

**Tuesday, April 16, 2013**

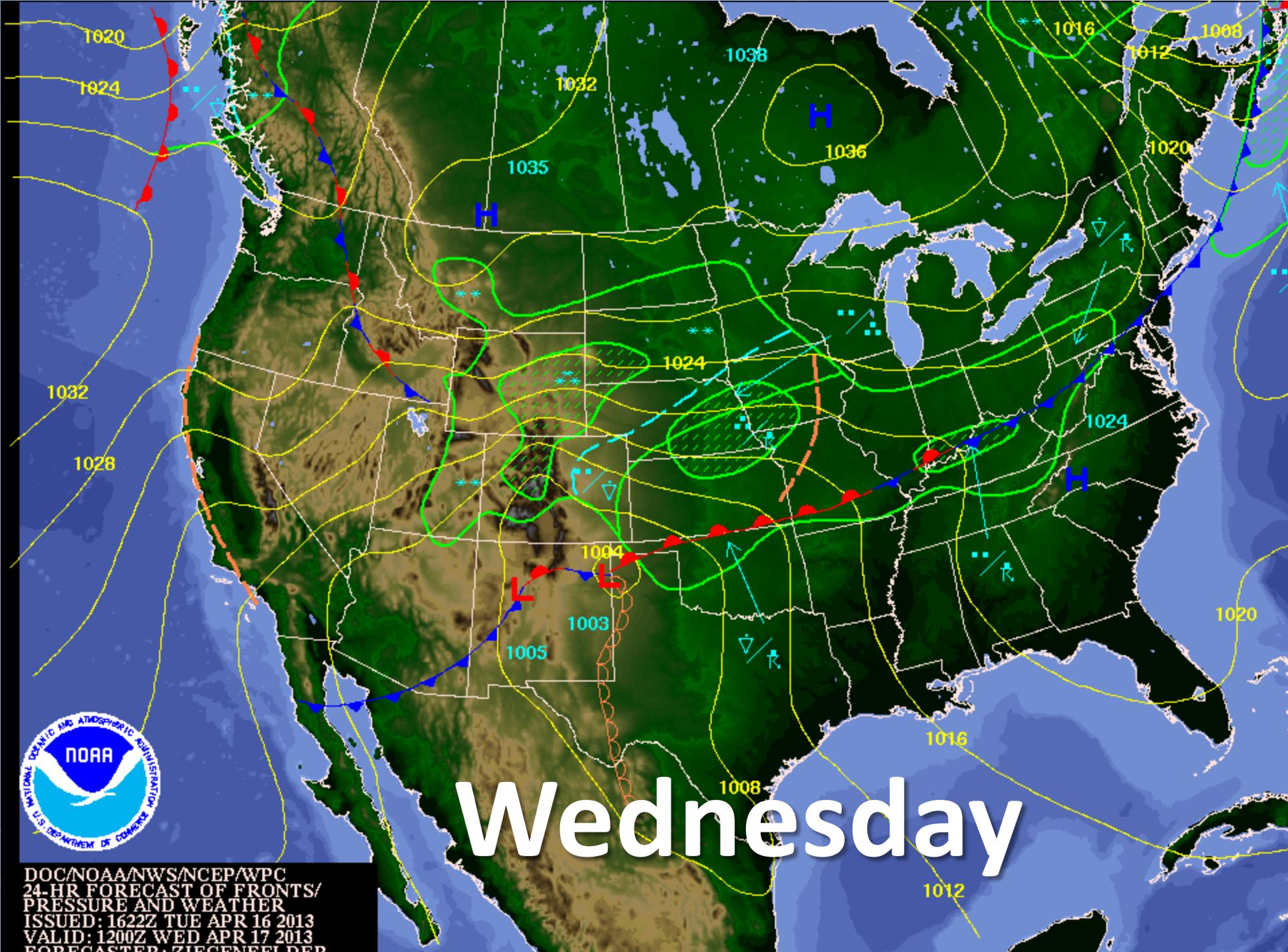
**National Weather Service DLH (Duluth, MN)  
Weather Briefing**

