



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

**BULLETIN NO. : 15 (ARB/01/2019)**

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

**TO: CONTROL ROOM, (NORTH BLOCK) MINISTRY OF HOME AFFAIRS (FAX.NO. 23092398/23093750)**

**CONTROL ROOM (NERC) DM DIVISION MHA ( FAX . NO. 23438254)**

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

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

**PS TO HON'BLE MINISTER FOR S & T AND EARTH SCIENCES (FAX NO.23316745)**

**SECRETARY, MOES, (FAX NO. 24629777)**

**H.Q. (INTEGRATED DEFENCE STAFF AND CDS) (FAX NO. 23005137/23005147)**

**DIRECTOR GENERAL, DOORDARSHAN (23114964)**

**DIRECTOR GENERAL, AIR (23421101, 23421105, 23421219)**

**PIB MOES (FAX NO. 23389042)**

**UNI (FAX NO. 23355841)**

**D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 26105912, 23438091)**

**DIRECTOR, PUNCTUALITY, INDIAN RAILWAYS (FAX NO. 23388503)**

**CHIEF SECRETARY, TAMILNADU (FAX NO. 044-25672304)**

**CHIEF SECRETARY, KERALA (FAX NO. 0471-2327176)**

**ADMINISTRATOR, LAKSHADWEEP ISLANDS (FAX NO. 04896262184)**

**ADMINISTRATOR, UNION TERRITORY OF DAMAN & DIU AND DADRA NAGAR HAVELI (0260-2230775)**

**CHIEF SECRETARY, KARNATAKA (FAX NO. 080-22258913)**

**CHIEF SECRETARY, GOA (FAX NO. 0832-2415201)**

**CHIEF SECRETARY, MAHARASHTRA (FAX NO. 022- 22028594)**

**CHIEF SECRETARY, GUJARAT (FAX NO. 079-23250305)**

**Sub: Very Severe Cyclonic Storm 'VAYU' over East-central Arabian:**

**Cyclone Warning for Gujarat Coast: Orange Message**

The Very **Severe Cyclonic Storm 'VAYU'** (pronounced as **VAA'YU**) over Eastcentral Arabian Sea moved nearly northwards with a speed of about 13 kmph in last six hours and lay centred at 0530 hrs IST of 12<sup>th</sup> June, 2019 near latitude 17.8°N and longitude 70.5°E over Eastcentral Arabian Sea, about 470 km west-northwest of Goa, 280 km south-southwest of Mumbai (Maharashtra) and 340 km nearly south of Veraval (Gujarat).

**It is very likely to move nearly northwards and cross Gujarat coast between Porbandar and Mahuva around Veraval & Diu region as a Very Severe Cyclonic Storm with wind speed 145-155 kmph gusting to 170 kmph around morning of 13<sup>th</sup> June 2019.**

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>
12.06.19/0530	17.8/70.5	135-145 gusting to 160	Very Severe Cyclonic Storm
12.06.19/1130	18.6/70.5	135-145 gusting to 160	Very Severe Cyclonic Storm
12.06.19/1730	19.4/70.4	140-150 gusting to 165	Very Severe Cyclonic Storm
12.06.19/2330	20.1/70.4	145-155 gusting to 170	Very Severe Cyclonic Storm
13.06.19/0530	20.7/70.3	145-155 gusting to 170	Very Severe Cyclonic Storm
13.06.19/1730	21.6/70.0	115-125 gusting to 135	Severe Cyclonic Storm
14.06.19/0530	22.2/69.6	85-95 gusting to 105	Severe Cyclonic Storm
14.06.19/1730	22.7/69.2	60-70 gusting 80	Cyclonic Storm
15.06.19/0530	23.1/68.8	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.**

## Warnings:

### (i) Heavy rainfall warning:

Sub-Divisions	12 June 2019*	13 June 2019*	14 June 2019*
Konkan & Goa	Widespread rainfall with heavy to very heavy falls at isolated places	Fairly widespread rainfall with heavy falls at isolated places	Fairly widespread rainfall
Saurashtra & Kutch	Fairly widespread rainfall with heavy falls at isolated places	Widespread rainfall with heavy to very heavy falls at few places and extremely heavy falls at isolated places	Fairly widespread rainfall with heavy to very heavy falls at isolated places
South Gujarat Region	Fairly widespread rainfall with heavy falls at isolated places	Rainfall at a few places with heavy falls at isolated places	Rainfall at a few places

Note: \* Rainfall till 0830 IST of next day.

