On “Listening fish to recover Ocean’s physical properties” by Edouard Gauvrit

Summarize the main results of the article in a few sentences:

mixed layer depth follows the 38kHz acoustic layer
chlorophyll maximum
thorpe length scale

Answer the following questions about the structure of the paper:

Overall content:

1. Is the overall purpose of the study and /or central question clear?

   Yes : Recover physical knowledge of the water column from acoustic observations
   feasability assessment of such method : on the depth of mixed layer

2. Does the interpretation of the findings answer the overall question of the paper?

   it’s possible but the method is not good enough / still has to be improved

3. Is every paragraph and sentence in the paper relevant to the overall question?

   Yes

4. Are there portions of the text that could be omitted?

   I don’t think so

5. Is the overall organization of the paper clear and effective?

   Yes the organization is good

   Suggestions for improvement:

   You need to say at least once what the acronyms stands for (for example you don’t say that MLD is Mixed Layer Depth)

   maybe the definition of the mixed layer should be said the first time you talk about it (in the context for example)

   I don’t like the abstract with parts and the conclusion with points but it’s just a personal preference

Individual sections:

1. Does the title adequately represent the content of the paper?

   Yes it shows that they used the biological activity to try to obtain physical properties

2. Does the abstract clearly and concisely summarize the paper and state the main results? Does is contain all needed information (context, need, task, object, findings and conclusion)?

   The abstract is well structured

3. Does the introduction provide enough context to the readers? Does it state the need for the work? Does it state clearly what has been done to address it?

   Maybe a little part on the mixed layer depth
   need = better resolution ?

4. Does this paper put the progress it reports in the context of existing published work? Is there adequate referencing and introductory discussion?

   The references are cited in the text

5. Are the material and methods used in the study clearly explained? Can you point out what is special, unexpected, or different in the approach compared to existing published work? Does it contain too many technical details?

   I did'nt understand the part in the Thorpe length scale about sorted and unsorted density profiles? What is it useful for??

   what are overturns?

   Not clear for the intermediate profiles and why they are useful

   maybe explain the frequency layers for the results ?

   what is a radial ?

6. Is the results sections(s) clearly and concisely written? Are there logical and smooth transitions between sections, subsections and between paragraphs?

   Yes there is a section for each of the different results : good organisation

   Maybe explain the figures and what each color represents ?
   The chlorophyll part seems to be coming out of nowhere
   I don't understand the Thorpe length scale part (blurred radials ?)

7. Does the conclusion clearly state the most important outcome of the work? Does it address the questions stated in the Introduction? Does the conclusion just

summarize the results or does it interpret the findings and explain what they mean?

Yes it adress the questions
little interpretation

8. Are the interpretations and conclusions adequately supported by the evidence presented? That is, are the assumptions valid, is the methodology sound, is the evidence adequate, and do the conclusions logically follow?

I suppose but I don't really understand the methods...

9. Are all parts of the text, references, graphics and tables necessary for the new results and main points to be understood?

Yes

10. Are the graphics and tables clear and their captions self-explanatory?

Yes

! Sentences and Wording

1. Can you find grammatical mistakes?

listening fishES?
Providing by → provided by (abstract)
will be showN (introduction)
re-emitted fro SV definition ?
Instead OF the temperature (methods)
differences less than the treshold → differences lower than
before to compute → before computing
can be define → can be defined
most part of the day → most of the day /or most partS of the day
is the fact Lt that we have calculated → is the fact that the Lt we have calculated

2. Can you point to sentences that loose you (too long/complex) and do you have suggestions for improvement?

A significant difference is relative to a threshold noise level below which a density difference is considered as due to random noise (methods)
I don't understand what it mean so I don't have suggestions for improvement

3. Are generally the action in verbs, characters in subjects and subjects near verbs? Can you find counter-examples? Can you point out misused nominalizations?

Yes generally
I don't find misused nominalizations

4. Is the writing cohesive? Does it flow well? Is the part of the sentence that links to the previous sentence at the beginning or the end?

   Sometimes it's a bit difficult to follow at first read but otherwise it's ok

5. Are the paragraphs coherent? Do the first and last sentences of paragraphs match? Can you find counter-examples?

   Yes

6. Is there an abusive use of passive voice?

   No abusive use of passive voice

7. Can you find a lot of useless words/phrases?

   No

8. Can you find complex words that could be replaced by simpler ones?

   No

9. Can you find too complex subjects?

   No

10. Can you find inadequately used adverbs/ repetition/ excessive hedging?

    No

11. Is the use of tenses (past/present/future) adequate?

    Not always but generally yes

! Other comments?

I had troubles understanding the article mainly the methods parts
it needs a few reads to be able to understand but it may be because I am not familiar with acousstic