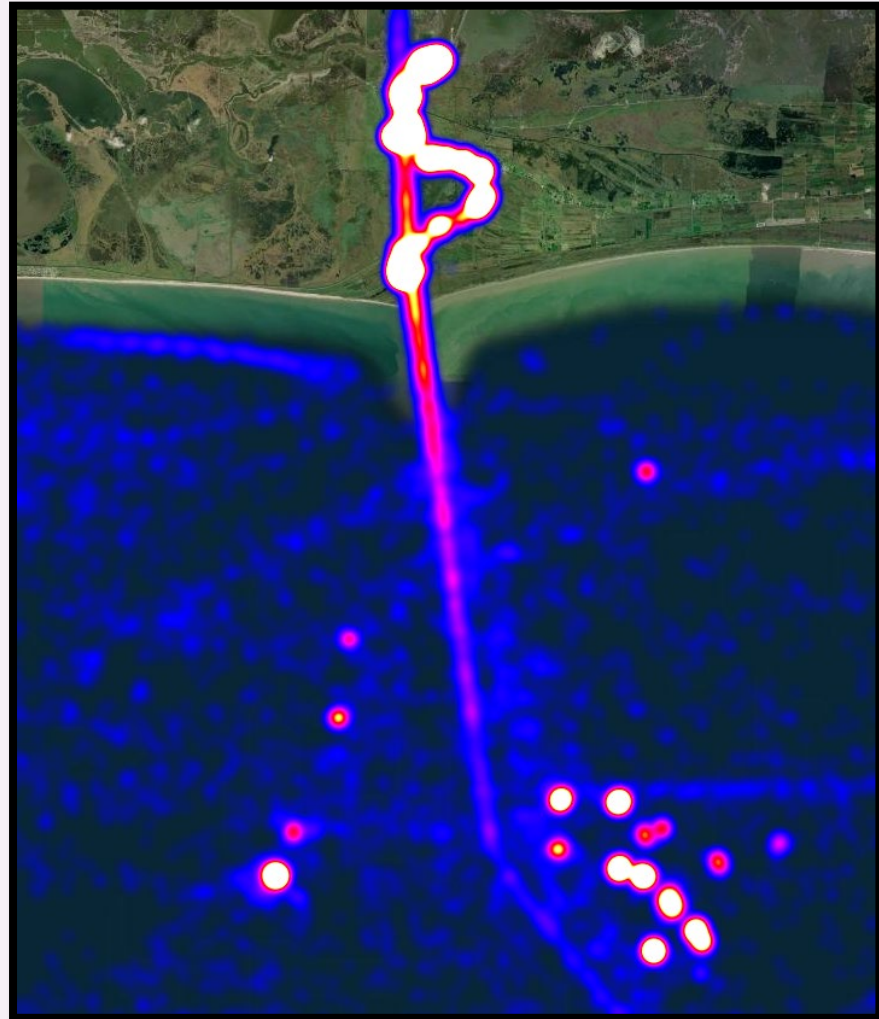


AUTOMATIC IDENTIFICATION SYSTEM ANALYSIS PACKAGE (AISAP)

INTRODUCTION

So You Think You Got a Shoal

May 11, 2021



AIS data illustration created with AISAP



"The views, opinions and findings contained in this report are those of the authors(s) and should not be construed as an official Department of the Army position, policy or decision, unless so designated by other official documentation."

WHAT CAN YOU USE AISAP FOR

- Identifying possible indications of a shoal
 - (and other channel disturbances)
- Measuring shoaling impacts on vessel traffic
 - (and other waterway restrictions or closures)
- Calculating the benefits of dredging
 - (and other O&M actions)

Which vessels? How many vessels? What types?

