

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

Press Release Date: 20th October, 2022

Subject: Current Weather Status and Extended range Forecast for next two weeks (20 October to 02 November, 2022)

1. Salient Observed Features for past week

- ➤ Withdrawal of Southwest Monsoon: Southwest monsoon has further withdrawn from remaining parts of Uttarakhand, Uttar Pradesh Madhya Pradesh and Gujarat; entire Bihar, Jharkhand, West Bengal & Sikkim and northeastern states; some parts of Maharashtra and most parts of Chhattisgarh & Odisha during the week. The withdrawal line of Southwest Monsoon now passes through 20.0°N, 93.0°E, Puri, Kanker, Buldana, Dahanu, Long. 71.0° E/Lat. 19.5° N (Annexure I).
- > A cyclonic circulation over Westcentral & adjoining Southwest Bay of Bengal off south Andhra Pradesh- north Tamilnadu coasts in the lower tropospheric levels during the first half of the week, another cyclonic circulation over Southeast Arabian Sea and adjoining Kerala coast in the lower tropospheric levels during 16 -17 October before shifting northwards subsequently, a trough in the lower tropospheric levels from Southeast Arabian Sea to Southwest Bay of Bengal across extreme south Peninsula during the same period and a trough from the cyclonic circulation over north Andaman sea & neighbourhood to Tamil Nadu coast across South Bay of Bengal in the lower tropospheric levels towards the end of the week. These system caused fairly widespread to widespread rainfall/thunderstorm activity over Kerala & Mahe and Interior Karnataka on most of the days, over Coastal Karnataka on many days and over Coastal Andhra Pradesh, Telangana and Lakshdweep on a few days with isolated to scattered rainfall/thunderstorm activity on the remaining days of the week; these systems had also caused scattered to fairly widespread rainfall/thunderstorm activity over Tamil Nadu on most of the days, over Chhattisgarh on many days, heavy rainfall also occurred over Tamil Nadu, Kerala and South Interior Karnataka on most of the days and over remaining parts of South Peninsula(excluding Coastal Karnataka) on three to four days; isolated very heavy rainfall also occurred over Tamil Nadu and North Interior Karnataka on two to three days

and over Kerala, South interior Karnataka, Rayalseema and Coastal Andhra Pradesh on one day each along with.

Analysis of Weekly overall Rainfall distribution during the current week (13.10.2022 to 19.10.2022) and post-monsoon Season's Rainfall Scenario (01.10.2022 to 19.10.2022):

The country as a whole, the weekly cumulative All India Rainfall till week ending on 19.10.2022 was 27% below from its long period average (LPA) and all India Seasonal cumulative rainfall during this year's post-monsoon Season Rainfall till 19.10.2022 is 34% above LPA.

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 **Annexure II**and III respectively.

WEEK **SEASON** Region 13.10.2022 to 19.10.2022 01.10.2022 to 19.10.2022 Actual Normal % Departure Actual Normal % Departure **East & Northeast India** 129.1 18 24.8 -27 96.4 34 -81 **59** 17.8 232 **Northwest India** 1.1 6.1 **Central India** 23.1 11.2 106 88.6 45 97 31.8 145.3 97.1 **50** South Peninsula 63.8 101 15.8 49 97.1 **55.1 Country as a Whole** 23.5 **76**

Table 1: Rainfall status (Weekly and seasonal)

2. Large scale features

- The La Niña conditions are prevailing over the equatorial Pacific region. The latest Monsoon Mission Climate Forecasting System (MMCFS) forecast indicates that the La Niña conditions are likely to continue up to the first quarter of next year. Other climate models are also indicating continuation of La Niña conditions until December to February (DJF) 2023 season and turn to neutral ENSO conditions thereafter.
- The negative Indian Ocean Dipole (IOD) conditions are prevailing over the Indian Ocean since June 2022. The latest MMCFS forecast indicates that the negative IOD conditions are likely to weaken and turn to neutral IOD conditions by the end of this year.
- The Madden Julian Oscillation Index (MJO) currently lies in phase 6 with amplitude more than 1 and would continue in same phase during the entire forecast period. MJO is not likely to support enhancement of convective activity over the Bay of Bengal and Arabian Sea.

