

भारत मौसम विज्ञान विभाग
पृथ्वी विज्ञान मंत्रालय



INDIA METEOROLOGICAL DEPARTMENT
Ministry of Earth Sciences

WEEKLY WEATHER REPORT

साप्ताहिक मौसम विवरण

For the week ending on 27th March 2024 (7 Chaitra 1946 Saka)

CHIEF FEATURES: 1) Light to moderate rainfall accompanied with thunderstorms was reported at many places over Nagaland, Manipur, Mizoram and Tripura and at a few places over Assam & Meghalaya during most of the days in the week. Light to moderate rainfall/snowfall and thunderstorms were also reported at most places over Arunachal Pradesh and Sub-Himalayan West Bengal & Sikkim during most of the days in the week. This was due to i) An east-west trough in the lower levels from Bihar to south Assam during first half of the week; ii) cyclonic circulation and associated upper level north-south trough in the region during most of the days; iii) moisture laden southerly/southwesterly winds at lower levels to these areas from Bay of Bengal due to anticyclone in lower levels over north Bay of Bengal. 2) Heavy to very heavy rainfall was reported at isolated places over Bihar and Meghalaya on a day. Heavy rainfall was reported at isolated places over Jharkhand, Assam & Meghalaya, Coastal Karnataka and Odisha on a day each. 3) Hailstorms were reported at isolated places over east Madhya Pradesh, Vidarbha, Chhattisgarh, Coastal Andhra Pradesh and Telangana on 21st; Gangetic West Bengal on 22nd; Nagaland, Manipur, Mizoram & Tripura on 25th; coastal Odisha and Chhattisgarh on 26th. 4) Due to subdued rainfall activity over northwest and central India, Maharashtra, Gujarat, the maximum temperatures raised gradually during the week and reached first time in this season at the range of 40-42°C at some places over west Madhya Pradesh, Vidarbha, Gujarat region, Marathwada, Madhya Maharashtra and west Rajasthan and at isolated places over north Interior Karnataka, Telangana, Rayalaseema, east Madhya Pradesh and east Rajasthan.

SEMI-PERMANENT FEATURES:

Inter Tropical Convergence Zone (ITCZ): During the week, it was located between Lat.4°N and Lat.10°N over the Indian region.

Sub-Tropical Ridge (STR): It oscillated between Lat.5°N and Lat.7°N at 200 hPa.

Sub-Tropical Westerly Jet (STWJ): The highest wind speed of 116 knots was recorded over Srinagar on 27th March at 150 hPa.

MAXIMUM TEMPERATURE:

The highest maximum temperature of 42.8°C was reported at Akola (Vidarbha) over the country on 27th March over the plains of the country.

MINIMUM TEMPERATURE:

The lowest minimum temperature of 12.2°C was reported at Rewa (east Madhya Pradesh) on 22nd March over the plains of the country.

SYNOPTIC WEATHER:

Heat wave conditions were reported at isolated places over Saurashtra on 21st and at isolated places over west Rajasthan on 27th.

Thunderstorms were reported at isolated places over Nagaland, Manipur, Mizoram, Tripura on 25th.

Hailstorms were reported at isolated places over east Madhya Pradesh, Vidarbha, Chhattisgarh, coastal Andhra Pradesh, Telangana on 21st; at isolated places over Gangetic West Bengal on 22nd; at isolated places over coastal Odisha, Chhattisgarh on 26th.

WEATHER AND ASSOCIATED SYNOPTIC FEATURES:

- A cyclonic circulation lay over northwest Rajasthan and neighbourhood which extended upto 0.9 km above m. s. l. on 27th.
- A trough in westerlies at 1.5 km above m. s. l. ran roughly along Long. 87 °E to the north of Lat. 21°N. on 27th.
- A trough ran from northwest Bihar to southeast Assam which extended upto 0.9 km above m. s. l. on 27th.
- A cyclonic circulation lay over Kerala and neighbourhood at 1.5 km above m. s. l. on 27th.
- Last week's trough/wind discontinuity from Kerala to north Telangana ran from coastal Karnataka to north Madhya Maharashtra on 21st morning and then lay as a trough from eastcentral and adjoining southeast Arabian sea off north Kerala-Karnataka coasts to north Maharashtra coast at 0.9 km above m. s. l. on 21st. It lay as a trough/wind discontinuity from north Tamil Nadu to west Vidarbha at 0.9 km above m. s. l. on 22nd.

