

Second review of egusphere-2025-2530 | Journal relation: CP “A five-century tree-ring record from Spain reveals recent intensification of western Mediterranean hydroclimatic extremes”  
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## Overview

This paper describes a regression-based 500+ year reconstruction of seasonal-total precipitation for the Iberian Range of eastern Spain from tree-ring data of two *Pinus* tree species and five sites collected (recently updated) by the authors. The reconstruction stands out compared with previous reconstructions of dendroclimatic variables for its great length, strength of calibration signal, and calibration with precipitation rather than a drought index. A key finding is recent intensification of hydroclimatic extremes consistent with climate change projections. The reconstruction is touted as a baseline for evaluating ecosystem resilience and water resource vulnerability.

The authors have satisfactorily addressed the comments in my first review. The authors went back and repeated analysis using variance-stabilized chronologies to exclude the possibility that the recent amplified extremes are an artifact of changing sample size in the tree-ring chronology. The authors also conducted additional analysis to demonstrate that signal in the tree-rings is indeed stronger in precipitation than in alternative predictand variables (e.g., SPEI) that measure a combined precipitation-evaporation signal. The additional supplemental material effectively lets the reader see that the identified seasonal daily-window response is indeed stronger than a simpler annual response, though the difference may not be significant. It is impressive that the same aggregated daily window is identified in split-sample calibration.

Minor comments in my first review were all effectively addressed.

I conclude that the paper is overall a worthy and strong contribution.