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Arguments against a physical long-term trend in global ISCCP cloud amounts

Amato T. Evan (1), Andrew K. Heidinger (2) and Daniel J. Vimont (3)

(1) Cooperative Institute for Meteorological Satellite Studies, University of Wisconsin-Madison, Madison, Wisconsin, USA, (2) Office of Research and Applications, National Environmental Satellite, Data, and Information Service, NOAA, Madison, Wisconsin, USA, (3) Department of Atmospheric Science, University of Wisconsin-Madison, Madison, Wisconsin, USA

The International Satellite Cloud Climatology Project (ISCCP) multi-decadal record of cloudiness exhibits a well-known global decrease in cloud amounts. This downward trend has recently been used to suggest widespread increases in surface solar heating, decreases in planetary albedo, and deficiencies in global climate models. Here we show that trends observed in the ISCCP data are artifacts of the satellite viewing geometry and are not related to physical changes in the atmosphere. Our results suggest that in its current form, the ISCCP data may not be appropriate for certain long-term global studies, especially those focused on trends.