



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

Dated: 01 February, 2018

Current Weather Status and Outlook for next two weeks

Highlights of the past week

Fog

Dense to very dense fog observed at many places over Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh and Bihar on a few days; at a few places over northwest Rajasthan and Sub Himalayan West Bengal and at isolated places over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura on one or two days during the week.

Cold day

Cold day to severe cold day conditions observed at isolated places over Punjab, Haryana & Delhi, Uttar Pradesh and Bihar on many days and over Sub Himalayan West Bengal & Sikkim and North Rajasthan on one or two days during the week. The lowest maximum temperature of 11.4° C was recorded at Najibabad (West Uttar Pradesh) in the plains of the country on 26th January 2018 during the week.

Cold wave

Cold wave conditions observed at isolated places over Vidarbha, southern parts of East Madhya Pradesh and northern parts of Rajasthan, Punjab, Haryana and Odisha on a few days and over East Uttar Pradesh, Bihar, West Madhya Pradesh, Himachal Pradesh, Uttarakhand, Marathwada and Sub Himalayan West Bengal on one to two days in the week. The lowest minimum temperature of 2.0 °C was recorded at Bhilwara (Rajasthan) in the plains of the country on 25th January 2018 during the week.

Weekly Rainfall Scenario (25 to 31 January, 2018)

During the week, rainfall was below Long Period Average (LPA) by 89% over the country as a whole. Details are given below:

Regions	Actual Rainfall (mm)	Normal Rainfall (mm)	% Departure from LPA
Country as a whole	0.6	5.4	-89%
Northwest India	0.3	11.8	-98%
Central India	0.0	1.8	-100%
South Peninsula	0.1	0.9	-85%
East & northeast India	3.1	6.1	-49%

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

Seasonal Rainfall Scenario (1 to 31 January, 2018)

For the country as a whole, cumulative rainfall during this year's winter season 2018 upto 31 January, 2018 is below LPA by 85%. 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	2.9	19.2	-85%
Northwest India	3.4	36.9	-91%
Central India	0.0	8.0	-99%
South Peninsula	3.6	7.8	-54%
East & northeast India	7.1	21.1	-67%

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

Chief synoptic conditions as on 01 February, 2018

- A Western Disturbance as a trough with its axis at 3.1 km above mean sea level runs roughly along longitude 71°E and north of Latitude 28°N.
- An upper air cyclonic circulation over east Bangladesh & neighbourhood and extends upto 1.5 km above mean sea level.
- A fresh Western Disturbance as a trough in mid-level westerlies runs roughly along longitude 52°E and north of Latitude 28°N.
- A fresh Western Disturbance likely to affect western Himalayan region from 5th February onwards..

Large scale features as on 01 February, 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 6 with amplitude more than 1 and is likely to move in phase 7 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(01 to 07 February 2018) and Week 2 (08 to 14 February 2018)

- Under the influence of Western Disturbance, light/moderate fairly widespread precipitation would over Jammu & Kashmir during next one day.
- **A fresh Western Disturbance would affect Western Himalayan Region & adjoining plains from 2nd February 2018 onwards. Moisture feed from Arabian Sea would take place over Western Himalayan region on 3rd & 4th. Under its influence isolated to scattered precipitation would occur over Jammu & Kashmir and Himachal Pradesh on 3rd & isolated over Jammu & Kashmir on 4th.**
- **Thereafter, another fresh Western Disturbance affect Western Himalayan region from 5th onwards, it would interact with strong southwesterly from Arabian Sea and would cause isolated light to moderate precipitation over Western Himalayan region on 5th & 6th.**
- 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 week and over Assam & Meghalaya during first half of 1st week.
- Isolated to scattered rainfall activity is likely over Tamilnadu, Kerala and South Interior Karnataka during second half of the 1st week.
- **Overall rainfall activity is likely to be below normal over Western Himalayan region and Andaman & Nicobar Islands and above normal over extreme south Peninsula; and no rain likely over any other part of the country during week 1 (Annexure IV).**
- **An intense Western Disturbance in mid-upper tropospheric levels along with an induced cyclonic circulation at lower levels would affect Western Himalayan Region & adjoining plains from 7th onwards. It would cause scattered to fairly widespread precipitation over Western Himalayan region during 9th to 12th and may cause heavy precipitation over Western Himalayan region on 9th & 10th.**
- **Light/moderate scattered to fairly widespread rainfall is likely to occur over Punjab, Haryana, Chandigarh & Delhi, West Uttar Pradesh during first half of 2nd week.**

