



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

Dated: 20 May, 2021

**Subject: Current Weather Status and Outlook for next two weeks
(20 May- 3 June 2021)**

Significant weather features observed for week ending on 19 May 2021

a. Day to day Major synoptic system and associated Weather

- A **Low Pressure Area** has formed over Southeast Arabian Sea & adjoining Lakshadweep area in the morning of 13th which has become a **Well Marked Low** pressure area over Lakshadweep area and adjoining Southeast Arabian Sea in the evening of the same day; it concentrated into a **Depression** in the morning of 14th over Lakshadweep area; moving north-northeastwards it intensified into a **Deep Depression** in the afternoon of the same day over Lakshadweep area and adjoining Southeast & Eastcentral Arabian Sea; moving northwards, it intensified into a **Cyclonic Storm “Tauktae” (pronounced as Tau’Te)** over Lakshadweep area and adjoining Southeast & Eastcentral Arabian Sea in the night of 14th; moving nearly northwards further, it intensified into a **Severe Cyclonic storm** in the evening of 15th May, 2021 and further into a **Very Severe Cyclonic Storm** in the night of 16th May, 2021 over Eastcentral Arabian Sea; it then moved north-northwestwards and intensified into an **Extremely Severe Cyclonic Storm** in the early morning hours of 17th May, 2021 over Eastcentral Arabian Sea; continuing to move north-northwestwards, it crossed Saurashtra coast, about 20 km to the northeast of Diu near latitude 20.8⁰N and longitude 71.1⁰E during 2000-2300 hrs IST of 17th May with wind speed of 160-170 kmph gusting to 190 kmph; after crossing it weakened into a **Very Severe Cyclonic Storm** over Saurashtra in the night of 17th and further into a **Severe Cyclonic Storm** in the morning of 18th May, 2021; moving north-northeastwards, it weakened into a **Cyclonic Storm** in the forenoon of 18th May, 2021 over Saurashtra and further into a **Deep Depression** in the night of 18th May, 2021 over Gujarat region; it then moved northeastwards and weakened into a **Depression** in the early morning of 19th

May, 2021 over south Rajasthan and adjoining Gujarat region and into a Well Marked Low in the evening of 19th May 2021 over East Rajasthan and adjoining West Madhya Pradesh; this system has caused widespread rainfall on many days along with heavy to very heavy and extremely heavy rainfall on one or two days along the west coast during the week and fairly widespread to widespread rainfall along with heavy to very heavy and extremely heavy rainfall on one day each over Gujarat State and Southeast Rajasthan towards the end of the week ; it has also caused heavy to very heavy rainfall over Lakshadweep and South Interior Karnataka on one or two days; the west coast also experienced very strong/gale speed winds during the passage of the system towards Gujarat coast.

- Remnants of the Extremely Severe cyclonic Storm “Tauktae” (pronounced as Tau’Te) and its interaction with the Western Disturbance has caused fairly widespread to widespread rainfall/thunderstorms over plains of Northwest and Central India along with isolated heavy to very heavy rainfall during 19-20 May. **On 19-20 May, some parts of National capital Delhi has received 10-13cm which is ever highest for any date for month of May.**
- Movement of Western Disturbances and troughs/cyclonic circulations to east, in the lower levels supported by moisture incursion from the Bay of Bengal have caused fairly widespread to widespread rainfall/thunderstorms over Northeast India and over parts of East India along with heavy/ very heavy rainfall at isolated places over these regions during the week.

b. Heavy Rain:

- **Heavy to very heavy rainfall at a few places with extremely heavy rainfall at isolated places** had occurred over Kerala & Mahe on two days and over South Konkan & Goa on one day; **heavy to very heavy rainfall with extremely heavy rainfall at isolated places** had occurred over Coastal Karnataka, Konkan & Goa, Saurashtra & Kutch, Gujarat Region, East Rajasthan and Assam & Meghalaya on one day each during the week.
- **Heavy to Very heavy rainfall at isolated places** had occurred over Tamil Nadu, Puducherry & Karaikkal and Lakshadweep on two days each; over Kerala & Mahe, South interior Karnataka, Konkan & Goa, Saurashtra & Kutch and Uttarakhand on one day each during the week.
- **Heavy rainfall** at isolated places had occurred over Assam & Meghalaya on five days; Nagaland, Manipur, Mizoram & Tripura, Sub Himalayan West Bengal & Sikkim, Tamil Nadu Puducherry & Karaikkal, Kerala & Mahe, Coastal & South Interior Karnataka and East Madhya Pradesh on two days each; over Odisha, Bihar, East Uttar Pradesh, Himachal Pradesh, Arunachal Pradesh, Vidarbha, Lakshadweep, Konkan & Goa, North Interior Karnataka, Madhya Maharashtra and West Madhya Pradesh on one day each during the week.

c. No heat wave spell was reported from any areas of the country during the

week due to rain and thunderstorm activities over many parts of India during many days of the week.

d. Weekly rainfall and seasonal rainfall Scenario

Weekly Rainfall Scenario (13-20 May, 2021)

During the week, rainfall for the country as a whole was above Long Period Average (LPA) by 127%. Details are given below:

Regions	Actual Rainfall (mm)	Normal Rainfall (mm)	% Departure from LPA
Country as a whole	31.8	14.0	127%
Northwest India	18.1	7.9	129%
Central India	30.9	4.7	557%
South Peninsula	40.2	18.4	118%
East & northeast India	49.6	40.0	24%

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

Pre-monsoon Rainfall Scenario (1 March to 20 May, 2021)

For the country as a whole, cumulative rainfall during this year's pre-monsoon season till 12 May, 2021 is normal with % departure from LPA as 0%. 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	105.1	105.0	0%
Northwest India	87.3	100.7	-13%
Central India	64.9	28.4	129%
South Peninsula	120.0	89.8	34%
East & northeast India	205.8	293.7	-30%

e. Weekly maximum temperature Scenario over the country (13-19 May, 2021)

The maximum temperatures were below normal in most parts of the country with highest departure from normal upto 5 to 7°C below normal, over western parts of central India, Karnataka, Maharashtra and parts of northeastern states of India (Annexure III).

f. Chief synoptic conditions as on 20 May, 2021

- ◆ A Low-pressure area lies over southwest Uttar Pradesh & neighbourhood. The associated cyclonic circulation extends upto 3.1 km above mean sea level.
- ◆ A trough runs from the cyclonic circulation associated with the above system to eastcentral Arabian Sea across West Madhya Pradesh, north Madhya Maharashtra and south Konkan at 3.1 km above mean sea level.
- ◆ Southwest Monsoon likely to advance into South Andaman Sea & adjoining Southeast Bay of Bengal during next 24 hours.
- ◆ A Western Disturbance now seen as a trough in mid-tropospheric westerlies with its axis at 5.8 km above mean sea level runs roughly along longitude 73°E to the north of latitude 27°N. However, the cyclonic circulation over Jammu & Kashmir & neighbourhood associated with western disturbance has become less marked.
- ◆ The cyclonic circulation over central Assam at 0.9 km above mean sea level has become less marked.
- ◆ A cyclonic circulation over Southeast Bay of Bengal & neighbourhood lies over Southwest Bay of Bengal & neighbourhood between 3.1 km & 5.8 km above mean sea level.
- ◆ A Low Pressure Area is very likely to form over north Andaman Sea & adjoining Eastcentral Bay of Bengal around 22nd May, 2021. It is very likely to intensify into a cyclonic storm by 24th May 2021. It very likely to move northwestwards and reach Odisha-West Bengal Coast around 26th May morning.

g. Large scale features as on 13 May, 2021

- Currently, moderate La Niña conditions are prevailing over equatorial Pacific and Sea Surface Temperatures (SSTs) are below normal over central & eastern equatorial Pacific Ocean. The latest Monsoon Mission Climate Forecasting System (MMCFS) forecast indicates warming of SSTs over Nino 3.4 region during the coming season and there is a possibility of transition of La Niña conditions to ENSO neutral conditions during the forthcoming season. However, model skill during this period is supposed to be limited because of the spring barrier.
- At present, neutral Indian Ocean Dipole (IOD) conditions are observed over Indian Ocean

and the latest MMCFS forecast indicates neutral IOD conditions are likely to continue up to May, June & July (MJJ) months and negative IOD conditions likely to develop thereafter.

