ATS/CIRA Colloquium

Nicholas Klingaman

Visiting ATS from the University of Reading

How well does the Met Office model predict West Pacific tropical cyclones?

Hosted by Eric Maloney

Friday, May 10, 2019

ATS room 101
Discussion will begin at 11:15 a.m.
Refreshments will be served at 10:45 a.m. in the weather lab

I will review the performance of the Met Office global numerical weather prediction (NWP) model for predicting tropical cyclones in the West Pacific, using analysis from our "Forecasting Air-Sea Coupled Interactions in NWP of Atmospheric Tropical Extremes (FASCINATE)" project. We analyzed 12 years of operational global forecasts (2006-2017) to reveal improvements in the predictions of cyclone tracks, intensities and associated precipitation. We also assessed how forecast skill for cyclone characteristics changes based on the phases of large-scale tropical climate variability, including the Madden-Julian Oscillation. Finally, we implemented a new atmosphere-ocean coupled configuration of the Met Office NWP model to reveal whether adding air-sea interactions improves predictions of West Pacific cyclones.

Link to colloquia page: https://www.atmos.colostate.edu/colloquia/