

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 **15th May 2024 (25 Vaisakha 1946 Saka)**

CHIEF FEATURES: 1) Due to the occurrence of rainfall accompanied with thunderstorm activities and gusty winds over many parts of the country, no heat wave conditions were observed during the week except at isolated pocket over west Rajasthan on initial two days and over Gujarat Region on the last day of the week. 2) The thunderstorms along with rainfall were reported over eastern India during first half of the week; over southeast peninsular India on most of the days; over northwest India on first day; over central India all throughout the week and over western parts of India including Maharashtra and Gujarat during the later half of the week. The rainfall over northwest India was mainly due to an active western disturbance over the region. The rainfall over the eastern and central India was due to a cyclonic circulation in lower tropospheric level over the region coupled with moisture incursion due to an anticyclonic circulation over Bay of Bengal. The rainfall over the southeast peninsular India was due to the presence of north-south trough/wind discontinuity.

SEMI-PERMANENT FEATURES:

Inter Tropical Convergence Zone (ITCZ): During the week, it was located between Lat.10°N and Lat.16°N over the Indian region.

Sub-Tropical Ridge (STR): It oscillated between Lat.5°N and Lat.10°N at 200 hPa.

Sub-Tropical Westerly Jet (STWJ): The highest wind speed of 70 knots was recorded over New Delhi on 10th May at 223 hPa.

MAXIMUM TEMPERATURE:

The **highest maximum temperature** of 46.2°C was recorded at Phalodi (west Rajasthan) on 9th May over the plains of the country.

SYNOPTIC WEATHER:

Heat wave conditions prevailed at a few places over west Rajasthan on 9th, 10th and at isolated places over Gujarat Region 15th May.

Thundersquall/Gusty winds were observed at a few places over Uttarakhand, Punjab, Haryana, Chandigarh, Delhi, west Uttar Pradesh, Rajasthan and Madhya Pradesh and at isolated places over Tamil Nadu, Puducherry, Karaikal, Chhattisgarh and Marathwada on 11th; at a few places over Chhattisgarh, Gangetic West Bengal, Jharkhand, Odisha, Bihar, east Uttar Pradesh, Rajasthan, Madhya Pradesh, Gujarat Region, Madhya Maharashtra, Marathwada, Telangana, interior Karnataka and Tamil Nadu on 12th; at a few places over Haryana, Chhattisgarh, Gangetic West Bengal, Jharkhand, Odisha, Bihar, Uttar Pradesh, Rajasthan, Madhya Pradesh, Vidarbha, Madhya Maharashtra, Marathwada, Telangana, interior Karnataka and Tamil Nadu on 13th.

Hailstorms were reported at a few places over Madhya Pradesh and at isolated places over Himachal Pradesh, Uttarakhand, east Rajasthan and Vidarbha on 9th; at a few places over Madhya Pradesh and at isolated places over Himachal Pradesh, Vidarbha and Jharkhand on 10th; at isolated places over Uttarakhand, Haryana, west Uttar Pradesh, east Rajasthan, Madhya Pradesh, Vidarbha and Chhattisgarh on 11th; at isolated places over Jharkhand, west Madhya Pradesh and Madhya Maharashtra on 12th; at isolated places over Jammu, Kashmir, Uttarakhand, west Uttar Pradesh, Madhya Pradesh, Vidarbha, Marathwada, Telangana and Madhya Maharashtra on 13th; at isolated places over Uttarakhand, east Uttar Pradesh, Madhya Pradesh, Konkan and Madhya Maharashtra on 14th and at isolated places over Madhya Pradesh, Konkan, Marathwada, Vidarbha and Madhya Maharashtra on 15th May.

Duststorms were reported at isolated places over east Uttar Pradesh and Rajasthan on 12th.

WEATHER AND ASSOCIATED SYNOPTIC FEATURES:

- A cyclonic circulation lay over south Haryana & neighbourhood at 0.9 km above m.s.l. on 15th.
- A cyclonic circulation lay over northwest Uttar Pradesh & neighbourhood between 1.5 km & 3.1 km above m.s.l. on 15th.
- A cyclonic circulation lay over central parts of Madhya Pradesh & neighbourhood at 1.5 km above m.s.l. on 15th.
- A cyclonic circulation lay over southwest Bay of Bengal & adjoining south Sri Lanka which extended upto 4.5 km above m.s.l. tilting southwestwards with height on 15th.
- A trough ran from the cyclonic circulation over southwest Bay of Bengal & adjoining south Sri Lanka to Lakshadweep between 1.5 km & 4.5 km above m.s.l. on 15th.
- A trough in westerlies ran roughly along Long.88°E to the north of Lat.21°N at 3.1 km above m.s.l. on 14th which persisted over the same region on 15th.
- A cyclonic circulation lay over west Vidarbha & neighbourhood at 0.9 km above m.s.l. on 14th. It lay over east Vidarbha & neighbourhood at the same level on 15th.
- A cyclonic circulation lay over southeast Arabian sea & adjoining Kerala which extended upto 1.5 km above m.s.l. on 14th. It merged with the trough from the cyclonic circulation over southwest Bay of Bengal & adjoining south Sri Lanka to Lakshadweep on 15th.
- A trough ran from south interior Karnataka to northwest Madhya Pradesh across Madhya Maharashtra at 0.9 km above m.s.l. on 13th. Lying at 0.9 km above m.s.l., it ran from the cyclonic circulation over southeast Arabian sea & adjoining Kerala to Marathwada across Karnataka on 14th and from south interior Karnataka to east Vidarbha on 15th.
- A cyclonic circulation lay over southeast Bihar & neighbourhood on 12th morning which lay over east Jharkhand & neighbourhood at 1.5 km above m.s.l. on the same day. Lying at 1.5 km above m.s.l., it persisted over the same region on 13th and lay over southwest Bangladesh & neighbourhood on 14th. It lay over Assam & neighbourhood at 0.9 km above m.s.l. on 15th.
- A fresh western disturbance lay as a trough in middle tropospheric westerlies with its axis at 5.8 km above m.s.l. ran roughly along Long.50°E to the north of Lat.30°N on 9th. It lay as a cyclonic circulation over Iran at 3.1 km above m.s.l. with the trough aloft in middle tropospheric westerlies with its axis at 5.8 km above m.s.l. roughly along Long.58°E to the north of Lat.26°N on 10th. It lay as a trough in middle tropospheric westerlies with its axis at 5.8 km above m.s.l. roughly along Long.64°E to the north of Lat.28°N on 11th. It lay as a cyclonic circulation over north Pakistan & neighbourhood at 3.1 km above m.s.l. with the trough aloft in middle & upper tropospheric westerlies with its axis at 5.8 km above m.s.l. roughly along Long.68°E to the north of Lat.28°N on 12th. It lay over Jammu & Kashmir and neighbourhood at 3.1 km above m.s.l. on 13th morning and became less marked. However, the trough aloft in middle & upper tropospheric westerlies with its axis at 5.8 km above

m.s.l. roughly along Long.73°E to the north of Lat.32°N persisted on 13th. With its axis at 5.8 km above m.s.l., it ran roughly along Long.81°E to the north of Lat.32°N on 14th and roughly along Long.81°E to the north of Lat.25°N on 15th.

