



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

Dated: 25 January, 2018

Current Weather Status and Outlook for next two weeks

Highlights of the past week

Precipitation

A western disturbance as a low pressure area with trough aloft caused fairly to widespread rain/snow over Jammu & Kashmir, Himachal Pradesh and Uttarakhand and rain / thunderstorms over Punjab, Haryana, Chandigarh & Delhi on 23rd. Isolated rainfall also occurred over Rajasthan and Uttar Pradesh due to this system.

Apart from this, isolated rainfall occurred over Andaman & Nicobar Islands on many days and Arunachal Pradesh on one day. Weather over the remaining India remained dry.

Fog

Dense to very dense fog occurred at many places over East Uttar Pradesh and Bihar on most days and at a few places over West Uttar Pradesh, Assam & Meghalaya, Mizoram & Tripura and West Bengal on many days during the week.

Cold day

Severe cold day conditions prevailed at isolated places over East Uttar Pradesh and Bihar on many days and over Punjab and Haryana on one day during the week. The lowest maximum temperature of 11.8^o C was recorded at Ludhiana (Punjab) on 23rd January 2018 in the plains during the week.

Cold wave

Severe cold wave conditions prevailed at isolated places over Bihar and Odisha on most days and Himachal Pradesh, Punjab, Haryana, Chandigarh & Delhi on a few days during the week. The lowest minimum temperature of 2.1^o C was recorded at Muzaffarnagar (West Uttar Pradesh) on 21st January 2018 in the plains. Ground frost conditions also occurred on a few days at isolated places over northwest India.

Weekly Rainfall Scenario (18 to 24 January, 2018)

During the week, rainfall was below Long Period Average (LPA) by 73% over the country as a whole. Details are given below:

Regions	Actual Rainfall (mm)	Normal Rainfall (mm)	% Departure from LPA
Country as a whole	1.0	3.7	-73%
Northwest India	3.0	7.1	-57%
Central India	0.0	1.6	-100%
South Peninsula	0.4	1.0	-59%
East & northeast India	0.0	4.7	-99%

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

Seasonal Rainfall Scenario (1 to 24 January, 2018)

For the country as a whole, cumulative rainfall during this year's winter season 2018 upto 24 January, 2018 is below LPA by 84%. 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	2.2	13.8	-84%
Northwest India	3.1	25.1	-88%
Central India	0.0	6.2	-99%
South Peninsula	3.4	6.9	-51%
East & northeast India	3.7	15.0	-75%

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

Chief synoptic conditions as on 25 January, 2018

- A fresh Western Disturbance is likely to affect Western Himalayan region from 28th January.
- A cyclonic circulation at 3.1 km above mean sea level lies over Sikkim & neighbourhood.
- The core of Sub-Tropical westerly jet stream passes between latitudes 30 & 32°N over Indian region.
- A cyclonic circulation at 1.5 km above mean sea level over southeast Arabian Sea off Kerala Coast.

- A trough of low at mean sea level runs from southeast Bay of Bengal to north Andaman Sea with the embedded cyclonic circulation extending upto 3.1 km above mean sea level over southeast Bay of Bengal & neighbourhood.

Large scale features as on 25 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 more than 1 and is likely to move in phase 6 with amplitude more than 1 during the week.
- Indian Ocean Dipole (IOD) is in neutral phase (-0.1°C).

Forecast for next two week

Weather systems & associated Precipitation during Week 1(25 to 31 January 2018) and Week 2 (01 to 07 February 2018)

- A fresh Western Disturbance is very likely to affect Western Himalayan Region from 28th onwards and may cause isolated to scattered precipitation over Jammu & Kashmir from 28th to 30th and light isolated precipitation over higher reaches of Himachal Pradesh on 29th & 30th.
- Isolated to scattered light/moderate rainfall activity is very likely over Andaman & Nicobar Islands during 1st week (**Annexure III**).
- Isolated to scattered precipitation is likely over Arunachal Pradesh during 1st half of the week.
- **Overall rainfall activity is likely to be above normal over Western Himalayan region** and below 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 over Western Himalayan region** and 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 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 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, where they are likely to be above normal during 1st week (Annexure V).
- During 2nd week, there would be slight rise in minimum temperatures over northern parts of India and overall there are likely to be below normal over most parts of India outside Western Himalayan Region & northeastern states, where they are likely to be above normal (Annexure V).

