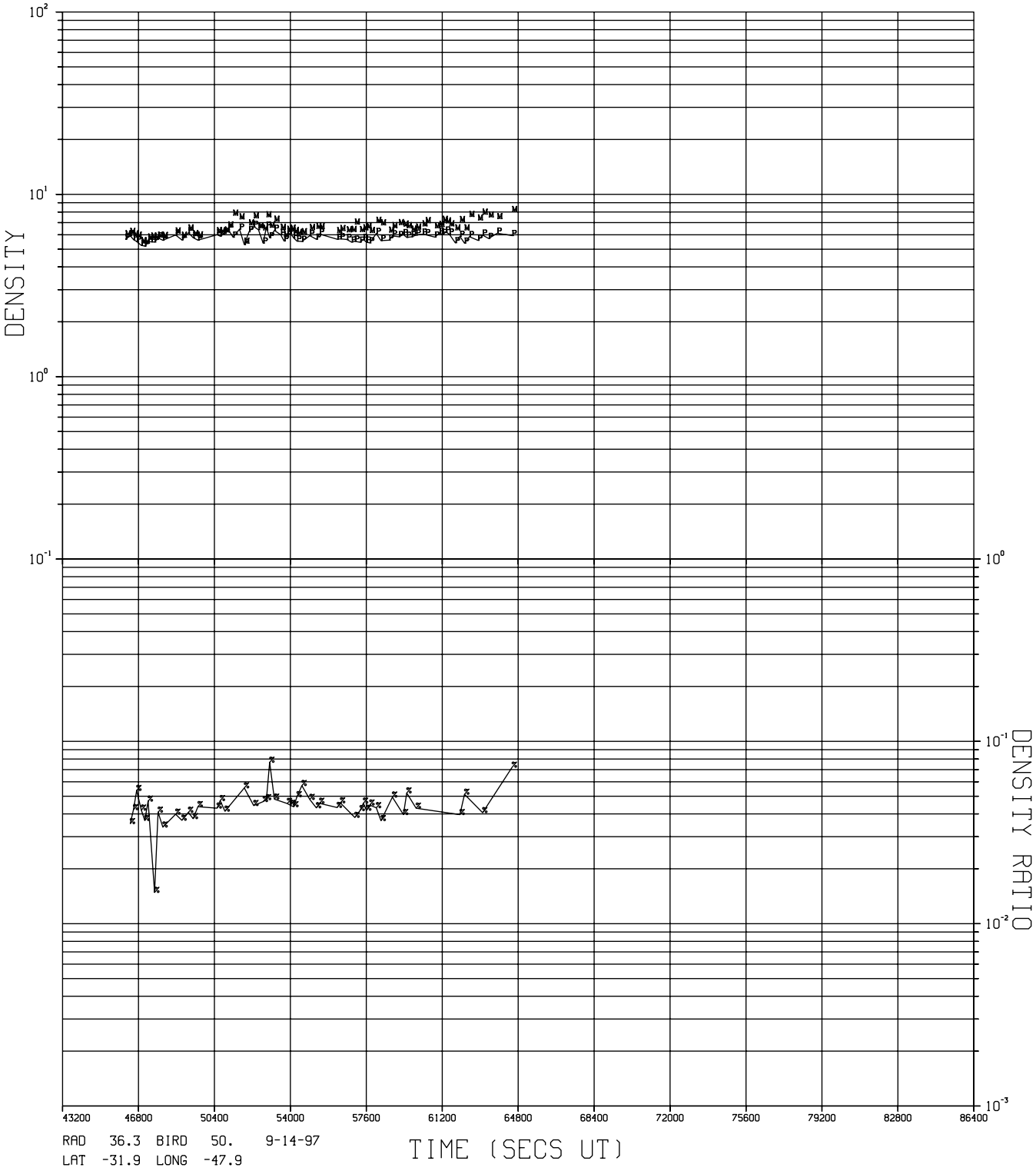
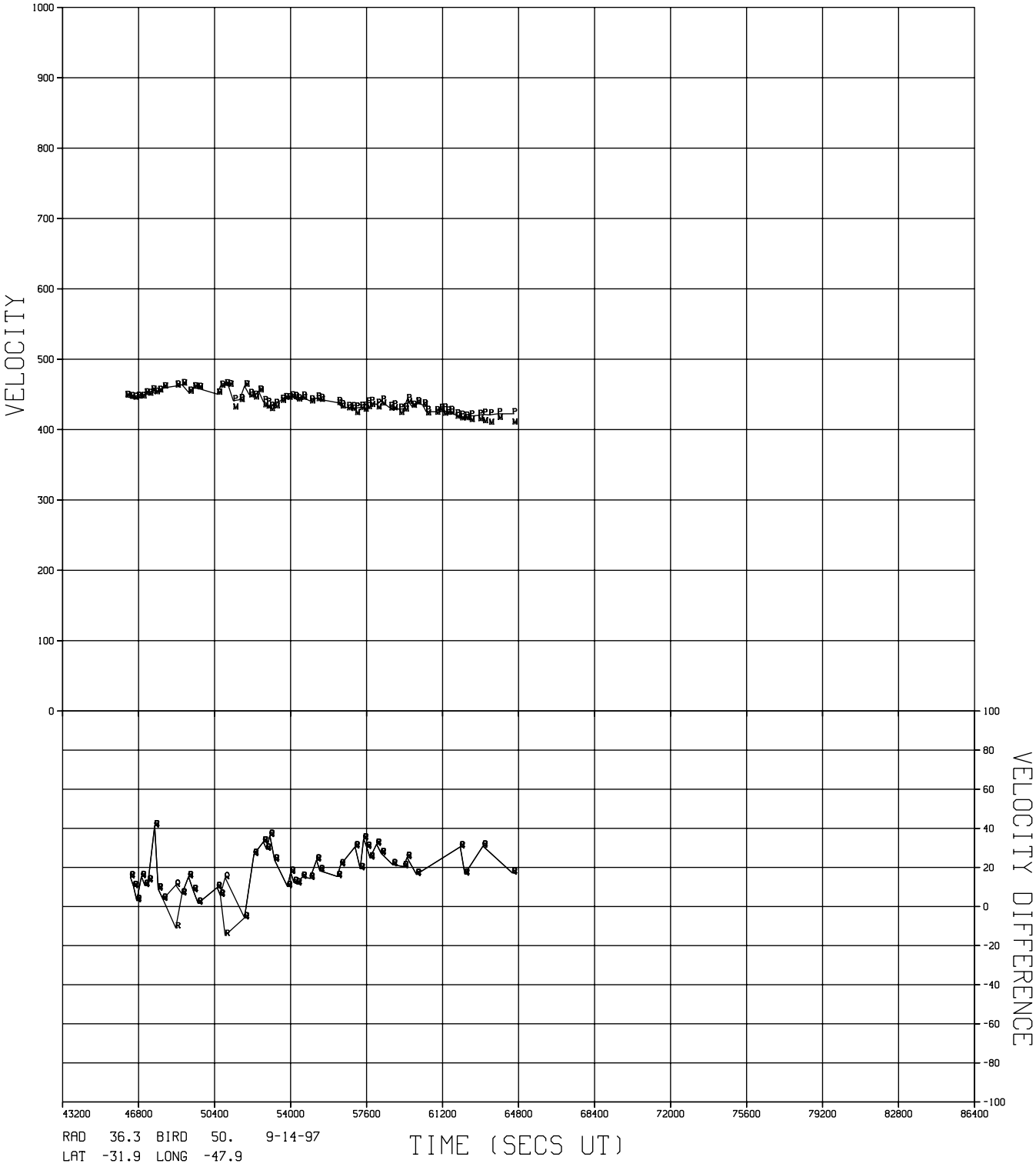
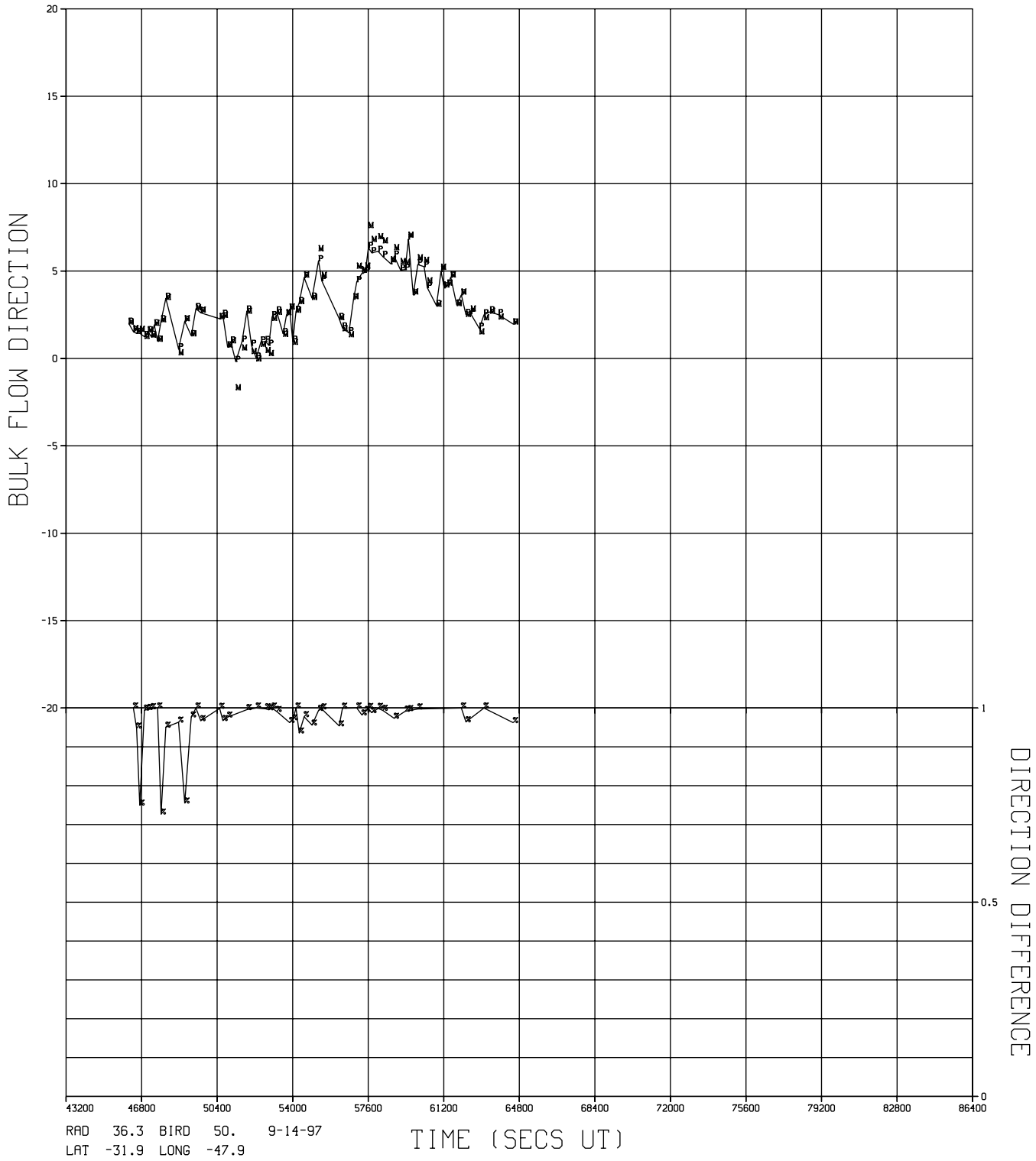
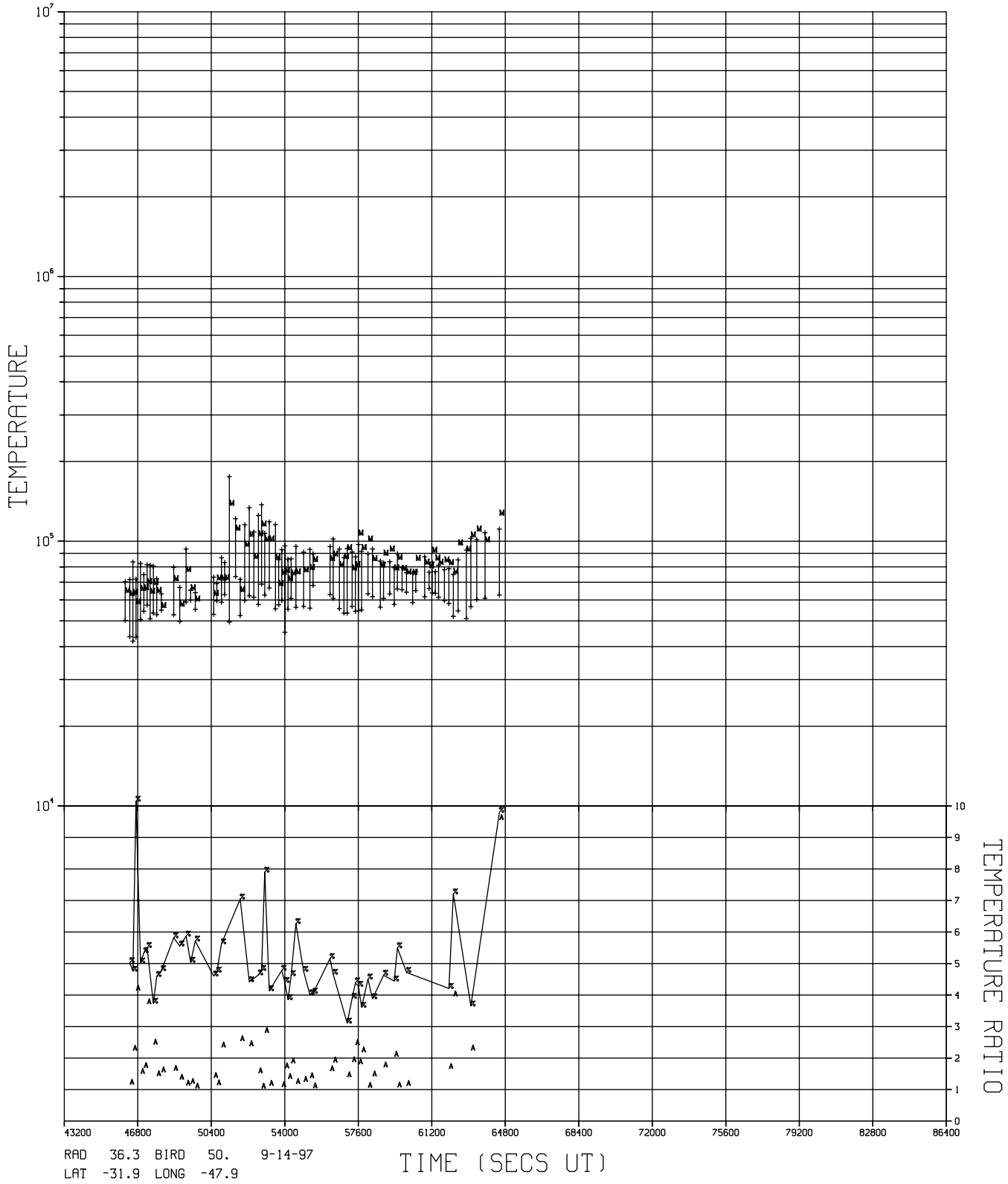
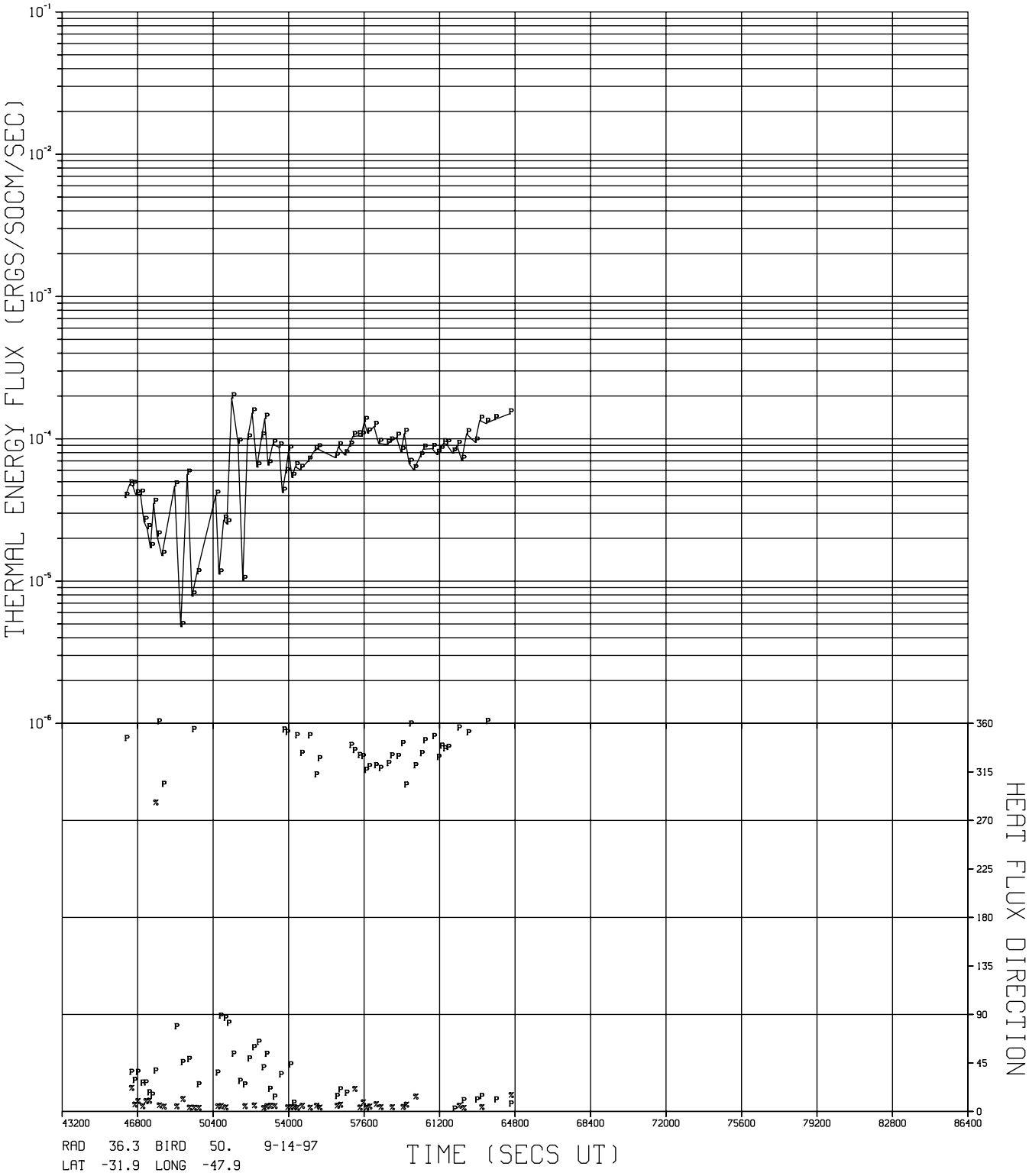
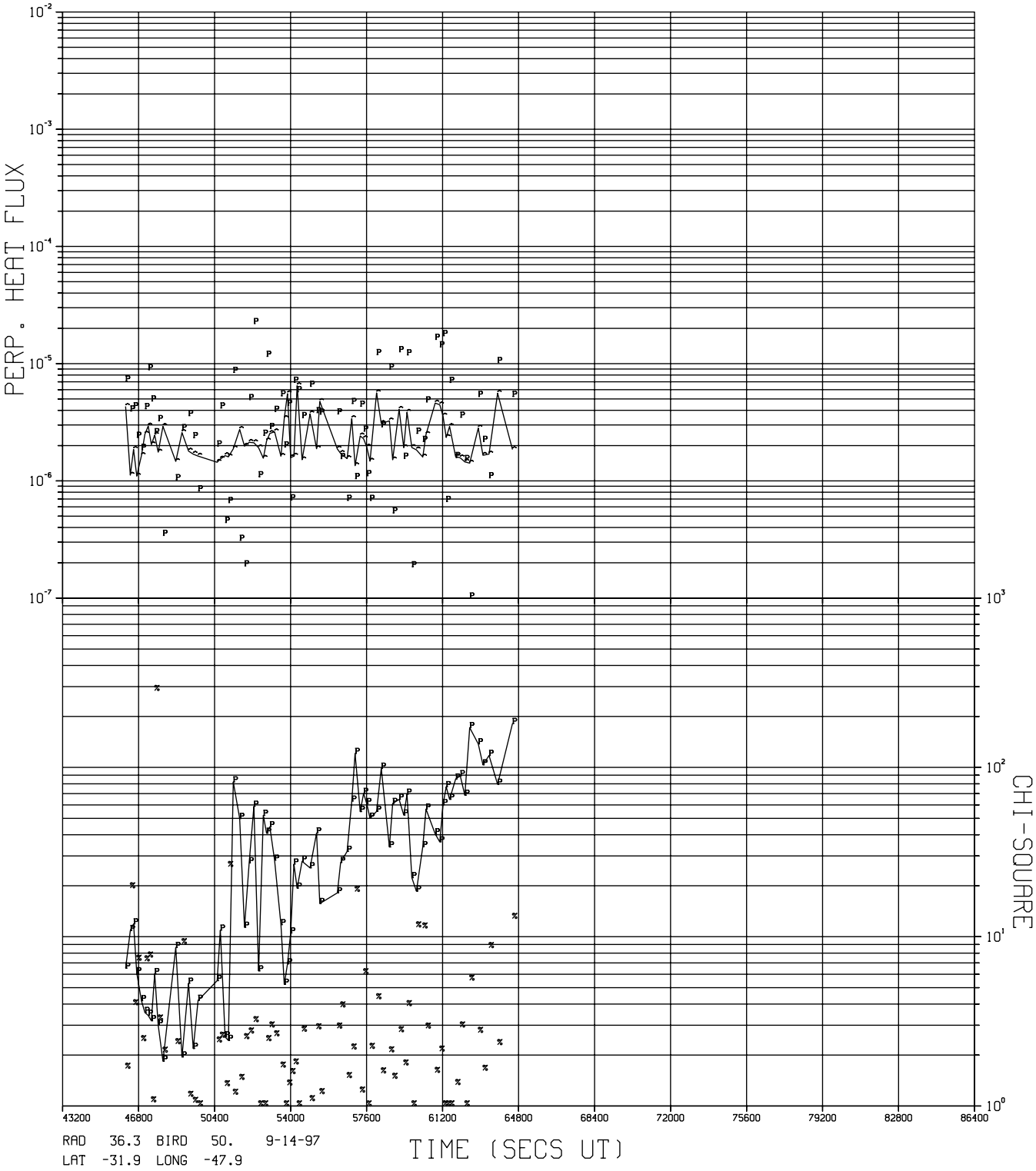

