



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

Dated: 11 October, 2018

Current Weather Status and Outlook for next two weeks (11 to 24 October, 2018)

Highlights of the past week (04 to 10 October, 2018)

- Southwest monsoon has withdrawn further from entire north eastern states, West Bengal & Sikkim, remaining parts of Bihar & Jharkhand, entire Odisha, most parts of Chhattisgarh and North Bay of Bengal, some more parts of Maharashtra, remaining parts of Gujarat State and north Arabian Sea on 5th October 2018. It has withdrawn further from remaining parts of North Bay of Bengal, Chhattisgarh and Maharashtra, entire Telangana, most parts of Central Bay of Bengal, Coastal Andhra Pradesh and Central Arabian Sea and some parts of Rayalaseema and Karnataka on 6th October 2018.
- The withdrawal line of southwest monsoon passed through Lat. 16°N/Long. 94°E, Lat. 15°N/long. 90°E, Machilipatnam, Kurnool, Gadag, Vengurla and Lat. 16°N/ Long. 60°E on 6th October 2018 and continued to be there till the end of the week 2018(**Annexure 1**).
- **Two intense low pressure systems had formed and persisted over North Indian Ocean during the week; one over Arabian Sea and another over Bay of Bengal.**
- The low pressure area which formed over South East Arabian Sea & neighbourhood concentrated into a Depression on 6th October 2018 and subsequently intensified into a **Cyclonic Storm 'LUBAN'** on 8th October 2018. After intensifying further, it lay as a **'Very Severe Cyclonic Storm'** over West Central Arabian Sea towards the end of the week. This system during its initial stage, caused fairly widespread to widespread intense rainfall activity over parts of south Peninsula.
- Another low pressure area which formed over South East Bay of Bengal & adjoining north Andaman Sea on 7th October 2018 has concentrated into a Depression on 8th October and intensified into a **Cyclonic Storm 'TITLI'** over West Central Bay of Bengal on 9th October 2018. It further intensified into a **Severe Cyclonic Storm** and then into a **Very Severe Cyclonic Storm** on 10th October 2018. It moved northwestwards crossed north Andhra Pradesh-south Odisha coasts, near Lat.18.8°N and Long. 84.5°E, (near Palasa, Srikakulam district) to the southwest of

Gopalpur, as a **very severe cyclonic storm** with estimated maximum sustained surface wind speed of 104-150 kmph gusting 165 kmph between 0430 and 0530 hours IST of 11th October 2018. The system has caused fairly widespread to widespread rainfall with isolated intense rainfall activity over Andaman Nicobar islands during the second half of the week.

Weekly Rainfall Scenario (04 to 10 October, 2018)

During the week, rainfall was below Long Period Average (LPA) by 62% over the country as a whole. Details are given below:

Regions	Actual Rainfall (mm)	Normal Rainfall (mm)	% Departure from LPA
Country as a whole	09.8	25.5	-62%
Northwest India	02.4	11.8	-80%
Central India	02.3	20.0	-88%
South Peninsula	36.4	40.3	-10%
East & northeast India	06.8	44.8	-85%

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

Post- monsoon Seasonal Rainfall Scenario (01 to 10 October, 2018)

For the country as a whole, cumulative rainfall during post- monsoon 2018 upto 10 October, 2018 was below LPA by 66% over the country as a whole. 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	12.9	38.1	-66%
Northwest India	02.6	17.0	-85%
Central India	03.7	30.4	-88%
South Peninsula	44.3	59.7	-26%
East & northeast India	13.2	68.2	-81%

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

Chief synoptic conditions as on 11 October, 2018

- The **Very Severe Cyclonic Storm 'TITLI'** lay centred at 0830 hours IST of today, 11th October 2018 over south Odisha near Lat 19.0 °N and Long 84.1° E, about 90 km west southwest of Gopalpur and 60 km south-southeast of Phulbani.
- The **Very Severe Cyclonic Storm (LUBAN)** over westcentral Arabian Sea lay centred at 0830 hrs IST of today, the 11th October 2018 over westcentral Arabian Sea.

