Flight Day Conditions

April 16-18, 2008

Henry Fuelberg
Andy Latto

"Your Eyes to the Skies"

Current Conditions

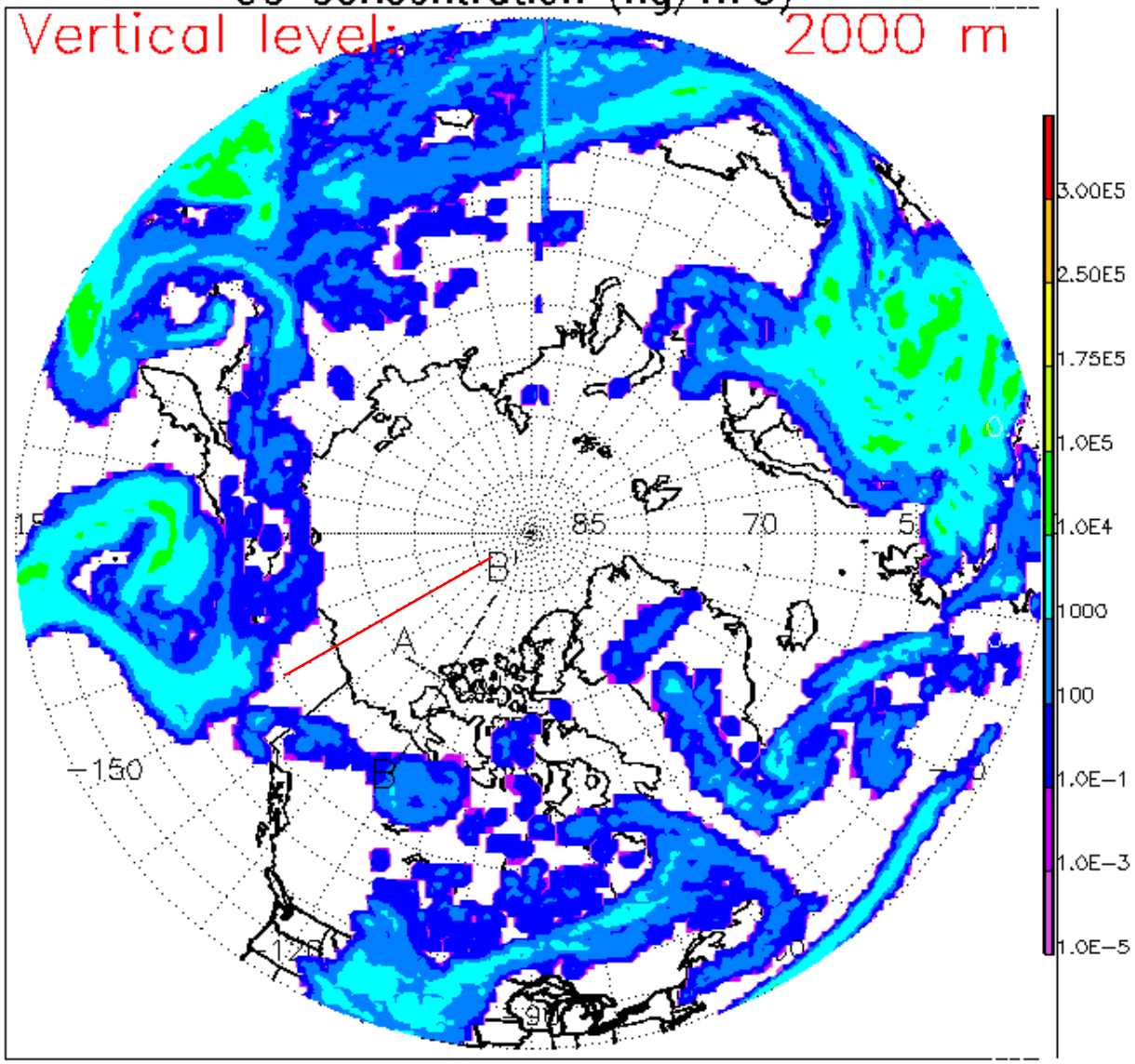
FSU Runs Flexpart

- Met data from FSU WRF run (25 km grid)
- Top 10% of emissions are tracked
- 7 day runs through fly day (Ending 12 noon ADT Friday)
- Color coded by concentration
- Fire Data Not Included

AdGIF UNREGISTERED - www.gif-animator.com

2000 April 16, 2008

CO Concentration (ng/m^3)



Florida State University Meteorology

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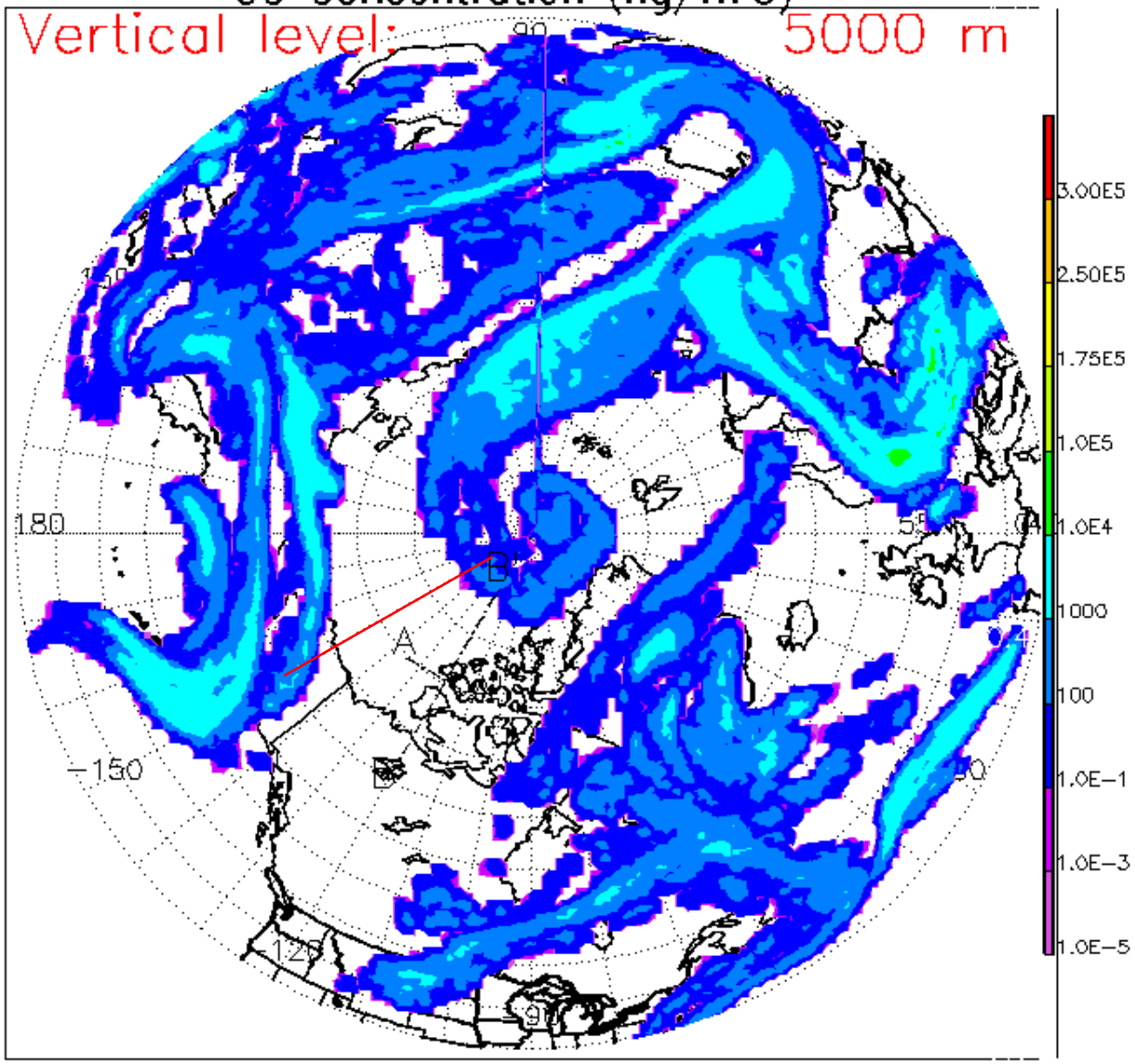

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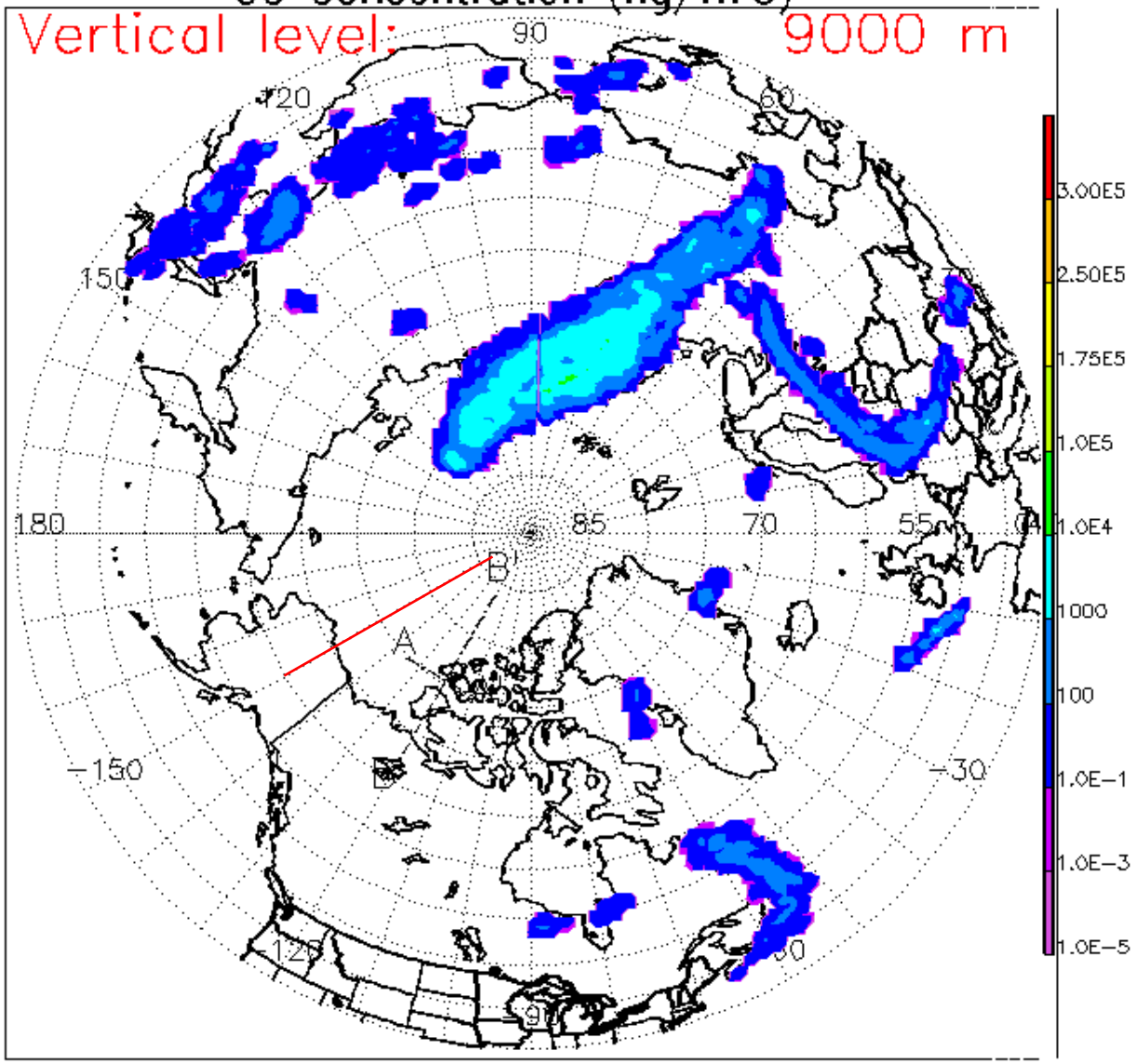
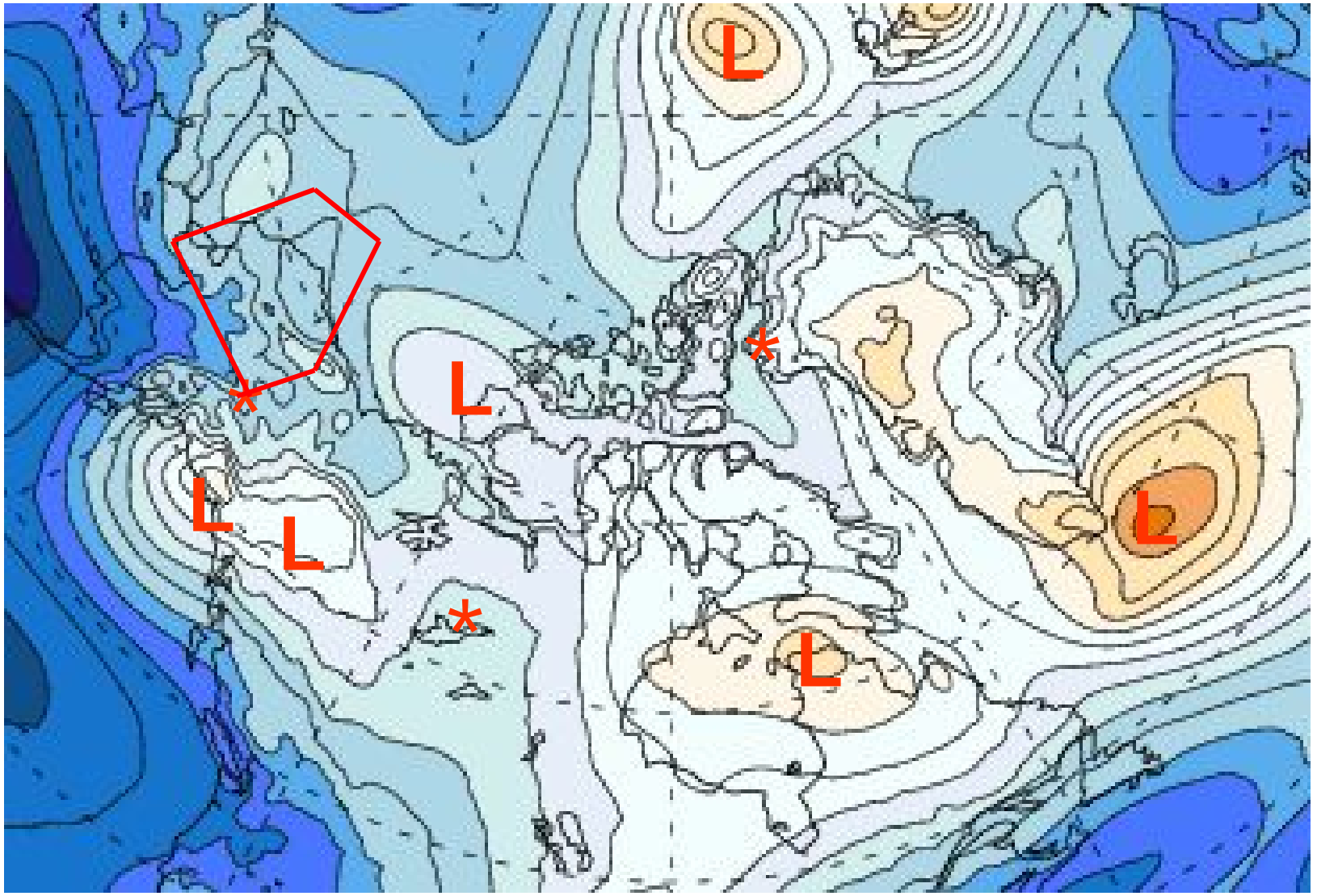


