



Government of India
Ministry of Earth Sciences
Earth System Science Organisation



Earth System Science Organisation
India Meteorological Department

PRESS RELEASE- 5

Time of issue: 1200 hours IST

Dated: 06-12-2019

**Sub: (a) Cyclonic Storm “Pawan” (pronounced as Pavan) over southwest Arabian Sea,
(b) Expected Development of low pressure area over Maldives and neighbourhood
(c) Depression over eastcentral Arabian Sea weakened into a well marked low pressure area**

(a) Cyclonic Storm “Pawan” (pronounced as Pavan) over southwest Arabian Sea

Yesterday’s cyclonic storm “PAWAN” (pronounced as PAVAN) moved west-southwestwards during past 24 hours and lay centered at 0830 hrs IST of today, the 06th December, 2019 near latitude 8.1°N and longitude 53.0°E over Southwest Arabian Sea, about 510 km south-southwest of Socotra (Yemen) and 540 km southeast of Bosaso (Somalia).

It is very likely to maintain its intensity as a cyclonic storm during next 06 hours and weaken gradually thereafter. It is very likely to move west-southwestwards during next 24 hours and cross Somalia coast as a Depression close to Latitude 07°N (around Garacad, Mudug) during the morning hours of 07th December.

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
06.12.19/0830	8.1/53.0	65-75 gusting to 85	Cyclonic Storm
06.12.19/1130	7.8/52.4	60-70 gusting to 80	Cyclonic Storm
06.12.19/1730	7.5/51.6	55-65 gusting to 75	Deep Depression
06.12.19/2330	7.2/50.5	50-60 gusting to 70	Deep Depression
07.12.19/0530	6.9/49.6	45-55 gusting to 65	Depression
07.12.19/1730	6.2/47.6	40-50 gusting to 60	Depression
08.12.19/0530	5.5/45.5	25-35 gusting to 45	Well Marked Low

Warnings:

(i) Rainfall Warning:

- No significant rainfall likely over the mainland in association with the above system.

(ii) Wind warning:

• Southwest Arabian Sea and along & off Somalia Coast:

Gale wind, speed reaching 65-75 kmph gusting to 85 kmph, is prevailing around the system centre over southwest Arabian Sea which is very likely to continue during next 06 hours. It is very likely to decrease gradually becoming, squally wind speed reaching 50-60 kmph gusting to 70 kmph, from tonight for subsequent 06 hours and decrease gradually thereafter.

Contact: Cyclone Warning Division, Office of the Director General of Meteorology,
India Meteorological Department, Ministry of Earth Sciences.

Phone: (91) 11-24652484, FAX: (91) 11-24643128, 24623220, E-mail:cwdhq2008@gmail.com, Website: rsmcnwedelhi.imd.gov.in

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.

(iii) Sea conditions:

• **Southwest Arabian Sea and along & off Somalia Coast:**

Very Rough to High Sea Conditions are likely to prevail over Southwest Arabian Sea during next 06 hours. It is very likely to improve gradually becoming very rough during subsequent 12 hours and improve further thereafter.

(iv) Fishermen Warning:

• **Southwest Arabian Sea and along & off Somalia Coast:**

The fishermen are advised not to venture into southwest Arabian Sea and along & off Somalia coast during next 36 hours.

(b) Expected Development of low pressure area over Maldives and neighbourhood

Under the influence of an equatorial easterly wave, a low pressure area is likely to form over Maldives and neighbourhood during next 24 hours. It is likely to become more marked subsequently.

(c) Depression over eastcentral Arabian Sea

Yesterday's depression over eastcentral Arabian Sea moved west-northwestwards and weakened into a well marked low pressure area over the same region in the evening (1730 hrs IST) of 05th December 2019. It further weakened into a low pressure area in the early morning (0530 hrs IST) over the same region and became less marked in the morning (0830 hrs IST) of today, the 6th December, 2019.

The salient features of the climatology of cyclonic disturbances over the north Indian Ocean vis-à-vis the enhanced cyclonic activity during 2019 is placed at Annexure-1.

Both the systems over Arabian Sea are under continuous surveillance and concerned state governments are being informed regularly.

