Message:

- There are lots of very active volcanoes in Alaska
- Hazards are international, national, and local in scale
- Our ability to monitor was adequate, but is eroding
Anchorage Airport (ANC)

- #5 worldwide (cargo weight)
- 1 in 8 dollars & jobs in Anchorage

~200 aircraft/day transit NOPAC routes
- 73,000 aircraft/yr
- 14.6M people/yr
Kuriles (Russia)
- ~20 active volcanoes
- SVERT

Active Alaska volcanoes
- 52 active within 250 yrs
- 90 active within 10,000 years
- 130 active within 2,000,000 years
- AVO (Alaska Volcano Observatory)

Kamchatka (Russia)
- 30 active volcanoes
- Ash can blow into U.S. controlled airspace within hours
- KVERT
Eruptions per Decade in Alaska

427 eruptive episodes since about 1750 A.D.

VEI

- unassigned (n=178)
- 1-2 (n=174)
- 3+ (n=75)

Incomplete recording
Kasatochi – August 2008
unexpected eruption from an unmonitored volcano

• Far traveled ash cloud
• Largest SO2 release worldwide since Pinatubo and Hudson (1991)
• Most energetic eruption yet monitored by AVO
• Devastation of island ecosystem (important seabird nesting site)
Redoubt Volcano
April 4, 2009 lahar
Real-time monitoring networks

52 historically active Alaska volcanoes

Monitored Volcanoes

YEAR

Real-time monitoring networks

52 historically active Alaska volcanoes
Spurr, 1992
Air traffic disruption in eastern North America