**SeaBASS Submission Checklist: Backscatter sensors**

**Instructions**: Please fill in section I. and the applicable bulleted points in section II. Rename this file to be specific to your data, for example, “checklist\_MyInstrument\_MyCruiseName.rtf” and include it among your submission’s documents.

Submissions require reporting methods of the acquisition process as well as data processing. Every processing step should be detailed with methods and equations.

**I. Submission Info**

Experiment name:

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Cruise name:

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Instrument model & manufacturer:

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Data type:e.g., profiles, flow through

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**II. Backscatter Documentation Requirements**

1. Describe instrument characteristics (from the manufacturer), including spatial, spectral, electrical and physical characteristics:
2. Report instrument characterization results including:
   1. Nominal wavelength(s) (and FWHM(s) if available):
   2. Angles (Angular Field of view for each of channels, if available):
3. Calibration details:
   * + 1. Date of calibration applied to data. Pre-cruise or Post-cruise:
       2. Who performed the calibration? (Manufacturer, your own lab, third party):
       3. If bead calibration, what size beads? NIST traceable?
4. Sampling procedure (e.g., instrument deployment details (if overboard note the position on the cage, if inline describe the box), other instruments used concurrently, etc.).
5. Sampling rate:
6. Data processing. Specify the conversion from data counts to particulate backscatter (*b*bp) :
   1. Conversion from data counts to β (calibration equation):
   2. Absorption correction (if performed):
   3. T,S correction performed (yes/no):
   4. Calculation of bb from β – which method?
      * + 1. If single-angle measurement, what value of chi was used?
   5. Subtraction of backscattering due to water – what model was used?
   6. Dark correction. Describe method for obtaining dark values (e.g. tape over sensor or detector, lens cap, or using calibration values). Please report (if available) median/mean and variability (e.g. standard deviation)
7. If data were collected or processed through commercial software package (e.g., ECOview, Hydrosoft):
   1. Software and version:
   2. Settings and optional modules used:
8. If data were binned, describe a method and provide measure of variability (e.g. standard deviation):
9. Any other data manipulation (intercalibration, deep values correction) performed? If so please elaborate.

**III. SeaBASS Data File Information**

This section does not need to be filled out. However, please note that the following information should be included within each SeaBASS data file.

Optional but recommended metadata headers:

* Wind speed (/wind\_speed ; m/s)
* Cloud cover (/cloud\_percent ; %)
* Wave height (/wave\_height ; m)

Data fields must include the following (see also <https://seabass.gsfc.nasa.gov/wiki/stdfields> for additional field names and info)

* Depth
* Water temperature (Wt)
* Conductivity (cond)
* Salinity (sal)