



**Government of India
Ministry of Earth Sciences
India Meteorological Department**

**Press Release
Date: 09th June, 2023
Time of Issue: 1330 hours IST**

**Subject: i) Heat wave conditions likely to continue over Bihar, Jharkhand, West Bengal, Odisha, Uttar Pradesh, Andhra Pradesh and Telangana during next 3-4 days.
ii) Low Pressure Area over northeast Bay of Bengal
iii) Very Severe Cyclonic Storm "Biparjoy" over eastcentral Arabian Sea**

Weather observed during past 24 hours ending at 0830 hrs IST of today: (Annexure I)

Advance of Southwest Monsoon:

- ❖ The Northern Limit of Monsoon (NLM) continues to pass through lat. 13.5°N/ Long. 55°E, lat. 14.0°N/ Long. 60°E, lat. 13.5°N/ Long. 65°E, lat. 13°N/ Long. 70°E, Cannur, Kodaikanal, Adirampattinam, lat. 12.0°N/ Long. 83.0°E, 16.0°N/88.0°E, 18.5°N/90.0°E, 22.0°N/93.0°E. (Annexure II)
- ❖ Conditions are favourable for further advance of Southwest monsoon into some more parts of central Arabian Sea, remaining parts of Kerala, some more parts of Tamil Nadu, some parts of Karnataka and some more parts of southwest, Central & northeast Bay of Bengal and some parts of northeastern states during next 24 hours. Conditions are also becoming favourable for advance of Southwest Monsoon over the remaining parts of northeastern states and some parts of Sub-Himalayan West Bengal & Sikkim during subsequent 48 hours.

Very Severe Cyclonic Storm "Biparjoy" (pronounced as "Biporjoy") over eastcentral Arabian Sea

The very severe cyclonic storm "Biparjoy" (pronounced as "Biporjoy") over eastcentral Arabian Sea moved slowly north-northeastwards with a speed of 6 kmph during past 6-hours and lay centered at 0830 hours IST of today, the 09th June, 2023 over the same region near latitude 14.8°N and longitude 66.4°E, about 800 km west of Goa, 820 km west-southwest of Mumbai, 830 km south-southwest of Porbandar and 1120 km south of Karachi. It would intensify further gradually during next 36 hours and move nearly north-northeastwards during next 48 hours and north-northwestwards during subsequent 3 days.

Fishermen Warning (Graphics in Annexure IV)

- Total suspension of fishing operations over
 - eastcentral and adjoining westcentral Arabian Sea till 13th June.
 - north and adjoining central Arabian Sea during 12th -14th June
- Fishermen are advised not to venture into:
 - Central Arabian Sea till 13th June.
 - Adjoining areas of north Arabian Sea during 12th -15th June.
 - Along & off Saurashtra & Kutch coasts during 10th to 15th June.
- Those out at sea are advised to return to coast.

Low Pressure Area over northeast Bay of Bengal

Under the influence of a cyclonic circulation over eastcentral Bay of Bengal off Myanmar coast, a low pressure area has formed over northeast Bay of Bengal at 0830 hours IST of 9th June, 2023. It is likely to become a well marked low pressure area during next 24 hours.

Weather forecast and warning over the country during next 5 days:

Northeast India:

- ❖ Light/moderate scattered to fairly widespread rainfall with thunderstorm/lightning very likely over the region during next 5 days.
- ❖ **Very Heavy rainfall** very likely at isolated places over Manipur, Mizoram & Tripura on 09th June and Assam & Meghalaya on 12th & 13th June. Isolated **heavy rainfall** over Arunachal Pradesh and Assam & Meghalaya during next 5 days and over Manipur & Mizoram on 10th & 12th June.

South India:

- ❖ Light/moderate scattered to fairly widespread rainfall with thunderstorm/lightning/gusty winds very likely over the region during next 5 days.
- ❖ **Heavy rainfall** very likely at isolated places over Kerala and Coastal Karnataka during next 3 days and over Lakshadweep during next 2 days.

East India:

- ❖ **Very Heavy rainfall** likely at isolated places over Sub-Himalayan West Bengal & Sikkim during 11th-13th June. Isolated **heavy rainfall** over Andaman & Nicobar islands during 09th-11th June, over Sub-Himalayan West Bengal & Sikkim on 09th & 10th June.

