The Medomak Work

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USGS science for a changing world

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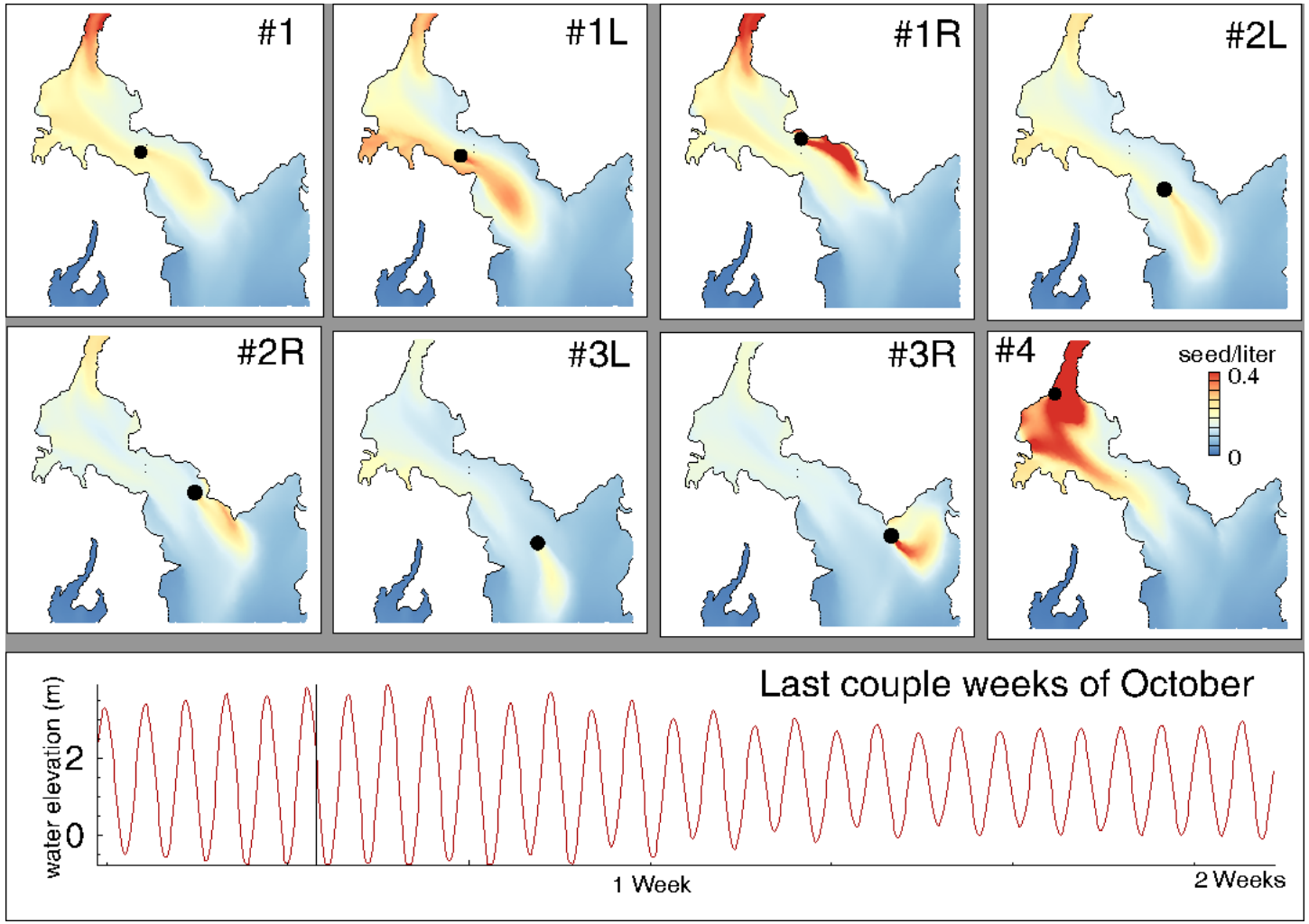
The determine the best location of the upweller: an example of Clammers-Scientists collaboration



How did we do that?

What else we are doing?

What is the clammers role?

