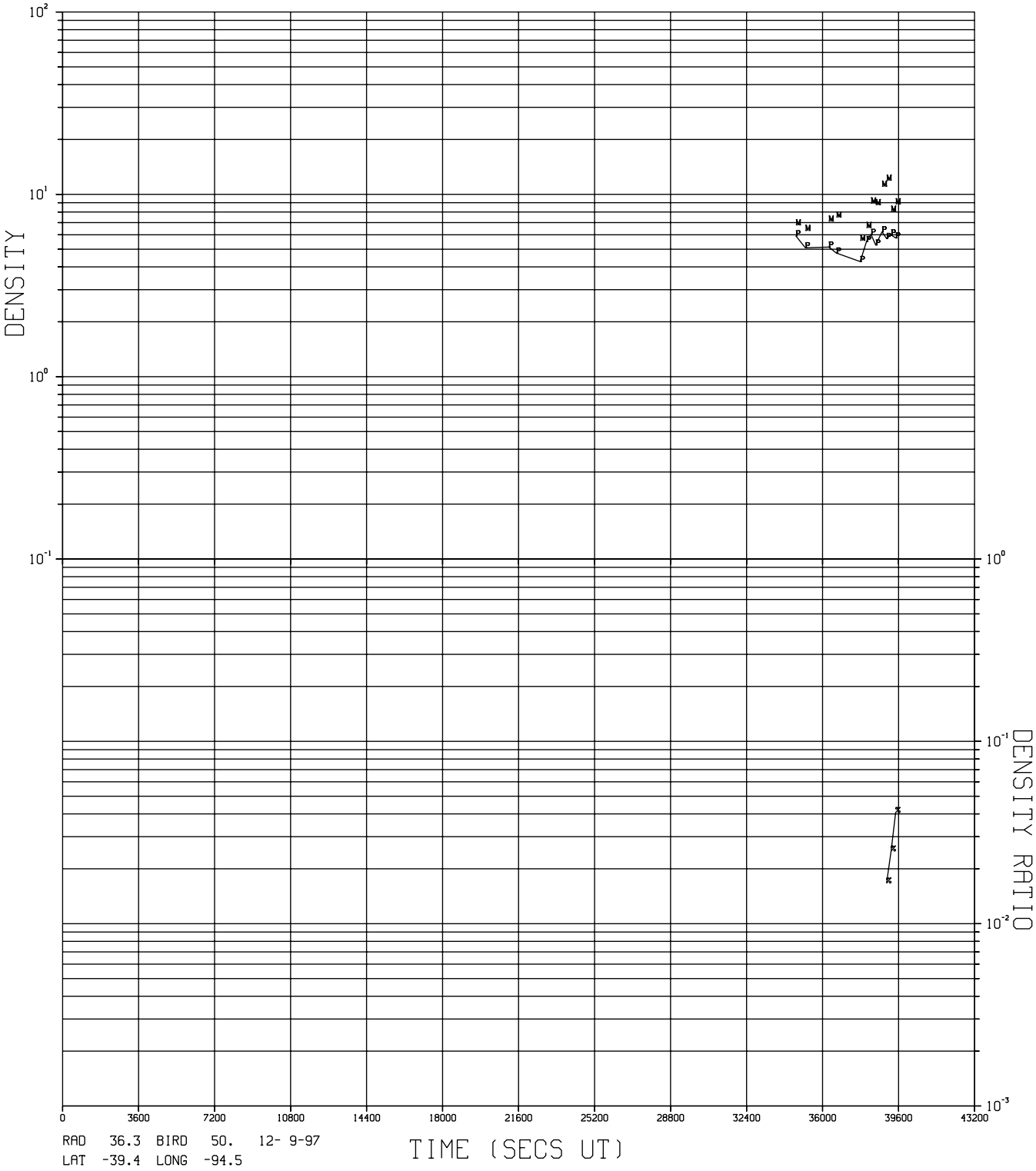
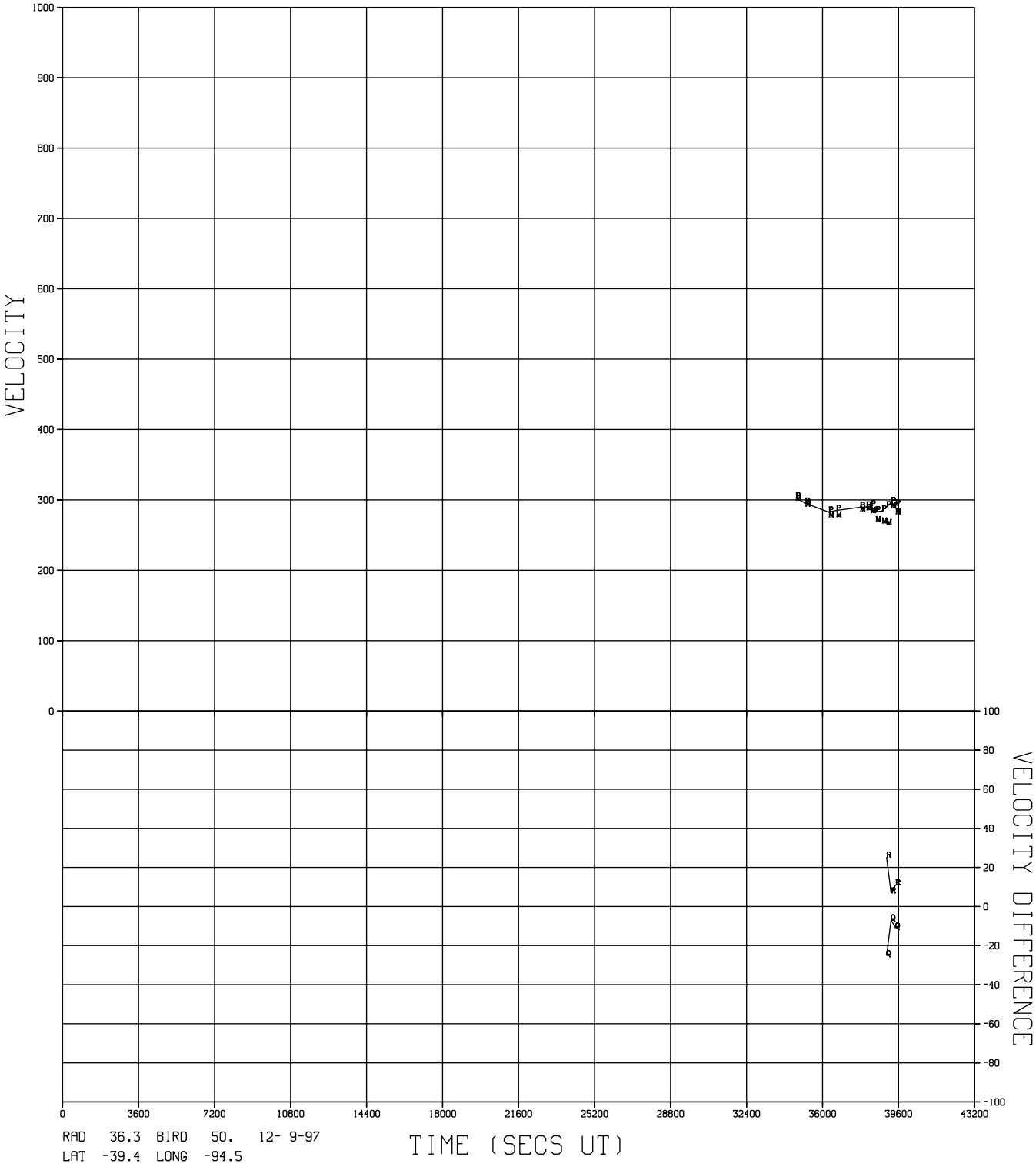
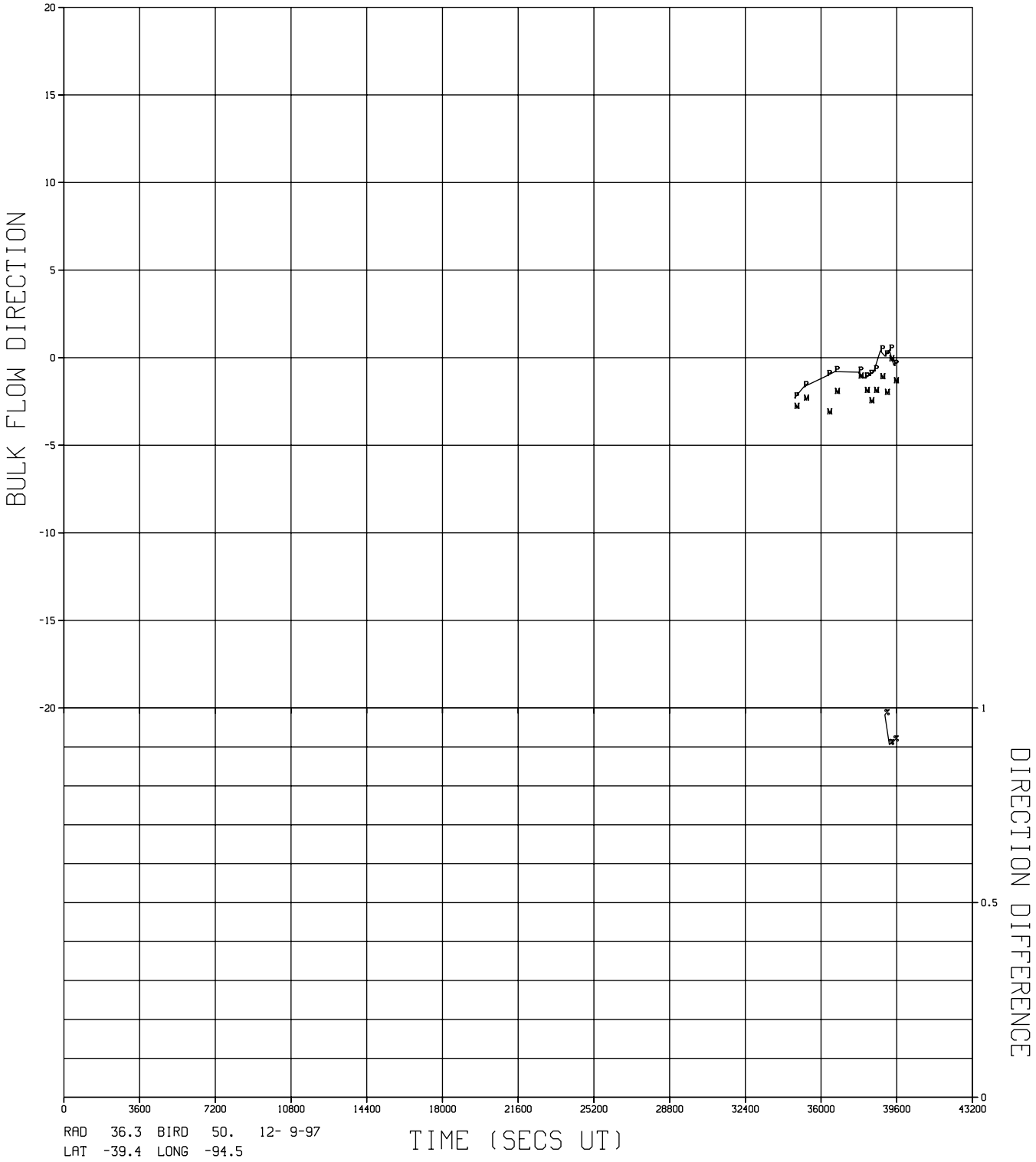
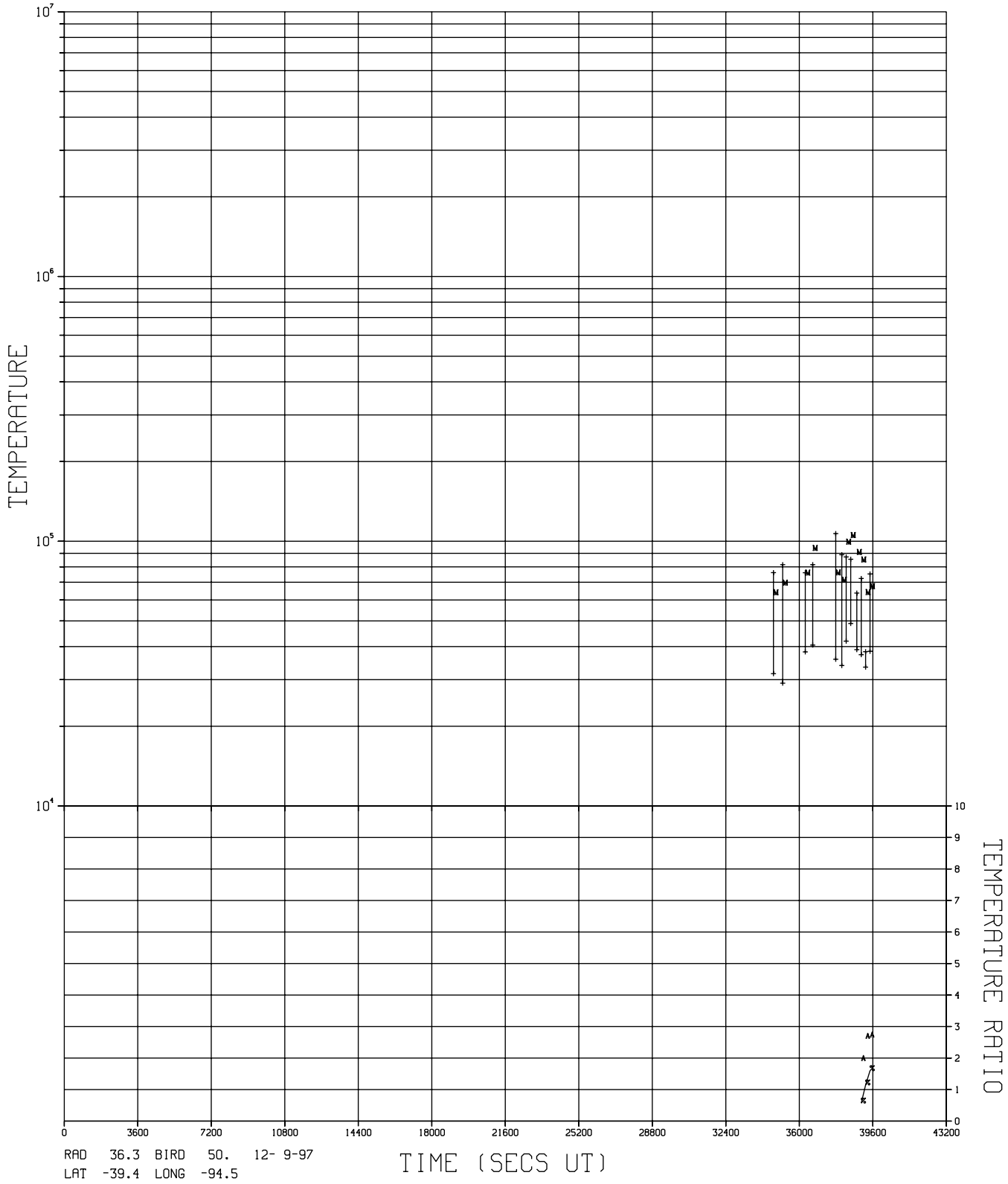
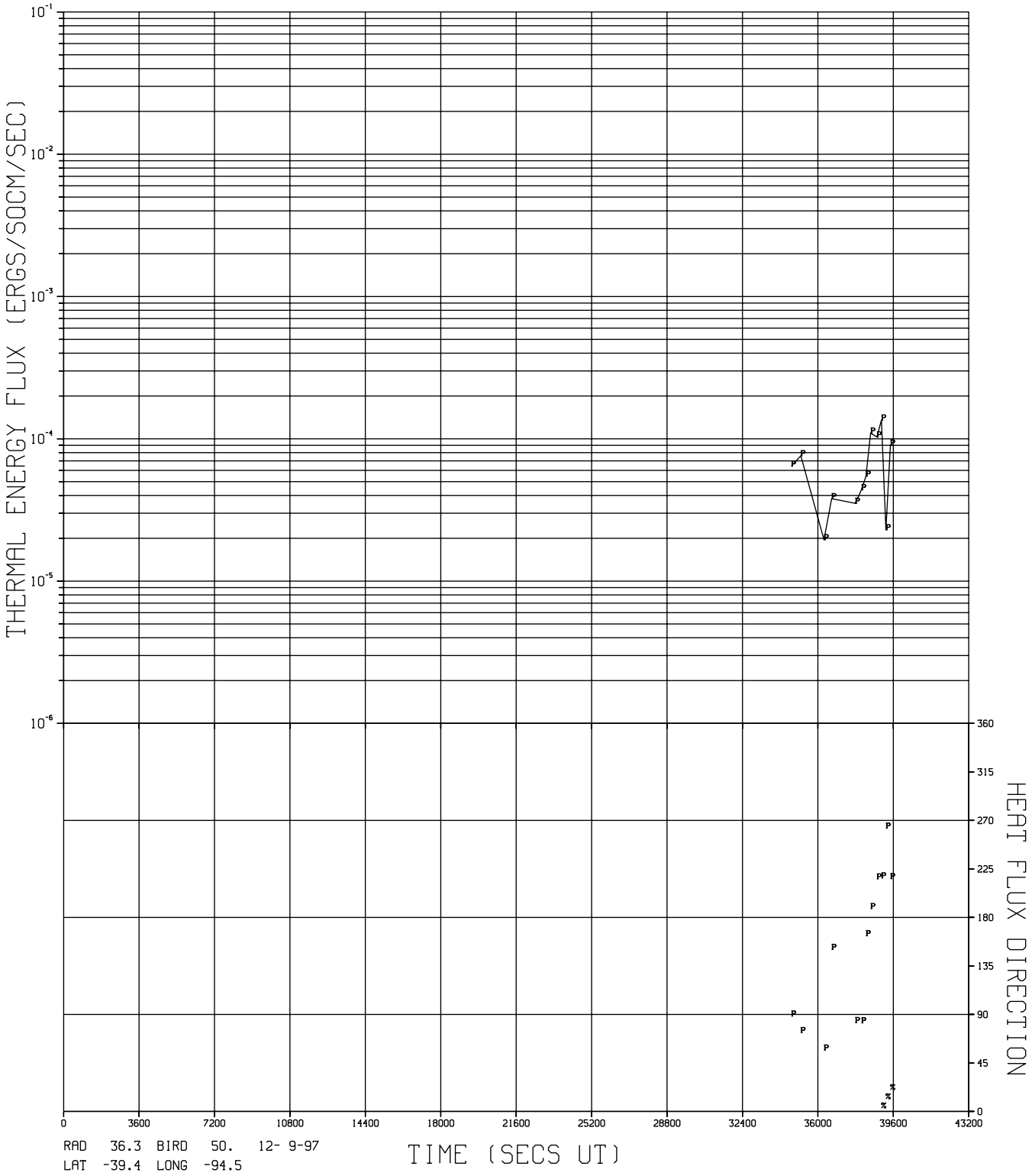
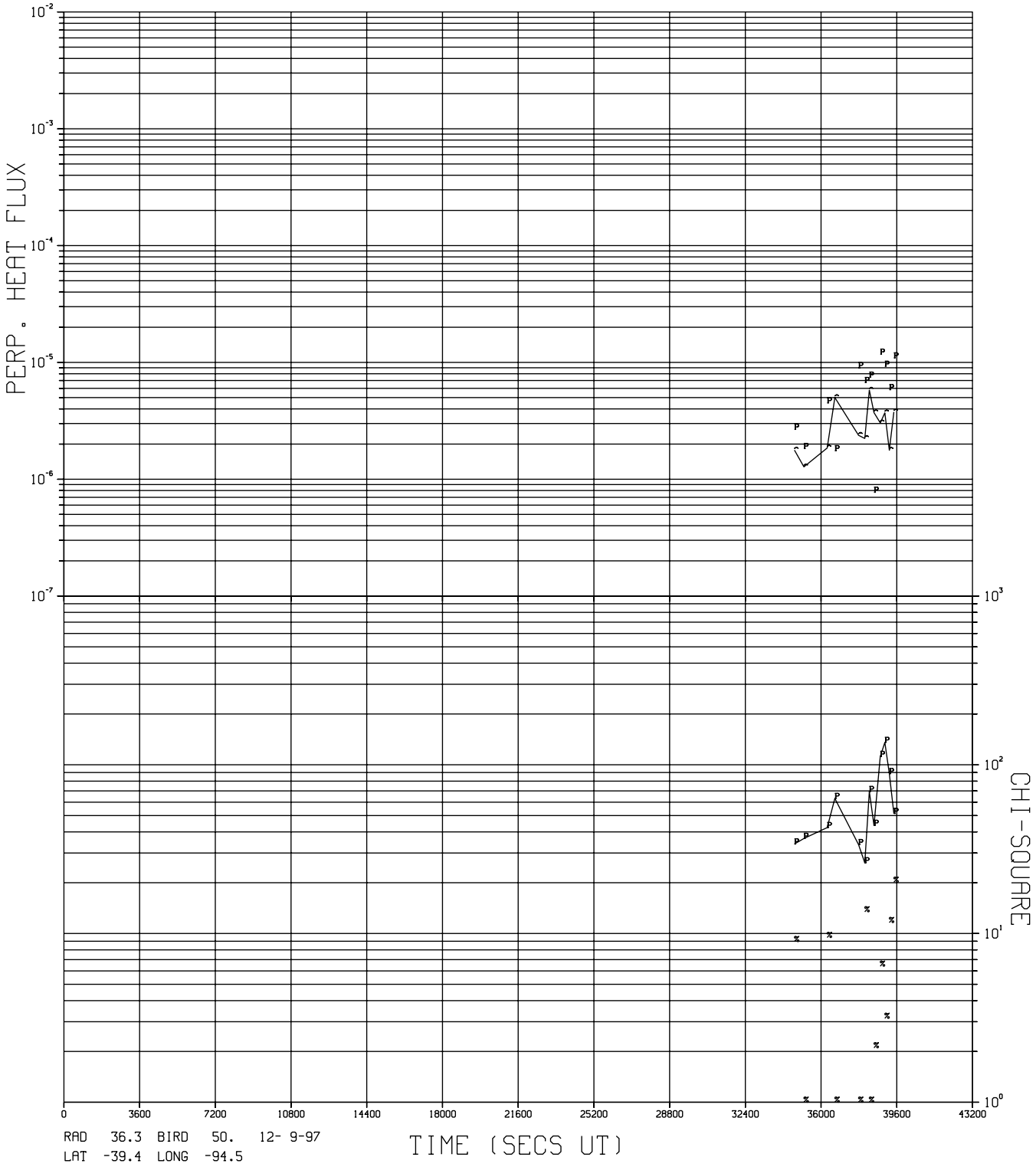

