Major comments:
I find the article "Weather and climate and their human impacts and responses during the Thirty Years' War in Central Europe" by Rudolf Brázdil et al. highly interesting and generally well-written and of interest to a broad readership from several academic disciplines. However, the article is unfortunately not citing, or referring to, much of the newer key works in the climate change–human history nexus that I strongly would recommend the author to include during the revision phase of the article. Besides from that, I only have minor comments as listed below.
RESPONSE: We would like to thank the referee 1 for critical comments to the article which we are trying to respond below.

Minor comments:
Title: The title is a bit too long and complicated. Could the authors please consider to revise and shortened it?
RESPONSE: Thanks for this comment. We understand, that the referee may consider the title as long, but we would like to preserve the recent title which expresses clearly key topics related to the whole content of the article. Other order of words in the title (e.g., The Thirty Years' War in Central Europe: climate, weather, human impacts and response) is probably not an expected solution.

Lines 15, 50: The expression "17th century reformation" is not perfect as the reformation was mainly a 16th century phenomena.
RESPONSE: Accepted, the expression "17th century reformation" was deleted from sentences in both lines.

Lines 17–19, 676 and other places: I think it is wrong to talk about "deterioration" here as the late 16th century seems to have been even colder and even more adverse for agriculture in Central Europe. This is extensively discussed in, among other works, Pfister and Wanner (2021) cited by the authors.
RESPONSE: Thanks for this comment. We understand this traditional view to use this term for the late 16th century, but we believe that the expression "climate deterioration" is also acceptable talking about "a decrease in solar activity towards the Maunder Minimum and increased volcanic activity."

Line 31: Besides Tucker (2012), please also cite:
Lee, H. F., Zhang, D. D., Brecke, P., & Fei, J. (2013). Positive correlation between the North Atlantic Oscillation and violent conflicts in Europe. Climate Research, 56, 1–10.
Lee, H. F., Zhang, D. D., Brecke, P., & Pei, Q. (2015). Regional geographic factors mediate the climate–war relationship in Europe. British Journal of Interdisciplinary Studies, 2, 1–28.
Lee, H. F., Zhang, D. D., Brecke, P., & Pei, Q. (2019). Climate change, population pressure, and wars in European history. Asian Geographer, 36, 29–45.
Tol, R. S., & Wagner, S. (2010). Climate change and violent conflict in Europe over the last millennium. Climatic Change, 99, 65–79.
Zhang, D. D., Lee, H. F., Wang, C., Li, B., Pei, Q., Zhang, J., & An, Y. (2011). The causality analysis of climate change and large-scale human crisis. Proceedings. National Academy of Sciences. United States of America, 108, 17296–17301.
RESPONSE: Accepted, the new paragraph considering above papers was included into Introduction as follows: „For Europe, some papers tried to study causal connections of violent conflicts/wars with climate change (e.g., Tol and Wagner, 2010; Lee et al., 2015, 2019) or with the North Atlantic Oscillation (Lee et al., 2013). Similar, Zhang et al. (2011) investigated

the causality of large-scale human crisis with climate change. Their statistical approaches to analyze the relationship climate and society were criticised by Degroot et al. (2021, pp. 540–541) arguing that such studies "provide examples of the 'McNamara fallacy', in which unquantifiable data are either ignored or arbitrarily quantified to produce superficially impressive but potentially misleading results." Presenting a new interdisciplinary framework on the "history of climate and society," they concluded that the past climate change did not always lead to collapse or disaster and that populations survived or even thrived in the face of climatic pressure (see also White et al., 2023)."

Lines 32–33: Not sure how relevant this is here as it refers to weather events rather than climate.
RESPONSE: Thanks for this comment, which is not fully clear for us. In these lines there are references to studies that deal with the environmental aspects of the two World Wars and the American civil war. They don't focus only on weather events but also on climate.

Line 51: Maybe cite here:
Parker, G., 2006. The Thirty Years' War. Routledge, London.
Theibault, J., 1997. The demography of the Thirty Years War re-revisited: Günther Franz and his critics. Ger. Hist. 15, 1–21.
RESPONSE: Thanks for this comment. As for Parker (2006), the related paragraph starts with some introductory statements concerning of the Thirty Years' War, which are followed by six citations, including Parker (1997) which is the 2nd edition of the book (complemented by many other citations in Section 2). We believe that in this form it is acceptable, without adding additional citation.
As for Theibault (1997), it fits better to cite it at line 609: "Estimating the exact population of the Holy Roman Empire during that time is challenging (Theibault, 1997), but it is believed to have been around 16 to 18 million in approximately 1618, and decreased to 10 to 12 million by around 1650 (Wilson, 2009; Repgen, 2015; Gotthard, 2016)."

