

The Iranian National Institute for Oceanography and Atmospheric Science (INIOAS) is a research center. Also, Iran Meteorological Organization has installed and run meteorological buoys and meteorological observation systems in waters and close to the shores.

The most important aims of the Atmospheric Science center of INIOAS are studying the interaction between atmosphere and ocean, simulating air-sea phenomena such as Water-sput and Tropical storms, determining the wind field in the Iran water environments that is often influenced by local conditions. Application of numerical weather forecasting model has a serious role in predicting extreme events like tropical storms. In INIOAS we are using WRF model, satellite data, and reanalysis data for monitoring and forecasting TC. Some of our publications related to Tropical cyclones in East Asia region and in Arab Sea are listed as below:

- Pegahfar, N., **Ghafarian, P.** 2014: Analysis of two Dynamic Parameters of CAPE and HELICITY for HAYAN Tropical Cyclone. The 11th International Conference on Coasts, Ports and Marine Structures (ICOPMAS2014), Tehran, Iran, 24-26 Nov. 2014
- Pegahfar, N., **Ghafarian, P.** 2015: Synoptic analysis of Haiyan tropical cyclone. 26th International Union of Geodesy and Geophysics. June 22-July 2, 2015, Prague, Czech Republic.
- **Ghafarian, P.**, Pegahfar, N., Owwad, e. 2015: Verification of weather research and forecasting model in predicting heavy precipitation from Tropical Cyclone Gonu off the coast of Iran. 26th International Union of Geodesy and Geophysics. June 22-July 2, 2015, Prague, Czech Republic.