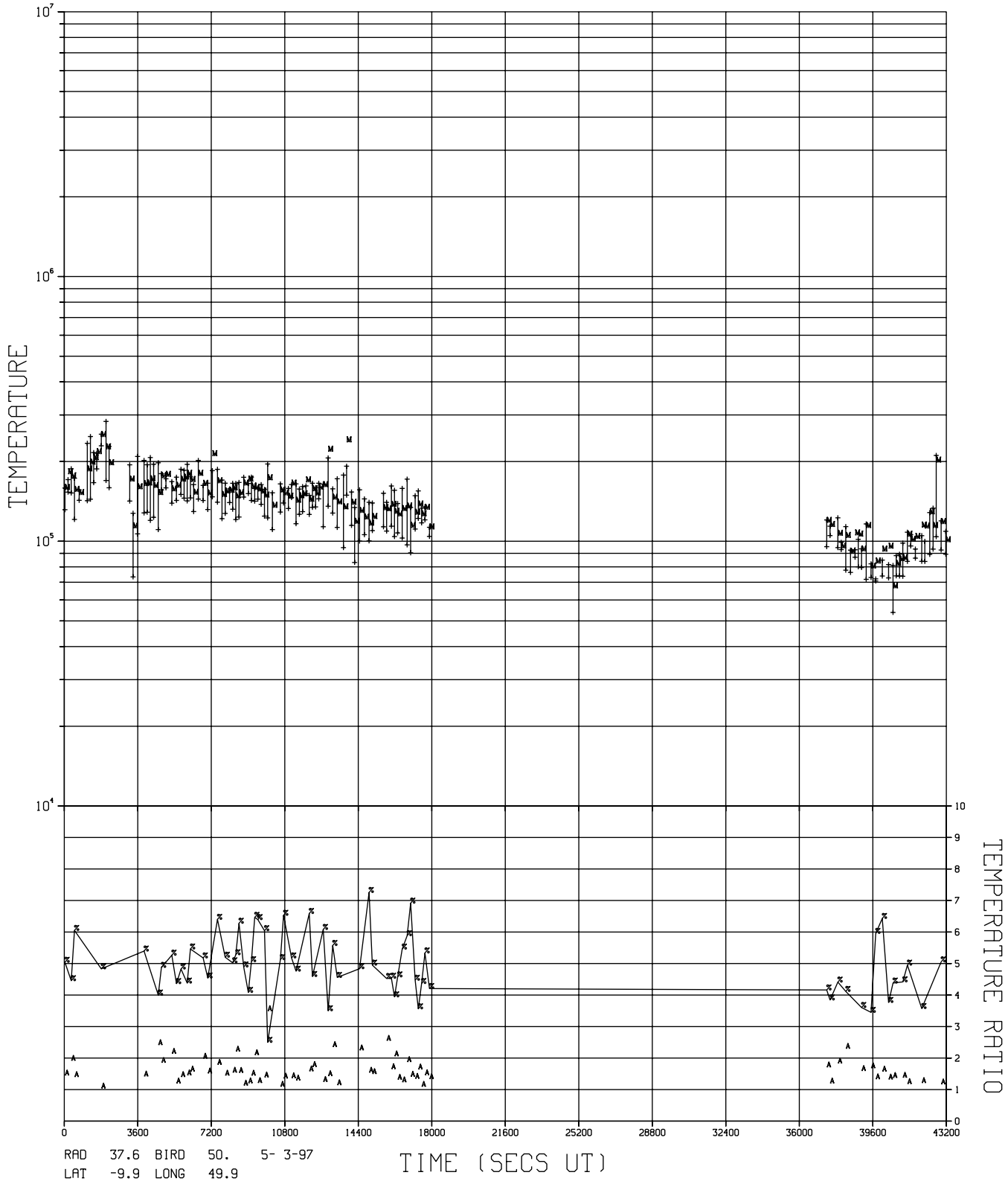

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 38.0 BIRD 50. 5- 2-97
LAT -2.2 LONG 40.5

