



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

**Dated: 21 January, 2021**

**Subject: Current Weather Status and Outlook for next two weeks (21 January to 3 February, 2021)**

**Salient Features**

- **Northeast Monsoon rains have ceased over Tamilnadu, Puducherry & Karaikal, Kerala & Mahe and adjoining areas of Andhra Pradesh and Karnataka from 19th January 2021.**
- An easterly waves caused scattered to fairly widespread rainfall/thunderstorms over extreme south Peninsula with isolated heavy falls over Tamil Nadu, Puducherry & Karaikkal during the beginning of the week (14 to 20 January, 2021).
- As a result, south Peninsula received 220% and Tamil Nadu, Puducherry & Karaikkal received 727% above Long Period Average (LPA) during past week.
- Under the influence of fresh Western Disturbance, scattered to fairly widespread rain/snow likely over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and Himachal Pradesh and isolated rain/snow over Uttarakhand during 22nd-24th and very light/light rain/thundershower likely at isolated places over Punjab and Haryana, Chandigarh & Delhi on 23rd January, 2021. Heavy rain/snow very likely **at isolated places** over Jammu & Kashmir, Gilgit-Baltistan & Muzaffarabad on 23rd January, 2021.
- No significant change in minimum temperatures very likely till tomorrow morning hours; rise by 2-4°C during 23<sup>rd</sup>-24<sup>th</sup> January and fall by 2-4°C during subsequent 48 hours (25th-26th January, 2021) over the plains of Northwest India.
- **No cold wave conditions likely over northern India during next 4-5 days.**
- **Dense to very dense Fog in isolated pockets very likely over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura during 22nd-26th and over Sub-Himalayan West Bengal during morning hours of 22nd-23rd and in some pockets over Punjab and Haryana, Chandigarh & Delhi in the morning hours of 22<sup>nd</sup>, 25<sup>th</sup> & 26<sup>th</sup> January, 2021.**

### Weekly Rainfall Scenario (14 to 20 January, 2021)

During the week, rainfall for the country as a whole was below LPA by 58%.

Details are given below:

Regions	Actual Rainfall (mm)	Normal Rainfall (mm)	% Departure from LPA
Country as a whole	1.7	4.0	-58%
Northwest India	0.0	7.8	-99%
Central India	0.0	1.5	-100%
South Peninsula	6.7	2.1	220%
East & northeast India	2.3	4.3	-46%

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

### Winter Rainfall Scenario (01 to 20 January, 2021)

For the country as a whole, cumulative rainfall during this year's winter season till 20 January, 2021 is above LPA by 82%. 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	18.5	10.2	82%
Northwest India	25.7	18.5	39%
Central India	3.3	4.8	-32%
South Peninsula	45.4	6.9	558%
East & northeast India	3.8	9.8	-62%

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

### Weekly minimum Rainfall Scenario (14 to 20 January, 2021)

- The minimum temperatures were below 8°C over many parts of northwest. These were below normal by about 2°C over parts of Saurashtra & Kutch. These were near normal over northwest & adjoining central India and above normal by 2 to 4°C over rest parts of central India and Maharashtra and were near normal over remaining parts of the country (**Annexure III**).

### Chief synoptic conditions as on 21 January, 2021

- A cyclonic circulation lies over Sub-Himalayan West Bengal & neighbourhood between 3.1 km & 3.6 km above mean sea level.
- Another cyclonic circulation lies over northeast Bangladesh & neighbourhood at lower levels.
- A cyclonic circulation lies over south Gujarat & neighbourhood at lower levels.

- A fresh Western Disturbance is likely to affect Western Himalayan Region from 22nd January, 2021.

### Large scale features as on 21 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 7) with amplitude nearly one. As per the latest projections, it is likely to be in same phase with high amplitude during next one week.

