Interactive comment on “Monitoring recent variations of the surface displacements of eight Nyainqêntanglha glaciers” by J. Shi and M. Menenti

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In their paper J. Shi and M. Menenti compared the surface displacements of 8 glaciers in the western Nyainqentanglha Mountains between 1993, 2003 and 2009. I think the authors could strengthen their manuscript by a proper accuracy assessment and a better cartographic presentation of the results.

Figure 1, 4 and 9: I certainly agree to reviewer 1 that the cartographic presentation of Figures 1, 4 and 9 are not state of the art. To my knowledge, the most actual glacier inventory in this region is the one derived by Bolch et al. (2010) which is more accurate
than the Chinese Glacier Inventory. As Figures 4 and 9 show the main results of the present study much more effort should be put in the cartographic presentation. I think it would be a good idea to show the surface velocities derived on “stable rock”, which should be around zero. This would give a first hint about the accuracy of the results and also could be used in the error-propagation (which is missing!). I also recommend to draw velocity vectors in order to see if the flow direction is appropriate.

A good overview about the actual standard of surface velocity processing from feature tracking is given by Paul et al. (2013).

References:


Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 11, 1555, 2014.