



UAF UAV Operations

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Alaska Center for UAS Integration (ACUASI)

- ACUASI is the University of Alaska's UAS research program
- Lead for the Pan-Pacific UAS Test Range Complex
 - Alaska, Hawaii, Oregon, and Mississippi conduct maritime UAS activities
 - Kansas conducts UAS research on lakes



ACUASI Flight Ranges



Beyond Visual Line of Sight (BVLOS) and Beyond Electronic Line of Sight (BLOS)

- In June 2017 ACUASI performed BVLOS and BLOS operations using an Outlaw SeaHunter UAS over land and Lac Saint-Jean in Alma, Quebec
- This was the first flight campaign of a Transport Canada effort to integrate unmanned aircraft into remote airports in the Arctic for maritime and other operations
- The SeaHunter carried an AIS receiver and collected AIS signatures from and images of boats on the lake



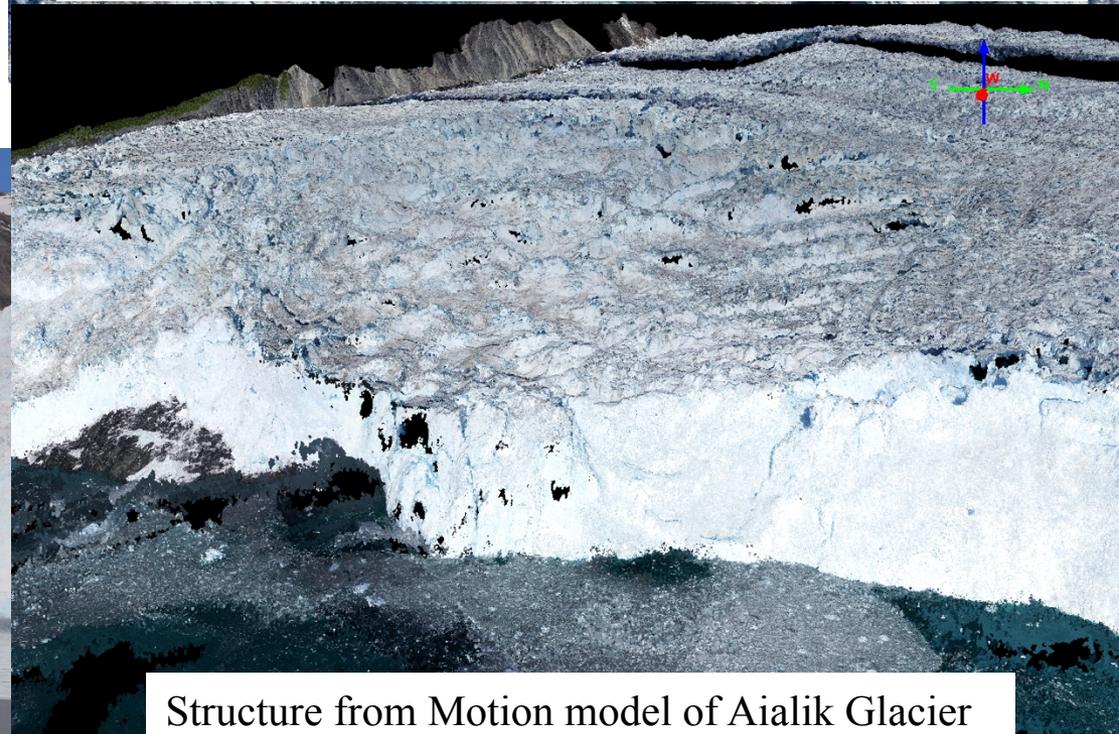
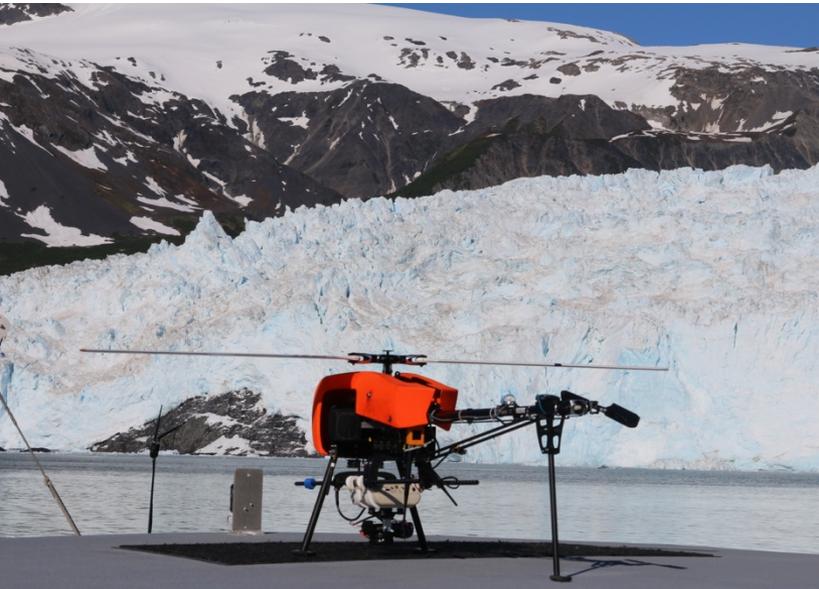
Aialik Glacier

Kenai Fjords National Park

- Responder operation
- Launch and recovery from moving 18.5' by 12' deck
- Mapped Aialik glacier



Structure from Motion model of Aialik Glacier's surface



Structure from Motion model of Aialik Glacier

R/V Sikuliaq



Conducted training and approval of Stephani Gordon to conduct safe UAS flights from the R/V Siquiliaq.

Oliktok Point

- Partnership with Sandia National Laboratories
- New UAS research facility with restricted airspace on north coast of Alaska



Planned 2018 ACUASI Research at Oliktok Point

- Testing deicing/anti-icing methods on a small, fixed-wing UAS (Aeromapper)
- Sea ice characterization flights with NOAA (SeaHunter)



Additional UAS Operations

- Participating in NASA UAS Traffic Management Research Platform testing and evaluation
- Extended Visual Line of Sight operations over the Trans-Alaska pipeline
- Forest health flights
- Testing experimental high-altitude, long-endurance aircraft
- Assisting in balloon-launched, high-altitude UAS operations

Questions?

