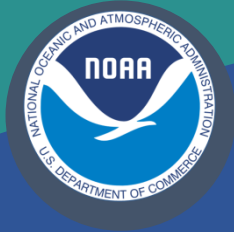


Science, Service, Stewardship



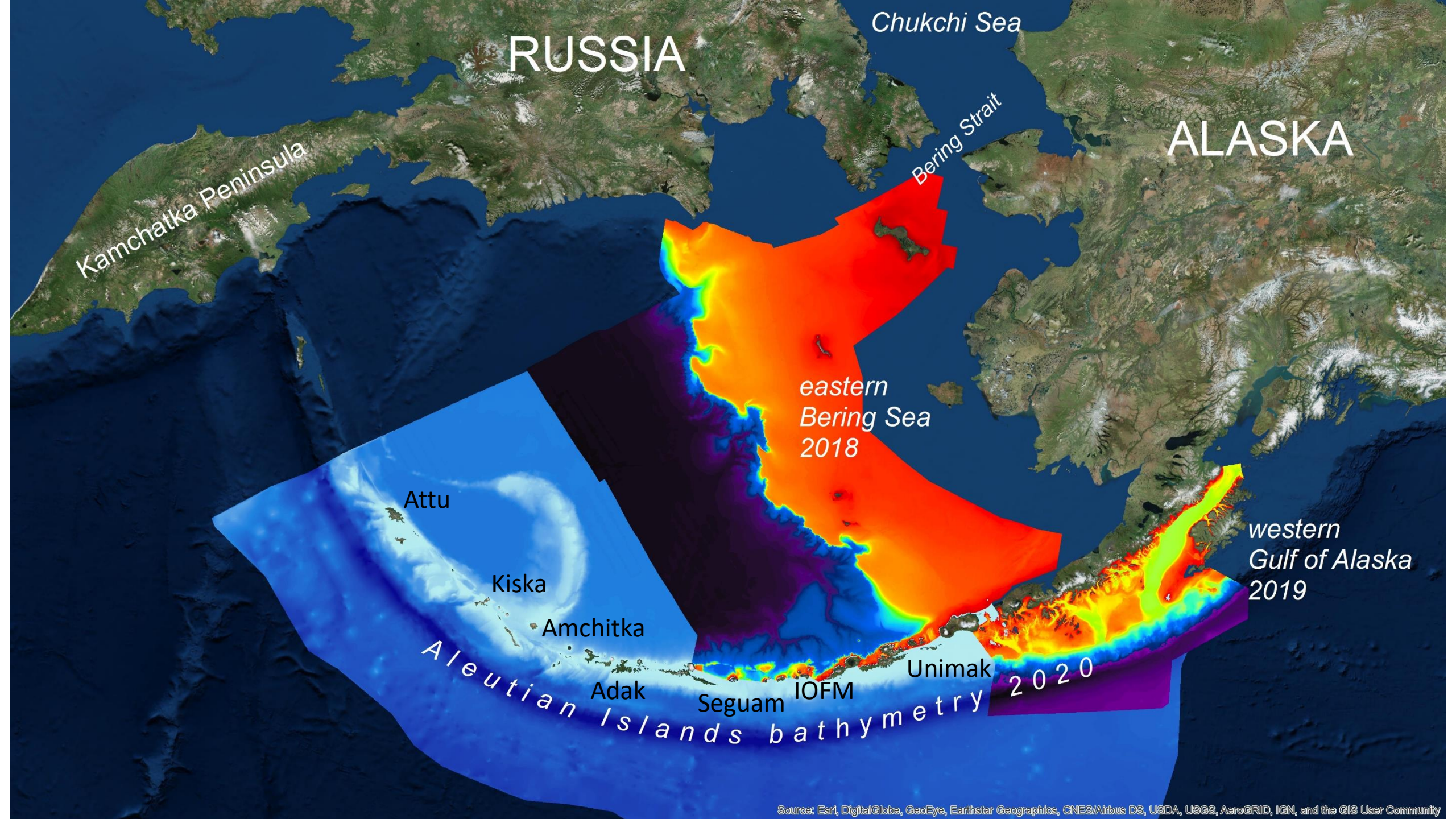
Aleutian Islands new bathymetry compilation

