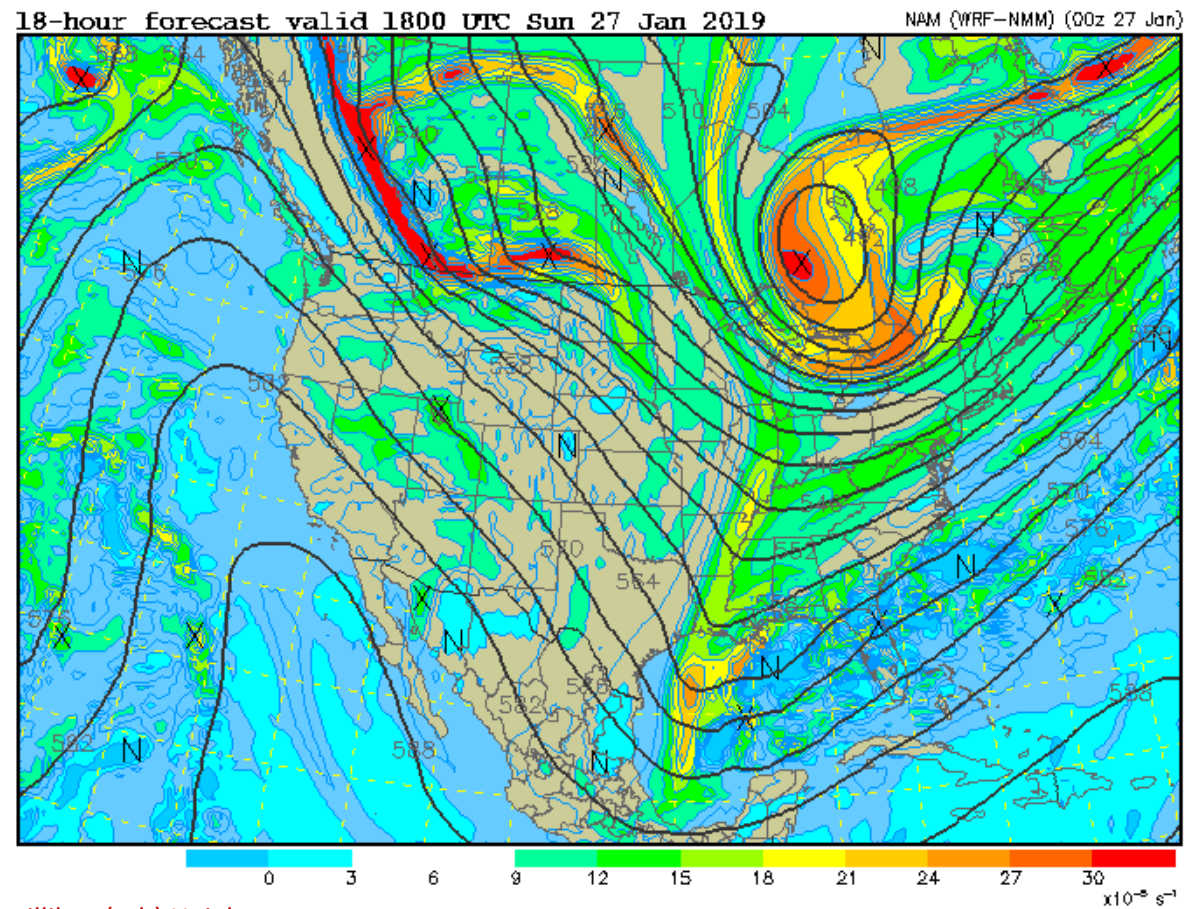


All slides are for 11am MST, 27 Jan 19

500 mb Heights (dm) / Abs. Vorticity ($\times 10^{-5} \text{ s}^{-1}$)

