



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

Dated: 11 January, 2018

Current Weather Status and Outlook for next two weeks

Highlights of the past week

Fog:

Dense to very dense fog observed at most places over East Uttar Pradesh and at many places over Punjab, Haryana, West Uttar Pradesh and Bihar on most of the days during the week. Dense to very dense fog observed at isolated places over north Rajasthan, north Madhya Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram and Tripura and West Bengal on many days during the week.

Cold Day:

Severe cold day conditions prevailed at a few places over East Uttar Pradesh and Bihar and at isolated places over Punjab, Haryana, Chandigarh & Delhi and West Uttar Pradesh on many days and over north Rajasthan and Sub-Himalayan West Bengal on one or two days during the week. The maximum temperature of 10.4^o C recorded at Gorakhpur (East Uttar Pradesh) on 6th January 2018 was the lowest maximum recorded in the plains of northwest India during the week.

Cold Wave:

Cold wave to severe cold wave conditions prevailed at isolated places over Jammu & Kashmir, Himachal Pradesh, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, north Rajasthan and Bihar on many days and over East Madhya Pradesh and Odisha on one or two days during the week. The minimum temperature of 0.2^o C recorded at Alwar (East Rajasthan) on 6th January 2018 was the lowest minimum temperature recorded over the plains of northwest India during the week..

Weekly Rainfall Scenario (04 to 10 January, 2018)

During the week, rainfall was below Long Period Average (LPA) by 80% over the country as a whole. Details are given below:

Regions	Actual Rainfall (mm)	Normal Rainfall (mm)	% Departure from LPA
Country as a whole	0.8	3.8	-80%
Northwest India	0.1	6.8	-98%
Central India	0.0	1.7	-100%
South Peninsula	1.8	2.1	-13%
East & northeast India	2.3	4.1	-44%

The Meteorological sub-division-wise rainfall for the week is given in **Annexure I**.

Seasonal Rainfall Scenario (1 to 10 January, 2018)

For the country as a whole, cumulative rainfall during this year's winter season 2018 upto 11 January, 2018 is below LPA by 81%. Details of the rainfall distribution over the four broad homogeneous regions of India are given below:

Regions	Actual Rainfall (mm)	Normal Rainfall (mm)	% Departure from LPA
Country as a whole	1.0	5.3	-81%
Northwest India	0.1	9.5	-99%
Central India	0.0	2.5	-99%
South Peninsula	2.2	3.1	-29%
East & northeast India	3.5	5.3	-33%

Cumulative seasonal rainfall is given in **Annexure II**.

Chief synoptic conditions as on 11 January, 2018

- A Western Disturbance as a northeast-southwest tilted trough in mid & upper tropospheric westerlies runs from Lat. 35.0°N / Long 65.0°E to Lat. 25.0°N / Long 55.0°E.
- A fresh feeble Western Disturbance is likely to cause isolated precipitation over higher reaches of western Himalayan region from 14th January.
- A cyclonic circulation lies over Bangladesh and extends upto 2.1 km above mean sea level.

- A trough of low at mean sea level lies over southeast Bay of Bengal and adjoining Nicobar Islands.

Large scale features as on 11 January, 2018

- La Niña conditions are prevailing currently and similar condition is likely to continue during next two weeks.
- Madden Julian Oscillation (MJO) is in phase 3 with amplitude more than 1 and is likely to move in phase 4 with amplitude more than 1 during the week.
- Indian Ocean Dipole (IOD) is in its negative phase (-0.4°C).

Forecast for next two week

Weather systems & associated Precipitation during Week 1(11 to 17 January 2018) and Week 2 (18 to 24 January 2018)