Mark Zimmermann – Fisheries Biologist

Megan Prescott – GIS Technician

**NATIONAL
MARINE
FISHERIES
SERVICE**

NOAA



RUSSIA

Chukchi Sea

ALASKA

Kamchatka Peninsula

Bering Strait

eastern
Bering Sea
2018

western
Gulf of Alaska
2019

Attu

Kiska

Amchitka

Adak

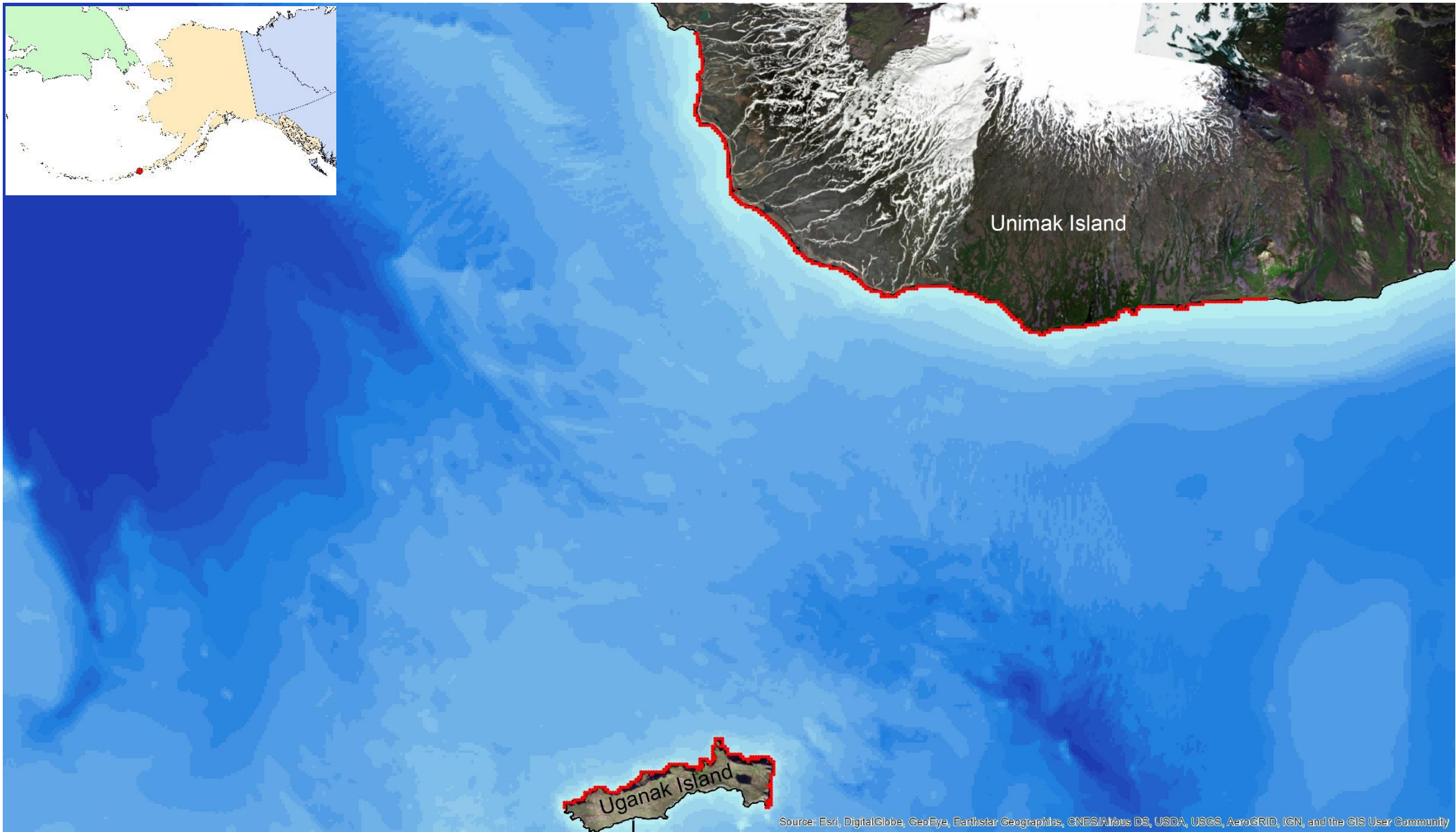
Seguam

IOFM

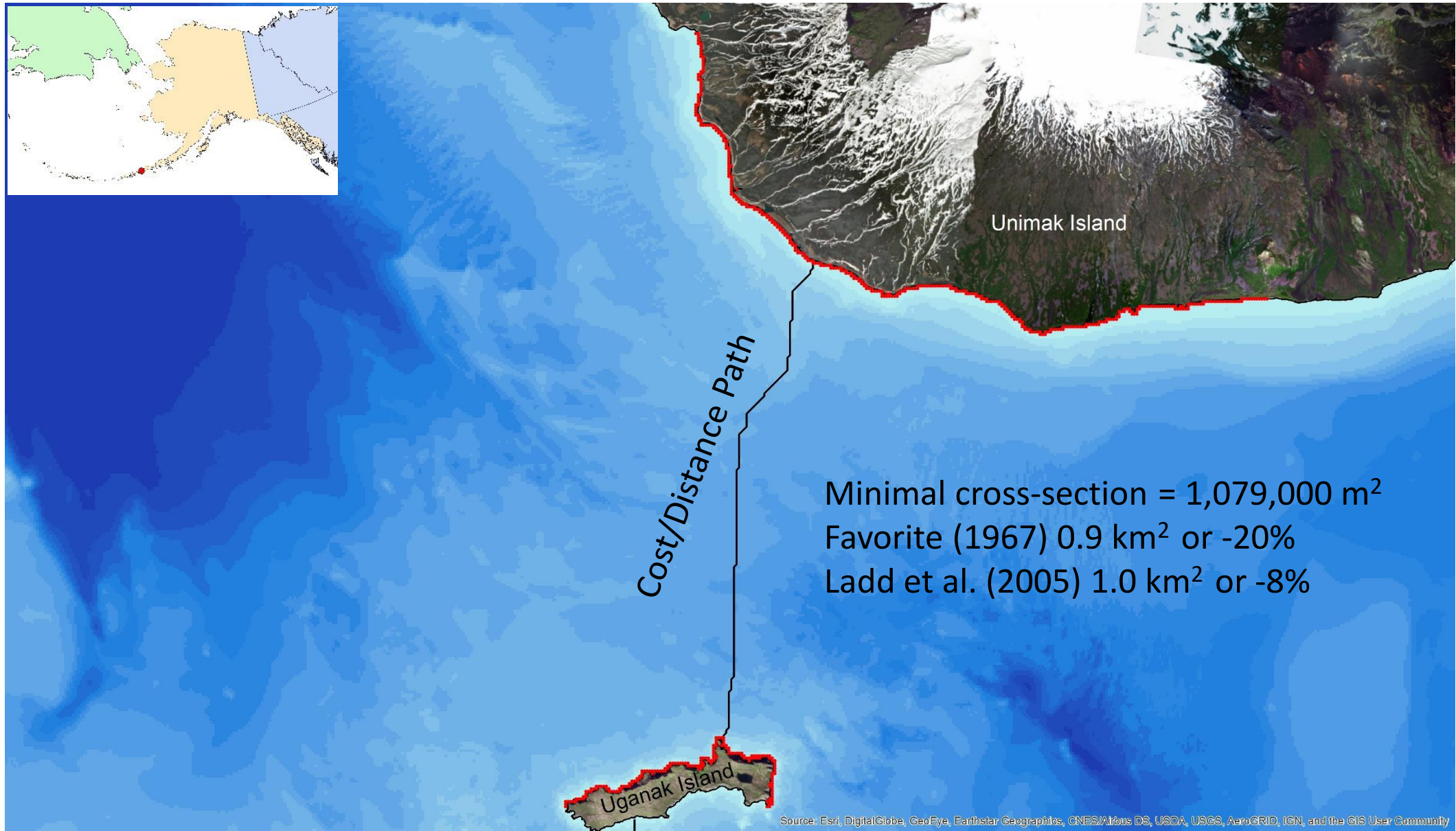
Unimak

Aleutian Islands bathymetry 2020

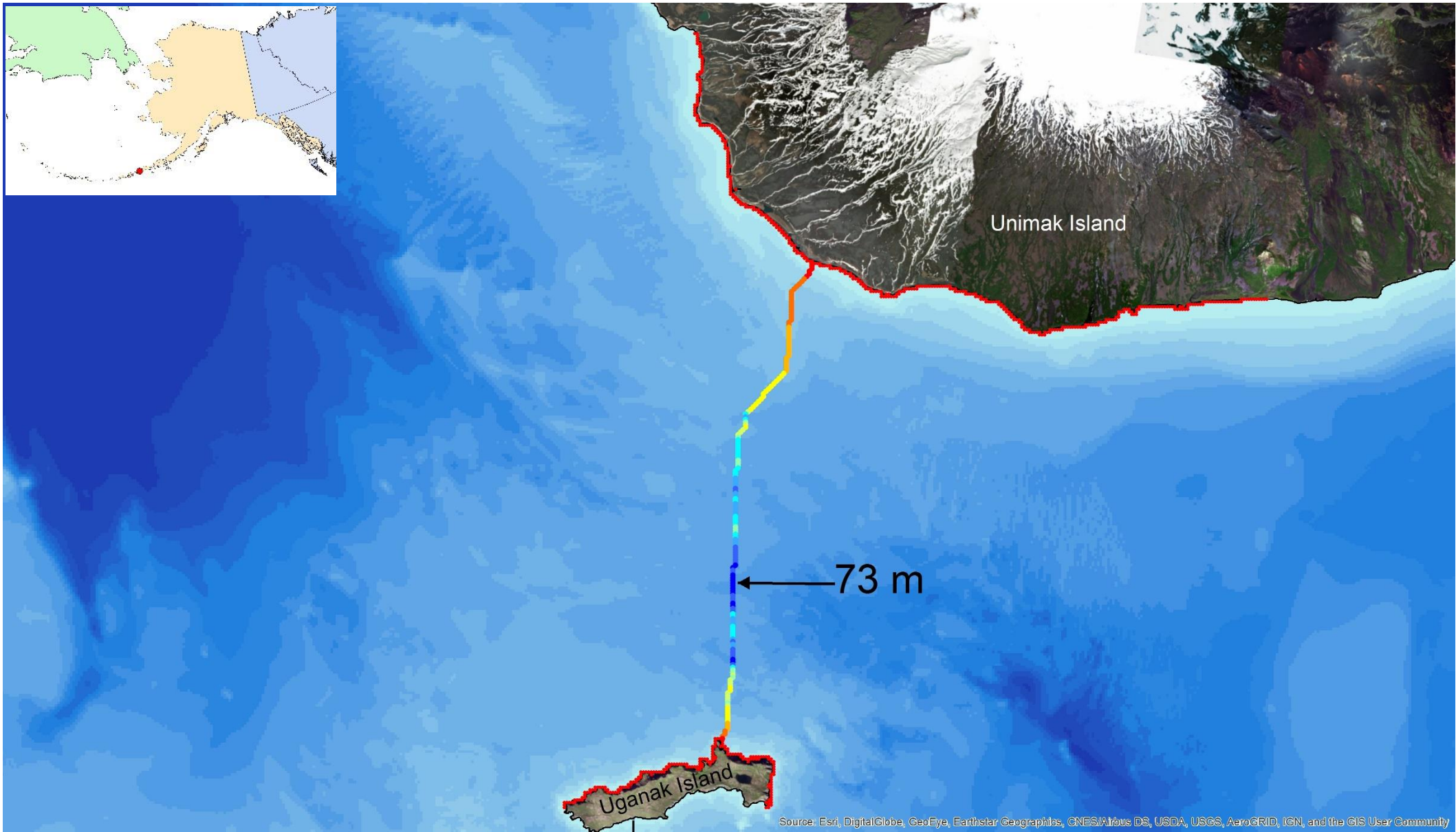
Start Cost/Distance at New Bathymetry Edges



