



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

Press: Dated: 24 Nov, 2022

**Subject: Current Weather Status and Extended range Forecast for next two weeks
(24 Nov to 7 Dec 2022)**

1. Salient Observed Features for week ending 17 Nov 2022

➤ A Low Pressure Area had formed over Southeast Bay of Bengal & adjoining Andaman Sea in the early morning hours of 17th November 2022 and it lay over Southeast Bay of Bengal & neighbourhood from the afternoon of 17th till 18th; it became a Well Marked Low Pressure Area in the early morning hours of 19th and accordingly it lay over central parts of South Bay of Bengal on that day; it concentrated into a Depression in the early morning hours of 20th and lay over Southwest and adjoining Southeast Bay of Bengal, at a distance of about 670 km east-southeast of Chennai; moving northwestwards and then north-northwestwards, it lay over Southwest Bay of Bengal in the evening of the same day (Refer Fig 1 for Track of the system), at a distance of about 560 km east of Karaikal and 570 km east-southeast of Chennai; maintaining the intensity of Depression, it moved northwestwards and lay over Southwest Bay of Bengal, at a distance of about 470 km east-northeast of Karaikal, 550 km southeast of Machilipatnam and 420 km east-southeast of Chennai in the morning of 21st; then moving west-northwestwards, it lay over Southwest and adjoining Westcentral Bay of Bengal in the evening of the same day, at a distance of about 190 km east of Chennai and 280 km east-southeast of Nellore; continuing to move west-northwestwards, it weakened into a Well Marked Low Pressure Area and lay over Westcentral and adjoining Southwest Bay of Bengal off south Andhra Pradesh-north Tamil Nadu coasts in the morning of 22nd November, 2022 and further weakened into a Low Pressure Area over the same areas in the evening of that day; it lay over south Coastal Andhra Pradesh & neighbourhood in the morning and over north Tamil Nadu & neighbourhood in the evening as a Low pressure area towards the end of the week, with the associated cyclonic circulation

extending upto mid tropospheric levels tilting southwestwards with height; this system during its initial stages had caused fairly widespread to widespread rainfall/thunderstorms over Andaman & Nicobar Islands on two to three days during the first half of the week along with isolated heavy rainfall activity over these areas on a single day; while progressing westwards, even though it attained the intensity of Depression and maintained that intensity for about 48 hours, it had weakened while approaching the coast; under the influence of the system and its remnant Low pressure area, fairly widespread rainfall/thunderstorm activity had occurred over Rayalseema and South Interior Karnataka on one day each along with isolated rainfall/thunderstorm activity over these areas on one or two days during the second half of the week; under their influence, scattered rainfall/thunderstorm activity had been reported over Coastal Andhra Pradesh & Yanam for about three days whereas isolated rainfall/thunderstorm activity had occurred over remaining parts of South Peninsula on two to three days during the second half of the week; isolated heavy rainfall also had occurred over Coastal Andhra Pradesh & Yanam and Rayalseema on one day each towards the end of the week along with.

- No major WD impacted the weather over north India, significantly, during the week, and hence daily observed minimum temperature, was at the range of 8-11degC, over parts of northwest plains and adjoining central parts of India, with a below normal by -2.0 to -4.0degC in most of the dates of the week.
- **Analysis of Weekly overall Rainfall distribution during the week ending on 23 Nov 2022 and Post monsoon Season's Rainfall Scenario (01 Oct-23 Nov):** 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 23 Nov, was -75%, with south Peninsula India had -85% while all India Seasonal cumulative rainfall % departure during this year's post monsoon Season Rainfall during 01 Oct-23 Nov 2022 is +1% and over south Peninsula, it is +28%. 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		
	17.11.2022 TO 23.11.2022			01.10.2022 TO 23.11.2022		
	Actual	Normal	% Dep	Actual	Normal	% Dep
EAST & NORTH-EAST INDIA	0	3.6	-99%	164.8	141.9	+16%
NORTH-WEST INDIA	0	2.4	-98%	79.5	30.4	+162%
CENTRAL INDIA	0	3.5	-100%	93.5	68.8	+36%
SOUTH PENINSULA	4.4	17.6	-75%	230.3	227.9	+1%
Country as a whole	0.9	5.9	-85%	127.5	99.9	+28%

