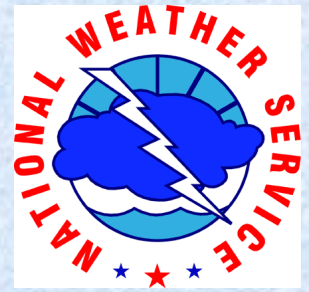


Short term Weather/ Runoff Considerations



Presentation to:
Combined Task Force Meeting
April 16, 2014
Bob Glancy
National Weather Service



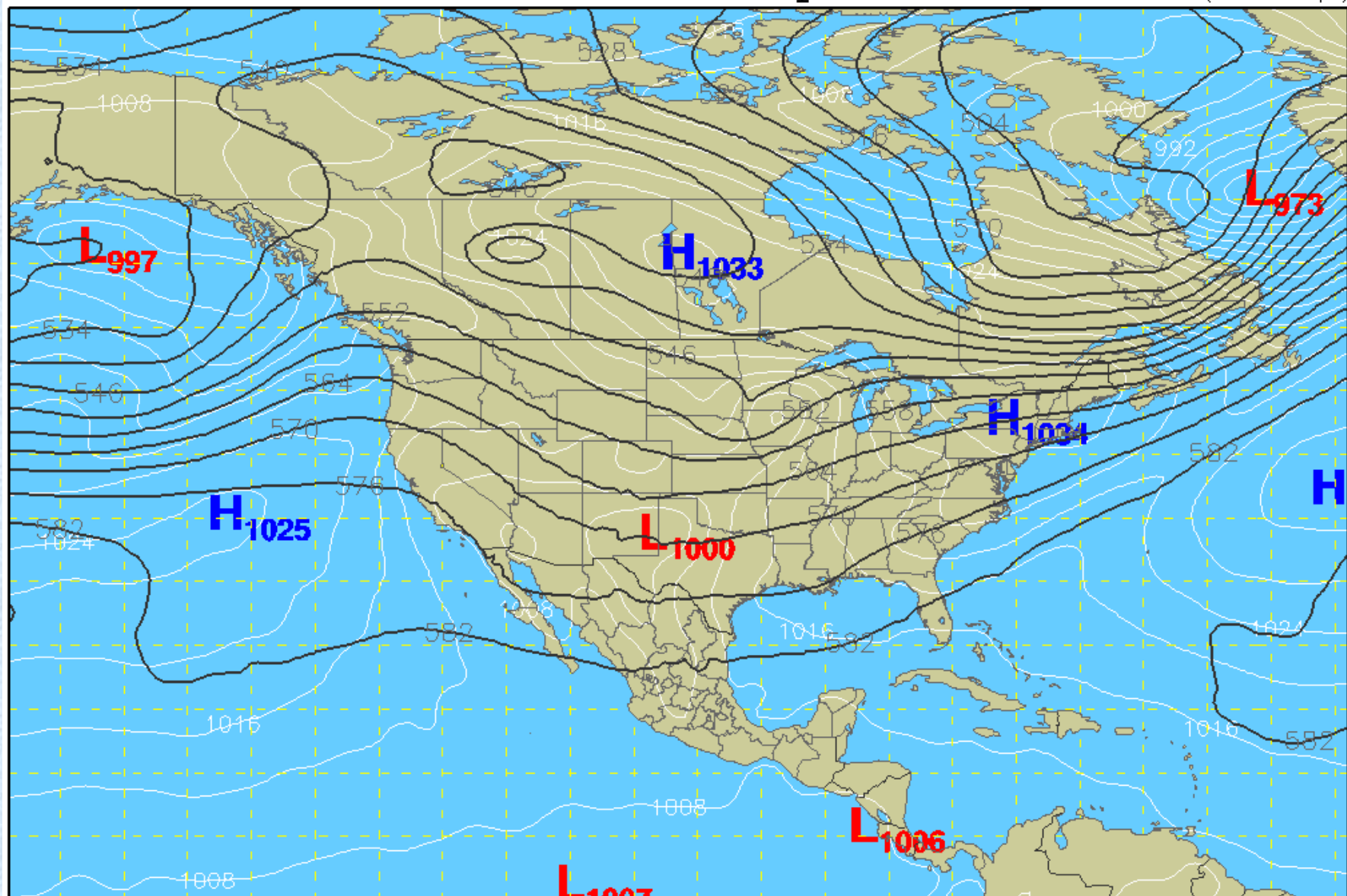
Hahn's Peak - from Steamboat Lake State Park 04/16/2014 10:45:30



MSLP (mb) / 500 mb Heights (dm)

12-hour forecast valid 0000 UTC Thu 17 Apr 2014

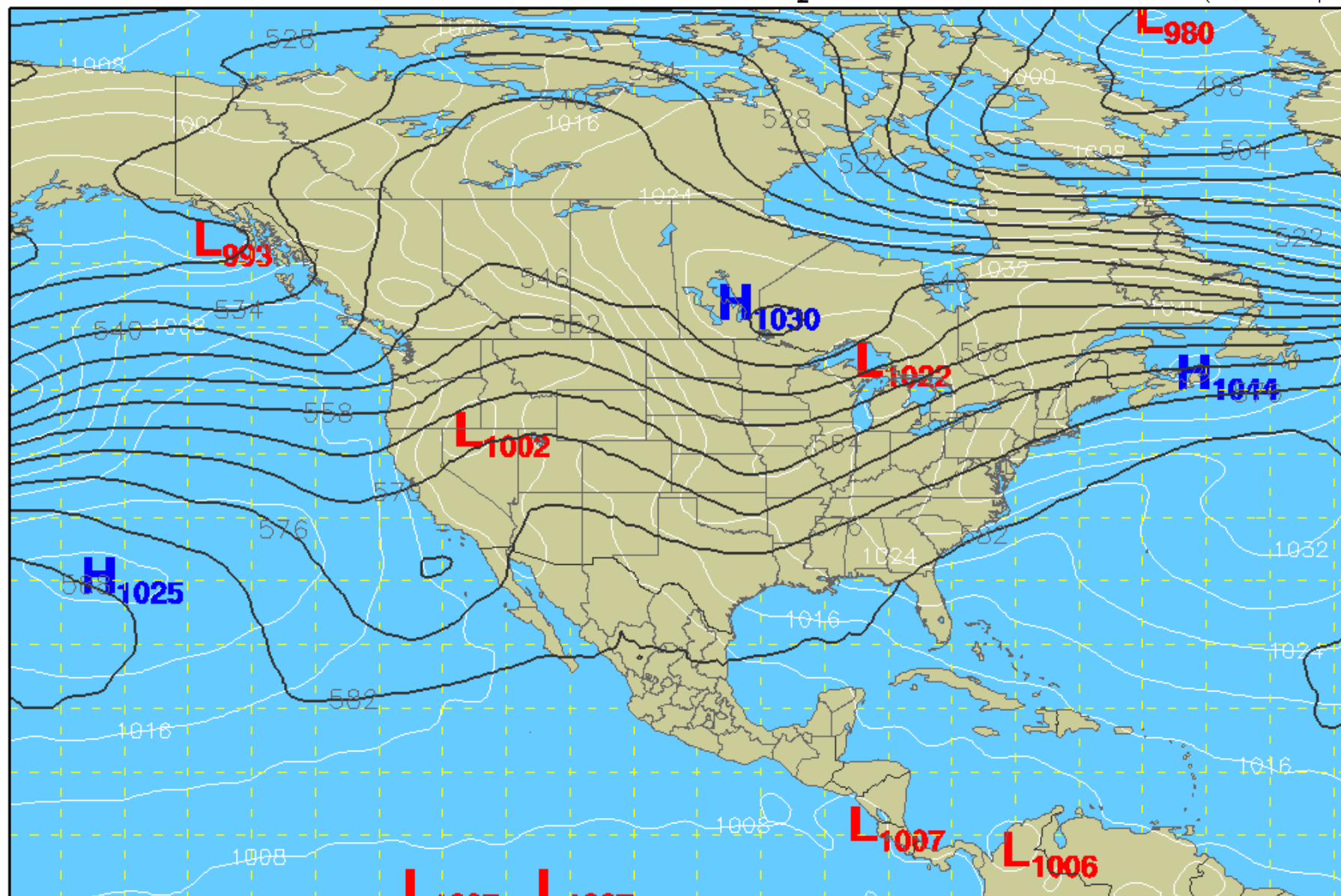
GFS (12z 16 Apr)



