Interactive comment on "Assessing qualitative long-term volcanic hazard at Lanzarote Island (Canary Islands)" *by* Laura Becerril et al.

Laura Becerril et al.

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Reply to JL Macías Comments Please indicate in section 7.2 Lava Flow Scenarios which program was used to simulate lava flows it is not mentioned in the text. Done

Figures:

Figure 1. Legend Change the colour of the 2011-2012 eruption, it is not visible or it is too small? The box of the Timanfaya eruption in the legend does not match that of the map The triangle for the 2011-2012 was too small, we have enlarged the symbol. We are not sure if you refer to the red box of the inset. We only wanted to show with this inset the location of Lanzarote (not Timanfaya) within the Canary Archipelago, as it is written in the Figure Caption.

Figure 2. Legend In the box labels you mixed eruptions with deposits so you need to define them in a homogeneous way for instance: Historical eruptions (1824) or Lava flows and pyroclastic (1824 eruption). We have corrected the legend What is the meaning of subhistorical?? Those Holocene eruptions that took place before the last 600 years. We have modified it in the legend

Fig. 2b caption mention the diameter of the crater. Done Fig. 2b and 2c please indicate the orientation of the photographs. Done

Figure 4. change obtained in a NE-SW area. for obtained along a NE-SW oriented area. Correction Done

Please also note the supplement to this comment:

http://www.nat-hazards-earth-syst-sci-discuss.net/nhess-2017-2/nhess-2017-2-RC1 - supplement.pdf

Lines are referred to the new corrected manuscript

Line 24: correction done

Line 26: we do not understand why the word visitors, has been crossed out, we have left it.

Line 28: we have decided to leave "forget about" since the meaning is the same one

Line 29: we have left the sentence as it is since it does not change the meaning

Lines 43, 44: correction done

Line 84: correction done

Line 111: correction done

Lines 143, 149, 153: correction done

Line 164: correction done

Lines 239, 240: correction done

Lines 253, 254, 255: corrections done

Lines 265, 266: corrections done

Line 271: we have included the tool used for simulation lava flows (VORIS 2.0.1)

Line 276: correction done

Line 288: corrections done

Please also note the supplement to this comment:
http://www.nat-hazards-earth-syst-sci-discuss.net/nhess-2017-2/nhess-2017-2-AC1-supplement.pdf