**"A Springtime Bouquet of Weather"**

Carol Christenson, Warning Coordination Meteorologist

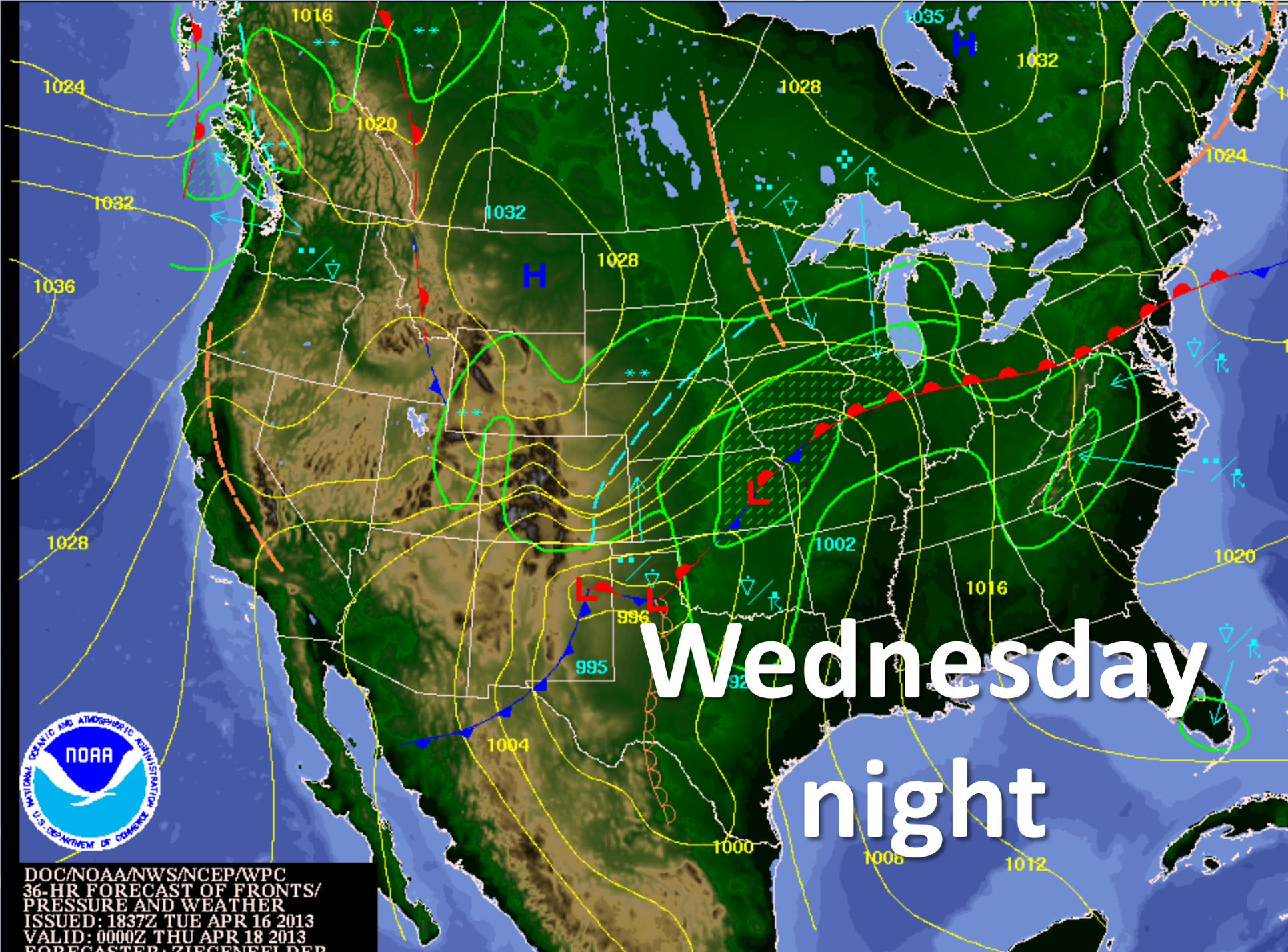
# A Long Event

- **Wednesday through Friday**
- **Still a lot of uncertainty**
- **Some rain and rain/snow mix across east central MN and northwest WI.**
