

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

Dated: 26 March 2020

Current Weather Status and Outlook for next two weeks (26 March to 08 April, 2020)

Significant Features

- Movement of two successive western disturbances across north India during the week: i) 1st Western Disturbance moved in the first half of the week and caused scattered to fairly widespread rainfall/snowfall activity over Western Himalayan Region and isolated to scattered rainfall/thunderstorm activity over adjoining plains of northwest India. ii)2nd Western Disturbance and its induced cyclonic circulation during the end of the week, have caused fairly widespread to widespread rainfall/snowfall/thunderstorm activity over Western Himalayan Region and scattered to fairly widespread rainfall/thunderstorm activity over adjoining plains of northwest India. Isolated hailstorm activity also had been reported from these regions during the same period.
- Strengthening of anticyclone over Bay of Bengal and resultant enhanced moisture feeding into the region have caused scattered to fairly widespread rainfall/thunderstorm activity over East and adjoining parts of Central India. Isolated hailstorm activity also had been reported from this region during the week.
- Heavy rainfall (≥64.5 mm) occurred at isolated places over Kerala & Mahe, Tamil Nadu, Puducherry & Karaikkal and Odisha on one day each during the week.
- Hail storm had been reported at a few places over Odisha on one day; at isolated places over Vidarbha, East Madhya Pradesh, Chhattisgarh and Gangetic West Bengal on two days each; over Madhya Maharashtra, Marathwada, Coastal Andhra Pradesh, Odisha, Sub-Himalayan West Bengal & Sikkim on one day each during the week.
- The highest maximum temperature of 41.0°C had been recorded at Anantapur (Rayalseema) on 19th March 2020 and at Khargone (West Madhya Pradesh) on 25th March 2020 and the **lowest Minimum temperature** of 11.2°C had been recorded at Panchmarhi (West Madhya Pradesh) on 22nd 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 (19 March to 25 March, 2020)

<u>During the week, rainfall was below Long Period Average (LPA) by 34% over the country as a whole. Details are given below:</u>

	Actual	Normal	%Departure from LPA		
Regions	Rainfall(mm)	Rainfall(mm)			
Country as a whole	5.4	8.3	-34%		
Northwest India	5.6	13.8	-60%		
Central India	4.4	1.6	177%		
South Peninsula	5.6	4.0	41%		
East & northeast India	7.1	17.2	-59%		

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

Seasonal Rainfall Scenario (1 March till 25 March 2020)

For the country as a whole, cumulative rainfall during this year's pre monsoon season upto 25 March 2019 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	35.5	24.3	46%
Northwest India	60.9	40.4	51%
Central India	21.7	6.8	220%
South Peninsula	12.1	11.5	5%
East & northeast India	44.4	46.1	-4%

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

Chief synoptic conditions as on 26 March 2020

- A Western disturbance as a cyclonic circulation extending upto 9.5 km above mean sea level lies over north Afghanistan & neighbourhood.
- An induced cyclonic circulation extending upto 0.9 km above mean sea level lies over south Pakistan & neighborhood.
- Another western disturbance as a cyclonic circulation between 1.5 & 3.1 km above mean sea level lies over Jammu & Kashmir and adjoining North Pakistan.
- A cyclonic circulation at 1.5 km above mean sea level lies over south Gujarat & neighbourhood.
- A trough extending upto 0.9 km above mean sea level runs from north coastal Karnataka to south East Rajasthan across Konkan & Goa and Gujarat Region

Large scale features as on 26 March 2020

- The Madden–Julian Oscillation (MJO) is currently in Phase-3 with amplitude greater than 1. It is likely to move to phase 4 with amplitude greater than 1 by first half of week 1 and then move to Phase 5 with reducing amplitude towards the end of week-1. Thereafter it is likely to move to Phase 6 with reducing amplitude less than 1 towards the middle of week-2 and then to phase 7 & 8 towards end of week 2.
- 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 rest December period.

Forecast for next two week

Weather systems & associated Precipitation during Week 1 (26 March to 01 April 2020) and Week 2 (02 to 08 April 2020)

Week 1: (26 March to 01 April 2020)

- Under the impact of the present Western disturbance over north Afghanistan & neighbourhood and its induced cyclonic circulation over south Pakistan & neighbourhood and their subsequent movement towards northeastwards, Fairly widespread/widespread rainfall/snowfall with isolated thunderstorm accompanied with hailstorm, lightning and gusty winds (speed reaching 30-40 kmph) very likely over Western Himalayan region (Jammu, Kashmir, Ladakh, Gilgit & Baltistan, Himachal Pradesh and Uttarakhand) during 26th to 27th March. Heavy Rainfall at isolated places also very likely over Jammu, Kashmir, Ladakh, Gilgit & Baltistan and Himachal Pradesh on 27th March. Scattered to fairly widespread rainfall with isolated to scattered thunderstorm / hailstorm accompanied with lightning and gusty winds (speed reaching 30-40 kmph) very likely over Punjab, Haryana, Chandigarh & Delhi, Rajasthan, Madhya Pradesh and Uttar Pradesh during 26th to 27th March
- With Likely development of a low level trough and moisture incursion over interior Maharashtra during 29 to 30th March 2020, isolated to scattered rain/thundershowers accompanied with lightning/hailstorm/gusty winds very likely over the same area.
- Under the impact of a fresh Western Disturbance likely to affect Western Himalayan Region from 30th March, Scattered to fairly widespread rainfall/snowfall (with isolated heavy falls over Jammu & Kashmir) likely over Western Himalayan region during 31 March till 1 April. Isolated to scattered rain/thundershowers likely over northeast India and Isolated rainfall over Central India and southern peninsula.
- Cumulatively, near normal rainfall very likely over Jammu & Kashmir, Punjab, Himachal Pradesh, Uttarakhand, East Rajasthan, West Madhya Pradesh and 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: (02 to 08 April 2020)

During week 2, near normal to below rainfall likely over Kerala, Western Himalayan Region and northeastern states and Andaman & Nicobar Islands with mainly dry weather likely over rest parts of the country(Annexure IV).