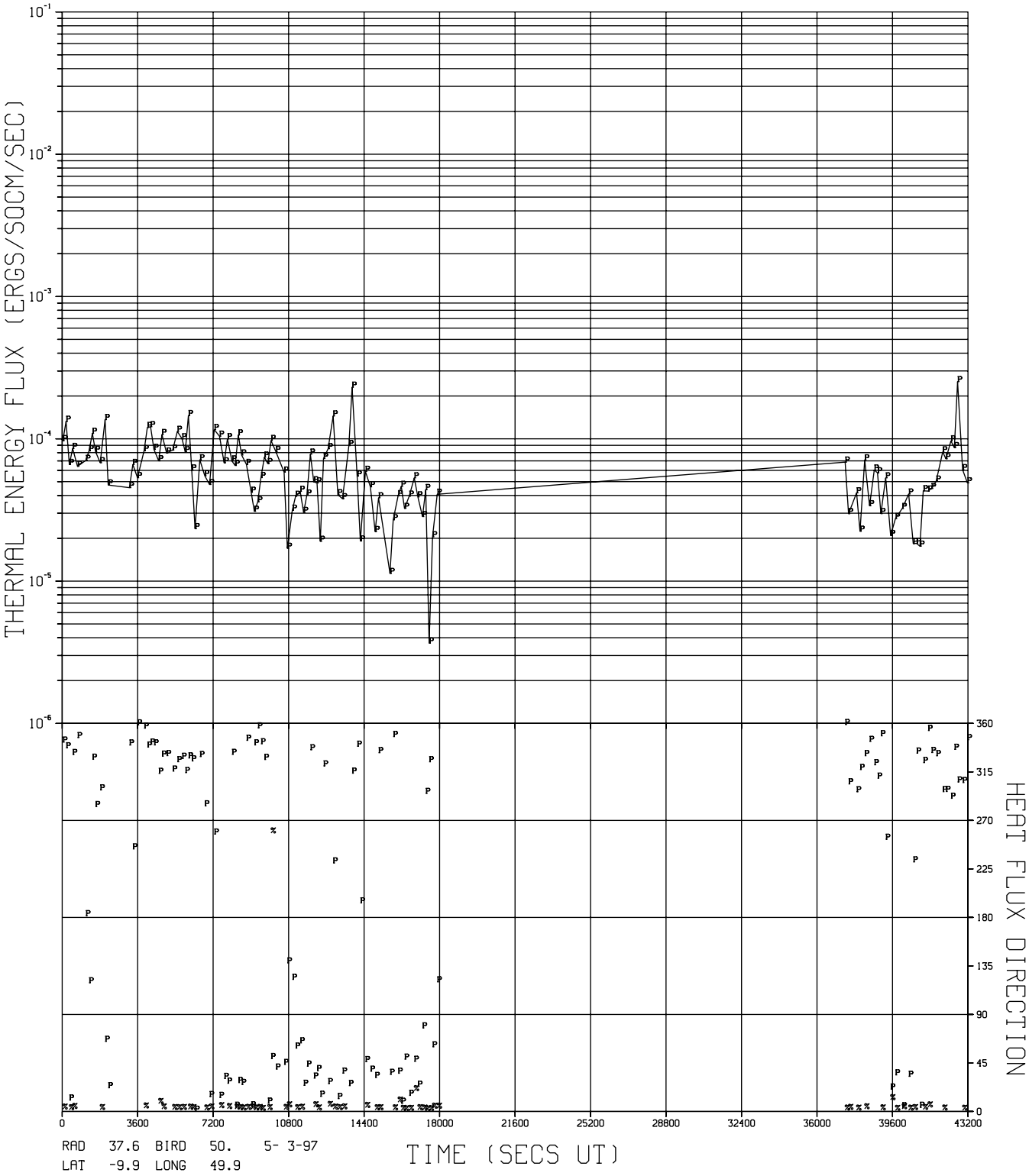

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
TIME (SECS UT)
RAD 38.0 BIRD 50. 5- 2-97
LAT -2.2 LONG 40.5

