
Dr. B. Praveen Kumar



Dr. Praveen Kumar works as Scientist in the Modelling and Ocean observations group at INCOIS, Hyderabad. He did his Ph.D in Oceanography from Andhra University in 2014. His area of expertise includes marine meteorology, air-sea fluxes, air-sea interactions and upper ocean variability. Praveen Kumar developed the theoretical framework to develop a better air-sea flux product named TropFlux, by deriving correction methods from the global moored buoy array. This method improves significantly the existing air-sea flux products. At INCOIS, Praveen Kumar operationalized the flux product as a near-real time data and made it freely available to the research community. Ever since, periodic updates of the product are provided by him. In the last four years after the product was operationalized, the TropFlux reference article received more than 115 citations. TopFlux product is widely used for basic research and for forcing the ocean models including the biological models at INCOIS. Development of TropFlux air-sea flux product and the operationalization of it at INCOIS is by far the significant achievement of Dr. Praveen Kumar.

Recognizing his expertise in marine meteorology and air-sea fluxes, the Intergovernmental Oceanographic Commission (IOC) of UNESCO invited him to co-author a white paper on the future design and new methods to be incorporated in the Tropical Pacific Observing System (TPOS) in 2020. His inputs for the white paper were significant, and presently he is working with some of the peers in that field in providing guidance for the future design of the world's largest moored buoy array. Once fully implemented, this system will have far reaching consequences in advancing the climate research.

In addition, Praveen Kumar handles the Indian Argo program since the last two years. He is responsible for the overall management of the program that include planning, procurement, deployment, float registration and communication related issues. Also, he actively participates in all the Ocean Observation programs like RAMA buoy program, Ocean Mixing and Monsoon (OMM) experiments and other dedicated ocean observation programs. He has more than 100 sea days in the last four years. In short, Praveen Kumar rightly balances the fundamental research and operational necessities of INCOIS.

In recognition to his outstanding research contributions in the field of Earth System Science the Ministry of Earth Sciences honours Dr. B. Praveen Kumar with the “Young Researcher Award in the field of Earth System Science” for the year 2018.