



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

Press: Dated: 12 Oct, 2023

**Subject: Current Weather Status and Extended range Forecast for next two weeks
(12-24 Oct 2023)**

1. Salient Observed Features for week ending 11 Oct 2023

- Last week's low pressure area and its Remnant as a lower level cyclonic circulation, moved very slowly north-northeastwards from Gangetic West Bengal & neighbourhood to Sub-Himalayan West Bengal & adjoining Bangladesh during 5-11 Oct, which caused stronger moisture convergence over northeastern states of India and nearby areas and it caused rainfall at many places over these areas during most dates in the week. Isolated Heavy to very heavy rainfall continued mainly over Assam & Meghalaya during 5-10 Oct. Isolated heavy rainfall also observed over West Bengal & Sikkim on 5, 8 and 9th Oct. Heavy to very heavy rainfall at a few places with extremely heavy falls at isolated places also observed over Meghalaya on 2 days on 7 and 8 Oct.
- Further Withdrawal of Southwest Monsoon from remaining parts of Northwest India; most parts of Central India & Maharashtra and some parts of East & north Peninsular India during the week(Fig.1).
- **Analysis of Weekly overall Rainfall distribution during the week ending on 11 Oct 2023 and Season's Rainfall Scenario (1 Oct-11 Oct 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 11 Oct 2023 was -41%, over south Peninsula, it was -68%, central India as -93% while over northwest India had -30% and east & northeast India had got 28%. All India Seasonal cumulative rainfall % departure during 1 Oct to 1 Oct 2023 is -6%, it was -56% over south peninsular India, -

34 % over central India, -8%. over northwest India and 78 % over east & northeast India. 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		
	05.10.2023 TO 11.10.2023			01.10.2023 TO 11.10.2023		
	Actual	Normal	% Dep	Actual	Normal	% Dep
EAST & NORTH-EAST INDIA	56.7	44.2	28%	122.1	68.5	78%
NORTH-WEST INDIA	4.8	6.9	-30%	9.9	10.8	-8%
CENTRAL INDIA	1.4	18.7	-93%	21	32	-34%
SOUTH PENINSULA	11.5	36.1	-68%	26.6	60.8	-56%
COUNTRY AS A WHOLE	13.2	22.5	-41%	34.8	36.9	-6%

2. Large scale features

- Currently, El Niño conditions are prevailing over the equatorial Pacific region. The latest MMCFS forecast indicates that the El Niño conditions are likely to continue during the upcoming season. Other climate models are also indicating the continuation of El Niño conditions during the upcoming season.
- In addition to El Nino-Southern Oscillation (ENSO) conditions over the Pacific, other factors such as

the Indian Ocean SSTs have also some influence on the northeast monsoon. Currently, the Indian Ocean is experiencing positive Indian Ocean Dipole (IOD) conditions, which began in August 2023. The latest MMCFS forecast indicates that the positive IOD conditions are likely to weaken by the end of the year.

- Most of the models are indicating that MJO is currently in phase 1 with amplitude more than 1 and would continue in same phase during week 1. As per GEFS and ECMWF, it would slow down and move across phase 1 with amplitude becoming less than 1 during week 2. Thus, MJO is not likely to support enhancement of convective activity over North Indian Ocean (NIO) including the Bay of Bengal (BoB) and the Arabian Sea (AS) during entire forecast period.

3. Forecast for next two week

Weather systems & associated Precipitation during Week 1 (12 to 18 October, 2023) and Week 2 (19 to 25 October, 2023)

Weather systems & associated Precipitation during Week 1 (12 to 18 October, 2023)

Withdrawal of Southwest Monsoon:

- ❖ Conditions are favourable for further withdrawal of Southwest Monsoon from some more parts of Bihar, Jharkhand, Chhattisgarh; some parts of Gangetic West Bengal & Odisha; some more parts of Karnataka and remaining parts of Telangana, Maharashtra and Central Arabia Sea during next 2 days.

Significant Weather features:

- ❖ A cyclonic circulation lies over north Tamil Nadu & neighbourhood and a trough runs from this cyclonic circulation to Comorin area in lower tropospheric levels.
- ❖ A fresh Western Disturbance likely to affect Western Himalayan Region from 13th night and plains of northwest India from 14th October, 2023.

Weather warnings for next one week:

South India: Light to moderate rainfall at some places with isolated **heavy rainfall** accompanied with thunderstorm & lightning very likely over Coastal Karnataka on 12th October, over South Interior Karnataka on 12th & 16th & 17th October, over Tamil Nadu and Kerala on 12th, 13th, 16th & 17th October. Light to moderate isolated/scattered rainfall activity is likely over above region during rest days of the week. No significant rainfall likely over rest parts during the week.

