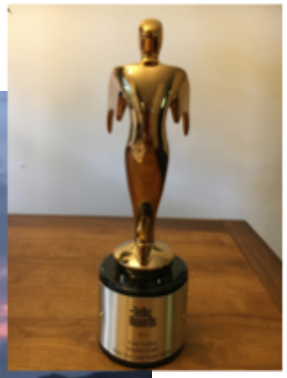
July 2017 *Telly* Award for *Fire, Ice and Safer Skies* Video

NASA Applied Sciences Project: "Near Real-Time Cloud Products for Aviation Safety"

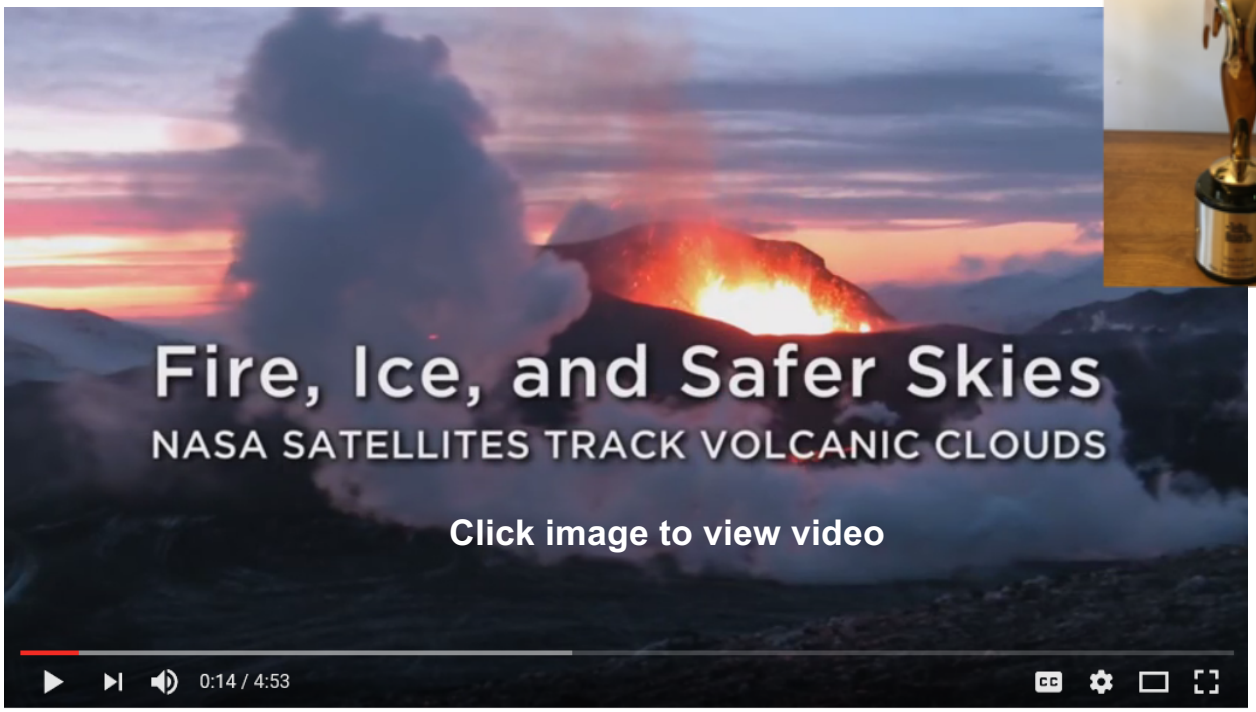
Project PI: Dr. Nickolay Krotkov, NASA Goddard Space Flight Center

Award recipient: Lisa Laden NASA/DMI videographer



James Kibler, VAAC Washington: "video…does a great job explaining different instruments used, how VAACs use this information in operations and how it affects the aviation community"

Tom Fahey, Delta Airlines: "good overview of hard work that has been done since the 2010 shut down of European Airspace"



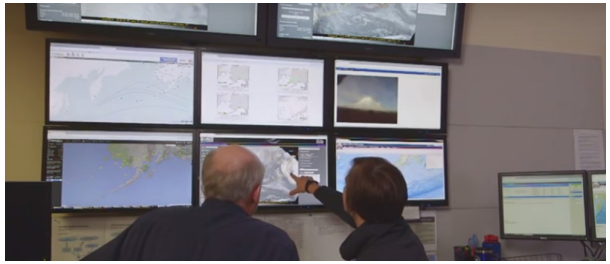
- **NASA's award-wining video highlights why timely and reliable measurements of sulfur dioxide (SO_2), a main component of volcanic emissions, and volcanic aerosols, including ash (VA), enable flight safety**
- **Narration, stakeholder interviews and dynamic imagery convey how NASA's Near Real Time and Direct Readout data derived from Aura OMI or Suomi NPP OMPS support reliable forecasting and trusted Decision Support Systems (DSS) used at the NOAA VA Advisory Centers, USGS's Alaska Volcano Observatory and the European Support to Aviation Control Service.**

https://disasters.nasa.gov/volcanoes

Volcano Video increases NASA's impact:

