



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

Press Release: Dated: 8th Aug, 2024

Subject: Current Weather Status and Extended range Forecast for next two weeks (8-21st Aug, 2024)

1. Salient Observed Features for week ending 7th August, 2024

- During the week, active to vigorous monsoon conditions prevailed over central India and adjoining areas of east-northeast India in most dates in the week and **Extremely heavy falls** observed at isolated places over Jharkhand on 03rd August; Chhattisgarh on 03rd & 04th August; East Madhya Pradesh on 02nd & 04th August; East Rajasthan on 05th August and West Rajasthan on 05th & 06th August. **It was mainly due to:**
- **A) Deep Depression moved west-northwestwards from North Jharkhand and neighbourhood to central parts of Pakistan across north Madhya Pradesh and north Rajasthan during 02nd – 06th August, 2024:** Under the influence of an upper air cyclonic circulation over Gangetic West Bengal and south Bangladesh, a low pressure area formed over Gangetic West Bengal and adjoining Jharkhand in the early morning (0530 hours IST) of 2nd August, 2024; which concentrated into a depression over North Jharkhand on evening of the same day. Then, it further intensified into a Deep Depression over Southwest Bihar and adjoining Northwest Jharkhand on 3 Aug. Thereafter, it was moved west-northwestwards to central parts of Pakistan during 3 to 6 Aug, across north Madhya Pradesh and north Rajasthan.
 - **B) Another low pressure area** formed over southwest Rajasthan and neighbourhood on 3rd August. Associated cyclonic circulation extended upto 7.6 km

above mean sea level tilting southwards with height. It moved away westward on 4th August.

- **C) Monsoon trough was active and south of the normal position in most dates during the week.**

- With the off-shore trough also remained active from Gujarat coast to Karnataka coast during 1st half of the week, monsoon was also active to vigorous during 1st half of the week along west coast of India and **Extremely heavy falls** observed at isolated places over South Interior Karnataka on 31st July; Konkan & Goa on 04th August; Gujarat Region on 05th August; Madhya Maharashtra on 04th August.
- **Heavy to very heavy rainfall observed at** isolated places over: Jammu-Kashmir on 06th August; Himachal Pradesh on 01st & 07th August; Uttarakhand on 31st July, 05th & 07th August; Punjab on 01st August; Haryana-Chandigarh-Delhi on 01st August; East Rajasthan on 01st , 02nd , 03rd & 06th August; West Rajasthan on 01st , 02nd , 03rd & 07th August; East Uttar Pradesh on 01st August; Jharkhand on 01st , 06th & 7th August; Chhattisgarh on 31st July, 02nd & 07th August; Bihar on 31st July, 01st , 06th & 07th August; Odisha on 01st , 05th , 06th August; Gangetic West Bengal on 01st August; Sub-Himalayan West Bengal & Sikkim on 05th & 07th August ; Assam & Meghalaya on 31st July, 02nd & 06th August; Konkan & Goa on 31st July, 01st , 02nd , 05th & 07th August; Gujarat region on 31st , 03rd & 04th August ; Konkan & Goa on 31st July, 01st , 02nd , 05th & 07th August; West Madhya Pradesh on 02nd , 03rd & 04th August; East Madhya Pradesh on 05th August; Madhya Maharashtra on 31st July, 01st 02nd , 03rd & 05th ; Coastal Karnataka on 31st July, 01st , 03rd , 05th & 07th August; South Interior Karnataka on 01st , 02nd & 03rd August; Kerala on 31st July; Tamil Nadu on 05th & 06th August; Andaman & Nicobar Islands on 05th August; Telangana on 06th & 07th August.

