

## ***Interactive comment on “Open access to regional geoid models: the International Service for the Geoid” by Mirko Reguzzoni et al.***

### **Anonymous Referee #1**

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The paper describes the activities of the International Service for the geoid (ISG). This is not a scientific paper in the strict sense, but a description of data and services. Therefore, the ESSD is the appropriate platform for the publication. The language is very good and the paper is easy to follow.

The main activity of ISG is the collection of regional geoid models (usually in gridded format) and providing a download service. Global models (as spherical harmonics) are not stored at ISG, but at ICGEM. ISG is a useful independent service. ISG has today a collection of 226 models. This is already impressive, but is far from being complete. However, this is not the fault of IGS, since they are dependent of the willingness of people providing their models to the service. Not all stored models are freely available. Except of the collection of geoid models, a rather important activity of ISG is the or-

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ganization of geoid schools. They are organized every several years in many regions of the world. This is very useful for education and spreading the knowledge of geoid determination (and the gravity field in general). The recently established indexing and DOI service as well is very helpful for many authors of geoid models. In my opinion, the height conversion tool is a nice tool and it works, but perhaps not as useful for many people, since most users will prefer to download the whole model and do the calculations themselves. So, they could use their own interpolation methods, not provided by ISG. A useful extension of this service would be, if someone could as well use the restricted models for online transformations (perhaps only for a limited amount of points, to avoid that the users can easily re-generate the original model). The other services provided by ISG (publications and software) are only mentioned shortly in the paper and not treated in detail. The software provided is rather limited and the Newton's Bulletin seems to be inactive since several years.

A big part of the paper (chapter 4) deals with the comparison of geoid models. It shows some of the possibilities of the data of ISG in different application cases. This part, in my opinion, is a little bit long, but I have no objection to leave it as it is. Chapter 4.4 describes the comparison of local with global models. Of course, you can and should do this. But this is not possible with data stored at ISG only. You have to get the global models from elsewhere. It would be nice, if the users could perform such comparisons online. However, I know that this would be a rather big extension of the ISG website.

On line 70 is mentioned "The paper closes with some general considerations and future perspectives of the service". But there is not much there, except of the very last sentence. I would like to learn a little bit more about the future of the ISG (organisation, extension of website, publications, software, ...). This is the main reason why I put in the evaluation "minor revisions".

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