



REAL-TIME COASTAL INTELLIGENCE

Association of Pacific Ports Conference
Longbeach, CA, August 16, 2023

Company Overview

- MarineLabs Data Systems Inc. – A real-time coastal intelligence company
- Located in Victoria, Canada
- Website: marinelabs.io
- Operating currently in Pacific and Atlantic

Selected Clients, Partnerships, Affiliations:



Pacific Pilotage
Authority

*BC*Ferries



KONGSBERG



IALA



GREEN
MARINE

Canada



U.S. DEPARTMENT OF
ENERGY



SCRIPPS INSTITUTION OF
OCEANOGRAPHY

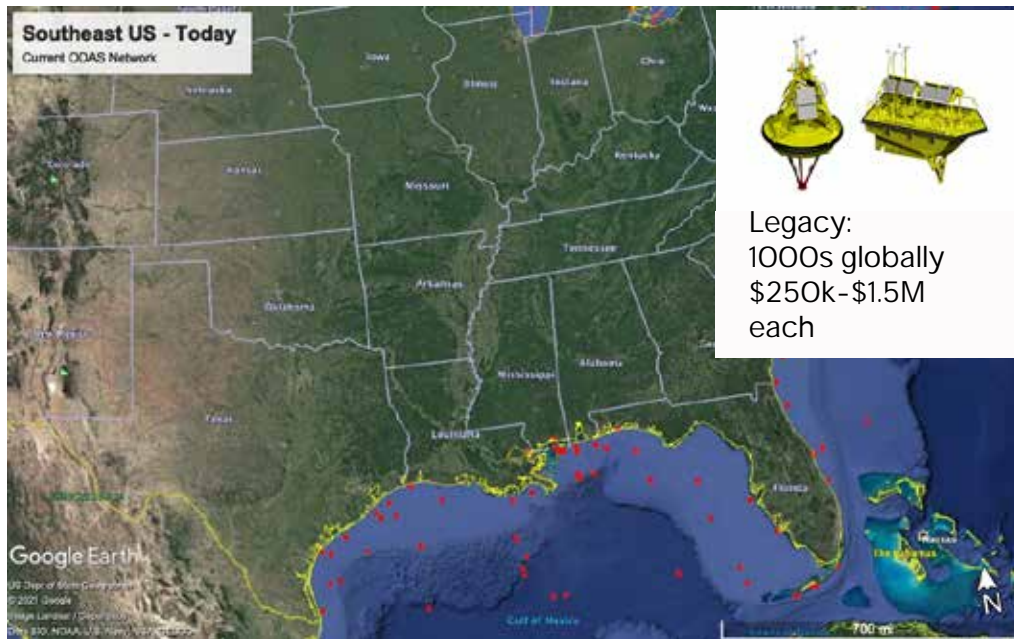


Problem

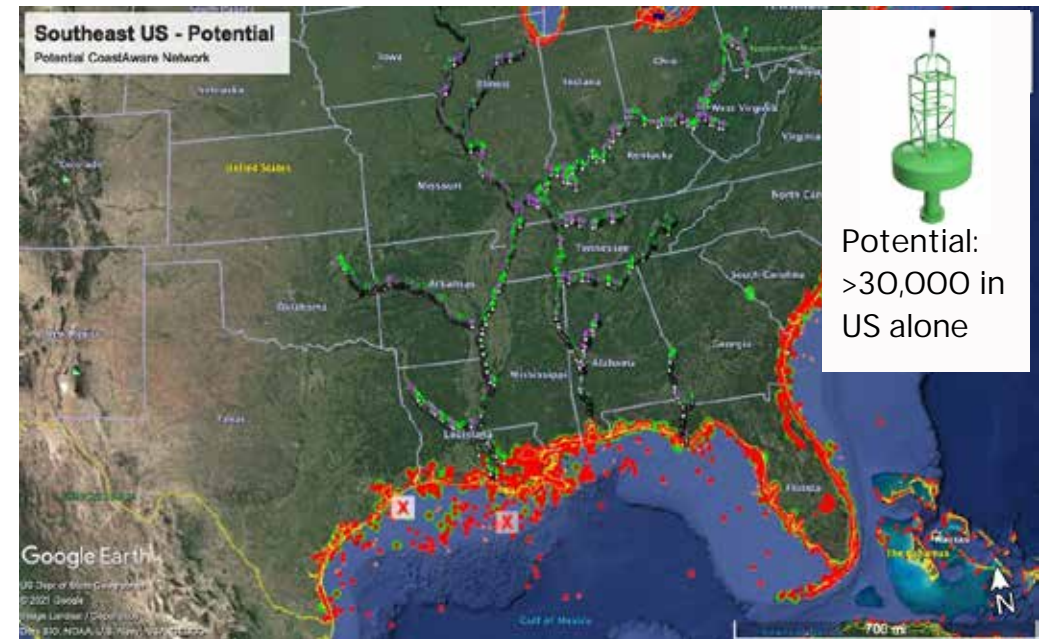