◆ **Analysis of weekly overall rainfall distribution during the week ending on 7th August and monsoon Season's Rainfall Scenario (01 June-08 Aug, 2024):** The country as a whole, the weekly cumulative All India Rainfall (for 1st to 7th Aug 2024) in % departure from its long period average (LPA) is +34%. All India Seasonal cumulative rainfall % departure during this year's monsoon Season's Rainfall (01 June to 7th Aug 2024) is +7%. 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		
	01.08.2024 TO 07.08.2024			01.06.2024 TO 07.08.2024		
	Actual	Normal	% Dep	Actual	Normal	% Dep
East & northeast India	15.6	10.3	+51%	729.8	825.8	-12%
Northwest India	9.1	7.6	+20%	319.2	337.8	-5%
Central India	13.9	12.4	+12%	683.6	573.7	+19%
South Peninsula	13.3	6.4	+108%	515.4	412.2	+25%
Country as a whole	12.6	9.4	+34%	545.9	509.6	+7%

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 1 with amplitude close to 1. It will continue in same phase with amplitude close to 1 till 1st half of week 1. Thereafter, It will move to phase 2 with amplitude more than 1, till end of week 1. Towards the end of week 2, it will move across phase 3 and enter into phase 4 with amplitude remaining more than 1. Thus, MJO is likely to contribute to enhanced convection towards end of the week 1 and during week 2 over the Equatorial Indian Ocean and adjoining Arabian Sea (AS) and Bay of Bengal.

3. Forecast for next two week

Weather systems & associated Precipitation during Week 1 (08 to 14 August, 2024) and Week 2 (15 to 21 August, 2024)

Weather systems & associated Precipitation during Week 1 (08 to 14 August, 2024)

Weather Systems

- ✓ A cyclonic circulation lies over west Jharkhand & neighbourhood extending up to middle tropospheric levels tilting south-westwards with height.
- ✓ The **Monsoon trough** is near its normal position at mean sea level. It is likely to remain near its normal position during most days of the week.
- ✓ The feeble **off-shore trough** at mean sea level runs along South Gujarat to north Kerala coasts. It is likely to feeble during the week.
- ✓ A cyclonic circulation lies over south Haryana & neighbourhood in lower tropospheric levels.

Forecast & Warnings:

❖ Northwest India

- ✓ Fairly widespread to widespread light/moderate rainfall **accompanied with thunderstorm & lightning** very likely over Himachal Pradesh, Uttarakhand & East Rajasthan; scattered to fairly widespread rainfall over Jammu-Kashmir, Uttar Pradesh, Punjab, Haryana-Chandigarh-Delhi, West Rajasthan during the week.
- ✓ Isolated **very heavy rainfall** also likely over East Rajasthan on 08th; Himachal Pradesh on 10th; Uttarakhand on 10th & 14th August.
- ✓ Isolated **heavy rainfall** very likely over Himachal Pradesh, Uttarakhand, East Rajasthan during 08th-14th; Haryana-Chandigarh on 08th & 09th; Uttar Pradesh during 08th – 12th; West Rajasthan during 09th – 14th; Punjab on 10th; Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad on 10th & 11th August.

❖ West & Central India

- ✓ Fairly widespread to widespread light to moderate rainfall **accompanied with thunderstorm & lightning** very likely over Madhya Pradesh, Vidarbha, Chhattisgarh, Konkan & Goa, Gujarat Region during the week; scattered to fairly widespread rainfall over Madhya Maharashtra, Marathwada, Saurashtra & Kutch during the week.
- ✓ **Very heavy rainfall** at isolated places over East Madhya Pradesh on 08th August.
- ✓ **Heavy rainfall** very likely at isolated places over Chhattisgarh on 08th; West Madhya Pradesh, Konkan & Goa on 08th & 09th; East Madhya Pradesh, Madhya Maharashtra during 08th – 10th 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 Arunachal Pradesh on 08th& 09th; Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Sub-Himalayan West Bengal & Sikkim on 08th, Bihar on 10th August.
- ✓ Isolated **heavy rainfall** very likely over Sub-Himalayan West Bengal & Sikkim during 08th-10th; Jharkhand during 08th-12th; Assam & Meghalaya during 08th-13th; Bihar, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura during 08th-14th; Gangetic West Bengal on 08th, 10th & 13th; Odisha on 08th, 09th & 13th August.