Legends:

**Yellow: Be Updated; Orange- Be prepared; Red- Take action, Green: No warning**

Heavy rain: 64.5-115.5 mm/day; Very heavy rain: 115.6-204.4 mm/day; Extremely heavy rain: more than 204.4 mm/day

### (ii) Wind warning

- **12<sup>th</sup> June:** Wind speed is very likely to become gale wind speed reaching **135-145 kmph gusting to 160 kmph** over eastcentral & adjoining northeast Arabian Sea by 12<sup>th</sup> June. It is very likely to be 60-70 kmph gusting to 80 kmph over Gujarat Coast from 12<sup>th</sup> morning and become gale wind speed reaching **145-155 kmph gusting to 170 kmph** by 12<sup>th</sup> night. It is very likely to be 50-60 kmph gusting to 70 kmph over Maharashtra Coast.
- **13<sup>th</sup> June:** Gale wind speed of the order of **145-155 kmph gusting to 170 kmph** very likely over north Arabian Sea & Gujarat coast in morning hours and decrease gradually thereafter. It is very likely to be 50-60 kmph gusting to 70 kmph over north Maharashtra Coasts & northern parts of eastcentral Arabian Sea.

### (iii) Sea condition

- The sea condition is very likely to become very high to phenomenal over eastcentral & adjoining northeast Arabian Sea & Gujarat coast from 12<sup>th</sup> June and over north Arabian Sea on 13<sup>th</sup> June 2019.
- The Sea condition is very likely to very rough to high along & off Maharashtra Coast on 12<sup>th</sup> & 13<sup>th</sup> June, 2019.

### (iv) Fishermen Warning

- The fishermen are advised not to venture into Eastcentral Arabian Sea and along & off Maharashtra Coast on 12<sup>th</sup>; northeast Arabian sea and along & off Gujarat coast on 12<sup>th</sup> & 13<sup>th</sup>.

### (iv) Storm Surge Warning

Storm surge of height of about 1.5-2.0 m above the astronomical tides likely to inundate the low lying coastal areas of Kutch, Devbhoomi, Dwarka, Porbandar, Junagarh, Diu, Gir Somnath, Amreli and Bhavnagar districts at the time of landfall.

### (v) Damage Expected and Action suggested for Kutch, Devbhoomi Dwarka, Porbandar, Rajkot, Junagarh, Diu, Gir Somnath, Amreli and Bhavnagar districts of Gujarat:

- (i) Total destruction of thatched houses/extensive damage to Kutcha houses. Some damage to pucca houses. Potential threat from flying objects.(ii) Bending/uprooting of power and communication poles. (iii) Major damage to Kutcha and Pucca roads. Flooding of escape routes. Minor disruption of railways, overhead power lines and signalling systems.(iv) Widespread damage to standing crops, plantation, orchards, falling of green coconuts and

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tearing of palm fronds. Blowing down bushy trees like mango.(v) Small boats, country crafts may get detached from moorings.(vi) Visibility severe affected.