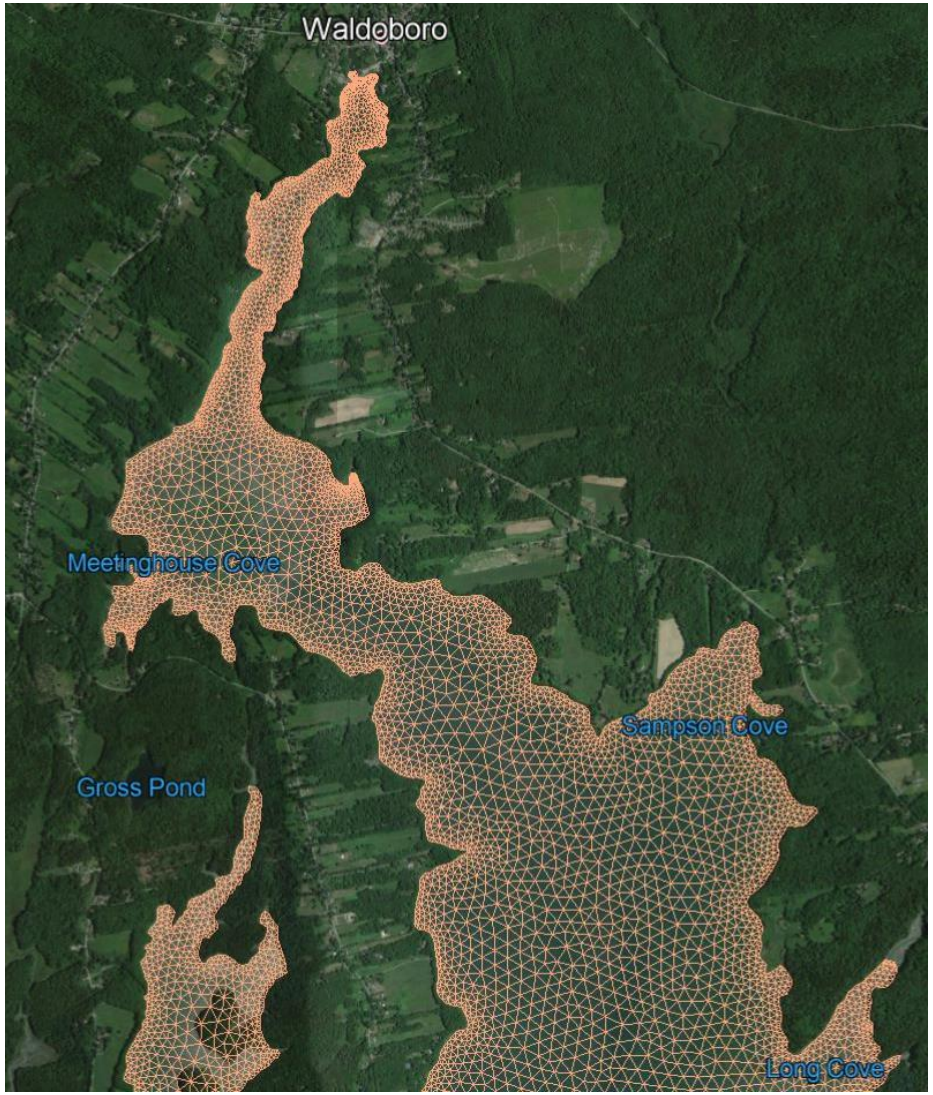
How do we do the modeling?