MSLP (mb) / 500 mb Heights (dm)

36-hour forecast valid 0000 UTC Fri 18 Apr 2014

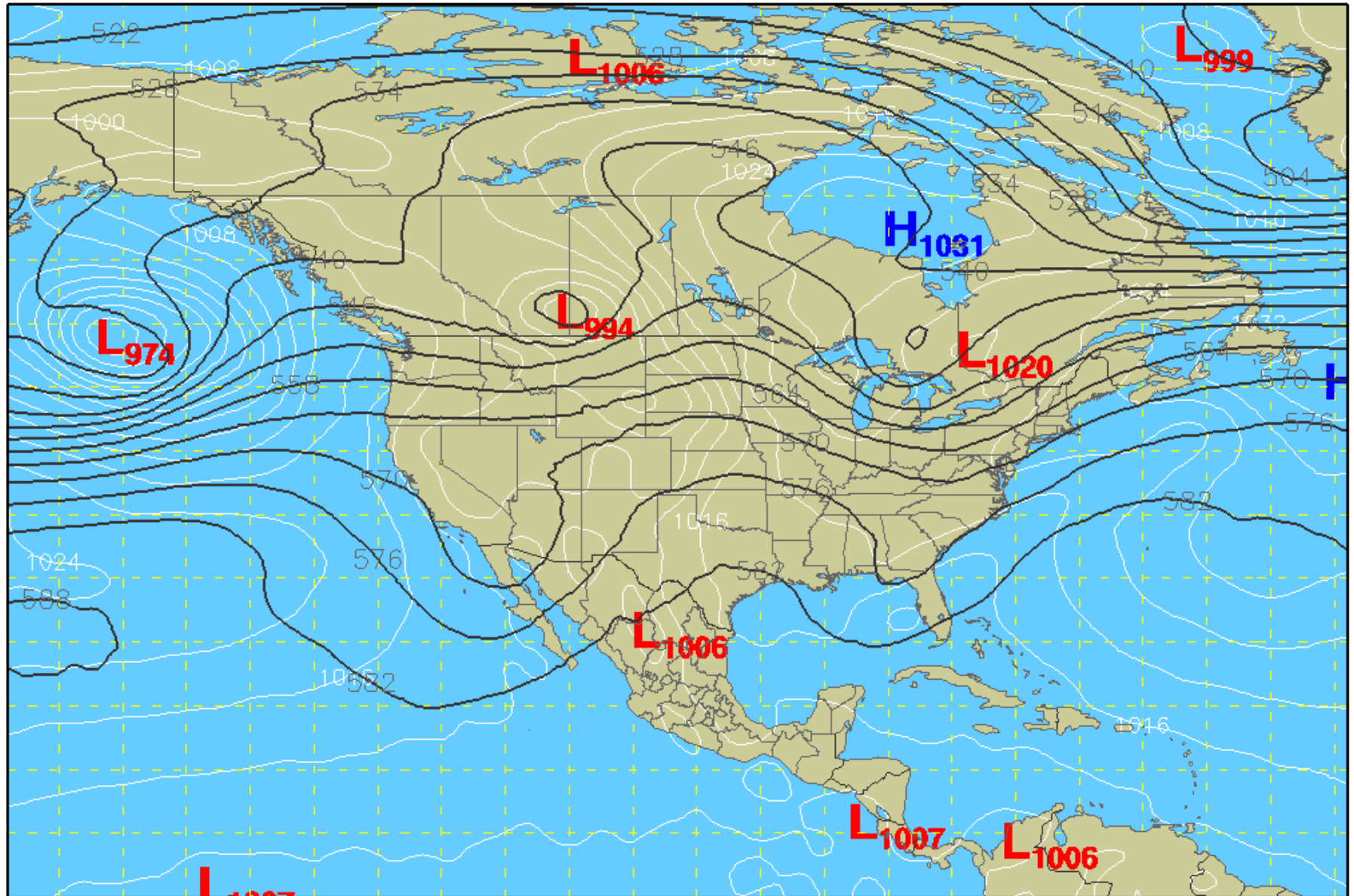
GFS (12z 16 Apr)



MSLP (mb) / 500 mb Heights (dm)

