



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

Dated: 28 January, 2021

Subject: Current Weather Status and Outlook for next two weeks (28 January to 10 February, 2021)

Salient Features

- An easterly waves caused light isolated rainfall/thunderstorms over extreme south Peninsula during the 1st half of the past week (21 to 27 January, 2021).
- A Western Disturbance and its induced cyclonic circulation have caused isolated to scattered rainfall/snowfall/thunderstorm activity over Western Himalayan Region during 23rd to 25th January and over adjoining plains on 24th January, 2021.
- Considering prevailing wind pattern at lower levels. no significant change in Minimum temperatures very likely over most parts of Northwest India during 1st half of the week 1 and rise by 2-3°C thereafter. **Hence Cold Wave to Severe Cold Wave conditions in some/many pockets very likely to continue over Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh and East Rajasthan on 29th & 30th January and isolated cold wave for subsequent 2-3 days and abate thereafter.**
- Prevailing dense to very dense fog in isolated/some/many pockets very likely over Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, Sub-Himalayan West Bengal & Sikkim and Bihar during 1st half of the week 1 and decrease in spatial distribution & intensity thereafter.

Weekly Rainfall Scenario (21 to 27 January, 2021)

During the week, rainfall for the country as a whole was below LPA by 66%.

Details are given below:

Regions	Actual Rainfall (mm)	Normal Rainfall (mm)	% Departure from LPA
Country as a whole	1.4	4.2	-66%
Northwest India	2.7	9.2	-70%
Central India	0.0	1.5	-100%
South Peninsula	0.2	0.7	-72%
East & northeast India	3.4	4.6	-26%

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

Winter Rainfall Scenario (01 to 27 January, 2021)

For the country as a whole, cumulative rainfall during this year's winter season till 27 January, 2021 is above LPA by 38%. Details of the rainfall distribution over the four broad geographical regions of India are given below:

Regions	Actual Rainfall (mm)	Normal Rainfall (mm)	% Departure from LPA
Country as a whole	19.9	14.4	38%
Northwest India	28.4	27.7	3%
Central India	3.3	6.3	-48%
South Peninsula	45.6	7.6	500%
East & northeast India	7.1	14.4	-51%

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

Chief synoptic conditions as on 28 January, 2021

- A cyclonic circulation lies over southeast Rajasthan & neighbourhood at lower levels.
- A cyclonic circulation lies over Marathawada & adjoining Madhya Maharashtra at lower levels.
- A fresh Western Disturbance likely to affect Western Himalayan Region from 31st January, 2021 night onwards.

Large scale features as on 28 January, 2021

- Currently, moderate La Niña conditions are prevailing over equatorial Pacific and Sea Surface Temperatures (SSTs) are below normal over central and eastern equatorial Pacific Ocean. The latest Monsoon Mission Climate Forecasting System (MMCFS) forecast indicates that colder than normal SST anomaly is most likely to persist over Nino 3.4 region and La Niña conditions likely to continue during coming seasons.
- At present, neutral Indian Ocean Dipole (IOD) conditions are observed over Indian Ocean and the latest MMCFS forecast indicates neutral IOD conditions are likely to continue during the coming months.
- The Madden Julian Oscillation (MJO) index is in Western Pacific (Phase 6) with high amplitude. As per the latest projections, it is likely to be in Phase 7 with high amplitude towards end of the next one week.

Forecast for next two week

Weather systems & associated Precipitation during Week 1 (28 January to 03 February, 2021) and Week 2 (04 to 10 February, 2021)

Rainfall for week 1: (28 January to 3 February, 2021)

- Under the influence of a cyclonic circulation over Marathawada & adjoining Madhya Maharashtra at lower levels, light isolated rain/thundershower very likely to occur over East Madhya Pradesh, Vidharbha on today and over Chhattisgarh on 28th & 28th January, 2021.
- Under the influence of an easterly wave, light isolated rain/thundershower very likely to occur over Tamilnadu, Puducherry & Karaikal during 29th January to 1st February and over Kerala & Mahe on 31st January & 1st February 2021.
- Under the influence of a fresh Western Disturbance, light isolated rain/snow very likely over the Western Himalayan region during 01st - 03rd February, 2021.
- Isolated to scattered rain/snow with moderate thunderstorm & lightning likely over Arunachal Pradesh during 29th to 31st January, 2021 and light rain/thundershower over rest parts of northeast India during same period (**Annexure III**).
- **Cumulatively, above normal rain over coastal Tamilnadu, normal to above**

normal over parts of central India and below normal over northern parts of country including Western Himalayan Region (Annexure IV).

