Alaska Volcano Observatory

...and how AVO’s seismic network might benefit the AACSE
Alaska’s Volcanoes

66 eruptions at 22 volcanoes since 1988

VEI 4
VEI 3
VEI 2
VEI 1
VEI ?, small
Volcanic Hazards in Alaska

• Up to **50,000 passengers per day** fly over the North Pacific.

• Over **60% of Alaska’s population** lives within 300 km and downwind of Cook Inlet volcanoes.

When ash enters jet engines, it can wear down and even mangle blades in the turbines and reduce airflow as it builds up.
ALL AVO INSTRUMENTS
DIGITAL & ANALOG SEISMIC INSTRUMENTATION ARC-WIDE
Analog to Digital station conversions

- Increase power capacity
- Improve instrumentation
- Lower noise floor

Photos by Dane Ketner, USGS-AVO
EXAMPLE OF TYPICAL DIGITAL UPGRADE SITE
SCOPE OF INTEREST
DIGITAL INSTRUMENTATION WITHIN SCOPE OF INTEREST

KATMAI
- Nanometrics TC120 (Qty 5)

PAVLOF
- Nanometrics TC120 (Qty 3)
- Sercel L-22 (Qty 3)

UNIMAK
- Nanometrics TC120 (Qty 1)
- Sercel L-22 (Qty 1)
- Guralp 6TD (Qty 5)
POTENTIAL 2018 EXPANSION WITHIN SCOPE OF INTEREST

KATMAI
- 11 Sites need A2D conversion

PEULIK
- 7 Sites need A2D conversion

ANIAKCHAK
- 7 Sites need A2D conversion

VENIAMINOF
- 8 Sites need A2D conversion
Concluding thoughts

- All AVO data is of course available to support AACSE
- Some station upgrades have already been done in the area of interest during 2017 field season
- We’ll shape and direct 2018 fieldwork to assist the AACSE cause (to whatever extent possible)
- We stand ready to offer support in permitting and shared logistics