

Change title to 'UAV survey method to monitor and analyze geological hazards: '

Line 13: Change in 'of geological hazards'.

Line 14: Remove 'and monitoring'.

Line 20: Structure from Motion (SfM). Correct this also in the other parts of the manuscript.

Line 25: Softwares.

Lines 27-30: Citations should be ordered by year of publication.

Line 35: Add papers from Bonali et al. which are based on Structure from Motion techniques and drone surveys applied to active volcanic areas.

Line 43: Remove 'in'.

Line 47: What do you mean by high 'temporal resolutions'? Please detail better.

Line: 'to georeference'.

Line 55: in other parts of the manuscript, you speak about DEMs, not DSMs. Please make the text more homogeneous.

Line 72: Fold and thrust belt. Correct also in 'gradually deformed'. Remove 'and moved'.

Line 74: they 'represent' a preferential way.

Line 94: 'outside the volcano area'.

Line 96: Why are you supposing that these structures are active? Please specify.

Line 104: 'in particular ensuring i).....'

Line 119: '0.016 m'.

Line 121: 'to compute'.

Line 123: '0.024 m'.

Line 131: 'GCPs'.

Line 142: The sentence is not clear, please rephrase.

Line 144: Please rephrase.

Line 156: Please specify the acronym 'TST'.

Line 158: Remove the comma after 'network'. Also 'Fig. 5A'. Same in line 161 '(Fig. 5B)'.

Line 161: What do you mean by 'verticality'? What is a bubble level?

Line 166: The sentence is not clear, please rephrase.

Line 170: Change 'we have done' in 'we performed'. Also, what do you mean by 'compared with the SfM software data'?

Line 175: Remove 'during'.

Line 186: 'Nadir'.

Line 190: '2.4 Data processing through Structure from Motion (SfM) techniques'.

Line 192: 'Steps of the processing chain regarding Tie Point Accuracy and Marker Accuracy have been performed according to James et al. (2017) (Fig.6)'.

Line 196: we modified 'some' parameters.

Lines 195-200: These sentences can be improved.

Line 206: Remove the comma after James.

Line 229: is usually detected from 'sparse point clouds'.

Line 233: Dense point cloud. Also, 'is the most suitable'.

Line 235: Dense point clouds. Also in line 243.

Lines 250-252: Remove the space between 10 and A,B,C. Same in all text.

Line 253: 'which exceed'.

Line 267: 'of the measurements'.

Line 276: '3. Results'.

Line 277: 'As shown in section 2.2, using a percentage of GCPs...'.

Line 278: 'GCPs'.

Line 279: 'When the threshold of 60% is exceeded, ...'

Line 315: 'on the whole mud volcano area'.

Line 316: 'In order to visualize important deformations....'

Line 345: 'Figure'. Same in line 346.

Line 360: Change 'questions' in 'issues'.

Line 366: 'the second aspect to be considered is the evaluation....'.

Line 371: What do you mean by 'volcano shell'?

Line 375: 'at least of...'.

Line 398: 'In hazards management,...'. Remove comma after 'technique'.

Line 403: 'can occur up to one year before...'.

Line 415: 'in the case of anomalous values detected, the monitoring campaigns must be improved'.

Figure 1: Add a scale and an orientation to the figure.

Figure 2: North and scale are missing.

Figure 3: Correct 'local' in the legend.

Figure 6: Correct 'Adjustment' and 'Reconstruction'. In Step 3, the white box is missing the word 'Point' in 'Build Dense Cloud'. Also, specify the acronym DEM.

Figure 17: in the legends, correct 'Area', sometimes written as 'areae'.