Multi-angle Measures of Cloud Tracked Winds

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GMAO assessment of MISR winds

- for period 9/1/03 to 10/15/03
  - 7-8 x 10^3 observations per day
- using new wind QA from MISR
- compared against 6 hr forecast from model initialized using a variety of conventional observations

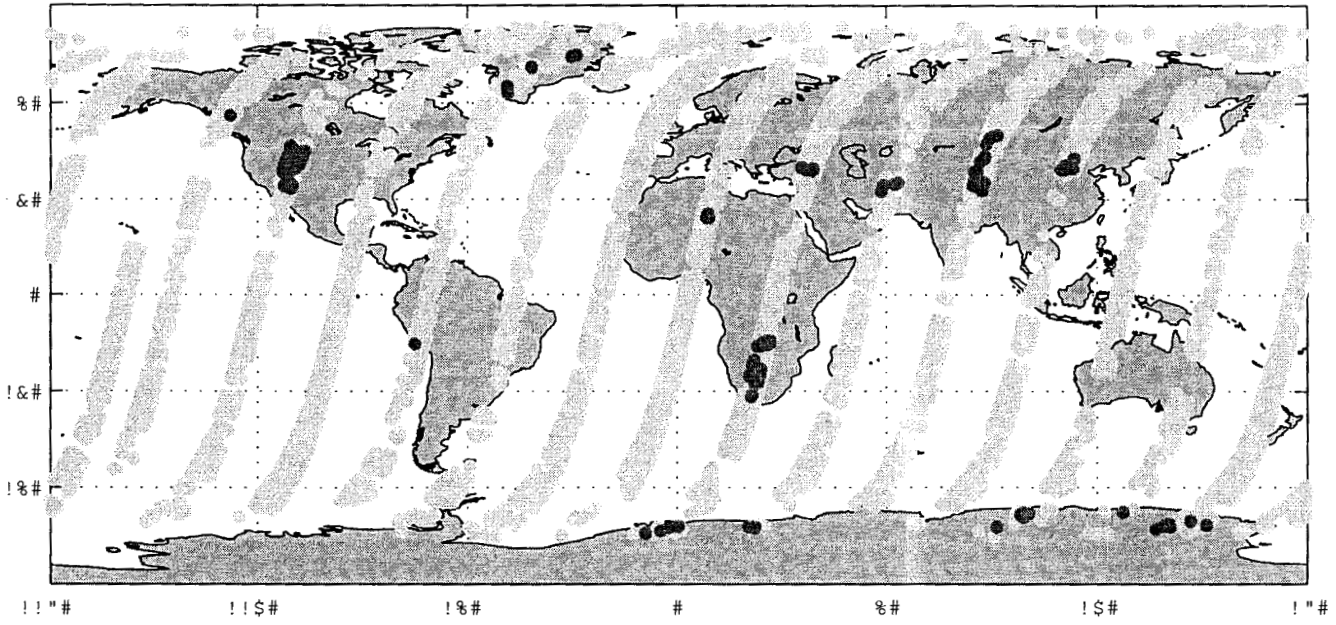
TFF2./I*)2NOJP2G/1H)U2!%&7"20()*+,-./01)

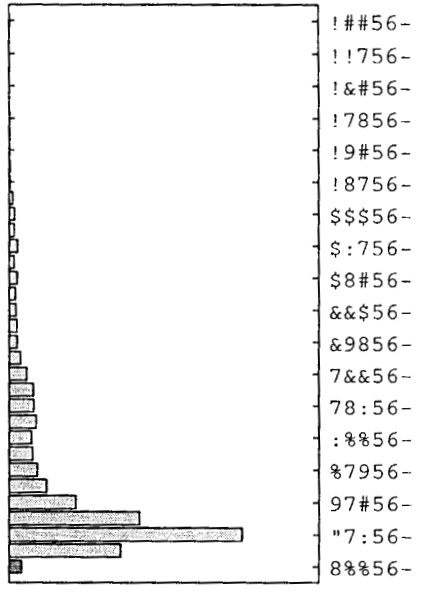
-FF2F-.V2-FF2F01V2-FF2F*,V2L.W7X:V2L?W$97V2-FF2Y4?V2-FF2Y45
KUZI-.F-([G0+LZH-.-ZI/)+ZI/)+=.$##&#8#&=0H)

$7$2+**4.*H2G/.50;.25/).0

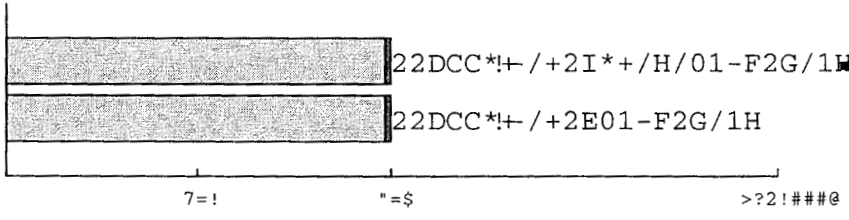
'()*+,-./012304-./01)