60-hour forecast valid 0000 UTC Sat 19 Apr 2014

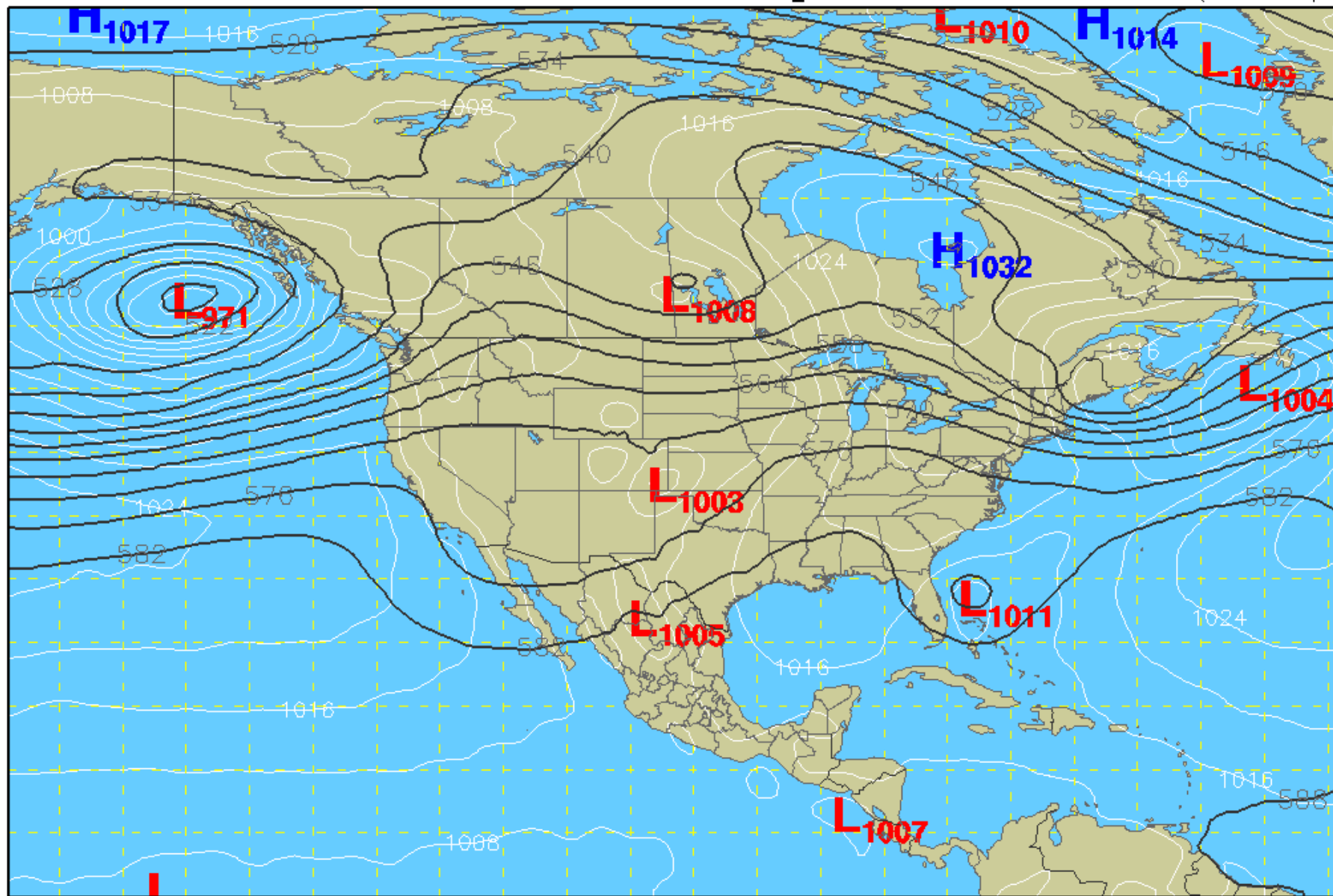
GFS (12z 16 Apr)



MSLP (mb) / 500 mb Heights (dm)

84-hour forecast valid 0000 UTC Sun 20 Apr 2014

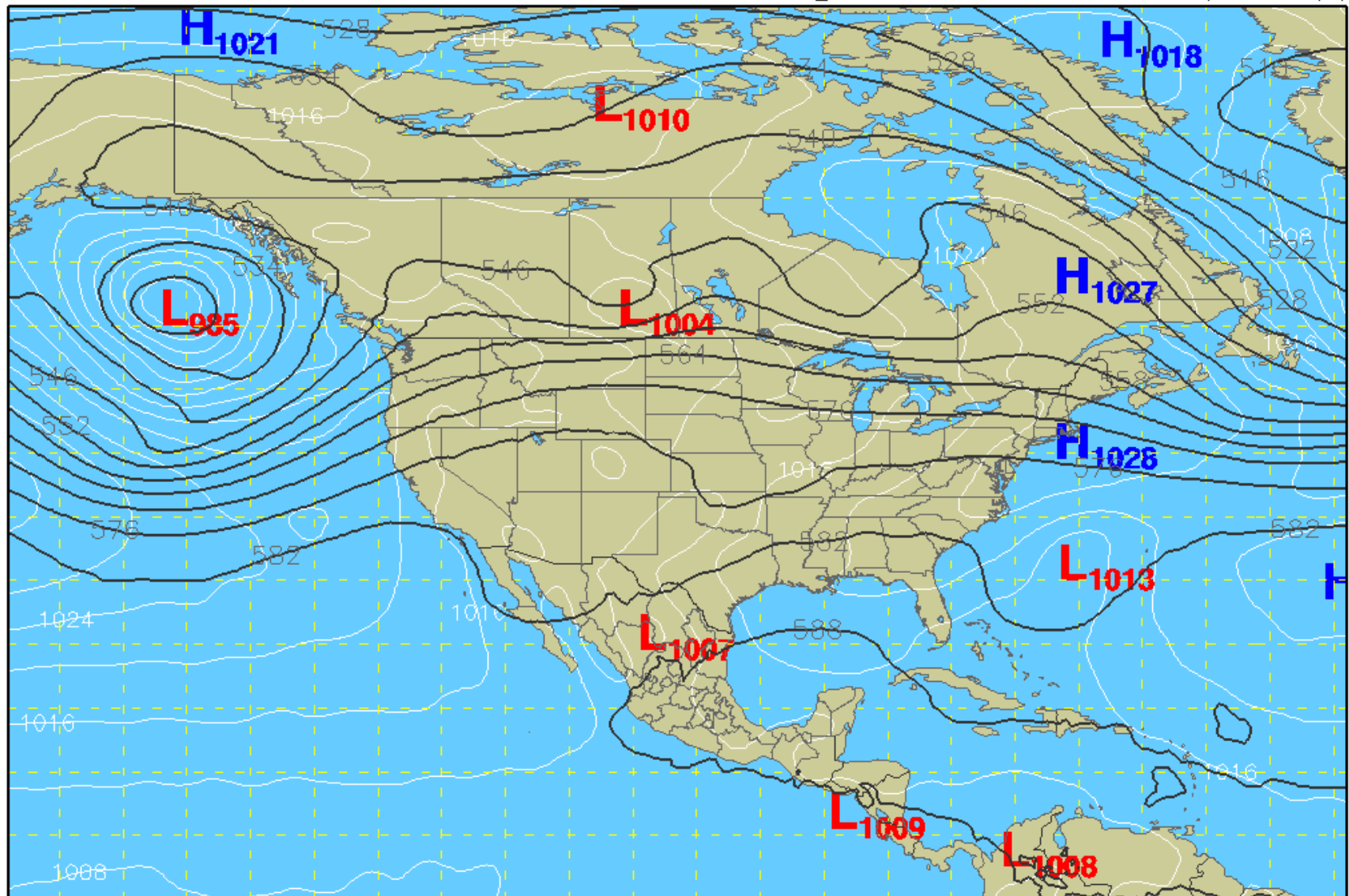
GFS (12z 16 Apr)



MSLP (mb) / 500 mb Heights (dm)

