

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

Press: Dated: 9 June, 2022

Subject: Current Weather Status and Extended range Forecast for next two weeks (9-22 June 2022)

1. Salient Observed Features for week ending on 8 June 2022

- Southwest Monsoon has further advanced into some parts of Northwest Bay of Bengal, some more parts of Northeast & Eastcentral Bay of Bengal and some parts of Mizoram, Manipur & Nagaland on 2nd June 2022 and the Northern Limit of Monsoon (NLM) passed through Lat. 15°N/ Long. 60°E, Lat. 15°N/ Long. 70°E, Karwar, Chikmagaluru, Bengaluru, Dharmapuri, Lat. 10°N/Long. 80°E, Lat. 11.0°N/ Long. 83°E, Lat.14.0°N/ Long.86°E, Lat.21.0°N/91°E, Aizwal, Kohima and 26.50°N/95°E on that day; it has further advanced into some more parts of Northwest and Westcentral Bay of Bengal, remaining parts of Northeast & Eastcentral Bay of Bengal, entire northeastern states and some parts of Sub Himalayan West Bengal & Sikkim on 3rd June 2022 and the Northern Limit of Monsoon (NLM) passed through Lat. 15°N/ Long. 60°E, Lat. 15°N/ Long. 70°E, Karwar, Chikmagaluru, Bengaluru, Dharmapuri, Lat. 10°N/ Long. 80°E, Lat. 11.0°N/ Long. 83°E, Lat.14.0°N/Long.86°E, Lat.22.0°N/90°E, Lat.25.0°N/89°E, Siliguri and 27.5°N/88°E on that day; it has further advanced into some more parts of Tamilnadu, Puducherry & Karaikal and that of Southwest and Westcentral Bay of Bengal on 7th June 2022 and the Northern Limit of Monsoon (NLM) passed through Lat. 15°N/ Long. 60°E, Lat. 15°N/ Long. 70°E, Karwar, Chikmagalur, Bengaluru, Puducherry, Lat. 14°N/ Long. 84°E, Lat. 17.0°N/ Long.87°E, Lat.20.0°N/89.5°E, Lat.22.0°N/90°E, Lat.25.0°N/89°E, Siliguri and 27.5°N/88°E on that day and remained the same till the end of the week.
- In the absence of active WD, a fresh spell of heat wave was observed over isolated pockets of

- northwest and adjoining central India during 4-9 covering northwest Rajasthan, Punjab, Haryana, Delhi, southern parts of Uttar Pradesh and north Madhya Pradesh and over Chhattisgarh, Jharkhand Odisha and Vidarbha during 2nd half of the week.
- ➤ Under favourable synoptic systems and winds, fairly widespread to widespread rainfall/thunderstorm activity over Northeast India and adjoining Sub-Himalayan West Bengal on most of the date in the week and Scattered to fairly widespread rainfall/thunderstorms reported over extreme South Peninsula on most of the days. Isolated heavy to very heavy rainfall also reported over these areas during 2-3 days during the week.
- Weekly overall Rainfall distribution during the current week ending on 8 June 2022 Monsoon Season's Rainfall Scenario (01 to 08 June, 2022): During the week ending on 8 June 2022, for the country as a whole, the weekly cumulative All India Rainfall departure from its long period average (LPA) was -42% with weekly cumulative over northwest India as -96%, while all India cumulative rainfall during this year's monsoon Season's Rainfall Scenario (01-08 June, 2022) is -42% and over northwest India, it is below LPA by -94%. Details of the rainfall distribution over the four broad geographical regions of India are given in Table 1 and Meteorological sub-division-wise rainfall both for week and season are given in Annex I and II respectively.

