



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

Press: Dated: 28 Sept, 2023

**Subject: Current Weather Status and Extended range Forecast for next two weeks
(28 Sept-11 Oct 2023)**

1. Salient Observed Features for week ending 27 Sept 2023

- As predicted, Southwest Monsoon has withdrawn from parts of southwest Rajasthan on 25th September, 2023 against its normal date of withdrawal from southwest Rajasthan of 17th September. The line of withdrawal of Southwest Monsoon passes through 28.3°N/72.0°E, Nokhra, Jodhpur, Barmer, 25.7°N/70.3°E on 25 Sept 2023(Fig 1).
- However, active monsoon conditions prevailed over most parts of east and adjoining parts of northeast India including Bihar, East central India, Maharashtra, south Gujarat and northern parts of peninsular India during many days in the week. It was mainly due to very slow movement of remnants of last Week's Low pressure area as cyclonic circulation extended upto mid-tropospheric levels, from west Jharkhand & neighbourhood, to East Uttar Pradesh & adjoining Bihar during 21-28 Sept. Isolated Heavy to very heavy rainfall also recorded over most of these states during the period and Bihar has received also Extremely heavy rainfall at isolated places also reported over Bihar on two days during 23-25 Sept.
- **Analysis of Weekly overall Rainfall distribution during the week ending on 27 Sept 2023 and monsoon Season's Rainfall Scenario (1 June-27 Sept 2023):** 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 27 Sept 2023 was +32%, over south Peninsula, it was 18%, central India as +71% while over northwest India had -39% and east & northeast India had got 38%. All India Seasonal cumulative rainfall % departure during this year's **monsoon Season's Rainfall** during **1 June to**

27 Sept 2023 is -6% and over northwest India, it is 0%. 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)

Region	WEEK			SEASON		
	21.09.2023 TO 27.09.2023			01.06.2023 TO 27.09.2023		
	Actual	Normal	% Dep	Actual	Normal	% Dep
EAST & NORTH-EAST INDIA	94.4	68.5	+38%	1103.6	1347	-18%
NORTH-WEST INDIA	11.2	18.2	-39%	592.2	583.9	+1%
CENTRAL INDIA	58.2	34	+71%	967.8	967.9	0%
SOUTH PENINSULA	45.4	38.5	+18%	636.2	699.5	-9%
Country as a whole	47	35.5	+32%	808.8	857.5	-6%

2. Large scale features

- Currently, weak El Niño conditions are prevailing over the equatorial Pacific region. The latest forecast of MMCFS and other global model forecasts indicate that the El Niño conditions are likely to further intensity and continue up to early next year.
- In addition to ENSO conditions over Pacific, other factors such as the Indian Ocean Sea Surface Temperatures (SSTs) also have some influence on Indian monsoon. At present the border line positive IOD conditions are prevailing over the Indian Ocean and the latest MMCFS and other global model forecast indicate positive IOD conditions are likely to strengthen during the upcoming months.
- Most of the models are indicating that currently, MJO is in phase 5 with amplitude > 1. It would move to phase 6 by middle of the week 1 and thereafter, it is likely to move in to phase 7 by middle of the

week 2 with amplitude continue to remain more than 1. It will remain in Phase 7 till end of the week 2. Thus, MJO is conducive for enhancement of convective activity over the Bay of Bengal (BoB) during for week 1.

3. Forecast for next two week

Forecast for next two week

Weather systems & associated Precipitation during Week 1 (28 September to 04 October, 2023) and Week 2 (05 to 11 October, 2023)

Weather systems & associated Precipitation during Week 1 (28 September to 04 October, 2023)

Withdrawal of Southwest Monsoon:

- ❖ Conditions are becoming favourable for further withdrawal of Southwest Monsoon from some more parts of Northwest and adjoining Westcentral India during next 2-3 days.
- ❖ The line of withdrawal of Southwest Monsoon continues to pass through 28.3°N/72.0°E, Nokhra, Jodhpur, Barmer and 25.7°N/70.3°E.

