CI DATA Availability, Management & Education

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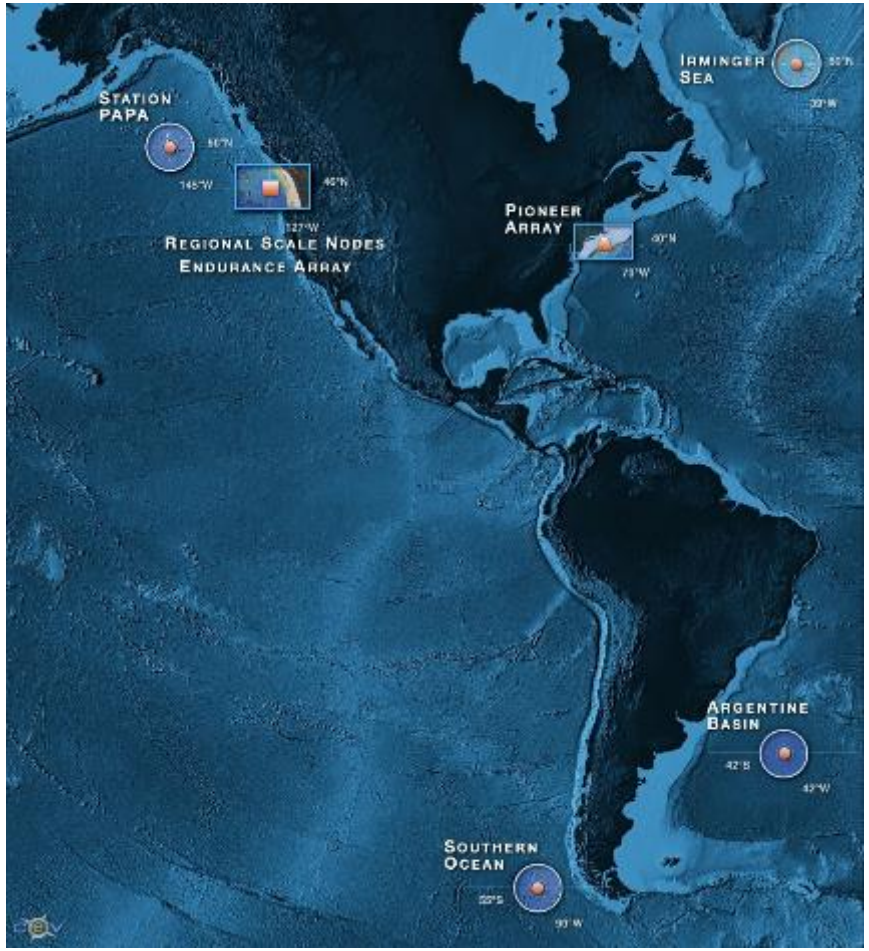
Overview

1. Team Structure & Responsibilities
2. Data Flow & Products
3. Data Review
4. Communications
5. Improvements
6. Conclusions
   a) A large amount of high value data has been and is being collected
   b) Data review is finally our primary focus, given maturation of the system
   c) Data team accelerating RIC review via development of specialized tools
   d) Short-term, medium-term, and long-term goals for improving data quality and delivery
   e) OOI is providing a curated, consistent data system that is delivering data and metadata to the community