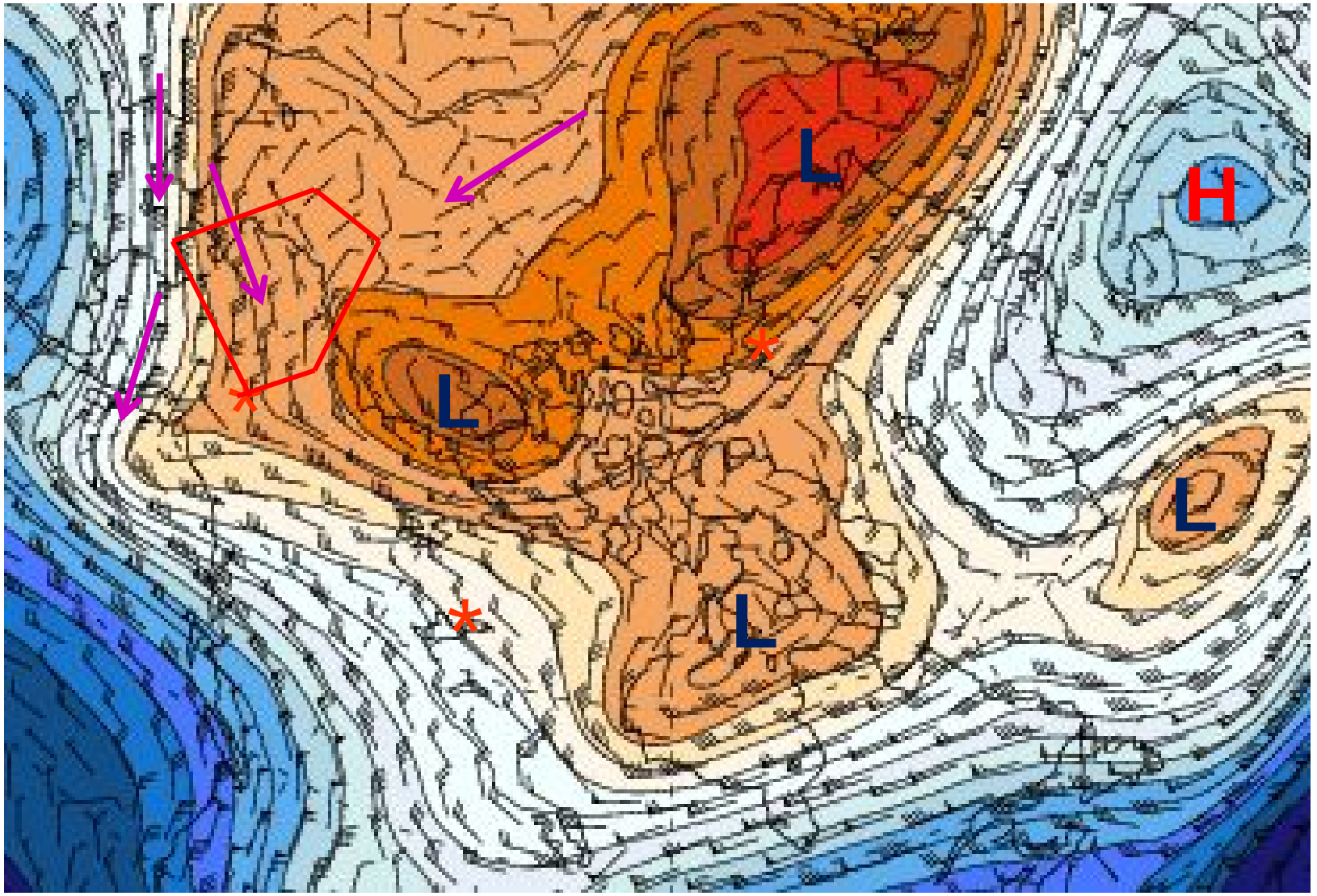
Florida State University Meteorology

Forecast For Wednesday

FSU WRF Forecast Valid 1800 Z April 16
Sea Level Pressure



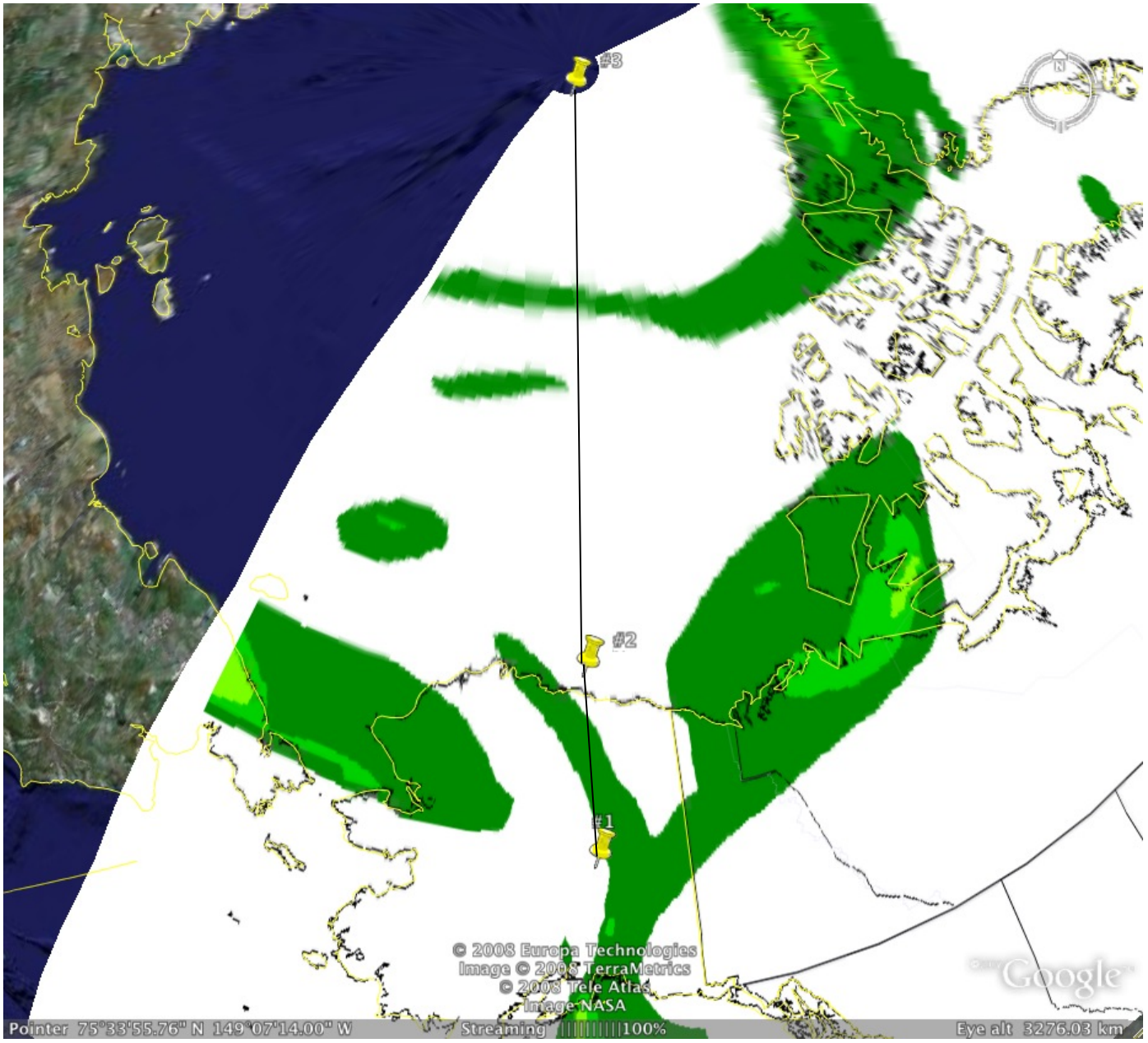
FSU WRF Forecast Valid 1800 Z April 16
500 hPa Heights and Winds



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

Tropopause height:

