The background features a blue gradient with white wave-like shapes at the top left and a semi-transparent globe on the right side. The globe shows the Americas and parts of Europe and Africa.

Factors influencing June and July's Climate in NOAA's Climate Service Eastern Region

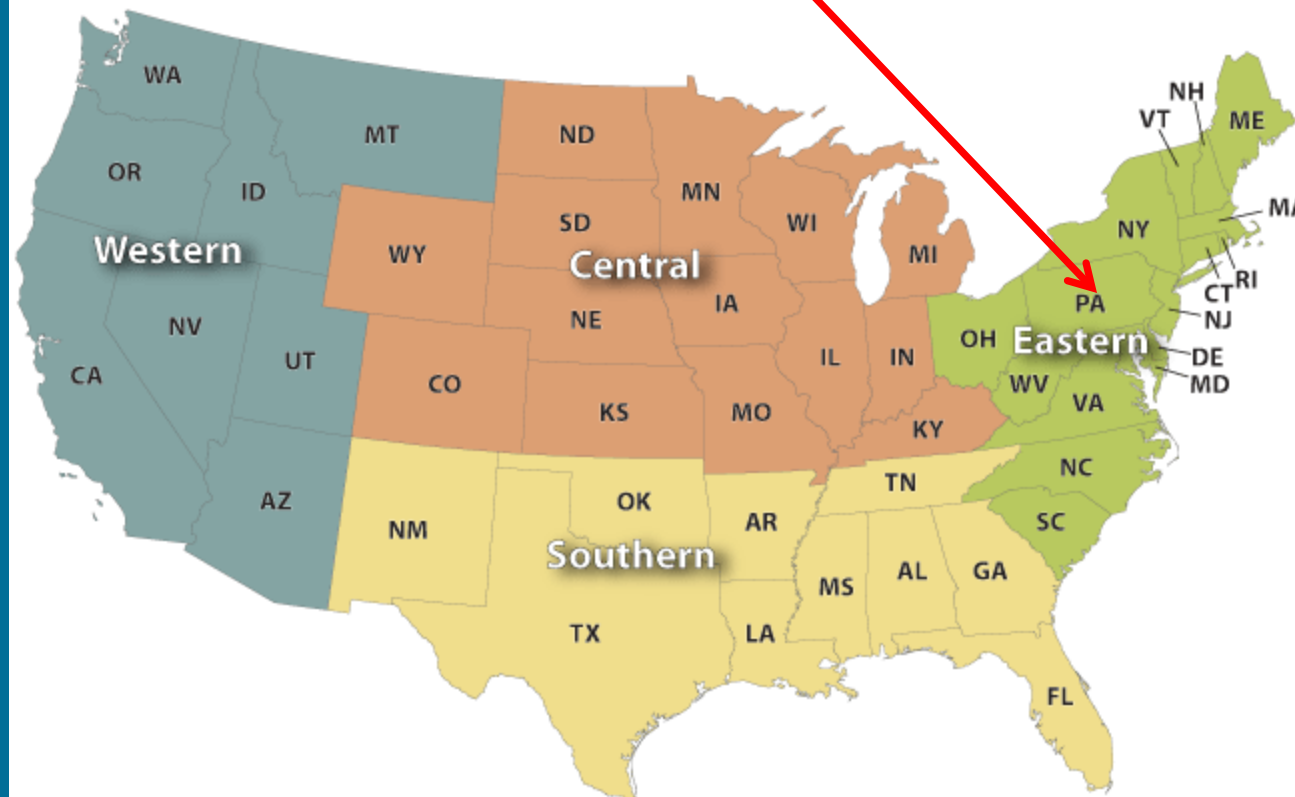
David J. Nicosia

Warning Coordination Meteorologist


NOAA-National Weather Service Binghamton, NY

NOAA Climate Service: Eastern Region

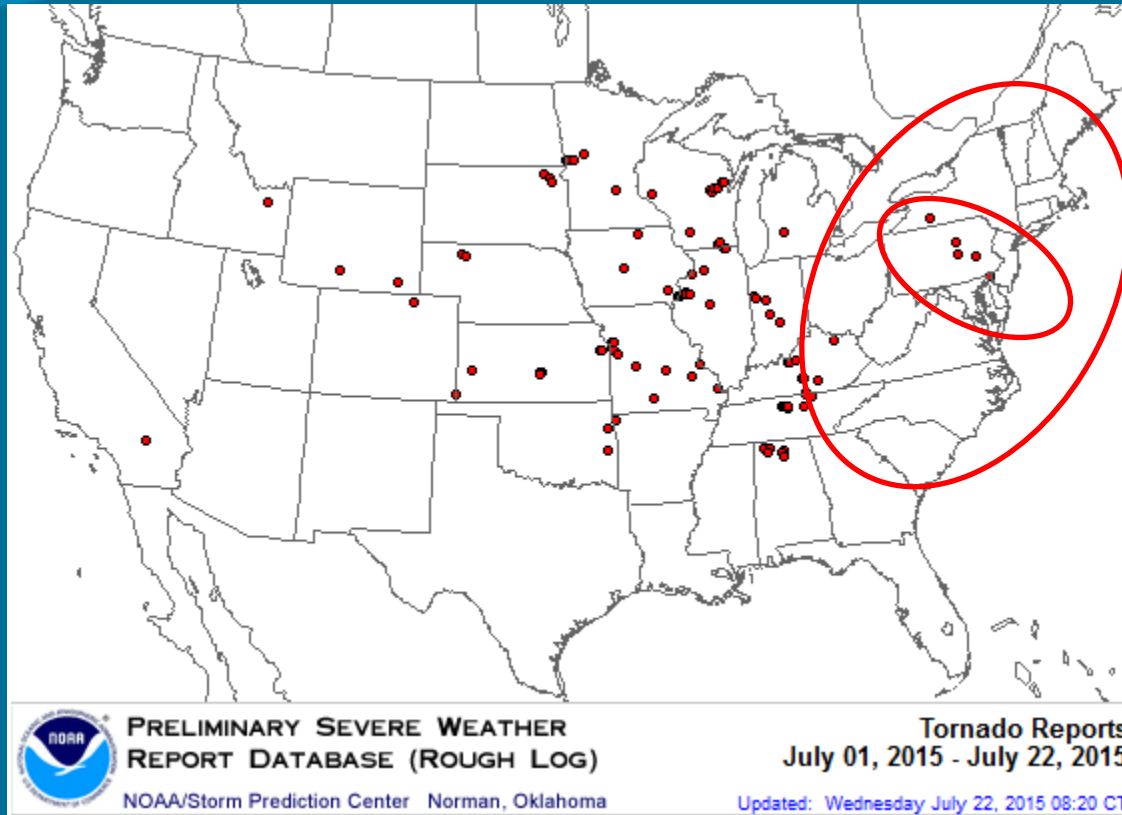
NWS Regions



Summary of Significant Hydro-Meteorological Events