- **Light isolated rainfall is also likely to occur over Gujarat, Rajasthan, West Madhya Pradesh & East Uttar Pradesh during first half of 2nd week.**
- **Overall, above normal rainfall activity is likely over Western Himalayan region, northwest & central parts of country during week 2 (Annexure IV).**

Minimum temperature for week 1 & Week 2

- Minimum temperatures are very likely to be between 5 to 10°C over parts of northwest India outside Western Himalayan region (where likely to be below 5°C) and between 10 to 15°C over rest northern parts of country during week 1. Considering the prevailing temperature and its trend during the week, **No Cold wave conditions likely over any part of country during week 1.**
- **Overall, minimum temperatures are very likely to be above normal over most parts of northwest India during 1st week (Annexure V).**
- **During 2nd week, there would be further rise in minimum temperatures over northern parts of India and these are very likely to be above normal over northern parts of the country (Annexure V).**

Fog:

- Light northwesterly to westerly winds are very likely to prevail over most parts of Indo-Gangetic Plains (IGPs) and Sub-Himalayan West Bengal & Sikkim near surface from 2nd to 6th February in morning hours.
- The relative humidity (RH) near surface is very likely to be more than 80% mainly over most parts of IGPs, Sub-Himalayan West Bengal & Sikkim and northeastern states on 2nd & 3rd February in morning hours. Thereafter, it would confine over East Uttar Pradesh, north Bihar, Sub-Himalayan West Bengal & Sikkim and northeastern states on 4th morning. It would decrease significantly thereafter over IGPs on 5th & 6th.
- There will be significant inversion layer near surface from Punjab to East Uttar Pradesh till 2nd morning.
- **So considering all above mentioned parameters, dense to very dense fog very likely at a few places over East Uttar Pradesh and at isolated places over Punjab, Haryana, Chandigarh & Delhi, West Uttar Pradesh and Bihar; dense fog at isolated places over Sub-Himalayan West Bengal and Tripura on 2nd & 3rd February (in morning hours).**
- **Again on 4th, its intensity & spread decrease over IGPs, hence dense to very dense fog very likely at isolated places over East Uttar Pradesh and Bihar.**

