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 13th March 2024 (23 Phalguna 1945 Saka)

**CHIEF FEATURES: 1)** Due to impact of western disturbance, light / moderate rainfall / snowfall occurred at isolated places over Jammu- Kashmir, Uttarakhand and Himachal Pradesh for two days. **2)** Hailstorms were also reported at isolated places over Himachal Pradesh for two days.

#### **SEMI-PERMANENT FEATURES:**

**Inter Tropical Convergence Zone (ITCZ):** During the week, it was located between Lat.4°N and Lat.13°N over the Indian region.

Sub-Tropical Ridge (STR): It oscillated between Lat.5°N and Lat.13°N at 200 hPa.

**Sub-Tropical Westerly Jet (STWJ):** The highest wind speed of 152 knots was recorded over Dehradun on 12<sup>th</sup> March at 235 hPa.

### **MAXIMUM TEMPERATURE:**

The highest maximum temperature of 41.3°C was reported at Anantapur (Rayalaseema) over the country on 13<sup>th</sup> March over the plains of the country.

#### **MINIMUM TEMPERATURE:**

The lowest minimum temperature of 6.9°C was reported at Karnal (Haryana) on 7<sup>th</sup> March over the plains of the country.

### SYNOPTIC WEATHER:

Hailstorms were reported at isolated places over Himachal Pradesh on 11th and 12th.

### **WEATHER AND ASSOCIATED SYNOPTIC FEATURES:**

- An induced cyclonic circulation lay over southwest Rajasthan at 0.9 km above m. s. l. on 13<sup>th</sup> morning which persisted over the same region on 13<sup>th</sup>.
- A cyclonic circulation lay over east Assam and neighbourhood at 1.5 km above m. s. l. on 13<sup>th</sup>.
- A western disturbance 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. 28°N. on 12<sup>th</sup> morning and then ran roughly along Long. 53°E to the north of Lat. 28°N. on 12<sup>th</sup>. It ran roughly along Long. 66°E to the north of Lat. 28°N. on 13<sup>th</sup>.
- A trough ran from north Chhattisgarh to north Interior Karnataka across Vidarbha and Telangana at 0.9 km above m. s. l. on 12<sup>th</sup>. It ran from interior Odisha to eastcentral Arabian sea across south Chhattisgarh, Telangana and Karnataka at 0.9 km above m. s. l. on 13<sup>th</sup>.
- A trough in westerlies ran roughly along Long. 92°E to the north of Lat. 25°N at 3.1 km above m. s. l. on 12<sup>th</sup> which became less marked on 13<sup>th</sup>.
- A western disturbance as a trough in mid. tropospheric westerlies with its axis at 5.8 km above m. s. l. ran roughly along Long. 50°E to the north of Lat. 28°N on 9<sup>th</sup>. It ran roughly along Long. 56°E to the north of Lat. 30°N on 10<sup>th</sup>, ran roughly along Long. 60°E to the north of Lat. 30°N on 11<sup>th</sup>, ran roughly along Long. 72°E to the north of Lat. 32°N on 12<sup>th</sup> which became less marked on 12<sup>th</sup> night.

