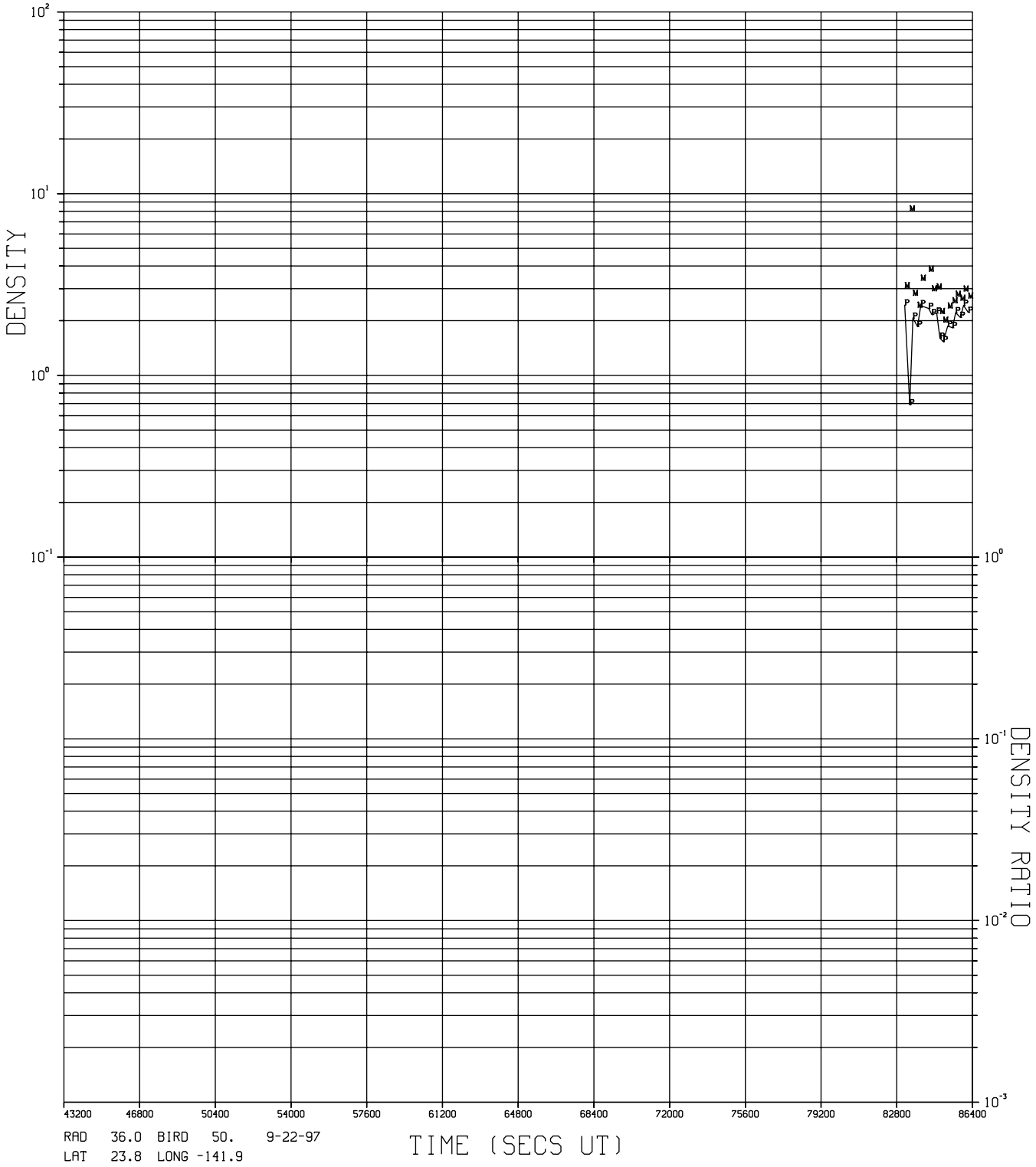
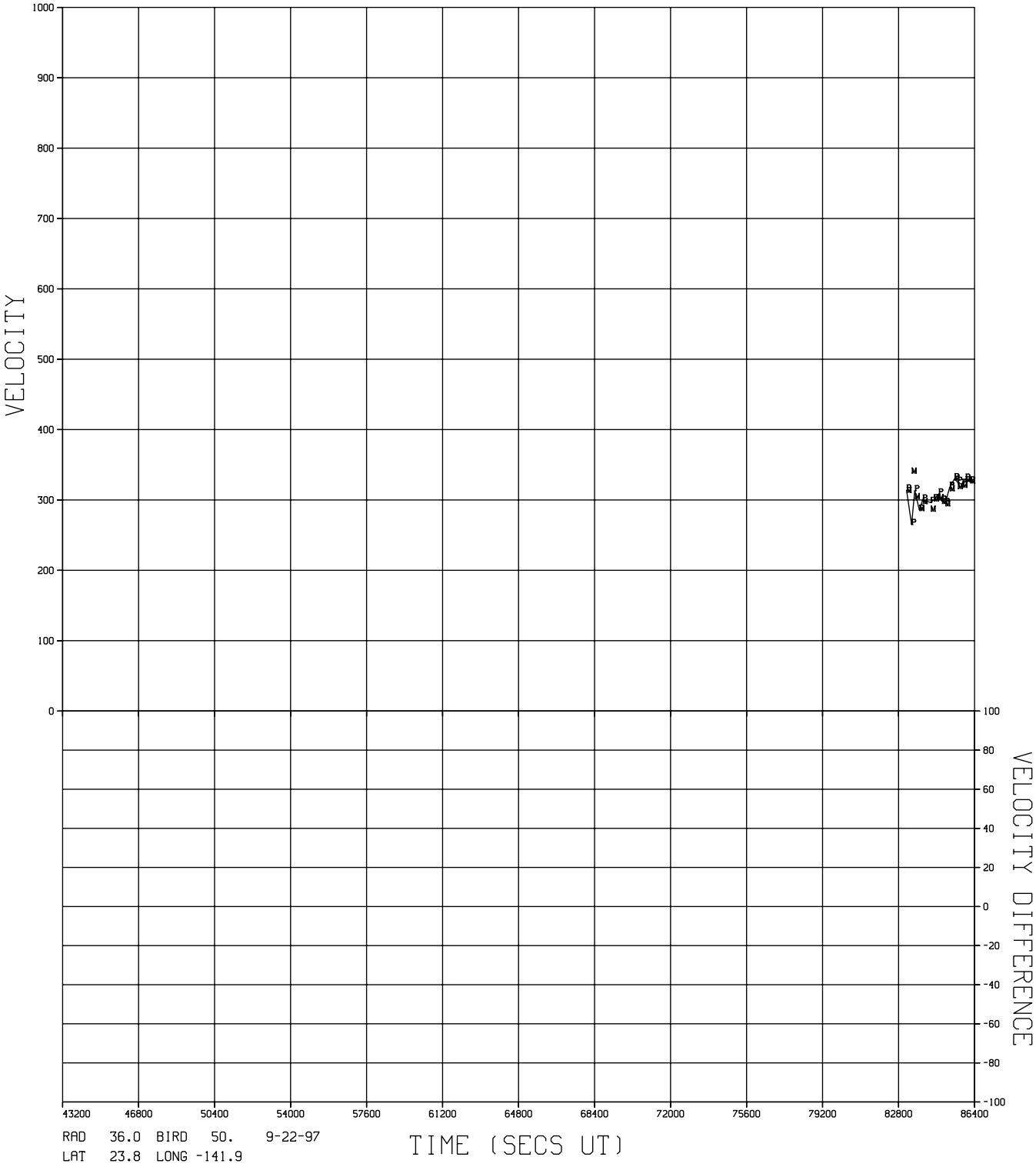
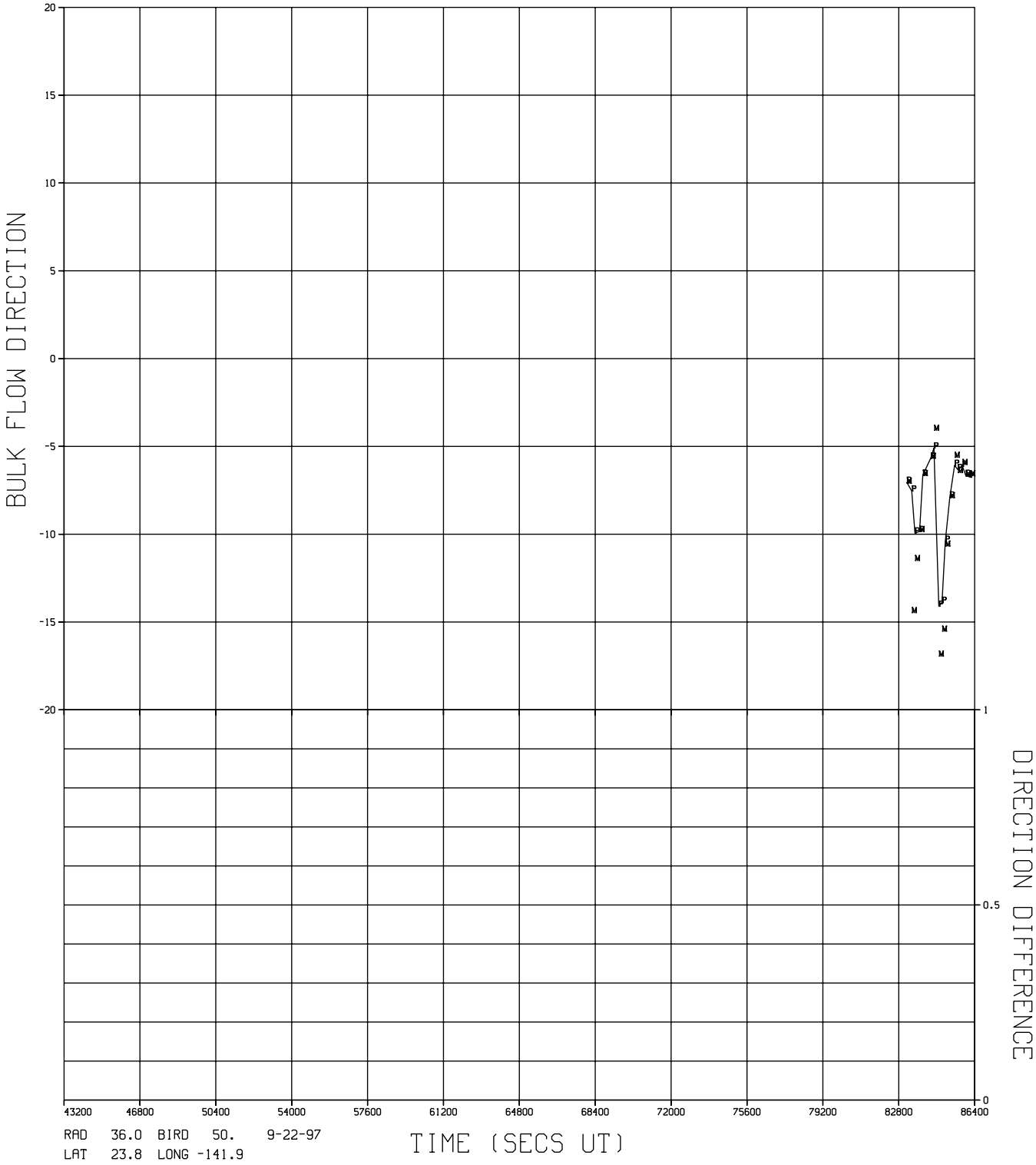
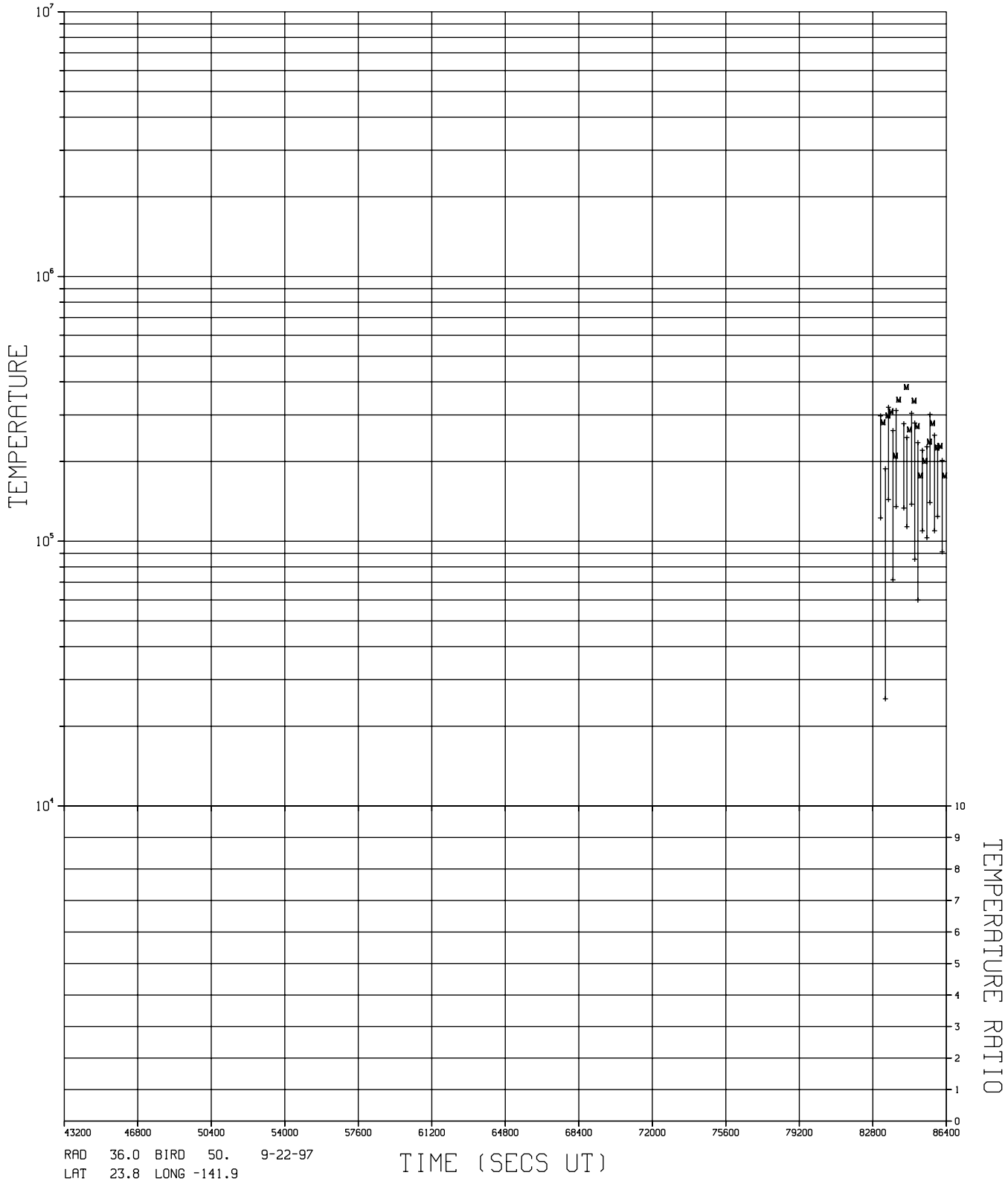
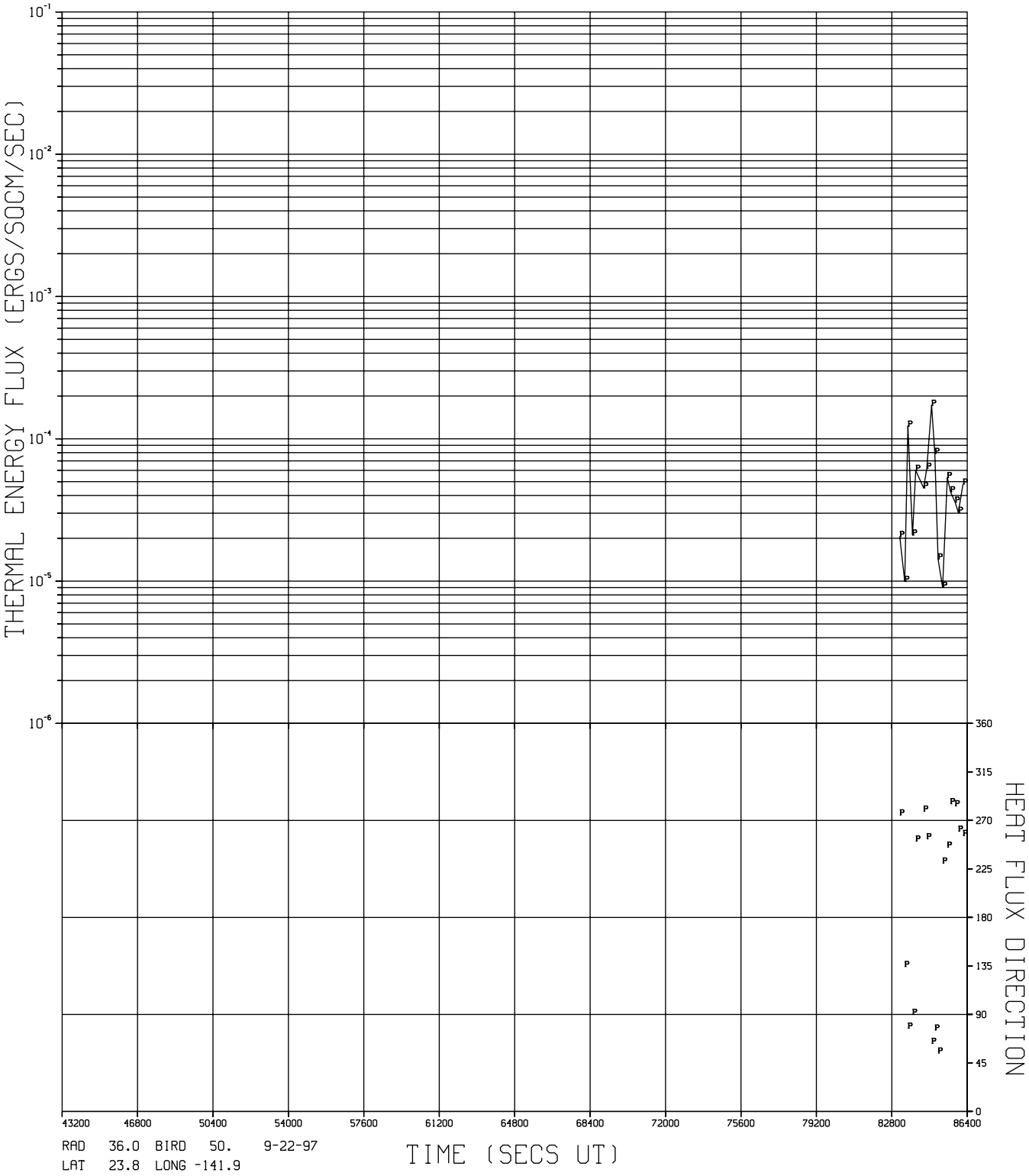
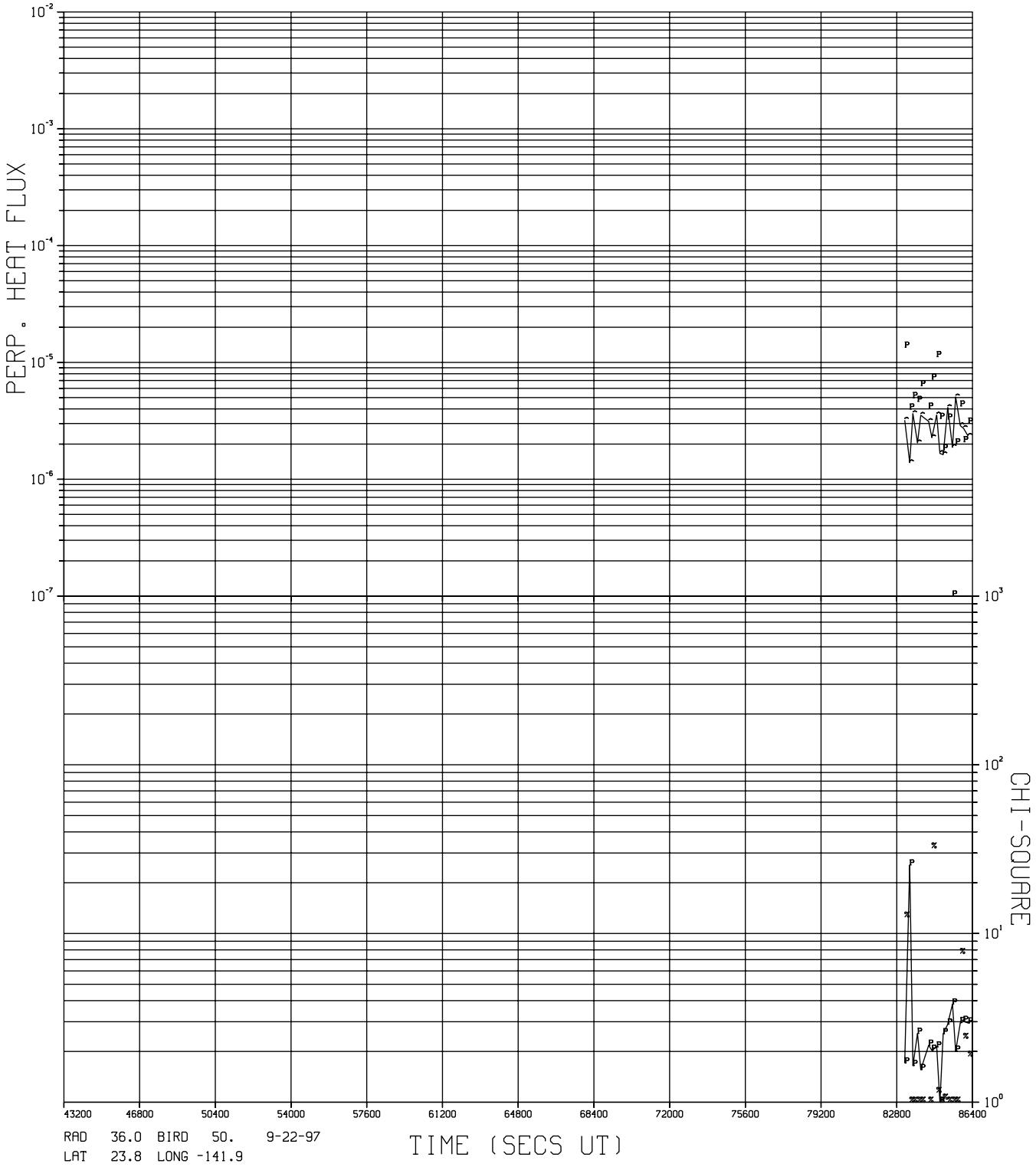

DENSITY
DENSITY RATIO
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 36.0 BIRD 50. 9-22-97
LAT 23.8 LONG -141.9

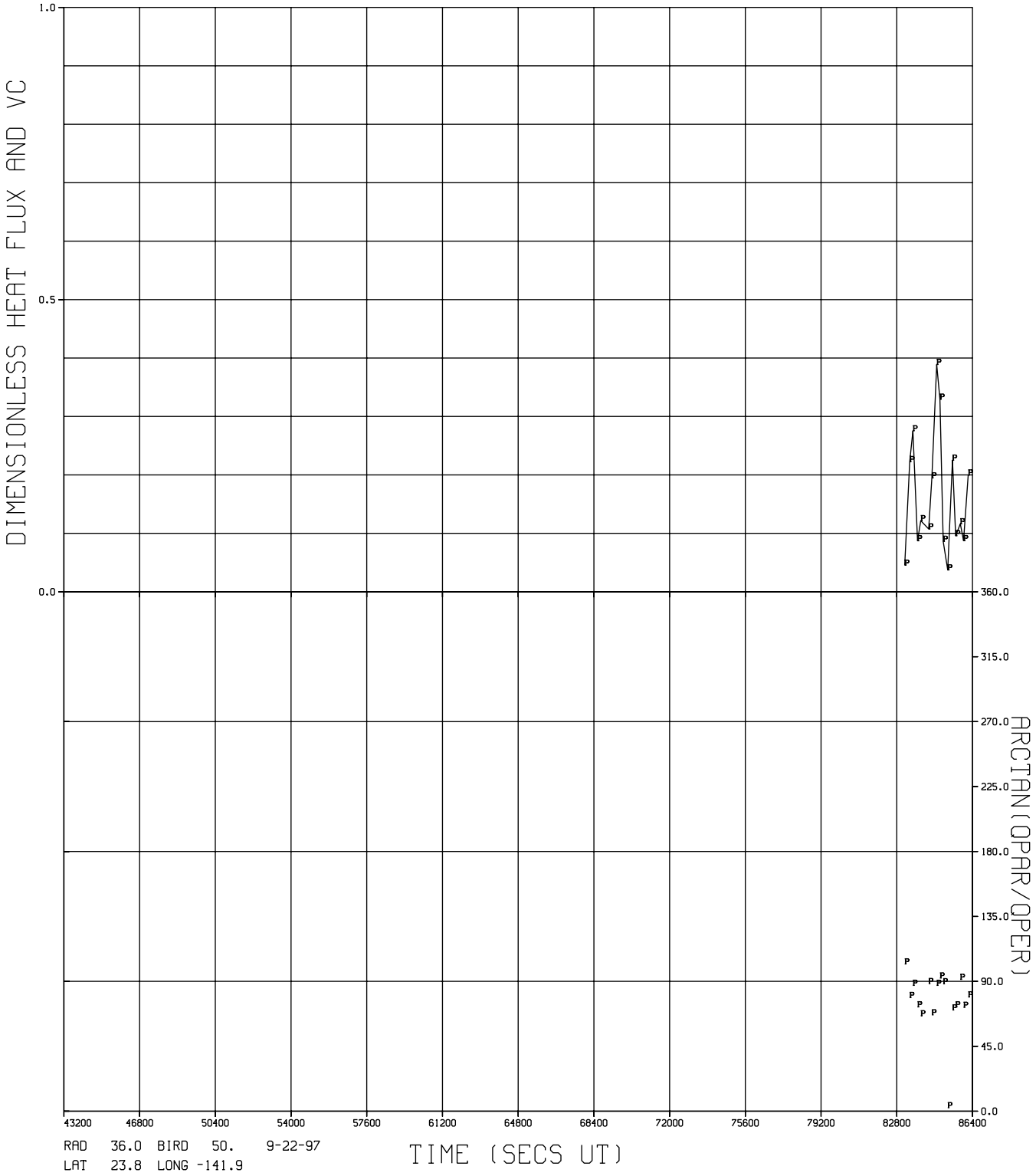

VELOCITY
1000
900
800
700
600
500
400
300
200
100
0
VELOCITY DIFFERENCE
100
80
60
40
20
0
-20
-40
-60
-80
-100
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
TIME (SECS UT)
RAD 36.0 BIRD 50. 9-22-97
LAT 23.8 LONG -141.9

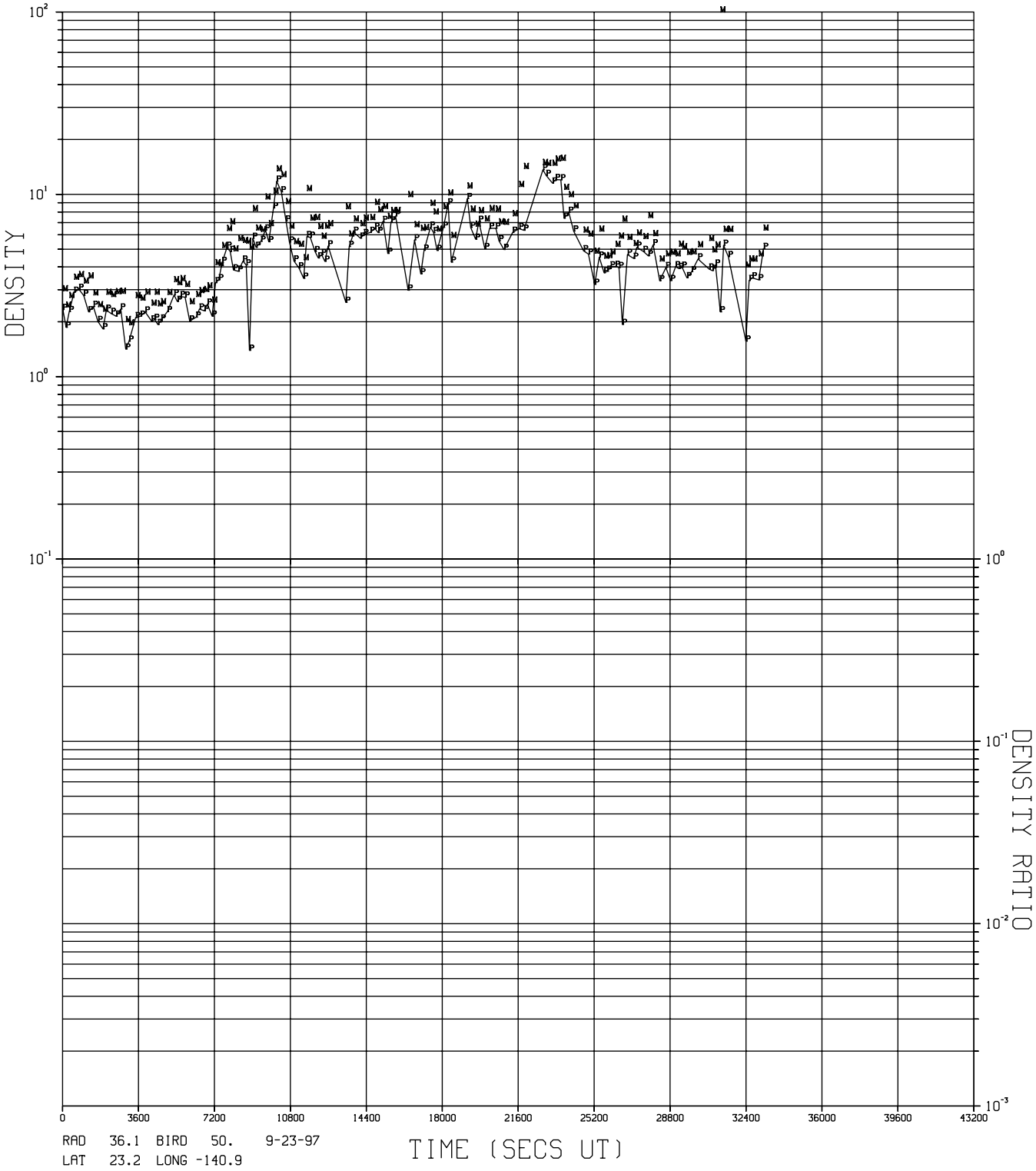

BULK FLOW DIRECTION
20
15
10
5
0
-5
-10
-15
-20
DIRECTION DIFFERENCE
1
0.5
0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
TIME (SECS UT)
RAD 36.0 BIRD 50. 9-22-97
LAT 23.8 LONG -141.9

