

NWS: MIDDLE TANANA VALLEY- INCLUDING...FAIRBANKS...

413 AM ADT MON APR 7 2008

TODAY...PERIODS OF LIGHT SNOW. SNOW ACCUMULATION UP TO 1 INCH. HIGHS 25 TO 30. LIGHT WINDS.

TONIGHT...CLOUDY WITH SCATTERED AREAS OF LIGHT SNOW. LOCAL SNOW ACCUMULATION UP TO 1 INCH. LOWS 10 TO 15. LIGHT WINDS.

TUESDAY...MOSTLY CLOUDY WITH FLURRIES. HIGHS AROUND 30. LIGHT WINDS. TUESDAY NIGHT...MOSTLY CLOUDY WITH FLURRIES. LOWS AROUND 15. LIGHT WINDS.

WEDNESDAY...MOSTLY CLOUDY WITH FLURRIES. HIGHS 30 TO 35. LIGHT WINDS. WEDNESDAY NIGHT...MOSTLY CLOUDY WITH A CHANCE OF SNOW. LOWS NEAR 15.

THURSDAY...MOSTLY CLOUDY WITH A CHANCE OF SNOW. HIGHS NEAR 35. THURSDAY NIGHT...MOSTLY CLOUDY WITH A CHANCE OF SNOW. LOWS NEAR 20.

FRIDAY...MOSTLY CLOUDY. HIGHS NEAR 35. FRIDAY NIGHT...MOSTLY CLOUDY WITH A CHANCE OF SNOW. LOWS NEAR 20.

WIND (MPS) T (C) TD (C) VIS (KM) WXC1 (CODE) TIME=15 DAY=098

SFC OBS, 15:00 UTC, 20080407

-175

76

-170

-165

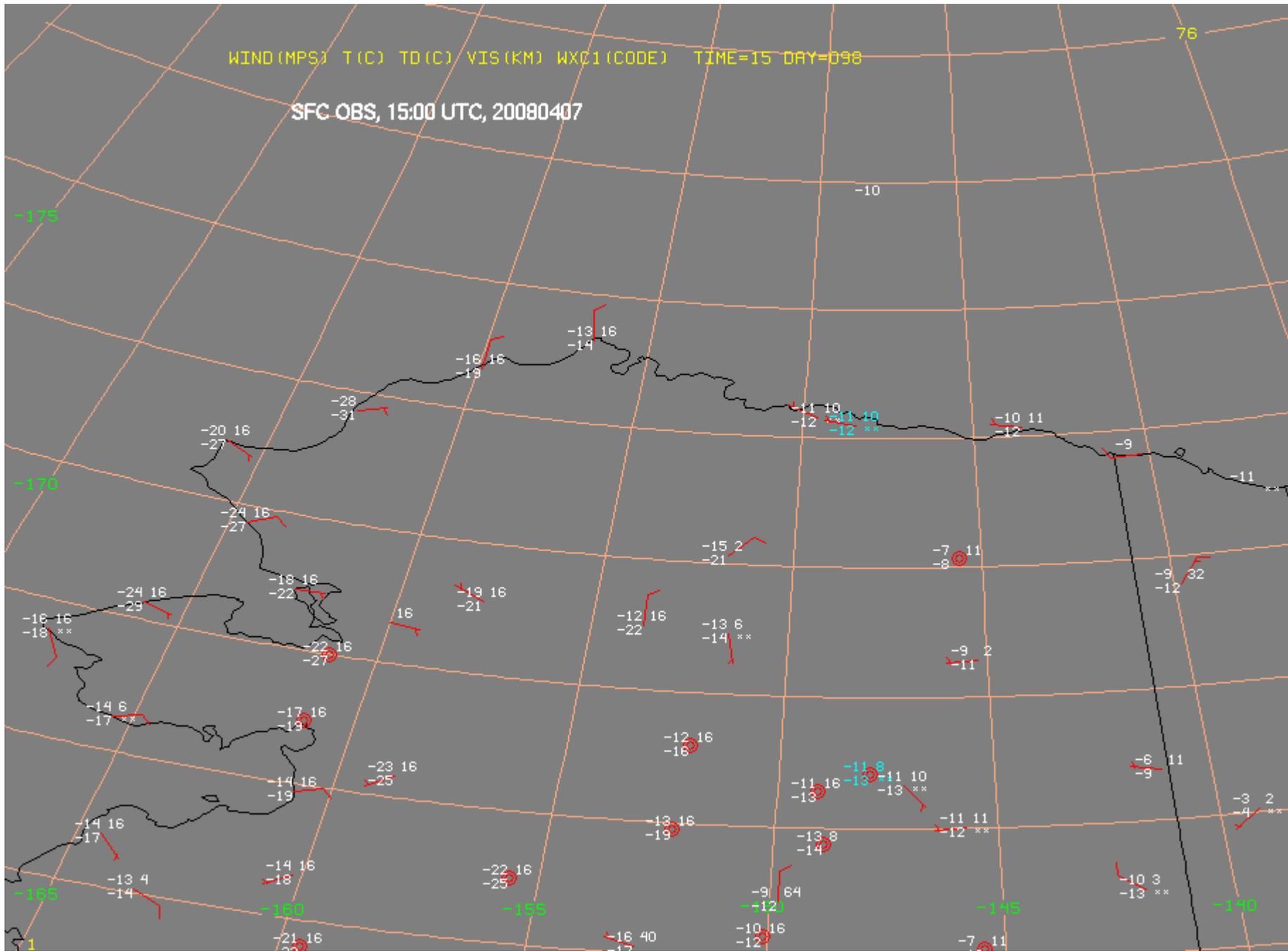
-160

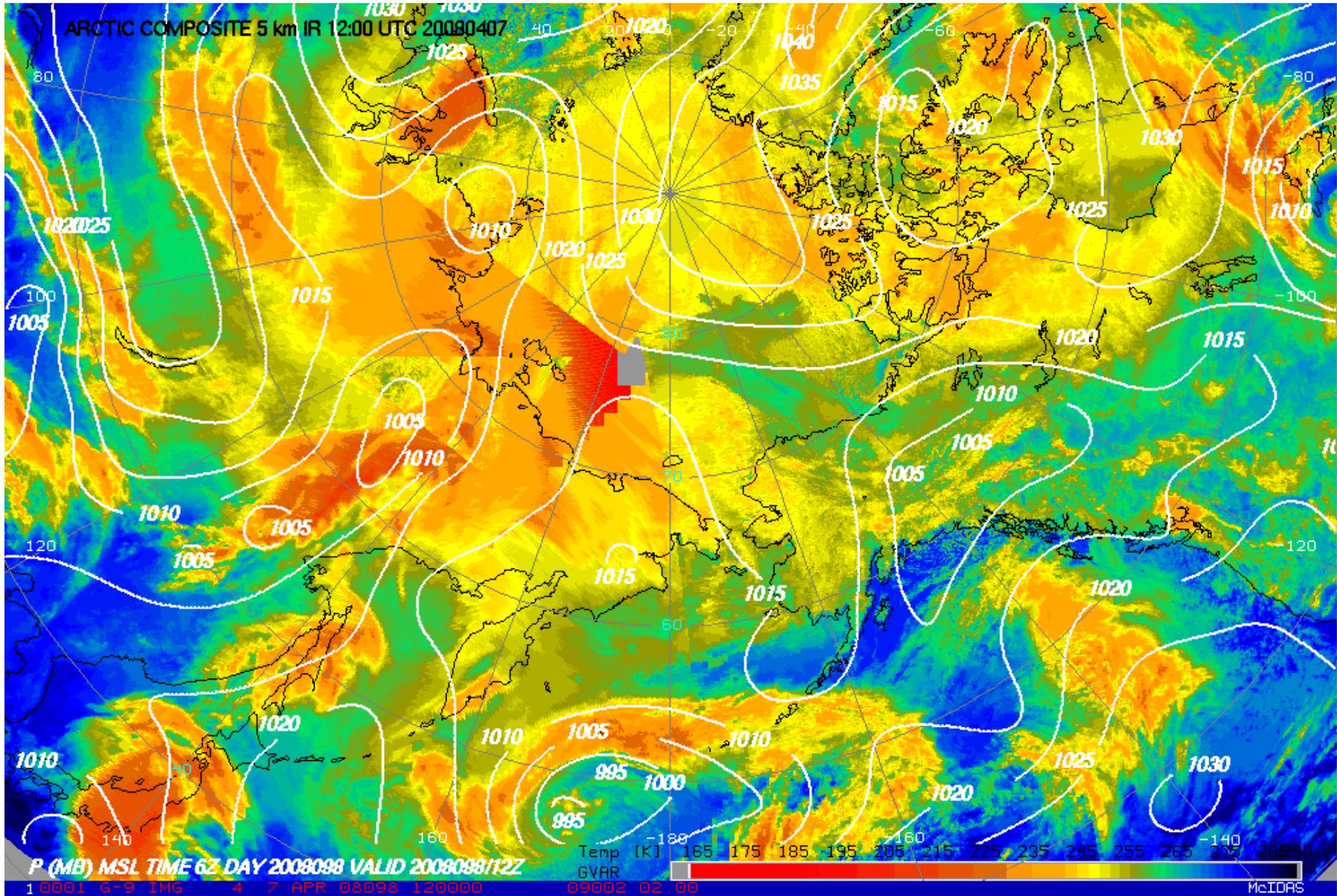
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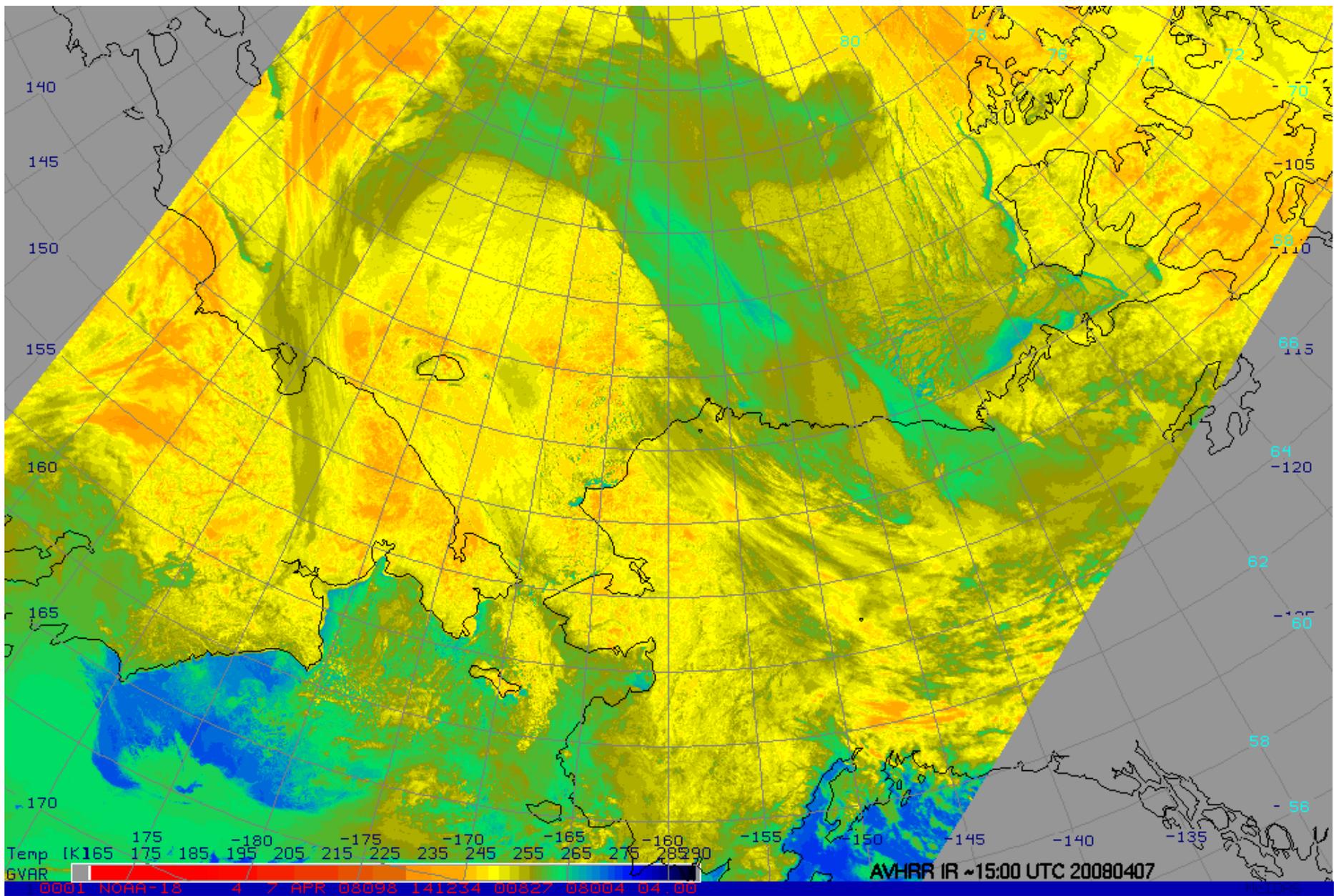
-145