Northwest India: Light to moderate rainfall at scattered to fairly widespread accompanied with isolated thunderstorm & lightning very likely over Jammu-Kashmir-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand during 14th-17th October

and over Punjab, Haryana, West Uttar Pradesh and East Rajasthan on 15th to 17th October.

Northeast India: Light to moderate scattered rainfall accompanied with thunderstorm & lightning very likely over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura on 12th October. **Heavy rainfall is** very likely at isolated places over Mizoram & Tripura today. Light isolated rainfall activity is likely over the region during rest days of the week.

East India: Light to moderate isolated/scattered rainfall at very likely over Sub-Himalayan West Bengal during next 5 days and dry weather thereafter. Light to moderate rainfall at many places is very likely over Andaman & Nicobar Islands during the week. No significant rainfall likely over rest parts during the week.

No significant weather over rest parts of the country during the week.

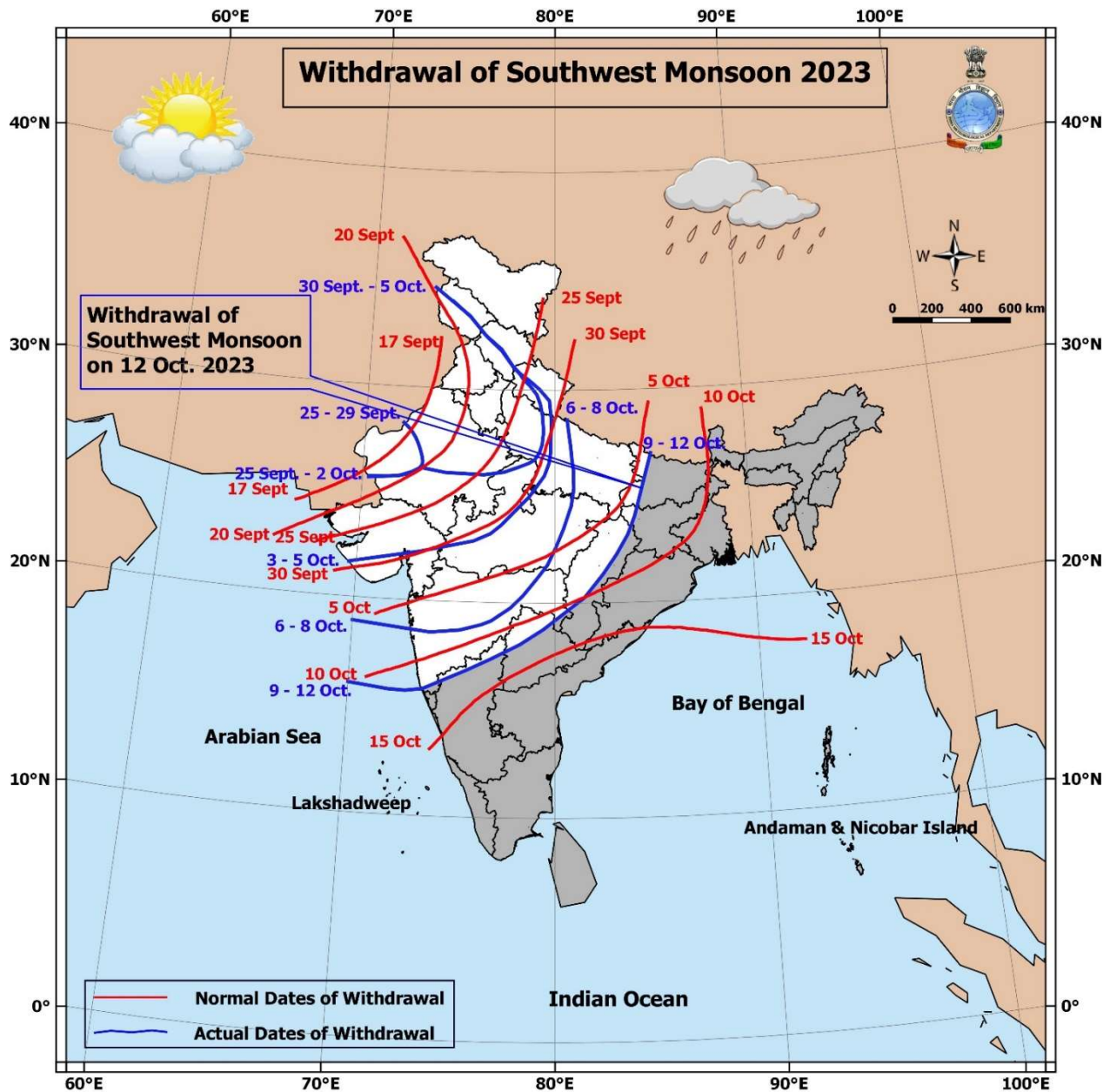
Rainfall for week 2 (19 to 25 October, 2023):

