



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

Dated: 02nd April 2020

Current Weather Status and Outlook for next two weeks (02nd -15th April, 2020)

Significant Features

- **Weather across Northern parts of the country was affected by movement of two successive western disturbances during the week. Both the systems caused precipitations and cloudy conditions in the region and hence, no heat wave conditions was observed in the region:** i) 1st Western Disturbance and its induced cyclonic circulation moved in the first half of the week and caused fairly widespread to widespread rainfall/snowfall/thunderstorm activity across Western Himalayan Region with scattered to fairly widespread rainfall/thunderstorm activity across adjoining plains of northwest India. It also caused isolated heavy to very heavy rainfall/snowfall over Western Himalayan Region and isolated heavy rainfall over adjoining plains, during the same period. ii) 2nd Western Disturbance and its induced cyclonic circulation affected the region during the end of the week, have caused fairly widespread to widespread rainfall/snowfall with isolated intense activity over Western Himalayan Region while isolated rainfall/thunderstorm activity was reported over the adjoining plains of northwest India during this period.
- Remnants of the Western Disturbances have caused isolated to scattered rainfall/thunderstorm activity over parts of East and Northeast India during the week
- Trough/wind discontinuities across parts of West and Central India with cyclonic circulations embedded in that and enhanced moisture feeding into the region have caused isolated to scattered rainfall/thunderstorm activity over these areas during the week. **Isolated hailstorm activity also had been reported from these regions in association with that.**
- **Heavy to very heavy rainfall (≥ 64.5 mm but ≤ 204.4)** occurred at isolated places over Jammu & Kashmir and Himachal Pradesh while **Heavy rainfall (≥ 64.5 mm) only** occurred at isolated places over Punjab, West Madhya Pradesh and Odisha on one day each during the week
- **The highest maximum temperature of** temperature of 42.0°C had been recorded at Khargone (West Madhya Pradesh) on 31st March 2020 and the lowest minimum temperature of 10.0°C had been recorded at Karnal (Haryana) on 30th March 2020, when data analyzed over the plains of the country during the week.

LEGEND: Few days-(3 days), Many days-4 to 5 days and Most days-6 to 7 days during the week.

Weekly Rainfall Scenario (26 March to 1 April, 2020)

During the week, rainfall was above Long Period Average (LPA) by 44% over the country as a whole. Details are given below:

Regions	Actual Rainfall(mm)	Normal Rainfall(mm)	%Departure from LPA
Country as a whole	10.3	7.2	44%
Northwest India	26.1	7.8	235%
Central India	5.3	1.9	181%
South Peninsula	0.9	3.5	-74%
East & northeast India	2.1	21.4	-90%

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

Seasonal Rainfall Scenario (1 March till 1 April 2020)

For the country as a whole, cumulative rainfall during this year's pre monsoon season upto 1 April 2020 was above Long Period Average (LPA) by 46%. 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	45.9	31.5	46%
Northwest India	87.0	48.2	80%
Central India	27.1	8.7	211%
South Peninsula	12.9	15.0	-14%
East & northeast India	46.9	67.5	-31%

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

Chief synoptic conditions as on 2 April 2020

- A trough at 0.9 km above mean sea level runs from Coastal Karnataka to Telangana across north interior Karnataka
- Another trough in westerlies runs from north Bihar to south Odisha at 0.9 km above mean sea level
- A cyclonic circulation lies at 1.5 km above mean sea level over north interior Odisha & neighbourhood.

Large scale features as on 2 April 2020

- The Madden–Julian Oscillation (MJO) is currently in Phase-5 with amplitude near to 1. It is likely to move to phase 6 with amplitude reducing slightly to less than 1 by first half of week 1 and then move to Phase 7 with amplitude near to 1 towards the end of week-1. Thereafter it is likely to move to Phase 8 with amplitude increasing to more than 1 by beginning of the week-2 and then to phase 1 towards end of week 2 with amplitude likely to be higher than 1.
- Currently, ENSO-neutral conditions are prevailing over equatorial Pacific Ocean and the latest

- MMCFS forecast indicates these conditions are likely to continue for the entire forecast period.
- At present, positive IOD conditions are observed over Indian Ocean and the latest MMCFS forecast indicates positive IOD conditions are likely to continue during the entire forecast period.

