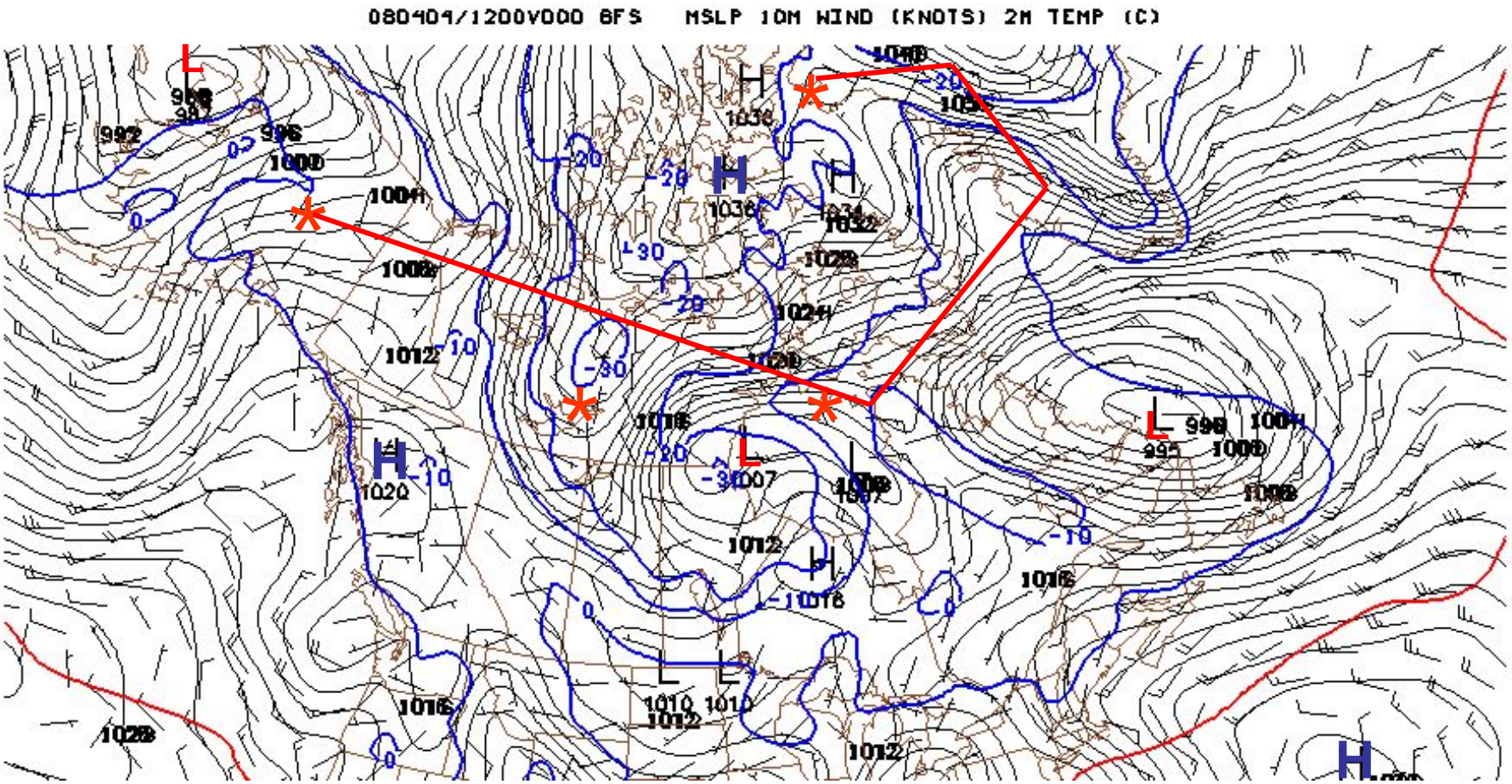
Flight Day Conditions

April 5, 2008

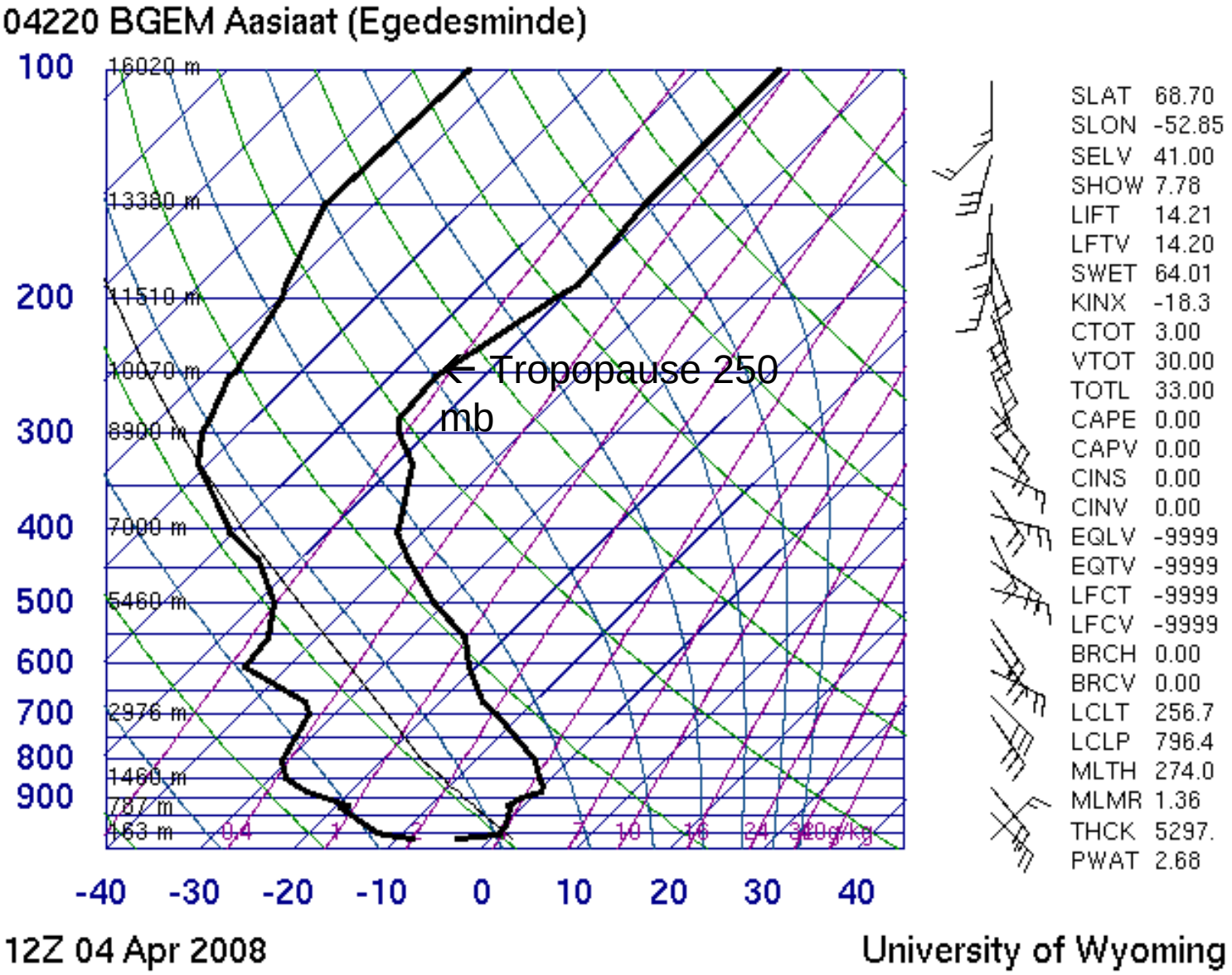
Henry Fuelberg
Andy Latto

"Your Eyes to the Skies"

