



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

Press Release: Dated: 17th Oct, 2024

Subject: Current Weather Status and Extended range Forecast for next two weeks (17-23 Oct, 2024)

1. Salient Observed Features for week ending 16th Oct, 2024

- The **Southwest Monsoon has withdrawn from the entire country** on 15th Oct 2024. Simultaneously, the **Northeast Monsoon rainfall activity has commenced** over the southeast peninsular India on 15th Oct.
- **Depression over central Arabian Sea (13th – 15th Oct, 2024)**: A **Low Pressure Area** was formed over Lakshadweep and adjoining southeast & eastcentral Arabian Sea on 9th Oct and it became a **Well Marked Low Pressure Area** over eastcentral Arabian Sea off Karnataka-Goa coasts on 10th Oct. It further intensified into a **Depression** over central Arabian Sea on 13th Oct and it crossed Oman coast close to Duqm (Oman) near latitude 19.35°N and longitude 57.7°E during the mid-night of 15th Oct.
- **Depression over southwest Bay of Bengal (15th – 17th Oct, 2024)**: A **Low Pressure Area** formed over southeast Bay of Bengal in the early morning of the 14th Oct. It became **Well-Marked Low Pressure Area** over central parts of south Bay of Bengal in the early morning of 15th Oct and intensified in to a **Depression** over southwest Bay of Bengal in the same evening. Under its influence, **extremely Heavy Rainfall** observed at isolated places over north coastal Tamil Nadu and Rayalaseema and **Very Heavy Rainfall** observed at isolated places over Coastal Andhra Pradesh on 16th Oct.
- **Very Heavy Rainfall** was recorded at isolated places over Sub-Himalayan West Bengal & Sikkim, and Tamil Nadu, Puducherry & Karaikal on 10th October; Konkan & Goa on 11th October; Kerala & Mahe, North Interior Karnataka on 12th October; Tamil Nadu, Puducherry & Karaikal on 12th – 15th October; Vidarbha on 14th October; East Madhya Pradesh on 15th October; Coastal Andhra Pradesh & Yanam on 15th and 16th October.

- **Minimum temperature** was above normal by 1-3°C over central and western parts of India during the week. **Maximum temperature** was below normal over south peninsula, northeastern and western parts of India during the week.
- **Temperature Scenario:** The highest maximum temperature of **39.6°C** had been recorded at **Sri Ganganagar (West Rajasthan)** on **16th Oct 2024** and the lowest minimum temperature of **15.4°C** had been recorded at **Delhi Ridge (Delhi)** on **15th Oct 2024** over the plains of the country during the week.
- **Analysis of weekly overall rainfall distribution during the week ending on 16th Oct and Post-monsoon Season's Rainfall Scenario (01st 16th, 2024):** The country as a whole, the weekly cumulative All India Rainfall in % departure from its long period average (LPA) is 43%. All India Seasonal cumulative rainfall % departure during this year's post-monsoon Season's Rainfall (01-16 Oct 2024) is -3%. 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 I & II respectively.

Table 1: Rainfall status (Week and season)

Region	WEEK			SEASON		
	10.10.2024 TO 16.10.2024			01.10.2024 TO 16.10.2024		
	Actual	Normal	% Dep	Actual	Normal	% Dep
East & northeast India	26.2	26.8	-2%	97.2	85.9	13%
Northwest India	1.6	5.8	-73%	4.1	14.6	-72%
Central India	21.2	13.0	+63%	28.6	40.6	-30%
South Peninsula	61.5	32.1	+92%	103.8	83.3	+25%
Country as a whole	23.9	16.7	+43%	46.8	48.2	-3%

2. Large scale features

- Currently, neutral El Nino-Southern Oscillation (ENSO) conditions are observed over the equatorial Pacific Ocean with below average sea surface temperatures in the east equatorial Pacific Ocean. The probability forecast indicates a higher chance of development of La Niña conditions during Post-Monsoon season, 2024.
- Above-average sea surface temperatures (SSTs) are currently seen across most of the Indian Ocean. Currently, neutral Indian Ocean Dipole (IOD) conditions prevail over the Indian Ocean. The latest MMCFS forecast indicates that the neutral IOD conditions are likely

to continue during post-monsoon season, 2024. Presently, neutral Indian Ocean Dipole (IOD) conditions are prevailing over the Indian Ocean. The climate models forecast indicates that these neutral IOD conditions are likely to continue until the end of the monsoon season.

- The Madden Julian Oscillation (MJO) index is currently in Phase 3 with amplitude close to 1. According to the forecasts by various models, it is likely to propagate eastward through phases 3 and 4 during the first week with rapid changes in amplitude (decrease and increase thereafter) during the first week. Subsequently, the MJO is likely to move eastward in phase 5 and enter into phase 6 at the end of the second week, .

