Flight Day Conditions

April 15-17 ,2008

Henry Fuelberg
Andy Latto

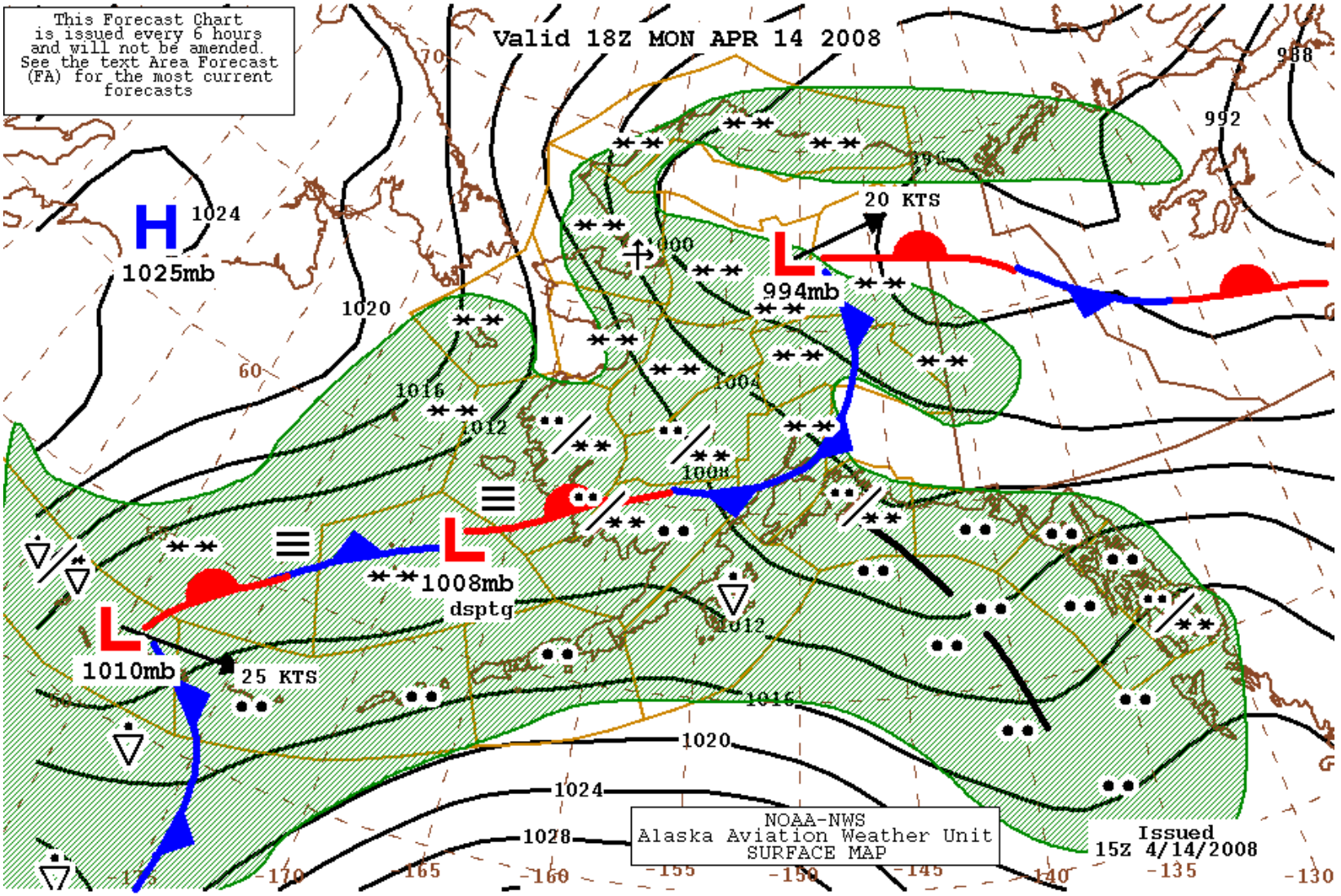
"Your Eyes to the Skies"

Thanks to Dr. David Atkinson of UAF

UAF™
UNIVERSITY OF ALASKA
FAIRBANKS

Current Conditions

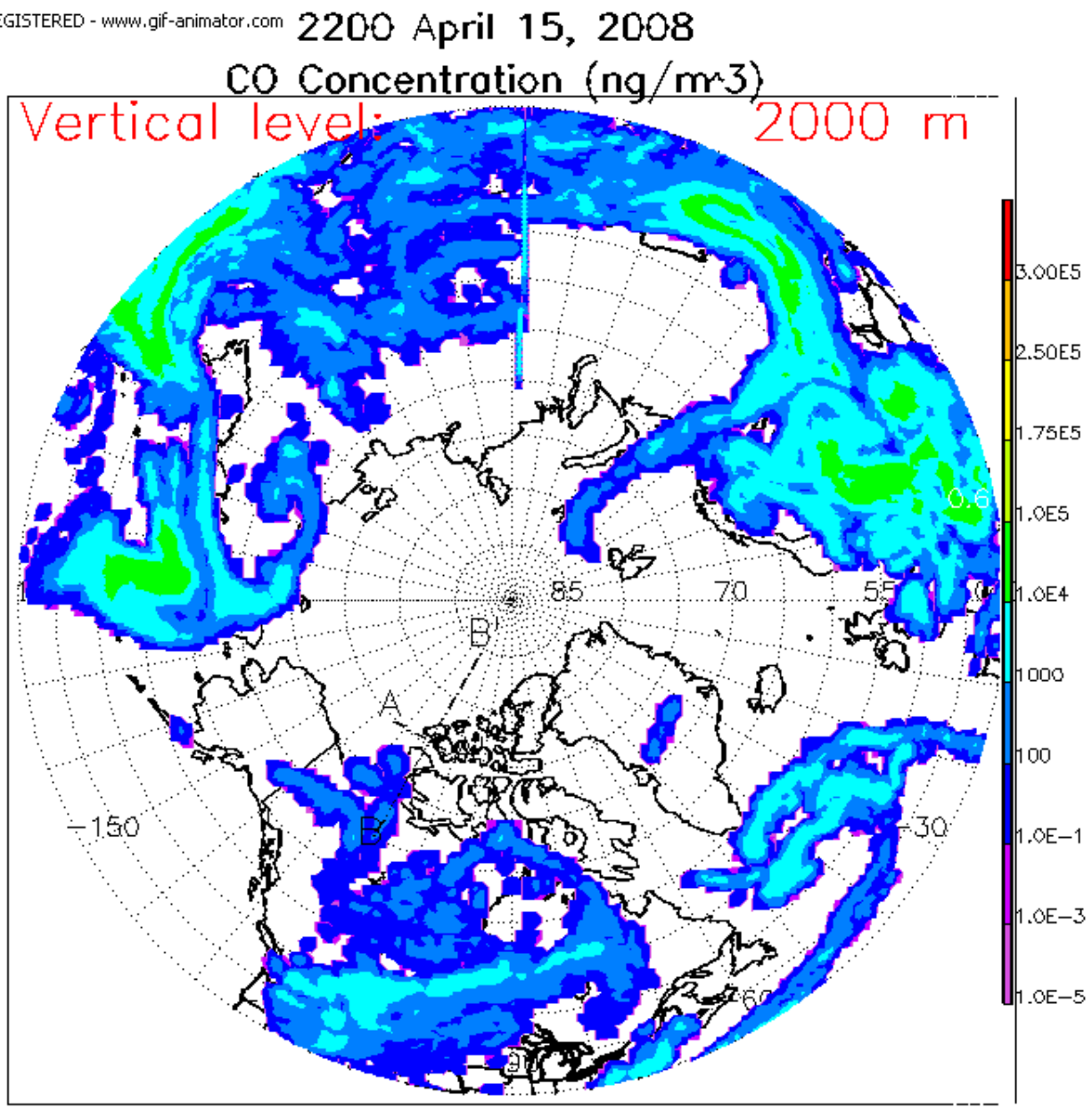
Current Surface Analysis



FSU Runs Flexpart

- Met data from FSU WRF run (25 km grid)
- Top 10% of emissions are tracked
- 7 day runs through fly day (Ending 2 pm ADT April 17)
- Color coded by concentration
- Fire Data Not Included

AdGIF UNREGISTERED - www.gif-animator.com



Florida State University Meteorology

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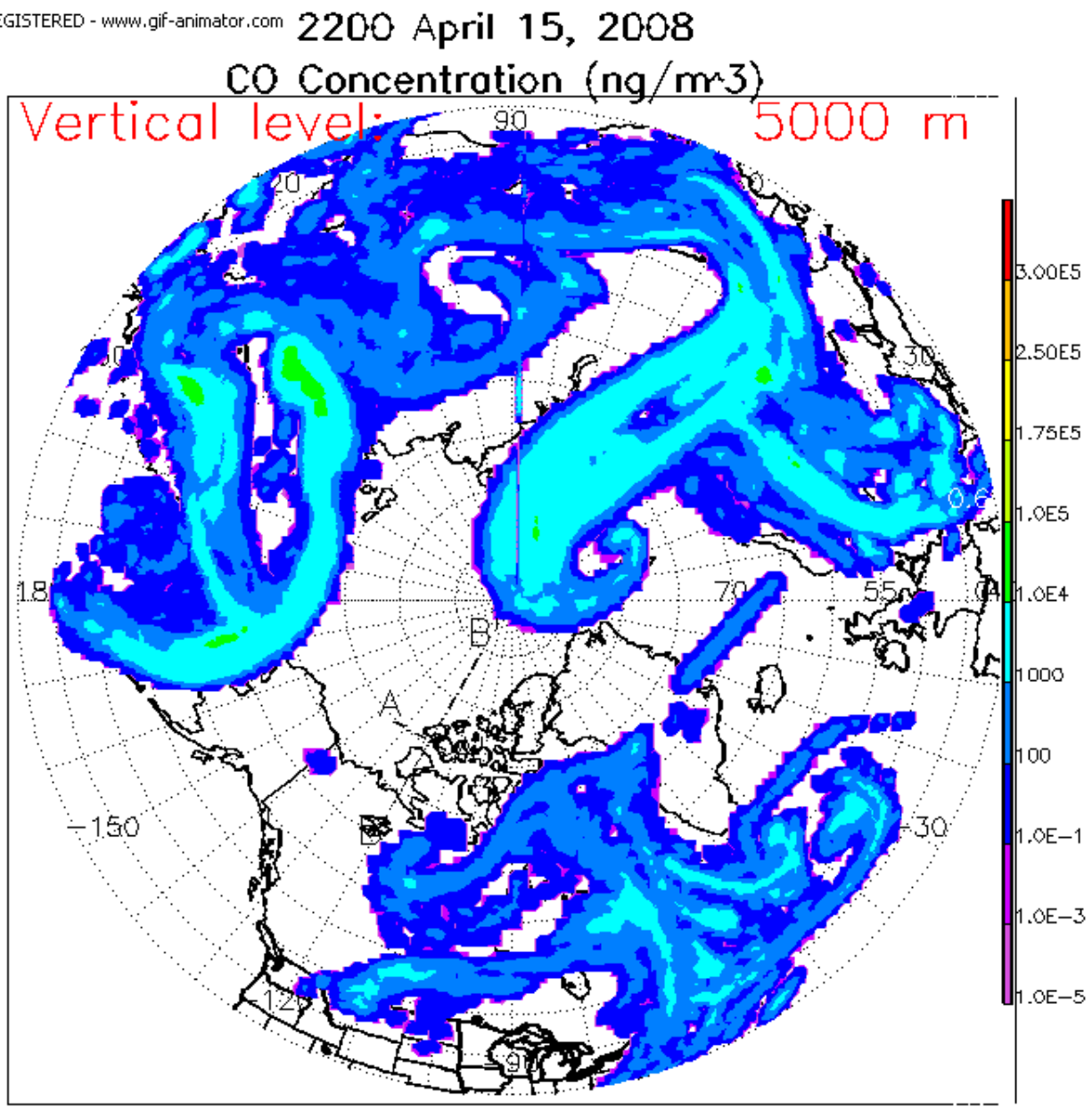

