

Some Major milestones

1792 Madras Observatory was established at Nungambakkam

1796 Meteorological register introduced.

1943 Establishment of Surface Meteorological Observatory at Meenambakkam

1945 Regional Meteorological Centre established at Chennai

1946 Radio sonde observations commenced at Meenambakkam Observatory

1960 New building of RMC, Chennai inaugurated

1969 Establishment of Area Cyclone Warning Centre at RMC Chennai.

1970 Automatic Picture Transmission (APT) facility installed to receive imageries from NOAA satellites.

1972 Cyclone Warning Research Centre established

1972 Port Meteorological Office opened

1973 Cyclone Detection Radar (CDR) commissioned at Chennai

1976 Agrometeorological Advisory Unit started

1984 Data Collection Platform (DCP) unit formed [presently Automatic Weather Station (AWS)]

1984 Imparting Training in Basic Meteorology commenced at Meenambakkam Chennai

1986 Inauguration of new Satellite Meteorology Building

1995 Main Building of RMC Chennai inaugurated

1996 High Resolution Picture Transmission (HRPT) direct readout ground station commissioned

1997 Training Section shifted from Meenambakkam to Nungambakkam

2002 S-band analogue Radar replaced with state-of-art DWR at Chennai

2007 On-line Briefing System (OLBS) for Aviation Services commenced at Chennai Airport

2008 State-of-art satellite based AWS commissioned

2008 Integrated Agrometeorological Advisory Services (IAAS) introduced

2009 Commissioned MFI Synergie Forecasting System in October

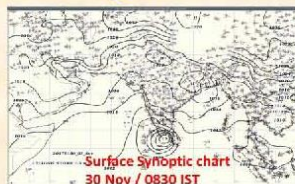
2009 RS-RW (GPS) instruments introduced replacing old Mark-II type for upper air observations

2010 Polar orbiting satellite data receiving facility commissioned at Meenambakkam observatory

2012 A meso-network of 10 ARGs commissioned in the Chennai metro city

Cyclone Warning and Public Weather Services

The Area Cyclone Warning Centre (ACWC) functioning in RMC Chennai delivers cyclone warning services for the region, issues coastal area bulletins and fisheries warnings and also provides public weather services for Tamil Nadu and Puducherry. All weather bulletins and warnings are disseminated to stake holders through email as well as updated in the RMC Chennai website.



Climatological Data Centre

The meteorological data collected by the observatories in Tamil Nadu and Puducherry are electronically archived at the Climatological Data Centre. The centre also supplies data to users on request as per norms.

Research and Development

Scientists under RMC Chennai carry out research on meteorological problems pertaining to their area of forecasting. At RMC Chennai, research on northeast monsoon is carried out.

IMD's dedicated research centre for Tropical Cyclones, namely, Cyclone Warning Research Centre also functions from RMC Chennai. This centre has brought out Cyclone track e-atlas and Cyclone Rainfall atlas which are available freely in RMC Chennai website for use by cyclone



disaster managers and cyclone researchers.

Training

RMC Chennai also conducts meteorological training course for the newly recruited scientific assistants in the region.

WMO recognition



**Government of India,
Ministry of Earth Sciences
India Meteorological Department
Regional Meteorological Centre, Chennai**



**No.6, College Road, Chennai 600006.
Phone: 044-2824 6030
044-2827 1951 (24 hrs weather enquiry)**

Background

The Regional Meteorological Centre (RMC) at Chennai was established on 1st April 1945. As of now, it is one of the six such RMCs of India Meteorological Department (IMD), headed by an officer of the rank of Deputy Director General of Meteorology. RMC Chennai has the responsibility of coordinating the entire gamut of meteorological services rendered by several of its subsidiary offices and observatories functioning within its area of responsibility covering the states of Andhra Pradesh, Karnataka, Kerala and Telangana and the Union Territories of Puducherry and Lakshadweep islands.

The meteorological observatory functioning at Nungambakkam, Chennai, [formerly known as Madras (13°04'N / 80°15'E)] was the first observatory established in India in the year 1792 “for promoting the knowledge of Astronomy, Geography and Navigation in India” by Sir Charles Oakeley, the then Governor of Madras under the East India Company.

