## DESCRIPTION

Introduction. Correct. Research motivated by increasing frequency of phenomena.

Definition of drougths. It's a complex but complet approach. Authors describe drought from a general and integrated point of view making effort for conceptual and quantitative definition. Very fruitful, as methodological milestone for future research. Correct references for historical and instrumental approach to drought events, where conceptual definitions are not so easy to define thresholds, impacts, durations.

Use of very dense database avoid the massive reference of sources and data previously available for this analysis. Consistence of results is guaranteed.

Bibliography is updated and complete. Absolutely adjusted to proposed research.

Figures are well displayed and helps to understand results of manuscript.

A first analysis, conceptual and methodological, with a good application to Germany. Example of potential developments to be applied in other historical contexts and regions.

## **GENERAL ASPECTS**

After first review of December 2019, all manuscript is acceptable.

## **SPECIFIC ASPECTS**

- + Line 71. "et al" by "et al."
- + Lines 71, 143, 213, 358, 369, 421, 454, 466, 472. "Brazdil by Brázdil"
- + Line 771. Figure 9. Using dates of events as symbols produce visual noise because of overlapping of labels. May be better using dots or other graphic symbols. Dates of events are already available in other formats, as lists or tables. Figure also has a temporal scale (X-axis) to locate events.