## In-water radiometry





The start off group:

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NASA protocol workshop, 10/25/14

Charge given by Steve:

- A) Summary of existing protocols
- B) recent advances
- C) Proposed revisions





Current protocols are Rev 4, 2003-2004.

Protocols relevant to in-water radiometry spread through:

Volume 1...basically definitions

Volume 2....instrument specifications

Volume 3....measurement and analysis protocols

Volume 4...MOBY, stray light correction, and shadowing.





Measurement techniques discussed in current protocols

Buoy measurements (MOBY), didn't see BOUSSOLE.

Regular profiles with radiometers

Floating buoys (such as the TSRB)

Existing Data Analysis protocols:

Summary of some aspects of dealing with profile data.

MOBY data analysis described.

BRDF correction (MAG, 2002) described





Recent advances, not discussed:

Multi-cast technique very important

Slow drop

**BOUSSOLE** 

Updating MOBY information, both data analysis (lists outdated Lwn calculation and the SLC section needs updating. Several other changes we are currently working on.

Other ideas?





New methods of analyzing near surface profile data

Very little discussion about how to handle turbid waters

There are some places that values need to be updated

Radiometric data on gliders?

Occasional other sections need review (ambient light 0.1% of dark signal?)





How do we want to proceed on revisions? Total rewrite of sections, and then incorporation of unchanging parts (a Rev 5)?

Moving towards a slightly more "living" document pluses: capture new technology as it comes on line (hopefully mature first)

Get new advances into the community faster(?)

Minuses: who is the "gate guard", a review committee? Under IOCCG?



## Final word:

Need more work on uncertainties in the final document!!