3. Forecast for next two week

Weather systems & associated Precipitation during Week 1 (17 to 23 October, 2024) and Week 2 (24 to 30 October, 2024)

Salient features:

- A Depression is likely to form over Central Bay of Bengal around 24th Oct and it would be 3rd depression in the months of October 2024.
- Under its influence, Isolated heavy to very heavy with isolated extremally heavy rainfall likely to occur at isolated places over Gangetic West Bengal and Odisha during 1st half of the week 2. Due to such rains, there could be landslide chances over Hilly areas in this region and Flooding over the low-lying areas. Also, there are chances of urban flooding over coastal cities, riverine floodings in the east flowing rivers of Odisha and West Bengal.
- No rapid fall in temperature over North West India during next week.
- A WD is likely impact WHR and adjoining planes with a light isolated rain/ Snow during first half of the week 2 (24-31 Oct).

Weather systems & associated Precipitation during Week 1 (17 to 23 October, 2024)

Weather Systems:

- ❖ A well marked low pressure area lay over south coastal Andhra Pradesh & adjoining North coastal Tamil Nadu with associated cyclonic circulation extending upto extending upto middle tropospheric levels at 0830 hours IST of today. It is likely to move west-northwestwards and weaken into a low pressure area during next 06 hours.

- ❖ A fresh **upper air cyclonic circulation** very likely to form over North Andaman Sea around 20th October. Under its influence, a low pressure area likely to form over Central Bay of Bengal around 22nd October, thereafter, it is likely to move northwestwards and intensify further into a Depression around 24th October, 2024.

Forecast & Warnings:

South Peninsular India

- ✓ Fairly widespread to widespread light to moderate rainfall very likely over Kerala & Mahe, Lakshadweep, Karnataka; Scattered to Fairly widespread light to moderate rainfall over Tamil Nadu, Puducherry & Karaikal, Coastal Andhra Pradesh & Yanam, Rayalaseema, Telangana during the week.
- ✓ **Isolated heavy rainfall** very likely over Tamil Nadu, Puducherry & Karaikal on 18th, 20th & 21st; South Interior Karnataka during 17th - 22nd; Kerala & Mahe on 17th, 22nd & 23rd; Coastal Andhra Pradesh & Yanam, Rayalaseema, Coastal & North Interior Karnataka on 17th October.

West India

- ✓ Scattered to Fairly widespread light to moderate rainfall very likely over Konkan & Goa, Madhya Maharashtra during next 5 days and isolated to scattered light to moderate rainfall during subsequent 2 days over the same region; Isolated to Scattered light to moderate rainfall over Marathwada, Gujarat State next 5 days and isolated light to moderate rainfall during subsequent 2 days over the same region;
- ✓ **Isolated heavy rainfall** very likely over Konkan & Goa and Madhya Maharashtra on 17th; Saurashtra & Kutch on 20th & 21st; Gujarat Region on 19th & 20th October.

Northwest, East, Central & Northeast India:

- ✓ No significant rainfall likely over these regions during the week.
- ❖ **Overall, rainfall is likely to be normal to above normal over most parts of central, East and south Peninsular India; below normal over rest parts of the country during the week.**

Rainfall for week 2 (24 to 30 October, 2024):

- ❖ Due to likely formation of a low pressure area over Central Bay of Bengal around 22nd October and likely its northwestwards movement and intensification into a Depression around 24th October, 2024, scattered to fairly widespread rainfall with isolated heavy falls likely over east & adjoining northeast India during 1st half of the week.
- ❖ A western disturbance is likely to cause scattered to fairly widespread rainfall/snowfall over Western Himalayan Region and light isolated rainfall over adjoining plains during 1st half of the week.
- ❖ Overall, rainfall is likely to be normal to above normal east & northeast India; near normal over northwest India and below normal over remaining 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

