



India Meteorological Department
Earth System Science Organisation
(Ministry of Earth Sciences)

BULLETIN NO.: 38 (BAY OF BENGAL 01/2020)

TIME OF ISSUE: 2200 HOURS IST

DATED: 20.05.2020

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Sub: Super Cyclonic Storm 'AMPHAN' (pronounced as UM-PUN) lay over West Bengal close to Kolkata as a Very Severe Cyclonic Storm: Cyclone warning for West Bengal coast: Red Message.

The Super Cyclonic Storm 'AMPHAN' (pronounced as **UM-PUN**) over West Bengal coast moved north-northeastwards with a speed of 25 kmph during past 06 hours and lay centered at 2030 hrs IST of today, the 20th may 2020 over West Bengal near **Lat. 22.7°N and Long. 88.6°E** close to Kolkata as a Very Severe Cyclonic Storm with wind speed of 120-130 kmph gusting to 145 kmph **160 km northeast of Digha (West Bengal), 120 km north-northeast of Sagar Islands and 185 km west-northwest of Khepupara (Bangladesh).**

Kolkata (Alipur & Dumdum) both reported 100 kmph winds and 222 mm & 194 mm rainfall respectively at 2030 hrs IST of today, the 20th May 2020.

The system is now being continuously tracked by the Doppler Weather Radar (DWR) at Kolkata (West Bengal).

Forecast track and intensity are given in the following table:

Date/Time(IST)	Position (Lat. °N/ long. °E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
20.05.20/2030	22.7/88.6	120-130 gusting to 145	Very Severe Cyclonic Storm
20.05.20/2330	23.2/88.8	100-110 gusting to 125	Severe Cyclonic Storm
21.05.20/0530	24.6/89.3	60-70 gusting to 80	Cyclonic Storm
21.05.20/1130	26.0/90.3	30-40 gusting to 50	Depression

Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
Rainfall amount (mm): Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.

(1) Heavy rainfall Warning:

West Bengal

Rainfall at most places with heavy rainfall at isolated places likely over Gangetic West Bengal (east & west Howrah, Hoogli, Kolkata and adjoining districts) during next 06 hours.

Sub-Himalayan West Bengal and Sikkim

Light to moderate rainfall at most places with heavy to very heavy falls at a few places over Malda & Dinajpur districts during next 12 hours and over most of the districts of Sub-Himalayan West Bengal & Sikkim on 21st May, 2020.

Assam & Meghalaya

Light to moderate rainfall at most places with heavy falls at isolated places over Meghalaya during next 12 hours and heavy to very heavy falls at a few places over the western districts of Assam & Meghalaya on 21st May.

(2) Wind warning

West Bengal & Odisha

- Squally wind, speed reaching 40 to 50 kmph gusting to 60 kmph is prevailing along and off Balasore district of Odisha during next 3 hours. It will gradually decrease subsequently.
- **Gale wind speed reaching 110 to 120 kmph gusting to 130 kmph very likely over Kolkata, Hoogli, Howrah and West Medinipur Districts and 80-90kmph gusting to 100 kmph over Bardhaman, Murshidabad, & Nadia Districts of West Bengal . It is very likely to decrease during next 06 hours.**

Deep Sea area

- Gale wind speed reaching 60-70 gusting to 80 kmph is prevailing over northern parts of northwest Bay of Bengal. It is likely to continue for next 6 hours. It will gradually decrease thereafter. Squally wind speed reaching 30-40 gusting to 50 kmph likely during subsequent 06 hours.

(3) Sea condition:

- Sea condition is rough to very rough over North Bay of Bengal and is likely to continue for next 12 hours.

(4) Fishermen Warning

- The fishermen are advised not to venture into North Bay of Bengal during next 12 hours. Also, fishermen are advised not to venture into North Bay of Bengal along and off North Odisha, West Bengal and adjoining Bangladesh coasts during next 12 hours.

(5) Damage Expected and Action suggested

(a) West Bengal (Howrah, Hoogli, Kolkata and adjoining interior districts)

Damage Expected:

- Total destruction of thatched houses/ extensive damage to kutcha houses. Some damage to pucca houses. Potential threat from flying objects.
- Bending/ uprooting of power and communication poles.
- Major damage to Kutcha and Pucca roads. Flooding of escape routes. Minor disruption of railways, overhead powerlines and signalling systems.
- Widespread damage to standing crops, plantations, orchards, falling of green coconuts and tearing of palm fronds. Blowing down of bushy trees like mango.

Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%

Rainfall amount (mm): Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.

