RMC Kolkata - History and Background:

Meteorology in India received substantial encouragement from The Asiatic Society of Bengal, formed in 1784 at Calcutta by Sir William Jones for the advancement of Sciences in Asia. James Kyd prepared the register of tidal observations in Hoogly river, Calcutta.

The first observatory was set up in Calcutta, at Surveyor General's Office at Park Street in the Year 1829. The first Superintendent of this observatory was V.N. Rees who later became the Chief Computer of the Survey of India in 1850-51. In 1852, Radhanath Sikdar took charge of the Calcutta observatory.

In August 1874, H.F. Blanford was appointed as the first 'Imperial Meteorological Reporter' to the Government of India. India Meteorological Department (IMD) was established in 1875 with Central Observatory at Calcutta (Alipore), established in 1877.

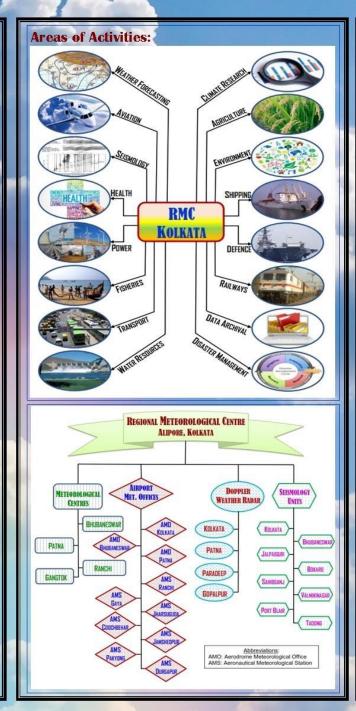
In 1905, IMD headquarters was shifted from Calcutta to Shimla and later to Pune in 1928, and finally to New Delhi in 1944.

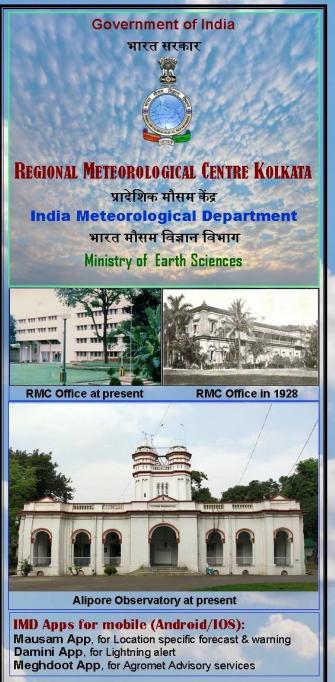
1st April 1945, Regional Meteorological Centre (RMC) Kolkata came into existence at Alipore Observatory complex with administrative jurisdiction of West Bengal, Bihar (unified Bihar and Jharkhand), Orissa, and entire north-east India. Later in April 1997, six states viz. Assam, Arunachal Pradesh, Nagaland, Manipur, Meghalaya and Mizoram detached from RMC Kolkata to constitute a new RMC at Guwahati, and Tripura joined RMC Guwahati later in April 2011.

Mandate:

RMC Kolkata is the principal government agency and the nodal office of IMD in Eastern India in meteorology and allied subjects in West Bengal, Bihar, Jharkhand, Odisha, Sikkim and Andaman and Nicobar Islands:

- To take meteorological observations and provide current and forecast meteorological information to related sectors viz. agriculture, irrigation, shipping, aviation, media etc.
- To warn against severe weather phenomena like tropical cyclones, nor'westers, heavy rains and snow, cold and heat waves, etc., which cause destruction of life and property.
- To provide meteorological statistics required for agriculture, water resource management, industries, oil exploration and other nation-building activities.
- To conduct and promote research in meteorology and allied disciplines.





Weather Forecasting:

Area of Responsibility:

- States of West Bengal, Sikkim, Bihar, Jharkhand, Odisha, Andaman and Nicobar Islands.
- Bay of Bengal consisting of North Bay of Bengal, north of latitude 18.5°N; Central Bay of Bengal between latitude 13.0°N and 18.5°N and west of longitude 92.0°E; South Bay of Bengal between latitude 5.0°N and 13.0°N, and Andaman Sea west of longitude 95.0°E.

Bulletins:

(A) For Sea Area:

- ♦ Bay Bulletins (Aurora, Balloon)
- FLEET forecast for Defence
- GMDSS (Global Maritime Distress Safety System)
 Bulletin for High Seas
- Coastal Bulletins for West Bengal coast and A and N coasts
- Fishermen Warnings for West Bengal coast and A and N coasts
- Port Warnings for Hooghly River Ports, Sagar Island Port, Port Blair Port.