Table 1: Rainfall status (Week and season)

| | WEEK 02.06.2022 TO 08.06.2022 | | | SEASON | | |
|-------------------------------|-------------------------------|--------|-------|--------------------------|--------|-------|
| Region | | | | 01.06.2022 TO 08.06.2022 | | |
| | Actual | Normal | % Dep | Actual | Normal | % Dep |
| EAST & NORTH-EAST INDIA | 56.4 | 57.4 | -2% | 60.4 | 65 | -7% |
| NORTH- WEST INDIA | 0.4 | 9.6 | -96% | 0.6 | 10.8 | -94% |
| CENTRAL INDIA | 1.8 | 17.9 | -90% | 2.4 | 19.5 | -88% |
| SOUTH PENINSULA | 22.5 | 32.2 | -30% | 26.2 | 35.5 | -26% |

| Country as a whole | 14.1 | 24.4 | -42% | 15.8 | 27.2 | -42% |
|--------------------|------|------|------|------|------|------|
| | | | | | | |

2. Large scale features

➤ Currently, La Niña conditions are prevailing over the equatorial Pacific region. The latest Monsoon Mission Climate Forecasting System (MMCFS) forecast indicates that La Niña conditions are likely to continue throughout the Month. Other climate models are also indicating enhanced probability for La Niña conditions likely during summer season. At present, neutral Indian Ocean Dipole(IOD) conditions are present over the Indian Ocean and the latest MMCFS forecast indicates that the neutral IOD conditions are likely to continue during summer season. As the changes in the sea surface temperature (SST) conditions over the Pacific and the Indian Oceans are known to influence the Indian climate, IMD is carefully monitoring the evolution of sea surface conditions over these Ocean basins.

➤ The Madden Julian Oscillation Index (MJO) currently lies in phase 1 with amplitude close to 1. It would continue in same phase with decreasing amplitude during remaining part of the forecast period. Hence, MJO will not support cyclogenesis over the North Indian Ocean (NIO) including the Bay of Bengal (BoB) and the Arabian Sea (AS) during the entire forecast period

3. Forecast for next two week

Weather systems & associated Precipitation during Week 1 (09 to 15 June, 2022) and Week 2 (16 to 22 June, 2022)

Advancement of Southwest Monsoon:

- The Northern Limit of Monsoon (NLM) continues to pass through Lat. 15°N/ Long. 60°E, Lat. 15°N/ Long.70°E, Karwar, Chikmagaluru, Bengaluru, Puducherry, Lat.14°N/Long.84°E, Lat.17.0°N/Long.87°E, Lat.20.0°N/Long.89.5°E, Lat.22.0°N/90°E, Lat.25.0°N/89°E, Siliguri and 27.50°N/88°E.
- Conditions are favorable for further advance of monsoon into some more parts of central Arabian sea, Goa, some parts of south Maharashtra, some more parts of Karnataka, remaining parts of Tamilnadu, some parts of south Andhra Pradesh, some more parts of westcentral & northwest Bay of Bengal during next 48 hours.
- Conditions would continue to become favourable for further advance of monsoon into more parts of Maharashtra, entire Karnataka, more parts of Andhra Pradesh and more parts of westcentral & northwest Bay of Bengal during subsequent 2 days.
- Conditions would likely to become favorable for further advance of monsoon into some

more parts of East India and some parts of central India towards end of the week 1(09 to 15 June, 2022).

Forecast for week 1 (09 to 15 June, 2022):