- Small boats, country crafts may get detached from moorings.
- Visibility severely affected.

Fishermen Warning & Action Suggested:

- Total suspension of fishing operations. Mobilise evacuation from coastal areas.
- Judicious regulation of rail and road traffic.
- People in affected areas to remain indoors.
- Movement in motor boats and small ships unsafe.

Kindly visit www.rsmcnewdelhi.imd.gov.in and www.mausam.imd.gov.in for updates on the system.

Next Bulletin will be issued at 0230 hours IST of today, the 21st May, 2020.

Please follow the hourly bulletin on the link:

<http://www.rsmcnewdelhi.imd.gov.in/images/bulletin/hourly.pdf>

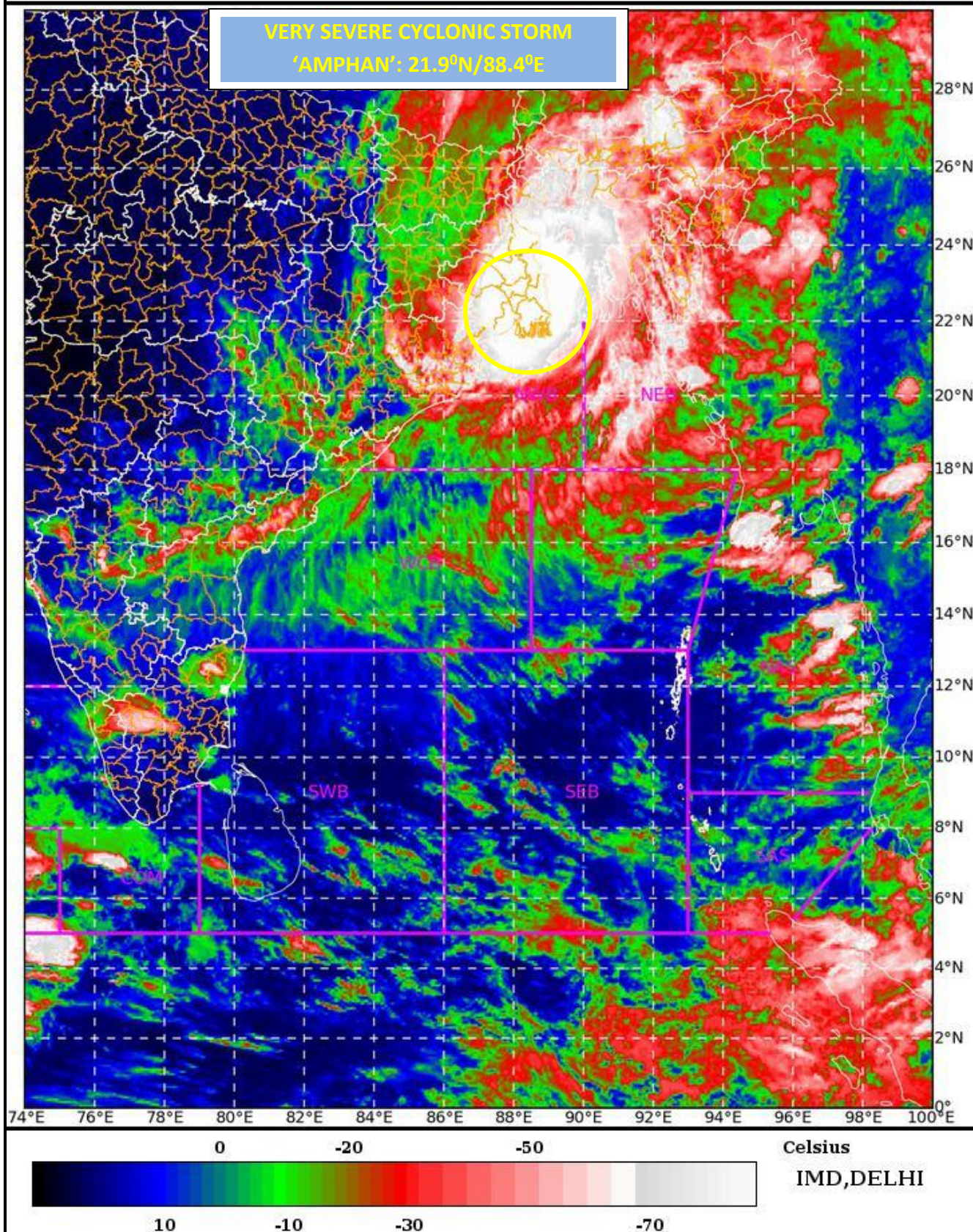
(V R Durai)
Scientist-E, RSMC, New Delhi