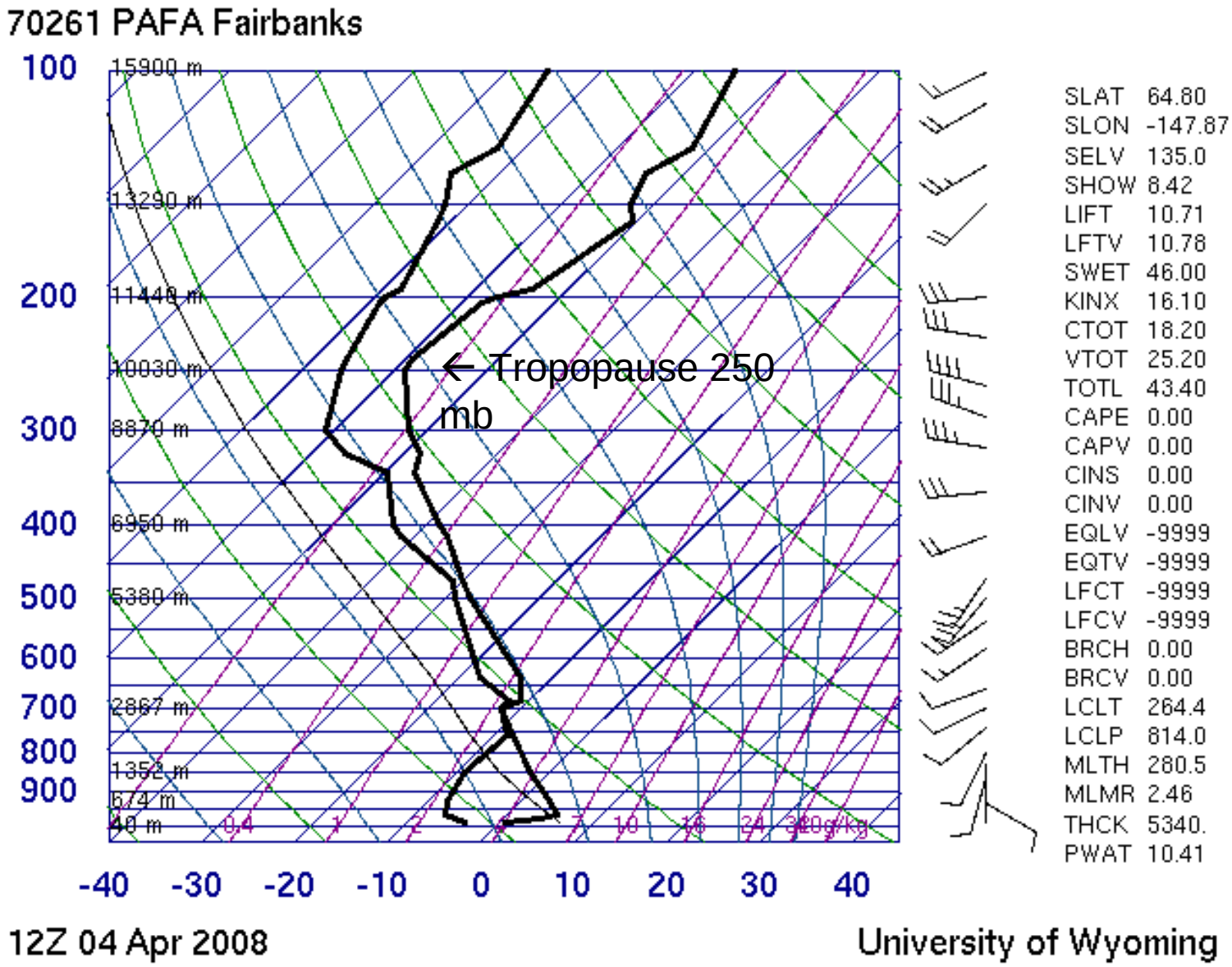
GFS Surface Analysis at 1200 Z April 4



Thule Sounding

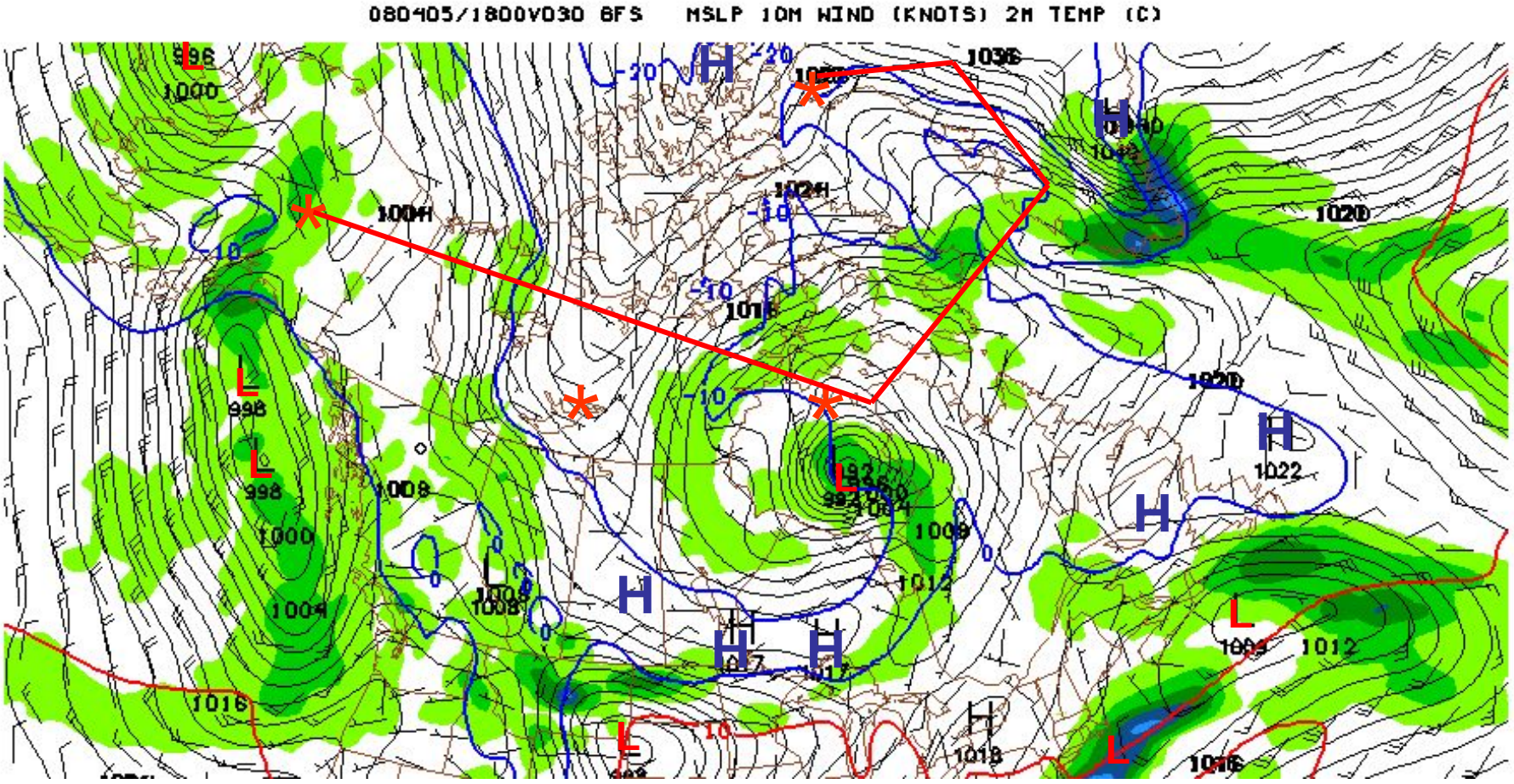


Fairbanks Sounding

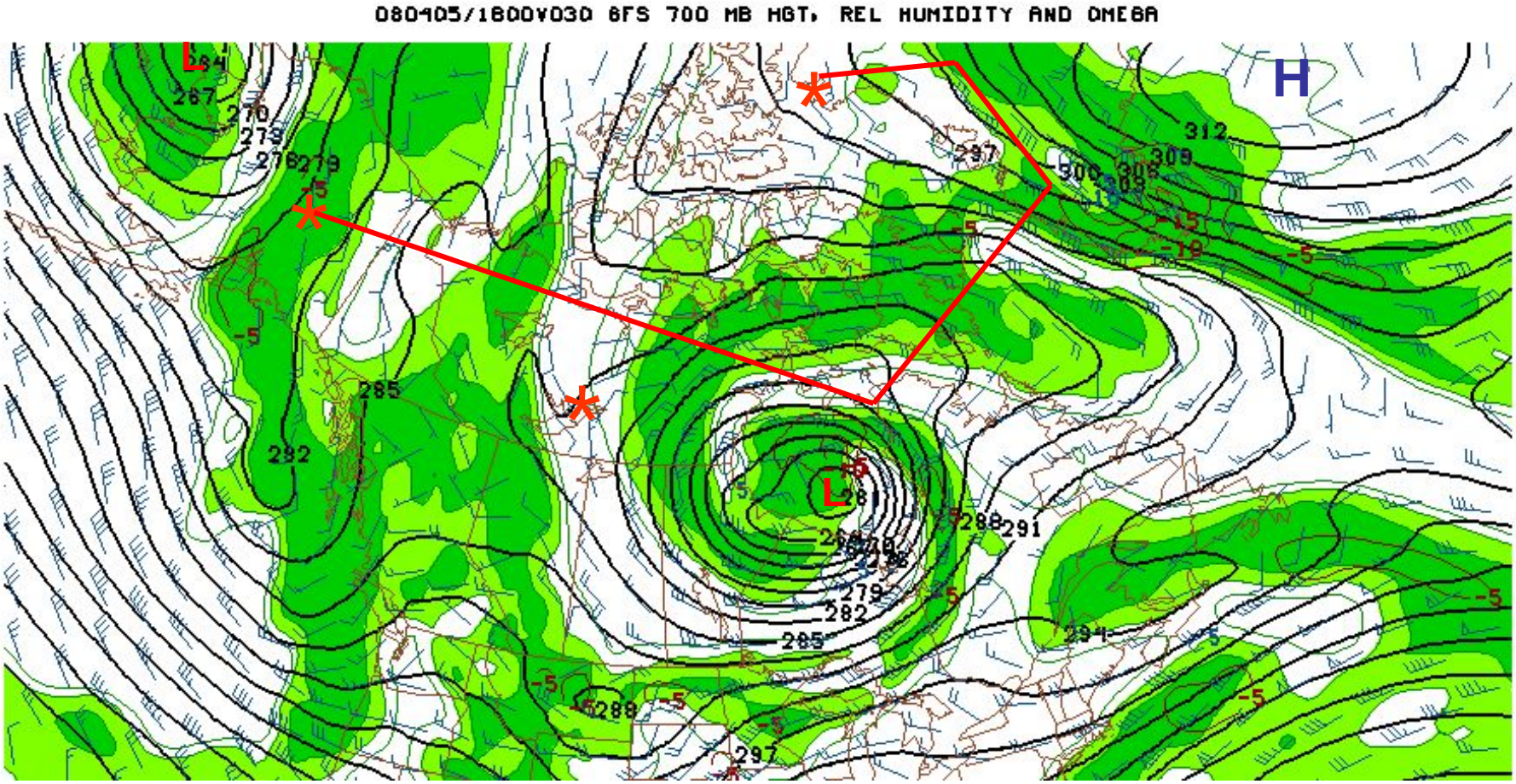


Saturday’s Forecast

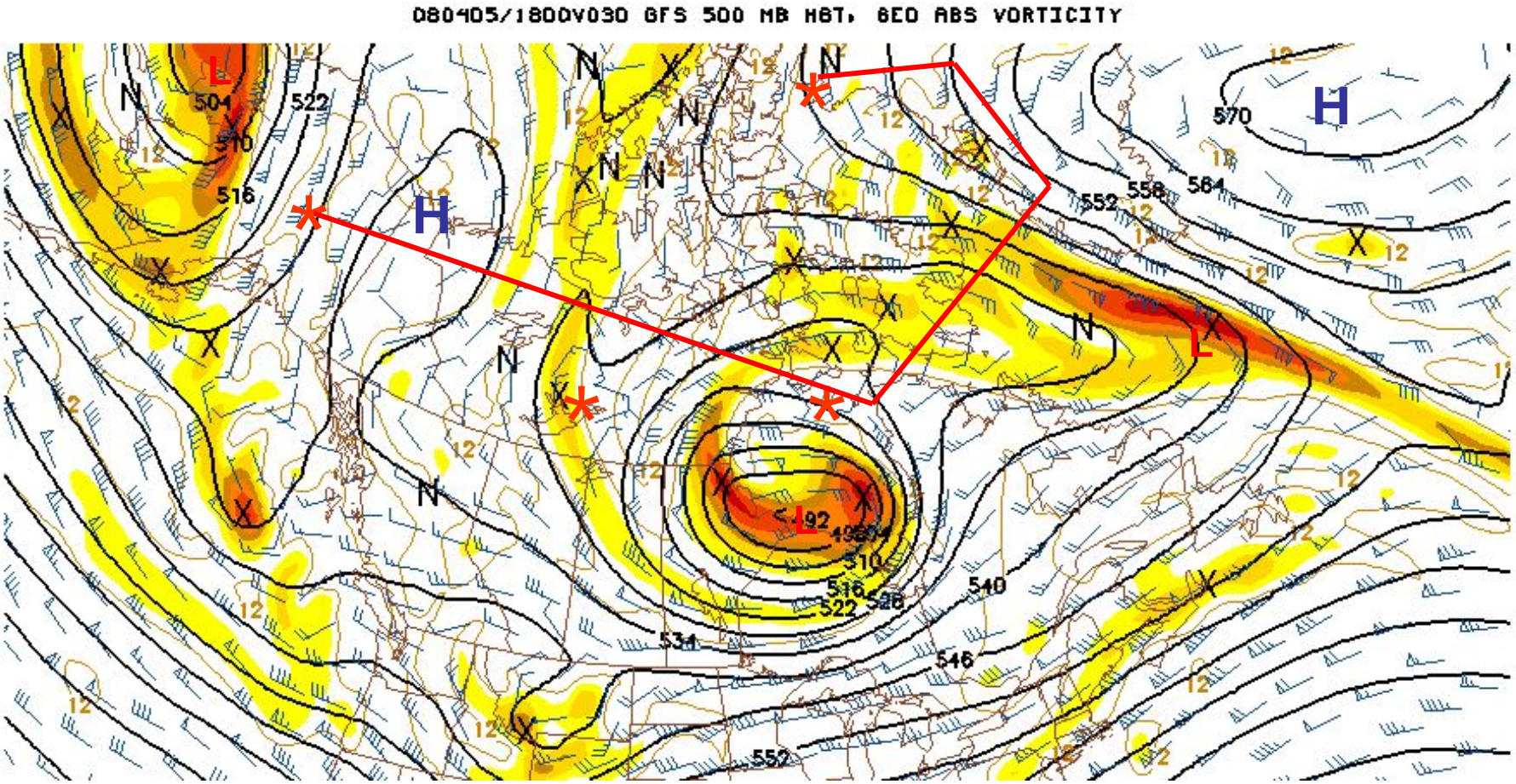
GFS Forecast Valid 1800 Z April 5
SLP, 10 m winds, 6 h precip



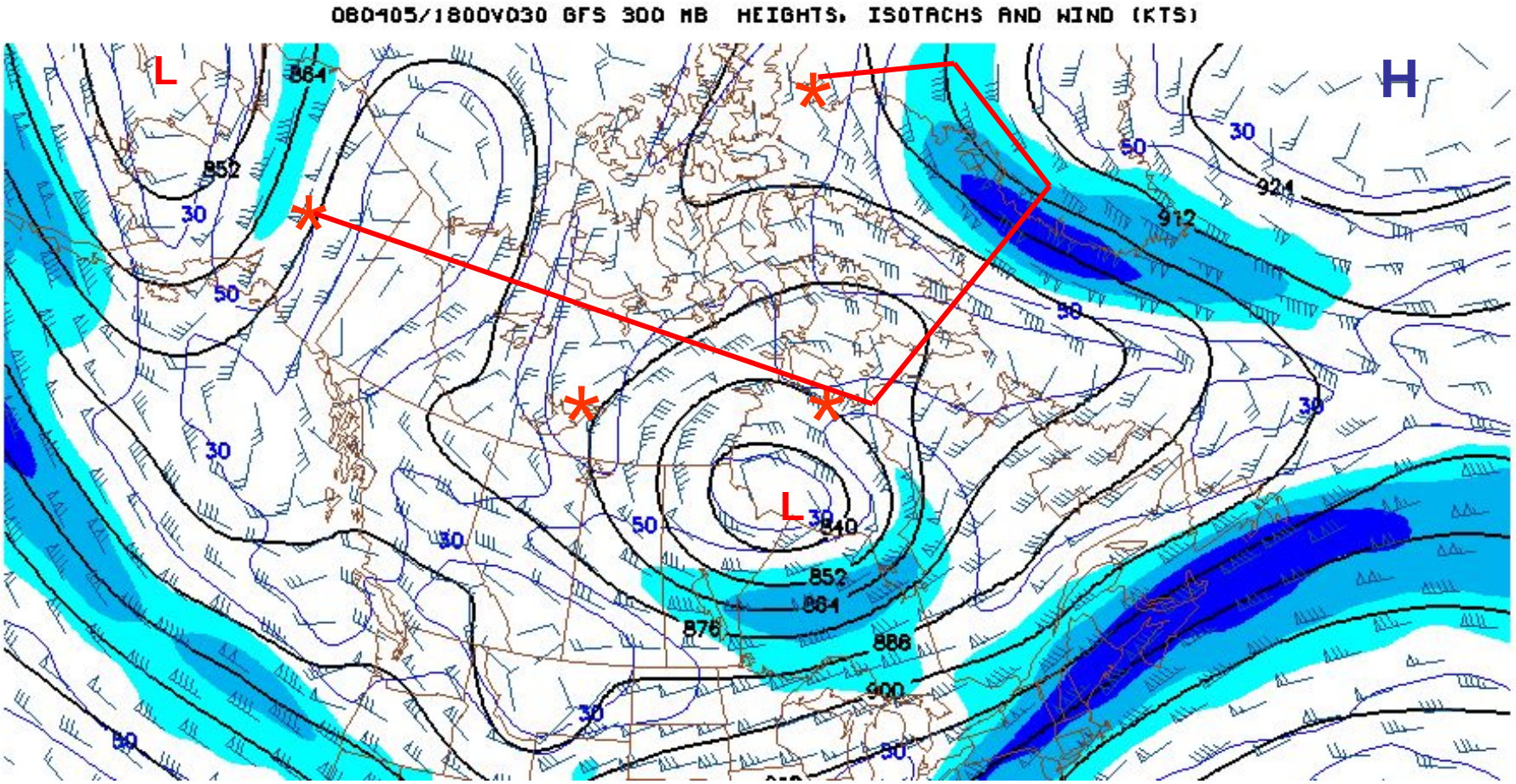
GFS Forecast Valid 1800 Z April 5
700 hPa RH, winds, and heights



