

Review of « Improving Statistical Projections of Ocean Dynamic Sea-level Change Using Pattern Recognition Techniques” by Malagon-Santos et al.

The authors answered all my previous comments and questions. I really appreciate the introduction of Fig1 which help me understand the method. I find the paper improved overall.

I would like to share with the authors only one minor comment I have.

After their answer, I can recommend the paper for possible publication in Ocean Science.

Minor comment

L169-176 : I do not understand the paragraph.

The authors state that: ‘zos is defined ... as the difference between local sea-surface height relative to the geoid, and its global mean over the ocean ^[L]_[SEP]area (GMTSLR, or ‘*zostoga*’ in CMIP experiments)”.

As I understand, the authors consider the global mean thermosteric sea level added to zos at that point.

Then, the authors state: “Hence, by definition, DSL, or *zos*, varies locally due to ocean circulation and horizontal gradients, but its global mean is zero at every time step”.

I disagree as the global mean sea level contains the thermosteric contribution which is not equal to zero at each time step.

Do I miss something here? I encourage the authors to clarify the paragraph as it can be misleading.

^[L]_[SEP]