Remote Sensing Support to Aviation for Volcanic Ash Avoidance

1st SAVAA Users Workshop

Istituto Nazionale di Geofisica e Vulcanologia
Rome, Italy, April 6-7, 2009

Support to Aviation for Volcanic Ash Avoidance (SAVAA) is a Remote Sensing project initiated by the European Space Agency (ESA):

- to support aviation by supplying quantitative and timely satellite-based products
- to fill the gaps in knowledge regarding the avoidance of hazardous volcanic clouds.

The project addresses the important problem of providing accurate and timely satellite-based information to Volcanic Ash Advisory Centers (VAACs) with the goal of improving and supporting services to the aviation community.

The project team is composed by European research Institutes and Universities: the Atmosphere and Climate Department Norwegian Institute for Air Research (NILU), Norway, the University of Bremen, Germany, the University of Natural Resources and Applied Life Sciences (BOKU), Austria, and the Istituto Nazionale di Geofisica e Vulcanologia (INGV), Italy.

The Workshop is organized by the INGV Remote Sensing group and will be held at INGV headquarter in Rome on April 6th and 7th, 2009.

SAVAA Organizing Committee

NILU

INGV

Universität Bremen

BOKU Met

Info:savaa_workshop@ingv.it

Agenda

Day 1, Monday 6 April 2009		
9:00 - 9:30	Registration	
9:30 – 10:00	Welcome	INGV (Fabrizia Buongiorno) ESA (Claus Zehner)
Opening Session		Chair: Fred Prata Fabrizia Buongiorno
10:00 - 10:30	Support for Aviation for Volcanic Ash Avoidance (SAVAA): Background, Objectives, and Implementation	Fred Prata (NILU)
10:30 – 10:50	Explosive volcanic eruptions: examples of the recent activity at Mt. Etna	Daniele Andronico (INGV-Catania)
10:50 – 11:10	Monitoring Mt. Etna volcanic plumes using TIR satellite measurements	Claudia Spinetti – Stefano Corradini (INGV-Rome)
11:10 – 11:30	*Coffee Break*	
11:30 – 11:50	Volcanic SO_2 products from UV satellite measurements	Andreas Richter (University of Bremen)
11:50 – 12:10	Inverse modelling of eruption source term profiles	Petra Seibert (University of Natural Resources and Applied Life Sciences, Vienna)
12:10 – 12:30	Modeling of volcanic SO_2 clouds: Application of the inversion method	Sabine Eckhardt (NILU)
12:30 – 12:50	The SAVAA Webportal	John Burkhart (NILU)
12:50 – 14:00	*Lunch*	

Users Session – Part I		Chair: Andreas Stohl Petra Seibert
14:00 – 14:20	International Airways Volcano Watch (IAVW)	Raúl Romero (ICAO)
14:20 – 14:40	Remote sensing issues at the Darwin Volcanic Ash Advisory Centre	Rebecca Patrick (Darwin VAAC, Australia)
14:40 – 15:00	VAAC Toulouse activity	Philippe Husson (Toulouse VAAC, Meteo France)
15:00 – 15:20	User Needs of the London VAAC	Nigel Gait (London VAAC, MetOffice UK)
15:20 – 15:50	Discussion	
15:50 – 16:05	*Coffee Break*	
Related projects		Chair: Andreas Richter Sabine Eckhardt
16:05 – 16:20	An alert system for volcanic SO_2 emissions using satellite measurements	Jos van Geffen (BIRA-IASB)
16:20 – 16:35	Exupéry: the mobile Volcano Fast Response System VFRS	Klemen Zaksek (University of Hamburg)
16:35 – 16:50	GLOBVOLCANO: Global monitoring of volcanoes from space	Lucia Tampellini - Raffaela Ratti (CGS)
16:50 – 17:05	An automatic procedure to forecast volcanic ash dispersal and deposition	Augusto Neri (INGV- PI)
17:05 – 17:20	Contributions from the FIRB project: the APOLLO procedure and the FALL3D ash dispersion model	Arnau Folch (Centro Nacional de Supercomputación)
17:20 – 17:35	The FIRB project	Mauro Coltelli - Michele Prestifilippo (INGV- CT)
17:35 – 18:00	Visit to INGV Operative Room	

Day 2, Tuesday 7 April 2009		
User Session – Part II		Chair: Fred Prata Fabrizia Buongiorno
9:30 - 9:50	Airline, Aircrafts and Volcanic Ash	Hans-Rudi Sonnabend *(Lufthansa Systems Aeronautics GmbH, Germany, on behalf of IATA)*
9:50 – 10:10	The Online NOAA-NASA OMI/AIRS/MODIS Volcanic Ash/SO_2 Cloud and Aerosol Index Monitoring System	Gilberto Vicente *(NOAA/NESDIS - Office of Satellite Data Processing and Distribution (OSDPD), USA)*
10:10 – 10:30	In-situ validation of ash-cloud models: research and development	Dave Pieri (JPL)
10:30 – 10:50	The use of Meteosat Second Generation data for Volcanic Ash and SO_2 detection	Volker Gärtner (EUMETSAT)
10:50 – 11:10	*Coffee Break*	
11:10 – 11:30	Volcanic Ash- Risks to the aviation ENAC Initiatives	Carmine Cifaldi (ENAC)
11:30 – 11:50	Volcanic ash plume detection and monitoring by the Servizio meteo A.M.	Luigi De Leonibus (USAM)
11:50 – 12:10	The role of the Italian Department of Civil Protection in supporting the management of air traffic in case of volcanic ash emission	Stefano Ciolli (DPC)
12:10 – 12:30	Discussion	
12:30 – 13:00	Round Table	
13:00	*Lunch*	