Interactive comment on “Multi-quadric collocation model of horizontal crustal movement” by G. Chen et al.

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A multi-quadric collocation method is used to build the horizontal crustal movement velocity field model of the Chinese mainland very well in the paper. The calculations and conclusions can provide good references for the study on geodynamics in China. On the other hand, some details should be noticed and some questions need clear explanations as follows: 1. Vector or matrix writing symbols should be unified. 2. Matrix B occurred in Eq. (8) seems different with the matrix B in Eq. (1), so it needs explanations. Matrix Ms and Matrix D first occurred in Eq. (8), so they also need explanations. 3. In the multi-quadric collocation method recommended by authors, an inverted double curved surface is used, but the choice of smoothing factor and nodes included in the inverted double curved surface isn’t mentioned by authors. 4. As for external checks, the velocities of 85 high precision GNSS points are used as the only way in the paper. Are there other ways to check the results externally, such as researching results in geophysics?

Interactive comment on Solid Earth Discuss., 7, 3359, 2015.