(B) For Land Area:

- Regional General Forecast and Wamings for West Bengal, Sikkim, Bihar, Jharkhand, Odisha, A and N Islands.
- Farmers Bulletin for AIR Kolkata, Akashvani Siliguri, Kurseong and Akashvani Port Blair.
- City Forecast for selected cities.
- Tourism Forecast for selected cities and also for Manas Sarovar Yatra.
- Local Forecast For Kolkata and neighbourhood.
- Adverse Weather Warnings like, Heavy rain, Thunder squall, Hail, Fog, Heat and Cold Wave, Gale wind, Cyclone Warnings etc for WB, Sikkim and A and N Islands.
- Issuance of advisories for cyclone warnings to West Bengal and A and N Administration.
- Nowcasts for WB, Jharkhand and Odisha under surveillance of DWR Kolkata.
- Forecast for VVIP / VIP movements.
- Forecast for Gangasagar Mela and other such fares in West Bengal, A and N Islands on request.
- Preparation of district wise rainfall statistics for West Bengal, Sikkim and A and N Islands throughout the year.

Alipore Observatory:

Alipore observatory was established on 1st April 1877, and took over the work of meteorological observations from the office of Surveyor General of India at Park Street, Calcutta maintaining this work since 1829.

The observatory was then equipped with seismographs, Standard Clocks, Chronometers, Chronograph, Transit instrument, the Calcutta Standard and other Barometers, Khudsen Barograph etc. The Time Signal work at Calcutta started in 1837. Seismological observation is one of the main responsibilities of Alipore Observatory.

Alipore Office and Gurudev Rabindranath:

Alipore observatory has some happy remembrances of the graceful presence of Gurudev Rabindranath Thakur. He spent some valuable days during 1926, in a guest

room on the first floor of the old RMC building. He wrote some of his famous poems under this old banyan tree. The guest room has later transformed to be 'Rabindra Museum' and inaugurated on 24th



September 2003, where a good number of important documents, some replicas of famous paintings, many old photographs and other memoirs of Gurudev are displayed for public viewing.

Aviation Services:

Aviation Weather information are provided to ATC and all Airlines at the AMOs and AMS daily, which include upper air winds, temperatures, take off forecast, significant weather, Aerodrome Warnings, TAF, METAR, ROFOR, Trend forecasts etc.

Agro Meteorological Advisory Services (AAS):

AAS started in 1976 to extend meteorological services to the farming community in the state. Gramin Krishi Mausam Sewa (GKMS) started 2012. Bi-weekly Agromet Advisory Bulletins are issued in English and local languages on every Tuesdays and Fridays. Block level advisories are issued since September 2020. 6 Agromet Field Units (AMFU) are set up in 6 agro-climatic zones in WB. District Agro Met Unit (DAMU) are setup in Krishi Vigyan Kendras (KVK) in collaboration with ICAR alongwith installation of Agro-AWS by IMD.

CLIMATOLOGIC	CAL NO	DRMAL	.s					
Stations ↓	Max. / Min. Temp (°C)				Monthly R/F (mm)			
	JAN	APR	JUL	Ост	JAN	APR	JUL	Ост
ALIPORE	25.8 14.1	35.3 25.3	32.4 26.5	32.2 24.1	10.4	58.9	396.0	180.5
SHANTINIKETAN	24.7 11.6	36.6 23.3	32.9 26.0	31.6 22.5	11.6	52.0	343.2	87.7
DARJEELING	10.7 1.5	18.5 8.8	19.6 13.4	19.5 10.5	13.5	76.9	656.7	59.1
PORT BLAIR	29.5	32.3 24.1	29.4	29.7	32.1	75.8	442.5	301.4

EXTREME VALUES (with date of occurrence)						
Stations 	Max. Temp (°C)	Min. Temp. (°C)	Daily R/F (mm) 369.6 28.09.1978			
ALIPORE	43.9 01.06.1924	6.7 20.01.1899				
SHANTINIKETAN	47.0	5.0	341.8			
	10.06.1966	15.01.2003	27.09.1978			
DARJEELING	28.5	-7.2	504.4			
	21.08.1970	30.01.1971	31.07.1995			
PORT BLAIR	36.4	14.6	374.3			
	10.05.2010	05.06.1986	31.12.1976			

Observational Network:

RMC Kolkata is equipped with 90 surface observatories (34 Departmental and 56 part-time), 1 MWO, 2 AMO, 7 AMS, 14 Upper-Air observatories (Radiosonde / Pilot Balloon), 4 Doppler Radar, 8 Seismological Observatory, 6 Radiation Units, 114 Automatic Weather Stations (AWS), 268 Automatic Rain Gauge (ARG), and 10 High Wind Speed Recorder (HWSR) stations throughout the Region.

Hydrological Services:

Main purpose of Hydrological Services are (i) issuing of Quantitative Precipitation Forecast (QPF) on catchments / sub-catchments basis; (ii) issuing of heavy rainfall forecast. There are two Flood Meteorological Offices (FMO) at Asansol and Jalpaiguri. Also, DVC Met. Unit was established in 1949, for agency based services for Damodar Valley Area.

Contact Us:

Regional Meteorological Centre Kolkata 4, Duel Avenue, Alipore, Kolkata 700027 Phone: 033-24793167 (Tele-Fax), 033-24492559 Data Supply: 033-24566062 (10 AM to 6 PM)

Website: http://imdkolkata.gov.in

- f https://www.facebook.com/KolkataWeatherIMD
- @ImdKolkata
- Youtube Channel: RMC Kolkata (https://www.youtube.com/channel/UCLTI_VT59JZNKdhZ7SHI6mA)
- www.instagram.com/rmckolkata/