-140

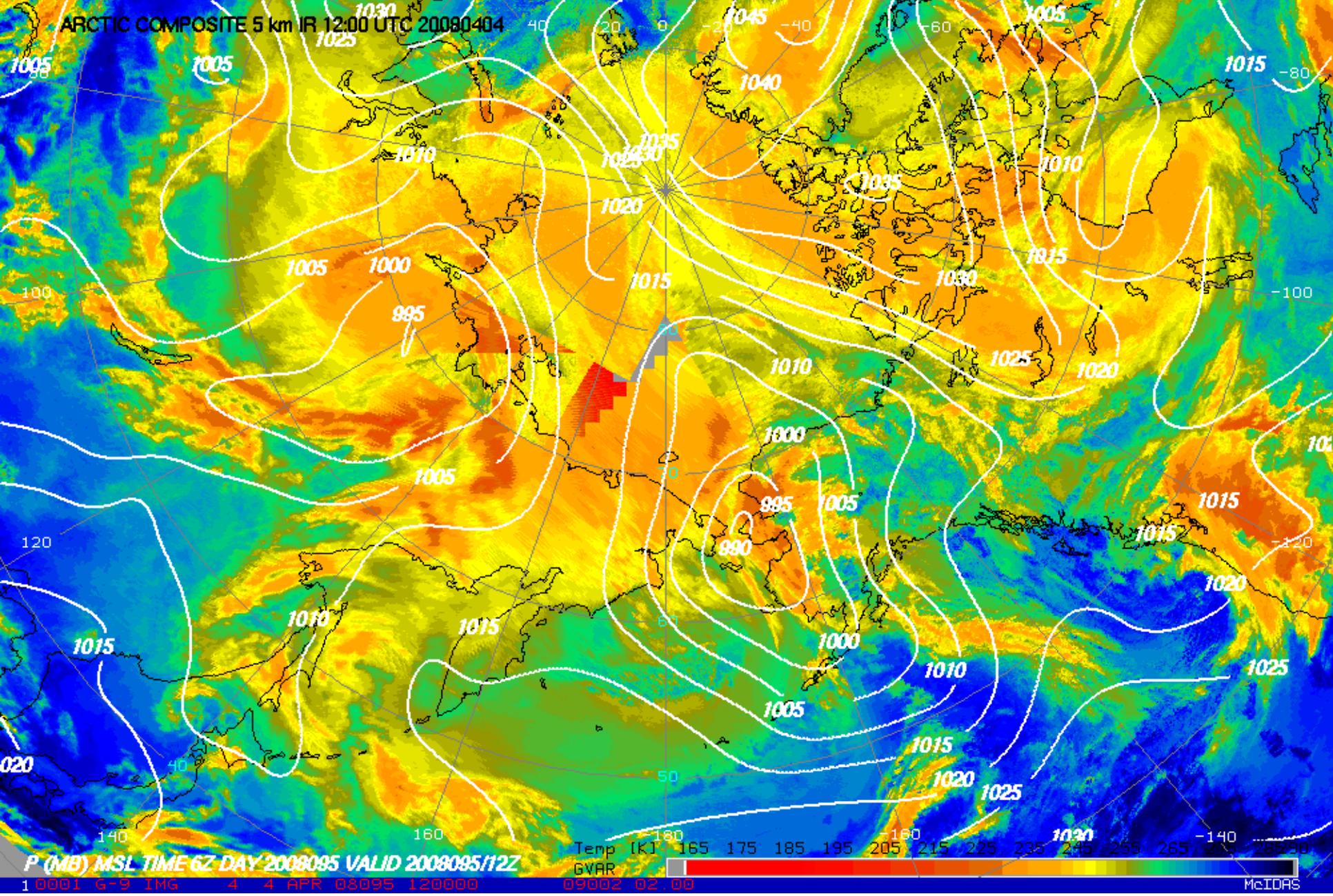
1







ARCTIC COMPOSITE 5 km IR 12:00 UTC 20080404

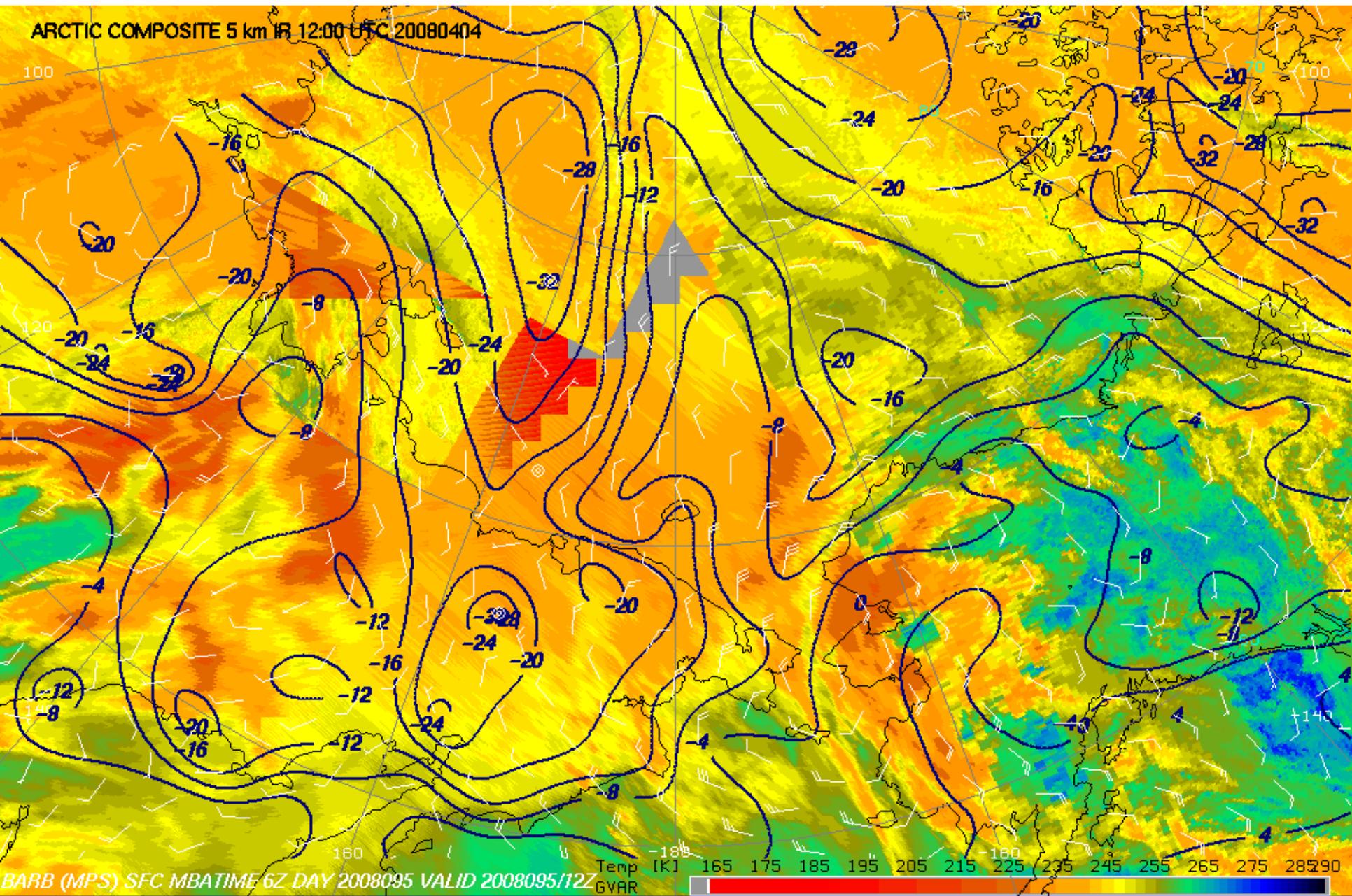


P (MB) MSL TIME 6Z DAY 2008095 VALID 2008095/12Z

1 0001 6-9 IMG 4 4 APR 08095 120000

Temp [K] 165 175 185 195 205 215 225 235 245 255 265 275 285 300
GVAR 09002 02 00
McIDAS

ARCTIC COMPOSITE 5 km IR 12:00 UTC 20080404

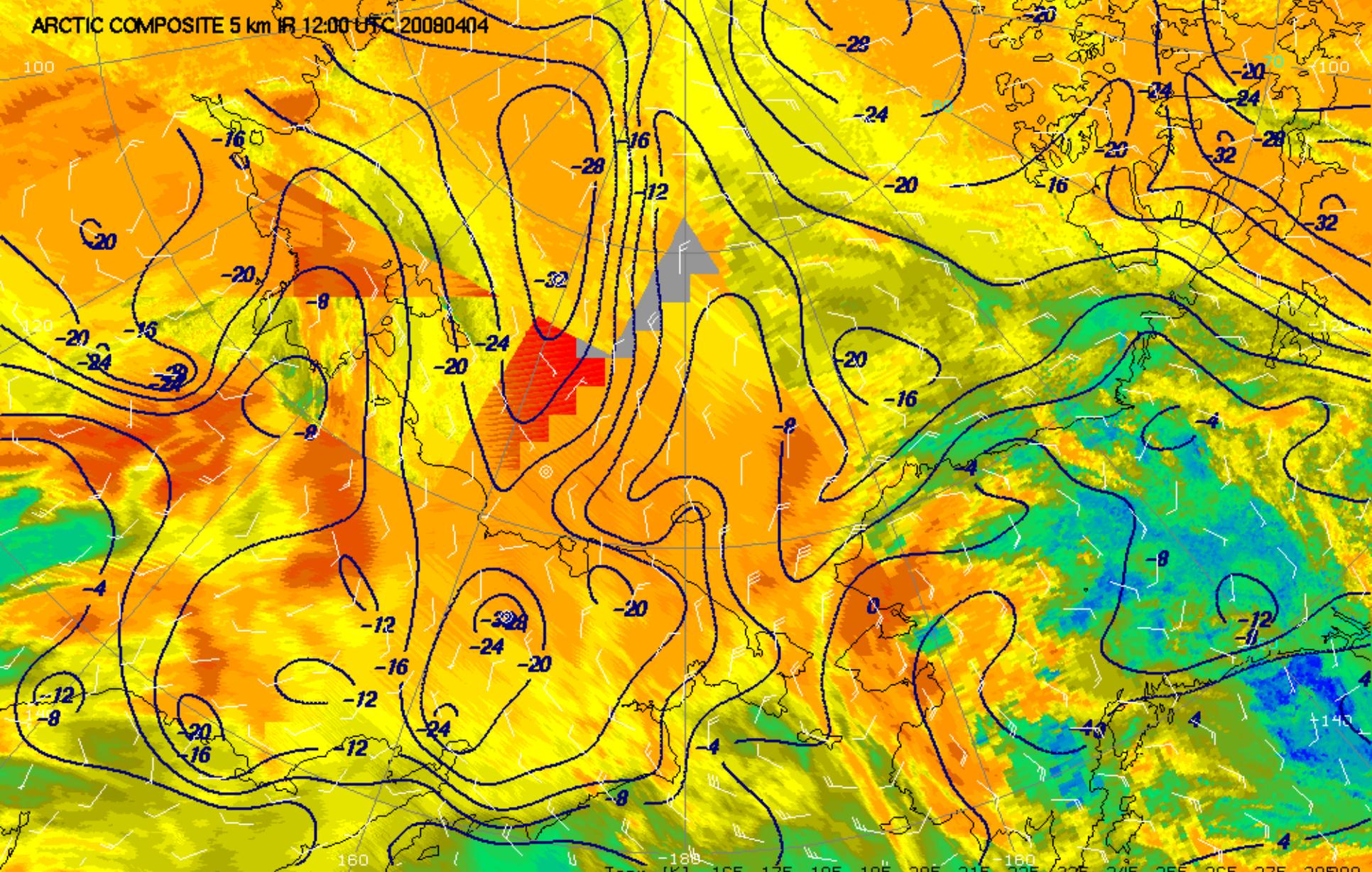


Temp (K) 165 175 185 195 205 215 225 235 245 255 265 275 285 290
GVAR

1 0001 6-9 IMG 4 4 APR 08095 120000 00029 09501 01 00

McIDAS

ARCTIC COMPOSITE 5 km IR 12:00 UTC 20080404



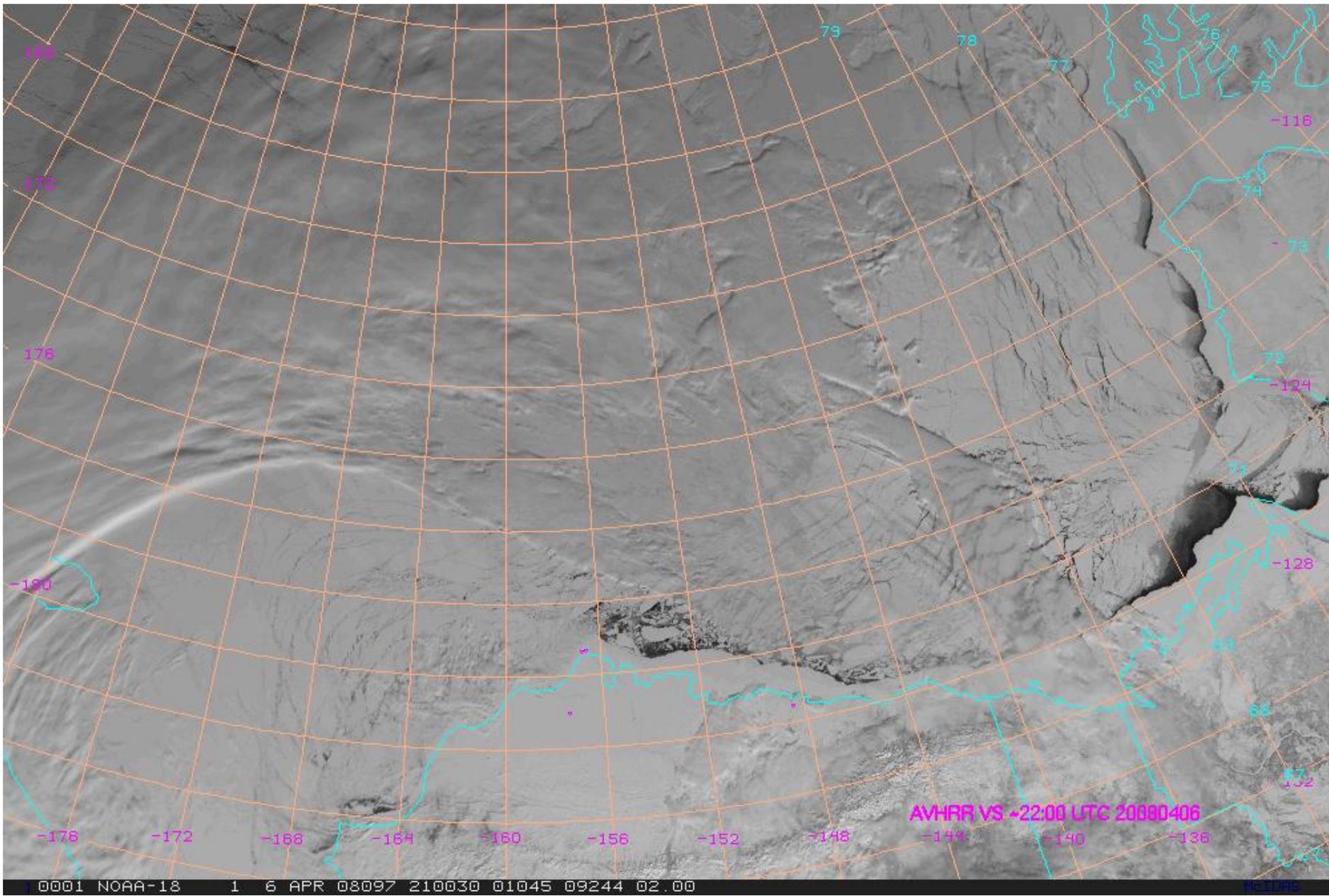
BARB (MPS) SFC MBATIME 6Z DAY 2008095 VALID 2008095/12Z