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

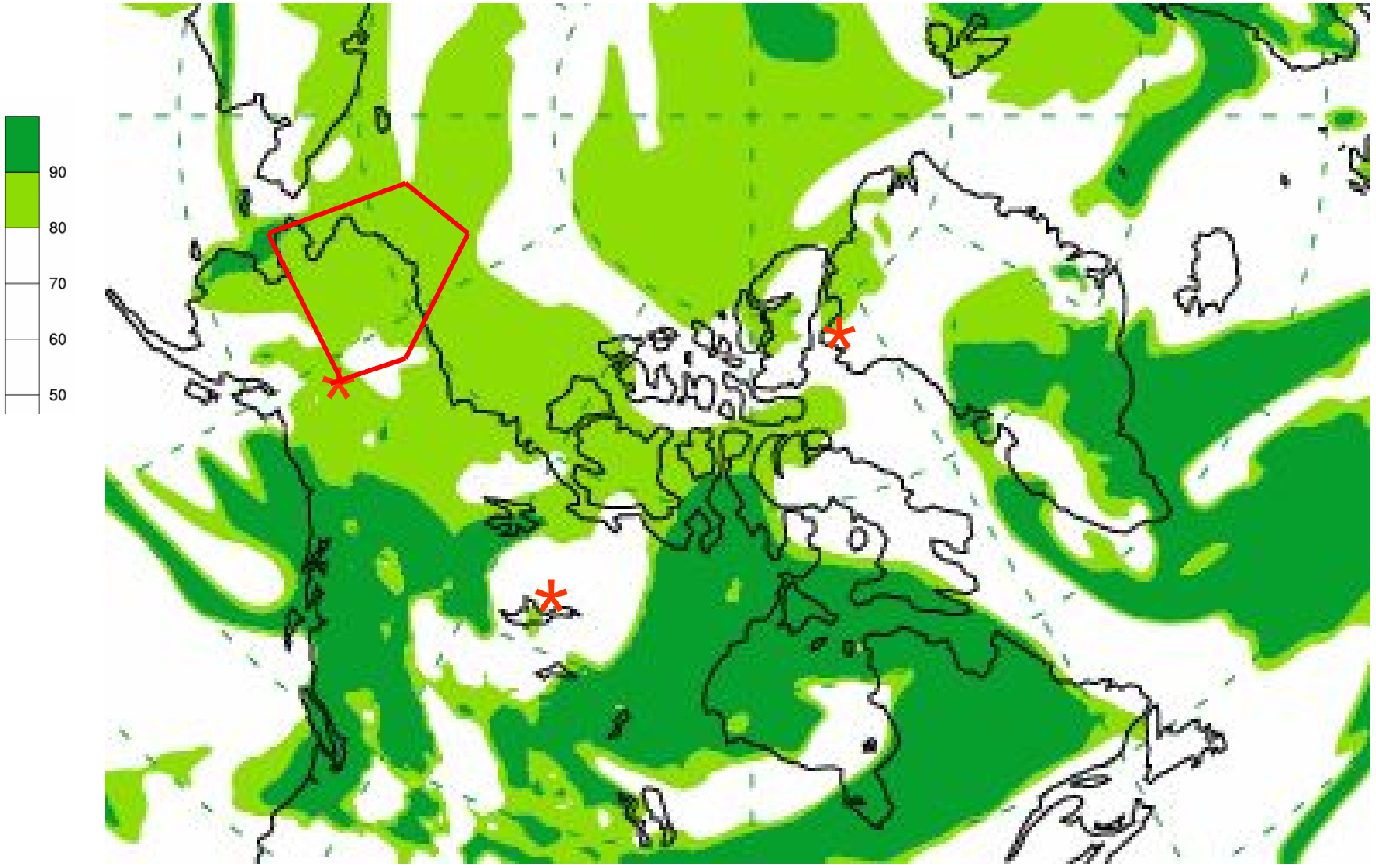


UNIVERSITY OF ALASKA FAIRBANKS

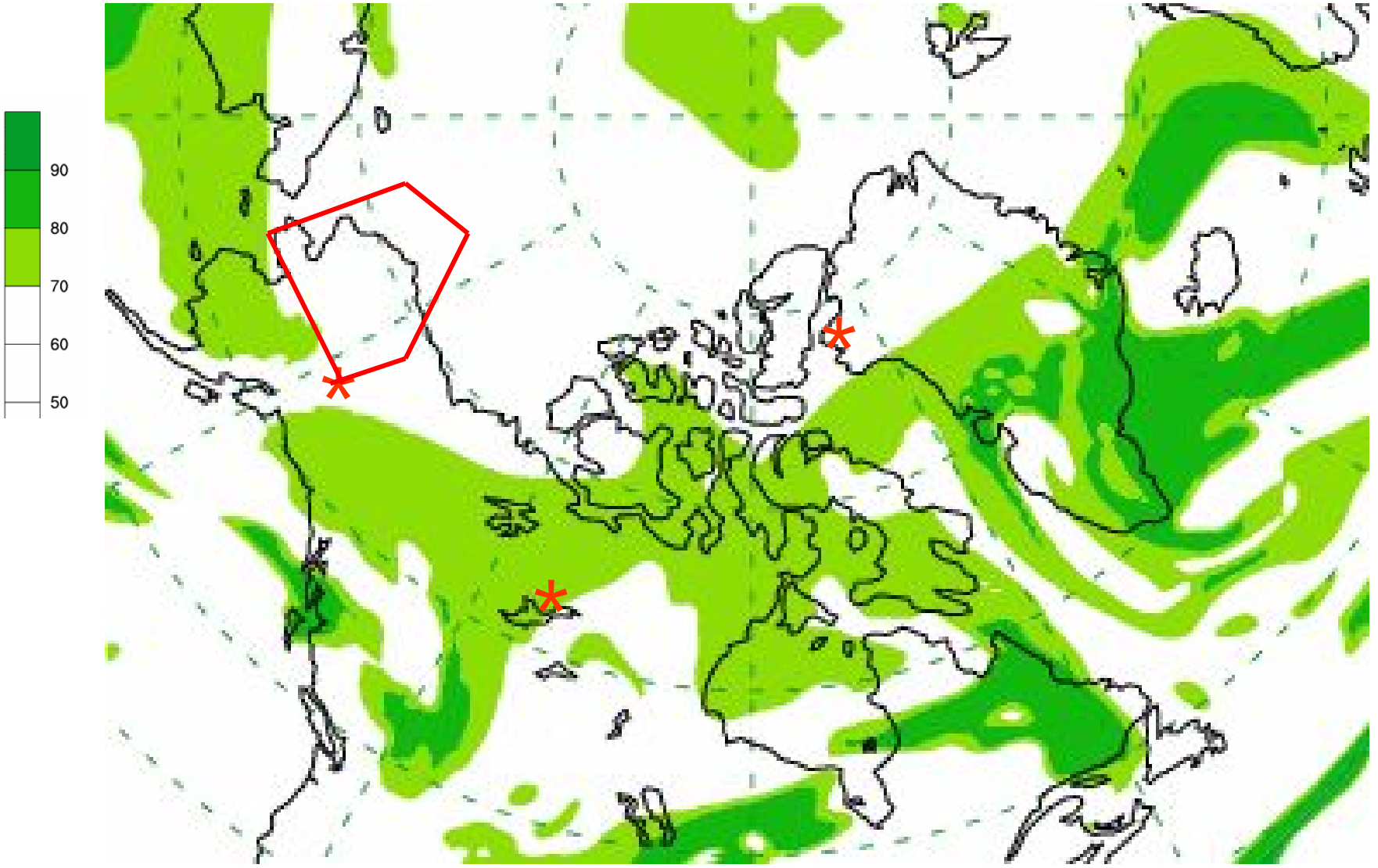
Courtesy of David Atkinson

What About Clouds for Wednesday??

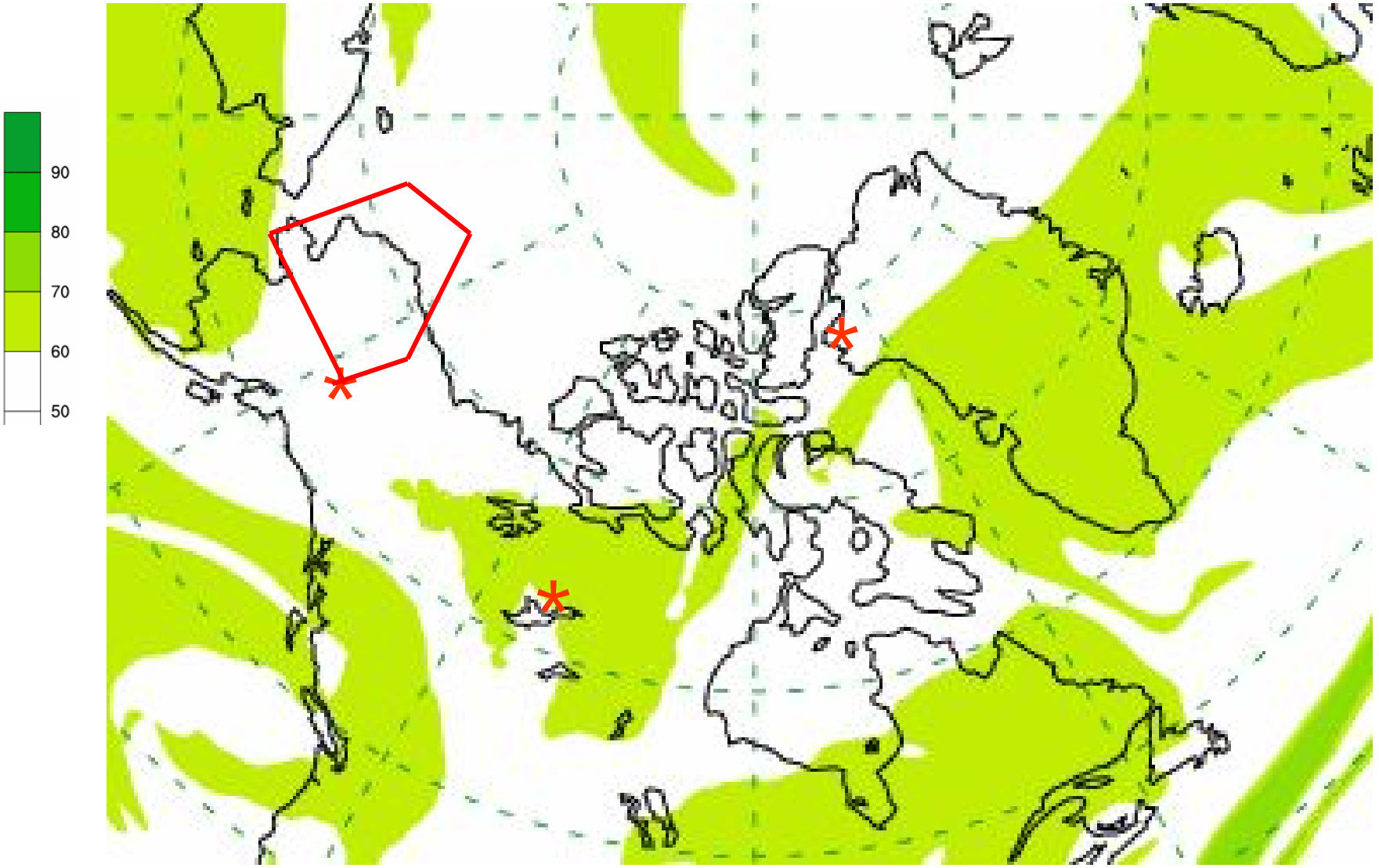
FSU WRF Relative Humidity at 850 hPa Forecast
Valid 1800 Z April 16



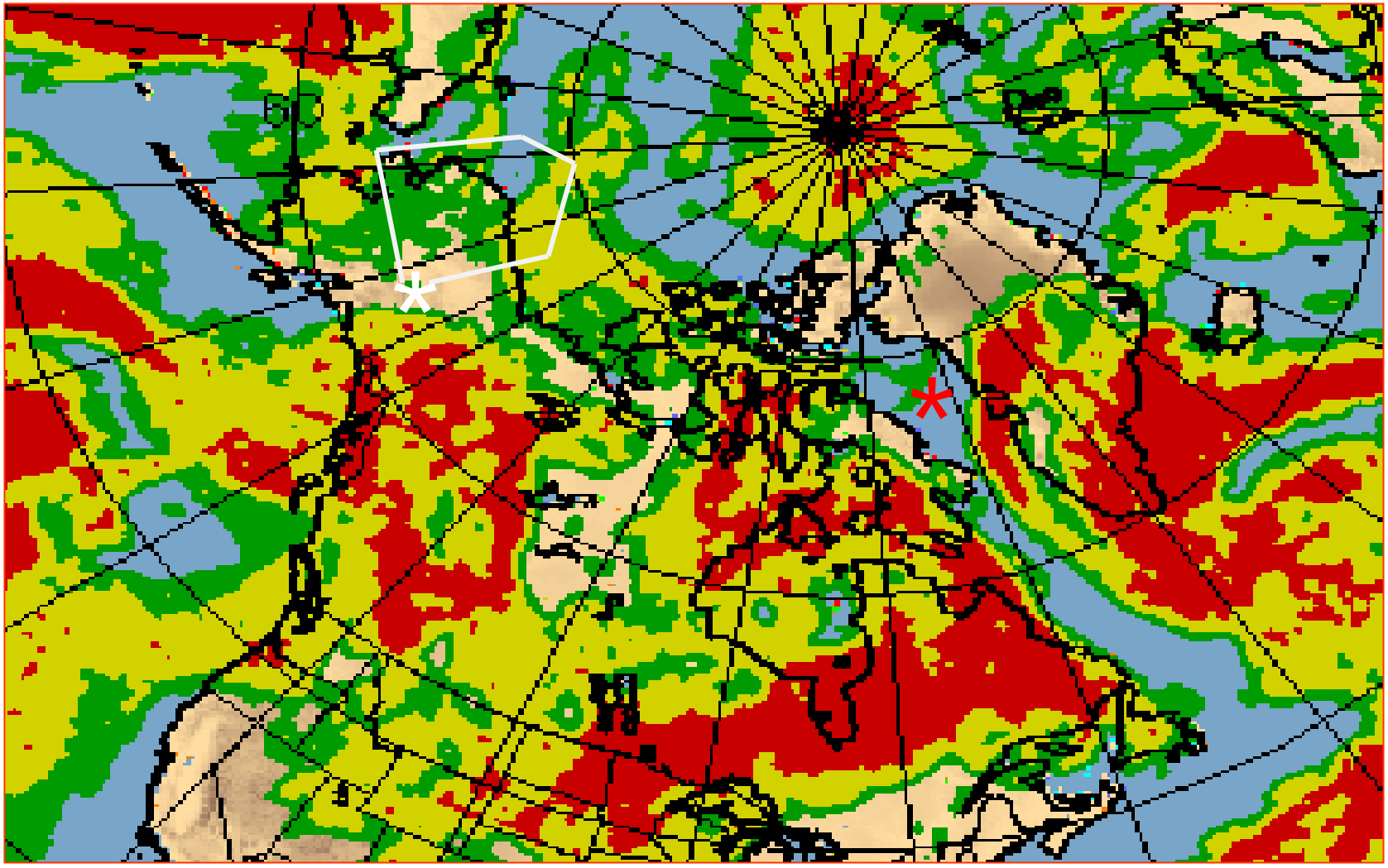
FSU WRF Relative Humidity at 500 hPa Forecast
Valid 1800 Z April 16