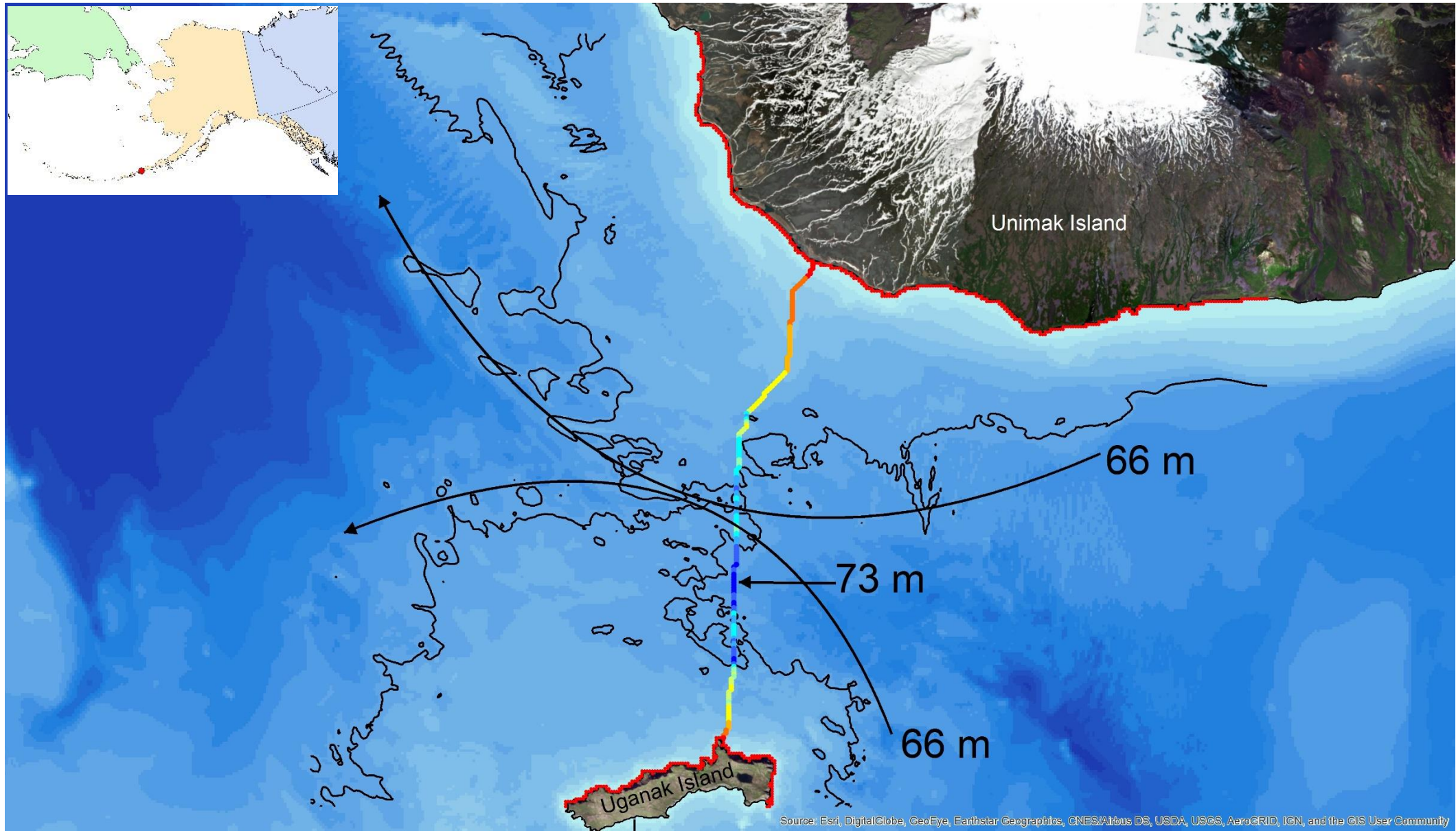
Calculate Minimal Cross-section



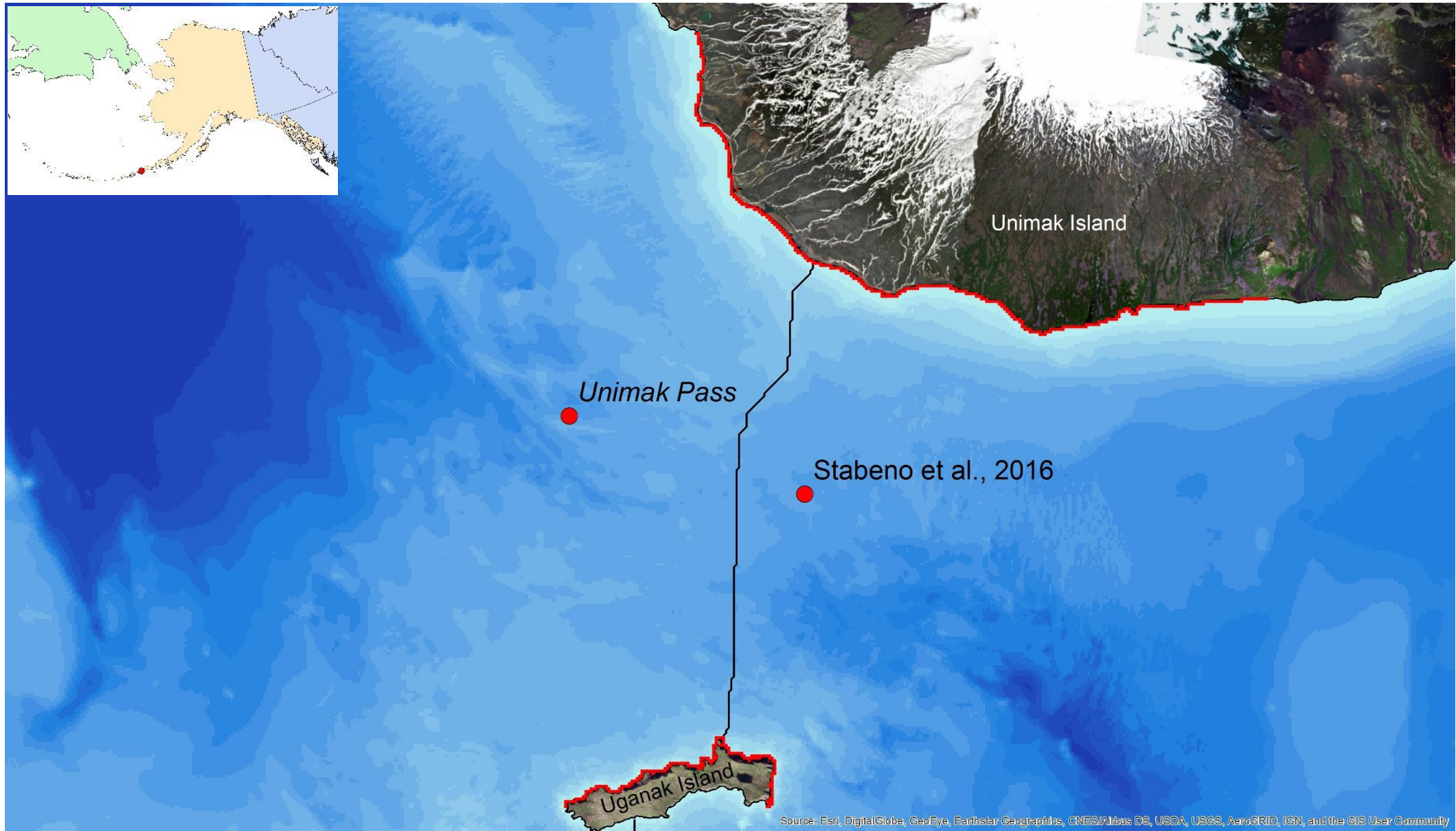
Calculate Maximum Pass Depth

