

# 2019 Release Notes

This page contains release notes from 2019, primarily for Oceans 2.0 / DMAS, as well as any applications created/maintained by the ONC software development group, including mobile Apps and desktop/PC applications. In progress project status may be presented as well.

## December 3, 2019

Major release for Oceans 2.0.

### Instruments

- AIS parsing: design and investigation
- Sandbox improvements: improvements to support user's code, more usability issues
- Improvements the Community Fishers / Citizen Scientist data acquisition Android App, including app update system

### Community Fishers

- Integration testing and fixes

### Automated Testing

- Automated task testing framework design
- Automated webservice testing expanded coverage and test improvements
- Continuous deployment: process changes for requirements and design reviews (in-progress)

### Data Products

- New data product for ASL echosounders: a CSV format that's compatible with EchoView data viewing and analysis software
- New data product options for ASL echosounders: Target Strength now available for all formats, ZAP noise reduction now optional (matches ASL processing)
- A weekly long-term spectral average plot is now available for all hydrophones
- Change to support automated State of Ocean plot generation (all plots are now up to date)
- Bug fixes in these areas: CODAR, ice buoy, rotary sonar

### Maintenance and Production Developer

- Replace manual search templates for State of Ocean / Environment plots and products with an automated job (deployed last month, now active)
- System console improvements: version/revision/deployment date now displayed
- Various other bug fixes and small projects

### SeaTubeV3 - CANARIE & NOAA & ONC

- User interface and styling consistency for SeaTube V3
- Bug fixes

### Dashboards - CANARIE

- Automated testing for sharing and video player
- Live video

### MINTED - CANARIE

- UI for sitedevicesubsets and siteDevice (in-progress)
- Requirements and design for versioning data, including updating DOIs (in-progress)
- Citation logic and metadata improvements (in-progress)

### CIOOS / ERDDAP

- Mobile scalar data is now available on ERDDAP
- Saanich inlet data on CIOOS metadata server for demo only

**Tickets Released:** Oceans 2.0: [19.11.000](#) (accessible to internal users only). Total: 100.

## November 7, 2019

Major release for Oceans 2.0.

### Instruments

- Fixed an issue blocking a new calibration formula
- Camera system driver improved

- Sandbox usability update complete. Starting further improvements to support user's code.
- Improvements the Community Fishers / Citizen Scientist data acquisition Android App

## Community Fishers

- Handling different instruments, reliability, bugs and refactoring
- On-demand .cor file data product product

## Automated Testing

- Automated UI testing tool improvements (with Selenium)
- Automated UI testing expanded coverage
- Continuous deployment: MATLAB migration from SVN to Git repository, new review process (in-progress)

## Data Products

- CODAR quality controlled surface currents data product revised, released and activated (available in all apps, including [Data Preview](#)), changes include:  
made grid files available in Data Search, revamped MAT file structure, updated plotting, additional GDOP testing, bug fixes, automated testing
- Bug fixes: RDI netCDF products on mobile devices, edge case on ASL echosounders and more
- Migrated code repository to Git/BitBucket, updated/modernized pathing
- Maintain and expand search automation, particularly in support of Git migration and FGDC deprecation

## Maintenance and Production Developer

- Fixes to ONC websites, including converting remaining http (non-secure) pages and links
- FGDC metadata report deprecated from Data Search
- Various other bug fixes and small projects

## SeaTubeV3 - CANARIE & NOAA & ONC

- Continuing fixes and various improvements for V3
- User interface panel designs and usability improvements

## Dashboards - CANARIE

- Completed advanced sharing screen & permissions
- Video component improvements (in-progress)

## MINTED - CANARIE

- UI for sitedevicesubsets and siteDevice (in-progress)
- Requirements for versioning data (in-progress)

## CIOOS / ERDDAP

- In progress

**Tickets Released:** Oceans 2.0: [19.10.000](#) (accessible to internal users only). Total: 95.

## October 3, 2019

Major release for Oceans 2.0.

## Instruments

- Didson sonar driver
- UMN sampler parser / driver fixes
- Sandbox update (in-progress)
- Finalize EEW PNSN integration

## Community Fishers

- Handling different instruments, reliability, bugs and refactoring

## Automated Testing

- Automated UI testing tool improvements (with Selenium)
- Automated UI testing expanded coverage
- Continuous deployment (in-progress)

## Data Products

- CODAR quality controlled surface currents data product deployed (not yet available to public - seeking internal user feedback)
- Bug fixes

### **Maintenance and Production Developer**

- Project reporting scheduled job for World Data System International Technology Office
- Improved loading indicators
- New system console available
- Various other bug fixes

### **SeaTubeV3 - CANARIE & NOAA & ONC**

- Big push to finish functional requirements for NOAA
- Useability testing and improvements (in-progress)
- Click on annotation marker brings up related information
- Bug fixes

### **Dashboards - CANARIE**

- Advanced sharing screen & permissions

### **MINTED - CANARIE**

- UI for sitedevicesubsets (in-progress)
- Requirements gathering (in-progress)

### **CIOOS / ERDDAP**

- Upgrade ERDDAP server version (to be deployed after release)
- expand coverage, include mobile sensors/device and other complex data sets (in-progress)

**Tickets Released:** Oceans 2.0: [19.09.000](#) (accessible to internal users only). Total: 66.

## **September 4, 2019**

Major release for Oceans 2.0.