2. Large scale features

- Currently La Niña conditions are prevailing over Equatorial Pacific Ocean and negative Indian Ocean Dipole (IOD) conditions are prevailing over the Indian Ocean. The latest global model forecasts indicate that the La Niña conditions are likely to continue during the upcoming season and negative IOD conditions are likely to weaken during the upcoming months.
- The Madden Julian Oscillation (MJO) Index is currently in Phase 6 with amplitude more than 1. It will continue in same phase for next 3 days. Thereafter, it would move to phase 7 and continue there with gradually decreasing amplitude till end of week1. Thereafter, from week 2, it would enter into phase 2 with amplitude less than 1. It would move eastwards across phases 3 & 4, reaching phase 5 during the end of week 2. Thus, MJO will be favourable for enhancement of convective activity over the Bay of Bengal (BoB) during week 2.

3. Forecast for next two week

Forecast for next two week

[Weather systems & associated Precipitation during Week 1 \(24 to 30 November, 2022\) and Week 2 \(01 to 07 December, 2022\)](#)

Forecast for week 1 (24 to 30 November, 2022):

- A cyclonic circulation lies over north interior Tamilnadu & neighbourhood and extends upto mid tropospheric levels.
- A fresh cyclonic circulation is likely to emerge over north Andaman Sea during next 24 hours.
- Under the influence of above systems and easterly/northeasterly winds from Bay of Bengal to south Peninsular India:
 - ❖ Fairly widespread to widespread light/moderate rainfall very likely over Andaman & Nicobar Islands during 1st half of the week; isolated to scattered light/moderate rainfall over Lakshadweep, Kerala, Karnataka, Tamilnadu, Telangana and Andhra Pradesh during most days of the week.
- No active Western Disturbance likely to affect northwest India during the week.
- No significant weather likely over any parts of the country during most days of the week.

Rainfall for week 2 (01 to 07 December, 2022):

- **There is possibility of formation of a Low Pressure area over southeast Bay of Bengal & adjoining Andaman Sea around middle of the second week with likely intensification and northwest movement thereafter.**
- Due to easterly wave, light/moderate isolated to scattered activity is likely over southeast Peninsular India.
- No significant Western Disturbance is likely to affect northwest India during the week.
- Overall rainfall activity is likely to be below normal over the country during the week.

Minimum Temperatures and its forecast during Week 1 (24 to 30 November, 2022) and Week 2 (01 to 07 December, 2022):

Minimum Temperatures for week 1 (24 to 30 November, 2022):

- Minimum temperatures are in the range of 8-10°C over many parts of Northwest & adjoining Central India.
- Minimum temperatures are likely to be below normal by 2-4°C over many parts of Central India and over some parts of Northwest & East India..
- Gradual fall in minimum temperatures by 2-3°C very likely over many parts of East India during 1st half of the week and no significant change thereafter.
- No significant change in minimum temperatures very likely over rest parts of the country during

the week.

- No significant cold wave likely over any part of the country during the week.

Minimum Temperatures for week 2 (01 to 07 December, 2022):

- Minimum temperatures are likely to be slightly below normal by 1-2°C over most parts of the country except East India, where these are likely to be below normal by 2-4°C during the week.
- No significant cold wave likely over any part 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

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 Widespread (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

