We appreciate the thorough review of our manuscript and the constructive feedback provided by Brian Luckman. Here, we address each comment and reference the changes in the revised manuscript.

Comment:
The use of symbols to identify important terms is difficult to follow e.g Wit, RAAIt etc and a table describing these terms (in words) would be a useful addition. One of the principal difficulties is the comparison of statistics such as RI values between sites based on records of different length where the RI values are strongly related to survival of older individuals within the avalanche path. Perhaps a comparison based on e.g. the last fifty years would be better to compare differences between tracks.
Response:
We incorporated verbal descriptors of these terms in Figure 2 so as to not increase the length of the manuscript.

Comment:
One of the principal difficulties is the comparison of statistics such as RI values between sites based on records of different length where the RI values are strongly related to survival of older individuals within the avalanche path. Perhaps a comparison based on e.g. the last fifty years would be better to compare differences between tracks.
Response:
We subset the period of record for each path from 1967-2017 and compared RI values. Nine paths exhibit no change in RI values when compared to the full record and one path RI values decreased by 4 years. We observed larger changes in the other two paths; JGO path where only one avalanche year was recorded (down from 5) and the median RI in LJC changed from 22.5 years to 35 years. We previously discussed JGO and LJC and the variable RIs of each of those paths in the Discussion. This exercise highlights that discussion emphasizing that these two paths were indeed slightly different than the others. We added the above text (ca. 350-353) to illustrate that we examined the most recent 50 years to "scale" the return periods to account for loss of older trees.

Comment:
No indication is given of the number of living vs dead trees sampled. If one discounts. the first 10 years of record over a third of the trees sampled have <35 years and half <60 years of record. How large/ tall are these trees on average at these ages and how might the nature of the tree-ring signal (i.e. the probability of recording a given event) vary with the age /height/ robustness of the tree. The avalanche chronologies are strongly biased towards the lifetime and response characteristics of the trees sampled. Although the number of GDs is cited in several places the breakdown of the individual types of GD e.g. scars, reaction wood series, TRD, tree mortality, etc. is never given.
Response:
We added # of living vs. dead trees sampled (line 290); 539 dead and 116 live sampled. Given the regulations of the protected areas in which we sampled, the majority of our cross sections were dead trees. The only exception is if the tree was growing a new leader and we sampled the old top that was previously destroyed in an avalanche. In addition, the dead trees spanned the same age class structure as the living trees from the surrounding forest and in the runout zone. Therefore, we did not bias the record by only working with dead trees. Rather, we simply improved the overall quality of the data by being able to work with cross sections. We would likely have obtained only lower quality responses by sampling more cores. Further, there were very few live trees/samples within the avalanche path itself and we sampled those that do exist.

Comment:
In several cases the results are self evident- one gets better results from more sites, more trees, cross sections vs cores. The main strength is the regional and sampling approach. However, I have reservations about some of the derived statistics and the comparisons between individual records. There is little

comment on the variability of the records within each of the sampling regions, or for example, the similarity between two adjacent paths. The main focus is the regional comparison. This regional approach tacitly assumes no significant differences in avalanche climate, or triggering factors across the region. There is no specific exploration of the relationship between avalanche activity and climatic factors.

Response:

In the discussion we provide interpretation on the variability between paths (e.g. JGO located east of the Continental Divide, LJC burned in the past, S10-7 sampled slightly differently than others b/c it was from another study). We also added text (lines 522-531) explaining inherent variability of RIs between individual paths for a variety of reasons. For example, avalanches are a function of weather and snowpack structure/variability. Climate drives weather, but is not a first order effect on avalanche occurrence in any one given avalanche path. This is the motivation for this study. We derive a regional avalanche chronology to provide a spatial scale that aligns more with the spatial scale of climate drivers than any one individual path. On that note, an analysis of climate drivers of avalanche frequency is beyond the scope of this manuscript. Climate and regional avalanche relationships are the topic of a follow-on manuscript using this dataset that is currently undergoing peer-review.

Detailed and specific comments:

Comment:

52 delete semi-colon before bracket

Response:

Removed

Comment:

66 Most of the data in table 2 is not greatly relevant to the paper. It is simply a compendium of earlier chronology studies. It is not used and could be in an appendix or supplementary material.

Response:

This table places our study in context to other studies re: spatial extent, sample size, # of GDs, etc. However, in an effort to decrease the length of our manuscript we moved it to Appendix A.