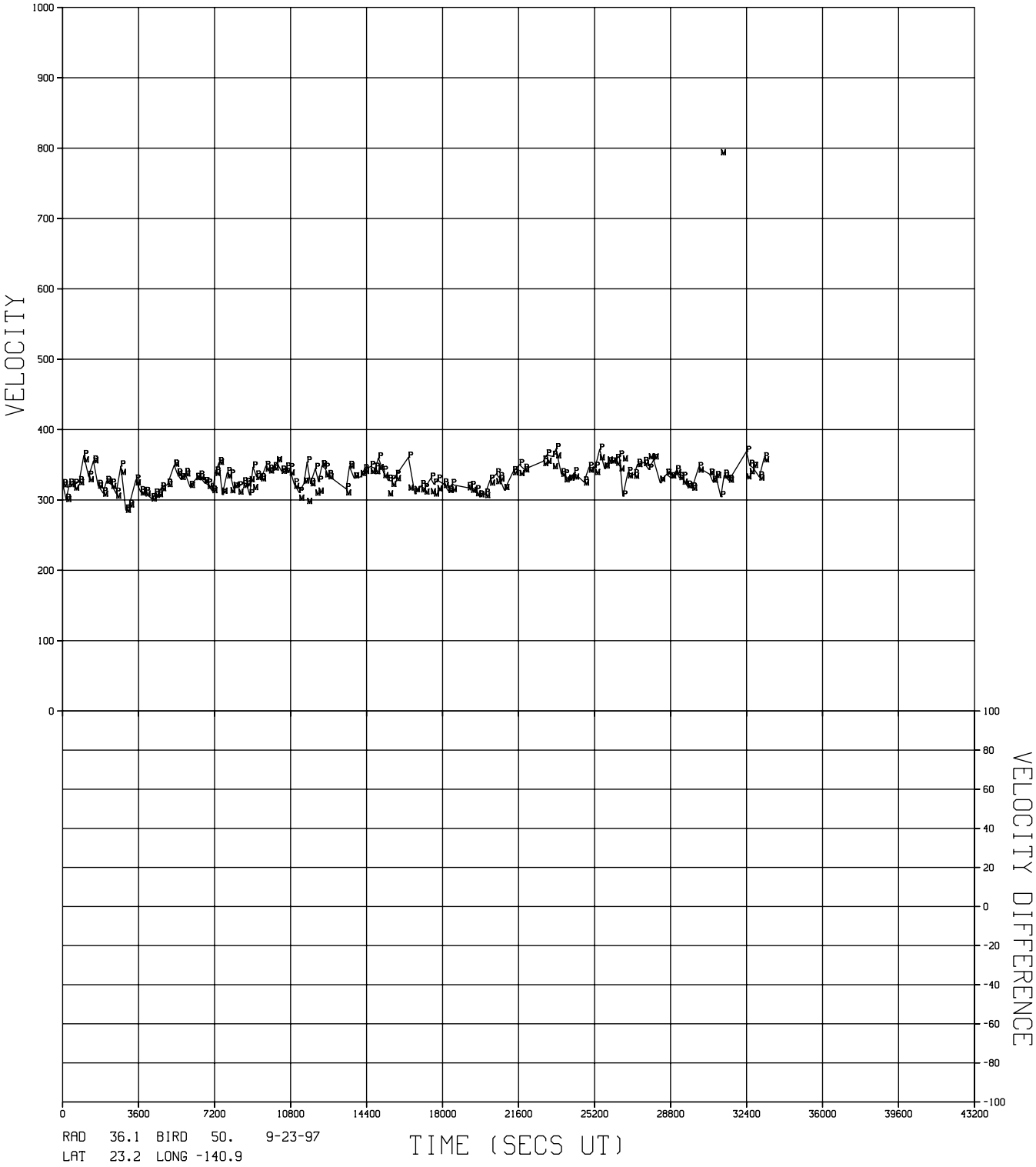

TEMPERATURE
10^7
10^6
10^5
10^4
TEMPERATURE RATIO
0
1
2
3
4
5
6
7
8
9
10
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 36.0 BIRD 50. 9-22-97
LAT 23.8 LONG -141.9
TIME (SECS UT)

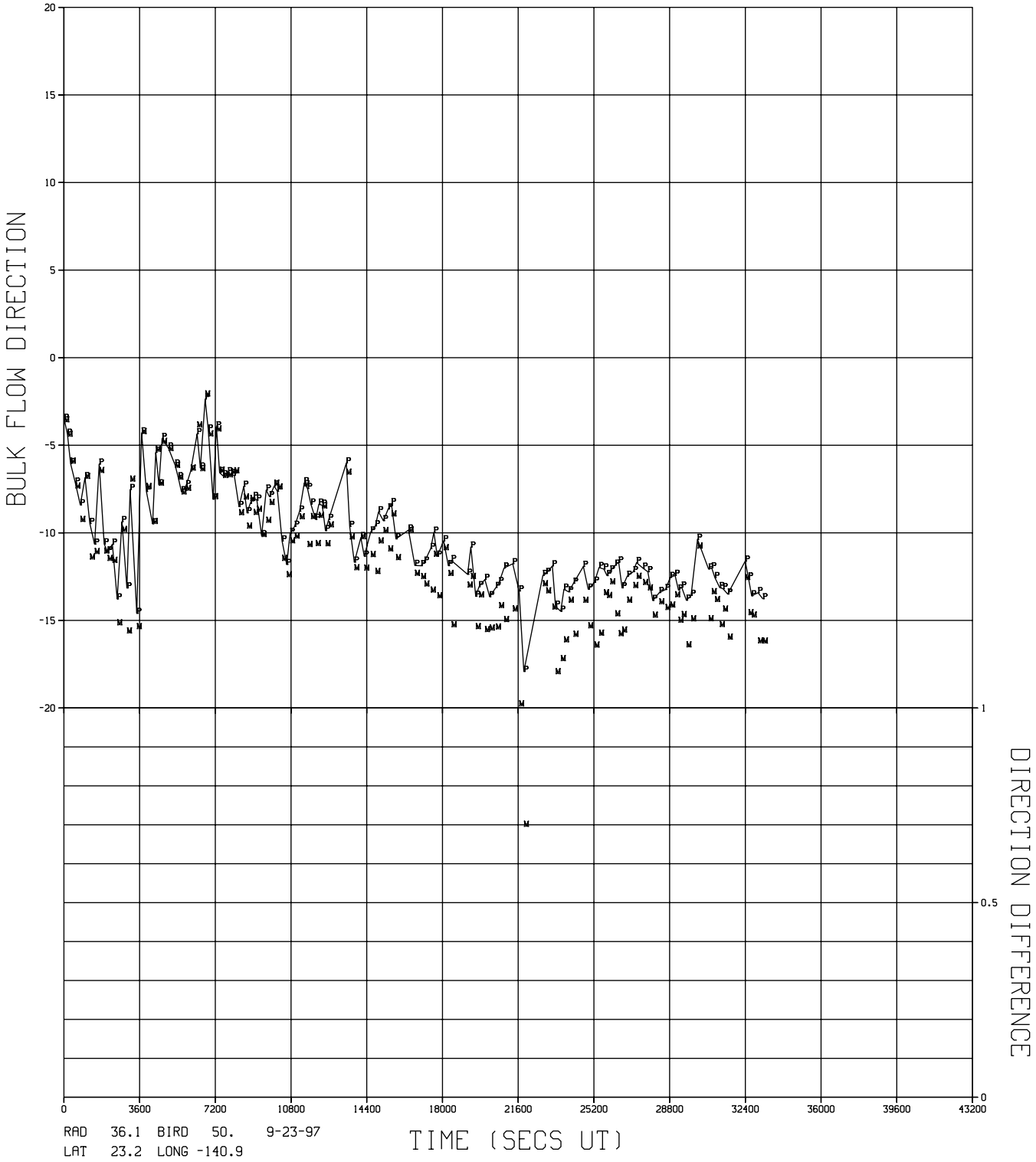

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{-5}
10^{-6}
HEAT FLUX DIRECTION
360
315
270
225
180
135
90
45
0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
TIME (SECS UT)
RAD 36.0 BIRD 50. 9-22-97
LAT 23.8 LONG -141.9

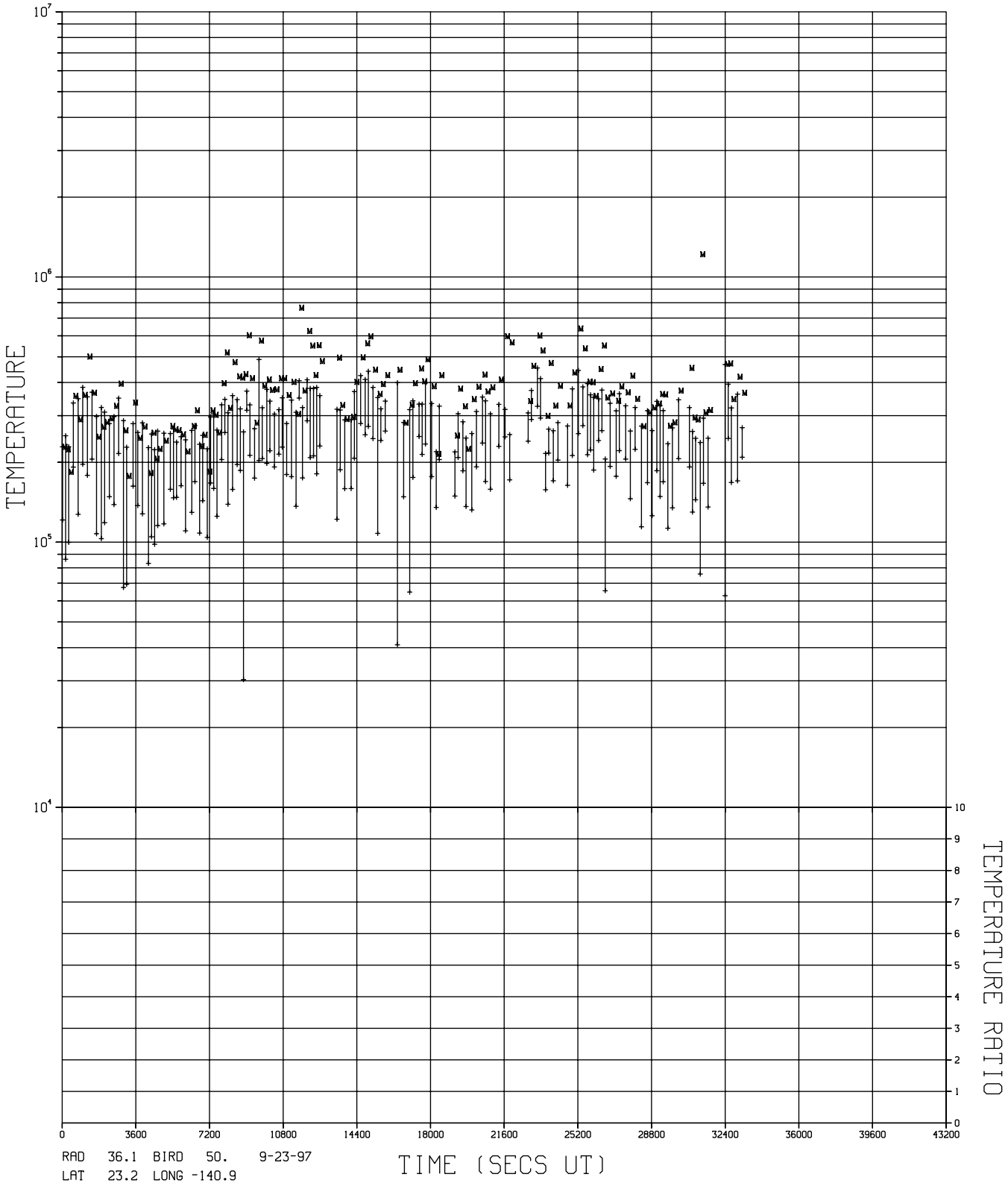

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 36.0 BIRD 50. 9-22-97
LAT 23.8 LONG -141.9

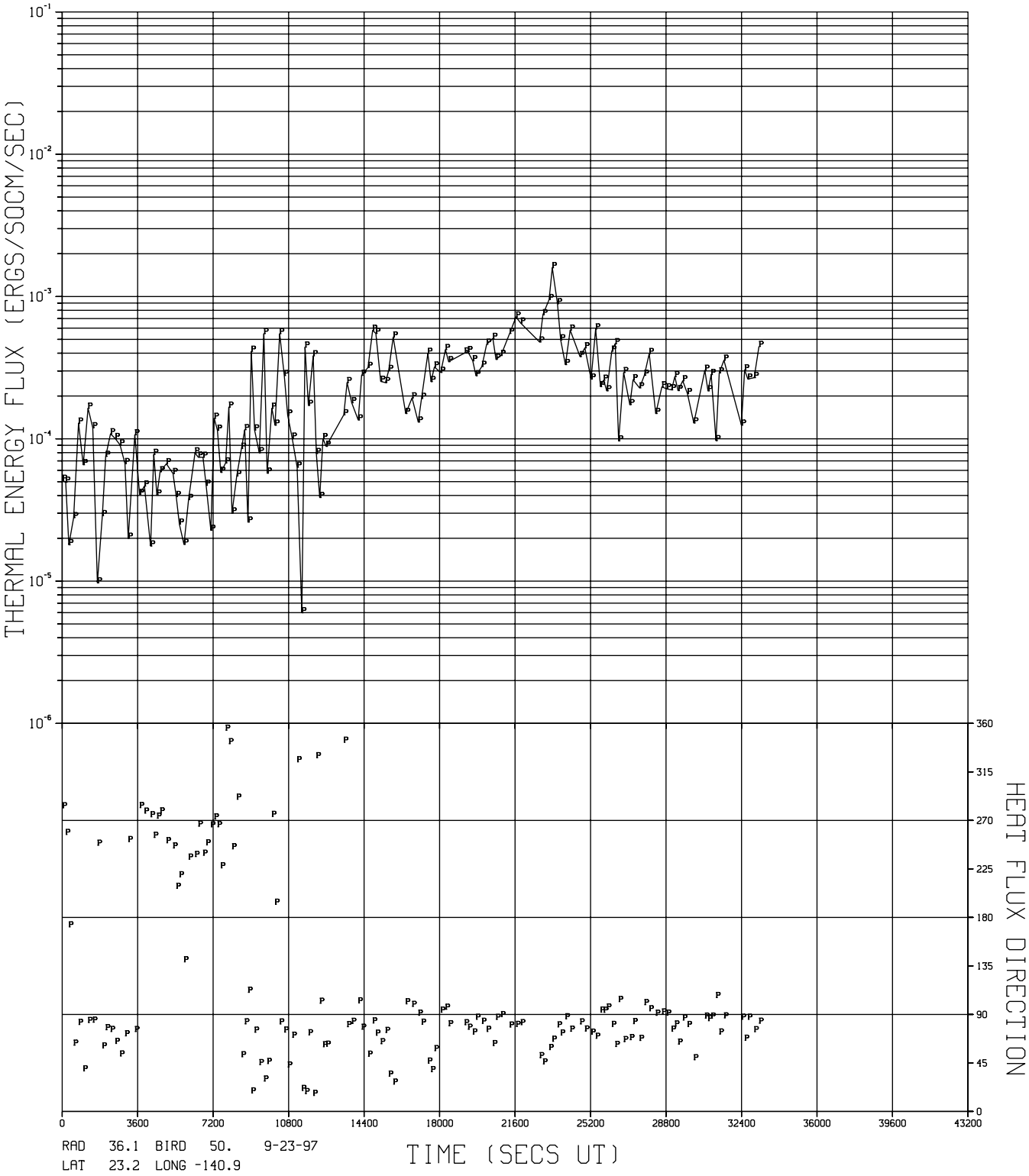

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
TIME (SECS UT)
RAD 36.0 BIRD 50. 9-22-97
LAT 23.8 LONG -141.9

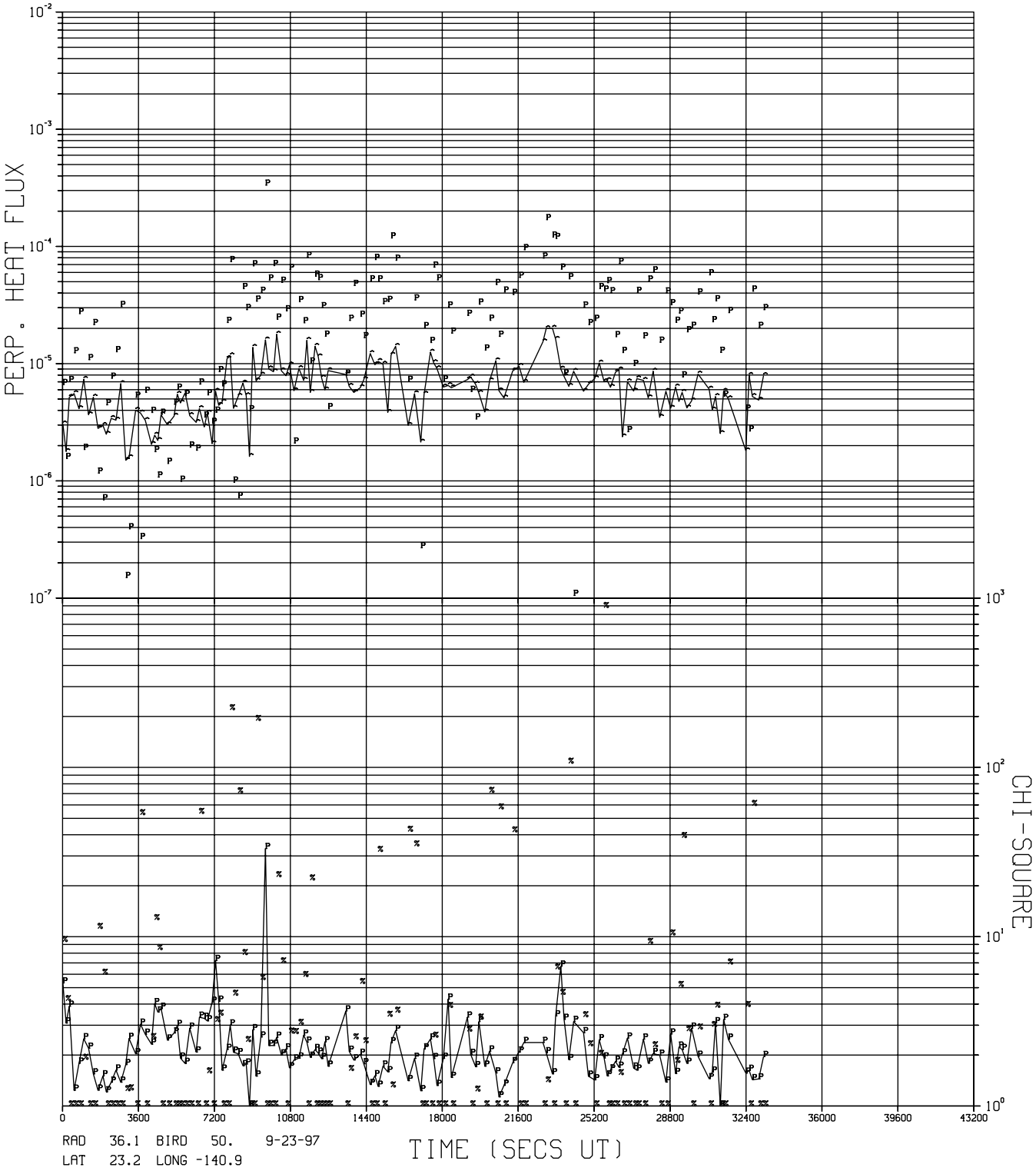

DENSITY
DENSITY RATIO
TIME (SECS UT)
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
RAD 36.1 BIRD 50. 9-23-97
LAT 23.2 LONG -140.9

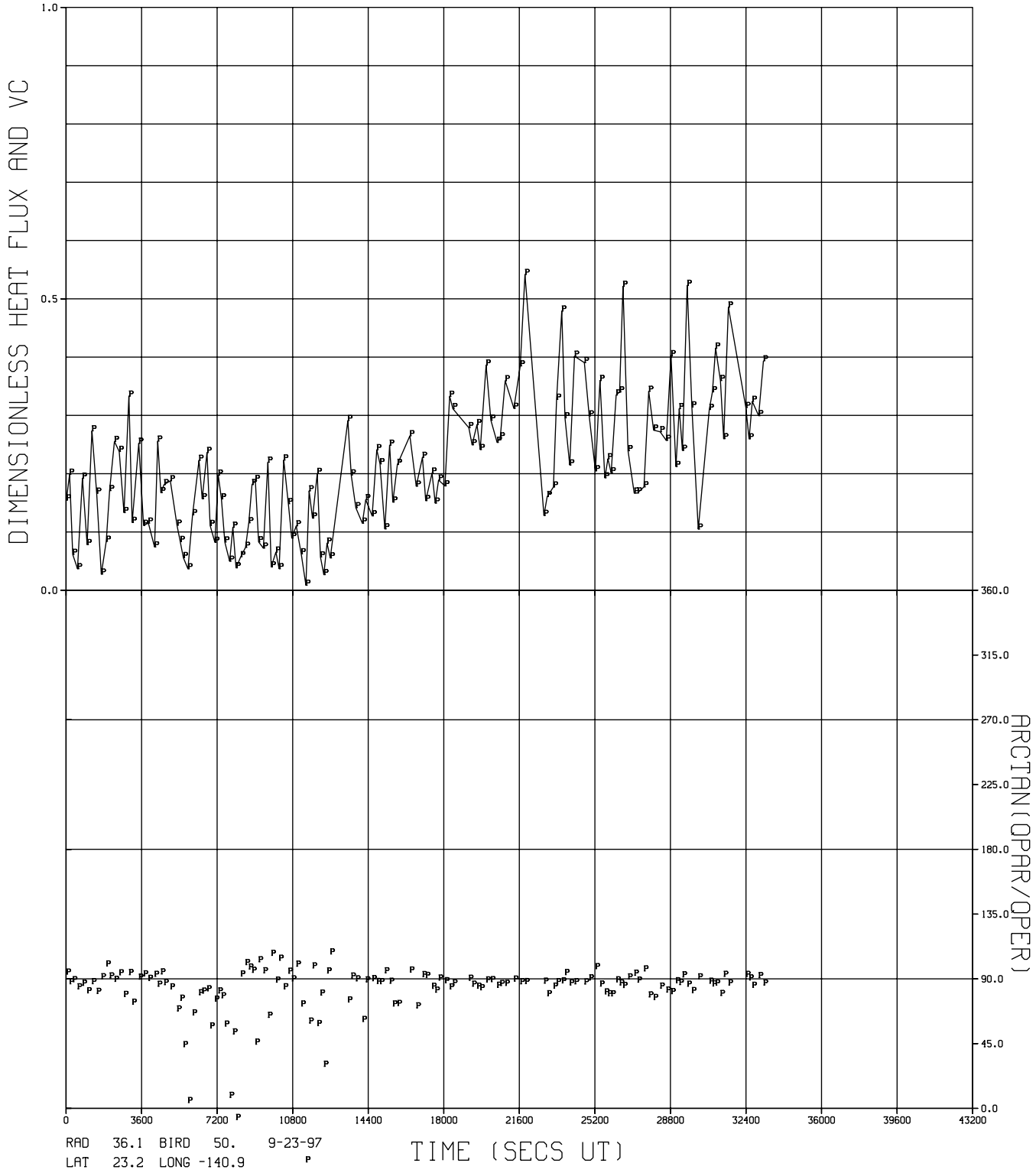

VELOCITY
VELOCITY DIFFERENCE
TIME (SECS UT)
RAD 36.1 BIRD 50. 9-23-97
LAT 23.2 LONG -140.9

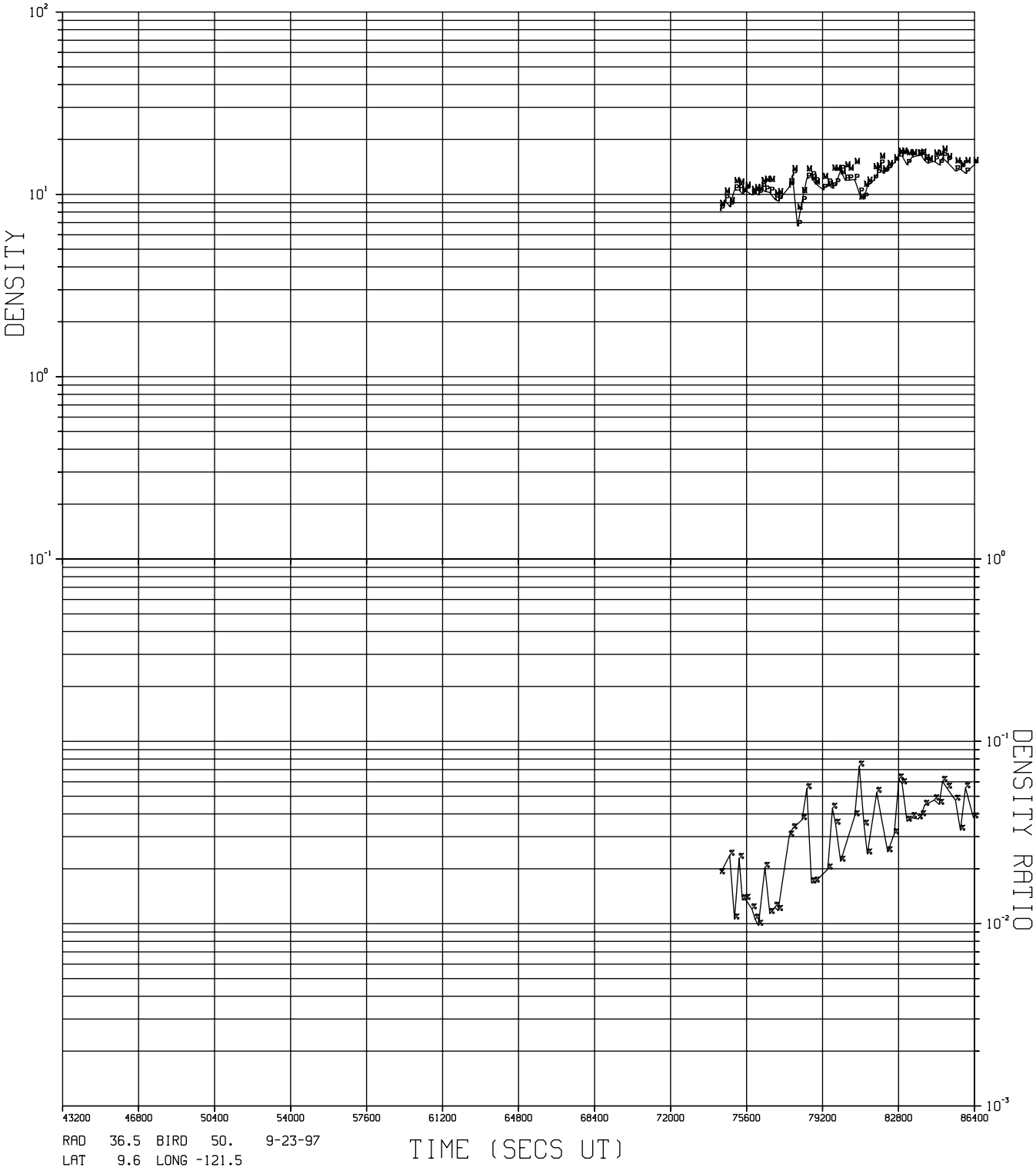

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
RAD 36.1 BIRD 50. 9-23-97
LAT 23.2 LONG -140.9