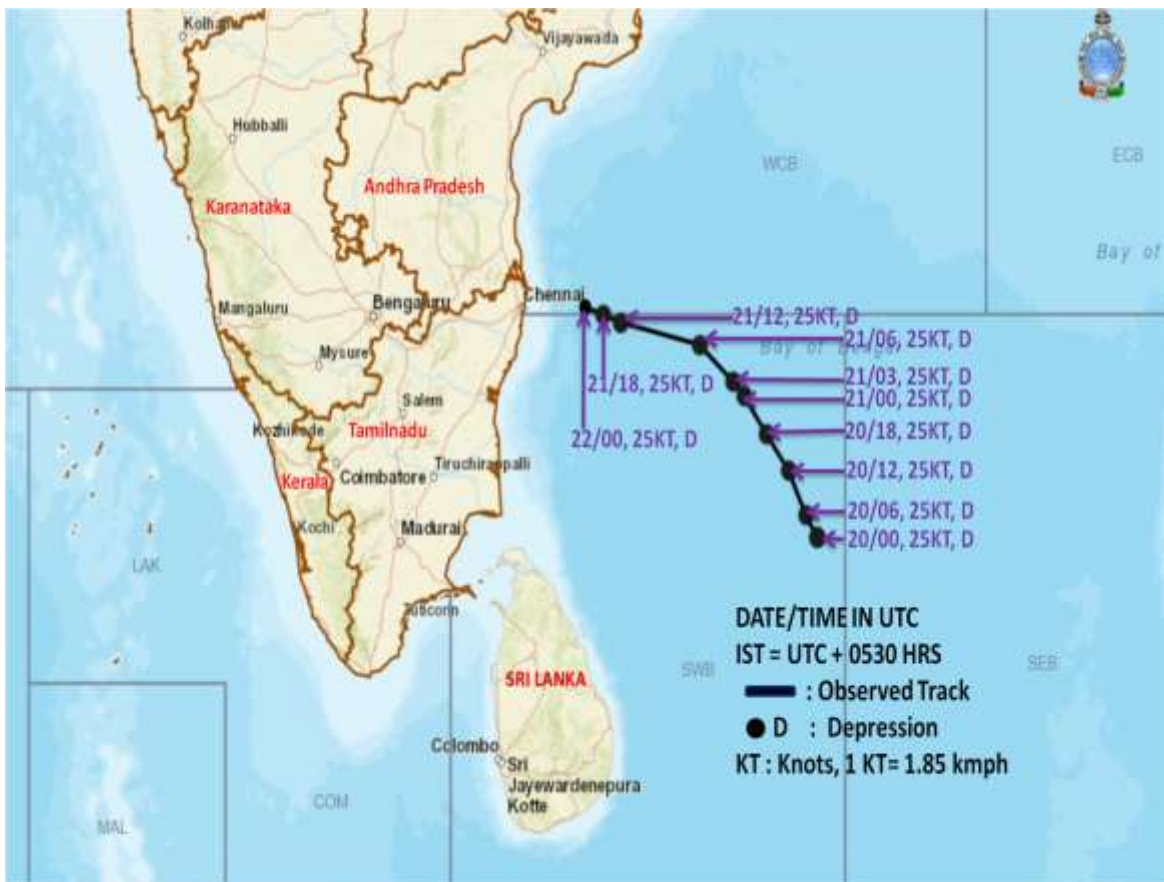
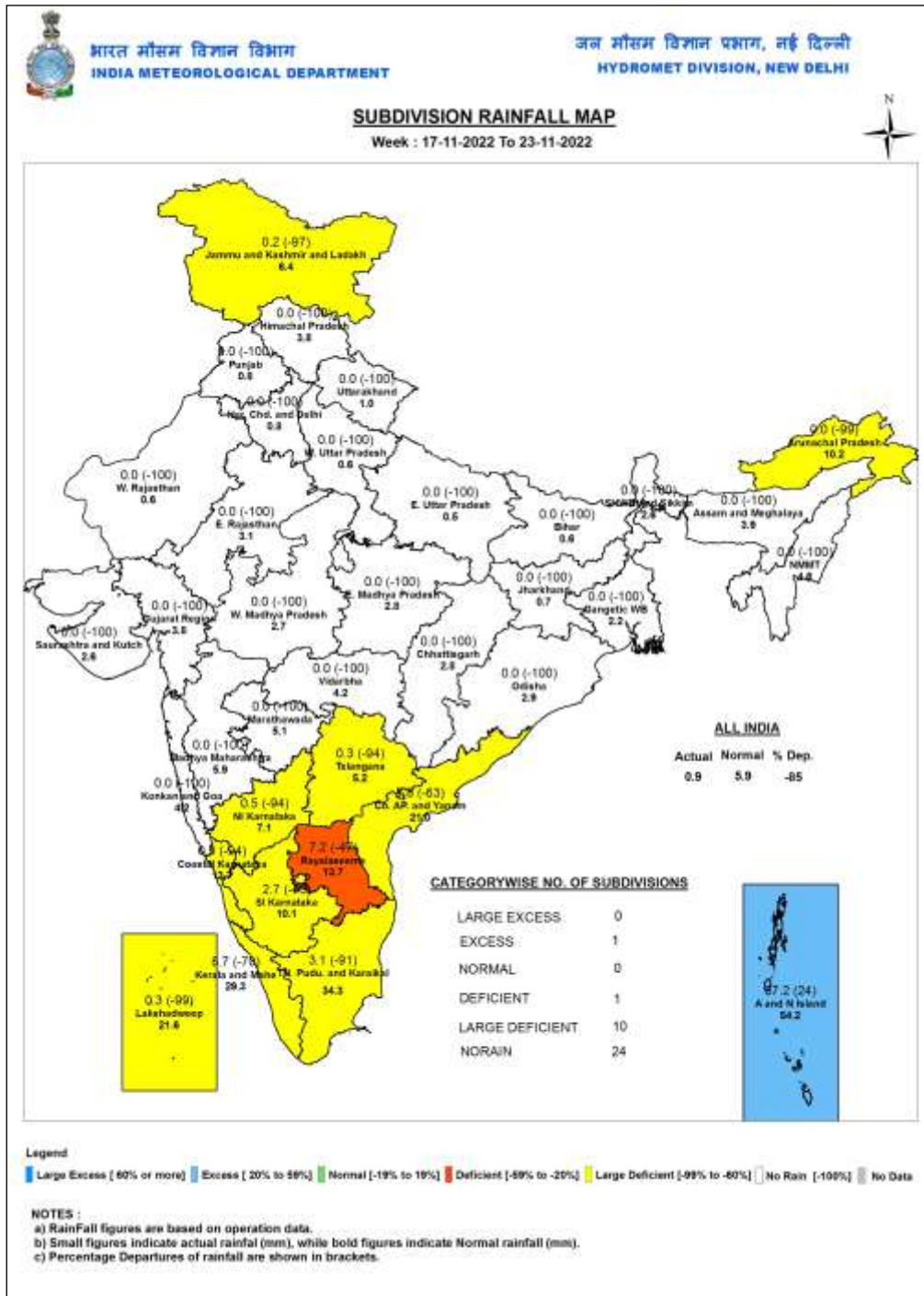