OOI By the Numbers



7 Arrays

57 Stable Platforms
Moorings, Profilers, Nodes

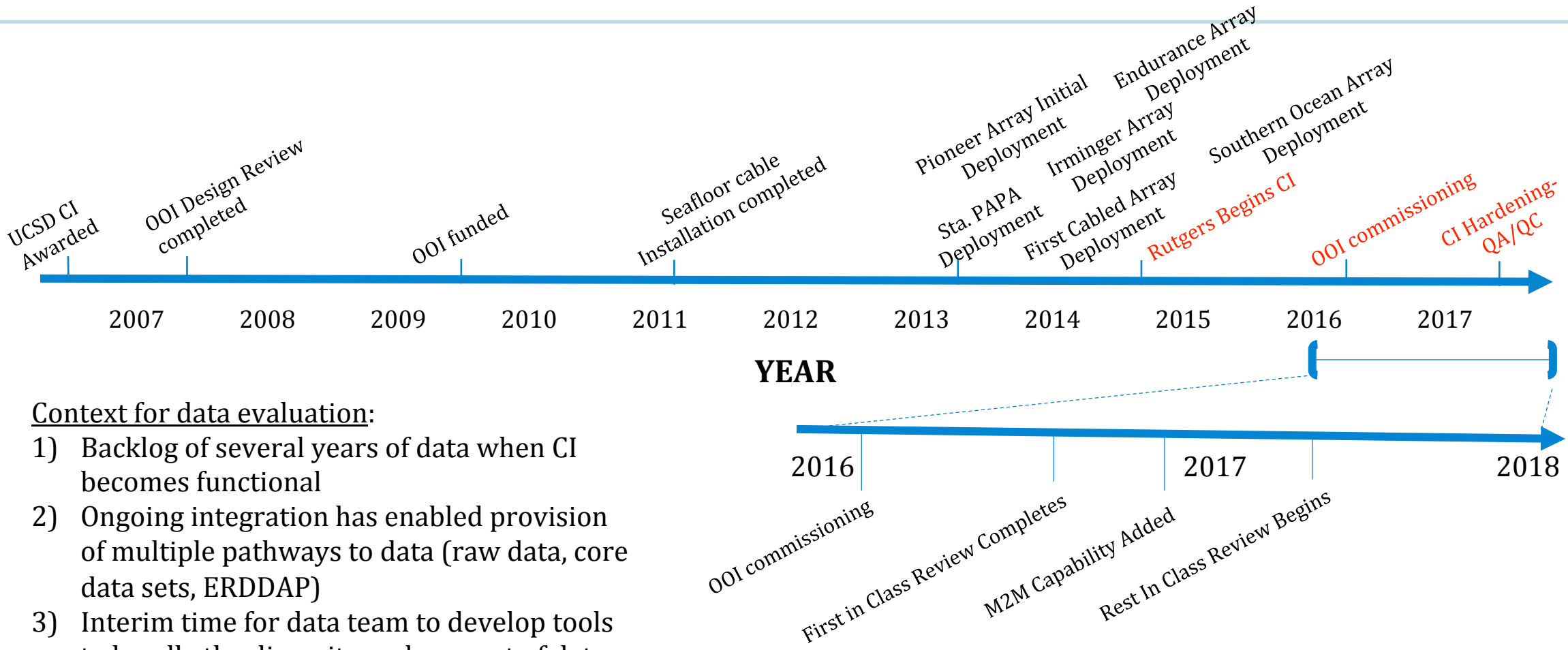
31 Mobile Assets
Gliders, AUVs

1227 Instruments (~850 deployed)

>2500 Science Data Products

>100K Science/Engineering Data Products

Timeline Context



<u>Context for data evaluation</u>:

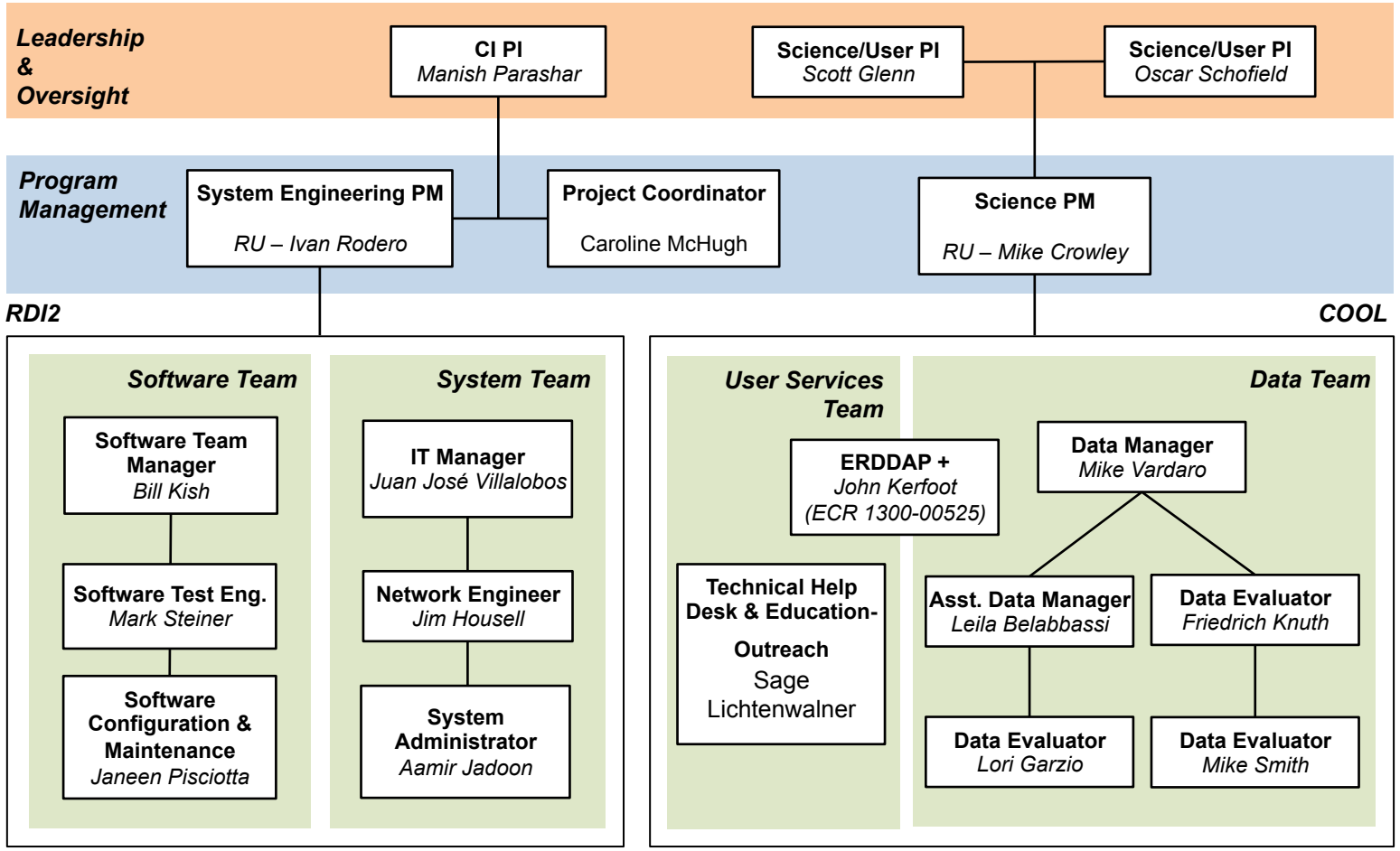
1) Backlog of several years of data when CI becomes functional
2) Ongoing integration has enabled provision of multiple pathways to data (raw data, core data sets, ERDDAP)
3) Interim time for data team to develop tools to handle the diversity and amount of data

