Earth Syst. Sci. Data Discuss., author comment AC1
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Reply on RC1

Alessandro Tibaldi et al.

Author comment on "Slope deformation, reservoir variation and meteorological data at the Khoko landslide, Enguri hydroelectric basin (Georgia), during 2016–2019" by Alessandro Tibaldi et al., Earth Syst. Sci. Data Discuss., https://doi.org/10.5194/essd-2020-324-AC1, 2021

Dear Reviewer 1,

thank you for your very useful suggestions. We have prepared a new version of the paper where we included all of them. The point-by-point replies to all suggestions are listed below. The Editor advised me that the we will be allowed to upload the new version of the manuscript only in a successive stage when we will have received all the reviews.

We now provide a series of new data and interpretations useful to correlate the shallow information with the underground data. First, we added a new chapter of description of the internal structure of the landslide, so the chapter "2 Site description" is now divided into two subsections: "2.1 Quaternary geology and geomorphology" and "2.2 Substrate characterization". The data of these subsections come from geological-structural field survey, logs drilled across the landslide deposits, a series of piezometers, and results of static analysis of the slope. With these data, we describe the Quaternary covers and the general architecture of the substrate of the landslide. We also describe the presence of more than one slip surface and their possible depth. This chapter is accompanied by a new figure that shows a vertical cross section through the landslide body and its substrate, completed with location of logs and potential slip surfaces.

Then we added a new chapter in the "5 Discussion", that now is divided into two subsections: "5.1 Correlation slope deformation - lake level - rainfall" and "5.2 Behavior of the landslide and slip planes". This latter new subsection contains a discussion on the internal behaviour of the landslide respect to the presence of different slip planes, and on the possible differential movements of the various parts of the landslide respect to an increase or a decrease of the lake level.

Following your suggestions, we also added the Latitude coordinates that were missing at the geological map, and Lat and Long coordinates at Figure 1b.

We improved the line drawing that shows correlation between sketches at different scale.

And finally, we inserted the suggestions contained in your attached pdf.