### Forecast for next two week

#### Weather systems & associated Precipitation during Week 1 (21 to 27 January, 2021) and Week 2 (21 to 27 January, 2021)

##### Rainfall for week 1: (21 to 27 January, 2021)

- A fresh Western Disturbance is likely to affect Western Himalayan Region from 22nd January. Under its influence, scattered to fairly widespread rain/snow likely over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and Himachal Pradesh and isolated rain/snow over Uttarakhand during 22nd-24th and very light/light rain/thundershower likely at isolated places over Punjab and Haryana, Chandigarh & Delhi on 23rd January, 2021. Heavy rain/snow very likely **at isolated places over Jammu & Kashmir, Gilgit-Baltistan & Muzaffarabad on 23rd January, 2021.** Isolated thunderstorm with lightning & hail also likely over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad on 22nd and over Himachal Pradesh and Uttarakhand on 23rd January, 2021. **No weather in the form of rain or snow is expected over northwest India during from 25<sup>th</sup> to 30<sup>th</sup> January, 2021.**
- Due to cyclonic circulation Sub-Himalayan West Bengal & neighbourhood, light scattered to fairly widespread precipitation very likely over northeastern states on today.

- Light isolated rain is also likely over Tamilnadu and Kerala during next 2 days.
- Under the influence of easterly wave, isolated rain/thundershower very likely over Andaman & Nicobar Islands during 2<sup>nd</sup> half of the week 1 (**Annexure IV**).
- **Cumulatively, above normal rain/snow very likely over Western Himalayan Region & northeastern states and above normal rainfall over extreme south peninsular India (Annexure V).**

#### **Rainfall for week 2: (28 January to 3 February, 2021)**

- **Due to the absence of any active Western Disturbance, below normal rain/snow likely over Western Himalayan Region and normal to above normal rainfall likely over northeastern states & extreme south peninsular India (Annexure V).**

#### **Temperature/fog for week 1 & 2: (21 January to 3 February, 2021)**

- Minimum temperatures are in the range of 6°C to 10°C over most parts of northwest, central & adjoining east India. Generally, these are near normal over most parts of northwest & adjoining central India. No significant change in minimum temperatures very likely till tomorrow morning hours; rise by 2-4°C during subsequent 48 hours (23<sup>rd</sup>-24<sup>th</sup> January) and fall by 2-4°C during subsequent 48 hours (25<sup>th</sup>-26<sup>th</sup> January) over the plains of Northwest India.
- No significant change in minimum temperatures very likely during next 2 days and rise by 2-3°C during subsequent 2-3 days over most parts of East India and no significant change over most parts of Central India during next 3 days and fall by 2-4°C during subsequent 2-3 days.
- **Hence no cold wave conditions likely over northern India during next 4-5 days.**
- Due to availability of moisture at lower levels and other favorable meteorological features, **Dense to very dense Fog in isolated pockets very likely over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura during 22<sup>nd</sup>-26<sup>th</sup> and over Sub-Himalayan West Bengal during morning hours of 22<sup>nd</sup>-23<sup>rd</sup> and in some pockets over Punjab and Haryana, Chandigarh & Delhi in the morning hours of 22<sup>nd</sup>, 25<sup>th</sup> & 26<sup>th</sup> January, 2021.**
- Overall week as a whole during week 1, **the minimum temperatures very likely to be below normal to normal over most parts of the country, outside northeastern states and south Peninsular India, where these are likely to be above normal by 2-4°C.**

- 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 south Peninsular India, where these are likely to be above normal by 2-3°C (Annexure VI)**
- **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. 28 January, 2021**