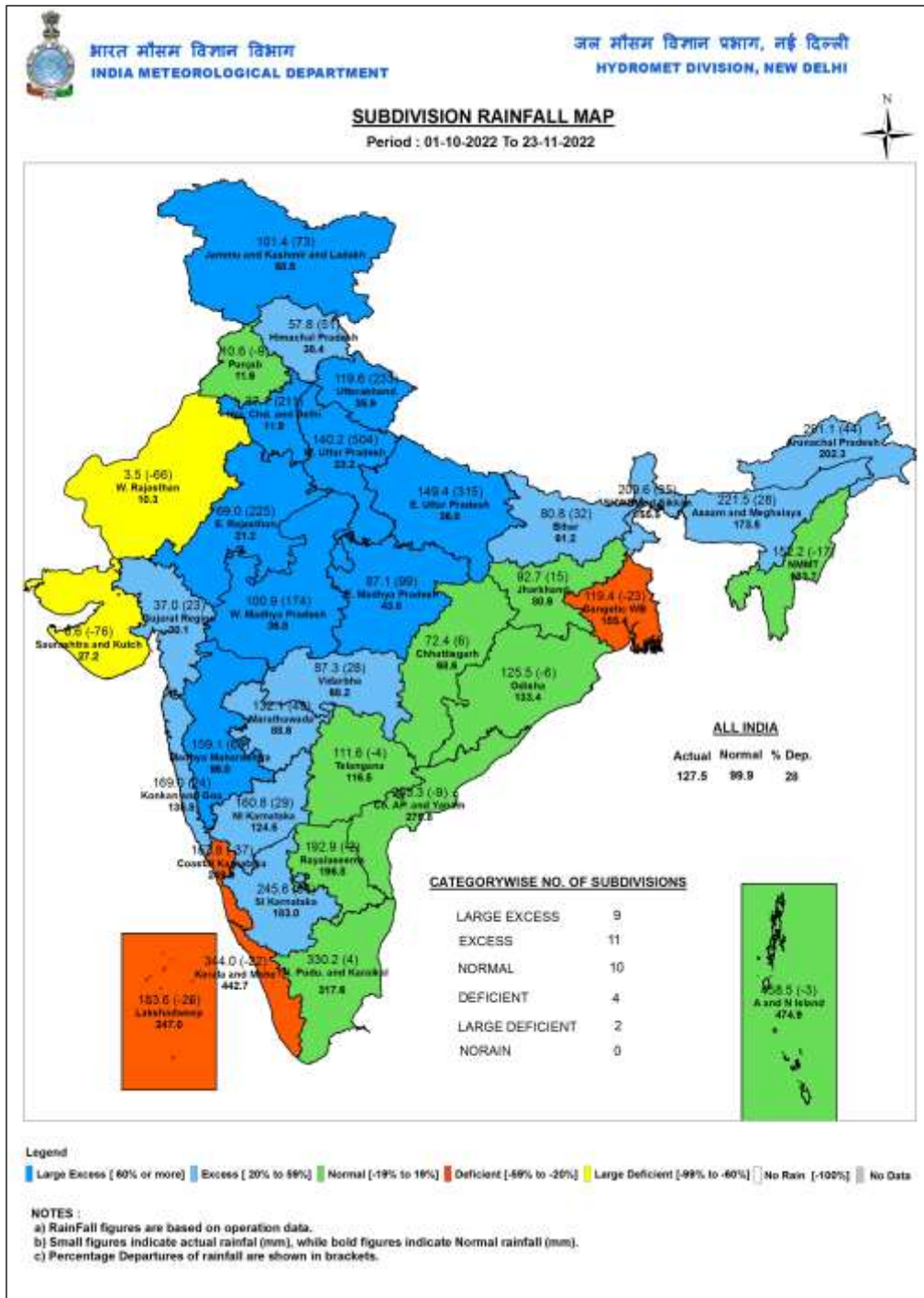