SOLUTION:

Every float in the world should be a real-time data station



Now with Legacy Tech



Our Vision



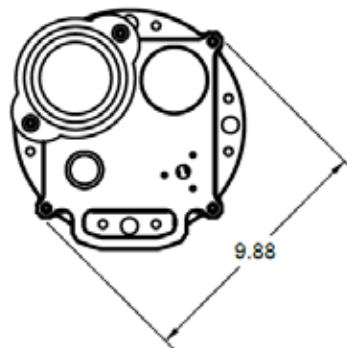
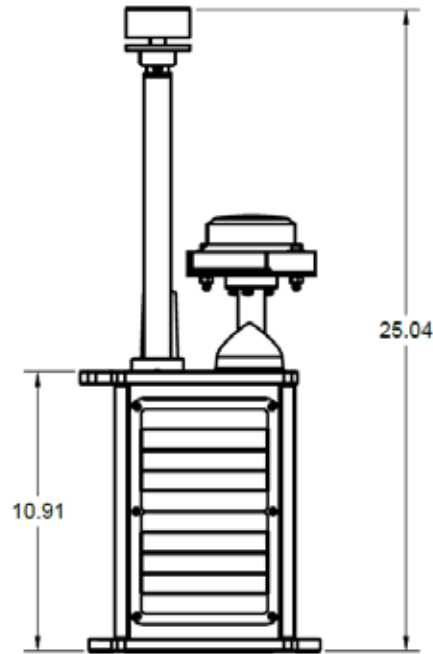
Why?



Why?







CoastScout™

- 15min updates
- Cell (LTE), + Satellite backup
- Wave: Directional using GPS, IMU fused for wave measurement
- Wind: Ultrasonic sensor (Speed, gust, direction)
- Camera: 360degree
- Solar powered, self contained
- 4 bolt mounting using std. pattern
- MIL SPEC Shock & Vibration tolerant
- Uses QARTOD - NOAA standard QA/QC
- US Patent Pending