Extending upto 1.5 km above m. s. l., it ran from north Kerala to Vidarbha on 23rd, ran from south interior Karnataka to Vidarbha across north interior Karnataka on 24th, persisted on 25th and ran from north interior Karnataka to east Vidarbha on 26th. It ran from south interior Karnataka to east Vidarbha which extended upto 0.9 km above m. s. l. on 27th.

- A western disturbance as a trough in mid and upper tropospheric westerlies with its axis at 5.8 km above m. s. l. ran roughly along Long. 45°E to the north of Lat. 25°N. on 25th. It ran roughly along Long. 50°E to the north of Lat. 28°N. on 26th and ran roughly along Long. 52°E to the north of Lat. 25°N. on 27th.
- A trough in westerlies at 3.1 km above m. s. l. ran roughly along Long. 93°E to the north of Lat. 23°N. on 25th. It persisted on 26th and became less marked on 27th.
- A cyclonic circulation lay over north Jharkhand and neighbourhood which extended upto 1.5 km above m. s. l. on 21st. It lay over northeast Assam and neighbourhood extending between 1.5 and 4.5 km above m. s. l. on 22nd. Extending upto 1.5 km above m. s. l., it persisted with a trough aloft roughly along Long. 92°E to the north of Lat. 25°N between 3.1 and 4.5 km above m. s. l. on 23rd. It persisted at 1.5 km above m. s. l. on 24th. However, the trough aloft roughly along Long. 92°E moved away east-northeastwards on 24th. The cyclonic circulation over northeast Assam and neighbourhood persisted at 1.5 km above m. s. l. till 26th which became less marked on 27th.
- A trough ran from northwest Bihar to southeast Assam across north Bangladesh at 0.9 km above m. s. l. on 24th. At the same level it ran from northeast Madhya Pradesh to southeast Assam across Chhattisgarh, Jharkhand and Gangetic West Bengal on 25th which became less marked on 26th.
- A cyclonic circulation lay over northeast Bangladesh and neighbourhood which extended upto 0.9 km above m. s. l. on 25th which became less marked on 26th.
- An induced cyclonic circulation lay over northwest Rajasthan and neighbourhood which extended upto 1.5 km above m. s. l. on 24th which became less marked on 25th.
- A western disturbance as a trough in mid and upper tropospheric westerlies with its axis at 5.8 km above m. s. l. ran roughly along Long. 67°E to the north of Lat. 32°N on 24th which moved away east-northeastwards on 25th.
- Last week's western disturbance as a trough in mid tropospheric westerlies with its axis at 5.8 km above m. s. l. ran roughly along Long. 60°E to the north of Lat. 30°N. on 21st. It ran roughly along Long. 70°E to the north of Lat. 32°N. on 22nd which moved away east-northeastwards on 23rd morning.
- A cyclonic circulation lay over northwest Rajasthan and adjoining Pakistan which extended upto 1.5 km above m. s. l. on 22nd. It lay over northeast Rajasthan and neighbourhood at 0.9 km above m. s. l. on 23rd morning and then became less marked on 23rd.
- Last week's cyclonic circulation over north Telangana and neighbourhood lay over west Vidarbha and neighbourhood at 1.5 km above m. s. l. on 21st which became less marked on 22nd.
- Last week's trough from northeast Madhya Pradesh to south Assam ran from the cyclonic circulation over north Jharkhand and neighbourhood to Manipur across Sub Himalayan West Bengal and Meghalaya at 1.5 km above m. s. l. on 21st which became less marked on 22nd.
- Last week's western disturbance as a cyclonic circulation over Jharkhand and neighbourhood lay over northeast Jharkhand and neighbourhood which extended between 3.1 km and 9.6 km above m. s. l. However, the trough aloft from northeast Uttar Pradesh to east Vidarbha ran from Bihar to south Odisha across Jharkhand on 21st morning and then became less marked on 21st. The cyclonic circulation over northeast Jharkhand and neighbourhood became less marked on 22nd.