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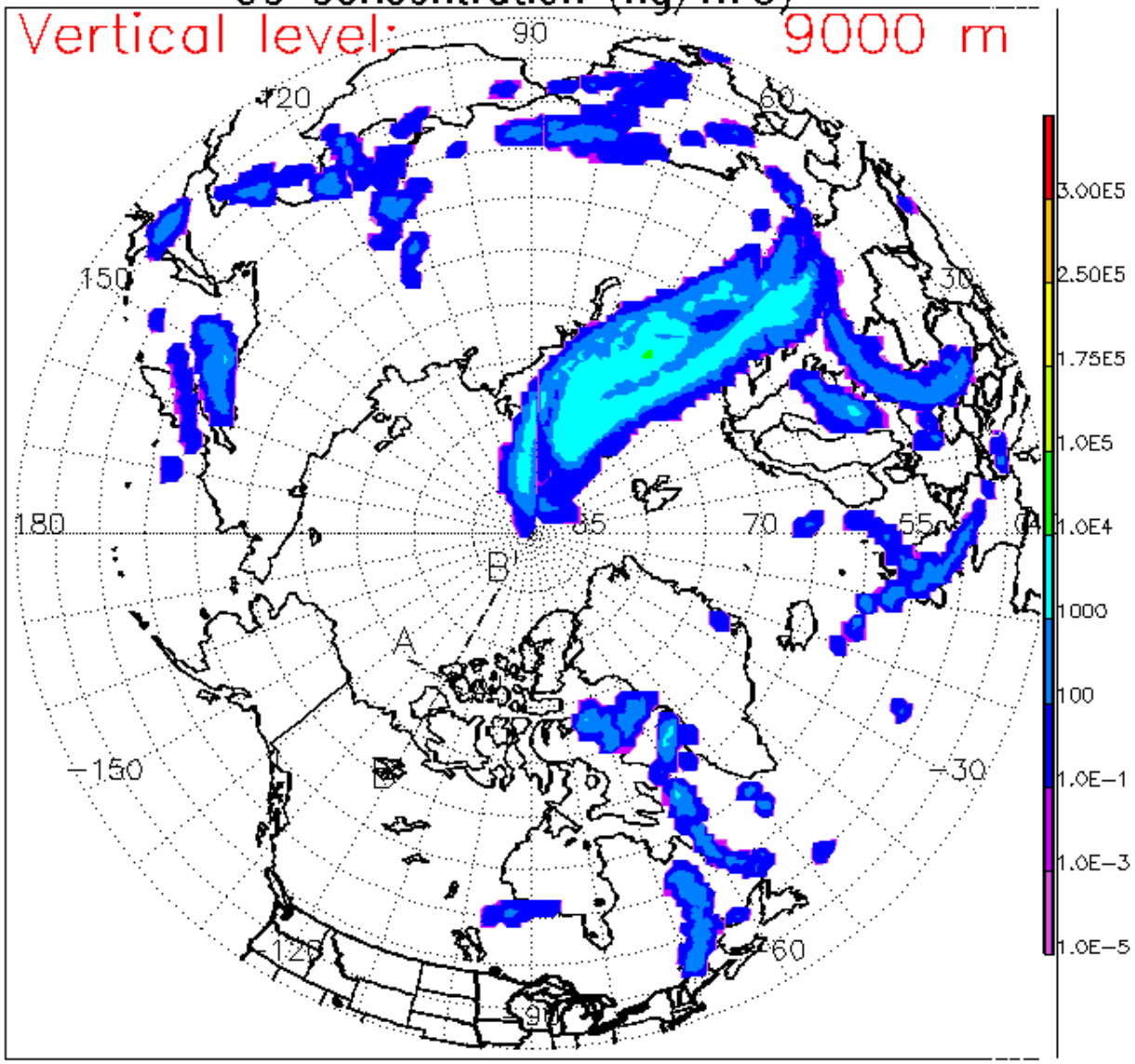
2200 April 15, 2008

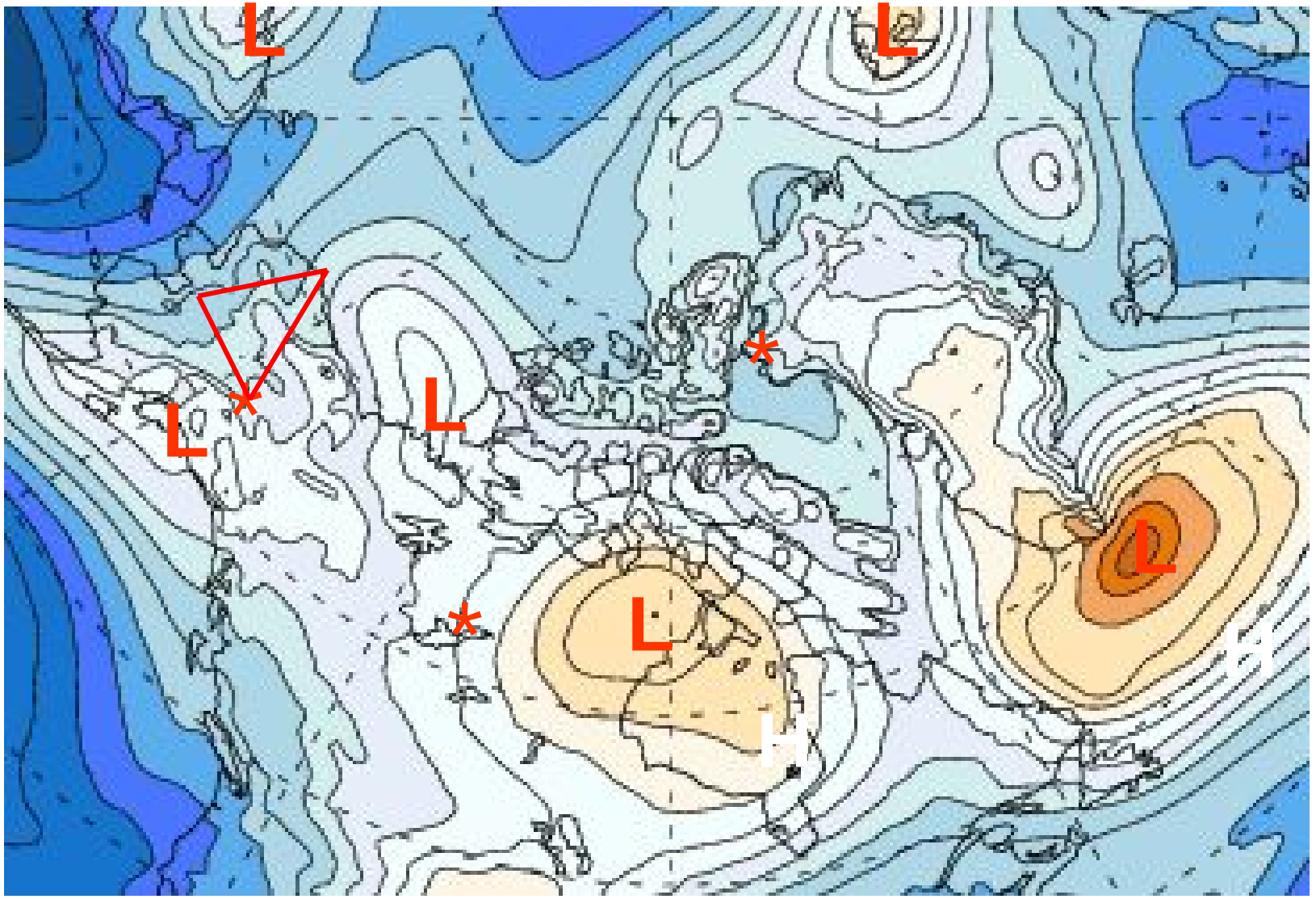
CO Concentration (ng/m^3)



