



**India Meteorological Department  
(Ministry of Earth Sciences)**

**BULLETIN NO. : 06 (BOB/07/2022)**

**TIME OF ISSUE: 0115 HOURS IST**

**DATED: 20.08.2022**

**FROM: INDIA METEOROLOGICAL DEPARTMENT (FAX NO. 24643965/24699216/24623220)**

**TO: CONTROL ROOM, NDM, MINISTRY OF HOME AFFAIRS (FAX.NO. 23093750)**

**CONTROL ROOM NDMA (FAX.NO. 26701729)**

**CABINET SECRETARIAT (FAX.NO.23012284, 23018638)**

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**Sub: Deep Depression over West Bengal & adjoining north Odisha**

The Deep Depression over coastal areas of West Bengal & adjoining north Odisha moved west-northwestwards during past 06 hours with a speed of 22 kmph and lay centered at 2330 hrs IST of 19<sup>th</sup> August, 2022 over West Bengal & adjoining north Odisha near latitude 22.1°N and longitude 87.0°E, about 40 km southwest of Kharagur (West Bengal), 30 km northeast of Baripada (Odisha) and 120 km southeast of Jamshedpur (Jharkhand).

It would continue to move west-northwestwards across West Bengal & adjoining north Odisha and Jharkhand towards north Chhattisgarh during next 24 hours and weaken gradually.

Forecast track and intensity are given in the following table:

<b>Date/Time(IST)</b>	<b>Position (Lat. °N/ long. °E)</b>	<b>Maximum sustained surface wind speed (Kmph)</b>	<b>Category of cyclonic disturbance</b>
19.08.22/2330	22.1/87.0	55-65 gusting to 75	Deep Depression
20.08.22/0530	22.4/86.2	50-60 gusting to 70	Deep Depression
20.08.22/1130	22.6/85.2	45-55 gusting to 65	Depression
20.08.22/1730	22.8/84.2	40-50 gusting to 60	Depression

## **Warnings:**

### **Rainfall:**

Rainfall at most places with **heavy to very heavy rainfall** at a few places and **extremely heavy rainfall** at isolated places is very likely over **North Odisha and coastal districts of southwest Gangetic West Bengal**. Rainfall at most places is very likely with **heavy to very heavy rainfall** at a few places over South Odisha & rest parts of Gangetic West Bengal; isolated heavy to very heavy rainfall over Jharkhand & Chattisgarh and heavy rainfall at isolated places over East Madhya Pradesh till morning of 20<sup>th</sup> August.

**20<sup>th</sup> August:** Rainfall at most places with **heavy to very heavy rainfall** at a few places and **extremely heavy rainfall** at isolated places is very likely over North Chattisgarh & East Madhya Pradesh. Rainfall at most places is very likely with **heavy to very heavy rainfall** at a few places over Northwest Odisha, Jharkhand & Vidarbha. Rainfall at most places with heavy rainfall at isolated places over remaining parts of Odisha, south Chhattisgarh and West Madhya Pradesh.

**21<sup>st</sup> August:** Rainfall at most places with heavy to very heavy rainfall at a few places and extremely heavy rainfall at isolated places is very likely over West Madhya Pradesh. Rainfall at most places is very likely with heavy to very heavy rainfall at isolated places over East Madhya Pradesh & East Rajasthan and heavy rainfall at isolated places over Chattisgarh & Vidarbha.

**22<sup>nd</sup> August:** Rainfall at most places is very likely with heavy to very heavy rainfall at isolated places over East Rajasthan and heavy rainfall at isolated places over West Madhya Pradesh.

### **Wind:**

- Prevailing **squally wind speed reaching 55-65 kmph** gusting to 75 kmph over North Bay of Bengal and along & off north Odisha (**Balasore, Bhadrak and adjoining Mayurbhanj Districts**) and West Bengal (**North & South 24 Parganas, East & West Medinipur and Jhargram Districts**) coasts is likely to decrease gradually becoming 45-55 kmph gusting 65 kmph by 20<sup>th</sup> morning over the same region and 35-45 kmph gusting 55 kmph by evening of 20<sup>th</sup> August.
- **Squally wind speed reaching 45-55 gusting to 65 kmph** likely along & off remaining districts of coastal Odisha & West Bengal till morning of 20<sup>th</sup> and decrease thereafter.
- **Strong Winds speed reaching 30-40 kmph gusting to 50 kmph** likely to prevail over interior districts of north Odisha, Gangetic West Bengal and adjoining areas of south Jharkhand during next 12 hours.