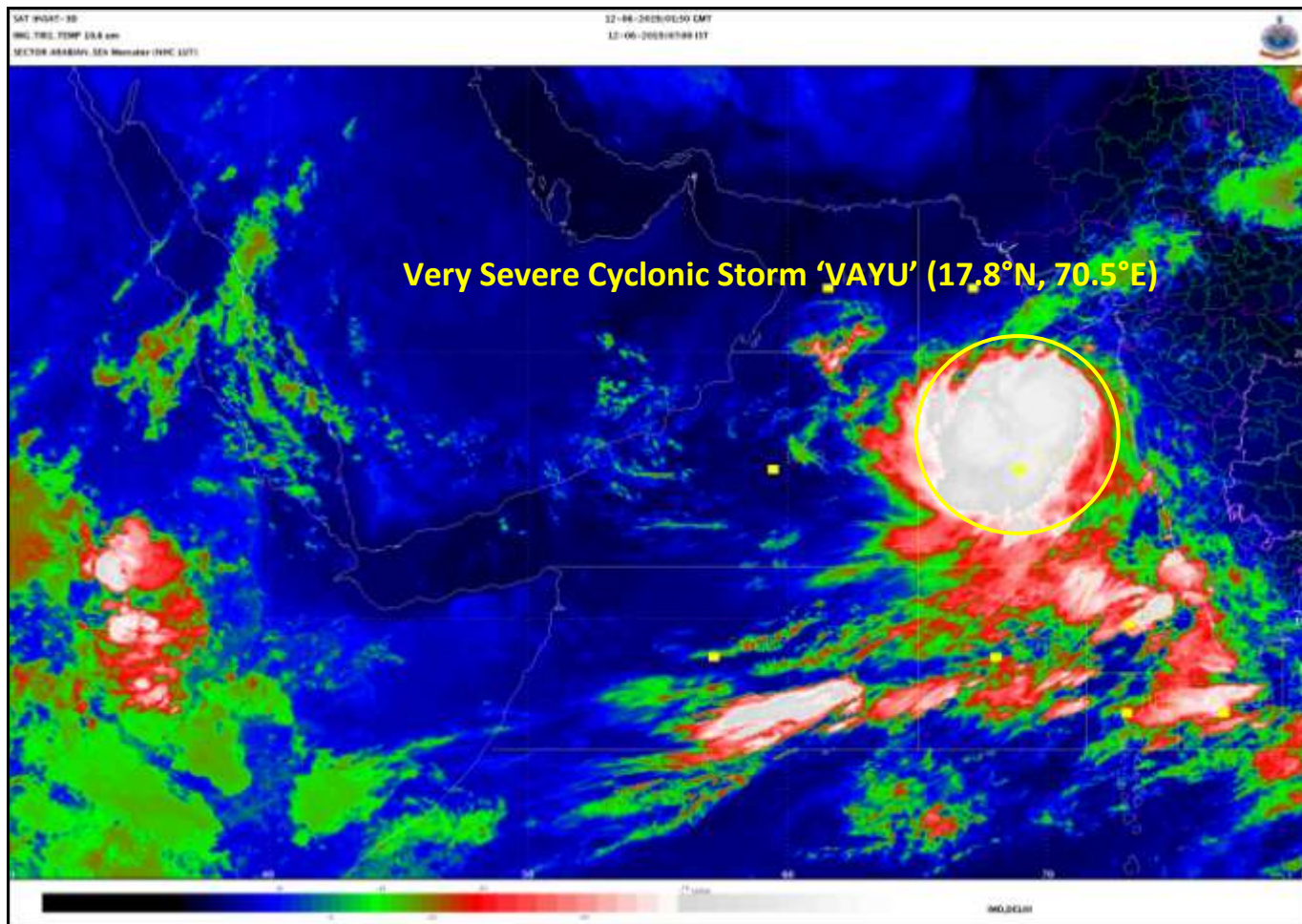
**Action suggested:**

(i) Regulate road & rail traffic (ii) Total suspension of fishing operations. (iii) Evacuation from low lying areas of the above mentioned Districts, coastal Hutment dwellers, urban slum dwellers and people staying in unsafe house to safer places. People in affected areas to remain indoors.(iv) Movement in motor boats & small ships unsafe.(v) Inundation of low lying areas in the along the coasts due to heavy rainfall and storm surge.

*The next bulletin will be issued at 1130 hrs IST of 12<sup>th</sup> June, 2019.*

