OMI Very Fast Delivery Products – Information on atmospheric composition and air quality in 15 minutes

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The OMI VFD (Very Fast Delivery) service has been operational since March 2006. The processing system utilizes the capability of Aura satellite to broadcast the measurements to ground stations at the same time as the measurements are being stored in the spacecraft's memory for later transmission to Earth. The products have been in form of maps of total ozone and ultraviolet radiation over Europe within 15 min after the satellite overpass Sodankylä ground station in northern Finland. The eruption of Eyjafjella volcano in Iceland acted as a beginning for further development of the VFD service. Following the agreement between FMI, KNMI and NASA, also OMI aerosol and SO2 algorithms were implemented. The updated system has been operational since January 2011. At the same time, the capabilities of the Sodankylä receiving station have been improved by implementing new receiving systems. This presentation will show the existing OMI-VFD system and receiving capabilities of Sodankylä. Furthermore, future possibilities including NPOESS/OMPS instrument will be discussed.