- **Freezing rain? Yup- could be. Especially over northwestern Wisconsin**
- **Height of storm for Northland: Wednesday night**



# Wednesday

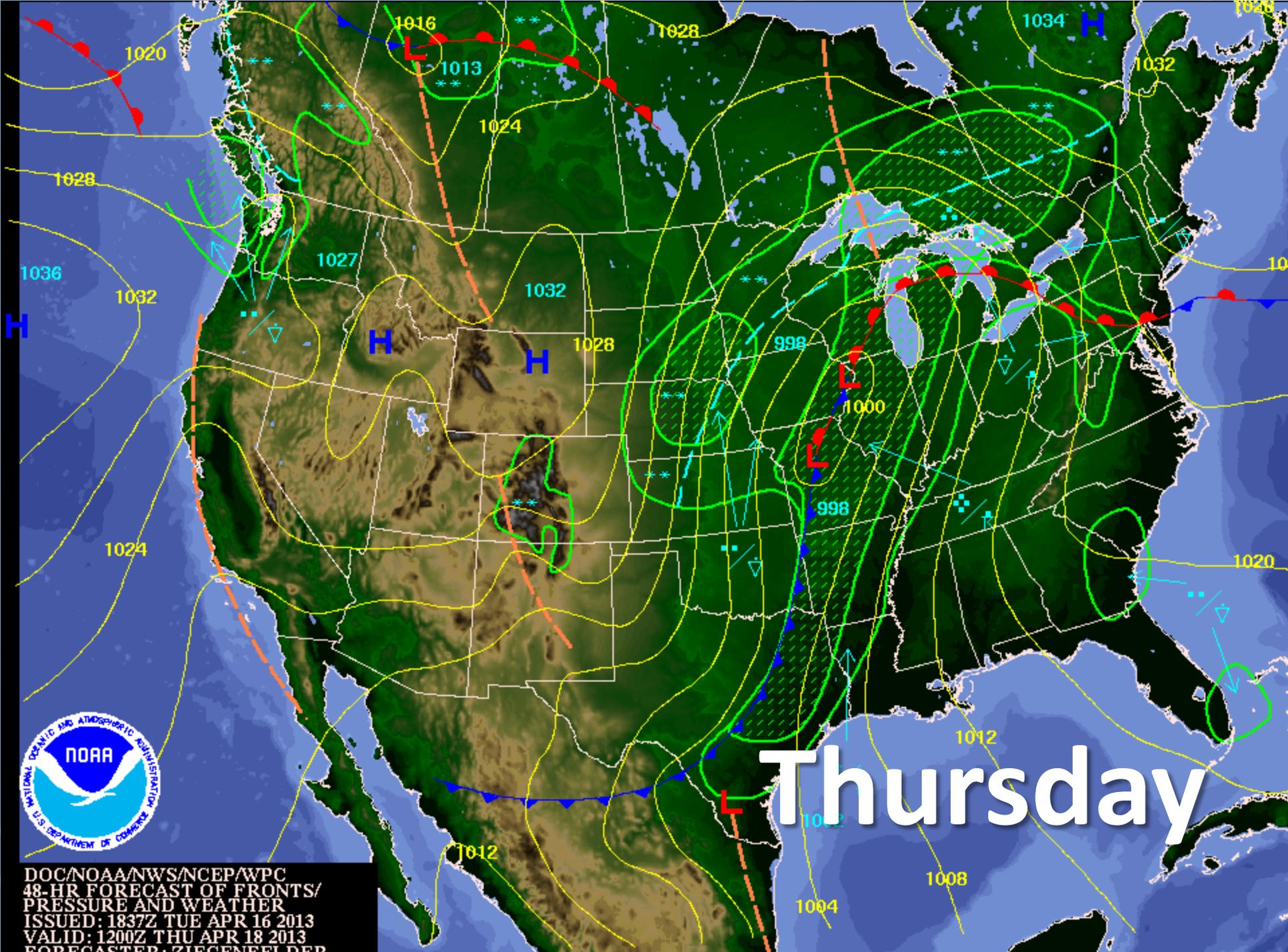
DOC/NOAA/NWS/NCEP/WPC  
24-HR FORECAST OF FRONTS/  
PRESSURE AND WEATHER  
ISSUED: 1622Z TUE APR 16 2013  
VALID: 1200Z WED APR 17 2013  
FORECASTER: ZIEGENFELDER



