

zones require careful land use controls and sound planning measures. The implementation of rational controls and procedures is not for the sole benefit of the tourist industry but more for the well-being of coastal environments and all who use them, for whatever (legal) purpose. Because this book contains much useful information and is handsomely produced, it deserves a place on your coastal bookshelf.

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Carbon Dioxide and Global Change: Earth in Transition, Sherwood B. Idso, 1989, Institute for Biospheric Research, Inc., 631 East Laguna Drive, Tempe, AZ 85282, 292p. US\$19.95 (+ \$2.00 postage). ISBN 0-9623489-1-0 (pbk).

This is an interesting book that should pique the curiosity of many researchers. For those who are iconoclasts, or who at least question the paradigms of the scientific establishment, there is much of interest in the alternative points of view positioned by Idso. I enjoyed reading this book because there is much food for thought. In fact, this paperback serves as an apophoreta for the plethora of issues facing those researchers who consider aspects of global change. Idso is to be commended for having the conviction of opinion to go ahead and publish this somewhat radical work.

Although Idso deals with many issues, his analysis of sea level trends sets the tone for the book as much as any other issue. Consider, for example, that many researchers have proposed that eustatic sea level is presently rising at the rate of about 2-3 mm/yr. There also has been much speculation that a CO₂-induced rise of 50 to 100 cm could be sustained over the next century. Some of these extreme predictions are being scaled back because they appear to lack a substantive basis. The author, documenting the work of others, carefully notes that some of the causative phenomena linked to changes in sea level are: long-term tectonic and isostatic behavior; variations in ocean current intensity,

crustal cooling along rift margins and overriding of adjacent tectonic plates; river discharge; El Niño-Southern Oscillation events; rainfall, storminess, sea surface temperature, and salinity; and on-shore wind stress and vertical mixing of surface and deep waters. It thus seems clear that worldwide sea level (what Russian researchers often refer to as the ocean level) displays great temporal and spatial variability that is neither confirmed nor easily confirmable. The unravelling of such variability still requires a great deal of research, especially its links with climate. Idso points to many tantalizing issues in the search for coupling between sea-level change and climate. Sea level certainly drops during major glacial-epoch coolings but there is also some evidence that it sometimes rises 1-3 m during minor cooling events. It is interesting to note that Idso questions whether it is possible that a minor CO₂-induced warming may actually lead to a decrease in sea level. "This type of response can only occur if water is being sequestered as snow and ice, which in turn suggests that the albedo of the Earth's surface may possibly increase somewhat with a minor global warming. Hence, whereas the ice-albedo feedback is believed to be positive for large-amplitude climatic excursions, it may well be negative for less dramatic perturbations" (p. 59). The book is full of vignettes that do not get bogged down in the detailia of minor points, although each statement is documented by reference to the appropriate literature.

The book contains a very good author index (24 pages), a comprehensive subject index (31 pages), and over 2,000 references. The citations are grouped in sections that correspond to the various chapters. There are only a few diagrams and figures but this hardly detracts from the effectiveness of the work.

This is a fun book. I recommend it to those researchers who wish to think for themselves; it is for those who dare to question the dogma of today's scientific establishment.

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