

Impacts of high-resolution Himawari-8 AMVs assimilation on TC forecast in HWRF

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To investigate the impact of the assimilation of high spatial and temporal resolution atmospheric motion vectors (AMVs) derived from the full disk scan of the new generation geostationary satellite Himawari-8 on tropical cyclone (TC) forecasts in a western North Pacific basin, forecast experiments for three TCs in 2016 are performed using the NCEP operational Hurricane Weather Research and Forecasting Model (HWRF). The results show the inclusion of high-resolution Himawari-8 AMVs (H8AMV) can benefit the track forecast skill, especially for longer-range lead times. The detailed analysis will be presented in the talk.