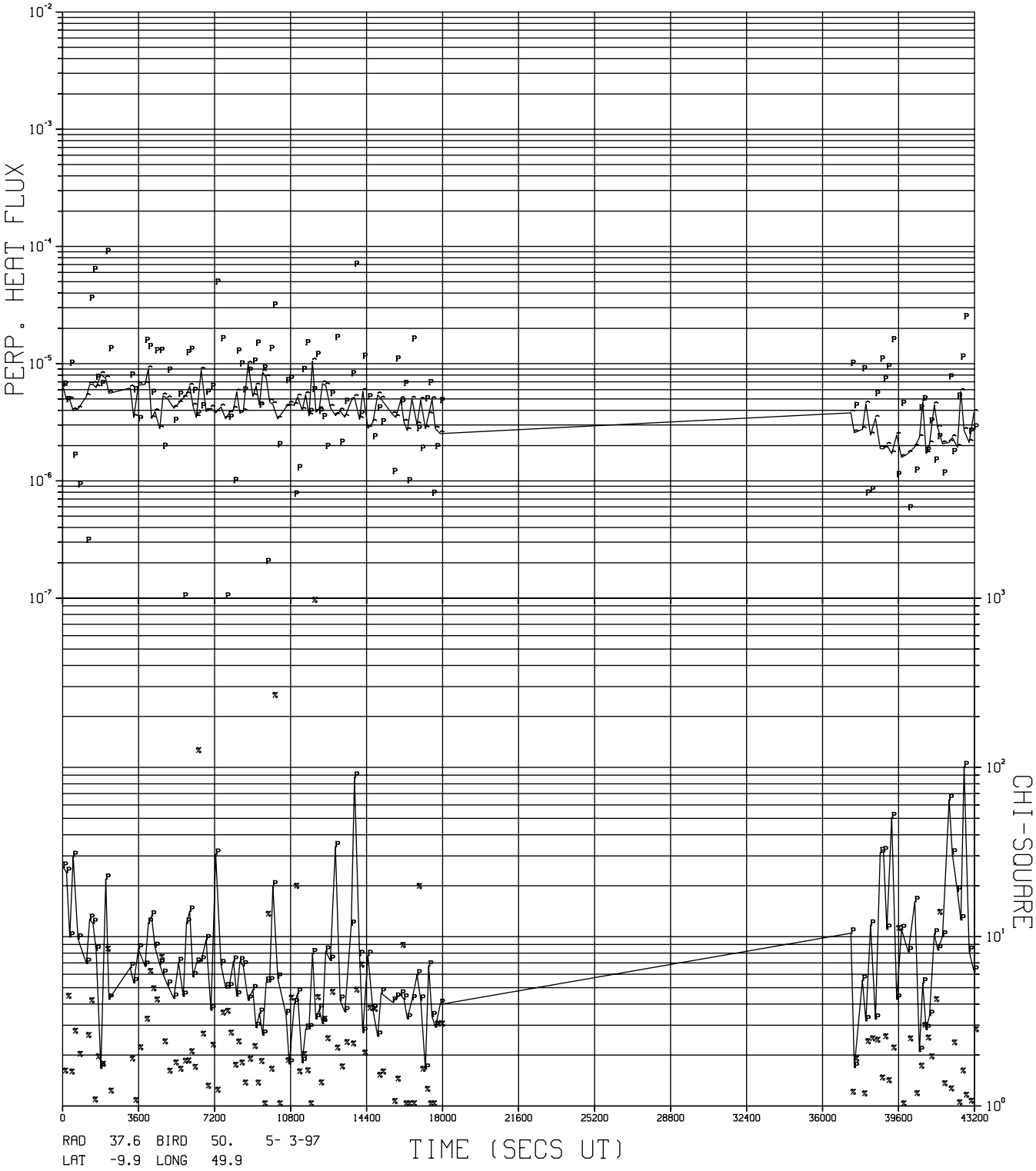

DENSITY
DENSITY RATIO
TIME (SECS UT)
RAD 37.6 BIRD 50. 5- 3-97
LAT -9.9 LONG 49.9

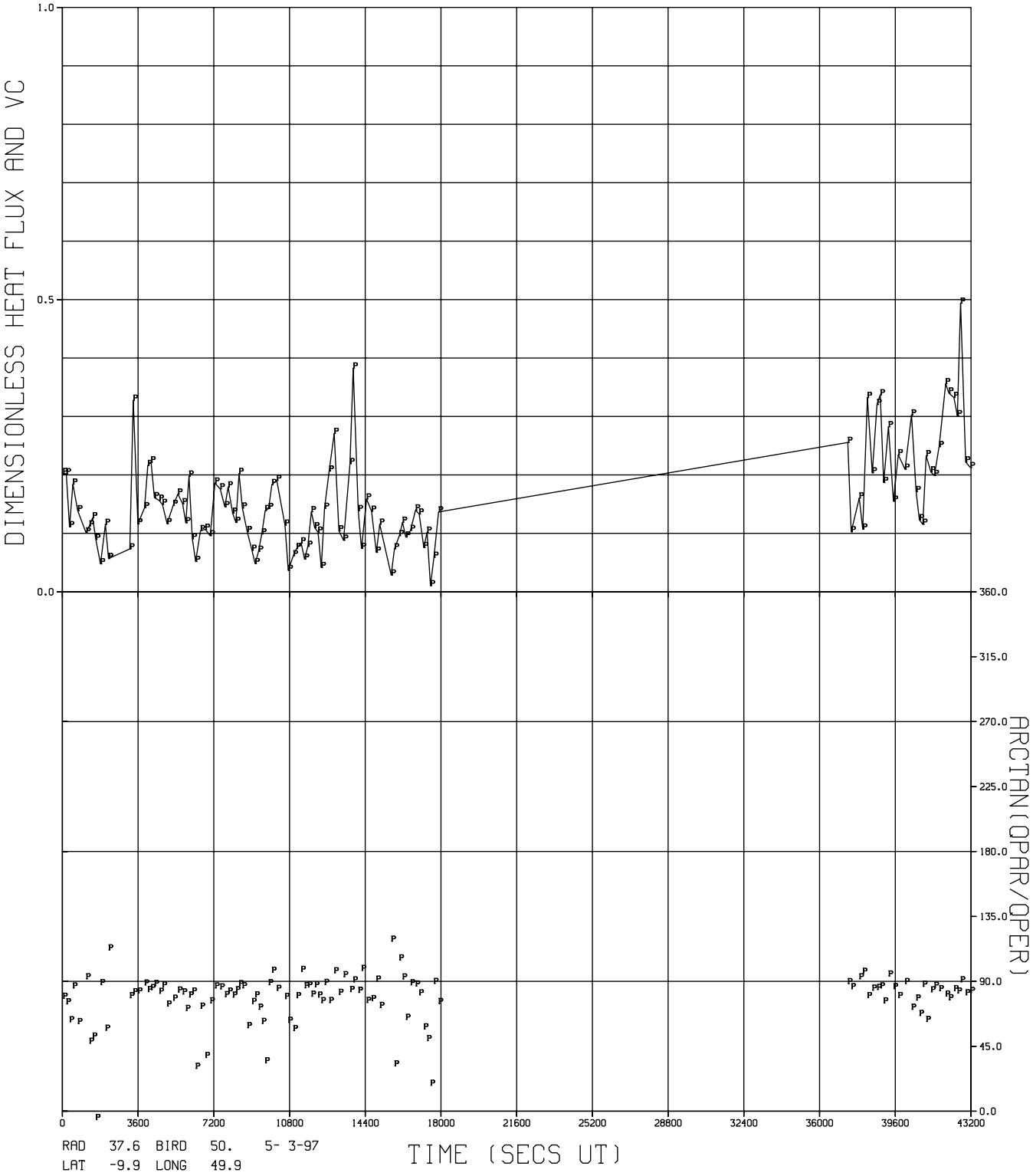

VELOCITY
1000
900
800
700
600
500
400
300
200
100
0
VELOCITY DIFFERENCE
100
80
60
40
20
0
-20
-40
-60
-80
-100
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
RAD 37.6 BIRD 50. 5- 3-97
LAT -9.9 LONG 49.9
TIME (SECS UT)

