## **BRIEF HISTORY**

The PATNA Meteorological Observatory was amongst the earliest observatory established in 1867 by the British Core of Engineering and subsequently it was managed by Army Medical Corp as part of their initiative to study the impact of weather on onset and prevalence of epidemic and other disease. First set of documented instructions were titled "Instruction for taking Meteorological Observations" was issued by Captain (Later Major General) Sir Henry James in 1852. Initially observations were taken twice a day at 0930 AM and 0330 PM local time and subsequently the frequency was increased to four observations and eventually to eight observations at three intervals. hourly Upon formal establishment of India Meteorological Department in 1875 as a government responsibility department, the of observation and management of all meteorological office was transferred to IMD. The Meteorological Centre is functional from its present location at Civil Aerodrome Patna since 1949.

World Meteorological Organization, Geneva in September 2020 has conferred to the Meteorological Observatory Patna the status of **Centennial Observing Station (COS)** in recognition to its long period meteorological observation and record exceeding 100 years.

PATNA



#### **HUMAN RESOURCE**

Meteorological Centre Patna and its sub offices are manned by a team of around 100 dedicated professional who are Post graduate and Graduate degree holders in Science or Engineering and trained in different streams of Meteorology.

### **IMPORTANT LINKS**

IMD HEAD QUARTER WEBSITE: https://mausam.imd.gov.in

Meteorological Centre Patna http://amsskolkata.gov.in/mc/patna

WEATHER WARNING UPDATE:

 https://mausam.imd.gov.in/
 imd\_latest/contents/subdivisionwisewarning.php
 https://mausam.imd.gov.in/
 imd\_latest/contents/districtwisewarning.php

# AGROMETEOROLOGICAL ADVISORY:

https://mausam.imd.gov.in/ imd\_latest/contents/agromet/advisory/ englishstate\_current.php

METEOROLOGICAL CENTRE, PATNA on Social Media <u>https://www.facebook.com/</u> <u>Meteorologicalcentrepatna</u> <u>https://twitter.com/imdpatna</u>

https://www.instagram.com/ imd\_patna/

https://www.youtube.com/chan nel/UC0hNt-62PjQdKStbqJOUHg

# METEOROLOGICAL APPS

	MAUSAM(मौसम सेवाएँ के लिए)
	MEGHDOOT (मौसम और कृषि परामर्श के लिए)
<u>.</u>	DAMINI ( बिजली और ठनका की चेतावनी के लिए)
UMANU	UMANG ( मौसम सेवाएँ )
	RAIN ALARM (मेघ गर्जन/ वर्षा की सूचना के लिए)

#### CONTACT US

भारत मौसम विज्ञान विभाग मौसम विज्ञान केंद्र पटना बिहार , पिन 800002 दुरभाष - 0612-2252356 /2251867/2222071 फैक्स: 0612-2252356/2222071 © 077398 39827 ई-मेल:mc.patna@imd.gov.in, wspatna@gmail.com patnamc@gmail.com.



मौसम विज्ञान केंद्र, पटना METEOROLOGICAL CENTRE, PATNA

भारत मौसम विज्ञान विभाग INDIA METEOROLOGICAL DEPARTMENT

> पृथ्वी विज्ञान मंत्रालय MINISTRY OF EARTH SCIENCES

# भारत सरकार GOVERNMENT OF INDIA



WEATHER

BSERVATIONAL NETWORK Support to State Govt. Network

Aviation(24\*7 hrs)
 Agriculture
 Public Weather service
 (24\*7 hrs)



WARNING FOR HIGH IMPACT WEATHER PHENOMENA ◆Thunderstorm
◆Heavy rain fall
◆Cold wave
◆Heat wave
◆Lightning, etc.

#### AREA OF RESPONSIBILITY AND SERVICES

The Meteorological Centre Patna caters to the meteorological, hydrological and climatological requirement of different stake holders in the state of Bihar . In Respect of hydro meteorological services area of responsibility stretches to the neighboring state of Jharkhand, West Bengal and Madhya Pradesh. The major stakeholders are Central and state Disaster Management Authorities ,Flood monitoring and management agencies, Agriculture Sector, Aviation, Power generation and distribution agencies, Infrastructure development agencies, Tourism industries and Medical professional.



### **CLIMATIOLOGICAL INFORMATION**

Weather related data and weather reports are recorded and archived for the Bihar state. The same is supplied to various government agencies, Research organisations/associates, private firms, general public etc. as per requirement based on IMD policy of data supply.



The District level agro-meteorological advisory bulletin was started in 2008 issuing biweekly forecast cum advisory bulletin for farming community on every Tuesday and Friday. These advisories are communicated through email, SMS, website, radio etc.

### FLOOD METEOROLOGICAL SERVICES Flood forecast is issued for 08 sub-basins which covers the area of Bihar along with some parts of Madhya Pradesh, Jharkhand Chhattisgarh & West Bengal.



Multi-Hazard map Of the state of Bihar



Vital meteorological information required for safe, efficient and economical flight operation is provided to Air Traffic Management Service and Airlines Operators at each airport for their respective area of responsibility. The information includes Upper-winds, temperatures, significant Aerodrome weather (SIG WX) charts, Warnings(Disastrous weather like Fog, heavy rainfall, Thunderstorm, Squall, Lightning Aerodrome etc.) Terminal Forecasts, Route Forecasts, METARs, etc.





#### WEATHER FORECAST AND BULLETIN

>In order to provide world class meteorological services, a team of qualified meteorologist and technical professional keep a close watch on the vital atmospheric parameters which affect the weather and climate of the state. The developing and potential weather systems are continuously tracked through a network of Radar and a series of satellites. The processing and analysis is done with the help of different analytical and prognostic tools. The outcome is disseminated in form of forecast of different time scale like general forecast and outlook for five to seven days, city weather, forecast for places of tourist importance and location specific forecast for places of religious importance where large congressional of people takes place.

>A short range Nowcast and warning is issued for hazardous weather events like intense thunderstorm short spell heavy rainfall and lightning. Heat wave warning is also issued for specific duration.

>The benefit of our scientific knowledge and expertise is extended to farmers in form of parameter specific forecast and this is coupled with corresponding agriculture advisory to produce Agrometeorological Advisory services.

>Meteorological Centre Patna is also collaborating with medical professional to provide advisory for vector born and other diseases which are weather dependent.

# **NEW INITIATIVES**

- > Extension of value added services for Power sector in Bihar.
- Collaboration with Indian Council of Medical Research (ICMR) and health authorities of state government for impact assessment of meteorological parameters on onset and prevalence of AES & JE in Bihar.
- Extension of data support to All India Institute of Medical Sciences Patna/Delhi for their ongoing research activities.
- Extension of technical support to state agencies for State Specific Action Plan (SSAP) under National Water Mission (NWM).

### CONTRIBUTION IN RESEARCH & DEVELOPMENT

- > बिहार मे गर्म हवाएं/लू की लक्षण एवं प्रभाव :-बिहार हीट एक्शन प्लान
- Meteorological Conditions Associated with AES/JE Outbreak 2019 in Bihar: Published as Technical report.
- Flood Hazard Atlas of Bihar: Published as NRSC-ISRO report.
- Meteorological features associated with flood over eastern India during southwest monsoon 2019.
- Published as Departmental Report. > वज्रपात :- जानकारी ही बचाव बिहार राज्य आपदा प्रबंधन प्राधिकरण के
  - मुख-पत्र **"पुनर्नवा"** में प्रकाशित
- Case study of two very severe lightning strike occurring on 25th February and 25th June 2020 over Bihar.

Presented in Tropmet 2020.