GFS Forecast Valid 1800 Z April 5
500 hPa heights, vorticity, and winds



GFS Forecast Valid 1800 Z April 5
300 hPa winds and heights

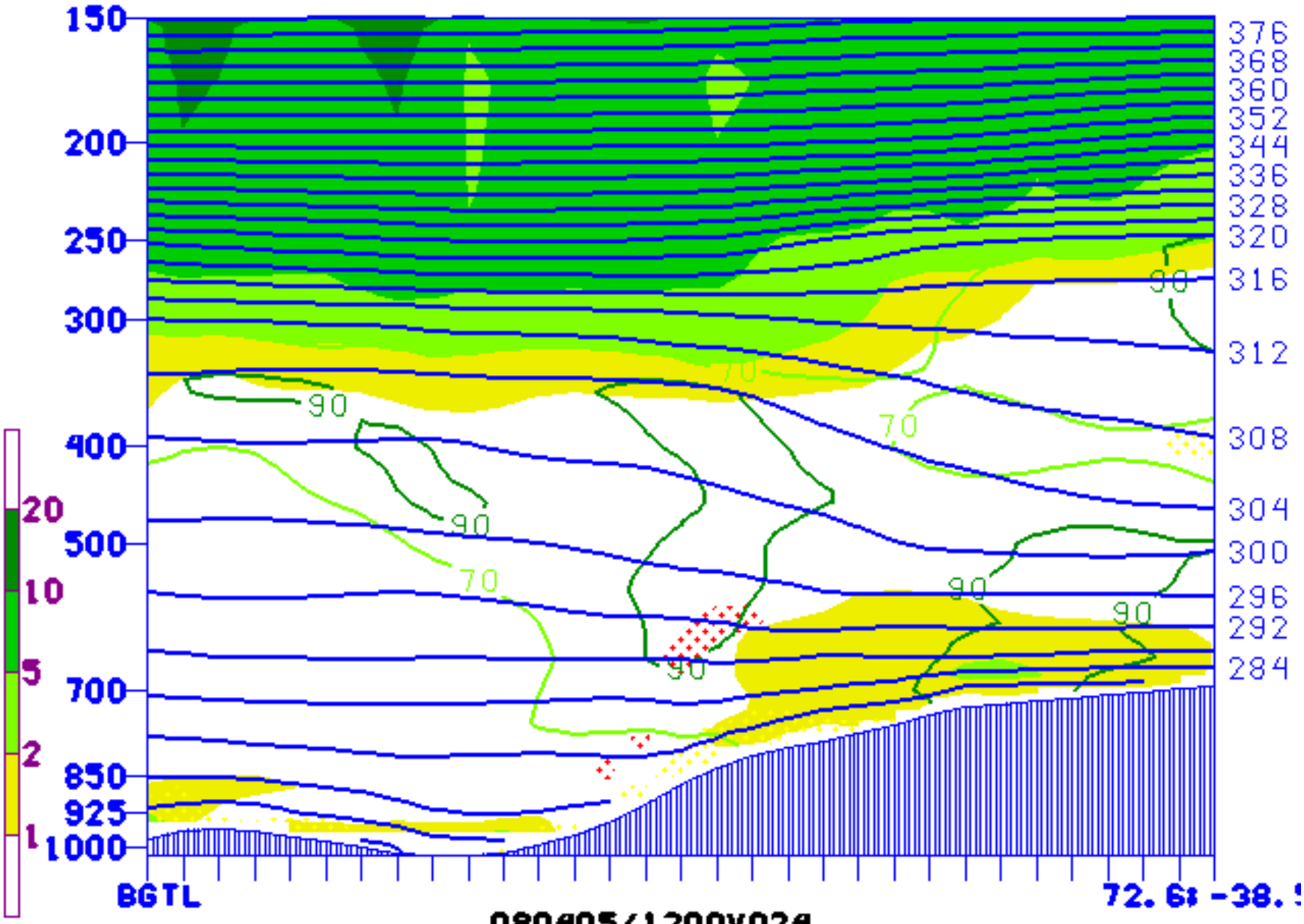


April 5, 2008
Cross sections of PV

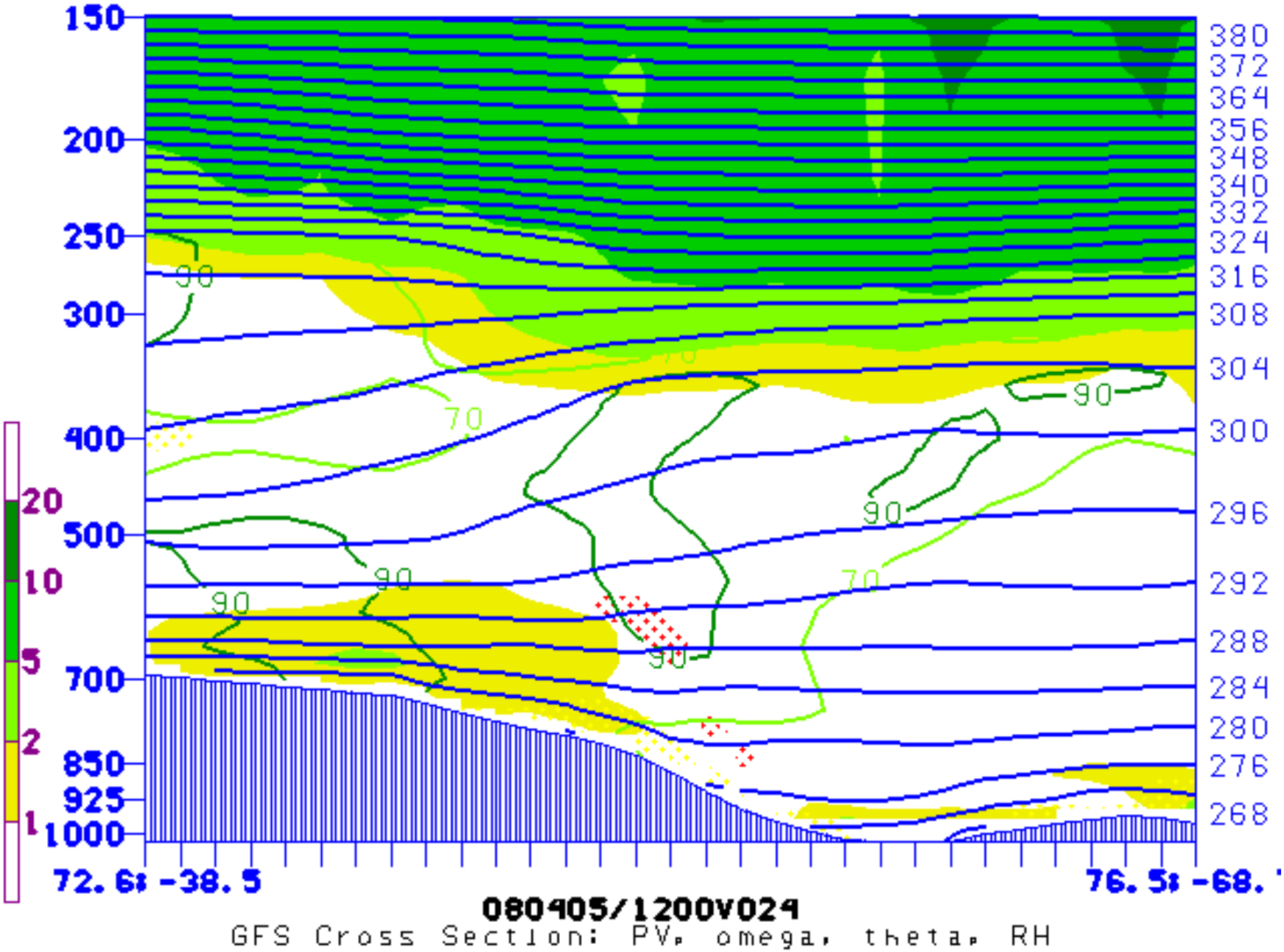
Thule – Summit – Ungava – Fairbanks

Atkinson, Cross, Malingowski
University of Alaska Fairbanks

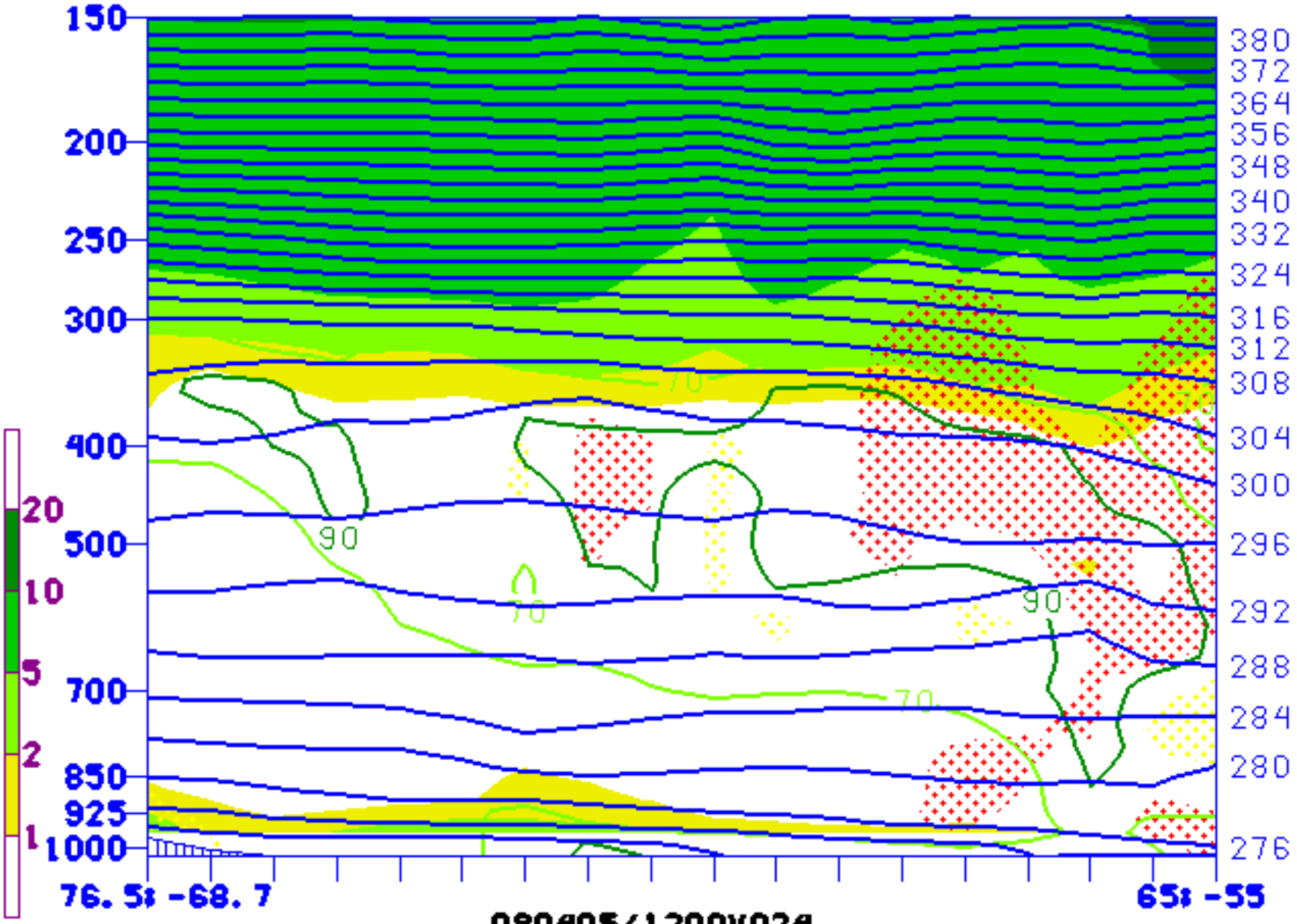
Thule - Summit



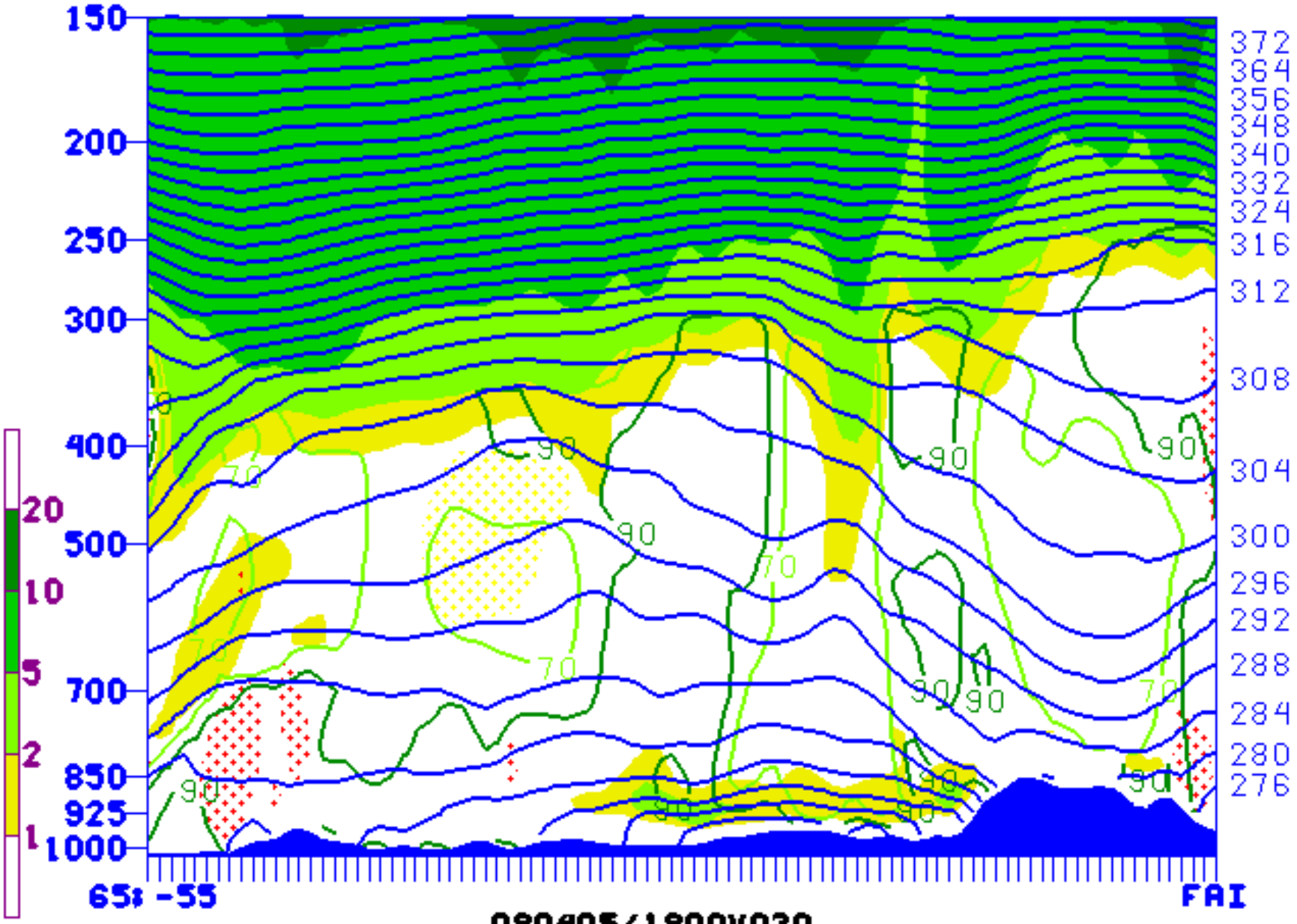
Summit - Baffin Bay (Pt3)



Baffin Bay (Pt3) - Ungava (Pt 4)

