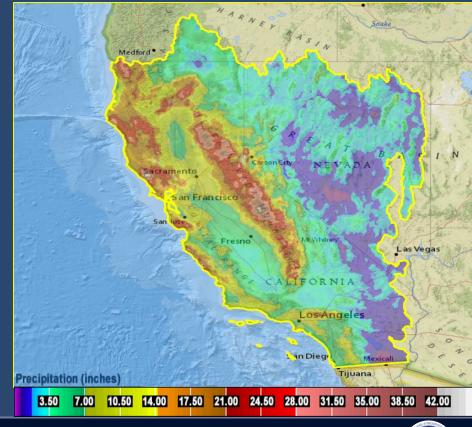
California Storms

Winter storms brought heavy rain and mountain snow to California January 20-22

- Multiple reports of flooding, debris flows, heavy seas / beach erosion and impassible mountain highways.
- Governor Jerry Brown declared a state of emergency for 50 counties by Monday January 23.
- Most of California has received more than 3 times normal January rainfall.
- Higher terrain northwest of the Bay Area and in the Sierra foothills have received over 40 inches of rain this month alone.
- More than 25 feet of snow has fallen over the higher mountains since mid Nov.

Location	January Rainfall as of 1/23/17	Normal January Rainfall
San Francisco (downtown)	10.53 inches	3.34 inches
Sacramento (Executive Airport)	9.92 inches	2.70 inches
Eureka	11.13 inches	4.82 inches
Long Beach	9.37 inches	1.93 inches



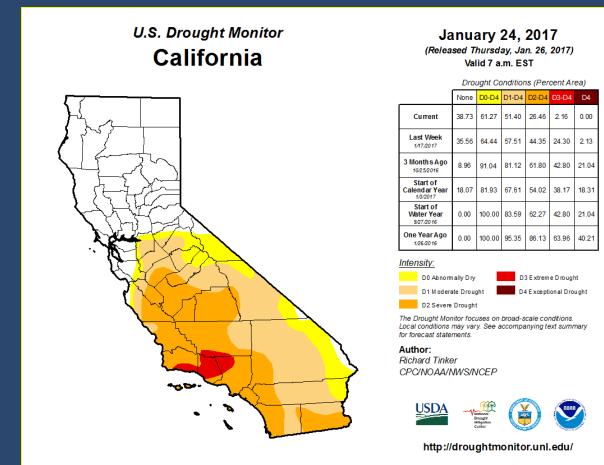




California Storms

Drought status has significantly improved across California

- No longer any drought areas identified in northern California.
- For the first time in several years, there are no areas of exceptional drought in Southern California.
- Additional improvement is almost certain as storms continue to bring moisture to the state this winter.
- Very impressive snowpack in the Sierra up to 30 inches of liquid equivalent will replenish water supply for spring and summer irrigation and other critical uses.







IDSS: California Storms

NWS Decision Support

- Western Region Regional Operations Center briefed the State of California Office of Emergency Services
 daily through the event.
- The NOAA Liaison to FEMA Headquarters provided briefings to FEMA leadership and the Logistics Resource Center Team emphasizing rainfall and flooding forecasts in California.
- The California/Nevada River Forecast Center and Sacramento Weather Forecast Office (WFO) provided daily weather and hydrology briefings for the California Department of Water Resources.
- WFOs Sacramento and Monterey sent partner emails, posted web videos, and used social media to relay threats.
- WFOs San Diego and Los Angeles / Oxnard conducted several partner briefings beginning several days in advance and continuing through the event.