DENSITY
DENSITY RATIO
TIME (SECS UT)
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
RAD 36.3 BIRD 50. 12- 9-97
LAT -39.4 LONG -94.5

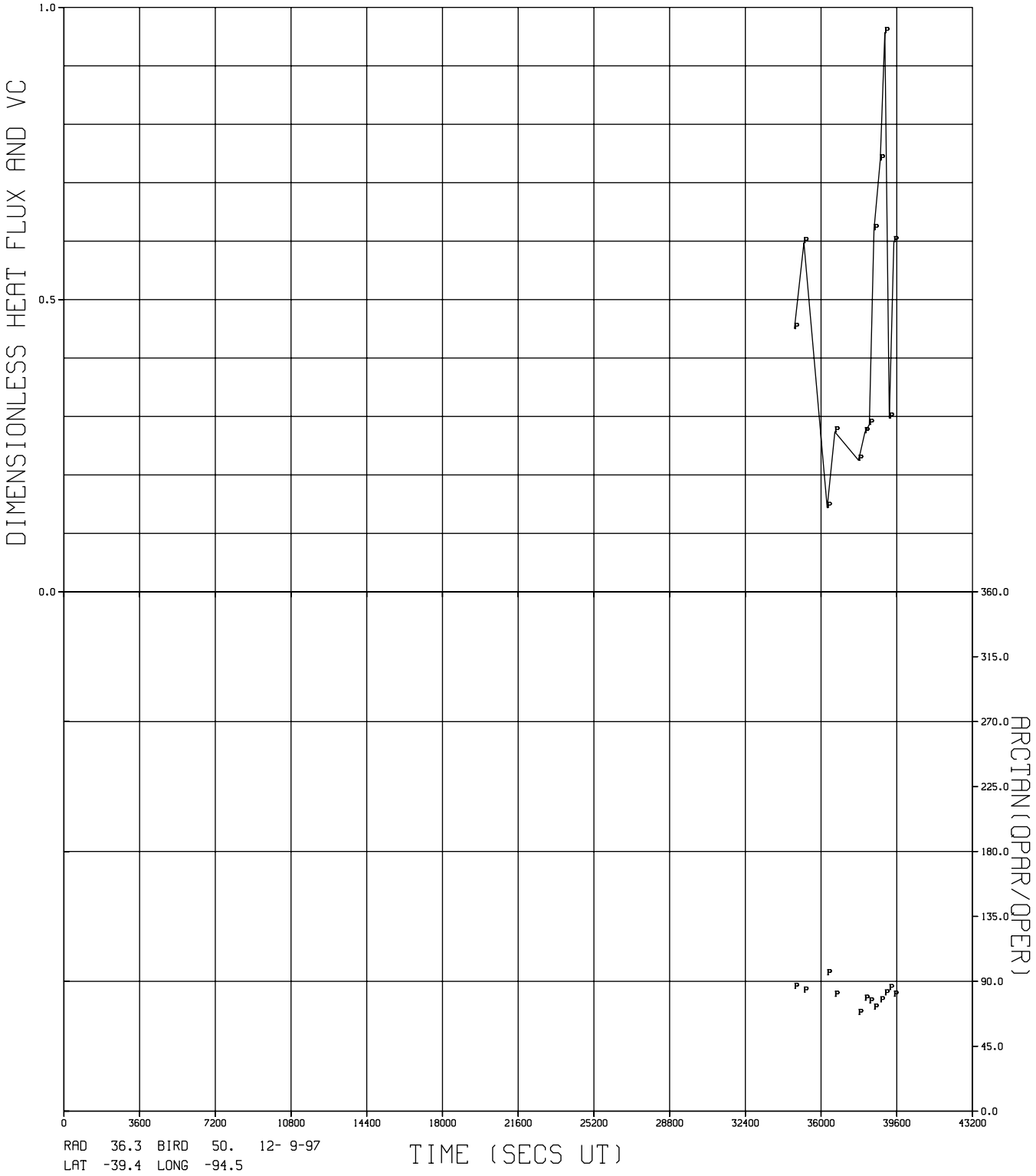

VELOCITY
VELOCITY DIFFERENCE
TIME (SECS UT)
1000
900
800
700
600
500
400
300
200
100
0
100
80
60
40
20
0
-20
-40
-60
-80
-100
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
RAD 36.3 BIRD 50. 12- 9-97
LAT -39.4 LONG -94.5

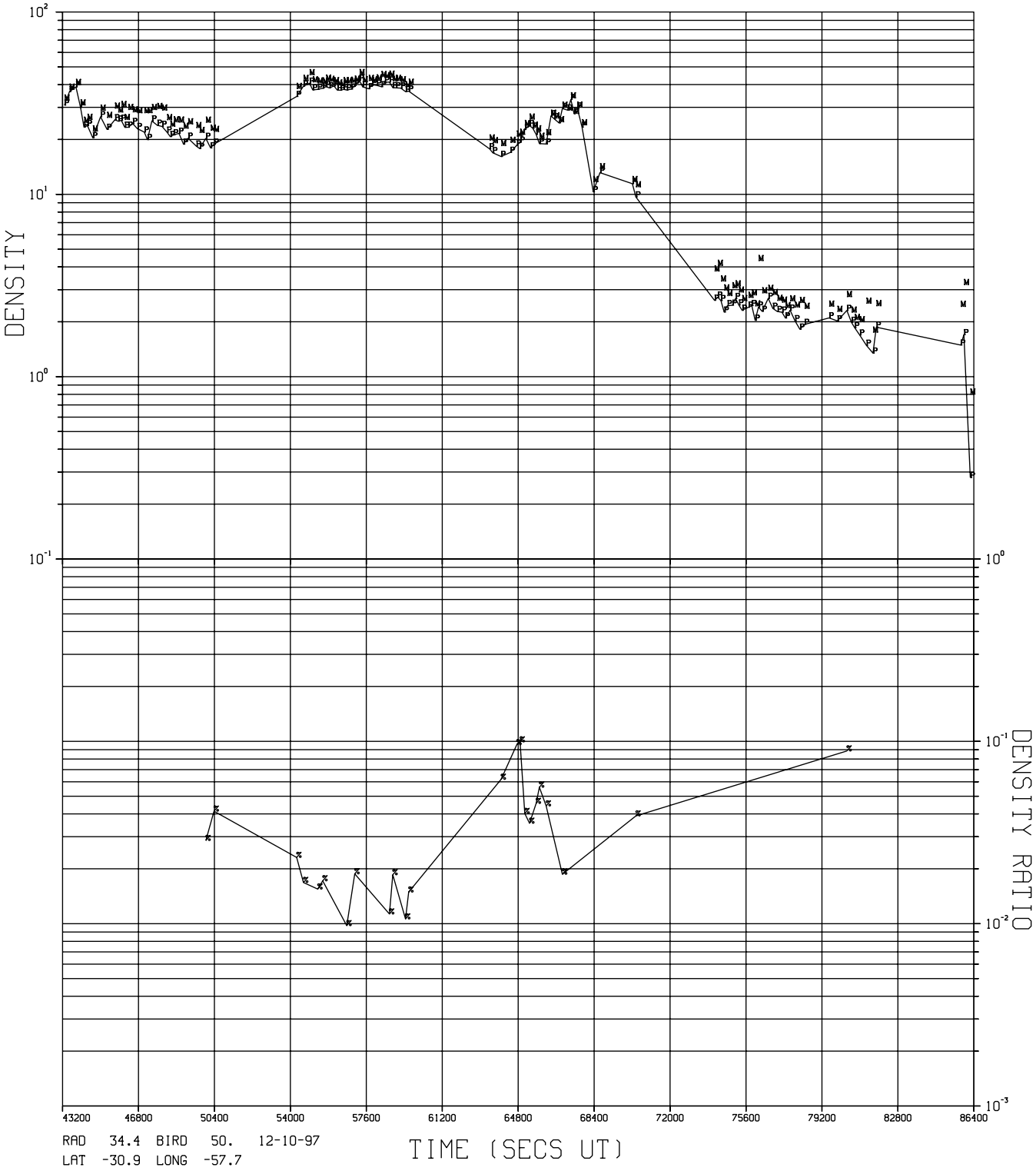

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
RAD 36.3 BIRD 50. 12- 9-97
LAT -39.4 LONG -94.5

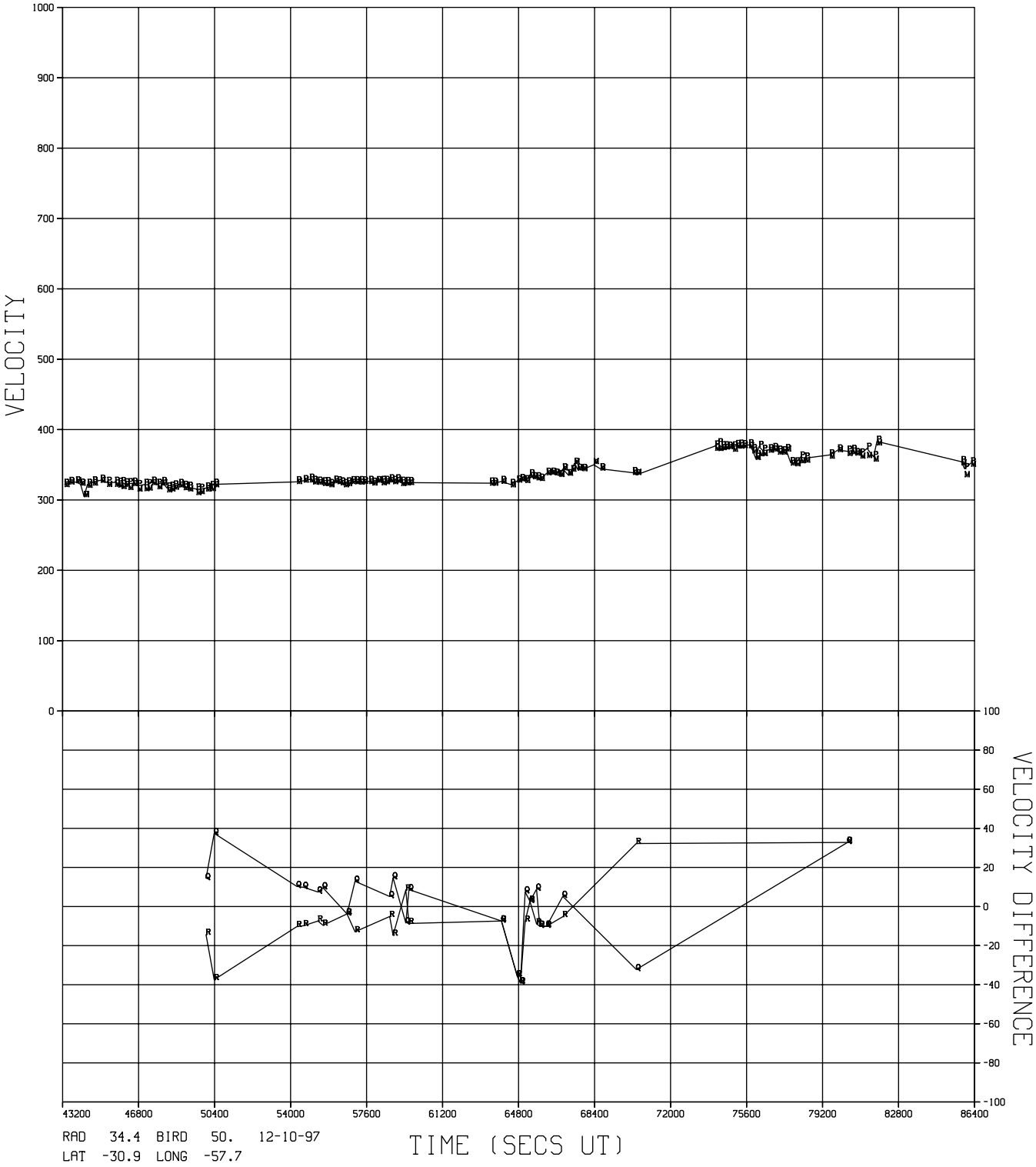

TEMPERATURE
10^7
10^6
10^5
10^4
TEMPERATURE RATIO
0
1
2
3
4
5
6
7
8
9
10
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
TIME (SECS UT)
RAD 36.3 BIRD 50. 12- 9-97
LAT -39.4 LONG -94.5

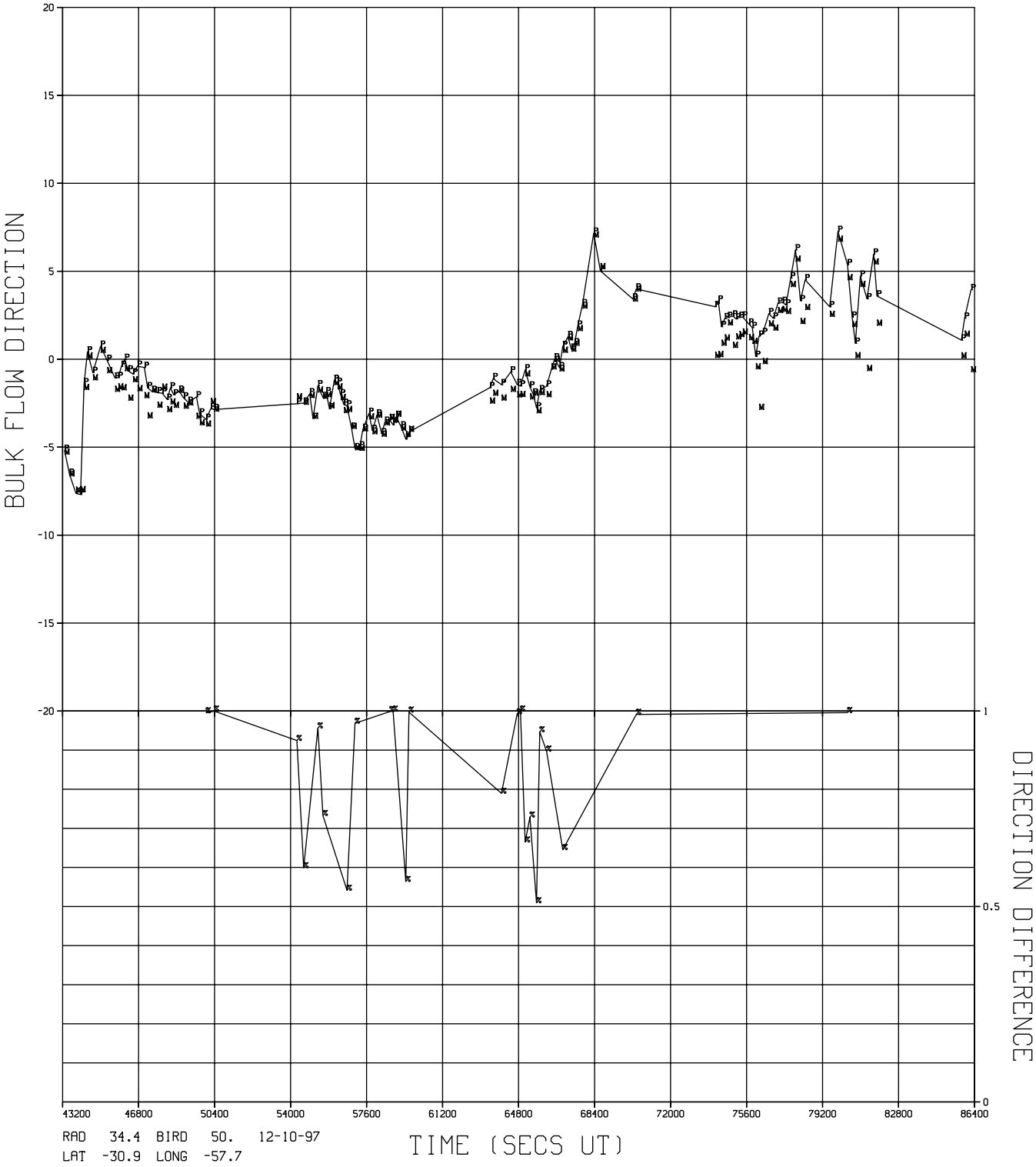

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 36.3 BIRD 50. 12- 9-97
LAT -39.4 LONG -94.5

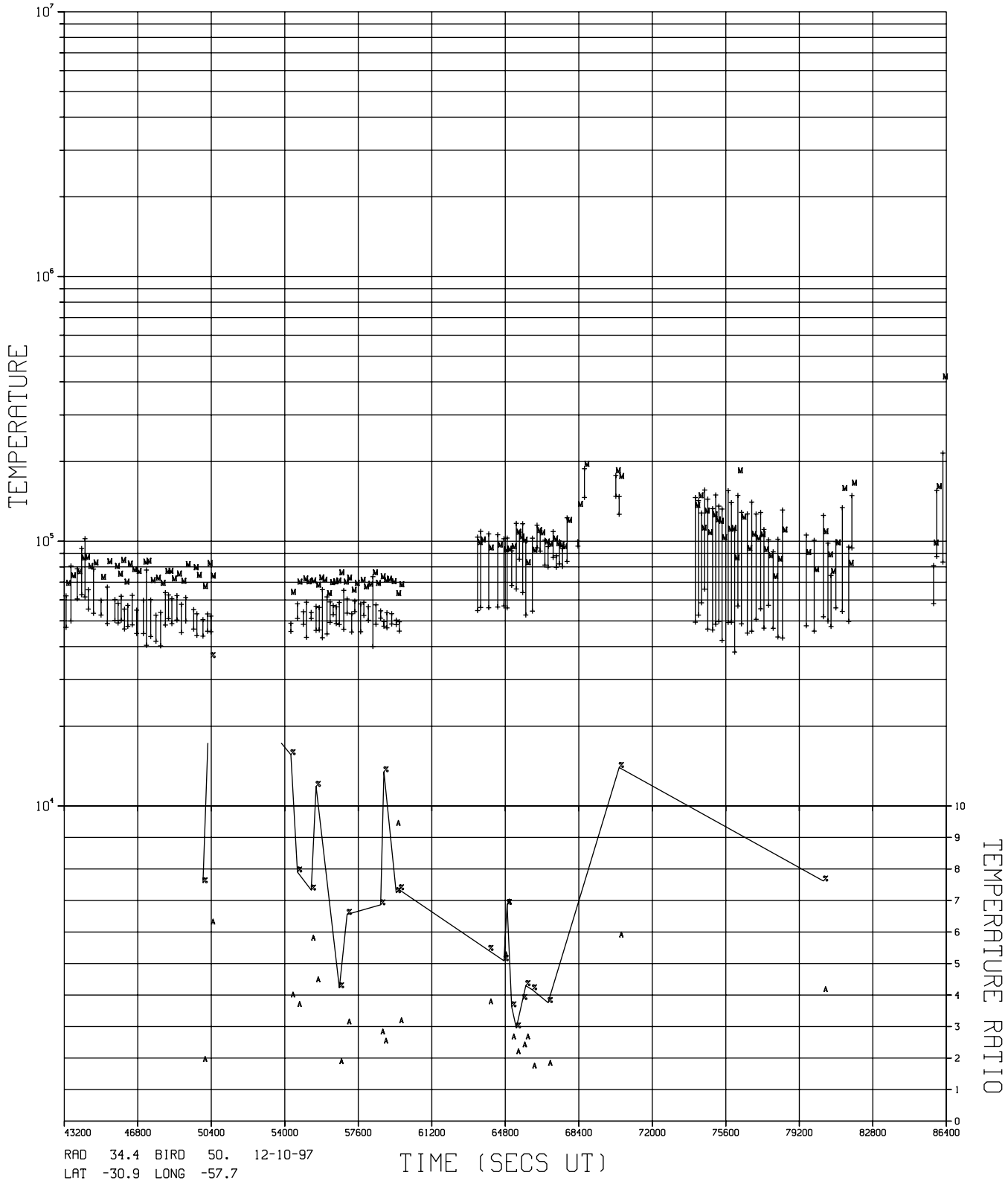

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
RAD 36.3 BIRD 50. 12- 9-97
LAT -39.4 LONG -94.5

