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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 **8th January 2025** (18 Pausa 1946 Saka)

CHIEF FEATURES: 1) In association with the western disturbance over northeast India, heavy rainfall was recorded at isolated places over Assam at the end of week. Hailstorm was also recorded at isolated places over Sub-Himalayan West Bengal & Sikkim and Assam during the same period. **2)** Large-scale Dense Fog / low cloud cover across Indo Gangetic Plains continued to persist on most of the days during the week. It further extended to Bihar and mainly observed to its western and central parts on most of the days during the period. **3)** Cold Wave conditions were observed at isolated places over Telangana and Himachal Pradesh towards the mid of week. While Cold Day to Severe Cold Day conditions were observed at isolated places over northern plains of the country on most of the days during the week. **4)** Weekly average minimum temperatures were above normal by 1 to 3ºC over the northern and northeastern parts of the country and nearly normal over rest parts of the country during the week.

ACTIVITY OF NORTHEAST MONSOON (NEM) DURING PAST WEEK:

No rainfall activity of Northeast Monsoon was observed during the week.

SEMI-PERMANENT FEATURES:

Inter Tropical Convergence Zone (ITCZ): During the week, it was located between Lat.8°N and Lat.10°N over the Indian region.

Sub-Tropical Ridge (STR): It oscillated between Lat.10°N and Lat.12°N at 200 hPa during the week.

Sub-Tropical Westerly Jet (STWJ): The highest wind speed of 216 knots was recorded over Dibrugarh at 143 hPa on 4th January 2025 during the week.

MINIMUM TEMPERATURE:

The lowest minimum temperature of 1.6°C was recorded at Rajgarh (West Madhya Pradesh) over the plains of the country on 8th January 2025.

SIGNIFICANT WEATHER:

Cold Wave conditions were observed at isolated places over Telangana and Himachal Pradesh on 4th January.

Cold Day to Severe Cold Day conditions were observed at a few places over Uttar Pradesh on 3rd; at a few places over Bihar on 4th; at a few places over east Uttar Pradesh on 5th and at isolated places over east Uttar Pradesh on 6th and 8th January.

Cold Day conditions were observed at isolated places over Bihar on 2nd; at isolated places over south Punjab, south Haryana on 3rd and at isolated places of west Uttar Pradesh on 6th January.

Very Dense Fog was observed at isolated places over Punjab, Haryana, Delhi, Rajasthan, west Madhya Pradesh, Uttar Pradesh on 2nd; at isolated places over Delhi, Uttar Pradesh, Madhya Pradesh, Jammu & Kashmir, Punjab, Chandigarh, east Madhya Pradesh on 3rd; at most places over Punjab, Haryana, Chandigarh & Delhi, at a few places over Uttar Pradesh, at isolated places over Jammu & Kashmir, northwest Rajasthan, northwest Madhya Pradesh, Bihar and Assam on 4th January.

Dense to Very Dense Fog was observed at isolated places over Jammu & Kashmir, northwest Rajasthan, Punjab, Haryana, Delhi, Uttar Pradesh, Madhya Pradesh, West Bengal, Bihar on 5th; at many places over east Uttar Pradesh, at a few places over Punjab, west Uttar Pradesh, Bihar, at isolated places over Haryana, Gangetic West Bengal, east Madhya Pradesh, Odisha on 6th; at isolated places over Jammu-Kashmir, Punjab, Haryana, Uttar Pradesh, Odisha on 7th; at a few places over Punjab, at isolated places over Jammu-Kashmir, Delhi, Uttar Pradesh on 8th January.

Dense Fog was observed at isolated places over Himachal Pradesh, east Madhya Pradesh, Odisha on 2nd; at isolated places over West Bengal on 3rd; at isolated places over Himachal Pradesh, Tripura, northeast Madhya Pradesh, north interior Odisha on 4th; at isolated places over Uttarakhand on 6th; at isolated places over Himachal Pradesh, Uttarakhand, Chandigarh, Bihar, Gangetic West Bengal,

Chhattisgarh, Jharkhand on 7th, at a few places over Himachal Pradesh, Haryana Chandigarh, northwest Madhya Pradesh, Odisha and at isolated places over south interior Karnataka on 8th January.

