University of Missouri – Atlantic Ocean Basin Tropical Forecast 2019

	Predicted
Number of Named Storms:	***13***
Tropical Storms:	***6***
Category 1-2	***5***
Category 3-5	***2***
Regional (where they will form):	
West Atlantic (to 45º W):	*6*
East Atlantic (to 45º W)	*1*
Gulf of Mexico	*4*
Caribbean	*2*

In 2018 – 2019, we went into a weak El Nino. This year, the models project the Eastern Tropical Pacific to remain in warm-neutral to weak El Niño sea surface temperatures (SSTs). The El Niño of 2018-19 has been persistent. Previous research has demonstrated a correlation toward fewer Atlantic region storms during El Nino conditions. This is due to the development of mid-Atlantic subtropical shear, and this year the Atlantic may have some potential for this shear to develop. Also, based on the previous 90-day evolution of the Madden Julian (MJO) / Intraseasonal Oscillation (ISO), the MJO has weakened substantially and models are projecting this to stay weak for the next 14 days. It could emerge in the Eastern Atlantic or Indian Ocean. It seems to have a strong 45-day cycle as well. This would project the MJO to be less influential at peak tropical cyclone time. We also used the climatological contingencies / analogs from previous studies by this group. These studies show that there are generally more storms during the negative phase of the PDO and there is some ENSO variability during this PDO phase. . The one caveat is that multiple analogs, and seasonal models, are foreshadowing warming in the subtropical Atlantic. This is reflected by our forecast of the Gulf of Mexico and Western Atlantic tropical systems being 76% of the total named storms[JR1]. Additionally, the previous two decades have been quite active compared to the entire climatological record. This year's forecast is basically the same as last

year’s or persistence. Forecast submitted by Jordan Rabinowitz, Brendan Heaven, Joe Renken, and Anthony Lupo.