

Atmos. Meas. Tech. Discuss., community comment CC1
<https://doi.org/10.5194/amt-2021-58-CC1>, 2021
© Author(s) 2021. This work is distributed under
the Creative Commons Attribution 4.0 License.



Comment on amt-2021-58

Forrest Mims

Community comment on "Tracking aerosols and SO₂ clouds from the Raikoke eruption: 3D view from satellite observations" by Nick Gorkavyi et al., Atmos. Meas. Tech. Discuss., <https://doi.org/10.5194/amt-2021-58-CC1>, 2021

This paper is significant, for it nicely affirms my 51 twilight photometer measurements of the elevation of the Raikoke plume over my site in Central Texas. My measurements of peak Raikoke aerosols at elevations up to 26 km are confirmed by this paper and by John Barnes lidar measurements from the Mauna Loa Observatory. (Very few reports of the Raikoke plume exceeding 17 km were reported. My altitude reports were received with polite skepticism by some of those to whom they were reported.) Of special interest is the discussion of the Raikoke cloud that encircled Earth at 30 N, which includes my site at 29.6 N. I recommend prompt publication. I also recommend that this study be copied to the Harvard group planning to deploy geoengineering tests of the injection of high albedo particles into the stratosphere to reduce incoming solar flux. I previously advised them that they should study the impact of the Raikoke plume before continuing their expensive and controversial SCoPEX geoengineering project, which may impact the ozone layer and which will impair my 32 years of AOD measurements as well as those by others. SCoPEX will most certainly affect future studies of stratospheric volcano plumes if they inject enough aerosols to reduce global temperature as much as they hope.

Forrest M. Mims III, Geronimo Creek Atmospheric Monitoring Station fmims@aol.com
www.forrestmims.org