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

BULLETIN NO. : 1 (ARB 04/2018)

TIME OF ISSUE: 1730 HOURS IST **DATED: 06.10.2018**

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)
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 (23385843)
DIRECTOR GENERAL, AIR (23421105, 23421219)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 24363261)
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. 04896-262184)
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: Depression over southeast & adjoining eastcentral Arabian Sea

Latest satellite imageries and surface observations indicate that a depression has formed over southeast & adjoining eastcentral Arabian Sea and lay centred at 1430 hrs IST of today, the 6th October 2018 near latitude 11.2°N and longitude 67.0°E, about 1500 km southeast of Salalah (Oman), 1400 km east-southeast of Socotra Islands (Yemen) and 730 km west-northwest of Minicoy (Lakshadweep Islands). It is very likely to intensify further into a Cyclonic Storm during next 24 hours. It is very likely to move northwestwards towards South Oman & adjoining Yemen Coasts during next 5 days.

Warnings:

(i) Heavy rainfall warning for Tamil Nadu & Puducherry, Kerala and Lakshadweep

Sub-Divisions	06 Oct. 2018 *	07 Oct. 2018 *	08 Oct. 2018*	09 Oct. 2018*
Kerala	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at many places with heavy falls at Isolated Places
Tamilnadu & Puducherry	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at many places with heavy falls at Isolated Places
Lakshadweep Islands	Rainfall at most places with heavy to very heavy falls at Isolated places	Rainfall at most places with heavy to very heavy falls at Isolated places	Rainfall at most places	Rainfall at a few places

Note: * Rainfall till 0830 IST of next day.
Legends: Orange- Be prepared; Yellow- be updated, 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

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.

(ii) Wind warning

- Squally wind speed reaching 40-50 kmph gusting to 60 kmph very likely over Lakshadweep and southeast Arabian Sea on 6th and 7th October.
- Squally wind speed reaching 40-50 kmph gusting to 60 kmph very likely over central Arabian Sea on 6th. The wind speed will gradually increase becoming 60-70 kmph gusting to 80 kmph on 8th October 2018. It will also increase thereafter.

(iii) Sea condition

- The sea condition would become rough to very rough from today the 6th October over southeast Arabian Sea and adjoining central Arabian Sea. It will become gradually high over central Arabian Sea around system centre from 7th evening/ 8th morning.

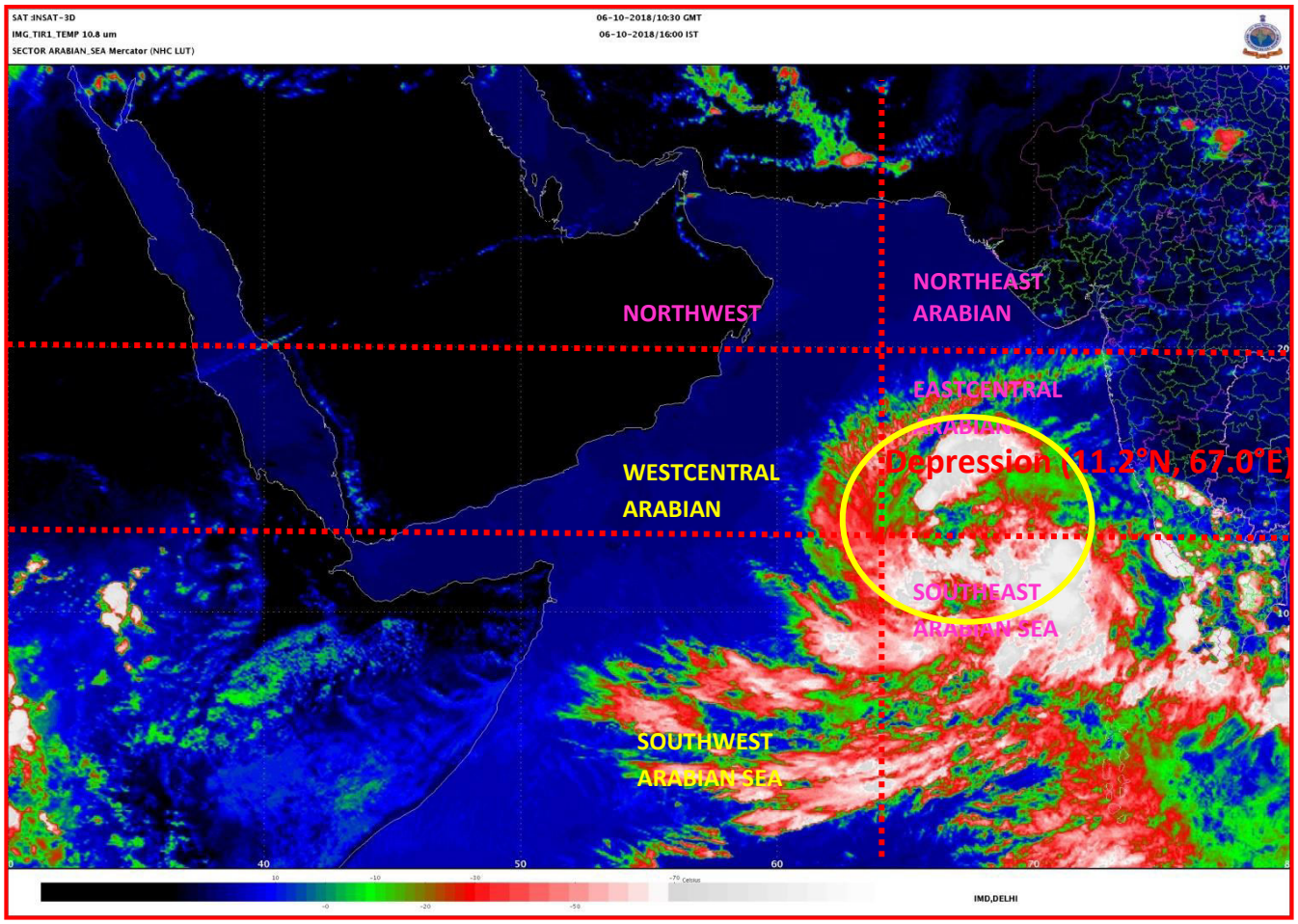
(iv) Fishermen Warning

- The fishermen are advised not to venture into deep sea areas of southeast and Lakshadweep area during 6th and 7th October and into east central Arabian Sea from 6th to 9th October and west-central Arabian Sea from 8-11 October.
- The fishermen out at deep Sea are advised to return to coast.

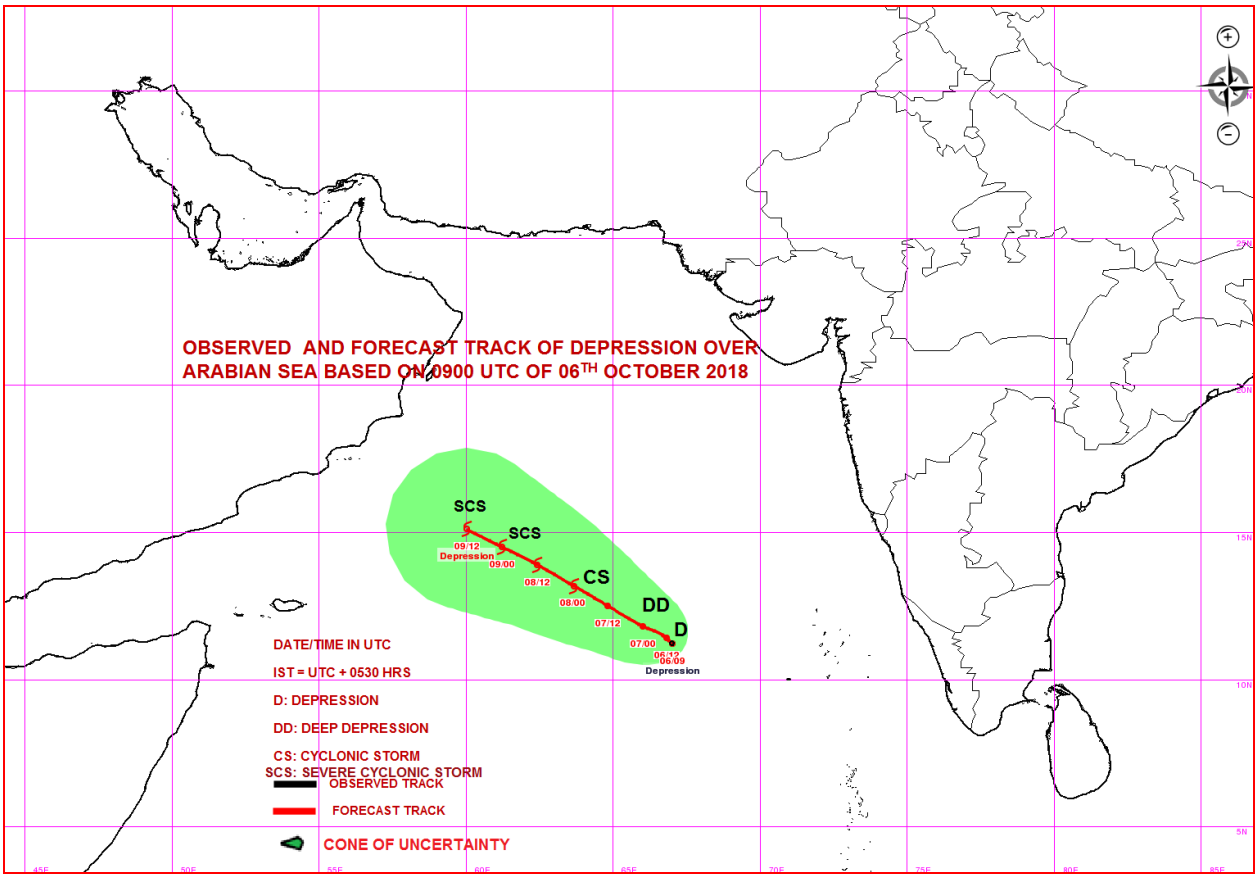
The next bulletin will be issued at 2030 hrs IST of 06th October, 2018.

(Naresh Kumar)
Scientist-E, RSMC, New Delhi

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



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.



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.

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

BULLETIN NO. : 2 (ARB 04/2018)

TIME OF ISSUE: 2000 HOURS IST **DATED: 06.10.2018**

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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H.Q. (INTEGRATED DEFENCE STAFF AND CDS) (FAX NO. 23005137/23005147)
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DIRECTOR GENERAL, AIR (23421105, 23421219)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
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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. 04896-262184)
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: Depression over southeast & adjoining east-central Arabian Sea

The depression over southeast & adjoining eastcentral Arabian Sea slightly moved northwestward and lay centred at 1730 hrs IST of today, the 6th October 2018 near latitude 11.3°N and longitude 66.9°E, about 1500 km southeast of Salalah (Oman), 1400 km east-southeast of Socotra Islands (Yemen) and 750 km west-northwest of Minicoy (Lakshadweep Islands). It is very likely to intensify further into a Cyclonic Storm during next 24 hours. It is very likely to move northwestwards towards South Oman & adjoining Yemen Coasts during next 5 days.

Warnings:

(i) Heavy rainfall warning for Tamil Nadu & Puducherry, Kerala and Lakshadweep in association with cyclonic storm and easterly wave.

Sub-Divisions	06 Oct. 2018 *	07 Oct. 2018 *	08 Oct. 2018*	09 Oct. 2018*
Kerala	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at many places with heavy falls at Isolated Places
Tamilnadu & Puducherry	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at many places with heavy falls at Isolated Places
Lakshadweep Islands	Rainfall at most places with heavy to very heavy falls at Isolated places	Rainfall at most places with heavy to very heavy falls at Isolated places	Rainfall at most places	Rainfall at a few places

Note: * Rainfall till 0830 IST of next day.
Legends: Orange- Be prepared; Yellow- be updated, Green: No warning

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.

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

- Squally wind speed reaching 40-50 kmph gusting to 60 kmph very likely over Lakshadweep and southeast Arabian Sea on 7th October.
- Squally wind speed reaching 50-60 kmph gusting to 70 kmph very likely over central Arabian Sea on 7th. The wind speed will gradually increase becoming 60-70 kmph gusting to 80 kmph on 8th October 2018. It will also increase thereafter.

(iii) Sea condition

- The sea condition would become rough to very rough from 7th October over southeast Arabian Sea and adjoining central Arabian Sea. It will become gradually high over central Arabian Sea around system centre from 7th evening/ 8th morning.

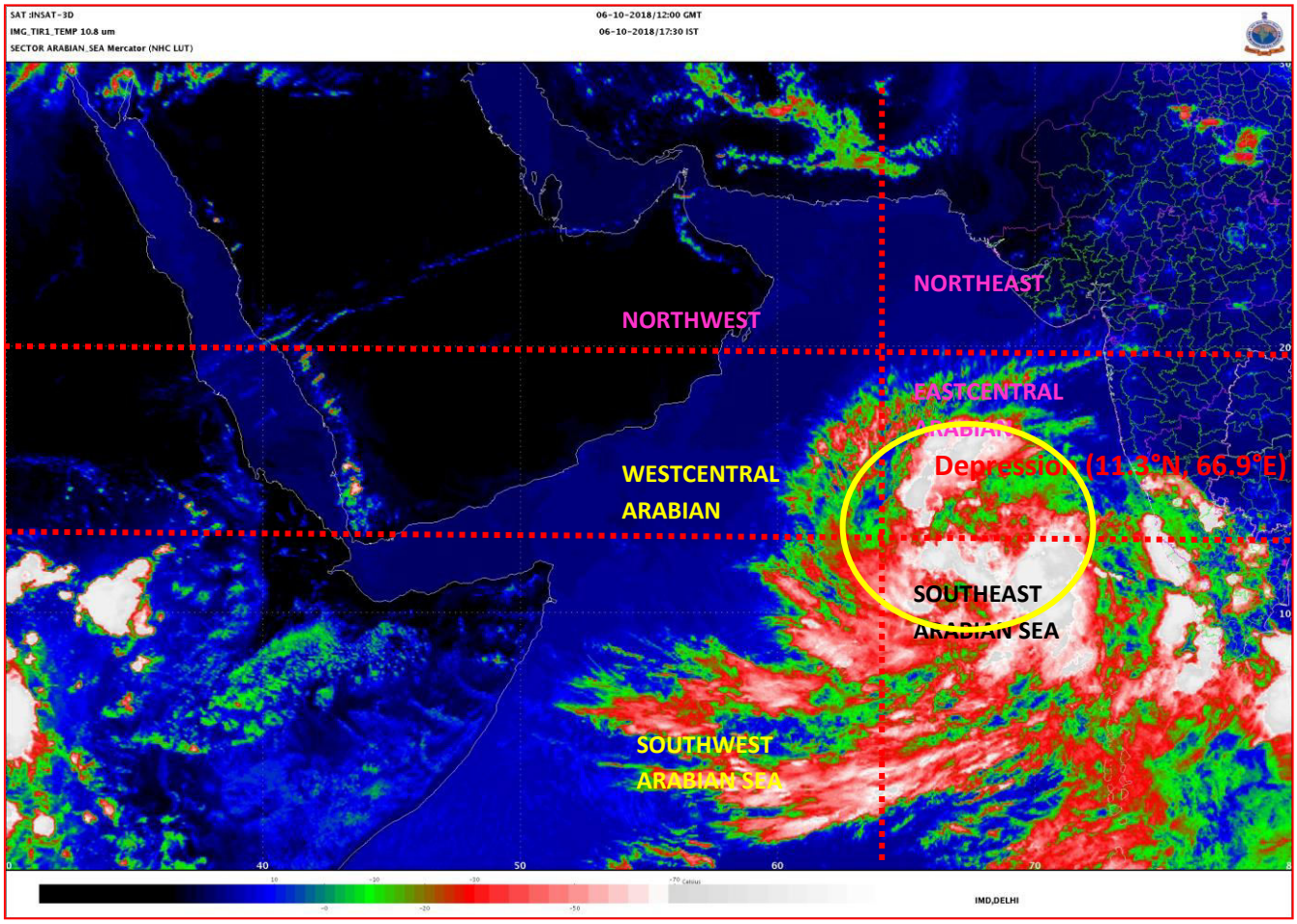
(iv) Fishermen Warning

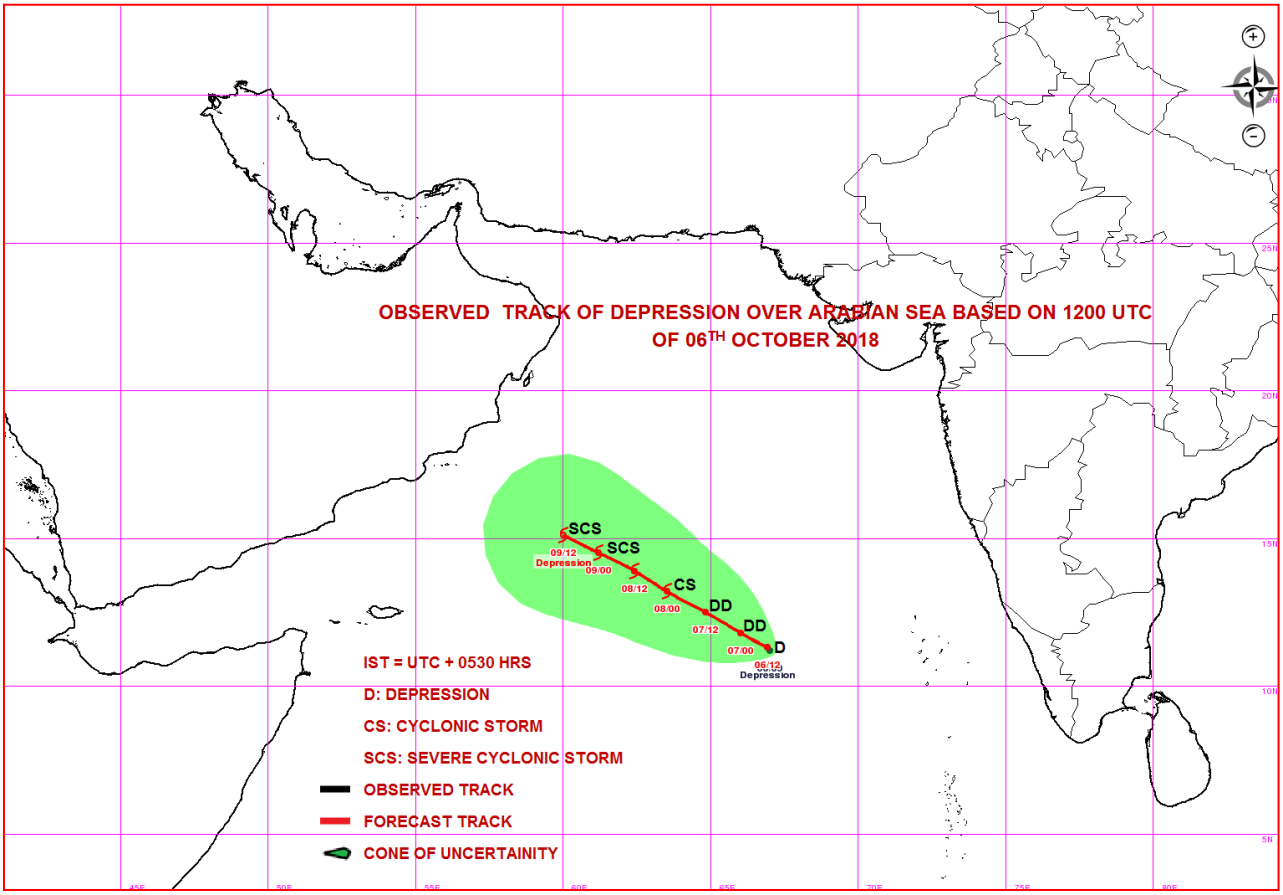
- The fishermen are advised not to venture into deep sea areas of southeast and Lakshadweep area during 7th October and into east central Arabian Sea from 7th to 9th October and west-central Arabian Sea from 8-11 October.
- The fishermen out at deep Sea are advised to return to coast.

The next bulletin will be issued at 0230 hrs IST of 07th October, 2018.

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

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





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.

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.

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

BULLETIN NO. : 3 (ARB 04/2018)

TIME OF ISSUE: 0100 HOURS IST **DATED: 07.10.2018**

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)
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 (23385843)
DIRECTOR GENERAL, AIR (23421105, 23421219)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 24363261)
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. 04896-262184)
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: Depression over southeast & adjoining east-central Arabian Sea

The depression over southeast & adjoining eastcentral Arabian Sea moved northwestward with a speed of about 09 kmph in last 06 hours and lay centred at 2330 hrs IST of yesterday, the 6th October 2018 near latitude 11.6°N and longitude 66.5°E, about 1460 km southeast of Salalah (Oman), 1370 km east-southeast of Socotra Islands (Yemen) and 810 km west-northwest of Minicoy (Lakshadweep Islands). It is very likely to intensify further into a Cyclonic Storm during next 24 hours. It is very likely to move northwestwards towards South Oman & adjoining Yemen Coasts during next 5 days.

Warnings:

(i) Heavy rainfall warning for Tamil Nadu & Puducherry, Kerala and Lakshadweep in association with cyclonic storm and easterly wave.

Sub-Divisions	07 Oct. 2018 *	08 Oct. 2018*	09 Oct. 2018*
Kerala	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at many places with heavy falls at Isolated Places
Tamilnadu & Puducherry	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at many places with heavy falls at Isolated Places
Lakshadweep Islands	Rainfall at most places with heavy to very heavy falls at Isolated places	Rainfall at most places	Rainfall at a few places

Note: * Rainfall till 0830 IST of next day.
Legends: Orange- Be prepared; Yellow- be updated, 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

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.

(ii) Wind warning

- Squally wind speed reaching 40-50 kmph gusting to 60 kmph very likely over Lakshadweep and southeast Arabian Sea on 7th October.
- Squally wind speed reaching 50-60 kmph gusting to 70 kmph very likely over central Arabian Sea on 7th. The wind speed will gradually increase becoming 60-70 kmph gusting to 80 kmph on 8th October 2018. It will also increase thereafter.

(iii) Sea condition

- The sea condition would become rough to very rough from 7th October over southeast Arabian Sea and adjoining central Arabian Sea. It will become gradually high over central Arabian Sea around system centre from 7th evening/ 8th morning.

(iv) Fishermen Warning

- The fishermen are advised not to venture into deep sea areas of southeast and Lakshadweep area during 7th October and into east central Arabian Sea from 7th to 9th October and west-central Arabian Sea from 8th to 11th October.
- The fishermen out at deep Sea are advised to return to coast.

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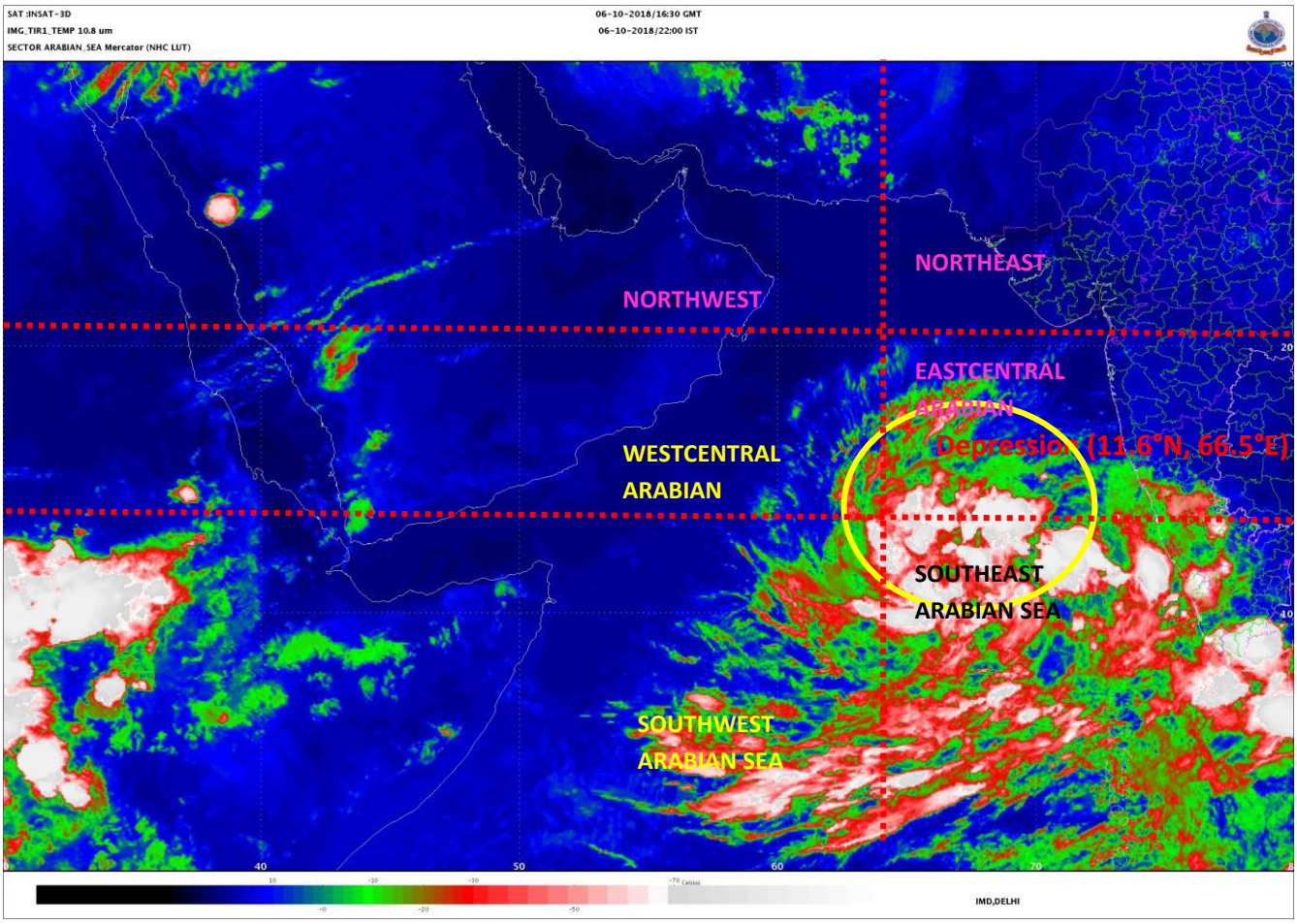
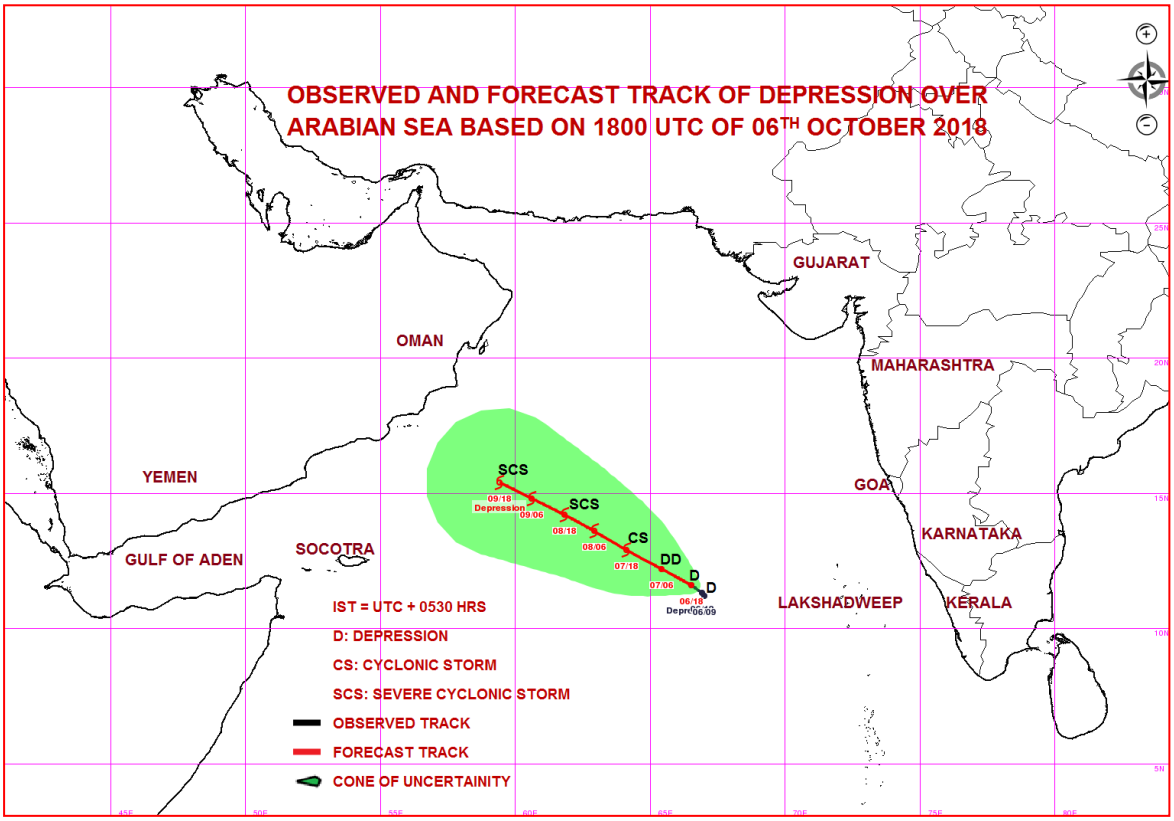
The next bulletin will be issued at 0830 hrs IST of today, 07th October, 2018.

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

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

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.





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.

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.

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

BULLETIN NO. : 4 (ARB 04/2018)

TIME OF ISSUE: 0745 HOURS IST **DATED: 07.10.2018**

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)
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CHIEF SECRETARY, GOA (FAX NO. 0832-2415201)
CHIEF SECRETARY, MAHARASHTRA (FAX NO. 022- 22028594)
CHIEF SECRETARY, GUJARAT (FAX NO. 079-23250305)

Sub: Depression over southeast & adjoining east-central Arabian Sea

The depression over southeast & adjoining eastcentral Arabian Sea moved west-northwestward with a speed of about 13 kmph in last 06 hours and lay centred at 0530 hrs IST of today, the 7th October 2018 near latitude 11.9°N and longitude 65.8°E, about 1380 km east-southeast of Salalah (Oman), 1290 km east-southeast of Socotra Islands (Yemen) and 900 km west-northwest of Minicoy (Lakshadweep Islands). It is very likely to intensify further into a Deep Depression during next 12 hours and into a Cyclonic Storm during subsequent 24 hours. It is very likely to move west-northwestwards towards South Oman & adjoining Yemen Coasts during next 5 days.

Warnings:

(i) Heavy rainfall warning for Tamil Nadu & Puducherry, Kerala and Lakshadweep in association with cyclonic storm and easterly wave.

Sub-Divisions	07 Oct. 2018 *	08 Oct. 2018*
Kerala	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at most places with heavy to very heavy falls at Isolated Places
Tamilnadu & Puducherry	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at most places with heavy to very heavy falls at Isolated Places
Lakshadweep Islands	Rainfall at most places with heavy to very heavy falls at Isolated places	Rainfall at most places

Legends: Orange- Be prepared; Yellow- be updated, 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

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.

(ii) Wind warning

- Squally wind speed reaching 40-50 kmph gusting to 60 kmph very likely over Lakshadweep and southeast Arabian Sea on 7th October.
- Squally wind speed reaching 40-50 kmph gusting to 60 kmph likely over adjoining east-central Arabian Sea. It would gradually increase becoming 50-60 kmph gusting to 70 kmph from 7th evening onwards and 60-70 kmph gusting to 80 kmph from 8th October 2018 morning. It will also increase thereafter.

(iii) Sea condition

- The sea condition would become rough to very rough on 7th October over southeast Arabian Sea and adjoining central Arabian Sea. It will become gradually high over central Arabian Sea around system centre from 8th.

(iv) Fishermen Warning

- The fishermen are advised not to venture into deep sea areas of southeast and Lakshadweep area during next 24 hours and into east central Arabian Sea from 7th to 9th October and west-central Arabian Sea from 8th to 11th October.

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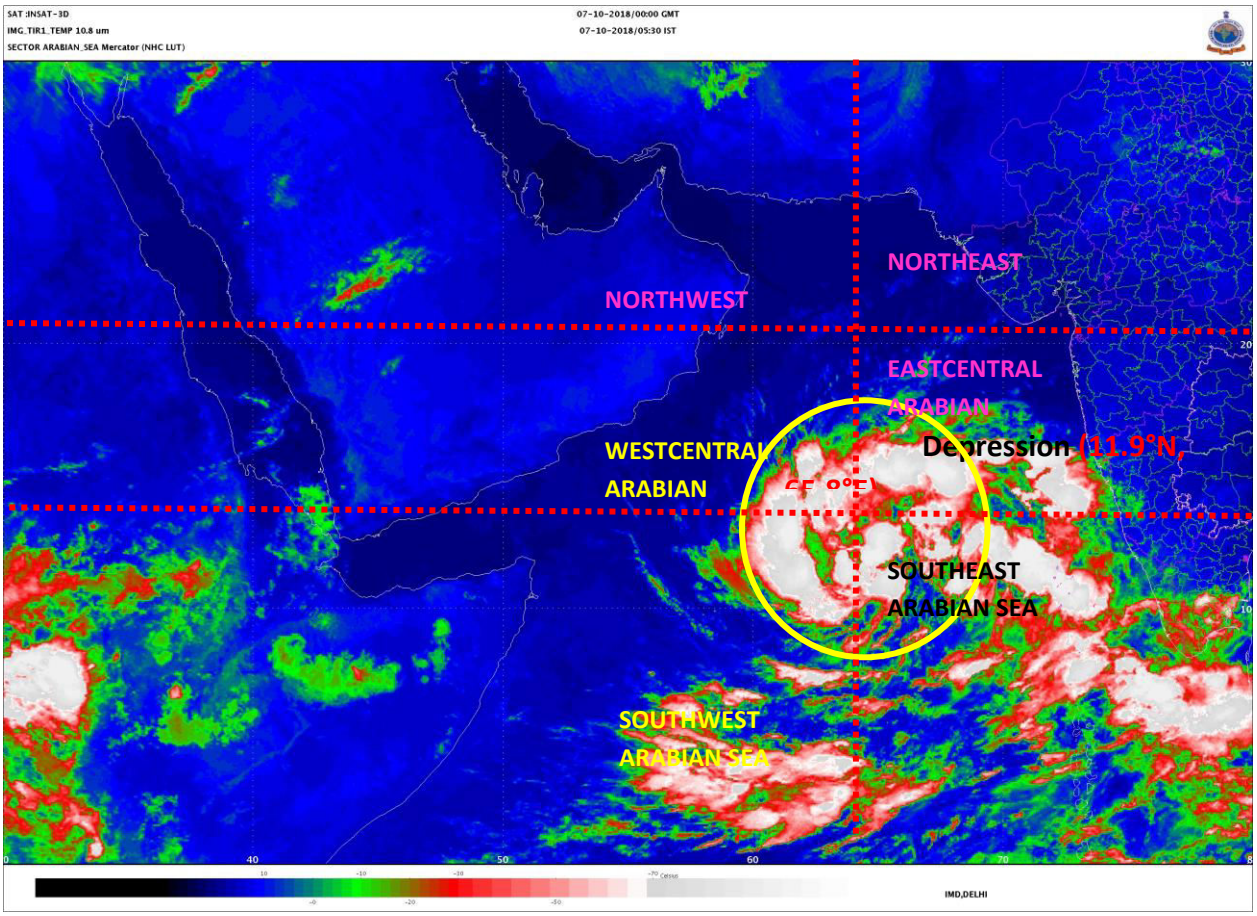
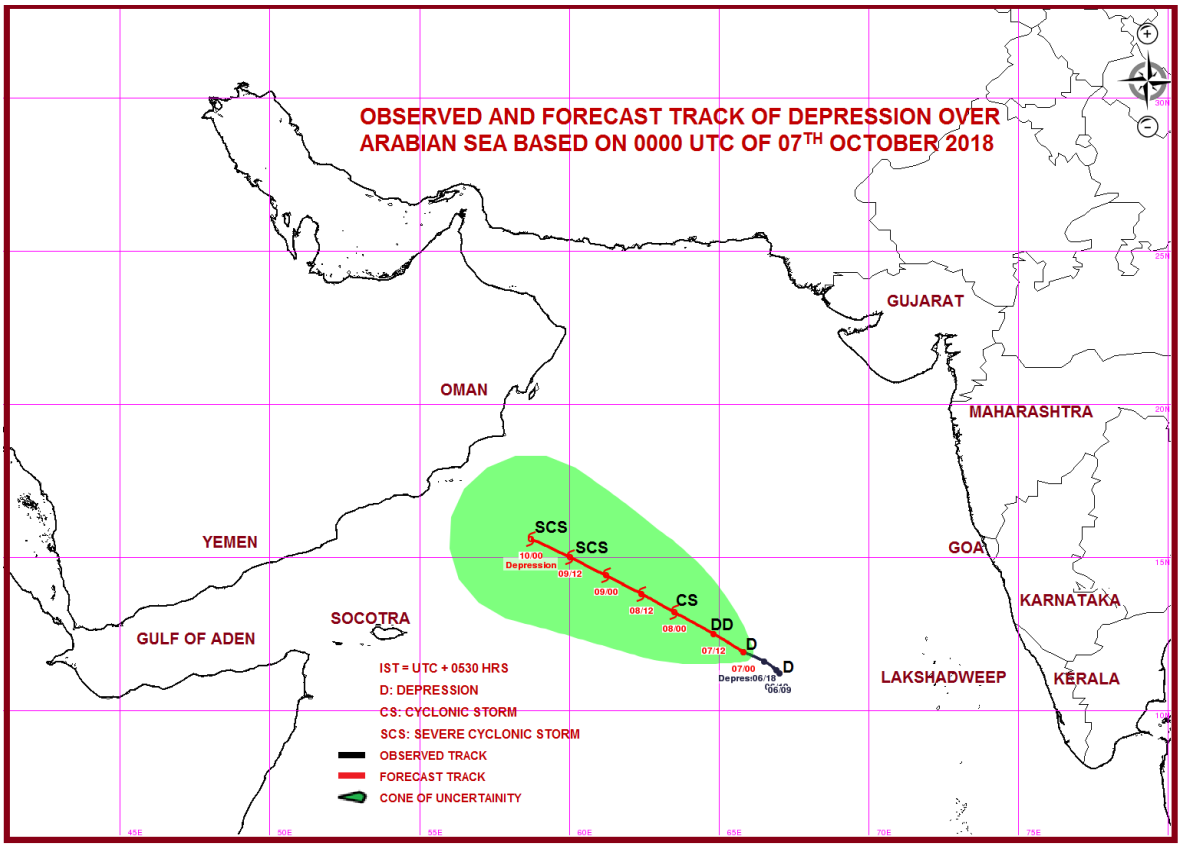
The next bulletin will be issued at 1130 hrs IST of today, 07th October, 2018.

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

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

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.





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.

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

BULLETIN NO. : 5 (ARB 04/2018)

TIME OF ISSUE: 1200 HOURS IST **DATED: 07.10.2018**

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)
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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)
CHIEF SECRETARY, ANDHRA PRADESH (FAX NO. 0866-2441029)
CHIEF SECRETARY, ODISHA (FAX NO. 0674 -2536660)
CHIEF SECRETARY, WEST BENGAL (FAX NO. 033 -22144328)
CHIEF SECRETARY, ANDAMAN & NICOBAR ISLANDS (FAX NO. 03192- 232656)

Sub: (a) Depression over southeast & adjoining east-central Arabian Sea (b) Low Pressure area over southeast Bay of Bengal & adjoining north Andaman Sea

(a) Depression over southeast & adjoining east-central Arabian Sea

The depression over southeast & adjoining eastcentral Arabian Sea moved further west-northwestward with a speed of about 12 kmph in last 06 hours and lay centred at 0830 hrs IST of today, the 7th October 2018 near latitude 12.0°N and longitude 65.6°E, about 1360 km east-southeast of Salalah (Oman), 1270 km east-southeast of Socotra Islands (Yemen) and 920 km west-northwest of Minicoy (Lakshadweep Islands). It is very likely to intensify further into a Deep Depression during next 12 hours and into a Cyclonic Storm during subsequent 24 hours. It is very likely to move west-northwestwards towards South Oman & adjoining Yemen Coasts during next 5 days.

Warnings:

(i) Heavy rainfall warning for Tamil Nadu & Puducherry, Kerala and Lakshadweep in association with cyclonic storm and easterly wave: Rainfall at most places with heavy at Isolated Places very likely to occur over Tamil Nadu & Puducherry, Kerala and Lakshadweep during next 24 hours.

(ii) Wind warning

- Squally wind speed reaching 40-50 kmph gusting to 60 kmph is very likely over Lakshadweep and southeast Arabian Sea during next 24 hours and over eastcentral Arabian Sea during next 48 hours.

- Squally wind speed reaching 40-50 kmph gusting to 60 kmph is very likely over westcentral & adjoining southwest Arabian Sea on 7th & 8th October 2018. It would gradually increase becoming 50-60 kmph gusting to 70 kmph from today, the 7th evening onwards and 60-70 kmph gusting to 80 kmph from 8th October 2018 morning over westcentral & southwest Arabian Sea . It will also increase thereafter over westcentral Arabian Sea during 8th to 12th October 2018.

(iii) Sea condition

- The sea condition would become rough to very rough on today, the 7th October over southeast Arabian Sea during next 24 hours and over southwest & adjoining westcentral Arabian Sea on 7th & 8th October 2018. It will become gradually high over westcentral & adjoining southwest Arabian Sea from 8th October 2018 onwards.

(iv) Fishermen Warning

- The fishermen are advised not to venture into deep sea areas of southeast & Lakshadweep area during next 24 hours and into southwest & eastcentral Arabian Sea from 7th & 8th October and westcentral Arabian Sea from 8th to 12th October.

(b) Low Pressure area over southeast Bay of Bengal & adjoining north Andaman Sea

Under the influence of yesterday's cyclonic circulation over north Andaman Sea & adjoining Southeast Bay of Bengal, a low pressure area has formed over southeast Bay of Bengal & adjoining north Andaman Sea. It is very likely to become well marked during next 12 hours and concentrate into a Depression during subsequent 24 hours. It is very likely to move northwestwards towards Odisha coast during next 72 hours.

Warnings:

(i) Wind warning

- Squally wind speed reaching 40-50 kmph gusting to 60 kmph very likely over north Andaman Sea, southeast & adjoining eastcentral Bay of Bengal and Andaman Islands during next 24 hours.
- Squally wind speed reaching 45-55 kmph gusting to 65 kmph likely over deep sea areas of central & adjoining north Bay of Bengal from 8th to 10th October 2018.

(ii) Sea condition

- The sea condition very likely to be rough to very rough over north Andaman Sea and southeast & adjoining eastcentral Bay of Bengal during next 24 hours; and over central & adjoining north Bay of Bengal during 8th to 10th October 2018.

(iii) Fishermen Warning

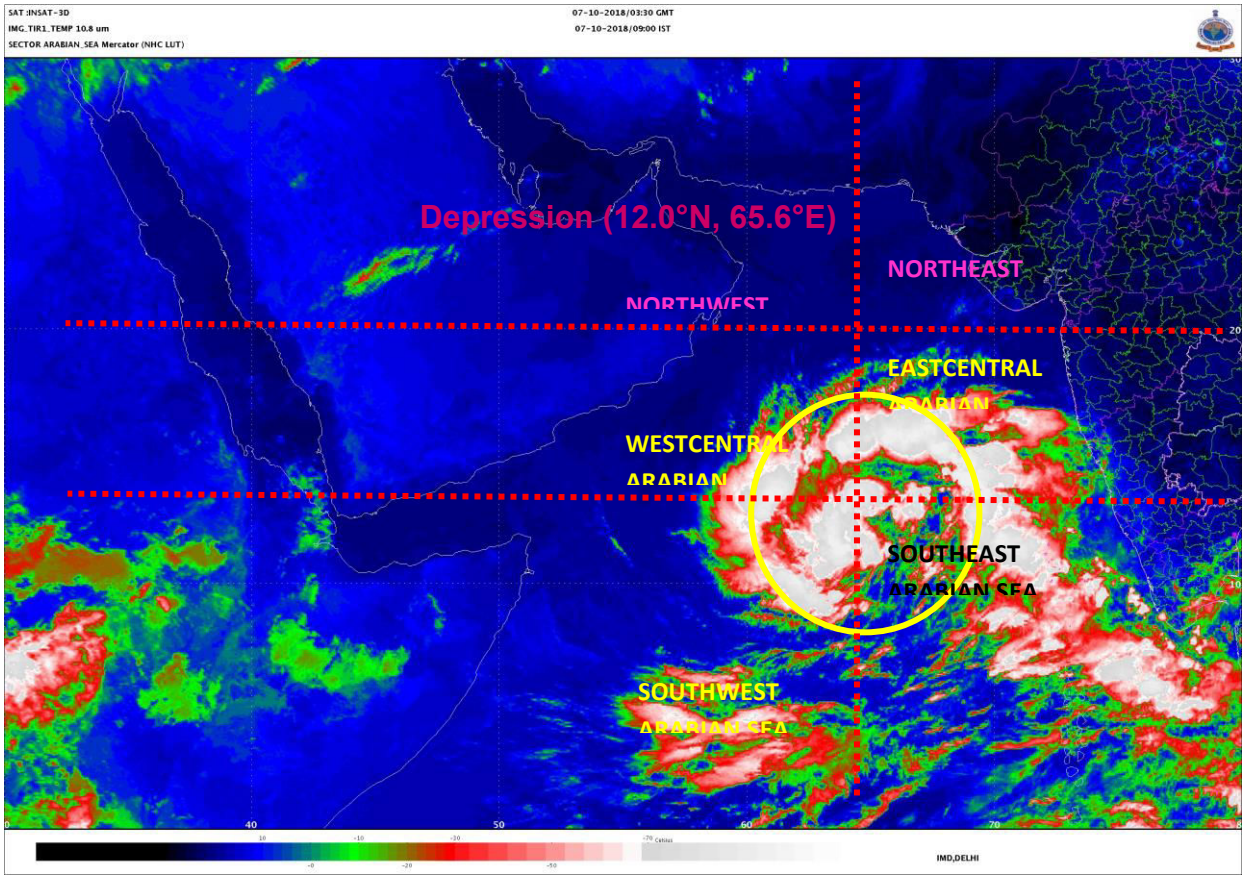
- The fishermen are advised not to venture into deep sea areas of north Andaman Sea and southeast & adjoining eastcentral Bay of Bengal during next 24 hours and over central & adjoining north Bay of Bengal during 8th to 10th October 2018.
- Those, who are out in deep sea areas are advised return to the coast.

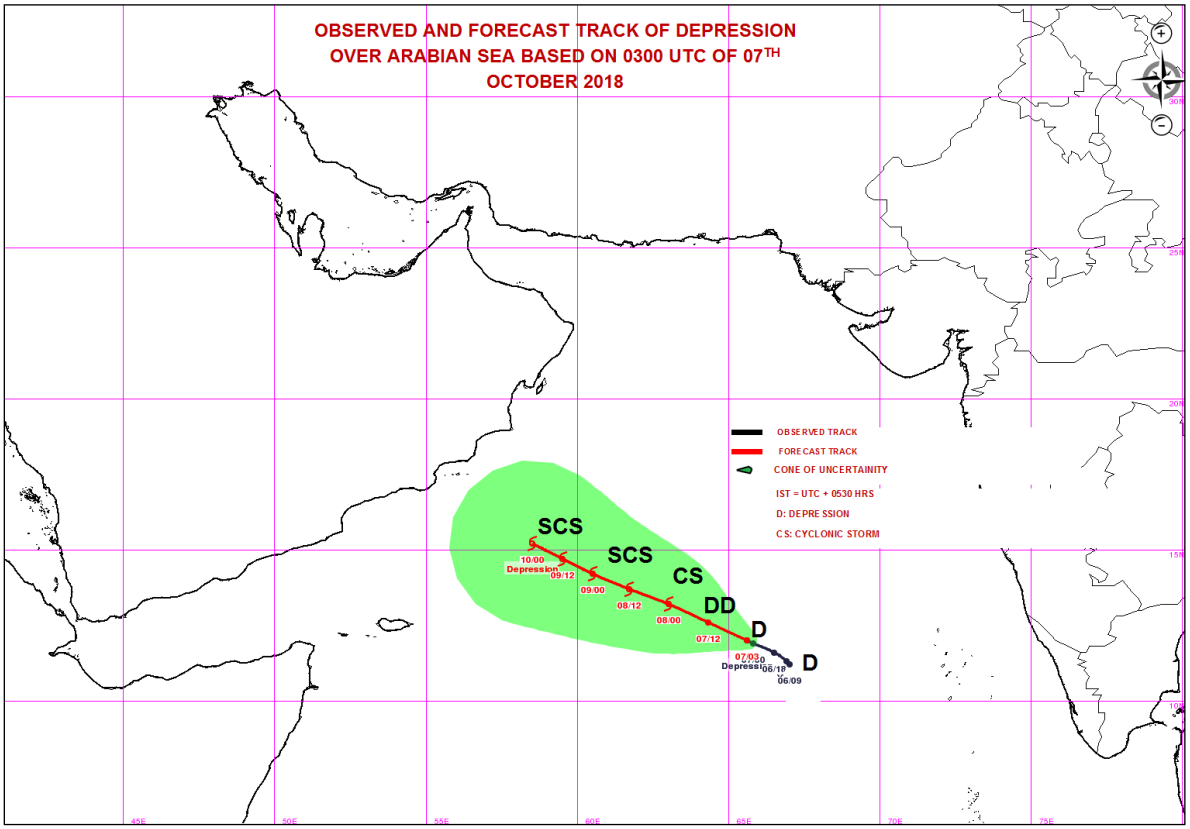
The next bulletin will be issued at 1430 hrs IST of today, 07th October, 2018.

(Naresh Kumar)
Scientist-E, RSMC, New Delhi

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

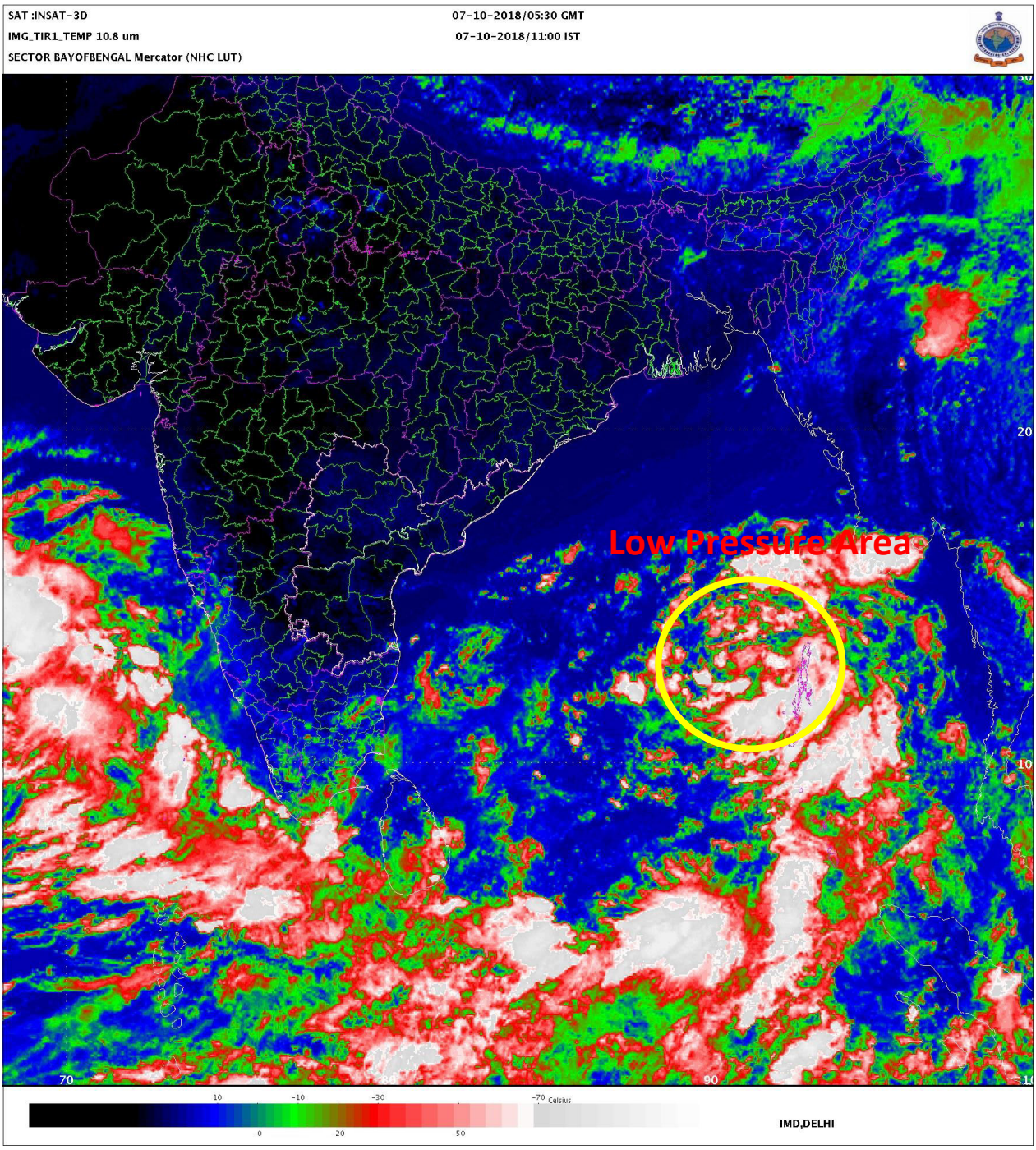
Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
Rainfall amount (mm): Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.





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.



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.

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

BULLETIN NO. : 6 (ARB 04/2018)

TIME OF ISSUE: 1400 HOURS IST **DATED: 07.10.2018**

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)
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 (23385843)
DIRECTOR GENERAL, AIR (23421105, 23421219)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 24363261)
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. 04896-262184)
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)
CHIEF SECRETARY, ANDHRA PRADESH (FAX NO. 0866-2441029)
CHIEF SECRETARY, ODISHA (FAX NO. 0674 -2536660)
CHIEF SECRETARY, WEST BENGAL (FAX NO. 033 -22144328)
CHIEF SECRETARY, ANDAMAN & NICOBAR ISLANDS (FAX NO. 03192- 232656)

Sub: (a) Depression over southeast & adjoining east-central Arabian Sea (b) Low Pressure area over southeast Bay of Bengal & adjoining north Andaman Sea

(a) Depression over southeast & adjoining east-central Arabian Sea

The depression over southeast & adjoining eastcentral Arabian Sea moved further west-northwestward with a speed of about 07 kmph in last 06 hours and lay centred at 1130 hrs IST of today, the 7th October 2018 near latitude 12.0°N and longitude 65.4°E, about 1340 km east-southeast of Salalah (Oman), 1250 km east-southeast of Socotra Islands (Yemen) and 940 km west-northwest of Minicoy (Lakshadweep Islands). It is very likely to intensify further into a Deep Depression during next 12 hours and into a Cyclonic Storm during subsequent 24 hours. It is very likely to move west-northwestwards towards South Oman & adjoining Yemen Coasts during next 5 days.

Warnings:

(i) Heavy rainfall warning for Tamil Nadu & Puducherry, Kerala and Lakshadweep in association with cyclonic storm and easterly wave: Rainfall at most places with heavy at Isolated Places very likely to occur over Tamil Nadu & Puducherry, Kerala and Lakshadweep during next 24 hours.

(ii) Wind warning

- Squally wind speed reaching 40-50 kmph gusting to 60 kmph is very likely over Lakshadweep and southeast Arabian Sea during next 24 hours and over eastcentral Arabian Sea during next 48 hours.

- Squally wind speed reaching 40-50 kmph gusting to 60 kmph is very likely over westcentral & adjoining southwest Arabian Sea on 7th & 8th October 2018. It would gradually increase becoming 50-60 kmph gusting to 70 kmph from today, the 7th evening onwards and 60-70 kmph gusting to 80 kmph from 8th October 2018 morning over westcentral & southwest Arabian Sea . It will also increase thereafter over westcentral Arabian Sea during 8th to 12th October 2018.

(iii) Sea condition

- The sea condition would become rough to very rough on today, the 7th October over southeast Arabian Sea during next 24 hours and over southwest & adjoining westcentral Arabian Sea on 7th & 8th October 2018. It will become gradually high over westcentral & adjoining southwest Arabian Sea from 8th October 2018 onwards.

(iv) Fishermen Warning

- The fishermen are advised not to venture into deep sea areas of southeast & Lakshadweep area during next 24 hours and into southwest & eastcentral Arabian Sea from 7th & 8th October and westcentral Arabian Sea from 8th to 12th October.

(b) Low Pressure area over southeast Bay of Bengal & adjoining north Andaman Sea

The low pressure area over southeast Bay of Bengal & adjoining north Andaman Sea persisted over the same area in past 06 hours. It is very likely to become well marked during next 12 hours and concentrate into a Depression during subsequent 24 hours. It is very likely to move northwestwards towards Odisha coast during next 72 hours.

<u>Warnings:</u>

(i) Wind warning

- Squally wind speed reaching 40-50 kmph gusting to 60 kmph very likely over north Andaman Sea, southeast & adjoining eastcentral Bay of Bengal and Andaman Islands during next 24 hours.
- Squally wind speed reaching 45-55 kmph gusting to 65 kmph likely over deep sea areas of central & adjoining north Bay of Bengal from 8th to 10th October 2018.

(ii) Sea condition

- The sea condition very likely to be rough to very rough over north Andaman Sea and southeast & adjoining eastcentral Bay of Bengal during next 24 hours; and over central & adjoining north Bay of Bengal during 8th to 10th October 2018.

(iii) Fishermen Warning

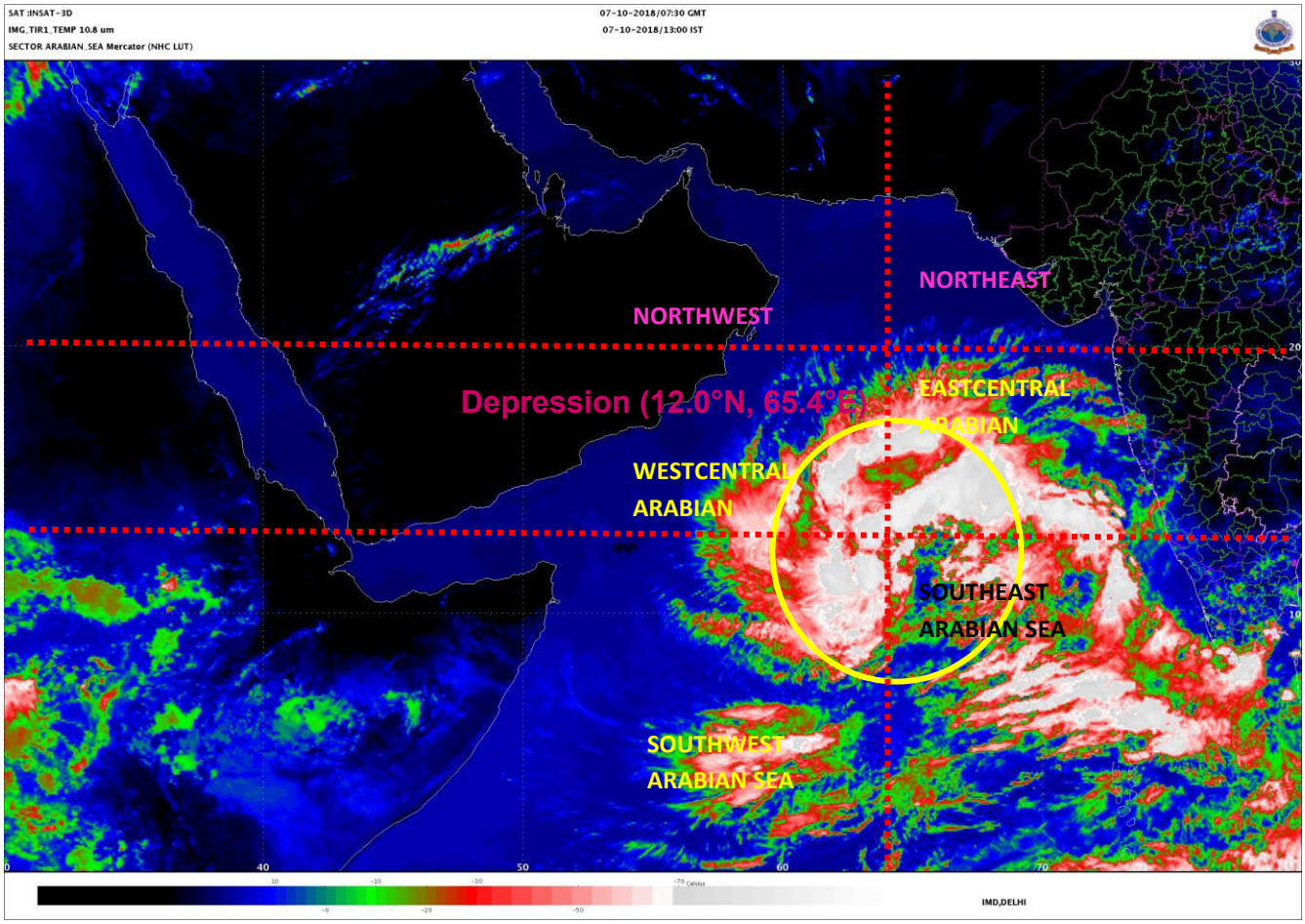
- The fishermen are advised not to venture into deep sea areas of north Andaman Sea and southeast & adjoining eastcentral Bay of Bengal during next 24 hours and over central & adjoining north Bay of Bengal during 8th to 10th October 2018.
- Those, who are out in deep sea areas are advised return to the coast.

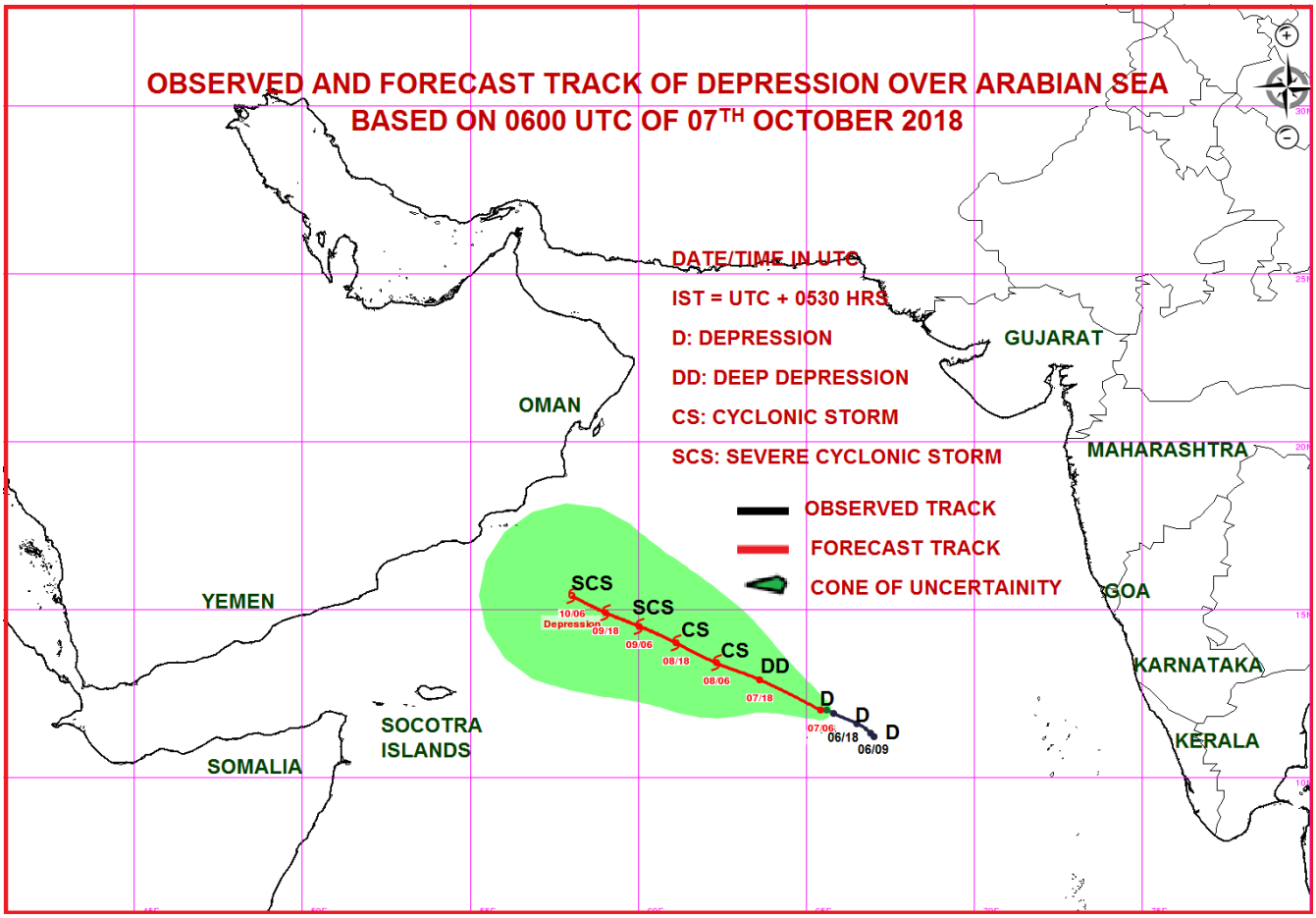
The next bulletin will be issued at 2030 hrs IST of today, 07th October, 2018.

(Naresh Kumar)
Scientist-E, RSMC, New Delhi

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

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.





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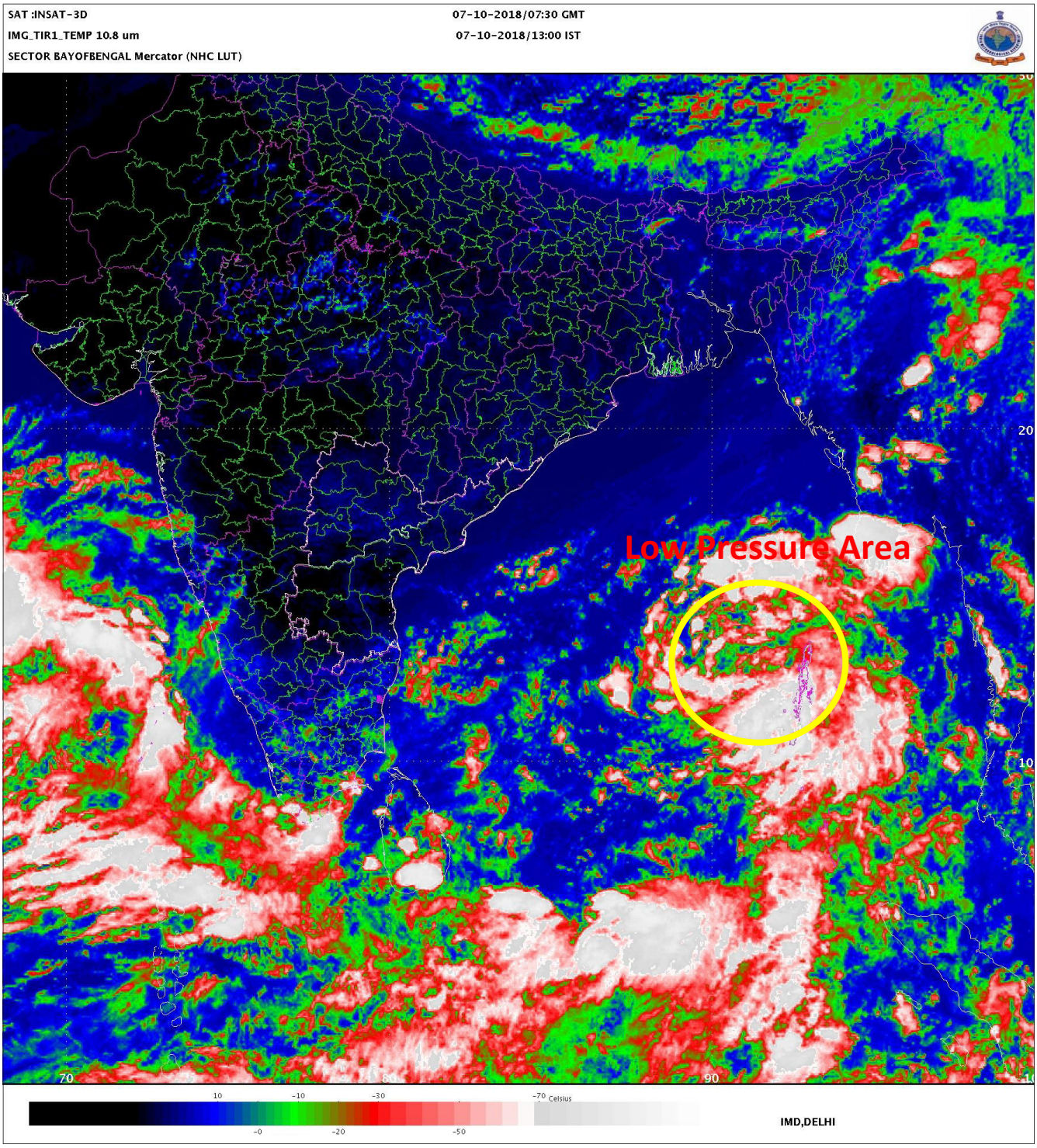

Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%

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

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

BULLETIN NO. : 07 (ARB 04/2018)

TIME OF ISSUE: 1700 HOURS IST **DATED: 07.10.2018**

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)
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 (23385843)
DIRECTOR GENERAL, AIR (23421105, 23421219)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 24363261)
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. 04896-262184)
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)
CHIEF SECRETARY, ANDHRA PRADESH (FAX NO. 0866-2441029)
CHIEF SECRETARY, ODISHA (FAX NO. 0674 -2536660)
CHIEF SECRETARY, WEST BENGAL (FAX NO. 033 -22144328)
CHIEF SECRETARY, ANDAMAN & NICOBAR ISLANDS (FAX NO. 03192- 232656)

Sub: (a) Depression intensified into Deep Depression over southeast & adjoining eastcentral Arabian Sea and (b) Well Low Pressure area over southeast Bay of Bengal & adjoining north Andaman Sea

(a) Deep Depression over southeast & adjoining eastcentral Arabian Sea

The depression over southeast & adjoining eastcentral Arabian Sea moved westwards with a speed of about 14 kmph in last 06 hours, intensified into a deep depression and lay centred at 1430 hrs IST of today, the 7th October 2018 near latitude 12.0°N and longitude 64.8°E, about 1280 km east-southeast of Salalah (Oman), 1180 km east-southeast of Socotra Islands (Yemen) and 980 km west-northwest of Minicoy (Lakshadweep Islands). It is very likely to intensify further into a Cyclonic Storm during next 24 hours and into a severe cyclonic storm during subsequent 24 hours. It is very likely to move west-northwestwards towards South Oman & adjoining Yemen Coasts during next 5 days.

Forecast track and intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
07.10.18/1430	12.0/64.8	50-60 gusting to 70	Deep Depression
07.10.18/1730	12.0/64.4	50-60 gusting to 70	Deep Depression
07.10.18/2330	12.1/63.7	55-65 gusting to 75	Deep Depression
08.10.18/0530	12.2/63.0	65-75 gusting to 85	Cyclonic Storm
08.10.18/1130	12.3/62.4	70-80 gusting to 90	Cyclonic Storm
08.10.18/1730	12.5/61.8	80-90 gusting to 100	Cyclonic Storm
09.10.18/0530	13.1/60.7	90-100 gusting to 115	Severe Cyclonic Storm
09.10.18/1730	13.7/59.7	100-110 gusting to 125	Severe Cyclonic Storm
10.10.18/0530	14.3/58.7	105-115 gusting to 130	Severe Cyclonic Storm
10.10.18/1730	14.8/58.0	110-120 gusting to 135	Severe Cyclonic Storm
11.10.18/0530	15.3/57.2	110-120 gusting to 135	Severe Cyclonic Storm

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 for Tamil Nadu & Puducherry, Kerala and Lakshadweep in association with cyclonic storm & easterly wave:** Rainfall at most places with heavy at Isolated Places very likely to occur over Tamil Nadu & Puducherry, Kerala and Lakshadweep during next 24 hours.

(ii) **Wind warning**

- Squally wind speed reaching 40-50 kmph gusting to 60 kmph is very likely over Lakshadweep & southeast Arabian Sea during next 24 hours and over eastcentral Arabian Sea during next 48 hours.
- Squally wind speed reaching 50-60 kmph gusting to 70 kmph is very likely over westcentral & adjoining southwest Arabian Sea on 7th & 8th October 2018. It would gradually increase becoming 60-70 kmph gusting to 80 kmph from 8th October 2018 morning over westcentral & southwest Arabian Sea. It will also increase thereafter over westcentral Arabian Sea during 8th to 12th October 2018.

(iii) **Sea condition**

- The sea condition would be rough to very rough during next 12 hours. It will become gradually high over westcentral & adjoining southwest Arabian Sea from 8th October 2018 onwards.

(iv) **Fishermen Warning**

- The fishermen are advised not to venture into deep sea areas of southeast & Lakshadweep area during next 12 hours and into southwest & eastcentral Arabian Sea during next 24 hours and into westcentral Arabian Sea from 8th to 12th October.

(b) Well Low Pressure area over southeast Bay of Bengal & adjoining north Andaman Sea

The low pressure area over southeast Bay of Bengal & adjoining north Andaman Sea has become a well marked low pressure area over the same region. It is very likely to concentrate into a Depression during next 24 hours. It is very likely to move northwestwards towards Odisha coast during next 72 hours.

Warnings:

(i) **Wind warning**

- Squally wind speed reaching 40-50 kmph gusting to 60 kmph very likely over north Andaman Sea, southeast & adjoining eastcentral Bay of Bengal and Andaman Islands during next 24 hours.
- Squally wind speed reaching 45-55 kmph gusting to 65 kmph likely over deep sea areas of central & adjoining north Bay of Bengal from 8th to 10th October 2018.

(ii) **Sea condition**

- The sea condition very likely to be rough to very rough over north Andaman Sea and southeast & adjoining eastcentral Bay of Bengal during next 24 hours; and over central & adjoining north Bay of Bengal during 8th to 10th October 2018.

(iii) **Fishermen Warning**

- The fishermen are advised not to venture into deep sea areas of north Andaman Sea and southeast & adjoining eastcentral Bay of Bengal during next 24 hours and over central & adjoining north Bay of Bengal during 8th to 10th October 2018.
- Those, who are out in deep sea areas are advised return to the coast.

The next bulletin will be issued at 2030 hrs IST of today, 07th October, 2018.

(Naresh Kumar)
Scientist-E, RSMC, New Delhi

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

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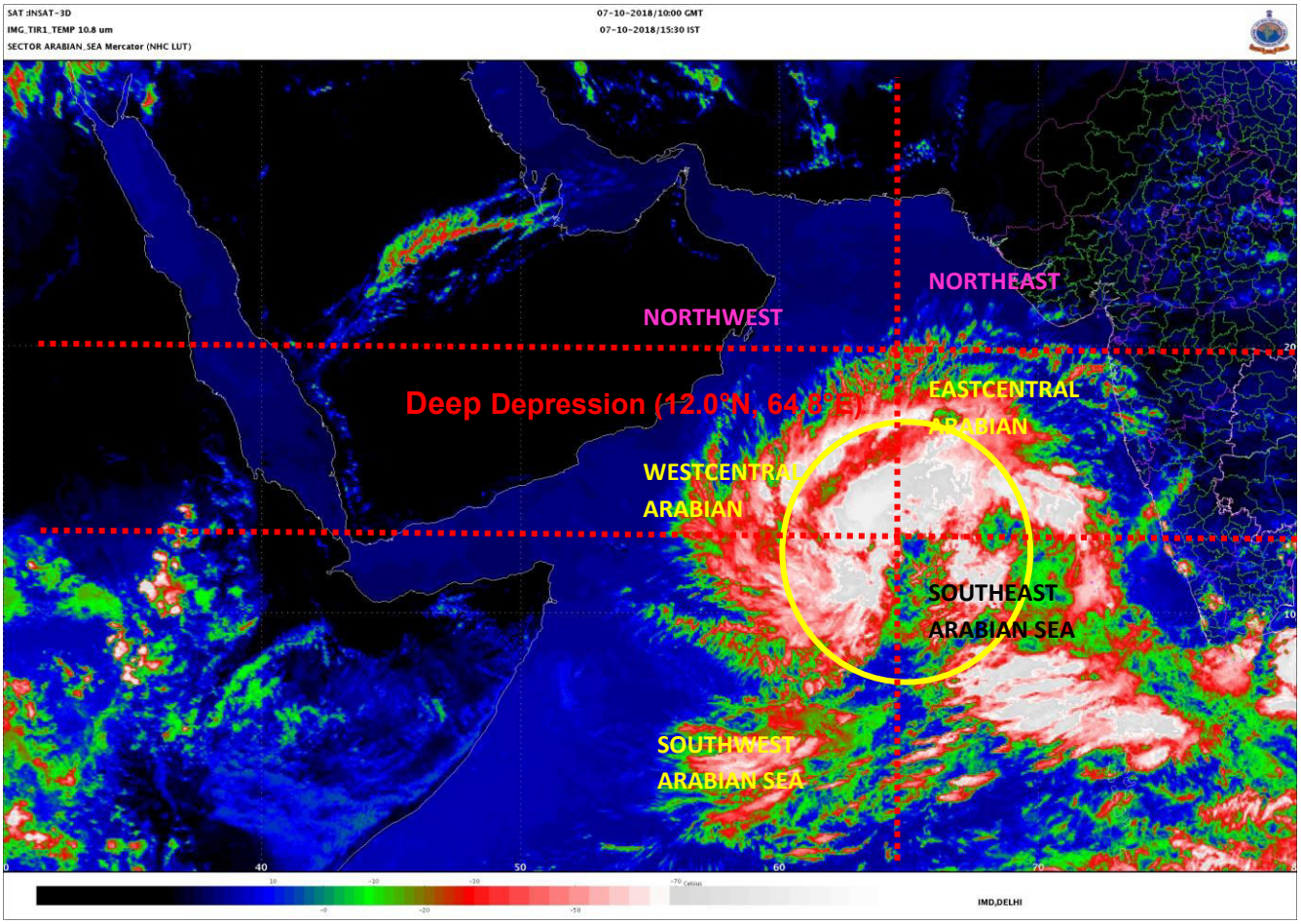

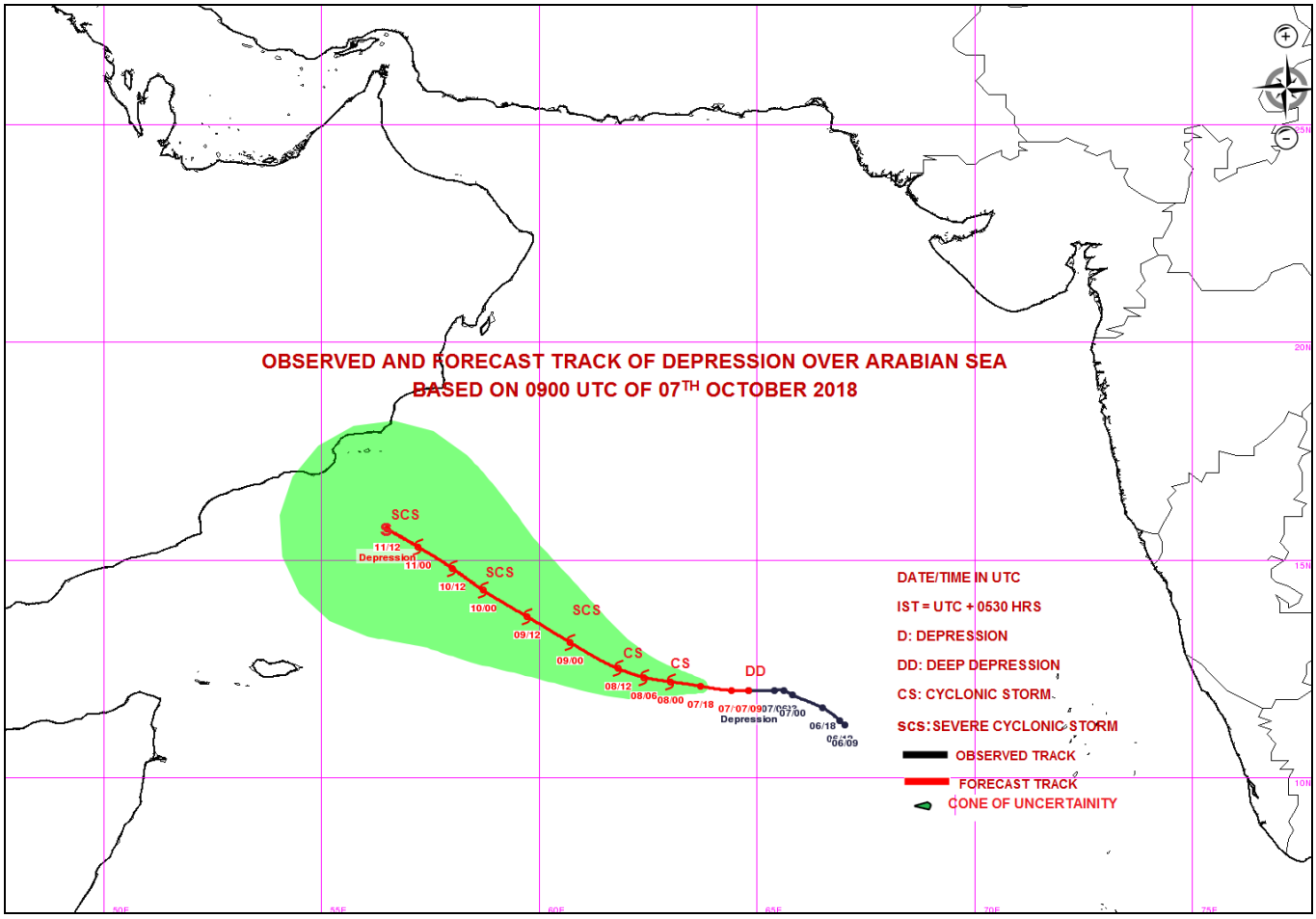

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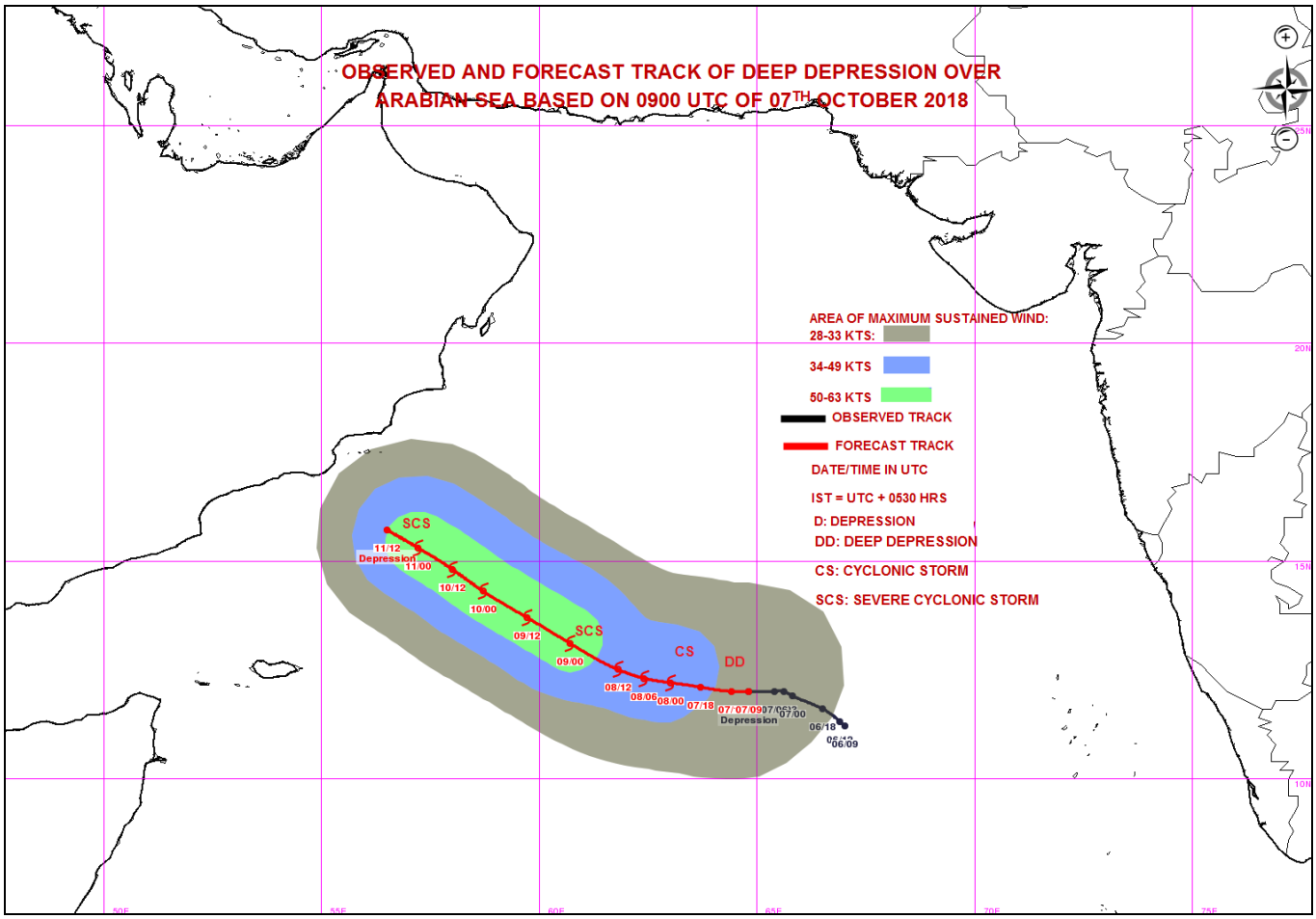
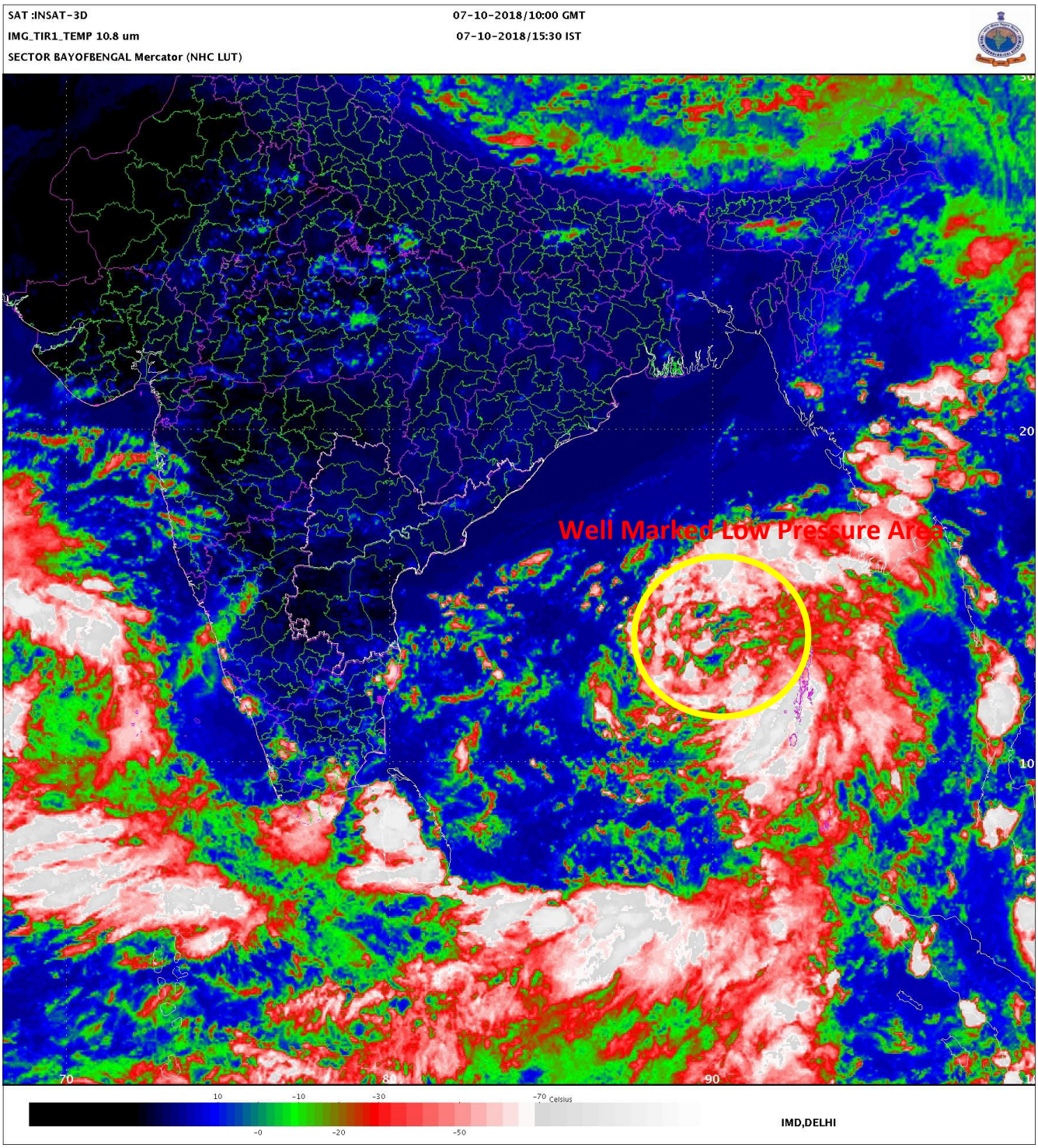
Rainfall amount (mm): Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.



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.



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.

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

BULLETIN NO. : 08 (ARB 04/2018)

TIME OF ISSUE: 2000 HOURS IST **DATED: 07.10.2018**

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)
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 (23385843)
DIRECTOR GENERAL, AIR (23421105, 23421219)
PIB MOES (FAX NO. 23389042)
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D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 24363261)
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. 04896-262184)
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)
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CHIEF SECRETARY, ANDHRA PRADESH (FAX NO. 0866-2441029)
CHIEF SECRETARY, ODISHA (FAX NO. 0674 -2536660)
CHIEF SECRETARY, WEST BENGAL (FAX NO. 033 -22144328)
CHIEF SECRETARY, ANDAMAN & NICOBAR ISLANDS (FAX NO. 03192- 232656)

Sub: (a) Deep Depression over eastcentral & adjoining southeast Arabian Sea and (b) Well Marked Low Pressure area over southeast Bay of Bengal & adjoining north Andaman Sea

(a) Deep Depression over eastcentral & adjoining southeast Arabian Sea:

The deep depression over southeast & adjoining eastcentral Arabian Sea moved west-northwestwards with a speed of about 20 kmph in last 06 hours and lay centred at 1730 hrs IST of today, the 7th October 2018 over eastcentral & adjoining southeast Arabian Sea, near latitude 12.1°N and longitude 64.3°E, about 1230 km east-southeast of Salalah (Oman), 1130 km east-southeast of Socotra Islands (Yemen) and 1050 km west-northwest of Minicoy (Lakshadweep Islands). It is very likely to intensify into a Cyclonic Storm during next 24 hours and into a severe cyclonic storm during subsequent 24 hours. It is very likely to move west-northwestwards towards South Oman & adjoining Yemen Coasts during next 5 days.

Forecast track and intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
07.10.18/1730	12.1/64.3	50-60 gusting to 70	Deep Depression
07.10.18/2330	12.2/63.7	55-65 gusting to 75	Deep Depression
08.10.18/0530	12.3/63.0	65-75 gusting to 85	Cyclonic Storm
08.10.18/1130	12.4/62.4	70-80 gusting to 90	Cyclonic Storm
08.10.18/1730	12.6/61.8	80-90 gusting to 100	Cyclonic Storm
09.10.18/0530	13.1/60.7	90-100 gusting to 115	Severe Cyclonic Storm
09.10.18/1730	13.7/59.7	100-110 gusting to 125	Severe Cyclonic Storm
10.10.18/0530	14.3/58.7	105-115 gusting to 130	Severe Cyclonic Storm
10.10.18/1730	14.8/58.0	110-120 gusting to 135	Severe Cyclonic Storm
11.10.18/0530	15.3/57.2	110-120 gusting to 135	Severe Cyclonic Storm
11.10.18/1730	15.7/56.5	110-120 gusting to 135	Severe Cyclonic Storm

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

- Rainfall at most places with heavy falls at Isolated Places very likely to occur over Lakshadweep during next 24 hours.
- As the system is moving away from the Indian Coast, it is not likely to cause any heavy rainfall over Kerala and Tamil Nadu & Puducherry. However, under the influence of easterly waves and embedded cyclonic circulation over Comorin area & neighbourhood at lower levels, rainfall at most places with heavy falls at isolated places very likely to occur over Tamil Nadu & Puducherry and Kerala during next 48 hours.

(ii) Wind warning

- Squally wind speed reaching 40-50 kmph gusting to 60 kmph is very likely over Lakshadweep & southeast Arabian Sea during next 24 hours and over eastcentral Arabian Sea during next 48 hours.
- Squally wind speed reaching 50-60 kmph gusting to 70 kmph is very likely over westcentral & adjoining southwest Arabian Sea on 7th & 8th October 2018. It is very likely to increase gradually becoming 60-70 kmph gusting to 80 kmph from 8th October 2018 morning over westcentral & southwest Arabian Sea. It will also increase thereafter over westcentral Arabian Sea during 8th to 12th October 2018.

(iii) Sea condition

- The sea condition is very likely to be rough to very rough during next 12 hours. It is very likely to become gradually high over westcentral & adjoining southwest Arabian Sea from 8th October 2018 onwards.

(iv) Fishermen Warning

- The fishermen are advised not to venture into deep sea areas of southeast & Lakshadweep area during next 12 hours, eastcentral Arabian Sea during next 24 hours, southwest Arabian Sea during next 48 hours and into westcentral Arabian Sea from 8th to 12th October.

(b) Well Marked Low Pressure area over southeast Bay of Bengal & adjoining north Andaman Sea:

The well marked low pressure area over southeast Bay of Bengal & adjoining north Andaman Sea persisted over the same region. It is very likely to concentrate into a Depression during next 24 hours and very likely to move northwestwards towards Odisha coast during next 72 hours.

Warnings:

(i) Wind warning

- Squally wind speed reaching 40-50 kmph gusting to 60 kmph very likely over north Andaman Sea, southeast & adjoining eastcentral Bay of Bengal and Andaman Islands during next 24 hours.
- Squally wind speed reaching 45-55 kmph gusting to 65 kmph likely over deep sea areas of central & adjoining north Bay of Bengal from 8th to 10th October 2018.

(ii) Sea condition

- The sea condition very likely to be rough to very rough over north Andaman Sea and southeast & adjoining eastcentral Bay of Bengal during next 24 hours; and over central & adjoining north Bay of Bengal during 8th to 10th October 2018.

(iii) Fishermen Warning

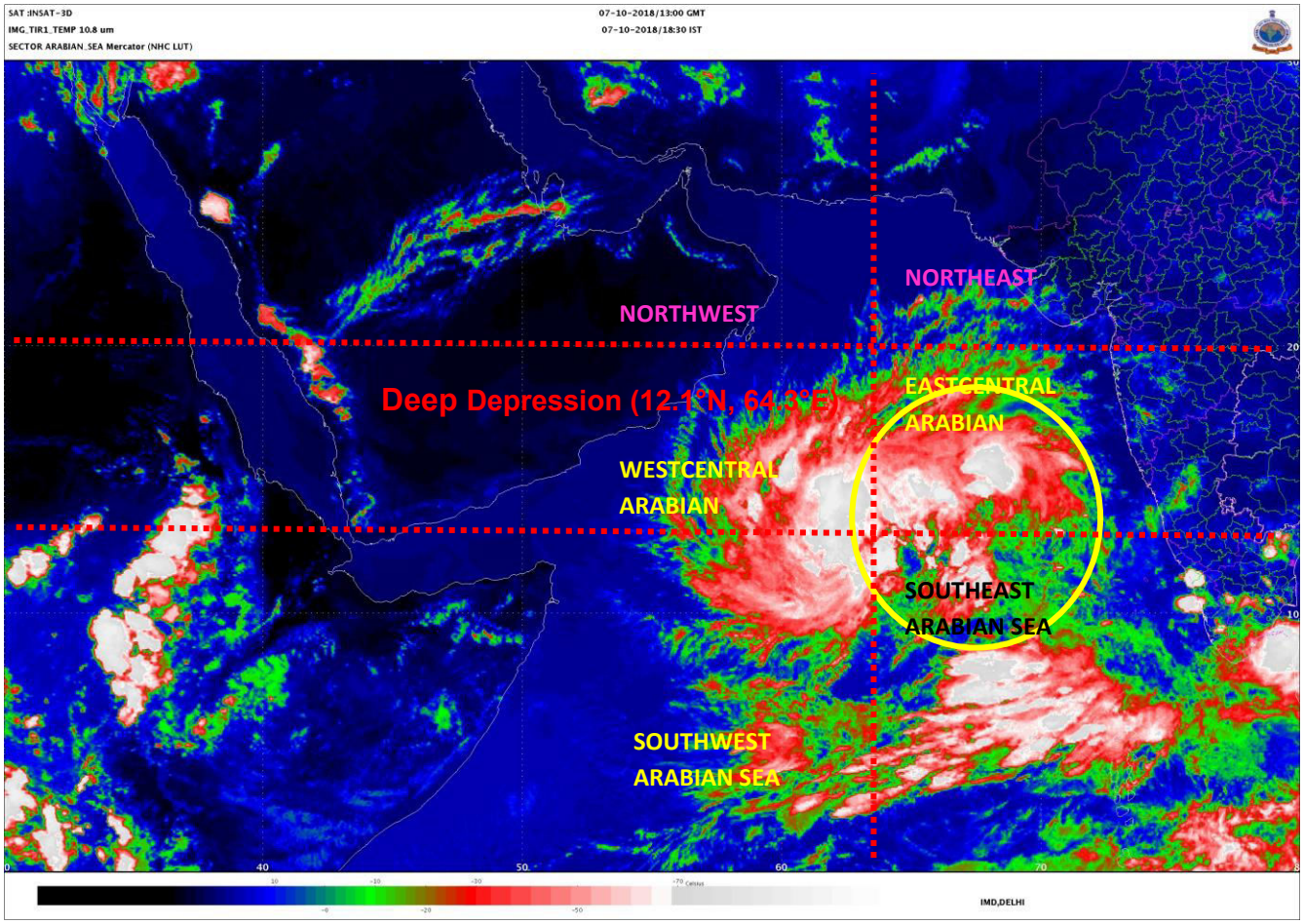
- The fishermen are advised not to venture into deep sea areas of north Andaman Sea and southeast & adjoining eastcentral Bay of Bengal during next 24 hours and over central & adjoining north Bay of Bengal during 8th to 10th October 2018.
- Those, who are out in deep sea areas are advised return to the coast.

The next bulletin will be issued at 0230 hrs IST of today, 08th October, 2018.

(Naresh Kumar)
Scientist-E, RSMC, New Delhi

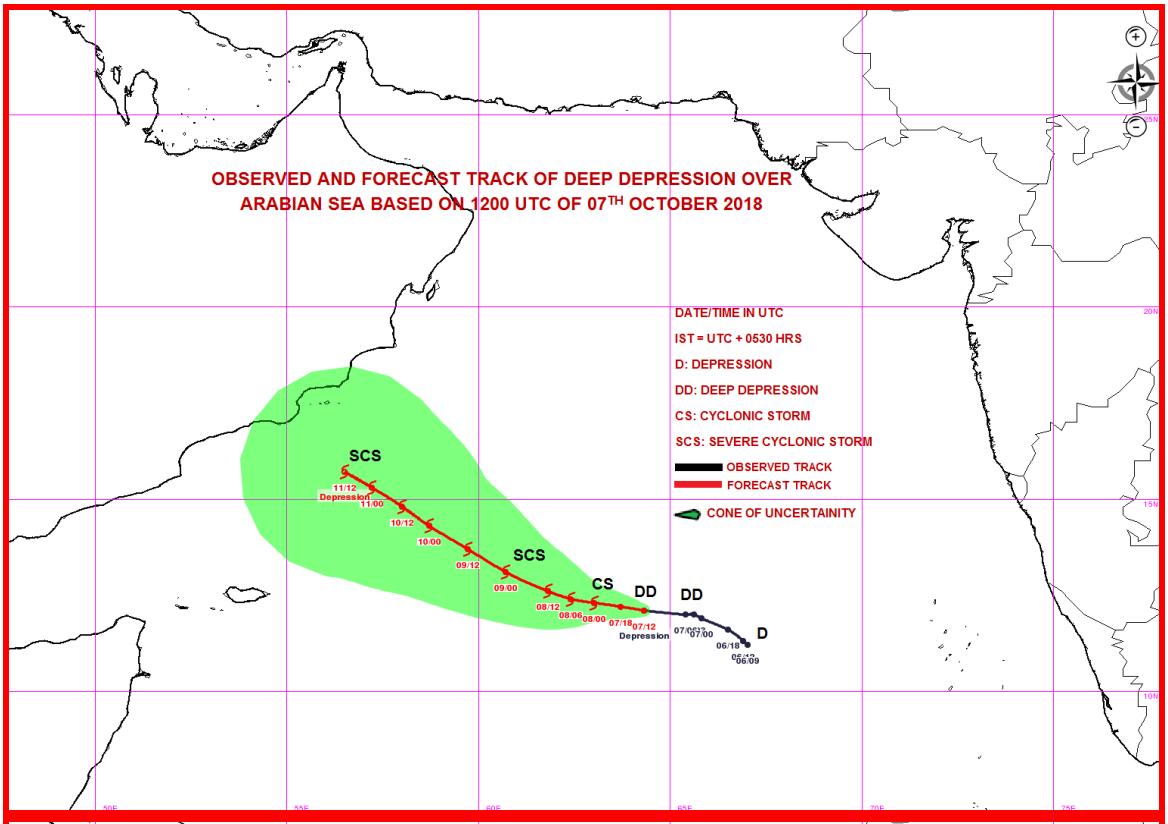
Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
Rainfall amount (mm): Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.

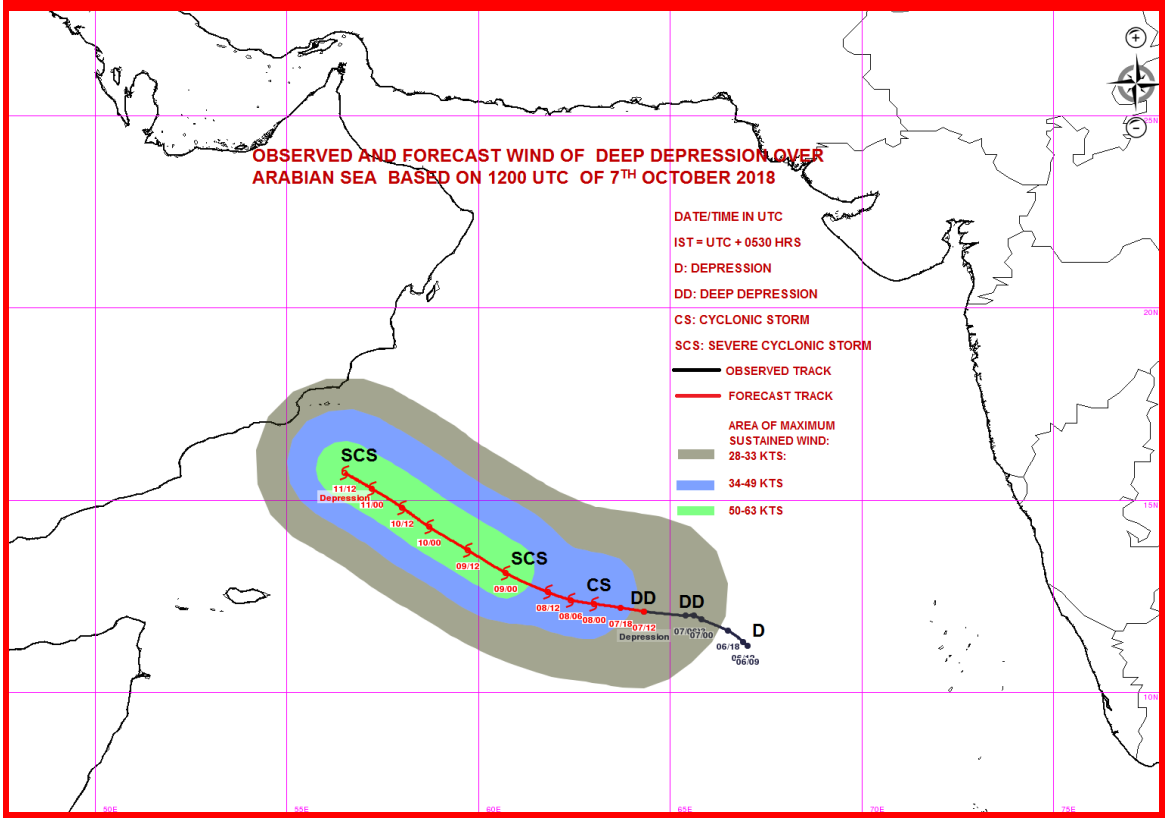
Copy to: CRS, Pune/ ACWC Chennai/ Mumbai/MC Goa/Thiruvanathapuram/ Bengaluru/ CWC Ahmedabad.



