

Solid Earth Discuss., referee comment RC2  
<https://doi.org/10.5194/se-2020-218-RC2>, 2021  
© Author(s) 2021. This work is distributed under  
the Creative Commons Attribution 4.0 License.

## Comment on se-2020-218

John Browning (Referee)

---

Referee comment on "Reply to Norini and Groppelli's comment on "Estimating the depth and evolution of intrusions at resurgent calderas: Los Humeros (Mexico)" by Urbani et al. (2020)" by Stefano Urbani et al., Solid Earth Discuss.,  
<https://doi.org/10.5194/se-2020-218-RC2>, 2021

---

Review of

Structural studies in active caldera geothermal systems. Reply to Comment on "Estimating the depth and evolution of intrusions at resurgent calderas: Los Humeros (Mexico)" by Norini and Groppelli (2020).

By Urbani et al

This manuscript presents a defense of the approach and findings of a recently published paper (Urbani et al., 2020) following later published comments by Norini and Groppelli (2020). Several criticisms were made by Norini and Groppelli (2020) which are well summarized and defended in the current manuscript. In essence the criticism relates to the Urbani et al (2020) model predicting localized bulges and faulting within the caldera floor formed by a shallow magma intrusion, which is apparently at odds with radiometric dating and other stratigraphic data.

I must admit that I am not overly familiar with the Los Humeros caldera complex but I did take the time to read the recent works of Norini, Bonali and authors as well as the original paper by Urbani et al., on the area. I must also admit that I found the back-and-forth comment manuscript stream that has developed regarding these papers somewhat strange. Nevertheless, in my view the manuscript that I was asked to review by Urbani et al is suitable for publication since it addresses all of the points raised by Norini and Groppelli, in a clear and concise manner and it expands on the original Urbani et al., 2020 manuscript with further useful and interesting information. I have sent, with this review, a commented PDF which includes several suggestions for amending the text for clarity. These are minor comments but I would appreciate if the authors take these on board. Lastly, I strongly recommend the authors avoid any overtly antagonistic language, which

for the most part I think they have done, but there are some comments which I have highlighted, in the appended PDF, that they may wish to review.

Regards,

John Browning

Please also note the supplement to this comment:

<https://se.copernicus.org/preprints/se-2020-218/se-2020-218-RC2-supplement.pdf>