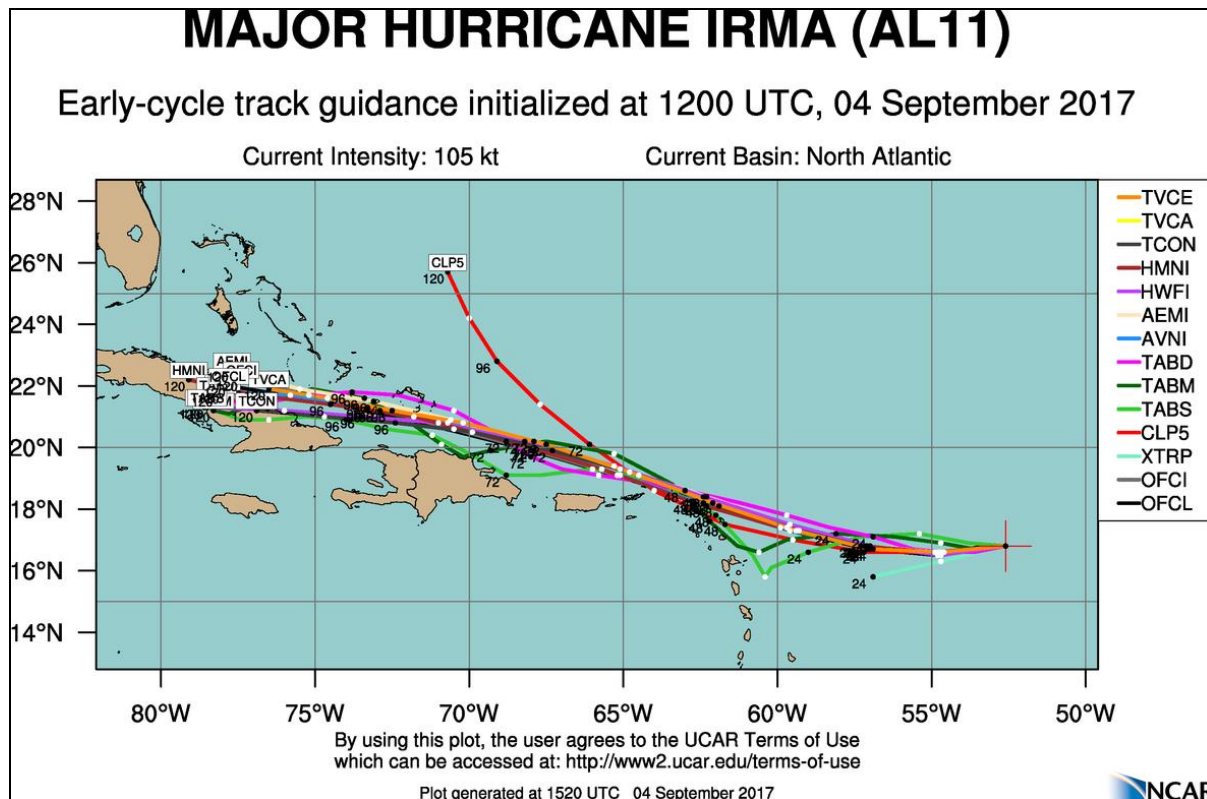


## Climate Impact Company Labor Day Report

**Issued: Monday, September 4, 2017**

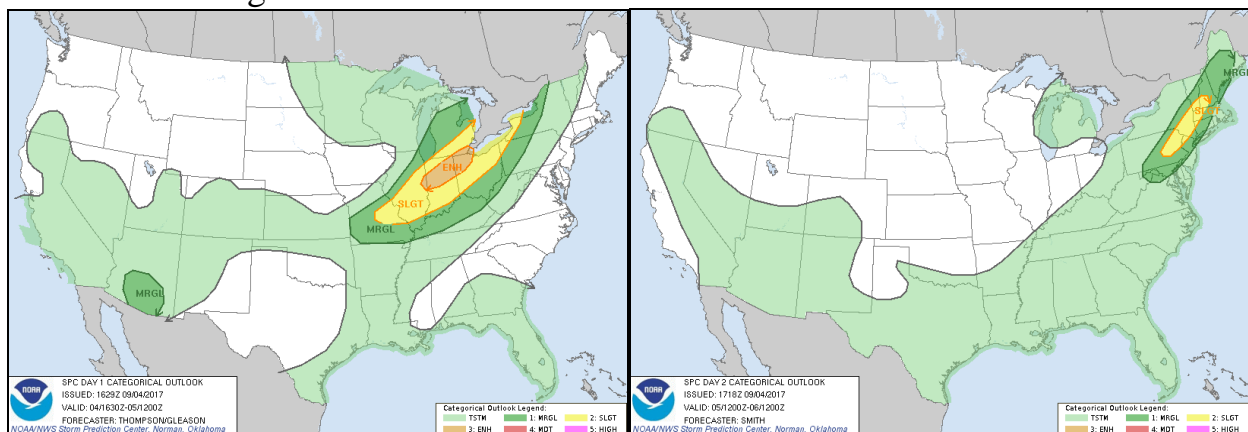
### **Highlight: All eyes on Irma**

**Irma update:** At 2PM EDT Category 3 Major Hurricane Irma was located about 530 miles east of the Leeward Islands moving west-southwest at 14 mph with top wind 120 mph and surface pressure 944 MB. Irma is forecast to become a category 4 hurricane late tonight. The NOAA/NHC 5-day forecast track continues to trend farther west now indicating the north coast of Cuba in 5 days (as a major hurricane). The forecast beyond 5 days is very uncertain although Florida and the eastern Gulf of Mexico are now certainly at increased risk while landfall somewhere on the East Coast is less likely.



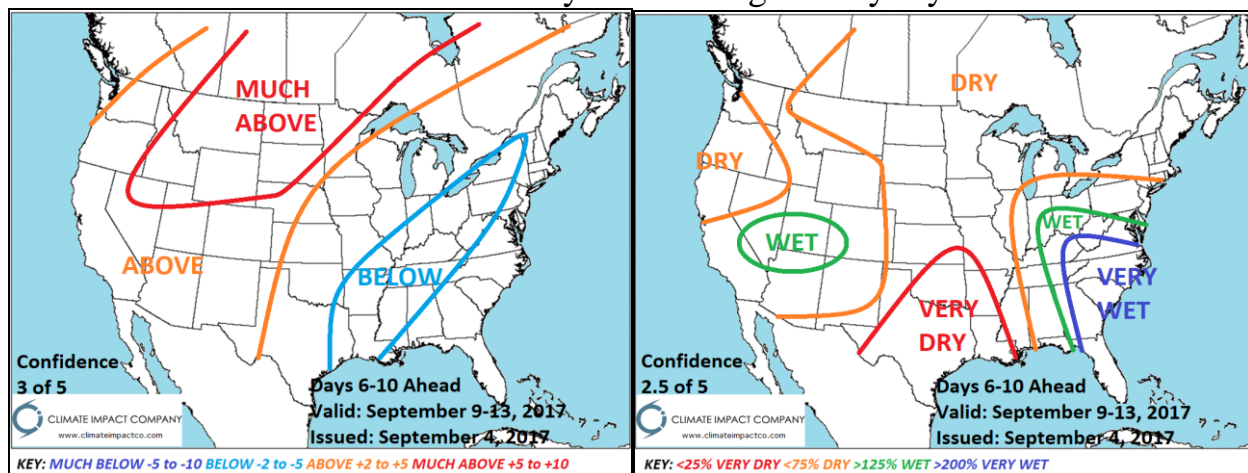
**Fig. 1:** Tropical cyclone model forecast tracks for Irma through 5 days are agreeable to the north Cuba Coast. Implied is a track into the Gulf of Mexico.

**Days 1-5 (Sep. 4-8):** An impressive cold front is sinking south and southeast from Canada across the Great Lakes today and triggering severe thunderstorms from Illinois to far western New York State. The primary issue is damaging wind centered on Indiana to northwest Ohio. The cold front extends southward to the Mid-South and eastward to the Northeast Corridor tomorrow with more severe storms likely from Pennsylvania to New Hampshire. While temperatures are 10-15F above normal tomorrow in the East (90 in Washington, DC) afternoon temperatures are 15-20F below normal across the Upper Midwest (near 58 in Minneapolis). Wednesday is rainy on the East Coast as the cold front stalls. Meanwhile the long-standing anomalous heat in the West fades later this week as a rare Pacific trough arrives at the coast.