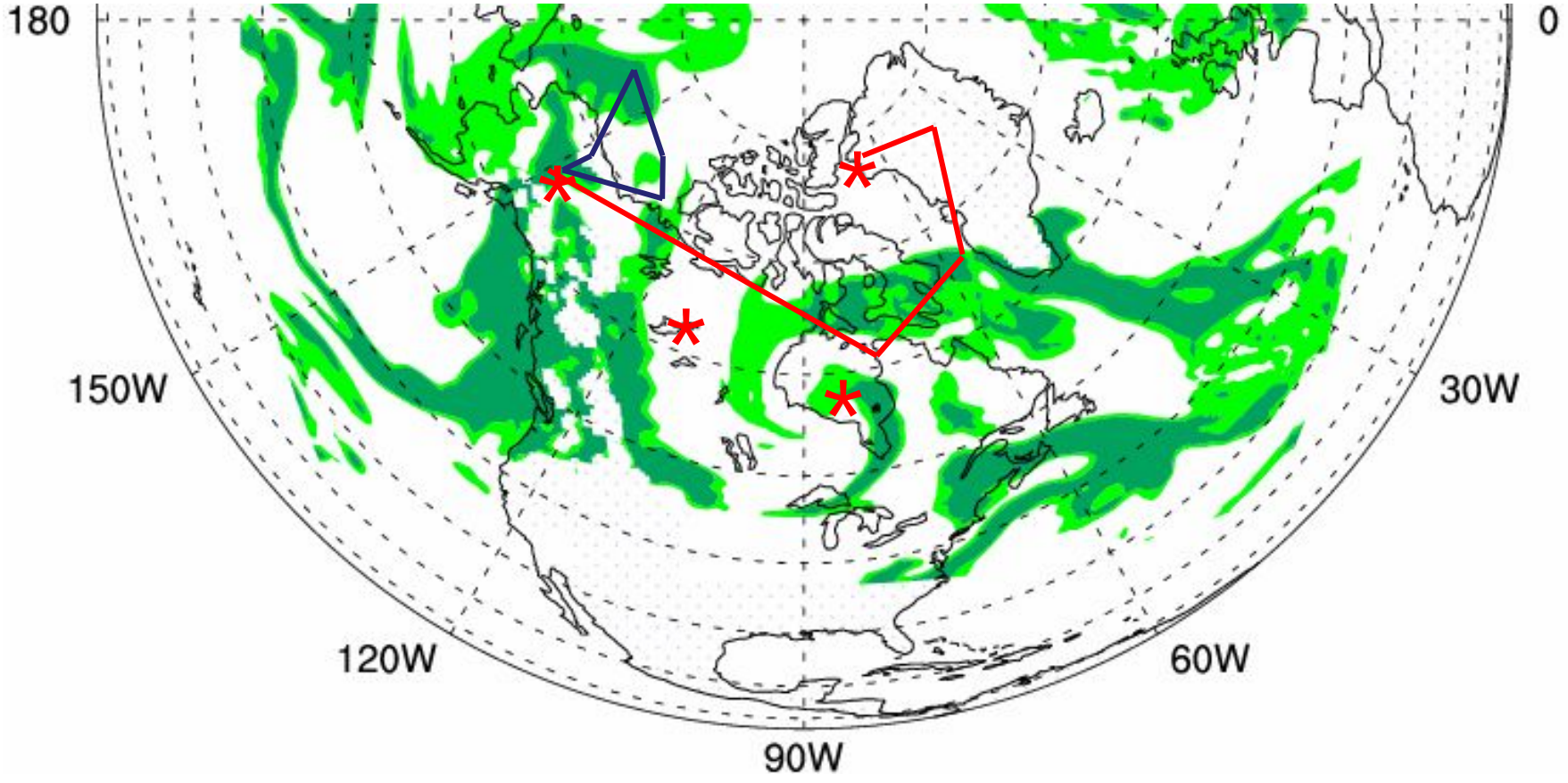


Ungava (Pt 4) - Fairbanks

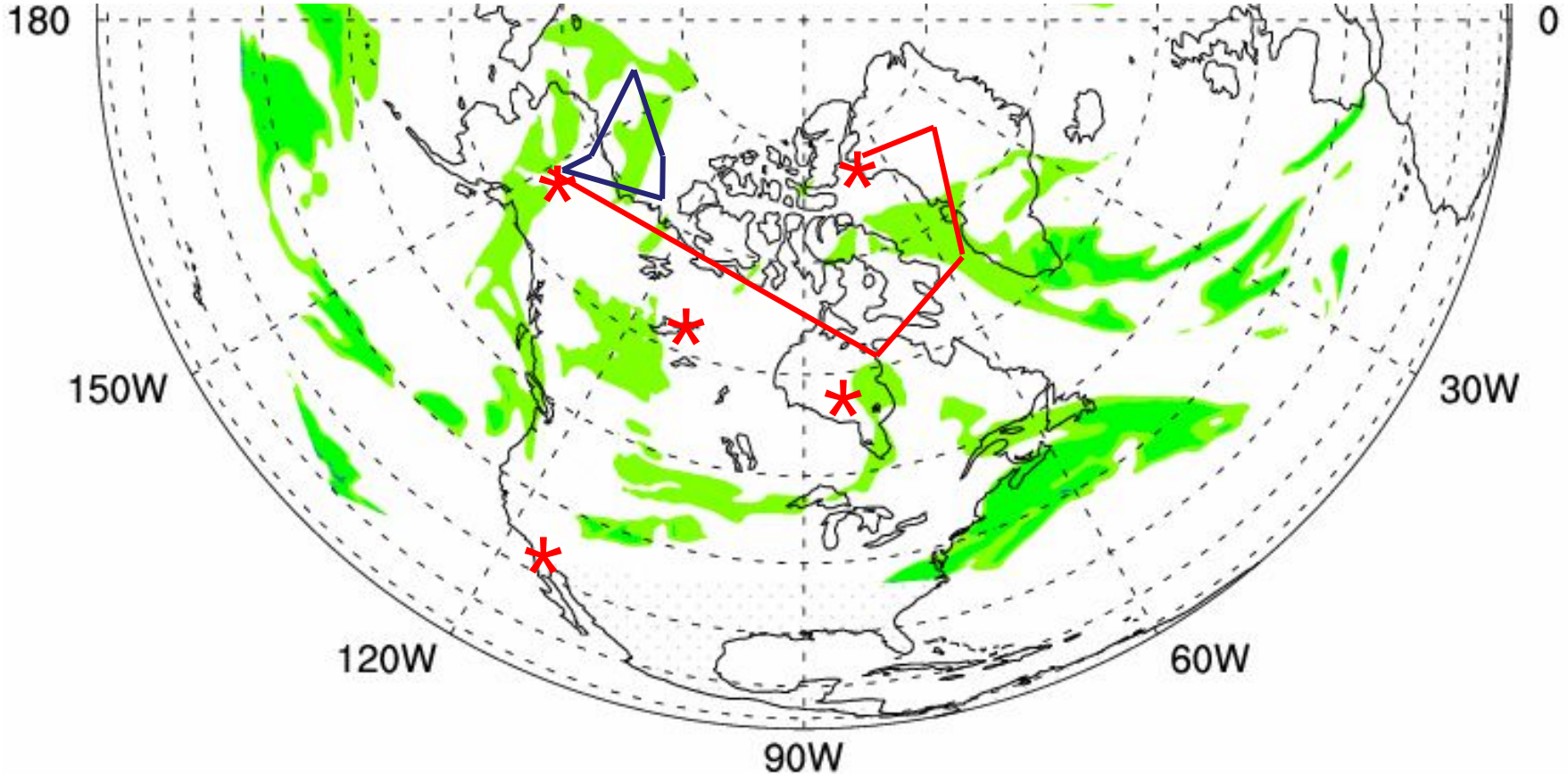


What About Clouds for Saturday??

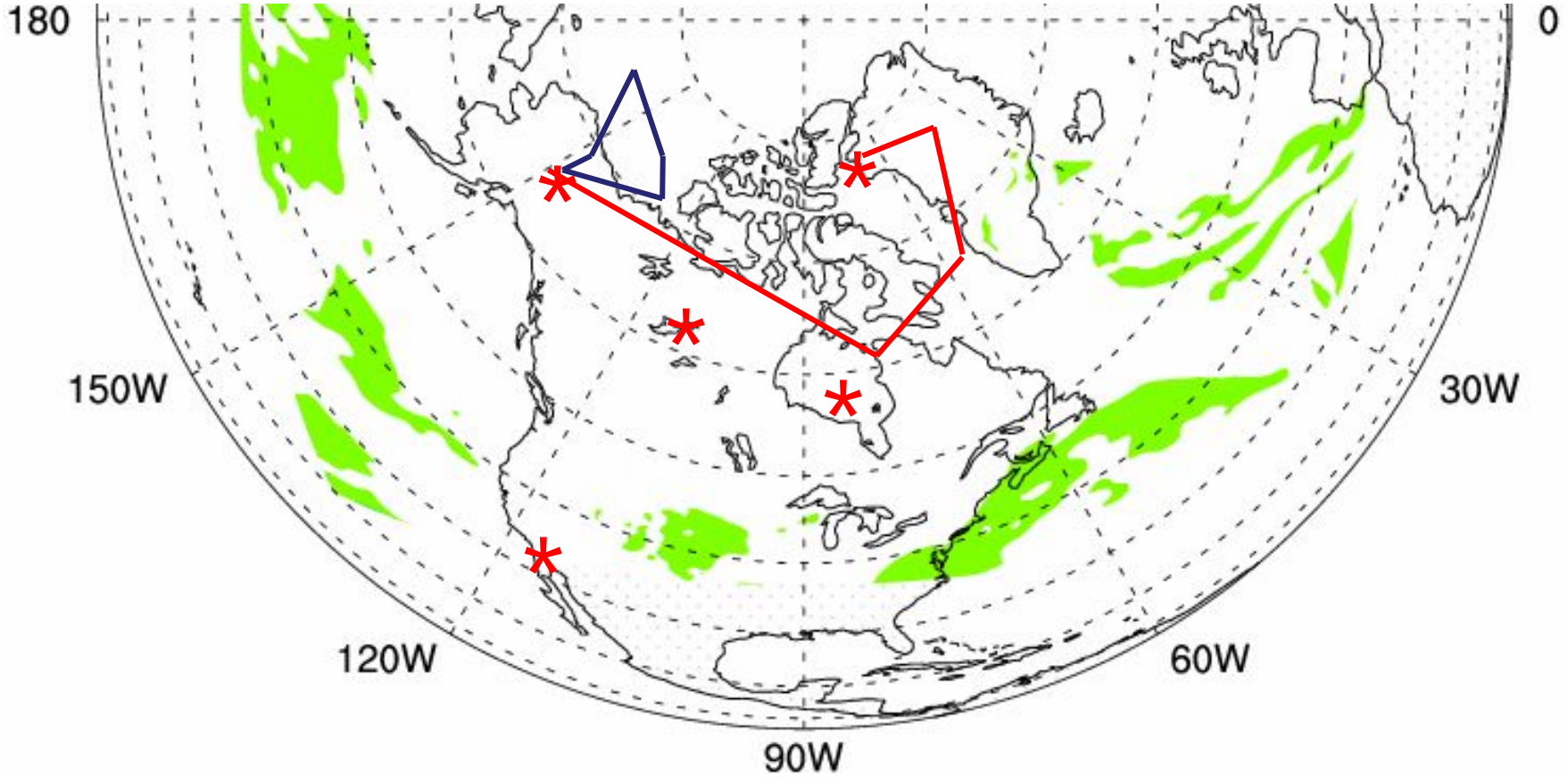
FSU WRF Relative Humidity at 850 hPa Forecast
Valid 1800 Z April 5



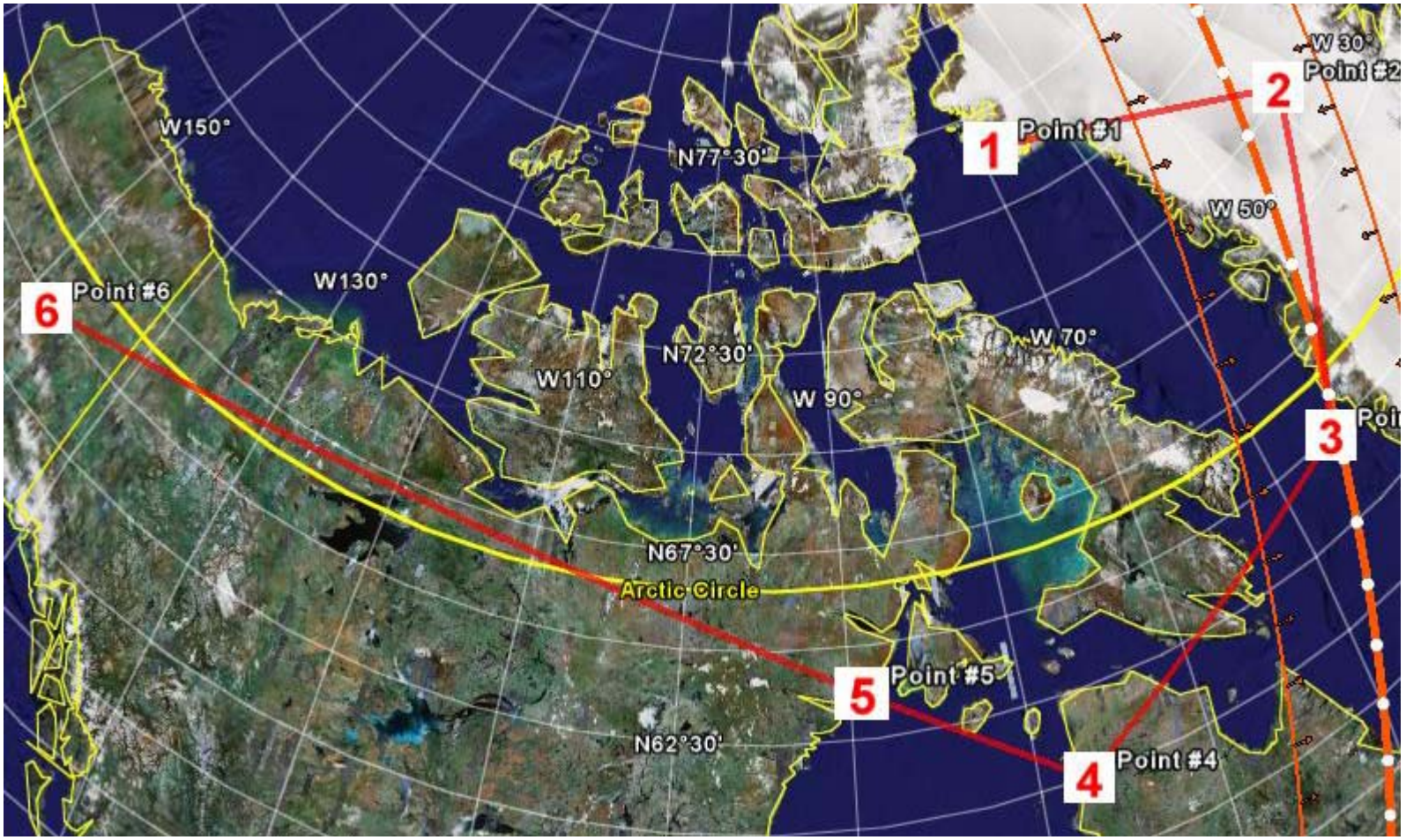
FSU WRF Relative Humidity at 500 hPa Forecast
Valid 1800 Z April 5