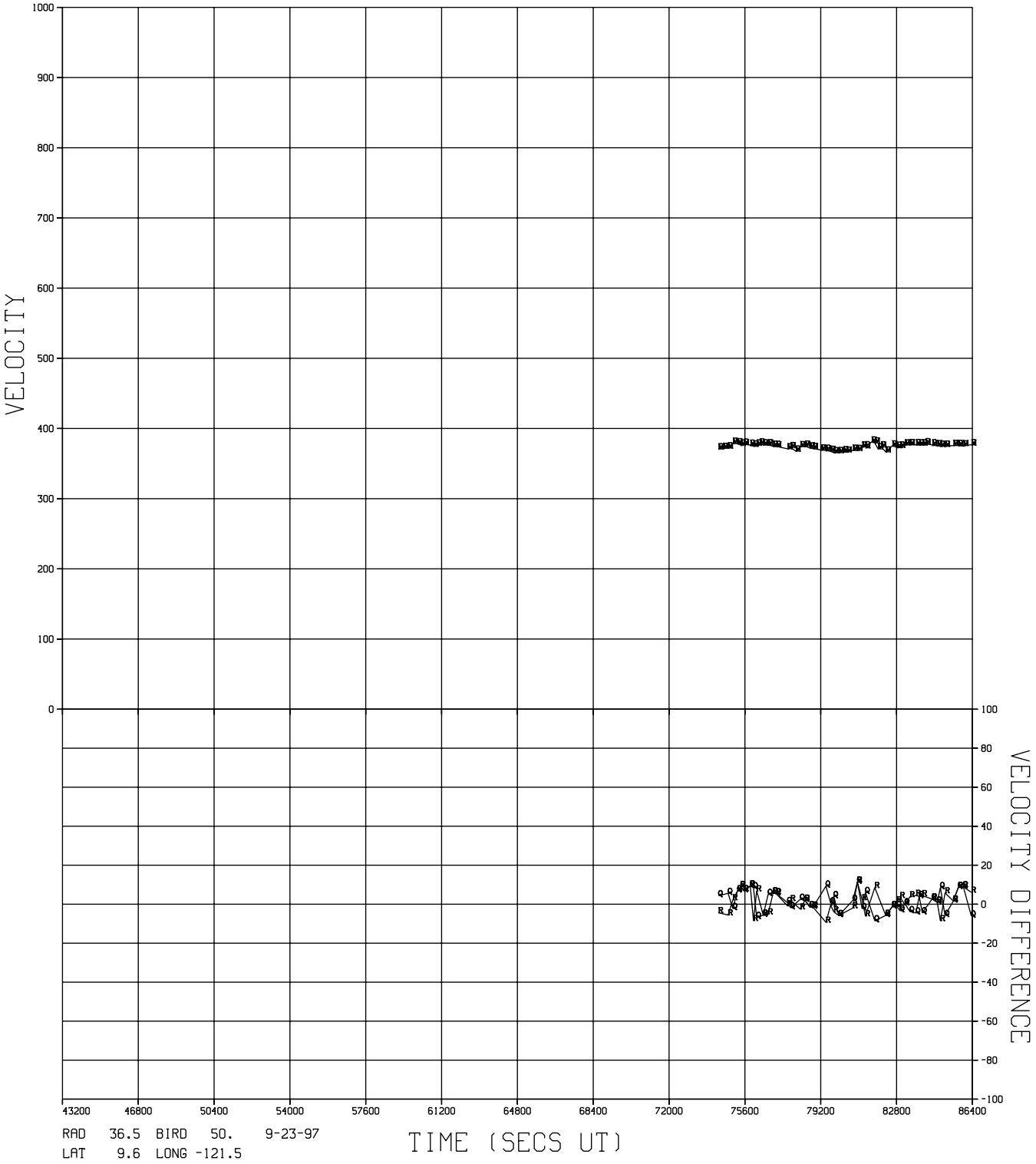

TEMPERATURE
TEMPERATURE RATIO
TIME (SECS UT)
RAD 36.1 BIRD 50. 9-23-97
LAT 23.2 LONG -140.9

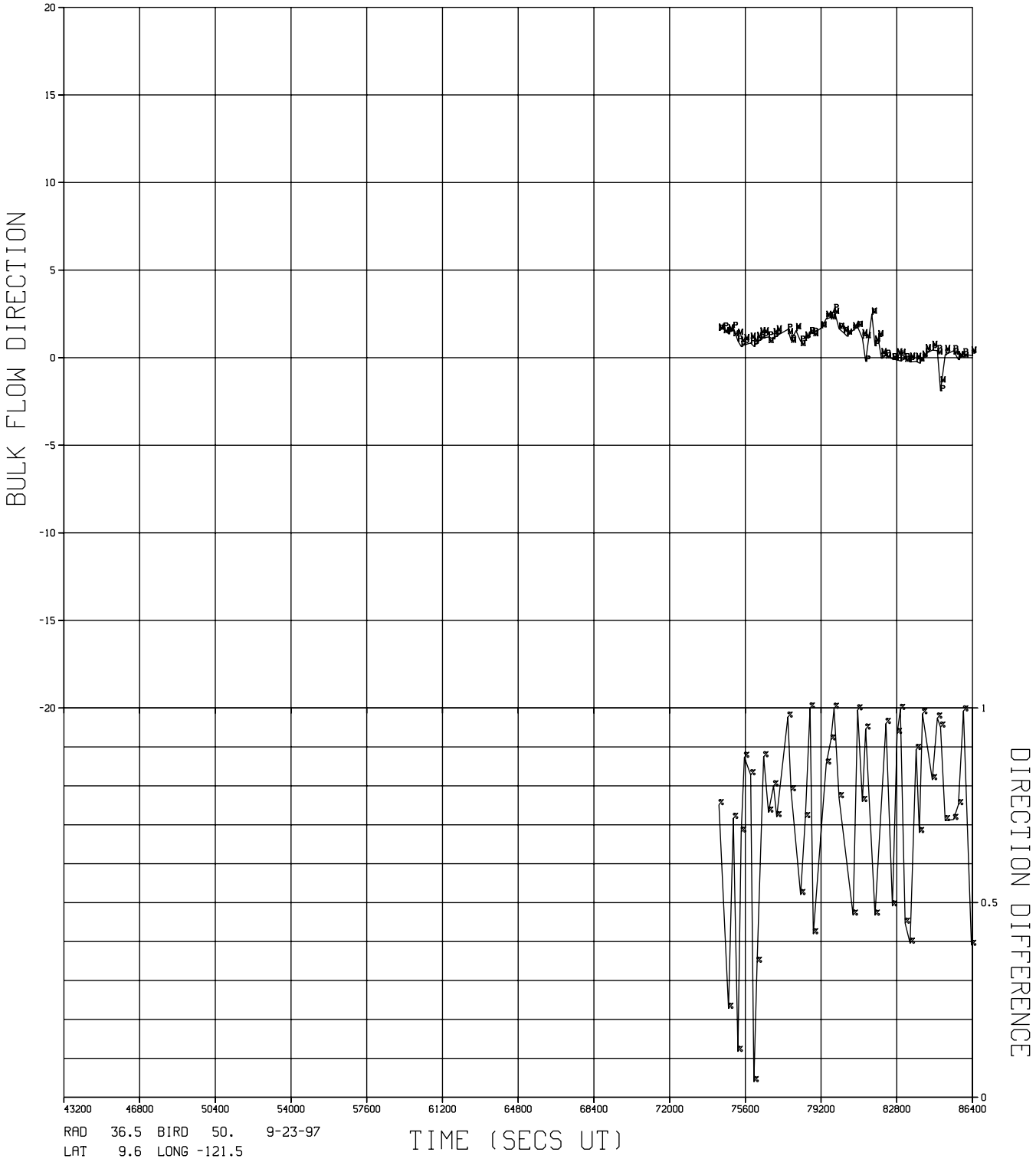

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 36.1 BIRD 50. 9-23-97
LAT 23.2 LONG -140.9

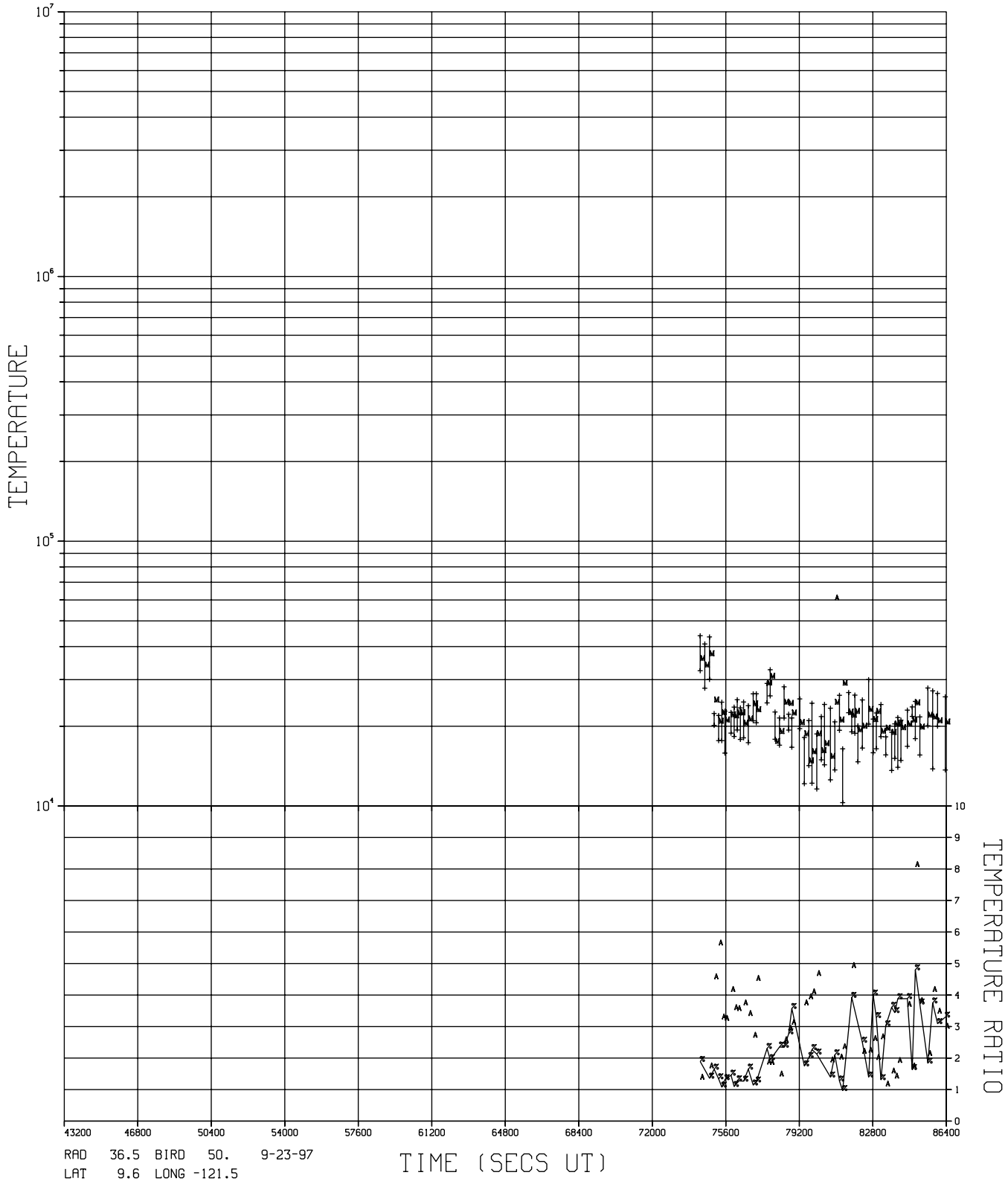

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
RAD 36.1 BIRD 50. 9-23-97
LAT 23.2 LONG -140.9

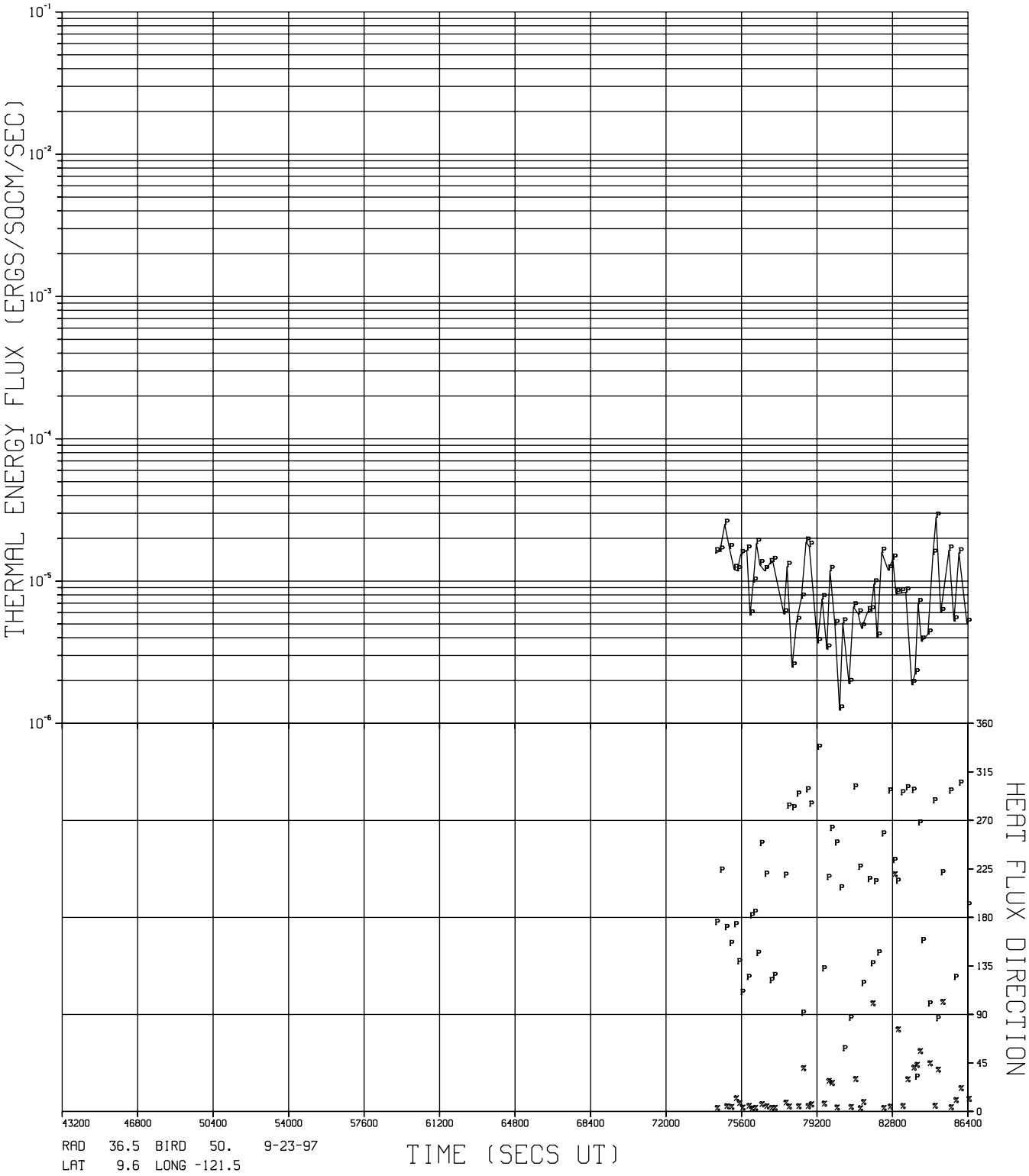

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
TIME (SECS UT)
RAD 36.1 BIRD 50. 9-23-97
LAT 23.2 LONG -140.9

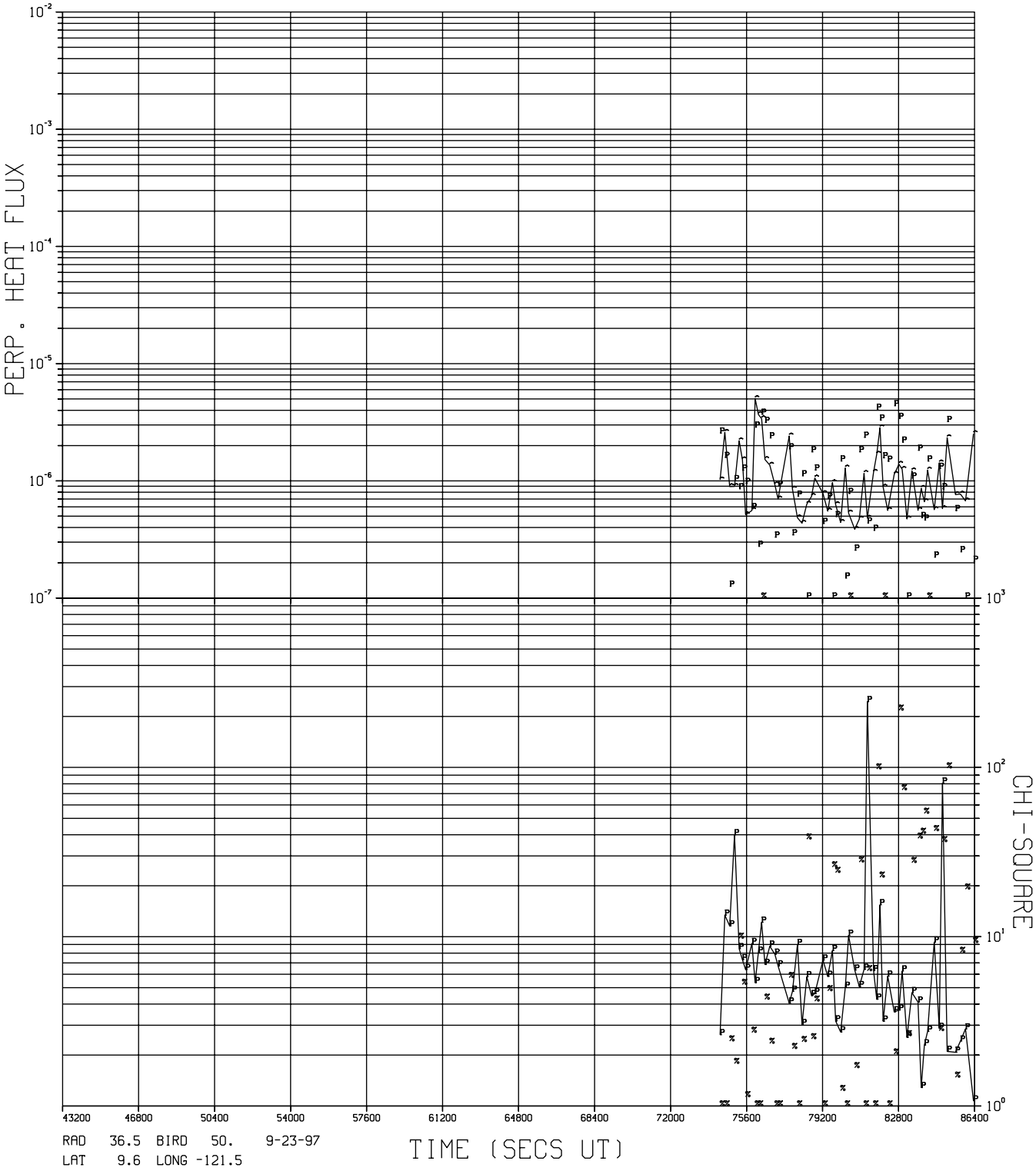

DENSITY
DENSITY RATIO
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 36.5 BIRD 50. 9-23-97
LAT 9.6 LONG -121.5

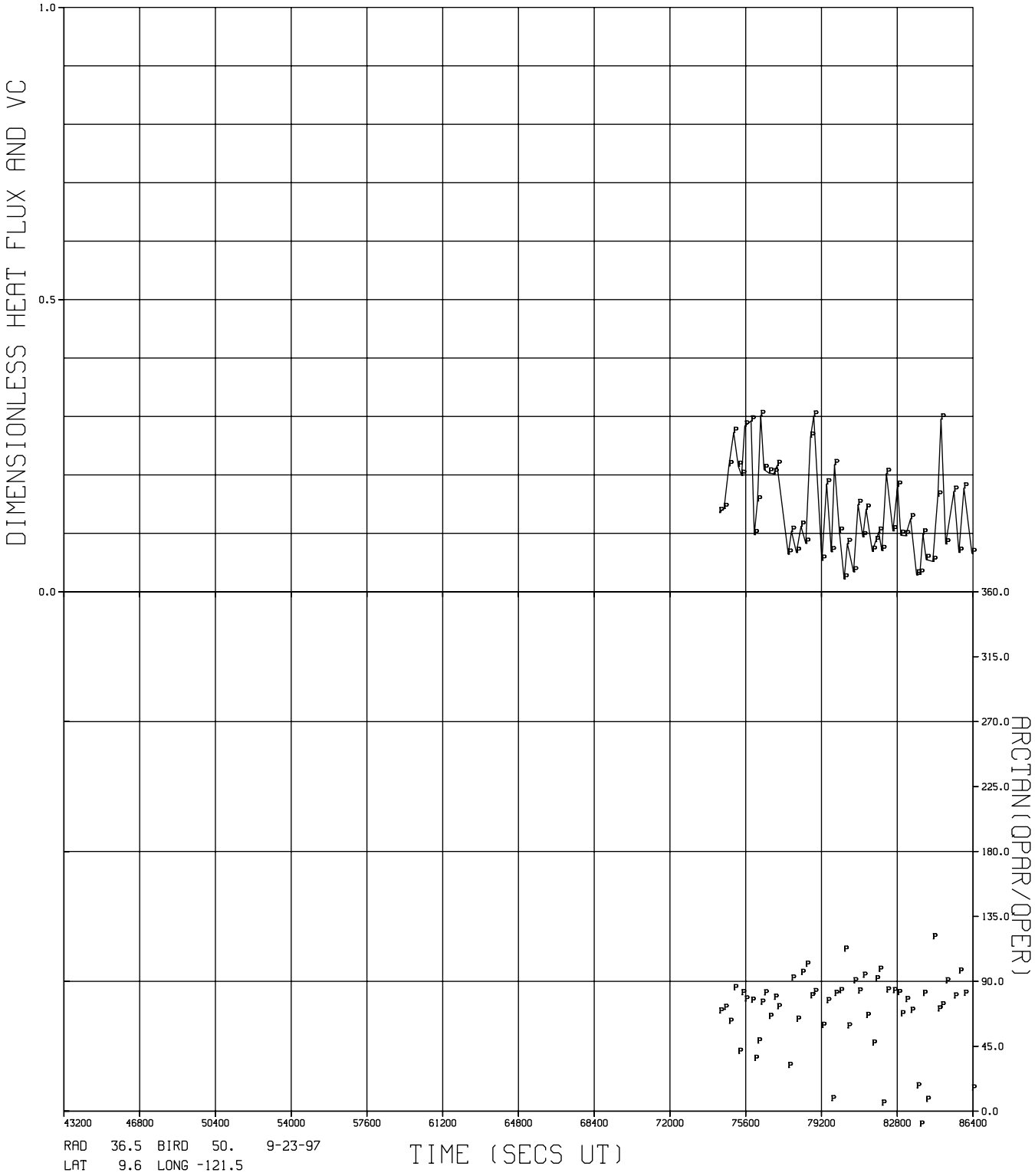

VELOCITY
1000
900
800
700
600
500
400
300
200
100
0
VELOCITY DIFFERENCE
100
80
60
40
20
0
-20
-40
-60
-80
-100
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 36.5 BIRD 50. 9-23-97
LAT 9.6 LONG -121.5
TIME (SECS UT)

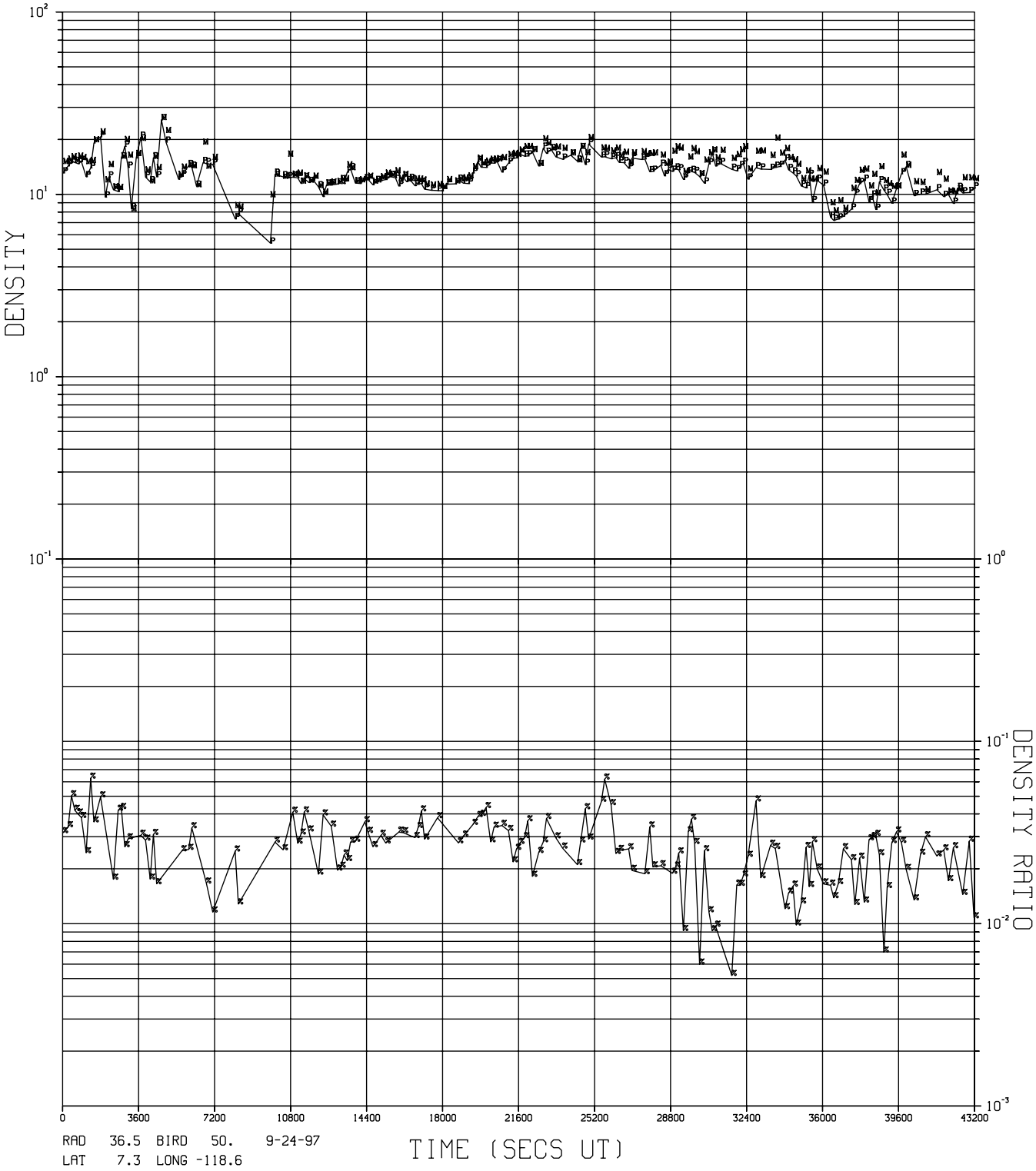

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 36.5 BIRD 50. 9-23-97
LAT 9.6 LONG -121.5

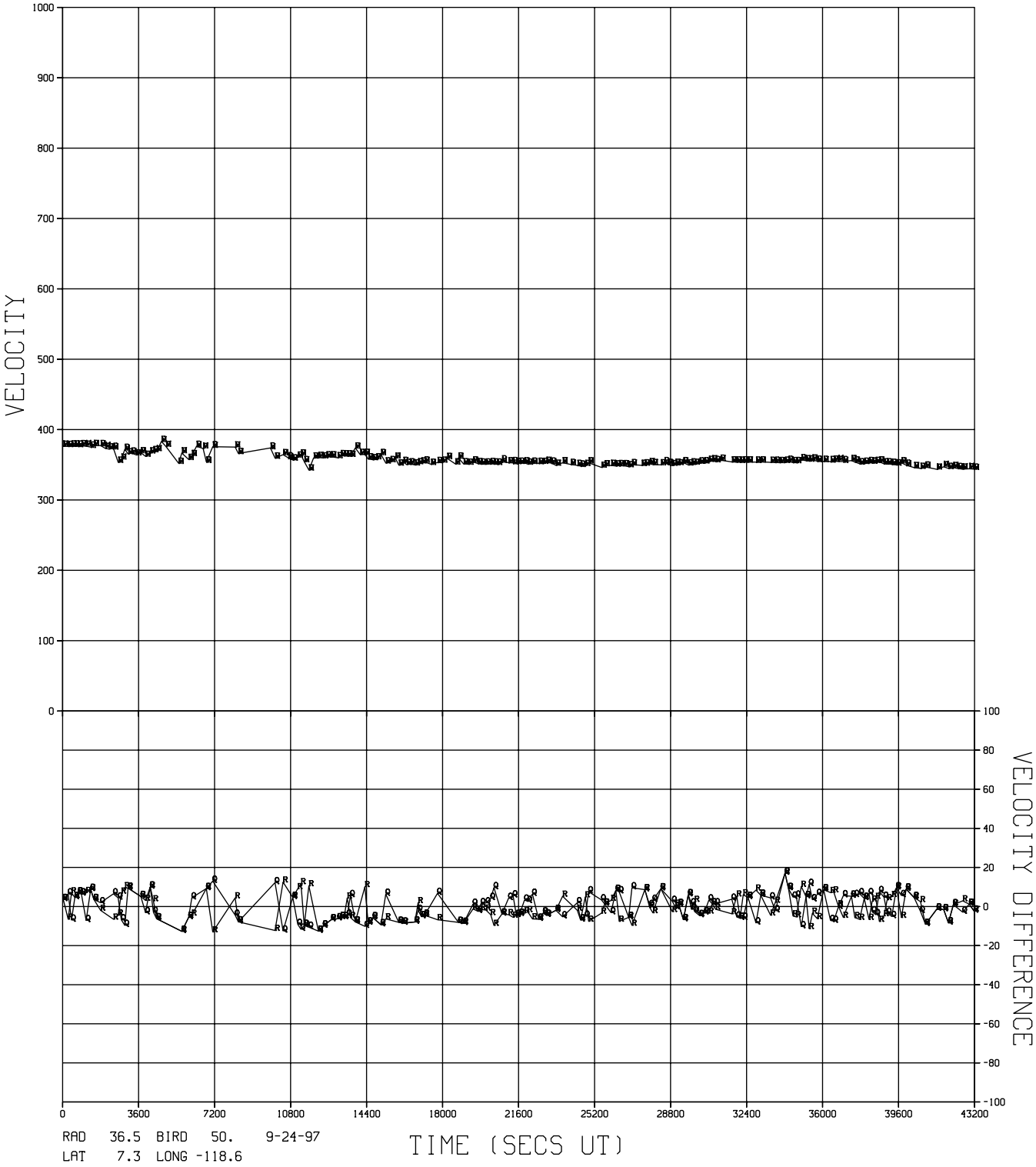

TEMPERATURE
10^7
10^6
10^5
10^4
TEMPERATURE RATIO
0
1
2
3
4
5
6
7
8
9
10
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
TIME (SECS UT)
RAD 36.5 BIRD 50. 9-23-97
LAT 9.6 LONG -121.5

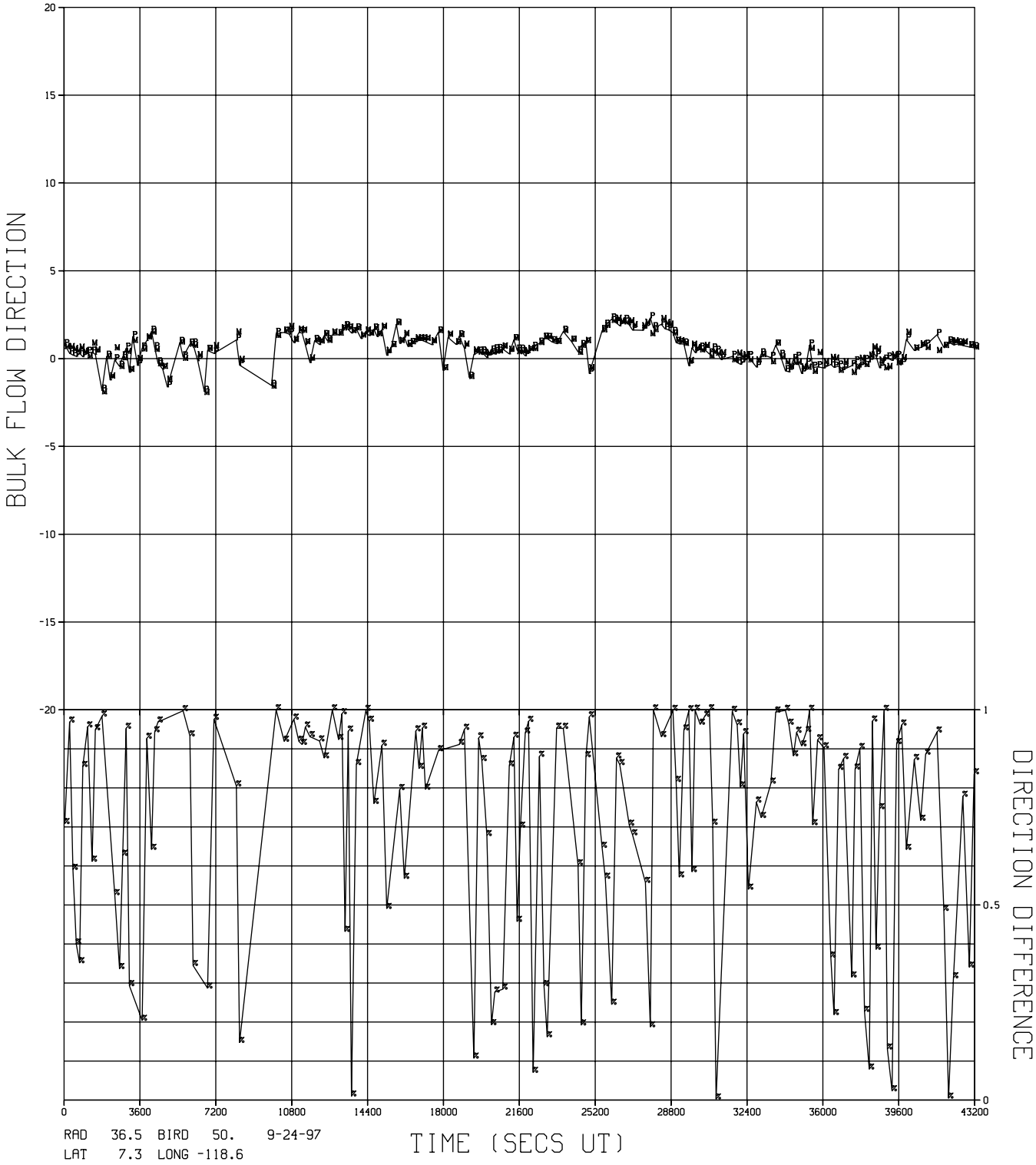

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 36.5 BIRD 50. 9-23-97
LAT 9.6 LONG -121.5

