SPECIFIC COMMENTS ON TEXT:

-In section 3, line 24, it is mentioned that a set of variables are nested from the NorKyst800 model, including water levels. But the tidal elevations forced at the open boundary are retrieved from the TPXO database. So, the water levels from the regional model are nested as mean sea level, then, and the astronomic tide from TPXO is added to it? This is no clear to me.

-Are the temperature and salinity daily means nested from NorKyst800 daily means of vertical profiles, or daily means of depth averaged quantities? If stratification is strong at the location of the open boundary, I would expect that imposing the right vertical profiles at the boundary can have significant impact on the baroclinic flow throughout the domain.

-Section 3, lines 28 to 31: Why are two different datasets (TPXO Atlantic database and TPXO atlas respectively) used for the two fjord models Oslofjord and Saltfjord? Specially for the Saltfjord model which has a very short open boundary, the use of a even lower resolution boundary forcing data(1/4 degrees) seems inadequate to me.

-Section 4, line 25. How many components are used for the analysis with T-Tide?

-Section 5, line 10: Here it is mentioned that table 2 shows that the tides, once corrected at the boundary, are distributed as intended in the inner parts of the fjord. An improvement at the open boundary forcing is expected to have a positive effect throughout the domain, but the quality of the tidal representation away from the boundary and especially in shallower waters will also strongly depend on the representation of the propagation, which is likely to be highly influenced by bottom friction, and on the representation of the shallow water constituents (e.g. quarter diurnal). The latter ones specially show quite a poor representation in Oscarsborg, but also diurnal constituents like K1 and P1. I think a discussion is needed on the factors affecting the representation away from the boundary which are separate from the boundary forcing quality.

-Section 5,line 25: Is the Figure 5 the resulting M2 amplitudes and phases once the boundary forcing is corrected?It is not clear from the text. If so, it is a good picture to show how although M2 representation at the boundary is very good, in the innermost stations representation deteriorates.

-Section 5, table 1: I think it is worth discussing how this table shows the big correction factors that had to be used in shallow water constituents, and therefore showing the very poor representation of these by the global forcing and the need for the correction. Maybe also discuss it for the other frequencies.

-Section 5, page 10, lines 21 to 28: For assessing the effectiveness of the method (which focuses on tide) on currents, I would focus on a period of the measurements in which there is no surge event if possible, since as you mention other effects dominate on currents during these events, and the depth averaged current doesn't look like a tidal signal any more. It would be also useful to show some RMSE values to assess the quality, and have a discussion on the possible sources of the resulting errors.

-Figure 9: Is this showing depth averaged currents subjected to tidal analysis for both model and observations? It is clear in the text and description of the figure that this is the case for the modeled timeseries, but not for the observations.

GENERAL COMMENTS:

I am missing more discussion on the limitations of the method and other sources of modelling errors that should be take into account on the interpretation of the results and impact of the method (like misrepresentation of the propagation from boundary to inner parts of the fjord). For the presentation of the tables with amplitude and phase per constituent for the 2 runs, I would use amplitude error and phase error instead to show how the error reduces (or not) from Run 1 to Run 2.