There is a datum bench mark in the observatory campus, which is the oldest one of such kind in India, with reference to which all geodesic survey measurements were made. The 10 ton, 15 feet tall granite pillar, in which the original transit equipment was located, is preserved as a monument of invaluable importance. . **Granite pillar preserved as a monument**



Mandates and Functions of RMC Chennai

Take meteorological observations and provide weather forecasts for the region

Monitor monsoon and other weather phenomena over land and ocean round the clock

Warn against severe weather phenomena like tropical cyclones, heavy rain, floods, heat waves, drought etc.

Provide aviation meteorological, agromet advisory and cyclone warning services for the region.

Provide meteorological statistics for agricultural operations, water resource management, industries and other nation-building activities.

Systematic archival of meteorological data collected and making the same available to users.

Undertake and promote research in meteorology and allied disciplines.

Observational organisation of RMC Chennai

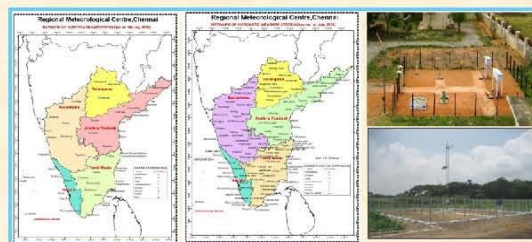
Under the overall administrative control of RMC Chennai, Meteorological Centres (MCs) function at Amaravati, Bengaluru, Hyderabad and Thiruvananthapuram rendering services to the states of Andhra Pradesh, Karnataka, Telangana and Kerala (& Lakshadweep) respectively. Cyclone Warning Centre (CWC) Visakhapatnam renders cyclone warning services for the Andhra Pradesh coast.



Organisation of RMC Chennai

The observatory network under RMC Chennai comprises of 56 surface meteorological observatories, 26 upper air observatories (Pilot balloon - 12, RS/RW - 14), 4 Aerodrome Meteorological Offices (AMO) and 22 Aerodrome Meteorological Stations (AMS), 133 Automatic Weather Stations (AWS), 271 Automatic Rain Gauge stations (ARG) and 7 Cyclone Detection Radars besides a host of smaller observatories / meteorological stations.

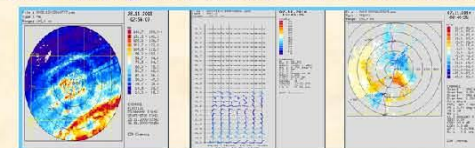
A ground station for receiving and processing data from polar orbiting satellites is also functioning from Meenambakkam observatory and provides very high resolution images and sounding data.



Surface observatories (manned and automatic) in RMC Chennai region

Radar Weather surveillance

Doppler Weather Radar (DWR) stations at Chennai, Karaikal, Sriharikota, Machilipatnam, Visakhapatnam, Thiruvananthapuram and Kochi provide continuous weather surveillance for nowcasting as well as for cyclone tracking. The DWR Chennai located at the 10th floor of Port Trust building was India's first DWR installed in 2002.



Sample Radar products from DWR Chennai

Aviation Meteorological Services

The Meteorological Watch Office (MWO) of Flight Information Region (FIR), Chennai and Aerodrome Meteorological Office (AMO) of Tamil Nadu are collocated at Chennai Airport. The MWO caters to the aviation meteorological requirements of flights operating in 26 civil airports located in the states of Andhra Pradesh, Telangana, Karnataka, Kerala, Tamil Nadu & UTs of Puducherry and Lakshadweep and over the adjoining sea areas of Bay of Bengal, Arabian Sea and Indian Ocean. An online Aviation Meteorological Briefing System (OLBS) <https://olbs.amsschennai.gov.in/> is made available for access by authorised pilots to collect weather information and forecasts pertaining to take-off, enroute, and destination aerodromes.



Agrometeorological Advisory Services

Agrometeorological advisories are issued to farmers on bi-weekly basis at district level in collaboration with state agricultural universities and agricultural departments under Gramin Krishi Mausam Seva (GKMS) scheme. Forecasts are uploaded in RMC Chennai website as well as communicated to registered farmers by SMS. These services are also disseminated through the mobile app - Meghdoot.