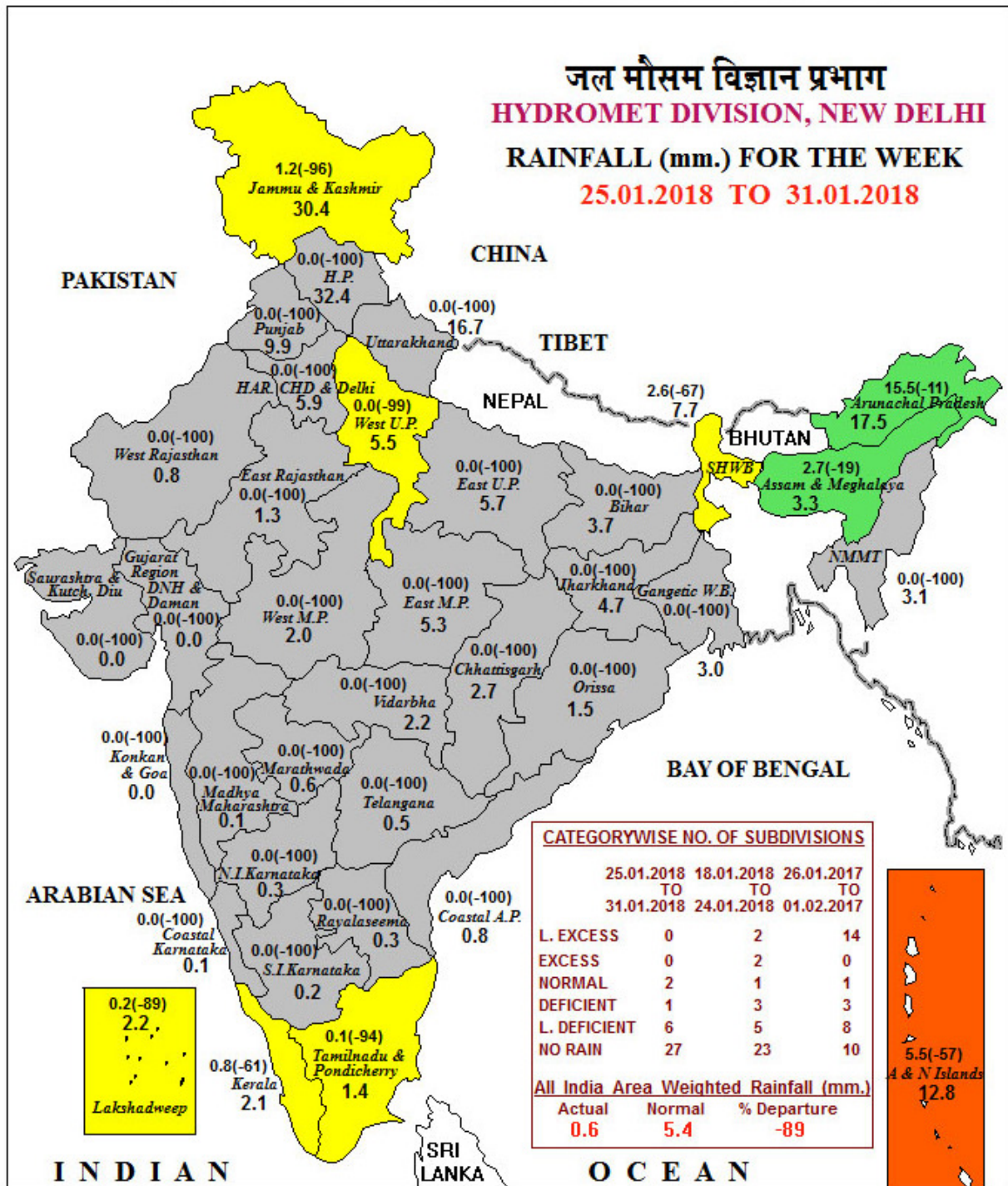
Cyclogenesis:

- 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. 08 February, 2018

भारत मौसम विज्ञान विभाग

INDIA METEOROLOGICAL DEPARTMENT



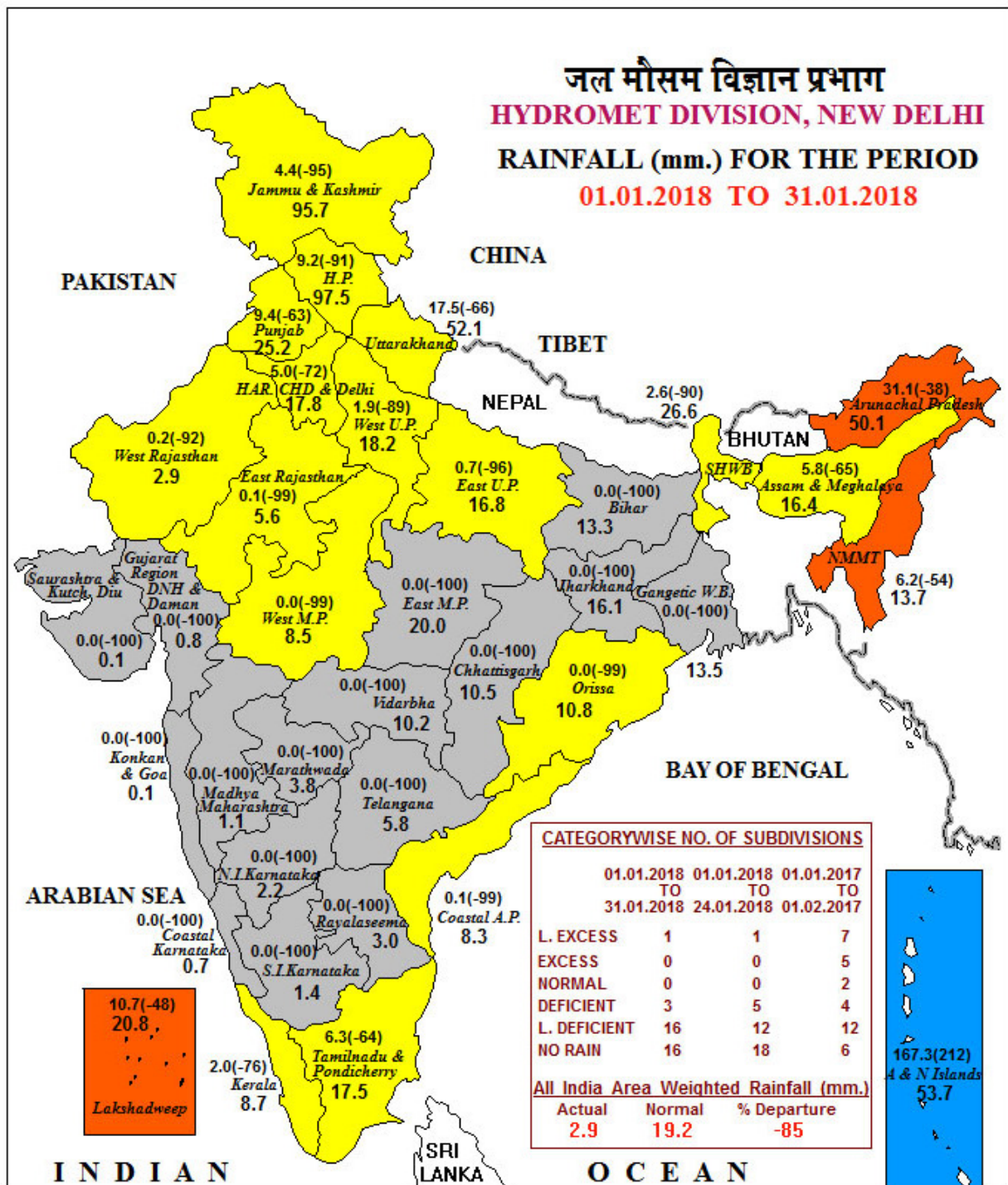
LEGEND: ■ L. EXCESS (+60% OR MORE) ■ EXCESS (+20% TO +59%) ■ NORMAL (+19% TO -19%)
■ DEFICIENT (-20% TO -59%) ■ L. DEFICIENT (-60% TO -99%) ■ NO RAIN (-100%) NO DATA

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.

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.

