Dr. Imranali M. Momin

Mr. Imranali M. Momin completed the Master of Sciences (M. Sc) from Gujarat University in 2005. Then he worked as Research Scholar at Space Application Centre (SAC/ISRO), Ahmedabad from 2006-2010 and as Project Scientist at National Centre for Medium Range Weather Forecasting (NCMRWF, MoES) from 2010-2014. Later, he joined NCMRWF, MoES as Scientist–C in 2014.

After joining NCMRWF, Mr. Imranali was involved with implementation of Global Ocean Model and upgraded them on the NCMRWF HPC system for operational and research activity. He was also involved with the R&D with the global ocean model to study the large scale ocean circulation at different horizontal resolutions. The Ocean initialization is crucial for the fully coupled atmosphere-ocean model to predict the weather on medium to extended/seasonal range time scale through the time varying lower boundary conditions. For initialization of global ocean and the coupled model, the NEMO model based variational ocean data assimilation (ODA) and ocean/sea-ice forecast system (up to 10 days) was implemented at NCMRWF. Mr. Imranali has also contributed to preparation of surface forcing fields from global atmosphere model to drive the global ocean/sea-ice models. He has also contributed to development of tools for continuous monitoring of global ocean observations at NCMRWF. Recently, the study of impact of Ka-band altimeter (ISRO SARAL-AltiKa) derived sea level anomaly data on ocean data assimilation system was also carried out. He has also contributed to the study of surface ocean currents in the Bay of Bengal from Ocean model and HF Radars of NIOT. Currently, Mr. Imranali is working on development of the quality control algorithm for the various ocean observations for ocean data assimilation and involved in development of High resolution global ocean model and also in Global Weakly Coupled Data Assimilation System for the Unified modelling system at NCMRWF.

Dr. Imran Ali is awarded Certificate of Merit for his outstanding contribution in the field of Atmospheric Science.