

S07-2

Assimilation experiments of Himawari rapid-scan atmospheric motion vectors

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Atmospheric motion vectors (AMV) derived from 5-minute rapid scan imagery are expected to capture small-scale distributions of airflows better than typical AMVs because the observation interval is shorter. Shimoji (2014) developed new schemes for height assignment and target tracking in the AMV algorithm in order to make the best use of higher temporal and spatial observations by the newly launched Himawari-8. The impact of these high-density data on numerical forecasting of heavy rainfall events was investigated by conducting data assimilation experiments using NHM-LETKF (Kunii 2014). We are seeking an optimal assimilation strategy for AMVs derived from the Himawari-8 datasets to better forecast severe mesoscale phenomena such as local heavy rainfalls.