Interactive comment on “Investigating volcanic hazard in Cape Verde Islands through geophysical monitoring: network description and first results” by B. Faria and J. F. B. D. Fonseca

Anonymous Referee #3

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Paper nhess-2013-302 by Faria & Fonseca reports on a recently installed seismic network to investigate the volcanic hazard in the Cape Verde Islands. The paper focuses on the geological background of the archipelago with emphasis on the volcanic activity, and presents the network installation. The authors nicely summarize the volcanic activity (e.g., also reviewing a large number of publications). The seismic networks seems to be well suited to provide important constraints on the volcanic hazard of this understudied (mainly in terms of local seismicity) archipelago, particularly on the ongoing seismic activity potentially related to the volcanism. The authors present also some first results. Therefore, the paper is well suited for NHESS. It is well written, well
structured and reads very easy. I very much appreciate that the authors already picked up most of my suggestions from the quick access review, particularly that they added more information on the geotectonic framework (What is the reason for the Cape Verde volcanism? Hot-spot relation?). Furthermore, the authors show now some more of the geological features in the map(s). I also appreciate that the authors added more information on the warning capabilities of the network in Fogo. So, there are only very minor issues left (see below). Accordingly, I recommend the acceptance of the paper after minor revisions.

Minor issues: Figure 6, 7, 11, 14, 15: What does the color mean? Please add a color scale to Figure 7 and a corresponding label to all these Figures. Figure 9: What are the contour lines? Bathymetry/Topography? Please explain in the caption. I suggest to show the shoreline of the island (or some shading of land area). Or is it all on land? Page 4999, L3 and L11: In Line 3 it is stated that “older islands (are found) in the east and younger islands in the northwest and southwest”, but on line 11 that “there is no clear age progression with geographic location”. Sounds a bit contradicting – please rephrase. Page 5002, L22: “extent” instead of “extend”

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