

Earth Syst. Sci. Data Discuss., referee comment RC2  
<https://doi.org/10.5194/essd-2020-371-RC2>, 2021  
© Author(s) 2021. This work is distributed under  
the Creative Commons Attribution 4.0 License.



## Comment on **essd-2020-371**

Anonymous Referee #2

---

Referee comment on "Complementing regional moment magnitudes to GCMT: a perspective from the rebuilt International Seismological Centre Bulletin" by Domenico Di Giacomo et al., Earth Syst. Sci. Data Discuss.,  
<https://doi.org/10.5194/essd-2020-371-RC2>, 2021

---

Comments to "Complementing regional moment magnitudes to GCMT: a perspective from the rebuilt ISC Bulletin"

Relevant and interesting description of a precious dataset such as the ISC in general, not only for magnitudes.  
The comparison of GCMT Mw with so many agencies shows the remarkable consistency of the characteristics regardless of the region covered by the data from the regional agencies. It would be nice to have a description, even a short one, of the different methods used in the different agencies to get the Mw.

This work also shows how important it is to produce data consistently along time. Long time window of data availability allows to find strong relationships between different magnitudes, necessary to standardize and increment dataset constituted by different magnitudes and produced with different methods/authors. This kind of dataset are fundamental for hazard studies for instance. It is appreciated also the invitation written clearly by the authors to observatories and regional agencies to produce data with constancy in time, as long as possible.

Some comments (also reported in the pdf) are the followings:

- 1) Some of figures have to be modified, mainly maps of events because those with lower seismicity are mostly not visible. Probably an inversion of the plotting order avoid that bigger simbols overlap smaller ones.
- 2) It would be really interesting, when possible, to add in the M comparison plots also other relation curves (e.g. the Borman et al 2013 or Lolli et al 2014 or else?)

I recommend also a review of the language.

Please also note the supplement to this comment:

<https://essd.copernicus.org/preprints/essd-2020-371/essd-2020-371-RC2-supplement.pdf>