

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 14<sup>th</sup> February 2018 (25<sup>th</sup> Magha 1939 Saka)

**CHIEF FEATURES:** 1) Thunderstorm accompanied with hailstorm had been observed over Vidarbha, Marathwada, Chattisgarh and East Madhya Pradesh during 11-12 February 2018. 2) Dense to very dense fog observed at a few places over Haryana and at isolated places over Chandigarh and Delhi, Madhya Pradesh, north Rajasthan, Odisha and Tripura on one to two days during the week.

### SEMI-PERMANENT FEATURES:

1. **Intertropical Convergence Zone (ITCZ):** During the week, it meandered between 10°N to 12°N over the Indian region.
2. **Sub Tropical Westerly Jet (STWJ):** During the week, its core oscillated between 25°N to 26°N. The highest wind speed of 161 kts at 193 hPa was recorded over Patna on 9<sup>th</sup>.
3. **Sub Tropical Ridge (STR):** It was oscillating between Equator to Lat.4°N at 200 hPa.

### MINIMUM TEMPERATURES:

The lowest minimum temperature recorded was 0.1°C at Pantnagar (Uttarakhand) on 10<sup>th</sup>.

### FOG CONDITION:

**Dense to very dense fog** observed at Rajkot (Saurashtra & Kutch) and Panjim (Konkan & Goa) on 9<sup>th</sup>, at Jamshedpur (Jharkhand) on 11<sup>th</sup>, at Rohtak & Hissar (Haryana), Ganganagar (west Rajasthan) and Bhopal & Khajurao (Madhya Pradesh) on 13<sup>th</sup>, at Pantnagar (Uttarakhand), N. Delhi (Haryana) and Shajapur, Rajgarh & Khajurao (Madhya Pradesh) on 14<sup>th</sup>. **Dense fog** observed at Baghdogra (Sub-Himalayan West Bengal & Sikkim) on 8<sup>th</sup>, at Baghdogra (Sub-Himalayan West Bengal & Sikkim), Ludhiana (Punjab) and Naliya (Saurashtra & Kutch) on 9<sup>th</sup>, at Ludhiana (Punjab) on 10<sup>th</sup>, at Panjim (Konkan & Goa) in the morning hours on 11<sup>th</sup>, at Gulmarg (Jammu & Kashmir) on 12<sup>th</sup>, at Guna & Gwalior (west Madhya Pradesh) on 13<sup>th</sup>, at Damoh (east Madhya Pradesh) on 14<sup>th</sup>. **Shallow to moderate fog** observed at Majbhat, Haflong & Dhubri (Assam & Meghalaya), Cooch Behar (Sub-Himalayan West Bengal & Sikkim), Bhagalpur (Bihar), N. Delhi (Haryana) and Ludhiana (Punjab) in the morning hours on 8<sup>th</sup>, at Majbhat & North Lakhimpur (Assam & Meghalaya), N. Delhi (Haryana), Surat (Gujarat Region), Ratnagiri (Konkan & Goa) and Bapla (coastal Andhra Pradesh) in the morning hours on 9<sup>th</sup>, at Cuttack (Odisha) and N. Delhi (Haryana) in the morning hours on 10<sup>th</sup>, at Gorakhpur (east Uttar Pradesh) and Shimla (Himachal Pradesh) in the morning hours on 12<sup>th</sup>, at Gaya (Bihar), Jhansi (west Madhya Pradesh), Karnal (Haryana) and Aurnagabad (Marathwada) in the morning hours on 13<sup>th</sup>, at Baghdogra & Jalpaiguri (Sub-Himalayan West Bengal & Sikkim) and Ujjain (west Madhya Pradesh) in the morning hours on 14<sup>th</sup>.

### WEATHER AND ASSOCIATED SYNOPTIC FEATURES:

- Last week's Western Disturbance as a trough in mid & upper tropospheric westerlies lay as a cyclonic circulation at 3.1 kms a.s.l. over north Pakistan and neighbourhood on 8<sup>th</sup>, moved away east-northeastwards on 9<sup>th</sup>.
- A fresh western disturbance as a cyclonic circulation at 3.1 kms a.s.l. lay over eastern parts of Iran and adjoining Afghanistan on 8<sup>th</sup>, over central parts of Afghanistan on 9<sup>th</sup>, over eastern parts of Afghanistan and adjoining Pakistan on 10<sup>th</sup>, persisted there on 11<sup>th</sup>, over Pakistan and adjoining east Afghanistan on 12<sup>th</sup>. However a trough aloft with its axis at 5.8 kms a.s.l. extended along: Long. 55°E to the north of Lat 32°N on 8<sup>th</sup>, Long. 62°E to the north of Lat 30°N on 9<sup>th</sup>, Long. 66°E to the north of Lat 26°N on 10<sup>th</sup>, Long. 66°E to the north of Lat 22°N on 11<sup>th</sup>, Long. 68°E to the north of Lat 22°N on 12<sup>th</sup>. The W. D. as a cyclonic circulation lay as a trough in mid & upper tropospheric westerlies with its axis at 5.8 kms a.s.l. running roughly along Long. 72°E to the north of Lat 28°N on 13<sup>th</sup>, along Long. 84°E to the north of Lat 22°N on 14<sup>th</sup>.