6+*));+*2</).+/(;./01



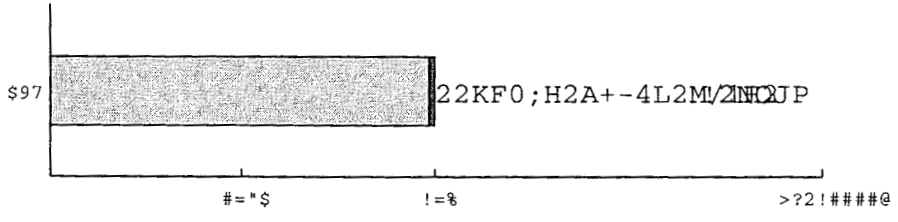


<-.-2ABC*)

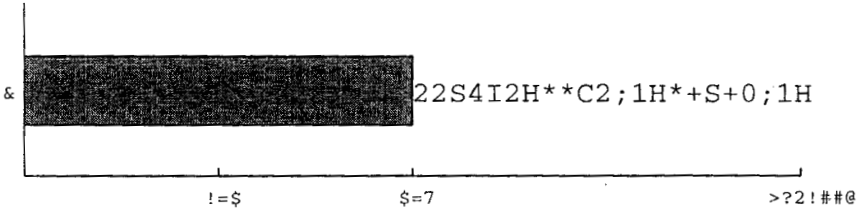


1.5% excluded by GMAO on 9/3/03

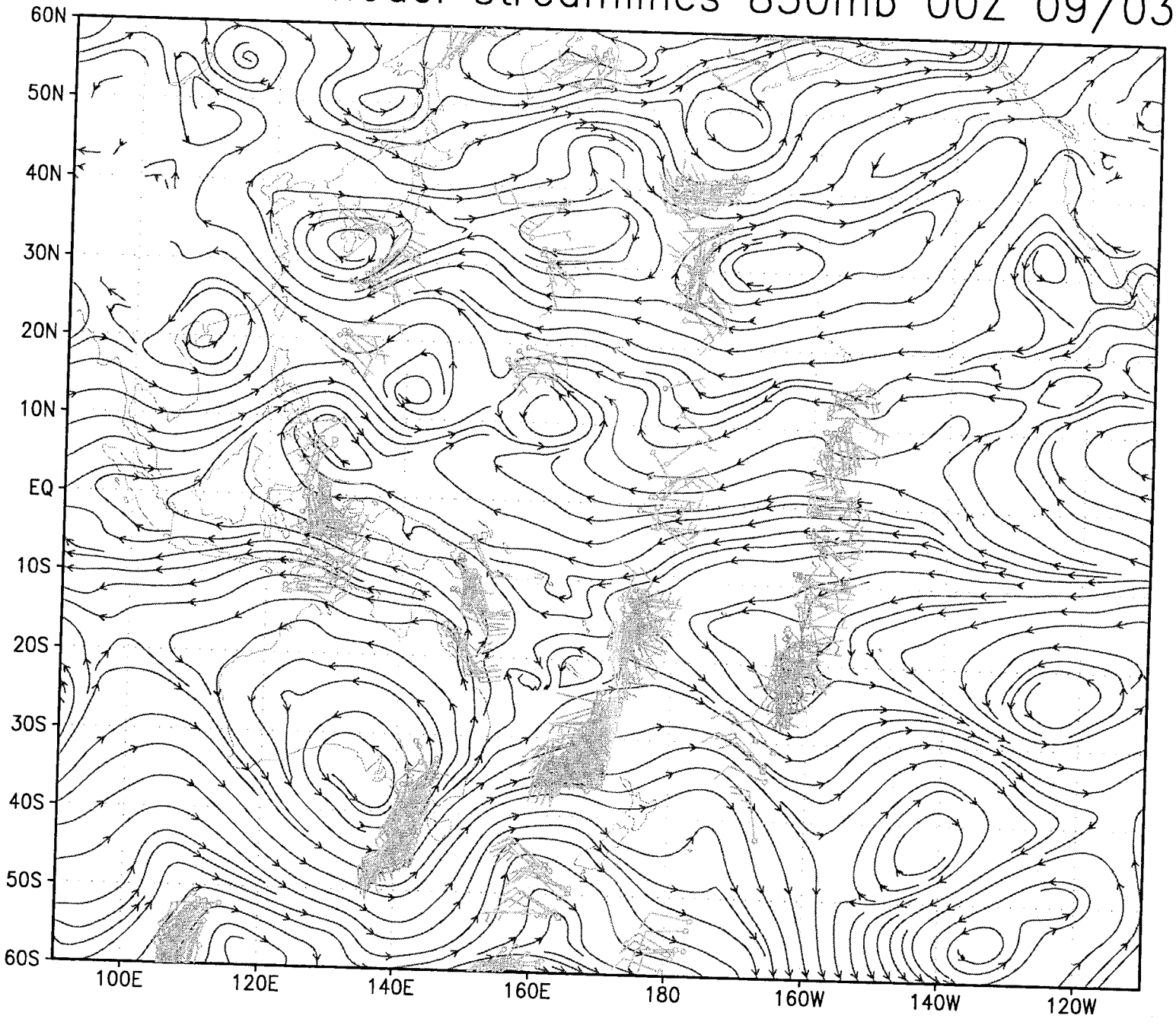
<-.-2J0;+4*)