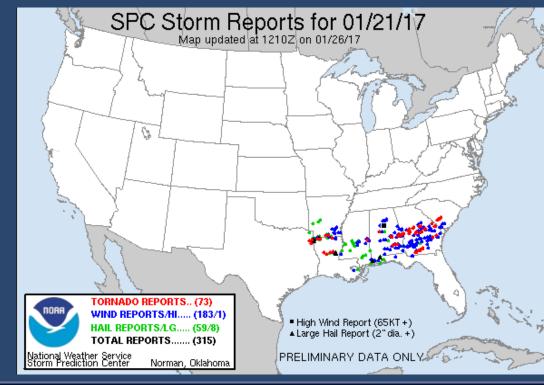




Severe Weather in the South

January 21-23 tornado outbreak - One of the largest winter outbreaks on record

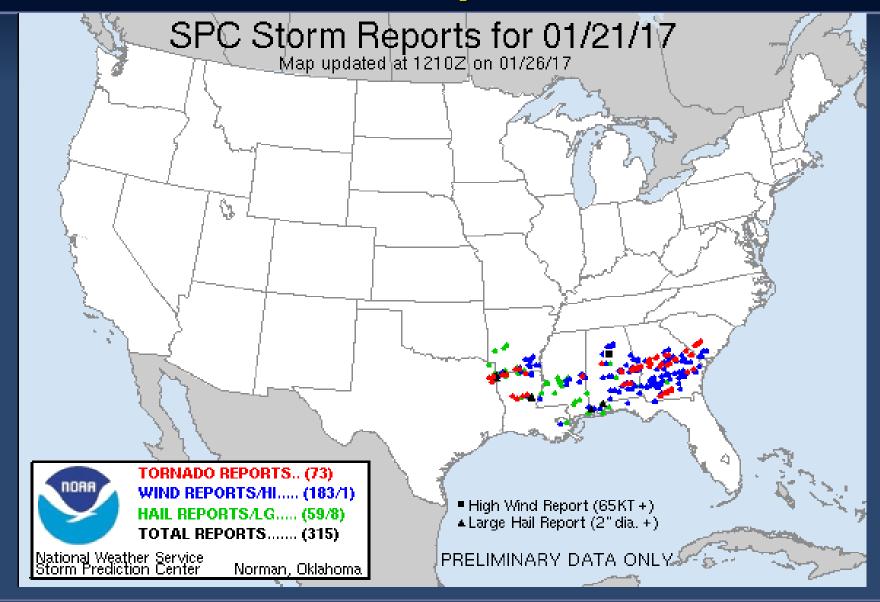
- More than 70 tornadoes occurred in eight states from Texas to South Carolina.
- A total of 20 fatalities have been confirmed from this outbreak.
 - Georgia has 15 confirmed storm-related fatalities.
 - Mississippi has 4 confirmed storm-related fatalities.
 - Florida has 1 confirmed storm-related fatality.
- Property damage already estimated in the hundreds of millions of dollars; likely to be higher.
- There have now been 113 tornadoes in January of 2017, which is second only to January of 1999 (212).







Storm Reports



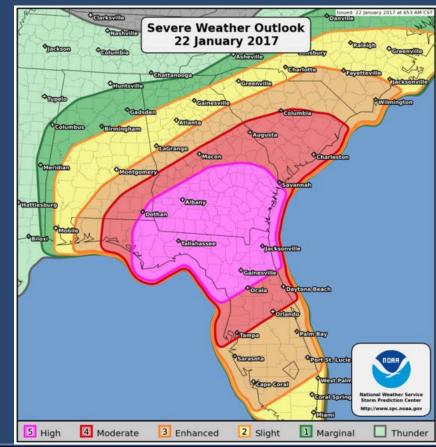




Severe Weather in the South

The Storm Prediction Center (SPC)

- SPC identified the risk area for severe weather six days in advance, and SPC advertised high-end severe weather two days in advance.
- A rare 'High Risk' day was issued for long track tornadoes across the southeast the morning of January 22.
 - This was only the third 'High Risk' that included the state of Florida since 2000.
 - It was the first 'High Risk' day issued in the month of January since 1999.
 - First 'High Risk' issued anywhere in the U.S. since June 3, 2014.
- SPC issued numerous Severe Thunderstorm/Tornado Watches, Public Weather Outlooks, and technical discussions highlighting the potential for significant <u>overnight</u> tornadoes.







IDSS: Severe Weather in the South

Southern Region - Regional Operations Center (SR-ROC) and WFOs

- SR-ROC provided several briefings for FEMA IV.
- All offices within or around the threat area (from Texas to Florida) began sending heads-up emails to core partners several days in advance.
- Numerous webinars and briefings for emergency managers and other key partners were held in the days leading up to the outbreak and during the recovery effort.

Liaisons to FEMA

- The NOAA Liaison to FEMA Headquarters highlighted the threat for severe weather during FEMA
 Daily Operations Briefings and provided decision support to FEMA leadership and interagency
 partners.
- Additional NWS Liaisons to FEMA augmented support for Enhanced Watch operations and were asked to provide weather briefings for Command and General Staff at the Joint Field Office in Baton Rouge, LA.