### **Instruments**

- Didson sonar driver (in-progress)
- Sandbox update (in-progress)
- Community Fishers: updates to handle AML CTDs

### **Automated Testing**

- Automated UI testing tool improvements (with Selenium)
- Expanded automation UI testing coverage
- Progress on moving toward continuous deployment

### **Data Products**

- CODAR data products (in-progress)
- Bug fixes

### **Maintenance and Production Developer**

- Add URLs to device work flow
- Various other bug fixes

### **Complex Data Viewer / Hydrophone**

- Gathering requirements for Aquadopp and other complex data sets

### **SeaTubeV3 - CANARIE & NOAA & ONC**

- Annotation export, refactor to use taxon-based system
- Performance improvements
- Digital Fishers UI improvements
- Bug fixes

### **Dashboards - CANARIE**

- bug fixes

## MINTED - CANARIE

- Requirements and development ongoing

**Tickets Released:** Oceans 2.0: [19.08.000](#) (accessible to internal users only). Total: 60.

## Aug 7, 2019

Major release for Oceans 2.0. HydroCal 19.06.000 released on July 24th.

### Instruments

- Didson sonar driver (in-progress)
- Geographic status map for EEW
- Sandbox update is half finished: usability and task machine integration improvements
- Community Fishers: minor fixes to data pipeline

### Automated Testing

- Automated UI testing tool improvements (with Selenium)
- All developers spent time adding automated UI tests to replace their manual regression tests. 52% complete, aim to finish by September.
- Oceans-Next PROD server online, pages embedded in Oceans 2.0 (these pages are in beta, not yet available to public)
- Progress on moving toward continuous deployment

### Data Products

- Major HydroCal update released (July 24th). Improved support for HF calibrations, specifically:
  - Handles start/stops/reloads of calibrations much better
  - Handles loading older versions of calibration data files and settings files
  - Added ability to recover badly synchronized data by cross-correlating to target tones
  - Improved spacing around plots
  - Various UI changes to display and interaction, including warnings for missing parameters that would caused calibrations to fail
  - Fixed cal sheet mis-alignment
  - Changed a number of defaults: source voltage ramp rates, sample rates
  - Made more parameters configurable, including the low voltage alert
  - Changed filename and date stamping to the date of the data acquisition instead of file creation
  - Improved re/post-processing of the data, plus added the ability (optionally) to reprocess the reference data, including changing some parameters
  - Add quality metrics: correlation and signal to noise ratios - this allows users to compare multiple runs and pick the best result
- CODAR data products (started)
- Bug fixes

### Maintenance and Production Developer

- Fixed Network Console load speed
- Support fault reset functionality on ONC "miniJB" type junction boxes
- Web service improvements and documentation (getByDevice method in the ScalarData service)
- Various other bug fixes

### Complex Data Viewer / Hydrophone

- Working on complex data viewer front-end and making additional option sets available for spectrogram product generation in the back-end

### SeaTubeV3 - CANARIE & NOAA & ONC

- All SeaTube V2 functionality in V3 (on Oceans-Next), plus new features
- Working on completing functions, beginning maintenance phase (after successful demo), prep for ONC and NOAA new requirements

### Dashboards - CANARIE

- clean up, fixes (in-progress)
- demo, development phase completion

## MINTED - CANARIE

- Instrument footprints
- Scoping, requirements and development ongoing

**Tickets Released:** Oceans 2.0: [19.07.000](#) (accessible to internal users only). Total: 79.

HydroCal: [HC.19.06.000](#) (link accessible to internal users only). Total: 22

## July 4, 2019

Major release.