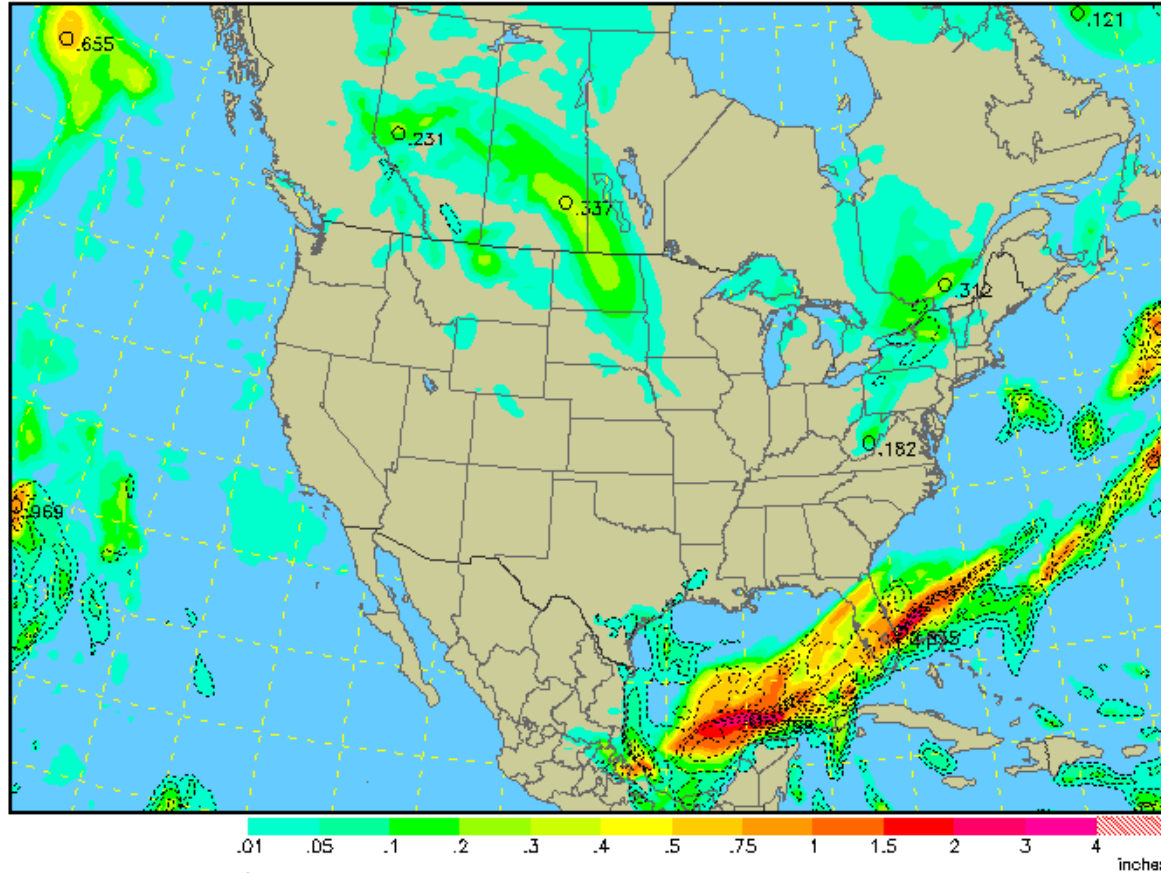


- Solid line contours are 500 millibar (mb) Heights
 - note the pattern of ridges (e.g., over western US) and troughs (e.g., over the East), and the polar vortex south of Hudson Bay
- The colored filled contours relates to the curvature (vorticity) of the height contours

6-h accum precip (total-shaded; convect-dashed)

