



Sentinel User Requirements from the Application Volcanic Ash Monitoring

Claus Zehner
ESA/ESRIN, Frascati, Italy,

ESA and EUMETSAT held a workshop at Frascati, Italy, on 26/27 May 2010 to examine the information available about the Eyjafjöll eruption (14 April – 23 May 2010) and to assess whether the eruption and subsequent associated actions were adequately addressed by current European remote sensing capabilities. The Eyjafjöll eruption caused major disruptions of air traffic over Europe during April and May 2010. The ash plume of the Eyjafjöll eruption was observed at many places in Europe from satellites, from aircraft, and from ground-based instruments. The impact of the new guidelines for aviation introduced in Europe during this event, (changing from zero tolerance to new ash threshold values) and the consequences on ash plume modelling and remote sensing measurements and retrieval techniques were discussed. Herewith the implications (user requirements based on a very concrete application) for already planned future satellite missions (Sentinels) are presented.