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Interactive comment

Interactive comment on "Cyclic activity of Fuego de Colima volcano (Mexico): insights from satellite thermal data and non-linear models" by Silvia Massaro et al.

Anonymous Referee #2

Received and published: 30 May 2019

The authors report a cyclic activity of Fuego de Colima volcano (Mexico) in the period 1998-2018. Three periodicities have been identified by using wavelet analysis. Numerical simulations support the hypotheses that the cyclic behavior is due to the non-linear coupling between magma flow and crystallization in elastic dykes connecting one or two magma chambers with the surface. The used magma viscosity should be reported in the manuscript and/or in Table 1. In the figure Appendix A2-A3 (frame a), page 41, the yellow zone is indicated as the "transient regime"; I think that it is more appropriate to indicate that zone as "unstable" as described in the text. Line 394: it could be useful to report the units of T0 and T1 (perhaps months). The concentration of the dissolved gas reported in Table 1 (0.05-0.06 wt%) seems quite small for a magma that produces

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vulcanian explosions (perhaps you mean weight fraction? please check).

Interactive comment on Solid Earth Discuss., https://doi.org/10.5194/se-2019-31, 2019.

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