

Interactive comment on “Geodynamic diagnostics, scientific visualisation and StagLab 3.0” by Fabio Crameri

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It is true that StagLab is originally designed for StagYY and therefore currently works best with only that particular code. However, I put a lot of effort in it to open it up for potential use with other (especially open-source) codes. As mentioned by the reviewer, there is a specific file to try and guide through the adjustments needed for making StagLab compatible with other codes. Specific built-in error messages throughout StagLab then indicate necessary additional adjustments elsewhere. However, this is still not straightforward and needs my involvement, which is why I can currently not provide a more general guide to allow other developers to write their own conversion script. I will work on that and try to provide something along these lines in future versions of StagLab.

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Most codes do unfortunately also not offer example output data, that would facilitate making StagLab compatible. I am, however, in contact with other developers to provide extended compatibility to other codes like ASPECT and CITCOM soon.

Regarding StagLab's native language MatLab, I generally agree that scientific codes should be accessible to anyone. However, for the sake of the discussion, I think one has to also consider the following aspects that seem to speak for MatLab and seem to favour effective user accessibility of MatLab over e.g., Python: The usage of MatLab is simpler than usage of e.g., Python; MatLab is probably learned by more people than Python; Most people that run Geodynamic models (often on a supercomputer) also have access to a MatLab license via their employers. On top of that, MatLab codes can, under some code simplifications, also be distributed as stand-alone applications that do not necessitate a licence for their execution. A light version of a stand-alone StagLab seems to be possible in the future.

Interactive comment on Geosci. Model Dev. Discuss., <https://doi.org/10.5194/gmd-2017-328>, 2018.

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