Ground Frost conditions were recorded at isolated places of Chhattisgarh on 4th and of Uttarakhand on 7th January.

Heavy rainfall was recorded at isolated places over Assam & Meghalaya on 8th January.

WEATHER SYSTEMS:

- Last week's western disturbance as a cyclonic circulation over central parts of Iran between 3.1 & 5.8 km above m.s.l. persisted with a trough aloft in upper tropospheric westerlies with its axis at 7.6 km above m.s.l. ran roughly along Long.54°E to the north of Lat.25°N on 2nd. It lay over eastern parts of Iran & neighbourhood on 2nd evening. It persisted over the same region and extended between 3.1 & 9.4 km above m.s.l. on 3rd However, the trough aloft in upper tropospheric westerlies became less marked on the same day. It lay over west Afghanistan & neighbourhood on 3rd evening. It lay over Afghanistan between 3.1 & 9.4 km above m.s.l. on 4th morning which lay as a trough in middle & upper tropospheric westerlies with its axis at 5.8 km above m.s.l. ran roughly along Long.64°E to the north of Lat. 25°N with an embedded cyclonic circulation over Afghanistan & neighbourhood between 3.1 & 9.4 km above m.s.l. on 4th. It ran roughly along Long.67°E to the north of Lat.20°N between 3.1 km & 12.6 km above m.s.l. with its axis at 3.1 km above m.s.l. on 5th. It lay as a cyclonic circulation over north Pakistan at 3.1 km above m.s.l. with a trough aloft in middle & upper tropospheric levels with its axis roughly along Long.71°E to the north of Lat.25°N at 5.8 km above m.s.l. on 6th. It lay as a trough in middle & upper tropospheric westerlies with its axis at 5.8 km above m.s.l. ran roughly along Long.80°E to the north of Lat.28°N on 7th morning. It ran roughly along Long.84°E to the north of Lat.28°N on 7th. It ran roughly along Long.93°E to the north of Lat. 26°N on 8th January.
- A cyclonic circulation lay over north Tamil Nadu & neighbourhood at 3.1 km above m.s.l. on 8th January.
- A cyclonic circulation lay over northeast Assam & neighbourhood at 3.1 km above m.s.l. on 6th. It persisted over the same area at 0.9 km above m.s.l. on 7th and 8th January.
- A cyclonic circulation lay over Equatorial Indian Ocean and adjoining southeast Bay of Bengal at 1.5 km above m.s.l. on 6th. It also persisted over the same region on 7th and 8th January.
- An induced cyclonic circulation lay over southwest Rajasthan & adjoining Pakistan which extended upto 1.5 km above m.s.l. on 4th. It lay over southwest Rajasthan & adjoining southeast Rajasthan on 5th. It lay over southeast Rajasthan and adjoining southwest Rajasthan on 5th evening. It lay over east Rajasthan & neighbourhood on 6th morning and lay over northeast Rajasthan & neighbourhood on 6th. It lay over west Uttar Pradesh & neighbourhood on 7th morning and lay over northwest Uttar Pradesh & neighbourhood at 0.9 km above m.s.l. on 7th. It became less marked on 8th January.
- A trough ran from the cyclonic circulation over Equatorial Indian Ocean and adjoining southeast Bay of Bengal to Tamil Nadu at 1.5 km above m.s.l. on 6th. It ran from the cyclonic circulation over Equatorial Indian Ocean to south Kerala across south Bay of Bengal & south Tamil Nadu at 1.5 km above m.s.l. on 7th which became less marked on 8th January.
- A cyclonic circulation lay over southeast Arabian Sea off Kerala coast at 0.9 km above m.s.l. on 7th and became less marked on 8th January.
- A cyclonic circulation lay over Madhya Maharashtra & neighbourhood at 0.9 km above m.s.l. on 6th which became less marked on 7th January.
- A trough ran from north Punjab to westcentral Arabian sea across the induced cyclonic circulation over southwest Rajasthan & adjoining southeast Rajasthan at 1.5 km above m.s.l. on 5th. It ran from west Uttar Pradesh to northeast Arabian Sea on 6th morning and became less marked on the same day.
- Last week's western disturbance as a cyclonic circulation over Jammu & adjoining north Pakistan at 3.1 km above m.s.l. persisted on 2nd and became less marked on 3rd January.
- Last week's cyclonic circulation over Equatorial Indian Ocean & adjoining southwest Bay of Bengal at 0.9 km above m.s.l. became less marked on 2nd January.

