Dear Reviewer 1,
thank you for your very useful suggestions. We have prepared a new version of the paper where we included all of those. Our point-by-point replies to all suggestions are listed below.

Dear authors,
principally, the manuscript is well written and can be understood.
But, for a journal with such a high IF, the data type is very simple and technical and correlations between extensometer data and the lake level and climatic data are relatively straightforward. You do not provide any deeper analysis of the landslide, no internal structures shown; therefore, while the data are certainly of great use - I doubt the results are sufficient for publication in a high-IF journal. However, if other reviewers think differently, the manuscript could be improved by providing more structural and subsurface information.
REPLY: *We have now provided a series of new data and interpretations, which are helpful to correlate the shallow information with the underground data. Firstly, we added a new chapter of description of the internal structure of the landslide, so the chapter "2 Site description" is now subdivided into two subsections: "2.1 Quaternary geology and geomorphology" and "2.2 Substrate characterization". The data in these subsections come from geological-structural field survey, logs drilled across the landslide deposits, a number of piezometers, and results derived from the static analysis of the slope. By means of these data, we have been able to describe the Quaternary cover and the general architecture of the substrate of the landslide. We have also described the presence of more than one slip surface and their possible depths. 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 the logs and potential slip surfaces.*
Then, we have added a new chapter to the "5 Discussion", which in the revised version is subdivided into two subsections: "5.1 Correlation of 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 in terms of the presence of different slip planes, and also focused on the possible differential movements of the various sectors of the landslide in response to an increase or a decrease of the lake level.

Coordinates should be added to the maps and a better lin should be established between the different maps - when changing scale.
REPLY: *Following your suggestions, we have added the Latitude coordinates that were missing in the geological map, and Lat and Long coordinates in Figure 1b.*
We have also improved the line drawing that shows the correlation between sketches at different scale.

Finally, we have inserted the suggestions contained in your attached pdf.

Dear Reviewer 2,
thanks for the very useful suggestions, all of which have been taken into account in the new version of the manuscript. Our point-by-point replies to all suggestions are listed below.

Replies point-by-point:

GENERAL COMMENTS

The manuscript provides continuous data monitored over about three years in a site located along the eastern mountain slope of the Greater Caucasus (Georgia) overlooking the Enguri artificial water reservoir, involved in the active Khoko landslide. In particular, it reports some data about i) the landslide displacement (monitored by to two digital extensometer installed next to the head scarp), and ii) the fluctuations of the lake level.
The paper, interesting and well written, aims to provide potentially useful information for risk mitigation measures. Nevertheless, the discussion session is not able to explain the different responses monitored by the two extensometers.
***Reply**: we have added an explanation in regard to this topic in the new Discussion section "5.2 Behaviour of the landslide and slip planes".*

In particular, the Authors do not carefully argue their assumption according to which the landslide activity is almost exclusively governed by the lake levels, while the rainfall-induced direct infiltration does not significantly influence the pattern of deformation.
***Reply**: we have discussed the possible influence of the rainfall on the pattern of deformation in both the new sections "5.1 Correlation slope deformation - lake level - rainfall" and "5.2 Behaviour of the landslide and slip planes".*

SPECIFIC COMMENTS

Line 169. How far is extensometer n.1 from extensometer n.2 ?
***Reply**: 240 m, we have pointed this out at the beginning of chapter "3 Methodology and instrumentation".*

Line 190. Some details regarding the about 70 mm starting value, registered on 4th November 2016, should be provided. Is it just an initial extension due to installation? If it is so, the graph in Figure 5 should start from zero value.
***Reply**: Yes, it was an initial extension due to installation; we have modified our Figure 5 in order to have zero as starting value.*

Line 201. Such gap should be indicated in Figure 4 and the corresponding (just hypothesized) values should be reported (for instance) through a dashed line.
***Reply**: We have modified figure 6 and 11 by changing the line segment with a dashed line.*

Line 210. As already requested for extensometer n.1, some details about the starting value of about 152 mm registered on 18 May 2017 should be provided. If it is due to installation, the graph in Figure 6 should start from zero value.

