

This is an interesting paper, describing a set of measurements conducted by the SRN network in the Eastern English Channel, and the Southern Bight of the North Sea.

The dataset described in this paper consists of measurements of hydrological and ecological variables, going back to 1992. Such historical datasets contribute to our understanding of long term ecological processes, and improve our ability to monitor and preserve sensitive ecosystems. This is especially important in areas subject to strong anthropogenic pressure, as the one addressed here, making the described dataset interesting and valuable.

The paper is well organized and clear. The authors do well in describing the geographical, hydrological and ecological context, emphasizing the dataset's importance and relevance. The technical aspects of data collection, analysis methods and quality control are, in general, well-described, although some important corrections/clarifications should be made (see comments below). In addition, the authors provide useful description of observed trends, discuss possible interpretation of observed variability patterns, and provide simple codes for data handling.

Overall this is a well written article that describes an important dataset and merits publication in Earth System Science Data. However, I have two concerns that should be addressed before acceptance:

While horizontal aspects of the sampling strategy are well described, it is not clear to me what is the **vertical configuration of the sampling strategy**. The authors should describe whether the measurements were taken at a single or multiple depths, what the sampling depths are, and what is the rationale behind their selection. This is an important limitation that has to be addressed both when describing the data collection, and when discussing the observed trends

Section 3.2. Hydrology was updated consequently. L. 155-171.

Information about the vertical structure of the water column has been added to the "6. Data Summary" section. L. 267-270.

In the Discussion and Conclusion section the authors provide a review of scientific works conducted using SRN data. Although interesting by itself, to my understanding such a review is not in the scope of a data description paper, and should not be included here.

We do not agree with this comment. As explained in the updated abstract, "We hope that this synthesis will also save data users time by allowing them to jump right into a deeper analysis based on previous conclusions and perspectives, or to investigate new scientific key challenges. These data should also be used at a wider geographical scale, combined with other data sources, to define more global patterns of environmental changes in a moving world subject to strong anthropogenic pressures. Data can also be used by the remote sensing (Ocean Color Observation) and modeling communities to calibrate or validate products in this complex and vital coastal region."