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



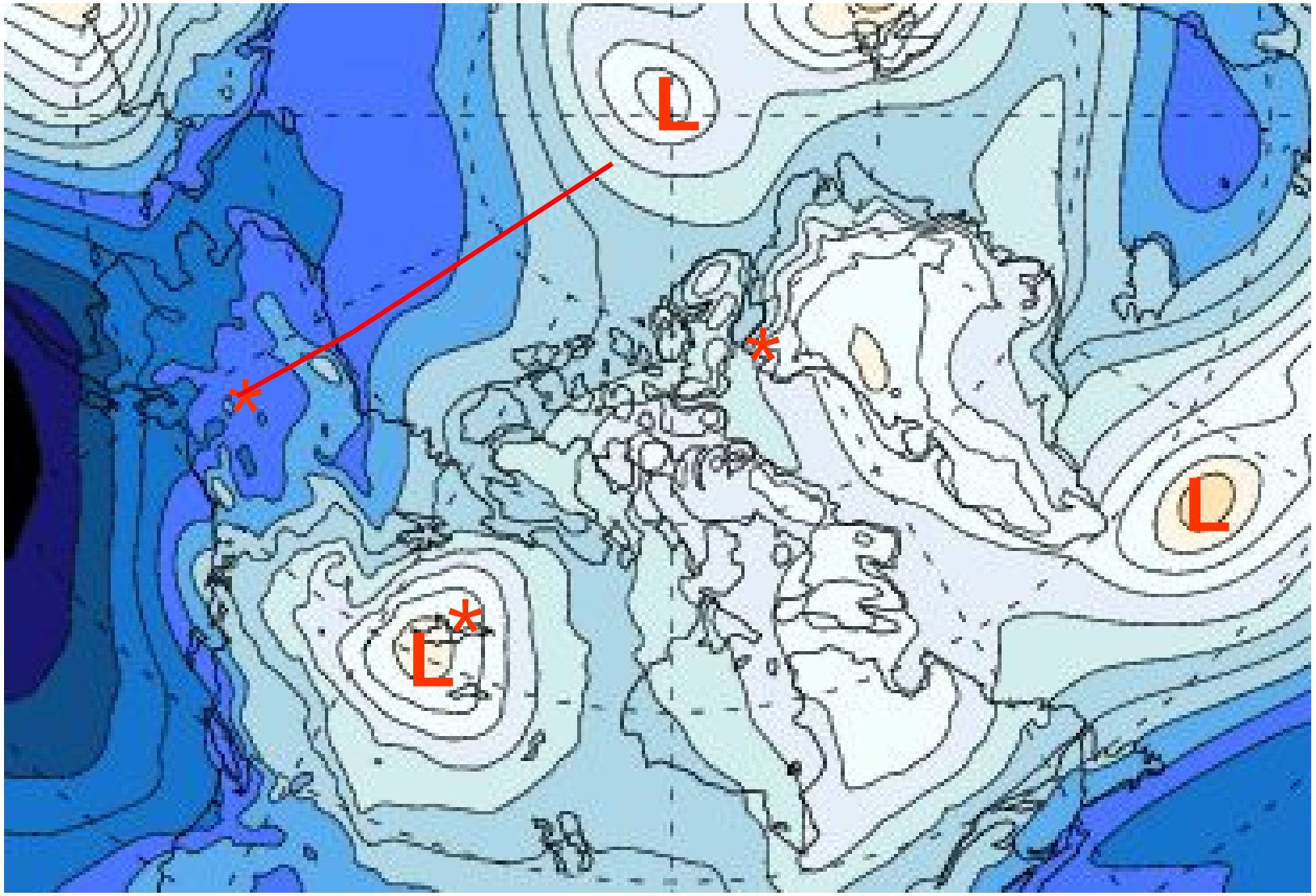
Let's Compare with Air Force Cloud Cover
Valid 1800 Z April 15



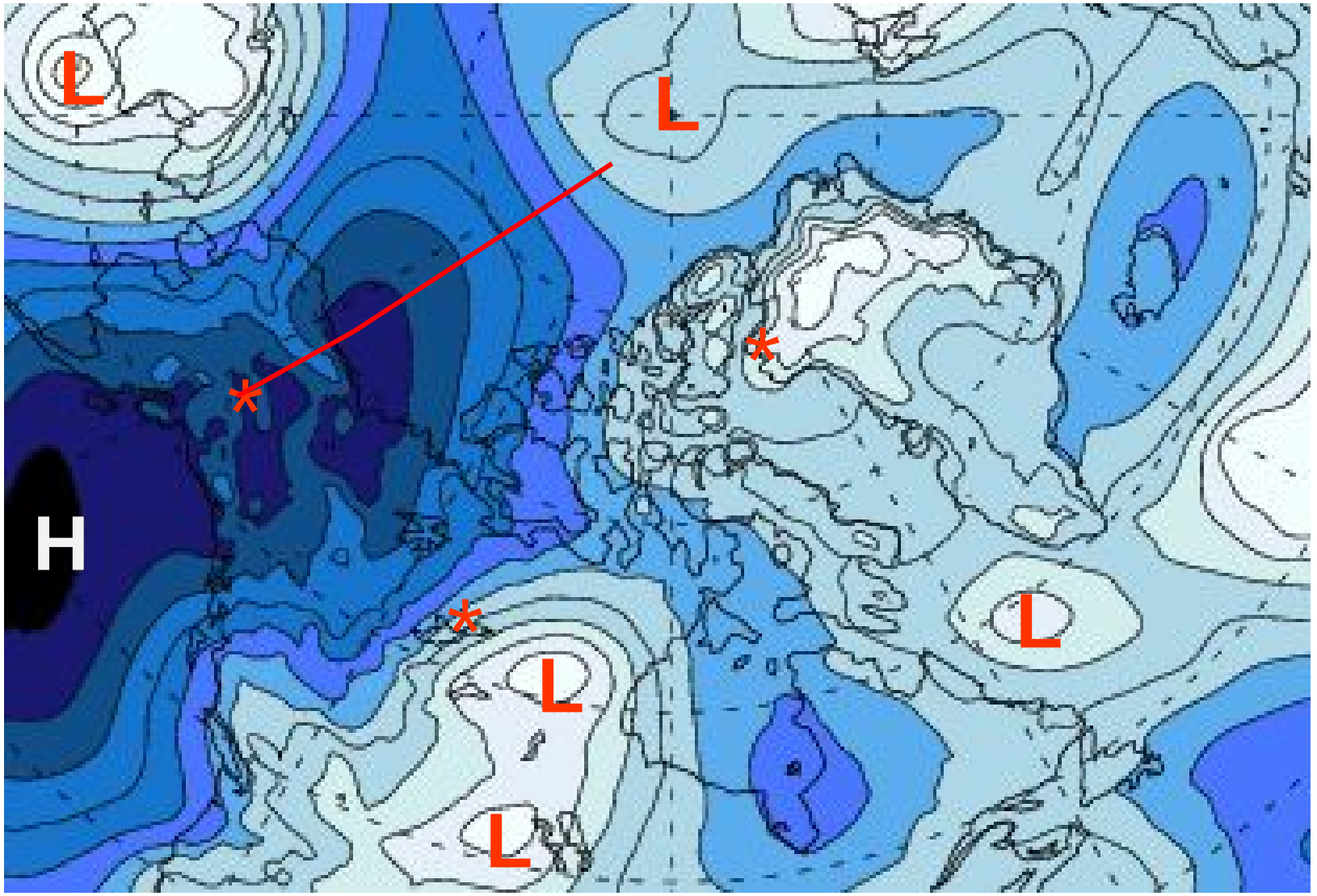
Red = Overcast Yellow = 0.6-0.9 coverage Green = 0.1-0.5 coverage

A Comparison Forecast For Thursday vs. Friday

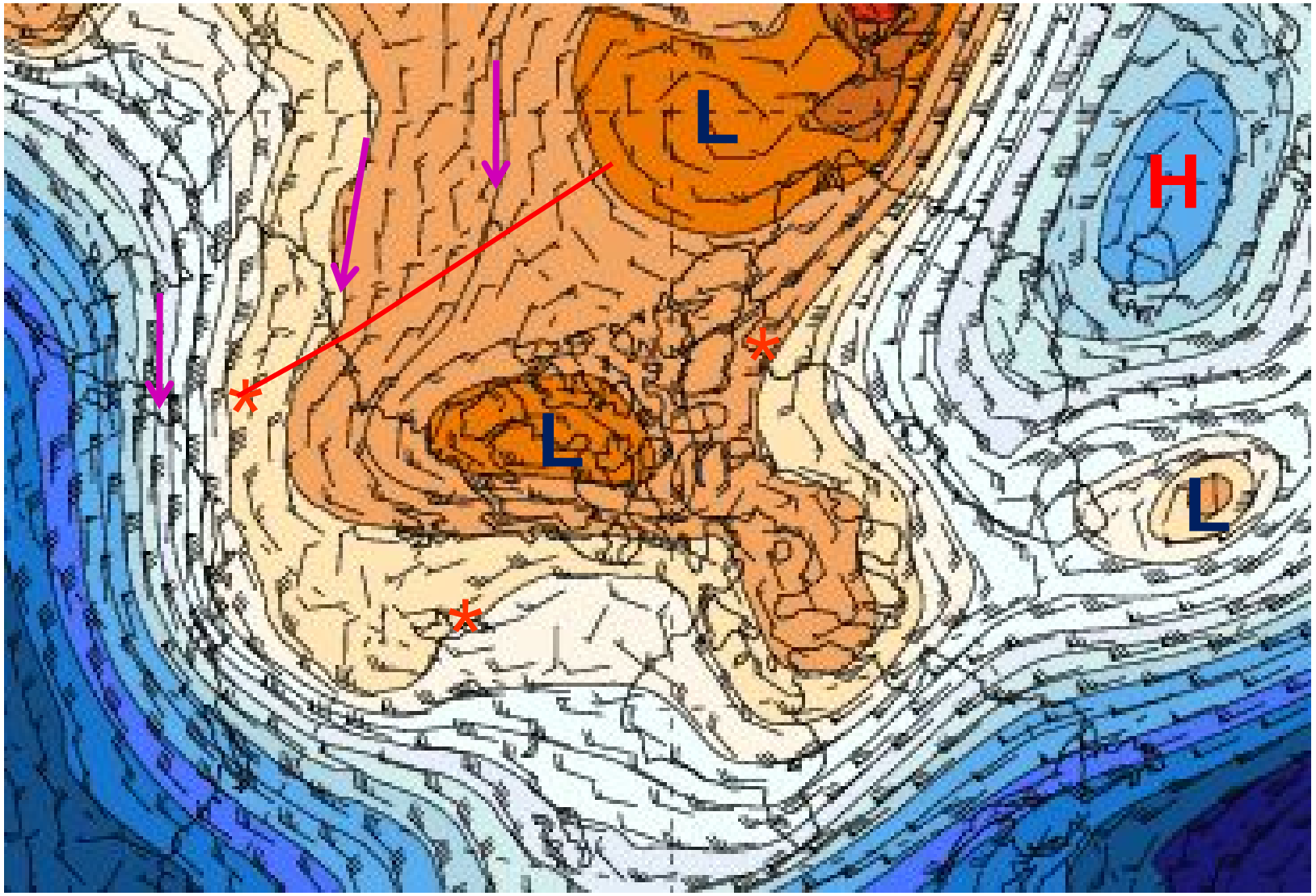
FSU WRF Forecast Valid 1800 Z Thursday April 17
Sea Level Pressure