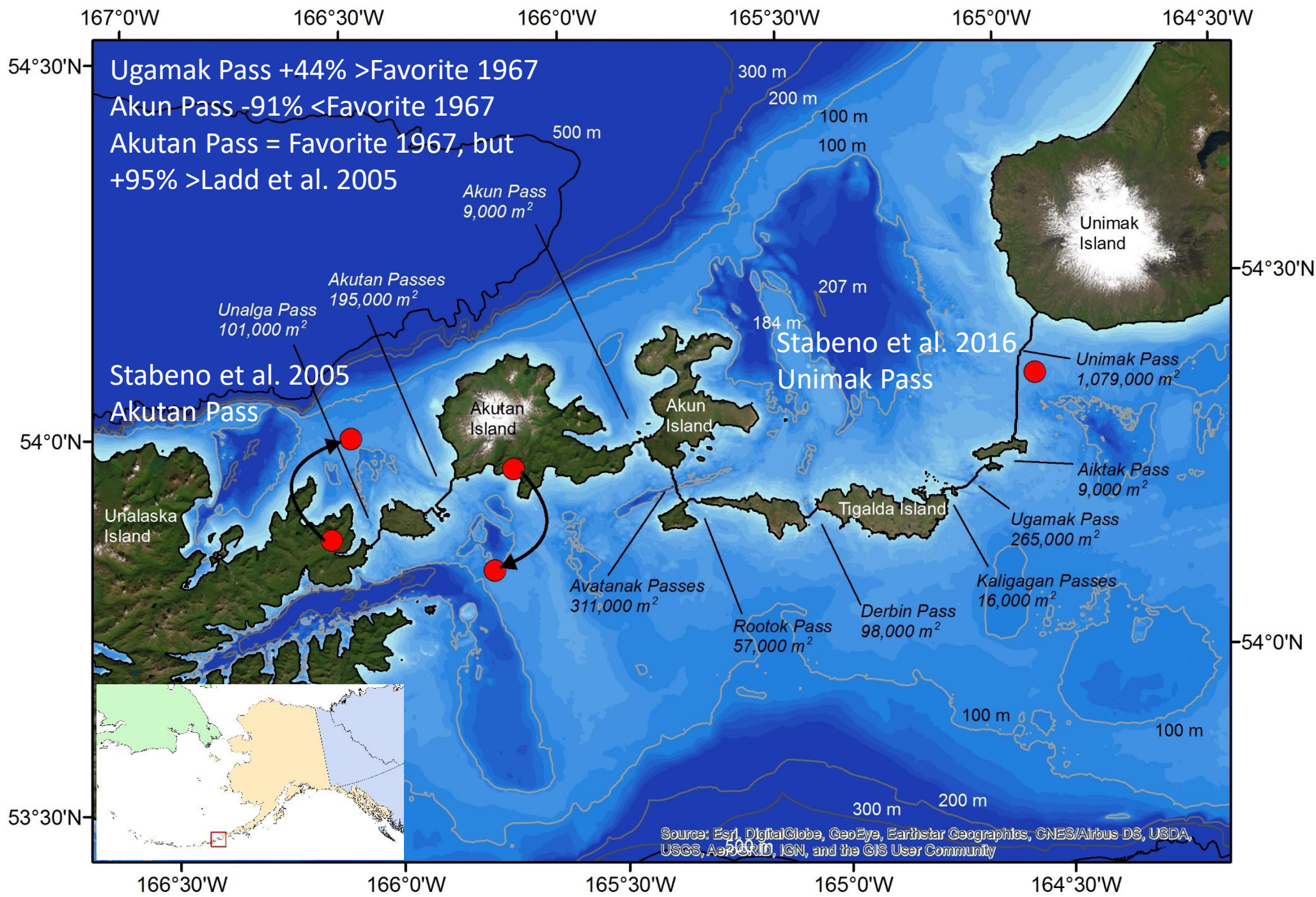


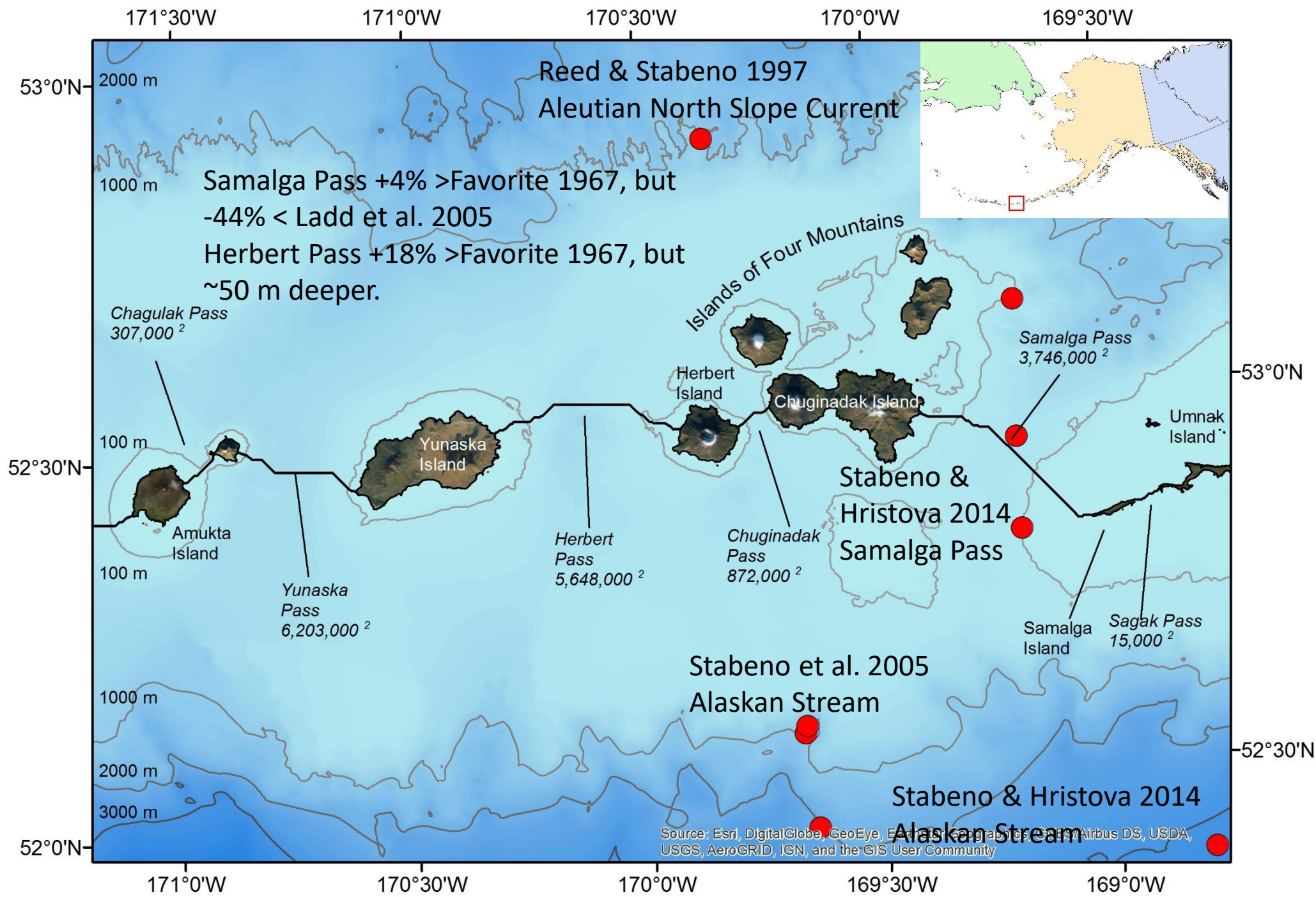
Calculate Maximum Through Depth

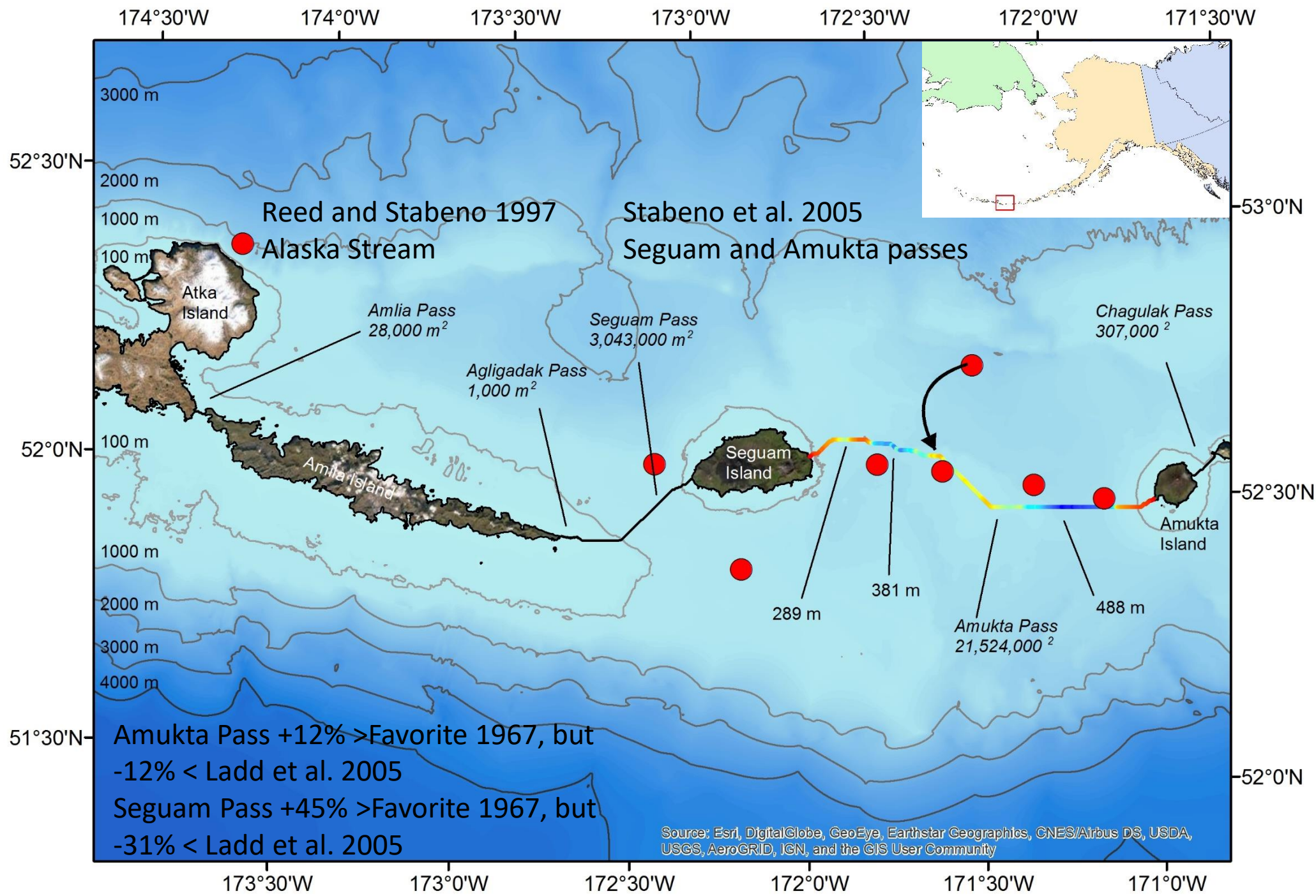


