

The directory structure below is an attempt to categorize how the data, primarily from ship cruises, will be organized into the PSD data system for access by users.

- The **project** directory will contain a metafile describing the project/experiment and instrumentation involved. Information to be included: Project name, PI, date, platform/location, reference, instrumentation, instrumentation mentor's
- The **location/platform** directory will be the location of any instrumentation. This could be a ship, a fixed land site, an aircraft, etc.
 - The **instrumentation** directory will include all instruments for that location/platform. A meta file should exist for each instrument describing that instrument and the data it collects. Some directories may have sub-directories down to a more specific list of instrumentation (ie radars and radiometers). An instrument should *not be included* if is not a part of a project to avoid confusion.
 - The **raw** directory will contain the raw data collected in the field. These data may or may not be useable by everyone. ASCII, binary, netcdf, etc. Files that are too large for storage here will have information as to where the data are stored (ie DVD) and how they can be accessed.
 - The **raw images** directory contains a *quick look* at the data. This maybe daily 2D images, profiles of measured winds, or times series of various measured parameters and could be created in the field or first thing when the data return to Boulder. Quick look images should have consistent scales for easy interpretation between days along with an explanation of the display. Time should be UTC and dates both Julian Day and YYMMDD when possible. The current EPIC MMCR data display is a good example of how a Quick Look might appear (<http://www.esrl.noaa.gov/psd/psd3/air-sea/epic/mmcr.html>).
 - A **processed** directory can be added whenever necessary. Processed data are data that have been altered in any fashion. This includes simple reformatting of the data or merging of data. Meta files should exist for each new type of file.
 - A **software/code** directory should be added to store any programs written to display or process the data (unless the code is proprietary) along with a description of what the code does.

Once this PROJECT tree is filled with data down to the raw and rawimages level it will be backed up to DVD(s). This should happen as soon after completion of a cruise as possible.

PSD Cruise Database Format

EXPERIMENT

EPIC2001 (Project)

RBN (Location/platform..ship, aircraft, land site, etc)

balloon

raw (*.wnd and *.ptu ascii files and binary files)

rawimages (T/RH/WS/WD profiles)

radar

profiler (915)

raw (*.spc {spectra}, *.25c {shipsmotion}, *.14c {winds} files)

rawimages (daily wind barb profiles and daily 0,1,2 moment time ht plots)

sband

raw (*.spc {spectra}, ship motion files)

rawimages (daily 0,1,2 moment time/ht plots)

cband

raw (too large...on DVD as needed)

rawimages (hrly intensity scans and maybe VAD winds)

mmcr

raw (moment and spectra netcdf files)

rawimages (daily 0,1,2 moments time/ht plots)

radiometer

mailbox (2030ghz)

raw

rawimages (time series of brightness temps, liquid water)

NPCO (NOAA Portable Cloud Observatory 20,30,90ghz)

raw

rawimages (time series of brightness temp, liquid water)

ceiliometer

raw (PSU zipped files or BT *.raw zipped files)

rawimages (PSU daily cloud base and reflectivity time/ht plots or BT reflectivity)

flux

raw (daily P0-P7 flux ascii files)

rawimages (entire cruise times series of T,RH,WS,WD,SR,IR)

lidar

raw

rawimages

shipscs

raw (*.hdr and elg files)

rawimages (entire cruise times series of T,RH,WS,WD,rain)

wave

raw

rawimages