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

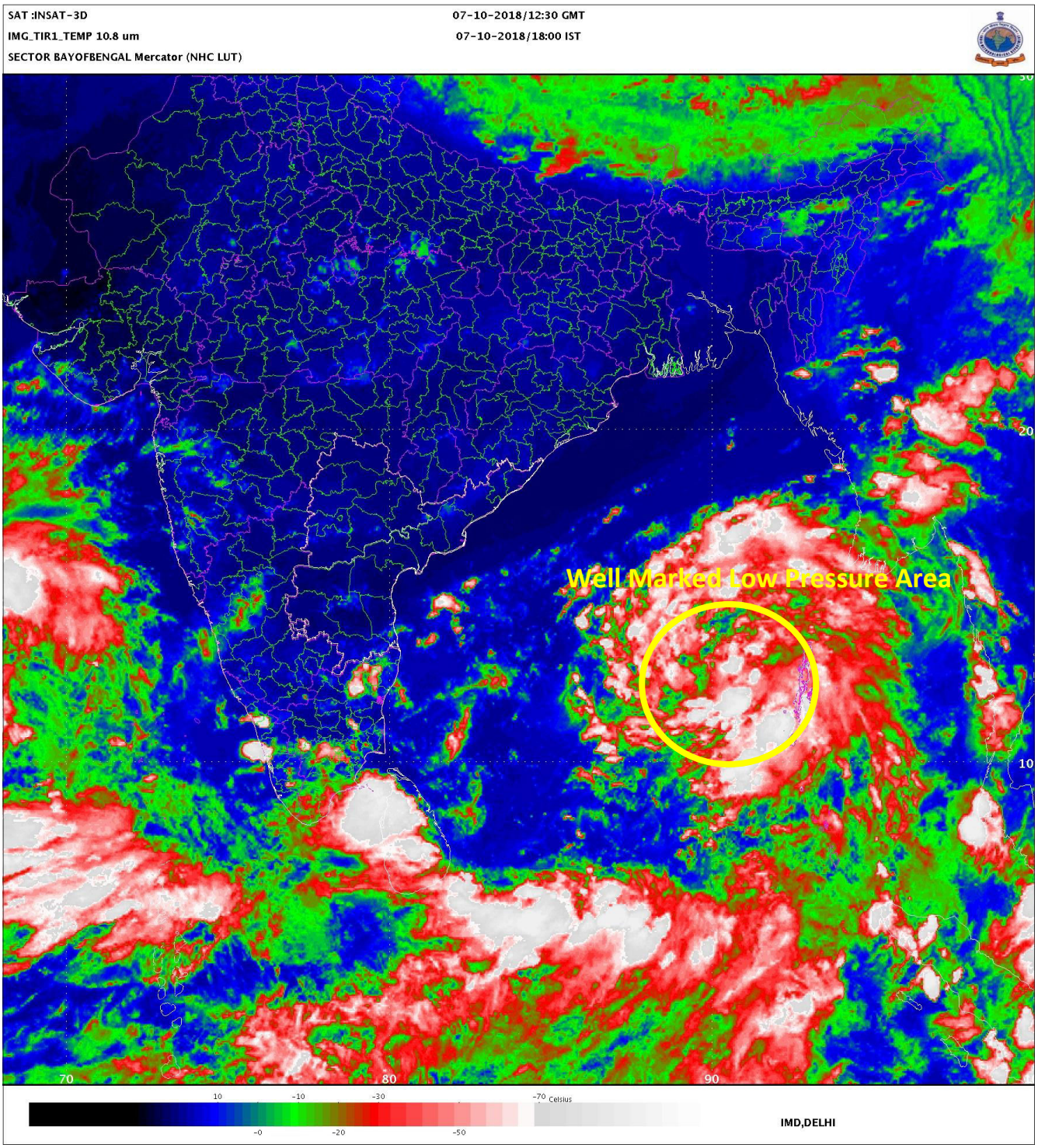
Rainfall amount (mm): Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.





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.



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.

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

BULLETIN NO. : 09 (ARB 04/2018)

TIME OF ISSUE: 1245 HOURS IST **DATED: 08.10.2018**

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)
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 (23385843)
DIRECTOR GENERAL, AIR (23421105, 23421219)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 24363261)
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. 04896-262184)
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)
CHIEF SECRETARY, ANDHRA PRADESH (FAX NO. 0866-2441029)
CHIEF SECRETARY, ODISHA (FAX NO. 0674 -2536660)
CHIEF SECRETARY, WEST BENGAL (FAX NO. 033 -22144328)
CHIEF SECRETARY, ANDAMAN & NICOBAR ISLANDS (FAX NO. 03192- 232656)

Sub: (a) Deep Depression over eastcentral & adjoining southeast Arabian Sea and (b) Well Marked Low Pressure area over southeast Bay of Bengal & adjoining north Andaman Sea

(a) Deep Depression over eastcentral & adjoining southeast Arabian Sea:

The deep depression over eastcentral & adjoining southeast Arabian Sea moved west-northwestwards with a speed of about 15 kmph in last 06 hours and lay centred at 2330 hrs IST of yesterday, the 07th October 2018 over the same area, near latitude 12.2°N and longitude 63.5°E, about 1150 km east-southeast of Salalah (Oman), 1050 km east-southeast of Socotra Islands (Yemen) and 1150 km west-northwest of Minicoy (Lakshadweep Islands). It is very likely to intensify into a Cyclonic Storm during next 12 hours and into a severe cyclonic storm during subsequent 24 hours. It is very likely to move west-northwestwards towards South Oman & adjoining Yemen Coasts during next 5 days.

Forecast track and intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
07.10.18/2330	12.2/63.5	55-65 gusting to 75	Deep Depression
08.10.18/0530	12.3/63.0	65-75 gusting to 85	Cyclonic Storm
08.10.18/1130	12.4/62.4	70-80 gusting to 90	Cyclonic Storm
08.10.18/1730	12.6/61.8	80-90 gusting to 100	Cyclonic Storm
08.10.18/2330	12.9/61.2	80-90 gusting to 100	Cyclonic Storm
09.10.18/1130	13.4/60.2	90-100 gusting to 115	Severe Cyclonic Storm
09.10.18/2330	14.0/59.2	100-110 gusting to 125	Severe Cyclonic Storm
10.10.18/1130	14.6/58.4	105-115 gusting to 130	Severe Cyclonic Storm
10.10.18/2330	15.0/57.6	110-120 gusting to 135	Severe Cyclonic Storm
11.10.18/1130	15.5/56.8	110-120 gusting to 135	Severe Cyclonic Storm

Warnings:

(i) Heavy rainfall warning

- Rainfall at most places with heavy falls at Isolated Places very likely to occur over Lakshadweep during next 12 hours.
- As the system is moving away from the Indian Coast, it is not likely to cause any heavy rainfall over Kerala and Tamil Nadu & Puducherry. However, under the influence of easterly waves and embedded cyclonic circulation over Comorin area & neighbourhood at lower levels, rainfall at most places with heavy falls at isolated places very likely to occur over Tamil Nadu & Puducherry and Kerala during next 48 hours.

(ii) Wind warning

- Squally wind speed reaching 40-50 kmph gusting to 60 kmph is very likely over Lakshadweep & southeast Arabian Sea during next 12 hours and over eastcentral Arabian Sea during next 24 hours.
- Squally wind speed reaching 50-60 kmph gusting to 70 kmph is very likely over westcentral & adjoining southwest Arabian Sea. It is very likely to increase gradually becoming 60-70 kmph gusting to 80 kmph from 8th October 2018 morning over westcentral & southwest Arabian Sea. It will also increase thereafter over westcentral Arabian Sea during 8th to 12th October 2018.

(iii) Sea condition

- The sea condition is rough to very rough around the system centre. It is very likely to become gradually high over westcentral & adjoining southwest Arabian Sea from 8th October 2018 onwards.

(iv) Fishermen Warning

- The fishermen are advised not to venture into deep sea areas of southeast Arabian Sea & Lakshadweep Islands during next 12 hours, eastcentral Arabian Sea during next 24 hours, southwest Arabian Sea during next 48 hours and westcentral Arabian Sea from 8th to 12th October.

(b) Well Marked Low Pressure area over southeast Bay of Bengal & adjoining north Andaman Sea:

The well marked low pressure area over southeast Bay of Bengal & adjoining north Andaman Sea persisted over the same region. It is very likely to concentrate into a Depression during next 24 hours and very likely to move northwestwards towards Odisha coast during next 72 hours.

Warnings:

(i) Wind warning

- Squally wind speed reaching 40-50 kmph gusting to 60 kmph very likely over north Andaman Sea, southeast & adjoining eastcentral Bay of Bengal and Andaman Islands during next 24 hours.
- Squally wind speed reaching 45-55 kmph gusting to 65 kmph likely over deep sea areas of central & adjoining north Bay of Bengal from 8th to 10th October 2018.

(ii) Sea condition

- The sea condition is very likely to be rough to very rough over north Andaman Sea and southeast & adjoining eastcentral Bay of Bengal during next 24 hours; and over central & adjoining north Bay of Bengal during 8th to 10th October 2018.

(iii) Fishermen Warning

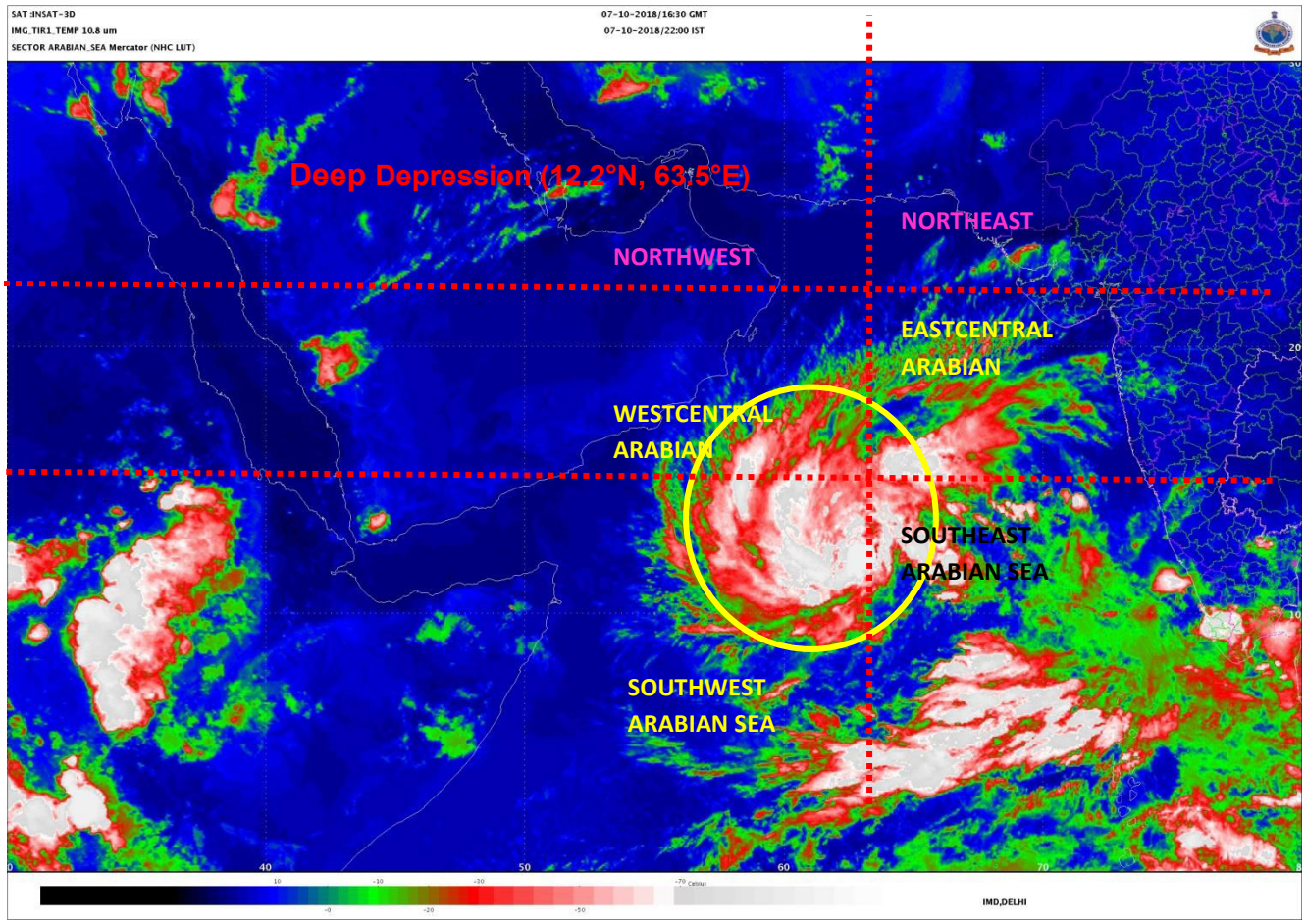
- The fishermen are advised not to venture into deep sea areas of north Andaman Sea and southeast & adjoining eastcentral Bay of Bengal during next 24 hours and over central & adjoining north Bay of Bengal during 8th to 10th October 2018.
- Those, who are out in deep sea areas are advised return to the coast.

The next bulletin will be issued at 0830 hrs IST of today, the 08th October, 2018.

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

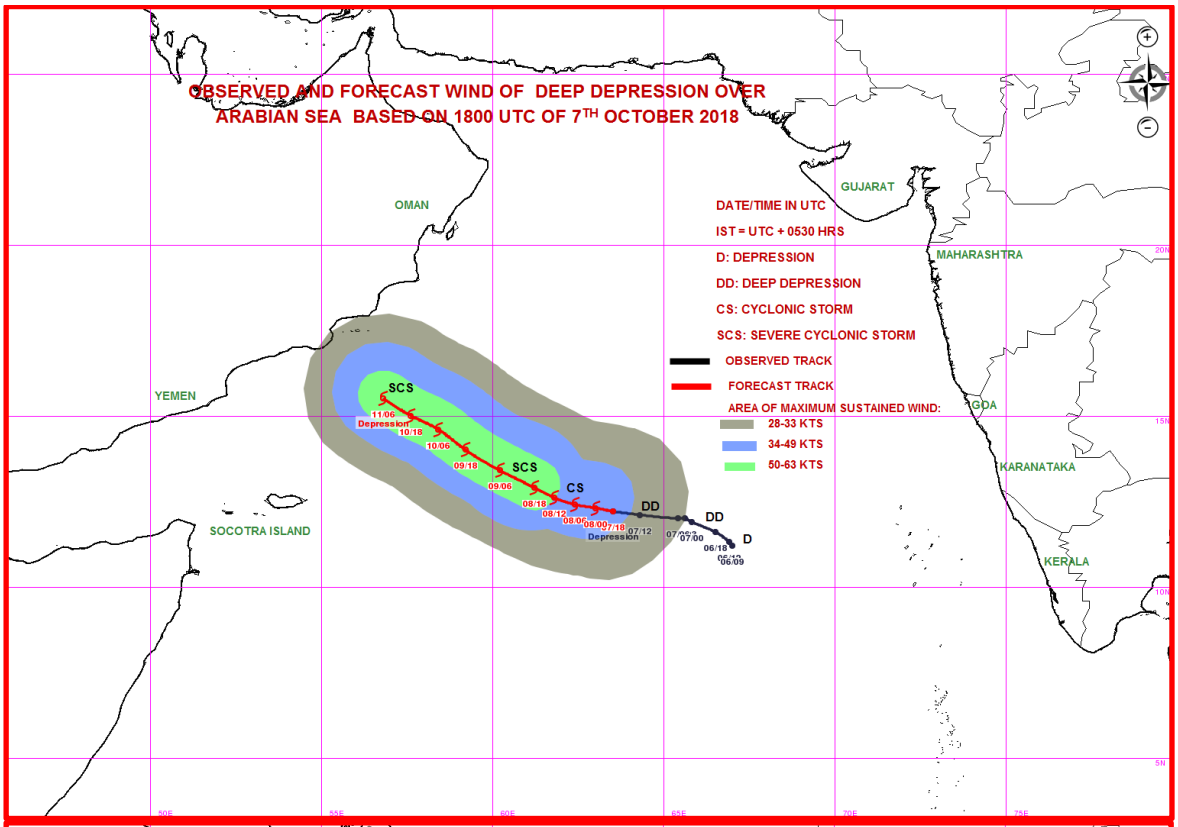
Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
Rainfall amount (mm): Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.

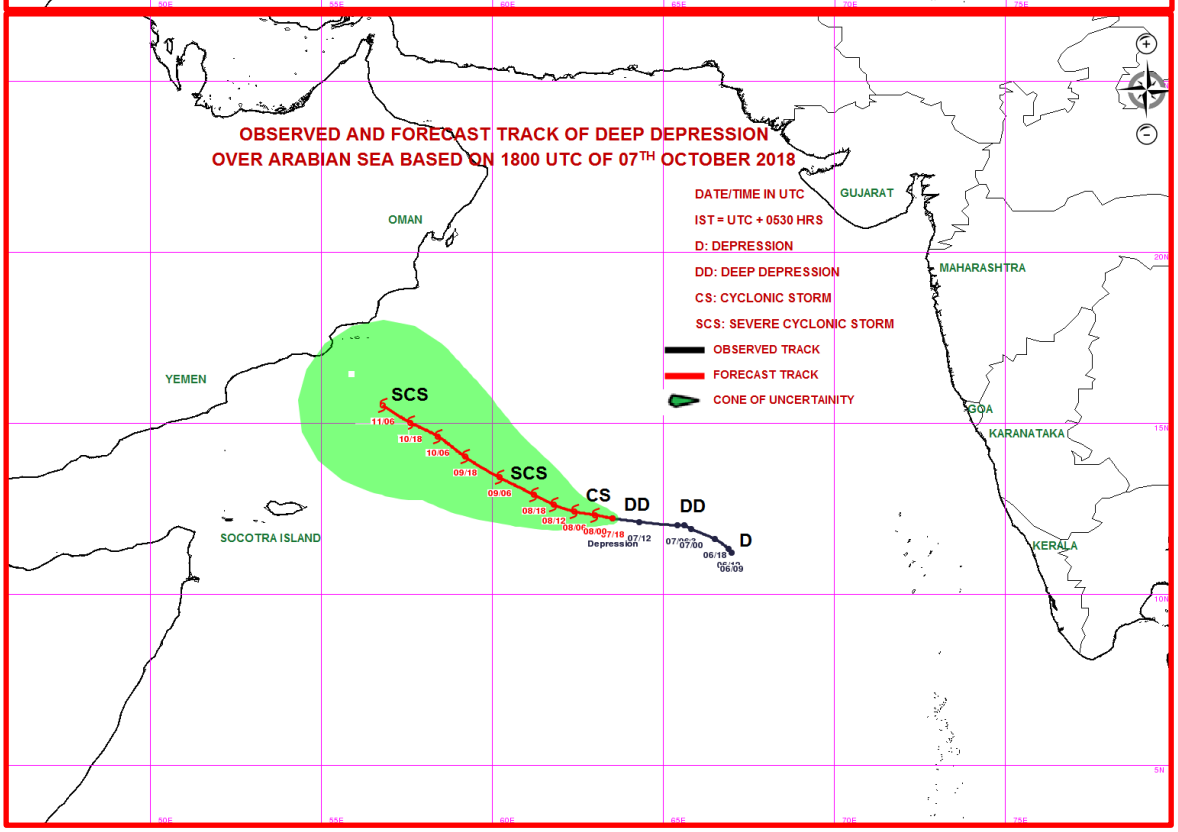
Copy to: CRS, Pune/ ACWC Chennai/ Mumbai/MC Goa/Thiruvanathapuram/ Bengaluru/ CWC Ahmedabad.



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.





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.

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

BULLETIN NO. : 10 (ARB 04/2018)

TIME OF ISSUE: 0830 HOURS IST **DATED: 08.10.2018**

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)
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 (23385843)
DIRECTOR GENERAL, AIR (23421105, 23421219)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 24363261)
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. 04896-262184)
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)
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CHIEF SECRETARY, ODISHA (FAX NO. 0674 -2536660)
CHIEF SECRETARY, WEST BENGAL (FAX NO. 033 -22144328)
CHIEF SECRETARY, ANDAMAN & NICOBAR ISLANDS (FAX NO. 03192- 232656)

Sub: (a) Deep Depression over eastcentral & adjoining southeast Arabian Sea intensified into a Cyclonic Storm over westcentral and adjoining southwest Arabian Sea
(b) Well Marked Low Pressure area over southeast and adjoining eastcentral Bay of Bengal

(a) Deep Depression over eastcentral & adjoining southeast Arabian Sea intensified into a Cyclonic Storm over westcentral and adjoining southwest & eastcentral Arabian Sea:

The deep depression over eastcentral & adjoining southeast Arabian Sea moved west-northwestwards with a speed of about 20 kmph in last 06 hours, intensified into a Cyclonic Storm, **Luban** and lay centered at 0530 hrs IST of today, the 08th October 2018, over westcentral and adjoining southwest Arabian Sea near latitude 12.3°N and longitude 62.4°E, about 1040 km east-southeast of Salalah (Oman), 920 km east-southeast of Socotra Islands (Yemen) and 1260 km west-northwest of Minicoy (Lakshadweep Islands). It is very likely to intensify further into a Severe Cyclonic Storm during next 24 hours. It is very likely to move west-northwestwards towards South Oman & Yemen Coasts during next 5 days.

Forecast track and intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
08.10.18/0530	12.3/62.4	65-75 gusting to 85	Cyclonic Storm
08.10.18/1130	12.5/61.8	70-80 gusting to 90	Cyclonic Storm
08.10.18/1730	12.8/61.2	80-90 gusting to 100	Cyclonic Storm
08.10.18/2330	13.1/60.6	80-90 gusting to 100	Cyclonic Storm
09.10.18/0530	13.4/60.0	90-100 gusting to 115	Severe Cyclonic Storm
09.10.18/1730	13.7/59.3	100-110 gusting to 125	Severe Cyclonic Storm
10.10.18/0530	14.0/58.6	100-110 gusting to 125	Severe Cyclonic Storm
10.10.18/1730	14.4/57.9	100-110 gusting to 125	Severe Cyclonic Storm
11.10.18/0530	14.8/57.8	100-110 gusting to 125	Severe Cyclonic Storm
11.10.18/1730	15.1/56.3	100-110 gusting to 125	Severe Cyclonic Storm

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.

12.10.18/0530	15.3/55.4	90-100 gusting to 115	Severe Cyclonic Storm
12.10.18/1730	15.5/54.0	80-90 gusting to 100	Cyclonic Storm

Warnings:

(i) Heavy rainfall warning

- Rainfall at most places with heavy falls at Isolated Places very likely to occur over Lakshadweep during next 12 hours.
- As the system is moving away from the Indian Coast, it is not likely to cause any heavy rainfall over Kerala and Tamil Nadu & Puducherry. However, under the influence of easterly waves and embedded cyclonic circulation over Comorin area & neighbourhood at lower levels, rainfall at most places with heavy falls at isolated places very likely to occur over Tamil Nadu & Puducherry and Kerala during next 48 hours.

(ii) Wind warning

- Gale wind speed reaching 70-80 kmph gusting to 90 kmph is very likely over westcentral & adjoining southwest Arabian Sea. It is very likely to increase gradually becoming 100-110 kmph gusting to 125 kmph during 9th October 2018 evening to 11th October evening over westcentral Arabian Sea around the system centre. The wind speed is very likely to decrease gradually over southwest Arabian Sea from 9th morning
- Squally wind speed reaching 40-50 kmph gusting to 60 kmph is very likely over adjoining areas of southeast and east central Arabian Sea during next 24 hrs.

(iii) Sea condition

- The sea condition is high around the system centre. It is very likely to become gradually very high over westcentral Arabian Sea from 8th October 2018 evening onwards.

(iv) Fishermen Warning

- The fishermen are advised not to venture into deep sea areas of westcentral Arabian Sea from 8th to 12th October, adjoining southwest Arabian sea during next 48 hrs and adjoining areas of southeast and east central Arabian Sea during next 24 hours.

(b) Well Marked Low Pressure area over southeast and adjoining eastcentral Bay of Bengal :

The well marked low pressure area over southeast Bay of Bengal & adjoining north Andaman Sea lay over southeast and adjoining eastcentral Bay of Bengal at 0530 hrs IST of today, the 8th October 2018. It is very likely to concentrate into a Depression during next 12 hours and very likely to move northwestwards towards Odisha coast during next 48 hours.

Warnings:

(i) Wind warning

- Squally wind speed reaching 40-50 kmph gusting to 60 kmph very likely over north Andaman Sea, southeast & adjoining eastcentral Bay of Bengal and Andaman Islands during next 24 hours.
- Squally wind speed reaching 45-55 kmph gusting to 65 kmph likely over deep sea areas of central & adjoining north Bay of Bengal from 8th to 10th October 2018.

(ii) Sea condition

- The sea condition is very likely to be rough to very rough over north Andaman Sea and southeast & adjoining eastcentral Bay of Bengal during next 24 hours; and over central & adjoining north Bay of Bengal during 8th to 10th October 2018.

(iii) Fishermen Warning

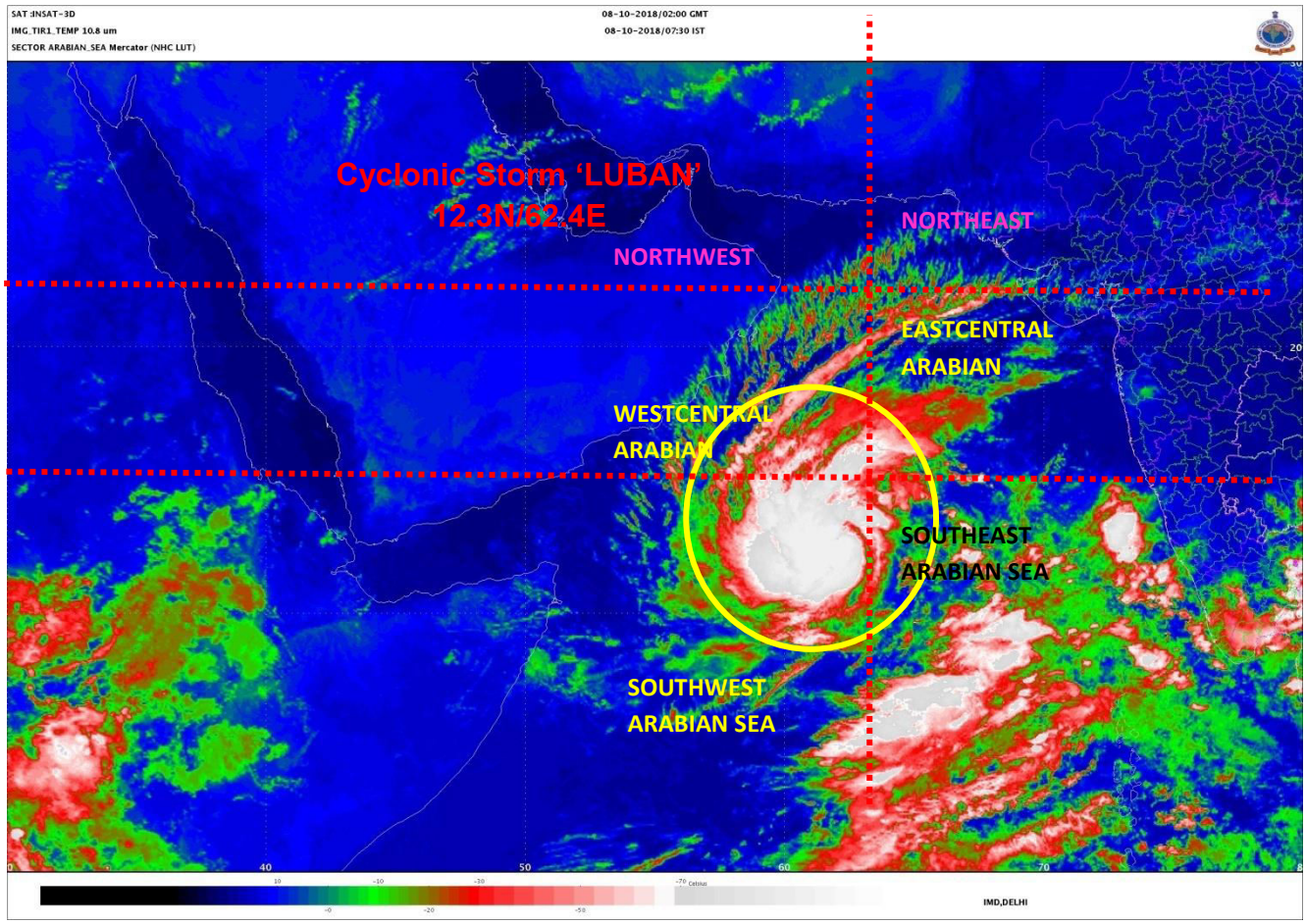
- The fishermen are advised not to venture into deep sea areas of north Andaman Sea and southeast & adjoining eastcentral Bay of Bengal during next 24 hours and over central & adjoining north Bay of Bengal during 8th to 10th October 2018.
- Those, who are out in deep sea areas are advised return to the coast.

The next bulletin will be issued at 1130 hrs IST of today, the 08th October, 2018.

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

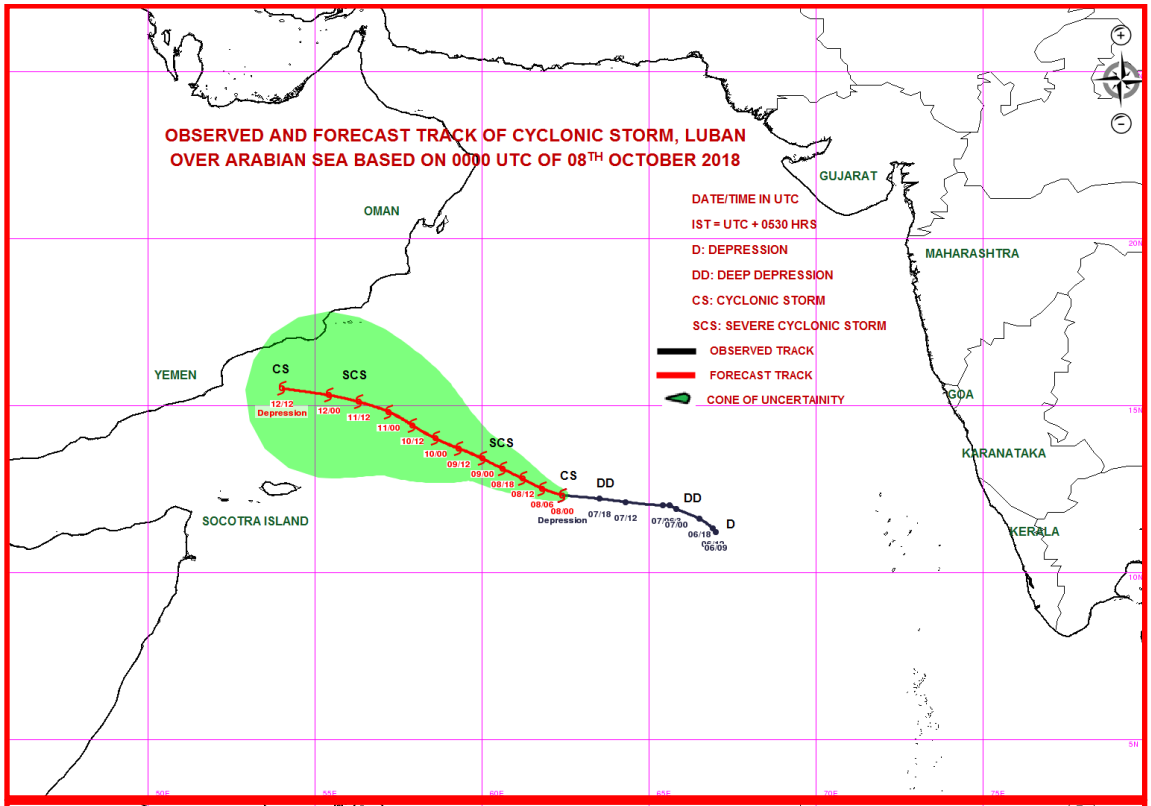
Copy to: CRS, Pune/ ACWC Chennai/Mumbai/Kolkata/MC Goa/ Bengaluru/ CWC Ahmedabad/Thiruvananthapuram/Visakhapatnam/Bhubaneswar.

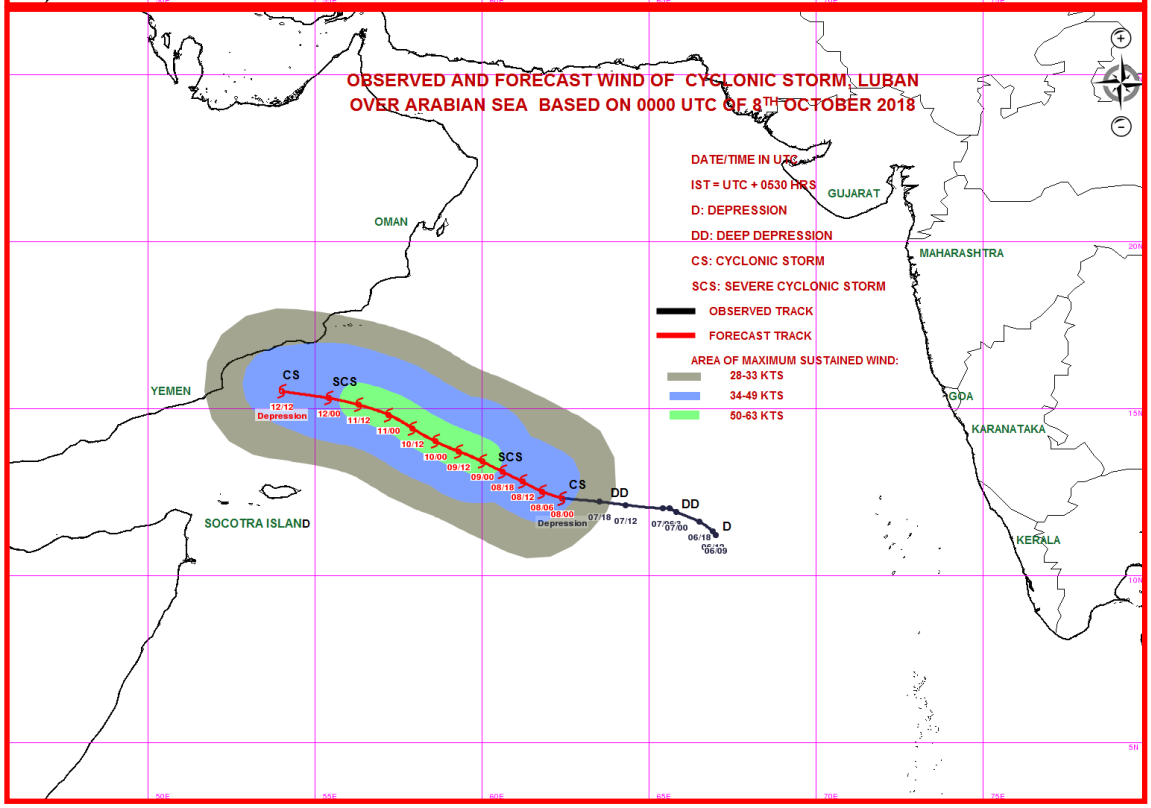
Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
Rainfall amount (mm): Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.



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

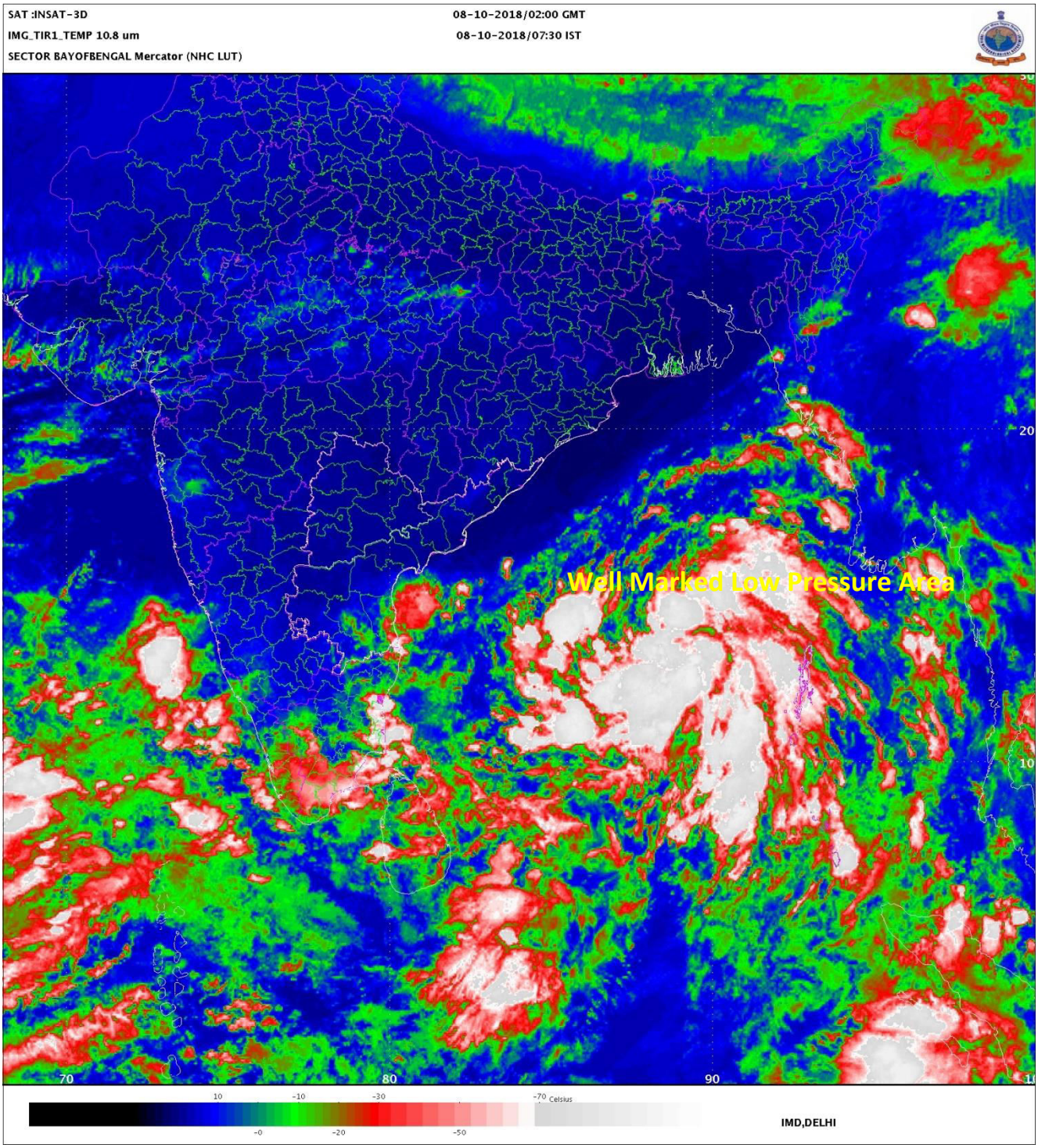
Rainfall amount (mm): Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.





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.



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.

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

BULLETIN NO. : 11 (ARB 04/2018)

TIME OF ISSUE: 1400 HOURS IST **DATED: 08.10.2018**

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)
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 (23385843)
DIRECTOR GENERAL, AIR (23421105, 23421219)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 24363261)
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. 04896-262184)
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)
CHIEF SECRETARY, ANDHRA PRADESH (FAX NO. 0866-2441029)
CHIEF SECRETARY, ODISHA (FAX NO. 0674 -2536660)
CHIEF SECRETARY, WEST BENGAL (FAX NO. 033 -22144328)
CHIEF SECRETARY, ANDAMAN & NICOBAR ISLANDS (FAX NO. 03192- 232656)

Sub: (a) Cyclonic Storm, 'LUBAN' over westcentral & adjoining southwest Arabian Sea
(b) Depression over eastcentral Bay of Bengal: Pre-cyclone watch for north Andhra Pradesh and Odisha coast

(a) Cyclonic Storm, 'LUBAN' over westcentral & adjoining southwest Arabian Sea:

The Cyclonic Storm over westcentral & adjoining southwest Arabian Sea moved west-northwestwards with a speed of about 18 kmph in last 06 hours and lay centered at 0830 hrs IST of today, the 08th October 2018 over westcentral & adjoining southwest Arabian Sea, near latitude 12.4°N and longitude 62.0°E, about 990 km east-southeast of Salalah (Oman), 880 km east of Socotra Islands (Yemen) and 1300 km west-northwest of Minicoy (Lakshadweep Islands). It is very likely to intensify into a Severe Cyclonic Storm during next 24 hours. It is very likely to move west-northwestwards towards South Oman & Yemen Coasts during next 5 days.

Forecast track and intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
08.10.18/0830	12.4/62.0	65-75 gusting to 85	Cyclonic Storm
08.10.18/1130	12.5/61.8	70-80 gusting to 90	Cyclonic Storm
08.10.18/1730	12.8/61.2	80-90 gusting to 100	Cyclonic Storm
08.10.18/2330	13.1/60.6	80-90 gusting to 100	Cyclonic Storm
09.10.18/0530	13.4/60.0	90-100 gusting to 115	Severe Cyclonic Storm
09.10.18/1730	13.7/59.3	100-110 gusting to 125	Severe Cyclonic Storm
10.10.18/0530	14.0/58.6	100-110 gusting to 125	Severe Cyclonic Storm
10.10.18/1730	14.4/57.9	100-110 gusting to 125	Severe Cyclonic Storm
11.10.18/0530	14.8/57.8	100-110 gusting to 125	Severe Cyclonic Storm
11.10.18/1730	15.1/56.3	100-110 gusting to 125	Severe Cyclonic Storm
12.10.18/0530	15.3/55.4	90-100 gusting to 115	Severe Cyclonic Storm
12.10.18/1730	15.5/54.0	80-90 gusting to 100	Cyclonic Storm

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) Wind warning

- Gale wind speed reaching 70-80 kmph gusting to 90 kmph is very likely over westcentral & adjoining southwest Arabian Sea. It is very likely to increase gradually becoming 100-110 kmph gusting to 125 kmph during 9th October 2018 evening to 11th October evening over westcentral Arabian Sea around the system centre. The wind speed is very likely to decrease gradually over southwest Arabian Sea from 9th morning
- Squally wind speed reaching 40-50 kmph gusting to 60 kmph is very likely over adjoining areas of southeast and east central Arabian Sea during next 24 hrs.

(ii) Sea condition

- The sea condition is high around the system centre. It is very likely to become gradually very high over westcentral Arabian Sea from 8th October 2018 evening onwards. .

(iii) Fishermen Warning

- The fishermen are advised not to venture into deep sea areas of westcentral Arabian Sea from 8th to 12th October, adjoining southwest Arabian sea during next 48 hrs and adjoining areas of southeast and east central Arabian Sea during next 24 hours.

(b) Depression over eastcentral Bay of Bengal: Pre-cyclone watch for north Andhra Pradesh and Odisha coast:

The well marked low pressure area over southeast and adjoining eastcentral Bay of Bengal concentrated into a depression and lay centred at 0830 hrs IST of today, the 8th October 2018 over eastcentral Bay of Bengal, near latitude 14.0°N and longitude 88.8°E, about 720 km south-southeast of Gopalpur (Odisha) and 690 km southeast of Kalingapatnam (Andhra Pradesh). It is very likely to intensify further into a Deep Depression during next 24 hours and into a Cyclonic Storm during subsequent 24 hours. It is very likely to move northwestwards towards Odisha and adjoining north Andhra Pradesh coasts during next 72 hours.

Forecast track and intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
08.10.18/0830	14.0/88.8	40-50 gusting to 60	Depression
08.10.18/1730	14.5/87.8	45-55 gusting to 65	Depression
09.10.18/0530	15.5/86.8	50-60 gusting to 70	Deep Depression
09.10.18/1730	16.5/86.0	55-65 gusting to 75	Deep Depression
10.10.18/0530	17.5/85.6	60-70 gusting to 80	Cyclonic Storm
10.10.18/1730	18.5/85.3	65-75 gusting to 85	Cyclonic Storm
11.10.18/0530	19.2/85.0	70-80 gusting to 90	Cyclonic Storm

Warnings:

(i) Heavy rainfall warning

Sub-Divisions	09 Oct. 2018*	10 Oct. 2018*	11 Oct. 2018*	12 Oct. 2018*
Odisha	Rainfall at many places with heavy falls at Isolated Places over south coastal Odisha	Rainfall at most places with heavy to very heavy falls at a few places and extremely heavy falls at Isolated Places over coastal Odisha	Rainfall at most places with heavy to very heavy falls at a few places and extremely heavy falls at Isolated Places over coastal & adjoining interior Odisha	Rainfall at many places with heavy falls at Isolated Places over north coastal Odisha
North Coastal Andhra Pradesh	Rainfall at a few places	Rainfall at many places with heavy falls at Isolated Places	Rainfall at many places with heavy falls at Isolated Places	Rainfall at Isolated Places
Gangetic West Bengal	Rainfall at Isolated Places	Rainfall at many places with heavy to very heavy falls at Isolated Places	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at many places with heavy falls at Isolated Places

Note: * Rainfall till 0830 IST of next day.

Legends: Red-Take Action; Orange- Be prepared; Yellow- be updated; 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

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.

(ii) Wind warning

- Squally wind speed reaching 40-50 kmph gusting to 60 kmph very likely over north Andaman Sea, southeast & adjoining eastcentral Bay of Bengal and Andaman Islands during next 24 hours.
- Squally wind speed reaching 45-55 kmph gusting to 65 kmph likely over deep sea areas of central & adjoining north Bay of Bengal from 8th to 10th October 2018.
- Squally wind speed reaching 45-55 kmph gusting to 65 kmph is very likely to commence along & off along north Andhra Pradesh, Odisha and West Bengal coast from 9th afternoon.
- It is very likely to increase gradually becoming 70-80 kmph gusting to 90 kmph from 10th October 2018 evening onwards along & off south Odisha & adjoining districts of north Andhra Pradesh coasts and 55-65 kmph gusting to 75 kmph along & off north Odisha, west Bengal and remaining districts of north Andhra Pradesh coasts.

(iii) Sea condition

- The sea condition is very likely to be rough to very rough over north Andaman Sea and southeast & adjoining eastcentral Bay of Bengal during next 24 hours; and very rough over central & adjoining north Bay of Bengal during 9th and very rough to high during 10th and 11th October 2018.

(iv) Fishermen Warning

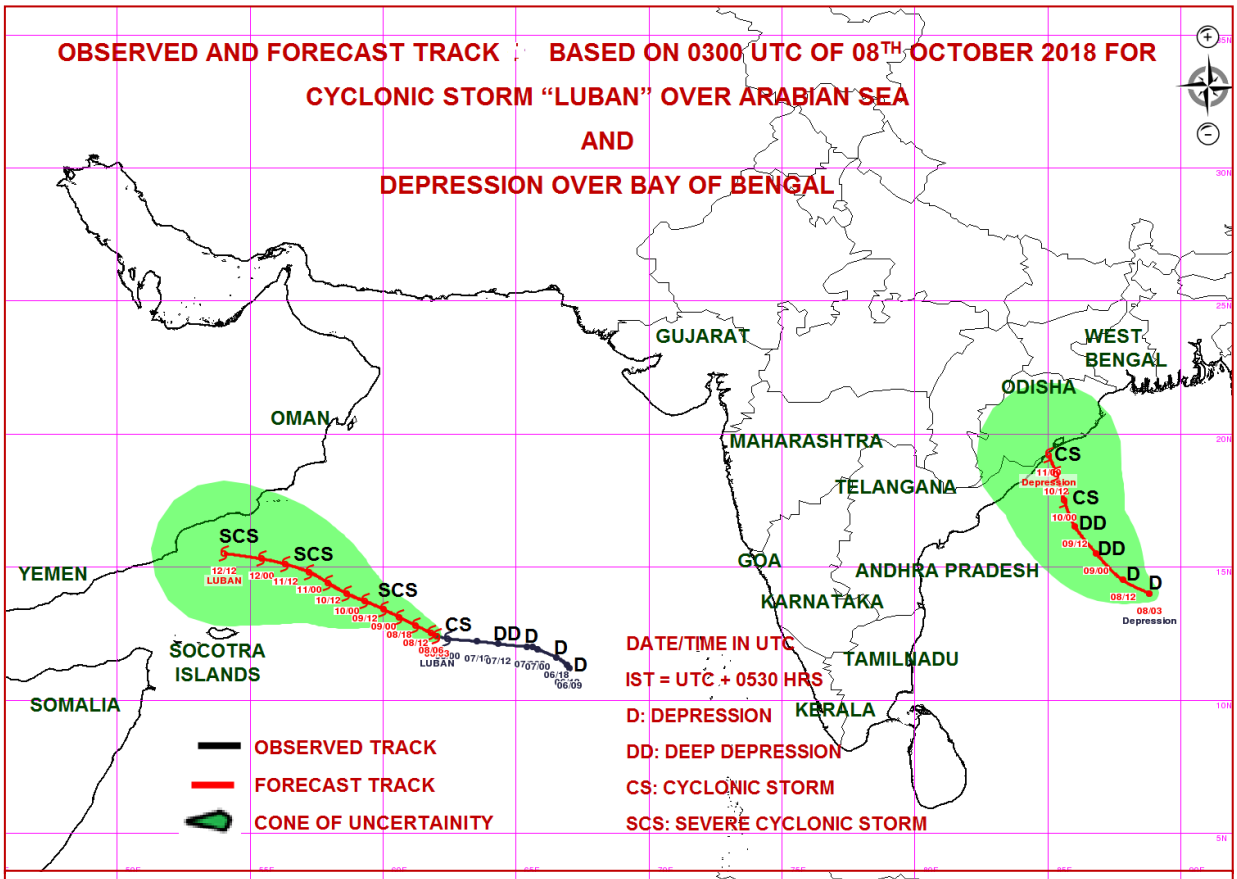
- The fishermen are advised not to venture into deep sea areas of central Bay of Bengal during 8th to 10th October 2018 and north Bay of Bengal during 9th to 11th October 2018 and into north Andaman Sea on 8th October 2018.
- Those, who are out in deep sea areas are advised return to the coast.

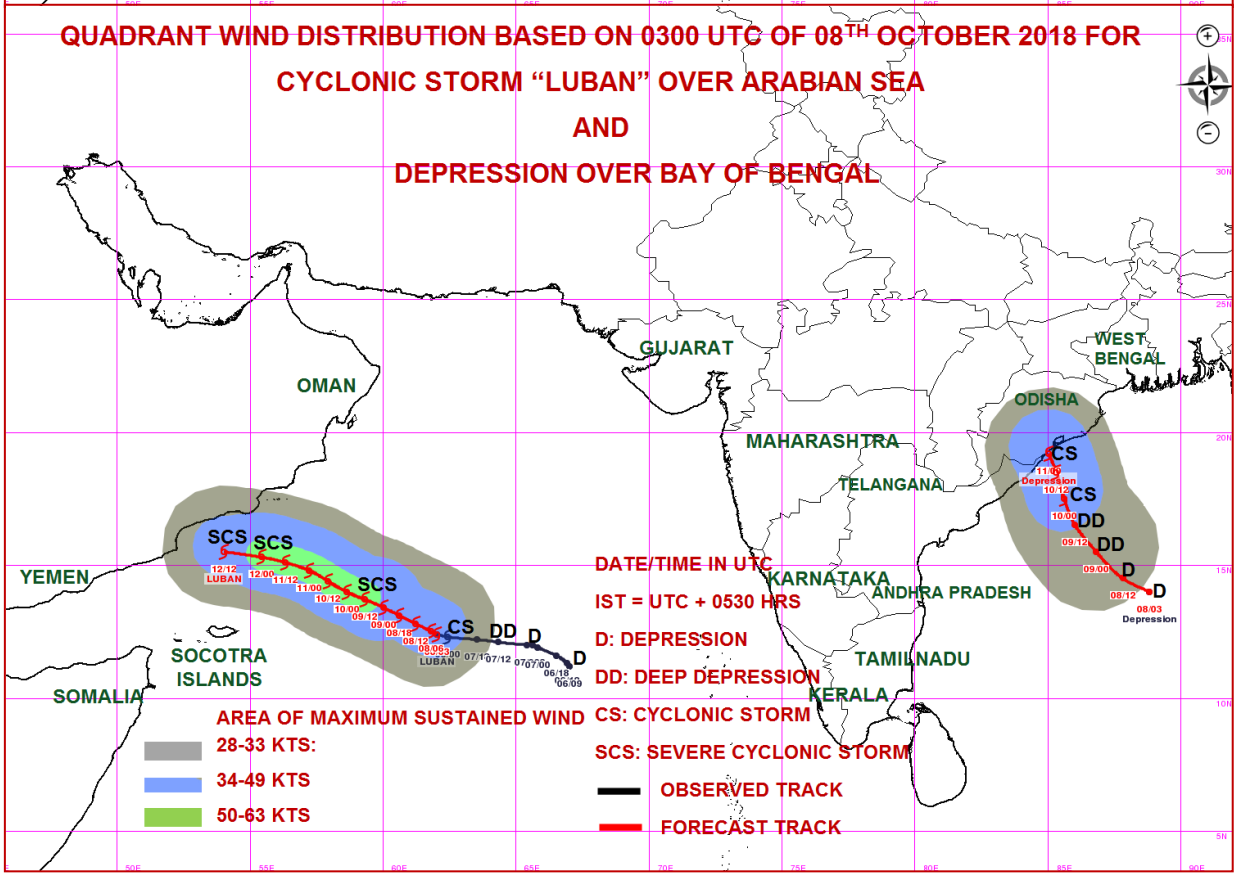
The next bulletin will be issued at 1430 hrs IST of today, the 08th October, 2018.

(Naresh Kumar)
Scientist-E, RSMC, New Delhi

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

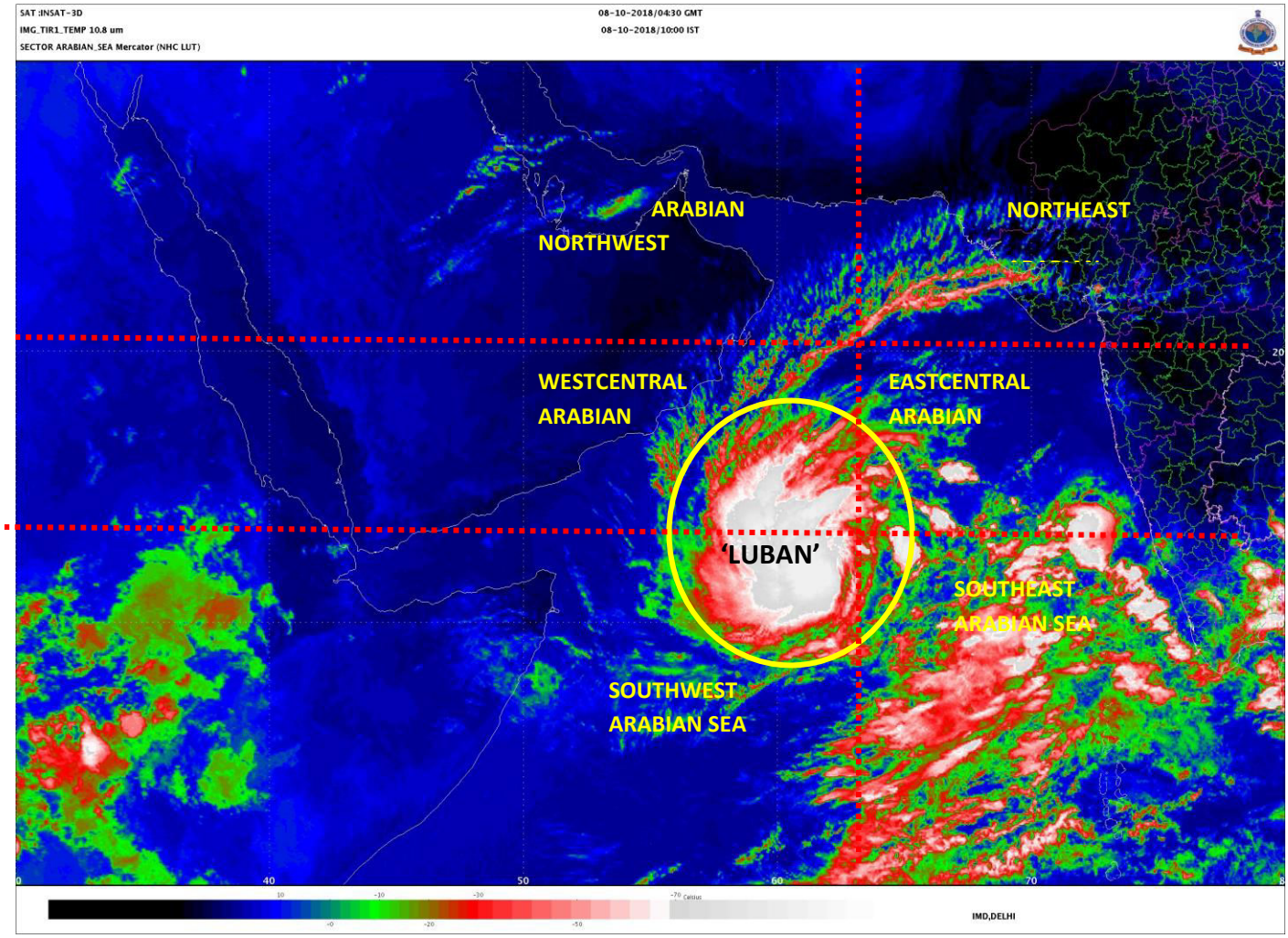
Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
Rainfall amount (mm): Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.





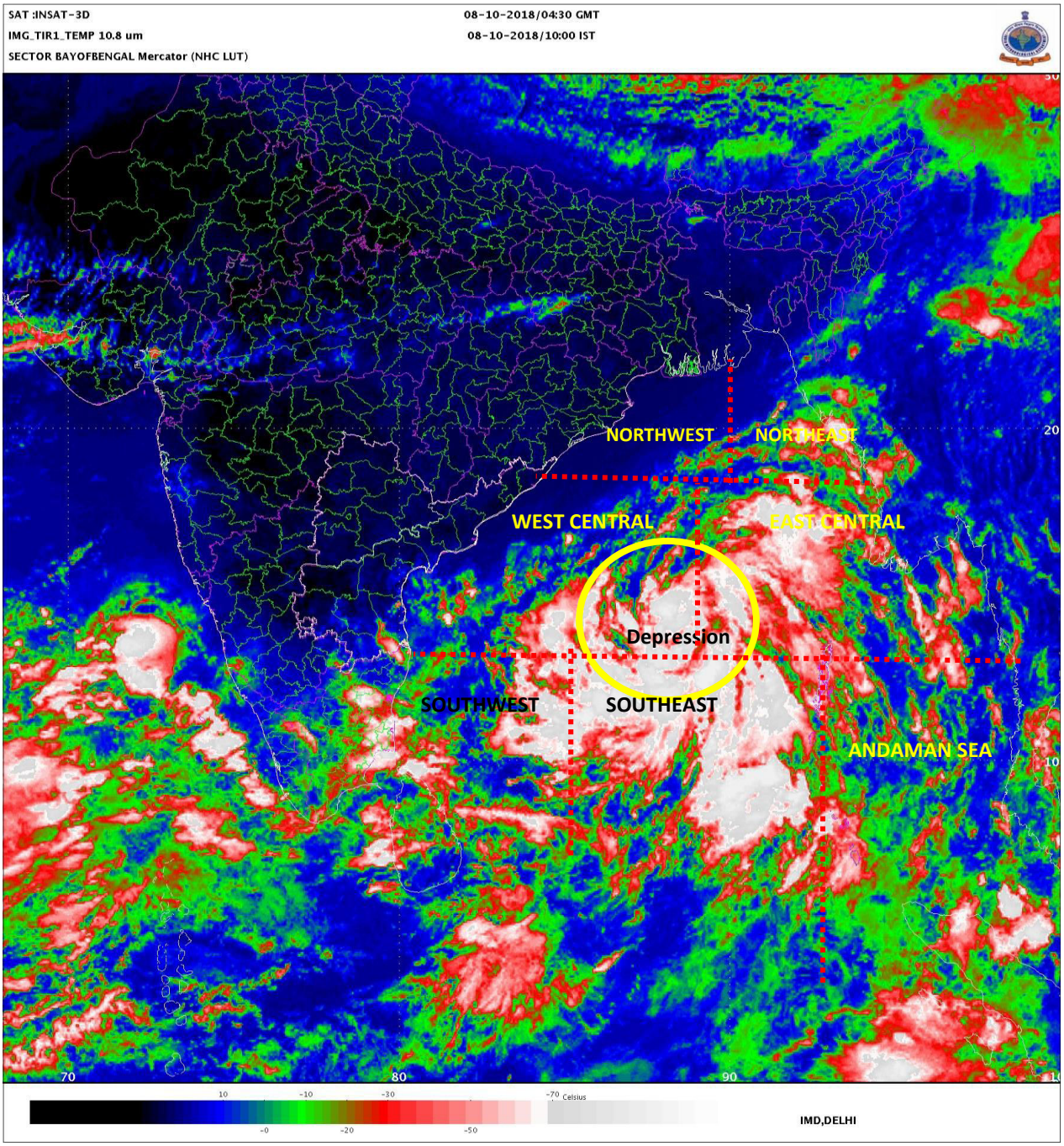
Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%

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



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.



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.

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

BULLETIN NO. : 12 (ARB 04/2018)

TIME OF ISSUE: 1500 HOURS IST **DATED: 08.10.2018**

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)
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 (23385843)
DIRECTOR GENERAL, AIR (23421105, 23421219)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 24363261)
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. 04896-262184)
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)
CHIEF SECRETARY, ANDHRA PRADESH (FAX NO. 0866-2441029)
CHIEF SECRETARY, ODISHA (FAX NO. 0674 -2536660)
CHIEF SECRETARY, WEST BENGAL (FAX NO. 033 -22144328)
CHIEF SECRETARY, ANDAMAN & NICOBAR ISLANDS (FAX NO. 03192- 232656)

Sub: (a) Cyclonic Storm, 'LUBAN' over westcentral & adjoining southwest Arabian Sea
(b) Depression over eastcentral Bay of Bengal: Pre-cyclone watch for Odisha and north Andhra Pradesh coasts

(a) Cyclonic Storm, 'LUBAN' over westcentral & adjoining southwest Arabian Sea:

The Cyclonic Storm over westcentral & adjoining southwest Arabian Sea moved west-northwestwards with a speed of about 11 kmph in last 06 hours and lay centered at 1130 hrs IST of today, the 08th October 2018 over westcentral & adjoining southwest Arabian Sea, near latitude 12.4°N and longitude 61.8°E, about 970 km east-southeast of Salalah (Oman), 860 km east of Socotra Islands (Yemen) and 1320 km west-northwest of Minicoy. It is very likely to intensify into a Severe Cyclonic Storm during next 24 hours. It is very likely to move west-northwestwards towards South Oman & Yemen Coasts during next 5 days. Forecast track & intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
08.10.18/1130	12.4/61.8	75-85 gusting to 95	Cyclonic Storm
08.10.18/1730	12.7/61.2	80-90 gusting to 100	Cyclonic Storm
08.10.18/2330	12.9/60.6	80-90 gusting to 100	Cyclonic Storm
09.10.18/0530	13.2/60.0	90-100 gusting to 115	Severe Cyclonic Storm
09.10.18/1130	13.3/59.6	95-105 gusting to 120	Severe Cyclonic Storm
09.10.18/2330	13.7/59.1	100-110 gusting to 125	Severe Cyclonic Storm
10.10.18/1130	14.1/58.5	100-110 gusting to 125	Severe Cyclonic Storm
10.10.18/2330	14.5/57.8	100-110 gusting to 125	Severe Cyclonic Storm
11.10.18/1130	14.8/57.0	100-110 gusting to 125	Severe Cyclonic Storm
11.10.18/2330	15.0/56.3	100-110 gusting to 125	Severe Cyclonic Storm
12.10.18/1130	15.2/55.2	100-110 gusting to 125	Severe Cyclonic Storm
12.10.18/2330	15.4/54.2	90-100 gusting to 115	Severe Cyclonic Storm
13.10.18/1130	15.5/53.2	80-90 gusting to 100	Cyclonic Storm

Warnings:

(i) Wind warning

- Gale wind speed reaching 70-80 kmph gusting to 90 kmph is very likely over westcentral & adjoining southwest Arabian Sea. It is very likely to increase gradually becoming 100-110 kmph gusting to 125 kmph during 9th October 2018 evening to 11th October evening over westcentral Arabian Sea around the system centre. The wind speed is very likely to decrease gradually over southwest Arabian Sea from 9th morning
- Squally wind speed reaching 40-50 kmph gusting to 60 kmph is very likely over adjoining areas of southeast and east central Arabian Sea during next 24 hrs.

(ii) Sea condition

- The sea condition is high around the system centre. It is very likely to become gradually very high over westcentral Arabian Sea from 8th October 2018 evening onwards. .

(iii) Fishermen Warning

- The fishermen are advised not to venture into deep sea areas of westcentral Arabian Sea from 8th to 12th October, adjoining southwest Arabian sea during next 48 hrs and adjoining areas of southeast and east central Arabian Sea during next 24 hours.

(b) Depression over eastcentral Bay of Bengal: Pre-cyclone watch for Odisha and north Andhra Pradesh coasts:

BULLETIN NO. : 2 (BOB 08/2018)

The depression over eastcentral Bay of Bengal remained practically stationary in past 03 hours and lay centred at 1130 hrs IST of today, the 8th October 2018 near latitude 14.0°N and longitude 88.8°E, about 720 km south-southeast of Gopalpur (Odisha) and 690 km southeast of Kalingapatnam (Andhra Pradesh). It is very likely to intensify into a Deep Depression during next 24 hours and into a Cyclonic Storm during subsequent 24 hours. It is very likely to move northwestwards towards Odisha and adjoining north Andhra Pradesh coasts during next 72 hours.

Forecast track and intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
08.10.18/1130	14.0/88.8	40-50 gusting to 60	Depression
08.10.18/1730	14.5/87.8	45-55 gusting to 65	Depression
09.10.18/0530	15.5/86.8	50-60 gusting to 70	Deep Depression
09.10.18/1730	16.5/86.0	55-65 gusting to 75	Deep Depression
10.10.18/0530	17.5/85.6	60-70 gusting to 80	Cyclonic Storm
10.10.18/1730	18.5/85.3	65-75 gusting to 85	Cyclonic Storm
11.10.18/0530	19.2/85.0	70-80 gusting to 90	Cyclonic Storm

Warnings:

(i) Heavy rainfall warning

Sub-Divisions	09 Oct. 2018*	10 Oct. 2018*	11 Oct. 2018*	12 Oct. 2018*
Odisha	Rainfall at many places with heavy falls at Isolated Places over south coastal Odisha	Rainfall at most places with heavy to very heavy falls at a few places and extremely heavy falls at Isolated Places over coastal Odisha	Rainfall at most places with heavy to very heavy falls at a few places and extremely heavy falls at Isolated Places over coastal & adjoining interior Odisha	Rainfall at many places with heavy falls at Isolated Places over north coastal Odisha
North Coastal Andhra Pradesh	Rainfall at a few places	Rainfall at many places with heavy falls at Isolated Places	Rainfall at many places with heavy falls at Isolated Places	Rainfall at Isolated Places
Gangetic West Bengal	Rainfall at Isolated Places	Rainfall at many places with heavy to very heavy falls at Isolated Places	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at many places with heavy falls at Isolated Places

Note: * Rainfall till 0830 IST of next day.

Legends: Red-Take Action; Orange- Be prepared; Yellow- be updated; 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

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.

(ii) Wind warning

- Squally wind speed reaching 40-50 kmph gusting to 60 kmph very likely over north Andaman Sea, southeast & adjoining eastcentral Bay of Bengal and Andaman Islands during next 24 hours.
- Squally wind speed reaching 45-55 kmph gusting to 65 kmph likely over deep sea areas of central & adjoining north Bay of Bengal from 8th to 10th October 2018.
- Squally wind speed reaching 45-55 kmph gusting to 65 kmph is very likely to commence along & off along north Andhra Pradesh, Odisha and West Bengal coast from 9th afternoon.
- It is very likely to increase gradually becoming 70-80 kmph gusting to 90 kmph from 10th October 2018 evening onwards along & off south Odisha & adjoining districts of north Andhra Pradesh coasts and 55-65 kmph gusting to 75 kmph along & off north Odisha, west Bengal and remaining districts of north Andhra Pradesh coasts.

(iii) Sea condition

- The sea condition is very likely to be rough to very rough over north Andaman Sea and southeast & adjoining eastcentral Bay of Bengal during next 24 hours; and very rough over central & adjoining north Bay of Bengal during 9th and very rough to high during 10th and 11th October 2018.

(iv) Fishermen Warning

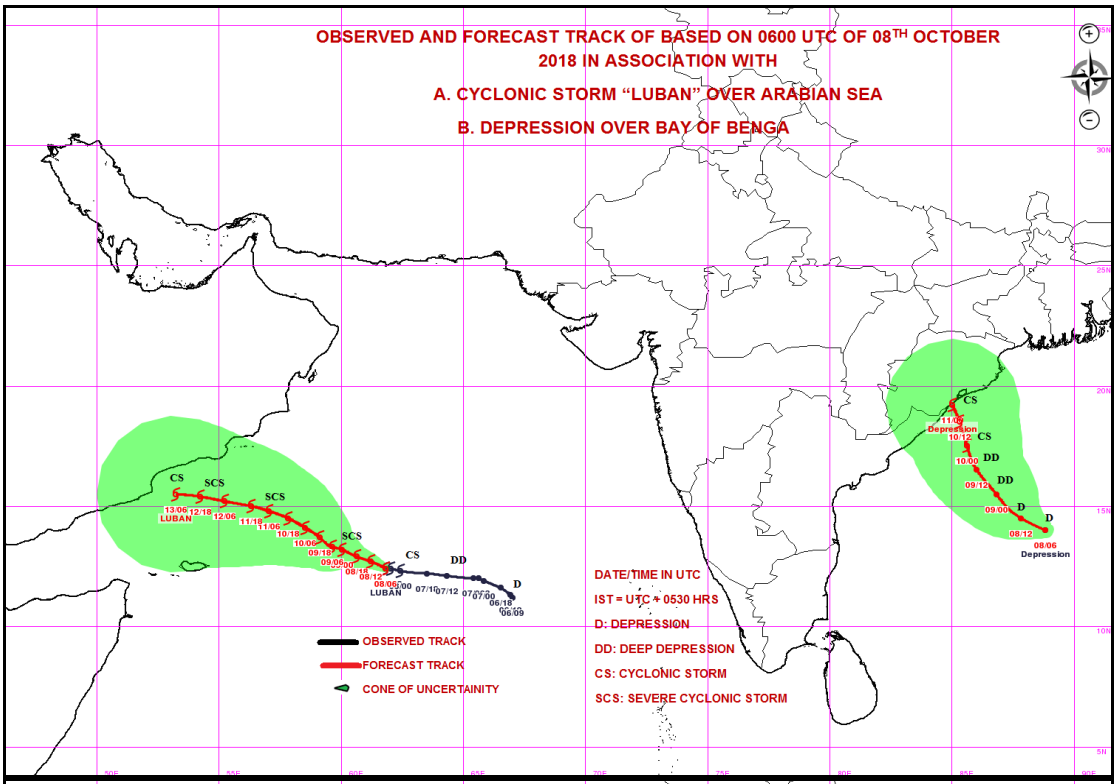
- The fishermen are advised not to venture into deep sea areas of central Bay of Bengal during 8th to 10th October 2018 and north Bay of Bengal during 9th to 11th October 2018 and into north Andaman Sea on 8th October 2018.
- Those, who are out in deep sea areas are advised return to the coast.

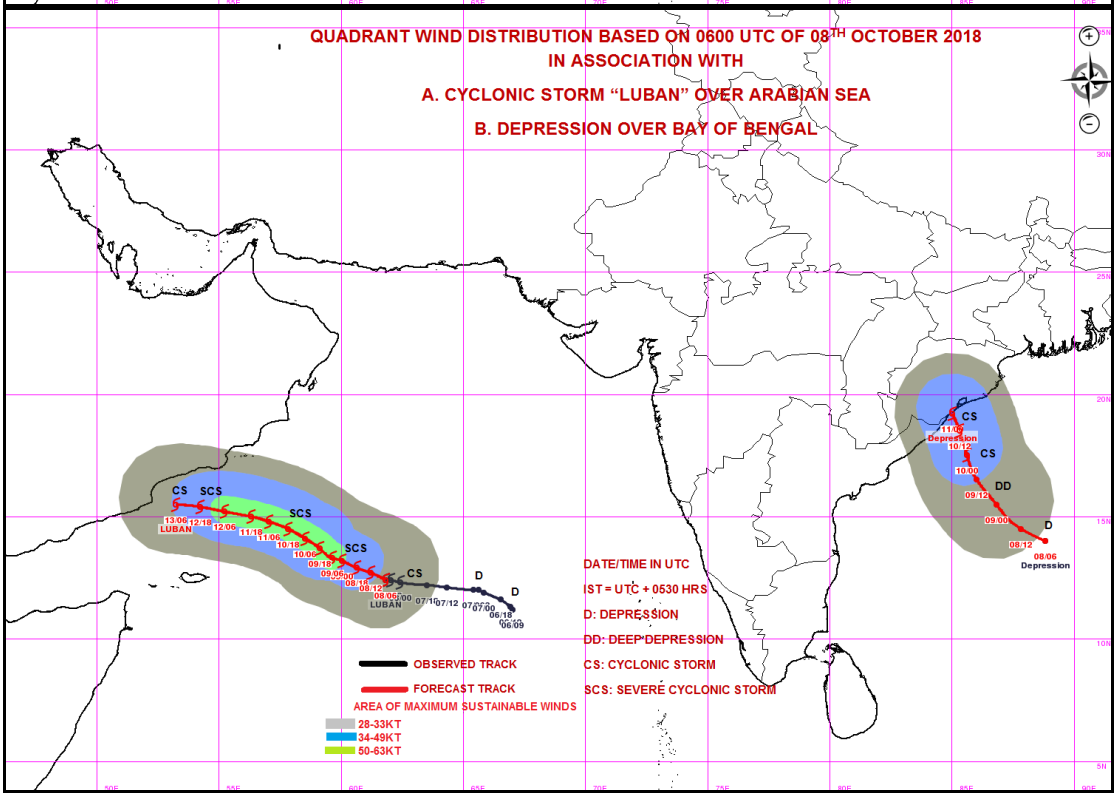
The next bulletin will be issued at 1730 hrs IST of today, the 08th October, 2018.

(Naresh Kumar)
Scientist-E, RSMC, New Delhi

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

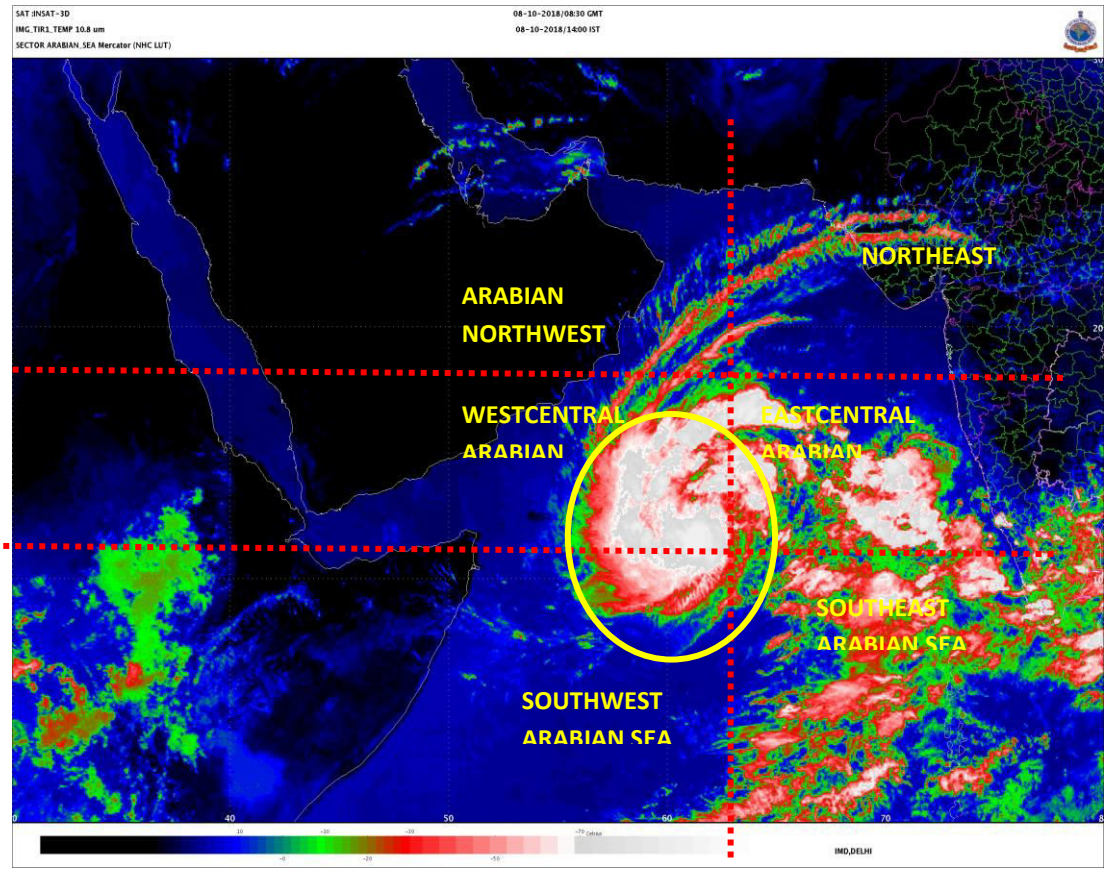
Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
Rainfall amount (mm): Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.

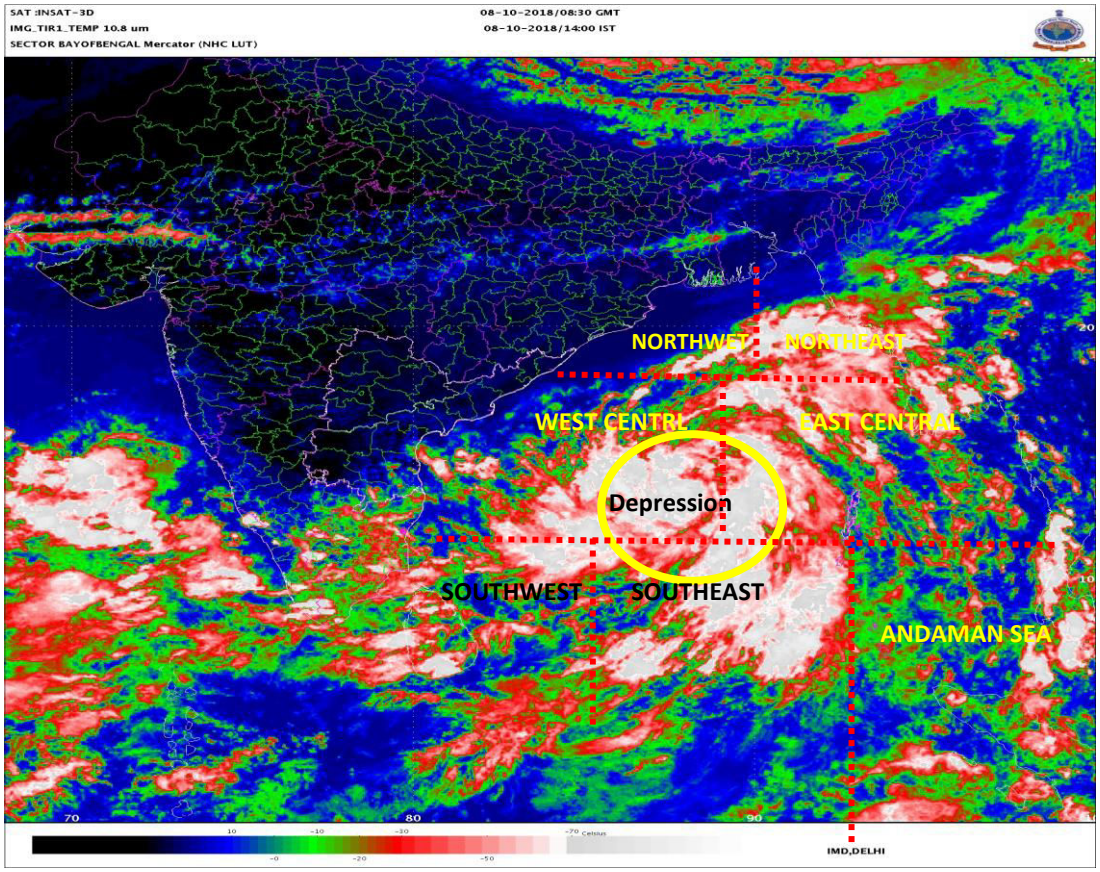




Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%

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





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.

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

BULLETIN NO. : 13 (ARB 04/2018)

TIME OF ISSUE: 1730 HOURS IST **DATED: 08.10.2018**

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)
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 (23385843)
DIRECTOR GENERAL, AIR (23421105, 23421219)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 24363261)
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. 04896-262184)
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)
CHIEF SECRETARY, ANDHRA PRADESH (FAX NO. 0866-2441029)
CHIEF SECRETARY, ODISHA (FAX NO. 0674 -2536660)
CHIEF SECRETARY, WEST BENGAL (FAX NO. 033 -22144328)
CHIEF SECRETARY, ANDAMAN & NICOBAR ISLANDS (FAX NO. 03192- 232656)

Sub: (a) Cyclonic Storm, 'LUBAN' over westcentral & adjoining southwest Arabian Sea
(b)Depression over eastcentral Bay of Bengal: Pre-cyclone watch for Odisha and north Andhra Pradesh coasts

(a) Cyclonic Storm, 'LUBAN' over westcentral & adjoining southwest Arabian Sea:

The Cyclonic Storm over westcentral & adjoining southwest Arabian Sea moved west-northwestwards with a speed of about 09 kmph in last 06 hours and lay centered at 1430 hrs IST of today, the 08th October 2018 over westcentral & adjoining southwest Arabian Sea, near latitude 12.5°N and longitude 61.5°E, about 940 km east-southeast of Salalah (Oman), 820 km east of Socotra Islands (Yemen) and 1350 km west-northwest of Minicoy. It is very likely to intensify into a Severe Cyclonic Storm during next 24 hours. It is very likely to move west-northwestwards towards South Oman & Yemen Coasts during next 5 days. Forecast track & intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
08.10.18/1430	12.5/61.5	80-90 gusting to 100	Cyclonic Storm
08.10.18/1730	12.7/61.2	80-90 gusting to 100	Cyclonic Storm
08.10.18/2330	12.9/60.6	80-90 gusting to 100	Cyclonic Storm
09.10.18/0530	13.2/60.0	90-100 gusting to 115	Severe Cyclonic Storm
09.10.18/1130	13.3/59.6	95-105 gusting to 120	Severe Cyclonic Storm
09.10.18/2330	13.7/59.1	100-110 gusting to 125	Severe Cyclonic Storm
10.10.18/1130	14.1/58.5	100-110 gusting to 125	Severe Cyclonic Storm
10.10.18/2330	14.5/57.8	100-110 gusting to 125	Severe Cyclonic Storm
11.10.18/1130	14.8/57.0	100-110 gusting to 125	Severe Cyclonic Storm
11.10.18/2330	15.0/56.3	100-110 gusting to 125	Severe Cyclonic Storm
12.10.18/1130	15.2/55.2	100-110 gusting to 125	Severe Cyclonic Storm
12.10.18/2330	15.4/54.2	90-100 gusting to 115	Severe Cyclonic Storm
13.10.18/1130	15.5/53.2	80-90 gusting to 100	Cyclonic Storm

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) Wind warning

- Gale wind speed reaching 70-80 kmph gusting to 90 kmph is very likely over westcentral & adjoining southwest Arabian Sea. It is very likely to increase gradually becoming 100-110 kmph gusting to 125 kmph during 9th October 2018 evening to 11th October evening over westcentral Arabian Sea around the system centre. The wind speed is very likely to decrease gradually over southwest Arabian Sea from 9th morning.
- Squally wind speed reaching 40-50 kmph gusting to 60 kmph is very likely over adjoining areas of southeast and east central Arabian Sea during next 24 hrs.

(ii) Sea condition

- The sea condition is high around the system centre. It is very likely to become gradually very high over westcentral Arabian Sea from today the 8th October 2018 night onwards.

(iii) Fishermen Warning

- The fishermen are advised not to venture into deep sea areas of westcentral Arabian Sea from 8th to 12th October, adjoining southwest Arabian sea during next 48 hrs and adjoining areas of southeast and east central Arabian Sea during next 24 hours.

(b) Depression over eastcentral Bay of Bengal: Pre-cyclone watch for Odisha and north Andhra Pradesh coasts:

BULLETIN NO.: 3 (BOB 08/2018)

The depression over eastcentral Bay of Bengal moved west-northwestwards with a speed of about 07 kmph in last 06 hours and lay centred at 1430 hrs IST of today, the 8th October 2018 near latitude 14.2°N and longitude 88.5°E, about 680 km southeast of Gopalpur (Odisha) and 650 km southeast of Kalingapatnam (Andhra Pradesh). It is very likely to intensify into a Deep Depression during next 18 hours and into a Cyclonic Storm during subsequent 24 hours. It is very likely to move north-westwards towards Odisha and adjoining north Andhra Pradesh coasts during next 72 hours.

Forecast track and intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
08.10.18/1430	14.2/88.5	40-50 gusting to 60	Depression
08.10.18/1730	14.5/87.8	45-55 gusting to 65	Depression
09.10.18/0530	15.5/86.8	50-60 gusting to 70	Deep Depression
09.10.18/1730	16.5/86.0	55-65 gusting to 75	Deep Depression
10.10.18/0530	17.5/85.6	60-70 gusting to 80	Cyclonic Storm
10.10.18/1730	18.5/85.3	65-75 gusting to 85	Cyclonic Storm
11.10.18/0530	19.2/85.0	70-80 gusting to 90	Cyclonic Storm

Warnings:

(i) Rainfall forecasts:

Sub-Divisions	09 Oct. 2018*	10 Oct. 2018*	11 Oct. 2018*	12 Oct. 2018*
Odisha	Rainfall at many places with heavy falls at Isolated Places over south coastal Odisha	Rainfall at most places with heavy to very heavy falls at a few places and extremely heavy falls at Isolated Places over coastal Odisha	Rainfall at most places with heavy to very heavy falls at a few places and extremely heavy falls at Isolated Places over coastal & adjoining interior Odisha	Rainfall at many places with heavy falls at Isolated Places over north coastal Odisha
North Coastal Andhra Pradesh	Rainfall at a few places	Rainfall at many places with heavy falls at Isolated Places	Rainfall at many places with heavy falls at Isolated Places	Rainfall at Isolated Places
Gangetic West Bengal	Rainfall at Isolated Places	Rainfall at many places with heavy to very heavy falls at Isolated Places	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at many places with heavy falls at Isolated Places

Note: * Rainfall till 0830 IST of next day.

Legends: Red-Take Action; Orange- Be prepared; Yellow- be updated; 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

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.

(ii) Wind warning

- Squally wind speed reaching 40-50 kmph gusting to 60 kmph very likely over north Andaman Sea, southeast & adjoining eastcentral Bay of Bengal and Andaman Islands during next 24 hours.
- Squally wind speed reaching 45-55 kmph gusting to 65 kmph likely over deep sea areas of central & adjoining north Bay of Bengal from 8th to 10th October 2018.
- Squally wind speed reaching 45-55 kmph gusting to 65 kmph is very likely to commence along & off along north Andhra Pradesh, Odisha and West Bengal coast from 9th afternoon.
- It is very likely to increase gradually becoming 70-80 kmph gusting to 90 kmph from 10th October 2018 evening onwards along & off south Odisha & adjoining districts of north Andhra Pradesh coasts and 55-65 kmph gusting to 75 kmph along & off north Odisha, west Bengal and remaining districts of north Andhra Pradesh coasts.

(iii) Sea condition

- The sea condition is very likely to be rough to very rough over north Andaman Sea and southeast & adjoining eastcentral Bay of Bengal during next 24 hours; and very rough over central & adjoining north Bay of Bengal during 9th and very rough to high during 10th and 11th October 2018.

(iv) Fishermen Warning

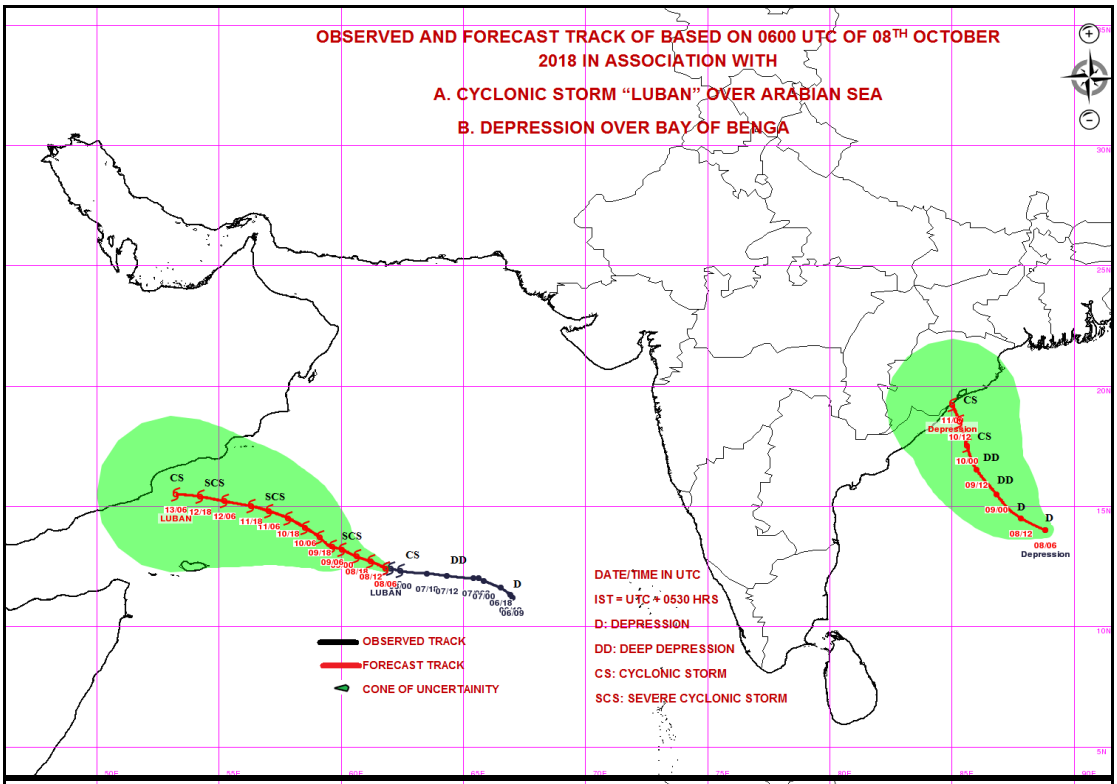
- The fishermen are advised not to venture into deep sea areas of central Bay of Bengal during 8th to 10th October 2018 and north Bay of Bengal during 9th to 11th October 2018 and into north Andaman Sea on 8th October 2018.
- Those, who are out in deep sea areas are advised return to the coast.

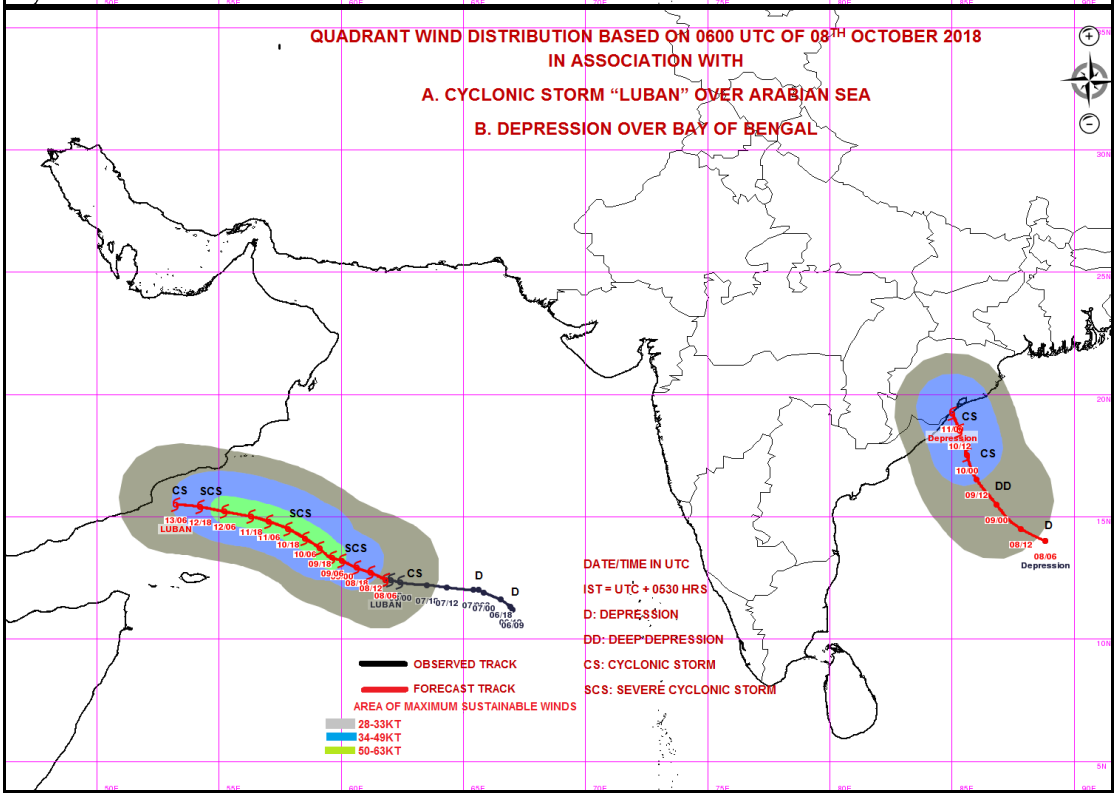
The next bulletin will be issued at 2030 hrs IST of today, the 08th October, 2018.

(Charan Singh)
Scientist-F, RSMC, New Delhi

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

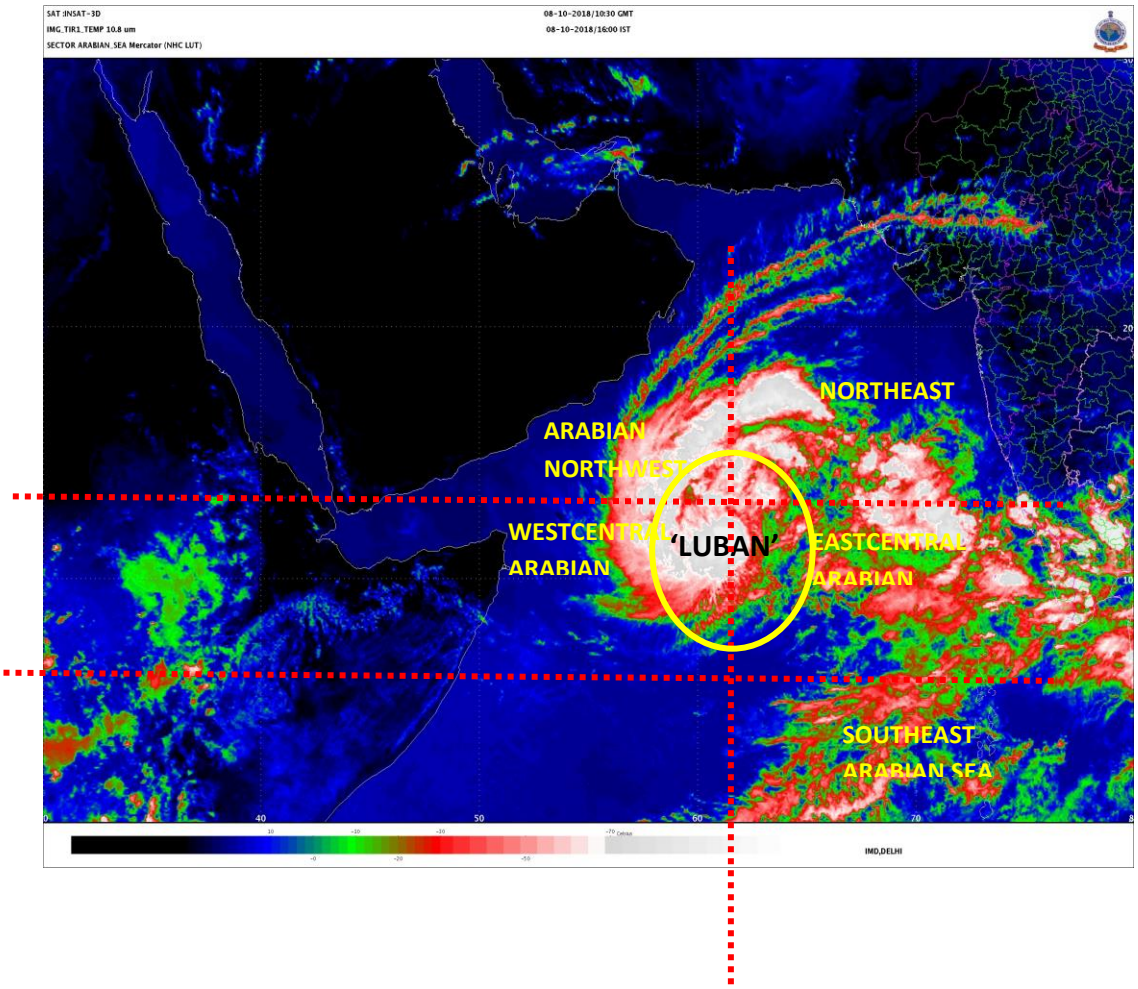
Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
Rainfall amount (mm): Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.

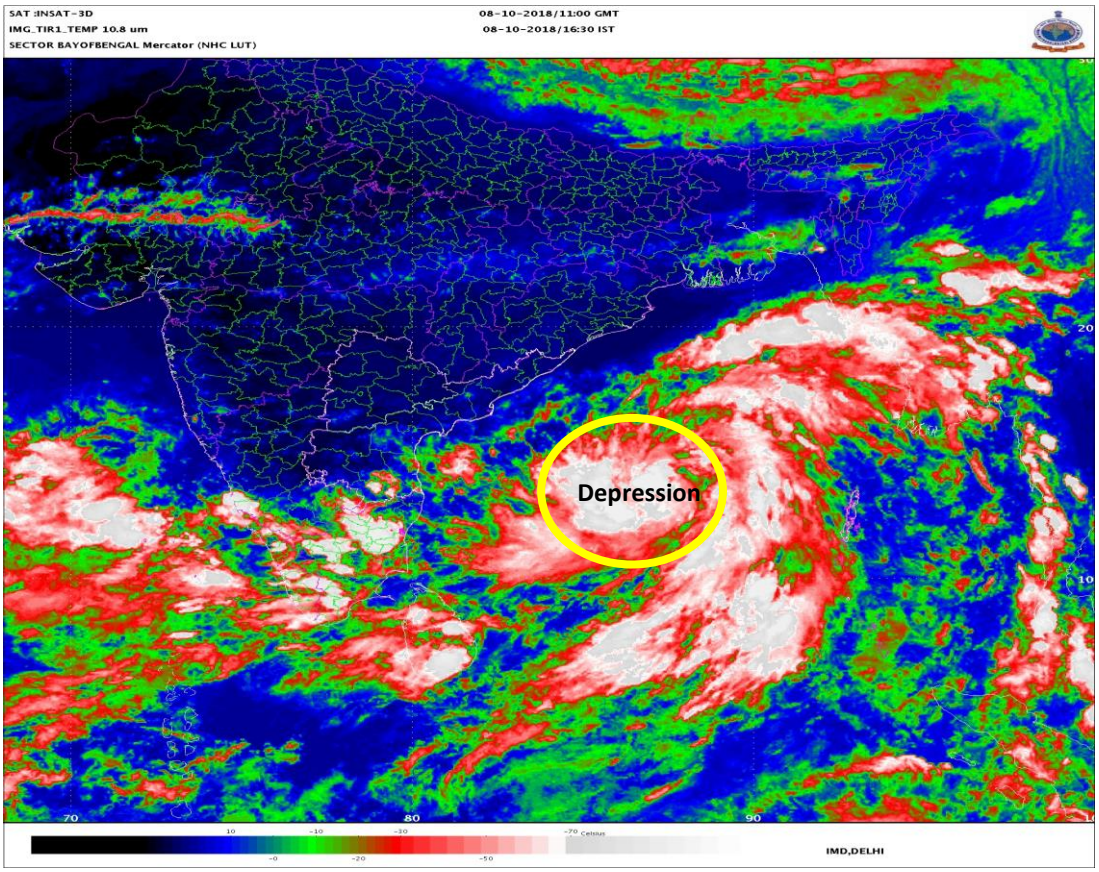




Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%

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





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.

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

BULLETIN NO. : 14 (ARB 04/2018) and BULLETIN NO.: 4 (BOB 08/2018)

TIME OF ISSUE: 2030 HOURS IST **DATED: 08.10.2018**

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)
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 (23385843)
DIRECTOR GENERAL, AIR (23421105, 23421219)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 24363261)
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. 04896-262184)
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)
CHIEF SECRETARY, ANDHRA PRADESH (FAX NO. 0866-2441029)
CHIEF SECRETARY, ODISHA (FAX NO. 0674 -2536660)
CHIEF SECRETARY, WEST BENGAL (FAX NO. 033 -22144328)
CHIEF SECRETARY, ANDAMAN & NICOBAR ISLANDS (FAX NO. 03192- 232656)

Sub: (a) Cyclonic Storm, 'LUBAN' over westcentral & adjoining southwest Arabian Sea
(b) Depression over eastcentral Bay of Bengal: Pre-cyclone watch for Odisha and north Andhra Pradesh coasts

(a) Cyclonic Storm, 'LUBAN' over westcentral & adjoining southwest Arabian Sea:

The Cyclonic Storm over westcentral & adjoining southwest Arabian Sea moved further west-northwestwards with a speed of about 14 kmph in last 06 hours and lay centered at 1730 hrs IST of today, the 08th October 2018 over westcentral & adjoining southwest Arabian Sea, near latitude 12.5°N and longitude 61.0°E, about 900 km east-southeast of Salalah (Oman) and 770 km east of Socotra Islands (Yemen). It is very likely to intensify into a Severe Cyclonic Storm during next 24 hours. It is very likely to move west-northwestwards towards Yemen & South Oman Coasts during next 5 days. Forecast track & intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
08.10.18/1730	12.5/61.0	80-90 gusting to 100	Cyclonic Storm
08.10.18/2330	12.7/60.5	85-95 gusting to 105	Cyclonic Storm
09.10.18/0530	12.9/60.0	90-100 gusting to 115	Severe Cyclonic Storm
09.10.18/1130	13.1/59.5	95-105 gusting to 120	Severe Cyclonic Storm
09.10.18/1730	13.3/59.0	100-110 gusting to 125	Severe Cyclonic Storm
10.10.18/0530	13.7/58.1	110-120 gusting to 135	Severe Cyclonic Storm
10.10.18/1730	14.1/57.1	110-120 gusting to 135	Severe Cyclonic Storm
11.10.18/0530	14.4/56.1	110-120 gusting to 135	Severe Cyclonic Storm
11.10.18/1730	14.7/55.1	105-115 gusting to 130	Severe Cyclonic Storm
12.10.18/0530	14.9/54.1	100-110 gusting to 125	Severe Cyclonic Storm
12.10.18/1730	15.1/53.2	95-105 gusting to 120	Severe Cyclonic Storm

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.

13.10.18/0530	15.2/52.3	90-100 gusting to 115	Severe Cyclonic Storm
13.10.18/1730	15.2/51.4	90-100 gusting to 115	Severe Cyclonic Storm

Warnings:

(i) Wind warning

- Gale wind speed reaching 80-90 kmph gusting to 100 kmph is very likely over westcentral & adjoining southwest Arabian Sea. It is very likely to increase gradually becoming 100-110 kmph gusting to 135 kmph during 10th to 12th October 2018 over westcentral Arabian Sea around the system centre. The wind speed is very likely to decrease gradually over southwest Arabian Sea from 9th morning.
- Squally wind speed reaching 40-50 kmph gusting to 60 kmph is very likely over adjoining areas of southeast and east central Arabian Sea during next 12 hrs.

(ii) Sea condition

- The sea condition is very high around the system centre. It is very likely continued to be very high over westcentral Arabian Sea till 12th October 2018 morning.

(iii) Fishermen Warning

- The fishermen are advised not to venture into deep sea areas of westcentral Arabian Sea & Gulf of Aden till 13th October, adjoining southwest Arabian Sea till 10th October and adjoining areas of southeast & east central Arabian Sea during next 12 hours.

(b) Depression over eastcentral Bay of Bengal: Pre-cyclone watch for Odisha and north Andhra Pradesh coasts:

The depression over eastcentral Bay of Bengal moved further west-northwestwards with a speed of about 12 kmph in last 06 hours and lay centred at 1730 hrs IST of today, the 8th October 2018 near latitude 14.3°N and longitude 88.2°E, about 650 km southeast of Gopalpur (Odisha) and 620 km southeast of Kalingapatnam (Andhra Pradesh). It is very likely to intensify into a Deep Depression during next 18 hours and into a Cyclonic Storm during subsequent 24 hours. It is very likely to move west-northwestwards for some more time and then northwestwards towards Odisha & adjoining north Andhra Pradesh coasts during next 72 hours.

Forecast track and intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
08.10.18/1730	14.3/88.2	45-55 gusting to 65	Depression
09.10.18/0530	14.8/87.4	50-60 gusting to 70	Deep Depression
09.10.18/1730	15.9/86.0	55-65 gusting to 75	Deep Depression
10.10.18/0530	17.2/85.3	60-70 gusting to 80	Cyclonic Storm
10.10.18/1730	18.1/85.0	65-75 gusting to 85	Cyclonic Storm
11.10.18/0530	18.8/84.8	70-80 gusting to 90	Cyclonic Storm
11.10.18/1730	19.5/84.8	70-80 gusting to 90	Cyclonic Storm

Warnings:

(i) Heavy rainfall warnings:

Sub-Divisions	09 Oct. 2018*	10 Oct. 2018*	11 Oct. 2018*	12 Oct. 2018*
Odisha	Rainfall at many places with heavy falls at Isolated Places over south coastal Odisha	Rainfall at most places with heavy to very heavy falls at a few places and extremely heavy falls at Isolated Places over coastal Odisha	Rainfall at most places with heavy to very heavy falls at a few places and extremely heavy falls at Isolated Places over coastal & adjoining interior Odisha	Rainfall at many places with heavy falls at Isolated Places over north coastal Odisha
North Coastal Andhra Pradesh	Rainfall at a few places	Rainfall at many places with heavy falls at Isolated Places	Rainfall at many places with heavy falls at Isolated Places	nil
Gangetic West Bengal	Rainfall at Isolated Places	Rainfall at many places with heavy to very heavy falls at Isolated Places	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at many places with heavy falls at Isolated Places

Note: * Rainfall till 0830 IST of next day.