No significant weather is likely over rest parts of the country during next 5 days.

Maximum Temperatures and Heat Wave warning (Graphics in Annexure III):

- ❖ Yesterday, **Maximum Temperatures** were in the range of 40-42°C over many parts of Central and East India and some parts of North India and northern parts of Peninsular India.
- ❖ Yesterday, **Heat Wave to Severe Heat Wave conditions** prevailed in some parts of Bihar; **Heat Wave conditions** in some parts of Gangetic West Bengal. This was 8th day of Heat Wave conditions over the above areas. Heat Wave conditions also observed in isolated pockets over Odisha and Coastal Andhra Pradesh.
- ❖ Fall in maximum temperatures by 2-3°C very likely over parts of Central India during next 2 days and no significant change thereafter. no significant change in maximum temperatures over rest parts of the country during next 5 days
- ❖ **Heat wave to severe heat wave conditions** very likely to continue in some pockets over Bihar during 09th to 11th June and heat wave in isolated pockets on 12th & 13th June.
- ❖ **Heat wave conditions** very likely to continue in isolated pockets over Gangetic West Bengal during 09th-13th; over Odisha and Jharkhand during 09th-12th June; Uttar Pradesh during 09th-11th June; over Sub-Himalayan West Bengal & Sikkim, Andhra Pradesh on 09th & 10th June; over Tamilnadu on 09th June.

For more details kindly refer:

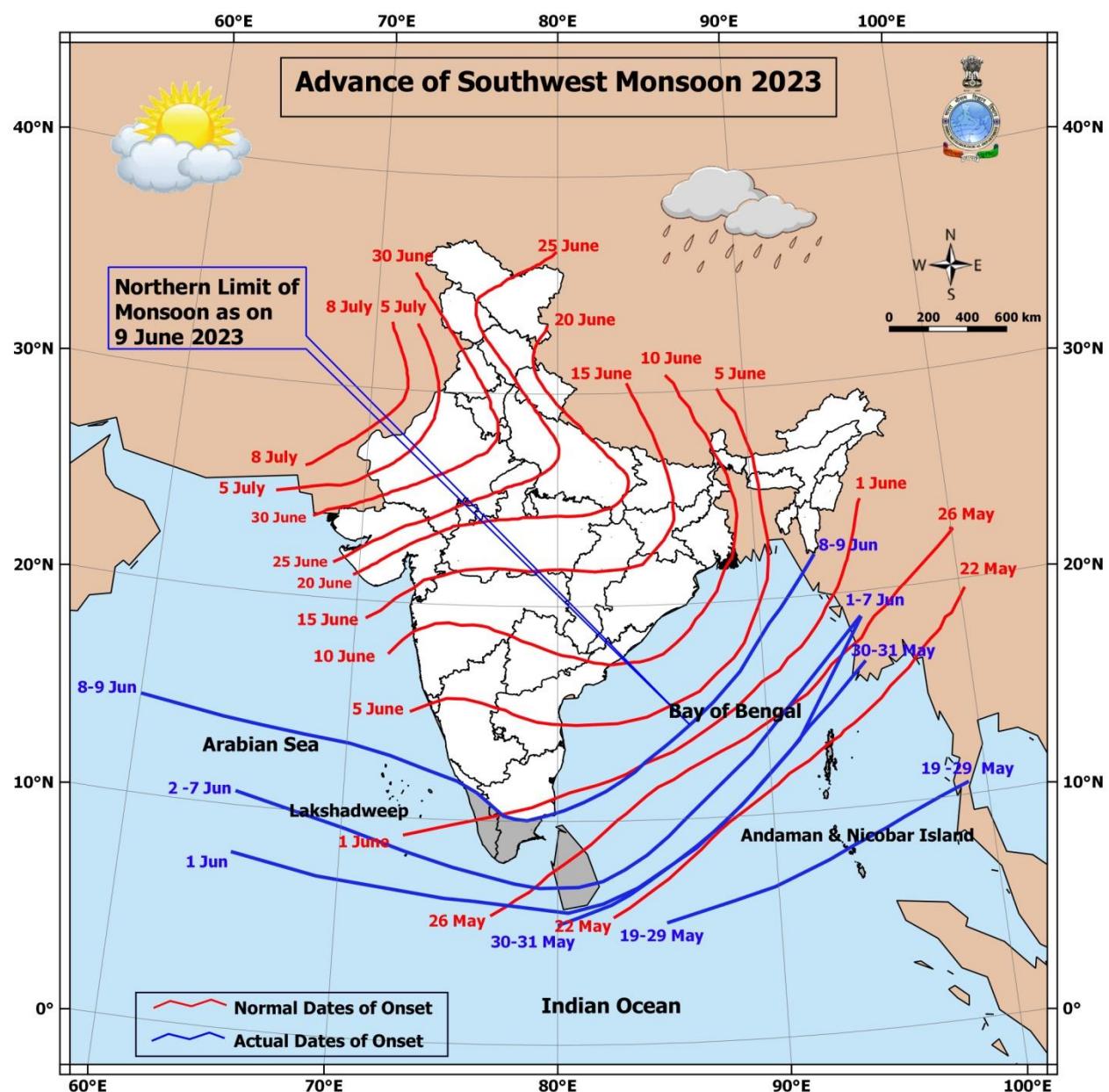
https://mausam.imd.gov.in/responsive/all_india_forcast_bulletin.php