Forecast for next two week

Weather systems & associated Precipitation during Week 1 (02-08 April 2020) and Week 2 (09-15 April 2020)

Week 1: (02-08 April 2020)

- With very likely development of an Anti-cyclonic pattern at lower levels over southwest Rajasthan and adj areas and its persistence during 2-6 April associated with a ridge line runs to north Odisha across northern parts of central India: Mainly northerly/northwesterly winds are likely to prevail over the northern plains and mainly dry weather like in most parts of India except isolated rainfall/thunderstorm over Interior parts of Maharashtra, Kerala and Mahe, northeastern states and adj eastern parts of India during the period.
- A Fresh Western Disturbance likely to affect Western Himalayan Region(WHR) from 6th April 2020 along with formation of induced cyclonic circulation at adj plains and their subsequent movement across north India and northeastern parts of India during 6-9 April, which very likely to cause Scattered to fairly widespread rain/thundershowers across Western Himalayan Region and eastern parts of India and Northeastern States during 7-9 April. Further, northeastern states likely to get rainfall till 11 April with peak on 9 and 10 April 2020
- Cumulatively, near normal rainfall very likely over interior Maharashtra and below normal rainfall likely over Arunachal Pradesh, Assam & Meghalaya, Tamilnadu and Nicobar Islands during week 1 (Annexure IV)

Rainfall for week 2: (09-15 April 2020)

During week 2, normal to above normal rainfall likely across Western Himalayan Region, eastern parts of India and Northeastern States with mainly dry weather likely over rest parts of the country(**Annexure IV**).

Maximum Temperature for week 1 & 2: (02-15 April, 2020)

Day maximum temperatures are likely to rise gradually by 2-3°C over plains of northwest India and also over Maharashtra & Gujarat state during next 3 days. No significant change in maximum temperatures over the rest parts of country during next 3 days. During week 1, Maximum temperatures are still likely to be normal to below normal over most parts of the country due to higher soil moisture from earlier rain spells, outside northern parts of Kashmir, parts of Bihar, East coast and northeastern parts of India, southeast peninsula and west cost of India, where, it is likely to be above normal by 2-4°C (Annex. V).

During week 2, due to fresh rain spells likely during 9-11 April across WHR, eastern and northeastern parts of India, maximum temperatures likely continue to be below normal by 1-2°C over Central and adjoining east & south Peninsular India (Annexure V).

Cyclogenesis:

- No cyclogenesis is expected over North Indian Ocean during weeks 1 and 2.