Legends: Red-Take Action; Orange- Be prepared; Yellow- be updated; 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

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.

(ii) Wind warning

- Squally wind speed reaching 40-50 kmph gusting to 60 kmph very likely over north Andaman Sea, southeast & adjoining eastcentral Bay of Bengal and Andaman Islands during next 24 hours.
- Squally wind speed reaching 45-55 kmph gusting to 65 kmph likely over deep sea areas of central & adjoining north Bay of Bengal till 10th October 2018.
- Squally wind speed reaching 45-55 kmph gusting to 65 kmph is very likely to commence along & off along north Andhra Pradesh, Odisha and West Bengal coast from 9th afternoon.
- It is very likely to increase gradually becoming 80-90 kmph gusting to 100 kmph from 10th October 2018 evening onwards along & off south Odisha & adjoining districts of north Andhra Pradesh coasts and 55-65 kmph gusting to 75 kmph along & off north Odisha, west Bengal and remaining districts of north Andhra Pradesh coasts.

(iii) Sea condition

- The sea condition is very likely to be rough to very rough over north Andaman Sea and southeast & adjoining eastcentral Bay of Bengal during next 24 hours; and very rough over central & adjoining north Bay of Bengal during 9th and very rough to high during 10th and 11th October 2018.

(iv) Fishermen Warning

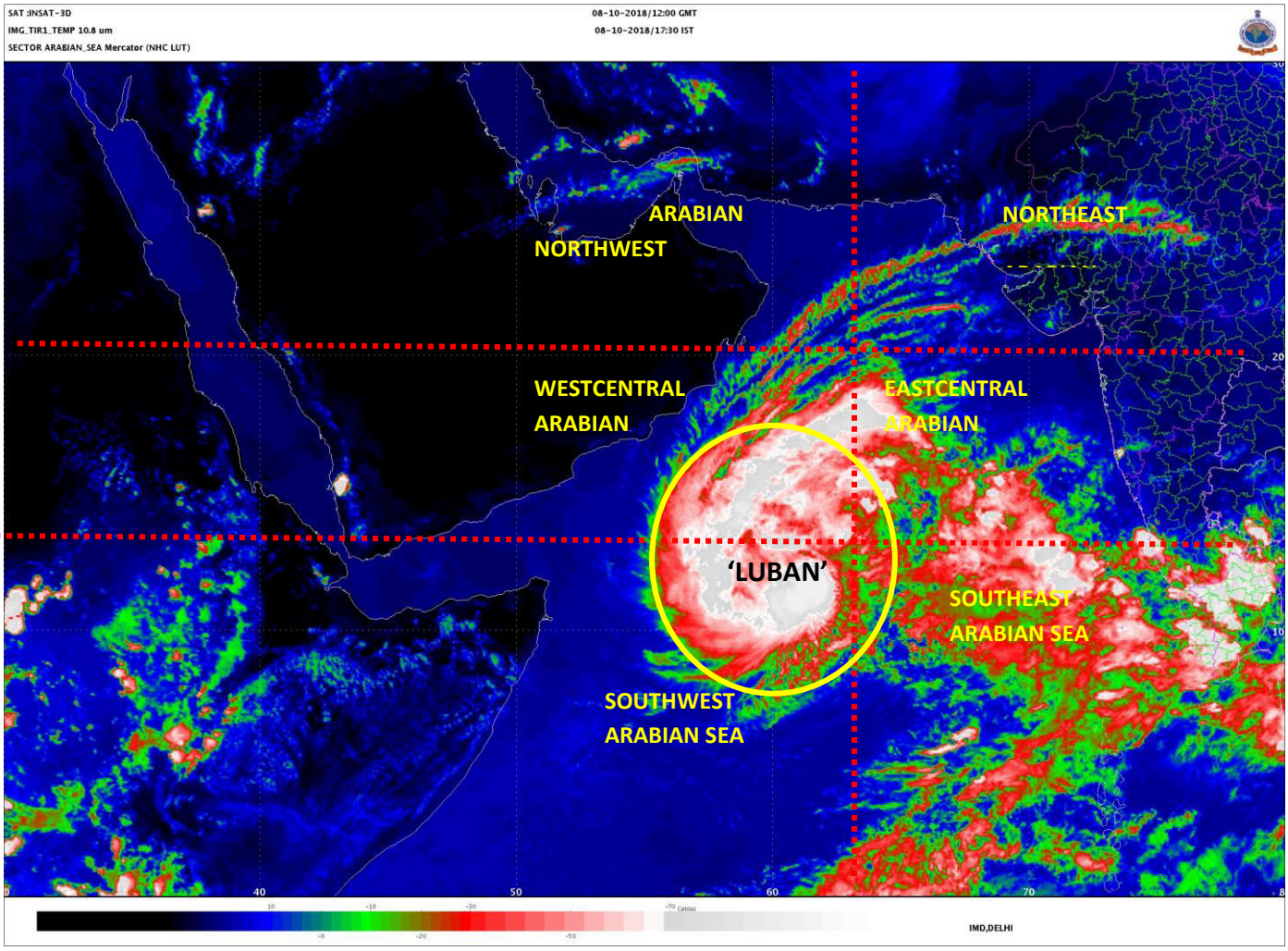
- The fishermen are advised not to venture into deep sea areas of central Bay of Bengal during 8th to 10th October 2018 and north Bay of Bengal during 9th to 11th October 2018 and into north Andaman Sea during next 12 hours.
- Those, who are out in deep sea areas are advised return to the coast.

The next bulletin will be issued at 2330 hrs IST of today, the 08th October, 2018.

(Naresh Kumar)
Scientist-E, RSMC, New Delhi

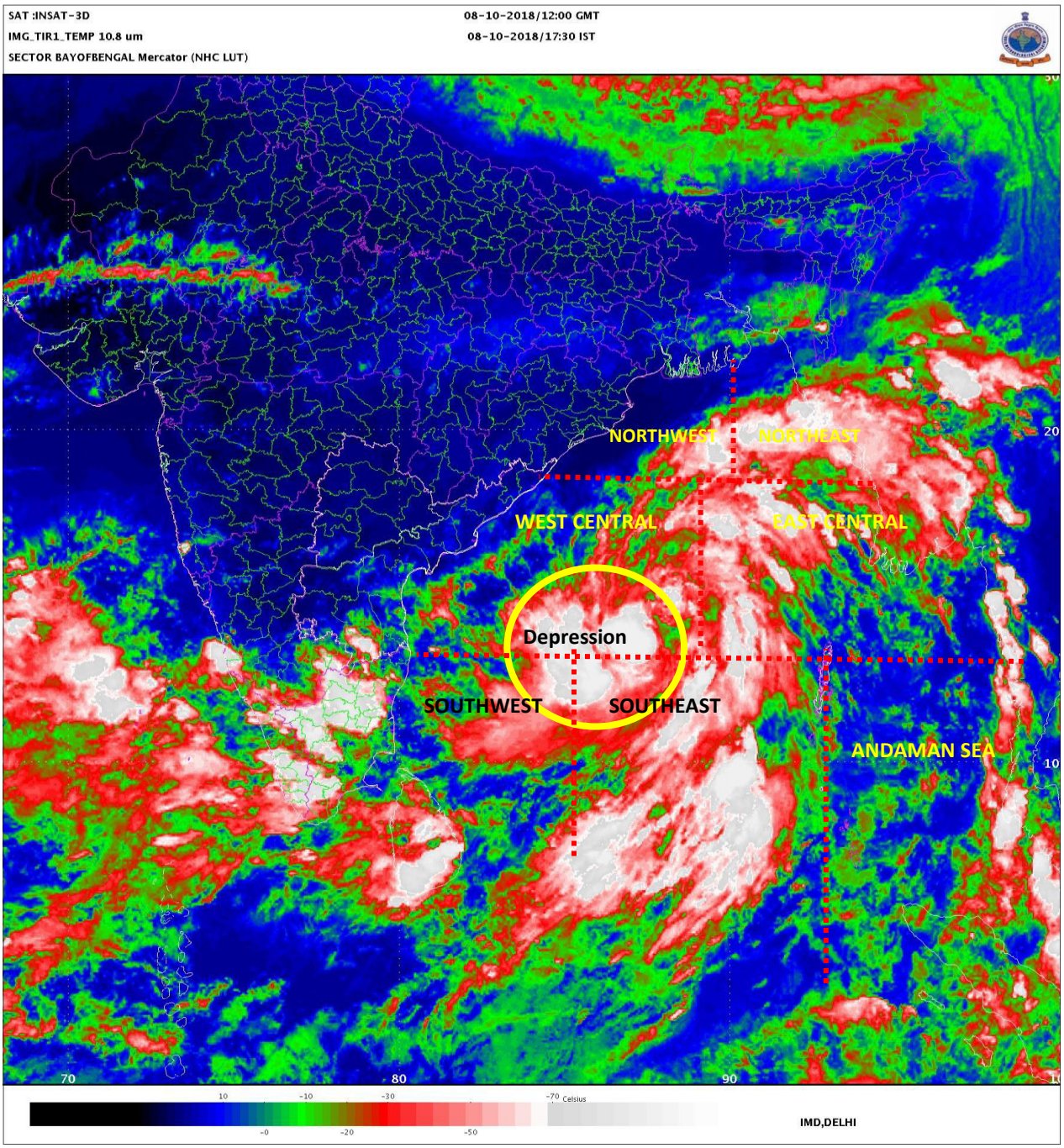
Copy to: CRS, Pune/ ACWC Chennai/ Kolkata/ Mumbai/MC Goa/Thiruvanathapuram/ Bengaluru/ CWC Ahmedabad.

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.



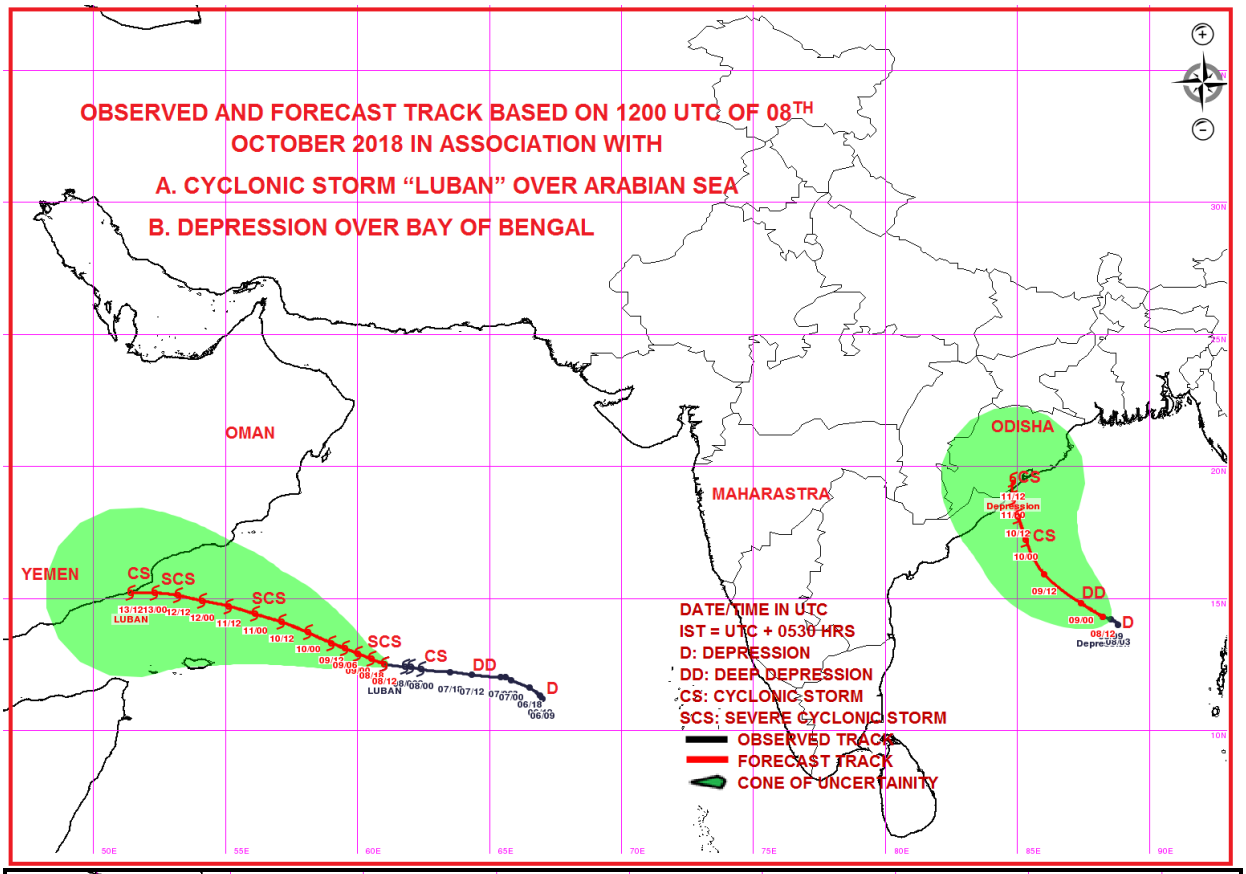
Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%

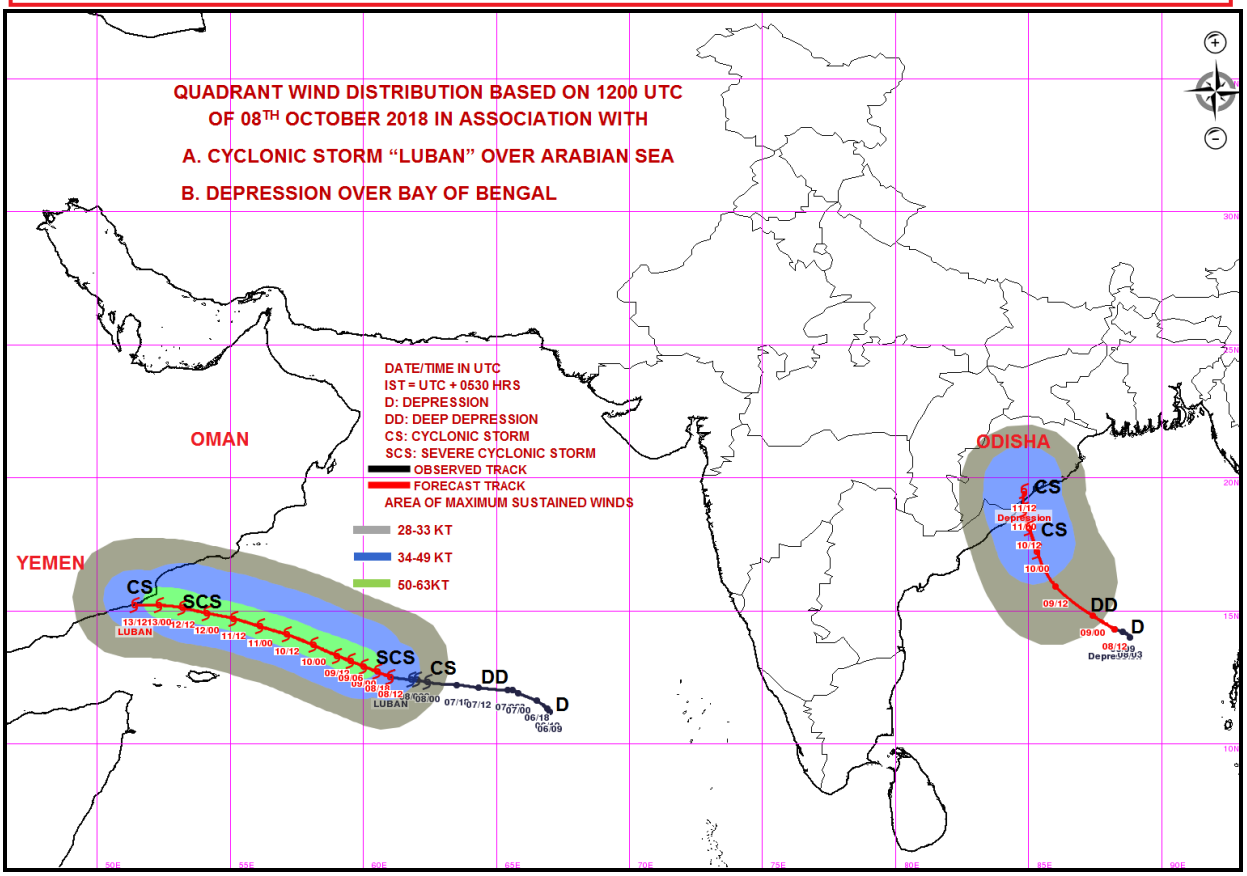
Rainfall amount (mm): Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.



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.





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.

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

BULLETIN NO. : 15 (ARB 04/2018) and BULLETIN NO.: 5 (BOB 08/2018)

TIME OF ISSUE: 2330 HOURS IST **DATED: 08.10.2018**

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)
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 (23385843)
DIRECTOR GENERAL, AIR (23421105, 23421219)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 24363261)
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. 04896-262184)
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)
CHIEF SECRETARY, ANDHRA PRADESH (FAX NO. 0866-2441029)
CHIEF SECRETARY, ODISHA (FAX NO. 0674 -2536660)
CHIEF SECRETARY, WEST BENGAL (FAX NO. 033 -22144328)
CHIEF SECRETARY, ANDAMAN & NICOBAR ISLANDS (FAX NO. 03192- 232656)

Sub: (a) Cyclonic Storm, 'LUBAN' over westcentral & adjoining southwest Arabian Sea
(b) Depression over eastcentral Bay of Bengal: Pre-cyclone watch for Odisha and north Andhra Pradesh coasts

(a) Cyclonic Storm, 'LUBAN' over westcentral & adjoining southwest Arabian Sea:

The Cyclonic Storm over westcentral & adjoining southwest Arabian Sea moved further west-northwestwards with a speed of about 08 kmph in last 03 hours and lay centered at 2030 hrs IST of today, the 08th October 2018 over westcentral & adjoining southwest Arabian Sea, near latitude 12.6°N and longitude 60.8°E, about 870 km east-southeast of Salalah (Oman), 740 km east of Socotra Islands (Yemen) and 1010 km east-southeast of Al-Ghaidah (41398-Yemen). It is very likely to intensify into a Severe Cyclonic Storm during next 24 hours. It is very likely to move west-northwestwards towards Yemen & South Oman Coasts during next 5 days. Forecast track & intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
08.10.18/2030	12.6/60.8	80-90 gusting to 100	Cyclonic Storm
08.10.18/2330	12.7/60.5	85-95 gusting to 105	Cyclonic Storm
09.10.18/0530	12.9/60.0	90-100 gusting to 115	Severe Cyclonic Storm
09.10.18/1130	13.1/59.5	95-105 gusting to 120	Severe Cyclonic Storm
09.10.18/1730	13.3/59.0	100-110 gusting to 125	Severe Cyclonic Storm
10.10.18/0530	13.7/58.1	110-120 gusting to 135	Severe Cyclonic Storm
10.10.18/1730	14.1/57.1	110-120 gusting to 135	Severe Cyclonic Storm
11.10.18/0530	14.4/56.1	110-120 gusting to 135	Severe Cyclonic Storm
11.10.18/1730	14.7/55.1	105-115 gusting to 130	Severe Cyclonic Storm
12.10.18/0530	14.9/54.1	100-110 gusting to 125	Severe Cyclonic Storm
12.10.18/1730	15.1/53.2	95-105 gusting to 120	Severe Cyclonic Storm

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.

13.10.18/0530	15.2/52.3	90-100 gusting to 115	Severe Cyclonic Storm
13.10.18/1730	15.2/51.4	90-100 gusting to 115	Severe Cyclonic Storm

Warnings:

(i) Wind warning

- Gale wind speed reaching 80-90 kmph gusting to 100 kmph is very likely over westcentral & adjoining southwest Arabian Sea. It is very likely to increase gradually becoming 100-110 kmph gusting to 135 kmph during 10th to 12th October 2018 over westcentral Arabian Sea around the system centre. The wind speed is very likely to decrease gradually over southwest Arabian Sea from 9th morning.
- Squally wind speed reaching 40-50 kmph gusting to 60 kmph is very likely over adjoining areas of southeast and east central Arabian Sea during next 12 hrs.

(ii) Sea condition

- The sea condition is very high around the system centre. It is very likely continued to be very high over westcentral Arabian Sea till 12th October 2018 morning.

(iii) Fishermen Warning

- The fishermen are advised not to venture into deep sea areas of westcentral Arabian Sea & Gulf of Aden till 13th October, adjoining southwest Arabian Sea till 10th October and adjoining areas of southeast & east central Arabian Sea during next 12 hours.

(b) Depression over eastcentral Bay of Bengal: Pre-cyclone watch for Odisha and north Andhra Pradesh coasts:

The depression over eastcentral Bay of Bengal moved further west-northwestwards with a speed of about 08 kmph in last 03 hours and lay centred at 2030 hrs IST of today, the 8th October 2018 near latitude 14.4°N and longitude 87.9°E, about 620 km southeast of Gopalpur (Odisha) and 590 km southeast of Kalingapatnam (Andhra Pradesh). It is very likely to intensify into a Deep Depression during next 06 hours and into a Cyclonic Storm during subsequent 24 hours. It is very likely to move west-northwestwards for some more time and then northwestwards towards Odisha & adjoining north Andhra Pradesh coasts during next 72 hours.

Forecast track and intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
08.10.18/2030	14.4/87.9	45-55 gusting to 65	Depression
09.10.18/0530	14.8/87.4	50-60 gusting to 70	Deep Depression
09.10.18/1730	15.9/86.0	55-65 gusting to 75	Deep Depression
10.10.18/0530	17.2/85.3	60-70 gusting to 80	Cyclonic Storm
10.10.18/1730	18.1/85.0	65-75 gusting to 85	Cyclonic Storm
11.10.18/0530	18.8/84.8	70-80 gusting to 90	Cyclonic Storm
11.10.18/1730	19.5/84.8	70-80 gusting to 90	Cyclonic Storm

Warnings:

(i) Heavy rainfall warnings:

Sub-Divisions	09 Oct. 2018*	10 Oct. 2018*	11 Oct. 2018*	12 Oct. 2018*
Odisha	Rainfall at many places with heavy falls at Isolated Places over south coastal Odisha	Rainfall at most places with heavy to very heavy falls at a few places and extremely heavy falls at Isolated Places over coastal Odisha	Rainfall at most places with heavy to very heavy falls at a few places and extremely heavy falls at Isolated Places over coastal & adjoining interior Odisha	Rainfall at many places with heavy falls at Isolated Places over north coastal Odisha
North Coastal Andhra Pradesh	Rainfall at a few places	Rainfall at many places with heavy falls at Isolated Places	Rainfall at many places with heavy falls at Isolated Places	nil
Gangetic West Bengal	Rainfall at Isolated Places	Rainfall at many places with heavy to very heavy falls at Isolated Places	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at many places with heavy falls at Isolated Places

Note: * Rainfall till 0830 IST of next day.

Legends: Red-Take Action; Orange- Be prepared; Yellow- be updated; 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

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.

(ii) Wind warning

- Squally wind speed reaching 40-50 kmph gusting to 60 kmph very likely over north Andaman Sea, southeast & adjoining eastcentral Bay of Bengal and Andaman Islands during next 24 hours.
- Squally wind speed reaching 45-55 kmph gusting to 65 kmph likely over deep sea areas of central & adjoining north Bay of Bengal till 10th October 2018.
- Squally wind speed reaching 45-55 kmph gusting to 65 kmph is very likely to commence along & off along north Andhra Pradesh, Odisha and West Bengal coast from 9th afternoon.
- It is very likely to increase gradually becoming 80-90 kmph gusting to 100 kmph from 10th October 2018 evening onwards along & off south Odisha & adjoining districts of north Andhra Pradesh coasts and 55-65 kmph gusting to 75 kmph along & off north Odisha, west Bengal and remaining districts of north Andhra Pradesh coasts.

(iii) Sea condition

- The sea condition is very likely to be rough to very rough over north Andaman Sea and southeast & adjoining eastcentral Bay of Bengal during next 24 hours; and very rough over central & adjoining north Bay of Bengal during 9th and very rough to high during 10th and 11th October 2018.

(iv) Fishermen Warning

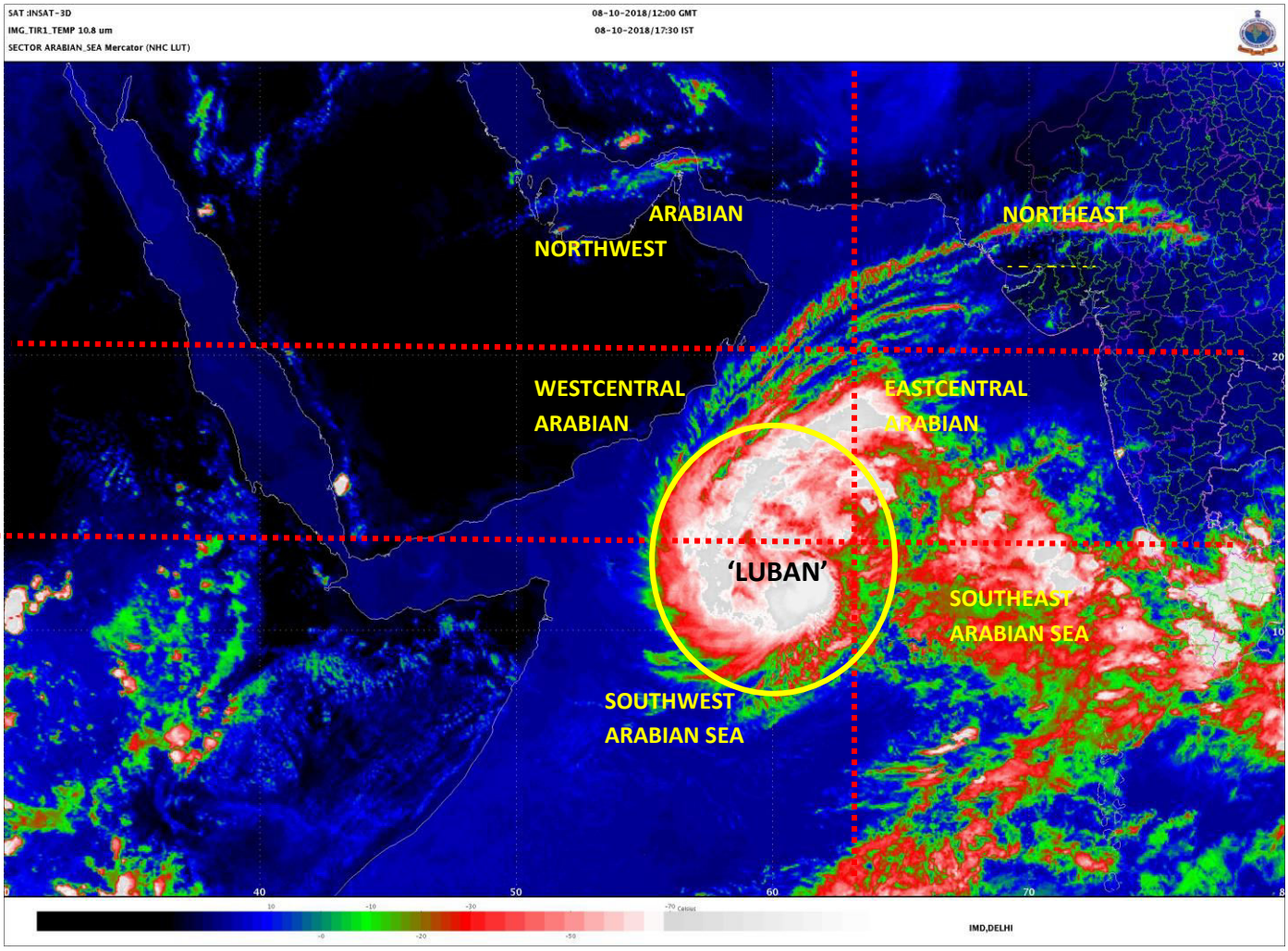
- The fishermen are advised not to venture into deep sea areas of central Bay of Bengal during 8th to 10th October 2018 and north Bay of Bengal during 9th to 11th October 2018 and into north Andaman Sea during next 12 hours.
- Those, who are out in deep sea areas are advised return to the coast.

The next bulletin will be issued at 0230 hrs IST of 09th October, 2018.

(D. Joardar)
Scientist-E, RSMC, New Delhi

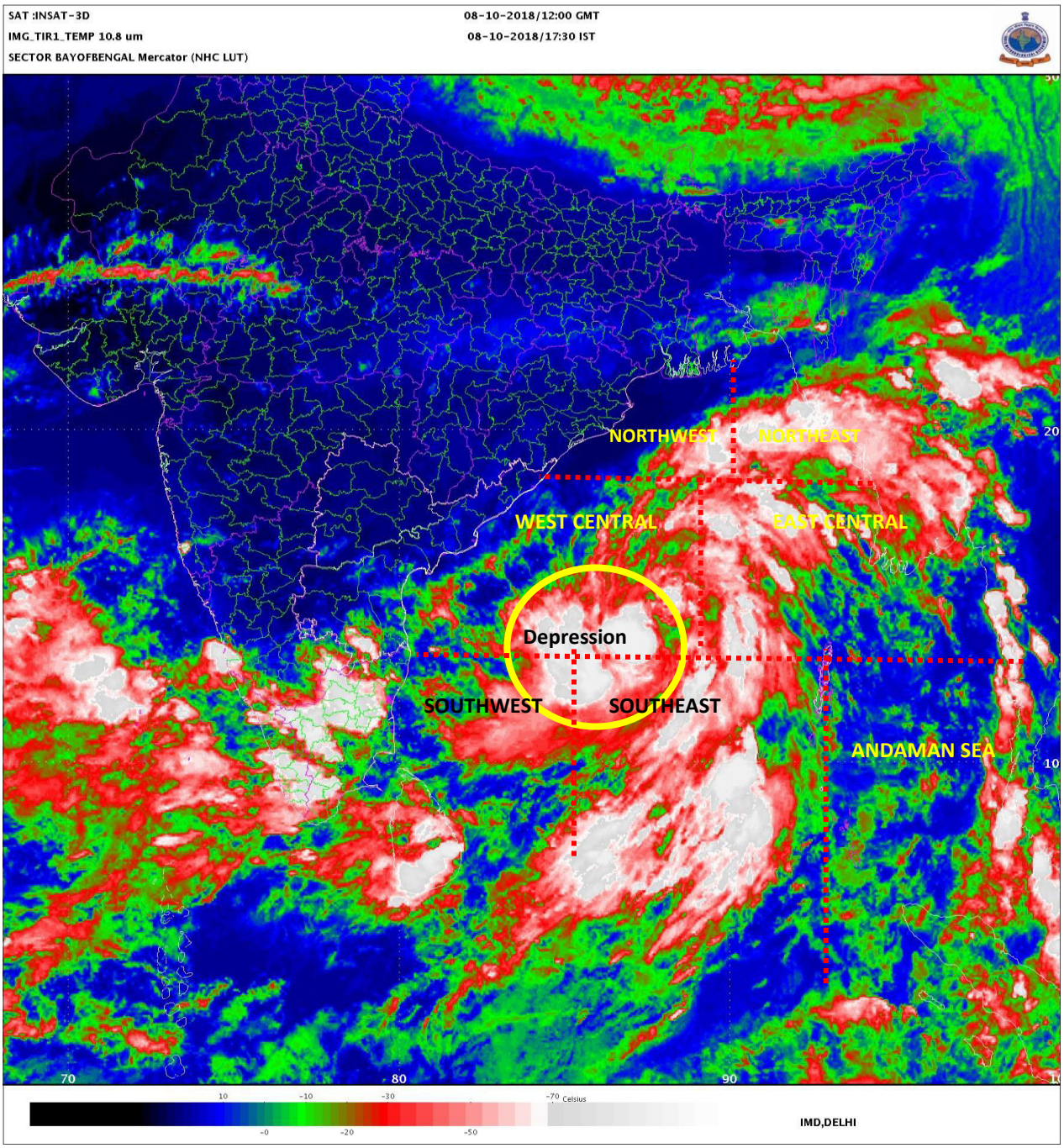
Copy to: CRS, Pune/ ACWC Chennai/ Kolkata/ Mumbai/MC Goa/Thiruvanathapuram/ Bengaluru/ CWC Ahmedabad.

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.



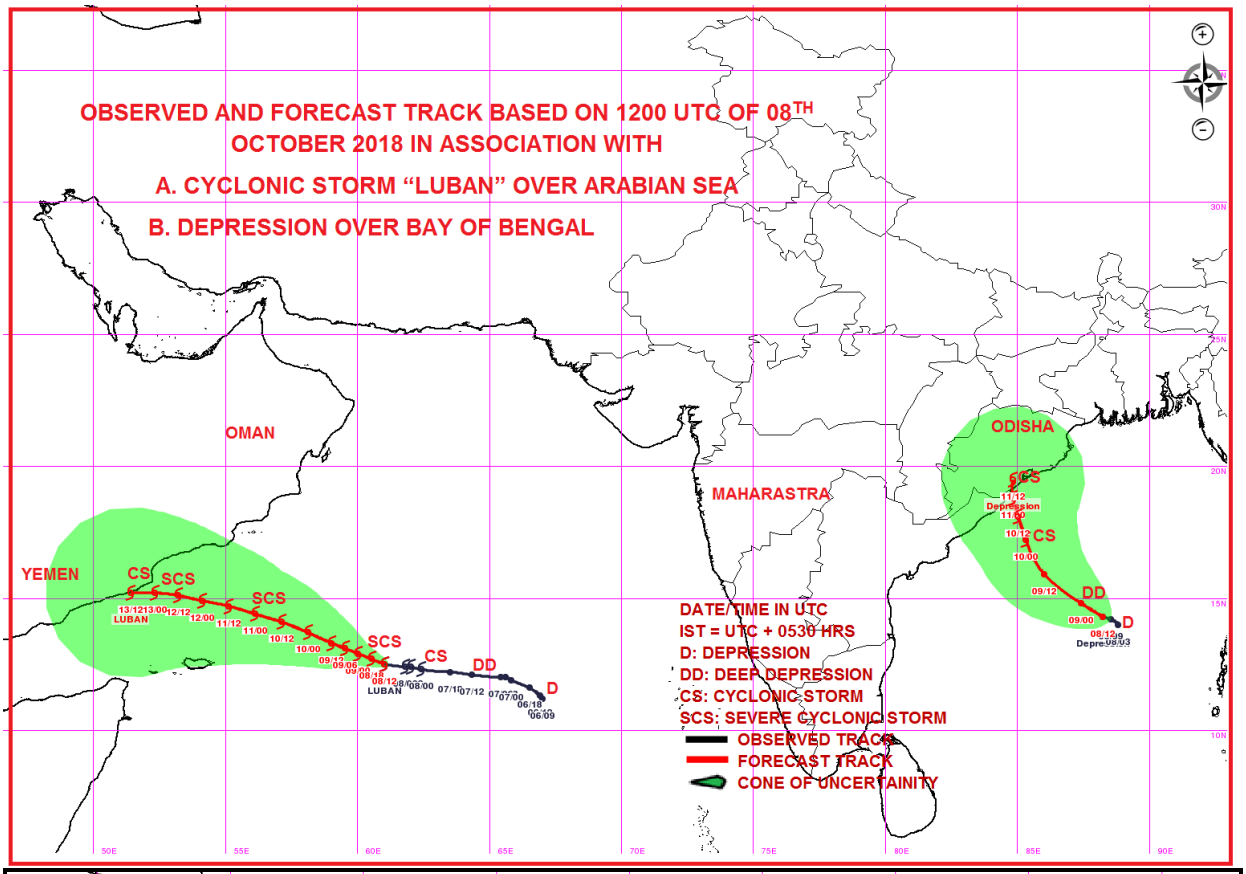
Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%

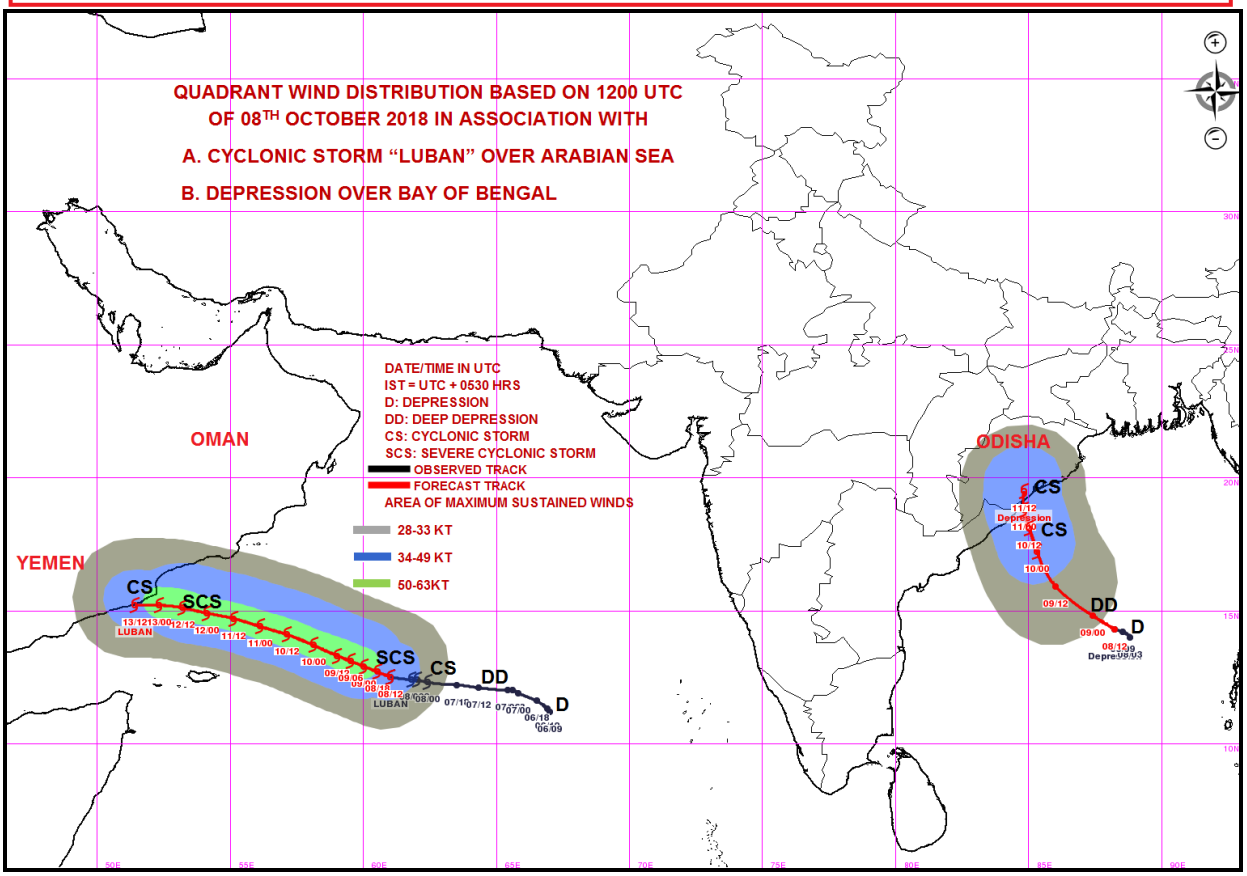
Rainfall amount (mm): Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.



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.





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.

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

BULLETIN NO. : 16 (ARB 04/2018) and BULLETIN NO.: 6 (BOB 08/2018)

TIME OF ISSUE: 0230 HOURS IST **DATED: 09.10.2018**

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)
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 (23385843)
DIRECTOR GENERAL, AIR (23421105, 23421219)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 24363261)
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. 04896-262184)
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)
CHIEF SECRETARY, ANDHRA PRADESH (FAX NO. 0866-2441029)
CHIEF SECRETARY, ODISHA (FAX NO. 0674 -2536660)
CHIEF SECRETARY, WEST BENGAL (FAX NO. 033 -22144328)
CHIEF SECRETARY, ANDAMAN & NICOBAR ISLANDS (FAX NO. 03192- 232656)

Sub: (a) Cyclonic Storm, 'LUBAN' over westcentral & adjoining southwest Arabian Sea
(b) Depression intensified into Deep Depression over eastcentral Bay of Bengal: Pre-cyclone watch for Odisha and north Andhra Pradesh coasts:

(a) Cyclonic Storm, 'LUBAN' over westcentral & adjoining southwest Arabian Sea:

The Cyclonic Storm over westcentral & adjoining southwest Arabian Sea moved further west-northwestwards with a speed of about 11 kmph in last 03 hours and lay centered at 2330 hrs IST 08th October 2018 over westcentral & adjoining southwest Arabian Sea, near latitude 12.7°N and longitude 60.5°E, about 840 km east-southeast of Salalah (Oman), 710 km east of Socotra Islands (Yemen) and 980 km east-southeast of Al-Ghaidah (41398-Yemen). It is very likely to intensify into a Severe Cyclonic Storm during next 24 hours. It is very likely to move west-northwestwards towards Yemen & South Oman Coasts during next 5 days. Forecast track & intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
08.10.18/2330	12.7/60.5	85-95 gusting to 105	Cyclonic Storm
09.10.18/0530	12.9/60.0	90-100 gusting to 115	Severe Cyclonic Storm
09.10.18/1130	13.1/59.5	95-105 gusting to 120	Severe Cyclonic Storm
09.10.18/1730	13.3/59.0	100-110 gusting to 125	Severe Cyclonic Storm
09.10.18/2330	13.5/58.5	100-110 gusting to 125	Severe Cyclonic Storm
10.10.18/1130	14.0/57.3	110-120 gusting to 135	Severe Cyclonic Storm
10.10.18/2330	14.3/56.3	110-120 gusting to 135	Severe Cyclonic Storm
11.10.18/1130	14.5/55.6	110-120 gusting to 135	Severe Cyclonic Storm
11.10.18/2330	14.8/54.6	105-115 gusting to 130	Severe Cyclonic Storm
12.10.18/1130	15.0/53.7	100-110 gusting to 125	Severe Cyclonic Storm
12.10.18/2330	15.1/52.7	100-110 gusting to 125	Severe Cyclonic Storm
13.10.18/1130	15.2/51.8	90-100 gusting to 110	Severe Cyclonic Storm
13.10.18/2330	15.3/51.3	80-90 gusting to 100	Cyclonic Storm

Warnings:

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.

(i) Wind warning

- Gale wind speed reaching 80-90 kmph gusting to 100 kmph is very likely over westcentral & adjoining southwest Arabian Sea. It is very likely to increase gradually becoming 100-110 kmph gusting to 135 kmph during 10th to 12th October 2018 over westcentral Arabian Sea around the system centre. The wind speed is very likely to decrease gradually over southwest Arabian Sea during next 12 hours.
- Squally wind speed reaching 40-50 kmph gusting to 60 kmph is very likely over adjoining areas of southeast and east central Arabian Sea during next 12 hrs.

(ii) Sea condition

- The sea condition is very high around the system centre. It is very likely continued to be very high over westcentral Arabian Sea till 12th October 2018 morning.

(iii) Fishermen Warning

- The fishermen are advised not to venture into deep sea areas of westcentral Arabian Sea & Gulf of Aden till 13th October, adjoining southwest Arabian Sea till 10th October and adjoining areas of southeast & east central Arabian Sea during next 12 hours.

(b) Depression intensified into Deep Depression over eastcentral Bay of Bengal: Pre-cyclone watch for Odisha and north Andhra Pradesh coasts:

The depression over eastcentral Bay of Bengal moved further west-northwestwards with a speed of about 10 kmph in last 03 hours, intensified into a deep depression and lay centred at 2330 hrs IST, 8th October 2018 near latitude 14.5°N and longitude 87.6°E, about 600 km southeast of Gopalpur (Odisha) and 560 km southeast of Kalingapatnam (Andhra Pradesh). It is very likely to intensify into a Cyclonic Storm during next 24 hours. It is very likely to move west-northwestwards for some more time and then northwestwards towards Odisha & adjoining north Andhra Pradesh coasts during next 72 hours.

Forecast track and intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
08.10.18/2330	14.5/87.6	50-60 gusting to 70	Deep Depression
09.10.18/0530	15.0/86.9	50-60 gusting to 70	Deep Depression
09.10.18/1130	15.4/86.5	55-65 gusting to 75	Deep Depression
09.10.18/1730	15.9/86.0	60-70 gusting to 80	Cyclonic Storm
09.10.18/2330	16.5/85.7	65-75 gusting to 85	Cyclonic Storm
10.10.18/1130	17.6/85.1	70-80 gusting to 90	Cyclonic Storm
10.10.18/2330	18.4/84.9	80-90 gusting to 100	Cyclonic Storm
11.10.18/1130	19.1/84.8	70-80 gusting to 90	Cyclonic Storm
11.10.18/2330	19.8/84.8	55-65 gusting to 75	Deep Depression

Warnings:

(i) Heavy rainfall warnings:

Sub-Divisions	09 Oct. 2018*	10 Oct. 2018*	11 Oct. 2018*	12 Oct. 2018*
Odisha	Rainfall at many places with heavy falls at Isolated Places over south coastal Odisha	Rainfall at most places with heavy to very heavy falls at a few places and extremely heavy falls at Isolated Places over coastal Odisha	Rainfall at most places with heavy to very heavy falls at a few places and extremely heavy falls at Isolated Places over coastal & adjoining interior Odisha	Rainfall at many places with heavy falls at Isolated Places over north coastal Odisha
North Coastal Andhra Pradesh	Rainfall at a few places	Rainfall at many places with heavy falls at Isolated Places	Rainfall at many places with heavy falls at Isolated Places	Nil
Gangetic West Bengal	Rainfall at Isolated Places	Rainfall at many places with heavy to very heavy falls at Isolated Places	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at many places with heavy falls at Isolated Places

Note: * Rainfall till 0830 IST of next day.
Legends: Red-Take Action; Orange- Be prepared; Yellow- be updated; 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

- Squally wind speed reaching 40-50 kmph gusting to 60 kmph very likely over north Andaman Sea, southeast & adjoining eastcentral Bay of Bengal and Andaman Islands during next 24 hours.
- Squally wind speed reaching 45-55 kmph gusting to 65 kmph likely over deep sea areas of central & adjoining north Bay of Bengal till 10th October 2018.
- Squally wind speed reaching 45-55 kmph gusting to 65 kmph is very likely to commence along & off along north Andhra Pradesh, Odisha and West Bengal coast on 9th afternoon.
- It is very likely to increase gradually becoming 80-90 kmph gusting to 100 kmph from 10th October 2018 evening onwards along & off south Odisha & adjoining districts of north Andhra Pradesh coasts and 55-65 kmph gusting to 75 kmph along & off north Odisha, west Bengal and remaining districts of north Andhra Pradesh coasts.

(iii) Sea condition

- The sea condition is very likely to be rough to very rough over north Andaman Sea and southeast & adjoining eastcentral Bay of Bengal during next 24 hours; and very rough over central & adjoining north Bay of Bengal during 9th and very rough to high during 10th and 11th October 2018.

(iv) Fishermen Warning

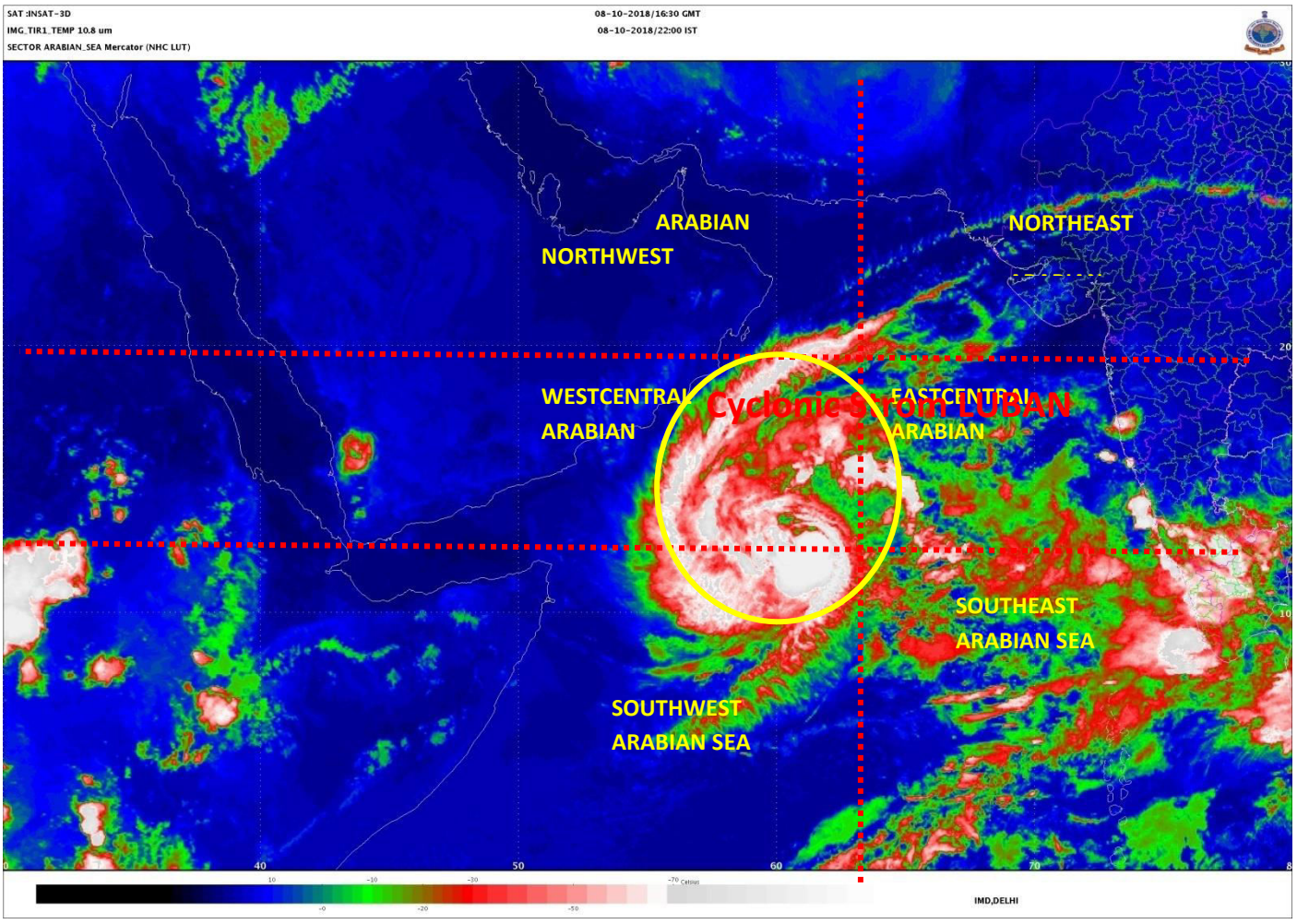
- The fishermen are advised not to venture into deep sea areas of central Bay of Bengal during 9th to 10th October 2018 and north Bay of Bengal during 9th to 11th October 2018 and into north Andaman Sea during next 12 hours.
- Those, who are out in deep sea areas are advised return to the coast.

The next bulletin will be issued at 0530 hrs IST of 09th October, 2018.

(D. Joardar)
Scientist-E, RSMC, New Delhi

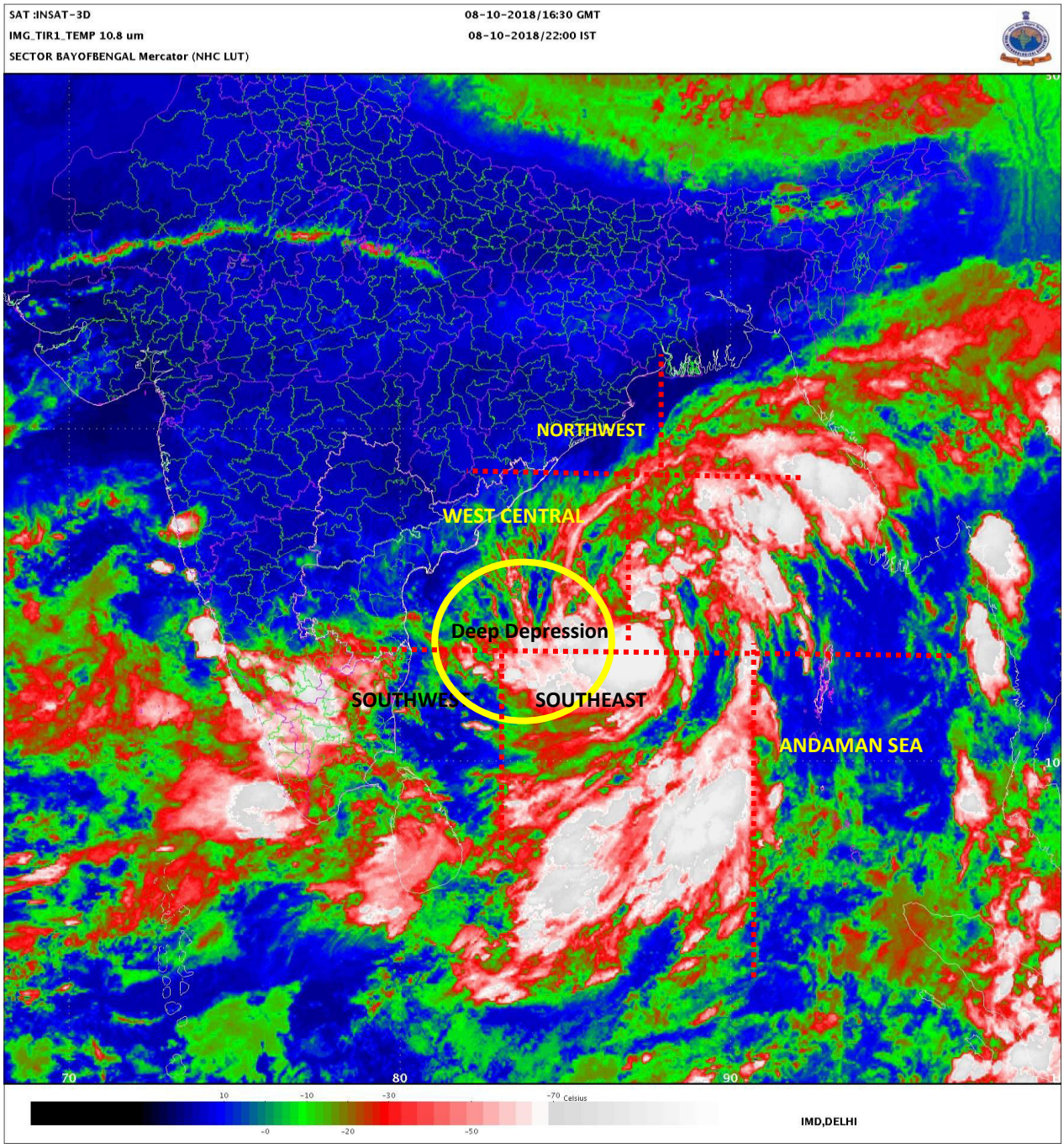
Copy to: CRS, Pune/ ACWC Chennai/ Kolkata/ Mumbai/MC Goa/Thiruvanathapuram/ Bengaluru/ CWC Ahmedabad.

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.



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.



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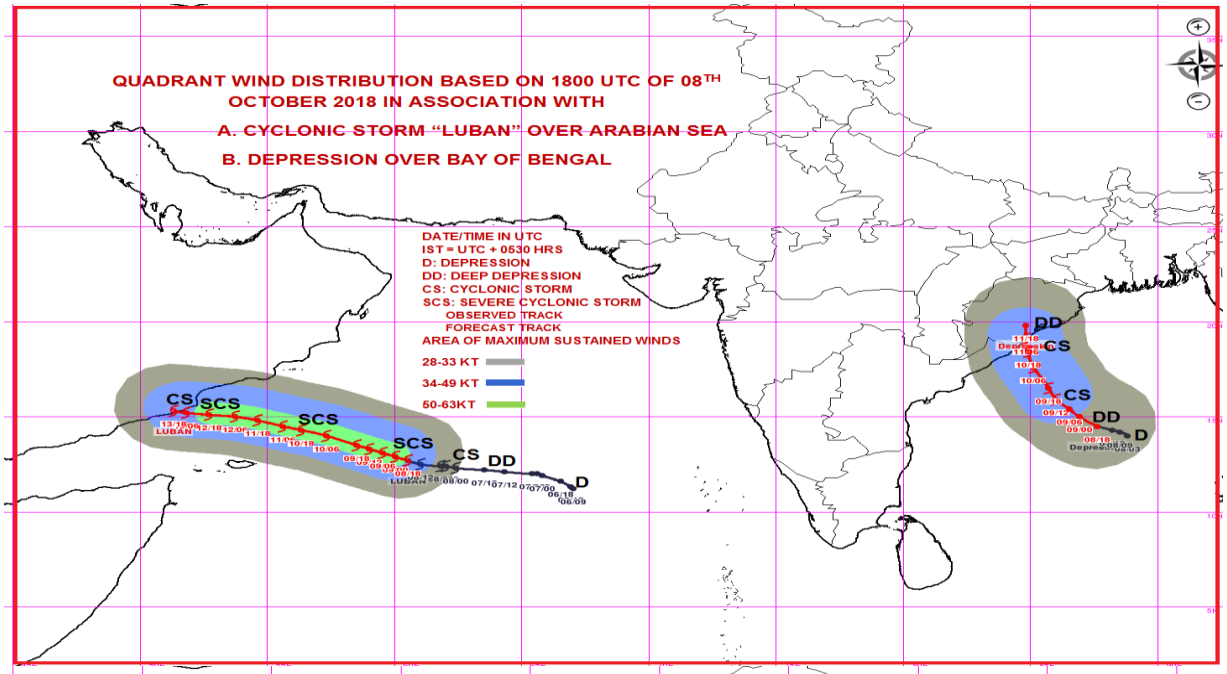

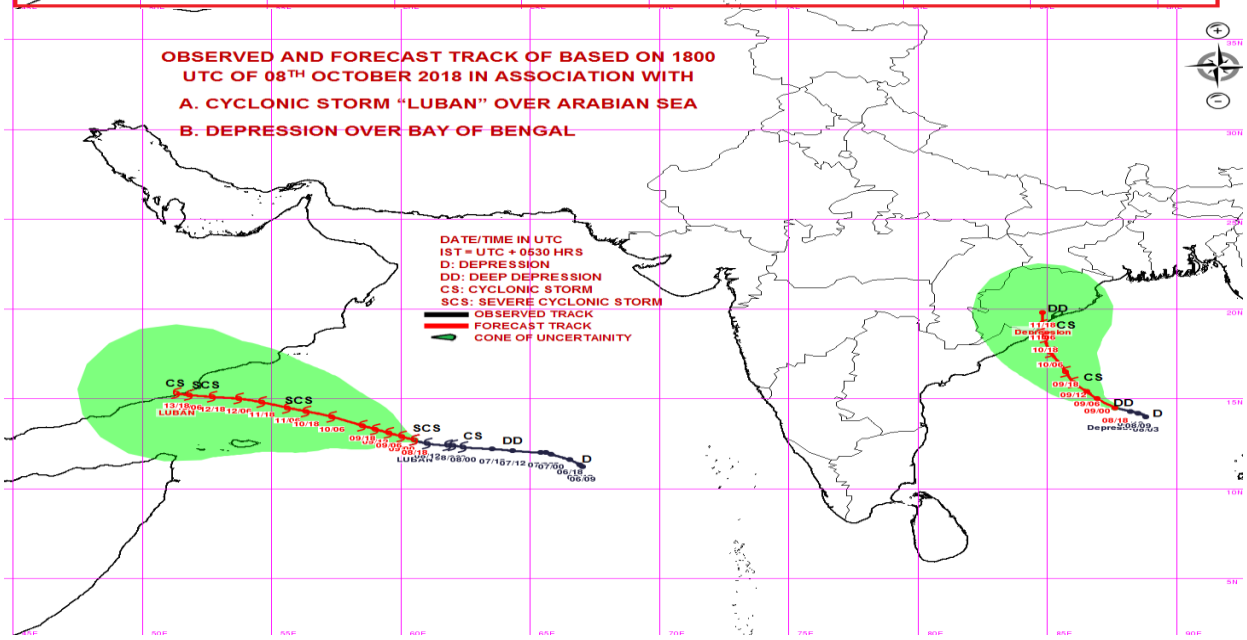

Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%

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

BULLETIN NO. : 17 (ARB 04/2018) and BULLETIN NO.: 7 (BOB 08/2018)

TIME OF ISSUE: 0530 HOURS IST **DATED: 09.10.2018**

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)
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 (23385843)
DIRECTOR GENERAL, AIR (23421105, 23421219)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 24363261)
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. 04896-262184)
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)
CHIEF SECRETARY, ANDHRA PRADESH (FAX NO. 0866-2441029)
CHIEF SECRETARY, ODISHA (FAX NO. 0674 -2536660)
CHIEF SECRETARY, WEST BENGAL (FAX NO. 033 -22144328)
CHIEF SECRETARY, ANDAMAN & NICOBAR ISLANDS (FAX NO. 03192- 232656)

Sub: (a) Cyclonic Storm, 'LUBAN' over westcentral & adjoining southwest Arabian Sea
(b) Deep Depression over eastcentral Bay of Bengal: Pre-cyclone watch for Odisha and north Andhra Pradesh coasts:

(a) Cyclonic Storm, 'LUBAN' over westcentral & adjoining southwest Arabian Sea:

The Cyclonic Storm over westcentral & adjoining southwest Arabian Sea moved further west-northwestwards with a speed of about 10 kmph in last 03 hours and lay centered at 0230 hrs IST 09th October 2018 over westcentral & adjoining southwest Arabian Sea, near latitude 12.8°N and longitude 60.2°E, about 800 km east-southeast of Salalah (Oman), 680 km east of Socotra Islands (Yemen) and 940 km east-southeast of Al-Ghaidah (41398-Yemen). It is very likely to intensify into a Severe Cyclonic Storm during next 12 hours. It is very likely to move west-northwestwards towards Yemen & South Oman Coasts during next 5 days. Forecast track & intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
09.10.18/0230	12.8/60.2	85-95 gusting to 105	Cyclonic Storm
09.10.18/0530	12.9/60.0	90-100 gusting to 115	Severe Cyclonic Storm
09.10.18/1130	13.1/59.5	95-105 gusting to 120	Severe Cyclonic Storm
09.10.18/1730	13.3/59.0	100-110 gusting to 125	Severe Cyclonic Storm
09.10.18/2330	13.5/58.5	100-110 gusting to 125	Severe Cyclonic Storm
10.10.18/1130	14.0/57.3	110-120 gusting to 135	Severe Cyclonic Storm
10.10.18/2330	14.3/56.3	110-120 gusting to 135	Severe Cyclonic Storm
11.10.18/1130	14.5/55.6	110-120 gusting to 135	Severe Cyclonic Storm
11.10.18/2330	14.8/54.6	105-115 gusting to 130	Severe Cyclonic Storm
12.10.18/1130	15.0/53.7	100-110 gusting to 125	Severe Cyclonic Storm
12.10.18/2330	15.1/52.7	100-110 gusting to 125	Severe Cyclonic Storm
13.10.18/1130	15.2/51.8	90-100 gusting to 110	Severe Cyclonic Storm
13.10.18/2330	15.3/51.3	80-90 gusting to 100	Cyclonic Storm

Warnings:

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.

(i) Wind warning

- Gale wind speed reaching 80-90 kmph gusting to 100 kmph is very likely over westcentral & adjoining southwest Arabian Sea. It is very likely to increase gradually becoming 100-110 kmph gusting to 135 kmph during 10th to 12th October 2018 over westcentral Arabian Sea around the system centre. The wind speed is very likely to decrease gradually over southwest Arabian Sea during next 12 hours.
- Squally wind speed reaching 40-50 kmph gusting to 60 kmph is very likely over adjoining areas of southeast and east central Arabian Sea during next 12 hrs.

(ii) Sea condition

- The sea condition is very high around the system centre. It is very likely continued to be very high over westcentral Arabian Sea till 12th October 2018 morning.

(iii) Fishermen Warning

- The fishermen are advised not to venture into deep sea areas of westcentral Arabian Sea & Gulf of Aden till 13th October, adjoining southwest Arabian Sea till 10th October and adjoining areas of southeast & east central Arabian Sea during next 12 hours.

(b) Deep Depression over eastcentral Bay of Bengal: Pre-cyclone watch for Odisha and north Andhra Pradesh coasts:

The deep depression over eastcentral Bay of Bengal moved further west-northwestwards with a speed of about 11 kmph in last 03 hours, at 0230 hrs IST, 9th October 2018 near latitude 14.6°N and longitude 87.3°E, about 570 km southeast of Gopalpur (Odisha) and 530 km southeast of Kalingapatnam (Andhra Pradesh). It is very likely to intensify into a Cyclonic Storm during next 24 hours. It is very likely to move west-northwestwards for some more time and then northwestwards towards Odisha & adjoining north Andhra Pradesh coasts during next 72 hours.

Forecast track and intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
08.10.18/0230	14.6/87.3	50-60 gusting to 70	Deep Depression
09.10.18/0530	15.0/86.9	50-60 gusting to 70	Deep Depression
09.10.18/1130	15.4/86.5	55-65 gusting to 75	Deep Depression
09.10.18/1730	15.9/86.0	60-70 gusting to 80	Cyclonic Storm
09.10.18/2330	16.5/85.7	65-75 gusting to 85	Cyclonic Storm
10.10.18/1130	17.6/85.1	70-80 gusting to 90	Cyclonic Storm
10.10.18/2330	18.4/84.9	80-90 gusting to 100	Cyclonic Storm
11.10.18/1130	19.1/84.8	70-80 gusting to 90	Cyclonic Storm
11.10.18/2330	19.8/84.8	55-65 gusting to 75	Deep Depression

Warnings:

(i) Heavy rainfall warnings:

Sub-Divisions	09 Oct. 2018*	10 Oct. 2018*	11 Oct. 2018*	12 Oct. 2018*
Odisha	Rainfall at many places with heavy falls at Isolated Places over south coastal Odisha	Rainfall at most places with heavy to very heavy falls at a few places and extremely heavy falls at Isolated Places over coastal Odisha	Rainfall at most places with heavy to very heavy falls at a few places and extremely heavy falls at Isolated Places over coastal & adjoining interior Odisha	Rainfall at many places with heavy falls at Isolated Places over north coastal Odisha
North Coastal Andhra Pradesh	Rainfall at a few places	Rainfall at many places with heavy falls at Isolated Places	Rainfall at many places with heavy falls at Isolated Places	Nil
Gangetic West Bengal	Rainfall at Isolated Places	Rainfall at many places with heavy to very heavy falls at Isolated Places	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at many places with heavy falls at Isolated Places

Note: * Rainfall till 0830 IST of next day.
Legends: Red-Take Action; Orange- Be prepared; Yellow- be updated; 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

- Squally wind speed reaching 40-50 kmph gusting to 60 kmph very likely over north Andaman Sea, southeast & adjoining eastcentral Bay of Bengal and Andaman Islands during next 24 hours.
- Squally wind speed reaching 45-55 kmph gusting to 65 kmph likely over deep sea areas of central & adjoining north Bay of Bengal till 10th October 2018.
- Squally wind speed reaching 45-55 kmph gusting to 65 kmph is very likely to commence along & off along north Andhra Pradesh, Odisha and West Bengal coast on 9th afternoon.
- It is very likely to increase gradually becoming 80-90 kmph gusting to 100 kmph from 10th October 2018 evening onwards along & off south Odisha & adjoining districts of north Andhra Pradesh coasts and 55-65 kmph gusting to 75 kmph along & off north Odisha, west Bengal and remaining districts of north Andhra Pradesh coasts.

(iii) Sea condition

- The sea condition is very likely to be rough to very rough over north Andaman Sea and southeast & adjoining eastcentral Bay of Bengal during next 24 hours; and very rough over central & adjoining north Bay of Bengal during 9th and very rough to high during 10th and 11th October 2018.

(iv) Fishermen Warning

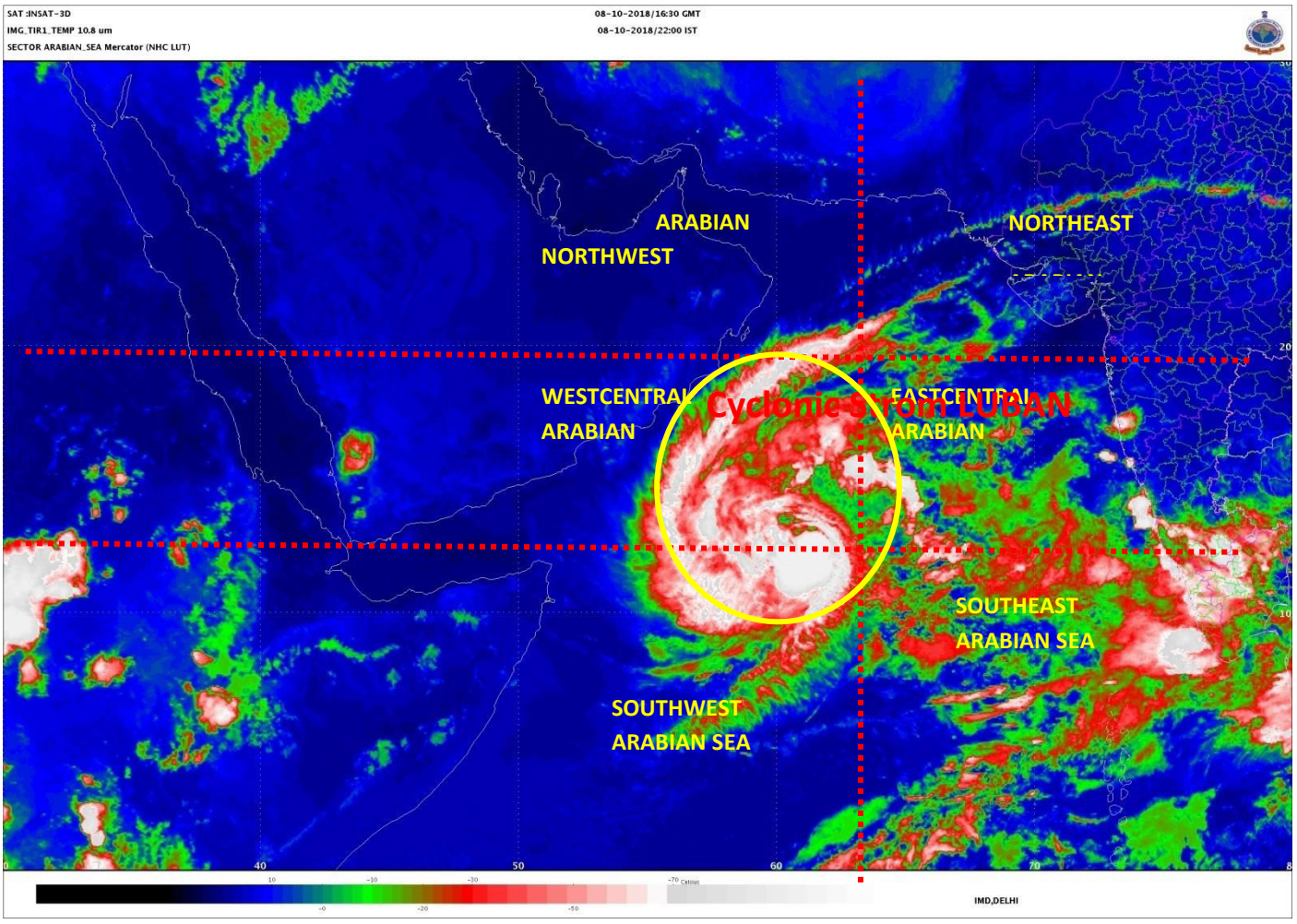
- The fishermen are advised not to venture into deep sea areas of central Bay of Bengal during 9th to 10th October 2018 and north Bay of Bengal during 9th to 11th October 2018 and into north Andaman Sea during next 12 hours.
- Those, who are out in deep sea areas are advised return to the coast.

The next bulletin will be issued at 0830 hrs IST of 09th October, 2018.

(D. Joardar)
Scientist-E, RSMC, New Delhi

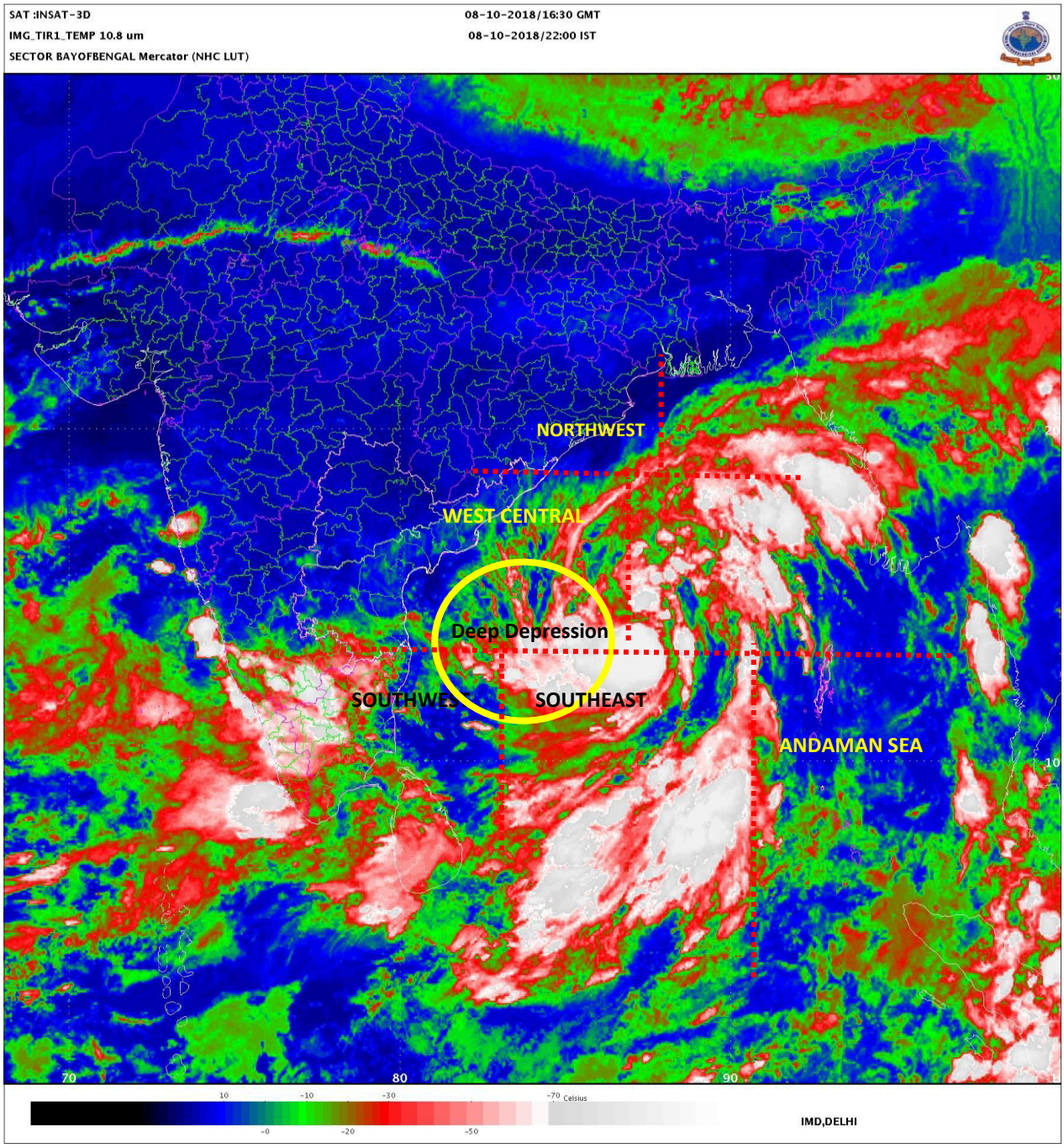
Copy to: CRS, Pune/ ACWC Chennai/ Kolkata/ Mumbai/MC Goa/Thiruvanathapuram/ Bengaluru/ CWC Ahmedabad.

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.



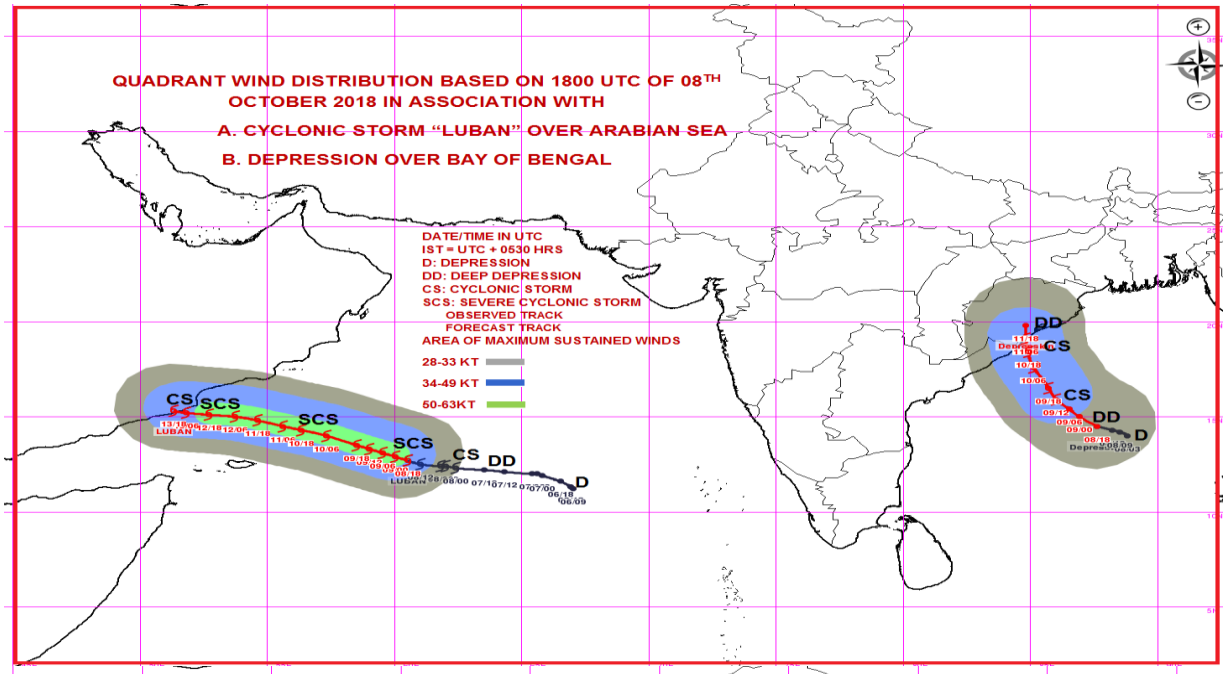
Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%

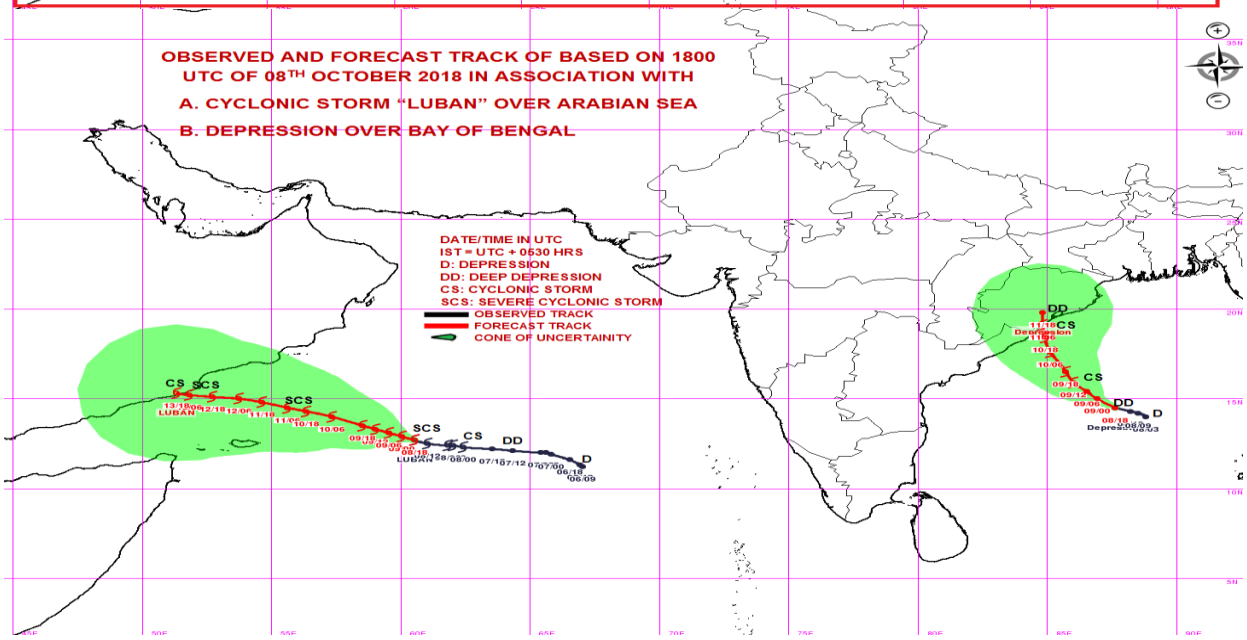
Rainfall amount (mm): Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.



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.





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.

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

BULLETIN NO. : 18 (ARB 04/2018) and BULLETIN NO.: 8 (BOB 08/2018)

TIME OF ISSUE: 0900 HOURS IST **DATED: 09.10.2018**
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)
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 (23385843)
DIRECTOR GENERAL, AIR (23421105, 23421219)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 24363261)
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. 04896-262184)
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)
CHIEF SECRETARY, ANDHRA PRADESH (FAX NO. 0866-2441029)
CHIEF SECRETARY, ODISHA (FAX NO. 0674 -2536660)
CHIEF SECRETARY, WEST BENGAL (FAX NO. 033 -22144328)
CHIEF SECRETARY, ANDAMAN & NICOBAR ISLANDS (FAX NO. 03192- 232656)

Sub: (a) Cyclonic Storm, 'LUBAN' over westcentral & adjoining southwest Arabian Sea
(b) Deep Depression over westcentral Bay of Bengal: Cyclone Alert for Odisha & north Andhra Pradesh coasts:

(a) Cyclonic Storm, 'LUBAN' over westcentral & adjoining southwest Arabian Sea:

The Cyclonic Storm over westcentral & adjoining southwest Arabian Sea moved further west-northwestwards with a speed of about 07 kmph in last 06 hours and lay centered at 0530 hrs IST 09th October 2018 over westcentral & adjoining southwest Arabian Sea, near latitude 12.9°N and longitude 60.2°E, about 800 km east-southeast of Salalah (Oman), 680 km east of Socotra Islands (Yemen) and 940 km east-southeast of Al-Ghaidah (Yemen). It is very likely to intensify into a Severe Cyclonic Storm during next 12 hours. It is very likely to move west-northwestwards towards Yemen & South Oman Coasts during next 5 days. Forecast track & intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
09.10.18/0530	12.9/60.2	80-90 gusting to 100	Cyclonic Storm
09.10.18/1130	13.1/59.9	90-100 gusting to 110	Severe Cyclonic Storm
09.10.18/1730	13.3/59.5	95-105 gusting to 115	Severe Cyclonic Storm
09.10.18/2330	13.5/59.1	100-110 gusting to 125	Severe Cyclonic Storm
10.10.18/0530	13.7/58.7	110-120 gusting to 135	Severe Cyclonic Storm
10.10.18/1730	14.1/58.1	110-120 gusting to 135	Severe Cyclonic Storm
11.10.18/0530	14.4/57.5	110-120 gusting to 135	Severe Cyclonic Storm
11.10.18/1730	14.6/56.7	110-120 gusting to 135	Severe Cyclonic Storm
12.10.18/0530	14.8/56.0	110-120 gusting to 135	Severe Cyclonic Storm
12.10.18/1730	14.9/55.3	100-110 gusting to 125	Severe Cyclonic Storm
13.10.18/0530	15.0/54.0	90-100 gusting to 110	Severe Cyclonic Storm
13.10.18/1730	15.0/52.7	80-90 gusting to 100	Cyclonic Storm
14.10.18/0530	15.0/51.4	70-80 gusting to 90	Cyclonic Storm

Warnings:

(i) Wind warning

- Gale wind speed reaching 80-90 kmph gusting to 100 kmph is prevailing over westcentral & adjoining southwest Arabian Sea. It is very likely to increase gradually becoming 110-120 kmph gusting to 135 kmph during 10th to 12th October 2018 over westcentral Arabian Sea around the system centre. The wind speed is very likely to decrease gradually over southwest Arabian Sea during next 24 hours.
- Squally wind speed reaching 40-50 kmph gusting to 60 kmph is very likely over adjoining areas of southeast and eastcentral Arabian Sea during next 12 hrs.

(ii) Sea condition

- The sea condition is very high around the system centre. It is very likely continued to be very high over westcentral Arabian Sea till 13th October 2018 and over Gulf of Aden during 11th to 13th October .

(iii) Fishermen Warning

- The fishermen are advised not to venture into deep sea areas of westcentral Arabian Sea & Gulf of Aden till 13th October, adjoining southwest Arabian Sea till 10th October.

(b) Deep Depression over eastcentral Bay of Bengal: Cyclone alert for Odisha and north Andhra Pradesh coasts:

The deep depression over eastcentral Bay of Bengal moved further west-northwestwards with a speed of about 10 kmph in last 06 hours and lay cantered at 0530 hrs IST, 9th October 2018 over westcentral Bay of Bengal near latitude 14.7°N and longitude 87.1°E, about 560 km southeast of Gopalpur (Odisha) and 510 km southeast of Kalingapatnam (Andhra Pradesh). It is very likely to intensify into a Cyclonic Storm during next 24 hours. It is very likely to move west-northwestwards for some more time and then northwestwards and cross Odisha & adjoining north Andhra Pradesh coasts between Gopalpur & Kalingapatnam around morning of 11th October.

Forecast track and intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
09.10.18/0530	14.7/87.1	55-65 gusting to 75	Deep Depression
09.10.18/1130	15.0/86.7	55-65 gusting to 75	Deep Depression
09.10.18/1730	15.6/86.4	55-65 gusting to 75	Deep Depression
09.10.18/2330	16.0/86.2	65-75 gusting to 85	Cyclonic Storm
10.10.18/0530	16.5/85.9	70-80 gusting to 90	Cyclonic Storm
10.10.18/1730	17.5/85.2	80-90 gusting to 100	Cyclonic Storm
11.10.18/0530	18.7/84.7	80-90 gusting to 100	Cyclonic Storm
11.10.18/1730	19.2/84.6	60-70 gusting to 80	Cyclonic Storm
12.10.18/0530	19.7/84.7	50-60 gusting to 70	Deep Depression
12.10.18/1730	20.2/85.3	40-50 gusting to 60	Depression

(i) Heavy rainfall warnings:

Region	09 Oct. 2018*	10 Oct. 2018*	11 Oct. 2018*	12 Oct. 2018*
Odisha	Rainfall at many places with heavy falls at Isolated Places over south coastal Odisha from evening/night.	Rainfall at most places with heavy to very heavy falls at a few places and extremely heavy falls at Isolated Places over coastal Odisha.	Rainfall at most places with heavy to very heavy falls at a few places and extremely heavy falls at Isolated Places over coastal & adjoining interior Odisha.	Rainfall at many places with heavy falls at Isolated Places over north coastal Odisha.
North Coastal Andhra Pradesh	Rainfall at a few places with heavy falls at isolated places from evening/night.	Rainfall at many places with heavy falls at Isolated Places.	Rainfall at many places with heavy falls at Isolated Places.	Nil
Gangetic West Bengal	Nil	Rainfall at many places with heavy to very heavy falls at Isolated Places over coastal West Bengal	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at many places with heavy falls at Isolated Places
Assam & Meghalaya	NIL	NIL	Rainfall at most places with heavy falls at isolated places	Rainfall at most places with heavy falls at isolated places
NMMT	NIL	NIL	Rainfall at most places with heavy falls at isolated places	Rainfall at most places with heavy falls at isolated places

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.

(ii) Wind warning

- Squally wind speed reaching 40-50 kmph gusting to 60 kmph very likely over north Andaman Sea, southeast & adjoining eastcentral Bay of Bengal and Andaman Islands during next 24 hours.
- Squally wind speed reaching 55-65 kmph gusting to 75 kmph likely over deep sea areas of central & adjoining north Bay of Bengal during 09th and gradually increase to 80-90 kmph gusting to 100 kmph from 10th evening to 11th forenoon.
- Squally wind speed reaching 45-55 kmph gusting to 65 kmph is very likely to commence along & off along north Andhra Pradesh, Odisha and West Bengal coast from today, the 9th October night.
- It is very likely to increase gradually becoming 80-90 kmph gusting to 100 kmph from 10th October 2018 evening onwards along & off south Odisha & adjoining districts of north Andhra Pradesh coasts and 55-65 kmph gusting to 75 kmph along & off north Odisha, west Bengal and remaining districts of north Andhra Pradesh coasts.

(iii) Sea condition

- The sea condition is very likely to be rough to very rough over north Andaman Sea and southeast & adjoining eastcentral Bay of Bengal during next 24 hours; and very rough over central & adjoining north Bay of Bengal on 9th and high during 10th and 11th October 2018.

(IV) Damage Expected over districts of Visakhapatnam, Vizianagaram and Srikakulam of Andhra Pradesh, Gajapati, Ganjam, Khurda, Nayagarh and Puri districts of Odisha :

Damage to thatched huts; Minor damage to power and communication lines due to breaking of branches and Major damage to Kutcha and minor damage to Pucca roads. Some damage to paddy crops, banana, papaya trees and orchards. Sea water inundation in low lying areas after erosion of Kutcha embankments.

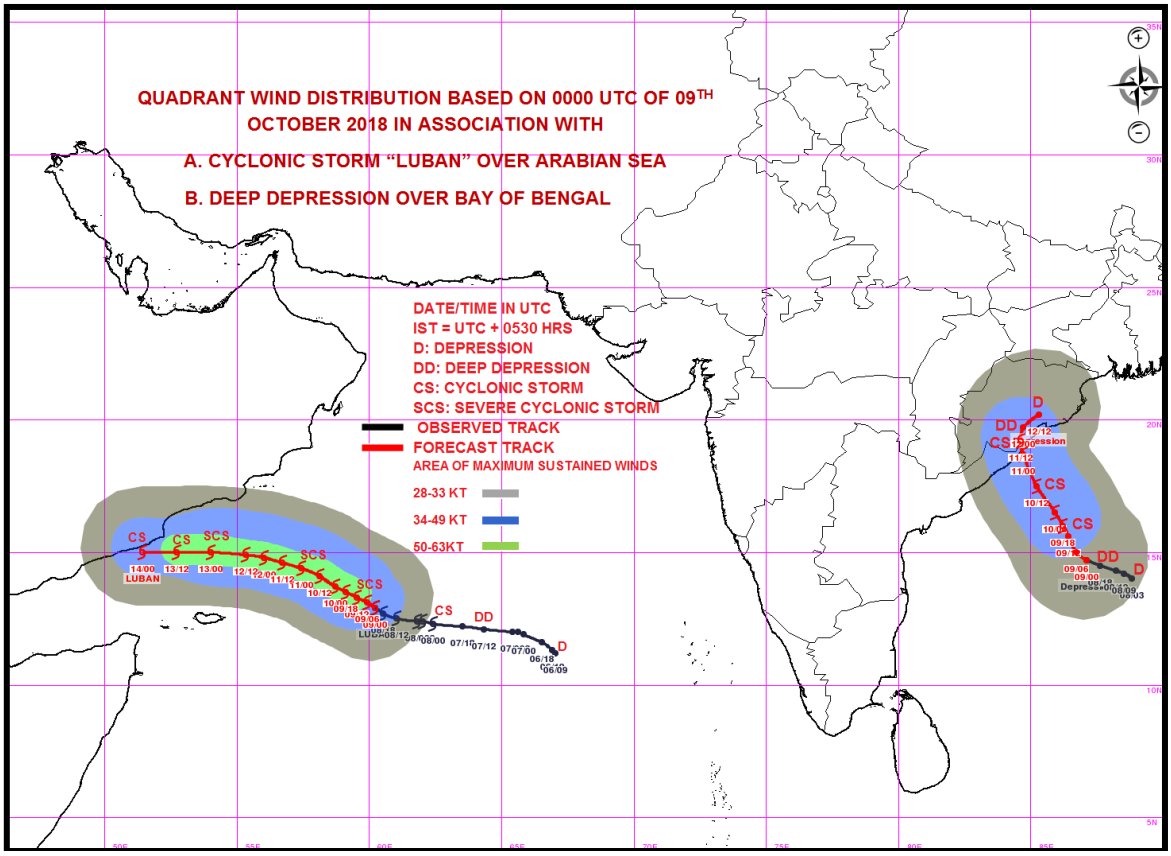
(V) Action Suggested:

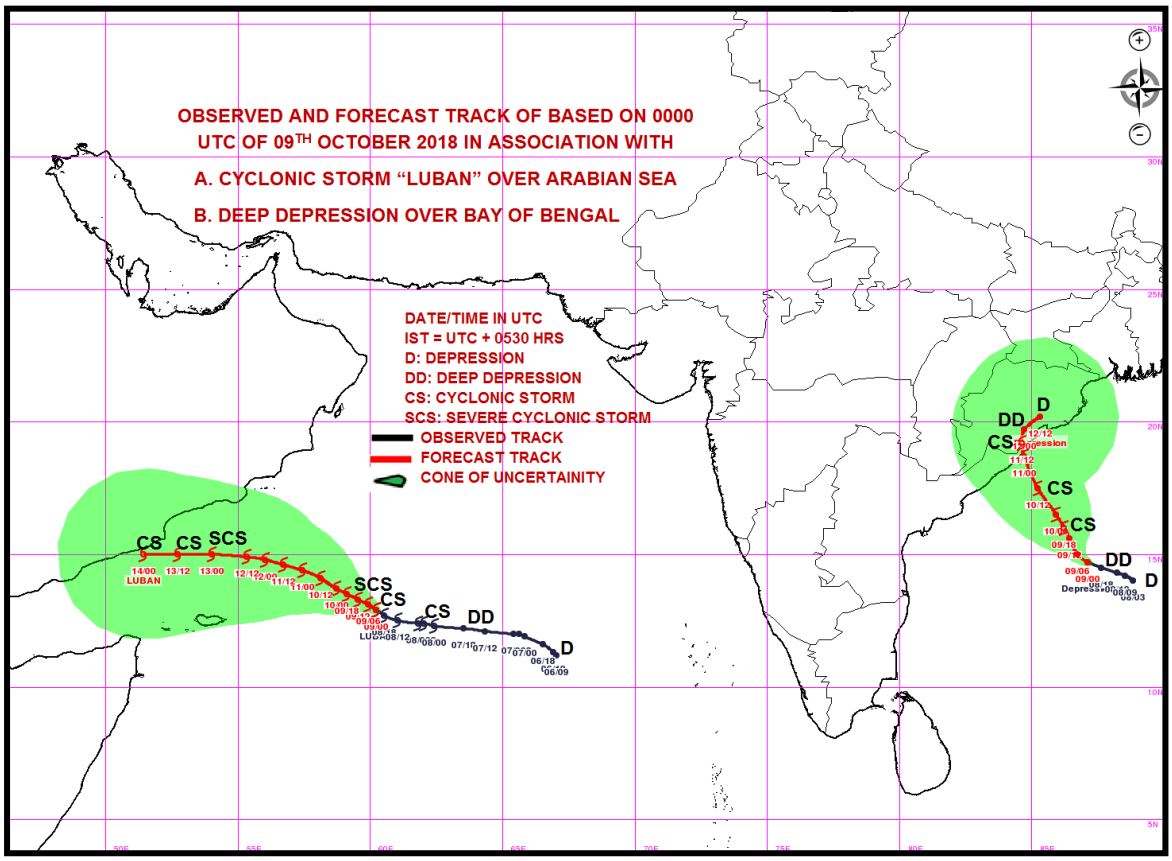
Total suspension of fishing operations. The fishermen are advised not to venture into deep sea areas of central Bay of Bengal during 9th to 10th October 2018 and north Bay of Bengal during 9th to 11th October 2018 and into north Andaman Sea during next 12 hours. Those, who are out in deep sea areas are advised return to the coast.

The next bulletin will be issued at 1130 hrs IST of 09th October, 2018.

(Charan Singh)
Scientist-F, RSMC, New Delhi

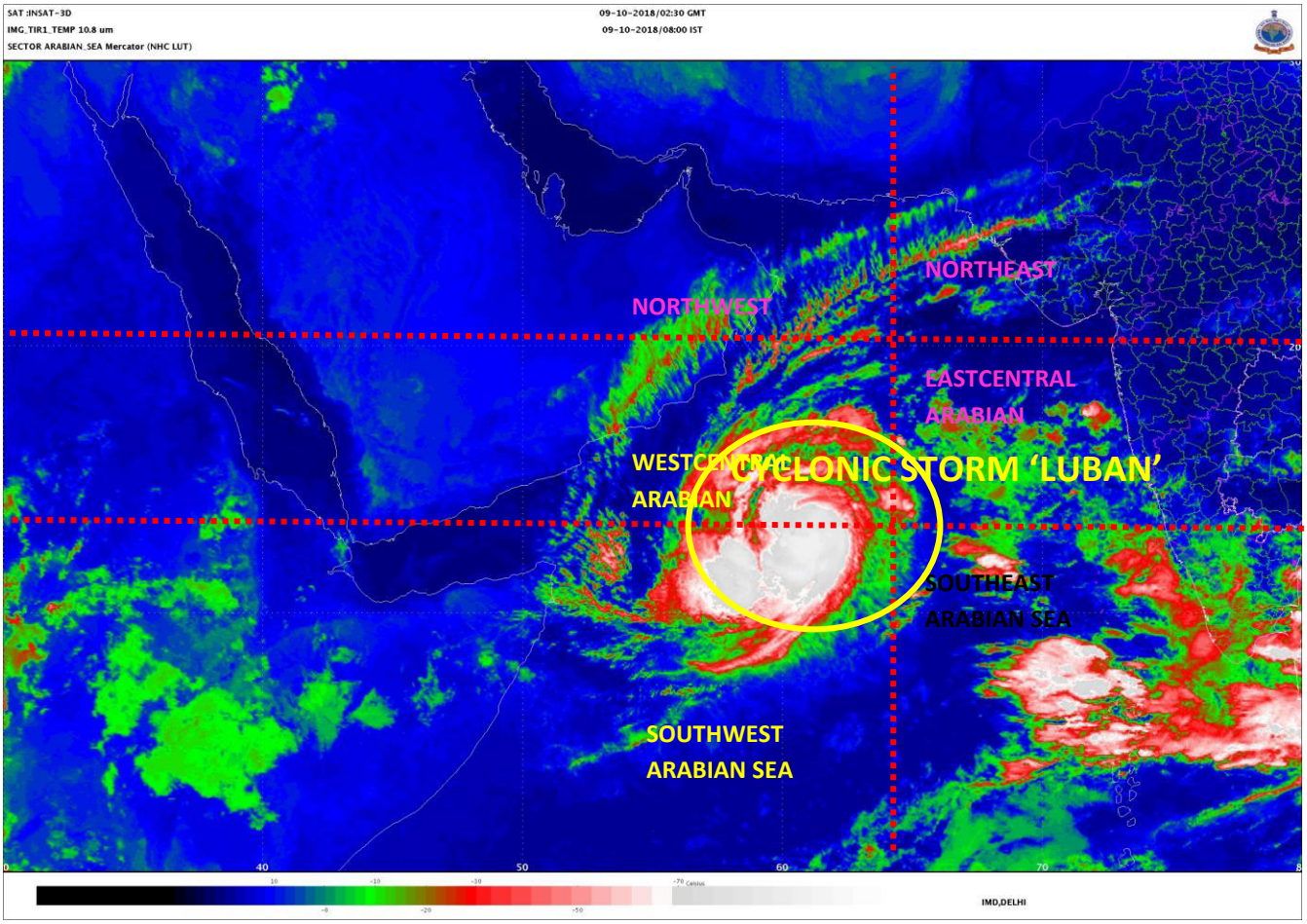
Copy to: CRS, Pune/ ACWC Chennai/ Kolkata/ Mumbai/MC Goa/Thiruvanathapuram/ Bengaluru/ CWC Ahmedabad.





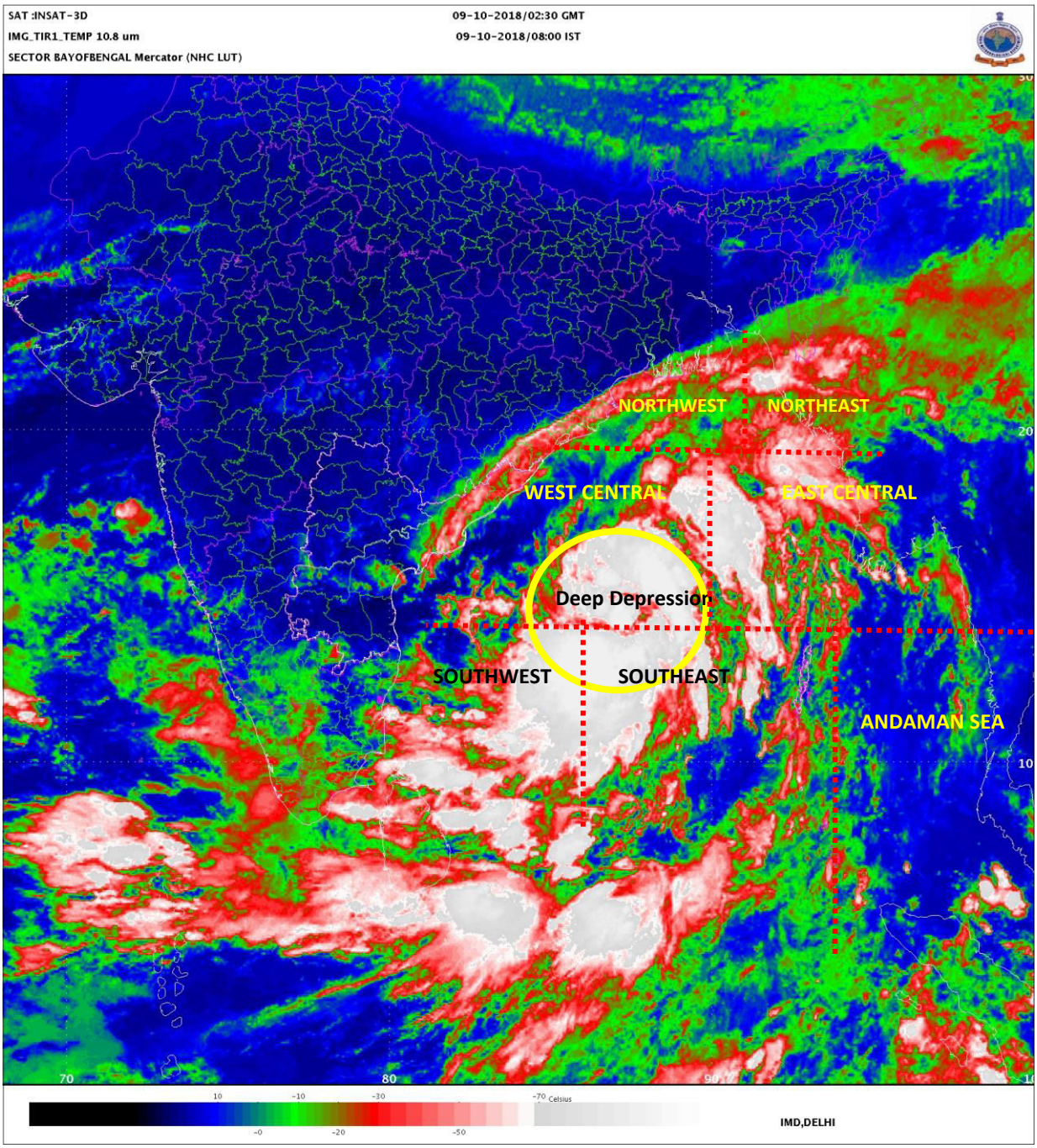
Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%

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



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.



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.