Significant Weather features:

- ❖ A cyclonic circulation lies over north Coastal Karnataka and another cyclonic circulation lies over north Madhya Maharashtra in lower tropospheric levels.
- ❖ A Shear Zone runs roughly 15°N in lower & middle tropospheric levels.
- ❖ A cyclonic circulation lies over Myanmar & adjoining Eastcentral Bay of Bengal and extends upto middle tropospheric levels. Under its influence, **a low pressure area** is likely to form over Eastcentral & adjoining Northeast Bay of Bengal during next 24 hours. Thereafter, it is likely to become **Well Marked Low Pressure area** and move northwestwards towards North Odisha & adjoining West Bengal coasts during subsequent 48 hours.
- ❖ **Overall monsoon rainfall is likely to be above normal over India as a whole.**

Weather Forecast and Warning for remaining parts of the country:

East India: Light/moderate fairly widespread to widespread rainfall/thunderstorm & lightning with **isolated heavy rainfall** very likely over Andaman & Nicobar Islands during 28th September to 01st October; Odisha on 29th September to 04th October; Gangetic West

Bengal on 29th & 30th and Jharkhand during 30th September to 04nd October and Bihar during 02nd to 04th October.

Isolated very heavy rainfall is very likely over Andaman & Nicobar Islands during 28th to 30th September; Odisha on 01st & 2nd October. Squally weather with wind speed reach 45-55 gusting to 65 likely over Andaman Islands during 28th September to 01st October, 2023.

Light to moderate scattered to fairly widespread rainfall is very likely over the region during rest days of the week.

Central India: Light/moderate fairly widespread to widespread rainfall/thunderstorm & lightning with isolated **heavy rainfall** very likely over Chhattisgarh during 30th September to 03rd October.

Light isolated/scattered rainfall is very likely over the region during rest days of the week.

Northwest India Light isolated/scattered rainfall is very likely over the region during rest days of the week. No significant rainfall likely over the region during rest days of the week.

West India: Light/moderate fairly widespread to widespread rainfall/thunderstorm & lightning with **isolated heavy rainfall** very likely over Konkan-Goa during 28th September to 01st October; Madhya Maharashtra during 28th-30th September.

Isolated very heavy rainfall is very likely over Konkan -Goa during 28th to 30th and Madhya Maharashtra on 29th September.

Light to moderate isolated to scattered rainfall is very likely over the region during rest days of the week except Gujarat State, where dry weather is likely during 2nd half of the week.

South India: Light/moderate fairly widespread to widespread rainfall with isolated **heavy rainfall** very likely over ghat areas of Tamil Nadu during 28th-29th; Coastal Karnataka during 28th September-01st October; Kerala & Mahe during 28th September to 01st October and Interior Karnataka during 28th to 29th September.

Isolated very heavy rainfall is very likely over Coastal Karnataka on 29th & 30th September.

Light to moderate scattered/fairly widespread rainfall is very likely over the region during rest days of the week.

Northeast India: Light/moderate fairly widespread to widespread rainfall/thunderstorm & lightning with **isolated heavy rainfall** very likely over Nagaland, Manipur, Mizoram & Tripura

on 28th & 29th; over Assam & Meghalaya 01st to 04th October and over Arunachal Pradesh on 03rd & 04th October.

Light to moderate scattered to fairly widespread rainfall is very likely over the region during rest days of the week.

On further Withdrawal of Southwest Monsoon and Rainfall for week 2 (05 to 11 October, 2023):