- A cyclonic circulation extending upto 0.9 km a.s.l. lay over southwest Madhya Pradesh and neighbourhood on 8<sup>th</sup>, became less marked on 9<sup>th</sup>.
- Last week's trough of low at mean sea level over Southwest Bay of Bengal & neighbourhood lay over southwest Bay of Bengal and adjoining Sri-Lanka on 8<sup>th</sup>, over southwest Bay of Bengal and adjoining south Sri-Lanka on 9<sup>th</sup>, became less marked on 10<sup>th</sup>.
- Last week's trough of low at mean sea level from Maldives area to east-central Arabian Sea off coastal Karnataka moved away westwards on 8<sup>th</sup>.
- Last week's induced cyclonic circulation over Punjab and neighbourhood became less marked on 8<sup>th</sup>.
- Last week's cyclonic circulation over Konkan and neighbourhood became less marked on 8<sup>th</sup>.
- Last week's cyclonic circulation over Haryana and neighbourhood became less marked on 7<sup>th</sup> evening.
- A cyclonic circulation extending upto 0.9 km a.s.l. lay over west Rajasthan and neighbourhood on 9<sup>th</sup>, persisted there on 10<sup>th</sup>, became less marked on 11<sup>th</sup>.
- Another cyclonic circulation extending upto 0.9 km a.s.l. lay over Jharkhand and adjoining areas of north Odisha and Gangetic West Bengal on 9<sup>th</sup>, became less marked on 10<sup>th</sup>.
- A trough of low at mean sea level lay over Southeast Arabian Sea off Kerala coast on 9<sup>th</sup>, persisted there on 10<sup>th</sup> to 13<sup>th</sup>, became less marked on 14<sup>th</sup>.
- An induced cyclonic circulation lay over south Pakistan and neighbourhood and extended upto 2.1 kms a.s.l. on 10<sup>th</sup>, lay over south Pakistan and adjoining west Rajasthan on 11<sup>th</sup>, over west Rajasthan and neighbourhood and extended upto 0.9 km a.s.l. on 12<sup>th</sup>, over northeast Rajasthan and neighbourhood on 13<sup>th</sup>, became less marked on 14<sup>th</sup>.
- A cyclonic circulation lay over south Maharashtra and neighbourhood and extended upto 0.9 km a.s.l. on 11<sup>th</sup>, lay over Marathwada and neighbourhood on 12<sup>th</sup>, persisted there on 13<sup>th</sup>, became less marked on 14<sup>th</sup>.
- Another cyclonic circulation lay over east Bangla Desh and neighbourhood and extended upto 1.5 kms a.s.l. on 11<sup>th</sup>, lay over South Assam and neighbourhood at 1.5 kms a.s.l. on 12<sup>th</sup>, persisted there on 13<sup>th</sup>, over Nagaland-Manipur-Mizoram-Tripura and neighbourhood on 14<sup>th</sup>.
- A fresh western disturbance as a trough in mid & upper tropospheric westerlies at 3.1 kms a.s.l. ran roughly along Long. 64°E to the north of Lat 30°N on 13<sup>th</sup>, along Long. 66°E to the north of Lat 30°N on 14<sup>th</sup>.
- A trough of low at mean sea level lay over southeast Bay of Bengal and adjoining equatorial Indian Ocean on 13<sup>th</sup>, became less marked on 14<sup>th</sup>.
- A cyclonic circulation at 3.1 kms a.s.l. lay over Gujarat Region and neighbourhood on 14<sup>th</sup>.
- A feeble trough in low level easterlies lay over Lakshadweep area and extended upto 0.9 km a.s.l. on 14<sup>th</sup>.

