



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

**Press Release: Dated: 1<sup>st</sup> Aug, 2024**

**Subject: Current Weather Status and Extended range Forecast for next two weeks (1-14<sup>th</sup> Aug, 2024)**

**1. Salient Observed Features for week ending 31<sup>st</sup> July, 2024**

- Last week's **extremely heavy rainfall** spell continued over Madhya Maharashtra, Konkan and Goa and Gujarat Region on 25<sup>th</sup> to 26<sup>th</sup> July and then significantly reduced thereafter across west coast of India. **On 25<sup>th</sup> July, exceptionally heavy rainfall** also reported in Ghat areas of **Pune Dist-(rainfall in cm, Tamini-56 and Lavasa-45). However, there was a significant** reduction of rainfall from 27<sup>th</sup> July over Konkan and Goa and Gujarat state and it was mainly due to northwards shifting of the monsoon trough and weakening of off-shore trough over Gujarat-Konkan coasts.
- Isolated heavy to very heavy rainfall with isolated **extremely heavy rainfall also observed over** Chhattisgarh on 27<sup>th</sup> July; West Madhya Pradesh on 28<sup>th</sup> July.
- A fresh spell of heavy to very heavy rainfall with isolated **extremely heavy rainfall** observed over Kerala on 30<sup>th</sup> July; South Interior Karnataka on 30<sup>th</sup> and 31<sup>st</sup> July and over Tamilnadu on 30<sup>th</sup> July. **Meteorological features leading to extremely heavy rainfall over Kerala on 30<sup>th</sup> July:** a)Active off-shore trough along Kerala coast with a cyclonic circulation in the lower levels over the South-East Arabian Sea and adjoining Lakshadweep Islands off Kerala coast. b)Strong south-westerly/westerly wind (upto 45 kmph) along and off Kerala coast in the lower level of atmosphere leading to convergence of moist winds and orographic upliftment due to the Western Ghats.

- **Temperature Scenario:** The highest maximum temperature of **42.2°C** had been recorded at **Sri Ganganagar (West Rajasthan)** on **31<sup>th</sup> July 2024** and the lowest minimum temperature of **17.5°C** had been recorded at **Yeotmal (Vidarbha)** on **25<sup>th</sup> July 2024** over the plains of the country during the week.

♦ **Analysis of weekly overall rainfall distribution during the week ending on 31<sup>st</sup> July 2024 and monsoon Season’s Rainfall Scenario (01 June-31<sup>st</sup> July, 2024):** The country as a whole, the weekly cumulative All India Rainfall (25.07.2024 to 31.07.2024) in % departure from its long period average (LPA) is +4%. All India Seasonal cumulative rainfall % departure during this year’s monsoon Season’s Rainfall (01 June to 31 July 2024) is +2%. 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 Annexure I & II respectively.

**Table 1: Rainfall status (Week and season)**

Region	WEEK			SEASON		
	25.07.2024 TO 31.07.2024			01.06.2024 TO 31.07.2024		
	Actual	Normal	% Dep	Actual	Normal	% Dep
East & northeast India	44.7	88.2	-49%	610.2	752.5	-19%
Northwest India	37.3	53.3	-30%	235.0	287.8	-18%
Central India	110.4	76.7	+44%	574.2	491.6	+17%
South Peninsula	63.8	46.6	+37%	463.1	365.5	+27%
Country as a whole	68.3	65.5	+4%	453.8	445.8	+2%

## 2. Large scale features

- ✓ Currently, neutral El Nino-Southern Oscillation (ENSO) conditions are prevailing in the equatorial Pacific region. The latest forecasts from the Monsoon Mission Climate Forecasting System (MMCFS) and other climate models suggest that La Nina is likely to develop in the second half of the monsoon season towards end of August.
- ✓ Presently, neutral Indian Ocean Dipole (IOD) conditions are prevailing over the Indian Ocean. The climate models forecast indicates that these neutral IOD conditions are likely to continue until the end of the monsoon season.
- ✓ The Madden Julian Oscillation (MJO) index is currently in phase 8 with amplitude close to 1. It will continue in same phase with amplitude remaining less than 1 till later half of week 1. Thereafter It will move across phase 1 with amplitude remaining less than 1 till

later half of week 2. Towards the end of week 2, it will enter into phase 2 with amplitude remaining less than 1. Thus, MJO is likely to contribute to enhanced convection towards end of week 2 over the Equatorial Indian Ocean and adjoining Arabian Sea (AS).

- ✓ Equatorial Waves forecast by NCICS indicate, influence of MJO over the region extending from North Bay of Bengal (BoB) to northeast AS during week 1 and influence of both MJO and Equatorial Rossby Waves over the same region in week 2. All these will favour enhanced convection over the region and support the genesis of low over the Head BoB on 2<sup>nd</sup> August with further intensification and westwards movement in week 1 and genesis of another low pressure system in week 2.

