



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

Press: Dated: 23 June, 2022

**Subject: Current Weather Status and Extended range Forecast for next two weeks
(23 June-6 July 2022)**

1. Salient Observed Features for week ending on 22 June 2022

- **Monsoon covered most parts of central and eastern India during the week:** Southwest Monsoon has advanced into remaining parts of Sub-Himalayan West Bengal and some more parts of Bihar on 17th June, 2022; the Northern Limit of Monsoon (NLM) was passing through Lat. 21°N/ Long. 60°E, Lat. 21°N/ Long. 70°E, Diu, Nandurbar, Jalgaon, Parbhani, Medak, Rentachintala, Machilipatnam, Lat. 17°N/ Long. 84°E, Lat. 18.5°N/ Long. 87°E, Lat. 22°N/90°E, Lat. 25°N/89°E, Balurghat, Supaul, Lat. 26.5°N/ Long. 86°E in the beginning of the week and it passed through Lat. 22°N/ Long. 60°E, Lat. 22°N/ Long. 65°E, Porbandar, Bhavnagar, Khandwa, Gondia, Durg, Bhawanipatna, Kalingapatnam, Lat. 22°N/89.5°E, Lat. 25°N/89°E, Malda, Motihari and Lat. 27°N/ Long. 84°E on 17th; it has further advanced into entire Westcentral Bay of Bengal, most parts of Northwest Bay of Bengal, some parts of Gangetic West Bengal and Jharkhand and some more parts of Bihar on 18th June, 2022 and the NLM passed through Lat. 22°N/ Long. 60°E, Lat. 22°N/ Long. 65°E, Porbandar, Bhavnagar, Khandwa, Gondia, Durg, Bhawanipatna, Kalingapatnam, Lat. 20°N/87°E, Haldia, Bardhaman, Dumka, Banka, Motihari, and Lat. 27°N/ Long. 84°E on that day; it has further advanced into some more parts of Gujarat region, Madhya Pradesh, remaining parts of Vidarbha, some more parts of Chhattisgarh, Gangetic West Bengal, Jharkhand and Bihar on 19th June, 2022 and the NLM passed through Lat. 22°N/ Long. 60°E, Lat. 22°N/ Long. 65°E, Porbandar, Baroda, Indore, Umariya, Pendra Road, Bhawanipatna, Kalingapatnam, Lat. 20°N/87°E, Digha, Giridih, Patna, Lat. 27°N/ Long. 84°E on that day; it has further advanced into most parts of Madhya Pradesh, remaining parts of Chhattisgarh and Coastal Andhra Pradesh, remaining parts of Northwest Bay of Bengal, entire Odisha and Gangetic West Bengal, most parts of Jharkhand and Bihar and some parts of southeast Uttar Pradesh on 20th June, 2022 and the NLM passed through Lat. 22°N/ Long. 60°E, Lat. 22°N/ Long. 65°E, Porbandar,

Baroda, Shivpuri, Rewa, Churk and Lat.27°N/Long.84°E on that day; since there had been no further advance of monsoon during the remaining two days of the week, the NLM continued to pass through Lat. 22°N/ Long. 60°E, Lat. 22°N/ Long. 65°E, Porbandar, Baroda, Shivpuri, Rewa, Churk and Lat.27°N/Long.84°E till the end of the week.