DENSITY
DENSITY RATIO
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 36.3 BIRD 50. 9-14-97
LAT -31.9 LONG -47.9

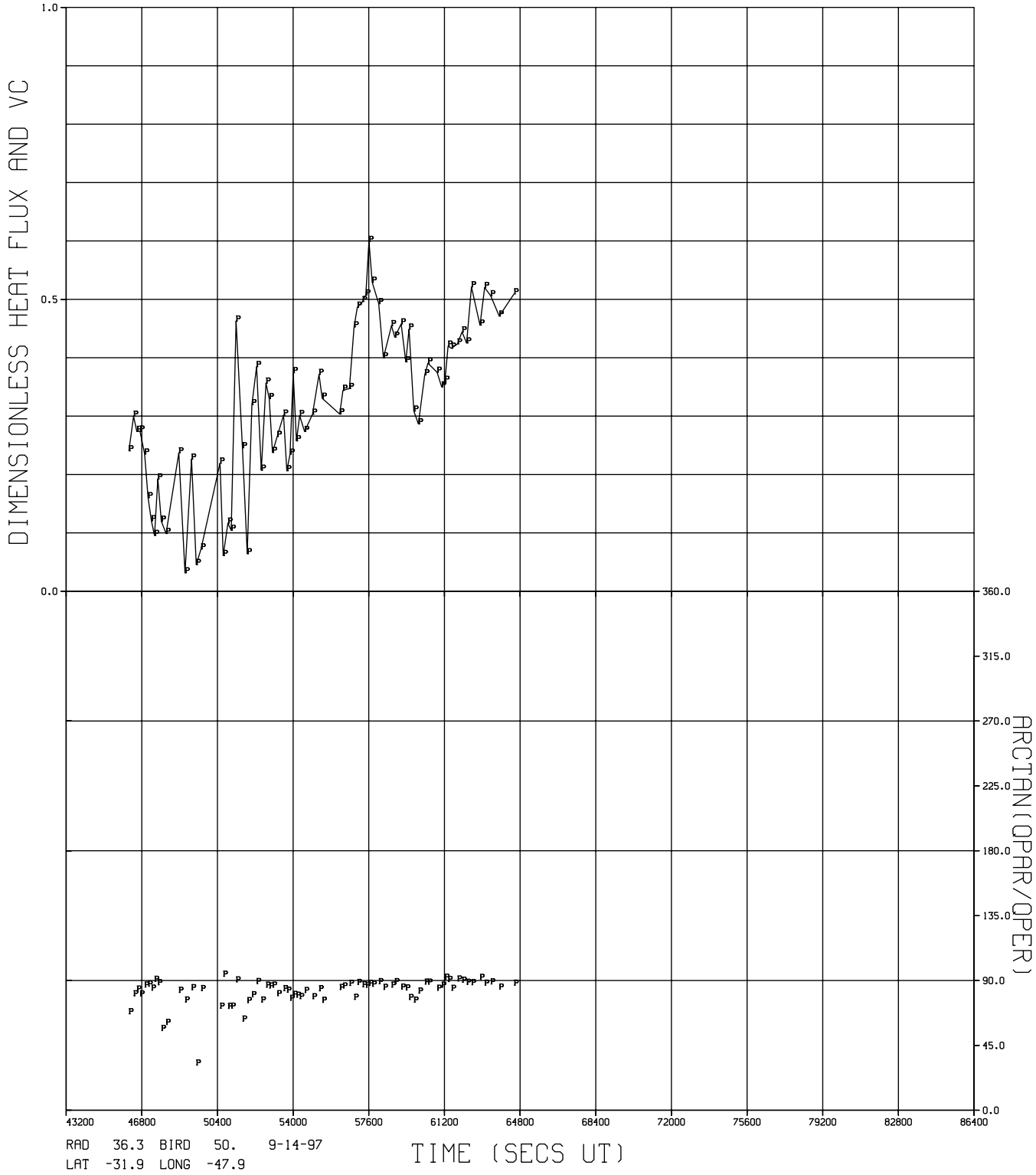

VELOCITY
1000
900
800
700
600
500
400
300
200
100
0
VELOCITY DIFFERENCE
100
80
60
40
20
0
-20
-40
-60
-80
-100
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
TIME (SECS UT)
RAD 36.3 BIRD 50. 9-14-97
LAT -31.9 LONG -47.9

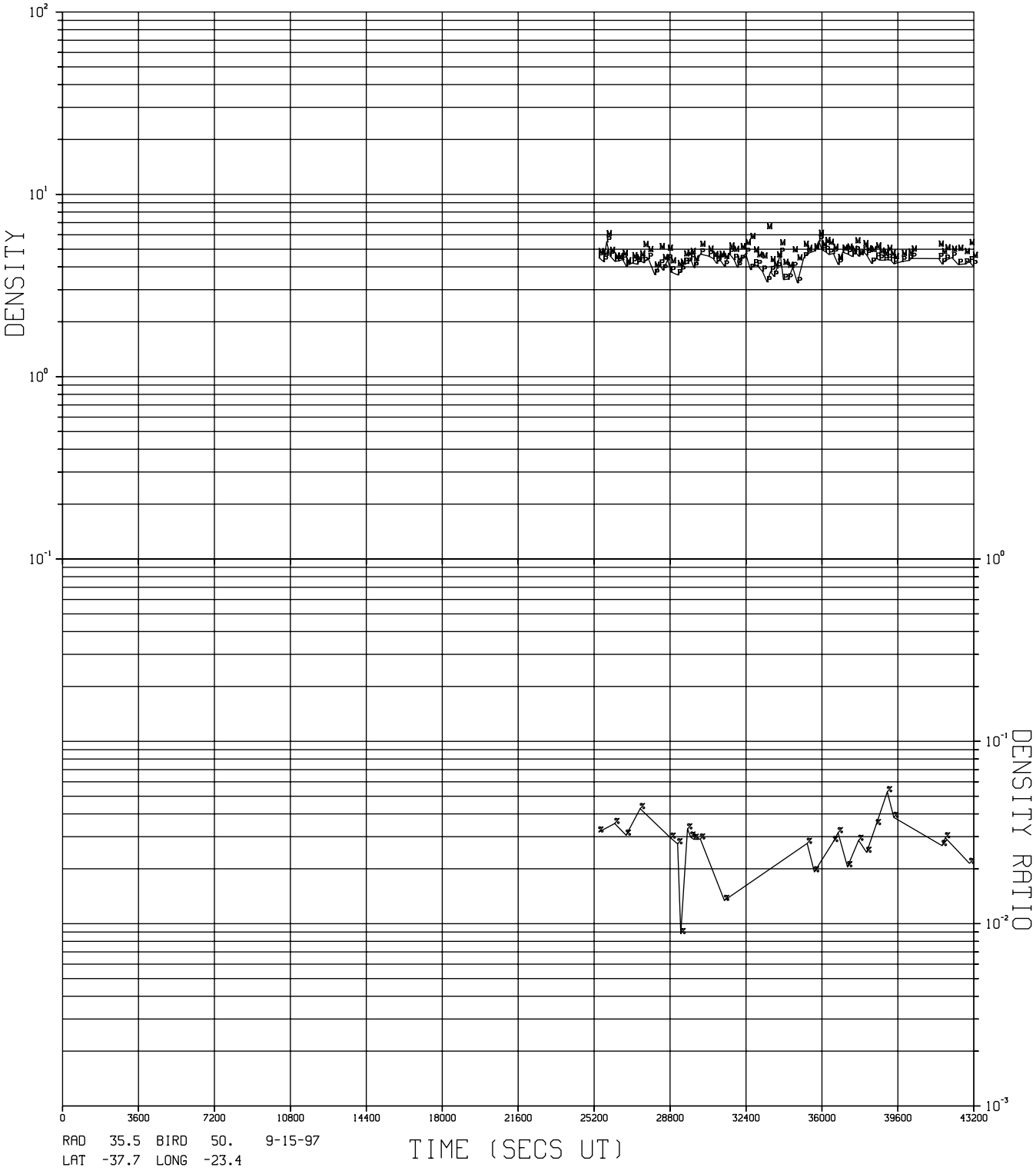

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 36.3 BIRD 50. 9-14-97
LAT -31.9 LONG -47.9

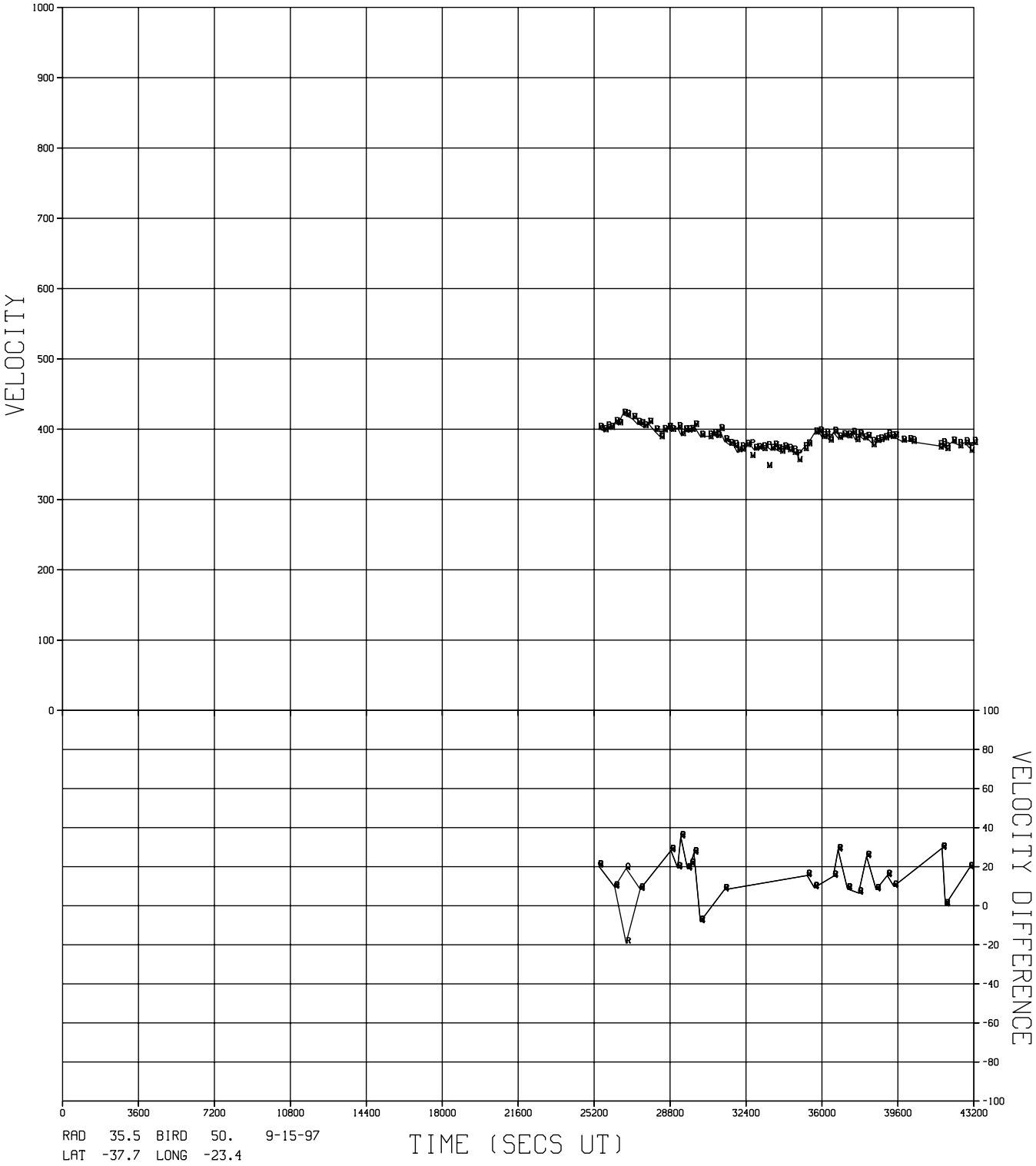

TEMPERATURE
TEMPERATURE RATIO
TIME (SECS UT)
RAD 36.3 BIRD 50. 9-14-97
LAT -31.9 LONG -47.9

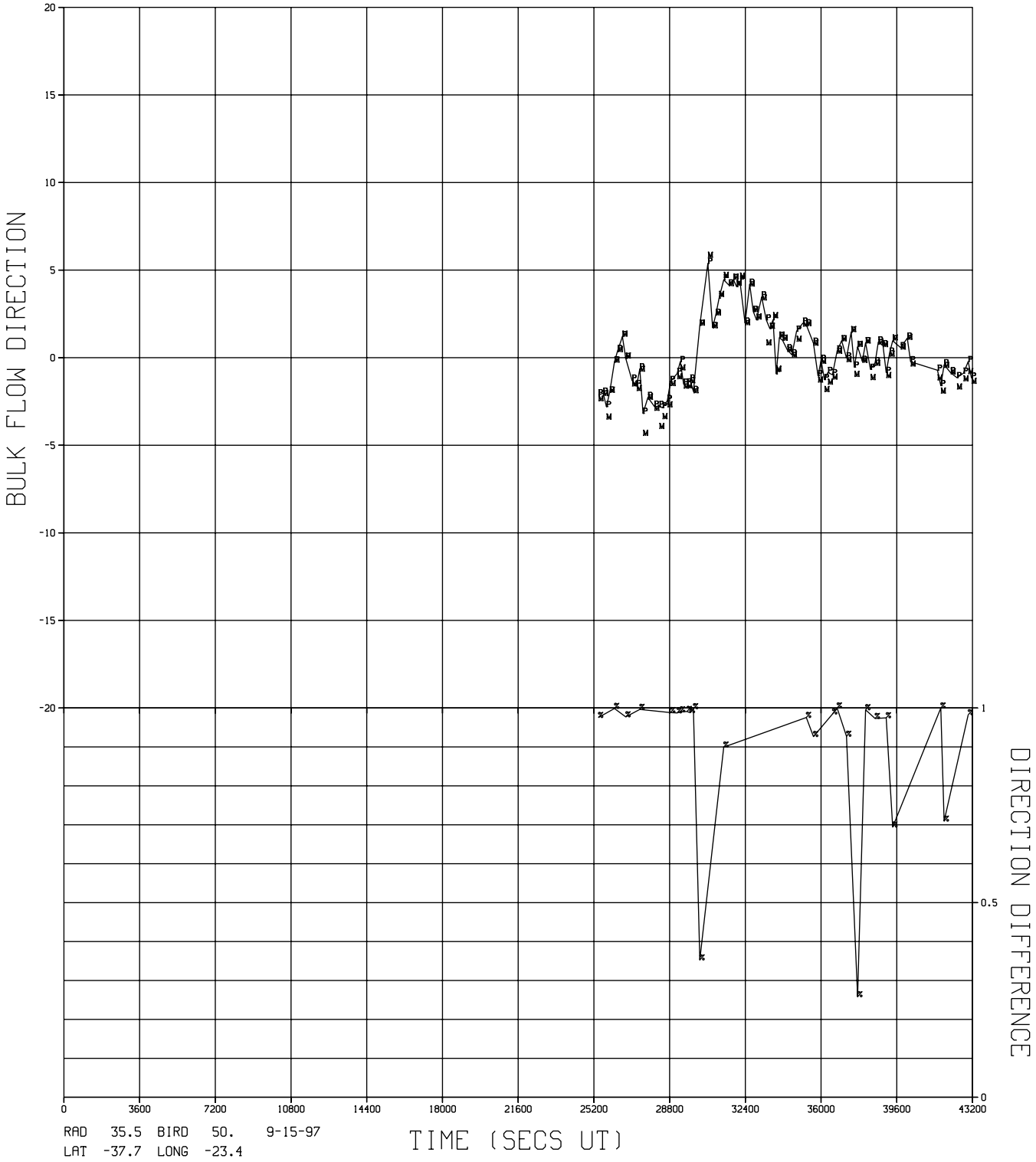

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 36.3 BIRD 50. 9-14-97
LAT -31.9 LONG -47.9

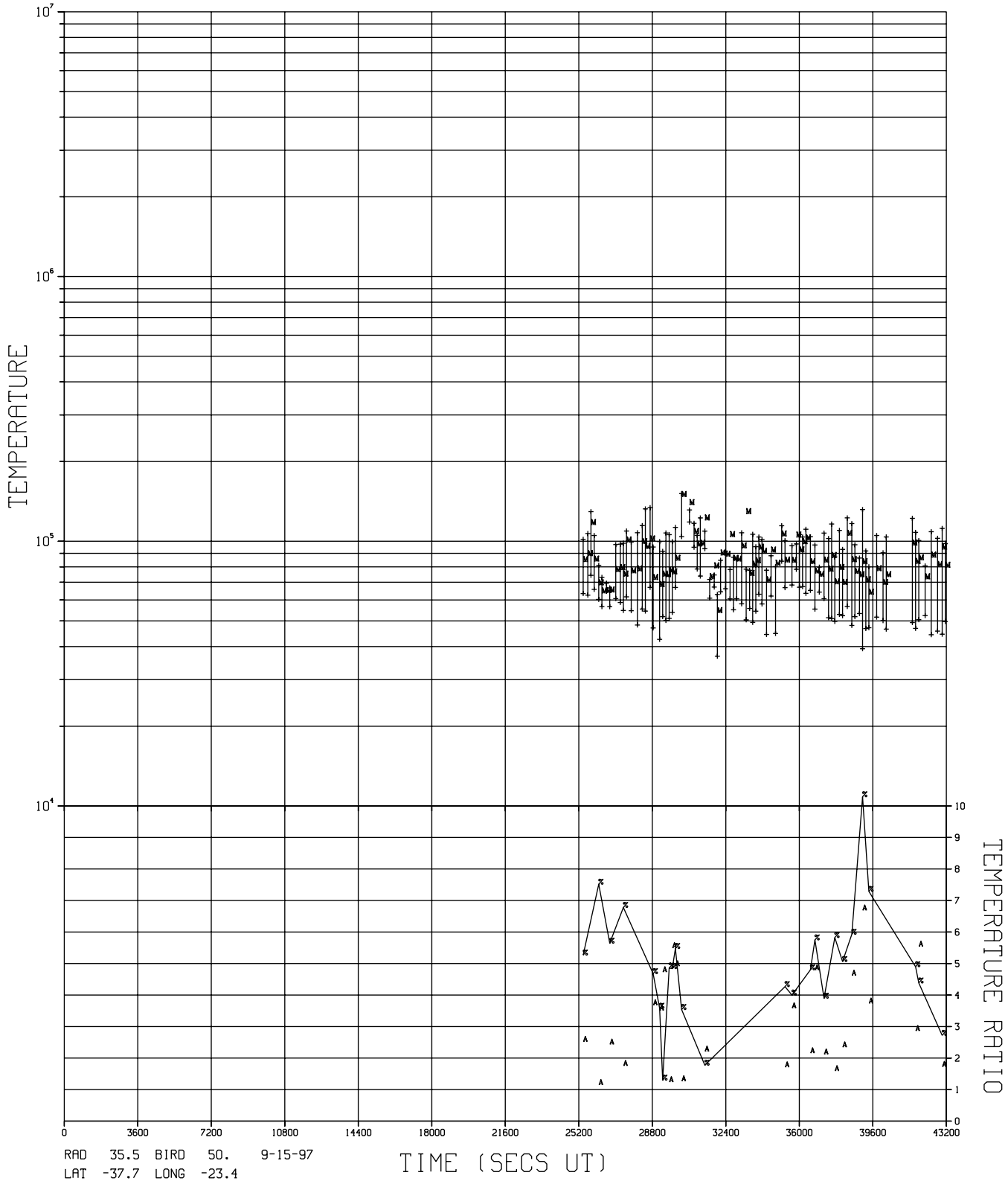

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
RAD 36.3 BIRD 50. 9-14-97
LAT -31.9 LONG -47.9

