Flight Day Conditions

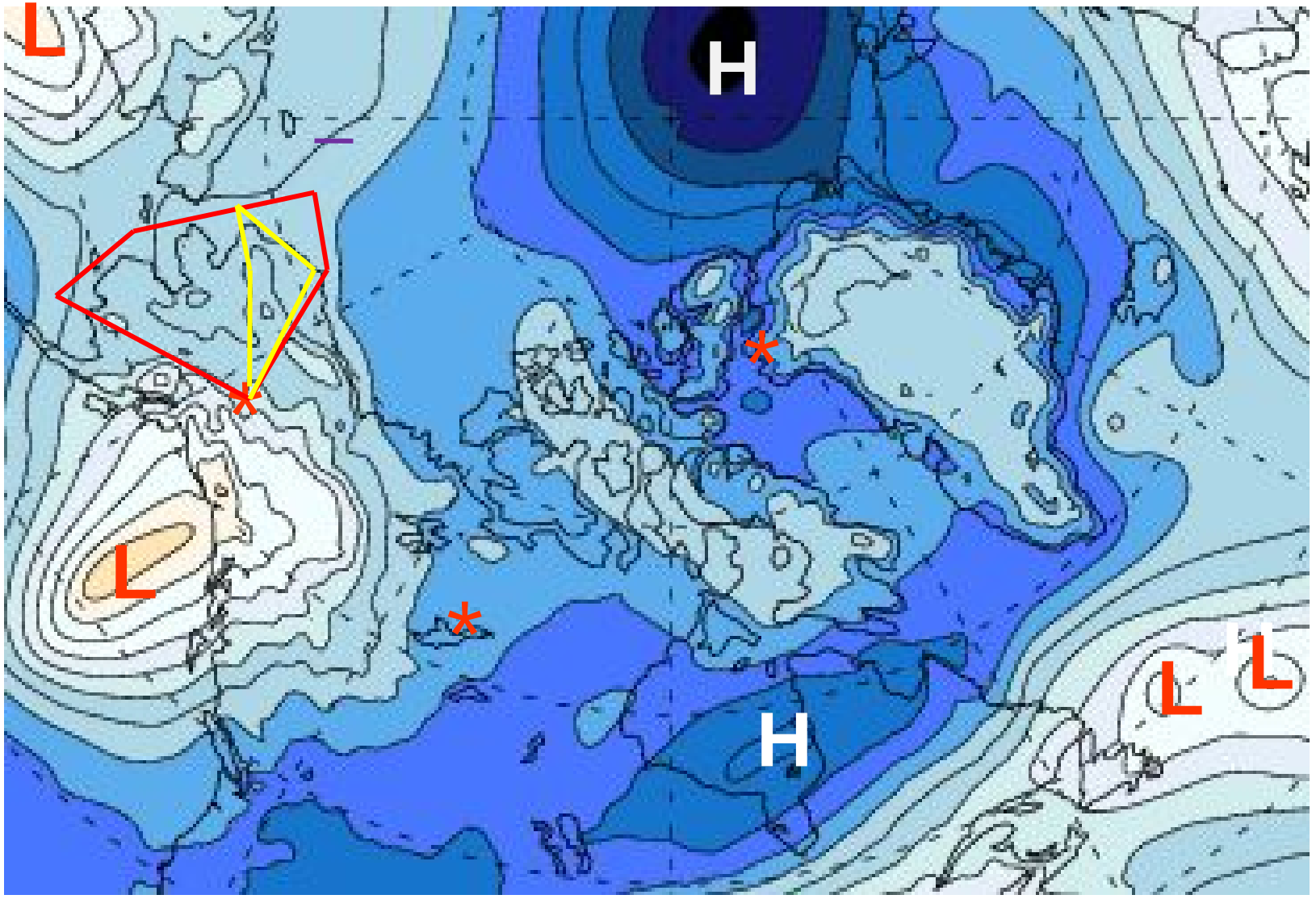
April 12-13, 2008

Andy Latto
Henry Fuelberg

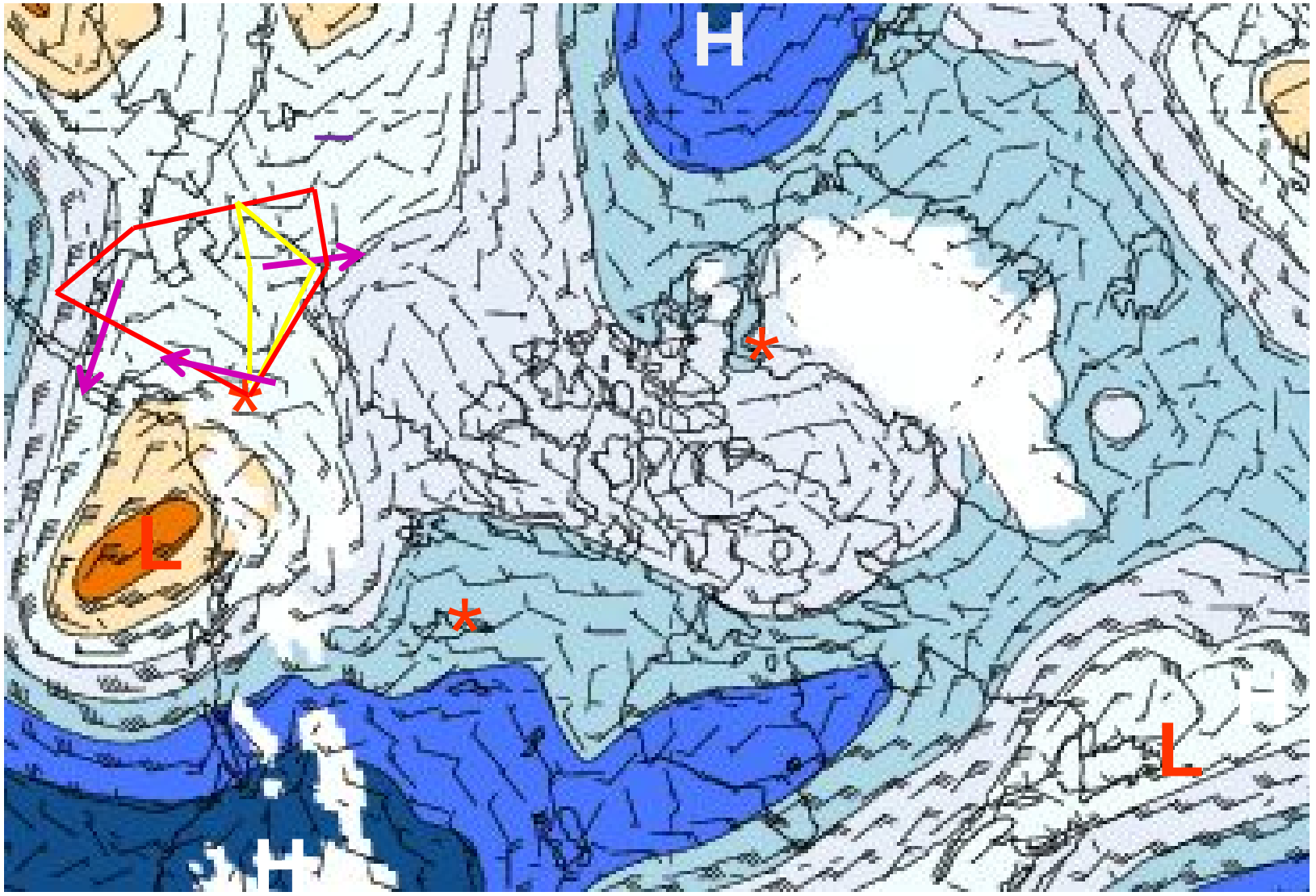
“Your Eyes to the Skies”

Forecast For Saturday

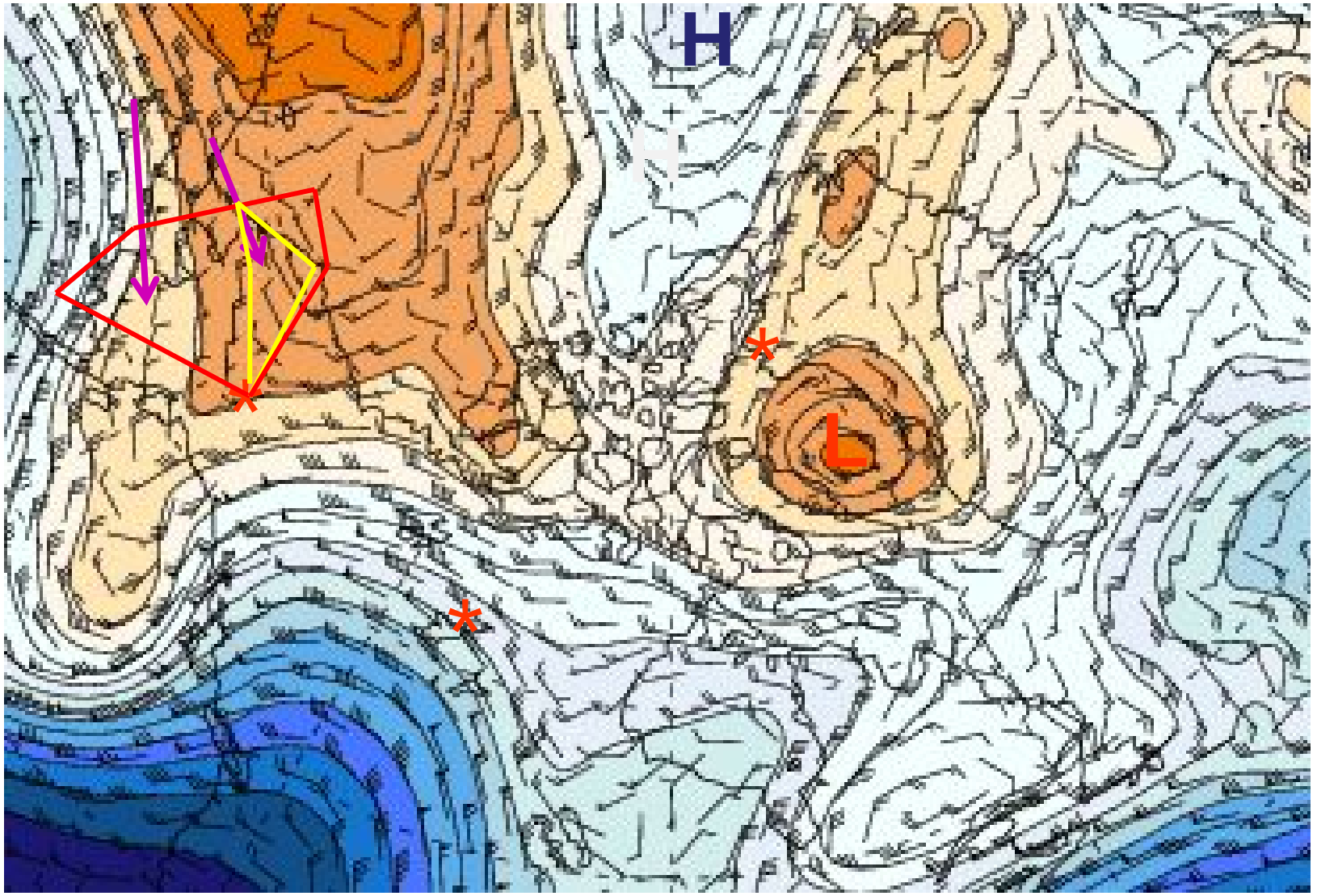
FSU WRF Forecast Valid 1800Z April 12
Sea Level Pressure



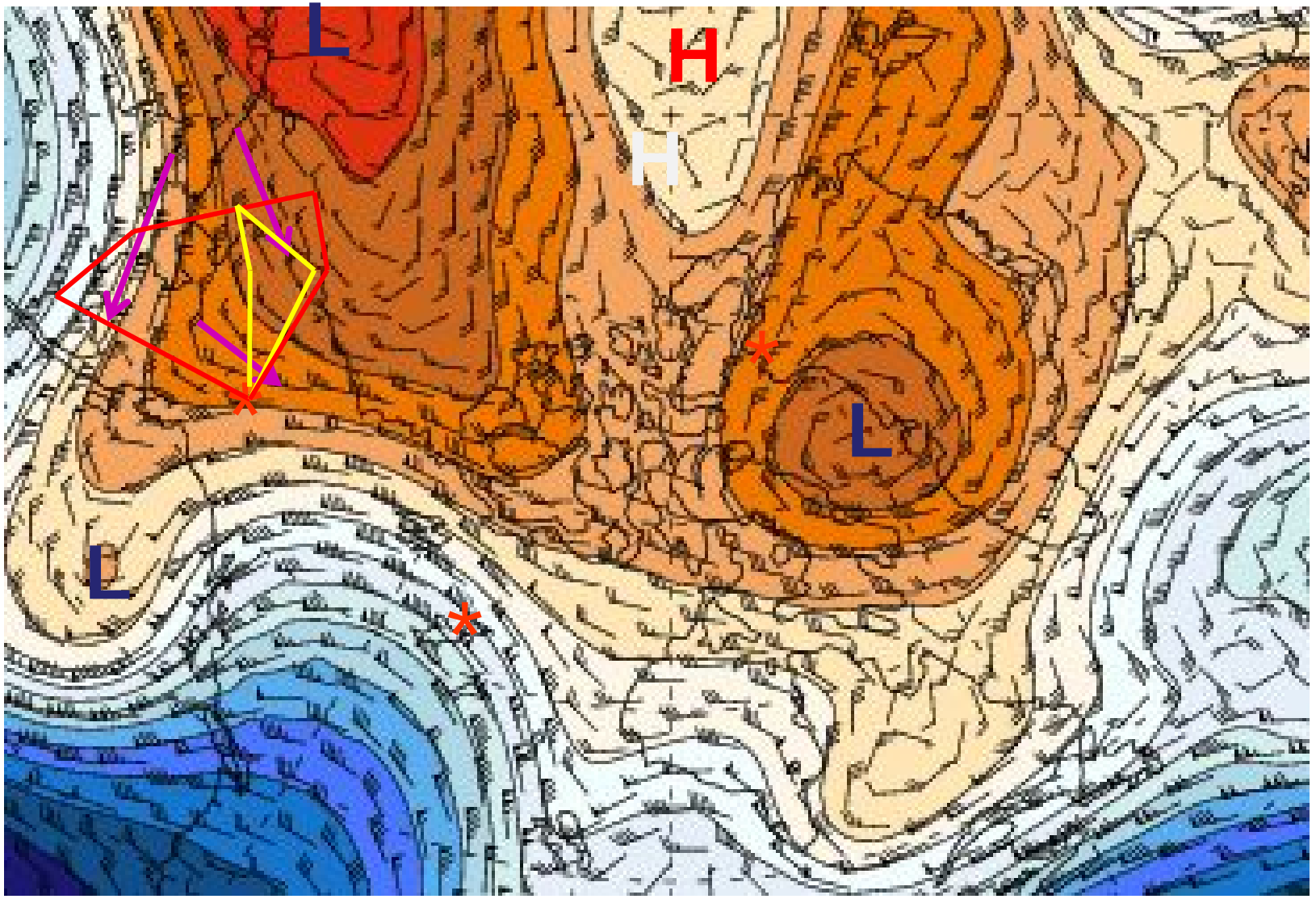
FSU WRF Forecast Valid 1800Z April 12
850 hPa Heights and Winds