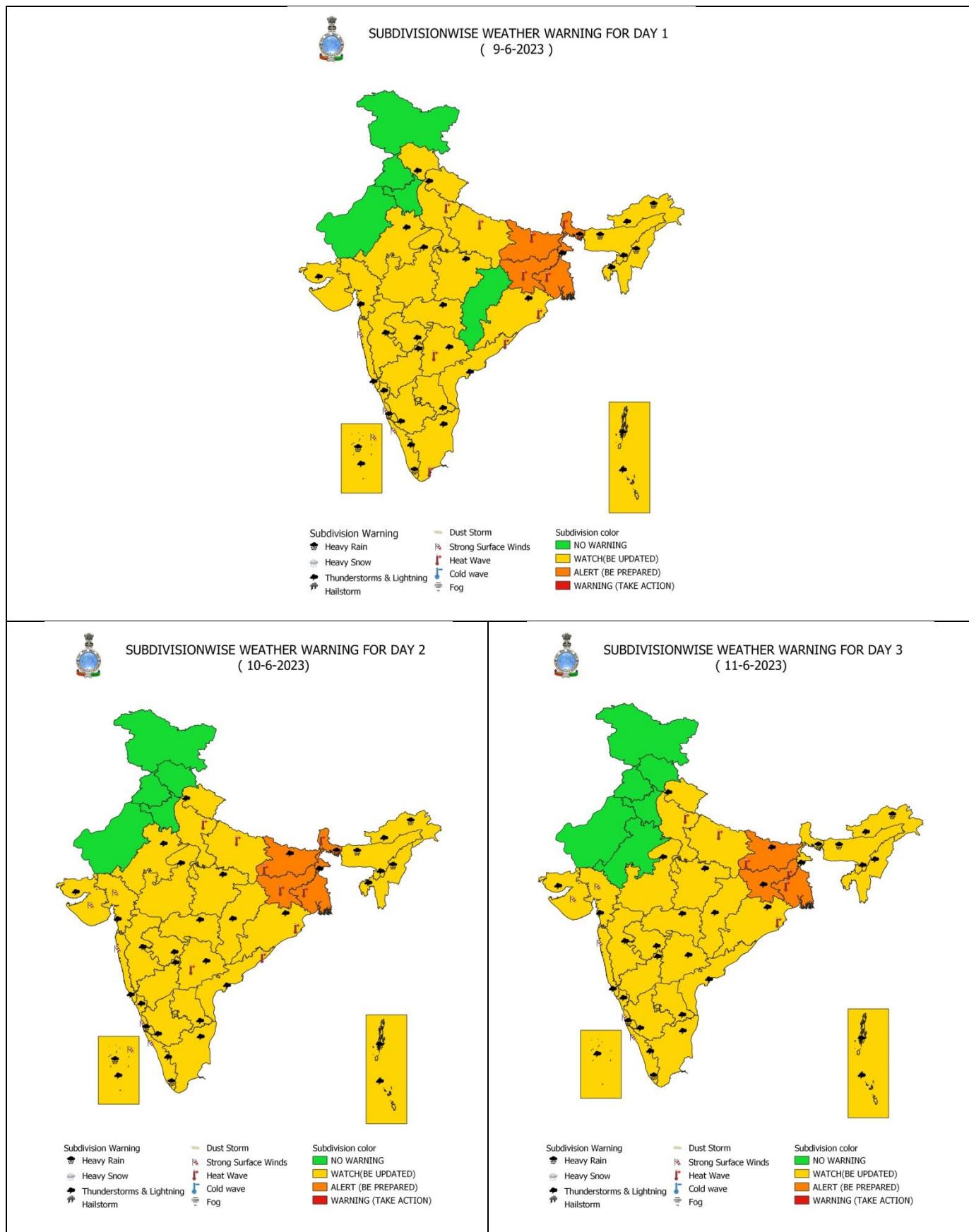
<https://mausam.imd.gov.in/responsive/districtWiseNowcast.php>