Temp (K) 165 175 185 195 205 215 225 235 245 255 265 275 285 290

GVAR

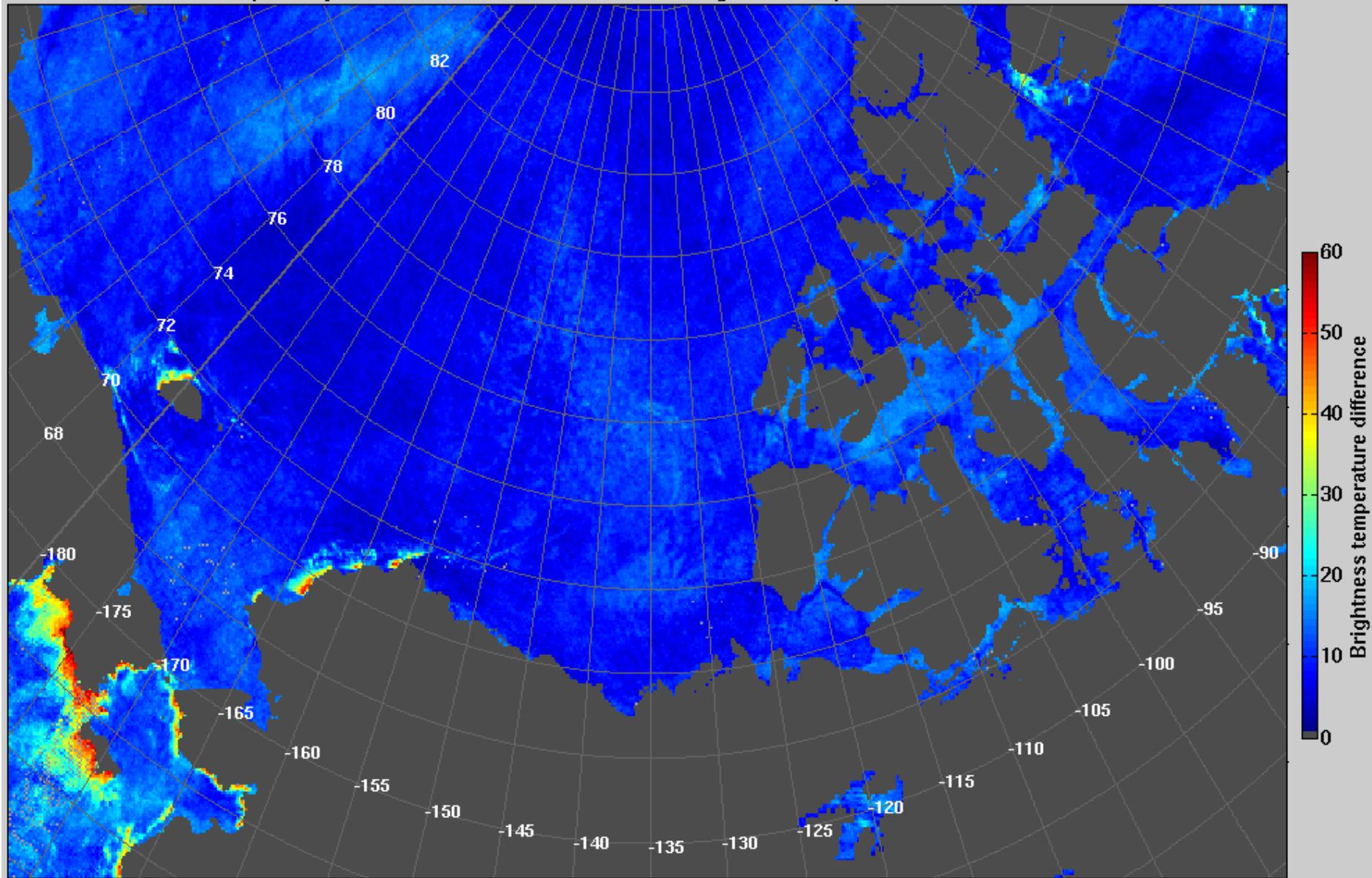
1 0001 6-9 IMG 4 4 APR 08095 120000 00029 09501 01 00

McIDAS



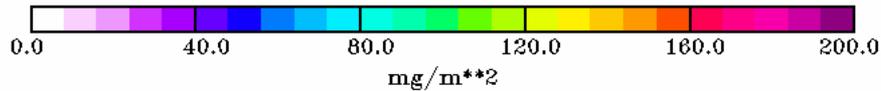
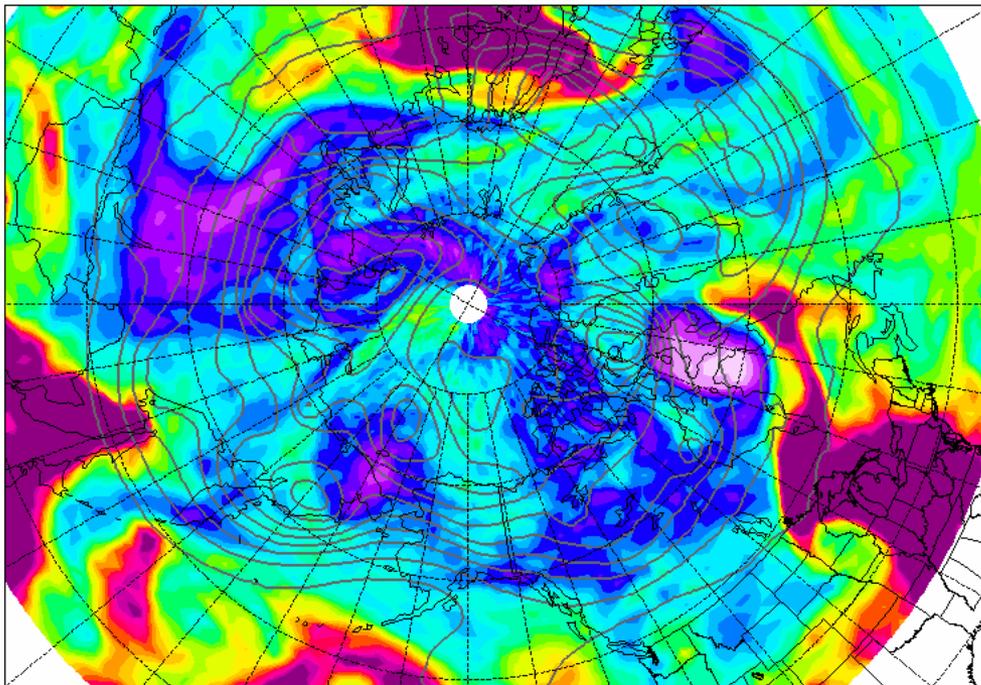
AVHRR VS ~22:00 UTC 20080406

AMSR-E/Aqua Daily L3 6.25 km 89GHz vertical-horizontal brightness temperature: 20080316

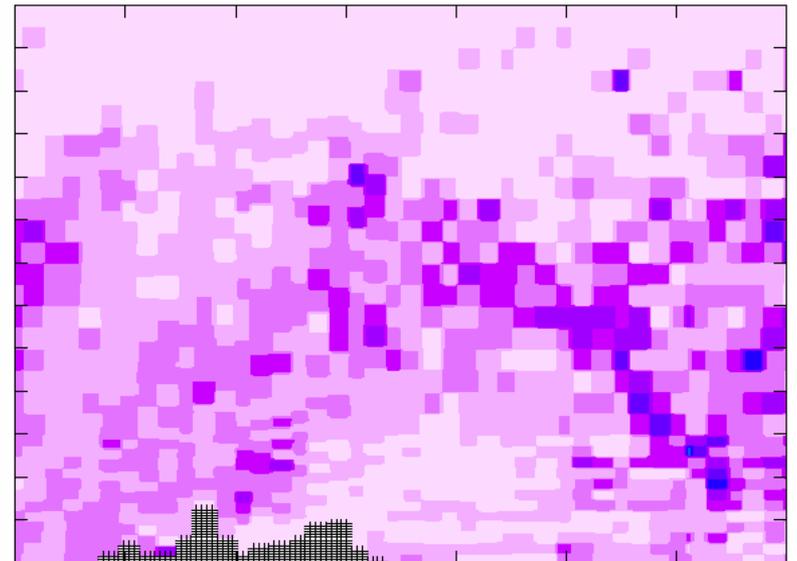


Total CO, FLEXPART

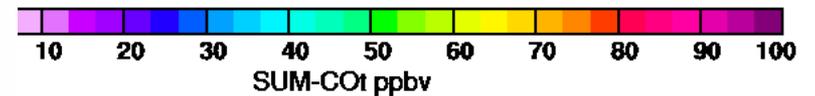
TOTAL COLUMN OF SUM-CO FOR AGE CLASS 0 - 20 DAYS
AND GEOPOTENTIAL HEIGHT CONTOURS AT 500 hPa
BASED ON GFS ANALYSIS
ANALYSIS 20080407 60000 UTC ACTUAL 20080407 90000 UTC
MAXIMUM VALUE: 0.663E+03



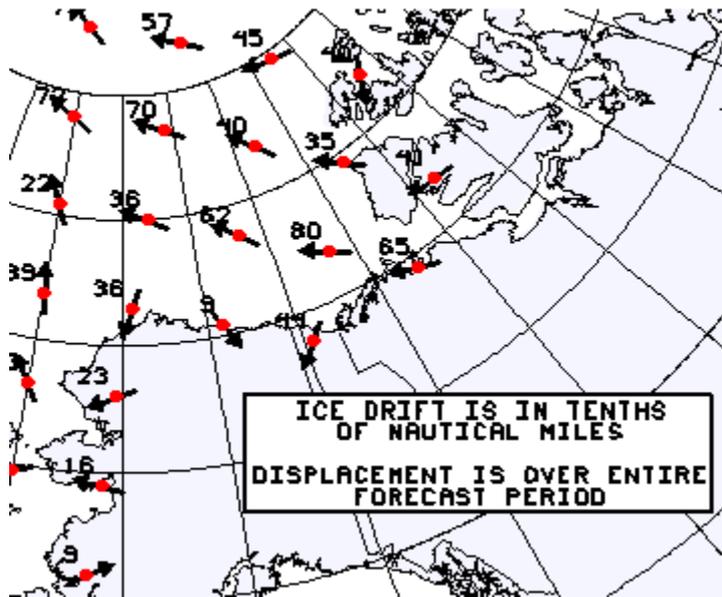
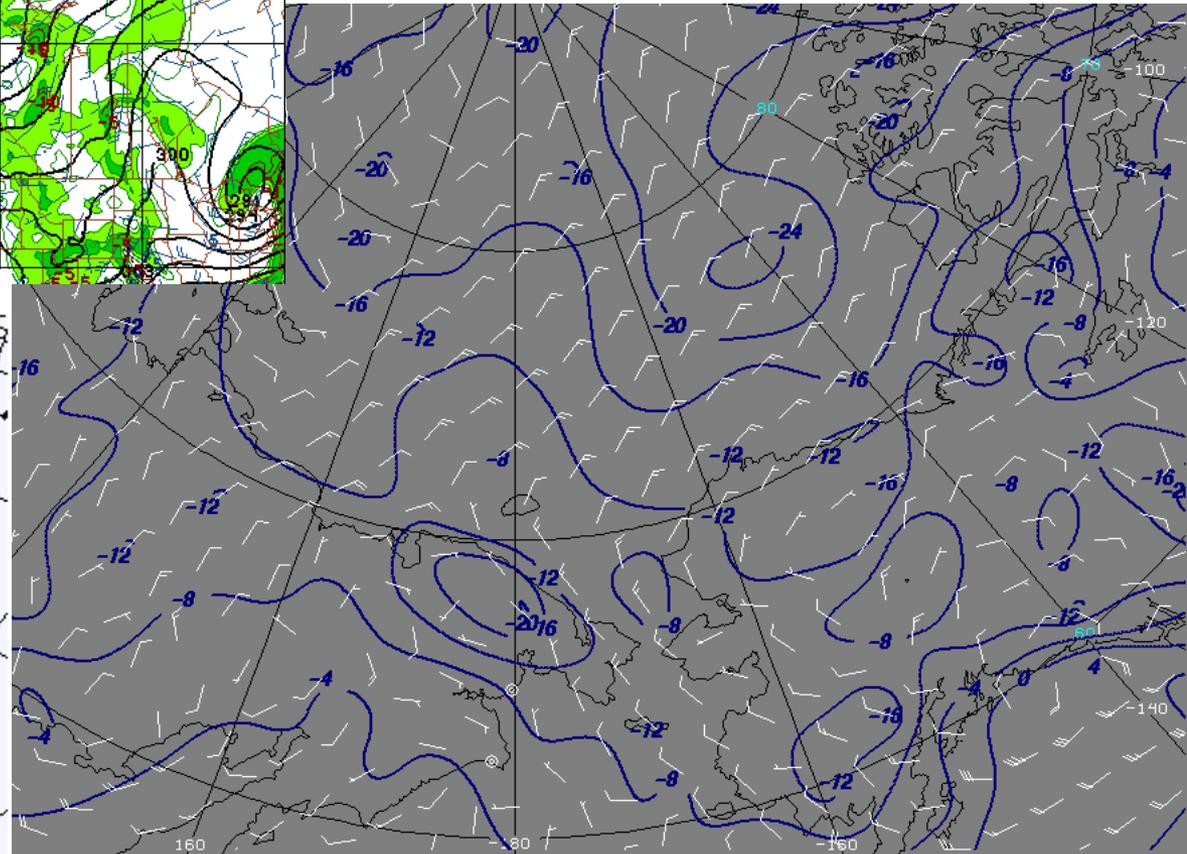
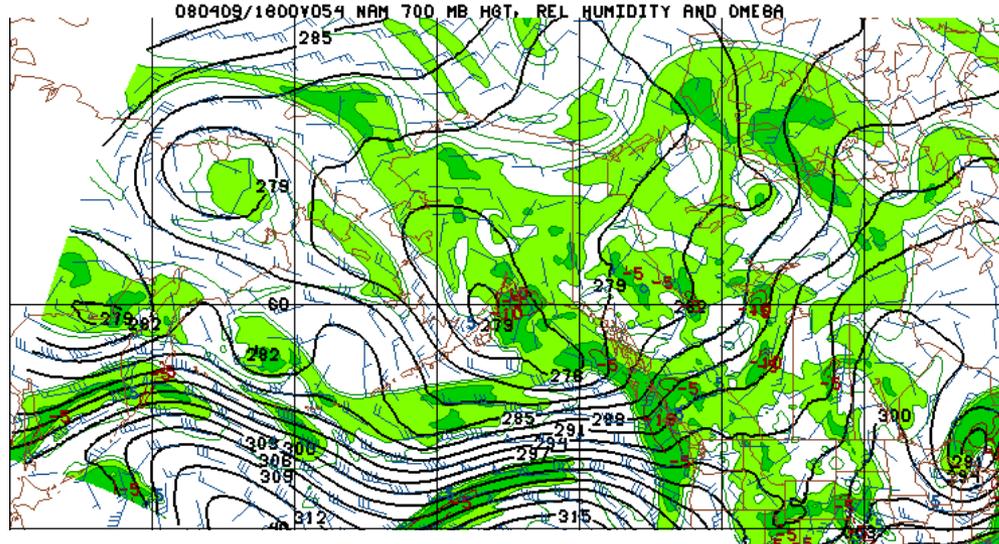
CROSS SECTION FROM 56 TO 86 LATITUDE AND -150 TO -153 LONGITUDE
NA-CO1 MIXING RATIO FOR AGE CLASS 0 - 20.00 DAYS
ATEST ANALYSIS 20080407 60000 UTC ACTUAL TIME 20080409 18