Rainfall for week 2: (04 to 10 February, 2021)

- **Due to the absence of any active Western Disturbance, below normal rain/snow likely over northern parts of country including Western Himalayan Region.**
- Under the influence of a cyclonic circulation/ trough over central India at lower levels, light isolated rain/thundershower very likely to occur over Madhya Pradesh, Vidharbha and Chhattisgarh during 1st half of the week 2. Hence **normal to above normal rainfall likely over above region (Annexure IV).**

Temperature/fog for week 1 & 2: (28 January to 10 February, 2021)

- Minimum temperatures are in the range of 2°C to 10°C over most parts of northwest & adjoining central India. Generally, these are below normal over most parts of northwest, central & adjoining east India.
- Considering the prevailing wind pattern at lower levels, No significant change in Minimum temperatures very likely over most parts of Northwest India during 1st half of the week 1 and rise by 2-3°C thereafter.
- No significant change in Minimum temperatures very likely over most parts of East India & adjoining Chhattisgarh during next 2 days and fall by 2-4°C thereafter. No significant change in Minimum temperatures very likely over most parts of Maharashtra during 1st half of the week 1 and gradual rise by 2-4°C thereafter.
- **Hence Cold Wave to Severe Cold Wave conditions in some/many pockets very likely over Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh and East Rajasthan on 29th & 30th January and isolated cold wave for subsequent 2-3 days and abate thereafter.**
- **Cold Wave conditions in isolated pockets very likely over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad, Himachal Pradesh, West Rajasthan and Madhya Pradesh during next 2-3 days.**
- **Ground Frost conditions in isolated places very likely over Punjab, Haryana, Chandigarh & Delhi, Himachal Pradesh, Uttarakhand, West Uttar Pradesh and**

north Rajasthan during 1st half of the week 1.

- Due to availability of moisture at lower levels and other favorable meteorological features, **Dense to Very Dense Fog in isolated/some/many pockets very likely over Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, Sub-Himalayan West Bengal & Sikkim and Bihar during 1st half of the week 1 and decrease in spatial distribution and intensity thereafter. Dense Fog in isolated pockets also very likely over Uttarakhand, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura during next 2-3 days and over Odisha during 29th-31st January, 2021.**
- **Cold Day to Severe Cold Day conditions in isolated/some pockets very likely over Uttarakhand, Uttar Pradesh and Bihar during 1st half of the week 1.**
- Overall week as a whole during week 1, **the minimum temperatures very likely to be below normal by 2-4°C over most parts of the country outside south Peninsular India, where these are likely to be near normal.**
- During week 2, due to absence of any active Western Disturbance, dry northwesterly winds likely to prevail over the northern & central parts of the country. Hence, **the minimum temperatures likely to be below normal by 2-4°C over most parts of the country , outside extreme south Peninsular India, where these are likely to be near normal by 2-3°C (Annexure V)**
- **Cold wave conditions likely at isolated places over north India during week 2.**

Cyclogenesis:

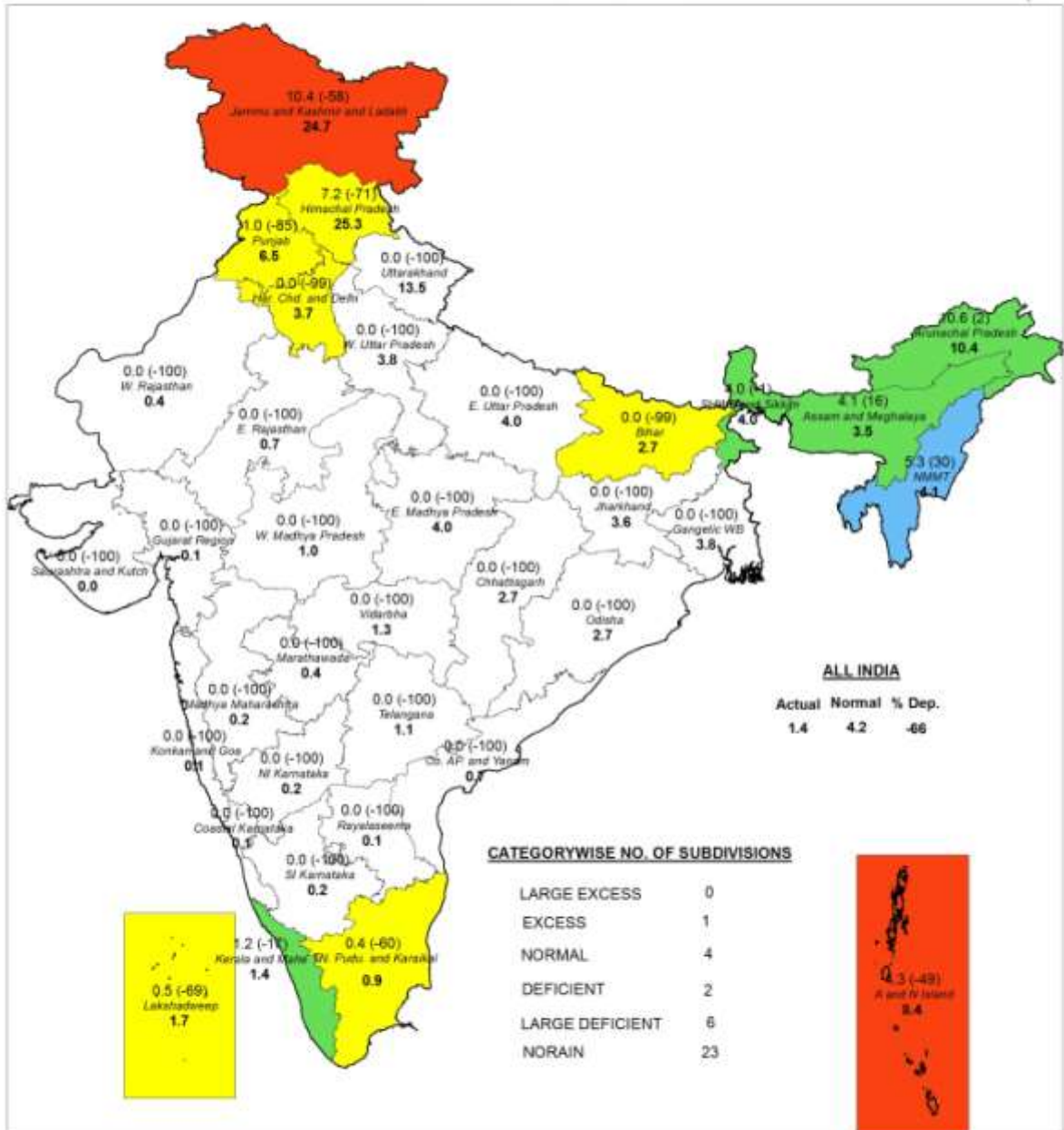
- No cyclogenesis is likely over the north Indian Ocean during next two weeks.

Next weekly update will be issued on next Thursday i.e. 4 February, 2021



SUBDIVISION RAINFALL MAP

Week : 21-01-2021 To 27-01-2021



Legend

Large Excess [80% or more] Excess [20% to 59%] Normal [-19% to 19%] Deficient [-59% to -20%] Large Deficient [-99% to -60%] No Rain [-100%] No Data