MarineLabs



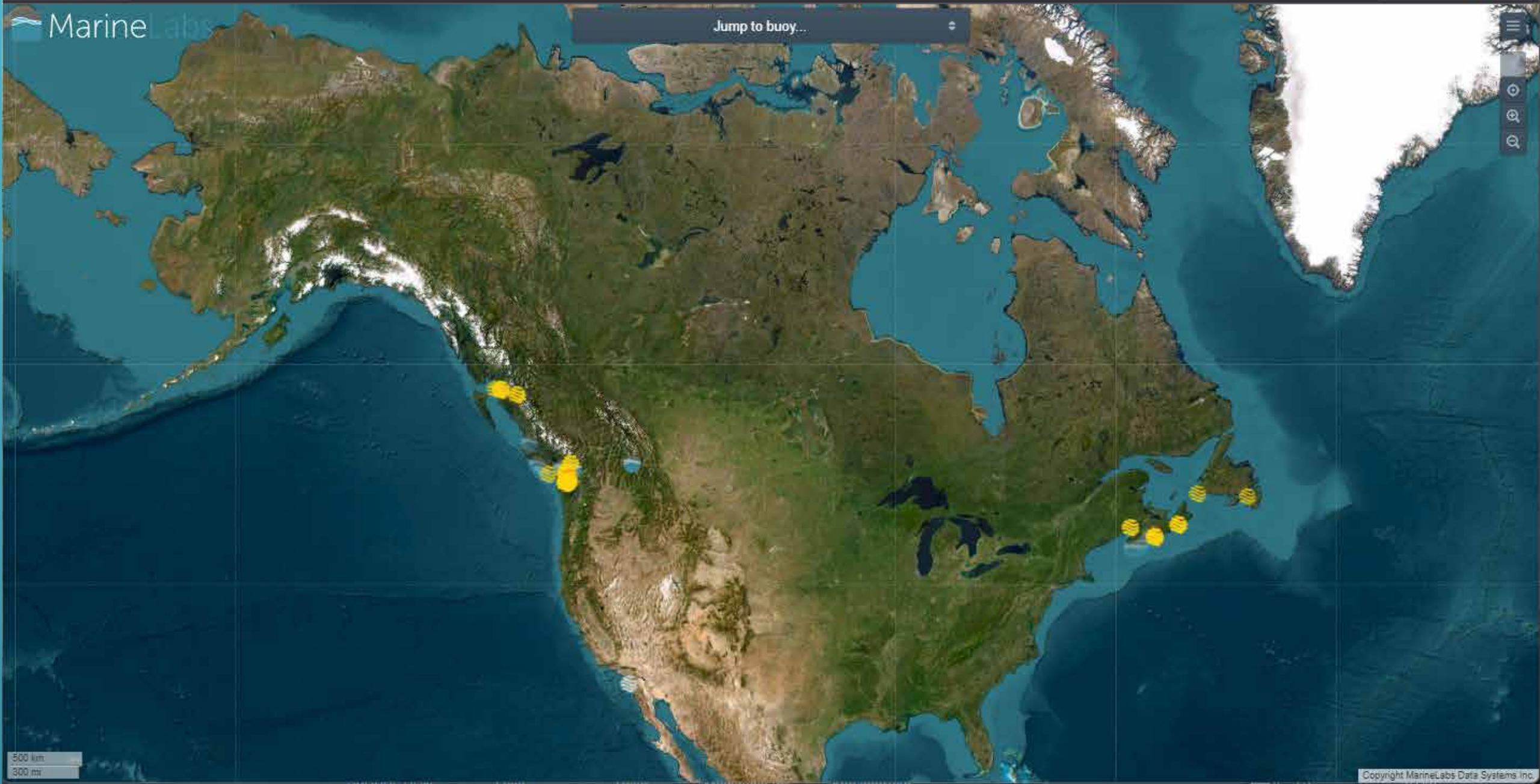


CoastAware™

The world's highest resolution, persistent, real-time weather data



Jump to buoy...



500 km
300 mi

HOW DOES IT WORK:

Subscription based service

- MarineLabs owns and operates the hardware
- Subscriptions to Port/Pilots/Industry
- Data access by phone, browser, API

Why do Ports Care?

1. Safety & Efficiency
 2. Tailored to Port
 3. Security
 4. Climate resilience
- 

Safety & Efficiency

- Handle larger ships in tight weather margins
- Reduce unforeseen weather delays and cancellations
- Incident/Accident avoidance

The background of the slide is a dark, low-key photograph of a large cargo ship. The ship's hull is visible, with the letters 'USCO' printed in large, dark characters. The ship is moving through the water, and the overall scene is dimly lit, emphasizing the industrial and maritime theme.

