

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

Press: Dated: 26 May, 2022

Subject: Current Weather Status and Extended range Forecast for next two weeks (26 May-8 June 2022)

# 1. Salient Observed Features for week ending on 25 May 2022

- Movement of an active Western Disturbances during 22-24 May across northwest and adjoining plains of India with induced low pressure area over northwest Rajasthan & neighbourhood on 23 May and persistence easterly wind pattern at lower levels across Indo-Gangetic plains at lower level in the region, had caused fairly widespread to widespread rainfall/thunderstorm activity over western Himalayan region and adjoining plains of India during the period. Also, under the influence of both systems, for the 1<sup>st</sup> time in this summer of 2022, such significant wet spell (refer Table 1 and Annex 1 for weekly rainfall) occurred over these areas in this summer and also heavy rainfall at isolated places, had been reported over plains i.e. over West Uttar Pradesh and Haryana on one or two days and thunder squall had been reported over the plains; isolated hailstorm activity also had been reported over parts of Northwest India during 22-24 May.
- As a result, maximum temperature over western Himalayan region and adjoining plains of India including over Delhi and over whole areas of Uttar Pradesh, was fallen drastically 1<sup>st</sup> time in this season, upto 7-12degC over these areas on 23 May. As a results, Heat wave/severe heat wave spell which was prevailing over many pockets of northwest and central India was abated during 2<sup>nd</sup> half of the week and maximum temperatures remained below normal over most parts of north and central India during 23-26 May 2022.
- ➤ Under the influence of a cyclonic circulation over South Peninsula in the lower /middle tropospheric levels tilting southwestwards with height, widespread pre-monsoonal rainfall/thunderstorm activity had occurred over Kerala & Mahe and Karnataka during the first half of the week with isolated heavy to very heavy rainfall had occurred over these areas during 19-21 May and

#### reduced thereafter.

- Under the influence of an east-west trough in the lower tropospheric levels extending from Northwest India to Northeast India and north-south troughs/cyclonic circulations in the lower/mid tropospheric levels over the region, fairly widespread to widespread rainfall/thunderstorm activity had occurred over parts of East and Northeast India isolated heavy/very heavy rainfall had been continued to reported over parts of Northeast India during 19-21 May which then reduced significantly thereafter.
  - ➤ Weekly overall Rainfall distribution during the current week ending on 25 May 2022 Premonsoon Season's Rainfall Scenario (01 March to 25 May, 2022): During the week ending on 25 May 2022, for the country as a whole, the weekly cumulative All India Rainfall departure from its long period average (LPA) was +65% with weekly cumulative over northwest India as 73%, while all India cumulative rainfall during this year's Pre-monsoon Season's Rainfall Scenario (01 March to 25 May, 2022) is above LPA by 4% and over northwest India, it is below LPA by -65%. 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)

	WEEK			SEASON		
Region	19.05.2022 TO 25.05.2022			01.03.2022 TO 25.05.2022		
	Actual	Normal	% Dep	Actual	Normal	% Dep
EAST & NORTH-EAST INDIA	51.5	43.9	17%	423.3	331.8	28%
NORTH- WEST INDIA	15.3	8.8	73%	38.1	108.3	-65%
CENTRAL INDIA	7.9	4.6	71%	19.9	32.5	-39%
SOUTH PENINSULA	43.3	17	155%	186.4	104.2	79%
Country as a whole	24.1	14.6	65%	122.5	117.6	4%

### 2. Large scale features

> Currently, La Niña conditions are prevailing over the equatorial Pacific region. The latest Monsoon

Mission Climate Forecasting System (MMCFS) forecast indicates that La Niña conditions are likely to continue throughout the Month. Other climate models are also indicating enhanced probability for La Niña conditions likely during summer season. At present, neutral Indian Ocean Dipole(IOD) conditions are present over the Indian Ocean and the latest MMCFS forecast indicates that the neutral IOD conditions are likely to continue during summer season. As the changes in the sea surface temperature (SST) conditions over the Pacific and the Indian Oceans are known to influence the Indian climate, IMD is carefully monitoring the evolution of sea surface conditions over these Ocean basins.