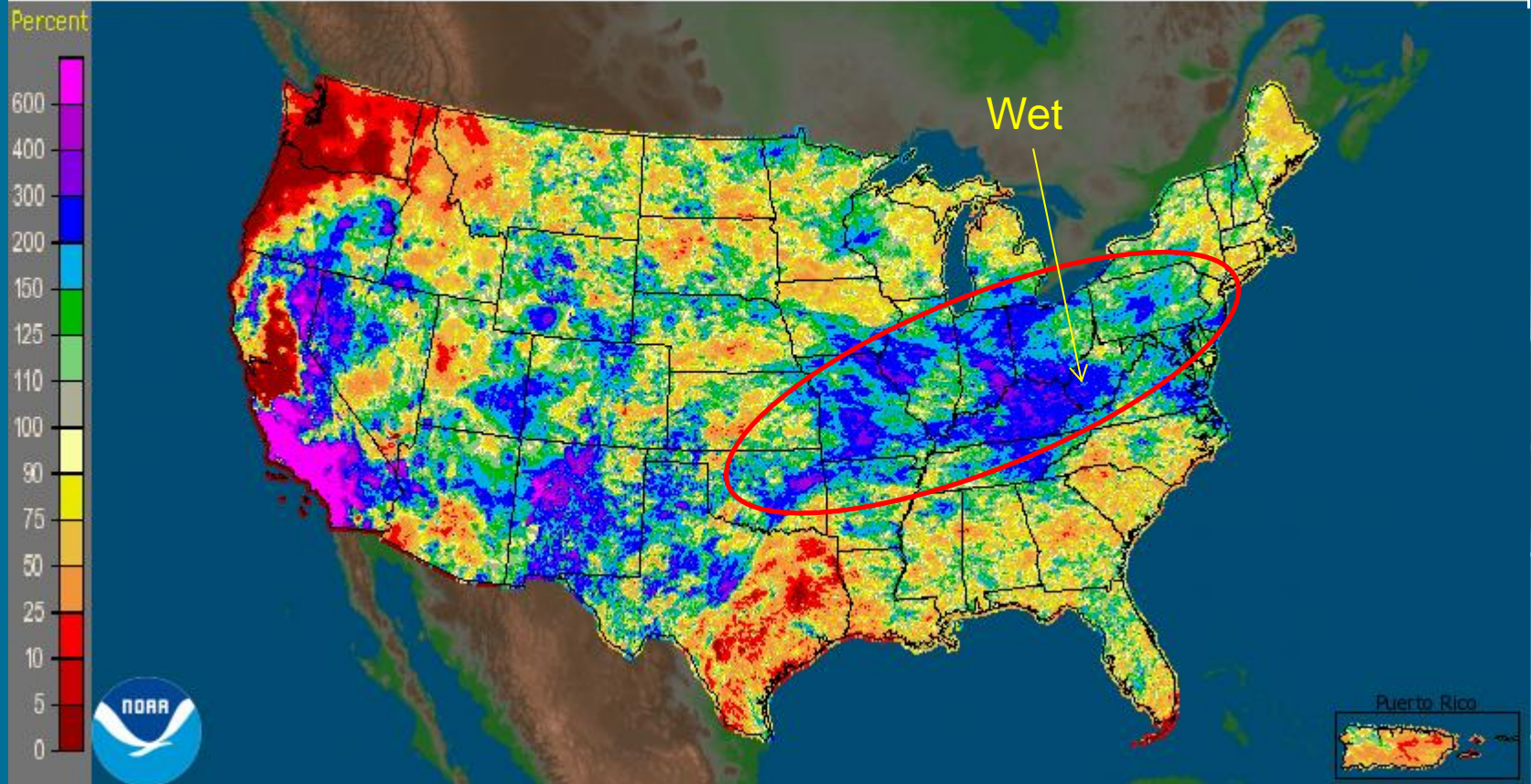
- Wet in much of the region.
 - Dry in far south and far north.
 - Cooler in the north part of the region.
 - Warmer in the south.
 - Flash floods.
 - There was some severe weather but the flash floods were the most significant.
- 