- A western disturbance as an upper air cyclonic circulation lies over Jammu & Kashmir and adjoining north Pakistan and extends upto 5.8 km above mean sea level with a trough aloft.
- An induced cyclonic circulation lies over Haryana & neighbourhood and extends upto
- 3.1 km above mean sea level.

Large scale features as on 11 October, 2018

- Currently, El Nino Southern Oscillation (ENSO) neutral conditions are prevailing over equatorial Pacific Ocean and the latest Monsoon Mission Climate Forecast System (MMCFS) forecast indicates that there is possibility of development of weak El Niño conditions during October to December.
- Currently, Positive IOD conditions are prevailing over equatorial Indian Ocean. Positive IOD conditions are likely to prevail during next 2 weeks.
- Madden Julian Oscillation (MJO) index is in Phase-2 with high amplitude, it is likely to be in same phase with low amplitude towards end of the next one week.

Forecast for next two week

Weather systems & associated Precipitation during Week 1(11 to 17 October, 2018) and Week 2 (18 to 24 October, 2018)

- The **Very Severe Cyclonic Storm 'TITLI'** is very likely to move northwestwards for next 12 hours and then recurve northeastwards towards Gangetic West Bengal across Odisha. It is very likely to weaken gradually becoming severe cyclonic storm around noon, cyclonic storm around evening and deep depression by mid-night of today, the 11th October 2018. Under its influence, widespread rainfall with isolated heavy to very heavy rainfall is very likely to occur over Odisha, West Bengal, Assam & Meghalaya, Mizoram & Tripura mainly during first half of the 1st week and decrease in intensity thereafter.
- The **Very Severe Cyclonic Storm (LUBAN)** over westcentral Arabian Sea is very likely to intensify further and move west-northwestwards towards Yemen & South Oman Coasts.
- Isolated to scattered rainfall very likely to occur over most parts of south Peninsular India during first half of the 1st week and very likely to be scattered to fairly widespread with possibility of heavy rainfall at isolated places during second half of the 1st week.

- Scattered to fairly widespread rainfall is also likely to occur over Arunachal Pradesh and Andaman & Nicobar Islands during the week and over Sub-Himalayan West Bengal & Sikkim during first half of the 1st week.
- Under the influence of approaching Western Disturbances, Isolated to scattered precipitation is very likely over Jammu & Kashmir and Himachal Pradesh during most days of the 1st week (**Annexure IV**).
- **Overall rainfall activity is likely to be above normal over most parts of Odisha, West Bengal and northeastern States during 1st week.**
- **During 2nd week, rainfall activity is likely to be normal to above normal over most parts of the country outside northeastern states and adjoining east India (Annexure V).**

