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Interactive comment on "Spatially explicit estimates of stocks sizes, structure and biomass of herring and blue whiting, and catch data of bluefin tuna" *by* G. Huse et al.

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Please note that the second reviewer posted his comments but for one reason or another they didn't appear on the web-site. I have attached his comments/review to this submission.

Please also note the supplement to this comment:
http://www.earth-syst-sci-data-discuss.net/7/C246/2014/essdd-7-C246-2014-supplement.pdf

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Interactive comment on Earth Syst. Sci. Data Discuss., 7, 457, 2014.

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DISCUSSIONS

***Interactive comment on* "Spatially explicit estimates of stocks sizes, structure and biomass of herring and blue whiting, and catch data of bluefin tuna"** *by* G. Huse et al.

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This paper presents data sets on the stocks, sizes, structure and biomass of herring, blue whiting and bluefin tuna in the NE Atlantic. The data is gathered using well established acoustic methods with trawls being used to identify fish generating the acoustic signals. The data will be very useful for some time to come as it is detailed and comes from a large area, particularly with regard to the blue whiting.

The methods are described in enough detail and references are given to sources of standard acoustic methodology. The abundance of fish in ICES statistical areas is es-

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timated from acoustic information. For each statistical rectangle the authors calculate the number of fish per square nautical mile. To estimate total abundance this figure is then multiplied by the number of square nautical miles in each ICES rectangle and then summed over all rectangles in the area covered by the stock. This approach appears to assume that the fish are evenly distributed over the whole area surveyed? This is unlikely to be true as certainly herring and mackerel, being schooling species, are likely to be aggregated in large groups with space between them. It would be good to see a discussion of this issue and how it might affect the estimates of stock size and biomass.

The data is easily accessible from the web addresses given in the paper and the data bases themselves are clear and easy to use. To ask if the data sets are complete, as is done in the instructions to referees, is like asking how long is a piece of string. The databases have, I assume, all the data that the authors have at their disposal but no doubt more could be obtained at some future date. These new data could easily be appended to the existing databases.

There is no mention of the variability inherent in the estimates of fish abundance. I would imagine that the error associated with acoustic methods of stock estimation is well understood and it would be good to see some mention of this in the paper.

There are some mnemonics that are not expanded and should be, for example NASC and HAC. What do these stand for?

The figures are informative and clear in colour. Some, such as Figure 1, are not so clear in black and white, which many readers might see if the paper is downloaded and printed on a black and white printer.

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Fig. 1.

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