- Under the influence of Western Disturbance, very light precipitation over higher reaches of Western Himalayan region (WHR) on today.
- Thereafter, a fresh feeble Western Disturbance would affect WHR from 14th January and would cause very light precipitation over higher reaches of Jammu & Kashmir on 14th.
- Thereafter, another fresh Western Disturbance would affect WHR and adjoining plains from 17th onwards and would cause light precipitation over WHR.
- Light isolated rainfall activity is very likely over Andaman & Nicobar Islands during 1st week.
- Light to moderate isolated rainfall activity is likely over Tamilnadu, Kerala and Lakshadweep during first half of 1st week with possibility of heavy rainfall over extreme south Tamilnadu on 12th (**Annexure III**).
- **Overall normal rainfall activity is likely to be below normal over Western Himalayan region** and above normal rainfall activity over Andaman & Nicobar Islands and Kerala; and no rain likely over any other part of the country during week 1 (**Annexure IV**).
- During week 2, below normal rainfall activity is likely over Western Himalayan region and above normal rainfall activity over Andaman & Nicobar Islands and extreme south Peninsula; and no rain likely over any other part of the country **Annexure IV**).

Minimum temperature for week 1 & Week 2

- Minimum temperatures are very likely to be between 5 to 10°C over most parts of northern parts of the country outside Western Himalayan region during week 1. Considering the prevailing temperature and its trend during the week, **Cold wave to**

severe cold wave conditions may prevail over isolated pockets of northwest India during week 1.

- **Overall, minimum temperatures are very likely to be above normal over parts of northwest India and below normal over East India during 1st week (Annexure V).**
- **During 2nd week, there would be slight fall in minimum temperatures over the country, however these are very likely to be near or below normal along Indo-Gangetic plains and rest parts of east India. (Annexure V).**

Fog:

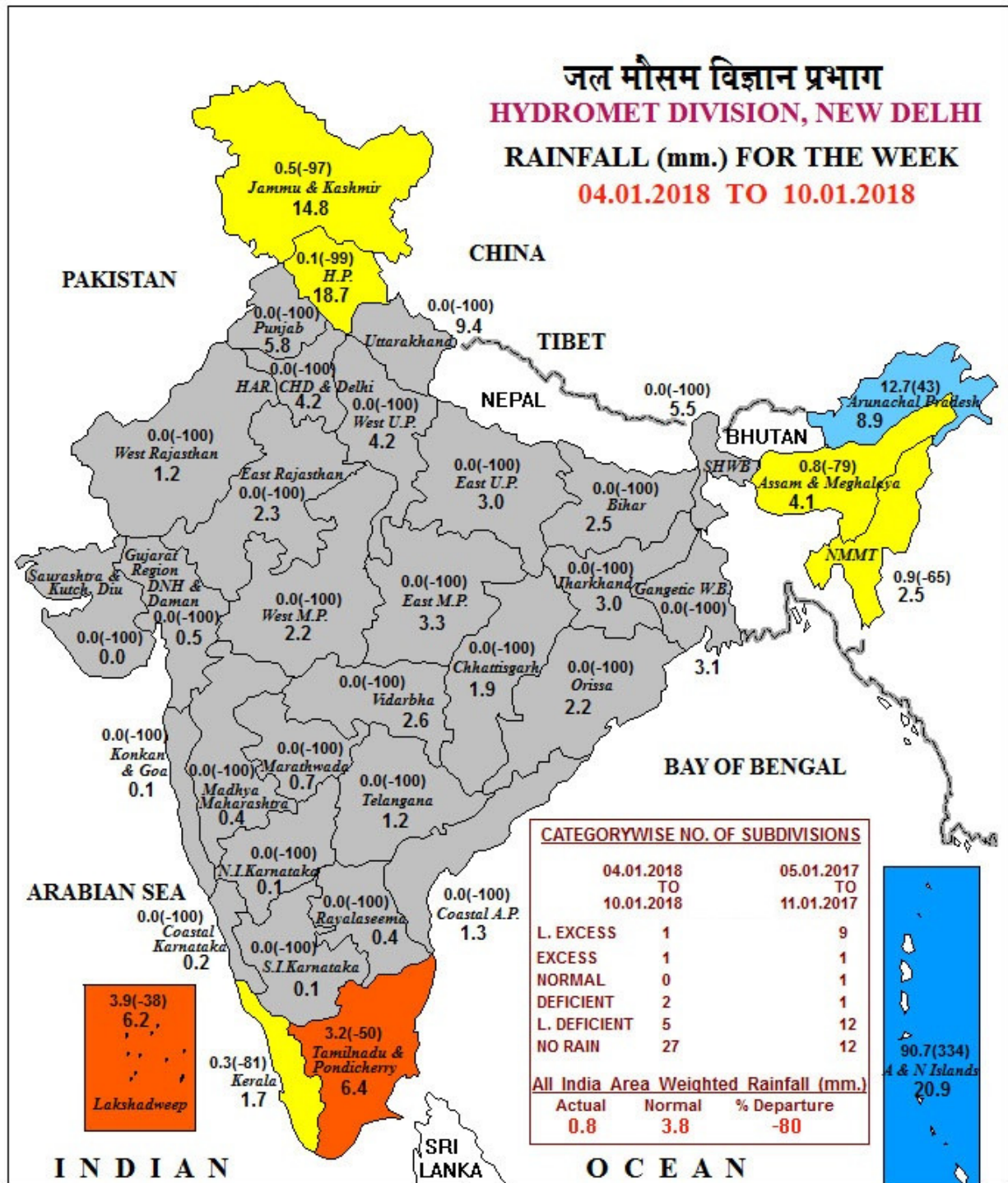
- Strong northwesterly/westerly winds at lower levels very likely to prevail over Indo-Gangetic Plains (IGPs) till tomorrow morning and wind speed will decrease over the region thereafter.
- Relative humidity (RH) near surface is very likely to be more than 80% over northern parts of Uttar Pradesh to Sub-Himalayan West Bengal on 12th morning. Thereafter, RH is very likely to increase over IGPs on 13th & 14th morning and again confine to northern parts of Uttar Pradesh to Sub-Himalayan West Bengal on 15th & 16th morning. RH is also likely to be more than 80% over most parts of northeastern states during morning hours during next 4-5 days. Significant temperature inversion layer near surface is very likely to persist from Punjab to East Uttar Pradesh during next 4-5 days. In northeastern states winds are very likely to be light near the surface and RH is also likely to be more than 80% over its most parts during next 4-5 days.
- So considering all above mentioned parameters, dense fog at many places with very dense at a few places very likely over East Uttar Pradesh; dense to very dense fog at isolated places over Uttarakhand, West Uttar Pradesh and Nagaland. Manipur, Mizoram & Tripura. Dense fog at many places over Bihar; at a few places over Sub-Himalayan West Bengal & Sikkim and at isolated places over Assam & Meghalaya on 12th morning.
- Thereafter, the intensity and spread may increase over IGPs for subsequent 2 days. Dense fog at many places with very dense at a few places very likely over East Uttar Pradesh & Bihar; dense fog at a few places with very dense at isolated places over West Uttar Pradesh & Uttarakhand; dense to very dense fog at isolated places over Nagaland. Manipur, Mizoram & Tripura. dense fog at a few places over Sub-Himalayan West Bengal & Sikkim; at isolated places over Himachal Pradesh, Haryana, Chandigarh & Delhi, Punjab and Assam & Meghalaya on 13th & 14th (mainly in morning hours) and decrease in intensity thereafter during 1st week.

Cyclogenesis:

- No cyclogenesis is likely to develop over Bay of Bengal and Arabian Sea during next one week.