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

BULLETIN NO. : 19 (ARB 04/2018) and BULLETIN NO.: 9 (BOB 08/2018)

TIME OF ISSUE: 1130 HOURS IST **DATED: 09.10.2018**

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)
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 (23385843)
DIRECTOR GENERAL, AIR (23421105, 23421219)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 24363261)
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. 04896-262184)
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)
CHIEF SECRETARY, ANDHRA PRADESH (FAX NO. 0866-2441029)
CHIEF SECRETARY, ODISHA (FAX NO. 0674 -2536660)
CHIEF SECRETARY, WEST BENGAL (FAX NO. 033 -22144328)
CHIEF SECRETARY, ANDAMAN & NICOBAR ISLANDS (FAX NO. 03192- 232656)
CHIEF SECRETARY, MIZORAM (FAX NO. 389 -2322745)
CHIEF SECRETARY, TRIPURA (FAX NO. 0381-2414013)
CHIEF SECRETARY, ASSAM (FAX NO. 0361-2237200)
CHIEF SECRETARY, MEGHALAYA (FAX NO. 0364 -2225978)

Sub: (a) Cyclonic Storm, 'LUBAN' over westcentral & adjoining southwest Arabian Sea
(b) Deep Depression over westcentral Bay of Bengal: Cyclone Alert for Odisha & north Andhra Pradesh coasts

(a) Cyclonic Storm, 'LUBAN' over westcentral & adjoining southwest Arabian Sea:

The Cyclonic Storm over westcentral & adjoining southwest Arabian Sea remained practically stationary and lay centered at 0830 hrs IST 09th October 2018 over westcentral & adjoining southwest Arabian Sea, near latitude 12.9°N and longitude 60.2°E, about 800 km east-southeast of Salalah (Oman), 680 km east of Socotra Islands (Yemen) and 940 km east-southeast of Al-Ghaidah (Yemen). It is very likely to intensify into a Severe Cyclonic Storm during next 12 hours. It is very likely to move west-northwestwards towards Yemen & South Oman Coasts during next 5 days. Forecast track & intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
09.10.18/0830	12.9/60.2	80-90 gusting to 100	Cyclonic Storm
09.10.18/1130	13.1/59.9	85-95 gusting to 105	Cyclonic Storm
09.10.18/1730	13.3/59.5	95-105 gusting to 115	Severe Cyclonic Storm
09.10.18/2330	13.5/59.1	100-110 gusting to 125	Severe Cyclonic Storm
10.10.18/0530	13.7/58.7	110-120 gusting to 135	Severe Cyclonic Storm
10.10.18/1730	14.1/58.1	110-120 gusting to 135	Severe Cyclonic Storm
11.10.18/0530	14.4/57.5	110-120 gusting to 135	Severe Cyclonic Storm
11.10.18/1730	14.6/56.7	110-120 gusting to 135	Severe Cyclonic Storm
12.10.18/0530	14.8/56.0	110-120 gusting to 135	Severe Cyclonic Storm
12.10.18/1730	14.9/55.3	100-110 gusting to 125	Severe Cyclonic Storm
13.10.18/0530	15.0/54.0	90-100 gusting to 110	Severe Cyclonic Storm
13.10.18/1730	15.0/52.7	80-90 gusting to 100	Cyclonic Storm
14.10.18/0530	15.0/51.4	70-80 gusting to 90	Cyclonic Storm

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) Wind warning

- Gale wind speed reaching 80-90 kmph gusting to 100 kmph is prevailing over westcentral & adjoining southwest Arabian Sea. It is very likely to increase gradually becoming 110-120 kmph gusting to 135 kmph during 10th to 12th October 2018 over westcentral Arabian Sea around the system centre. The wind speed is very likely to decrease gradually over southwest Arabian Sea during next 24 hours.
- Squally wind speed reaching 40-50 kmph gusting to 60 kmph is very likely over adjoining areas of southeast and eastcentral Arabian Sea during next 12 hrs.

(ii) Sea condition

- The sea condition is very high around the system centre. It is very likely continued to be very high over westcentral Arabian Sea till 13th October 2018 and over Gulf of Aden during 11th to 13th October .

(iii) Fishermen Warning

- The fishermen are advised not to venture into deep sea areas of westcentral Arabian Sea & Gulf of Aden till 13th October, adjoining southwest Arabian Sea till 10th October.

(b) Deep Depression over westcentral Bay of Bengal: Cyclone alert for Odisha and north Andhra Pradesh coasts:

The deep depression over westcentral Bay of Bengal remained practically stationary and lay cantered at 0830 hrs IST, 9th October 2018 over same area near latitude 14.7°N and longitude 87.1°E, about 560 km southeast of Gopalpur (Odisha) and 510 km southeast of Kalingapatnam (Andhra Pradesh). It is very likely to intensify into a Cyclonic Storm during next 24 hours. It is very likely to move west-northwestwards for some more time and then northwestwards and cross Odisha & adjoining north Andhra Pradesh coasts between Gopalpur & Kalingapatnam around morning of 11th October. It is very likely to re-curve northeastwards, move towards Gangetic West Bengal across coastal Odisha and weaken gradually. Forecast track and intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
09.10.18/0830	14.7/87.1	55-65 gusting to 75	Deep Depression
09.10.18/1130	15.0/86.7	55-65 gusting to 75	Deep Depression
09.10.18/1730	15.6/86.4	55-65 gusting to 75	Deep Depression
09.10.18/2330	16.0/86.2	65-75 gusting to 85	Cyclonic Storm
10.10.18/0530	16.5/85.9	70-80 gusting to 90	Cyclonic Storm
10.10.18/1730	17.5/85.2	80-90 gusting to 100	Cyclonic Storm
11.10.18/0530	18.7/84.7	80-90 gusting to 100	Cyclonic Storm
11.10.18/1730	19.2/84.6	60-70 gusting to 80	Cyclonic Storm
12.10.18/0530	19.7/84.7	50-60 gusting to 70	Deep Depression
12.10.18/1730	20.2/85.3	40-50 gusting to 60	Depression

(i) Heavy rainfall warnings:

Region	09 Oct. 2018*	10 Oct. 2018*	11 Oct. 2018*	12 Oct. 2018*
Odisha	Rainfall at many places with heavy falls at Isolated Places over south coastal Odisha from evening/night.	Rainfall at most places with heavy to very heavy falls at a few places and extremely heavy falls at Isolated Places over coastal Odisha.	Rainfall at most places with heavy to very heavy falls at a few places and extremely heavy falls at Isolated Places over coastal & adjoining interior Odisha.	Rainfall at many places with heavy falls at Isolated Places over north Odisha.
North Coastal Andhra Pradesh	Rainfall at a few places with heavy falls at isolated places from evening/night.	Rainfall at many places with heavy falls at Isolated Places.	Rainfall at many places with heavy falls at Isolated Places.	Nil
Gangetic West Bengal	Nil	Rainfall at many places with heavy to very heavy falls at Isolated Places over coastal West Bengal	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at many places with heavy to very heavy falls at Isolated Places
Assam & Meghalaya	NIL	NIL	Rainfall at most places with heavy falls at isolated places	Rainfall at most places with heavy to very heavy falls at isolated places
Mizoram & Tripura	Rainfall at most places with heavy falls at isolated places	Rainfall at most places with heavy falls at isolated places	Rainfall at most places with heavy to very heavy falls at isolated places	Rainfall at most places with heavy to very heavy falls at isolated places

Note: * Rainfall till 0830 IST of next day.
Legends: Red-Take Action; Orange- Be prepared; Yellow- be updated; 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

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.

(ii) Wind warning

- Squally wind speed reaching 40-50 kmph gusting to 60 kmph very likely over north Andaman Sea, southeast & adjoining eastcentral Bay of Bengal and Andaman Islands during next 24 hours.
- Squally wind speed reaching 55-65 kmph gusting to 75 kmph likely over deep sea areas of central & adjoining north Bay of Bengal during 09th and gradually increase to 80-90 kmph gusting to 100 kmph from 10th evening to 11th forenoon.
- Squally wind speed reaching 45-55 kmph gusting to 65 kmph is very likely to commence along & off along north Andhra Pradesh, Odisha and West Bengal coast from today, the 9th October night.
- It is very likely to increase gradually becoming 80-90 kmph gusting to 100 kmph from 10th October 2018 evening onwards along & off south Odisha & adjoining districts of north Andhra Pradesh coasts and 55-65 kmph gusting to 75 kmph along & off north Odisha, west Bengal and remaining districts of north Andhra Pradesh coasts.

(iii) Sea condition

- The sea condition is very likely to be rough to very rough over north Andaman Sea and southeast & adjoining eastcentral Bay of Bengal during next 24 hours; and very rough over central & adjoining north Bay of Bengal on 9th and high during 10th and 11th October 2018.

(iv) Storm Surge Warning

- Storm surge of height of about 0.5 m above astronomical tide is very likely inundate low lying areas of Srikakulam district of Andhra Pradesh; Ganjam, Khurda & Puri districts of Odisha at the time of landfall.

(v) Damage Expected over districts of Visakhapatnam, Vizianagaram and Srikakulam of Andhra Pradesh, Gajapati, Ganjam, Khurda, Nayagarh and Puri districts of Odisha :

- Damage to thatched huts; Minor damage to power and communication lines due to breaking of branches and Major damage to Kutcha and minor damage to Pucca roads. Some damage to paddy crops, banana, papaya trees and orchards. Sea water inundation in low lying areas after erosion of Kutcha embankments.

(vi) Action Suggested:

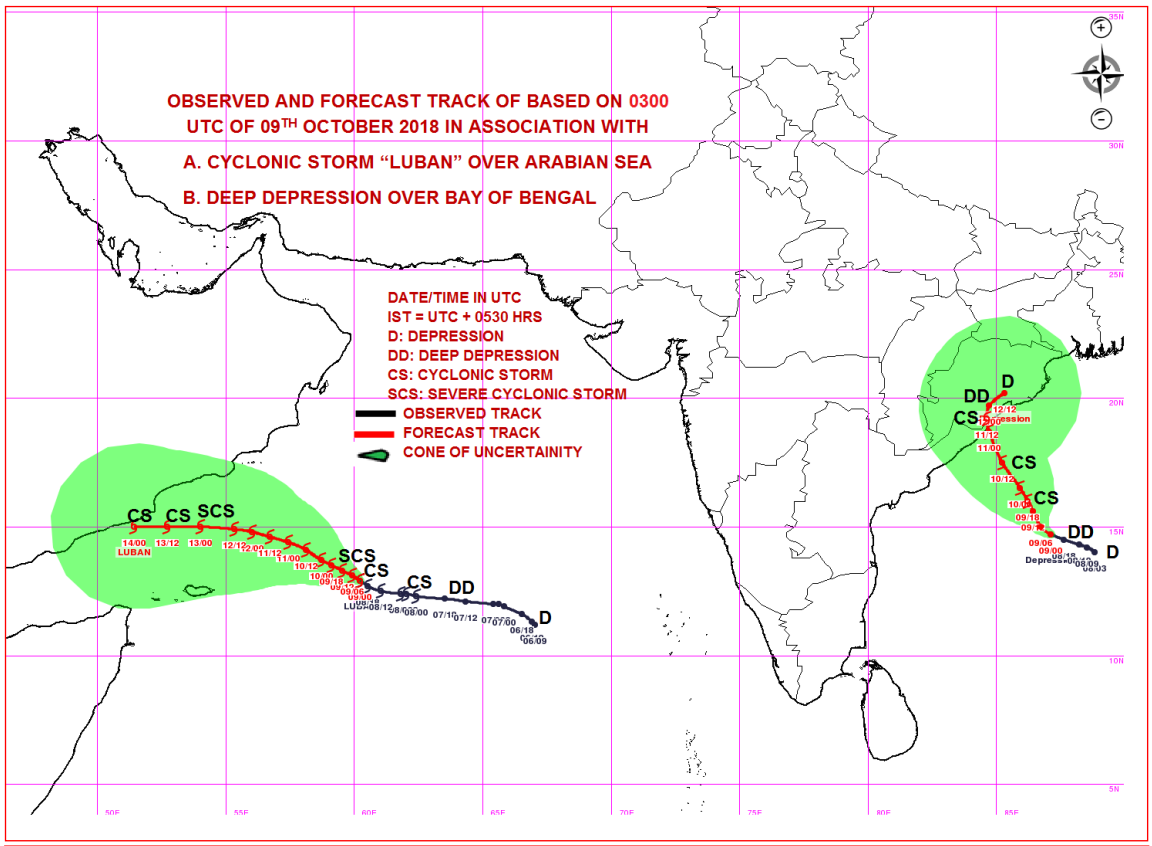
- The fishermen are advised not to venture into deep sea areas of central Bay of Bengal during 9th to 10th October 2018 and north Bay of Bengal during 9th to 11th October 2018 and into north Andaman Sea during next 12 hours. Those, who are out in deep sea areas are advised return to the coast.
- Total suspension of fishing operations.

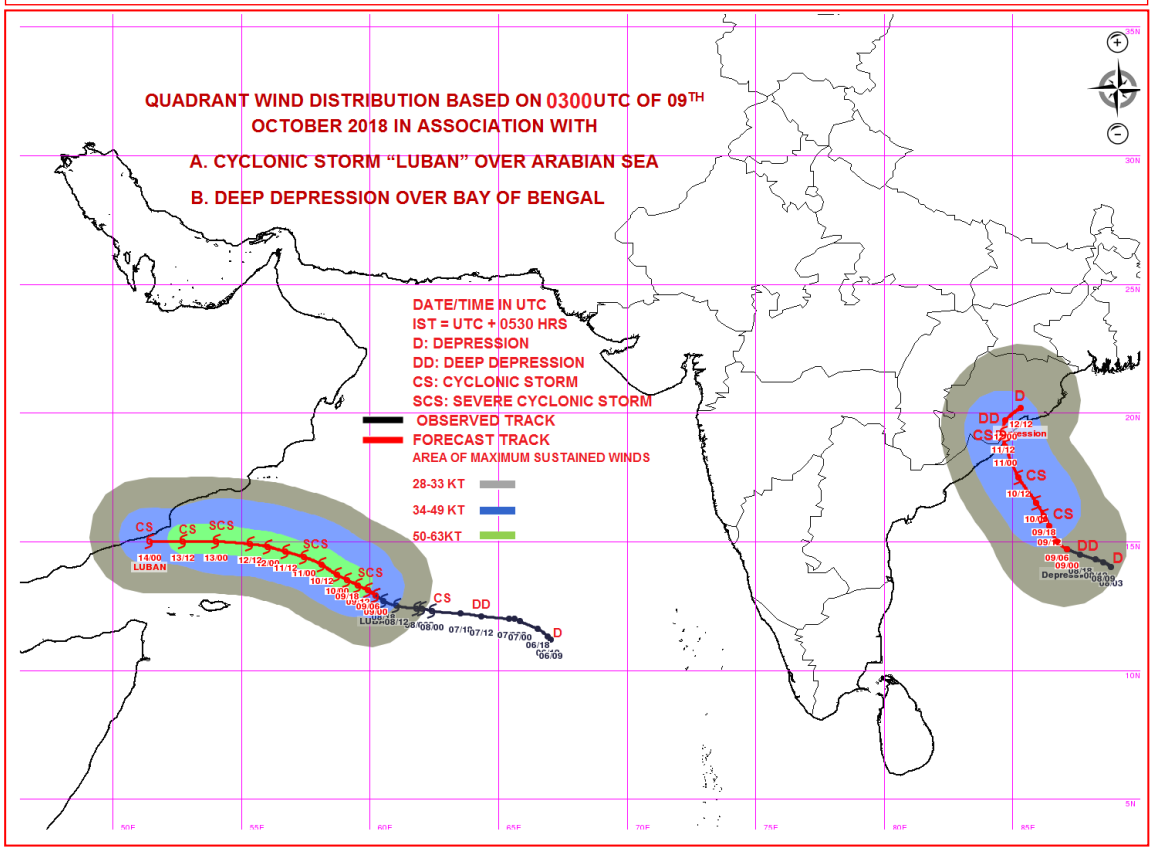
The next bulletin will be issued at 1430 hrs IST of 09th October, 2018.

(Naresh Kumar)
Scientist-E, RSMC, New Delhi

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

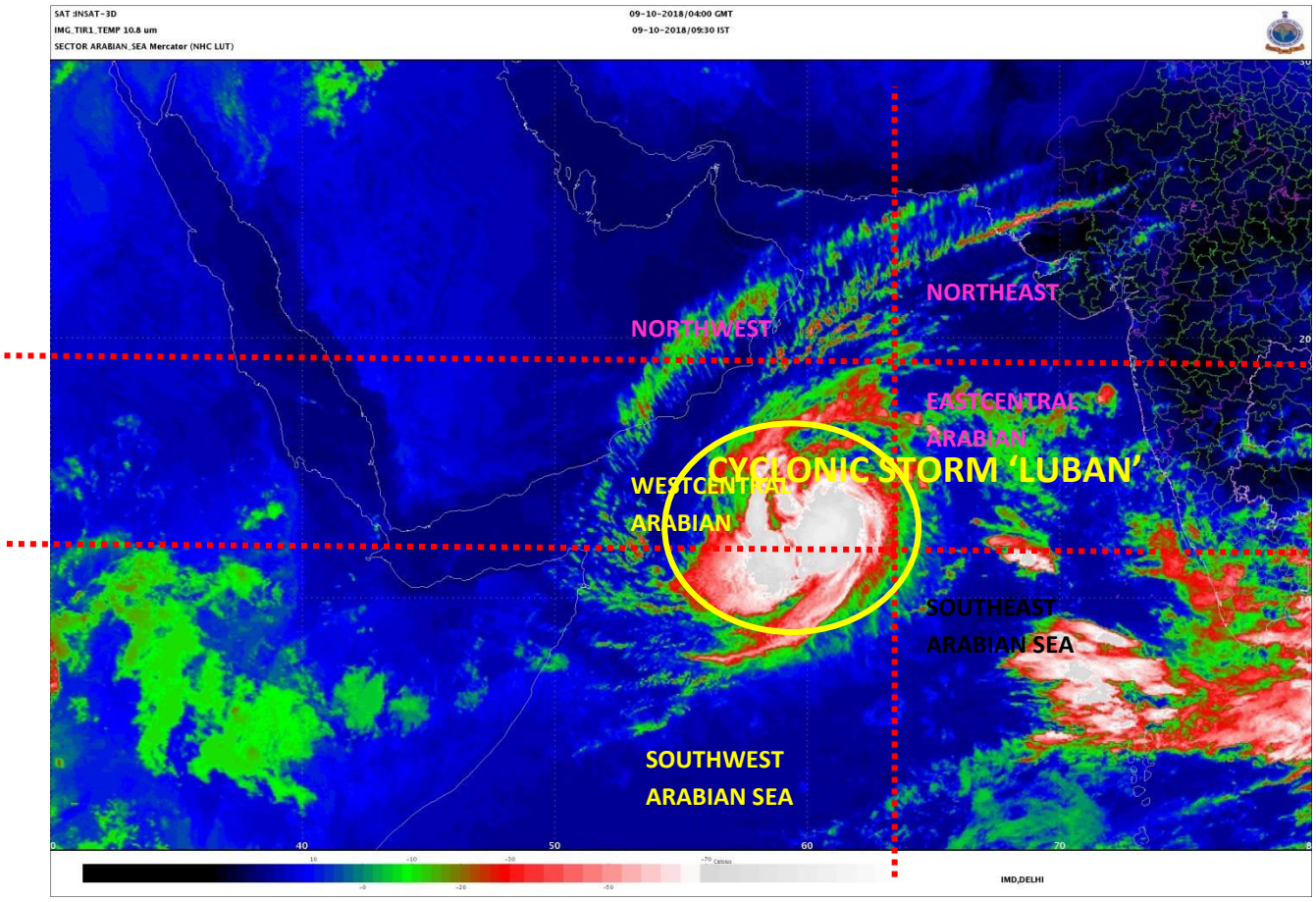
Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
Rainfall amount (mm): Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.





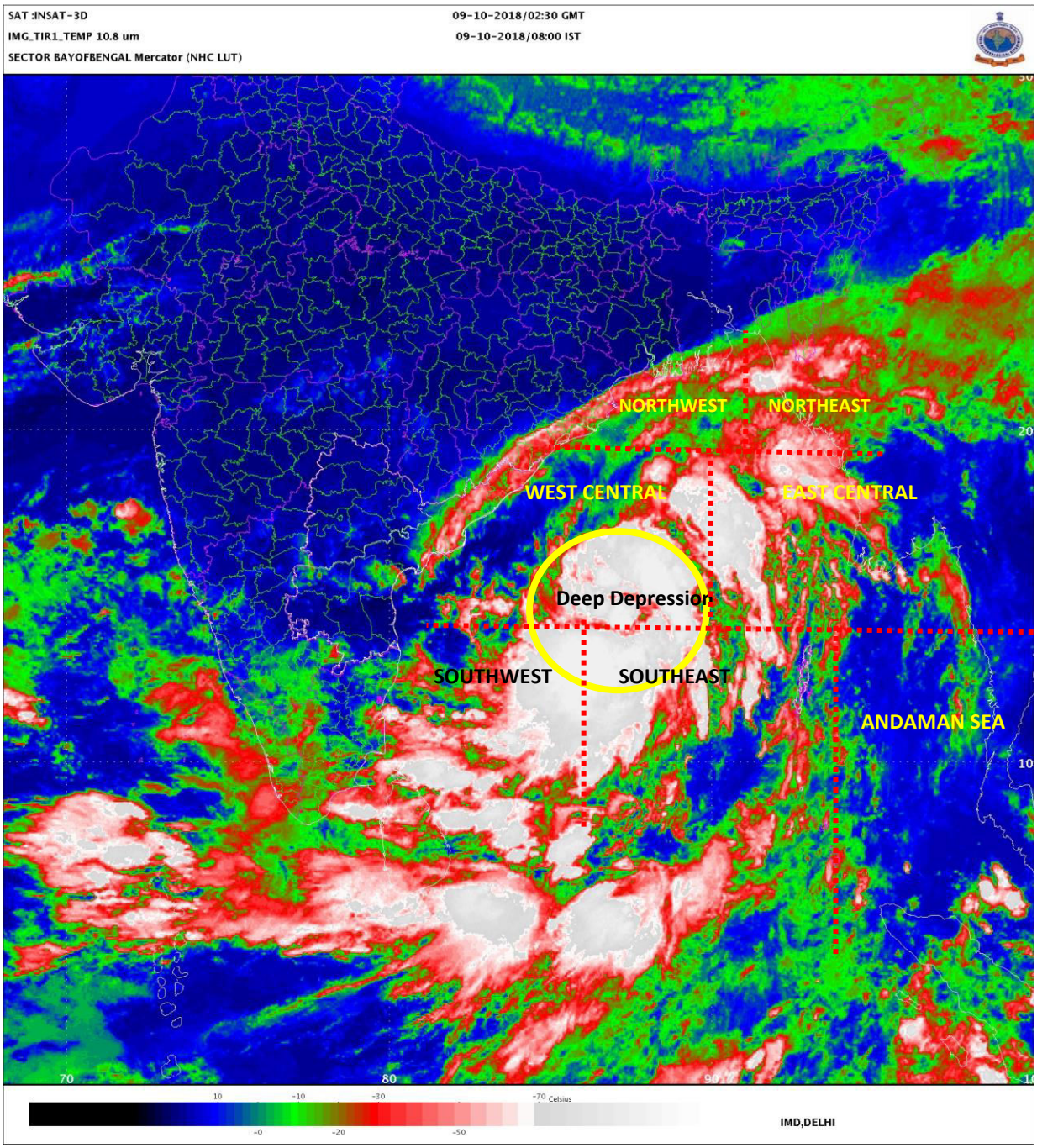
Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%

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



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.



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.

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

BULLETIN NO.: 10 (BOB 08/2018) and BULLETIN NO. : 20 (ARB 04/2018)-Modified

TIME OF ISSUE: 1500 HOURS IST **DATED: 09.10.2018**

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)
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 (23385843)
DIRECTOR GENERAL, AIR (23421105, 23421219)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 24363261)
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. 04896-262184)
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)
CHIEF SECRETARY, ANDHRA PRADESH (FAX NO. 0866-2441029)
CHIEF SECRETARY, ODISHA (FAX NO. 0674 -2536660)
CHIEF SECRETARY, WEST BENGAL (FAX NO. 033 -22144328)
CHIEF SECRETARY, ANDAMAN & NICOBAR ISLANDS (FAX NO. 03192- 232656)
CHIEF SECRETARY, MIZORAM (FAX NO. 389 -2322745)
CHIEF SECRETARY, TRIPURA (FAX NO. 0381-2414013)
CHIEF SECRETARY, ASSAM (FAX NO. 0361-2237200)
CHIEF SECRETARY, MEGHALAYA (FAX NO. 0364 -2225978)

Sub: (a) Deep depression intensified into Cyclonic Storm 'TITLI' over westcentral Bay of Bengal: Cyclone Warning for districts of north Andhra Pradesh & south Odisha coasts: Orange Message.
(b) Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea

(a) Deep depression intensified into Cyclonic Storm 'TITLI' over westcentral Bay of Bengal: Cyclone Warning for districts of north Andhra Pradesh & south Odisha coasts: Orange Message.

The deep depression over westcentral Bay of Bengal moved west-northwestwards with a speed of 08 kmph during past 06 hours and intensified into a **Cyclonic Storm 'TITLI'** and lay cantered at 1130 hrs IST of today, the 09th October 2018 over Westcentral Bay of Bengal near latitude 14.8°N and longitude 86.7°E, about 530 km southeast of Gopalpur (Odisha) and 480 km east-southeast of Kalingapatnam (Andhra Pradesh). It is very likely to intensify further into a Severe Cyclonic Storm during next 24 hours. It is very likely to move west-northwestwards for some more time, then northwestwards and cross Odisha & adjoining north Andhra Pradesh coasts between Gopalpur & Kalingapatnam around morning of 11th October.

Thereafter, it is very likely to re-curve northeastwards, move towards Gangetic West Bengal across coastal Odisha and weaken gradually. Forecast track and intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
09.10.18/1130	14.8/86.7	65-75 gusting to 85	Cyclonic Storm
09.10.18/1730	15.2/86.3	70-80 gusting to 90	Cyclonic Storm
09.10.18/2330	15.6/85.9	80-90 gusting to 100	Cyclonic Storm
10.10.18/0530	16.0/85.6	90-100 gusting to 110	Severe Cyclonic Storm
10.10.18/1130	16.9/85.2	100-110 gusting to 125	Severe Cyclonic Storm
10.10.18/2330	18.0/84.9	100-110 gusting to 125	Severe Cyclonic Storm
11.10.18/1130	19.2/84.7	70-80 gusting to 90	Cyclonic Storm
11.10.18/2330	19.6/84.7	50-60 gusting to 70	Deep Depression
12.10.18/1130	20.2/85.0	40-50 gusting to 60	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.

(i) Heavy rainfall warnings:

Region	09 Oct. 2018*	10 Oct. 2018*	11 Oct. 2018*	12 Oct. 2018*
Odisha	Rainfall at many places with heavy falls at Isolated Places over south coastal Odisha from evening/night.	Rainfall at most places with heavy to very heavy falls at a few places and extremely heavy falls at Isolated Places over coastal Odisha.	Rainfall at most places with heavy to very heavy falls at a few places and extremely heavy falls at Isolated Places over coastal & adjoining interior Odisha.	Rainfall at many places with heavy falls at Isolated Places over north Odisha.
North Coastal Andhra Pradesh	Rainfall at a few places with heavy falls at isolated places from evening/night.	Rainfall at many places with heavy falls at Isolated Places.	Rainfall at many places with heavy falls at Isolated Places.	Nil
Gangetic West Bengal	Nil	Rainfall at many places with heavy to very heavy falls at Isolated Places over coastal West Bengal	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at many places with heavy to very heavy falls at Isolated Places
Assam & Meghalaya	NIL	NIL	Rainfall at most places with heavy falls at isolated places	Rainfall at most places with heavy to very heavy falls at isolated places
Mizoram & Tripura	Rainfall at most places with heavy falls at isolated places	Rainfall at most places with heavy falls at isolated places	Rainfall at most places with heavy to very heavy falls at isolated places	Rainfall at most places with heavy to very heavy falls at isolated places

Note: * Rainfall till 0830 IST of next day.
Legends: Red-Take Action; Orange- Be prepared; Yellow- be updated; 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

- Squally wind speed reaching 40-50 kmph gusting to 60 kmph very likely over southeast & adjoining eastcentral Bay of Bengal during next 24 hours.
- Squally wind speed reaching 65-75 kmph gusting to 85 kmph very likely over deep sea areas of westcentral & adjoining north Bay of Bengal and gradually increase to 80-90 kmph gusting to 100 kmph from 10th evening to 11th forenoon.
- Squally wind speed reaching 45-55 kmph gusting to 65 kmph is very likely to commence along & off along north Andhra Pradesh, Odisha and West Bengal coast from today, the 9th October night.
- It is very likely to increase gradually becoming 100-110 kmph gusting to 125 kmph from 10th October 2018 evening onwards along & off south Odisha & adjoining districts of north Andhra Pradesh coasts and 65-75 kmph gusting to 85 kmph along & off north Odisha, west Bengal and remaining districts of north Andhra Pradesh coasts.

(iii) Sea condition

- The sea condition is very likely to be rough to very rough over southeast & adjoining eastcentral Bay of Bengal during next 24 hours; and very rough to high over westcentral & adjoining north Bay of Bengal on today, the 9th October and high during 10th and 11th October 2018.

(iv) Storm Surge Warning

- Storm surge of height of about 0.5 m above astronomical tide is very likely inundate low lying areas of Srikakulam district of Andhra Pradesh; Ganjam, Khurda & Puri districts of Odisha at the time of landfall.

(v) Damage Expected over districts of Visakhapatnam, Vizianagaram and Srikakulam of Andhra Pradesh, Gajapati, Ganjam, Khurda, Nayagarh and Puri districts of Odisha :

- Damage to thatched huts/houses; Minor damage to power and communication lines due to breaking of branches and uprooting of trees. Major damage to Kutcha & minor damage to Pucca roads. Some damage to paddy crops, banana, papaya trees and orchards. Sea water inundation in low lying areas after erosion of Kutcha embankments.

(vi) Action Suggested:

- The fishermen are advised not to venture into deep sea areas of central Bay of Bengal during 9th to 10th October 2018 and north Bay of Bengal during 9th to 11th October 2018 and into north Andaman Sea during next 12 hours. Those, who are out in deep sea areas are advised return to the coast.
- Total suspension of fishing operations.
- Coastal hutment dwellers are advised to move to safer places. Other people in the affected areas to remain indoors.

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.

(b) Cyclonic Storm, 'LUBAN' over westcentral & adjoining southwest Arabian Sea:

The Cyclonic Storm over westcentral & adjoining southwest Arabian Sea moved northwestwards with a speed of about 04 kmph in last 06 hours and lay centered at 1130 hrs IST 09th October 2018 over westcentral & adjoining southwest Arabian Sea, near latitude 13.1°N and longitude 60.1°E, about 780 km east-southeast of Salalah (Oman), 670 km east of Socotra Islands (Yemen) and 920 km east-southeast of Al-Ghaidah (Yemen). It is very likely to intensify into a Severe Cyclonic Storm during next 06 hours. It is very likely to move west-northwestwards towards Yemen & South Oman Coasts during next 5 days. Forecast track & intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
09.10.18/1130	13.1/60.1	80-90 gusting to 100	Cyclonic Storm
09.10.18/1730	13.3/59.5	90-100 gusting to 115	Severe Cyclonic Storm
09.10.18/2330	13.5/59.1	100-110 gusting to 125	Severe Cyclonic Storm
10.10.18/0530	13.7/58.7	100-110 gusting to 125	Severe Cyclonic Storm
10.10.18/1130	13.9/58.4	100-110 gusting to 125	Severe Cyclonic Storm
10.10.18/2330	14.2/57.7	100-110 gusting to 125	Severe Cyclonic Storm
11.10.18/1130	14.5/57.0	110-120 gusting to 135	Severe Cyclonic Storm
11.10.18/2330	14.7/56.3	110-120 gusting to 135	Severe Cyclonic Storm
12.10.18/1130	14.8/55.7	110-120 gusting to 135	Severe Cyclonic Storm
12.10.18/2330	14.8/54.6	110-120 gusting to 135	Severe Cyclonic Storm
13.10.18/1130	14.7/53.3	100-110 gusting to 125	Severe Cyclonic Storm
13.10.18/2330	14.6/52.0	90-100 gusting to 115	Severe Cyclonic Storm
13.10.18/1130	14.5/50.7	70-80 gusting to 90	Cyclonic Storm

Warnings:

(i) Wind warning

- Gale wind speed reaching 85-95 kmph gusting to 105 kmph is prevailing over westcentral & adjoining southwest Arabian Sea. It is very likely to increase gradually becoming 110-120 kmph gusting to 135 kmph during 10th to 12th October 2018 over westcentral Arabian Sea around the system centre. The wind speed is very likely to decrease gradually over southwest Arabian Sea during next 24 hours.

(ii) Sea condition

- The sea condition is very high around the system centre. It is very likely continued to be very high over westcentral Arabian Sea till 13th October 2018 and over Gulf of Aden during 11th to 13th October .

(iii) Fishermen Warning

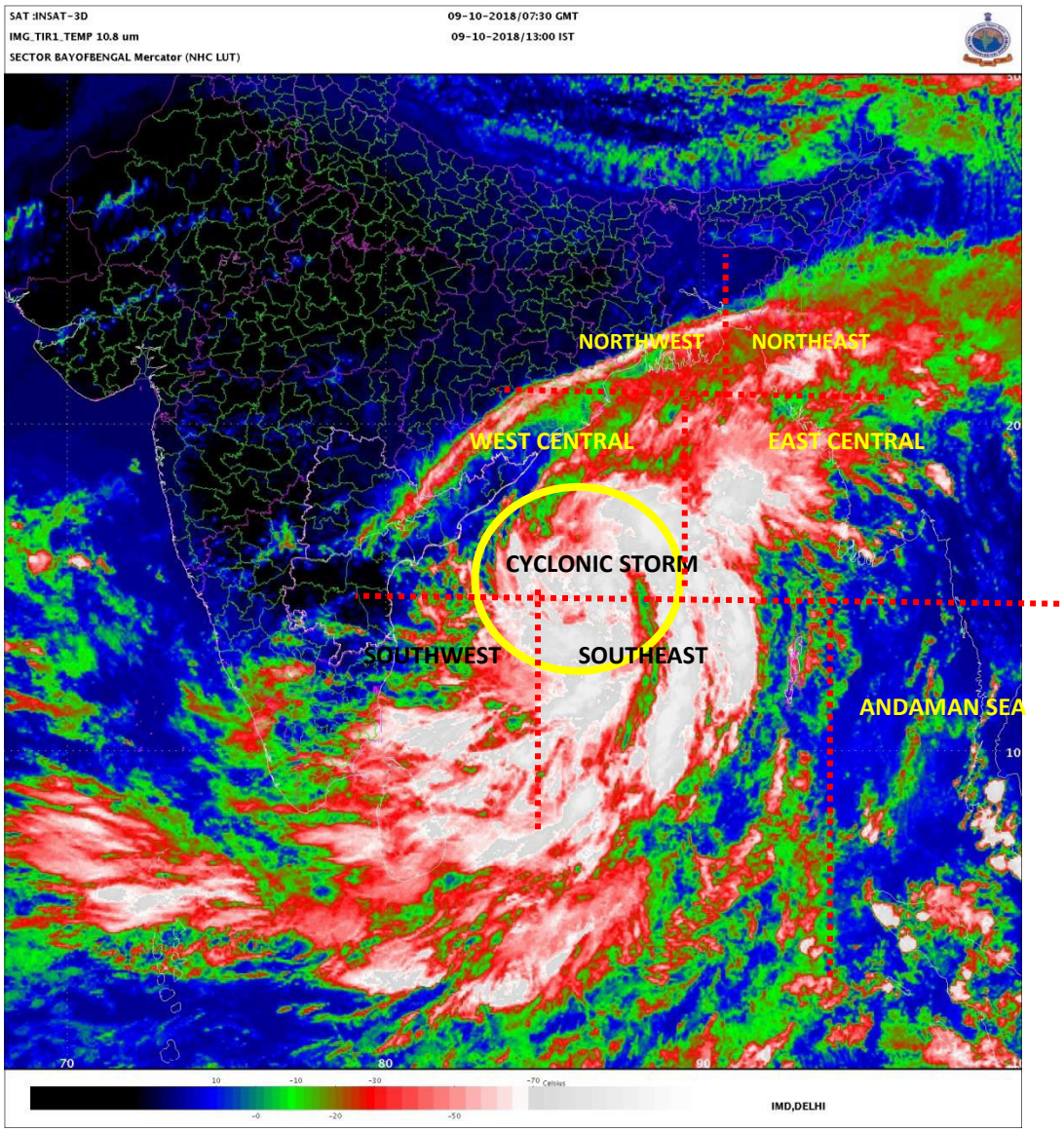
- The fishermen are advised not to venture into deep sea areas of westcentral Arabian Sea & Gulf of Aden till 13th October and adjoining southwest Arabian Sea till 10th October.

The next bulletin will be issued at 1730 hrs IST of 09th October, 2018.

(Naresh Kumar)
Scientist-E, RSMC, New Delhi

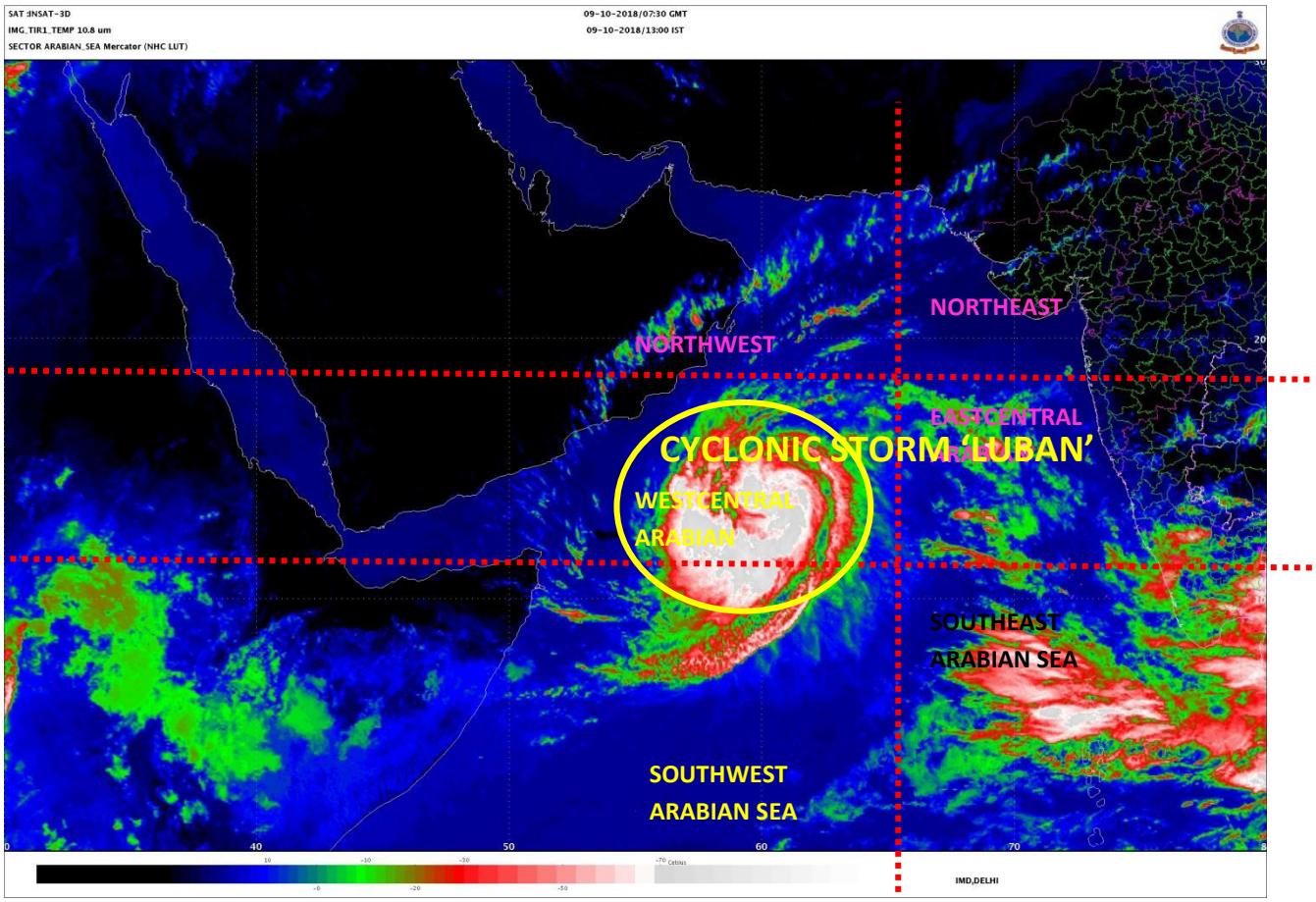
Copy to: CRS, Pune/ ACWC Chennai/ Kolkata/ Mumbai/MC Goa/Thiruvanathapuram/ Bengaluru/ CWC Ahmedabad.

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.



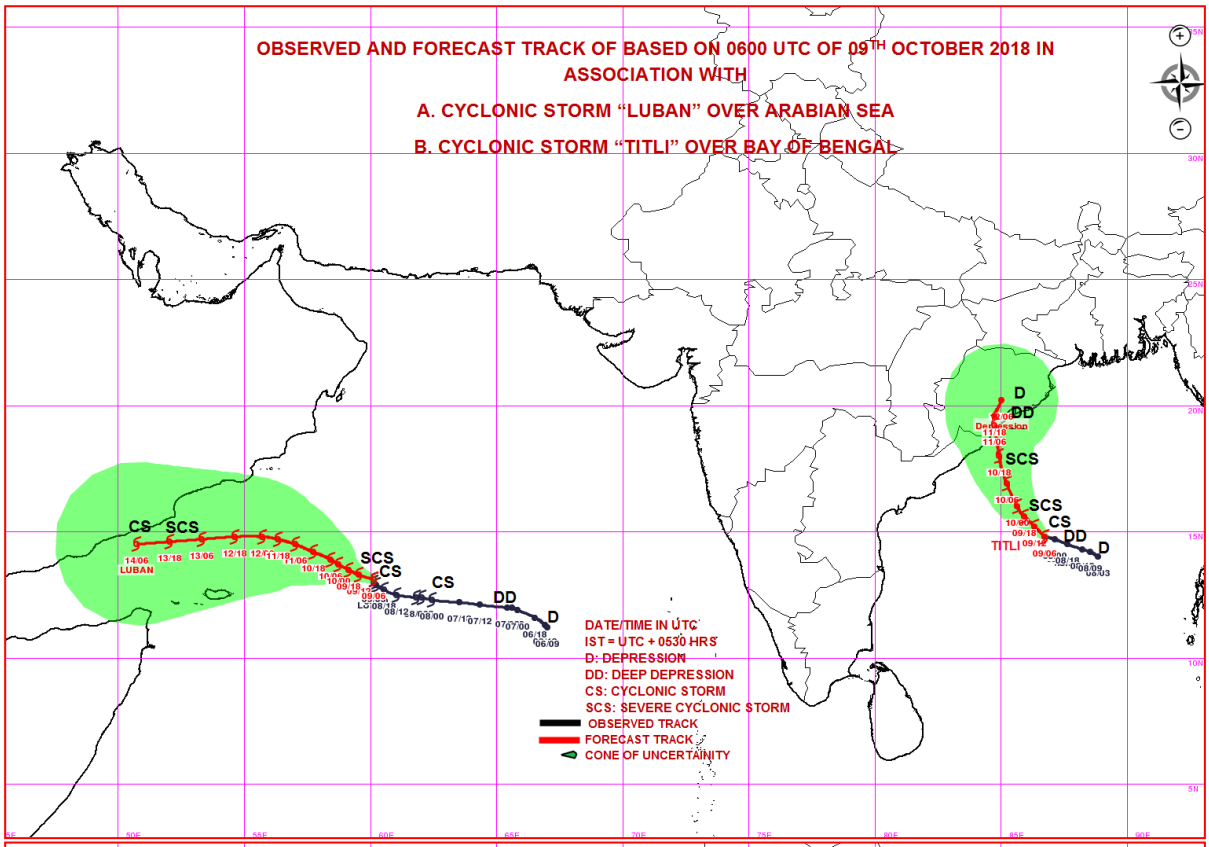
Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%

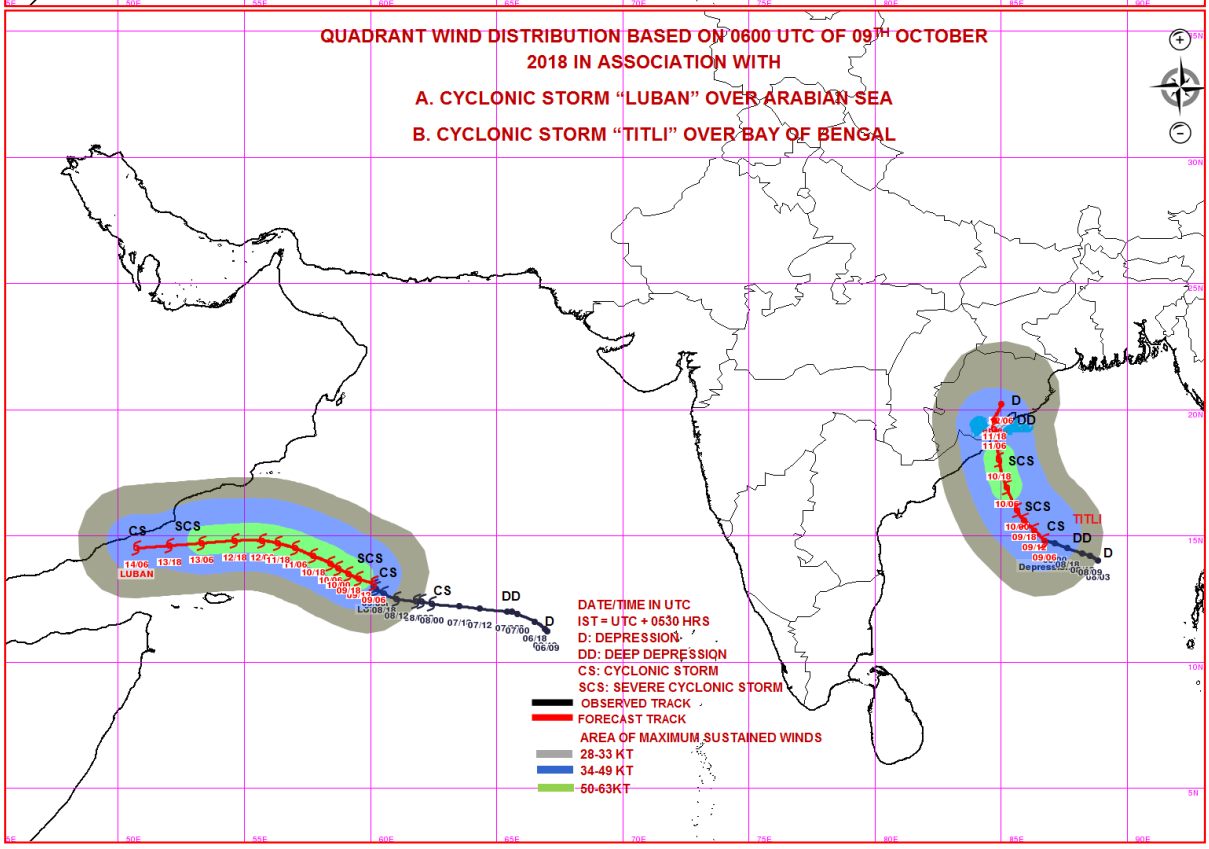
Rainfall amount (mm): Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.



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.





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.

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

BULLETIN NO.: 11 (BOB 08/2018) and BULLETIN NO. : 21 (ARB 04/2018)

TIME OF ISSUE: 1700 HOURS IST **DATED: 09.10.2018**

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)
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 (23385843)
DIRECTOR GENERAL, AIR (23421105, 23421219)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 24363261)
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. 04896-262184)
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)
CHIEF SECRETARY, ANDHRA PRADESH (FAX NO. 0866-2441029)
CHIEF SECRETARY, ODISHA (FAX NO. 0674 -2536660)
CHIEF SECRETARY, WEST BENGAL (FAX NO. 033 -22144328)
CHIEF SECRETARY, ANDAMAN & NICOBAR ISLANDS (FAX NO. 03192- 232656)
CHIEF SECRETARY, MIZORAM (FAX NO. 389 -2322745)
CHIEF SECRETARY, TRIPURA (FAX NO. 0381-2414013)
CHIEF SECRETARY, ASSAM (FAX NO. 0361-2237200)
CHIEF SECRETARY, MEGHALAYA (FAX NO. 0364 -2225978)

Sub: (a) Cyclonic Storm 'TITLI' over westcentral Bay of Bengal: Cyclone Warning for districts of north Andhra Pradesh & south Odisha coasts: Orange Message.
(b) Cyclonic Storm, 'LUBAN' intensified into severe cyclonic storm over westcentral Arabian Sea

(a) Cyclonic Storm 'TITLI' over westcentral Bay of Bengal: Cyclone Warning for districts of north Andhra Pradesh & south Odisha coasts: Orange Message.

The Cyclonic Storm **'TITLI'** over westcentral Bay of Bengal moved northwestwards with a speed of about 10 kmph during past 06 hours and lay cantered at 1430 hrs IST of today, the 09th October 2018 over Westcentral Bay of Bengal near latitude 14.9°N and longitude 86.6°E, about 510 km southeast of Gopalpur (Odisha) and 460 km east-southeast of Kalingapatnam (Andhra Pradesh). It is very likely to intensify further into a Severe Cyclonic Storm during next 18 hours. It is very likely to move northwestwards and cross Odisha & adjoining north Andhra Pradesh coasts between Gopalpur & Kalingapatnam around morning of 11th October. Thereafter, it is very likely to re-curve northeastwards, move towards Gangetic West Bengal across coastal Odisha and weaken gradually. Forecast track and intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
09.10.18/1430	14.9/86.6	65-75 gusting to 85	Cyclonic Storm
09.10.18/1730	15.2/86.3	70-80 gusting to 90	Cyclonic Storm
09.10.18/2330	15.6/85.9	80-90 gusting to 100	Cyclonic Storm
10.10.18/0530	16.0/85.6	90-100 gusting to 110	Severe Cyclonic Storm
10.10.18/1130	16.9/85.2	100-110 gusting to 125	Severe Cyclonic Storm
10.10.18/2330	18.0/84.9	100-110 gusting to 125	Severe Cyclonic Storm
11.10.18/1130	19.2/84.7	70-80 gusting to 90	Cyclonic Storm
11.10.18/2330	19.6/84.7	50-60 gusting to 70	Deep Depression
12.10.18/1130	20.2/85.0	40-50 gusting to 60	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.

(i) Heavy rainfall warnings:

Region	09 Oct. 2018*	10 Oct. 2018*	11 Oct. 2018*	12 Oct. 2018*
Odisha	Rainfall at many places with heavy falls at Isolated Places over south coastal Odisha from evening/night.	Rainfall at most places with heavy to very heavy falls at a few places and extremely heavy falls at Isolated Places over coastal Odisha.	Rainfall at most places with heavy to very heavy falls at a few places and extremely heavy falls at Isolated Places over coastal & adjoining interior Odisha.	Rainfall at many places with heavy falls at Isolated Places over north Odisha.
North Coastal Andhra Pradesh	Rainfall at a few places with heavy falls at isolated places from evening/night.	Rainfall at many places with heavy falls at Isolated Places.	Rainfall at many places with heavy falls at Isolated Places.	Nil
Gangetic West Bengal	Nil	Rainfall at many places with heavy to very heavy falls at Isolated Places over coastal West Bengal	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at many places with heavy to very heavy falls at Isolated Places
Assam & Meghalaya	NIL	NIL	Rainfall at most places with heavy falls at isolated places	Rainfall at most places with heavy to very heavy falls at isolated places
Mizoram & Tripura	Rainfall at most places with heavy falls at isolated places	Rainfall at most places with heavy falls at isolated places	Rainfall at most places with heavy to very heavy falls at isolated places	Rainfall at most places with heavy to very heavy falls at isolated places

Note: * Rainfall till 0830 IST of next day.
Legends: Red-Take Action; Orange- Be prepared; Yellow- be updated; 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

- Squally wind speed reaching 40-50 kmph gusting to 60 kmph very likely over southeast & adjoining eastcentral Bay of Bengal during next 24 hours.
- Squally wind speed reaching 65-75 kmph gusting to 85 kmph very likely over deep sea areas of westcentral & adjoining north Bay of Bengal and gradually increase to 80-90 kmph gusting to 100 kmph from 10th evening to 11th forenoon.
- Squally wind speed reaching 45-55 kmph gusting to 65 kmph is very likely to commence along & off along north Andhra Pradesh, Odisha and West Bengal coast from today, the 9th October night.
- **It is very likely to increase gradually becoming 100-110 kmph gusting to 125 kmph from 10th October 2018 evening onwards along & off south Odisha & adjoining districts of north Andhra Pradesh coasts** and 65-75 kmph gusting to 85 kmph along & off north Odisha, west Bengal and remaining districts of north Andhra Pradesh coasts.

(iii) Sea condition

- The sea condition is very likely to be rough to very rough over southeast & adjoining eastcentral Bay of Bengal during next 24 hours; and very rough to high over westcentral & adjoining north Bay of Bengal on today, the 9th October and high during 10th and 11th October 2018.

(iv) Storm Surge Warning

- Storm surge of height of about 0.5 m above astronomical tide is very likely inundate low lying areas of Srikakulam district of Andhra Pradesh; Ganjam, Khurda & Puri districts of Odisha at the time of landfall.

(v) Damage Expected over districts of Visakhapatnam, Vizianagaram and Srikakulam of Andhra Pradesh, Gajapati, Ganjam, Khurda, Nayagarh and Puri districts of Odisha :

- Damage to thatched huts/houses; Minor damage to power and communication lines due to breaking of branches and uprooting of trees. Major damage to Kutcha & minor damage to Pucca roads. Some damage to paddy crops, banana, papaya trees and orchards. Sea water inundation in low lying areas after erosion of Kutcha embankments.

(vi) Action Suggested:

- The fishermen are advised not to venture into deep sea areas of central Bay of Bengal during 9th to 10th October 2018 and north Bay of Bengal during 9th to 11th October 2018 and into north Andaman Sea during next 12 hours. Those, who are out in deep sea areas are advised return to the coast.
- Total suspension of fishing operations.
- Coastal hutment dwellers are advised to move to safer places. Other people in the affected areas to remain indoors.

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.

(b) Cyclonic Storm, 'LUBAN' intensified into severe cyclonic storm over westcentral Arabian Sea:

The Cyclonic Storm over westcentral & adjoining southwest Arabian Sea moved northwestwards with a speed of about 07 kmph in last 06 hours, intensified into severe cyclonic storm and lay centered at 1430 hrs IST 09th October 2018 over westcentral & adjoining southwest Arabian Sea, near latitude 13.2°N and longitude 60.0°E, about 760 km east-southeast of Salalah (Oman), 660 km east of Socotra Islands (Yemen) and 900 km east-southeast of Al-Ghaidah (Yemen). It is very likely to intensify further and move west-northwestwards towards Yemen & South Oman Coasts during next 4 days. Forecast track & intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
09.10.18/1430	13.2/60.0	90-100 gusting to 115	Severe Cyclonic Storm
09.10.18/1730	13.3/59.5	90-100 gusting to 115	Severe Cyclonic Storm
09.10.18/2330	13.5/59.1	100-110 gusting to 125	Severe Cyclonic Storm
10.10.18/0530	13.7/58.7	100-110 gusting to 125	Severe Cyclonic Storm
10.10.18/1130	13.9/58.4	100-110 gusting to 125	Severe Cyclonic Storm
10.10.18/2330	14.2/57.7	100-110 gusting to 125	Severe Cyclonic Storm
11.10.18/1130	14.5/57.0	110-120 gusting to 135	Severe Cyclonic Storm
11.10.18/2330	14.7/56.3	110-120 gusting to 135	Severe Cyclonic Storm
12.10.18/1130	14.8/55.7	110-120 gusting to 135	Severe Cyclonic Storm
12.10.18/2330	14.8/54.6	110-120 gusting to 135	Severe Cyclonic Storm
13.10.18/1130	14.7/53.3	100-110 gusting to 125	Severe Cyclonic Storm
13.10.18/2330	14.6/52.0	90-100 gusting to 115	Severe Cyclonic Storm
13.10.18/1130	14.5/50.7	70-80 gusting to 90	Cyclonic Storm

Warnings:

(i) Wind warning

- Gale wind speed reaching 85-95 kmph gusting to 105 kmph is prevailing over westcentral & adjoining southwest Arabian Sea. It is very likely to increase gradually becoming 110-120 kmph gusting to 135 kmph during 10th to 12th October 2018 over westcentral Arabian Sea around the system centre. The wind speed is very likely to decrease gradually over southwest Arabian Sea during next 24 hours.

(ii) Sea condition

- The sea condition is very high around the system centre. It is very likely continued to be very high over westcentral Arabian Sea till 13th October 2018 and over Gulf of Aden during 11th to 13th October .

(iii) Fishermen Warning

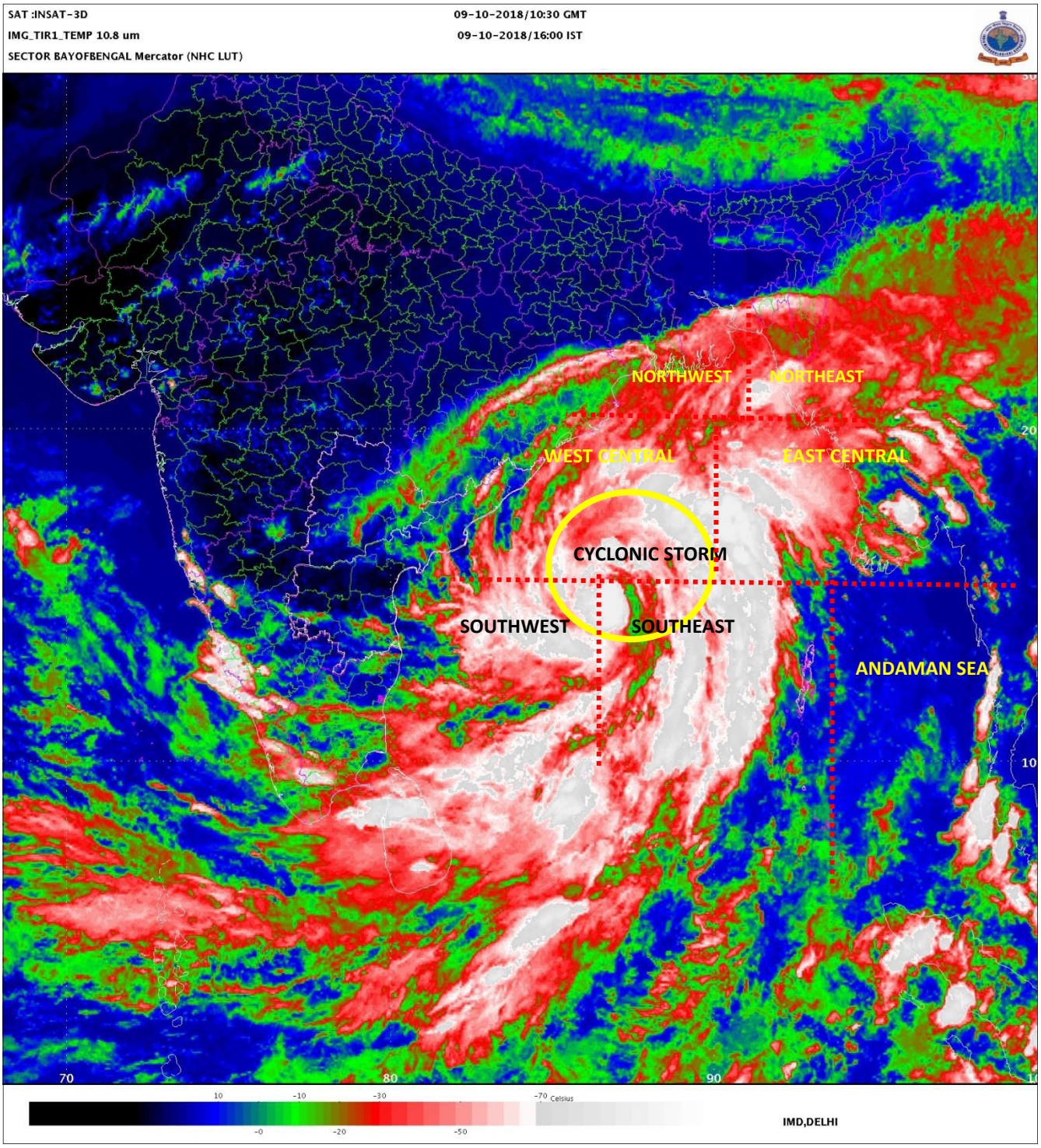
- The fishermen are advised not to venture into deep sea areas of westcentral Arabian Sea & Gulf of Aden till 13th October and adjoining southwest Arabian Sea till 10th October.

The next bulletin will be issued at 2030 hrs IST of 09th October, 2018.

(Naresh Kumar)
Scientist-E, RSMC, New Delhi

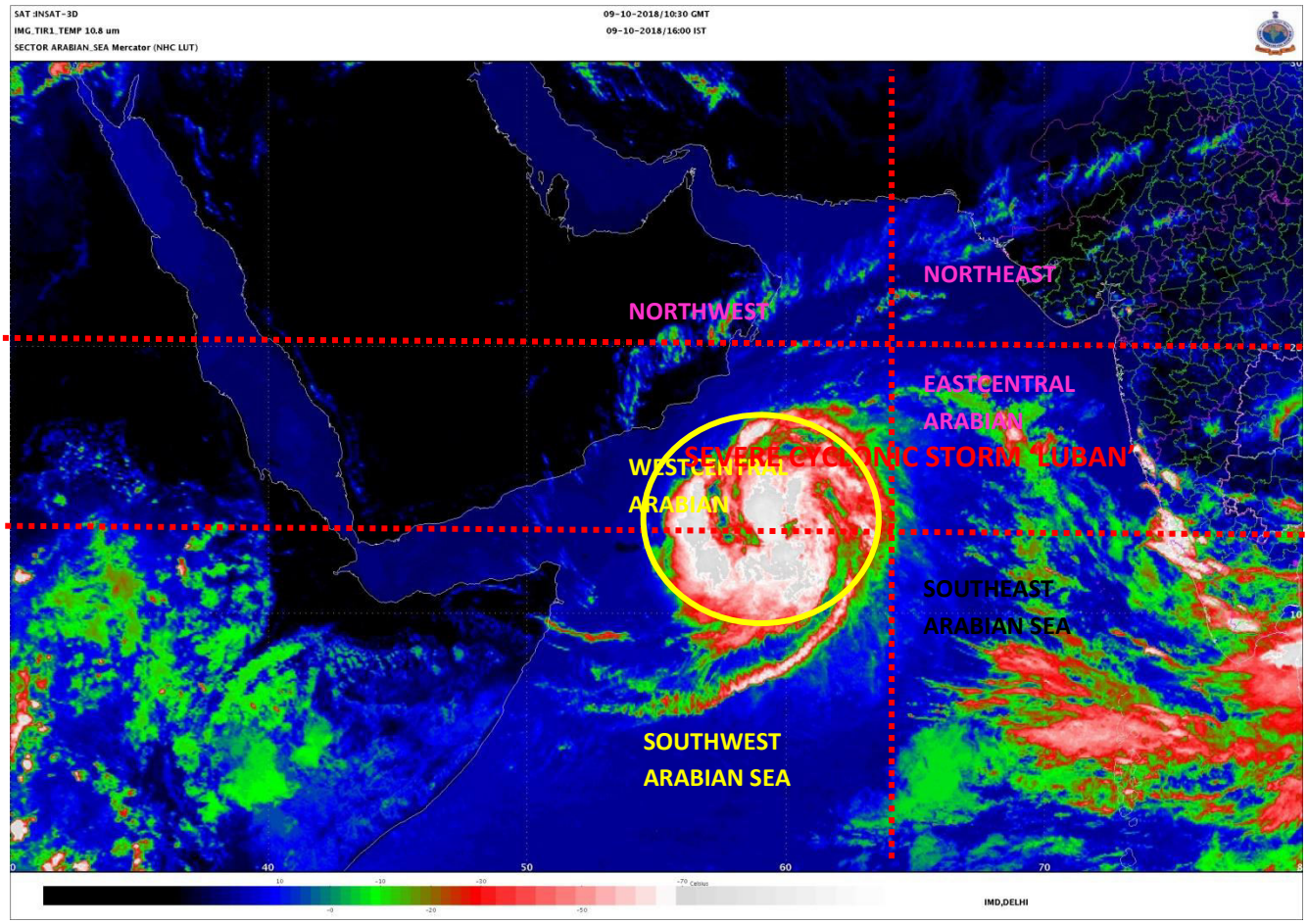
Copy to: CRS, Pune/ ACWC Chennai/ Kolkata/ Mumbai/MC Goa/Thiruvanathapuram/ Bengaluru/ CWC Ahmedabad.

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.



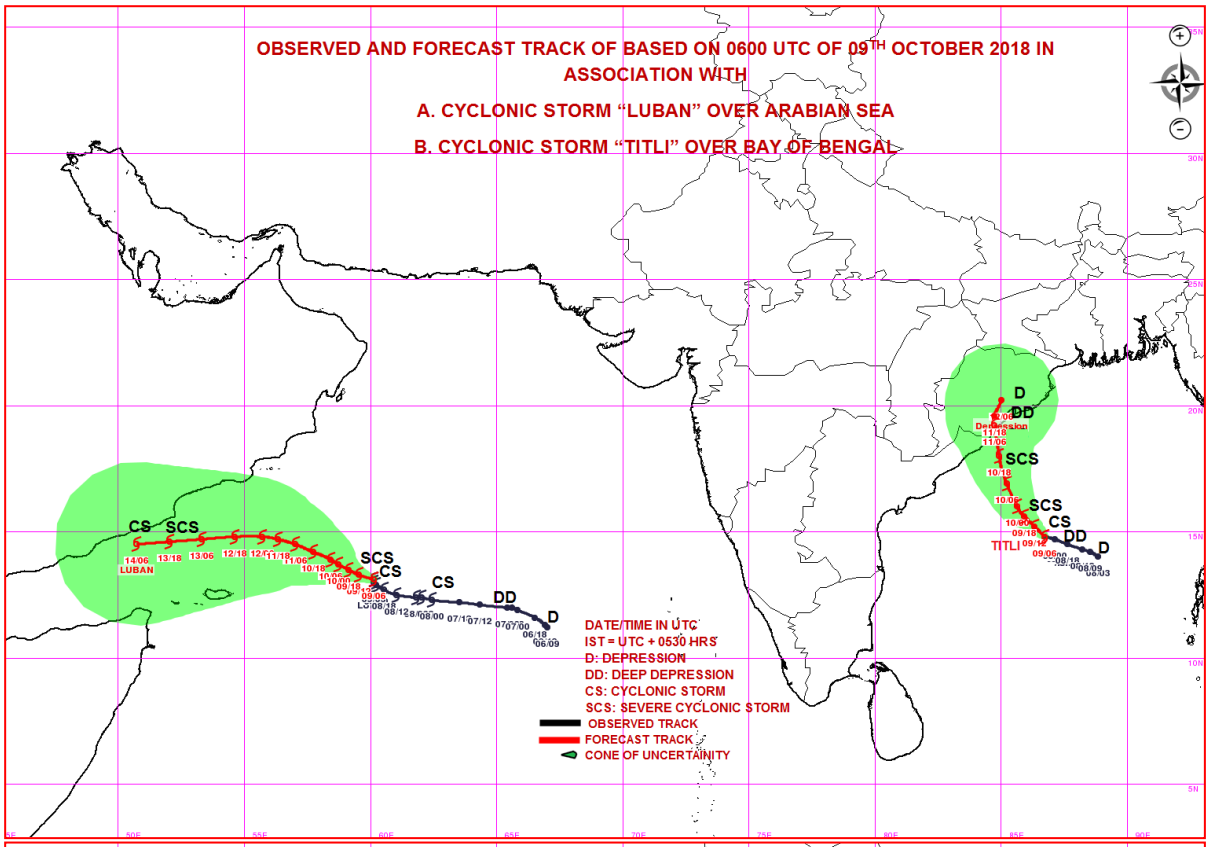
Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%

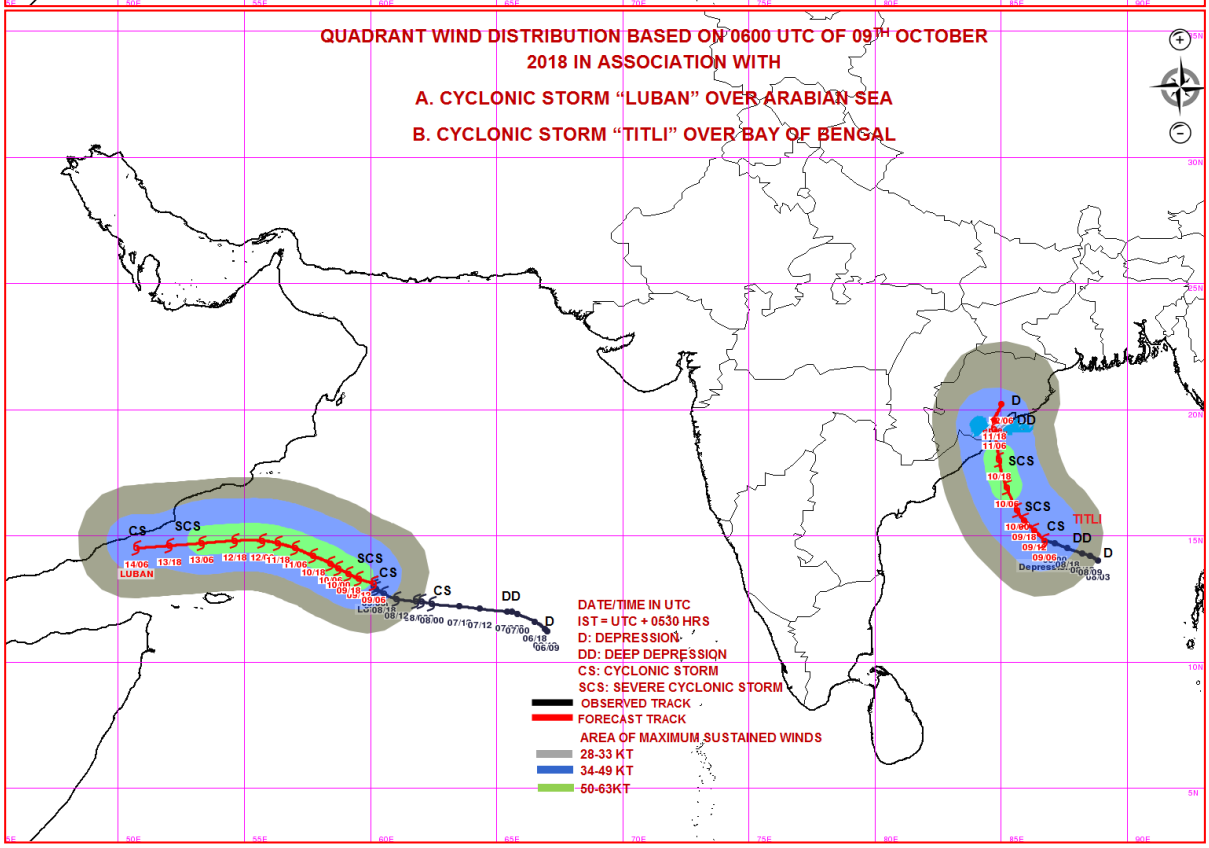
Rainfall amount (mm): Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.



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.





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.

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

BULLETIN NO.: 12 (BOB 08/2018) and BULLETIN NO. : 22 (ARB 04/2018)

TIME OF ISSUE: 2100 HOURS IST **DATED: 09.10.2018**

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)
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ADMINISTRATOR, LAKSHADWEEP ISLANDS (FAX NO. 04896-262184)
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CHIEF SECRETARY, GUJARAT (FAX NO. 079-23250305)
CHIEF SECRETARY, ANDHRA PRADESH (FAX NO. 0866-2441029)
CHIEF SECRETARY, ODISHA (FAX NO. 0674 -2536660)
CHIEF SECRETARY, WEST BENGAL (FAX NO. 033 -22144328)
CHIEF SECRETARY, ANDAMAN & NICOBAR ISLANDS (FAX NO. 03192- 232656)
CHIEF SECRETARY, MIZORAM (FAX NO. 389 -2322745)
CHIEF SECRETARY, TRIPURA (FAX NO. 0381-2414013)
CHIEF SECRETARY, ASSAM (FAX NO. 0361-2237200)
CHIEF SECRETARY, MEGHALAYA (FAX NO. 0364 -2225978)

Sub: (a) Cyclonic Storm 'TITLI' over westcentral Bay of Bengal: Cyclone Warning for districts of north Andhra Pradesh & south Odisha coasts: Orange Message.
(b) Severe Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea

(a) Cyclonic Storm 'TITLI' over westcentral Bay of Bengal: Cyclone Warning for districts of north Andhra Pradesh & south Odisha coasts: Orange Message.

The Cyclonic Storm **'TITLI'** over westcentral Bay of Bengal moved northwestwards with a speed of about 08 kmph during past 06 hours and lay cantered at 1730 hrs IST of today, the 09th October 2018 over Westcentral Bay of Bengal near latitude 15.1°N and longitude 86.4°E, about 490 km south-southeast of Gopalpur (Odisha) and 430 km southeast of Kalingapatnam (Andhra Pradesh). It is very likely to intensify further into a Severe Cyclonic Storm during next 18 hours. It is very likely to move northwestwards and cross Odisha & adjoining north Andhra Pradesh coasts between Gopalpur & Kalingapatnam around morning of 11th October. Thereafter, it is very likely to re-curve northeastwards, move towards Gangetic West Bengal across coastal Odisha and weaken gradually. Forecast track and intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
09.10.18/1730	15.1/86.4	70-80 gusting to 90	Cyclonic Storm
09.10.18/2330	15.6/85.9	75-85 gusting to 95	Cyclonic Storm
10.10.18/0530	16.0/85.6	80-90 gusting to 100	Cyclonic Storm
10.10.18/1130	16.9/85.2	90-100 gusting to 115	Severe Cyclonic Storm
10.10.18/1730	17.5/85.0	100-110 gusting to 125	Severe Cyclonic Storm
11.10.18/0530	18.6/84.7	100-110 gusting to 125	Severe Cyclonic Storm
11.10.18/1730	19.4/84.7	65-75 gusting to 85	Cyclonic Storm
12.10.18/0530	19.9/84.9	50-60 gusting to 70	Deep Depression
12.10.18/1730	20.4/85.5	40-50 gusting to 60	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.

(i) Heavy rainfall warnings:

Region	09 Oct. 2018*	10 Oct. 2018*	11 Oct. 2018*	12 Oct. 2018*
Odisha	Rainfall at many places with heavy falls at Isolated Places over south coastal Odisha from evening/night.	Rainfall at most places with heavy to very heavy falls at a few places and extremely heavy falls at Isolated Places over coastal Odisha.	Rainfall at most places with heavy to very heavy falls at a few places and extremely heavy falls at Isolated Places over coastal & adjoining interior Odisha.	Rainfall at many places with heavy falls at Isolated Places over north Odisha.
North Coastal Andhra Pradesh	Rainfall at a few places with heavy falls at isolated places from evening/night.	Rainfall at many places with heavy to very heavy falls at Isolated Places.	Rainfall at many places with heavy to very heavy falls at Isolated Places.	Nil
Gangetic West Bengal	Nil	Rainfall at many places with heavy to very heavy falls at Isolated Places over coastal West Bengal	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at many places with heavy to very heavy falls at Isolated Places
Assam & Meghalaya	NIL	NIL	Rainfall at most places with heavy falls at isolated places	Rainfall at most places with heavy to very heavy falls at isolated places
Mizoram & Tripura	Rainfall at most places with heavy falls at isolated places	Rainfall at most places with heavy falls at isolated places	Rainfall at most places with heavy to very heavy falls at isolated places	Rainfall at most places with heavy to very heavy falls at isolated places

Note: * Rainfall till 0830 IST of next day.
Legends: Red-Take Action; Orange- Be prepared; Yellow- be updated; 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

- Squally wind speed reaching 40-50 kmph gusting to 60 kmph very likely over southeast & adjoining eastcentral Bay of Bengal during next 12 hours.
- Squally wind speed reaching 65-75 kmph gusting to 85 kmph very likely over deep sea areas of westcentral & adjoining north Bay of Bengal and gradually increase to 80-90 kmph gusting to 100 kmph from 10th evening to 11th forenoon.
- Squally wind speed reaching 45-55 kmph gusting to 65 kmph is very likely to commence along & off along north Andhra Pradesh, Odisha and West Bengal coast from tonight onwards.
- **It is very likely to increase gradually becoming 100-110 kmph gusting to 125 kmph from 10th October 2018 evening onwards along & off south Odisha & adjoining districts of north Andhra Pradesh coasts** and 65-75 kmph gusting to 85 kmph along & off north Odisha, west Bengal and remaining districts of north Andhra Pradesh coasts.

(iii) Sea condition

- The sea condition is high over westcentral Bay of Bengal around system centre. It is very likely to be high to very high over westcentral & north Bay of Bengal during 10th & 11th October 2018.

(iv) Storm Surge Warning

- Storm surge of height of about 0.5 meter above astronomical tide is very likely inundate low lying areas of Srikakulam district of Andhra Pradesh; Ganjam, Khurda & Puri districts of Odisha at the time of landfall.

(v) Damage Expected over districts of Visakhapatnam, Vizianagaram and Srikakulam of Andhra Pradesh, Gajapati, Ganjam, Khurda, Nayagarh and Puri districts of Odisha:

- Major damage to thatched huts/houses, roof tops may blow off and unattached metal sheets may fly. Minor damage to power and communication lines. Major damage to Kutcha & minor damage to Pucca roads. Breaking of tree branches and uprooting of large avenue trees. Moderate damage to paddy crops, banana, papaya trees and orchards. Sea water inundation in low lying areas after erosion of Kutcha embankments.

(vi) Action Suggested:

- Total suspension of fishing operations.
- The fishermen are advised not to venture into westcentral & north Bay of Bengal till 11th October 2018. Those, who are out in deep sea areas are advised return to the coast.
- Coastal hutment dwellers are advised to move to safer places. Other people in the affected areas to remain indoors.

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.

(b) Severe Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea:

The Severe Cyclonic Storm over westcentral & adjoining southwest Arabian Sea moved west-northwestwards with a speed of about 08 kmph in last 06 hours and lay centered at 1730 hrs IST 09th October 2018 over westcentral Arabian Sea, near latitude 13.3°N and longitude 59.7°E, about 730 km east-southeast of Salalah (Oman), 630 km east-northeast of Socotra Islands (Yemen) and 870 km east-southeast of Al-Ghaidah (Yemen). It is very likely to intensify further into a very severe cyclonic storm during next 24 hours and move west-northwestwards towards Yemen & South Oman Coasts during next 4 days. Forecast track & intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
09.10.18/1730	13.3/59.7	100-110 gusting to 125	Severe Cyclonic Storm
09.10.18/2330	13.5/59.3	100-110 gusting to 125	Severe Cyclonic Storm
10.10.18/0530	13.7/58.9	105-115 gusting to 130	Severe Cyclonic Storm
10.10.18/1130	13.9/58.4	110-120 gusting to 135	Severe Cyclonic Storm
10.10.18/1730	14.1/58.0	120-130 gusting to 145	Very Severe Cyclonic Storm
11.10.18/0530	14.3/57.3	125-135 gusting to 150	Very Severe Cyclonic Storm
11.10.18/1730	14.6/56.6	130-140 gusting to 155	Very Severe Cyclonic Storm
12.10.18/0530	14.7/55.8	135-145 gusting to 160	Very Severe Cyclonic Storm
12.10.18/1730	14.8/54.9	125-135 gusting to 150	Very Severe Cyclonic Storm
13.10.18/0530	14.7/53.9	120-130 gusting to 145	Very Severe Cyclonic Storm
13.10.18/1730	14.5/52.6	110-120 gusting to 135	Severe Cyclonic Storm
14.10.18/0530	14.3/51.3	100-110 gusting to 125	Severe Cyclonic Storm
14.10.18/1730	14.1/50.0	90-100 gusting to 115	Severe Cyclonic Storm

Warnings:

(i) Wind warning

- Gale wind speed reaching 100-110 kmph gusting to 125 kmph is prevailing over westcentral & adjoining southwest Arabian Sea. It is very likely to increase gradually becoming 135-145 kmph gusting to 160 kmph by 12th October 2018 morning over westcentral Arabian Sea around the system centre. The wind speed is very likely to decrease gradually over southwest Arabian Sea during next 24 hours.

(ii) Sea condition

- The sea condition is very high around the system centre. It is very likely continued to be very high over westcentral Arabian Sea till 13th October 2018 and over Gulf of Aden during 11th to 13th October .

(iii) Fishermen Warning

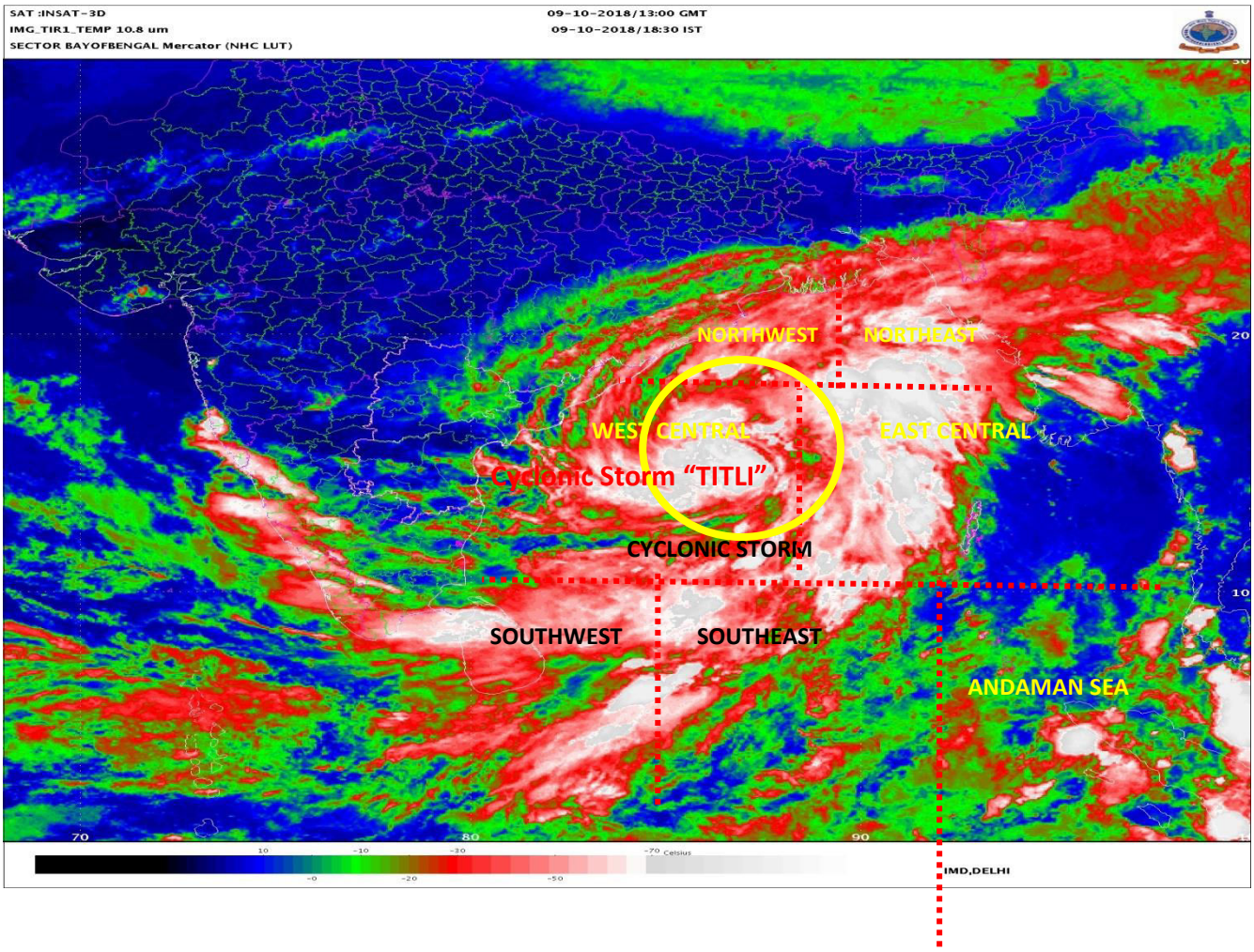
- The fishermen are advised not to venture into deep sea areas of westcentral Arabian Sea & Gulf of Aden till 13th October and adjoining southwest Arabian Sea till 10th October.

The next bulletin will be issued at 2330 hrs IST of 09th October, 2018.

(Naresh Kumar)
Scientist-E, RSMC, New Delhi

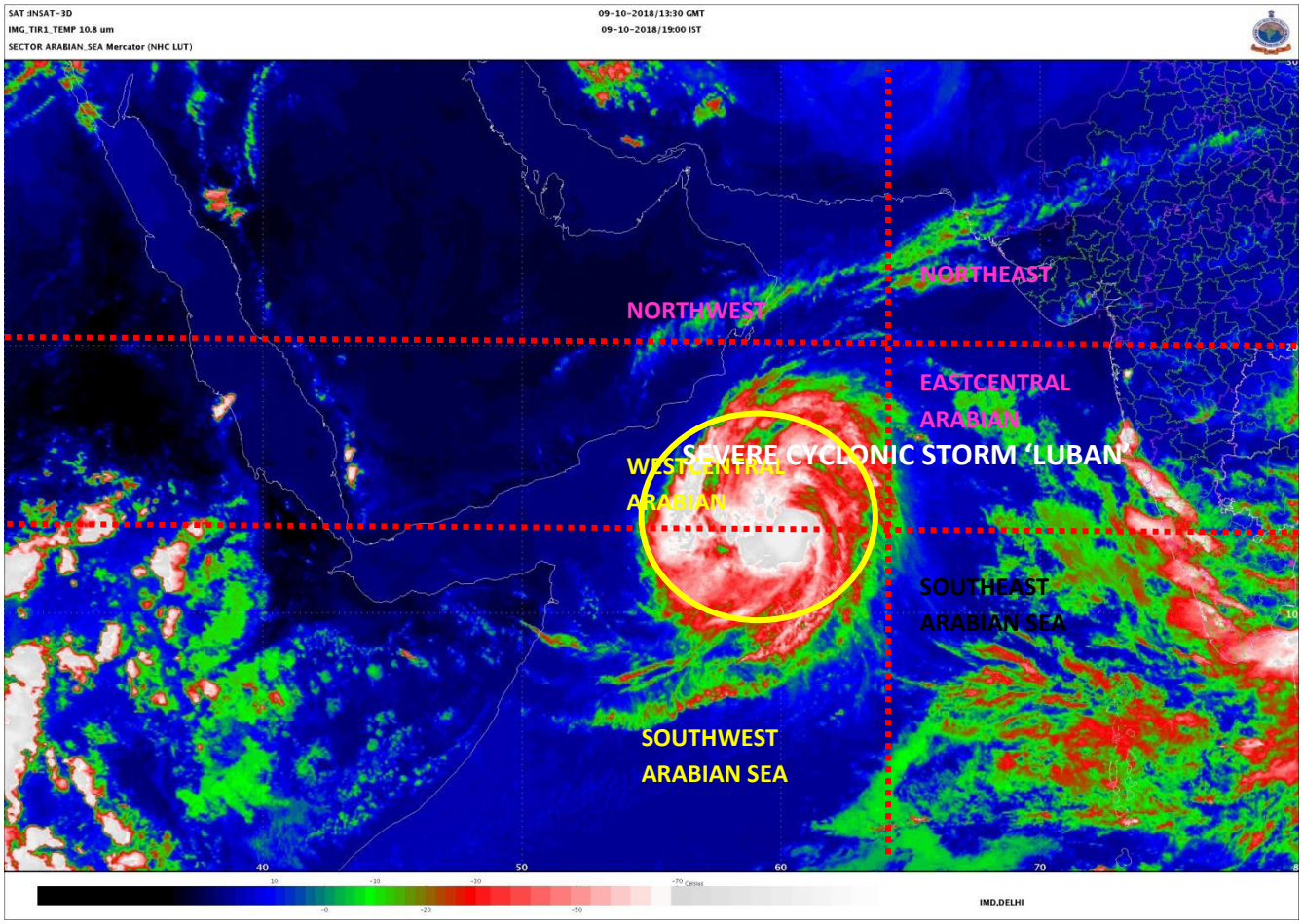
Copy to: CRS, Pune/ ACWC Chennai/ Kolkata/ Mumbai/MC Goa/Thiruvanathapuram/ Bengaluru/ CWC Ahmedabad.

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.



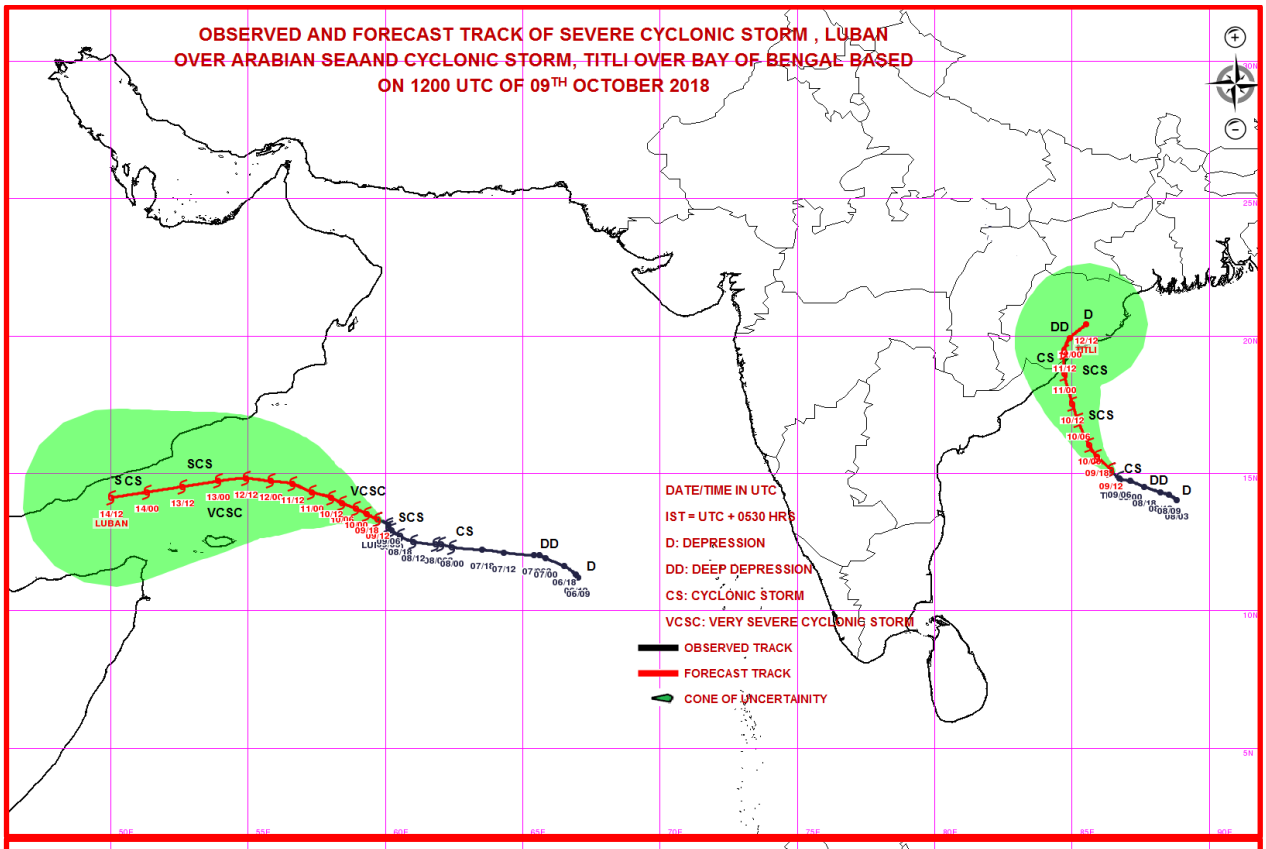
Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%

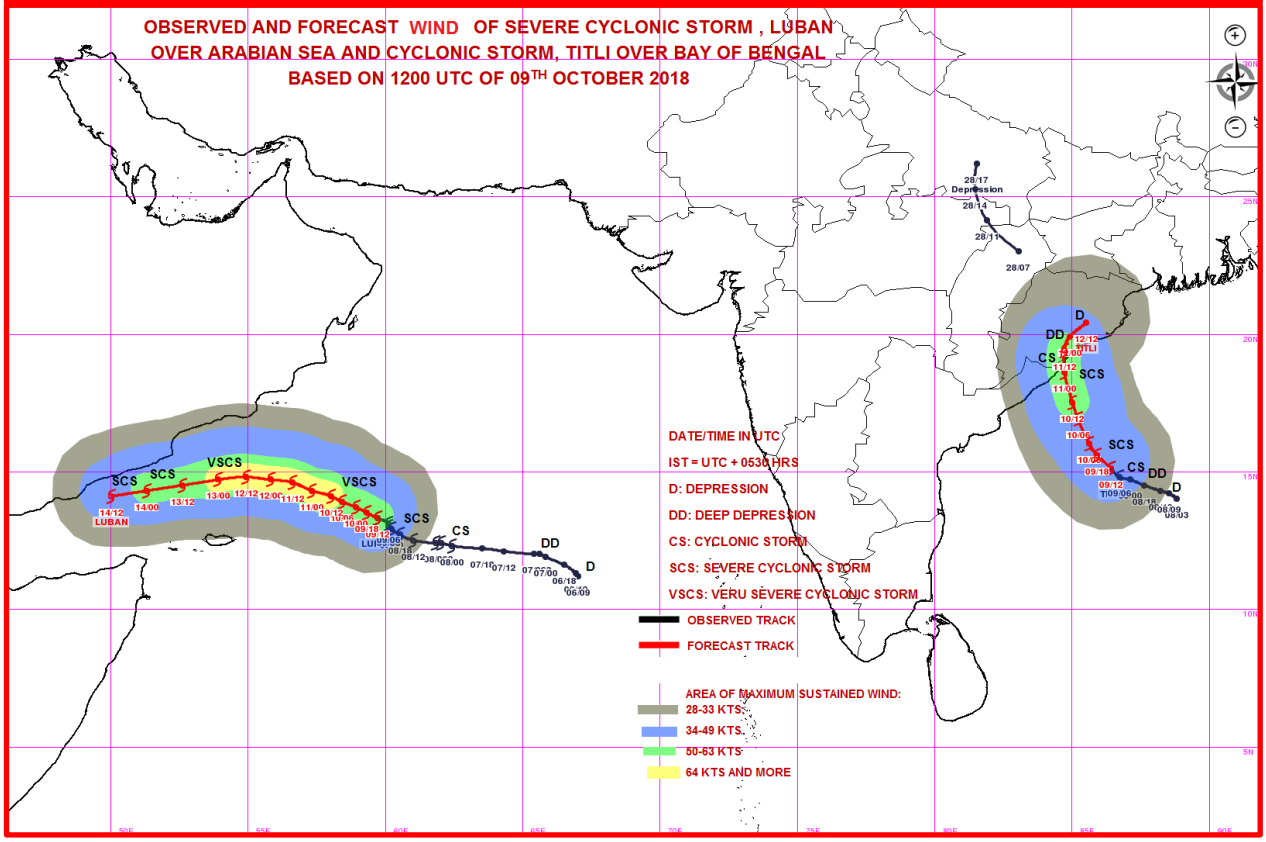
Rainfall amount (mm): Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.



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.





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.

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

BULLETIN NO.: 13 (BOB 08/2018) and BULLETIN NO. : 23 (ARB 04/2018)

TIME OF ISSUE: 2330 HOURS IST **DATED: 09.10.2018**

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)
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 (23385843)
DIRECTOR GENERAL, AIR (23421105, 23421219)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 24363261)
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. 04896-262184)
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)
CHIEF SECRETARY, ANDHRA PRADESH (FAX NO. 0866-2441029)
CHIEF SECRETARY, ODISHA (FAX NO. 0674 -2536660)
CHIEF SECRETARY, WEST BENGAL (FAX NO. 033 -22144328)
CHIEF SECRETARY, ANDAMAN & NICOBAR ISLANDS (FAX NO. 03192- 232656)
CHIEF SECRETARY, MIZORAM (FAX NO. 389 -2322745)
CHIEF SECRETARY, TRIPURA (FAX NO. 0381-2414013)
CHIEF SECRETARY, ASSAM (FAX NO. 0361-2237200)
CHIEF SECRETARY, MEGHALAYA (FAX NO. 0364 -2225978)

Sub: (a) Cyclonic Storm 'TITLI' over westcentral Bay of Bengal: Cyclone Warning for districts of north Andhra Pradesh & south Odisha coasts: Orange Message.
(b) Severe Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea

(a) Cyclonic Storm 'TITLI' over westcentral Bay of Bengal: Cyclone Warning for districts of north Andhra Pradesh & south Odisha coasts: Orange Message.

The Cyclonic Storm **'TITLI'** over westcentral Bay of Bengal moved northwestwards with a speed of about 10 kmph during past 06 hours and lay cantered at 2030 hrs IST of today, the 09th October 2018 over Westcentral Bay of Bengal near latitude 15.3°N and longitude 86.2°E, about 460 km south-southeast of Gopalpur (Odisha) and 400 km southeast of Kalingapatnam (Andhra Pradesh). It is very likely to intensify further into a Severe Cyclonic Storm during next 18 hours. It is very likely to move northwestwards and cross Odisha & adjoining north Andhra Pradesh coasts between Gopalpur & Kalingapatnam around morning of 11th October. Thereafter, it is very likely to re-curve northeastwards, move towards Gangetic West Bengal across coastal Odisha and weaken gradually. Forecast track and intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
09.10.18/2030	15.3/86.2	75-85 gusting to 95	Cyclonic Storm
09.10.18/2330	15.6/85.9	75-85 gusting to 95	Cyclonic Storm
10.10.18/0530	16.0/85.6	80-90 gusting to 100	Cyclonic Storm
10.10.18/1130	16.9/85.2	90-100 gusting to 115	Severe Cyclonic Storm
10.10.18/1730	17.5/85.0	100-110 gusting to 125	Severe Cyclonic Storm
11.10.18/0530	18.6/84.7	100-110 gusting to 125	Severe Cyclonic Storm
11.10.18/1730	19.4/84.7	65-75 gusting to 85	Cyclonic Storm
12.10.18/0530	19.9/84.9	50-60 gusting to 70	Deep Depression
12.10.18/1730	20.4/85.5	40-50 gusting to 60	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.

(i) Heavy rainfall warnings:

Region	09 Oct. 2018*	10 Oct. 2018*	11 Oct. 2018*	12 Oct. 2018*
Odisha	Rainfall at many places with heavy falls at Isolated Places over south coastal Odisha from evening/night.	Rainfall at most places with heavy to very heavy falls at a few places and extremely heavy falls at Isolated Places over coastal Odisha.	Rainfall at most places with heavy to very heavy falls at a few places and extremely heavy falls at Isolated Places over coastal & adjoining interior Odisha.	Rainfall at many places with heavy falls at Isolated Places over north Odisha.
North Coastal Andhra Pradesh	Rainfall at a few places with heavy falls at isolated places from evening/night.	Rainfall at many places with heavy to very heavy falls at Isolated Places.	Rainfall at many places with heavy to very heavy falls at Isolated Places.	Nil
Gangetic West Bengal	Nil	Rainfall at many places with heavy to very heavy falls at Isolated Places over coastal West Bengal	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at many places with heavy to very heavy falls at Isolated Places
Assam & Meghalaya	NIL	NIL	Rainfall at most places with heavy falls at isolated places	Rainfall at most places with heavy to very heavy falls at isolated places
Mizoram & Tripura	Rainfall at most places with heavy falls at isolated places	Rainfall at most places with heavy falls at isolated places	Rainfall at most places with heavy to very heavy falls at isolated places	Rainfall at most places with heavy to very heavy falls at isolated places

Note: * Rainfall till 0830 IST of next day.
Legends: Red-Take Action; Orange- Be prepared; Yellow- be updated; 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

- Squally wind speed reaching 40-50 kmph gusting to 60 kmph very likely over southeast & adjoining eastcentral Bay of Bengal during next 12 hours.
- Squally wind speed reaching 65-75 kmph gusting to 85 kmph very likely over deep sea areas of westcentral & adjoining north Bay of Bengal and gradually increase to 80-90 kmph gusting to 100 kmph from 10th evening to 11th forenoon.
- Squally wind speed reaching 45-55 kmph gusting to 65 kmph is very likely to commence along & off along north Andhra Pradesh, Odisha and West Bengal coast from tonight onwards.
- **It is very likely to increase gradually becoming 100-110 kmph gusting to 125 kmph from 10th October 2018 evening onwards along & off south Odisha & adjoining districts of north Andhra Pradesh coasts** and 65-75 kmph gusting to 85 kmph along & off north Odisha, west Bengal and remaining districts of north Andhra Pradesh coasts.

(iii) Sea condition

- The sea condition is high over westcentral Bay of Bengal around system centre. It is very likely to be high to very high over westcentral & north Bay of Bengal during 10th & 11th October 2018.

(iv) Storm Surge Warning

- Storm surge of height of about 0.5 meter above astronomical tide is very likely inundate low lying areas of Srikakulam district of Andhra Pradesh; Ganjam, Khurda & Puri districts of Odisha at the time of landfall.

(v) Damage Expected over districts of Visakhapatnam, Vizianagaram and Srikakulam of Andhra Pradesh, Gajapati, Ganjam, Khurda, Nayagarh and Puri districts of Odisha:

- Major damage to thatched huts/houses, roof tops may blow off and unattached metal sheets may fly. Minor damage to power and communication lines. Major damage to Kutcha & minor damage to Pucca roads. Breaking of tree branches and uprooting of large avenue trees. Moderate damage to paddy crops, banana, papaya trees and orchards. Sea water inundation in low lying areas after erosion of Kutcha embankments.

(vi) Action Suggested:

- Total suspension of fishing operations.
- The fishermen are advised not to venture into westcentral & north Bay of Bengal till 11th October 2018. Those, who are out in deep sea areas are advised return to the coast.
- Coastal hutment dwellers are advised to move to safer places. Other people in the affected areas to remain indoors.

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.

(b) Severe Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea:

The Severe Cyclonic Storm over westcentral & adjoining southwest Arabian Sea moved west-northwestwards with a speed of about 10 kmph in last 06 hours and lay centered at 2030 hrs IST 09th October 2018 over westcentral Arabian Sea, near latitude 13.4°N and longitude 59.5°E, about 700 km east-southeast of Salalah (Oman), 610 km east-northeast of Socotra Islands (Yemen) and 850 km east-southeast of Al-Ghaidah (Yemen). It is very likely to intensify further into a very severe cyclonic storm during next 24 hours and move west-northwestwards towards Yemen & South Oman Coasts during next 4 days. Forecast track & intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
09.10.18/2030	13.4/59.5	100-110 gusting to 125	Severe Cyclonic Storm
09.10.18/2330	13.5/59.3	100-110 gusting to 125	Severe Cyclonic Storm
10.10.18/0530	13.7/58.9	105-115 gusting to 130	Severe Cyclonic Storm
10.10.18/1130	13.9/58.4	110-120 gusting to 135	Severe Cyclonic Storm
10.10.18/1730	14.1/58.0	120-130 gusting to 145	Very Severe Cyclonic Storm
11.10.18/0530	14.3/57.3	125-135 gusting to 150	Very Severe Cyclonic Storm
11.10.18/1730	14.6/56.6	130-140 gusting to 155	Very Severe Cyclonic Storm
12.10.18/0530	14.7/55.8	135-145 gusting to 160	Very Severe Cyclonic Storm
12.10.18/1730	14.8/54.9	125-135 gusting to 150	Very Severe Cyclonic Storm
13.10.18/0530	14.7/53.9	120-130 gusting to 145	Very Severe Cyclonic Storm
13.10.18/1730	14.5/52.6	110-120 gusting to 135	Severe Cyclonic Storm
14.10.18/0530	14.3/51.3	100-110 gusting to 125	Severe Cyclonic Storm
14.10.18/1730	14.1/50.0	90-100 gusting to 115	Severe Cyclonic Storm

Warnings:

(i) Wind warning

- Gale wind speed reaching 100-110 kmph gusting to 125 kmph is prevailing over westcentral & adjoining southwest Arabian Sea. It is very likely to increase gradually becoming 135-145 kmph gusting to 160 kmph by 12th October 2018 morning over westcentral Arabian Sea around the system centre. The wind speed is very likely to decrease gradually over southwest Arabian Sea during next 24 hours.

(ii) Sea condition

- The sea condition is very high around the system centre. It is very likely continued to be very high over westcentral Arabian Sea till 13th October 2018 and over Gulf of Aden during 11th to 13th October .

(iii) Fishermen Warning

- The fishermen are advised not to venture into deep sea areas of westcentral Arabian Sea & Gulf of Aden till 13th October and adjoining southwest Arabian Sea till 10th October.

The next bulletin will be issued at 0230 hrs IST of 09th October, 2018.