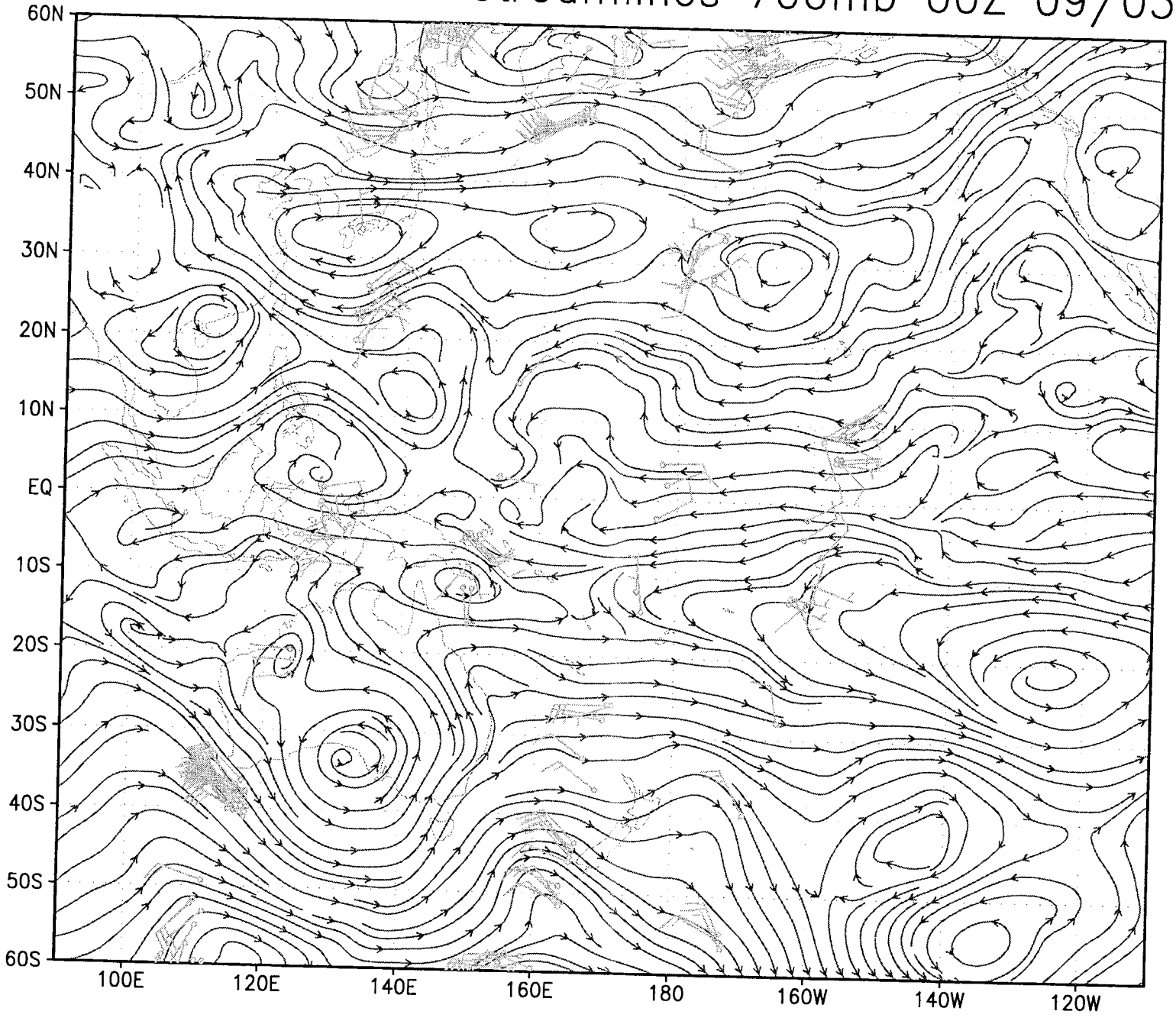
QK2R?4F;)/012N-+L)