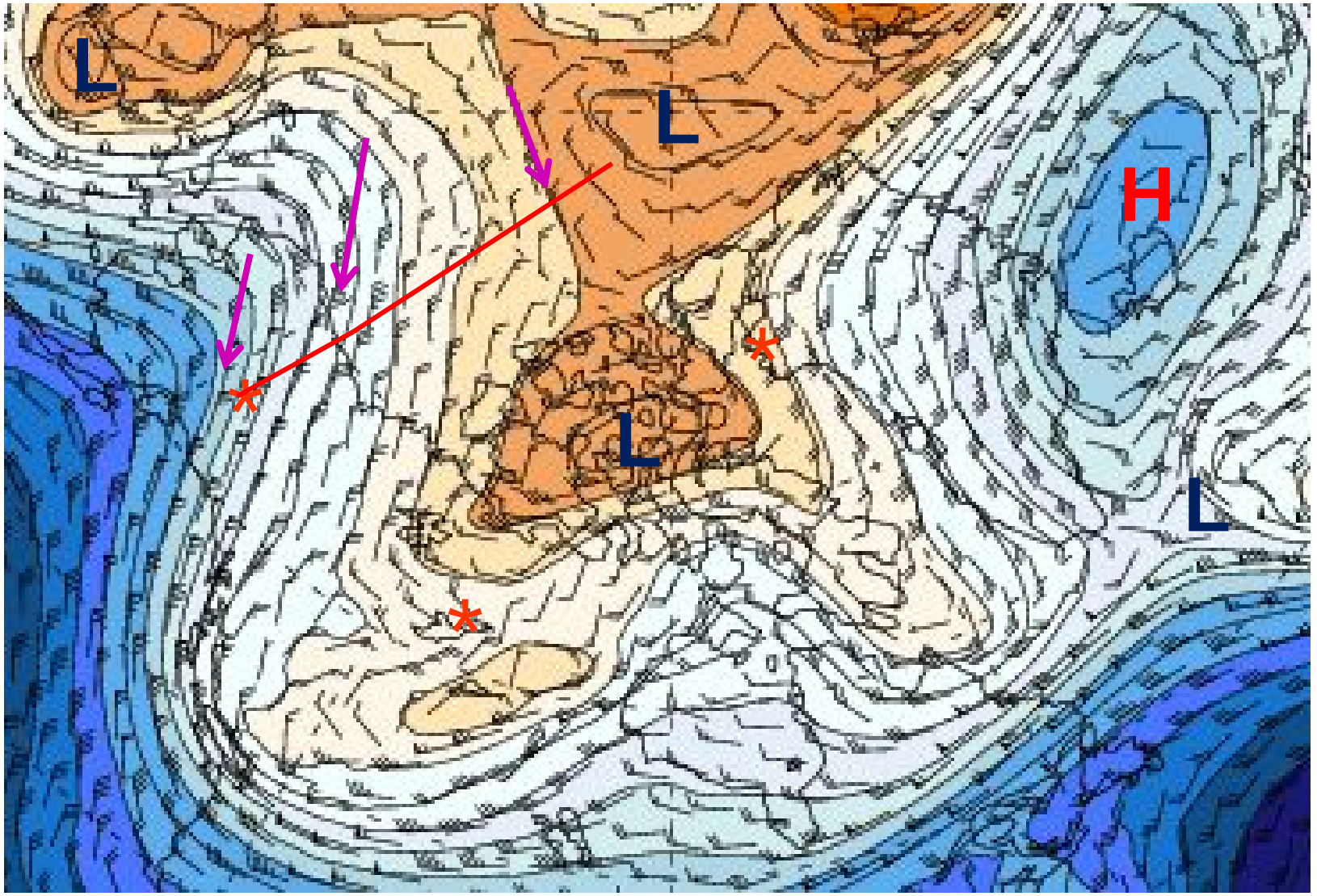
FSU WRF Forecast Valid 1800 Z Friday April 18
Sea Level Pressure



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

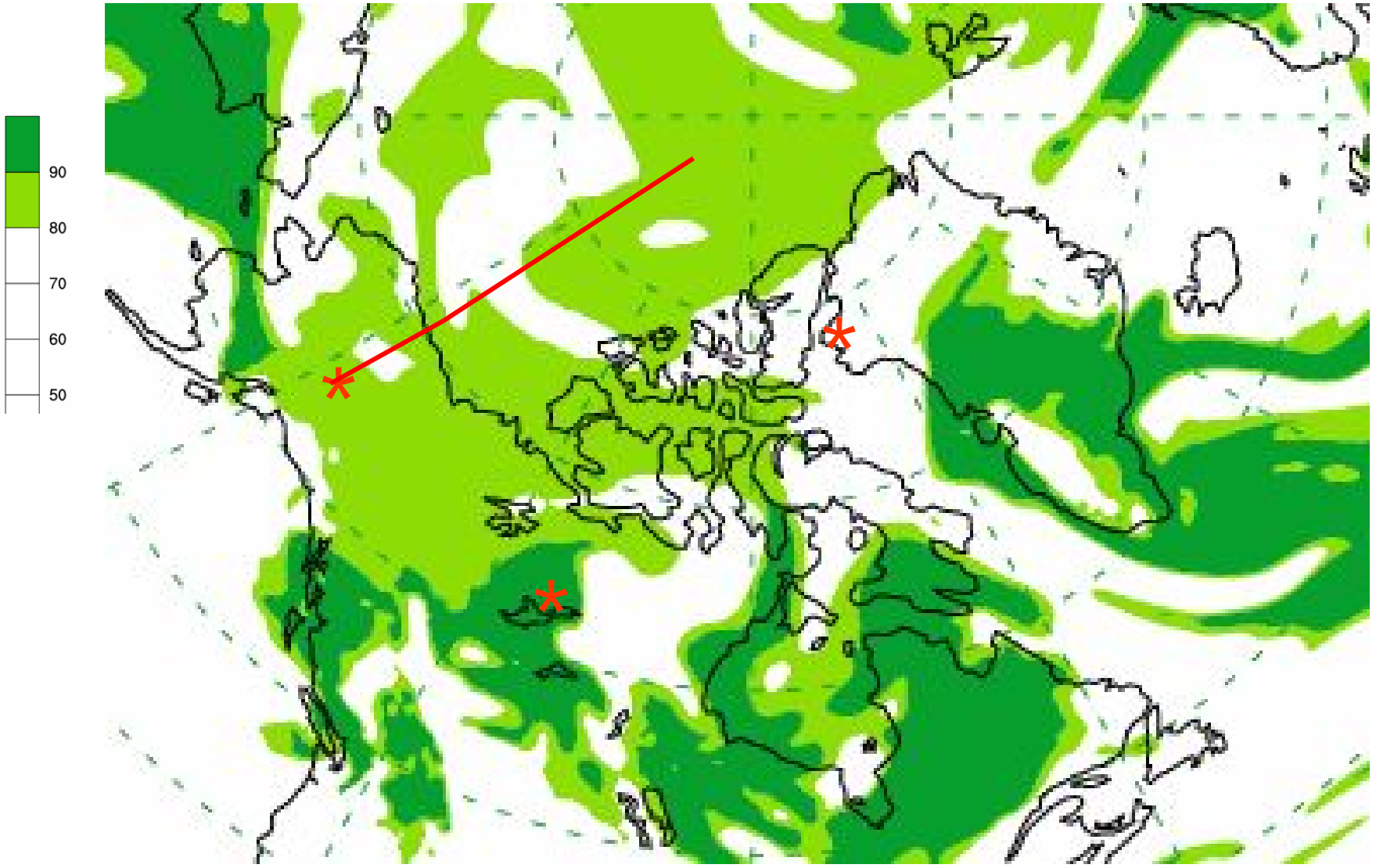


FSU WRF Forecast Valid 1800 Z Friday April 18
500 hPa Heights and Winds

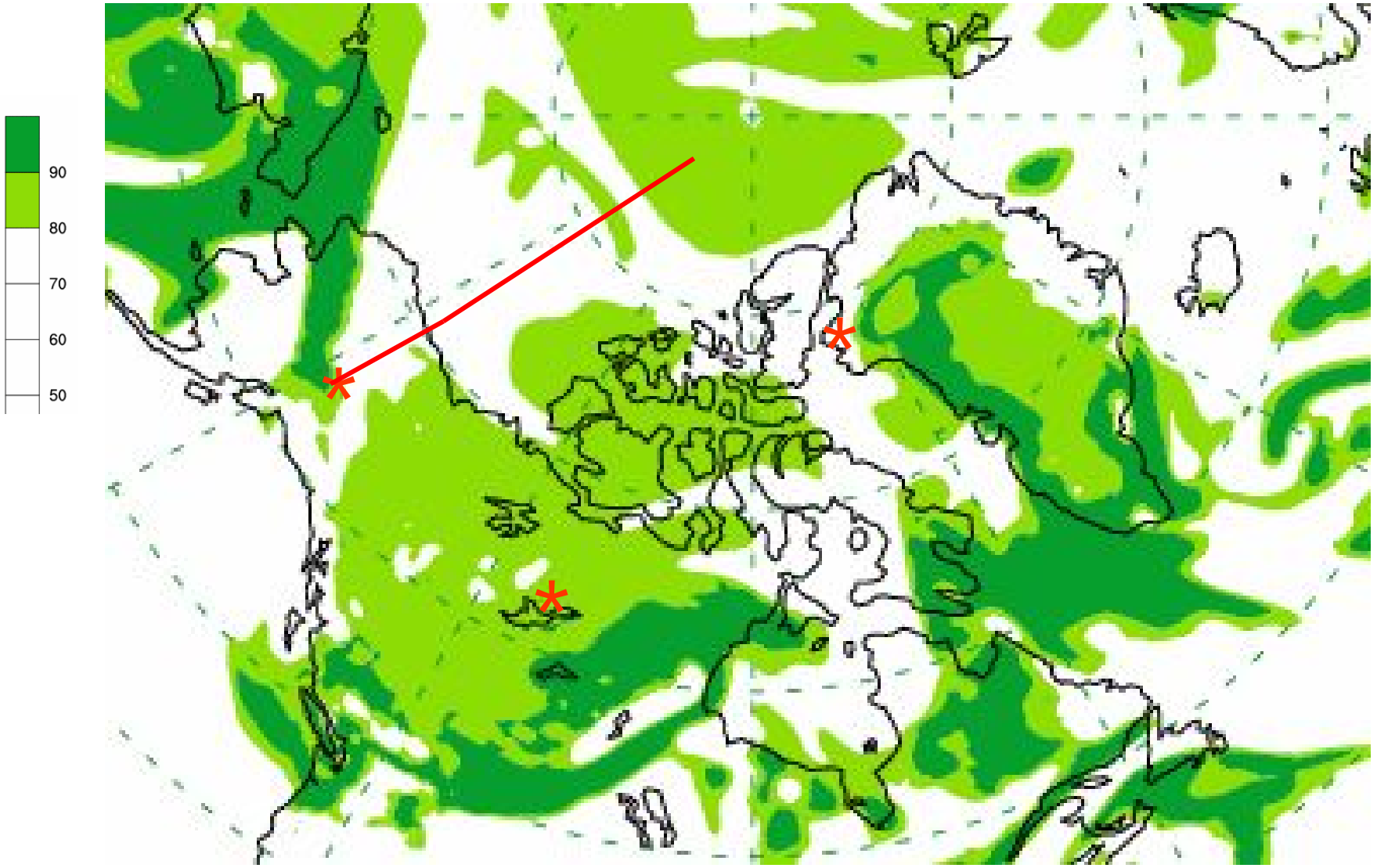


What About Clouds for Thursday vs. Friday??