### 3. Forecast for next two week

#### Forecast for next two week

#### Weather systems & associated Precipitation during Week 1 (01 to 07 August, 2024) and Week 2 (08 to 14 August, 2024)

#### Weather systems & associated Precipitation during Week 1 (01 to 07 August, 2024)

##### Weather Systems

- ✓ The **Monsoon trough** is active and near of its normal position at mean sea level. It is likely to persist near its normal position most days of the week.
- ✓ The **off-shore trough** at mean sea level runs along South Gujarat to Kerala coast. It is likely to persist during 1<sup>st</sup> half of the week and weaken thereafter.
- ✓ A **cyclonic circulation lies** over Gangetic West Bengal & adjoining south Bangladesh in lower & middle tropospheric levels. Under its influence a low pressure area likely to develop during next 24 hours.
- ✓ A **cyclonic circulation** lies over northeast Rajasthan & neighbourhood in lower tropospheric levels.
- ✓ A **trough** runs from West Uttar Pradesh to cyclonic circulation over Gangetic West Bengal in lower & middle tropospheric levels.
- ✓ A **cyclonic circulation** lies over Punjab & neighbourhood in lower & middle tropospheric levels.

##### Forecast & Warnings:

##### ❖ West & Central India

- ✓ Fairly widespread to widespread light/moderate rainfall **accompanied with thunderstorm & lightning** very likely over the region during one week.

- ✓ **Isolated extremely heavy rainfall very likely over Madhya Maharashtra during 01<sup>st</sup>-03<sup>rd</sup> August; East Madhya Pradesh on 02<sup>nd</sup>& 03<sup>rd</sup>; Konkan & Goa, West Madhya Pradesh and Gujarat Region on 03<sup>rd</sup>August.**
- ✓ **Heavy to very heavy rainfall very likely at isolated places over Konkan & Goa, Madhya Maharashtra, Gujarat Region during 01<sup>st</sup>-05<sup>th</sup>; Madhya Pradesh during 01<sup>st</sup>-04<sup>th</sup>; Vidarbha, Chhattisgarh during 01<sup>st</sup>-03<sup>rd</sup> and Saurashtra & Kutch on 03<sup>rd</sup> August.**
- ✓ **Heavy rainfall** very likely at isolated places over Marathwada on 03<sup>rd</sup> and Saurashtra & Kutch on 04<sup>th</sup> August.

#### ❖ **Northwest India**

- ✓ Fairly widespread to widespread light to moderate rainfall **accompanied with thunderstorm & lightning** very likely over Jammu-Kashmir, Himachal Pradesh, Uttarakhand; scattered to fairly widespread rainfall over Punjab, Haryana-Chandigarh-Delhi, Uttar Pradesh and Rajasthan during the week.
- ✓ **Isolated very heavy rainfall also likely over Himachal Pradesh, Punjab, Haryana-Chandigarh, West Uttar Pradesh and West Rajasthan on 01<sup>st</sup>; Uttarakhand during 01<sup>st</sup>-03<sup>rd</sup>; East Rajasthan during 01<sup>st</sup>-04<sup>th</sup>August.**
- ✓ Isolated **heavy rainfall** very likely over Jammu-Kashmir and Rajasthan during 01<sup>st</sup>-05<sup>th</sup>; Himachal Pradesh and Uttarakhand during 01<sup>st</sup>-07<sup>th</sup>; Uttar Pradesh during 01<sup>st</sup>-03<sup>rd</sup>, 6<sup>th</sup> & 7<sup>th</sup>; Punjab, Haryana-Chandigarh on 01<sup>st</sup> & 02<sup>nd</sup> August.

#### ❖ **South Peninsular India:**

- ✓ Fairly widespread to widespread light to moderate rainfall over Coastal Karnataka, Lakshadweep and Kerala & Mahe, Karnataka and isolated to scattered rainfall over Tamil Nadu, Puducherry & Karaikal, Coastal Andhra Pradesh & Yanam, Telangana and Rayalaseema during the week.
- ✓ **Isolated extremely heavy rainfall very likely over Coastal Karnataka on 01<sup>st</sup> August.**
- ✓ **Very heavy rainfall very likely at isolated places over South Interior Karnataka 01<sup>st</sup> & 02<sup>nd</sup>; Kerala on 01<sup>st</sup> and Coastal Karnataka on 02<sup>nd</sup> August.**
- ✓ **Heavy rainfall** very likely at isolated places over Coastal & South Interior Karnataka during 01<sup>st</sup>-04<sup>th</sup>; Kerala & Mahe on 02<sup>nd</sup> & 03<sup>rd</sup>; Tamil Nadu, Telangana on 01<sup>st</sup> August and North Interior Karnataka on 01<sup>st</sup> & 02<sup>nd</sup> August.