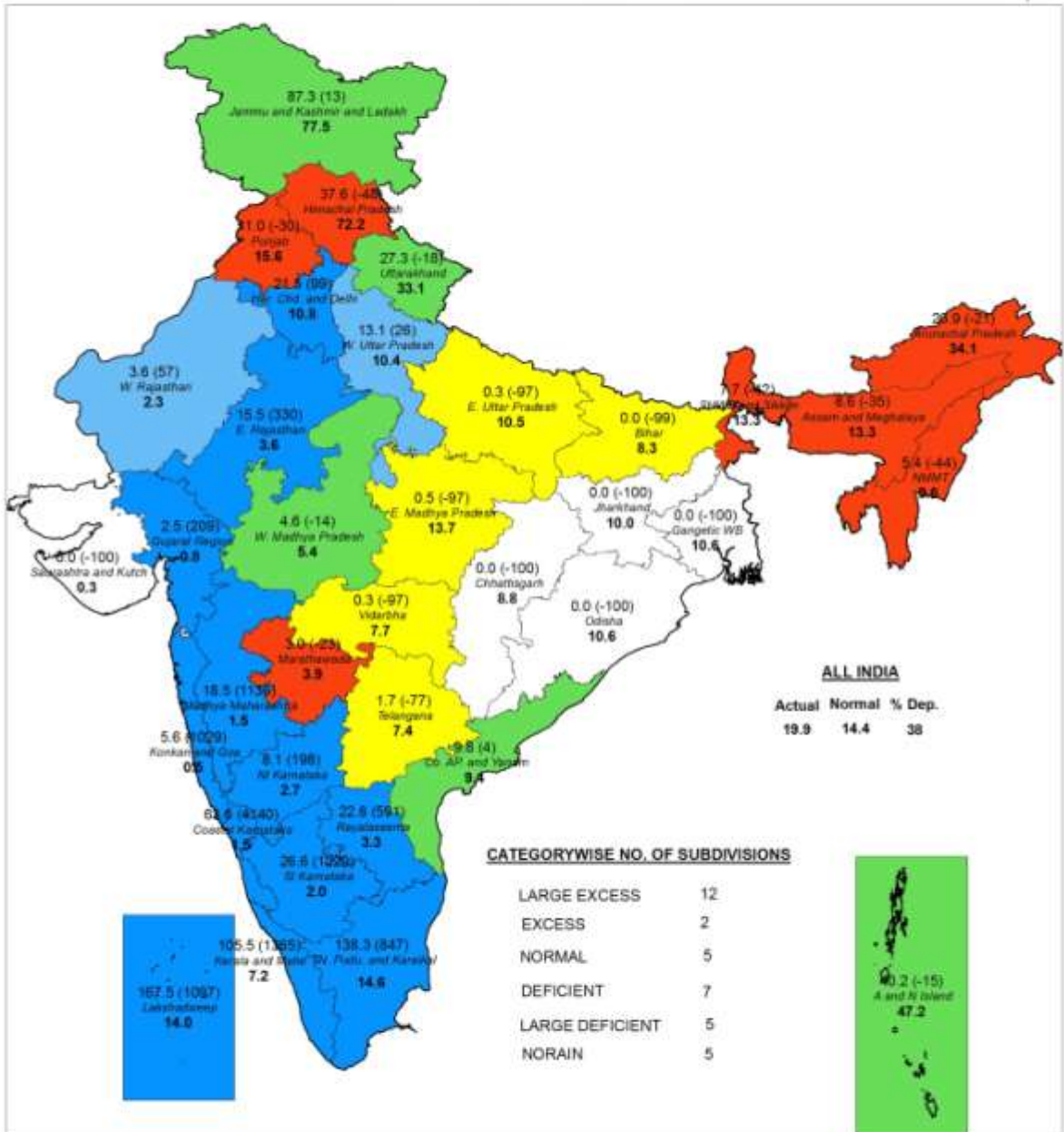
NOTES :

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



SUBDIVISION RAINFALL MAP

Period : 01-01-2021 To 27-01-2021



Legend

Large Excess [60% or more] Excess [20% to 59%] Normal [-19% to 19%] Deficient [-59% to -20%] Large Deficient [-89% to -60%] No Rain [-100%] No Data

NOTES :

