



Historic vessel position data for Kansas City District

ERDC Dredging Operations Technical Support Program (DOTS)

U.S. ARMY CORPS OF ENGINEERS

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Response Summary:

In this Dredging Operations Technical Support (DOTS) response, staff from the Coastal and Hydraulics Lab (CHL), Navigation branch, provided historic vessel position data derived from the Automatic Identification System (AIS) signals. The AIS data was originally received by the network of shore sites maintained by the USACE Lock Operations Management Application (LOMA), which is maintained and managed within the CHL Navigation branch. Staff in USACE Kansas City District were interested in vessel position reports from commercial

B	C	D	E	F	G	H	I	J
Vessel ID	Name	Rcvr ID	Date tag last rpt (UTC)	Time tag last rpt (GMT)	Latitude	Longitude	COG	VDM01 Nav Status
367714170	KATHRYN_ANN ***	AS-NWK-MOGASADE	20200401	12:04:08	38.7113733	-91.4186333	NA	
367714170	KATHRYN_ANN ***	AS-NWK-MOGASADE	20200401	12:04:17	38.7113783	-91.4186333	NA	
367714170	KATHRYN_ANN ***	AS-NWK-MOGASADE	20200401	12:04:27	38.7113817	-91.4186333	NA	
367714170	KATHRYN_ANN ***	AS-NWK-MOGASADE	20200401	12:04:38	38.7113867	-91.4186317	NA	
367714170	KATHRYN_ANN ***	AS-NWK-MOGASADE	20200401	12:04:48	38.7113883	-91.4186317	NA	
367714170	KATHRYN_ANN ***	AS-NWK-MOGASADE	20200401	12:04:58	38.711395	-91.41863	NA	
367714170	KATHRYN_ANN ***	AS-NWK-MOGASADE	20200401	12:05:08	38.7113967	-91.41863	NA	Under way using engine
367714170	KATHRYN_ANN ***	AS-NWK-MOGASADE	20200401	12:05:17	38.7113967	-91.4186317	NA	
367714170	KATHRYN_ANN ***	AS-NWK-MOGASADE	20200401	12:05:27	38.7113933	-91.4186333	NA	Under way using engine
367714170	KATHRYN_ANN ***	AS-NWK-MOGASADE	20200401	12:05:38	38.7113917	-91.4186333	NA	Under way using engine
367714170	KATHRYN_ANN ***	AS-NWK-MOGASADE	20200401	12:05:48	38.7113883	-91.4186333	NA	Under way using engine
367714170	KATHRYN_ANN ***	AS-NWK-MOGASADE	20200401	12:05:58	38.71139	-91.4186317	NA	Under way using engine
367714170	KATHRYN_ANN ***	AS-NWK-MOGASADE	20200401	12:06:08	38.7113933	-91.4186317	NA	Under way using engine
367714170	KATHRYN_ANN ***	AS-NWK-MOGASADE	20200401	12:06:17	38.711395	-91.4186317	NA	Under way using engine
367714170	KATHRYN_ANN ***	AS-NWK-MOGASADE	20200401	12:06:27	38.7113917	-91.4186283	NA	Under way using engine
367714170	KATHRYN_ANN ***	AS-NWK-MOGASADE	20200401	12:06:38	38.7113917	-91.4186317	NA	Under way using engine
367714170	KATHRYN_ANN ***	AS-NWK-MOGASADE	20200401	12:06:48	38.711395	-91.4186333	NA	Under way using engine
367714170	KATHRYN_ANN ***	AS-NWK-MOGASADE	20200401	12:06:58	38.7113983	-91.418635	NA	Under way using engine
367714170	KATHRYN_ANN ***	AS-NWK-MOGASADE	20200401	12:07:08	38.7114033	-91.4186367	NA	Under way using engine
367714170	KATHRYN_ANN ***	AS-NWK-MOGASADE	20200401	12:07:17	38.7114083	-91.41864	NA	Under way using engine
367714170	KATHRYN_ANN ***	AS-NWK-MOGASADE	20200401	12:07:27	38.711415	-91.4186417	NA	Under way using engine
367714170	KATHRYN_ANN ***	AS-NWK-MOGASADE	20200401	12:07:38	38.71142	-91.4186433	NA	Under way using engine
367714170	KATHRYN_ANN ***	AS-NWK-MOGASADE	20200401	12:07:48	38.71142	-91.4186433	NA	Under way using engine
367714170	KATHRYN_ANN ***	AS-NWK-MOGASADE	20200401	12:07:58	38.7114233	-91.418645	NA	Under way using engine

Figure 1. Screenshot of typical spreadsheet containing historical AIS vessel position reports from the Missouri River.

vessels operating on the lower portion of the Missouri River that falls within the area of responsibility for Kansas City District. Each navigation season on the Missouri River spans from April through the end of November. Each AIS position report contains a timestamp along with latitude, longitude, and identifying vessel information.

Period of Performance:

This DOTS request was completed in January 2023. The data provided in this request spanned the navigation seasons of 2020, 2021, and the 2022 navigation season. Each navigation season on the Missouri River spans from April through the end of November.

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

This DOTS response provided benefits to the USACE navigation program by providing actual historical vessel position data from commercial vessels that navigated on the Missouri River. The navigation operations staff in Kansas City District that received this data were able to carry out their analysis of vessel traffic in order to evaluate possible dredging needs on the Missouri River.

Deliverable:

The deliverable in this DOTS request was a set of CSV files delivered to Kansas City District navigation staff, along with explanatory materials related to reading and interpreting the data.



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

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