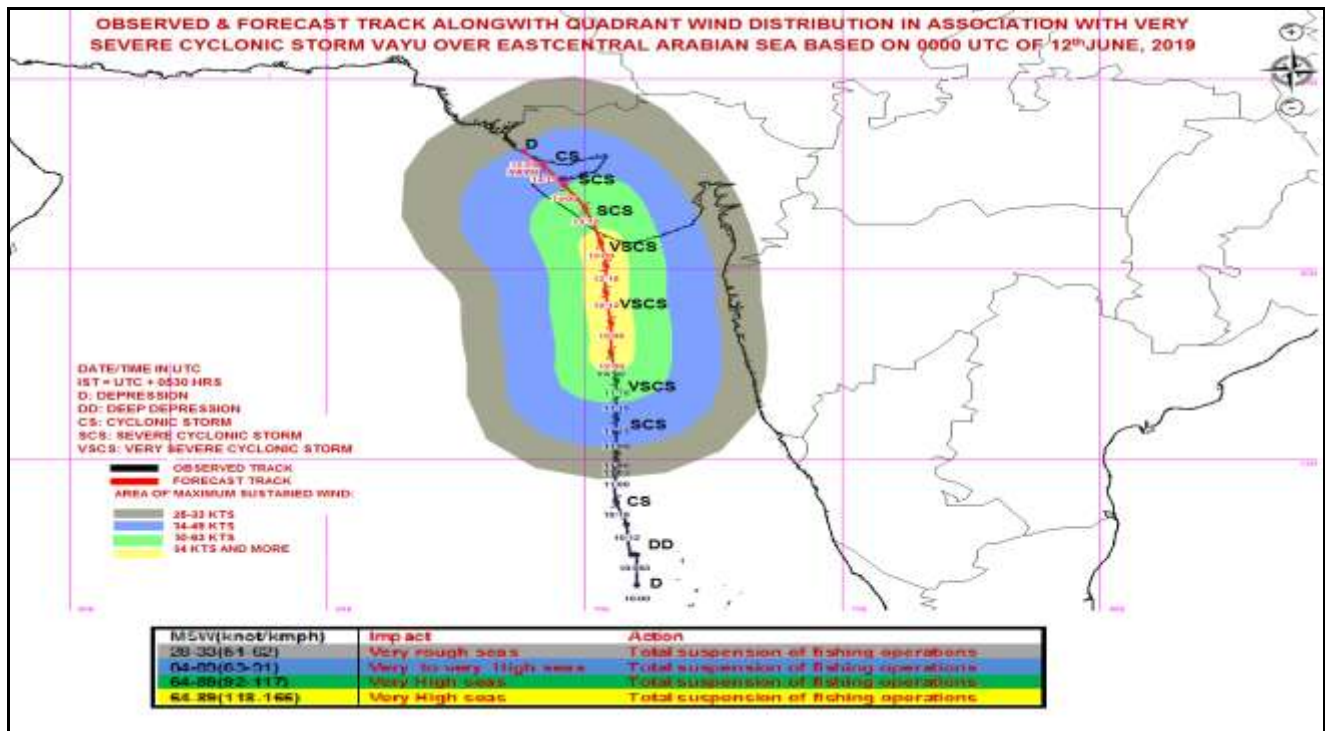
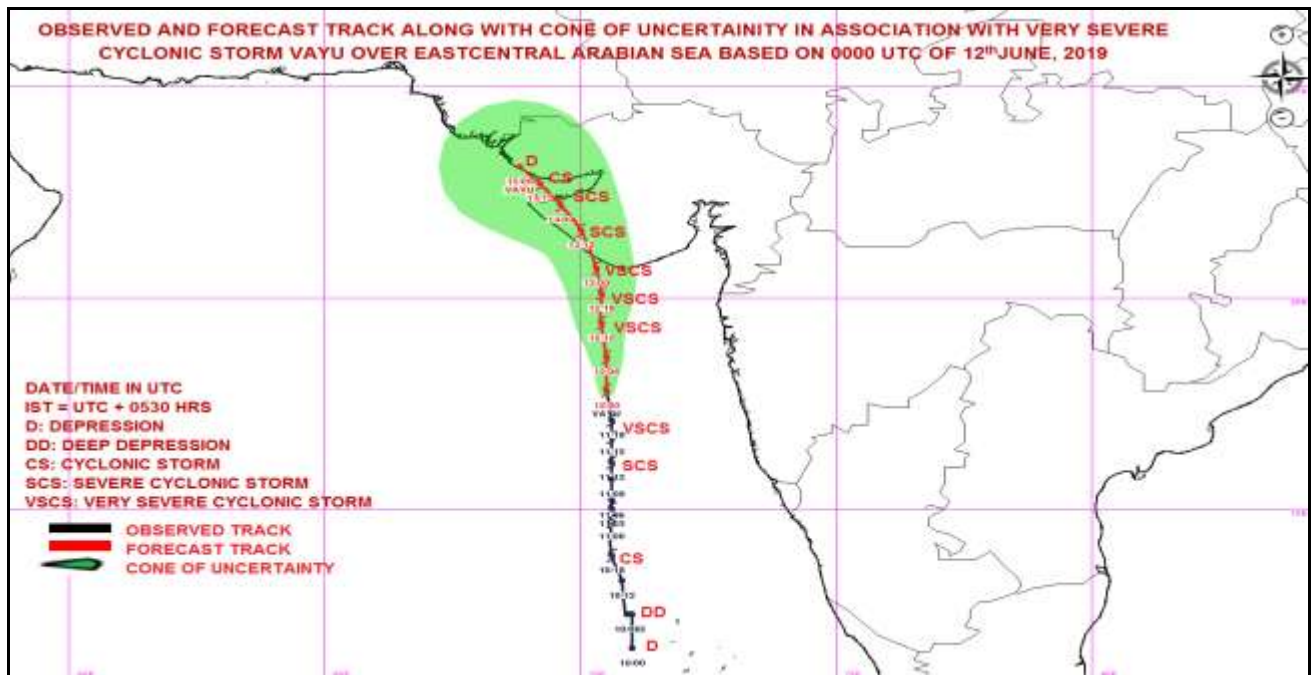
**(D.R. Pattanaik)**  
**Scientist-E, RSMC, New Delhi**

**Copy to: CRS, Pune/ ACWC Chennai/ ACWC Mumbai/MC Goa/ MC Bengaluru/CWC  
Ahmedabad/Thiruvananthapuram.**



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