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

Annexure III

METEOROLOGICAL SUB-DIVISIONWISE WEEKLY RAINFALL FORECAST & Wx. WARNINGS-2021

Sr. No	MET.SUB-DIVISIONS	28 JAN	29 JAN	30 JAN	31 JAN	01 FEB	02 FEB	03 FEB
1	ANDAMAN & NICO.ISLANDS	SCT	SCT	SCT	ISOL	ISOL	ISOL	ISOL
2	ARUNACHAL PRADESH	ISOL	ISOL ^{L#}	SCT ^{L#}	ISOL	D	D	D
3	ASSAM & MEGHALAYA	D ^F	ISOL ^L	ISOL ^L	D ^F	D ^F	D	D
4	NAGA.MANI.MIZO.& TRIPURA	D ^F	ISOL ^F	ISOL ^F	D ^F	D ^F	D	D
5	SUB-HIM.W. BENG. & SIKKIM	D ^F	ISOL ^F	D	D	D	D	D
6	GANGETIC WEST BENGAL	D	ISOL	D	D	D	D	D
7	ODISHA	D	D ^F	D ^F	D ^F	D	D	D
8	JHARKHAND	ISOL	ISOL	D	D	D	D	D
9	BIHAR	D ^F	D ^F	D ^F	D	D	D	D
10	EAST UTTAR PRADESH	D ^F ↓	D ^F ↓	D ^F ↓	D ^F ↓	D ^F ↓	D	D
11	WEST UTTAR PRADESH	D ^F ↓	D ^F ↓	D ^F ↓	D ^F ↓	D ^F ↓	D	D
12	UTTARAKHAND	D	D	D	D	D	D	D
13	HARYANA CHD. & DELHI	D ^F ↓	D ^F ↓	D ^F ↓	D ^F ↓	D	D	D
14	PUNJAB	D ^F ↓	D ^F ↓	D ^F ↓	D ^F ↓	D	D	D
15	HIMACHAL PRADESH	D↓	D↓	D	D	D	ISOL	D
16	JAMMU & KASHMIR AND LADAKH	D↓	D↓	D	ISOL	ISOL	ISOL	D
17	WEST RAJASTSAN	D↓	D↓	D↓	D	D	D	D
18	EAST RAJASTSAN	D↓	D↓	D↓	D↓	D	D	D
19	WEST MADHYA PRADESH	D↓	D↓	D↓	D	D	D	D
20	EAST MADHYA PRADESH	ISOL↓	D↓	D↓	D	D	D	D
21	GUJARAT REGION	D	D	D	D	D	D	D
22	SAURASTRA & KUTCH	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	ISOL	D	D	D	D	D	D
27	CHHATTISGARH	ISOL	ISOL	D	D	D	D	D
28	COASTAL ANDHRA PR. & YANAM	ISOL	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	TAMIL. PUDU. & KARAIKAL	D	ISOL	ISOL	ISOL	ISOL	D	D
32	COASTAL KARNATAKA	D	D	D	D	D	D	D
33	NORTH INTERIOR KARNATAKA	D	D	D	D	D	D	D
34	SOUTH INTERIOR KARNATAKA	D	D	D	D	D	D	D
35	KERALA & MAHE	D	D	D	ISOL	ISOL	D	D
36	LAKSHADWEEP	D	D	D	D	D	D	D