3. Forecast for next two week

Weather systems & associated Precipitation during Week 1 (20 to 26 October, 2022) and Week 2 (27 October to 02 November, 2022)

Forecast for week 1 (20 to 26 October, 2022):

- ➤ Conditions are very likely to become favourable for further withdrawal of Southwest Monsoon from some more parts of Maharashtra; remaining parts of Chhattisgarh, Odisha and North Bay of Bengal; some parts of Telangana, Andhra Pradesh & Yanam and Central Bay of Bengal during next 2 days.
- A Low Pressure Area has formed over north Andaman Sea & adjoining areas of south Andaman Sea & Southeast Bay of Bengal in the morning of today, the 20th October, 2022. It is very likely to move west-northwestwards and concentrate into a **Depression** over eastcentral & adjoining southeast Bay of Bengal around 22nd October and into a **Deep Depression** on 23rd October. Subsequently, it is very likely to recurve northwards and intensify into a **Cyclonic Storm** over westcentral & adjoining eastcentral Bay of Bengal by 24th October. Thereafter, it is likely to move gradually north- northeastwards and reach near West Bengal Bangladesh coasts on 25th October, skirting Odisha coast.
- A trough runs from the cyclonic circulation associated with **Low Pressure Area** over north Andaman Sea & adjoining areas of south Andaman Sea & Southeast Bay of Bengal to Tamil Nadu coast across South Bay of Bengal in lower tropospheric level. The trough is likely to persist next 3-4 days.
- ➤ A cyclonic circulation lies over southeast Arabian Sea & adjoining Kerala coast and extends upto mid tropospheric levels.
- A Western Disturbance as a trough in mid-tropospheric westerlies runs roughly along Long 72°E to the north of Lat 32°N.
- Under the influence of above systems::
 - Scattered to fairly/widespread rainfall with isolated heavy to very heavy falls & thunderstorm/lightning very likely over Odisha on 24th & 25th; with isolated heavy to very heavy falls over Gangetic West Bengal on 24th & 25th and with isolated extremely heavy falls on 26th October, 2022; with isolated heavy falls over Nagaland, Manipur, Mizoram & Tripura on 24th & 25th and with isolated extremely heavy falls on 26th October, 2022.
 - Fairly widespread to widespread light/moderate rainfall very likely over Andaman & Nicobar Islands during the week. Isolated heavy falls is also likely during 20th-23rd

- October, 2022.
- Fairly widespread/widespread light/moderate rainfall with isolated heavy falls & thunderstorm/lightning very likely over Tamil Nadu, Puducherry & Karaikal during 20th 22nd; over Kerala & Mahe during 20th-23rd and South Interior Karnataka and Lakshadweep on 20th October, 2022. Isolated to scattered light rain/thundershower is likely over rest parts of south Peninsular India during most days of the week.
- Isolated light rainfall/snowfall over Western Himalayan Region during next 2 days.
- Dry weather very likely to prevail over most parts of Northwest & adjoining east India and over central India during most days of the week.

Fishermen Warnings;

