Comment 1:

For instance, the introduction starts with a paragraph on the InSAR and source inversion of the Kumamoto earthquake, which has nothing to do with the landslide investigated here.

Response: The section has been deleted as suggested by the reviewer.

Comment 2:

The problematic of the study is not addressed. Is the main question related to landslide detection? Or a methodological paper on the combination of InSAR and GNSS? Or the study of the triggering factors on landslides?

Response: In this paper, InSAR technology is used as the main technology, and GNSS and meteorological data are used as auxiliary technology to study the triggering factors of landslide deformation.

Comment 3:

The data and methods section does not present the GNSS data, the sampling frequency, the type of instrument, the way they are processed.

Response: We will add the GNSS data, the sampling frequency, the type of instrument, the way they are processed.

Comment 4:

The results section does not present the GNSS results and the errors associated with the measurements. This is of specific concern when looking at Figures 11 and 12, where the GNSS time-series of the same point don't have the same sampling rate in the two Figures, and where the GNSS positions seem to fluctuate by about 20mm with a 1-month sampling frequency. I am a bit surprised by such a large fluctuation for GNSS measurements. Knowing the type of GNSS (simple, double frequency) and the way the data are processed would help to rely on these data.

Response: We will present the GNSS results and the errors associated with the measurements. In Figure 11, the sampling frequency of GNSS is week, while that of Figure 12 is the month.

Comment 5:

The comparison between the InSAR and the GPS time-series at the same locations show large discrepancies (Figure 12), which is very lightly discussed (authors mentioned at lines 217 a different spatial resolution, and some cumulative errors without being precise on these errors). Errorbars on the different time series should be shown, and sources of the errors must be discussed.

Response: Error bars on the different time series will be shown, and sources of the errors must be discussed in detail.

Comment 6.

The rain gauge used to analyze the data is 50km away, which is certainly too far to study a local response to a specific landslide. Also, the rainfall time-series shown in Figures 15 and 16 are not the same. Are they coming from different locations?

Response: Although the rainfall gauge can not accurately represent the rainfall distribution of the landslide, the rainfall trend is roughly the same. This paper focuses on the inducing factors of landslide deformation, and the rain gauge can be used in this paper. In order to compare rainfall and deformation results of GNSS and InSAR, the sampling frequency of GNSS and InSAR is consistent with rainfall.

Comment 7.

Authors claim to see a seasonal effect rainy/dry seasons on the landslide displacement (Line 220) that I don't see. I clearly see an acceleration on a GPS time-series (GNSS5) at the end of the period of observation, which would be interested in

investigating, but no seasonal motion. The time series of 15 months is too short of analyzing the correlation between landslide displacement and seasonal rainfall. At least two years would be required for investigating a seasonal effect.
Response: We will add two years of observation data to analyze the relationship between landslide deformation and rainfall by the reviewer.

Comment 8.
Figure 16 shows a time series of InSAR displacement between July 2018 and October 2020, whereas authors state they process InSAR data between July 2019 and August 2020. Where does the July 2018-July 2019 time series come from?
Response: We made a mistake. We will change "between July 2019 and August 2020" to "between July 2018 and August 2020".

Comment 9.
Showing a correlation between rainfall and landslide displacement is not really novel. What do you learn from this correlation on the physical processes of the landslide?
Response: We will add a correlation to the physical processes of the landslide.

Comment 10.
In Figure 8, where is the landslide situated? Also, the range of the colour scales is not the same, which makes it hard to compare the three different images.
Response: We can compare the results of GACOS model before and after correction: (a) and (c), (d) and (f) and (g) and (I), (b), (E) and (H) are the results of atmospheric phase delay. If it is set to the same colour bar, the error of atmospheric phase delay will not be displayed.

Comment 11.
Why is the sampling frequency reduced in Figure 12 compare to the original sampling rate of both InSAR and GNSS time-series?
Response: In order to make the image beautiful, the sampling frequency is the month in Figure 12.

Comment 12.
Figure 13 claims a landslide profile, which I don't see. It is clearly information missing in this manuscript, together with an interpretative cross-section of the landslide.
Response: We will add the profile in Figure13.

Comment 12.
Other forcing factors than rainfall must also be investigated; River sapping? Earthquakes? For instance, Figure 1 shows the location of several earthquakes (Mw4.5+) in the vicinity of the landslide. Is there an impact of these earthquakes on the landslide displacement?
Response: We will seriously consider the influence of other factors (river sapping or earthquakes) on landslide deformation.