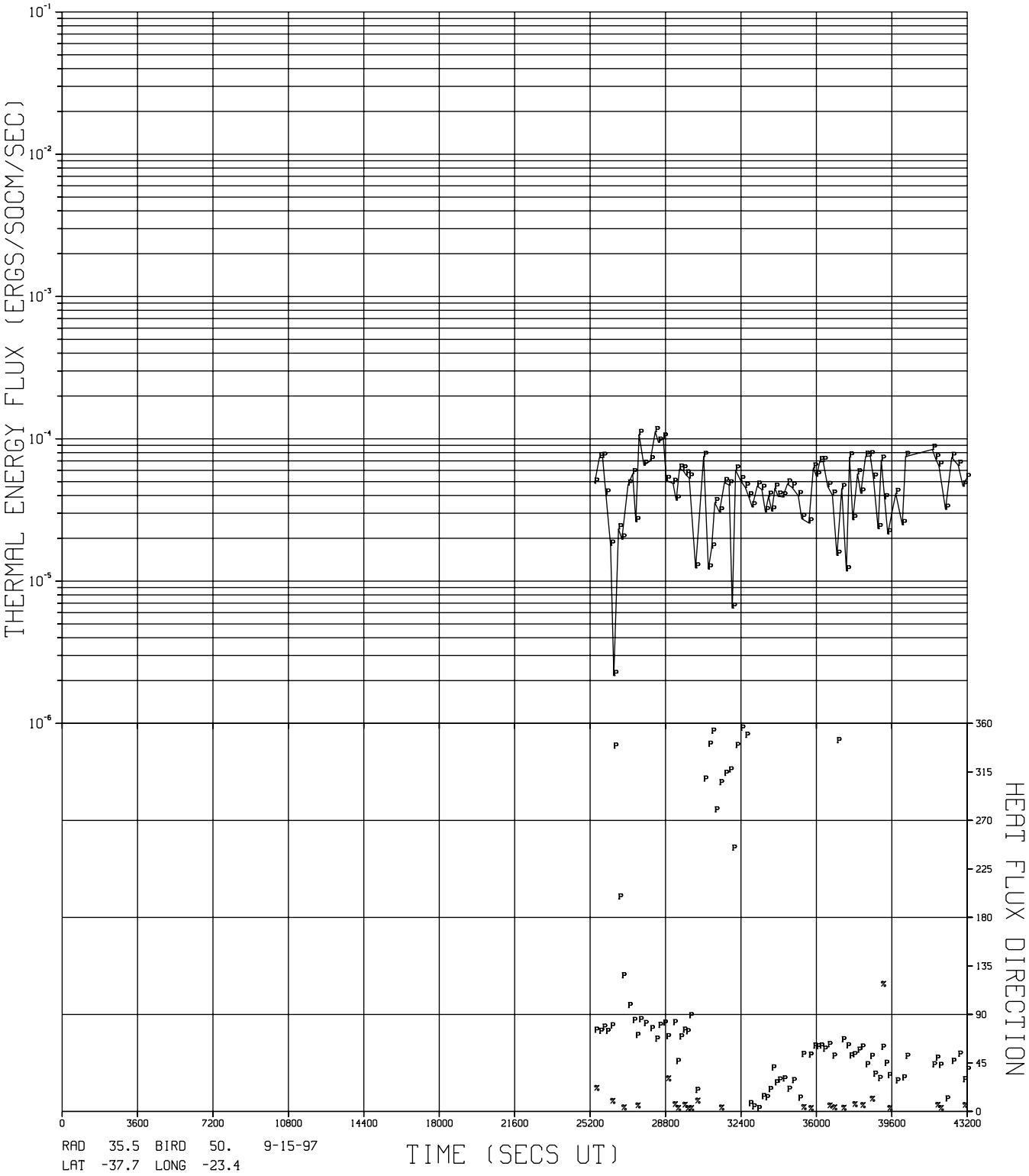

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
TIME (SECS UT)
RAD 36.3 BIRD 50. 9-14-97
LAT -31.9 LONG -47.9

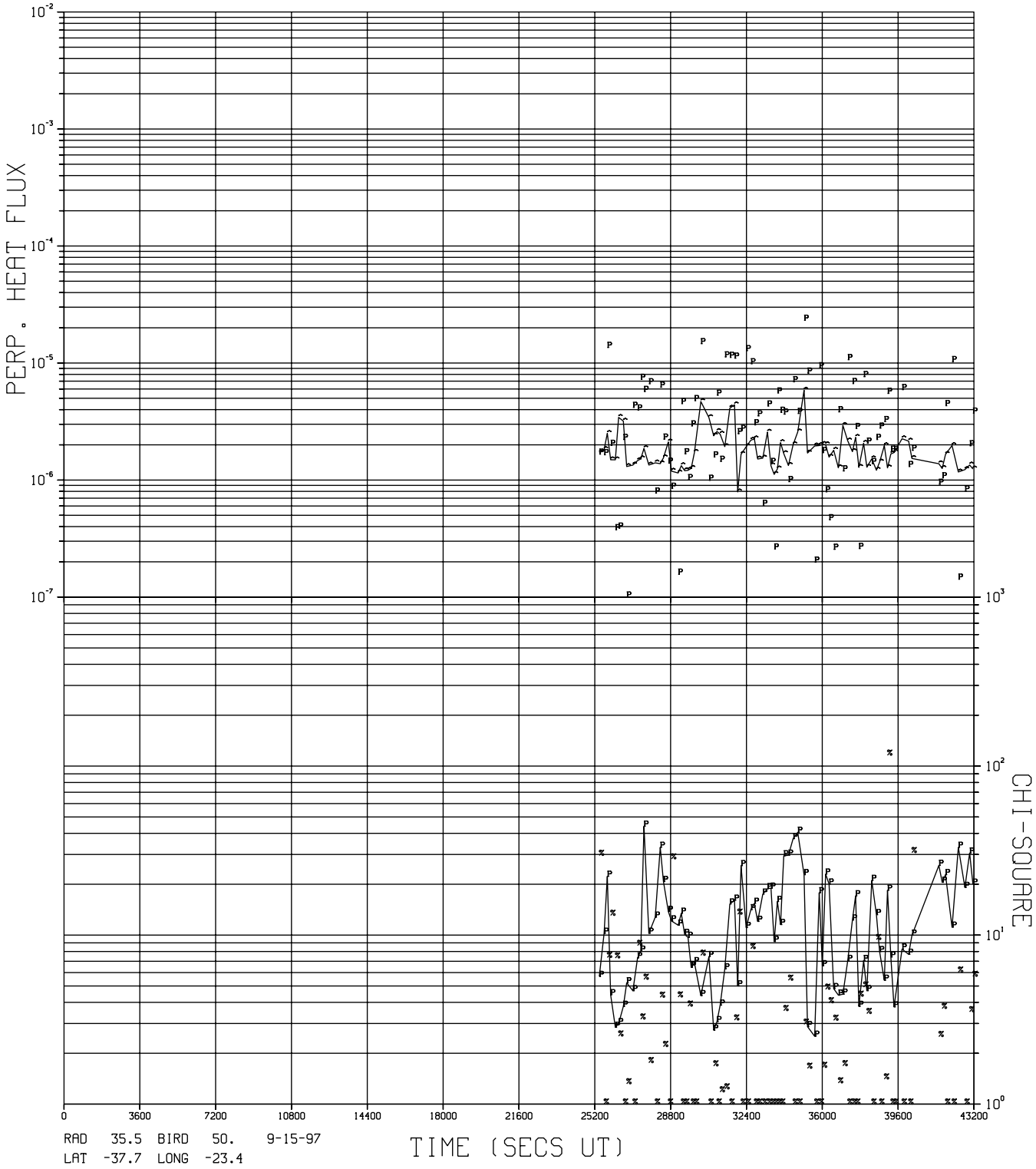

DENSITY
DENSITY RATIO
TIME (SECS UT)
RAD 35.5 BIRD 50. 9-15-97
LAT -37.7 LONG -23.4

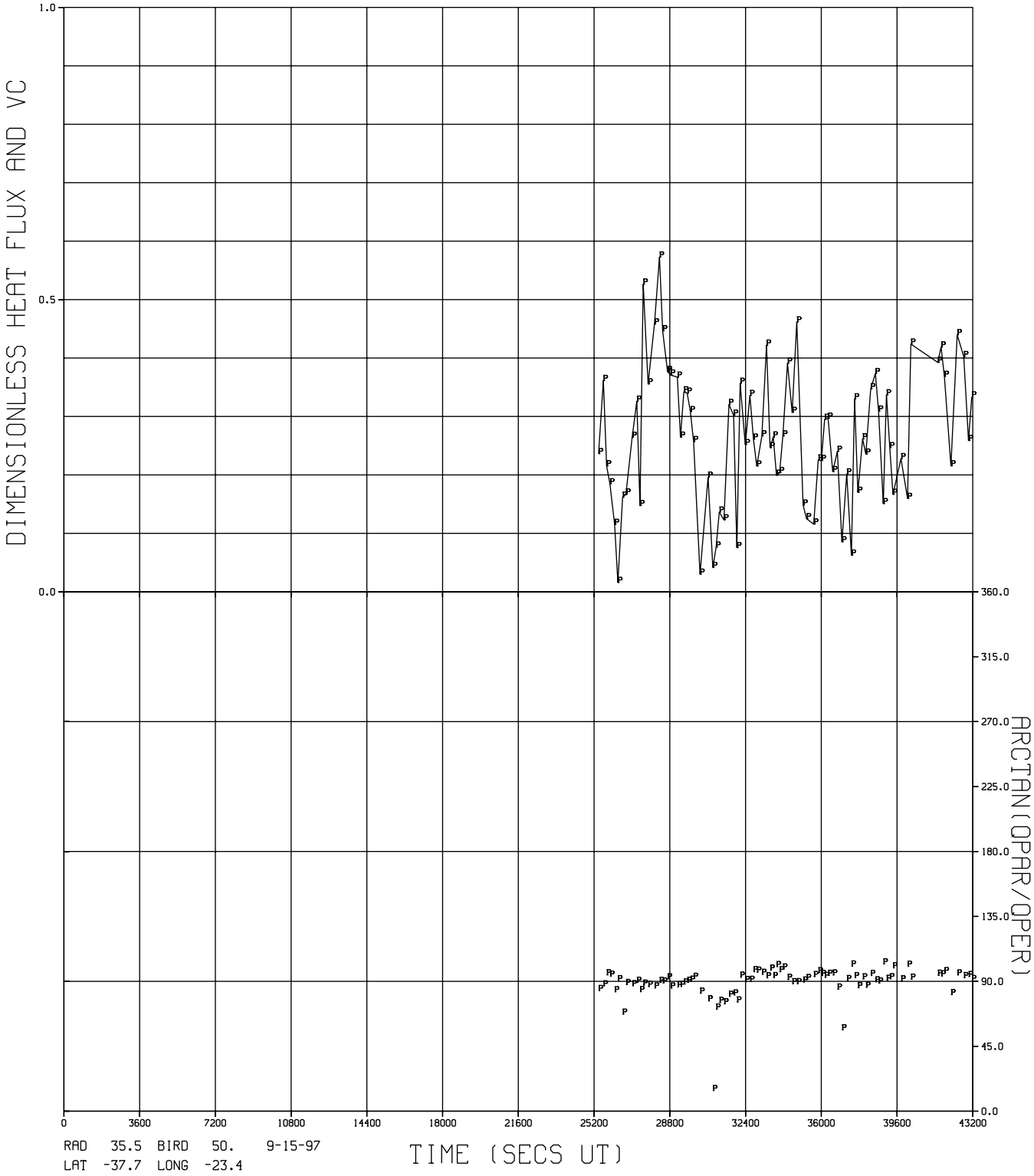

VELOCITY
1000
900
800
700
600
500
400
300
200
100
0
VELOCITY DIFFERENCE
100
80
60
40
20
0
-20
-40
-60
-80
-100
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
RAD 35.5 BIRD 50. 9-15-97
LAT -37.7 LONG -23.4
TIME (SECS UT)

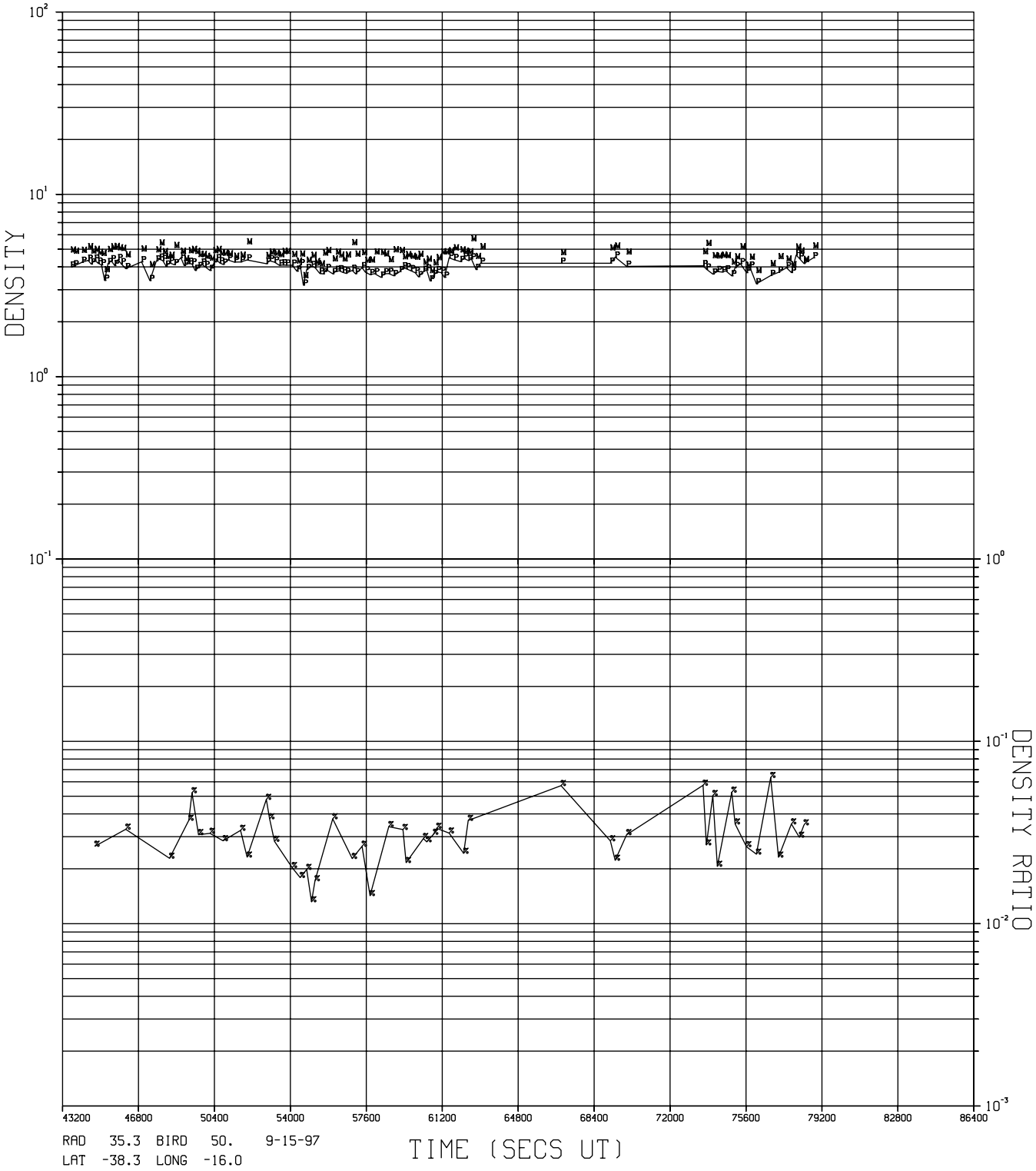

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
RAD 35.5 BIRD 50. 9-15-97
LAT -37.7 LONG -23.4