Tailored to the Port

- Fill gaps in existing weather data
- More frequent,
- More accurate
- More reliable

Reliability in Numbers

With a single data buoy



With MarineLabs



Reliability in Numbers

Data void



Still reliable data





Security

- BuoyCam
- Vessel wake detection



Buoy Cam

- 360degree view every 15min
- Weather context for Pilots
- Visibility information
- Security monitoring applications

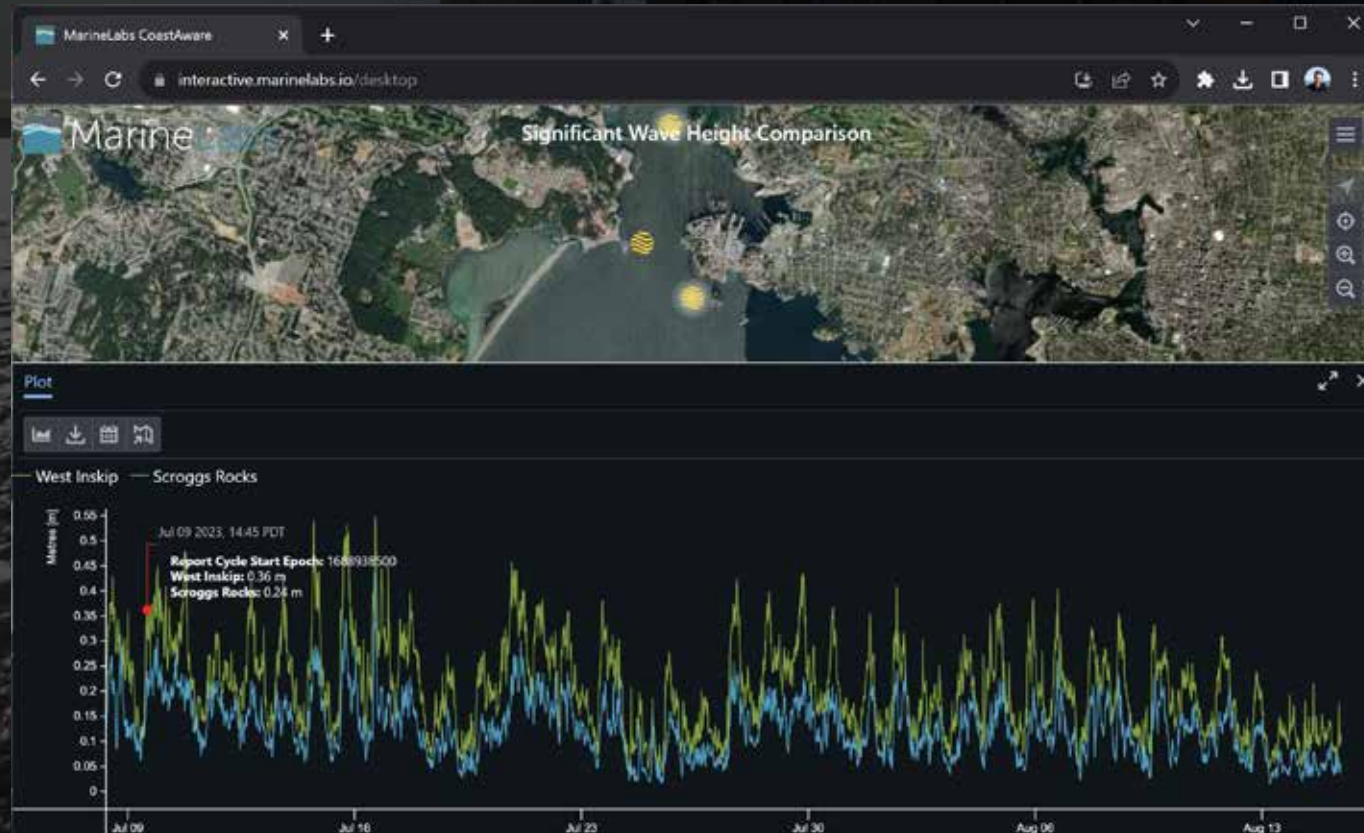


Buoy Cam

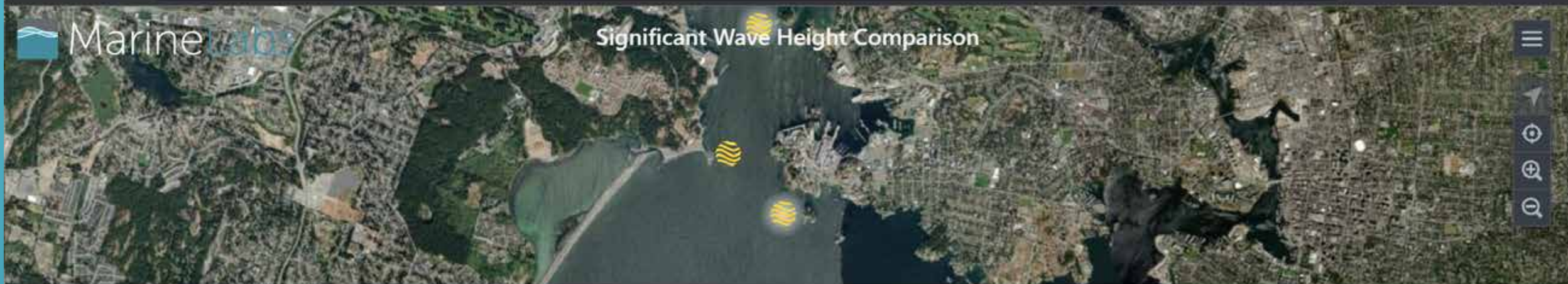
- 360degree view every 15min
- Weather context for Pilots
- Visibility information
- Security monitoring applications

Climate resilience

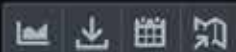