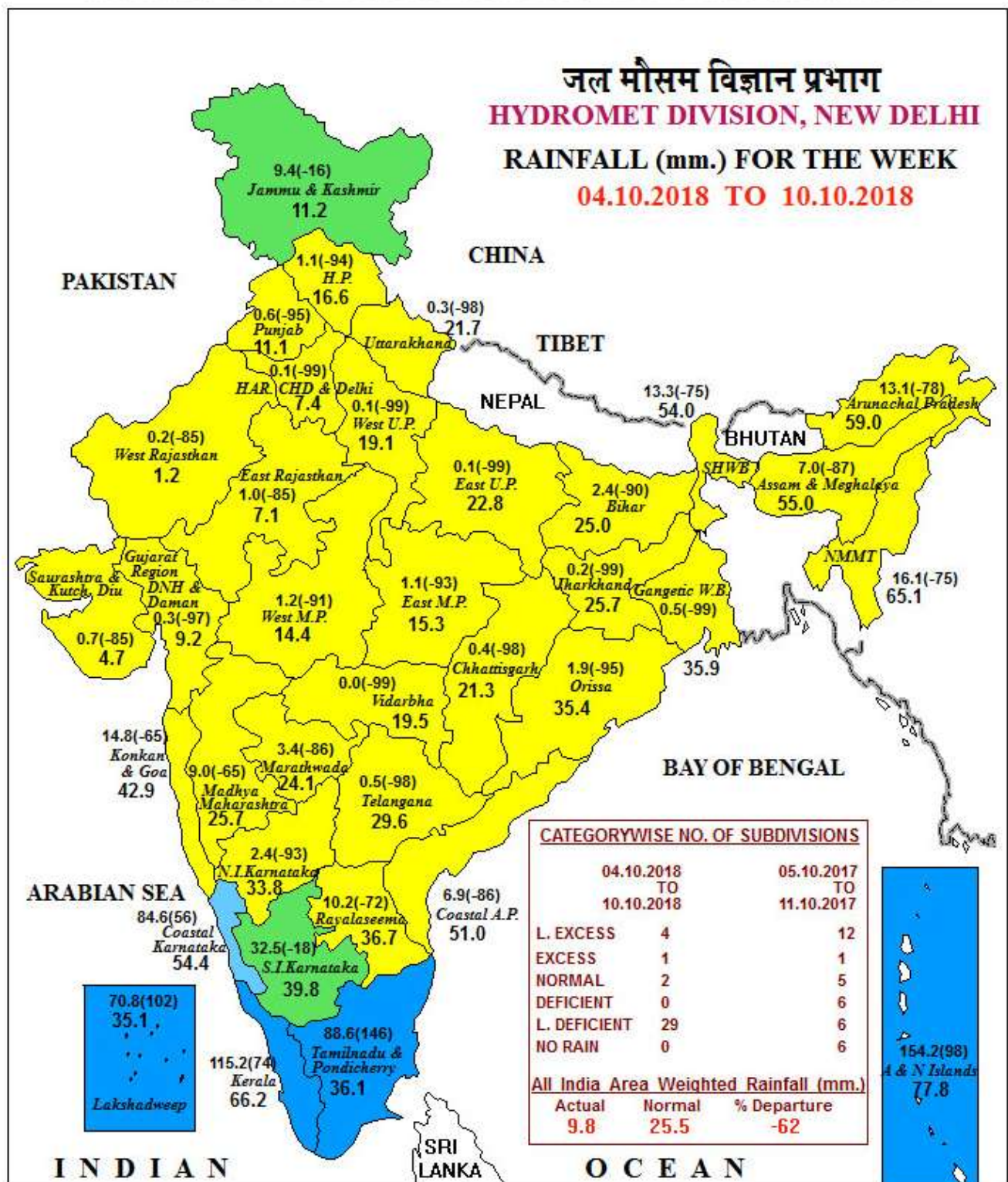
Cyclogenesis:

- **The Very Severe Cyclonic Storm (LUBAN) over westcentral Arabian Sea is very likely to intensify further and move west-northwestwards towards Yemen & South Oman Coasts.**