- The Madden Julian Index (MJO) currently lies in phase 4 with amplitude more than 1 and likely remain in Phase 4 till 22 May. Thereafter, it will move to phase 5 and continue in same phase with amplitude remaining more than 1 till 24 May and then less than 1 till 26 May. It will move and remain in Phase 6 and 7 in week 2 .

h. Forecast for next two week

Weather systems & associated Precipitation during Week 1 (20 to 27 May, 2021) and Week 2 (27 May to 3 June 2021)

Advance of southwest monsoon:

- Southwest Monsoon likely to advance into South Andaman Sea & adjoining Southeast Bay of Bengal on 21st May, 2021.
- Southwest monsoon is likely to set in over Kerala during week 2 (27 May to 02 June, 2021).
- Further advance of southwest monsoon is also likely over some more parts of Bay of Bengal during week 2.

Rainfall for week 1: (20 to 27 May, 2021)

- A Low pressure area lies over southwest Uttar Pradesh & neighbourhood and the Western Disturbance as a trough in middle tropospheric westerlies roughly along longitude 73°E to the north of latitude 27°N. Under its influence, fairly widespread to widespread rainfall with isolated heavy falls very likely over Uttarakhand, Uttar Pradesh and Bihar on 20th May and decrease in rainfall intensity & distribution from 21st may onwards.
- **Due to likely favorable metrological conditions, southwest Monsoon likely to advance into South Andaman Sea & adjoining Southeast Bay of Bengal on 21st May, 2021. Fairly widespread to widespread rainfall activity with isolated heavy to very heavy falls is likely over Andaman & Nicobar Islands till 23 May and its intensity likely to decrease thereafter.**

- **A Low Pressure Area is very likely to form over north Andaman Sea & adjoining eastcentral Bay of Bengal around 22nd May, 2021. It is very likely to intensify into a cyclonic storm by 24th May 2021. It very likely to move northwestwards and reach north Bay of Bengal near Odisha-West Bengal Coast around 26th May morning.**
- Due to southerly/southwesterly winds from Bay of Bengal over northeast India and cyclonic circulation over Assam at lower levels, **fairly widespread to widespread rainfall with isolated heavy rainfall** very likely over Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh and Assam & Meghalaya during 20th to 21st May, 2021. It is very likely to decrease in distribution & intensity thereafter.
- **Fairly widespread to widespread rainfall with isolated heavy falls is likely over Coastal & South Interior Karnataka, Kerala & Mahe and Lakshadweep during most days of the week. Isolated heavy rainfall is also likely over Coastal & South Interior Karnataka, Kerala & Mahe during 20 to 22 May, 2021. Isolated to scattered rainfall activity likely over rest parts of south Peninsular India (Annexure IV).**

Rainfall for week 2: (27 May to 03June, 2021)

- **Fairly widespread to widespread rainfall with isolated heavy falls is very likely east & adjoining central India.** Hence, rainfall activity is very likely to be above normal above areas.
- Southwest monsoon is likely to set in over Kerala during this week. Hence, rainfall activity is very likely to increase over Kerala, Lakshadweep and coastal & south Interior Karnataka with widespread rainfall alongwith isolated heavy falls over these areas during the week. **Rainfall activity is likely to be normal to above normal over south Peninsular India.**
- **No major WD likely to affect northwestern parts of India during the period. Hence, during the week2, cumulative weekly rainfall likely to below normal over Jammu & Kashmir and Himachal Pradesh and adjoining northwestern plains of India and near normal over remaining parts of the country (Annexure V).**

Temperature for week 1: (20 to 27 May, 2021)

- **Maximum Temperature Departures as on 19-05-2021:** Maximum temperatures were above normal (1.6°C to 3.0°C) at many places over Andaman & Nicobar Islands; at a few places over West Bengal & Sikkim and at isolated places over Tamil Nadu, Puducherry & Karaikal. **These were below normal upto 5°C over most parts of the country.**
- These are very likely to be below normal over most parts of the country except east coast, Gujarat and northeastern states, where these are likely to be near normal or slightly above normal.
- **Hence, heat wave is unlikely over the country during next one week.**