### Instruments

- WERA Integration (added support for USORT files)
- Created a new webservice to access RDI ADCP data with averaging from specific bins. This is to provide ocean current data to Port Metro Vancouver.
- Community Fishers data access project: clean up and fixes
- Small driver changes

### Automated Testing

- Automated UI testing implemented with Selenium
- All developers spent time adding automated UI tests to replace their manual regression tests
- Develop infrastructure for Oceans Next webserver
- Automated DAF testing final demo of phase 1

### Data Products

- Major HydroCal update to support HF hydrophone field testing - separate release coming later in July
- RDI ADCP minor fix to comments and NaN'ing in specific scenarios

### Maintenance and Production Developer

- RDI ADCP complex parser: added screening, fixed bugs and made it match Matlab data products and manufacturer's processing suite
- JIRA service desk is now available in Oceans 2.0
- Web service improvements and documentation
- Various other bug fixes

### Complex Data Viewer / Hydrophone

- Requirements and implementation (in-progress)

### SeaTubeV3 - CANARIE & NOAA & ONC

- Primary development phase for CANARIE is ending, transition to maintenance and minor feature updates (NOAA and ONC development is ongoing)
- Completion of features, improvements and bug fixes
- Continuing moving features into SeaTubeV3 on Ocean Next webserver, to replace SeaTube Pro (current public version) and SeaTubeV2 (NOAA variant)
- Demo prep

### Dashboards - CANARIE

- Primary development phase is ending, making dashboards webserver (Oceans Next) available in production
- clean up, fixes (in-progress)
- Demo prep

### MINTED - CANARIE

- Added concepts of batched commits and data areas to the database (in-progress)

**Tickets Released:** Oceans 2.0: [19.06.000](#) (accessible to internal users only). Total: 138.

## June 4, 2019

Major release.

### Instruments

- WERA Integration (FTP job and file archiving)
- Community Fishers Android app: supports USB and RBR devices
- Community Fishers data access project: web portal ready, working on data pipeline
- Phytoplankton sampler drivers

## Web Presence

- Website fully online for World Data System - International Technology Office

## Automated Testing

- UI improvements
- Live automatic DAF testing (nearly complete)

## Data Products

- WERA animated GIF data products available in Data Search and Data Preview

## Maintenance

- Internal maintenance for QA and build systems
- Security improvements on device details page
- ONC web search ordered by date
- ONC staff photos all same size
- Various other bug fixes

## Complex Data Viewer / Hydrophone

- Project initiation

## SeaTubeV3 - CANARIE & NOAA

- Many components updated/modified in SeaTube V2 and copied to the new Oceans Next SeaTube (V3) (in-progress), including:
- Support for multiple user-configurable Digital Fishers campaigns
- Ocean Biogeographic Information System (OBIS) statistics on annotations
- Cruise Summary Reports (initial version)

## Dashboards - CANARIE

- Widgets and dashboards (in-progress)
- Standardized behaviour improved

## MINTED - CANARIE

- Working on services (in-progress)

**Tickets Released:** Oceans 2.0: [19.05.000](#) (accessible to internal users only). Total: 161.

## May 1, 2019

Major release.

## Instruments

- Declarative parsers: last test file integrated into declarative tests. Project complete.
- Community Fishers Android app: working on USB driver
- Community Fishers data access project: web portal ready, working on data pipeline
- New and modified drivers and parsers in support of maintenance cruises: chemical samplers, microscopes, RBR BPR and more.

## Web Presence

- Website for World Data System - International Technology Office
- Website for CIOOS, CKAN server (in-progress)

## Automated Testing

- Added testing history
- Live automatic DAF testing (in-progress)

## Maintenance

- System and status console pages ready in new front-end. Allows batching of various system commands from a UI: cache reloads in particular.
- Web service fixes to date ranges: documentation and vocabulary
- Improved speed for data product upload
- Many bugs fixed in search hydrophone page: data access violations, improper file downloads
- Various other bugs

## SeaTubeV3 - CANARIE

- Updates and features in initial release
- Updates to annotations, digital fishers
- Building components in new framework
- Bug fixes

## Dashboards - CANARIE

- More widgets in progress
- Creating pages

## MINTED - CANARIE

- Progress on assigning DOIs to datasets

**Tickets Released:** Oceans 2.0: [19.04.000](#) (accessible to internal users only). Total: 63.

## April 1, 2019

Major release.

### Instruments

- Declarative parsers done
- Community Fishers Android app: working on USB driver
- Community Fishers data access project: data model done, workflow design, geospatial areas defined, integration of data products and processing
- Driver and parser updates in support of upcoming field maintenance: SeaFET, STRAW driver & FTP online and more
- World magnetic model update
- Bug fixes for parsers found in DAF testing and by improved reprocessing automated testing

### Web Presence

- Two conference sites created in Liferay

### Automated Testing

- Improvements for reprocessing/data acquisition framework (DAF) automated testing
- Live automatic DAF testing: UI built, basic validation, checks on device attributes and topology, set up and removal of device metadata

### Maintenance

- Various bug fixes
- Archiver performance improved with efficient QAQC writing
- Back-end support for sending system commands in batches, front-end in progress
- Web service updates to unify the behaviour of dateTo parameters

### Earthquake Early Warning

- Small bug fixes

## SeaTubeV3 - CANARIE

- Design complete for SeaTubeV3
- Building components in new framework
- Changes for NOAA

## Dashboards - CANARIE

- More widgets
- Creating wrappers for base components

## MINTED - CANARIE

- Progress on the base level case

**Tickets Released:** Oceans 2.0: [19.03.000](#) (accessible to internal users only). Total: 97.

## March 5, 2019

Major release.

