



## ERDC Dredging Operations Technical Support Program (DOTS)

U.S. ARMY CORPS OF ENGINEERS

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### Response Summary:

The USACE dredging community request historical ship tracking data for a specific time and date range as part of an incident investigation on the Lower Columbia River. Historic Automatic Identification System (AIS) for all available vessels in the area was acquired, this included commercial and recreational vessels.



Figure 1. Still image produced featuring two vessels operating in the time and area of interest, with vessel information displayed in associated pop-up windows.

### Period of Performance:

The work for this DOTS request was completed in January 2023.

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

The USACE navigation and dredging programs benefitted by receiving rapid assistance to historical vessel position information to “replay” the events during the time and place of interest. One of the vessels of interest was a dredging vessel.



Figure 2. Screenshot from an animated playback video showing multiple vessel positions changing through the time and area of interest. Vessels are shown as triangles, color varies based on vessel information included in the AIS message.

**Deliverable:** The deliverables produced as part of this DOTS request were a series of videos and still images that showed the relative positions of multiple vessels at different points in time.

This DOTS request was completed by Mr. Brady Towne ([Brady.A.Towne@usace.army.mil](mailto:Brady.A.Towne@usace.army.mil)) and Dr. Marin Kress ([Marin.M.Kress@usace.army.mil](mailto:Marin.M.Kress@usace.army.mil)) of the Coastal and Hydraulics Laboratory, Navigation Branch.



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