- Under the influence of north-south trough from Sub-Himalayan West Bengal to interior Odisha and strong southwesterly winds from Bay of Bengal to northeast India in lower tropospheric levels:
- ✓ Widespread light/moderate rainfall with isolated heavy to very heavy rainfall very likely over Arunachal Pradesh and Assam & Meghalaya, Sub-Himalayan West Bengal & Sikkim and Nagaland, Manipur, Mizoram & Tripura during most days of the week. Isolated extremely heavy rainfall also likely over Arunachal Pradesh on 10th & 11th June and over Assam & Meghalaya during next 5 days.
- Isolated/scattered rainfall with thunderstorm/lightning/gusty winds very likely over Bihar,
 Jharkhand, Odisha and Gangetic West Bengal during most days of the week
- Under the influence of strong westerly/southwesterly winds along the west coast in lower tropospheric levels:
- ✓ Fairly widespread/ widespread light/moderate rainfall with thunderstorm/lightning very likely over Karnataka, Kerala & Mahe and Lakshadweep; scattered to fairly widespread rainfall over Andhra Pradesh & Yanam and Tamilnadu, Puducherry & Karaikal and Telangana during most days of the week. Isolated heavy rainfall very likely over South Interior Karnataka on 12th; Coastal Karnataka during 09th-13th and over Kerala & Mahe on 11th & 12th June, 2022.
- ✓ Fairly widespread to widespread rainfall with thunderstorm/lightning/gusty winds very likely over Konkan & Goa and scattered to fairly widespread rainfall with thunderstorm/lightning/gusty winds over Madhya Maharashtra and Marathwada during most days of the week. Isolated heavy rainfall also likely over Konkan & Goa on 10th & 13th and isolated very heavy rainfall on 11th & 12th June, 2022.
- Isolated to scattered rainfall with thunderstorm likely to occur over rest parts of the country outside most parts of the plains of northwest India, where weather is likely to be dry during most days of the week.

Rainfall for week 2 (16 to 22 June, 2022):

- Due to strong southerly/southwesterly winds from Bay of Bengal to northeast & adjoining East India at lower tropospheric levels, fairly widespread to widespread rainfall with isolated heavy falls likely over northeast & adjoining East India during most days of the week.
- Due to Easterly winds from Bay of Bengal at lower tropospheric levels and Western Disturbances, light/moderate isolated to scattered rainfall very likely over northwest India during most days of the week.
- Due to westerly/south-westerly winds from Arabian Sea over south Peninsula India at lower tropospheric levels, light/moderate fairly widespread to widespread rainfall activity likely over southwest Peninsular India and isolated to scattered rainfall over rest peninsular India.
- Southwest monsoon is likely to advance over some more parts of East & central India and some parts of Uttar Pradesh.
- Overall, rainfall activity is likely to be above normal over northeast & east India (excluding Odisha), and northwest India and it is likely to below normal over south Peninsular & central India.

Maximum Temperatures for week 1(09 to 15 June, 2022) and week 2(16 to 22 June, 2022)

Maximum Temperatures for Week 1(09 to 15 June, 2022):

- Maximum Temperature Departures (as on 08-06-2022): Maximum temperatures were markedly above normal (5.1°C or more) at a few places over Uttarakhand and Jharkhand; appreciably above normal (3.1°C to 5.0°C) at many places over Punjab; at a few places over Himachal Pradesh, Haryana, Chandigarh & Delhi, Vidarbha, Chhattisgarh, Telangana, Odisha, Coastal Andhra Pradesh & Yanam and Nagaland, Manipur, Mizoram & Tripura; at isolated places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, West Rajasthan, Uttar Pradesh, East Madhya Pradesh, Kerala & Mahe; above normal (1.6°C to 3.0°C) at a few places over Konkan & Goa, Madhya Maharashtra, Tamilnadu, Puducherry & Karaikal and Bihar. It is near normal or below normal over rest parts of the country.
- No significant change in maximum temperatures very likely over central India during next 2 days and gradual fall by 2-3°C thereafter.
- No significant change in maximum temperatures very likely over rest parts of the country during most days of the week.

 Heat wave conditions in isolated places very likely over Punjab, Haryana-Delhi, south Uttar Pradesh, northwest Rajasthan, north Madhya Pradesh, interior Odisha and Jharkhand on 09th & 10th June; Uttarakhand, Chhattisgarh, south coastal Andhra Pradesh, Telangana and Vidarbha on 09th June, 2022.

