



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

**Dated: 18 January, 2018**

## **Current Weather Status and Outlook for next two weeks**

### **Highlights of the past week**

#### **Northeast Monsoon:**

Northeast monsoon rainfall has ceased over Tamilnadu & Puducherry, Kerala and adjoining parts of Andhra Pradesh and Karnataka from 15th January 2018.

#### **Fog:**

Dense to very dense fog observed at most places over East Uttar Pradesh and Bihar and at a few places over West Uttar Pradesh and Sub Himalayan West Bengal and at isolated places over Nagaland, Manipur, Mizoram and Tripura on most of the days and at isolated places over Uttarakhand, Punjab, Assam & Meghalaya and Gangetic West Bengal on a few days during the week.

#### **Cold Day:**

Severe cold day conditions observed at a few places over East Uttar Pradesh and Bihar on most of the days and at isolated places over Uttarakhand, West Uttar Pradesh and West Bengal on one or two days during the week. The maximum temperature of 10.2° C recorded at Shahjahanpur (West Uttar Pradesh) on 12th January, 2018 was the lowest maximum temperature recorded in the plains of the country during the week.

#### **Cold Wave:**

Severe cold wave conditions observed at few places over Uttar Pradesh and Bihar on most of the days and at isolated places over Jammu & Kashmir, Himachal Pradesh, north Rajasthan, Gangetic West Bengal, Jharkhand and Odisha on one or two days during the week. The minimum temperature of 0.0° C recorded at Sikar (East Rajasthan) on 16th January, 2018 was the lowest minimum recorded in the plains of the country during the week.

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### Weekly Rainfall Scenario (11 to 17 January, 2018)

During the week, rainfall was below Long Period Average (LPA) by 96% over the country as a whole. Details are given below:

Regions	Actual Rainfall (mm)	Normal Rainfall (mm)	% Departure from LPA
Country as a whole	0.2	4.8	-96%
Northwest India	0.0	8.5	-100%
Central India	0.0	2.1	-100%
South Peninsula	0.8	2.8	-72%
East & northeast India	0.2	5.0	-96%

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

### Seasonal Rainfall Scenario (1 to 17 January, 2018)

For the country as a whole, cumulative rainfall during this year's winter season 2018 upto 17 January, 2018 is below LPA by 88%. 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	1.2	10.1	-88%
Northwest India	0.1	18.0	-99%
Central India	0.0	4.6	-99%
South Peninsula	3.0	5.9	-49%
East & northeast India	3.7	10.3	-64%

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

### Chief synoptic conditions as on 18 January, 2018

- A Western Disturbance as an upper air cyclonic circulation lies over north Pakistan & neighbourhood and extends upto 3.1 km above mean sea level.
- A fresh Western disturbance as a trough, interacting briefly with a tropical easterly trough is likely to affect northwest India from 22<sup>nd</sup>.
- A cyclonic circulation at 3.1 km above mean sea level lies over south interior Karnataka and neighbourhood.

- Another cyclonic circulation lies over Maldives area and neighbourhood and extends upto 0.9 km above mean sea level.

### Large scale features as on 18 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 5 with amplitude nearly 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(18 to 24 January 2018) and Week 2 (25 to 31 January 2018)**

- Under the influence of Western Disturbance as an upper air cyclonic circulation over north Pakistan & neighbourhood, very light precipitation would occur over higher reaches of Jammu & Kashmir during next 24 hours.
- **Thereafter, a fresh intense Western Disturbance is very likely to be seen as a deep trough with embedded cyclonic circulation roughly along Longitude 65° E and north of Latitude 25°N on 23<sup>rd</sup> and would start affecting Western Himalayan Region and plains of northwest India from 23<sup>rd</sup> onwards. It would cause light to moderate precipitation at many places over Western Himalayan Region on 23<sup>rd</sup> and isolated precipitation on 24<sup>th</sup>. It would also cause light isolated to scattered rainfall over Punjab, Haryana & Rajasthan on 23<sup>rd</sup> & 24<sup>th</sup>.**
- Isolated to scattered light/moderate rainfall activity is very likely over Andaman & Nicobar Islands during 1<sup>st</sup> week (**Annexure III**).
- **Overall rainfall activity is likely to be below normal over Western Himalayan region** and above normal rainfall activity over Andaman & Nicobar Islands; 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 to continue over Western Himalayan region** and above normal rainfall activity over extreme south Peninsula and near normal over Andaman & Nicobar Islands; 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 (where likely to be below 5°C) 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 first half of the week 1.**