# Wednesday night

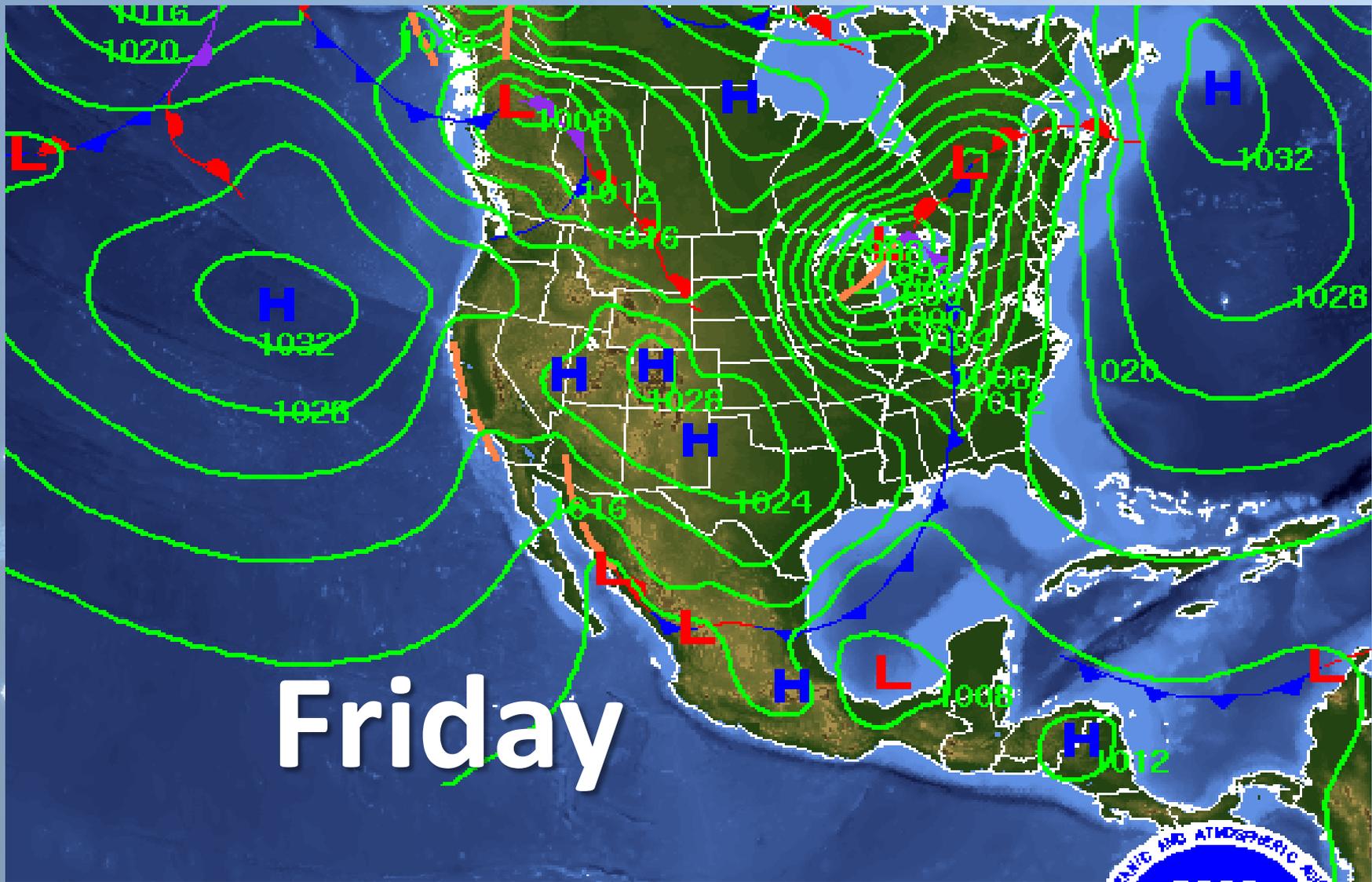


DOC/NOAA/NWS/NCEP/WPC  
36-HR FORECAST OF FRONTS/  
PRESSURE AND WEATHER  
ISSUED: 1837Z TUE APR 16 2013  
VALID: 0000Z THU APR 18 2013  
FORECASTER: ZIEGENFELDER