➤ The Madden Julian Oscillation Index (MJO) currently lies in phase 6 with amplitude equal to 1. It would continue in same phase with increasing amplitude during first half of week 1. Thereafter, it would move across phases 7 and 8 during remaining part of the forecast period. Hence, MJO will not support any convective activity over the North Indian Ocean (NIO) including the Bay of Bengal (BoB) and the Arabian Sea (AS) during the entire forecast period

#### 3. Forecast for next two week

# Forecast for next two week

Weather systems & associated Precipitation during
Week 1 (26 May to 01 June, 2022) and Week 2 (02 to 08 June, 2022)

**Advancement of Southwest Monsoon:** 

- Southwest Monsoon has further advanced into some parts of Southwest Arabian Sea, some more parts of Southeast Arabian Sea, Maldives & Comorin area and South Bay of Bengal. The Northern Limit of Southwest Monsoon continues to pass through 7.5°N/60°E, 7.5°N/70°E, 7.5°N/79°E, 8.0°N/83°E, 11.5°N/89°E, 16.0°N/93°E and 18.0°N/94.5°E.
- Conditions are favorable for further advance of Southwest Monsoon over some more parts of South Arabian Sea, entire Maldives & adjoining areas of Lakshadweep and some more parts of Comorin area during next 48 hours.
- Conditions are likely to become favourable for onset of monsoon over Kerala during the week.

Forecast for week 1 (26 May to 01 June, 2022):

 Due to east-west trough from northwest Rajasthan to Interior Odisha, a cyclonic circulation over north Bihar & neighbourhood and likely southwesterly winds from Bay of Bengal to Northeastern States at lower tropospheric levels:

- ✓ Scattered to fairly widespread light/moderate rainfall very likely over Northeast India and isolated to scattered rainfall with isolated thunderstorm/lightning/gusty winds over Bihar, Jharkhand, Odisha and West Bengal & Sikkim during the week.
- ✓ Isolated heavy rainfall also likely over Arunachal Pradesh on 26<sup>th</sup> & 30<sup>th</sup>; over Assam-Meghalaya on 26<sup>th</sup>, 27<sup>th</sup>, 29<sup>th</sup> May to 01<sup>st</sup> June and over Nagaland, Manipur, Mizoram & Tripura on 26<sup>th</sup>, 27<sup>th</sup> & 29<sup>th</sup> May 2022.
- Under the influence of a north-south trough from North interior Karnataka to Comorin area and likely westerly winds from Arabian Sea over the south peninsular India in lower tropospheric levels:
- ✓ Widespread light/moderate rainfall with thunderstorm/lightning very likely over Kerala & Mahe & Lakshadweep and isolated to scattered rainfall over Andhra Pradesh, Telangana, Karnataka and Tamilnadu, Puducherry & Karaikal during the week. Isolated heavy rainfall also likely over Kerala & Mahe and north Tamilnadu on 26th & 27th May.
- ✓ Squally weather (wind speed 40-50 kmph gusting to 60 kmph) very likely over southwest Arabian Sea during next 5 day; over southeast Arabian Sea along & off Kerala coast & Lakshadweep area on 26th & 27th and over northeast Arabian Sea & adjoining Gujarat coast during 27th-29th May..
- A cyclonic circulation lies over north interior Tamilnadu & neighbourhood extending upto upper tropospheric levels. It is likely to persist over the region during next 2 days and become less marked thereafter. A north-south trough runs from central Madhya Pradesh to interior Tamilnadu in lower tropospheric levels. Under the influence of these systems:
- ❖ Fairly widespread to widespread light/moderate rainfall with isolated thunderstorm/lightning/gusty winds very likely over Kerala-Mahe and Karnataka during most days of the week. Isolated extremely heavy falls is very likely over Coastal & South Interior Karnataka today and isolated heavy rainfall on 20<sup>th</sup> May. Heavy to very heavy rainfall at isolated places likely over Kerala-Mahe 19<sup>th</sup> & 20<sup>th</sup> and isolated heavy rainfall rest days of the week.
- Scattered to fairly widespread light/moderate rainfall with isolated thunderstorm/lightning very likely over Tamilnadu & Rayalaseema and isolated rainfall/thunderstorm over rest

parts of the Peninsular India during the week. Isolated heavy falls is also very likely over Tamilnadu & Rayalaseema on today, the 19<sup>th</sup> May, 2022.