Real World

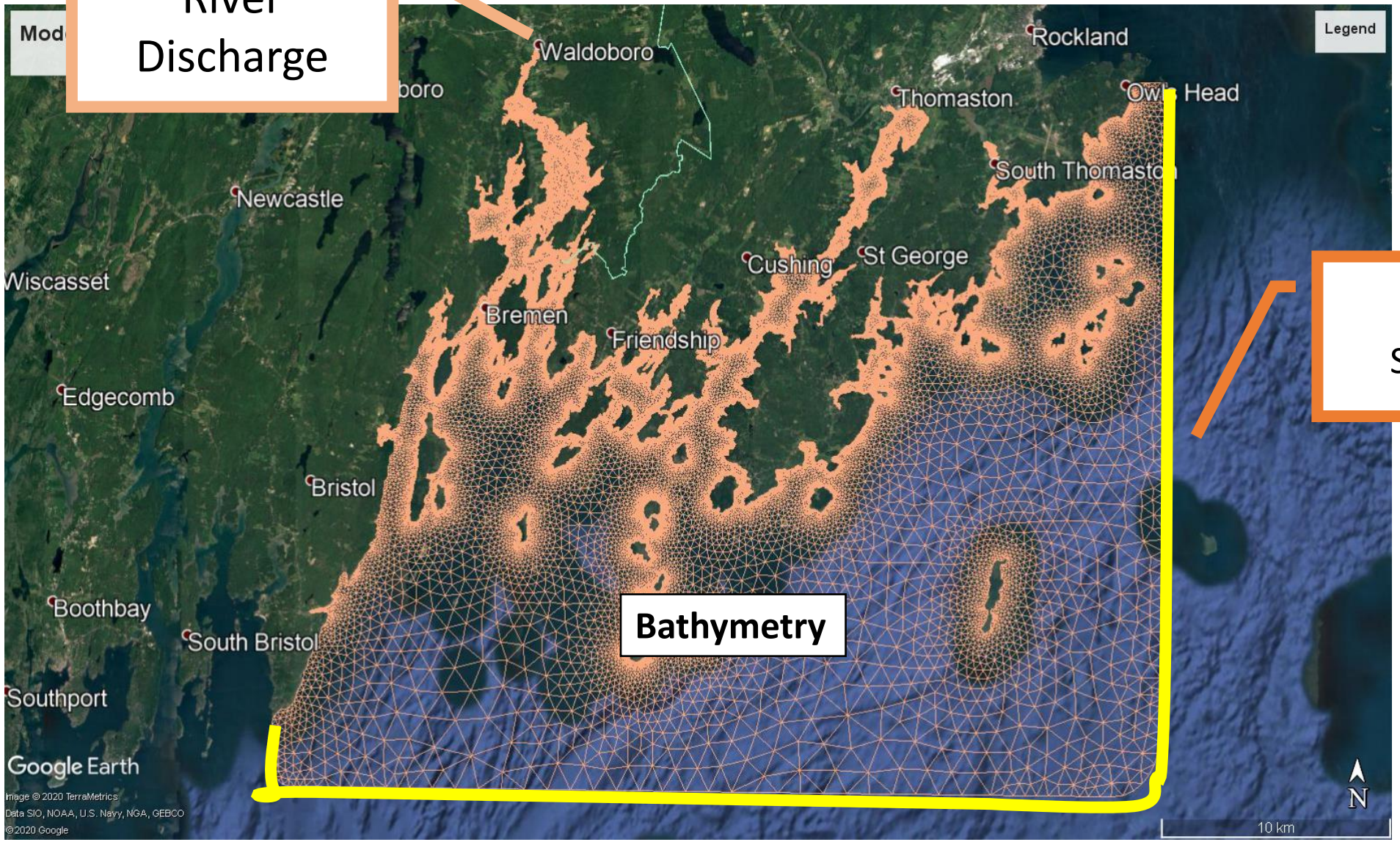
Rules of Physics

→

Predicted World



Physics


River Discharge
Waldoboro
Rockland
Thomaston
Owl's Head
South Thomaston
Newcastle
Wiscasset
Cushing
St George
Bremen
Friendship
Edgecomb
Bristol
Boothbay
South Bristol
