Assimilation of Level-1D ATOVS Radiances in the Australian Region LAPS System

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Implementation of the assimilation of locally received and processed ATOVS level-1D radiances in the Australian Region Local Assimilation and Prediction System (LAPS) has been a major priority in BMRC: the timeliness of local reception and processing will increase the quantity of radiance data available to the operational system, which employs an early data cut-off. The recent availability of local radiance data processed to 1D level via the AAPP package, along with the successful realization of a T239L60 configuration of the Bureau's global model (GASP), has provided the basis for trials of a 60-level (L60) version of LAPS, with the aim of producing an operational system able to assimilate AAPP derived radiance data, whether received and processed locally or from overseas centres, equivalently. We report here the results of trials conducted to date and the likely impact the use of the 1D radiance data will have on operational forecast skill.
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