

In the revised version of the paper, the authors have satisfactorily addressed the issues raised in the previous round. The new figures are useful to illustrate events, but an extra step could be taken to improve accessibility.

Thank you for your time and comments. We have addressed the remaining issues below.

Table 1 is now easier to read but more explanation on the percentages should be provided. Why in some cases measurements at say 50m depth are more than those at 2m? This is counterintuitive to me. I would not consider satellite SST as the "reference", but compare the in-situ data at different depths instead.

We have changed the percentages in table 1 to be based on data availability at each depth, rather than percentages relative to the surface.

With regards to why there are more data below the surface, we had added the following text to Section 3.1:

“Data availability (Table 1 and Fig. 2) is consistent through the water column at PHA because the temperature record consists of bottle and CTD profiles only. However, at PHB/PH100, MAI, and ROT there is increased sub-surface data availability relative to the surface (satellite). This is because the satellite-derived SST data that we use starts in 2012 and has some gaps (dependent on clear skies).”

In the same Table 1, why MHWs and MCSs for PHA are given for a different period than other stations?

We have edited the table so that there is just one time period specified for all event types at this site, and we will work with the typesetter to remove the double-column.

Figure 2 is still hard to interpret; you could consider to add an additional figure, showing e.g. yearly mean temperatures for each station and depth (if higher frequency is not suitable).

This would support the discussion in Section 3.4 on baselines.

We have added a new figure – now Figure 3 (copied below), that shows the annual median temperature anomalies at each site and depth. These annual median temperature anomalies show an increasing trend, with earlier years generally being anomalously cold, and recent years anomalously warm. We now refer to this figure in Section 3.1:

“The annual median temperatures for each site are shown in Figure 3.”

and Section 3.4, along with text referencing a recent study on ocean trends at PHB/PH100 and MAI:

“Temperatures at two of the sites: PHB/PH100 and MAI, have increased non-linearly over time, with mean temperatures (dependent on depth) in 2022 approximately 0.5 to 1.3 °C warmer relative to the 1940/50s (Hemming et al., (2023)), and annual median temperature anomalies can be seen in Figure 3.”

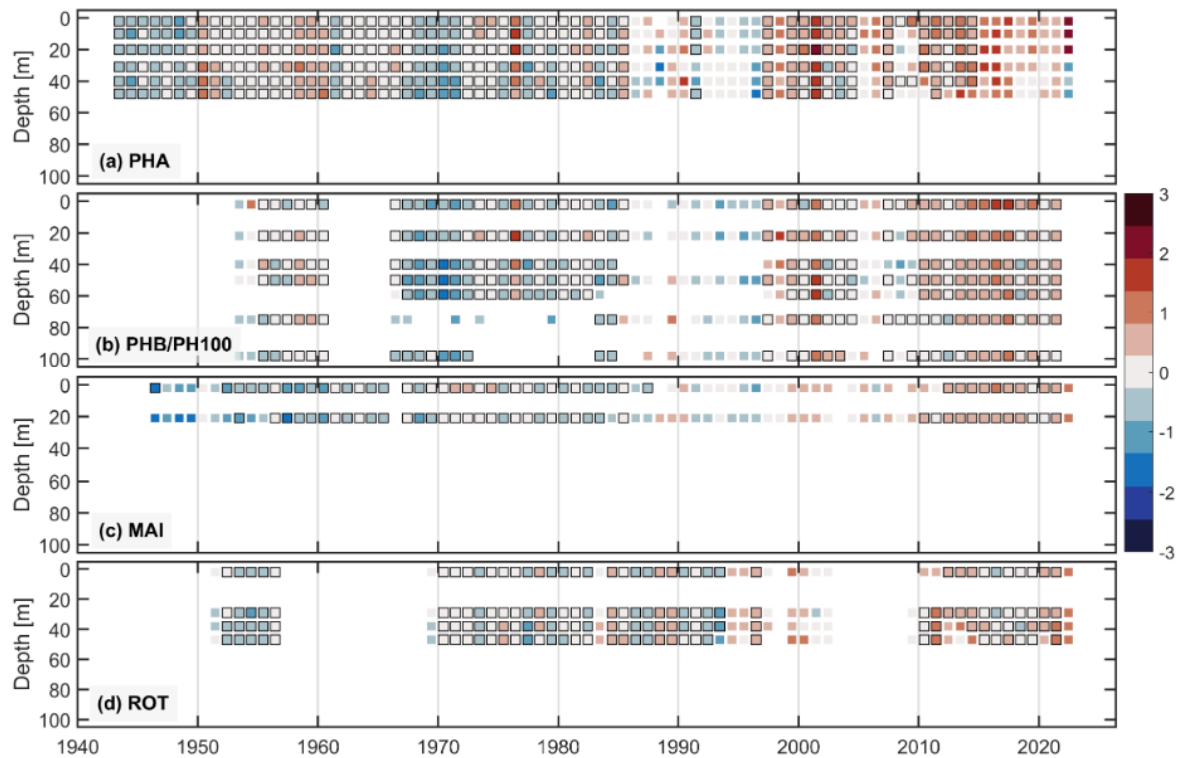


Figure 3. Annual median temperature anomalies relative to the mean daily-varying climatology at optimal depths for the a) Port Hacking 50 m (PHA), b) Port Hacking 100 m (PHB/PH100), c) Maria Island (MAI), and d) Rottnest Island (ROT) sites. All years and depths shown have measurements available in at least 4 months of the year, while those years and depths with a solid black outline have measurements available in at least 10 months of the year.

Section 'Code and data availability' does not seem updated as stated in the response to reviewers. Please avoid repetition.

Thank you for highlighting this. We have removed the text in the 'Code and Data availability' section. Please note that for some reason the tracked changes in the 'Code and data availability' section do not appear in the tracked changes document, even after text has been edited. This appears to be a latex error.

Please double check the references - as pointed out below some look incorrect.

Specific comments (track changed document)

l113 kelvin symbol is K

l232 mismatched bracket

l348 typo

l396 typo

l424 citation looks corrupted

l439 as above

We have made changes on L113 and L232 as requested by the reviewer.

All citations have been updated using Zotero citation management instead. Hence, the citations highlighted by the reviewer have now been fixed.

We have read through the manuscript once more and have made a few minor adjustments. Please see the tracked changes version of the manuscript for highlighted changes.