Compare to Moorings and Place Names



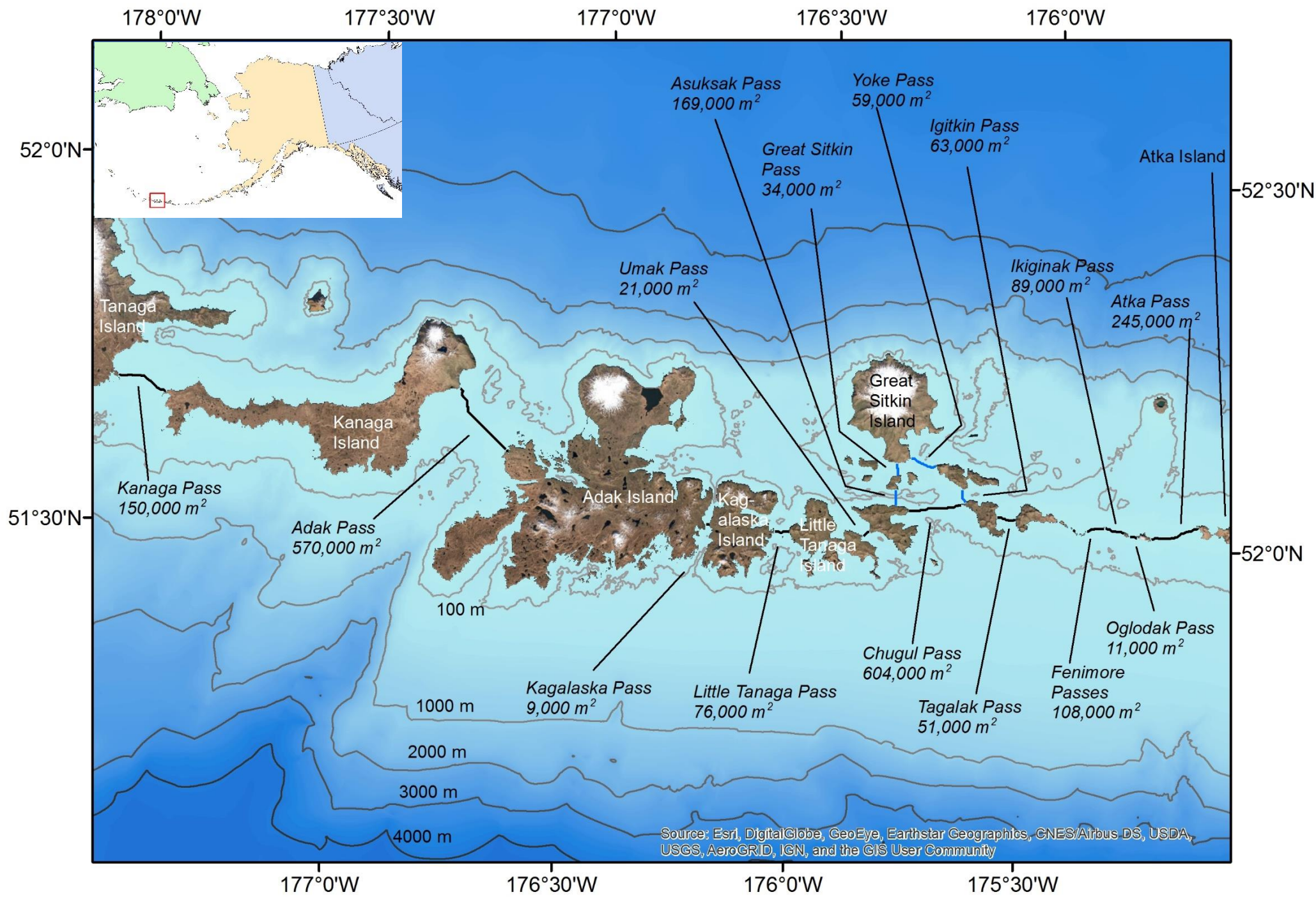


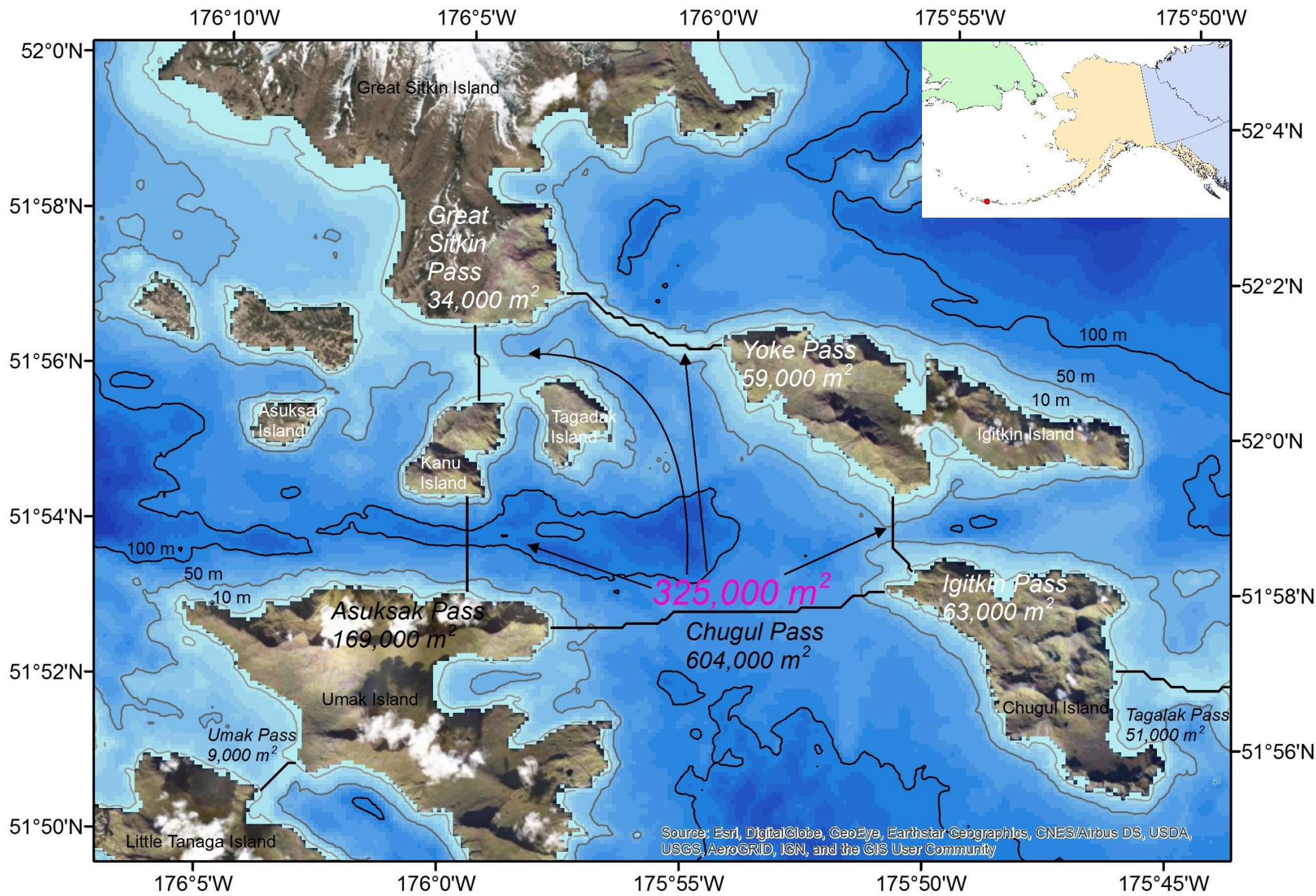


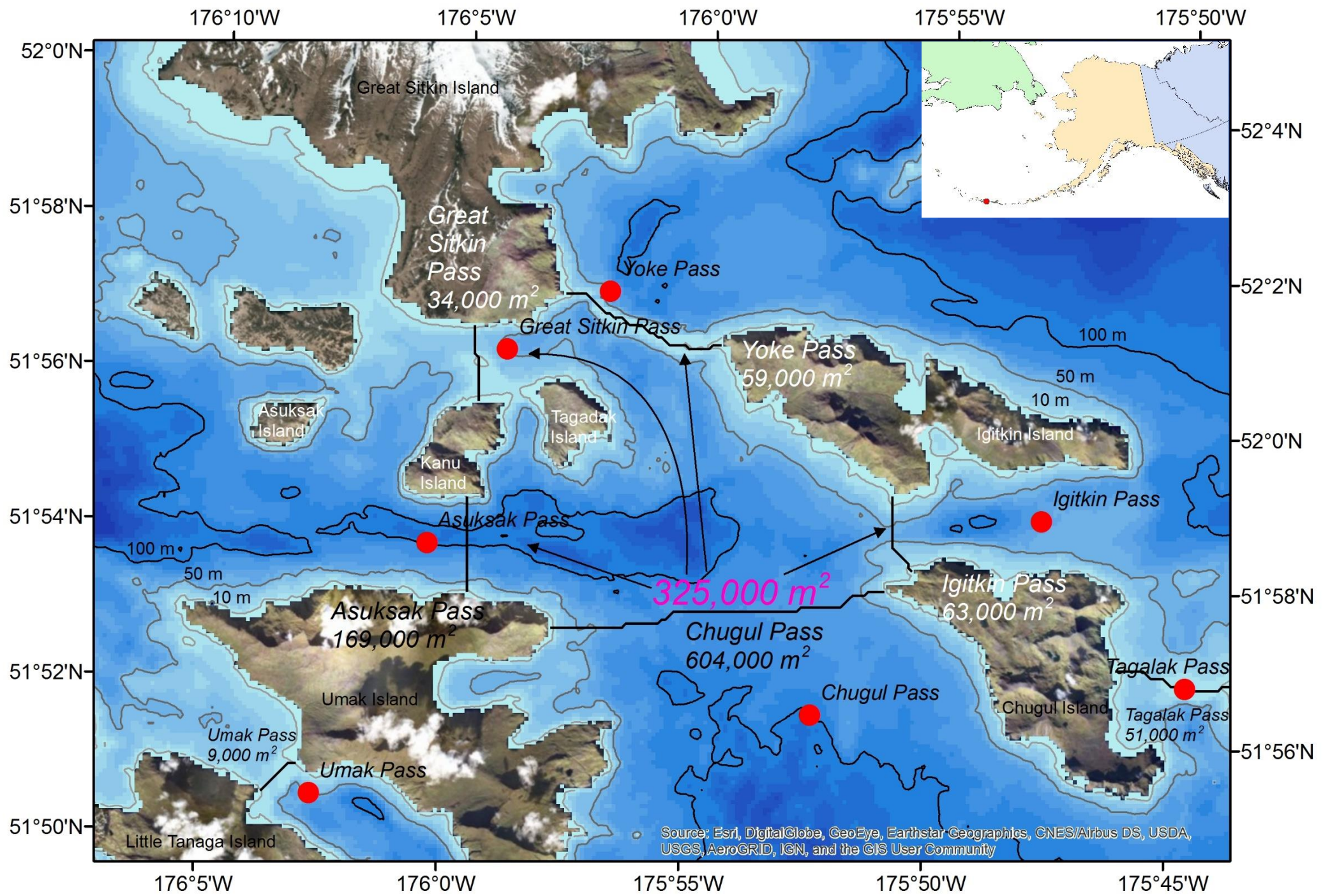


