

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

Dated: 26th August, 2021

Subject: Current Weather Status and Extended range Forecast for next two weeks (26Aug-8 Sept 2021)

1. Salient Features

- ➤ Due to monsoon trough laying to the south of the normal position during 19-23 August, Active monsoon spell prevailed over central parts of India covering Madhya Pradesh and Gujarat Region during 19-21 august and then over most parts of northwest India during 20-23 Aug. With the shifting of the monsoon trough towards foothills of the Himalayas during subsequent days of the week during 24-26 August, weak monsoon spell prevailed over larger parts of the India covering Northwest, Central and West coast of India. However, Uttarakhand, Eastern Uttar Pradesh and Bihar continued to get isolated heavy to very heavy rainfall in most days during the period.
- ➤ Strong southerly/southwesterly winds from Bay of Bengal continued to prevail over northeast India and Sub-Himalayan West Bengal & Sikkim during most days of the week causing isolated heavy to extremely heavy rainfall during some days over these areas during the week.
- ➤ Weekly cumulative rainfall for the country as a whole for the week ending on 25th Aug is 21% below its Long Period Average (LPA), while the Seasonal cumulative rainfall during 1st June to 25th Aug, 2021 is 10 % below the LPA. Details of the rainfall distribution over the four broad geographical regions of India are given Table 1 (refer page 2) and Met sub-division-wise rainfall both for week and season given in Annex I and II.

Table 1: Rainfall status (Week and season)

	WEEK 19.08.2021 TO 25.08.2021				SEASON		
Region				01.06.2021 TO 25.08.2021			
	Actual	Normal	% Dep	Actual	Normal	% Dep	
EAST &	73.9	81.6	-9%	945.6	1064.3	-11%	
NORTH-							
EAST INDIA							
NORTH-	32.5	43.5	-25%	405.1	459.3	-12%	
WEST INDIA							
CENTRAL	45.5	63.0	-28%	651.6	747.6	-13%	
INDIA							
SOUTH	34.2	40.7	-16%	551.7	535.1	3%	
PENINSULA							
country as a whole	43.8	55.6	-21%	603.1	667.7	-10%	

> Forecast for next 2 weeks based on NWP model consensus:

Week 1 (26 August to 01 September, 2021)

a) Forecast of the Monsoon trough

 Based upon NWP Model consensus, there is a likelihood of formation of a cyclonic circulation over northwest & adjoining westcentral Bay of Bengal on 27th August, the eastern end of the monsoon trough is very likely to shift southwards from 27th August.
 The western end likely to shift gradually southwards from 28th August.

b) Rainfall Forecast

- i) Enhanced rainfall activity likely to continue over northeast India, Sub-Himalayan West Bengal & Sikkim, Bihar, East Uttar Pradesh and Uttarakhand till 29th August and reduction thereafter.
- ii) Enhanced rainfall activity likely over south Peninsular India during 28th -30th August

- and reduction thereafter.
- iii) Increase in rainfall activity with isolated likely heavy rainfall over Maharashtra and Gujarat region from 30 Aug to 1 Sept.
- iv) Subdued rainfall activity likely to continue over Northwest India till 28th August and increase thereafter with light/moderate isolated to scattered rainfall over the rest parts of northwest India.

Overall rainfall activity during week 1, is very likely to be near normal.

Rainfall for week 2: (02 to 08 September, 2021)

- The monsoon trough is very likely to be near normal or south of its position during most days of the week.
- There is likely increase in rainfall activity over northwest & central India as compare to week 1.
- Fairly widespread to widespread rainfall activity with isolated heavy falls very likely over central & adjoining northwest and north Peninsular India during most of the days.
- Light/moderate scattered to fairly widespread rainfall likely over rest parts of country except northwest India.

Overall normal to above normal rainfall activity likely over central & adjoining northwest and north Peninsular India; near normal rainfall activity likely over most parts of east & northeast India and below normal rainfall activity likely over most parts of south Peninsular India

2. Large scale features as on 26th August, 2021

- ➤ Presently, neutral ENSO conditions are seen over the equatorial Pacific. The latest global model forecasts indicate that the current neutral ENSO conditions are likely to continue during the month over the equatorial Pacific Ocean. However, sea surface temperatures over central and east equatorial Pacific Ocean is showing cooling tendency and there is an increased possibility of re-emergence of the La Nina condition at the end of the monsoon season or thereafter.
- > At present, negative Indian Ocean Dipole (IOD) conditions are prevailing over the Indian

Ocean. The latest forecast from the MMCFS and other global models together indicate negative IOD conditions over the Indian Ocean are likely to continue during remaining part of the monsoon season.

