

## ***Interactive comment on “Hydrographic data from the GEF Patagonia cruises” by M. Charo and A. R. Piola***

### **Anonymous Referee #1**

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I read this manuscript with great interest. I find particularly useful this kind of accompanying papers to give visibility and properly support the publication of a given dataset.

Hydrographic data collected during three cruises carried out in October 2005 and March and September 2006 over the Argentine continental shelf are reported. The dataset itself is certainly significant in terms of usefulness and uniqueness. This sort of seasonally gathered hydrographic data are not frequent for the southern Southwestern Atlantic. The region is overall quite understudied and poorly understood despite its great ecological and economical importance. In this case, I emphasize the fact that data from the three cruises are reported at once in one only set (though in three separate folders for clarity, one for each cruise).

C13

Regarding the quality of the data, as far as I can tell the reported protocols used for sampling, calibration and measurements are the standard ones, commonly used. The data sets are currently available at the National Oceanographic Data Center, NOAA. US (doi:10.7289/V5RN35S0), which I assume must have their own quality controls.

For the rest, this was a reasonably straightforward report, with little in the way of discussion or interpretation. Following are a few specific comments, which need some attention:

p. 94, line 17 – “The oxygen from water samples was compared with historical data collected. . .”

Perhaps the source or quote for the oxygen historical data should be mentioned.

p. 95, lines 2 – “. . .standard seawater batch P131 (1996). . .”

As far as I understand, standard seawater batches older than about 2-3 years should not be used for standardization. Please explain if there was a reason for using a batch from 1996. May have this circumstance affected Autosal standardization for the GEFPAT-1 data, which were collected about ten years later?

p. 95, lines 2-3 – “. . .standard seawater (SSW) batches P131 (1996) and P141 (2002, GEFPAT-1), P141 (2002) and P146 (2005, GEFPAT-2) and P146 (2005, GEFPAT-3). . .”

The way the batches are referred to each cruise is rather confusing. So, I would suggest changing slightly the text to something like:

“. . .standard seawater (SSW) batches P131 (1996) and P141 (2002) were used for GEFPAT-1 processing, P141 (2002) and P146 (2005) for GEFPAT-2 and P146 (2005) for GEFPAT-3. . .”

p. 95, lines 6-18 – “The double conductivity ratio of SSW during GEFPAT-3, showed a positive trend with time determined from the difference between the beginning and the completion of each run of samples. . .”

C14

What about the other two cruises? It can be assumed that nothing irregular happened with them but I think it is better just to mention it.

p. 96, line 5 – “The data were recorded every 30 s and occasionally every 60 s along some tracks of GEFPAT-2”

I wonder whether it would have not be more useful the record of spatially-related data, e.g., every 1000 m. As user, I would be interested in the spatial variations rather than in time. Is this possible? Which was the recording criterion?

p. 96, line 6-7 – “Bottle salinity samples were taken periodically from the thermosalinograph water intake to calibrate the thermosalinograph conductivity sensor”.

I am not sure if “calibrate” is the correct word to be used here. The sense of this sampling is to check (not calibrate) for the correct functioning of the thermosalinograph, isn't it?

p. 97, line 6 – “. . .in standard Seabird format”

What do you mean by standard Seabird format? What is this format like?

p. 97, line 24 – Typing error, replace “form” by “from”

Table 1. I think that last calibration dates of the instruments should be also provided.

With regard to the quality of the dataset publication as currently available at NOAA, if re-use is bore in mind, I found confusing how to discriminate between files referring to CTD data and those from thermosalinograph. Headers are hard to follow. This is likely related to the publication format, and so I do not think there is much that can be done at this stage. I would suggest trying a better, user-friendly format in the future, if this is possible.

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