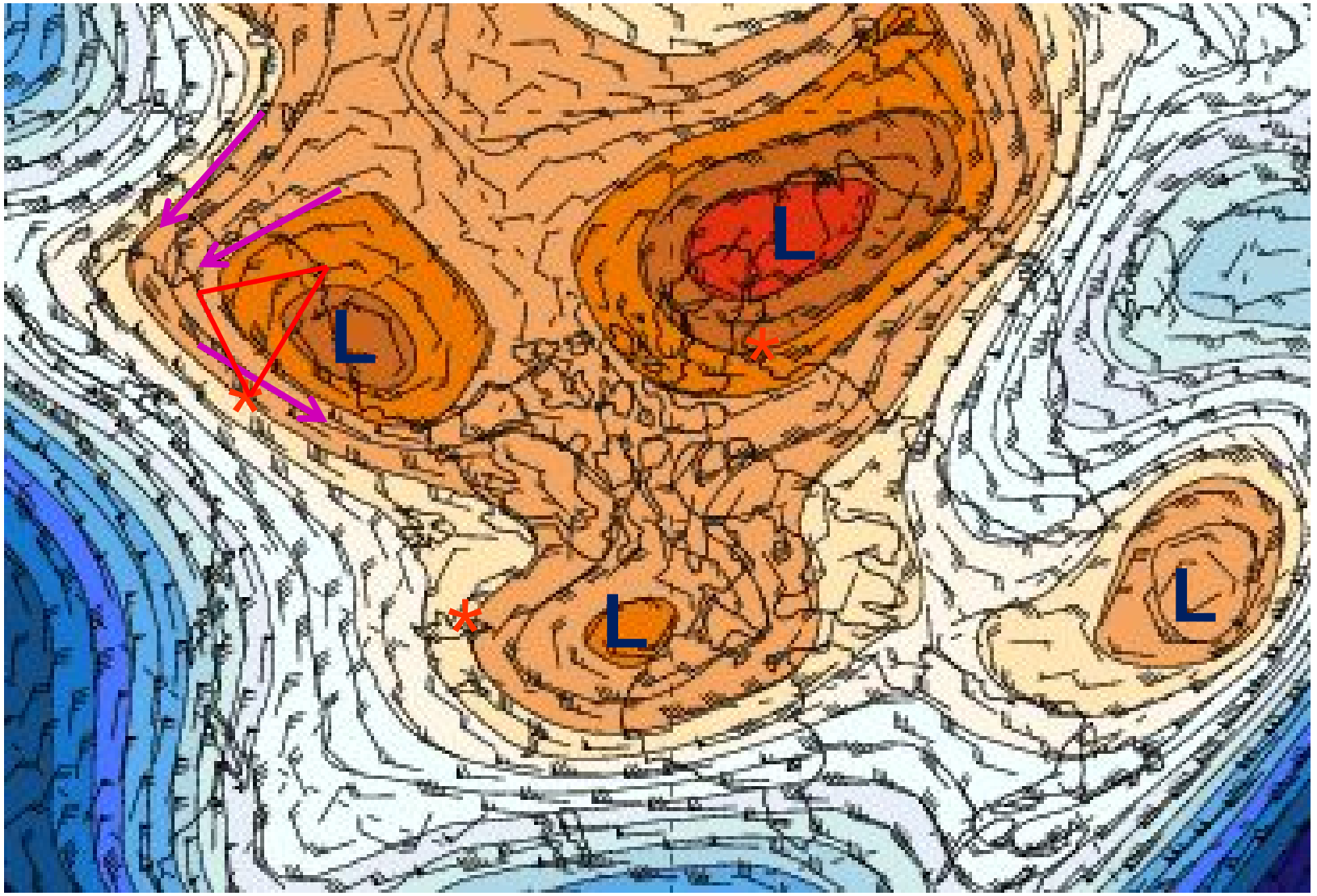
Florida State University Meteorology

Forecast For Tuesday

FSU WRF Forecast Valid 1800 Z April 15
Sea Level Pressure



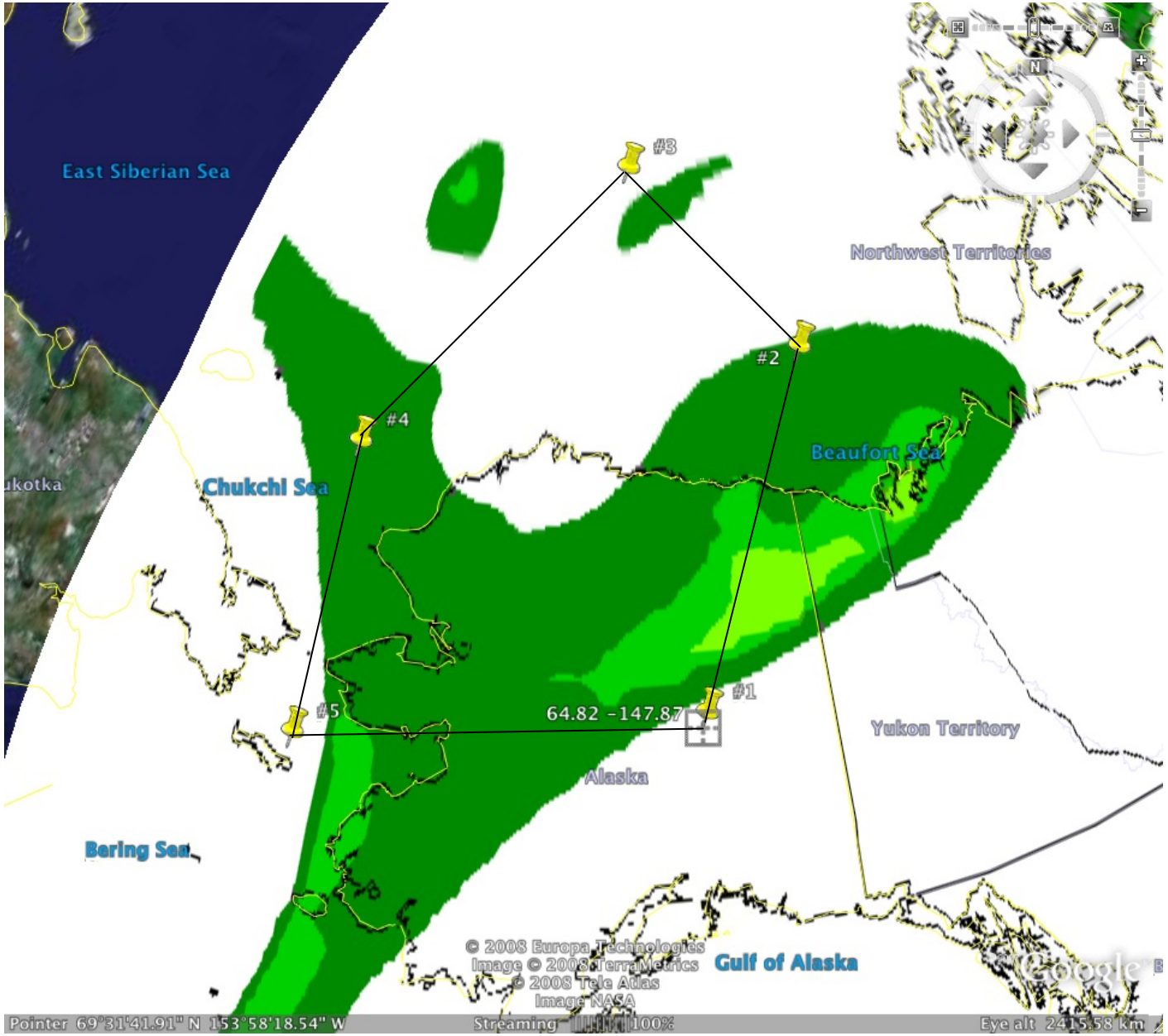
FSU WRF Forecast Valid 1800 Z April 15
500 hPa Heights and Winds



Overview – Tropopause height – April 15 1000 AK (18Z April 15)

Tropopause height:

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

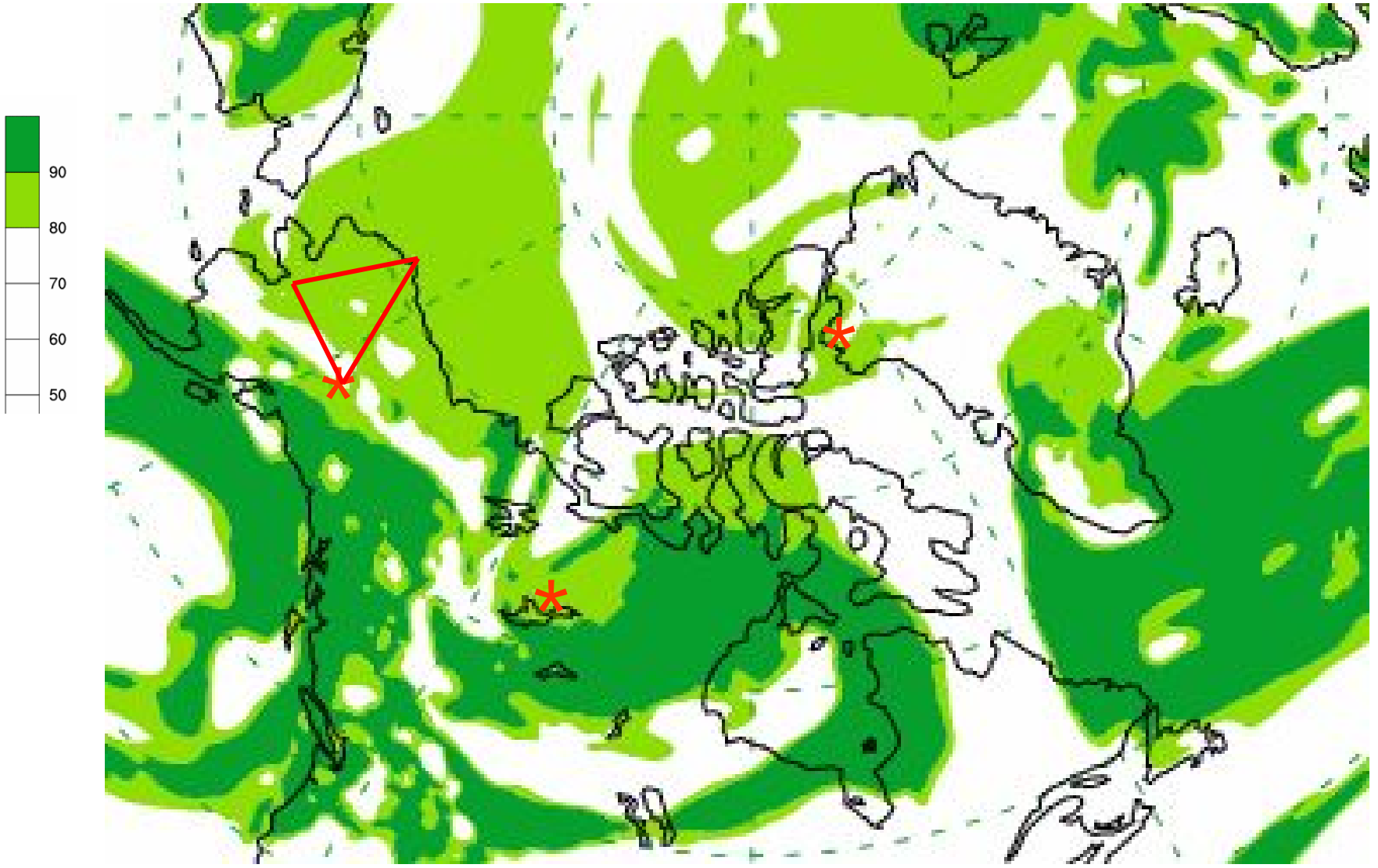


UNIVERSITY OF ALASKA FAIRBANKS

Courtesy of David Atkinson

What About Clouds for Tuesday??