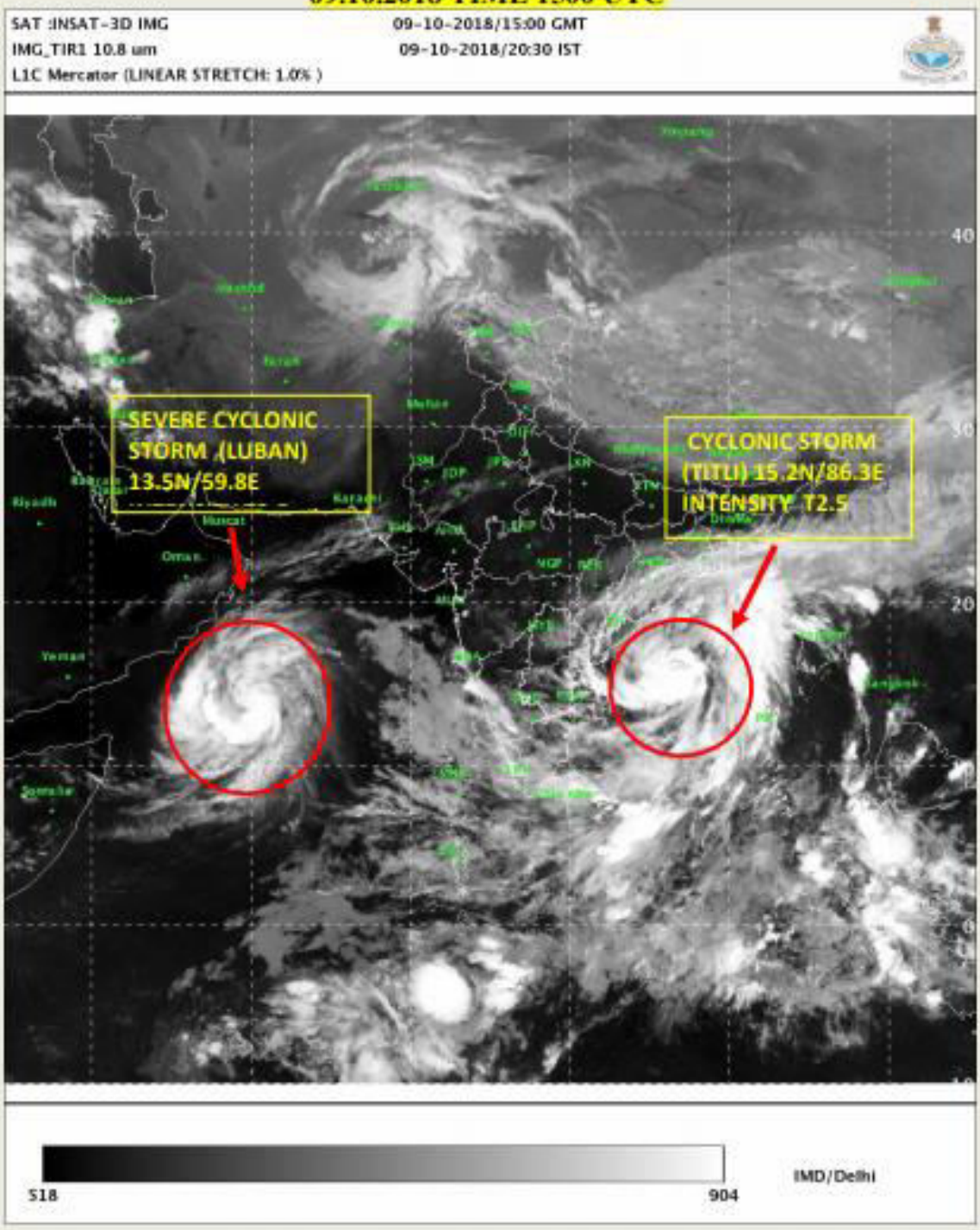
(S. D. Kotal)
Scientist-E, RSMC, New Delhi

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

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.

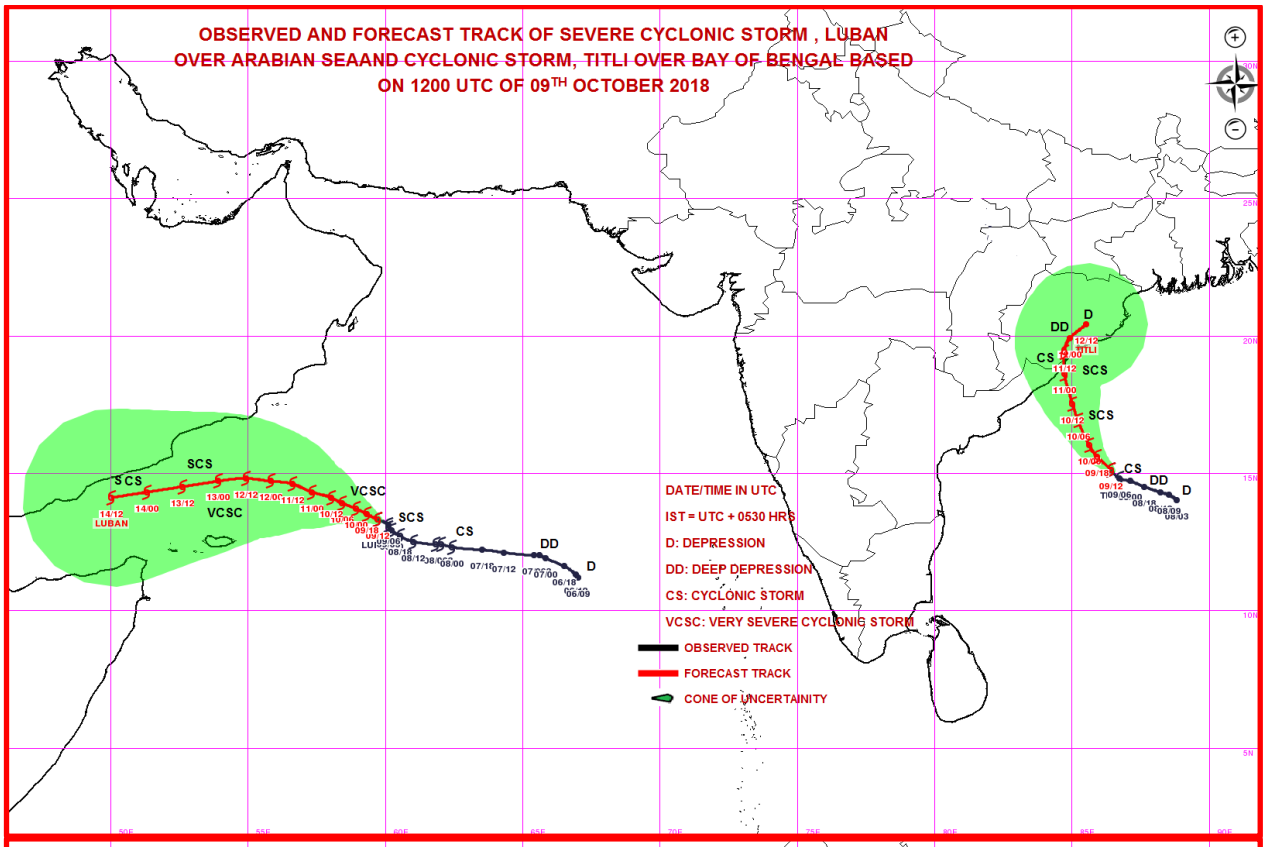
SATELLITE BULLETIN BASED ON SATELLITE IMAGERIES AND PRODUCTS

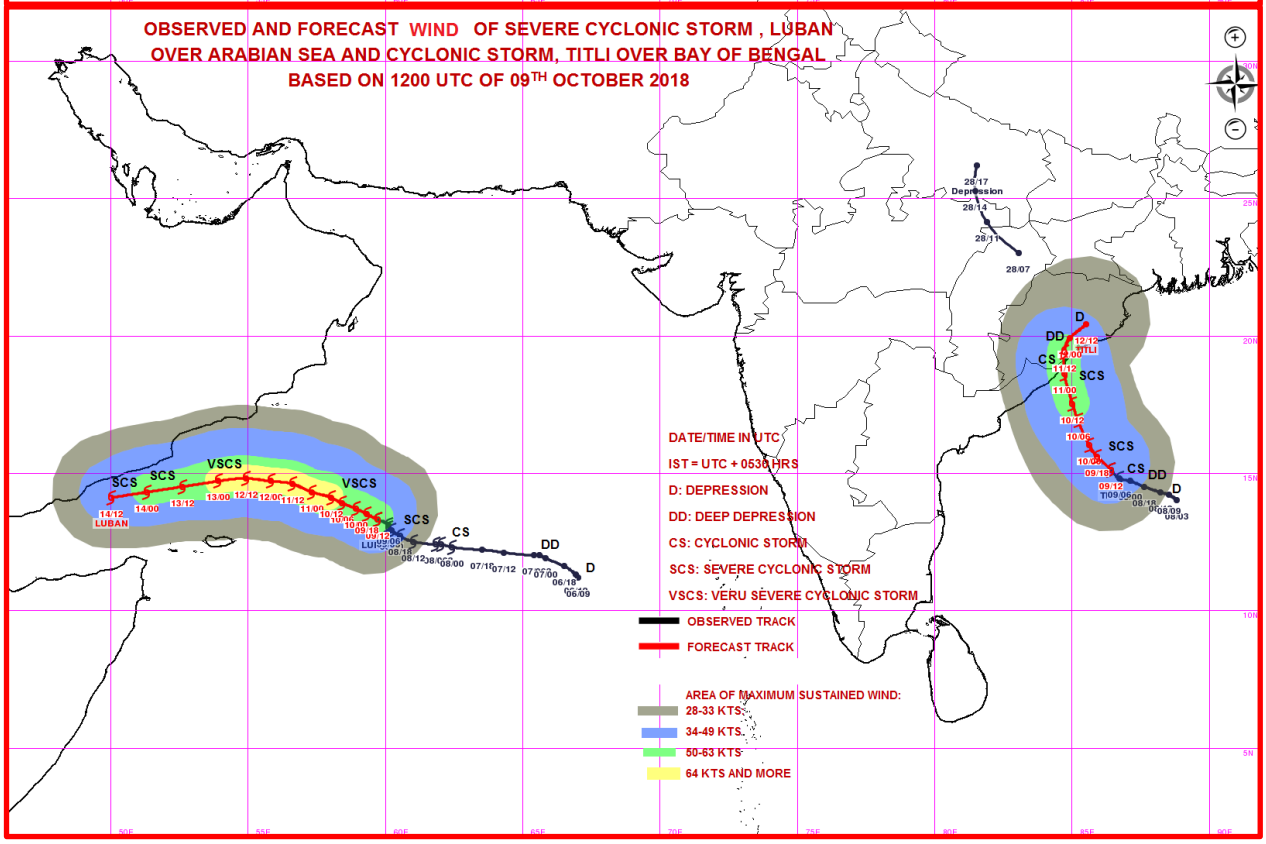
09.10.2018 TIME 1500 UTC



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.





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.

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

BULLETIN NO.: 14 (BOB 08/2018) and BULLETIN NO. : 24 (ARB 04/2018)

TIME OF ISSUE: 0215 HOURS IST **DATED: 10.10.2018**

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)
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 (23385843)
DIRECTOR GENERAL, AIR (23421105, 23421219)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 24363261)
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. 04896-262184)
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)
CHIEF SECRETARY, ANDHRA PRADESH (FAX NO. 0866-2441029)
CHIEF SECRETARY, ODISHA (FAX NO. 0674 -2536660)
CHIEF SECRETARY, WEST BENGAL (FAX NO. 033 -22144328)
CHIEF SECRETARY, ANDAMAN & NICOBAR ISLANDS (FAX NO. 03192- 232656)
CHIEF SECRETARY, MIZORAM (FAX NO. 389 -2322745)
CHIEF SECRETARY, TRIPURA (FAX NO. 0381-2414013)
CHIEF SECRETARY, ASSAM (FAX NO. 0361-2237200)
CHIEF SECRETARY, MEGHALAYA (FAX NO. 0364 -2225978)

Sub: (a) Cyclonic Storm 'TITLI' over westcentral Bay of Bengal: Cyclone Warning for districts of north Andhra Pradesh & south Odisha coasts: Orange Message.
(b) Severe Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea

(a) Cyclonic Storm 'TITLI' over westcentral Bay of Bengal: Cyclone Warning for districts of north Andhra Pradesh & south Odisha coasts: Orange Message.

The Cyclonic Storm **'TITLI'** over westcentral Bay of Bengal moved northwestwards with a speed of about 10 kmph during past 06 hours and lay cantered at 2330 hrs IST of today, the 09th October 2018 over Westcentral Bay of Bengal near latitude 15.5°N and longitude 86.0°E, about 430 km south-southeast of Gopalpur (Odisha) and 370 km southeast of Kalingapatnam (Andhra Pradesh). It is very likely to intensify further into a Severe Cyclonic Storm during next 12 hours. It is very likely to move northwestwards and cross Odisha & adjoining north Andhra Pradesh coasts between Gopalpur & Kalingapatnam around morning of 11th October. Thereafter, it is very likely to re-curve northeastwards, move towards Gangetic West Bengal across coastal Odisha and weaken gradually. Forecast track and intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
09.10.18/2330	15.5/86.0	85-95 gusting to 105	Cyclonic Storm
10.10.18/0530	16.0/85.6	85-95 gusting to 105	Cyclonic Storm
10.10.18/1130	16.9/85.2	90-100 gusting to 115	Severe Cyclonic Storm
10.10.18/1730	17.5/85.0	100-110 gusting to 125	Severe Cyclonic Storm
10.10.18/2330	18.2/84.8	100-110 gusting to 125	Severe Cyclonic Storm
11.10.18/1130	19.0/84.7	80-90 gusting to 100	Cyclonic Storm
11.10.18/2330	19.7/84.8	50-60 gusting to 70	Deep Depression
12.10.18/1130	20.2/85.2	50-60 gusting to 70	Deep Depression
12.10.18/2330	20.6/85.6	40-50 gusting to 60	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.

(i) Heavy rainfall warnings:

Region	09 Oct. 2018*	10 Oct. 2018*	11 Oct. 2018*	12 Oct. 2018*
Odisha	Rainfall at many places with heavy falls at Isolated Places over south coastal Odisha from evening/night.	Rainfall at most places with heavy to very heavy falls at a few places and extremely heavy falls at Isolated Places over coastal Odisha.	Rainfall at most places with heavy to very heavy falls at a few places and extremely heavy falls at Isolated Places over coastal & adjoining interior Odisha.	Rainfall at many places with heavy falls at Isolated Places over north Odisha.
North Coastal Andhra Pradesh	Rainfall at a few places with heavy falls at isolated places from evening/night.	Rainfall at many places with heavy to very heavy falls at Isolated Places.	Rainfall at many places with heavy to very heavy falls at Isolated Places.	Nil
Gangetic West Bengal	Nil	Rainfall at many places with heavy to very heavy falls at Isolated Places over coastal West Bengal	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at many places with heavy to very heavy falls at Isolated Places
Assam & Meghalaya	NIL	NIL	Rainfall at most places with heavy falls at isolated places	Rainfall at most places with heavy to very heavy falls at isolated places
Mizoram & Tripura	Rainfall at most places with heavy falls at isolated places	Rainfall at most places with heavy falls at isolated places	Rainfall at most places with heavy to very heavy falls at isolated places	Rainfall at most places with heavy to very heavy falls at isolated places

Note: * Rainfall till 0830 IST of next day.
Legends: Red-Take Action; Orange- Be prepared; Yellow- be updated; 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

- Squally wind speed reaching 40-50 kmph gusting to 60 kmph very likely over southeast & adjoining eastcentral Bay of Bengal during next 12 hours.
- Squally wind speed reaching 65-75 kmph gusting to 85 kmph very likely over deep sea areas of westcentral & adjoining north Bay of Bengal and gradually increase to 80-90 kmph gusting to 100 kmph from 10th evening to 11th forenoon.
- Squally wind speed reaching 45-55 kmph gusting to 65 kmph is very likely to commence along & off along north Andhra Pradesh, Odisha and West Bengal coast from tonight onwards.
- **It is very likely to increase gradually becoming 100-110 kmph gusting to 125 kmph from 10th October 2018 evening onwards along & off south Odisha & adjoining districts of north Andhra Pradesh coasts** and 65-75 kmph gusting to 85 kmph along & off north Odisha, west Bengal and remaining districts of north Andhra Pradesh coasts.

(iii) Sea condition

- The sea condition is high over westcentral Bay of Bengal around system centre. It is very likely to be high to very high over westcentral & north Bay of Bengal during 10th & 11th October 2018.

(iv) Storm Surge Warning

- Storm surge of height of about 0.5 meter above astronomical tide is very likely inundate low lying areas of Srikakulam district of Andhra Pradesh; Ganjam, Khurda & Puri districts of Odisha at the time of landfall.

(v) Damage Expected over districts of Visakhapatnam, Vizianagaram and Srikakulam of Andhra Pradesh, Gajapati, Ganjam, Khurda, Nayagarh and Puri districts of Odisha:

- Major damage to thatched huts/houses, roof tops may blow off and unattached metal sheets may fly. Minor damage to power and communication lines. Major damage to Kutcha & minor damage to Pucca roads. Breaking of tree branches and uprooting of large avenue trees. Moderate damage to paddy crops, banana, papaya trees and orchards. Sea water inundation in low lying areas after erosion of Kutcha embankments.

(vi) Action Suggested:

- Total suspension of fishing operations.
- The fishermen are advised not to venture into westcentral & north Bay of Bengal till 11th October 2018. Those, who are out in deep sea areas are advised return to the coast.
- Coastal hutment dwellers are advised to move to safer places. Other people in the affected areas to remain indoors.

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.

(b) Severe Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea:

The Severe Cyclonic Storm over westcentral & adjoining southwest Arabian Sea moved west-northwestwards with a speed of about 08 kmph in last 06 hours and lay centered at 2330 hrs IST 09th October 2018 over westcentral Arabian Sea, near latitude 13.5°N and longitude 59.3°E, about 680 km east-southeast of Salalah (Oman), 590 km east-northeast of Socotra Islands (Yemen) and 820 km east-southeast of Al-Ghaidah (Yemen). It is very likely to intensify further into a very severe cyclonic storm during next 24 hours and move west-northwestwards towards Yemen & South Oman Coasts during next 4 days. Forecast track & intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
09.10.18/2330	13.5/59.3	105-115 gusting to 130	Severe Cyclonic Storm
10.10.18/0530	13.7/58.9	105-115 gusting to 130	Severe Cyclonic Storm
10.10.18/1130	13.9/58.4	110-120 gusting to 135	Severe Cyclonic Storm
10.10.18/1730	14.1/58.0	120-130 gusting to 145	Very Severe Cyclonic Storm
10.10.18/2330	14.2/57.6	125-135 gusting to 150	Very Severe Cyclonic Storm
11.10.18/1130	14.4/57.0	130-140 gusting to 155	Very Severe Cyclonic Storm
11.10.18/2330	14.6/56.2	135-145 gusting to 160	Very Severe Cyclonic Storm
12.10.18/1130	14.7/55.4	130-140 gusting to 150	Very Severe Cyclonic Storm
12.10.18/2330	14.7/54.4	125-135 gusting to 145	Very Severe Cyclonic Storm
13.10.18/1130	14.6/53.4	120-130 gusting to 140	Very Severe Cyclonic Storm
13.10.18/2330	14.4/52.0	105-115 gusting to 125	Severe Cyclonic Storm
14.10.18/1130	14.2/50.6	95-105 gusting to 115	Severe Cyclonic Storm
14.10.18/2330	14.0/49.2	95-105 gusting to 115	Severe Cyclonic Storm

Warnings:

(i) Wind warning

- Gale wind speed reaching 100-110 kmph gusting to 125 kmph is prevailing over westcentral & adjoining southwest Arabian Sea. It is very likely to increase gradually becoming 135-145 kmph gusting to 160 kmph by 12th October 2018 morning over westcentral Arabian Sea around the system centre. The wind speed is very likely to decrease gradually over southwest Arabian Sea during next 24 hours.

(ii) Sea condition

- The sea condition is very high around the system centre. It is very likely continued to be very high over westcentral Arabian Sea till 13th October 2018 and over Gulf of Aden during 11th to 13th October .

(iii) Fishermen Warning

- The fishermen are advised not to venture into deep sea areas of westcentral Arabian Sea & Gulf of Aden till 13th October and adjoining southwest Arabian Sea till 10th October.

The next bulletin will be issued at 0530 hrs IST of 10th October, 2018.

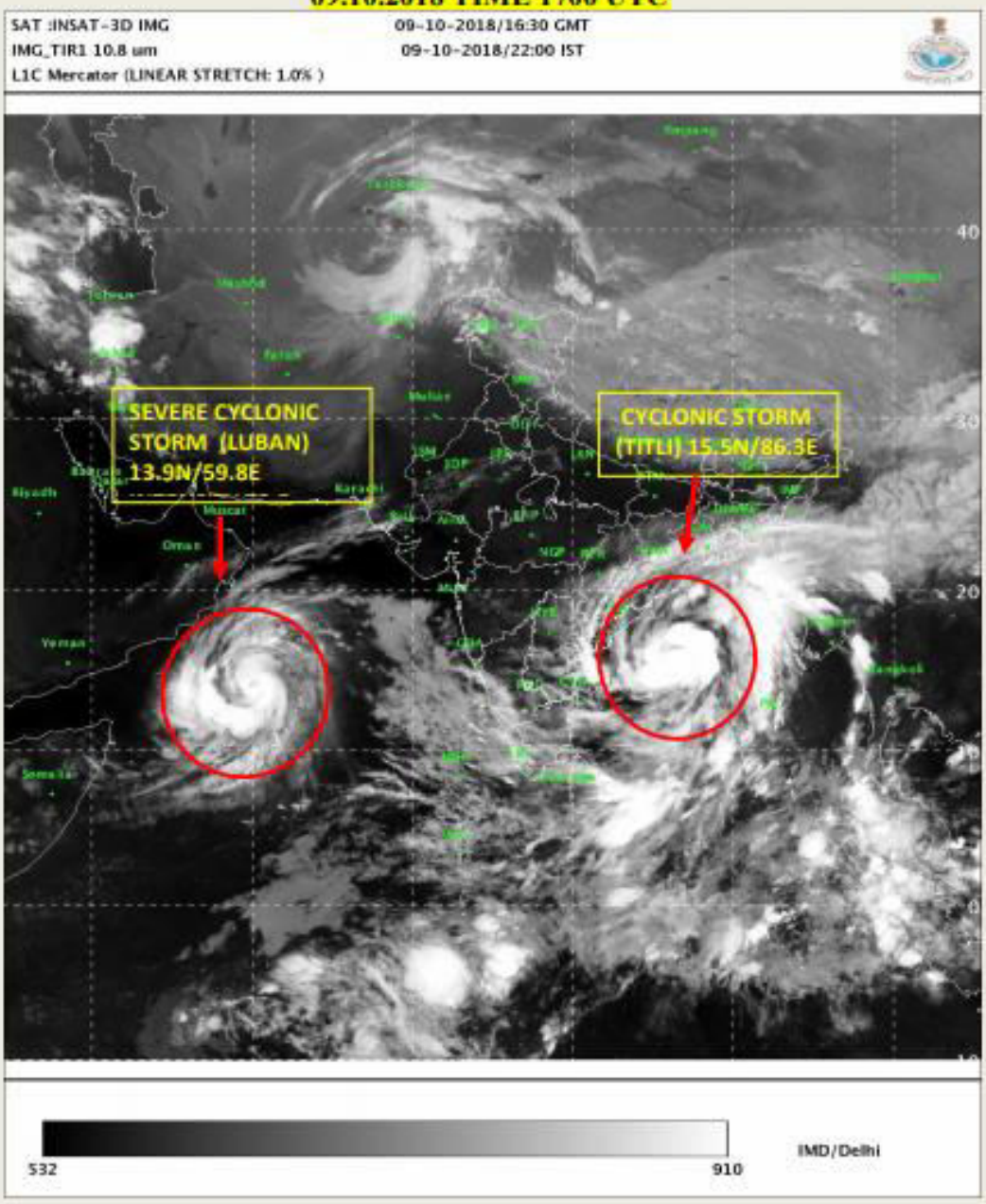
(S. D. Kotal)
Scientist-E, RSMC, New Delhi

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

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.

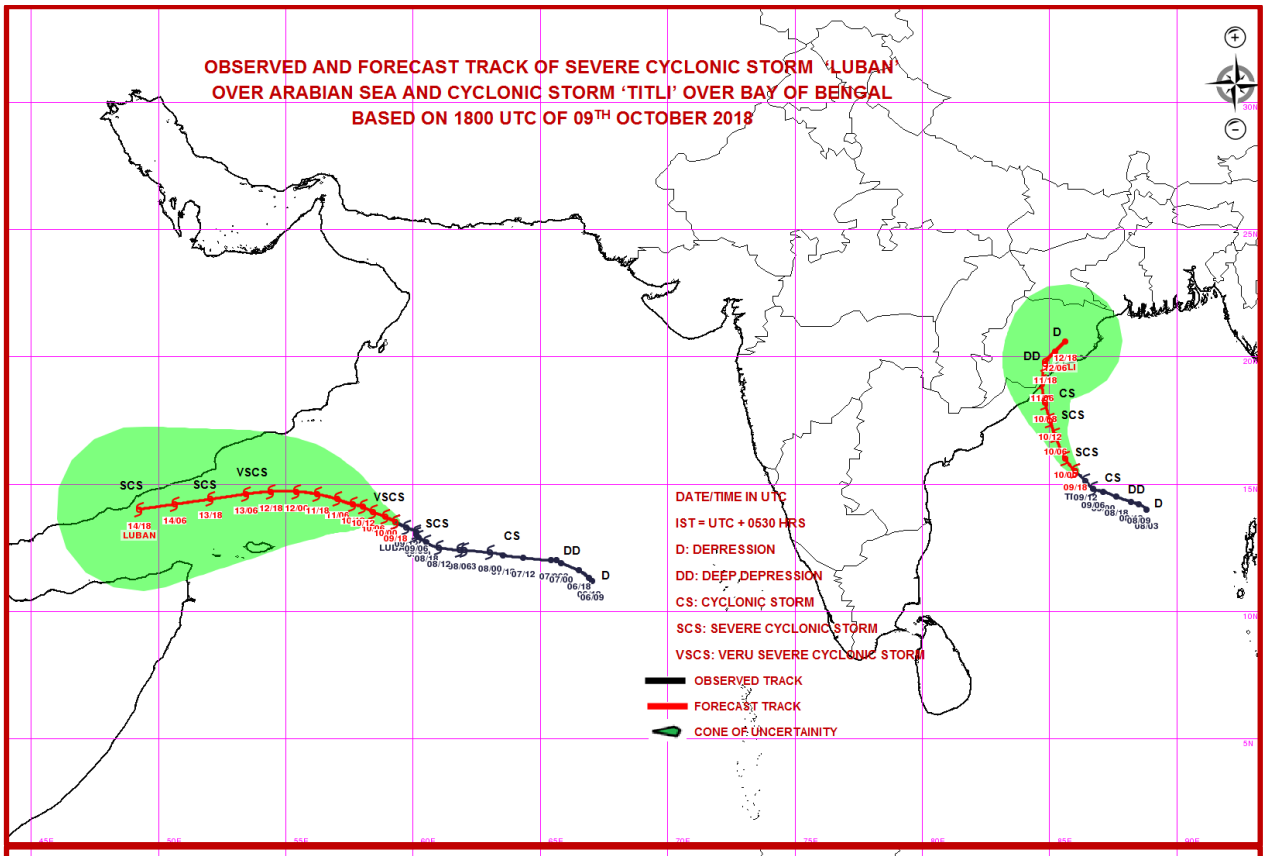
SATELLITE BULLETIN BASED ON SATELLITE IMAGERIES AND PRODUCTS

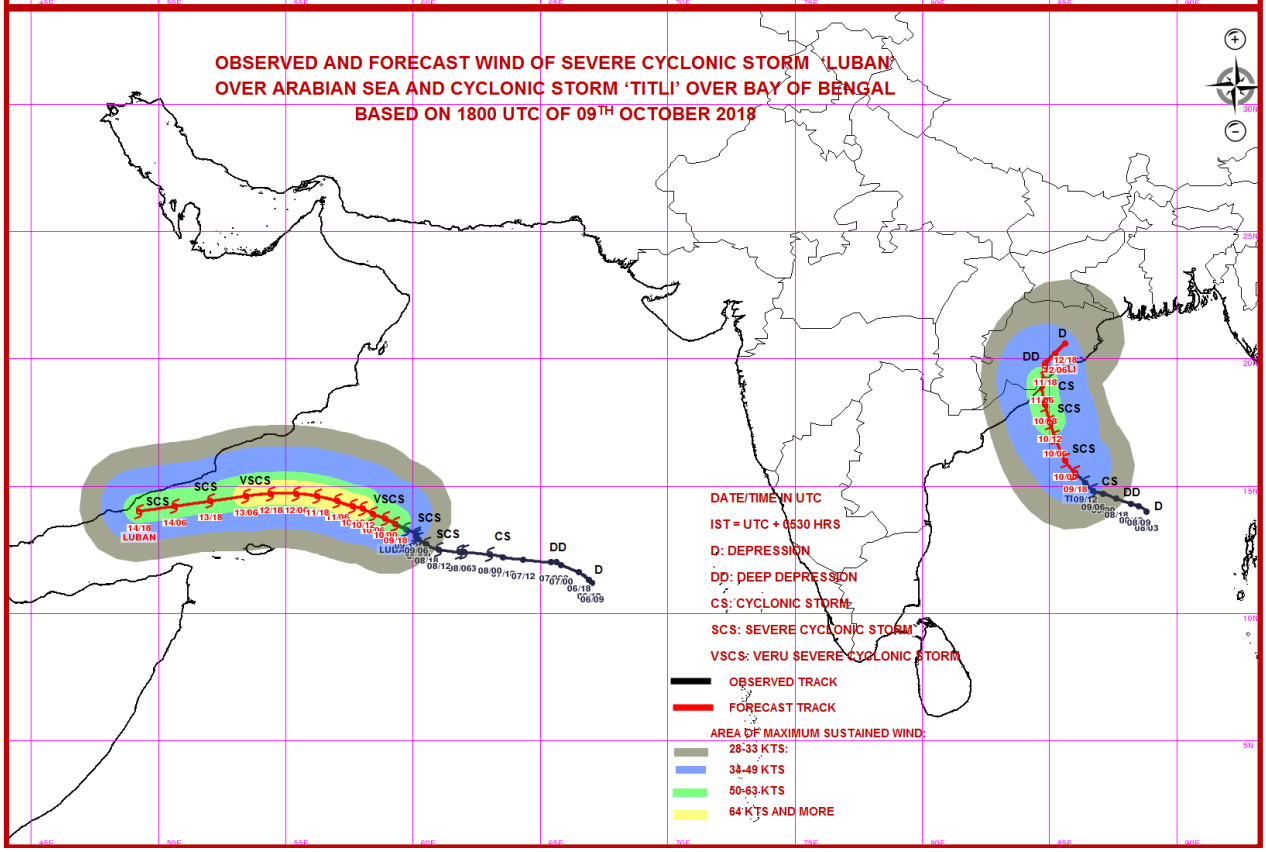
09.10.2018 TIME 1700 UTC



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.





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.

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

BULLETIN NO.: 15 (BOB 08/2018) and BULLETIN NO. : 25 (ARB 04/2018)

TIME OF ISSUE: 0530 HOURS IST **DATED: 10.10.2018**

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)
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 (23385843)
DIRECTOR GENERAL, AIR (23421105, 23421219)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 24363261)
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. 04896-262184)
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)
CHIEF SECRETARY, ANDHRA PRADESH (FAX NO. 0866-2441029)
CHIEF SECRETARY, ODISHA (FAX NO. 0674 -2536660)
CHIEF SECRETARY, WEST BENGAL (FAX NO. 033 -22144328)
CHIEF SECRETARY, ANDAMAN & NICOBAR ISLANDS (FAX NO. 03192- 232656)
CHIEF SECRETARY, MIZORAM (FAX NO. 389 -2322745)
CHIEF SECRETARY, TRIPURA (FAX NO. 0381-2414013)
CHIEF SECRETARY, ASSAM (FAX NO. 0361-2237200)
CHIEF SECRETARY, MEGHALAYA (FAX NO. 0364 -2225978)

Sub: (a) Cyclonic Storm 'TITLI' over westcentral Bay of Bengal: Cyclone Warning for districts of north Andhra Pradesh & south Odisha coasts: Orange Message.
(b) Severe Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea

(a) Cyclonic Storm 'TITLI' over westcentral Bay of Bengal: Cyclone Warning for districts of north Andhra Pradesh & south Odisha coasts: Orange Message.

The Cyclonic Storm **'TITLI'** over westcentral Bay of Bengal moved northwestwards with a speed of about 10 kmph during past 06 hours and lay cantered at 0230 hrs IST of today, the 10th October 2018 over Westcentral Bay of Bengal near latitude 15.7°N and longitude 85.8°E, about 410 km south-southeast of Gopalpur (Odisha) and 340 km southeast of Kalingapatnam (Andhra Pradesh). It is very likely to intensify further into a Severe Cyclonic Storm during next 12 hours. It is very likely to move northwestwards and cross Odisha & adjoining north Andhra Pradesh coasts between Gopalpur & Kalingapatnam around morning of 11th October. Thereafter, it is very likely to re-curve northeastwards, move towards Gangetic West Bengal across coastal Odisha and weaken gradually. Forecast track and intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
10.10.18/0230	15.7/85.8	85-95 gusting to 105	Cyclonic Storm
10.10.18/0530	16.0/85.6	85-95 gusting to 105	Cyclonic Storm
10.10.18/1130	16.9/85.2	90-100 gusting to 115	Severe Cyclonic Storm
10.10.18/1730	17.5/85.0	100-110 gusting to 125	Severe Cyclonic Storm
10.10.18/2330	18.2/84.8	100-110 gusting to 125	Severe Cyclonic Storm
11.10.18/1130	19.0/84.7	80-90 gusting to 100	Cyclonic Storm
11.10.18/2330	19.7/84.8	50-60 gusting to 70	Deep Depression
12.10.18/1130	20.2/85.2	50-60 gusting to 70	Deep Depression
12.10.18/2330	20.6/85.6	40-50 gusting to 60	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.

(i) Heavy rainfall warnings:

Region	09 Oct. 2018*	10 Oct. 2018*	11 Oct. 2018*	12 Oct. 2018*
Odisha	Rainfall at many places with heavy falls at Isolated Places over south coastal Odisha from evening/night.	Rainfall at most places with heavy to very heavy falls at a few places and extremely heavy falls at Isolated Places over coastal Odisha.	Rainfall at most places with heavy to very heavy falls at a few places and extremely heavy falls at Isolated Places over coastal & adjoining interior Odisha.	Rainfall at many places with heavy falls at Isolated Places over north Odisha.
North Coastal Andhra Pradesh	Rainfall at a few places with heavy falls at isolated places from evening/night.	Rainfall at many places with heavy to very heavy falls at Isolated Places.	Rainfall at many places with heavy to very heavy falls at Isolated Places.	Nil
Gangetic West Bengal	Nil	Rainfall at many places with heavy to very heavy falls at Isolated Places over coastal West Bengal	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at many places with heavy to very heavy falls at Isolated Places
Assam & Meghalaya	NIL	NIL	Rainfall at most places with heavy falls at isolated places	Rainfall at most places with heavy to very heavy falls at isolated places
Mizoram & Tripura	Rainfall at most places with heavy falls at isolated places	Rainfall at most places with heavy falls at isolated places	Rainfall at most places with heavy to very heavy falls at isolated places	Rainfall at most places with heavy to very heavy falls at isolated places

Note: * Rainfall till 0830 IST of next day.
Legends: Red-Take Action; Orange- Be prepared; Yellow- be updated; 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

- Squally wind speed reaching 40-50 kmph gusting to 60 kmph very likely over southeast & adjoining eastcentral Bay of Bengal during next 12 hours.
- Squally wind speed reaching 65-75 kmph gusting to 85 kmph very likely over deep sea areas of westcentral & adjoining north Bay of Bengal and gradually increase to 80-90 kmph gusting to 100 kmph from 10th evening to 11th forenoon.
- Squally wind speed reaching 45-55 kmph gusting to 65 kmph is very likely to commence along & off along north Andhra Pradesh, Odisha and West Bengal coast from tonight onwards.
- **It is very likely to increase gradually becoming 100-110 kmph gusting to 125 kmph from 10th October 2018 evening onwards along & off south Odisha & adjoining districts of north Andhra Pradesh coasts** and 65-75 kmph gusting to 85 kmph along & off north Odisha, west Bengal and remaining districts of north Andhra Pradesh coasts.

(iii) Sea condition

- The sea condition is high over westcentral Bay of Bengal around system centre. It is very likely to be high to very high over westcentral & north Bay of Bengal during 10th & 11th October 2018.

(iv) Storm Surge Warning

- Storm surge of height of about 0.5 meter above astronomical tide is very likely inundate low lying areas of Srikakulam district of Andhra Pradesh; Ganjam, Khurda & Puri districts of Odisha at the time of landfall.

(v) Damage Expected over districts of Visakhapatnam, Vizianagaram and Srikakulam of Andhra Pradesh, Gajapati, Ganjam, Khurda, Nayagarh and Puri districts of Odisha:

- Major damage to thatched huts/houses, roof tops may blow off and unattached metal sheets may fly. Minor damage to power and communication lines. Major damage to Kutcha & minor damage to Pucca roads. Breaking of tree branches and uprooting of large avenue trees. Moderate damage to paddy crops, banana, papaya trees and orchards. Sea water inundation in low lying areas after erosion of Kutcha embankments.

(vi) Action Suggested:

- Total suspension of fishing operations.
- The fishermen are advised not to venture into westcentral & north Bay of Bengal till 11th October 2018. Those, who are out in deep sea areas are advised return to the coast.
- Coastal hutment dwellers are advised to move to safer places. Other people in the affected areas to remain indoors.

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.

(b) Severe Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea:

The Severe Cyclonic Storm over westcentral & adjoining southwest Arabian Sea moved west-northwestwards with a speed of about 08 kmph in last 06 hours and lay centered at 0230 hrs IST 10th October 2018 over westcentral Arabian Sea, near latitude 13.6°N and longitude 59.1°E, about 660 km east-southeast of Salalah (Oman), 570 km east-northeast of Socotra Islands (Yemen) and 800 km east-southeast of Al-Ghaidah (Yemen). It is very likely to intensify further into a very severe cyclonic storm during next 24 hours and move west-northwestwards towards Yemen & South Oman Coasts during next 4 days. Forecast track & intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
10.10.18/0230	13.6/59.1	105-115 gusting to 130	Severe Cyclonic Storm
10.10.18/0530	13.7/58.9	105-115 gusting to 130	Severe Cyclonic Storm
10.10.18/1130	13.9/58.4	110-120 gusting to 135	Severe Cyclonic Storm
10.10.18/1730	14.1/58.0	120-130 gusting to 145	Very Severe Cyclonic Storm
10.10.18/2330	14.2/57.6	125-135 gusting to 150	Very Severe Cyclonic Storm
11.10.18/1130	14.4/57.0	130-140 gusting to 155	Very Severe Cyclonic Storm
11.10.18/2330	14.6/56.2	135-145 gusting to 160	Very Severe Cyclonic Storm
12.10.18/1130	14.7/55.4	130-140 gusting to 150	Very Severe Cyclonic Storm
12.10.18/2330	14.7/54.4	125-135 gusting to 145	Very Severe Cyclonic Storm
13.10.18/1130	14.6/53.4	120-130 gusting to 140	Very Severe Cyclonic Storm
13.10.18/2330	14.4/52.0	105-115 gusting to 125	Severe Cyclonic Storm
14.10.18/1130	14.2/50.6	95-105 gusting to 115	Severe Cyclonic Storm
14.10.18/2330	14.0/49.2	95-105 gusting to 115	Severe Cyclonic Storm

Warnings:

(i) Wind warning

- Gale wind speed reaching 100-110 kmph gusting to 125 kmph is prevailing over westcentral & adjoining southwest Arabian Sea. It is very likely to increase gradually becoming 135-145 kmph gusting to 160 kmph by 12th October 2018 morning over westcentral Arabian Sea around the system centre. The wind speed is very likely to decrease gradually over southwest Arabian Sea during next 24 hours.

(ii) Sea condition

- The sea condition is very high around the system centre. It is very likely continued to be very high over westcentral Arabian Sea till 13th October 2018 and over Gulf of Aden during 11th to 13th October .

(iii) Fishermen Warning

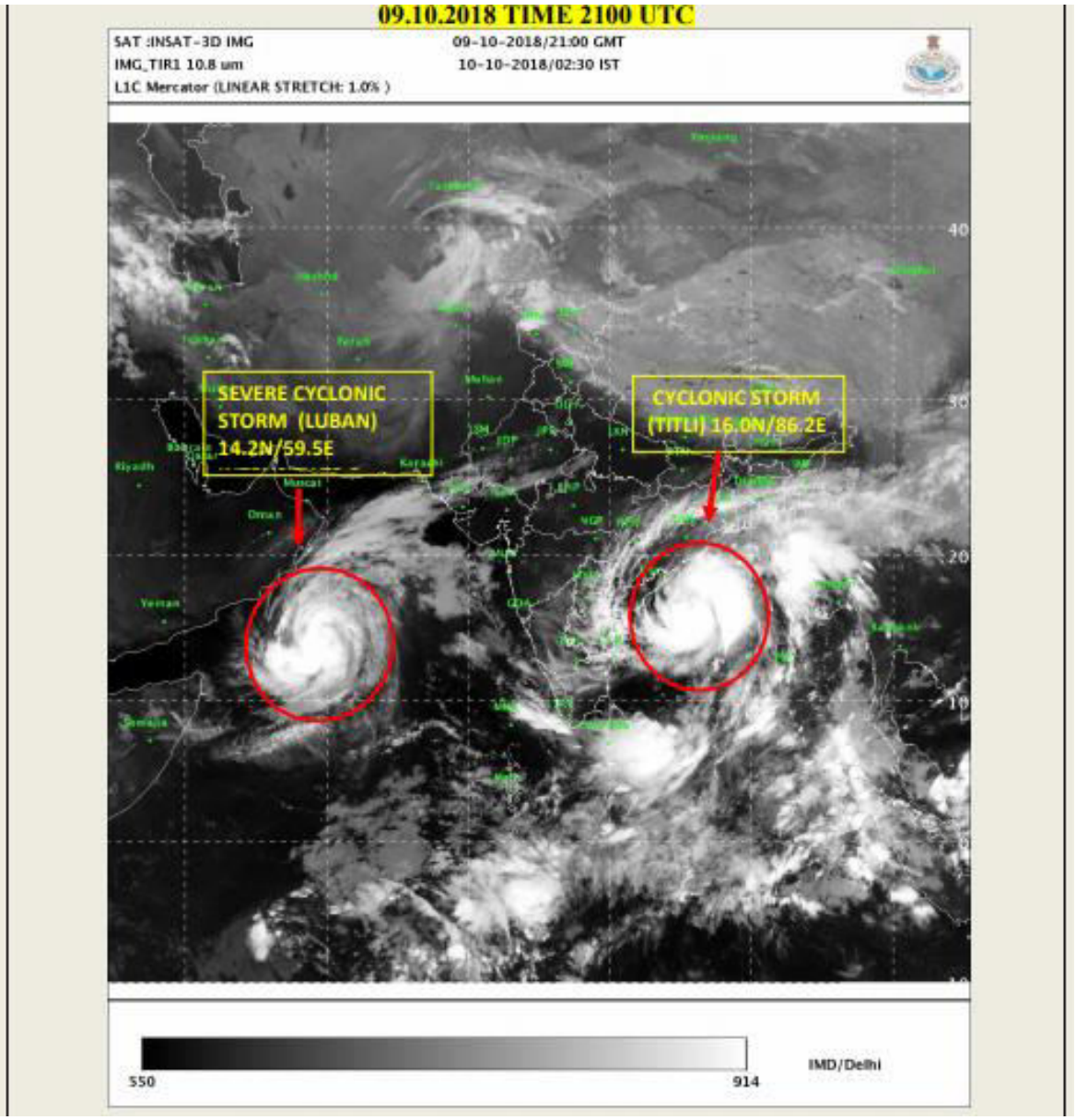
- The fishermen are advised not to venture into deep sea areas of westcentral Arabian Sea & Gulf of Aden till 13th October and adjoining southwest Arabian Sea till 10th October.

The next bulletin will be issued at 0830 hrs IST of 10th October, 2018.

(S. D. Kotal)
Scientist-E, RSMC, New Delhi

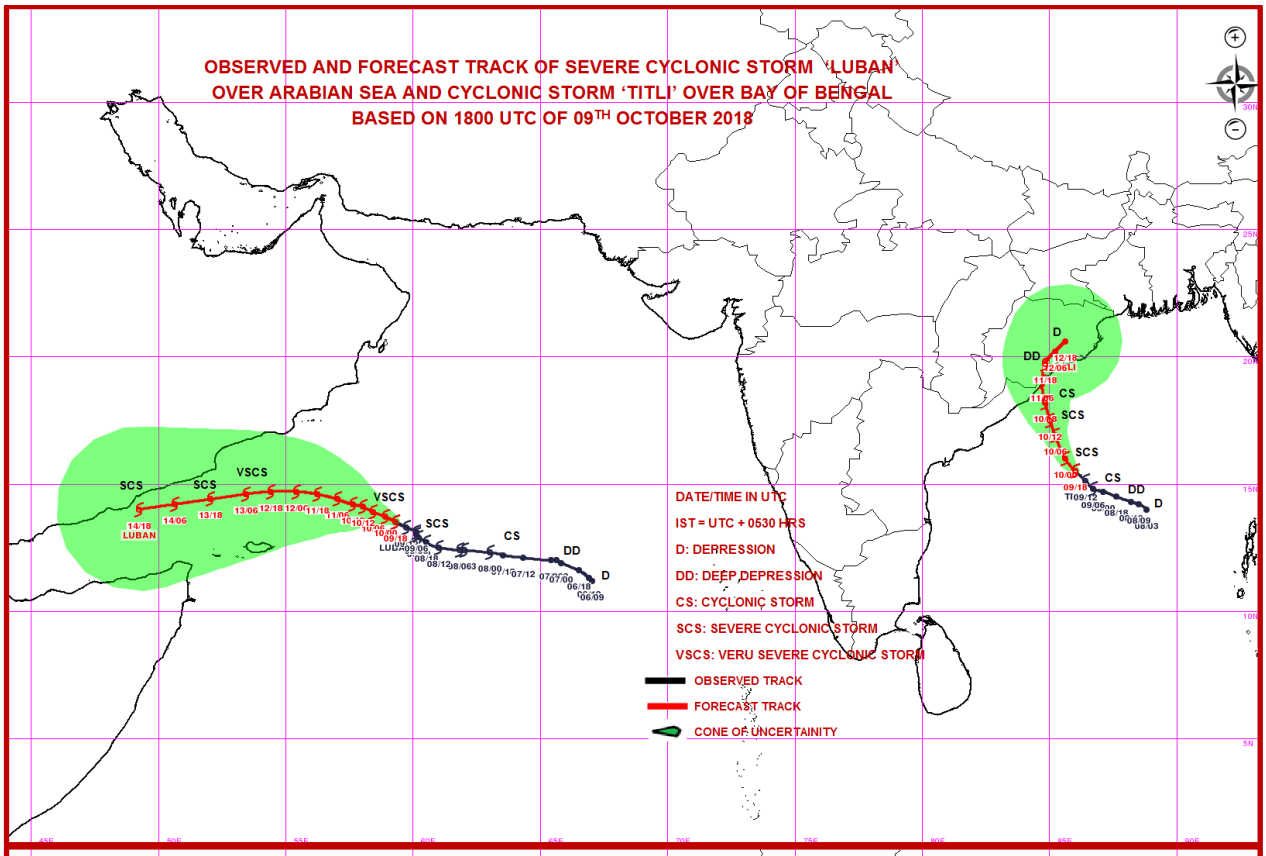
Copy to: CRS, Pune/ ACWC Chennai/ Kolkata/ Mumbai/MC Goa/Thiruvanathapuram/ Bengaluru/ CWC Ahmedabad.

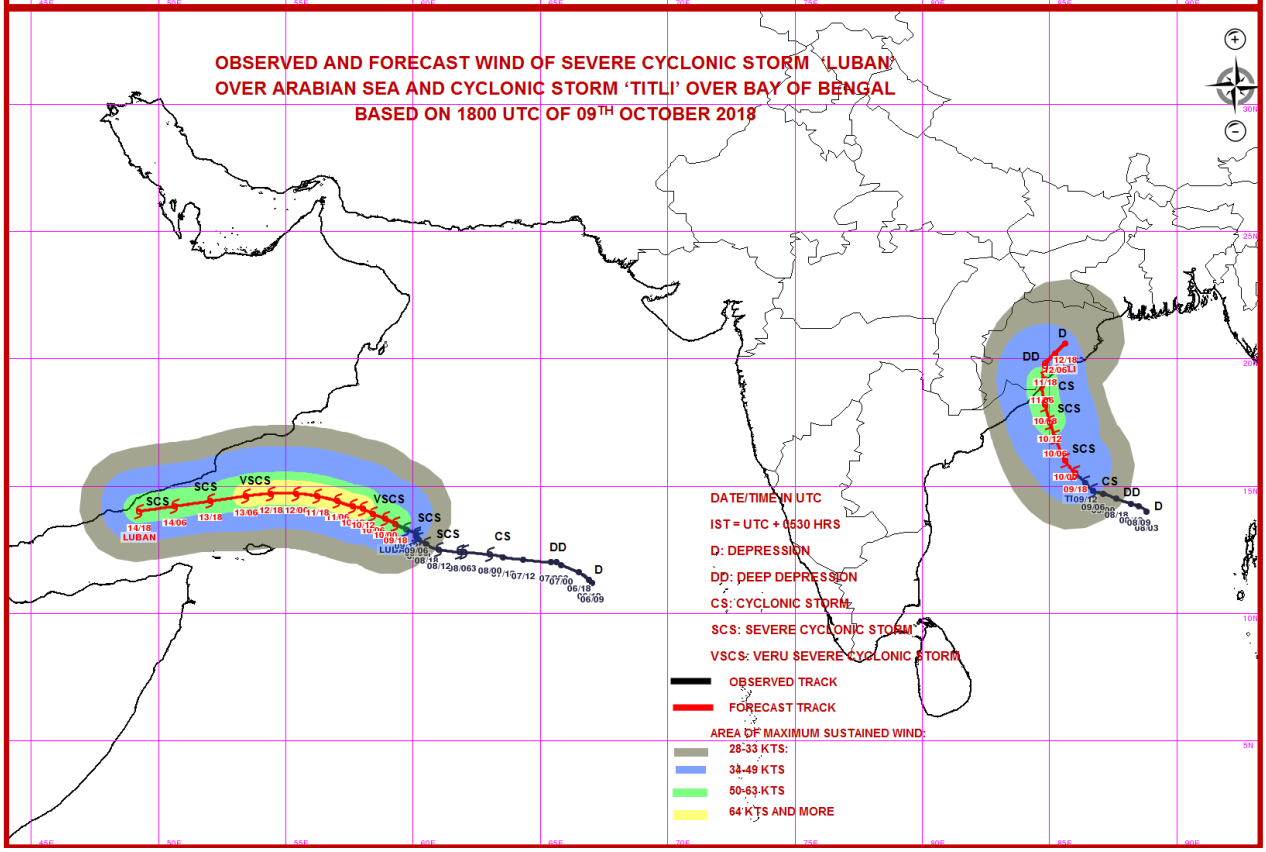
Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
Rainfall amount (mm): Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.



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.





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.

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

BULLETIN NO.: 16 (BOB 08/2018) and BULLETIN NO. : 26 (ARB 04/2018)

TIME OF ISSUE: 0920 HOURS IST **DATED: 10.10.2018**

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)
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 (23385843)
DIRECTOR GENERAL, AIR (23421105, 23421219)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 24363261)
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. 04896-262184)
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)
CHIEF SECRETARY, ANDHRA PRADESH (FAX NO. 0866-2441029)
CHIEF SECRETARY, ODISHA (FAX NO. 0674 -2536660)
CHIEF SECRETARY, WEST BENGAL (FAX NO. 033 -22144328)
CHIEF SECRETARY, ANDAMAN & NICOBAR ISLANDS (FAX NO. 03192- 232656)
CHIEF SECRETARY, MIZORAM (FAX NO. 389 -2322745)
CHIEF SECRETARY, TRIPURA (FAX NO. 0381-2414013)
CHIEF SECRETARY, ASSAM (FAX NO. 0361-2237200)
CHIEF SECRETARY, MEGHALAYA (FAX NO. 0364 -2225978)

Sub: (a) Severe Cyclonic Storm 'TITLI' over westcentral Bay of Bengal: Cyclone Warning for districts of north Andhra Pradesh & south Odisha coasts: Red Message.

(b) Very Severe Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea

(a) Severe Cyclonic Storm 'TITLI' over westcentral Bay of Bengal: Cyclone Warning for districts of north Andhra Pradesh & Odisha coasts: Red Message.

The Cyclonic Storm **'TITLI'** over westcentral Bay of Bengal moved north-northwestwards with a speed of about 10 kmph during past 06 hours, intensified into a severe cyclonic storm and lay cantered at 0530 hrs IST of today, the 10th October 2018 over Westcentral Bay of Bengal near latitude 16.0°N and longitude 85.8°E, about 370 km south-southeast of Gopalpur (Odisha) and 310 km southeast of Kalingapatnam (Andhra Pradesh). It is very likely to intensify further into a Very Severe Cyclonic Storm during next 18 hours. It is very likely to move north-northwestwards and cross Odisha & adjoining north Andhra Pradesh coasts between Gopalpur & Kalingapatnam around morning of 11th October. Thereafter, it is very likely to re-curve northeastwards, move towards Gangetic West Bengal across Odisha and weaken gradually. Forecast track and intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
10.10.18/0530	16.0/85.8	100-110 gusting to 125	Severe Cyclonic Storm
10.10.18/1130	16.7/85.6	105-115 gusting to 130	Severe Cyclonic Storm
10.10.18/1730	17.4/85.3	110-120 gusting to 135	Severe Cyclonic Storm
10.10.18/2330	18.0/85.1	120-130 gusting to 145	Very Severe Cyclonic Storm
11.10.18/0530	18.6/84.9	120-130 gusting to 145	Very Severe Cyclonic Storm
11.10.18/1730	19.5/84.7	70-80 gusting to 90	Cyclonic Storm

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.

12.10.18/0530	20.5/85.2	50-60 gusting to 70	Deep Depression
12.10.18/1730	22.1/86.4	40-50 gusting to 60	Depression

Region	10 Oct. 2018 (Rainfall till 0830 IST of next day.)	11 Oct. 2018 (Rainfall till 0830 IST of next day.)	12 Oct. 2018(Rainfall till 0830 IST of next day.)	13 Oct. 2018(Rainfall till 0830 IST of next day.)
Odisha	Rainfall at most places with heavy to very heavy falls at a few places and extremely heavy falls at Isolated Places over coastal Odisha and isolated heavy over interior Odiha.	Rainfall at most places with heavy to very heavy falls at a few places and extremely heavy falls at Isolated Places over coastal & interior Odisha.	Rainfall at many places with heavy falls at Isolated Places over north Odisha.	Nil
North Coastal Andhra Pradesh	Rainfall at many places with heavy to very heavy falls at Isolated Places.	Rainfall at many places with heavy to very heavy falls at Isolated Places.	Nil	Nil
Gangetic West Bengal	Rainfall at many places with heavy to very heavy falls at Isolated Places over coastal West Bengal	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at many places with heavy to very heavy falls at Isolated Places	Nil
Assam & Meghalaya	Nil	Rainfall at most places with heavy falls at isolated places	Rainfall at most places with heavy to very heavy falls at isolated places	Rainfall at many places with heavy falls at isolated places
Mizoram & Tripura	Nil	Rainfall at most places with heavy to very heavy falls at isolated places	Rainfall at most places with heavy to very heavy falls at isolated places	Rainfall at many places with heavy falls at isolated places

(i) Heavy rainfall warnings:

Legends: Red-Take Action; Orange- Be prepared; Yellow- be updated; 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

- Gale wind speed reaching 100-110 kmph gusting to 125 kmph prevails over deep sea areas of westcentral & adjoining north Bay of Bengal and gradually increase to 120-130 kmph gusting to 145 kmph from today the 10th evening to 11th forenoon.
- Gale wind speed reaching 60-70 kmph gusting to 80 kmph is very likely to commence along & off north Andhra Pradesh and Odisha coasts from today afternoon.
- **It is very likely to increase gradually becoming 120-130 kmph gusting to 145 kmph from 10th October 2018 night onwards along & off south Odisha & adjoining districts of north Andhra Pradesh coasts** and 70-80 kmph gusting to 90 kmph along & off north Odisha and remaining districts of north Andhra Pradesh coasts.
- Squally winds speed reaching 50-60 kmph gusting 70 kmph is very likely to commence along & off West Bengal coast from today afternoon and gradually increase to 60-70 kmph gusting 80 kmph from today night onwards.

(iii) Sea condition

- The sea condition is very high over westcentral Bay of Bengal around system centre. It is very likely to be phenomenal over westcentral & adjoining north Bay of Bengal and along & off south Odisha and adjoining north Andhra Pradesh coasts from tonight to 11th October 2018 forenoon.

(iv) Storm Surge Warning

- Storm surge of height of about 1.0 meter above astronomical tide is very likely inundate low lying areas of Srikakulam district of Andhra Pradesh; Ganjam, Khurda & Puri districts of Odisha at the time of landfall.

(v) Damage Expected over districts of Visakhapatnam, Vizianagaram and Srikakulam of Andhra Pradesh, Gajapati, Ganjam, Khurda, Nayagarh and Puri districts of Odisha:

- Major damage to thatched huts/houses, roof tops may blow off and unattached metal sheets may fly. Minor damage to power and communication lines. Major damage to Kutcha & minor damage to Pucca roads. Breaking of tree branches and uprooting of large avenue trees. Moderate damage to paddy crops, banana, papaya trees and orchards. Sea water inundation in low lying areas after erosion of Kutcha embankments.

(vi) Action Suggested:

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.

- Total suspension of fishing operations.
- The fishermen are advised not to venture into westcentral & north Bay of Bengal till 11th October 2018. Those, who are out in deep sea areas are advised return to the coast.
- Coastal hutment dwellers are advised to move to safer places. Other people in the affected areas to remain indoors.

(b) Very Severe Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea:

The Severe Cyclonic Storm over westcentral & adjoining southwest Arabian Sea moved north-northwestwards with a speed of about 12 kmph in last 06 hours, intensified into a very severe cyclonic storm and lay centered at 0530 hrs IST 10th October 2018 over westcentral Arabian Sea, near latitude 14.1°N and longitude 59.0°E, about 610 km east-southeast of Salalah (Oman), 570 km east-northeast of Socotra Islands (Yemen) and 770 km east-southeast of Al-Ghaidah (Yemen). It is very likely to move west-northwestwards towards Yemen & South Oman Coasts during next 4 days. Forecast track & intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
10.10.18/0530	14.1/59.0	120-130 gusting to 145	Very Severe Cyclonic Storm
10.10.18/1130	14.2/58.8	125-135 gusting to 150	Very Severe Cyclonic Storm
10.10.18/1730	14.4/58.6	130-140 gusting to 155	Very Severe Cyclonic Storm
10.10.18/2330	14.5/58.3	130-140 gusting to 155	Very Severe Cyclonic Storm
11.10.18/0530	14.6/58.1	130-140 gusting to 155	Very Severe Cyclonic Storm
11.10.18/1730	14.8/57.5	135-145 gusting to 160	Very Severe Cyclonic Storm
12.10.18/0530	15.0/56.7	135-145 gusting to 160	Very Severe Cyclonic Storm
12.10.18/1730	15.1/55.9	135-145 gusting to 160	Very Severe Cyclonic Storm
13.10.18/0530	15.2/55.0	135-145 gusting to 160	Very Severe Cyclonic Storm
13.10.18/1730	15.2/53.8	120-130 gusting to 145	Very Severe Cyclonic Storm
14.10.18/0530	15.1/52.0	110-120 gusting to 130	Severe Cyclonic Storm
14.10.18/1730	14.8/49.8	90-100 gusting to 110	Severe Cyclonic Storm

Warnings:

(i) Wind warning

- Gale wind speed reaching 120-130 kmph gusting to 145 kmph is prevailing over westcentral & adjoining southwest Arabian Sea. It is very likely to increase gradually becoming 135-145 kmph gusting to 160 kmph by 11th October 2018 evening over westcentral Arabian Sea around the system centre. The wind speed is very likely to decrease gradually over southwest Arabian Sea from 11th onwards.

(ii) Sea condition

- The sea condition is phenomenal around the system centre. It is very likely continued to be phenomenal over westcentral Arabian Sea till 13th October 2018 and over Gulf of Aden during 11th to 13th October.

(iii) Fishermen Warning

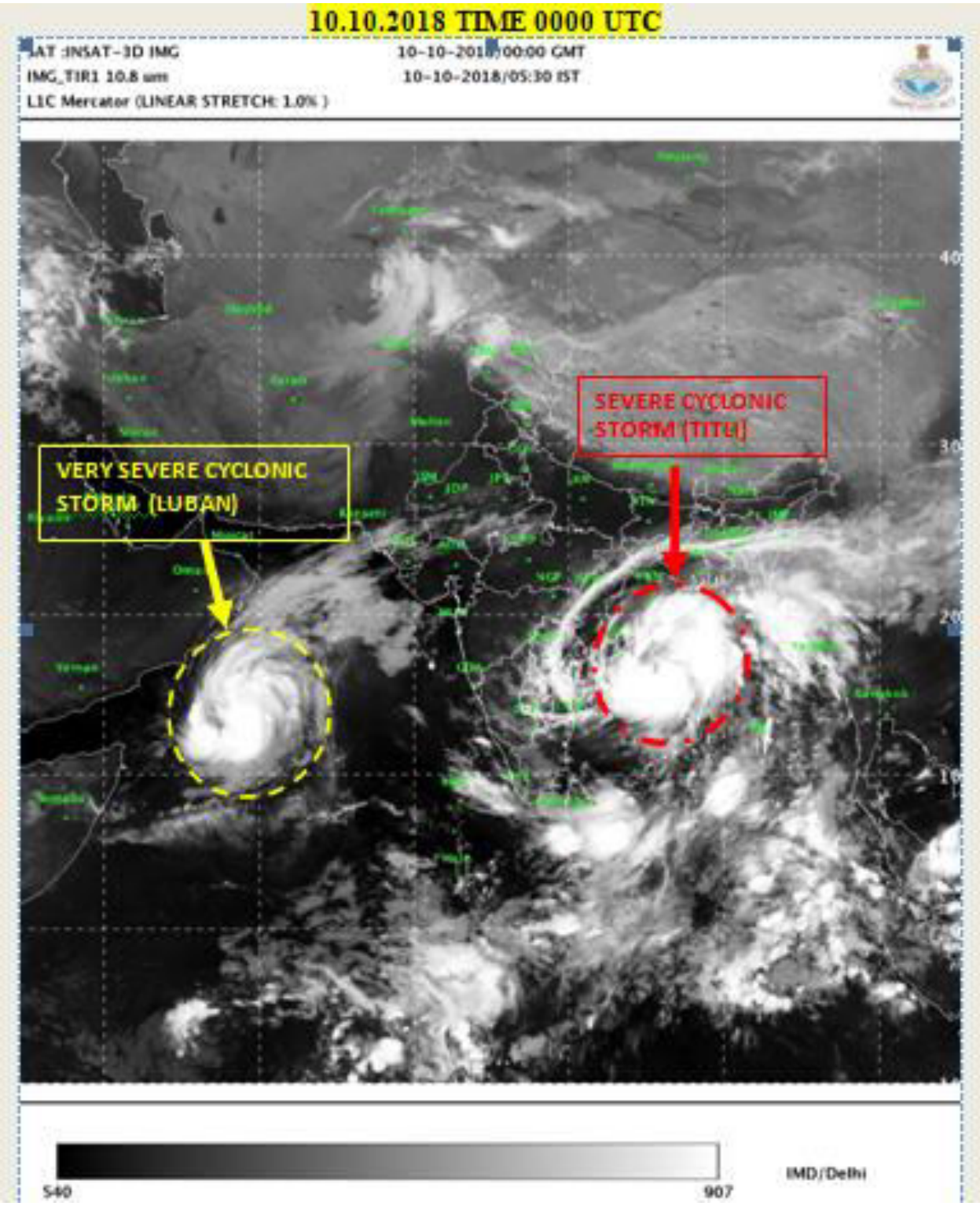
- The fishermen are advised not to venture into deep sea areas of westcentral Arabian Sea & Gulf of Aden till 14th October and adjoining southwest Arabian Sea till 11th October.

The next bulletin will be issued at 1130 hrs IST of 10th October, 2018.

(S. D. Kotal)
Scientist-E, RSMC, New Delhi

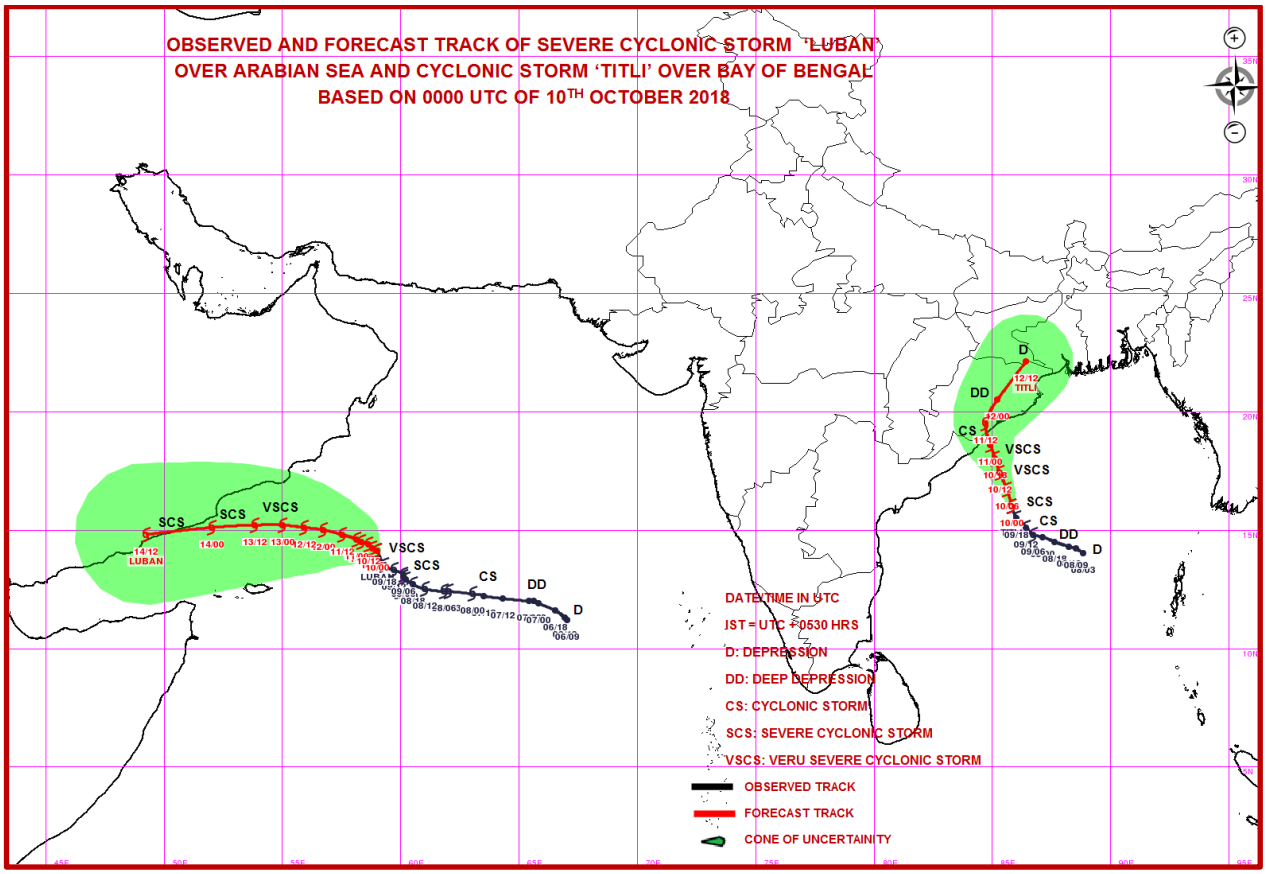
Copy to: CRS, Pune/ ACWC Chennai/ Kolkata/ Mumbai/MC Goa/Thiruvanathapuram/ Bengaluru/ CWC Ahmedabad.

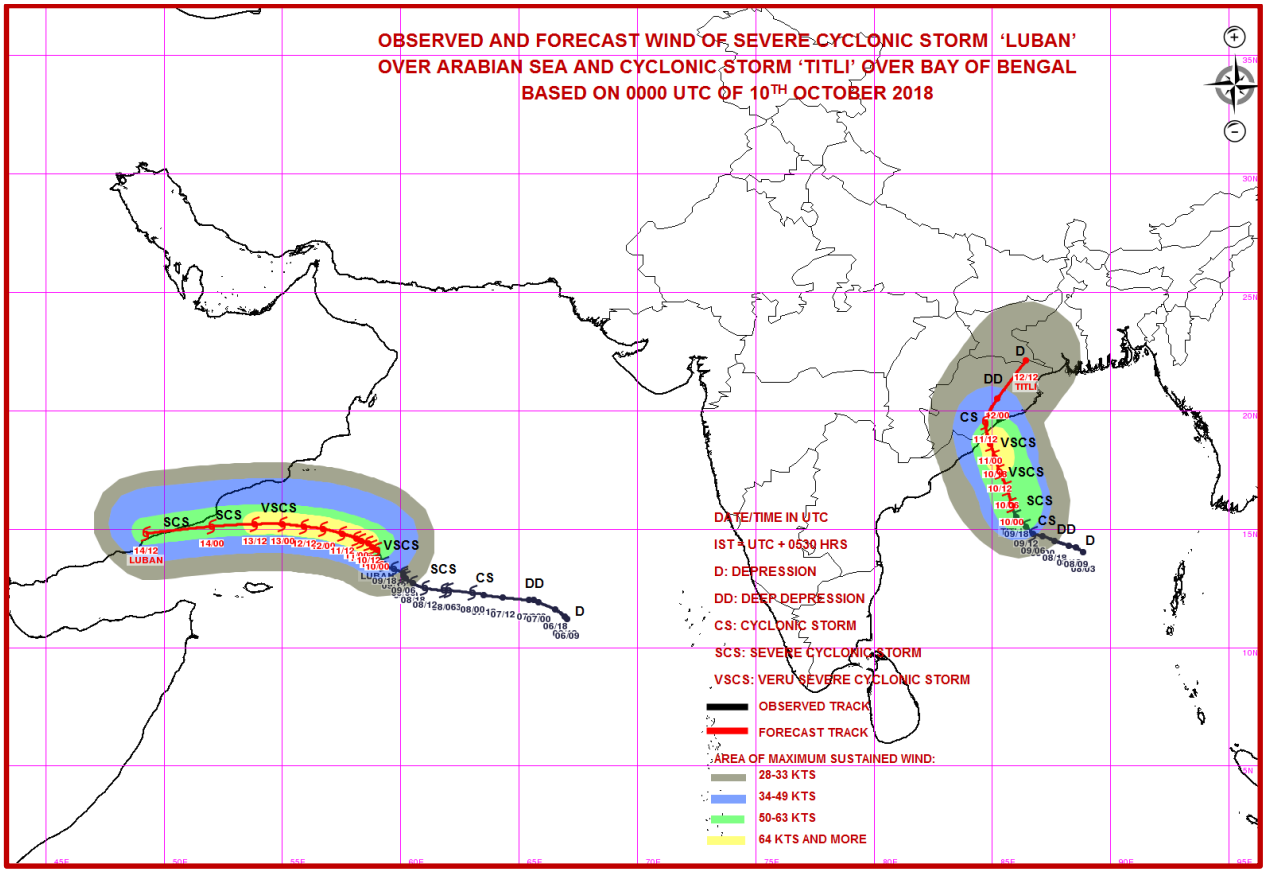
Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
Rainfall amount (mm): Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.



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.





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.

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

BULLETIN NO.: 17 (BOB 08/2018) and BULLETIN NO. : 27 (ARB 04/2018)

TIME OF ISSUE: 1100 HOURS IST **DATED: 10.10.2018**

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)
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 (23385843)
DIRECTOR GENERAL, AIR (23421105, 23421219)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 24363261)
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. 04896-262184)
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)
CHIEF SECRETARY, ANDHRA PRADESH (FAX NO. 0866-2441029)
CHIEF SECRETARY, ODISHA (FAX NO. 0674 -2536660)
CHIEF SECRETARY, WEST BENGAL (FAX NO. 033 -22144328)
CHIEF SECRETARY, ANDAMAN & NICOBAR ISLANDS (FAX NO. 03192- 232656)
CHIEF SECRETARY, MIZORAM (FAX NO. 389 -2322745)
CHIEF SECRETARY, TRIPURA (FAX NO. 0381-2414013)
CHIEF SECRETARY, ASSAM (FAX NO. 0361-2237200)
CHIEF SECRETARY, MEGHALAYA (FAX NO. 0364 -2225978)

Sub: (a) Severe Cyclonic Storm 'TITLI' over westcentral Bay of Bengal: Cyclone Warning for districts of north Andhra Pradesh & south Odisha coasts: Red Message.

(b) Very Severe Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea

(a) Severe Cyclonic Storm 'TITLI' over westcentral Bay of Bengal: Cyclone Warning for districts of north Andhra Pradesh & Odisha coasts: Red Message.

The Severe Cyclonic Storm **'TITLI'** over westcentral Bay of Bengal moved northwards with a speed of about 14 kmph during past 06 hours, and lay cantered at 0830 hrs IST of today, the 10th October 2018 over Westcentral Bay of Bengal near latitude 16.5°N and longitude 85.8°E, about 320 km south-southeast of Gopalpur (Odisha) and 270 km southeast of Kalingapatnam (Andhra Pradesh). It is very likely to intensify further into a Very Severe Cyclonic Storm during next three hours. It is very likely to move north-northwestwards and cross Odisha & adjoining north Andhra Pradesh coasts between Gopalpur & Kalingapatnam around morning of 11th October. Thereafter, it is very likely to re-curve northeastwards, move towards Gangetic West Bengal across Odisha and weaken gradually. Forecast track and intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
10.10.18/0830	16.5/85.8	110-120 gusting to 135	Severe Cyclonic Storm
10.10.18/1130	16.8/85.6	120-130 gusting to 145	Very Severe Cyclonic Storm
10.10.18/1730	17.4/85.3	130-140 gusting to 155	Very Severe Cyclonic Storm
10.10.18/2330	18.0/85.1	140-150 gusting to 165	Very Severe Cyclonic Storm
11.10.18/0530	18.6/84.9	140-150 gusting to 165	Very Severe Cyclonic Storm
11.10.18/1730	19.5/84.7	70-80 gusting to 90	Cyclonic Storm
12.10.18/0530	20.5/85.2	50-60 gusting to 70	Deep 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.

12.10.18/1730	22.1/86.4	40-50 gusting to 60	Depression

(i) Heavy rainfall warnings:

Region	10 Oct. 2018 (Rainfall till 0830 IST of next day.)	11 Oct. 2018 (Rainfall till 0830 IST of next day.)	12 Oct. 2018(Rainfall till 0830 IST of next day.)	13 Oct. 2018(Rainfall till 0830 IST of next day.)
Odisha	Rainfall at most places with heavy to very heavy falls at a few places and extremely heavy falls at Isolated Places over coastal Odisha and isolated heavy over interior Odiha.	Rainfall at most places with heavy to very heavy falls at a few places and extremely heavy falls at Isolated Places over coastal & interior Odisha.	Rainfall at many places with heavy falls at Isolated Places over north Odisha.	Nil
North Coastal Andhra Pradesh	Rainfall at many places with heavy to very heavy falls at Isolated Places.	Rainfall at many places with heavy to very heavy falls at Isolated Places.	Nil	Nil
Gangetic West Bengal	Rainfall at many places with heavy to very heavy falls at Isolated Places over coastal West Bengal	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at many places with heavy to very heavy falls at Isolated Places	Nil
Assam & Meghalaya	Nil	Rainfall at most places with heavy falls at isolated places	Rainfall at most places with heavy to very heavy falls at isolated places	Rainfall at many places with heavy falls at isolated places
Mizoram & Tripura	Nil	Rainfall at most places with heavy to very heavy falls at isolated places	Rainfall at most places with heavy to very heavy falls at isolated places	Rainfall at many places with heavy falls at isolated places

Legends: Red-Take Action; Orange- Be prepared; Yellow- be updated; 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

- Gale wind speed reaching 100-110 kmph gusting to 125 kmph prevails over deep sea areas of westcentral & adjoining north Bay of Bengal and gradually increase to 120-130 kmph gusting to 145 kmph from today the 10th evening to 11th forenoon.
- Gale wind speed reaching 60-70 kmph gusting to 80 kmph is very likely to commence along & off north Andhra Pradesh and Odisha coasts from today afternoon.
- **It is very likely to increase gradually becoming 140-150 kmph gusting to 165 kmph from today, the 10th October 2018 night onwards along & off south Odisha & adjoining districts of north Andhra Pradesh coasts** and 70-80 kmph gusting to 90 kmph along & off north Odisha and remaining districts of north Andhra Pradesh coasts.
- Squally winds speed reaching 50-60 kmph gusting 70 kmph is very likely to commence along & off West Bengal coast from today afternoon and gradually increase to 60-70 kmph gusting 80 kmph from today night onwards.

(iii) Sea condition

- The sea condition is very high over westcentral Bay of Bengal around system centre. It is very likely to be phenomenal over westcentral & adjoining north Bay of Bengal and along & off south Odisha and adjoining north Andhra Pradesh coasts from tonight to 11th October 2018 forenoon.

(iv) Storm Surge Warning

- Storm surge of height of about 1.0 meter above astronomical tide is very likely inundate low lying areas of Srikakulam district of Andhra Pradesh; Ganjam, Khurda & Puri districts of Odisha at the time of landfall.

(v) Damage Expected over districts of Visakhapatnam, Vizianagaram and Srikakulam of Andhra Pradesh, Gajapati, Ganjam, Khurda, Nayagarh and Puri districts of Odisha:

- 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. Breaking of tree branches and uprooting of large avenue trees.
- Major damage to Kutcha and and Pucca roads. Flooding of escape routes. Minor disruption of railway.
- Widespread damage to standing crops, plantations, orchards, falling of green coconuts and tearing of palm fronds. Blowing down of bushy trees.

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.

(vi) Action Suggested:

- Total suspension of fishing operations.
- The fishermen are advised not to venture into westcentral & north Bay of Bengal till 11th October 2018. Those, who are out in deep sea areas are advised return to the coast immediately.
- Evacuation from coastal areas need to be mobilised. People advised to remain indoors.
- Judicious regulation of rail and road traffic needed.

(b) Very Severe Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea:

The Very Severe Cyclonic Storm over westcentral Arabian Sea remained practically stationary and lay centered at 0830 hrs IST 10th October 2018 over westcentral Arabian Sea, near latitude 14.1°N and longitude 59.0°E, about 610 km east-southeast of Salalah (Oman), 570 km east-northeast of Socotra Islands (Yemen) and 770 km east-southeast of Al-Ghaidah (Yemen). It is very likely to move west-northwestwards towards Yemen & South Oman Coasts during next 4 days. Forecast track & intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
10.10.18/0830	14.1/59.0	120-130 gusting to 145	Very Severe Cyclonic Storm
10.10.18/1130	14.2/58.8	125-135 gusting to 150	Very Severe Cyclonic Storm
10.10.18/1730	14.4/58.6	130-140 gusting to 155	Very Severe Cyclonic Storm
10.10.18/2330	14.5/58.3	130-140 gusting to 155	Very Severe Cyclonic Storm
11.10.18/0530	14.6/58.1	130-140 gusting to 155	Very Severe Cyclonic Storm
11.10.18/1730	14.8/57.5	135-145 gusting to 160	Very Severe Cyclonic Storm
12.10.18/0530	15.0/56.7	135-145 gusting to 160	Very Severe Cyclonic Storm
12.10.18/1730	15.1/55.9	135-145 gusting to 160	Very Severe Cyclonic Storm
13.10.18/0530	15.2/55.0	135-145 gusting to 160	Very Severe Cyclonic Storm
13.10.18/1730	15.2/53.8	120-130 gusting to 145	Very Severe Cyclonic Storm
14.10.18/0530	15.1/52.0	110-120 gusting to 130	Severe Cyclonic Storm
14.10.18/1730	14.8/49.8	90-100 gusting to 110	Severe Cyclonic Storm

Warnings:

(i) Wind warning

- Gale wind speed reaching 120-130 kmph gusting to 145 kmph is prevailing over westcentral & adjoining southwest Arabian Sea. It is very likely to increase gradually becoming 135-145 kmph gusting to 160 kmph by 11th October 2018 evening over westcentral Arabian Sea around the system centre. The wind speed is very likely to decrease gradually over southwest Arabian Sea from 11th onwards.

(ii) Sea condition

- The sea condition is phenomenal around the system centre. It is very likely continued to be phenomenal over westcentral Arabian Sea till 13th October 2018 and over Gulf of Aden during 11th to 13th October.

(iii) Fishermen Warning

- The fishermen are advised not to venture into deep sea areas of westcentral Arabian Sea & Gulf of Aden till 14th October and adjoining southwest Arabian Sea till 11th October.

The next bulletin will be issued at 1430 hrs IST of 10th October, 2018.

(Naresh Kumar)
Scientist-E, RSMC, New Delhi

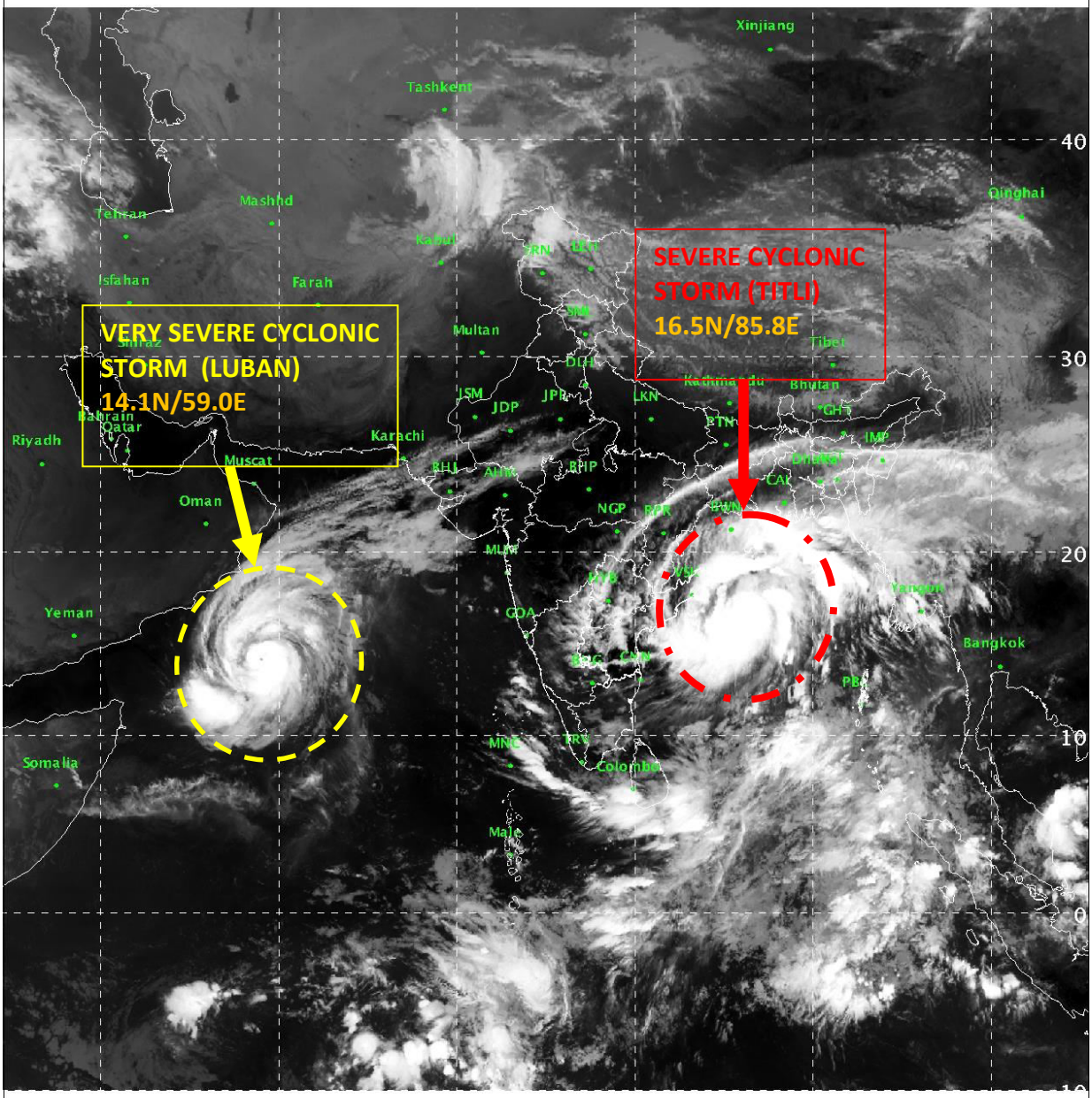
Copy to: CRS, Pune/ ACWC Chennai/ Kolkata/ Mumbai/MC Goa/Thiruvanathapuram/ Bengaluru/ CWC Ahmedabad.

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.

10.10.2018 TIME 0300 UTC

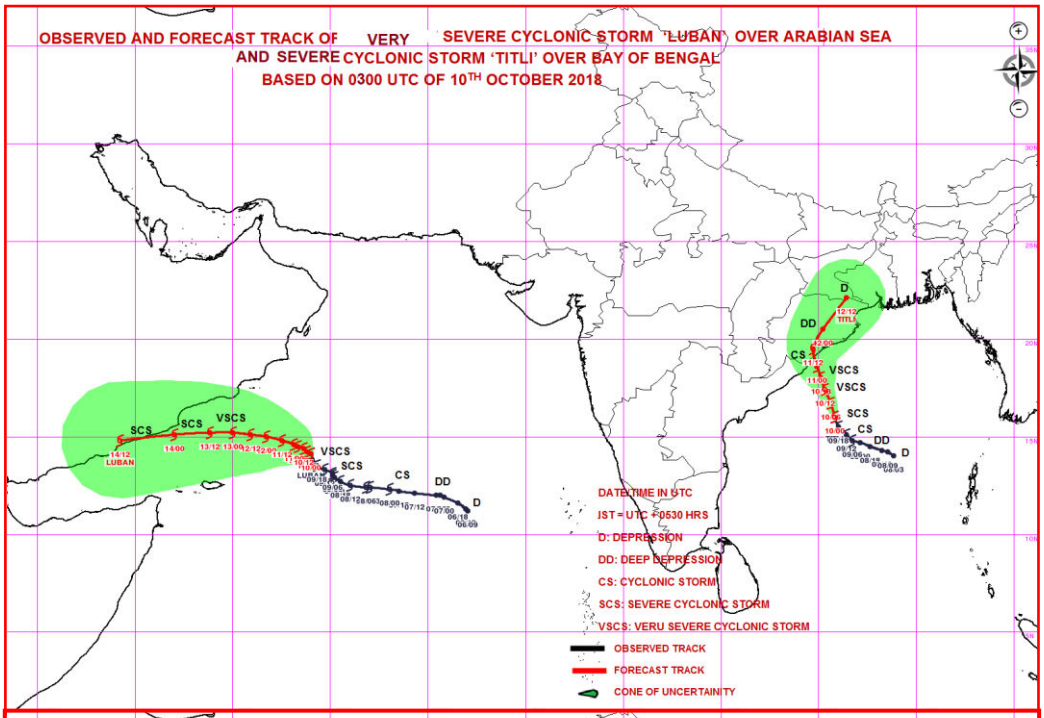
SAT :INSAT-3D IMG
IMG_TIR1 10.8 um
L1C Mercator (LINEAR STRETCH: 1.0%)

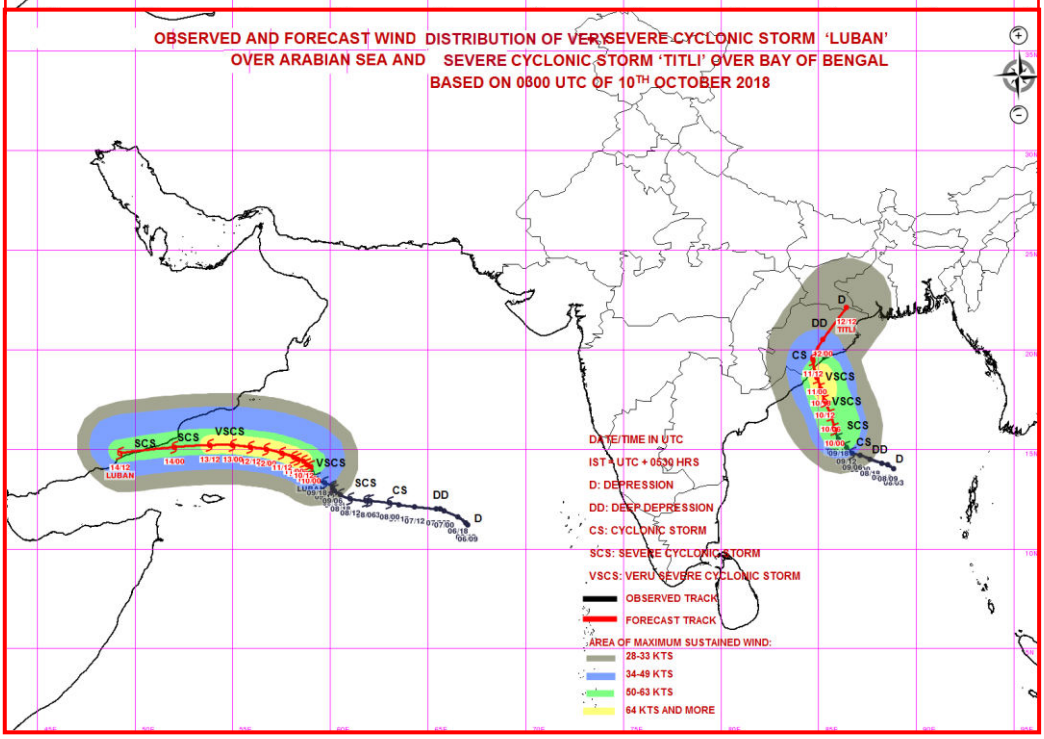
10-10-2018/03:00 GMT
10-10-2018/08:30 IST



522 897 IMD/Delhi

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.





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.

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

BULLETIN NO.: 18 (BOB 08/2018) and BULLETIN NO. : 28 (ARB 04/2018)

TIME OF ISSUE: 1330 HOURS IST **DATED: 10.10.2018**

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)
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 (23385843)
DIRECTOR GENERAL, AIR (23421105, 23421219)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 24363261)
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. 04896-262184)
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)
CHIEF SECRETARY, ANDHRA PRADESH (FAX NO. 0866-2441029)
CHIEF SECRETARY, ODISHA (FAX NO. 0674 -2536660)
CHIEF SECRETARY, WEST BENGAL (FAX NO. 033 -22144328)
CHIEF SECRETARY, ANDAMAN & NICOBAR ISLANDS (FAX NO. 03192- 232656)
CHIEF SECRETARY, MIZORAM (FAX NO. 389 -2322745)
CHIEF SECRETARY, TRIPURA (FAX NO. 0381-2414013)
CHIEF SECRETARY, ASSAM (FAX NO. 0361-2237200)
CHIEF SECRETARY, MEGHALAYA (FAX NO. 0364 -2225978)

Sub: (a) Very Severe Cyclonic Storm 'TITLI' over westcentral Bay of Bengal: Cyclone Warning for districts of north Andhra Pradesh & south Odisha coasts: Red Message.

(b) Very Severe Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea

(a) Very Severe Cyclonic Storm 'TITLI' over westcentral Bay of Bengal: Cyclone Warning for districts of north Andhra Pradesh & Odisha coasts: Red Message.

The very severe cyclonic storm, Titli is being monitored by the coastal Doppler Weather Radars at Visakhapatnam, Gopalpur and Paradip. The latest observations indicate that the Severe Cyclonic Storm **'TITLI'** over westcentral Bay of Bengal moved northwestwards with a speed of about 15 kmph during past 06 hours, intensified into a Very Severe Cyclonic Storm and lay cantered at 1130 hrs IST of today, the 10th October 2018 over Westcentral Bay of Bengal near latitude 16.8°N and longitude 85.6°E, about 280 km south-southeast of Gopalpur (Odisha) and 230 km southeast of Kalingapatnam (Andhra Pradesh). It is very likely to intensify further during next 12 hours. It is very likely to move north-northwestwards and cross Odisha & adjoining north Andhra Pradesh coasts between Gopalpur & Kalingapatnam around morning of 11th October. Thereafter, it is very likely to re-curve northeastwards, move towards Gangetic West Bengal across Odisha and weaken gradually. Forecast track and intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
10.10.18/1130	16.8/85.6	130-140 gusting to 155	Very Severe Cyclonic Storm
10.10.18/1730	17.4/85.3	140-150 gusting to 165	Very Severe Cyclonic Storm
10.10.18/2330	18.0/85.1	140-150 gusting to 165	Very Severe Cyclonic Storm
11.10.18/0530	18.6/84.9	140-150 gusting to 165	Very Severe Cyclonic Storm
11.10.18/1130	19.3/84.8	140-150 gusting to 165	Very Severe Cyclonic Storm
11.10.18/2330	20.5/85.5	70-80 gusting to 90	Cyclonic Storm
12.10.18/1130	21.8/87.0	50-60 gusting to 70	Deep Depression
12.10.18/2330	23.1/88.7	40-50 gusting to 60	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.

(i) Heavy rainfall warnings:

Region	10 Oct. 2018 (Rainfall till 0830 IST of next day.)	11 Oct. 2018 (Rainfall till 0830 IST of next day.)	12 Oct. 2018(Rainfall till 0830 IST of next day.)	13 Oct. 2018(Rainfall till 0830 IST of next day.)
Odisha	Rainfall at most places with heavy to very heavy falls at a few places and extremely heavy falls at Isolated Places over coastal Odisha and isolated heavy over interior Odiha.	Rainfall at most places with heavy to very heavy falls at a few places and extremely heavy falls at Isolated Places over coastal & interior Odisha.	Rainfall at many places with heavy falls at Isolated Places over north Odisha.	Nil
North Coastal Andhra Pradesh	Rainfall at many places with heavy to very heavy falls at Isolated Places.	Rainfall at many places with heavy to very heavy and extremely heavy falls at Isolated Places.	Nil	Nil
Gangetic West Bengal	Rainfall at many places with heavy to very heavy falls at Isolated Places over coastal West Bengal	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at many places with heavy to very heavy falls at Isolated Places	Nil
Assam & Meghalaya	Nil	Rainfall at most places with heavy falls at isolated places	Rainfall at most places with heavy to very heavy falls at isolated places	Rainfall at many places with heavy falls at isolated places
Mizoram & Tripura	Rainfall at most places with heavy falls at isolated places	Rainfall at most places with heavy to very heavy falls at isolated places	Rainfall at most places with heavy to very heavy falls at isolated places	Rainfall at many places with heavy falls at isolated places

Legends: Red-Take Action; Orange- Be prepared; Yellow- be updated; 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

- Gale wind speed reaching 130-140 kmph gusting to 155 kmph prevails over deep sea areas of westcentral & adjoining north Bay of Bengal and gradually increase to 140-150 kmph gusting to 145 kmph from today the 10th evening to 11th forenoon.
- Gale wind speed reaching 60-70 kmph gusting to 80 kmph is very likely to commence along & off north Andhra Pradesh and Odisha coasts from today afternoon.
- **It is very likely to increase gradually becoming 140-150 kmph gusting to 165 kmph from today, the 10th October 2018 night onwards along & off south Odisha & adjoining districts of north Andhra Pradesh coasts** and 70-80 kmph gusting to 90 kmph along & off north Odisha and remaining districts of north Andhra Pradesh coasts.
- Squally winds speed reaching 50-60 kmph gusting 70 kmph is very likely to commence along & off West Bengal coast from today afternoon and gradually increase to 60-70 kmph gusting 80 kmph from today night onwards.

(iii) Sea condition

- The sea condition is very high over westcentral Bay of Bengal around system centre. It is very likely to be phenomenal over westcentral & adjoining north Bay of Bengal and along & off south Odisha and adjoining north Andhra Pradesh coasts from tonight to 11th October 2018 forenoon.

(iv) Storm Surge Warning

- Storm surge of height of about 1.0 meter above astronomical tide is very likely inundate low lying areas of Srikakulam district of Andhra Pradesh; Ganjam, Khurda & Puri districts of Odisha at the time of landfall.

(v) Damage Expected over districts of Visakhapatnam, Vizianagaram and Srikakulam of Andhra Pradesh, Gajapati, Ganjam, Khurda, Nayagarh and Puri districts of Odisha:

- 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. Breaking of tree branches and uprooting of large avenue trees.
- Major damage to Kutcha and and Pucca roads. Flooding of escape routes. Minor disruption of railway.
- Widespread damage to standing crops, plantations, orchards, falling of green coconuts and tearing of palm fronds. Blowing down of bushy trees.

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.

(vi) Action Suggested:

- Total suspension of fishing operations.
- The fishermen are advised not to venture into westcentral & north Bay of Bengal till 11th October 2018. Those, who are out in deep sea areas are advised return to the coast immediately.
- Evacuation from coastal areas need to be mobilised. People advised to remain indoors.
- Judicious regulation of rail and road traffic needed.

(vii) Post landfall Outlook:

- After the landfall the very severe cyclonic storm, Titli is very likely to maintain the intensity of cyclone till evening of 11th October 2018, while moving northeastwards across Odisha. As a result, the gale wind speed of 60-90 kmph is very likely to prevail over the interior districts adjacent to south coastal Odisha during 11th morning to 11th afternoon and wind speed of 60-70 kmph over the interior districts adjacent to north coastal Odisha from 11th noon to night.
- It may lead to breaking of tree branches, uprooting of trees, minor damage to power and communication lines, Damage to thatched huts, damage to standing crops.

(b) Very Severe Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea:

The Very Severe Cyclonic Storm over westcentral Arabian Sea moved northwestwards with a speed of 3 kmph during past six hours and lay centered at 1130 hrs IST 10th October 2018 over westcentral Arabian Sea, near latitude 14.2°N and longitude 58.9°E, about 600 km east-southeast of Salalah (Oman), 560 km east-northeast of Socotra Islands (Yemen) and 760 km east-southeast of Al-Ghaidah (Yemen). It is very likely to intensify further and move west-northwestwards towards Yemen & South Oman Coasts during next 4 days. Forecast track & intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
10.10.18/1130	14.2/58.9	135-145 gusting to 160	Very Severe Cyclonic Storm
10.10.18/1730	14.4/58.7	135-145 gusting to 160	Very Severe Cyclonic Storm
10.10.18/2330	14.5/58.3	140-150 gusting to 165	Very Severe Cyclonic Storm
11.10.18/0530	14.6/58.1	140-150 gusting to 165	Very Severe Cyclonic Storm
11.10.18/1130	14.7/57.8	140-150 gusting to 165	Very Severe Cyclonic Storm
11.10.18/2330	14.9/57.1	140-150 gusting to 165	Very Severe Cyclonic Storm
12.10.18/1130	15.0/56.3	140-150 gusting to 165	Very Severe Cyclonic Storm
12.10.18/2330	15.1/55.4	140-150 gusting to 165	Very Severe Cyclonic Storm
13.10.18/1130	15.2/54.4	135-145 gusting to 160	Very Severe Cyclonic Storm
13.10.18/2330	15.2/52.9	120-130 gusting to 145	Very Severe Cyclonic Storm
14.10.18/1130	15.2/51.1	110-120 gusting to 130	Severe Cyclonic Storm
14.10.18/2330	15.0/48.3	90-100 gusting to 110	Severe Cyclonic Storm

Warnings:

(i) Wind warning

- Gale wind speed reaching 120-130 kmph gusting to 145 kmph is prevailing over westcentral & adjoining southwest Arabian Sea. It is very likely to increase gradually becoming 135-145 kmph gusting to 160 kmph by 11th October 2018 evening over westcentral Arabian Sea around the system centre. The wind speed is very likely to decrease gradually over southwest Arabian Sea from 11th onwards.

(ii) Sea condition

- The sea condition is phenomenal around the system centre. It is very likely continued to be phenomenal over westcentral Arabian Sea till 13th October 2018 and over Gulf of Aden during 11th to 13th October.

(iii) Fishermen Warning

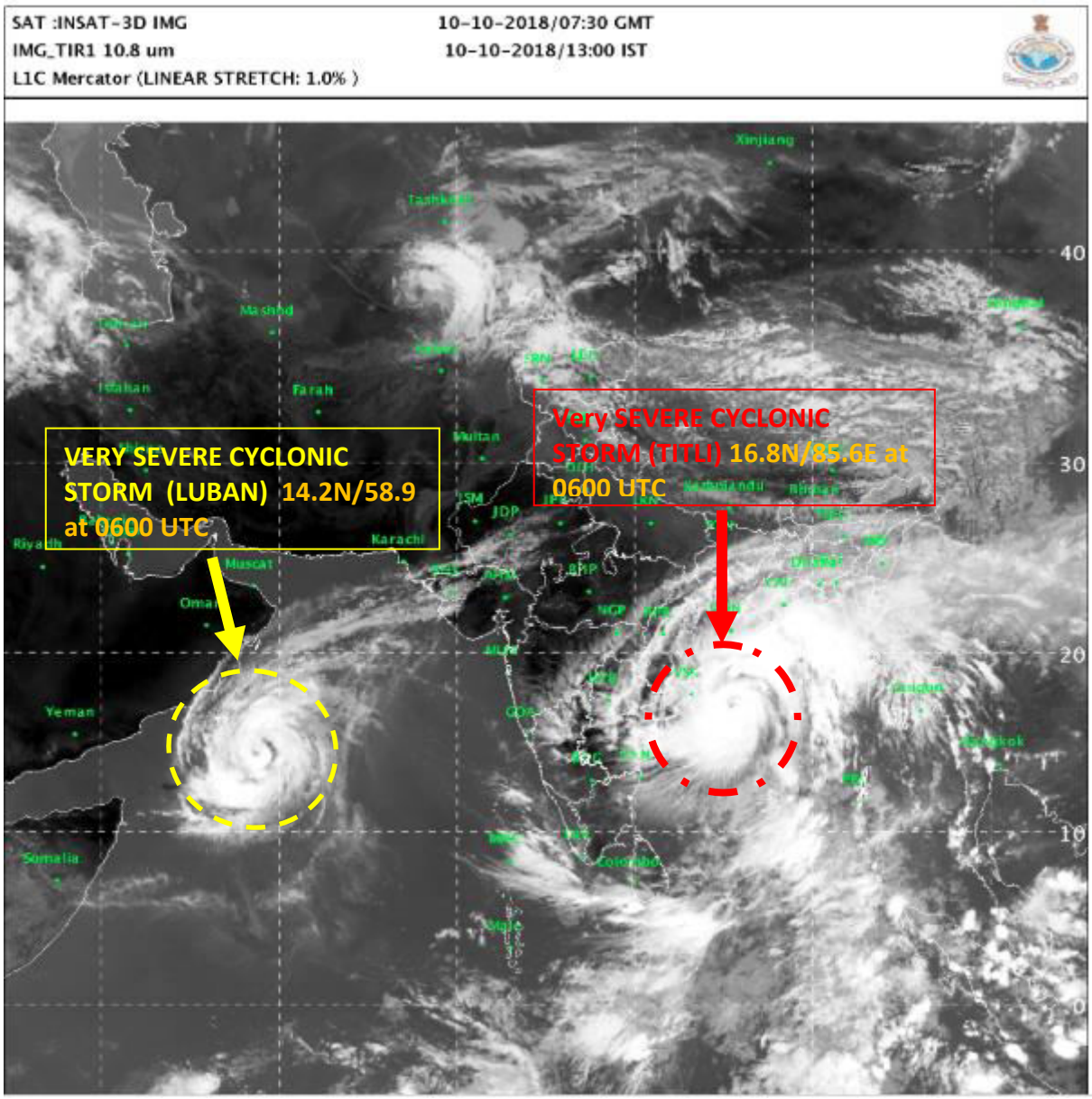
- The fishermen are advised not to venture into deep sea areas of westcentral Arabian Sea & Gulf of Aden till 14th October and adjoining southwest Arabian Sea till 11th October.

The next bulletin will be issued at 1730 hrs IST of 10th October, 2018.

(Naresh Kumar)
Scientist-E, RSMC, New Delhi

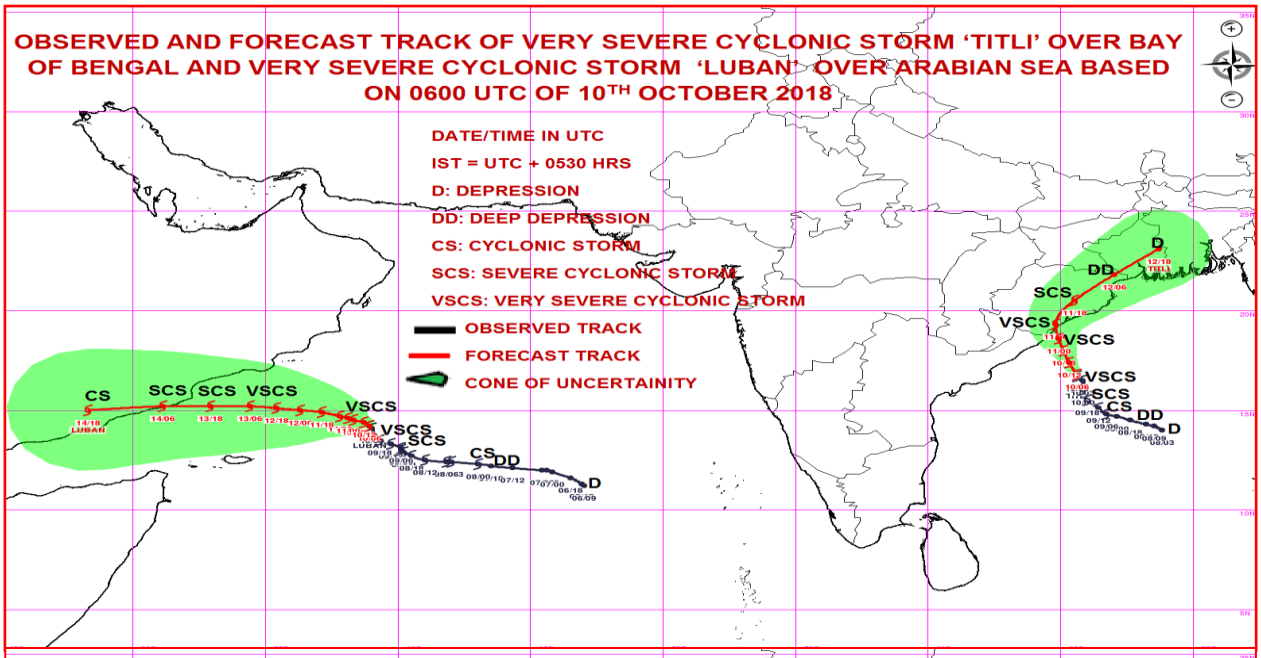
Copy to: CRS, Pune/ ACWC Chennai/ Kolkata/ Mumbai/MC Goa/Thiruvanathapuram/ Bengaluru/ CWC Ahmedabad.