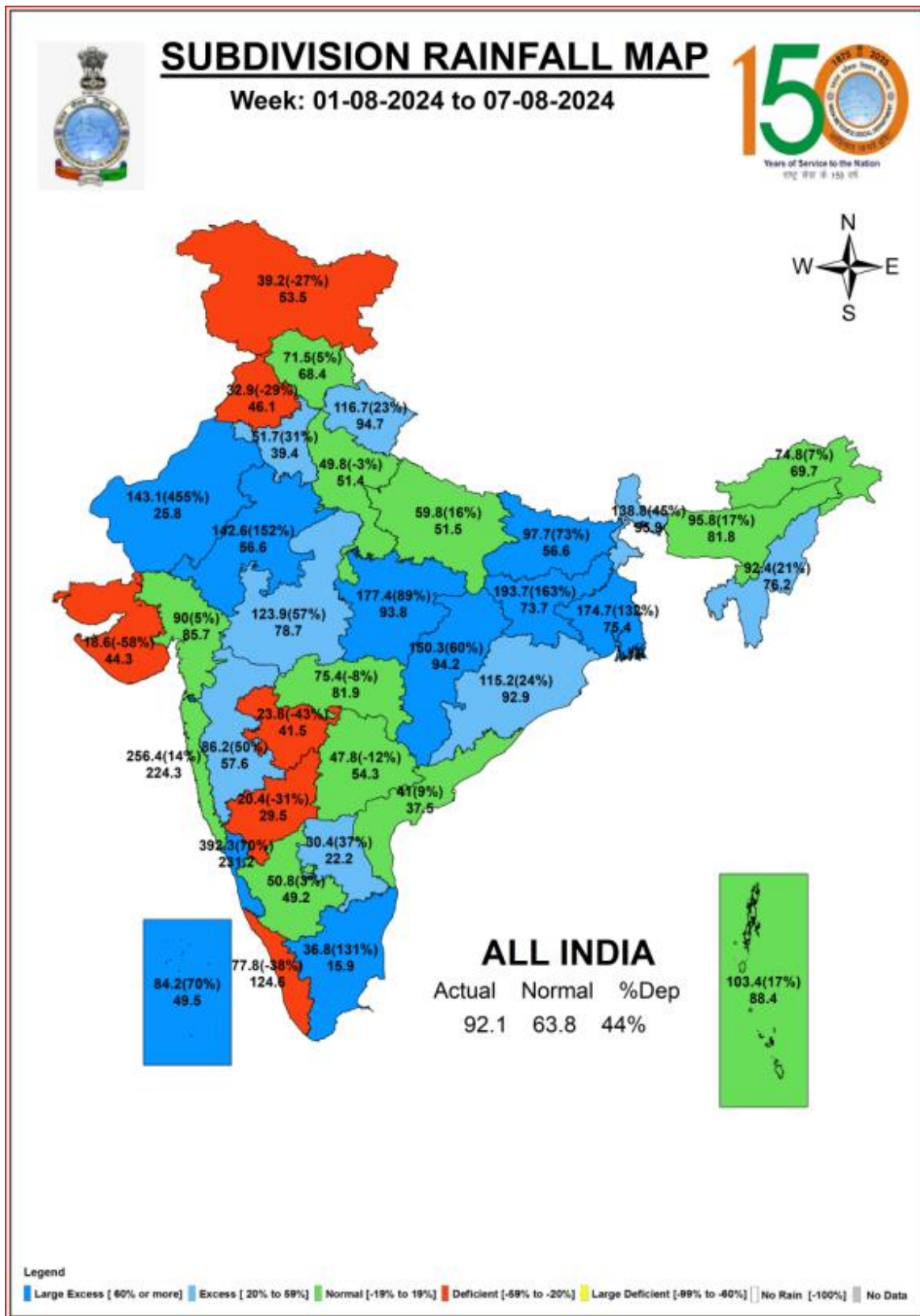
❖ **South Peninsular India:**

- ✓ Scattered to fairly widespread light to moderate rainfall over Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, Lakshadweep and Karnataka; isolated to scattered rainfall over Coastal Andhra Pradesh & Yanam, Telangana and Rayalaseema during the week.
- ✓ **Heavy rainfall** very likely at isolated places over Tamil Nadu, Puducherry & Karaikal on 08th, 11th& 12th; Kerala & Mahe during 10th – 13th August.