FSU WRF Relative Humidity at 850 hPa Forecast
Valid 1800 Z April 15



FSU WRF Relative Humidity at 500 hPa Forecast
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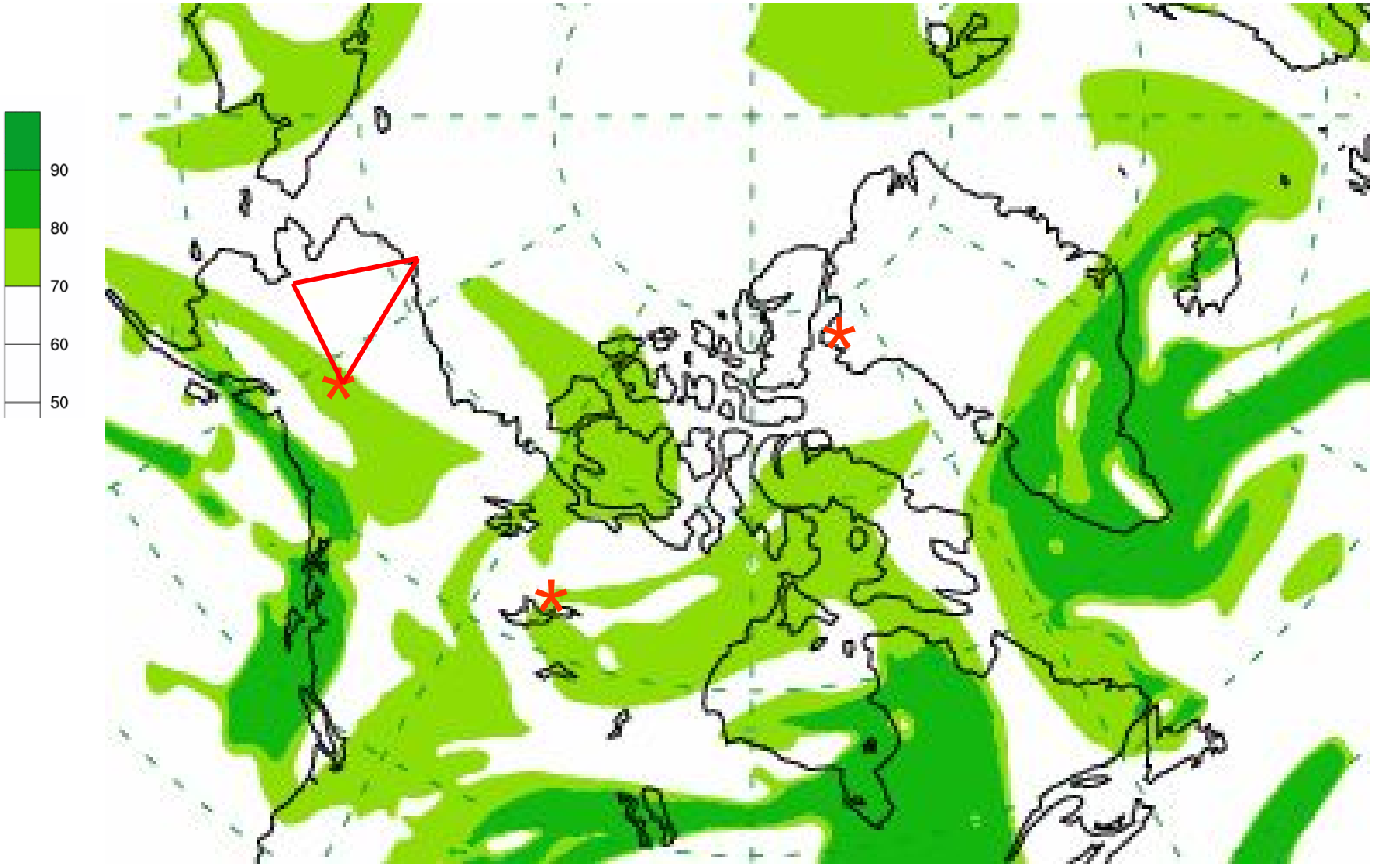
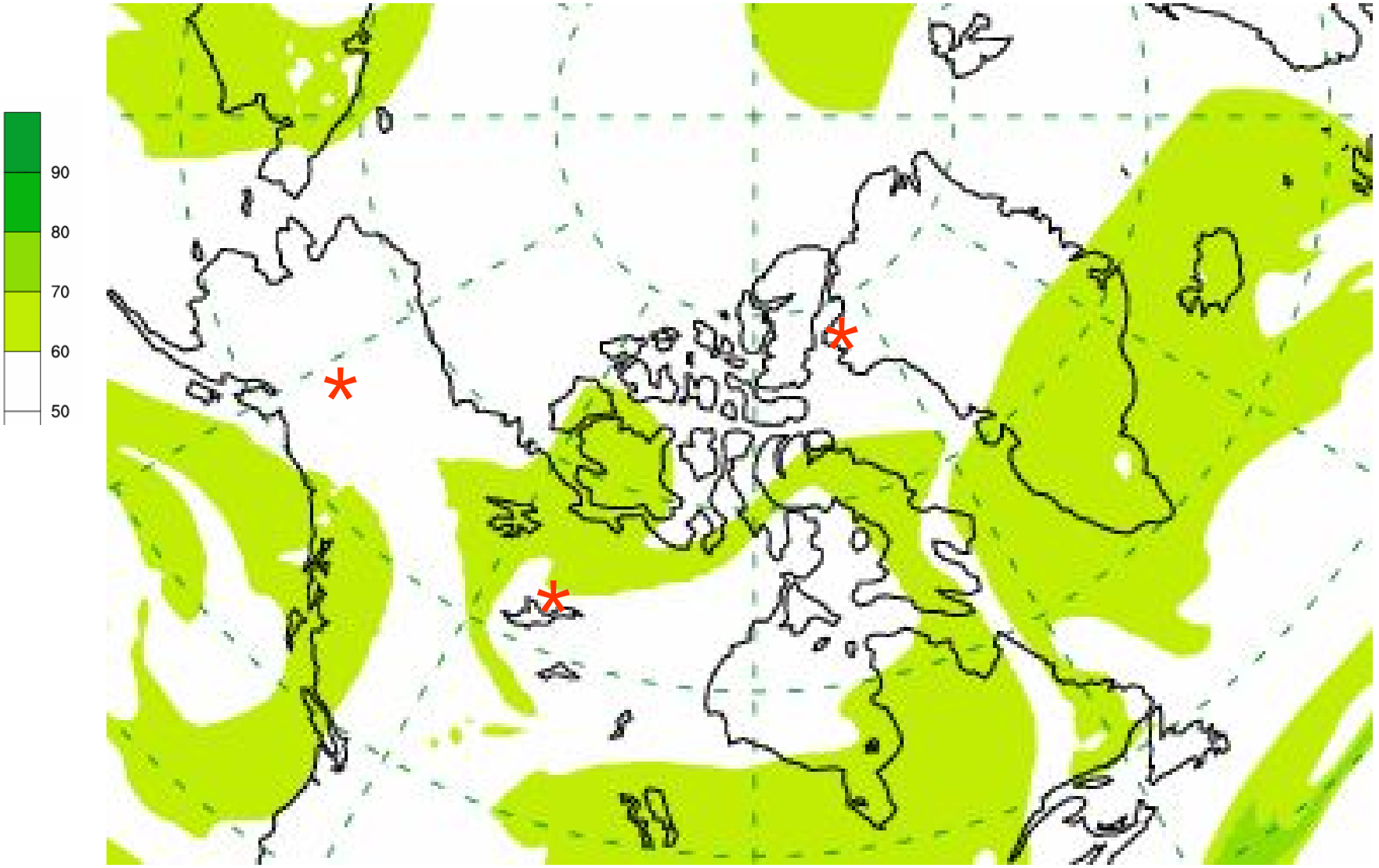
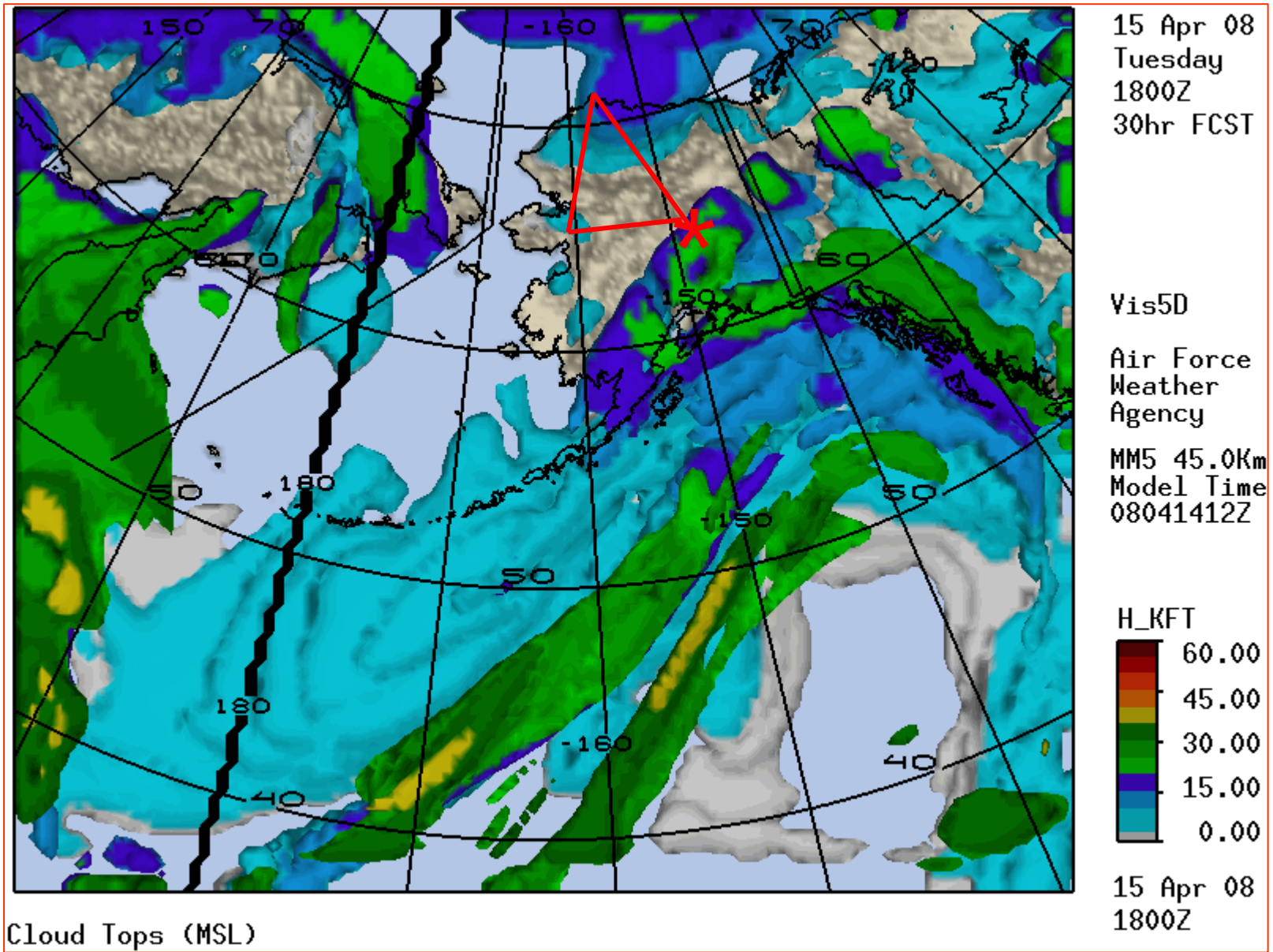