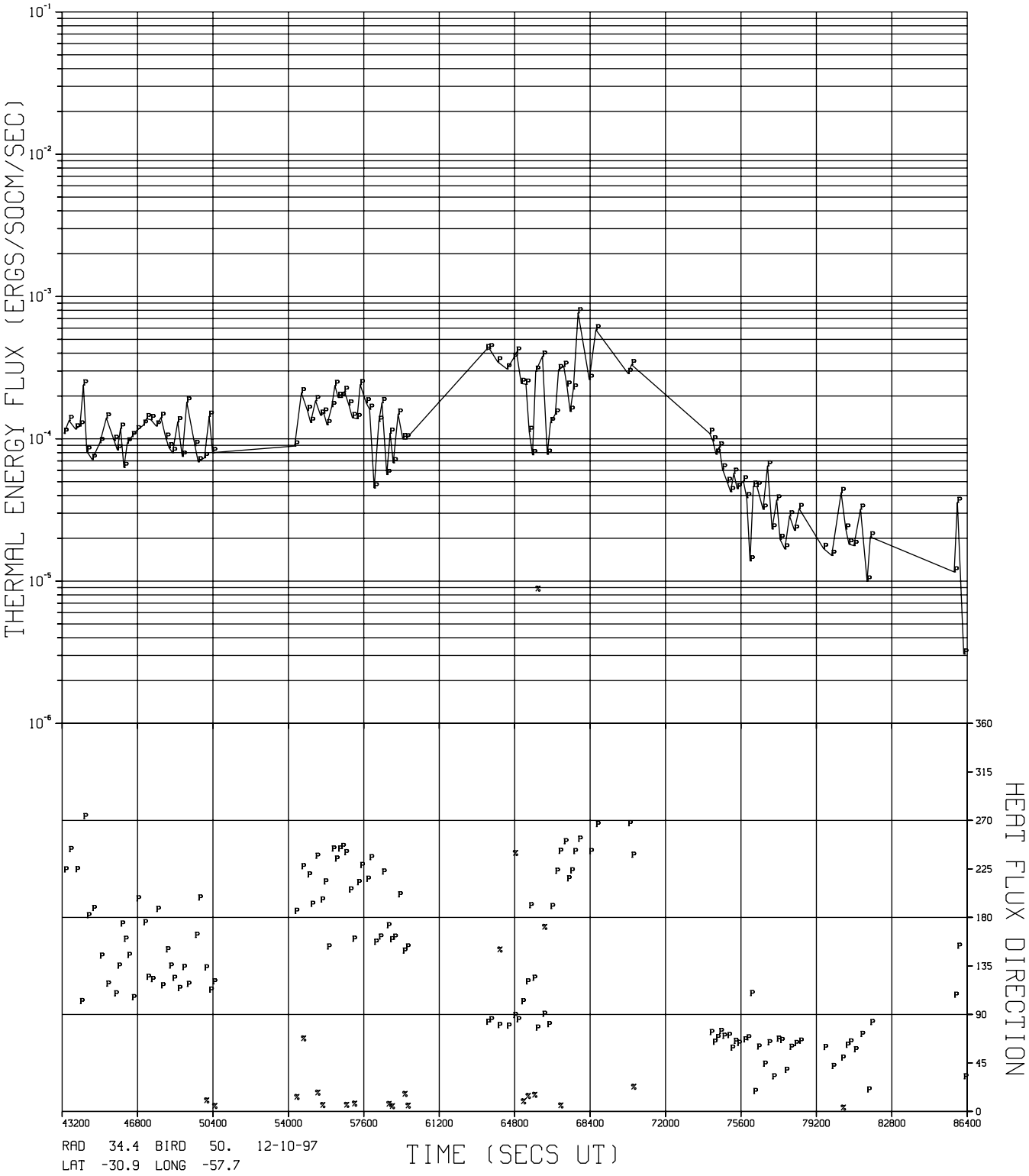

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
TIME (SECS UT)
RAD 36.3 BIRD 50. 12- 9-97
LAT -39.4 LONG -94.5

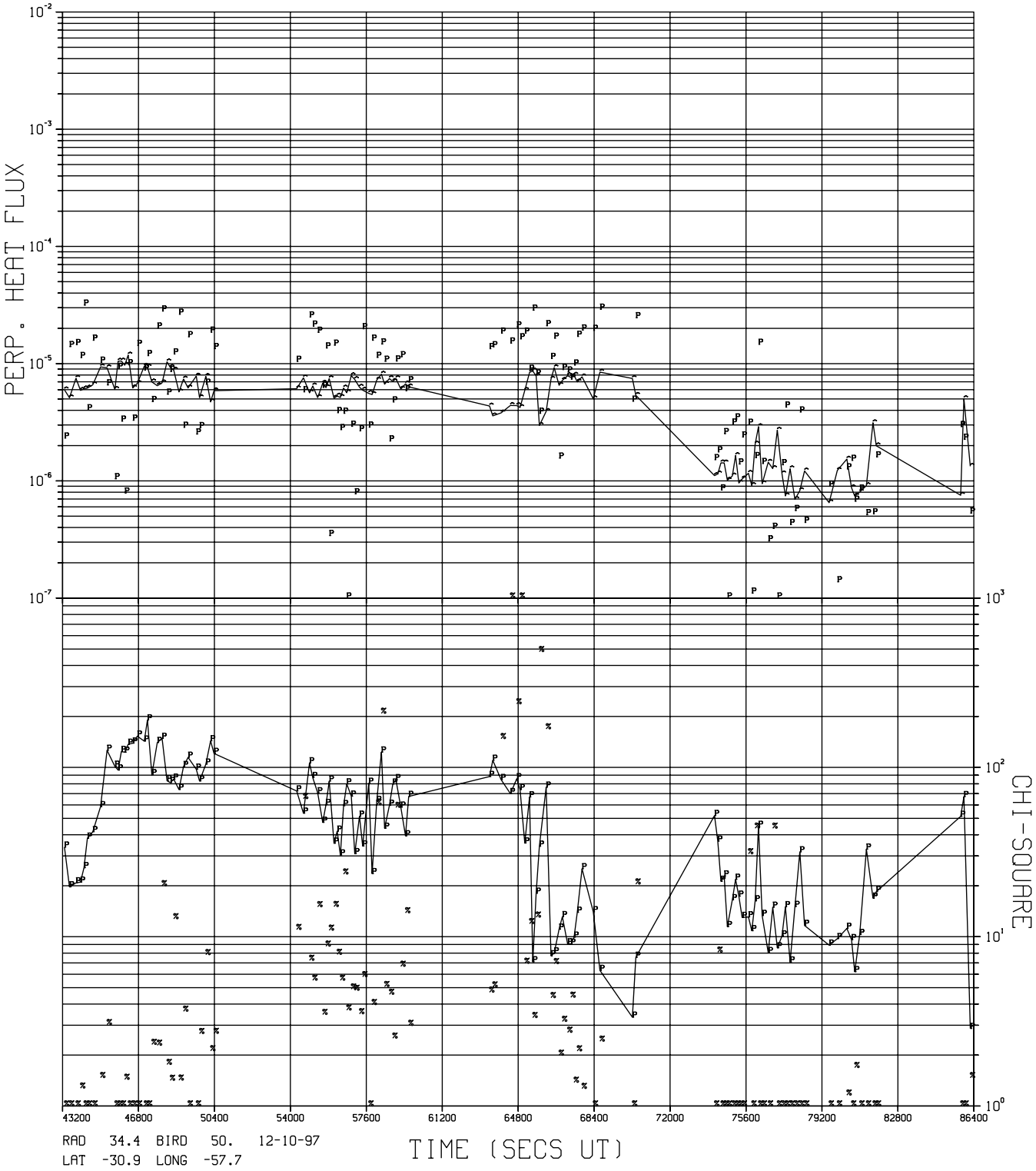

DENSITY
DENSITY RATIO
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 34.4 BIRD 50. 12-10-97
LAT -30.9 LONG -57.7

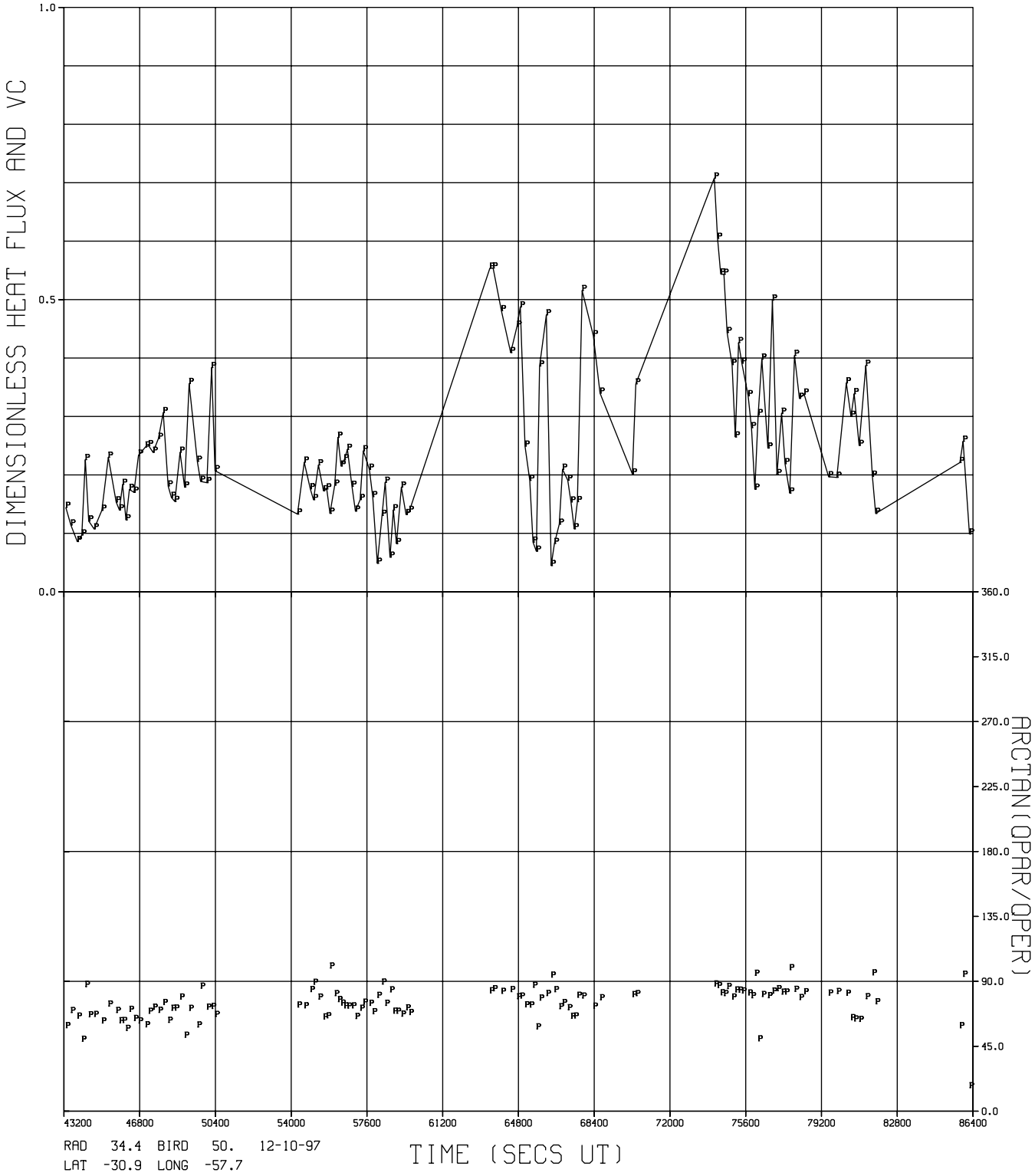

VELOCITY
VELOCITY DIFFERENCE
TIME (SECS UT)
RAD 34.4 BIRD 50. 12-10-97
LAT -30.9 LONG -57.7

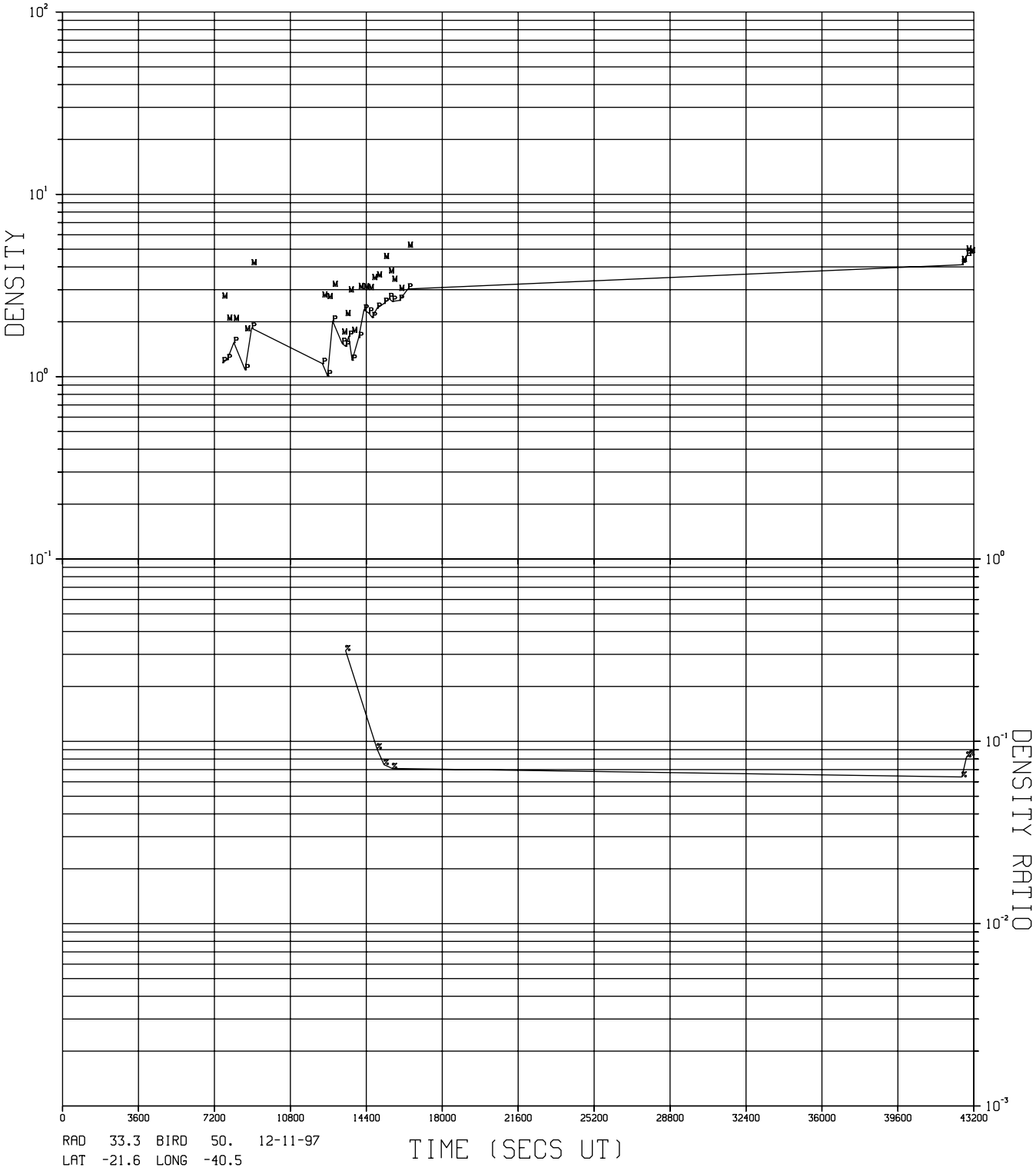

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 34.4 BIRD 50. 12-10-97
LAT -30.9 LONG -57.7