- Under the influence of a fresh approaching Western Disturbance, scattered light/moderate rainfall with isolated thunderstorm/lightning/gusty winds very likely over Jammu & Kashmir, Himachal Pradesh and isolated rainfall over Uttarakhand, Punjab, Uttar Pradesh, East Rajasthan on 28th & 29th May. Isolated hailstorm likely over Himachal Pradesh & Uttarakhand on 27th May and over Jammu & Kashmir on 28th May. Duststorm activity at isolated places very likely over West Rajasthan on 28th & 29th May
- No significant weather likely over remaining parts of the country during the week.

# Rainfall for week 2 (02 to 08 June, 2022):

- Due to westerly flow from Arabian Sea over south Peninsula India, light/moderate fairly widespread to widespread rainfall activity likely over southwest Peninsular India and isolated to scattered rainfall over rest peninsular India.
- Due to southwesterly follow from Bay of Bengal to northeastern states, light/moderate scattered to fairly widespread rainfall activity likely over northeast & adjoining east India during most days of the week.
- Overall, rainfall activity is likely to be near normal over northeast India; below normal over rest parts of the country.

Maximum Temperatures for week 1(26 May to 01 June, 2022) and week 2(02 to 08 June, 2022)

# Maximum Temperatures for Week 1(26 May to 01 June, 2022):

Maximum Temperature Departures (as on 25-05-2022): Maximum temperatures were appreciably above normal (+3.1°C to +5.0°C) at isolated places over Assam & Meghalaya and Arunachal Pradesh; above normal (1.6°C to 3.0°C) at a few places over Jammu & Kashmir-Gilgit-Baltistan & Muzaffarabad and Coastal Karnataka and at isolated places over Saurashtra & Kutch, Coastal Andhra Pradesh & Yanam and Gangetic West Bengal. They were markedly below normal (-5.1 or less) at many [places over Haryana, Chandigarh & Delhi; at a few places over East Madhya Pradesh and at isolated places over West Uttar Pradesh; appreciably below normal (-3.1°C to -5.0°C) at most places over Punjab; at many places over Himachal Pradesh; at a few places over East Uttar Pradesh and at isolated

places over Rajasthan and Tamil Nadu, Puducherry & Karaikal; below normal (-1.6°C to -3.0°C) at most places over Bihar, North Interior Karnataka and Uttrakhand; at many places over Jharkhand, Chattisgarh & South Interior Karnataka and at a few places over Vidarbha, Madhya Maharashtra and Telangana and near normal over rest parts of the country.

- Gradual rise in maximum temperatures by 2-4°C very likely over many parts of Northwest &
   East India during 1<sup>st</sup> half of the week and no significant change thereafter.
- No significant change in maximum temperatures very likely over rest parts of the country during the week.
- Heat Wave conditions at isolated pockets very likely over southwest Rajasthan on 28th & 29th May, 2022.

Maximum Temperatures for week 2 (02 to 08 June, 2022):

- Maximum temperatures are likely to be below to near normal over the country except east India, where these are likely to be above normal by 1-3°C.
- No significant heat wave is likely over any part of the country. Refer Annex V)
- 4. Cyclogenesis forecast for North Indian Ocean during next 2 weeks

Refer

https://rsmcnewdelhi.imd.gov.in/uploads/archive/24/24\_93a6f8\_Extended%20Range%20Outlook\_2 6052022.pdf

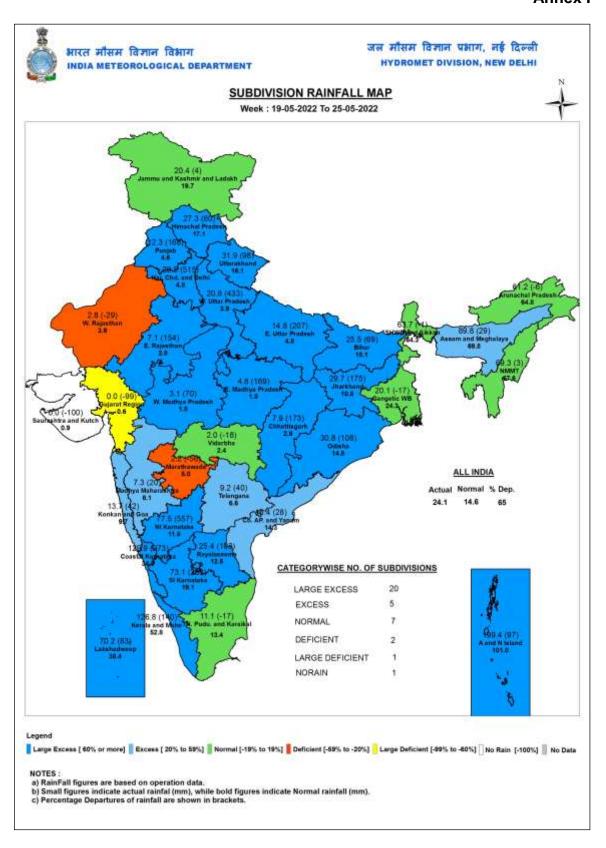
Next weekly update will be issued on next Thursday i.e. 2 June 2022