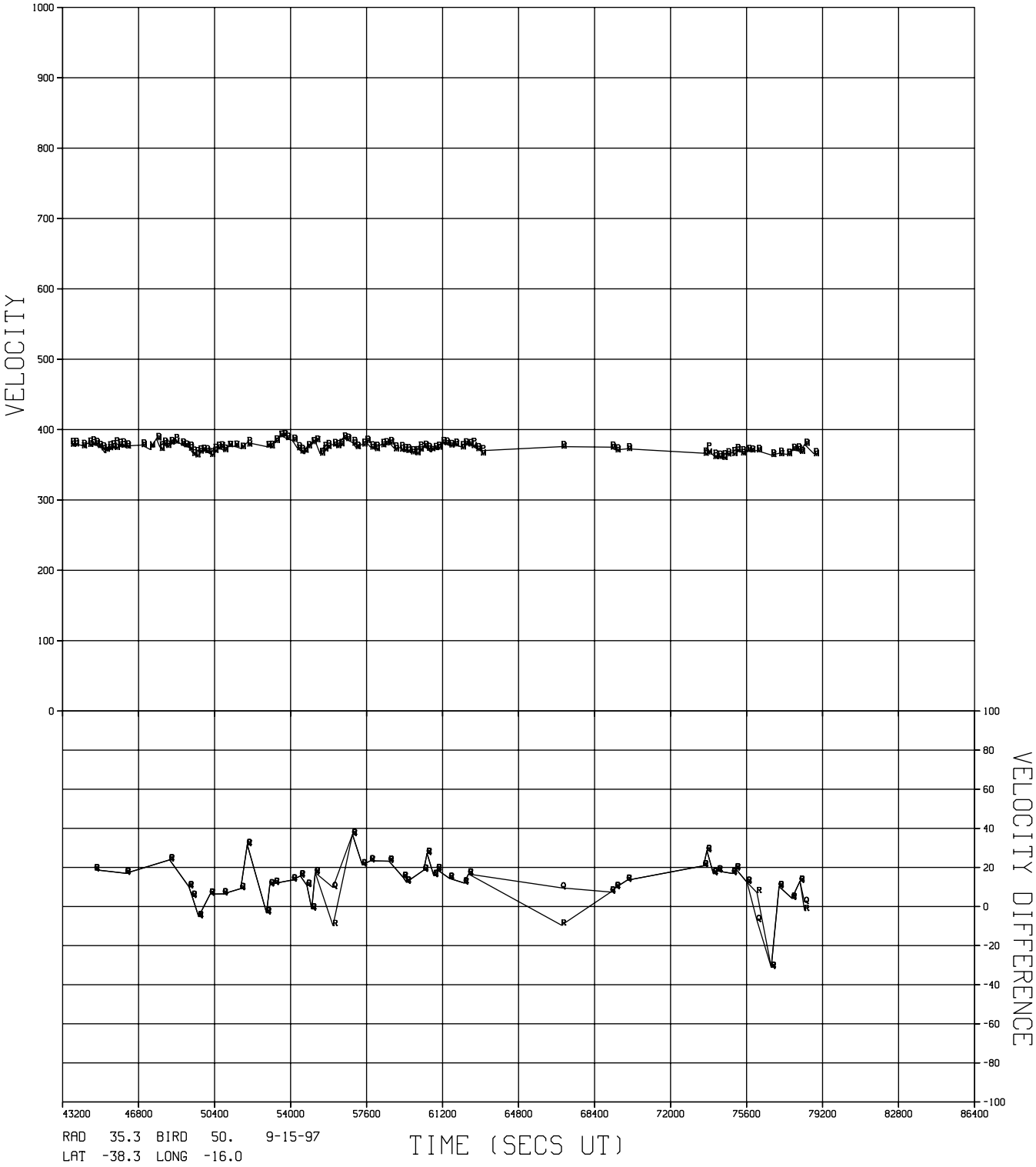

TEMPERATURE
TEMPERATURE RATIO
TIME (SECS UT)
RAD 35.5 BIRD 50. 9-15-97
LAT -37.7 LONG -23.4

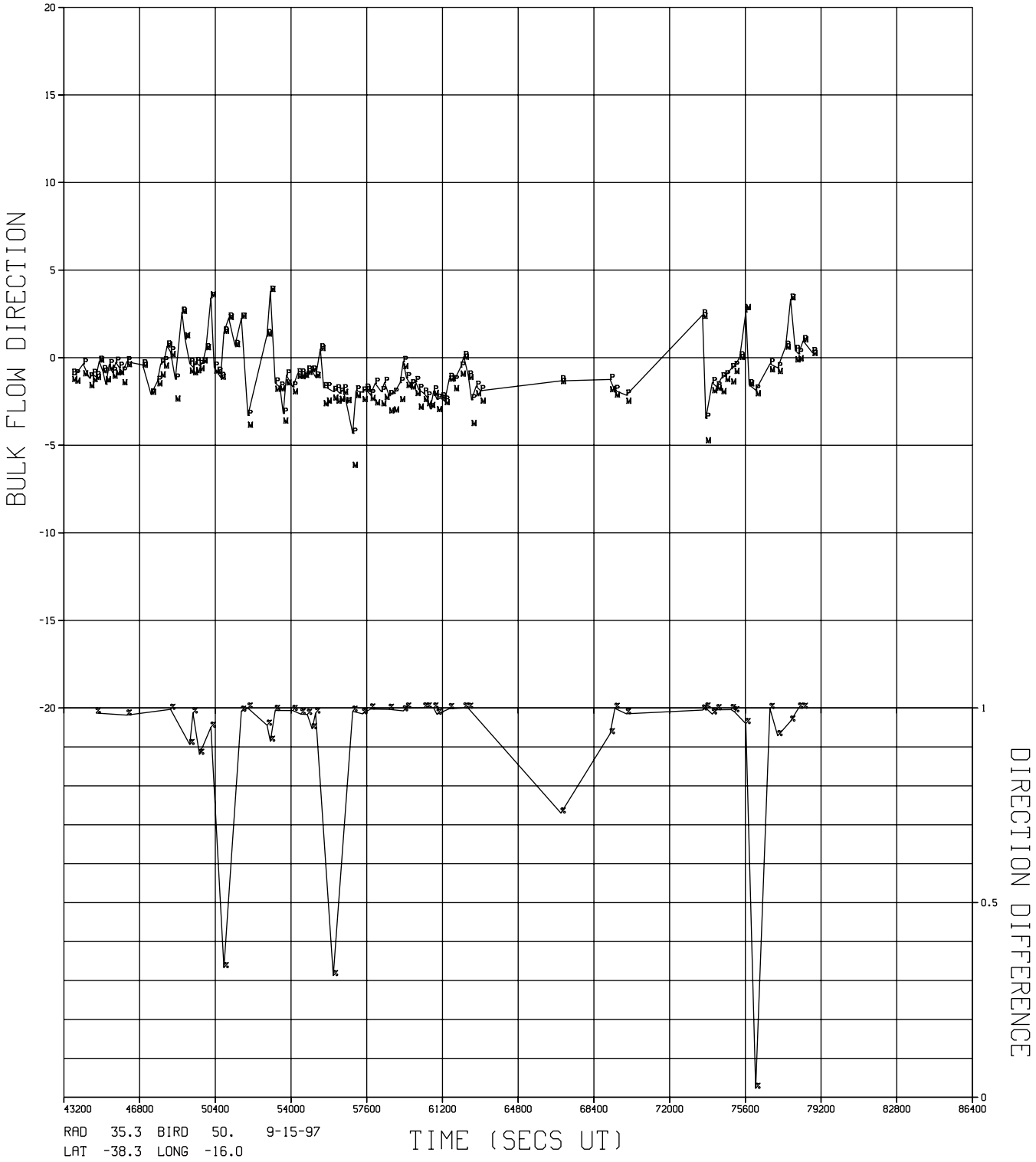

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 35.5 BIRD 50. 9-15-97
LAT -37.7 LONG -23.4

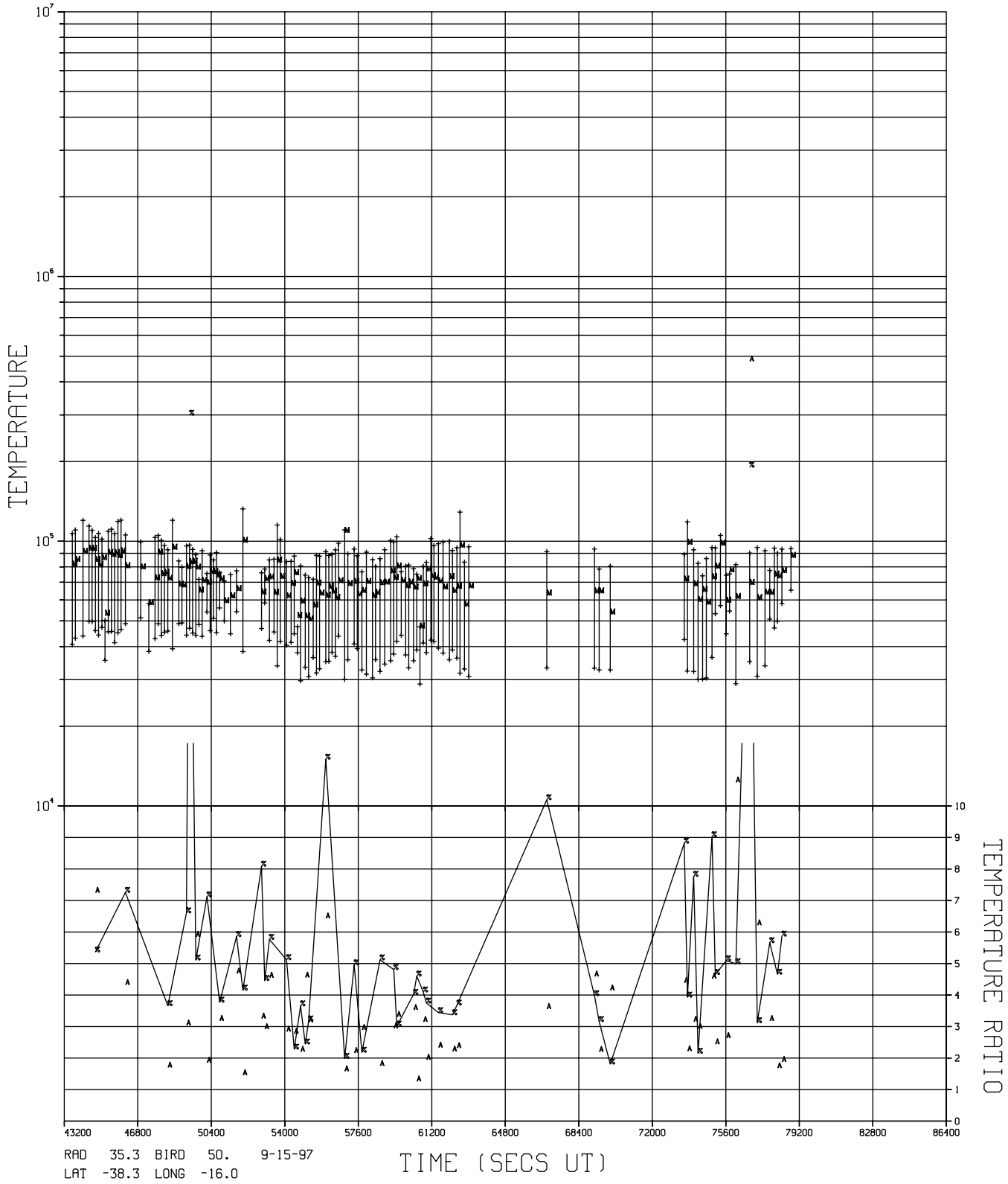

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
RAD 35.5 BIRD 50. 9-15-97
LAT -37.7 LONG -23.4

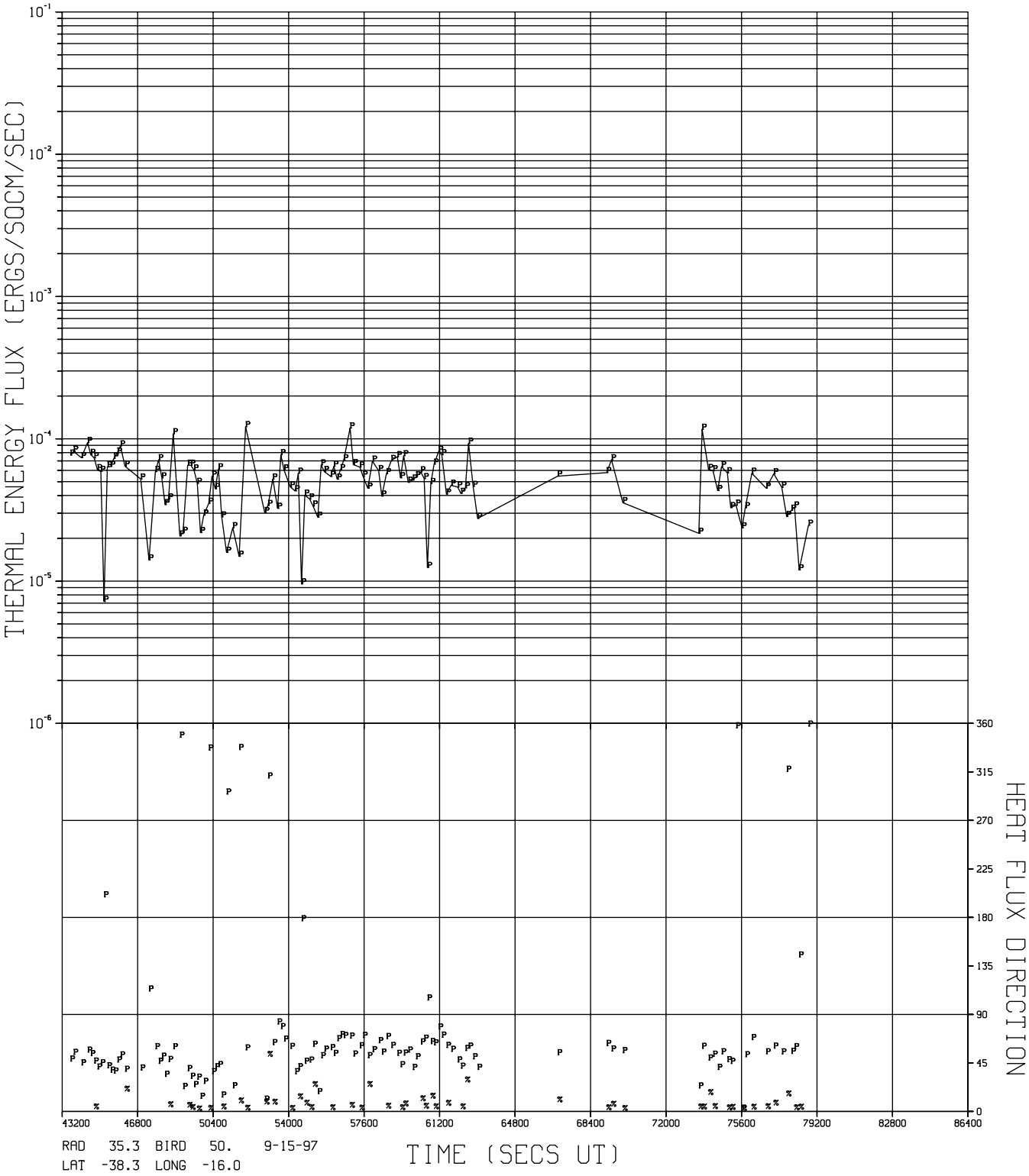

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
TIME (SECS UT)
RAD 35.5 BIRD 50. 9-15-97
LAT -37.7 LONG -23.4

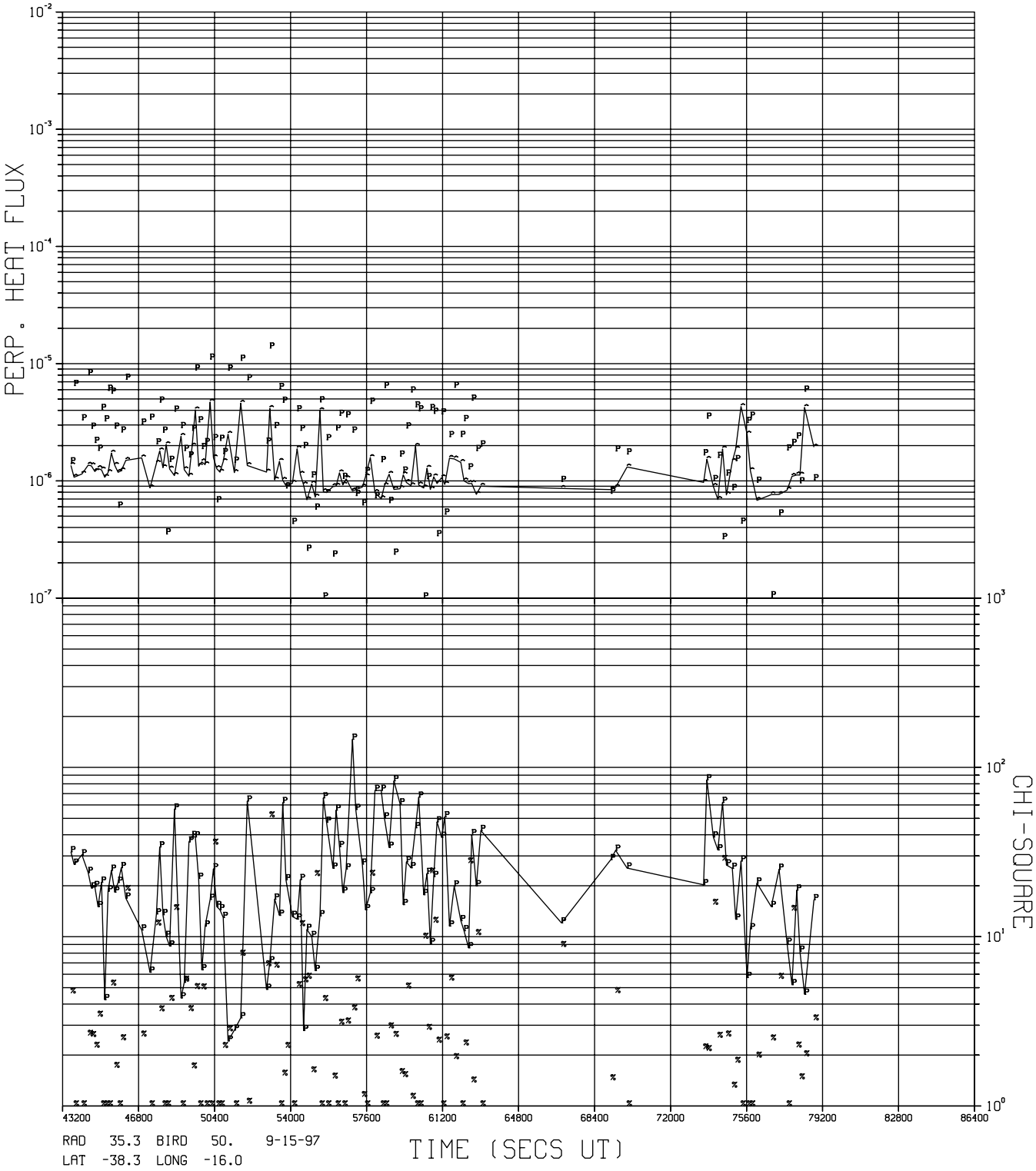

DENSITY
DENSITY RATIO
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 35.3 BIRD 50. 9-15-97
LAT -38.3 LONG -16.0

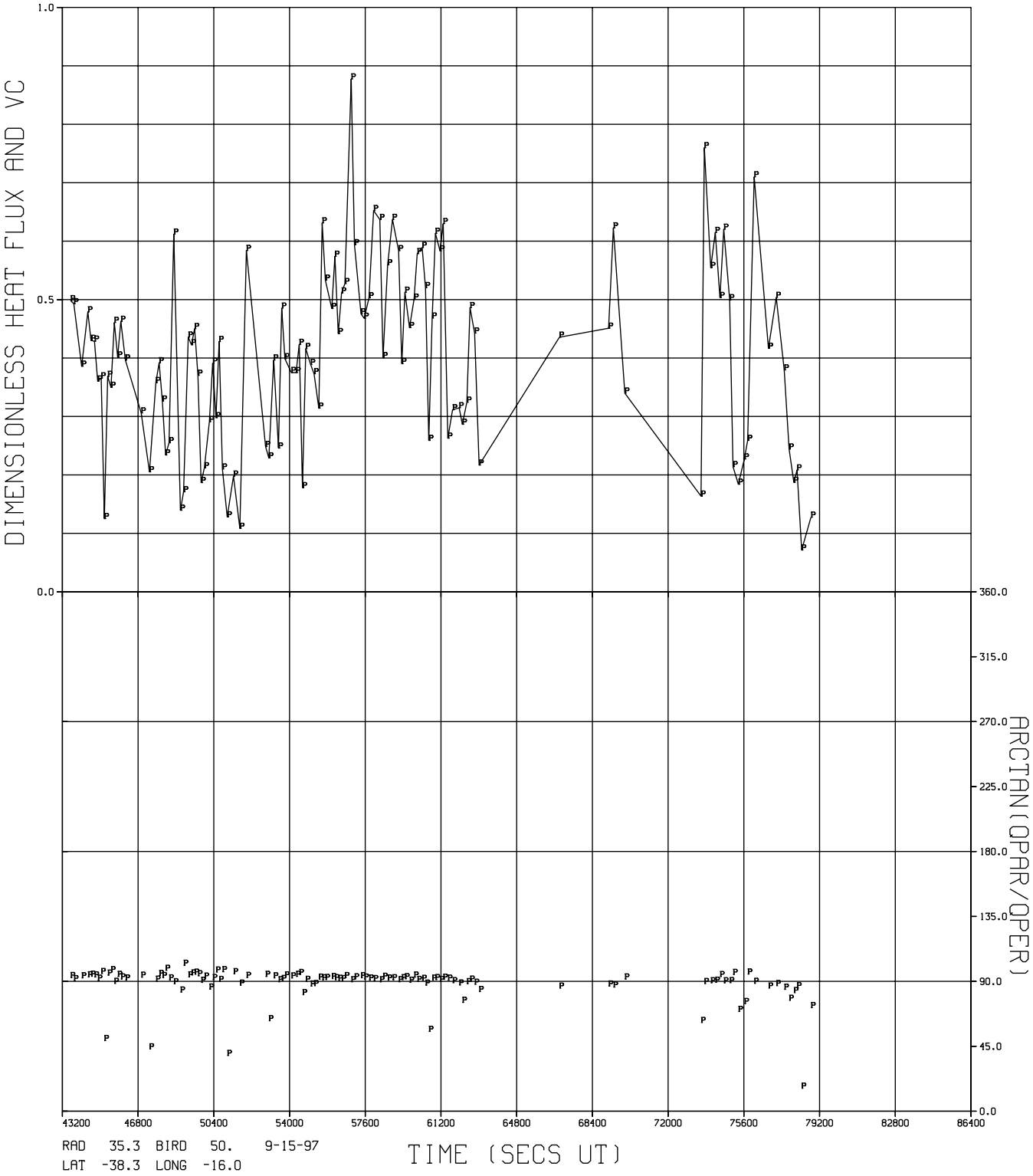

VELOCITY
1000
900
800
700
600
500
400
300
200
100
0
VELOCITY DIFFERENCE
100
80
60
40
20
0
-20
-40
-60
-80
-100
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
TIME (SECS UT)
RAD 35.3 BIRD 50. 9-15-97
LAT -38.3 LONG -16.0