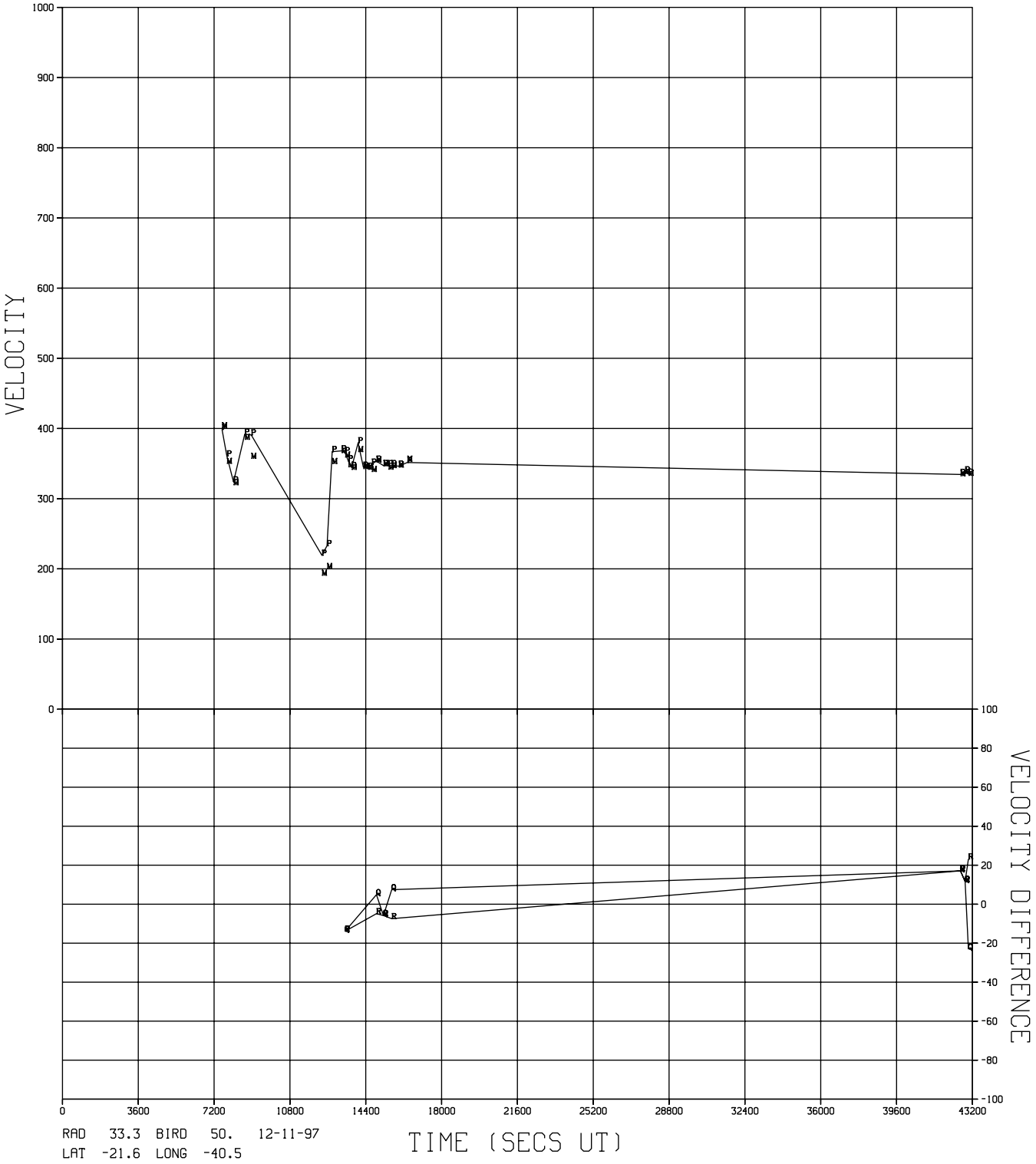

TEMPERATURE
TEMPERATURE RATIO
TIME (SECS UT)
RAD 34.4 BIRD 50. 12-10-97
LAT -30.9 LONG -57.7

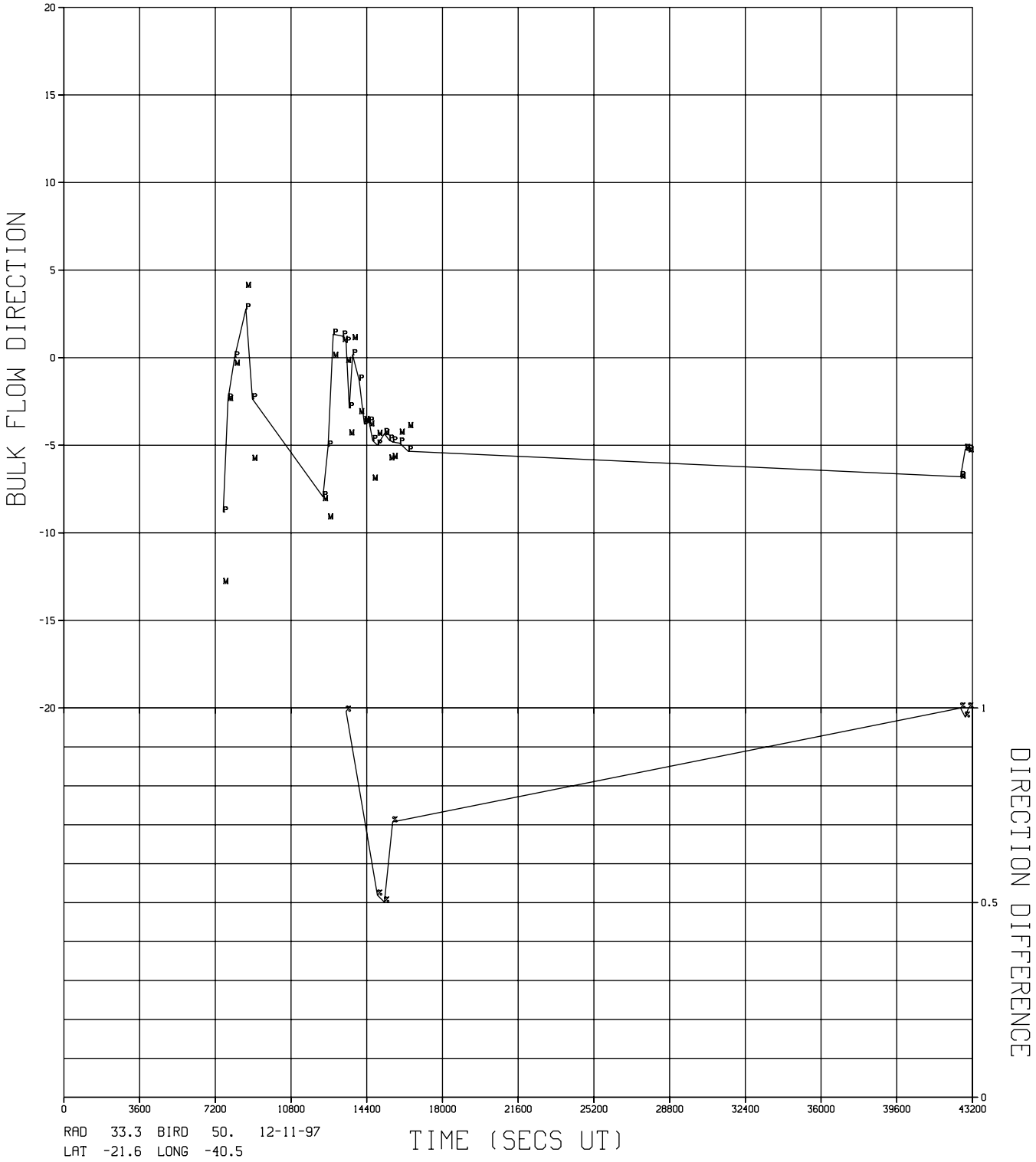

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 34.4 BIRD 50. 12-10-97
LAT -30.9 LONG -57.7

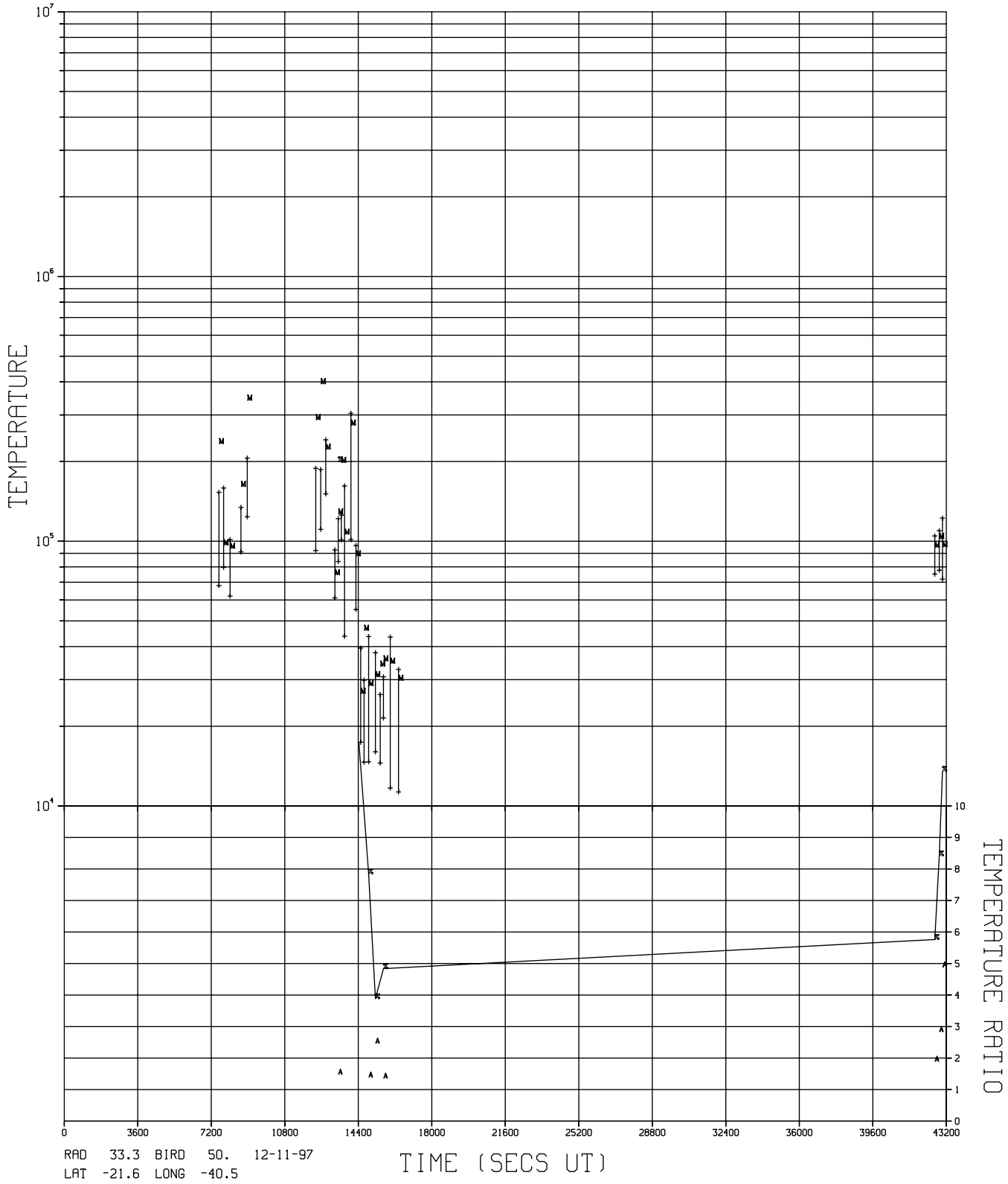

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
RAD 34.4 BIRD 50. 12-10-97
LAT -30.9 LONG -57.7

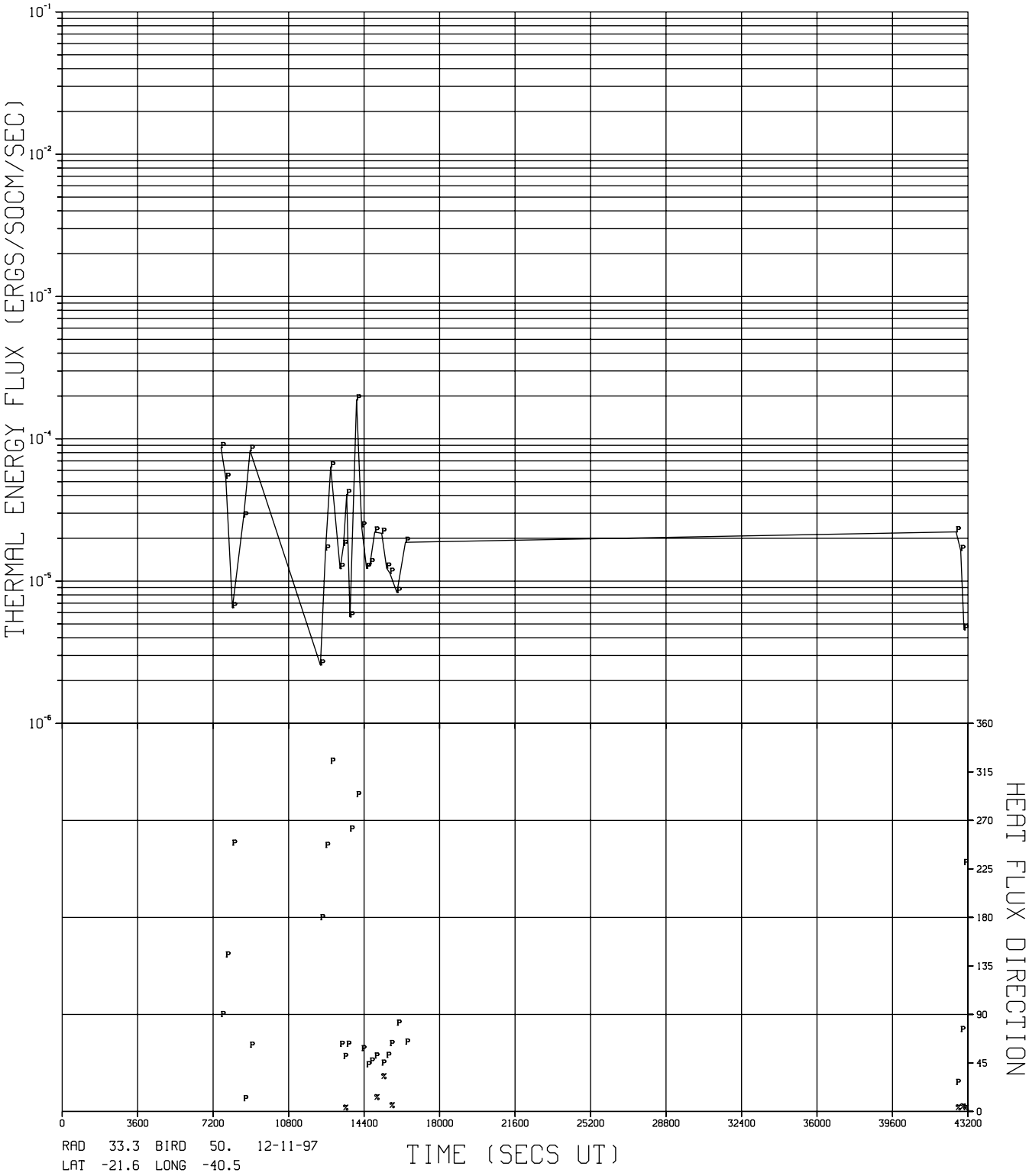

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
TIME (SECS UT)
RAD 34.4 BIRD 50. 12-10-97
LAT -30.9 LONG -57.7

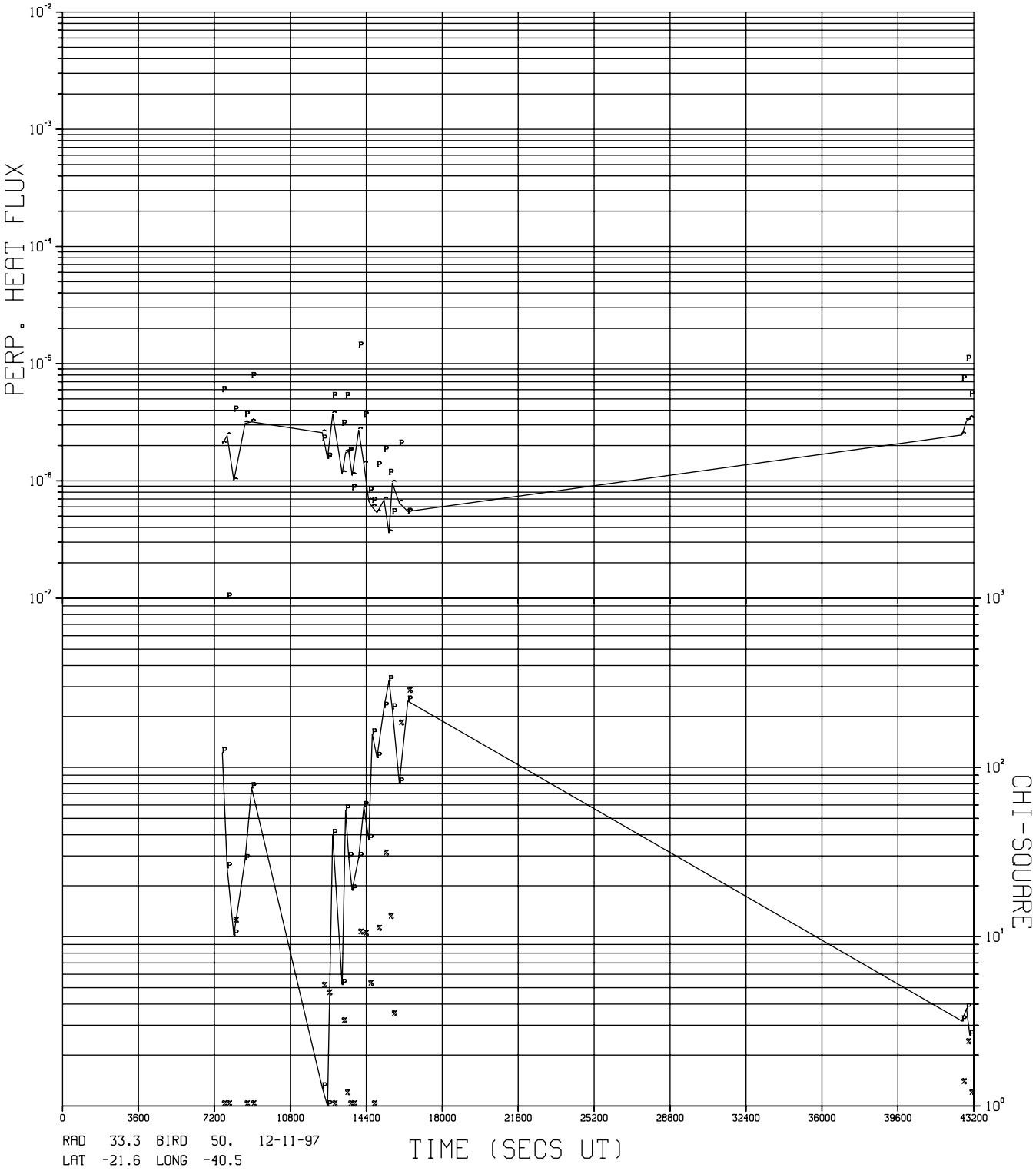

DENSITY
DENSITY RATIO
TIME (SECS UT)
10^2
10^1
10^0
10^{-1}
10^{-2}
10^{-3}
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
RAD 33.3 BIRD 50. 12-11-97
LAT -21.6 LONG -40.5