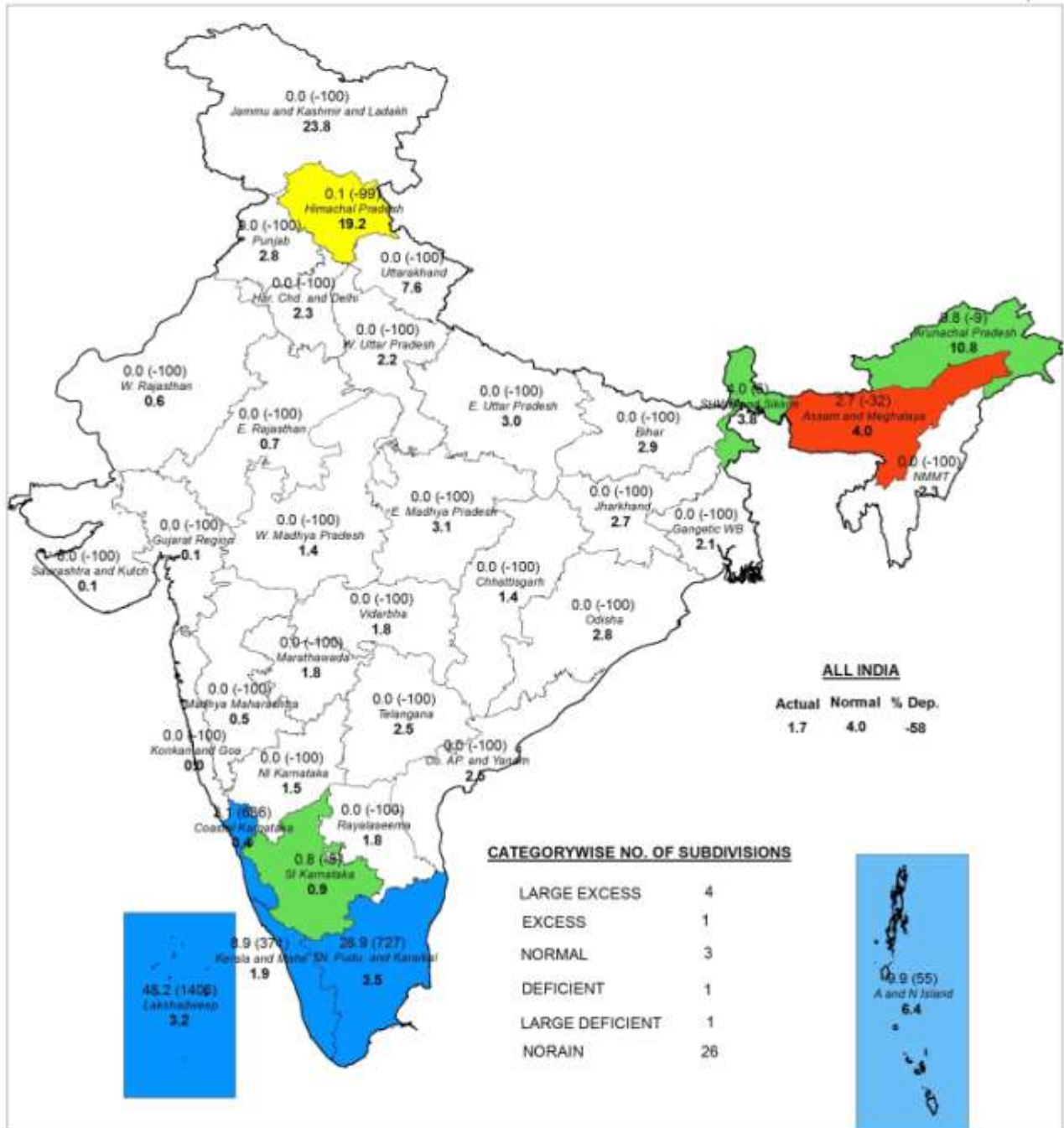


भारत मौसम विज्ञान विभाग  
INDIA METEOROLOGICAL DEPARTMENT

जल मौसम विज्ञान प्रभाग, नई दिल्ली  
HYDROMET DIVISION, NEW DELHI

**SUBDIVISION RAINFALL MAP**

Week : 14-01-2021 To 20-01-2021



**Legend**

Large Excess [ 60% 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 :**