## Instruments

- Declarative parsers: mitigating test cases, adding documentation
- Community Fishers Android app: working on USB driver
- Community Fishers data products and portal project: data model design, workflow design
- STRAW (test neutrino detection project) virtual machine integration and driver
- Driver and parser fixes in support of upcoming field maintenance: mini-junction box and more
- Bug fixes for parsers found by improved reprocessing automated testing

## Web Presence

- Data Search "V2" released: Geospatial search and Data Search UI improvements final user testing, improvements
- Two conference sites, including a new simpler submission system

## Automated Testing

- Improvements for reprocessing/data acquisition framework (DAF) automated testing
- Progress on automating manual DAF testing

## Maintenance

- Various bug fixes
- Progress on improving archiving time
- Progress on metrics and event detection/reaction

## Data Products

- State of Ocean product updates
- Various bug fixes

## Earthquake Early Warning

- Data from PNSN (Pacific NorthWest Seismic Network) is on online and contributing
- Documentation

## SeaTubeV3 - CANARIE

- Design for mobile and desktop SeaTube

## Dashboards - CANARIE

- Mock-ups to stakeholders
- Building widget components

## MINTED - CANARIE

- Requisition DOI's for siteDevices

**Tickets Released:** Oceans 2.0: [19.02.000](#) (accessible to internal users only). Total: 54.

February 7, 2019

Major release.

## Instruments

- Declarative parsers nearly done, mitigating test cases, adding documentation
- Updates to Community Fishers Android app (bug fixes), working on RBR driver and parser
- Community Fishers data products and portal project: requirements complete, working on design

## Web Presence

- Geospatial search and Data Search UI improvements final round of testing
- Conference websites

## Automated Testing

- Improvements Data Search automation system
- Data Search automation coverage increased to > 90%, project complete.
- Progress on reprocessing automated testing, automated data acquisition framework testing

## Maintenance

- Good progress (10 tickets): improvements to back-end, particularly sites cache
- Progress on event monitoring and metrics for data acquisition framework



## Data Products

- State of Ocean data products updated to include pressure data and have consistent gap filling
- [SIDSSE Underwater Ultraviolet Raman Spectrometer \(UURS\) data products released](#)

## Earthquake Early Warning

- Integration of PNSN (Pacific NorthWest Seismic Network) data ready to switch on

## SeaTubeV3 - CANARIE

- Requirements complete, designs in progress
- Building page components

## Dashboards - CANARIE

- Progress on new front-end technologies and tools (liferay)
- Requirements and mock-ups with user feedback

## MINTED - CANARIE

- Investigation and requirements (no features)
- Workflows investigated

**Tickets Released:** Oceans 2.0: [19.01.000](#) (accessible to internal users only). Total: 134.

## January 8, 2019

Major release. Smaller than usual due to holiday break.

## Instruments

- Moved more parsers from java into declarative parsers, added more unit tests.
- Updates to sensor load system that handles variations within devicetypes for the declarative parsers.
- Adding declarative parsers to Community Fishers App
- Community Fishers data products and portal project initiation

## Web Presence

- Geospatial search and Data Search UI improvements (not yet publicly available)

## Automated Testing

- Improvements Data Search automation system
- Added test cases to Data Search automation (increased coverage metric from 40% to 58%, remaining cases are simple file products and scalar data products (tested elsewhere))

## Maintenance

- Various bug fixes, including but not limited to:
- Cache improvements
- Add more data acquisition metrics to Grafana, add configurations and work on reactions

## Data Products

- HydroCal software updated with new metadata fields (serial numbers), handling biased wav data, saturation detection, calibration m-file metadata improved, calibration m-files now produced by default.

## Earthquake Early Warning

- Progress on integration of PNSN (Pacific NorthWest Seismic Network) data

## SeaTubeV3 - CANARIE

- Investigation of new technologies and requirements (no features)
- Building page components

## Dashboards - CANARIE

- Investigation of new technologies and requirements (no features)

## MINTED - CANARIE

- Investigation and requirements (no features)

**Tickets Released:** Oceans 2.0: [18.12.000](#) (accessible to internal users only). Total: 47.

HydroCal App: [HC.18.12.000](#) (accessible to internal users only). Total: 1.