➤ The Madden Julian Oscillation (MJO) Index currently lies in in Phase 2 with amplitude close to 1. It is likely to move to Phase 3 with reduced amplitude (<1) during second half of Week 1 and remain in Phase 3 with slight increase in amplitude during entire period of week 2. Hence the phase of MJO could favour the convective activity over the North Indian Ocean (NIO) from the later part of Week 1 and entire period of week 2.

3. Forecast for next two week

Weather systems & associated Precipitation during Week 1 (26 August to 01 September, 2021) and Week 2 (26 August to 01 September, 2021)

Rainfall for week 1: (26 August to 01 September, 2021)

- The monsoon trough at mean sea level runs along the foothills of the Himalayas. In view
 of the likely formation of a cyclonic circulation over northwest & adjoining westcentral Bay
 of Bengal on 27th August, the eastern end of the monsoon trough is very likely to shift
 southwards from 27th August. The western end likely to shift gradually southwards from
 28th August.
- An off-shore trough at mean sea level runs from Karnataka coast to Kerala coast.
- A cyclonic circulation lies over Southeast Arabian Sea off north Kerala coast in lower tropospheric levels.
- Strong southerly/south-westerly winds from Bay of Bengal to northeast India very likely to continue to prevail till 27th August, 2021.
- Due to above meteorological conditions:
- ✓ Fairly widespread to widespread rainfall activity with isolated heavy falls very likely over Coastal & South Interior Karnataka, Tamilnadu and Kerala & Mahe during next 2 days and likely to increase from 28th August with isolated heavy to very heavy falls during 28th to 30th August. Isolated extremely heavy falls also likely over Kerala & Mahe and ghat areas of Tamilnadu on 29th & 30th August, 2021 and isolated heavy falls on 31st August & 01 September, 2021.

- ✓ Scattered to fairly widespread rainfall activity is very likely over rest parts of Peninsular & central India during the week. Isolated **heavy rainfall** is also very likely over Coastal Andhra Pradesh & Chhattisgarh from 28th to 30th August; over Madhya Pradesh, Telangana & Vidharbha on 29th & 30th August, 2021.
- ✓ Widespread rainfall activity with isolated heavy to very heavy falls very likely to continue over Northeast India, Sub-Himalayan West Bengal & Sikkim till 27th August and reduce thereafter with isolated heavy rainfall over the region. Isolated extremely heavy falls also likely over Arunachal Pradesh and Sub-Himalayan West Bengal & Sikkim on 26th August; over Assam & Meghalaya on 26th & 27th August, 2021.
- Fairly widespread to widespread rainfall activity with isolated **heavy falls** very likely over Bihar, East Uttar Pradesh and Uttarakhand till 29th August and isolated heavy to very heavy falls likely over Bihar on 26th & 27th and over East Uttar Pradesh on 26th August, 2021. Intensity of the rainfall is very likely to decrease thereafter over above areas. Scattered to fairly widespread rainfall activity is very likely over rest parts of East India. Isolated **heavy rainfall** is also very likely over Gangetic West Bengal on 26th & 27th, over Odisha from 26th to 29th and over Jharkhand on 28th & 29th August, 2021.
- ✓ Increase in rainfall activity with isolated likely heavy rainfall over Maharashtra and Gujarat region from 30 Aug to 1 Sept.
- ✓ Subdued rainfall activity likely to continue over Northwest India till 28th August and increase thereafter with light/moderate isolated to scattered rainfall over the rest parts of northwest India.
- Overall rainfall activity is very likely to be near normal.

Rainfall for week 2: (02 to 08 September, 2021)

- •The monsoon trough is very likely to be near normal or south of its position during most days of the week.
- •There is likely increase in rainfall activity over northwest & central India as compare to week

 1.
- •Fairly widespread to widespread rainfall activity with isolated heavy falls very likely over central & adjoining northwest and north Peninsular India during most of the days.
- •Light/moderate scattered to fairly widespread rainfall likely over rest parts of country except

northwest India.

