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Natural Hazards and Earth System Sciences
Discussions

Interactive comment on "Processes culminating in the 2015 phreatic explosion at Lascar volcano, Chile, monitored by multiparametric data" *by* Ayleen Gaete et al.

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The ms is a very interesting document where several data from a number of techniques showing its behavior pre, during and after 2015 Lascar's eruption, become the first very well documented eruption from that volcano, becoming a very important contribution to the knowledge of this volcano and Central Andes volcanoes eruptive style.

However, I have to do mention about several problems in the text, specially in the quality of some data and how is interpreted. here I mention where are the main problems, but in the attached pdf appear detailed comments about each topic.

1. A questionable interpretation of data coming from seismic station, considering that only 1 station was available during the eruption. 2. A major problem is the interpretation of the existence of a lava dome, where only a solidified conduit is present, and mostly of the model is related with the presence of a dome, becoming a doubtable interpretations. 3. Some problems in the techniques can be detected, specially in the case of processing of SO2 data from permanent mini-DOAS station. 4. A better interpretation between rain or snow fall water interaction with hydrothermal-magmatic fluids is needed.

I recommend major corrections, based in a better interpretation of processes, fluid interaction, distribution of hydrothermal-magmatic system, current active crater morphology and conduit details.

Please also note the supplement to this comment:
https://www.nat-hazards-earth-syst-sci-discuss.net/nhess-2019-189/nhess-2019-189-RC1-supplement.pdf

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