ABSTRACT

This dataset provides a booklet documenting the discussions and outcomes from a knowledge-exchange meeting with Yupik elders from the Yukon-Kuskokwim Delta (YKD), western Alaska, community members, and natural scientist to discuss landscape and weather changes that have been observed in their homelands. The meeting was held during November 14-16, 2018. Yupik participants represented several YKD villages that occupy very different biophysical environments and have lifelong perspectives of environmental conditions and change that predate the era of Earth-observing satellites by many decades. Nearly 16 hours of discussion and testimonials from YKD elders were recorded during the meeting.

The booklet is structured according to the environmental change processes that were discussed (e.g., coastal flooding, permafrost thaw, shrub expansion, climate change) and includes narrative summaries, quotations from participants, graphical illustrations, and examples of the field- and remote-sensing-based scientific findings, and map products developed as part of the larger ABoVE project. The booklet is provided in .pdf format.

Figure 1. Aerial view of the Yukon Delta landscape near the village of Emmonak, August 2017 (image from Fienup-Riordan et al. (2021).

Project: Arctic-Boreal Vulnerability Experiment

The Arctic-Boreal Vulnerability Experiment (ABoVE) is a NASA Terrestrial Ecology Program field campaign being conducted in Alaska and western Canada, for 8 to 10 years, starting in 2015. Research for ABoVE links field-based, process-level studies with geospatial data products derived from airborne and satellite sensors, providing a foundation for improving the analysis, and modeling capabilities needed to understand and predict ecosystem responses to, and societal implications of, climate change in the Arctic and Boreal regions.

Related Publication:

Fienup-Riordan, A., G.V. Frost, R. Nayamin-Kelly, U.S. Bhatt, A.S. Hendricks, M. John, and P. Odom. 2021. Yup'ik and Cup'ik Observations of Alaska's Changing Yukon-Kuskokwim Delta.

Results of a Knowledge Exchange Meeting with Natural Scientists. ABR, Inc.—Environmental Research & Services, Fairbanks AK. 40 pp. https://doi.org/10.3334/ORNLDAAC/1894

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Data Characteristics

Spatial Coverage: Yukon-Kuskokwim Delta, Alaska

ABoVE Reference Locations

Domain: Core ABoVE

State/Territory: Alaska

Grid cells (5-m):

Spatial Resolution: NA

Temporal Coverage: 1933-01-01 to 2018-11-16

Temporal Resolution: NA

Site Boundaries: Latitude and longitude are given in decimal degrees.

Site	Westernmost	Easternmost	Northernmost	Southernmost
	Longitude	Longitude	Latitude	Latitude
Yukon-Kuskokwim Delta, Alaska	-166.552734	-159.47754	63.433318	59.581633

Data file information

There is one file in .pdf format with this dataset:

YKDelta_Knowledge_Exchange_Meeting.pdf. This pdf is a booklet with 40 pages documenting the discussions and outcomes from a knowledge-exchange meeting with Yupik elders from the Yukon-Kuskokwim Delta (YKD), western Alaska, community members, and natural scientist to discuss landscape and weather changes that have been observed in their homelands.

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