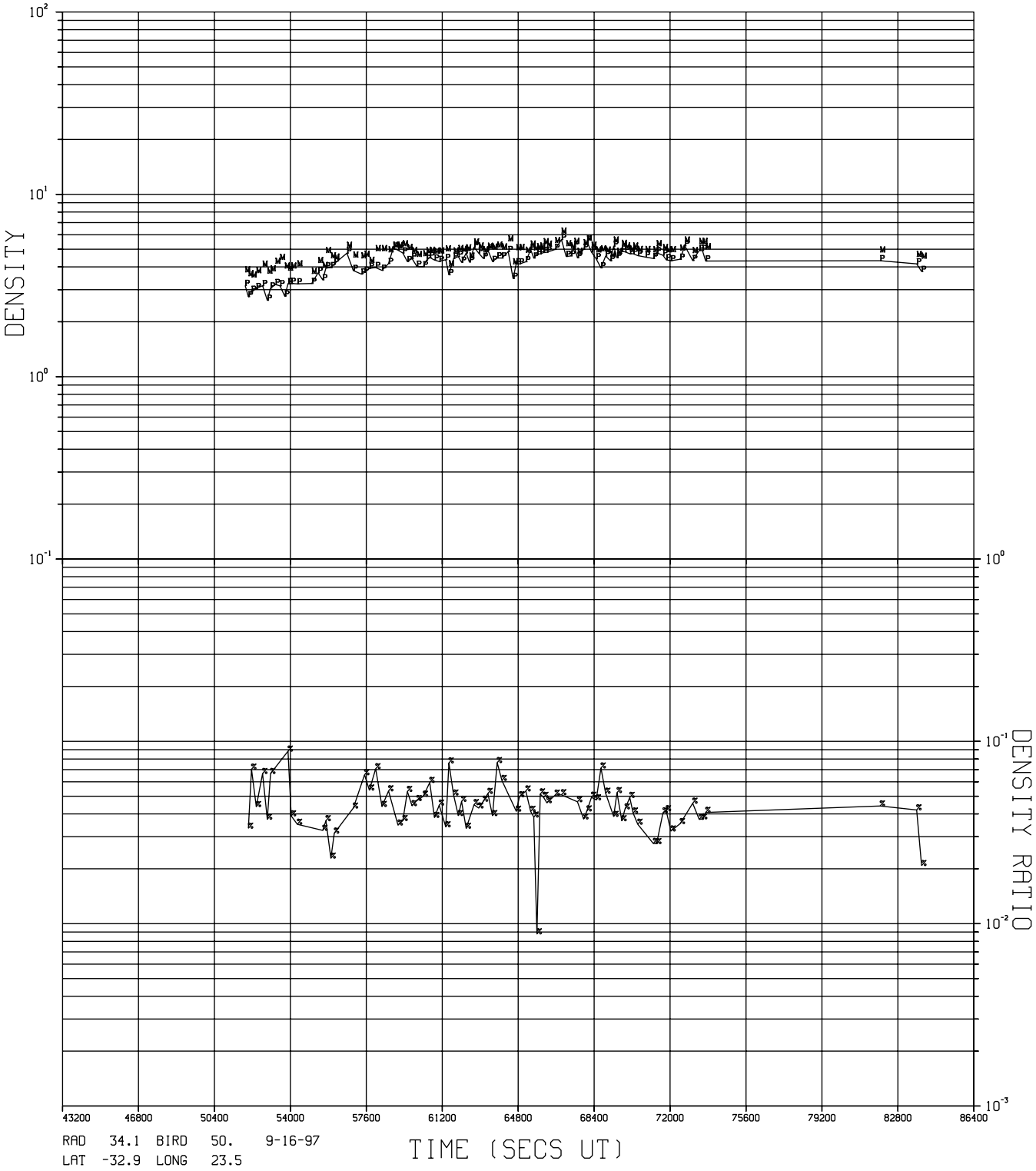

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 35.3 BIRD 50. 9-15-97
LAT -38.3 LONG -16.0

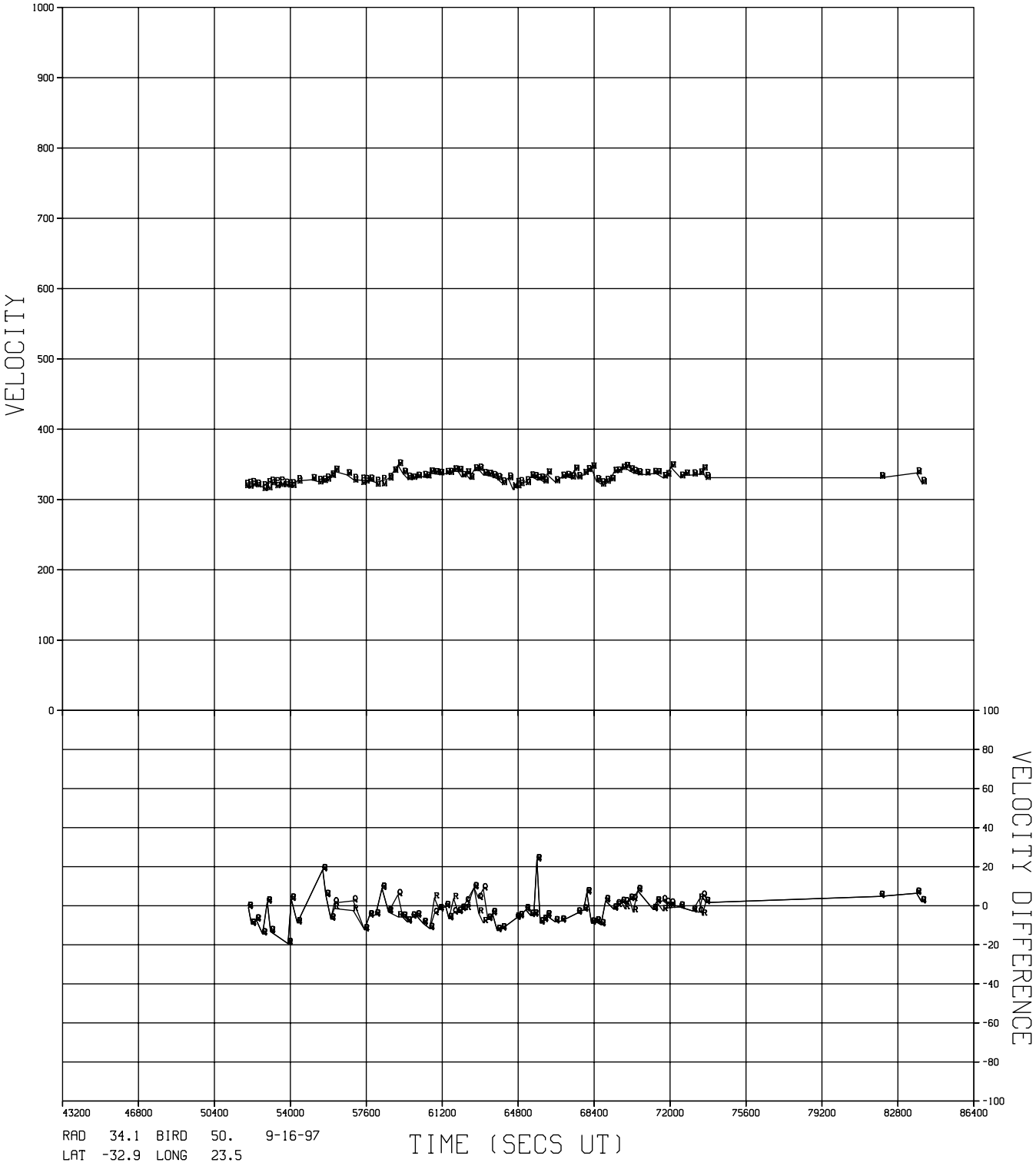

TEMPERATURE
TEMPERATURE RATIO
TIME (SECS UT)
RAD 35.3 BIRD 50. 9-15-97
LAT -38.3 LONG -16.0

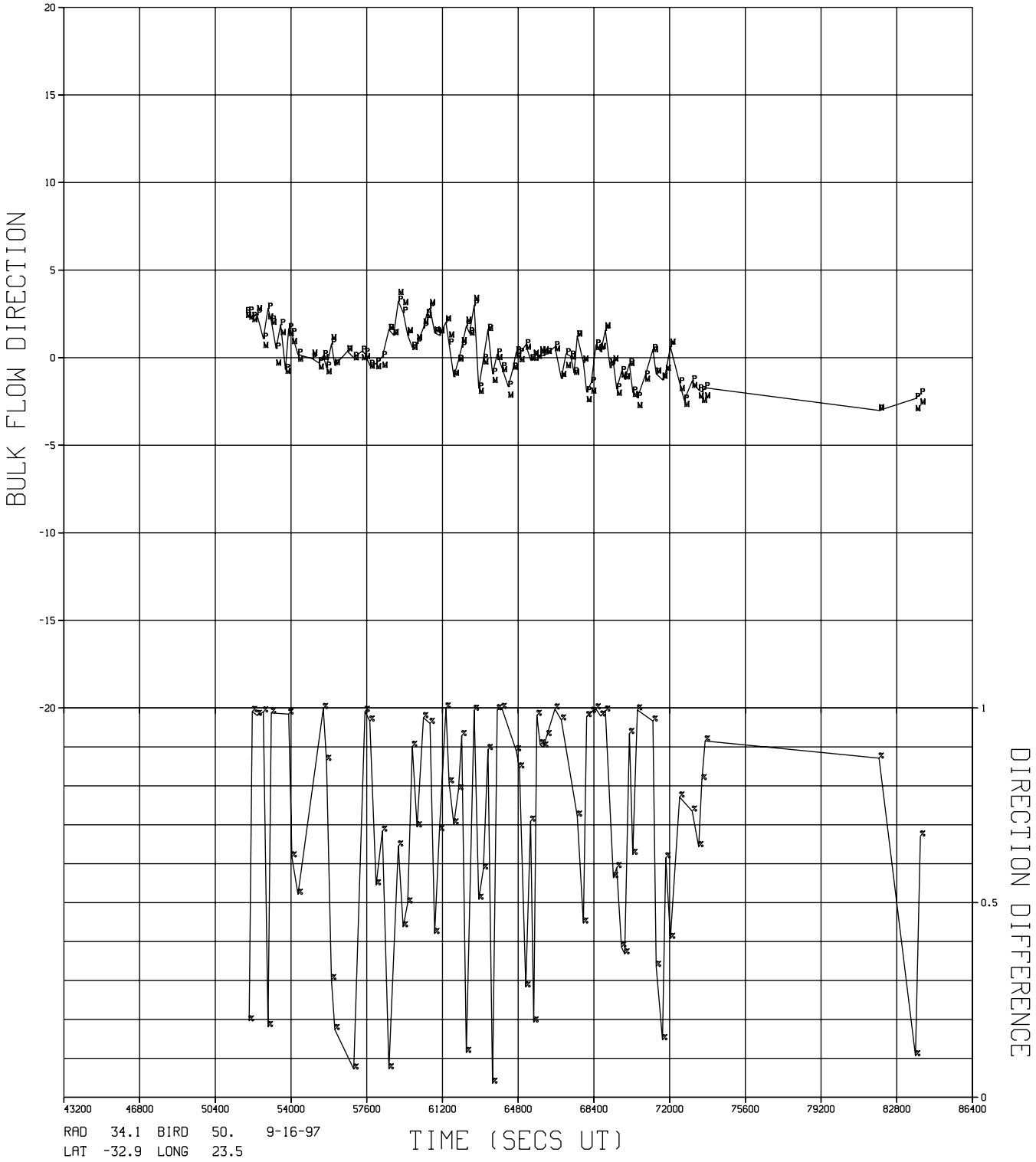

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 35.3 BIRD 50. 9-15-97
LAT -38.3 LONG -16.0

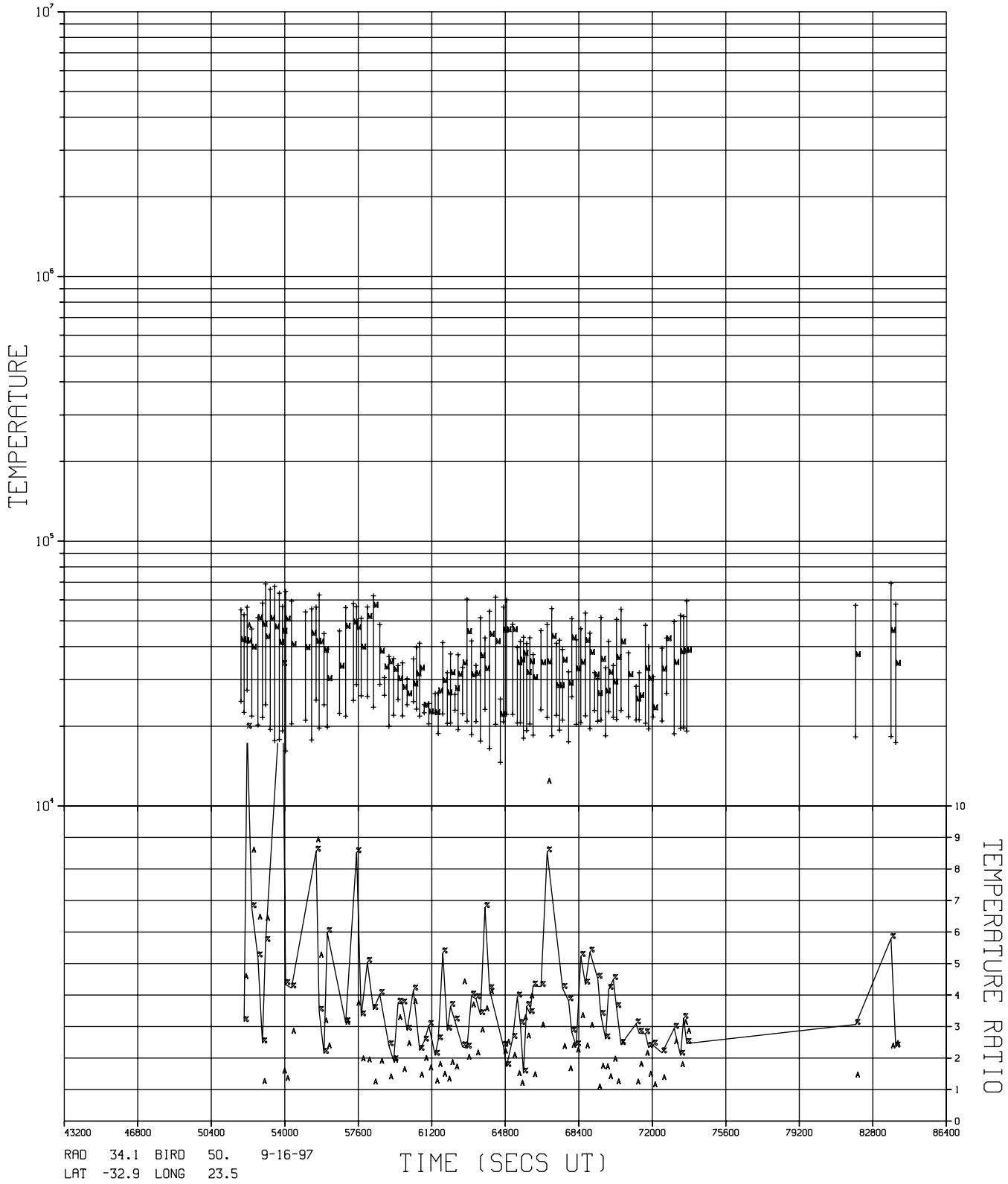

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 35.3 BIRD 50. 9-15-97
LAT -38.3 LONG -16.0

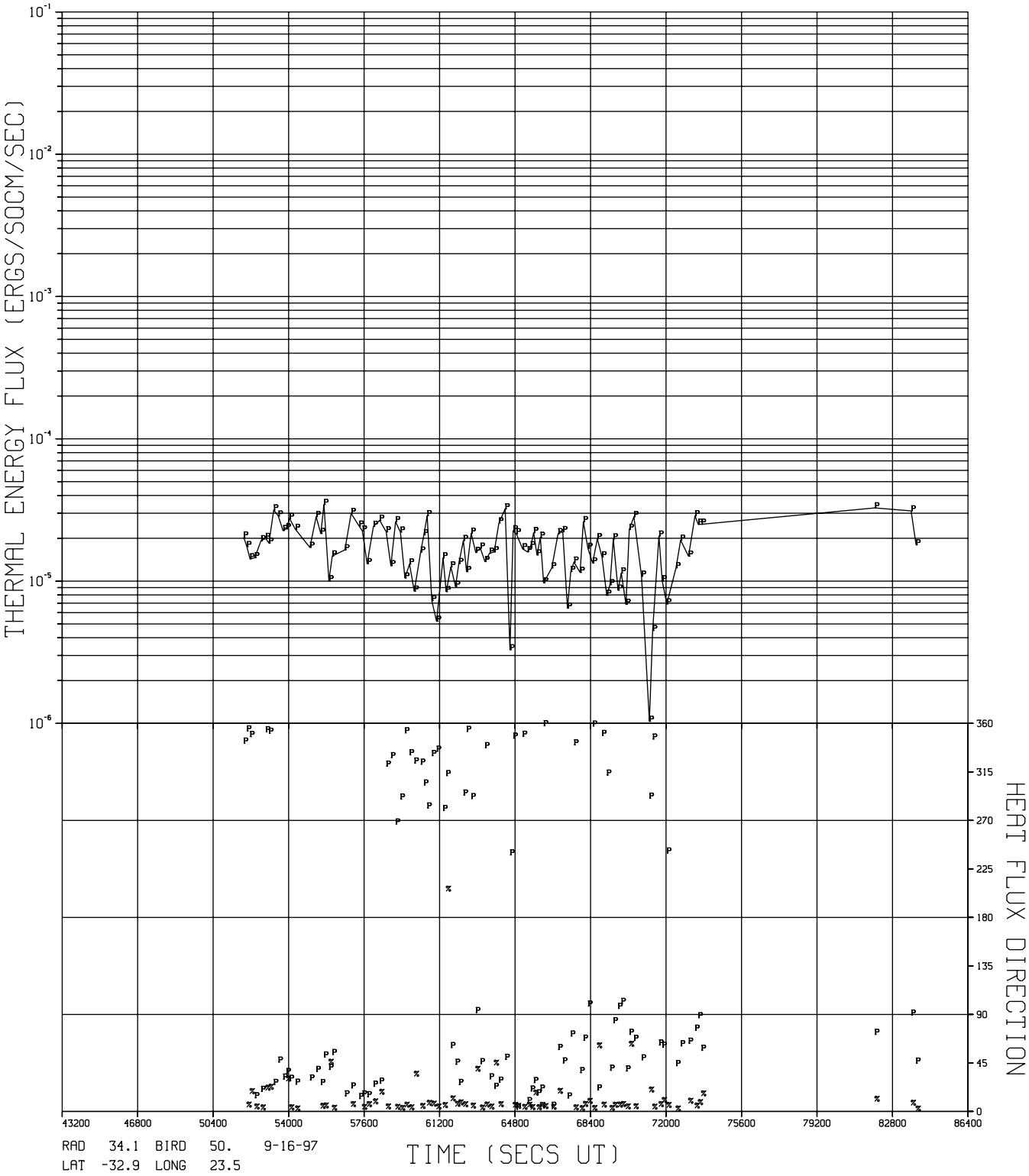

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
TIME (SECS UT)
RAD 35.3 BIRD 50. 9-15-97
LAT -38.3 LONG -16.0