Effective communication raises awareness and provides an integrated picture

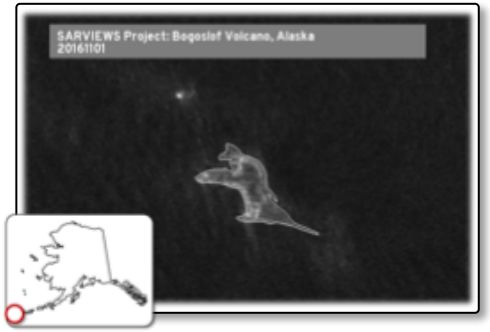
- **NASA contributes to the goal of safe and efficient global aviation by aiding in the collection of observational data from which predictive Volcanic Ash Transport and Dispersion models and maps are used to inform air traffic management systems.**



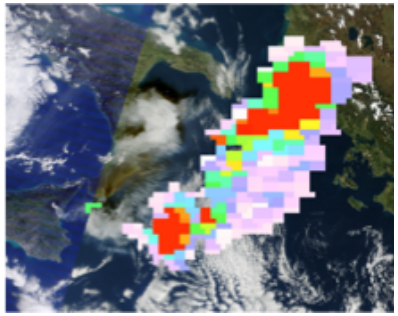
Videos and other means of story telling ensure critical data and products reach more practitioners, decision makers and the public

While no single satellite provides all the information needed when an eruption occurs, NASA's constellation of satellites and partnerships combine to provide an integrated picture.

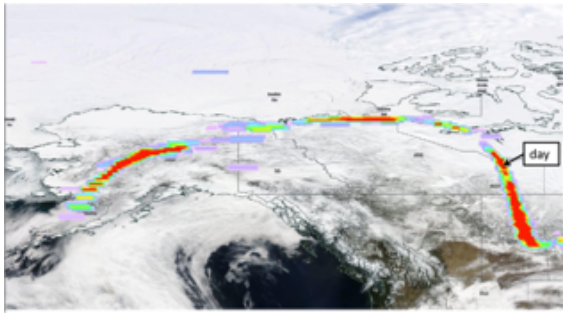
NASA Data and Applications Products Provide Integrated Solutions for Volcanos and Volcanic Ash



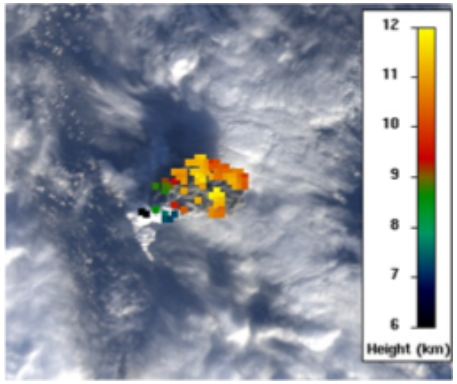
Animated Sentinel-1 SAR images of Bogsolof Island show destruction of the island December 2016 to date.



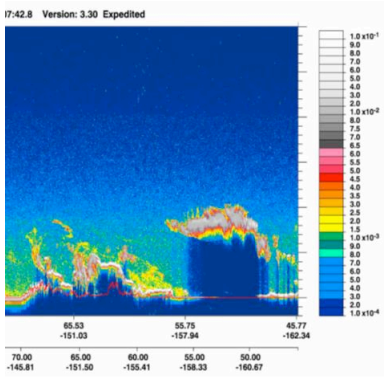
Composite Terra MODIS RGB + AIRS SO2 map of the Etna volcanic SO2 cloud from Mt Etna on December 2015.



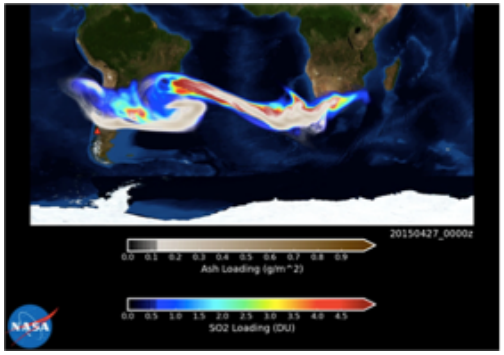
Aura OMI and Suomi NPP OMPS shows the geographic location of March 2106 Pavlov volcanic ash and SO_2 plumes.



January 2017 stereo images of Bogoslof volcanic plume from NASA's Multi-Angle Imaging Spectroradiometer (MISR) provide plume heights estimates.



CALIPSO Calipo LIDAR data show precise plume injection heights of March 2106 Pavlov eruption and physical properties of the ash.



Trajectory models such as the NASA GSFC GOCART (shown) and LaRC LATM models forecast the location of the June 2011 Cordon-Puelle plume.