WebCAT Tools & Data Management
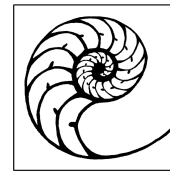
Dave Foster

Axiom Data Science
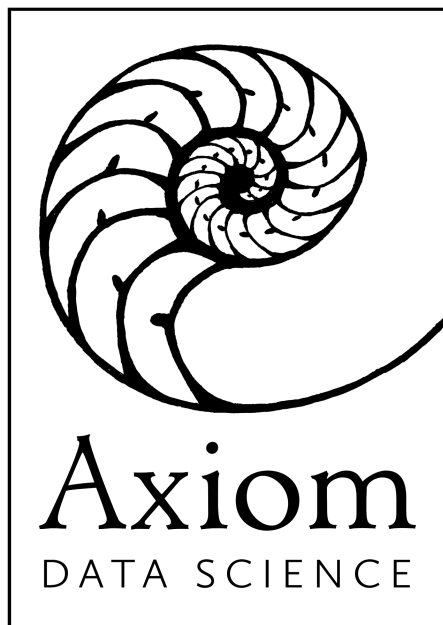
dave@axiomdatascience.com

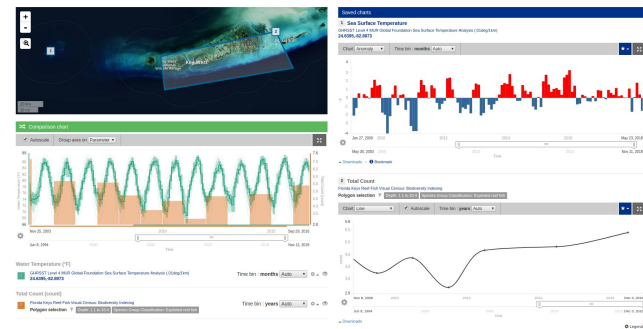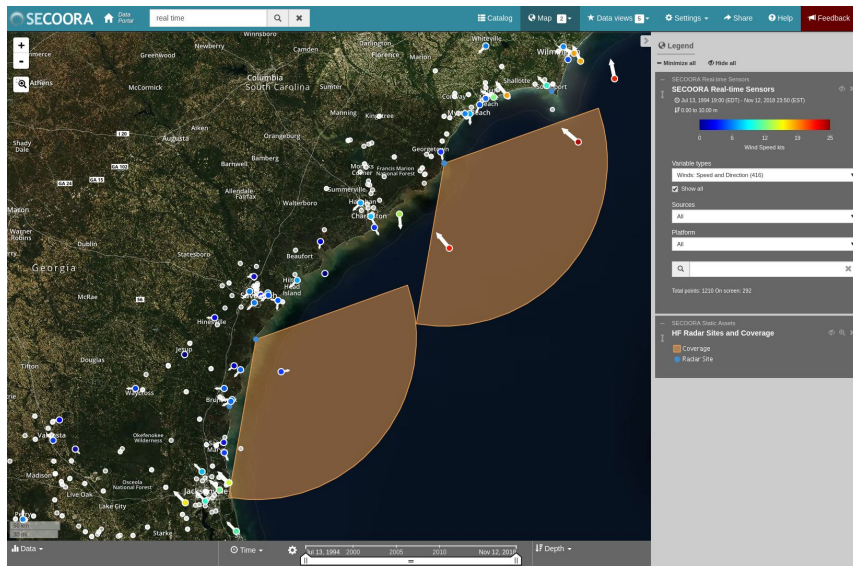🕐 **November 14 - 15, 2018**   📍 **Charleston, SC**

Company Background

- Founded in 2006

- 20 employees

- Offices in AK, OR and RI

- Mission driven: Build capabilities which accelerate the synthesis and re-use of earth science data