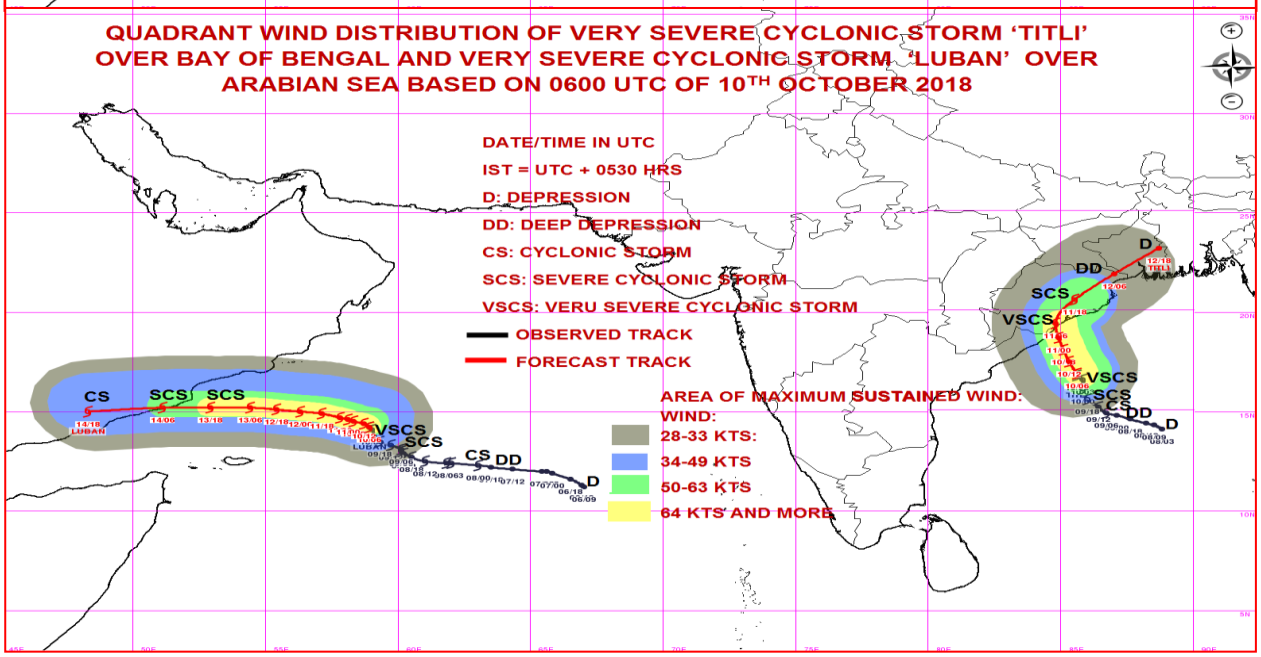
Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
Rainfall amount (mm): Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.



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.





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.

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

BULLETIN NO.: 19 (BOB 08/2018) and BULLETIN NO. : 29 (ARB 04/2018)-Modified

TIME OF ISSUE: 1600 HOURS IST **DATED: 10.10.2018**

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)
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 (23385843)
DIRECTOR GENERAL, AIR (23421105, 23421219)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 24363261)
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. 04896-262184)
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)
CHIEF SECRETARY, ANDHRA PRADESH (FAX NO. 0866-2441029)
CHIEF SECRETARY, ODISHA (FAX NO. 0674 -2536660)
CHIEF SECRETARY, WEST BENGAL (FAX NO. 033 -22144328)
CHIEF SECRETARY, ANDAMAN & NICOBAR ISLANDS (FAX NO. 03192- 232656)
CHIEF SECRETARY, MIZORAM (FAX NO. 389 -2322745)
CHIEF SECRETARY, TRIPURA (FAX NO. 0381-2414013)
CHIEF SECRETARY, ASSAM (FAX NO. 0361-2237200)
CHIEF SECRETARY, MEGHALAYA (FAX NO. 0364 -2225978)

Sub: (a) Very Severe Cyclonic Storm 'TITLI' over westcentral Bay of Bengal: Cyclone Warning for districts of north Andhra Pradesh & south Odisha coasts: Red Message.

(b) Very Severe Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea

(a) Very Severe Cyclonic Storm 'TITLI' over westcentral Bay of Bengal: Cyclone Warning for districts of north Andhra Pradesh & Odisha coasts: Red Message.

The very severe cyclonic storm, '**TITLI**' is being monitored by the coastal Doppler Weather Radars at Visakhapatnam, Gopalpur and Paradip. The latest observations indicate that the Very Severe Cyclonic Storm **'TITLI'** over westcentral Bay of Bengal moved northwestwards with a speed of about 18 kmph during past 06 hours and lay cantered at 1430 hrs IST of today, the 10th October 2018 over Westcentral Bay of Bengal near latitude 17.2°N and longitude 85.5°E, about 230 km south-southeast of Gopalpur (Odisha) and 190 km southeast of Kalingapatnam (Andhra Pradesh). It is very likely to intensify further during next 12 hours. It is very likely to move north-northwestwards and cross Odisha & adjoining north Andhra Pradesh coasts between Gopalpur & Kalingapatnam around morning of 11th October. Thereafter, it is very likely to re-curve northeastwards, move towards Gangetic West Bengal across Odisha and weaken gradually. Forecast track and intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
10.10.18/1430	17.2/85.5	130-140 gusting to 155	Very Severe Cyclonic Storm
10.10.18/1730	17.4/85.3	140-150 gusting to 165	Very Severe Cyclonic Storm
10.10.18/2330	18.0/85.1	140-150 gusting to 165	Very Severe Cyclonic Storm
11.10.18/0530	18.6/84.9	140-150 gusting to 165	Very Severe Cyclonic Storm
11.10.18/1130	19.3/84.8	140-150 gusting to 165	Very Severe Cyclonic Storm
11.10.18/2330	20.5/85.5	70-80 gusting to 90	Cyclonic Storm
12.10.18/1130	21.8/87.0	50-60 gusting to 70	Deep Depression
12.10.18/2330	23.1/88.7	40-50 gusting to 60	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.

(i) Heavy rainfall warnings:

Region	10 Oct. 2018 (Rainfall till 0830 IST of next day.)	11 Oct. 2018 (Rainfall till 0830 IST of next day.)	12 Oct. 2018(Rainfall till 0830 IST of next day.)	13 Oct. 2018(Rainfall till 0830 IST of next day.)
Odisha	Rainfall at most places with heavy to very heavy falls at a few places and extremely heavy falls at Isolated Places over coastal Odisha and isolated heavy over interior Odiha.	Rainfall at most places with heavy to very heavy falls at a few places and extremely heavy falls at Isolated Places over coastal & interior Odisha.	Rainfall at many places with heavy falls at Isolated Places over north Odisha.	Nil
North Coastal Andhra Pradesh	Rainfall at many places with heavy to very heavy falls at Isolated Places.	Rainfall at many places with heavy to very heavy and extremely heavy falls at Isolated Places.	Nil	Nil
Gangetic West Bengal	Rainfall at many places with heavy to very heavy falls at Isolated Places over coastal West Bengal	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at many places with heavy to very heavy falls at Isolated Places	Nil
Assam & Meghalaya	Nil	Rainfall at most places with heavy falls at isolated places	Rainfall at most places with heavy to very heavy falls at isolated places	Rainfall at many places with heavy falls at isolated places
Mizoram & Tripura	Rainfall at most places with heavy falls at isolated places	Rainfall at most places with heavy to very heavy falls at isolated places	Rainfall at most places with heavy to very heavy falls at isolated places	Rainfall at many places with heavy falls at isolated places

Legends: Red-Take Action; Orange- Be prepared; Yellow- be updated; 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

- Gale wind speed reaching 140-150 kmph gusting to 165 kmph prevails over deep sea areas of westcentral & adjoining north Bay of Bengal till 11th forenoon.
- Gale wind speed reaching 60-70 kmph gusting to 80 kmph is very likely to commence along & off north Andhra Pradesh and Odisha coasts from today afternoon.
- **It is very likely to increase gradually becoming 140-150 kmph gusting to 165 kmph from today, the 10th October 2018 night onwards along & off south Odisha & adjoining districts of north Andhra Pradesh coasts** and 70-80 kmph gusting to 90 kmph along & off north Odisha and remaining districts of north Andhra Pradesh coasts.
- Squally winds speed reaching 50-60 kmph gusting 70 kmph is very likely to commence along & off West Bengal coast from today afternoon and gradually increase to 60-70 kmph gusting 80 kmph from today night onwards.

(iii) Sea condition

- The sea condition is very high over westcentral Bay of Bengal around system centre. It is very likely to be phenomenal over westcentral & adjoining north Bay of Bengal and along & off south Odisha and adjoining north Andhra Pradesh coasts from tonight to 11th October 2018 forenoon.

(iv) Storm Surge Warning

- Storm surge of height of about 1.0 meter above astronomical tide is very likely inundate low lying areas of Srikakulam district of Andhra Pradesh; Ganjam, Khurda & Puri districts of Odisha at the time of landfall.

(v) Damage Expected over districts of Visakhapatnam, Vizianagaram and Srikakulam of Andhra Pradesh, Gajapati, Ganjam, Khurda, Nayagarh and Puri districts of Odisha:

- 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. Breaking of tree branches and uprooting of large avenue trees.
- Major damage to Kutcha and and Pucca roads. Flooding of escape routes. Minor disruption of railway.
- Widespread damage to standing crops, plantations, orchards, falling of green coconuts and tearing of palm fronds. Blowing down of bushy trees.

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.

(vi) Action Suggested:

- Total suspension of fishing operations.
- The fishermen are advised not to venture into westcentral & north Bay of Bengal till 11th October 2018. Those, who are out in deep sea areas are advised return to the coast immediately.
- Evacuation from coastal areas need to be mobilised. People advised to remain indoors.
- Judicious regulation of rail and road traffic needed.

(vii) Post landfall Outlook:

- After the landfall the very severe cyclonic storm, Titli is very likely to maintain the intensity of cyclone till evening of 11th October 2018, while moving northeastwards across Odisha. As a result, the gale wind speed of 60-90 kmph is very likely to prevail over the interior districts adjacent to south coastal Odisha during 11th morning to 11th afternoon and wind speed of 60-70 kmph over the interior districts adjacent to north coastal Odisha from 11th noon to night.
- It may lead to breaking of tree branches, uprooting of trees, minor damage to power and communication lines, Damage to thatched huts, damage to standing crops.

(b) Very Severe Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea:

The Very Severe Cyclonic Storm over westcentral Arabian Sea moved northwestwards with a speed of 07 kmph during past six hours and lay centered at 1430 hrs IST 10th October 2018 over westcentral Arabian Sea, near latitude 14.4°N and longitude 58.7°E, about 570 km east-southeast of Salalah (Oman), 550 km east-northeast of Socotra Islands (Yemen) and 730 km east-southeast of Al-Ghaidah (Yemen). It is very likely to intensify further and move west-northwestwards towards Yemen & South Oman Coasts during next 4 days. Forecast track & intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
10.10.18/1430	14.4/58.7	135-145 gusting to 160	Very Severe Cyclonic Storm
10.10.18/1730	14.5/58.6	135-145 gusting to 160	Very Severe Cyclonic Storm
10.10.18/2330	14.6/58.3	140-150 gusting to 165	Very Severe Cyclonic Storm
11.10.18/0530	14.7/58.1	140-150 gusting to 165	Very Severe Cyclonic Storm
11.10.18/1130	14.8/57.8	140-150 gusting to 165	Very Severe Cyclonic Storm
11.10.18/2330	14.9/57.1	140-150 gusting to 165	Very Severe Cyclonic Storm
12.10.18/1130	15.0/56.3	140-150 gusting to 165	Very Severe Cyclonic Storm
12.10.18/2330	15.1/55.4	140-150 gusting to 165	Very Severe Cyclonic Storm
13.10.18/1130	15.2/54.4	135-145 gusting to 160	Very Severe Cyclonic Storm
13.10.18/2330	15.2/52.9	120-130 gusting to 145	Very Severe Cyclonic Storm
14.10.18/1130	15.2/51.1	110-120 gusting to 130	Severe Cyclonic Storm
14.10.18/2330	15.0/48.3	90-100 gusting to 110	Severe Cyclonic Storm

Warnings:

(i) Wind warning

- Gale wind speed reaching 120-130 kmph gusting to 145 kmph is prevailing over westcentral & adjoining southwest Arabian Sea. It is very likely to increase gradually becoming 135-145 kmph gusting to 160 kmph by 11th October 2018 evening over westcentral Arabian Sea around the system centre. The wind speed is very likely to decrease gradually over southwest Arabian Sea from 11th onwards.

(ii) Sea condition

- The sea condition is phenomenal around the system centre. It is very likely continued to be phenomenal over westcentral Arabian Sea till 13th October 2018 and over Gulf of Aden during 11th to 13th October.

(iii) Fishermen Warning

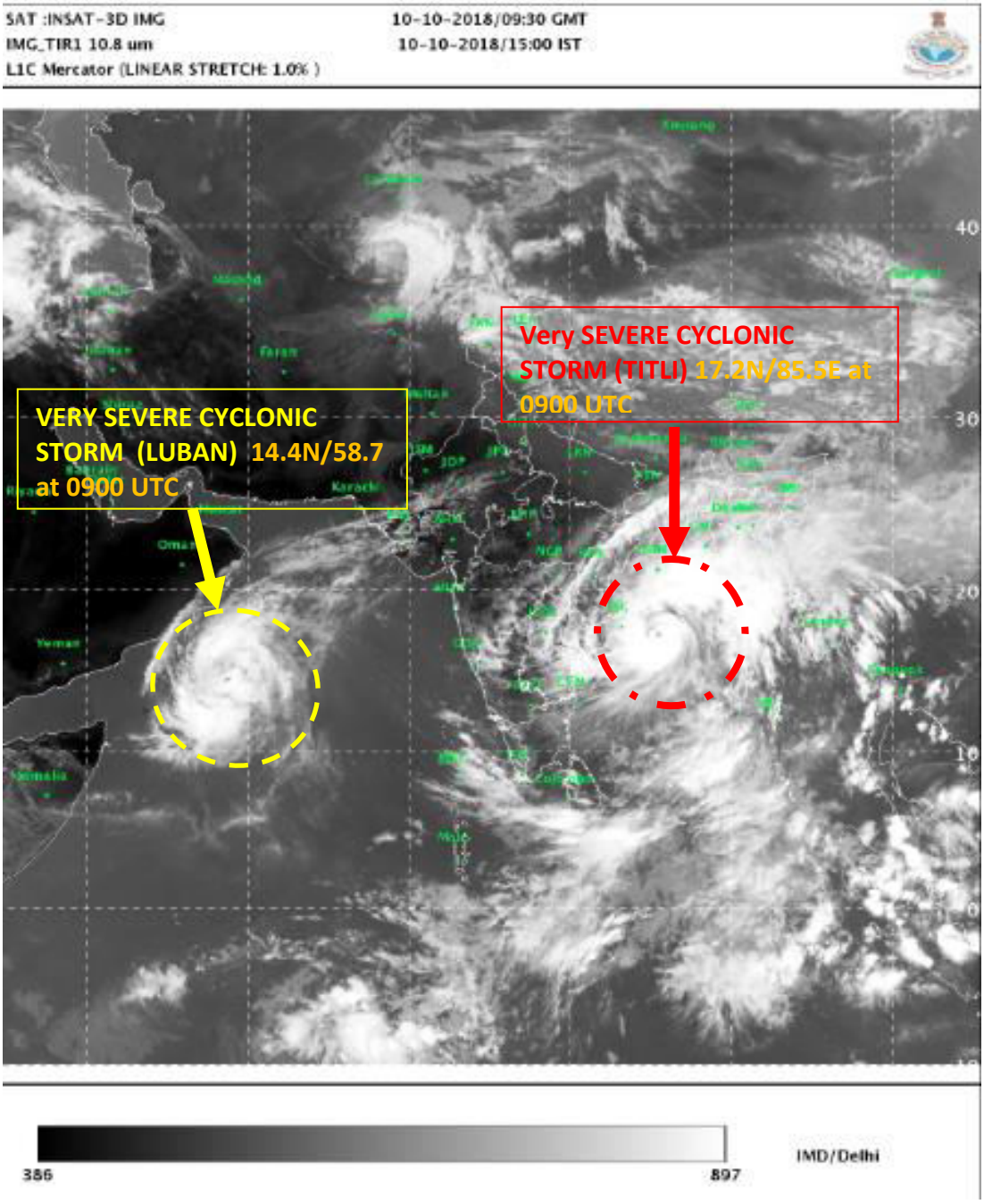
- The fishermen are advised not to venture into deep sea areas of westcentral Arabian Sea & Gulf of Aden till 14th October and adjoining southwest Arabian Sea till 11th October.

The next bulletin will be issued at 2030 hrs IST of 10th October, 2018.

(Sunitha Devi)
Scientist-E, RSMC, New Delhi

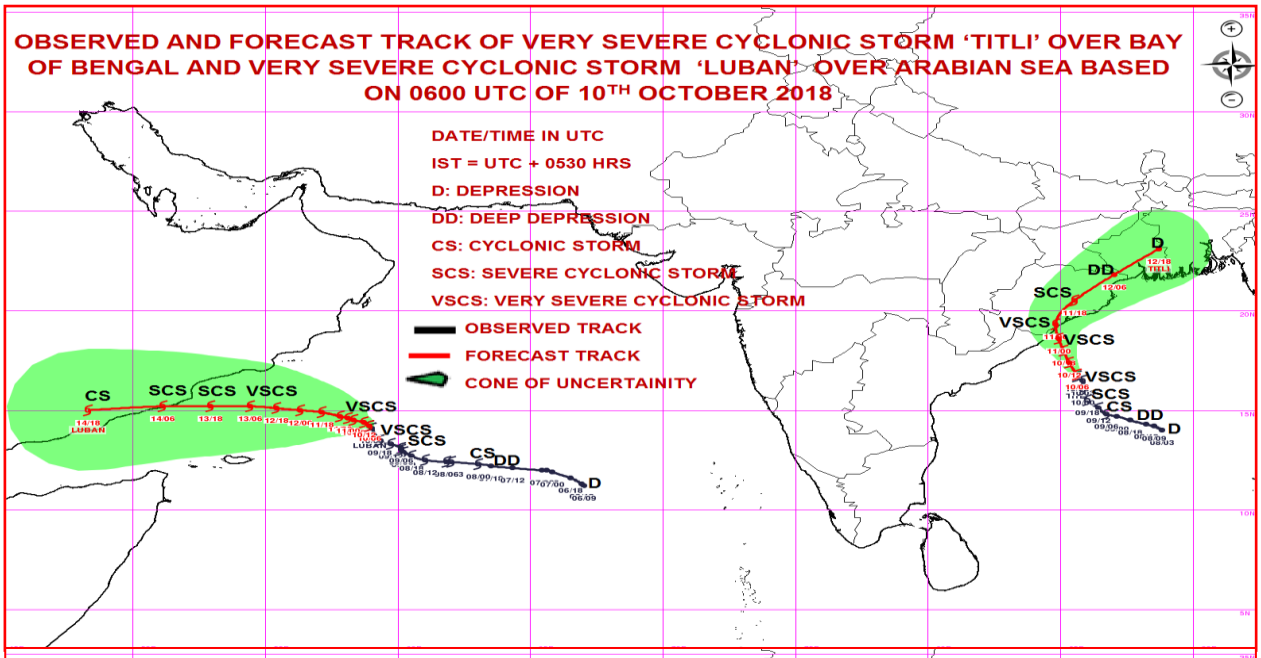
Copy to: CRS, Pune/ ACWC Chennai/ Kolkata/ Mumbai/MC Goa/Thiruvanathapuram/ Bengaluru/ CWC Ahmedabad.

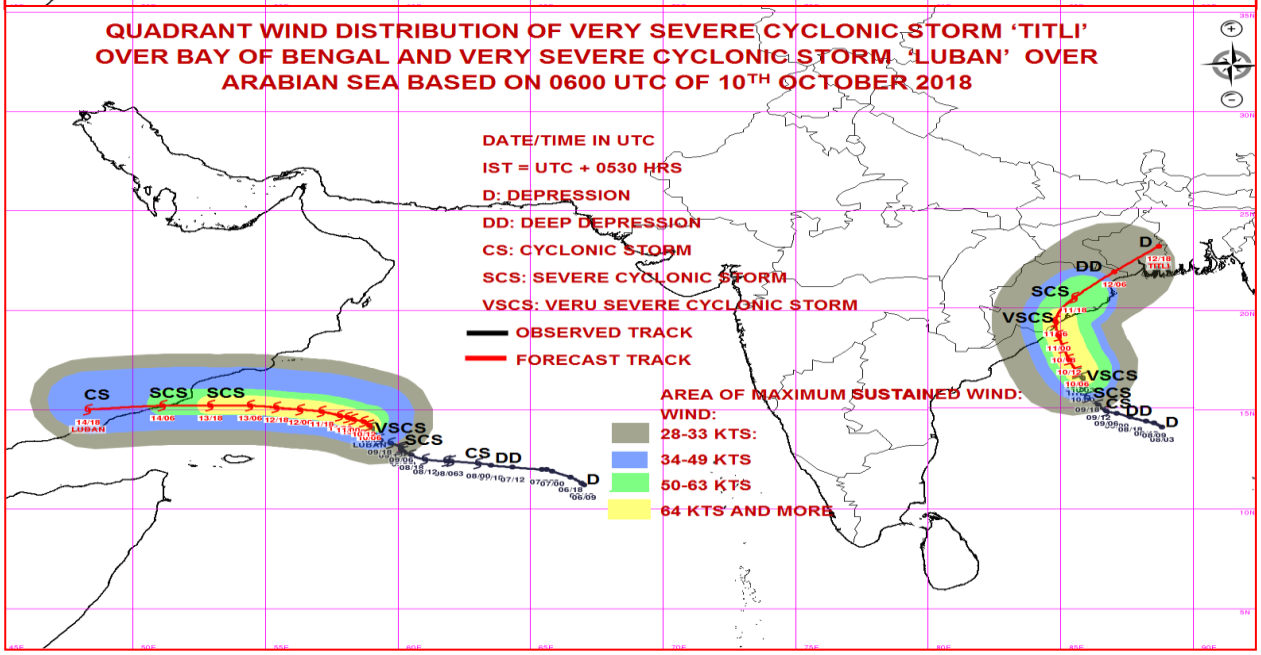
Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
Rainfall amount (mm): Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.



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.





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.

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

BULLETIN NO.: 20 (BOB 08/2018) and BULLETIN NO. : 30 (ARB 04/2018)

TIME OF ISSUE: 2030 HOURS IST **DATED: 10.10.2018**

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)
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 (23385843)
DIRECTOR GENERAL, AIR (23421105, 23421219)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 24363261)
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. 04896-262184)
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)
CHIEF SECRETARY, ANDHRA PRADESH (FAX NO. 0866-2441029)
CHIEF SECRETARY, ODISHA (FAX NO. 0674 -2536660)
CHIEF SECRETARY, WEST BENGAL (FAX NO. 033 -22144328)
CHIEF SECRETARY, ANDAMAN & NICOBAR ISLANDS (FAX NO. 03192- 232656)
CHIEF SECRETARY, MIZORAM (FAX NO. 389 -2322745)
CHIEF SECRETARY, TRIPURA (FAX NO. 0381-2414013)
CHIEF SECRETARY, ASSAM (FAX NO. 0361-2237200)
CHIEF SECRETARY, MEGHALAYA (FAX NO. 0364 -2225978)

Sub: (a) Very Severe Cyclonic Storm 'TITLI' over westcentral Bay of Bengal: Cyclone Warning for districts of north Andhra Pradesh & south Odisha coasts: Red Message.

(b) Very Severe Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea

(a) Very Severe Cyclonic Storm 'TITLI' over westcentral Bay of Bengal: Cyclone Warning for districts of north Andhra Pradesh & Odisha coasts: Red Message.

The very severe cyclonic storm, '**TITLI**' is being monitored by the coastal Doppler Weather Radars at Visakhapatnam, Gopalpur and Paradip. The latest observations indicate that the Very Severe Cyclonic Storm **'TITLI'** over westcentral Bay of Bengal moved north-northwestwards with a speed of about 14 kmph during past 06 hours and lay cantered at 1730 hrs IST of today, the 10th October 2018 over Westcentral Bay of Bengal near latitude 17.5°N and longitude 85.3°E, about 200 km south-southeast of Gopalpur (Odisha) and 150 km southeast of Kalingapatnam (Andhra Pradesh). It is very likely to intensify slightly further during next 06 hours. It is very likely to move north-northwestwards and cross Odisha & adjoining north Andhra Pradesh coasts close to Gopalpur around morning of 11th October. Thereafter, it is very likely to re-curve northeastwards, move towards Gangetic West Bengal across Odisha and weaken gradually. Forecast track and intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
10.10.18/2330	18.0/85.1	140-150 gusting to 165	Very Severe Cyclonic Storm
11.10.18/0530	18.6/84.9	140-150 gusting to 165	Very Severe Cyclonic Storm
11.10.18/1130	19.3/84.7	125-135 gusting to 150	Very Severe Cyclonic Storm
11.10.18/1730	20.0/85.0	70-80 gusting to 90	Cyclonic Storm
11.10.18/2330	20.6/85.6	70-80 gusting to 90	Cyclonic Storm
12.10.18/1130	21.8/86.9	50-60 gusting to 70	Deep Depression
12.10.18/2330	23.0/88.0	40-50 gusting to 60	Depression

(i) Heavy rainfall warnings:

Region	10 Oct. 2018 (Rainfall till 0830 IST of next day)	11 Oct. 2018 (Rainfall till 0830 IST of next day)	12 Oct. 2018(Rainfall till 0830 IST of next day)	13 Oct. 2018(Rainfall till 0830 IST of next day)
Odisha	Rainfall at most places with heavy to very heavy falls at a few places and extremely heavy falls at Isolated Places over coastal Odisha and isolated heavy over interior Odiha.	Rainfall at most places with heavy to very heavy falls at a few places and extremely heavy falls at Isolated Places over coastal & interior Odisha.	Rainfall at many places with heavy falls at Isolated Places over north Odisha.	Nil
North Coastal Andhra Pradesh	Rainfall at many places with heavy to very heavy falls at Isolated Places.	Rainfall at many places with heavy to very heavy and extremely heavy falls at Isolated Places.	Nil	Nil
Gangetic West Bengal	Rainfall at many places with heavy to very heavy falls at Isolated Places over coastal West Bengal	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at many places with heavy to very heavy falls at Isolated Places	Nil
Assam & Meghalaya	Nil	Rainfall at most places with heavy falls at isolated places	Rainfall at most places with heavy to very heavy falls at isolated places	Rainfall at many places with heavy falls at isolated places
Mizoram & Tripura	Rainfall at most places with heavy falls at isolated places	Rainfall at most places with heavy to very heavy falls at isolated places	Rainfall at most places with heavy to very heavy falls at isolated places	Rainfall at many places with heavy falls at isolated places

Legends: Red-Take Action; Orange- Be prepared; Yellow- be updated; 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

- **Gale wind speed reaching 140-150 kmph gusting to 165 kmph** very likely over westcentral & adjoining north Bay of Bengal and **along & off south Odisha & adjoining districts of north Andhra Pradesh coasts from tonight, the 10th October 2018 to forenoon of tomorrow the 11th October 2018.** Squally wind speed reaching 80-90 kmph gusting to 100 kmph very likely along & off north Odisha and remaining districts of north Andhra Pradesh coasts during the same period.
- Squally winds speed reaching 60-70 kmph gusting 80 kmph very likely along & off West Bengal coast from tonight onwards.

(iii) Sea condition

- The sea condition is phenomenal over westcentral & north Bay of Bengal and along & off south Odisha and adjoining north Andhra Pradesh coasts and very likely continue to remain so till 11th October 2018 forenoon.

(iv) Storm Surge Warning

- Storm surge of height of about 1.0 meter above astronomical tide is very likely inundate low lying areas of Srikakulam district of Andhra Pradesh; Ganjam, Khurda & Puri districts of Odisha at the time of landfall.

(v) Damage Expected over districts of Visakhapatnam, Vizianagaram and Srikakulam of Andhra Pradesh, Gajapati, Ganjam, Khurda, Nayagarh and Puri districts of Odisha:

- 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. Breaking of tree branches and uprooting of large avenue trees.
- Major damage to Kutcha and and Pucca roads. Flooding of escape routes. Minor disruption of railway.
- Widespread damage to standing crops, plantations, orchards, falling of green coconuts and tearing of palm fronds. Blowing down of bushy trees.

(vi) Action Suggested:

- Total suspension of fishing operations.
- The fishermen are advised not to venture into westcentral & north Bay of Bengal till 11th October 2018. Those, who are out in deep sea areas are advised return to the coast immediately.
- Evacuation from coastal areas need to be mobilised. People advised to remain indoors.
- Judicious regulation of rail and road traffic needed.

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.

(vii) Post landfall Outlook:

- After the landfall the very severe cyclonic storm, '**TITLI'** is very likely to maintain the intensity of cyclone till evening of 11th October 2018, while moving northeastwards across Odisha. As a result, the gale wind speed of 60-90 kmph is very likely to prevail over the interior districts adjacent to south coastal Odisha during 11th morning to afternoon and wind speed of 60-70 kmph gusting to 80 kmph over the interior districts adjacent to north coastal Odisha from 11th noon to night.
- It may lead to breaking of tree branches, uprooting of trees, minor damage to power and communication lines, Damage to thatched huts, damage to standing crops.

(b) Very Severe Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea:

The Very Severe Cyclonic Storm over westcentral Arabian Sea moved west-northwestwards with a speed of 06 kmph during past six hours and lay centered at 1730 hrs IST 10th October 2018 over westcentral Arabian Sea, near latitude 14.4°N and longitude 58.6°E, about 560 km east-southeast of Salalah (Oman), 540 km east-northeast of Socotra Islands (Yemen) and 720 km east-southeast of Al-Ghaidah (Yemen). It is very likely to slightly intensify further and move west-northwestwards towards Yemen & South Oman Coasts during next 4 days. Forecast track & intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
10.10.18/2330	14.6/58.3	135-145 gusting to 160	Very Severe Cyclonic Storm
11.10.18/0530	14.7/58.1	140-150 gusting to 165	Very Severe Cyclonic Storm
11.10.18/1130	14.8/57.8	140-150 gusting to 165	Very Severe Cyclonic Storm
11.10.18/1730	14.8/57.4	140-150 gusting to 165	Very Severe Cyclonic Storm
12.10.18/0530	14.9/56.7	135-145 gusting to 160	Very Severe Cyclonic Storm
12.10.18/1730	15.0/55.8	130-140 gusting to 155	Very Severe Cyclonic Storm
13.10.18/0530	15.1/54.7	120-130 gusting to 145	Very Severe Cyclonic Storm
13.10.18/1730	15.2/53.4	110-120 gusting to 130	Severe Cyclonic Storm
14.10.18/0530	15.2/52.1	100-110 gusting to 125	Severe Cyclonic Storm
14.10.18/1730	15.3/50.7	70-80 gusting to 90	Cyclonic Storm
15.10.18/0530	15.4/49.2	50-60 gusting to 70	Deep Depression

Warnings:

(i) Wind warning

(ii) Gale wind speed reaching 130-140 kmph gusting to 155 kmph is prevailing over westcentral & adjoining southwest Arabian Sea. It is very likely to increase gradually becoming 140-150 kmph gusting to 165 kmph by 11th October 2018 evening over westcentral Arabian Sea around the system centre. The wind speed is very likely to decrease gradually over southwest Arabian Sea becoming squally wind speed reaching 50-60 kmph gusting to 70 kmph on 11th October and further decrease thereafter.

(iii) Sea condition

- The sea condition is phenomenal around the system centre. It is very likely continued to be phenomenal over westcentral Arabian Sea till 13th October 2018 and over Gulf of Aden during 11th to 14th October.

(iv) Fishermen Warning

- The fishermen are advised not to venture into deep sea areas of westcentral Arabian Sea & Gulf of Aden till 14th October and adjoining southwest Arabian Sea till 11th October.

The next bulletin will be issued at 2330 hrs IST of 10th October, 2018.

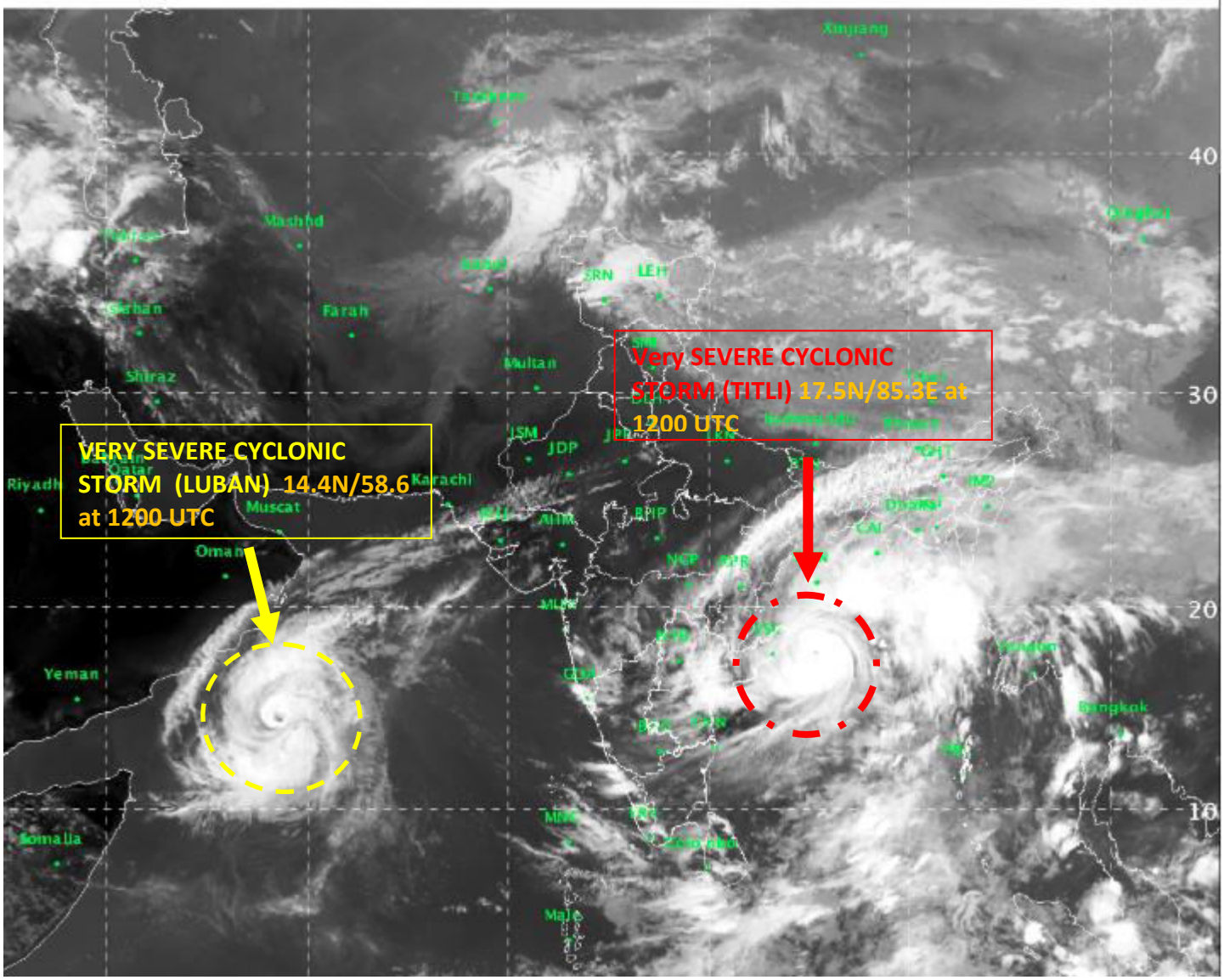
(Naresh Kumar)
Scientist-E, RSMC, New Delhi

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

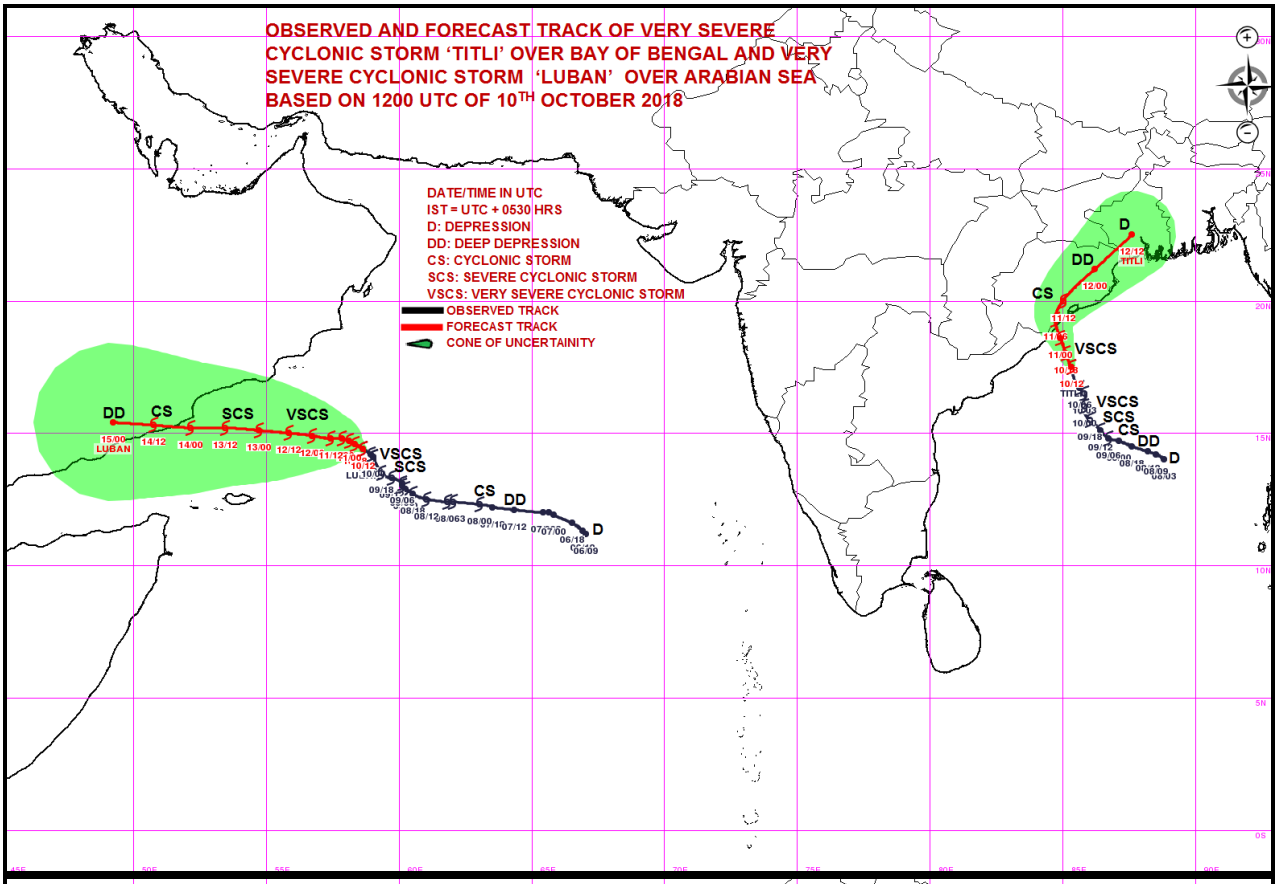
Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
Rainfall amount (mm): Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.

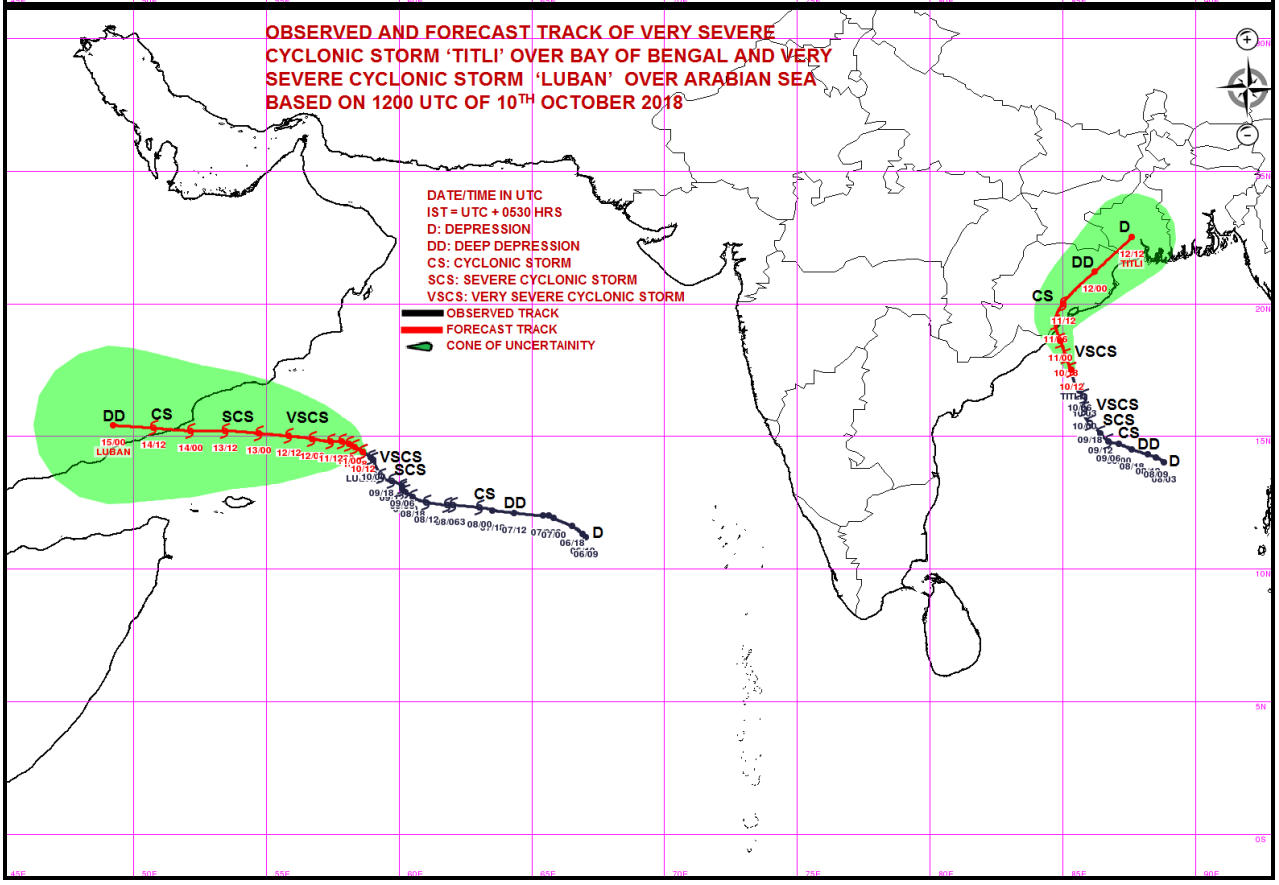
SAT :INSAT-3D IMG
IMG_TIR1 10.8 um
L1C Mercator (LINEAR STRETCH: 1.0%)

10-10-2018/12:00 GMT
10-10-2018/17:30 IST



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.





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.

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

BULLETIN NO.: 21 (BOB 08/2018) and BULLETIN NO. : 31 (ARB 04/2018)

TIME OF ISSUE: 2200 HOURS IST **DATED: 10.10.2018**

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)
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 (23385843)
DIRECTOR GENERAL, AIR (23421105, 23421219)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 24363261)
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. 04896-262184)
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)
CHIEF SECRETARY, ANDHRA PRADESH (FAX NO. 0866-2441029)
CHIEF SECRETARY, ODISHA (FAX NO. 0674 -2536660)
CHIEF SECRETARY, WEST BENGAL (FAX NO. 033 -22144328)
CHIEF SECRETARY, ANDAMAN & NICOBAR ISLANDS (FAX NO. 03192- 232656)
CHIEF SECRETARY, MIZORAM (FAX NO. 389 -2322745)
CHIEF SECRETARY, TRIPURA (FAX NO. 0381-2414013)
CHIEF SECRETARY, ASSAM (FAX NO. 0361-2237200)
CHIEF SECRETARY, MEGHALAYA (FAX NO. 0364 -2225978)

Sub: (a) Very Severe Cyclonic Storm 'TITLI' over westcentral Bay of Bengal: Cyclone Warning for districts of north Andhra Pradesh & south Odisha coasts: Red Message.

(b) Very Severe Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea

(a) Very Severe Cyclonic Storm 'TITLI' over westcentral Bay of Bengal: Cyclone Warning for districts of north Andhra Pradesh & Odisha coasts: Red Message.

The very severe cyclonic storm, '**TITLI**' is being monitored by the coastal Doppler Weather Radars at Visakhapatnam, Gopalpur and Paradip. The latest observations indicate that the Very Severe Cyclonic Storm **'TITLI'** over westcentral Bay of Bengal moved north-northwestwards with a speed of about 11 kmph during past 06 hours and lay cantered at 2030 hrs IST of today, the 10th October 2018 over Westcentral Bay of Bengal near latitude 17.7°N and longitude 85.2°E, about 180 km south-southeast of Gopalpur (Odisha) and 130 km southeast of Kalingapatnam (Andhra Pradesh). It is very likely to move north-northwestwards and cross Odisha & adjoining north Andhra Pradesh coasts close to Gopalpur around morning of 11th October. Thereafter, it is very likely to re-curve northeastwards, move towards Gangetic West Bengal across Odisha and weaken gradually. Forecast track and intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
10.10.18/2030	17.7/85.2	135-145 gusting to 160	Very Severe Cyclonic Storm
10.10.18/2330	18.0/85.1	140-150 gusting to 165	Very Severe Cyclonic Storm
11.10.18/0530	18.6/84.9	140-150 gusting to 165	Very Severe Cyclonic Storm
11.10.18/1130	19.3/84.7	125-135 gusting to 150	Very Severe Cyclonic Storm
11.10.18/1730	20.0/85.0	70-80 gusting to 90	Cyclonic Storm
12.10.18/0530	21.2/86.2	50-60 gusting to 70	Deep Depression
12.10.18/1730	22.5/87.6	40-50 gusting to 60	Depression

(i) Heavy rainfall warnings:

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.

Region	10 Oct. 2018 (Rainfall till 0830 IST of next day)	11 Oct. 2018 (Rainfall till 0830 IST of next day)	12 Oct. 2018(Rainfall till 0830 IST of next day)	13 Oct. 2018(Rainfall till 0830 IST of next day)
Odisha	Rainfall at most places with heavy to very heavy falls at a few places and extremely heavy falls at Isolated Places over coastal Odisha and isolated heavy over interior Odiha.	Rainfall at most places with heavy to very heavy falls at a few places and extremely heavy falls at Isolated Places over coastal & interior Odisha.	Rainfall at many places with heavy falls at Isolated Places over north Odisha.	Nil
North Coastal Andhra Pradesh	Rainfall at many places with heavy to very heavy falls at Isolated Places.	Rainfall at many places with heavy to very heavy and extremely heavy falls at Isolated Places.	Nil	Nil
Gangetic West Bengal	Rainfall at many places with heavy to very heavy falls at Isolated Places over coastal West Bengal	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at many places with heavy to very heavy falls at Isolated Places	Nil
Assam & Meghalaya	Nil	Rainfall at most places with heavy falls at isolated places	Rainfall at most places with heavy to very heavy falls at isolated places	Rainfall at many places with heavy falls at isolated places
Mizoram & Tripura	Rainfall at most places with heavy falls at isolated places	Rainfall at most places with heavy to very heavy falls at isolated places	Rainfall at most places with heavy to very heavy falls at isolated places	Rainfall at many places with heavy falls at isolated places

Legends: Red-Take Action; Orange- Be prepared; Yellow- be updated; 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

- **Gale wind speed reaching 140-150 kmph gusting to 165 kmph** very likely over westcentral & adjoining north Bay of Bengal and **along & off south Odisha & adjoining districts of north Andhra Pradesh coasts from tonight, the 10th October 2018 to forenoon of tomorrow the 11th October 2018.** Squally wind speed reaching 80-90 kmph gusting to 100 kmph very likely along & off north Odisha and remaining districts of north Andhra Pradesh coasts during the same period.
- Squally winds speed reaching 60-70 kmph gusting 80 kmph very likely along & off West Bengal coast from tonight onwards.

(iii) Sea condition

- The sea condition is phenomenal over westcentral & north Bay of Bengal and along & off south Odisha and adjoining north Andhra Pradesh coasts and very likely continue to remain so till 11th October 2018 forenoon.

(iv) Storm Surge Warning

- Storm surge of height of about 1.0 meter above astronomical tide is very likely inundate low lying areas of Srikakulam district of Andhra Pradesh; Ganjam, Khurda & Puri districts of Odisha at the time of landfall.

(v) Damage Expected over districts of Visakhapatnam, Vizianagaram and Srikakulam of Andhra Pradesh, Gajapati, Ganjam, Khurda, Nayagarh and Puri districts of Odisha:

- 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. Breaking of tree branches and uprooting of large avenue trees.
- Major damage to Kutcha and and Pucca roads. Flooding of escape routes. Minor disruption of railway.
- Widespread damage to standing crops, plantations, orchards, falling of green coconuts and tearing of palm fronds. Blowing down of bushy trees.

(vi) Action Suggested:

- Total suspension of fishing operations.
- The fishermen are advised not to venture into westcentral & north Bay of Bengal till 11th October 2018. Those, who are out in deep sea areas are advised return to the coast immediately.
- Evacuation from coastal areas need to be mobilised. People advised to remain indoors.
- Judicious regulation of rail and road traffic needed.

(vii) Post landfall Outlook:

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.

- After the landfall the very severe cyclonic storm, '**TITLI'** is very likely to maintain the intensity of cyclone till evening of 11th October 2018, while moving northeastwards across Odisha. As a result, the gale wind speed of 60-90 kmph is very likely to prevail over the interior districts adjacent to south coastal Odisha during 11th morning to afternoon and wind speed of 60-70 kmph gusting to 80 kmph over the interior districts adjacent to north coastal Odisha from 11th noon to night.
- It may lead to breaking of tree branches, uprooting of trees, minor damage to power and communication lines, Damage to thatched huts, damage to standing crops.

(b) Very Severe Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea:

The Very Severe Cyclonic Storm over westcentral Arabian Sea moved west-northwestwards with a speed of 04 kmph during past six hours and lay centered at 2030 hrs IST 10th October 2018 over westcentral Arabian Sea, near latitude 14.5°N and longitude 58.5°E, about 550 km east-southeast of Salalah (Oman), 540 km east-northeast of Socotra Islands (Yemen) and 710 km east-southeast of Al-Ghaidah (Yemen). It is very likely to slightly intensify further and move west-northwestwards towards Yemen & South Oman Coasts during next 4 days. Forecast track & intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
10.10.18/2030	14.5/58.5	130-140 gusting to 155	Very Severe Cyclonic Storm
10.10.18/2330	14.6/58.3	135-145 gusting to 160	Very Severe Cyclonic Storm
11.10.18/0530	14.7/58.1	140-150 gusting to 165	Very Severe Cyclonic Storm
11.10.18/1130	14.8/57.8	140-150 gusting to 165	Very Severe Cyclonic Storm
11.10.18/1730	14.8/57.4	140-150 gusting to 165	Very Severe Cyclonic Storm
12.10.18/0530	14.9/56.7	135-145 gusting to 160	Very Severe Cyclonic Storm
12.10.18/1730	15.0/55.8	130-140 gusting to 155	Very Severe Cyclonic Storm
13.10.18/0530	15.1/54.7	120-130 gusting to 145	Very Severe Cyclonic Storm
13.10.18/1730	15.2/53.4	110-120 gusting to 130	Severe Cyclonic Storm
14.10.18/0530	15.2/52.1	100-110 gusting to 125	Severe Cyclonic Storm
14.10.18/1730	15.3/50.7	70-80 gusting to 90	Cyclonic Storm
15.10.18/0530	15.4/49.2	50-60 gusting to 70	Deep Depression

Warnings:

(i) Wind warning

(ii) Gale wind speed reaching 130-140 kmph gusting to 155 kmph is prevailing over westcentral & adjoining southwest Arabian Sea. It is very likely to increase gradually becoming 140-150 kmph gusting to 165 kmph by 11th October 2018 evening over westcentral Arabian Sea around the system centre. The wind speed is very likely to decrease gradually over southwest Arabian Sea becoming squally wind speed reaching 50-60 kmph gusting to 70 kmph on 11th October and further decrease thereafter.

(iii) Sea condition

- The sea condition is phenomenal around the system centre. It is very likely continued to be phenomenal over westcentral Arabian Sea till 13th October 2018 and over Gulf of Aden during 11th to 14th October.

(iv) Fishermen Warning

- The fishermen are advised not to venture into deep sea areas of westcentral Arabian Sea & Gulf of Aden till 14th October and adjoining southwest Arabian Sea till 11th October.

The next bulletin will be issued at 0230 hrs IST of 11th October, 2018.

(D. Joardar)
Scientist-E, RSMC, New Delhi

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

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.

SAT :INSAT-3D IMG
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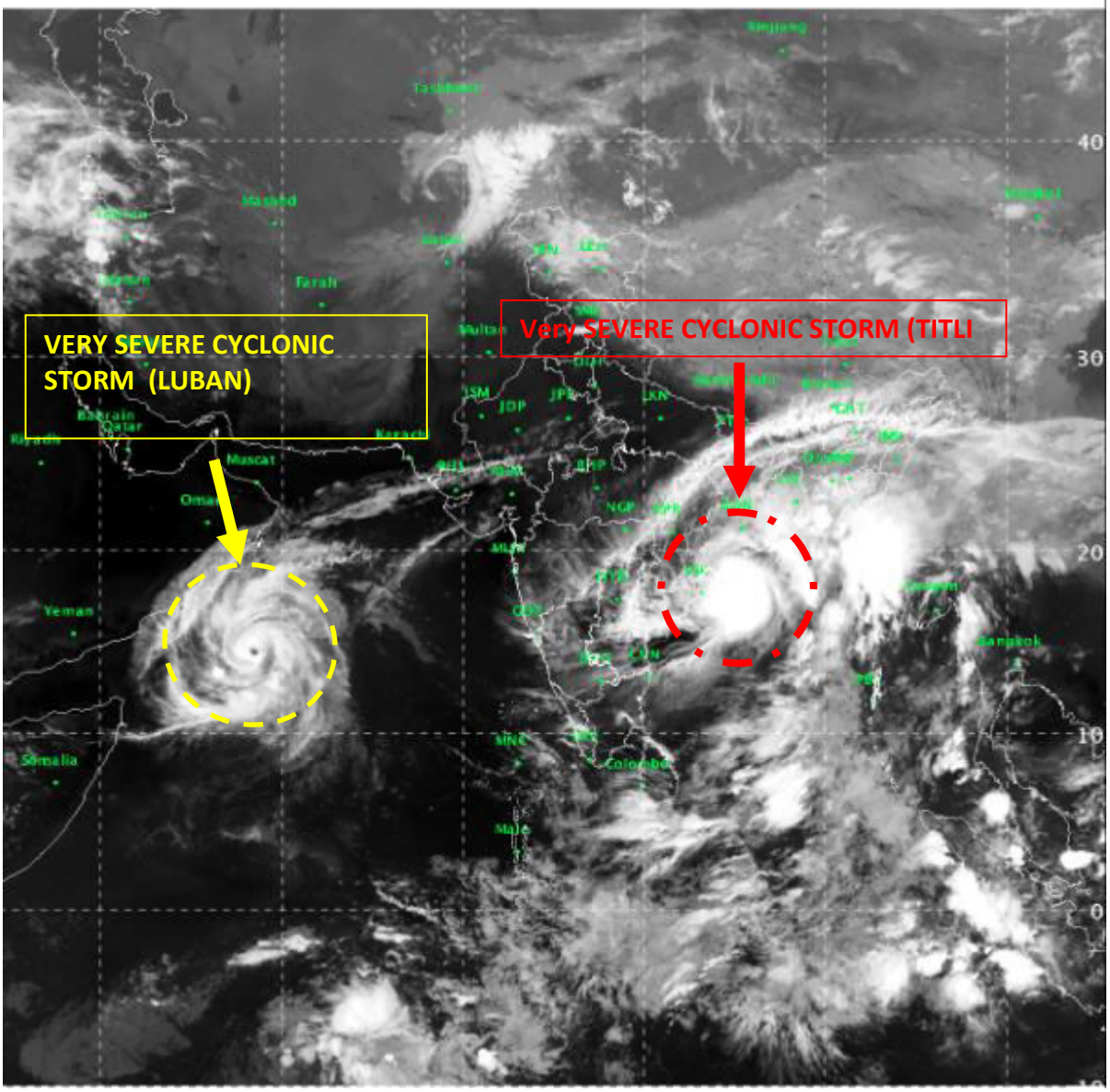
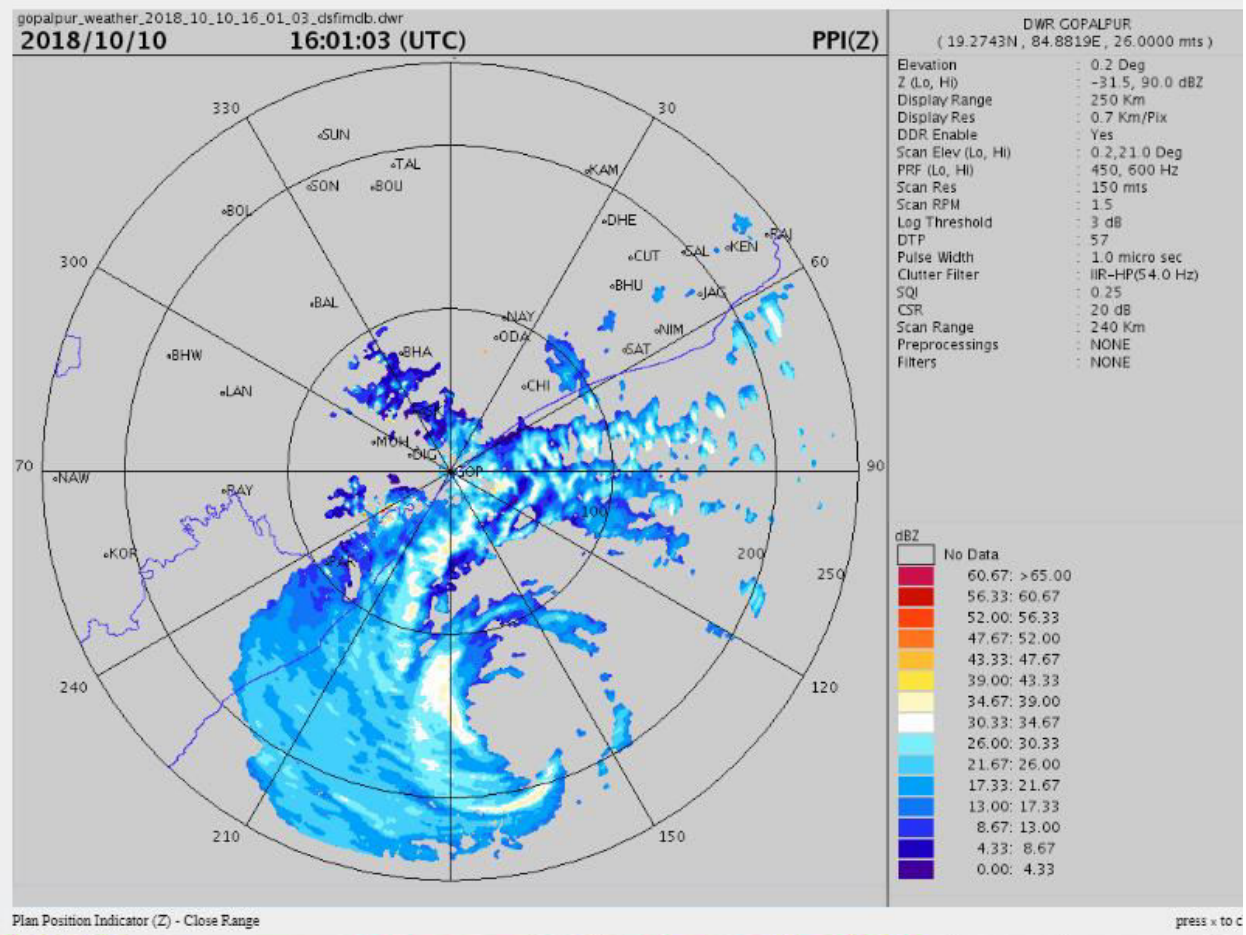
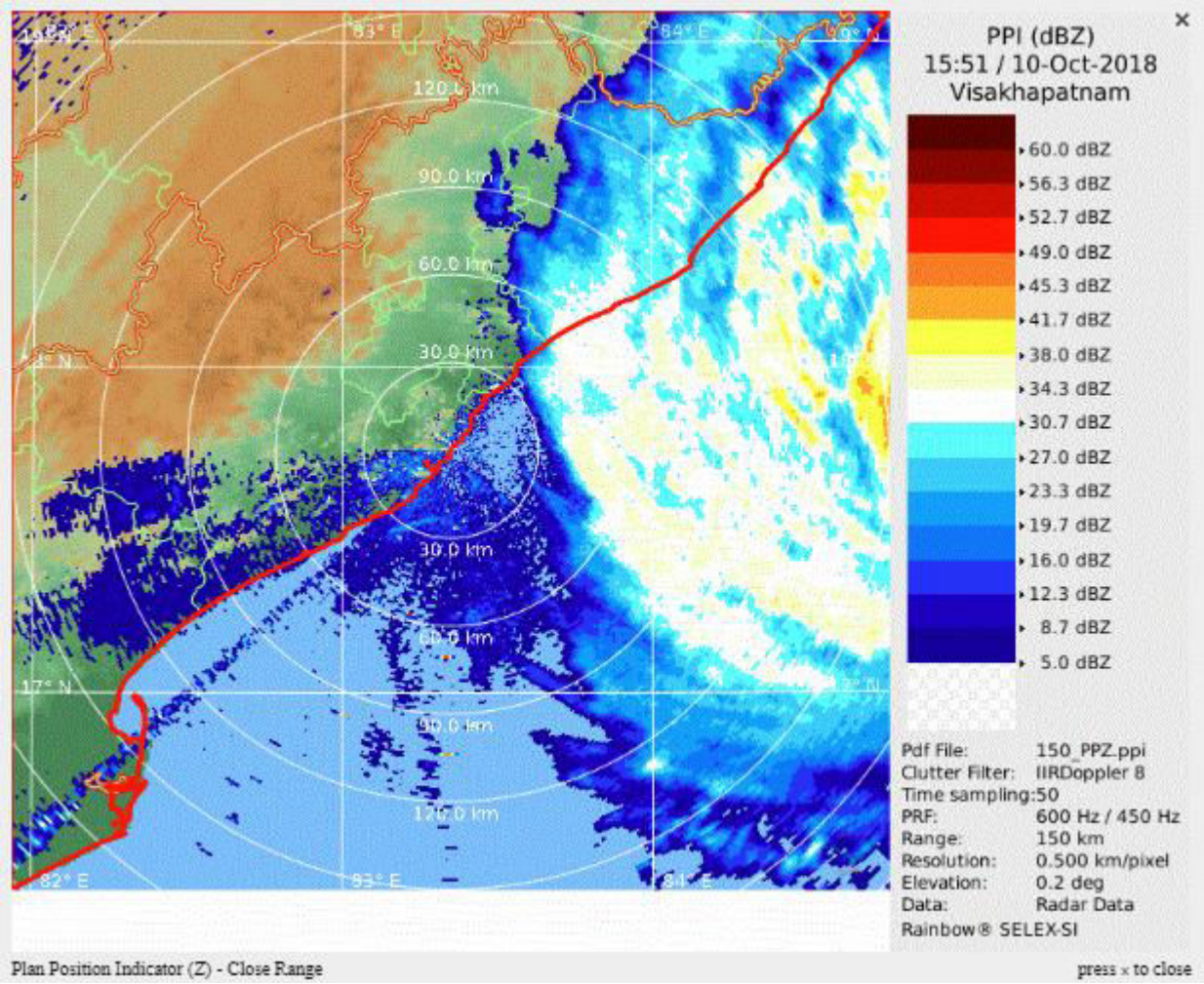
L1C Mercator (LINEAR STRETCH: 1.0%)

10-10-2018/15:00 GMT
10-10-2018/20:30 IST



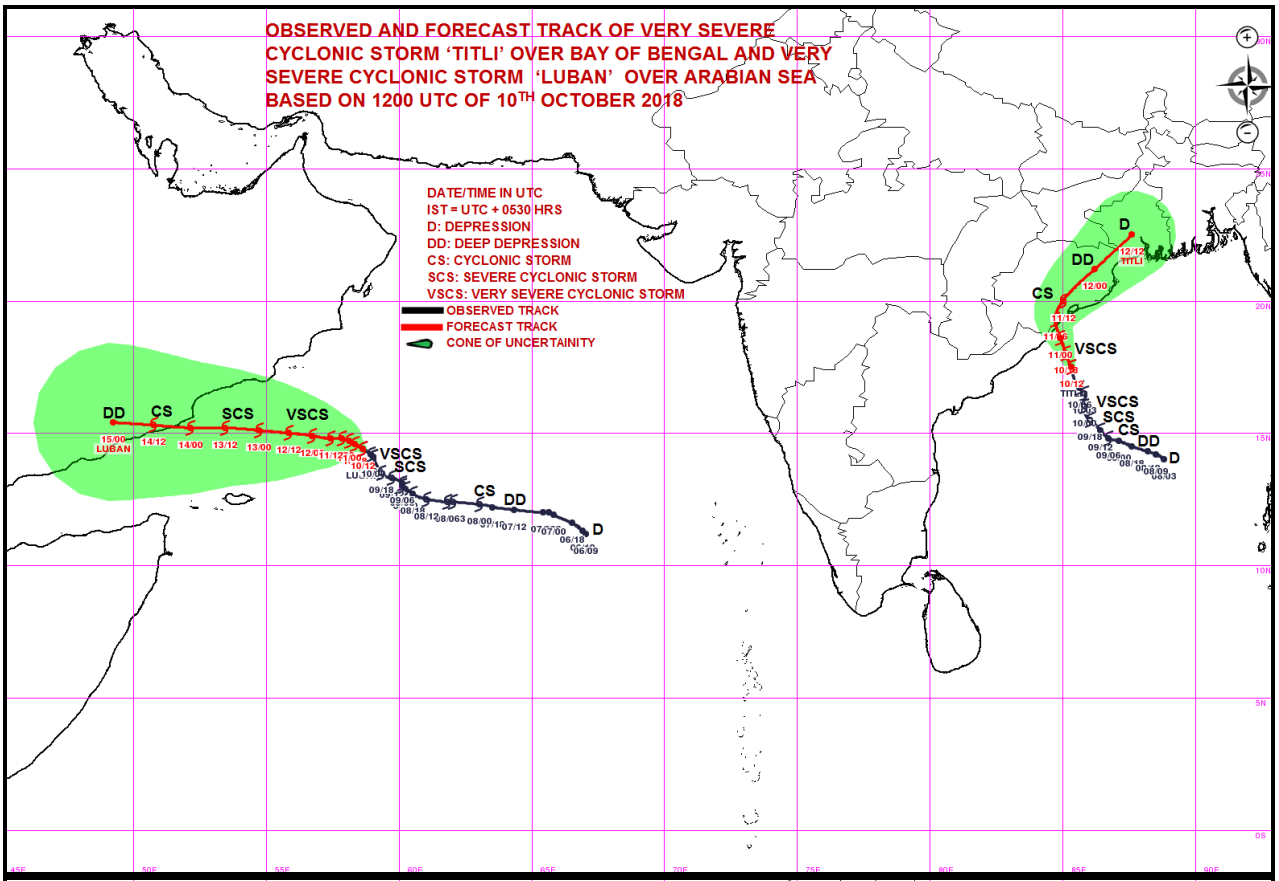
Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
Rainfall amount (mm): Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.

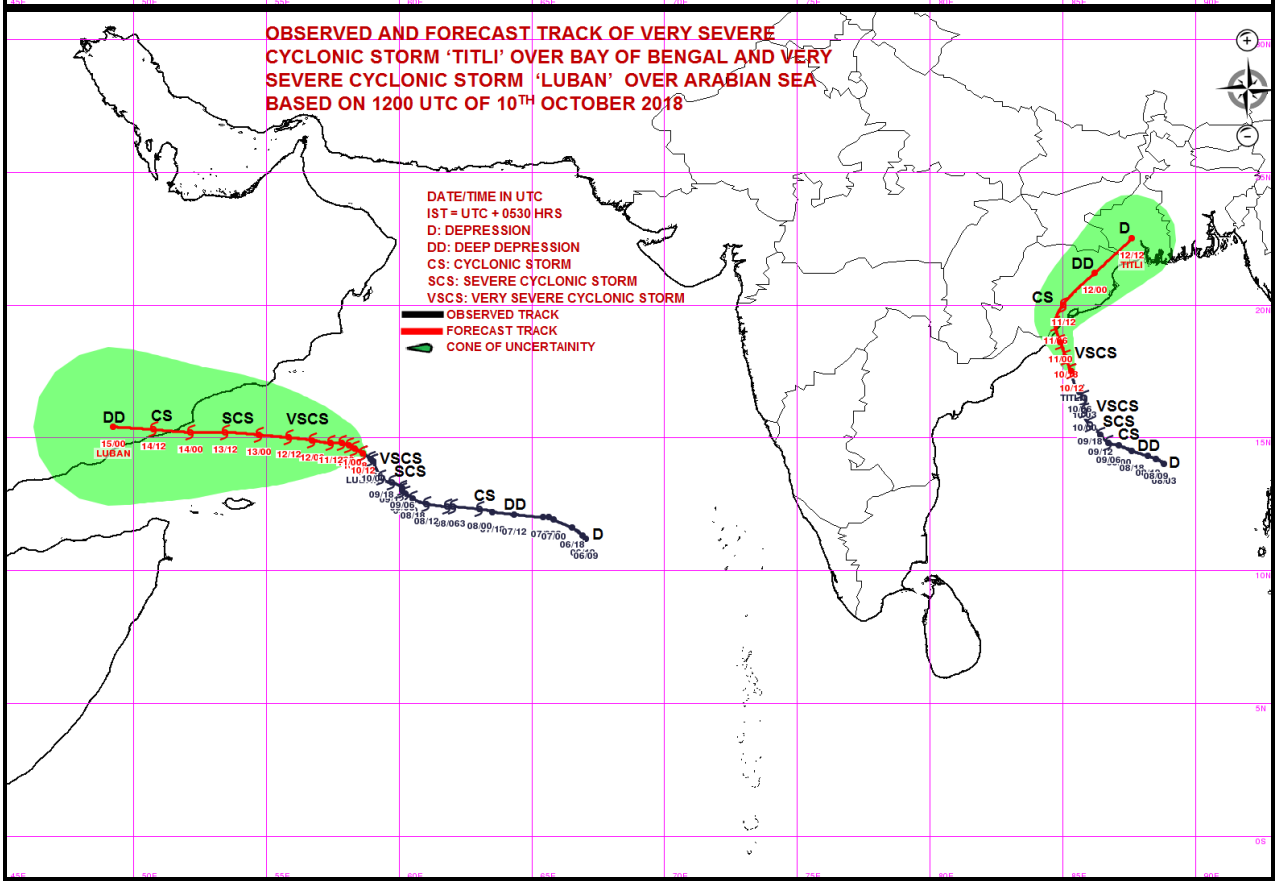




Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%

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





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.

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

BULLETIN NO.: 22 (BOB 08/2018) and BULLETIN NO. : 32 (ARB 04/2018)

TIME OF ISSUE: 0145 HOURS IST **DATED: 11.10.2018**

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)
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 (23385843)
DIRECTOR GENERAL, AIR (23421105, 23421219)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 24363261)
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. 04896-262184)
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)
CHIEF SECRETARY, ANDHRA PRADESH (FAX NO. 0866-2441029)
CHIEF SECRETARY, ODISHA (FAX NO. 0674 -2536660)
CHIEF SECRETARY, WEST BENGAL (FAX NO. 033 -22144328)
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CHIEF SECRETARY, MIZORAM (FAX NO. 389 -2322745)
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CHIEF SECRETARY, ASSAM (FAX NO. 0361-2237200)
CHIEF SECRETARY, MEGHALAYA (FAX NO. 0364 -2225978)

Sub: (a) Very Severe Cyclonic Storm 'TITLI' over westcentral Bay of Bengal: Cyclone Warning for districts of north Andhra Pradesh & south Odisha coasts: Red Message.

(b) Very Severe Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea

(a) Very Severe Cyclonic Storm 'TITLI' over westcentral Bay of Bengal: Cyclone Warning for districts of north Andhra Pradesh & Odisha coasts: Red Message.

The very severe cyclonic storm (VSCS), '**TITLI**' is being monitored by the coastal Doppler Weather Radars at Visakhapatnam, Gopalpur and Paradip. The latest observations indicate that the Very Severe Cyclonic Storm **'TITLI'** over westcentral Bay of Bengal moved north-northwestwards with a speed of about 13 kmph during past 06 hours and lay cantered at 2330 hrs IST of yesterday, the 10th October 2018 over Westcentral Bay of Bengal near latitude 18.2°N and longitude 85.1°E, about 120 km south-southeast of Gopalpur (Odisha) and 100 km southeast of Kalingapatnam (Andhra Pradesh). It is very likely to move north-northwestwards and cross north Andhra Pradesh and south Odisha coasts southwest of Gopalpur by morning of today, the 11th October as a VSCS with maximum sustained surface wind speed of 140-150 kmph gusting to 165 kmph. Thereafter, it is very likely to re-curve northeastwards, move towards Gangetic West Bengal across Odisha and weaken gradually. Forecast track and intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
10.10.18/2330	18.2/85.1	140-150 gusting to 165	Very Severe Cyclonic Storm
11.10.18/0530	18.6/84.9	140-150 gusting to 165	Very Severe Cyclonic Storm
11.10.18/1130	19.3/84.7	125-135 gusting to 150	Very Severe Cyclonic Storm
11.10.18/1730	20.0/85.0	70-80 gusting to 90	Cyclonic Storm
11.10.18/2330	20.6/85.6	60-70 gusting to 80	Cyclonic Storm
12.10.18/1130	21.8/86.9	50-60 gusting to 70	Deep Depression
12.10.18/2330	23.0/88.2	40-50 gusting to 60	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.

(i) Heavy rainfall warnings:

Region	10 Oct. 2018 (Rainfall till 0830 IST of next day)	11 Oct. 2018 (Rainfall till 0830 IST of next day)	12 Oct. 2018(Rainfall till 0830 IST of next day)	13 Oct. 2018(Rainfall till 0830 IST of next day)
Odisha	Rainfall at most places with heavy to very heavy falls at a few places and extremely heavy falls at Isolated Places over coastal Odisha and isolated heavy over interior Odiha.	Rainfall at most places with heavy to very heavy falls at a few places and extremely heavy falls at Isolated Places over coastal & interior Odisha.	Rainfall at many places with heavy falls at Isolated Places over north Odisha.	Nil
North Coastal Andhra Pradesh	Rainfall at many places with heavy to very heavy falls at Isolated Places.	Rainfall at many places with heavy to very heavy and extremely heavy falls at Isolated Places.	Nil	Nil
Gangetic West Bengal	Rainfall at many places with heavy to very heavy falls at Isolated Places over coastal West Bengal	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at many places with heavy to very heavy falls at Isolated Places	Nil
Assam & Meghalaya	Nil	Rainfall at most places with heavy falls at isolated places	Rainfall at most places with heavy to very heavy falls at isolated places	Rainfall at many places with heavy falls at isolated places
Mizoram & Tripura	Rainfall at most places with heavy falls at isolated places	Rainfall at most places with heavy to very heavy falls at isolated places	Rainfall at most places with heavy to very heavy falls at isolated places	Rainfall at many places with heavy falls at isolated places

Legends: Red-Take Action; Orange- Be prepared; Yellow- be updated; 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

- **Gale wind speed reaching 140-150 kmph gusting to 165 kmph** very likely over westcentral & adjoining north Bay of Bengal and **along & off south Odisha & adjoining districts of north Andhra Pradesh coasts from tonight, the 10th October 2018 to forenoon of tomorrow the 11th October 2018.** Squally wind speed reaching 80-90 kmph gusting to 100 kmph very likely along & off north Odisha and remaining districts of north Andhra Pradesh coasts during the same period.
- Squally winds speed reaching 60-70 kmph gusting 80 kmph very likely along & off West Bengal coast from tonight onwards.

(iii) Sea condition

- The sea condition is phenomenal over westcentral & north Bay of Bengal and along & off south Odisha and adjoining north Andhra Pradesh coasts and very likely continue to remain so till 11th October 2018 forenoon.

(iv) Storm Surge Warning

- Storm surge of height of about 1.0 meter above astronomical tide is very likely inundate low lying areas of Srikakulam district of Andhra Pradesh; Ganjam, Khurda & Puri districts of Odisha at the time of landfall.

(v) Damage Expected over districts of Visakhapatnam, Vizianagaram and Srikakulam of Andhra Pradesh, Gajapati, Ganjam, Khurda, Nayagarh and Puri districts of Odisha:

- 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. Breaking of tree branches and uprooting of large avenue trees.
- Major damage to Kutcha and and Pucca roads. Flooding of escape routes. Minor disruption of railway.
- Widespread damage to standing crops, plantations, orchards, falling of green coconuts and tearing of palm fronds. Blowing down of bushy trees.

(vi) Action Suggested:

- Total suspension of fishing operations.
- The fishermen are advised not to venture into westcentral & north Bay of Bengal till 11th October 2018. Those, who are out in deep sea areas are advised return to the coast immediately.
- Evacuation from coastal areas need to be mobilised. People advised to remain indoors.
- Judicious regulation of rail and road traffic needed.

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.

(vii) Post landfall Outlook:

- After the landfall the very severe cyclonic storm, '**TITLI'** is very likely to maintain the intensity of cyclone till evening of 11th October 2018, while moving northeastwards across Odisha. As a result, the gale wind speed of 60-90 kmph is very likely to prevail over the interior districts adjacent to south coastal Odisha during 11th morning to afternoon and wind speed of 60-70 kmph gusting to 80 kmph over the interior districts adjacent to north coastal Odisha from 11th noon to night.
- It may lead to breaking of tree branches, uprooting of trees, minor damage to power and communication lines, Damage to thatched huts, damage to standing crops.

(b) Very Severe Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea:

The Very Severe Cyclonic Storm **'LUBAN'** over westcentral Arabian Sea moved northwestwards with a speed of 05 kmph during past six hours and lay centered at 2330 hrs IST of yesterday, the 10th October 2018 over westcentral Arabian Sea, near latitude 14.6°N and longitude 58.4°E, about 530 km east-southeast of Salalah (Oman), 530 km east-northeast of Socotra Islands (Yemen) and 700 km east-southeast of Al-Ghaidah (Yemen). It is very likely to intensify further and move west-northwestwards towards Yemen & South Oman Coasts during next 4 days. Forecast track & intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
10.10.18/2330	14.6/58.4	135-145 gusting to 160	Very Severe Cyclonic Storm
11.10.18/0530	14.7/58.1	140-150 gusting to 165	Very Severe Cyclonic Storm
11.10.18/1130	14.8/57.8	140-150 gusting to 165	Very Severe Cyclonic Storm
11.10.18/1730	14.8/57.4	140-150 gusting to 165	Very Severe Cyclonic Storm
11.10.18/2330	14.9/57.0	135-145 gusting to 160	Very Severe Cyclonic Storm
12.10.18/1130	14.9/56.2	130-140 gusting to 155	Very Severe Cyclonic Storm
12.10.18/2330	15.0/55.3	120-130 gusting to 145	Very Severe Cyclonic Storm
13.10.18/1130	15.1/54.1	115-125 gusting to 140	Very Severe Cyclonic Storm
13.10.18/2330	15.2/52.8	100-110 gusting to 125	Severe Cyclonic Storm
14.10.18/1130	15.2/51.4	90-100 gusting to 115	Cyclonic Storm
14.10.18/2330	15.3/50.0	70-80 gusting to 90	Cyclonic Storm
15.10.18/1130	15.4/48.9	50-60 gusting to 70	Deep Depression

Warnings:

(i) Wind warning

(ii) Gale wind speed reaching 130-140 kmph gusting to 155 kmph is prevailing over westcentral & adjoining southwest Arabian Sea. It is very likely to increase gradually becoming 140-150 kmph gusting to 165 kmph by 11th October 2018 evening over westcentral Arabian Sea around the system centre. The wind speed is very likely to decrease gradually over southwest Arabian Sea becoming squally wind speed reaching 50-60 kmph gusting to 70 kmph on 11th October and further decrease thereafter.

(iii) Sea condition

- The sea condition is phenomenal around the system centre. It is very likely continued to be phenomenal over westcentral Arabian Sea till 13th October 2018 and over Gulf of Aden during 11th to 14th October.

(iv) Fishermen Warning

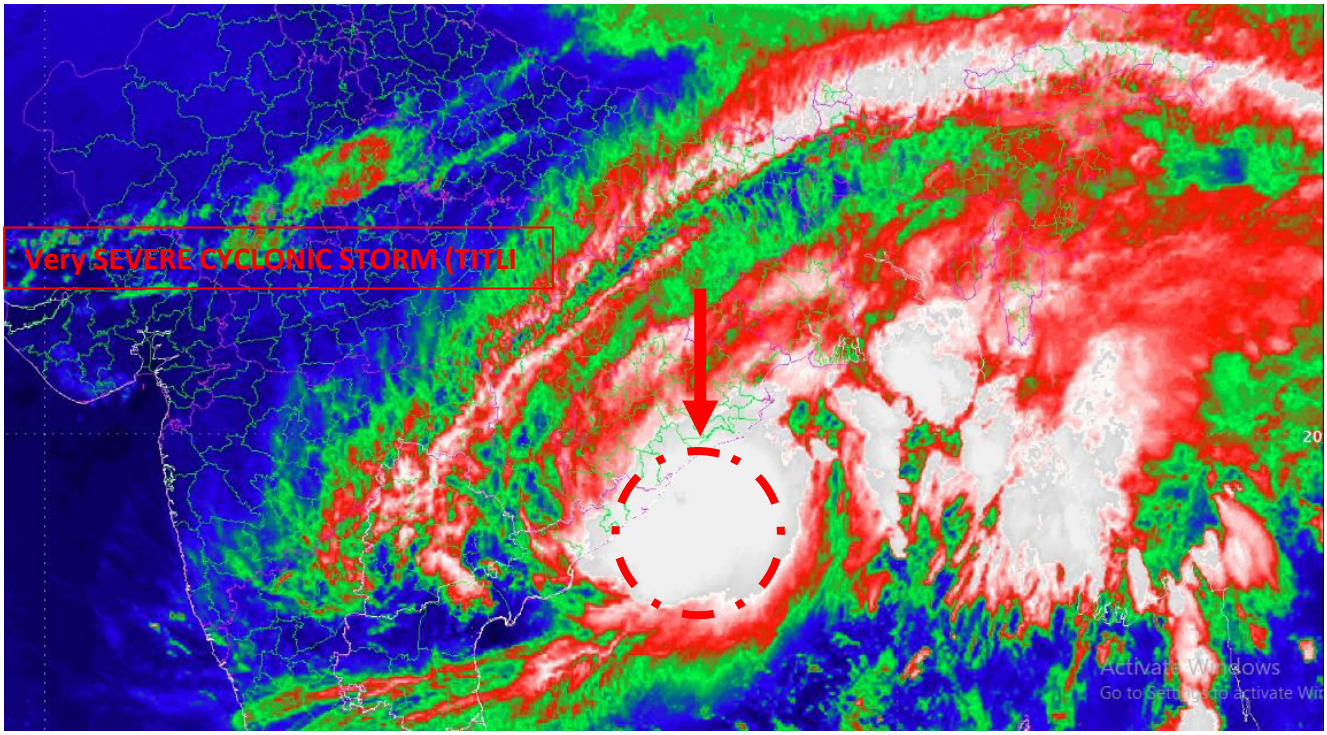
- The fishermen are advised not to venture into deep sea areas of westcentral Arabian Sea & Gulf of Aden till 14th October and adjoining southwest Arabian Sea till 11th October.

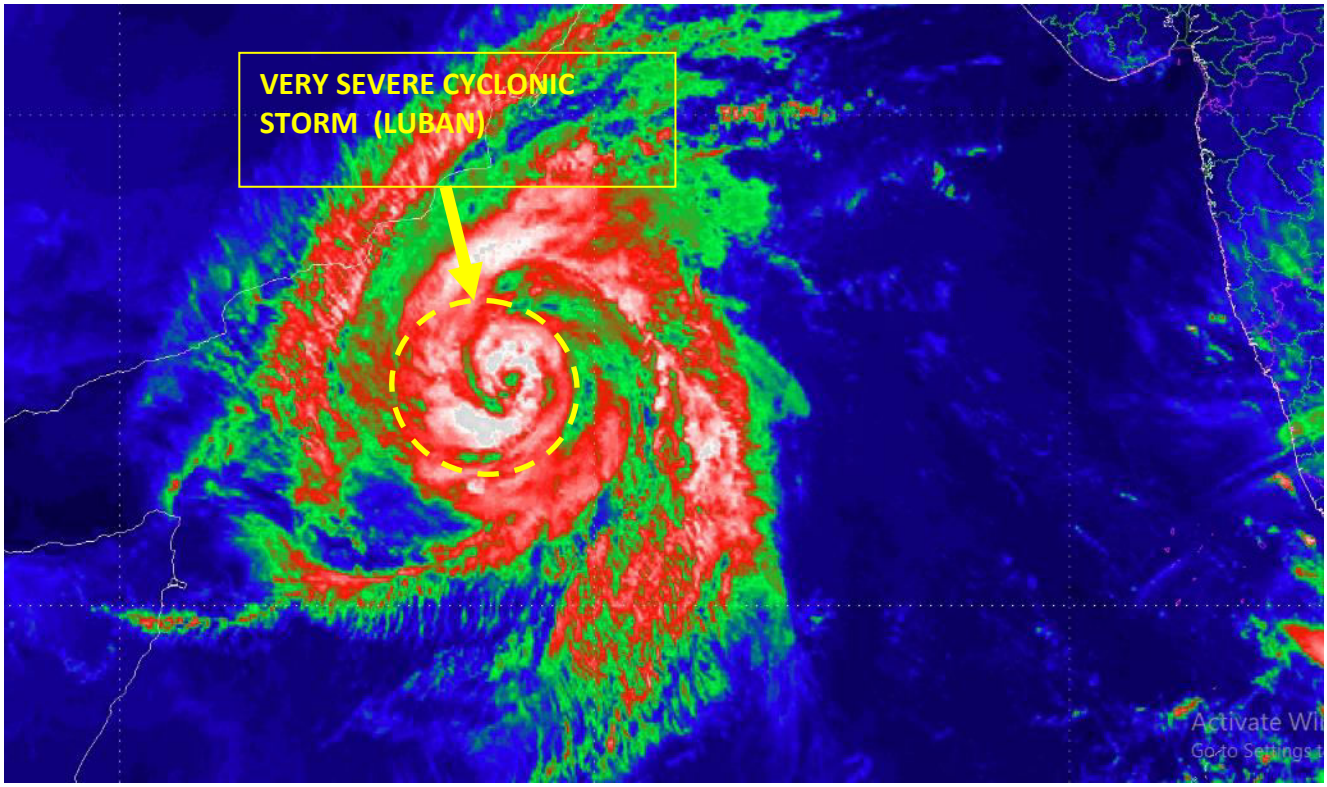
The next bulletin will be issued at 0530 hrs IST of today, the 11th October, 2018.

(D. Joardar)
Scientist-E, RSMC, New Delhi

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

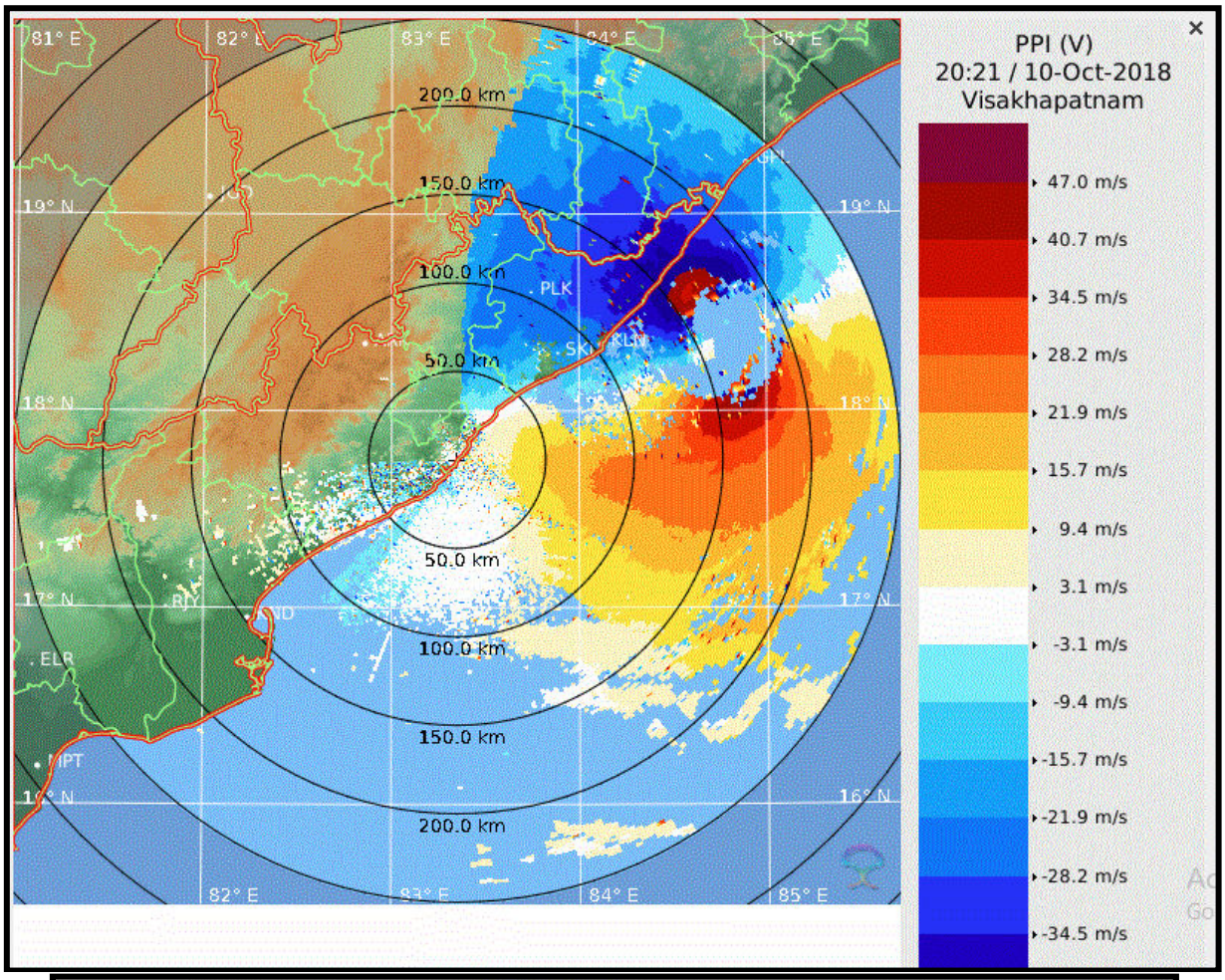
Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
Rainfall amount (mm): Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.

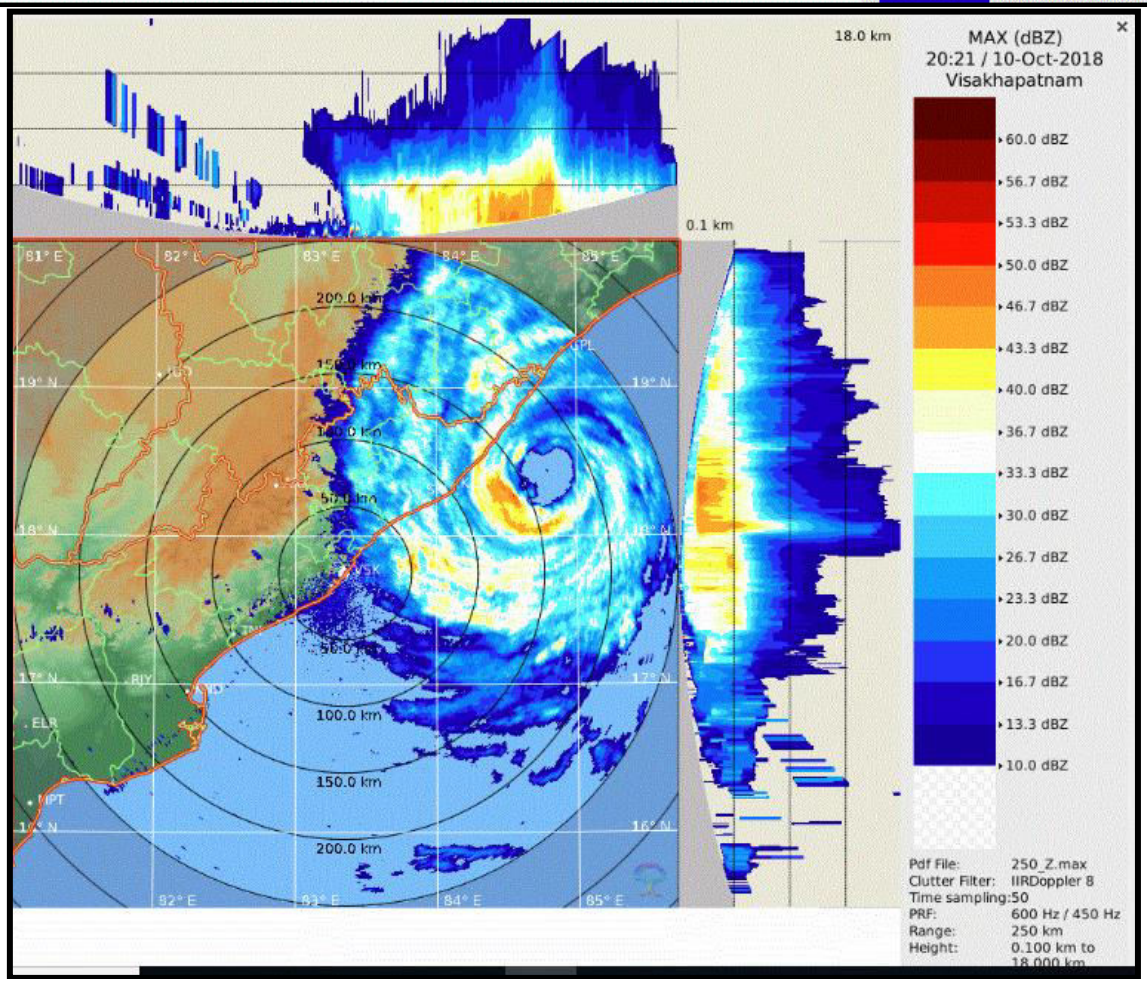




Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%

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





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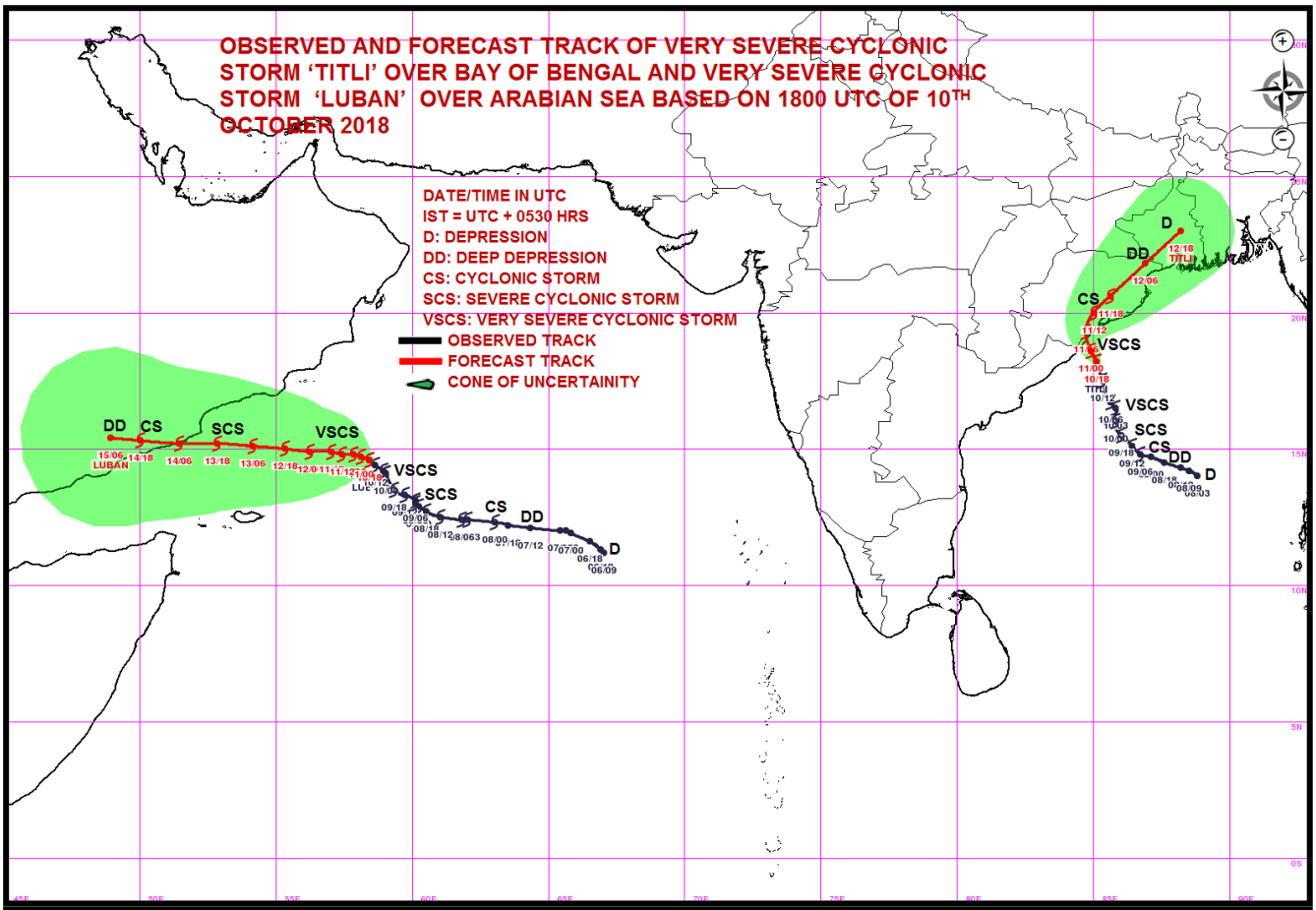

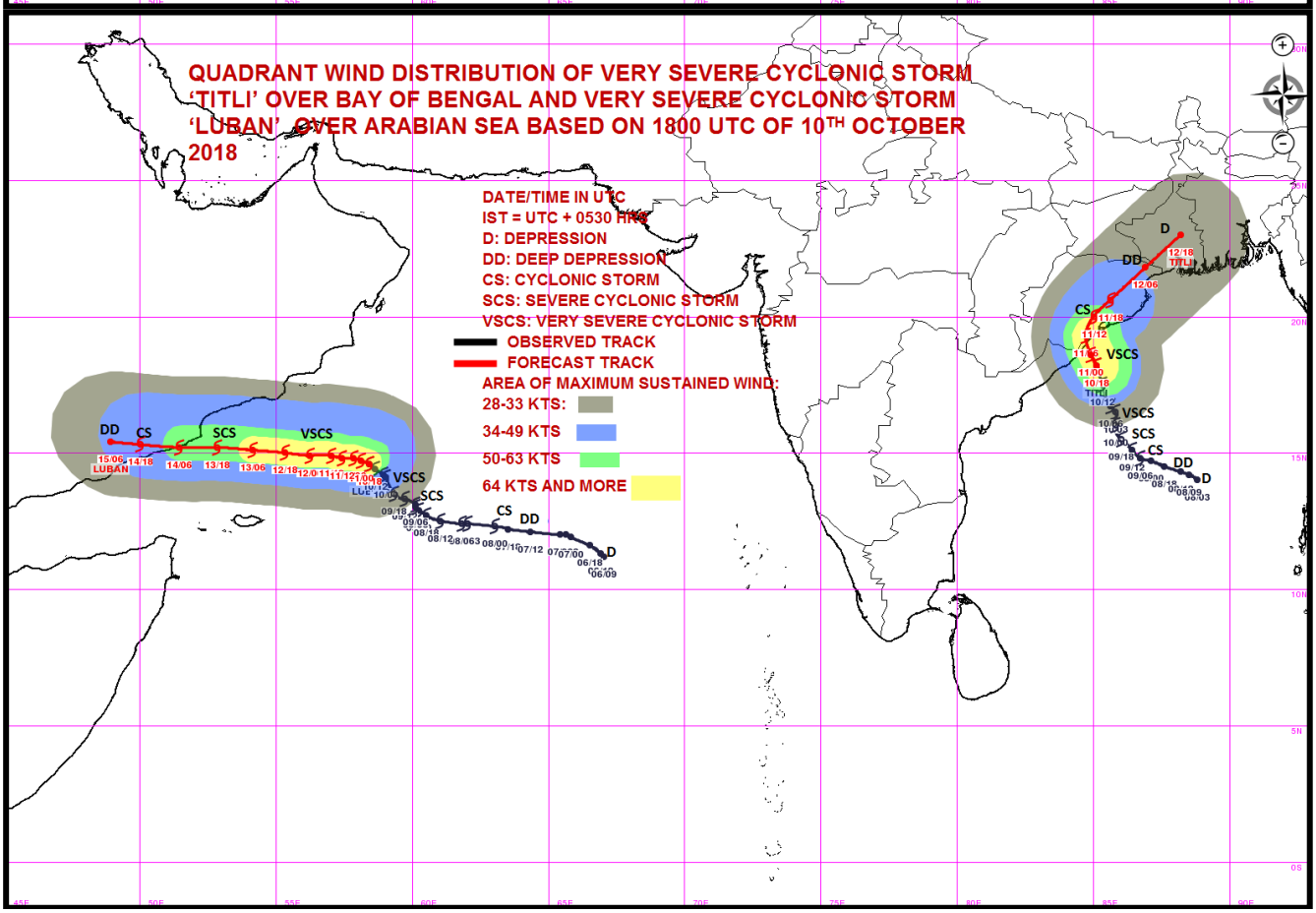

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India Meteorological Department
Earth System Science Organisation
(Ministry of Earth Sciences)

BULLETIN NO.: 23 (BOB 08/2018) and BULLETIN NO. : 33 (ARB 04/2018)

TIME OF ISSUE: 0400 HOURS IST **DATED: 11.10.2018**

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)
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 (23385843)
DIRECTOR GENERAL, AIR (23421105, 23421219)
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D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 24363261)
DIRECTOR, PUNCTUALITY, INDIAN RAILWAYS (FAX NO. 23388503)
CHIEF SECRETARY, TAMILNADU (FAX NO. 044-25672304)
CHIEF SECRETARY, KERALA (FAX NO. 0471-2327176)
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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)
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CHIEF SECRETARY, MIZORAM (FAX NO. 389 -2322745)
CHIEF SECRETARY, TRIPURA (FAX NO. 0381-2414013)
CHIEF SECRETARY, ASSAM (FAX NO. 0361-2237200)
CHIEF SECRETARY, MEGHALAYA (FAX NO. 0364 -2225978)

Sub: (a) Very Severe Cyclonic Storm 'TITLI' over westcentral Bay of Bengal: Cyclone Warning for districts of north Andhra Pradesh & south Odisha coasts: Red Message.

(b) Very Severe Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea

(a) Very Severe Cyclonic Storm 'TITLI' over westcentral Bay of Bengal: Cyclone Warning for districts of north Andhra Pradesh & Odisha coasts: Red Message.

The very severe cyclonic storm (VSCS), '**TITLI**' is being monitored by the coastal Doppler Weather Radars at Visakhapatnam, Gopalpur and Paradip. The latest observations indicate that the Very Severe Cyclonic Storm **'TITLI'** over westcentral Bay of Bengal moved north-northwestwards with a speed of about 19 kmph during past 06 hours and lay centered at 0230 hrs IST of today, the 11th October 2018 over Westcentral Bay of Bengal near latitude 18.6°N and longitude 84.7°E, close to north Andhra Pradesh – south Odisha coast. Gopalpur reported 107 kmph and Kalingapatnam reported 55 kmph surface wind speed at 0230 hrs IST of today, the 11th October . It is very likely to move north-northwestwards and cross north Andhra Pradesh and south Odisha coasts to the southwest of Gopalpur within next 3 hours as a VSCS with maximum sustained surface wind speed of 140-150 kmph gusting to 165 kmph. Thereafter, it is very likely to re-curve gradually northeastwards, move towards Gangetic West Bengal across Odisha and weaken gradually. Forecast track and intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
11.10.18/0230	18.6/84.7	140-150 gusting to 165	Very Severe Cyclonic Storm
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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.