0 486.1 972.2 1458.2 1944.3 2430.4 2916.5 3402.6
distance(km)



Wednesday:RH, temp, ice drift



6Z DAY 2008098 VALID 2008101.06Z

BARB (MPS) SFC MBATIME 6Z DAY 2008098 VALID 2008101.06Z

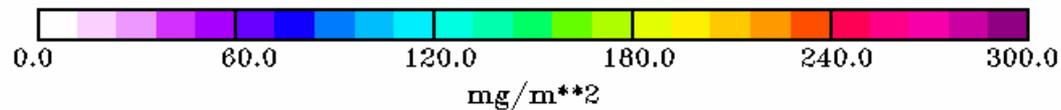
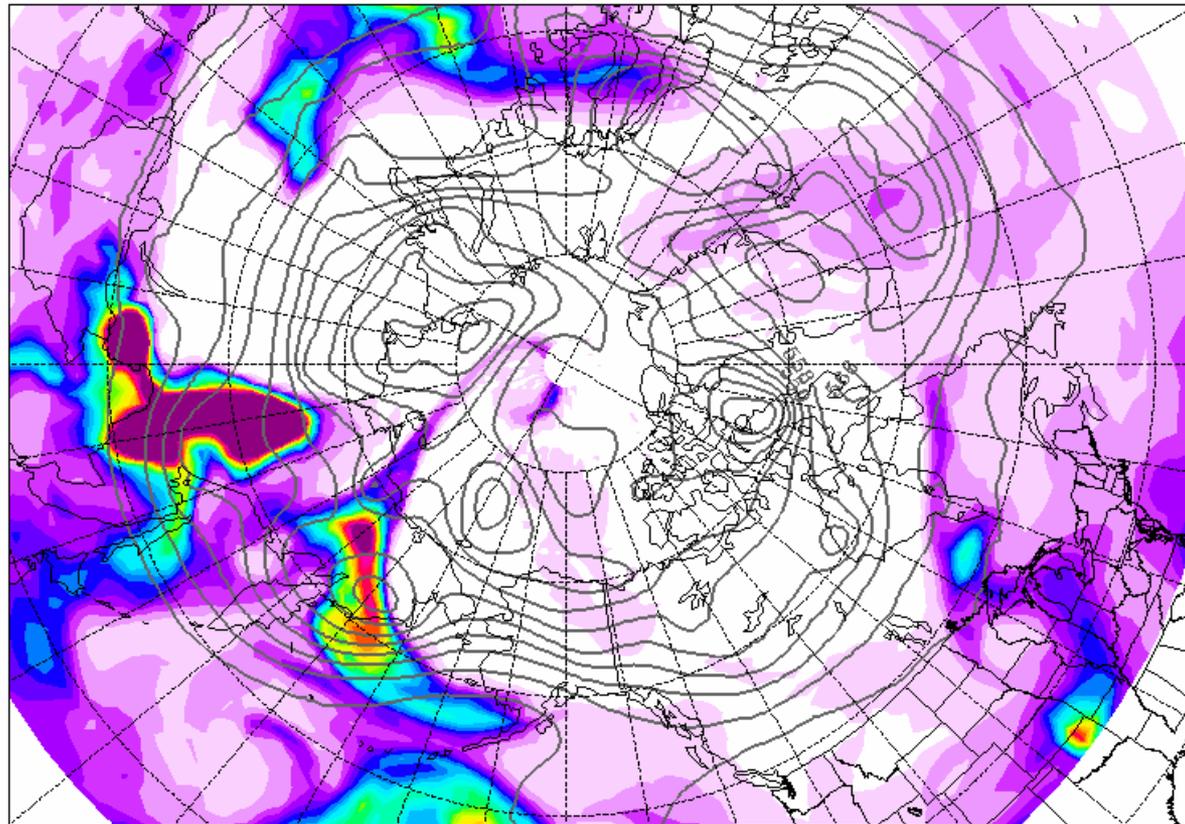
Biomass burning CO

TOTAL COLUMN OF BB-CO_t FOR AGE CLASS 0 - 20 DAYS
AND GEOPOTENTIAL HEIGHT CONTOURS AT 500 hPa

BASED ON GFS ANALYSIS

ANALYSIS 20080407 60000 UTC ACTUAL 20080407 90000 UTC

MAXIMUM VALUE: 0.105E+04



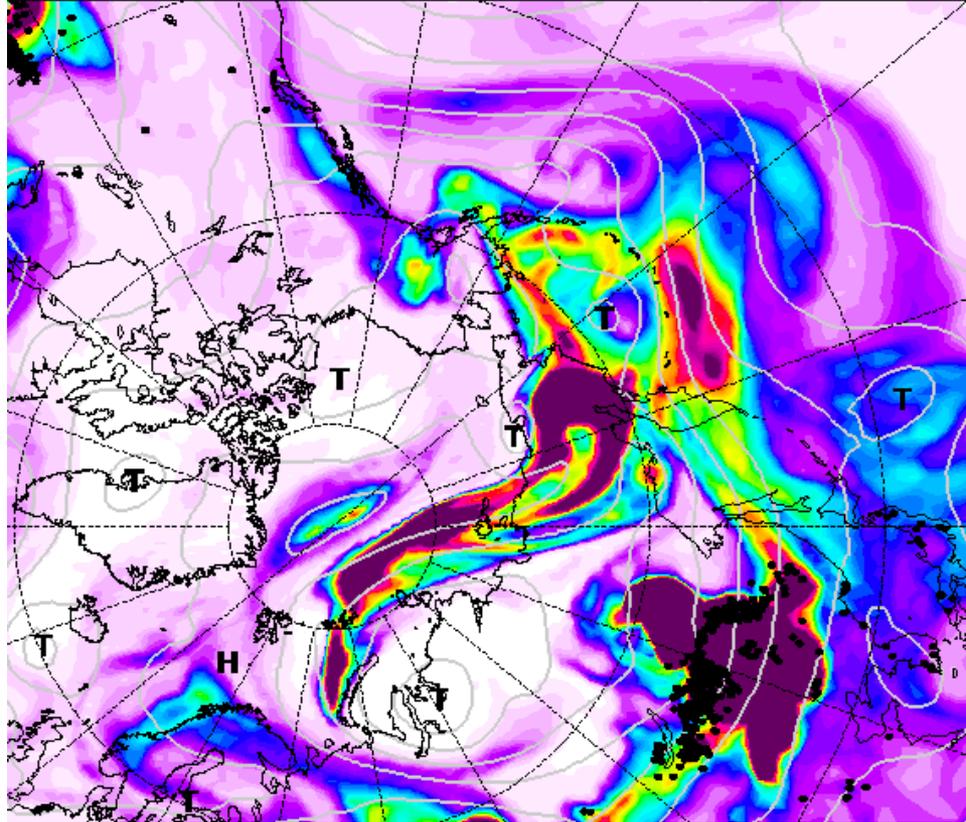
BB CO on 18Z 9 Apr,

18Z 10 Apr

Plot of BB-CO and 500 hPa geopotential

0407. 60000

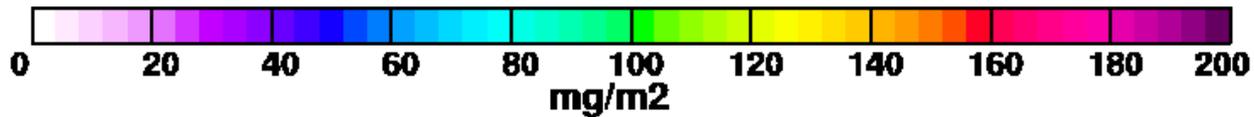
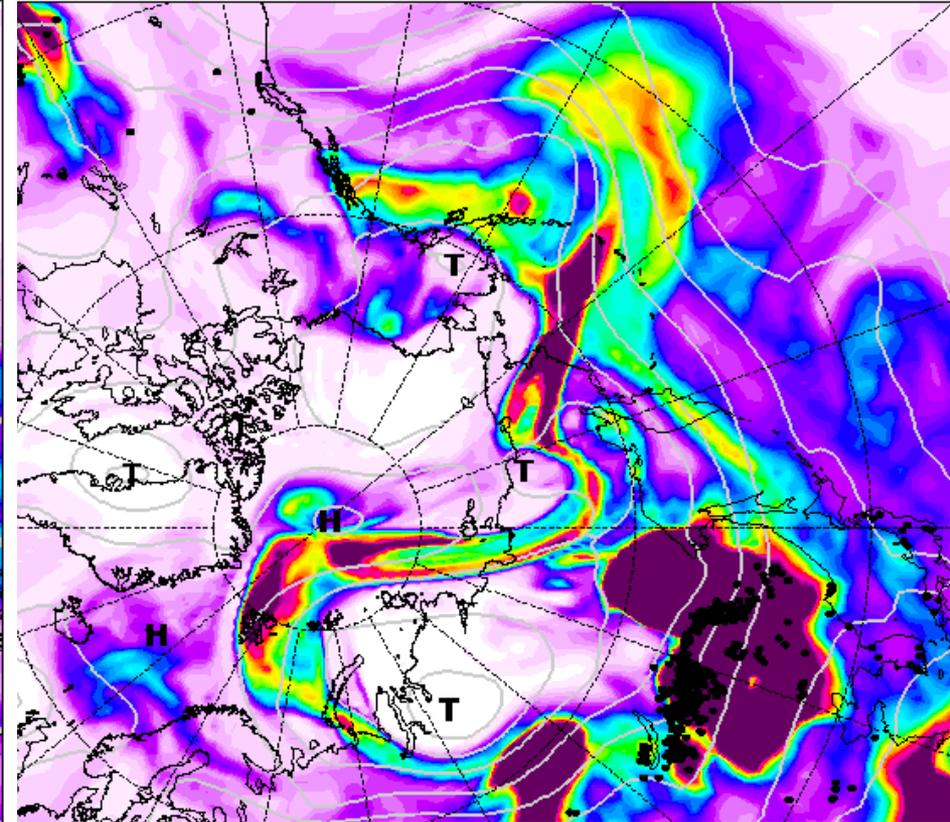
Actual @ 20080409.180000



Plot of BB-CO and 500 hPa geopotential

0407. 60000

Actual @ 20080410.180000



Altitude 4-5km

FC from U6Z 20080407

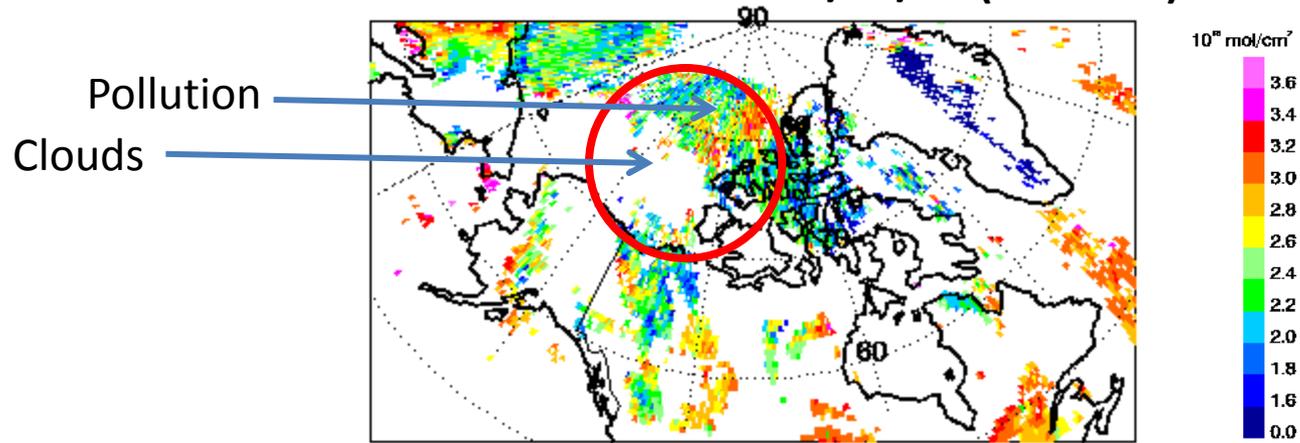
RAQMS Fairbanks Local FX Discussion:

**00Z 04/10/2008
(84hr)**

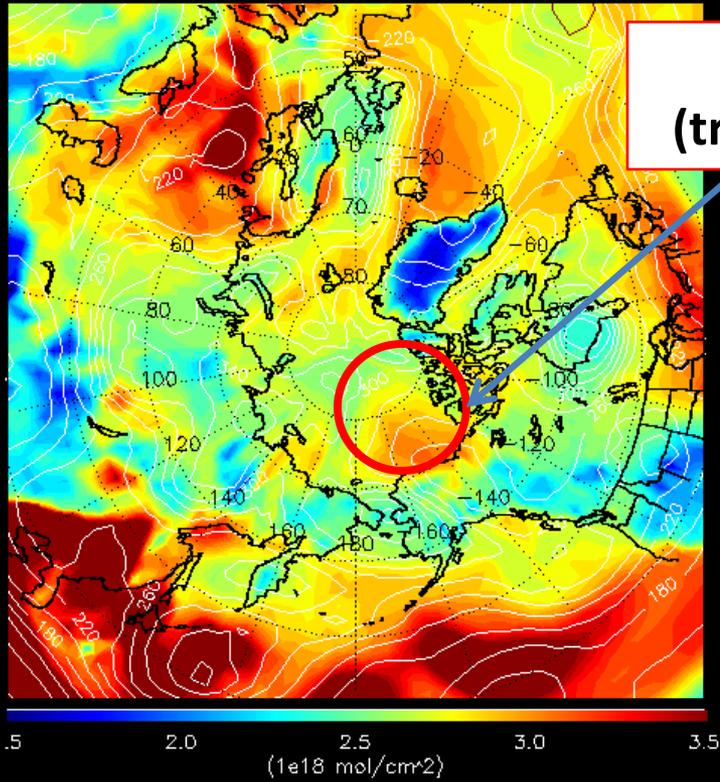
**00Z 04/11/2008
(108hr)**

initialized 12Z 04/06/2008

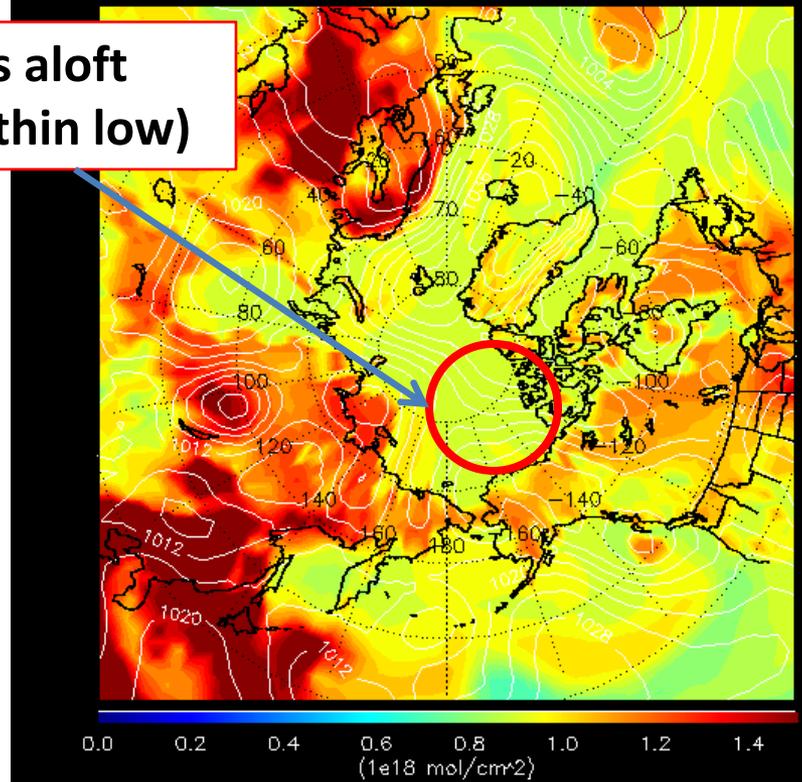
NRT MOPITT COLUMN 04/06/08 (Emmons)



SFC-Trap CO Column00Z 20080406
Trap Pres (White)/95% Conv Precip (Red)



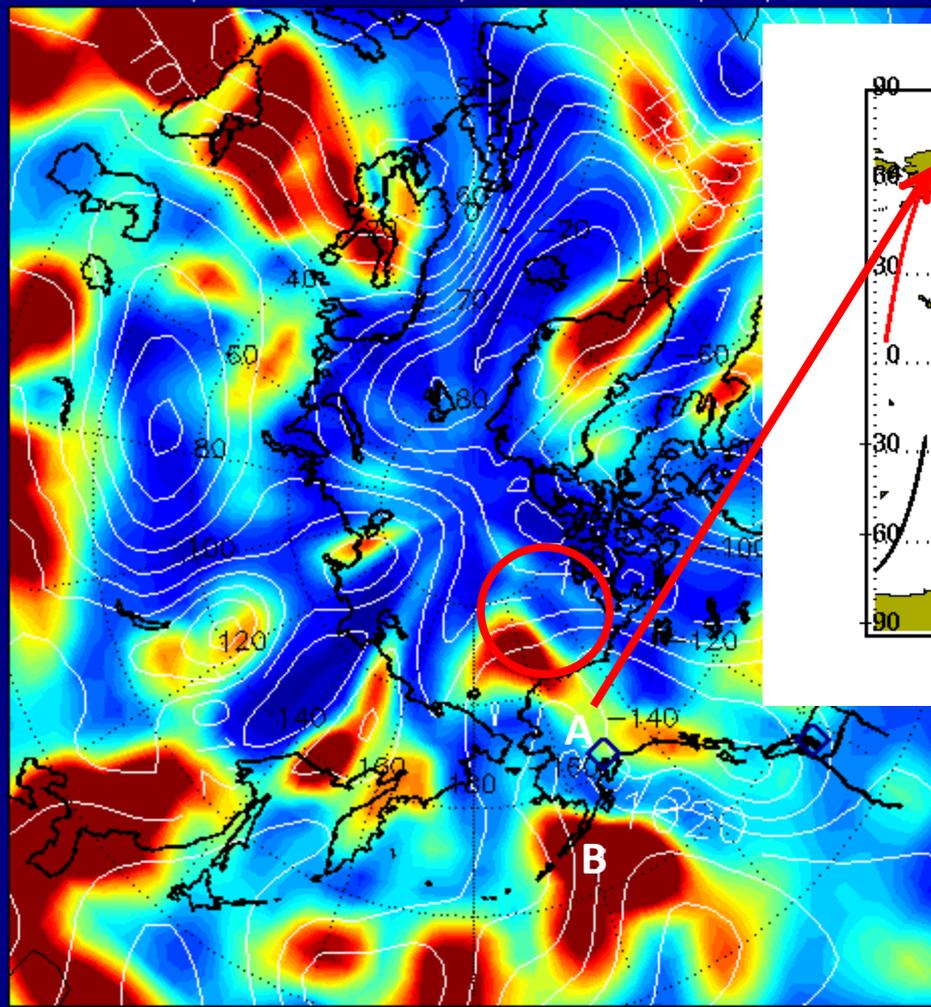
Lowest 250mb CO Column00Z 20080406
MSLP (White)/95% Conv Precip (Red)



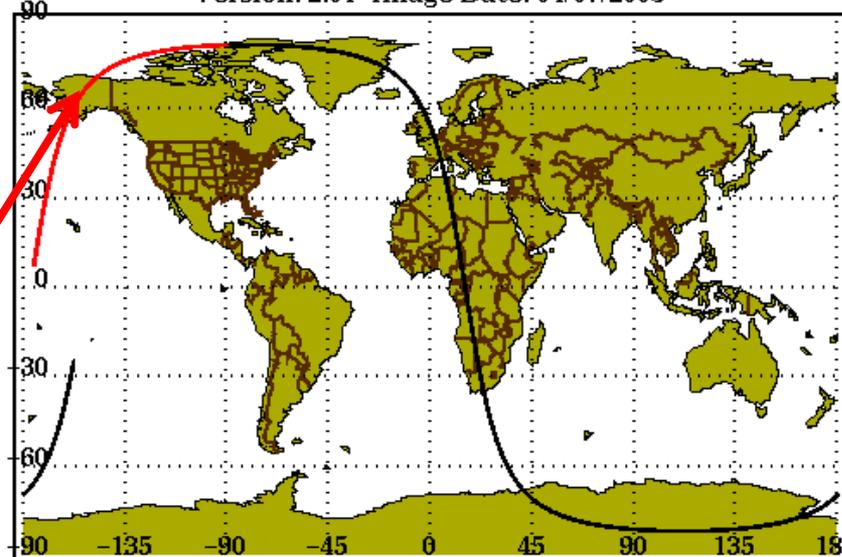
**Pollution is aloft
(transport within low)**

AOD Total Aerosol 12Z 20080406

(MSL Pressure Contoured/95% Convective Precip=Red)

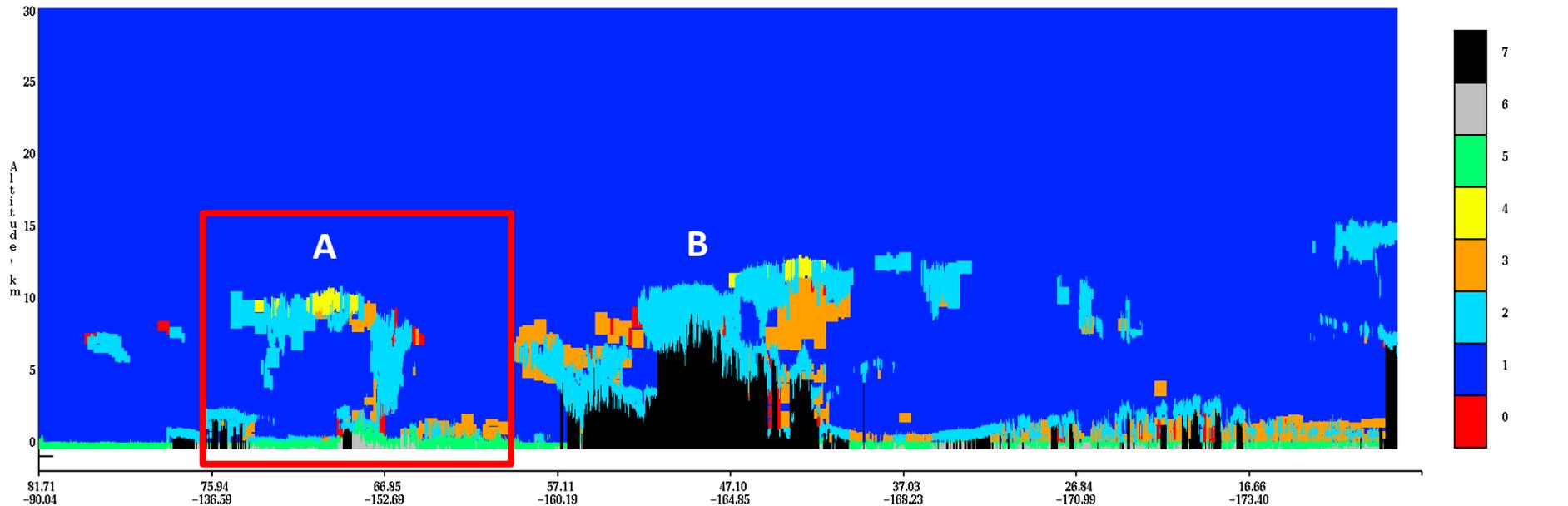
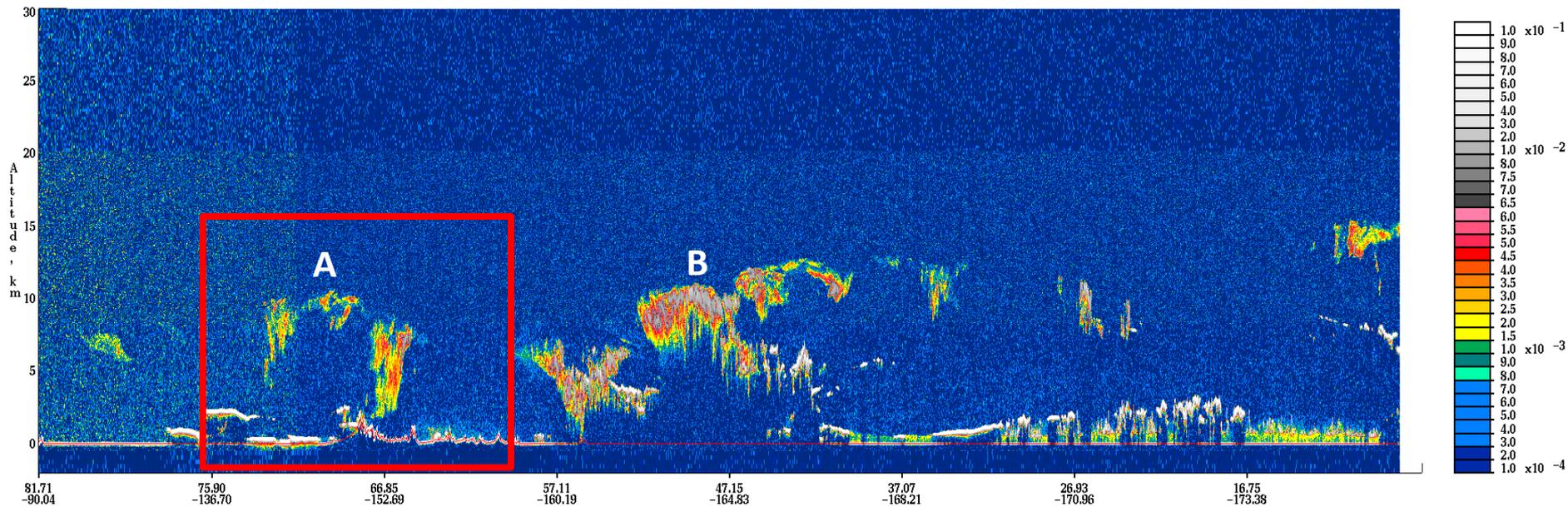


