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

Press Release
Dated: 19 October, 2023

Subject: Current Weather Status and Extended Range Forecast for next two weeks (19 October-1 November 2023)

1. Salient Observed Features for week ending 18 Oct 2023

- Movement of an active Western Disturbance (WD) and under the influence of its induced cyclonic circulation in the lower tropospheric levels during 16-17 October, fairly widespread to widespread rainfall and thunderstorms activities reported over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Uttarakhand, Punjab, Himachal Pradesh, Haryana-Chandigarh-Delhi, West Uttar Pradesh. Season's 1st spell of Snowfall also reported over hills of western Himalayan States during the same period.
- Further Withdrawal of Southwest Monsoon from remaining parts of east central India & entire East and Northeast India and some more parts of north Peninsular India during the week (Fig.1).
- **Analysis of Weekly overall Rainfall distribution during the week ending on 18 October 2023 and Post monsoon Season's Rainfall Scenario (1-18 October 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 18 October 2023 was -26%; over south Peninsula, it was -36%; central India as -89% while over northwest India had +252% and east & northeast India had got -73%. All India Seasonal cumulative rainfall % departure during this year's **Post monsoon Season's Rainfall** during **1 October to 18 October 2023** is -12% and over northwest India, it is +84%. 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		
	12.10.2023 TO 18.10.2023			01.10.2023 TO 18.10.2023		
	Actual	Normal	% Dep	Actual	Normal	% Dep
EAST & NORTH-EAST INDIA	6.4	24	-73%	128.6	92.5	+39%
NORTH-WEST INDIA	20.8	5.9	+252%	30.7	16.7	+84%
CENTRAL INDIA	1.3	11.7	-89%	22.3	43.7	-49%
SOUTH PENINSULA	20.3	31.7	-36%	46.9	92.5	-49%
Country as a whole	11.8	15.9	-26%	46.7	52.8	-12%

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 it would move back to phase 8 by middle of week 1 with amplitude becoming less than 1 and then to phase 7 by end of week 1 with amplitude likely remain less than 1. Thereafter, it is likely to move to

Phase 8 during 2nd half of the 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 weeks

Weather systems & associated Precipitation during Week 1 (19 to 25 October, 2023) and Week 2 (26 October to 01 November, 2023)

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

Withdrawal of Southwest Monsoon and commencement of Northeast Monsoon:

- The Southwest Monsoon has withdrawn from the remaining parts of the country today, the 19th October 2023.
- With the setting in of Easterlies/Northeasterlies over southern peninsular India, northeast monsoon rainfall activity is likely to commence over southern peninsular region in the next 72 hours. However, the initial phase of the northeast monsoon in general is likely to be weak.

Significant Weather features:

- Yesterday's Low-Pressure Area over Southeast & adjoining Eastcentral Arabian Sea moved nearly westwards and lay over Southeast & adjoining Southwest Arabian Sea at 0830 hours IST of today, the 19th October, 2023. It is likely to move nearly west-northwestwards and become **Well Marked Low Pressure Area** over Southwest Arabian Sea during next 24hours and intensify into a **Depression** over Southwest & adjoining Westcentral Arabian Sea around 21st October.
- Yesterday's cyclonic circulation over southeast Bay of Bengal in lower tropospheric levels persisted over the same region. Under its influence a **Low-Pressure Area** is likely to form over central parts of Bay of Bengal by 21st morning. Thereafter, it is likely to intensify further into a **Depression** over Westcentral Bay of Bengal around 23rd October.
- A cyclonic circulation lies over Comorin area & neighbourhood in lower & middle tropospheric levels.

Weather warnings in association with the Low Pressure Area over Southeast & adjoining Eastcentral Arabian Sea:

(i) Wind warning:

- **Eastcentral Arabian Sea & Lakshadweep Area:** Squally weather with wind speed reaching 35-45 kmph gusting to 55 kmph is very likely to prevail on 19th October and decrease gradually thereafter.