Next weekly update will be issued on next Thursday i.e. 18 January, 2018

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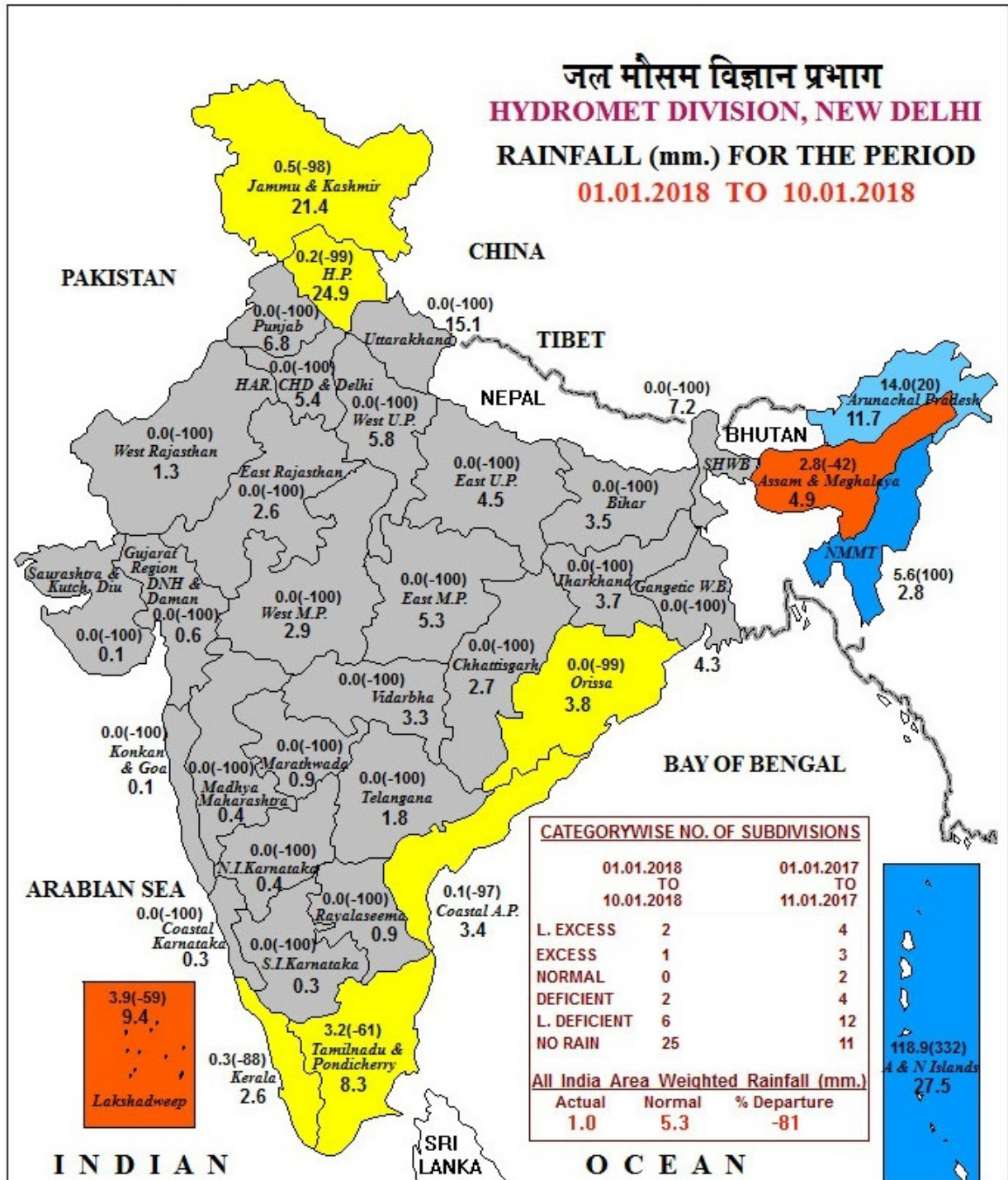


LEGEND: ■ L. EXCESS (+60% OR MORE) ■ EXCESS (+20% TO +59%) ■ NORMAL (+19% TO -19%)
■ DEFICIENT (-20% TO -59%) ■ L. DEFICIENT (-60% TO -99%) ■ NO RAIN [-100%] NO DATA

NOTES:

- (a) Rainfall figures are based on operational data.
 (b) Small figures indicate actual rainfall (mm.), while bold figures indicate Normal rainfall (mm.)
 Percentage Departures of Rainfall are shown in Brackets.