- Federal Partners: NSF, NOAA, USGS, BOEM, NASA, FWS, DARPA, ONR

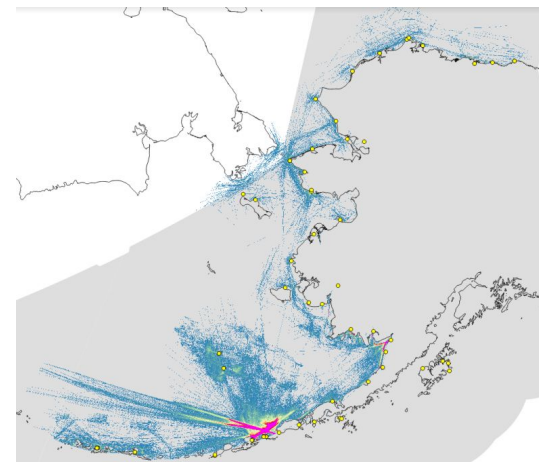- Other Partners: MBARI, Shell, UAF, UAA, Carnival
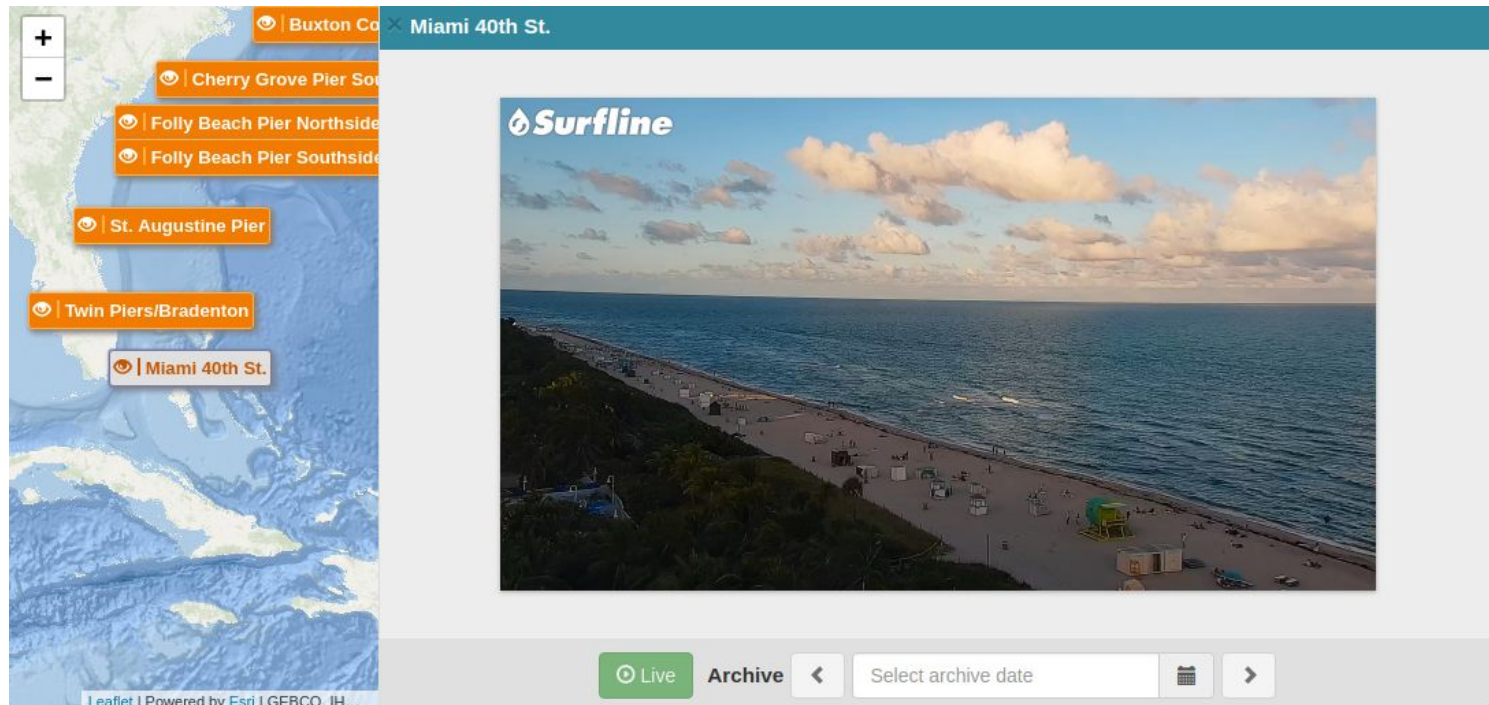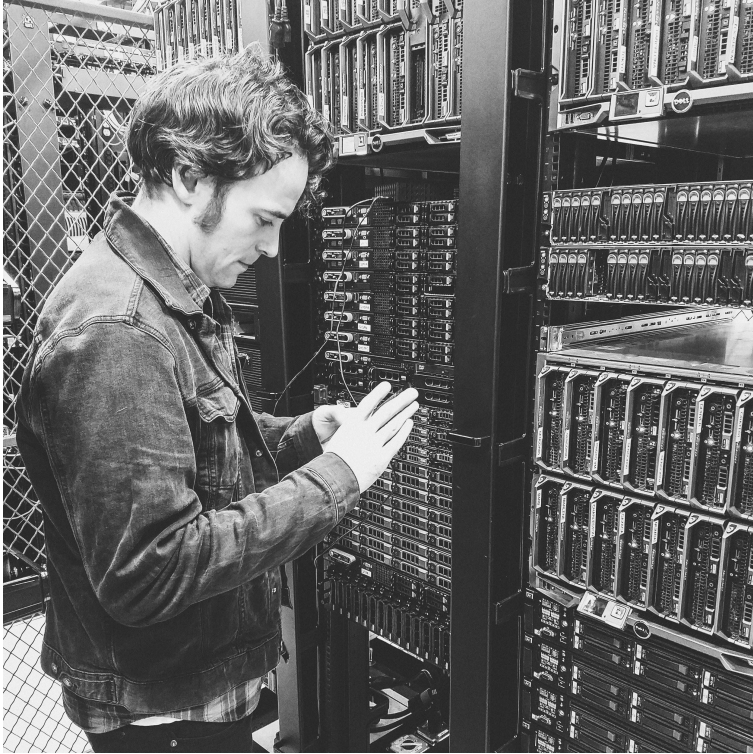
Our Work