#### ❖ **East & Northeast India**

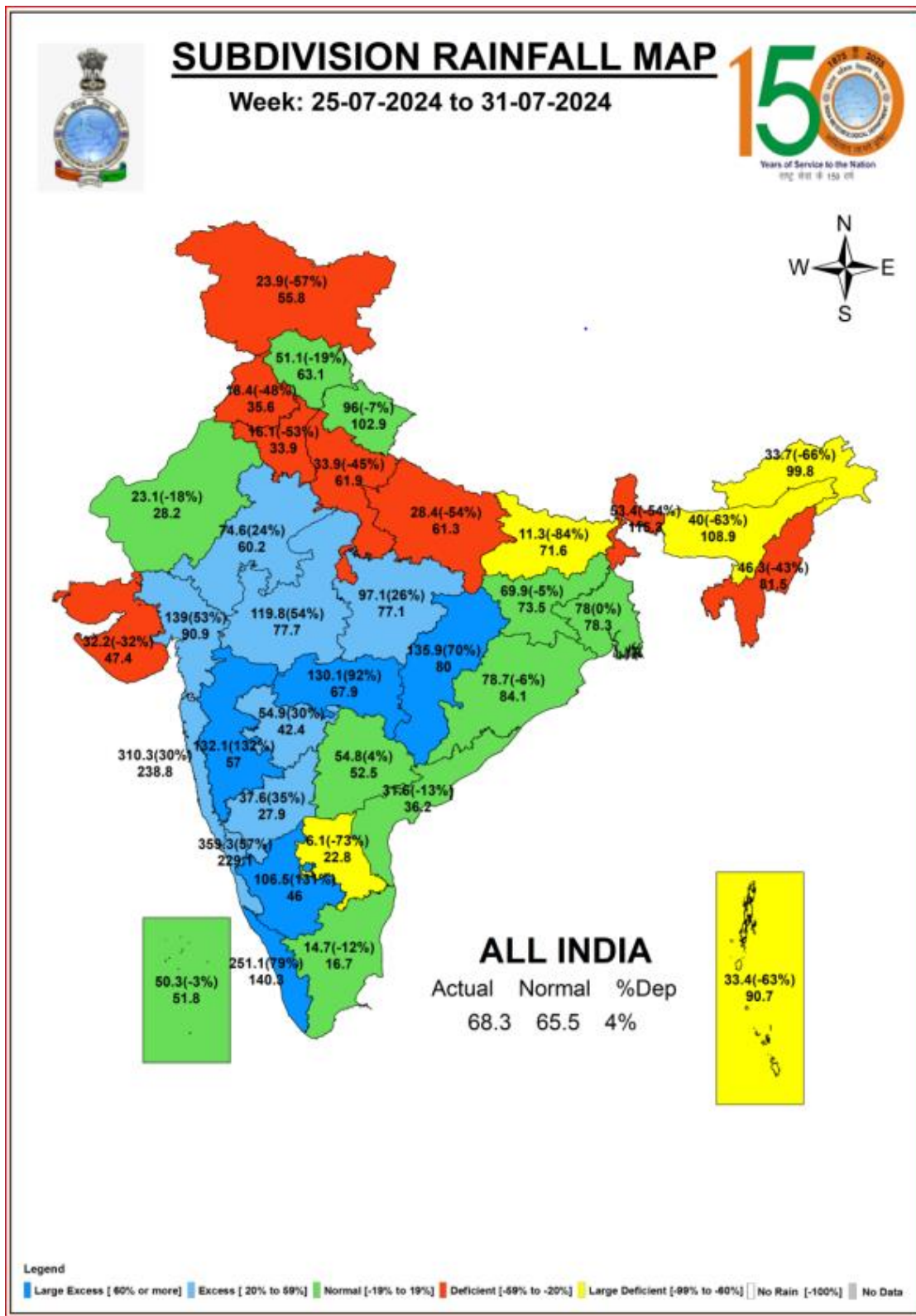
- ✓ Fairly widespread to widespread light to moderate rainfall **accompanied with thunderstorm, lightning** very likely over East & Northeast India during the week.
- ✓ **Very heavy rainfall very likely at isolated places over Jharkhand, Odisha, Gangetic West Bengal on 01<sup>st</sup>; Assam & Meghalaya on 01<sup>st</sup> & 02<sup>nd</sup>; Manipur, Mizoram on 01<sup>st</sup> and Sub-Himalayan West Bengal & Sikkim on 05<sup>th</sup> August.**

- ✓ Isolated **heavy rainfall** very likely over Jharkhand, Odisha, Gangetic West Bengal on 01<sup>st</sup> & 02<sup>nd</sup> August; Bihar, Assam & Meghalaya, Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura during 01<sup>st</sup>-07<sup>th</sup> August.

