**OPERATIONALLY USE of NWCSAF AMV pacKAGE in the metoffice mesoscale forecasting SYSTEM**

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Abstract

Satellite derived Atmospheric Motion Vectors (AMVs) have given positive benefit to operational large-scale NWP forecasts for many years. Their use in Nowcasting has been limited due to the use of the large tracking box sizes that are used by operational AMV products. The NWCSAF AMV package allows local AMVs to be produced with smaller tracking boxes producing AMVs with scales that are more suitable for Nowcasting systems. Delays in the processing and reception of AMVs are also a problem for Nowcasting. Local AMVs can be produced within five minutes after the satellite image reception whereas the operational product may take up to 30 minutes.

The MSG NWCSAF software has been setup over the 1.5km UK model area and produces AMVs every 15 minutes. OSEs will be discussed using the 1.5km UK hourly 4DVAR Nowcasting system. The NWCSAF AMVs have been introduced into the Metoffice’s Operational Mesoscale system.