Comment:

85-8 In this paper large magnitude avalanches are identified based on the cumulative evidence of disturbance by avalanches for an individual year in a given track given a minimum number of trees sampled. This identification is independent of the location of these disturbances within the individual avalanche track. The distribution of sampled trees within the avalanche track is therefore critical to the interpretation of this evidence with respect to avalanche hazard. Large magnitude in this scenario doesn't necessarily mean large or full length avalanches that would impact the runout/ danger zones. The authors need to emphasize more strongly that these avalanche chronologies are based on sampling in the terminal zone and down track margins and therefore the large magnitude events are inferred to be large full length avalanches that would represent hazard to these areas. In some cases there are a significant number of samples in the upper part of the track.

Response:

You are correct in that the definition of large magnitude avalanche in this study doesn't necessarily mean full length of avalanche path as we indeed sample at various locations in the runout zone and into the track in some instances. However, we sampled spatial extents within each avalanche path that represent large avalanches as defined in Greene et al. (2010). The areas sampled are representative of the runout extents of $\geq$ size D2 avalanches. We also used recent (within previous 10 years) observed large magnitude avalanche activity in these paths to constrain the spatial extent of our sampling. We added this text line 150.

Comment:
118 Figure 1 When enlarged Figure 1 clearly shows black dots which are assumed to be the sampling locations within the tracks. The figure caption should clearly point this out-it is not clear from the key and does not seem to be mentioned in the text or caption. As tree location is a critical factor in defining the size of avalanches their specific location is important. At several tracks the location of the sampled trees is some distance from the terminal zone of the avalanche track (there are two sampled areas on the northernmost GTSR site near Crystal Point?). Perhaps the track names should be identified on Figure 1.
Response:
We added more description in the figure caption in addition to the legend. As noted in the response above all sampling locations are within spatial extents representative of large magnitude avalanche extents.

Comment:
Tables 2, 4 and 5. Is the colouring necessary?
Response:
We removed the color.

Comment:
110 These data do not appear to be used or referenced in the present study, even for comparative purposes. Did they identify similar major avalanche events?
Response:
These studies are referenced in the Intro. and Discussion (ca lines 153, 484, 500, 568) and in current Table A1 for comparison of spatial extent, sample size, etc.

Comment:
160 the spatial footprint is 3000km2 in the abstract and 3500 km2 here.
Response:
Revised to read 3500 km^2 in the Introduction (ca. line 92).

Comment:
167 The text at this point suggests that all the cross sections were from dead trees and that the only living trees sampled were cored. Is this the case? Is the outer ring from these dead trees assumed to be from a "high magnitude" event i.e. the tree was killed/ sheared by an avalanche. These outer rings were presumably crossdated from adjacent living trees or chronologies. Were the core data actually used?
Response:
First, most cross sections were from dead trees. As previously mentioned, the only exception is if the tree was growing a new leader and we sampled the old top that was destroyed in an avalanche. The outer ring from these dead trees is not presumed to be from an avalanche as the tree may have died from some other cause and transported to the sampled location. We only dated the outer ring as an avalanche if historical records indicated a large magnitude avalanche in that path. The cross sections were indeed cross dated from living trees (i.e. cores) from either the adjacent gallery forest or nearby chronologies from the ITRDB (see Table A2). The core data were used for cross dating and for avalanche event dating if a signal was evident as some of these cores were sampled near the trim line where very large avalanches may have reached.

Comment:
200 + How does one also counter the censoring of the avalanche record due to continuing persistence of damage (e.g. reaction wood or TRD) in tree rings for several years following a major disturbance?
Response:
Cross sections provide us the ability to scrutinize reaction wood in any given location along the sample relative to other parts of the tree. Working with cross sections from all across the runout zone more or less ensures we don't miss avalanche events in years subsequent to a major slide event that damaged many

trees. Subsequent slide events not only become obvious in trees that have recorded a major event already due to the generation of new scars and reaction wood growth that forms in different cardinal directions due to impacts from differing predominant flow directions, but also some proportion of trees in different parts of the runout zone that were not damaged in the prior slide event are likely to have captured the new event that occurred a year or two after the major event that was identified and classified. We see this throughout the record where individual avalanche events can and do classify as major slide event occurring in the same path but only a year or two after a different major event.
In addition to carefully classifying each signal (GD) in each sample using the classification scheme (see current Table 2), we also made the best attempt possible to filter out the the noise by using recent threshold methods devised by Corona et al. (2012) and Favillier et al. (2018, 2018)/Kogelnig Mayer (2011). The classification scheme clearly delineates that reaction wood or TRD alone receives a lower ranked classification. This then is taken into account in the W_{it} indexing process.