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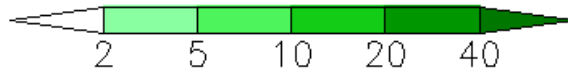
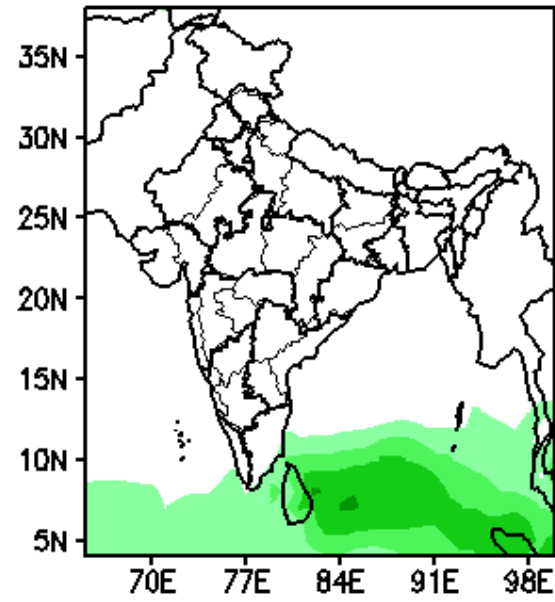
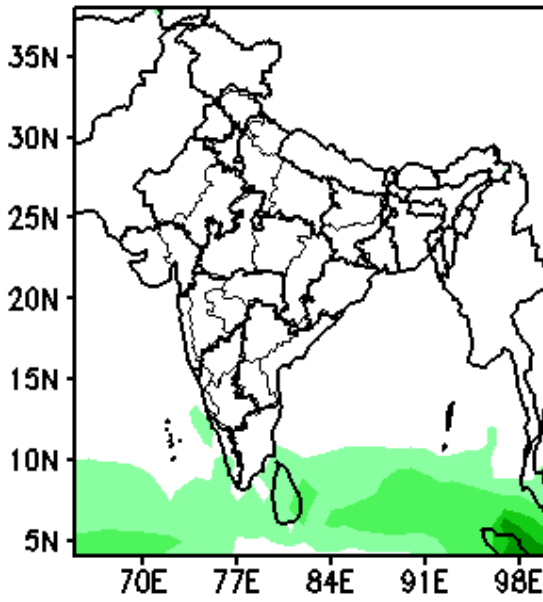
Annexure III