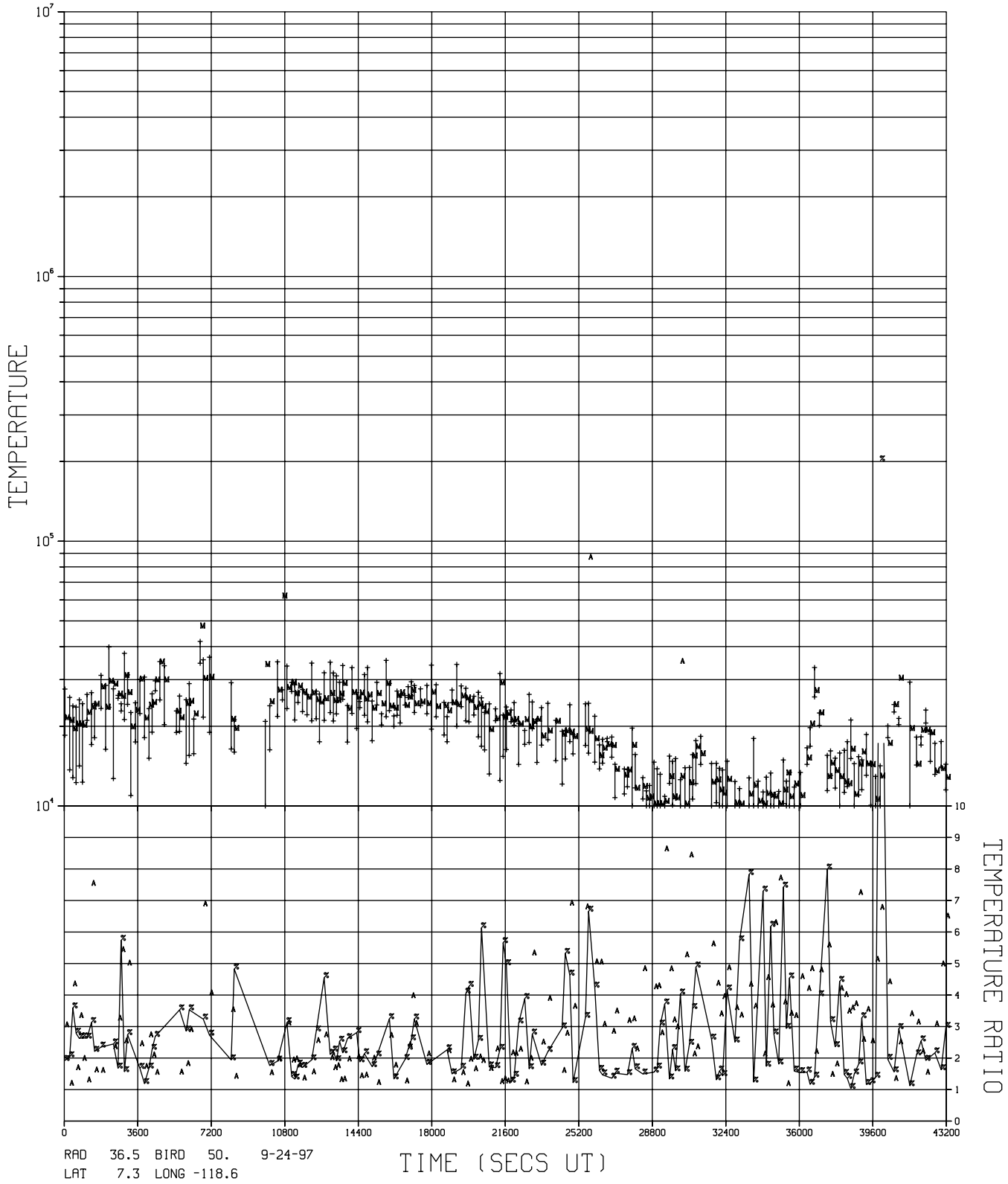

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
RAD 36.5 BIRD 50. 9-23-97
LAT 9.6 LONG -121.5

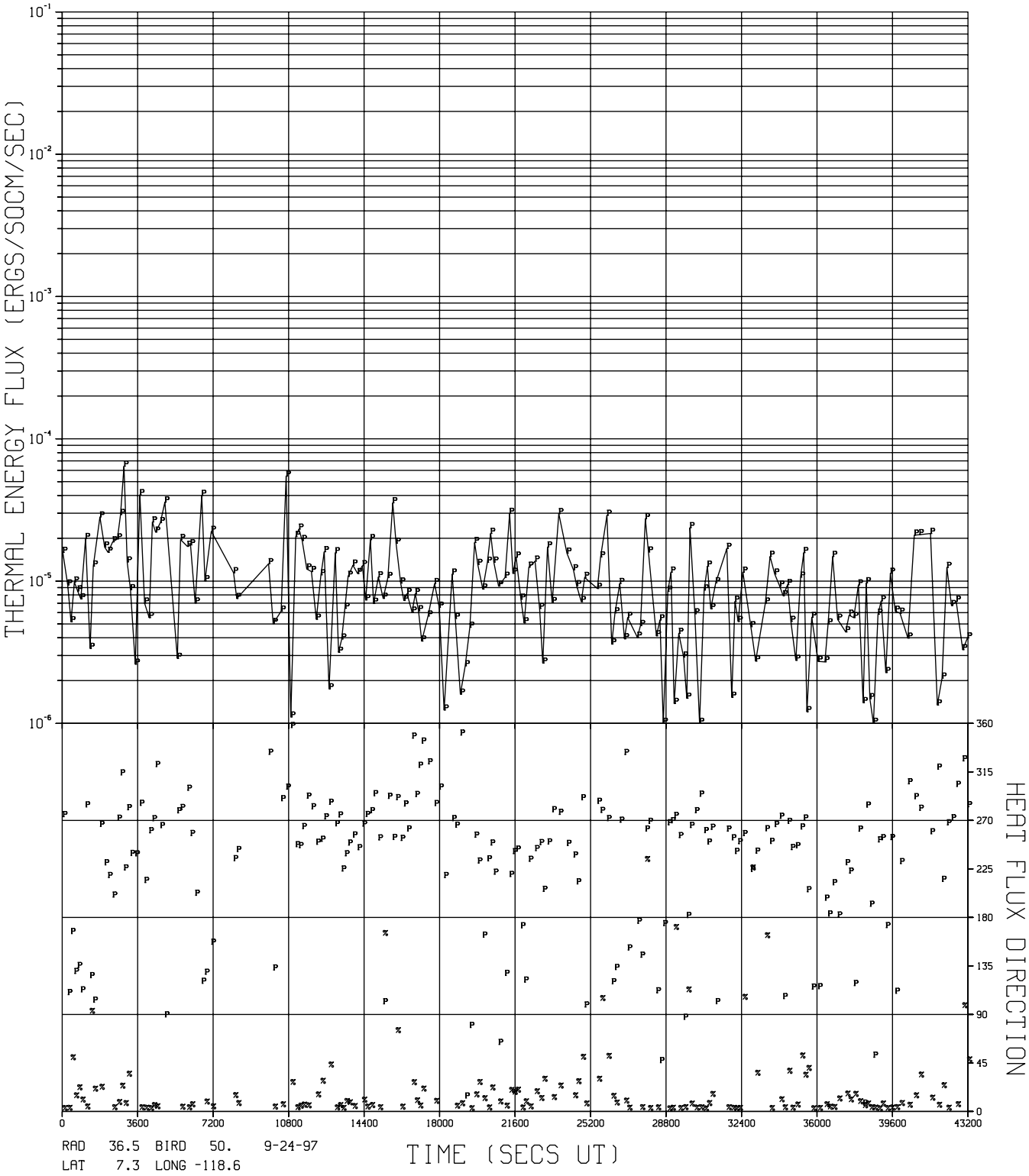

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
TIME (SECS UT)
RAD 36.5 BIRD 50. 9-23-97
LAT 9.6 LONG -121.5

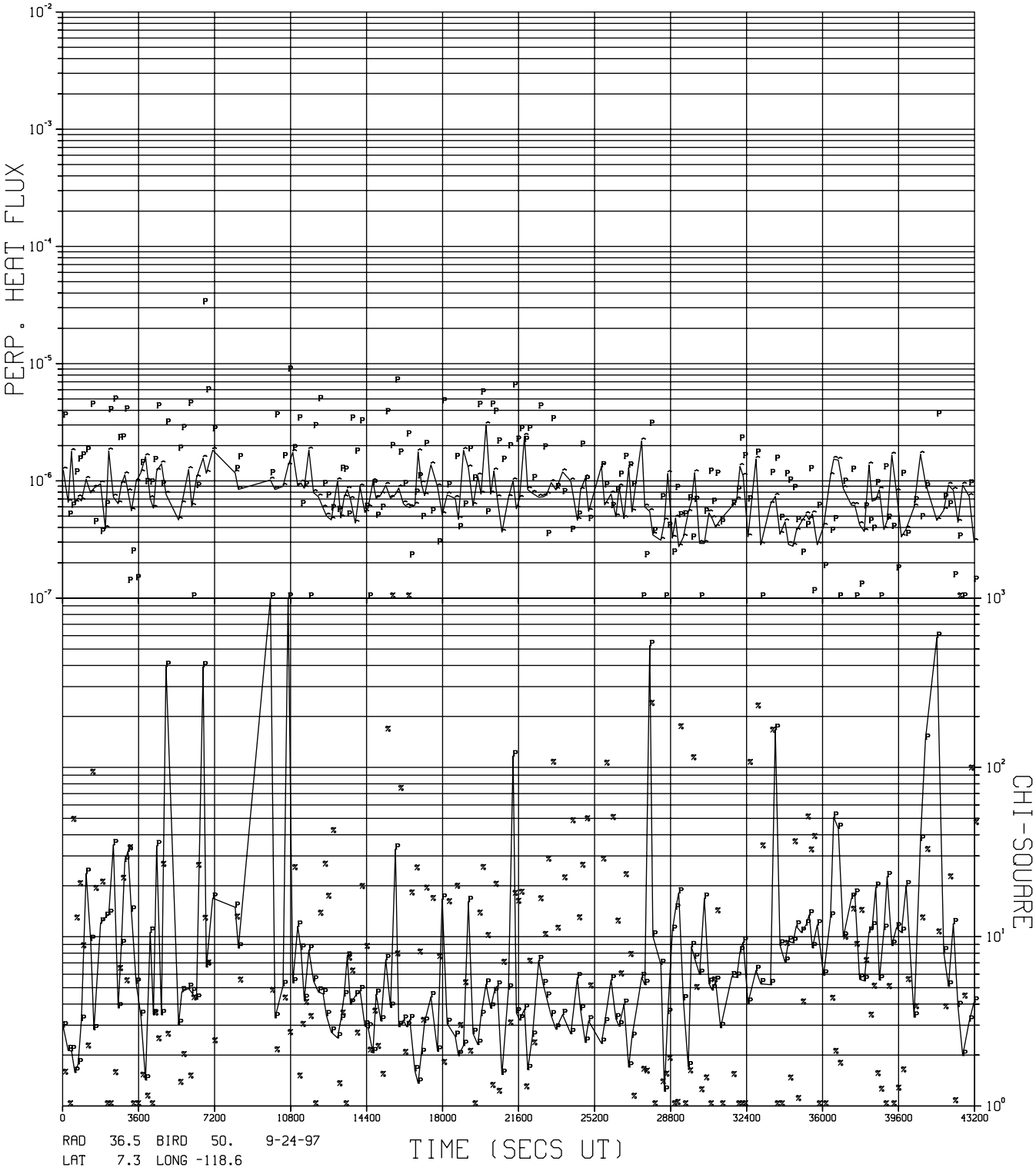

DENSITY
DENSITY RATIO
TIME (SECS UT)
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
RAD 36.5 BIRD 50. 9-24-97
LAT 7.3 LONG -118.6

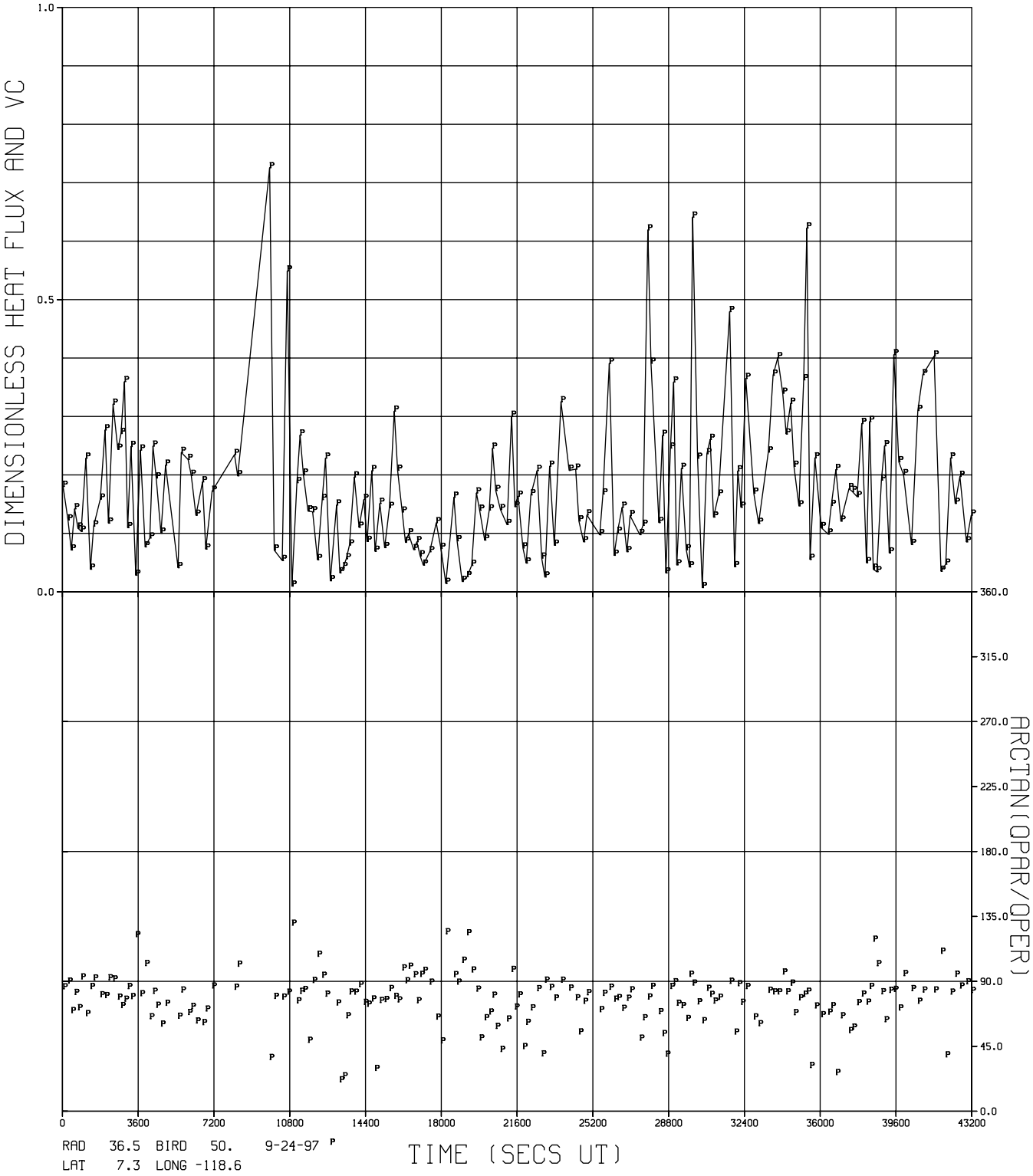

VELOCITY
VELOCITY DIFFERENCE
TIME (SECS UT)
RAD 36.5 BIRD 50. 9-24-97
LAT 7.3 LONG -118.6

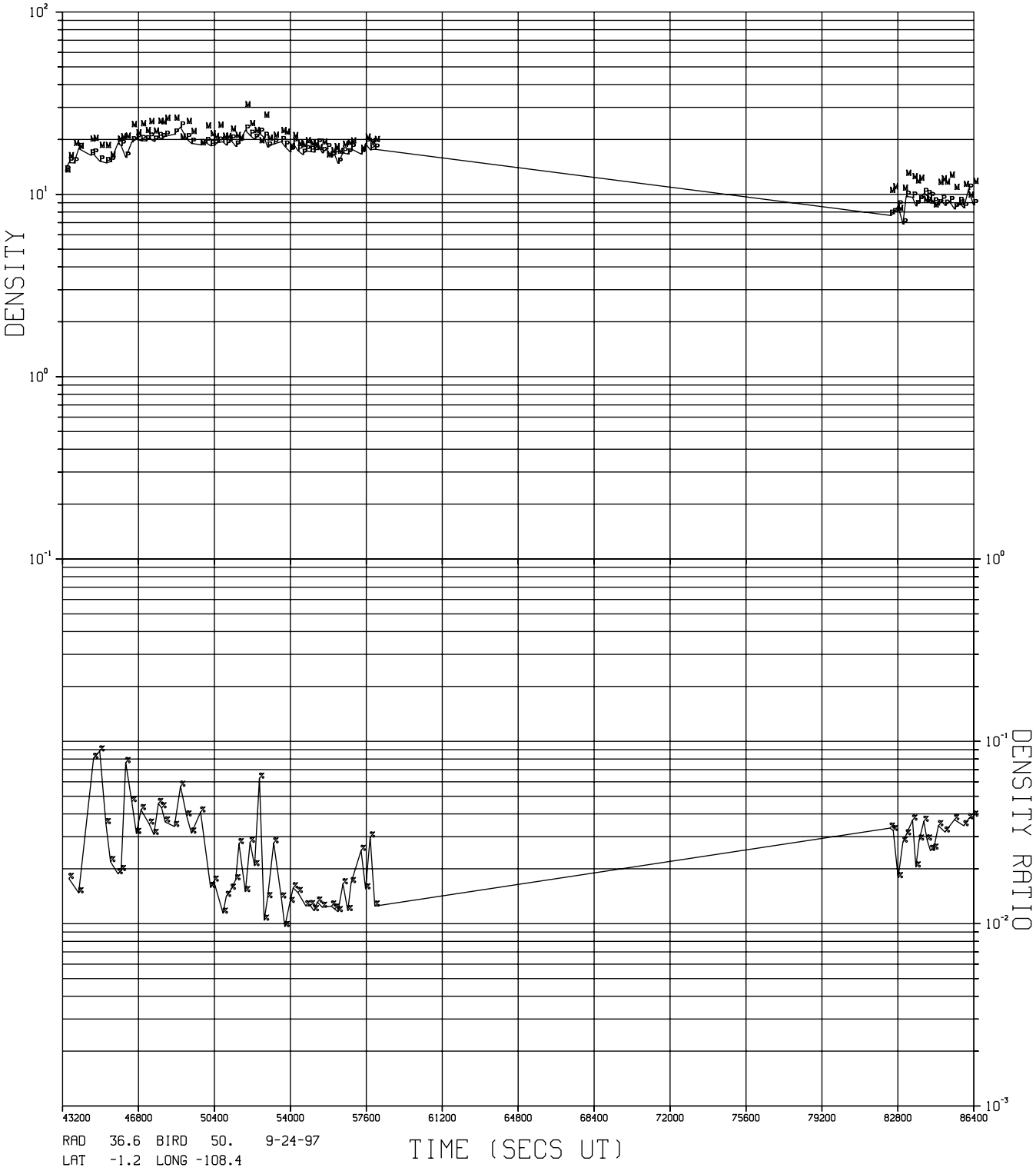

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
RAD 36.5 BIRD 50. 9-24-97
LAT 7.3 LONG -118.6

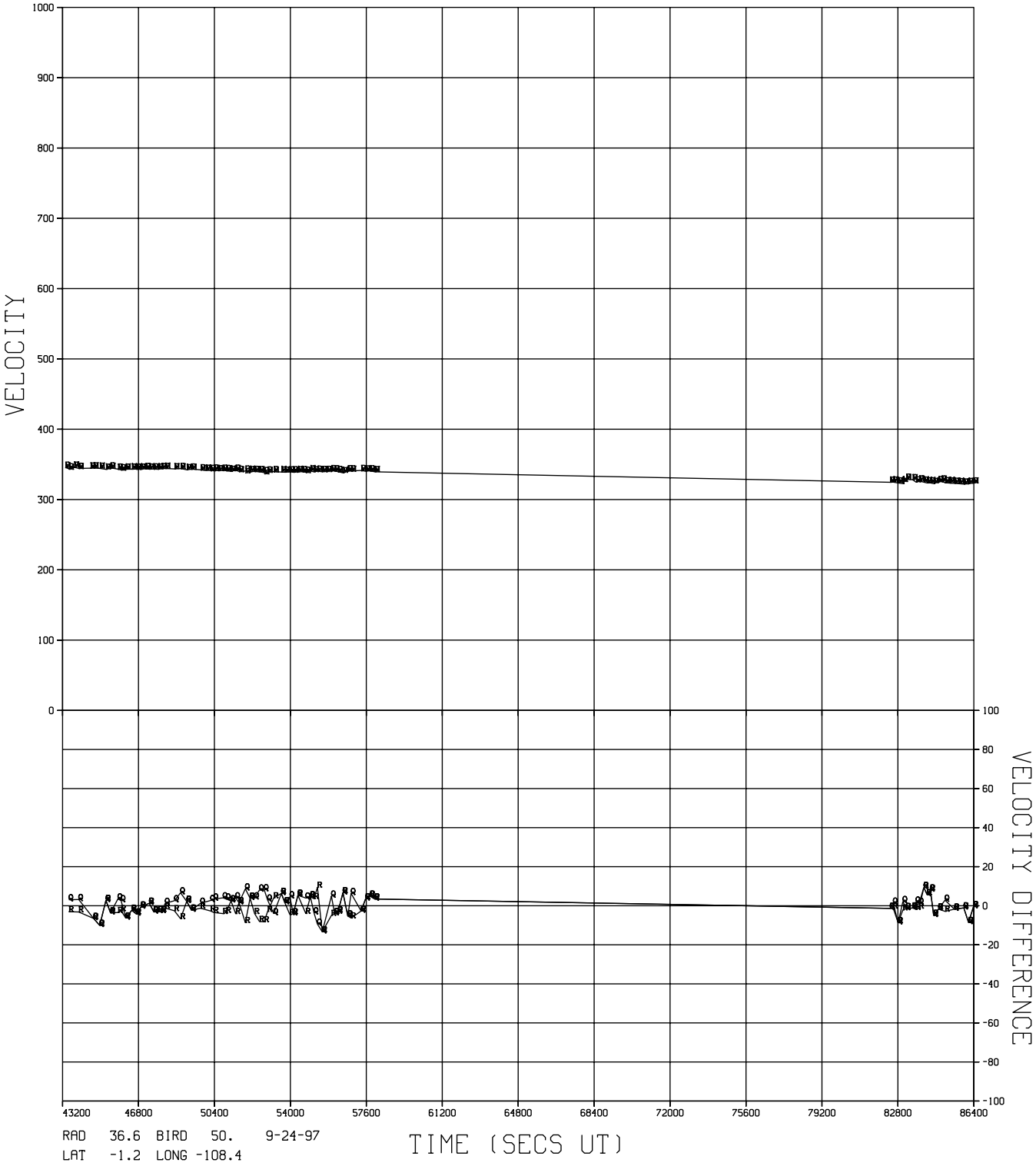

TEMPERATURE
TEMPERATURE RATIO
TIME (SECS UT)
RAD 36.5 BIRD 50. 9-24-97
LAT 7.3 LONG -118.6

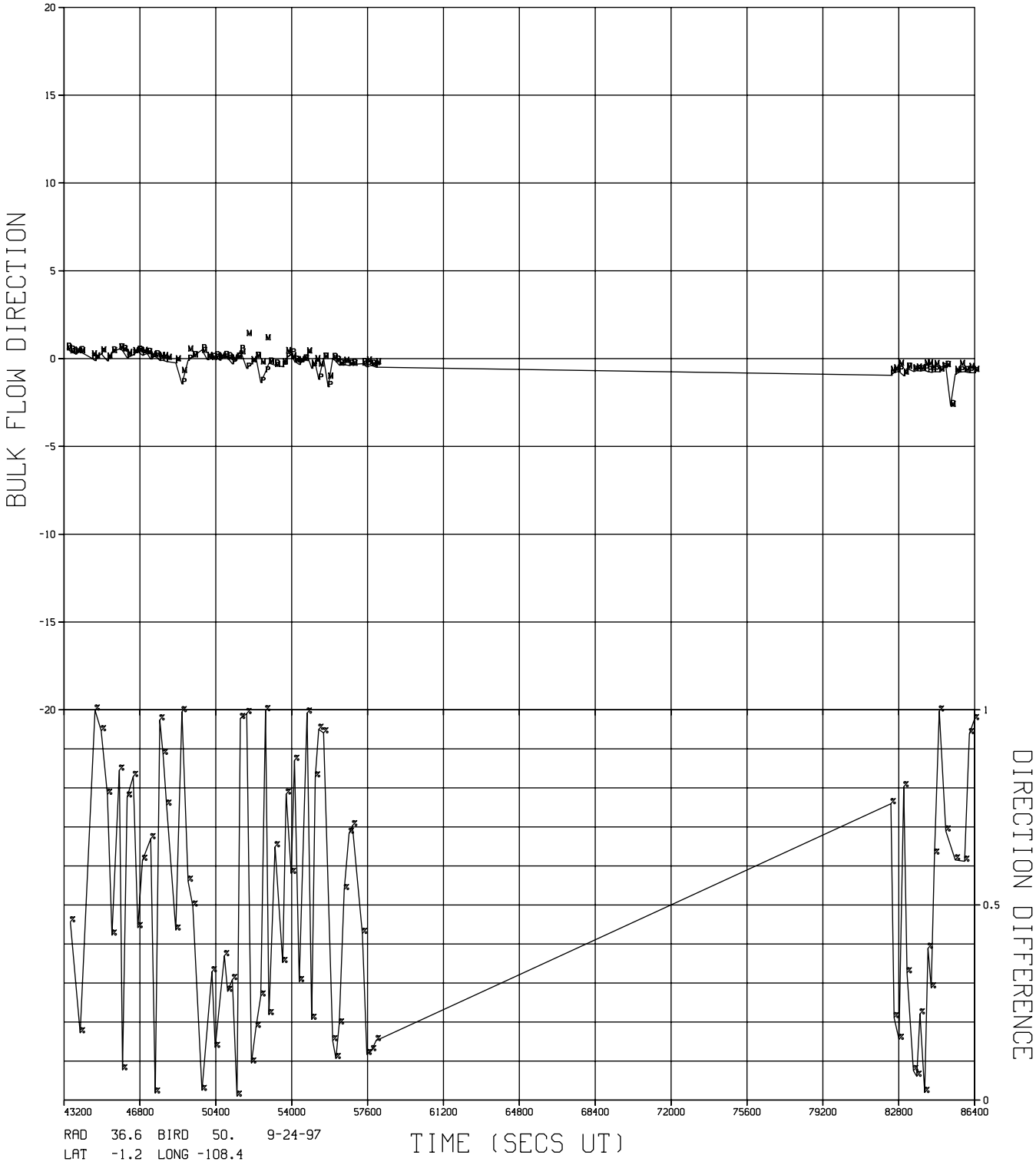

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 36.5 BIRD 50. 9-24-97
LAT 7.3 LONG -118.6

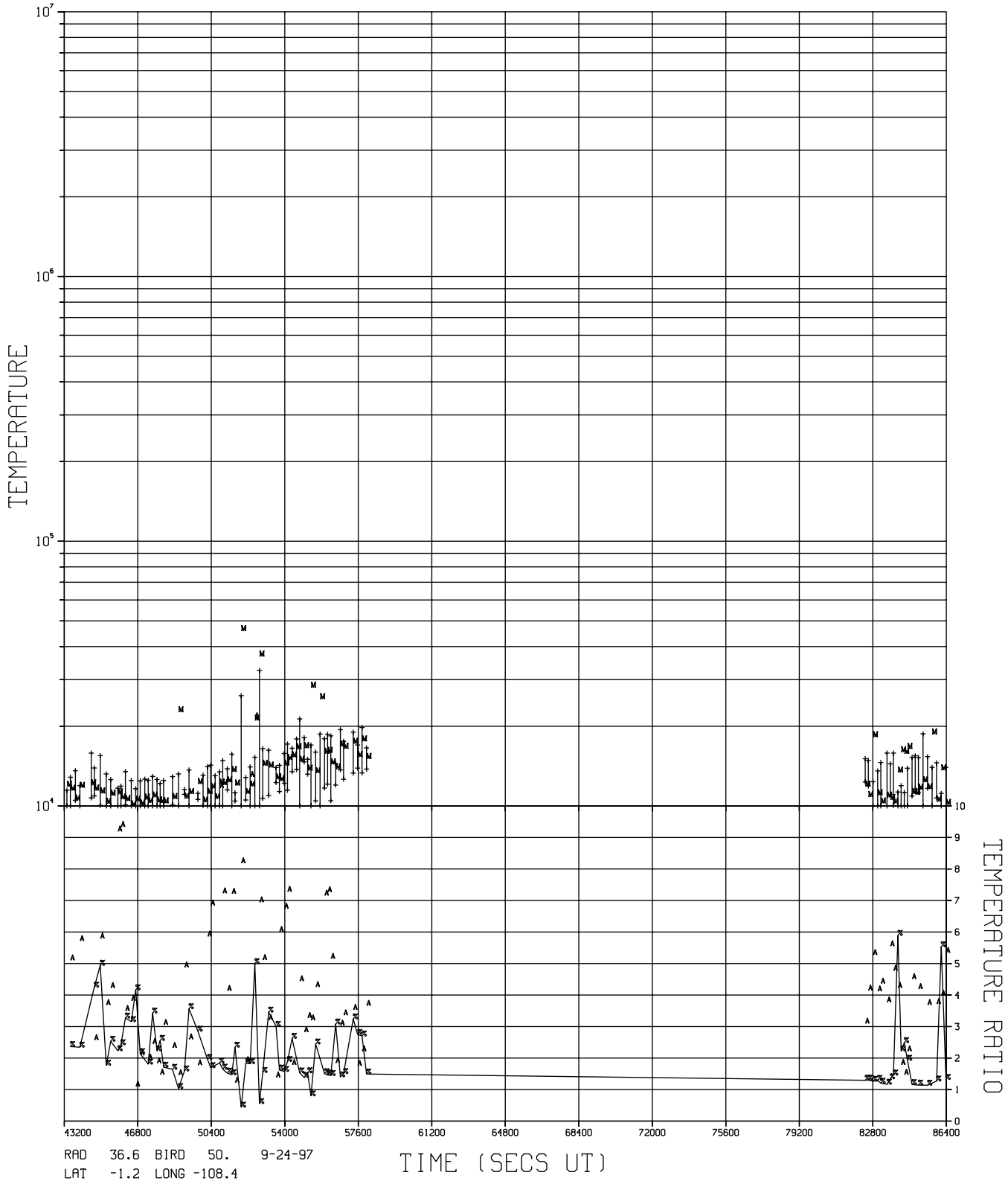

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
RAD 36.5 BIRD 50. 9-24-97
LAT 7.3 LONG -118.6