Next weekly update will be issued on next Thursday i.e. 18 October, 2018

भारत मौसम विज्ञान विभाग

INDIA METEOROLOGICAL DEPARTMENT



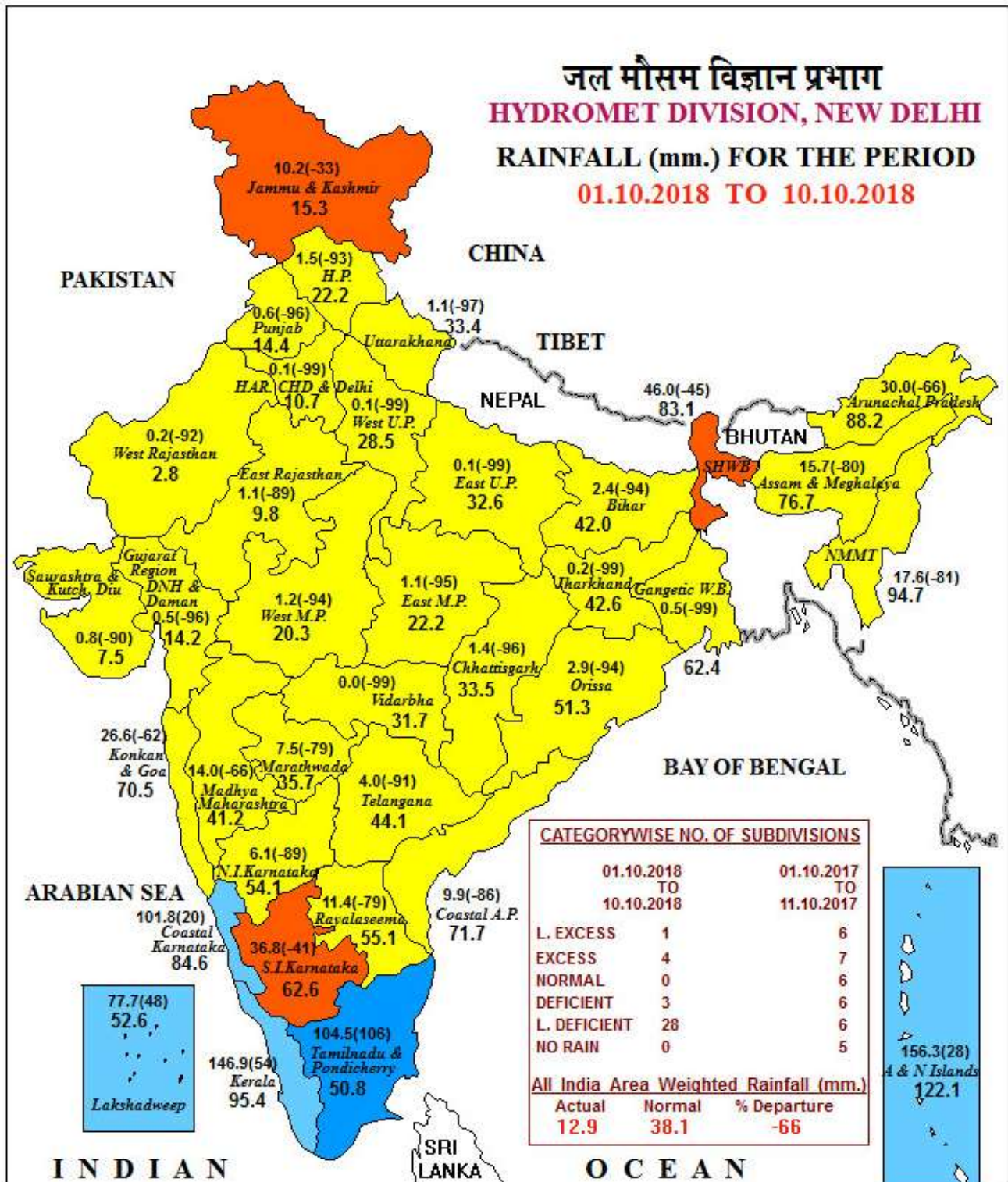
LEGEND: ■ L. EXCESS (+60% OR MORE) ■ EXCESS (+20% TO +59%) ■ NORMAL (+19% TO -19%)
 ■ DEFICIENT (-20% TO -59%) ■ L. DEFICIENT (-60% TO -99%) ■ NO RAIN (-100%) ■ NO DATA