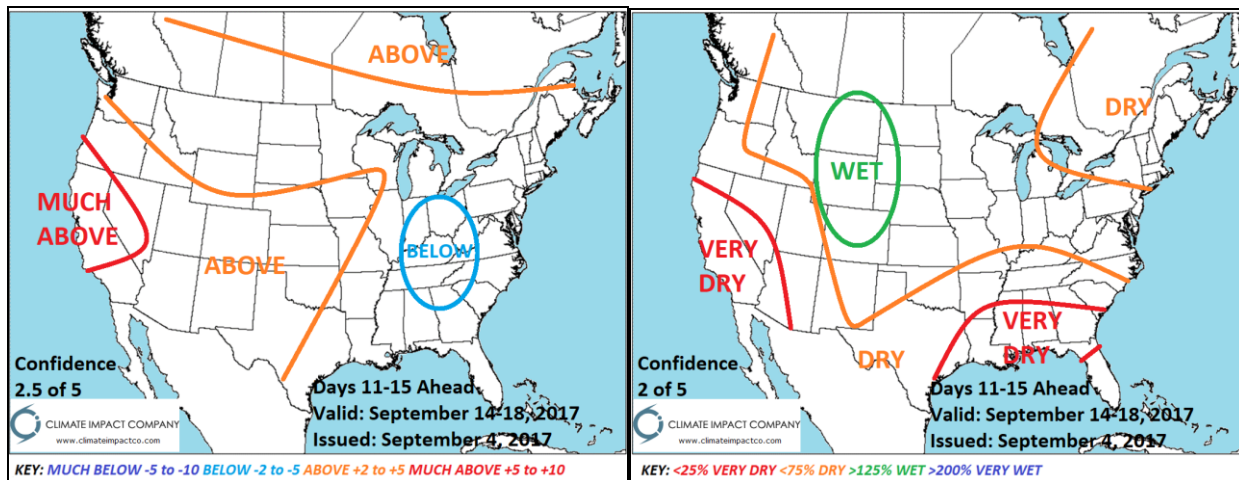
**Fig. 2-3:** The NOAA/SPC severe weather risks for today and tomorrow.

**Days 6-10 (Sep. 9-13):** The outlook is very dependent on the track of Irma. The model consensus is across Florida and into the Southeast/Interior Mid-Atlantic U.S. Attendant clouds and precipitation keep the Interior East/Southeast cool while the West to North-Central U.S. is very warm and generally dry.



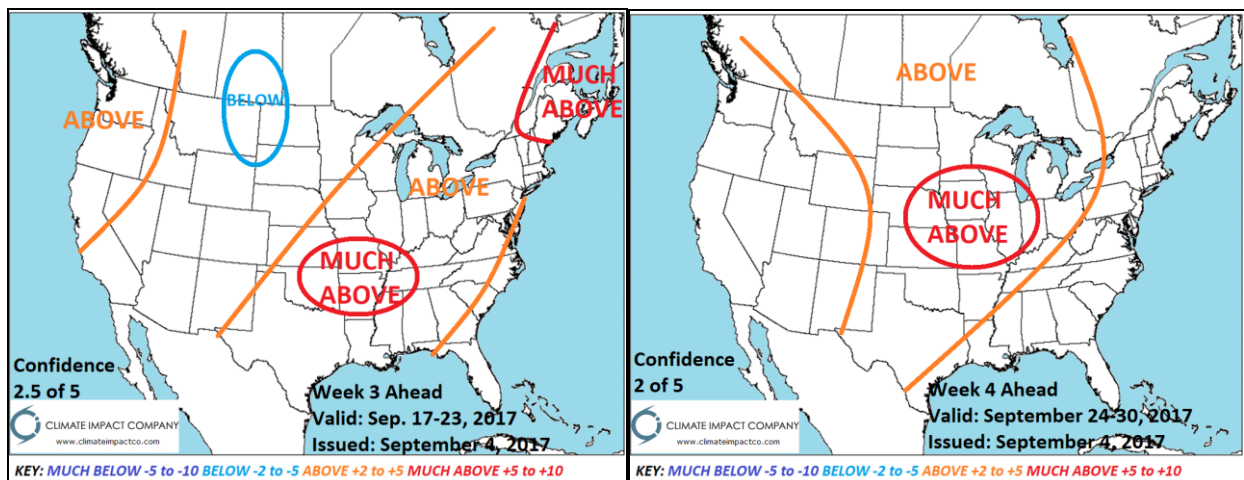
**Fig. 4-5:** The CIC day 6-10 temperature/precipitation anomaly outlooks.

**Days 11-15 (Sep. 14-18):** The outlook indicates most of the U.S. is dry in the wake of Irma. The driest anomalies are across the southern U.S. Anomalous warmth remains locked in the West to Great Plains while the East is generally temperate.