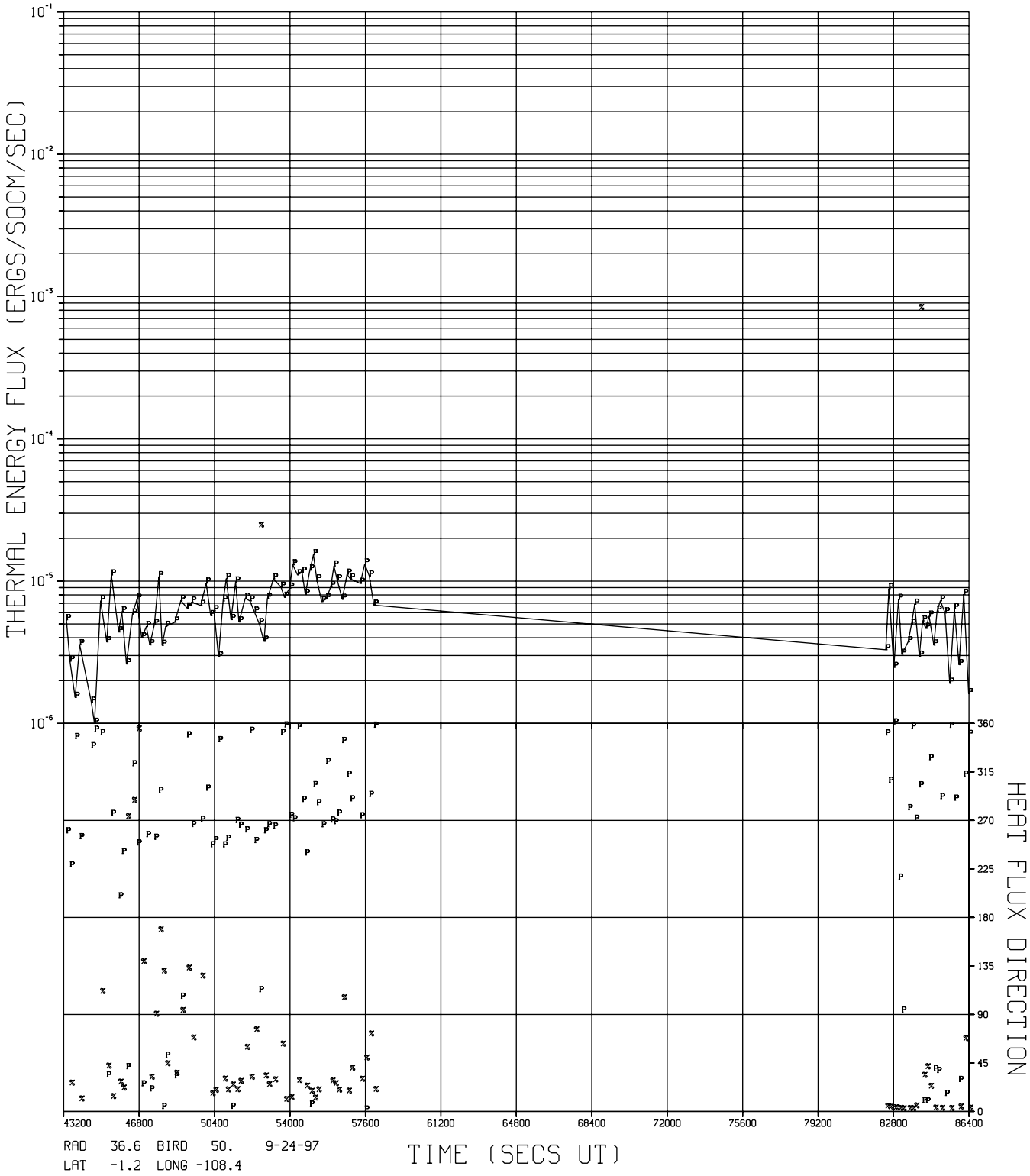

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
TIME (SECS UT)
RAD 36.5 BIRD 50. 9-24-97
LAT 7.3 LONG -118.6

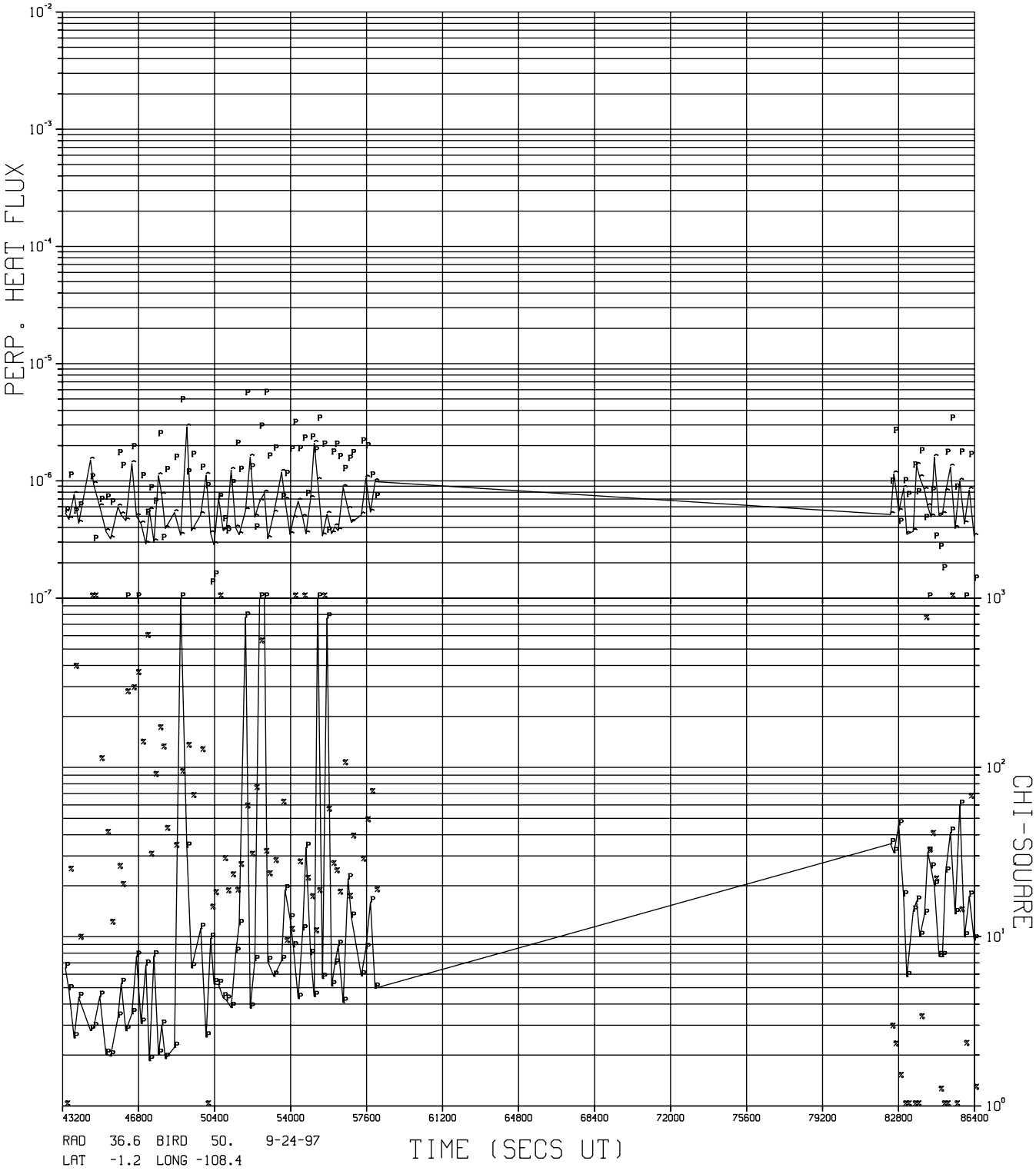

DENSITY
DENSITY RATIO
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 36.6 BIRD 50. 9-24-97
LAT -1.2 LONG -108.4

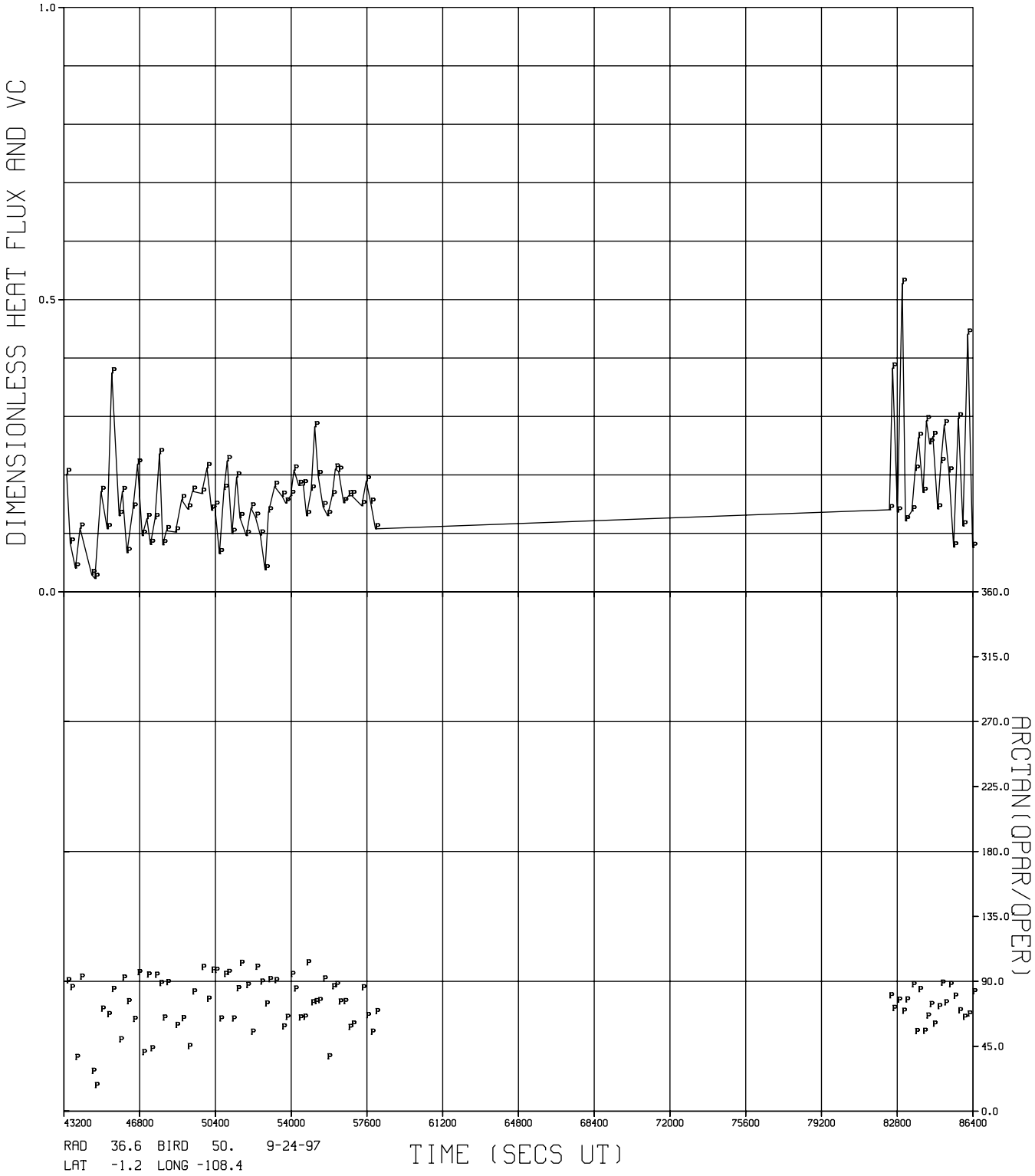

VELOCITY
VELOCITY DIFFERENCE
TIME (SECS UT)
1000
900
800
700
600
500
400
300
200
100
0
100
80
60
40
20
0
-20
-40
-60
-80
-100
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 36.6 BIRD 50. 9-24-97
LAT -1.2 LONG -108.4

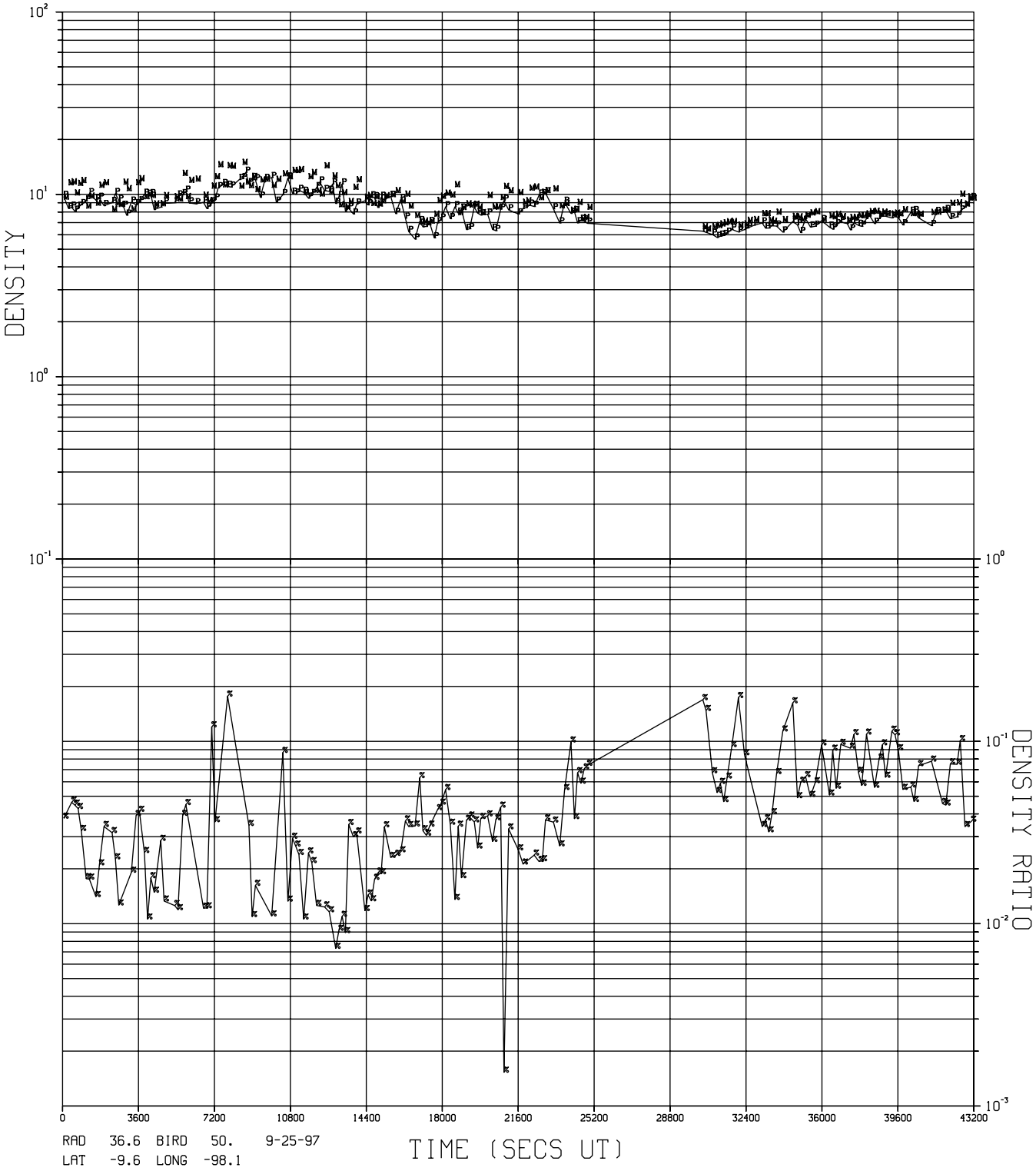

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 36.6 BIRD 50. 9-24-97
LAT -1.2 LONG -108.4

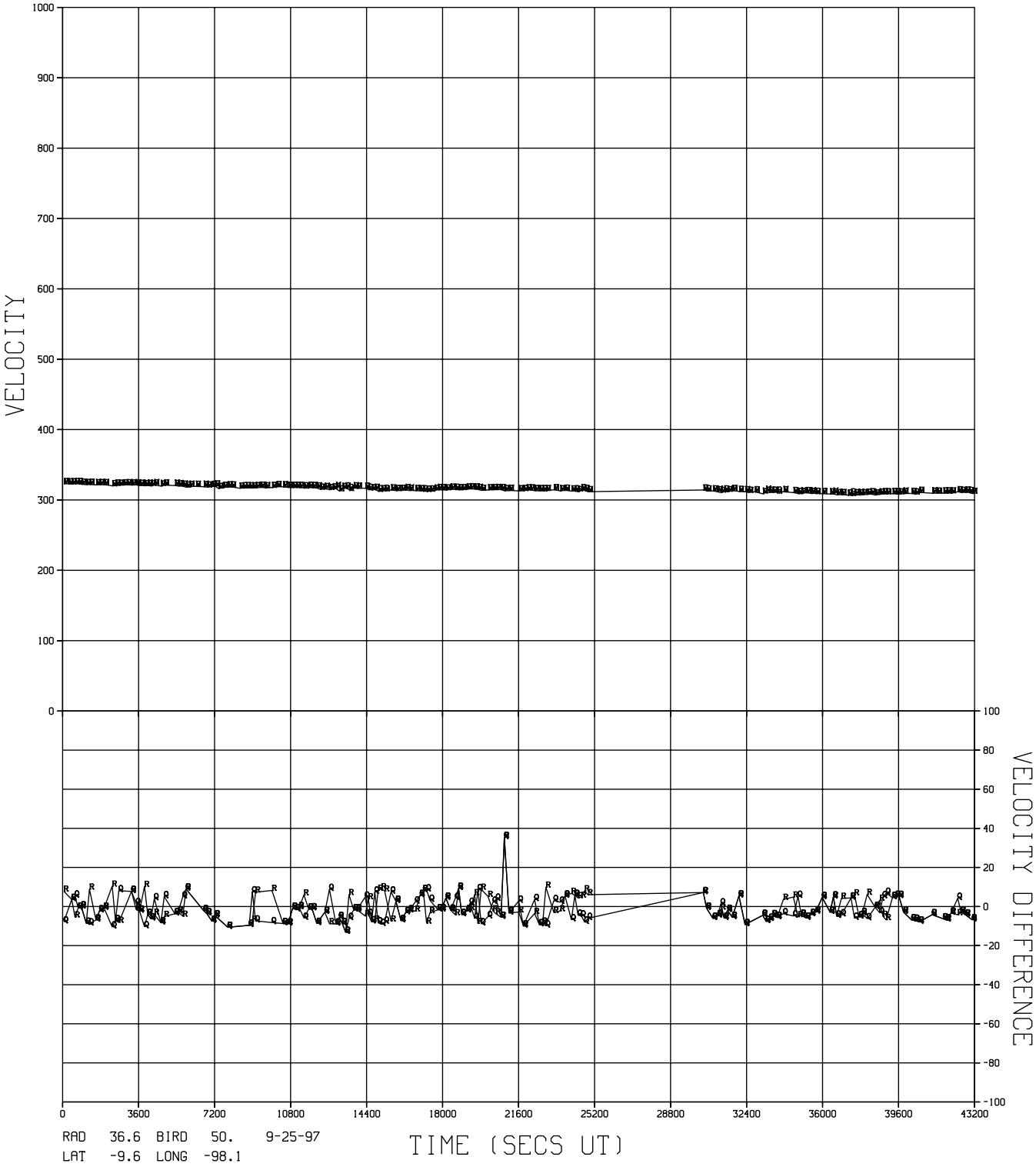

TEMPERATURE
TEMPERATURE RATIO
TIME (SECS UT)
RAD 36.6 BIRD 50. 9-24-97
LAT -1.2 LONG -108.4

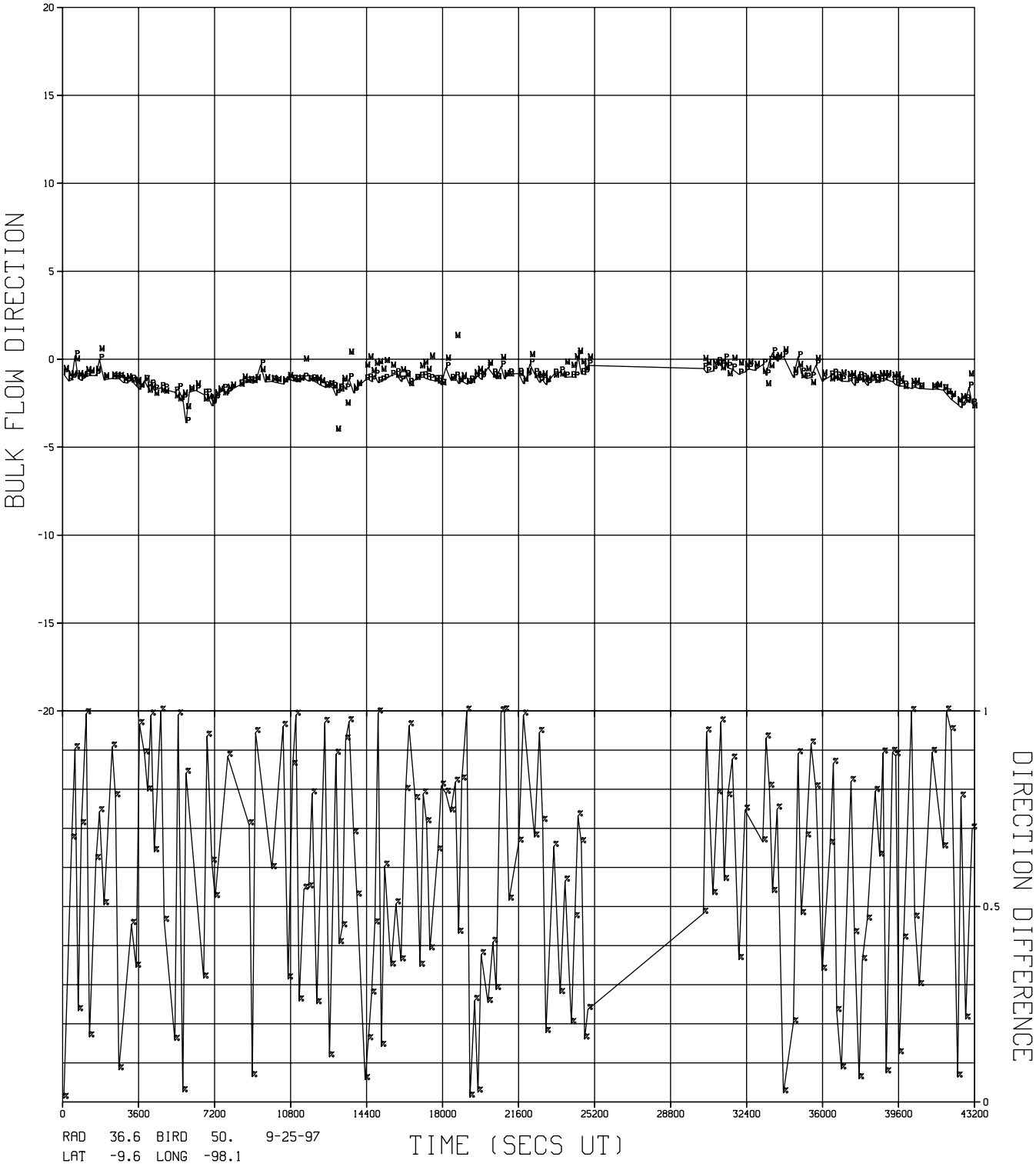

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 36.6 BIRD 50. 9-24-97
LAT -1.2 LONG -108.4

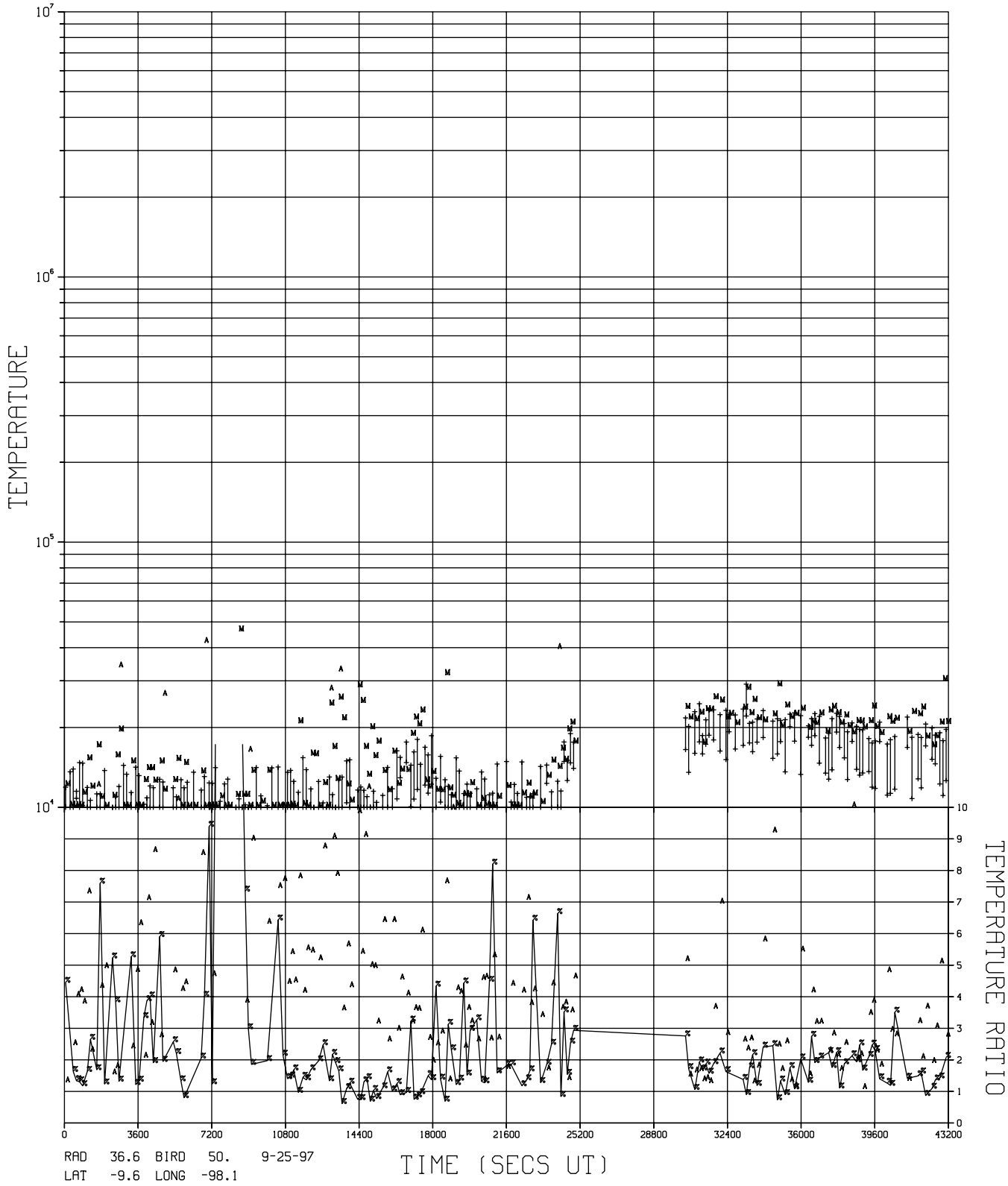

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 36.6 BIRD 50. 9-24-97
LAT -1.2 LONG -108.4

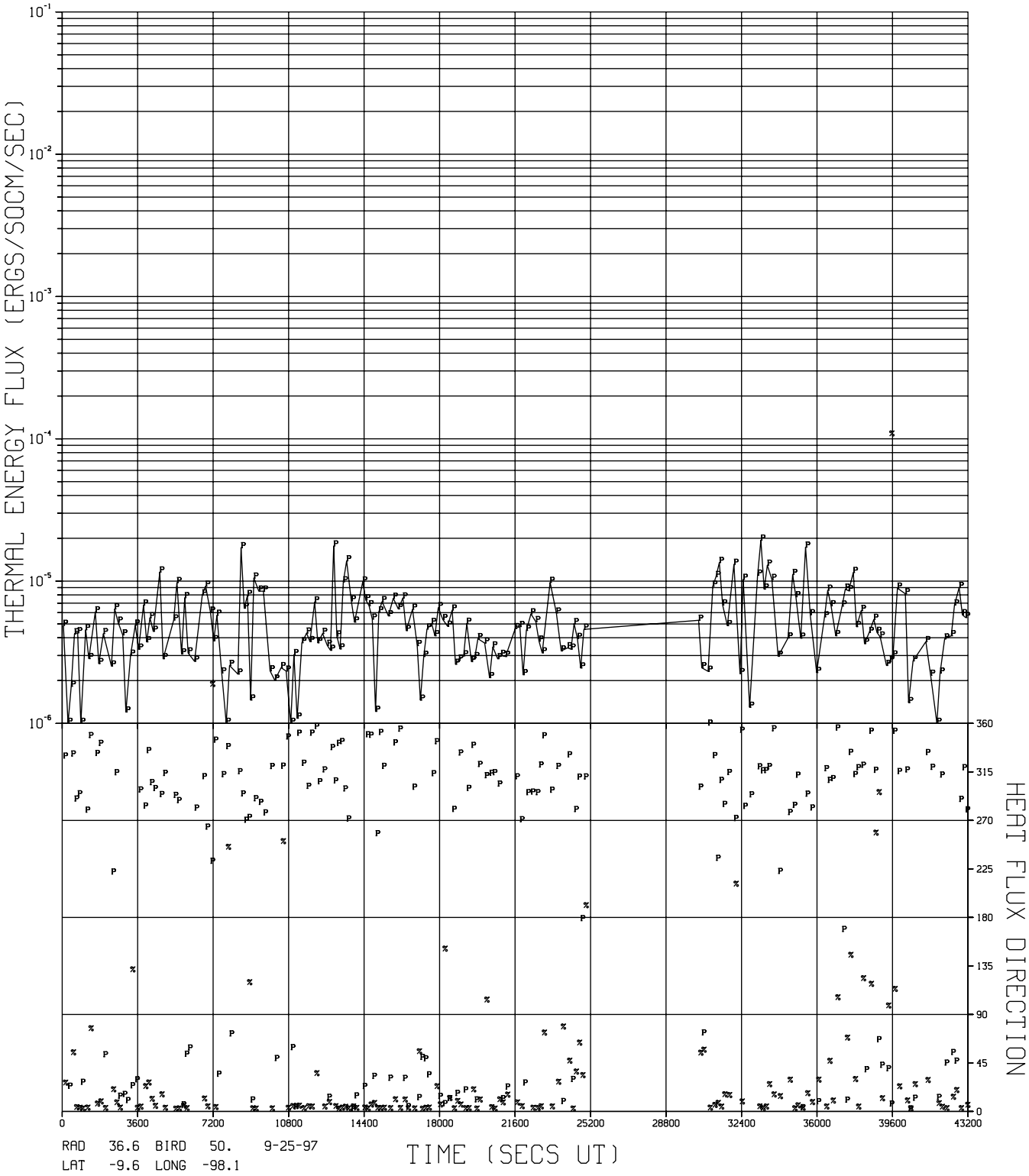

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
TIME (SECS UT)
RAD 36.6 BIRD 50. 9-24-97
LAT -1.2 LONG -108.4

