



State of play of radiance processing in the NWP system at the Met Office

by Chawn Harlow and Brett Candy

Abstract: The Met Office has been engaged for the last two years in porting the Observation Processing System (OPS) and 4D-Var DA system (VAR) to a new suite of software based on the code base of the Joint Effort for Data assimilation Integration (JEDI; see 13.01 Thomas Auligné). This means that the work of the Satellite Radiance Assimilation Group has been focused on a new technical implementation of OPS rather than the development and application of new radiance assimilation techniques. Regardless of this high level of commitment to the technical changes to the OPS, there has been some progress to report in a few of areas. This poster presentation will summarize the current state of play of radiance assimilation at the Met Office as well as short review the observation impacts with recent FSOI results.

Presentations and posters from Met Office at ITSC-24:

1.01 **James Hocking** - RTTOV development status

1p.11 **Emma Turner** - Implementing the Zeeman effect in the RTTOV fast radiative transfer model

6p.01 **Nigel Atkinson** - An update on NWP SAF satellite data processing packages to support EPSSG and MTG

9p.01 **Brett Candy** - A sensitivity Study into the representation of ice particles for all sky assimilation at 183 GHz

10p.08 **Stuart Newman** - PARMIO: A reference quality model for ocean emissivity and backscatter from microwave to infrared wavelengths

13p.02 **Chawn Harlow** - Multi-year changes in IASI LST biases and inter-channel error covariances seen in the Met Office Global NWP System

15p.12 **Stefano Migliorini** - Assimilation of Transformed Retrievals from IASI radiances at the Met Office: current results and future perspectives