Southport
Bathymetry
Tide Salinity
Legend
Google Earth
Image © 2020 TerraMetrics
Data SIO, NOAA, U.S. Navy, NGA, GEBCO
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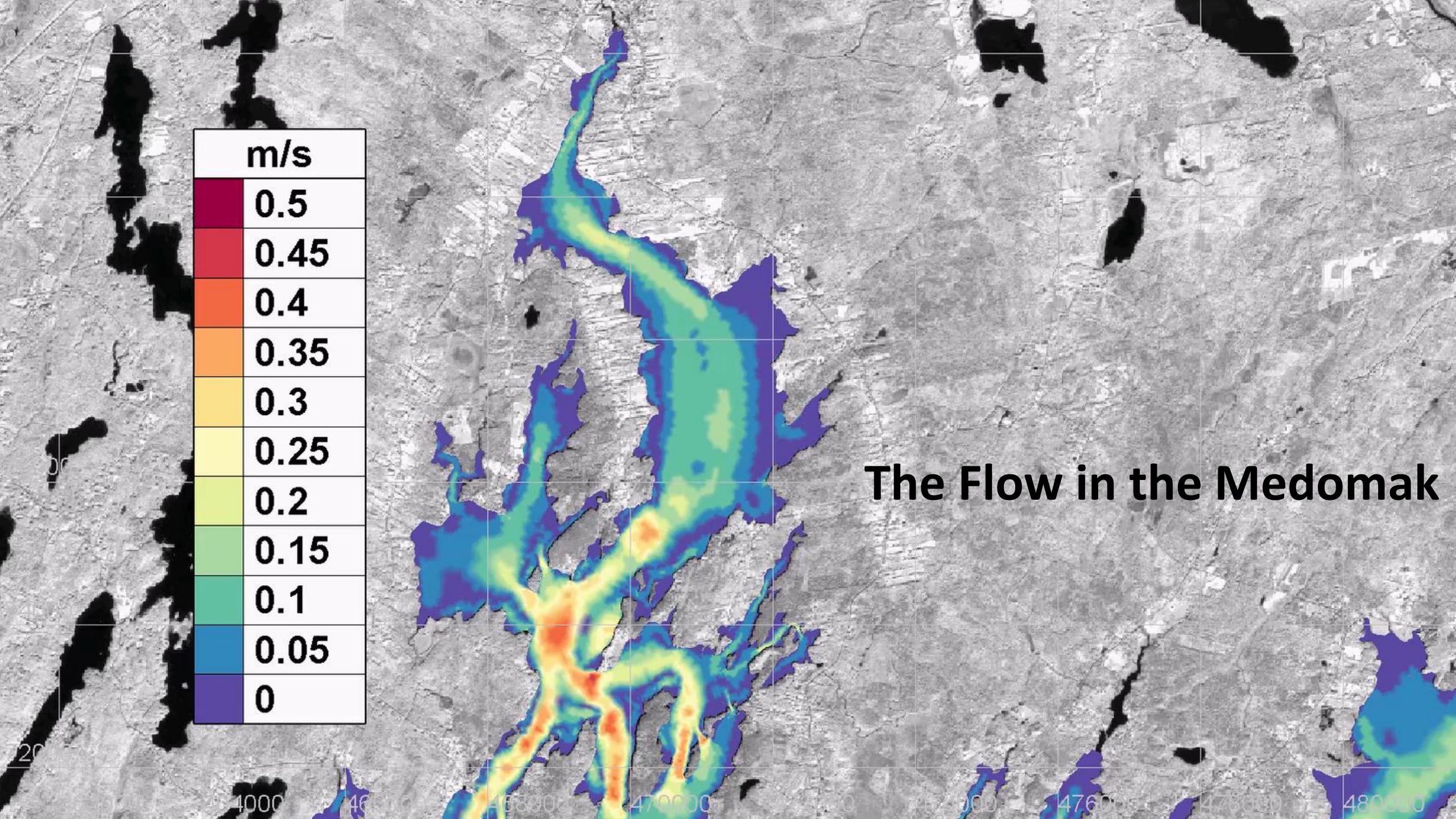
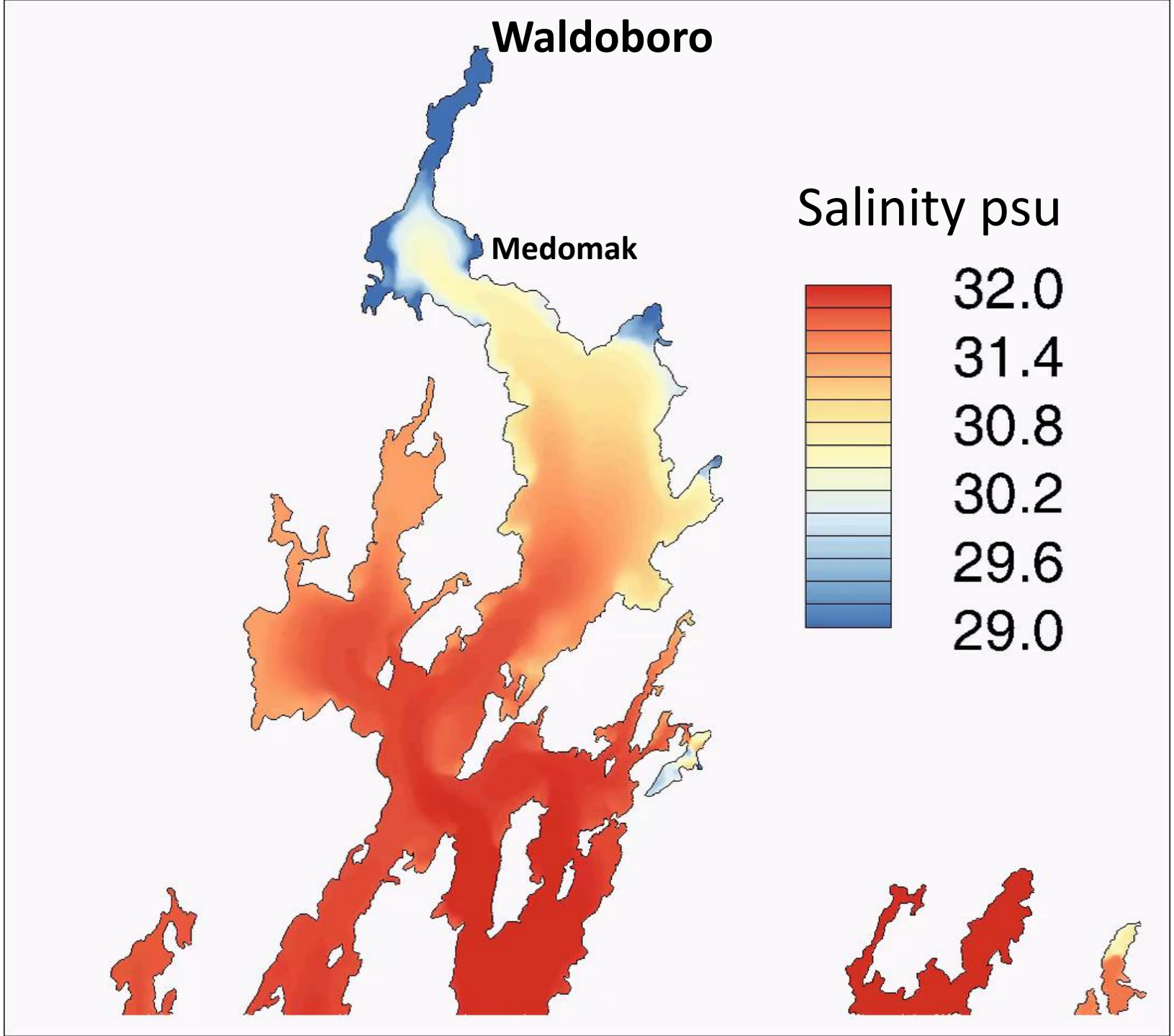
N
10 km



