

MODIS Band 26 near-IR (1.3µm) data can be used to detect particles that are good scatterers of light (such as cirrus ice crystals, airborne dust/haze/ash, etc) — such scattering particles will exhibit a slightly brighter signal on greyscale MODIS "cirrus detection channel" images. On 2 consecutive overpasses of the MODIS instrument (on Terra at 18:21 UTC, and on Aqua at 19:59 UTC) there was a subtle signal of an elevated volcanic plume that was oriented SWNE across Iowa, Wisconsin, and Illinois during the day on 27 March 2009 — this plume originated from one of the eruptions of the Redoubt volcano in Alaska a few days earlier. Ground-based lidar at the Space Science and Engineering Center (University of Wisconsin – Madison) depicted enhanced aerosol backscatter aloft, with multiple layers seen between 11–13 km around the time of the 2 MODIS images.