



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

Press: Dated: 28 July, 2022

**Subject: Current Weather Status and Extended range Forecast for next two weeks
(28 July-10 August 2022)**

1. Salient Observed Features for week ending on 27 July 2022

- The Monsoon trough was near the normal position during beginning of the week on 20 and 21 July. It then gradually shifted southwards and remained in south of the normal position during 23 till 26 July. It was mainly due to the formation of a low Pressure Area southwest Rajasthan & neighbourhood and its west-ward movement during 24-26 July. Monsoon trough was passed through the center of the Low Pressure Area over southwest Rajasthan & neighbourhood, Jaisalmer, Kota, Guna, Jabalpur, Pendra Road, Bhubaneshwar and thence southeastwards to eastcentral Bay of Bengal on 24th July. The trough was seen near normal position on 27th July and then the western end of monsoon trough at mean sea level is near its normal position and eastern end is north of its normal position 28th July with its line passes through roughly along Ganganagar, Narnaul, Aligarh, Kanpur, Daltonganj, Berhampore and thence eastwards to Imphal across Bangladesh and Silchar.
- Besides the presence of the low pressure system during 24-27 July over western end of the monsoon trough, the movement of the cyclonic circulation from Jharkhand & neighbourhood to southeast Madhya Pradesh & neighbourhood during 21-25 July at lower levels along the monsoon trough zone, both of which caused higher monsoon rainfall activities over central and western India mainly covering Rajasthan, Madhya Pradesh and Gujarat during the week.
- Rainfall during the week over Northeast India rainfall continue to remain less and it received deficient rainfall 4rd week consecutively and it was due to continued absence of major winds

and moisture convergence from Bay of Bengal to that region.

- **Analysis of Weekly overall Rainfall distribution during the current week ending on 20 July 2022 and Monsoon Season’s Rainfall Scenario (01 June-27 July, 2022) shows rainfall status have further improved:** It shows for the country as a whole, the weekly cumulative All India Rainfall departure till week ending on 27 July 2022, from its long period average (LPA) was +7 %, with **over east and northeast India as -22%** while all India Seasonal cumulative rainfall %departure during this year’s **monsoon Season Rainfall during 01 June till 27 July 2022 is +10% i.e. normal.** 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			SEASON		
	21.07.2022 TO 27.07.2022			01.06.2022 TO 27.07.2022		
	Actual	Normal	% Dep	Actual	Normal	% Dep
EAST & NORTH-EAST INDIA	71.8	92.3	-22%	597.3	703	-15%
NORTH-WEST INDIA	74.5	51.5	+45%	261.9	257.5	+2%
CENTRAL INDIA	80.3	78.9	+2%	562.2	448.4	+25%
SOUTH PENINSULA	50.8	49.6	+2%	440.2	339.6	+30%
Country as a whole	71.4	66.8	+7%	451.5	408.9	+10%

2. Large scale features

- Currently, the sea surface temperatures (SSTs) as well as the atmospheric conditions over Equatorial Pacific Ocean indicate La Niña conditions. The latest forecasts from MMCFS and other global models indicate that La Niña conditions are likely to continue during remaining part of the monsoon season. In addition to ENSO conditions over Pacific, other factors such as the Indian Ocean Sea Surface Temperatures (SSTs) also have some influence on Indian monsoon.

Currently, the SST conditions over Equatorial Indian Ocean are very close to the threshold level for negative Indian Ocean Dipole (IOD) conditions. The latest forecasts from MMCFS and other global models indicate negative IOD conditions are likely to develop during remaining part of the monsoon season.

- The Madden Julian Oscillation Index (MJO) currently lies in phase 2 with amplitude less than 1. It would continue in same phase during first half of week 1 with amplitude remaining less than 1 during first half of week 1. Thereafter, it would move across phases 3, 4 & 5 during remaining part of the forecast period with amplitude remaining less than 1. Hence, MJO phase will support enhancement of convective activity over the Arabian Sea (AS) during first half of week 1 and over Bay of Bengal (BoB) thereafter.