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

The salient features of the climatology of cyclonic disturbances over the north Indian Ocean vis-a-vis the enhanced cyclonic activity during 2019 (Updated)

1. So far 11 cyclonic disturbances (CDs) developed over the north Indian Ocean (NIO) including 4 over the Bay of Bengal (BoB) and 7 over the Arabian Sea (AS) during the year 2019 against the normal of 12 CDs per year over the NIO.
2. It includes 8 cyclones (3 over BoB and 5 over AS) and 3 depressions/deep depressions (1 over BoB and 2 over AS). Out of 5 cyclones over the AS, 4 were severe & above intensity cyclones and out of 3 cyclones over BoB, 2 were severe & above intensity cyclones.
3. The maximum number of 10 cyclones developed over north Indian Ocean during 1893, 1926, 1930 and 1976. The maximum number of 5 cyclones with 4 severe cyclones developed over Arabian Sea during 1902.
4. Details of these CDs are listed below:
 - i. Cyclonic Storm Pabuk over Andaman Sea during 04-08 January
 - ii. Extremely severe cyclonic storm FANI over the Bengal during 26 April-04 May
 - iii. Very severe cyclonic storm VAYU over the Arabian Sea during 10-17 June
 - iv. Deep depression over the Bay of Bengal during 06-12 August
 - v. Very severe cyclonic storm HIKAA over the Arabian Sea during 22-25 September
 - vi. Depression over the Arabian Sea during 29 September-01 October, (AS)
 - vii. Super Cyclonic Storm Kyarr over eastcentral Arabian Sea during 24 Oct.-02 Nov.
 - viii. Extremely Severe Cyclonic Storm Maha over the Arabian Sea during 30 Oct.-07 Nov.
 - ix. VSCS BULBUL over the Bay of Bengal during 05-11 November
 - x. Cyclonic Storm Pawan over the southwest Arabian Sea during 2nd December- till date
 - xi. Deep depression over eastcentral Arabian Sea during 3rd December, (AS)- till date
5. Thus, the Arabian Sea has been more active during 2019 with the formation of 7 CDs against the normal of 1.7 CDs per year. Similarly, 5 cyclones have developed over Arabian Sea against the normal of 1 per year. Considering the past data (1891-2018), the maximum of 6 CDs developed over the Arabian Sea in the year 1998 & 5 cyclones in 1902. Thus, the frequency of cyclones over the Arabian Sea during 2019 so far equals the previous record of 1902.
6. The year 2019 also witnessed development of **more intense cyclones over the Arabian Sea**, as out of 5 cyclones, there have been 1 cyclonic storm (Pawan), 2 very severe cyclonic storms (Vayu, Hikaa), 1 extremely severe cyclonic storm (Maha) and 1 super cyclonic storm (Kyarr).
7. The **activity over the Bay of Bengal** has been subdued this year as compared to Arabian Sea with the formation of only 3 cyclones (Pabuk, Fani, Bulbul) against the normal of 4 per year. Out of these, there were two severe cyclones (Fani & Bulbul) against the normal of 2 per year.
8. **Comparing the post and pre-monsoon cyclone seasons**, the post-monsoon cyclone season has been more active over the Arabian Sea and subdued over the Bay of Bengal with the formation of **4 CDs over the Arabian Sea** against normal of 1 per year and 1 over Bay of Bengal against normal of 3.5 per year during post monsoon season. It included **3 cyclones over the AS** against normal of 1 per year and 1 cyclone over the BOB against normal of 2 per year.
9. Thus, the frequency of CDs observed over the Arabian Sea during 2019 post monsoon season equals the past record of 1982 and 2011 when 4 CDs developed in the post monsoon season. It also equals the past record of 1902 post monsoon season with formation of 3 cyclones including 2 severe cyclones.

