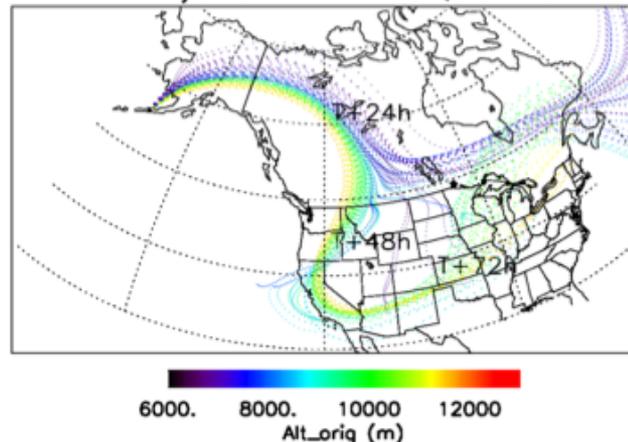




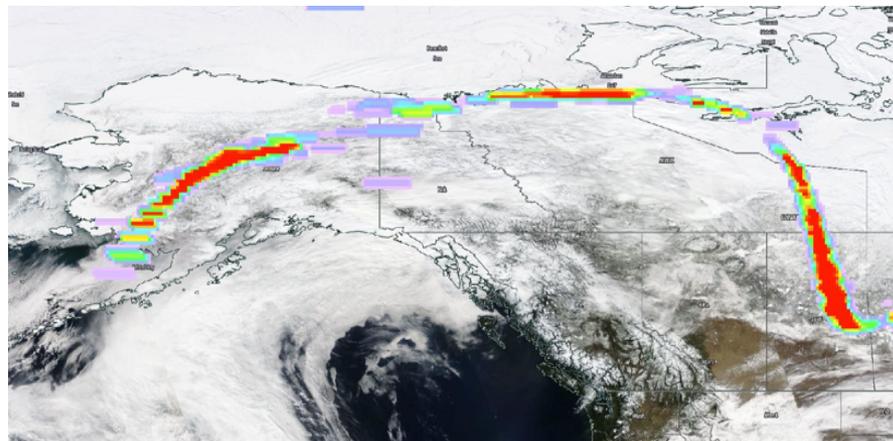
# NASA SO<sub>2</sub> Data Resolve Initial Advisory Issue Minimizing Aircraft Disruption

- Mt. Pavlof erupts March 27, 2016, ejecting a plume of ash and SO<sub>2</sub>.
- On March 28, using Terra MODIS, the plume height estimated at 4-14 km.
- NASA modeling forecasts a bifurcated plume (a), with the path depending on injection height. Volcanic Ash Advisory Centers (VAACs) issue advisories for the entire plume, potentially disrupting air traffic in much of the West.
- CALIOP measures 8-10 km plume injection heights, which straddled both halves of the forecast plume.
- OMPS SO<sub>2</sub> observations (b) verify the northern transport path across Canada.
- VAACs amend their advisories to remove the forecast of ash at 12 km over Washington and California.
- Anchorage and Montreal VAACs reroute air traffic to avoid the northern routes with minimal disruption.

GEOS5 FWD Traj @ d\_55.N 161.89W, 20160313 96hr



(a) Langley trajectory model forecasts plume forward 96 hours.



(b) OMPS SO<sub>2</sub> confirms the northern trajectory at lower altitudes on March 29.