FSU WRF Forecast Valid 1800Z April 12
500 hPa Heights and Winds



FSU WRF Forecast Valid 1800Z April 12
300 hPa Heights and Winds



April 12, 2008
Tropopause Height plan view

Alaska and environs

Atkinson, Cross, Malingowski
University of Alaska Fairbanks
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UNIVERSITY OF ALASKA FAIRBANKS

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Overview – Tropopause height – April 12 0700 AK (15Z April 12)

Tropopause height:

- 400mb – 500mb
- 500mb – 550mb
- 550mb – 600mb
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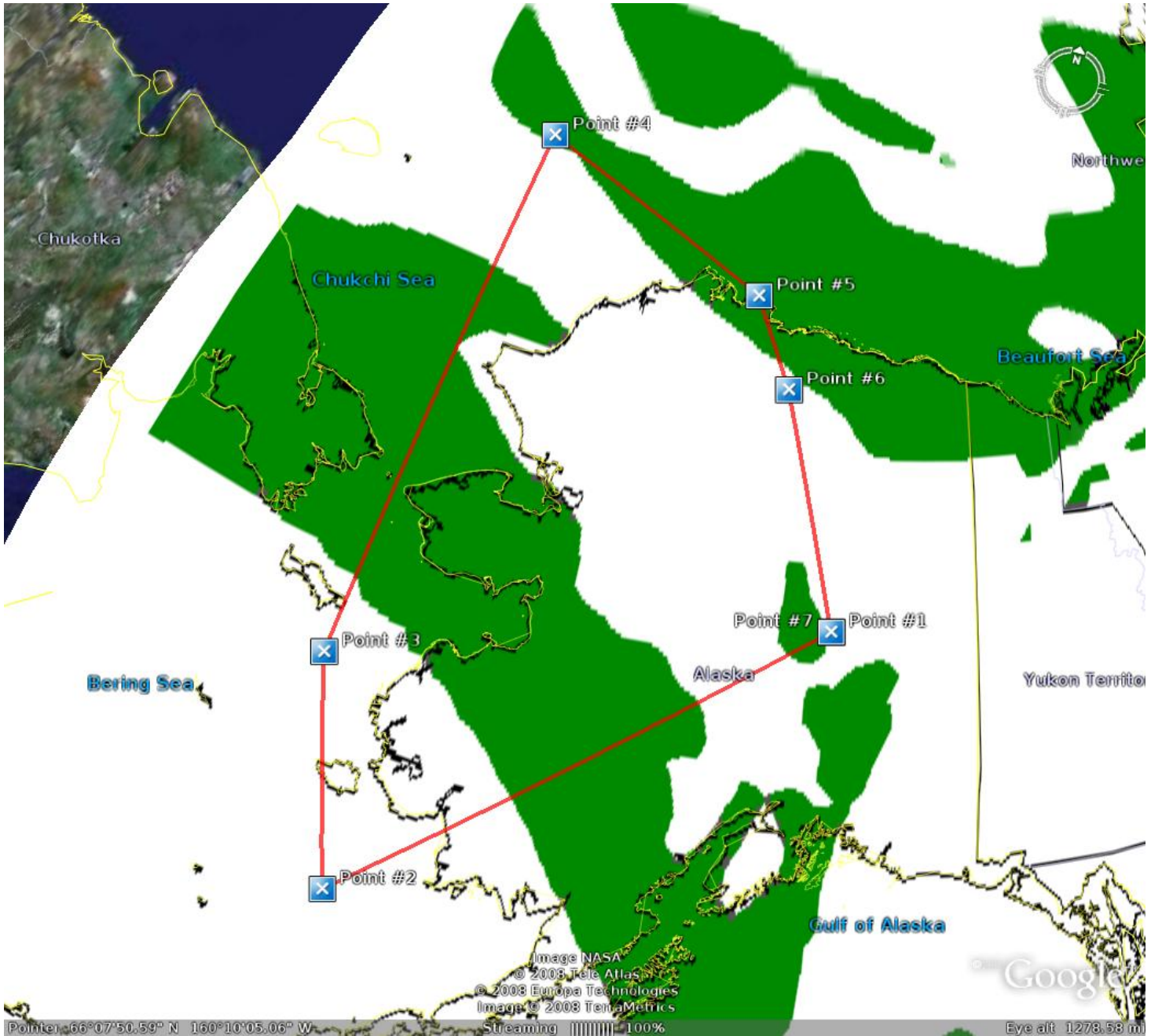
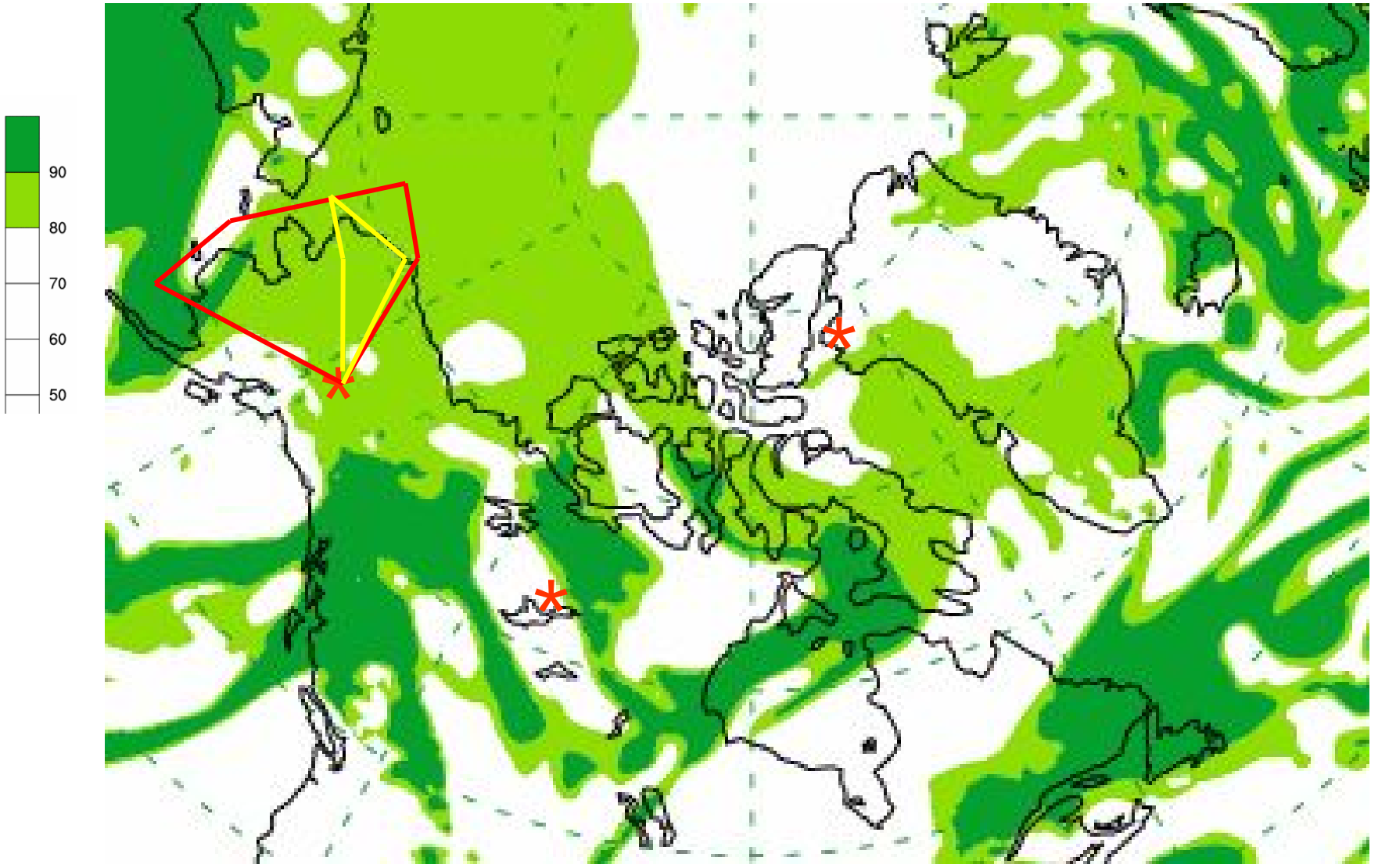
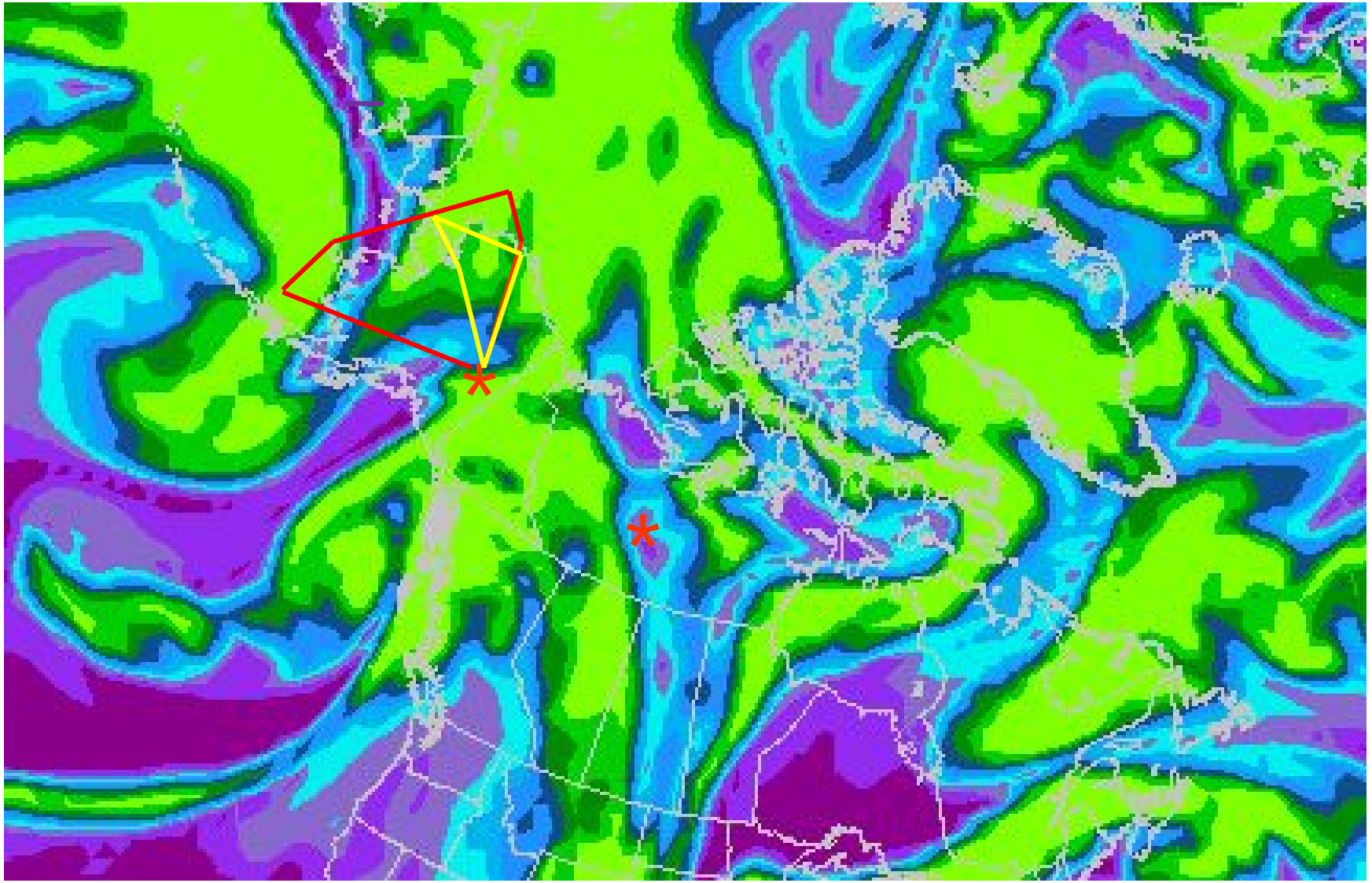


What About Clouds for Saturday??