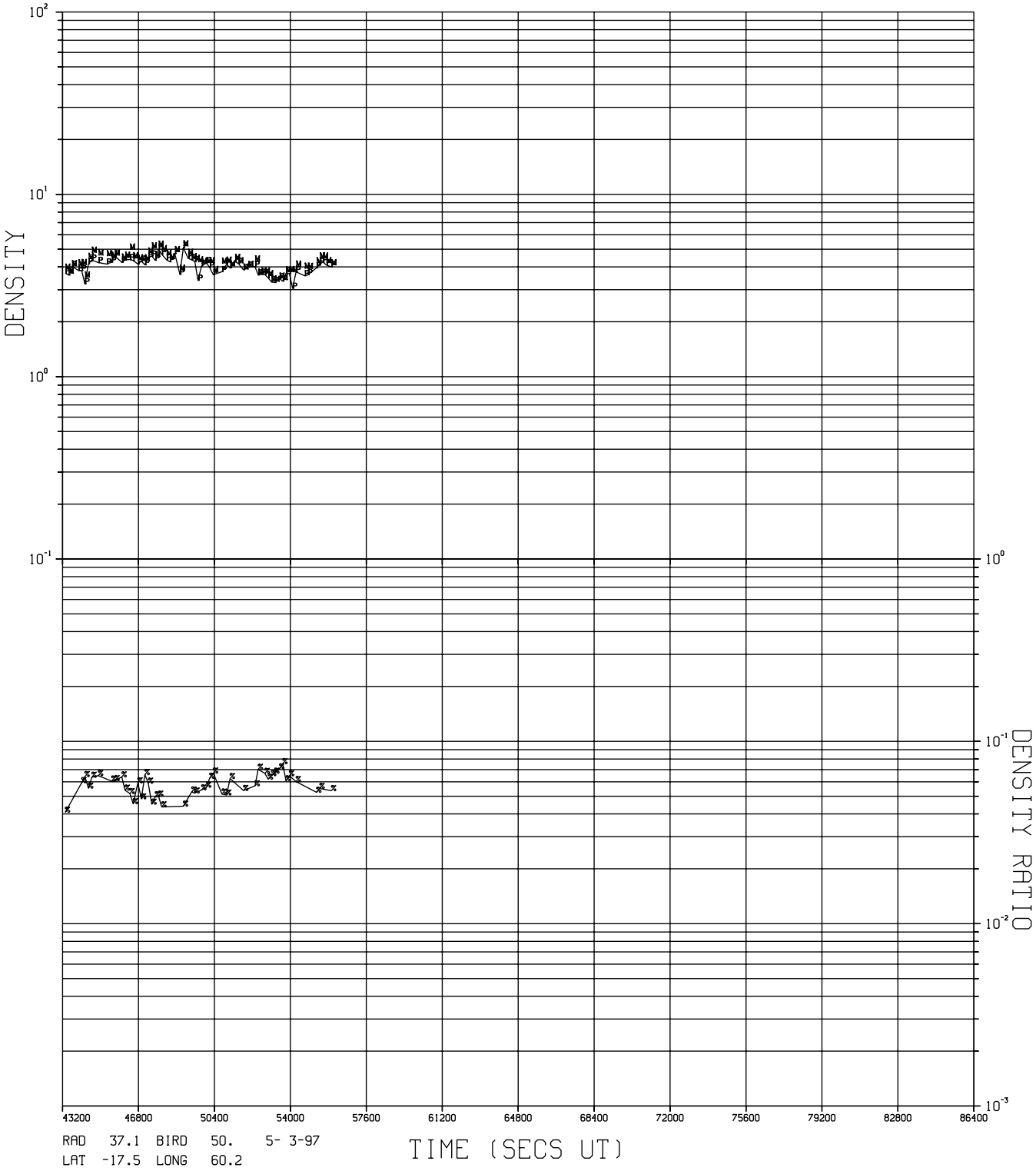

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
RAD 37.6 BIRD 50. 5- 3-97
LAT -9.9 LONG 49.9