Maximum Temperature for week 1 & 2: (26 March to 08 April, 2020)

During Week 1, due to ongoing rainfall/thunderstorm activity over many parts of the country, maximum temperatures are likely to be below normal by 2-4°C over most parts of the country outside northern parts of Kashmir, 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 (Annexure V).

During week 2, there is likely slight rise in maximum temperatures, however these are likely to below normal by 1-2°C over Central and adjoining east & south Peninsular India (Annexure V).

Cyclogenesis:

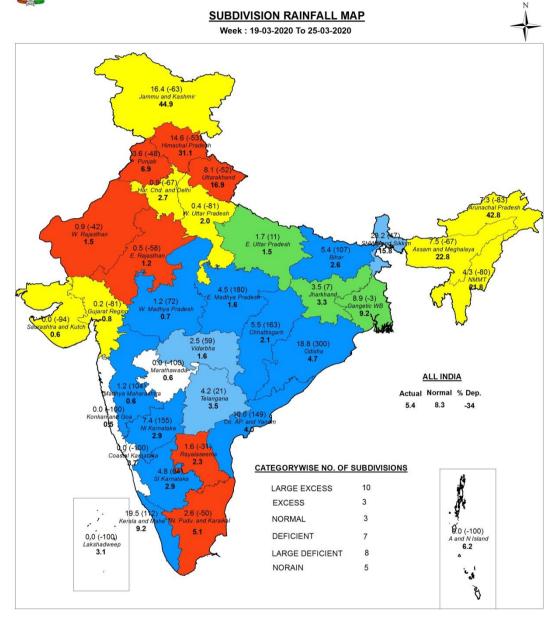
No cyclogenesis is expected over North Indian Ocean during weeks 1 and 2.

Next weekly update will be issued on next Thursday i.e. 2nd April, 2020

Annexure I



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



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

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

Annexure II



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

SUBDIVISION RAINFALL MAP Period: 01-03-2020 To 25-03-2020 131.6 (1) 130.1 126.8 (34) Himachal D 94 6 103.6 (10.9 45.8 (487) 140.3 11.3 (196) W. Rajastha 38.1 (580) Biha **6.2** 88.5 (637) 12.0 53.0 (142) 5.3 (45) W. Madhyo D 3.7 48.3 (462) 58.2 (218) 9.0 4.8 ALL INDIA 15.2 (58) Actual Normal % Dep. Telangana 9.6 35.5 24.3 0.0 10.6 (103) CATEGORYWISE NO. OF SUBDIVISIONS LARGE EXCESS 18 5 **EXCESS** 4.3 (-76) N. Pudu. and Ka NORMAL 6 13.2 (40) Lakshadur Ø.1 (-99) 18.0 DEFICIENT 2 nd N Island 21.0 9.4 LARGE DEFICIENT NORAIN

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:

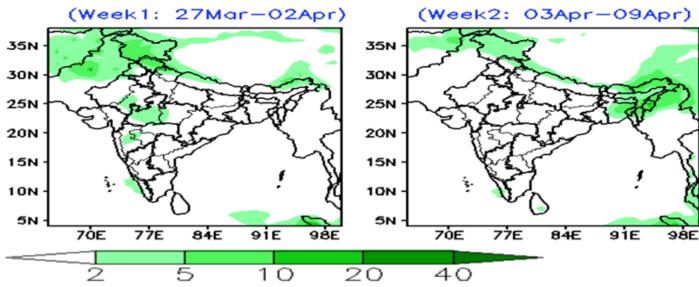
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 c) Percentage Departures of rainfall are shown in brackets.

Annexure III

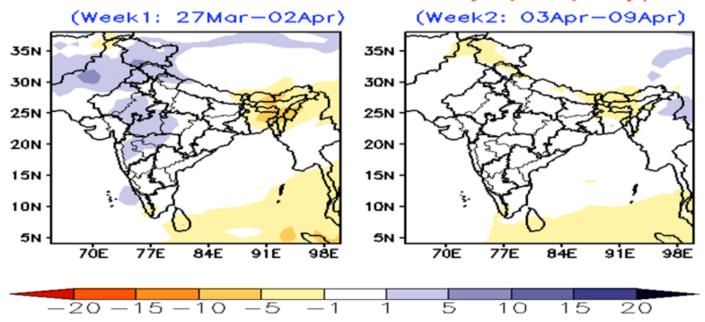
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Annexure IV

Forecast Rainfall (mm/day)



Forecast Rainfall Anomaly (mm/day)



Annexure V

MME forecast Tmax anomaly (Deg C)