*Details of the rainfall received under the influence of these synoptic systems are given in the subsequent Figures and Tables.*

**Media Reports:** 1) Due to the hailstorm in Jalna district over central Maharashtra, Marathwada and parts of Vidarbha claimed three lives and severely damaged crops, including grapes, cotton, green gram and wheat. (The Hindu 12<sup>th</sup>). 2) Jammu-Srinagar highway was closed on Monday due to snowfall in the Bannihal (The Hindu 12<sup>th</sup>).

(Dr. A. K. Srivastava)

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14<sup>th</sup> February 2018  
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# Rainfall % Departure For the week ending

14th February 2018

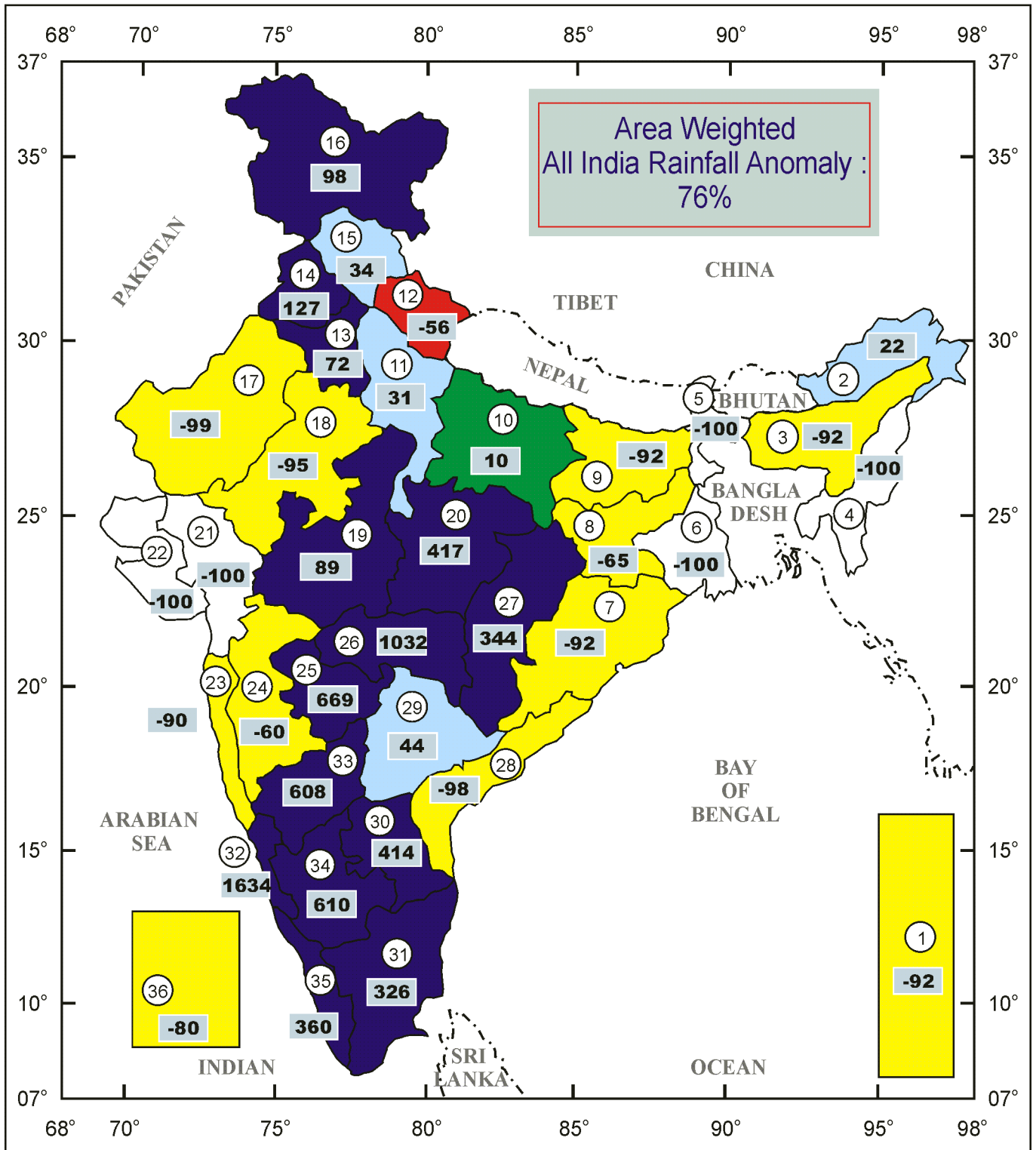
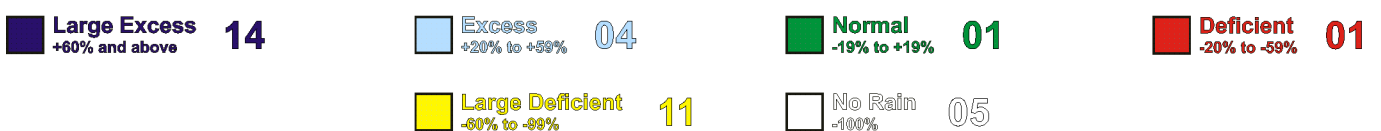


Figure in ○ Indicates sub-division number.