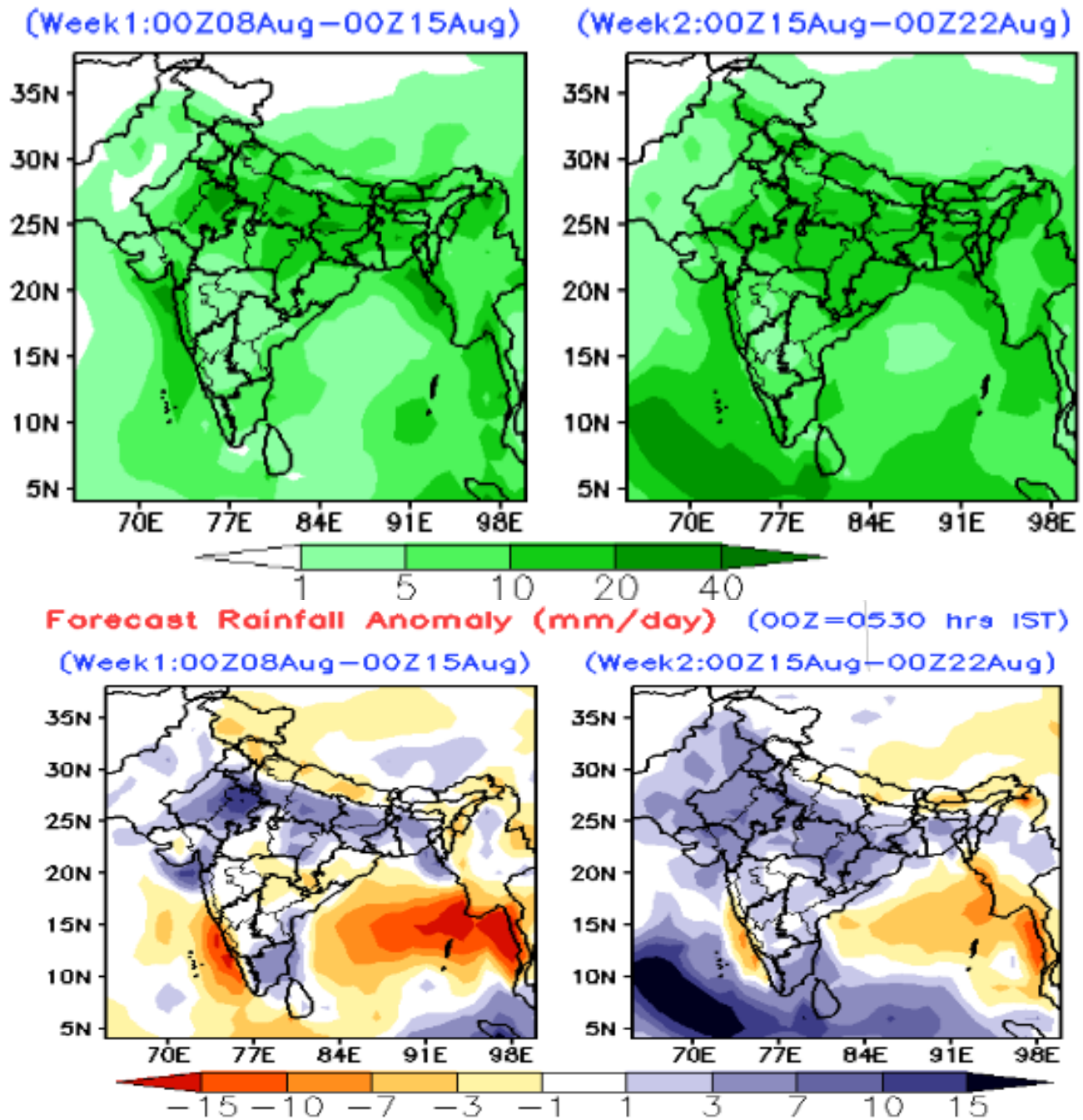
Rainfall for week 2 (15 to 21 August, 2024):

- ❖ Monsoon trough is likely to be active and oscillate near its normal position during the week.
- ❖ Off-shore trough along west coast is likely to prevail & active during most days of the week.
- ❖ There is likely interaction of westerly system with monsoonal winds over northwest India during some days of the week.
- ❖ Due to above meteorological features, fairly widespread to widespread rainfall with heavy to very heavy falls are likely over most parts of northwest & central India; with heavy falls over east & northeast India during most days of the week.
- ❖ Overall, rainfall is likely to be above normal over northwest & central India; normal to above normal over East and south Peninsular India and near normal over most parts of northeast India 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 panesl) from IMD MME