Geophysical Research Abstracts Vol. 14, EGU2012-9606, 2012 EGU General Assembly 2012 © Author(s) 2012



A toy model of a climate system with multiyear temperature variability produced by constant radiation forcing

A. Christofides and D. Koutsoyiannis National Technical University of Athens, Greece (anthony@itia.ntua.gr)

We present a toy model based on radiation balances. The model, which is a caricature of a climate system, has constant, deterministic forcings and dynamics, and yet it exhibits multiyear temperature variability, with trends and shifts. Although the toy model cannot possibly (and is not intended to) capture the features of the actual climate system, it serves to illustrate that some things that are often taken for granted can be challenged. For example, it is widely believed that a climate change must necessarily have a cause; this may be the case for some climate changes, but it is not a logical necessity.