

Government of India Earth System Science Organization Ministry of Earth Sciences India Meteorological Department

Press Release: Dated: 27 June 2024

Subject: Current Weather Status and Extended range Forecast for next two weeks (27 June-10 July, 2024)

- 1. Salient Observed Features for week ending 26 June 2024
- Last week's Heat wave spell over north and adjoining central India abated during beginning of the week on 21st June over most of these areas due to active Western Disturbance and its induced circulation caused clouding and rainfall accompanied with thunderstorms mainly on 20th and 21st June. There was no significant heat wave developed thereafter over any part of the country during the week except it was prevailed in isolated pockets over Punjab on 24th and 25th June and southwest Bihar on 24th June.
- About Further Advance of Southwest Monsoon during the week: Monsoon was stagnated about a week without any progress till 19th June. On 20th June, it was advanced into some more parts of Maharashtra, Chhattisgarh, Odisha, Northwest Bay of Bengal, Sub-Himalayan West Bengal and some parts of Bihar. On 23rd June, it was further advanced into some more parts of Arabian Sea, Gujarat state; remaining parts of Maharashtra; some more parts of Madhya Pradesh & Chhattisgarh; remaining parts of Odisha and some parts of Jharkhand and on 25th June, further advanced into some more parts of North Arabian Sea, Gujarat State and Madhya Pradesh. There was no advance of monsoon on 26th June. On both 25th and 26th June: The Northern Limit of Monsoon continued to pass through 23°N/60°E, 23°N/65°E, Mundra, Mehsana, Udaipur, Shivpuri, Siddhi, Chaibasa, Haldia, Pakur, Sahibganj and Raxaul. (Refer Monsoon advance map in Figure 1).

• Analysis of Weekly overall Rainfall distribution during the week ending on 26 June 2024 and Monsoon Season's Rainfall Scenario (1-26 June 2024): It shows for the country as a whole, the weekly cumulative All India Rainfall in % departure from its long period average (LPA) till week ending on 26 June was -19%. All India Seasonal cumulative rainfall % departure during this year's Summer Season's during 1 to 26 June 2024 is -19% and over northwest India, it is -51%. Details of the rainfall distribution over the four broad geographical regions of India are given in Table 1 and Meteorological sub-division-wise rainfall both for week and season are given in Annex I and II respectively.

Table 1: Rainfall status (Week and season)

Region	WEEK 20.06.2024 TO 26.06.2024			SEASON 01.06.2024 TO 26.06.2024		
	EAST & NORTH-EAST INDIA	53.0	90.6	-41%	221.4	274.2
NORTH-WEST	33.0	90.6	-41%	221.4	2/4.2	-19%
INDIA	18.1	22.7	-20%	28.8	59.1	-51%
CENTRAL INDIA	47.9	54.7	-13%	102.5	134.9	-24%
SOUTH PENINSULA	41.8	39.2	7%	154.4	137.2	13%
Country as a whole	38.3	47.6	-19%	109.0	134.3	-19%

2. Large scale features

The Madden Julian Oscillation (MJO) index is currently entering in phase 3 with amplitude close to 1 and would continue in same phase during first half of week 1. Thereafter, it would move across phase 4 with amplitude remaining close to 1 during remaining part of the forecast period. Hence, MJO phase and amplitude are conducive for enhancement of convective activity over the Arabian Sea (AS) during first half of week 1 and over the Bay of Bengal (BoB) during the entire forecast period.

3. Forecast for next two week

Weather systems & associated Precipitation during Week 1 (27 June-3 July, 2024) and Week 2 (4 to 10 July, 2024)

<u>Weather systems & associated Precipitation during Week 1 (27 June-3 July, 2024)</u> Advance of Southwest Monsoon:

- Southwest Monsoon further advanced into remaining parts of North Arabian Sea, Gujarat State; some more parts of Rajasthan, most parts of Madhya Pradesh; some more parts of West Uttar Pradesh; Bihar, some parts of East Uttar Pradesh; most parts of Uttarakhand, Himachal Pradesh, Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, some parts of Punjab today on 27th June 2024.
- ❖ The Northern Limit of Monsoon passes through 26.5°N/60°E, 25.5°N/65°E, Barmer, Jaipur, Agra, Banda, Siddhi, Chaibasa, Haldia, Pakur, Patna, Maharajganj, Dehradun, Una, Pathankot, Jammu, 33°N/74°E.
- Conditions are likely to become favourable for further advance of southwest Monsoon into some more parts of Rajasthan; remaining parts of Madhya Pradesh, Chhattisgarh, West Bengal, Jharkhand, Bihar, some more parts of Uttar Pradesh, Delhi, Chandigarh and some parts of Haryana, some more parts of Punjab, remaining parts of Uttarakhand, Himachal Pradesh and Jammu during next 2-3 days.