Comment:
212 responses within the tree or over the site?
Response:
The number of responses per year were calculated for each avalanche path. Descriptive statistics were computed for each path, sub-region, and region. We clarified the text to read: "We calculated the age of each tree sampled, the number of responses per year in each avalanche path, and computed descriptive statistics for the entire dataset." (lines 211-212)

Comment:
212-4 should the analyses and comparison of return intervals be limited to a common period when there is a reasonable sample of avalanche events (however defined) based on the age distribution of sampled trees within all tracks?
Response:
See response above to where we examined RIs from 1967-2017 as recommended with no major difference except in two paths. We previously discussed these paths in the Discussion.

Comment:
221 Figure 2 More information needs to be given in the caption identifying the symbols used N= sample trees available. GD= number of GDs identified. Perhaps include (N) after sample size in line 226. Is GD any GD or those above some minimal value? The context seems to indicate it is the number of GDs identified and not their magnitude.
Response:
We added text to the caption of Figure 2 and added "(N)" to line 227. GD is any growth disturbance identified and classified (as per Table 2) due to an avalanche.

Comment:
229 Is the statistic for avalanche years simply binary i.e. yes no?
Response:
Yes.

Commment:
239-40 therefore high magnitude years are all years where Wit is ≥3? Is the last term in Eqn 2 simply It? Essentially you derive a Wit value for each year for which there was avalanche data in each track and identify avalanche years as those with Wit ≥ 0.3.
Response:

We identify a large magnitude avalanche year as one where W_{it} is ≥2 (a measure of Medium and High confidence). The last term in Eq. 2 is indeed a typo. As we mentioned to Reviewer 1: We used the eqn. from Favillier et al. (2017, 2018) in the analysis, but accidentally inserted the R_t term from the Kogelnig-Mayer et al. (2011) eqn. in the manuscript.

Comment:
Line 229 in the text indicates that RI calculations are based on the avalanche year examples (box 2 of fig 2) but lines 241 et seq. indicate that RI values are also calculated for high magnitude events (Wit ≥ 0.3) only. Therefore, are there two sets of RI data for (i) avalanche years and (ii) high magnitude (Wit) years? So which data are used in the subsequent analyses? Are these high magnitude years simply binary data (yes/no?)
Response:
The return intervals are simply calculated for large magnitude avalanches, the only type of avalanche investigated in this study. There is only one set of RI values for each path, sub-region, and region. The avalanche years are binary. We added text (lines 244-245) to clarify that the RIs used throughout the study are the ones calculated after all processing steps.

Comment:
253 RAAIt is based on the definition of avalanche years (It), not high magnitude Wit years. Therefore avalanche years are identified using the It statistic but high magnitude avalanches are identified using the Wit statistic. It appears that the RI data are calculated based on both the It and the Wit classification whereas the RAAIt statistics are based on the It definition of avalanche years. Is this correct?
Response:
The RAAI is based on the I_t index. The W_{it} is simply a threshold to identify confidence in the signals. Once again, this illustrates the benefit of using high quality cross sections where most of the avalanche years we identified for each path using the thresholds developed by Corona et al. (2012) fell above the W_{it} threshold.

Comment:
Line 324 seems to imply that the avalanche years identified in Figure 2 and the high magnitude events identified using Wit were identical so this difference does not matter? In any event only one set of calculations defining RI values should be specified. The term RI is used throughout the text but in places it is not clear whether it refers to the mean or median value.
Response:
We added text to clarify that we use median return interval throughout when referring to return interval (line 342).

Comment:
263 how does the probability of detection differ from the probability of avalanches?
Response:
The probability of detection (year) is a measure of the likelihood of detecting an avalanche year in the regional chronology by sampling any one given path and the probability of detection (path) is the probability of detecting the full chronology using any one given avalanche path. The probability of an avalanche would be the 1/RI (inverse of the return interval) for each individual path. These are both described in the revised Figure 2.

Comment:
284 are these comparisons included in this paper?
Response:
Yes. Line 348-349.