METEOROLOGICAL SUB-DIVISIONWISE WEEKLY RAINFALL FORECAST & Wx. WARNINGS-2017								
Sr. No	MET.SUB-DIVISIONS	11 JAN	12 JAN	13 JAN	14 JAN	15 JAN	16 JAN	17 JAN
1	ANDAMAN & NICO.ISLANDS	SCT	SCT	ISOL	ISOL	ISOL	SCT	FWS [•]
2	ARUNACHAL PRADESH	DRY	DRY	ISOL	ISOL	ISOL	DRY	DRY
3	ASSAM & MEGHALAYA	DRY [•]	DRY [•]	DRY [•]	DRY [•]	ISOL [•]	DRY	DRY
4	NAGA.MANI.MIZO.& TRIPURA	DRY [•]	DRY [•]	DRY [•]	DRY [•]	ISOL [•]	DRY	DRY
5	SUB-HIM.W. BENG. & SIKKIM	DRY [•]	DRY [•]	DRY [•]	DRY [•]	DRY [•]	DRY	DRY
6	GANGETIC WEST BENGAL	DRY ↓	DRY ↓	DRY	DRY	DRY	DRY	DRY
7	ODISHA	DRY ↓	DRY ↓	DRY	DRY	DRY	DRY	DRY
8	JHARKHAND	DRY	DRY	DRY	DRY	DRY	DRY	DRY
9	BIHAR	DRY [•] ↓	DRY [•]	DRY [•]	DRY [•]	DRY [•]	DRY	DRY
10	EAST UTTAR PRADESH	DRY [•]	DRY [•]	DRY [•]	DRY [•]	DRY [•]	DRY [•] ↓	DRY
11	WEST UTTAR PRADESH	DRY [•]	DRY [•]	DRY [•]	DRY [•]	DRY [•]	DRY [•] ↓	DRY
12	UTTARAKHAND	ISOL [•]	DRY [•] ↓	DRY [•] ↓	DRY [•] ↓	DRY [•] ↓	DRY	DRY
13	HARYANA CHD. & DELHI	DRY	DRY [•] ↓	DRY [•] ↓	DRY [•] ↓	DRY ↓	DRY [•]	DRY
14	PUNJAB	DRY	DRY [•] ↓	DRY [•] ↓	DRY [•] ↓	DRY ↓	DRY [•]	ISOL
15	HIMACHAL PRADESH	ISOL	DRY [•] ↓	DRY [•] ↓	DRY [•] ↓	DRY ↓	DRY	ISOL
16	JAMMU & KASHMIR	ISOL	DRY	DRY	ISOL	DRY	ISOL	SCT
17	WEST RAJASTHAN	DRY ↓	DRY ↓	DRY ↓	DRY ↓	DRY ↓	DRY	DRY
18	EAST RAJASTHAN	DRY ↓	DRY ↓	DRY ↓	DRY ↓	DRY ↓	DRY	DRY
19	WEST MADHYA PRADESH	DRY	DRY	DRY	DRY	DRY	DRY	DRY
20	EAST MADHYA PRADESH	DRY	DRY	DRY	DRY	DRY	DRY	DRY
21	GUJARAT REGION D.D. & N.H.	DRY	DRY	DRY	DRY	DRY	DRY	DRY
22	SAURASTRA KUTCH & DIU	DRY	DRY	DRY	DRY	DRY	DRY	DRY
23	KONKAN & GOA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
24	MADHYA MAHARASHTRA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
25	MARATHAWADA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
26	VIDARBHA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
27	CHHATTISGARH	DRY	DRY	DRY	DRY	DRY	DRY	DRY
28	COASTAL ANDHRA PRADESH	DRY	DRY	DRY	DRY	DRY	DRY	DRY
29	TELANGANA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
30	RAYALASEEMA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
31	TAMILNADU & PUDUCHERRY	ISOL	ISOL [•]	ISOL	DRY	DRY	DRY	DRY
32	COASTAL KARNATAKA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
33	NORTH INT.KARNATAKA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
34	SOUTH INT.KARNATAKA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
35	KERALA	ISOL	ISOL	ISOL	DRY	DRY	DRY	DRY
36	LAKSHADWEEP	SCT	SCT	SCT	DRY	DRY	DRY	DRY
LEGENDS:								
WS	WIDE SPREAD / MOST PLACES (76-100%)			FWS	FAIRLY WIDE SPREAD / MANY PLACES (51% to 75%)			
SCT	SCATTERED / FEW PLACES (26% to 50%)			ISOL	ISOLATED (up to 25%)		DRY	NIL RAINFALL
[•] Heavy Rainfall (64.5-115.5 mm)			^{••} Heavy to Very Heavy Rainfall (115.6-204.4 mm)			^{•••} Extremely Heavy Rainfall (204.5 mm or more)		
[•] FOG		[*] SNOWFALL		[#] HAILSTORM		[↓] HEAT WAVE		[↑] SEVERE HEAT WAVE
⁵ THUNDER SQUALL		^{DS/TS} DUST/THUNDERSTORM		[↓] COLD WAVE		[↓] SEVERE COLD WAVE		

Actual Rainfall (mm/day)

(Week1: 12Jan-18Jan)

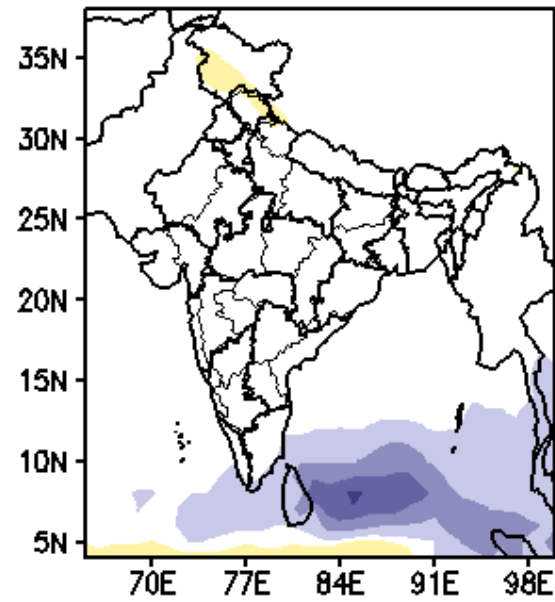
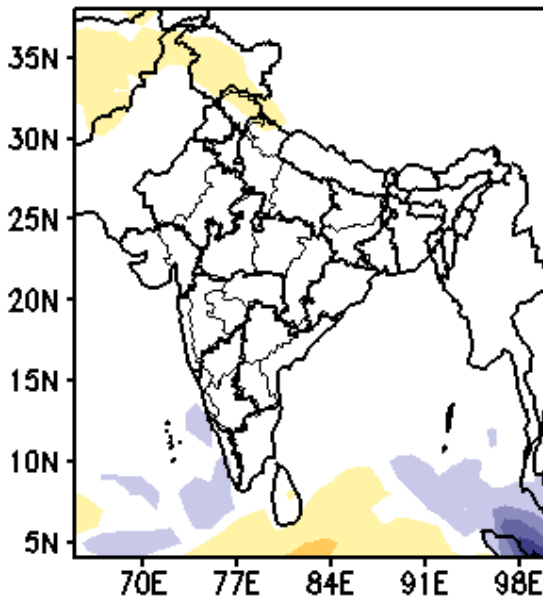
(Week2: 19Jan-25Jan)



