

Interactive comment on “Deformation characteristics and exploratory data analysis of rainfall-induced rotational landslide: A case study of the Zhutoushan landslide in Nanjing, China” by Weiguo Li et al.

Anonymous Referee #2

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[Major section] There are three major weaknesses in this manuscript so I suggest this manuscript should be rejected. First, most figures are too unclear to understand what the author's description. For example, the resolution of maps, labels, and numbers in Figs. 1, 4, 5, 6, 7, 8, 9, 10, 11, 13, and 14 are poor, so that I cannot identify the results are corresponding to text. Second, the introduction of methodology is not enough to explain how the results are produced. For example, Box plot, EDA, fitting method. Besides, the literature reviews should include the important results or concept to relate to this study and basic contents should be introduced, such as the distribution of layers

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in Fig. 2 (Line 47: heavily deformed sandstone, siltstone, marlstone, limestone, and soil.), evidence of landslide boundary in Figs. 1 and 13, and the variation meaning of each data in Fig. 4. Third, the data and evidence are not enough to support the conclusion of rainfall-induced rotating landslide. [Minor section] It is conflict between the statements of Lines 78-90 and Lines 90-91. What is the meaning of four column diagrams in Fig. 11? If you use the same scale in North axis and West axis, it could show the azimuth directly in Fig. 12. Fig. 13: the horizontal displacement could be calculated by N and W components. Lines 158-159: "... , the average rate of 8 points is 2mm per day, ..." Is it corresponding to the data of Line 155-156 "The horizontal displacement of the GPS1 point is the largest, reaching 792mm (from July 14, 2017 to April 8, 2019, 633 days)". $792\text{mm}/633\text{days} = 1.25\text{mm per day}$ (Largest?)

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