



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

Dated: 20 December, 2018

Current Weather Status & Outlook for next two weeks (20 December, 2018 to 3 January, 2019)

Significant Features

- **Low Pressure Systems/Depression/Cyclone:** A severe cyclonic storm “PHETHAI” formed over Bay of Bengal during 13-18 December 2018 and it crossed as a cyclonic storm Andhra Pradesh coast near Kakinada in the afternoon of 17th December, 2018.
- **Heavy rain:** Heavy to very heavy rainfall observed at isolated places over Coastal Andhra Pradesh and heavy at isolated places over Tamilnadu and Andaman & Nicobar Islands during one or two days of the week.
- **Rain/snow:** Scattered to fairly widespread rain/snow observed over Jammu & Kashmir and isolated to scattered over Himachal Pradesh and Uttarakhand on one or two days of the week.
- **Fog:** Dense to very dense fog observed at isolated places over Chhattisgarh on a few days; and over Jammu, Himachal Pradesh, Haryana, West Uttar Pradesh and Bihar on one or two days during the week.
- **Cod wave/cold day:** Conditions observed at a few places over Rajasthan and at isolated places over Punjab, Haryana, Madhya Pradesh and Gujarat on one or two days of the week. Cold day conditions also observed at isolated places over west Madhya Pradesh on one day during the week. The lowest minimum temperature of **0.5^o C** was recorded at **Sikar** (East Rajasthan) on 19th December, 2018.

Weekly Rainfall Scenario (13-19 December 2018)

During the week, rainfall was above Long Period Average (LPA) by 220 % over the country as a whole. Details are given below:

Regions	Actual Rainfall (mm)	Normal Rainfall (mm)	% Departure from LPA
Country as a whole	10.9	3.4	220%
Northwest India	4.2	4.2	-1%
Central India	12.4	1.1	1024%
South Peninsula	12.8	6.3	103%
East & northeast India	18.3	3.7	395%

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

Post-monsoon Seasonal Rainfall Scenario (01 October to 19 December, 2018)

For the country as a whole, cumulative rainfall during post-monsoon season 2018 (01 October to 19 December, 2018) was below LPA by -42% over the country as a whole. 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	70.3	121.1	-42%
Northwest India	34.8	51.2	-32%
Central India	38.6	78.1	-51%
South Peninsula	170.4	266.6	-36%
East & northeast India	82.5	166.1	-50%

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

Chief synoptic conditions as on 13 December, 2018

- A feeble western disturbance with its axis in mid & lower tropospheric westerlies runs roughly along Long.70° E to the north of Lat. 34°N. It is moving eastwards across northern parts of Jammu & Kashmir and there is no fresh significant western disturbance likely to affect western Himalayan region during next 4-5 days. Under this scenario, no significant change likely in wind pattern over plains of northwest India. Minimum temperatures very likely continue to prevail below normal by 3-4°C over some parts of plains of northwest India and adjoining central & west India leading to cold wave and ground frost conditions over some parts of northwest India and adjoining central & west India during next 2-3 days.
- A trough of low at mean sea level lies over central parts of Bay of Bengal and adjoining equatorial Indian ocean extending upto 1.5 Km above mean sea level. Due to approaching this trough of low at mean sea level towards southern peninsular India rainfall activity very likely to increase over the region during 22nd to 24th December 2018.
- A cyclonic circulation lies over southeast Arabian Sea & adjoining Lakshadweep area extending upto 3.1 Km above mean sea level.
- A cyclonic circulation at 1.5 Km above mean sea level lies over east Bangladesh persists.
- A cyclonic circulation at 4.5 Km above mean sea level lies over east Arabian sea & adjoining Coastal Karnataka.

Large scale features as on 20 December, 2018

- Currently, moderate El Niño Southern Oscillation (ENSO) conditions are prevailing over equatorial Pacific Ocean. The current SST of Niño 3.4 is 1.1°C. Moderate El Niño conditions likely to prevail during next couple of months.

- At present, conditions over equatorial Indian Ocean have temporarily reached to positive IOD conditions and the latest MMCFS forecast indicates present positive IOD conditions are likely to turn into neutral IOD conditions during the next month and persist thereafter.
- Madden Julian Oscillation (MJO) index is in Phase 4 with amplitude more than 1, it is likely to move in phase 5 during the week and likely to move remain in phase 5 during next week with amplitude (more than 1).

