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

Press: Dated: 27 Oct, 2022

Subject: Current Weather Status and Extended range Forecast for next two weeks (27 Oct-9 Nov 2022)

1. Salient Observed Features for week ending on 26 Oct 2022

- **Withdrawal of Southwest Monsoon:** Southwest Monsoon has further withdrawn from some more parts of Vidarbha, Chhattisgarh; many parts of Odisha; remaining parts of Jharkhand, West Bengal, Assam, Tripura; entire Mizoram, Manipur, Nagaland, Arunachal Pradesh and many parts of North Bay of Bengal on 20th October, 2022 and the withdrawal line of Southwest Monsoon passed through 20.0°N, 93.0°E, Puri, Kanker, Buldana, Dahanu, Long. 71.0° E/Lat. 19.5° N on 20th October; it has further withdrawn from some more parts of Vidarbha, remaining parts of Chhattisgarh, Odisha & North Bay of Bengal, some parts of Telangana, Coastal Andhra Pradesh & Central Bay of Bengal today, the 21st October, 2022 and the withdrawal line of Southwest Monsoon passed through Long. 94.5°E/ Lat. 17.0°N, Kakinada, Ramagundam, Buldana, Dahanu and Long. 71.0° E/Lat. 19.5° N on 21st Oct. It has withdrawn from the remaining parts of the country on 23rd October, 2022.
- **Formation and Movement of Cyclonic Storm "SITRANG":** Under the influence of the cyclonic circulation over north Andaman Sea and neighbourhood, a low pressure area formed over North Andaman Sea and adjoining areas of south Andaman Sea & Southeast Bay of Bengal(BoB) in the morning of 20th October, 2022. It lay as a well marked low pressure area over the same region in the evening of 21st October. It concentrated into a depression over southeast and adjoining eastcentral BoB close to Andaman Islands in the forenoon of 22nd October, 2022. It moved northwestwards and intensified into a deep depression over westcentral Bay of Bengal in the early morning (0530 hrs IST) of 23rd October. Thereafter, it moved nearly northwards and intensified into the cyclonic storm "SITRANG" in the evening (1730 hrs IST) of 23rd October. It then gradually re-curved north-northeastwards and crossed Bangladesh coast between Tinkona and Sandwip close to Barisal in the night of 24th October

during 2130 to 2330 hours IST of 24th October as a cyclonic storm with maximum sustained wind speed of 80-90 kmph gusting to 100 kmph. Continuing to move north-northeastwards, it weakened into a deep depression over interior Bangladesh in the early hours (0230 hours IST of 25th), into a depression over interior Bangladesh in the early morning (0530 hours IST) of 25th October and into a well marked low pressure area over northeast Bangladesh & adjoining in the forenoon (0830 hours IST) of 25th October, 2022. It weakened into a Low Pressure Area over south Assam and adjoining areas of northeast Bangladesh & east Meghalaya on the same day in the evening and become less marked in the early morning of 26th Oct. However, the associated cyclonic circulation over south Assam & neighbourhood extended upto 5.8 km above mean sea level became less marked on the afternoon of 26th Oct. This system has caused scattered to fairly widespread rainfall with Isolated extremely heavy rainfall occurred over Meghalaya; very heavy rainfall over Arunachal Pradesh and heavy rainfall over Assam, Manipur during 24-25 Sept 2022 and isolated heavy rainfall over Arunachal Pradesh on 25-26 Oct.

- **Analysis of Weekly overall Rainfall distribution during the current week ending on 26 Oct 2022 and Post monsoon Season's Rainfall Scenario (01-26 Oct):** It shows for the country as a whole, the weekly cumulative All India Rainfall departure till week ending on 26th Oct, from its long period average (LPA) was -7**%,** with **over east and northeast India as +60%** while all India Seasonal cumulative rainfall % departure during this year's **monsoon Season Rainfall during 01 Oct-26 Oct 2022** is +60**%.** 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		
	20.10.2022 TO 26.10.2022			01.10.2022 TO 26.10.2022		
	Actual	Normal	% Dep	Actual	Normal	% Dep
EAST & NORTH-EAST INDIA	30.8	19.2	60%	159.8	115.6	38%
NORTH-WEST INDIA	5.3	2.8	88%	64.3	20.6	212%
CENTRAL INDIA	4.9	8.6	-43%	93.2	53.6	74%
SOUTH	21	32.8	-36%	165.9	129.9	28%