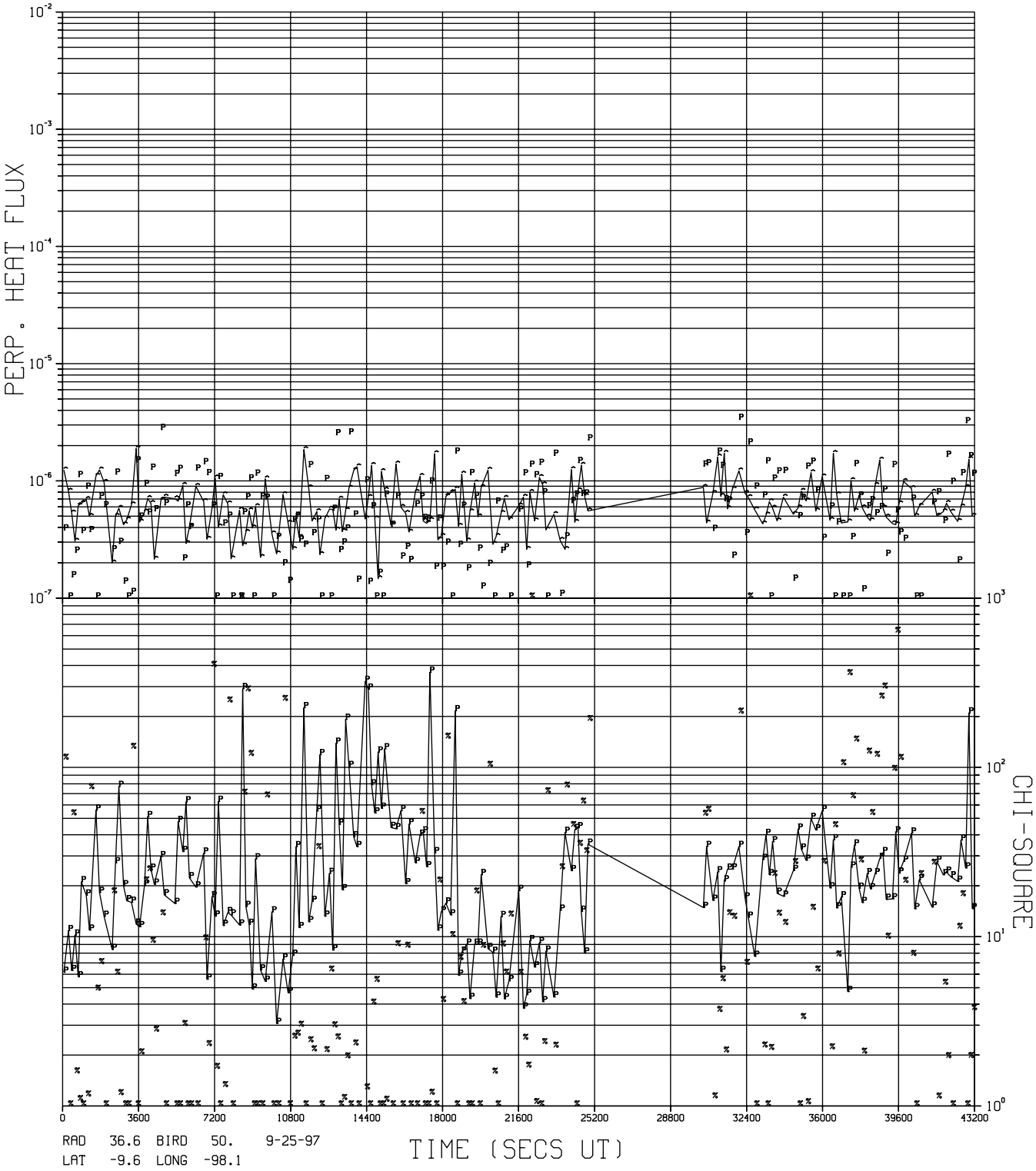

DENSITY
DENSITY RATIO
TIME (SECS UT)
RAD 36.6 BIRD 50. 9-25-97
LAT -9.6 LONG -98.1

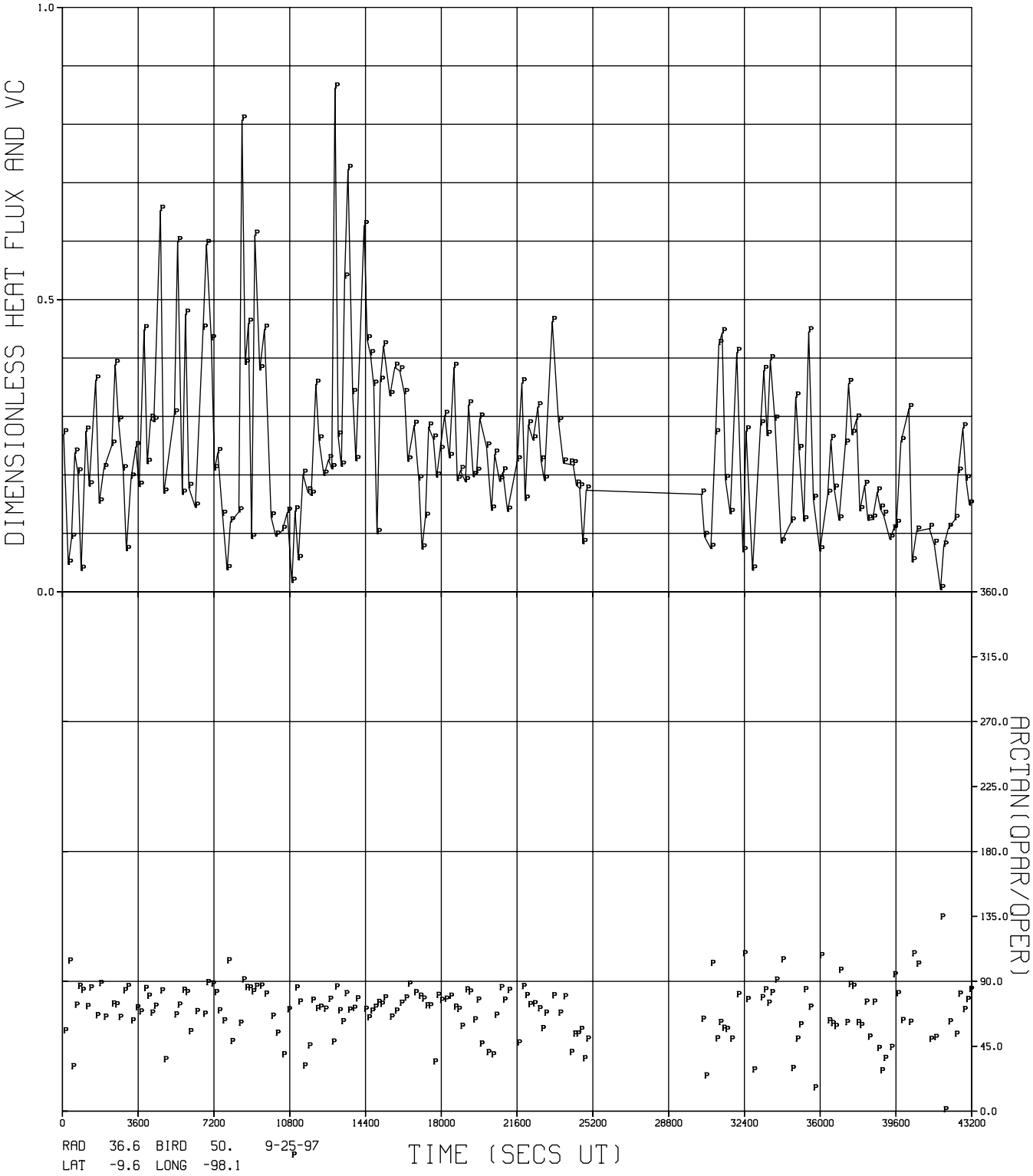

VELOCITY
1000
900
800
700
600
500
400
300
200
100
0
VELOCITY DIFFERENCE
100
80
60
40
20
0
-20
-40
-60
-80
-100
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
RAD 36.6 BIRD 50. 9-25-97
LAT -9.6 LONG -98.1
TIME (SECS UT)

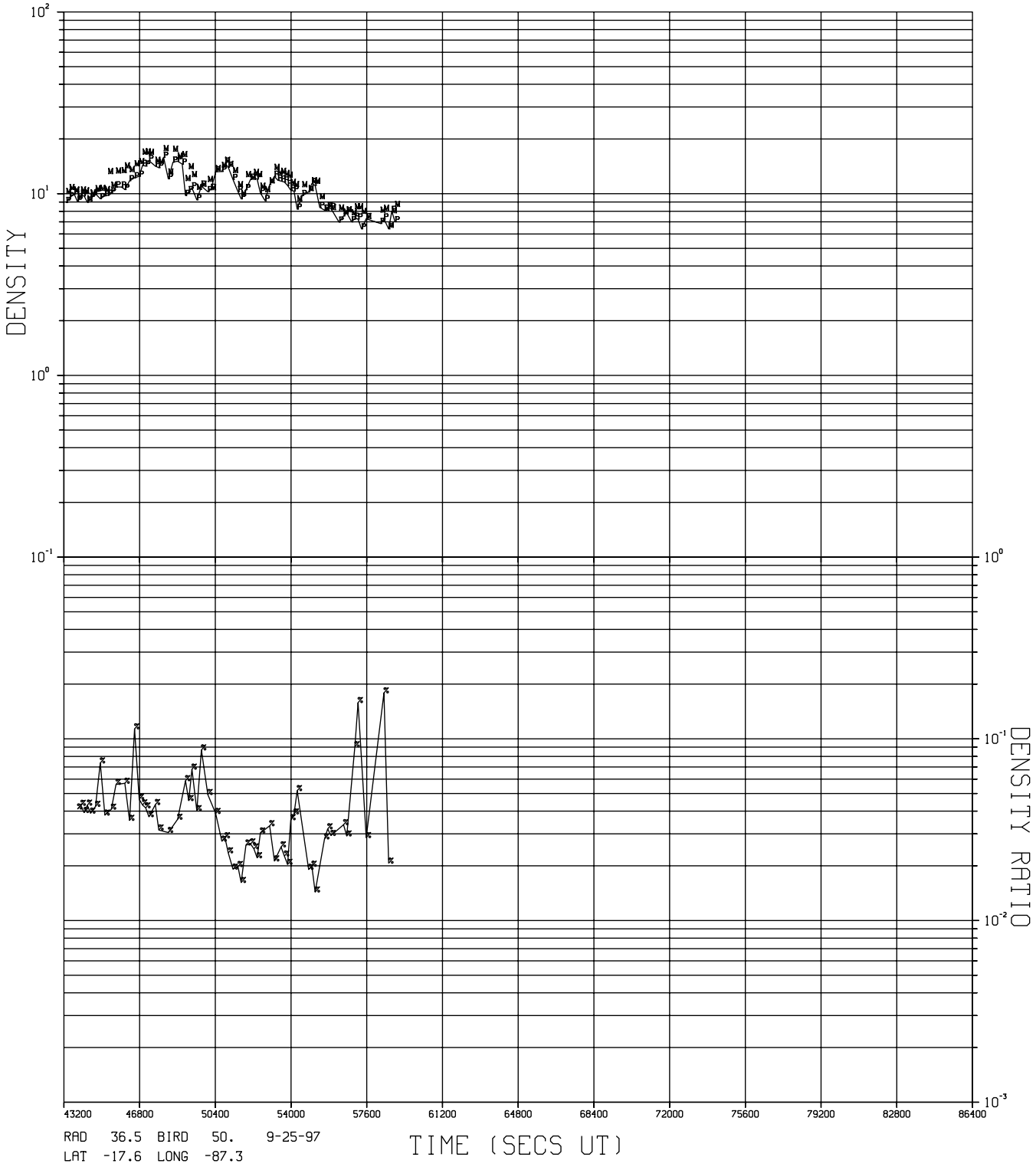

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
RAD 36.6 BIRD 50. 9-25-97
LAT -9.6 LONG -98.1

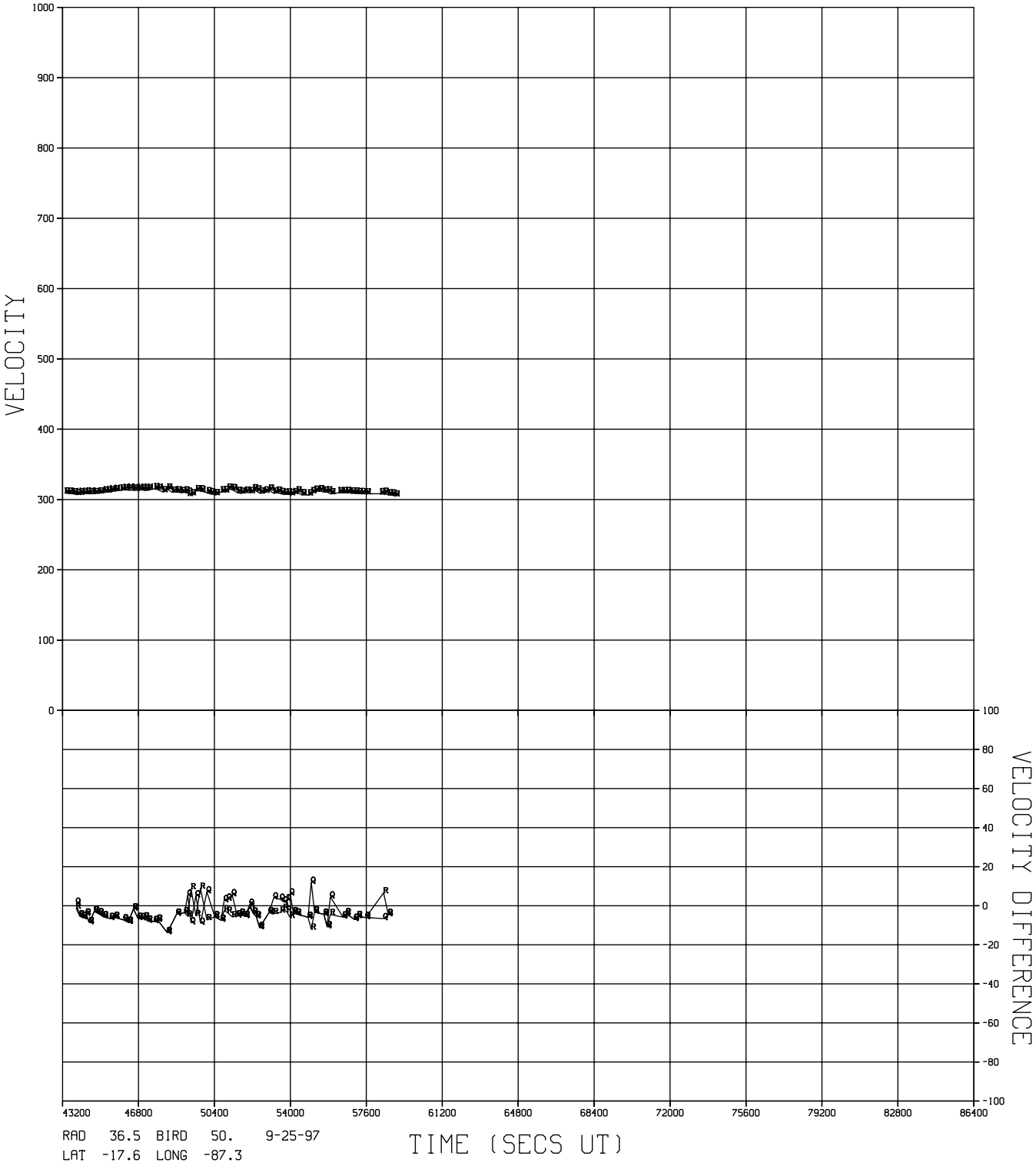

TEMPERATURE
TEMPERATURE RATIO
TIME (SECS UT)
RAD 36.6 BIRD 50. 9-25-97
LAT -9.6 LONG -98.1

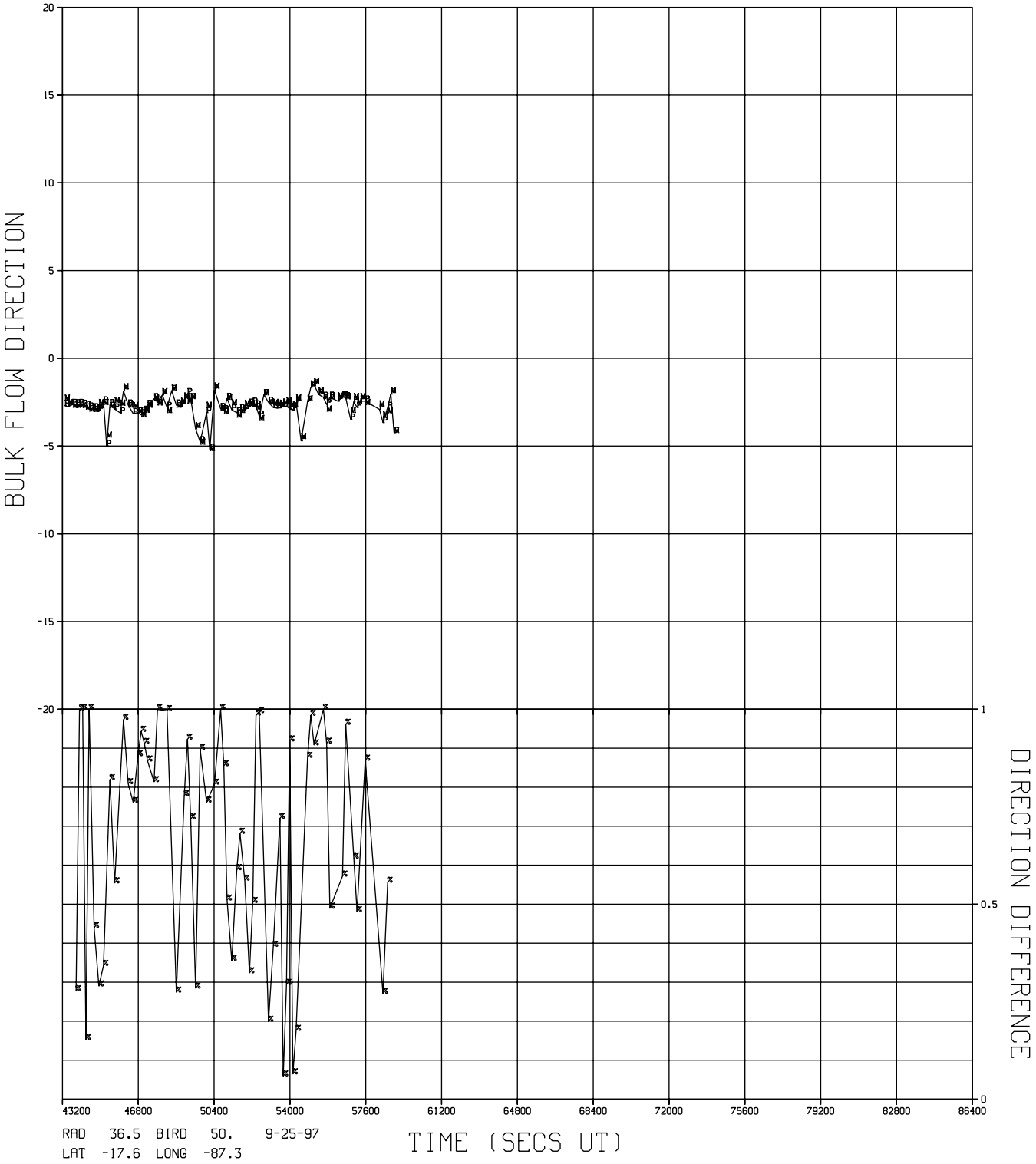

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 36.6 BIRD 50. 9-25-97
LAT -9.6 LONG -98.1

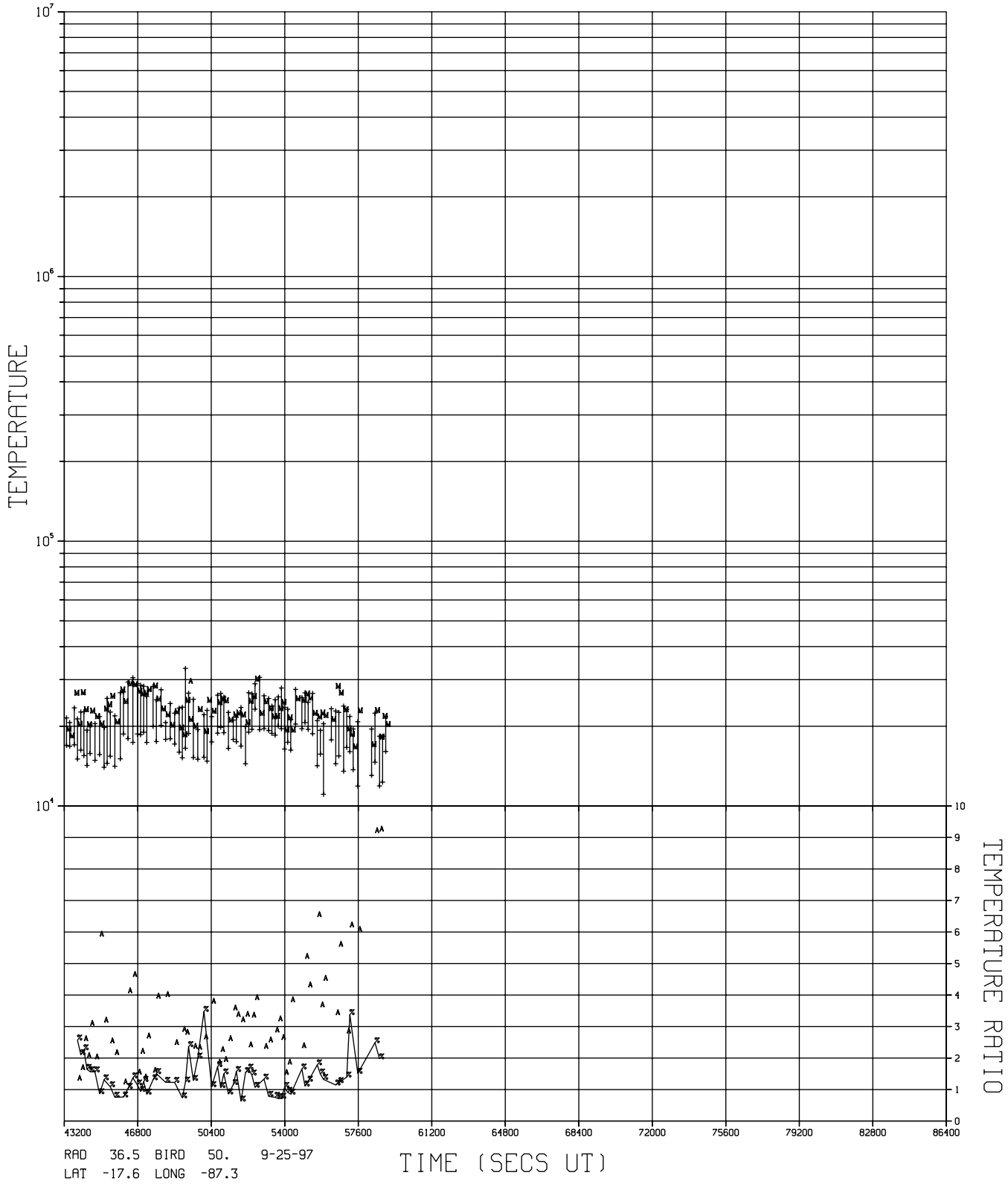

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
RAD 36.6 BIRD 50. 9-25-97
LAT -9.6 LONG -98.1

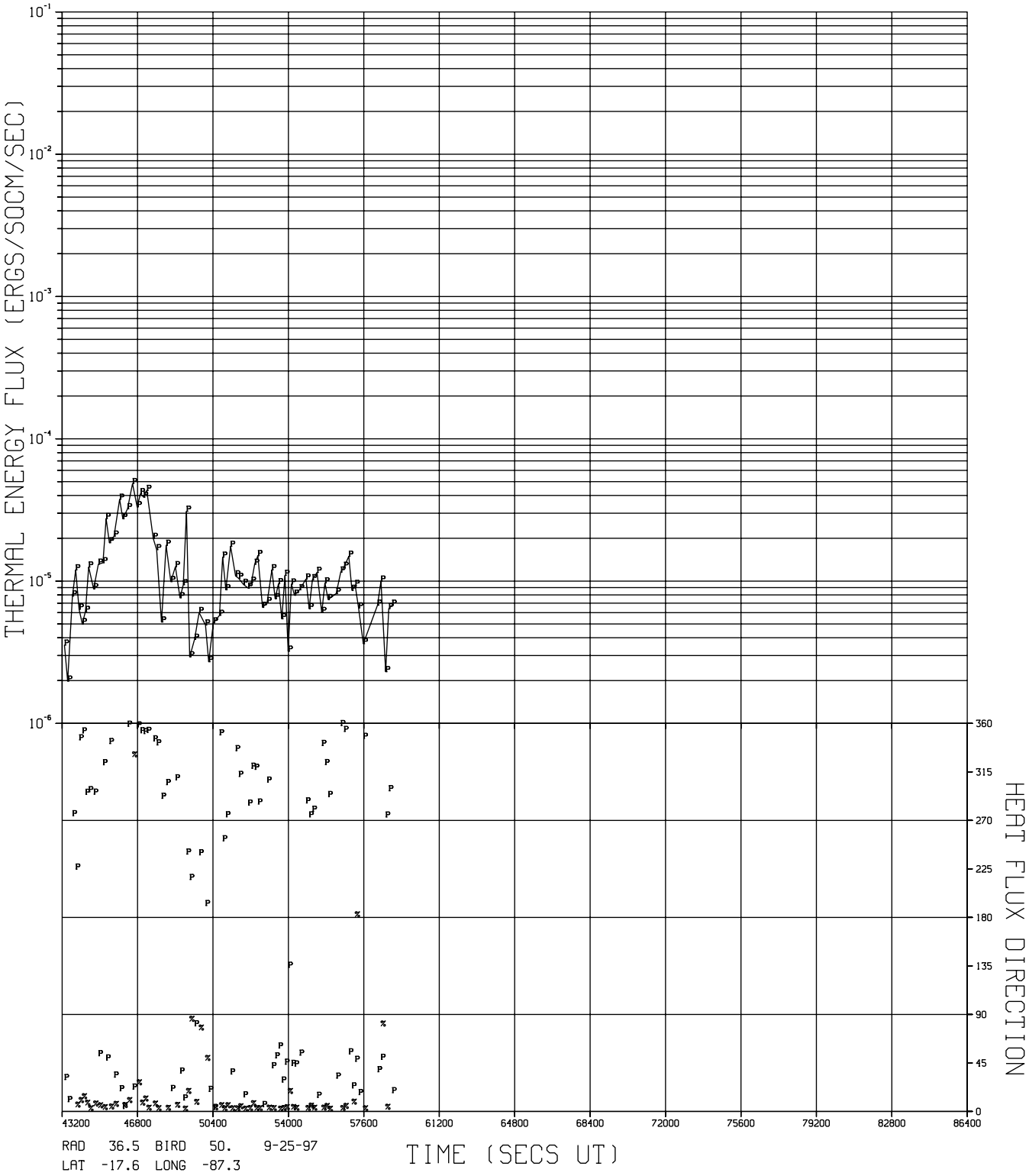

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
TIME (SECS UT)
RAD 36.6 BIRD 50. 9-25-97
LAT -9.6 LONG -98.1

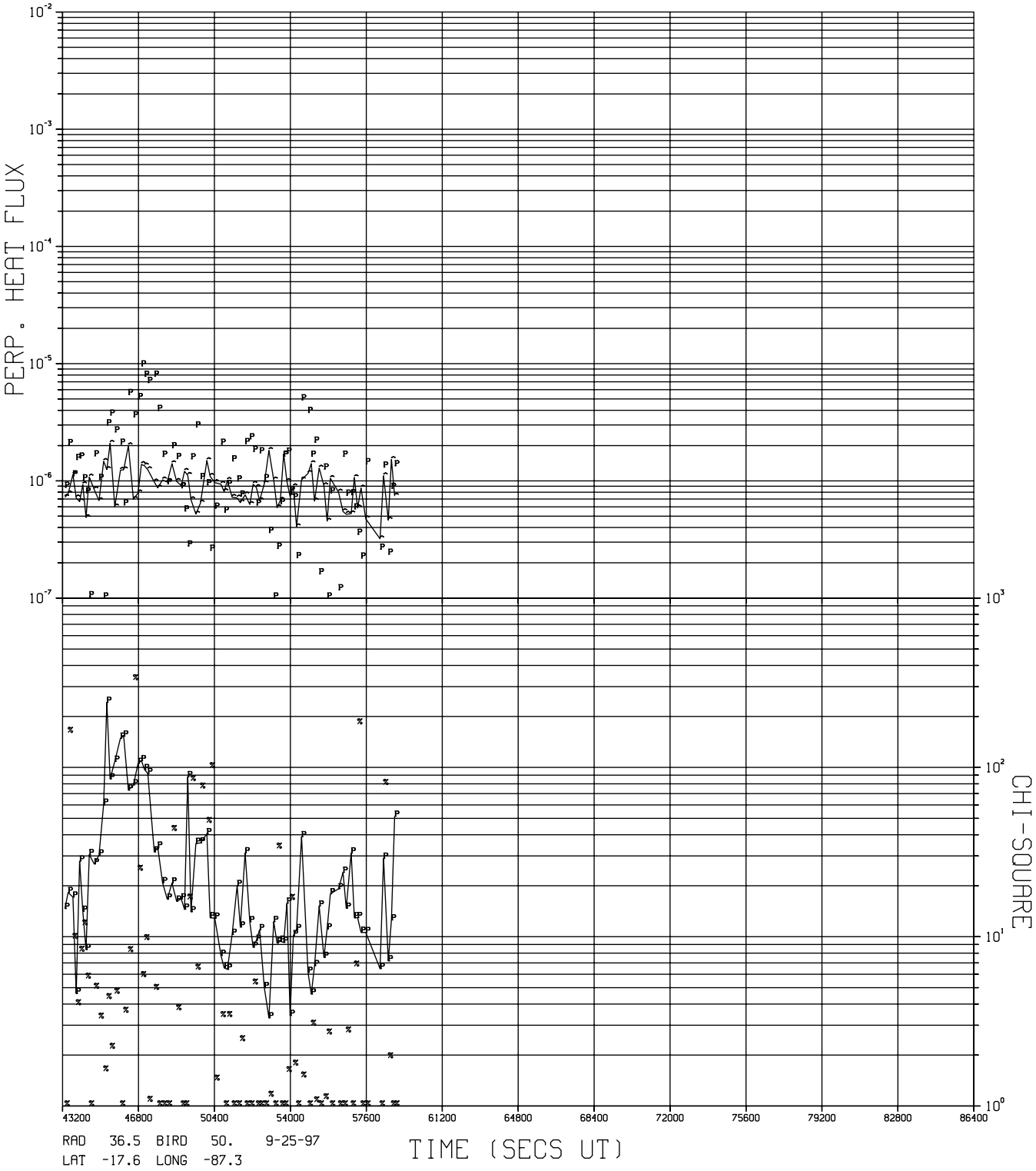

DENSITY
DENSITY RATIO
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 36.5 BIRD 50. 9-25-97
LAT -17.6 LONG -87.3