Comment:
291 ID by GD class but not type? So what was principal evidence used?
Response:
The GD class incorporates type in a systematic way for avalanche identification. Simply using type places imbalanced emphasis on certain types and not the cumulative signature of other types.

Comment:
298 this is predictable given the ages of trees sampled. Perhaps more interesting would be the years with the highest It values
Response:
The number of raw responses per year across all the paths is important as it provides a baseline to compare to avalanche years after applying signal:noise thresholds. The I_t values simply provide a % of responses based on the number of trees alive in each year per individual path. This is simply used as a metric in the steps to identify avalanche years and don't serve to enhance the understanding of avalanche frequency when reported alone.

Comment:
299 Figures 3a and b appear identical and one is redundant. The scale on Fig 3b is incorrect (0.3 %?). The ages in Fig 3c indicate that many of these trees were quite small. What would the diameter of a 40-year old tree be? How does age influence the nature of the GD? In 3d were the larix and betula species identified?
Response:
We changed the figure to have one panel with the proportions labeled on the bars instead of a second panel. We didn't measure the diameter of each tree/sample as it wasn't relevant to the study. Instead, we chose samples that would have the capability of recording an avalanche event. Younger trees more pliable for a while so perhaps more resilient to impact pressure. Then as tree ages/grows it becomes more susceptible to uprooting by avalanches until it becomes larger/older. At that point the avalanche signal on an older tree is likely to be a scar or reaction wood. However, if the avalanche is sufficiently powerful, it will uproot the old/large tree. The Larix and Betula species were not identified given they were so few samples.

Comment:
308 missed 67 or 66?
Response:
Thanks for the catch. Changed to 67.

Comment:
312 Figure 4 needs a scale. Some comparison of the derived GD data would be useful to make the point. To be effective this topic warrants a more extensive discussion and presentation of data than that presented here. This discussion and figure should probably be deleted.
Response:
The scale in Figure 4 is labeled with the 5mm corer rectangles and mentioned in the caption. We believe that the results of this analysis in examining cores vs. cross-sections align with the objectives of the article. Determining the value of using cross-sections was central to the original sampling design which distinguishes this study from previous dendro-avalanche research. The exercise must be mentioned in the Methods section because we present values on the comparisons in the Results and then the Discussion. Lastly, we provide this comparison to quantitatively illustrate the difference in using cross sections vs. cores and do not in any way discount any studies that use cores.

Comment:
312 More importantly were results from these cores actually used in the analysis.

Response:
These "cores" were simulated cores as if we indeed cored the sample as opposed to using the full cross section.

Comment:
324 Table 5 what does the standard deviation figure refer to (bottom line). Explain in caption?
Response:
It refers to the std. dev. of the return interval. We added text to the caption to describe this.

Comment:
332 Tables 4 and 5 What is the statistic 1/RI in these tables? Why is the median RI value used rather than the mean? Explain in the caption.
Response:
1/RI refers to the probability of an avalanche occurring in that avalanche path in any given year. We added text to the caption describing this. We use the median as it is insensitive to outliers.

Comment:
334 Table 4 An additional line identifying the sub region should be added to the top of the table. The table should also give the period of record utilised to calculate RI for each track.
Response:
We added the line. We also added the period of record for each avalanche path. However, the POR for the return intervals was already listed and can be gleaned from avalanche years. The period of record (POR) for each path represents earliest inner year to the most recent outer year of all samples in the path. The RI was calculated on the return interval of avalanche years. This was added in the caption to current Table 3 (previous Table 4).

Comment:
337 JGO is a function of the early record but why LJB? LJB and LJC are 26, LGA is 25 and shed 7 is 28?
Response:
We don't really follow this comment. What are the values you reference for LJB, LJC, LGP (LGA [sic]) and S7? Those values aren't the RI for any of those paths.

Comment:
399 Table 7 explain MLC and HLC in the caption
Response:
Added text to updated Table 6.

Comment:
346 Figure 6 what are the data plotted in this Figure? The median of GDO in Table 4 is ca 34 but in this figure it is ca 28. For LGP the median is ca 12.6 in Table 4 but ca 8 in figure 6
Response:
Figure 6 shows the return intervals for each path, sub-region, and overall region as stated in the caption. Good catch. There is one typo in Table 4 (new Table 3). The median for JGO (GDO [sic]) is 28.5. However, the median for LGP is listed as 8 in Table 4 and is also 8 in Figure 6.