- **Extreme rainfall spell over northeast India continued till 21 June 2022 and reduced thereafter:** Under favourable synoptic systems and winds from Bay of Bengal, last week's fairly widespread to widespread rainfall/thunderstorm activity observed over Northeast India and adjoining Sub-Himalayan West Bengal with extremely heavy rainfall at isolated places continued till 21 June, which further aggravated flood situation over the region. Fairly widespread to widespread rainfall/thunderstorms also reported from many met-sub-divisions of Peninsula and parts of central India during most dates of the weeks.
- **Active WD and its induced system caused wet spell during 17-22 June over northwest India which caused day maximum temperature below 6-12degC below normal over many areas in the region during 17 June till 21 June:** Movement of Western Disturbances had caused fairly widespread to widespread rainfall/thunderstorm activity over Western Himalayan Region on many days and over Punjab during 17-22 June; passage of the systems along with the presence of a cyclonic circulation over Haryana & neighbourhood in the lower tropospheric levels on many days during the week had caused scattered to fairly widespread rainfall/thunderstorm activity over Rajasthan and Madhya Pradesh on many days and over Haryana, Chandigarh & Delhi on four to five days; under their influence, isolated to scattered rainfall/thunderstorm activity had occurred over Punjab and Haryana, Chandigarh & Delhi on the remaining days of the week and over other parts of northwest India throughout the week; isolated heavy/very heavy rainfall had occurred over Jammu Kashmir & Ladakh and Uttarakhand on one or two days whereas isolated heavy rainfall had occurred over Madhya Pradesh on four to five days and over Rajasthan on two to three days along with; isolated hailstorm activity also had occurred over Western Himalayan Region on one or two days.
- **Country as a whole received excess rainfall during this week: Analysis of Weekly overall Rainfall distribution during the current week ending on 22 June 2022 and Monsoon Season's Rainfall Scenario (01 to 22 June, 2022)** for the country as a whole shows the weekly cumulative All India Rainfall departure from its long period average (LPA) was 45% with weekly cumulative over northwest India as 120%, while all India cumulative rainfall during this year's **monsoon Season's Rainfall Scenario (01-22 June, 2022)** is 0% and over northwest India, it is below LPA by 9%. 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)

Region	WEEK			SEASON		
	16.06.2022 TO 22.06.2022			01.06.2022 TO 22.06.2022		
	Actual	Normal	% Dep	Actual	Normal	% Dep
EAST & NORTH-EAST INDIA	149.9	84.8	77%	305.4	220.8	38%
NORTH-WEST INDIA	43.1	19.6	120%	48.9	45	9%
CENTRAL INDIA	48.4	49.3	-2%	67	102.3	-34%
SOUTH PENINSULA	51	39.6	29%	99.1	114.6	-14%
Country as a whole	63.5	43.9	45%	105.8	106	0%

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 more than 1. It would move eastwards and enter phase 2 with amplitude remaining more than 1 on 24th June. Thereafter, it would move across phases 2, 3 and 4 during remaining part of the forecast period with amplitude becoming less than 1 from the middle of the week 1 to beginning of week 2. Hence, MJO phase will support enhancement of convective activity over the North Indian Ocean including Bay of

Bengal (BoB) and the Arabian Sea (AS) during entire forecast period.

3. Forecast for next two week

Weather systems & associated Precipitation during Week 1 (23 to 29 June, 2022) and Week 2 (30 June to 06 July, 2022)

Advancement of Southwest Monsoon:

- The Northern Limit of Monsoon (NLM) continues to pass through Lat. 22°N/ Long. 60°E, Lat. 22°N/ Long. 65°E, Porbandar, Baroda, Shivpuri, Rewa, Churk, 27.0°N/84°E.
- **Southwest monsoon is likely to cover remaining parts of Gujarat, Madhya Pradesh, entire Bihar and some parts of northwest India towards the end of the week.**

Forecast for week 1 (23 to 29 June, 2022):

- **Under the influence of an off-shore trough, a middle-level cyclonic circulation over Eastcentral Arabian Sea off Maharashtra coast and strong westerly winds along the west coast in lower tropospheric levels:**
- ✓ Fairly widespread/ widespread rainfall with thunderstorm/lightning very likely over Karnataka, Konkan & Goa, Madhya Maharashtra, Marathwada, Kerala & Mahe and Lakshadweep and scattered to fairly widespread rainfall likely over Andhra Pradesh & Yanam, Telangana and Tamilnadu, Puducherry & Karaikal during the week.
- ✓ **Isolated heavy rainfall** very likely over Konkan & Goa, Gujarat region, Coastal Karnataka and Kerala & Mahe during the week; ghat areas of Madhya Maharashtra during 23rd-26th; Interior Karnataka on 25th and over Coastal Andhra Pradesh on 23rd & 24th June, 2022. **Isolated Very heavy rainfall also likely over Konkan & Goa during next 4 days.**
- **Under the influence of southerly/southwesterly winds from Bay of Bengal to Northeast & adjoining East India:**
- ✓ Widespread rainfall very likely over Northeast India and Sub-Himalayan West Bengal & Sikkim during the week. **Isolated heavy rainfall** likely over Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura during the week. **Isolated very heavy rainfall** also likely over Sub-Himalayan West Bengal during 25th-27th June.
- ✓ Fairly widespread rainfall with thunderstorm/lightning very likely to continue over Bihar, Jharkhand, Odisha, Chhattisgarh, Vidarbha and Gangetic West Bengal during next 5 days. Isolated heavy rainfall likely over Vidarbha on 24th & 25th; Bihar during 24th-27th; over Odisha during 23rd-25th & 27th and over Chhattisgarh during 23rd-27th June, 2022.