- **Southeast Arabian Sea:** Squally weather with wind speed reaching 35-45 kmph gusting to 55 kmph is prevailing near the system and it is likely to increase becoming squally wind speed reaching 40-50 kmph gusting to 60 kmph on 20th October. It would decrease gradually thereafter.
- **Southwest Arabian Sea:** Squally wind speed reaching 35-45 kmph gusting to 55 kmph is prevailing near the system and it is likely to gradually increase becoming squally wind speed reaching 45-55 kmph gusting to 65 kmph on 20th and 50-60 kmph gusting to 70 kmph on 22nd & 23rd October.
- **Westcentral Arabian Sea:** Squally wind speed reaching 40-50 kmph gusting to 60 kmph is likely to prevail on 20th October. It is likely to gradually increase becoming 45-55 kmph gusting to 65 kmph on 21st and 50-60 kmph gusting to 70 kmph on 22nd & 23rd October.

(ii) Fishermen Warning:

Fishermen are advised not to venture into

- Eastcentral Arabian Sea & Lakshadweep Area on 19th October.
- Southeast Arabian Sea on 19th & 20th October.
- Southwest Arabian Sea from 19th to 23rd October.
- Westcentral Arabian Sea from 20th to 23rd October.

The Fishermen out at sea are advised to return to coast.

Weather warnings in association with the Cyclonic Circulation over southeast Bay of Bengal

(i) Wind warning:

- **Southwest and adjoining southeast Bay of Bengal:** Squally wind speed reaching 35-45 kmph gusting to 55 kmph is prevailing near the system and it is likely to gradually increase becoming squally wind speed reaching 45-55 kmph gusting to 65 kmph on 21st & 22nd and 50-60 kmph gusting to 70 kmph on 23rd October.
- **Westcentral Bay of Bengal:** Squally wind speed reaching 40-50 kmph gusting to 60 kmph is likely to prevail on 21st October. It is likely to gradually increase becoming 45-55 kmph gusting to 65 kmph on 22nd and 50-60 kmph gusting to 70 kmph on 23rd October.

(ii) Fishermen Warning:

Fishermen are advised not to venture into

- Southwest and adjoining southeast Bay of Bengal from 20th to 23rd October.
- Westcentral Bay of Bengal from 21st October onwards.

Rainfall forecast & warnings for next one week:

South India: Light to moderate isolated/scattered rainfall is very likely over most parts of Peninsular India during the week. Isolated heavy falls is also likely over Tamil Nadu and Kerala on 24th & 25th October, 2023.

Northwest India: Under the influence of a fresh Western Disturbance, light rainfall/snowfall is likely over Western Himalayan Region during 21st to 23rd and light rainfall over adjoining plains on 21st & 22nd October, 2023.

Northeast India: Light to moderate isolated/scattered rainfall accompanied with thunderstorm & lightning very likely over the region during 2nd half of the week.

East India: Light to moderate scattered to fairly widespread rainfall is very likely over Andaman & Nicobar Islands during the week and isolated/scattered rainfall over West Bengal and Odisha during 2nd half of the week.