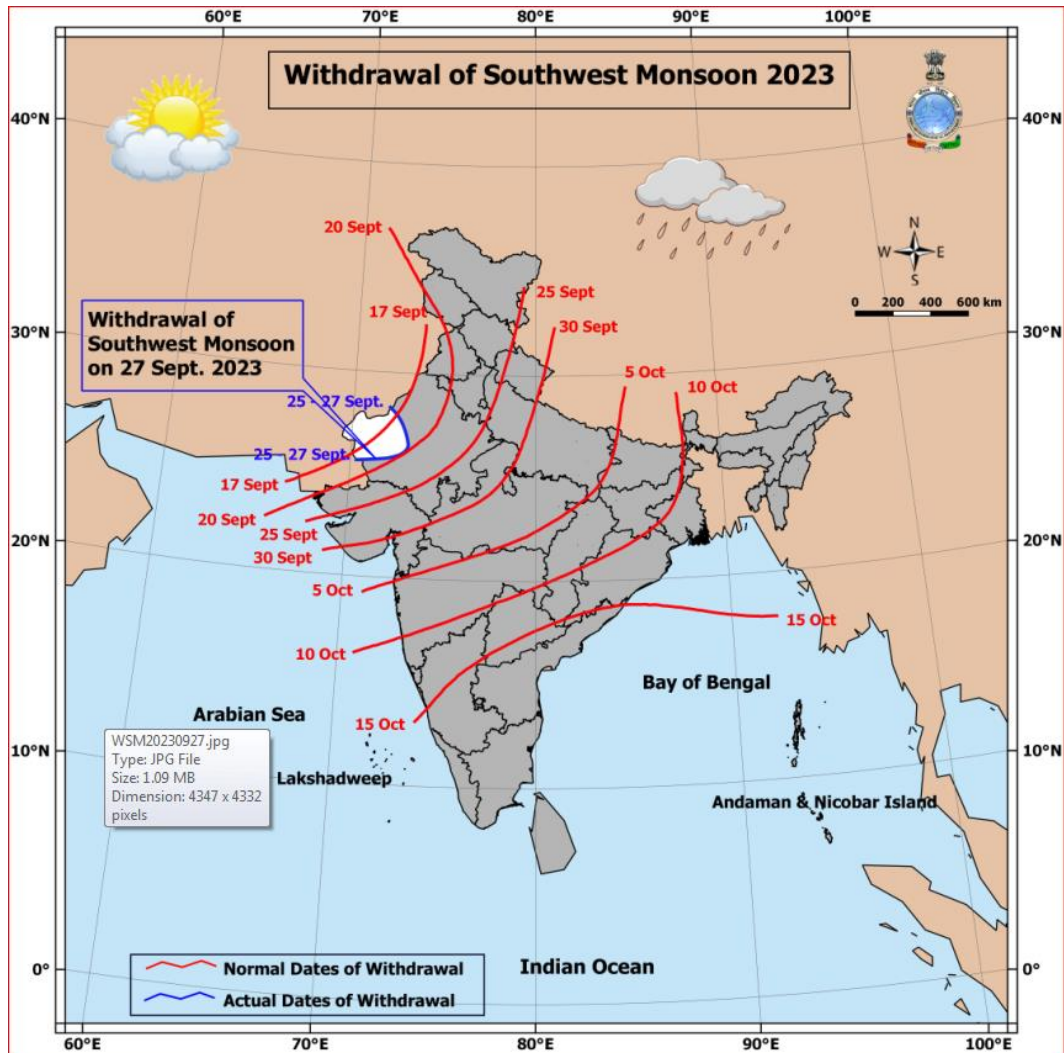
- **Conditions Likely to become further favorable for further withdrawal of Southwest Monsoon from Gujarat, some parts of Maharashtra, Some more parts of central India during the 1st half of the week.**
- ✓ Light to moderate fairly widespread to widespread rainfall activity with **isolated heavy to very heavy falls** are likely over most parts of central, east & northeast India during the week.
- ✓ Rainfall activity is likely to be **above normal** over central, east & northeast India; normal to above normal over south Peninsular India and below normal over most parts of northwest India during the week.

Overall, above normal rainfall activity is likely over country as a whole during week2.