Temperature for week 2: (27 May to 03 June, 2021)

- **Maximum temperatures are likely to increase as compare to week 1. However, it is likely to be below normal or near normal over most parts of the country outside Gujarat, Rajasthan, Odisha & northeastern states, where these are likely to be near normal or slightly above normal (Annexure VI).**
- **Hence, heat wave is unlikely over any part of the country except Rajasthan, where it may occur at isolated places.**

i. Cyclogenesis:

Considering existing environmental features and model guidance, it may be concluded that a low pressure area is very likely to form over north Andaman Sea and adjoining eastcentral Bay of Bengal (BOB) around 22nd May, 2021 with moderate to high probability of formation of depression around 23rd. The system is very likely to intensify into a cyclonic storm by 24th. It is very likely to move northwestwards and reach north Bay of Bengal near Odisha - West Bengal coasts around 26th may morning. **There is High probability of cyclogenesis during first half of week 1 (21.05.2021-27.05.2021) over Andaman Sea and adjoining east central BoB.**

Areas likely to be affected: Andaman & Nicobar Islands, central, southeast & north Bay of Bengal and coastal areas of Andhra Pradesh, Odisha, West Bengal, Bangladesh and Myanmar.

(a) Impact expected:

- i. Sea conditions will be rough to very rough over southeast Bay of Bengal & south Andaman Sea from 21st May onwards.
- ii. Sea conditions will be rough to very rough over Andaman Sea & adjoining eastcentral and southeast Bay of Bengal on 22nd and 23rd May, High to very High over major parts of central Bay of Bengal during 24th – 26th May. It would be rough to very rough on 24th and high to very high during 25th – 26th May over north Bay of Bengal and along & off Odisha, West Bengal and Bangladesh coasts.

iii. **(b) Warnings / Advisory:**

- The fishermen are advised not to venture into southeast Bay of Bengal & south Andaman Sea from 21st May onwards, into eastcentral Bay of Bengal, north Andaman Sea and adjoining southeast Bay of Bengal from 23rd – 24th May and into north and central Bay of Bengal and along & off West Bengal – Odisha – Bangladesh coasts from 24th – 26th May.
- Those who are out in the Deep Sea are advised to return to the coast by 22nd May.
- Ships are advised to avoid these areas
- Ports along the east coast of India may take necessary pre-cautions.
- Naval base operations may maintain necessary pre-cautions
- Tourism activities may be restricted over these areas.

For further details pls visit

http://www.rsmcnewdelhi.imd.gov.in/uploads/archive/24/24_ad83b3_Extended%20Range%20Outlook_20052021.pdf