June and July Tornadoes

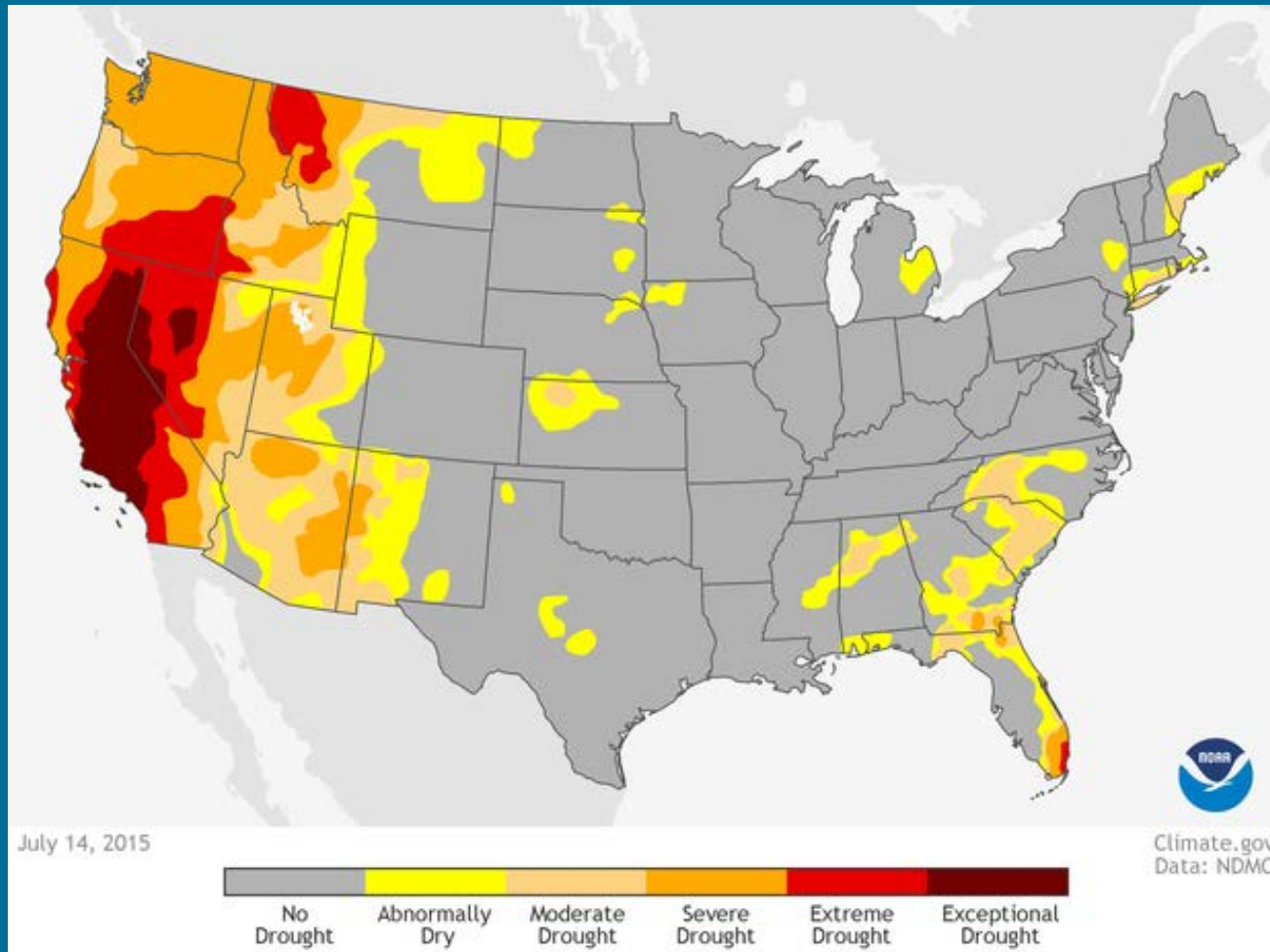


June and July Rainfall

CONUS + Puerto Rico: Current 30-Day Percent of Normal Precipitation
Valid at 7/22/2015 1200 UTC- Created 7/22/15 18:32 UTC