- Long term data feeds directly into port and harbor design



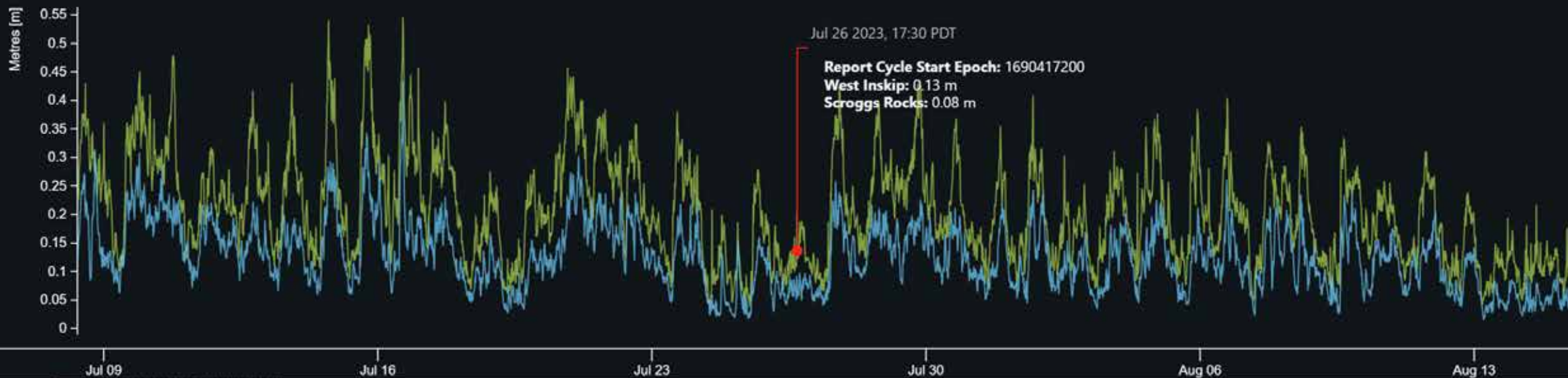
Significant Wave Height Comparison



Plot



West Inskip — Scroggs Rocks





Brent Baxter
Harbour Master
Prince Rupert Port Authority

"We simply wouldn't be able to smoothly support the new class of ships without MarineLabs data."



Adam Parsons
Director, Marine Operations and
Harbour Master
Port of Halifax

"....MarineLabs provide all of us working in the marine environment with information that will ultimately lead to safer outcomes for all involved."



Summary

- We bring real-time data as service
- Making ports safer, greener and more climate resilient



MarineLabs

REAL-TIME COASTAL INTELLIGENCE

Scott.beatty@marinelabs.io