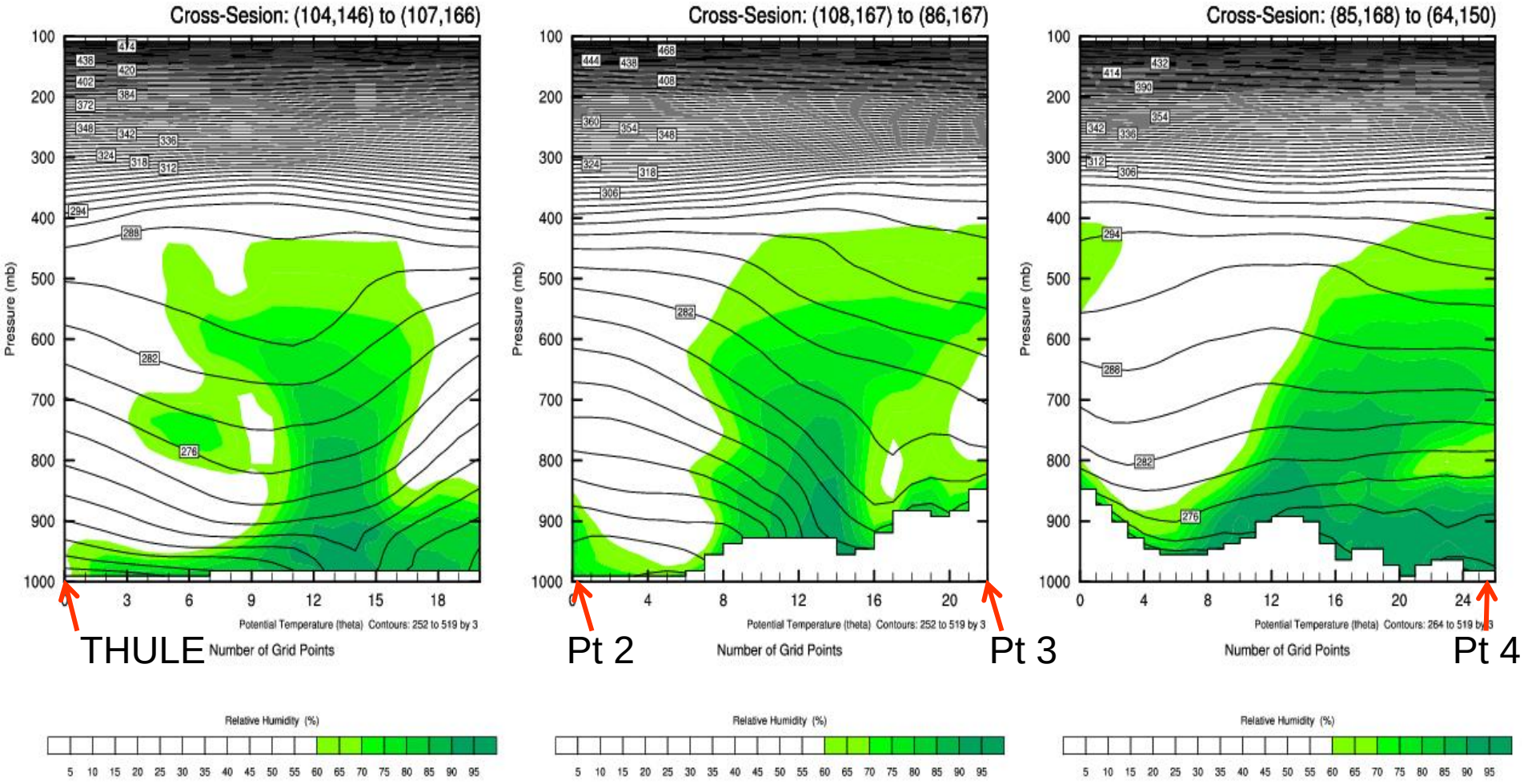
FSU WRF Relative Humidity at 300 hPa Forecast
Valid 1800 Z April 5



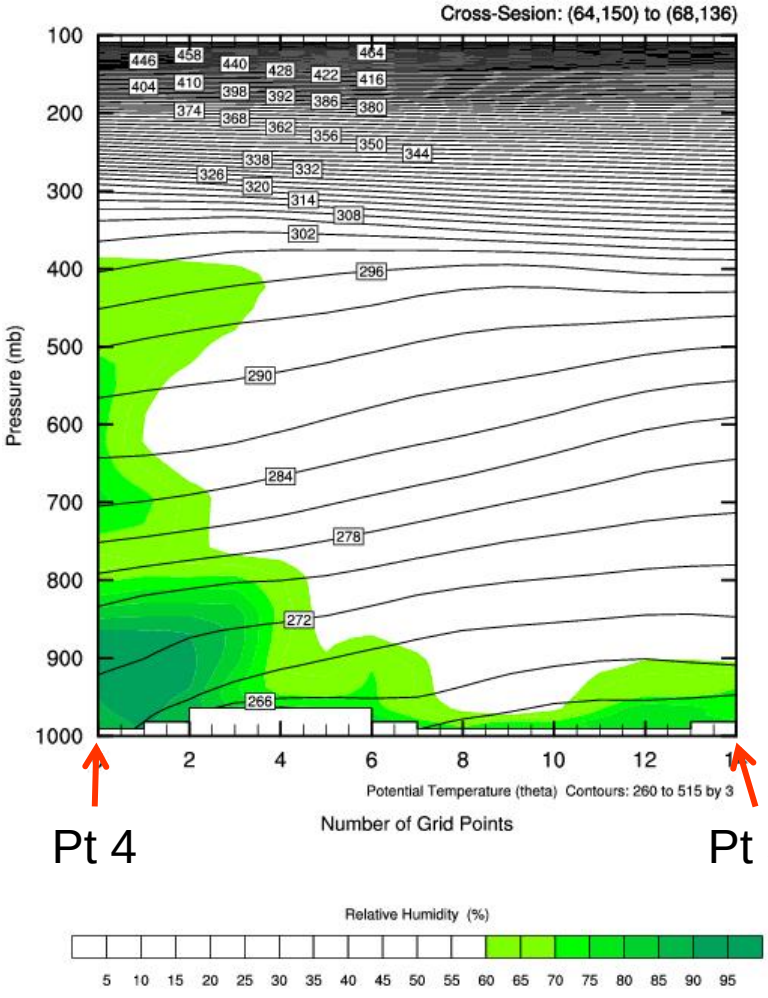
Draft DC-8 Flight Plan for 04/05/2008 – Flight 5 (version 1)



FSU WRF RH DC-8 Flight Path Forecast
Valid 1800 Z April 5

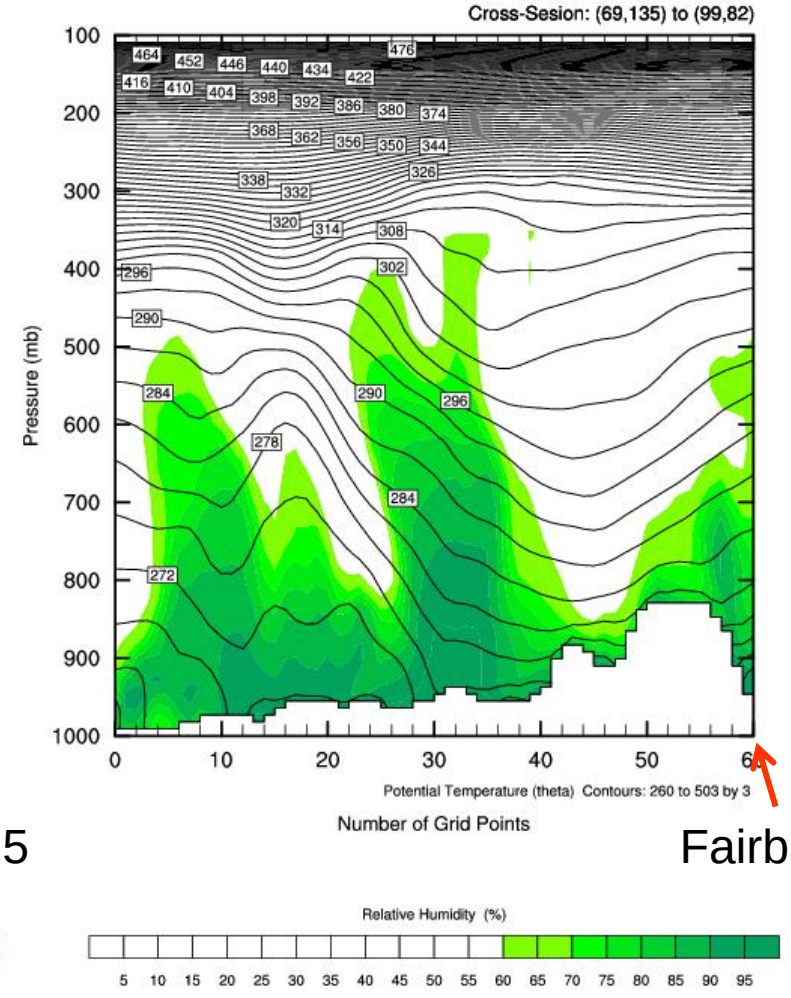


FSU WRF RH DC-8 Flight Path Forecast
Valid 1800 Z April 5



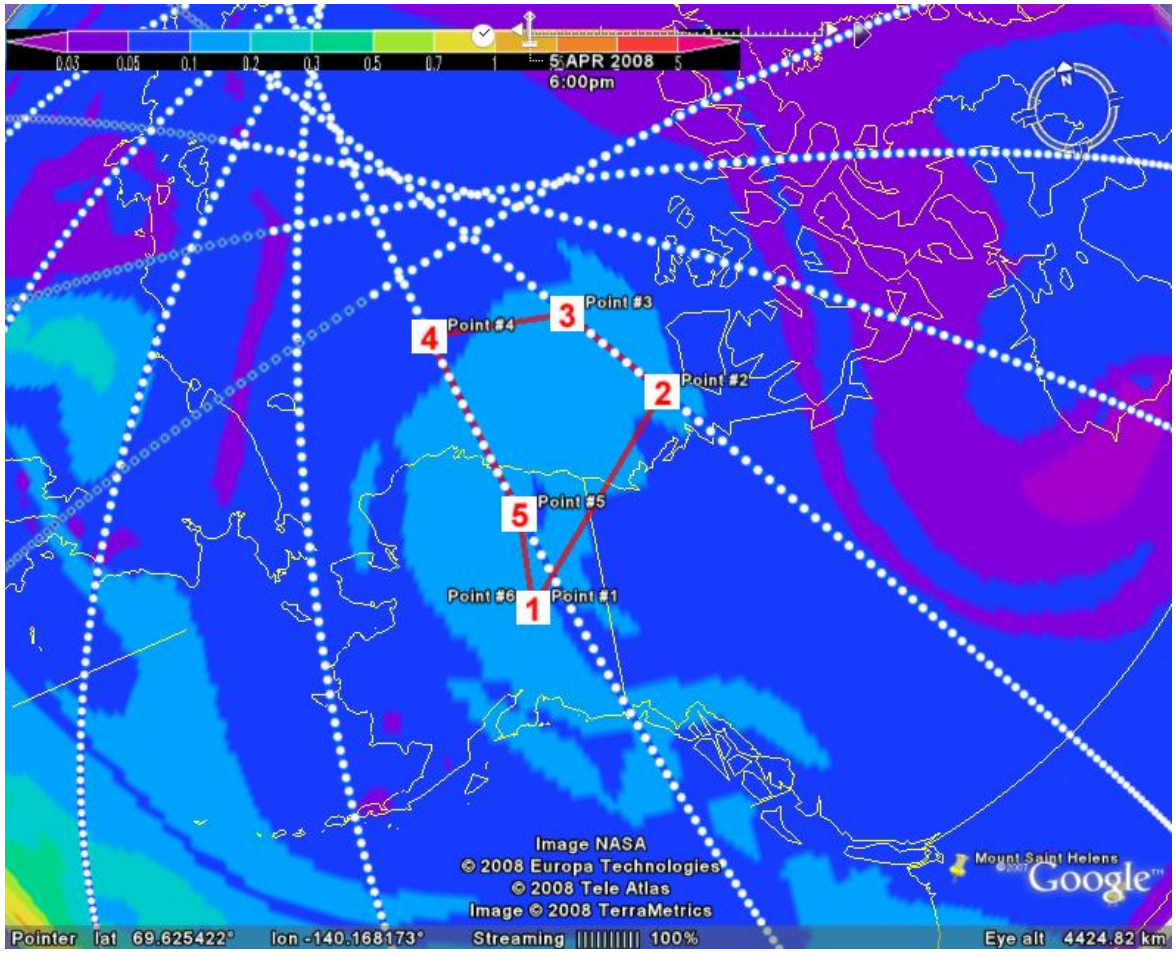
Pt 4

Pt 5

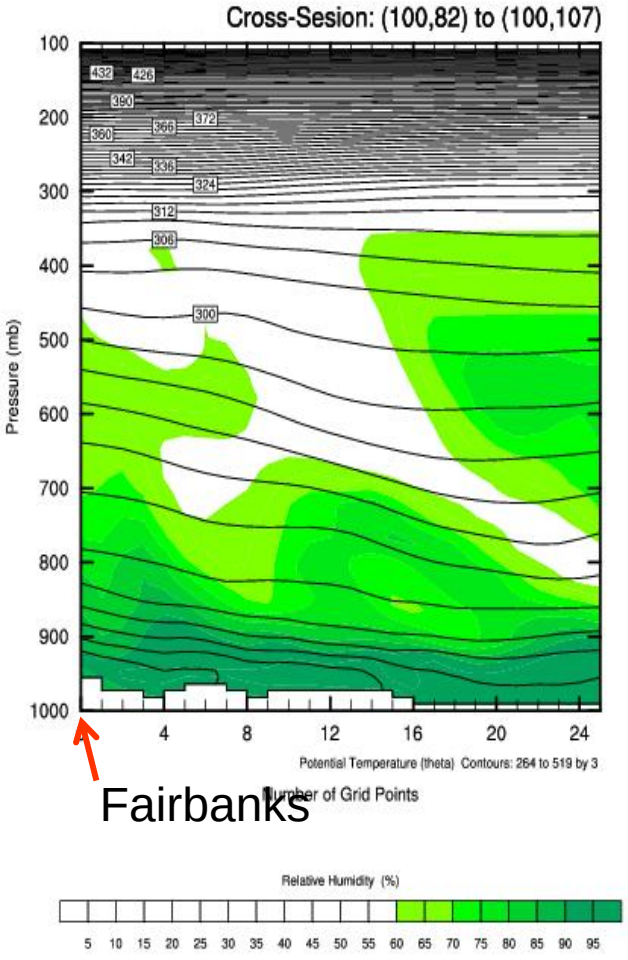


Fairbanks

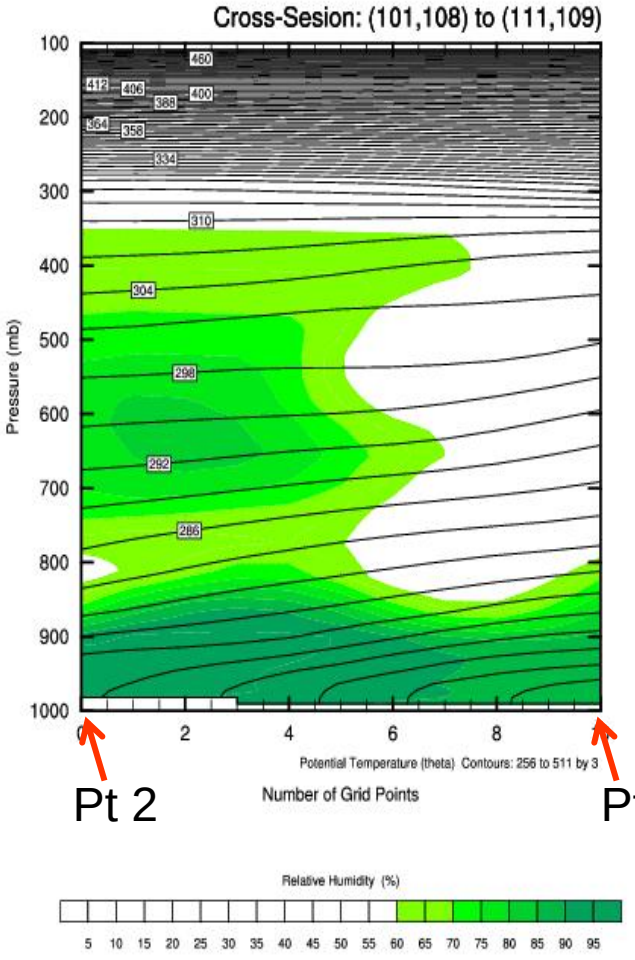
Draft P-3 Flight Plan for 04/05/2008 – Flight 5 (version 1)