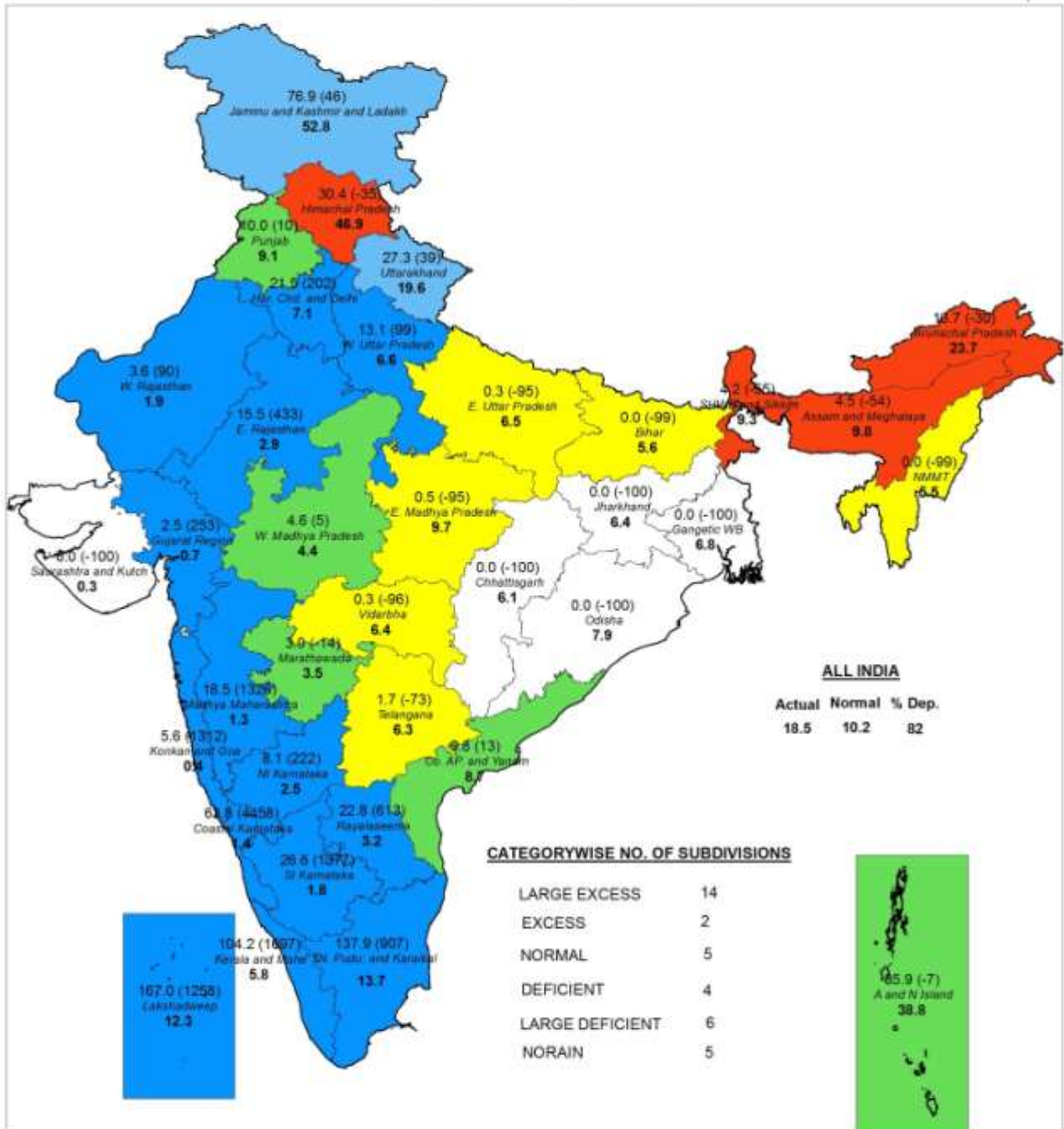
- a) RainFall figures are based on operation data.
- b) Small figures indicate actual rainfall (mm), while bold figures indicate Normal rainfall (mm).
- c) Percentage Departures of rainfall are shown in brackets.