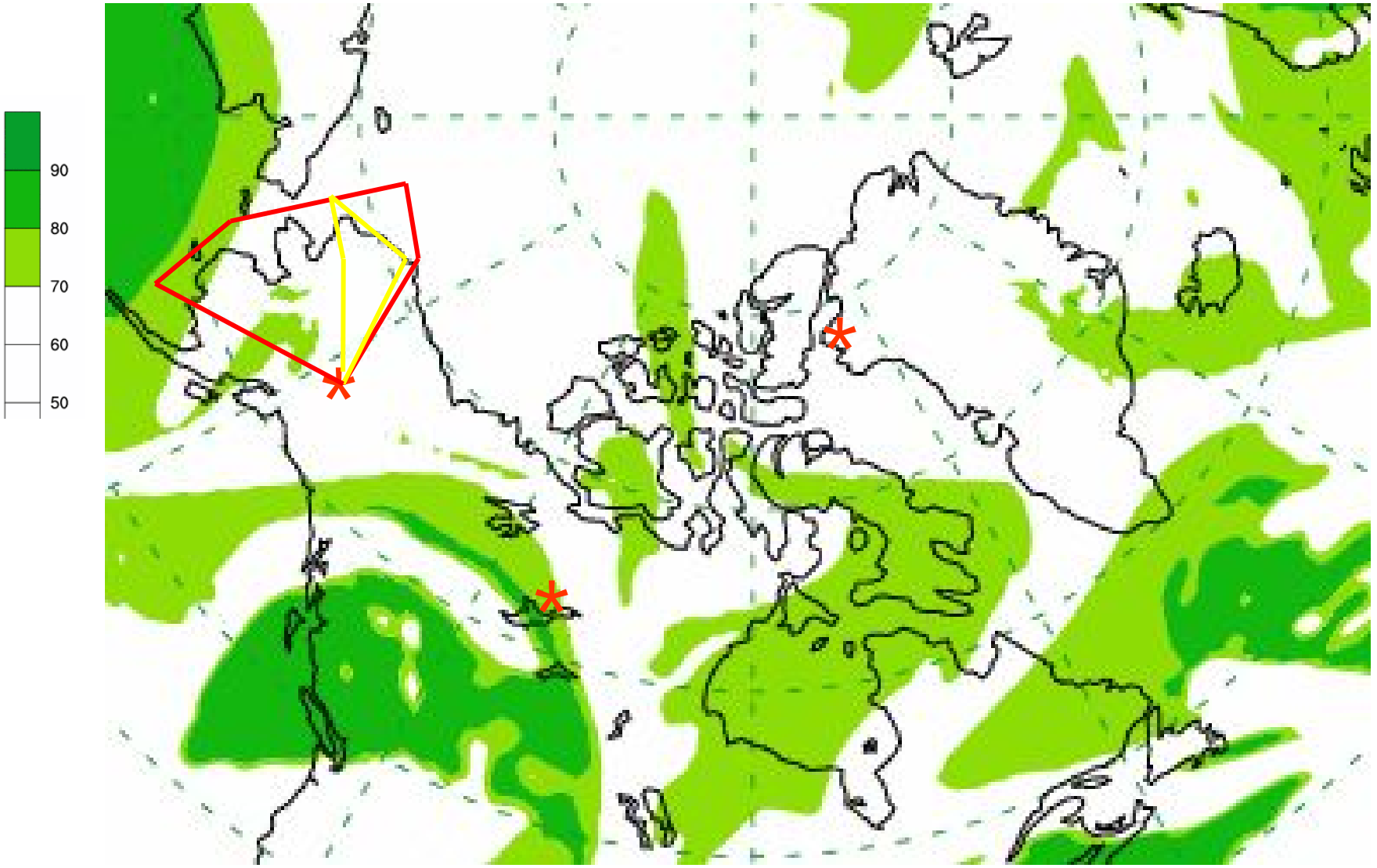
FSU WRF Relative Humidity at 850 hPa Forecast
Valid 1800 Z April 12



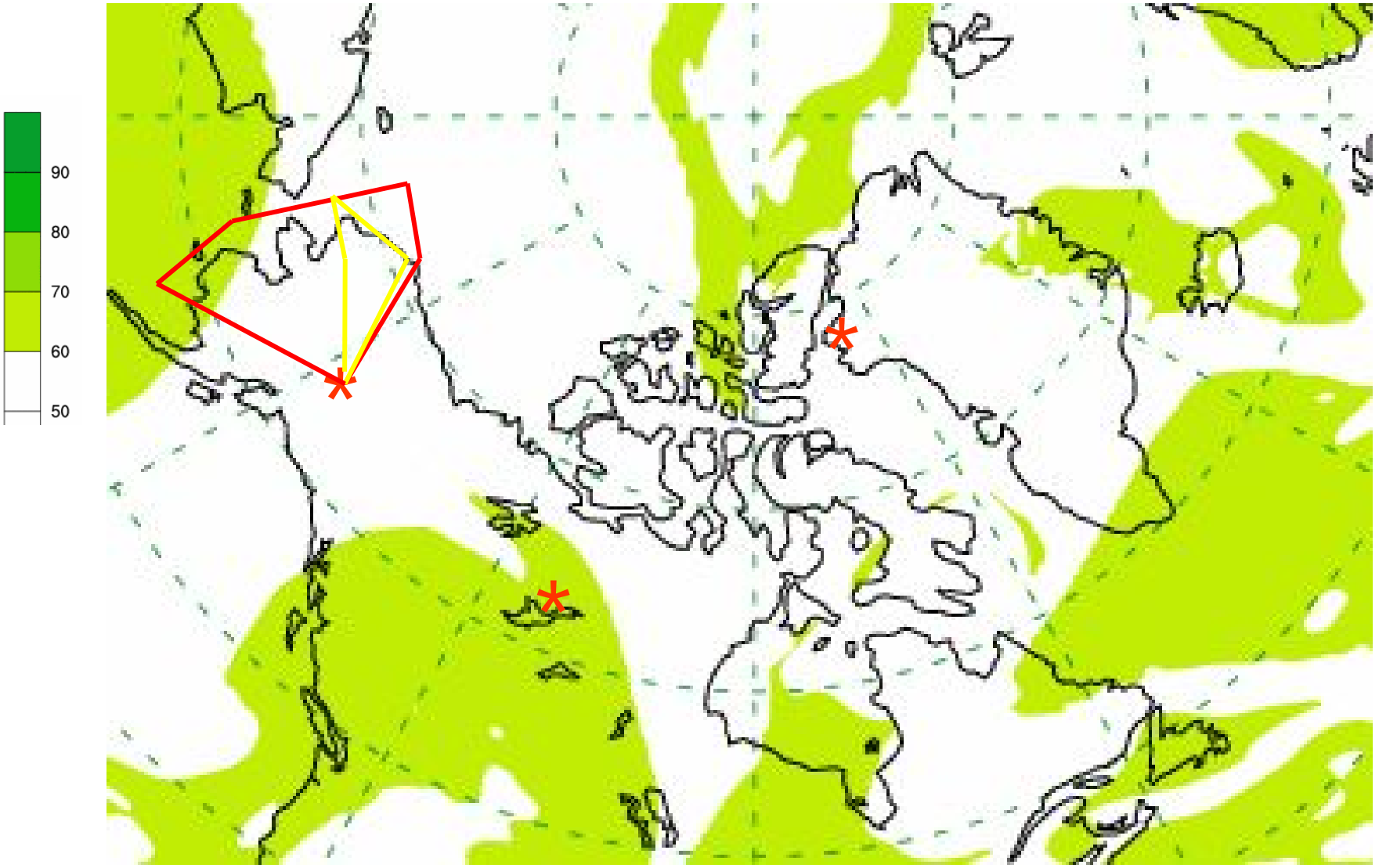
Let's Compare with GFS Forecast Valid 1800Z April 12
700 hPa Relative Humidity and Heights



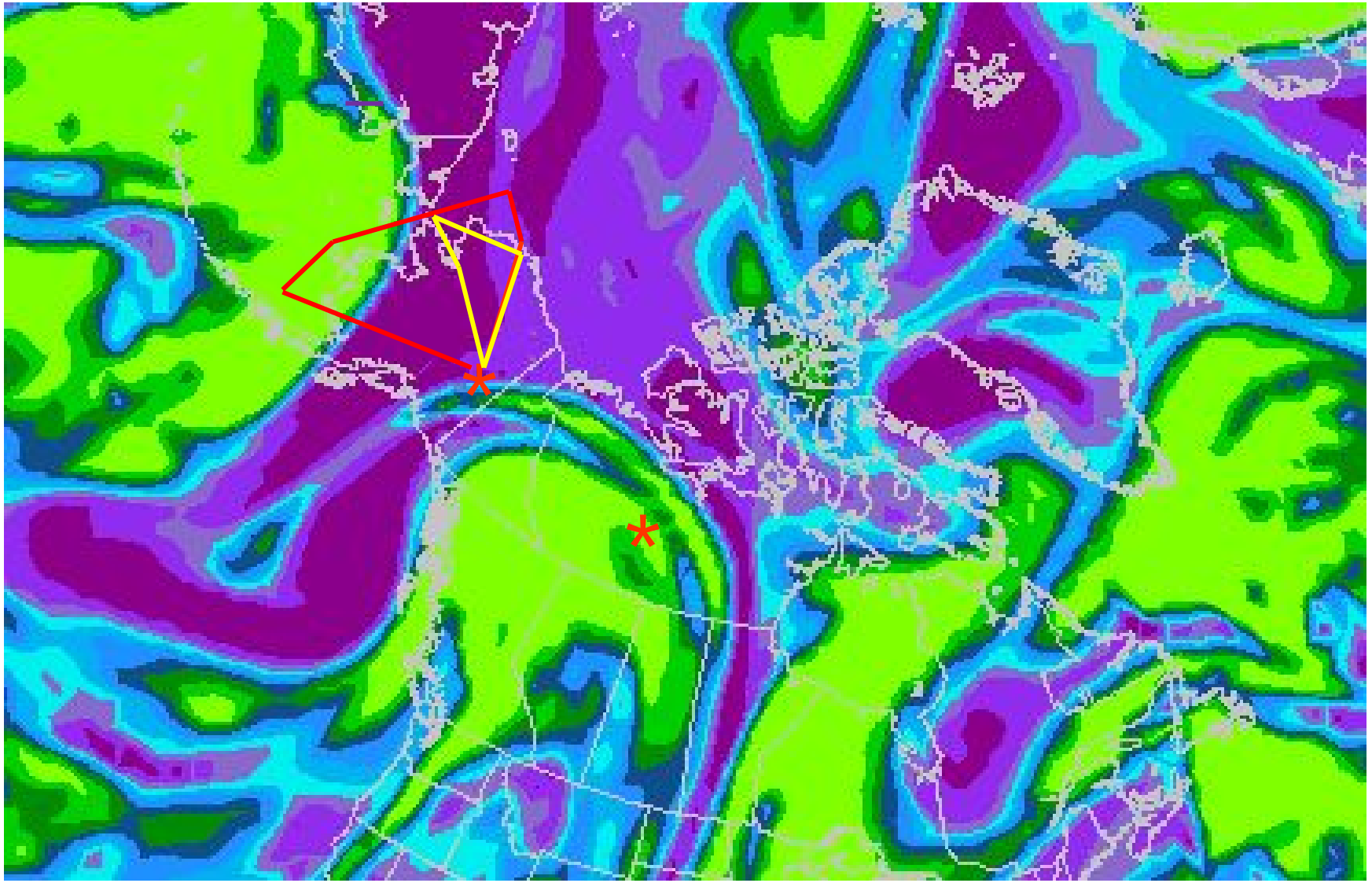
FSU WRF Relative Humidity at 500 hPa Forecast
Valid 1800 Z April 12



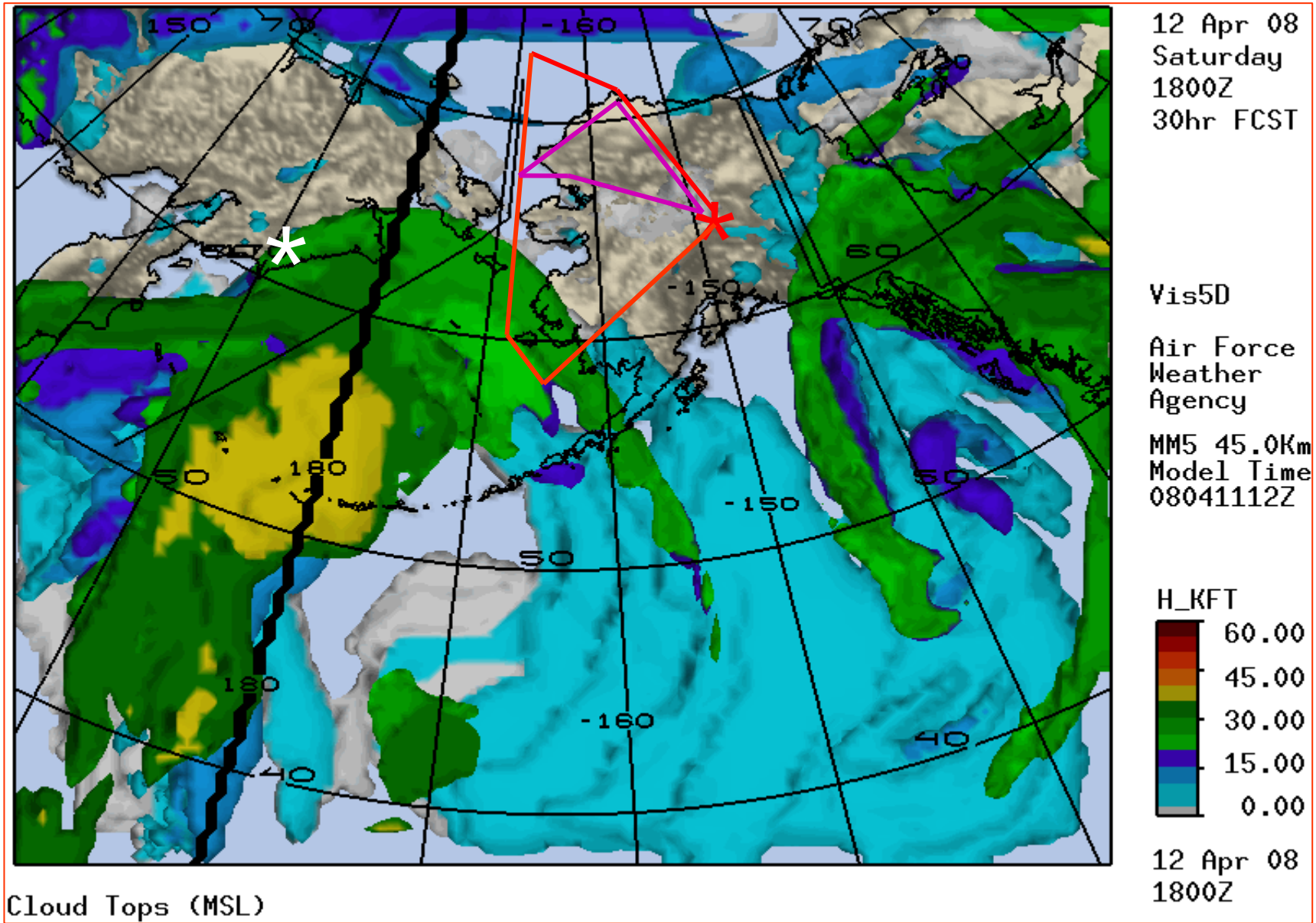
FSU WRF Relative Humidity at 300 hPa Forecast
Valid 1800 Z April 12