Transit times pre / during / post

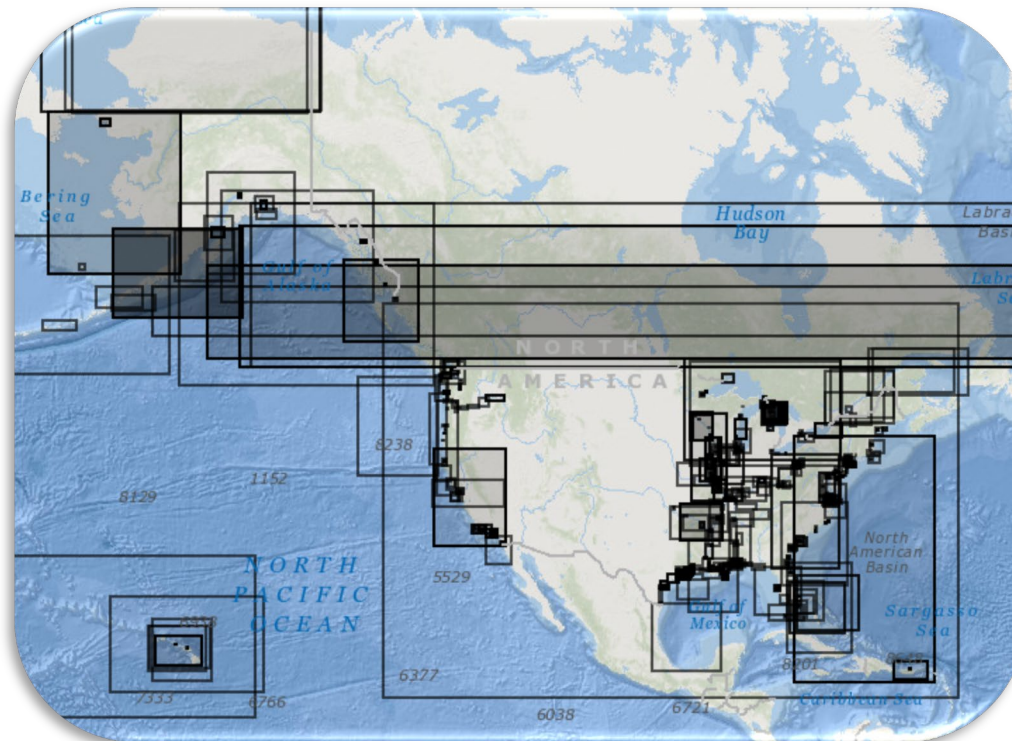
Anchorage times pre / during / post

Is the channel width being utilized?

Are vessel tracks indicating shoal avoidance?

AISAP FEATURES

- Accessible online
- Available to the USACE and federal partners
- AIS data library
- Data filtering

