



Historic Vessel Position Data near St. Louis District Lock and Dam Structures

ERDC Dredging Operations Technical Support Program (DOTS)

U.S. ARMY CORPS OF ENGINEERS

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Response Summary:

The River Engineering branch in St. Louis District requested assistance in acquiring data on vessel traffic around Lock & Dam 25 for multiple years, and for specific vessel allision events at Mel Price Lock and Dam on the Mississippi River. Researchers were able to assist in this request by accessing historical vessel position from the U.S. Coast Guard Nationwide Automatic Identification System (NAIS) archive, using the AIS Analysis Package (AISAP) software developed by ERDC-CHL, available to all USACE employees at <http://ais-portal.usace.army.mil/>.

Period of Performance:

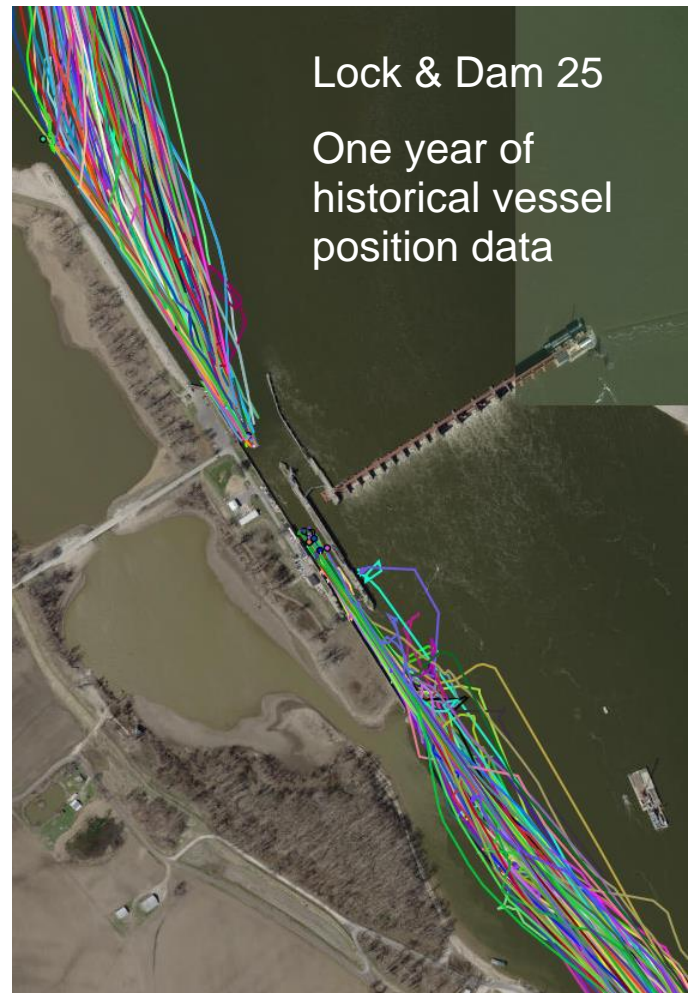
The study period included years 2016, 2017, and part of 2018, as well as individual allision events within that time. The request was fulfilled in November-December 2018 in consultation with St. Louis District staff to provide the most useful product.

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

This DOTS request benefits the USACE Navigation program by providing accurate historical data about vessel navigation behavior around lock structures, notably the approach path taken towards a lock under a variety of hydrologic conditions. St. Louis District staff are using this data to evaluate channel alignment, and potential engineering/river control structures in the Mississippi River to improve navigation.

Deliverable:

The main deliverable for this DOTS request was a series of spreadsheet files that could be brought in to geospatial software for further spatial analysis. Additional deliverables were technical support, dialogue about data limitations and other potential uses of AIS position data, and consultation with St. Louis District staff about methods to improve data processing workflows.



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