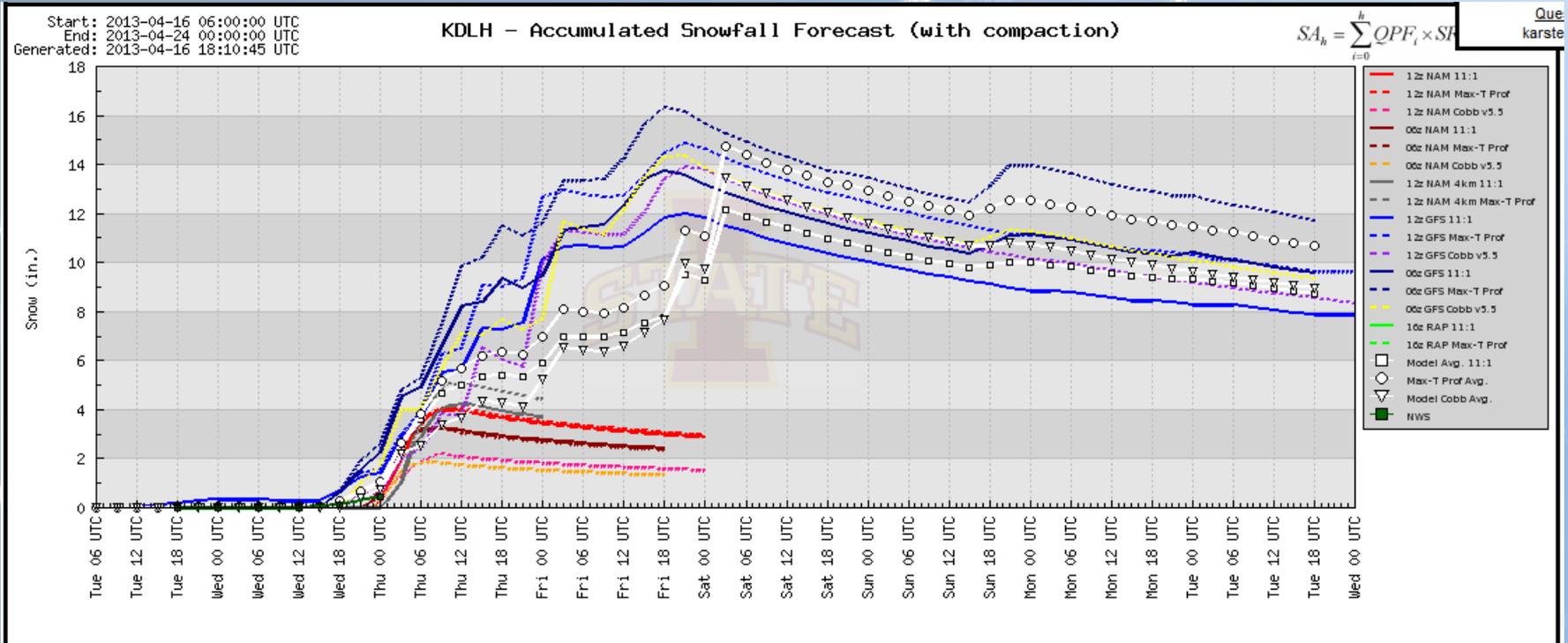


# Thursday

DOC/NOAA/NWS/NCEP/WPC  
48-HR FORECAST OF FRONTS/  
PRESSURE AND WEATHER  
ISSUED: 1837Z TUE APR 16 2013  
VALID: 1200Z THU APR 18 2013  
FORECASTER: ZIEGENFELDER



# A Long-lived Winter Storm



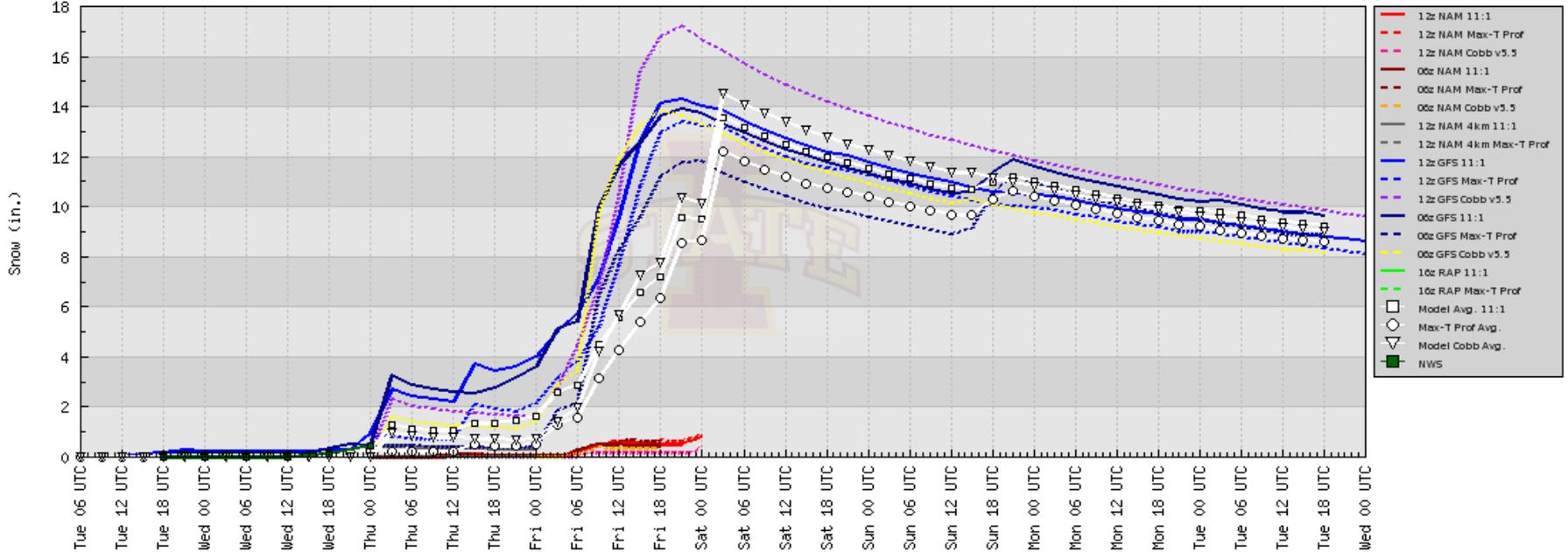
Snowfall forecast model comparison for Duluth

# A Long-lived Winter Storm

Start: 2013-04-16 06:00:00 UTC  
 End: 2013-04-24 00:00:00 UTC  
 Generated: 2013-04-16 18:14:38 UTC