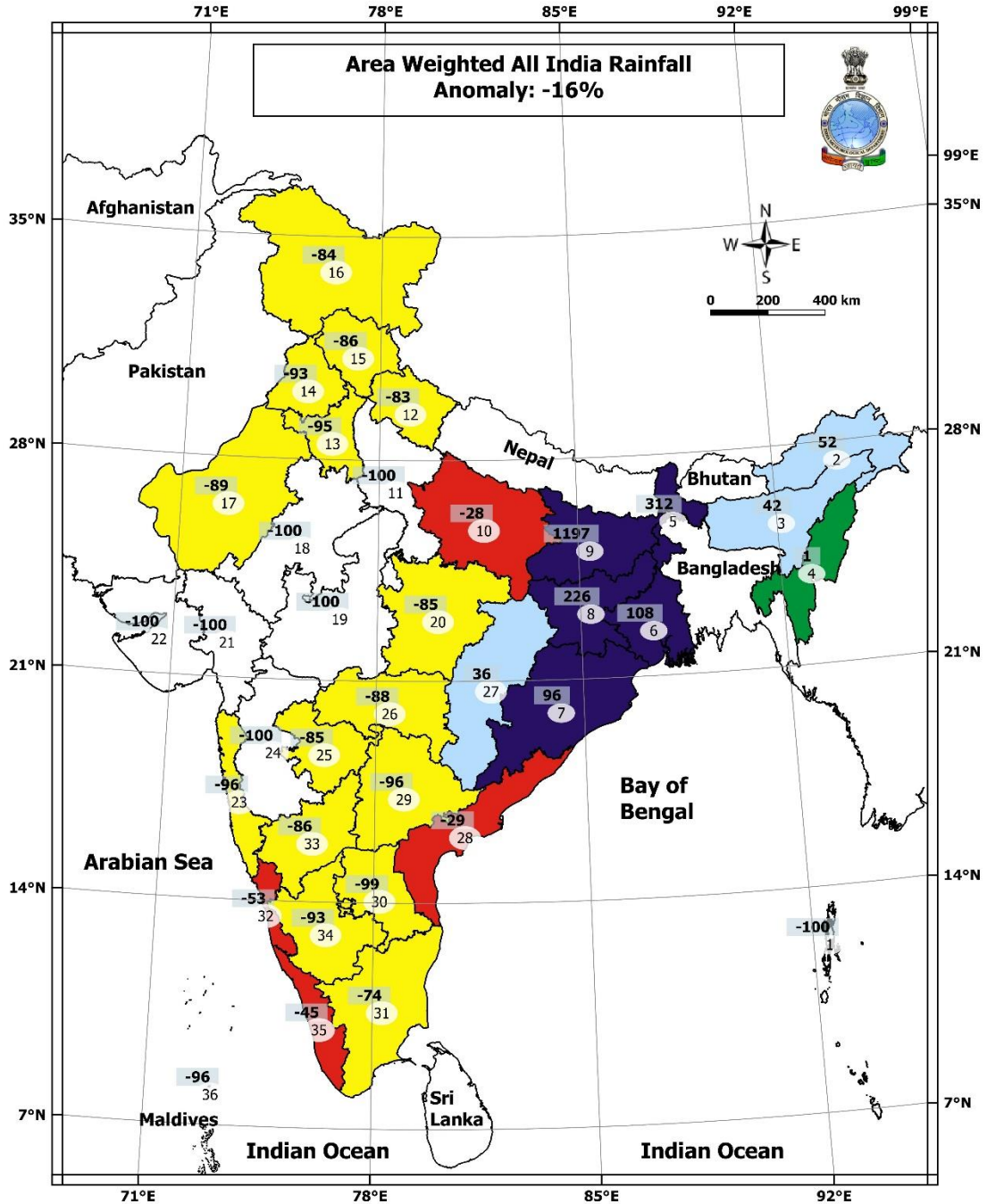
Media Reports: Two persons died and seven others were injured following a stampede at a shrine due to landslide at Una district, Himachal Pradesh (NDTV, 25 March). **Heavy thunderstorms accompanied with gusty wind** lashed different parts of Tripura; more than 200 houses were severely damaged; electricity poles were uprooted in different parts of the state leaving many areas under darkness, four fishermen from the Dhalai district of Tripura drowned after their boat capsized during a thunderstorm (East Mojo, 24 March). **Heavy rainfall accompanied with hailstorm** caused widespread devastation of houses and crops at Senapati district, Manipur (East Mojo, 27 March). **Heavy rainfall, strong winds and thunderstorms** affected Tripura State and caused severe weather-related incidents. Electric poles were uprooted in different locations, at least 4585 houses were damaged in five districts and many trees came crashing down due to stormy wind. Lightning strike took toll of a person and three persons died in different rain related incidents in Tripura (Reliefweb, 27 March).