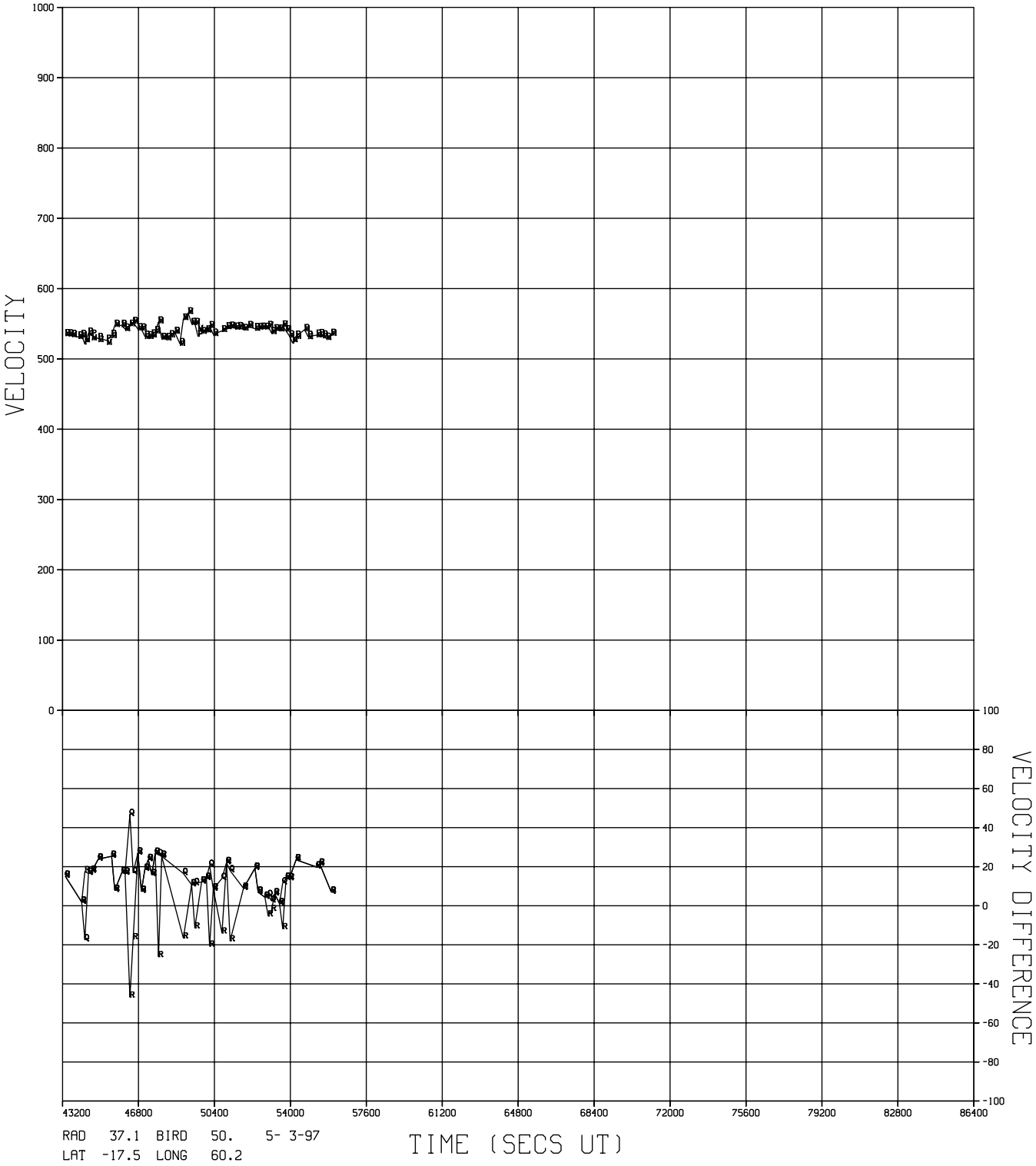

TEMPERATURE
TEMPERATURE RATIO
TIME (SECS UT)
RAD 37.6 BIRD 50. 5- 3-97
LAT -9.9 LONG 49.9

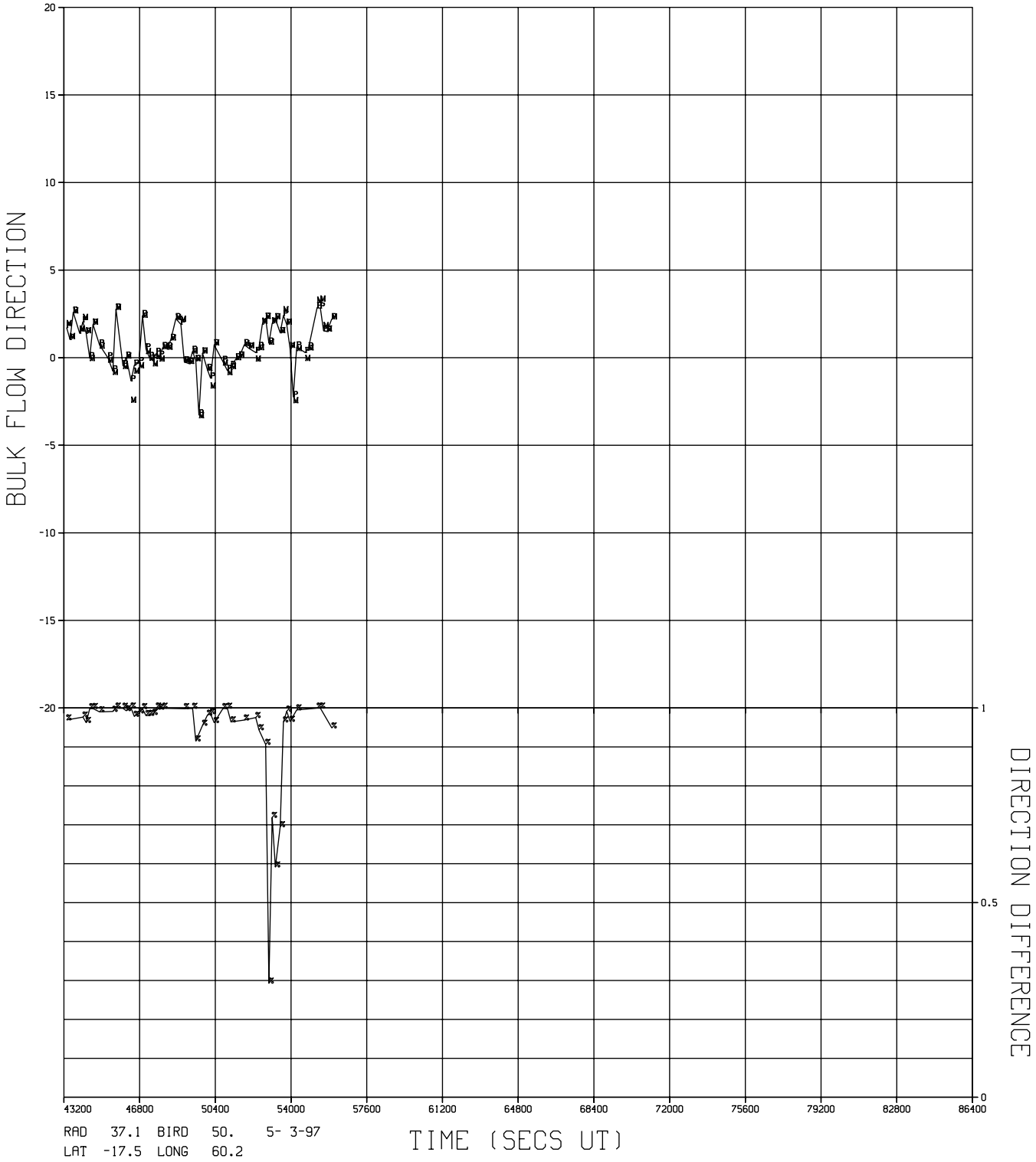

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 37.6 BIRD 50. 5- 3-97
LAT -9.9 LONG 49.9