- Overall, minimum temperatures are very likely to be below normal over most parts of India outside Western Himalayan Region & northeastern states, where they are likely to be above normal during 1<sup>st</sup> week (Annexure V).
- During 2<sup>nd</sup> week, there would be slight fall in minimum temperatures over central parts of India and overall there are likely to be below normal over most parts of India outside Western Himalayan Region, where they are likely to be above normal (Annexure V).

#### Fog:

- Light northwesterly/westerly winds (upto 5 knots) very likely to prevail over Indo-Gangetic Plains (IGPs) on 19th morning. Light northwesterly/westerly winds are likely to be strengthened over Punjab, Haryana & West Uttar Pradesh on 20th morning; however, in the remaining parts of IGPs light winds are very likely to continue to prevail. Again on 21st, light northwesterly/westerly winds prevail over IGPs. On 22nd & 23rd, winds near the surface are very likely to be light easterlies from West Uttar Pradesh to Punjab, However in remaining parts of IGPs, winds are very likely to be light northwesterly to westerly during same period.
- The relative humidity (RH) near surface is very likely to be more than 80% from Punjab, Haryana, north Rajasthan, Uttar Pradesh, north Bihar and Sub-Himalayan West Bengal on 18th night/19th morning hours. On 20th, there will be reduction in RH specifically over Punjab & Haryana and may confine over Uttar Pradesh, Bihar and Sub-Himalayan West Bengal: It is very likely to confine over extreme northern parts of IGPs on 21st and over northern parts of Punjab, Haryana, Uttar Pradesh, Bihar and Sub-Himalayan West Bengal on 22nd morning. Thereafter on 23rd morning, RH is likely to be more than 80% over northern parts of Uttar Pradesh, Bihar and Sub-Himalayan West Bengal & Sikkim.
- 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.
- Significant temperature inversion layer near surface is very likely from Punjab to East Uttar Pradesh from 19th to 21st morning hours.
- So considering all above mentioned parameters, **dense to very dense fog very likely at many places over Bihar, Sub-Himalayan West Bengal and East Uttar Pradesh; at a few places over Punjab, West Uttar Pradesh and at isolated places over Uttarakhand, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and north Rajasthan and dense fog at isolated places over Coastal Andhra Pradesh on 18th night/19th morning.**
- **It spread & intensity may further decrease particularly over Punjab & Haryana, hence dense to very dense fog very likely at many places over Bihar and Sub-Himalayan West Bengal; at a few places over and East Uttar Pradesh and at isolated places over West Uttar Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and dense fog at isolated places over Uttarakhand and Coastal Andhra Pradesh on 20th morning.**
- Thereafter, dense fog may occur over Punjab & Haryana also, thus **Dense to very dense fog very likely at many places over Bihar and Sub-Himalayan West Bengal ; at a few places over and East Uttar Pradesh and at isolated places**

**over West Uttar Pradesh and dense fog at isolated places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Haryana, Chandigarh & Delhi, north Punjab and Uttarakhand on 21st & 22nd morning.**

