

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

Press: Dated: 17 Nov, 2022

**Subject: Current Weather Status and Extended range Forecast for next two weeks** (17-30 Nov 2022)

#### 1. Salient Observed Features for week ending 17 Nov 2022

> A Low pressure area lay over Southwest Bay of Bengal off Sri-Lanka coast in the beginning of the week; it has become a Well Marked Low Pressure area in the early morning hours of 11th and remained over Southwest Bay of Bengal off Tamil Nadu coast on that day; it has weakened into a Low Pressure area and lay over north coastal Tamilnadu & neighbourhood in the morning and over north Interior Tamil Nadu & neighbourhood in the evening of 12th; moving westwards, it emerged into Arabian Sea and lay over Southeast Arabian Sea off Kerala coast in the morning and over Southeast Arabian Sea and adjoining areas of Lakshadweep Islands in the evening of 13th; the Low pressure area has become less marked in the early morning hours of 14th however, its remnant cyclonic circulation extending upto mid tropospheric levels lay over Southeast Arabian sea on 14th and over Southeast & adjoining Southwest Arabian Sea on 15<sup>th</sup> before progressing westwards further towards the end of the week; this system had caused fairly widespread to widespread rainfall/thunderstorm activity over Tamil Nadu, Puducherry & Karaikkal and Lakshadweep Islands on many days and over Kerala & Mahe on two to three days; isolated to scattered rainfall/thunderstorm activity also had occurred over Kerala & Mahe on the remaining days, over South Interior Karnataka and Rayalseema on most of the days and over Coastal Karnataka on three to four days whereas isolated rainfall/thunderstorm activity had occurred over Coastal Andhra Pradesh & Yanam on most of the days and over Tamil Nadu, Puducherry & Karaikkal and North Interior Karnataka on one or two days during the week; under the influence of the system, heavy rainfall had occurred over Tamil Nadu, Puducherry and Karaikkal on most of the days, over Coastal Andhra Pradesh & Yanam and Kerala & Mahe on two days each and over Rayalseema on a single day; very heavy rainfall also had occurred over Tamil

- Nadu, Puducherry & Karaikkal and Coastal Andhra Pradesh & Yanam on two days each whereas extremely heavy rainfall had occurred over Tamil Nadu, Puducherry and Karaikkal on a single day along with.
- Movement of a Western Disturbance had caused fairly widespread to widespread rainfall/snowfall/thunderstorm activity over Jammu Kashmir & Ladakh and Himachal Pradesh on one day each with isolated rainfall/snowfall/thunderstorm activity over Himachal Pradesh on another day in the beginning of the week whereas isolated rainfall/thunderstorm activity had occurred over Uttarakhand and over the plains of Northwest India on one or two days during the same period; movement of another two Western Disturbances subsequently had caused widespread rainfall/snowfall/thunderstorm activity over Jammu Kashmir & Ladakh and scattered to fairly widespread rainfall/snowfall/thunderstorm activity over Himachal Pradesh on two days each during the second half of the week with isolated rainfall/snowfall/thunderstorm activity reported over these areas on another day; under their influence, scattered rainfall/thunderstorm activity had occurred over Uttarakhand also on a single day; passage of these systems along with an induced cyclonic circulation had caused isolated to scattered rainfall/thunderstorm activity over Punjab, Haryana, Chandigarh & Delhi and West Rajasthan also on one or two days during the same period.
- ➤ Under the influence of a cyclonic circulation over South Andaman Sea & neighbourhood extending upto mid tropospheric levels, fairly widespread to widespread rainfall/thunderstorm activity along with isolated heavy rainfall had occurred over Andaman & Nicobar Islands on two days towards the end of the week.
- Analysis of Weekly overall Rainfall distribution during the week ending on 16 Nov 2022 and Post monsoon Season's Rainfall Scenario (01 Oct-16 Nov): It shows for the country as a whole, the weekly cumulative All India Rainfall in % departure from its long period average (LPA) till week ending on 16 Nov, was +17%, with south Peninsula India had +42% while all India Seasonal cumulative rainfall % departure during this year's post monsoon Season Rainfall during 01 Oct-16 Nov 2022 is +35% and over south Peninsula, it 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 Annex I and II respectively.