FSU WRF Relative Humidity at 300 hPa Forecast
Valid 1800 Z April 15



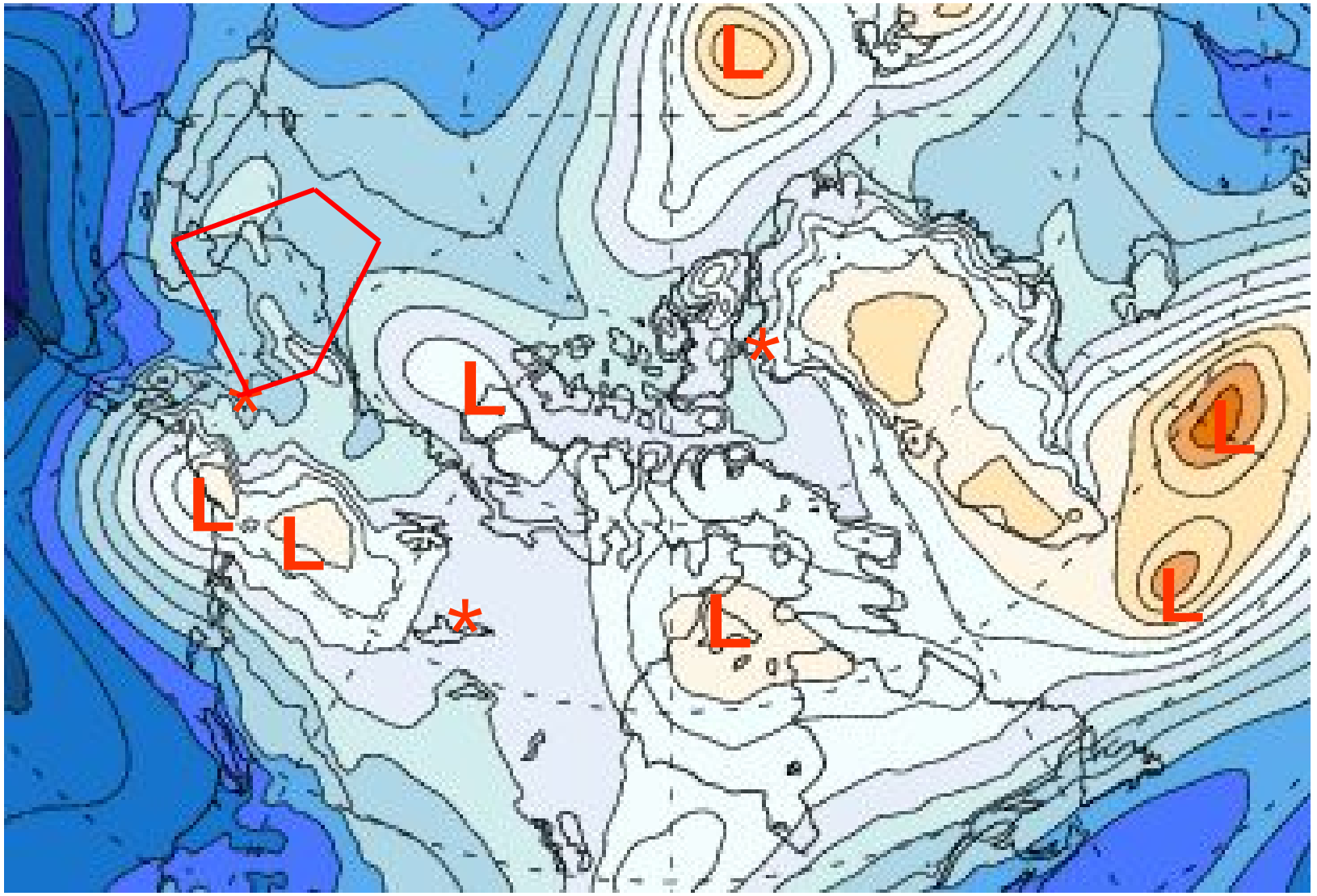
Let's Compare with Air Force Cloud Tops

Valid 1800 Z April 15

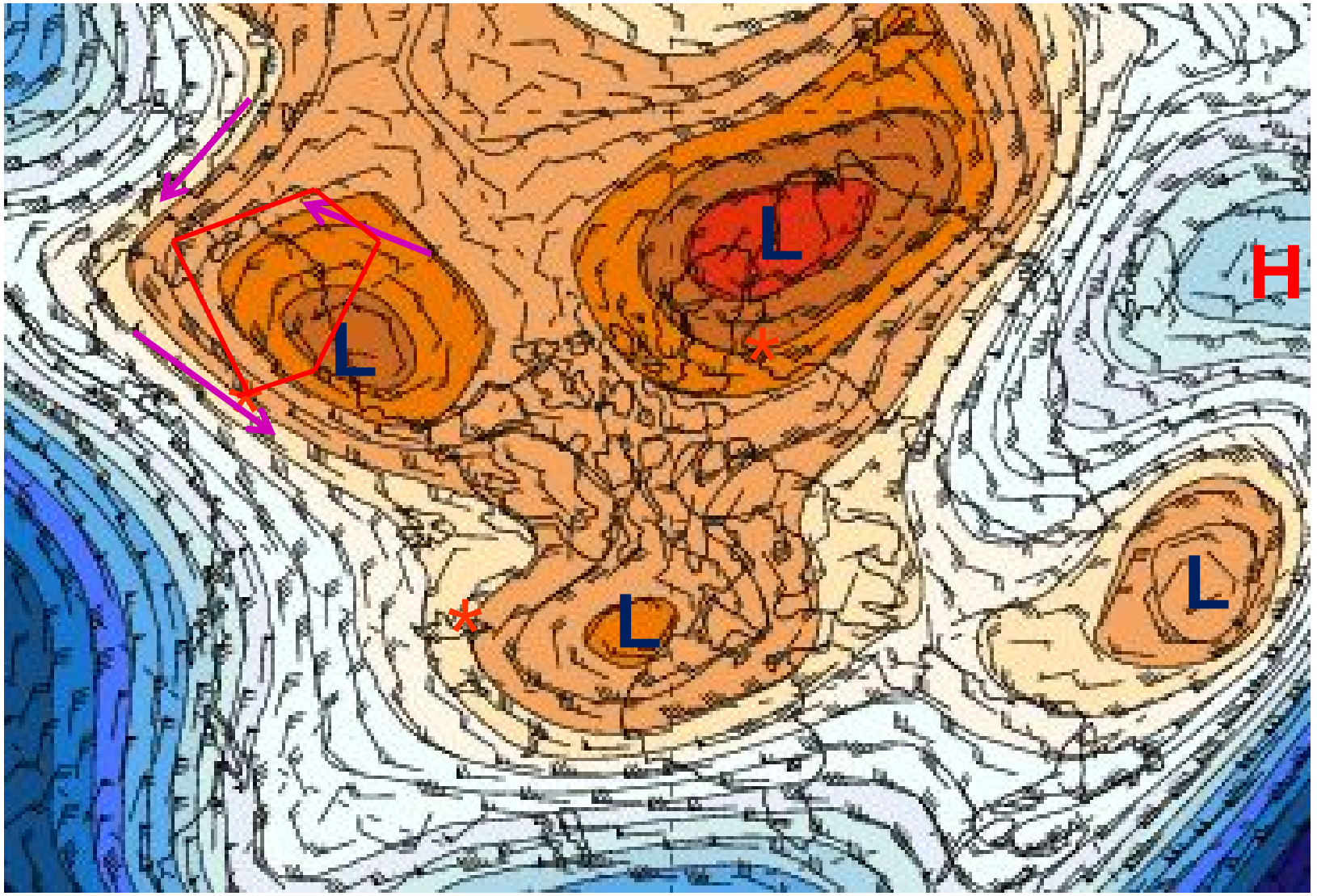


Forecast For Wednesday

FSU WRF Forecast Valid 1800 Z April 16
Sea Level Pressure



FSU WRF Forecast Valid 1800 Z April 16
500 hPa Heights and Winds



Overview – Tropopause height – April 16 1000 AK (18Z April 16)

Tropopause height:

- 400mb – 500mb
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- 550mb – 600mb
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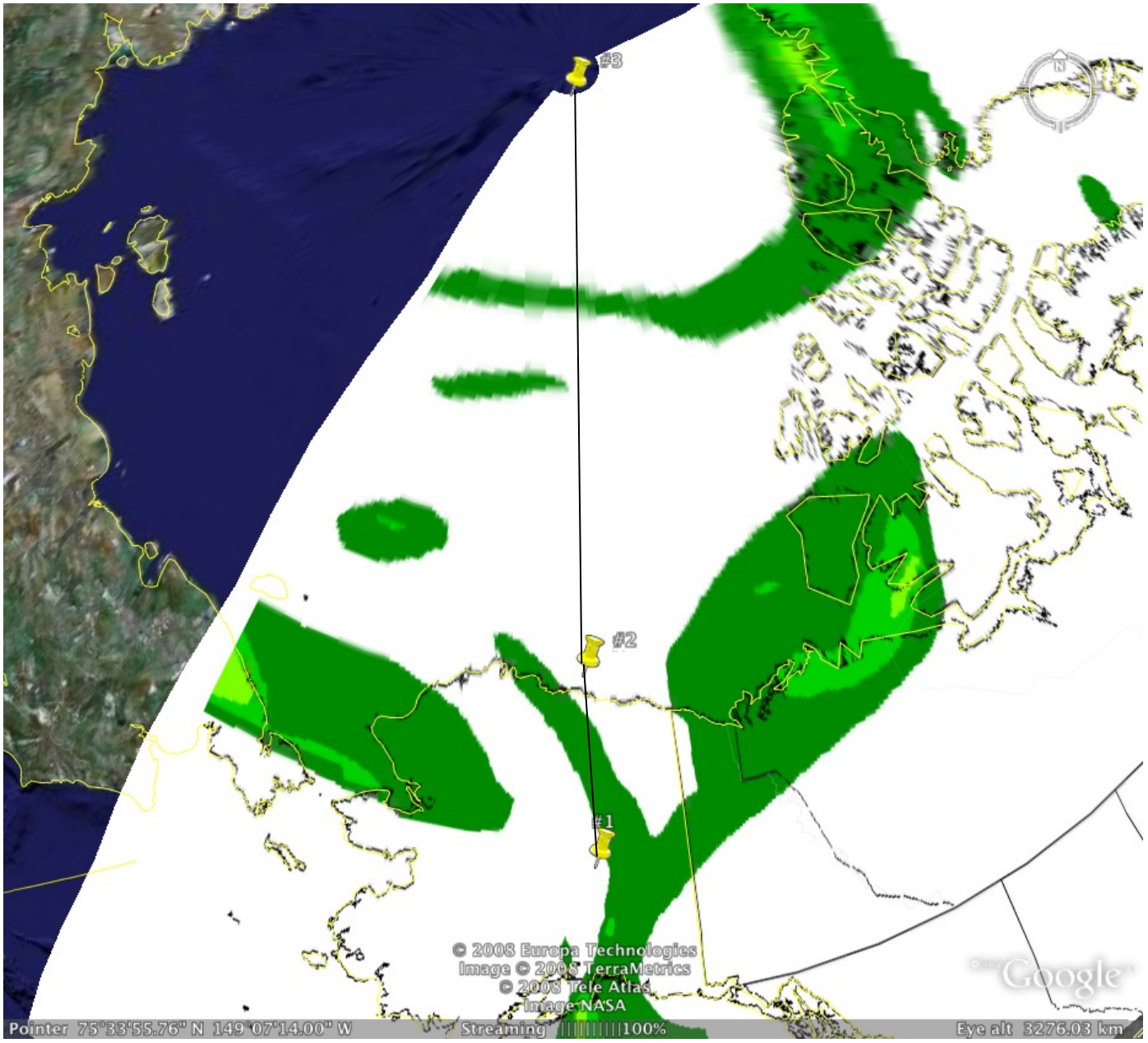

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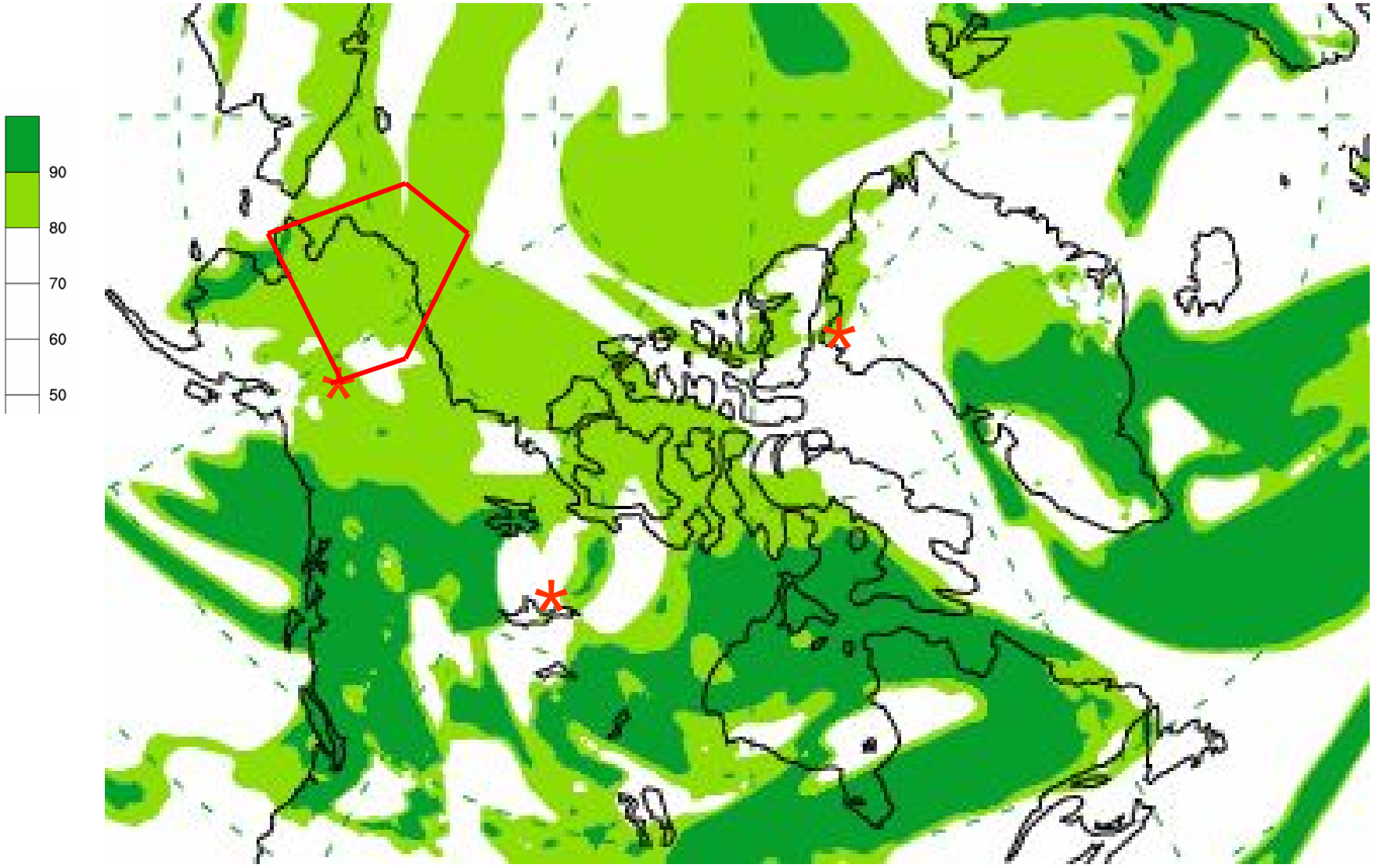
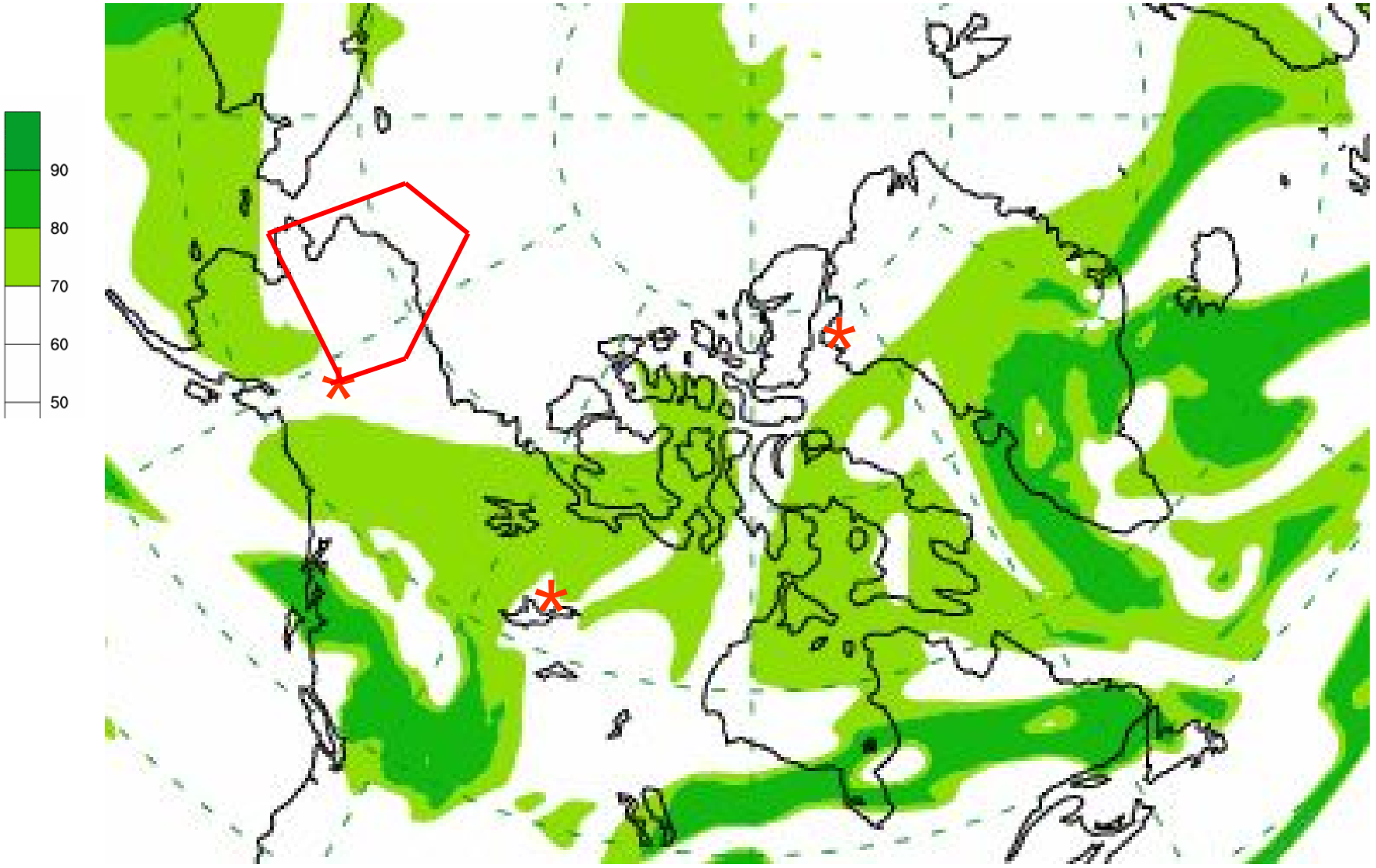
Courtesy of David Atkinson

