

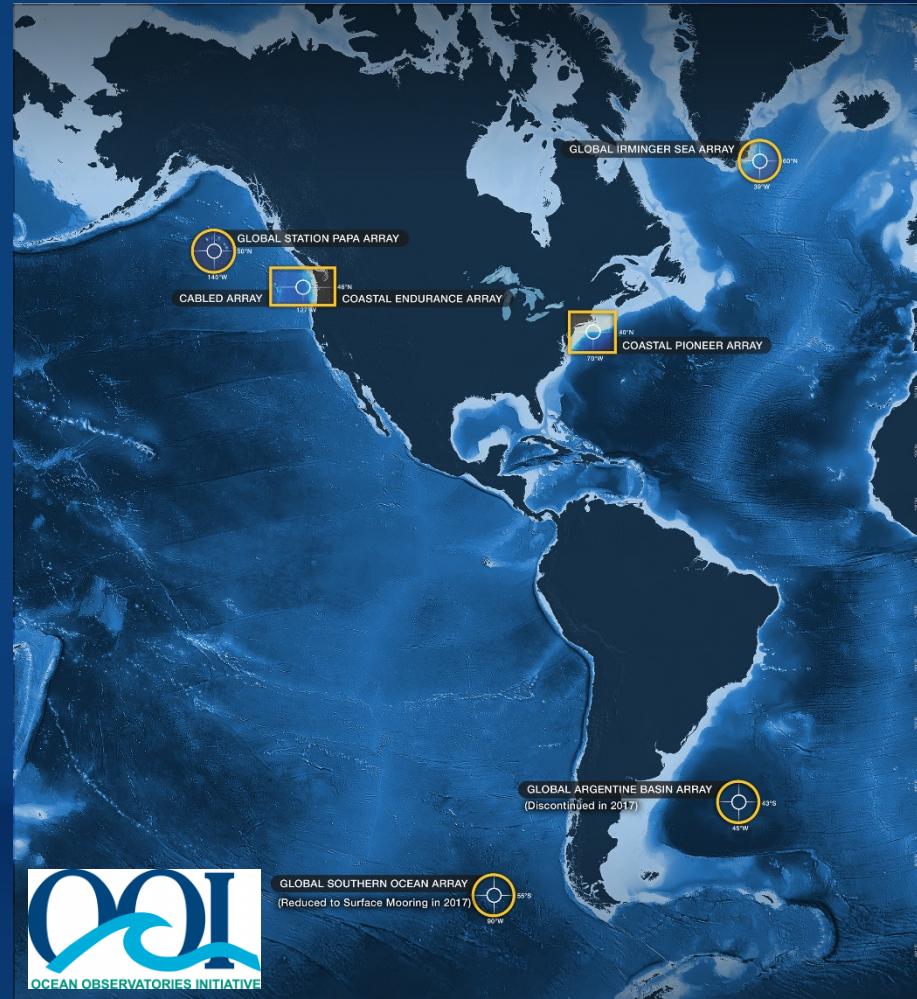
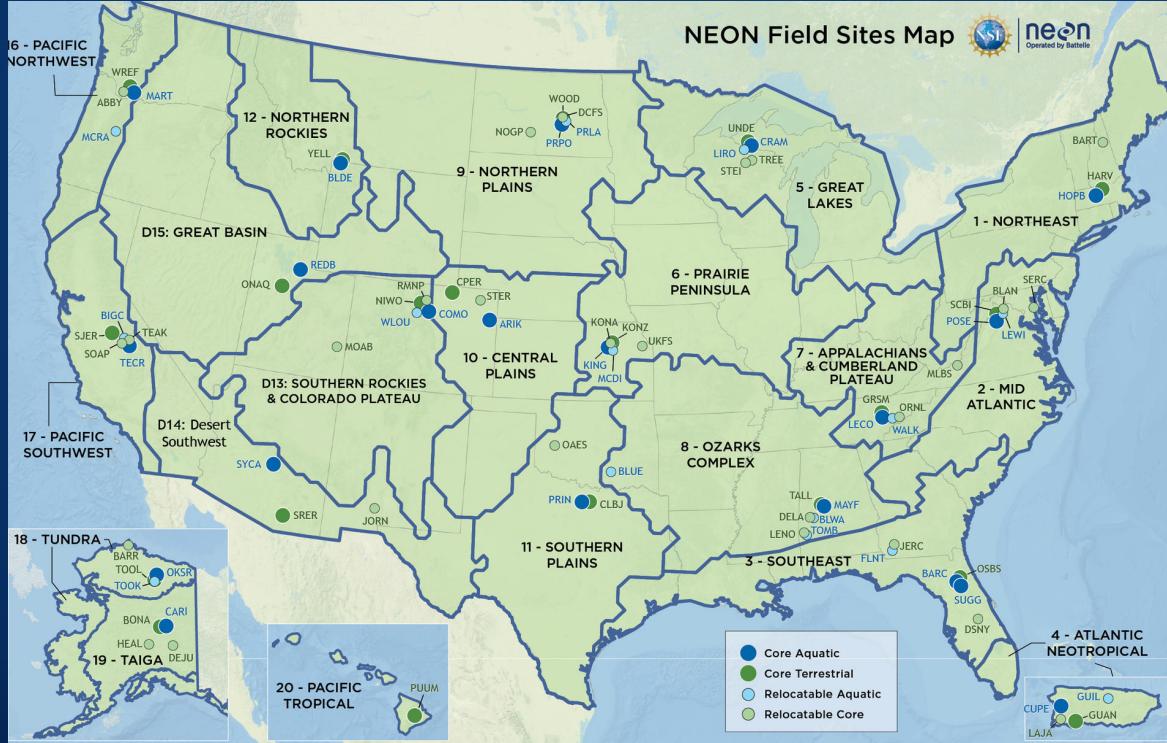
Building LF Cyberinfrastructure Communities to Advance the Endless Frontier



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Investing in Big Data at Large Scales



NSF's Large Facilities

- Provide shared-use infrastructure, instrumentation, equipment and data
- Accessible to a broad community of researchers and/or educators



What are the CI Challenges?

- Very large and diverse data sets
- Housed at separate facilities
- Need CI that is interoperable across investments



Starting Conversations



- Facility-led community engagement
- Sharing experiences through workshops and meetings
- Bringing together expert advisory groups from different facilities, disciplines

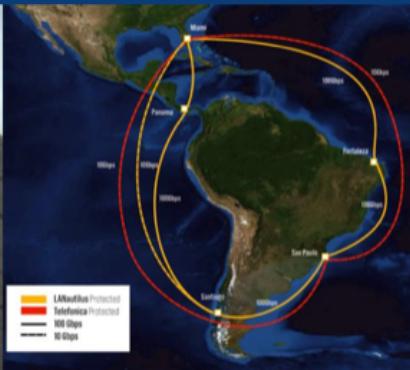
Connecting Data Streams



- Facilities need to go beyond operating in parallel
- Need to connect diverse investments (beyond NSF-funded facilities)

Developing LF CI Standard Principles

- 2017 Large Facilities Cyberinfrastructure Workshop: There is a need for close interactions, collaborations and sharing across LF and CI communities
- 2018-2020 – Cyberinfrastructure Center of Excellence Pilot



Areas of Future Opportunity

- Earth systems predictability
- Ecological forecasting



Thank you!

