Thank you for the review and comments. We provide below our responses to the points raised, including details on the modifications made to the manuscript.

1. The first part of the introduction gives a useful summary of previous work on using CGPS for tidal research. On page 2, line 9 it would be useful to mention that the GPS results from Yuan et al. (2013) were used by Lau, Mitrovica, ...(Nature September 2017) to look for lateral variations in body tide models of the lower mantle.

We have added a sentence on page 2 to incorporate this.

2. Page 3, line 16 (also page 7, line 5). It would be worth pointing out that Baker and Bos (2003, Fig. 9) used tidal gravity observations in Wuhan, China, to show that there are major problems with the earlier set of FES ocean tide models in that area.

We have added to Section 2 the sentence, "Such problems with the earlier set of FES ocean tide models were also seen from tidal gravity observations in Wuhan, China (Baker and Bos, 2003) near this sub-area".

3. Page 5, line 32. STDs of the phasor differences....should be STDs of the amplitudes of the phasor differences.

We used equation 2 of Stammer et al. (2014), which we now mention in the text, and which takes the form:

$$SD = \sqrt{\frac{1}{n}\sum_{n=1}^{n}\frac{1}{2}\left[\left(H_n\cos G_n - H_{mean}\cos G_{mean}\right)^2 + \left(H_n\sin G_n - H_{mean}\sin G_{mean}\right)^2\right]}$$

$$H_{mean}\cos G_{mean} = \frac{1}{n}\sum_{n=1}^{n}H_n\cos G_n$$

$$H_{mean}\sin G_{mean} = \frac{1}{n}\sum_{n=1}^{n}H_n\sin G_n$$

4. In Figures 4 and 5, it is very difficult to see all the phasors in Kyushu and the maps look very jumbled in that area. It is not easy to get round this problem. Maybe it would be better to reduce the number of sites/phasors and say that for clarity only 50% (or whatever) of the phasors are shown.

We have modified both Figures 4 and 5 such that they now comprise a part (a) showing the whole region and all phasors and a part (b) showing an enlargement of Kyushu and part of the Ryukyu Islands on an oblique Mercator plot. This enables us to still show the results from all GPS sites but with less clutter.

5. In Figure 5, the final (red) phasors still show some correlations along the Ryukyu islands. This implies that there is still some information left in these residuals. The authors may want to comment on this.

We have included at the end of the first paragraph of the rewritten Section 5 a comment on the correlations between the residual phasors along the Ryukyu Islands, suggesting that they might be due to the tectonic setting of the subduction zone.

6. Page 15, line 32. It is stated that the discrepancies are less than 0.8 mm on the Ryukyu Islands. This is not consistent with Table 4 on the same page.

As per our response to Reviewer 1 point 4, we have modified Table 4 to now also include percentiles and we now refer to those in the Abstract, discussion in Section 5 and in Section 6 (Conclusions).