108-hour forecast valid 0000 UTC Mon 21 Apr 2014

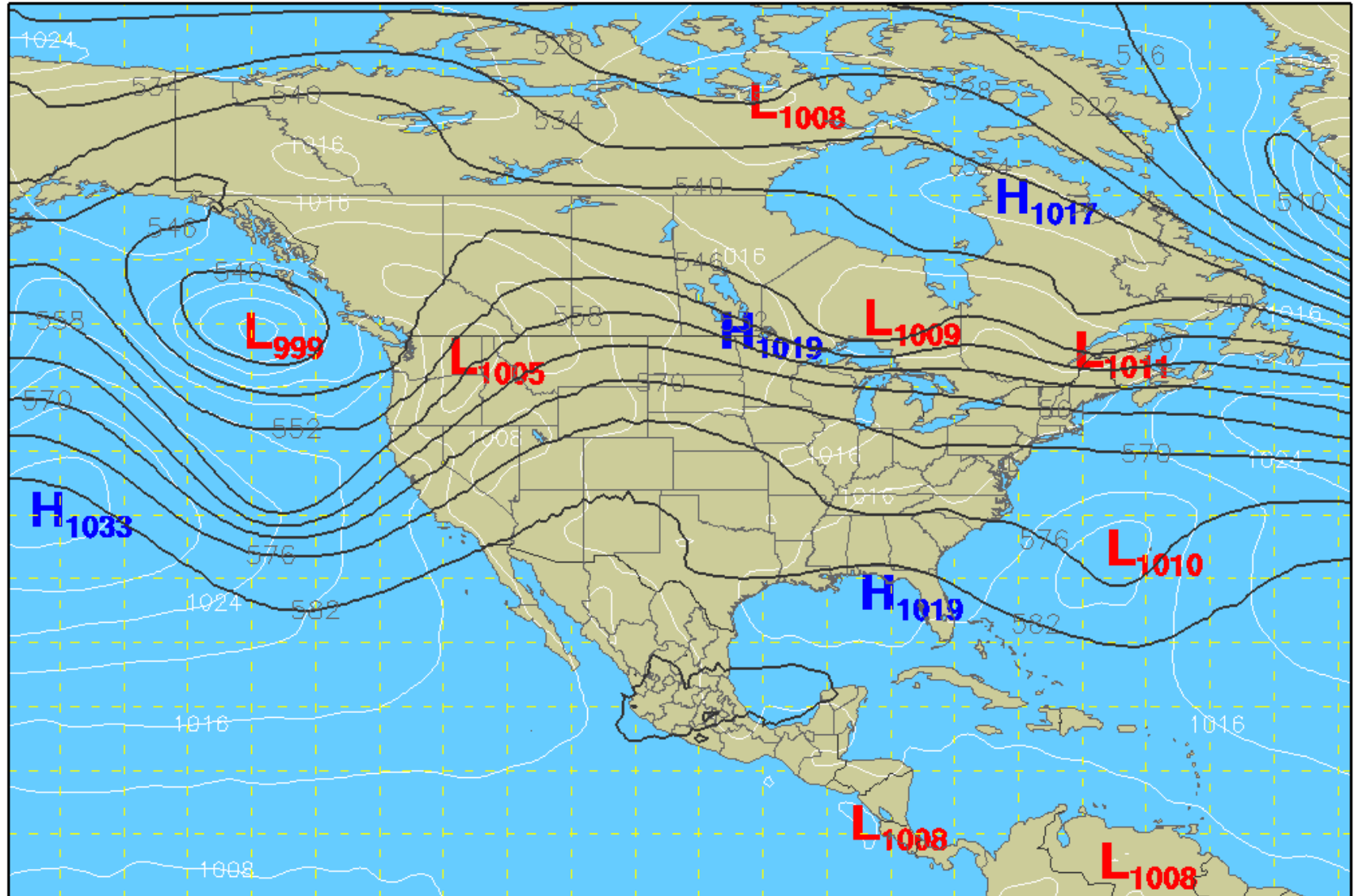
GFS (12z 16 Apr)



MSLP (mb) / 500 mb Heights (dm)

132-hour forecast valid 0000 UTC Tue 22 Apr 2014

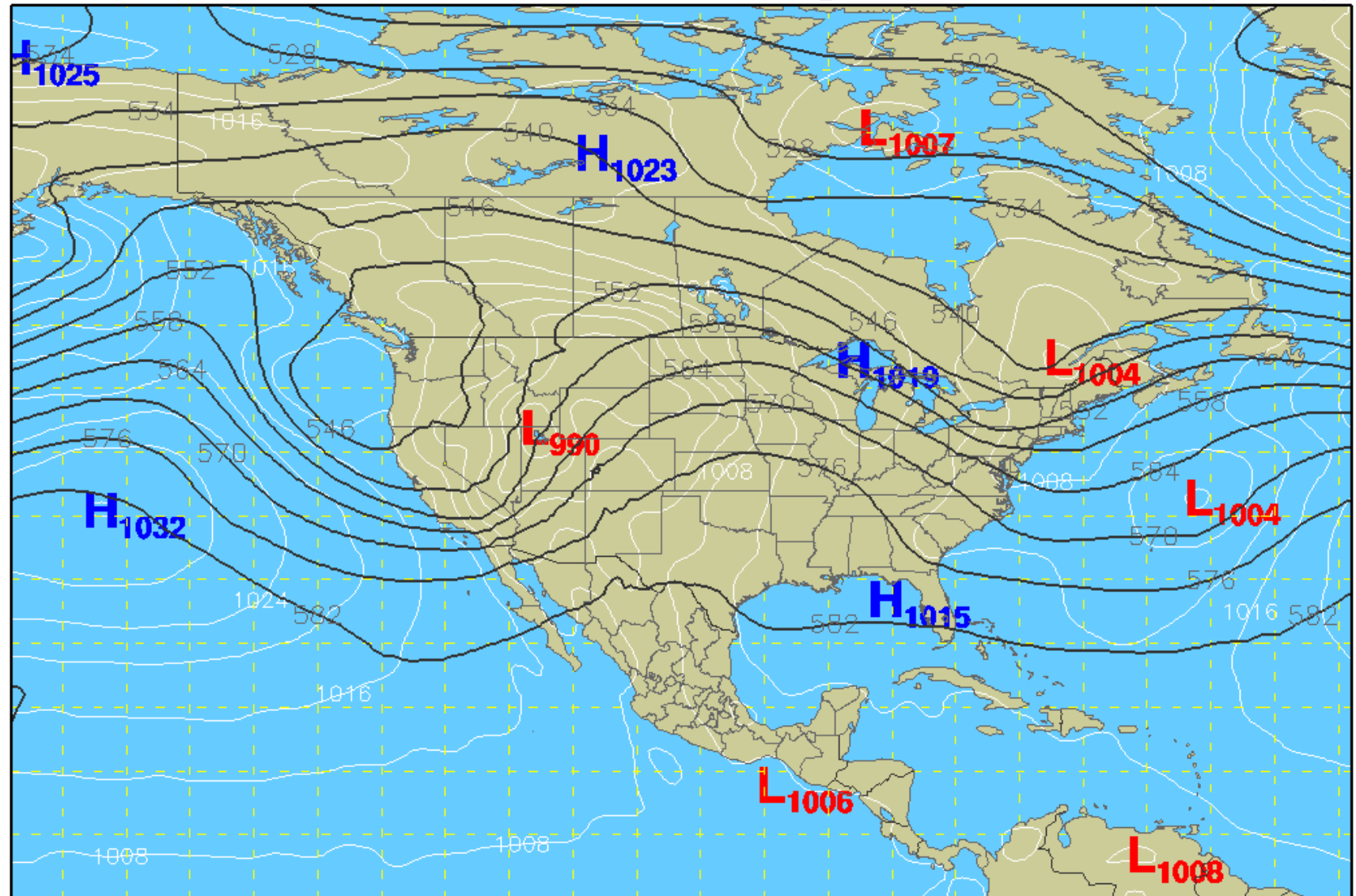
GFS (12z 16 Apr)



