

## Queries Reviewer 2

The manuscript compares climate conditions to wine must (and wine) quality assessment series.

The paper is clearly written and quite straightforward.

The research present is of sound quality and seems to me very relevant in general. Addressing wine (wine must) quality / climate relationship is very welcome to me, as the subject is seldom consider long-time series.

**Here are some specific clarifications / questions I address to the authors:**

L40: Why using the first name of Andrea Kiss (et al.) here while ignoring them for the previously cited authors Pejml, Brazdil? Of course, you can choose the way you quote each authors, as long as they match the journal standard...it is only a genuine question here. However, I would use “**their May-August temperature reconstruction**” rather than “her” because the paper cited has been written by 3 authors, and not only A. Kiss.

**Reply: We put instead: Kiss et al. (2011) included grape quality data from the late 18th century in their May–August temperature reconstructions for western Hungary.**

L51: I’m not sure [www.winenium.com](http://www.winenium.com) is the right citation to support epistemology. I suggest the citation of an English or latin dictionary.

**Reply: We refer instead to Wikipedia <https://en.wikipedia.org/wiki/Must>**

L79: Gregory V. Jones is a climatologist ([https://en.wikipedia.org/wiki/Gregory\\_V.\\_Jones](https://en.wikipedia.org/wiki/Gregory_V._Jones))

**Reply: For clarification we prefer the original wording: “Gregory V. Jones is an American research climatologist specializing in the climatology of viticulture.”**

L127: “This device, ...” The device is not explained. Do you mean the hydrometer? Hasn’t the first scale for density this device (also used for wine must) proposed by André Baumé ?

**Reply: We write instead “Appropriate devices”**

L221: downy mildew, phylloxera could be written without capital letters as the common name is used here.

**Reply : Accepted**

L235: Combe et al. (2015) is missing in the reference list. I would also stress that harvest (unless for sparkling wines) occurs much later than 3 / 4 weeks after veraison. See for instance table 1 from <https://doi.org/10.3354/cr01048>

**Reply: It should read Combe and Smart (2015) which is in the list of references.**

L242: “The meteorological variables.....taken from the re-analysis (Valler et al., 2023)”. Written as it is, it seems like “the re-analysis” is the name of a specific climate data series, while it is a generic name in climatology referring to historical climatological data gridded

field combining climate data assimilation and modelling. I believe the sentence would be clearer providing directly the name of the product established in the cited submitted work : “ModE-RA re-analysis”.

**Reply: We put “The meteorological variables taken from the rModE-RA re-analysis (Valler et al., 2023)”**

L298: This follows the expected pattern, except that one might also have suspected more abundant high-pressure days over central Europe (type 5) in the good quality years. We find almost the same number (19 versus 20). This is perhaps due to the fact that this type is rare.

**Reply: We put “We find almost the same number of #5 weather type in both vintages identified with either low or high must quality. This might be due to the fact that this type is rare.”**

L313: What would be a standard price for Château d’Yquem produced in the 1940s or 1950s?

**Reply: We don’t know whether such evidence is available at all. We find that this it is not relevant to the topic of this article.**

L327: Why “wine musts obtained in the past 20 years must be classified top...” isn’t using the verb “must” a little bit excessive here?

**Reply: Accepted. We put instead ”most wine musts obtained in the past 20 years can be classified top”**

L330: I did not understand whether the authors consider Riesling or Muller-Thurgau grape varieties. These are two different cultivars

(<https://ojs.openagrar.de/index.php/VITIS/article/view/4608>)

**Reply: Accepted. (Müller-Thurgau) is removed.**

L335: Do you mean grey mould (bunch rot)? While I don’t have access to series of bunch rot in viticulture Switzerland, Germany and France from 1970 to 2019, it seems to me that bunch rot has not specifically developed in these regions in the 21<sup>st</sup> century.

**Reply: Accepted. We just put “mould.”**