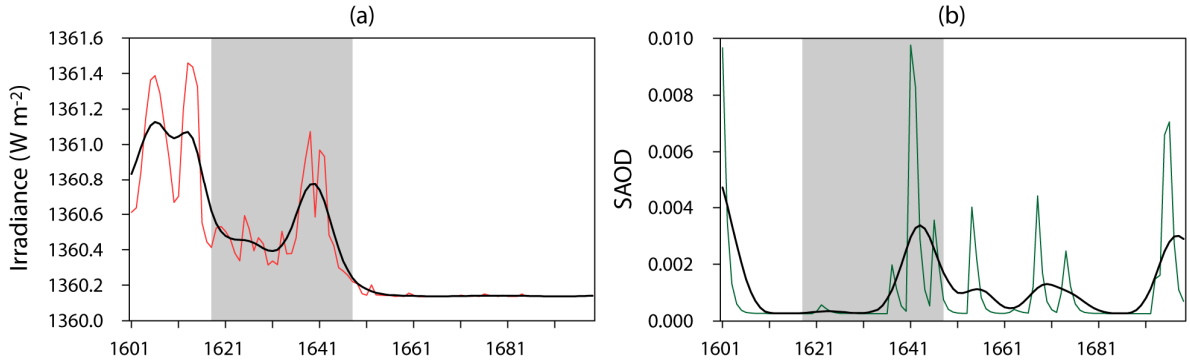
Line 55: This statement is not entirely true. Many studies have also considered decadal and inter-annual time-scales. See, for a review, Ljungqvist et al. (2021) listed below.
RESPONSE: Accepted and corrected as follows: "climatological patterns during this time have been analyzed not only on millennial or centennial scales (e.g., Glaser, 2008; Parker, 2008, 2013; Pfister et al., 2018; Pfister and Wanner, 2021), but also considered decadal or inter-annual scales (see Ljungqvist et al., 2021 for a review)."

Lines 199–201: The low skill of the Pauling et al. (2006) precipitation reconstruction prior to c. 1750 needs to be critically discussed and acknowledged here.
RESPONSE: Accepted. We are aware of the problem of uncertainty (the low skill), which applies to all used reconstructions. Therefore, it is difficult to discuss it in greater detail in this paper. We believe, that existing higher uncertainty of Pauling et al. (2006) data before 1750 is well explained by sentence added to point (iv) in Section 3.2: "Despite the fact that this precipitation dataset uses especially for the early 17th century a limited set of input proxy data (see Fig. 1 in Pauling et al., 2006) as well as rather out-of-date climate model for the gridded reconstruction (Ljungqvist et al., 2022), it is the only available spatial precipitation reconstruction with a seasonal resolution."

Line 201: Wrongly written. Should be: Self-calibrating Palmer Drought Severity Index (scPDSI).
RESPONSE: Accepted and corrected.

Around line 205: Consider to also here include the EuroMed2k (Luterbacher et al., 2016) reconstruction discussed later in the article (lines 570ff.).
RESPONSE: Thanks for this comment, but the JJA series by Luterbacher et al. (2016) is not used in results of the paper, but only for comparisons in Discussion, i.e., we believe that this paper should be not cited in Section 3.2.

Lines 209–210: I would strongly recommend to use the volcanic dataset of Toohey and Sigl (2017) instead of Crowley and Unterman (2013) as the later dataset is NOT state-of-the-art anymore and even includes dating errors. A revised article should use Toohey and Sigl (2017):
Toohey, M. and Sigl, M. (2017). Volcanic stratospheric sulfur injections and aerosol optical depth from 500 BCE to 1900 CE, Earth System Science Data 9: 809–831.
RESPONSE: Accepted. We used dataset of Toohey and Sigl (2017) and complemented this reference instead of Crowley and Unterman (2013). The last sentence of the second paragraph of Section 5.1.4 was changed as follows: "When considering the entire 17th century, a slightly stronger volcanic signal besides the 1640s was found at the beginning of the 1600s and in the mid-1690s."
Using data by Toohey and Sigl (2017), the new version of Fig. 8b was prepared – see below:



Lines 232 and other places: Ljungqvist et al. (2022) should be referred to, and discussed, concerning grain prices as it very extensively treats both the impacts from climate and from the Thirty Years' War on European grain prices. Reference:
Ljungqvist, F. C., Thejll, P., Christiansen, B., Seim, A., Hartl, C., and Esper, J.: The significance of climate variability on early modern European grain prices, Cliometrica, 16, 29–77, 2022.
RESPONSE: Accepted. Results of the paper by Ljungqvist et al. (2022) were included in Discussion in a new paragraph after Figure 14 as follows: "Esper et al. (2017) pointed out that European gran price series were spatially less coherent during the TYW (see also Figure 12 for Central Europe) when also temperature–grain prices correlations completely fell. Ljungqvist et al. (2022) in their extensive statistical analysis of temperature effects on grain prices in early modern Europe excluded the period of the TYW altogether. They argued that the grain prices were rather strongly influenced by "the disintegration of established market forces and regional decoupling of trade" and that the war and its effects "weakened the climate signal in the grain prices".