- A cyclonic circulation lay over Comorin Area between 1.5 & 3.1 km above m.s.l. on 13th. It lay over north Equatorial Indian Ocean & adjoining Comorin area between the same levels on 14th which became unimportant for Indian region on 15th.
- Last week's cyclonic circulation over northeast Assam and neighbourhood persisted between 3.1 & 5.8 km above m.s.l. on 9th. It persisted over the same region between 1.5 & 3.1 km above m.s.l. on 10th; between 1.5 & 5.8 km above m.s.l. on 11th and at 3.1 km above m.s.l. on 12th. It persisted over the same region and extended upto 1.5 km above m.s.l. on 13th which became less marked on 14th.
- A cyclonic circulation lay over south interior Karnataka & neighbourhood at 1.5 km above m.s.l. on 12th. It persisted over the same region and extended upto 1.5 km above m.s.l. on 13th which further merged with the trough from the cyclonic circulation over southeast Arabian sea & adjoining Kerala to Marathwada on 14th.
- A cyclonic circulation lay over northwest Madhya Pradesh & neighbourhood at 1.5 km above m.s.l. on 13th and became less marked on 14th.
- Last week's cyclonic circulation over northeast Arabian sea and adjoining Gujarat coast lay over northeast Arabian sea at 3.1 km above m.s.l. on 9th. It lay over northeast Arabian sea off Gujarat coast at 1.5 km above m.s.l. on 10th. Lying at 1.5 km above m.s.l., it lay over south Pakistan & adjoining northeast Arabian sea on 11th, 12th and became less marked on 13th.
- A cyclonic circulation lay over northwest Rajasthan and neighbourhood at 0.9 km above m.s.l. on 9th. It persisted over the same region and extended upto 1.5 km above m.s.l. on 10th. Extending upto 1.5 km above m.s.l., it lay over west Uttar Pradesh & neighbourhood on 11th, 12th and became less marked on 13th.
- A cyclonic circulation lay over southeast Assam & neighbourhood at 1.5 km above m.s.l. on 12th and became less marked on 13th.
- A trough/wind discontinuity ran from Marathwada to Comorin area across interior Karnataka and Kerala at 0.9 km above m.s.l. on 11th. It ran from east Madhya Pradesh to Comorin area across Vidarbha, Marathwada, interior Karnataka & Tamil Nadu at 0.9 km above m.s.l. on 12th and became less marked on 13th.
- A cyclonic circulation lay over south Rajasthan & neighbourhood at 0.9 km above m.s.l. on 11th. It persisted over the same region on 12th and became less marked on 13th.
- An east-west trough ran from the cyclonic circulation over northwest Rajasthan to south Assam across Madhya Pradesh, Jharkhand and Gangetic West Bengal at 0.9 km above m.s.l. on 10th. Lying at 0.9 km above m.s.l., it ran from the cyclonic circulation over west Uttar Pradesh to south Assam across east Uttar Pradesh, Bihar and Sub-Himalayan West Bengal on 11th, 12th and became less marked on 13th.
- A cyclonic circulation extending upto 1.5 km above m.s.l. lay over south Kerala and neighbourhood on 10th. It lay over southeast Arabian sea off Kerala coast at 1.5 km above m.s.l. on 11th and became less marked on 12th.
- A cyclonic circulation lay over north Bangladesh & neighbourhood at 1.5 km above m.s.l. on 11th which became less marked on 12th.
- A cyclonic circulation lay over north Bihar and neighbourhood at 3.1 km above m.s.l. on 10th and became less marked on 11th.
- A trough ran from the cyclonic circulation over north Bihar to north Odisha across Jharkhand and Gangetic West Bengal at 3.1 km above m.s.l. on 10th which became less marked on 11th.
- A cyclonic circulation lay over central Madhya Pradesh and neighbourhood at 1.5 km above m.s.l. on 10th and became less marked on 11th.
- Last week's cyclonic circulation over Bangladesh and neighbourhood lay over east Bangladesh and neighbourhood at 1.5 km above m.s.l. on 9th and became less marked on 10th.
- Last week's cyclonic circulation over northeast Rajasthan and neighbourhood persisted at 1.5 km above m.s.l. on 9th which became less marked on 10th.
- A cyclonic circulation extending upto 1.5 km above m.s.l. lay over Madhya Maharashtra and neighbourhood on 9th which became less marked on 10th.
- The trough/wind discontinuity from the cyclonic circulation over northeast Rajasthan to south interior Karnataka ran from the cyclonic circulation over Madhya Maharashtra to south interior Karnataka across north interior Karnataka which extended upto 1.5 km above m.s.l. on 9th. It became less marked on 10th.
- A trough ran from the cyclonic circulation over northwest Rajasthan to west Vidarbha across west Madhya Pradesh at 0.9 km above m.s.l. on 9th which became less marked on 10th.
- A trough ran from east Assam to north Odisha across Gangetic West Bengal at 0.9 km above m.s.l. on 9th and became less marked on 10th.
- Last week's cyclonic circulation over north Haryana and neighbourhood became less marked on 9th.
- Last week's cyclonic circulation over Tamil Nadu became less marked on 9th.
- Last week's trough from the cyclonic circulation over northeast Rajasthan to south Assam across Uttar Pradesh, Jharkhand & Gangetic West Bengal became less marked on 9th.

MEDIA REPORTS:

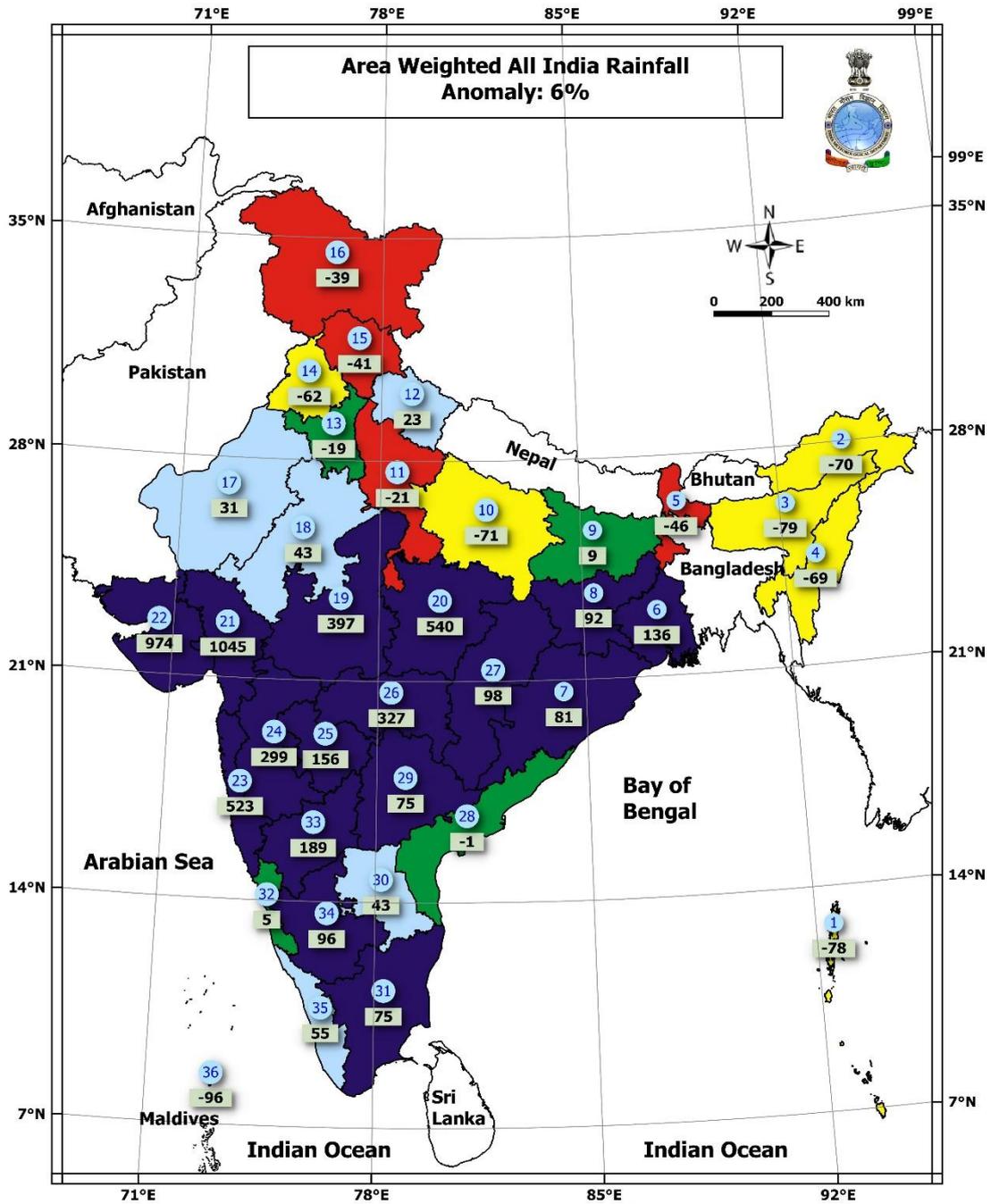
Thunderstorms accompanied with heavy rains and gusty winds took toll of 17 persons in Mumbai (Maharashtra) due to collapse of massive hoarding on 13th which also disrupted Road, Metro, Train and Air transport (ABP Majha); 3 people died on 10th and 11th in National Capital Region, northwest Delhi and disrupted Rail & Air traffic. Also, many trees were uprooted in Delhi (Relief Web); one person was killed due to tree collapse in Mandya (Karnataka) on 13th (Deccan Herald); one person died due to house collapse in Palghar (Maharashtra) on 15th (Mid-Day).

Thunderstorms accompanied with lightning strike killed 11 persons in Rohtas and three other districts of Bihar on 12th (Lokmat); one person died in Satara (Maharashtra) on 11th; two persons died in Nagpur district and one woman also died in Nasik district of Maharashtra on 12th (Lokmat); one person died in Panjim (Goa) on 14th (TOI); 3 women died and 6 livestock perished in Surendranagar (Gujarat) on 14th and 15th May (Times Now).