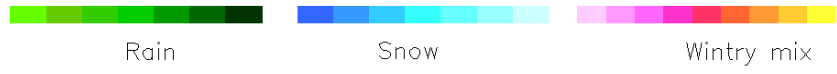
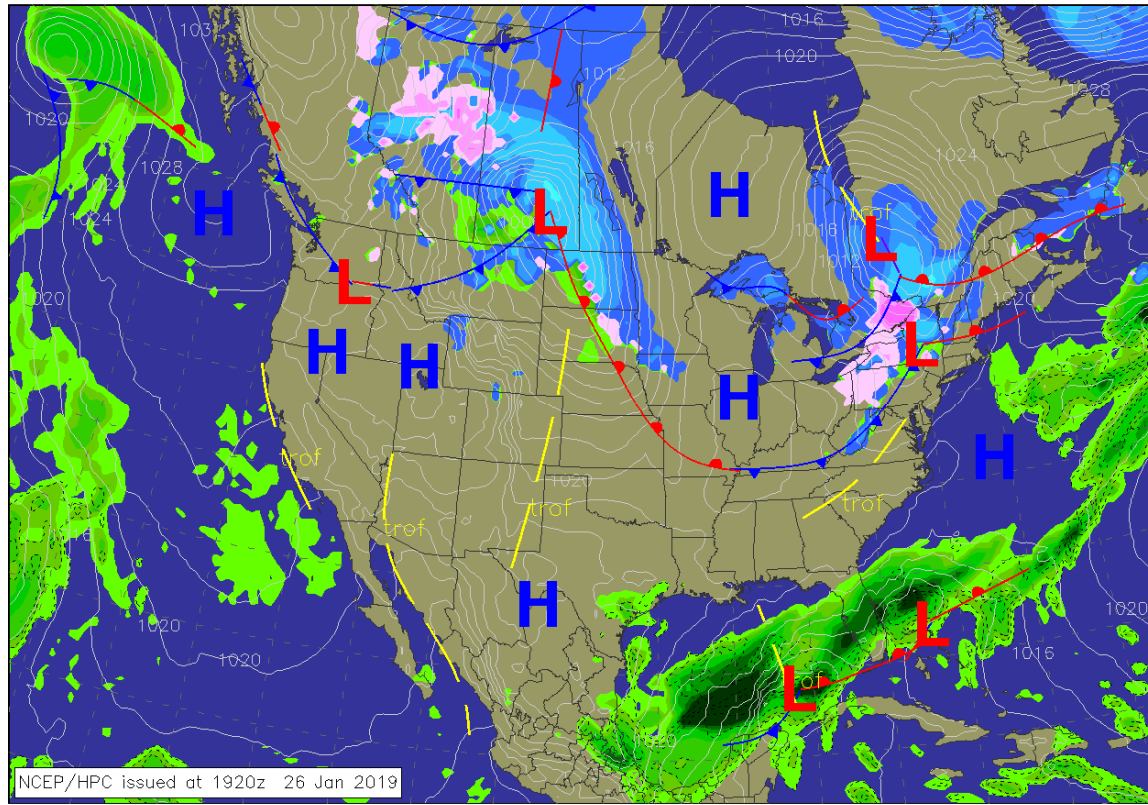
18-hour forecast valid 1800 UTC Sun 27 Jan 2019

NAM (WRF-NMM) (00z 27 Jan)



- Precipitation – note that these areas are east of troughs in 500mb heights in the previous slide, and areas without precipitation are to the east of 500mb ridges (especially that off the west coast of N America)

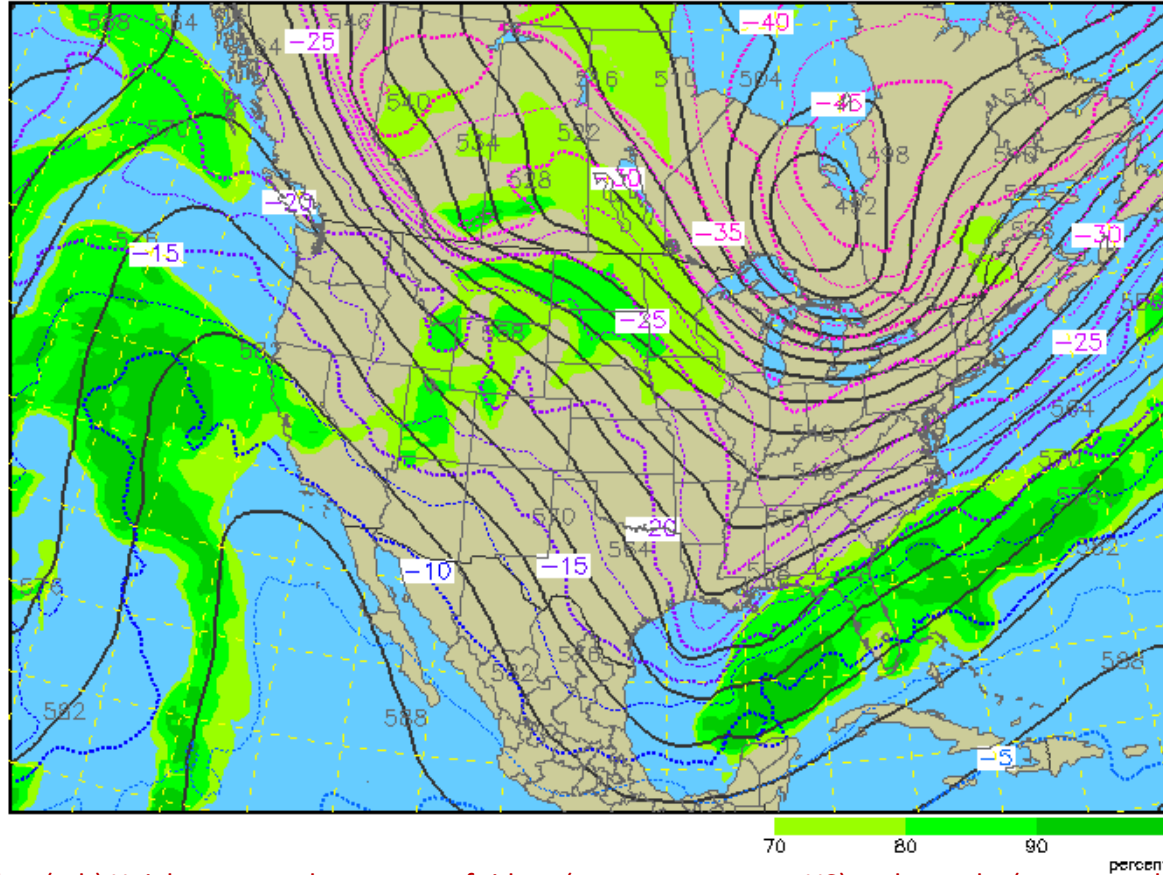
24 hr forecast valid 1800 UTC Sun 27 Jan 2019