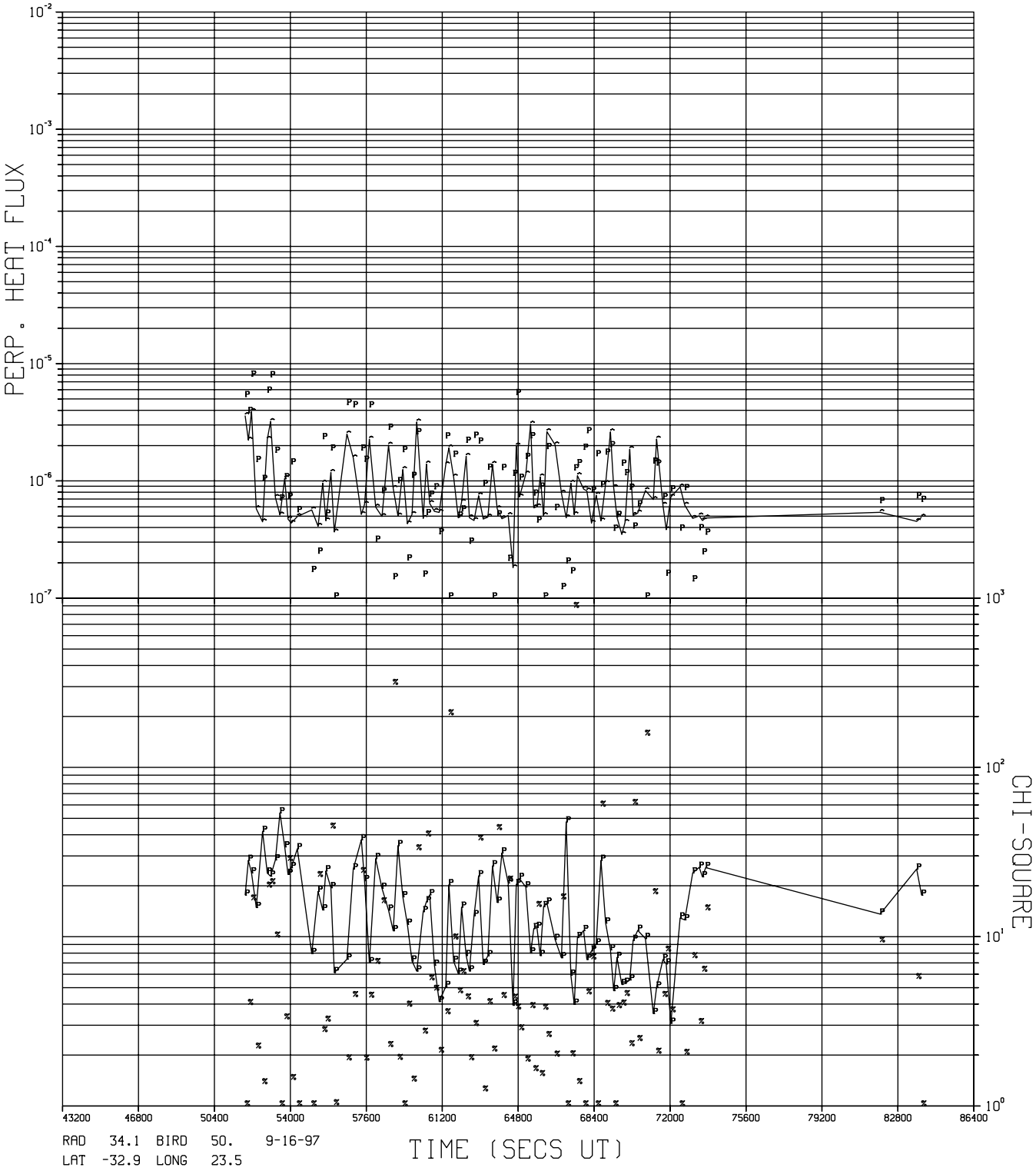

DENSITY
DENSITY RATIO
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 34.1 BIRD 50. 9-16-97
LAT -32.9 LONG 23.5

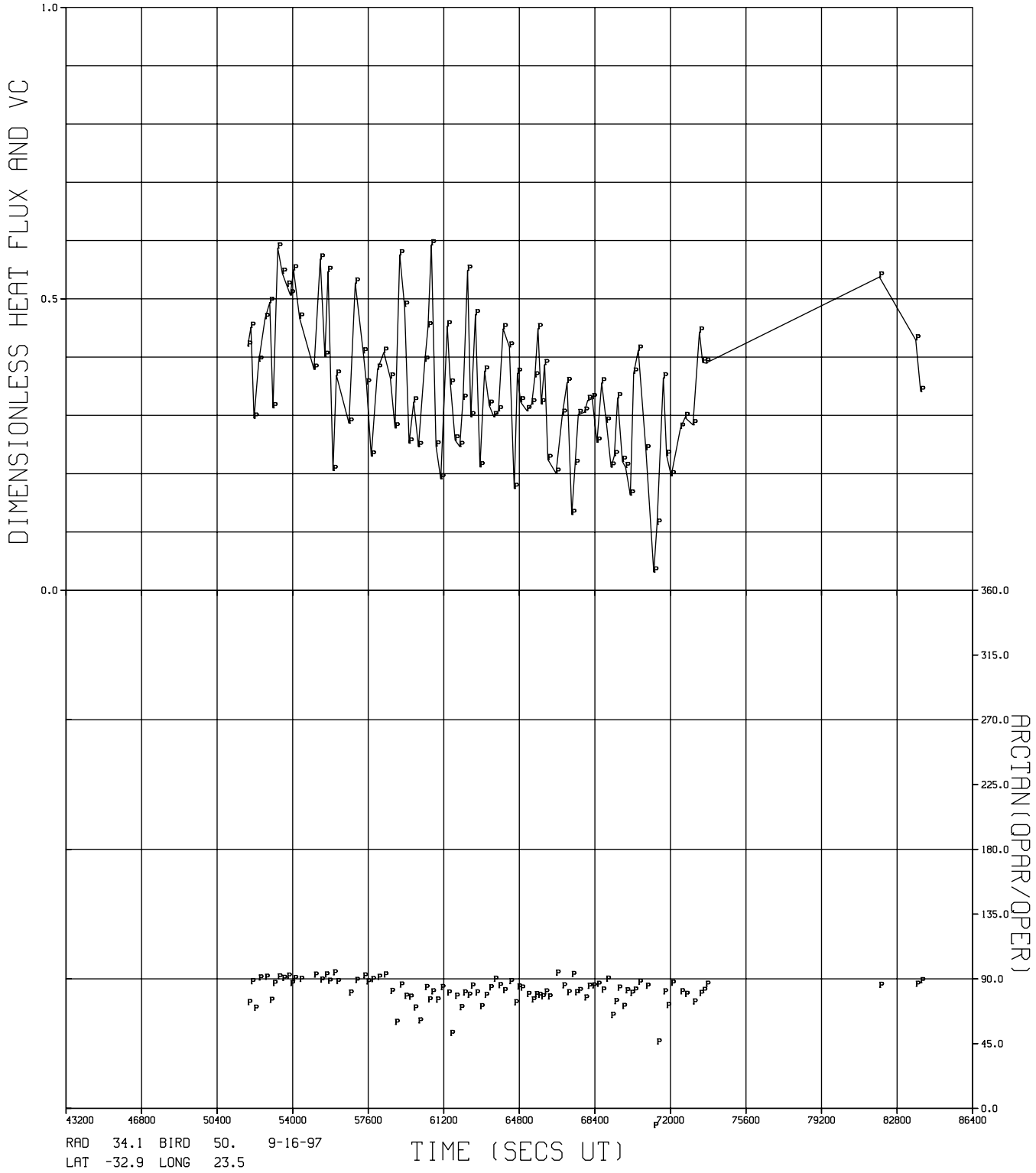

VELOCITY
1000
900
800
700
600
500
400
300
200
100
0
VELOCITY DIFFERENCE
100
80
60
40
20
0
-20
-40
-60
-80
-100
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 34.1 BIRD 50. 9-16-97
LAT -32.9 LONG 23.5
TIME (SECS UT)

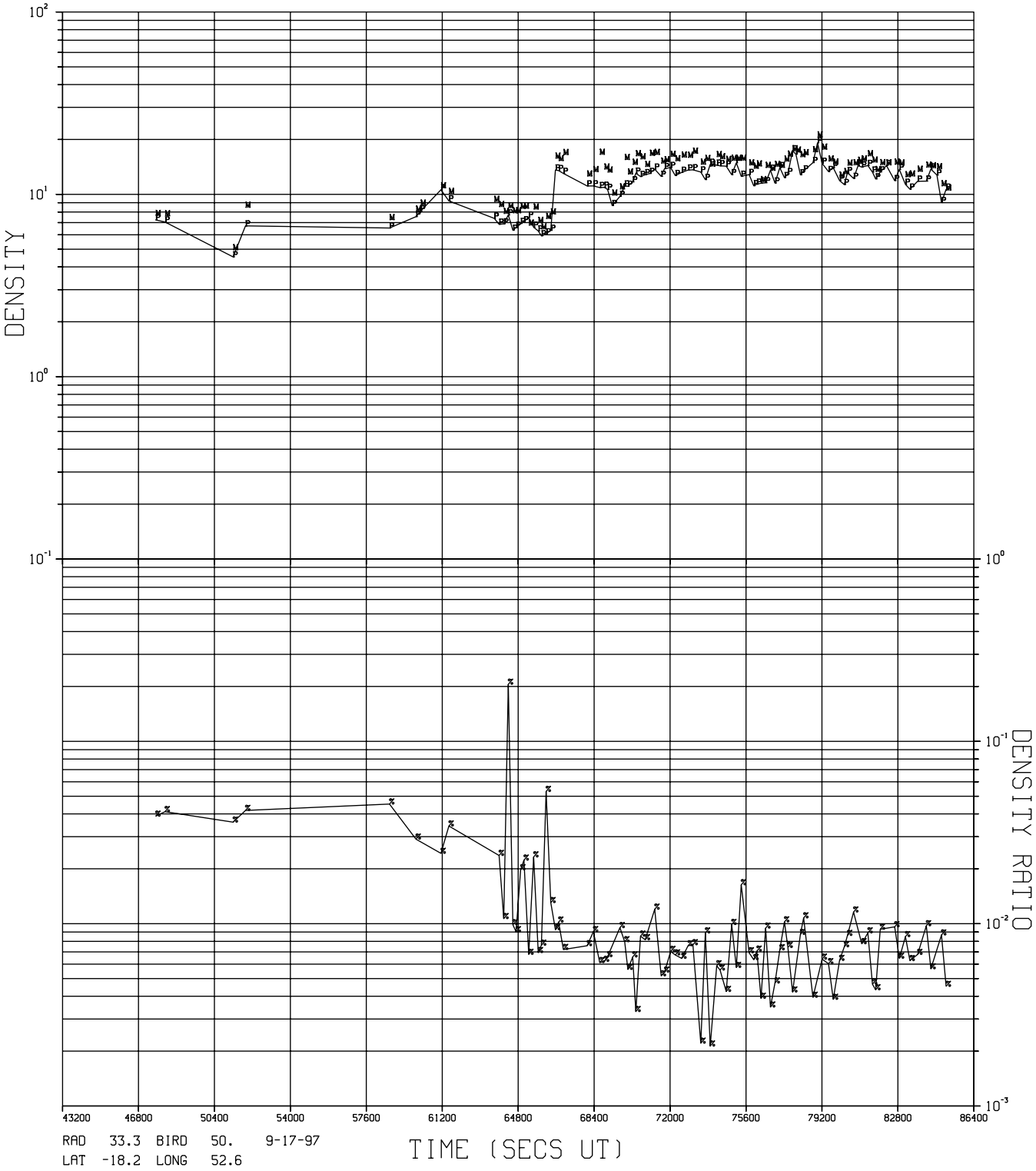

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 34.1 BIRD 50. 9-16-97
LAT -32.9 LONG 23.5

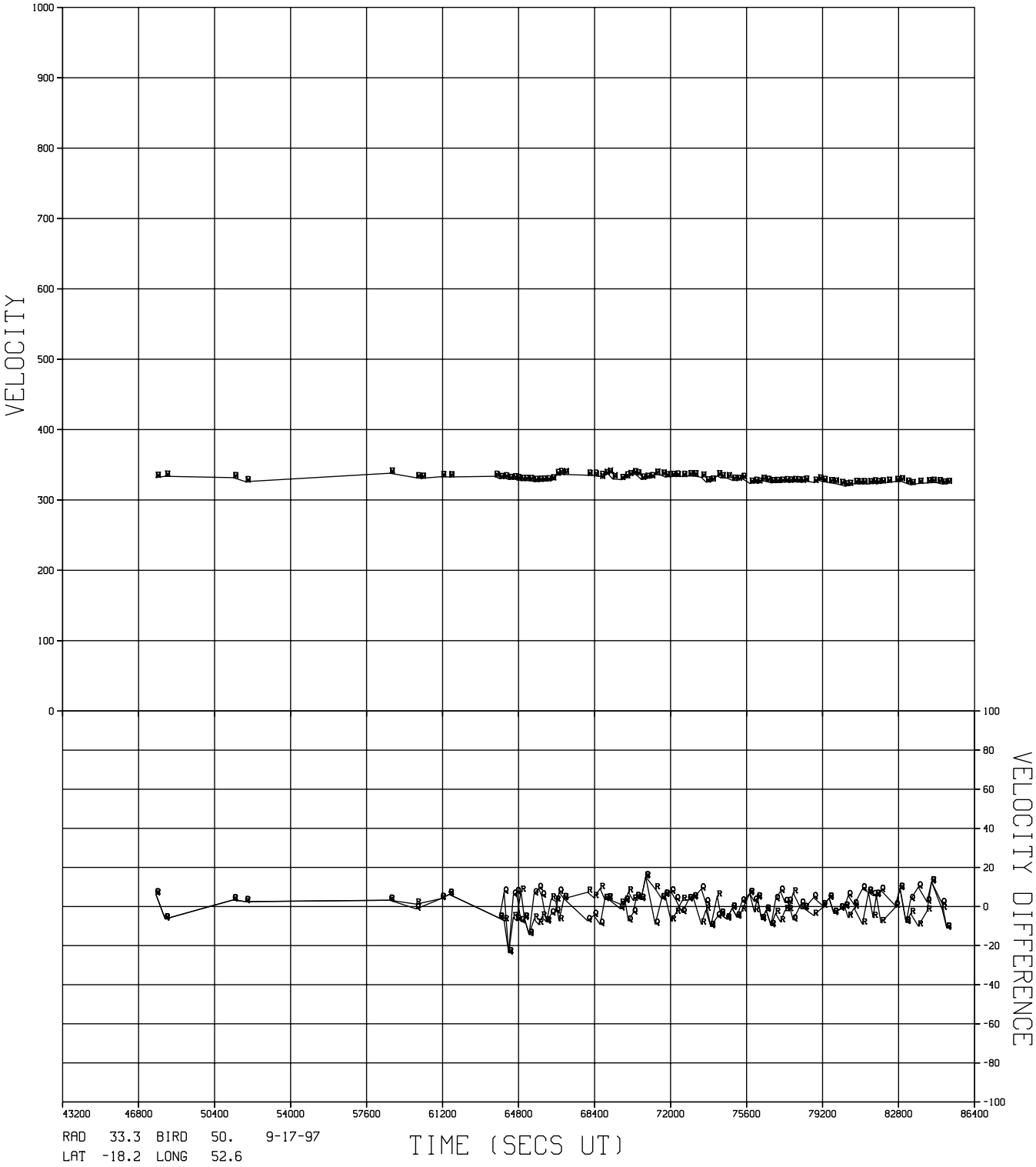

TEMPERATURE
TEMPERATURE RATIO
TIME (SECS UT)
RAD 34.1 BIRD 50. 9-16-97
LAT -32.9 LONG 23.5

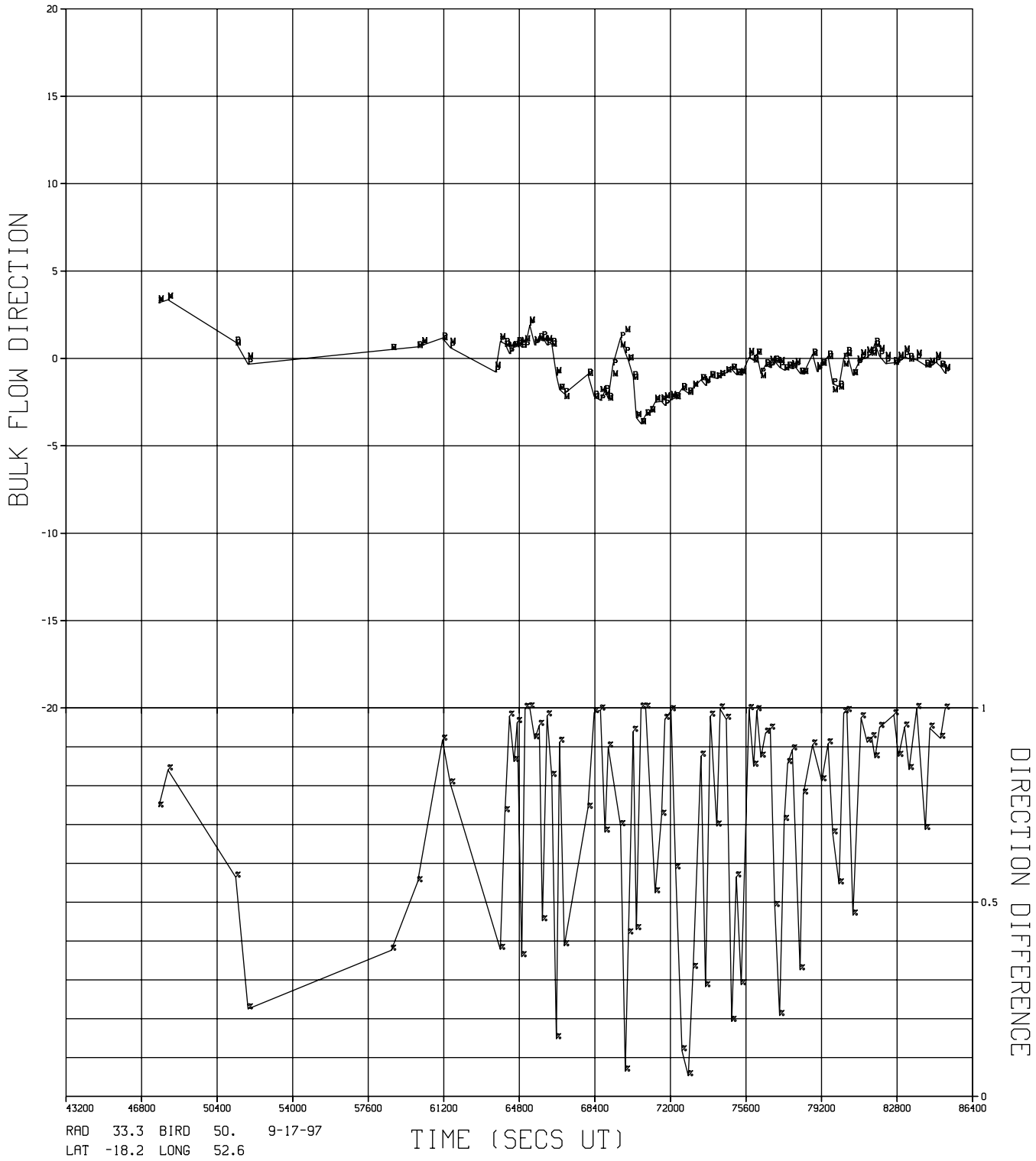

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 34.1 BIRD 50. 9-16-97
LAT -32.9 LONG 23.5

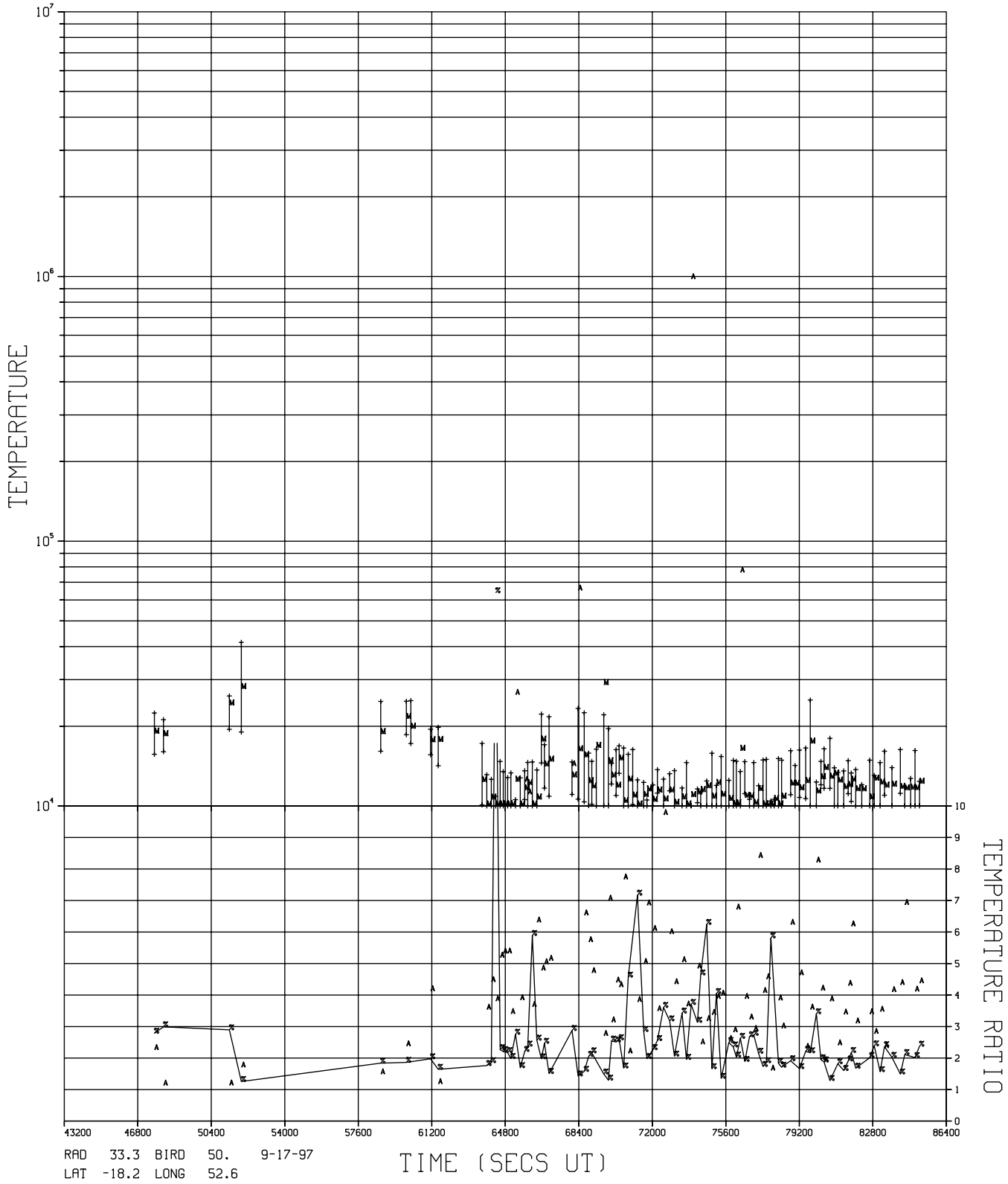

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
RAD 34.1 BIRD 50. 9-16-97
LAT -32.9 LONG 23.5

