**Introduction to the Guangzhou Institute of Tropical and Marine Meteorology, China Meteorological Administration​**​

The Guangzhou Institute of Tropical and Marine Meteorology (hereinafter referred to as the "Institute") under the China Meteorological Administration (CMA) was established in 1976. Its predecessor was the Guangdong Provincial Meteorological Science Research Institute. In 2001, it was approved by the Ministry of Science and Technology as a national-level public welfare research institution.The Institute aligns itself with the forefront of global meteorological science and technology, the overarching needs of China's meteorological development, and the specific requirements for modernized meteorological services in the South China region. Adhering to a primary focus on "applied research," it concentrates on typical tropical meteorological disasters. Its research revolves around three key disciplinary directions: tropical meteorological observation experiments and mechanisms, key technologies for tropical regional numerical weather prediction, and tropical environmental meteorology. The Institute aims to build itself into a nationally first-class and internationally influential professional research and achievement transformation base for tropical and marine meteorology, thereby enhancing the scientific and technological support capacity for meteorological disaster prevention and mitigation in China's tropical monsoon region.Currently, the Institute has a staff of 88 permanent employees, including 24 senior professionals with full professorial titles and 45 holding doctoral degrees. Among its staff are 3 CMA Science and Technology Leading Talents. It possesses 6 ministerial/provincial-level scientific and technological platforms: one national atmospheric background station, one provincial/ministerial-level key laboratory, three field scientific experiment bases, and one scientific data center. The Institute is also home to the CMA Key Innovation Team in Tropical Meteorology.

Over the past five years, the Institute has secured 32 national-level research projects, including one project led under the National Key R&D Program, two projects funded by the National Natural Science Foundation (NSFC)-Meteorological Joint Fund, 11 NSFC General Program projects, and 18 NSFC Young Scientists Fund projects. It has published 229 papers in SCI-indexed or Chinese core journals (including 179 SCI papers, of which 118 are in Q1/Q2 journals). Technology-related revenue reached 69.73 million RMB, and 26 patents were obtained. Two scientific achievements received an "Excellent" rating in the CMA Scientific Achievement Evaluation, while two others were rated "Good." The Institute has nurtured 3 CMA Leading Talents and 5 CMA Young Elites. A total of 11 achievements were adopted into operational meteorological services (including 7 endorsed by CMA functional departments and 4 by Guangdong Provincial Meteorological Bureau functional offices). New ministerial/provincial-level research platforms were established, such as the Guangdong Xinfeng National Atmospheric Background Station and the Guangdong Marine Meteorological Science Data Center.