 Overall normal to above normal rainfall activity likely over central & adjoining northwest and north Peninsular India; near normal rainfall activity likely over most parts of east & northeast India and below normal rainfall activity likely over most parts of south Peninsular India.

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

Based on Numerical Models guidance, it may be concluded that no cyclogenesis is likely over the north Indian Ocean during the forecast period. However, a Low Pressure Area is likely to form over northwest & adjoining west-central Bay of Bengal (BoB) off south Odishanorth Andhra Pradesh coasts during the first half of Week 1, followed by another one over west-central & adjoining northwest BoB off north Andhra Pradesh – south Odisha coasts during the second half of Week 2.

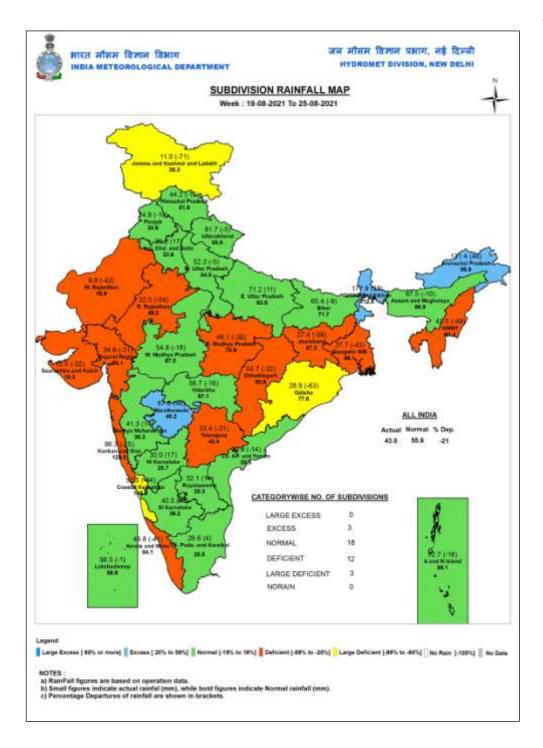
Next weekly update will be issued on next Thursday i.e. 2 Sept 2021

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

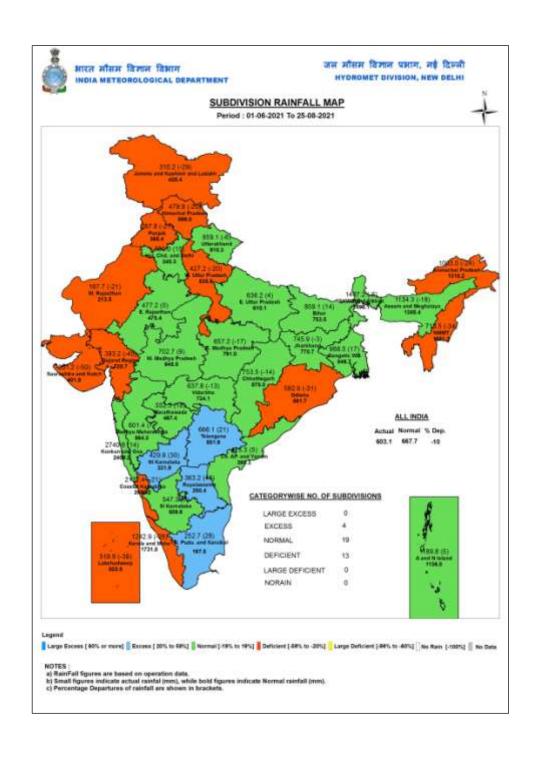
SPATIAL DISTRIBUTION (% of Stations reporting)					
% Stations	Category	% Stations	Category		
76-100	Widespread (WS/Most Places)	26-50	Scattered (SCT/ A Few Places)		
51-75	Fairly Widespred (FWS/ Many Places)	1-25	Isolated (ISOL)		

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

Annex I



Annexure II



Forecast Rainfall (mm/day) (Week1: 27Aug-02Sep) (Week2: 03Sep-09Sep) 35N 35N 30N 30N 25N 25N 20N 20N 15N 15N 101 10N 5N 5N 70E 84E 9iE 70E 84E 7 3 10