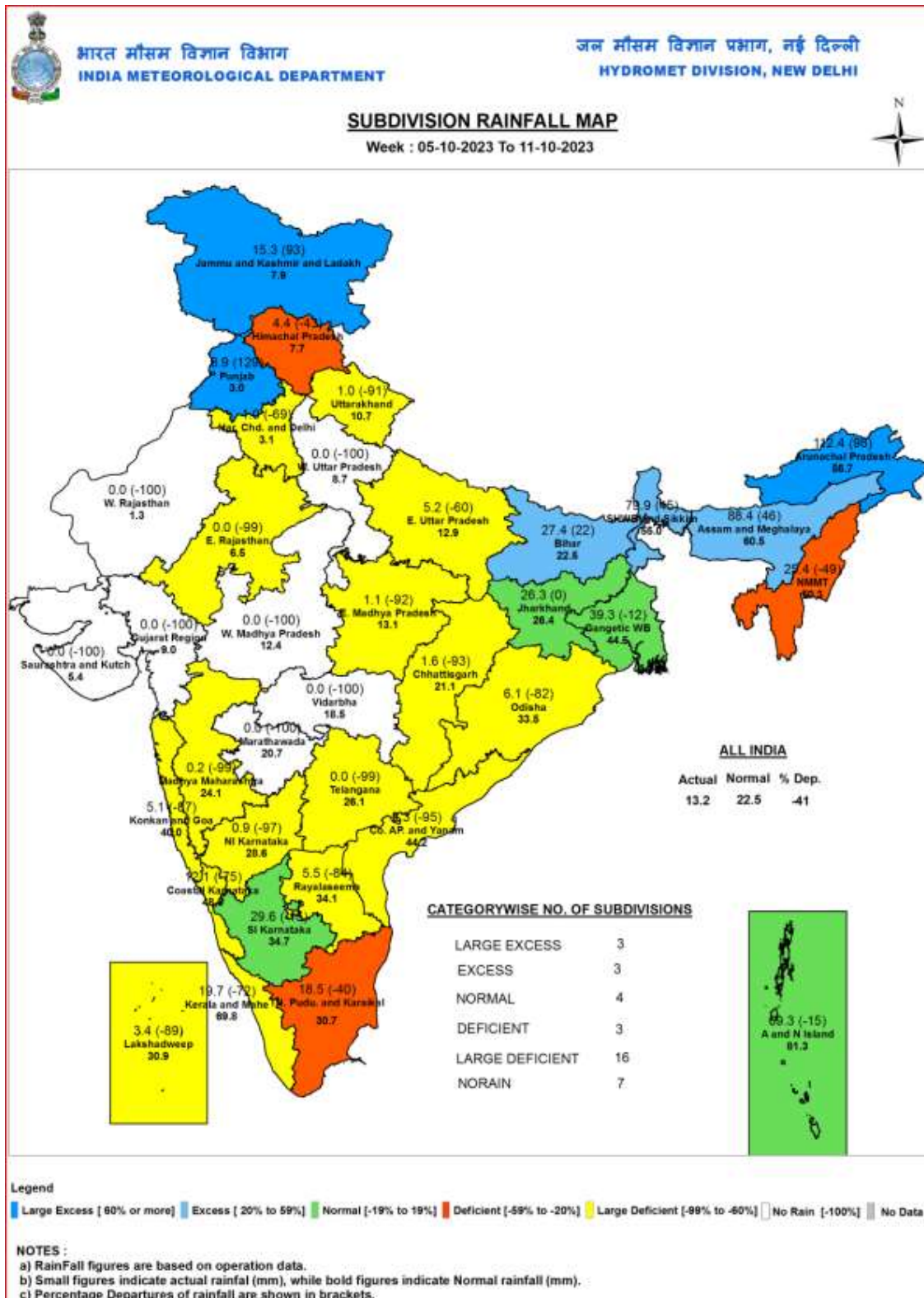
- ✓ No active Western Disturbance likely to affect Northwest India during the week.
- ✓ Due to easterly/northeasterly winds from Bay of Bengal to south Peninsular India, light to moderate scattered to fairly widespread rainfall activity with **isolated heavy falls** are likely over extreme south Peninsular India during some days of the week.
- ✓ Overall, rainfall activity is likely to be **normal to above normal** over extreme south Peninsular India, plains of northwest India, central & adjoining east India and below normal over northeast India during the week.
- ✓ **The Southwest Monsoon is likely to withdraw from the remaining parts of the country and Northeast Monsoon rains are likely to commence over Southeast Peninsular India during 2nd half of the week.**