Annexure I

Weather Observations: (from 0830 hours IST of yesterday to 0830 hours IST of today):

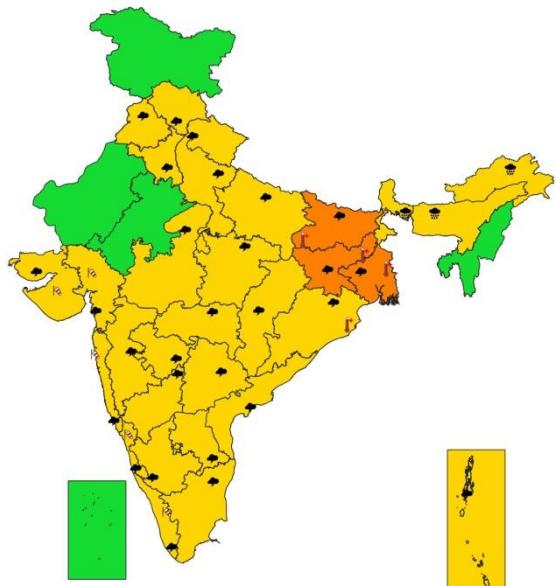
- **Rainfall/thundershowers** observed **at most places** over Nagaland, Manipur, Mizoram & Tripura, Andaman & Nicobar Islands, Lakshadweep; **at many places** over Kerala & Mahe, Sub-Himalayan West Bengal & Sikkim; **at a few places over** Arunachal Pradesh, Assam & Meghalaya, Coastal & South Interior Karnataka.
- **Heavy to very heavy rainfall observed** at isolated places over Andaman & Nicobar Islands and **heavy rainfall observed** at isolated places over Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Tamil Nadu.
- **Hailstorm observed** at isolated places over Himachal Pradesh.
- **Significant rainfall recorded (in cm):** **Andaman & Nicobar Islands:** Maya Bandar 13; **Tamilnadu:** Vadapudupattu (dist Tirupattur) 11; **Sub-Himalayan West Bengal:** Barobhisha (Jalpaiguri) 9; **Assam & Meghalaya:** Hangrabari Arg (dist Kamrup Metropolitan) 7, Shillong C.s.o. (dist East Khasi Hills) 7; **Tripura:** Agartala Aero (dist West Tripura) 9, Arundhutinagar (dist West Tripura) 8, A D Nagar_aws (dist West Tripura) 7.







SUBDIVISIONWISE WEATHER WARNING FOR DAY 4
(12-6-2023)



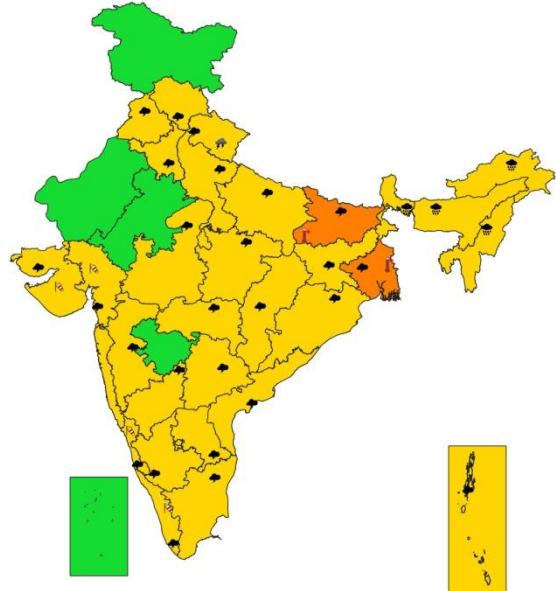
Subdivision Warning
Heavy Rain
Heavy Snow
Thunderstorms & Lightning
Hailstorm