MSLP (mb) / 500 mb Heights (dm)

156-hour forecast valid 0000 UTC Wed 23 Apr 2014

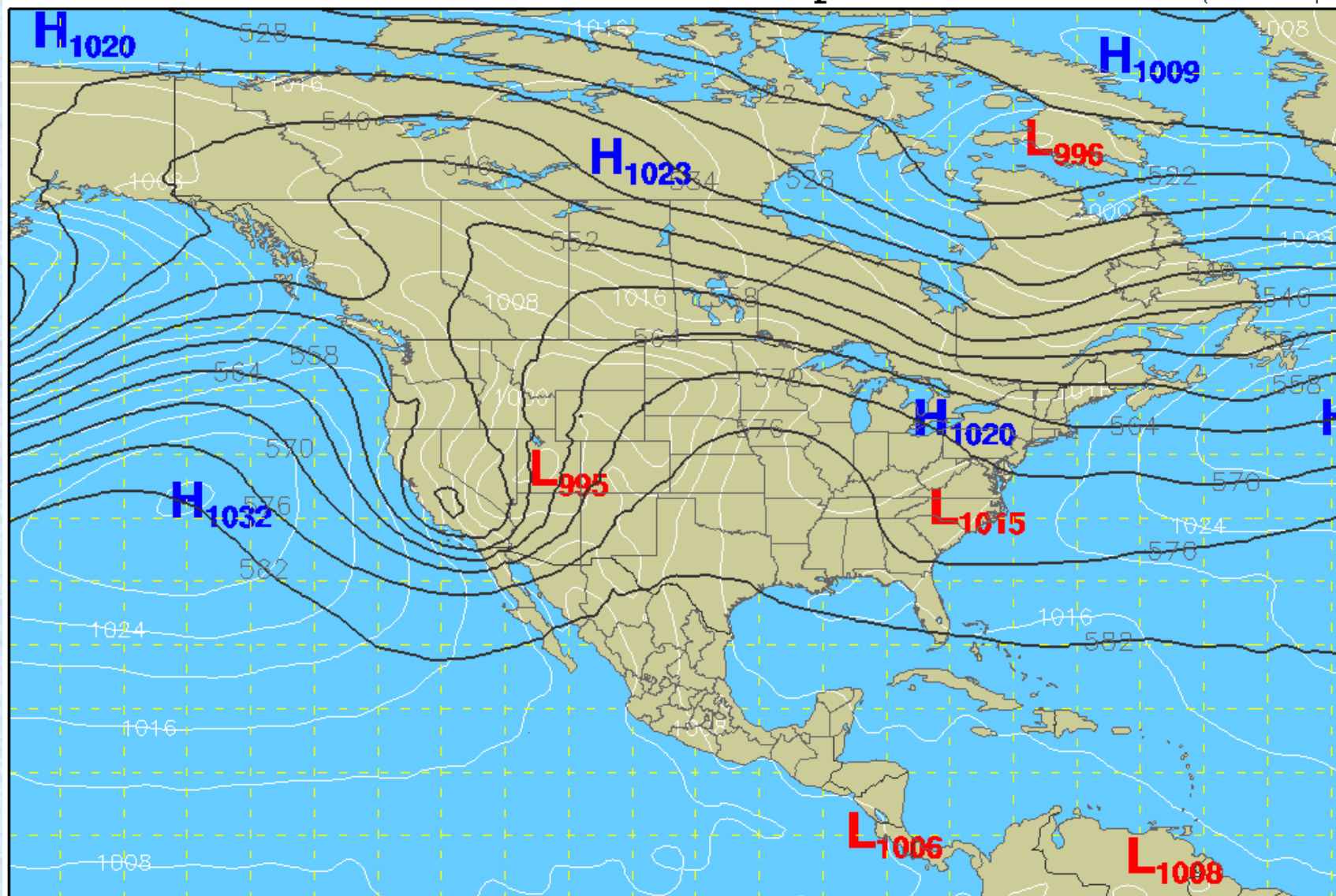
GFS (12z 16 Apr)



MSLP (mb) / 500 mb Heights (dm)

168-hour forecast valid 0000 UTC Wed 23 Apr 2014

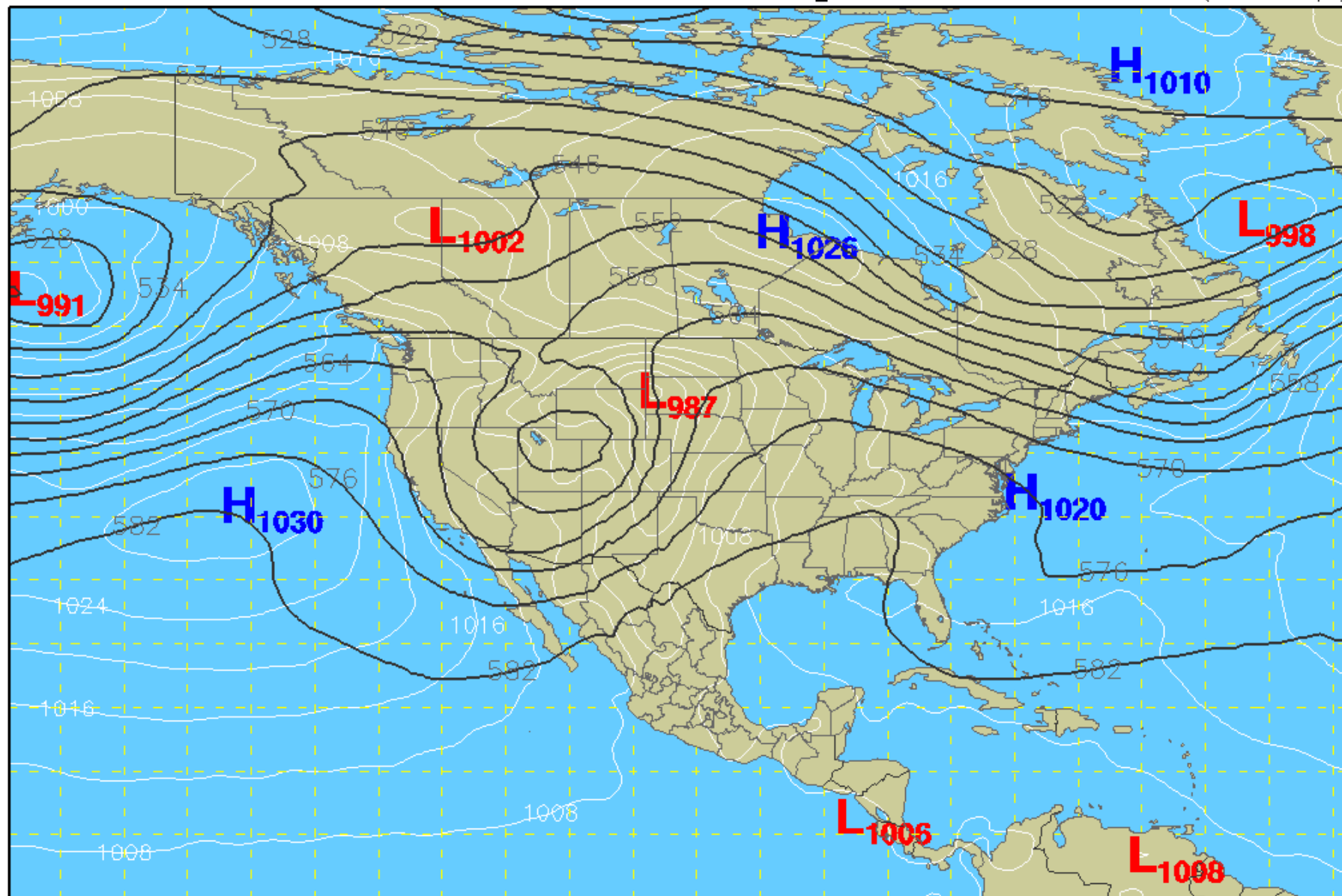
GFS (00z 16 Apr)