What About Clouds for Wednesday??

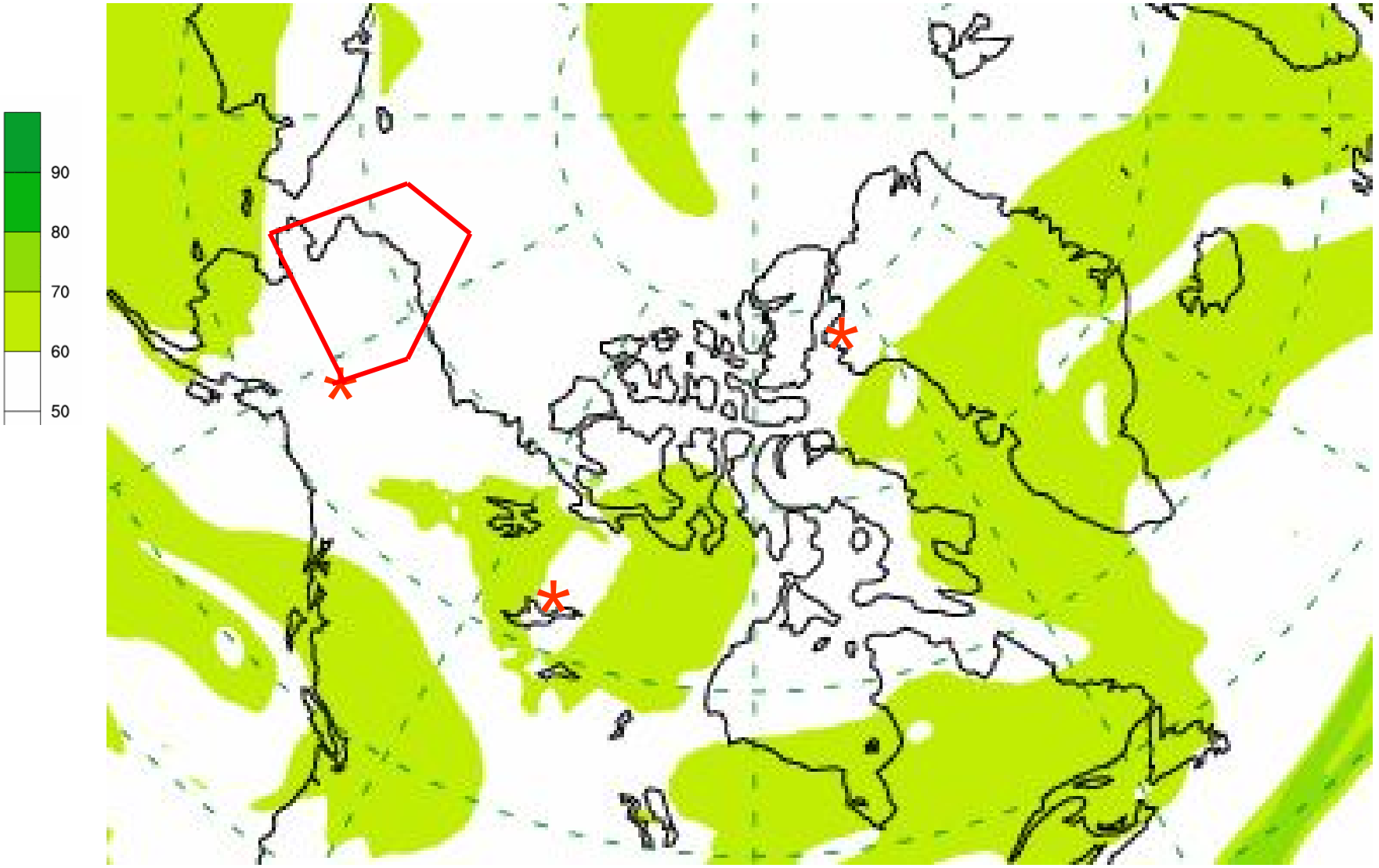
FSU WRF Relative Humidity at 850 hPa Forecast
Valid 1800 Z April 16