15th May 2024
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Head, Weather Forecasting Division,
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Rainfall % Departure For the Week ending 15 May 2024

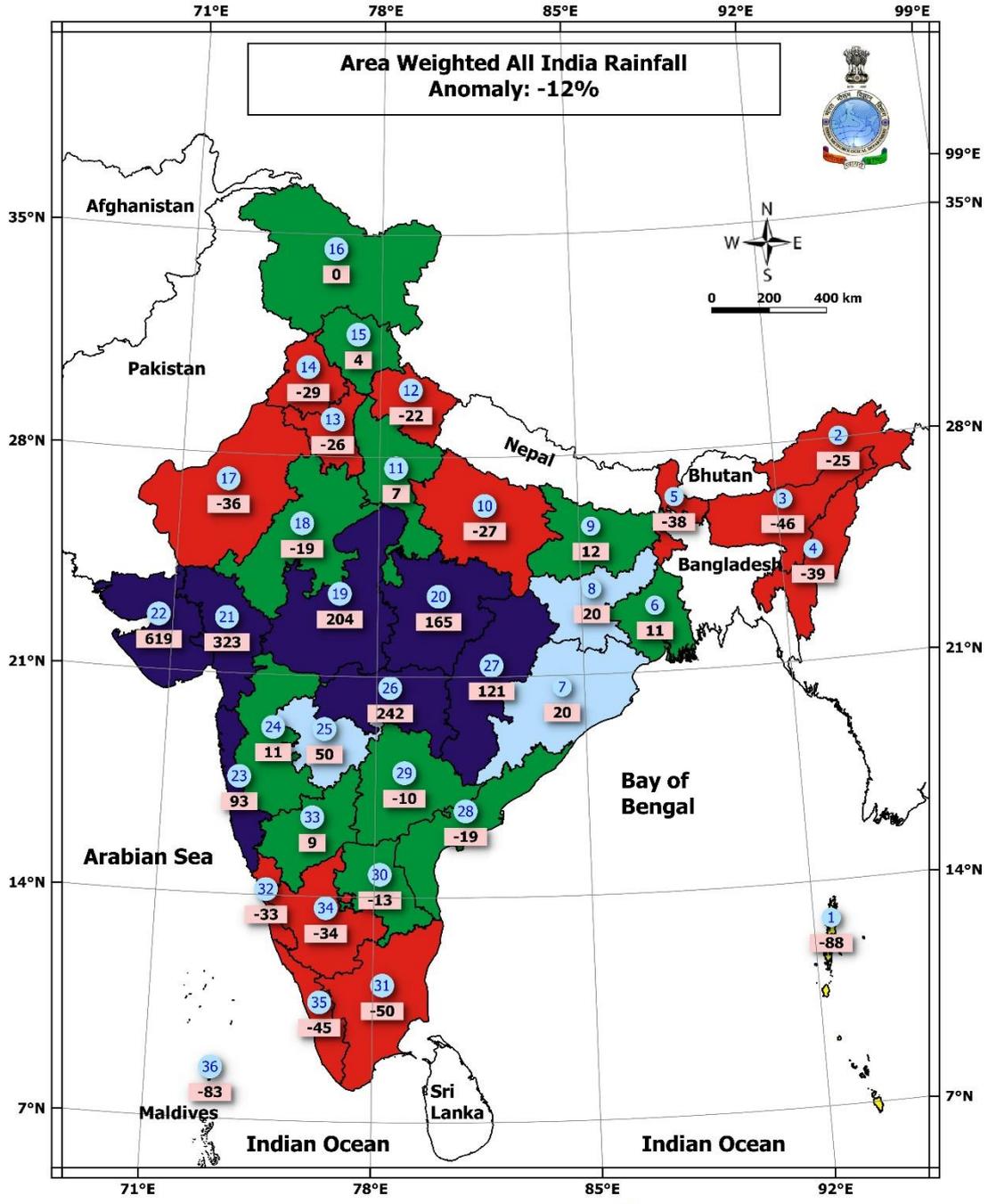


Indicates rainfall anomaly
 Indicates sub-division number

Large Excess (+60% and above) **16**
 Excess (+20% to +59%) **05**
 Normal (-19% to +19%) **04**

Deficient (-20% to -59%) **04**
 Large Deficient (-60% to -99%) **07**
 No Rain (-100%) **00**

Rainfall % Departure For the Season ending 1 March to 15 May 2024



 Indicates rainfall anomaly	 Indicates sub-division number	
 Large Excess +60% and above 07	 Excess (+20% to +59%) 03	 Normal (-19% to +19%) 11
 Deficient (-20% to -59%) 13	 Large Deficient (-60% to -99%) 02	 No Rain (-100%) 00