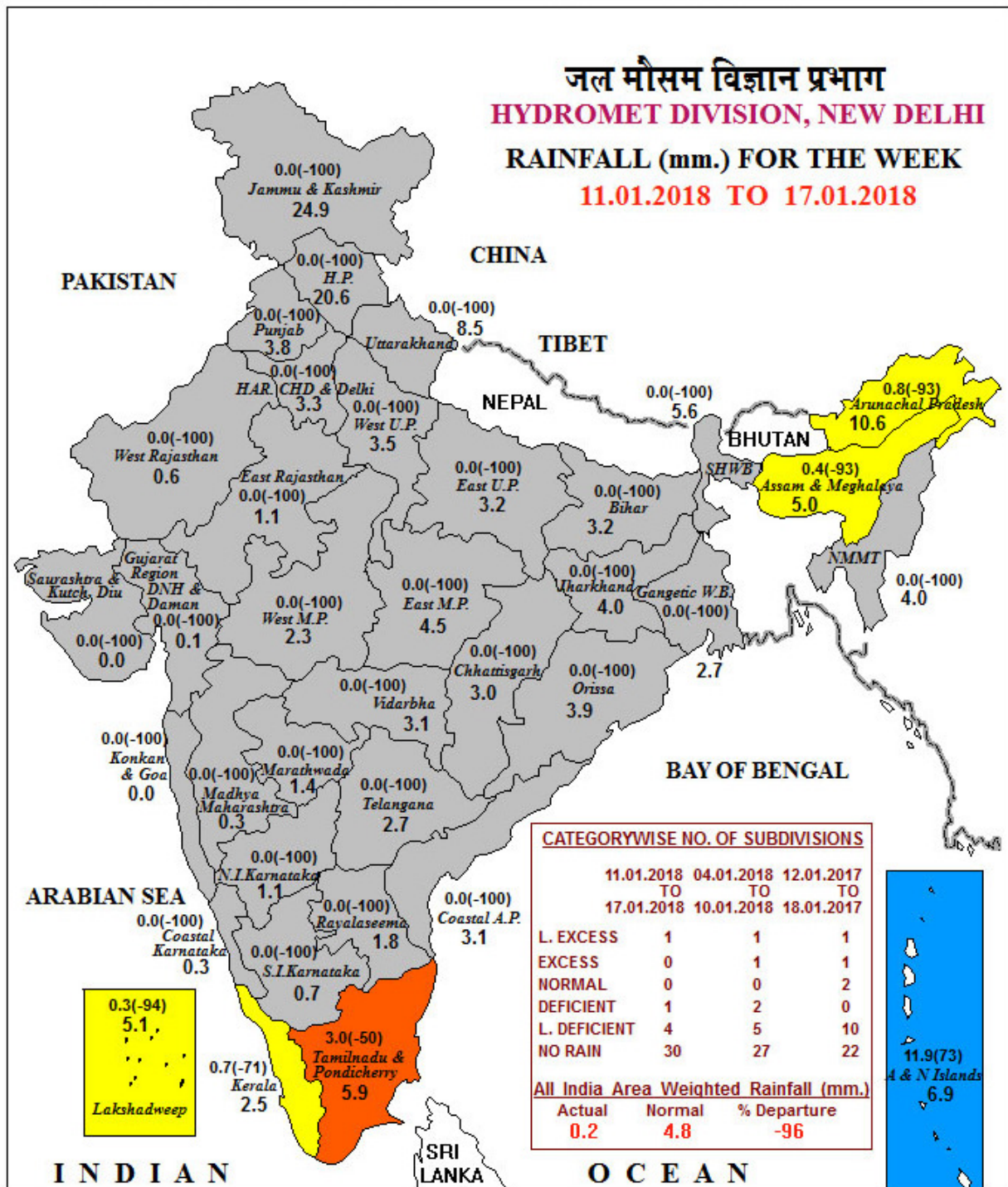
**Cyclogenesis:**

- 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. 25 January, 2018**

# भारत मौसम विज्ञान विभाग

## INDIA METEOROLOGICAL DEPARTMENT



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

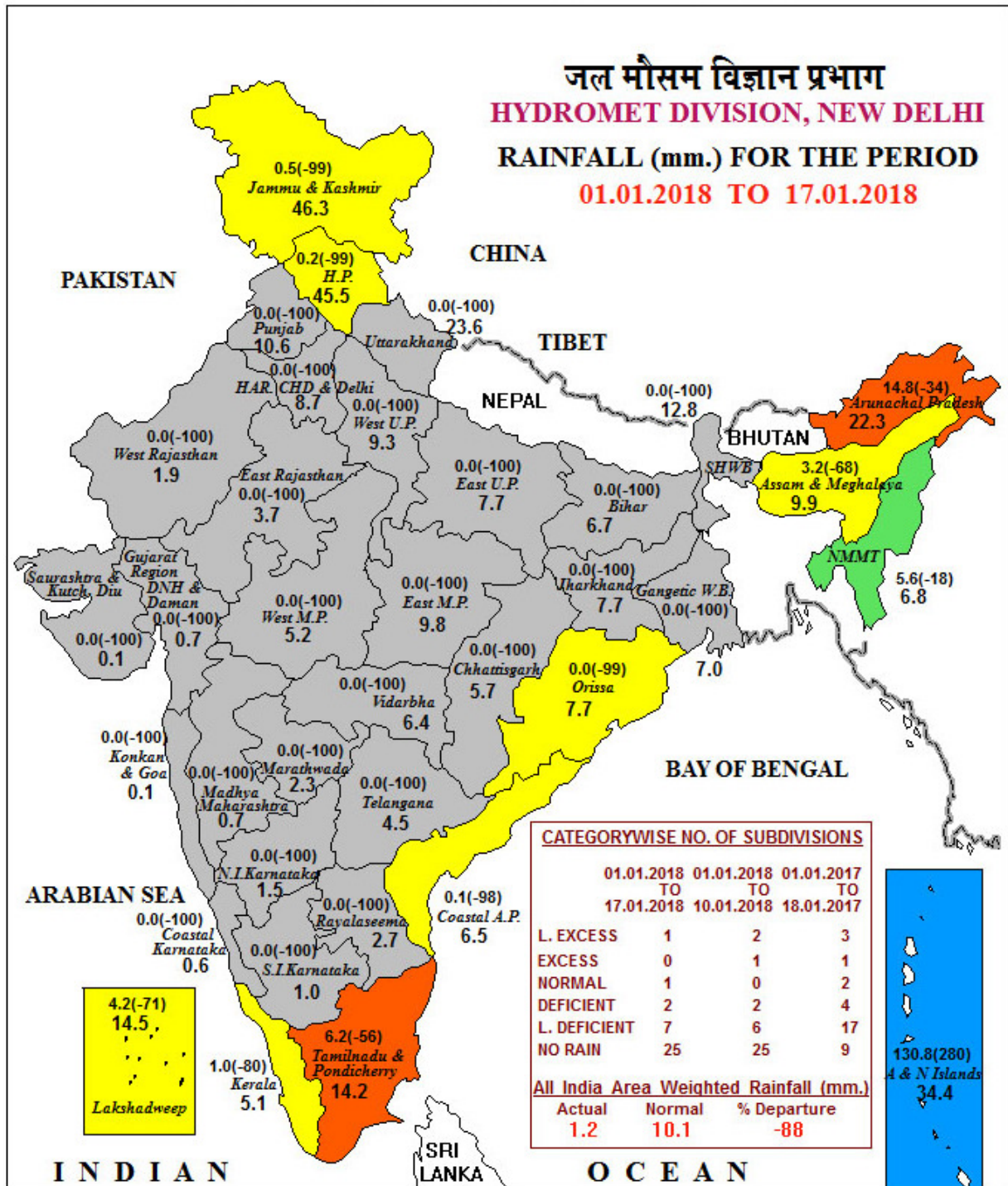
**NOTES:**

[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

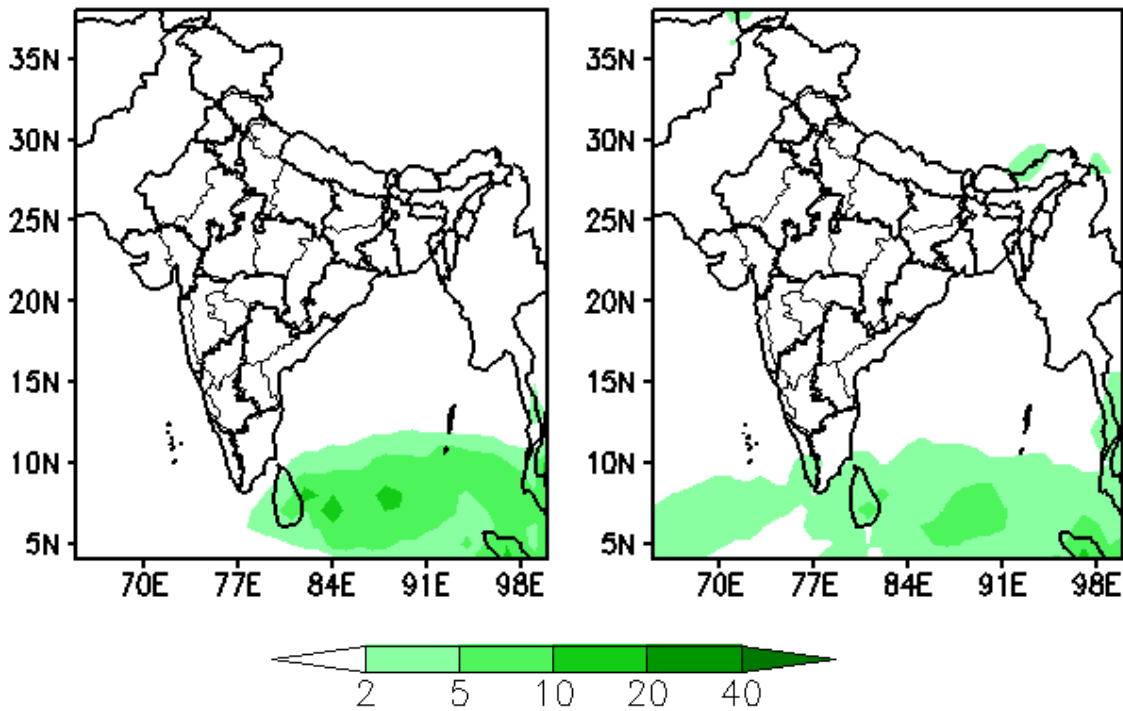
METEOROLOGICAL SUB-DIVISIONWISE WEEKLY RAINFALL FORECAST & Wx. WARNINGS-2018								
Sr. No	MET.SUB-DIVISIONS	18 JAN	19 JAN	20 JAN	21 JAN	22 JAN	23 JAN	24 JAN
1	ANDAMAN & NICO.ISLANDS	ISOL	ISOL	ISOL	SCT	SCT	FWS	SCT
2	ARUNACHAL PRADESH	D	D	D	D	D	D	ISOL
3	ASSAM & MEGHALAYA	D*	D*	D*	D*	D*	D*	D*
4	NAGA.MANI.MIZO.& TRIPURA	D*	D*	D*	D*	D*	D*	D*