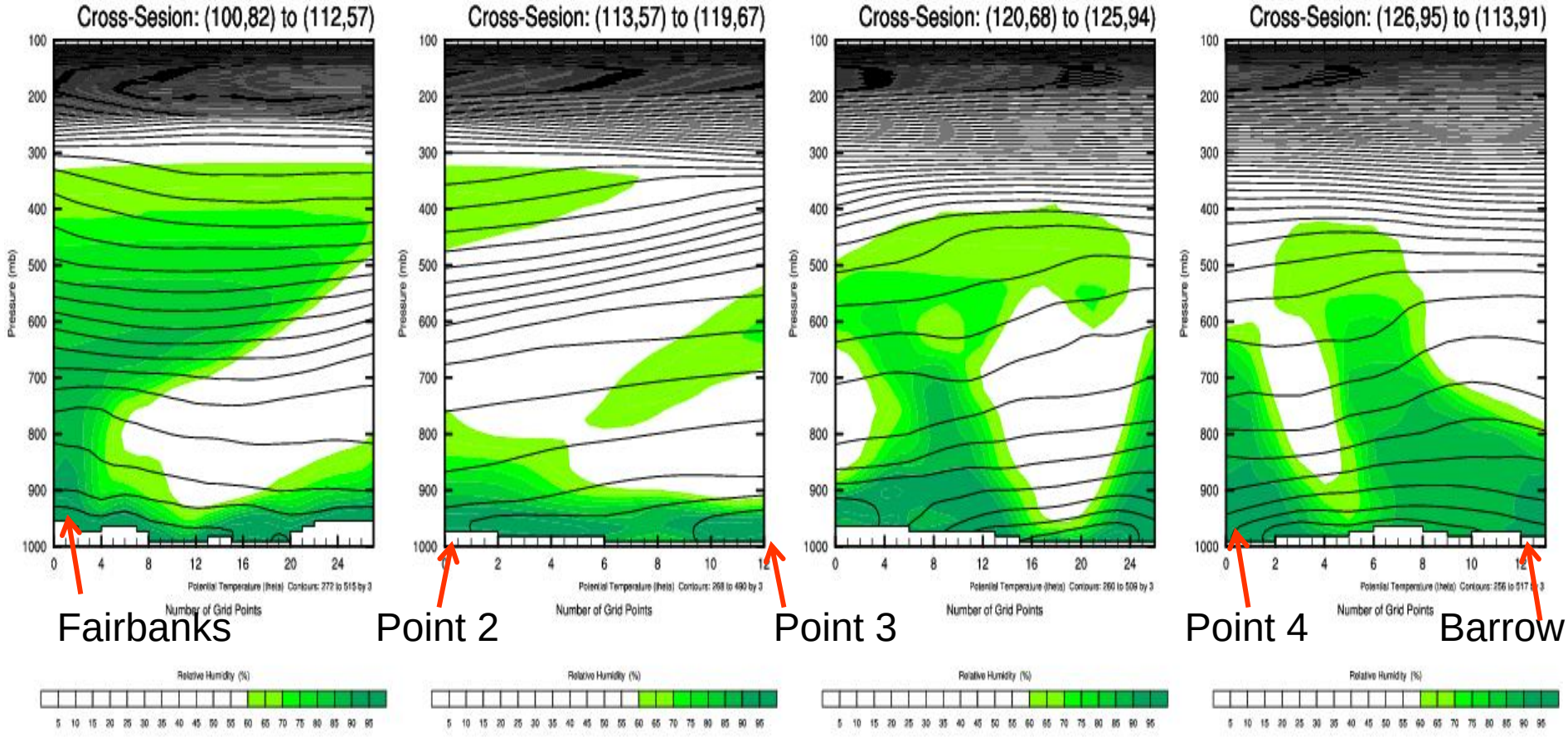
Let's Compare with GFS Forecast Valid 1800Z April 12
300 hPa Relative Humidity and Heights



Let's Compare with Air Force Cloud Cover
Valid 1800 Z April 12



FSU WRF RH Cross Section DC-8 Flight Path Forecast for Suitcase Flight Valid 1800 Z April 12



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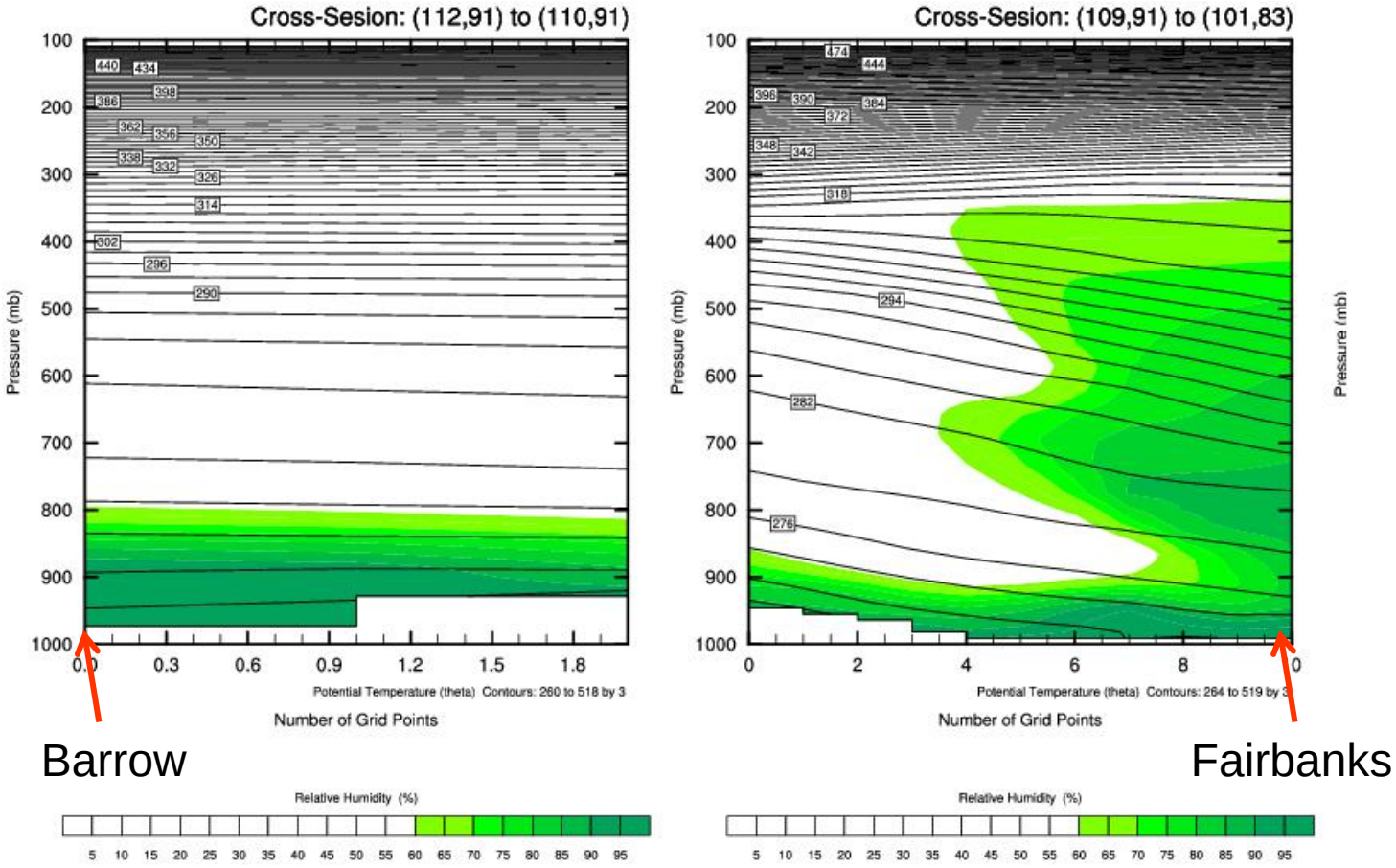
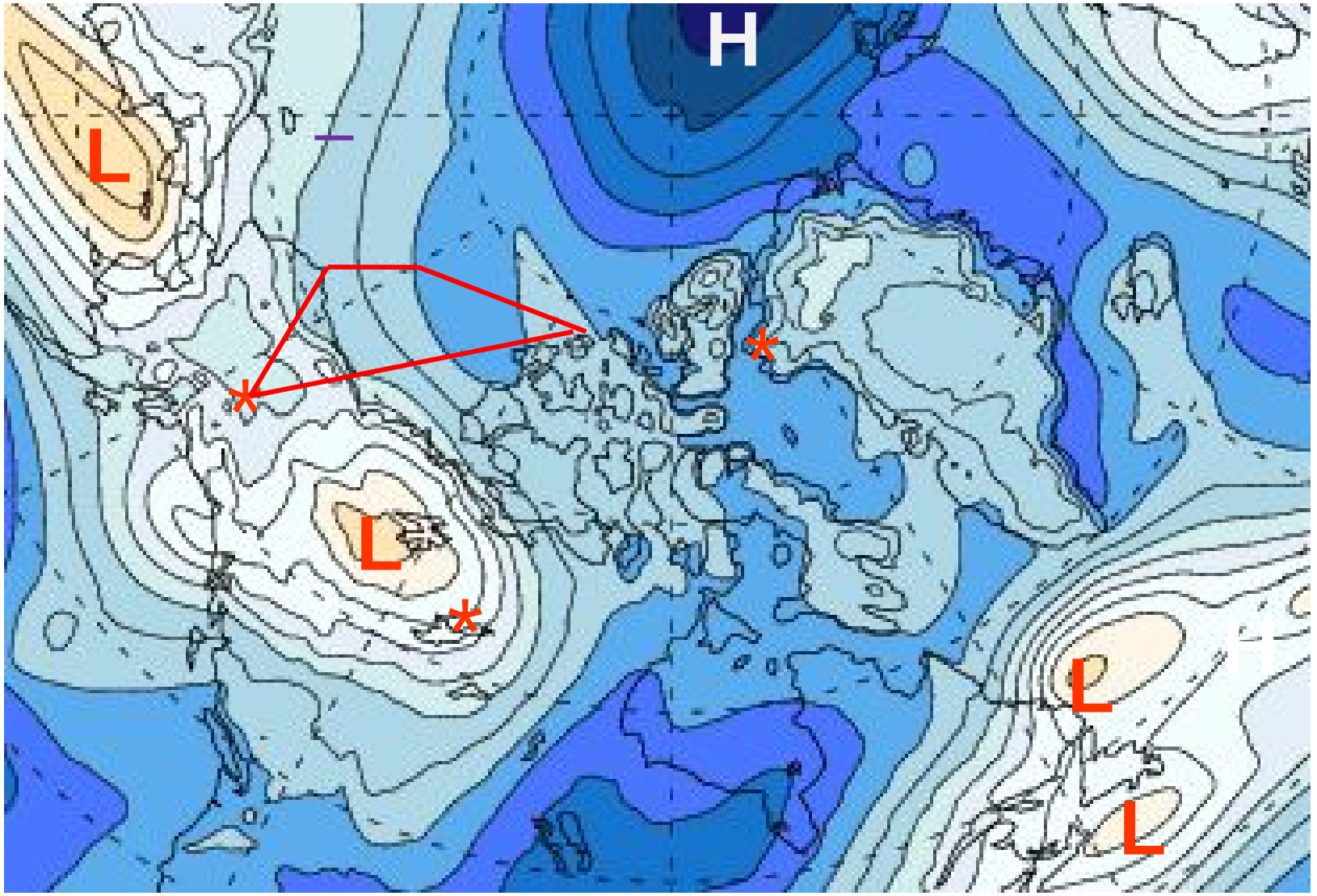
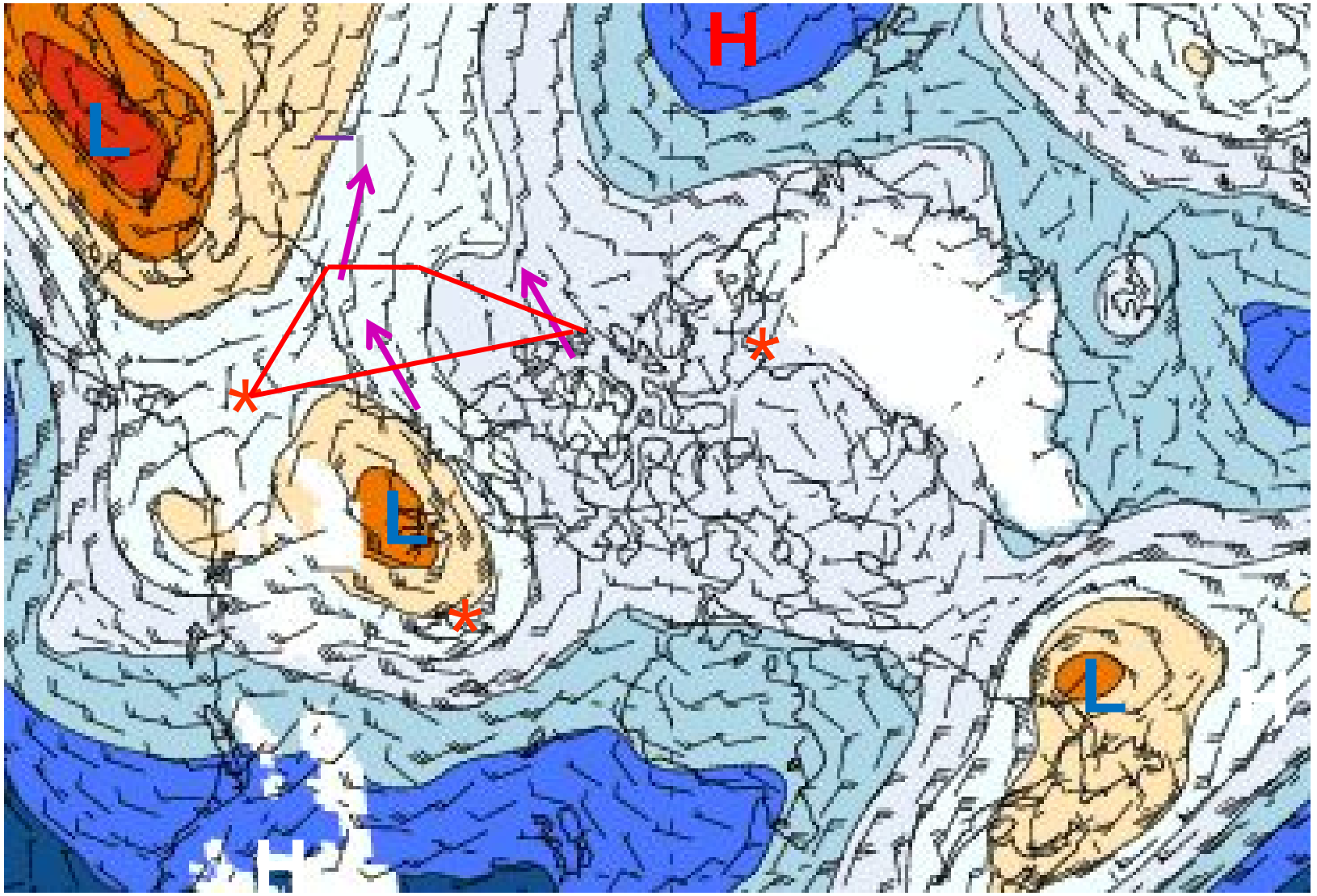