500 mb Heights (dm) / Temperature (°C) / Humidity (%)

18-hour forecast valid 1800 UTC Sun 27 Jan 2019

NAM (WRF-NMM) (00z 27 Jan)

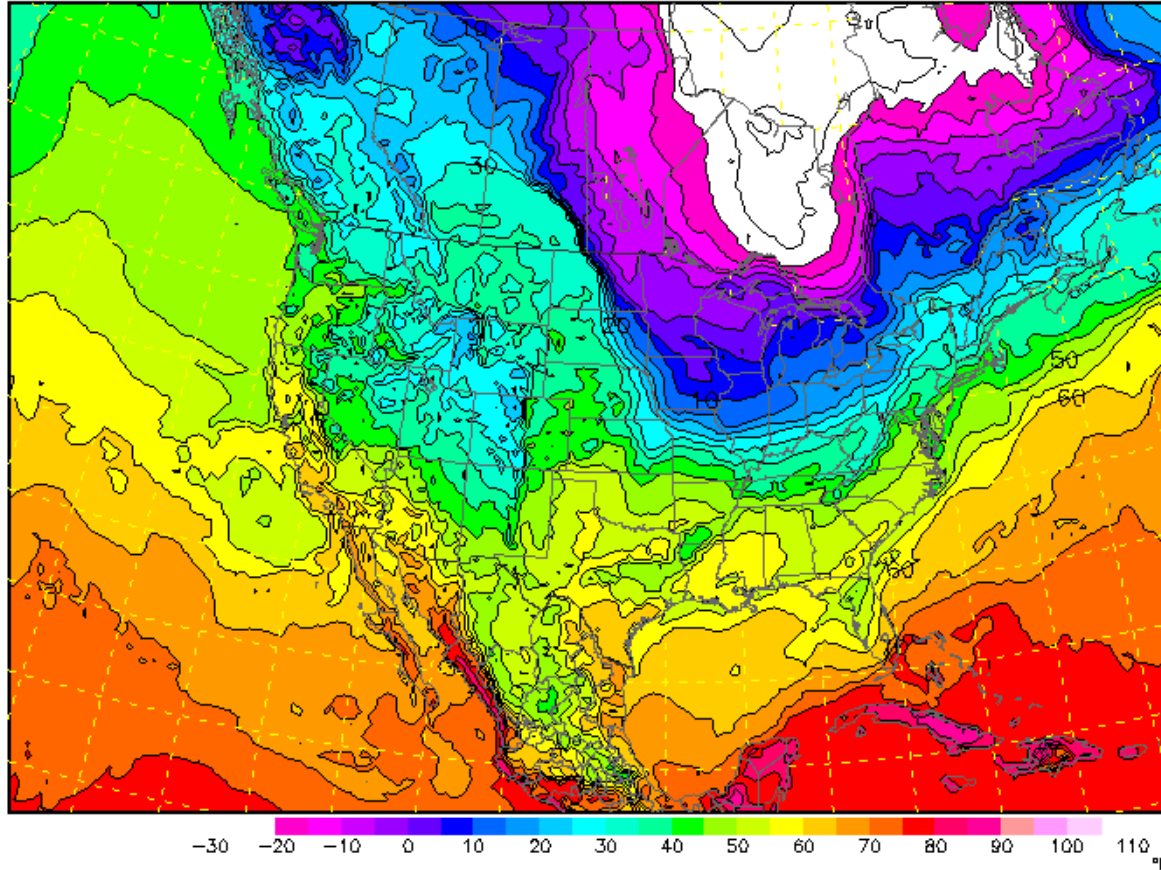


- Solid contours are 500 millibar (mb) Heights – note the pattern of ridges (e.g., over western US) and troughs (e.g., over the East)
- Colored (blue-purple) dashed lines are 500mb Temperature – note the polar vortex south of Hudson Bay
- Green filled areas are 500mb Humidity – note that these area are east of the troughs in 500mb heights, and correspond to precipitation in the previous slide

