

## ***Interactive comment on “Water transport among the world ocean basins within the water cycle” by David García-García et al.***

### **Anonymous Referee #3**

Received and published: 26 August 2020

Review for esd-2020-54 "Water transport among the world ocean basins within the water".

In general, this study is interesting to me, with the global ocean basins to study water mass transport based on GRACE and ERA5. The conclusions are generally supported by the data analyses in this study, but more validations/evaluations are necessary to improve the reliability of the results. At least, a careful inter-comparison between this study and previous studies/literatures can be discussed to enhance our understanding.

Other comments:

L44, change 'de' to 'the'.

In section 2: Methodology and Data: please use subtitles to re-organize the section,

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and improve the readability.

Fig 1: suggest to add legends to indicate the locations of different ocean basins.

Fig 2: are these values obtained from GRACE? or a combination of ERA5 and GRACE? please briefly clarify this in the figure caption.

Fig 3: black curve is the AIA inflow: 'if' should be 'is'.

Fig 4: N component should be briefly explained in the caption.

Fig 6: please indicate the correlation coefficient R between each climate index and the Pacific outflow, at each time series.

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Interactive comment on Earth Syst. Dynam. Discuss., <https://doi.org/10.5194/esd-2020-54>, 2020.