5	SUB-HIM.W. BENG. & SIKKIM	D*	D*	D*	D*	D*	D*	ISOL
6	GANGETIC WEST BENGAL	D	D	D	D	D	D	D
7	ODISHA	D ↓	D ↓	D ↓	D	D	D	D
8	JHARKHAND	D	D	D	D	D	D	D
9	BIHAR	D ↓*	D ↓*	D ↓*	D*	D*	D*	ISOL
10	EAST UTTAR PRADESH	D ↓*	D ↓*	D ↓*	D ↓*	D*	ISOL	ISOL
11	WEST UTTAR PRADESH	D ↓*	D ↓*	D ↓*	D ↓*	D*	SCT	ISOL
12	UTTARAKHAND	D ↓*	D ↓*	D ↓*	D ↓*	D*	FWS#	SCT
13	HARYANA CHD. & DELHI	D	D ↓	D ↓*	D ↓*	D	SCT	ISOL
14	PUNJAB	D ↓*	D ↓	D ↓*	D ↓*	D	SCT	D
15	HIMACHAL PRADESH	D ↓	D ↓	D ↓	D ↓	D	FWS#	ISOL
16	JAMMU & KASHMIR	ISOL	D	D	D	D	FWS#	ISOL
17	WEST RAJASTHAN	D*	D ↓	D ↓	D	ISOL	ISOL	D
18	EAST RAJASTHAN	D*	D ↓	D ↓	D	D	ISOL	D
19	WEST MADHYA PRADESH	D	D	D	D	D	ISOL	D
20	EAST MADHYA PRADESH	D ↓	D ↓	D	D	D	D	D
21	GUJARAT REGION D.D. & N.H.	D	D	D	D	D	D	D