PENINSULA						
Country as a whole	**12.3**	**13.2**	**-7%**	**109.2**	**68.3**	**60%**

2. Large scale features

- Currently, the sea surface temperatures (SSTs) as well as the atmospheric conditions over Equatorial Pacific Ocean indicate La Niña conditions. The latest forecasts indicate that La Niña conditions are likely to continue during Oct-Nov 2022. Currently, the SST conditions over Equatorial Indian Ocean are very close to the threshold level for negative Indian Ocean Dipole (IOD) conditions. The latest forecasts indicate negative IOD conditions are likely to in Oct-Nov 2022.
- The Madden Julian Oscillation Index (MJO) currently lies in phase 6 with amplitude more than 1 and would continue in same phase during the Week 1 and then entered into Phase 7 with amplitude more than 1 from 3 Nov and would continue in same phase till end of Week 2.

3. Forecast for next two week

Weather systems & associated Precipitation during Week 1 (27 Oct-2 Nov, 2022) and Week 2 (3-9 Nov, 2022)

On major synoptic features and Systems over Indian region: By considering the model guidance and various environmental features, it is inferred that

a)On likely synoptic systems over North Indian Ocean (for details pls refer https://rsmcnewdelhi.imd.gov.in/uploads/archive/24/24_c7aa1d_Extended%20Range%20Outlook_27102022.pdf)

- The existing cyclonic circulation over southwest BoB off Tamil Nadu coast is less likely to intensify further while moving westward during first half of the week 1.
- There is likelihood of formation of another cyclonic circulation over southwest BoB and neighbourhood around 30th -31st October with west-northwestwards movement towards Tamil Nadu coast. It is likely to emerge into southeast and adjoining east central AS during second half of the week 1.
- There is also likelihood of formation of a cyclonic circulation over Andaman Sea and adjoining southeast Bay of Bengal during later part of the week 2.

b)Commencement of Northeast Monsoon Rains

- Northeast Monsoon rains are likely to commence over Southeast Peninsular India around

29th October, 2022.

c)Two WDs likely to affect extreme northwest parts of India with 1st one as feeble one during 1-3 Nov and 2nd WD during 3-5 Nov, 2022.

- The 1st WD is likely to cause isolated light rain/snow over higher ridges of Western Himalayan region during 1-3 Nov while 2nd WD is likely to cause scattered to fairly widespread light rain/snow over higher ridges of Western Himalayan region and also isolated rainfall over remaining parts Western Himalayan region and adjoining parts of the Plains of Northwest India during 3-6 Nov.

Forecast for week 1 (27 Oct-2 Nov, 2022):

- Under the influence of likely setting in of north-easterly winds in the lower tropospheric levels over Bay of Bengal and South Peninsular India**,** Scattered/Fairly widespread light/ moderate rainfall with **isolated heavy falls & thunderstorm/lightning** very likely over Tamil Nadu, Puducherry & Karaikal during 29th Oct till 1st Nov; Kerala & Mahe on 30 & 31st and over Coastal Andhra Pradesh & Yanam on 31st October, 2022.
- Isolated light rainfall/snowfall likely over Northeastern states and Sub-Himalayan West Bengal & Sikkim on 27th October, 2022.
- Scattered/Fairly widespread light/moderate rainfall also likely over Andaman & Nicobar Islands during next 7 days.
- Isolated light rain/snow over higher ridges of Western Himalayan region during 1-2 Nov
- **Dry weather very likely to prevail over rest parts of the country during next 5 days.**

Rainfall for week 2 (3-9 Nov, 2022):

- Scattered to fairly widespread rainfall & **isolated heavy falls likely** over extreme south Peninsular India during most days of the week.
- Scattered to fairly widespread light rain/snow over higher ridges of Western Himalayan region and also isolated rainfall over remaining parts Western Himalayan region and adjoining parts of the Plains of Northwest India during 3-6 Nov.
- **Overall, rainfall activity during the Week 2,** is likely to be normal to above normal over extreme south Peninsular India except northeast Tamil Nadu and adjoining Andhra Pradesh,

where it is likely to be below normal. Rainfall activity is also likely to be normal to above normal over parts of Western Himalayan Region; near normal over parts of central and northwest India, while it is likely to be be below normal over east & northeast India.