Forecast For Sunday

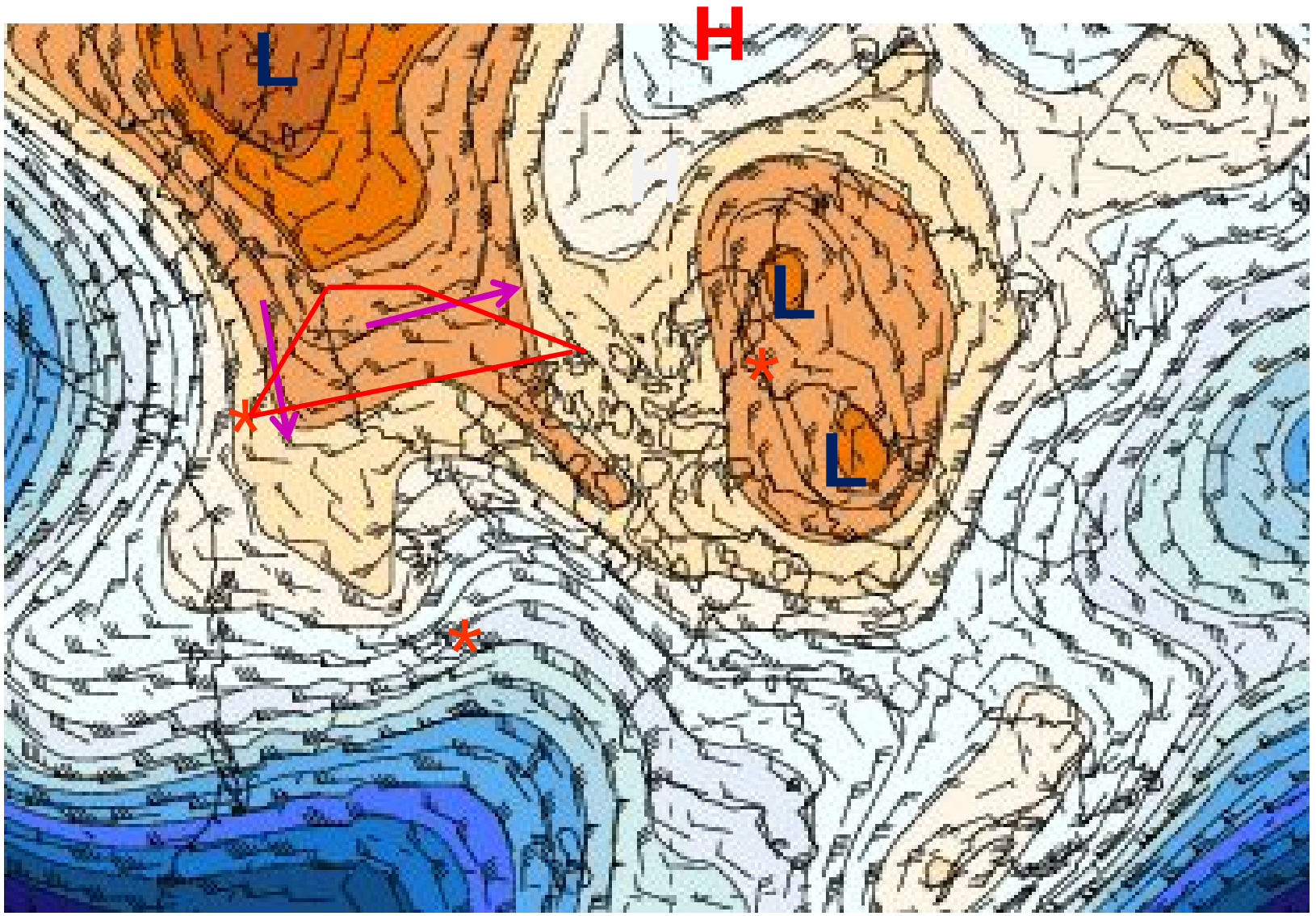
FSU WRF Forecast Valid 1800Z April 13
Sea Level Pressure



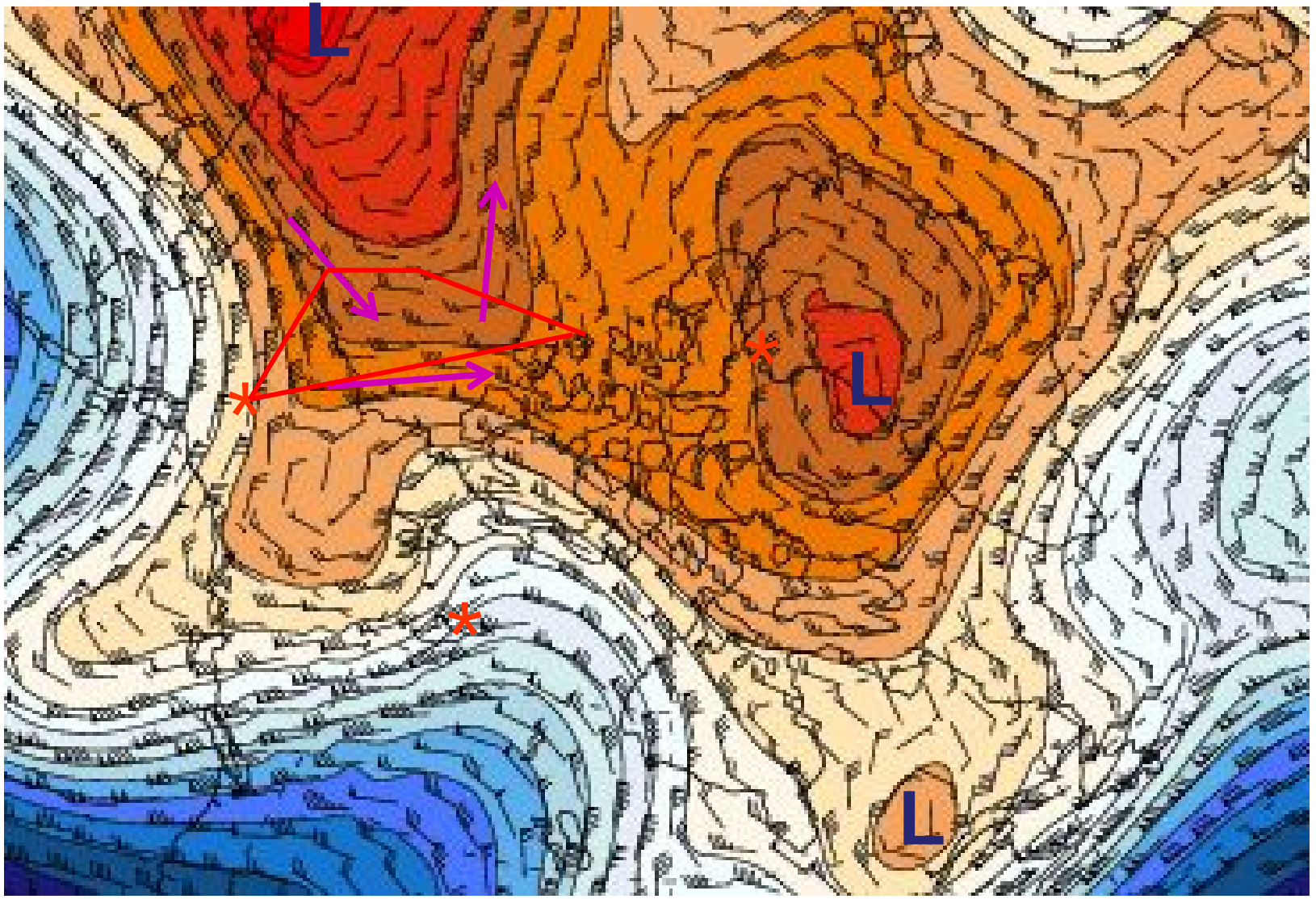
FSU WRF Forecast Valid 1800Z April 13
850 hPa Heights and Winds



FSU WRF Forecast Valid 1800Z April 13
500 hPa Heights and Winds



FSU WRF Forecast Valid 1800Z April 13
300 hPa Heights and Winds



April 13, 2008
Tropopause Height plan view

Alaska and environs

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Overview – Tropopause height – April 13 0700 AK (15Z April 13)