Figure in □ indicates rainfall anomaly.



# Rainfall % Departure For the period

1st January to 14th February 2018

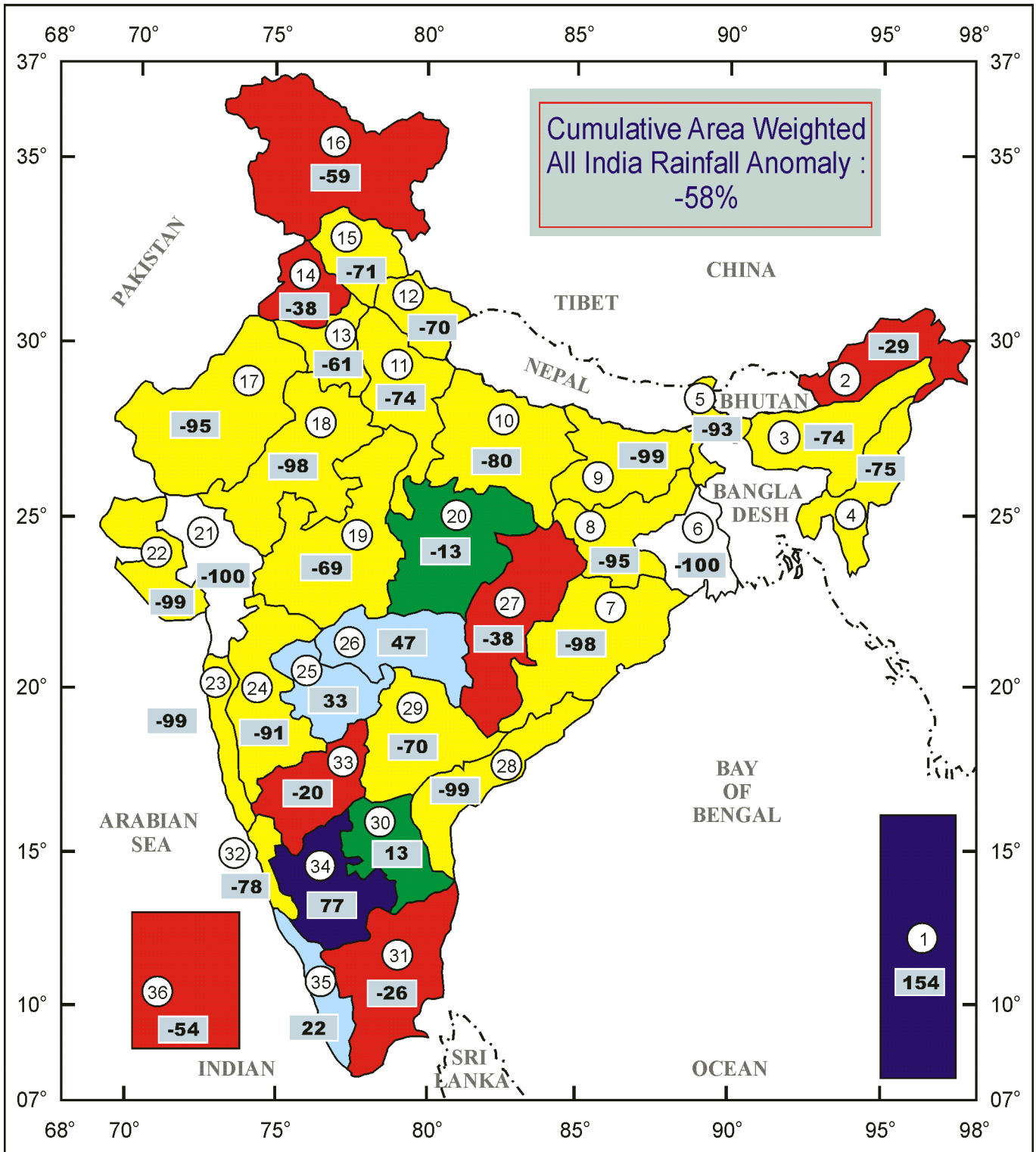


Figure in ○ Indicates sub-division number.

Figure in □ indicates rainfall anomaly.