(i) Heavy rainfall warnings:

Region	10 Oct. 2018 (Rainfall till 0830 IST of next day)	11 Oct. 2018 (Rainfall till 0830 IST of next day)	12 Oct. 2018(Rainfall till 0830 IST of next day)	13 Oct. 2018(Rainfall till 0830 IST of next day)
Odisha	Rainfall at most places with heavy to very heavy falls at a few places and extremely heavy falls at Isolated Places over coastal Odisha and isolated heavy over interior Odiha.	Rainfall at most places with heavy to very heavy falls at a few places and extremely heavy falls at Isolated Places over coastal & interior Odisha.	Rainfall at many places with heavy falls at Isolated Places over north Odisha.	Nil
North Coastal Andhra Pradesh	Rainfall at many places with heavy to very heavy falls at Isolated Places.	Rainfall at many places with heavy to very heavy and extremely heavy falls at Isolated Places.	Nil	Nil
Gangetic West Bengal	Rainfall at many places with heavy to very heavy falls at Isolated Places over coastal West Bengal	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at many places with heavy to very heavy falls at Isolated Places	Nil
Assam & Meghalaya	Nil	Rainfall at most places with heavy falls at isolated places	Rainfall at most places with heavy to very heavy falls at isolated places	Rainfall at many places with heavy falls at isolated places
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Legends: Red-Take Action; Orange- Be prepared; Yellow- be updated; 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

- **Gale wind speed reaching 140-150 kmph gusting to 165 kmph** very likely over westcentral & adjoining north Bay of Bengal and **along & off south Odisha & adjoining districts of north Andhra Pradesh coasts from tonight, the 10th October 2018 to forenoon of tomorrow the 11th October 2018.** Squally wind speed reaching 80-90 kmph gusting to 100 kmph very likely along & off north Odisha and remaining districts of north Andhra Pradesh coasts during the same period.
- Squally winds speed reaching 60-70 kmph gusting 80 kmph very likely along & off West Bengal coast from tonight onwards.

(iii) Sea condition

- The sea condition is phenomenal over westcentral & north Bay of Bengal and along & off south Odisha and adjoining north Andhra Pradesh coasts and very likely continue to remain so till 11th October 2018 forenoon.

(iv) Storm Surge Warning

- Storm surge of height of about 1.0 meter above astronomical tide is very likely inundate low lying areas of Srikakulam district of Andhra Pradesh; Ganjam, Khurda & Puri districts of Odisha at the time of landfall.

(v) Damage Expected over districts of Visakhapatnam, Vizianagaram and Srikakulam of Andhra Pradesh, Gajapati, Ganjam, Khurda, Nayagarh and Puri districts of Odisha:

- Total destruction of thatched houses/ extensive damage to kutcha houses. Some damage to pucca houses. Potential threat from flying objects.
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(vi) Action Suggested:

- Total suspension of fishing operations.
- The fishermen are advised not to venture into westcentral & north Bay of Bengal till 11th October 2018. Those, who are out in deep sea areas are advised return to the coast immediately.
- Evacuation from coastal areas need to be mobilised. People advised to remain indoors.

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- Judicious regulation of rail and road traffic needed.

(vii) Post landfall Outlook:

- After the landfall the very severe cyclonic storm, '**TITLI'** is very likely to maintain the intensity of cyclone till evening of 11th October 2018, while moving northeastwards across Odisha. As a result, the gale wind speed of 60-90 kmph is very likely to prevail over the interior districts adjacent to south coastal Odisha during 11th morning to afternoon and wind speed of 60-70 kmph gusting to 80 kmph over the interior districts adjacent to north coastal Odisha from 11th noon to night.
- It may lead to breaking of tree branches, uprooting of trees, minor damage to power and communication lines, Damage to thatched huts, damage to standing crops.

(b) Very Severe Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea:

The Very Severe Cyclonic Storm **'LUBAN'** over westcentral Arabian Sea remained practically stationary during past three hours and lay centered at 0230 hrs IST of today, the 11th October 2018 over westcentral Arabian Sea, near latitude 14.6°N and longitude 58.4°E, about 530 km east-southeast of Salalah (Oman), 530 km east-northeast of Socotra Islands (Yemen) and 700 km east-southeast of Al-Ghaidah (Yemen). It is very likely to intensify further and move west-northwestwards towards Yemen & South Oman Coasts during next 4 days. Forecast track & intensity are given in the following table:

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11.10.18/2330	14.9/57.0	135-145 gusting to 160	Very Severe Cyclonic Storm
12.10.18/1130	14.9/56.2	130-140 gusting to 155	Very Severe Cyclonic Storm
12.10.18/2330	15.0/55.3	120-130 gusting to 145	Very Severe Cyclonic Storm
13.10.18/1130	15.1/54.1	115-125 gusting to 140	Very Severe Cyclonic Storm
13.10.18/2330	15.2/52.8	100-110 gusting to 125	Severe Cyclonic Storm
14.10.18/1130	15.2/51.4	90-100 gusting to 115	Cyclonic Storm
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Warnings:

(i) Wind warning

(ii) Gale wind speed reaching 130-140 kmph gusting to 155 kmph is prevailing over westcentral & adjoining southwest Arabian Sea. It is very likely to increase gradually becoming 140-150 kmph gusting to 165 kmph by 11th October 2018 evening over westcentral Arabian Sea around the system centre. The wind speed is very likely to decrease gradually over southwest Arabian Sea becoming squally wind speed reaching 50-60 kmph gusting to 70 kmph on 11th October and further decrease thereafter.

(iii) Sea condition

- The sea condition is phenomenal around the system centre. It is very likely continued to be phenomenal over westcentral Arabian Sea till 13th October 2018 and over Gulf of Aden during 11th to 14th October.

(iv) Fishermen Warning

- The fishermen are advised not to venture into deep sea areas of westcentral Arabian Sea & Gulf of Aden till 14th October and adjoining southwest Arabian Sea till 11th October.

The next bulletin will be issued at 0830 hrs IST of today, the 11th October, 2018.

(D. Joardar)
Scientist-E, RSMC, New Delhi

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

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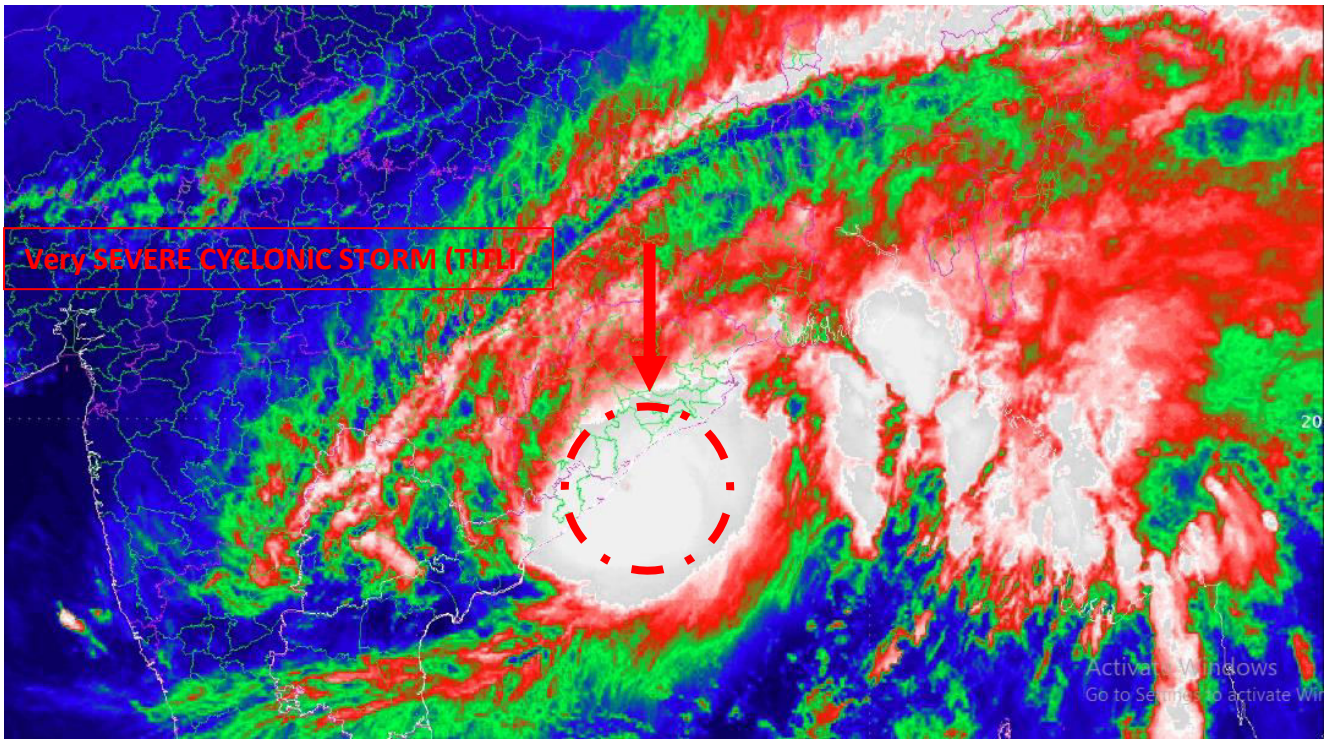

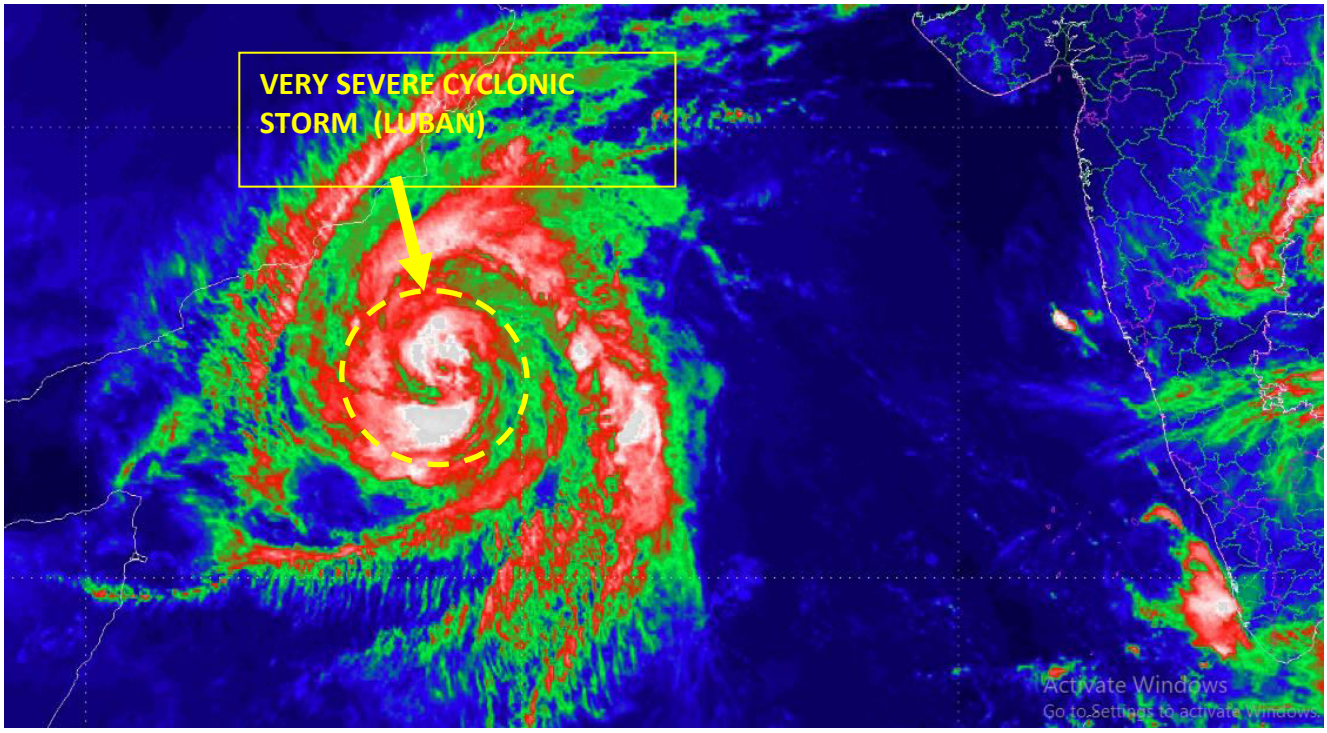

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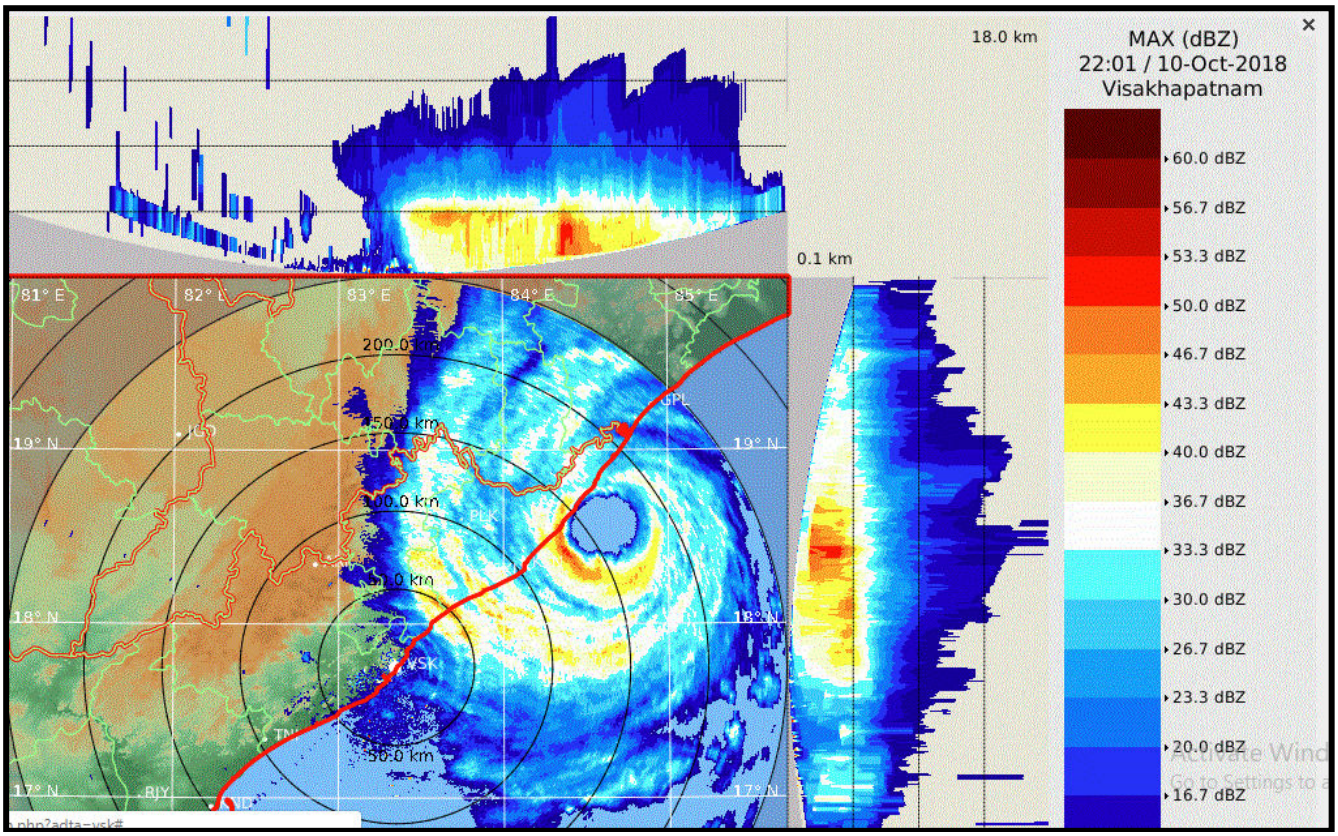
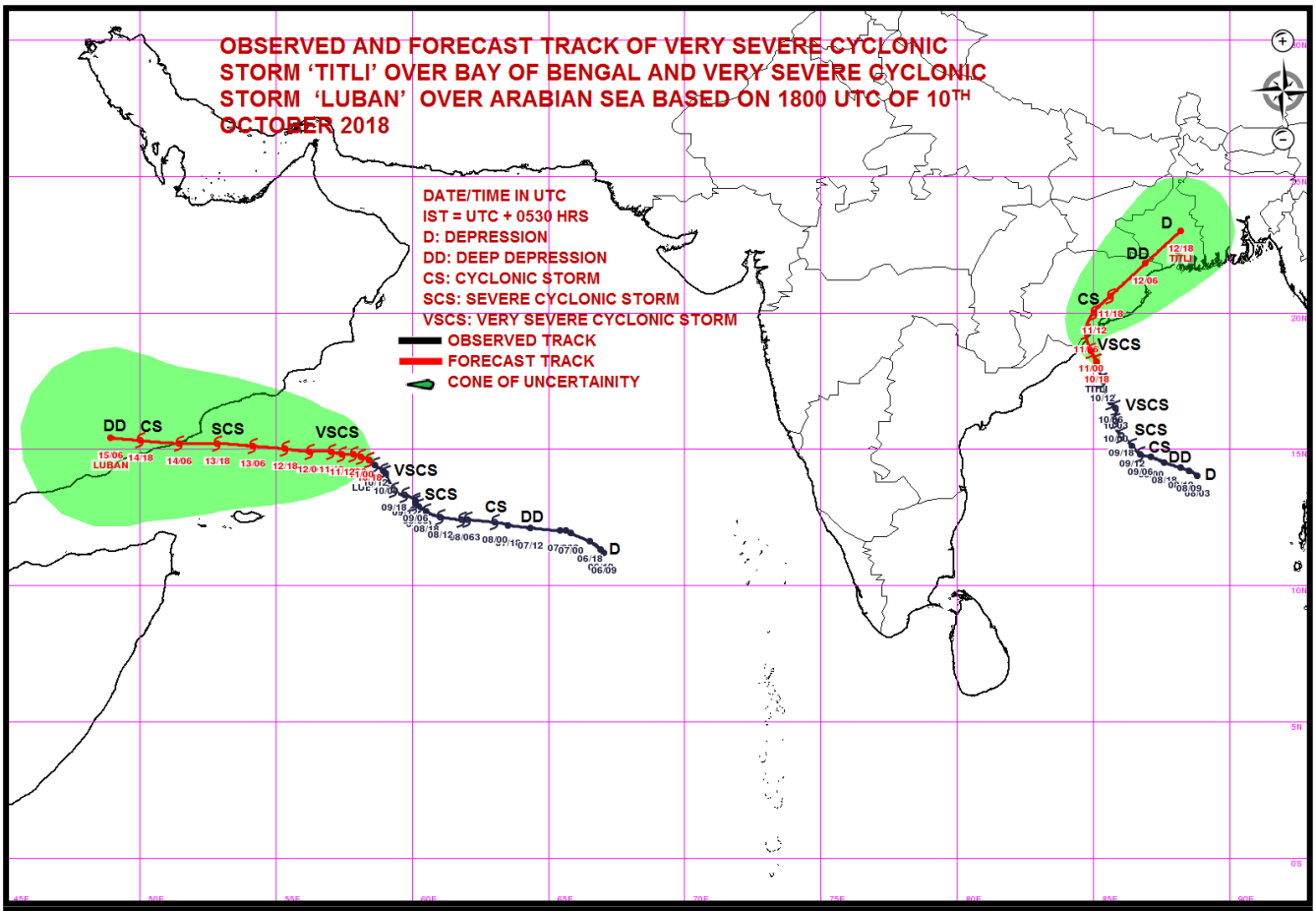
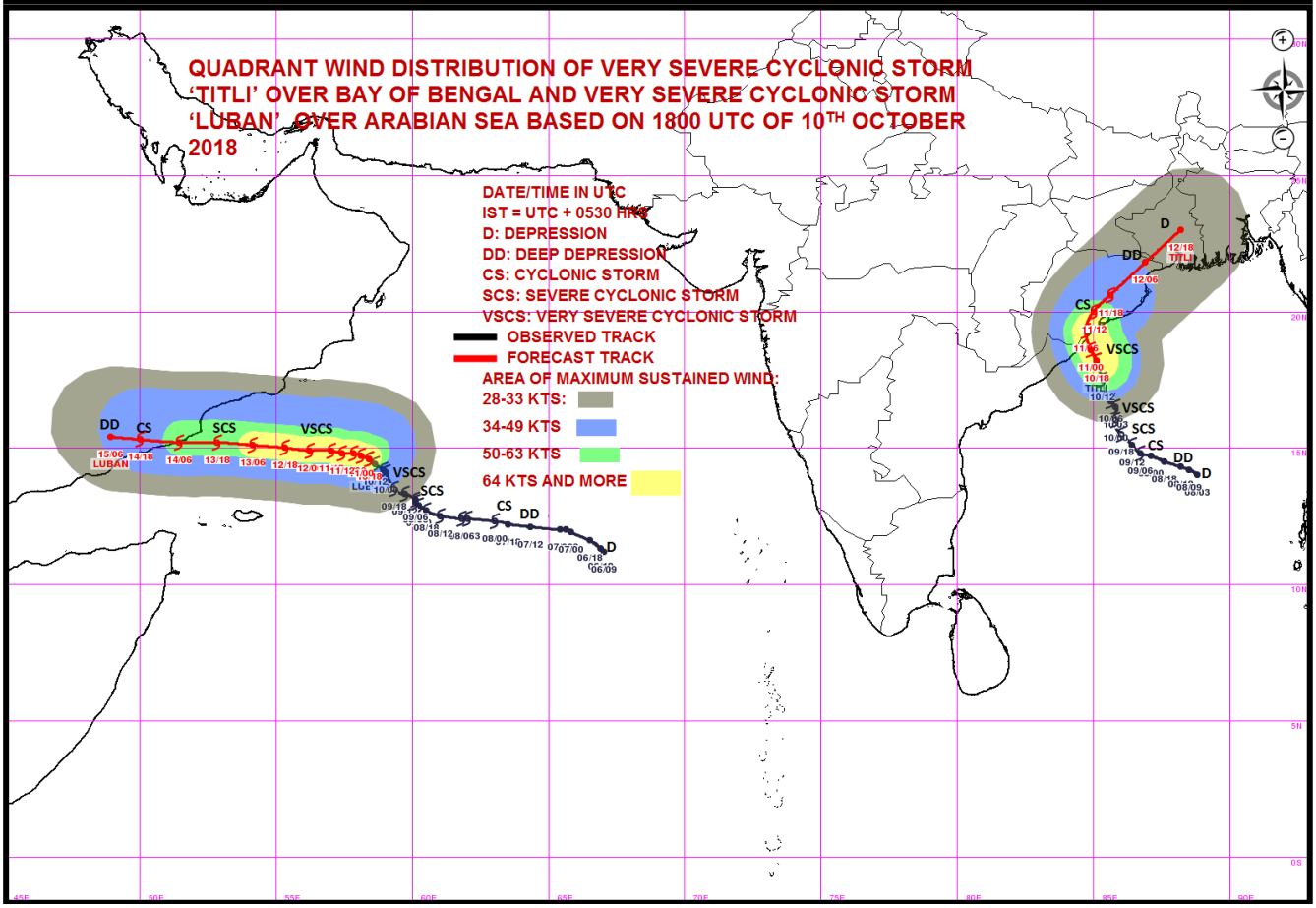
Rainfall amount (mm): Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.



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.





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.

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

BULLETIN NO.: 24 (BOB 08/2018) and BULLETIN NO. : 34 (ARB 04/2018)

TIME OF ISSUE: 0800 HOURS IST **DATED: 11.10.2018**

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)
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 (23385843)
DIRECTOR GENERAL, AIR (23421105, 23421219)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 24363261)
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. 04896-262184)
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)
CHIEF SECRETARY, ANDHRA PRADESH (FAX NO. 0866-2441029)
CHIEF SECRETARY, ODISHA (FAX NO. 0674 -2536660)
CHIEF SECRETARY, WEST BENGAL (FAX NO. 033 -22144328)
CHIEF SECRETARY, ANDAMAN & NICOBAR ISLANDS (FAX NO. 03192- 232656)

CHIEF SECRETARY, MIZORAM (FAX NO. 389 -2322745)
CHIEF SECRETARY, TRIPURA (FAX NO. 0381-2414013)
CHIEF SECRETARY, ASSAM (FAX NO. 0361-2237200)
CHIEF SECRETARY, MEGHALAYA (FAX NO. 0364 -2225978)

Sub: (a) Very Severe Cyclonic Storm 'TITLI' over north Coastal Andhra Pradesh & adjoining south Odisha: Cyclone Warning for districts of north Andhra Pradesh & Odisha coasts
(b) Very Severe Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea

(a) Very Severe Cyclonic Storm 'TITLI' over north Coastal Andhra Pradesh & adjoining south Odisha: Cyclone Warning for districts of north Andhra Pradesh & Odisha coasts

The very severe cyclonic storm, '**TITLI**' is being monitored by the coastal Doppler Weather Radars at Visakhapatnam, Gopalpur and Paradip. The latest observations indicate that the Very Severe Cyclonic Storm **'TITLI'** over westcentral Bay of Bengal moved northwestwards with a speed of about 17 kmph during past 06 hours, crossed north Andhra Pradesh- south Odisha coasts, near latitude 18.8°N and longitude 84.5°E (near Palasa, Srikakulam District) to the southwest of Gopalpur, as a Very Severe Cyclonic Storm with estimated maximum sustained surface wind speed of 140-150 Kmph gusting to 165 Kmph between 0430 and 0530 hours IST of today, the 11th October 2018. It lay centred at 0530 hrs IST of today, the 11th October 2018 over north Coastal Andhra Pradesh & adjoining south Odisha near latitude 18.8°N and longitude 84.4°E, about 70 km southwest of Gopalpur and 60 km north-northeast of Kalingapatnam.

According to hourly coastal observations, Gopalpur reported surface wind speed of 126 kmph at 0430 hours IST and Kalingapatnam reported 59 kmph at 0330 hrs IST of today, the 11th October 2018.

It is very likely to move northwestwards for next 12 hours and then re-curve northeastwards towards Gangetic West Bengal across Odisha. It is very likely to weaken gradually becoming severe cyclonic storm around noon, cyclonic storm around evening of today and a deep depression by morning of tomorrow, the 12th October 2018. Forecast track and intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
11.10.18/0530	18.8/84.4	135-145 gusting to 160	Very Severe Cyclonic Storm
11.10.18/1130	19.1/84.2	110-120 gusting to 135	Severe Cyclonic Storm
11.10.18/1730	19.5/84.0	80-90 gusting to 100	Cyclonic Storm
11.10.18/2330	20.1/84.5	60-70 gusting to 80	Cyclonic Storm
12.10.18/0530	20.7/85.1	50-60 gusting to 70	Deep 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.

12.10.18/1730	21.7/86.3	40-50 gusting to 60	Depression

(i) Heavy rainfall warnings:

Region	11 Oct. 2018 (Rainfall till 0830 IST of next day)	12 Oct. 2018(Rainfall till 0830 IST of next day)	13 Oct. 2018(Rainfall till 0830 IST of next day)
Odisha	Rainfall at most places with heavy to very heavy falls at a few places and extremely heavy falls at Isolated Places over coastal & interior Odisha.	Rainfall at many places with heavy falls at Isolated Places over north Odisha.	Nil
North Coastal Andhra Pradesh	Rainfall at most places with heavy to very heavy falls at Isolated Places	Nil	Nil
Gangetic West Bengal	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at many places with heavy to very heavy falls at Isolated Places	Nil
Assam & Meghalaya	Rainfall at most places with heavy falls at isolated places	Rainfall at most places with heavy to very heavy falls at isolated places	Rainfall at many places with heavy falls at isolated places
Mizoram & Tripura	Rainfall at most places with heavy to very heavy falls at isolated places	Rainfall at most places with heavy to very heavy falls at isolated places	Rainfall at many places with heavy falls at isolated places

Legends: Red-Take Action; Orange- Be prepared; Yellow- be updated; 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

- **Gale wind speed reaching 135-145 kmph gusting to 160 kmph along & off south Odisha & adjoining districts of north Andhra Pradesh coasts and adjoining south Odisha districts during next three hours and gradually decrease thereafter becoming** gale wind speed reaching 80-90 kmph gusting to 100 kmph in evening and squally wind speed of 45-55 kmph gusting to 65 kmph from tonight to tomorrow morning.
- Gale winds speed reaching 60-70 kmph gusting 80 kmph very likely along & off north Odisha and West Bengal coasts during next 12 hours and decrease becoming squally wind speed of 45-55 kmph gusting to 65 kmph thereafter subsequent 24 hours. Squally wind speed of 50-60 kmph gusting to 70 kmph is very likely over adjoining districts of north Coastal Odisha from today afternoon for subsequent 12 hours.

(iii) Sea condition

- The sea condition will be phenomenal over westcentral & north Bay of Bengal and along & off south Odisha and adjoining north Andhra Pradesh coasts during next 06 hours. It will become very high to high along & off these coasts for subsequent 12 hours and gradually improve thereafter. It will become high along & off north Odisha coast on 11th during next 18 hours and become very rough for subsequent 12 hours. Sea conditions will be rough to very rough along & off West Bengal Coast on 11th & 12th October.

(iv) Storm Surge Warning

- Storm surge of height of about 0.5 meter above astronomical tide is very likely to inundate low lying areas of Srikakulam district of Andhra Pradesh; Ganjam, Khurda & Puri districts of Odisha during next 06 hours.

(v) Damage Expected over districts of Visakhapatnam, Vizianagaram and Srikakulam of Andhra Pradesh, Gajapati, Ganjam, Khurda, Nayagarh and Puri districts of Odisha:

- 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. Breaking of tree branches and uprooting of large avenue trees.
- Major damage to Kutcha and and Pucca roads. Flooding of escape routes. Minor disruption of railway.
- Widespread damage to standing crops, plantations, orchards, falling of green coconuts and tearing of palm fronds. Blowing down of bushy trees.

(vi) Action Suggested:

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.

- Total suspension of fishing operations.
- The fishermen are advised not to venture into westcentral till 11th October 2018 and north Bay of Bengal on 11th & 12th October 2018.
- People advised to remain indoors.
- Judicious regulation of rail and road traffic needed.

(b) Very Severe Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea:

The Very Severe Cyclonic Storm **'LUBAN'** over westcentral Arabian Sea moved west-northwestwards with a speed of about 06 kmph during past 06 hours and lay centered at 0530 hrs IST of today, the 11th October 2018 over westcentral Arabian Sea, near latitude 14.7°N and longitude 58.1°E, about 500 km east-southeast of Salalah (Oman), 510 km east-northeast of Socotra Islands (Yemen) and 660 km east-southeast of Al-Ghaidah (Yemen). It is very likely to intensify further and move west-northwestwards towards Yemen & South Oman Coasts during next 4 days. Forecast track & intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
11.10.18/0530	14.7/58.1	135-145 gusting to 160	Very Severe Cyclonic Storm
11.10.18/1130	14.8/57.9	130-140 gusting to 155	Very Severe Cyclonic Storm
11.10.18/1730	14.8/57.7	125-135 gusting to 150	Very Severe Cyclonic Storm
11.10.18/2330	14.9/57.3	125-135 gusting to 150	Very Severe Cyclonic Storm
12.10.18/0530	15.0/56.8	120-130 gusting to 145	Very Severe Cyclonic Storm
12.10.18/1730	15.0/56.0	120-130 gusting to 145	Very Severe Cyclonic Storm
13.10.18/0530	15.0/54.7	115-125 gusting to 140	Severe Cyclonic Storm
13.10.18/1730	15.1/53.5	110-120 gusting to 135	Severe Cyclonic Storm
14.10.18/0530	15.2/52.1	110-120 gusting to 135	Severe Cyclonic Storm
14.10.18/1730	15.2/50.7	90-100 gusting to 115	Severe Cyclonic Storm
15.10.18/0530	15.3/49.5	65-75 gusting to 85	Cyclonic Storm

Warnings:

(i) Wind warning

(ii) Gale wind speed reaching 135-145 kmph gusting to 160 kmph is prevailing over westcentral Arabian Sea. It is very likely to decrease gradually becoming 110-120 kmph gusting to 135 kmph by 14th October 2018 morning over westcentral Arabian Sea around the system centre. The wind speed reaching 50-60 kmph gusting to 70 kmph is very likely over adjoining areas of southwest Arabian Sea during next 24 hours and decrease thereafter.

(iii) Sea condition

- The sea condition is phenomenal around the system centre. It is very likely continued to be phenomenal over westcentral Arabian Sea till 13th October 2018 and over Gulf of Aden during 11th to 14th October.

(iv) Fishermen Warning

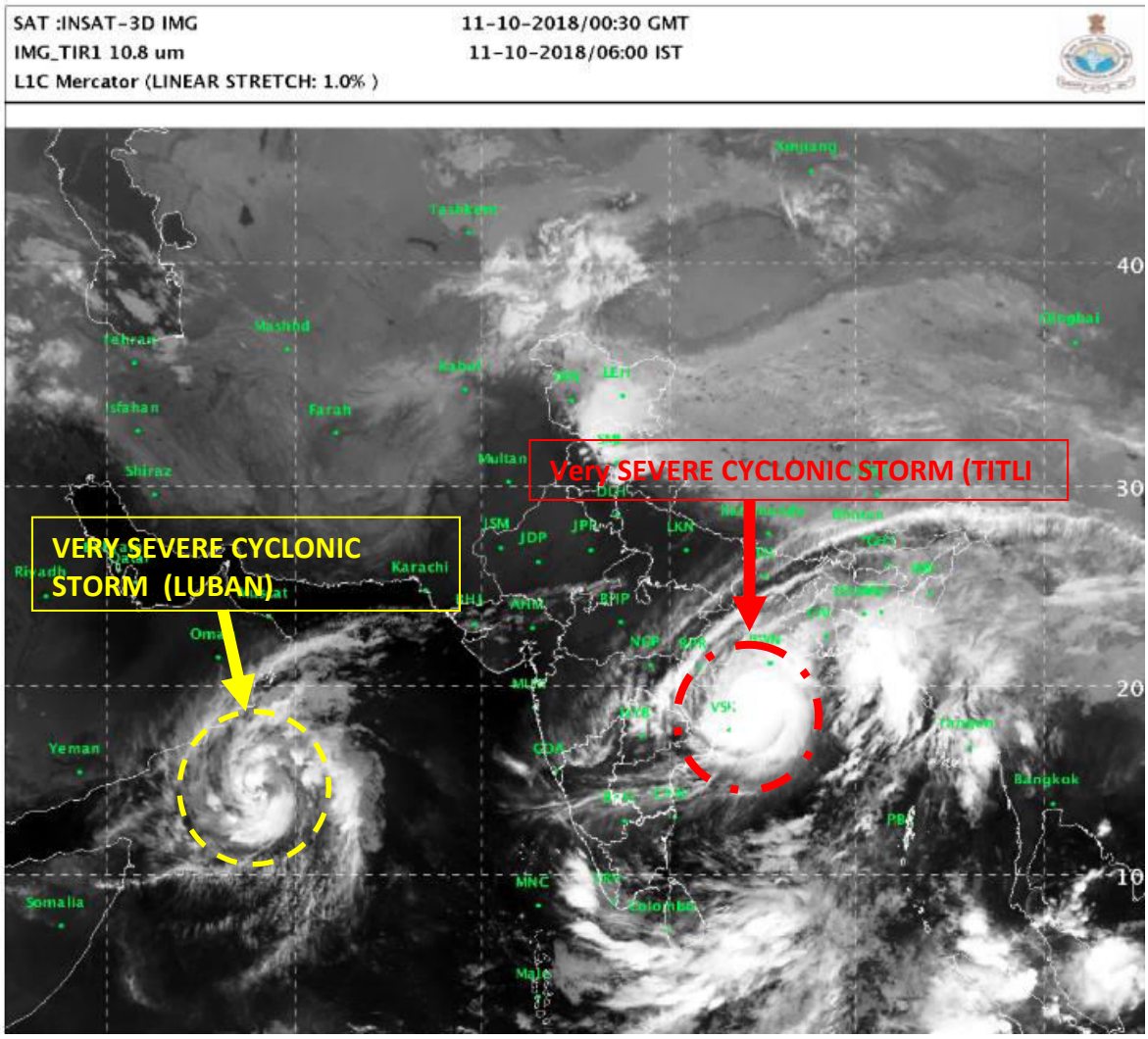
- The fishermen are advised not to venture into deep sea areas of westcentral Arabian Sea & Gulf of Aden till 14th October and adjoining southwest Arabian Sea till 11th October.

The next bulletin will be issued at 1130 hrs IST of today, the 11th October, 2018.

(Naresh Kumar)
Scientist-E, RSMC, New Delhi

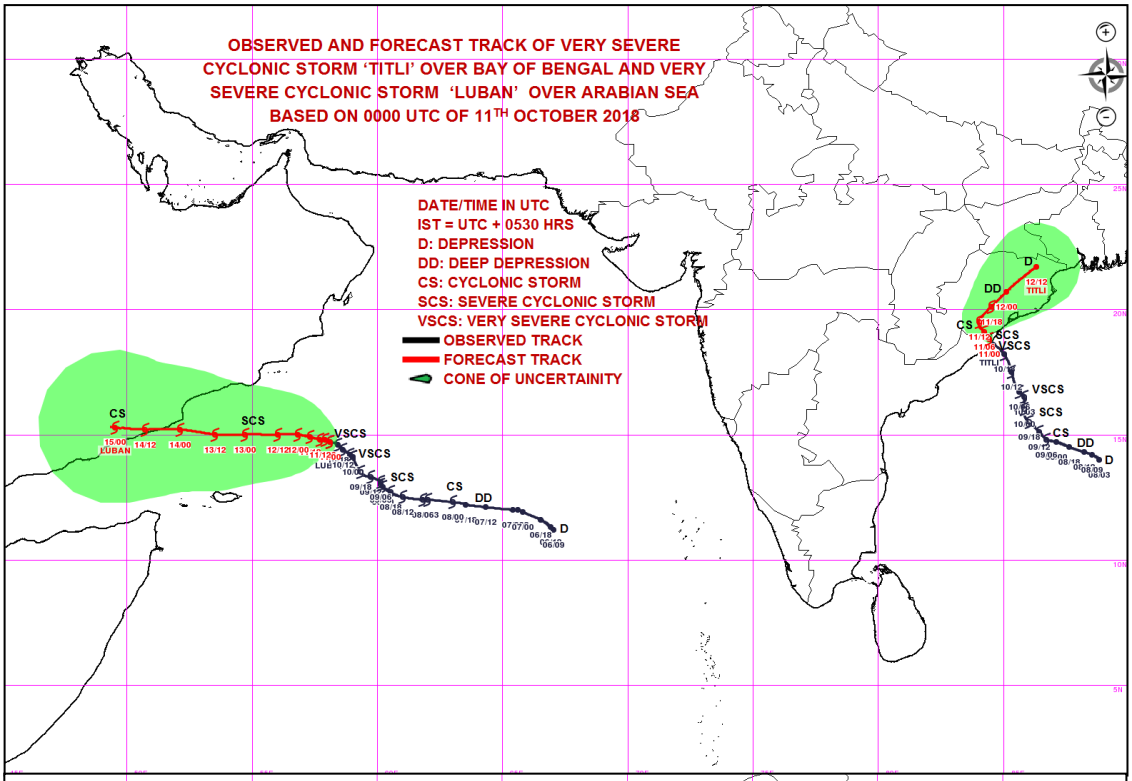
Copy to: CRS, Pune/ ACWC Chennai/ Kolkata/ Mumbai/MC Goa/Thiruvanathapuram/ Bengaluru/ CWC Ahmedabad.

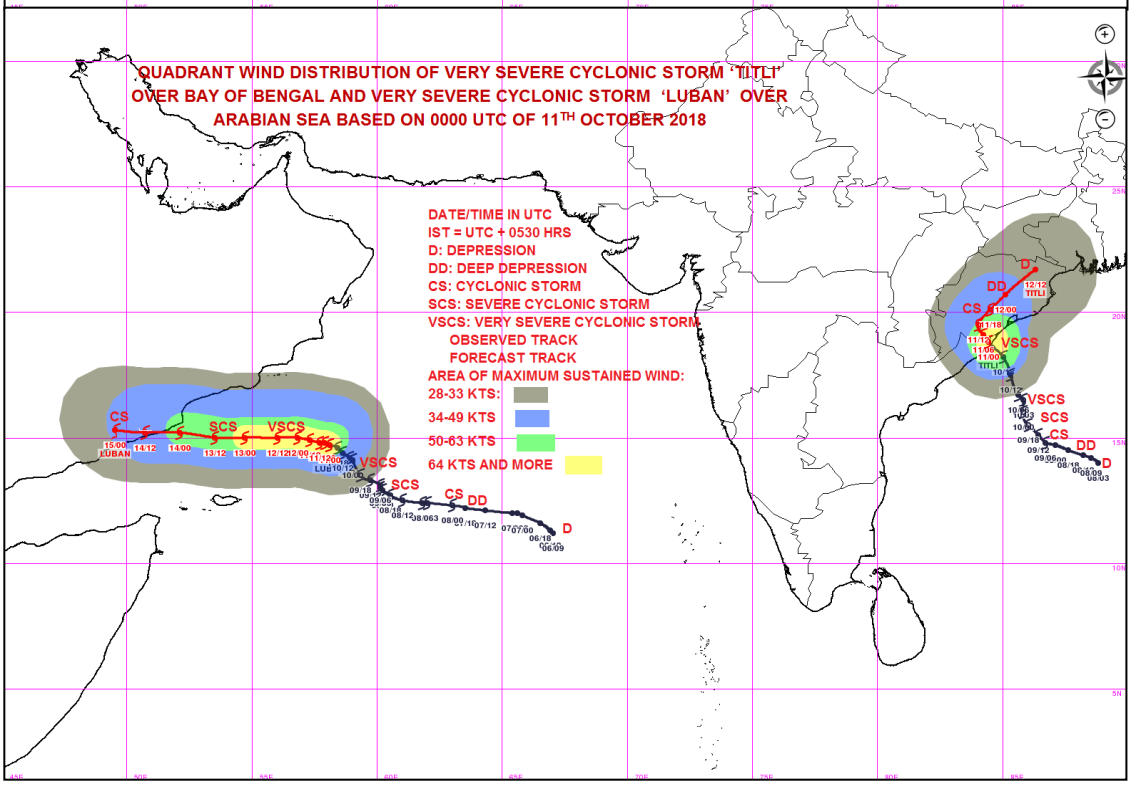
Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
Rainfall amount (mm): Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.



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.





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.

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

BULLETIN NO.: 25 (BOB 08/2018) and BULLETIN NO. : 35 (ARB 04/2018)

TIME OF ISSUE: 1230 HOURS IST **DATED: 11.10.2018**

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)
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 (23385843)
DIRECTOR GENERAL, AIR (23421105, 23421219)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 24363261)
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. 04896-262184)
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)
CHIEF SECRETARY, ANDHRA PRADESH (FAX NO. 0866-2441029)
CHIEF SECRETARY, ODISHA (FAX NO. 0674 -2536660)
CHIEF SECRETARY, WEST BENGAL (FAX NO. 033 -22144328)
CHIEF SECRETARY, ANDAMAN & NICOBAR ISLANDS (FAX NO. 03192- 232656)

CHIEF SECRETARY, MIZORAM (FAX NO. 389 -2322745)
CHIEF SECRETARY, TRIPURA (FAX NO. 0381-2414013)
CHIEF SECRETARY, ASSAM (FAX NO. 0361-2237200)
CHIEF SECRETARY, MEGHALAYA (FAX NO. 0364 -2225978)
CHIEF SECRETARY, NAGALAND (FAX NO. 0370 -2270057)
CHIEF SECRETARY, MANIPUR (FAX NO. 0385 2452629)

Sub: (a) Very Severe Cyclonic Storm 'TITLI' over south Odisha: Cyclone Warning for districts of north Andhra Pradesh & south Odisha
(b) Very Severe Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea

(a) Very Severe Cyclonic Storm 'TITLI' over south Odisha & neighbourhood

The Very Severe Cyclonic Storm **'TITLI'** over north Coastal Andhra Pradesh & adjoining south Odisha moved west-northwestwards with a speed of about 13 kmph during past 06 hours and lay centred at 0830 hrs IST of today, the 11th October 2018 over south Odisha near latitude 19.0°N and longitude 84.1°E, about 90 km west-southwest of Gopalpur and 60 km south-southeast of Phulbani.

It is very likely to move northwestwards for next 12 hours and then re-curve northeastwards towards Gangetic West Bengal across Odisha. It is very likely to weaken gradually becoming severe cyclonic storm around noon, cyclonic storm around evening and a deep depression by mid-night of today, the 11th October 2018. Forecast track and intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
11.10.18/1130	19.3/83.8	110-120 gusting to 135	Severe Cyclonic Storm
11.10.18/1730	19.5/83.6	80-90 gusting to 100	Cyclonic Storm
11.10.18/2330	20.1/84.0	55-65 gusting to 75	Deep Depression
12.10.18/0530	20.7/85.0	50-60 gusting to 70	Deep Depression
12.10.18/1130	20.8/85.0	50-60 gusting to 70	Deep Depression
12.10.18/1130	21.5/86.2	40-50 gusting to 60	Depression
12.10.18/2330	22.9/88.4	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.

(i) Heavy rainfall warnings:

Region	11 Oct. 2018 (Rainfall till 0830 IST of next day)	12 Oct. 2018(Rainfall till 0830 IST of next day)	13 Oct. 2018(Rainfall till 0830 IST of next day)
Odisha	Rainfall at most places with heavy to very heavy falls at a few places and extremely heavy falls at Isolated Places over south Odisha.	Rainfall at most places with heavy to very heavy falls at Isolated Places	Nil
North Coastal Andhra Pradesh	Rainfall at a few places with heavy to very heavy falls at isolated places	Nil	Nil
Gangetic West Bengal	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at most places with heavy to very heavy falls at a few places	Rainfall at most places with heavy to very heavy falls at Isolated Places
Assam & Meghalaya	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at most places with heavy to very heavy falls and extremely heavy falls at Isolated Places	Rainfall at most places with heavy to very heavy falls and extremely heavy falls at Isolated Places
Mizoram & Tripura	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at most places with heavy to very heavy falls at isolated places	Rainfall at most places with heavy to very heavy falls at isolated places

Legends: Red-Take Action; Orange- Be prepared; Yellow- be updated; 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

- **Gale wind speed reaching 90-100 kmph gusting to 115 kmph very likely over Gajapati, Ganjam, Nayagarh Kandhamal & Raigada districts of Odisha during next three hours** and gradually decrease thereafter becoming squally wind speed of 50-60 kmph gusting to 70 kmph by evening. **Gale wind speed reaching 60-70 kmph gusting to 80 kmph very likely along & off south coastal Odisha during next three hours** and squally wind speed of 40-50 kmph gusting to 60 kmph likely during subsequent 18 hours.
- Squally wind speed of 40-50 kmph gusting 60 kmph very likely along & off north Odisha and West Bengal coasts during next 24 hours. Squally wind speed of 30-40 kmph gusting to 50 kmph is very likely over adjoining districts of north interior Odisha from today afternoon for subsequent 12 hours.

(iii) Sea condition

- The sea condition will be very rough to high over westcentral & north Bay of Bengal and along & off south Odisha and adjoining north Andhra Pradesh coasts during next 06 hours. It will become very rough along & off these coasts for subsequent 24 hours and gradually improve thereafter. Sea conditions will be rough to very rough along & off West Bengal and north Odisha Coasts on 11th & 12th October.

(iv) Damage Expected over Gajapati, Ganjam, Nayagarh Kandhamal and Raigada districts of Odisha:

- Major damage to thatched houses/ huts. Unattached metal sheets may fly.
- Minor damage to Kutcha and some damage to Pucca roads. Flooding of low lying areas.
- Minor damage to power and communication lines
- Breaking of tree branches, uprooting of trees. Moderate damage to banana and papaya trees. Large dead limbs blown from trees
- Major damage to standing crops, plantations and orchards.

(v) Action Suggested:

- Total suspension of fishing operations.
- The fishermen are advised not to venture into north Bay of Bengal on 11th & 12th October 2018.
- People advised to remain indoors during next six hours in the around 100 km from the centre of the Very Severe Cyclonic Storm over south Odisha .

(b) Very Severe Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea:

The Very Severe Cyclonic Storm **'LUBAN'** over westcentral Arabian Sea remained practically stationary and lay centered at 1130 hrs IST of today, the 11th October 2018 over westcentral Arabian Sea, near latitude 14.5°N and longitude 58.0°E, about 500 km east-southeast of Salalah (Oman), 490 km east-northeast of Socotra Islands (Yemen) and 670 km east-southeast of Al-Ghaidah (Yemen). It is very likely to intensify further and move west-northwestwards towards Yemen & South Oman Coasts during next 4 days. Forecast track & intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
11.10.18/1130	14.5/58.0	125-135 gusting to 150	Very Severe Cyclonic Storm
11.10.18/1730	14.7/57.7	135-145 gusting to 160	Very Severe Cyclonic Storm
11.10.18/2330	14.9/57.3	135-145 gusting to 160	Very Severe Cyclonic Storm
12.10.18/0530	15.0/57.0	135-145 gusting to 160	Very Severe Cyclonic Storm
12.10.18/1130	15.0/56.8	130-140 gusting to 155	Very Severe Cyclonic Storm
12.10.18/2330	15.1/55.9	120-130 gusting to 145	Very Severe Cyclonic Storm
13.10.18/1130	15.1/54.5	115-125 gusting to 130	Very Severe Cyclonic Storm
13.10.18/2330	15.2/52.6	110-120 gusting to 135	Severe Cyclonic Storm
14.10.18/1130	15.2/51.2	90-100 gusting to 115	Severe Cyclonic Storm
13.10.18/2330	15.3/49.7	70-80 gusting to 90	Cyclonic Storm

Warnings:

(i) Wind warning

(ii) Gale wind speed reaching 120-130 kmph gusting to 145 kmph is prevailing over westcentral Arabian Sea. It is very likely to decrease gradually becoming 110-120 kmph gusting to 135 kmph by 14th October 2018 morning over westcentral Arabian Sea around the system centre.

(iii) Sea condition

- The sea condition is phenomenal around the system centre. It is very likely continue to be phenomenal over westcentral Arabian Sea till 13th October 2018 morning and over adjoin areas of Gulf of Aden.

(iv) Fishermen Warning

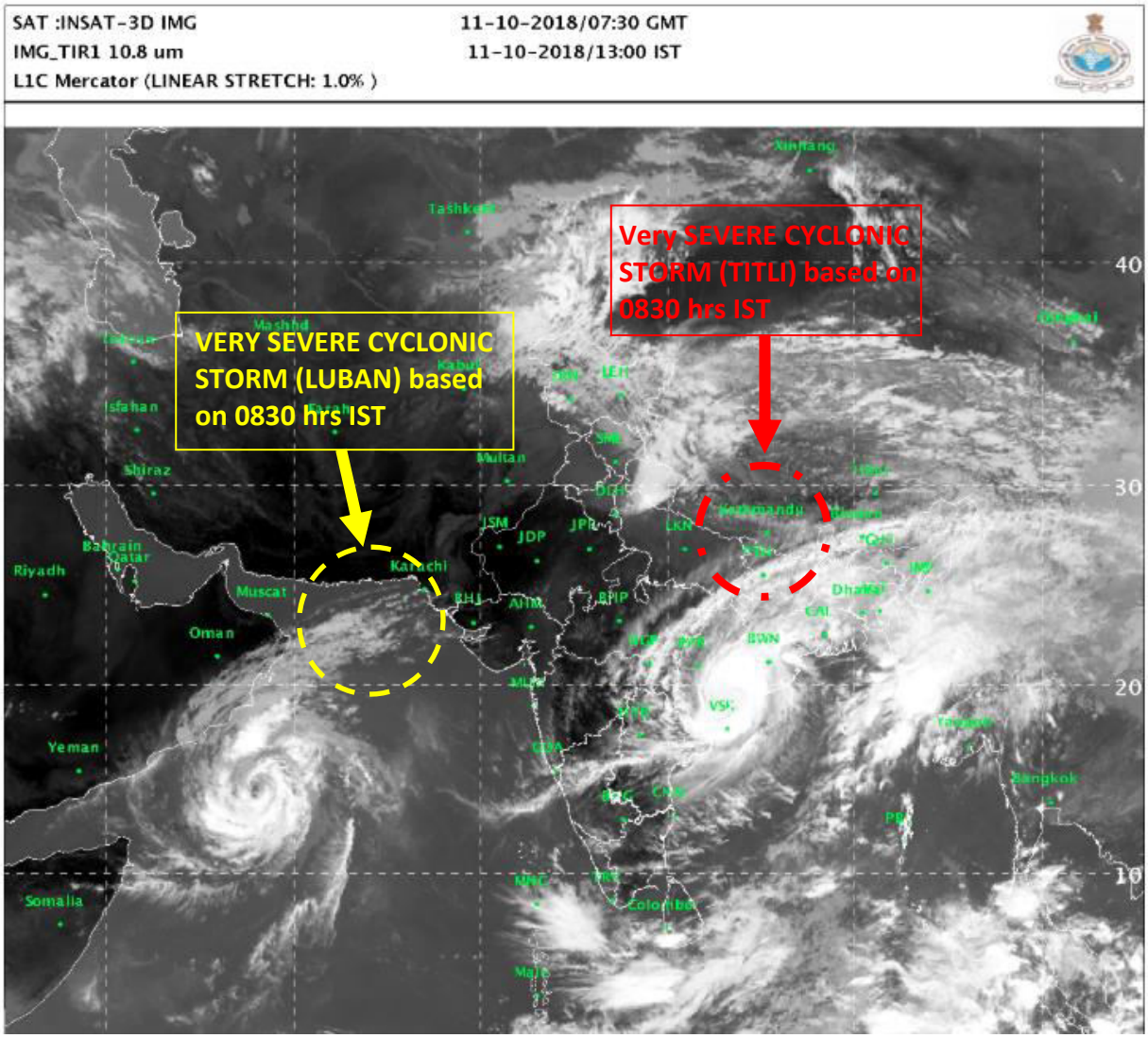
- The fishermen are advised not to venture into deep sea areas of westcentral Arabian Sea & Gulf of Aden till 14th October.

The next bulletin will be issued at 1430 hrs IST of today, the 11th October, 2018.

(Naresh Kumar)
Scientist-E, RSMC, New Delhi

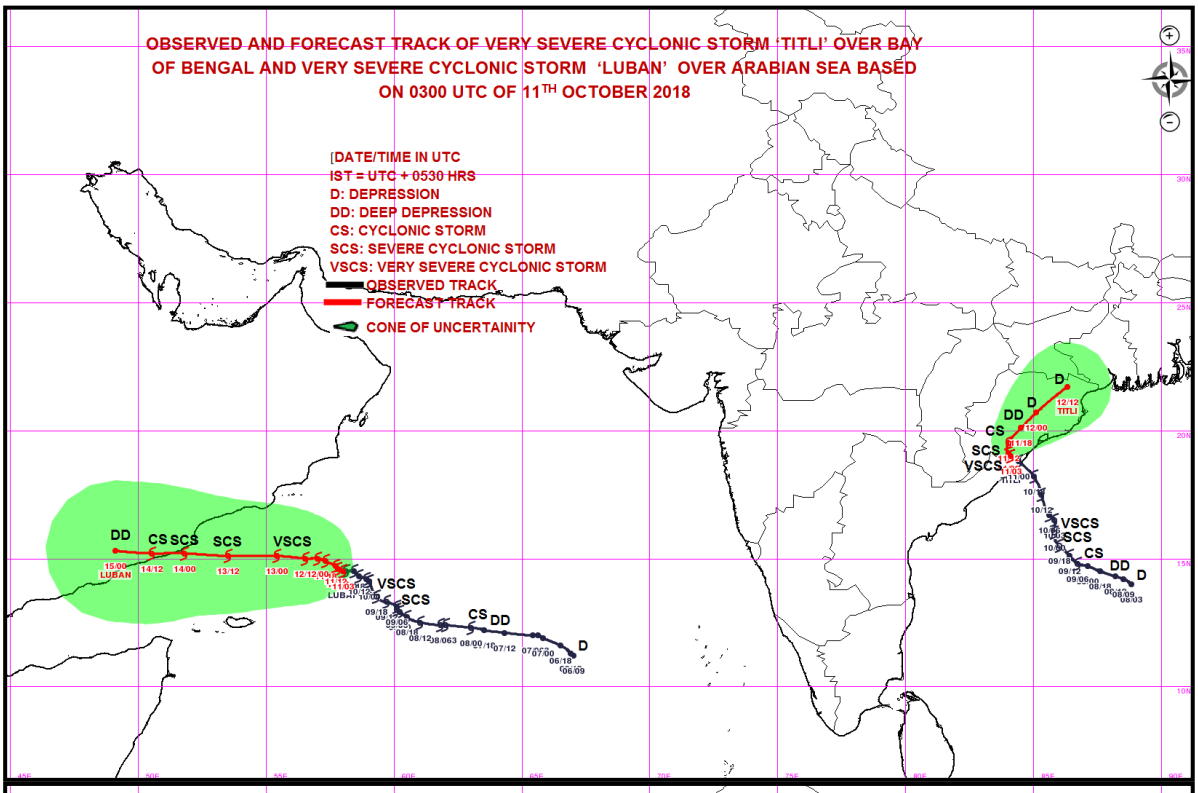
Copy to: CRS, Pune/RSMC Guwahati/ ACWC Chennai/ Kolkata/ Mumbai/MC Goa/Thiruvanathapuram/ Bengaluru/Agartala/ CWC Ahmedabad.

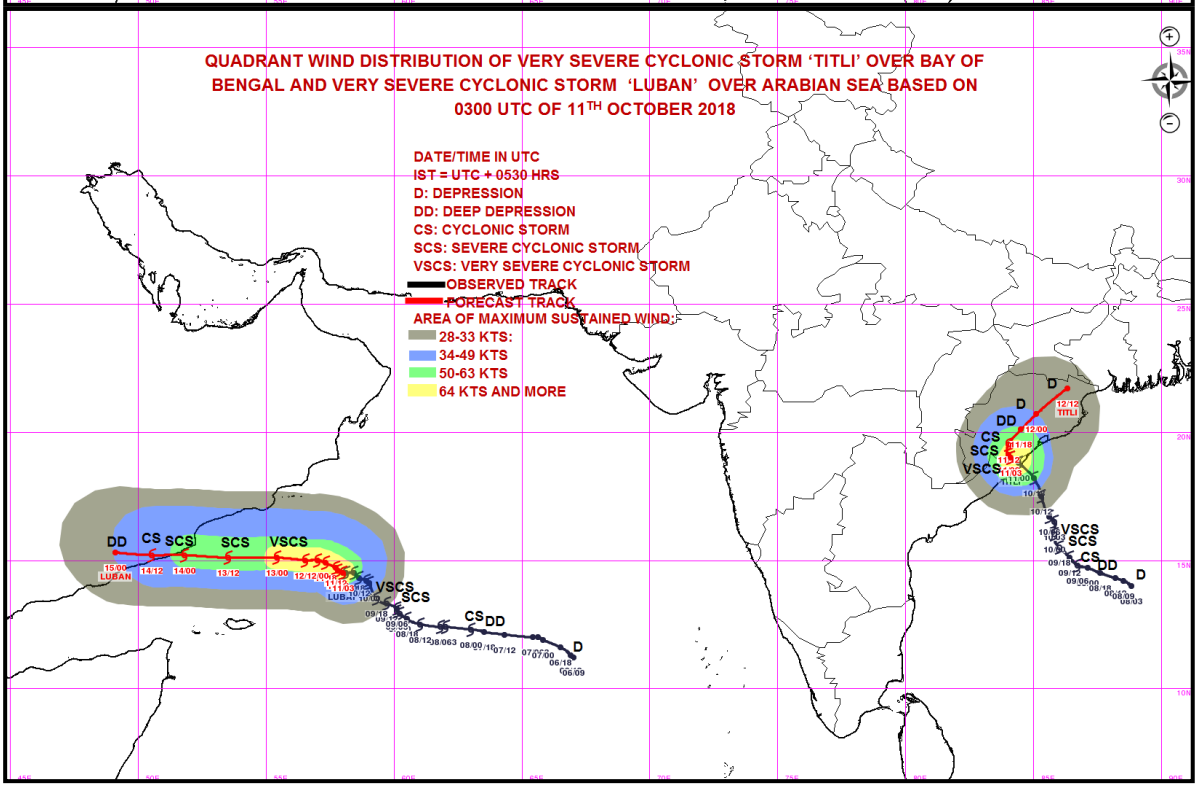
Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
Rainfall amount (mm): Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.



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.





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.

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

BULLETIN NO.: 26 (BOB 08/2018) and BULLETIN NO. : 36 (ARB 04/2018)

TIME OF ISSUE: 1500 HOURS IST **DATED: 11.10.2018**

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)
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 (23385843)
DIRECTOR GENERAL, AIR (23421105, 23421219)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 24363261)
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. 04896-262184)
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)
CHIEF SECRETARY, ANDHRA PRADESH (FAX NO. 0866-2441029)
CHIEF SECRETARY, ODISHA (FAX NO. 0674 -2536660)
CHIEF SECRETARY, WEST BENGAL (FAX NO. 033 -22144328)
CHIEF SECRETARY, ANDAMAN & NICOBAR ISLANDS (FAX NO. 03192- 232656)
CHIEF SECRETARY, MIZORAM (FAX NO. 389 -2322745)
CHIEF SECRETARY, TRIPURA (FAX NO. 0381-2414013)
CHIEF SECRETARY, ASSAM (FAX NO. 0361-2237200)
CHIEF SECRETARY, MEGHALAYA (FAX NO. 0364 -2225978)
CHIEF SECRETARY, NAGALAND (FAX NO. 0370 -2270057)
CHIEF SECRETARY, MANIPUR (FAX NO. 0385 2452629)

Sub: (a) Severe Cyclonic Storm 'TITLI' over south Odisha: Cyclone Warning for south Odisha
(b) Very Severe Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea

(a) Severe Cyclonic Storm 'TITLI' over south Odisha

The Very Severe Cyclonic Storm **'TITLI'** over south Odisha moved further northwestwards with a speed of about 14 kmph during past 06 hours, weakened into a Severe Cyclonic Storm and lay centred at 1130 hrs IST of today, the 11th October 2018 over south Odisha near latitude 19.3°N and longitude 83.8°E, about 110 km west of Gopalpur and 140 km southwest of Phulbani.

It is very likely to move northwestwards for next 06 hours and then re-curve northeastwards towards Gangetic West Bengal. It is very likely to weaken gradually becoming cyclonic storm around evening and a deep depression by mid-night of today, the 11th October 2018. Forecast track and intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
11.10.18/1130	19.3/83.8	110-120 gusting to 135	Severe Cyclonic Storm
11.10.18/1730	19.5/83.6	80-90 gusting to 100	Cyclonic Storm
11.10.18/2330	20.1/84.0	55-65 gusting to 75	Deep Depression
12.10.18/0530	20.8/85.0	50-60 gusting to 70	Deep Depression
12.10.18/1130	21.5/86.2	40-50 gusting to 60	Depression
12.10.18/2330	22.9/88.4	30-40 gusting to 50	Depression

(i) Heavy rainfall warnings:

Region	11 Oct. 2018 (Rainfall till 0830 IST of next day)	12 Oct. 2018(Rainfall till 0830 IST of next day)	13 Oct. 2018(Rainfall till 0830 IST of next day)
Odisha	Rainfall at most places with heavy to very heavy falls at a few places and extremely heavy falls at Isolated Places over south Odisha.	Rainfall at most places with heavy to very heavy falls at Isolated Places	Nil
North Coastal Andhra Pradesh	Rainfall at a few places with heavy to very heavy falls at isolated places	Nil	Nil
Gangetic West Bengal	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at most places with heavy to very heavy falls at a few places	Rainfall at most places with heavy to very heavy falls at Isolated Places
Assam & Meghalaya	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at most places with heavy to very heavy falls and extremely heavy falls at Isolated Places	Rainfall at most places with heavy to very heavy falls and extremely heavy falls at Isolated Places
Mizoram & Tripura	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at most places with heavy to very heavy falls at isolated places	Rainfall at most places with heavy to very heavy falls at isolated places

Legends: Red-Take Action; Orange- Be prepared; Yellow- be updated; 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

- **Gale wind speed reaching 90-100 kmph gusting to 115 kmph very likely over Gajapati, Ganjam, Nayagarh Kandhamal & Raigada districts of Odisha during next three hours** and gradually decrease thereafter becoming squally wind speed of 50-60 kmph gusting to 70 kmph by evening. **Gale wind speed reaching 60-70 kmph gusting to 80 kmph very likely along & off south coastal Odisha during next three hours** and squally wind speed of 40-50 kmph gusting to 60 kmph likely during subsequent 18 hours.
- Squally wind speed of 40-50 kmph gusting 60 kmph very likely along & off north Odisha and West Bengal coasts during next 24 hours. Squally wind speed of 30-40 kmph gusting to 50 kmph is very likely over adjoining districts of north interior Odisha from today afternoon for subsequent 12 hours.

(iii) Sea condition

- The sea condition will be very rough to high over westcentral & north Bay of Bengal and along & off south Odisha and adjoining north Andhra Pradesh coasts during next 06 hours. It will become very rough along & off these coasts for subsequent 24 hours and gradually improve thereafter. Sea conditions will be rough to very rough along & off West Bengal and north Odisha Coasts on 11th & 12th October.

(iv) Damage Expected over Gajapati, Ganjam, Nayagarh Kandhamal and Raigada districts of Odisha:

- Major damage to thatched houses/ huts. Unattached metal sheets may fly.
- Minor damage to Kutcha and some damage to Pucca roads. Flooding of low lying areas.
- Minor damage to power and communication lines
- Breaking of tree branches, uprooting of trees. Moderate damage to banana and papaya trees. Large dead limbs blown from trees
- Major damage to standing crops, plantations and orchards.

(v) Action Suggested:

- Total suspension of fishing operations.
- The fishermen are advised not to venture into north Bay of Bengal on 11th & 12th October 2018.
- People advised to remain indoors during next six hours in the around 100 km from the centre of the Very Severe Cyclonic Storm over south Odisha.

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.

(b) Very Severe Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea:

The Very Severe Cyclonic Storm **'LUBAN'** over westcentral Arabian Sea remained practically stationary and lay centered at 1130 hrs IST of today, the 11th October 2018 over westcentral Arabian Sea, near latitude 14.5°N and longitude 58.0°E, about 500 km east-southeast of Salalah (Oman), 490 km east-northeast of Socotra Islands (Yemen) and 670 km east-southeast of Al-Ghaidah (Yemen). It is very likely to intensify further slightly and move west-northwestwards towards Yemen & South Oman Coasts during next 4 days. Forecast track & intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
11.10.18/1130	14.5/58.0	125-135 gusting to 150	Very Severe Cyclonic Storm
11.10.18/1730	14.7/57.7	135-145 gusting to 160	Very Severe Cyclonic Storm
11.10.18/2330	14.9/57.3	135-145 gusting to 160	Very Severe Cyclonic Storm
12.10.18/0530	15.0/57.0	135-145 gusting to 160	Very Severe Cyclonic Storm
12.10.18/1130	15.0/56.7	130-140 gusting to 155	Very Severe Cyclonic Storm
12.10.18/2330	15.1/55.9	120-130 gusting to 145	Very Severe Cyclonic Storm
13.10.18/1130	15.1/54.5	115-125 gusting to 130	Very Severe Cyclonic Storm
13.10.18/2330	15.2/53.1	110-120 gusting to 135	Severe Cyclonic Storm
14.10.18/1130	15.2/51.6	90-100 gusting to 115	Severe Cyclonic Storm
14.10.18/2330	15.3/49.8	70-80 gusting to 90	Cyclonic Storm
15.10.18/1130	15.3/48.0	40-50 gusting to 60	Depression

Warnings:

(i) Wind warning

Gale wind speed reaching 120-130 kmph gusting to 145 kmph is prevailing over westcentral Arabian Sea. It is very likely to decrease gradually becoming 110-120 kmph gusting to 135 kmph by 14th October 2018 morning over westcentral Arabian Sea around the system centre.

(ii) Sea condition

The sea condition is phenomenal around the system centre. It is very likely continue to be phenomenal over westcentral Arabian Sea till 13th October 2018 morning and over adjoin areas of Gulf of Aden.

(iii) Fishermen Warning

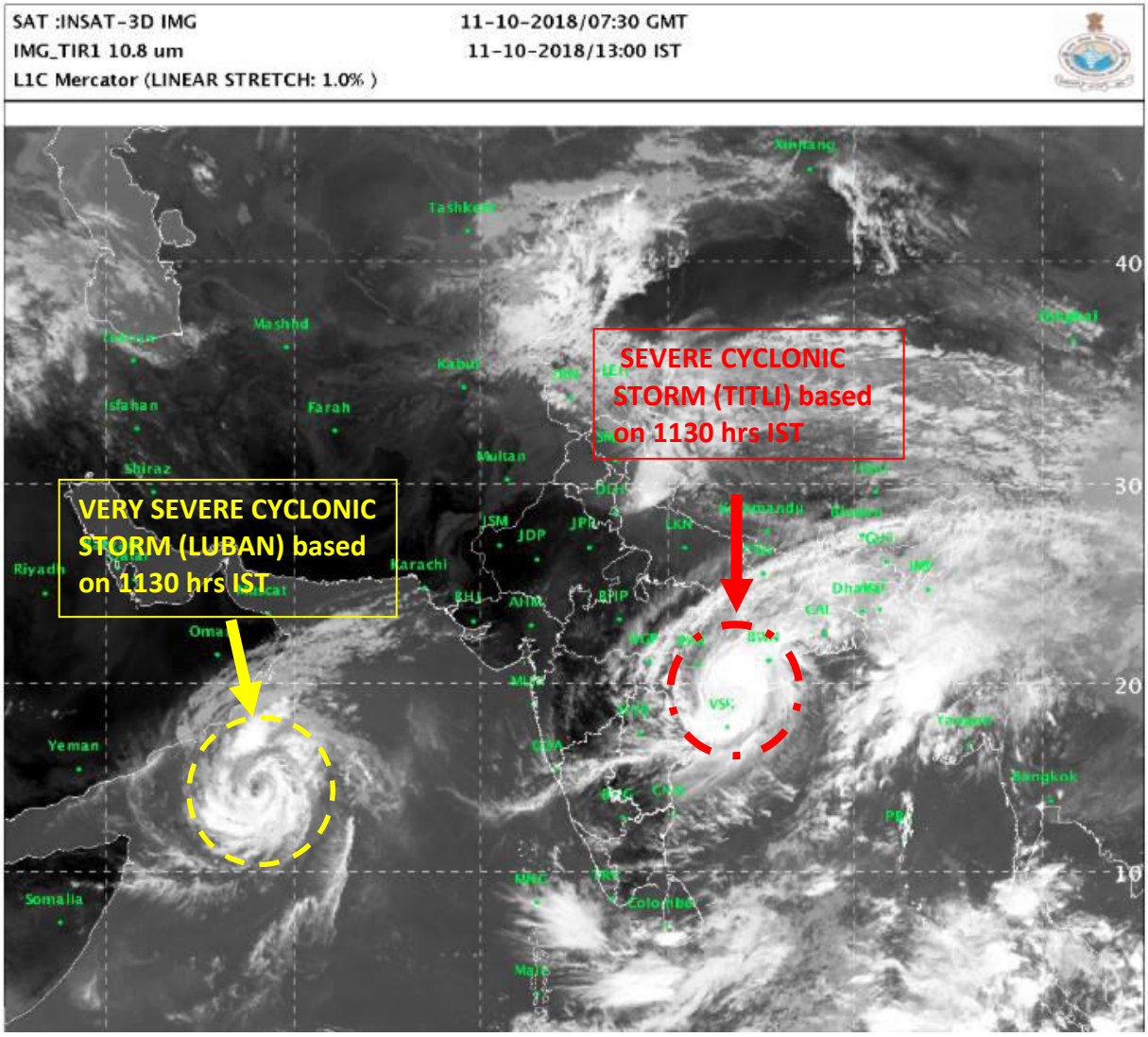
The fishermen are advised not to venture into deep sea areas of westcentral Arabian Sea & Gulf of Aden till 14th October.

The next bulletin will be issued at 1730 hrs IST of today, the 11th October, 2018.

(Naresh Kumar)
Scientist-E, RSMC, New Delhi

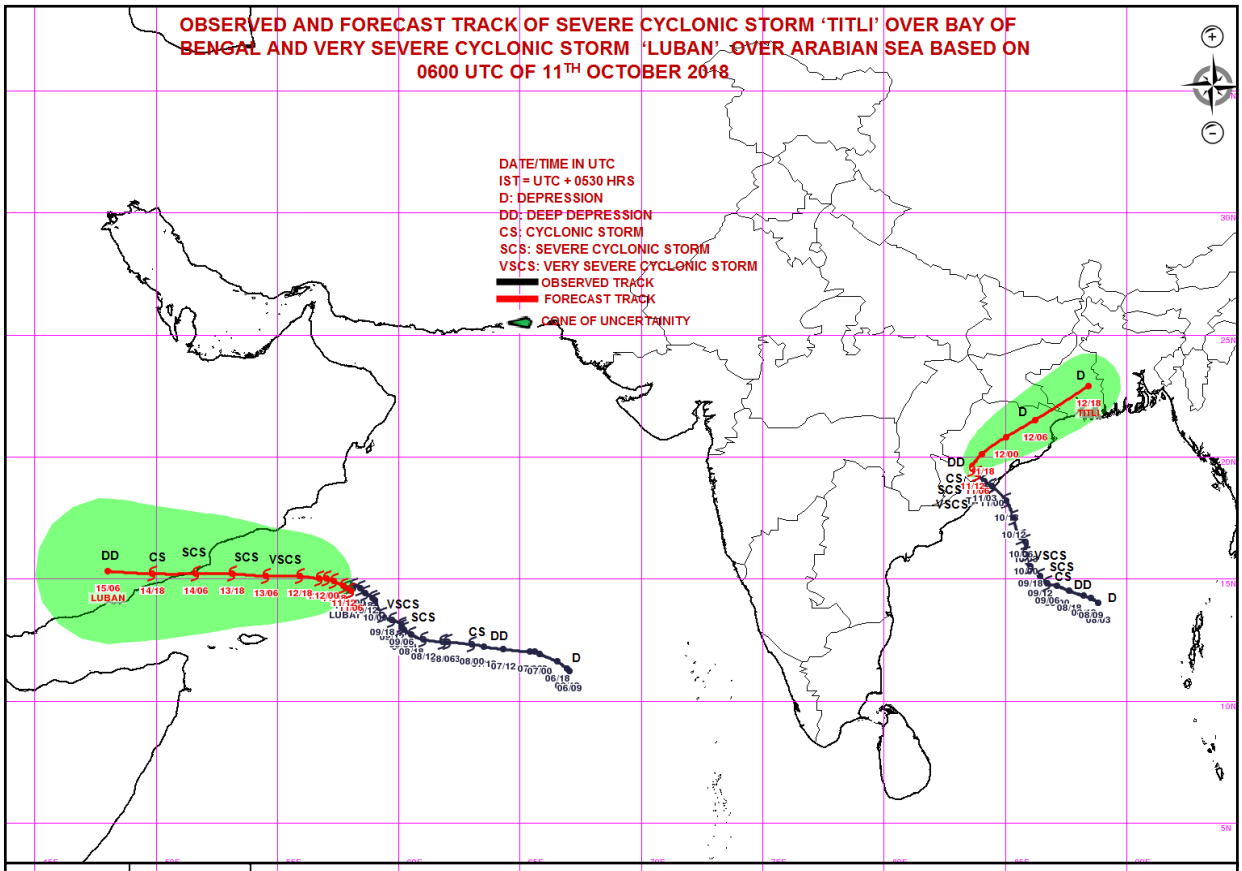
Copy to: CRS, Pune/RSMC Guwahati/ ACWC Chennai/ Kolkata/ Mumbai/MC Goa/Thiruvanathapuram/ Bengaluru/Agartala/ CWC Ahmedabad.

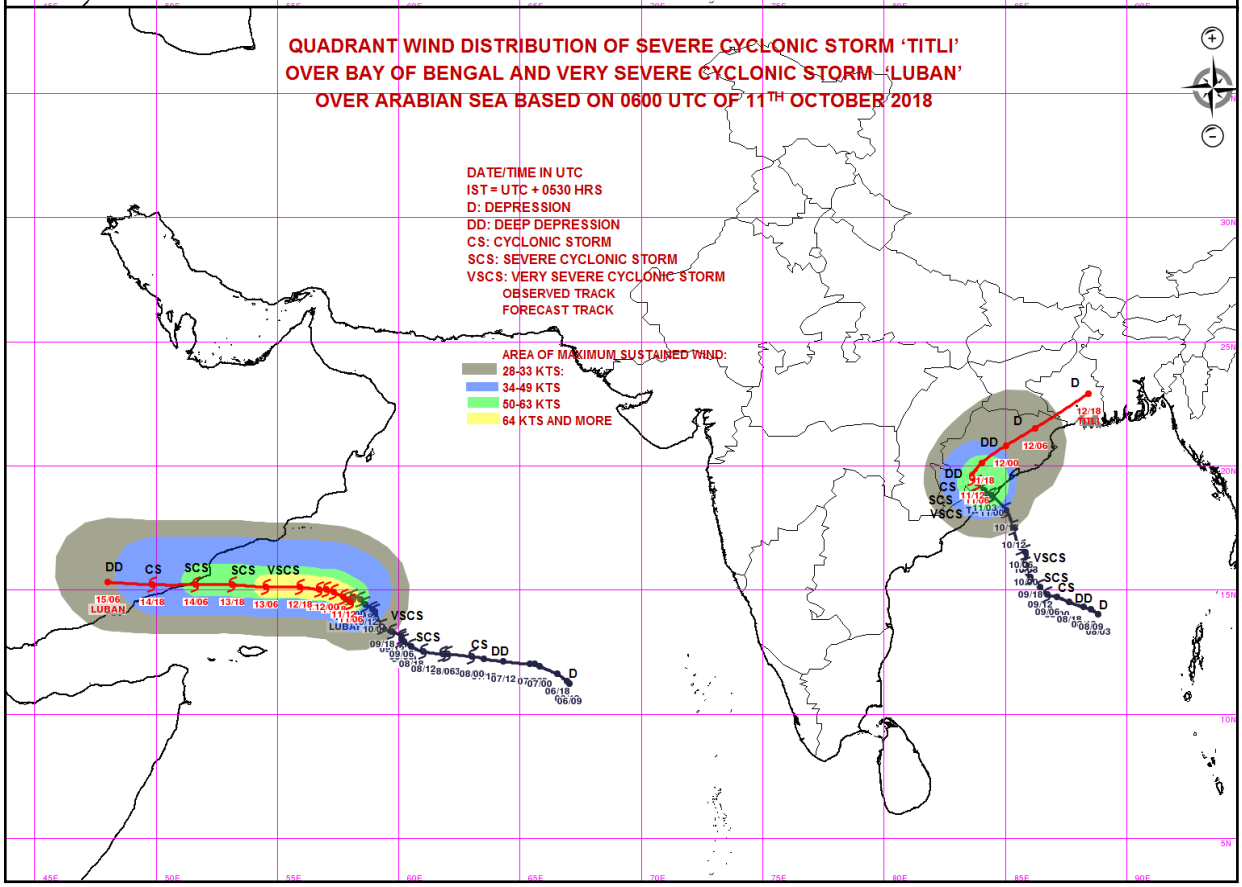
Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
Rainfall amount (mm): Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.



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.





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.

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

BULLETIN NO.: 27 (BOB 08/2018) and BULLETIN NO. : 37 (ARB 04/2018)

TIME OF ISSUE: 1730 HOURS IST **DATED: 11.10.2018**

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)
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 (23421101)
DIRECTOR GENERAL, AIR (23421105, 23421219)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 24363261)
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. 04896-262184)
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)
CHIEF SECRETARY, ANDHRA PRADESH (FAX NO. 0866-2441029)
CHIEF SECRETARY, ODISHA (FAX NO. 0674 -2536660)
CHIEF SECRETARY, WEST BENGAL (FAX NO. 033 -22144328)
CHIEF SECRETARY, ANDAMAN & NICOBAR ISLANDS (FAX NO. 03192- 232656)
CHIEF SECRETARY, MIZORAM (FAX NO. 389 -2322745)
CHIEF SECRETARY, TRIPURA (FAX NO. 0381-2414013)
CHIEF SECRETARY, ASSAM (FAX NO. 0361-2237200)
CHIEF SECRETARY, MEGHALAYA (FAX NO. 0364 -2225978)
CHIEF SECRETARY, NAGALAND (FAX NO. 0370 -2270057)
CHIEF SECRETARY, MANIPUR (FAX NO. 0385 2452629)

Sub: (a) Severe Cyclonic Storm 'TITLI' over south Odisha: Cyclone Warning for south Odisha
(b) Very Severe Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea

(a) Severe Cyclonic Storm 'TITLI' over south Odisha

The Severe Cyclonic Storm **'TITLI'** over south Odisha remained practically stationary, weakened slightly further and lay centred at 1430 hrs IST of today, the 11th October 2018 over south Odisha near latitude 19.3°N and longitude 83.8°E, about 110 km west of Gopalpur and 140 km southwest of Phulbani. Gopalpur reported 65 Kmph surface wind at 1430 hours IST of today, the 11th October 2018.

It is very likely to move northwestwards for next 06 hours and then re-curve northeastwards towards Gangetic West Bengal. It is very likely to weaken gradually becoming cyclonic storm around evening and a deep depression by mid-night of today, the 11th October 2018. Forecast track and intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
11.10.18/1430	19.3/83.8	90-100 gusting to 115	Severe Cyclonic Storm
11.10.18/1730	19.5/83.6	80-90 gusting to 100	Cyclonic Storm
11.10.18/2330	20.1/84.0	55-65 gusting to 75	Deep Depression
12.10.18/0530	20.8/85.0	50-60 gusting to 70	Deep Depression
12.10.18/1130	21.5/86.2	40-50 gusting to 60	Depression
12.10.18/2330	22.9/88.4	30-40 gusting to 50	Depression

(i) Heavy rainfall warnings:

Region	11 Oct. 2018 (Rainfall till 0830 IST of next day)	12 Oct. 2018(Rainfall till 0830 IST of next day)	13 Oct. 2018(Rainfall till 0830 IST of next day)
Odisha	Rainfall at most places with heavy to very heavy falls at a few places and extremely heavy falls at Isolated Places over south Odisha.	Rainfall at most places with heavy to very heavy falls at Isolated Places	Nil
North Coastal Andhra Pradesh	Rainfall at a few places with heavy to very heavy falls at isolated places	Nil	Nil
Gangetic West Bengal	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at most places with heavy to very heavy falls at a few places	Rainfall at most places with heavy to very heavy falls at Isolated Places
Assam & Meghalaya	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at most places with heavy to very heavy falls and extremely heavy falls at Isolated Places	Rainfall at most places with heavy to very heavy falls and extremely heavy falls at Isolated Places
Mizoram & Tripura	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at most places with heavy to very heavy falls at isolated places	Rainfall at most places with heavy to very heavy falls at isolated places

Legends: Red-Take Action; Orange- Be prepared; Yellow- be updated; 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

- **Gale wind speed reaching 80-90 kmph gusting to 105 kmph very likely over Gajapati, Ganjam, Nayagarh Kandhamal & Raigada districts of Odisha during next three hours** and gradually decrease thereafter becoming squally wind speed of 50-60 kmph gusting to 70 kmph by night. **Gale wind speed reaching 60-70 kmph gusting to 80 kmph very likely along & off south coastal Odisha during next three hours** and squally wind speed of 40-50 kmph gusting to 60 kmph likely during subsequent 18 hours.
- Squally wind speed of 40-50 kmph gusting 60 kmph very likely along & off north Odisha and West Bengal coasts during next 24 hours. Squally wind speed of 30-40 kmph gusting to 50 kmph is very likely over adjoining districts of north interior Odisha from today afternoon for subsequent 12 hours.

(iii) Sea condition

- The sea condition will be very rough to high over westcentral & north Bay of Bengal and along & off south Odisha and adjoining north Andhra Pradesh coasts during next 06 hours. It will become very rough along & off these coasts for subsequent 24 hours and gradually improve thereafter. Sea conditions will be rough to very rough along & off West Bengal and north Odisha Coasts on 11th & 12th October.

(iv) Damage Expected over Gajapati, Ganjam, Nayagarh Kandhamal and Raigada districts of Odisha:

- Major damage to thatched houses/ huts. Unattached metal sheets may fly.
- Minor damage to Kutcha and some damage to Pucca roads. Flooding of low lying areas.
- Minor damage to power and communication lines
- Breaking of tree branches, uprooting of trees. Moderate damage to banana and papaya trees. Large dead limbs blown from trees
- Major damage to standing crops, plantations and orchards.

(v) Action Suggested:

- Total suspension of fishing operations.
- The fishermen are advised not to venture into north Bay of Bengal on 11th & 12th October 2018.
- People advised to remain indoors during next six hours in the around 100 km from the centre of the Very Severe Cyclonic Storm over south Odisha.

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.

(b) Very Severe Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea:

The Very Severe Cyclonic Storm **'LUBAN'** over westcentral Arabian Sea move westwards in past six hours with speed 04 kmph and lay centered at 1430 hrs IST of today, the 11th October 2018 over westcentral Arabian Sea, near latitude 14.5°N and longitude 57.8°E, about 480 km east-southeast of Salalah (Oman), 470 km east-northeast of Socotra Islands (Yemen) and 640 km east-southeast of Al-Ghaidah (Yemen). It is very likely to intensify further slightly and move west-northwestwards towards Yemen & South Oman Coasts during next 4 days. Forecast track & intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
11.10.18/1430	14.5/57.8	125-135 gusting to 150	Very Severe Cyclonic Storm
11.10.18/1730	14.7/57.7	135-145 gusting to 160	Very Severe Cyclonic Storm
11.10.18/2330	14.9/57.3	135-145 gusting to 160	Very Severe Cyclonic Storm
12.10.18/0530	15.0/57.0	135-145 gusting to 160	Very Severe Cyclonic Storm
12.10.18/1130	15.0/56.7	130-140 gusting to 155	Very Severe Cyclonic Storm
12.10.18/2330	15.1/55.9	120-130 gusting to 145	Very Severe Cyclonic Storm
13.10.18/1130	15.1/54.5	115-125 gusting to 130	Very Severe Cyclonic Storm
13.10.18/2330	15.2/53.1	110-120 gusting to 135	Severe Cyclonic Storm
14.10.18/1130	15.2/51.6	90-100 gusting to 115	Severe Cyclonic Storm
14.10.18/2330	15.3/49.8	70-80 gusting to 90	Cyclonic Storm
15.10.18/1130	15.3/48.0	40-50 gusting to 60	Depression

Warnings:

(i) Wind warning

Gale wind speed reaching 120-130 kmph gusting to 145 kmph is prevailing over westcentral Arabian Sea. It is very likely to decrease gradually becoming 110-120 kmph gusting to 135 kmph by 14th October 2018 morning over westcentral Arabian Sea around the system centre.

(ii) Sea condition

The sea condition is phenomenal around the system centre. It is very likely continue to be phenomenal over westcentral Arabian Sea till 13th October 2018 morning and over adjoin areas of Gulf of Aden.

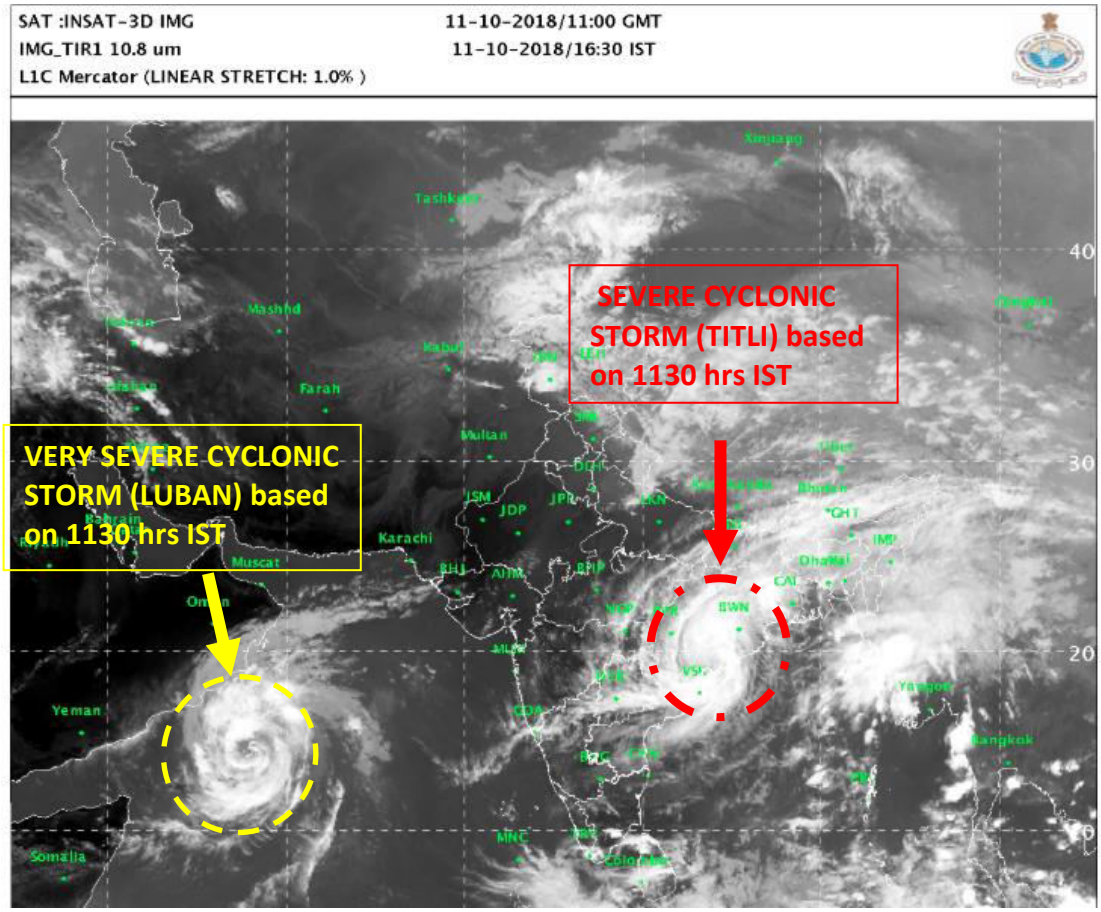
(iii) Fishermen Warning

The fishermen are advised not to venture into deep sea areas of westcentral Arabian Sea & Gulf of Aden till 14th October.

The next bulletin will be issued at 2030 hrs IST of today, the 11th October, 2018.

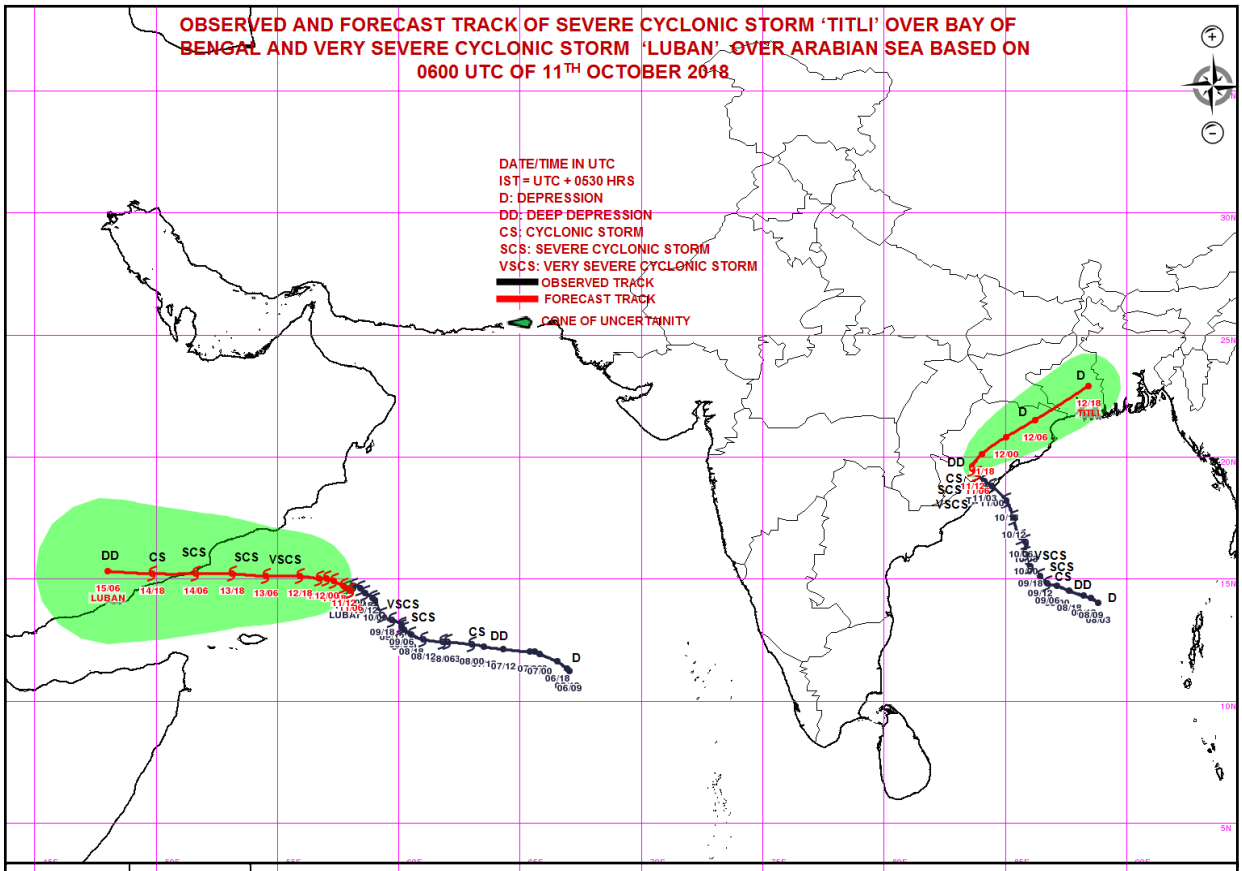
(Naresh Kumar)
Scientist-E, RSMC, New Delhi

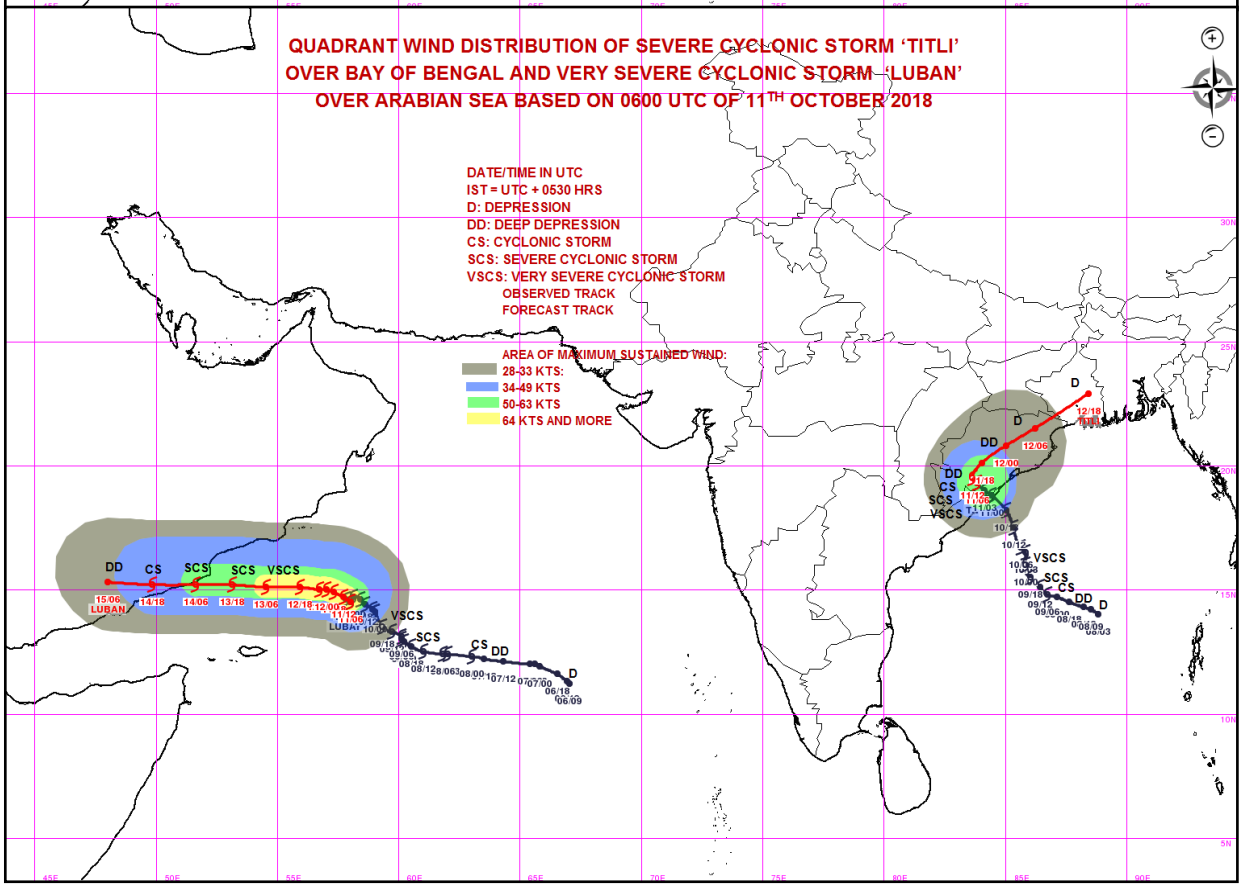
Copy to: CRS, Pune/RSMC Guwahati/ ACWC Chennai/ Kolkata/ Mumbai/MC Goa/Thiruvanathapuram/ Bengaluru/Agartala/ CWC Ahmedabad.



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.





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.

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

BULLETIN NO.: 28 (BOB 08/2018) and BULLETIN NO. : 38 (ARB 04/2018)

TIME OF ISSUE: 2130 HOURS IST **DATED: 11.10.20180**

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)
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 (23421101)
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PIB MOES (FAX NO. 23389042)
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D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 24363261)
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. 04896-262184)
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)
CHIEF SECRETARY, ANDHRA PRADESH (FAX NO. 0866-2441029)
CHIEF SECRETARY, ODISHA (FAX NO. 0674 -2536660)
CHIEF SECRETARY, WEST BENGAL (FAX NO. 033 -22144328)
CHIEF SECRETARY, ANDAMAN & NICOBAR ISLANDS (FAX NO. 03192- 232656)
CHIEF SECRETARY, MIZORAM (FAX NO. 389 -2322745)
CHIEF SECRETARY, TRIPURA (FAX NO. 0381-2414013)
CHIEF SECRETARY, ASSAM (FAX NO. 0361-2237200)
CHIEF SECRETARY, MEGHALAYA (FAX NO. 0364 -2225978)
CHIEF SECRETARY, NAGALAND (FAX NO. 0370 -2270057)
CHIEF SECRETARY, MANIPUR (FAX NO. 0385 2452629)

Sub: (a) Severe Cyclonic Storm 'TITLI' weakened into a Cyclonic Storm over south Odisha: Cyclone Warning for south Odisha
(b) Very Severe Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea

(a) Cyclonic Storm 'TITLI' over south Odisha

The Severe Cyclonic Storm **'TITLI'** over south Odisha moved north-northwestwards in past six hours with speed 13 kmph, weakened into a cyclonic storm and lay centred at 1730 hrs IST of today, the 11th October 2018 over south Odisha near latitude 20°N and longitude 83.7°E, 50 km east-northeast of Bhawanipatna and 80 km west-southwest of Phulbani. Gopalpur reported 55 Kmph and Bhawanipatna reported 52 Kmph surface wind at 1730 hours IST of today, the 11th October 2018.

It is very likely to re-curve northeastwards towards Gangetic West Bengal across north Odisha. It is very likely to weaken further into a Deep Depression during next 06 hours. Forecast track and intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
11.10.18/1730	20/83.7	80-90 gusting to 100	Cyclonic Storm
11.10.18/2330	20.5/84.0	60-70 gusting to 80	Cyclonic Storm
12.10.18/0530	21.1/85.0	50-60 gusting to 70	Deep Depression
12.10.18/1130	21.7/86.2	40-50 gusting to 60	Depression
12.10.18/1730	22.3/87.3	30-40 gusting to 50	Depression
13.10.18/0530	23.6/89.5	20-30 gusting to 40	Well Marked Low

(i) Heavy rainfall warnings:

Region	11 Oct. 2018 (Rainfall till 0830 IST of next day)	12 Oct. 2018(Rainfall till 0830 IST of next day)	13 Oct. 2018(Rainfall till 0830 IST of next day)
Odisha	Rainfall at most places with heavy to very heavy falls at a few places and extremely heavy falls at Isolated Places over south Odisha.	Rainfall at most places with heavy to very heavy falls at Isolated Places	Nil
North Coastal Andhra Pradesh	Rainfall at a few places with heavy to very heavy falls at isolated places	Nil	Nil
Gangetic West Bengal	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at most places with heavy to very heavy falls at a few places	Rainfall at most places with heavy to very heavy falls at Isolated Places
Assam & Meghalaya	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at most places with heavy to very heavy falls and extremely heavy falls at Isolated Places	Rainfall at most places with heavy to very heavy falls and extremely heavy falls at Isolated Places
Mizoram & Tripura	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at most places with heavy to very heavy falls at isolated places	Rainfall at most places with heavy to very heavy falls at isolated places

Legends: Red-Take Action; Orange- Be prepared; Yellow- be updated; 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

- **Gale wind speed reaching 70-80 kmph gusting to 95 kmph very likely over Gajapati, Ganjam, Nayagarh Kandhamal & Rayagada districts of Odisha during next three hours** and gradually decrease thereafter becoming squally wind speed of 50-60 kmph gusting to 70 kmph by late night. **Squally wind speed of 50-60 kmph gusting to 70 kmph very likely along & off south coastal Odisha during next three hours** and squally wind speed of 40-50 kmph gusting to 60 kmph likely during subsequent 12 hours.
- Squally wind speed of 40-50 kmph gusting 60 kmph very likely along & off north Odisha and West Bengal coasts during next 24 hours. Squally wind speed of 30-40 kmph gusting to 50 kmph is very likely over adjoining districts of north interior Odisha from today afternoon for subsequent 12 hours.

(iii) Sea condition

- The sea condition will be very rough over westcentral & north Bay of Bengal and along & off south Odisha and adjoining north Andhra Pradesh coasts during next 06 hours. It will become rough to very rough along & off these coasts for subsequent 24 hours and gradually improve thereafter. Sea conditions will be rough to very rough along & off West Bengal and north Odisha Coasts during next 36 hours.

(iv) Damage Expected over Gajapati, Ganjam, Nayagarh, Kandhamal and Rayagada districts of Odisha:

- Damage to thatched huts.
- Minor damage to power and communication lines due to breaking of branches.
- Major damage to Kutcha and minor damage to Pucca roads.
- Some damage to paddy crops, banana, papaya trees and orchards.

(v) Action Suggested:

- Total suspension of fishing operations.
- The fishermen are advised not to venture into north Bay of Bengal during next 36 hours.
- People advised to remain indoors during next six hours in the around 100 km from the centre of the Cyclonic Storm over south Odisha.

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.

(b) Very Severe Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea:

The Very Severe Cyclonic Storm **'LUBAN'** over westcentral Arabian Sea move westwards in past six hours with speed 05 kmph and lay centered at 1730 hrs IST of today, the 11th October 2018 over westcentral Arabian Sea, near latitude 14.5°N and longitude 57.7°E, about 480 km east-southeast of Salalah (Oman), 460 km east-northeast of Socotra Islands (Yemen) and 620 km east-southeast of Al-Ghaidah (Yemen). It is very likely to intensify further slightly and move west-northwestwards towards Yemen & South Oman Coasts during next 4 days. Forecast track & intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
11.10.18/1730	14.5/57.7	125-135 gusting to 150	Very Severe Cyclonic Storm
11.10.18/2330	14.6/57.3	130-140 gusting to 155	Very Severe Cyclonic Storm
12.10.18/0530	14.7/57.0	130-140 gusting to 155	Very Severe Cyclonic Storm
12.10.18/1130	14.8/56.5	130-140 gusting to 155	Very Severe Cyclonic Storm
12.10.18/1730	14.9/56.0	130-140 gusting to 155	Very Severe Cyclonic Storm
13.10.18/0530	15.0/55.0	120-130 gusting to 145	Very Severe Cyclonic Storm
13.10.18/1730	15.1/53.2	110-120 gusting to 135	Severe Cyclonic Storm
14.10.18/05 30	15.2/51.5	100-110 gusting to 125	Severe Cyclonic Storm
14.10.18/1730	15.2/50.7	80-90 gusting to 100	Cyclonic Storm
15.10.18/0530	15.3/48.9	55-65 gusting to 75	Deep Depression
15.10.18/1730	15.3/47.3	40-50 gusting to 60	Depression

Warnings:

(i) Wind warning

Gale wind speed reaching 120-130 kmph gusting to 145 kmph is prevailing over westcentral Arabian Sea. It is very likely to decrease gradually becoming 110-120 kmph gusting to 135 kmph by 14th October 2018 morning over westcentral Arabian Sea around the system centre.

(ii) Sea condition

The sea condition is phenomenal around the system centre. It is very likely continue to be phenomenal over westcentral Arabian Sea till 13th October 2018 morning and over adjoin areas of Gulf of Aden.

(iii) Fishermen Warning

The fishermen are advised not to venture into deep sea areas of westcentral Arabian Sea & Gulf of Aden till 14th October.

The next bulletin will be issued at 2330 hrs IST of today, the 11th October, 2018.

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

Copy to: CRS, Pune/RSMC Guwahati/ ACWC Chennai/ Kolkata/ Mumbai/MC Goa/Thiruvanathapuram/ Bengaluru/Agartala/ CWC Ahmedabad.

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.