8th January 2025
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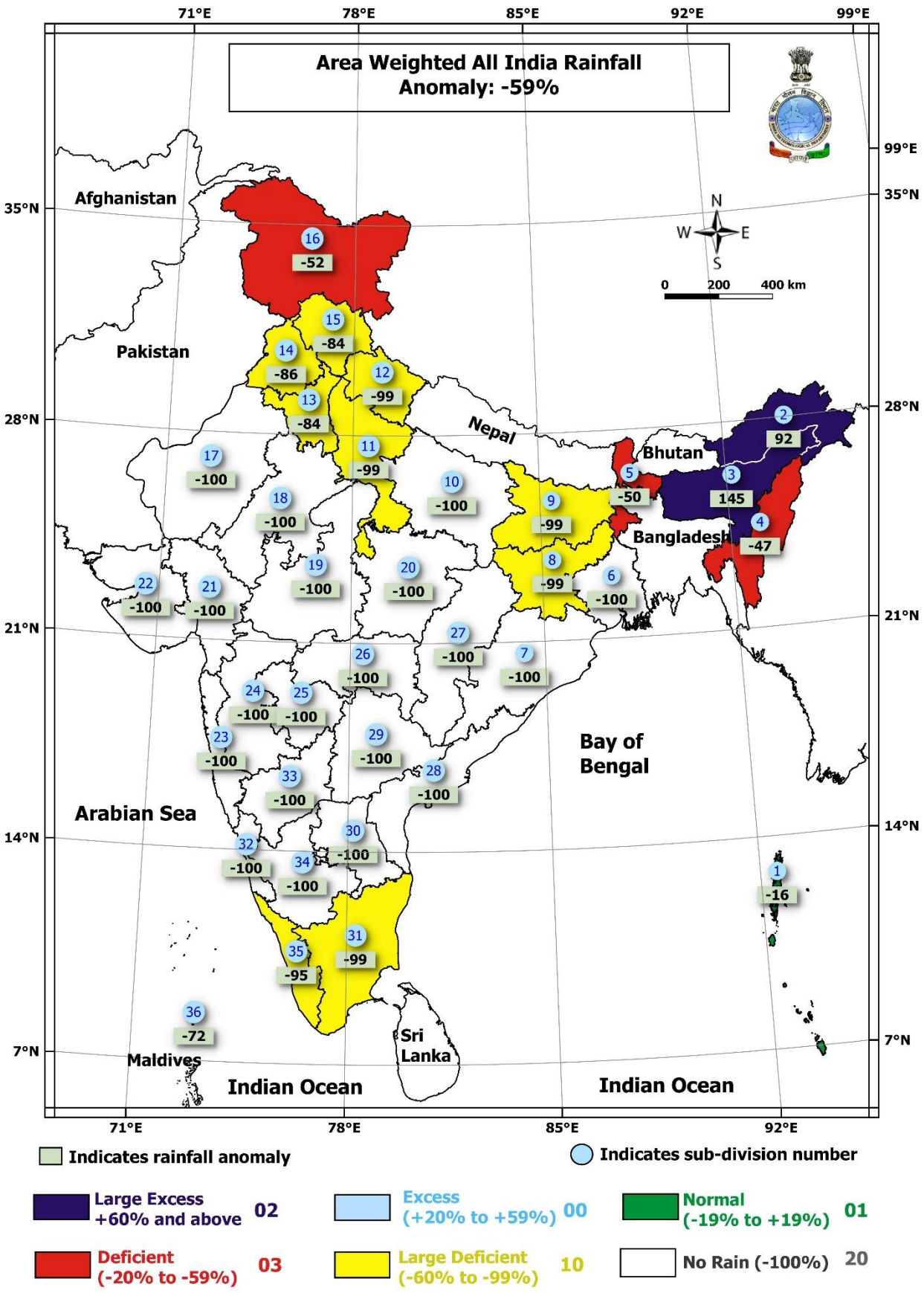
Head, Weather Forecasting Division,
O/o The Climate Research & Services, Pune

