**Interactive comment on “Full-tensor gravity gradient eigenvector analysis for locating complex geological source positions” by Boxin Zuo et al.**

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Received and published: 1 March 2017

The main problem is the definition of GTA: GTA = Φ[Z*][tanϕ]β tanϕ over the centres of mass of sources attains very large values.

This means that the GTA is an amplification filter of Φ[Z]. The authors implicitly think it plots edges of sources by using its contours, but in practice there is no way to choose one contour over others. In general, ϕ locates the centres of mass of the sources, and Φ[Z] has location and edge information. By multiplying them we lose information.

We could also define GGTA = Φ[ZZ*][tanϕ]β Following the authors scheme GGTA would then be better than the GTA in defining location and edges as Φ[ZZ] is much better than Φ[Z] in defining location and edges.

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Finally, if β = zero then GTA = Φ[Z]*tanϕ and you obtain an amplified Φ[Z] from which the edge information is mostly absent and if β = some very large value then GTA = Φ[Z]*β and the centre of mass information is mostly absent, this means that β is a “focussing” parameter: when far from sources it makes the GTA have information of only Φ[Z] as we get nearer to the top of sources it makes GTA almost totally dependent on ϕ. The edges get lost in this process, that is, they become dependent on β in an unpredictable way.

My recommendation is to reject the manuscript.