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INITIATIVE

CI and Data Delivery Update

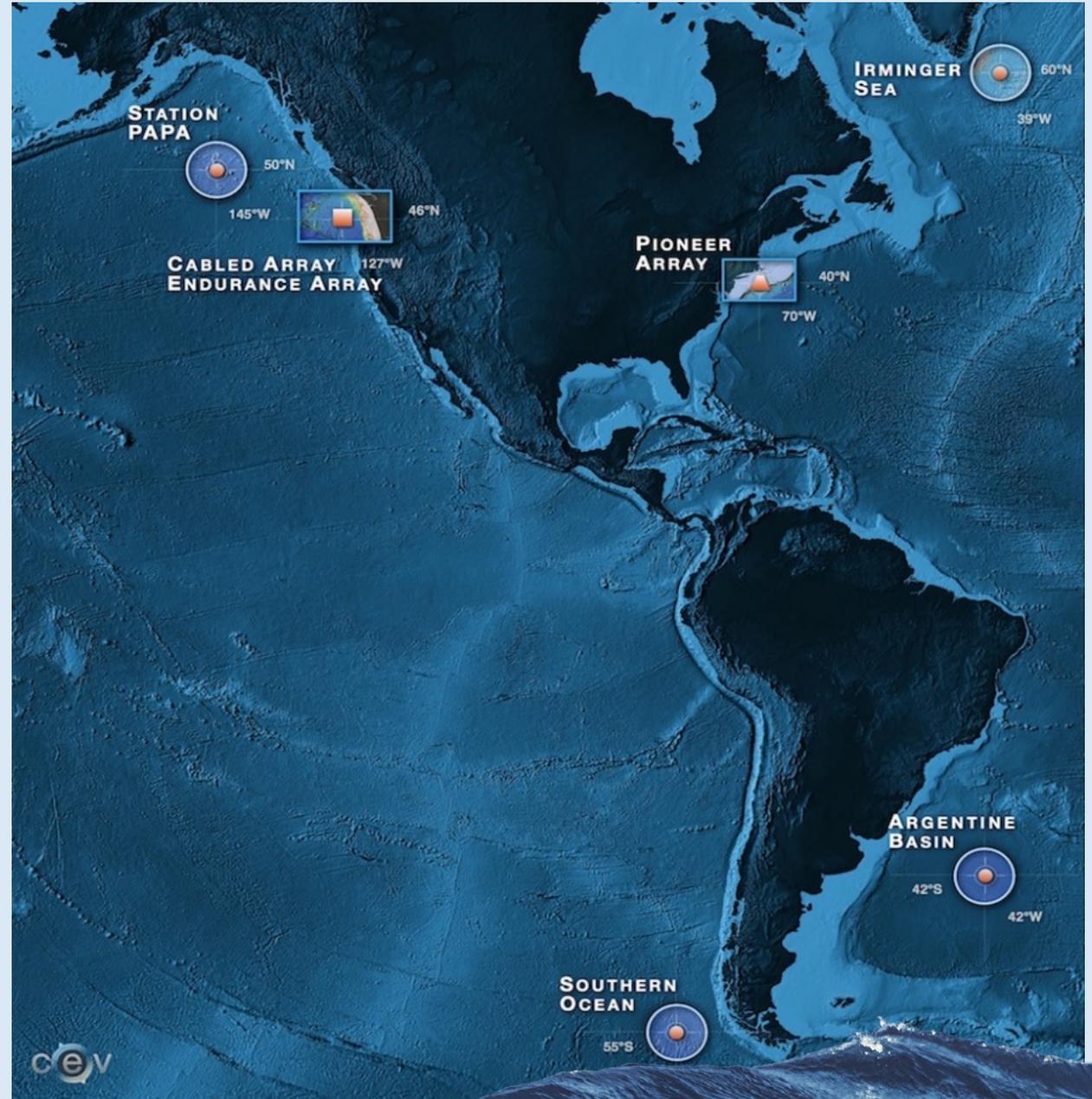
Wednesday, May 8th, 2024

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Senior Manager of Cyberinfrastructure



Agenda

- PYVI Progress to date
- Questions



PYVI Work Highlights

- ✓ Recruit Senior Software Engineer
- Recruit Chief Security Officer – physical or virtual TBD
 - Engaged with OmniSOC – hire will happen after engagement
- QA/QC
 - ✓ Continue to work Data Quality and FAIR Redmine tickets
 - Develop data quality tests based on MIO requirements (e.g. gap and timing)
 - Build data quality report
 - In progress - 50% complete
 - Design QA/QC dashboard as one stop portal for test support
- Continue to support pre-load changes in support of CF compliance
 - Preload changes have gone in but work remains for this effort
- Python 2 – Python 3 upgrade (multi year project)
 - Stream Engine and ION functions
 - In progress – 80% done
 - Ingest engine and Parsers
 - Port Agents (MI Instrument)
- Implement new Document Management tool
 - In progress



PYVI Work Highlights - continued

- Data Center Technical refresh
 - ✓ Databases
 - Upgrade of uFrame software stack
 - Some libraries have been upgraded but not the full stack
- ☐ System Dashboard – Beta
 - Data Explorer content with last loaded information
 - Data ingestion status
 - Report of data location
 - Data retrieval queues
 - System messages
- ✓ Support of Pioneer move
 - New parsers
 - Update preload database
 - Migration to Data Explorer
- Digital Object Identifiers - meta data review completed
 - ☐ Build out oceanobservatories.org support pages
 - ☐ Build look up function for DOI/PID combination
 - ☐ Implement PID logic (PYVII finish)
- Software administration tuning
 - In progress



PYVI Work Highlights - continued

- Data Explorer
 - ❑ Display DOIs
 - ❑ Integrate HYDBB data and video into search and visualization
 - ✓ Annotation service
 - Operational and performance tuning
 - Ongoing
 - Continue to implement improvements for high resolution data sets
 - Ongoing
 - ✓ QC results visualization with HITL annotations
 - Streamline system metadata management
 - Ongoing
 - Integration of JupyterHub
 - Links have been added to front page
 - ❑ Research visualization of full-resolution three-dimensional data sets
 - Cross training of resources across CI
 - Progress made
 - ✓ Support Data Center server virtualization



PYVI Work Highlights - continued

- Strategic
 - Start research into data download redesign (replacement of ERDDAP) – multi year project
 - Some progress made
 - User interface to manage data reloads into Data Explorer
 - Continue cloud research
 - Consider Jupyter HUB a private cloud





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Questions?