22	SAURASTRA KUTCH & DIU	D	D	D	D	ISOL	D	D
23	KONKAN & GOA	D	D	D	D	D	D	D
24	MADHYA MAHARASHTRA	D	D	D	D	D	D	D
25	MARATHAWADA	D	D	D	D	D	D	D
26	VIDARBHA	D	D	D	D	D	D	D
27	CHHATTISGARH	D ↓	D ↓	D	D	D	D	D
28	COASTAL ANDHRA PRADESH	D*	D*	D	D	D	D	D
29	TELANGANA	D	D	D	D	D	D	D
30	RAYALASEEMA	D	D	D	D	D	D	D
31	TAMILNADU & PUDUCHERRY	D	D	D	D	D	D	D
32	COASTAL KARNATAKA	D	D	D	D	D	D	D
33	NORTH INT.KARNATAKA	D	D	D	D	D	D	D
34	SOUTH INT.KARNATAKA	D	D	D	D	D	D	D
35	KERALA	D	D	D	D	D	D	D
36	LAKSHADWEEP	ISOL	D	D	D	D	D	D
<b>LEGENDS:</b>								
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%)			D/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	
§ THUNDER SQUALL	DS/TS DUST/THUNDERSTORM			↓ COLD WAVE			↓ SEVERE COLD WAVE	



