

Data assimilation experiments of tropical cyclones with the NHM-LETKF

KUNII, Masaru^{1*}

¹Meteorological Research Institute

Intensity forecast of tropical cyclones (TCs) has still been a challenging task whereas TC track forecasts have constantly improved over the past several decades owing to advances in numerical weather prediction models as well as observational capabilities. This is partly due to the difficulties in TC initialization because TCs occur and remain almost throughout their existence over the ocean, where observational data have generally been scarce. In this study, TC vital observations are assimilated with an ensemble Kalman filtering, and their impacts are estimated by comparing with the conventional bogus assimilation scheme.

Keywords: data assimilation, ensemble Kalman filter, tropical cyclone