FSU WRF RH P-3 Flight Path Forecast
Valid 1800 Z April 5

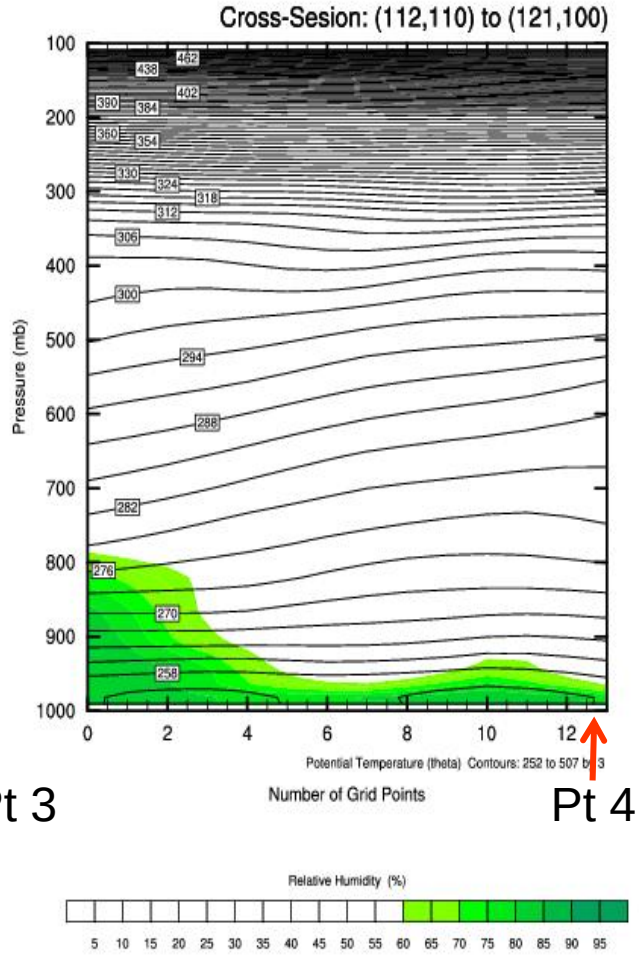


Fairbanks



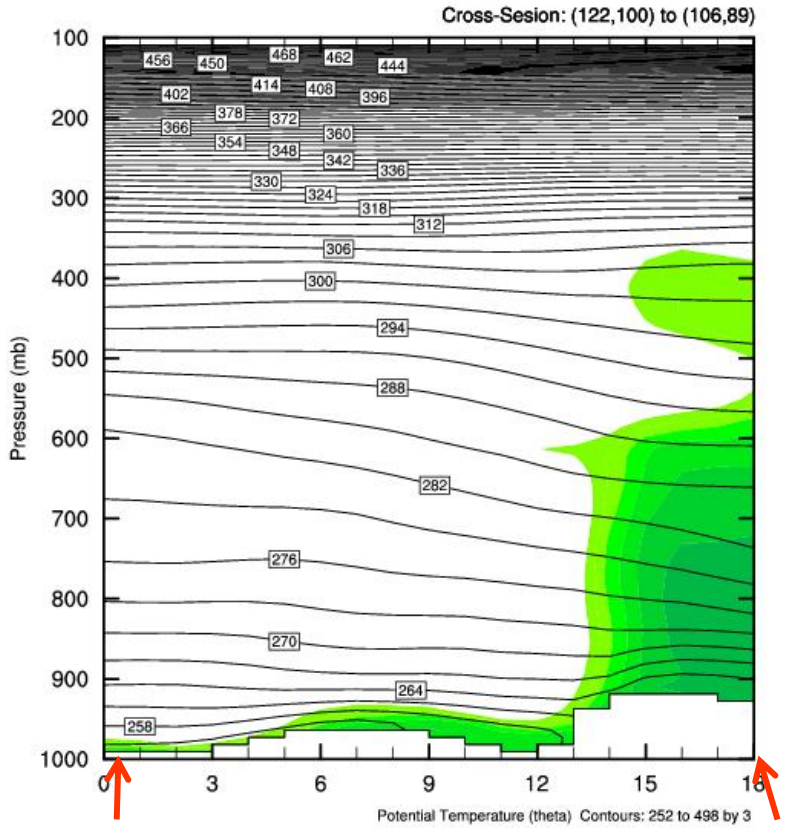
Pt 2

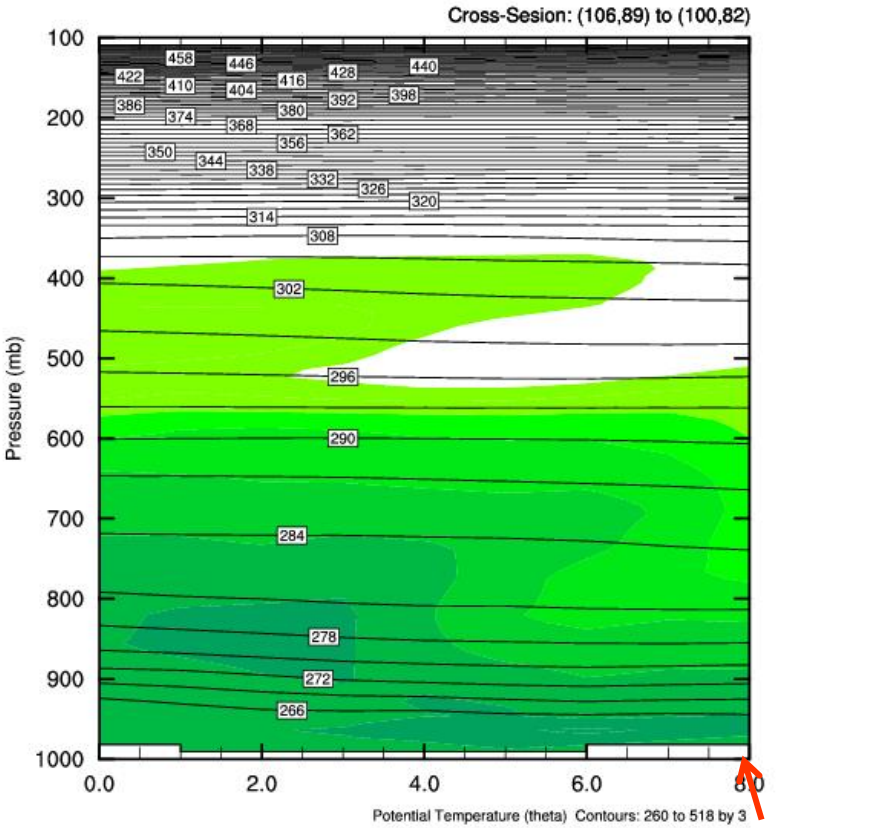
Pt 3

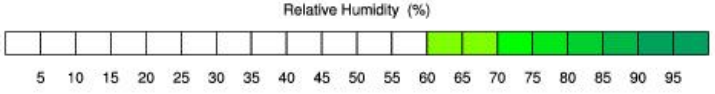


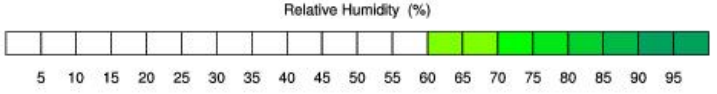
Pt 4

FSU WRF RH P-3 Flight Path Forecast
Valid 1800 Z April 5

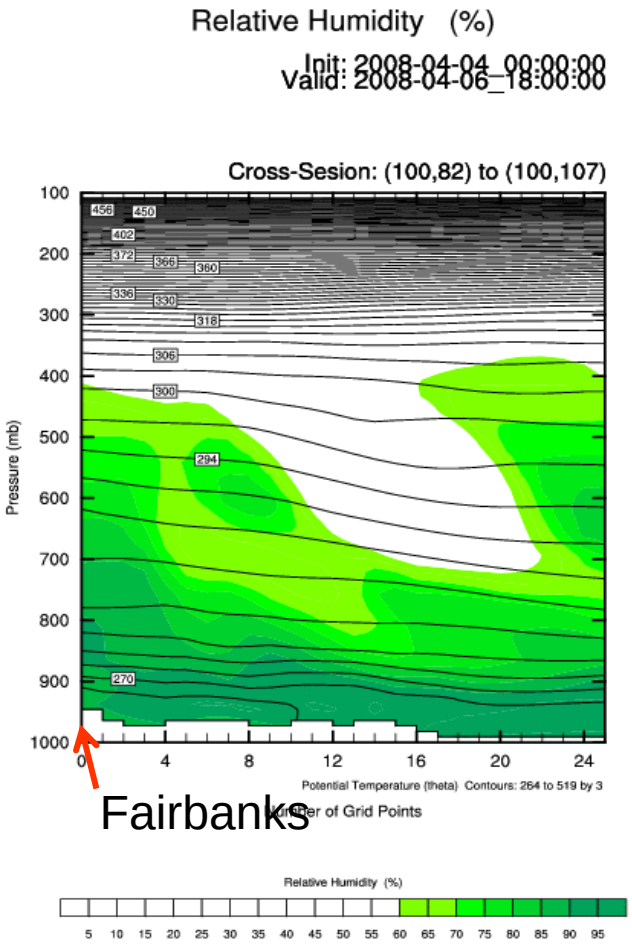


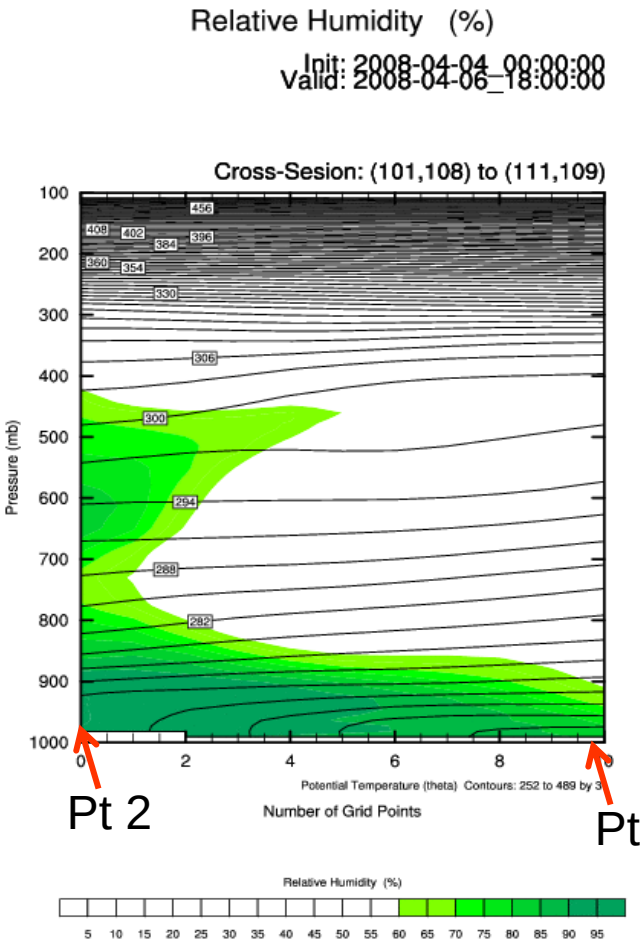


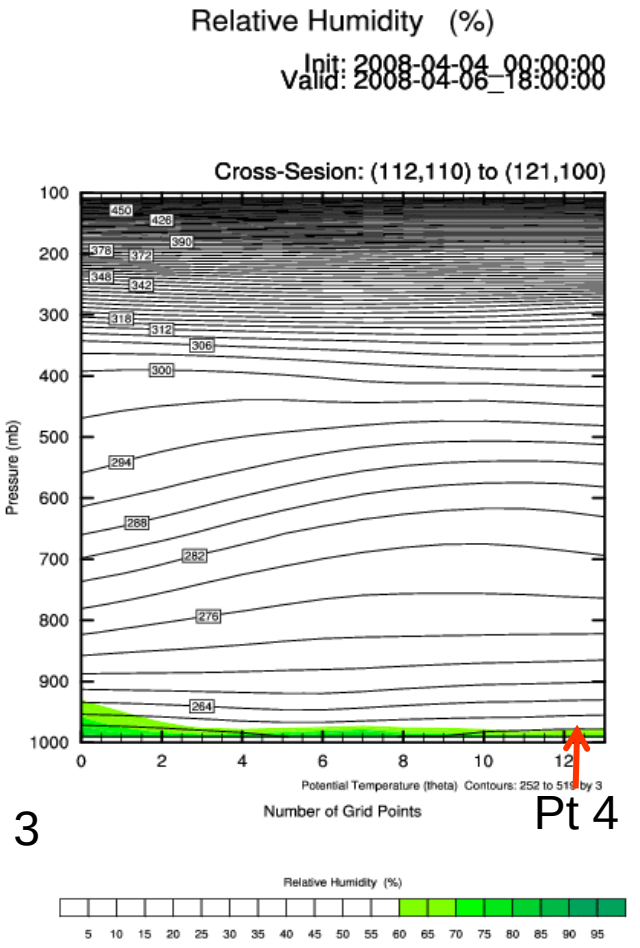




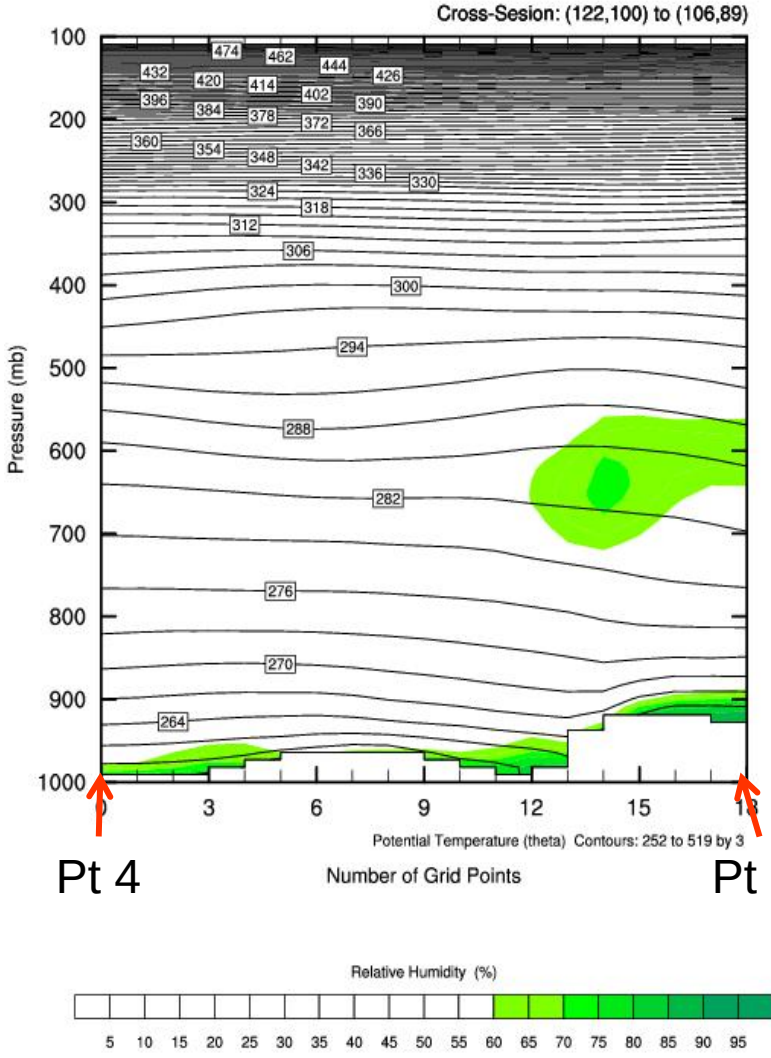
FSU WRF RH P-3 Flight Path Forecast
Valid 1800 Z April 6
FSU WRF Cross Sections