Copy to: CRS, Pune/ ACWC Chennai/ ACWC Kolkata/CWC Bhubaneswar/ /CWC Visakhapatnam

SAT : INSAT-3D IMG 20-05-2020/(1500 to 1526) GMT

IMG_TIR1_TEMP 10.8 um 20-05-2020/(2030 to 2056) IST

L1C Mercator



Legend: WCB – Westcentral Bay of Bengal
NWB – Northwest Bay of Bengal

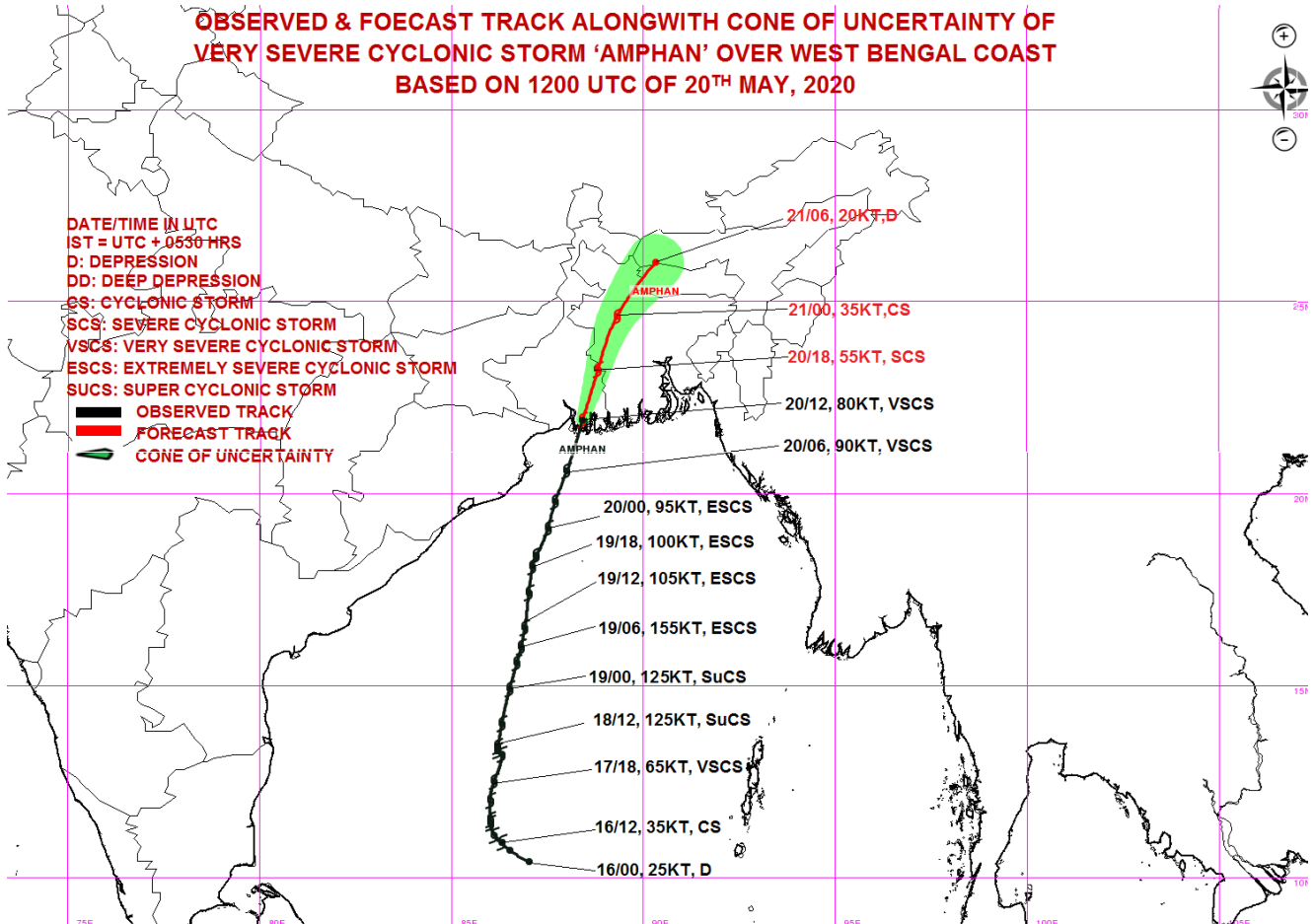
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Rainfall amount (mm): Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.