MSLP (mb) / 500 mb Heights (dm)

192-hour forecast valid 0000 UTC Thu 24 Apr 2014

GFS (00z 16 Apr)

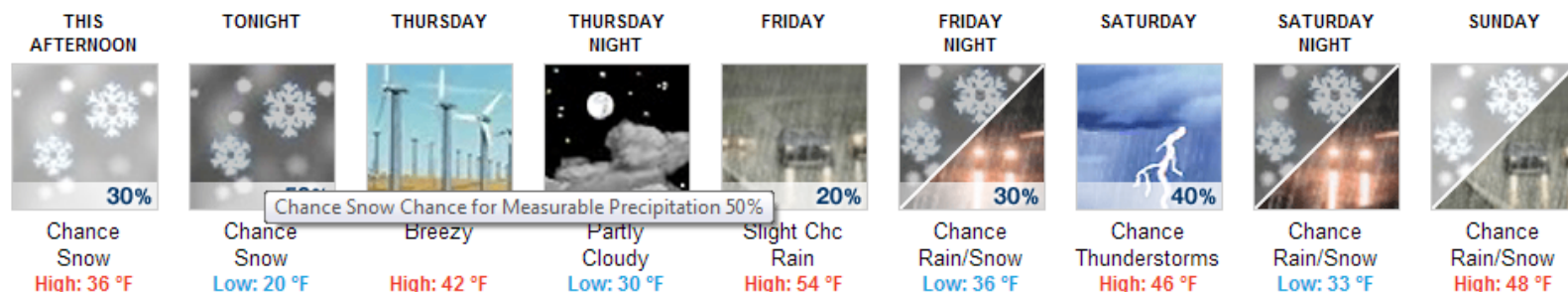


Georgetown CO

7 Day Forecast

Denver-Boulder, CO

NWS Weather Forecast Office

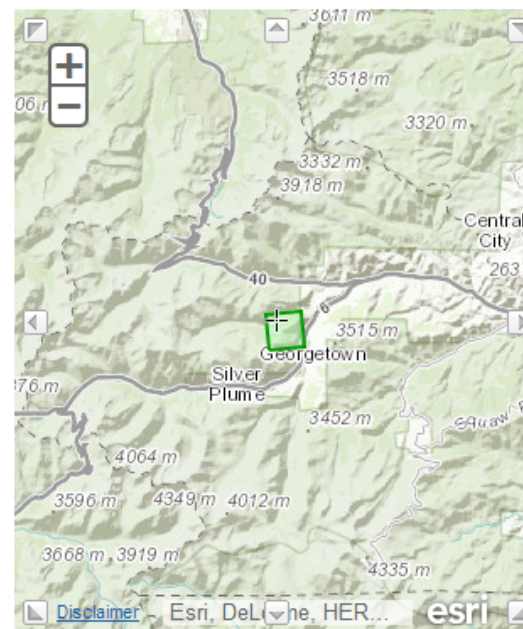


Detailed Forecast

This Afternoon	A 30 percent chance of snow. Mostly cloudy, with a high near 36. Breezy, with a west northwest wind 9 to 15 mph, with gusts as high as 24 mph. Total daytime snow accumulation of less than one inch possible.
Tonight	A 50 percent chance of snow. Cloudy, with a low around 20. Northwest wind 7 to 9 mph becoming southwest in the evening. Winds could gust as high as 15 mph. New snow accumulation of less than one inch possible.
Thursday	Partly sunny, with a high near 42. Breezy, with a west wind 9 to 16 mph, with gusts as high as 25 mph.
Thursday Night	Partly cloudy, with a low around 30. West southwest wind 10 to 14 mph, with gusts as high as 21 mph.
Friday	A 20 percent chance of rain after noon. Mostly sunny, with a high near 54. West wind 10 to 14 mph, with gusts as high as 22 mph.
Friday Night	A chance of rain before midnight, then a chance of rain and snow. Mostly cloudy, with a low around 36. Chance of precipitation is 30%.
Saturday	A chance of showers, with thunderstorms also possible after noon. Mostly cloudy, with a high near 46. Chance of precipitation is 40%.
Saturday Night	A chance of rain and snow showers. Some thunder is also possible. Mostly cloudy, with a low around 33.
Sunday	A chance of rain and snow. Partly sunny, with a high near 48.
Sunday Night	A slight chance of rain and snow. Partly cloudy, with a low around 32.
Monday	A slight chance of rain. Partly sunny, with a high near 51.