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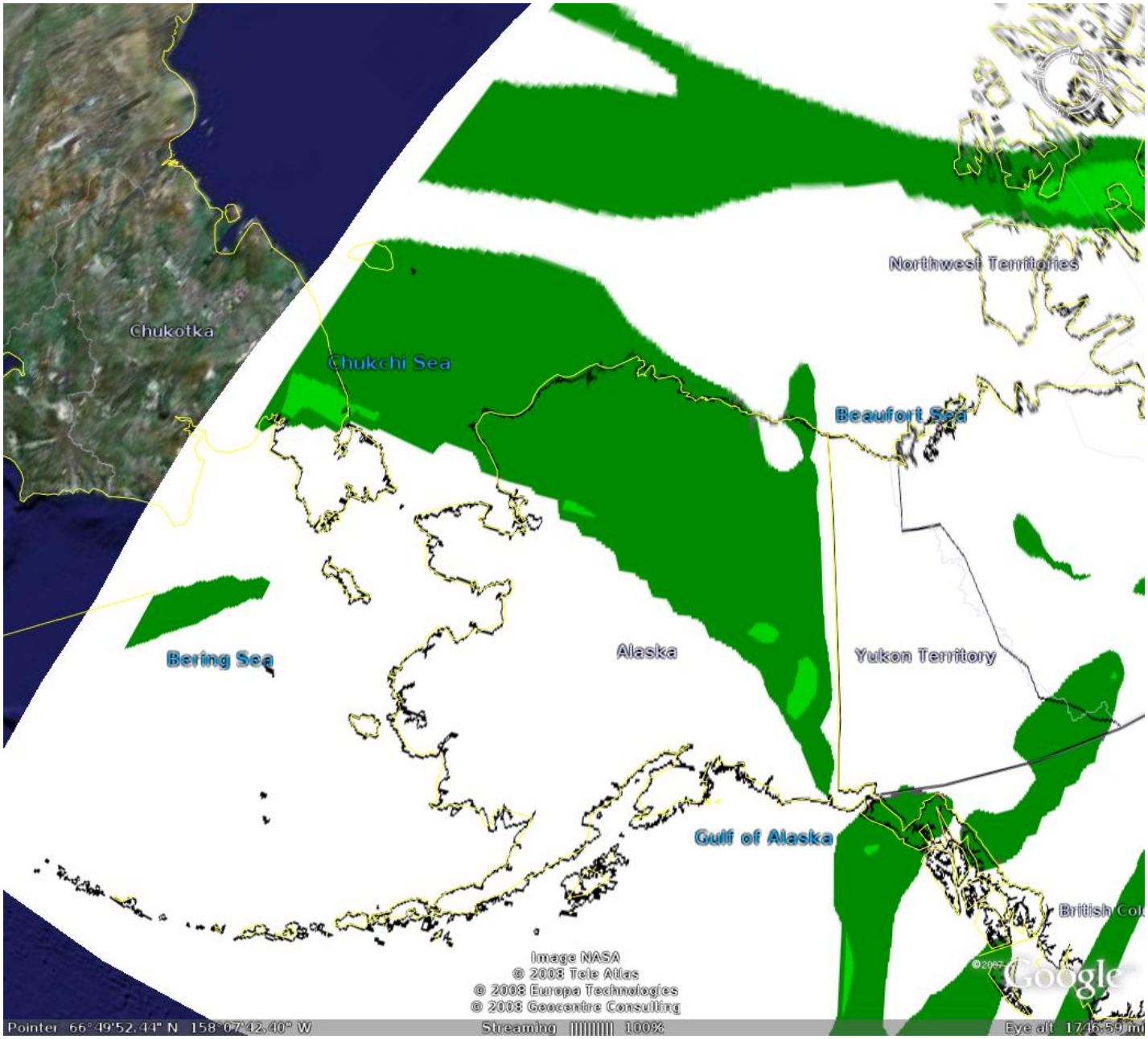
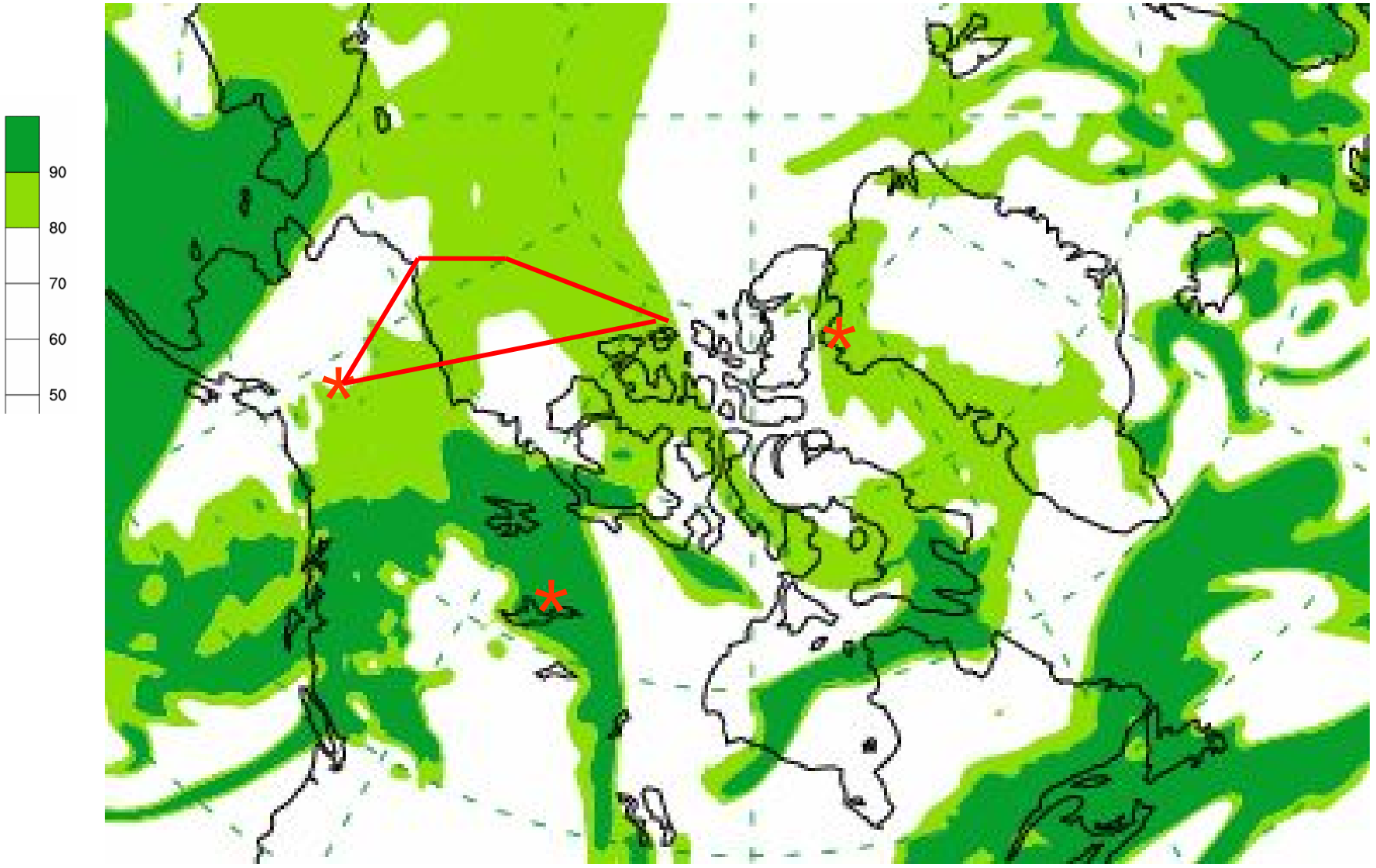
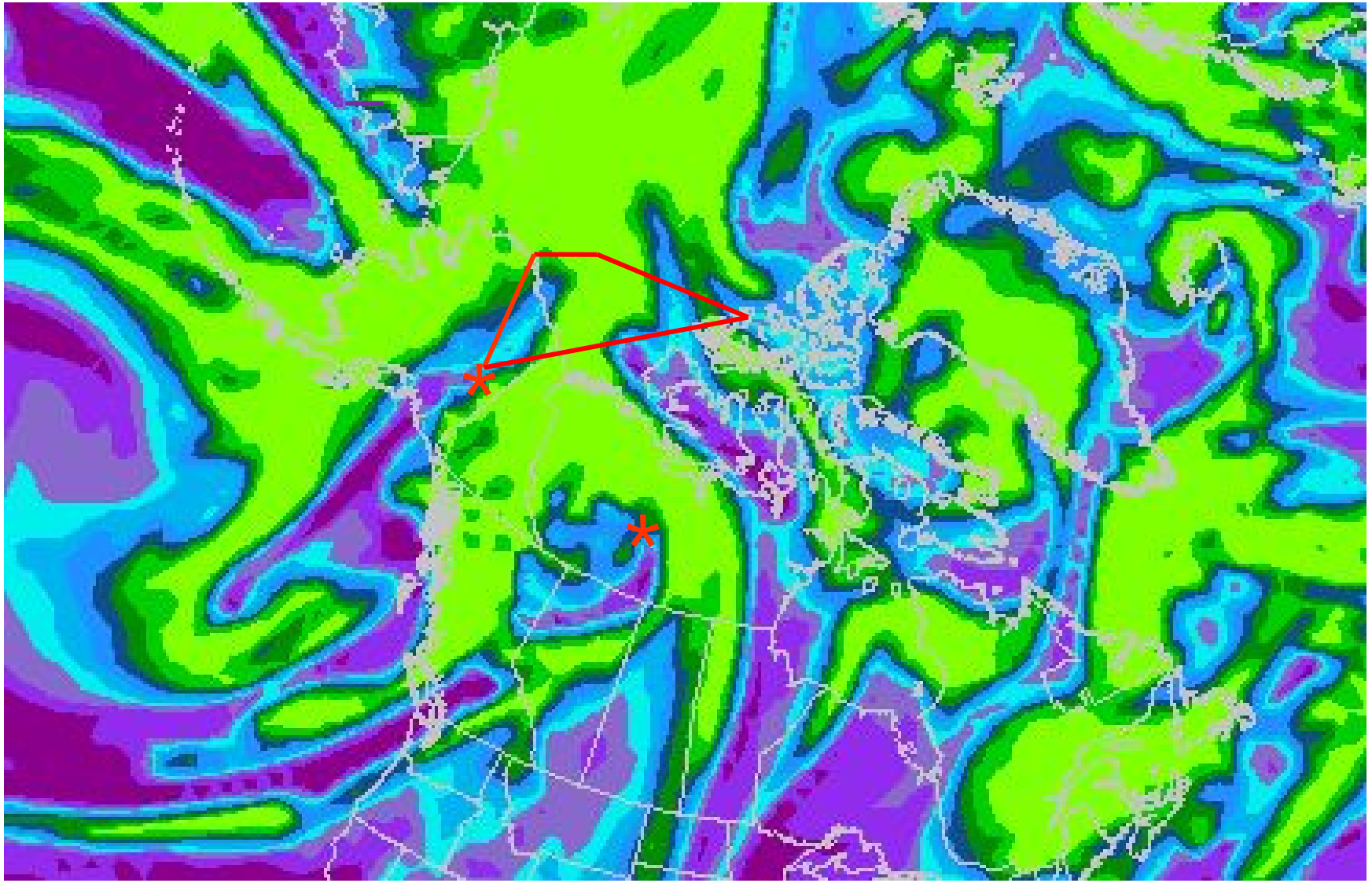


What About Clouds for Sunday??

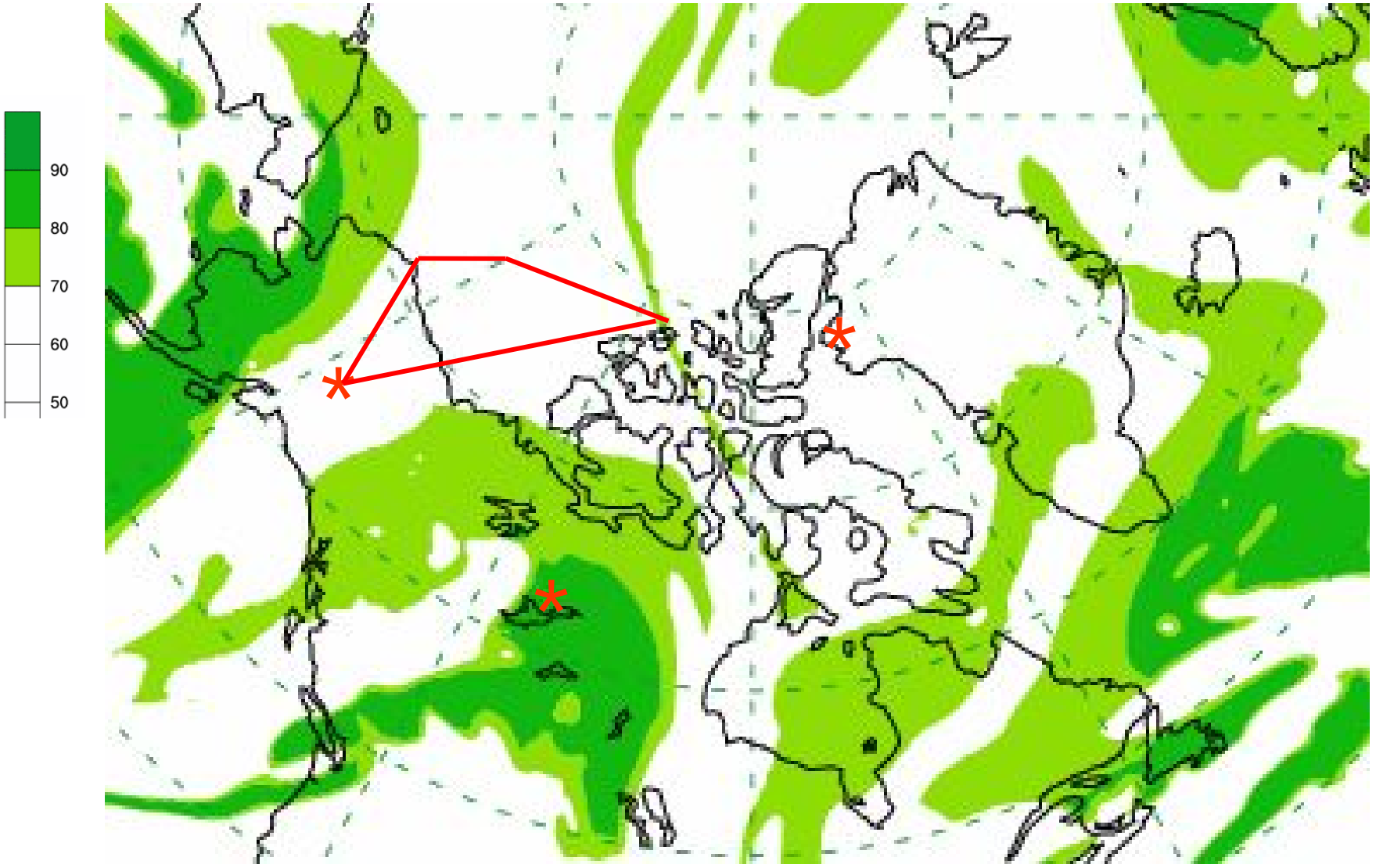
FSU WRF Relative Humidity at 850 hPa Forecast
Valid 1800 Z April 13