✓ **Present spell of Subdued rainfall activity over Northwest & adjoining Central India till 25th June, 2022.** Due to easterly winds from Bay of Bengal to parts of northwest India at lower tropospheric levels towards end of the week, it will increase with Scattered to fairly widespread rainfall with isolated heavy falls with **thunderstorm/lightning** very likely over northwest India (excluding West Rajasthan) towards end of the week.

- Isolated to scattered rainfall with thunderstorm likely to occur over rest parts of the country during most days of the week.

Rainfall for week 2 (30 June to 06 July, 2022):

- Due to 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 to continue 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 scattered to fairly widespread rainfall very likely over northwest India during most days of the week.
- Due to strong westerly/south-westerly winds from Arabian Sea over north Peninsula India at lower tropospheric levels, light/moderate fairly widespread to widespread rainfall with isolated heavy falls very likely over Gujarat and Maharashtra.
- **Southwest monsoon is likely to cover entire country during the week.**
- **Overall, rainfall activity is likely to be above normal over central parts of the country; below normal over northeast & adjoining east India and Interior parts of Maharashtra; and normal to above normal over rest parts of the country.**

Maximum Temperatures for week 1(23 to 29 June, 2022) and week 2(30 June to 06 July, 2022)

Maximum Temperatures for Week 1(23 to 29 June, 2022):

- **Maximum Temperature Departures (as on 22-06-2022):** Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at a few places over Arunachal Pradesh and Saurashtra & Kutch and at isolated places over Madhya Maharashtra; above normal (1.6°C to 3.0°C) at many places over Jharkhand; at a few places over West Bengal & Sikkim, Assam & Meghalaya and Kerala & Mahe. They are near normal or below normal over rest parts of the country.
- Maximum temperatures are very likely to rise by 2-4° C over most parts of northwest India during 1st half of the week and no significant change in maximum temperatures very likely over rest parts of the country during the week.
- **No Heat wave conditions likely over any part of the country.**

Maximum Temperatures for week 2 (30 June to 06 July, 2022):

- **Maximum temperatures are likely to be below normal to near normal over the country.**

○ No heat wave likely over any part of the country during the week.

4. Cyclogenesis forecast for North Indian Ocean during next 2 weeks

Refer:

https://rsmcnewdelhi.imd.gov.in/uploads/archive/24/24_cb60d2_Extended%20Range%20Outlook_23062022.pdf

The guidance from various deterministic & ensemble numerical models including IMD GFS, NCEP GFS, ECMWF, NCUM, NEPS, GEFS and IMD MME CFS (V2) etc. indicate no cyclogenesis over the region during next 2 weeks. However, IMD GFS, NCUM, indicate development of a cyclonic circulation/low pressure area over northwest BoB off Odisha coast with no further intensification and northwestwards movement in the end of week 1.