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

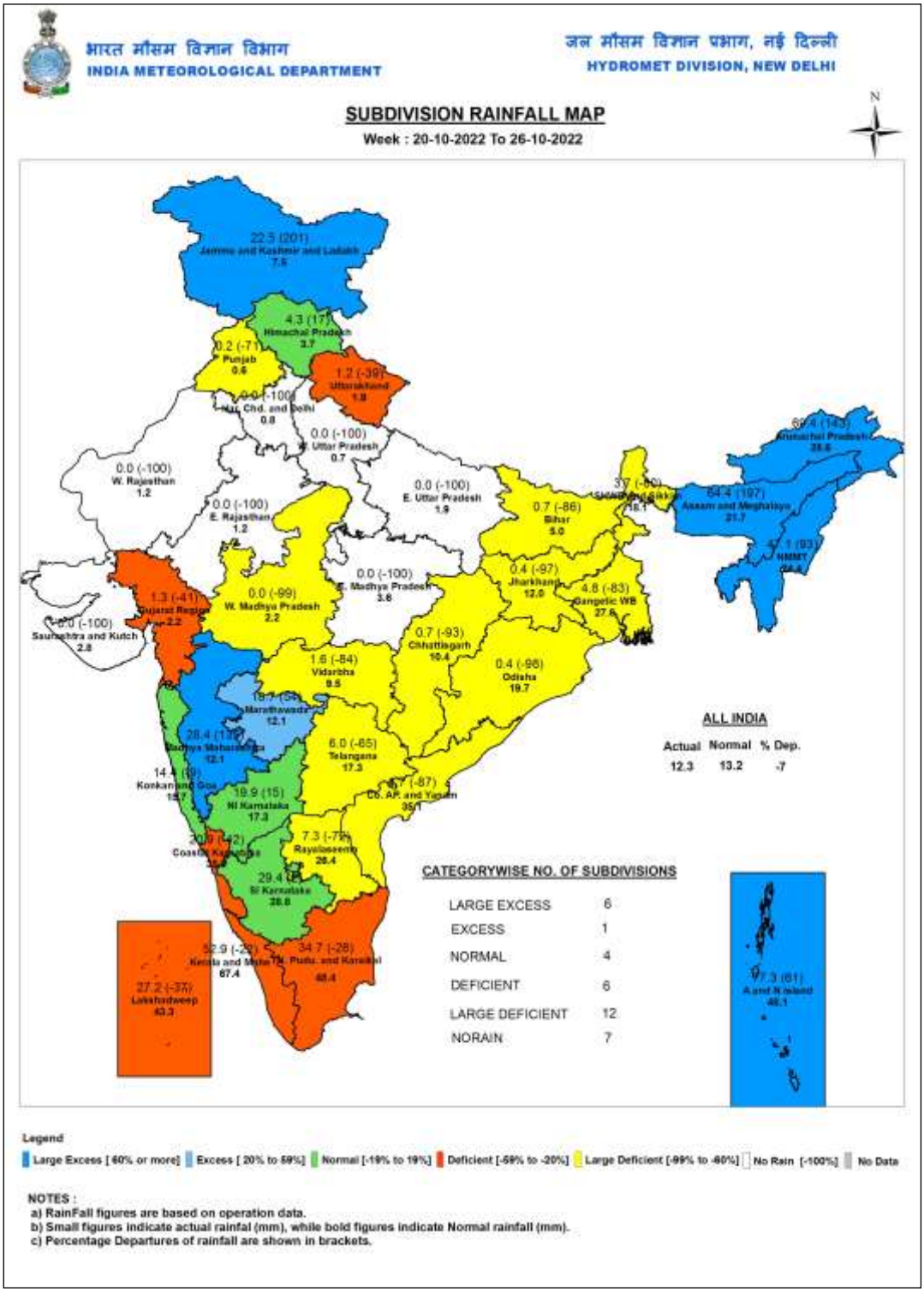
SPATIAL DISTRIBUTION (% of Stations reporting)