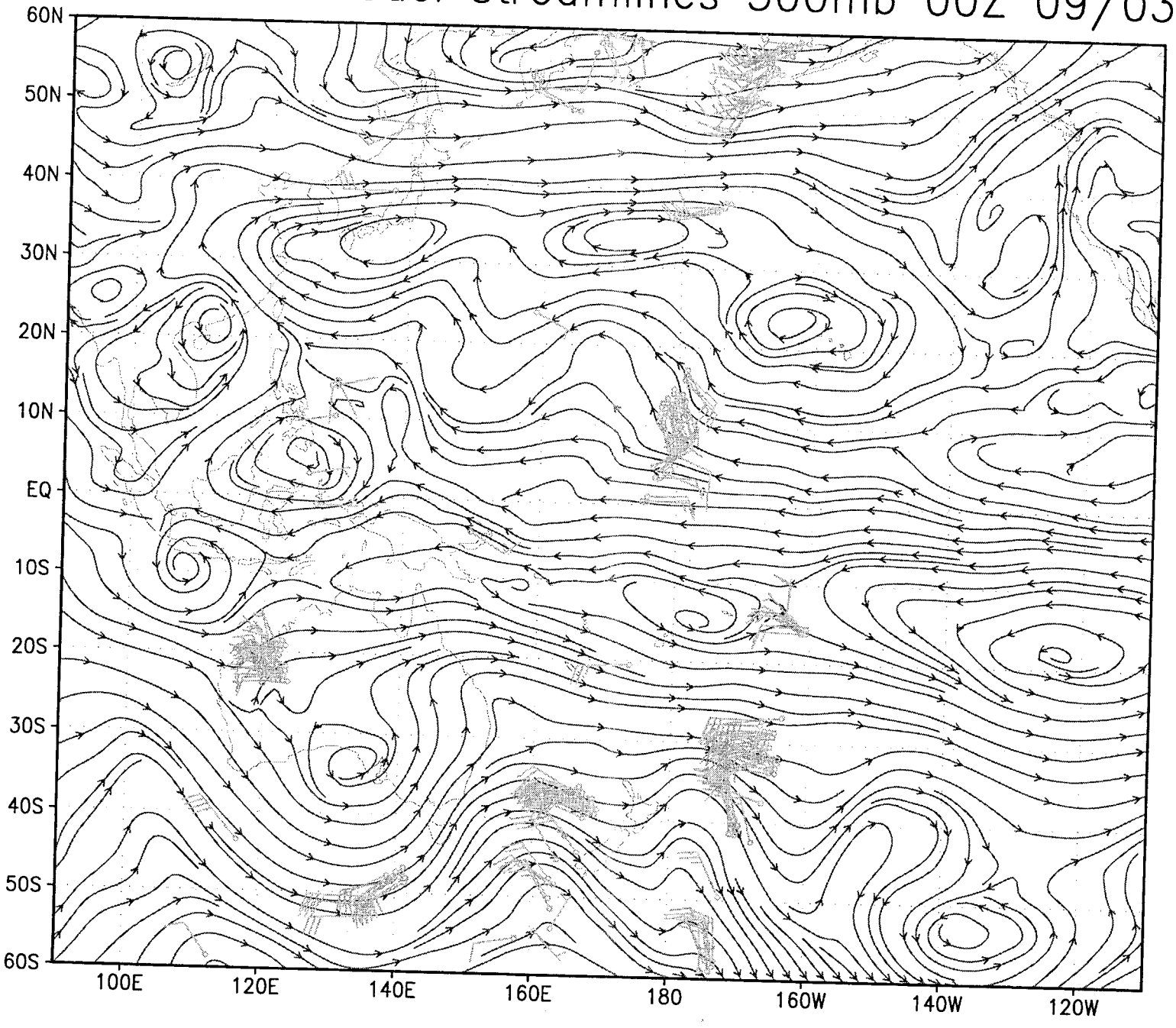
MISR winds & model streamlines 850mb 00Z 09/03/03