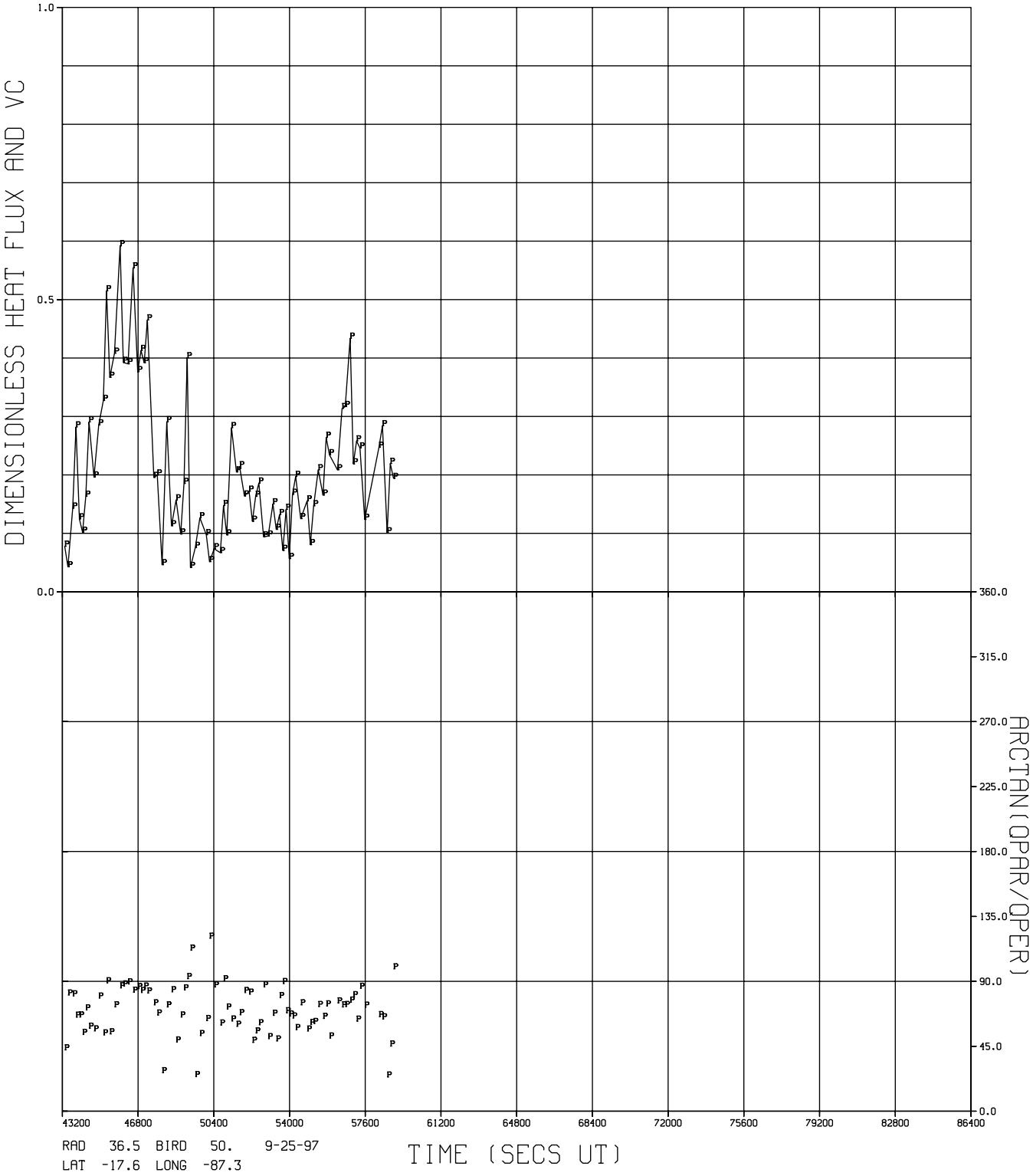

VELOCITY
1000
900
800
700
600
500
400
300
200
100
0
VELOCITY DIFFERENCE
100
80
60
40
20
0
-20
-40
-60
-80
-100
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 36.5 BIRD 50. 9-25-97
LAT -17.6 LONG -87.3
TIME (SECS UT)

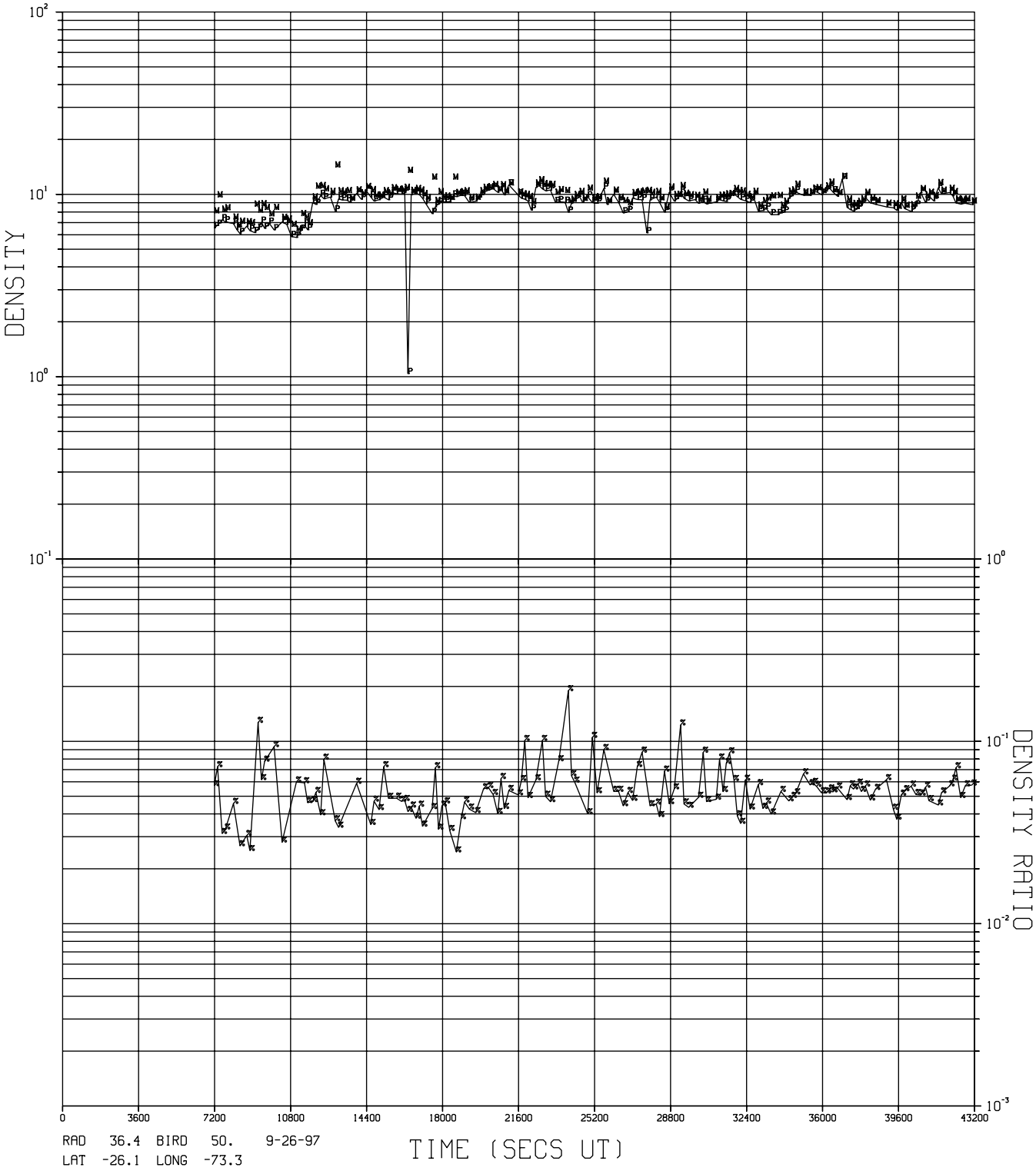

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 36.5 BIRD 50. 9-25-97
LAT -17.6 LONG -87.3

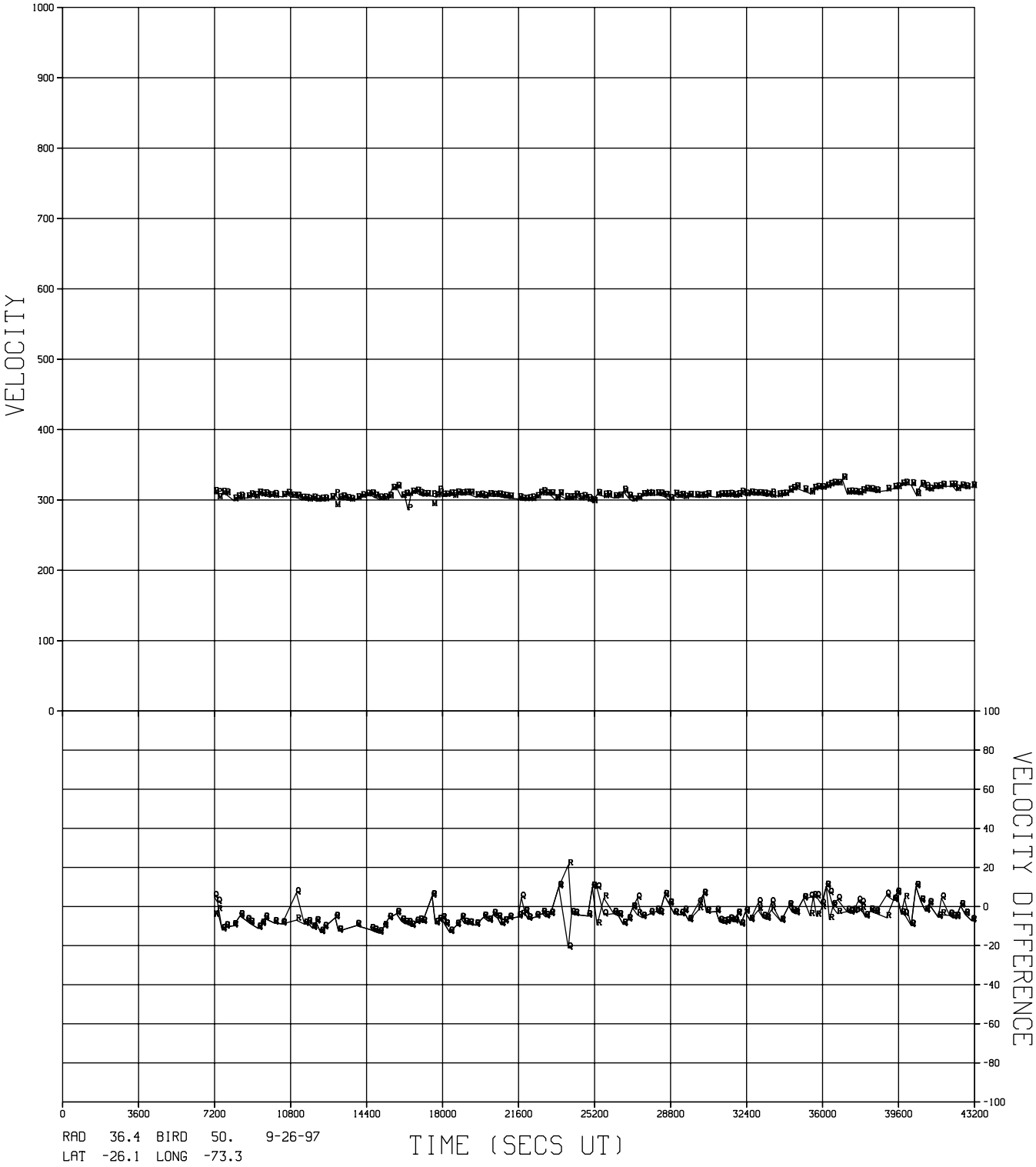

TEMPERATURE
10^7
10^6
10^5
10^4
TEMPERATURE RATIO
0
1
2
3
4
5
6
7
8
9
10
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
TIME (SECS UT)
RAD 36.5 BIRD 50. 9-25-97
LAT -17.6 LONG -87.3

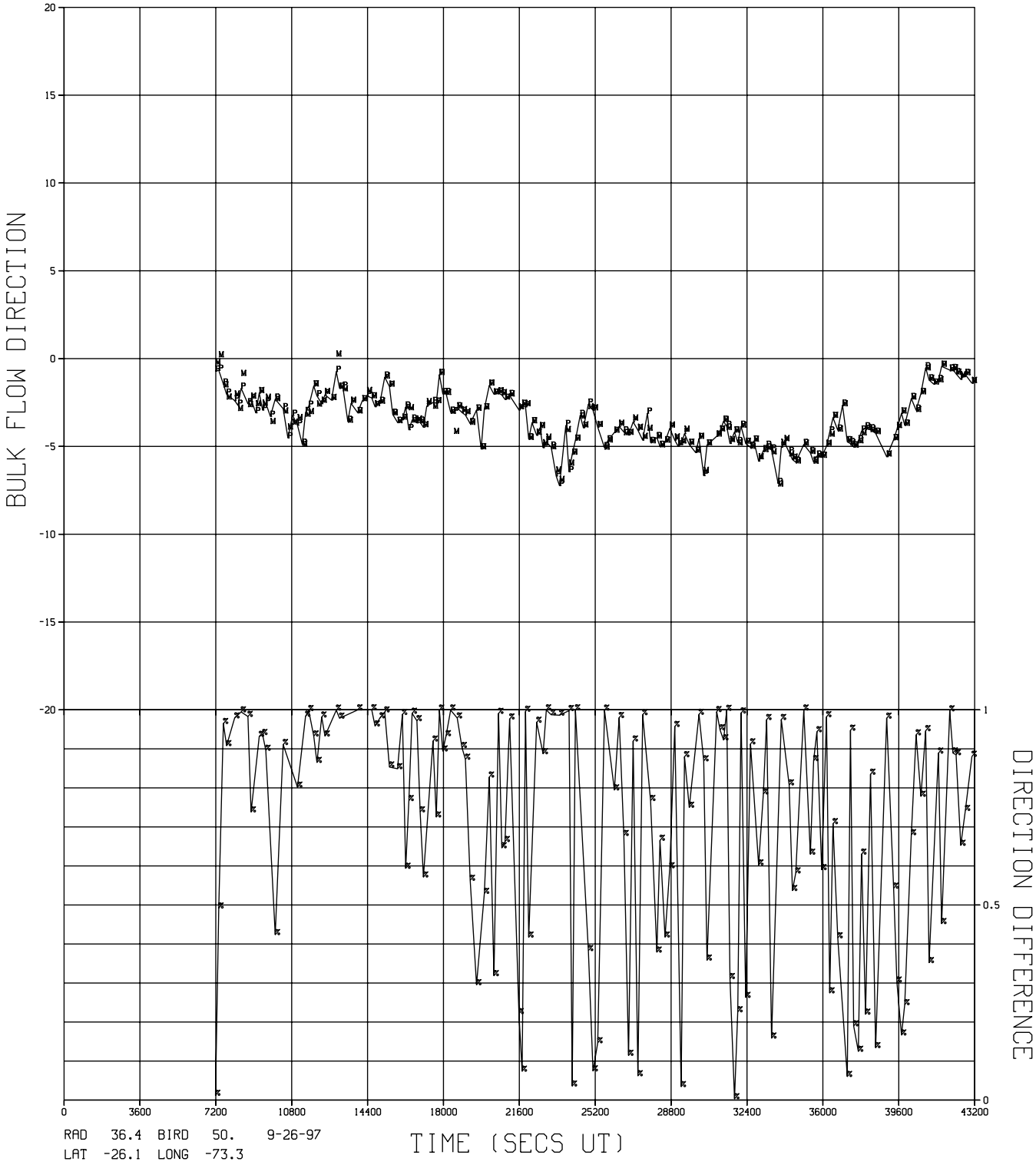

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 36.5 BIRD 50. 9-25-97
LAT -17.6 LONG -87.3

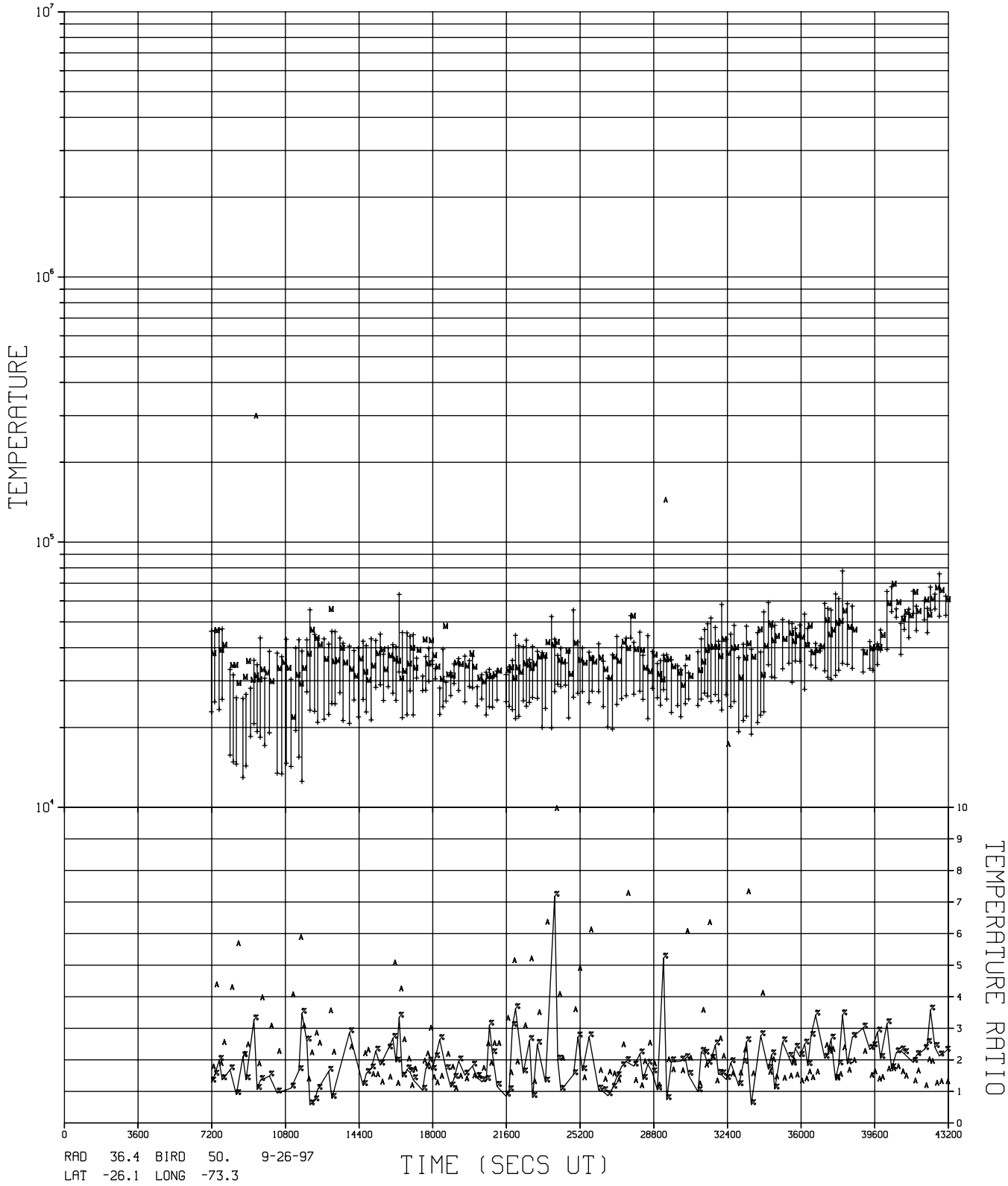

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
RAD 36.5 BIRD 50. 9-25-97
LAT -17.6 LONG -87.3

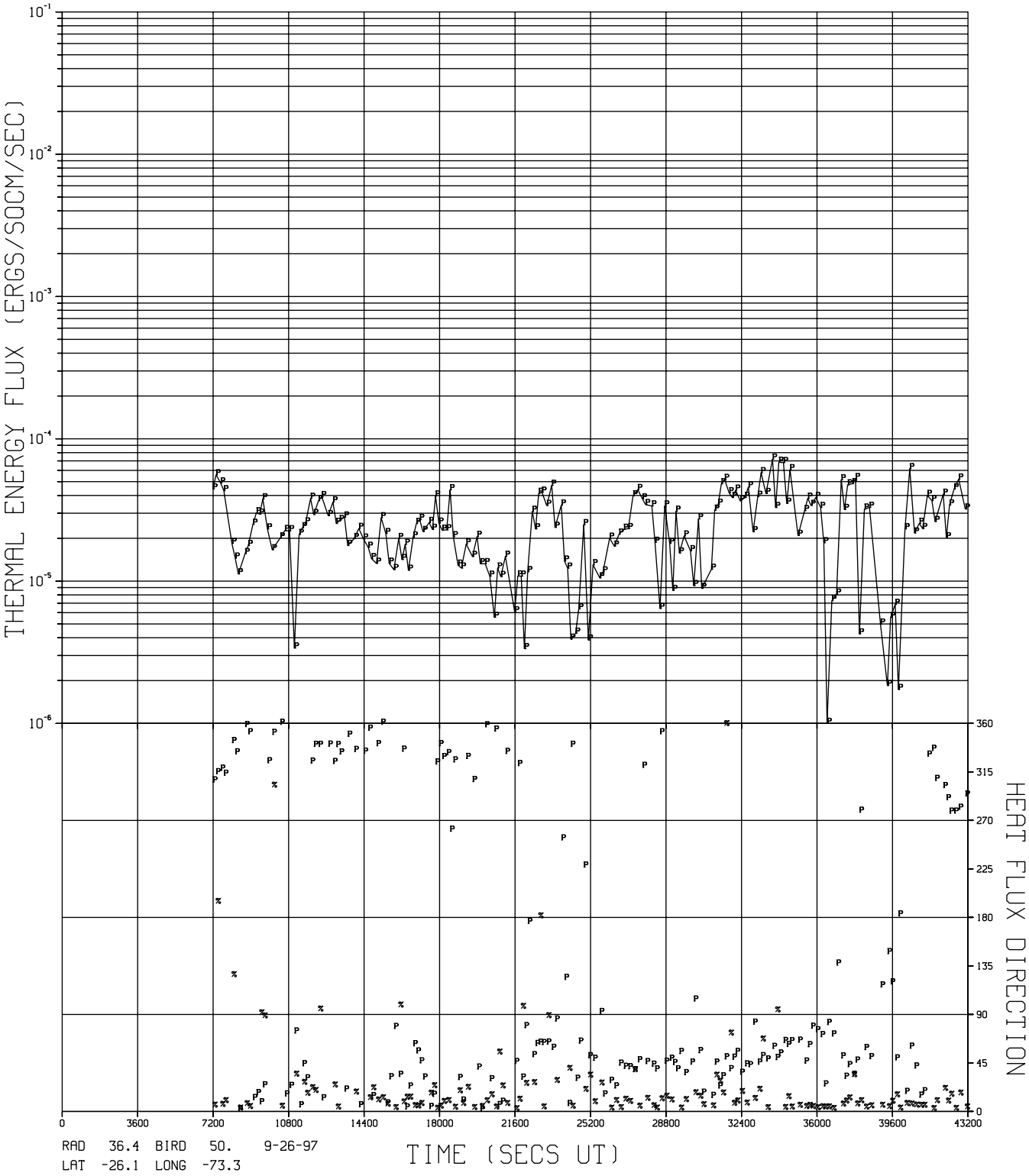

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
TIME (SECS UT)
RAD 36.5 BIRD 50. 9-25-97
LAT -17.6 LONG -87.3

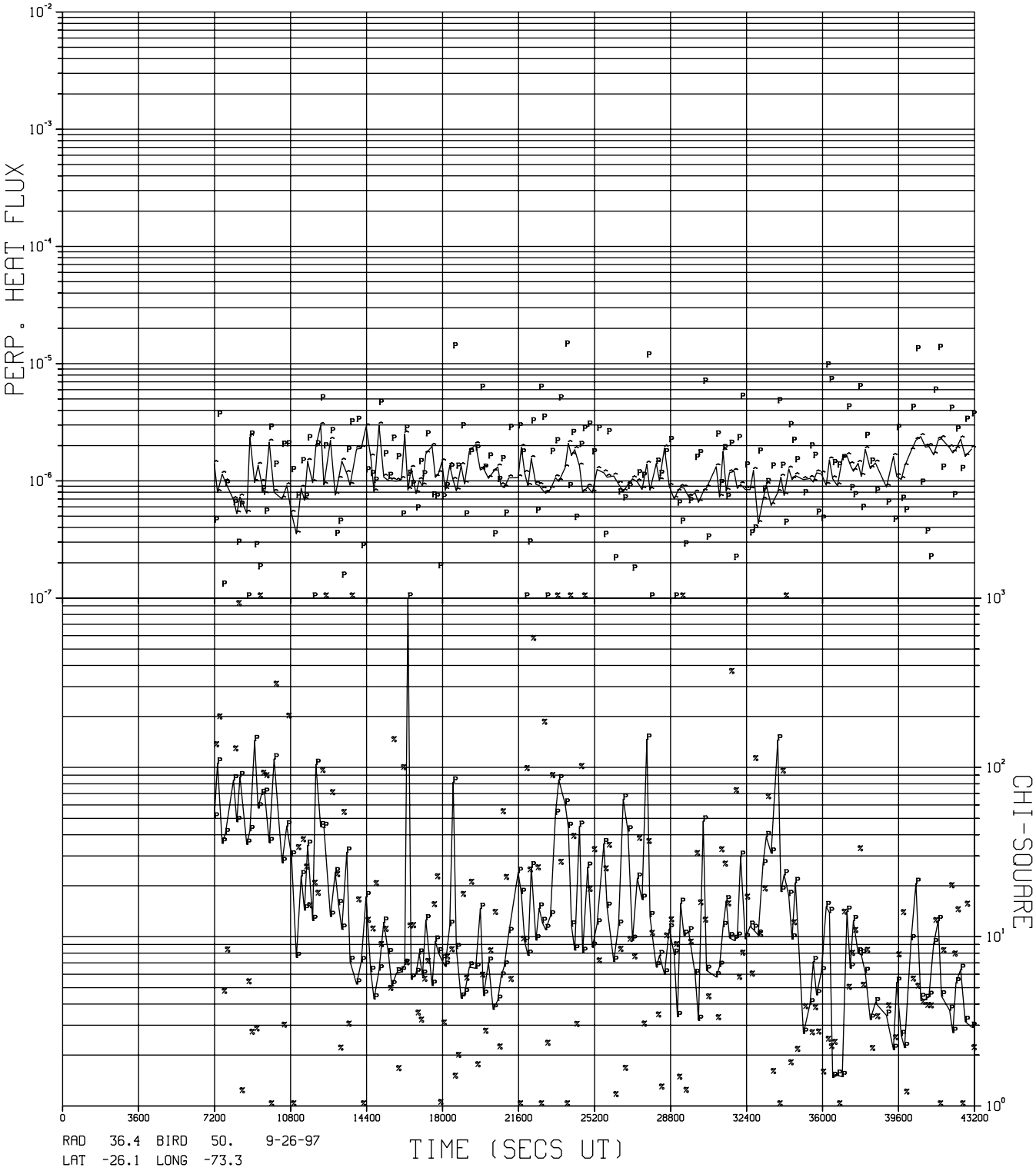

DENSITY
DENSITY RATIO
TIME (SECS UT)
RAD 36.4 BIRD 50. 9-26-97
LAT -26.1 LONG -73.3

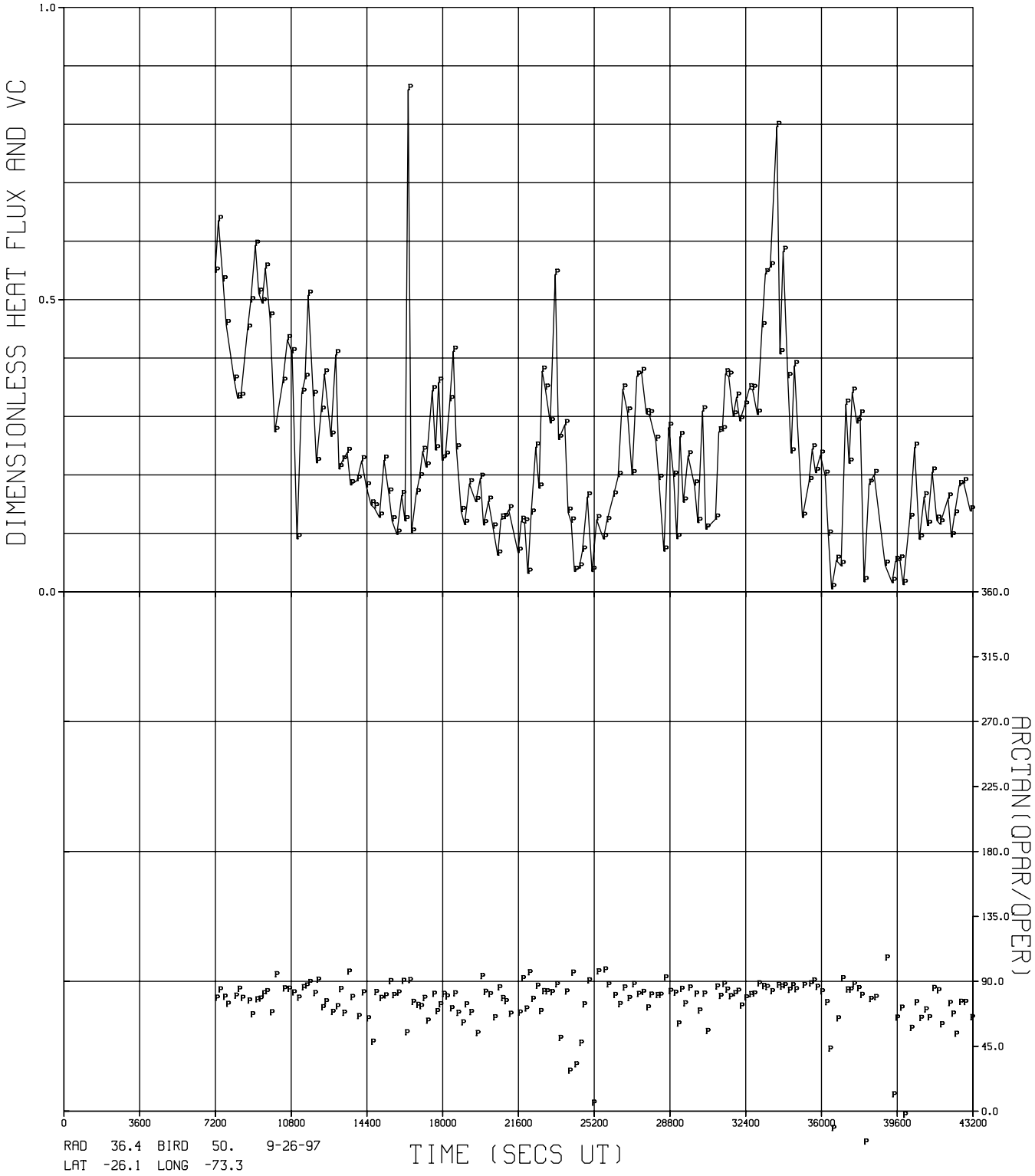

VELOCITY
1000
900
800
700
600
500
400
300
200
100
0
VELOCITY DIFFERENCE
100
80
60
40
20
0
-20
-40
-60
-80
-100
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
TIME (SECS UT)
RAD 36.4 BIRD 50. 9-26-97
LAT -26.1 LONG -73.3