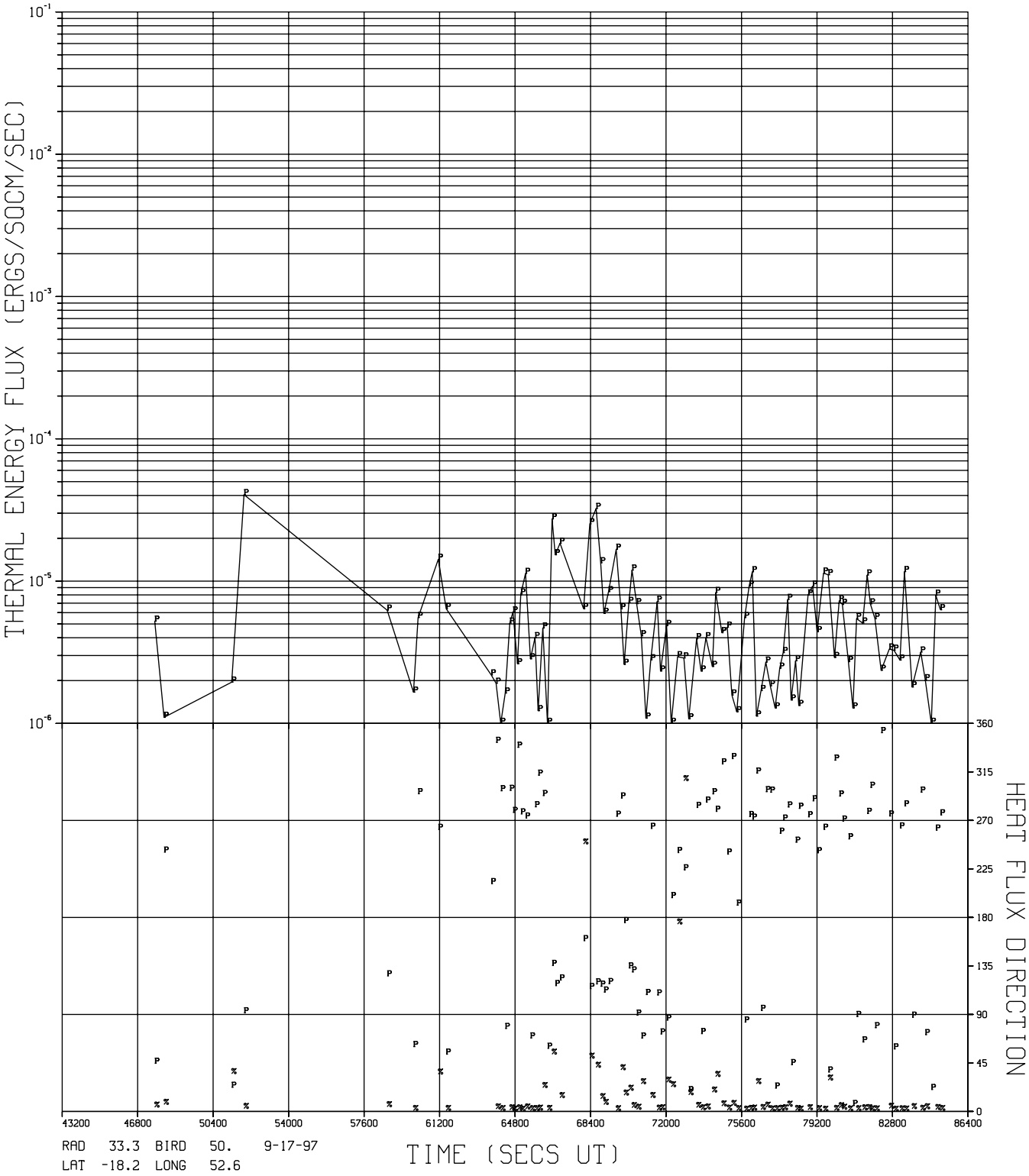

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
TIME (SECS UT)
RAD 34.1 BIRD 50. 9-16-97
LAT -32.9 LONG 23.5

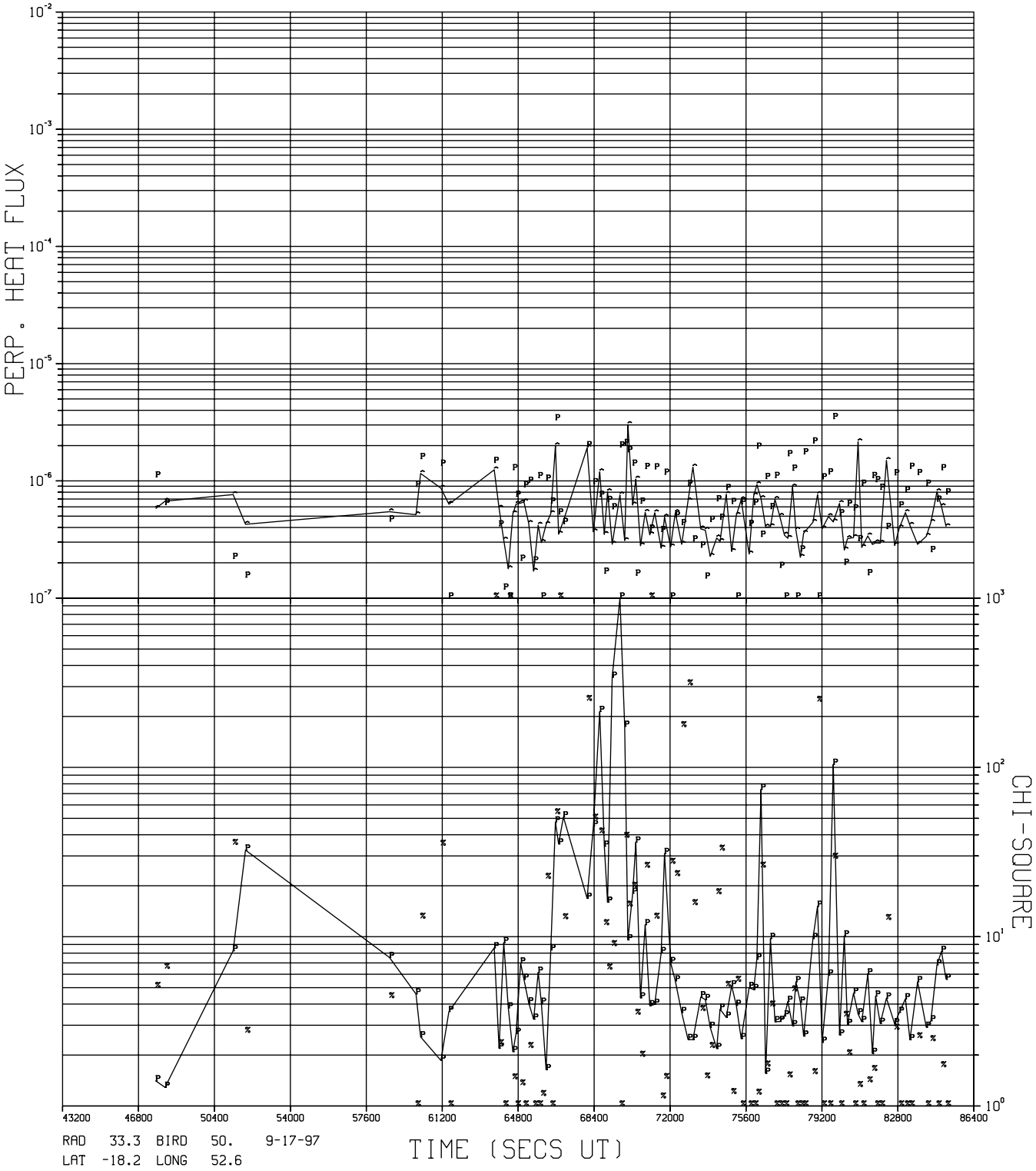

DENSITY
DENSITY RATIO
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 33.3 BIRD 50. 9-17-97
LAT -18.2 LONG 52.6

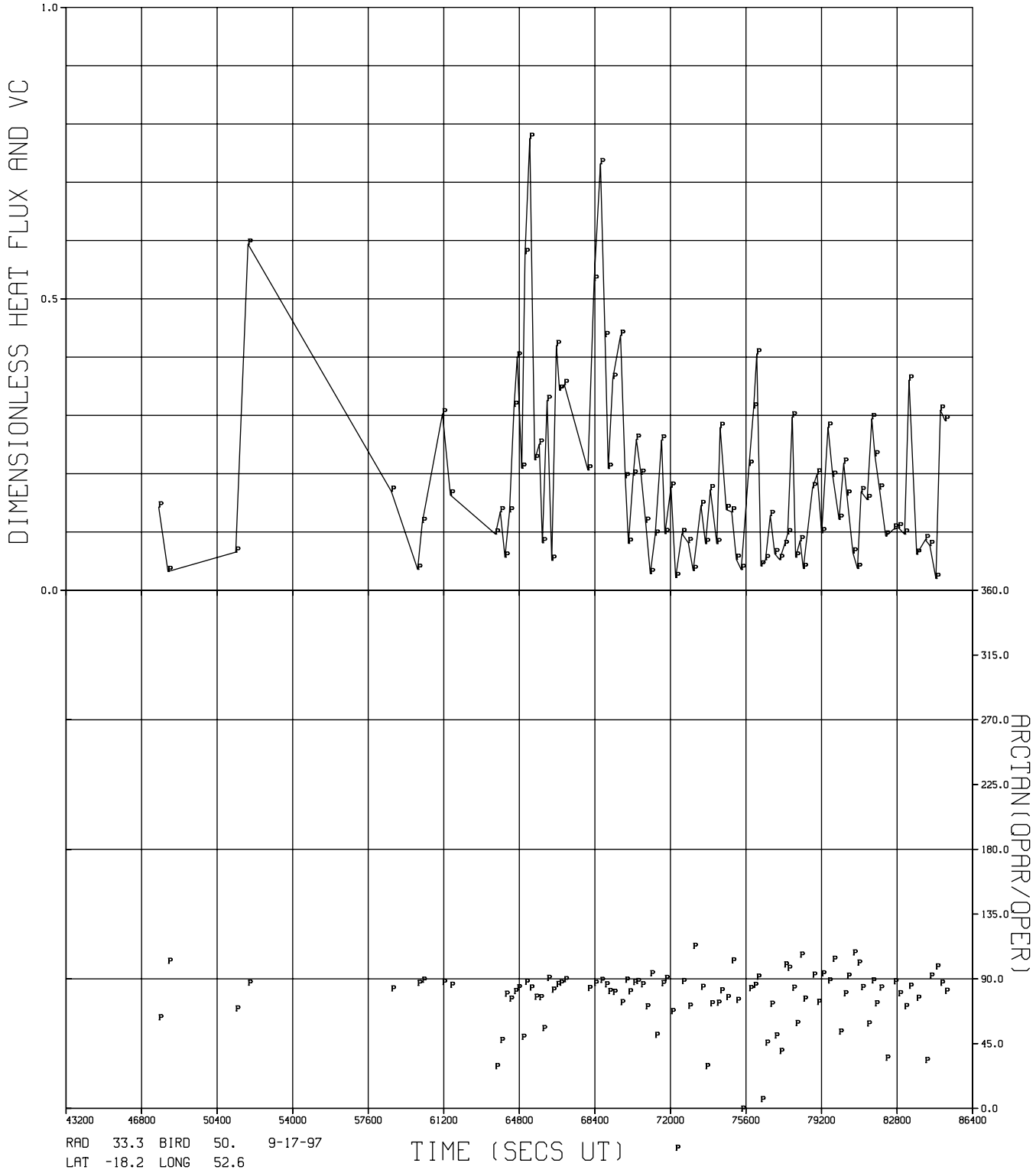

VELOCITY
1000
900
800
700
600
500
400
300
200
100
0
VELOCITY DIFFERENCE
100
80
60
40
20
0
-20
-40
-60
-80
-100
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 33.3 BIRD 50. 9-17-97
LAT -18.2 LONG 52.6
TIME (SECS UT)

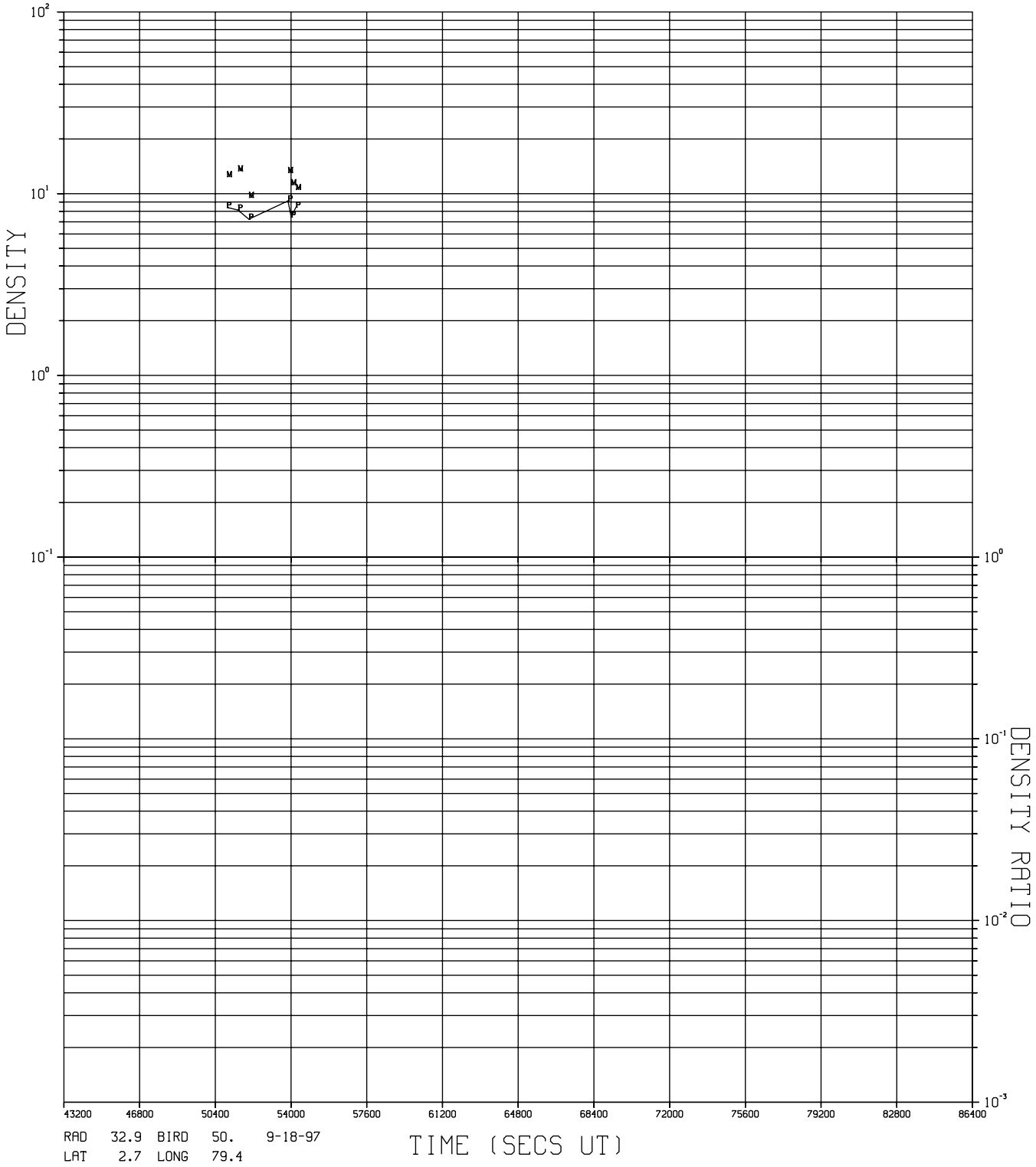

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 33.3 BIRD 50. 9-17-97
LAT -18.2 LONG 52.6