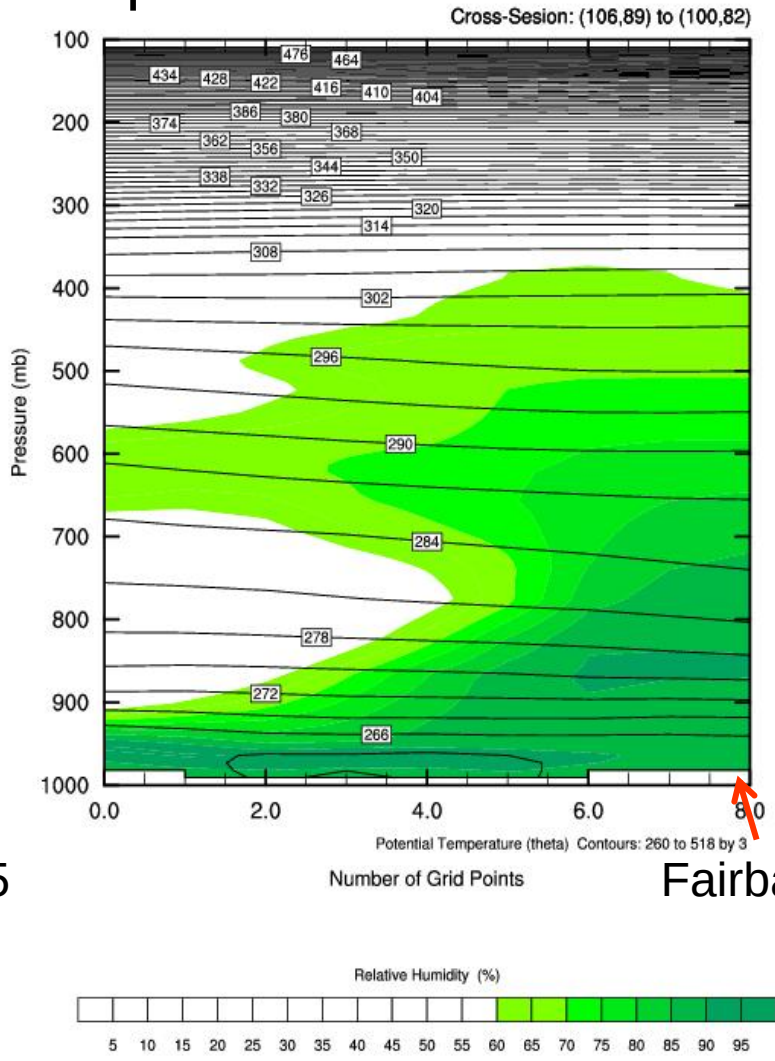


FSU WRF RH P-3 Flight Path Forecast
Valid 1800 Z April 6



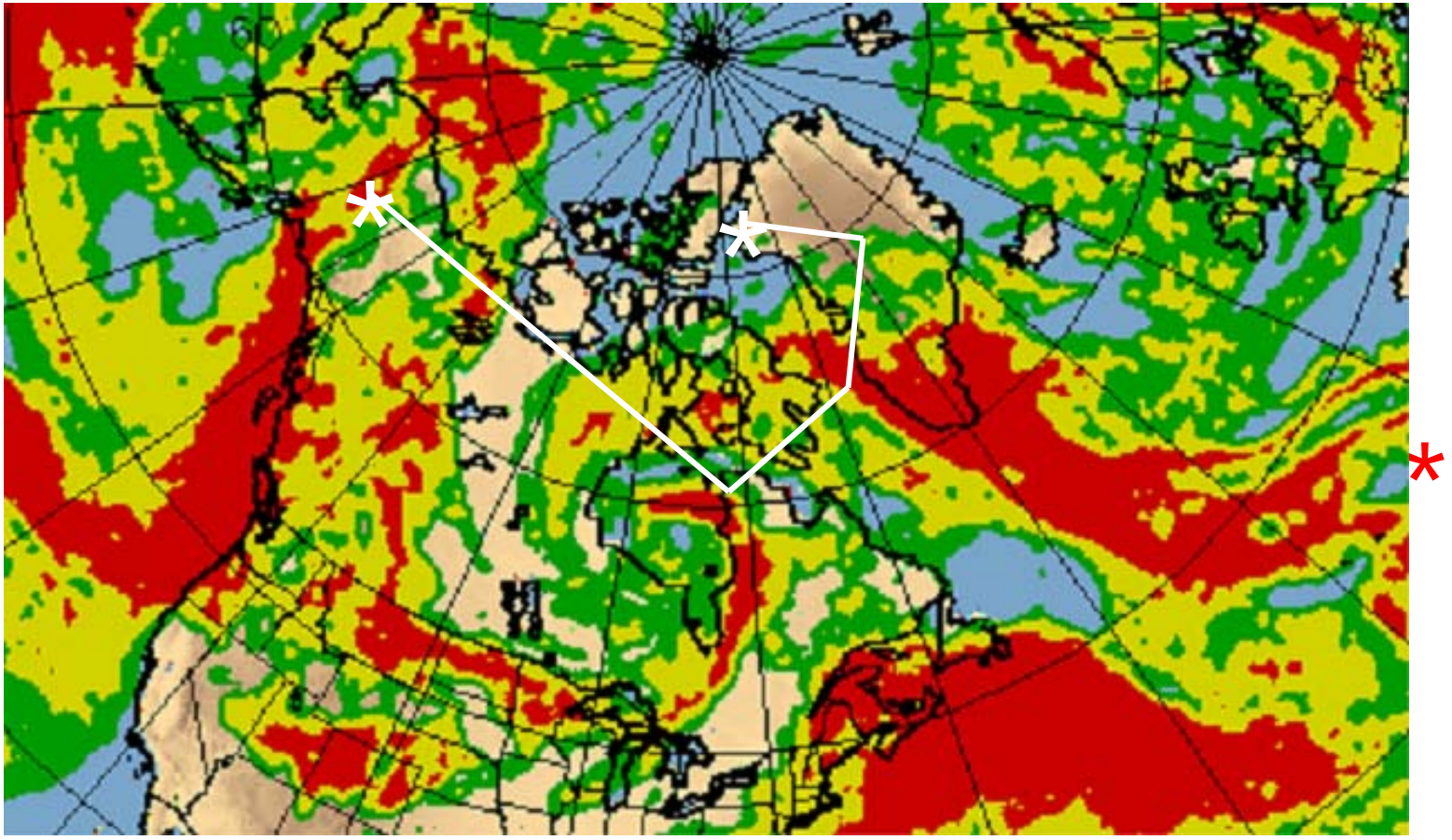
Pt 4

Pt 5



Fairbanks

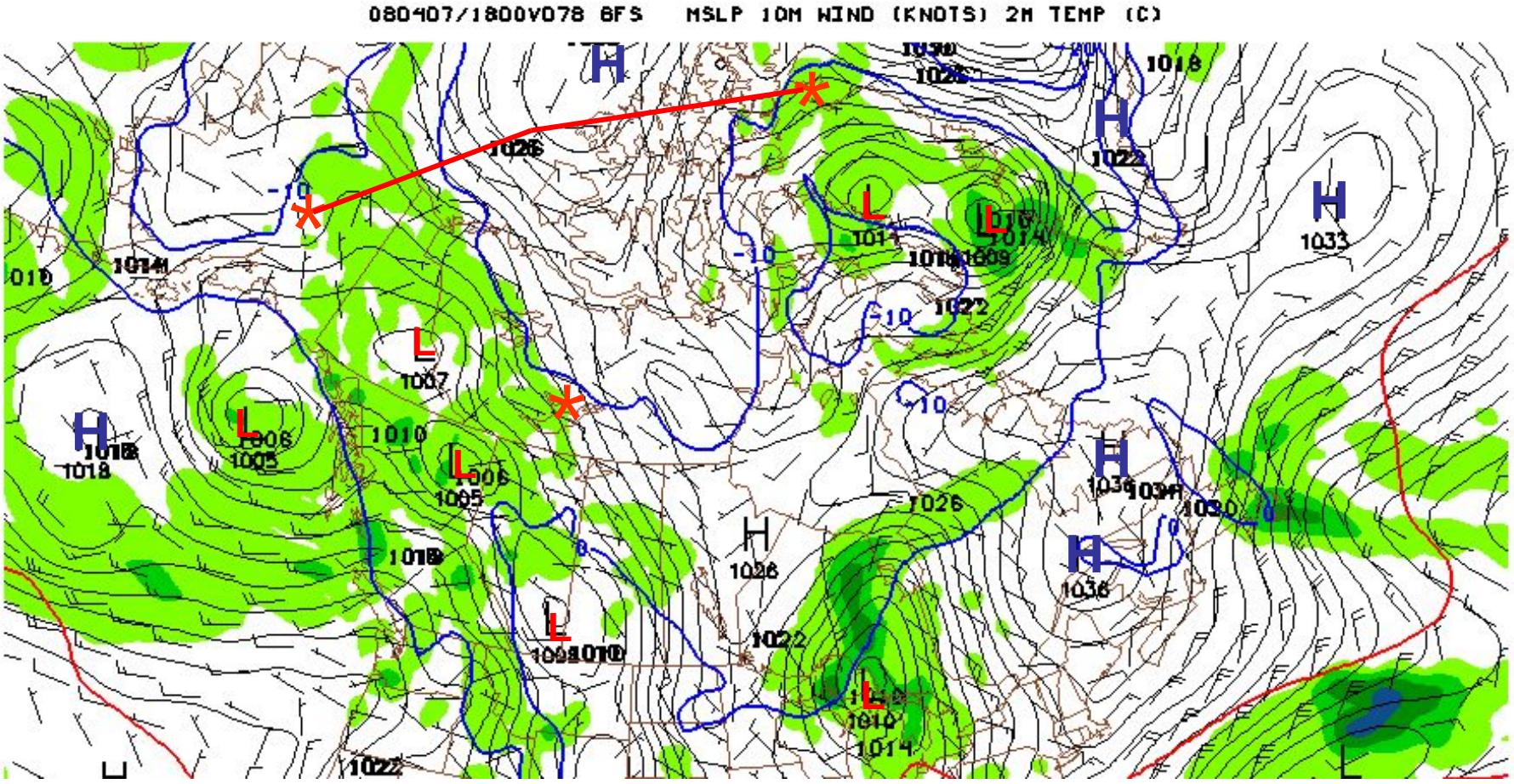
Air Force Total Cloud Cover for comparison
Valid 1800 Z April 5



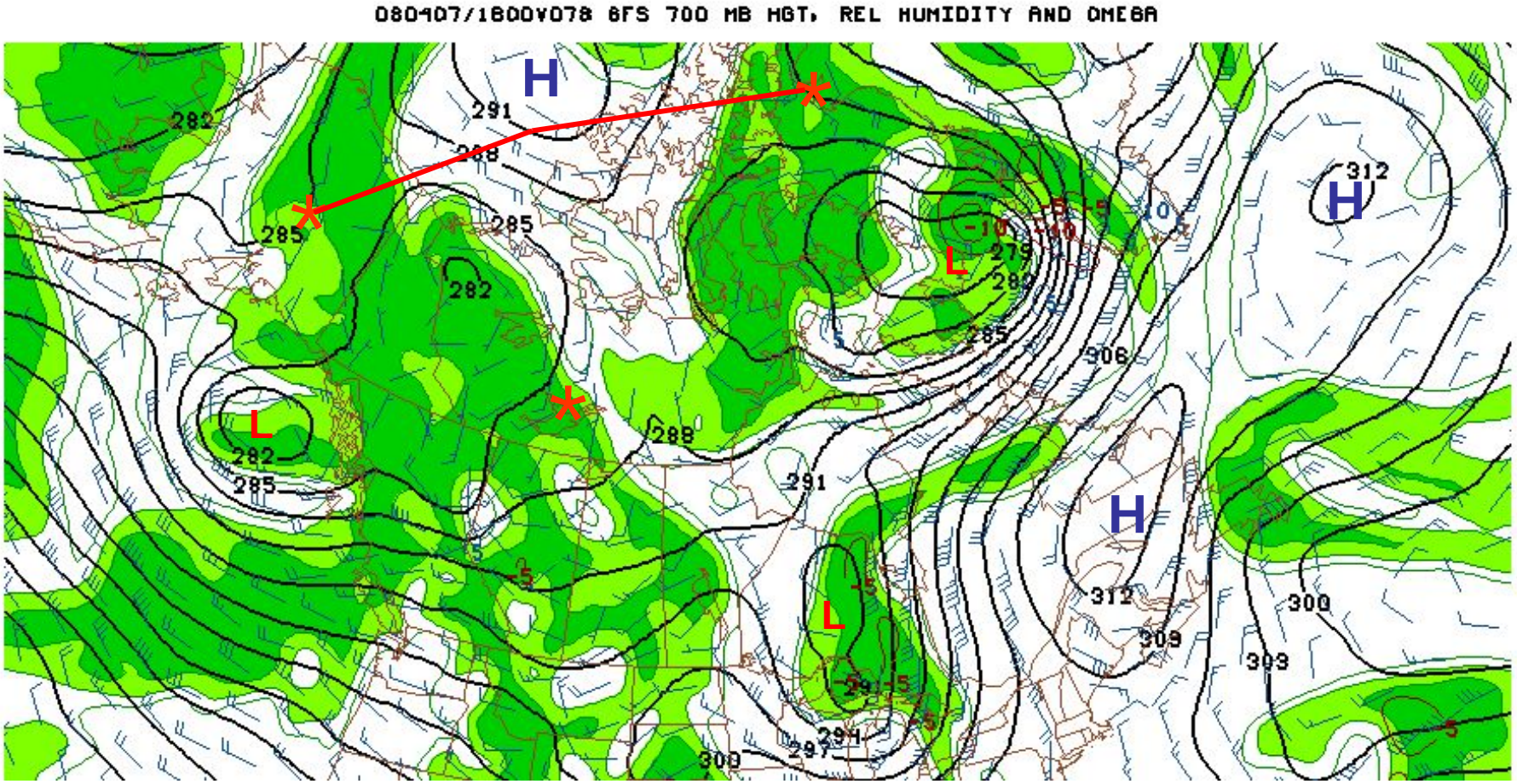
Red = Overcast **Yellow = 0.6-0.9 coverage** **Green = 0.1-0.5 coverage**