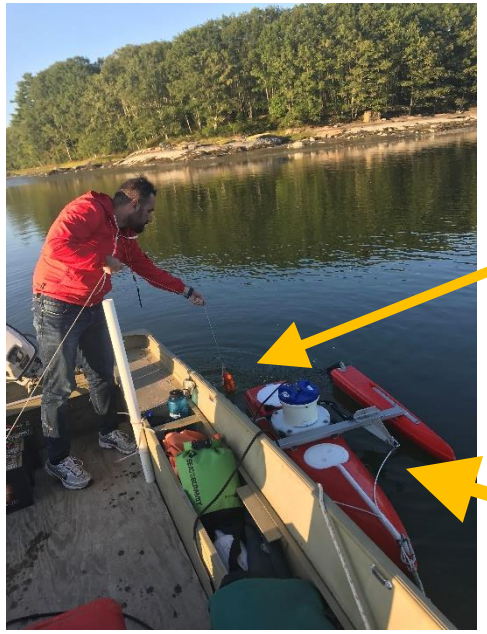
The Flow in the Medomak



The Salinity in the Medomak

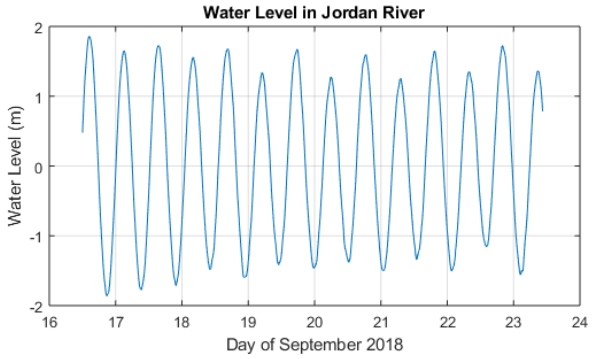
Field Work in Maine estuaries

Pressure Sensor for Tide

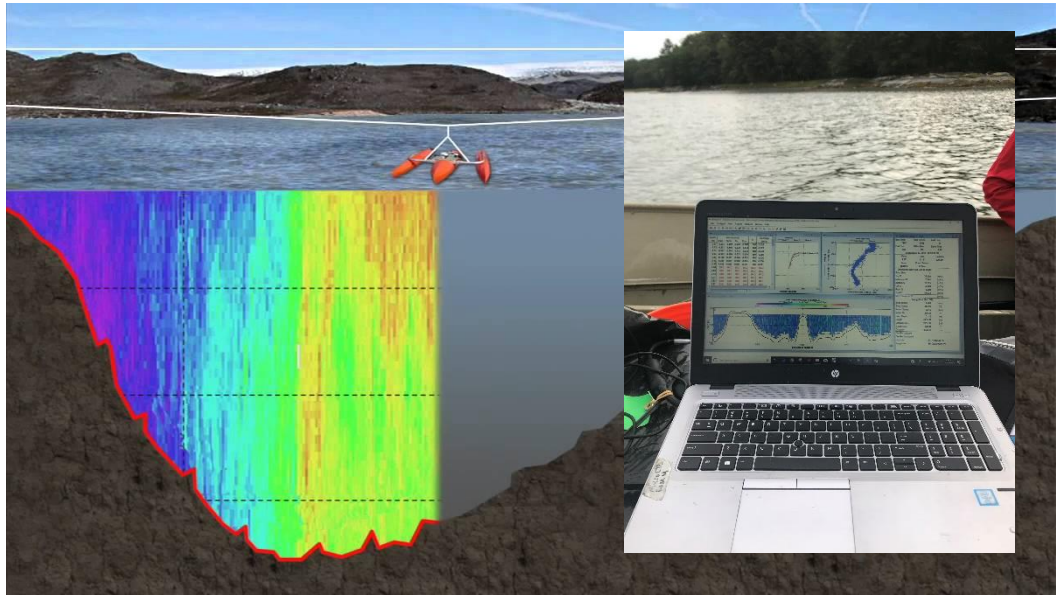


CTD for Salinity & Temp

ADCP for Velocity for 12.4 h!