### Actual Rainfall (mm/day)

(Week1: 19Jan-25Jan)

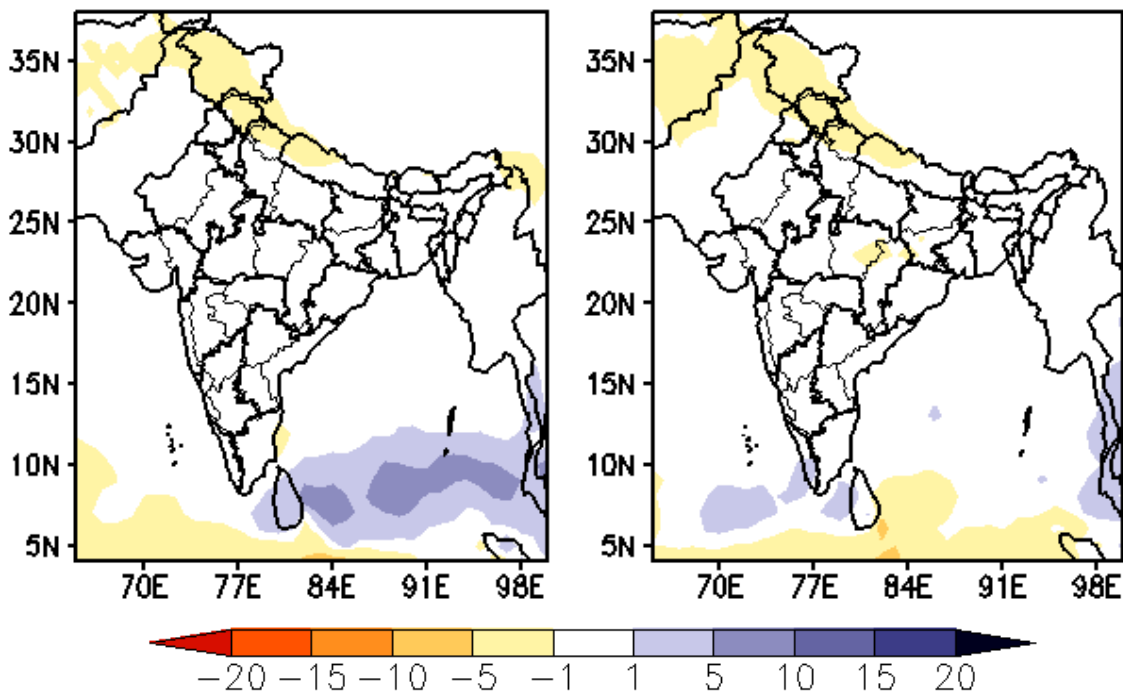
(Week2: 26Jan-01Feb)



