Editor

Dear authors,

I encourage you to respond to the comments of the two reviewers using the online interface. Your responses should simply explain how you will address their suggestions and comments, without submitting a revised version of your article. There is no need for a lot of details. Once received, your responses will enable me to decide whether or not to invite you to submit a revised version of your article.

I have also read your article carefully. I would like to make a few suggestions, mainly on stylistic issues that were not raised by the reviewers, with the aim of improving this article, which is already of very high quality.

CP recommends using the abbreviation 'a' (for annum) when referring to a date, and the abbreviation 'yr' when referring to an age/duration (see instructions for authors). Most of the temporal information in your manuscript is dates and should, therefore, be referred to as "a."
We will update all temporal notation so that dates use "a" and durations use "yr," according to CP guidelines.

Fig 1b: Can you make the location of your study site a little more visible?
We will adjust the symbol and contrast to make the site more visible.

Fig 1c : Why is it not the watershed of the Lake Vangsvatnet that is outlined with the white dotted line?
Thanks for the correction, in the figure we outline the whole watershed of the Vosso River. The dotted line will be corrected to show the watershed of Vangsvatnet.

Line 120: How thick is the snow cover?
It varies, but for this year it is between 1–4 m (senorge.no). We will add a short statement on typical seasonal snow thickness.

Fig 2: The marine limit line is purple, not blue.
Thanks for the clarification, I am colour weak and some nuances can be mistaken. We will correct the colour reference from blue to purple.

Line 189: CT scans have been performed on half cores? It might be a good idea to write it down.
Yes, that is true. We will clarify this in the methods section.

Line 200: Have you used dispersants (such as hexametaphosphate) to perform the grain-size measurements? If not, why?
We used Sodium polyphosphate as dispersant and will state it explicitly in the procedure.

Table 1: replace dating by
We will correct the phrasing.

Lines 233-244: I have the feeling that this information should be in the study area section, but I do not have a strong opinion about this. Just consider this option.
We will consider the option. We will move this text if it improves the flow.

Fig 4a: can you flip this figure 90˚ to make it vertical?
Fig 5: the same comment, but I understand this might not be possible here.
Figure 4a will be rotated for improved readability. We have made a flipped version of figure 5 and will discuss what version to use. The drawback of flipping this figure is that we can lose some of the details.

Fig 7: would it be possible to have an example of an M-O?
Yes, we will add an interval that includes an MO-type event in Fig 7.

For the CT – volume percentage, I understand that this will be explained in the Cederstrøm paper in review, but I'm curious to see a grey level histogram for each of the facies identified.
We will add representative histograms to illustrate facies differences in Fig 7 or can provide a figure/the paper in review from Cederstrøm illustrating the method.

Line 370: Don't you have a higher-resolution bathymetric map if the Norwegian Mapping Authority performed a high-resolution multi-beam survey? This might be useful to show there is no sign of erosion where the core has been taken.
Yes, that is true. The data from the multi-beam is visible in figure 2, and we will add an inset map showing the slumping in the northern slope. The coring site is flat and far from the slumping in the north. This will be addressed properly in the revised manuscript.

Lines 385-390. It seems that MS does not increase in facies M. Why? High carbonate content?
The MS increase in some of the thickest M-facies, but it is hard to see in figure 5. We will try to implement MS in Figure 7 to highlight this. Some of the layers are thin (2 mm) and the MS-sensor may not register the change in composition due to low variation between 'background sedimentation' and event layers. This is one of the reasons why we rely more on the CT data in comparison to the MS-data.

Lines 412-413: already said.
We will remove the duplicated information.

Fig 11: I also suggest flipping the figure vertically. (Just a suggestion)
We will flip and see if the figure is more visible and clearer, and then decide what version to use.

Line 463: 4900-1600 cal BP. I'm wondering if it should not be 4900 – 1400 cal BP.
Yes, we agree. We will include the 200-year period with no floods (1600-1400 cal BP) in that group.

Lines 489-490: I suggest citing the lake in the same order that they appear in Fig. 12
That is a good idea. We will cite the lakes in the same order that they appear in the figure.

12: This is a nice figure, but I suggest adding the names of each site near their curve to facilitate the reading of the text.
We will add labels directly on the figure curves.