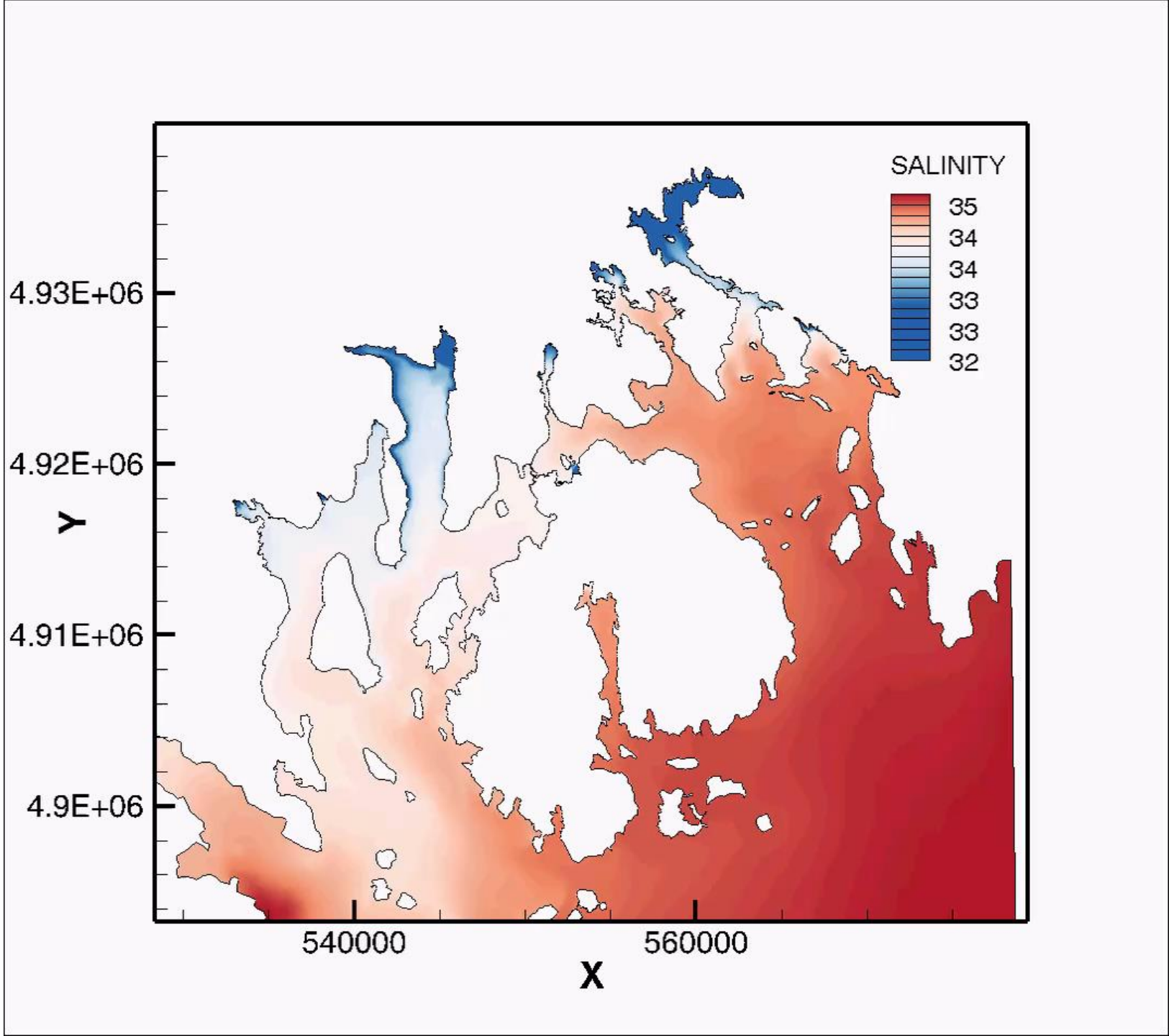


https://www.solinst.com/products/dataloggers-and-telemetry/3001-levelogger-series/levelogger-edge/