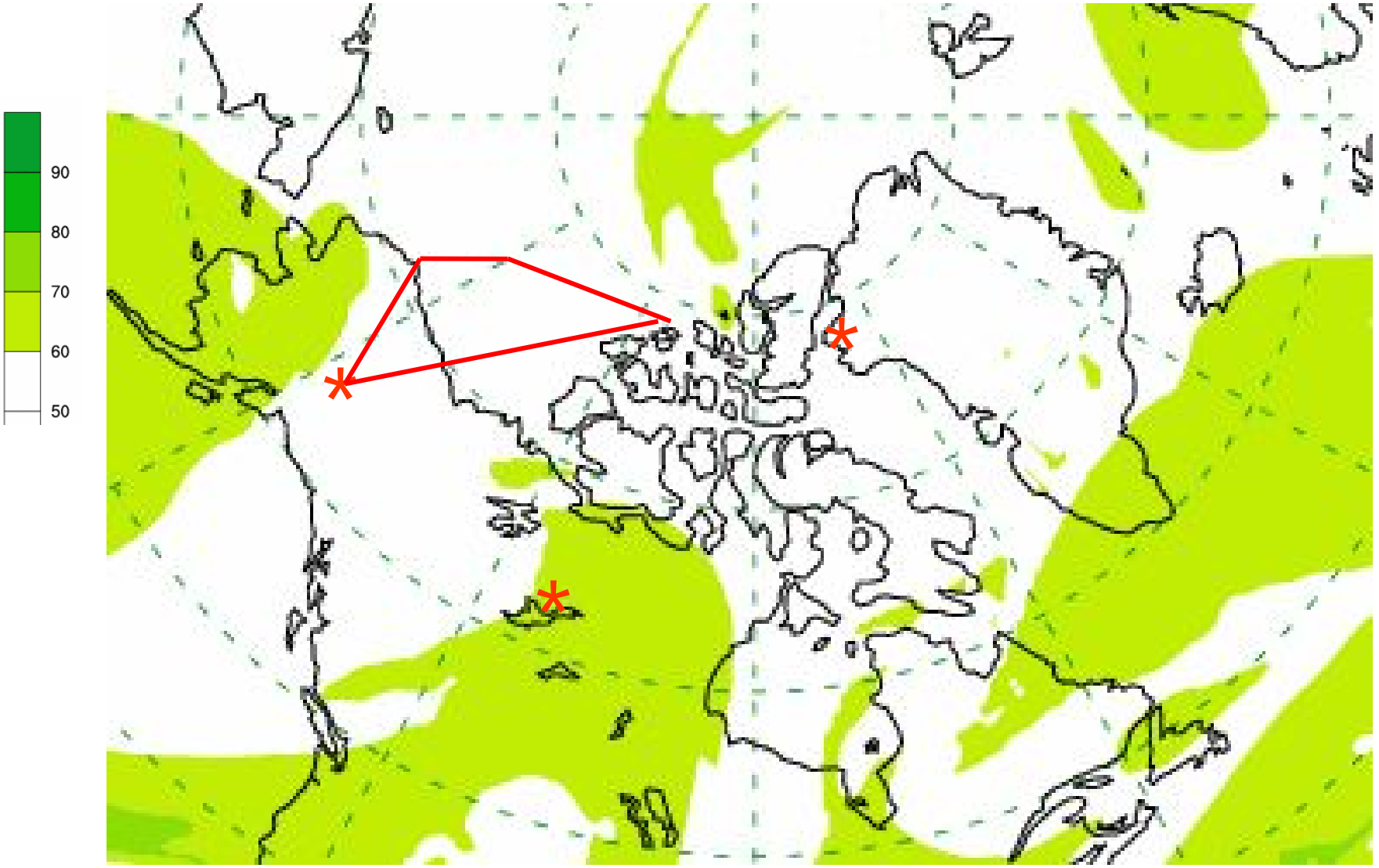
Let's Compare with GFS Forecast Valid 1800Z April 13
700 hPa Relative Humidity and Heights



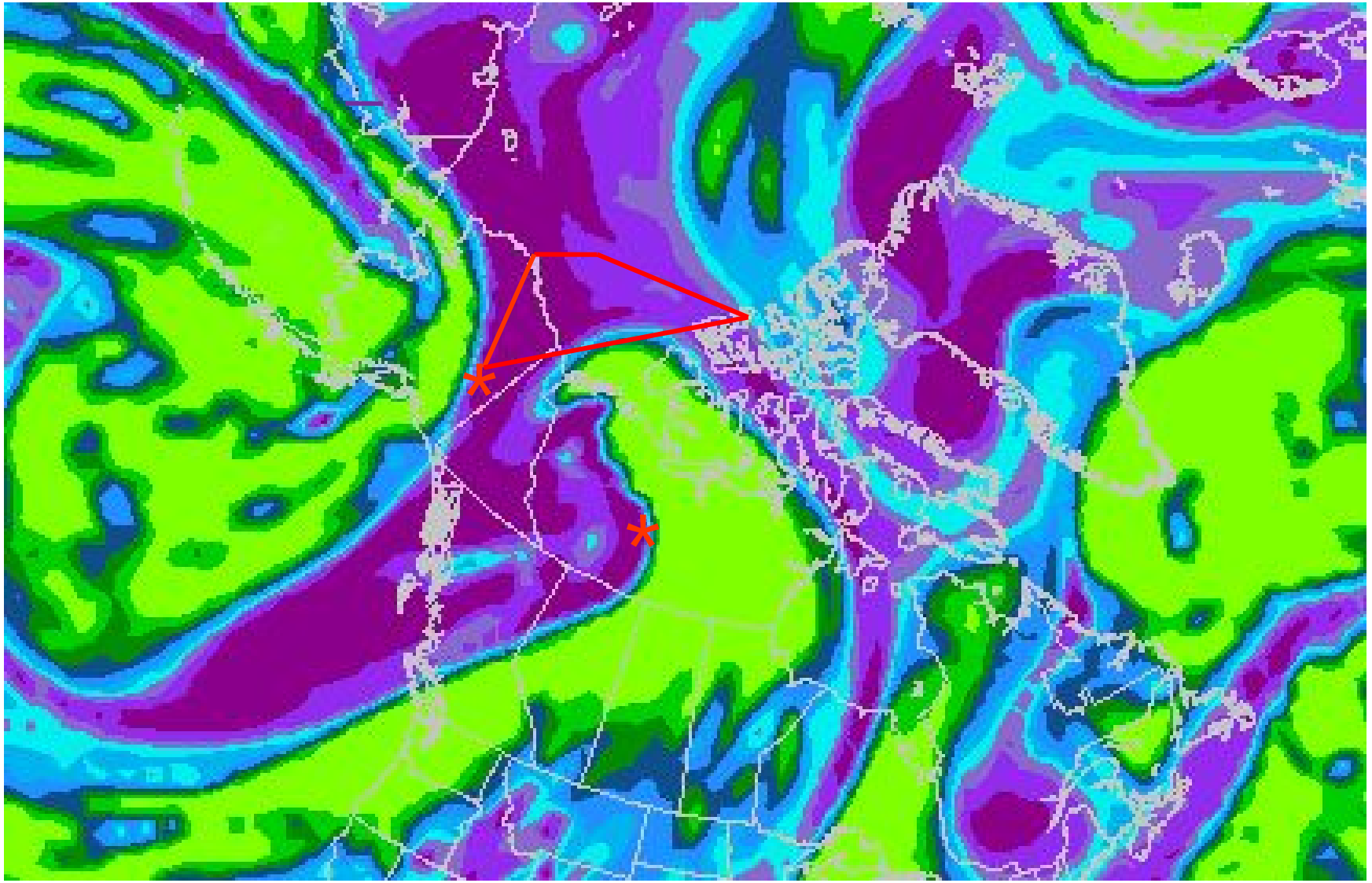
FSU WRF Relative Humidity at 500 hPa Forecast
Valid 1800 Z April 13



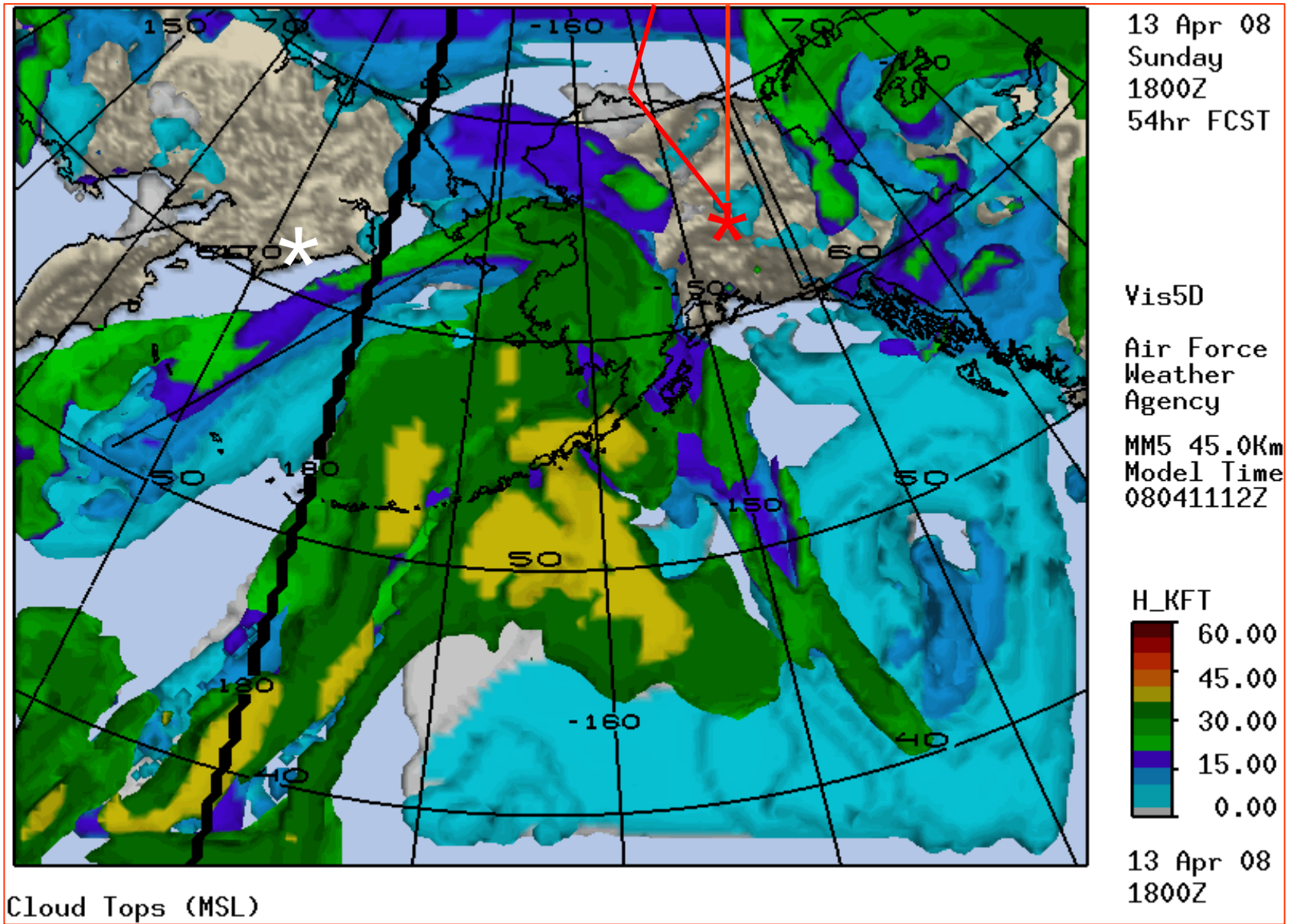
FSU WRF Relative Humidity at 300 hPa Forecast
Valid 1800 Z April 13



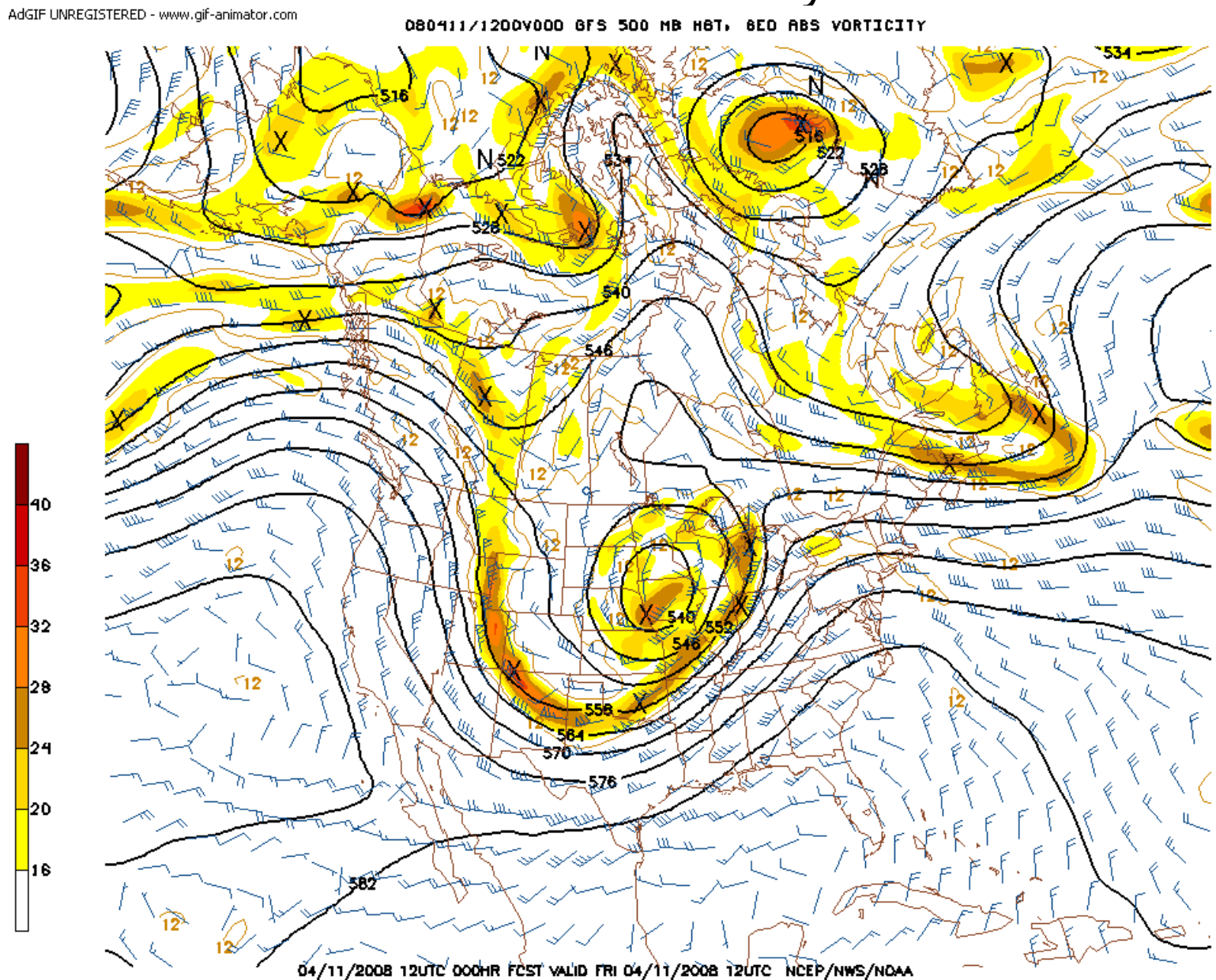
Let's Compare with GFS Forecast Valid 1800Z April 13
300 hPa Relative Humidity and Heights