MISR winds & model streamlines 700mb 00Z 09/03/03



MISR winds & model streamlines 500mb 00Z 09/03/03



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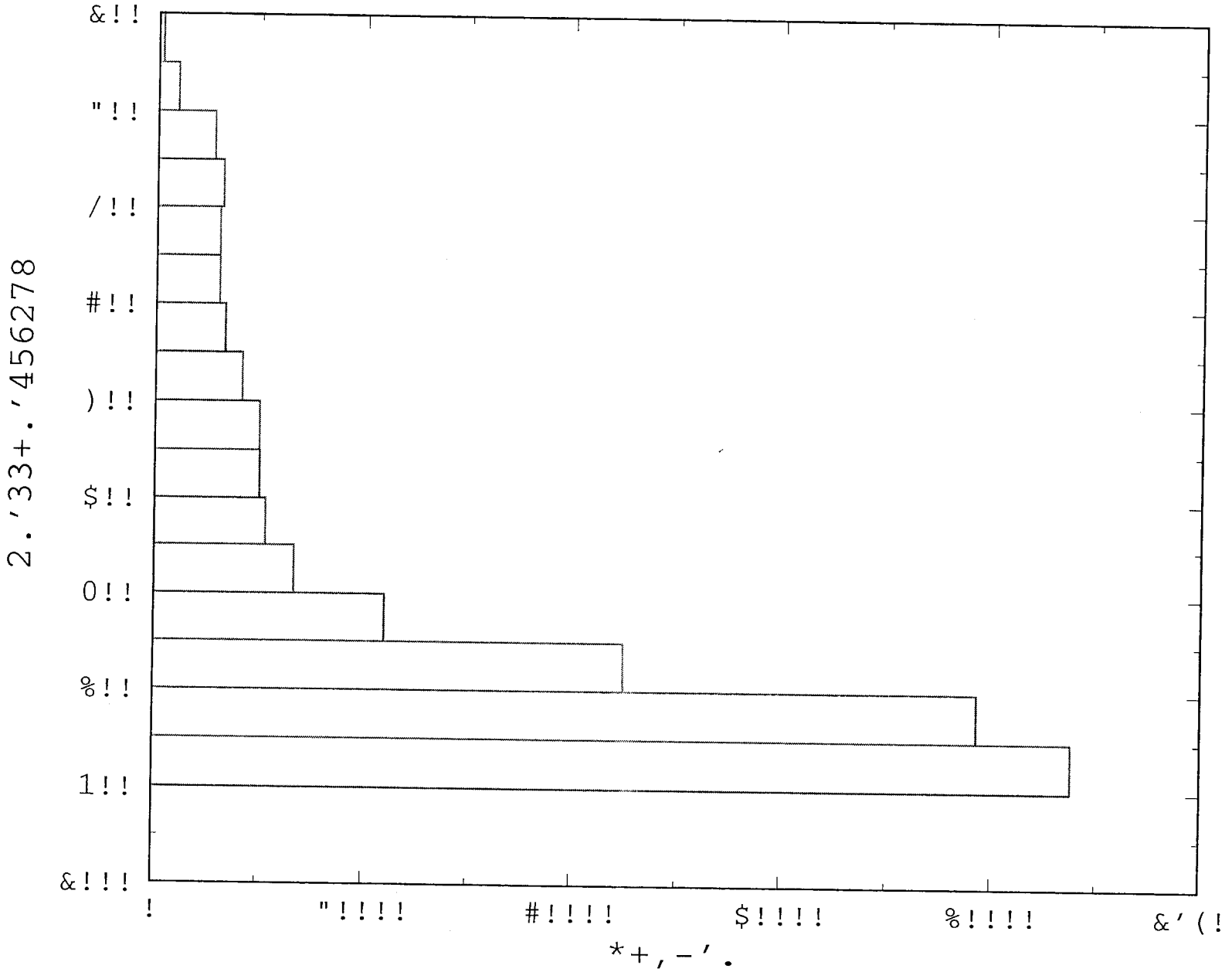
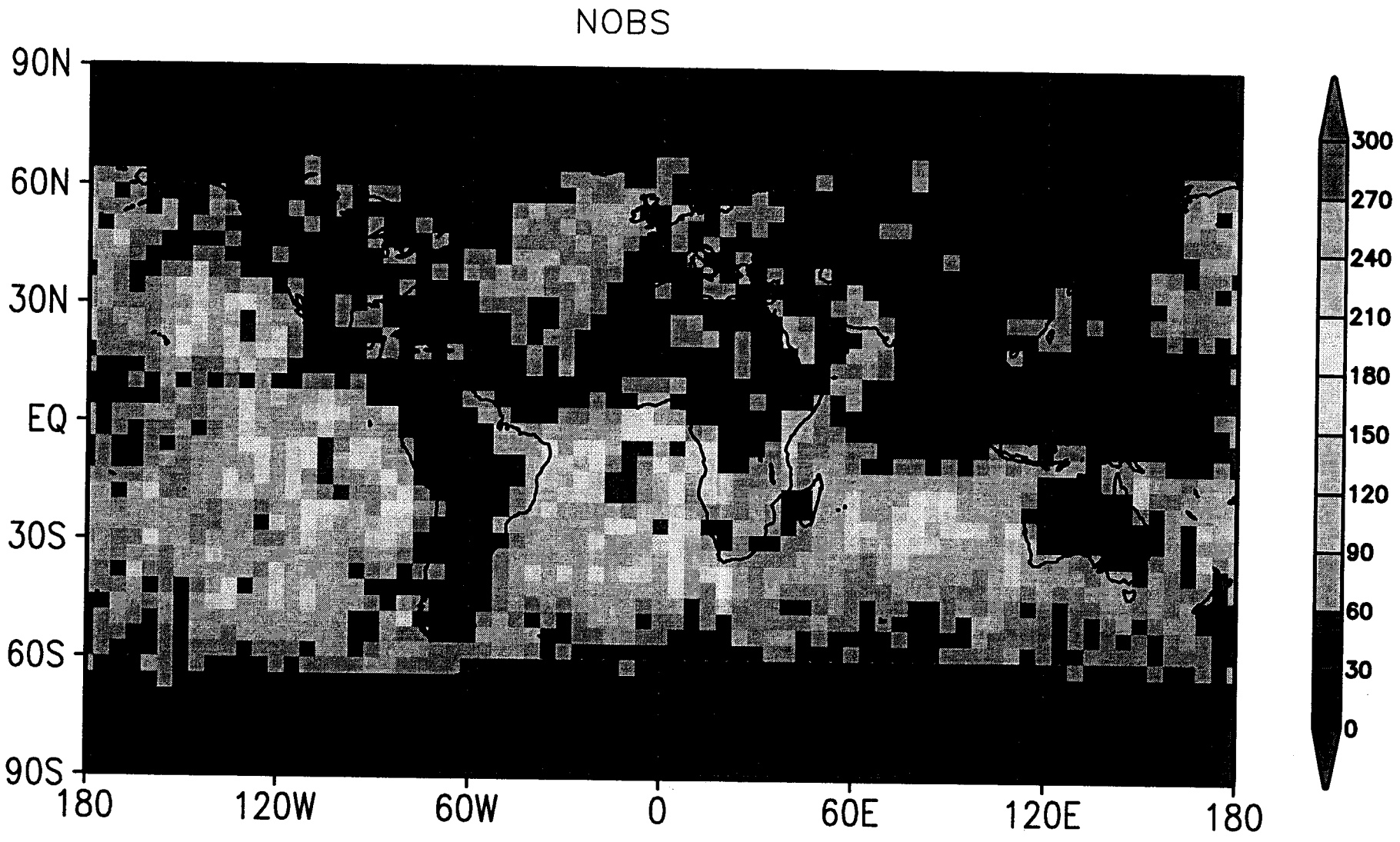
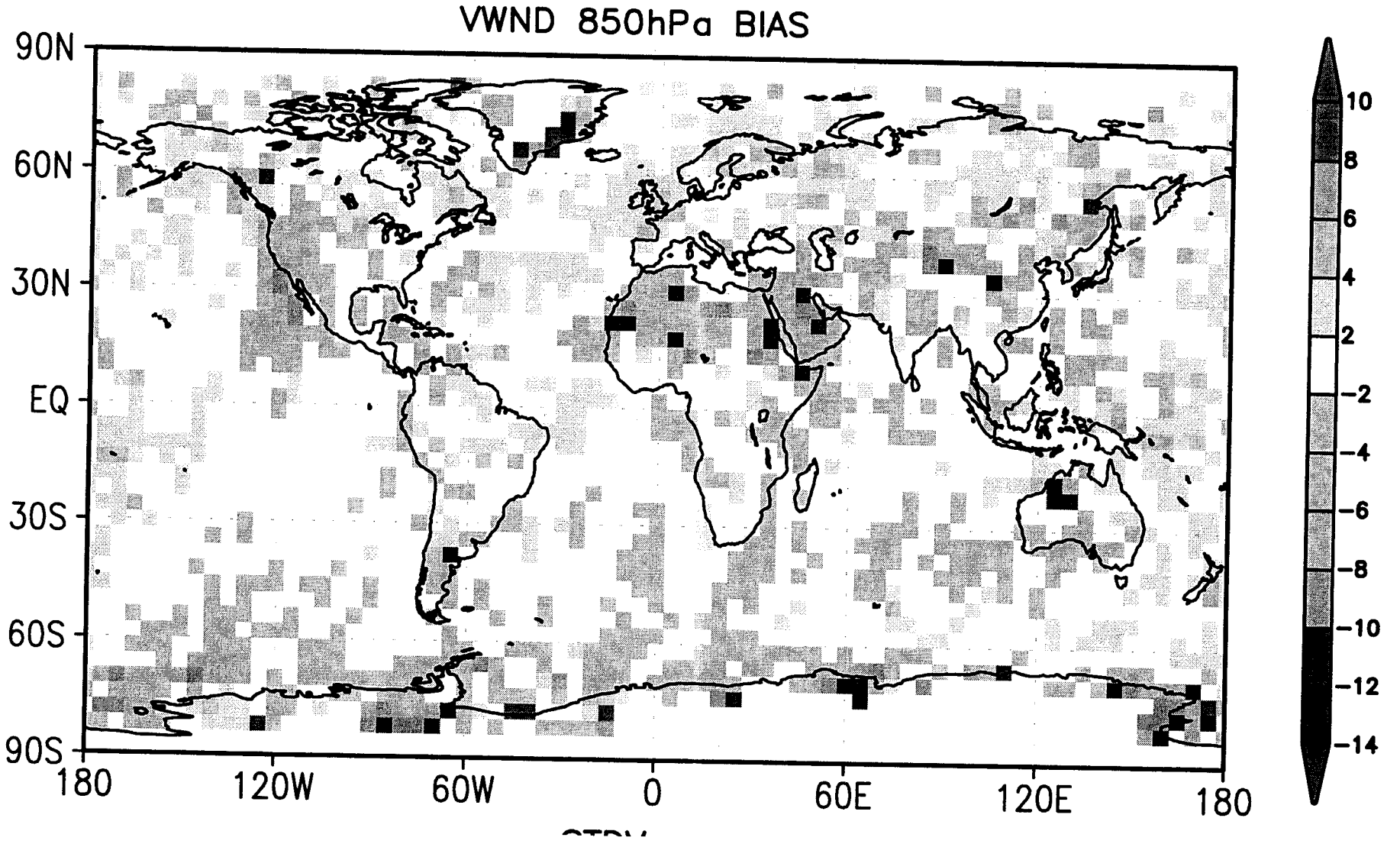