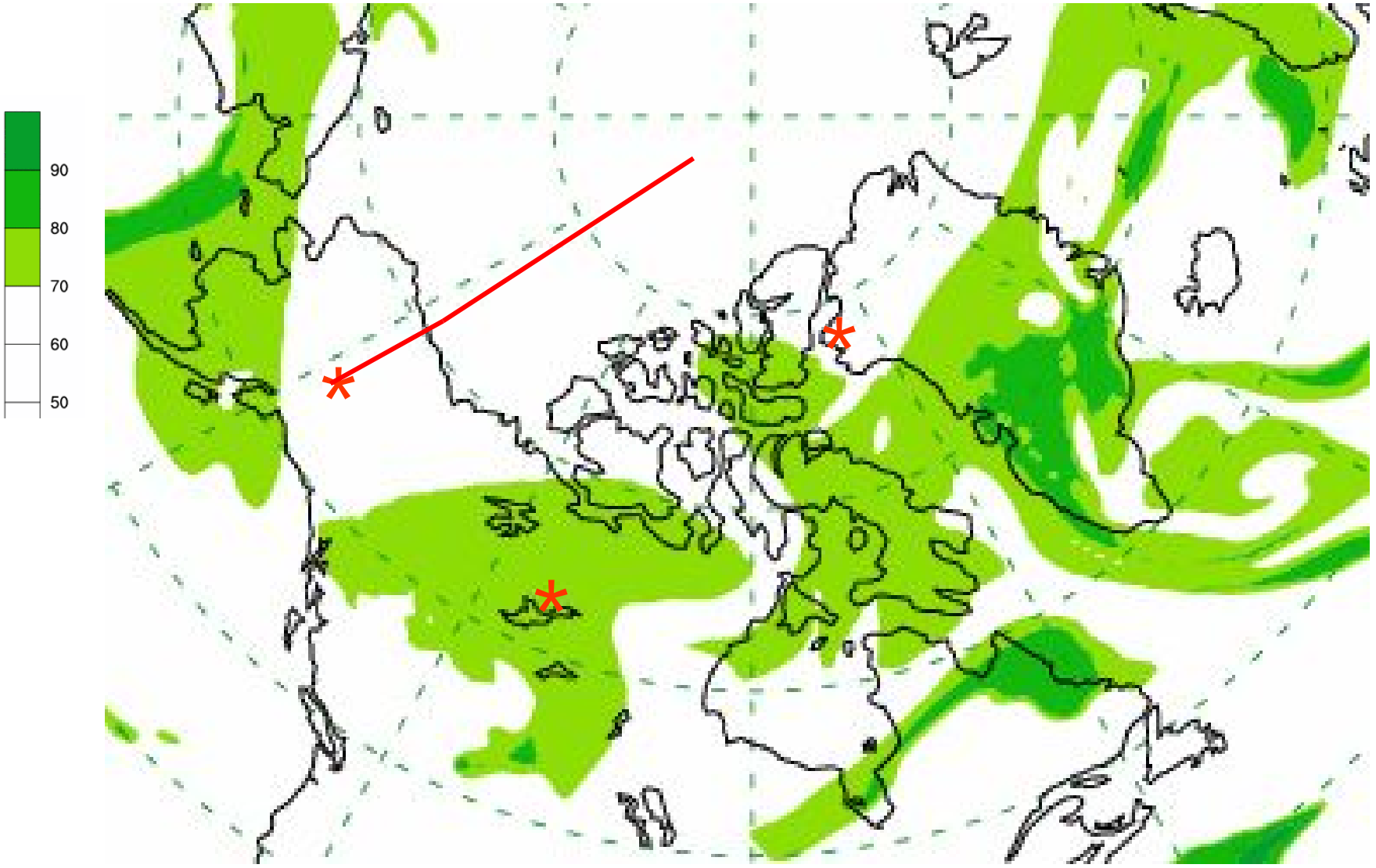
FSU WRF Relative Humidity at 850 hPa Forecast
Valid 1800 Z Thursday April 17



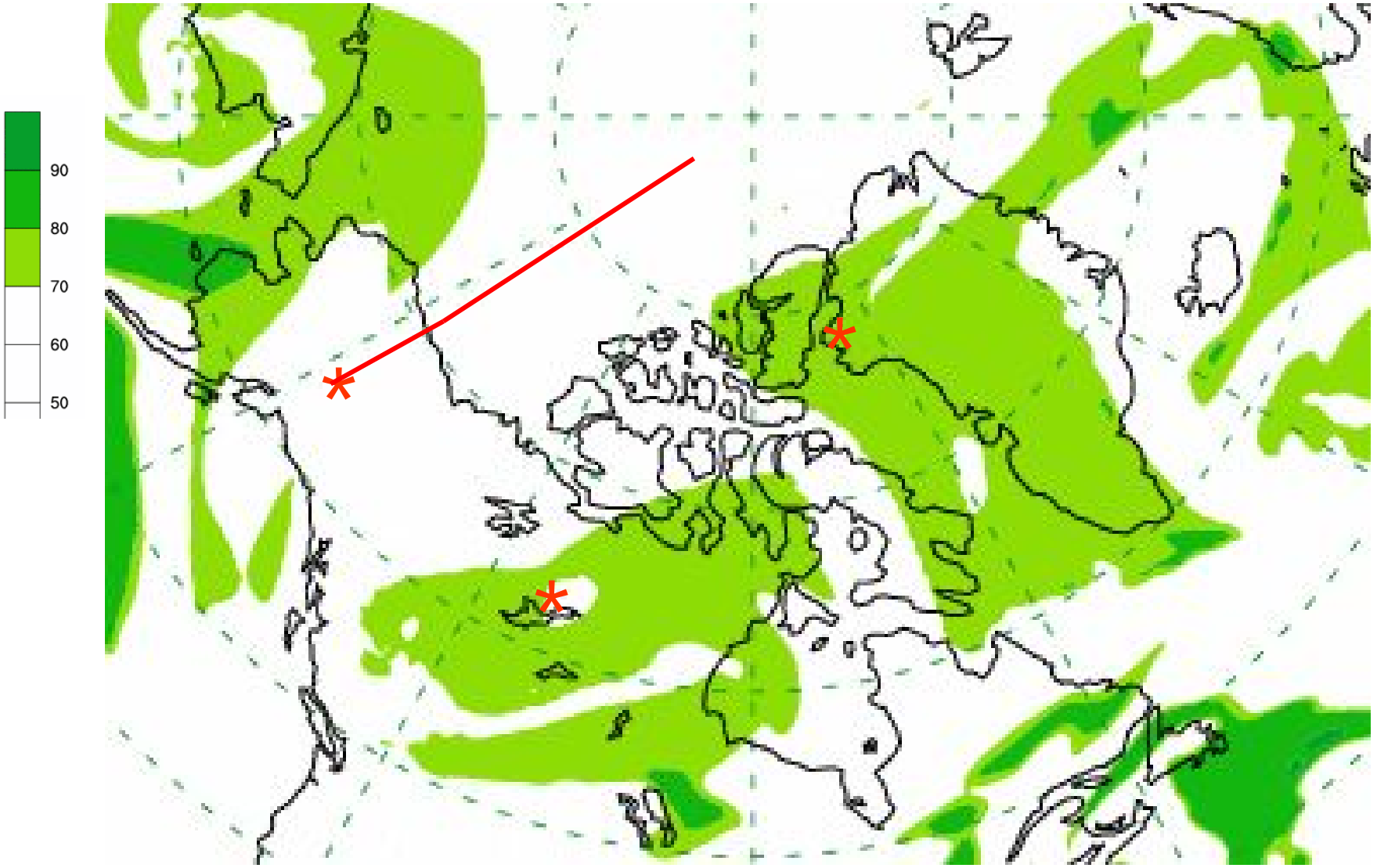
FSU WRF Relative Humidity at 850 hPa Forecast
Valid 1800 Z Friday April 18



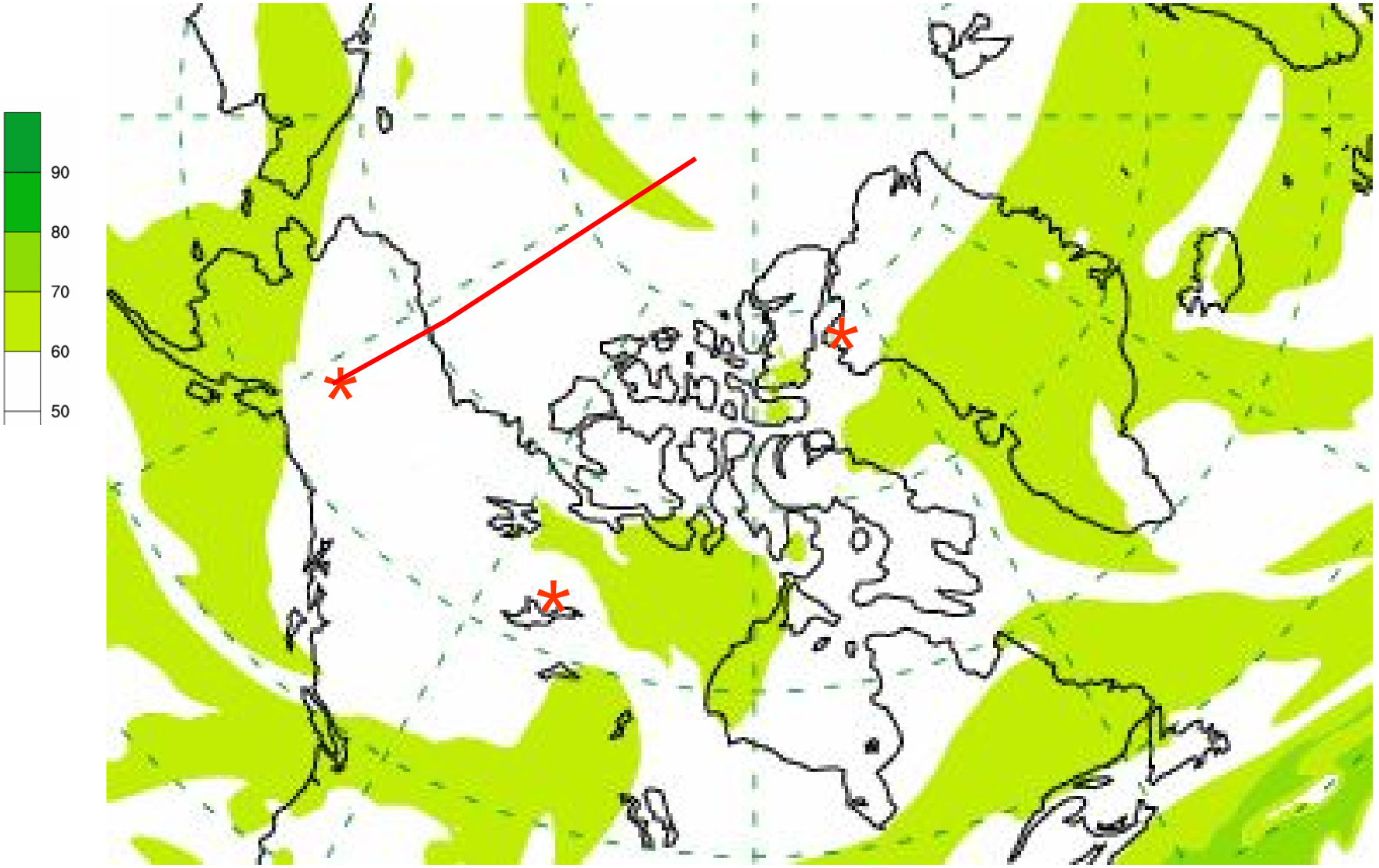
FSU WRF Relative Humidity at 500 hPa Forecast
Valid 1800 Z Thursday April 17