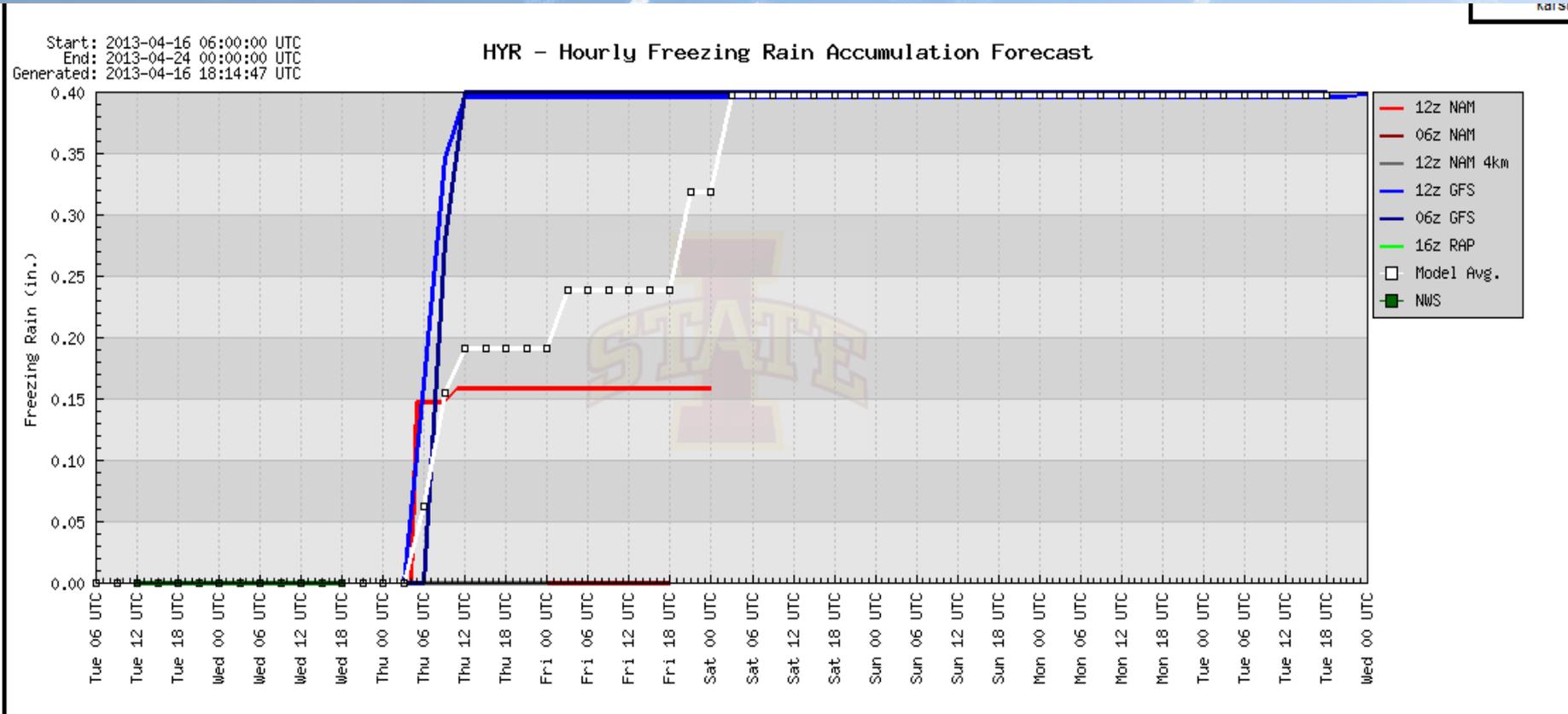
HYR - Accumulated Snowfall Forecast (with compaction)

$$SA_h = \sum_{i=0}^h QPF_i \times SF$$



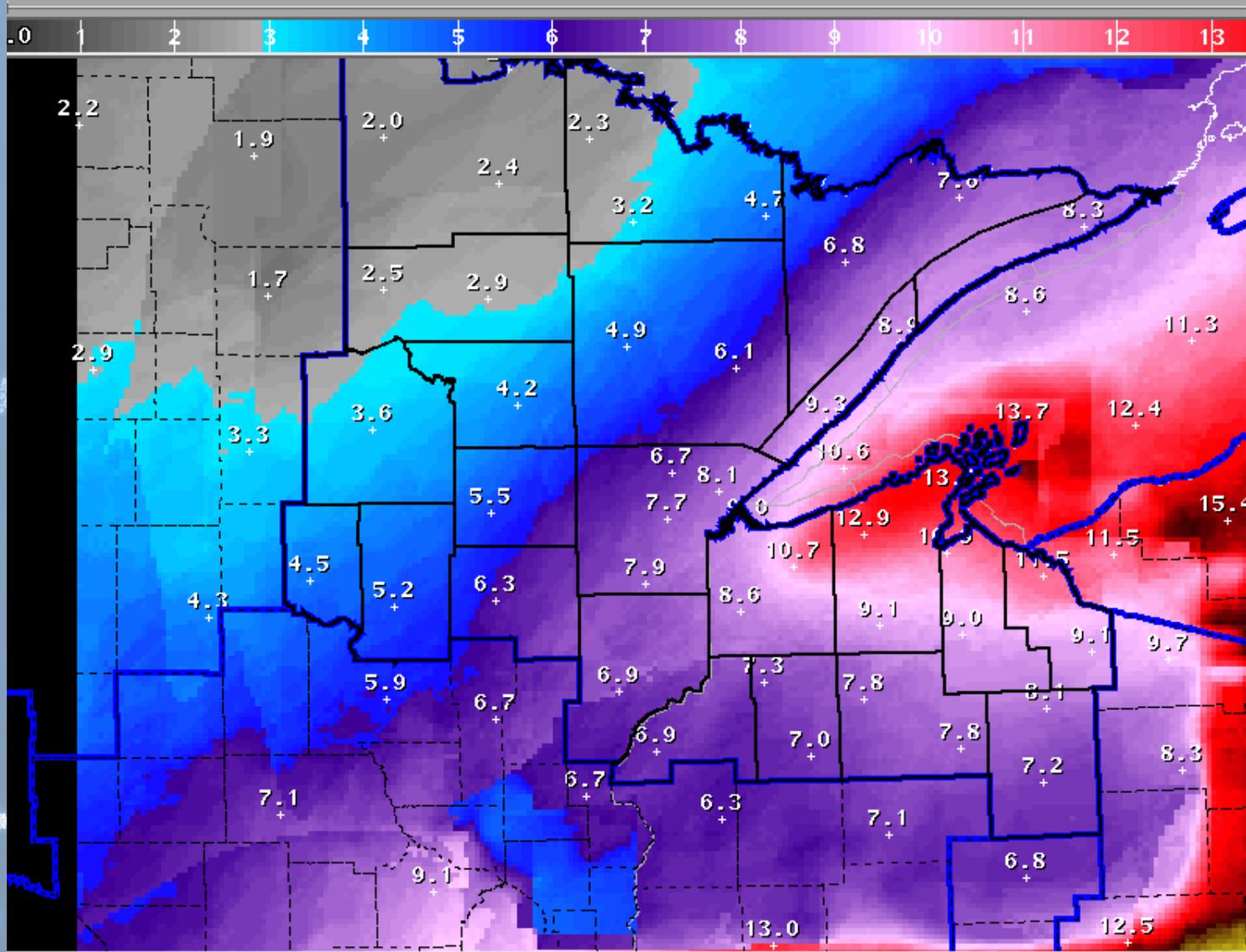
Snowfall forecast model comparison for Hayward, WI