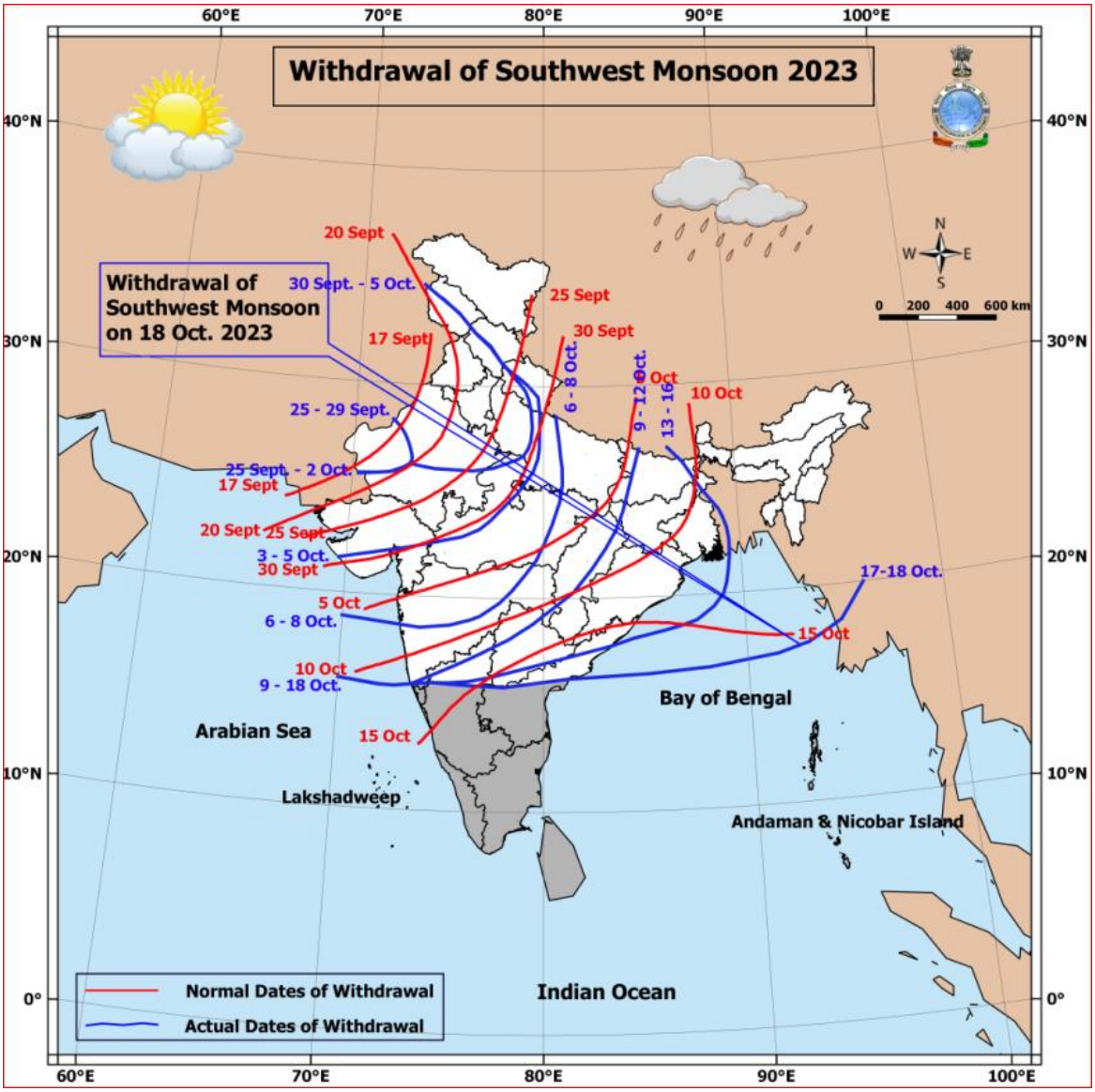
No significant weather over rest parts of the country during the week.

Rainfall for week 2 (26 October to 01 November, 2023):