Dust Storm
Strong Surface Winds
Heat Wave
Cold wave
Fog

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



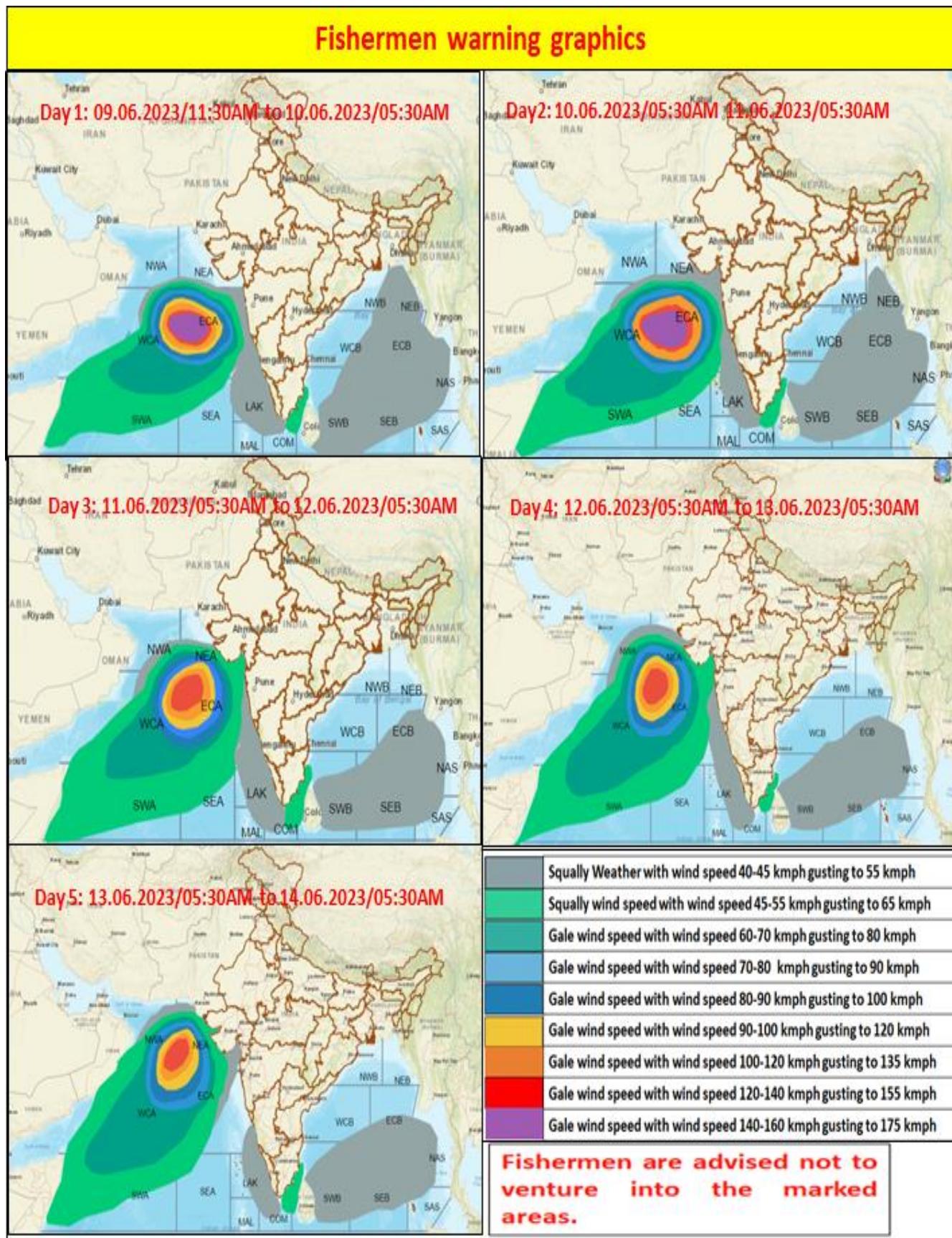
SUBDIVISIONWISE RAINFALL FORECAST FOR DAY 5
(13-6-2023)



