



Government of India
Ministry of Earth Sciences
India Meteorological Department

Date: 06th April, 2022
Time of Issue: 1315 hrs IST

Subject:

- i) Current status of heat wave spell over North & Central India.**
- ii) Heat Wave Spell likely to continue over Northwest & Central India during next 5 days.**
- iii) Heavy rainfall spell likely over Arunachal Pradesh during next 5 days; over Sub-Himalayan West Bengal-Sikkim during 06th-08th April and over Assam-Meghalaya during 08th-10th April.**

1. Current status of heat wave spell over North & Central India

Annexure 1 shows details of heat wave to severe heat wave conditions developed over various meteorological sub-divisions. It shows that the current heat wave spell started mainly over west Rajasthan and adjoining areas of Gujarat state and west Madhya Pradesh from 27 March. It further extended to east Rajasthan, east Madhya Pradesh, south Haryana, Delhi and Southern parts of Uttar Pradesh by 29 March. This spell has been continuing for longer period and already completed more than a week. During this period of heat waves, maximum temperatures recorded in the range of 40-42 degC over most of stations in these states, with a few stations mainly over West Rajasthan and West Madhya Pradesh recorded in the range of 42-43 deg C. Besides this persistent heat wave observed over northern plains & central India and parts of western Himalayan region also reported heat wave to severe heat wave conditions with maximum temperature in the range of 25-33 degC at higher ridges while at lower ridges it has been 33-39 deg C with 6 to 9 deg C above normal.

- ✓ Past heat wave data during 2017-2021 (5-years) for the month of April shows this type of longer spell is not unusual. The spells of heat wave to severe heat wave with 8-12 days duration were observed in April 2017 and 2019 over Rajasthan, Madhya Pradesh, Haryana, Chandigarh & Delhi, Punjab and parts of Gujarat and of 6-8 days duration over parts of Western Himalayan region covering Himachal Pradesh and Jammu in April 2017.

Weather observed during past 24 hours:

- ✓ **Maximum Temperatures** (as on 05/04/2022) were **41-43°C** in many parts over West Rajasthan, Vidarbha; in some parts of Gujarat state, West Madhya Pradesh, East Uttar Pradesh, Bihar, Madhya Maharashtra and **40-42°C** in most parts over East Rajasthan, East Madhya Pradesh, Marathawada; in isolated pockets over south Haryana-Delhi, Jharkhand, Chhattisgarh, Interior Odisha and Telangana.
- ✓ The maximum temperatures were **above normal by 6-8°C** at many parts over Jammu division, Himachal Pradesh, Punjab; **by 4-6°C** in many parts over Uttarakhand, Rajasthan, Haryana-Delhi, Madhya Pradesh; in some parts over Uttar Pradesh, Bihar, Jharkhand, Gujarat

Region and in isolated pockets over Saurashtra-Kutch, Vidarbha, Marathawada and Madhya Maharashtra.

- ✓ **Severe Heat Wave conditions** in some pockets over Himachal Pradesh; **Heat Wave conditions** in most pockets with **Severe Heat Wave conditions** in isolated pockets observed over West Rajasthan; **Heat Wave to Severe heat wave condition** in some pockets over south Haryana-Delhi and **Heat Wave conditions** in many pockets over East Rajasthan; in some pockets over Madhya Pradesh and in isolated pockets over Jammu Division, Uttar Pradesh, Bihar and Jharkhand.
- ✓ **Chief Rainfall amount (in cm): Sub-Himalayan West Bengal: Jalpaiguri: Alipurwar-17, Cooch Behar: Pundibari-10; Meghalaya: Cherrapunji, Baksa- 7 each; Arunachal Pradesh: Itanagar-6.**

2. Maximum Temperature forecast and Heat Wave warning:

- ✓ Rise in maximum temperatures by about 2°C very likely over many parts of Northwest & Central India during next 3 days and no significant thereafter.
- ✓ Fall in maximum temperatures by about 2-3°C very likely over Gujarat during next 3 days and no significant thereafter.
- ✓ No significant change in maximum temperatures very likely over rest parts of the country during next 5 days.

- ✓ **Heat Wave conditions** in most parts with **severe heat wave conditions** in isolated pockets very likely over West Rajasthan during next 5 days; **Heat Wave conditions** in some parts **with severe heat wave conditions** in isolated pockets over East Rajasthan during next 5 days and **Heat Wave to Severe heat wave conditions** in isolated/some pockets over south Haryana-Delhi, West Uttar Pradesh & Madhya Pradesh during next 5 days.
- ✓ **Heat Wave conditions** in **isolated** pockets over Himachal Pradesh, Vidarbha & Bihar during next 5 days; over Madhya Maharashtra & Jammu division during next 2-3 days; over Jharkhand during 06th-08th; over south Punjab during 07th-10th and over Chhattisgarh on 09th & 10th April, 2022.