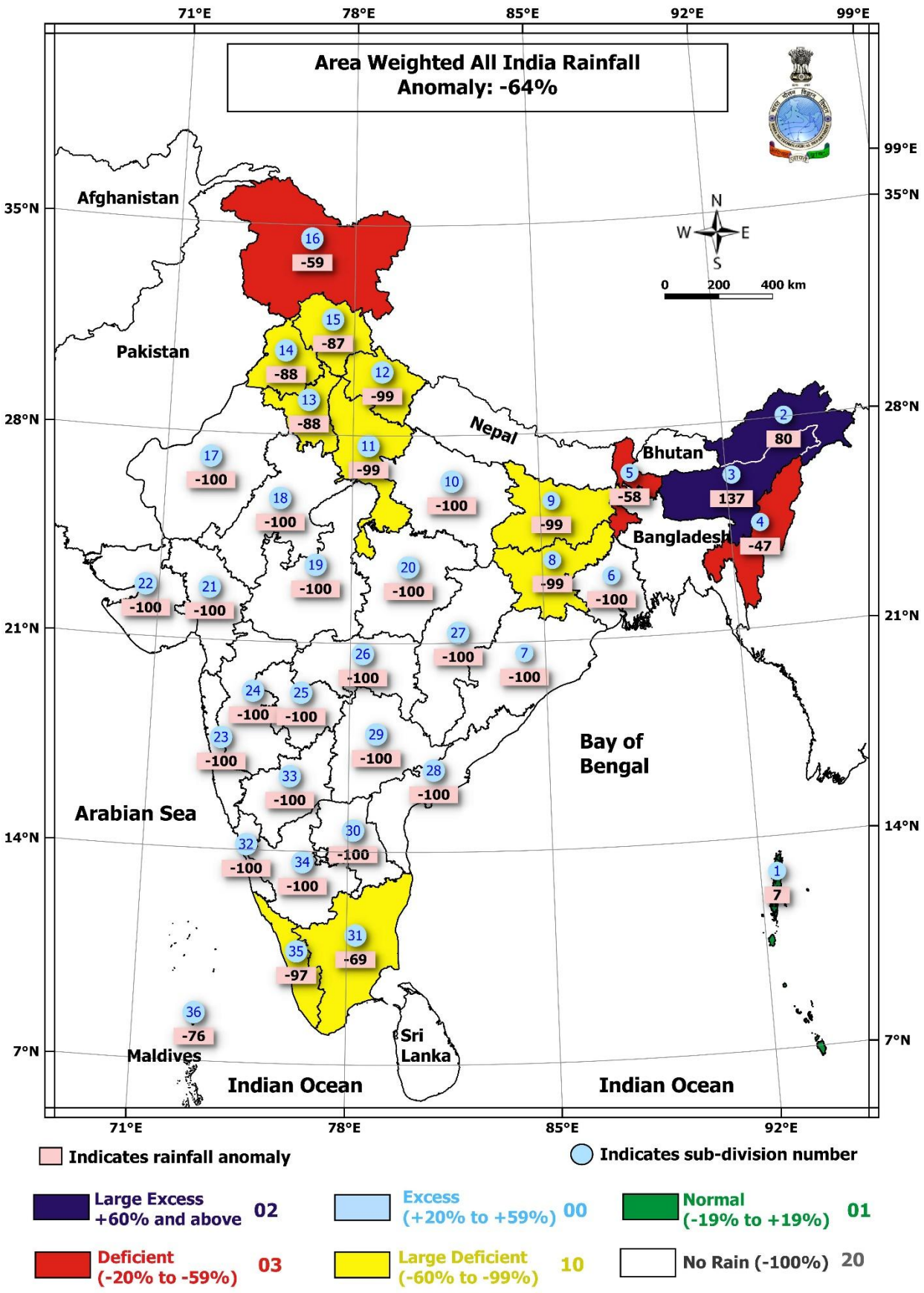
Rainfall % Departure For the Week ending

8 January 2025



Rainfall % Departure For the Season ending

1 Jan to 8 Jan 2025



Indicates rainfall anomaly

Indicates sub-division number

Large Excess +60% and above	02	Excess (+20% to +59%)	00	Normal (-19% to +19%)	01
Deficient (-20% to -59%)	03	Large Deficient (-60% to -99%)	10	No Rain (-100%)	20