

***Interactive comment on “Prospecting for safe (low fluoride) groundwater in the eastern African Rift: a multidisciplinary approach in the Arumeru District (northern Tanzania)” by G. Ghiglieri et al.***

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We agree with the referee that hydrogeochemical data in the paper are lacking. Our campaign in Tanzania spanned a three years lasting period. Such an experience along with the wide number of collected data in our opinion could have organized into a first paper based on the criteria for safe water prospecting in similar contexts, and another specifically dealing with hydrogeochemistry. As far this second paper is in progress, we have realized that our option is a valid one as the length of this paper, which treats isotope data (both stables and radiogenic), mineralogical composition of

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rocks, paleosoils and magadi-like concretions, chemical composition of the previous and of the glassy fraction occurring in the lahar and ash falls. We are processing these data with PHREEQC to assess the saturation state of the groundwater with respect to the different Phases (calcite, villiaumite, fluorspar, fluoroapatite etc.): the results seem to be interesting. Anyway we rest of the opinion that putting all together these data with strictly hydrogeological, geophysical and geological data may render this paper redundant and confusing. The aim of the paper is how to prospect low fluorine water can be prospected so we paid attention only to this parameter. As for the water-rock interactions mechanisms that control the fluorine content we will be pleased to submit, shortly, a new paper. As for the figures and tables we thank for the suggestions and we will re-handle them at once. Best regards Giorgio Ghiglieri and Giacomo Oggiano

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