Withdrawal of Southwest Monsoon 2024

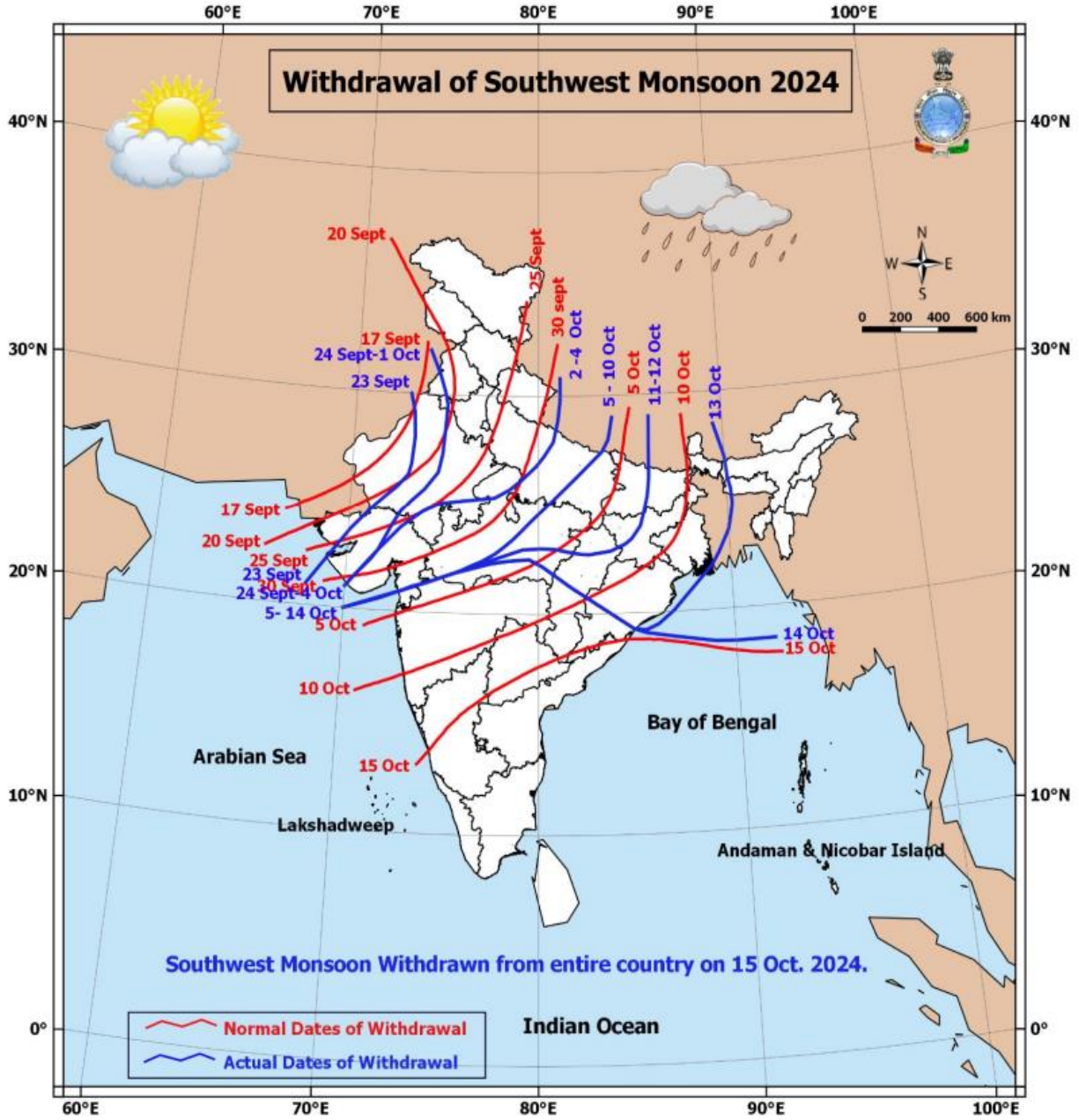


Fig. 1: Withdrawal Map of Southwest Monsoon 2024





SUBDIVISION RAINFALL MAP

Period: 01-10-2024 to 16-10-2024



Legend

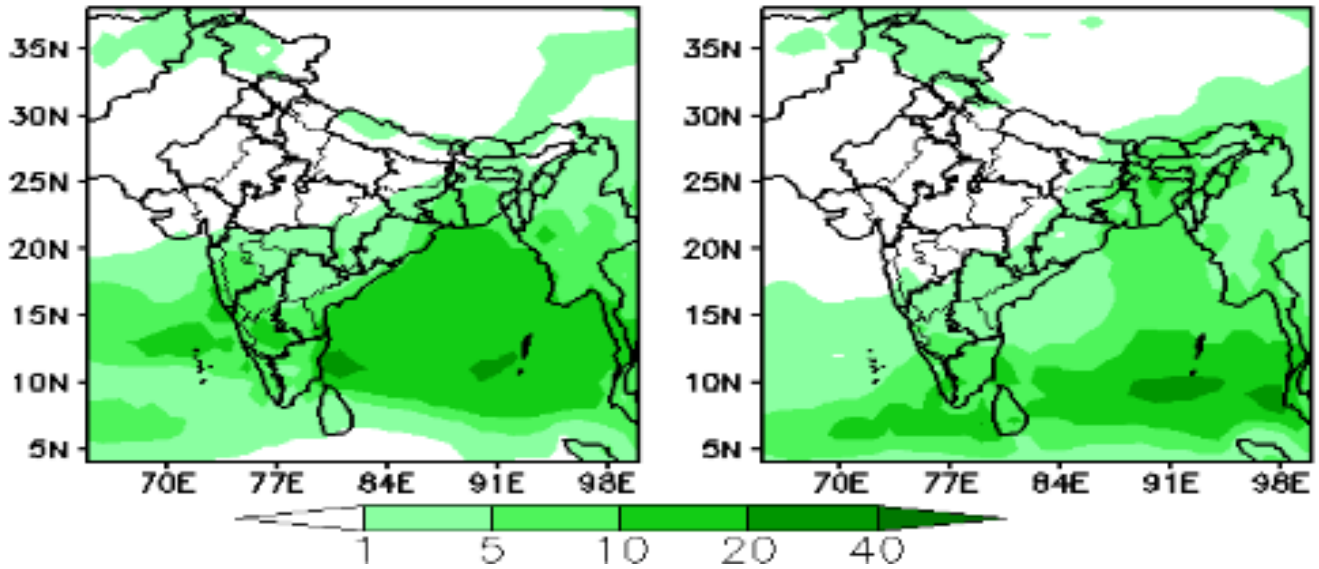
■ Large Excess [60% or more]
 ■ Excess [20% to 59%]
 ■ Normal [-19% to 19%]
 ■ Deficient [-69% to -20%]
 ■ Large Deficient [-99% to -60%]
 ■ No Rain [-100%]