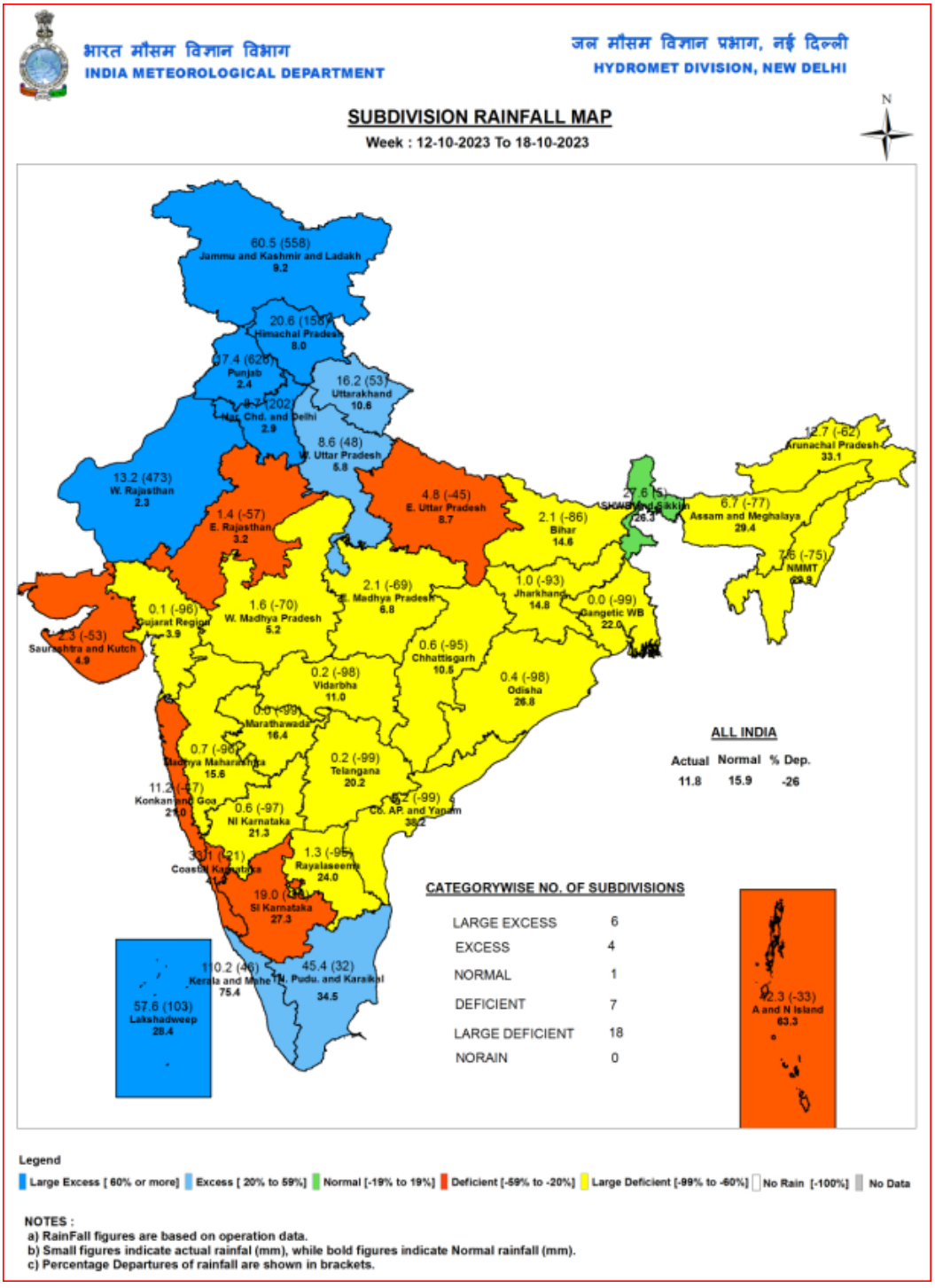
- ✓ Northeast monsoon is likely to be in active phase with light to moderate scattered to fairly widespread rainfall activity with **isolated heavy falls** are likely over south Peninsular India during many days of the week.
- ✓ No active Western Disturbance likely to affect Northwest India during the week.
- ✓ Overall, rainfall activity is likely to be **above normal** over south Peninsular India, near normal over parts of central India and below normal over rest parts of the country during the week.