Fog:

- Light northwesterly to westerly winds (strength upto 5 knots) are very likely to prevail over Indo-Gangetic Plains (IGPs) near surface till 28th morning, however there may be slight strengthen in the winds over Punjab, Haryana & West Uttar Pradesh from 27th morning.
- The relative humidity (RH) near surface is very likely to be more than 80% over entire IGPs till 27th morning and reduction thereafter over IGPs on 28th & 29th.
- Weak temperature inversion layer near surface is very likely from Punjab to East Uttar Pradesh till 27th and significant inversion layer thereafter on 28th & 29th morning.
- **So considering all above mentioned parameters, dense to very dense fog very likely at a few places over Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, Bihar, Sub-Himalayan West Bengal and at isolated places over north Rajasthan and lower reaches of Himachal Pradesh & Uttarakhand on 26th (in morning hours).**
- Thereafter, there is likely reduction in its intensity & spread over Punjab & Haryana, hence Dense to very dense fog very likely at a few places over East Uttar Pradesh, Bihar and Sub-Himalayan West Bengal and at isolated places over north Rajasthan, Punjab, Haryana, Chandigarh & Delhi, West Uttar Pradesh and lower reaches of Himachal Pradesh & Uttarakhand on 27th & 28th (in morning hours).

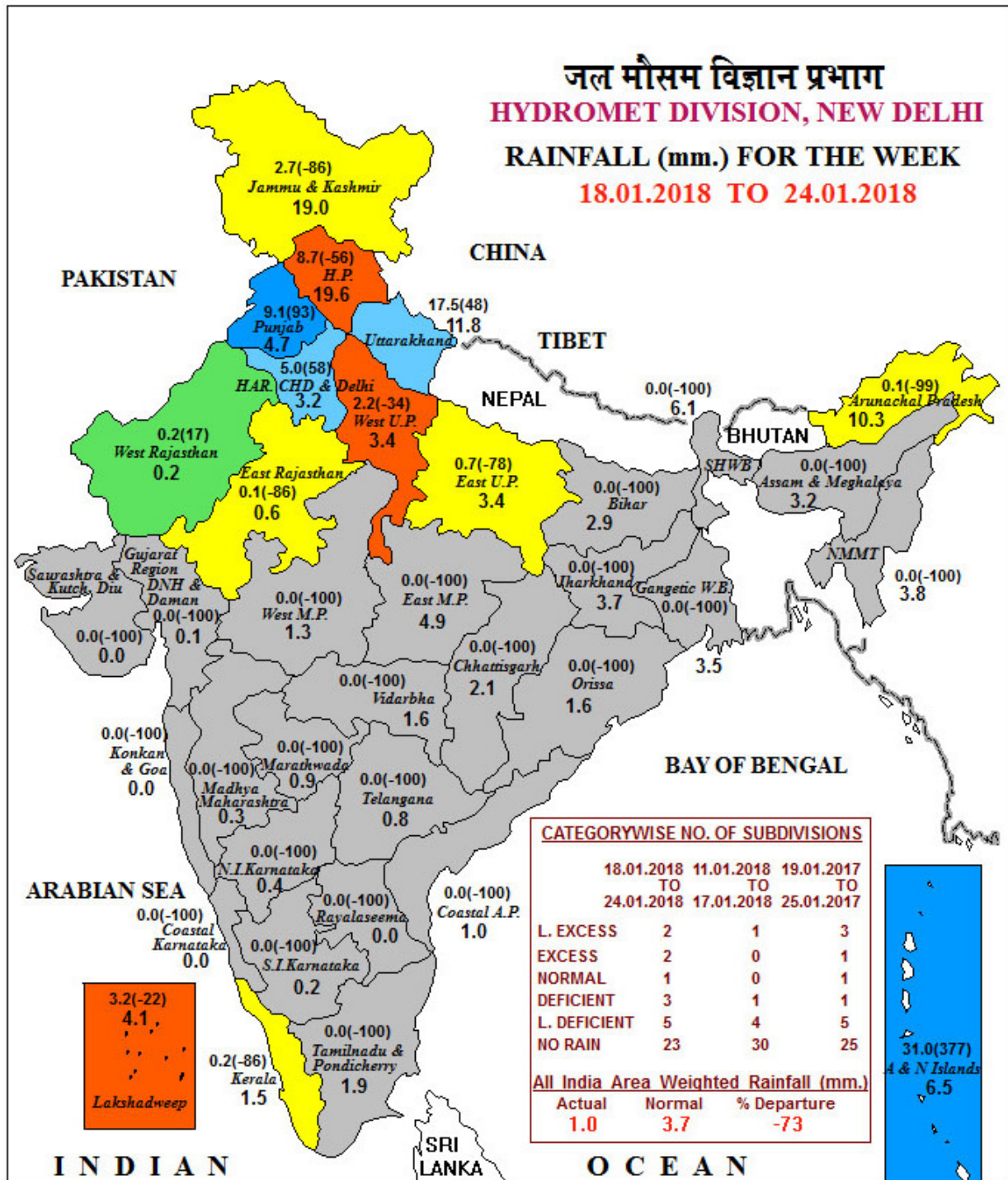
Cyclogenesis:

- 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. 01 February, 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

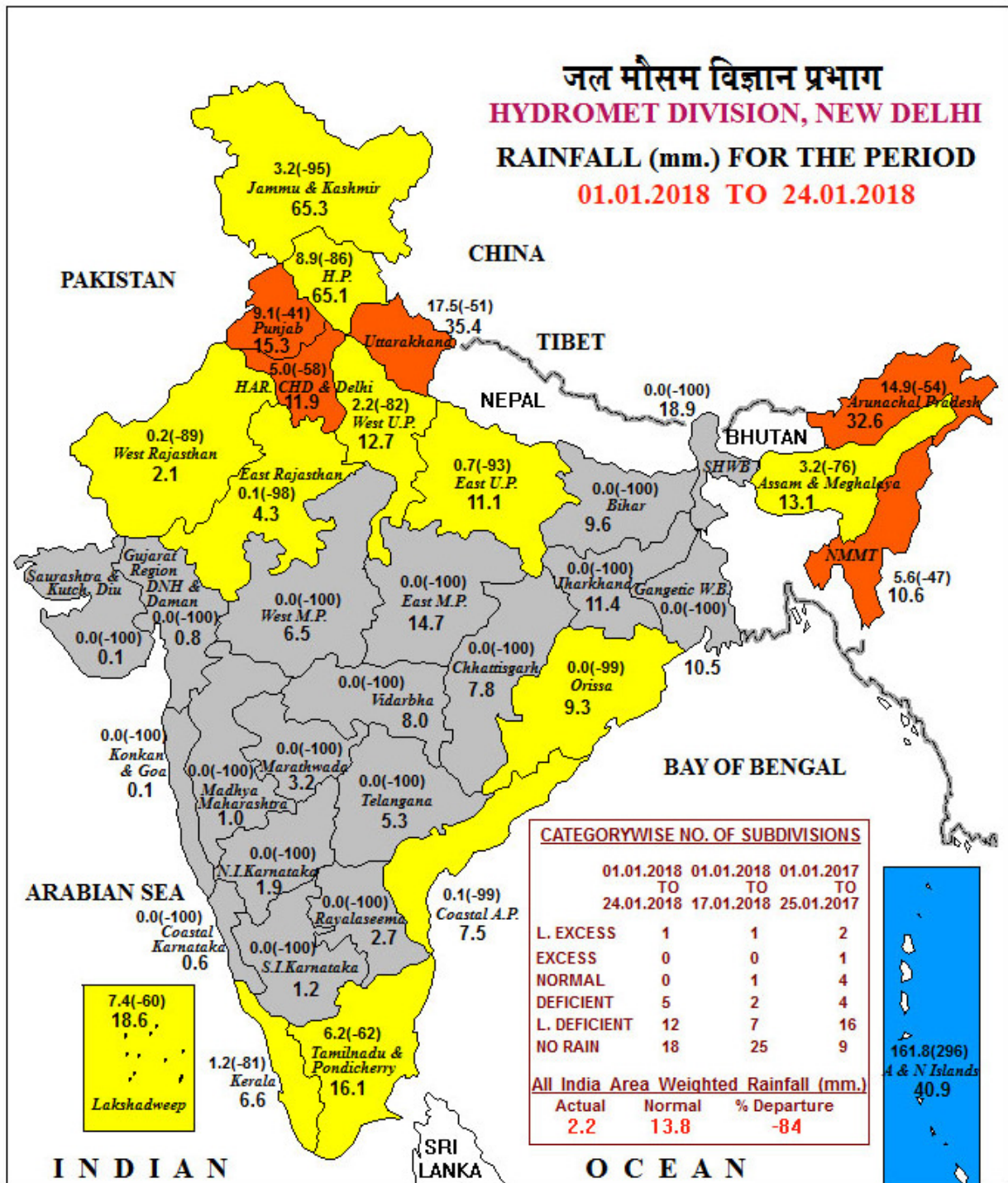
NOTES:

[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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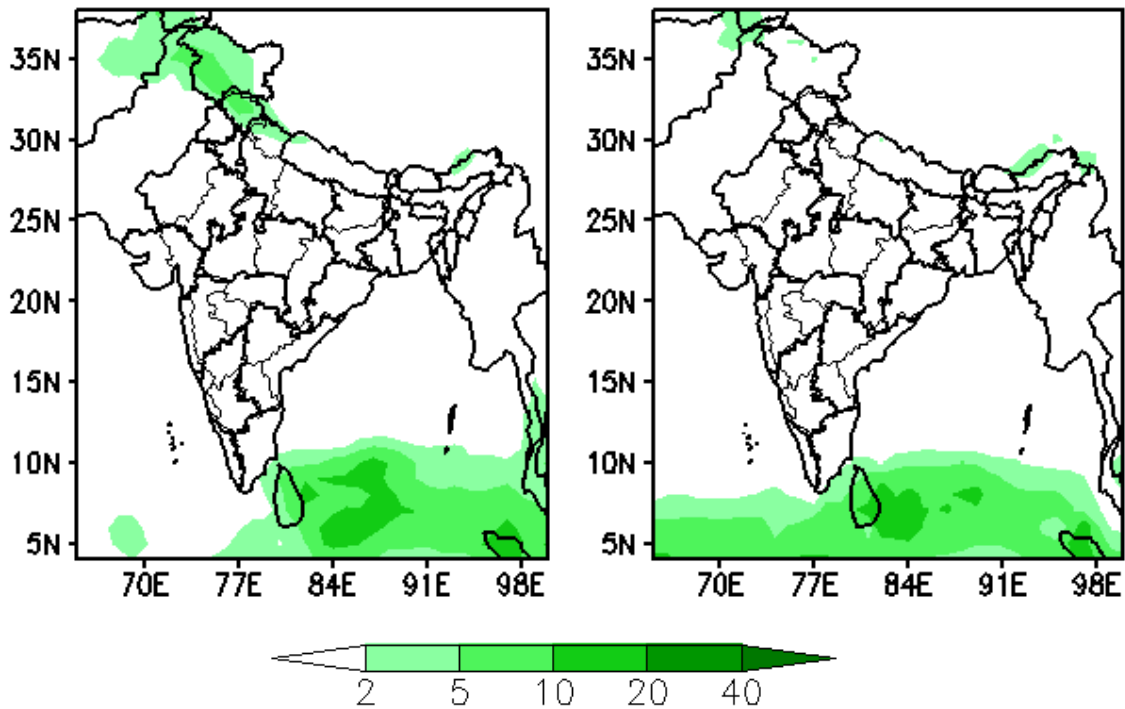
Annexure III