FSU WRF Relative Humidity at 500 hPa Forecast
Valid 1800 Z April 16

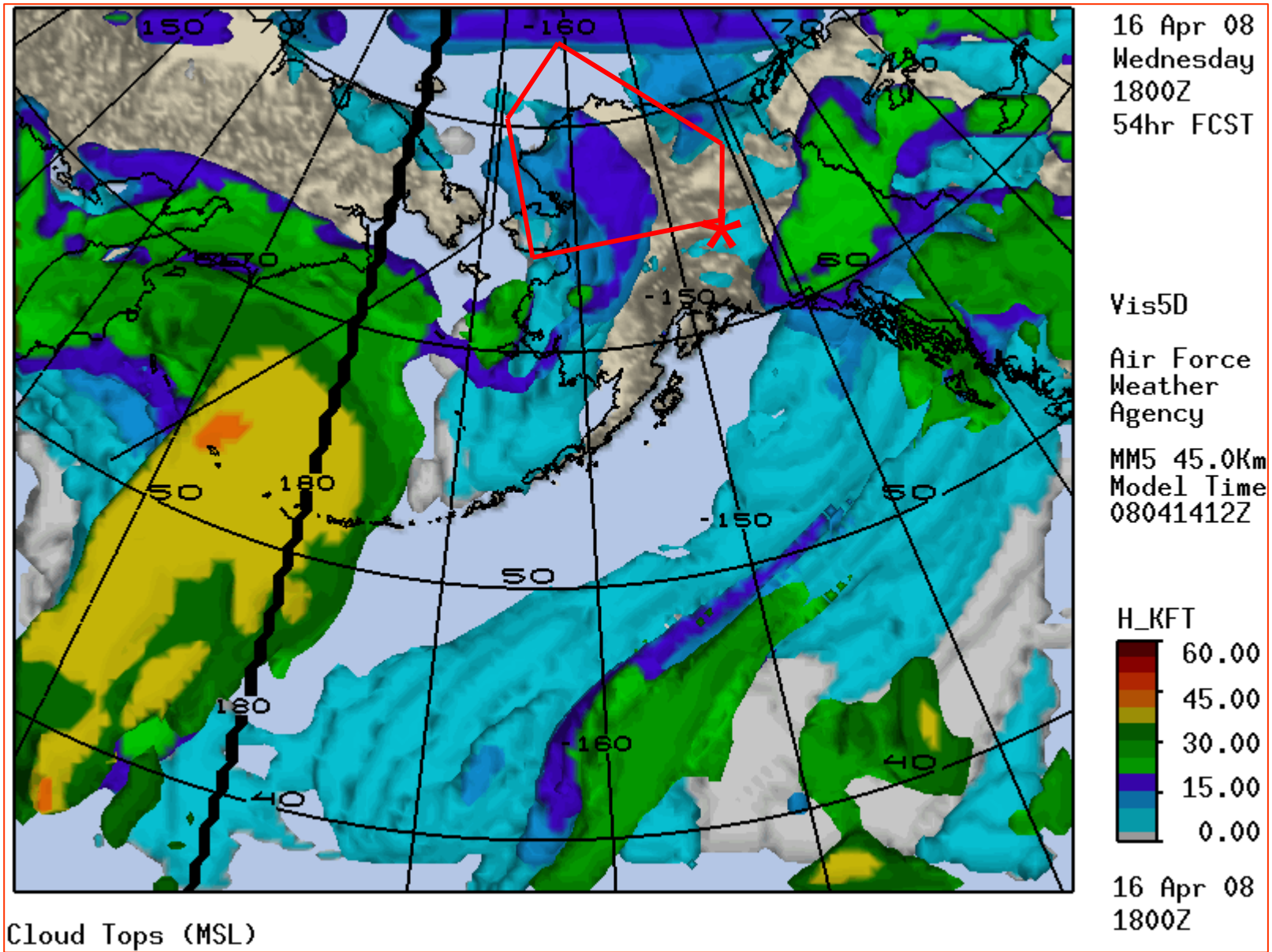


FSU WRF Relative Humidity at 300 hPa Forecast
Valid 1800 Z April 16



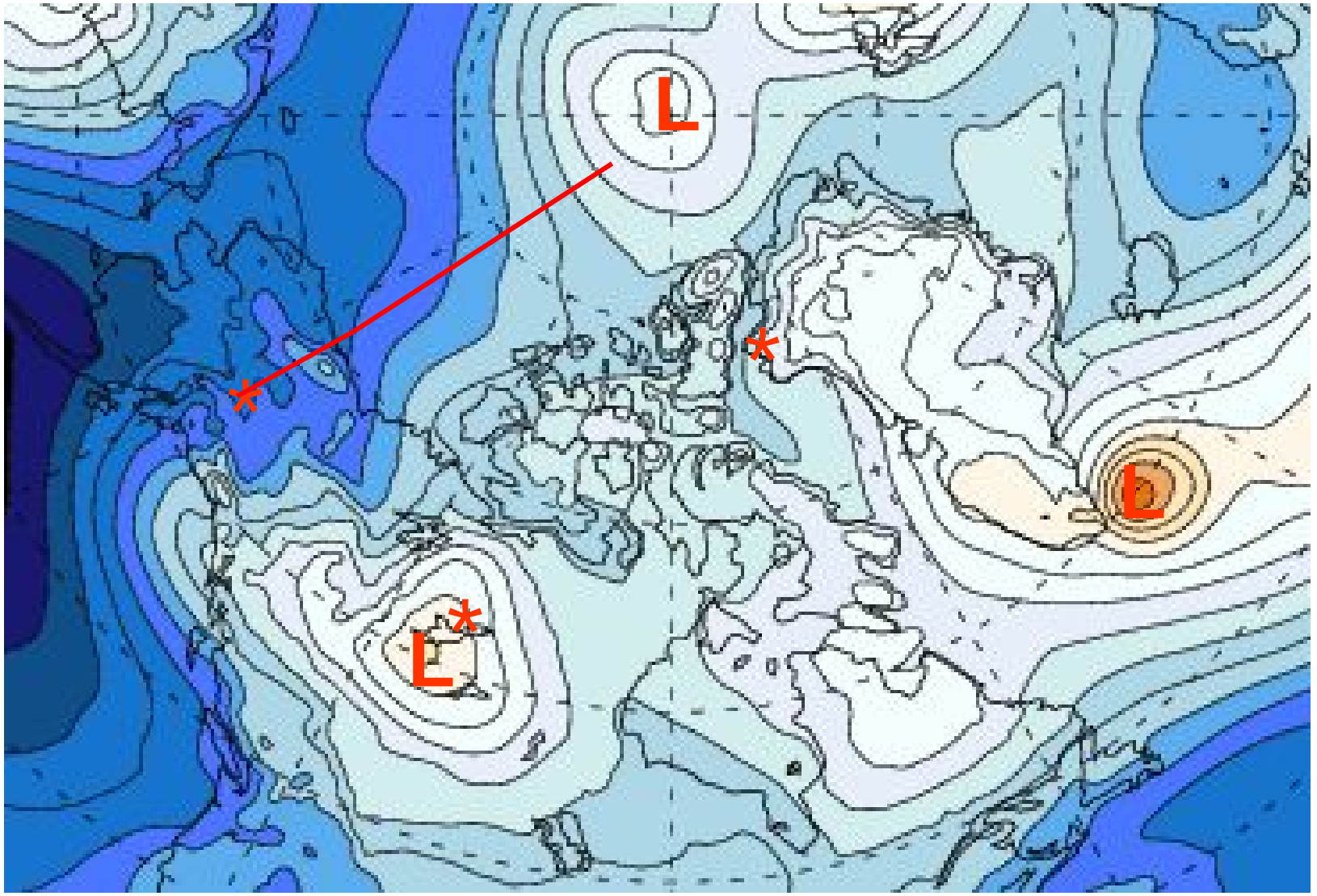
Let's Compare with Air Force Cloud Tops

Valid 1800 Z April 16

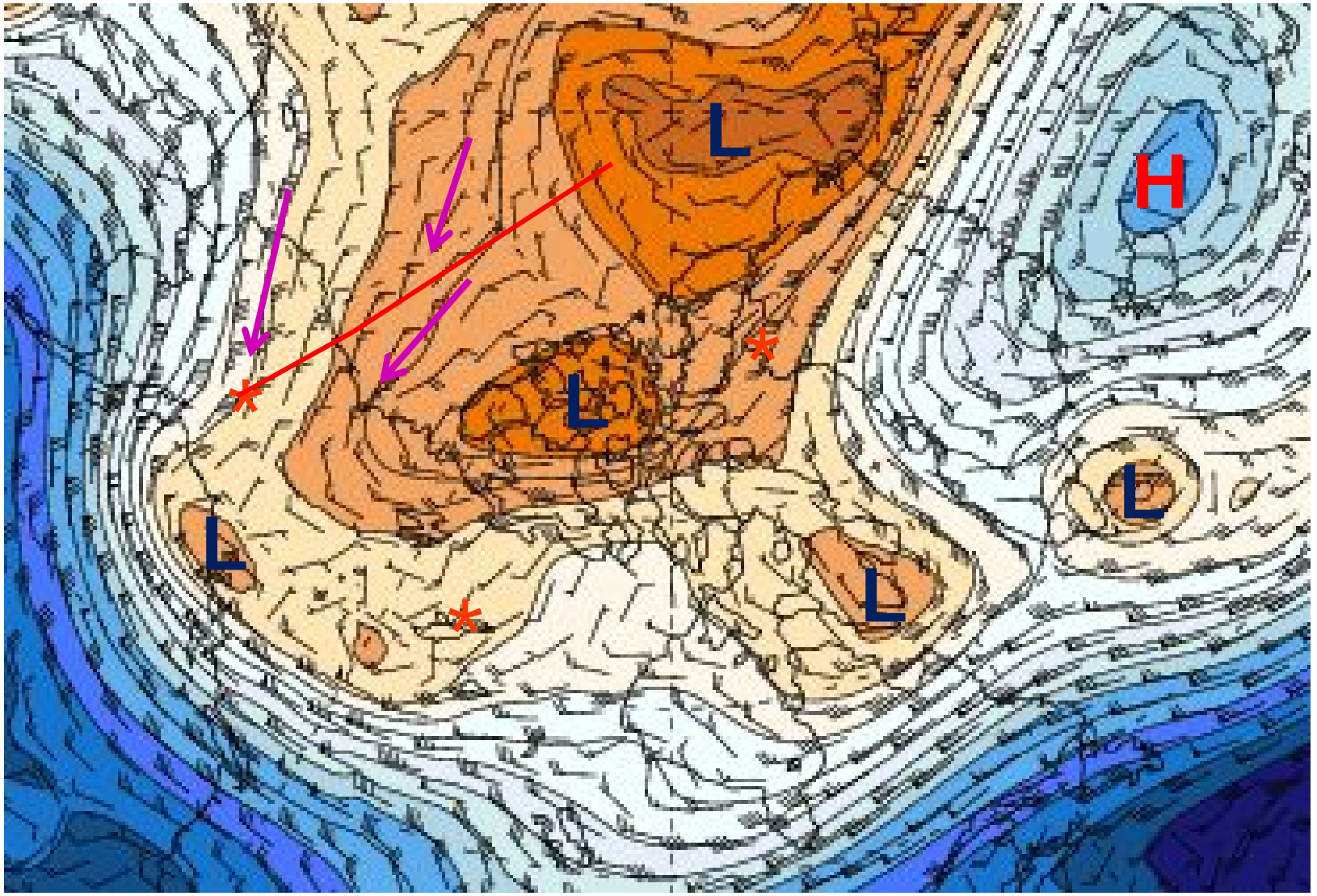


Forecast For Thursday

FSU WRF Forecast Valid 1800 Z April 17
Sea Level Pressure

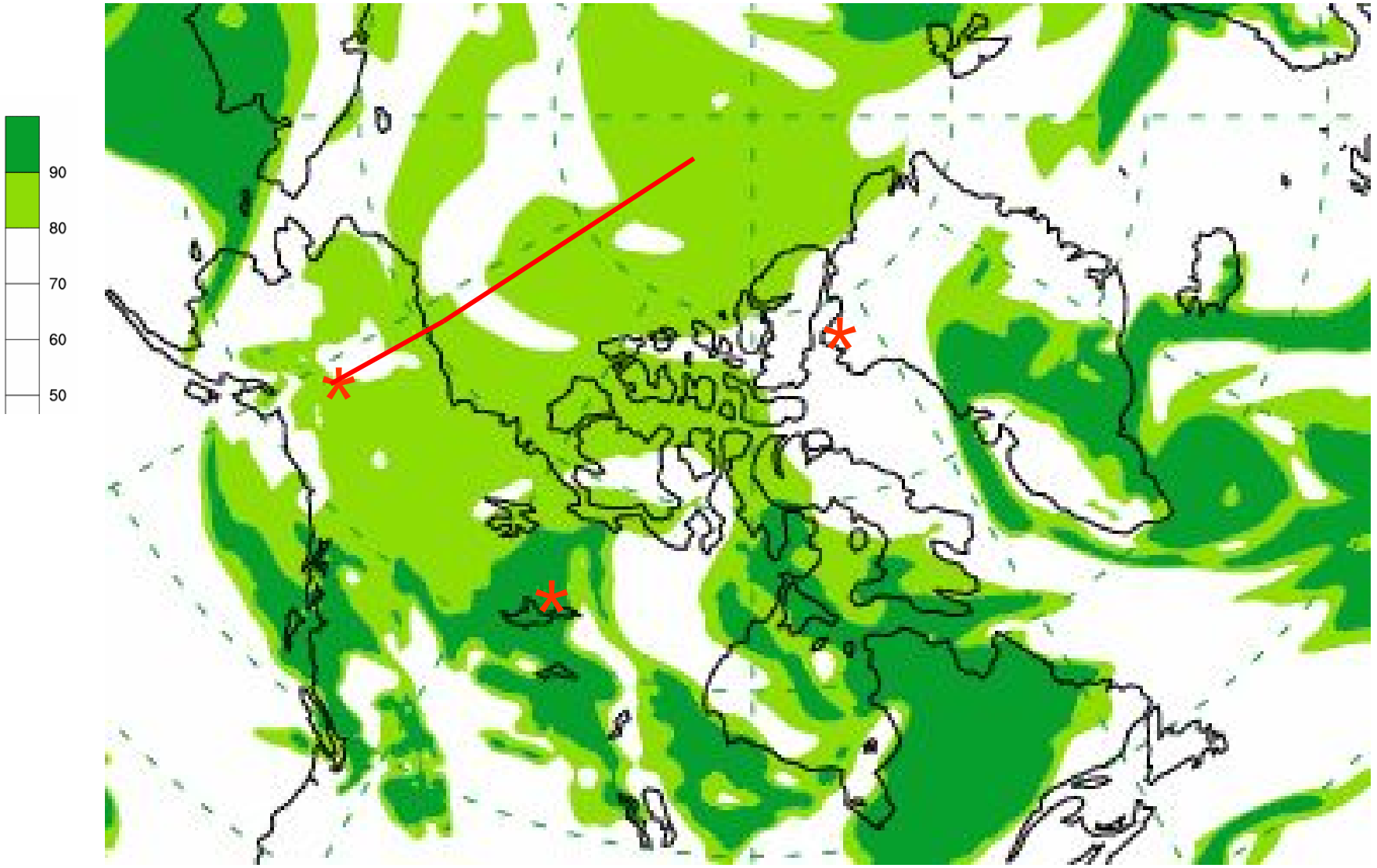


FSU WRF Forecast Valid 1800 Z April 17
500 hPa Heights and Winds

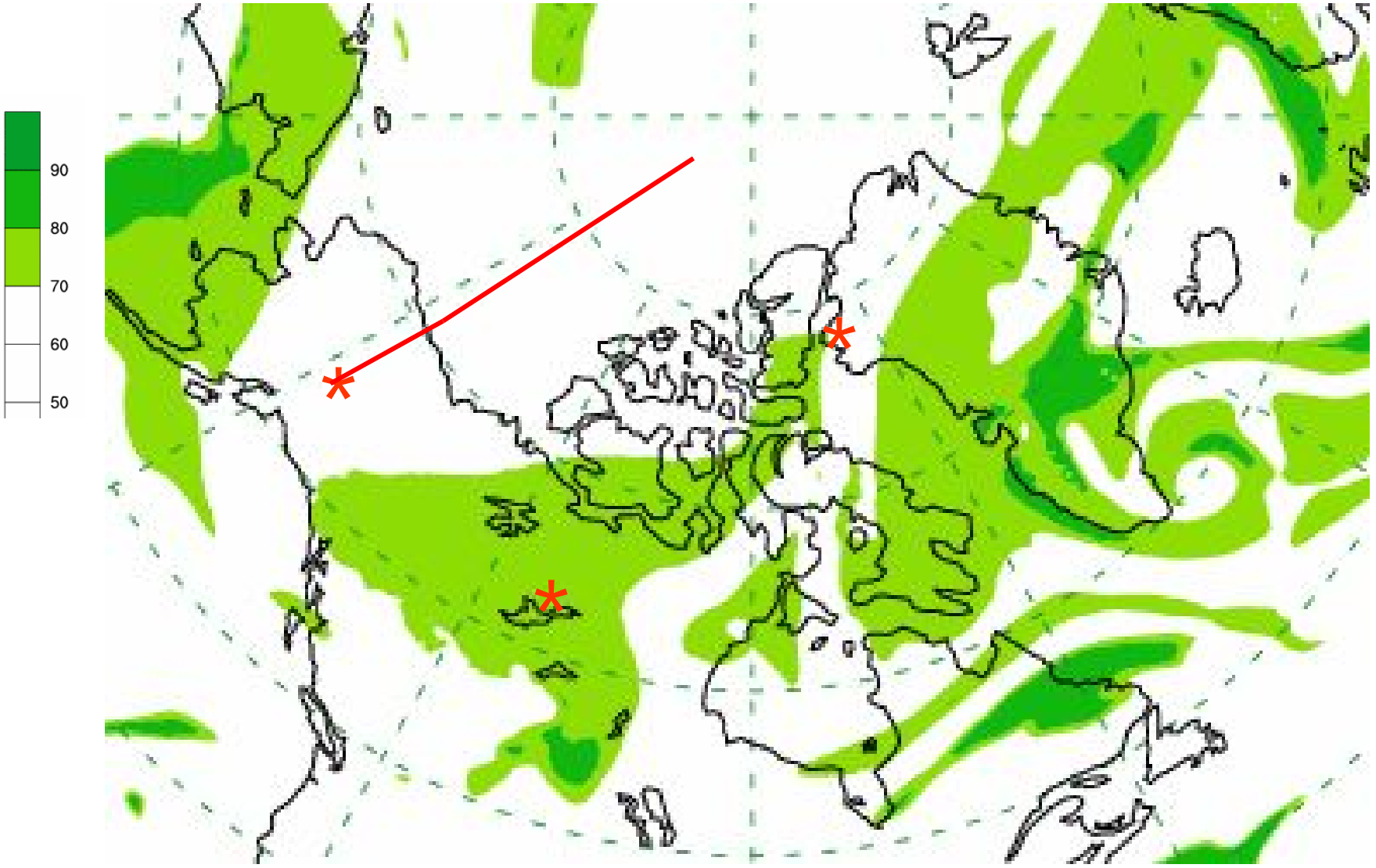


What About Clouds for Thursday??

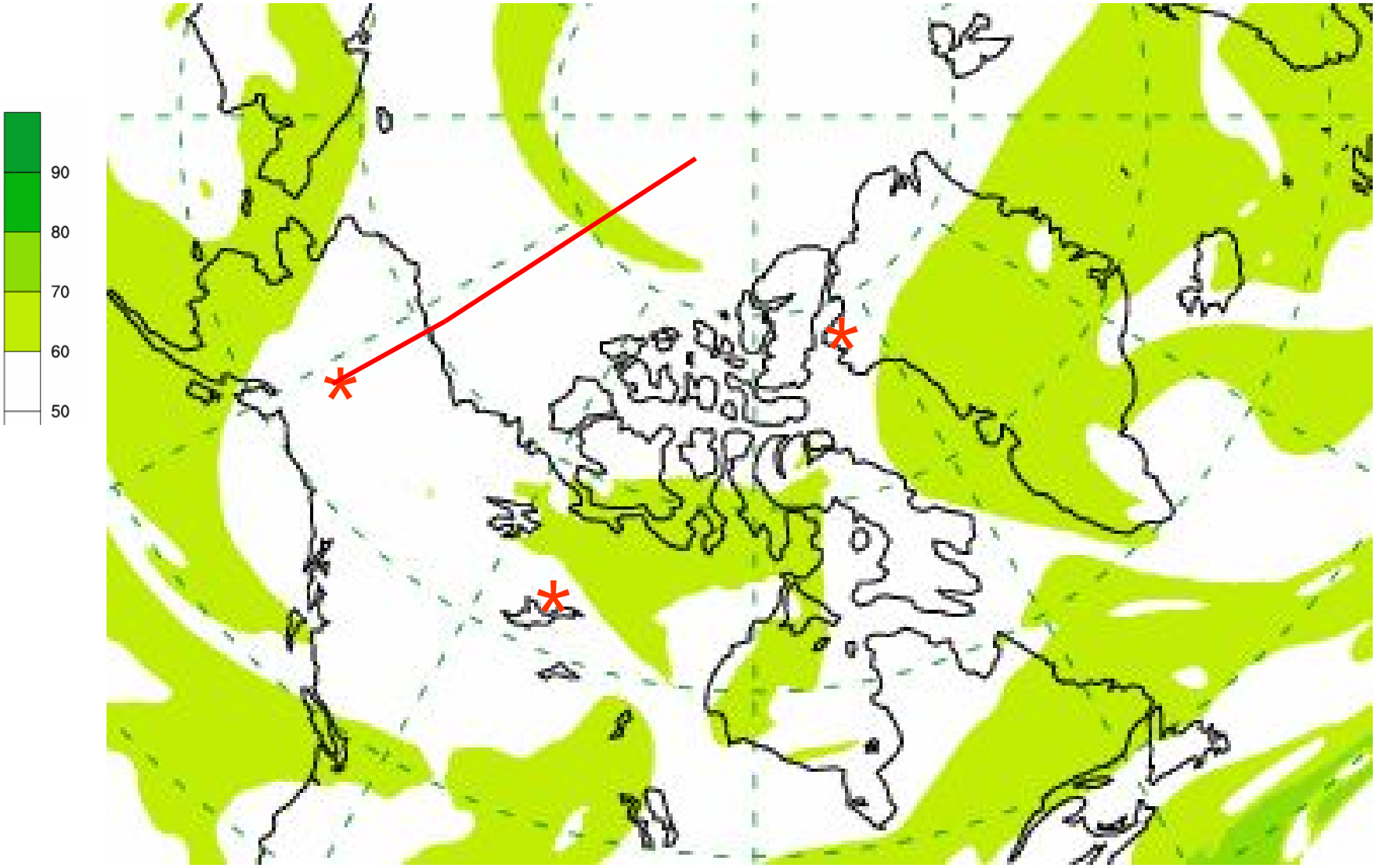
FSU WRF Relative Humidity at 850 hPa Forecast
Valid 1800 Z April 17



FSU WRF Relative Humidity at 500 hPa Forecast
Valid 1800 Z April 17

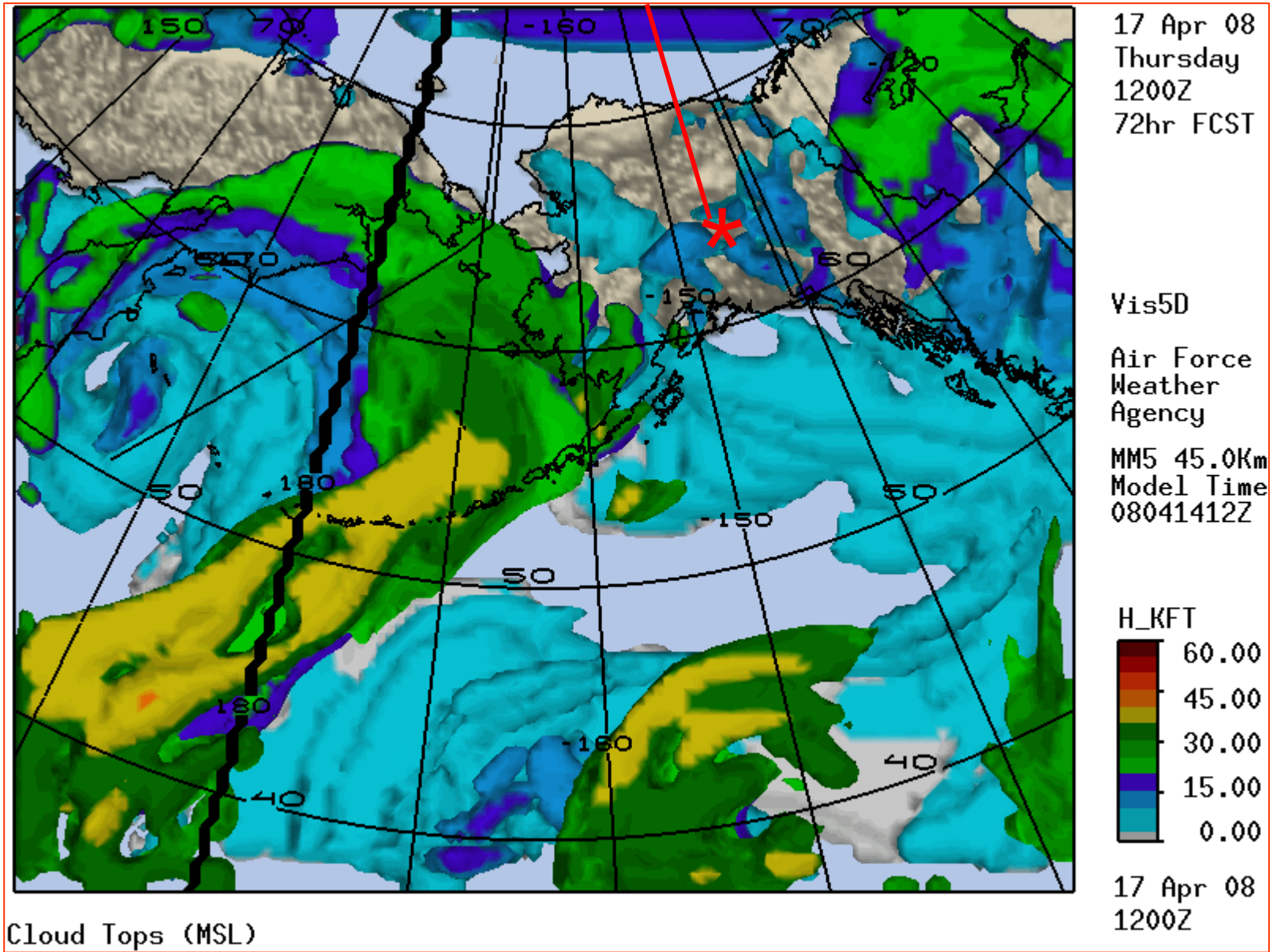


FSU WRF Relative Humidity at 300 hPa Forecast