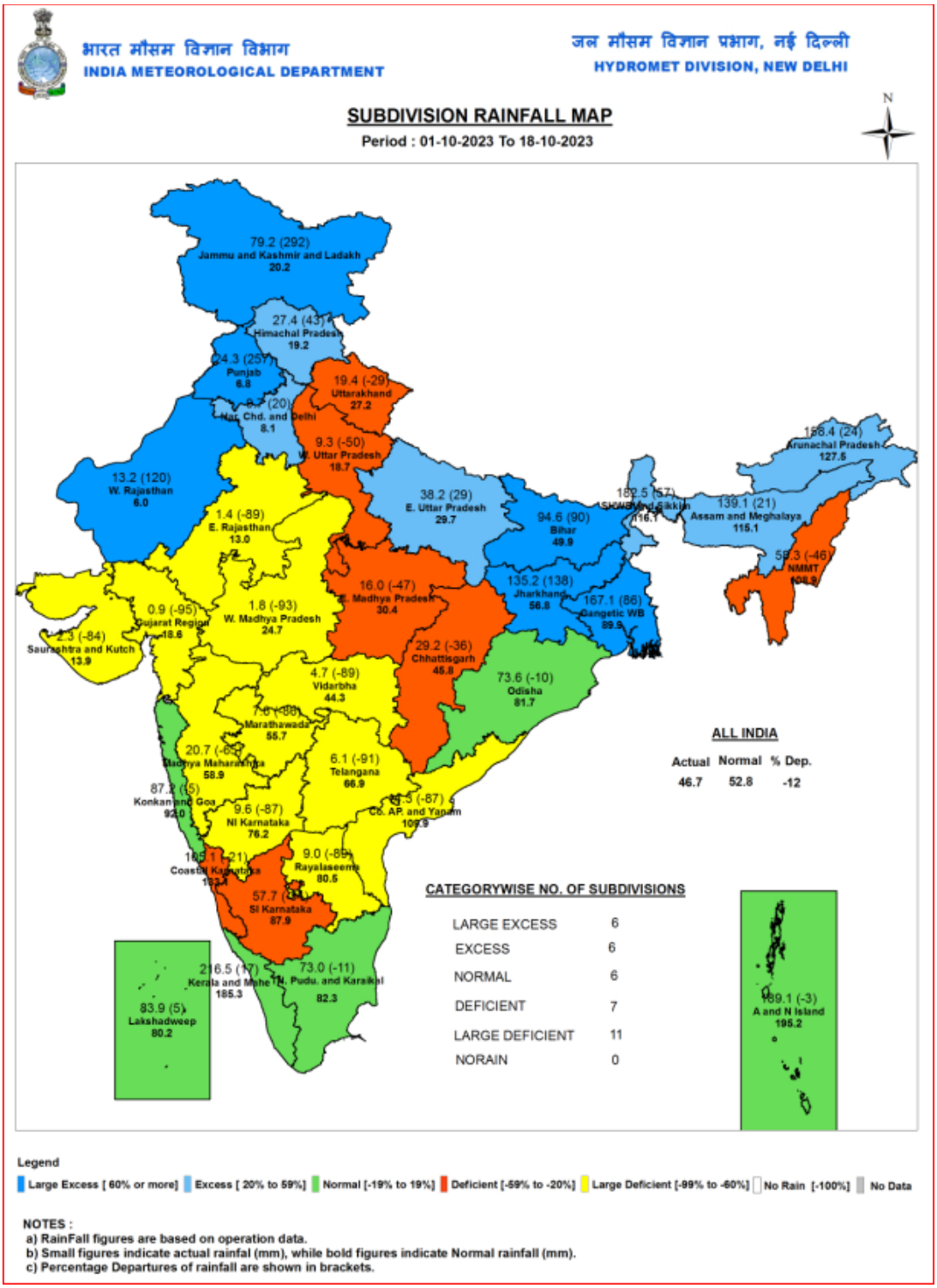
Legends: **Heavy Rain:** 64.5 to 115.5 mm **Very Heavy Rain:** 115.6 to 204.4 mm, **Extremely Heavy Rain**> 204.4 mm