Forecast for next two week

Weather systems & associated Precipitation during Week 1 (20 to 26 December, 2018) and Week 2 (27 December 2018 to 3 January, 2019)

- Isolated rainfall activity likely over Andaman & Nicobar Islands, Peninsular India & over Lakshadweep area and dry weather conditions over rest of the country during week 1; over Andaman & Nicobar Islands, Kerala & over Lakshadweep area and dry weather likely over rest of the during week 2 **Annexure III**.
- Above normal rainfall activity likely over southwest Peninsular India and over Lakshadweep area during week 1 and week 2 over Andaman & Nicobar Islands during week 2. Below normal precipitation activity likely over western Himalayan region and rest of the country during week1 and week 2 **Annexure IV**.
- Minimum temperatures likely to be below normal over most parts of the country outside northeastern states and peninsular India where it is likely to be above normal during week 1. They are likely to be above normal over some parts of western Himalayan region, northeastern states and south Interior Karnataka and below normal over rest of the country during week 2 (**Annexure V**).
- Dense fog likely at isolated places over northeast and east India during next 4-5 days. Shallow to moderate fog likely at isolated pockets over northern plains during next 4-5 days

Cyclogenesis:

- Cyclo-genesis is not likely during next week.

Next weekly update will be issued on next Thursday i.e. 27 December, 2018

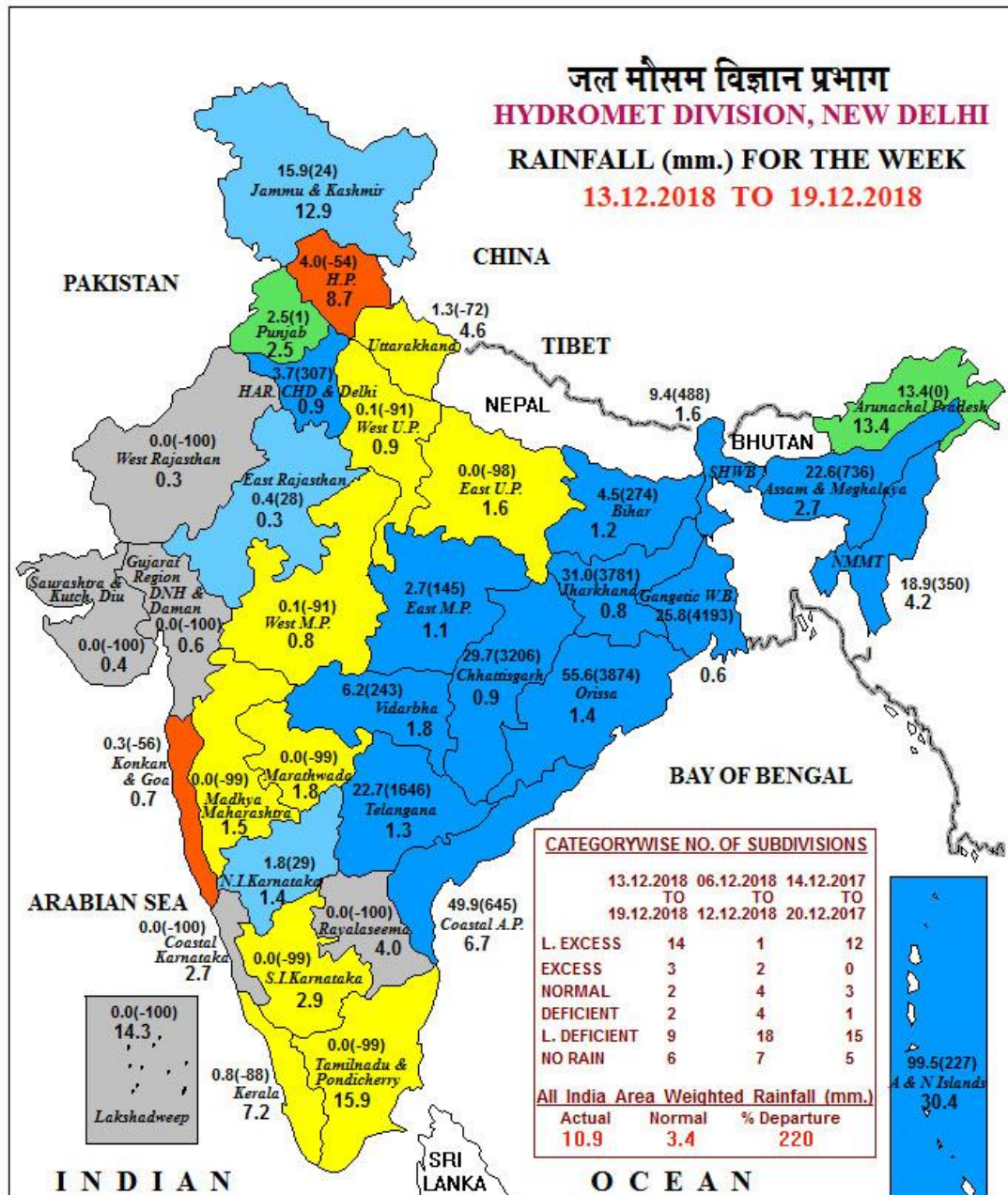
METEOROLOGICAL SUB-DIVISIONWISE WEEKLY RAINFALL FORECAST & Wx. WARNINGS-2018

Sr. No	MET.SUB-DIVISIONS	20 DEC	21 DEC	22 DEC	23 DEC	24 DEC	25 DEC	26 DEC
1	ANDAMAN & NICO.ISLANDS	FWS	SCT	ISOL	ISOL	ISOL	ISOL	ISOL
2	ARUNACHAL PRADESH	ISOL	D	D	D	D	D	D
3	ASSAM & MEGHALAYA	D*	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	D	D	D
16	JAMMU & KASHMIR	D	D	D	D	D	D	D
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	ISOL
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	ISOL	ISOL	D	D	D
29	TELANGANA	D	D	D	D	D	D	D
30	RAYALASEEMA	D	D	ISOL	ISOL	D	D	D
31	TAMILNADU & PUDUCHERRY	ISOL	ISOL*	SCT*	SCT	ISOL	ISOL	ISOL
32	COASTAL KARNATAKA	ISOL	D	D	ISOL	ISOL	ISOL	ISOL
33	NORTH INT.KARNATAKA	D	D	D	D	D	D	D
34	SOUTH INT.KARNATAKA	D	D	ISOL	SCT	ISOL	D	D
35	KERALA	ISOL	ISOL	ISOL	SCT	SCT	ISOL	ISOL
36	LAKSHADWEEP	ISOL	D	D	ISOL	ISOL	ISOL	SCT

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 (+4.5°C to +6.4°C)	⚡ SEVERE HEAT WAVE (> +6.4)
§ THUNDERSTORM WITH SQUALL/GUSTY WIND		DS/TS DUST/THUNDERSTORM	⚡ COLD WAVE (-4.5°C to -6.4°C)	⚡ SEVERE COLD WAVE (< -6.4)	

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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