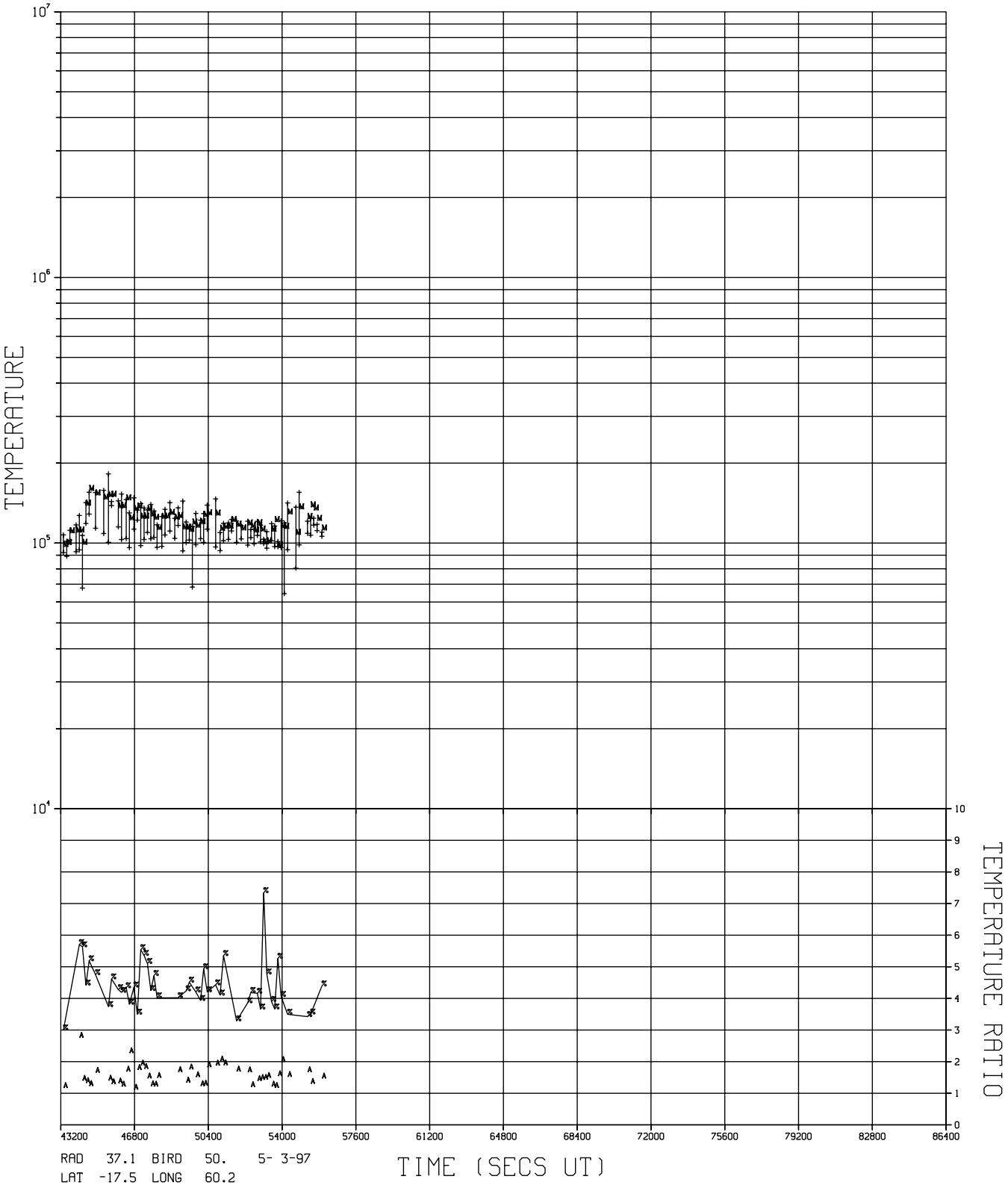

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
RAD 37.6 BIRD 50. 5- 3-97
LAT -9.9 LONG 49.9