Fig 1 Track of the Depression over Bay of Bengal 20-21 Nov 2022



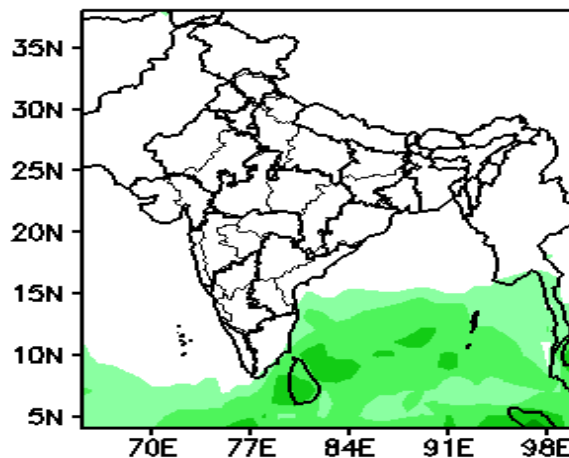
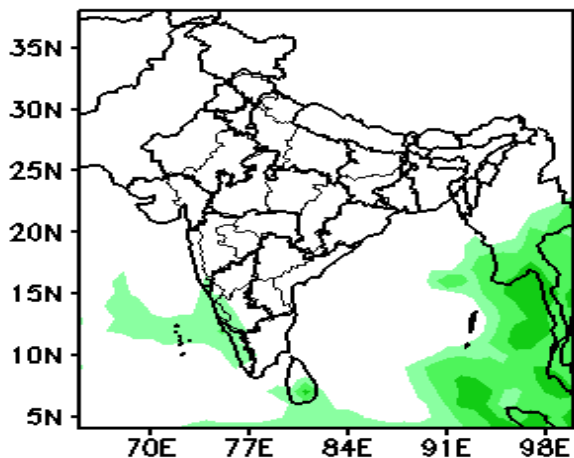
Annex: II



