

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

Press: Dated: 4 Aug, 2022

Subject: Current Weather Status and Extended range Forecast for next two weeks (4-17 August 2022)

1. Salient Observed Features for week ending on 4 Aug 2022

- The Monsoon trough which was south of the normal position till 26 July, shifted northward from 27 July and was over north of its normal position during 29-31 July. Then, the western end of monsoon trough at mean sea level lies north of its normal position and eastern end close to foothills of the Himalayas on 1 Aug and it remained there till 2 Aug. This resulted a weak monsoon conditions prevailed over central and West coast of India during 31 July to 2 Aug 2022. However from 3rd Aug, it shifted southwards and by 4th Aug 2022, it was south of its normal position and passed through Bikaner, Shivpuri, Jabalpur, Raipur, Bhubaneswar and thence southeastwards to eastcentral Bay of Bengal.
- Formation and persistence of a shear zone across South Peninsular India in middle tropospheric levels and a cyclonic circulation over Westcentral & adjoining Southwest Bay of Bengal off south Andhra during 2-4 Aug have helped rapid revival of monsoon Peninsula parts of India.
- Rainfall during the week over both northwest and Northeast India, have increased due to monsoon trough north of the normal on most dates.
- Analysis of Weekly overall Rainfall distribution during the current week ending on 3 Aug 2022 and Monsoon Season's Rainfall Scenario (01 June-3 Aug, 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 3 Aug 2022, from its long period average (LPA) was -21 %, with over east and northeast India as -10% while all India Seasonal cumulative

rainfall %departure during this year's **monsoon Season Rainfall during 01 June till 27 July 2022** is +6% **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.

	WEEK			SEASON		
Region	28.07.2022 TO 03.08.2022			01.06.2022 TO 03.08.2022		
	Actual	Normal	% Dep	Actual	Normal	% Dep
EAST & NORTH-EAST INDIA	74	82.3	-10%	672.3	785.3	-14%
NORTH-WEST INDIA	53.5	51.4	4%	315.4	308.9	2%
CENTRAL INDIA	22.3	76.3	-71%	584.5	524.7	11%
SOUTH PENINSULA	72.7	46.1	58%	512.9	385.7	33%
Country as a whole	50	63.7	-21%	501.7	472.6	+ 6%

Table 1: Rainfall status (Week and season)

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 5 with amplitude less than

1. It would continue in same phase with gradually decreasing amplitude during first half of week

1. Thereafter, it would move to phase 1 with gradually increasing amplitude. Hence, MJO phase will support enhancement of convective activity over the Bay of Bengal (BoB) during first half of week 1

3. Forecast for next two week

Forecast for next two week

Weather systems & associated Precipitation during Week 1 (04 to 10 August, 2022) and Week 2 (11 to 17 August, 2022)

Forecast for week 1 (04 to 10 August, 2022):

 $_{\odot}$ A shear zone runs roughly along 11°N over South Peninsular India in middle tropospheric levels. It is likely to shift gradually northwards during 1st half of the week.

 $_{\odot}$ The monsoon trough lies south of its normal position. It will continue to remain so during theweek.

• A **Low Pressure Area** is likely to form over Northwest & adjoining Westcentral Bay of Bengal around 07th August, 2022.

• Under the influence of above systems:

✓ Fairly widespread/widespread rainfall with **isolated heavy falls** and **thunderstorm/lightning** very likely over Lakshadweep on 04th; Rayalaseema on 05th; Coastal Andhra Pradesh & Yanam during 06th - 08th; Tamil Nadu, Puducherry & Karaikal during 04th-06th and over Telangana, Karnataka, and Kerala & Mahe during 04th -10th August, 2022.

Isolated very heavy rainfall likely over Rayalaseema on 04th; Coastal & South Interior Karnataka during 04th - 06th; North Interior Karnataka on 05th; Kerala & Mahe on 05th; ghat areas of Tamil Nadu on 05th, Telangana during 06th - 08th and Coastal Andhra Pradesh on 08th August, 2022.

 Isolated extremely heavy rainfall also likely over ghat areas of Tamil Nadu and Kerala & Mahe on 04th and over Coastal & South Interior Karnataka on 05th August, 2022.

○ Fairly widespread/widespread rainfall with isolated heavy falls and thunderstorm/lightning very likely over Chhattisgarh & Madhya Pradesh during 04th-08th; Vidarbha and Saurashtra & Kutch during 06th - 08th; Madhya Maharashtra, Marathwada, Gujarat Region and Konkan & Goa during 04th-10th August, 2022.

 Isolated/scattered very heavy rainfall also likely over Chhattisgarh during 05th-8th; over Madhya Pradesh, Vidarbha and Gujarat State on 08th & 09th and over Madhya Maharashtra & Konkan & Goa during 05th-09th August, 2022.

Fairly widespread rainfall with isolated heavy falls and thunderstorm/lightning very likely over Sub-Himalayan West Bengal & Sikkim on 05th; over Jharkhand 06th & 07th and Odisha during 05th-08th; Nagaland, Manipur, Mizoram & Tripura during 04th -08th; over

Andaman & Nicobar Islands during 04th-06th and over Assam & Meghalaya on 04th -05th August, 2022.

Isolated very heavy rainfall also likely over Odisha on 07th & 8th August, 2022.

• Fairly widespread/widespread rainfall with isolated **heavy falls** and **thunderstorm/lightning** very likely over Himachal Pradesh and Uttarakhand during 04th-07th; West Uttar Pradesh during 4th-6th; over Haryana-Chandigarh-Delhi on 04th; West Rajasthan on 04th & 05th and over East Rajasthan during next 5 days.

Isolated very heavy rainfall also likely over Uttarakhand on 4th and over East Rajasthan on 07th & 08th August, 2022.

 $_{\odot}$ Isolated to scattered rainfall with thunderstorm likely to occur over rest parts of the country during the week.

Rainfall for week 2 (11 to 17 August, 2022):

 $_{\odot}$ 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 parts f the country & north Peninsular India during most days of the week.

• Rainfall activity is likely to be above normal over Central parts of the country & north Peninsular India. It is likely to be normal to above normal over northwaet India; near normal over northeast India and below normal over extreme south Peninsular India.

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

Refer:

https://rsmcnewdelhi.imd.gov.in/uploads/archive/24/24_a1ea5c_Extended%20Range%20Outlook_04_082022.pdf

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

				Probabilistic Forecast		
	SPATIAL DISTRIBUT	Terms	Probability of Occurrence (%)			
% Stations	Category	% Stations	Category	Unlikely	< 25	
76-100	Widespread (WS/Most Places)	26-50	Scattered (SCT/ A Few Places)	Likely Very Likely	25 - 50	
51-75	Fairly Widespred (FWS/ Many Places)	1-25 Isolated (ISOL)		Most Likely	> 75	





Annex: II



Annexure III