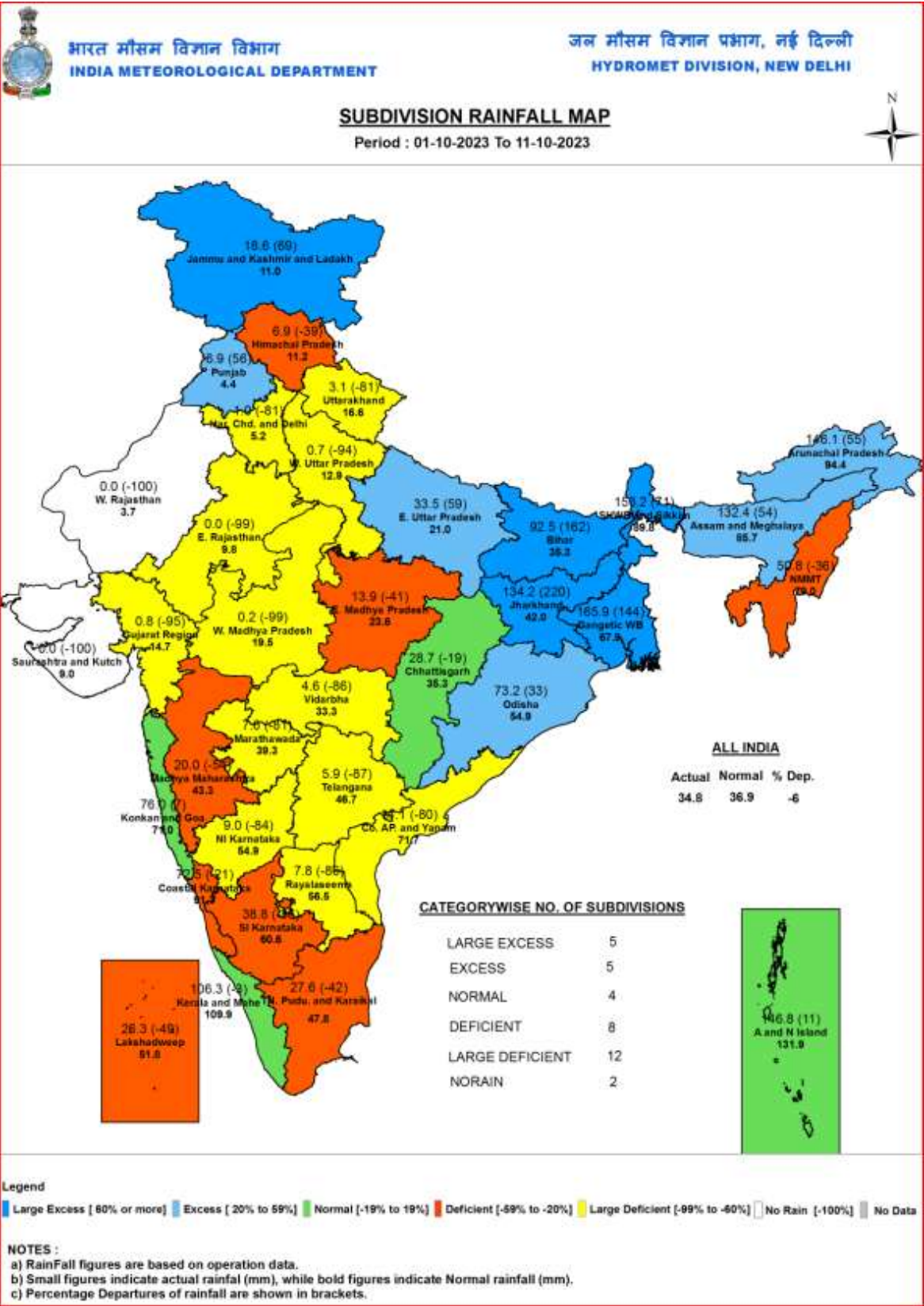
Legends: Heavy Rain: 64.5 to 115.5 mm Very Heavy Rain: 115.6 to 204.4 mm, Extremely Heavy Rain> 204.4 mm