Next weekly update will be issued on next Thursday i.e. 27 May, 2021

Annexure I

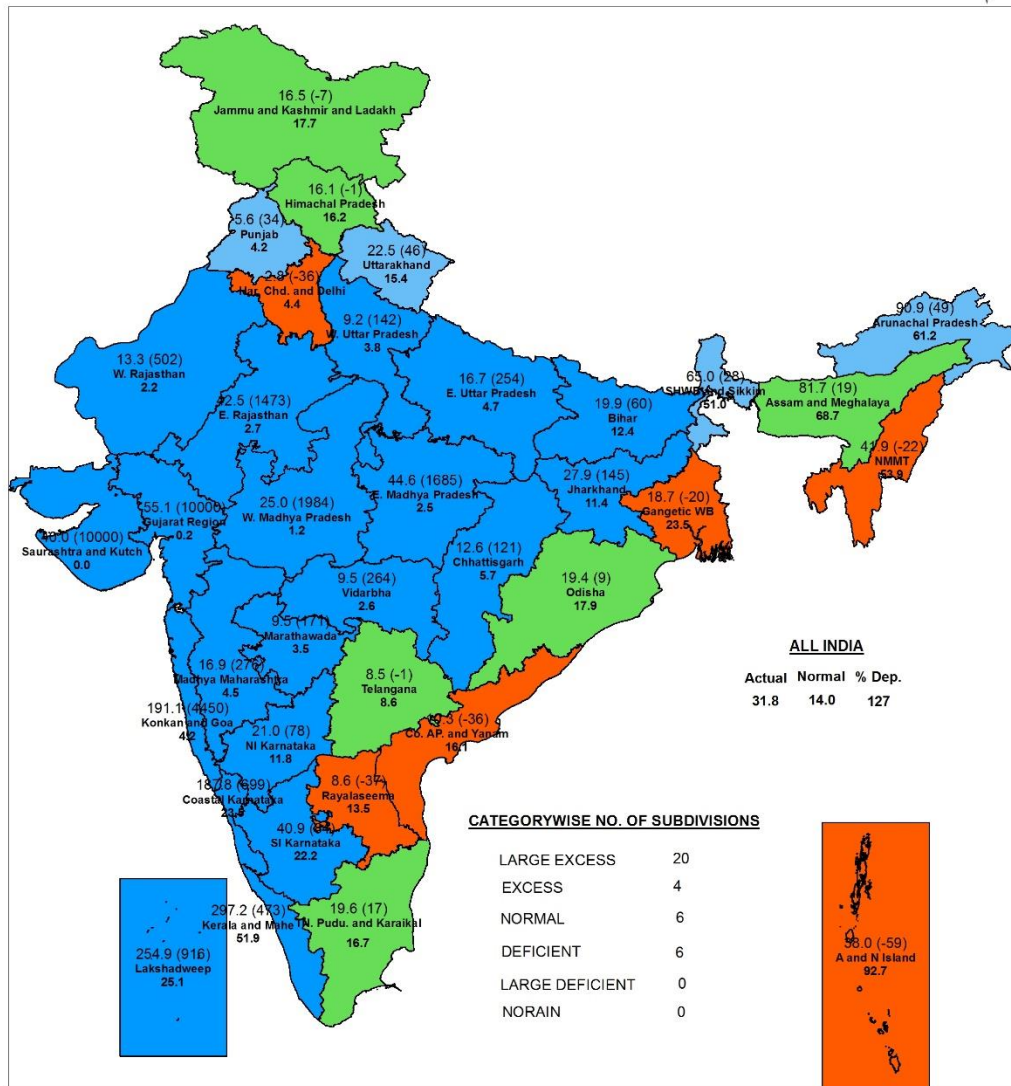


भारत मौसम विज्ञान विभाग
INDIA METEOROLOGICAL DEPARTMENT

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

SUBDIVISION RAINFALL MAP

Week : 13-05-2021 To 19-05-2021



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.