850 hPa observations from 9/1/03-10/15/03



850 hPa observations from 9/1/03-10/15/03



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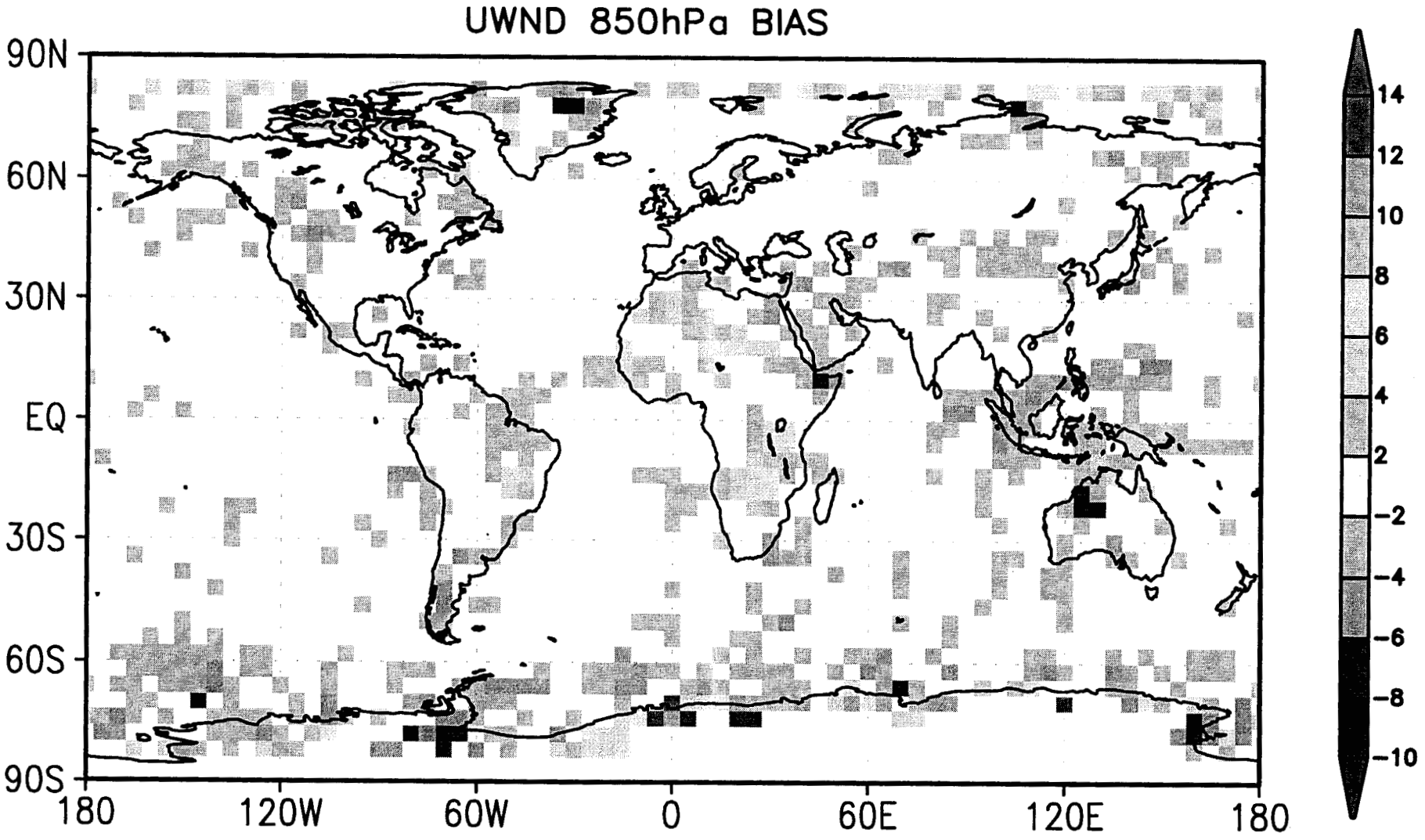
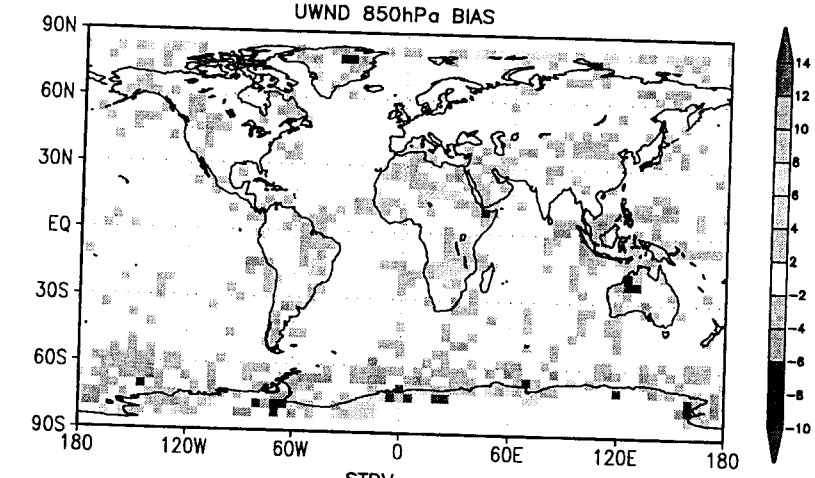
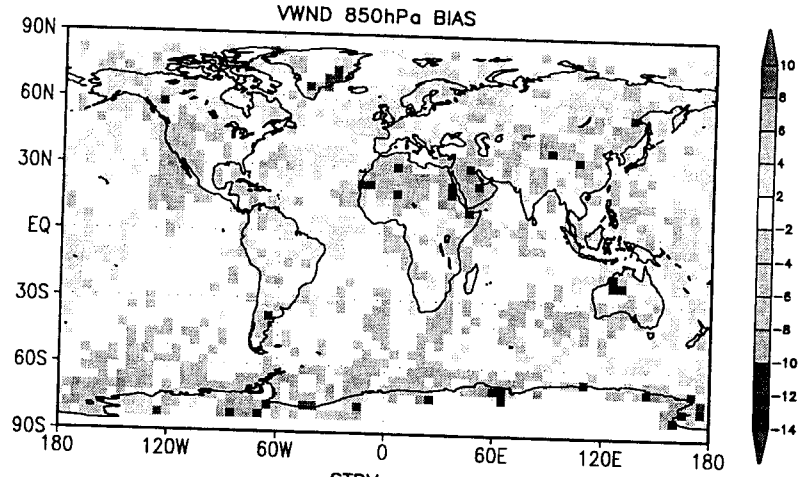
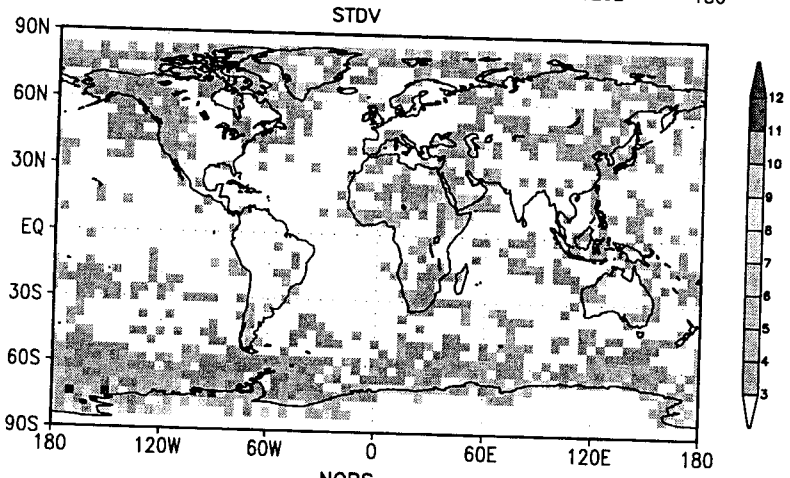