### **Sea condition:**

Sea condition is likely to be rough to very rough over North Bay of Bengal and along & off West Bengal, Odisha & Bangladesh coasts till 20<sup>th</sup> August noon and improve gradually thereafter.

### **Fishermen Warnings: (for graphics please visit <https://rsmcnewdelhi.imd.gov.in>)**

Fishermen are advised not to venture into North Bay of Bengal and along & off West Bengal, Odisha & Bangladesh coasts till 20<sup>th</sup> August noon.

### **Damage expected over North Odisha, Gangetic West Bengal and Jharkhand:**

- Damage to loose/unsecured structures. Some breaches in Kutcha road & embankments due to flooding.
- Damage to small trees like Banana, Papaya etc. and near coastal agriculture due to salt spray. Damage to standing crops and horticulture.
- Localized Flooding of roads, water logging in low lying areas and closure of underpasses.
- Reduction in visibility due to heavy rainfall.
- Disruption of traffic in major cities due to water logging in roads.

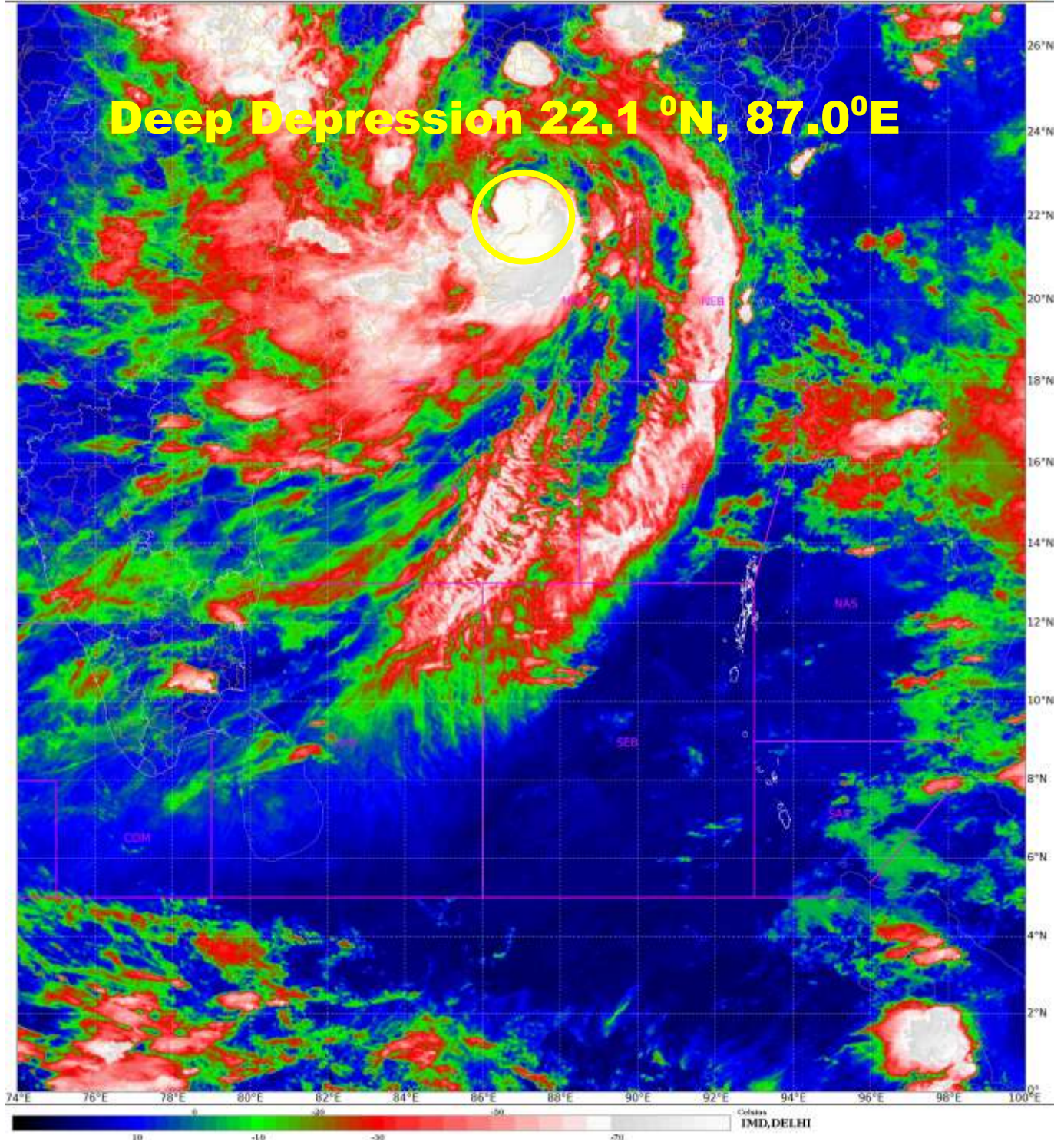
- Localized Landslide/Mudslides.
- It may lead to riverine flooding in some river catchments (for riverine flooding please visit Web page of CWC)