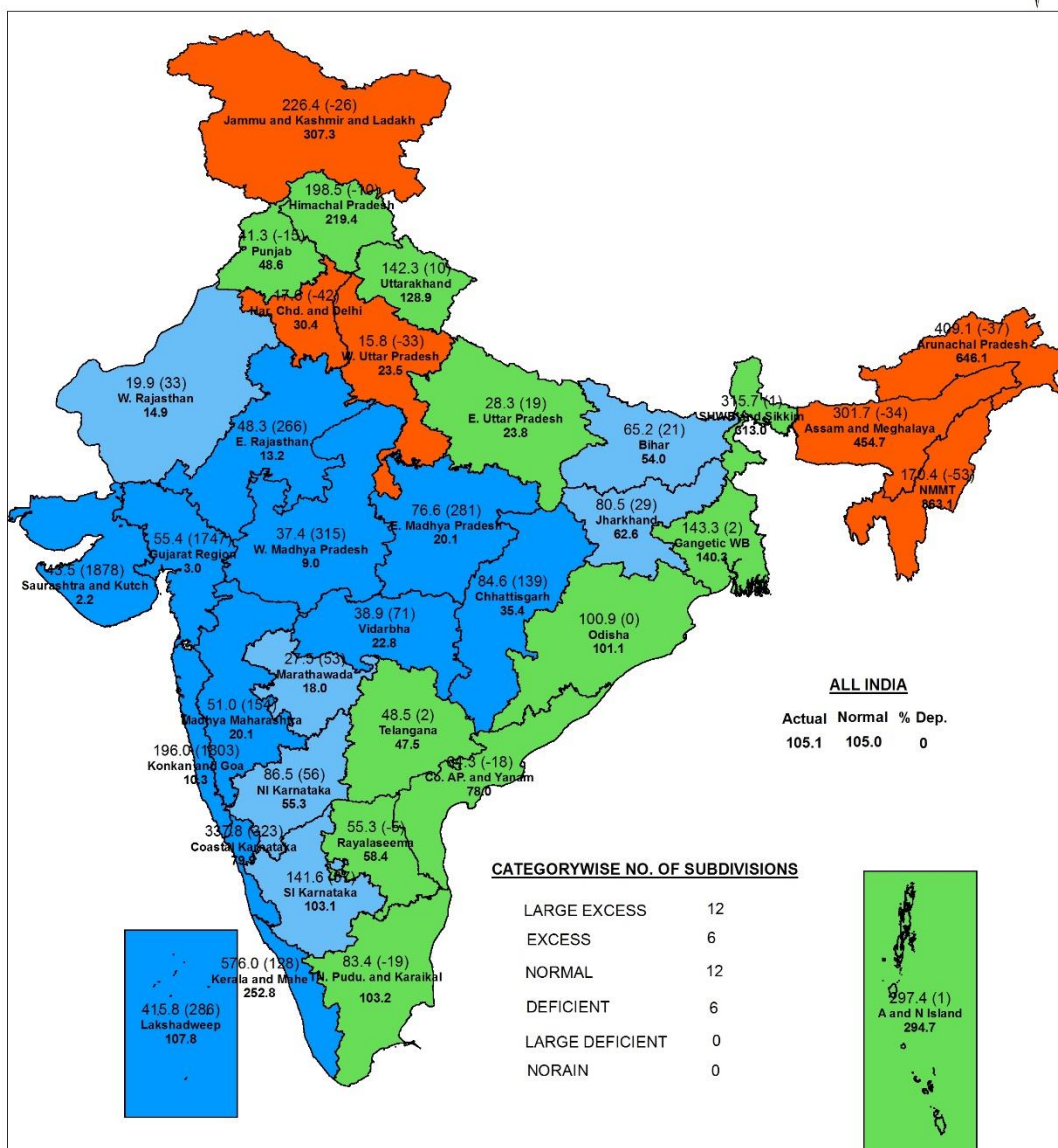


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HYDROMET DIVISION, NEW DELHI

