

# **Assimilation of Aura/MLS data in a version of the ECMWF data assimilation system**

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## **Brief Abstract:**

The paper will describe early results from a project to assimilate retrieved profiles of temperature, ozone and water vapour from the MLS instrument on the Aura satellite (launched in July 2004) using a version of ECMWF's data assimilation system. This system is based on a 60-level model of the troposphere and stratosphere, and was used by ECMWF in its ERA-40 re-analysis project. The intention is to enhance the quality and scientific value of the re-analysis data set for the climate research community with these new data. Possibilities of extending this work by assimilating data from the HIRDLS and TES instruments on Aura will be outlined, and the intention ultimately to assimilate radiances directly from limb-viewing Aura instruments will be noted.