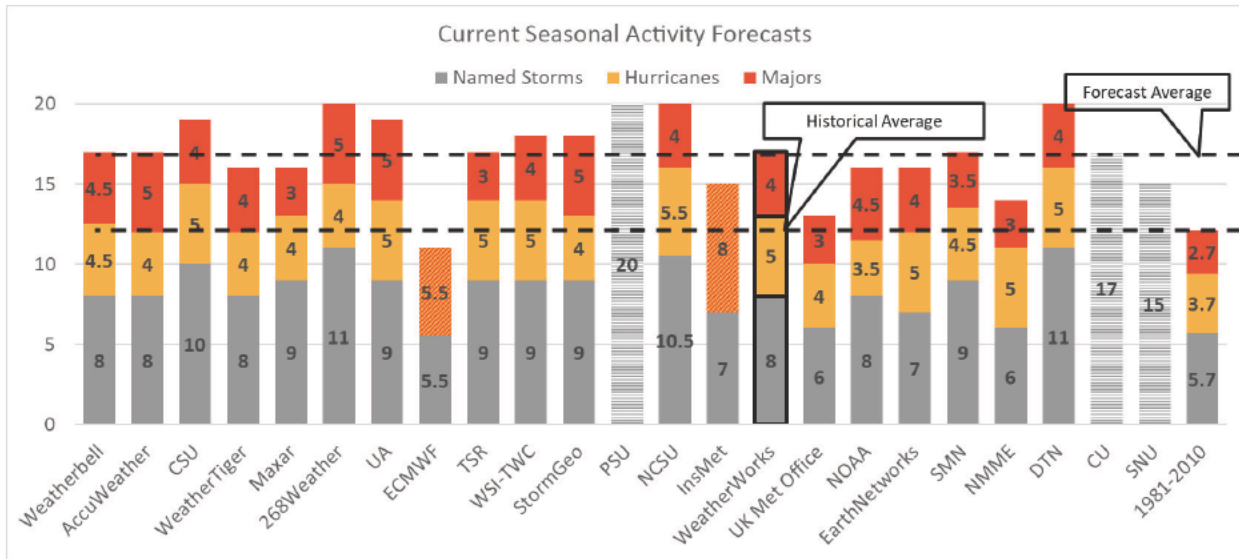


SEASONAL HURRICANE FORECAST



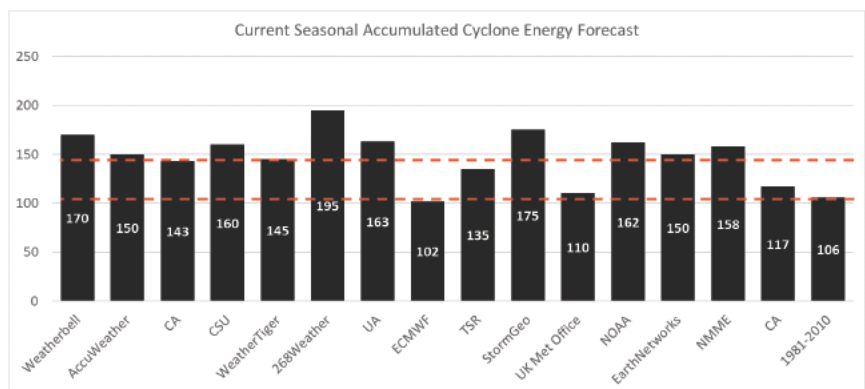
Strong signs of an above average season of Hurricane activity in the Atlantic

Each year forecasters start making their bets for the hurricane season early. The earliest forecasts come out in March-April and are generally updated every 4-8 weeks. We're still months away from the peak of hurricane season (September 10th), but we have already seen 3 named storms. **Seasonal forecasts are calling for an average of 17 (39% higher than average) named storms, of which, 8.4 (+31%) are hurricanes of which 4 (+49%) are major hurricanes.** Remember, forecasting skill this far out is generally low, and the relationship between Atlantic hurricane activity and US Hurricane loss is weak, but we can listen to the agreement among forecasters (strong) and the direction of forecasts (high).



*the ECMWF and InsMet forecasts do not distinguish major / non - major strength hurricanes

What do forecasters base their information on this far out? It depends on the type of forecast, but the leading predictors are based on the ENSO forecast for peak hurricane season and sea surface temperatures (SSTs):



All data from: <https://seasonalhurricanepredictions.bsc.es/>

SEASONAL FORECAST METHODS

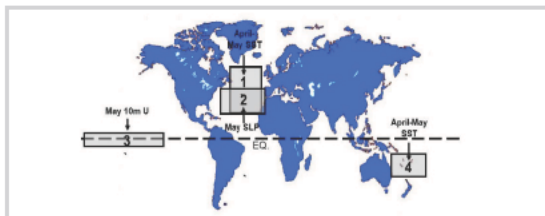
- Seasonal hurricane forecasts are typically limited to “activity” and this has limited bearing on landfall frequency
- Dynamic forecasts

Are (generally) based on coupled ocean atmospheric models. The euro model is one such example. They take an ensemble approach and then go back and systematically identify and track “warm core” storms assumed to be tropical cyclones to generate a season activity forecast

- Statistical

Relating observed measures to future

Predictor	2020 Forecast Value	Impact on 2020 TC Activity
1) April-May SST (20°N-60°N, 40°W-15°W) (+)	+1.3 SD	Enhance
2) May SLP (20°N-40°N, 60°W-10°W) (-)	+0.9 SD	Suppress
3) May 10m U (5°S-5°N, 180°W-130°W) (-)	-1.0 SD	Enhance
4) April-May SST (35°S-15°S, 155°E-180°E) (+)	+1.0 SD	Enhance



- Dynamic / Statistical hybrid

Similar to statistical, but using dynamic model outputs as predictors (such as July / August winds and surface temps)

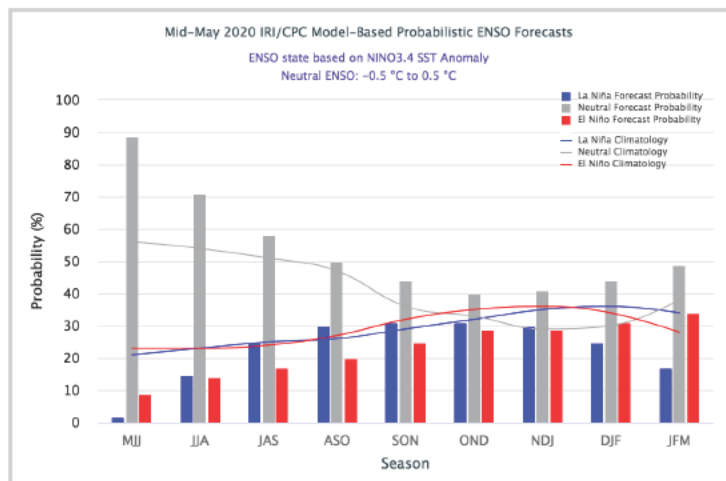
- Analog seasons

Pick a handful of seasons with similarities to current conditions and expected future conditions

-

NO SIGNS OF EL NINO

The set up for this year is pointing toward above average activity because there is a low chance of El Nino forming during the peak of hurricane season (20% or less). El Nino inhibits hurricane activity, so it's absence will allow hurricanes to form more readily.



WARM SSTs

Additionally, we are seeing warm SSTs in the Atlantic and this warmth is expected to persist throughout the season. SSTs are the number one ingredient necessary for hurricane formation.