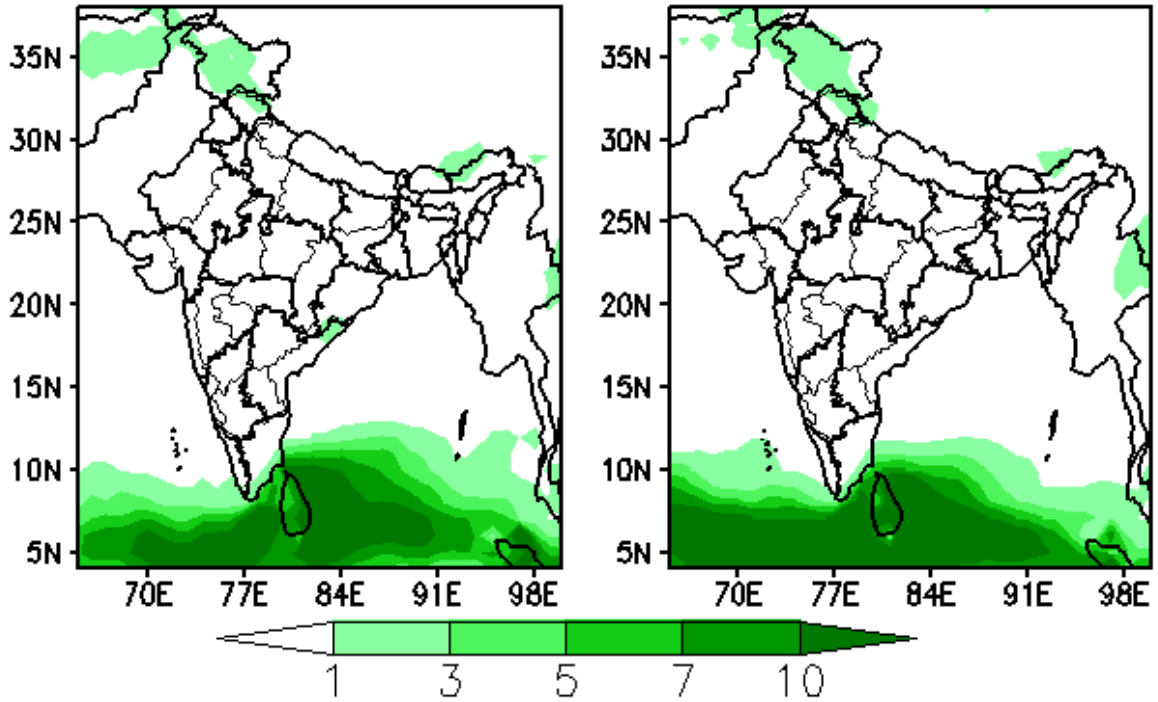
LEGENDS:

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 - NO 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)			
^F Fog	[*] Snowfall	^D Duststorm	^S Thunderstorm with Squall		^L Thunderstorm with Lightning		[#] Thunderstorm with Hail	
↓ Cold Wave (Minimum temperature departure from Normal -4.5 °C to -6.4°C)				↓ Severe Cold Wave (Minimum temperature departure from Normal ≤ -6.5°C)				
↑ Heat Wave (Maximum temperature departure from Normal +4.5 °C to +6.4°C)				↑ Severe Heat Wave (Maximum temperature departure from Normal ≥ +6.5°C)				

Forecast Rainfall (mm/day)

(Week1: 29Jan-04Feb)

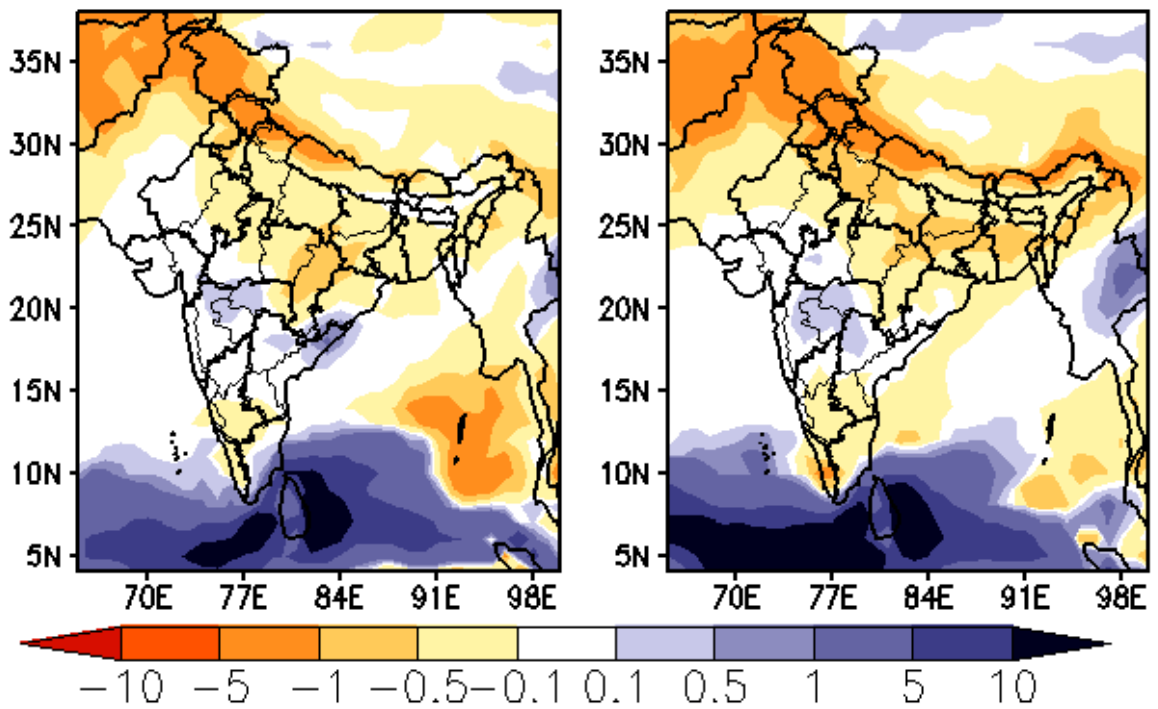
(Week2: 05Feb-11Feb)