Click Map For Forecast

Topographic



Lat/Lon: 39.73°N 105.71°W Elevation: 10531 ft

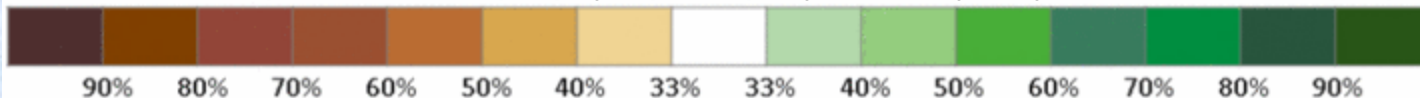
ABOUT THIS FORECAST

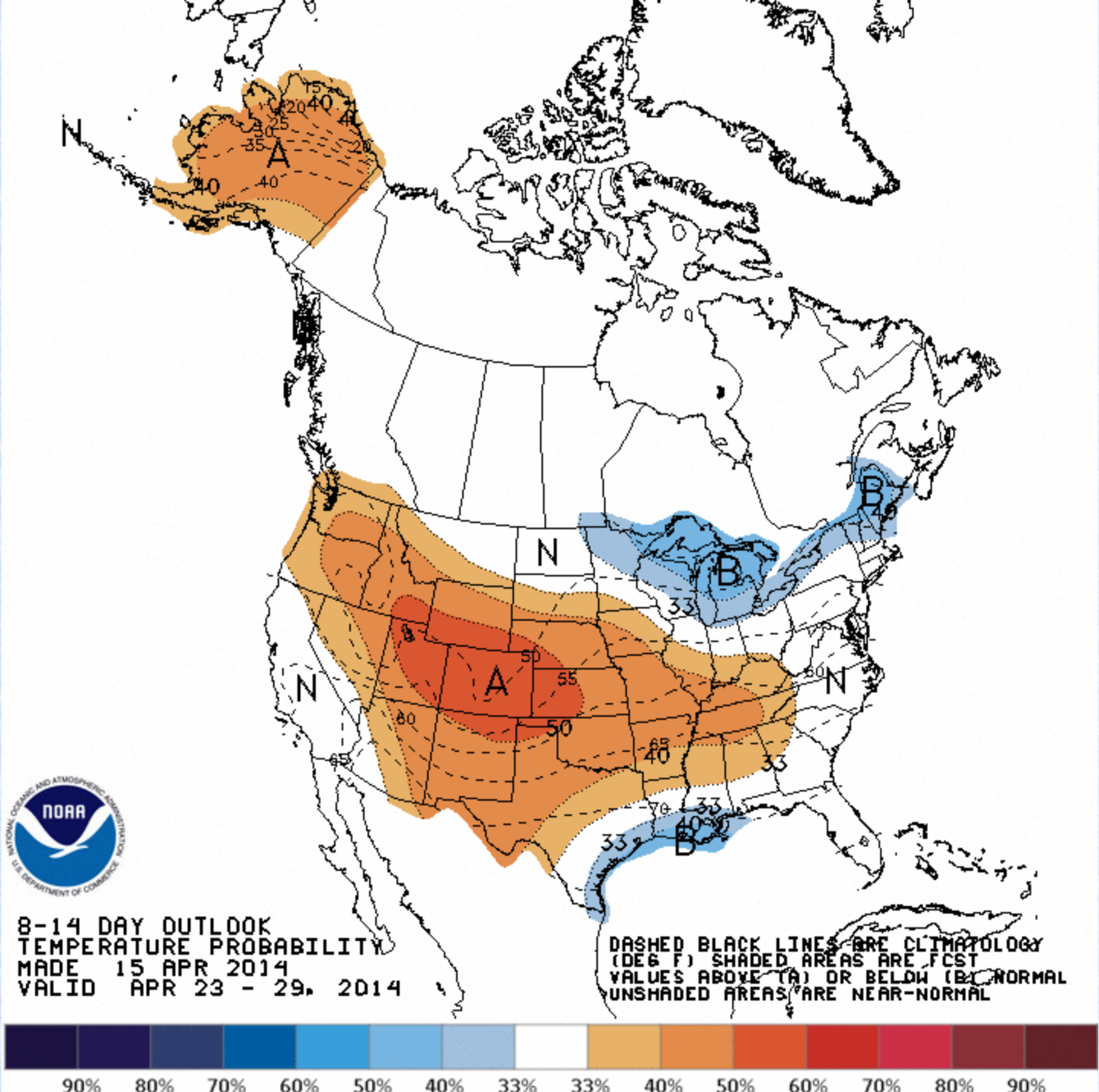
Point Forecast: Georgetown CO
39.73°N 105.71°W (Elev. 10531 ft)



8-14 DAY OUTLOOK
PRECIPITATION PROBABILITY
MADE 15 APR 2014
VALID APR 23 - 29, 2014

DASHED BLACK LINES ARE CLIMATOLOGY
(TENTH OF INCHES) SHADED AREAS ARE FCS
VALUES ABOVE (A) OR BELOW (B) MEDIAN
UNSHADED AREAS ARE NEAR-MEDIAN