### Rainfall Anomaly (mm/day)

(Week1: 19Jan-25Jan)

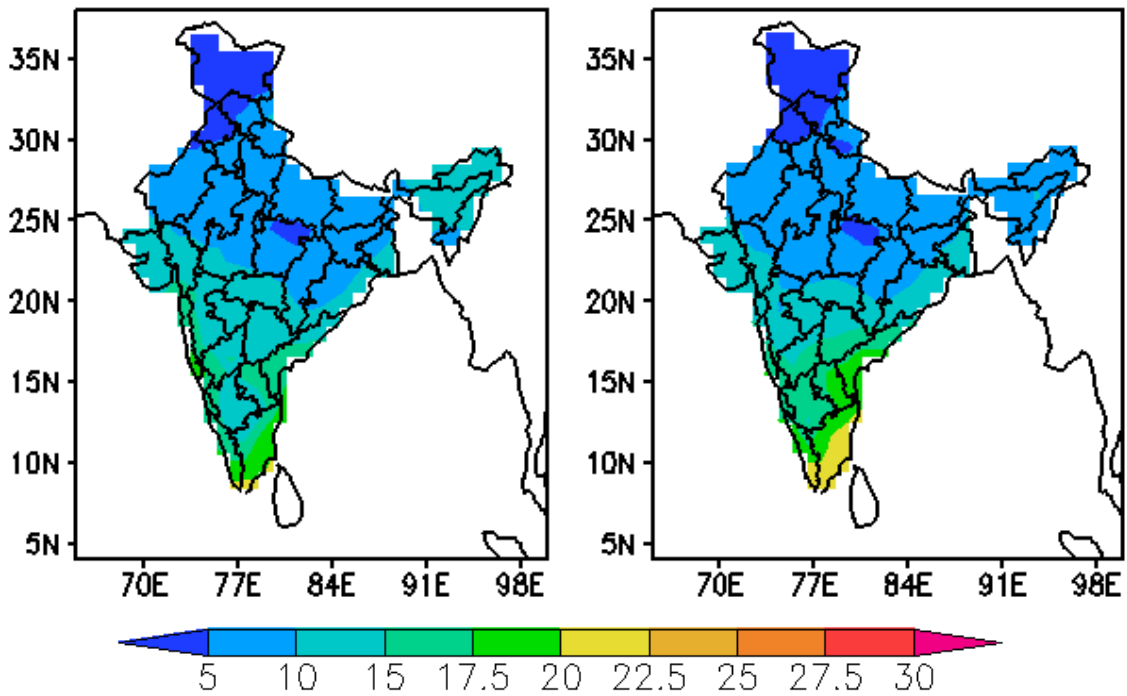
(Week2: 26Jan-01Feb)



### MME Bias Corrected Actual Tmin (Deg C)

(Week1: 19Jan-25Jan)

(Week2: 26Jan-01Feb)



### MME Bias Corrected Tmin Anomaly (Deg)

(Week1: 19Jan-25Jan)

(Week2: 26Jan-01Feb)