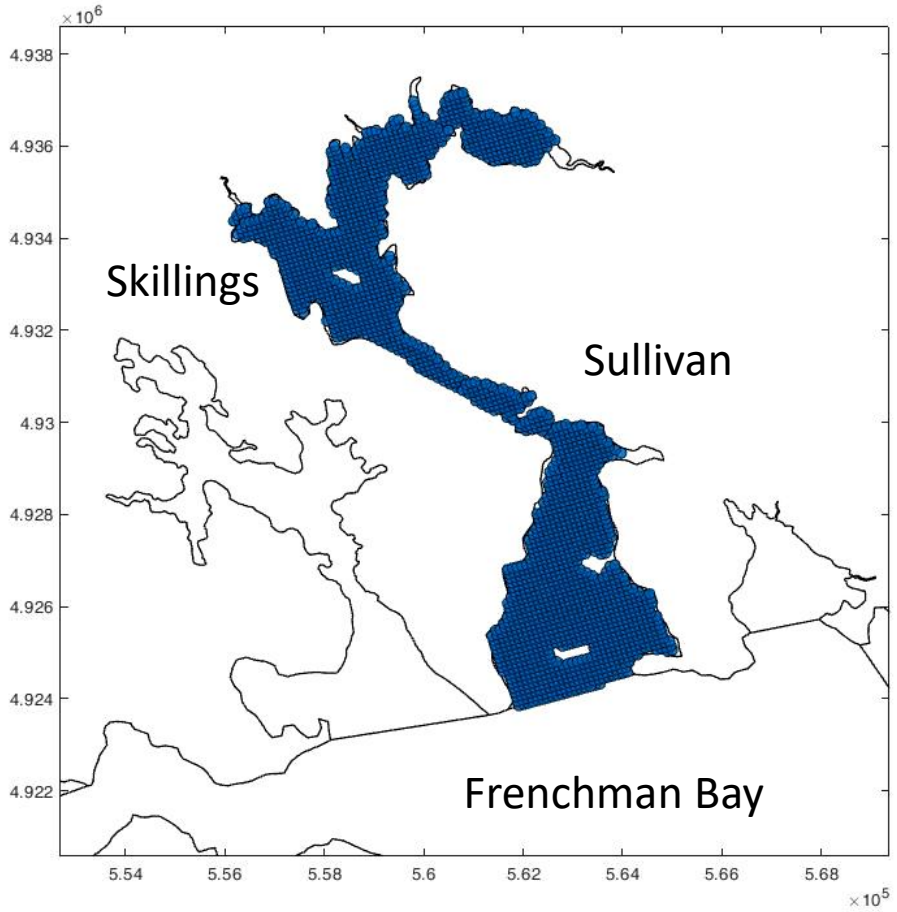


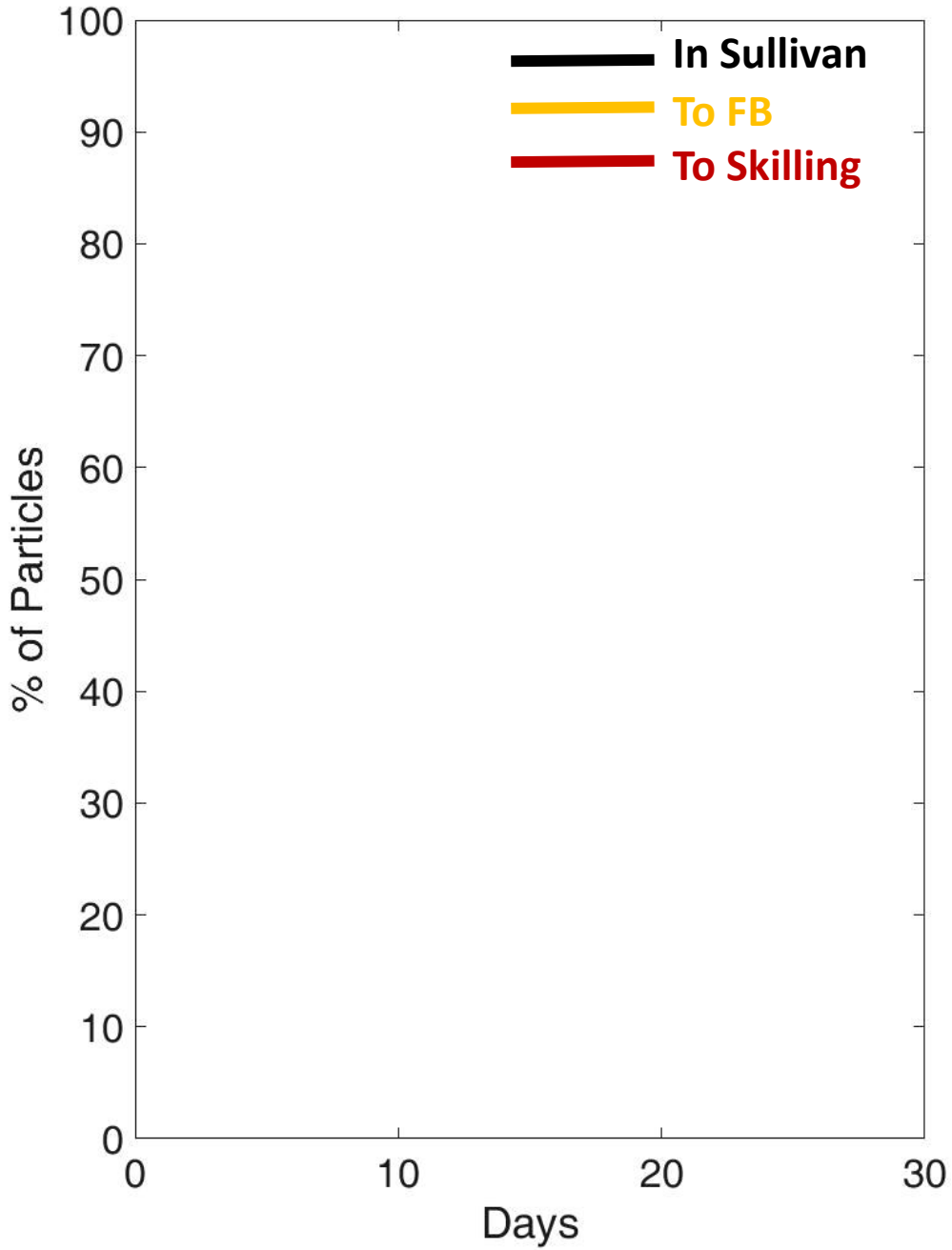
What else we are doing?