The line of withdrawal of Southwest Monsoon

Fig-1





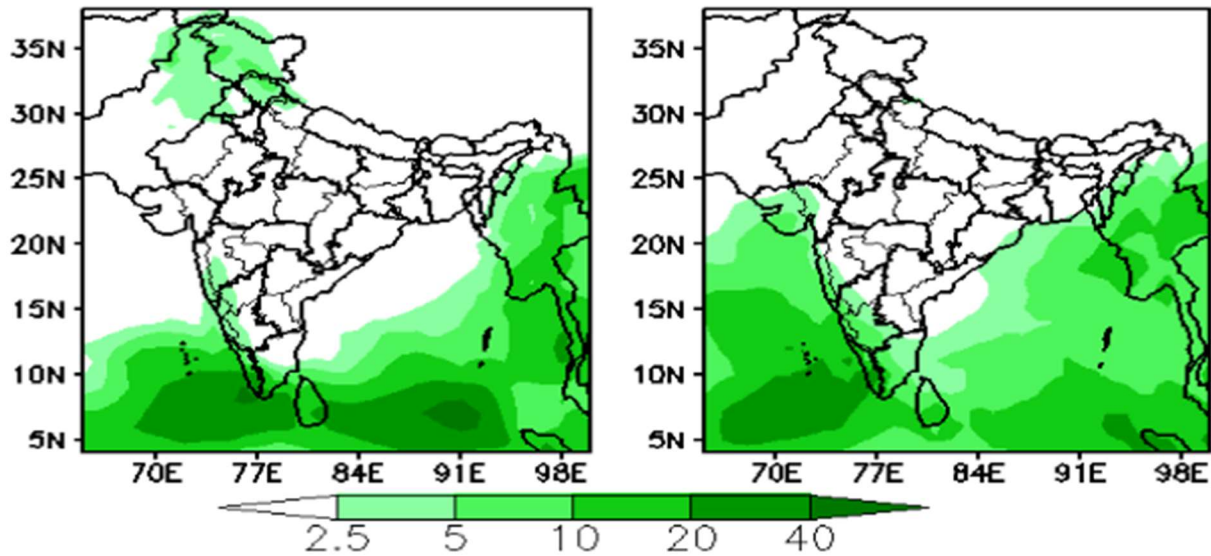


Forecast Rainfall (mm/day)

(00Z=0530 hrs IST)

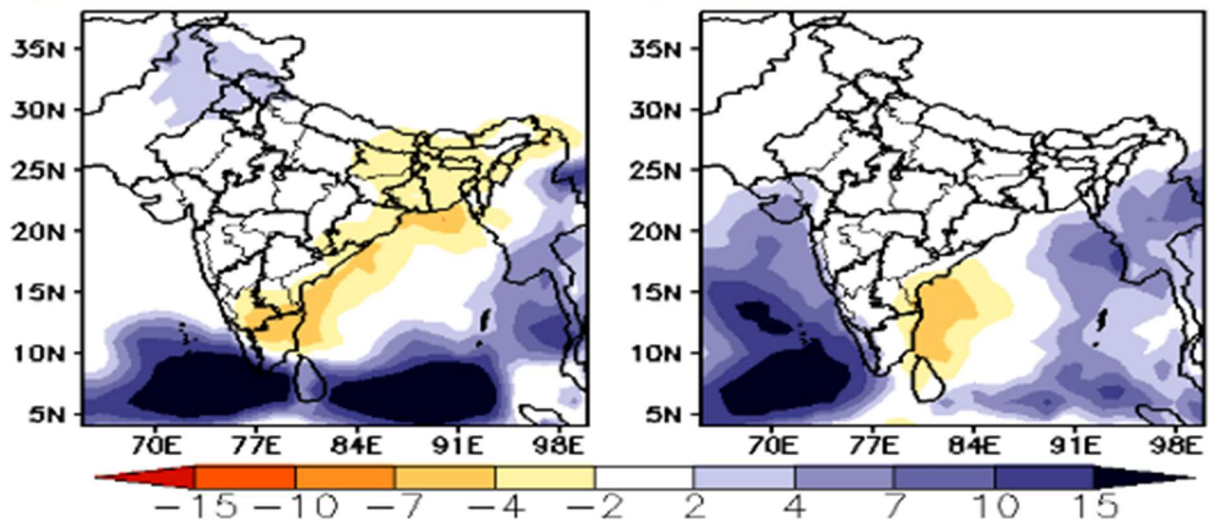
(Week1:00Z12Oct–00Z19Oct)

(Week2:00Z19Oct–00Z26Oct)

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

(Week1:00Z12Oct–00Z19Oct)

(Week2:00Z19Oct–00Z26Oct)



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