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Climatic Changes Since 1700

Earth's climate is undergoing profound changes. Understanding and assessing these changes requires insight from the past. The period since 1700 is of particular relevance because Earth's climate underwent a transition from the Little Ice Age climate to the era of anthropogenic global warming. Moreover, pronounced climatic excursions occurred on interannual and decadal time scales, and atmospheric composition changed. Recent developments in the fields of palaeoclimatology and historical climatology – high-resolution climate proxies, climate model simulations, and numerical techniques such as data assimilation – allow a much more detailed analysis of climatic changes of the past centuries than possible only a decade ago. *Climatic Changes Since 1700* – the title honours the 1890 book by the same title of geographer Eduard Brückner – covers data and methods used to study climate of the past centuries, summarises the mechanisms behind interannual to multidecadal climate variability and provides an overview of global climate history since 1700 based on new data sets and model simulations.

Environment

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