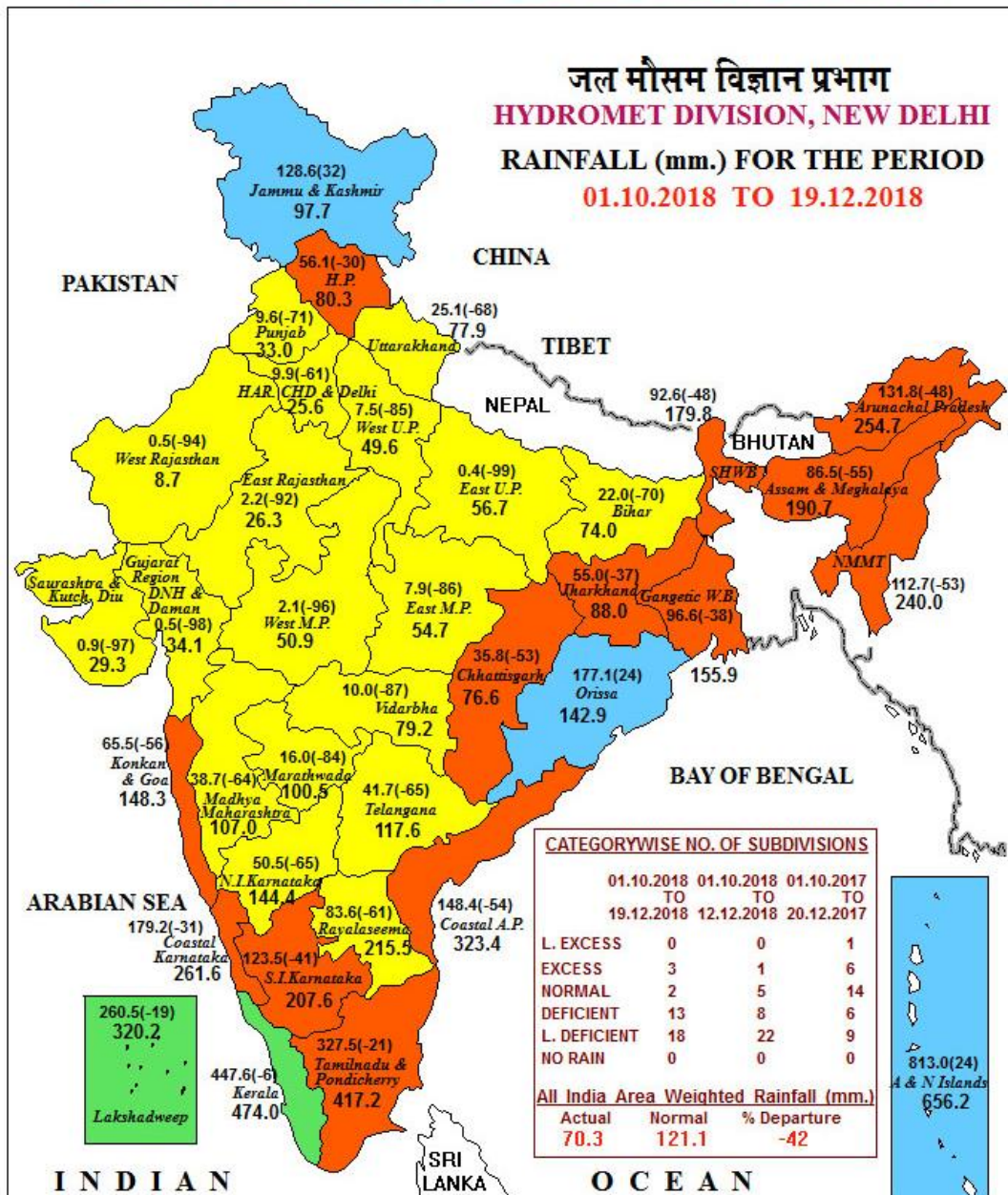
NOTES:

[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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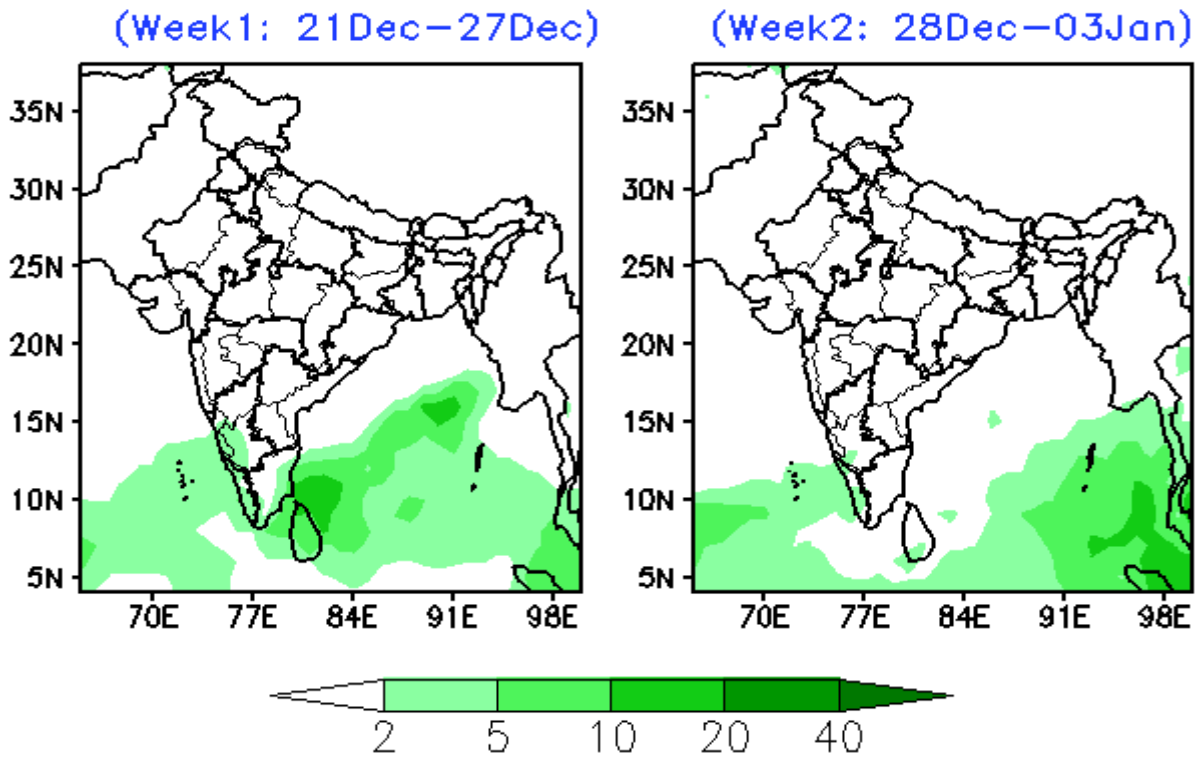