**Next message will be issued at 0830 hours IST of today, the 20<sup>th</sup> August, 2022.**

**(Surendra Pratap Singh)  
Scientist C, Cyclone Warning Division, New Delhi**

**Copy to: ACWC Mumbai/ ACWC Kolkata/ ACWC Chennai/ CWC  
Bhubaneswar/CWCVisakhapatnam/ / MO Port Blair/MC Raipur/MC Bhopal/MC  
Hyderabad/RMC Nagpur/**

**LEGEND: Heavy Rainfall:** 64.5 to 115.5mm, **Very Heavy Rainfall:** 115.6 to 204.4mm **Most Places:** more than 76% of total stations, **Isolated Places:** Less than 25% of total





**OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF DEEP DEPRESSION OVER WEST BENGAL AND ADJOINING NORTH ODISHA BASED ON 1800 UTC OF 19<sup>th</sup> AUGUST, 2022**



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 ( $\geq 120$  KT)

- LESS THAN 34 KT
- 34-47 KT
- $\geq 48$  KT
- OBSERVED TRACK
- FORECAST TRACK
- CONE OF UNCERTAINTY



## OBSERVED AND FORECAST TRACK ALONG WITH QUADRANT WIND DISTRIBUTION OF DEEP DEPRESSION OVER WEST BENGAL AND ADJOINING NORTH ODISHA BASED ON 1800 UTC OF 19<sup>th</sup> AUGUST, 2022



**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)**  
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**SuCS: SUPER CYCLONIC STORM ( $\geq$  120 KT)**

- LESS THAN 34 KT
- 34-47 KT
- $\geq$  48 KT
- OBSERVED TRACK
- FORECAST TRACK
- CONE OF UNCERTAINTY

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
$\geq$ 64 ( $\geq$ 118)	Phenomenal	Total suspension of fishing operations



 Heavy Rain  
 Strong Winds  
 Frost

 Heavy Snow  
 Visibility  
 Cold Wave

 Thunderstorm  
 Cyclone  
 Heat Wave

 Dust Storm  
 Squall/ Hail  
 Sea State

## Fishermen warning graphics

**Day 1: 19.08.2022/11:30 AM to 20.08.2022/05:30 AM**



**Day 2: 20.08.2022/05:30 AM to 21.08.2022/05:30 AM**



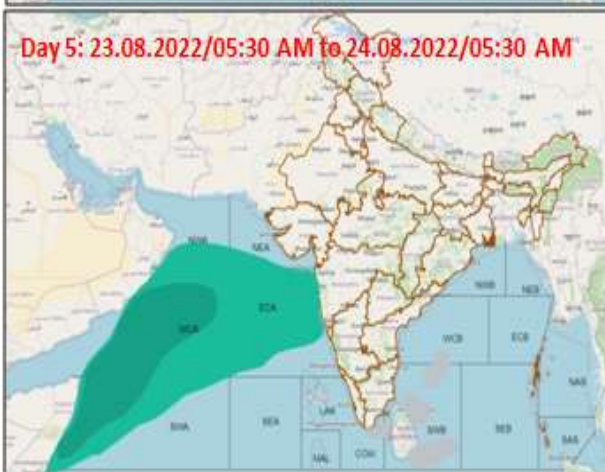
**Day 3: 21.08.2022/05:30 AM to 22.08.2022/05:30 AM**