- O 20th October: Squally weather (wind speed 40-45 kmph gusting to 55 kmph) very likely over Southeast Arabian sea and along & off Kerala coast, Lakshadweep, Maldives, Comorin area, Gulf of Mannar; Andaman Sea and adjoining South Bay of Bengal. Fishermen are advised not to venture into these seas.
- 21st October: Squally weather (wind speed 40-45 kmph gusting to 55 kmph) very likely over Southeast Arabian sea and along & off Kerala coast, Lakshadweep, Maldives, Comorin area, Gulf of Mannar; wind speed reaching 40-50 kmph gusting to 60 kmph over Andaman Sea and adjoining South Bay of Bengal. Fishermen are advised not to venture into these seas.
- October: Squally weather (wind speed 45-55 kmph gusting to 65 kmph) very likely over along & off Lakshadweep, Maldives, Comorin area, Gulf of Mannar and adjoining Southeast Arabian sea; wind speed reaching 45-50 kmph gusting to 60 kmph over Andaman sea and adjoining North, Eastcentral, Westcentral & Southeast Bay of Bengal. Fishermen are advised not to venture into these seas.
- October: Squally weather (wind speed 45-55 kmph gusting to 65 kmph) very likely over along & off Lakshadweep, Maldives, Comorin area, Gulf of Mannar and adjoining Southeast Arabian sea; wind speed reaching 50-60 kmph gusting to 70 kmph over Andaman sea, Odisha-West Bengal coasts, North Bay of Bengal and adjoining Central & Southeast Bay of Bengal. Fishermen are advised not to venture into these seas.
- 24th October: Squally weather (wind speed 60-70 kmph gusting to 80 kmph) very likely over Odisha-West Bengal coasts, North Bay of Bengal and adjoining Central & Southeast Bay of Bengal. Fishermen are advised not to venture into these seas.

25th October: Squally weather (wind speed 65-75 kmph gusting to 85 kmph) very likely over Odisha-West Bengal coasts, North Bay of Bengal and adjoining Central & Southeast Bay of Bengal. Fishermen are advised not to venture into these seas.

Rainfall for week 2 (27 October to 02 November, 2022):

- A cyclonic circulation is likely to develop over eastcentral Bay of Bengal
- Due to easterly wave, light/moderate scattered to fairly widespread rainfall activity is likely over most parts of south Peninsular India. Isolated heavy rainfall is also likely over southeast Peninsular India during many days of the week.
- No active Western Disturbance is likely to affect northwest India during the week.
- Overall rainfall activity is likely to be near normal over most parts of south Peninsular India; near normal over east & northeast India and below normal over northwest & Central India during the week (Annexure IV).

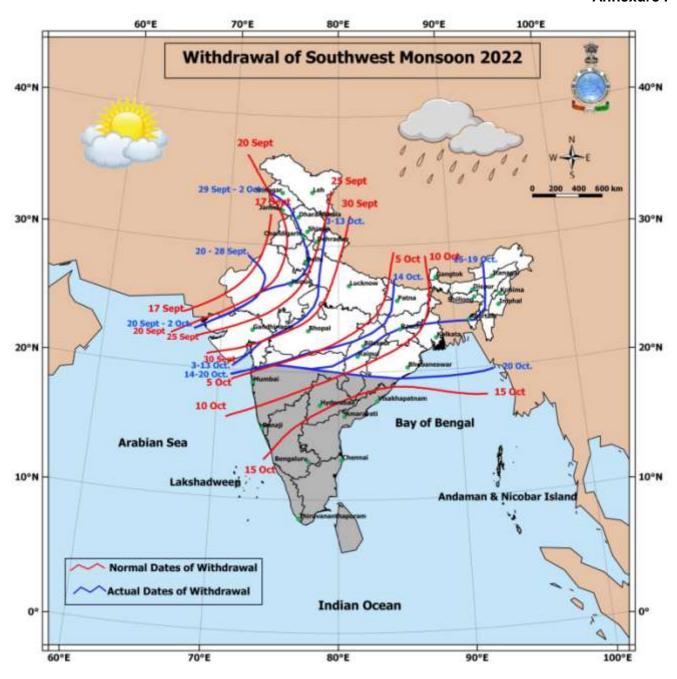
Legends:

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

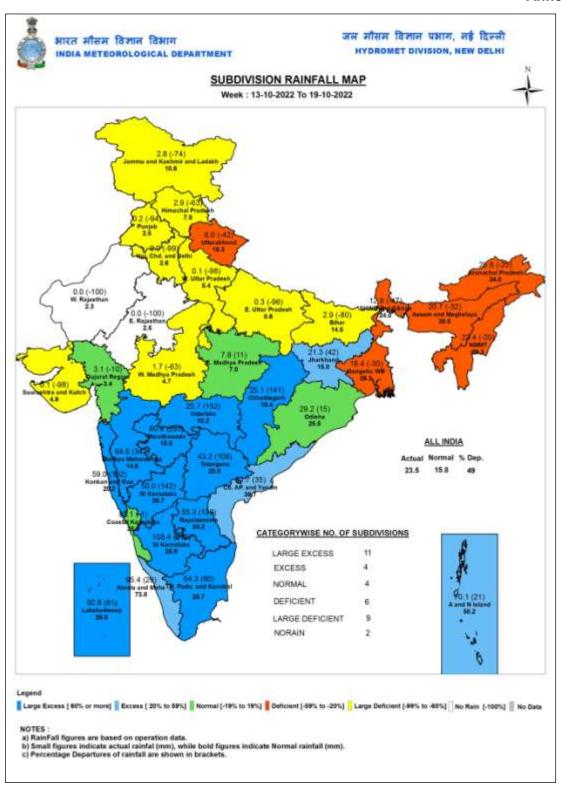


Probabilistic Forecast	
Terms	Probability of Occurrence (%)
Unlikely	< 25
Likely	25 - 50
Very Likely	50 - 75
Most Likely	>75

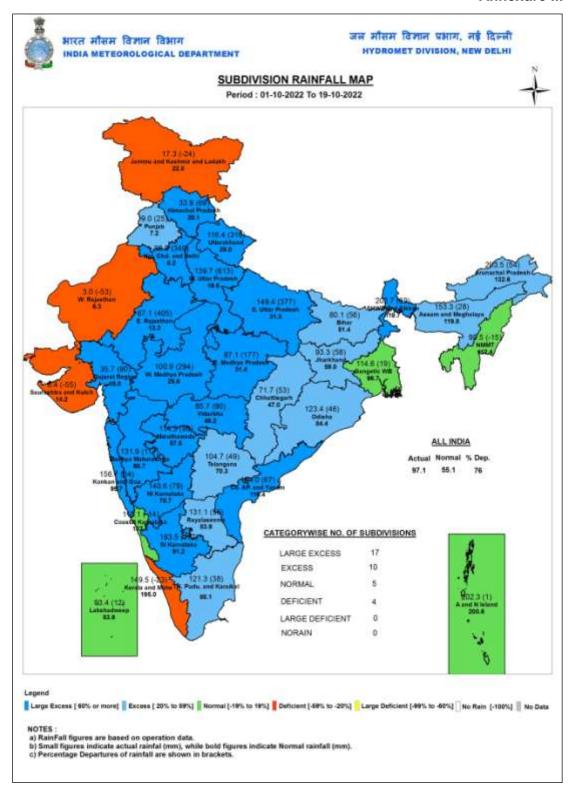
Annexure I



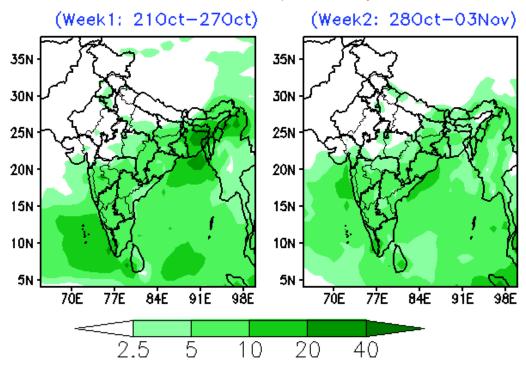
Annexure II



Annexure III



Forecast Rainfall (mm/day)



Forecast Rainfall Anomaly (mm/day)