OBSERVED & FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF VERY SEVERE CYCLONIC STORM 'AMPHAN' OVER WEST BENGAL COAST BASED ON 1200 UTC OF 20TH MAY, 2020



DATE/TIME IN UTC
 IST = UTC + 0530 HRS
 D: DEPRESSION
 DD: DEEP DEPRESSION
 CS: CYCLONIC STORM
 SCS: SEVERE CYCLONIC STORM
 VSCS: VERY SEVERE CYCLONIC STORM
 ESCS: EXTREMELY SEVERE CYCLONIC STORM
 SuCS: SUPER CYCLONIC STORM

— OBSERVED TRACK
 — FORECAST TRACK
 — CONE OF UNCERTAINTY

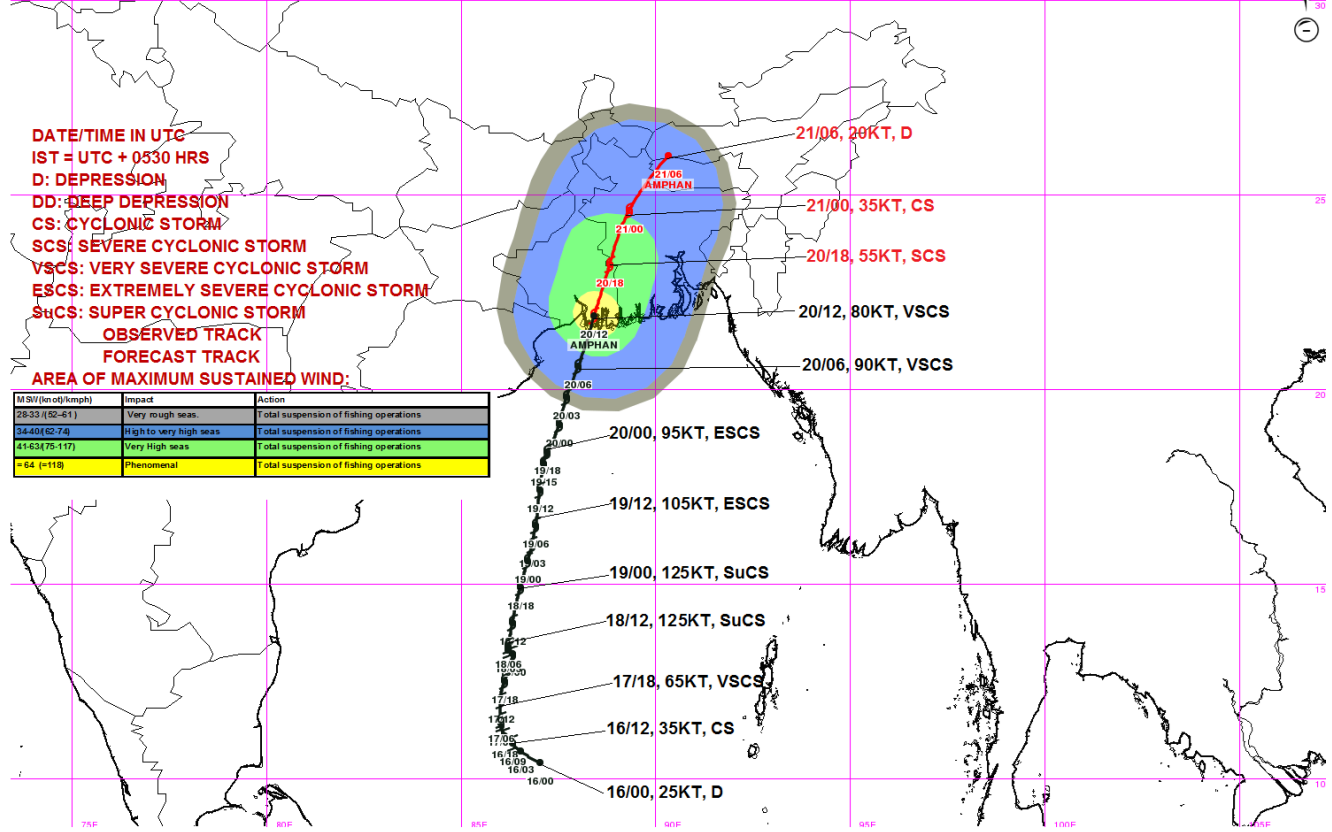


OBSERVED & FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF VERY SEVERE CYCLONIC STORM 'AMPHAN' OVER WEST BENGAL COAST BASED ON 1200 UTC OF 20TH MAY, 2020