*Fig. 6-7: The CIC day 11-15 temperature/precipitation anomaly outlooks.*

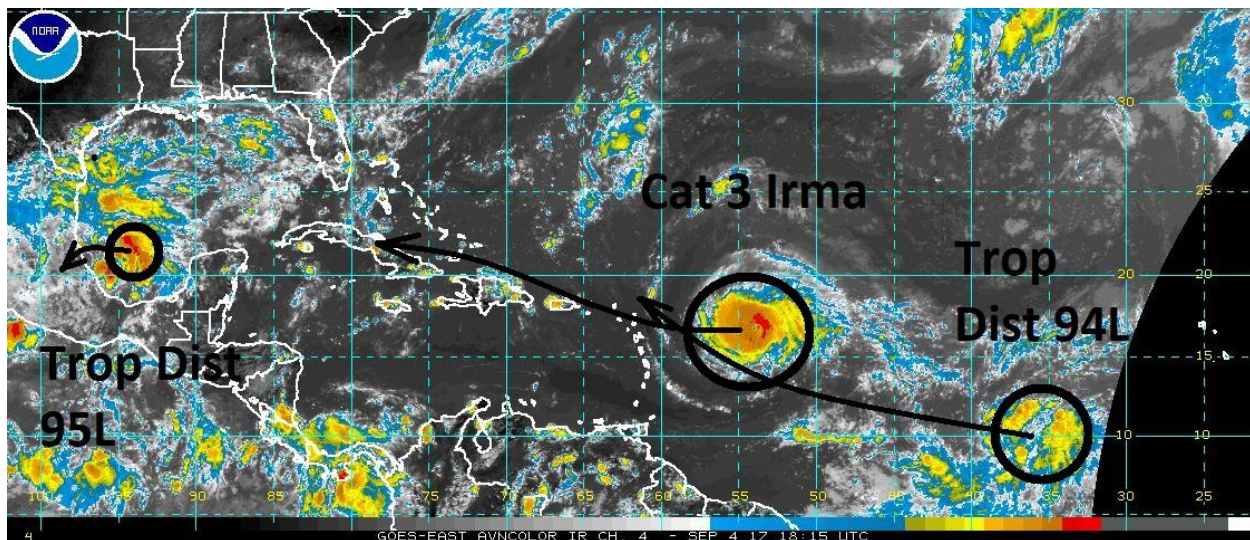
**Weeks 3 and 4 (Sep. 17-30):** Analogs, CFS V2 and ECMWF all agree on a warmer-than-normal national climate the second half of September with the anomalous warmth increasingly focused on the Central U.S.



*Fig. 8-9: The CIC week 3 and 4 ahead temperature anomaly forecast.*

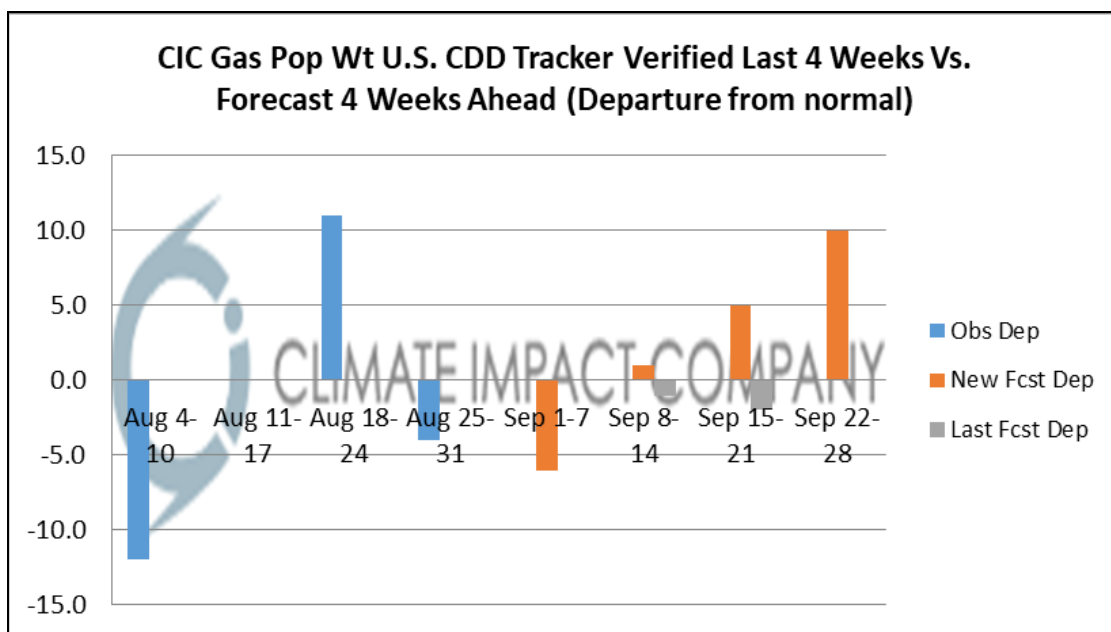
**Tropics:** Irma will track westward the next 5 days to the north coast of Cuba as a major hurricane. 94L is in the outer North Atlantic and will track west-northwest to northeast of Puerto Rico becoming a tropical cyclone in 4-5 days. 95L is organizing in the Bay of Campeche and is expected to remain stationary or drift southwestward.





*Fig. 10: Afternoon satellite view of the tropics.*

**4-Week Verification/Forecast U.S. Gas Pop Weight CDD:** Last week the national gas consumption was slightly below normal. This week's outlook is also below normal. Recovery to above normal CDD is indicated for the last 2 weeks of September.



*Fig. 11: Climate Impact Co. 4-week population weight CDD forecast.*