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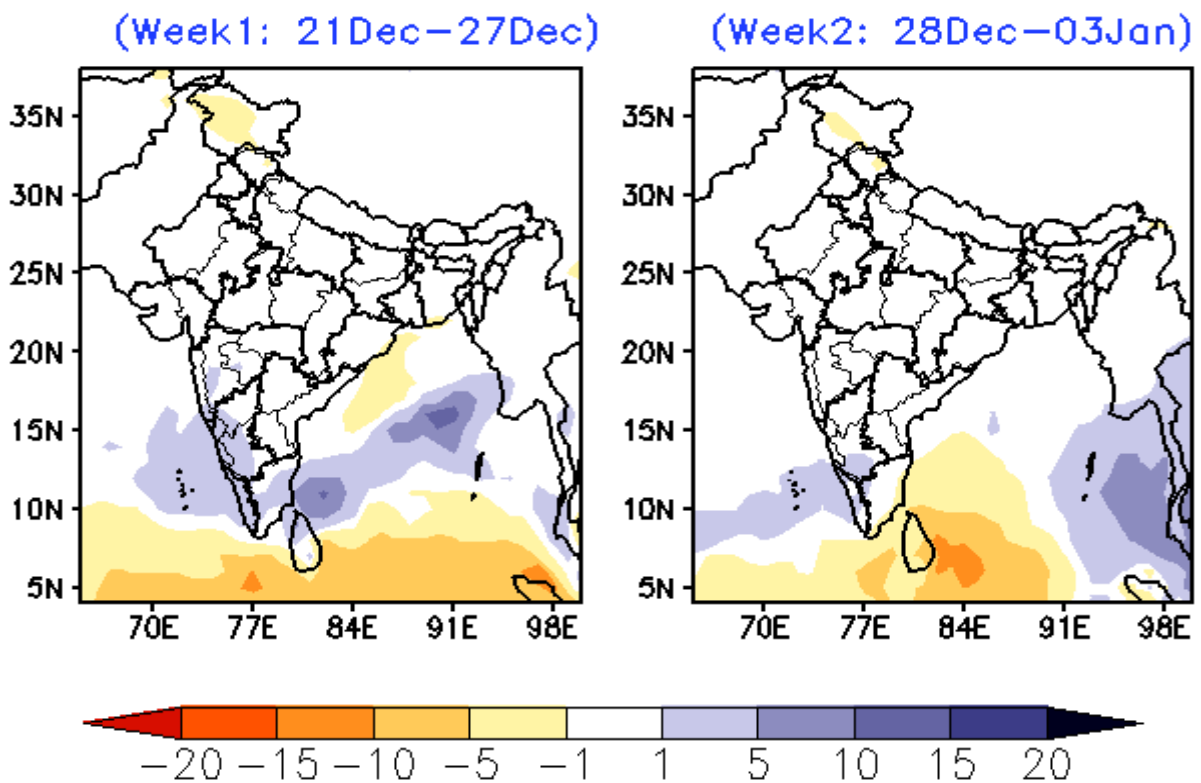
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Forecast rainfall (mm per day)



Forecast rainfall anomaly (mm per day)



MME Bias Corrected Tmin Anomaly (Deg)

(Week1: 21Dec-27Dec)

(Week2: 28Dec-03Jan)