Rutgers CI Team

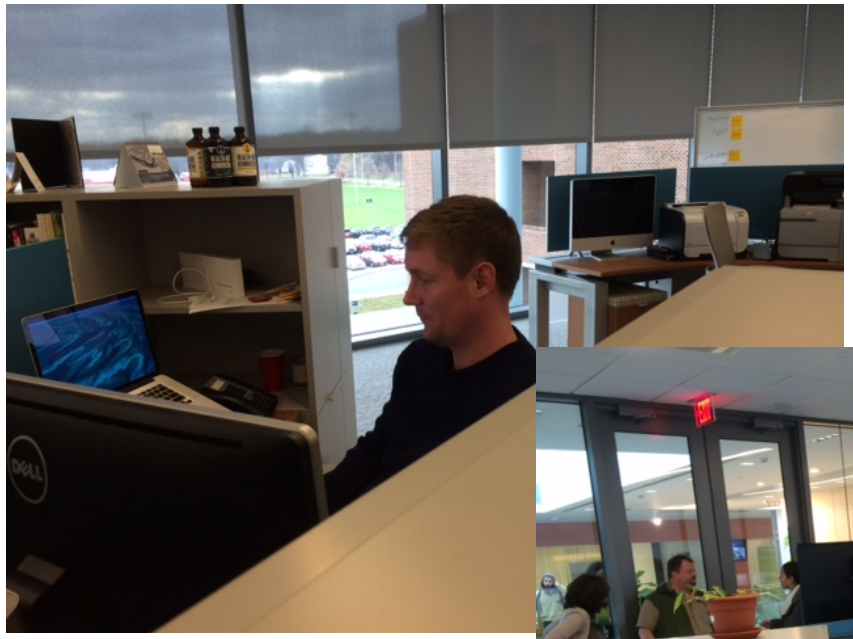
Leadership & Oversight: 0 FTE

OOI Management: 1.0 FTE *(ECR 1300-00525)*

OOI Operations: 12.5 FTEs



Day in the life of an OOI data evaluator



- Evaluator is assigned a specific array and works closely with the MIOs
- Range of expertise (biology, physics, geophysics)
- Data community including collocated non-OOI data experts
- Development of open-access tools to visualize and synthesize the data
- Developing inputs for automated QC
- Quick looks and deep data dives, updating OOINet asset sheets
- Interactions within team, with MIOs, with users & students, and specific SMEs
- Full-time effort is required

User Support and Outreach

- Primary point of contact for software inquiries and general OOI questions from end users, including researchers, scientists, marine operators, educators, and students
- Provides technical support on the software and user interface, and produces tutorial videos and text
- Works with software developers to resolve user issues with the system
- Maintain oceanobservatories.org, EPE web sites, and QC Database, and moderate the OOI User Forum
- Supports Rest in Class data reviews

Why Cluster and Co-locate Data Team?

- Allows for local management of team and consistent, coordinated efforts **(Direct responsibility; prompt action)**
- Enables different disciplines to work together **(Pathfinder for other large programs)**
- Promotes economies of scale, implementation of fixes across the entire program, and improved standardization across the MIOs **(Cost savings)**
- Fosters cross-fertilization between arrays & between federal agencies **(Leveraging)**
- Accelerates the iterative fixes/improvements within the program **(Improved efficiencies)**
- Engages students across the University in crowd sourcing support activities **(Grows a new generation)**