

Interactive comment on “A 3-D RBF-FD elliptic solver for irregular boundaries: modeling the atmospheric global electric circuit with topography” by V. Bayona et al.

Anonymous Referee #1

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I agree with Astrid that the code should be made available to support reproducible research for other researchers to learn. The codes can be made publicly through git repository. If it is short enough to be coded in MATLAB or any other rapid prototyping language under a page or two, it might be good to be included in the paper.

I think that providing the codes to reproduce the convergence trend in Figure 6 will be nice. Providing codes to produce the nice figures (e.g Figure 1 and 2) on the surface of the earth is also a big plus since not so many people know the trick how to do the plots.

One way to speed up the use of RBF-FD in this real world application is to spread the

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codes so that others can compare and benchmark with other legacy codes. This paper has a potential to fulfill that.

Interactive comment on Geosci. Model Dev. Discuss., 8, 3523, 2015.

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