

## Answers to Referee #2

After reading the reviewer's comments, we realized that when we presented the results we were distracted by the historical development of the work and didn't present the results in a logical way. The 2006 data were analyzed prior to the 2013 campaign. At that time, we found that while the observational and numerical results matched well, the vertical structure of the waves could not be assessed based only on the bottom velocities. That's why we never tried to publish the results but we presented them at a conference (Forcat 2013). Only after the 2013 campaign, we realized that the data recorded within the water column could help to assess the vertical modes. Therefore we analyzed the 2013 data in the same way the 2006 data had been analyzed. Unfortunately, as our analysis of the 2013 data brought us back to the 2006 study, we presented the results starting from that year. As the 2006 results had not been published, we incorporated them in the paper, but we should not have mentioned Forcat (2013). It only confuses the reader.

After considering the reviewer's requirements, we have changed the structure of the Results and Discussion sections. The results are presented starting in 2006, and the plots have been modified accordingly. We have added a small introduction to the Results section that mentions the main characteristics of the stratification and the wind conditions which are described previously in the Materials and Methods section, because they are needed to better explain the numerical simulations and the methods of analysis prior to the Results section. The plot with the characteristic density profiles has been complemented with the corresponding temperature and salinity profiles.

The Discussion section has been organized according to the horizontal and the vertical structure of the internal waves. In it we comment on the features that favor the excitation of the different modes and the reasons for the differences observed between 2006 and 2013. Finally, although the fluxes related to the internal seiches cannot be assessed using these data, based in our results, they have been briefly discussed in the context of current knowledge.

As mentioned in the previous version of the manuscript, differences of morphometry and stratification make it difficult to compare the observed sub-inertial internal waves in the Aral Sea with those studied in other lakes. Therefore, after reading the reviewer's comment, we removed the last paragraph of the Discussion section and added the references given there to the Introduction section. More recent works have now been added to the Discussion section.

The reviewer's specific comments have also been addressed in the new version of the manuscript. In our opinion the reference to the Defant/Mortimer model does not contradict to works by early researchers treating the lake as multilayer systems after mentioning Mortimer (1979). Note that the work of Heaps (1961) had already been mentioned in the first manuscript after the reference to Mortimer's work.

We regret the reviewer's complaint about the language. The paper had been reviewed by a native speaker. Now it has been reviewed by another native reviewer who has more experience with scientific texts.

We acknowledge and appreciate the reviewer's constructive comments. We believe they have helped considerably to improve the manuscript.