PO.DAAC Data Archival/Distribution Support of NASA Salinity

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NASA OSST Meeting

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2 Major Milestones related to Aquarius Completed

- Aquarius V5.0 end-of-mission data archived & released publicly on 12 December 2017

- Phase F Aquarius mission artifact preservation & closeout task
  - Joint PODAAC & GSFC undertaking
  - Concluded July 2018
  - AquariusPreservationArtifactChecklistForMissionCloseout_20180708.xlsx

- All mission data products & versions (sci, evsci)
- All ancillary datasets used in ADPS processing (19), AVDS validation analyses etc
- ADPS SeaDAS software with Aquarius V5.0 processing module and documentation
- All technical documentation artifacts (ATBDs, ICD, User Guides, Flagging specs, ...)
- All Aquarius CalVal team Samoa-ftp documentation artifacts
- Aquarius-related webinar presentation materials
- Aquarius mission website & PODAAC Aquarius mission page
- List of Aquarius CalVal team names/contacts
DOIs for 8 Key Aquarius V5.0 technical Documents

- http://dx.doi.org/10.5067/DOCUM-AQR01 Aquarius Data Users Guide V5.0
- http://dx.doi.org/10.5067/DOCUM-AQR02 Aquarius Salinity Validation Analysis V5.0
- http://dx.doi.org/10.5067/DOCUM-AQR03 Aquarius Validation Data System (AVDS) protocol & data
- http://dx.doi.org/10.5067/DOCUM-AQR04 Aquarius consolidated ATBD V5.0
- http://dx.doi.org/10.5067/DOCUM-AQR05 Aquarius L2 to L3 Processing Document
- http://dx.doi.org/10.5067/DOCUM-AQR06 Aquarius Performance Degradation & Q/C Flagging of Aquarius L2 Salinity Retrievals
- http://dx.doi.org/10.5067/DOCUM-AQR07 Aquarius Scatterometer Calibration report
- http://dx.doi.org/10.5067/DOCUM-AQR08 Aquarius Radiometer Counts to Antenna Temperature Processing for V5

New Dataset Releases (5)

- 2017-12-19 Official NASA AQUARIUS/SAC-D Version 5.0 End-of-Mission Data
- 2018-02-22 JPL SMAP Sea Surface Salinity (SSS) CAP V4.0 Dataset (Fore, Tang, Hyashi, Yueh)
- 2018-07-03 Aquarius Ancillary Celestial Sky Microwave Emission Map Dataset (Dinnat)
- 2018-07-27 IPRC/SOEST Optimally Interpolated Sea Surface Salinity (OISSS) Aquarius V5.0 Dataset (Melnichenko)

Upcoming Releases in September/October

- RSS SMAP-SSS V3.0 (40km & 70km – 6 products)
- JPL Aquarius CAP V5.0 (7 products)
- JPL SMAP-SSS V4.1 (3 products)

User Support

- Ongoing user support via PODAAC Helpdesk podaac@podaac.jpl.nasa.gov & Forum https://podaac.jpl.nasa.gov/forum/
NASA Salinity Field Campaign & Project Support

Support for SPURS 1 & 2 Field Campaigns
- [https://podaac.jpl.nasa.gov/spurs](https://podaac.jpl.nasa.gov/spurs)
- SPURS1 datasets (15) released in 2015-05-11
- First of 3 SPURS2 data deliveries to PODAAC expected this December through end 2019

Saildrone Data for SSS Science and Arctic SST/SSS
- PODAAC data engineering support for data product specification
- Archival/distribution support only for campaigns directly linked to NASA science activities:
  - Saildrone deployment during SPURS2
  - Baja CA 2018 field campaign data delivery (Oct. 2018) - surface measurements & ADCP
  - Future: Saildrone data to be used in NOPP project on Arctic SST and project relating to Arctic-SSS

NASA ACCESS “Oceanographic In-situ data Interoperability” project
[https://oiip.jpl.nasa.gov/](https://oiip.jpl.nasa.gov/)

Software tools services aimed at increasing PODAAC capacity to deal with oceanographic field datasets
- THREDDS V5.0 - support for discrete geometry datasets (point, profile, trajectory series)
- ROSETTA – web-based conversion tool for the production of CF compliant netCDF files from CSV
- Web-based Satellite-insitu data visualization tool (JPL Common Mapping Client)
  [https://youtu.be/CgOTwWMhdc](https://youtu.be/CgOTwWMhdc)
NASA-Wide FTP is being retired!

- PODAAC sent a general announcement on this 5 June. More info to follow soon ...
- PODAAC has recently been informed by JPL that after November the PODAAC public ftp site will no longer receive the necessary security clearances to operate.
- PODAAC ftp will be retired by end-November and replaced by HTTPS based-data access:
  - Downloads via WGET, CURL are supported
  - A nice utility called “PODAAC Drive” is available [https://podaac-tools.jpl.nasa.gov/drive/](https://podaac-tools.jpl.nasa.gov/drive/) providing...
    - GUI webclient for interactively browsing data directories and downloading data
    - Network drive Mapping via WebDAV supporting rsync and drag-n-drop downloads
  - **NOTE:**
    - HTTPS/Drive-based access requires users having a NASA Earthdata login (URS)
    - Register for URS at [https://urs.earthdata.nasa.gov/home](https://urs.earthdata.nasa.gov/home)
    - For automated application access, login persistence based on Cookies (max 1 month)
  - **Very important users be proactive in becoming familiar with and transitioning to HTTPS/Drive for PODAAC data access**
Data Producers & Potential Data Providers

If your salinity project produces data products of use/importance to the broader community, you have a NASA funding agency requirement to archive your data at a DAAC, and you stated in your proposal that you would do so, then …

- If you are here, let us know and we can discuss further
- Contact the PODAAC proactively to inform us of your dataset, timeline and data submission plans
- While PODAAC encourages relevant submissions, it also has a review process (DGAP) aimed at reviewing, selecting and prioritizing candidate PI datasets for archival
- Prior to archival a “Dataset Submission Agreement” is completed between Data provider and PODAAC (provides necessary logistical information and outlines expectations)
- Requirements for Archival:
  - Data product(s) adheres to data interoperability standards (CF/ACDD metadata, netCDF/HDF file formats) per https://podaac.jpl.nasa.gov/PO.DAAC_DataManagementPractices
  - Technical Interfaces to access the data are defined and documented (ICD)
  - Data are accompanied by Technical Documentation (eg. ATBD, User Guide/Format Spec, Validation Report)
Questions ?