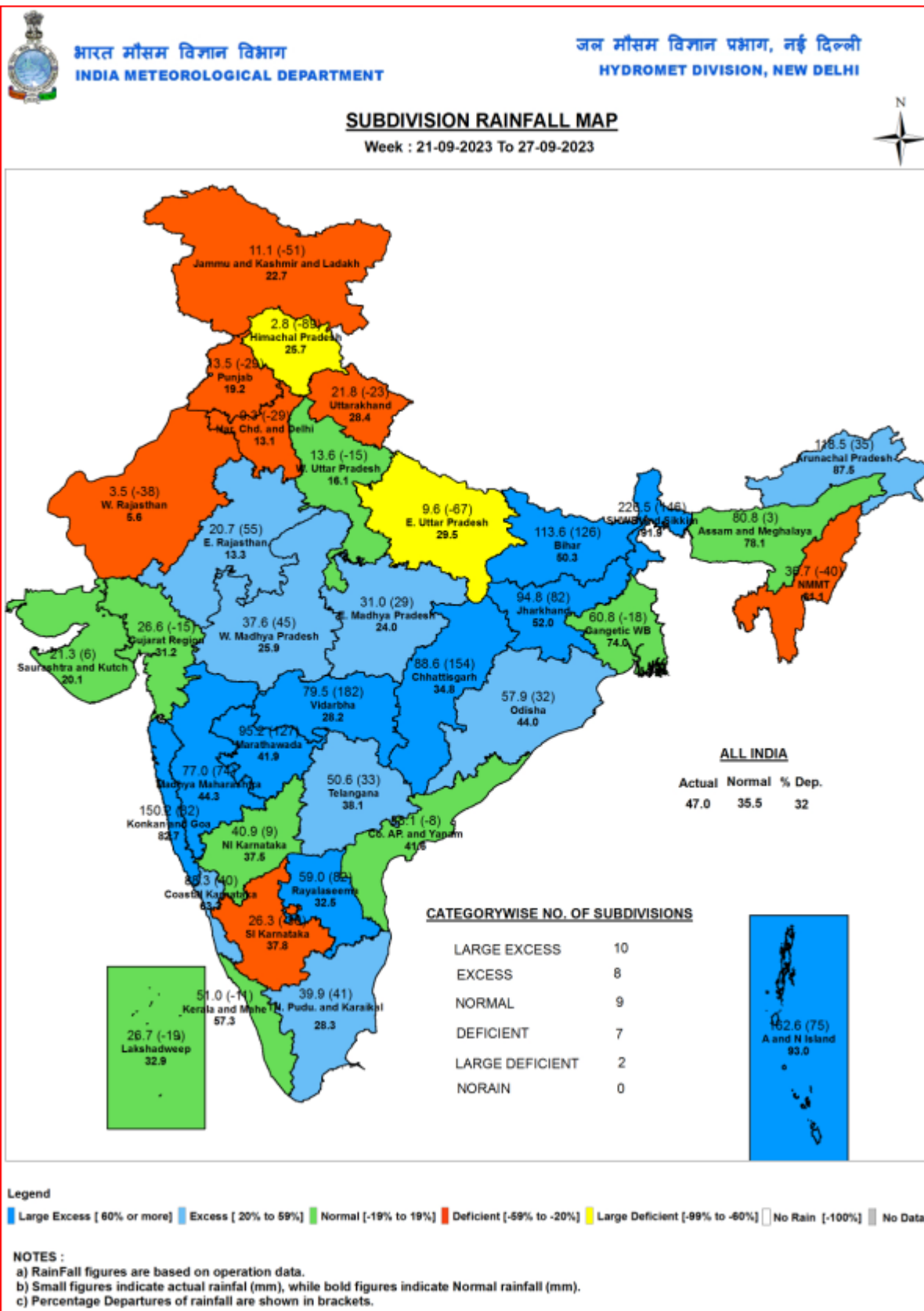
Legends: Heavy Rain: 64.5 to 115.5 mm Very Heavy Rain: 115.6 to 204.4 mm, Extremely Heavy Rain> 204.4 mm

