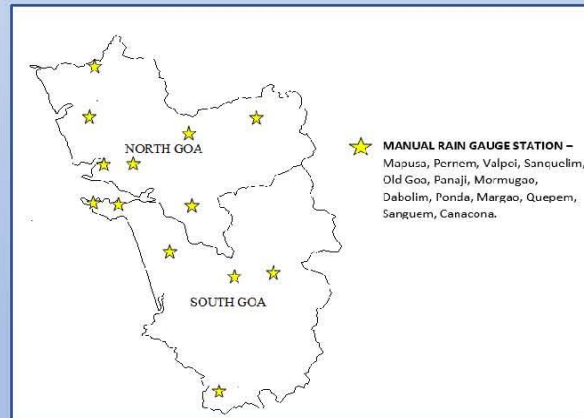


OBSERVATIONAL NETWORK

2 surface observatories, 1 weather Radar Station, 1 RS/RW, 1 Seismo monitoring unit, 1 Radiation station, 13 rain gauge stations, 3 Automatic Weather Stations and 5 Automatic rain gauge stations throughout the state. 1 High Wind Speed Recorder and one GNSS based IPWV estimation instrument.

OBSERVATORIES IN GOA



AUTOMATIC WEATHER
STATION



SURFACE OBSERVATORY



AUTOMATIC RAIN
GAUGE

ORGANISATION STRUCTURE

DIRECTOR GENERAL OF METEOROLOGY

HEAD, REGIONAL METEOROLOGICAL CENTRE, MUMBAI

DIRECTOR, METEOROLOGICAL CENTRE, GOA

WEATHER FORECASTING SECTION
DOPPLER WEATHER RADAR SECTION
SURFACE OBSERVATORY SECTION
RADIO SONDE SECTION
STATE INSTRUMENT MAINTENANCE CENTRE
PORT MET OFFICE, MORMUGAO
RADIATION SECTION
SEISMOLOGY SECTION

ANDROID/IOS APPLICATIONS

Recently the following meteorological Apps are introduced by IMD (MOES) for mobile (Android / ios) users:

- Mausam** : Location specific forecast & warning
- Damini** : For Lightning alert
- Meghdoot** : For Agro Advisory service

CONTACT US

Website: www.imdgoa.gov.in

Email: mc.goa@imd.gov.in

Landline: 0832-2425547

Radar: 0832-2231990

Facebook: [@India Meteorological Department Goa](https://www.facebook.com/IndiaMeteorologicalDepartmentGoa)

Twitter: [@Goalmd](https://twitter.com/Goalmd)

Address: Meteorological Centre,
Altinho, Panaji, North Goa,
Goa, Pin Code- 403001



भारत सरकार

GOVERNMENT OF INDIA

पृथ्वी विज्ञान मंत्रालय

MINISTRY OF EARTH SCIENCES

मौसम केन्द्र, गोवा

METEOROLOGICAL CENTRE, GOA



DWR Building, Meteorological Centre, Goa

- Met office in Goa was established in the year 1860 and was earlier known as "SERVICO METEOROLOGICO DO ESTADO DA INDIA" under "SERVICO METEOROLOGICO NACIONAL", LISBOA, PORTUGAL. (The Meteorological Service started in Goa immediately after it started in Portugal.)
- Later it was known as "Goa Observatory" in the middle of the year 1963 as a part of India Meteorological Department. It was declared as "Meteorological Centre" from Aug 2007.

IMD MANDATE

To take meteorological observations and to provide current and forecast meteorological information for optimum operation of weather-sensitive activities like agriculture, irrigation, shipping, aviation, offshore oil explorations etc.

To warn against severe weather phenomena like Tropical Cyclones, Norwesters, Dust storms, Heavy rains, Snow, Cold and

To provide meteorological statistics required for different users.

To conduct and promote research in meteorology and allied disciplines.

To detect and locate earthquake and to evaluate seismicity in different parts of the country for development projects.

FORECAST AND BULLETINS

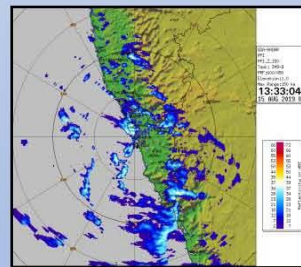
- **Daily weather Report:** Report comprising of weather over the state during past 24 hours, forecast and warning for next 5 days, issued twice a day based on 0300UTC observations and 1200UTC observations.
- **Forecast bulletin for AIR & Doordarshan:** 5 days forecast for all the districts of the state issued 3 times a day at 0700hrs IST, 1300 hours IST and 1730hrs IST
- **Fishermen warning:** Warnings issued 4 times a day for fishermen. This includes wind speed warnings issued by IMD and high wave alerts issued by INCOIS.
- **District forecast:** 5 days forecast for all the districts of the state issued at 1130 hours IST.
- **Nowcast:** District wise & Station wise nowcast for thunderstorm, heavy rain etc. issued at three-hour interval.
- **Highway forecast:** Forecast for expected weather conditions en-route the state / National highways of the state for next 24 hours, issued at 1300 hours IST.
- **Tourism forecast:** Forecast issued for important tourist places of the state.
- **Warning bulletin:** This bulletin Issued daily at 1300 hrs IST contains information on warnings related to severe weather and warnings for fishermen.
- **Impact based forecast:** Forecast issued regarding the possible impacts of server weather, over city of Panaji and also general impact over districts of North Goa and South Goa.
- **Press release for severe weather:** Press release / warnings alerts are issued for disastrous weather affecting the state and sent to all stake holders and to media.