 ■ No Data

Forecast Rainfall (mm/day)

(00Z=0530 hrs IST)

(Week1:00Z17Oct-00Z24Oct)

(Week2:00Z24Oct-00Z31Oct)

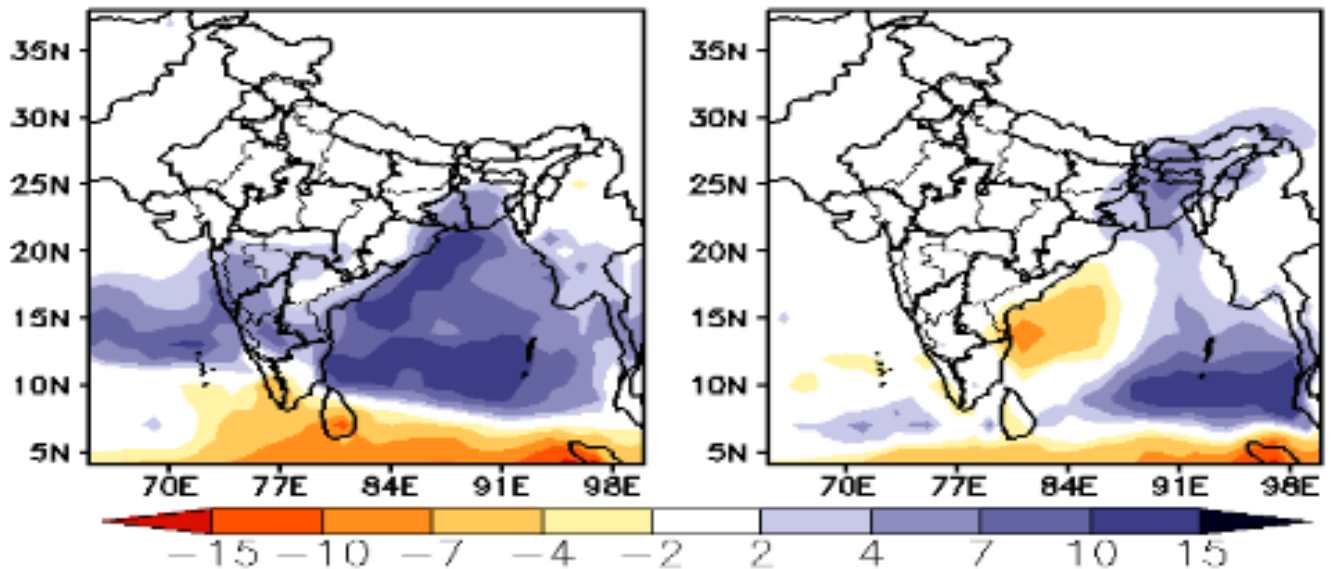


Forecast Rainfall Anomaly (mm/day)

(00Z=0530 hrs IST)

(Week1:00Z17Oct-00Z24Oct)

(Week2:00Z24Oct-00Z31Oct)



Extended range forecast of weekly distribution of rainfall in mm per day (top panel) and anomalies (lower panel) from IMD MME