Comment:
338-40 surely the similarities and differences between tracks reflect the length and nature of the avalanche record in each track? Differences/ similarity in return intervals are partially dependant on the length of record
Response:

As we demonstrated to your comment in the beginning of the review, “scaling” the period of record makes a difference in only the two paths that we already discuss as being different in terms of RI values. Here is the response to that original comment: We subset the period of record for each path from 1967-2017 and compared RI values. Nine paths exhibit no change in RI values when compared to the full record and one path RI values decreased by 4 years. We observed larger changes in the other two paths; JGO path where only one avalanche year was recorded (down from 5) and the median RI in LJC changed from 22.5 years to 35 years. We previously discussed JGO and LJC and the variable RIs of each of those paths in the Discussion. This exercise highlights that discussion that these two paths were indeed slightly different than the others. We added the above text (ca. 348-351) to illustrate that we examined the most recent 50 years to “scale” the return periods to account for loss of older trees.

Comment:
349-66 These differences in recurrence intervals are calculated for different periods of record. To be comparable do they need to be calculated over the same interval?
Response:
See response above and, yes, we compared a similar period of record.

Comment:
369 The avalanche records in these tracks start in 1933, 1936 and 1993so why compare them to a record starting in 1908 which presumably has avalanches predating those records. Surely comparisons need to be over the same intervals?
Response:
See response above.

Comment:
370 Figure 7 a nice (original?) way to show these data.
Response:
Thanks.

Comment:
380 Figure 8b the red line is not visible. Perhaps delete it and simply indicate this value in the caption
Response:
We kept the line and the value in the caption. It is a bit difficult to see (hopefully the indicated value in the caption helps), but readers are able to zoom in a bit when viewing on a monitor and it’s clearly evident then and provides a graphical reference for readers.

Comment:
386 et seq. But the records being compared have quite different lengths and histories. How unique is the record of individual paths? If you compared the record of the tracks with similar length of record (say, ca 1950-2010, RMA-C, 54.3, LJA, 10.7 and S4.7) how similar are they?
Response:
See responses above re: comparison of similar lengths of record.

Comment:
405-6 These trends are mainly an effect of the increased sampling of avalanche years
Response:
Yes, these trends are likely a function of increasing samples through time which is why we mention them, but don’t hang our hat on the trend results. The RAAI is simply another way to view a regional chronology using techniques from previous literature to allow for comparison.

Comment:

432-3 relevance of these comparisons?
Response:
As per Reviewer 1's comments we removed these lines as they aren't necessarily relevant.

Comment:
435 up into the bottom? English? Is the bottom the end or center of the track?
Response:
Revised sentence to read "However, at several sites we also collected samples into the bottom of the track (S10.7, Shed 7, and 1163) rather than just the runout zone." (lines 447-448). The bottom is the end of the track just above the runout zone.

Comment:
437-40 some specific dates needed here as this is the basis for the selection of records used. What specifically is the most recent time period for which you have adequate data across the network?
Response:
This sentence is a bit confusing so we revised to read: "Therefore, we chose to examine more recent time periods dictated by the avalanche years identified through the double threshold methods." (lines 453-455).

Comment:
451-2 how frequent is tree removal? What % of GDs are termination of growth vs other indicators of avalanche damage?
Response:
We don't really know the frequency of tree removal. It depends on the impact pressure of any given avalanche and this isn't something we can tease out from our data. It is not possible to determine the real % of GDs due to termination of growth because we can't assume the tree was killed by an avalanche for all of our dead and downed samples. Tree mortality could be caused by insects, storm damage, etc. and a subsequent avalanche could then transport the tree. However, if we assume that all sampled trees were removed by an avalanche (a rather large assumption), then we can take the number of cross sections (614) divided by the number of GD (2134). This provides a rough estimate under this assumption.
$\frac{614}{2134} \times 100 = 29\%$ of GDs are termination of growth.

Comment:
454 Although mentioned several times this incomplete historical record is never presented or directly compared to the equivalent tree-ring record for the comparable sites
Response:
We state in lines 142-144 that we compare the records for the 3 paths in JFS Canyon to this historical observational record but only for qualitative purposes. The record is simply used to provide some context for 3 avalanche paths. We reference Reardon et al. (2008) and that is where the observational record can be found. Text from Methods: "We compared the reconstructed avalanche chronology of the JFS sub-region to the historical record for qualitative purposes of large magnitude years. A quantitative comparison would not be reflective of the true reliability of tree-ring methods because of the incomplete historical record."

