A-CCP’s support to aviation with improved ash advisories

Jean-Paul Vernier (NIA/NASA LaRC), Michael Pavalonis (NESDIS NOAA)

Area of responsibilities of the 9 Volcanic Ash Advisory Centers

- Need more volcanic cloud obs. (D1A is preferable)
- Lidar classification current limitations; Need for passive sensors (SO2/ash); HSRL should also help
- Anticipation of lidar obs. for integrated system
- Toward more complex tracking tools; combination obs. and modelling (e.g. Vernier et al., 2013, JAMC)

CALIPSO obs. of the Puyehue-Cordon volcanic plume near Australia (06/11)

Ash Advisory, Darwin

Re-constructed plume from CALIPSO

Lidar value added to VAAC advisory

https://journals.ametsoc.org/view/journals/apme/52/9/jamc-d-12-0279.1.xml