Forecast Rainfall Anomaly (mm/day)

(Week1: 29Jan-04Feb)

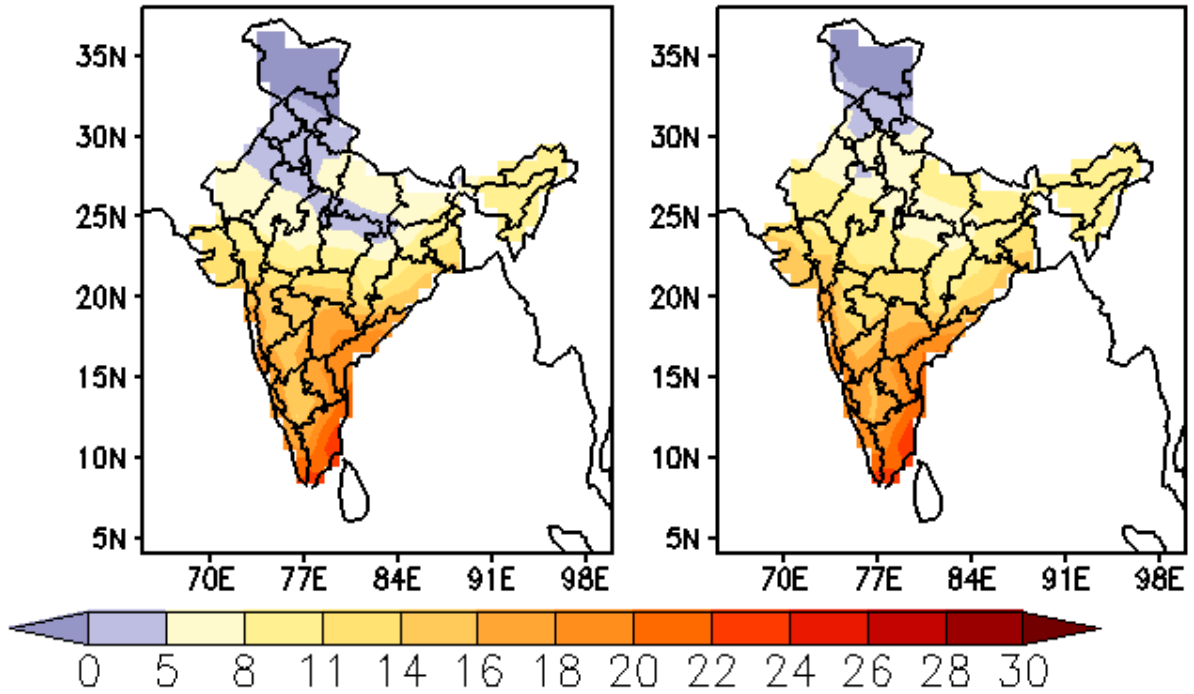
(Week2: 05Feb-11Feb)



MME Bias corrected forecast Tmin (Deg)

(Week1: 29Jan-04Feb)

(Week2: 05Feb-11Feb)



MME forecast Tmin anomaly (Deg C)

(Week1: 29Jan-04Feb)

(Week2: 05Feb-11Feb)

