

Technical assistance with historic vessel position data for Alaska District planning study in Pribilof Islands.

ERDC Dredging Operations Technical Support Program (DOTS)

U.S. ARMY CORPS OF ENGINEERS

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Response Summary:

For the Dredging Operations Technical Support (DOTS) response, Dr. Marin Kress provided technical assistance to staff from the Economics and Planning group in Alaska District. This assistance took the form of querying historic vessel position reports as broadcast via the Automatic Identification System (AIS) transceivers onboard vessels.

Period of Performance:

This DOTS request was initiated in January 2025, the product was delivered in February 2025.

Benefits of the Response to the USACE Dredging/Navigation Program:

The benefit of this technical response was the provision of historical real-world AIS-derived vessel position information, which also contains self-reported vessel dimension information. Vessel dimension information is crucial when planners and economists are considering what kind of vessels may potentially use new harbor infrastructure after it is constructed.

Deliverable:

The product generated from this request was a series of images showing vessel tracklines in the vicinity of the Pribilof Islands of St. Paul and St. George for the months of interest, captured in a PowerPoint file, along with a CSV file containing vessel records.

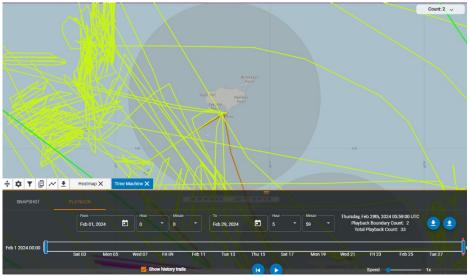


Figure 1. Screenshot of vessel traffic in the vicinity of St. Paul Island, Alaska, during February 2024.

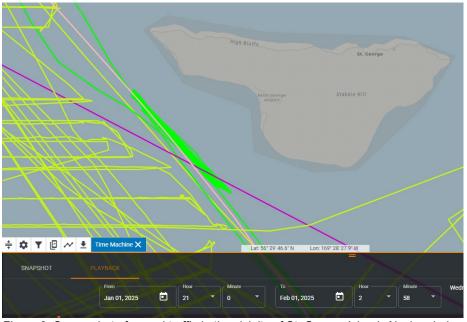


Figure 2. Screenshot of vessel traffic in the vicinity of St. George Island, Alaska, during January 2025.



Providing environmental and engineering technical support to the U.S. Army Corps of Engineers Operations and Maintenance navigation and dredging missions