Reply*: we have modified Figure 6 in order to have zero as starting value, as well as in Figure 11.*

Line 210. “Deformation” should be replaced (here and elsewhere in the text) by “extension”, because deformation is, of course, dimensionless.
Reply*: the term has been replaced wherever necessary.*

Line 240. Could you explain such different responses shown in Trench 1 and Trench 2 ?
Reply*: we have included a possible explanation for this in the new version of the paper.*

Line 271 - Discussion. Such section is rather weak. In particular, it is not able to explain the different responses monitored by the two extensometers. Some properly commented figures should be added to highlight the relation between the extension rate data and the lake levels monitored during the infilling and drawdown stages. Figure 10 by itself can not put into evidence such crucial aspect.
Reply*: we have added an explanation for the different responses monitored by the two extensometers, in the new Discussion section “5.2 Behaviour of the landslide and slip planes”. We have also inserted some labelling/arrows in Figure 11 (previous Fig. 10) in order to show more clearly the correlation between lake level and extension.*

Lines 285-286. Such observation should be furtherly discussed. The represented daily precipitation values are not sufficient to make such observation. Rainfall accumulated over larger periods (for instance, one or more months) could agree with the observed velocity trends. Therefore, a relation between movements and direct rainfall-induced infiltration cannot be excluded.
Reply*: we have provided an in-depth discussion of the possible influence of rainfall on the measured pattern of extension, in both the new sections “5.1 Correlation of slope deformation - lake level - rainfall” and “5.2 Behaviour of the landslide and slip planes”. We have also calculated the amount of rainfall (month by month) to be able to better assess the rainfall accumulated over longer periods.*

Line 293. Such delay is not clear and should be discussed. In particular, I did not understand why after 29 January 2019 the rate of extension monitored at trench 1 is about 1 mm/month, while deformation monitored at trench 2 is nil.
Reply*: we have discussed the possible independence of the two trenches in terms of their location in two parts of the landslide that can move separately; we also have proved, by way of new data and the geological section, that there are different potential slip planes. This may also explain why trench 1 moved slowly in 2019 and trench 2 showed zero amount of movement.*

Figure 10. Such Figure resumes all the data shown by Figure 5, 6, 7, 8 and 9. Therefore, in my opinion, Figures from 5 to 9 could be eliminated and replaced by Figure 10.
Reply*: At this stage we would rather maintain these figures because Figure 11 (previous Fig. 10) is too rich with information, and the various lines can be better appreciated if they are shown separately in each graph, especially those referring to daily rainfall and temperature, the details of which are hardly seen in Figure 11. Moreover, we have inserted in Figure 11 the monthly rainfall instead of the daily rainfall, and thus the graph pertaining to daily rainfall should be shown seprately.*

TECHNICAL CORRECTIONS
Some technical corrections are reported by the attached supplement pdf file
Reply*: we have inserted all these corrections.*

Dear Reviewer 3,
thank you for your 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.

Data presented are interesting sine there was real monitoring. But the analysis and interpretation looks rather poor.
Reply*: In the new version we have added a new chapter focused on the inner structure of the landslide, in which we have described more data derived from logs, piezometers, geological surveys and numerical modelling. We have also expanded the Discussion with the addition of the new sections "5.1 Correlation of slope deformation - lake level - rainfall" and "5.2 Behaviour of the landslide and slip planes".*

I have few major comments. First, about the overal shape of the Khoko landslide (a in Figure 3). I'm not sure that the landslide northern boundary is correct. To my knowledge, I would drw the overal landslide more funnel-shape, with its northen boundary on the other, southern side of the "peninsula". It can be of some importance for the interpretation.
Reply*: thank you for your suggested interpretation; however, our Figure 3a (and the map of Figure 2) are based on our field surveys, and also on those performed by Soviet researchers before lake infilling; these show the presence of scarps, sinkholes and fissures in the drawn landslide body, and the drawn landslide boundaries are also based on piezometers broken by movements along the landslide slip planes, as explained in the new data section "2.2 Substrate description". These observations and data have allowed us to precisely draw the boundaries of this complex landslide.*

Second, relationships between extension measured in Trench 1 and 2 and lake level shown in Figure 10 have opposit trends. While in trench 1 it followed with some delay first impoindment and, generally ignored further variations, in Trench 2 extension increased during first level drop and somehow during the second drop and following the maximal rain. Authors did not expalain it. Authers should provode more fact-based analysis not affected by some initial hypothesis.
Reply*: we have added a more in-depth discussion analyzing the deformation at each extensometer, compared to lake level variations and rainfall values. We have highlighted the presence of different rock volumes in the landslide that can move independently, as also suggested by the presence of different slip planes (described in the new section "2.2 Substrate description"). This can explain the different behaviors recorded at the two trenches.*

Frankly speaking, I'm not sure that there is enough data to provide any well gronded conclusions.
Reply*: our paper contains four years of observations of lake level, rainfall, extension at two extensometers, and temperature, plus geological and geomorphological data coming from field surveys of the landslide area (added to the new version of the paper), plus lithostratigraphic and geotechnical data coming from more than a dozen logs and piezometers distributed in the landslide body (added to the new version as well). These data are of paramount importance as this is the first monitored landslide in the Republic of Georgia, and it represents a key example of how to monitor an unstable slope facing an artificial water reservoir, connected to a major hydroelectrical plant. Apart from being a useful example, the publication of these data is also necessary to raise awareness about the geohazard at this strategic facility.*

Dear Reviewer 4,
thank you for your very useful and constructive suggestions and for your sketch of the landslide area, which has been highly appreciated. We have prepared a new version of the paper, in which we have included all your suggestions. The point-by-point replies to all your suggestions are listed below.

