

Climate Shocks: Natural and Anthropogenic, by K. Ya. Kondratyev (translated from Russian by A. P. Kostrova), Wiley Series in Climate and the Biosphere, edited by Michael H. Glantz and Robert E. Dickinson. J. Wiley & Sons, 1988, 296p., \$52.50 (ISBN 0-471-83019-4).

THIS BOOK REACHED me during the hottest and driest part of the summer of 1988, the summer when the greenhouse effect due to fossil fuel carbon dioxide became front page news. What a great topic for a book, and what excellent timing! The plan of the book is simple and sensible. There are three main chapters: "The Greenhouse Effect of the Atmosphere and Climate", "The Climatic Impact of Volcanic Eruptions", and "Possible Climatic Impacts of Nuclear War" (written in collaboration with G. Nikolsky). A short concluding chapter brings the earlier chapters up to date.

Sadly, the book neither enlightens nor entertains the reader. There is little analysis and interpretation, no theoretical development, and hardly any explanation. Instead there is uncritical review of the lit-

erature: "According to . . . Estimates by . . . From the work of . . ." From time to time the text is decorated with lists of recommendations of the kind usually offered to government agencies: "It is essential that . . . To resolve these difficult problems reliably the following steps are necessary. . . ." Here, however, we are offered no discussion of who is to take the necessary steps, who is to pay for them, or even whether they are possible using known techniques.

Nevertheless, for the serious student of climate change the book could be useful. It lists 469 references, some published as recently as 1985, and many of them grey. It includes, moreover, 29 pages devoted to the Impact of the Tunguska Meteor Fall on the Ozone Layer and Climate. Get the book if you do not mind receiving information raw, unpolished, and unrefined.

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