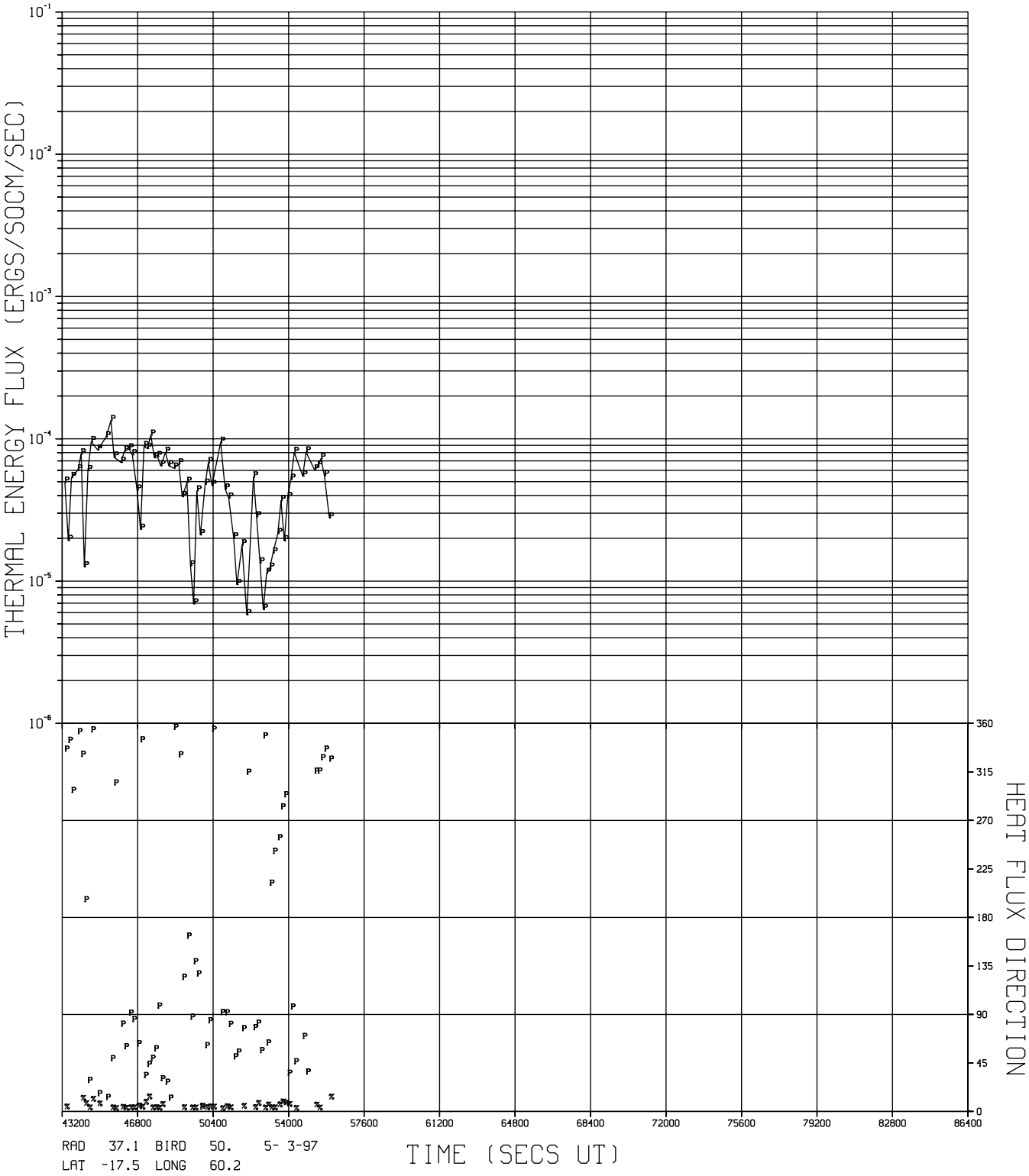

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
TIME (SECS UT)
RAD 37.6 BIRD 50. 5- 3-97
LAT -9.9 LONG 49.9