27th March 2024
Pune - 5

(Dr. Medha Khole)
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Rainfall % Departure For the Week ending

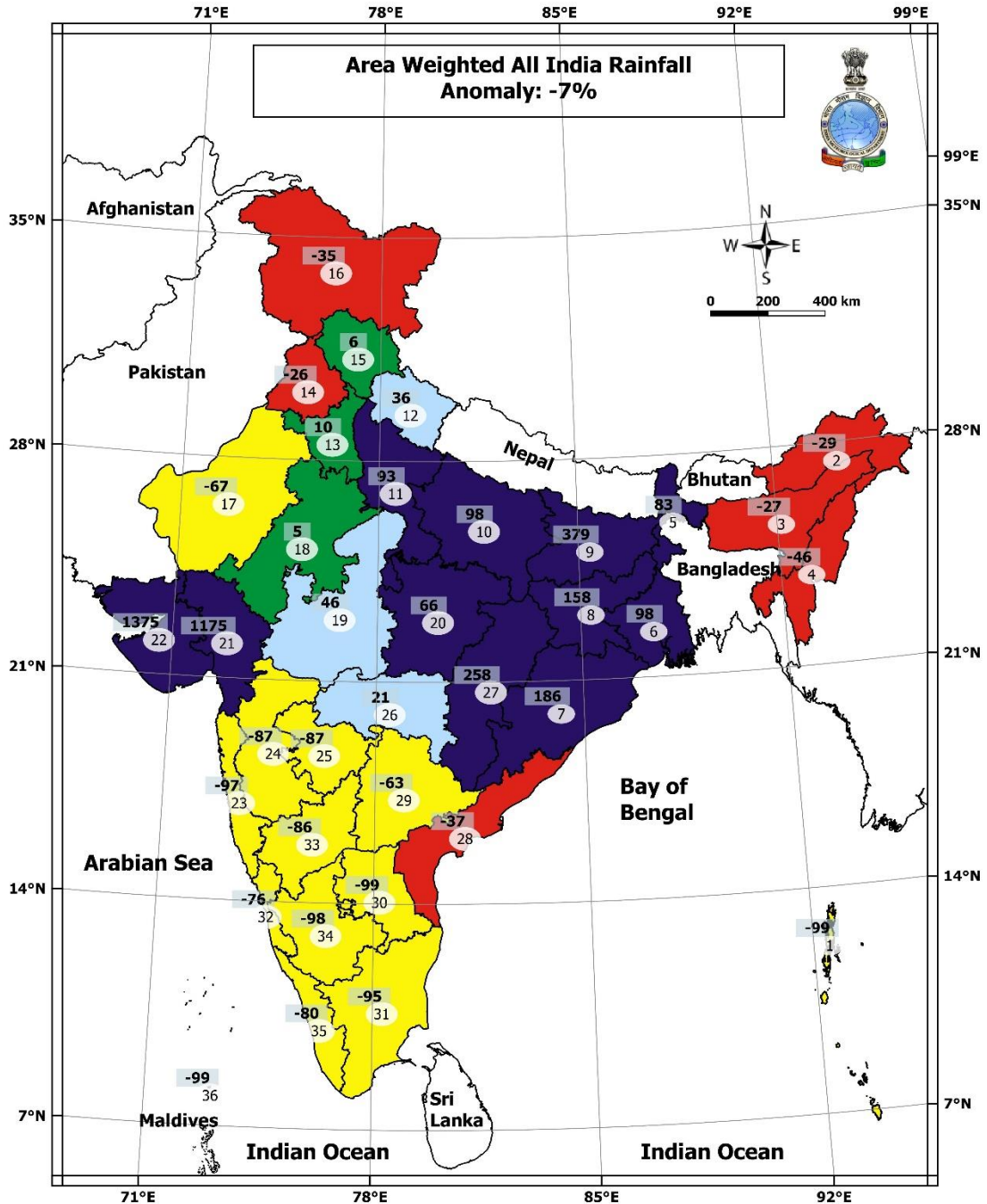
27 March 2024



□ Indicates rainfall anomaly ○ Indicates sub-division number

- Large Excess** 05
 +60% and above
- Excess** 03
 (+20% to +59%)
- Normal** 01
 (-19% to +19%)
- Deficient**
 (-20% to -59%) 04
- Large Deficient** 16
 (-60% to -99%)
- No Rain (-100%)** 07

Rainfall % Departure For the Season ending 27 March 2024



<input type="checkbox"/> Indicates rainfall anomaly	<input type="checkbox"/> Indicates sub-division number
Large Excess 11 +60% and above	Excess 03 (+20% to +59%)
Deficient 06 (-20% to -59%)	Normal 03 (-19% to +19%)
Large Deficient 13 (-60% to -99%)	No Rain (-100%) 00