Table 1: Rainfall status (Week and season)

	WEEK 10.11.2022 TO 16.11.2022			SEASON 01.10.2022 TO 16.11.2022		
Region						
_	Actual	Normal	% Dep	Actual	Normal	% Dep
EAST & NORTH-EAST INDIA	0.2	5.7	-97%	164.8	138.3	+19%
NORTH-WEST INDIA	7.2	2.4	+199%	79.5	28	+184%
CENTRAL INDIA	0	3.2	-99%	93.5	65.3	+43%
SOUTH PENINSULA	27.9	19.7	+42%	225.9	210.3	+7%
Country as a whole	7.7	6.6	+17%	126.6	94	+35%

#### 2. Large scale features

- ➤ Currently La Niña conditions are prevailing over Equatorial Pacific Ocean and negative Indian Ocean Dipole (IOD) conditions are prevailing over the Indian Ocean. The latest global model forecasts indicate that the La Niña conditions are likely to continue during the upcoming season and negative IOD conditions are likely to weaken during the upcoming months.
- The Madden Julian Oscillation Index (MJO) is currently in Phase 5 with amplitude more than 1. It will continue in same phase for next 3 days. Thereafter, it would move to phase 6. Thus MJO will be favourable for enhancement of convective activity over the Bay of Bengal during first half of week 1.

#### 3. Forecast for next two week

#### Forecast for next two week

Weather systems & associated Precipitation during Week 1 (17 to 23 November, 2022) and Week 2 (24 to 30 November, 2022)

#### Forecast for week 1 (17 to 23 November, 2022):

➤ A Low pressure area has formed over Southeast Bay of Bengal & adjoining Andaman Sea today morning the, 17<sup>th</sup> November, 2022. It is likely to move west-northwestwards and gradually concentrate into a Depression over central parts of

South Bay of Bengal around 19<sup>th</sup> November, 2022. Thereafter, it is likely to move west-northwestwards towards Tamilnadu-Puducherry and south Andhra Pradesh coasts during subsequent 3 days. Under its influence;

## **Heavy rainfall and wind warning:**

- ❖ Widespread light to moderate rainfall with heavy falls at isolated places very likely over Andaman & Nicobar Islands on 17<sup>th</sup> November 2022. Strong surface winds (speed reaching 30-40 kmph gusting to 50 kmph) also very likely to prevail over Andaman & Nicobar Islands on 17<sup>th</sup> & 18<sup>th</sup> November, 2022.
- ❖ Widespread light to moderate rainfall with isolated heavy falls very likely over Coastal Tamilnadu, Puducherry & Karaikal during 20<sup>th</sup>-22<sup>nd</sup> and adjoining areas of south Coastal Andhra Pradesh & Rayalaseema on 21<sup>st</sup> & 22<sup>nd</sup> November, 2022. Isolated very heavy rainfall likely over north Coastal Tamilnadu on 21<sup>st</sup> and over north Tamilnadu on 22<sup>nd</sup> November, 2022.

#### Fishermen warning:

- ❖ Squally weather with wind speed reaching 40-45 kmph gusting to 55 kmph with rough Sea condition likely to prevail over Andaman Sea & adjoining Southeast & Eastcentral Bay of Bengal on 17<sup>th</sup>; over Southeast Bay of Bengal adjoining Andaman Sea and adjoining areas of Southwest & Eastcentral Bay of Bengal on 18<sup>th</sup> November, 2022.
- ❖ Squally wind speed reaching 45-55 kmph gusting to 65 kmph with rough to very rough Sea condition likely to prevail over Southwest and adjoining Southeast & Westcentral Bay of Bengal and along & off Sri Lanka coast on 19<sup>th</sup>; Southwest & adjoining Westcentral Bay of Bengal, along & off south Andhra Pradesh-Tamilnadu-Puducherry-Sri Lanka coasts from 20<sup>th</sup> to forenoon of 22<sup>nd</sup> and over Gulf of Mannar from 21<sup>st</sup> to forenoon of 22<sup>nd</sup> November, 2022.
- ❖ Fishermen are advised not to venture into Andaman Sea & adjoining Southeast & Eastcentral Bay of Bengal on 17<sup>th</sup>; into Southeast Bay of Bengal adjoining Andaman Sea and adjoining areas of Southwest & Eastcentral Bay of Bengal on 18<sup>th</sup>; Southwest and adjoining Southeast & Westcentral Bay of Bengal and along & off Sri Lanka coast on 19<sup>th</sup>; Southwest & adjoining Westcentral Bay of Bengal, along & off south Andhra Pradesh-Tamilnadu-Puducherry-Sri Lanka coasts from 20<sup>th</sup> to forenoon of 22<sup>nd</sup> and over Gulf of Mannar from 21<sup>st</sup> to forenoon of 22<sup>nd</sup> November, 2022.
- ➤ Under the influence of feeble Western Disturbance, isolated/scattered light to moderate rainfall/snowfall very likely over Jammu, Kashmir, Ladakh, Gilgit Baltistan & Muzaffarabad on 18<sup>th</sup> & 19<sup>th</sup> and Himachal Pradesh on 19<sup>th</sup> November, 2022.
- ➤ No significant weather likely over any parts of the country except Andaman & Nicobar Islands, where scattered/fairly widespread light to moderate rainfall/thundershower is very likely during most days of the week.