Next weekly update will be issued on next Thursday i.e. 8th April, 2020

Annexure I

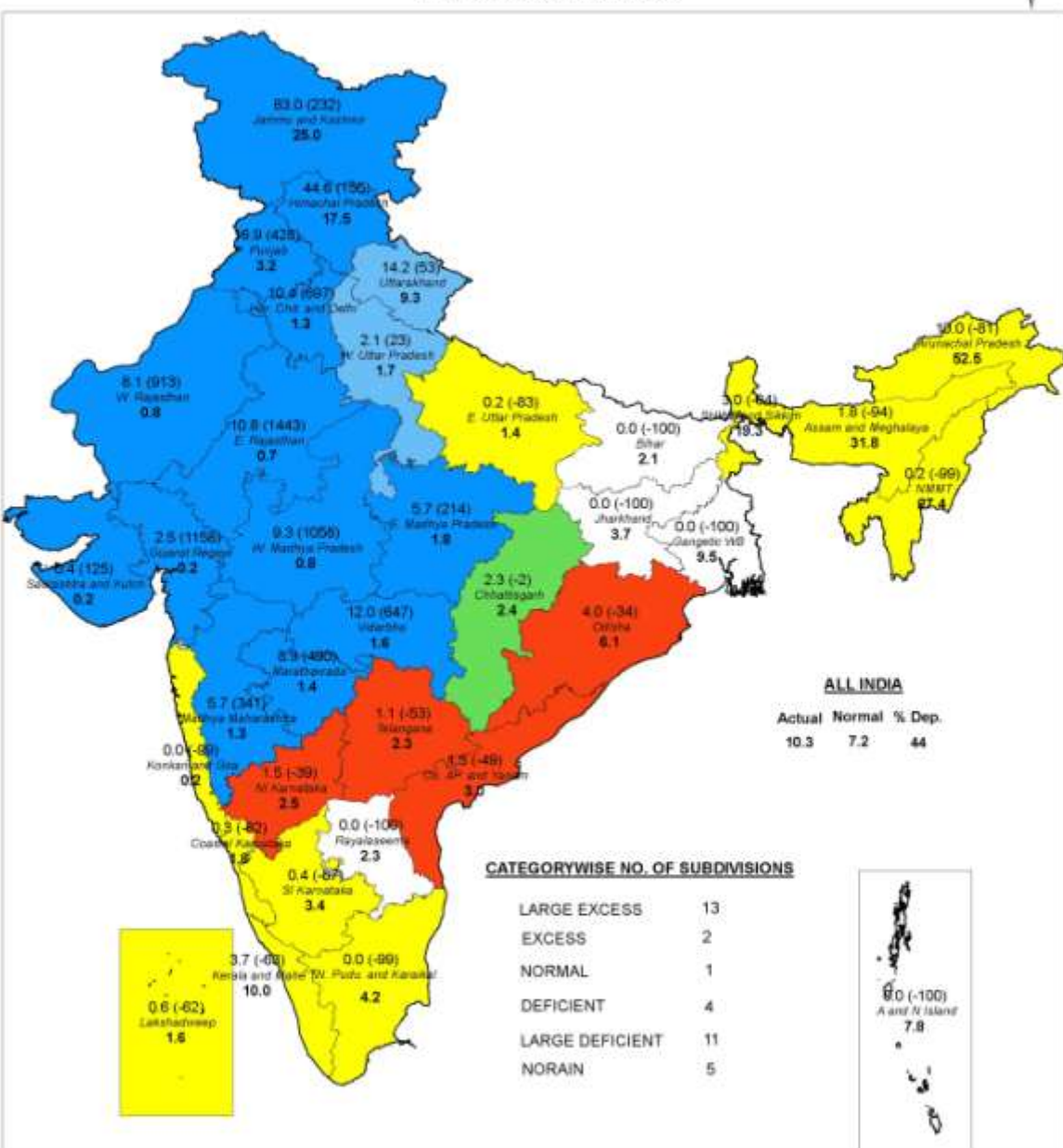


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HYDROMET DIVISION, NEW DELHI