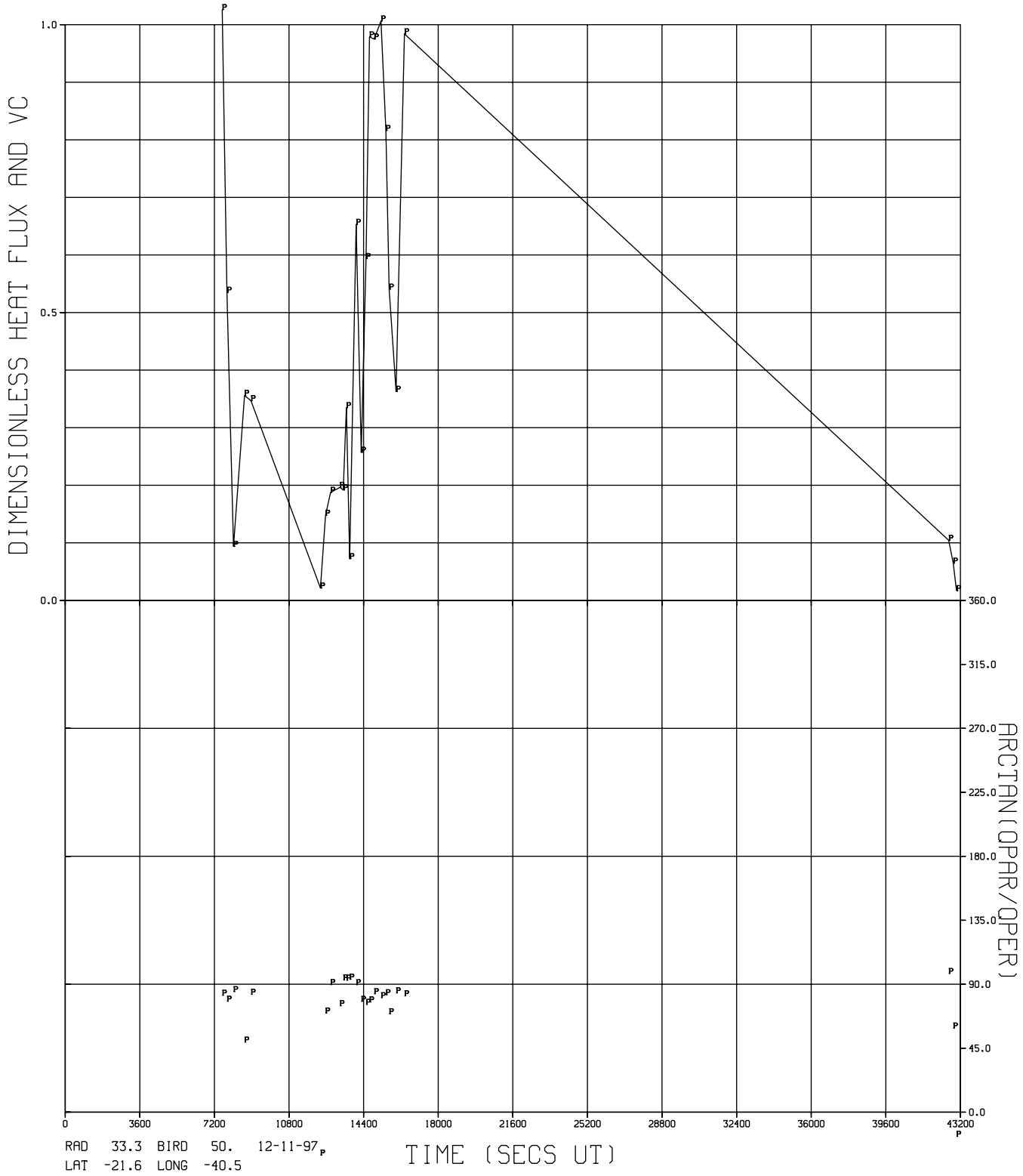

VELOCITY
VELOCITY DIFFERENCE
TIME (SECS UT)
RAD 33.3 BIRD 50. 12-11-97
LAT -21.6 LONG -40.5

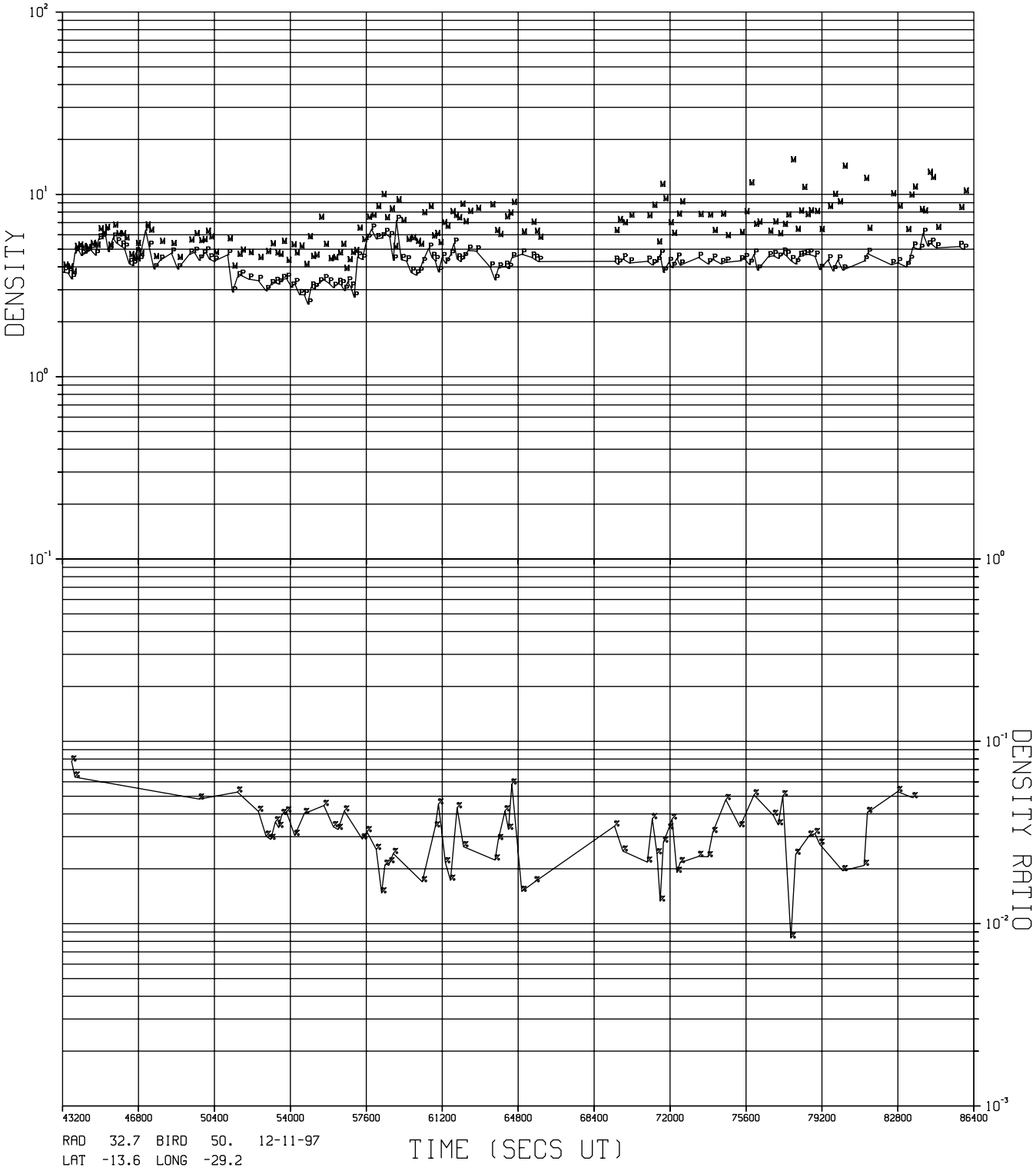

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
RAD 33.3 BIRD 50. 12-11-97
LAT -21.6 LONG -40.5

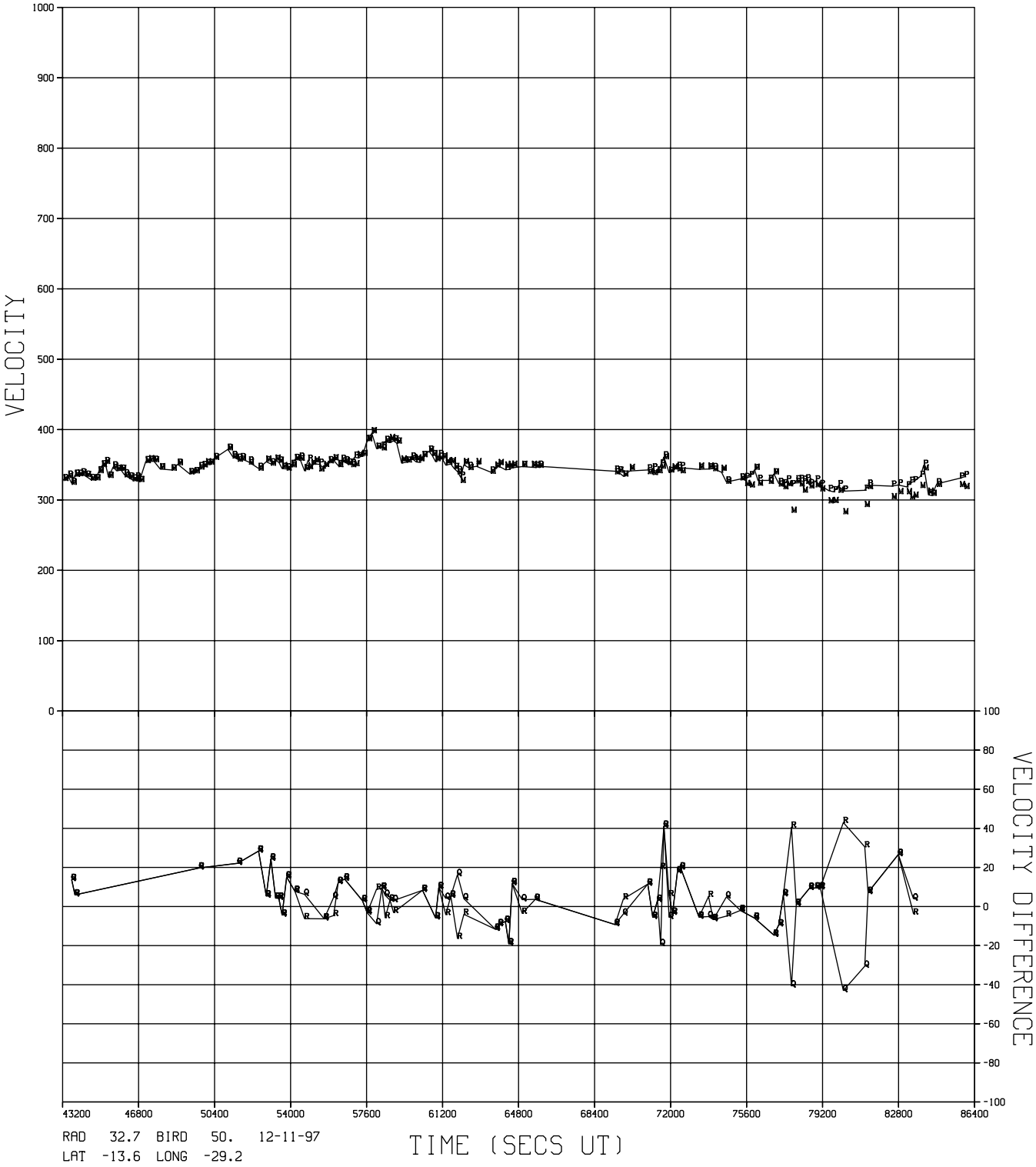

TEMPERATURE
TEMPERATURE RATIO
TIME (SECS UT)
RAD 33.3 BIRD 50. 12-11-97
LAT -21.6 LONG -40.5

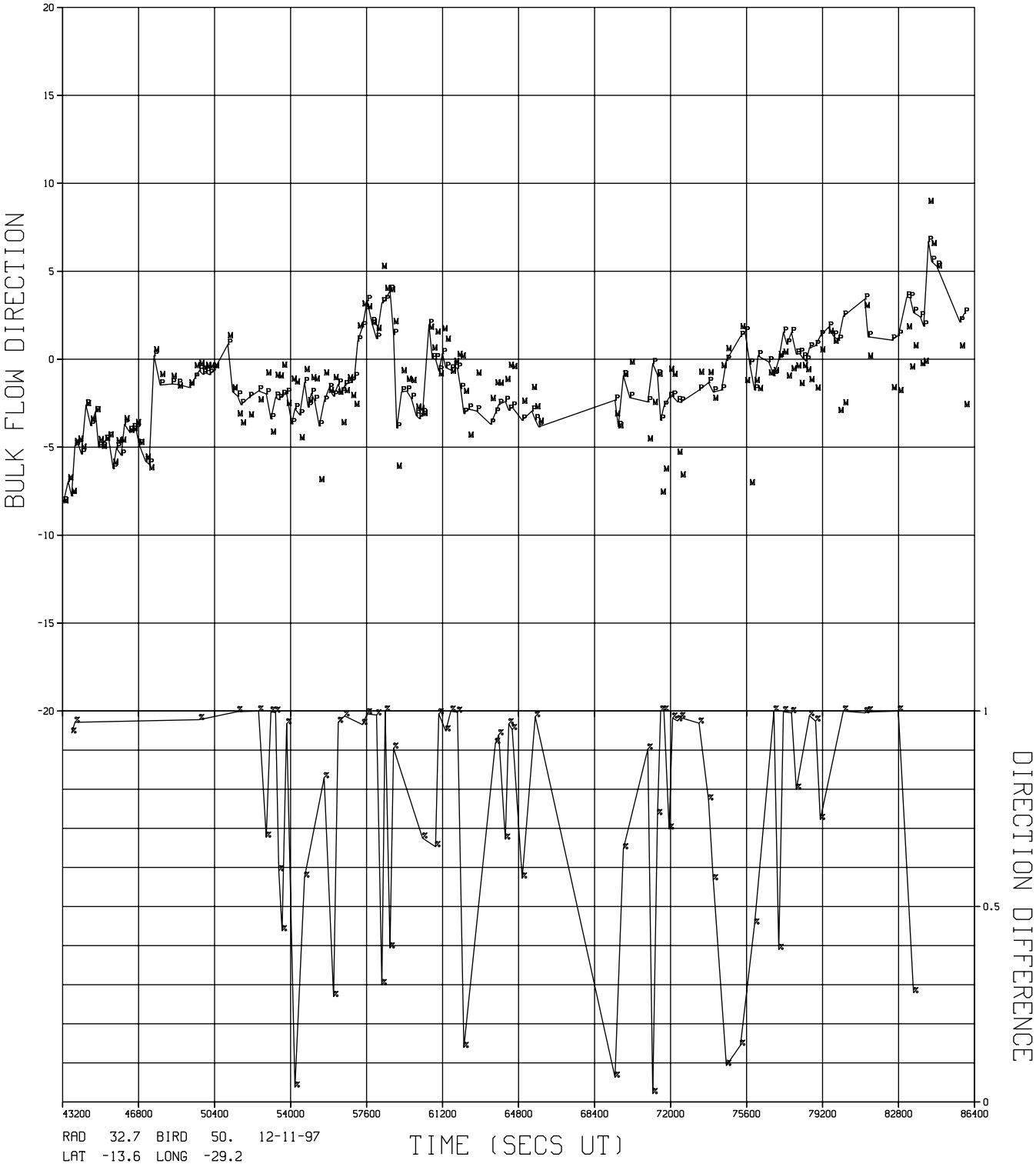

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 33.3 BIRD 50. 12-11-97
LAT -21.6 LONG -40.5

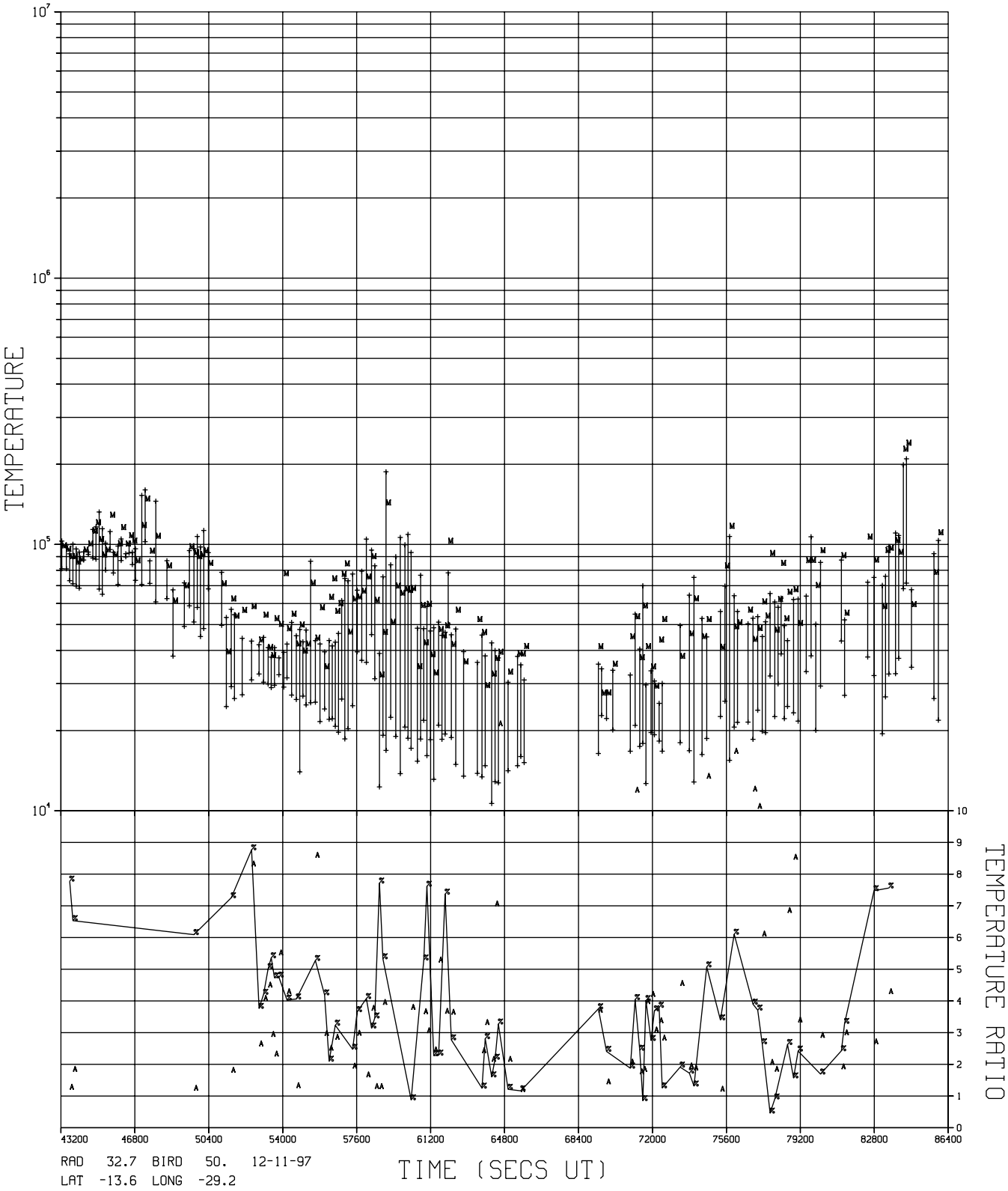

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
RAD 33.3 BIRD 50. 12-11-97
LAT -21.6 LONG -40.5

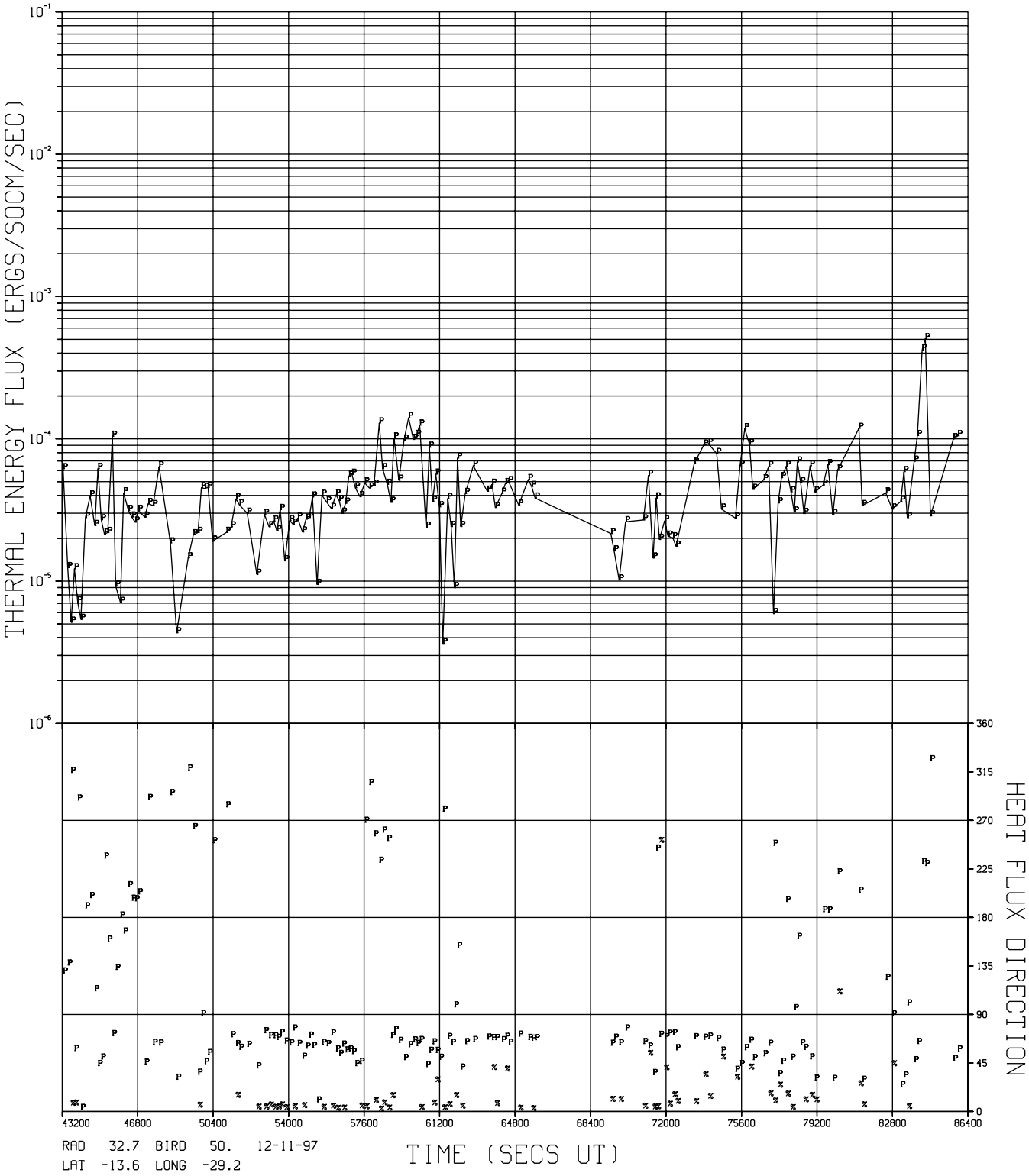

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
TIME (SECS UT)
RAD 33.3 BIRD 50. 12-11-97
LAT -21.6 LONG -40.5