2008-04-06 12-00-00 UTC Start of Hour Conditions
Version: 2.01 Image Date: 04/07/2008

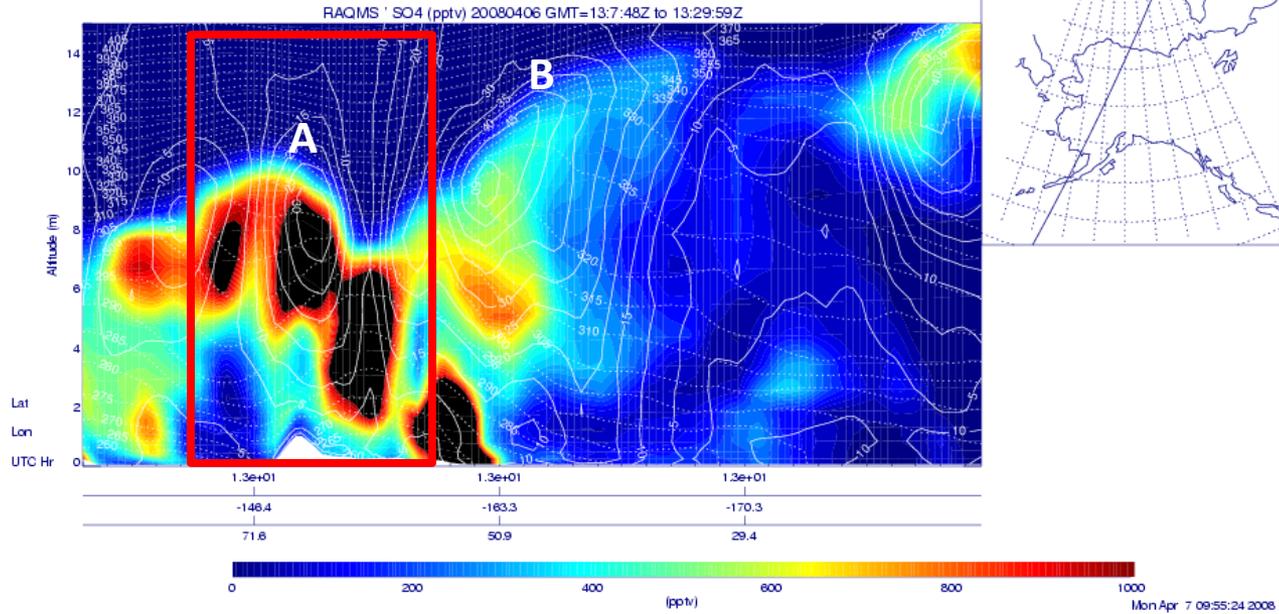


0.0 0.2 0.4 0.6 0.8 1.0

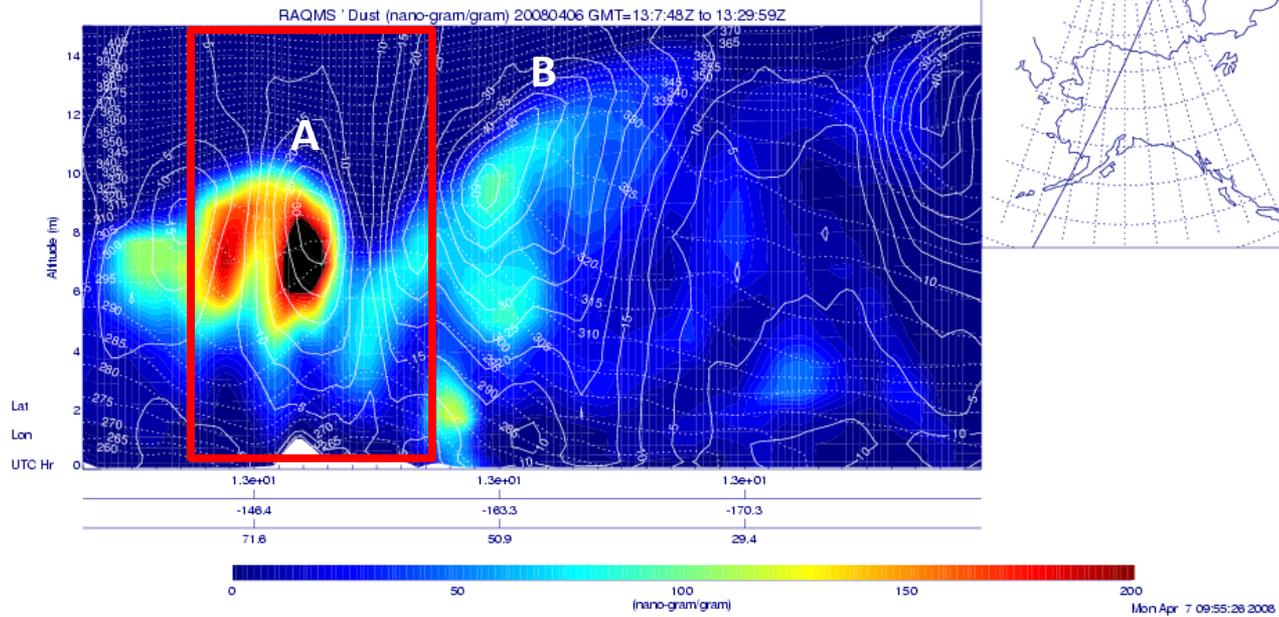
RAQMS₆ 24hr ASSIM + 00hr Fx Initialized 12Z 20080405