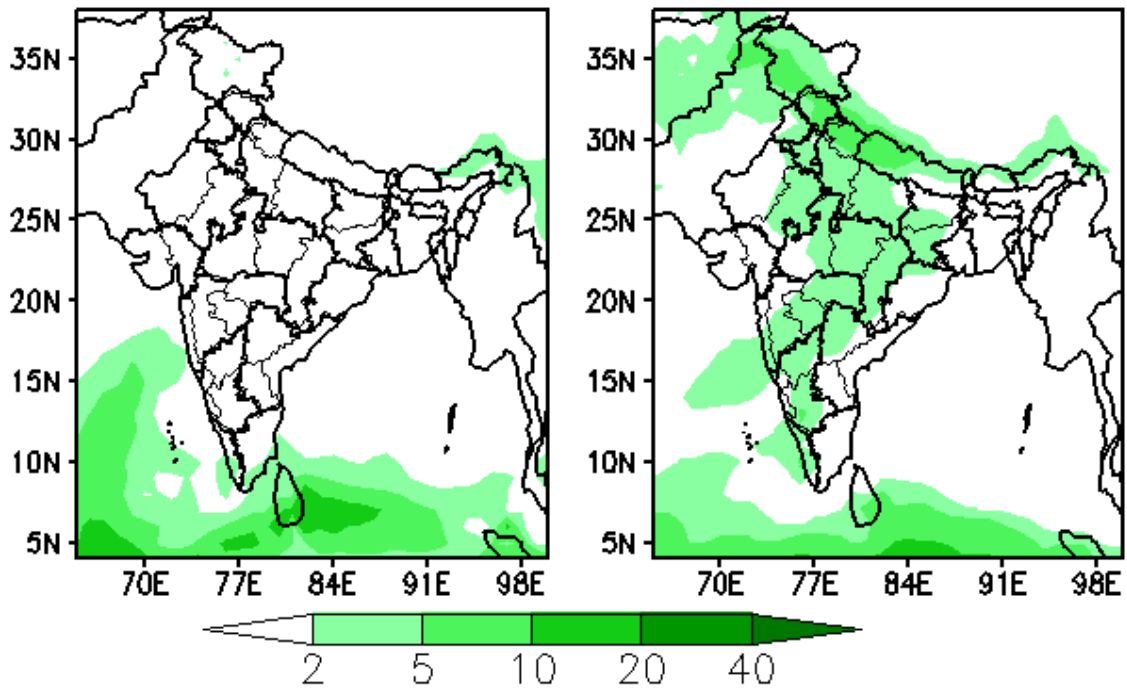
Annexure III

METEOROLOGICAL SUB-DIVISIONWISE WEEKLY RAINFALL FORECAST & Wx. WARNINGS-2018								
Sr. No	MET.SUB-DIVISIONS	01 FEB	02 FEB	03 FEB	04 FEB	05 FEB	06 FEB	07 FEB
1	ANDAMAN & NICO.ISLANDS	ISOL	ISOL	SCT	SCT	ISOL	ISOL	D
2	ARUNACHAL PRADESH	ISOL	ISOL	SCT	SCT	ISOL	ISOL	ISOL
3	ASSAM & MEGHALAYA	D	ISOL	ISOL	ISOL	D	D	D
4	NAGA.MANI.MIZO.& TRIPURA	D*	D*	ISOL	D	D	D	D
5	SUB-HIM.W. BENG. & SIKKIM	D*	ISOL*	ISOL	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	ISOL	ISOL	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	ISOL	D	ISOL	D	D
16	JAMMU & KASHMIR	ISOL	ISOL	SCT	ISOL	ISOL	D	ISOL
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	ISOL
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	D	D	D	D	ISOL	ISOL	SCT
32	COASTAL KARNATAKA	D	D	D	D	D	D	D
33	NORTH INT.KARNATAKA	D	D	D	D	D	D	ISOL
34	SOUTH INT.KARNATAKA	D	D	D	D	D	ISOL	ISOL
35	KERALA	D	D	D	D	D	ISOL	SCT
36	LAKSHADWEEP	D	D	D	D	D	ISOL	ISOL
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: 02Feb-08Feb)

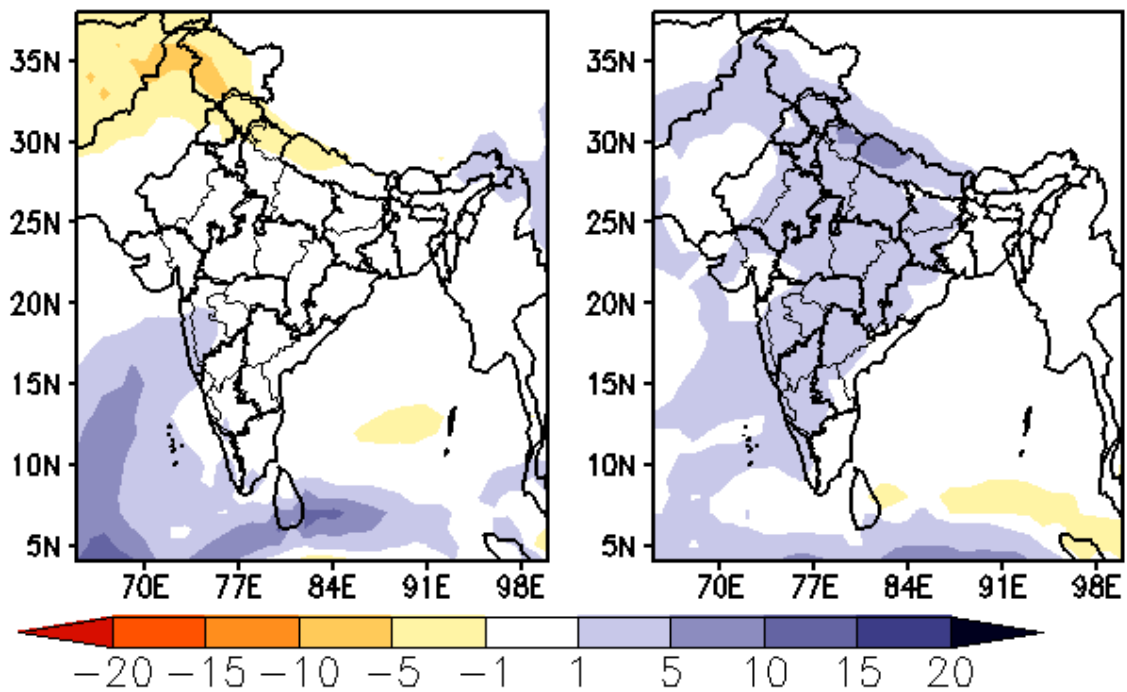
(Week2: 09Feb-15Feb)