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 IV

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

Sr. No	MET.SUB-DIVISIONS	11 OCT	12 OCT	13 OCT	14 OCT	15 OCT	16 OCT	17 OCT
1	ANDAMAN & NICO.ISLANDS	FWS	SCT	SCT	SCT	SCT	SCT	FWS
2	ARUNACHAL PRADESH	SCT	FWS [•]	FWS [•]	FWS	FWS	SCT	SCT
3	ASSAM & MEGHALAYA	WS ^{••}	WS ^{•••}	WS ^{•••}	FWS [•]	ISOL	ISOL	ISOL
4	NAGA.MANI.MIZO.& TRIPURA	WS [•]	WS ^{••}	WS ^{••}	WS [•]	ISOL	ISOL	ISOL
5	SUB-HIM.W. BENG. & SIKKIM	SCT	FWS [•]	FWS [•]	ISOL	ISOL	ISOL	ISOL
6	GANGETIC WEST BENGAL	WS ^{••}	WS ^{••}	WS ^{••}	ISOL	D	D	D
7	ODISHA	WS ^{•••}	WS ^{••}	SCT	SCT	ISOL	D	D
8	JHARKHAND	FWS [•]	FWS [•]	ISOL	D	D	D	D
9	BIHAR	ISOL	SCT	SCT	D	D	D	D
10	EAST UTTAR PRADESH	ISOL	ISOL	D	D	D	D	D
11	WEST UTTAR PRADESH	ISOL ^{TS#}	D	D	D	D	D	D
12	UTTARAKHAND	WS ^{TS#}	ISOL	D	D	D	ISOL	ISOL
13	HARYANA CHD. & DELHI	ISOL ^{TS#}	D	D	D	D	D	ISOL
14	PUNJAB	ISOL	D	D	D	D	ISOL	ISOL
15	HIMACHAL PRADESH	SCT	ISOL	D	D	D	ISOL	SCT
16	JAMMU & KASHMIR	SCT	ISOL	D	D	ISOL	SCT	FWS
17	WEST RAJASTHAN	D	D	D	D	D	ISOL	ISOL
18	EAST RAJASTHAN	D	D	D	D	D	D	ISOL
19	WEST MADHYA PRADESH	D	D	D	D	D	D	D
20	EAST MADHYA PRADESH	ISOL	ISOL	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	ISOL	ISOL	D	D	D	ISOL	ISOL
24	MADHYA MAHARASHTRA	D	D	D	D	D	ISOL	ISOL
25	MARATHAWADA	D	D	D	D	D	D	D
26	VIDARBHA	ISOL	D	D	D	D	D	D
27	CHHATTISGARH	SCT	ISOL	D	D	D	ISOL	ISOL
28	COASTAL ANDHRA PRADESH	SCT ^{••}	ISOL	ISOL	ISOL	SCT	FWS [•]	SCT
29	TELANGANA	D	ISOL	ISOL	ISOL	D	ISOL	ISOL
30	RAYALASEEMA	D	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
31	TAMILNADU & PUDUCHERRY	ISOL	ISOL	ISOL	ISOL	SCT	FWS	FWS
32	COASTAL KARNATAKA	SCT	SCT	SCT	FWS	FWS [•]	WS [•]	FWS [•]
33	NORTH INT.KARNATAKA	ISOL	ISOL	ISOL	ISOL	D	SCT ^{TS}	SCT ^{TS}
34	SOUTH INT.KARNATAKA	ISOL	ISOL	SCT	FWS	FWS	FWS	FWS
35	KERALA	SCT	SCT	SCT	FWS [•]	FWS [•]	WS [•]	FWS
36	LAKSHADWEEP	SCT	SCT	SCT	ISOL	ISOL	ISOL	ISOL

LEGENDS:

