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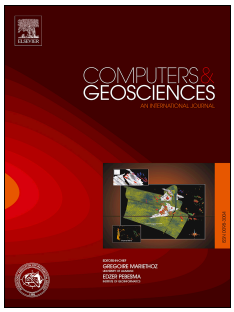

Updates to FuncLab, a Matlab based GUI for handling receiver functions

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-**Reviewer 1**

This manuscript provides an update to the FuncLab software – a Matlab based GUI for processing receiver functions (RFs). RFs are widely used in seismology to study near-receiver structures, such as Moho, LAB or mantle transition zone discontinuities. As the data volume continues growing, the interactive nature of GUI is crucial for processing large amount of seismic data as well as for data quality control. The update of the software as described in the manuscript includes several new features, such as directly fetching data using webservices and on-the-fly CCP stacking. It thus provides a more complete workflow of receiver function analysis. To this end, I think this manuscript is well suited for the journal of Computers and Geosciences. I have only a few minor comments.

a) As far as I understood, RFs in this manuscript refers to P-wave receiver functions only. S-wave receiver functions are not included. If this is the case, it would be good to clarify, for example using PRFs instead of RFs.
I've added a section in the introduction to briefly describe and differentiate PRF and SRF. I've also noted that while the capabilities for SRF are included, many of the functions assume PRF.

b) The author has a video tutorial online which is great. But it would be good to have a manual along with the software also, including some text tutorials.
I have updated the manual to reflect the current updates and it is posted as a pdf online.

c) Line 7: "Receiver Functions" 🗅🗅✇ "Receiver functions"

Changed as suggested.

d) Line 13: H-k stacking, k should be κ (kappa; and the rest of the text)

Changed as suggested.

e) Line 20: "USArray: 🗅🗅✇ "USArray Transportable Array"

Changed as suggested

f) Line 53: "is not useful for other interfaces"🗅🗅✇ "is of limited use for other interfaces". H-κ may be applicable to the sedimentary layer.

That was an oversight also caught by the other reviewer. I've adjusted the statement and added a reference to Yeck et al., 2013 which deals with stripping the sedimentary layer and Wang et al, 2017 which also deals with low velocity zones. The citations have also been added to the citation menu within FuncLab itself.

g) Line 53-58: You may also need to mention artifacts caused by multiples, e.g. PpPs, in CCP images.

Mentioned this in the CCP images section.

h) Line 107: "most previous tools required researchers to email a server". How about SOD, which the previous FuncLab uses to retrieve data?

Yes, SOD, is a great tool to download seismic data and really did lay much of the groundwork for webservices. My experience was that earlier versions of SOD were not user friendly and not as broadly adapted as it could have been. One of the selling points of this revision is a graphical front end to webservices, similar to jweed3.