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## ***Interactive comment on “New insights on the occurrence of peperites and sedimentary deposits within the silicic volcanic sequences of the Paraná Magmatic Province, Brazil” by A. C. F. Luchetti et al.***

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Received and published: 9 January 2014

Dear Editor, I'm pleased to comment the manuscript entitled “New insights on the occurrence of peperites and sedimentary deposits within the silicic volcanic sequence of the Parana' Magmatic Province” by Lucchetti and Co-authors.

The authors present a fascinating study on volcanic products from the Parana volcanic sequence, which show interlayers of sandy sediments forming peperite textures. The presence of peperites suggests that temporal gaps occurred during the volcanism and

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indicates a shifting towards more humid environmental conditions. The manuscript is well written and organized however; I believe that the overall good quality of geochemical data and of descriptions of deposits is not adequately discussed. The key point of the manus is the occurrence of peperites and their possible relation with a change in the climate conditions but an attempt to explain the different type of observed texture is lacking. If I well understood, peperites occur in the upper part of the volcanic sequence, is there any relation between the chemistry of lavas and the occurrence of peperites? Which factors control the aspect of peperites (angular vs rounded)? Is there any significant difference in the chemistry of sediments forming peperites? A discussion on the relationship eventually occurring between chemistry of lavas and textures of peperites could give more indication on the depositional mechanisms and improve the overall quality of the manuscript.

Specific comments: Line 12: by the occurrence; Fig 1. What is “areas surrounding the Parana’ basin”? If there’s not significant geologic information you could left this part in white; Fig 6. report in legend the red and yellow Chapeco and Palmas formations.

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