

Interactive comment on “An Accurate and Homogeneous Altimeter Sea Level Record from the ESA Climate Change Initiative” by Jean-François Legeais et al.

Anonymous Referee #2

Received and published: 16 November 2017

The aim of the paper is well addressed, which focuses on the review of the SL_cci v2.0 ECV and the associated uncertainty, as well as the validation process. Comparison between the updated v2 product with the previous v1 and other datasets (from different groups) is also discussed, making the study relevant to various readers.

In general, the article is well written and clear. The structure and flow of the paper are in appropriate order.

Only some minor points:

Pg 2. Row 4. in the Abstract, authors mentioned about the GCOS requirements. But no clear explanation is given in the Abstract nor in the Introduction. The reader is left

C1

without clear explanation about what actually are the GCOS requirements.

Pg 6. Row 10. Author wrote 'In the v1.1 SL_cci ECV, a 1 mm jump was found in the GMSL around mid 2008'. Is this referred to Fig.4? If so, please indicate in the sentence.

Pg 7. Row 26. +3 cm². 2 should be written in superscript.

Pg 24 Figure 3. Does the x-axis referred to Years? If so, please indicate. The legend should be improved. What are the solid and dashed lines in black (and dashed lines in yellow)?

Pg 24 Figure 4. In the Figure caption and text, Author highlights a jumped about 1mm in mid-2008. Unfortunately, the jump is not obviously appeared in the Figure. I suggest the author highlights the jump area by showing it in a scar-box.

Interactive comment on Earth Syst. Sci. Data Discuss., <https://doi.org/10.5194/essd-2017-116>, 2017.