LANZAROTE

CANARY ISLANDS

Simplified Geology

■ Holocene (Historical Eruptions 1730-36)	■ Pliocene
■ Holocene (Historical Eruptions 1824)	■ Miocene
■ Holocene (Subhistorical Eruptions)	■ Sedimentary Deposits
■ Upper Pleistocene	▲ 2011-2012 Eruption (Inset)
■ Middle Pleistocene	--- 1730-1736 Eruptive Fiss.
■ Lower Pleistocene	--- 1824 Eruptive Fissure
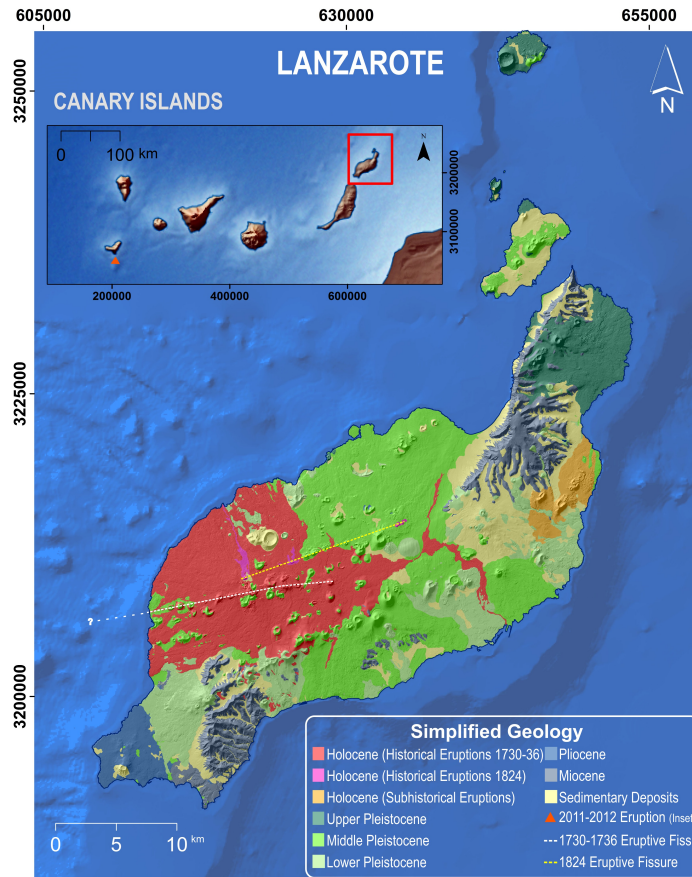
Fig. 1. Figure 1. Simplified geological map of Lanzarote Island. The top left inset displays the location of Lanzarote within the Canary Archipelago. (Original geological map can be found in: http://info.igme
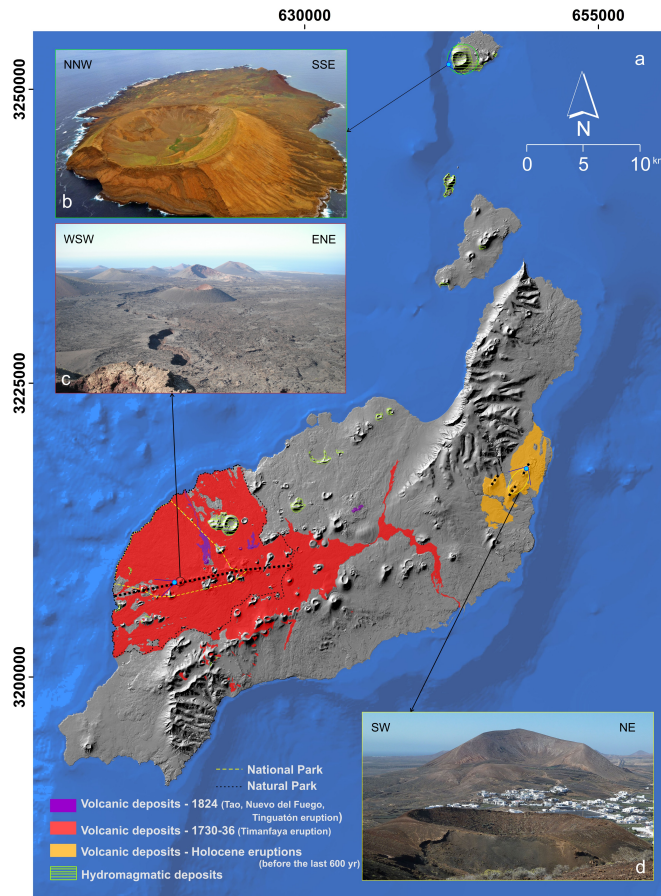
Fig. 2. Figure 2. a) Historical eruptions (red, pink and yellow), and hydromagmatic edifices (green) on Lanzarote; b) Alegranza hydromagmatic cone with a diameter of 1.2 km; c) Timanfaya cones; d) Mt. Guenia
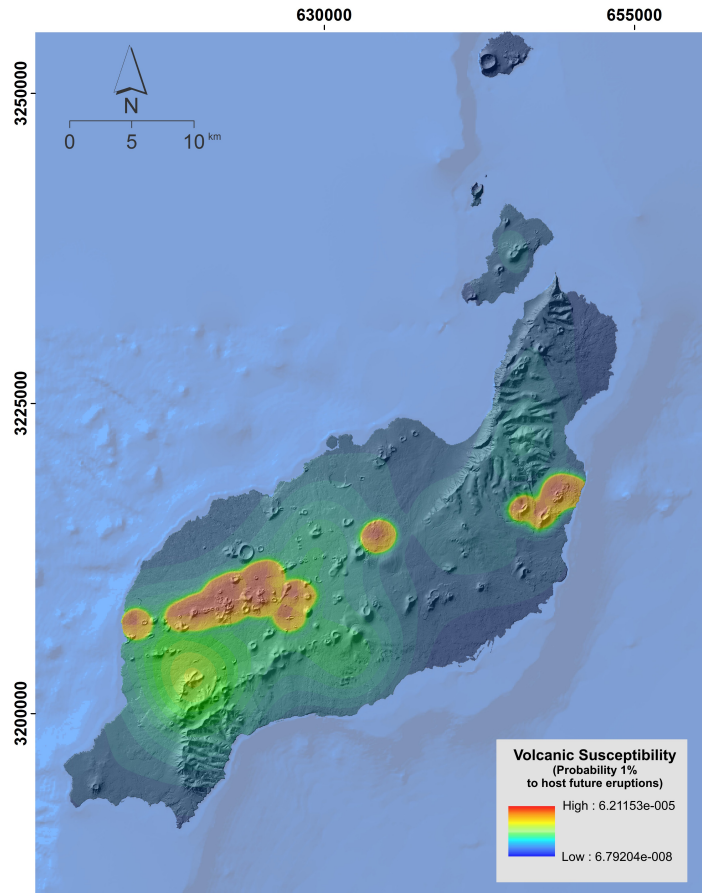
Fig. 3. Figure 4. Volcanic susceptibility map of Lanzarote Island. The highest probability (0.00006) of new vent open-ing is obtained along a NE-SW area. High probabilities are also observed in the South of