Line 344 Caption): Define "persistent frost" clearly.
RESPONSE: Accepted. We added related explanations to the first paragraph of Section 5.2 as follows: "As is characteristic for analysis of qualitative daily weather observations (e.g.,

Pfister et al., 1999; Brázdil et al., 2003, 2019; Domínguez-Castro et al., 2015; Harvey-Fishenden and Macdonald, 2021), Lenke (1960) calculated corresponding numbers of days according to weather phenomena observed and reported by Hermann IV as follows: frost day – any occurrence of frost during the day; persistent frost day – frost continuing the whole day; hot (very hot) day – any occurrence of heats during the day; precipitation day – the occurrence of rain, rain with snow, snowfall or hail/sleet during the day."

Line 529: Describe method calculating breakdates here.
RESPONSE: Accepted. At the end of the Section 4 the following explanation was added: "The method tests the possible occurrence of changes in the slope parameters of the linear regression models, which are gradually fitted to the grain price time series. In the first step, the F-test determines whether the series contains significant changes in the regression models. In the second step, the optimal number of changes (breakpoints) and the date of their occurrence are determined using the Bayesian Information Criterion, BIC (Bai and Perron, 2003)."
New reference:
Bai, J. and Perron, P.: Computation and analysis of multiple structural change models. J. Appl. Econometrics, 18, 1–22, https://doi.org/10.1002/jae.659, 2003.

Lines 637–639: I think it is an overstatement to claim that the destructive forces of the war was the MAIN cause of famine. Climate and war interacted in a destructive synergy. See, among other works, Slavin (2016) listed below.
RESPONSE: Accepted and corrected as follows: "The war shifted the balance between the determinants in Fig. 13. Climatic factors and wars interacted in a destructive synergy. Their effects devastated the available farmland, decimated livestock, burdened subjects with war taxes and tributes, made the populations more susceptible to disease, and led to a significant loss of the workforce through death, disease, and military duties, which likely exacerbated subsistence crises, food shortages, and famines (Outram, 2001; Slavin, 2016)."

Missing references to important works (including overviews):
Adamson, G. C., Nash, D. J., and Grab, S. W.: Quantifying and reducing researcher subjectivity in the generation of climate indices from documentary sources, Clim. Past, 18, 1071–1081, 2022.
RESPONSE: Accepted, this paper was cited at the end of the first paragraph of Sect. 5.2.1 as follows: "This discrepancy may be attributed to problems with the documentary data (missing monthly indices) and the different precipitation variability observed across various parts of Central Europe as well as in potential subjective generation of precipitation indices (see e.g. Adamson et al., 2022)."

Degroot, D., Anchukaitis, K., Bauch, M., Burnham, J., Carnegy, F., Cui, J., de Luna, K., Guzowski, P., Hambrecht, G., Huhtamaa, H., Izdebski, A., Kleemann, K., Moesswilde, E., Neupane, N., Newfield, T., Pei, Q., Xoplaki, E., and Zappia, N.: Towards a rigorous understanding of societal responses to climate change, Nature, 591, 539–550, 2021.
RESPONSE: Accepted, the citation of this paper was included in the new paragraph in Introduction (see above).

Haldon, J., Mordechai, L., Newfield, T. P., Chase, A. F., Izdebski, A., Guzowski, P., Labuhn, I., and Roberts, N.: History meets palaeoscience: Consilience and collaboration in studying past societal responses to environmental change, Proc. Natl. Acad. Sci. USA, 115, 3210–3218, 2018.

RESPONSE: Thanks for this comment, but this citation was not included being not really dealing with violent conflicts or wars.

Ljungqvist, F. C., Seim, A., and Huhtamaa, H.: Climate and society in European history, Wiley Interdiscip. Rev. Clim. Change, 12, e691, 2021.
RESPONSE: Accepted, this citation was added to as follows: "… climatological patterns during this time have mostly been analyzed not only on millennial or centennial scales (e.g., Glaser, 2008; Parker, 2008, 2013; Pfister et al., 2018; Pfister and Wanner, 2021; Wanner et al., 2022), but also considered decadal or inter-annual scales (see Ljungqvist et al., 2021 for a review)."

Slavin, P.: Climate and famines: A historical reassessment. Wiley Interdisciplin. Rev.: Clim. Change, 7, 433–447, 2016.
RESPONSE: This citation was added to the changed text in lines 637–639 – see above.

Wanner, H., Pfister, C., and Neukom, R.: The variable European Little Ice Age, Quat. Sci. Rev., 287, 107531, 2022.
RESPONSE: Accepted, this citation was included in the fourth paragraph of Introduction (see response to Ljungqvist et al., 2021 above).

White, S., Pei, Q., Kleemann, K., Dolák, L., Huhtamaa, H. and Camenisch, C. (2023) New perspectives on historical climatology. Wiley Interdisciplin. Rev.: Clim. Change, 14, e808.
RESPONSE: Accepted, this citation was included in the second and third paragraphs of Introduction.