WebCAT Interface

secoora.org/webcat

Data Infrastructure

Data Infrastructure

~5,000 processor cores

~1.5 petabytes of functional storage/5 petabytes of actual storage (~1,500 hard drives)

Level 2 Fat Tree Infiniband Network, 40 Gb/Sec node to node). 240 Gb/Sec cluster to cluster

Software Infrastructure

System for ingesting and standardizing remote data to Axiom infrastructure

- ~100 gridded products
    - forecasts, satellite, etc
- ~900 moving platforms
    - gliders, animals, cruises
- 8 video cameras
- Sensors:
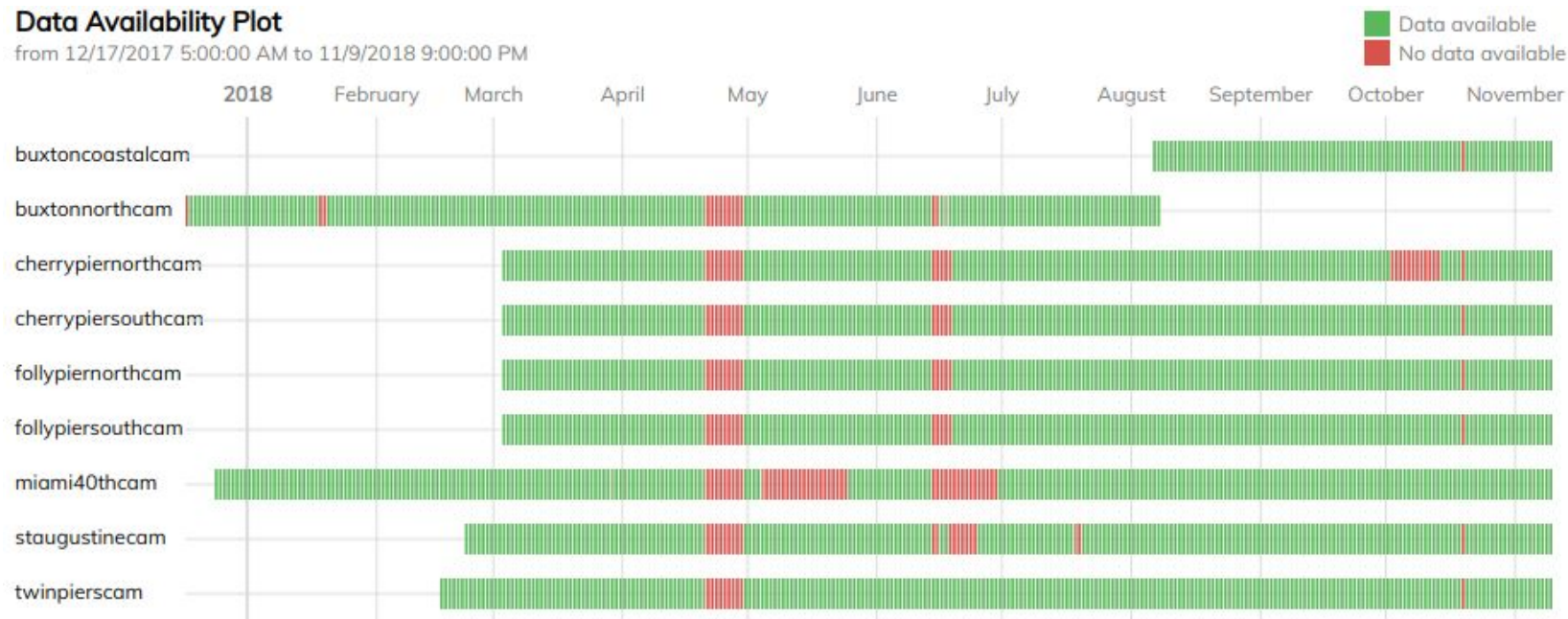   - 10 sources, 44 stations (& growing!)

WebCAT:

Daily, two days back for a full day

Weekly, backfill the previous week

packrat ⛨ Internal ⚖ Add license

Temporal Coverage

webcat-video.axds.co/status

www.secoora.org/webcat