**SUBDIVISION RAINFALL MAP**

Period : 01-01-2021 To 20-01-2021



**Legend**

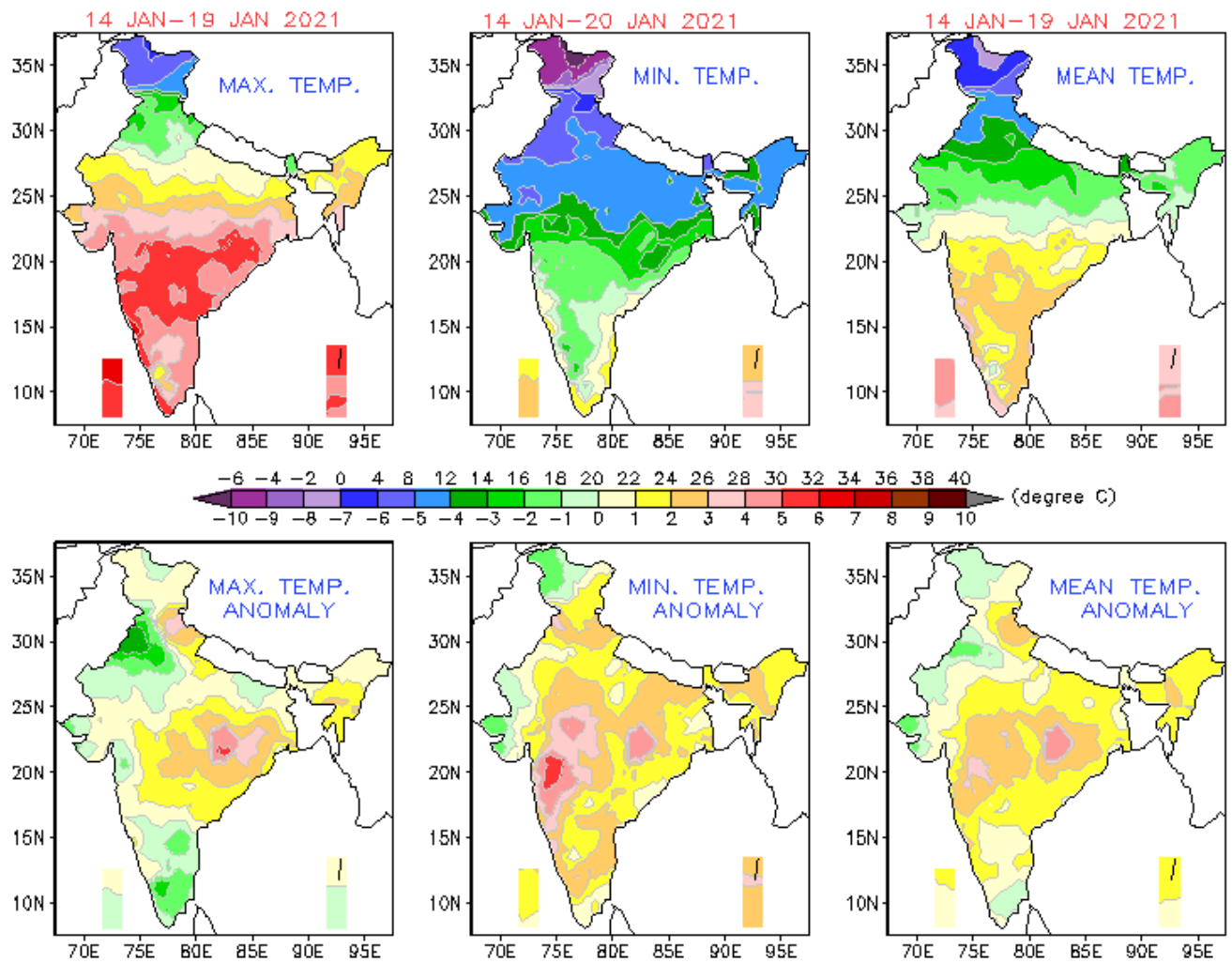
Large Excess [ 60% or more] Excess [ 20% to 59%] Normal [-19% to 19%] Deficient [-59% to -20%] Large Deficient [-99% to -60%] No Rain [-100%] No Data