Subdivision Warning
Heavy Rain
Heavy Snow
Thunderstorms & Lightning
Hailstorm

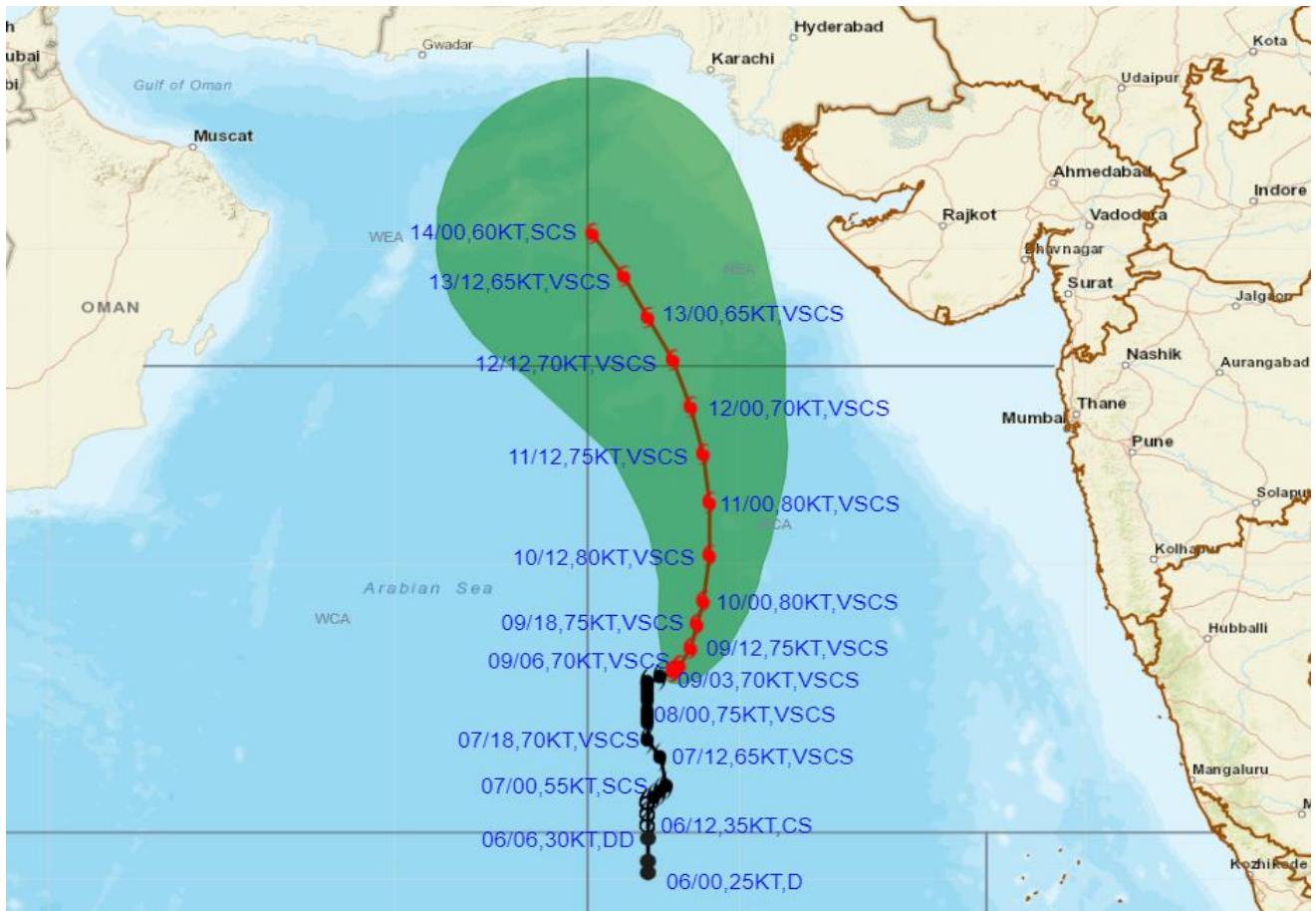
Dust Storm
Strong Surface Winds
Heat Wave
Cold wave
Fog