Surface (2m) Temperature (°F)

18-hour forecast valid 1800 UTC Sun 27 Jan 2019

NAM (WRF-NMM) (00z 27 Jan)

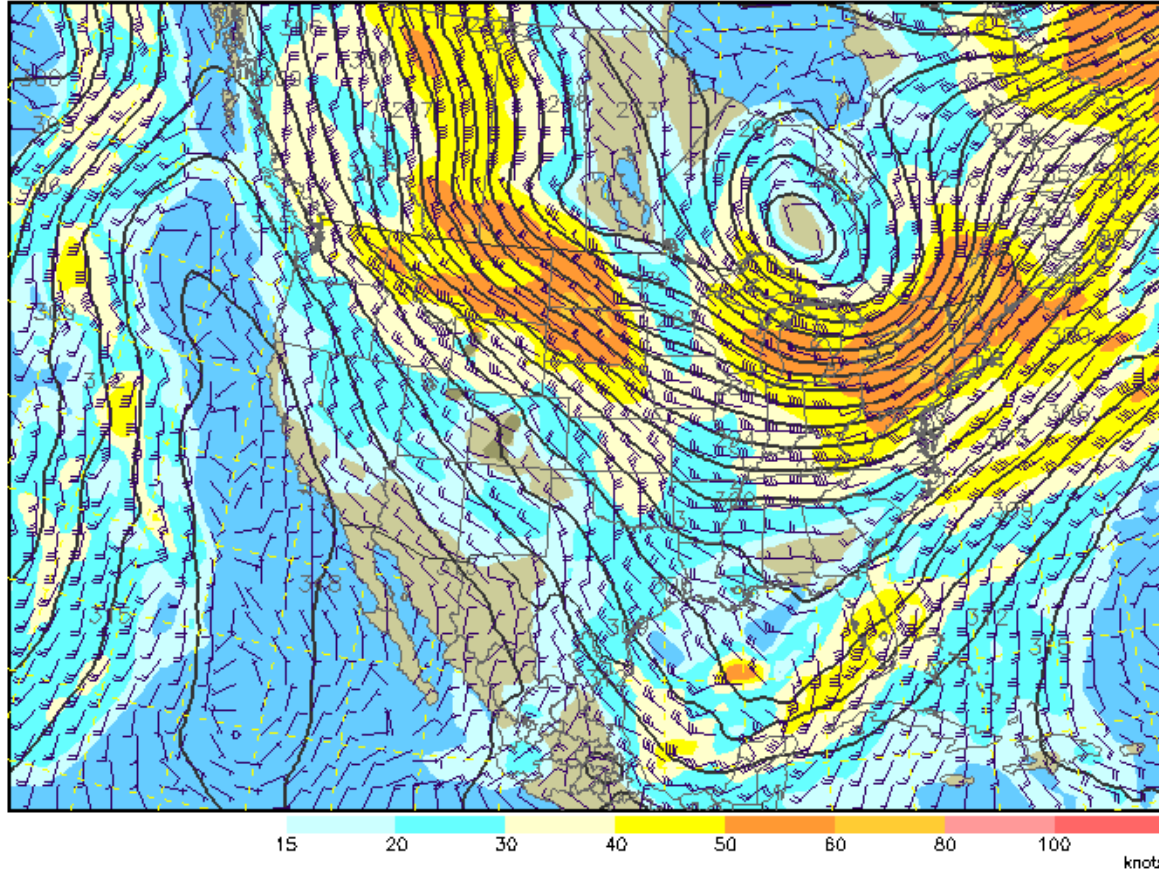


- Solid contours are surface temperature
 - note the Arctic air mass over the Midwest US and central Canada (centered under the Polar Vortex in the previous slide). This “Arctic Blast” will generate precipitation as it spreads out and backs into the Colorado Front Range.

700 mb Heights (dm) / Isotachs (knots)

18-hour forecast valid 1800 UTC Sun 27 Jan 2019

NAM (WRF-NMM) (00z 27 Jan)



- Solid contours are 700 millibar (mb) Heights – roughly the elevation of the Mountain Research Station
- Barbs show wind direction and speed (speed also shown by color-filled contours)
 - note wind intensity and direction (from NW) over the Colorado Front Range