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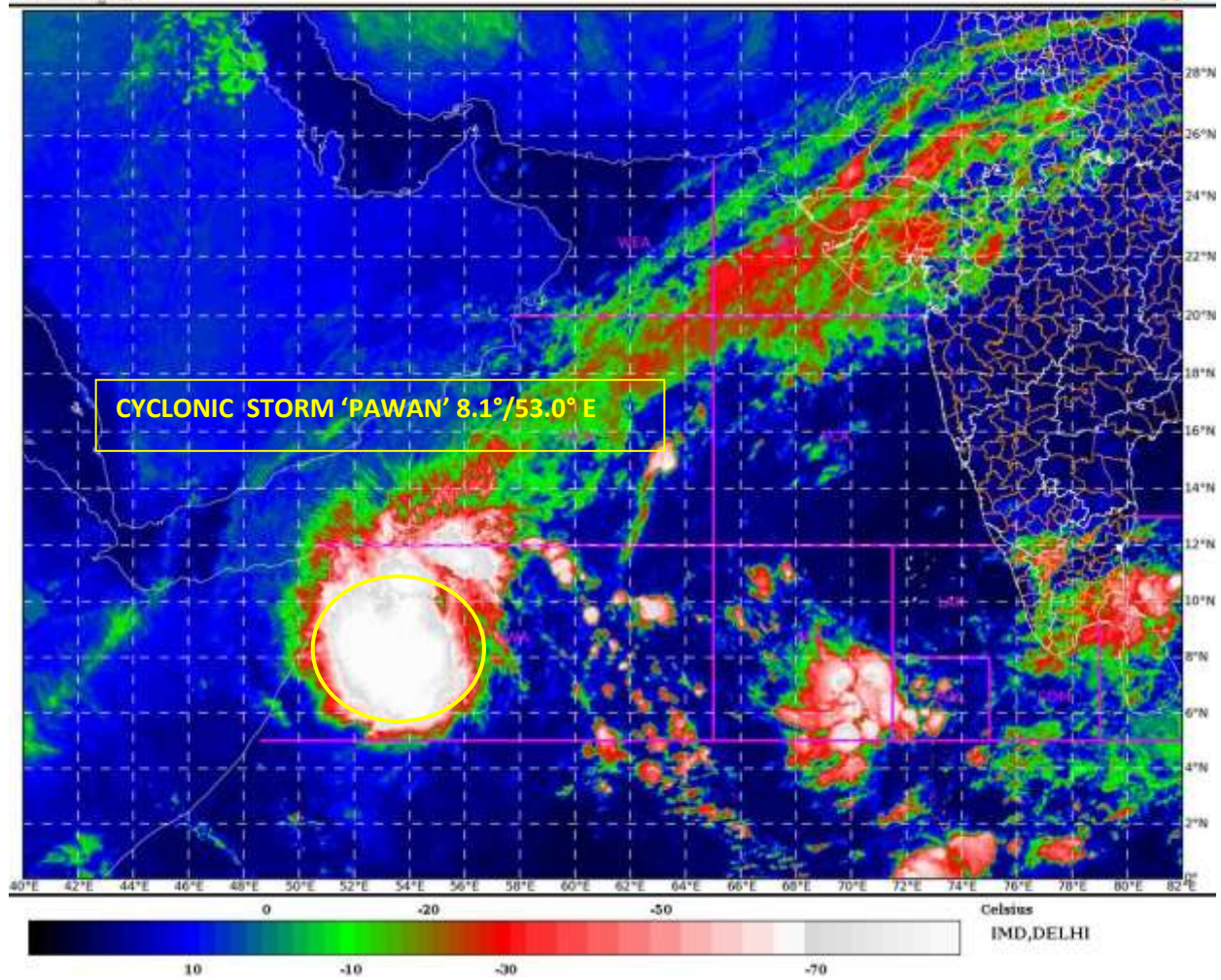
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SAT : INSAT-3D IMG
IMG_TIR1_TEMP 10.8 um
ARABIAN SEA

