15 Jan 2009

Ingestion Working Group

Participants: David Dana, John Morrow, Carlos Garcia, Wendy Kozlowski, David Court

Preferred format is ASCII.

<u>RECOMMENDED INPUTS</u> (those marked with "REQ" denote those necessary for processor to FUNCTION. Others in this list are those considered "required" for data to be included in cal/val data set. Beyond this they start to help define performance metrics)

- Radiometric Data (Can be raw (will then require cal data), or calibrated) (REQ)
  - Ed, Lu, Es (diffuse and direct), Eu (λ,x,t)
- Pressure/Depth (REQ)
  - Pressure "tare" correction information – if this has already been applied needs to be noted.
- Pitch/Roll
  - Profiling
  - Es
- Station Data
  - Cruise
  - Station
  - Lat/Lon (REQ)
  - Date/GMT (REQ)
  - Deployment conditions
    - Freefall
    - Winch/crane/wire
    - Instrument deployment location (ie stern, rear quarter)
    - Instrument distance from ship
  - Boat orientation
  - Sun orientation
  - Bottom information (depth, type…)
  - Personnel
- Instrument Data
  - Model
  - Serial number
  - Gain information
  - Depth offsets
  - Es sensor location
  - Bandwidths
  - Sensor dimensions
- Package description
  - To record instrument layout
  - Photos
- Field dark data

Multiple cast information

- Need to discuss further if the handling of multiple

IF INPUT IS CALIBRATED DATA

Calibration lineage

Binning

Software used

SUGGESTION: Have an option to allow a logical, formatted, file nomenclature system in place for inputting data or batches of data, though it should not be mandatory to use a certain file naming scheme.

SUGGESTION: Though somewhat obvious, processor would need capability to use certain "defaults" entered by user. Ie. all casts of a certain cruise would use the same calibration information.

DESIRED INPUTS

Temperature

"Housekeeping" values (instrument temp, voltages etc) – may be as part of the raw data stream.

Calibration Data

Lab dark scaling and offsets

Date of calibration*

Who did the calibration *

Lamp used *

Calibration monitoring (SQM/PURLS etc)*

*could all be considered "calibration lineage"

GPS Stream

Comment field – transcription from logs

Met Data (including photos)

Wind

Sea State

Sky State

Sun position

Ice conditions

Air temp

Aerosols

CTD Data Stream**

HPLC Pigments**

Fluorometric Chls**

IOP Data**

**Note that for any of these ancillary data collected at a slightly different space or time, important to denote which or define how profile/cast is to be associated with this radiometric data.

IMPLICATIONS FOR CURRENT PROTOCOLS

Secci disk is listed

Photos are not listed

PERFORMANCE METRICS
Distinctly tied to inputs, but better defined in processing group