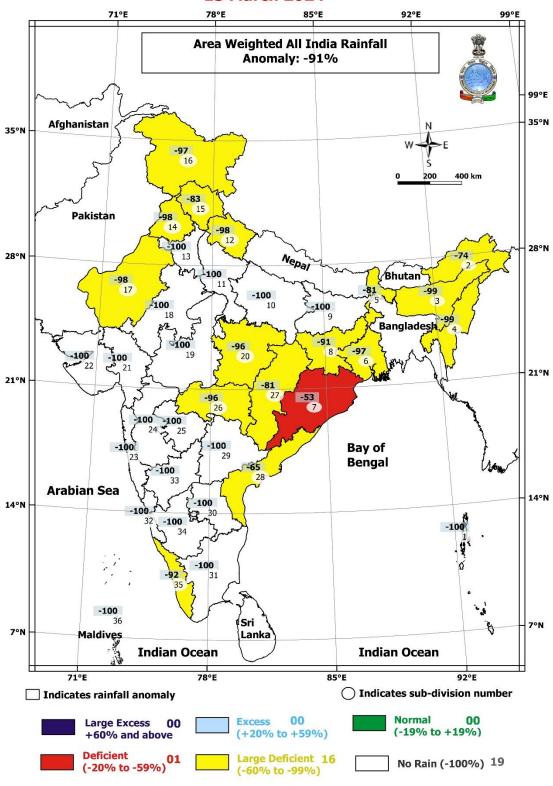
- A cyclonic circulation lay over south interior Karnataka and neighbourhood at 1.5 km above m. s. l. on 10<sup>th</sup>. It persisted over the same region at 1.5 km above m. s. l. on 11<sup>th</sup> which became less marked on 12<sup>th</sup>.
- A trough ran from west Rajasthan to southeast Madhya Pradesh across east Rajasthan and west Madhya Pradesh at 0.9 km above m. s. l. on 11<sup>th</sup> which became less marked on 12<sup>th</sup>.
- A cyclonic circulation lay over north coastal Andhra Pradesh and neighbourhood at 1.5 km above m. s. l. on 11<sup>th</sup> which became less marked on 12<sup>th</sup>.
- A trough ran from east Vidarbha to interior Odisha at 0.9 km above m. s. l. on 10<sup>th</sup> which became less marked on 11<sup>th</sup>.
- A cyclonic circulation lay over southwest Rajasthan and neighbourhood at 3.1 km above m. s. l. on 10<sup>th</sup> which became less marked on 11<sup>th</sup>.
- A trough in westerlies at 3.1 km above m. s. l. ran roughly along Long. 92°E to the north of Lat. 25°N. on 8<sup>th</sup>. It ran roughly along Long. 93°E to the north of Lat. 26°N. on 9<sup>th</sup> which moved away eastwards on 10<sup>th</sup>.
- A cyclonic circulation lay over Telangana and neighbourhood at 1.5 km above m. s. l. on 8<sup>th</sup>. It lay over south Odisha and neighbourhood extending upto 1.5 km above m. s. l. on 9<sup>th</sup> which became less marked on 10<sup>th</sup>.
- Last week's trough from south Tamil Nadu to north interior Karnataka ran from west Vidarbha to north Tamil Nadu which extended upto 1.5 km above m. s. l. on 7<sup>th</sup>. At 0.9 km above m. s. l., it ran from Telangana to Comorin area across Rayalaseema and Tamil Nadu at on 8<sup>th</sup> and ran from Vidarbha to south Tamil Nadu across Marathwada and Karnataka on 9<sup>th</sup> which became less marked on 10<sup>th</sup>.
- Last week's western disturbance as a cyclonic circulation over north Pakistan at 3.1 km above m. s. l. with trough aloft in mid. tropospheric westerlies with its axis at 5.8 km above m. s. l. ran roughly along Long. 67°E to the north of Lat. 30°N on 7<sup>th</sup>. It lay over Punjab and neighbourhood at 3.1 km above m. s. l. with the trough aloft in mid. tropospheric westerlies with its axis at 5.8 km above m. s. l. ran roughly along Long. 72°E to the north of Lat. 32°N on 8<sup>th</sup>. The cyclonic circulation over Punjab and neighbourhood became less marked on 9<sup>th</sup> morning. However, the trough in mid. tropospheric westerlies with its axis at 5.8 km above m. s. l. ran roughly along Long. 78°E to the north of Lat. 32°N on 9<sup>th</sup> morning and then moved away east-northeastwards.
- A trough ran from north Odisha to north coastal Andhra Pradesh and Yanam at 0.9 km above m. s. l. on 8<sup>th</sup> which became less marked on 9<sup>th</sup>.
- An induced cyclonic circulation lay over southwest Rajasthan and adjoining Pakistan at 0.9 km above m. s. l. on 7<sup>th</sup> which became less marked on 8<sup>th</sup>.
- Last week's cyclonic circulation over south Odisha and neighbourhood persisted at 0.9 km above m. s. l. on 7<sup>th</sup> which merged with the trough from north Odisha to north coastal Andhra Pradesh and Yanam on 8<sup>th</sup>.
- Last week's cyclonic circulation over northwest Uttar Pradesh and adjoining Haryana became less marked on 7<sup>th</sup>.
- Last week's cyclonic circulation over east Assam and neighbourhood also became less marked on 7<sup>th</sup>.

Media Reports: Nil.

(Dr. Medha Khole)

## Rainfall % Departure For the Week ending

13 March 2024



# Rainfall % Departure For the Season ending

13 March 2024