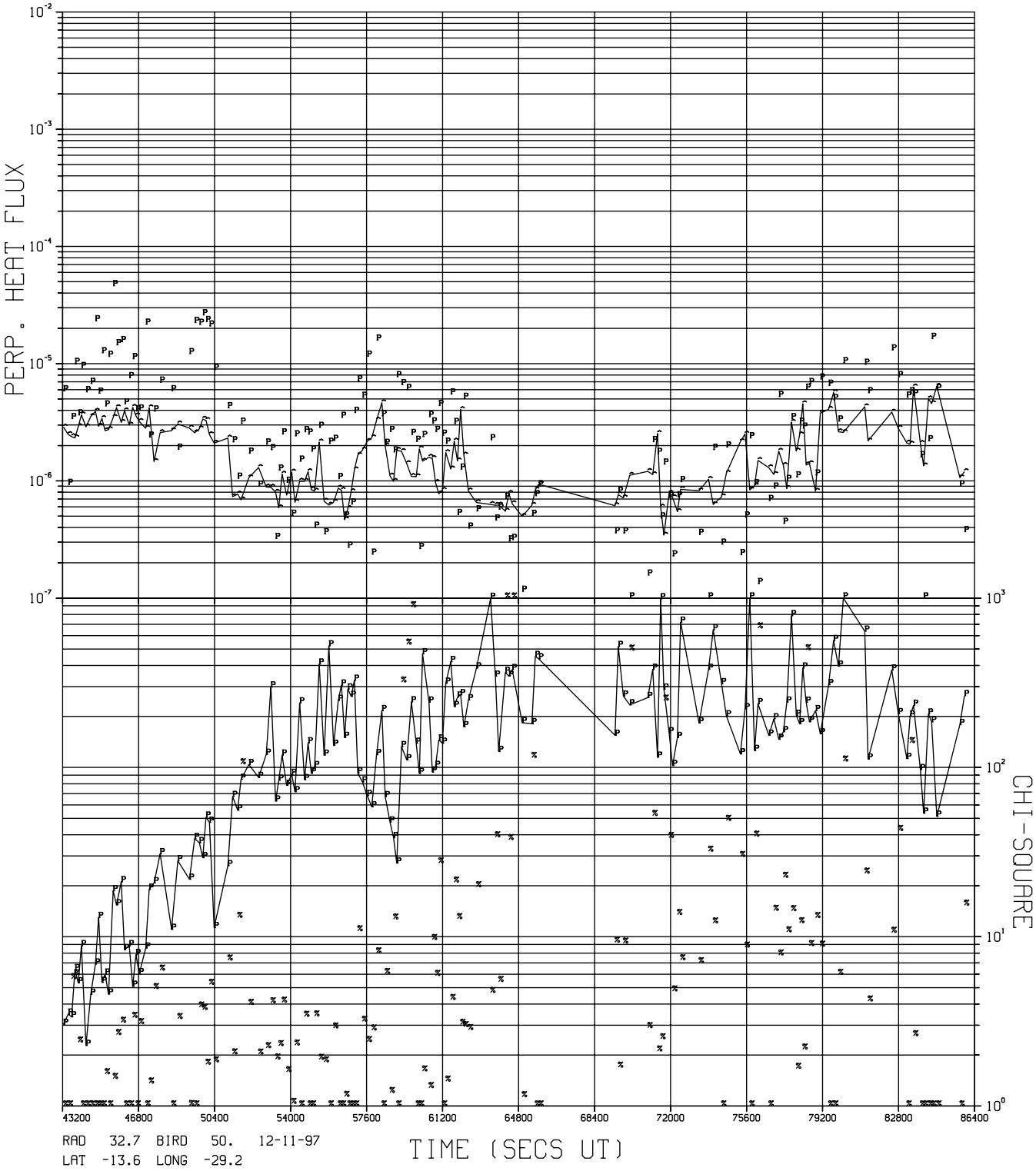

DENSITY
DENSITY RATIO
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 32.7 BIRD 50. 12-11-97
LAT -13.6 LONG -29.2

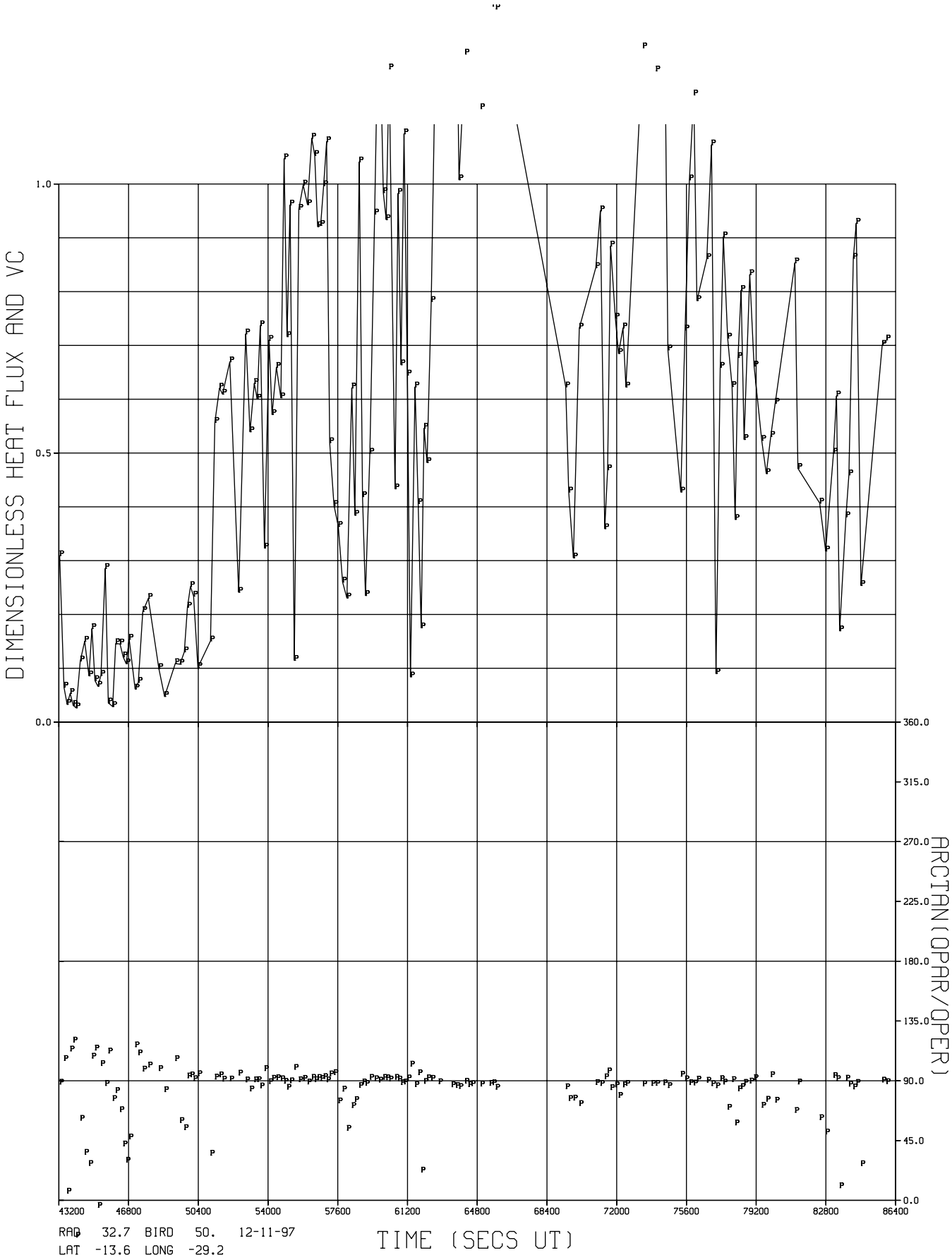

VELOCITY
1000
900
800
700
600
500
400
300
200
100
0
VELOCITY DIFFERENCE
100
80
60
40
20
0
-20
-40
-60
-80
-100
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
TIME (SECS UT)
RAD 32.7 BIRD 50. 12-11-97
LAT -13.6 LONG -29.2

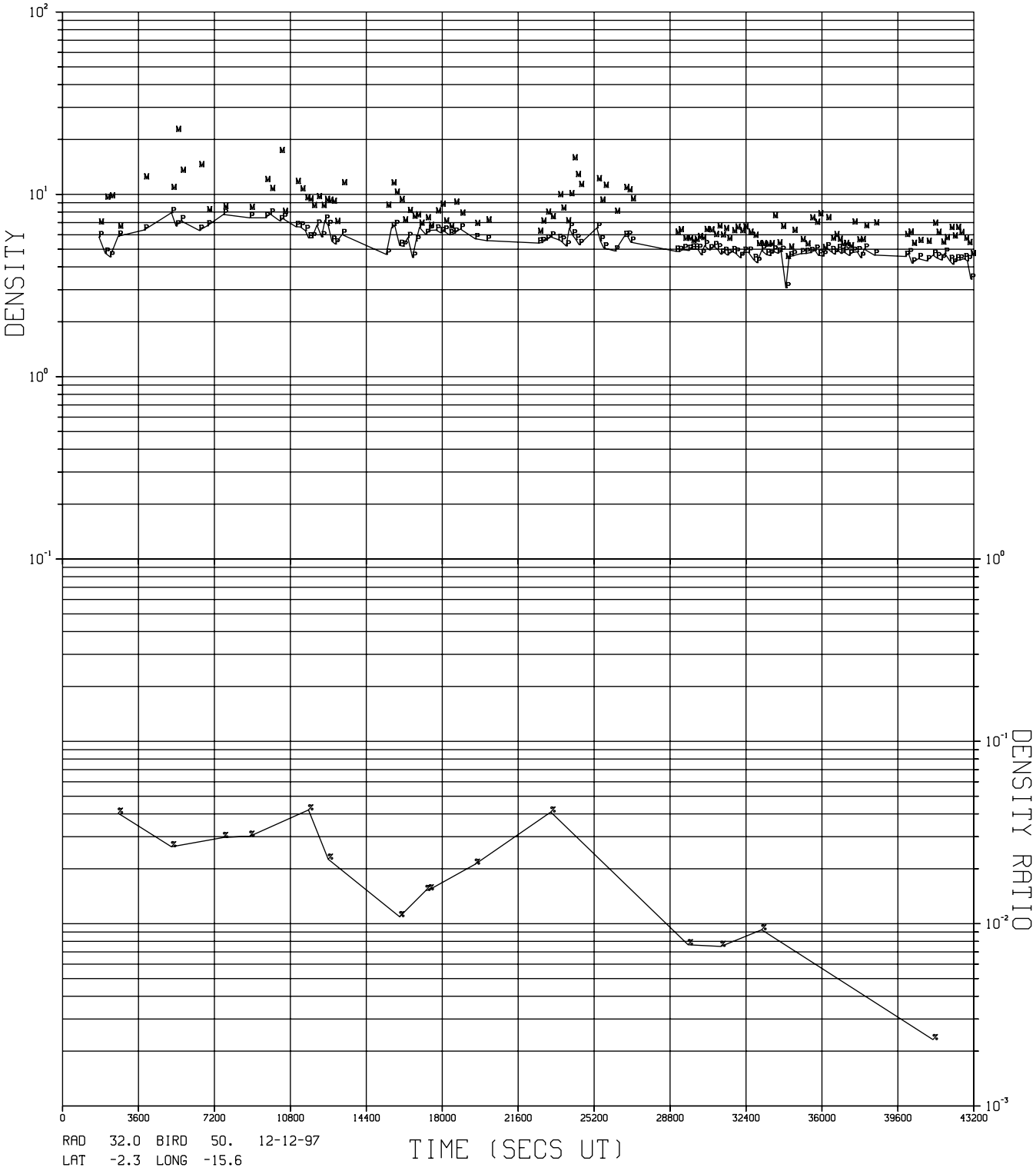

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 32.7 BIRD 50. 12-11-97
LAT -13.6 LONG -29.2

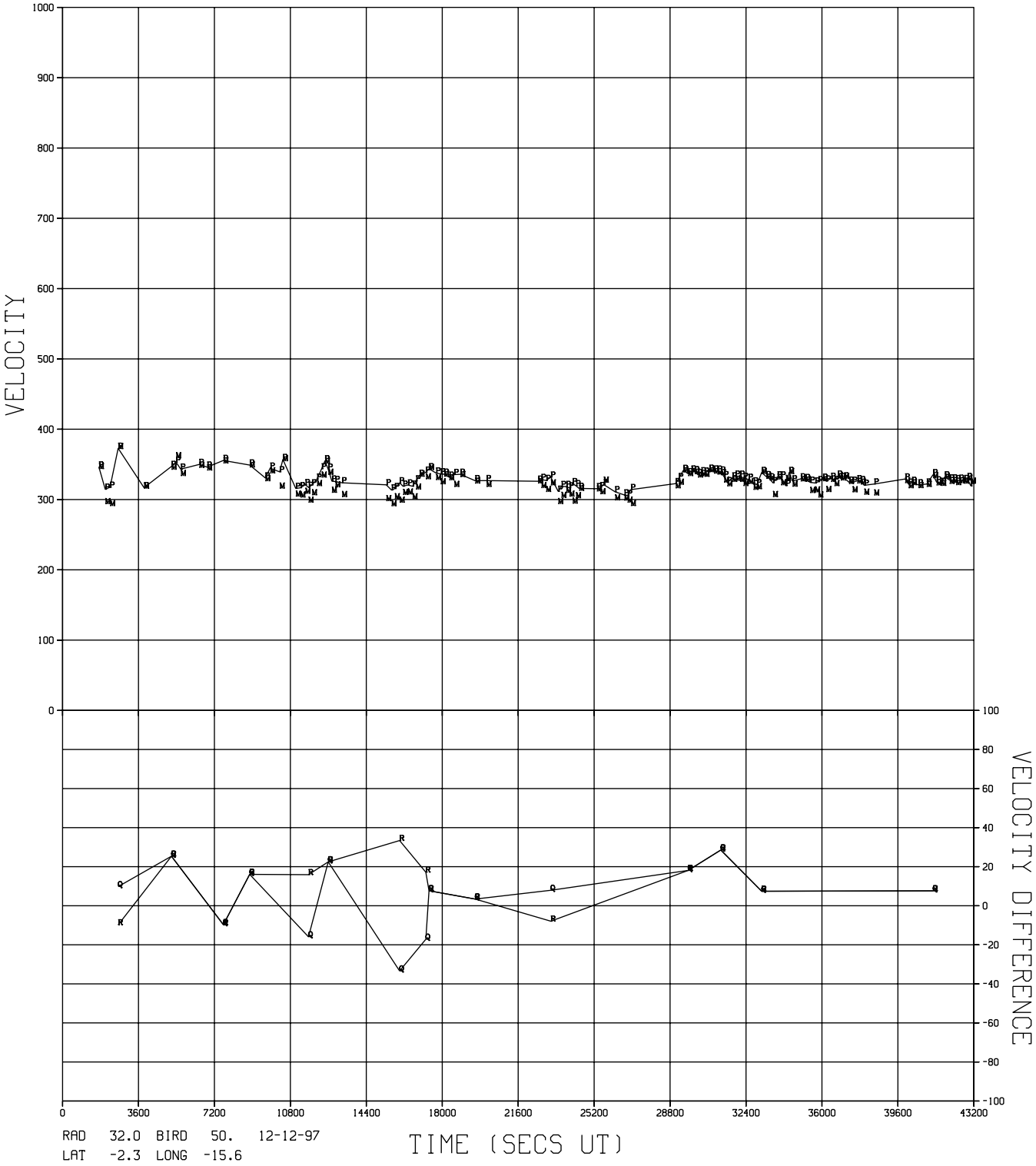

TEMPERATURE
TEMPERATURE RATIO
TIME (SECS UT)
RAD 32.7 BIRD 50. 12-11-97
LAT -13.6 LONG -29.2

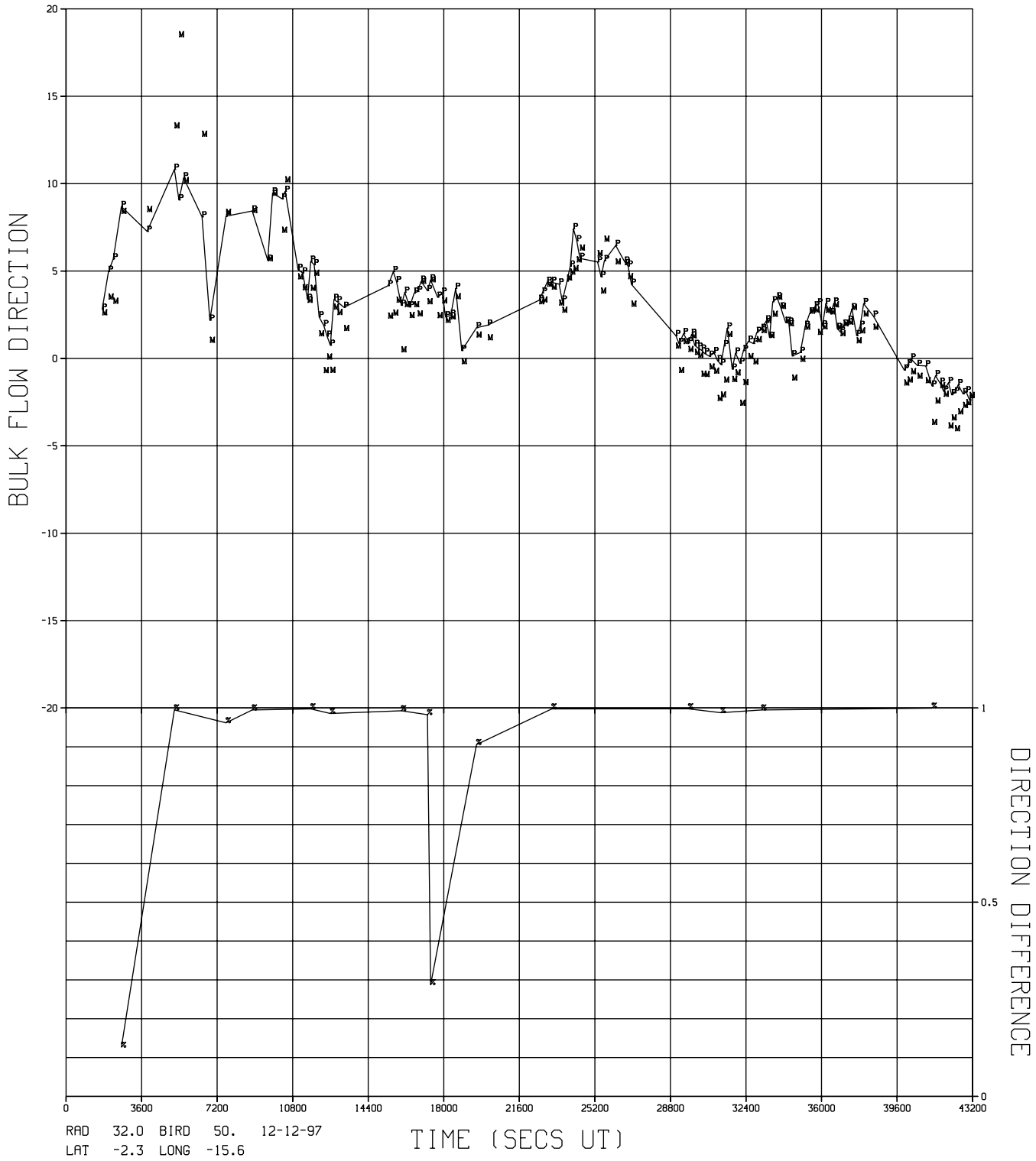

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 32.7 BIRD 50. 12-11-97
LAT -13.6 LONG -29.2

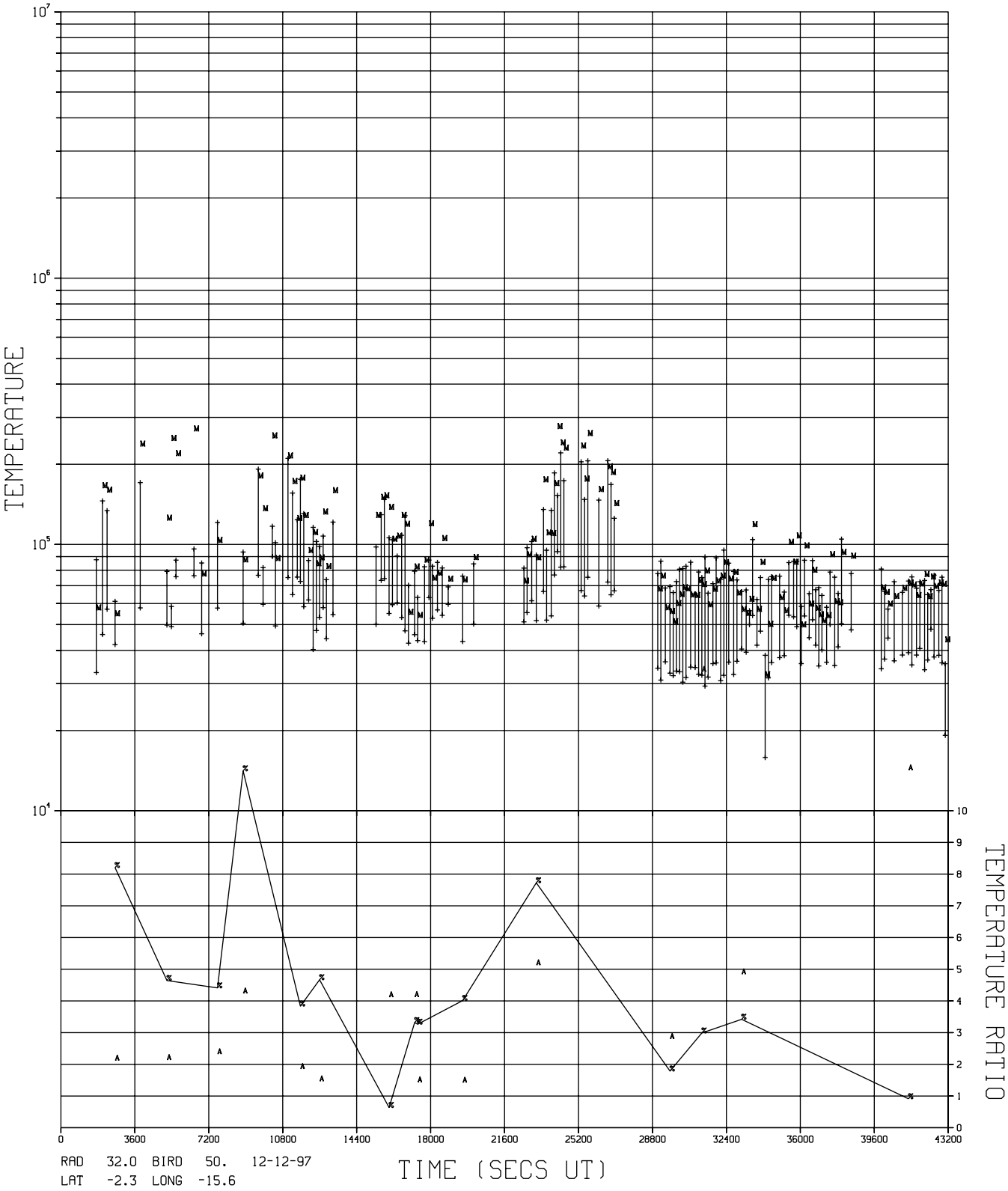

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
RAD 32.7 BIRD 50. 12-11-97
LAT -13.6 LONG -29.2