The line of withdrawal of Southwest Monsoon

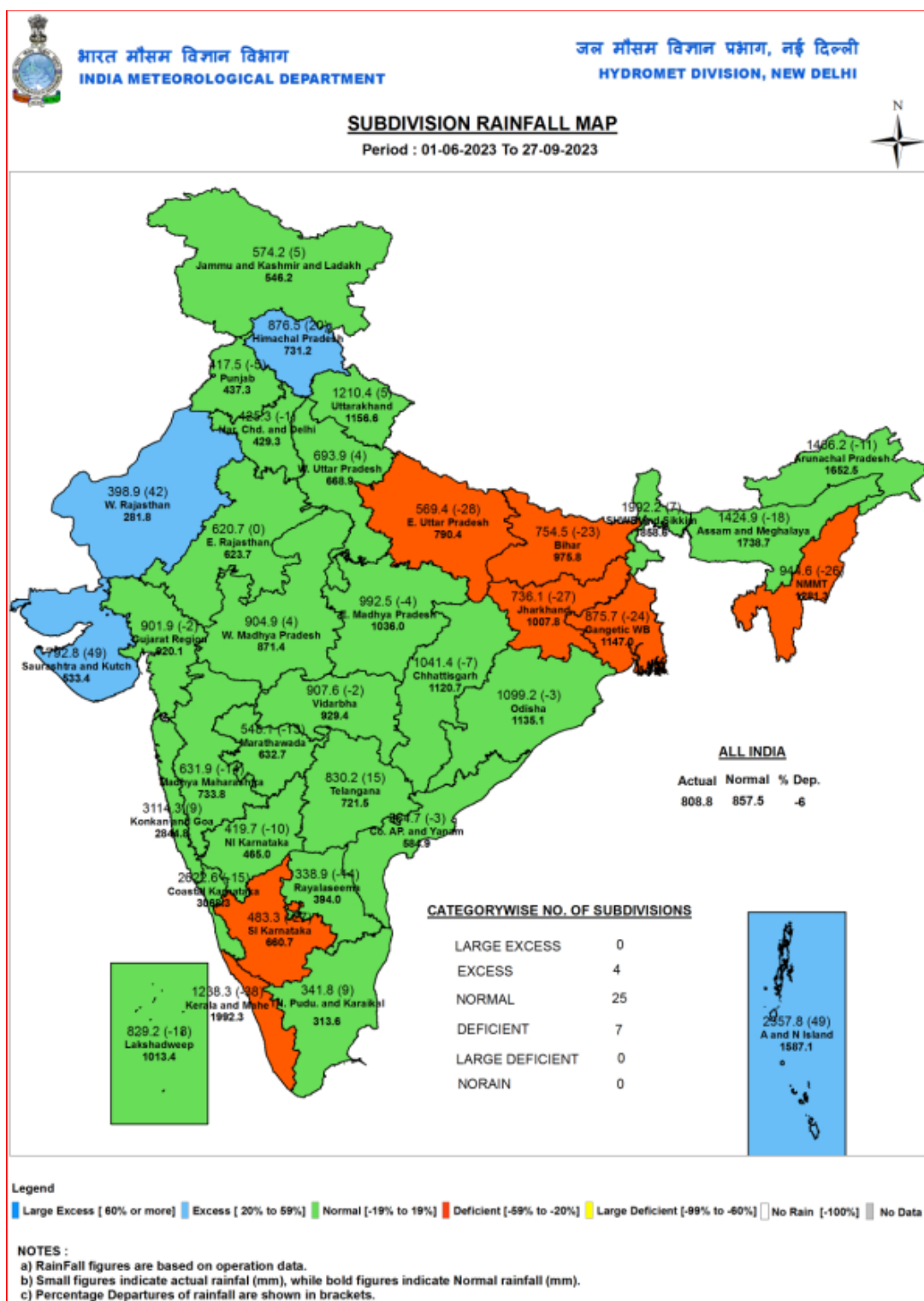
Fig-1



Annex: I



Annex II

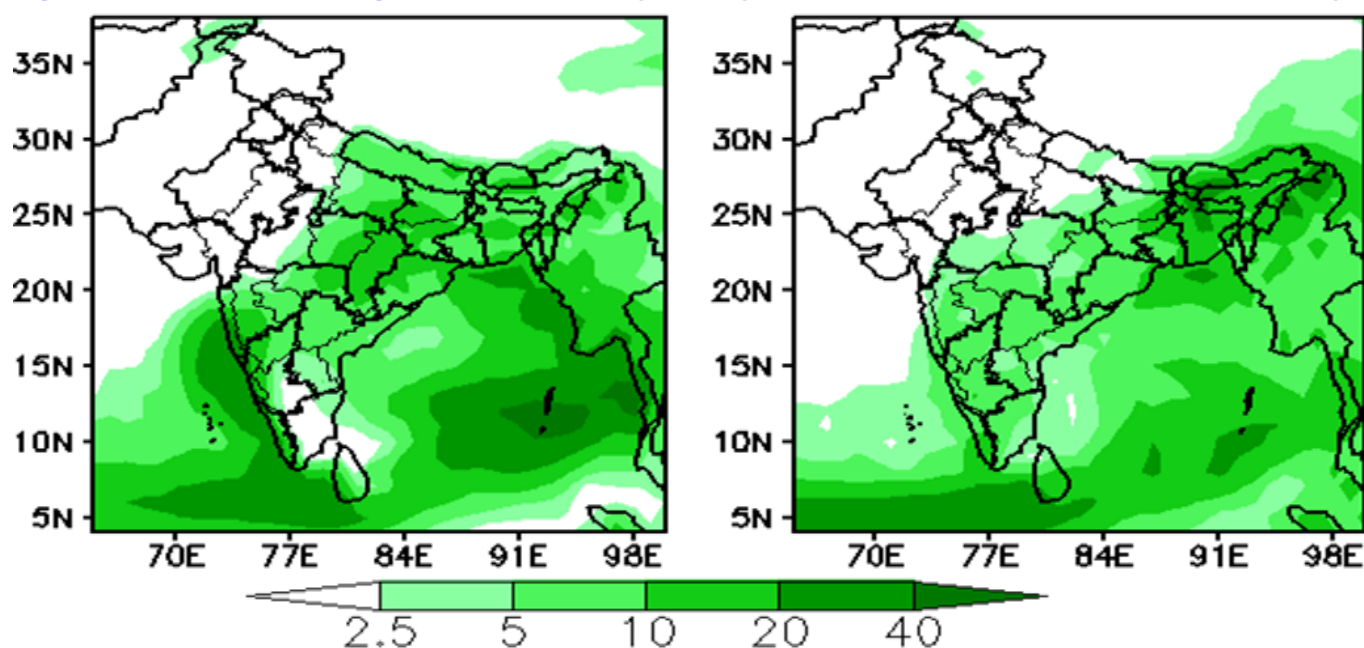


Forecast Rainfall (mm/day)

(00Z=0530 hrs IST)

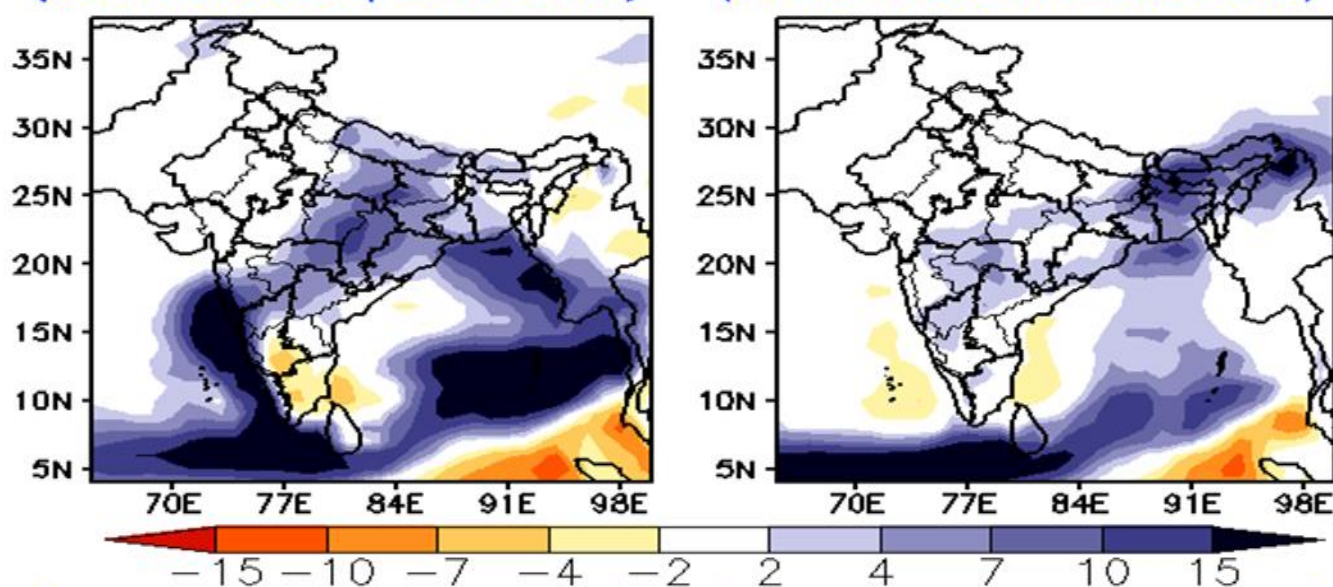
(Week1:00Z28Sep–00Z05Oct)

(Week2:00Z05Oct–00Z12Oct)

**Forecast Rainfall Anomaly (mm/day)** (00Z=0530 hrs IST)

(Week1:00Z28Sep–00Z05Oct)

(Week2:00Z05Oct–00Z12Oct)



Extended range forecast of weekly dsitirubtion of rainfall in mm per day (top panel) and anomalies(lower panesl) from IMD MME for [Week 1 \(28 September to 05 October, 2023\)](#) and [Week 2 \(05 to 12 October, 2023\)](#)