06-12-2019(0330 to 0357) GMT
06-12-2019(0900 to 0927) IST



SWA: Southwest Arabian Sea

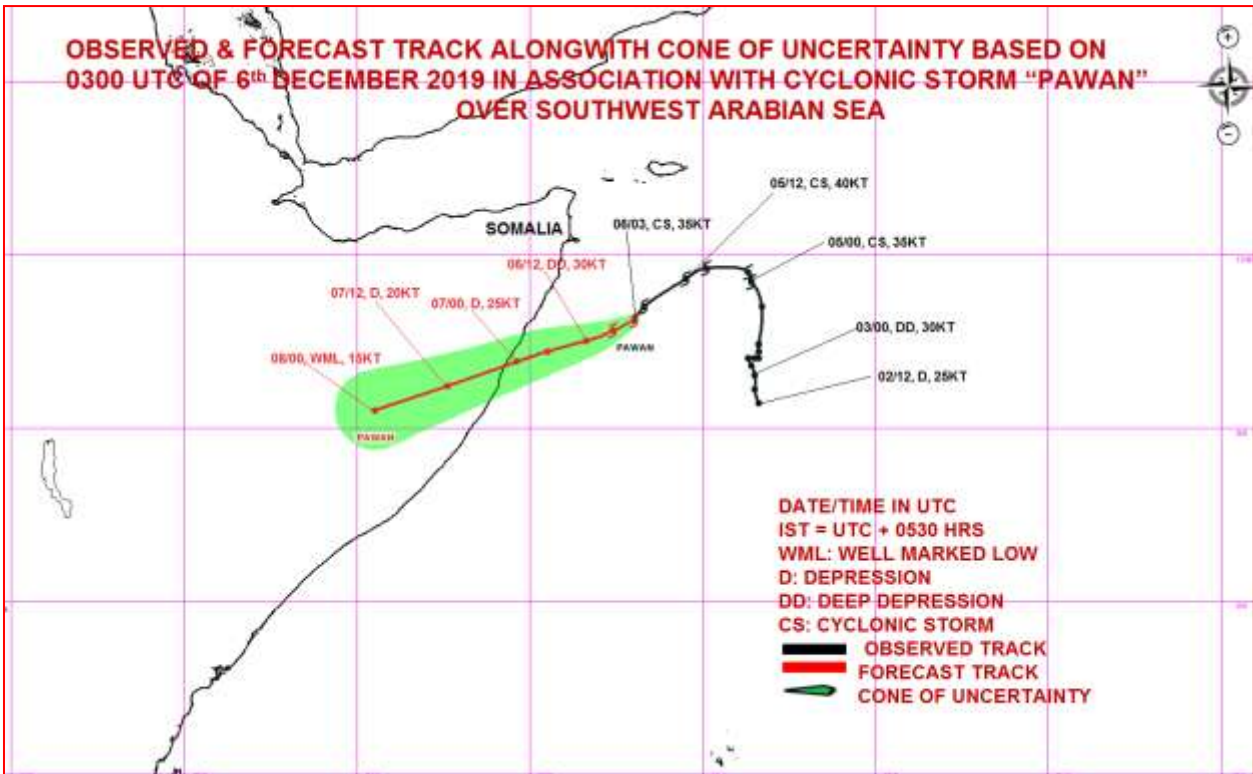
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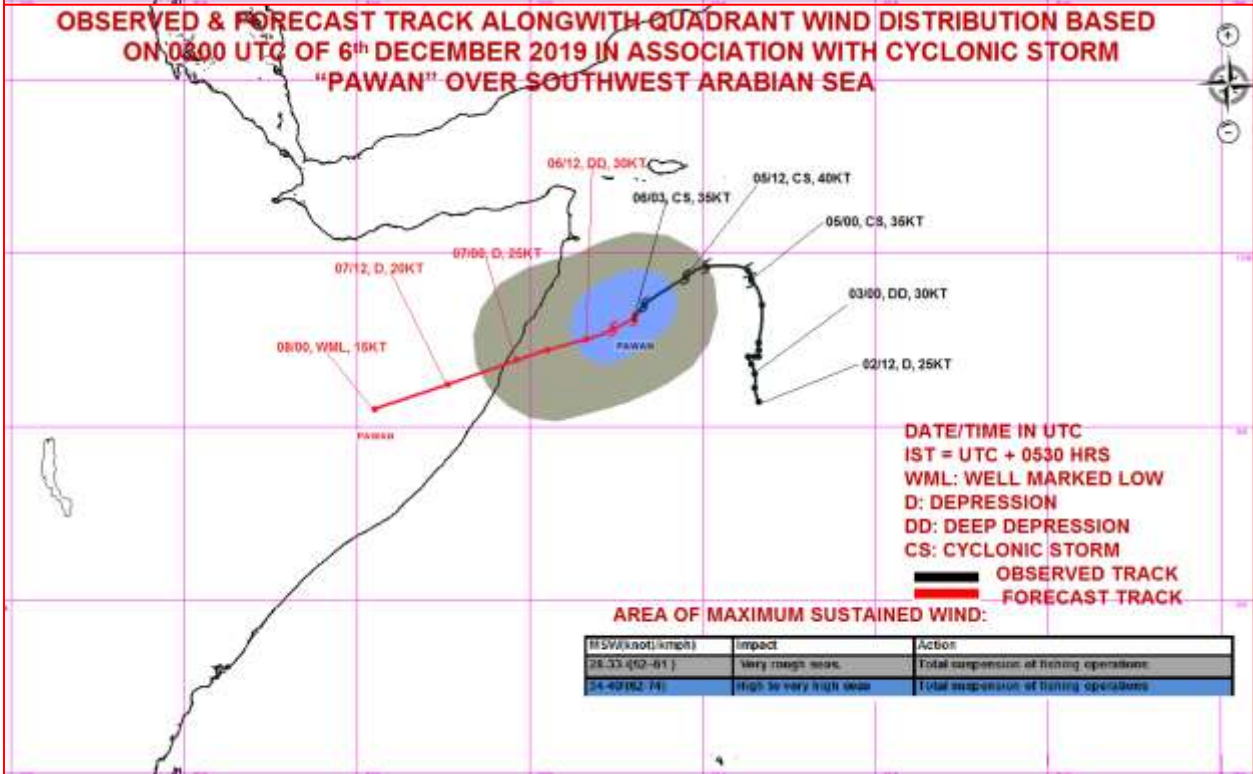
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OBSERVED & FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY BASED ON 0300 UTC OF 6th DECEMBER 2019 IN ASSOCIATION WITH CYCLONIC STORM "PAWAN" OVER SOUTHWEST ARABIAN SEA



OBSERVED & FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION BASED ON 0800 UTC OF 6th DECEMBER 2019 IN ASSOCIATION WITH CYCLONIC STORM "PAWAN" OVER SOUTHWEST ARABIAN SEA



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