

Extreme weather, global warming and natural climate variability

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There is an intense debate at present on recent extreme weather (EW) events and their possible linkage to warming of the earth's climate, popularly known as Global Warming (GW). The link between EW and GW has been postulated by the Intergovernmental Panel on Climate Change (IPCC, a UN Body of scientists and environmentalists) in their 2007 Climate Change Documents. In recent years, hundreds of research papers, reports, documents etc have been published in an attempt to verify this link.

A close scrutiny of EW events of last several decades suggests that this GW-EW link is more perception than reality, the perception being fostered by uncritical media attention to recent EW events. In this presentation a brief overview of the science of global warming and climate change is presented. Some of the recent EW events (e.g., heat waves in Europe-2010 & US-2012, floods in Pakistan-2010) which garnered extensive media coverage will be discussed in the context of the present debate. The role of natural climate variability as the primary driving mechanism for worldwide EW events will be demonstrated. The presentation will conclude by emphasizing a need for improved forecasting of future EW events in order to minimize their impacts on human societies.

Biography

Madhav L Khandekar is a former research scientist from Environment Canada and was an Expert Reviewer for the IPCC 2007 Climate Change Documents. Khandekar holds M.Sc in Statistics from Pune University, India and M.S and Ph.D. in Meteorology from the Florida State University USA. Khandekar is a Lead Author of a Chapter on *Extreme Weather* in a report "Climate Change Reconsidered-2" to be published in 2013 by the NIPPC-Nongovernmental International Panel on Climate Change.

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