Interactive comment on “Jurassic–cretaceous deformational phases in the Paraná intracratonic basin, southern Brazil” by A. J. Strieder et al.

Anonymous Referee #2

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The ms. present results of fault slip data inversion from the Paraná intracratonic basin (Brasil), with the aim to decipher the paleostress field during its tectonic evolution. Despite the data set is appreciable, the ms. appears as an exercise on the application of the used software to the solution of the inverse problem of gathering paleo-stress conditions from fault slip population data, and, consequently, as a mere report of these results.

Major weakness 1. Which is the aim of the work? which gap of knowledge does the ms. address for? 2. The structural data set is lacunose: No field data is presented, or even less, overprinting relationships in the field adequately demonstrated and kinematic analysis totally missing. Which are space-time relationships between folding and jointing? 3. No constrain exists for the timing of deformation: why deformation should be Jurassic-Cretaceous in age? 4. No sensitivity analysis is presented. Sensitivity analysis is also hapered by the lack of field data, or at least, a commented data set. 5. Poor internal organisation: A “geological setting” section is totally missing and the introduction is not exhaustive: why a reader not familiar with the regional geology should be interested in this paper? intracratonic deformation? what else?

Interactive comment on Solid Earth Discuss., 7, 1263, 2015.