General Comments

I applaud the efforts of Bolaños and Souza to get these data published and made available to all. In a perfect system, this document would provide direct links to data set and serve as a complete set of metadata. However, I was disappointed to see that direct links to the data were not available, and there were no helpful hints about how to request these data from the BODC. The system for requesting data from BODC is clumsy. After messing around and cancelling my poor instrument choices (ADVs were not one of the options), I found that I could specify " POL Dee Experiment" in the Project field and reveal 5 records that appear to be a subsets of the March 2007 data. It would be much more convenient if this document provided specific BODC Series Reference Numbers with which users could request the data from BODC, or at least the complete list of Project Fields. (This seems like a good way to group diverse data sets like this one). Best of all would be a table with enable hyperlinks that would link to the data or jump to the data request page for that dataset.

It does not look like all of the data described here are at BODC; only the 2007 data showed up in my searches. The BODC data curator said "The current meter data you selected is not yet fit for online release. It is currently being audited and the auditor has found some issues with the data. It should be available in a few weeks."

If the data are not at BODC, other links or information on how to download the data should be provided; even just a note that the data are available from the researchers (rather than BODC) would be informative. It looks like some of the less commonplace data (e.g., ABS, LISST, ripple profiler) may not easily fit on the BODC site. These data are difficult to archive because the each data set is multidimensional and sometimes unique, but I would encourage the authors to make these available.

However, the most critical recommendation is to ensure that this article is in synch with data that are actually available. The most important revisions to the article should ensure that the data described are accessible.

Comments organized by the ESSDD Review Guidelines

This article is highly appropriate for the publication of a data set. These are the data are all new, and in some cases, the methods are new, or unique. There is a high potential of the data being useful in the future. Some of the methods and materials are described in sufficient detail, but in many cases, it is likely that a researcher would need more information in order to use the data. (I don't know this for sure, because I could not get access to the data; my request is pending.) I did not check to ensure that all of the references are there and correct; my only comment on references to other data sets is that the appropriate information for finding the data at BODC should be supplied in association with other data sets.

As mentioned above, the authors have not provided BODC identifiers. The data at BODC is apparently only a subset of the experimental data, and it will be a challenge to get all of the data listed here moved to BODC.

There are not specific error estimates provided in the paper, and the methods for attributing uncertainty to these data are not always clear. On the other hand, some of these data could be checked for drift (e.g., before and after checks of conductivity sensors, ZSCAT measurements of the LISST), but these procedures are not mentioned.

The data processing discussed by the authors is appropriate, but the description may not be detailed enough for researchers to use the processed data without more information. For example, the authors do not describe the frequency limits over which the ADV data is converted to wave statistics using the PUV methods. In most practical applications, a high-frequency cut-off is required to prevent biasing the significant wave height by instrument noise. Similar details are likely required for other data processing steps (for example, Fig. 3 shows ADV data before and after removal of spikes. ADV users might disagree with the criteria used to define spikes in this data set, and would want to know, for example, which mode was used (e.g., what is wrap-around speed for these data) and why the time series shown here does not look like a typical wave-current time series.

Overall, it is great to have the existence of these data made public, and the more of it that becomes available, the better. I am certain that users will have specific questions about format, calibrations and processing, and specifics of instrument deployment that are not addressed in this paper. Maybe the electronic format will allow authors to supplement or enhance this document as the data are moved to BODC and released.

Specific Comments

Would that the first sentence was true! Alas, monitoring and prediction only provide tools that may be used to aid in sustainable development. Suggest: “The capabilities of monitoring and prediction in the marine environment provides information that may allow sustainable development…”

I suggest that the manufacturer and model number of the commercial instruments, and their operating frequencies be added. For example, if the ADVs are Sontek ADV-Ocean operating at 1.5 KHz instruments with Hydra loggers, that information should be noted. It is great that the serial numbers are specified.

The response range for OBS sensors and or a calibration formula should be included, if possible.

Technical Corrections (suggested changes in *italics*; line numbers refer to PDF version).

There are a number of minor grammatical quirks in the paper…an hour with an editor would improve the readability. Here are some examples from the Abstract.

Line 6: The *aim of the data collection is* to improve…

Line 7: Data *includes information from* the deployment

Line 10: The data *cover* flood

Line 13: The data, in raw and treated *formats, are banked* at