3. Forecast for next two week

Weather systems & associated Precipitation during Week 1 (28 July to 03 August, 2022) and Week 2 (04 to 10 August, 2022)

Forecast for week 1 (28 July to 03 August, 2022):

- The western end of monsoon trough at mean sea level is near its normal position and eastern end is north of its normal position. The western end of monsoon trough is very likely to shift northwards during next 2-3 days. It is likely to be north of its normal position during most days of the week.
- A North-south trough runs from North Interior Karnataka to Comorin area across South Interior Karnataka and Interior Tamilnadu at lower tropospheric levels. It is likely to persist next 2 days.
- Under the influence of above systems;
- ✓ Fairly widespread/widespread rainfall with **isolated heavy falls** and thunderstorm/lightning very likely over Jammu & Kashmir and West Uttar Pradesh during 28th & 29th; Himachal Pradesh, Punjab, Haryana-Chandigarh during 28th-31st July; over Uttarakhand during the week, over East Uttar Pradesh during 28th July – 2nd August and over Rajasthan on 28th July, 2022. **Isolated very heavy rainfall** also very likely over Punjab, north Haryana-Chandigarh & Himachal Pradesh on 28th & 29th; Uttarakhand during 28th- 31st July, 2022.
- ✓ Scattered to fairly widespread light/moderate rainfall with thunderstorm & lightning very likely to continue over Central, West, East and South India during most days of the week. **Isolated heavy falls** very likely over north Madhya Pradesh and Madhya Maharashtra on 28th; Jharkhand on 30th; Bihar during 29th July – 03rd August; Gangetic West Bengal on 31st; Rayalaseema during 30th July – 01st August, Coastal Andhra Pradesh during 31st July & 01st August, Coastal Karnataka on 28th & 29th July & 01st August; over Tamil Nadu, Puducherry & Karaikal, South Interior Karnataka during 28th July – 01st August and over Kerala & Mahe on 28th & 29th, 31st July to 03rd August, 2022. **Isolated very heavy**

rainfall is also likely over Coastal & South Interior Karnataka on 28th and over Tamil Nadu, Puducherry & Karaikal on 31st July & 01st August 2022.

- ✓ Widespread light/moderate rainfall with isolated heavy falls and thunderstorm/lightning very likely over Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura during the week. **Isolated very heavy rainfall is also very likely over Sub-Himalayan West Bengal & Sikkim and Arunachal Pradesh during 30th & 31st and over Assam & Meghalaya during 28th - 31st July, 2022.**
- Isolated to scattered rainfall with thunderstorm likely to occur over rest parts of the country during most days of the week.

Rainfall for week 2 (04 to 10 August, 2022):

- The monsoon trough is very likely to be active & south of its normal position during most days of the week.
- Fairly widespread/ widespread rainfall with isolated heavy falls likely over Central & Peninsular India during most days of the week.
- Rainfall activity is likely to be above normal over Central & Peninsular India. It is likely to near normal over rest parts of the country (outside Jammu & Kashmir, Punjab and Saurashtra & Kutch, where it is likely to be below normal).

4. Cyclogenesis forecast for North Indian Ocean during next 2 weeks

Refer:

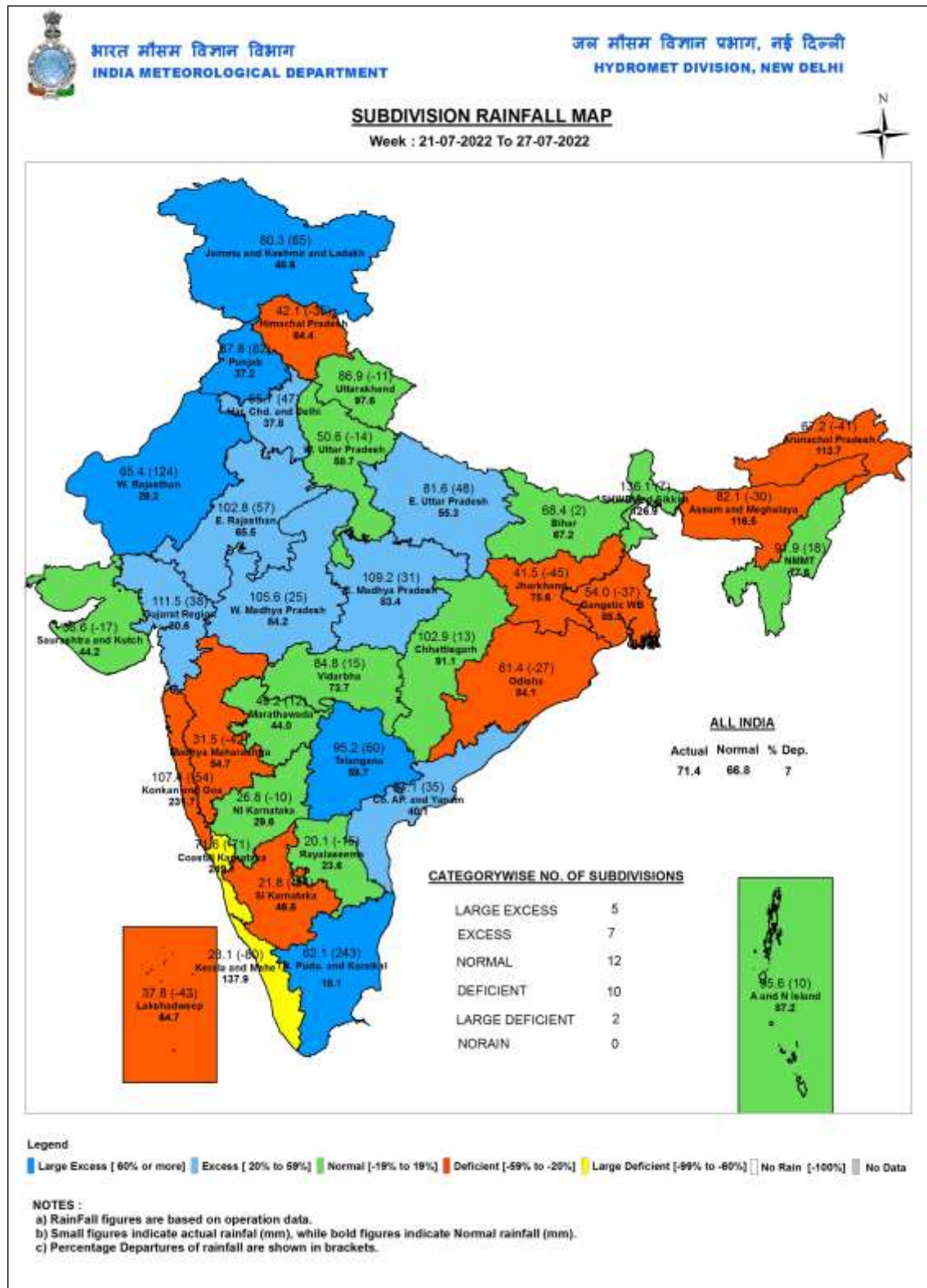
https://rsmcnewdelhi.imd.gov.in/uploads/archive/24/24_ddb8de_Extended%20Range%20Outlook_21072022.pdf

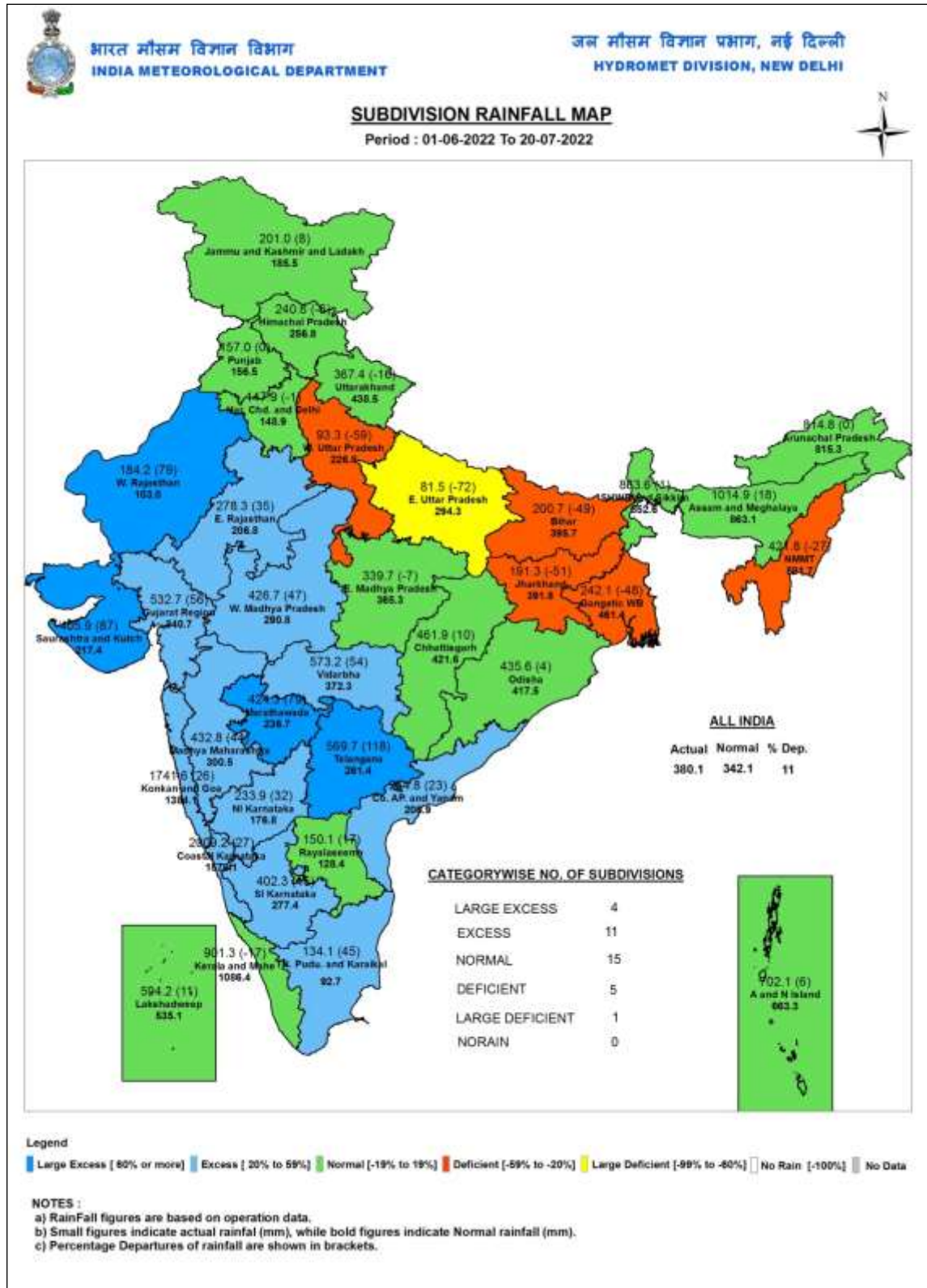
Next weekly update will be issued on next Thursday i.e. 28 July 2022