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





**OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF
VERY SEVERE CYCLONIC STORM "BIPARJOY" OVER EASTCENTRAL ARABIAN SEA
BASED ON 0300 UTC (0830 IST) OF 09TH JUNE 2023.**



DATE/TIME IN UTC

IST=UTC + 0530

L: LOW PRESSURE AREA

WML: WELL MARKED LOW PRESSURE AREA

D: DEPRESSION (17-27 KT)

DD: DEEP DEPRESSION (28-33 KT)

CS: CYCLONIC STORM (34-47 KT)

SCS: SEVERE CYCLONIC STORM (48-63KT)

VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)

ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)

SuCS: SUPER CYCLONIC STORM (≥ 120 KT)

LESS THAN 34 KT

34-47 KT

≥ 48 KT

OBSERVED TRACK

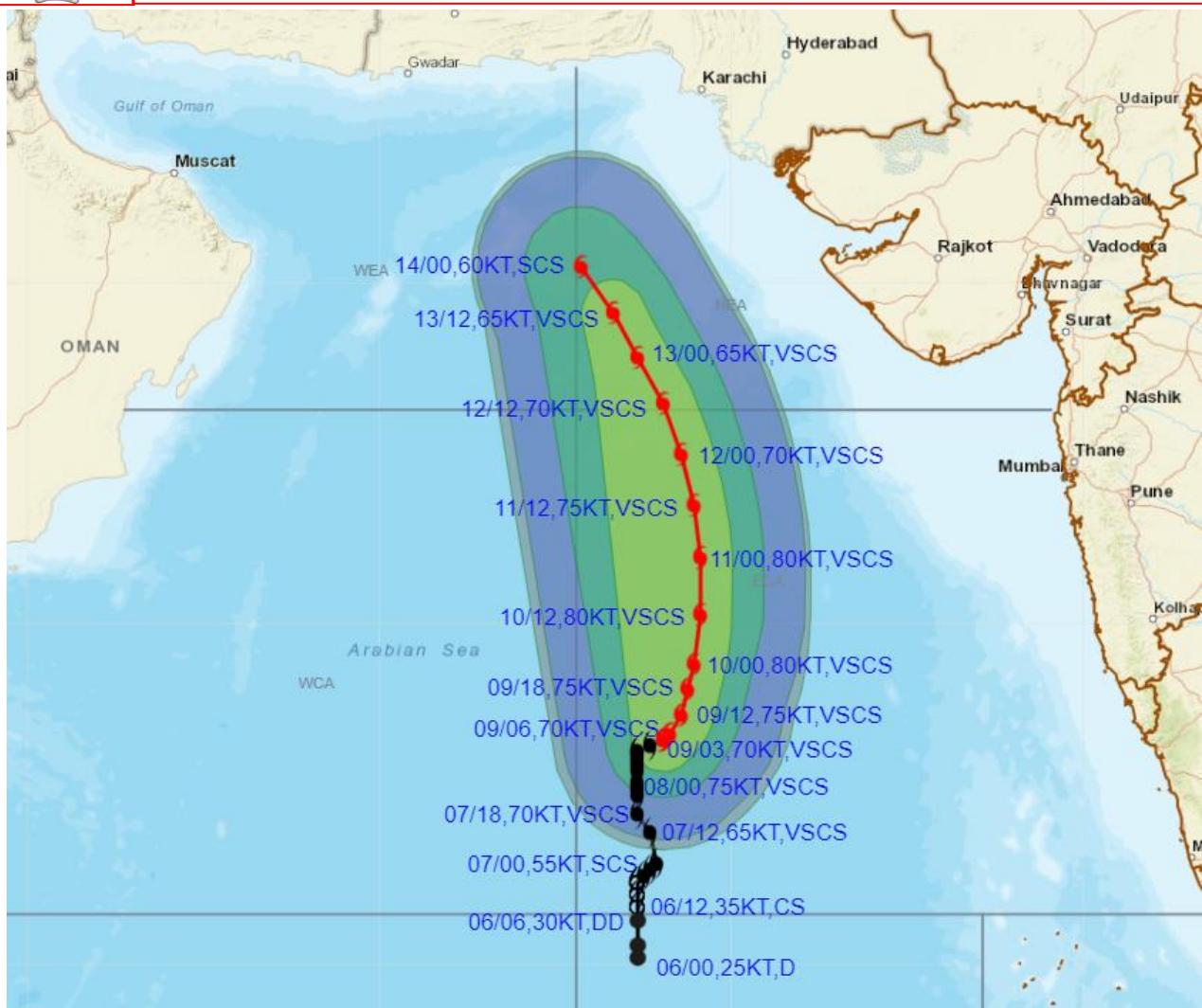
FORECAST TRACK

CONE OF UNCERTAINTY

Forecast	DISTANCE(KM) AND DIRECTION FROM STATIONS					
Date and Time	Lead Period	PORBANDAR	BOMBAY / COLABA	GOA/PANJIM	KARACHI AIRPOR	MASIRAH
10.06.23/0000	21	690, SSW	700, WSW	750, W	990, S	990, ESE
11.06.23/0000	45	520, SSW	630, WSW	770, WNW	800, S	910, ESE
12.06.23/0000	69	400, SW	650, W	870, WNW	620, S	820, E
13.06.23/0000	93	400, WSW	750, WNW	1020, NW	470, SSW	730, E
14.06.23/0000	117	470, W	880, WNW	1180, NW	360, SW	660, ENE



OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF VERY SEVERE CYCLONIC STORM "BIPARJOY" OVER EASTCENTRAL ARABIAN SEA BASED ON 0300 UTC (0830 IST) OF 09TH JUNE 2023.



DATE/TIME IN UTC

DATE/TIME IN SINGAPORE
IST=UTC + 0530

1: LOW PRESSURE AREA

WML: WELL MARKED LOW PRESSURE AREA

D: DEPRESSION (17.27 KTD)

DD: DEEP DEPRESSION (28-33 KT)

CS: CYCLONIC STORM (34-47 KTS)

SCS: CYCLONIC STORM (34-47 KT)

VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)

ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KTD)

SuCS: SUPER CYCLONIC STORM & 130 KT)

- LESS THAN 34 KT