#### Rainfall for week 2 (08 to 14 August, 2024):

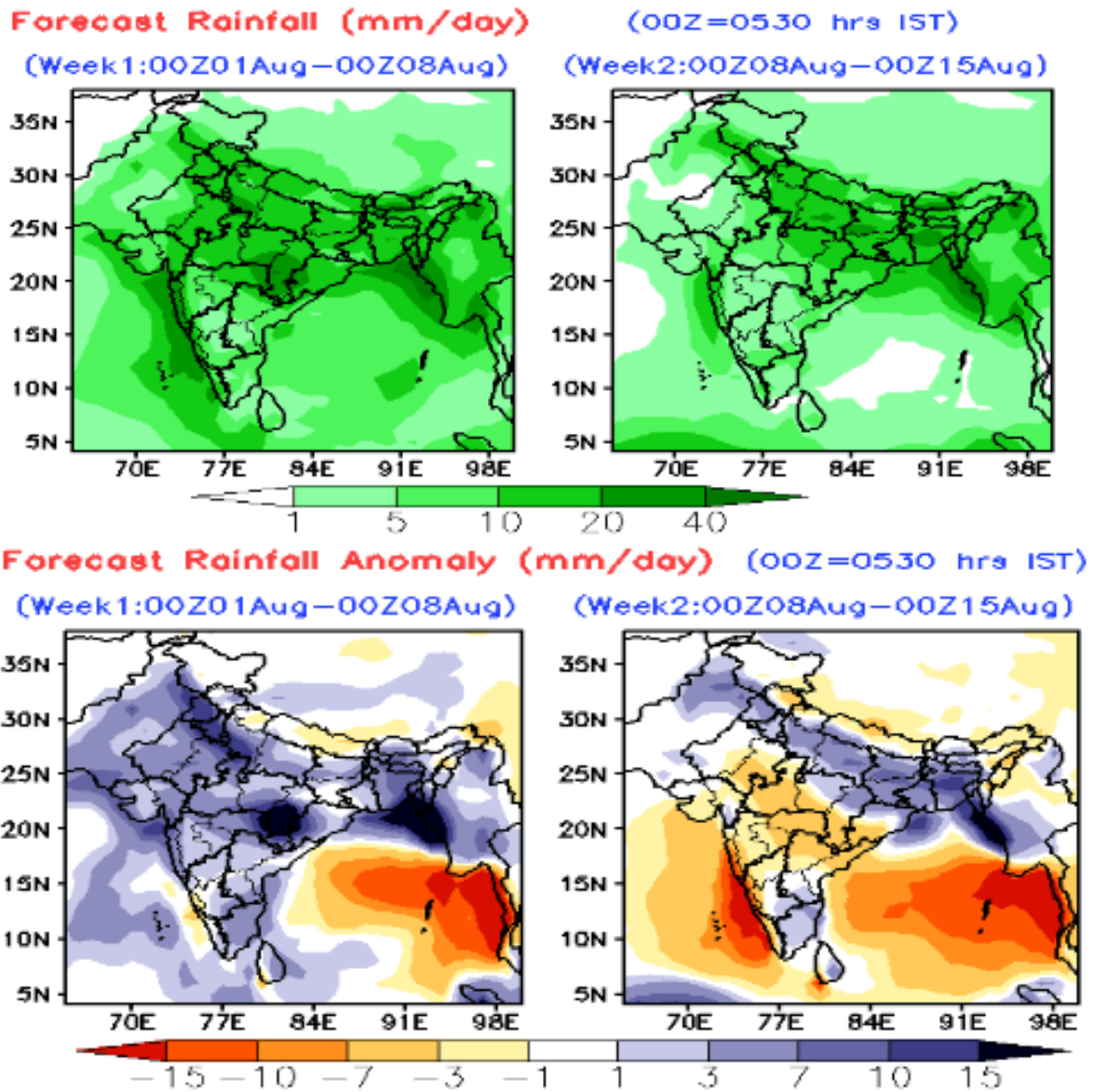
- ❖ Monsoon trough is likely to be near normal or north of its normal position during most days of the week.
- ❖ Off-shore trough along west coast is likely to prevail & feeble during many days of the week.
- ❖ Due to above meteorological features, fairly widespread to widespread rainfall with heavy falls are likely over northwest, central, east & northeast India during most days of the week.
- ❖ Overall, rainfall is likely to be above normal over most parts of the East India; normal to above normal over Northwest India: near normal over Northeast India and below normal over most parts of Central & South Peninsular India (except Tamilnadu and Rayalaseema, where it is likely to be above normal) during the week.

**Legends:** Heavy Rain: 64.5 to 115.5 mm Very Heavy Rain: 115.6 to 204.4 mm,  
Extremely Heavy Rain > 204.4 mm









Extended range forecast of weekly distribution of rainfall in mm per day (top panel) and anomalies(lower panels) from IMD MME