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

SPATIAL DISTRIBUTION (% of Stations reporting)			
% Stations	Category	% Stations	Category
76-100	Widespread (WS/ Most Places)	26-50	Scattered (SCT/ A Few Places)
51-75	Fairly Widespread (FWS/ Many Places)	1-25	Isolated (ISOL)

Probabilistic Forecast	
Terms	Probability of Occurrence (%)
Unlikely	< 25
Likely	25 - 50
Very Likely	50 - 75
Most Likely	> 75

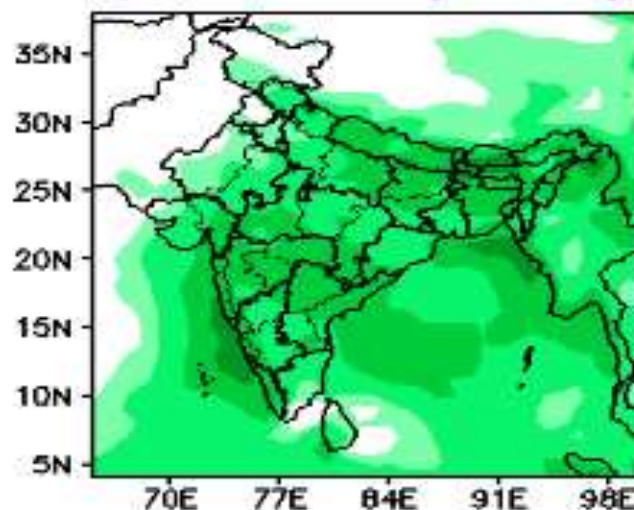
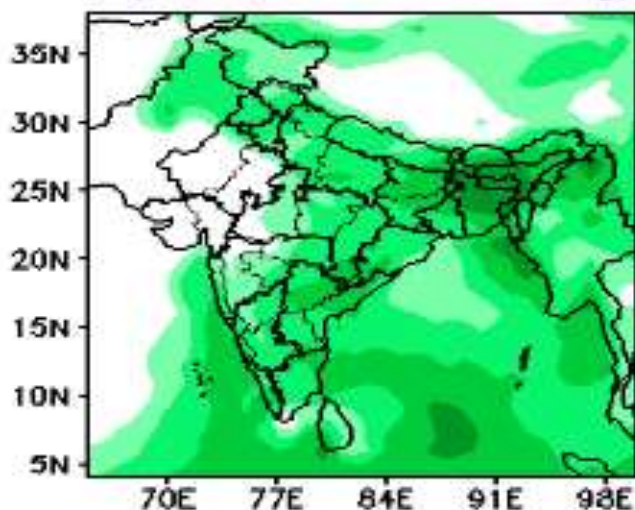




Forecast Rainfall (mm/day)

(Week1: 29Jul-04Aug)

(Week2: 05Aug-11Aug)



Forecast Rainfall Anomaly (mm/day)

(Week1: 29Jul-04Aug)

(Week2: 05Aug-11Aug)