METEOROLOGICAL SUB-DIVISIONWISE WEEKLY RAINFALL FORECAST & Wx. WARNINGS-2018								
Sr. No	MET.SUB-DIVISIONS	25 JAN	26 JAN	27 JAN	28 JAN	29 JAN	30 JAN	31 JAN
1	ANDAMAN & NICO.ISLANDS	FWS	SCT	SCT	ISOL	ISOL	ISOL	ISOL
2	ARUNACHAL PRADESH	FWS	SCT	ISOL	ISOL	D	D	D
3	ASSAM & MEGHALAYA	ISOL	D	D	D	D	D	D
4	NAGA.MANI.MIZO.& TRIPURA	ISOL	D	D	D	D	D	D
5	SUB-HIM.W. BENG. & SIKKIM	D*	D*	D*	D	D	D	D
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	D
10	EAST UTTAR PRADESH	D*	D*	D*	D*	D	D	D
11	WEST UTTAR PRADESH	D*	D*	D*	D	D	D	D
12	UTTARAKHAND	D* ↓	D* ↓	D* ↓	D	D	D	D
13	HARYANA CHD. & DELHI	D* ↓	D* ↓	D* ↓	D	D	D*	D*
14	PUNJAB	D* ↓	D* ↓	D* ↓	D	D	D*	D*
15	HIMACHAL PRADESH	D* ↓	D* ↓	D* ↓	D	ISOL	ISOL	ISOL
16	JAMMU & KASHMIR	ISOL	ISOL ↓	ISOL	ISOL	SCT	FWS	SCT
17	WEST RAJASTHAN	D* ↓	D* ↓	D ↓	D	D	D	D
18	EAST RAJASTHAN	D* ↓	D* ↓	D ↓	D	D	D	D
19	WEST MADHYA PRADESH	D ↓	D ↓	D ↓	D	D	D	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	D	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	ISOL	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	ISOL	D	D	D	D	D	D
36	LAKSHADWEEP	ISOL	ISOL	ISOL	D	D	D	D
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%)			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: 26Jan-01Feb)

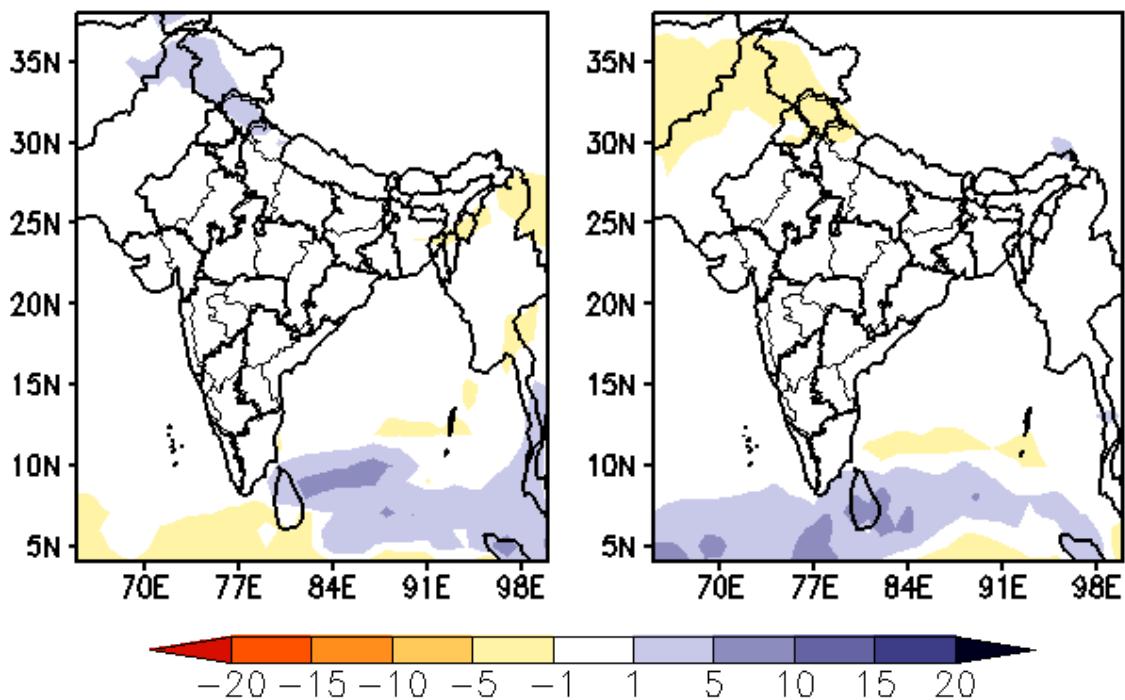
(Week2: 02Feb-08Feb)



