cycle to be monitored by GEOSAT satellite altimetry. A paper by Koblinsky *et al.* compares 42 oceanic island tide gauges (to avoid continental coastal bias effect, "aliasing") with the altimetry, spanning those two years. The two are comparable, with monthly variations often exceeding 6 cm, and disclosing the seasonal undulations relating to the Asiatic monsoon, the seasonal expansion and contraction of the water bodies on the west sides of mid-latitude oceans and the wind-forcing of the equatorial Pacific. The TOPEX/Poseidon Mission should, within the next decade, vastly expand our knowledge of this area.

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Coastal Dunes: Form and Process, edited by Karl Nordstrom, Norbert Psuty, and W. Carter, 1990. John Wiley & Sons, Chichester, 392p. ISBN 0-471-91842-3 ($145).

According to the publisher this is a "state-of-the-science" volume from twenty-two international contributors, dealing with parts of Australia, Britain, Ireland, United States, Canada, Israel, Japan, Poland and South Africa. A useful introduction is provided by the editors touching lightly on global distribution (with map), geomorphology and human interactions. Curiously, their map and discussion omit entirely the interesting dunes of the Arctic regions as well as those of oceanic islands, *e.g.* the Bahamas, Bermuda, the Canary Islands, St. Helena, Ascension, Hawaii—even Madagascar (!)— while they gratuitously introduce on the map three totally imaginary islands off S.E. Australia.

Section I deals with eolian transport and sedimentation, with five chapters which reflect the pioneering work of Bagnold and develop an appreciable volume of new quantitative and experimental data. Section II turns to the beach-dune interaction (chapters 6–11), with attention to such things as vegetation and spray.

Section III undertakes the more challenging problems of "secondary" dunes and dune fields. Three chapters introduce three distinctive areas with a high degree of competence: Australian examples (Help and Thom), the Polish Baltic (Borónka), and the Morro dunes of California (Orme). In each case there are examples of mid-to-late Holocene cycles of dune growth and stabilization or erosion. The first of them contains an all-too-brief review of the world's transgressive dune fields. Causality is only touched on briefly: storm-frequency, sea-level change, isostatic motions, and so on.

The final section, IV, deals with effects of human development (chapters 15 and 16) and a short consideration by the editors of directions for future research (chapter 17). This section should prove to be extremely useful to those concerned with environmental management.

The volume as a whole is well produced, with plenty of useful figures, although some were over-reduced and disclosed a lack of foresight (and/or) ruthless editorial supervision. There is an excellent index, but the publishers have regrettably set far too high a price on the volume for it to get the large sales it deserves.

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California's Coastal Hazards: A Critical Assessment of Existing Land-Use Policies and Practices, by G. B. Griggs, J. E. Pepper and M. E. Jordan, 1992. California Policy Seminar Research Report, University of California, Berkeley, 224p.

As population expansion and overdevelopment of the coastal areas increase, there is a growing awareness of the dangers incurred by occupying a dynamic zone that is subject to the forces of storms, tides and waves as well as other natural phenomena more common in California—earthquakes, tsunamis, and cliff or bluff retreat. In California, the population has more than doubled between 1950 and 1980. At present, around 80% of the population lives within 30 miles of the shore, and this proportion is expected to rise in the near future. This rapid growth has taken place during a period of relative calm in storm activity. Since then, storm frequency and severity have increased significantly. Both factors—shoreline development and climatic deterioration—have contributed to the need for a coherent coastal hazards policy.