Next weekly update will be issued on next Thursday i.e. 30 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

SPATIAL DISTRIBUTION (% of Stations reporting)			
% Stations	Category	% Stations	Category
76-100	Widespread (WS/ Most Places)	26-50	Scattered (SCT/ A Few Places)
51-75	Fairly Widespread (FWS/ Many Places)	1-25	Isolated (ISOL)

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

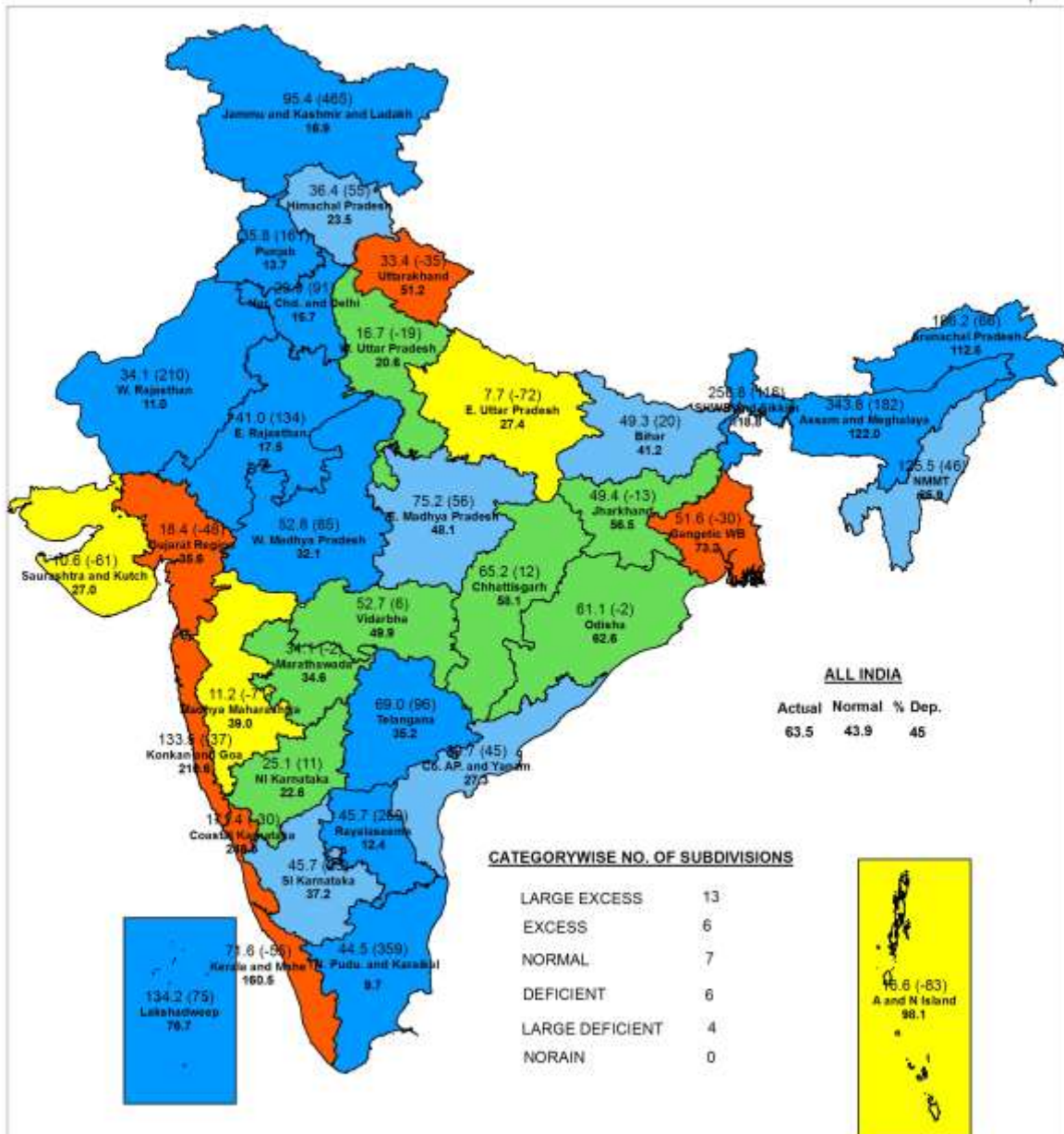


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INDIA METEOROLOGICAL DEPARTMENT

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HYDROMET DIVISION, NEW DELHI

SUBDIVISION RAINFALL MAP

Week : 16-06-2022 To 22-06-2022



Legend

Large Excess [60% or more] Excess [20% to 59%] Normal [-19% to 19%] Deficient [-59% to -20%] Large Deficient [-59% 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.