SUBDIVISION RAINFALL MAP

Period : 01-03-2021 To 19-05-2021



Legend

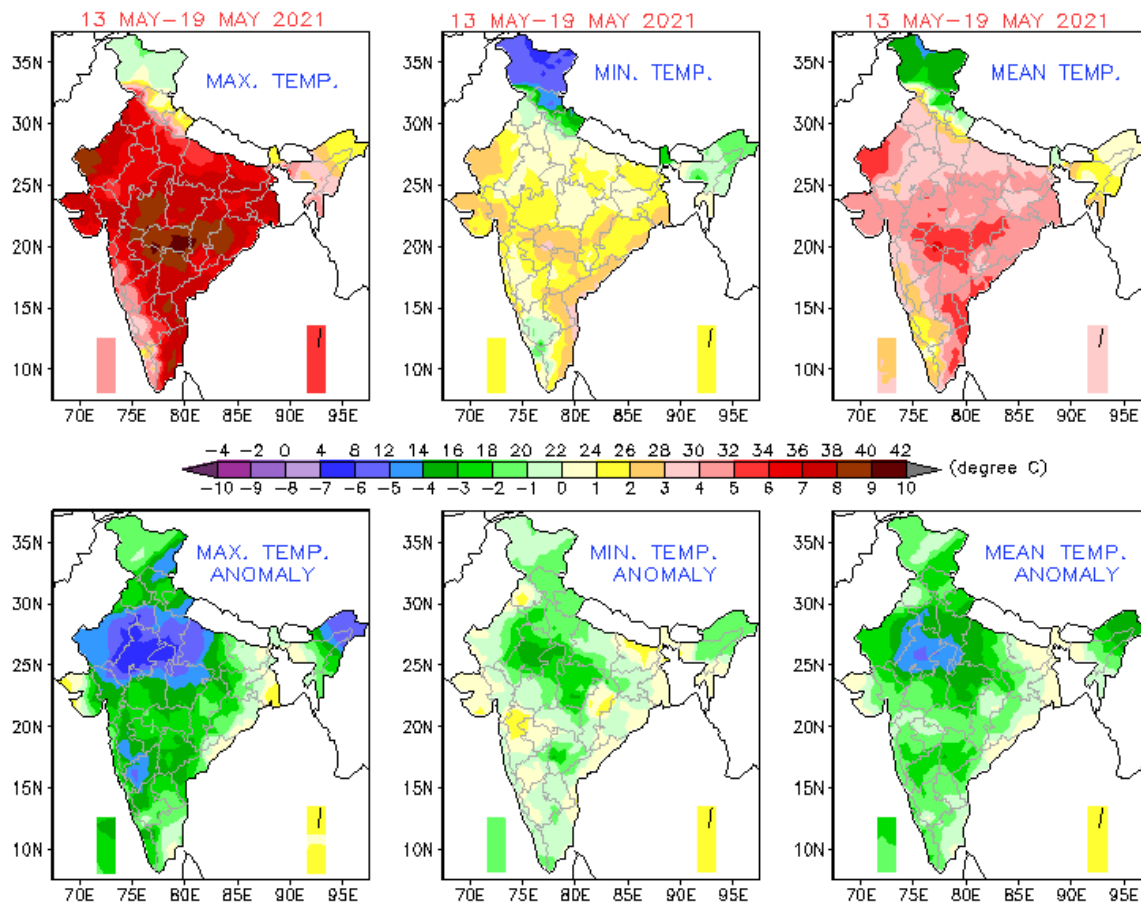
Large Excess [60% or more] | Excess [20% to 59%] | Normal [-19% to 19%] | Deficient [-59% to -20%] | Large Deficient [-99% to -60%] | No Rain [-100%] | No Data

NOTES :

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- c) Percentage Departures of rainfall are shown in brackets.

Annexure III

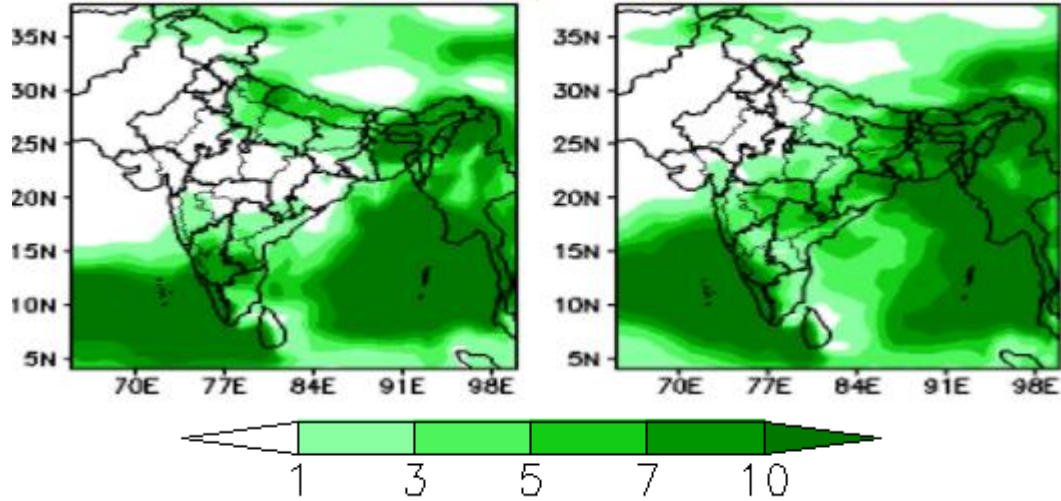
TEMPERATURE FOR WEEK ENDING 19 MAY & ITS ANOMALY



Forecast Rainfall (mm/day)

(Week1: 21May-27May)

(Week2: 28May-03Jun)



Forecast Rainfall Anomaly (mm/day)

(Week1: 21May-27May)

(Week2: 28May-03Jun)

