**CHARACTERIZING AMV HEIGHT ASSIGNMENT ERRORS IN A SIMULATION STUDY**

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Abstract

Simulation studies, whereby synthetic Atmospheric Motion Vector retrievals are generated from

high resolution NWP model radiances, provide a useful tool to help understand and characterize

AMV errors.

In this presentation we present results from an investigation of height assignment errors using the

Met Office 1.5km grid length UKV model to generate synthetic AMVs using the NWCSAF

package. Statistics of cloud top height errors from the NWCSAF cloud products are calculated

through a comparison against the model 'truth' cloud condensate profiles during a month long trial

period.

Results indicate that biases in the assigned cloud top heights depend strongly on the diagnosed

cloud type and cloud height. The feasibility of bias correction of the cloud top height product to

reduce systematic height assignment errors in AMVs will be discussed.