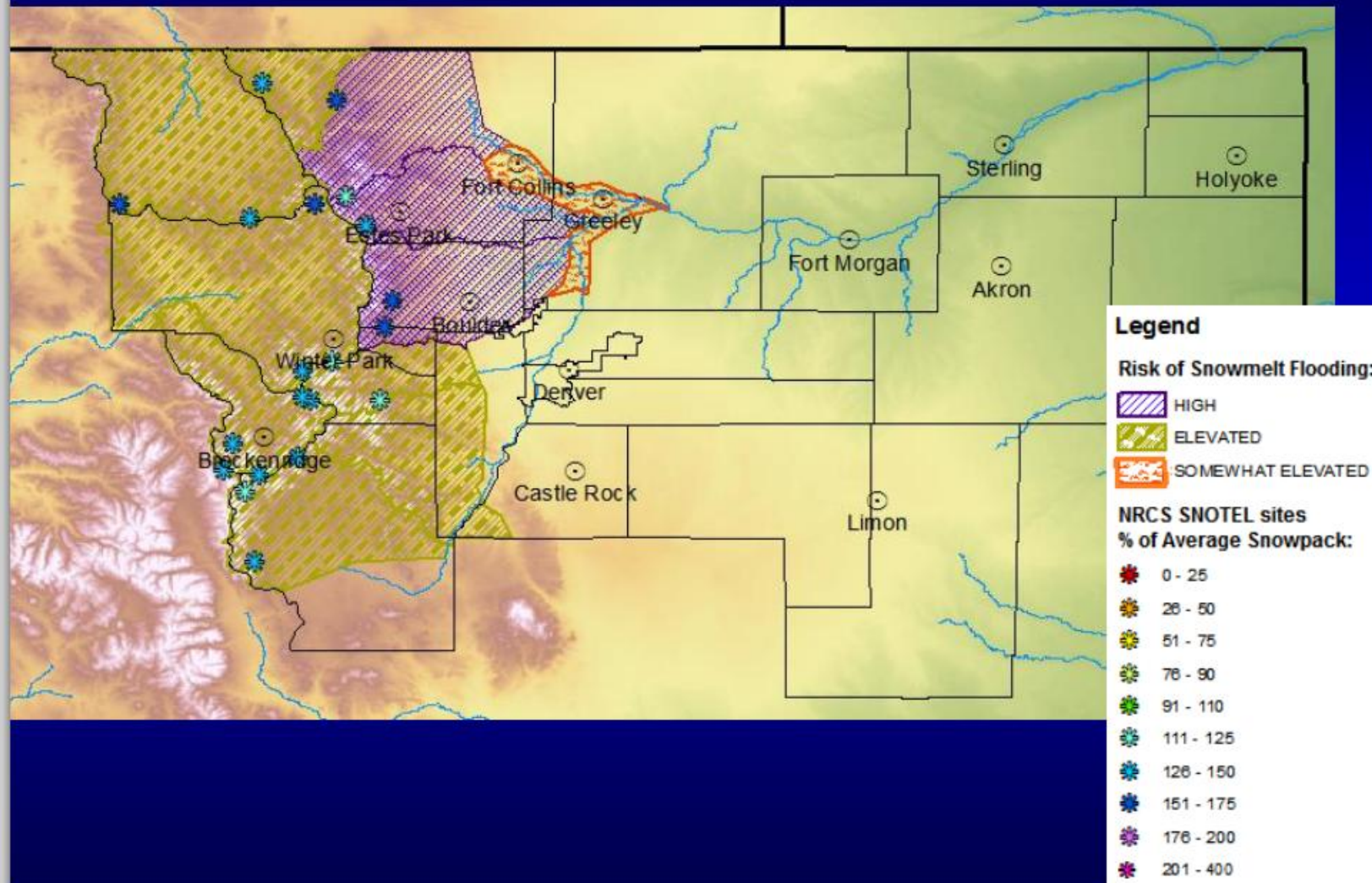


Average temperatures May 1

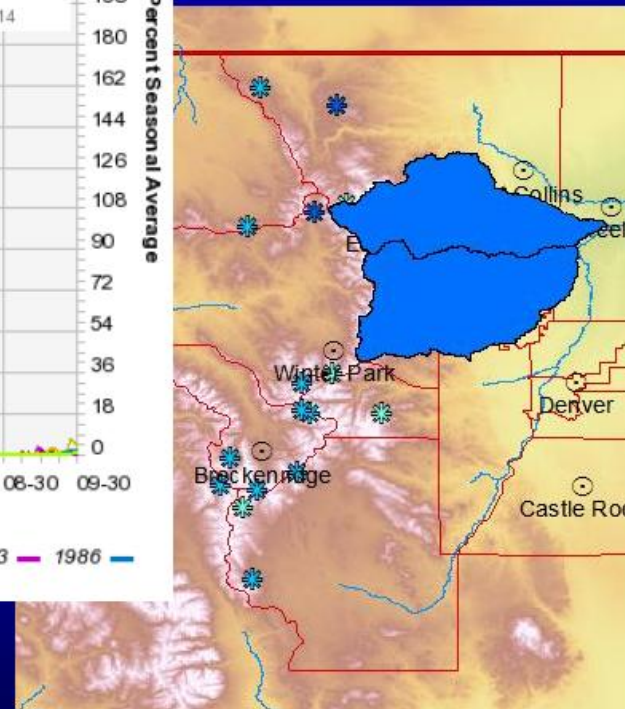
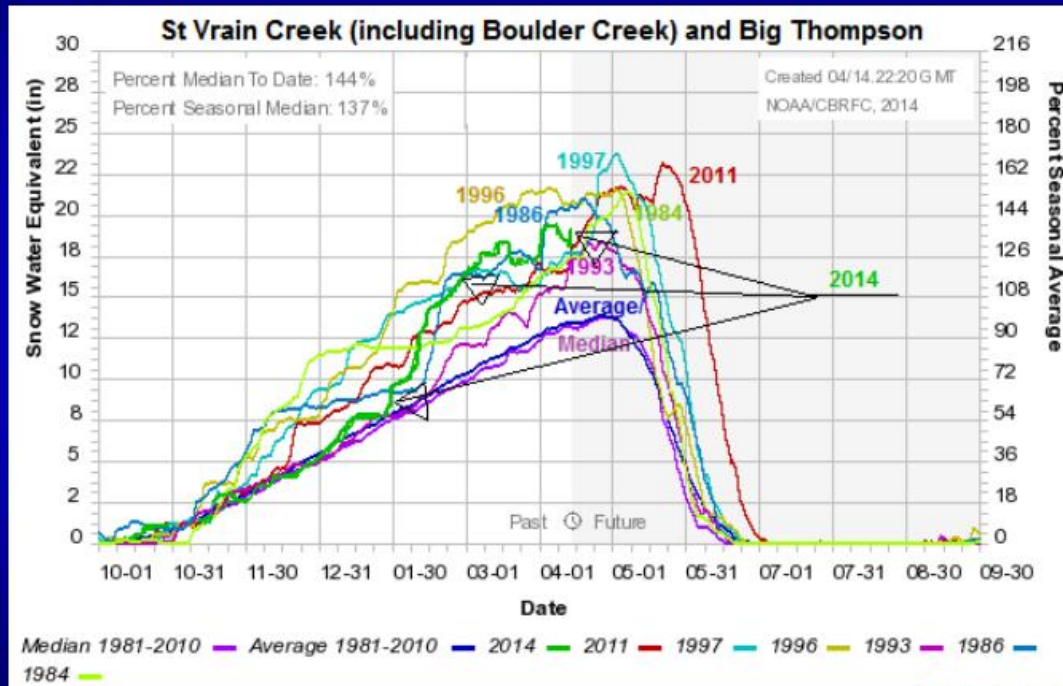
- Maximum Denver 66 degrees
- Minimum Denver 38 degrees
- Maximum Evergreen 64 degrees
- Minimum Evergreen 36 degrees
- Maximum Georgetown 58 degrees
- Minimum Georgetown 34 degrees

Spring Snowmelt Flood Potential Outlook Graphic

April 14th, 2014



1981-2010 average/median. The years displayed are some of the highest snowpack years.



The September 2013 flood was a hydrologic event (stream flooding), a geologic event (sedimentation & landslides), and a hydrogeologic event (high water table).

Many of the antecedent conditions for another flood remain:

Due to last September's rain and flooding; the risk of flooding and flash flooding is higher this year primarily in the Front Range Foothills extending into the urban corridor in Boulder, Larimer, SW Weld and extreme Nrn Jefferson Counties.

- A small amount of water could start moving large quantities of sediment in affected streams.
- There are reduced creek and river capacities due to the increased sedimentation, rocky debris and stream bank erosion.
- Debris flows and landslides may cause access issues and obstruct creek flows.
- Woody debris along streams could potentially cause debris dams and subsequent flooding.
- Altered locations and conditions of streams may impact structures and infrastructures at risk.
- Some reservoirs in these areas are at or near capacity and will spill earlier than usual causing additional flow during the runoff and thunderstorm season.

These 6 risks are from the Boulder Office of Emergency Management: Post-Flood Community Preparedness Guide - Flash Flood, Landslide and Debris Flow 2014 Edition at: <http://www.bouldercounty.org/doc/flood/preparednessguide2014.pdf>

Some factors that can impact mountain snowmelt runoff:

- **Future snowfall**
- **Stream levels during the melt**
- **When and how fast the snow melts (freezing and thawing in the mountains)**
- **Future rainfall amounts and timing**
- **Whether rain (especially a warm rain) falls on the snowpack**
- **Groundwater/soil moisture**
- **Dry winds**