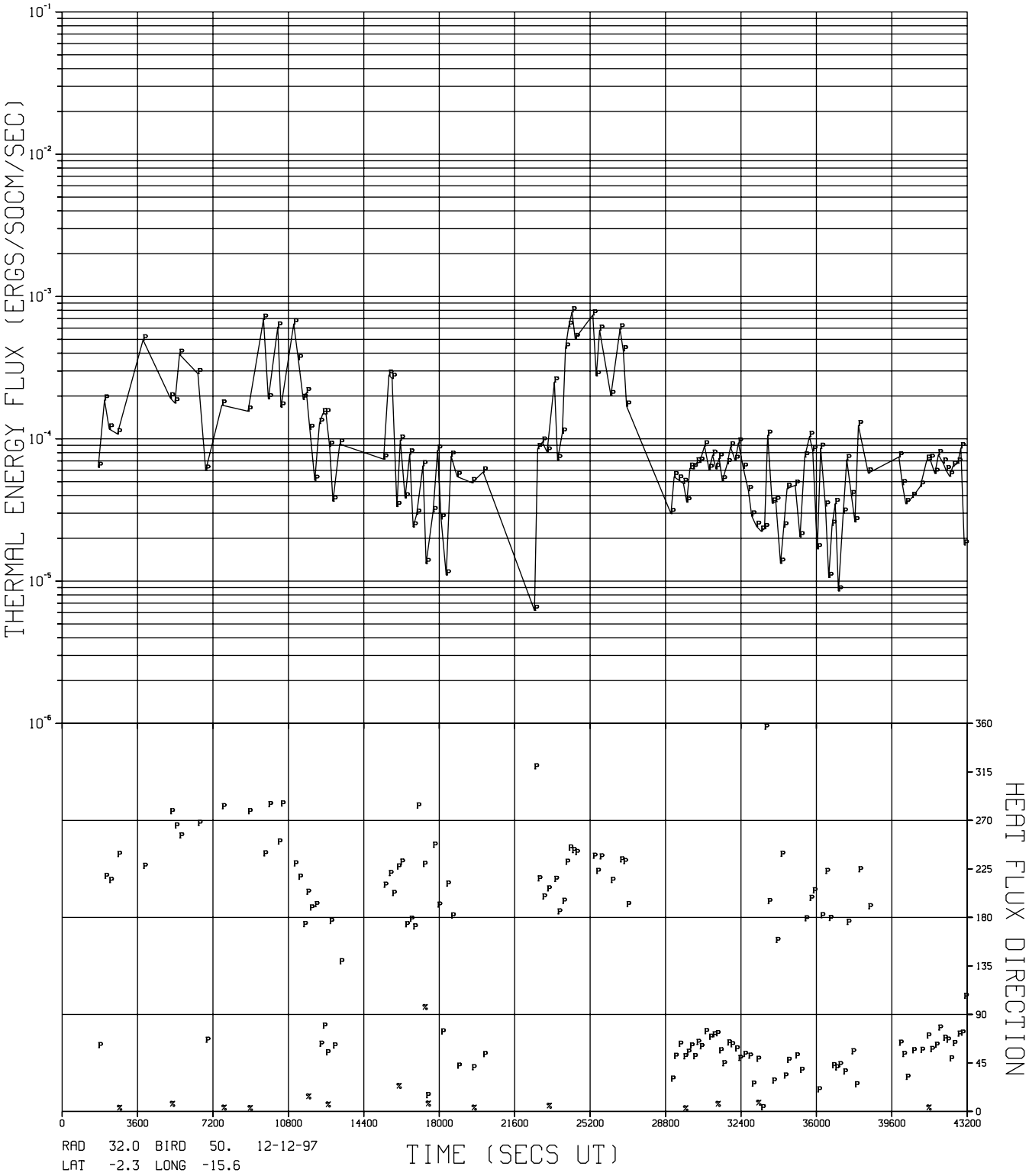

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
TIME (SECS UT)
RAD 32.7 BIRD 50. 12-11-97
LAT -13.6 LONG -29.2

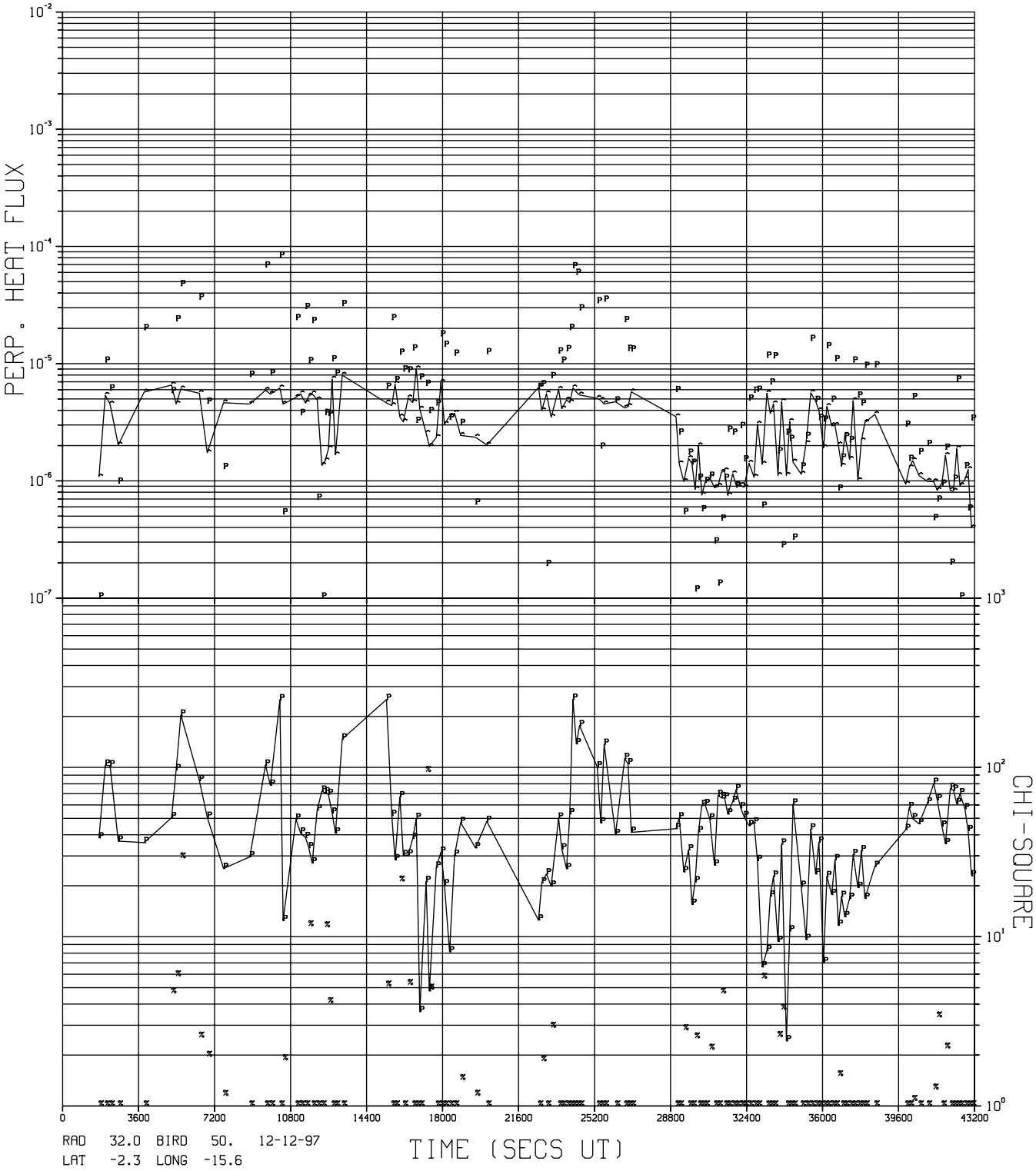

DENSITY
DENSITY RATIO
TIME (SECS UT)
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
RAD 32.0 BIRD 50. 12-12-97
LAT -2.3 LONG -15.6

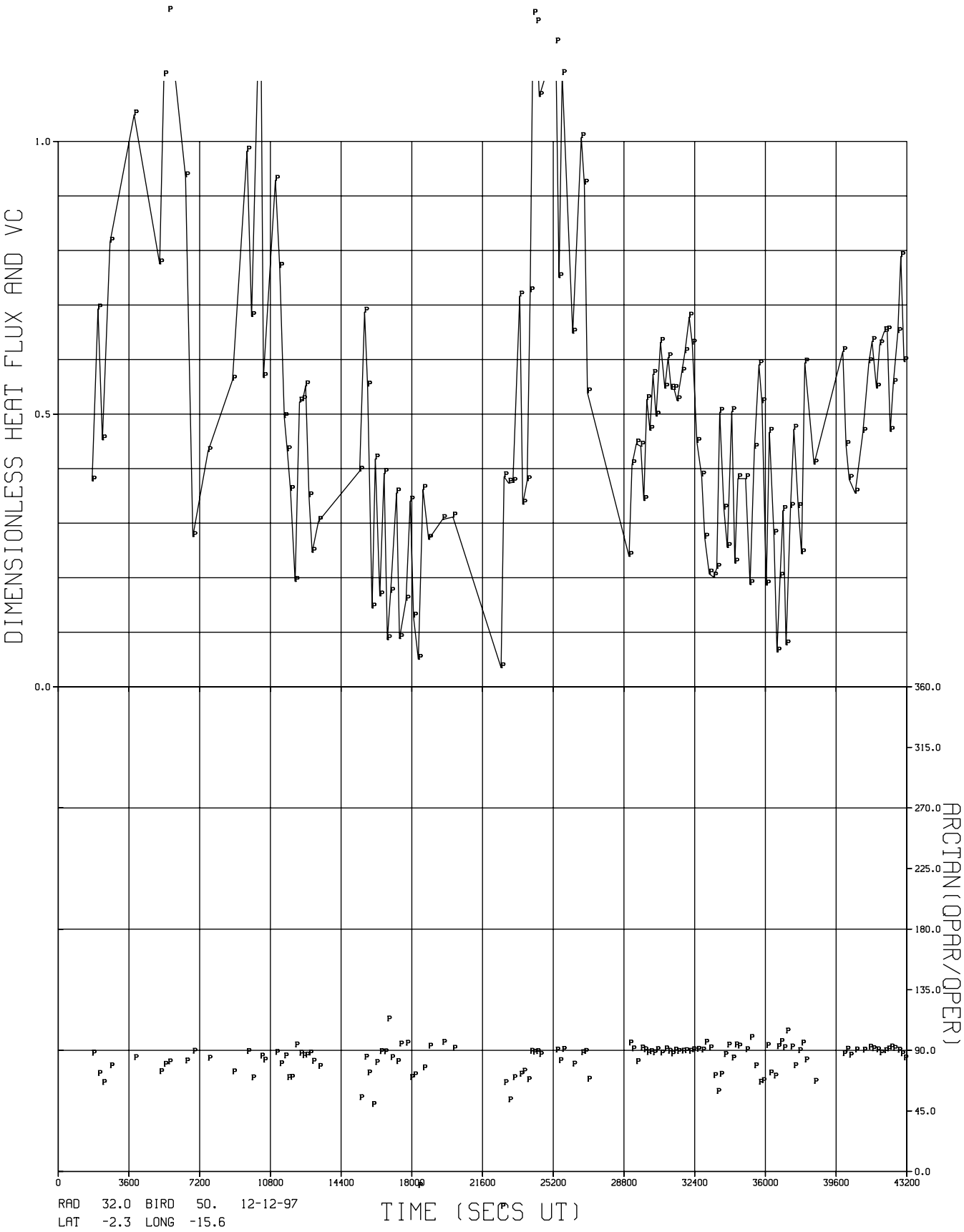

VELOCITY
VELOCITY DIFFERENCE
TIME (SECS UT)
RAD 32.0 BIRD 50. 12-12-97
LAT -2.3 LONG -15.6

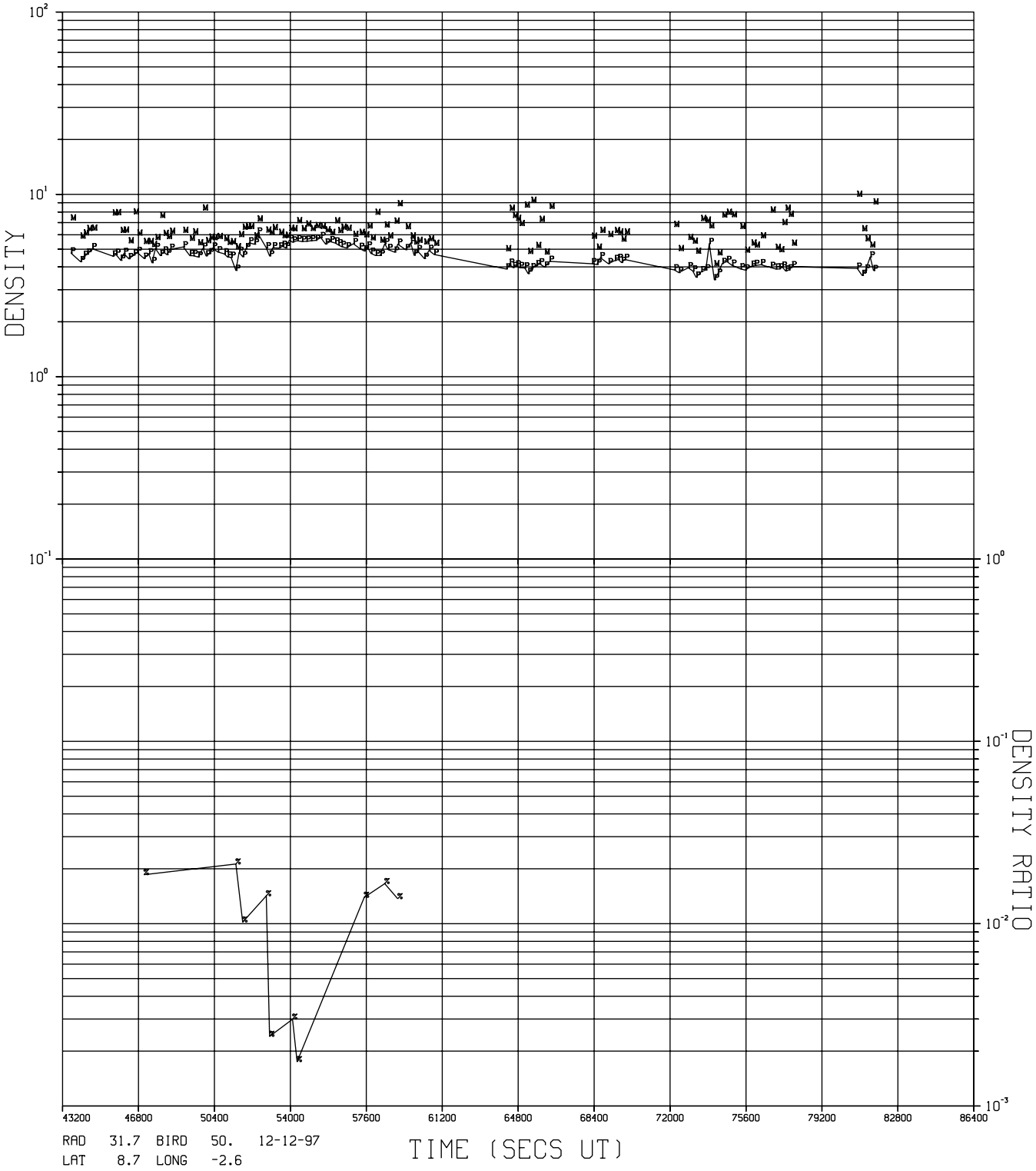

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
RAD 32.0 BIRD 50. 12-12-97
LAT -2.3 LONG -15.6