SUBDIVISION RAINFALL MAP

Week : 26-03-2020 To 01-04-2020



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 II

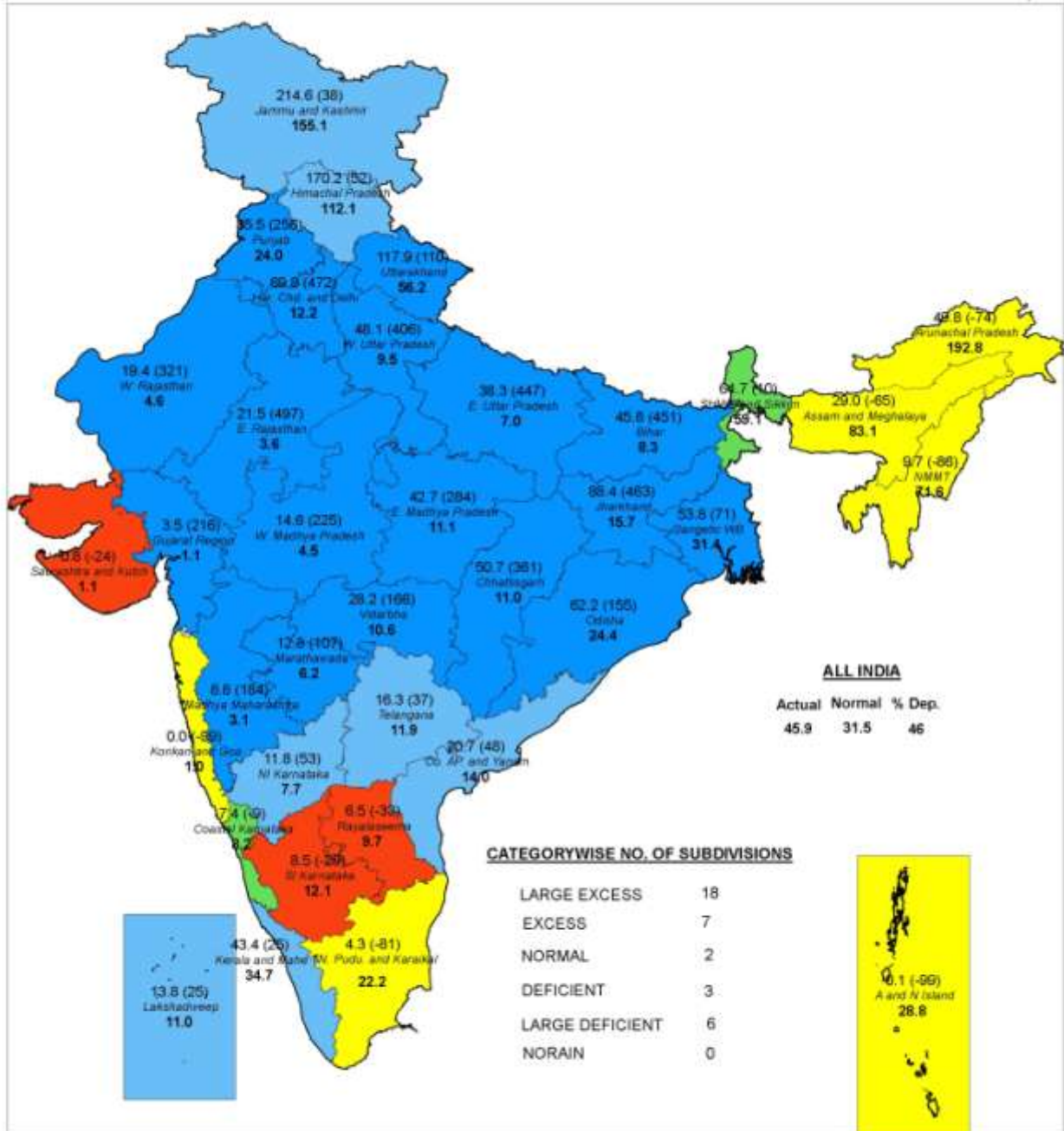


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HYDROMET DIVISION, NEW DELHI

SUBDIVISION RAINFALL MAP

Period : 01-03-2020 To 01-04-2020



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

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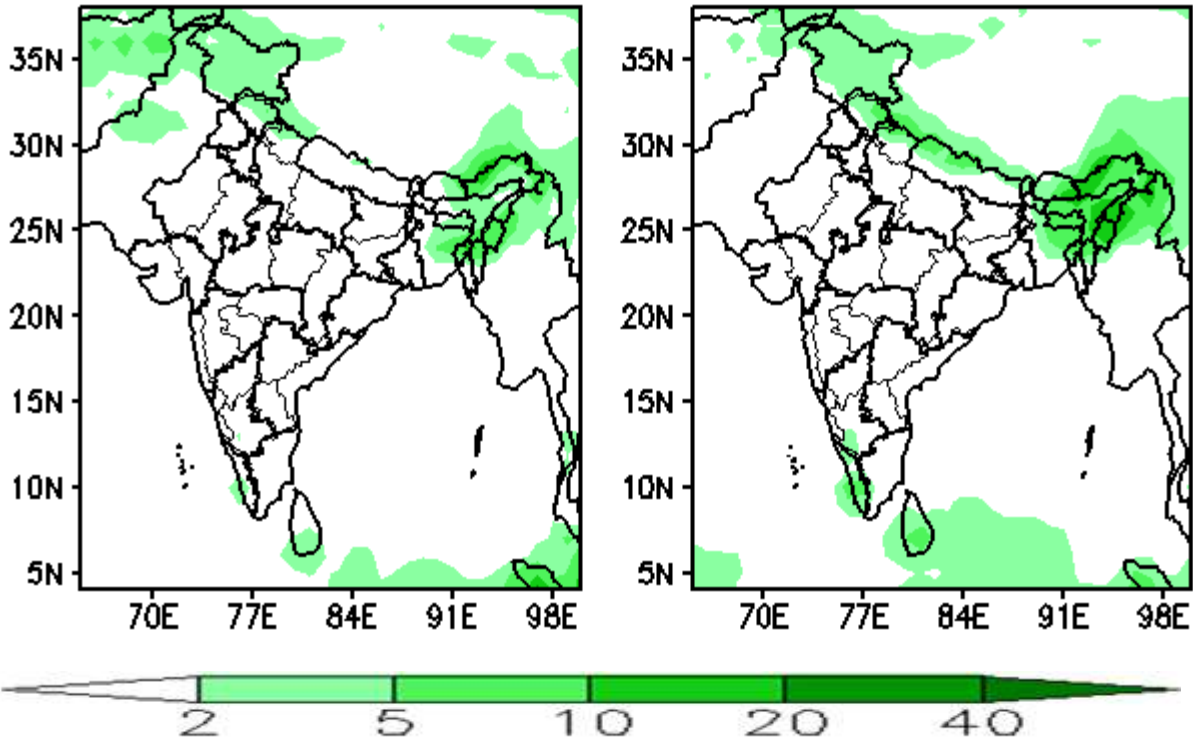
Annexure III