Valid 1800 Z April 17



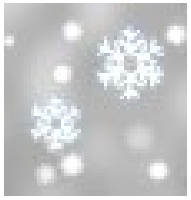
Let's Compare with Air Force Cloud Tops

Valid 1200 Z April 17



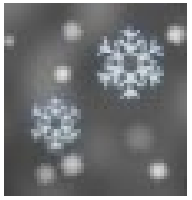
Fairbanks AK Forecast

Monday



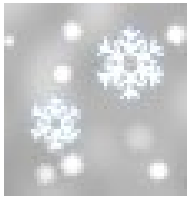
2 inches of additional Snow Likely
Hi: 34F

Mon. Night



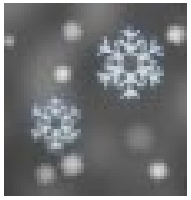
Scattered Snow Showers
Lo: 15F

Tuesday



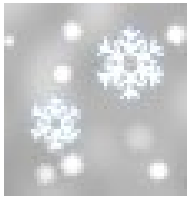
Chance of Snow and *COLD*
Hi: 25F

Tue. Night



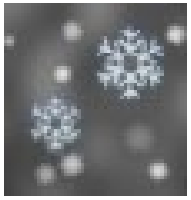
Chance of Snow
Lo: 8F

Wednesday



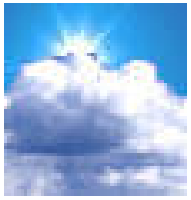
Chance of Snow
Hi: 25F

Wed. Night



Chance of Snow
Lo: 10F

Thursday

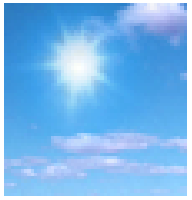


Mostly Cloudy
Hi: 30F

Thu. Night

Mostly Cloudy
Lo: 6

Friday



Partly Cloudy
Hi: 37F

AVERAGES Hi: 41 Low: 18