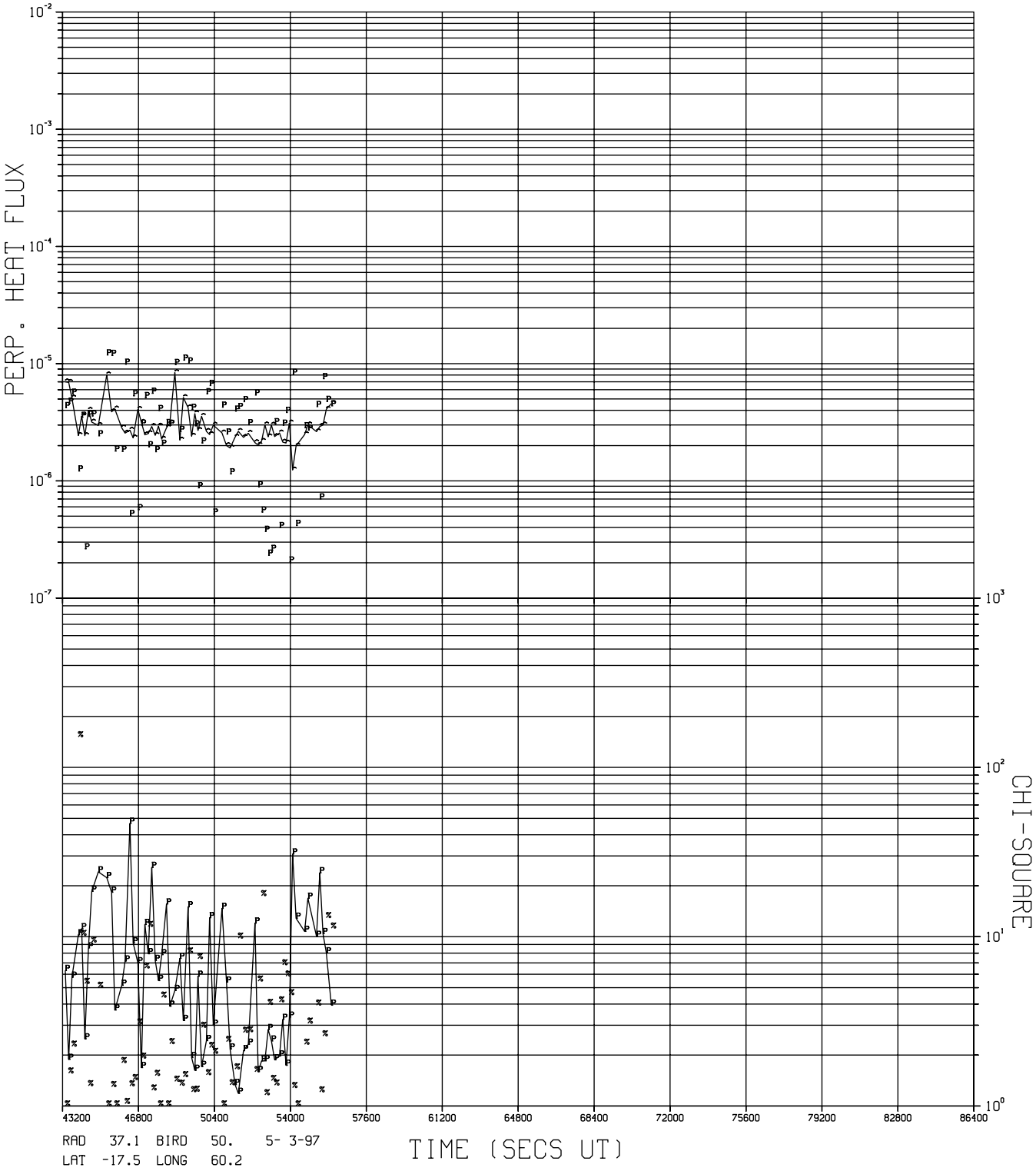

DENSITY
DENSITY RATIO
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 37.1 BIRD 50. 5- 3-97
LAT -17.5 LONG 60.2

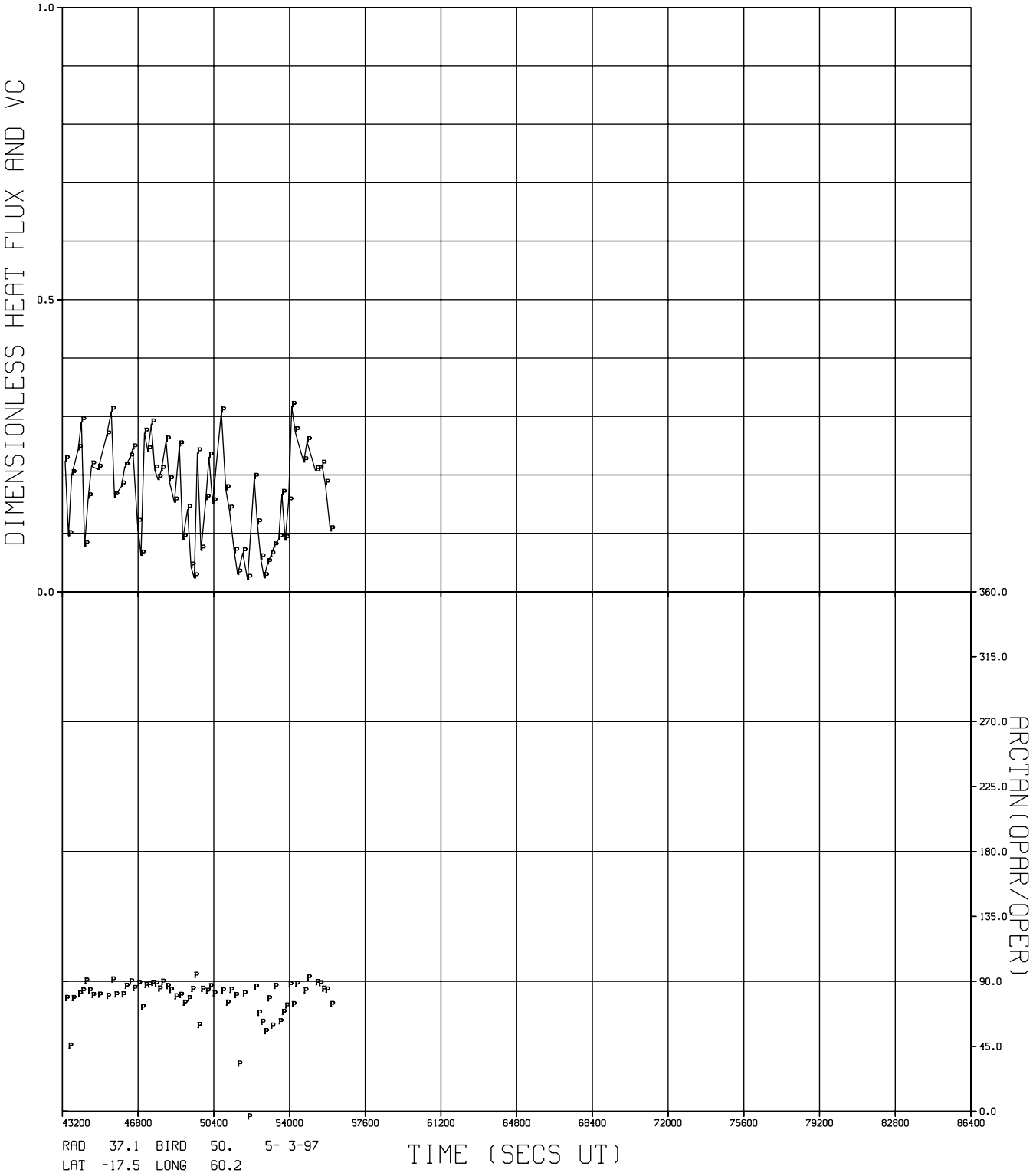

VELOCITY
1000
900
800
700
600
500
400
300
200
100
0
VELOCITY DIFFERENCE
100
80
60
40
20
0
-20
-40
-60
-80
-100
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
TIME (SECS UT)
RAD 37.1 BIRD 50. 5- 3-97
LAT -17.5 LONG 60.2


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 37.1 BIRD 50. 5- 3-97
LAT -17.5 LONG 60.2


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 37.1 BIRD 50. 5- 3-97
LAT -17.5 LONG 60.2
TIME (SECS UT)


THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 37.1 BIRD 50. 5- 3-97
LAT -17.5 LONG 60.2


PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 37.1 BIRD 50. 5- 3-97
LAT -17.5 LONG 60.2


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
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
TIME (SECS UT)
RAD 37.1 BIRD 50. 5- 3-97
LAT -17.5 LONG 60.2