GENERAL COMMENTS

The present work represents an interesting case study (first time for the Republic of Georgia) of a monitoring of an important landslide phenomenon facing an artificial water reservoir. Despite its uniqueness, however, the study does not seem to provide methodological or quantitative indications such as those required by such a high IF journal. Even the interpretations proposed remain generic and not adequately justified by the data collected. At present, the manuscript should be implemented and the data more thoroughly discussed and interpreted.
***Reply**: we have expanded the data section and the discussion, and both have been thoroughly implemented: we have been able to showcase new data and results related to the inner structure of the landslide from logs, piezometers, geological-structural mapping, and numerical modelling. We have added a new figure showing a geological-structural section through the landslide body with superimposed the potential multiple slip planes resulting from numerical static slope instability modeling and log/piezometer observations. Thus, the chapter "2 Site description" is now subdivided into two subsections: "2.1 Quaternary geology and geomorphology" and "2.2 Substrate characterization". We have also expanded the Discussion with the subsections: "5.1 Correlation of 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 in terms of the presence of different slip planes, and on the possible differential movements of the various parts of the landslide also based on GPS monitoring stations located in different parts of the unstable slope, which have now been described.*

SPECIFIC COMMENTS

1) Figure 3 - Observing the aerial image, the perimeter of the landslide does not seem adequately bordered. At the link below, for greater clarity, I have reported a sketch of my hypothesis based on the morphology and some characteristics of the slope, https://we.tl/t-9TlRiDhnlZ. In particular, I believe that the area is affected both by a deep phenomenon (related to the gravitational trench - DSGSD?) and by more "superficial" ones coinciding with that bordered in blue and that described by the authors.
***Reply**: thank you for your constructive interpretation. We have taken into account your suggestions, which, anyway, need to match field observations. The boundaries of the landslide area, as depicted in Figures 2 and 3a, are based upon our field surveys, and also on surveys made by Soviet researchers before the lake infilling, that show the presence of scarps, sinkholes and fissures in the drawn landslide body, as well as on a series of piezometers broken by movements along the landslide slip planes and on logs. The above data have been reported in the new section "2.2 Substrate description". If, on the one side, these observations have allowed us to precisely draw the boundaries of this complex landslide, on the other side we have taken into account your suggestion relative to possible different landslide bodies. This has been assessed also with the aid of GPS monitoring stations located in different parts of the unstable slope.*

The latter, however, would seem to be composed of two distinct movements, with different velocity and (perhaps) type (red and orange in the sketch). This fact would also justify the different phases of activation (probably one consequent to the other).
***Reply**: We have taken into account this suggestion, which is included in the revised Discussion, and we have also added a new figure where we try to define different landslide units/bodies. In this figure we have also placed the arrows representing the GPS vectors measured in different parts of the landslide.*

2) Figure 10 - Based on what has been said, I believe a direct correlation between the oscillations of the lake level and the response to the estesimeters is unlikely, although these oscillations certainly represent a strongly destabilizing element. More likely a direct relationship with rainfall events; the different response time would be related to the differential movements inside the landslide body (red + orange). As is well known in geomorphology, more superficial landslides can be activated after a few days of intense rainfalls, while deeper landslides respond with delay to "seasonal" events. In this regard, the use of inclinometers inside the landslide body would have been useful.
***Reply**: we have provided a more in-depth discussion analyzing the deformation at each extensometer compared to lake level variations and rainfall values. We recalculated rainfall values month by month (instead of daily values) to check if there is any clearer relationship with cumulated rain. We have better clarified the possible influence of rainfall on some periods of enhanced extension rates, while we still think that the first major increase of extension rate at extensometer 1 has been influenced also by the close-in-time increase of the lake's level. We have highlighted the presence of different rock volumes in the landslide that can move independently, as also suggested by the presence of different slip planes (described in the new section "2.2 Substrate description") and of GPS vectors (now added). This can explain the different behaviors recorded at the two trenches.*