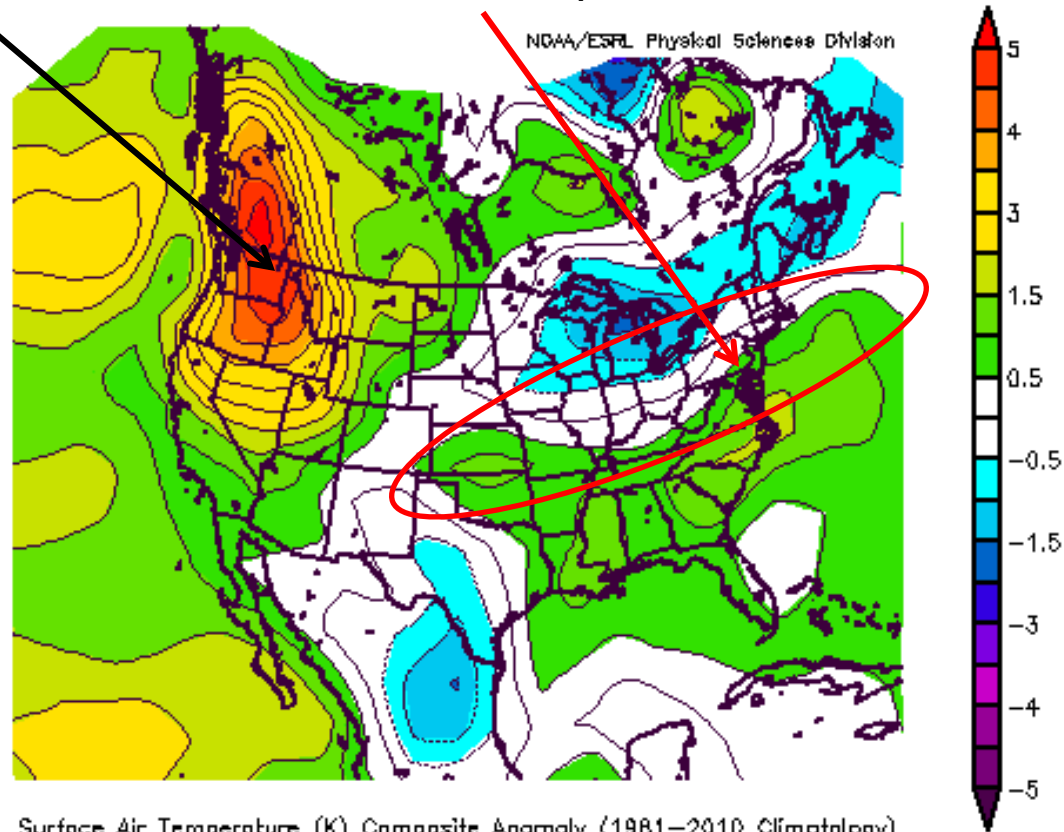
Drought Condition Changes from End of May to Present



NOAA Re-analysis Temperature Anomaly Data June 1-July 20th, 2015

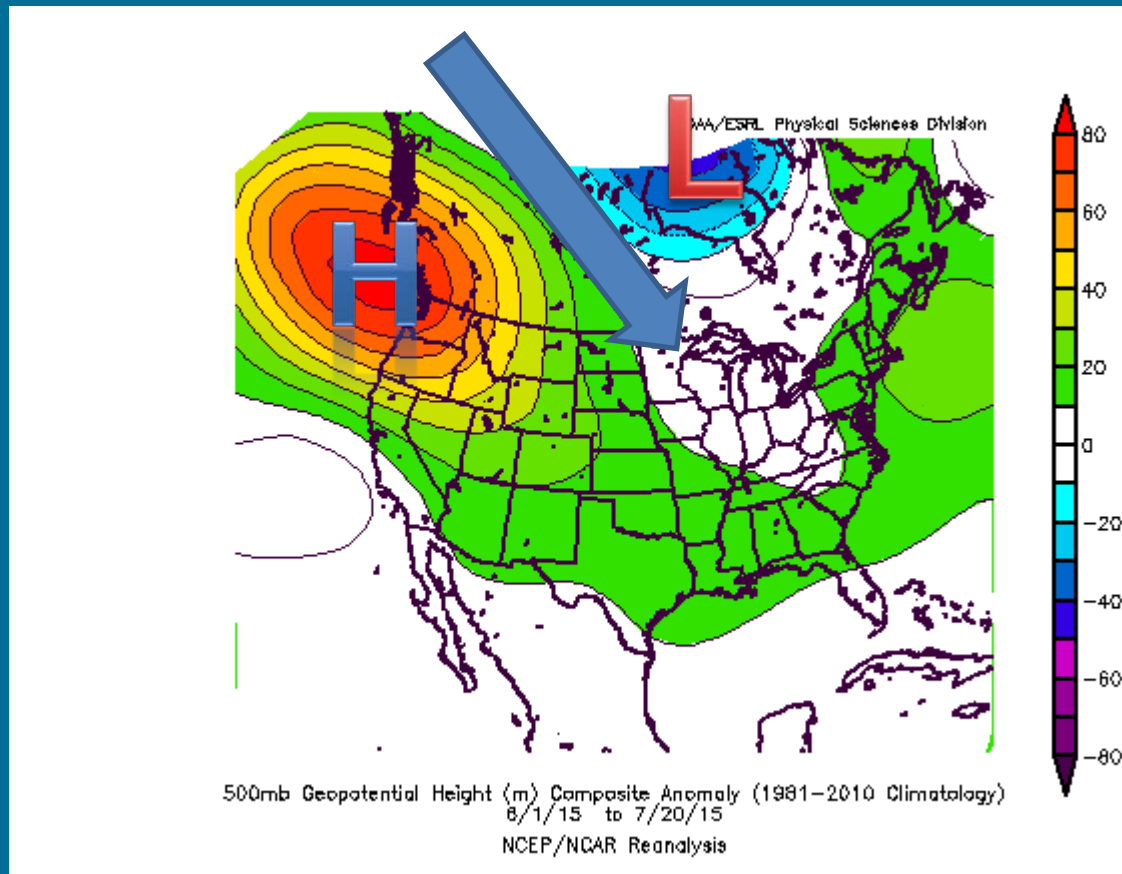
Exceptional
Warmth
(Heat!!)