% Stations	Category	% Stations	Category
76-100	Widespread (WS/Most Places)	26-50	Scattered (SCT/ A Few Places)
51-75	Fairly Widespred (FWS/ Many Places)	1-25	Isolated (ISOL)

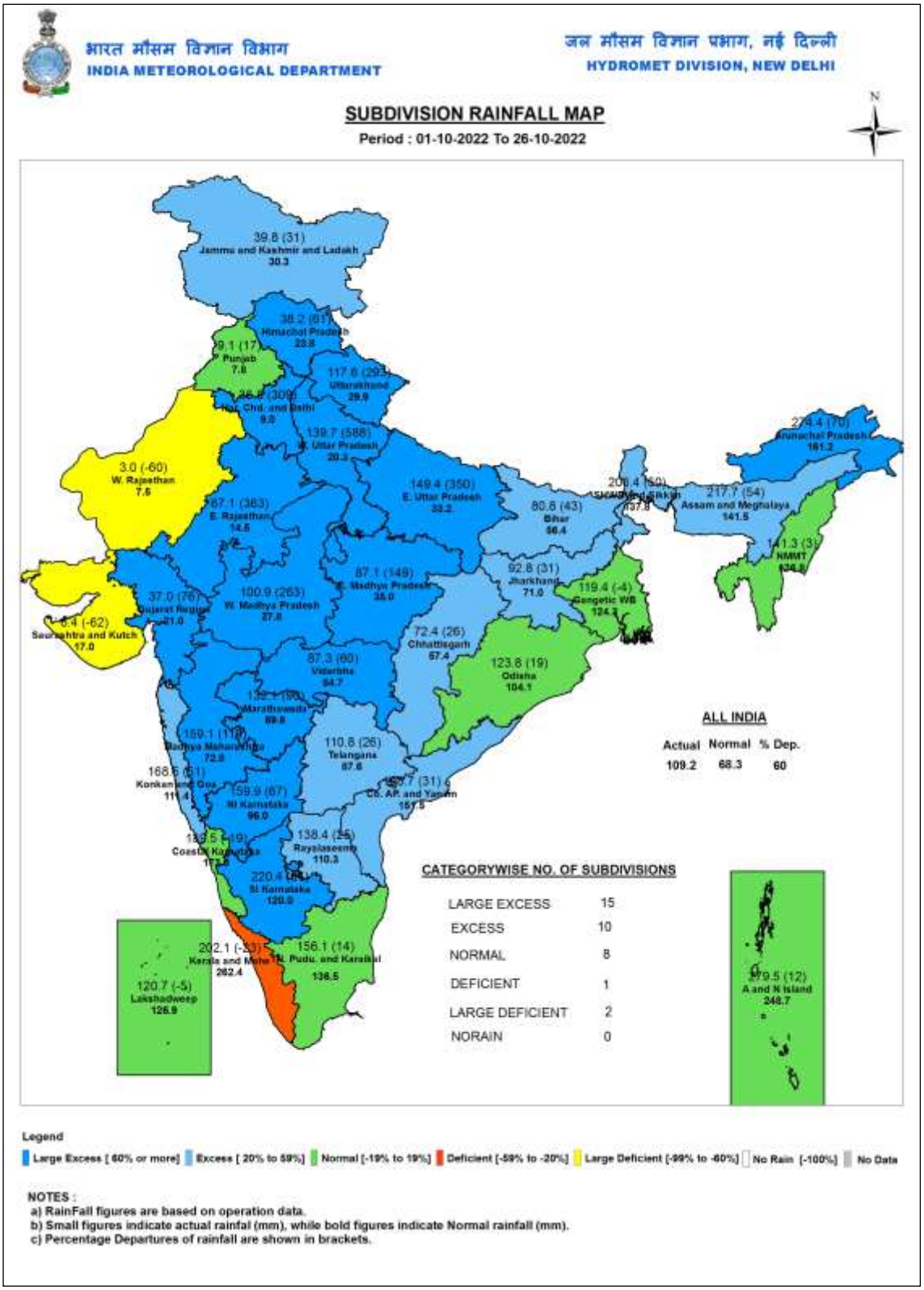
Probabilistic Forecast

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