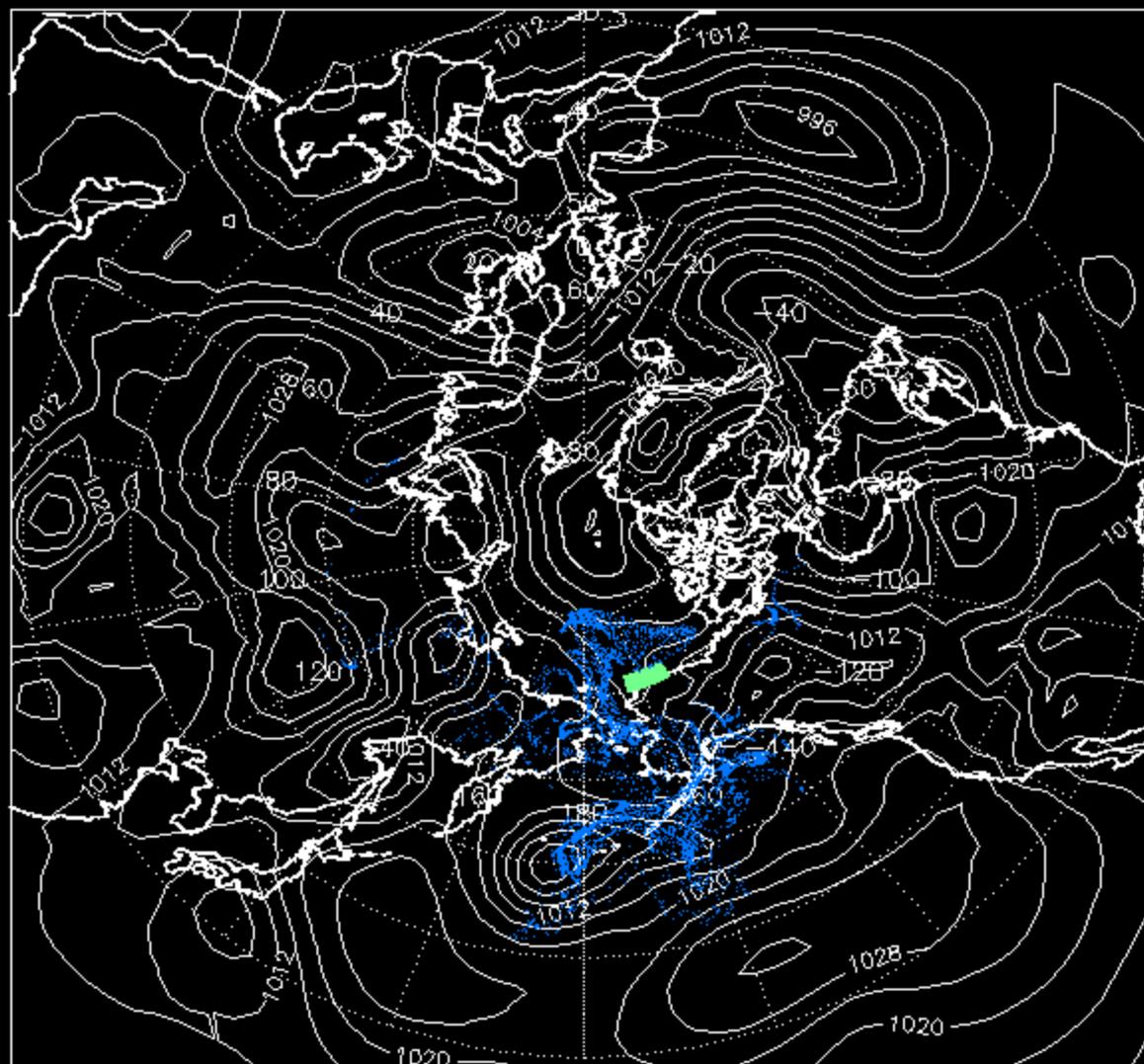
SO4 04/06/08



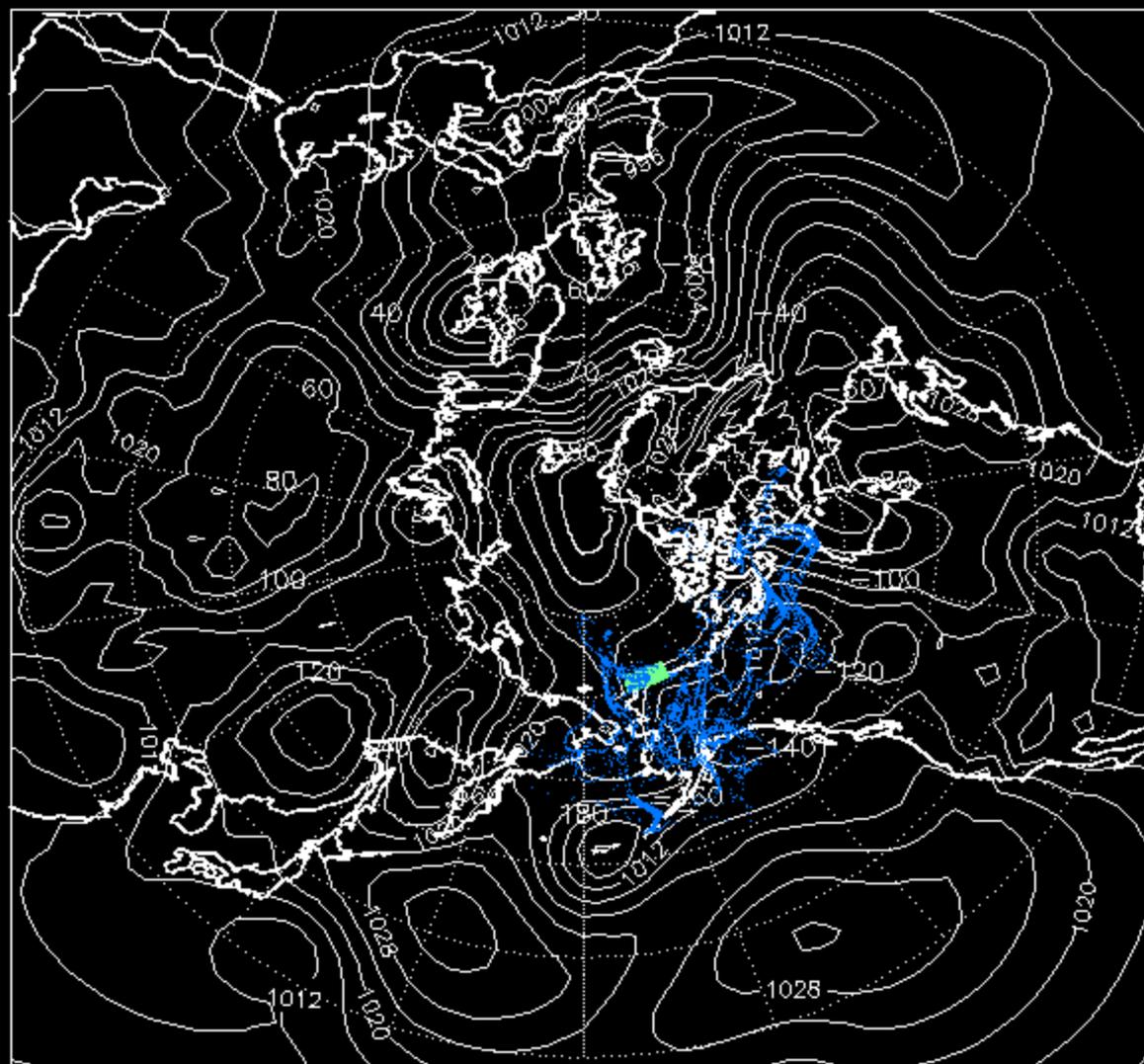
Dust 04/06/08



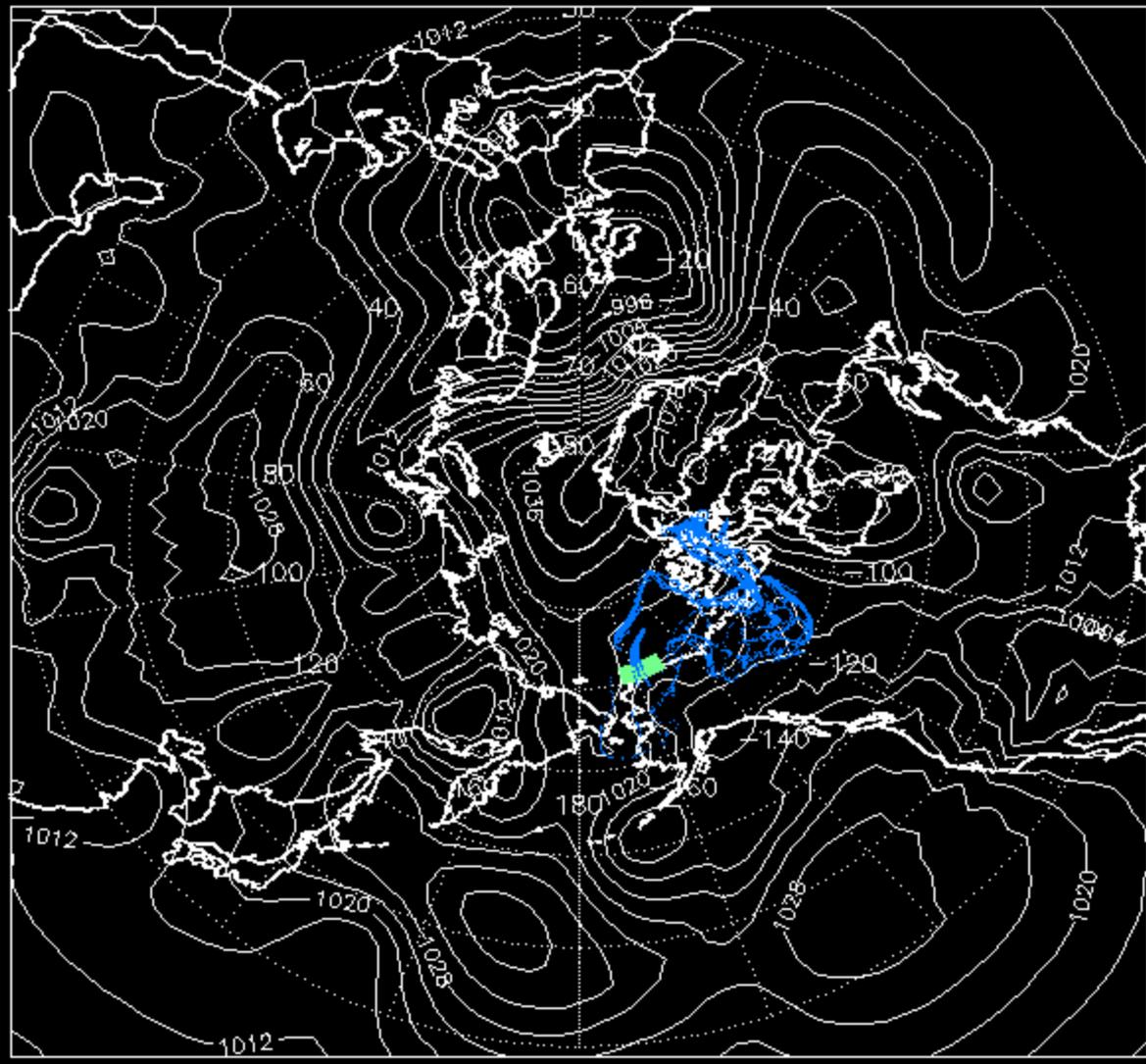
2008040800 Initial (Blue) and Final (Green) Lat/Lon
(Barrow Parcels below 5km)



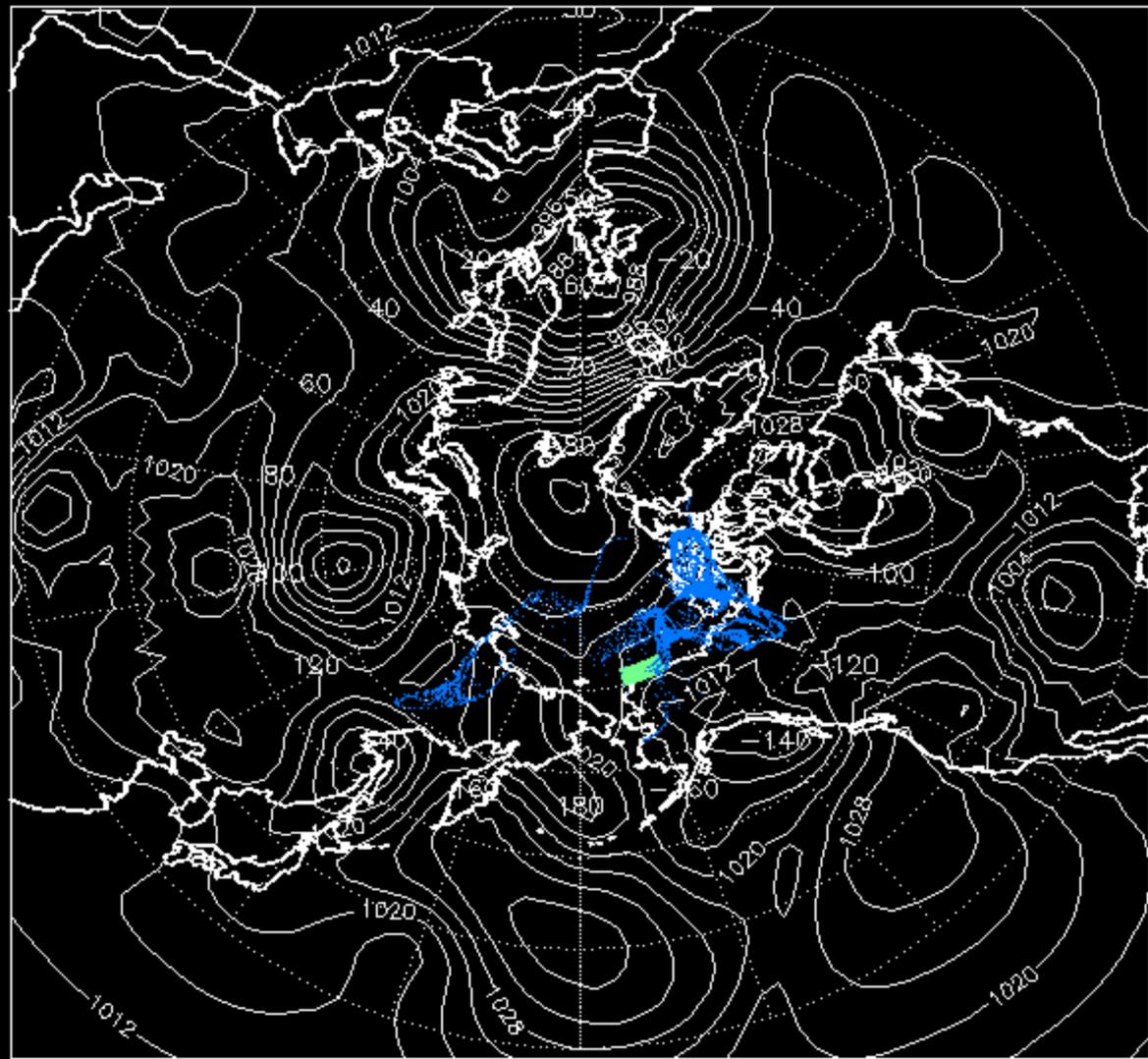
2008040900 Initial (Blue) and Final (Green) Lat/Lon
(Barrow Parcels below 5km)



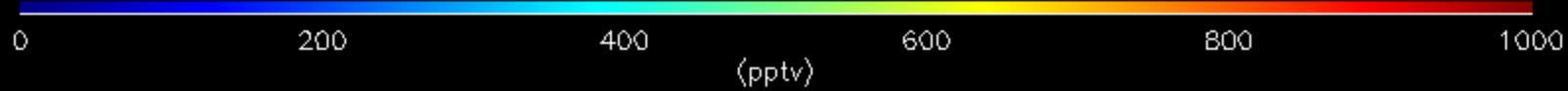
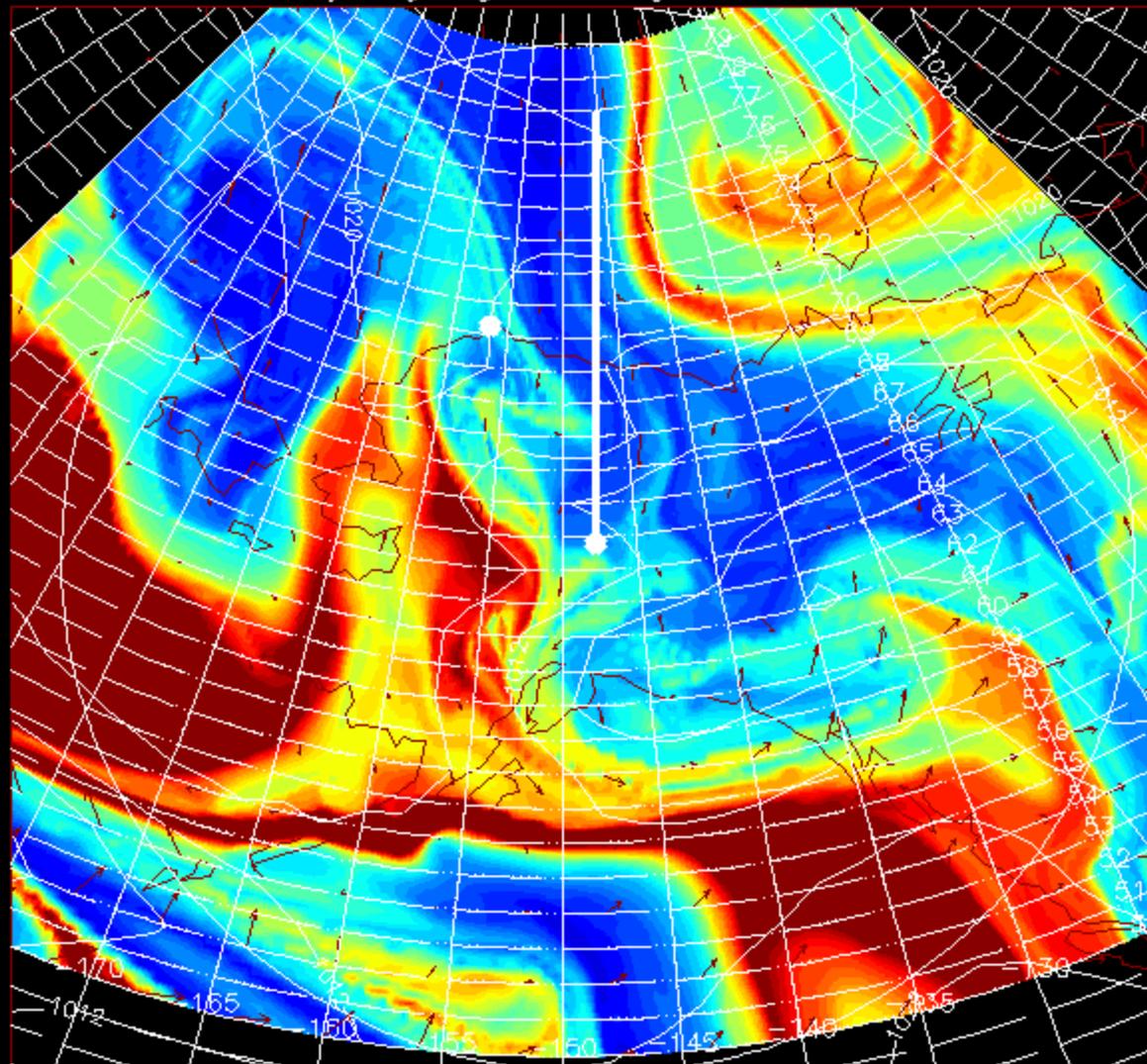
2008041000 Initial (Blue) and Final (Green) Lat/Lon
(Barrow Parcels below 5km)



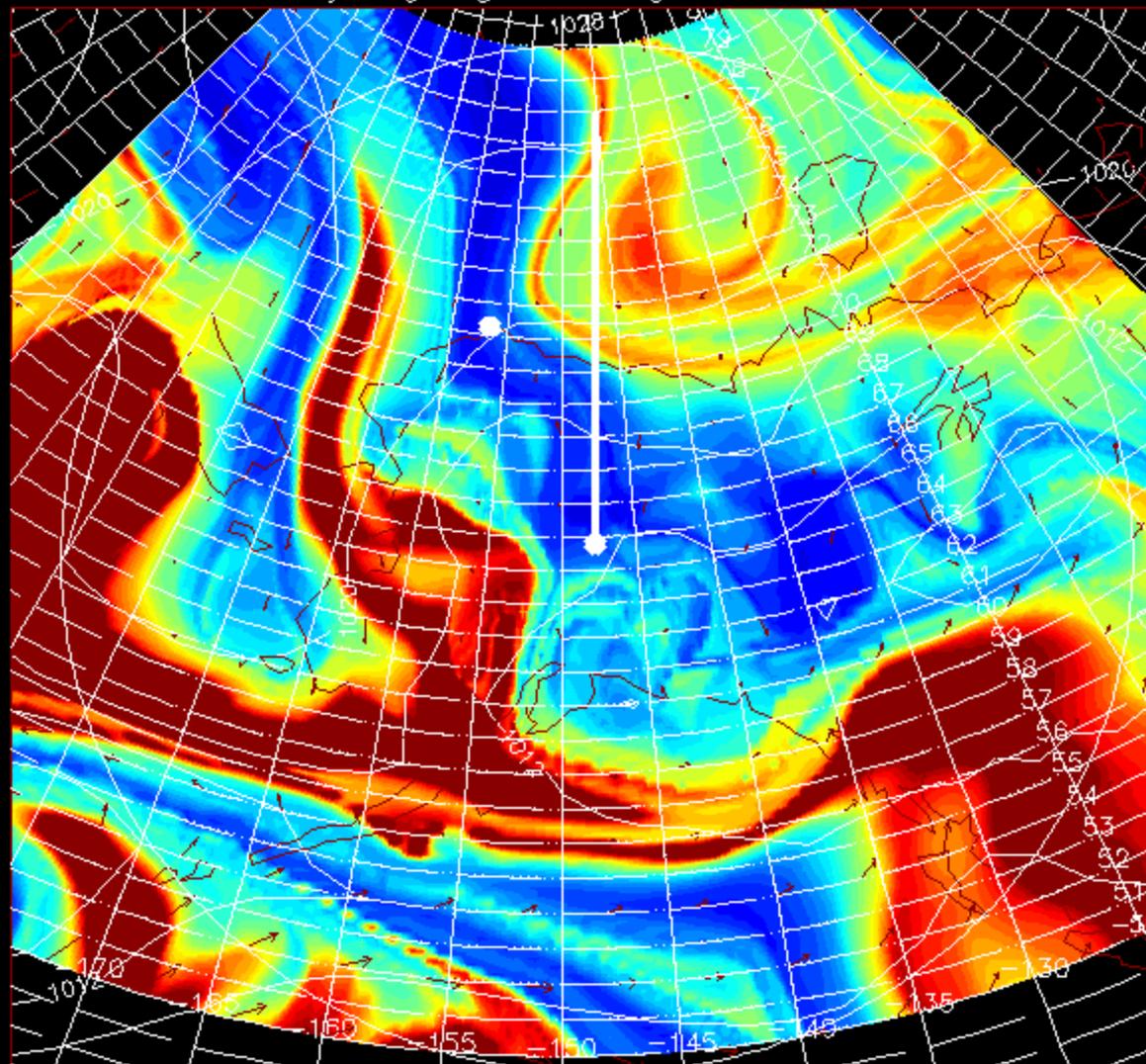
2008041100 Initial (Blue) and Final (Green) Lat/Lon
(Barrow Parcels below 5km)