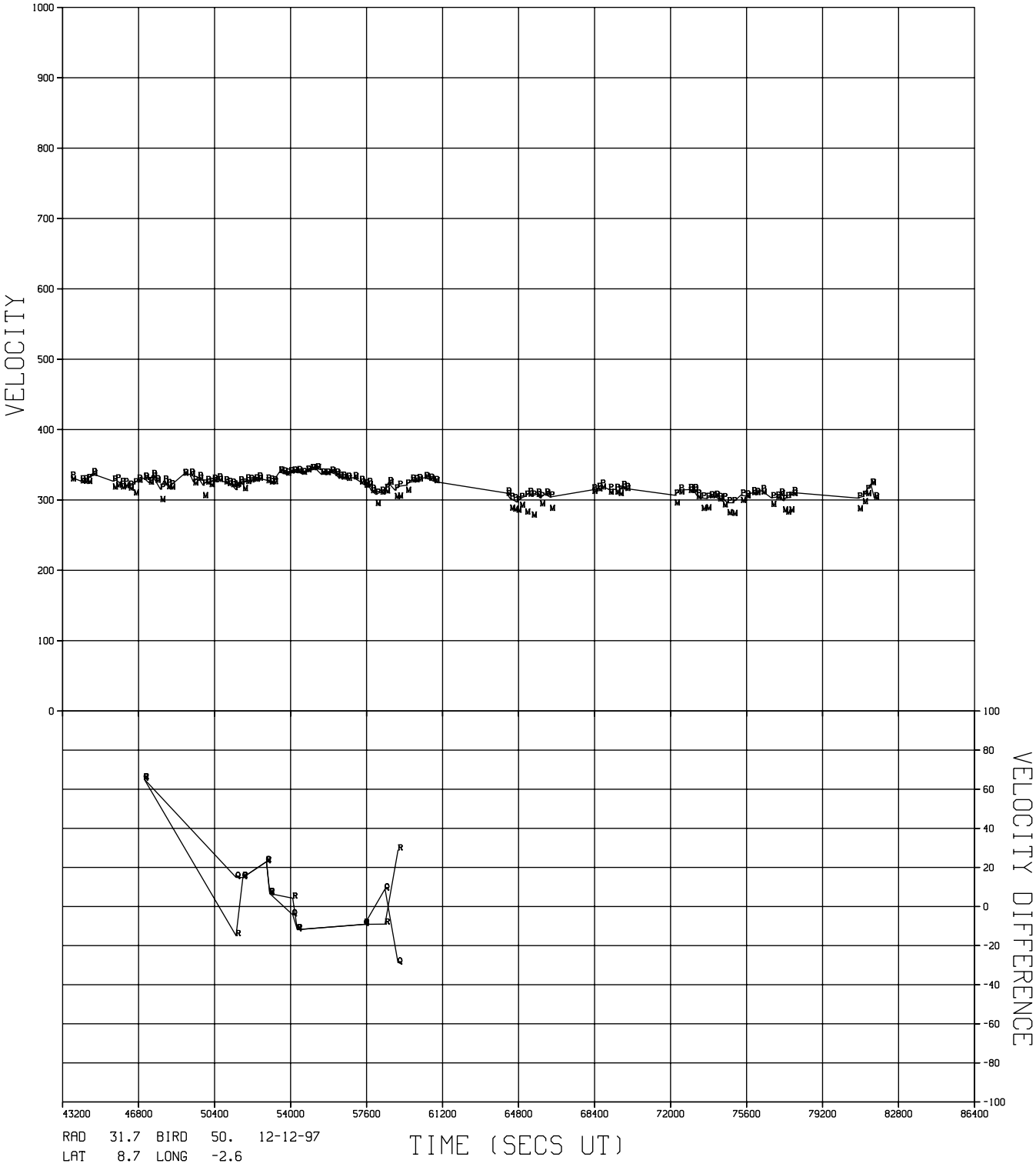

TEMPERATURE
TEMPERATURE RATIO
TIME (SECS UT)
RAD 32.0 BIRD 50. 12-12-97
LAT -2.3 LONG -15.6

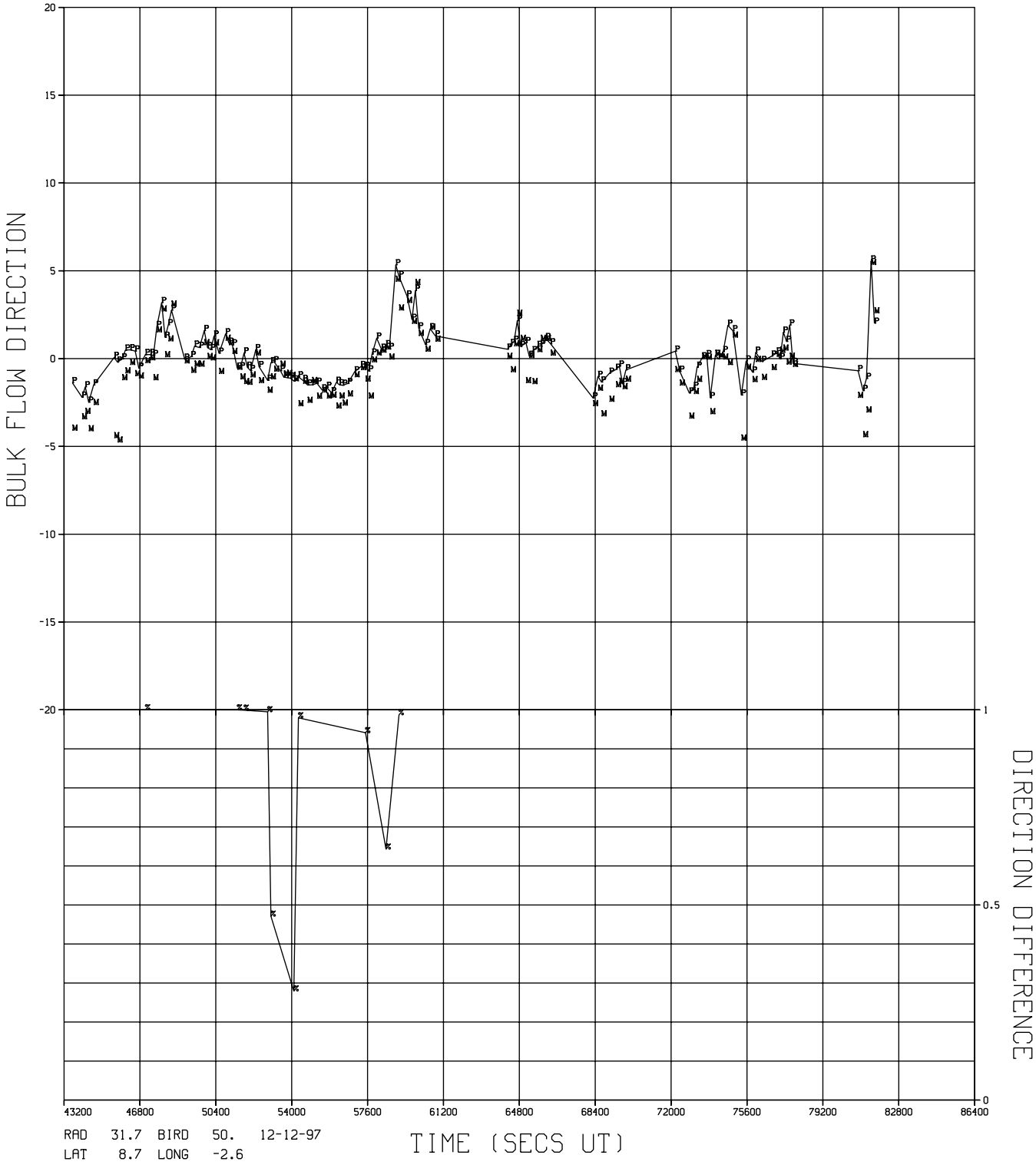

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 32.0 BIRD 50. 12-12-97
LAT -2.3 LONG -15.6

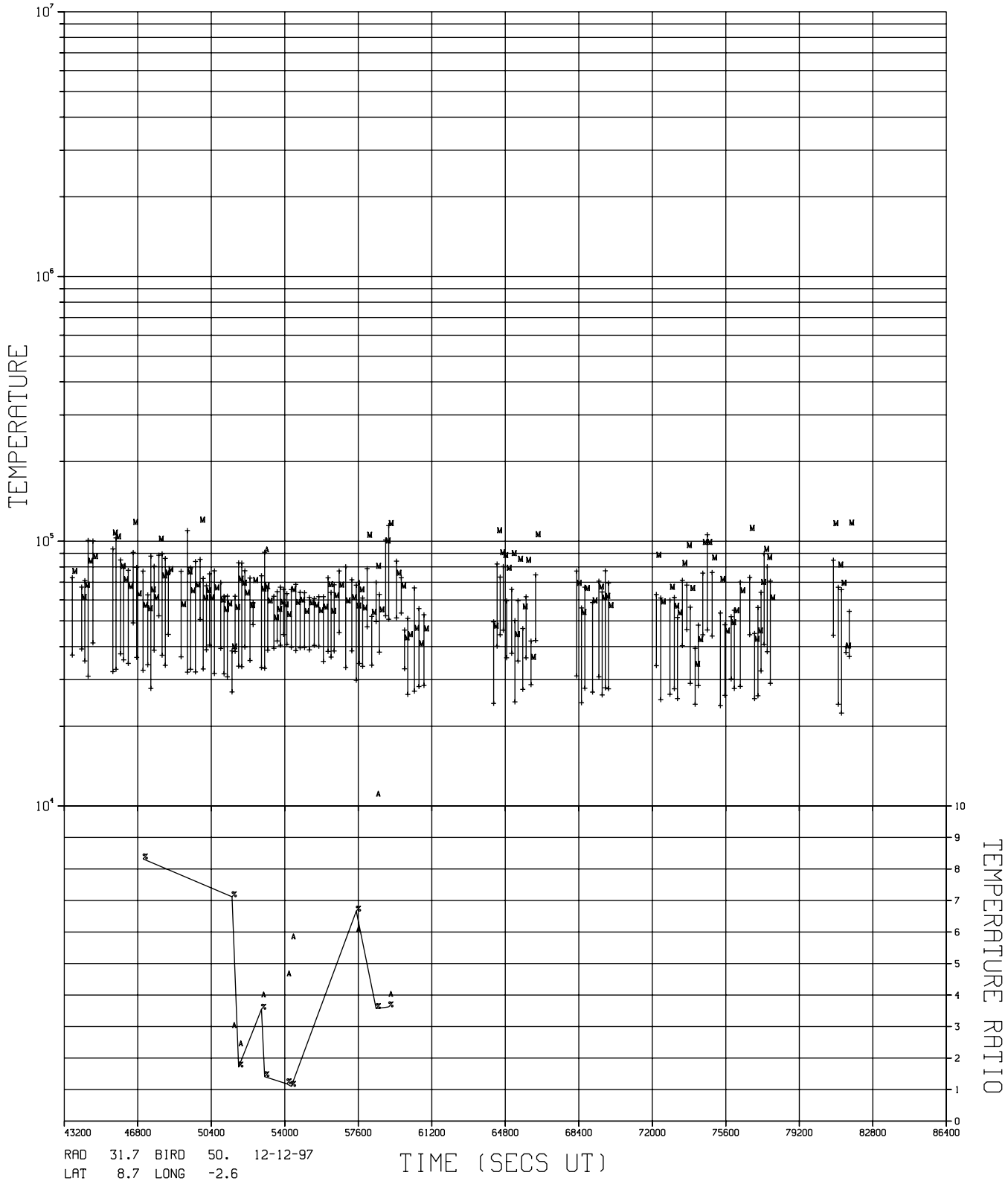

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
RAD 32.0 BIRD 50. 12-12-97
LAT -2.3 LONG -15.6

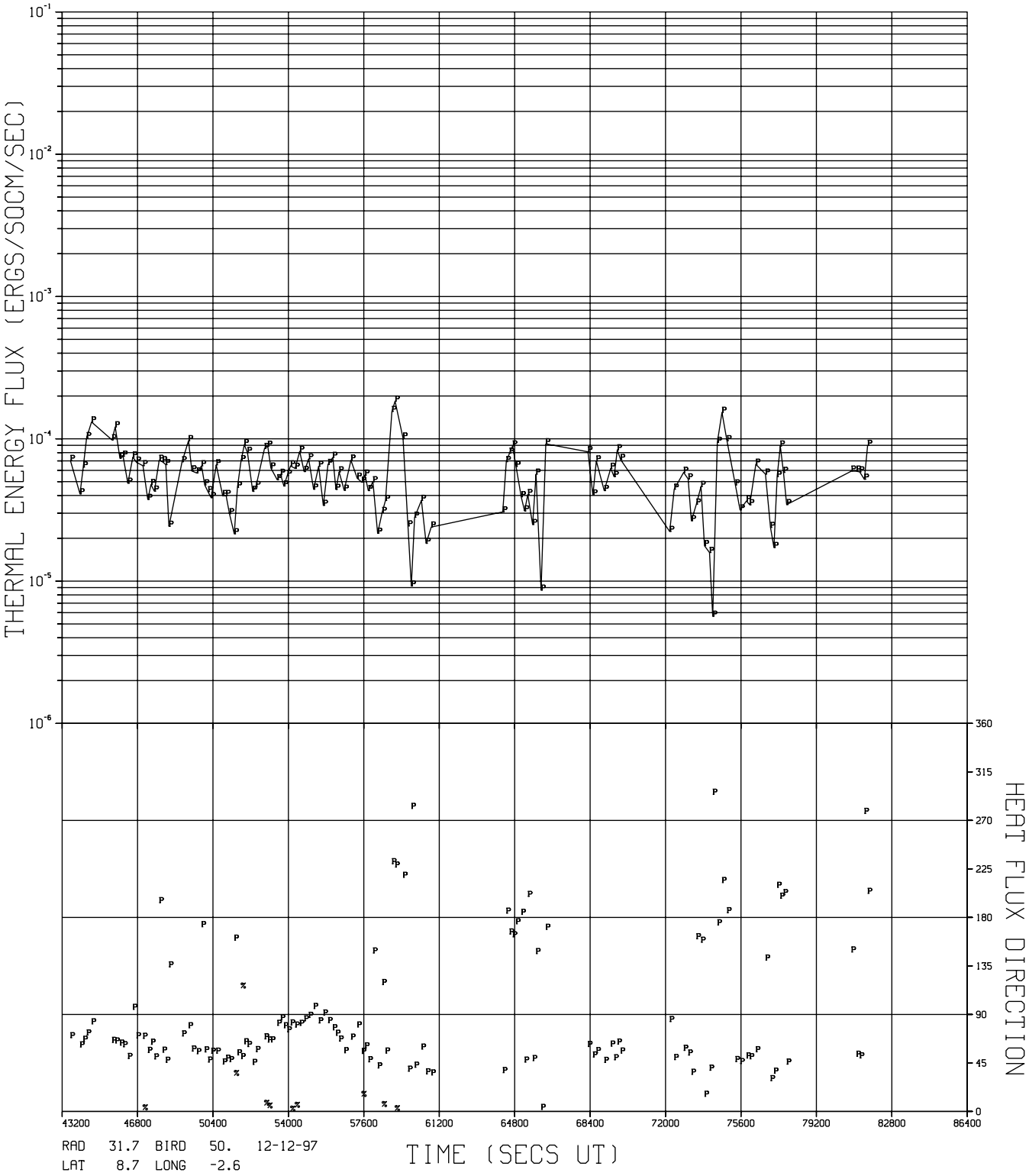

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
TIME (SECS UT)
RAD 32.0 BIRD 50. 12-12-97
LAT -2.3 LONG -15.6

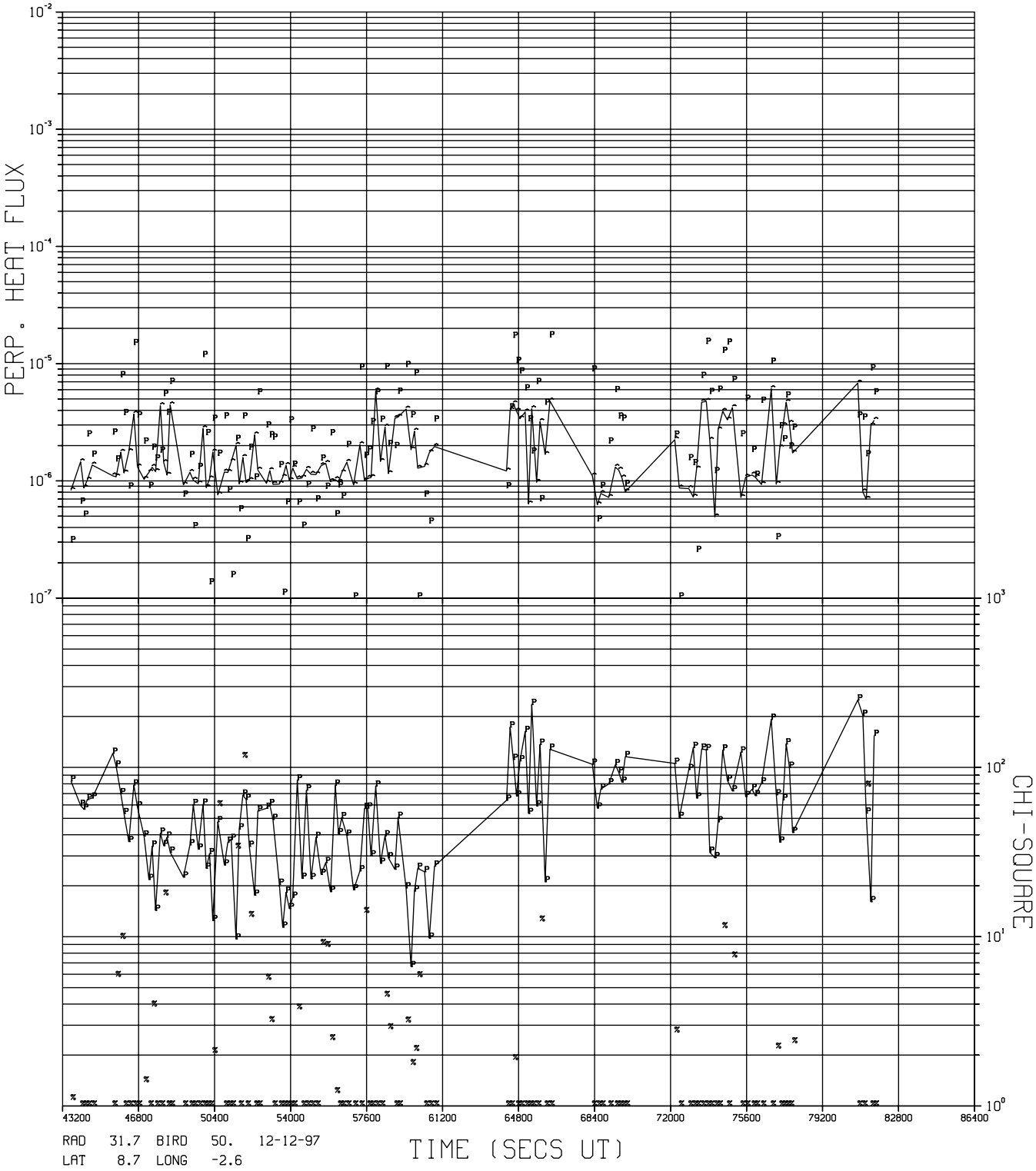

DENSITY
DENSITY RATIO
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 31.7 BIRD 50. 12-12-97
LAT 8.7 LONG -2.6

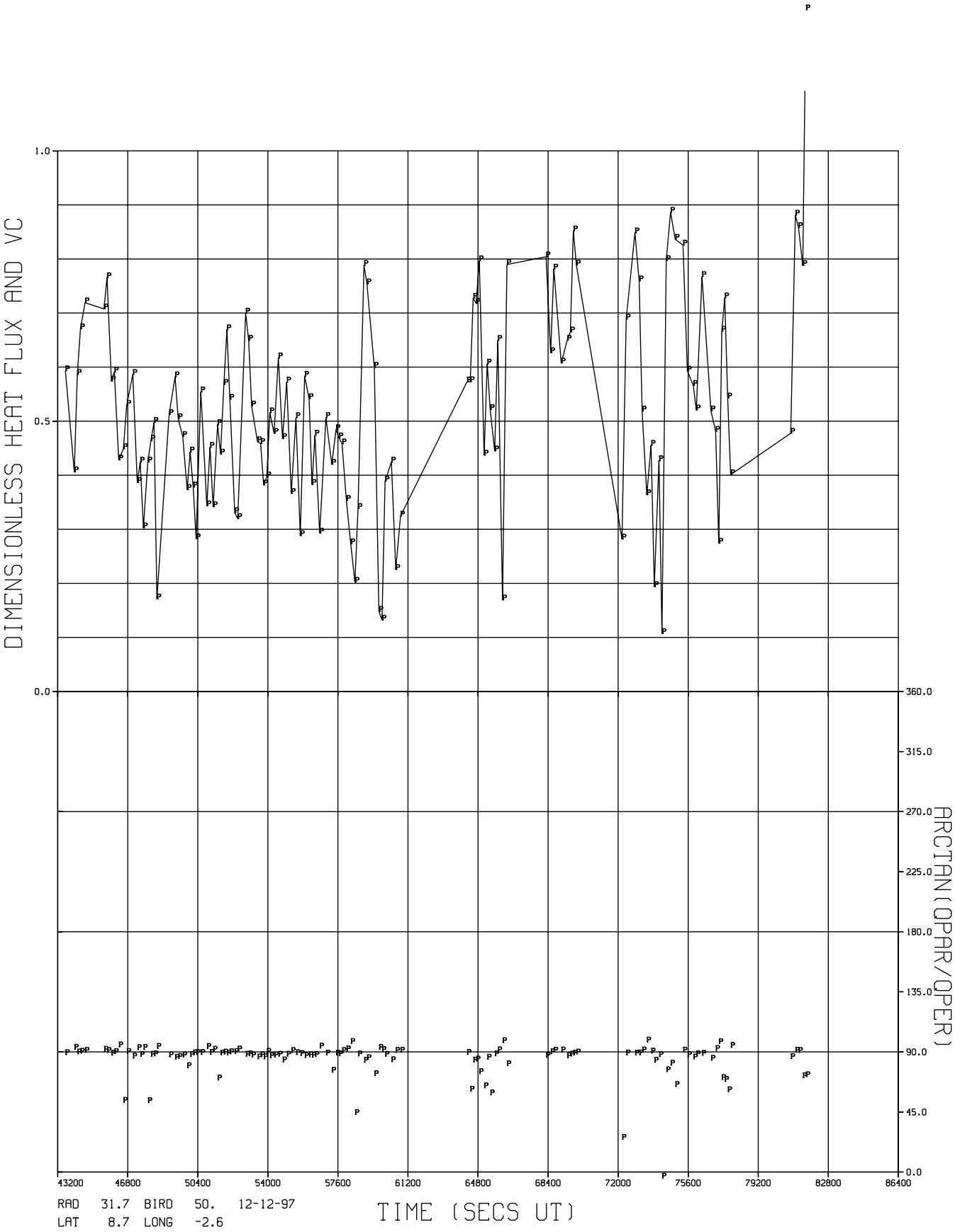

VELOCITY
VELOCITY DIFFERENCE
TIME (SECS UT)
RAD 31.7 BIRD 50. 12-12-97
LAT 8.7 LONG -2.6


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 31.7 BIRD 50. 12-12-97
LAT 8.7 LONG -2.6


TEMPERATURE
TEMPERATURE RATIO
TIME (SECS UT)
RAD 31.7 BIRD 50. 12-12-97
LAT 8.7 LONG -2.6


THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 31.7 BIRD 50. 12-12-97
LAT 8.7 LONG -2.6


PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 31.7 BIRD 50. 12-12-97
LAT 8.7 LONG -2.6


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 31.7 BIRD 50. 12-12-97
LAT 8.7 LONG -2.6