UWND 850hPa BIAS
90N
60N
30N
EQ
30S
60S
90S
180
120W
60W
0
60E
120E
180
14
12
10
8
6
4
2
-2
-4
-6
-8
-10


VWND 850hPa BIAS
90N
60N
30N
EQ
30S
60S
90S
180
120W
60W
0
60E
120E
180
10
8
6
4
2
-2
-4
-6
-8
-10
-12
-14


STDV
90N
60N
30N
EQ
30S
60S
90S
180
120W
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0
60E
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9
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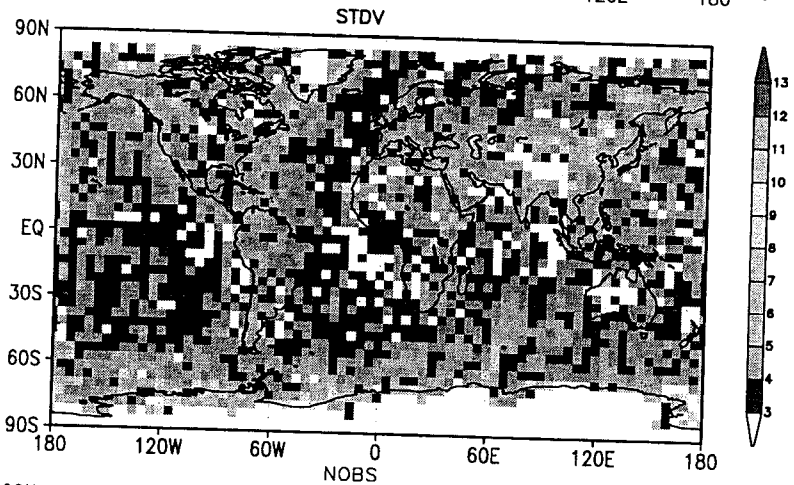
7
6
5
4
3


STDV
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EQ
30S
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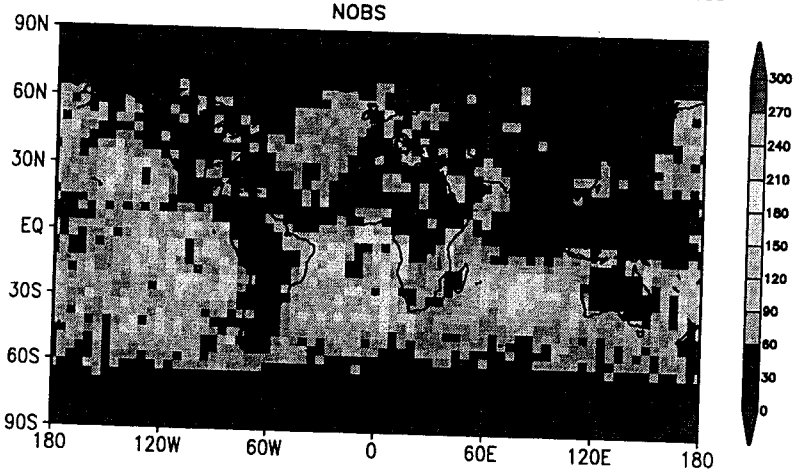
NOBS
90N
60N
30N
EQ
30S
60S
90S
180
120W
60W
0
60E
120E
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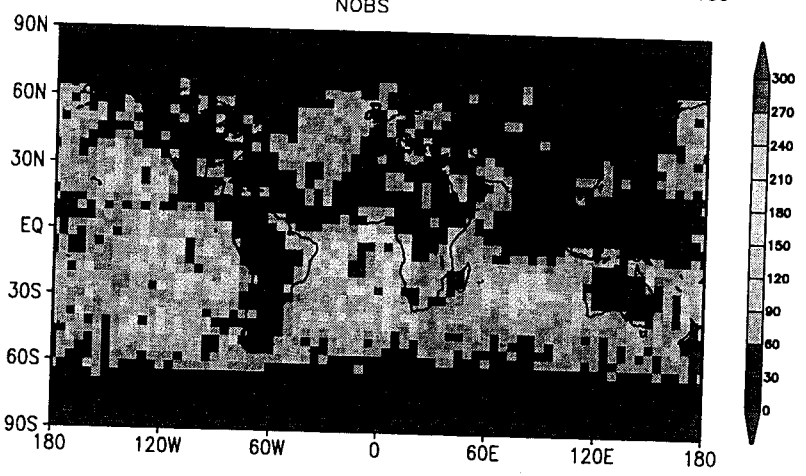
270
240
210
180
150
120
90
60
30
0


NOBS
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60E
120E
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300
270
240
210
180
150
120
90
60
30
0

Global summary

	low > 700 hPa	middle 400 – 700	high < 400 hPa
speed bias m/s	0.45	0.92	1.26
rms vector m/s	6.2	8.7	10.4
normalized (rms/mean speed)	0.7	0.7	0.5
N of obs	2×10^5	5×10^4	2×10^4

the end