Rainfall Anomaly (mm/day)

(Week1: 26Jan-01Feb)

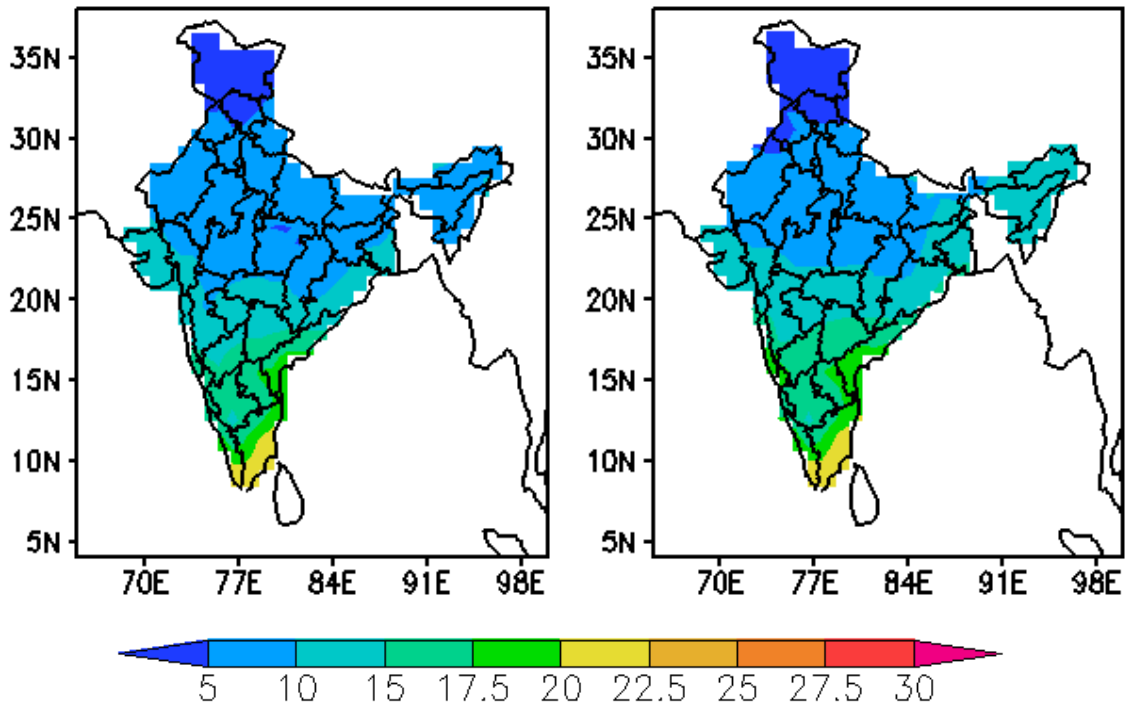
(Week2: 02Feb-08Feb)



MME Bias Corrected Actual Tmin (Deg C)

(Week1: 26Jan-01Feb)

(Week2: 02Feb-08Feb)



MME Bias Corrected Tmin Anomaly (Deg)

(Week1: 26Jan-01Feb)

(Week2: 02Feb-08Feb)