Comment:
475 the difference between Readon's earlier results or the other avalanche tracks? What are these differences?
Response:
We revised the sentence for clarity to "This is likely the root of the difference for S10.7 and the reason this path contains the largest numbers of avalanche years in this analysis." (lines 487-488).

Comment:
481 LJC has the greatest RI? It has the greatest median but not mean. The large median is a function of the small sample size in this track. The fire may have taken out evidence for most events between 1943 and 2017 and therefore this is not a valid comparison.
Response:
We revised the sentence to read "...were the greatest in this sub-region.." (line 493) as the RIs for JGO are the greatest. We agree that the fire played a major role in removing some evidence and now the slope is more exposed and susceptible to avalanching. We added text reflecting the fire's impact on data availability (line 500).

Comment:
489 using which RI value, mean or median? What is the correlation statistic?
Response:
We compared both mean and median RI values. r=0.65, p=0.02, Figure A1. This was stated in the Results (line 348-349 previously lines 343-344).

Comment:
495 JGO is very unusual with only two avalanches between 1880 and 2017! The critical difference is the absence of documented events in the last 50 years. The only answer to these tentative explanations is more data from adjacent tracks. Perhaps the only comment necessary is that the reason for this is not known.
Response:
This path is unusual and we provide some explanation given its unique geographical location east of the Continental Divide within our dataset. We added text to reflect your very good points about this path (lines 510-511). "To understand if this value is accurate, we would have to sample adjacent tracks to determine if the return intervals are similar or not."

Comment:
507 but these differences are never explored
Response:
As previously mentioned, it is beyond the scope of this paper to explore the localized weather and climate drivers and the interaction with terrain. We explore such atmospheric and climate drivers in another manuscript.

Comment:
527 but these changes are also influenced by which avalanche track you remove.
Response:
The changes are only influenced by the removal (or addition) of the S10.7 path which we state and discuss in the next paragraph. We also reference recent literature that discusses the importance of selecting individual avalanche paths (line 550-552).

Comment:
532 But how typical is the record of s10-7 of other paths in the region see e.g. Table 4
Response:
We added text describing how S10.7 differs in line 552-553. "This is also illustrated by the large number of avalanche years detected in S10.7 due to increased sampling in the track."

Comment:
533 s10.7 has the most avalanche activity but surprisingly is not compared with the available, if limited, observational record.
Response:

Reardon et al. (2008) provides a more detailed examination of the individual path S10.7 and by referencing their work we are able to focus on the effect to the overall regional chronology, the major objective of our study.

Comment:
538 What is an avalanche cycle chronology?
Response:
Including the word cycle shows that, at the regional scale, we are able to capture major avalanche cycles (widespread avalanche event) through time. We added "(widespread avalanche event)" to line 558.

Comment:
547-9 these data would be useful here to validate some of these comments or are they solely based on the examples which follow.
Response:
They are based on the examples that follow.

Comment:
566 paths with one scar or one GD of class 3? Where are these scar data?
Response:
Good catch. We changed to "GD" (line 586). We referenced the data in Section 7 - Data Availability (lines 651-655) (https://doi.org/10.5066/P9TLHZAI, 2019)

Comment:
570 is the sample design or the number of paths the critical factor here? The sample design clearly increases the area covered.
Response:
We discuss that sampling more paths certainly increases the POD of avalanche years. However, the sampling design using scale triplet allows one to scale the process of avalanching from small path scale to the larger regional scale.

Comment:
582-5 Basic point is that if you sample more avalanche tracks you get more avalanche years and a more consistent pattern may emerge. However, the pattern of avalanche activity varies from track to track and from year to year.
Response:
Correct. This illustrates the benefit of such a sampling design where one can scale the process across spatial extents.

Comment:
587 Is this a function of sample size or other characteristics such as the time period covered by those samples and the sampling network?
Response:
A function of sample size. We collected a large number of samples across the region, but at the individual path scale, more would have been better in two of the paths.

Comment:
603 this median value probably should be linked to a time frame to which it applies
Response:
We added the full regional chronology period of record (1866-2017) (line 623).

Comment:

Figure A1 What are the data used here (reference to Table 2)? Some numbers are barely visible. Perhaps use bolder (larger) numbers and colour as a background to individual cells?
Response:
Yes, the data refer to Table 2 (new Table 1). We revised Figure A1 with larger numbers and a different background for easier readability.