DATE/TIME IN UTC
 IST = UTC + 0530 HRS
 D: DEPRESSION
 DD: DEEP DEPRESSION
 CS: CYCLONIC STORM
 SCS: SEVERE CYCLONIC STORM
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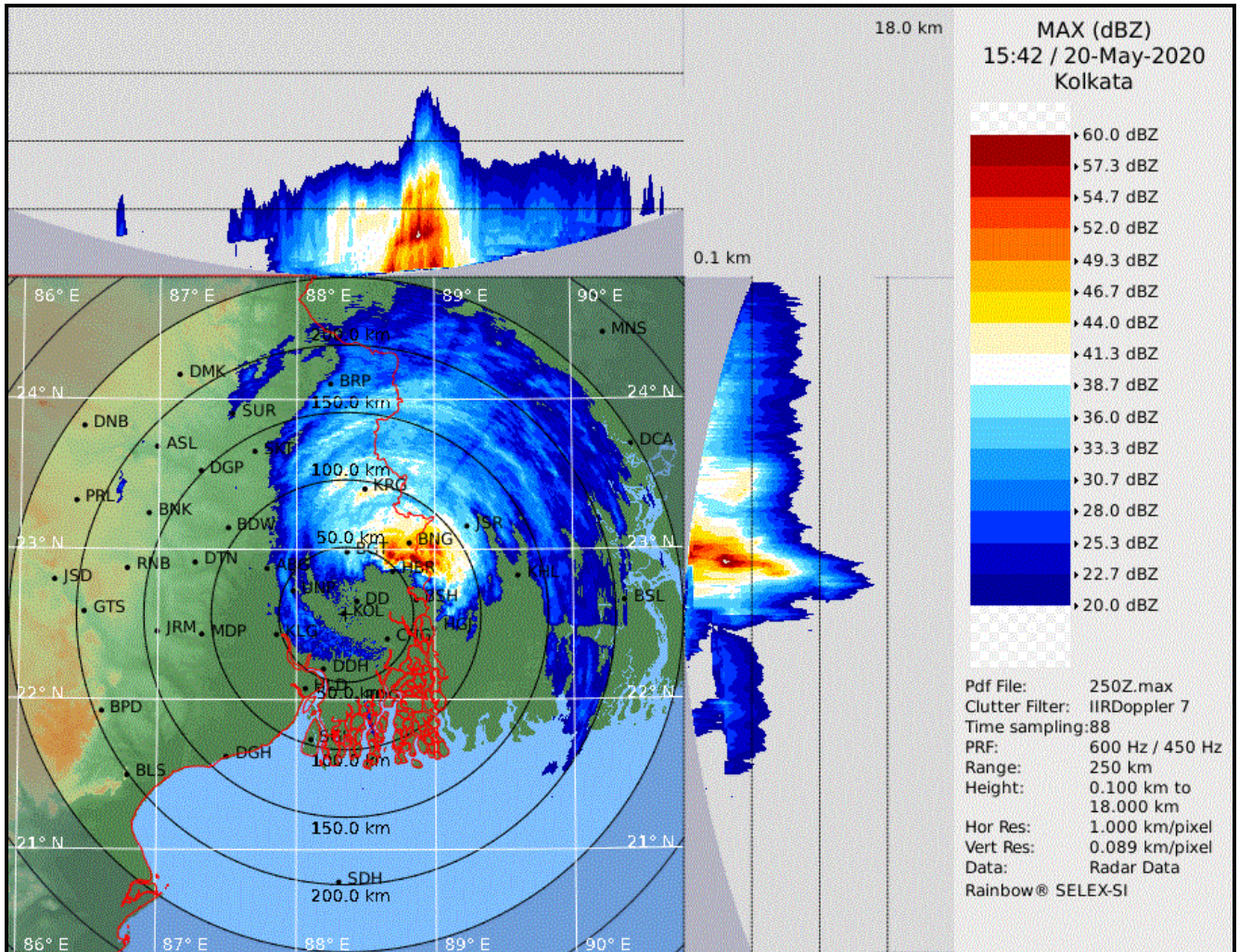
— OBSERVED TRACK
 — FORECAST TRACK
 — AREA OF MAXIMUM SUSTAINED WIND:



Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%

Rainfall amount (mm): Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.

Figure: Reflectivity of Kolkata Doppler Weather Radar at 1542 UTC of 20th May 2020



Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
Rainfall amount (mm): Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.