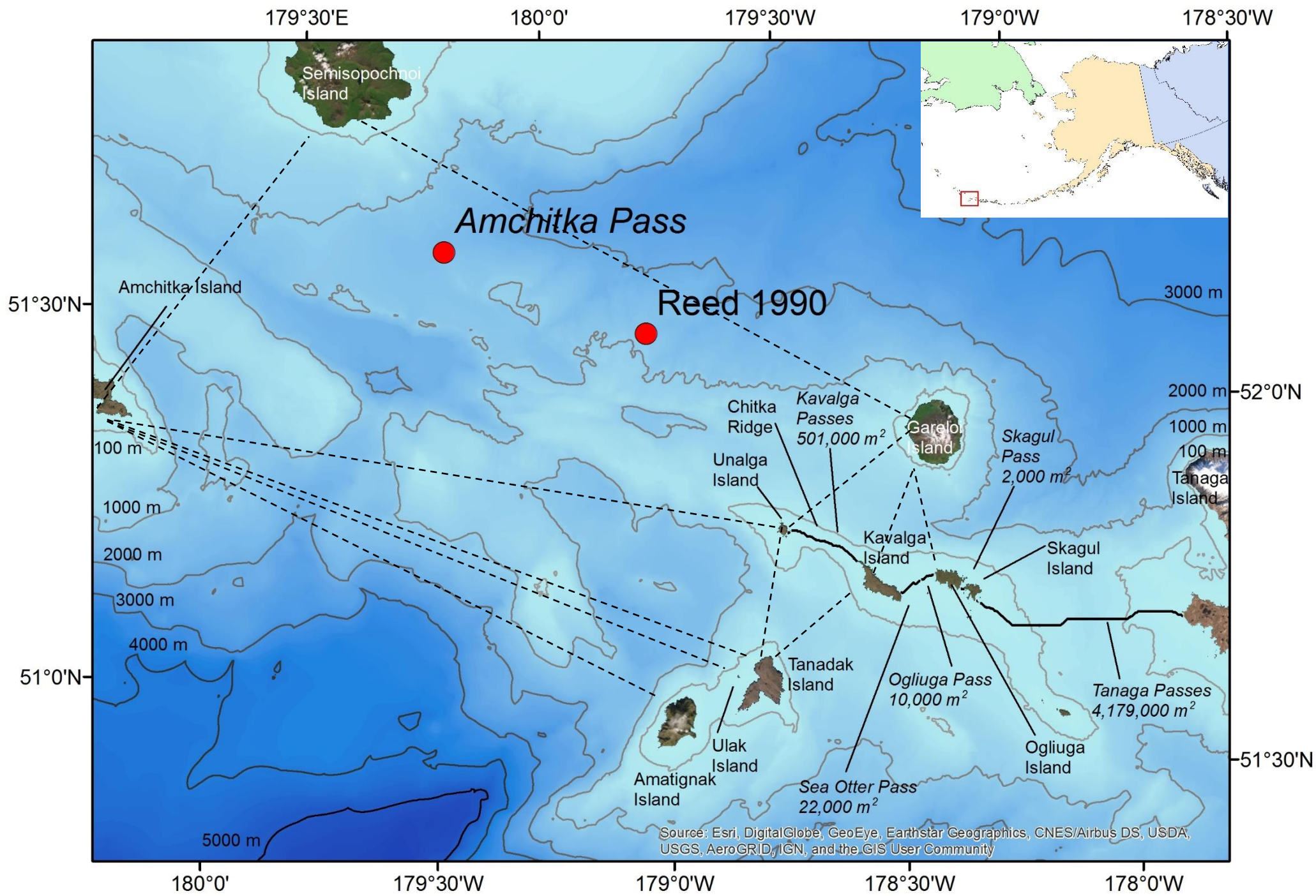
Amukta Pass +12% > Favorite 1967, but
 -12% < Ladd et al. 2005
 Segum Pass +45% > Favorite 1967, but
 -31% < Ladd et al. 2005