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

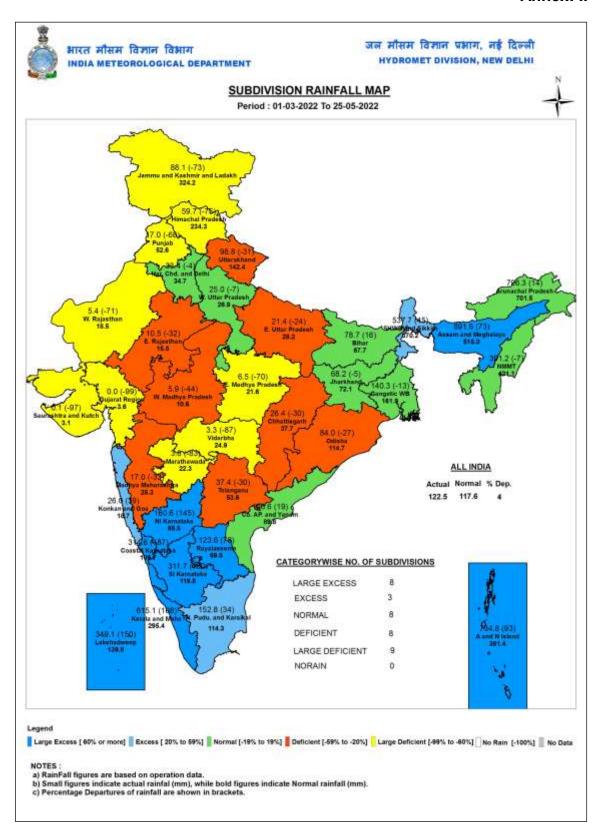


Probabilistic Forecast					
Terms	Probability of Occurrence (%)				
Unlikely	< 25				
Likely	25 - 50				
Very Likely	50 - 75				
Most Likely	> 75				

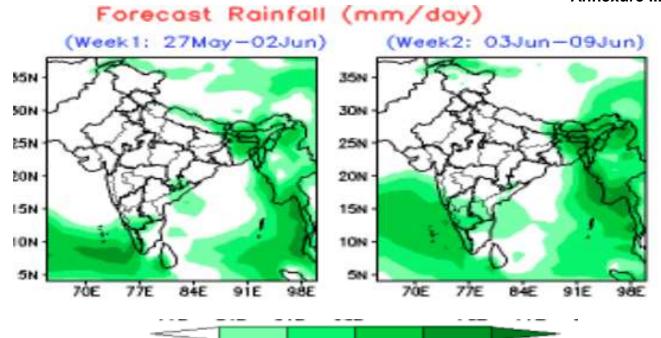
# Annex I



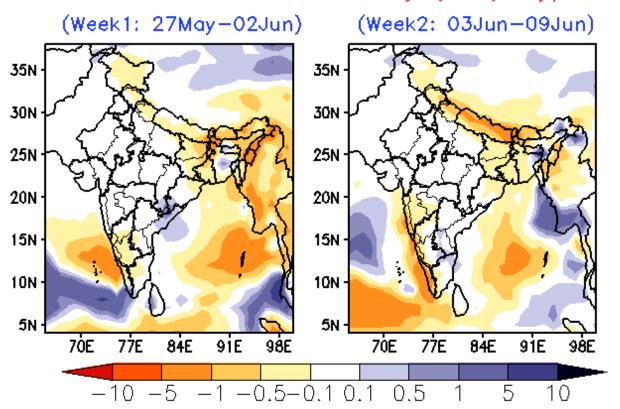
### Annex: II







# Forecast Rainfall Anomaly (mm/day)



# **Annex IV**