- 34-47 KT
- ≥ 48 KT
- OBSERVED TRACK
- FORECAST TRACK
- CONE OF UNCERTAINTY
- AREA OF MAXIMUM SUSTAINED WIND SPEED:
 - 28-33 KT (52-61 KMPH)
 - 34-49 KT (62-91 KMPH)
 - 50-63 KT (92-117 KMPH)
 - ≥ 64 KT (≥118 KMPH)

IMPACT OVER THE SEA

MSW (knot/kmph)	Impact	Action
28-33 (52-61)	Very rough seas	Total suspension of fishing operations
34-49 (62-91)	High to very high seas	Total suspension of fishing operations
50-63 (92-117)	Very high seas	Total suspension of fishing operations
≥ 64 (≥118)	Phenomenal	Total suspension of fishing operations

Legends:

- ❖ **Heavy Rain:** 64.5 to 115.5 mm; **Very Heavy Rain:** 115.6 to 204.4 mm; **Extremely Heavy Rain:** >204.4mm.
- ❖ **Region wise classification of meteorological Sub-Divisions:**
 - **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.
 - **Central India:** West Madhya Pradesh, East Madhya Pradesh, Vidarbha and Chhattisgarh.
 - **East India:** Bihar, Jharkhand, Sub-Himalaya West Bengal & Sikkim; Gangetic West Bengal, Odisha and Andaman & Nicobar Islands.
 - **Northeast India:** Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.
 - **West India:** Gujarat Region, Saurashtra & Kutch, Konkan & Goa, Madhya Maharashtra and Marathwada.
 - **South India:** Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Coastal Karnataka, North Interior Karnataka, South Interior Karnataka, Kerala & Mahe, Tamilnadu, 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 Widespred (FWS/ Many Places)	1-25	Isolated (ISOL)

Subdivision Warning	Dust Storm	Subdivision color
Heavy Rain	Strong Surface Winds	NO WARNING
Heavy Snow	Heat Wave	WATCH(BE UPDATED)
Thunderstorms & Lightning	Cold wave	ALERT (BE PREPARED)
Hailstorm	Fog	WARNING (TAKE ACTION)

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