Weather Systems and Forecast & Warnings:

- ❖ A trough at mean sea level runs off Maharashtra-north Kerala coasts. A cyclonic circulation lies over central Gujarat and a trough runs from this cyclonic circulation to west Bihar in lower tropospheric levels. Under their influence:
- Fairly widespread to widespread light to moderate rainfall accompanied with thunderstorm & lightning very likely over Konkan & Goa, Madhya Maharashtra, Karnataka, Kerala & Mahe, Lakshadweep, Gujarat state, Madhya Pradesh, Vidarbha, Chhattisgarh; scattered to fairly widespread light to moderate rainfall over Coastal Andhra Pradesh & Yanam, Rayalaseema, Telangana, Marathwada and Tamil Nadu, Puducherry & Karaikal during next 7 days.
- ➤ Isolated **heavy rainfall** very likely over Gujarat Region, Konkan & Goa, Madhya Maharashtra, Coastal Karnataka during 27th June-01st July; Saurashtra & Kutch, Kerala & Mahe, South Interior Karnataka on 27th & 28th; Tamil Nadu, Telangana, Coastal Andhra Pradesh, Vidarbha on 27th; West Madhya Pradesh during 26th-28th; East Madhya Pradesh during 27th-29th and over Chhattisgarh during 26th-30th June 2024
- ➤ Isolated very heavy rainfall very likely over Konkan & Goa during 27th June-01st July; Coastal Karnataka, Saurashtra & Kutch on 27th & 28th; South Interior Karnataka, Kerala & Mahe, north Coastal Andhra Pradesh and West Madhya Pradesh on 27th June.

➤ Isolated extremely heavy rainfall very likely over Coastal Karnataka today.

- ❖ A Western Disturbance as a trough in middle tropospheric westerlies runs roughly along Long. 64°E to the north of Lat. 28°N. A cyclonic circulation lies over northwest Rajasthan and another over east Assam in the lower tropospheric levels. Strong southerly/southwesterly winds prevail in the lower tropospheric levels from the Bay of Bengal into east & northeast India. Under their influence;
- Fairly widespread to widespread light to moderate rainfall accompanied with thunderstorm, lightning & **isolated heavy rainfall** likely over Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura during next 5 days.
- Fairly widespread to widespread light to moderate rainfall accompanied with **thunderstorm**, **lightning** very likely over Northwest and east India during next 5 days.
- ➤ Isolated **heavy rainfall** very likely over Himachal Pradesh, Uttarakhand, East Rajasthan, Uttar Pradesh, Punjab, Haryana during next 5 days; Delhi on 29th & 30th; West Rajasthan on 27th, 28th June & 01st July; East Madhya Pradesh, Gangetic West Bengal during 28th-30th; Chhattisgarh, Odisha during 27th-30th and Vidarbha on 27th; Bihar during 27th June-01st July; Jharkhand during 29th June-01st July.
- ❖ Isolated very heavy rainfall very likely over East Rajasthan during 27th June-01st July; Uttarakhand, Odisha during 27th-29th; East Uttar Pradesh on 28th & 29th and Bihar on 29th; over Haryana and West Uttar Pradesh on 29th & 30th June, 2024.
- ❖ A cyclonic circulation over Eastcentral Bay of Bengal & neighbourhood lay over westcentral adjoining northwest Bay of Bengal between 1.5 & 5.8 km above mean sea level tilting southwestwards with height. Under its influent, there is a Low probability of formation of a feeble low-pressure area over northwest & adjoining westcentral Bay of Bengal with northwestwards movement during first half of week 1. Hence, Rrainfall likely to increase further over east and adjoining parts of east central India from 29 June.
- ❖ Heavy to very heavy rainfall activities at isolated places over Eastcentral India, West coast of India, Madhya Maharashtra and Gujarat and South Rajasthan likely to continued till 3 July.

Rainfall for week 2 (20 to 26 June, 2024):

- ❖ Low probability of formation of another low-pressure area over north Bay of Bengal with northwestwards movement during week 2.
- Monsoon trough likely to get established
- ❖ East-west shear line likely to persist across northern parts of Pensiurla India -
- Overall, rainfall activity is likely to normal to above normal over most parts of the country except east northeast India mainly covering East Uttar Pradesh, Bihar, Sub Himalayan West Bengal and most parts of northeast India during the week, where it is likely to norma to below normal.