**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.

### Annexure III

#### TEMPERATURE FOR WEEK ENDING 20 JAN & ITS ANOMALY





## Annexure IV

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

Sr. No	MET.SUB-DIVISIONS	21 JAN	22 JAN	23 JAN	24 JAN	25 JAN	26 JAN	27 JAN
1	ANDAMAN & NICO.ISLANDS	D	D	D	D	ISOL	SCT	SCT
2	ARUNACHAL PRADESH	FWS	D	D	ISOL	ISOL	ISOL	D
3	ASSAM & MEGHALAYA	SCT <sup>F</sup>	D <sup>F</sup>	D <sup>F</sup>	D <sup>F</sup>	D <sup>F</sup>	D	D
4	NAGA.MANI.MIZO.& TRIPURA	ISOL <sup>F</sup>	D <sup>F</sup>	D <sup>F</sup>	D <sup>F</sup>	D <sup>F</sup>	D	D
5	SUB-HIM.W. BENG. & SIKKIM	ISOL <sup>F</sup>	D <sup>F</sup>	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 <sup>F</sup> ↓	D <sup>F</sup>	D	D	D	D	D
10	EAST UTTAR PRADESH	D <sup>F</sup> ↓	D <sup>F</sup>	D	D	D <sup>F</sup>	D	D
11	WEST UTTAR PRADESH	D <sup>F</sup>	D	D	D	D <sup>F</sup>	D	D
12	UTTARAKHAND	D <sup>F</sup>	D	ISOL <sup>L#</sup>	ISOL	D	D	D
13	HARYANA CHD. & DELHI	D <sup>F</sup>	D	ISOL	D <sup>F</sup>	D <sup>F</sup>	D	D
14	PUNJAB	D <sup>F</sup>	D	ISOL	D <sup>F</sup>	D <sup>F</sup>	D	D
15	HIMACHAL PRADESH	D	ISOL	FWS <sup>L#</sup>	SCT	D	D	D
16	JAMMU & KASHMIR AND LADAKH	D	FWS <sup>L</sup>	WS <sup>L*</sup>	SCT	D	D	D
17	WEST RAJASTSAN	D <sup>F</sup>	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	D	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	D	D	D	D	D	D	D
27	CHHATTISGARH	D	D	D	D	D	D	D
28	COASTAL ANDHRA PR. & YANAM	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	TAMIL. PUDU. & KARAIKAL	ISOL	ISOL	D	D	D	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	ISOL	ISOL	D	D	D	D	D
36	LAKSHADWEEP	D	D	D	D	D	D	D

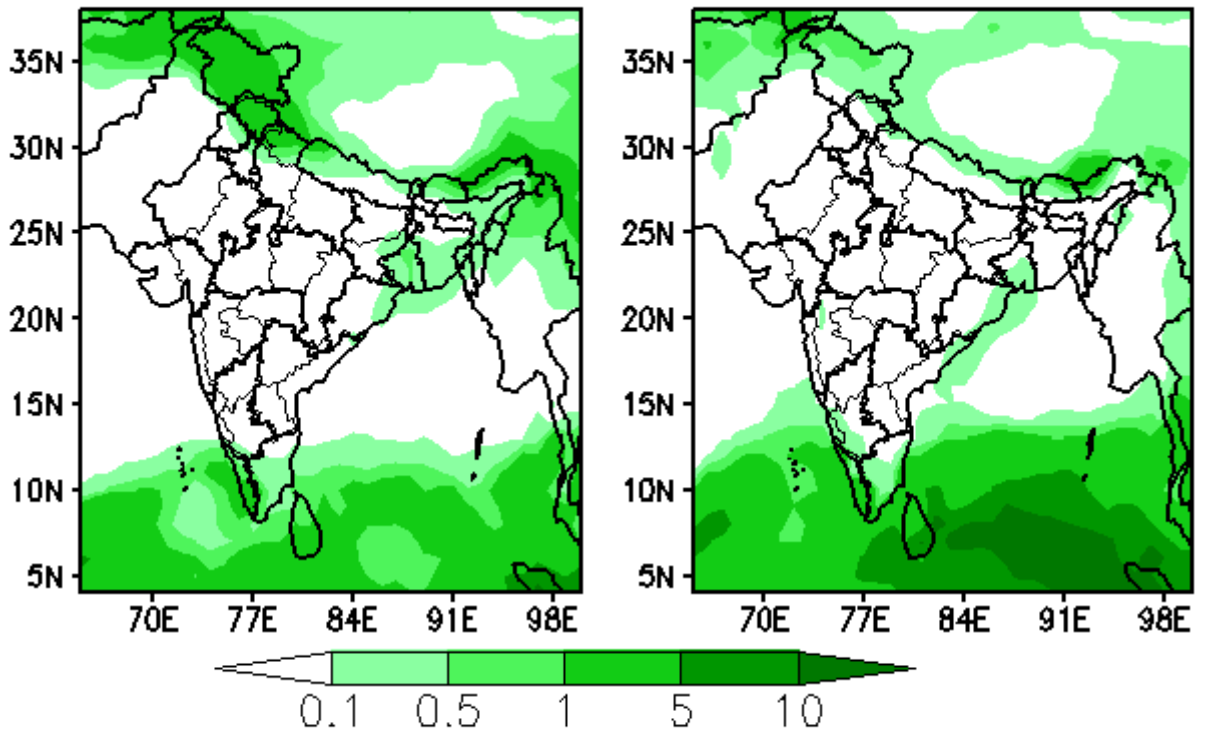
## LEGENDS:

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)	
<sup>F</sup> Fog	<sup>*</sup> Snowfall	<sup>D</sup> Duststorm	<sup>S</sup> Thunderstorm with Squall	<sup>L</sup> Thunderstorm with Lightning	<sup>#</sup> 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: 22Jan-28Jan)

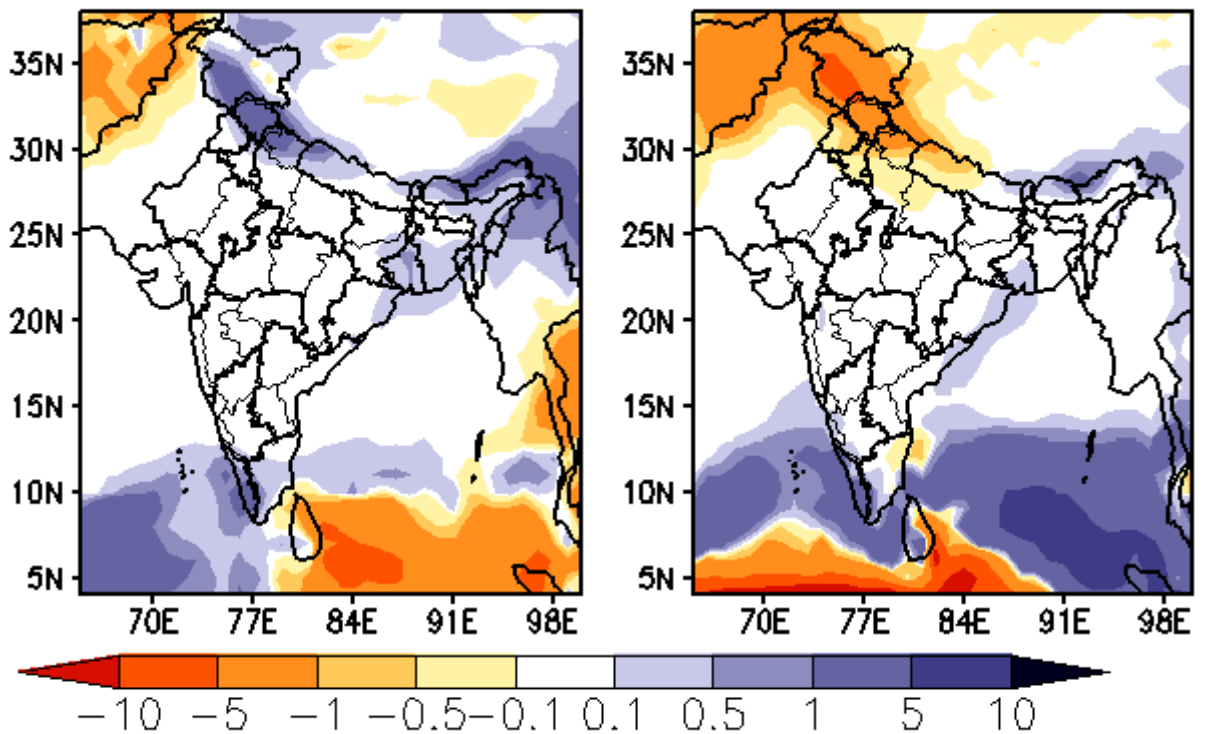
(Week2: 29Jan-04Feb)