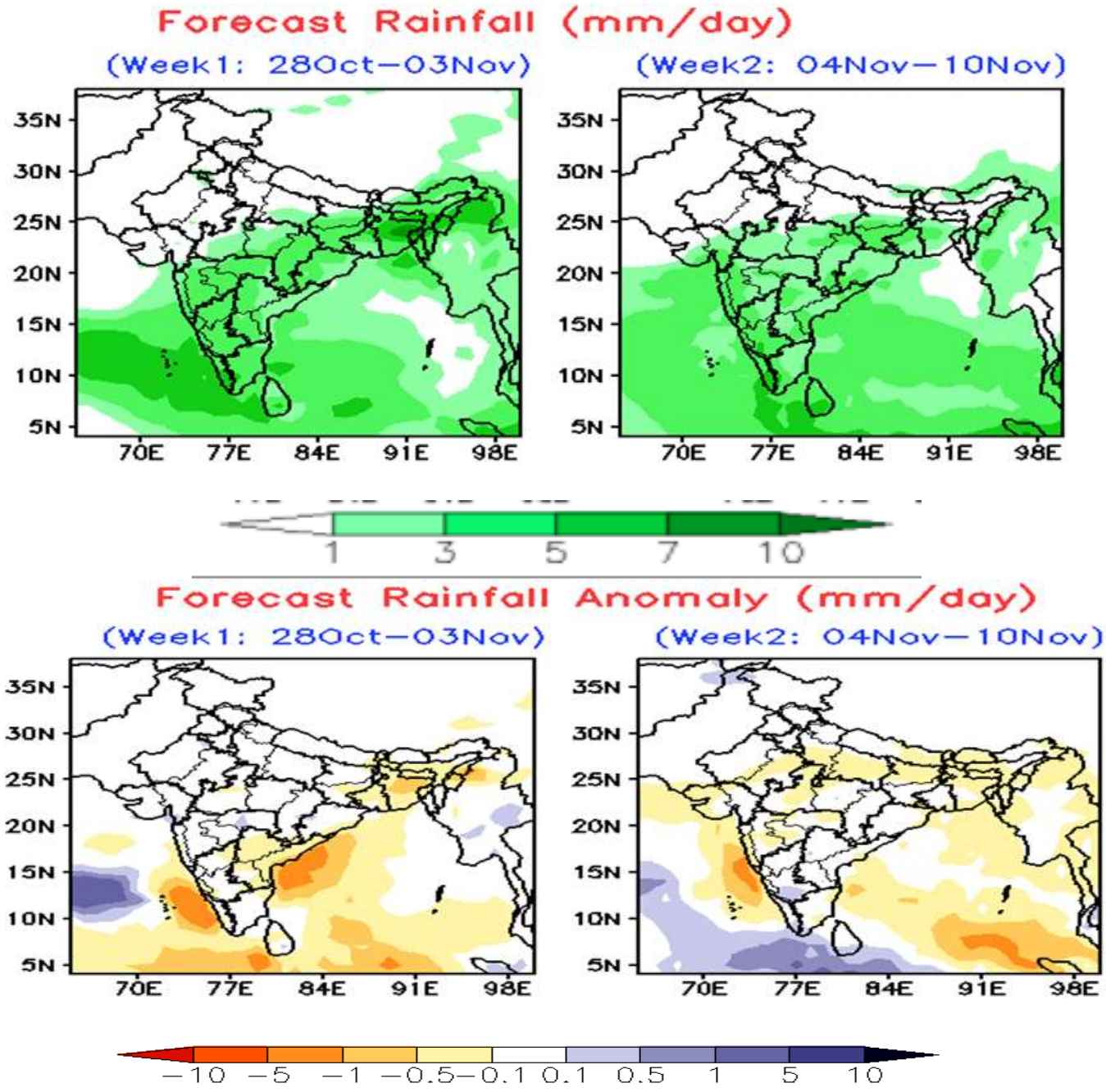
Annex 1



Annex: II



Annexure III


Forecast Rainfall (mm/day)
(Week1: 28Oct–03Nov)
(Week2: 04Nov–10Nov)
35N
30N
25N
20N
15N
10N
5N
70E
77E
84E
91E
98E
1
3
5
7
10
Forecast Rainfall Anomaly (mm/day)
(Week1: 28Oct–03Nov)
(Week2: 04Nov–10Nov)
−10
−5
−1
−0.5
−0.1
0.1
0.5
1
5
10