Rainfall Anomaly (mm/day)

(Week1: 02Feb-08Feb)

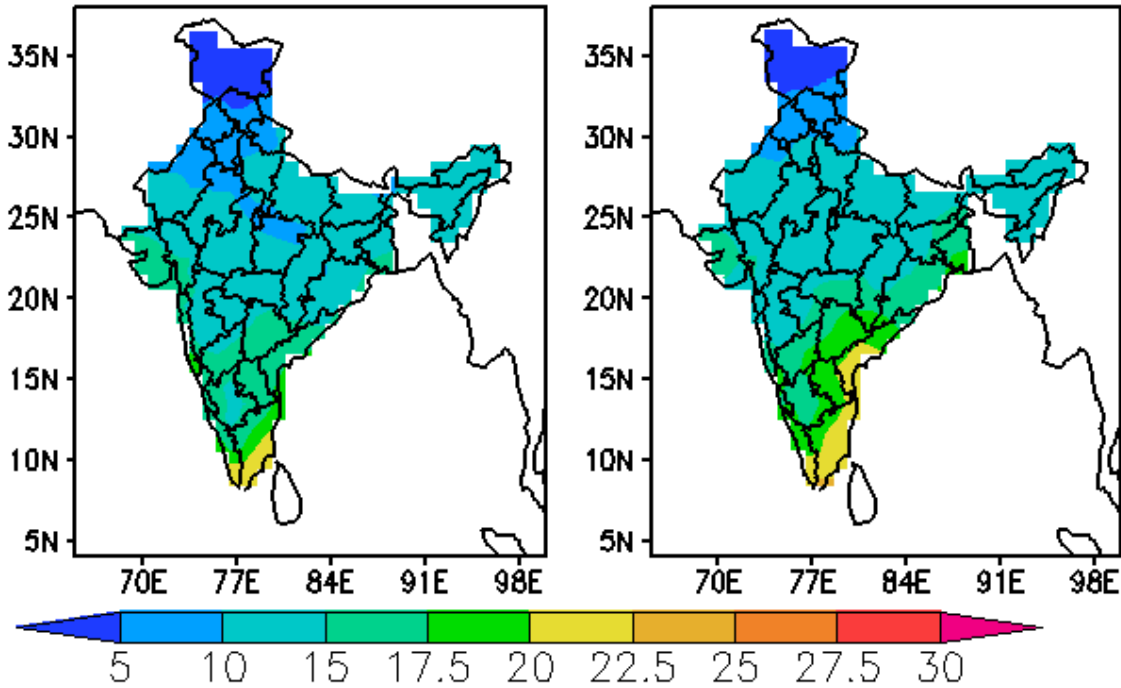
(Week2: 09Feb-15Feb)



MME Bias Corrected Actual Tmin (Deg C)

(Week1: 02Feb-08Feb)

(Week2: 09Feb-15Feb)



MME Bias Corrected Tmin Anomaly (Deg)

(Week1: 02Feb-08Feb)

(Week2: 09Feb-15Feb)

