Earth System Science Organisation (ESSO) Ministry of Earth Sciences (MoES)

Atlas on Wave related Information

A Wave Atlas for the Indian coast has been published by the ESSO-National Institute of Ocean Technology, Chennai.

The atlas is a reference for basic wave related information, viz. design wave height, wave approach, period etc. in the public domain, hitherto not readily available. It presents the statistics derived from past information using simulated wave data. The simulation domain covers major portion of the Indian Ocean including the Bay of Bengal and the Arabian Sea. The wind field and resulting wave field over 15 years of duration have been analysed to produce yearly and long-term statistics for engineering use. The long-term estimate like probable maximum wave height at a user selected location in as much as 50 and 100 years in future are presented in the atlas for planning purpose. The simulation exercise will continue and more data will be assimilated with time to update the atlas on routine basis.

The activities like design of marine structures, beach protection, and environmental protection require information on wave parameters. This information will help in site selection for industrial and other development purposes. Being an unrestricted open access database, this will benefit entrepreneurs, researchers, students and practicing engineers in coastal projects as the first source of scientifically produced marine information.