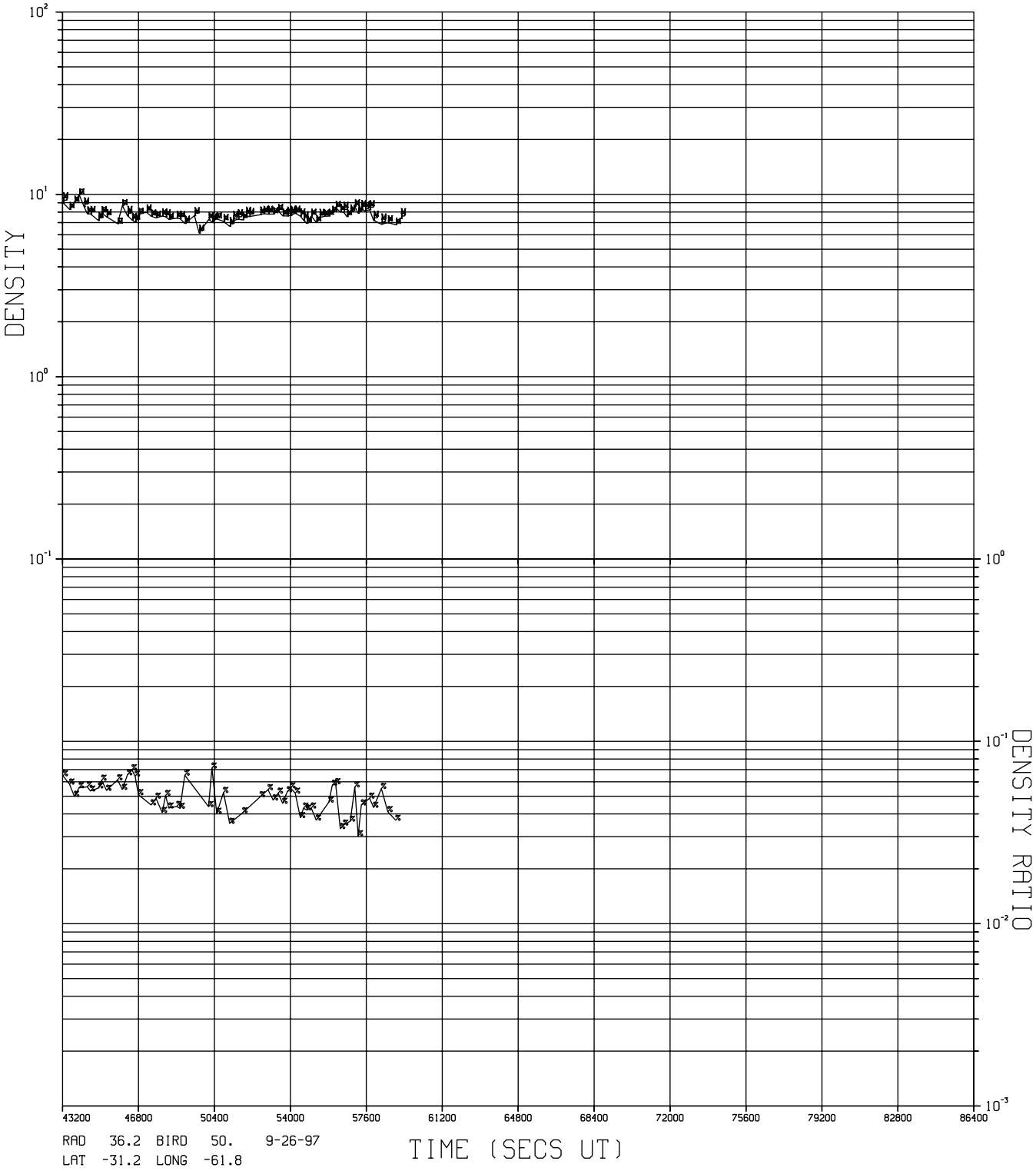

BULK FLOW DIRECTION
DIRECTION DIFFERENCE
TIME (SECS UT)
20
15
10
5
0
-5
-10
-15
-20
1
0.5
0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
RAD 36.4 BIRD 50. 9-26-97
LAT -26.1 LONG -73.3

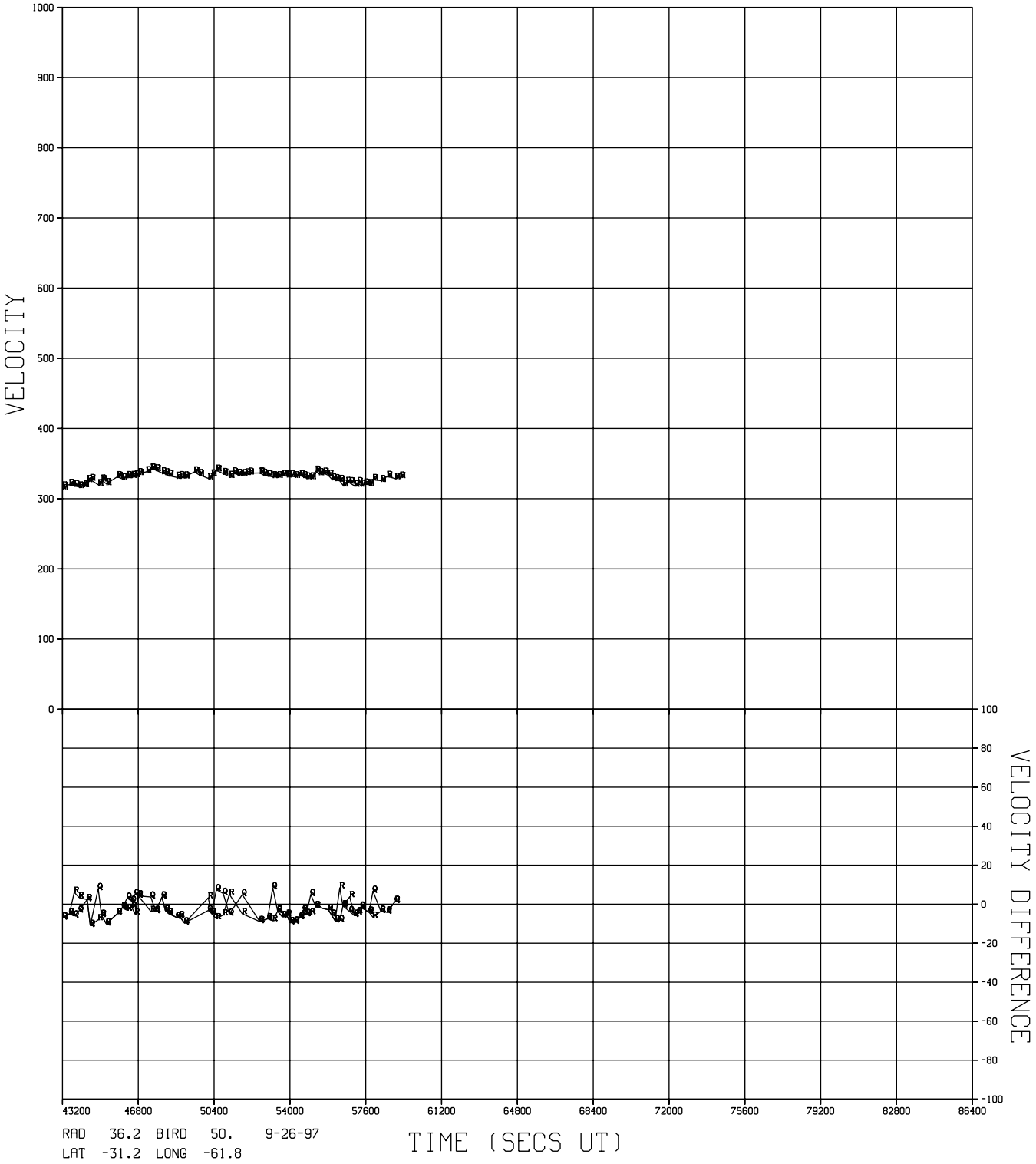

TEMPERATURE
TEMPERATURE RATIO
TIME (SECS UT)
RAD 36.4 BIRD 50. 9-26-97
LAT -26.1 LONG -73.3

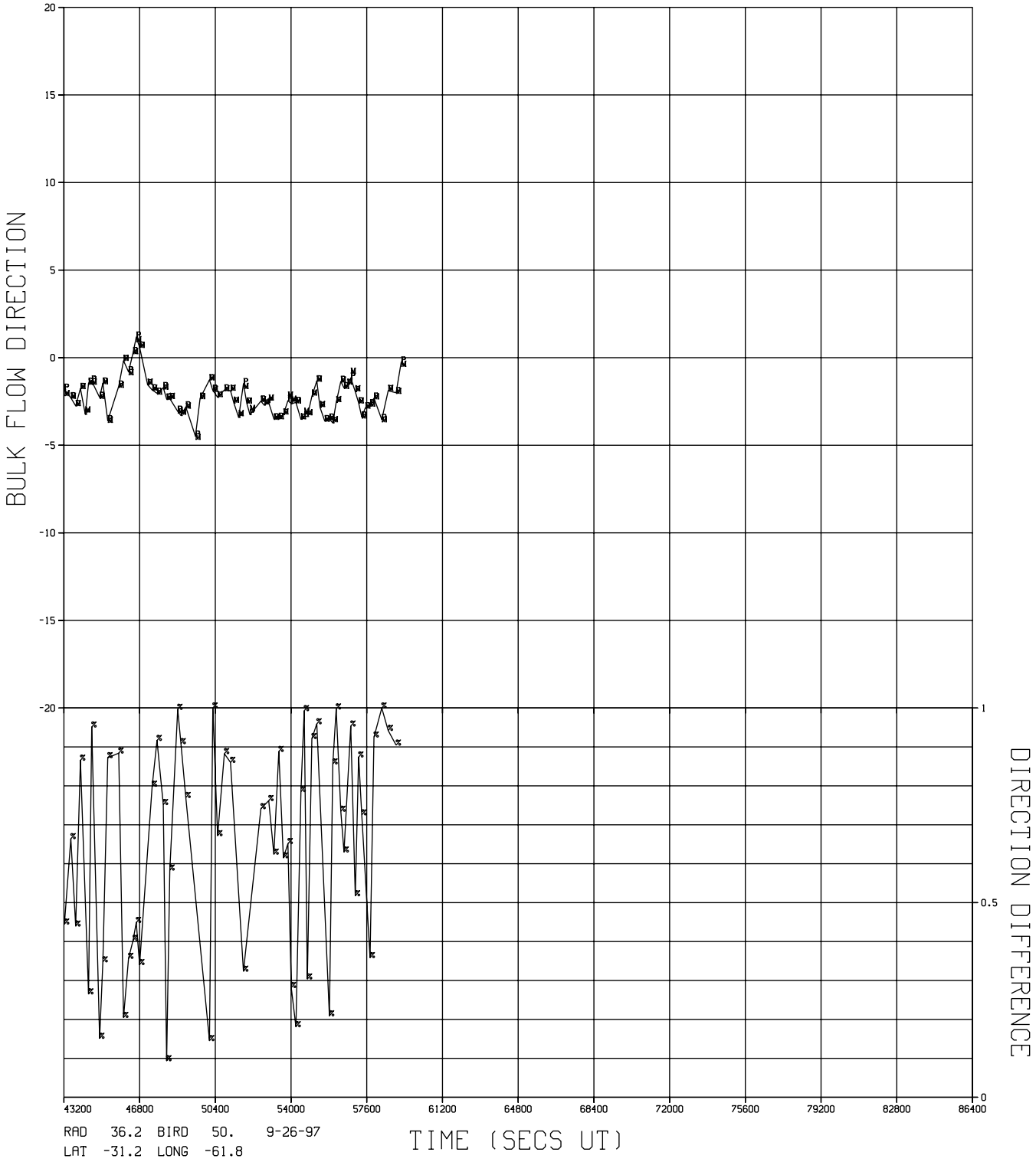

THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 36.4 BIRD 50. 9-26-97
LAT -26.1 LONG -73.3

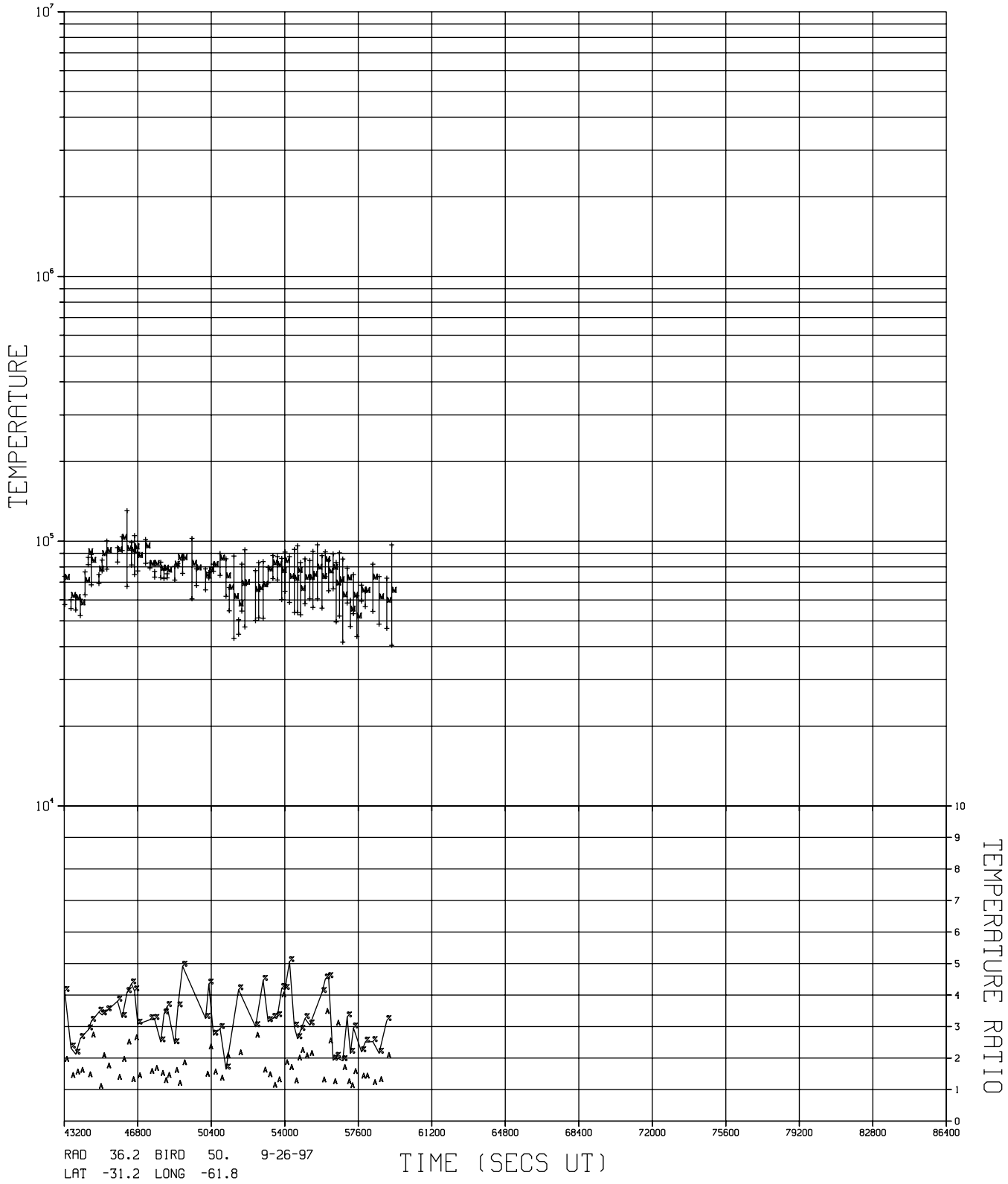

PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
RAD 36.4 BIRD 50. 9-26-97
LAT -26.1 LONG -73.3

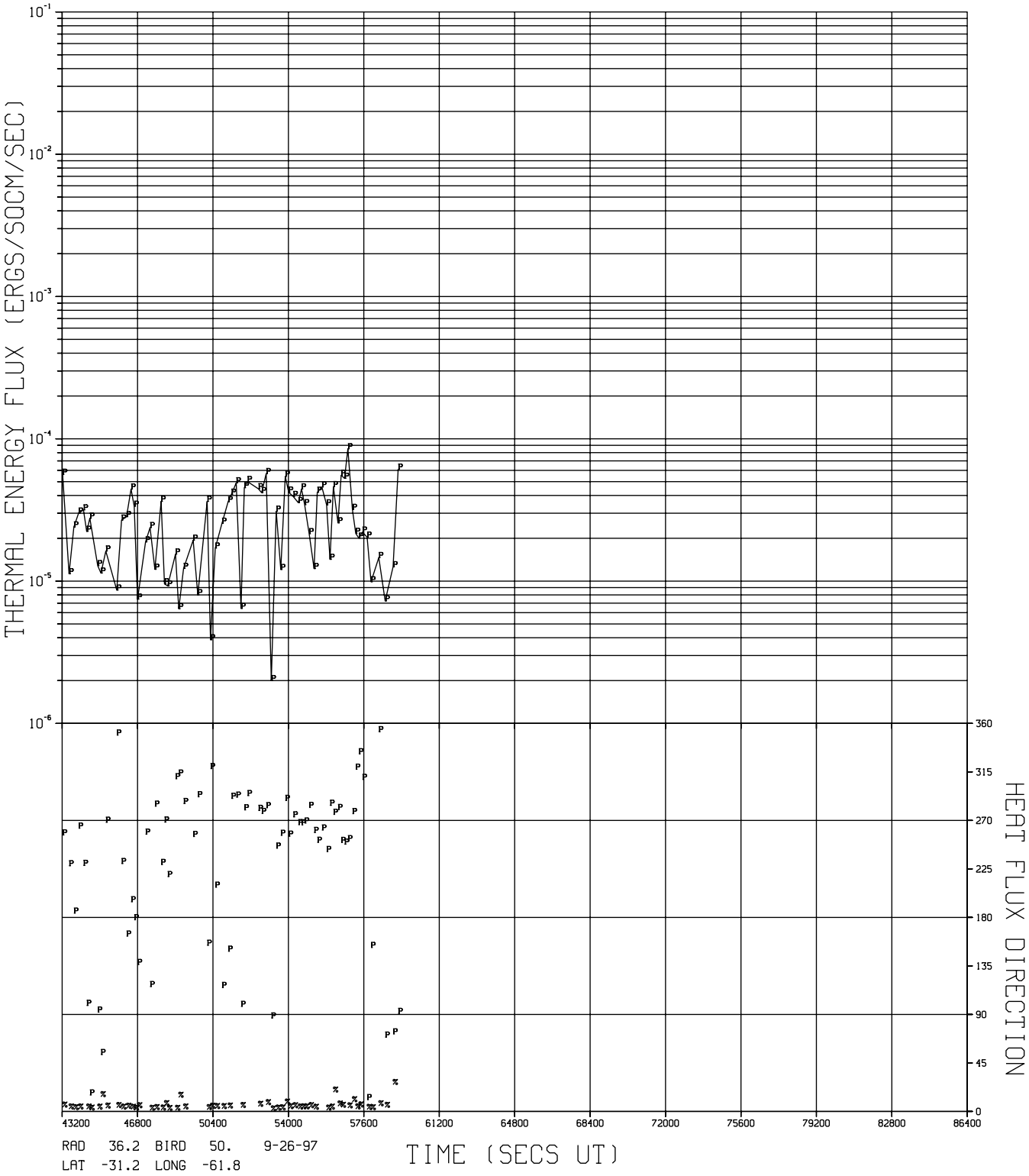

DIMENSIONLESS HEAT FLUX AND VC
1.0
0.5
0.0
ARCTAN(QPAR/QPER)
360.0
315.0
270.0
225.0
180.0
135.0
90.0
45.0
0.0
0
3600
7200
10800
14400
18000
21600
25200
28800
32400
36000
39600
43200
TIME (SECS UT)
RAD 36.4 BIRD 50. 9-26-97
LAT -26.1 LONG -73.3

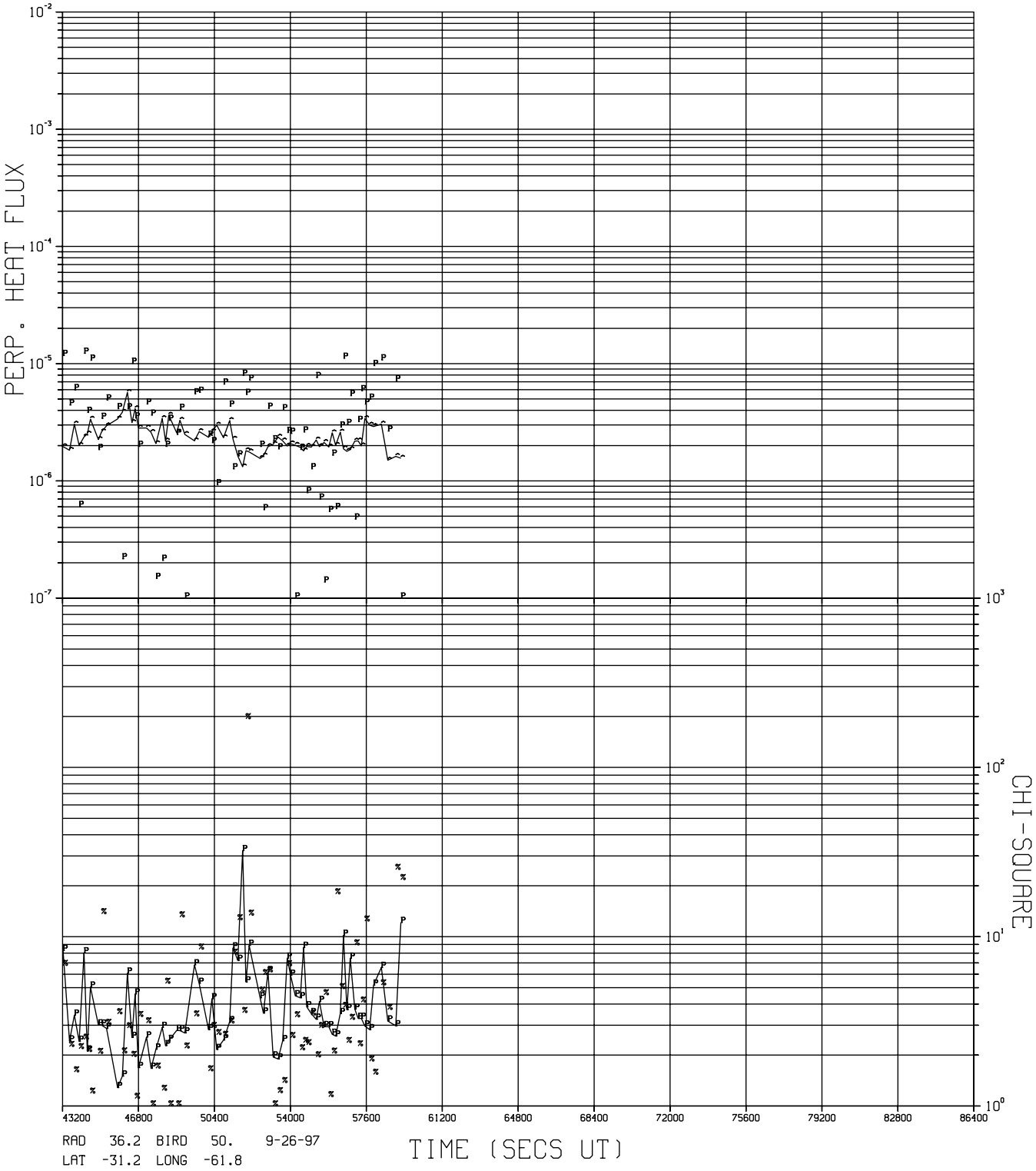

DENSITY
DENSITY RATIO
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 36.2 BIRD 50. 9-26-97
LAT -31.2 LONG -61.8

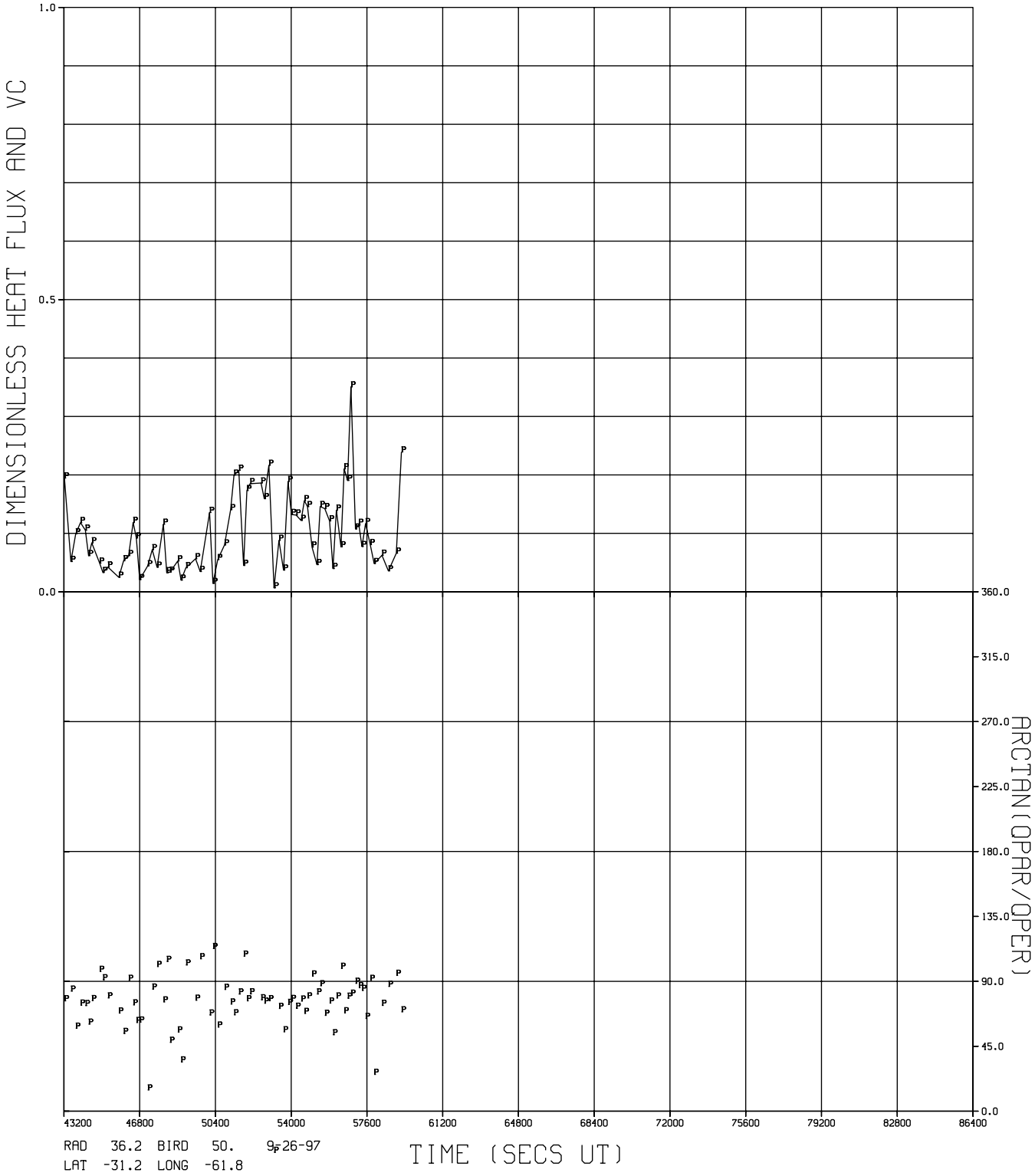

VELOCITY
1000
900
800
700
600
500
400
300
200
100
0
VELOCITY DIFFERENCE
100
80
60
40
20
0
-20
-40
-60
-80
-100
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 36.2 BIRD 50. 9-26-97
LAT -31.2 LONG -61.8
TIME (SECS UT)


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 36.2 BIRD 50. 9-26-97
LAT -31.2 LONG -61.8


TEMPERATURE
TEMPERATURE RATIO
TIME (SECS UT)
RAD 36.2 BIRD 50. 9-26-97
LAT -31.2 LONG -61.8


THERMAL ENERGY FLUX (ERGS/SQCM/SEC)
HEAT FLUX DIRECTION
TIME (SECS UT)
RAD 36.2 BIRD 50. 9-26-97
LAT -31.2 LONG -61.8


PERP. HEAT FLUX
CHI-SQUARE
TIME (SECS UT)
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
RAD 36.2 BIRD 50. 9-26-97
LAT -31.2 LONG -61.8


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
43200
46800
50400
54000
57600
61200
64800
68400
72000
75600
79200
82800
86400
TIME (SECS UT)
RAD 36.2 BIRD 50. 9-26-97
LAT -31.2 LONG -61.8