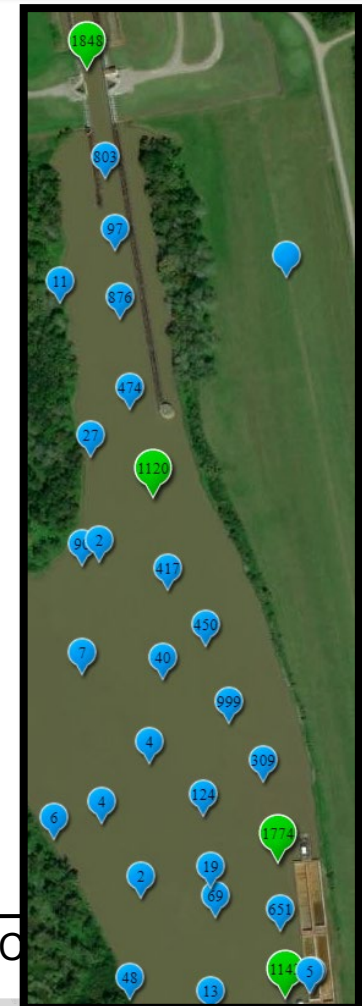
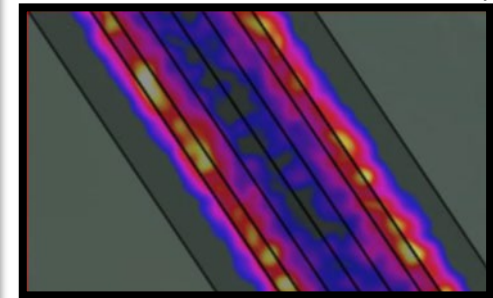
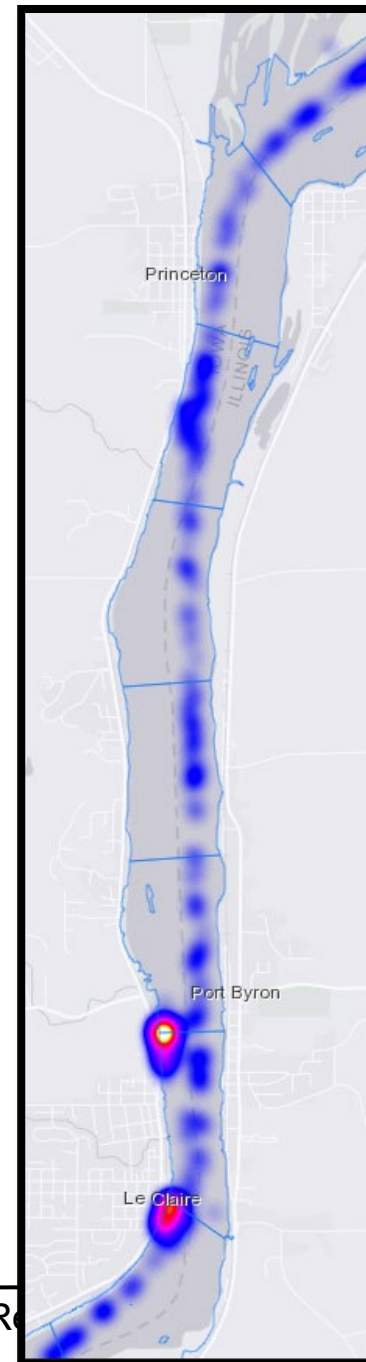
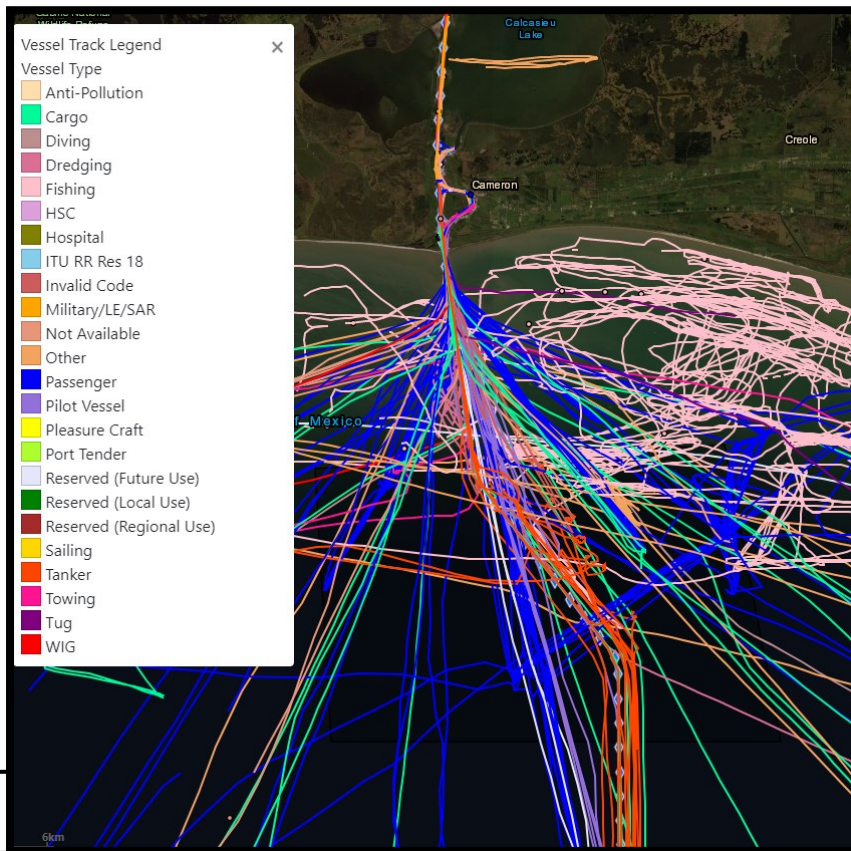


The outlined boxes indicate locations for which AIS data is available in the AIS data library.