# A Long-lived Winter Storm

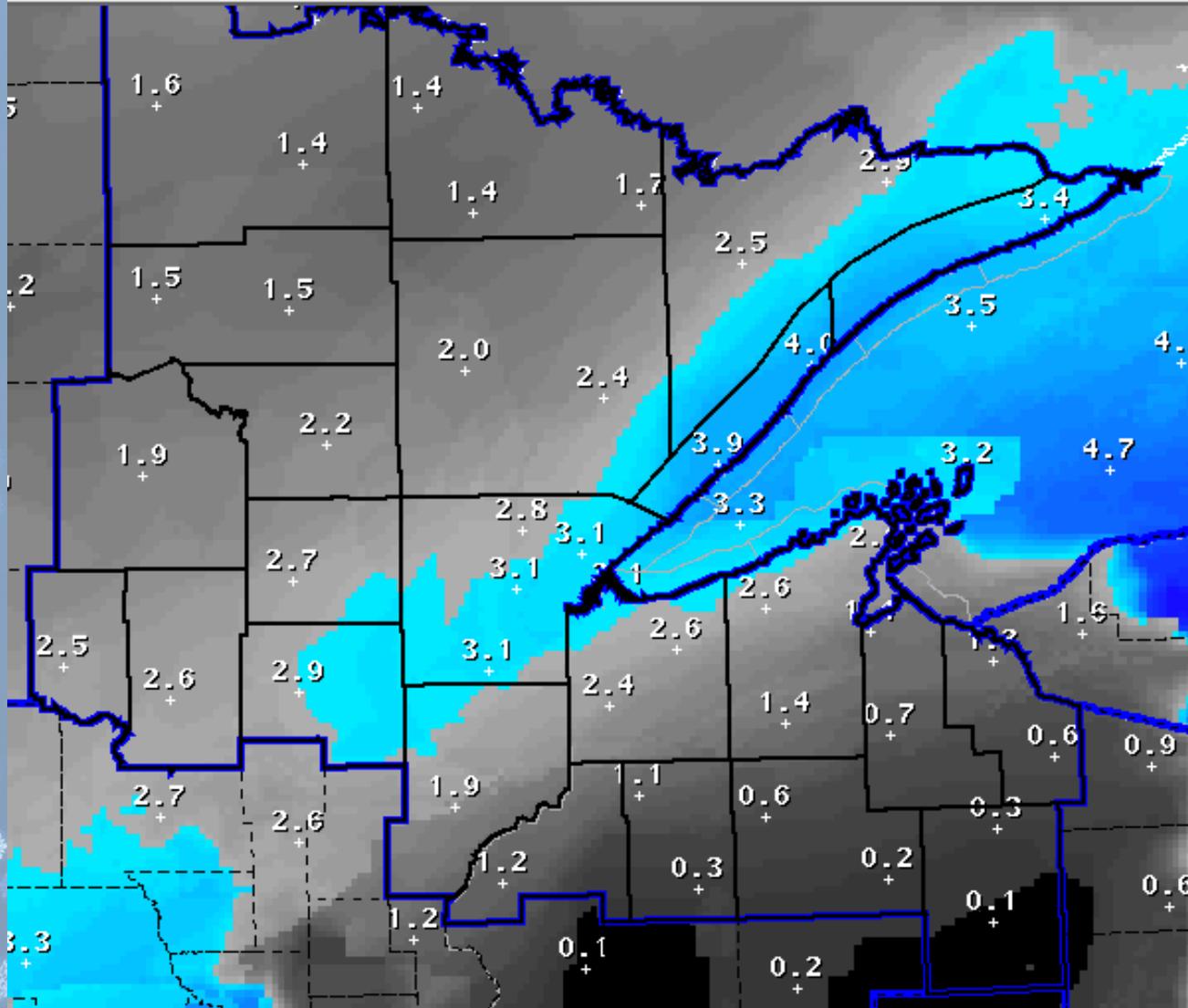


Ice forecast model comparison for Hayward, WI

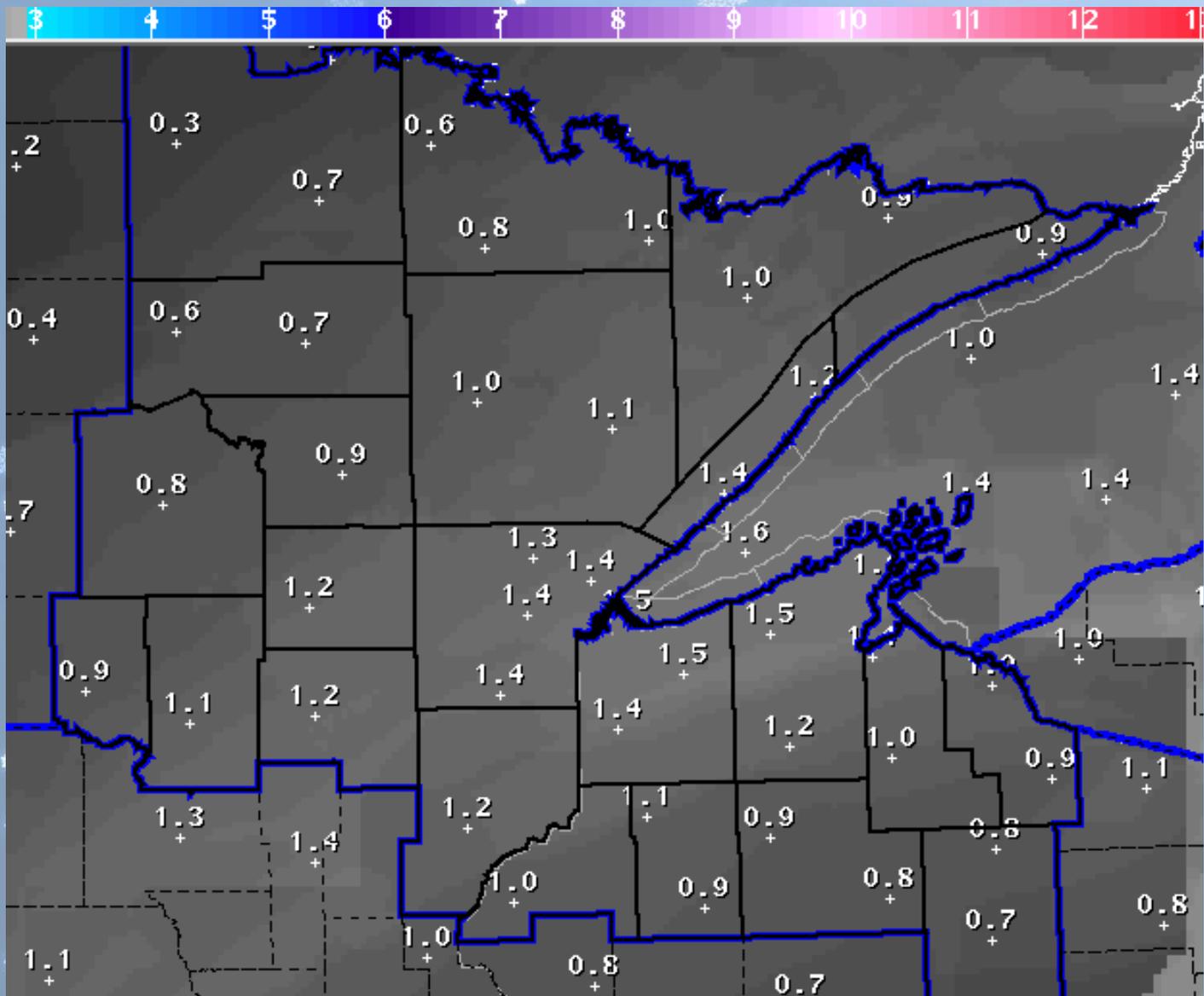
# Forecasted Total Snowfall Through Friday