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

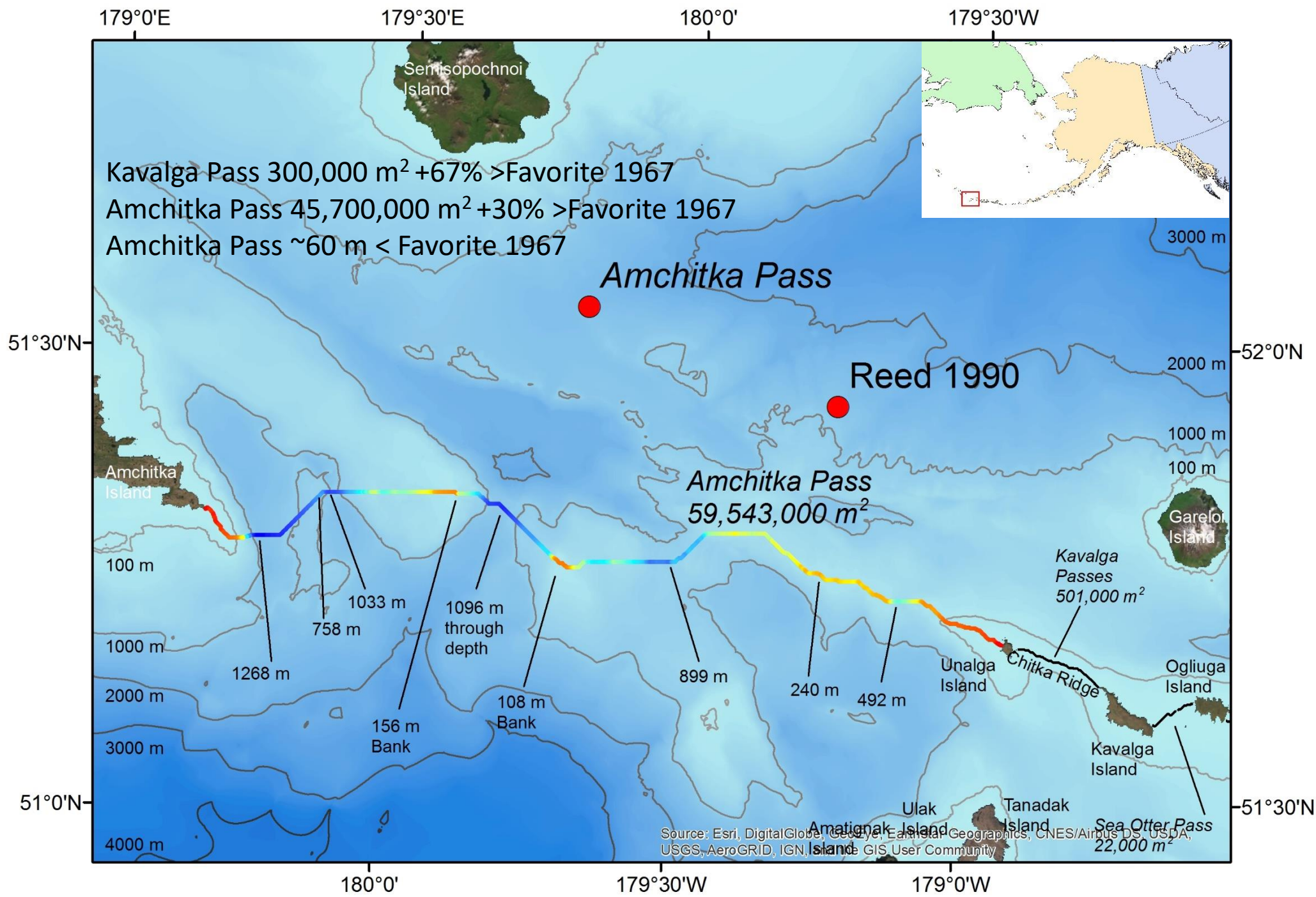


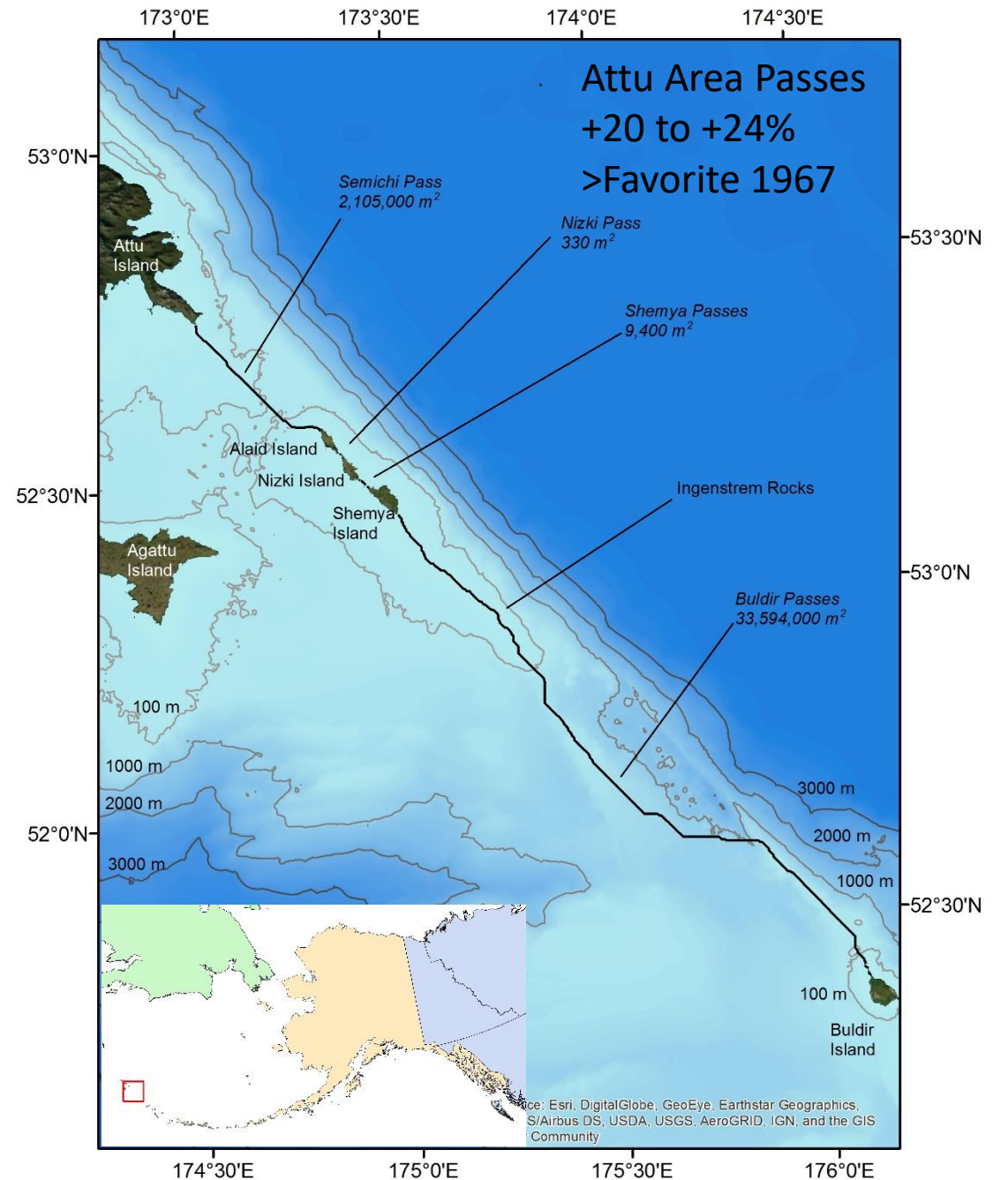
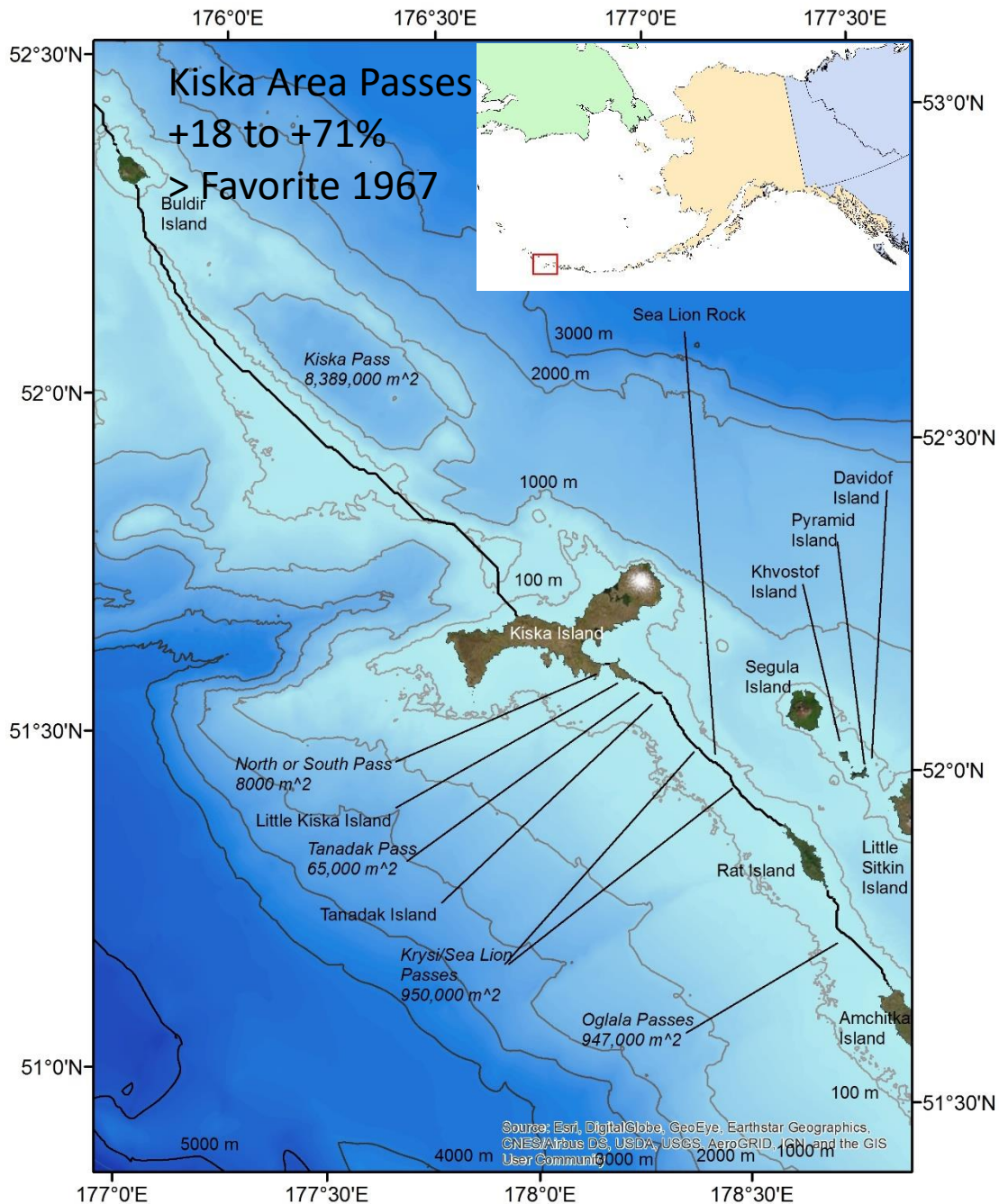






Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community





Benefits of better bathymetry

- Eastern passes roughly equal to Favorite (1967) estimates
- Chugul Pass not limiting, 46% < Favorite (1967)
- Amchitka Pass misplaced, 30% > Favorite (1967)
- Western passes 26% > Favorite (1967)
- Some moorings (Akutan, south Seguam, and Amchitka) and US Board of Geographic Names misplaced