Let's Compare with Air Force Cloud Cover
Valid 1800 Z April 13

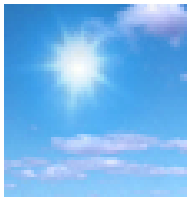


GFS Forecast next 120 hours 500 hPa Heights, Winds and Vorticity



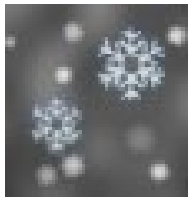
Fairbanks AK Forecast

Today



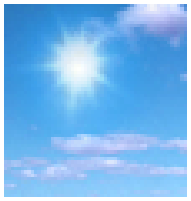
Partly
Cloudy
Hi: 28F

Tonight



Scattered
Snow
Showers
Lo: 5F

Saturday

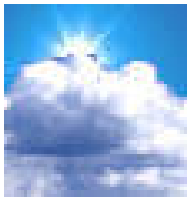


Mostly
Sunny
Hi: 35F

Sat. Night

Partly
Cloudy
Lo: 10F

Sunday

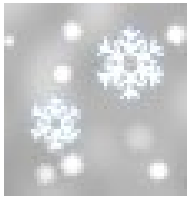


Mostly
Cloudy
Hi: 40F

Sun. Night

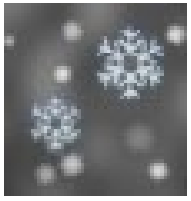
Mostly
Cloudy
Lo: 20F

Monday



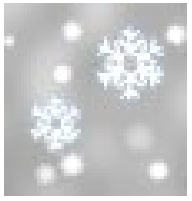
Snow
Likely
Hi: 36F

Mon. Night



Snow
Likely
Lo: 20F

Tuesday



Chance
of Snow
Hi: 28F

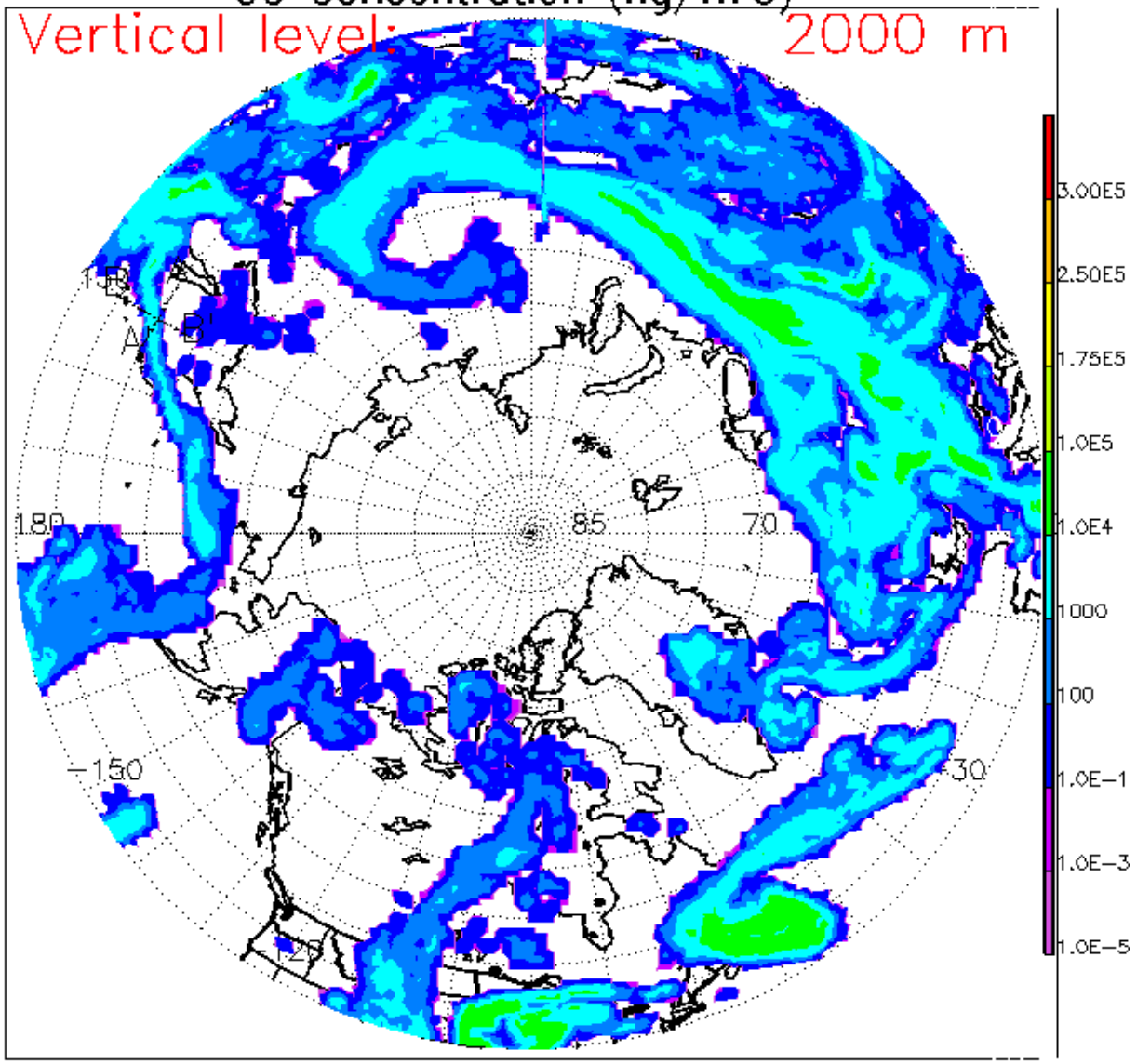
FSU Runs Flexpart

- Met data from FSU WRF run (25 km grid)
- Top10% of emissions are tracked
- 7 day runs through fly day (April 13)
- Color coded by concentration
- Fire Data Not Included

AdGIF UNREGISTERED - www.gif-animator.com

2200 April 11, 2008

CO Concentration (ng/m^3)



Florida State University Meteorology

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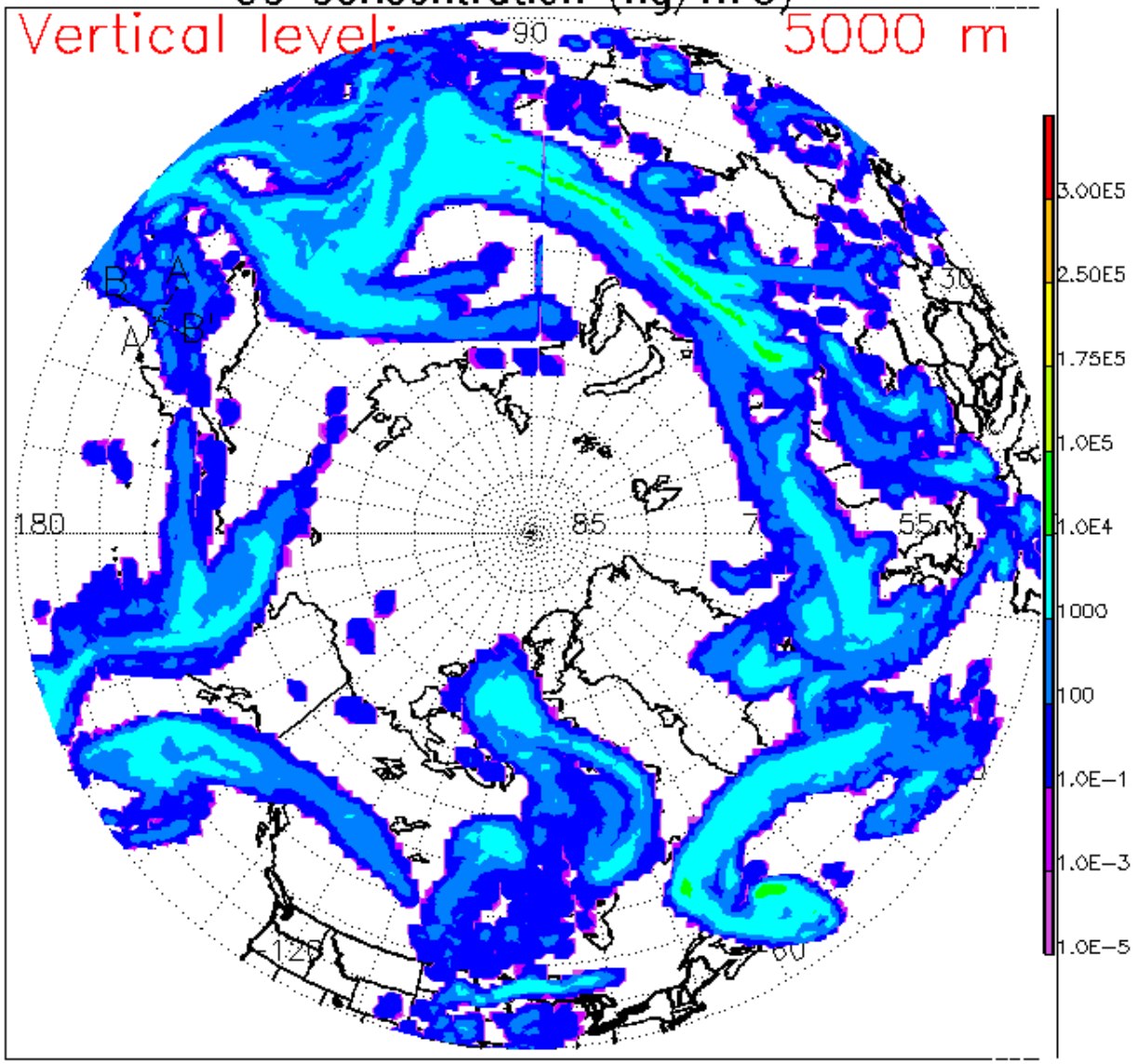

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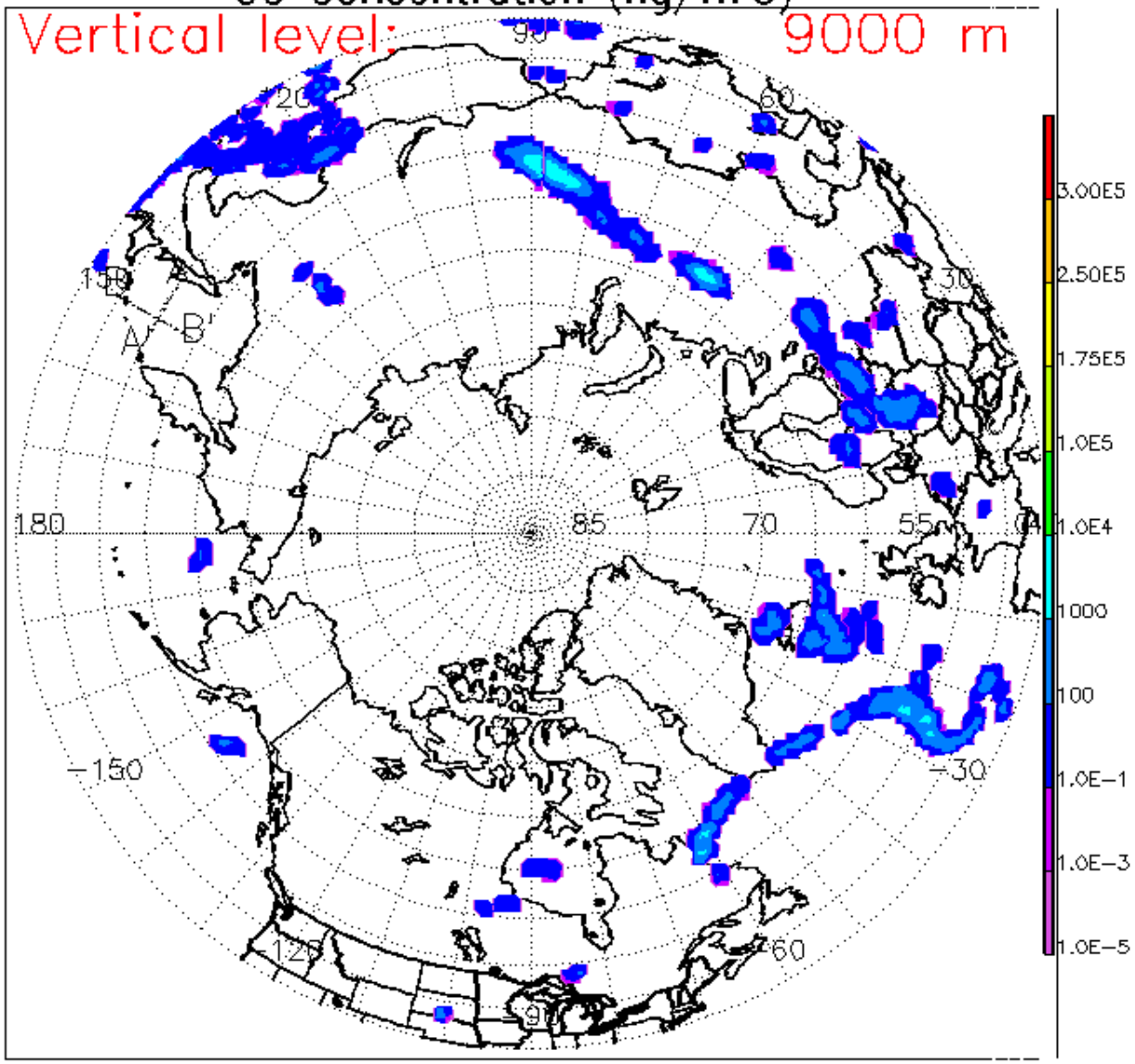

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