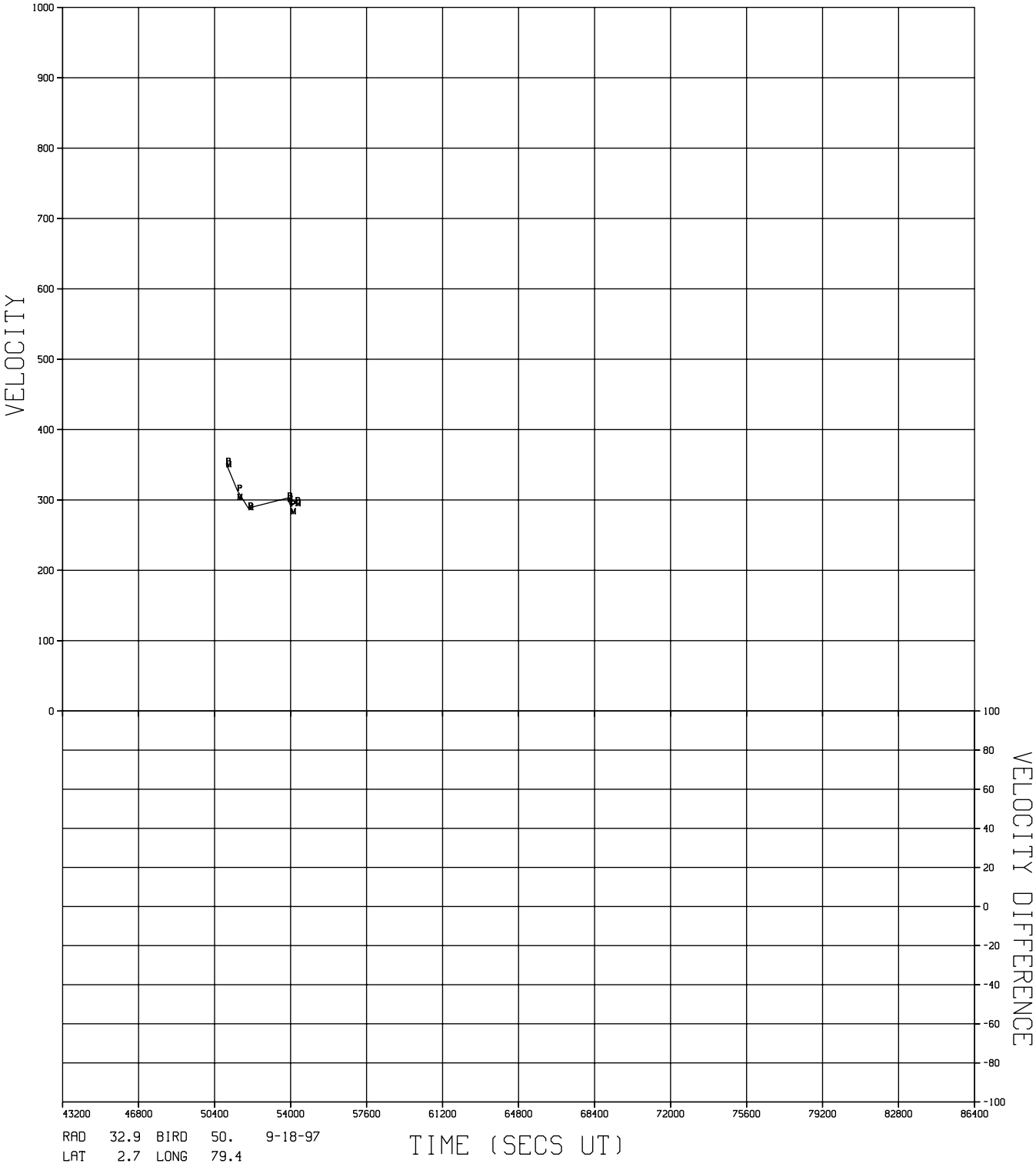

TEMPERATURE
TEMPERATURE RATIO
TIME (SECS UT)
RAD 33.3 BIRD 50. 9-17-97
LAT -18.2 LONG 52.6

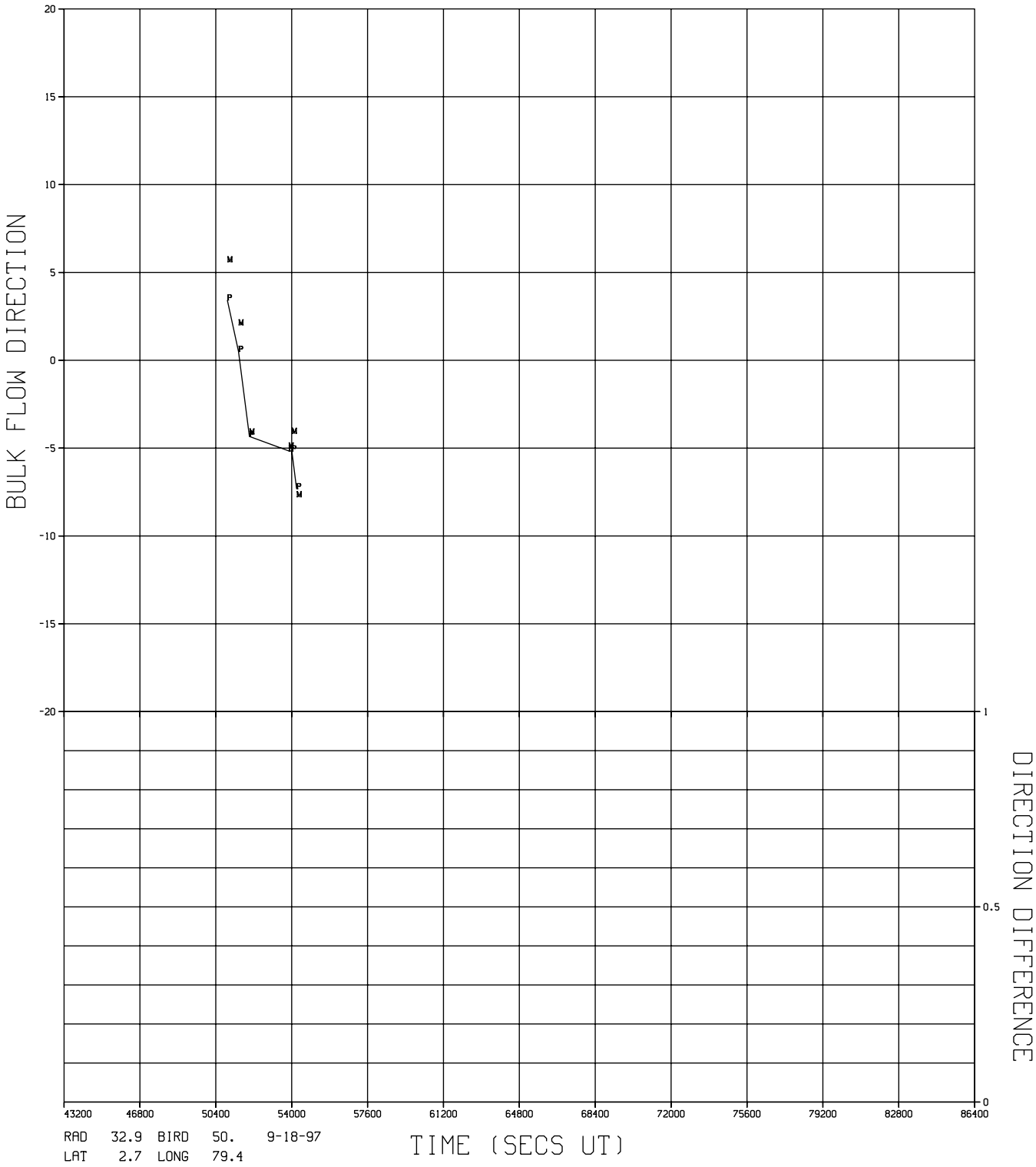

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 33.3 BIRD 50. 9-17-97
LAT -18.2 LONG 52.6

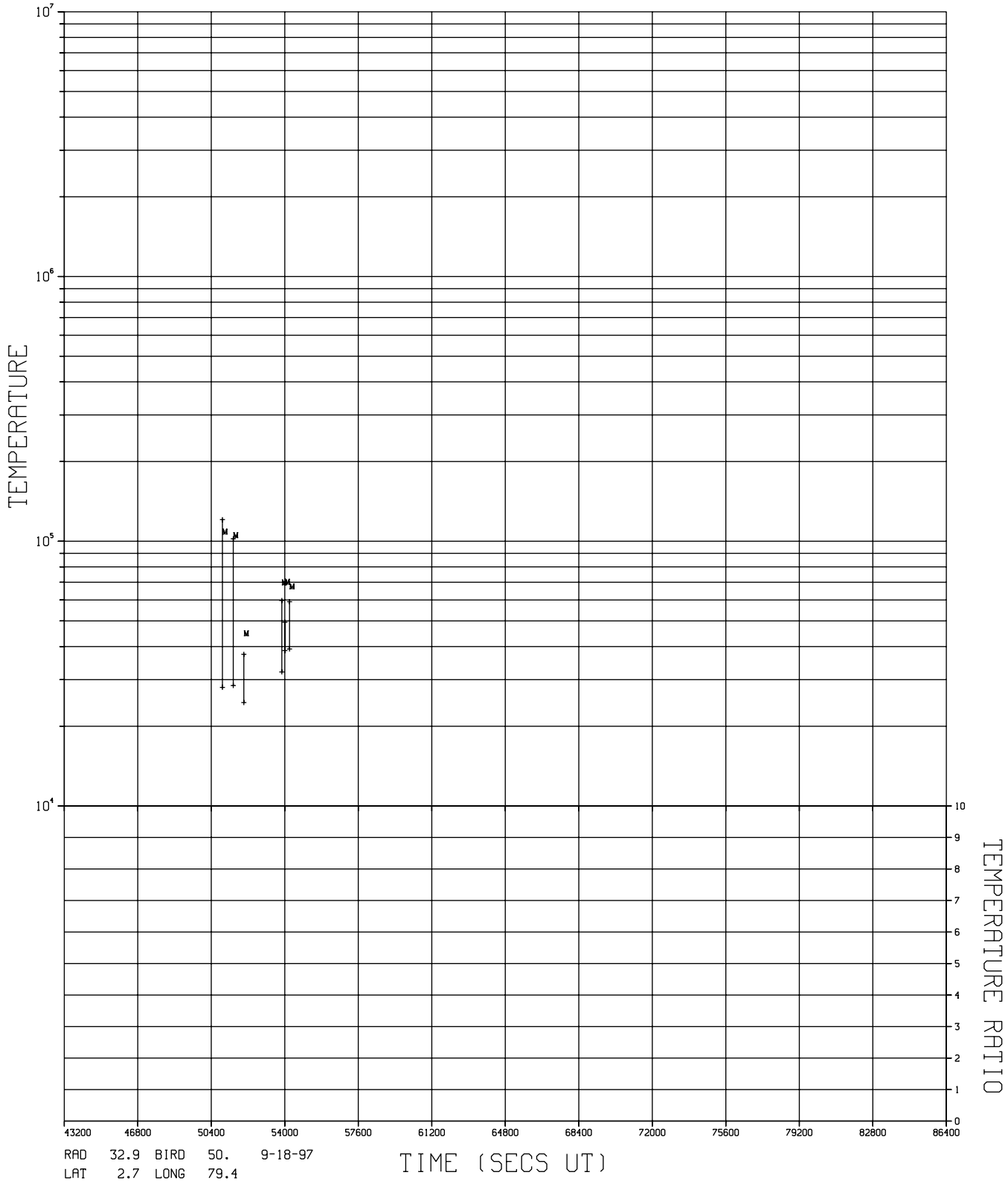

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 33.3 BIRD 50. 9-17-97
LAT -18.2 LONG 52.6

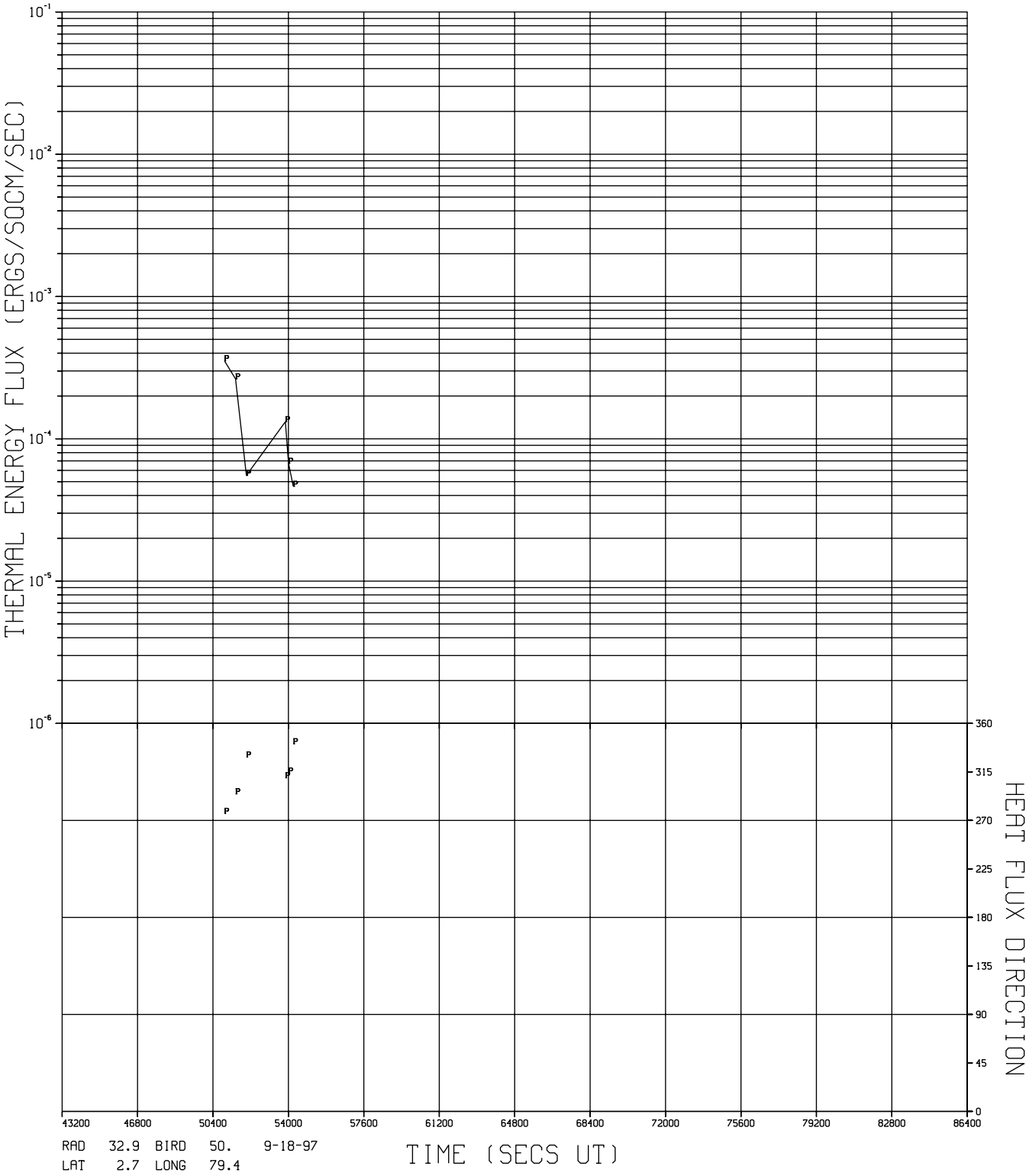

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
TIME (SECS UT)
RAD 33.3 BIRD 50. 9-17-97
LAT -18.2 LONG 52.6

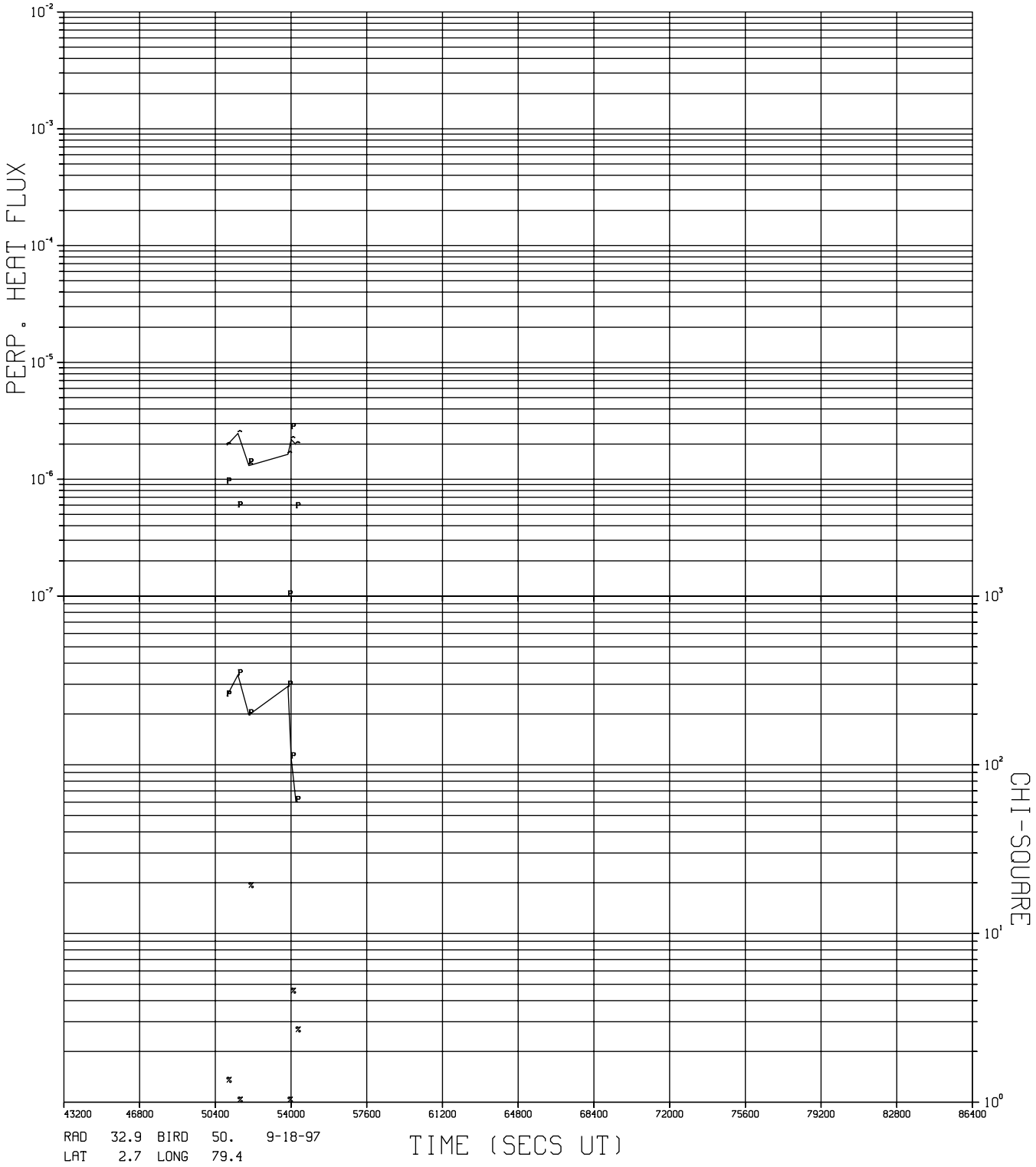

DENSITY
DENSITY RATIO
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 32.9 BIRD 50. 9-18-97
LAT 2.7 LONG 79.4

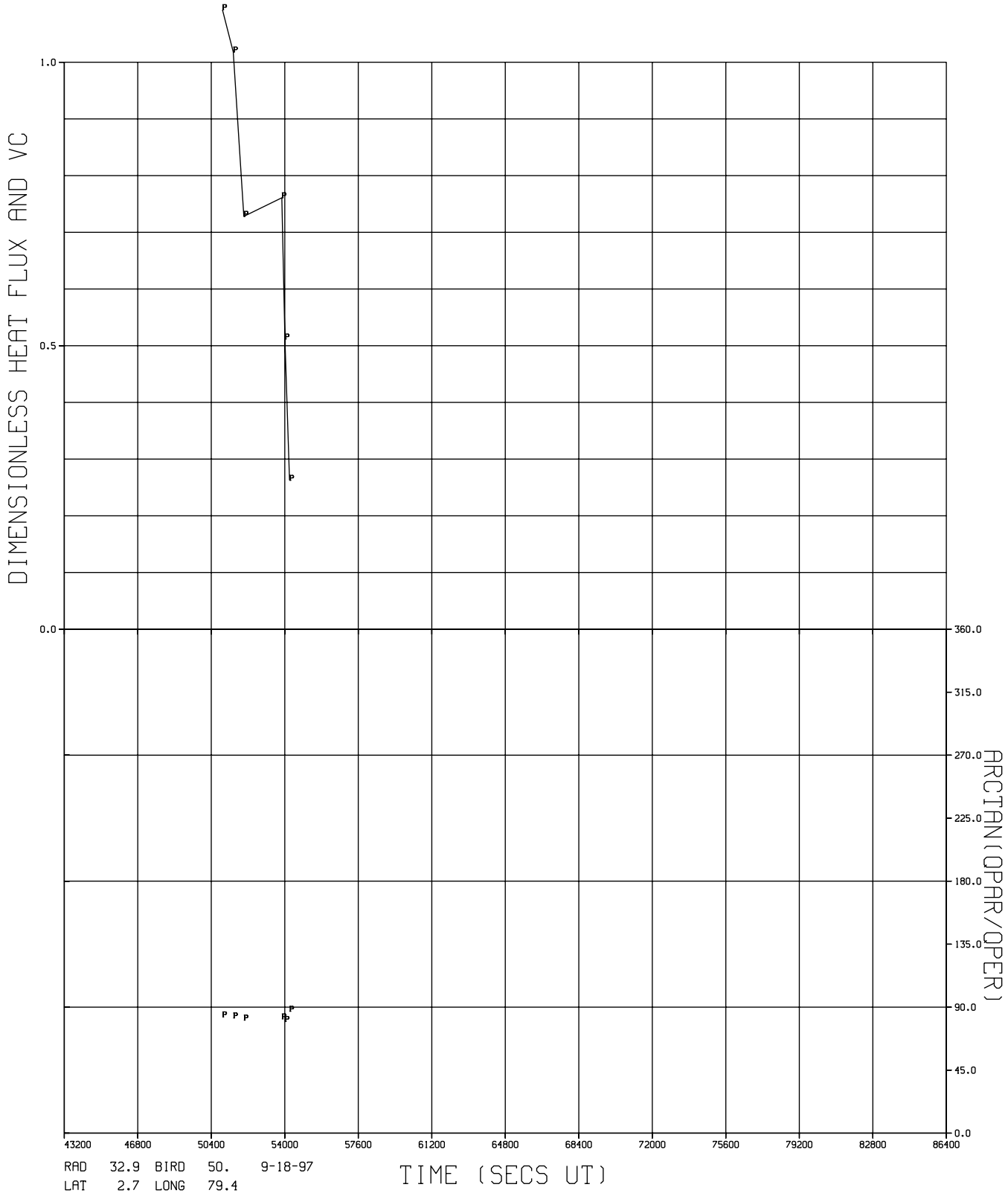

VELOCITY
VELOCITY DIFFERENCE
TIME (SECS UT)
1000
900
800
700
600
500
400
300
200
100
0
100
80
60
40
20
0
-20
-40
-60
-80
-100
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 32.9 BIRD 50. 9-18-97
LAT 2.7 LONG 79.4


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 32.9 BIRD 50. 9-18-97
LAT 2.7 LONG 79.4


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 32.9 BIRD 50. 9-18-97
LAT 2.7 LONG 79.4


THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 32.9 BIRD 50. 9-18-97
LAT 2.7 LONG 79.4


PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 32.9 BIRD 50. 9-18-97
LAT 2.7 LONG 79.4


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 32.9 BIRD 50. 9-18-97
LAT 2.7 LONG 79.4