**P27 Performance of MPAS for tropical cyclone prediction in 2016, 2017 seasons.**

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The performance of the Model for Prediction Across Scales (MPAS) in predicting tropical cyclones is evaluated for the 2016 and 2017 seasons over the Western Pacific basin. A variable resolution of the model at 15 to 60 km grid sizes was run daily for a 10-day forecast from July 1 through the end of October. Normal tropical cyclone performance statistics will be presented and compared to other global

models. The results show that with an improved cumulus convection scheme and ocean surface physics, the model performance has improved when compared with the forecasts made in 2014. The biases in tropical rainfall and low level model winds identified in Davis et al. (2016) have been reduced. The incorporation of an orographic gravity-wave drag scheme also helped to improve the large-scale flow pattern, which led to a significant improvement in the Anomaly Correlation

Coefficient at 500 hPa in the 5-day forecast.