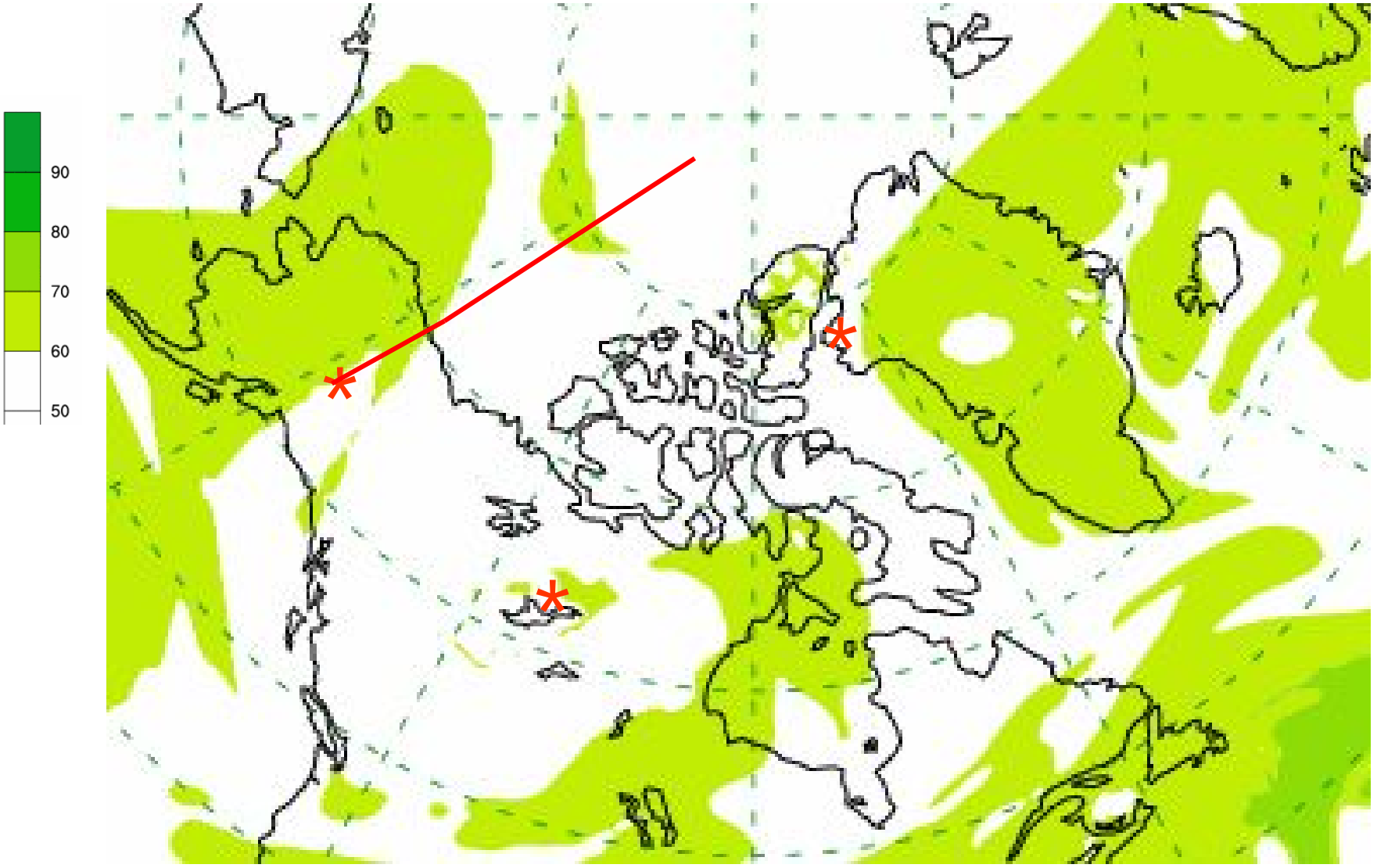
FSU WRF Relative Humidity at 500 hPa Forecast
Valid 1800 Z Friday April 18



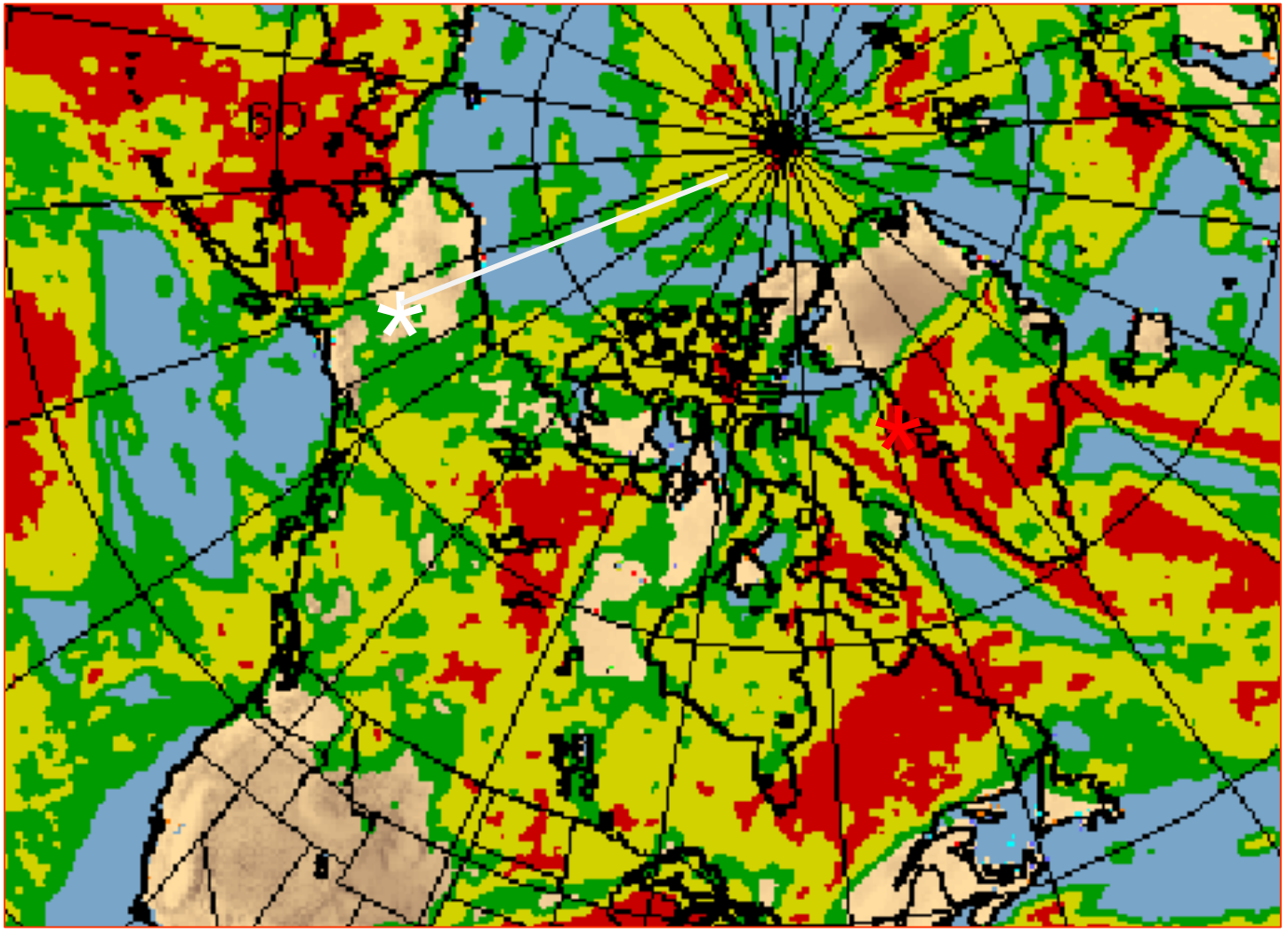
FSU WRF Relative Humidity at 300 hPa Forecast
Valid 1800 Z Thursday April 17