AISAP BUILT-IN TOOLS

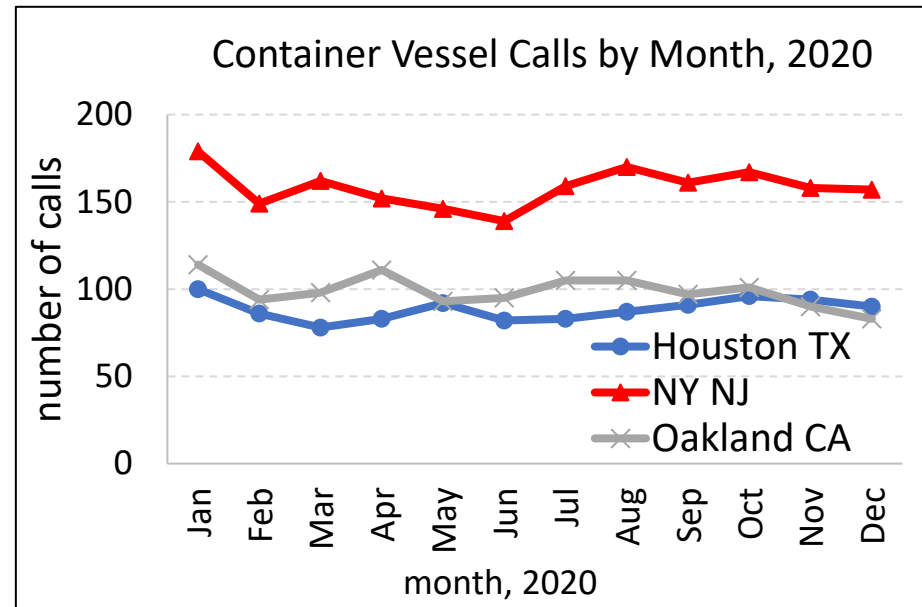
- Data visualization tools
 - Vessel track lines
 - Heat maps
 - Cluster maps

AIS data illustrations created with AISAP

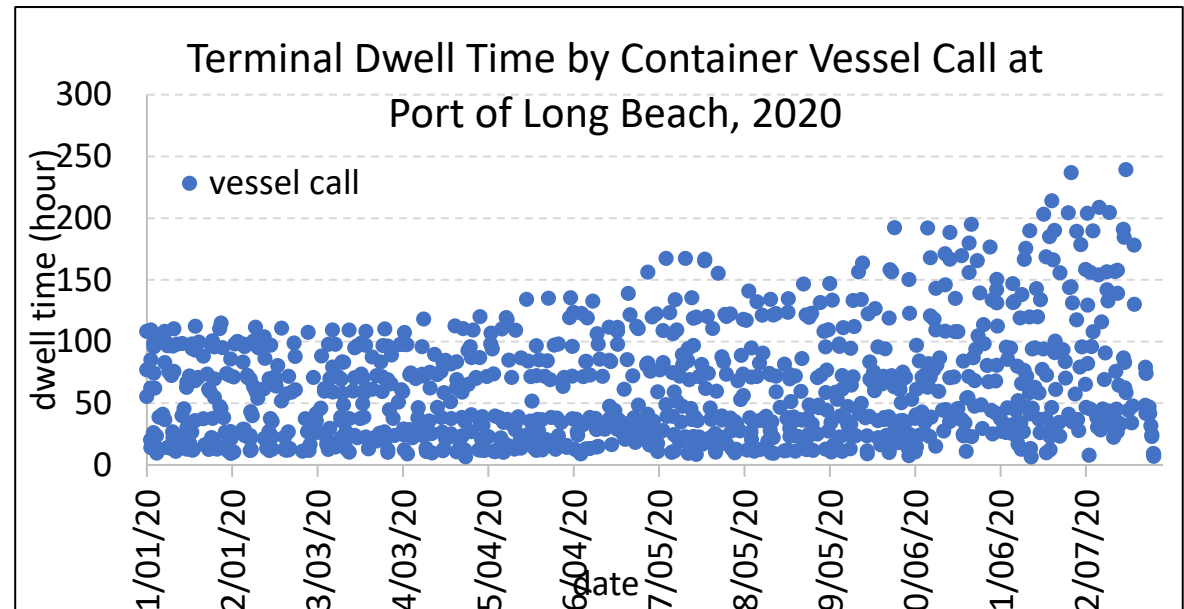


AISAP BUILT-IN TOOLS

- Quantitative analysis tools
 - Vessel type statistics
 - Vessel speeds
 - Transit times
 - Dwell / anchorage times
 - Trip counts



Port of St. Paul, MN Vessel Calls by Type, 2018	
Vessel Type	# of Calls
Cargo	6
Fishing	1
Military/LE/SAR	4
Other	5
Passenger	3
Pleasure Craft	2
Towing	82
Tug	1
WIG	2
Not Provided	11



EXERCISES OVERVIEW

- **Exercises**
 1. Create a project
 2. Add AIS data to a project
 3. Create areas of interest and add'l data filters
 4. Built-in tools for data visualization and quantitative analysis
 5. Request new AIS data
 6. Check request completion status
 7. KML animation of a vessel track in GoogleEarth

- **Exercise Case Study Information**
 - Location: Calcasieu River (Louisiana)
 - Time period: May 1-5, 2019

- **Going Forward**
 - Can apply exercises to any location and time period
 - Remember to go in order of the exercises