Annexure III

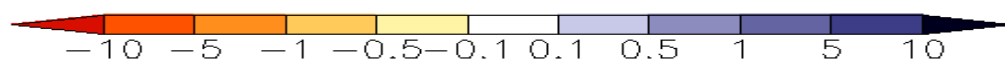
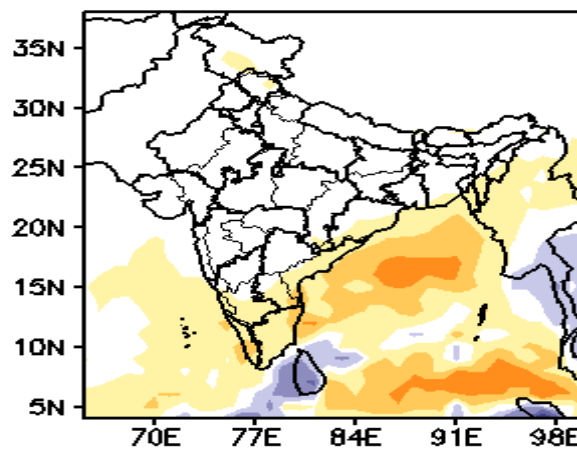
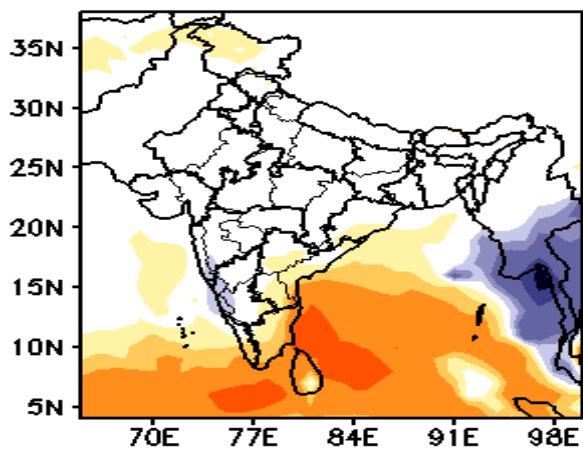
(Week1: 25Nov-01Dec)

(Week2: 02Dec-08Dec)



(Week1: 25Nov-01Dec)

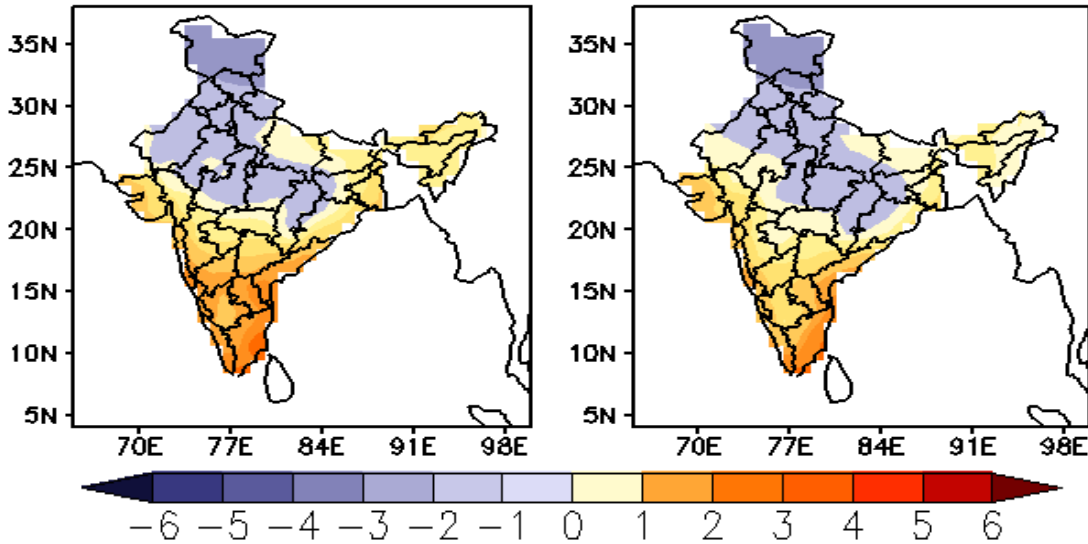
(Week2: 02Dec-08Dec)



MME Bias corrected forecast Tmin (Deg)

(Week1: 25Nov-01Dec)

(Week2: 02Dec-08Dec)



MME forecast Tmin anomaly (Deg C)

(Week1: 25Nov-01Dec)

(Week2: 02Dec-08Dec)