Rainfall Anomaly (mm/day)

(Week1: 12Jan-18Jan)

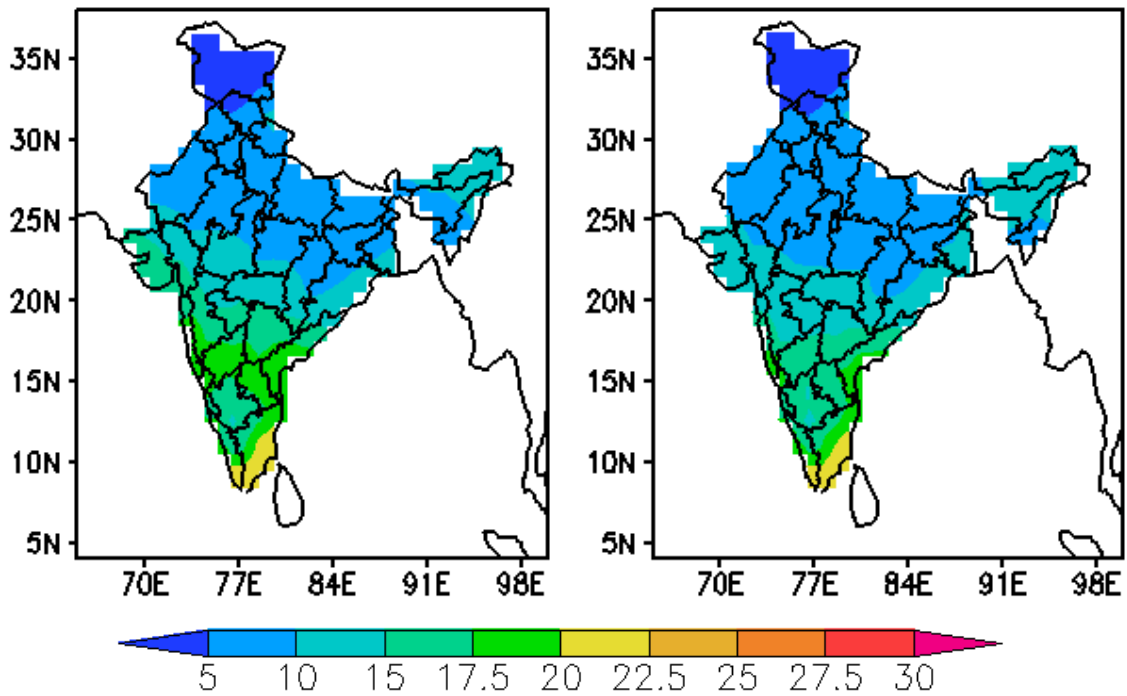
(Week2: 19Jan-25Jan)



MME Bias Corrected Actual Tmin (Deg C)

(Week1: 12Jan-18Jan)

(Week2: 19Jan-25Jan)



MME Bias Corrected Tmin Anomaly (Deg)

(Week1: 12Jan-18Jan)

(Week2: 19Jan-25Jan)