Increased Temperature Contrast



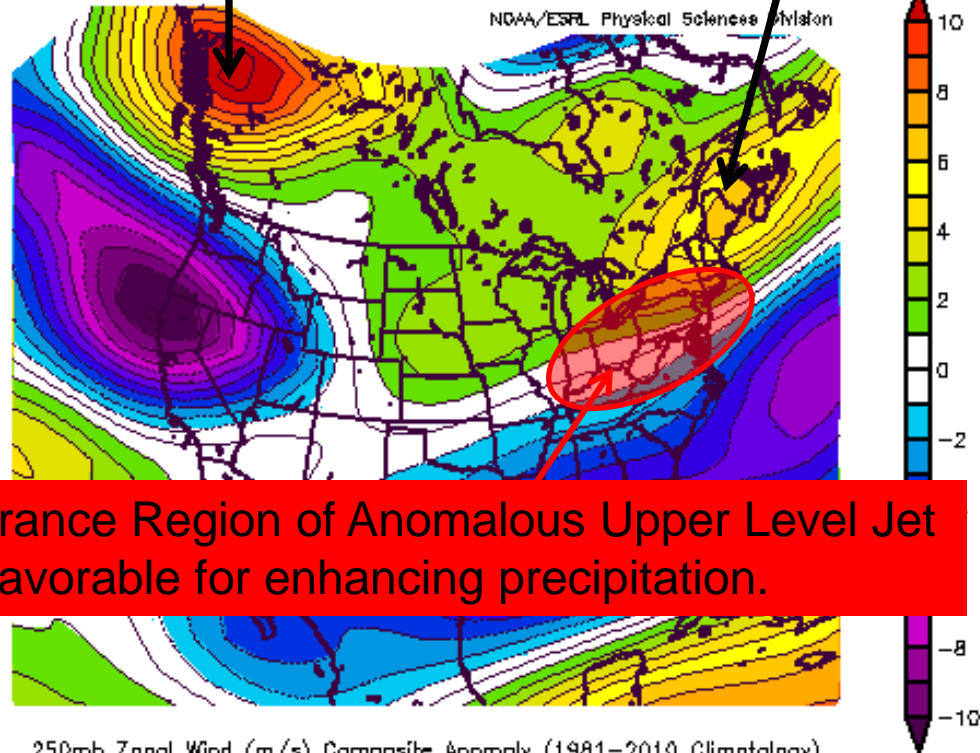
NOAA Re-analysis Geopotential Height Anomaly Data 500 mb June 1-July 20th, 2015

Enhanced Northwest Flow Aloft, more short waves/low pressure systems from the North Pacific make it to the eastern U.S. than what is “normal” for summer.



NOAA Re-analysis Zonal Wind Anomaly at 250 mb June 1-July 20th, 2015

Enhanced Westerly Jet Stream here and here



Right Entrance Region of Anomalous Upper Level Jet which is favorable for enhancing precipitation.

250mb Zonal Wind (m/s) Composite Anomaly (1981-2010 Climatology)
8/1/15 to 7/20/15
NCEP/NCAR Reanalysis

Summary

- Stronger than normal northwest flow aloft supplied the region with more short waves from the North Pacific than a typical summer.
- These waves of low pressure were enhanced by a stronger than normal upper level jet stream over northern New England.
- This put much of region under the favorable upper divergent portion of the jet stream.
- Result: wetter than normal many areas and flash floods.