

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 **19th March 2025** (28 Phalguna 1946 Saka)

CHIEF FEATURES: **1)** During the first half of this week, a western disturbance moved across northern parts of India which caused light to moderate rainfall/snowfall over Western Himalayan Region along with light to moderate rain over adjoining northern plains. Thunderstorms with hailstorm & lightning were observed across North India during the same period. Heavy to very heavy rainfall/snowfall was also observed over Himachal Pradesh at the mid of the week. **2)** A cyclonic circulation was observed over northeast India in the lower tropospheric levels which caused isolated heavy rainfall over the same area during the first half of week. **3)** Heavy rainfall at isolated places was also observed over south peninsular India due to passage of trough in easterlies at the beginning of the week and the presence of trough in westerlies in the lower levels over the region during second half of the week. **4)** Heat Wave spells from the previous week over western India intensified and further spread into east central India towards the mid of week. **5)** Weekly average maximum temperatures were above normal by 2 to 4°C over west, central and east India; were below normal by 1 to 3°C over north and northeast India during first half of the week and were near normal over the country during the second half of the week. **6)** Weekly average minimum temperatures were above normal by 1 to 3°C over parts of north, west, central and eastern India and were near normal over the remaining parts of the country during the first half of the week. It was above normal by 1 to 3°C over west coast of India and parts of east and northeast India and near normal over remaining parts of the country during the second half of the week.

SEMI-PERMANENT FEATURES:

Inter Tropical Convergence Zone (ITCZ): During the week, it was located between Lat.5°N and Lat.8°N over the Indian region.

Sub-Tropical Ridge (STR): It oscillated between Lat.9°N and Lat.12°N at 200 hPa during the week.

Sub-Tropical Westerly Jet (STWJ): The highest wind speed of 146 knots was recorded over Pasighat at 271 hPa on 18th March 2025 during the week.

MAXIMUM TEMPERATURE:

The highest maximum temperature of 43.6°C was recorded at Boudh (Odisha) over the plains of the country on 16th March 2025 during the week.

MINIMUM TEMPERATURE:

The lowest minimum temperature of 9.8°C was recorded at Adampur (Punjab) over the plains of the country on 17th March 2025 during the week.

SIGNIFICANT WEATHER:

Heat Wave to Severe Heat Wave conditions were prevailed at isolated places over Saurashtra & Kutch on 13th; at isolated places over Odisha, Saurashtra & Kutch on 14th; at many places over interior Odisha on 15th; at isolated places over Jharkhand, Odisha on 16th and at isolated places over north interior Odisha on 17th March.

Heat Wave conditions were prevailed at isolated places over Gujarat Region, Vidarbha on 13th; at isolated places over Vidarbha on 14th; at many places over Jharkhand; at a few places over Vidarbha; at isolated places over Chhattisgarh on 15th and at isolated places over Vidarbha on 16th March.

Warm Night conditions were also prevailed at a few places over interior Odisha and Jharkhand on 16th March.

Thunderstorm with lightning was reported at isolated places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Sub-Himalayan West Bengal & Sikkim, Punjab on 13th; at isolated places over northwest India, Sub-Himalayan West Bengal & Sikkim, northeast India on 15th; at isolated places over Jammu-Kashmir, Himachal Pradesh, Uttarakhand, Uttar Pradesh, Assam and Sikkim on 16th March.

Hailstorms were also reported at isolated places over coastal Karnataka on 13th; at isolated places over Himachal Pradesh, Haryana, Manipur, Nagaland, Arunachal Pradesh, Assam on 15th and at isolated places over Uttarakhand on 16th March.

Gusty winds were observed at isolated places over Kerala & Mahe on 13th and at isolated places over Assam on 16th March.

