

NOAA and University of Hawaii ADCP Laboratory: Joint Archive for Shipboard ADCP

## **Explanation of files/directories of a unique sonar-cruise directory set**

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### **Summary**

The Joint Archive for Shipboard ADCP (JASADCP) archival packages within the NOAA/NESDIS/NCEI public repository consist of science-ready data that have been post-cruise processed, quality-controlled, and calibrated to earth-coordinates. Submission packages to the JASADCP are in science-ready status. The JASADCP only provides the data management and archival services. The highest granularity for data management is by ADCP sonar mode of a given cruise, to which a 5-digit code is assigned and referred to as the SACID. Data, metadata, and products associated with a SACID are placed in a single directory, named as the SACID; e.g., /00323.

### **Details of SACID directory holdings**

There can be two cases: 1) Common Ocean Data Access System (CODAS) binary files, which would represent over 95% of JASADCP holdings, or 2) submitter sonar-cruise sets in formats other than CODAS that could not readily be converted to CODAS. Conversion to CODAS was not possible if the original data did not include all pertinent parameters, such as the ship u- and v-components.

#### **CASE 1. Submitter's files as CODAS sonar-cruise sets or readily converted to CODAS**

a) High-resolution ADCP data with ancillary parameters in CODAS binary "block" files

File naming convention, ssssnnn.blk and one file as ssssdire.blk,

Where sssss is the SACID, nnn is count 000-999, "dir" and "blk" are fixed (CODAS directory file "dir" and block file extension "blk," respectively).

Example: 00323001.blk, 00323002.blk, 00323003.blk, 00323dire.blk

Note, in most cases these are the **original files** as provided to the JASADCP.

However, in some cases, high-resolution data were provided in non-CODAS format and were converted to CODAS format by the JASADCP. In such cases, a separate directory, /orig\_data, is created for more recent years. Historically, the original data may or may not have been included in the final archival set.

#### ***The following files are generated by the JASADCP:***

b) NetCDF complete dump of the CODAS block files (exactly the contents of the CODAS set)

File naming convention, sssss\_long.nc (sssss aforementioned)

Example: 00323\_long.nc

Note, the u- and v-components are as measured by the ADCP. To derive absolute currents, the u- and v-component ship velocities must be subtracted.

- c) NetCDF science-ready, high resolution, u- and v-component absolute currents and select fields  
File naming convention, sssss\_short.nc  
Example: 00323\_short.nc
- d) Legacy ASCII-text “standard subset” of nominally hourly/10 m depth averages  
File naming convention, sssss.sub, where “sub” is fixed (subset)  
Example: 00323.sub
- e) NetCDF format for d) above, i.e. “standard subset”  
File naming convention, ssssv3.nc, where “v3.nc” refers to version 3 of the  
World Ocean Circulation Experiment (WOCE) NetCDF conventions  
Example: 00323v3.nc
- f) Legacy ASCII-text metadata for the specific sonar-cruise set  
File naming convention, sssss.bft, where “bft” is fixed (block footer)  
Example: 00323.bft  
Note, the \_long.nc and \_short.nc NetCDF files include this metadata in global attributes

## **CASE 2. Submitter’s files as non-CODAS sonar-cruise sets-- unable to convert to CODAS**

- a) Original files as provided to JASADCP in variable formats  
The non-CODAS files can be of either high resolution or a filtered subset of less resolution in time and/or space. The files remain in the file naming convention and formats as received at the JASADCP. In more recent years, the JASADCP has created a sub-directory, orig\_data/, to hold the original files.  
Example 1. /00312 contains file w9805001.a10  
Example 2. /01982 contains sub-directory orig\_data/ with original files and descriptions

### ***The following files are generated by the JASADCP:***

- b) Legacy ASCII-text “standard subset” of nominally hourly/10 m depth averages if possible  
File naming convention, sssss.sub, where “sub” is fixed (subset)  
Example: 01070.sub  
Note, the time/depth averaging is variable
- c) NetCDF format for d) above, i.e. “standard subset”  
File naming convention, ssssv3.nc, where “v3.nc” refers to version 3 of the  
World Ocean Circulation Experiment (WOCE) NetCDF conventions  
Example: 01070v3.nc

d) Legacy ASCII-text metadata for the specific sonar-cruise set

File naming convention, ssss.bft, where “bft” is fixed (block footer)

Example: 01070.bft

Note, the \_long.nc and \_short.nc NetCDF files include this metadata in global attributes