**Day 4: 22.08.2022/05:30 AM to 23.08.2022/05:30 AM**



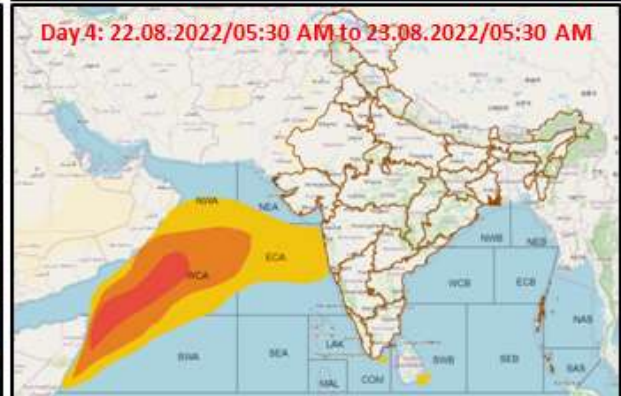
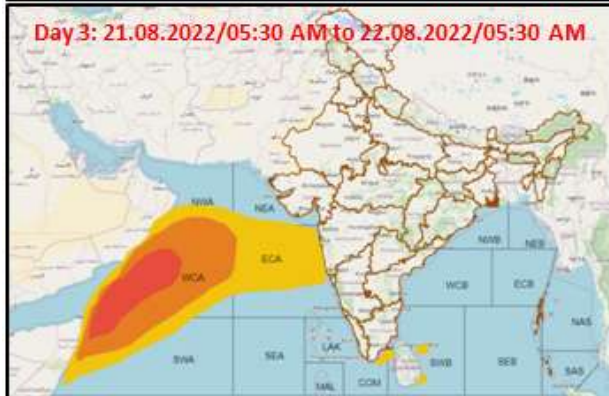
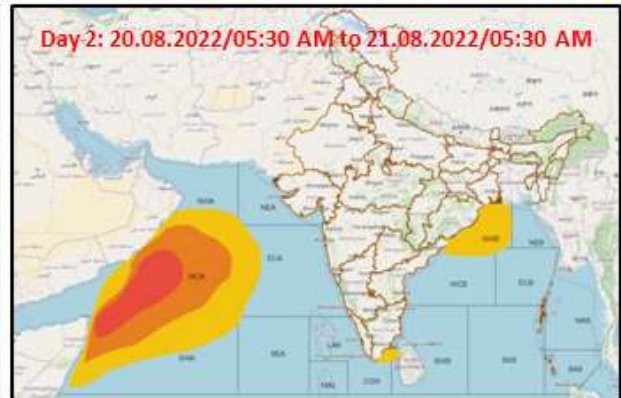
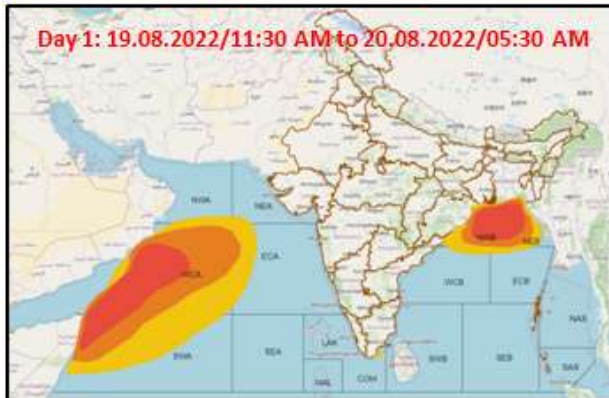
**Day 5: 23.08.2022/05:30 AM to 24.08.2022/05:30 AM**






	Squally WX with wind speed 40-45 <u>kmph</u> gusting to 55 <u>kmph</u>
	Squally wind speed 40-50 <u>kmph</u> gusting to 60 <u>kmph</u>
	Squally wind speed 45-55 <u>kmph</u> gusting to 65 <u>kmph</u>
	Squally wind speed 55-65 <u>kmph</u> gusting to 75 <u>kmph</u>



## Probability of exceedance of maximum sustained winds $\geq 45$ kmph



	Probability of exceedance
	Low (1-33%)
	Moderate (34-67%)
	High (68-100%)