



University of Missouri – Atlantic Ocean Basin Tropical Forecast 2021

Predicted (20 April)

	Predicted	Observed	Difference
<i>Number of Named Storms:</i>	16	21	-5 (-24%)
<i>Tropical Storms:</i>	9	14	-5 (-36%)
<i>Category 1-2:</i>	3	3	SCORE!
<i>Category 3-5:</i>	4	4	SCORE!

Regional (where they will form):

<i>West Atlantic (to 45° W):</i>	7	11	-4 (-36%)
<i>East Atlantic (to 45° W):</i>	5	5	SCORE!
<i>Gulf of Mexico:</i>	2	2	SCORE!
<i>Caribbean:</i>	2	3	-1 (-33%)

In 2020 – 2021, we were coming off a La Nina year. During this season, the majority of forecast models are projecting the Eastern Tropical Pacific to remain in cool-neutral to near neutral with respect to sea-surface temperatures (SSTs). Previous research has suggested a reasonable correlation towards an average to above-average number of Atlantic-based storms during this projected ENSO state. This is predominantly due to a combination of eastern/central Atlantic-based subtropical shear, and this year may feature the development of decreased shear to develop over these regions based on the QBO. In addition, based on 30 to 60-day evolution of the Intraseasonal Oscillation (ISO) (aka MJO), the MJO is strengthening a bit currently and is projected to continue moving forward after a winter of instability. Based on the current near 60-day cycle, this projection would land more conducive MJO impacts towards Africa and the North Atlantic during early July and early September if one projects out along the same path MJO has taken. However, depending upon the ongoing intensity of these projected MJO convective event rates of propagation, it may be less or more of a factor even during peak-season times. We referenced climatological research from a few different analog platforms. Most of these tropical analogs suggested that 2018, 2017, 2011, 2008, 2006, 2000, 1999, 1996, 1898, 1970, 1964, and 1954 were favorable analogs. We were particularly impressed with 2017, 2011, 2008, 1999, and 1989. Thus, development will likely occur across the western and eastern Atlantic regions. Forecast issued by: Adam Schneringer, Joe Renken, and Anthony R. Lupo