FSU WRF Relative Humidity at 300 hPa Forecast
Valid 1800 Z Friday April 18

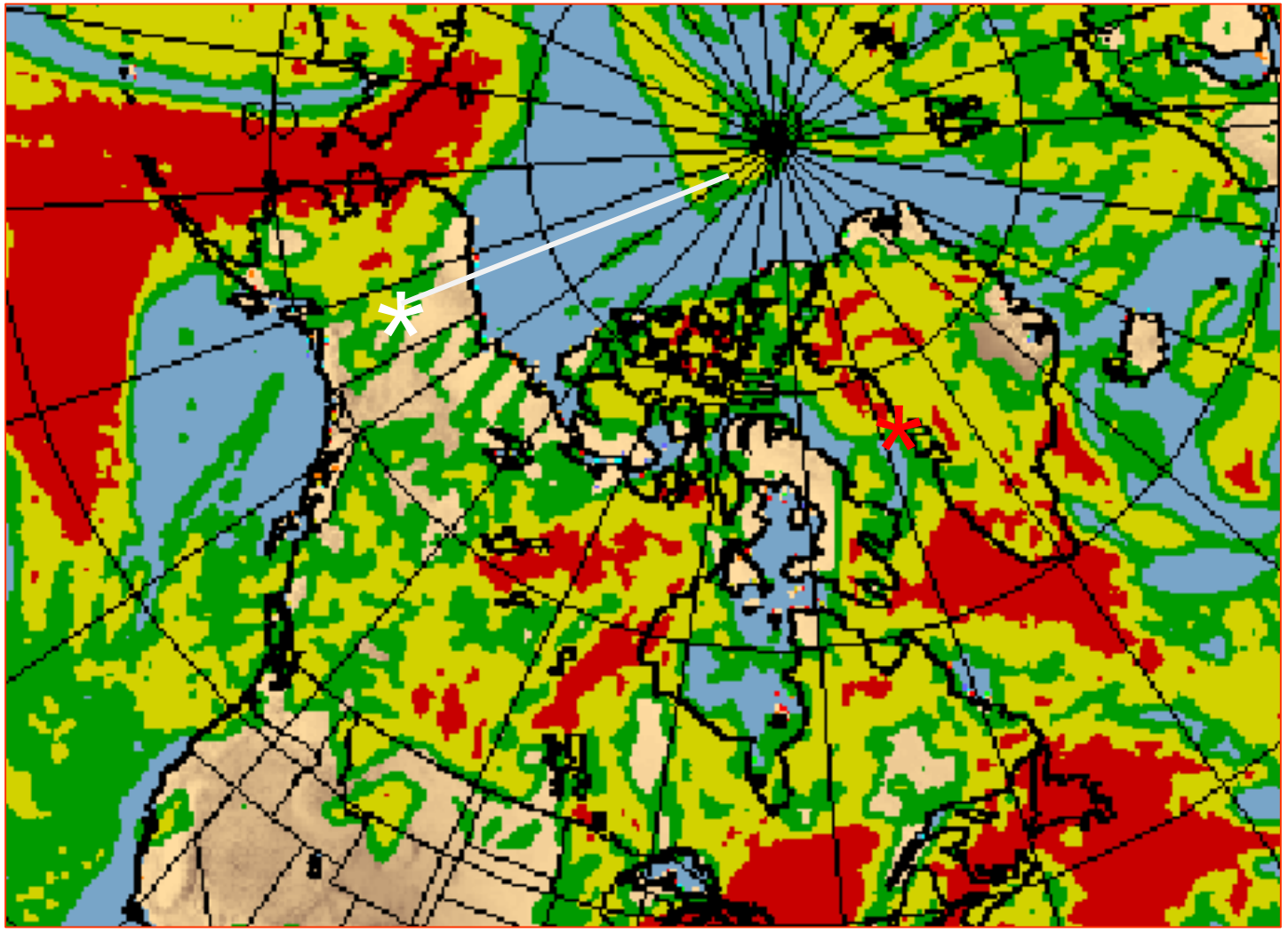


Let's Compare with Air Force Cloud Cover
Valid 1800 Z Thursday April 17



Red = Overcast Yellow = 0.6-0.9 coverage Green = 0.1-0.5 coverage

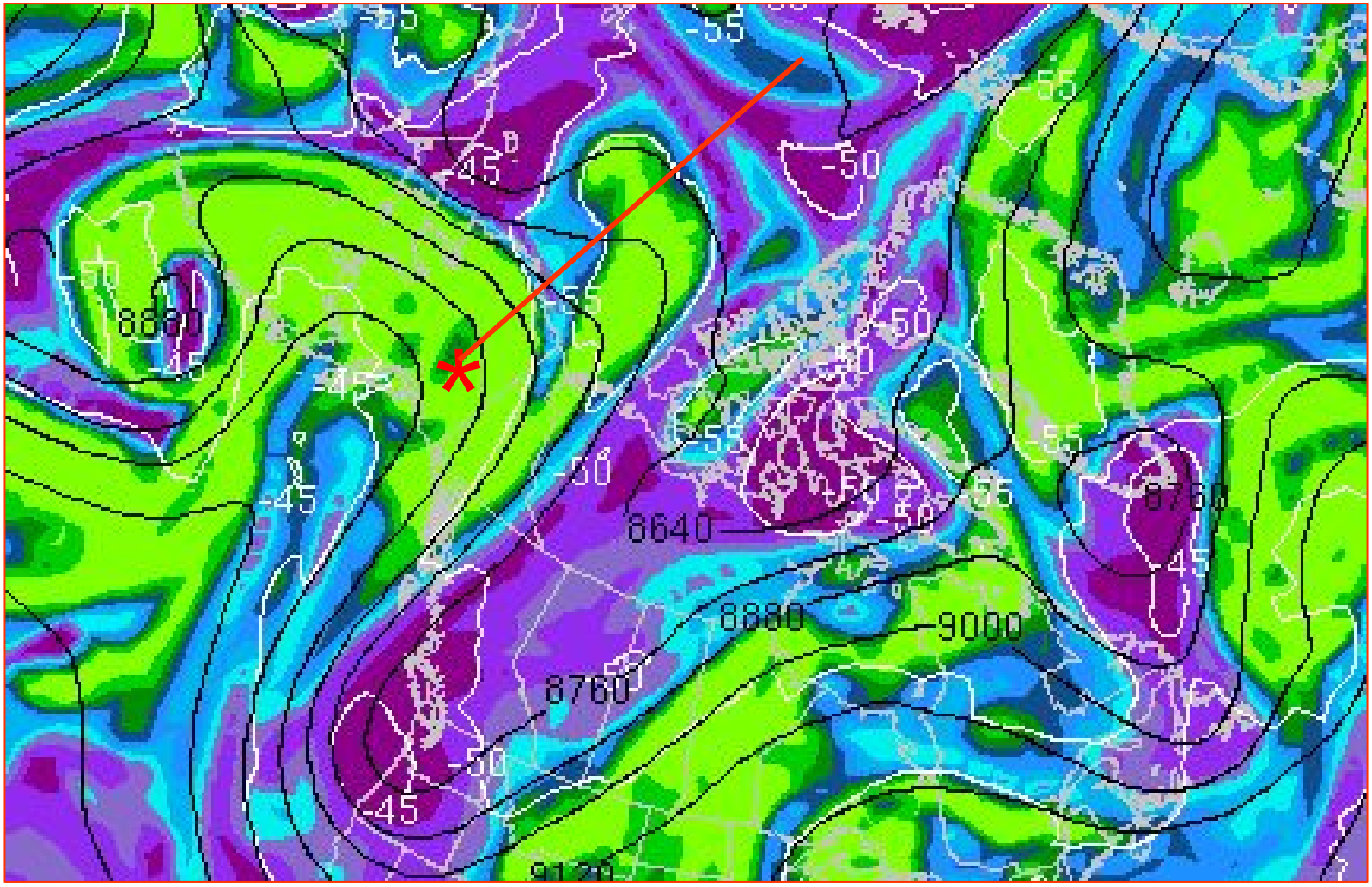
Let's Compare with Air Force Cloud Cover
Valid 1800 Z Friday April 18



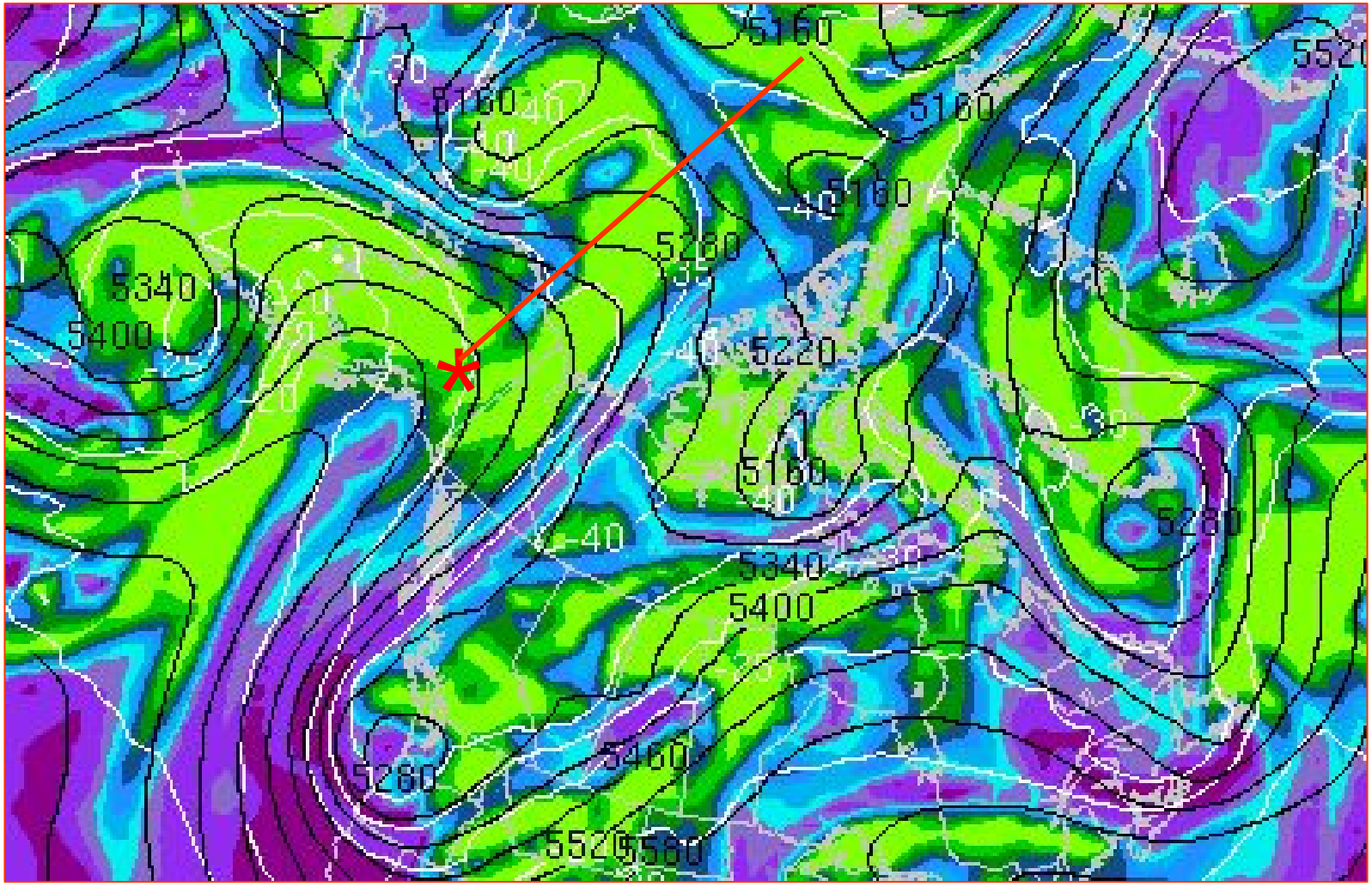
Red = Overcast Yellow = 0.6-0.9 coverage Green = 0.1-0.5 coverage

What About Clouds for Saturday??

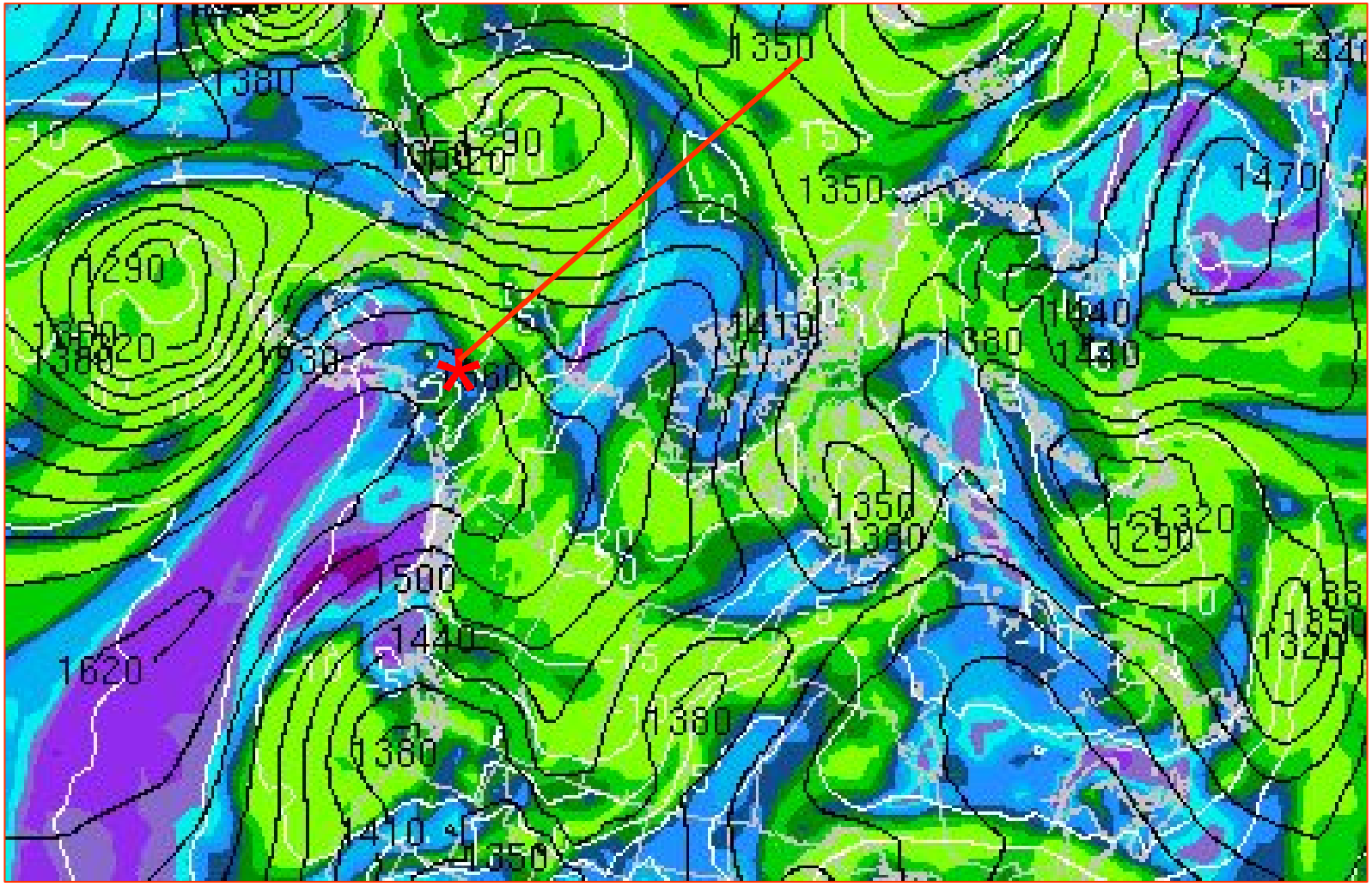
GFS 300 hPa RH Valid 1800 Z Saturday April 19
Green = High Clouds



GFS 500 hPa RH Valid 1800 Z Saturday April 19
Green = Mid Level Clouds

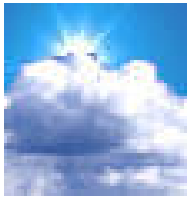


GFS 850 hPa RH Valid 1800 Z Saturday April 19
Green = Low Clouds



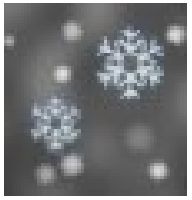
Fairbanks AK Forecast

Tuesday



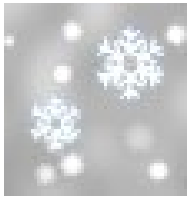
Scattered Flurries
Hi: 31F

Tue. Night



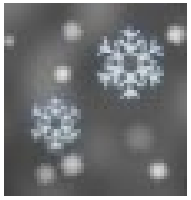
Scattered Flurries
Hi: 15F

Wednesday



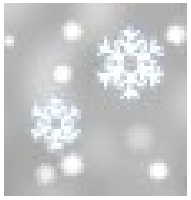
Chance of PM Snow
Hi: 30F

Wed. Night



Chance of Snow
Lo: 10F

Thursday

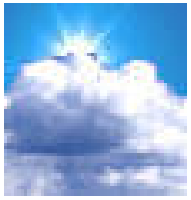


Chance of Snow
Hi: 32F

Thurs. Night

Mostly Cloudy
Lo: 10F

Friday

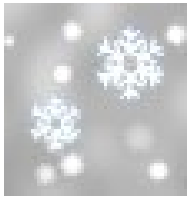


Increasing Clouds
Hi: 38F

Fri. Night

Mostly Cloudy
Lo: 15

Saturday



Mostly Cloudy
Hi: 40F

AVERAGES Hi: 41 Low: 18