METEOROLOGICAL SUB-DIVISIONWISE WEEKLY RAINFALL FORECAST & Wx. WARNINGS-2020								
Sr. No	MET.SUB-DIVISIONS	02 APR	03 APR	04 APR	05 APR	06 APR	07 APR	08 APR
1	ANDAMAN & NICO.ISLANDS	D	D	D	D	ISOL	D	ISOL
2	ARUNACHAL PRADESH	FWS ^{TS#}	FWS ^{TS}	SCT ^{TS}	ISOL	ISOL	ISOL ^{TS}	SCT ^{TS}
3	ASSAM & MEGHALAYA	SCT ^{TS}	SCT ^{TS}	ISOL	ISOL	D	ISOL ^{TS}	FWS ^{TS#}
4	NAGA.MANI.MIZO.& TRIPURA	ISOL ^{TS}	SCT ^{TS}	ISOL	ISOL	D	ISOL ^{TS}	FWS ^{TS#}
5	SUB-HIM.W. BENG. & SIKKIM	ISOL ^{TS}	ISOL	ISOL	ISOL	D	ISOL ^{TS}	SCT ^{TS}
6	GANGETIC WEST BENGAL	ISOL ^{TS}	ISOL ^{TS}	ISOL ^{TS}	ISOL ^{TS}	D	ISOL ^{TS}	ISOL ^{TS}
7	ODISHA	ISOL ^{TS}	ISOL ^{TS}	ISOL ^{TS}	ISOL ^{TS}	ISOL ^{TS}	SCT ^{TS}	ISOL ^{TS}
8	JHARKHAND	D	D	D	ISOL	ISOL	ISOL ^{TS}	ISOL ^{TS}
9	BIHAR	D	D	D	D	D	ISOL ^{TS}	ISOL
10	EAST UTTAR PRADESH	D	D	D	D	D	ISOL	D
11	WEST UTTAR PRADESH	D	D	D	D	ISOL ^{TS}	SCT ^{TS}	ISOL
12	UTTARAKHAND	D	D	D	D	ISOL ^{TS}	SCT	FWS ^{TS#}
13	HARYANA CHD. & DELHI	D	D	D	D	ISOL ^{TS}	SCT ^{TS}	ISOL
14	PUNJAB	D	D	D	ISOL	ISOL ^{TS}	ISOL ^{TS}	ISOL
15	HIMACHAL PRADESH	ISOL ^{TS}	D	D	ISOL	ISOL ^{TS}	SCT ^{TS}	FWS ^{TS#}
16	JAMMU & KASHMIR	ISOL	D	D	ISOL	ISOL ^{TS}	SCT ^{TS}	FWS ^{TS#}
17	WEST RAJASTSAN	D	D	D	D	ISOL ^{DS}	ISOL	D
18	EAST RAJASTSAN	D	D	D	D	ISOL ^{DS}	ISOL	D
19	WEST MADHYA PRADESH	D	D	ISOL ^{TS}	ISOL ^{TS}	ISOL	D	D
20	EAST MADHYA PRADESH	D	D	ISOL ^{TS}	ISOL ^{TS}	ISOL ^{TS}	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	ISOL ^{TS}	ISOL ^{TS}	ISOL	D	D	D
26	VIDARBHA	D	ISOL ^{TS}	ISOL ^{TS}	ISOL ^{TS}	ISOL ^{TS}	ISOL ^{TS}	ISOL
27	CHHATTISGARH	D	ISOL ^{TS}	ISOL ^{TS}	ISOL ^{TS}	ISOL ^{TS}	ISOL ^{TS}	ISOL
28	COASTAL A. PR. & YANAM	ISOL	ISOL	ISOL ^{TS}	ISOL ^{TS}	ISOL ^{TS}	SCT ^{TS*}	SCT ^{TS}
29	TELANGANA	ISOL	ISOL	ISOL	ISOL	ISOL ^{TS}	SCT ^{TS#}	SCT ^{TS*}
30	RAYALASEEMA	D	D	D	D	ISOL	ISOL ^{TS}	ISOL ^{TS}
31	TAMIL. PUDU. & KARAIKAL	D	D	ISOL	ISOL ^{TS}	ISOL ^{TS}	ISOL ^{TS}	SCT ^{TS}
32	COASTAL KARNATAKA	D	D	D	D	D	D	D
33	NORTS INT.KARNATAKA	D	D	D	D	D	D	D
34	SOUTS INT.KARNATAKA	ISOL	ISOL	D	D	ISOL	ISOL ^{TS}	ISOL ^{TS}
35	KERALA & MAHE	ISOL	ISOL	ISOL	ISOL ^{TS}	SCT ^{TS}	SCT ^{TS}	SCT ^{TS}
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	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	* SNO WFAL L	# HAILSTORM		⚡ COLD WAVE (-4.5 °C to -6.4 °C)		⚡ SEVERE COLD WAVE (< -6.4)		
§ TSUNDERSTORM WITS SQUALL/GUSTY WIND			DS/TS DUST/TSUNDE RSTORM		⚡+ HEAT WAVE (+4.5 °C to +6.4 °C)		⚡++ SEVERE HEAT WAVE (> +6.4)	