3. Rainfall Forecast & Warnings:

- ✓ Under the influence of strong southwesterly winds from Bay of Bengal to northeastern States at lower tropospheric levels:
 - ❖ Fairly widespread to widespread rainfall accompanied with **thunderstorm/lightning** very likely over Arunachal Pradesh, Assam-Meghalaya and isolated rainfall accompanied with **thunderstorm/lightning** over Nagaland, Manipur, Mizoram & Tripura during next 5 days.
 - ❖ **Isolated heavy rainfall very likely over Arunachal Pradesh during next 5 days; over Assam-Meghalaya during 08th-10th and over Sub-Himalayan West Bengal-Sikkim during 06th-08th April, 2022.**
- ✓ Under the influence of trough over south Peninsular India,
 - Light isolated/scattered rainfall accompanied with **thunderstorm/lightning** very likely over Kerala-Mahe, Tamilnadu- Puducherry-Karaikal, Coastal & South Interior Karnataka during next 5 days; over North Interior Karnataka during 06th-08th; over Coastal Andhra Pradesh on 06th, 09th & 10th and over Telangana on 06th April.

- ✓ A cyclonic circulation lies over South Andaman Sea & neighbourhood and extends upto midtropospheric level. Under its influence, a Low Pressure Area is likely to form over Southeast Bay of Bengal during subsequent 48 hours.

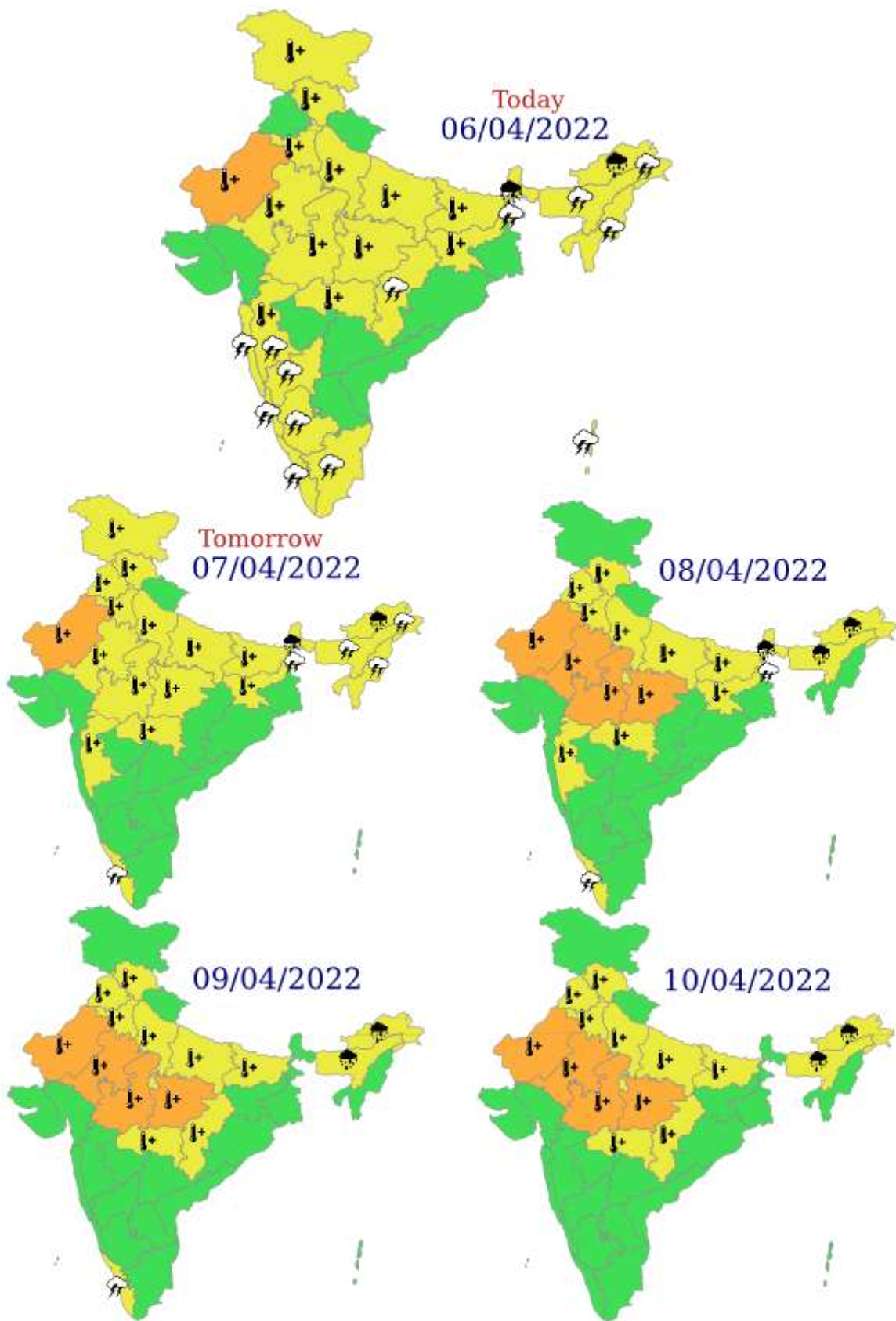
For more details refer:

https://mausam.imd.gov.in/imd_latest/contents/subdivisionwise-warning.php

Annexure 1

Severity and duration of the current spell of heat wave to severe heat wave as prevailed over northwest and central India since 27 March, 2022

Name of Met Sub-Division affected	Heat wave to severe heat wave periods with duration	Temperature range prevailed (in degree C)	Departure from normal (in degree C)
West Rajasthan	27 March-5 April (10-days)	41-43	+5 to 8 above normal
East Rajasthan	28 March-5 April except 1 April (8-days)	40-42	+5 to 7 above normal
West Madhya Pradesh	27 March-31 March and then 3-5 April(8 days), but temperature remain above normal all dates	41-44	+5 to 7 above normal
East Madhya Pradesh	29 March-1 April and then 3-5 April(6 days), but temperature remain above normal	40-42	+5 to 7 above normal
Western Himalayan region	All dates of 27 March-5 April Over Himachal Pradesh(10 days) while over Jammu division it was on 27-31 March and 3-5 April (8 days)	25-33 at higher ridges while at lower it was 33-39degC	+6 to 9 above normal
Gujarat state	26-28 March and 3-4 April (5 days)	40-43 at few pockets mainly over north Gujarat state	+2 to 4 in most dates while 1-2 above normal degC in some dates
South Haryana and Delhi NCR, West Uttar Pradesh, southeast Uttar Pradesh	29 March -5 April (8 days)	40-42 at few pockets	+4 to 9 above normal
Jharkhand	2-5 April (4 days)	40-43 at few pockets	+4 to 7 above normal
Bihar	4-5 April(2 days)	40-42 at few pockets	+4 to 6 above normal



Impact expected and action suggested due to severe heat wave conditions over Rajasthan, Madhya Pradesh, south Haryana-Delhi, south Uttar Pradesh and Bihar.

Impact expected:

- Heat wave could lead to moderate health concern for vulnerable people e.g. infants, elderly, people with chronic diseases
- Increased likelihood of heat illness symptoms in people who are either exposed to sun for a prolonged period or doing heavy work.

Action suggested:

- Avoid heat exposure– keep cool. Avoid dehydration.
- Drink sufficient water- even if not thirsty.
- Avoid heat exposure, wear lightweight, light-colored, loose, cotton clothes and cover the head by use of cloth, hat or umbrella etc.
- Use ORS, homemade drinks like lassi, torani (rice water), lemon water, buttermilk, etc. to keep yourself hydrated.

Legends:

Heavy Rain: 64.5 to 115.5 mm; **Very Heavy Rain:** 115.6 to 204.4 mm; **Extremely Heavy Rain:** >204.4 mm.

Region wise classification of meteorological Sub-Divisions:

- 1) **Northwest India:** Western Himalayan Region (Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh and Uttarakhand); Punjab, Haryana-Chandigarh-Delhi; West Uttar Pradesh, East Uttar Pradesh, West Rajasthan and East Rajasthan.
- 2) **Central India:** West Madhya Pradesh, East Madhya Pradesh, Vidarbha and Chhattisgarh.
- 3) **East India:** Bihar, Jharkhand, Sub-Himalayan West Bengal & Sikkim; Gangetic West Bengal, Odisha and Andaman & Nicobar Islands.
- 4) **Northeast India:** Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.
- 5) **West India:** Gujarat Region, Saurashtra & Kutch, Konkan & Goa, Madhya Maharashtra and Marathwada.
- 6) **South India:** Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Coastal Karnataka, North Interior Karnataka, South Interior Karnataka, Kerala & Mahe, Tamil Nadu, Puducherry & Karaikal and Lakshadweep.

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)



WARNING	
WARNING (TAKE ACTION)	
ALERT (BE PREPARED)	
WATCH (BE UPDATED)	
NO WARNING (NO ACTION)	

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