### Forecast Rainfall Anomaly (mm/day)

(Week1: 22Jan-28Jan)

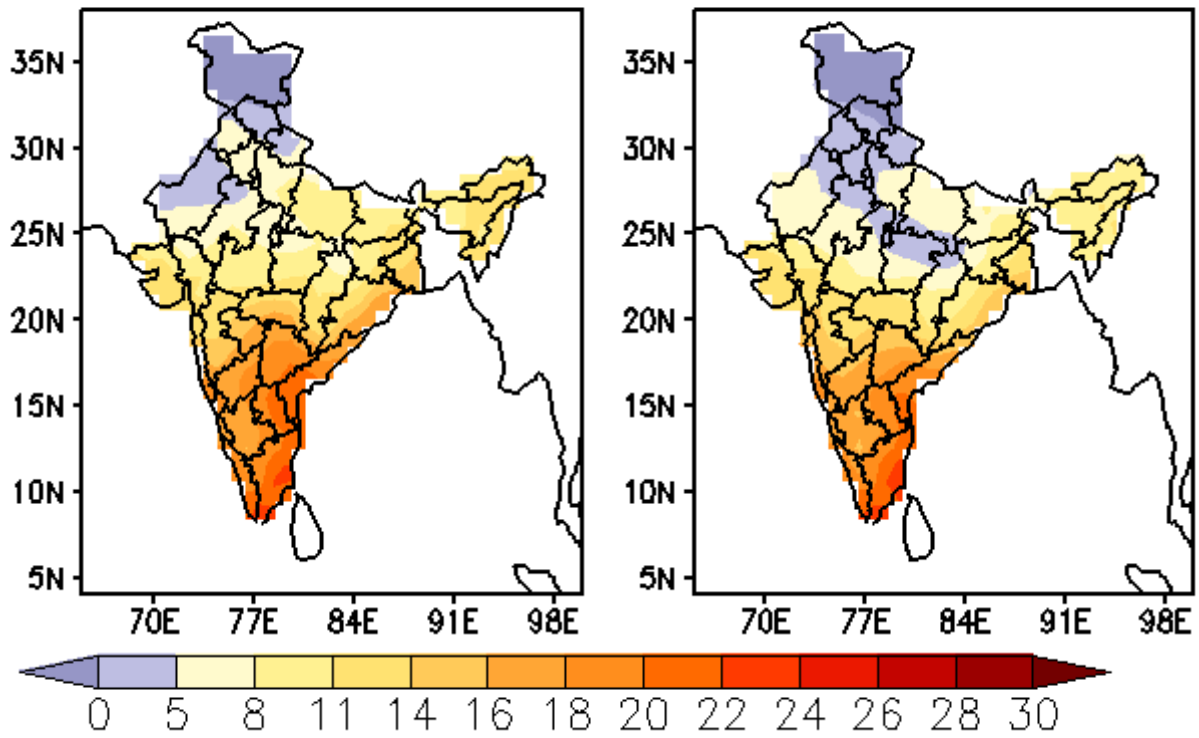
(Week2: 29Jan-04Feb)



### MME Bias corrected forecast Tmin (Deg)

(Week1: 22Jan–28Jan)

(Week2: 29Jan–04Feb)



### MME forecast Tmin anomaly (Deg C)

(Week1: 22Jan–28Jan)

(Week2: 29Jan–04Feb)