- Modeling the flow in Frenchman Bay.
- Good policy management.
- Help coastal communities expand their work



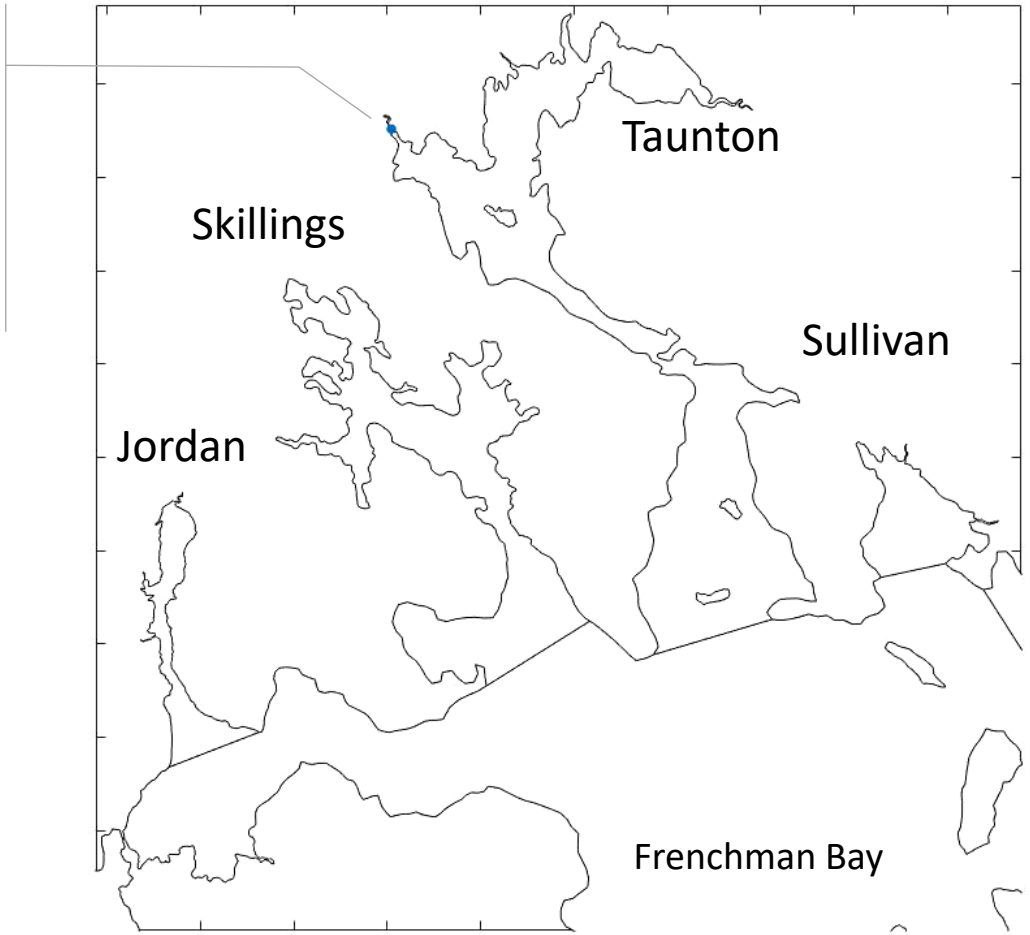
Where the particles go and how long would it take to leave the system?

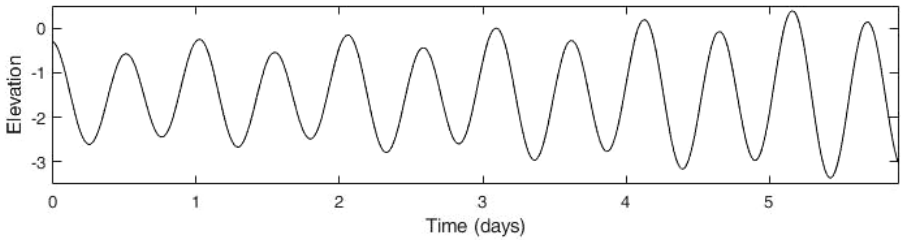




River-Flushed Particles: Targeting the closure issues due to rainfall events

600 Particles released every 1 hour in Egypt River for 2 days. The particles are tracked for 6 days.





What is the clammers role?

Help us in ask the right questings!

Use the clammers expertise and knowledge

Thank You