Maximum Temperatures for week 2 (16 to 22 June, 2022):

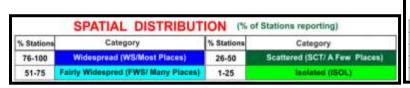
- Maximum temperatures are likely to be below normal to near normal over the country.
 - No significant heat wave likely over any part of the country during the week. (Refer Annex V)
 - 4. Cyclogenesis forecast for North Indian Ocean during next 2 weeks

Refer:

https://rsmcnewdelhi.imd.gov.in/uploads/archive/24/24_3d9ee2_Extended%20Range%20Outlook_0906202 2.pdf

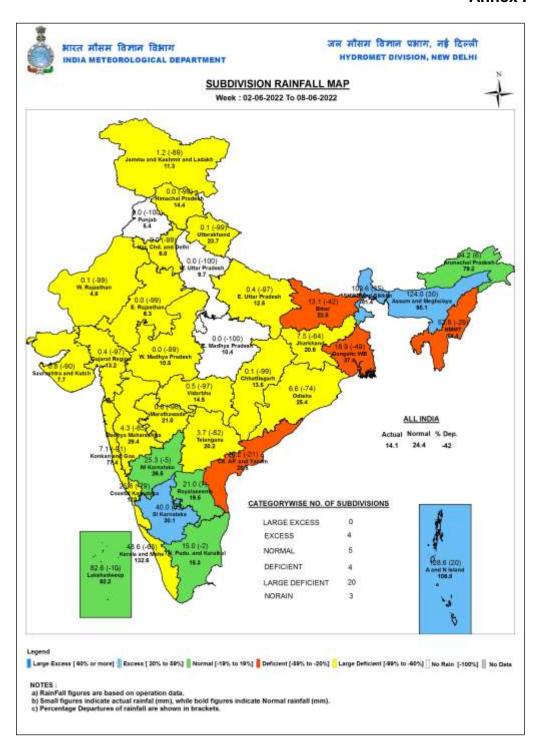
Next weekly update will be issued on next Thursday i.e. 16 June 2022

Legends: Heavy Rain: 64.5 to 115.5 mm **Very Heavy Rain:** 115.6 to 204.4 mm, **Extremely Heavy Rain >** 204.4 mm

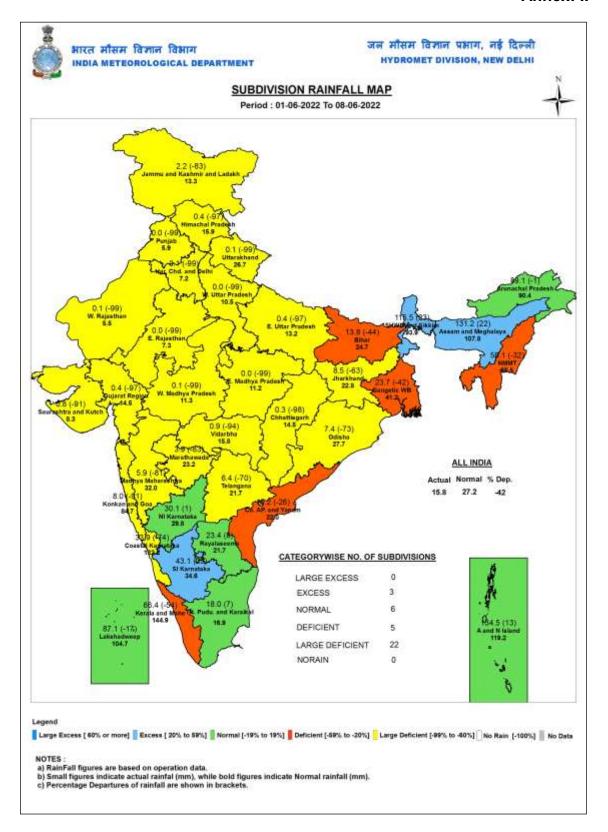


| Probabilistic Forecast | | | | |
|------------------------|-------------------------------|--|--|--|
| Terms | Probability of Occurrence (%) | | | |
| Unlikely | < 25 | | | |
| Likely | 25 - 50 | | | |
| Very Likely | 50 - 75 | | | |
| Most Likely | > 75 | | | |

Annex I



Annex: II



Annexure III