NEW INITIATIVES

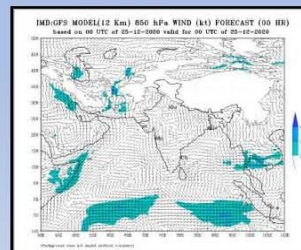
- **IMPACT BASED FORECAST:** Forecast on the possible impacts of server weather, over city of Panaji and also general impact over districts of North Goa and South Goa were started from the south west monsoon season of 2020.
- **FORECAST BULLETIN IN KONKANI:** Meteorological Centre Goa started to issue daily forecast bulletin in Konkani language, targeting particularly the farmers of the region. This new initiative is with the combined efforts of Meteorological Centre, Goa and District Agro-Met Unit, ICAR, North Goa.

FORECASTING TOOLS AND TECHNIQUES

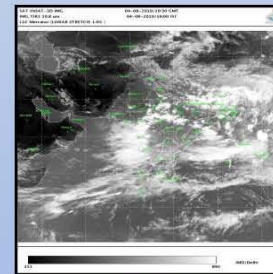
- **RADAR:** S-band Doppler weather radar, a powerful tool for Nowcast.
- **SATELLITE:** INSAT 3D, INSAT 3DR & HIMAWARI satellites are used for monitoring & forecast of weather systems.
- **Surface and upper air data:** Realtime surface and upper air data analysis for identification of synoptic scale systems.
- **NWP Model:** Various regional & global numerical weather prediction models are utilized for short range to medium range forecast.
 - WRF, UM: For short range forecast
 - GFS, GEFS & ECMWF : For medium range forecast
 - MME (CFSV2) : Extended range forecast



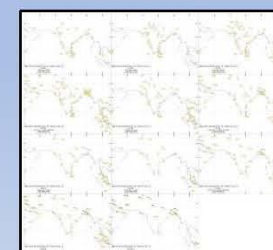
Radar Products



NWP Products

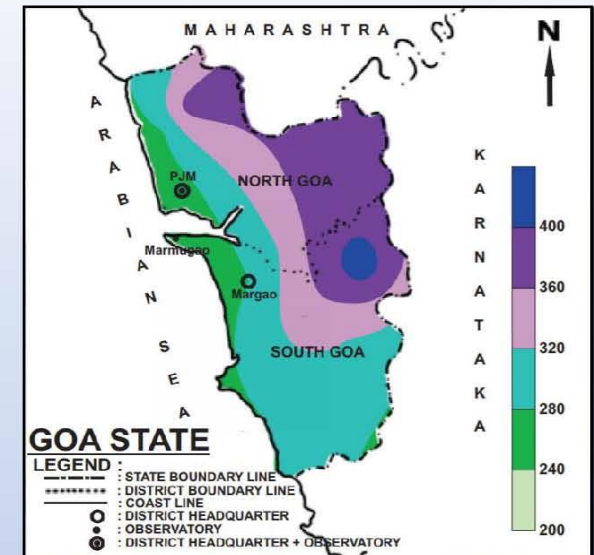


Satellite Products



Upper Air observation chart

CLIMATE OF GOA AT A GLANCE



SEASONAL RAINFALL (cm) - SOUTHWEST MONSOON SEASON (JUNE - SEPTEMBER)

OBSERVATORY	TEMP	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
Panaji	Max	32.4	32.2	32.3	33.1	33.6	30.6	29.2	29.1	30.1	31.8	33.2	32.9	31.7
	Min	20.2	20.7	23.3	25.3	26.4	24.9	24.3	24.1	24.1	24.0	22.6	20.9	23.4
Mormugao	Max	31.8	31.3	31.9	32.8	33.2	30.7	29.2	28.9	29.9	31.6	33.1	32.7	31.4
	Min	21.9	22.3	24.2	26.2	27.1	25.2	24.5	24.2	24.3	24.6	23.8	22.5	24.2
State Mean	Max	32.1	31.7	32.1	32.9	33.4	30.7	29.2	29.0	30.0	31.7	33.1	32.8	31.5
	Min	21.1	21.5	23.7	25.7	26.7	25.1	24.4	24.1	24.2	24.3	23.2	21.7	23.8

MEAN MAXIMUM AND MINIMUM TEMPERATURE (Degree Celsius)

DISTRICTS		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
North Goa	a	0.6	0.1	2.8	5.6	70.4	928.1	1108.9	706.0	315.1	160.0	39.7	9.8	3347.1
	b	0.1	0.0	0.1	0.4	3.2	21.8	27.5	25.0	14.3	7.1	2.4	0.4	102.3
South Goa	a	1.8	0.0	2.9	7.6	92.2	888.8	1128.0	709.5	340.0	171.6	38.5	13.3	3394.2
	b	0.1	0.0	0.1	0.5	3.1	21.9	27.1	24.7	14.8	7.9	2.0	0.6	102.8
State Mean	a	1.2	0.1	2.9	6.6	81.3	908.5	1118.5	707.7	327.5	165.8	39.1	11.5	3370.7
	b	0.1	0.0	0.1	0.5	3.1	21.9	27.3	24.9	14.5	7.5	2.2	0.5	102.5

a :- Normal Rainfall (mm)

b :- Average number of rainy days (i.e. days with rainfall of 2.5 mm or more)

MEAN RAINFALL (in mm) AND NUMBER OF RAINY DAYS

Highest ever Maximum temperature recorded:

39.8°C at Panaji on 7th April 1989

Lowest ever Minimum temperature recorded:

12.2°C at Mormugao on 18th November 1946