Report on 'The IAS2024 coastal sea level dataset and first evaluations' by Peng et al. -Revised version-

I (Reviewer 2) have read the revised manuscript and found it considerably improved compared to the original version. The authors have well responded to all my comments. This revised version now reads very well. It includes the detailed information on the data processing that was lacking in the initial version. It has also improved the comparison with other data sets. I think this revised version is now acceptable for publication in ESSD.

I list below a few minor comments that should be taken into account by the authors when preparing the final version.

- Abstract, line 2: change 'has been' by 'is'
- Lines 40-41: change '…calculate…estimates' by '…estimate the vertical land motions.'
- Line 136: explain what is the Topex ellipsoid and give a reference
- Table 1: give references for EWCMF and CLS22
- Line 144: change 'derived' in 'derive'
- Line 161: define SWH
- Line 172: give a reference for the CLS22 mean sea surface
- Line 181: add a sentence, explaining that crossovers can occur between ascending and descending Jason tracks
- Line 186: add the reference to Holgate et al., 2013 for the PSMSL
- Line 187: Figure 13a showing the location of the 549 tide gauges should appear here or at least at the beginning of the paragraph that starts line 330 or line 345
- Line 248: give a reference for ITRF 2014
- Figure 9: explain in the figure caption what the violet bars represent
- Line 294: change 'They' by 'the two datasets'
- Lines 337-338: cancellation of global VLMs may be true on a 'true' global scale. But the distribution of the 549 tide gauges used in this study is far from global. Thus I am not sure that cancellation applies here
- Line 356: change 'where' by 'which'
- Lines 505-506: differences in altimetry-based sea level trends and tide gauge trends are visible in several other regions

A final comment: I do not see in the text any information on how the coast is defined and on the associated dataset. Please correct this.