Monday’s Forecast

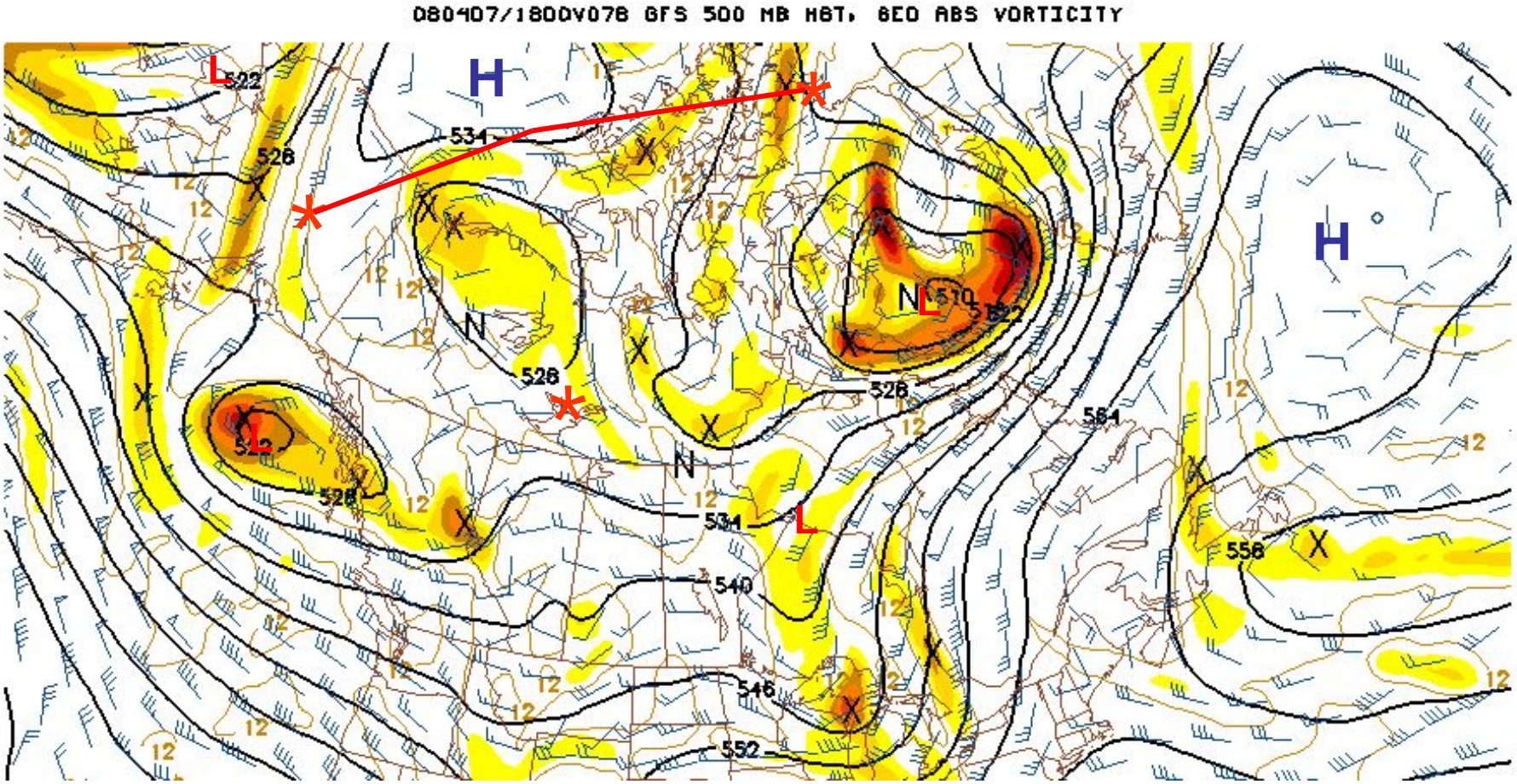
GFS Forecast Valid 1800 Z April 7
SLP, 10 m winds, 6 h precip



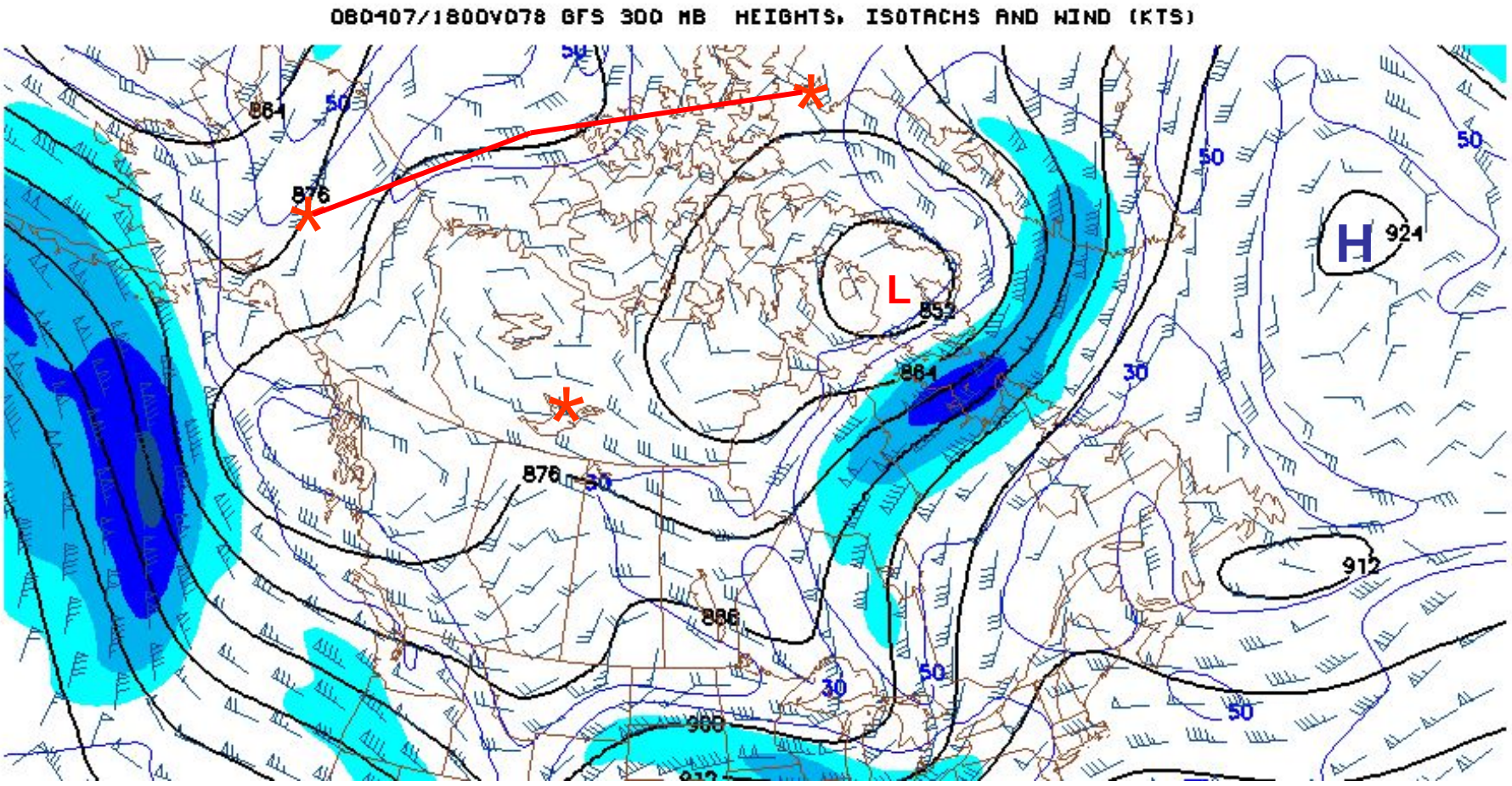
GFS Forecast Valid 1800 Z April 7
700 hPa RH, winds, and heights



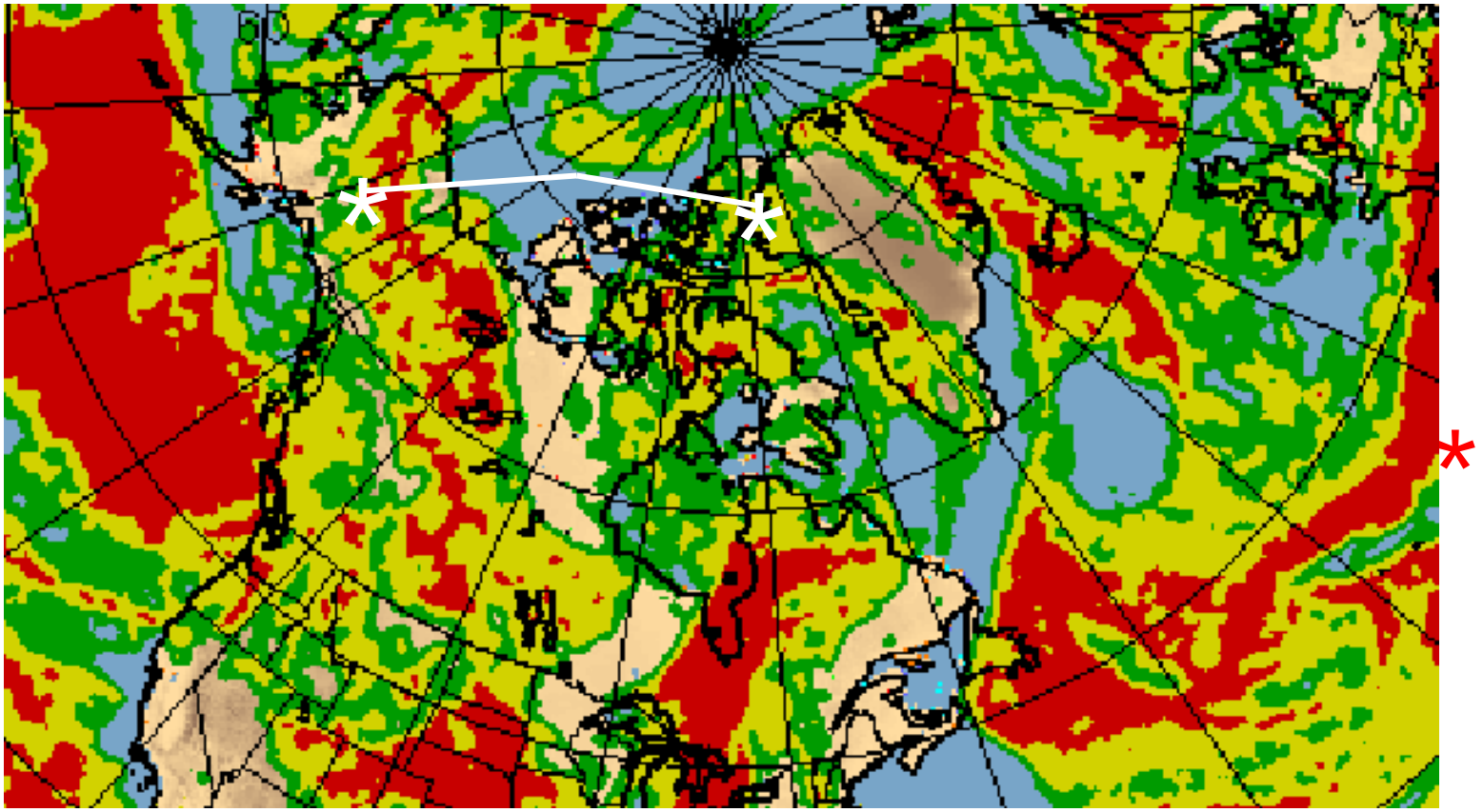
GFS Forecast Valid 1800 Z April 7
500 hPa heights, vorticity, and winds



GFS Forecast Valid 1800 Z April 7
300 hPa winds and heights



Air Force Total Cloud Cover for comparison
Valid 1800 Z April 7



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

Fairbanks AK Forecast

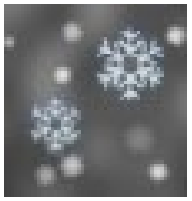
Tonight

Mostly Cloudy
Lo: 23F

Saturday

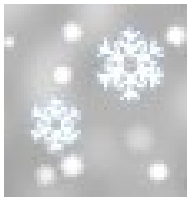
Chance of Rain and Snow
Hi: 38F

Sat. Night



Chance of snow
Lo: 20F

Sunday

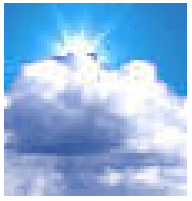


Chance of snow, then rain
Hi: 40F

Sun. Night

Mostly Cloudy
Lo: 20F

Monday

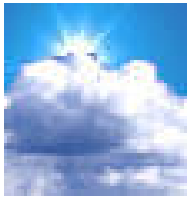


Mostly Cloudy
Hi: 40F

Mon. Night

Cloudy
Lo: 20F

Tuesday



Mostly Cloudy:
Hi: 40F

Tue. Night

Mostly Cloudy
Lo: 20F