Aura MLS Near-Real-Time Processing Stream for use in Data Assimilation and in Support of SEAC4RS

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The Microwave Limb Sounder (MLS) on the Aura satellite launched in July 2004 has produced daily global atmospheric data for over 7 years. Since March 2008 MLS has provided temperature, geopotential height and ozone data products in near-real-time (NRT) with 90% of the data being available within three hours of the satellite observation time. We report on the recent testing of an improved near-real-time retrieval algorithm to produce temperature, geopotential height, ozone and water vapor on 12 levels per decade, and carbon monoxide, nitric acid, nitrous oxide and sulfur dioxide on 6 levels per decade in pressure. The MLS team expects the new NRT data products to be available before August 2012 in a production stream at the Goddard DISC to support the NASA led Southeast Asia Composition, Cloud, Climate Coupling Regional Study (SEAC4RS).