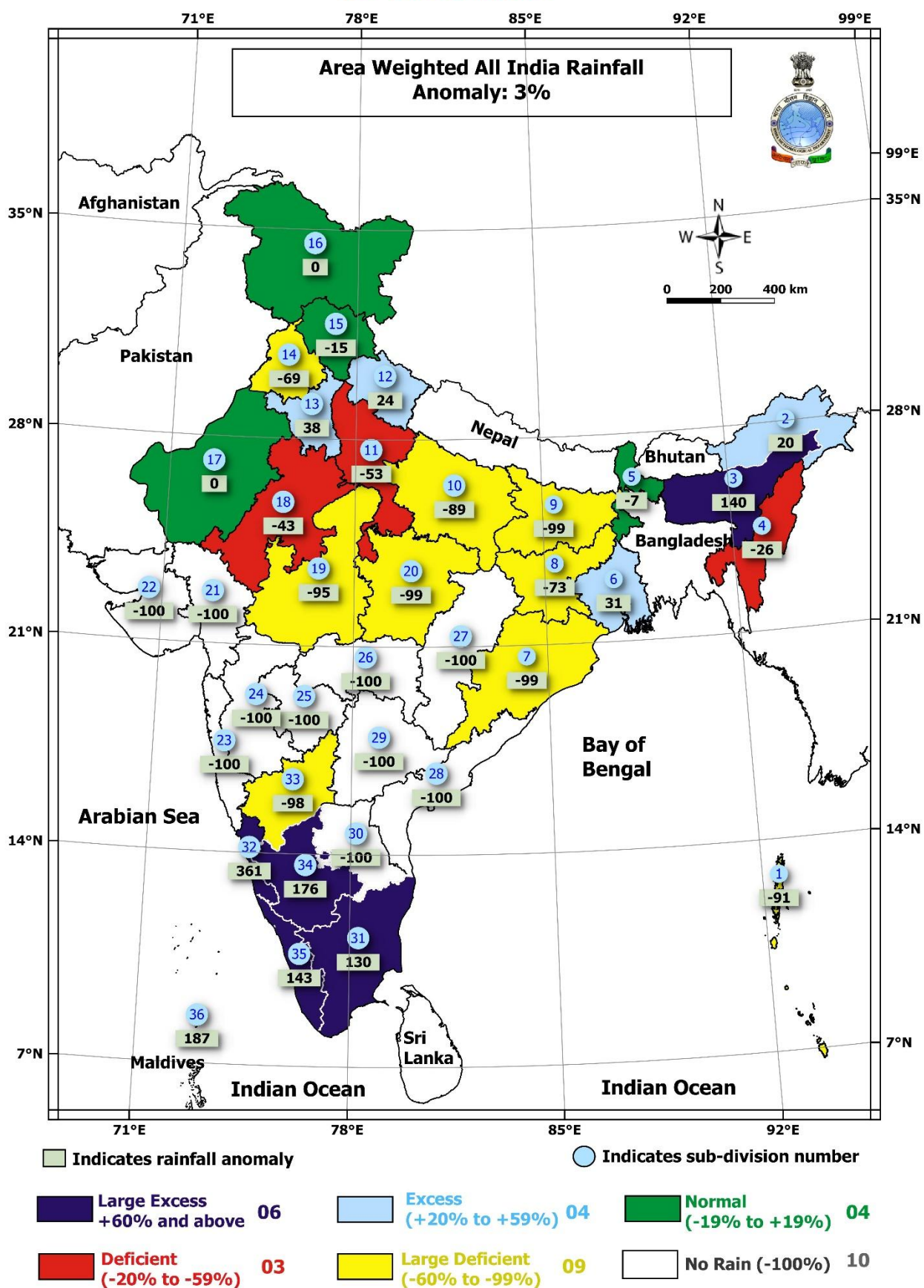
Heavy to very heavy rainfall/snowfall at isolated places was reported over Arunachal Pradesh and Assam on 16th March.

Heavy rainfall at isolated places was reported over Tamil Nadu Puducherry & Karaikal, Kerala & Mahe on 13th; over Arunachal Pradesh, Assam & Meghalaya on 14th; over Assam & Meghalaya on 15th March; over Himachal Pradesh on 16th; over Assam & Meghalaya, Kerala & Mahe on 17th and over Kerala & Mahe on 19th March.

WEATHER SYSTEMS:

- A cyclonic circulation lay over east Assam at 0.9 km above m.s.l. on 14th. It lay over northeast Assam & neighbourhood on 15th morning which persisted over the same region and extended upto 3.1 km above m.s.l. on 15th and persisted over the same area on 16th. It persisted over the same area at 0.9 km above m.s.l. on 17th and 18th. It persisted over the same area and extended upto 1.5 km above m.s.l. on 19th March.
- A trough ran from the cyclonic circulation over northwest Madhya Pradesh to Marathwada at 0.9 km above m.s.l. on 16th. It ran from northeast Madhya Pradesh to Vidarbha on 17th morning which ran from north Chhattisgarh to Vidarbha at 0.9 km above m.s.l. on 17th. It ran from central Chhattisgarh to north interior Karnataka at 0.9 km above m.s.l. on 18th. It ran from central parts of Odisha to south Vidarbha across south Chhattisgarh on 19th morning which persisted over the same region at 0.9 km above m.s.l. on 19th.
- A trough in westerlies ran from north interior Karnataka to Gulf of Mannar across Tamil Nadu at 0.9 km above m.s.l. on 17th. It ran from north interior Karnataka to interior Kerala across interior Karnataka at the same level on 18th. It ran as a trough/wind discontinuity from Marathwada to the cyclonic circulation over south Tamil Nadu, across interior Karnataka at 0.9 km above m.s.l. on 19th morning which persisted over the same region on 19th.
- A western disturbance lay as a cyclonic circulation over southeast Iran and neighbourhood and extended between 3.1 & 9.6 km above m.s.l. on 18th. It lay over Afghanistan between 5.8 & 7.6 km above m.s.l. on 19th.
- An upper air cyclonic circulation lay over southwest Rajasthan & neighbourhood which extended upto 1.5 km above m.s.l. on 19th.
- A cyclonic circulation lay over south Tamil Nadu & neighbourhood at 0.9 km above m.s.l. on 19th morning which persisted over the same region on 19th.
- Last week's western disturbance as a cyclonic circulation over west Afghanistan & neighbourhood lay over Afghanistan between 3.1 & 7.6 km above m.s.l. on 13th. It lay over central parts of Afghanistan & adjacent Pakistan between the same levels on 14th. It lay over north Pakistan & neighbourhood on 15th morning which lay over north Pakistan and adjoining Jammu Region between 3.1 & 9.6 km above m.s.l. on 15th. It persisted over the same region between 3.1 & 5.8 km above m.s.l. with a trough aloft with its axis at 7.6 km above m.s.l. ran roughly along Long.70°E to the north of Lat.24°N on 16th. It lay north Haryana & adjoining northwest Uttar Pradesh between 3.1 & 5.8 km above m.s.l. with the trough aloft with its axis at 7.6 km above m.s.l. roughly along Long.75°E to the north of Lat.27°N on 17th. It moved away north-eastwards on 18th morning.
- Last week's cyclonic circulation over southwest Rajasthan & neighbourhood persisted over the same region and extended upto 1.5 km above m.s.l. on 13th. It persisted over the same region at 0.9 km above m.s.l. on 14th. It lay over central parts of Rajasthan on 15th evening which lay over northeast Rajasthan adjoining south Haryana and extended upto 1.5 km above m.s.l. on 15th. It lay over Haryana at 1.5 km above m.s.l. on 16th; persisted over the same region on 17th and became less marked on 18th morning.
- A trough in easterlies ran from Gulf of Mannar to south interior Karnataka across interior Tamil Nadu at 0.9 km above m.s.l. on 16th and became less marked on 17th.
- An upper air cyclonic circulation lay over northwest Madhya Pradesh & neighbourhood at 0.9 km above m.s.l. on 16th and became less marked on 17th.
- A trough ran from Punjab to southwest Rajasthan at 1.5 km above m.s.l. on 14th. It ran from the cyclonic circulation over northeast Rajasthan adjoining south Haryana to southwest Rajasthan on 15th morning. It ran from southwest Uttar Pradesh to southwest Rajasthan across the cyclonic circulation over northeast Rajasthan adjoining south Haryana at 0.9 km above m.s.l. on 15th and became less marked on 16th.
- Last week's cyclonic circulation over east Bangladesh & neighbourhood persisted at 0.9 km above m.s.l. on 13th and became less marked on 14th.
- Last week's cyclonic circulation lay over west Equatorial Indian Ocean & adjoining Maldives area which extended upto 5.8 km above m.s.l. on 13th which became less marked on 14th.
- Last week's trough in easterlies from cyclonic circulation over west Equatorial Indian Ocean & adjoining Maldives area to southwest Bay of Bengal off Tamil Nadu coast ran from the cyclonic circulation over west Equatorial Indian Ocean & adjoining Maldives to south Kerala at 0.9 km above m.s.l. on 13th and became less marked on 14th.
- A trough in westerlies ran roughly along Long.88°E to the north of Lat.21°N at 1.5 km above m.s.l. on 13th and became less marked on 14th.
- Last week's cyclonic circulation over Comorin area became less marked on 13th.
- Last week's cyclonic circulation over east Assam & neighbourhood at 3.1 km above m.s.l. with a trough aloft roughly along Long.93°E to the north of Lat.25°N became less marked on 13th March.

Rainfall % Departure For the Week ending 19 March 2025



Rainfall % Departure For the Season ending 1 March to 19 March 2025