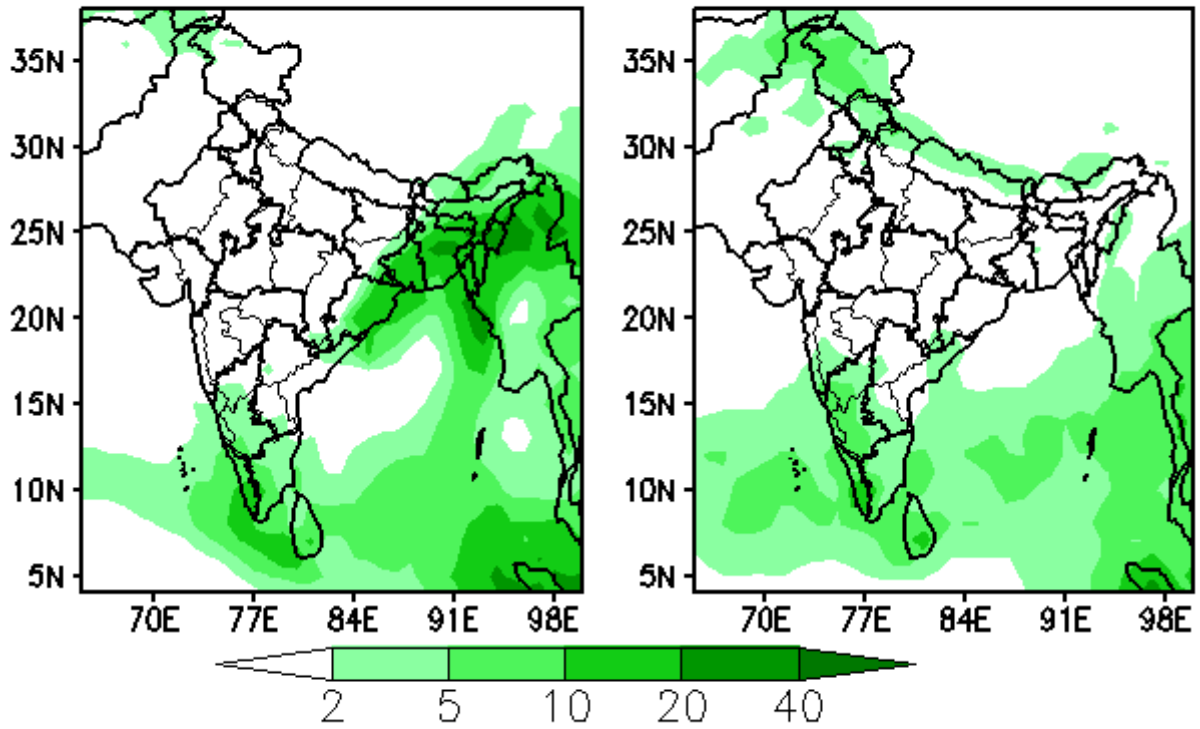
WS	WIDE SPREAD / MOST PLACES (76-100%)	FWS	FAIRLY WIDE SPREAD / MANY PLACES (51% to 75%)
SCT	SCATTERED / FEW PLACES (26% to 50%)	ISOL	ISOLATED (up to 25%)
		D/DRY	NIL RAINFALL
[•] Heavy Rainfall (64.5-115.5 mm)	^{••} Heavy to Very Heavy Rainfall (115.6-204.4 mm)	^{•••} Extremely Heavy Rainfall (204.5 mm or more)	
[•] FOG	[*] SNOWFALL	[#] HAILSTORM	[↑] HEAT WAVE (+4.5°C to +6.4°C)
[§] THUNDERSTORM WITH SQUALL/GUSTY WIND	^{DS/TS} DUST/THUNDERSTORM	[↓] COLD WAVE (-4.5°C to -6.4°C)	[↑] SEVERE HEAT WAVE (> +6.4)
			[↓] SEVERE COLD WAVE (< -6.4)

Forecast rainfall (mm per day)

Actual Rainfall (mm/day)

(Week1: 12Oct-18Oct)

(Week2: 19Oct-25Oct)



Forecast rainfall anomaly (mm per day)

Rainfall Anomaly (mm/day)

(Week1: 12Oct-18Oct)

(Week2: 19Oct-25Oct)