❖ Southwest Monsoon likely to advance into remaining parts of the northwest India and thus the entire country during the week.

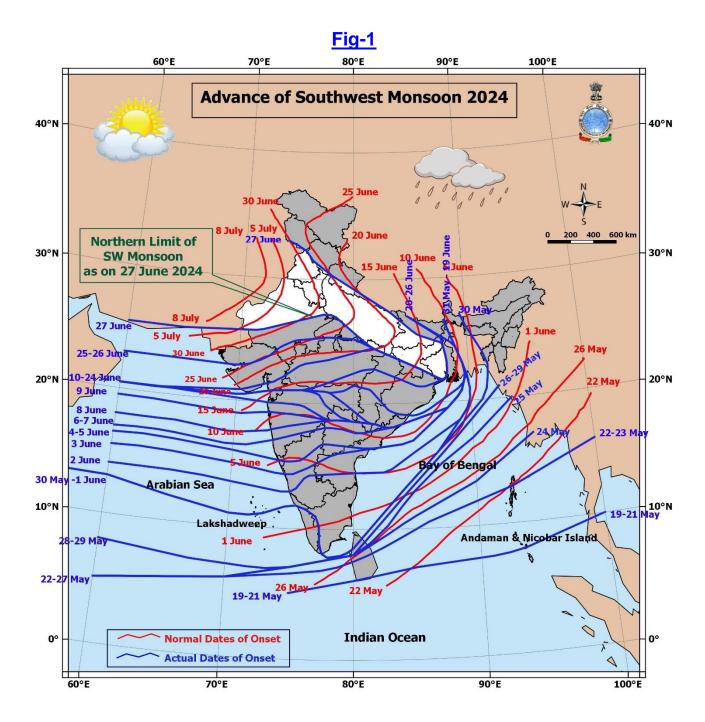
Maximum temperatures and Heat wave forecasts for Week 1 (27 June-3 July, 2024) and Week 2 (4 to 10 July, 2024)

Maximum temperatures and Heat wave forecasts for Week 1 (27 June-3 July, 2024)

- ❖ No significant change in maximum temperatures very likely over Northwest India during next 24 hours and fall by 3-5°C thereafter for subsequent 3 days.
- ❖ No significant change in maximum temperatures very likely over rest parts of the country.
- **❖** No Heat wave conditions over the country.

Maximum temperatures and Heat wave forecasts for and Week 2 (4 to 10 July, 2024)

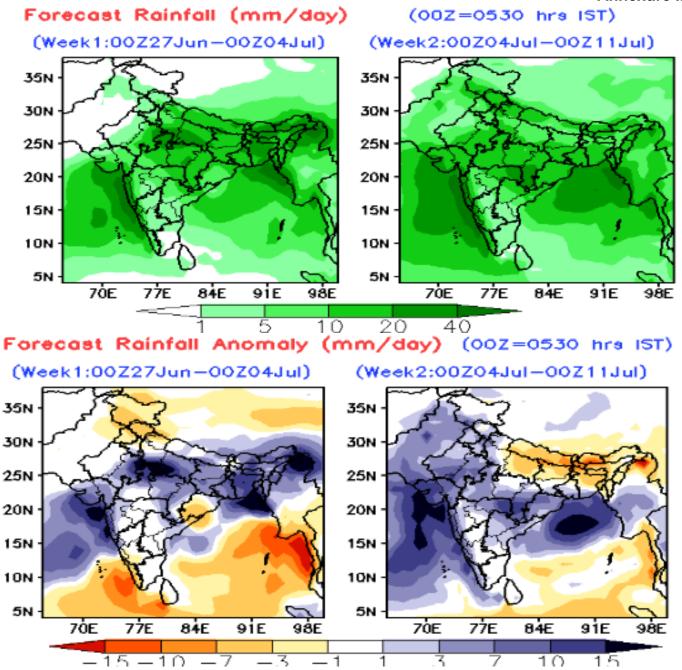
No significant change in maximum temperatures very likely over the country. No Heat wave conditions over the country (https://internal.imd.gov.in/pages/heatwave_mausam.php).











Extended range froecast of weekly dsitirubtion of rainfall in mm per day (top panel) and anomalies (lower panesl) from IMD MME