Fig-1: **The line of Withdrawal of Southwest Monsoon**



Annex: I


भारत मौसम विज्ञान विभाग
INDIA METEOROLOGICAL DEPARTMENT
जल मौसम विज्ञान प्रभाग, नई दिल्ली
HYDROMET DIVISION, NEW DELHI
SUBDIVISION RAINFALL MAP
Week : 12-10-2023 To 18-10-2023
N
60.5 (558)
Jammu and Kashmir and Ladakh
9.2
20.6 (158)
Himachal Pradesh
8.0
37.4 (626)
Punjab
2.4
16.2 (53)
Uttarakhand
10.6
9.2 (202)
Hr. Chd. and Delhi
2.9
8.6 (48)
W. Uttar Pradesh
6.8
13.2 (473)
W. Rajasthan
2.3
1.4 (-57)
E. Rajasthan
3.2
4.8 (-45)
E. Uttar Pradesh
8.7
2.1 (-86)
Bihar
14.6
27.6 (5)
Sikkim
26.3
12.7 (-62)
Arunachal Pradesh
33.1
6.7 (-77)
Assam and Meghalaya
29.4
7.6 (-75)
NMMT
29.9
2.1 (-69)
E. Madhya Pradesh
6.8
1.0 (-93)
Jharkhand
14.8
0.0 (-99)
Gangetic WB
22.0
0.1 (-96)
Gujarat Region
3.9
1.6 (-70)
W. Madhya Pradesh
5.2
2.3 (-53)
Saurashtra and Kutch
4.9
0.6 (-95)
Chhattisgarh
10.5
0.2 (-98)
Vidarbha
11.0
0.4 (-98)
Odisha
26.8
0.0 (-99)
Marathawada
16.4
0.7 (-96)
Madhya Maharashtra
15.8
0.2 (-99)
Telangana
20.2
11.2 (-47)
Konkan and Goa
21.0
0.2 (-99)
Co. AP. and Yanam
35.2
0.6 (-97)
NI Karnataka
21.3
3.1 (-21)
Coastal Karnataka
14.7
1.3 (-95)
Rayalaseema
24.0
19.0 (-31)
SI Karnataka
27.3
110.2 (46)
Kerala and Mahe
75.4
45.4 (32)
N. Pudu. and Karaikal
34.5
57.6 (103)
Lakshadweep
28.4
2.3 (-33)
A and N Island
63.3
ALL INDIA
Actual Normal % Dep.
11.8 15.9 -26
CATEGORYWISE NO. OF SUBDIVISIONS
LARGE EXCESS 6
EXCESS 4
NORMAL 1
DEFICIENT 7
LARGE DEFICIENT 18
NORAIN 0
Legend
Large Excess [60% or more]
Excess [20% to 59%]
Normal [-19% to 19%]
Deficient [-59% to -20%]
Large Deficient [-99% to -60%]
No Rain [-100%]
No Data
NOTES :
a) RainFall figures are based on operation data.
b) Small figures indicate actual rainfal (mm), while bold figures indicate Normal rainfall (mm).
