



The early 20th century warming

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This talk presents an overview of results of the project Transition into the Anthropocene. It will quantify contributions by external forcing to the evolution of global temperature, particularly, the early 20th century warming, and discuss periods of strong anomalies superimposed on the best estimate of the forced temperature changes. This early 20th century warming was preceded by anomalously cold conditions in the 1910s followed by rapid 20th century warming. I will also show evidence for decadal variability in the frequency of heat waves both in North America and Europe, including the heat waves during the dust bowl period; and discuss mechanisms that contribute to such extraordinary heat wave activity.