

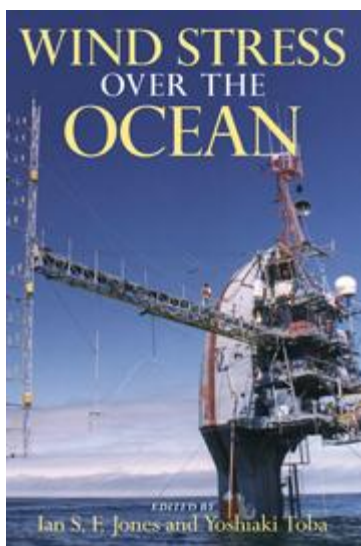
NEW ARRIVALS



Title: Large-Scale Transport Processes in Oceans and Atmosphere

Editors: Willebrand, J., Anderson, D.L.T.

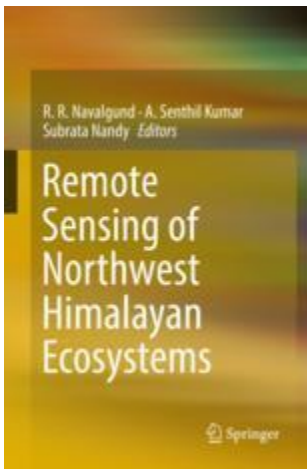
One of the major experiments in earth science at the present time is about to begin: the World Climate Research Program (WCRP). The objectives of WCRP are to determine the extent to which climate change can be predicted, and the extent to which human activities (such as increasing the level of CO₂) can influence our climate. To understand and possibly to predict climate change, one needs a good understanding of the dynamics of the ocean, the atmosphere, and the processes by which they are coupled. Two major programs are being developed within WCRP: TOGA (Tropical Oceans, Global Atmosphere) and WOCE (World Ocean Circulation Experiment). The success of these programs will depend on many things, not least of which is the existence of a pool of active young researchers. This NATO Advanced Study Institute brought together students and young scientists from 13 countries, most of them from Europe and North America. The objective was to provide them with a background in the perceived state of knowledge of atmosphere and ocean dynamics, and to mediate a flavour of the problems presently concerning scientists active in climate related dynamics. In the past, the two disciplines of oceanography and meteorology have largely been carried out separately. But for climate research both disciplines must interact strongly, and another objective of this school was to bring together both oceanographers and meteorologists. To promote an integrated approach, the lecture presentations were divided into two formats.



Title: Wind Stress over the Ocean

Editors: Ian S.F. Jones & Yoshiaki Toba

Understanding wind stress (drag) over the ocean is central to many facets of air-sea interaction, which in turn is vital for models of weather prediction and climate modelling. Wind Stress over the Ocean, first published in 2001, brings together thirty of the world's leading experts in air-sea interaction, under the auspices of the Scientific Committee on Oceanic Research. Wind Stress over the Ocean provides a thorough re-examination of the physical processes that transfer momentum between the atmosphere and the ocean. As well as describing the established fundamentals, the book also explores active areas of research and controversy. The book will form a comprehensive guide and reference for researchers and graduate students in physical oceanography, meteorology, fluid dynamics and coastal engineering



Title: Remote Sensing of Northwest Himalayan Ecosystem

Editors: Navalgund, R.R., Kumar, Senthil, Nandy, Subrata

Himalaya, one of the global biodiversity hotspots, is the abode of a variety of flora and fauna. The Himalayan ecosystems have immense ecological, socioeconomic, and aesthetic significance as they provide a wide range of ecosystem services. The northwest Himalaya (NWH), covering three states of India viz., Uttarakhand, Himachal Pradesh, and Jammu and Kashmir, starts from the foothills of Shivaliks in the south and extends to the greater Himalaya in the north. This region is also the source of some of the major rivers of India. With the increase in population, the NWH ecosystems have been under threat due to deforestation, loss of biodiversity, expansion of agriculture and settlement, overexploitation of natural resources, habitat loss and fragmentation, poaching, mining, construction of roads and large dams, and unplanned tourism. The Himalaya being young and geotectonically active, remains inherently unstable, fragile, and prone to natural disasters. Climate change is also likely to impact the Himalayan cryosphere drastically. Recognizing the importance of the Himalaya, a National Mission for Sustaining the Himalayan Ecosystem, one of the eight missions under the National Action Plan on Climate Change (NAPCC) of Govt. of India, to conserve biodiversity, forest cover and other ecological values in the Himalayan region has been taken up.

Space borne remote sensing with its ability to provide synoptic and repetitive coverage has emerged as a powerful tool for assessment and monitoring of the Himalayan resources and phenomena. Indian Institute of Remote Sensing, Dehradun has taken up a number of studies in the fields of geology, water resources, forestry, agriculture, urban settlement, etc., over the last decade. The book summarises the work carried out in different disciplines, illustrated with tables and figures and a host of relevant references. It is hoped that the book serves as an excellent reference of immense value to the students, researchers, professors, scientists, professionals, and decision makers working in the NWH region