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## **Abstract**

This paper studies the representation of a drought period that affected Central Europe from 1945 to 1949 in the “Twentieth Century Reanalysis” (20CR). We analysed temperature and precipitation fields in 20CR and compared them to other data products. From the monthly precipitation rate at a 20CR grid point in the Swiss Plateau, the Standardised Precipitation Index over six months (SPI6) was calculated and compared with the corresponding index calculated from station data. For additional analyses, 20CR soil moisture, run off, and evaporation data were used. 20CR well reproduces the temperature and precipitation anomalies over Central Europe during this period, although during 1947, the precipitation anomaly is shifted to the east as compared to observations. With respect to the SPI6 index, the agreement between 20CR and station data is good except again for 1947 (conversely, drought was overestimated in 20CR for 1945 and 1949). Low SPI values in 20CR are accompanied by negative soil moisture anomalies and a negative water balance. Thus, apart from the shift in the spatial drought pattern in 1947, the drought is depicted in a realistic way in 20CR.