c) Percentage Departures of rainfall are shown in brackets.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HYDROMET DIVISION, NEW DELHI
SUBDIVISION RAINFALL MAP
Period : 01-10-2023 To 18-10-2023
N
79.2 (292) Jammu and Kashmir and Ladakh 20.2
27.4 (43) Himachal Pradesh 19.2
24.3 (257) Punjab 6.8
19.4 (-29) Uttarakhand 27.2
8.7 (20) Har. Chd. and Delhi 8.1
9.3 (-50) W. Uttar Pradesh 18.7
13.2 (120) W. Rajasthan 6.0
1.4 (-89) E. Rajasthan 13.0
38.2 (29) E. Uttar Pradesh 29.7
94.6 (90) Bihar 49.9
182.5 (57) Sikkim 116.1
156.4 (24) Arunachal Pradesh 127.5
139.1 (21) Assam and Meghalaya 115.1
58.3 (-46) NMMT
16.0 (-47) E. Madhya Pradesh 30.4
135.2 (138) Jharkhand 56.8
167.1 (86) Gangetic WB 89.9
0.9 (-95) Gujarat Region 18.6
1.8 (-93) W. Madhya Pradesh 24.7
2.3 (-84) Saurashtra and Kutch 13.9
29.2 (-36) Chhattisgarh 45.8
4.7 (-89) Vidarbha 44.3
73.6 (-10) Odisha 81.7
7.6 (-88) Marathawada 55.7
20.7 (-65) Madhya Maharashtra 58.9
6.1 (-91) Telangana 66.9
87.2 (5) Konkan and Goa 92.0
9.6 (-87) NI Karnataka 76.2
6.5 (-87) Co. AP. and Yanam 109.9
165.1 (21) Coastal Karnataka 193.4
9.0 (-89) Rayalaseema 80.5
57.7 (-31) SI Karnataka 87.9
216.5 (17) Kerala and Mahe 185.3
73.0 (-11) N. Pudu. and Karaikal 82.3
83.9 (5) Lakshadweep 80.2
189.1 (-3) A and N Island 195.2
ALL INDIA
Actual Normal % Dep.
46.7 52.8 -12
CATEGORYWISE NO. OF SUBDIVISIONS
LARGE EXCESS 6
EXCESS 6
NORMAL 6
DEFICIENT 7
LARGE DEFICIENT 11
NORAIN 0
Legend
Large Excess [60% or more]
Excess [20% to 59%]
Normal [-19% to 19%]
Deficient [-59% to -20%]
Large Deficient [-99% to -60%]
No Rain [-100%]
No Data
NOTES :
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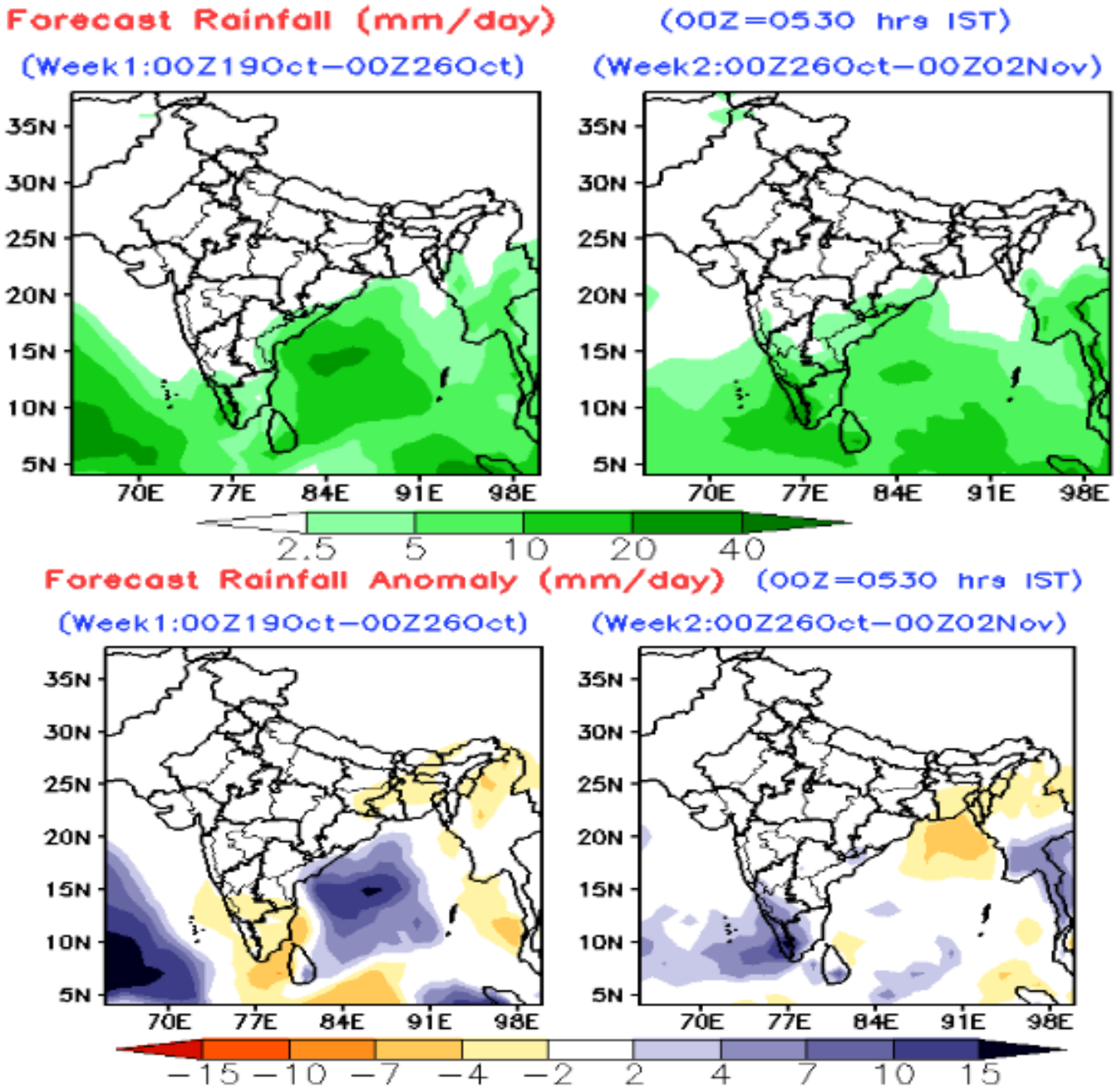

Extended range froecast of weekly distribution of rainfall in mm per day (top panel) and anomalies(lower panesl) from IMD MME