### Rainfall for week 2 (24 to 30 November, 2022):

- A fresh low pressure area/cyclonic circulation is likely to form over north Andaman Sea in beginning of 2<sup>nd</sup> week.
  - Due to easterly wave and remnant cyclonic circulation of Low Pressure System of 1<sup>st</sup> week, light/moderate scattered to fairly widespread rainfall activity is likely over many parts of south Peninsular India mainly during 1<sup>st</sup> half of the week.
  - No significant Western Disturbance is likely to affect northwest India during the week.
  - Overall rainfall activity is likely to be normal to above normal over south Peninsular India; below normal over rest parts of the country during the week.

Minimum Temperatures and its forecast during Week 1 (17 to 23 November, 2022) and Week 2 (24 to 30 November, 2022):

### Minimum Temperatures for week 2 (17 to 23 November, 2022):

- o Minimum temperatures are above normal (1.6°C to 3.0°C) at a few places over Saurashtra & Kutch and at isolated places over Punjab, West Rajasthan, West Madhya Pradesh, Tamilnadu, Puducherry & Karaikal and Bihar. They are appreciably below normal (-3.1°C to -5.0°C) at a few places over North Interior Karnataka, Telangana and Coastal Andhra Pradesh & Yanam and below normal (-1.6°C to -3.0°C) at most places over Rayalaseema; at many places over Gangetic West Bengal; at a few places over Himachal Pradesh, East Madhya Pradesh, Konkan & Goa, Madhya Maharashtra and Odisha and at isolated places over East Rajasthan, Vidarbha and Marathwada and near normal over rest parts of the country. Today, the lowest minimum temperature of 8.2°C reported at Churu (West Rajasthan) over the plains of the country.
- Fall in minimum temperatures by 2-3°C very likely over Uttar Pradesh till tomorrow morning and no significant change thereafter. Fall in minimum temperatures by 2-3°C very likely over Gujarat state during 1<sup>st</sup> half of the week and no significant change thereafter. No significant change in minimum temperatures over rest parts of the north India during the week.

# Minimum Temperatures for week 2 (24 to 30 November, 2022):

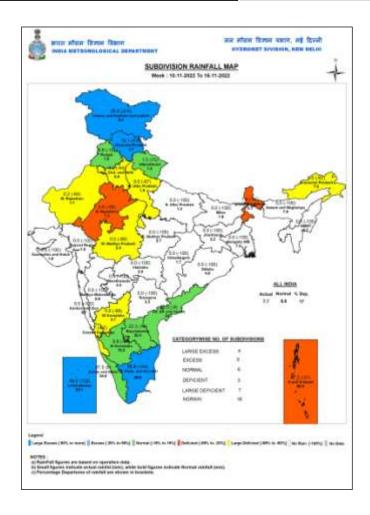
 Minimum temperatures are likely to be near normal or slightly below normal by 1-2 °C over most parts of the country.

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

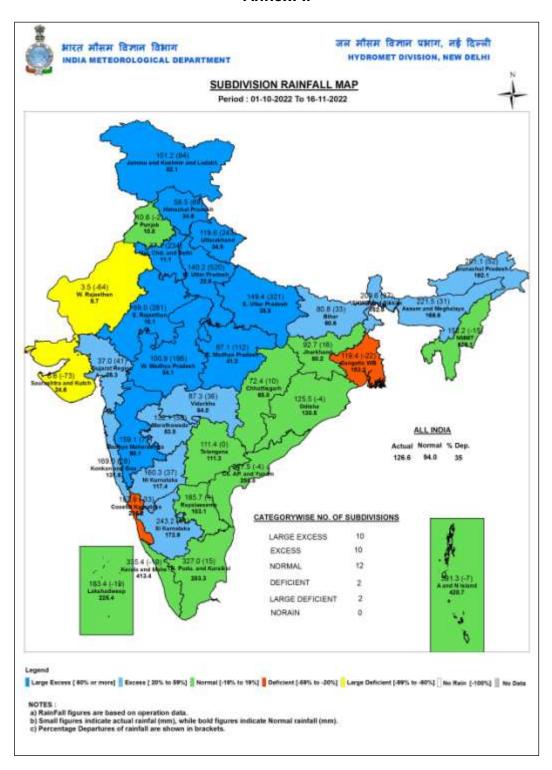
SPATIAL DISTRIBUTION (% of Stations reporting)						
% Stations	Category	% Stations	Category			
76-100	Widespread (WS/Most Places)	26-50	Scattered (SCT/ A Few Places)			
51-75	Fairty Widespred (FWS/ Many Places)	1-25	Isolated (ISOL)			

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

Annex 1



#### Annex: II



#### **Annexure III**

# Forecast Rainfall (mm/day)

