



THE 2003 HEAT WAVE IN EUROPE. A SHAPE OF THINGS TO COME?

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The 2003 heat wave that affected much of Europe from June to September bears a close resemblance to what many regional climate models are projecting for summers in the latter part of the 21st century. Model results suggest that under enhanced atmospheric greenhouse-gas concentrations, summer temperatures are likely to increase by over 4[°]C on average, with a corresponding increase in the frequency of severe heat waves. Statistical features of the 2003 heat wave for the Swiss site of Basel are investigated and compared to both past, 20th century events and possible future extreme temperatures based on model simulations of climatic change. For many purposes, the 2003 event can be used as an analog of future summers in coming decades in climate impacts and policy studies.