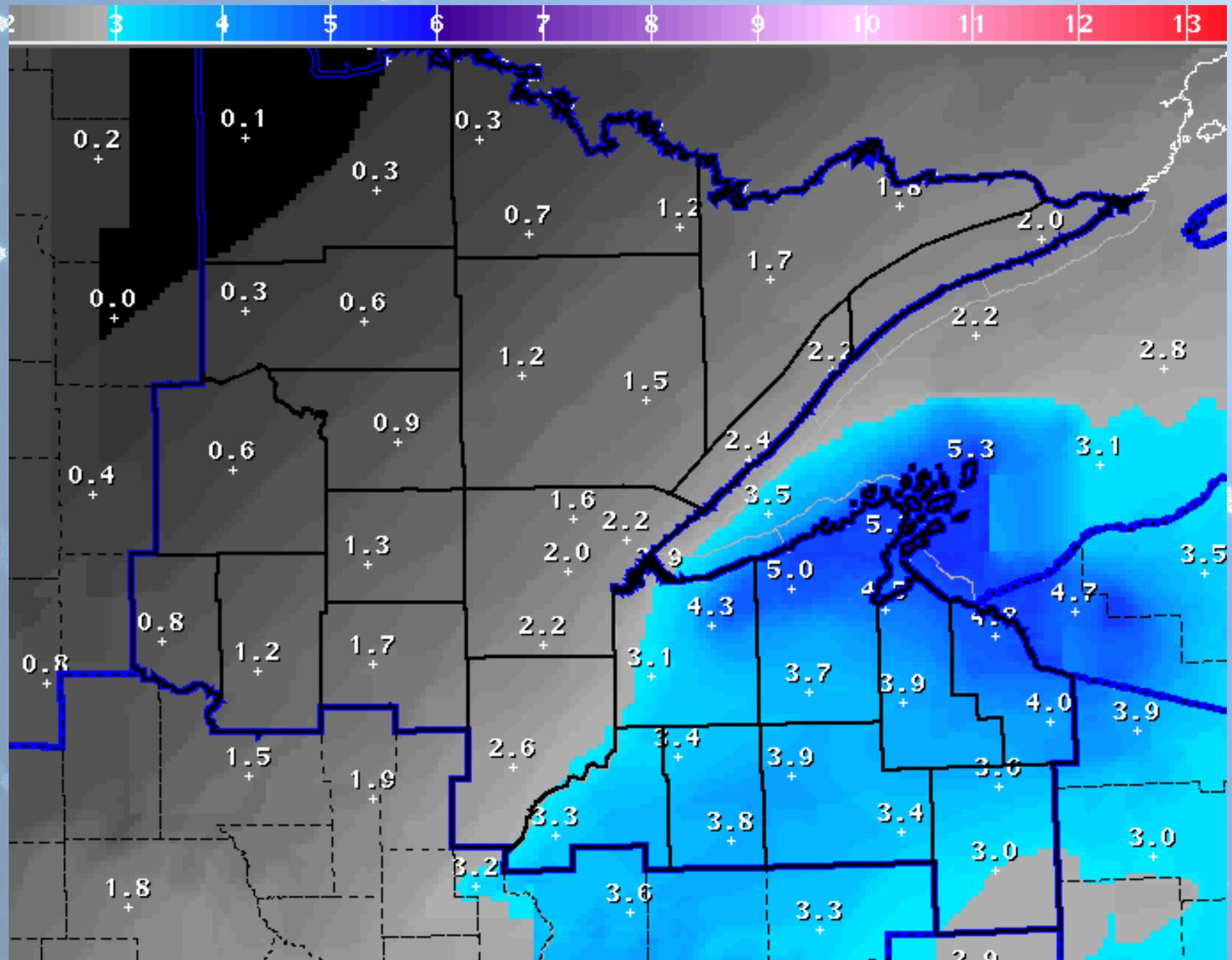
# Snowfall for Wednesday Night



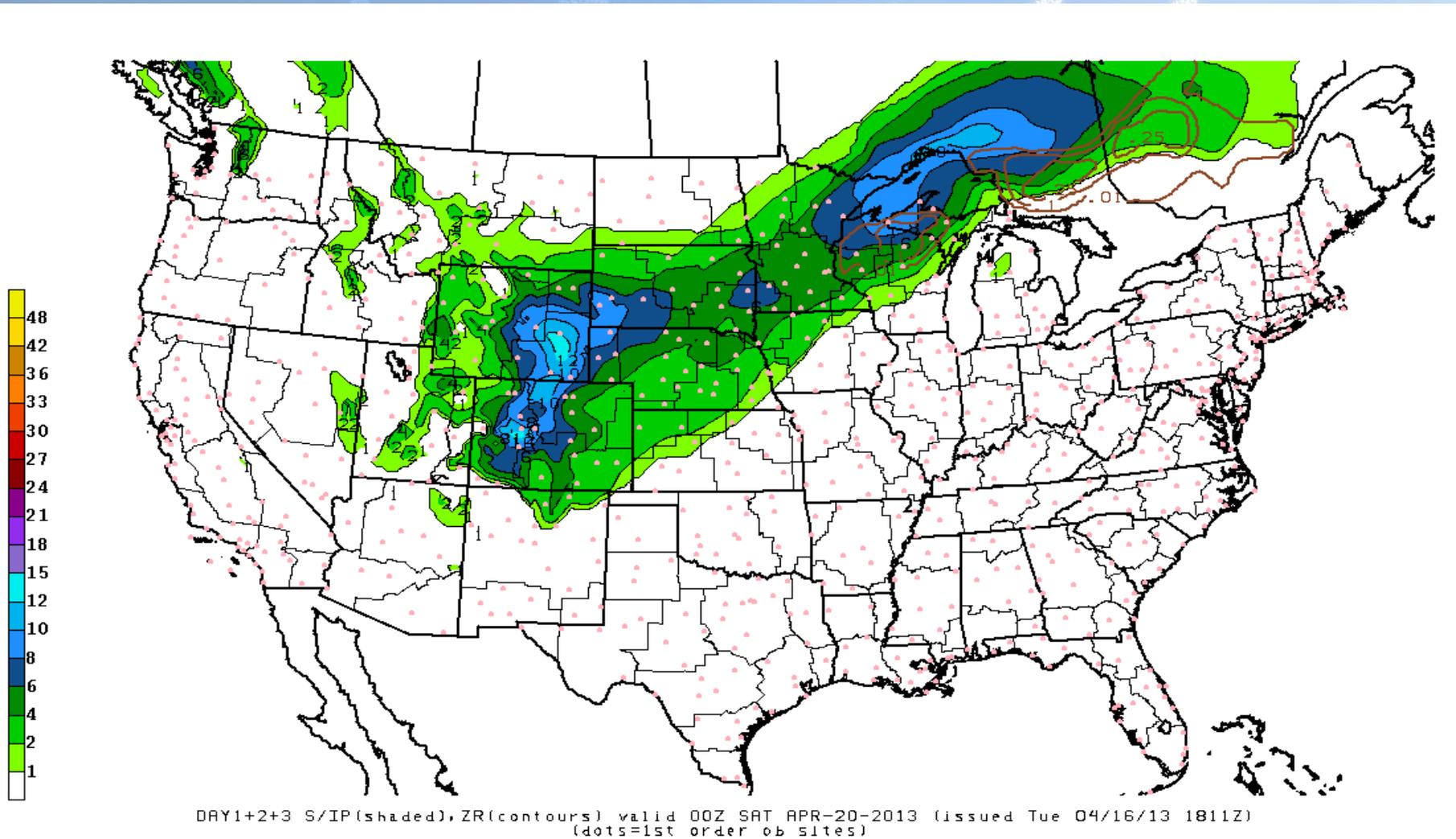
# Snowfall for Thursday



# Snowfall for Thursday Night







**3 Day Total through Friday- snow contours are shaded colors**

# Review

- Precipitation type in question-
  - Snow north; rain/freezing rain?/sleet/then snow? south
- Windy Duluth and north shore Wednesday night
  - Northeast gusts to 40 mph
- Lull on Thursday
  - Then colder with more snow through Friday
- Really cold Friday night
  - Record low temperatures possible

**Any Questions?**