Forecast Rainfall (mm/day)

(Week1: 03Apr-09Apr)

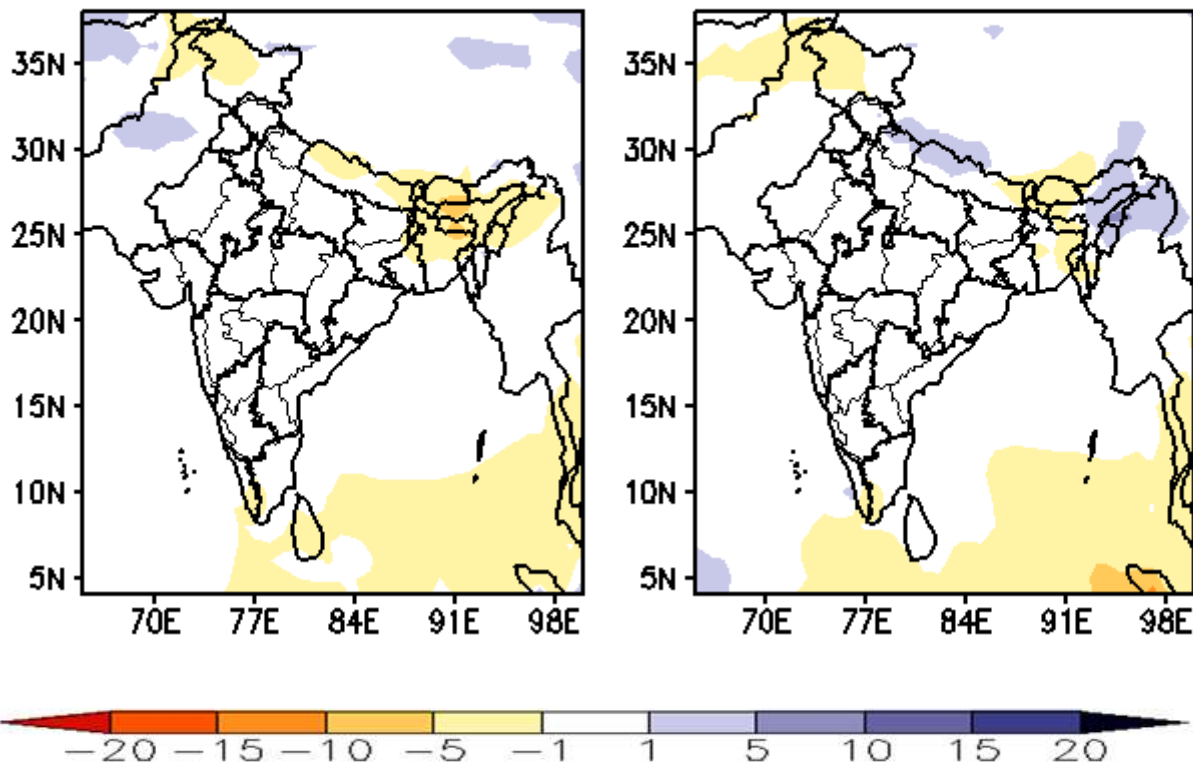
(Week2: 10Apr-16Apr)



Forecast Rainfall Anomaly (mm/day)

(Week1: 03Apr-09Apr)

(Week2: 10Apr-16Apr)



MME forecast Tmax anomaly (Deg C)

(Week1: 03Apr-09Apr)

(Week2: 10Apr-16Apr)