1km 5-day Lagrangian Averaged SO4 2008040800



1km 5-day Lagrangian Averaged S04 2008040900



0

200

400

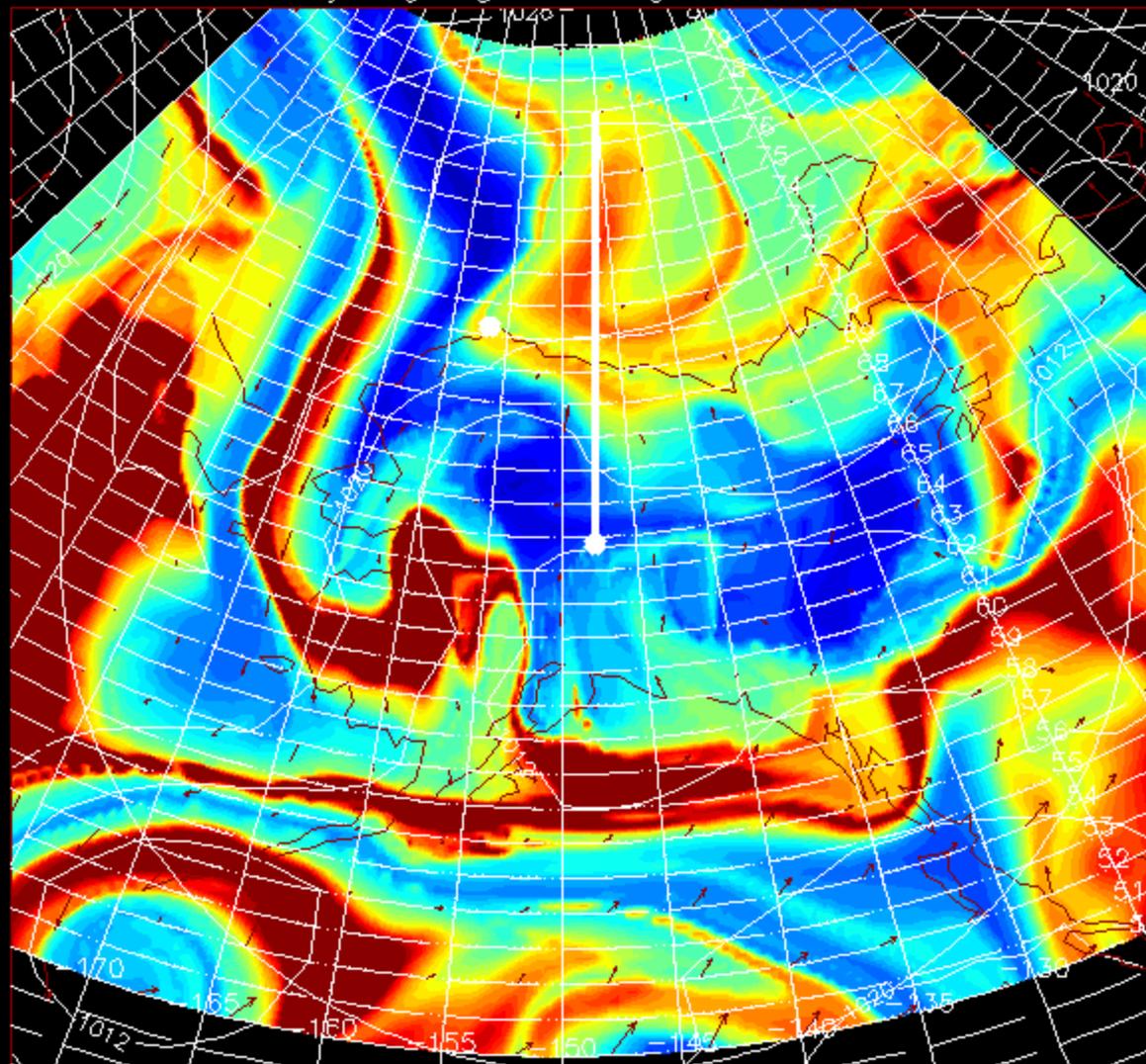
(pptv)

600

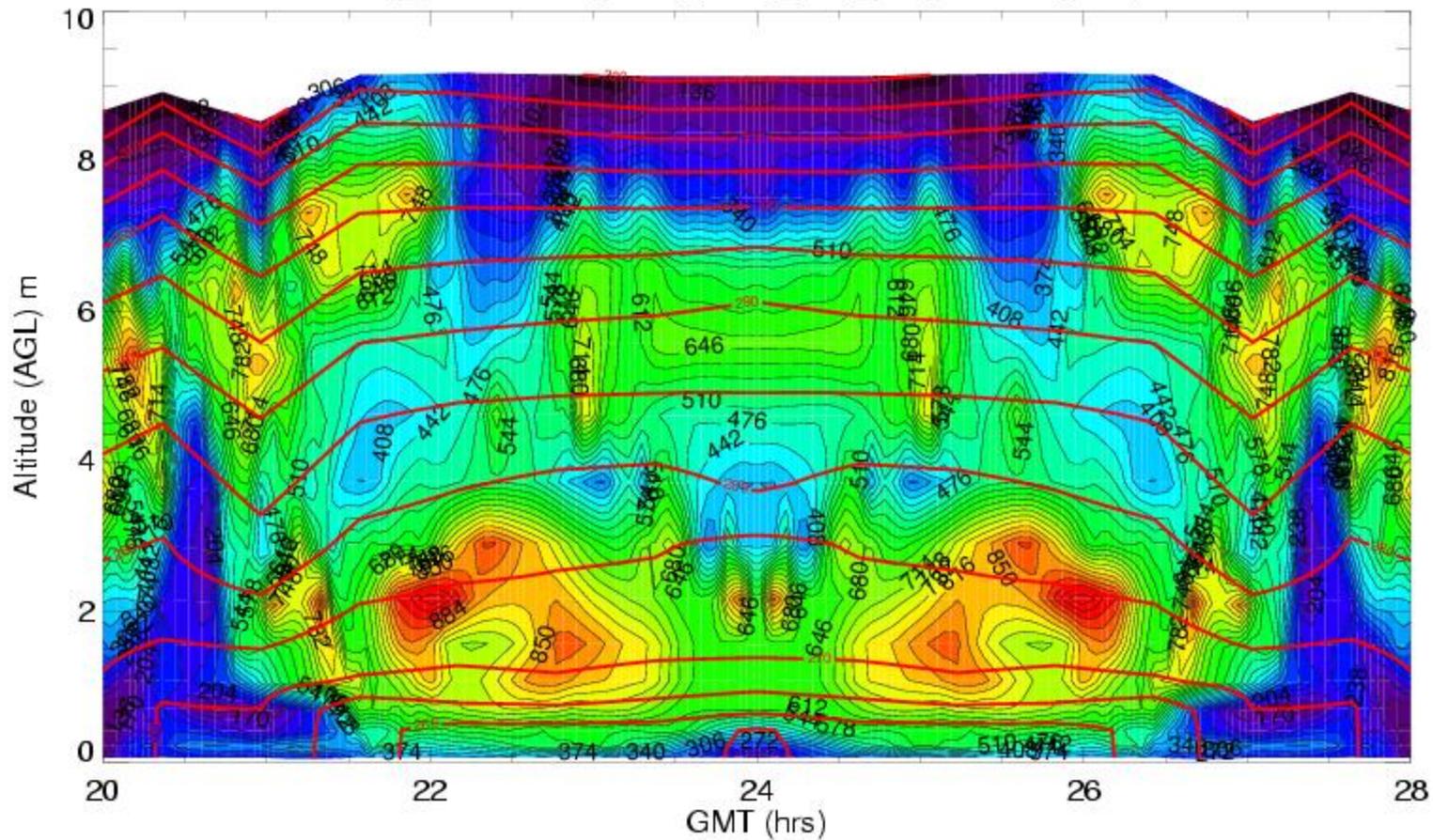
800

1000

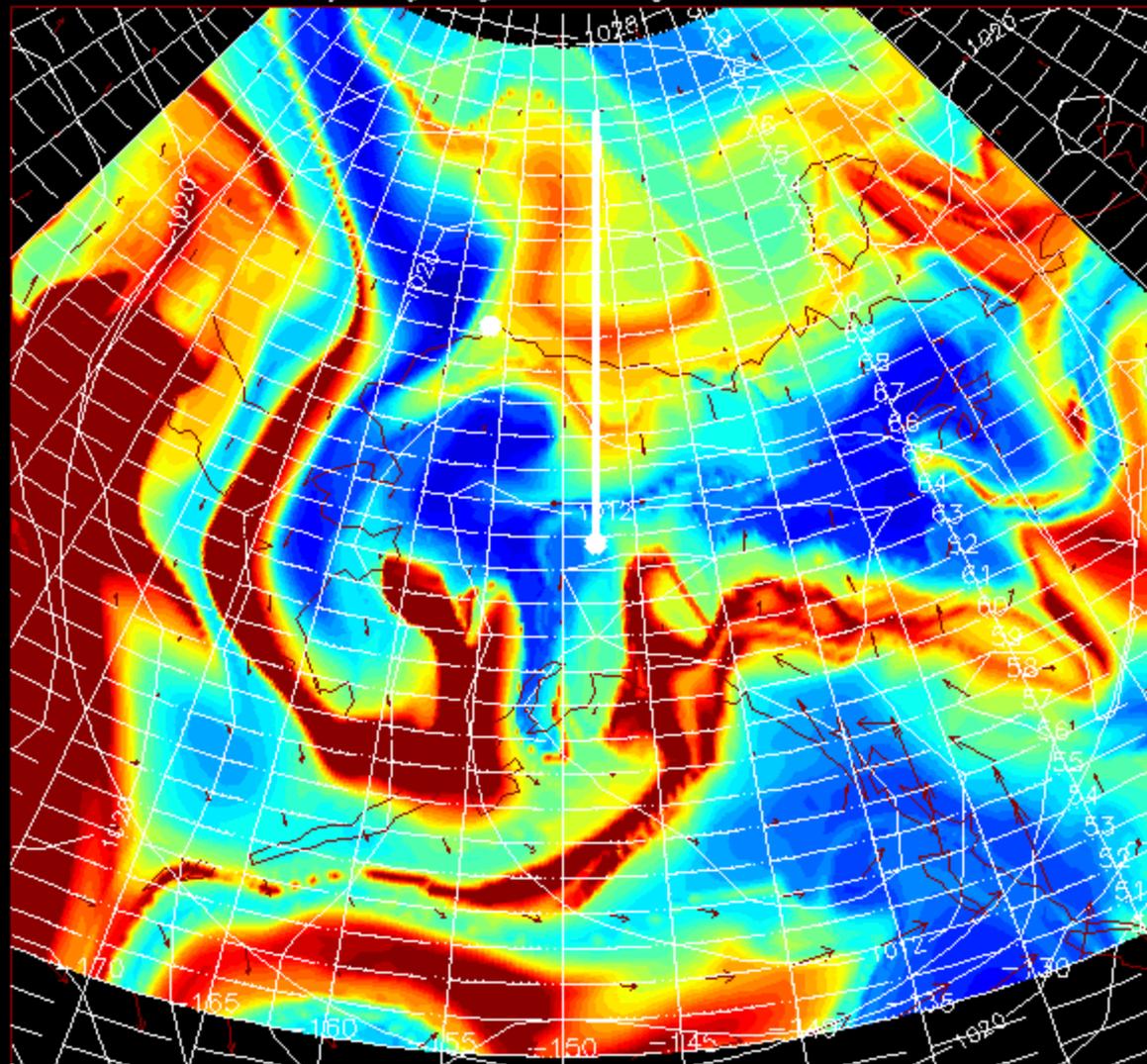
1km 5-day Lagrangian Averaged S04 2008041000



84hr FX iso4 Cl= 34.0000 max= 1048.89
RAQMS_20080410_00Z_84hr_fcst_rdf_curtain_arcpac.dat



1km 5-day Lagrangian Averaged S04 2008041100



0

200

400

(pptv)

600

800

1000

108hr FX iso4 CI= 33.0000 max= 1019.01
RAQMS_20080411_00Z_108hr_fcst_rdf_curtain_arcpac.dat