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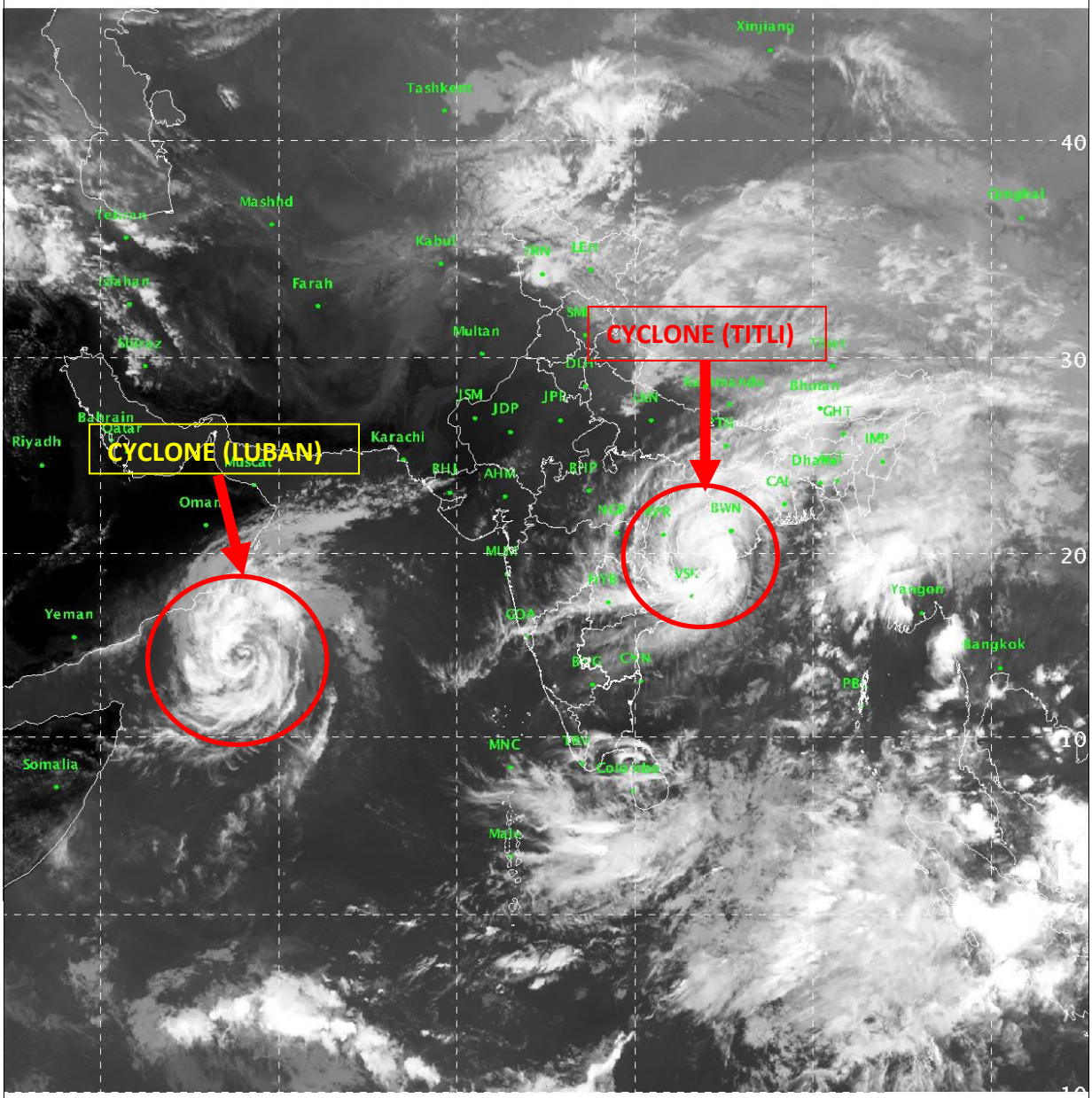
IMG_TIR1 10.8 um
L1C Mercator (LINEAR STRETCH: 1.0%)

11-10-2018/12:00 GMT
11-10-2018/17:30 IST



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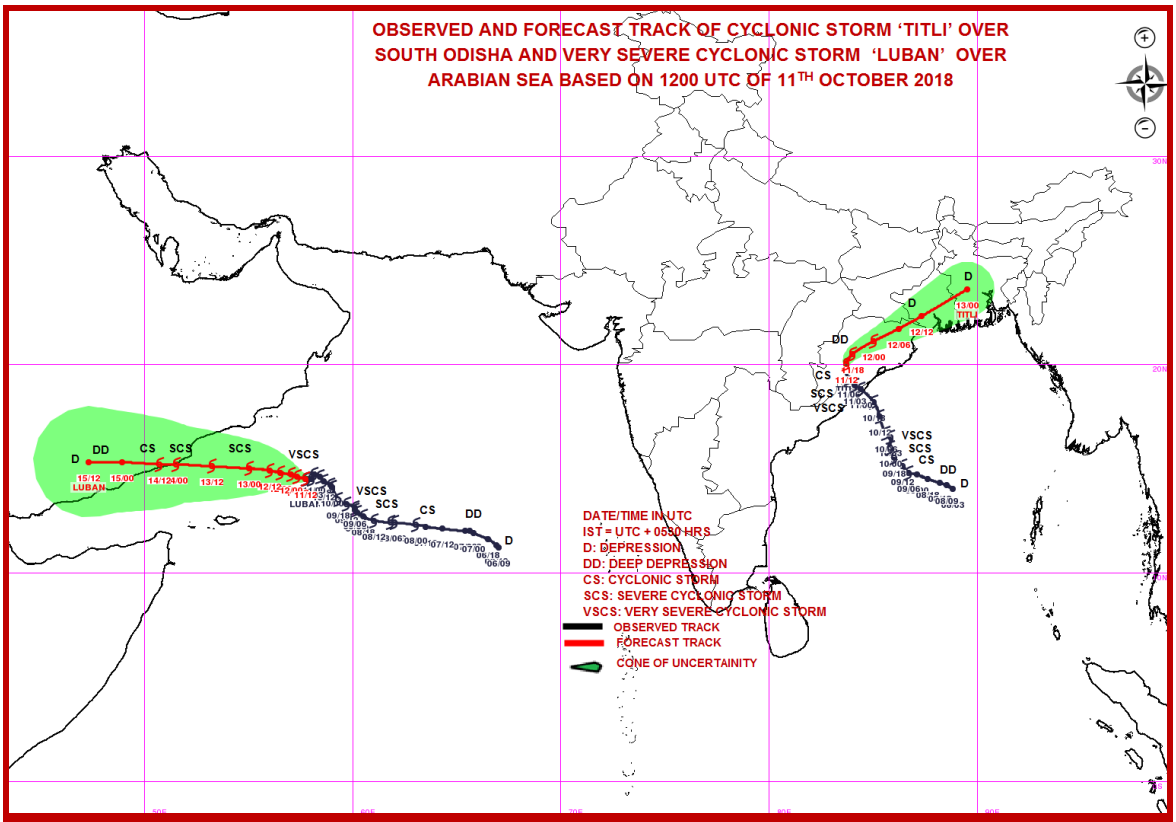
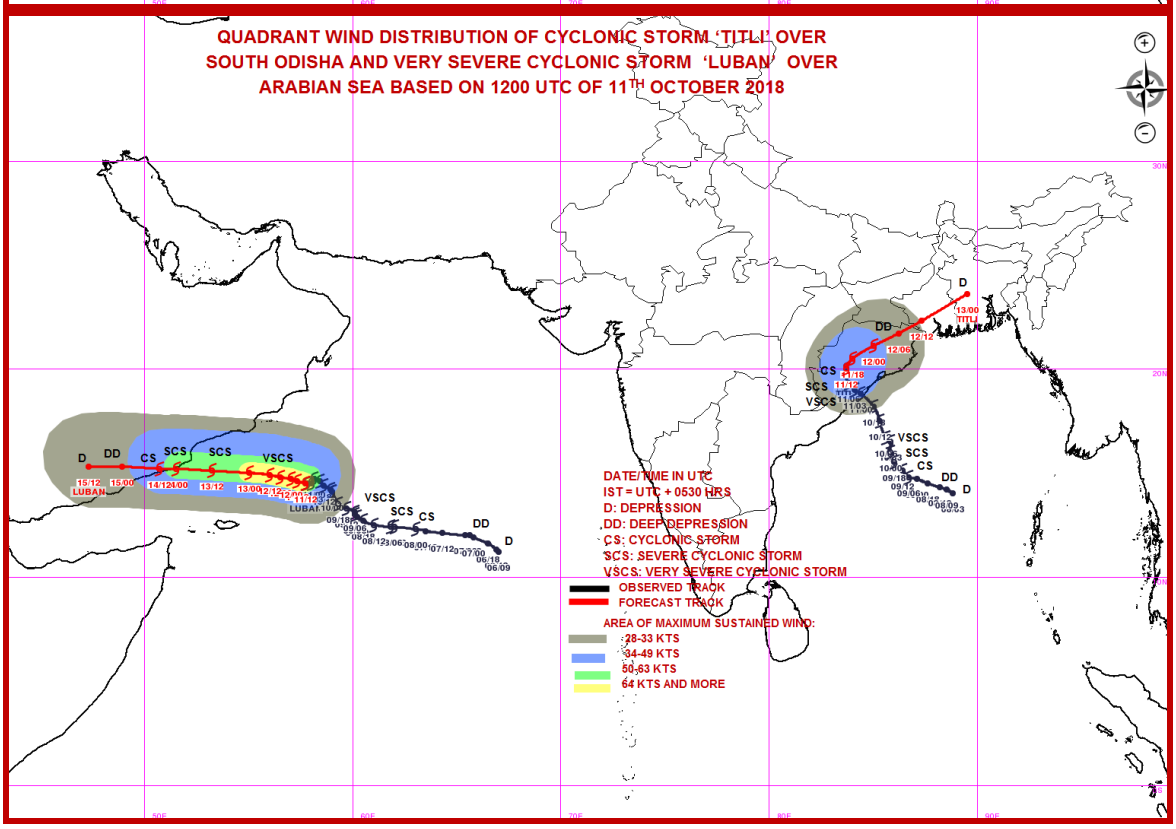
IMD/Delhi

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.





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.

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

BULLETIN NO.: 29 (BOB 08/2018) and BULLETIN NO. : 39 (ARB 04/2018)

TIME OF ISSUE: 2345 HOURS IST **DATED: 11.10.20180**

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)
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 (23421101)
DIRECTOR GENERAL, AIR (23421105, 23421219)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 24363261)
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. 04896-262184)
ADMINISTRATOR, UNION TERRITORY OF DAMAN & DIU AND DADRA NAGAR HAVELI (0260-2230775)
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CHIEF SECRETARY, GOA (FAX NO. 0832-2415201)
CHIEF SECRETARY, MAHARASHTRA (FAX NO. 022- 22028594)
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CHIEF SECRETARY, ANDHRA PRADESH (FAX NO. 0866-2441029)
CHIEF SECRETARY, ODISHA (FAX NO. 0674 -2536660)
CHIEF SECRETARY, WEST BENGAL (FAX NO. 033 -22144328)
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CHIEF SECRETARY, MIZORAM (FAX NO. 389 -2322745)
CHIEF SECRETARY, TRIPURA (FAX NO. 0381-2414013)
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CHIEF SECRETARY, MEGHALAYA (FAX NO. 0364 -2225978)
CHIEF SECRETARY, NAGALAND (FAX NO. 0370 -2270057)
CHIEF SECRETARY, MANIPUR (FAX NO. 0385 2452629)

Sub: (a) Cyclonic Storm 'TITLI' over south Odisha: Cyclone Warning for south Odisha
(b) Very Severe Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea

(a) Cyclonic Storm 'TITLI' over south Odisha

The Cyclonic Storm **'TITLI'** over south Odisha moved northeastwards in past six hours with speed 15 kmph and lay centred at 2030 hrs IST of today, the 11th October 2018 over south Odisha near latitude 20.1°N and longitude 84.0°E, 90 km east-northeast of Bhawanipatna and 50 km west-southwest of Phulbani.

It is very likely to move northeastwards towards Gangetic West Bengal across north Odisha. It is very likely to weaken further into a Deep Depression during next 06 hours. Forecast track and intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
11.10.18/2030	20.1/84.0	70-80 gusting to 90	Cyclonic Storm
11.10.18/2330	20.5/84.0	60-70 gusting to 80	Cyclonic Storm
12.10.18/0530	21.1/85.0	50-60 gusting to 70	Deep Depression
12.10.18/1130	21.7/86.2	40-50 gusting to 60	Depression
12.10.18/1730	22.3/87.3	30-40 gusting to 50	Depression
13.10.18/0530	23.6/89.5	20-30 gusting to 40	Well Marked Low

(i) Heavy rainfall warnings:

Region	11 Oct. 2018 (Rainfall till 0830 IST of next day)	12 Oct. 2018(Rainfall till 0830 IST of next day)	13 Oct. 2018(Rainfall till 0830 IST of next day)
Odisha	Rainfall at most places with heavy to very heavy falls at a few places and extremely heavy falls at Isolated Places over south Odisha.	Rainfall at most places with heavy to very heavy falls at Isolated Places	Nil
North Coastal Andhra Pradesh	Rainfall at a few places with heavy to very heavy falls at isolated places	Nil	Nil
Gangetic West Bengal	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at most places with heavy to very heavy falls at a few places	Rainfall at most places with heavy to very heavy falls at Isolated Places
Assam & Meghalaya	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at most places with heavy to very heavy falls and extremely heavy falls at Isolated Places	Rainfall at most places with heavy to very heavy falls and extremely heavy falls at Isolated Places
Mizoram & Tripura	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at most places with heavy to very heavy falls at isolated places	Rainfall at most places with heavy to very heavy falls at isolated places

Legends: Red-Take Action; Orange- Be prepared; Yellow- be updated; 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

- **Gale wind speed reaching 60-70 kmph gusting to 80 kmph very likely over Gajapati, Ganjam, Nayagarh Kandhamal & Rayagada districts of Odisha during next three hours** and gradually decrease thereafter becoming squally wind speed of 45-55 kmph gusting to 65 kmph by early morning of 12th. Squally wind speed of 40-50 kmph gusting to 60 kmph likely along & off south coastal Odisha during subsequent 12 hours.
- Squally wind speed of 40-50 kmph gusting 60 kmph very likely along & off north Odisha and West Bengal coasts during next 24 hours. Squally wind speed of 30-40 kmph gusting to 50 kmph is very likely over adjoining districts of north interior Odisha during next 12 hours.

(iii) Sea condition

- The sea condition will be rough to very rough along & off south Odisha coast during next 12 hours. Sea conditions will be rough to very rough along & off West Bengal and north Odisha Coasts during next 36 hours.

(iv) Damage Expected during next 03 hours over Gajapati, Ganjam, Nayagarh, Kandhamal and Rayagada districts of Odisha:

- Damage to thatched huts.
- Minor damage to power and communication lines due to breaking of branches.
- Major damage to Kutcha and minor damage to Pucca roads.
- Some damage to paddy crops, banana, papaya trees and orchards.

(v) Action Suggested:

- The fishermen are advised not to venture into north Bay of Bengal during next 36 hours.
- People advised to remain indoors during next three hours in the around 100 km from the centre of the Cyclonic Storm over south Odisha.

(b) Very Severe Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea:

The Very Severe Cyclonic Storm **'LUBAN'** over westcentral Arabian Sea remained practically stationary and lay centered at 2030 hrs IST of today, the 11th October 2018 over westcentral Arabian Sea, near latitude 14.5°N and longitude 57.7°E, about 480 km east-southeast of Salalah (Oman), 460 km east-northeast of Socotra Islands (Yemen) and 620 km east-southeast of Al-Ghaidah (Yemen). It is very likely to intensify further slightly and move west-northwestwards towards Yemen & South Oman Coasts during next 4 days. Forecast track & intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
11.10.18/2030	14.5/57.7	125-135 gusting to 150	Very Severe Cyclonic Storm
11.10.18/2330	14.6/57.3	130-140 gusting to 155	Very Severe Cyclonic Storm
12.10.18/0530	14.7/57.0	130-140 gusting to 155	Very Severe Cyclonic Storm
12.10.18/1130	14.8/56.5	130-140 gusting to 155	Very Severe Cyclonic Storm
12.10.18/1730	14.9/56.0	130-140 gusting to 155	Very Severe Cyclonic Storm
13.10.18/0530	15.0/55.0	120-130 gusting to 145	Very Severe Cyclonic Storm
13.10.18/1730	15.1/53.2	110-120 gusting to 135	Severe Cyclonic Storm
14.10.18/05 30	15.2/51.5	100-110 gusting to 125	Severe Cyclonic Storm
14.10.18/1730	15.2/50.7	80-90 gusting to 100	Cyclonic Storm
15.10.18/0530	15.3/48.9	55-65 gusting to 75	Deep Depression
15.10.18/1730	15.3/47.3	40-50 gusting to 60	Depression

Warnings:

(i) Wind warning

Gale wind speed reaching 120-130 kmph gusting to 145 kmph is prevailing over westcentral Arabian Sea. It is very likely to decrease gradually becoming 110-120 kmph gusting to 135 kmph by 14th October 2018 morning over westcentral Arabian Sea around the system centre.

(ii) Sea condition

The sea condition is phenomenal around the system centre. It is very likely continue to be phenomenal over westcentral Arabian Sea till 13th October 2018 morning and over adjoin areas of Gulf of Aden.

(iii) Fishermen Warning

The fishermen are advised not to venture into deep sea areas of westcentral Arabian Sea & Gulf of Aden till 14th October.

The next bulletin will be issued at 0230 hrs IST 12th October, 2018.

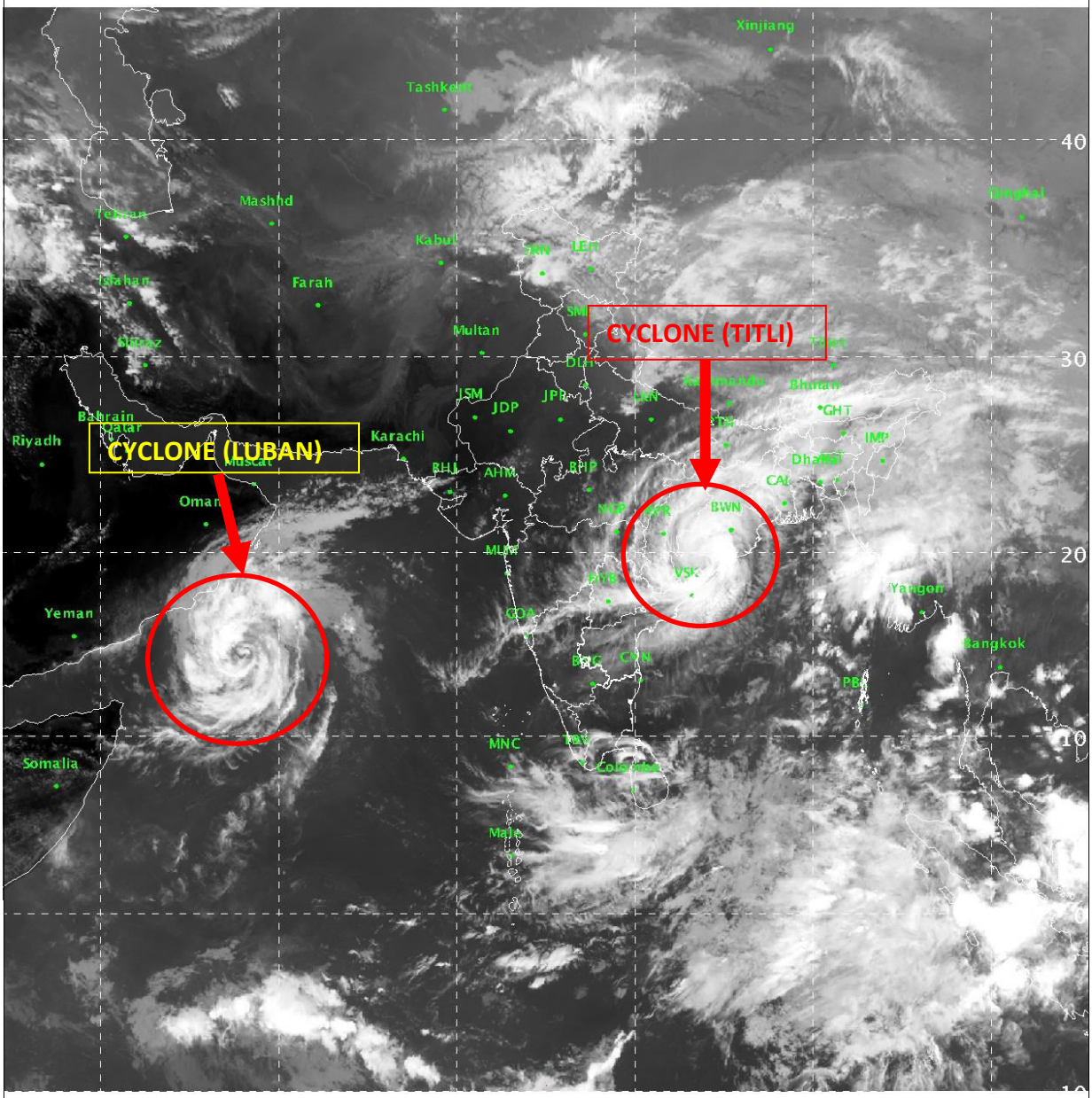
(D R Pattanaik)
Scientist-E, RSMC, New Delhi

Copy to: CRS, Pune/RSMC Guwahati/ ACWC Chennai/ Kolkata/ Mumbai/MC Goa/Thiruvanathapuram/ Bengaluru/Agartala/ CWC Ahmedabad.

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.

SAT :INSAT-3D IMG
IMG_TIR1 10.8 um
L1C Mercator (LINEAR STRETCH: 1.0%)

11-10-2018/12:00 GMT
11-10-2018/17:30 IST



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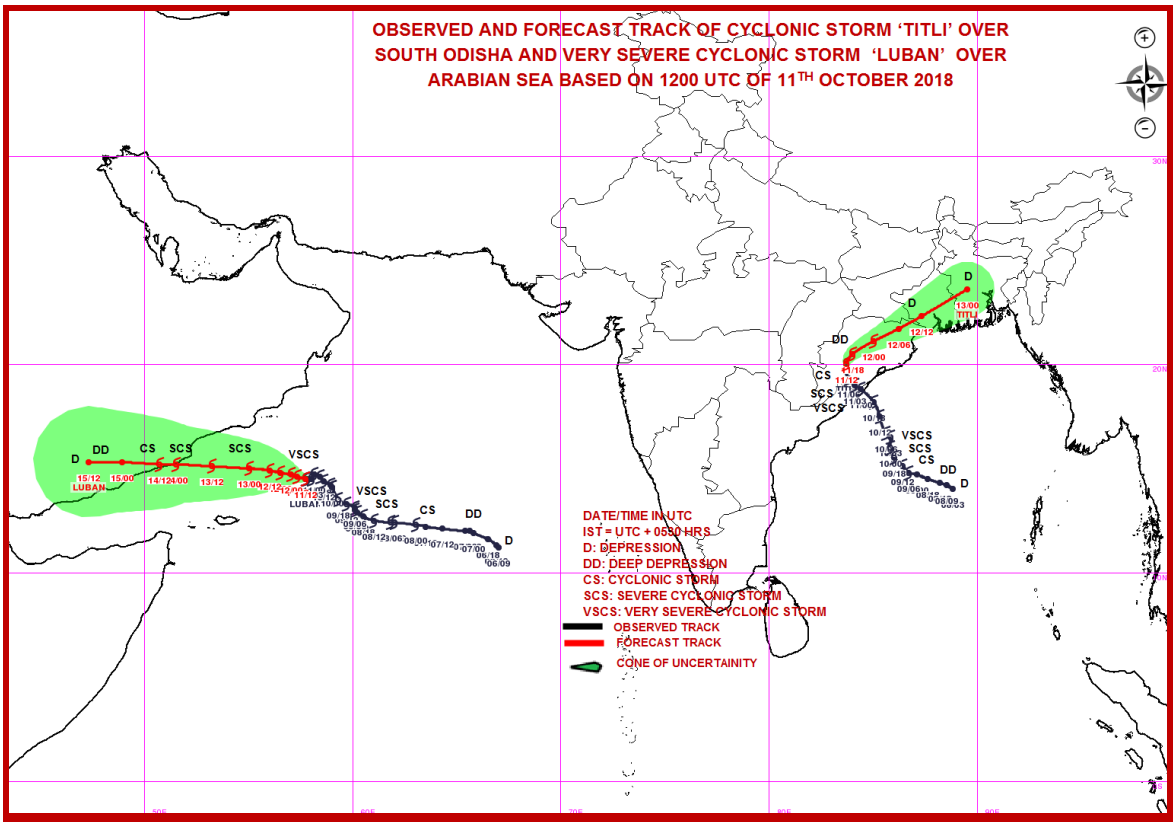
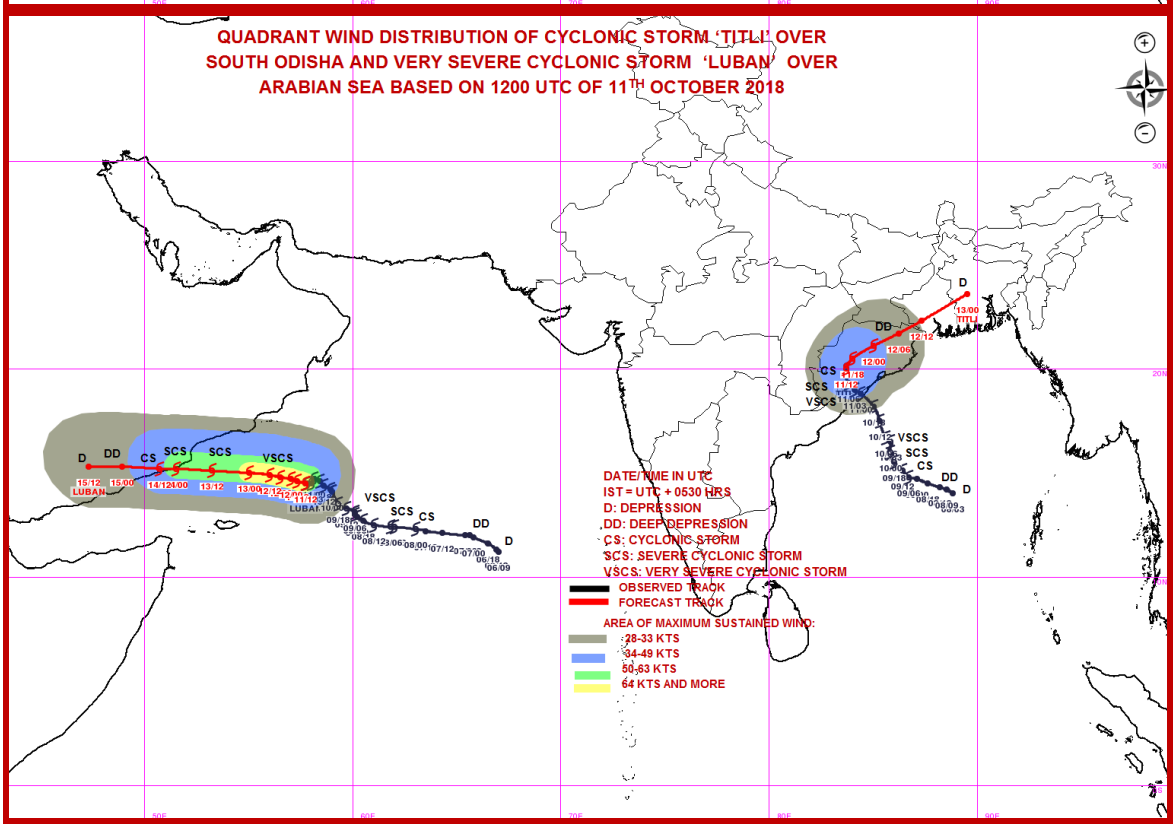
IMD/Delhi

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.





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.

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

BULLETIN NO.: 30 (BOB 08/2018) and BULLETIN NO. : 40 (ARB 04/2018)

TIME OF ISSUE: 0200 HOURS IST **DATED: 12.10.20180**

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

TO: CONTROL ROOM, NDM, MINISTRY OF HOME AFFAIRS (FAX.NO. 23093750)
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CHIEF SECRETARY, ODISHA (FAX NO. 0674 -2536660)
CHIEF SECRETARY, WEST BENGAL (FAX NO. 033 -22144328)
CHIEF SECRETARY, ANDAMAN & NICOBAR ISLANDS (FAX NO. 03192- 232656)
CHIEF SECRETARY, MIZORAM (FAX NO. 389 -2322745)
CHIEF SECRETARY, TRIPURA (FAX NO. 0381-2414013)
CHIEF SECRETARY, ASSAM (FAX NO. 0361-2237200)
CHIEF SECRETARY, MEGHALAYA (FAX NO. 0364 -2225978)
CHIEF SECRETARY, NAGALAND (FAX NO. 0370 -2270057)
CHIEF SECRETARY, MANIPUR (FAX NO. 0385 2452629)

Sub: (a) Cyclonic Storm 'TITLI' weakened into a Deep Depression over south Odisha
(b) Very Severe Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea

(a)Cyclonic Storm 'TITLI' weakened into a Deep Depression over south Odisha

The Cyclonic Storm **'TITLI'** over south Odisha moved eastwards in past six hours with speed 8 kmph, weakened into a deep depression and lay centred at 2330 hrs IST of 11th October 2018 over south Odisha near latitude 20.1°N and longitude 84.2°E, 100 km east-northeast of Bhawanipatna and 50 km north-northwest of Phulbani. It is very likely to move northeastwards towards Gangetic West Bengal across north Odisha.

Forecast track and intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
11.10.18/2330	20.1/84.2	50-60 gusting to 70	Deep Depression
12.10.18/0530	20.8/85.0	50-60 gusting to 70	Deep Depression
12.10.18/1130	21.7/86.2	40-50 gusting to 60	Depression
12.10.18/1730	22.3/87.3	30-40 gusting to 50	Depression
12.10.18/2330	23.6/89.5	20-30 gusting to 40	Well Marked Low

(i) Heavy rainfall warnings:

Region	11 Oct. 2018 (Rainfall till 0830 IST of next day)	12 Oct. 2018(Rainfall till 0830 IST of next day)	13 Oct. 2018(Rainfall till 0830 IST of next day)
Odisha	Rainfall at most places with heavy to very heavy falls at a few places and extremely heavy falls at Isolated Places over south Odisha.	Rainfall at most places with heavy to very heavy falls at Isolated Places	Nil
North Coastal Andhra Pradesh	Rainfall at a few places with heavy to very heavy falls at isolated places	Nil	Nil
Gangetic West Bengal	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at most places with heavy to very heavy falls at a few places	Rainfall at most places with heavy to very heavy falls at Isolated Places
Assam & Meghalaya	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at most places with heavy to very heavy falls and extremely heavy falls at Isolated Places	Rainfall at most places with heavy to very heavy falls and extremely heavy falls at Isolated Places
Mizoram & Tripura	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at most places with heavy to very heavy falls at isolated places	Rainfall at most places with heavy to very heavy falls at isolated places

Legends: Red-Take Action; Orange- Be prepared; Yellow- be updated; 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

- Squally wind speed of 45-55 kmph gusting to 65 kmph very likely over Gajapati, Ganjam, Nayagarh Kandhamal & Rayagada districts of Odisha during next 06 hours. Squally wind speed of 40-50 kmph gusting to 60 kmph likely along & off south coastal Odisha during subsequent 12 hours.

- Squally wind speed of 40-50 kmph gusting 60 kmph very likely along & off north Odisha and West Bengal coasts during next 24 hours. Squally wind speed of 30-40 kmph gusting to 50 kmph is very likely over adjoining districts of north interior Odisha during next 12 hours.

(iii) Sea condition

- The sea condition will be rough to very rough along & off south Odisha coast during next 12 hours. Sea conditions will be rough to very rough along & off West Bengal and north Odisha Coasts during next 24 hours.

(iv) Damage Expected during next 06 hours over Gajapati, Ganjam, Nayagarh, Kandhamal, Rayagada districts and north coastal & adjoining districts of north interior Odisha:

- Minor damage to loose/unsecured structures
- Some breaches in Kutcha road due to flooding.
- Minor damage to Banana trees and near coastal agriculture due to salt spray. Damage to ripe paddy crops.

(v) Action Suggested:

- The fishermen are advised not to venture into north Bay of Bengal during next 36 hours.

(b) Very Severe Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea

The Very Severe Cyclonic Storm **'LUBAN'** over westcentral Arabian Sea moved northwestward in past 06 hours with a speed of 03 km/hours. and lay centered at 2330 hrs IST of 11th October 2018 over westcentral Arabian Sea, near latitude 14.6°N and longitude 57.6°E, about 460 km east-southeast of Salalah (Oman), 450 km east-northeast of Socotra Islands (Yemen) and 610 km east-southeast of Al-Ghaidah (Yemen). It is very likely to intensify further slightly and move west-northwestwards towards Yemen & South Oman Coasts during next 4 days. Forecast track & intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance

11.10.18/2330	14.6/57.6	130-140 gusting to 155	Very Severe Cyclonic Storm
12.10.18/0530	14.7/57.0	130-140 gusting to 155	Very Severe Cyclonic Storm
12.10.18/1130	14.8/56.5	130-140 gusting to 155	Very Severe Cyclonic Storm
12.10.18/1730	14.9/56.0	130-140 gusting to 155	Very Severe Cyclonic Storm
12.10.18/2330	15.0/55.5	130-140 gusting to 155	Very Severe Cyclonic Storm
13.10.18/1130	15.1/54.1	120-130 gusting to 145	Very Severe Cyclonic Storm
13.10.18/2330	15.1/52.4	110-120 gusting to 135	Severe Cyclonic Storm
14.10.18/1130	15.2/51.1	100-110 gusting to 125	Severe Cyclonic Storm
14.10.18/2330	15.2/50.0	80-90 gusting to 100	Cyclonic Storm
15.10.18/1130	15.3/48.1	55-65 gusting to 75	Deep Depression
15.10.18/2330	15.3/46.8	40-50 gusting to 60	Depression

Warnings:

(i) Wind warning

Gale wind speed reaching 120-130 kmph gusting to 145 kmph is prevailing over westcentral Arabian Sea. It is very likely to decrease gradually becoming 110-120 kmph gusting to 135 kmph by 14th October 2018 morning over westcentral Arabian Sea around the system centre.

(ii) Sea condition

The sea condition is phenomenal around the system centre. It is very likely continue to be phenomenal over westcentral Arabian Sea till 13th October 2018 morning and over adjoin areas of Gulf of Aden.

(iii) Fishermen Warning

The fishermen are advised not to venture into deep sea areas of westcentral Arabian Sea & Gulf of Aden till 14th October.

The next bulletin will be issued at 0530 hrs IST 12th October, 2018.

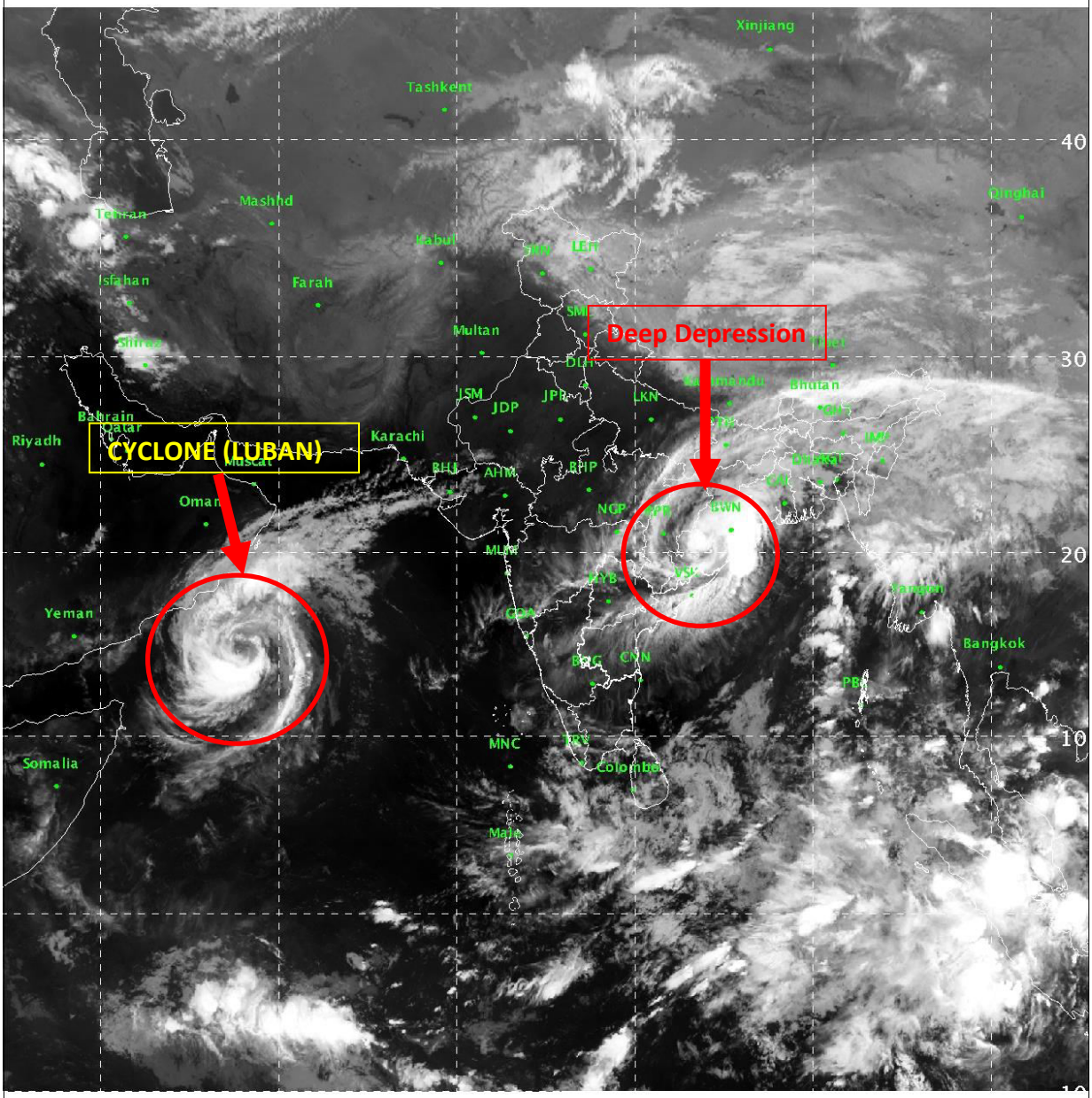
(D R Pattanaik)
Scientist-E, RSMC, New Delhi

Copy to: CRS, Pune/RSMC Guwahati/ ACWC Chennai/ Kolkata/ Mumbai/MC Goa/Thiruvanathapuram/ Bengaluru/Agartala/ CWC Ahmedabad.

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.

SAT :INSAT-3D IMG
IMG_TIR1 10.8 um
L1C Mercator (LINEAR STRETCH: 1.0%)

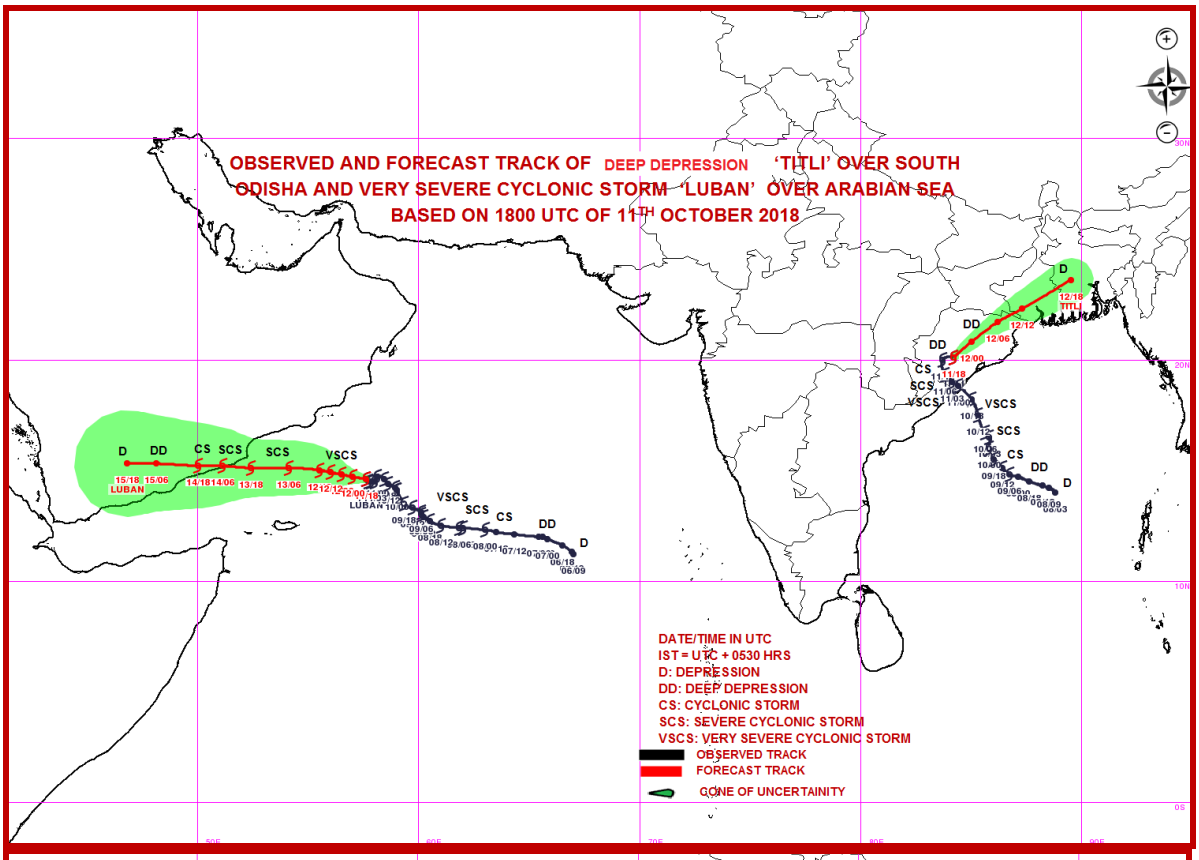
11-10-2018/16:30 GMT
11-10-2018/22:00 IST

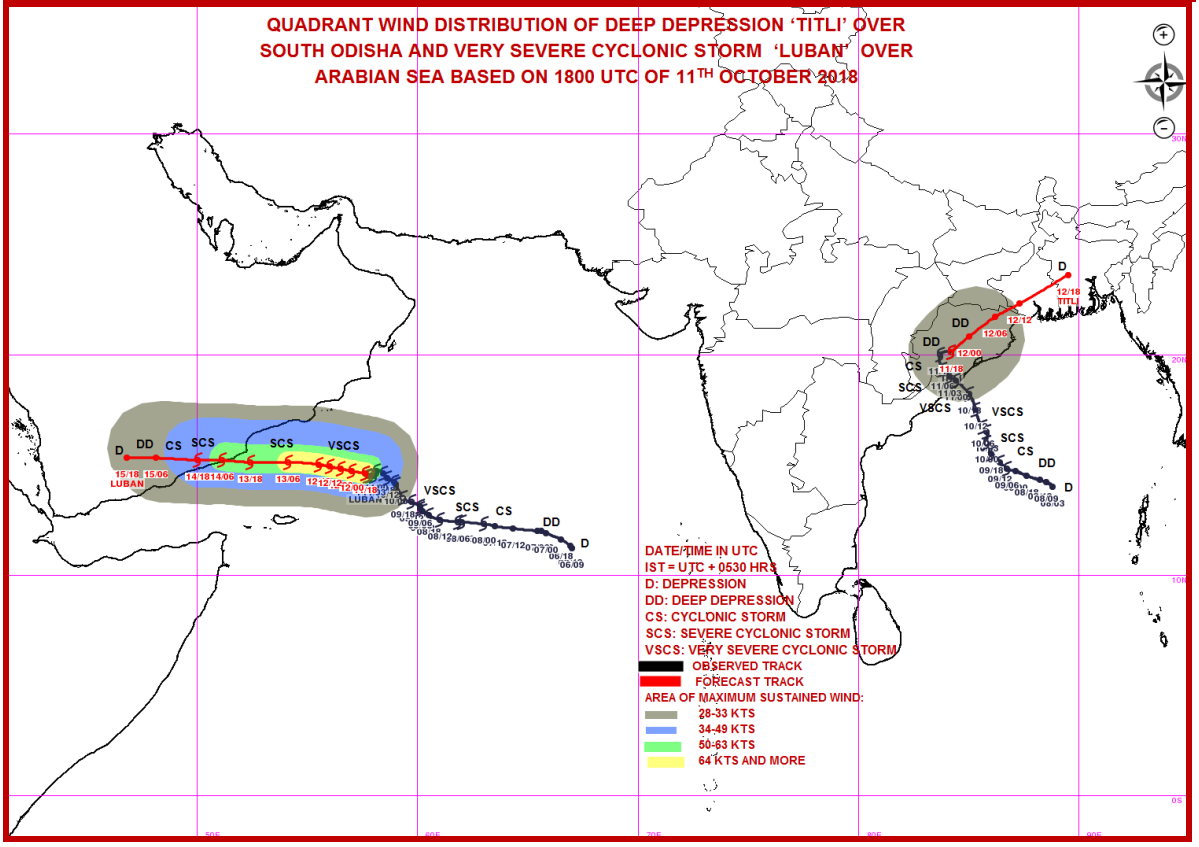


532 899 IMD/Delhi

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.





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.

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

BULLETIN NO.: 31 (BOB 08/2018) and BULLETIN NO. : 41 (ARB 04/2018)

TIME OF ISSUE: 0600 HOURS IST **DATED: 12.10.20180**

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)
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 (23421101)
DIRECTOR GENERAL, AIR (23421105, 23421219)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 24363261)
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. 04896-262184)
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)
CHIEF SECRETARY, ANDHRA PRADESH (FAX NO. 0866-2441029)
CHIEF SECRETARY, ODISHA (FAX NO. 0674 -2536660)
CHIEF SECRETARY, WEST BENGAL (FAX NO. 033 -22144328)
CHIEF SECRETARY, ANDAMAN & NICOBAR ISLANDS (FAX NO. 03192- 232656)
CHIEF SECRETARY, MIZORAM (FAX NO. 389 -2322745)
CHIEF SECRETARY, TRIPURA (FAX NO. 0381-2414013)
CHIEF SECRETARY, ASSAM (FAX NO. 0361-2237200)
CHIEF SECRETARY, MEGHALAYA (FAX NO. 0364 -2225978)
CHIEF SECRETARY, NAGALAND (FAX NO. 0370 -2270057)
CHIEF SECRETARY, MANIPUR (FAX NO. 0385 2452629)

Sub: (a) Deep Depression over Odisha
(b) Very Severe Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea

(a) Deep Depression over Odisha

The Deep Depression over south Odisha moved east-northeastwards in past six hours with speed 5 kmph, and lay centred at 0230 hrs IST of today, the 12th October 2018 over Odisha near latitude 20.2°N and longitude 84.3°E, 120 km east-northeast of Bhawanipatna and 30 km south of Phulbani. It is very likely to move northeastwards towards Gangetic West Bengal across north Odisha.

Forecast track and intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
12.10.18/0230	20.2/84.3	50-60 gusting to 70	Deep Depression
12.10.18/0530	20.8/85.0	50-60 gusting to 70	Deep Depression
12.10.18/1130	21.7/86.2	40-50 gusting to 60	Depression
12.10.18/1730	22.3/87.3	30-40 gusting to 50	Depression
12.10.18/2330	23.6/89.5	20-30 gusting to 40	Well Marked Low

(i) Heavy rainfall warnings:

Region	11 Oct. 2018 (Rainfall till 0830 IST of next day)	12 Oct. 2018(Rainfall till 0830 IST of next day)	13 Oct. 2018(Rainfall till 0830 IST of next day)
Odisha	Rainfall at most places with heavy to very heavy falls at a few places and extremely heavy falls at Isolated Places over south Odisha.	Rainfall at most places with heavy to very heavy falls at Isolated Places	Nil
North Coastal Andhra Pradesh	Rainfall at a few places with heavy to very heavy falls at isolated places	Nil	Nil
Gangetic West Bengal	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at most places with heavy to very heavy falls at a few places	Rainfall at most places with heavy to very heavy falls at Isolated Places
Assam & Meghalaya	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at most places with heavy to very heavy falls and extremely heavy falls at Isolated Places	Rainfall at most places with heavy to very heavy falls and extremely heavy falls at Isolated Places
Mizoram & Tripura	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at most places with heavy to very heavy falls at isolated places	Rainfall at most places with heavy to very heavy falls at isolated places

Legends: Red-Take Action; Orange- Be prepared; Yellow- be updated; 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

- Squally wind speed of 45-55 kmph gusting to 65 kmph very likely over Gajapati, Ganjam, Nayagarh Kandhamal & Rayagada districts of Odisha during next 06 hours. Squally wind speed of 40-50 kmph gusting to 60 kmph likely along & off south coastal Odisha during subsequent 12 hours.

- Squally wind speed of 40-50 kmph gusting 60 kmph very likely along & off north Odisha and West Bengal coasts during next 24 hours. Squally wind speed of 30-40 kmph gusting to 50 kmph is very likely over adjoining districts of north interior Odisha during next 12 hours.

(iii) Sea condition

- The sea condition will be rough to very rough along & off south Odisha coast during next 12 hours. Sea conditions will be rough to very rough along & off West Bengal and north Odisha Coasts during next 24 hours.

(iv) Damage Expected during next 06 hours over Gajapati, Ganjam, Nayagarh, Kandhamal, Rayagada districts and north coastal & adjoining districts of north interior Odisha:

- Minor damage to loose/unsecured structures
- Some breaches in Kutcha road due to flooding.
- Minor damage to Banana trees and near coastal agriculture due to salt spray. Damage to ripe paddy crops.

(v) Action Suggested:

- The fishermen are advised not to venture into north Bay of Bengal during next 36 hours.

(b) Very Severe Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea

The Very Severe Cyclonic Storm **'LUBAN'** over westcentral Arabian Sea moved northwestward in past 06 hours with a speed of 04 km/hours and lay centered at 0230 hrs IST of today, the 12th October 2018 over westcentral Arabian Sea, near latitude 14.7°N and longitude 57.6°E, about 450 km east-southeast of Salalah (Oman), 460 km east-northeast of Socotra Islands (Yemen) and 610 km east-southeast of Al-Ghaidah (Yemen). It is very likely to move west-northwestwards towards Yemen & South Oman Coasts during next 4 days. Forecast track & intensity are given in the following table:

Date/Time(IST)	Position	Maximum sustained surface	Category of cyclonic

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.

	(Lat. ^{0}N/ long. ^{0}E)	wind speed (Kmph)	disturbance
12.10.18/0230	14.7/57.6	130-140 gusting to 155	Very Severe Cyclonic Storm
12.10.18/0530	14.7/57.0	130-140 gusting to 155	Very Severe Cyclonic Storm
12.10.18/1130	14.8/56.5	130-140 gusting to 155	Very Severe Cyclonic Storm
12.10.18/1730	14.9/56.0	130-140 gusting to 155	Very Severe Cyclonic Storm
12.10.18/2330	15.0/55.5	130-140 gusting to 155	Very Severe Cyclonic Storm
13.10.18/1130	15.1/54.1	120-130 gusting to 145	Very Severe Cyclonic Storm
13.10.18/2330	15.1/52.4	110-120 gusting to 135	Severe Cyclonic Storm
14.10.18/1130	15.2/51.1	100-110 gusting to 125	Severe Cyclonic Storm
14.10.18/2330	15.2/50.0	80-90 gusting to 100	Cyclonic Storm
15.10.18/1130	15.3/48.1	55-65 gusting to 75	Deep Depression
15.10.18/2330	15.3/46.8	40-50 gusting to 60	Depression

Warnings:

(i) Wind warning

Gale wind speed reaching 120-130 kmph gusting to 145 kmph is prevailing over westcentral Arabian Sea. It is very likely to decrease gradually becoming 110-120 kmph gusting to 135 kmph by 14th October 2018 morning over westcentral Arabian Sea around the system centre.

(ii) Sea condition

The sea condition is phenomenal around the system centre. It is very likely continue to be phenomenal over westcentral Arabian Sea till 13th October 2018 morning and over adjoin areas of Gulf of Aden.

(iii) Fishermen Warning

The fishermen are advised not to venture into deep sea areas of westcentral Arabian Sea & Gulf of Aden till 14th October.

The next bulletin will be issued at 0830 hrs IST 12th October, 2018.

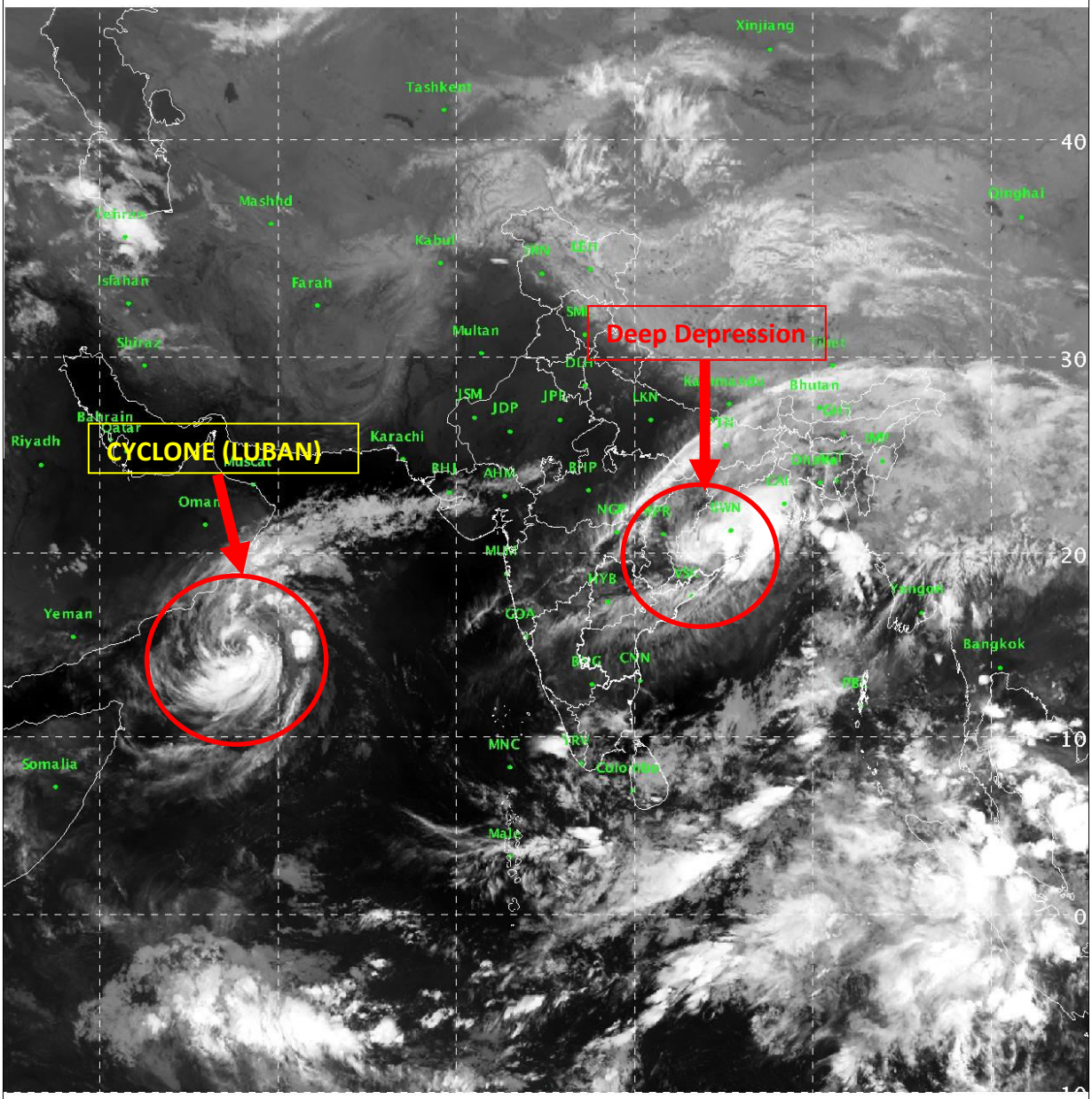
(D R Pattanaik)
Scientist-E, RSMC, New Delhi

Copy to: CRS, Pune/RSMC Guwahati/ ACWC Chennai/ Kolkata/ Mumbai/MC Goa/Thiruvanathapuram/ Bengaluru/Agartala/ CWC Ahmedabad.

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.

SAT :INSAT-3D IMG
IMG_TIR1 10.8 um
L1C Mercator (LINEAR STRETCH: 1.0%)

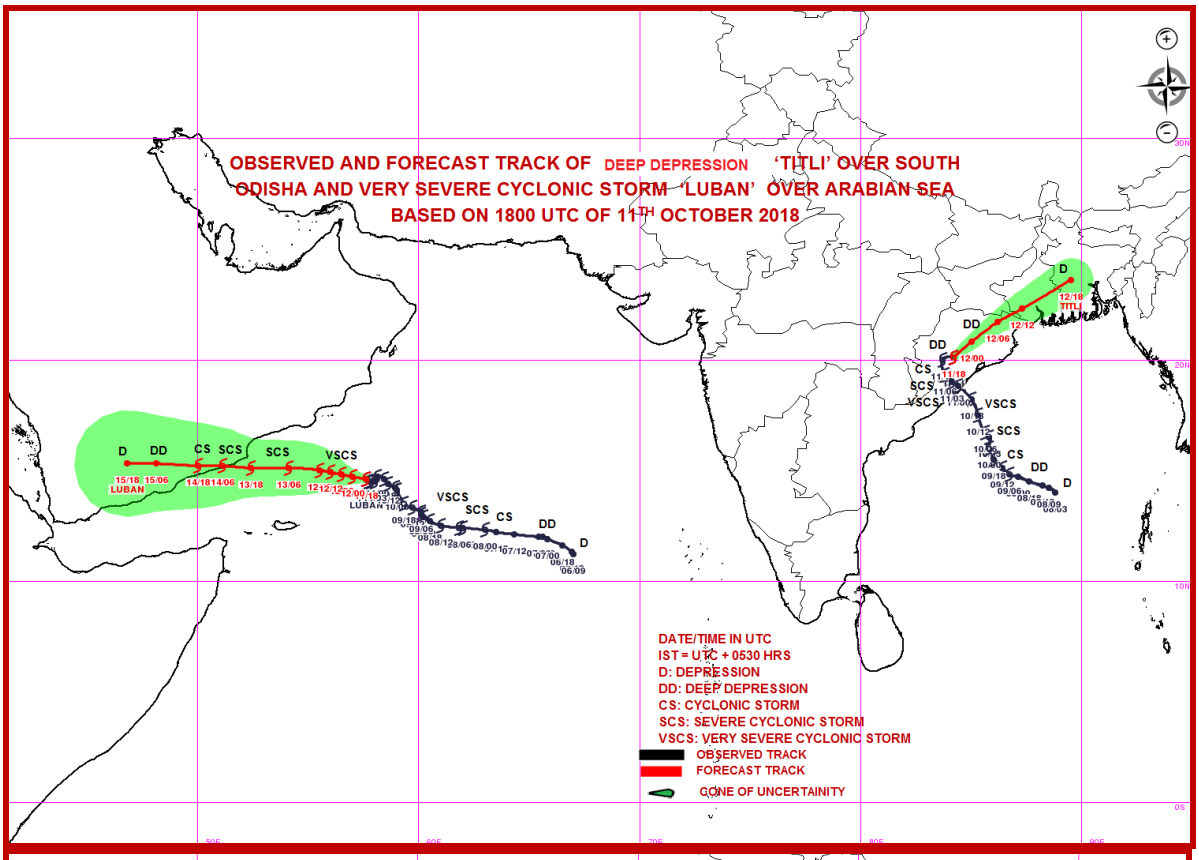
11-10-2018/21:00 GMT
12-10-2018/02:30 IST

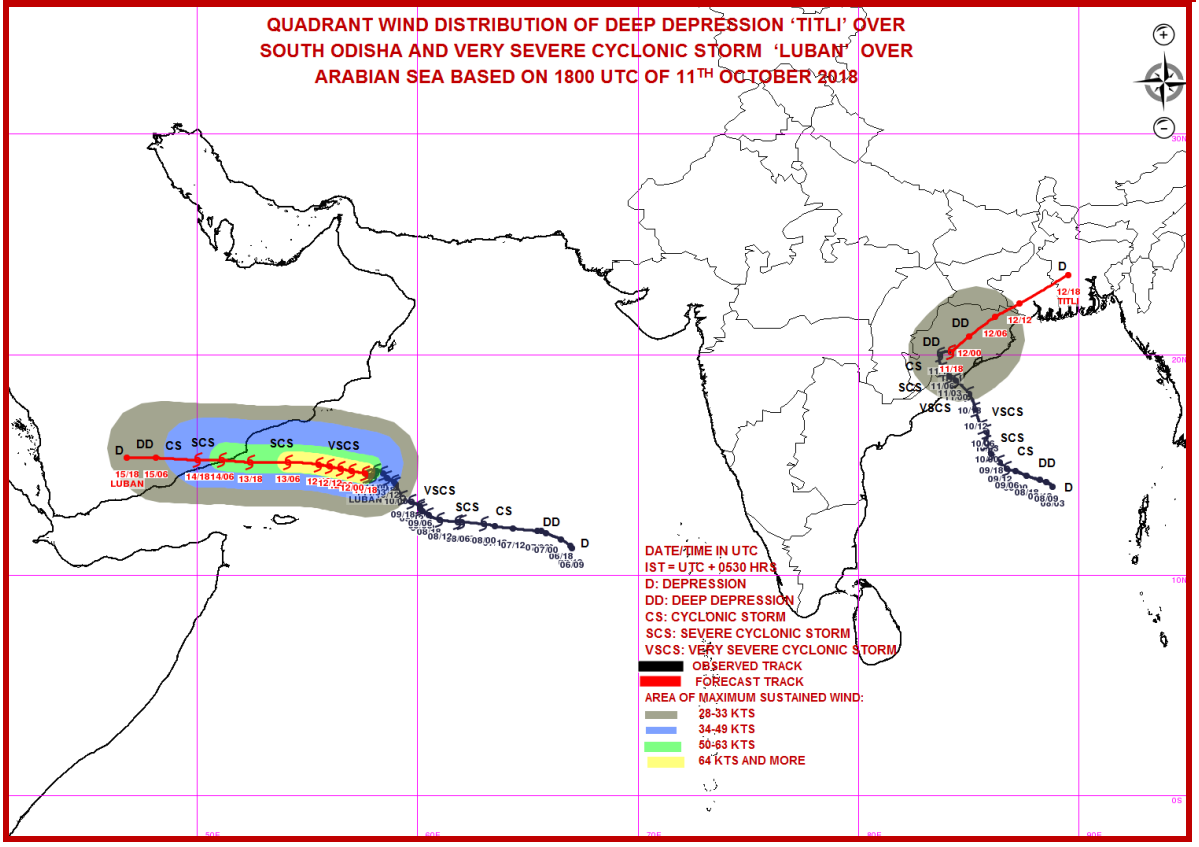


546 901 IMD/Delhi

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.





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.

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

BULLETIN NO.: 32 (BOB 08/2018) and BULLETIN NO. : 42 (ARB 04/2018)

TIME OF ISSUE: 0930 HOURS IST **DATED: 12.10.20180**

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)
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 (23421101)
DIRECTOR GENERAL, AIR (23421105, 23421219)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 24363261)
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. 04896-262184)
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)
CHIEF SECRETARY, ANDHRA PRADESH (FAX NO. 0866-2441029)
CHIEF SECRETARY, ODISHA (FAX NO. 0674 -2536660)
CHIEF SECRETARY, WEST BENGAL (FAX NO. 033 -22144328)
CHIEF SECRETARY, MIZORAM (FAX NO. 389 -2322745)
CHIEF SECRETARY, TRIPURA (FAX NO. 0381-2414013)
CHIEF SECRETARY, ASSAM (FAX NO. 0361-2237200)
CHIEF SECRETARY, MEGHALAYA (FAX NO. 0364 -2225978)
CHIEF SECRETARY, NAGALAND (FAX NO. 0370 -2270057)
CHIEF SECRETARY, MANIPUR (FAX NO. 0385 2452629)

Sub: (a) Deep Depression over Odisha and
(b) Very Severe Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea

(a) Deep Depression over Odisha

The Deep Depression over Odisha moved east-northeastwards in past six hours with a speed of 8 kmph, and lay centred at 0530 hrs IST of today, the 12th October 2018 over Odisha near latitude 20.4°N and longitude 84.6°E, 30 km north-east of Phulbani and 70 km southwest of Angul. It is very likely to move northeastwards towards Gangetic West Bengal and weaken into a depression during next 12 hours.

Forecast track and intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
12.10.18/0530	20.4/84.6	50-60 gusting to 70	Deep Depression
12.10.18/1130	20.7/85.1	50-60 gusting to 70	Deep Depression
12.10.18/1730	21.0/85.6	45-55 gusting to 65	Depression
12.10.18/2330	21.4/86.3	40-50 gusting to 60	Depression
13.10.18/0530	21.9/87.0	35-45 gusting to 55	Depression
13.10.18/1730	23.0/88.6	25-35 gusting to 45	Well Marked Low

(i) Heavy rainfall warnings:

Region	12 Oct. 2018(Rainfall till 0830 IST of next day)	13 Oct. 2018(Rainfall till 0830 IST of next day)
Odisha	Rainfall at most places with heavy to very heavy falls at isolated places over north Odisha.	Nil
Gangetic West Bengal	Rainfall at most places with heavy to very heavy falls at isolated places	Rainfall at many places with heavy falls at Isolated Places
Assam & Meghalaya	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at most places with heavy to very heavy falls at Isolated Places
Mizoram & Tripura	Rainfall at most places with heavy to very heavy falls at isolated places	Rainfall at most places with heavy to very heavy falls at isolated places

Legends: Red-Take Action; Orange- Be prepared; Yellow- be updated; Green: No warning

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.

(i) Wind warning

Squally wind speed of 45-55 kmph gusting to 65 kmph very likely along & off Odisha and West Bengal and 35-45 kmph gusting to 55 kmph likely over adjoining areas of north interior Odisha during next 12 hours and adjoining areas of south interior Odisha during next 6 hours..

(ii) Sea condition

- The sea condition will be rough to very rough along & off Odisha and West Bengal during next 24 hours. Sea conditions will be rough to very rough along & off West Bengal and north Odisha Coasts during next 24 hours.

(iii) Action Suggested:

- The fishermen are advised not to venture into Sea along and off Odisha and West Bengal coasts and north Bay of Bengal during next 24 hours.

(b) Very Severe Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea

The Very Severe Cyclonic Storm **'LUBAN'** over westcentral Arabian Sea moved slightly northward during past 06 hours with a speed of 02 km/hour and lay centered at 0530 hrs IST of today, the 12th October 2018 over westcentral Arabian Sea, near latitude 14.7°N and longitude 57.6°E, about 450 km east-southeast of Salalah (Oman), 460 km east-northeast of Socotra Islands (Yemen) and 610 km east-southeast of Al-Ghaidah (Yemen). It is very likely to move west-northwestwards and cross Yemen & adjoining South Oman Coasts around 15 degree north during noon of 14th October 2018 as a severe cyclonic storm.

Forecast track & intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
12.10.18/0530	14.7/57.6	120-130 gusting to 145	Very Severe Cyclonic Storm
12.10.18/1130	14.8/57.2	110-120 gusting to 135	Severe Cyclonic Storm
12.10.18/1730	14.9/56.8	110-120 gusting to 135	Severe Cyclonic Storm
12.10.18/2330	14.9/55.9	110-120 gusting to 135	Severe Cyclonic Storm
13.10.18/0530	14.9/55.2	110-120 gusting to 135	Severe Cyclonic Storm
13.10.18/1730	15.0/54.1	100-110 gusting to 125	Severe Cyclonic Storm
14.10.18/0530	15.1/52.3	100-110 gusting to 125	Severe Cyclonic Storm
14.10.18/1730	15.3/50.6	80-90 gusting to 100	Cyclonic Storm
15.10.18/0530	15.5/48.9	50-60 gusting to 70	Deep Depression

(i) Wind warning

Gale wind speed reaching 120-130 kmph gusting to 145 kmph is prevailing over westcentral Arabian Sea. It is very likely to decrease gradually becoming 110-120 kmph gusting to 135 during next six hours and 100-110 kmph gusting to 125 kmph by 14th October 2018 morning along and off south Oman and Yemen coasts and over adjoining westcentral Arabian Sea and adjoining Gulf of Aden .

(ii) Sea condition

The sea condition is phenomenal around the system centre. It will become very high Il is very likely become very high over westcentral Arabian Sea and adjoining Gulf of Aden till 14th October 2018 noon.

(iii) Fishermen Warning

The fishermen are advised not to venture into westcentral Arabian Sea & Gulf of Aden till 14th October.

The next bulletin will be issued at 1130 hrs IST 12th October, 2018.

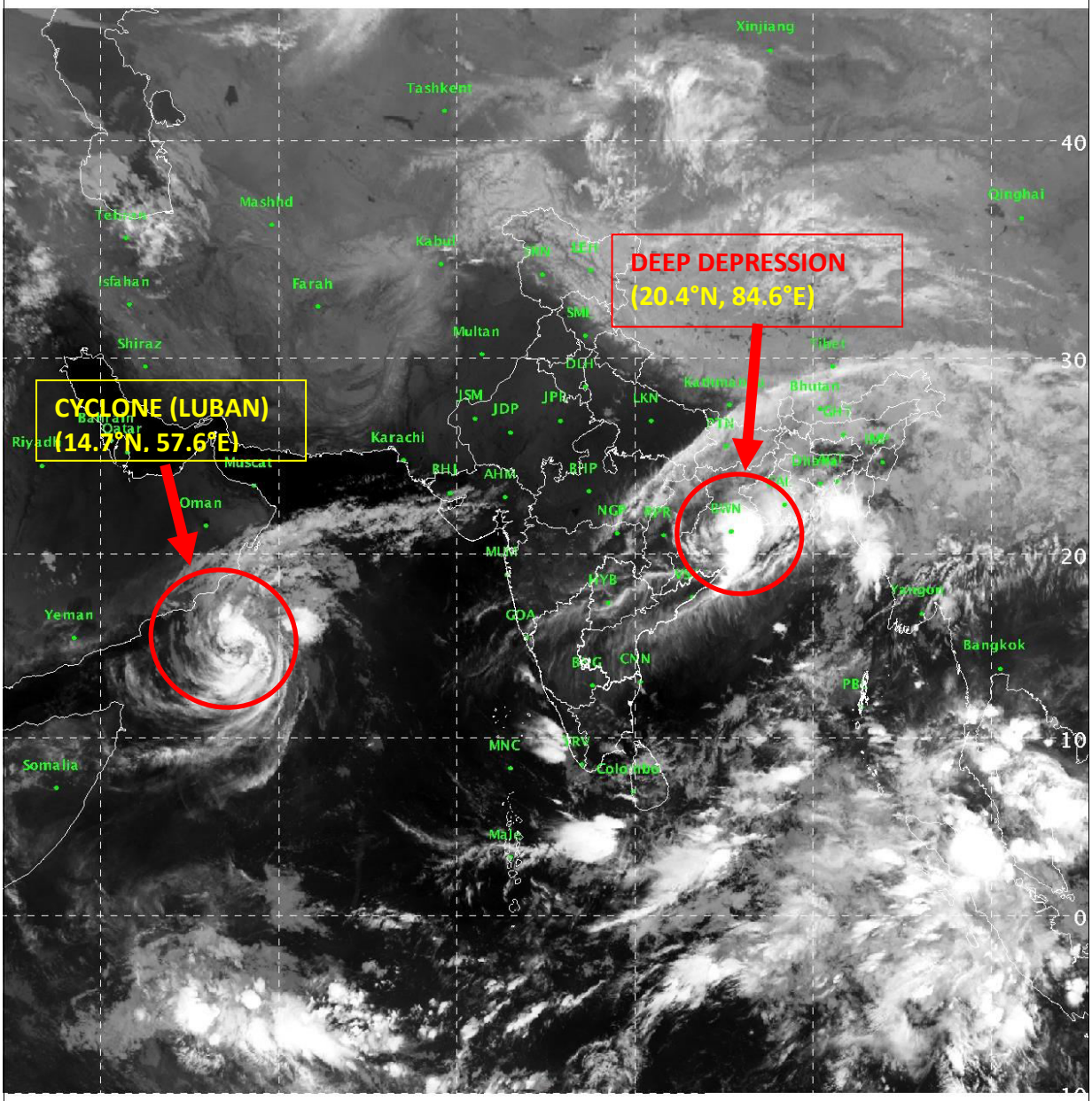
(D R Pattanaik)
Scientist-E, RSMC, New Delhi

Copy to: CRS, Pune/RSMC Guwahati/ ACWC Chennai/ Kolkata/ Mumbai/MC Goa/Thiruvanathapuram/ Bengaluru/Agartala/ CWC Ahmedabad.

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.

SAT :INSAT-3D IMG
IMG_TIR1 10.8 um
L1C Mercator (LINEAR STRETCH: 1.0%)

12-10-2018/00:00 GMT
12-10-2018/05:30 IST

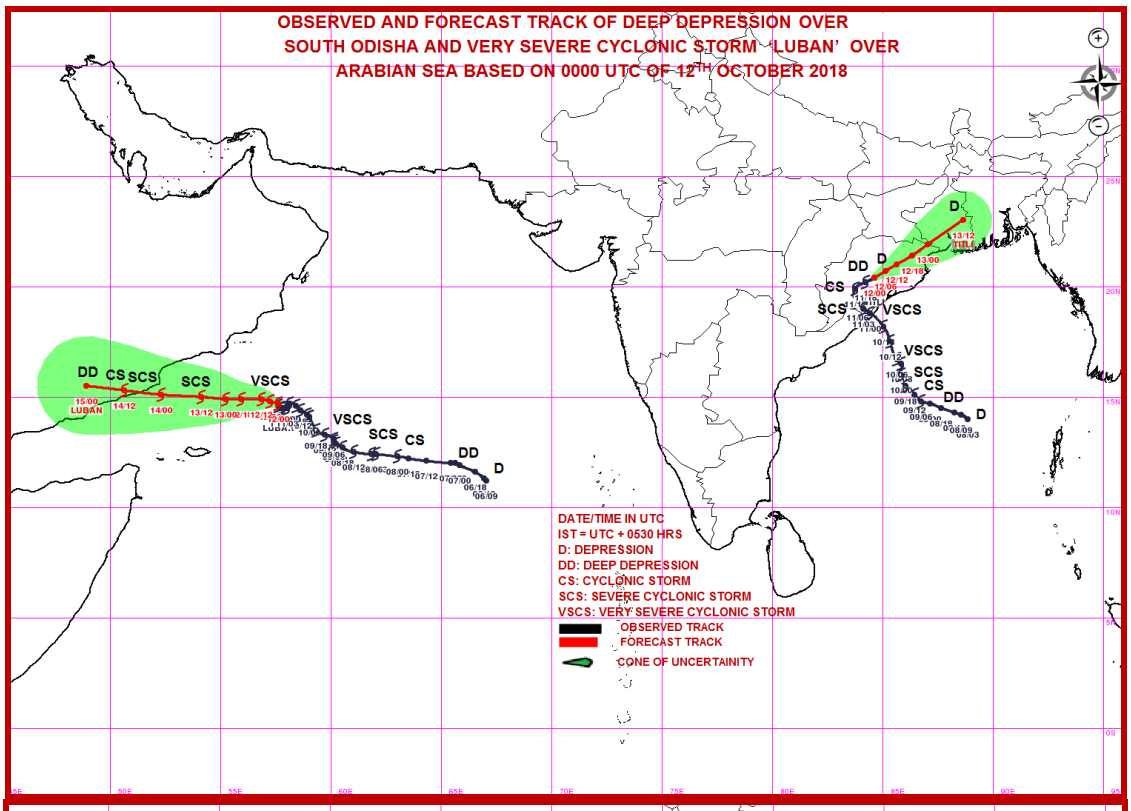


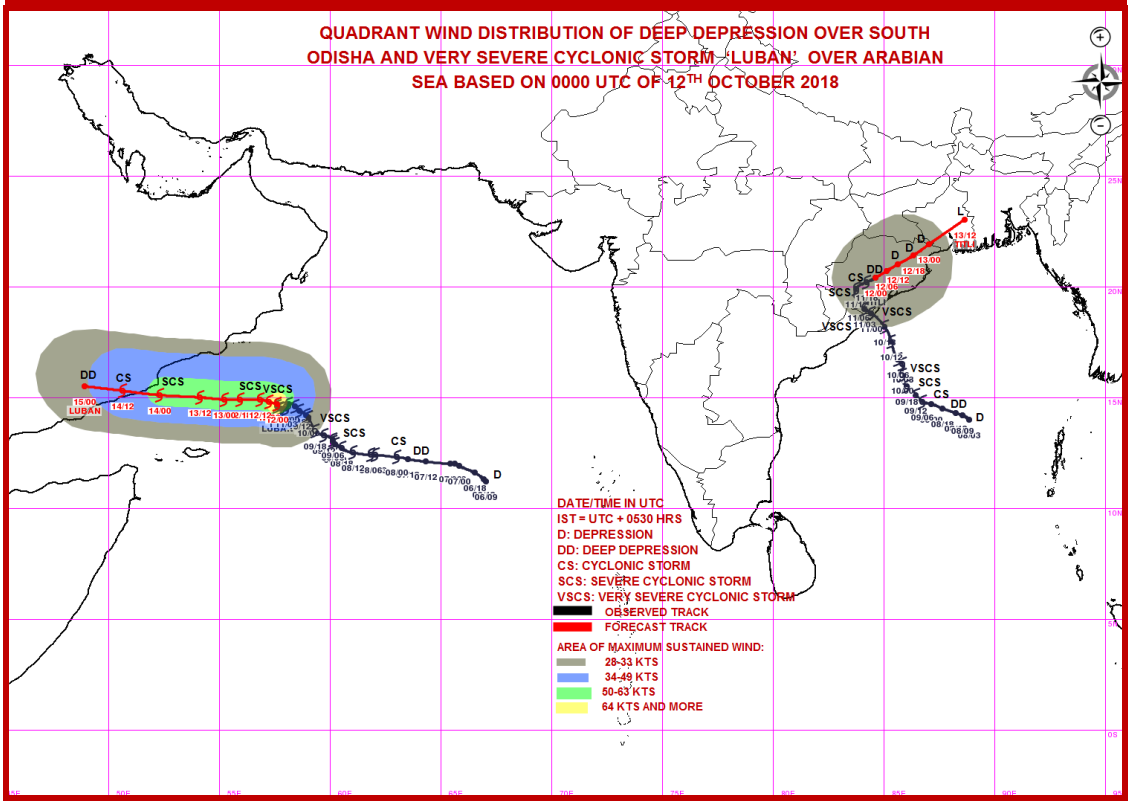
534 898

IMD/Delhi

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.





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.

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

BULLETIN NO.: 33 (BOB 08/2018) and BULLETIN NO. : 43 (ARB 04/2018)

TIME OF ISSUE: 1220 HOURS IST **DATED: 12.10.20180**

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)
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 (23421101)
DIRECTOR GENERAL, AIR (23421105, 23421219)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 24363261)
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. 04896-262184)
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)
CHIEF SECRETARY, ANDHRA PRADESH (FAX NO. 0866-2441029)
CHIEF SECRETARY, ODISHA (FAX NO. 0674 -2536660)
CHIEF SECRETARY, WEST BENGAL (FAX NO. 033 -22144328)
CHIEF SECRETARY, MIZORAM (FAX NO. 389 -2322745)
CHIEF SECRETARY, TRIPURA (FAX NO. 0381-2414013)
CHIEF SECRETARY, ASSAM (FAX NO. 0361-2237200)
CHIEF SECRETARY, MEGHALAYA (FAX NO. 0364 -2225978)
CHIEF SECRETARY, MANIPUR (FAX NO. 0385 2452629)

Sub: (a) Deep Depression over Odisha and
(b) Severe Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea

(a) Deep Depression over Odisha

The Deep Depression over Odisha moved east-northeastwards in past six hours with a speed of 13 kmph, and lay centred at 0830 hrs IST of today, the 12th October 2018 over Odisha near latitude 20.6°N and longitude 84.9°E, 60 km east-northeast of Phulbani and 30 km southwest of Angul. It is very likely to move northeastwards towards Gangetic West Bengal and weaken into a depression during next 06 hours.

Forecast track and intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
12.10.18/0830	20.6/84.9	50-60 gusting to 70	Deep Depression
12.10.18/1130	20.7/85.1	50-60 gusting to 70	Deep Depression
12.10.18/1730	21.0/85.6	45-55 gusting to 65	Depression
12.10.18/2330	21.4/86.3	40-50 gusting to 60	Depression
13.10.18/0530	21.9/87.0	35-45 gusting to 55	Depression
13.10.18/1730	23.0/88.6	25-35 gusting to 45	Well Marked Low

(i) Heavy rainfall warnings:

Region	12 Oct. 2018(Rainfall till 0830 IST of next day)	13 Oct. 2018(Rainfall till 0830 IST of next day)
Odisha	Rainfall at most places with heavy to very heavy falls and extremely heavy falls at isolated places over north Odisha.	Nil
Gangetic West Bengal	Rainfall at most places with heavy to very heavy falls at isolated places	Rainfall at most places with heavy to very heavy falls at isolated places
Assam & Meghalaya	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at most places with heavy to very heavy falls at Isolated Places
Mizoram, Tripura & Manipur	Rainfall at most places with heavy to very heavy falls at isolated places	Rainfall at most places with heavy to very heavy falls at isolated places

Legends: Red-Take Action; Orange- Be prepared; Yellow- be updated; Green: No warning

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.

(ii) Wind warning

Squally wind speed of 45-55 kmph gusting to 65 kmph very likely along & off Odisha and West Bengal and 35-45 kmph gusting to 55 kmph likely over adjoining areas of north interior Odisha during next 12 hours.

(iii) Sea condition

The Sea conditions will be rough to very rough along & off West Bengal and north Odisha Coasts during next 24 hours.

(iv) Action Suggested:

The fishermen are advised not to venture into Sea along and off Odisha and West Bengal coasts and north Bay of Bengal during next 24 hours.

(b) Severe Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea

The Very Severe Cyclonic Storm **'LUBAN'** over westcentral Arabian Sea moved westwards during past 06 hours with a speed of 04 kmph, weakened into a severe cyclonic storm and lay centered at 0830 hrs IST of today, the 12th October 2018 over westcentral Arabian Sea, near latitude 14.7°N and longitude 57.4°E, about 440 km east-southeast of Salalah (Oman), 440 km east-northeast of Socotra Islands (Yemen), 590 km east-southeast of Al-Ghaidah (Yemen) and 860 km east of Riyan (Mukalla). It is very likely to move west-northwestwards and cross Yemen Coast between Riyan (Mukalla) and Al-Ghaidah (Yemen), close to 15°N during noon/afternoon of 14th October 2018 as a severe cyclonic storm.

Forecast track & intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
12.10.18/0830	14.7/57.4	110-120 gusting to 135	Severe Cyclonic Storm
12.10.18/1130	14.8/57.2	100-110 gusting to 125	Severe Cyclonic Storm
12.10.18/1730	14.9/56.8	100-110 gusting to 125	Severe Cyclonic Storm
12.10.18/2330	14.9/55.9	110-120 gusting to 135	Severe Cyclonic Storm
13.10.18/0530	14.9/55.2	110-120 gusting to 135	Severe Cyclonic Storm
13.10.18/1730	15.0/54.1	110-120 gusting to 135	Severe Cyclonic Storm
14.10.18/0530	15.1/52.3	110-120 gusting to 135	Severe Cyclonic Storm
14.10.18/1730	15.3/50.6	90-100 gusting to 115	Severe Cyclonic Storm
15.10.18/0530	15.5/49.1	50-60 gusting to 70	Deep Depression
15.10.18/1730	15.0/48.5	35-45 gusting to 55	Depression

(i) Wind warning

- Gale wind speed reaching 100-110 kmph gusting to 125 prevails over westcentral Arabian Sea around system centre. It will become 110-120 kmph gusting to 135 kmph by 12th October 2018 midnight and continue till 14th October morning over westcentral Arabian Sea & adjoining Gulf of Aden around system centre.
- Gale wind speed reaching 110-120 kmph gusting to 135 is very likely along & off Yemen & adjoining south Oman coasts at the time of landfall.

(ii) Sea condition

The sea condition is very high around the system centre. It will continue to be very high westcentral Arabian Sea & adjoining Gulf of Aden till 14th October evening and improve rapidly thereafter.

(iii) Fishermen Warning

The fishermen are advised not to venture into westcentral Arabian Sea & Gulf of Aden till 14th October.

The next bulletin will be issued at 1430 hrs IST 12th October, 2018.

(Naresh Kumar)
Scientist-E, RSMC, New Delhi

Copy to: CRS, Pune/RSMC Guwahati/ ACWC Chennai/ Kolkata/ Mumbai/MC Goa/Thiruvanathapuram/ Bengaluru/Agartala/ CWC Ahmedabad.

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.

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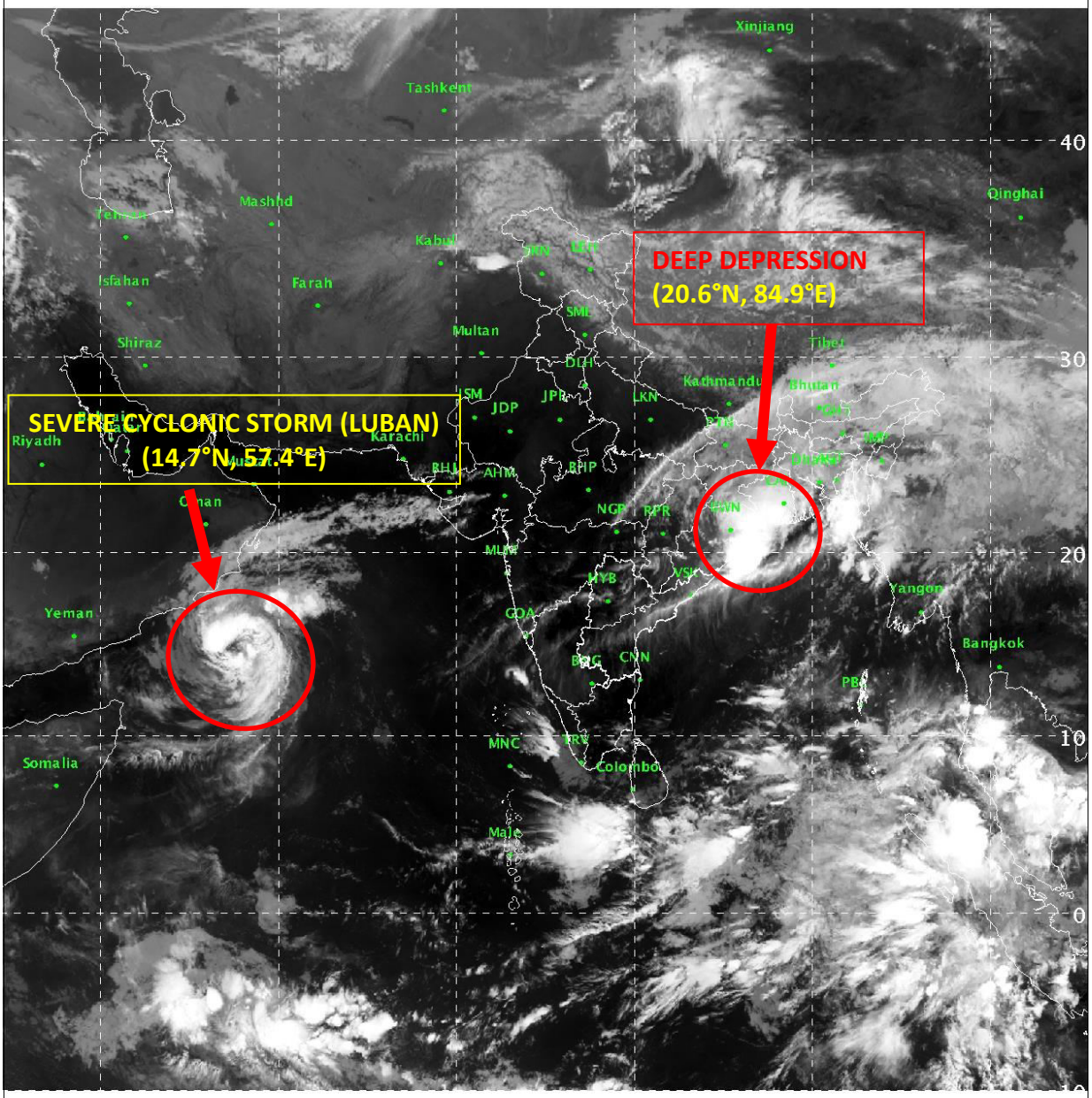
IMG_TIR1 10.8 um
L1C Mercator (LINEAR STRETCH: 1.0%)

12-10-2018/03:00 GMT
12-10-2018/08:30 IST

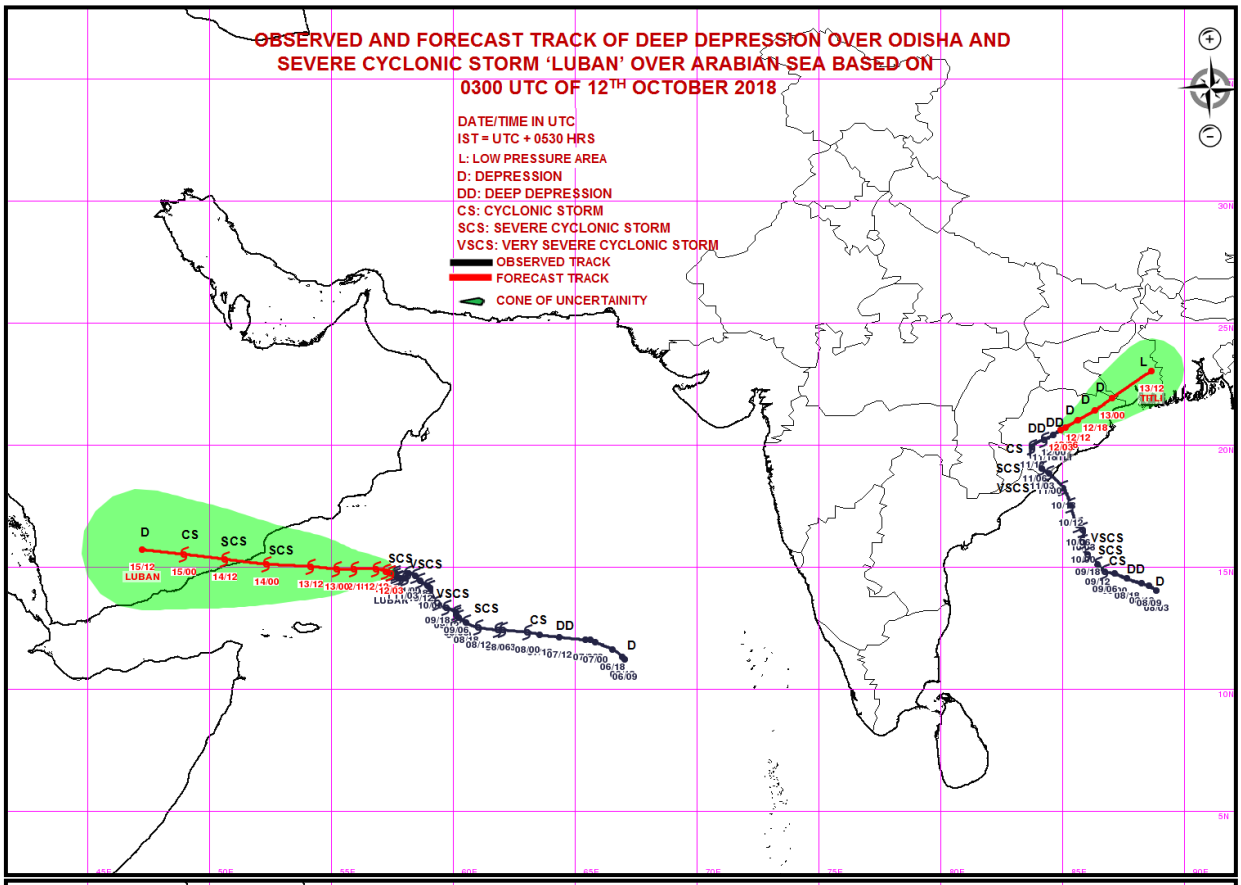


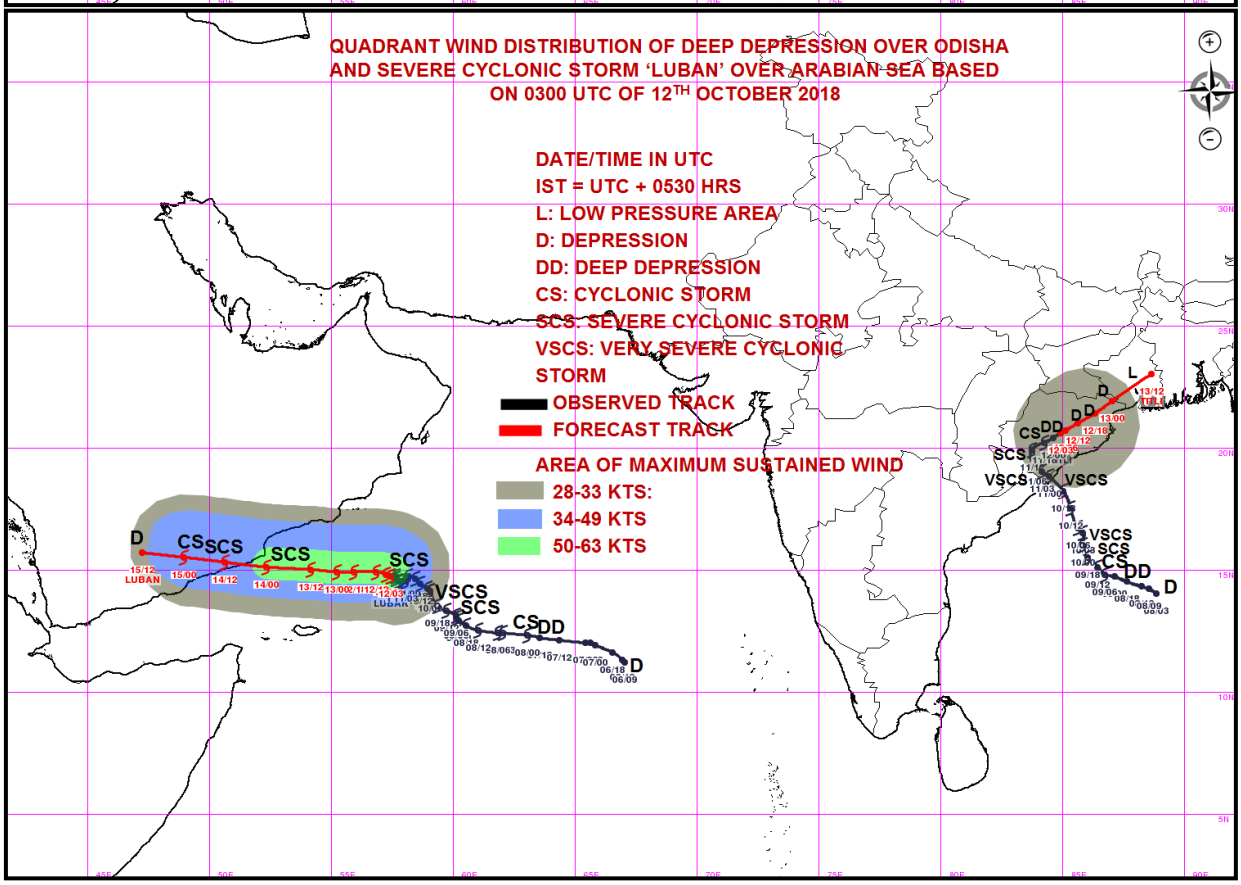
518 889

IMD/Delhi

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.





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.

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.

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

BULLETIN NO.: 34 (BOB 08/2018) and BULLETIN NO. : 44 (ARB 04/2018)

TIME OF ISSUE: 1500 HOURS IST **DATED: 12.10.20180**

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)
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 (23421101)
DIRECTOR GENERAL, AIR (23421105, 23421219)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 24363261)
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. 04896-262184)
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)
CHIEF SECRETARY, ANDHRA PRADESH (FAX NO. 0866-2441029)
CHIEF SECRETARY, ODISHA (FAX NO. 0674 -2536660)
CHIEF SECRETARY, WEST BENGAL (FAX NO. 033 -22144328)
CHIEF SECRETARY, MIZORAM (FAX NO. 389 -2322745)
CHIEF SECRETARY, TRIPURA (FAX NO. 0381-2414013)
CHIEF SECRETARY, ASSAM (FAX NO. 0361-2237200)
CHIEF SECRETARY, MEGHALAYA (FAX NO. 0364 -2225978)
CHIEF SECRETARY, MANIPUR (FAX NO. 0385 2452629)

Sub: (a) Deep Depression over Odisha and
(b) Severe Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea

(a) Deep Depression over Odisha

The Deep Depression over Odisha moved northeastwards in past six hours with a speed of 11 kmph and lay centred at 1130 hrs IST of today, the 12th October 2018 over Odisha near latitude 20.8°N and longitude 85.1°E about 100 km southwest of Keonjhargarh. It is very likely to continue to move northeastwards towards Gangetic West Bengal, weaken into a depression during next 06 hours and into a well marked low pressure area during subsequent 24 hours.

Forecast track and intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
12.10.18/1130	20.8/85.1	50-60 gusting to 70	Deep Depression
12.10.18/1730	21.0/85.6	45-55 gusting to 65	Depression
12.10.18/2330	21.4/86.3	40-50 gusting to 60	Depression
13.10.18/0530	21.9/87.0	35-45 gusting to 55	Depression
13.10.18/1730	23.0/88.6	25-35 gusting to 45	Well Marked Low

(i) Heavy rainfall warnings:

Region	12 Oct. 2018(Rainfall till 0830 IST of next day)	13 Oct. 2018(Rainfall till 0830 IST of next day)
Odisha	Rainfall at most places with heavy to very heavy falls and extremely heavy falls at isolated places over north Odisha.	Nil
Gangetic West Bengal	Rainfall at most places with heavy to very heavy falls at isolated places	Rainfall at most places with heavy to very heavy falls at isolated places
Assam & Meghalaya	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at most places with heavy to very heavy falls at Isolated Places
Mizoram, Tripura & Manipur	Rainfall at most places with heavy to very heavy falls at isolated places	Rainfall at most places with heavy to very heavy falls at isolated places

Legends: Red-Take Action; Orange- Be prepared; Yellow- be updated; Green: No warning

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.

(ii) Wind warning

Squally wind speed of 45-55 kmph gusting to 65 kmph very likely along & off Odisha and West Bengal and 35-45 kmph gusting to 55 kmph likely over adjoining areas of north interior Odisha during next 12 hours.

(iii) Sea condition

The Sea conditions will be rough to very rough along & off West Bengal and north Odisha Coasts during next 24 hours.

(iv) Action Suggested:

The fishermen are advised not to venture into Sea along and off Odisha and West Bengal coasts and north Bay of Bengal during next 24 hours.

(b) Severe Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea

The Severe Cyclonic Storm **'LUBAN'** over westcentral Arabian Sea moved further westwards during past 06 hours with a speed of 05 kmph and lay centered at 1130 hrs IST of today, the 12th October 2018 over westcentral Arabian Sea, near latitude 14.7°N and longitude 57.3°E, about 430 km east-southeast of Salalah (Oman), 430 km east-northeast of Socotra Islands (Yemen), 580 km east-southeast of Al-Ghaidah (Yemen) and 850 km east of Riyan (Mukalla). It is very likely to move west-northwestwards and cross Yemen Coast between Riyan (Mukalla) and Al-Ghaidah (Yemen), close to 15°N during noon/afternoon of 14th October 2018 as a severe cyclonic storm.

Forecast track & intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
12.10.18/1130	14.7/57.3	100-110 gusting to 125	Severe Cyclonic Storm
12.10.18/1730	14.8/56.8	100-110 gusting to 125	Severe Cyclonic Storm
12.10.18/2330	14.8/55.9	110-120 gusting to 135	Severe Cyclonic Storm
13.10.18/0530	14.9/55.2	110-120 gusting to 135	Severe Cyclonic Storm
13.10.18/1130	14.9/54.8	110-120 gusting to 135	Severe Cyclonic Storm
13.10.18/2330	15.0/53.2	110-120 gusting to 135	Severe Cyclonic Storm
14.10.18/1130	15.2/51.5	100-110 gusting to 125	Severe Cyclonic Storm
14.10.18/2330	15.4/59.9	90-100 gusting to 115	Severe Cyclonic Storm
15.10.18/1130	15.6/48.2	50-60 gusting to 70	Deep Depression
15.10.18/2330	15.8/45.5	35-45 gusting to 55	Depression

(i) Wind warning

- Gale wind speed reaching 100-110 kmph gusting to 125 prevails over westcentral Arabian Sea around system centre. It will become 110-120 kmph gusting to 135 kmph by 12th October 2018 midnight and continue till 14th October morning over westcentral Arabian Sea & adjoining Gulf of Aden around system centre.
- Gale wind speed reaching 110-120 kmph gusting to 135 is very likely along & off Yemen & adjoining south Oman coasts at the time of landfall.

(ii) Sea condition

The sea condition is very high around the system centre. It will continue to be very high westcentral Arabian Sea & adjoining Gulf of Aden till 14th October evening and improve rapidly thereafter.

(iii) Fishermen Warning

The fishermen are advised not to venture into westcentral Arabian Sea & Gulf of Aden till 14th October.

The next bulletin will be issued at 1730 hrs IST 12th October, 2018.

(Naresh Kumar)
Scientist-E, RSMC, New Delhi

Copy to: CRS, Pune/RSMC Guwahati/ ACWC Chennai/ Kolkata/ Mumbai/MC Goa/Thiruvanathapuram/ Bengaluru/Agartala/ CWC Ahmedabad.

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.

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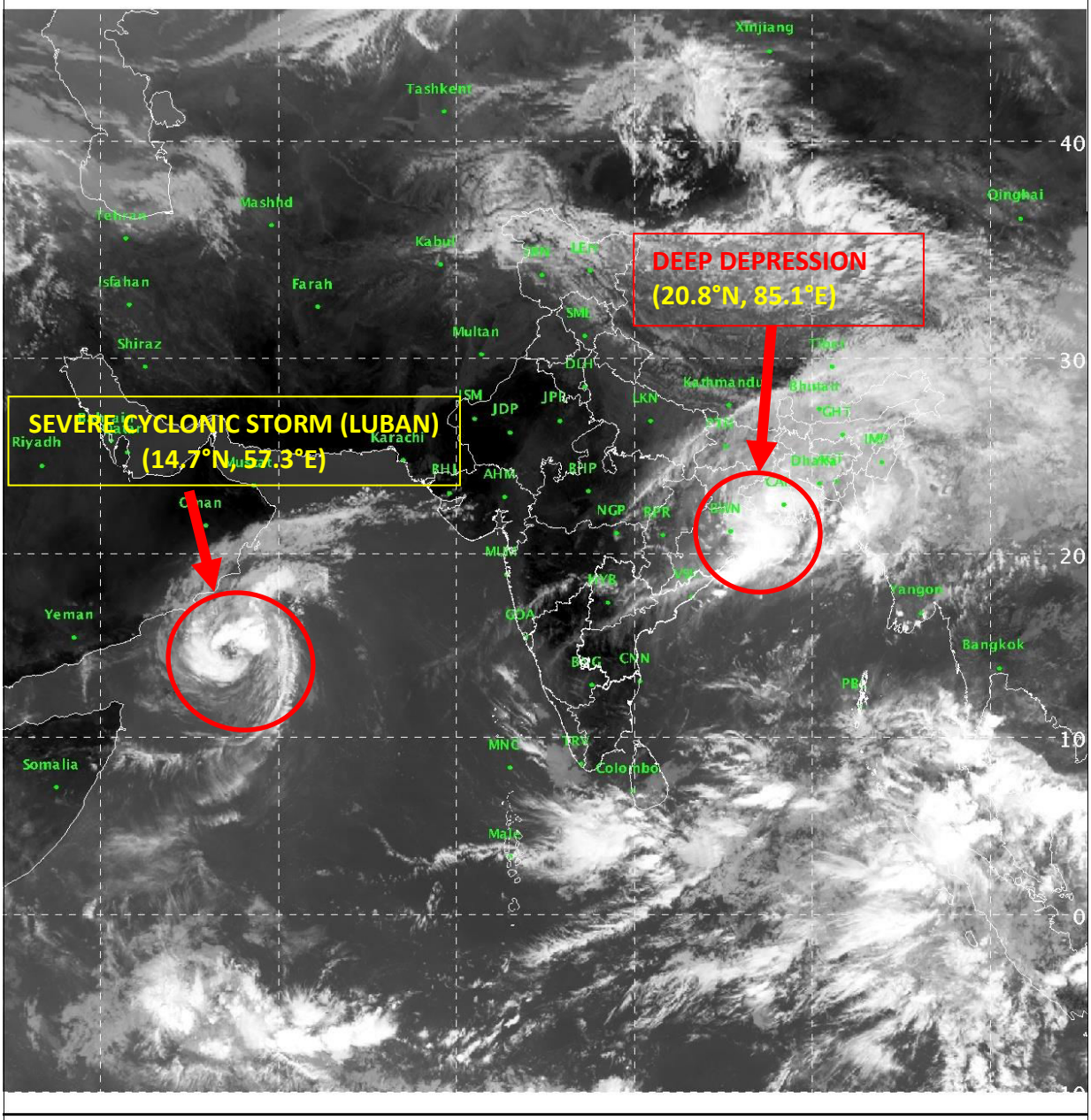
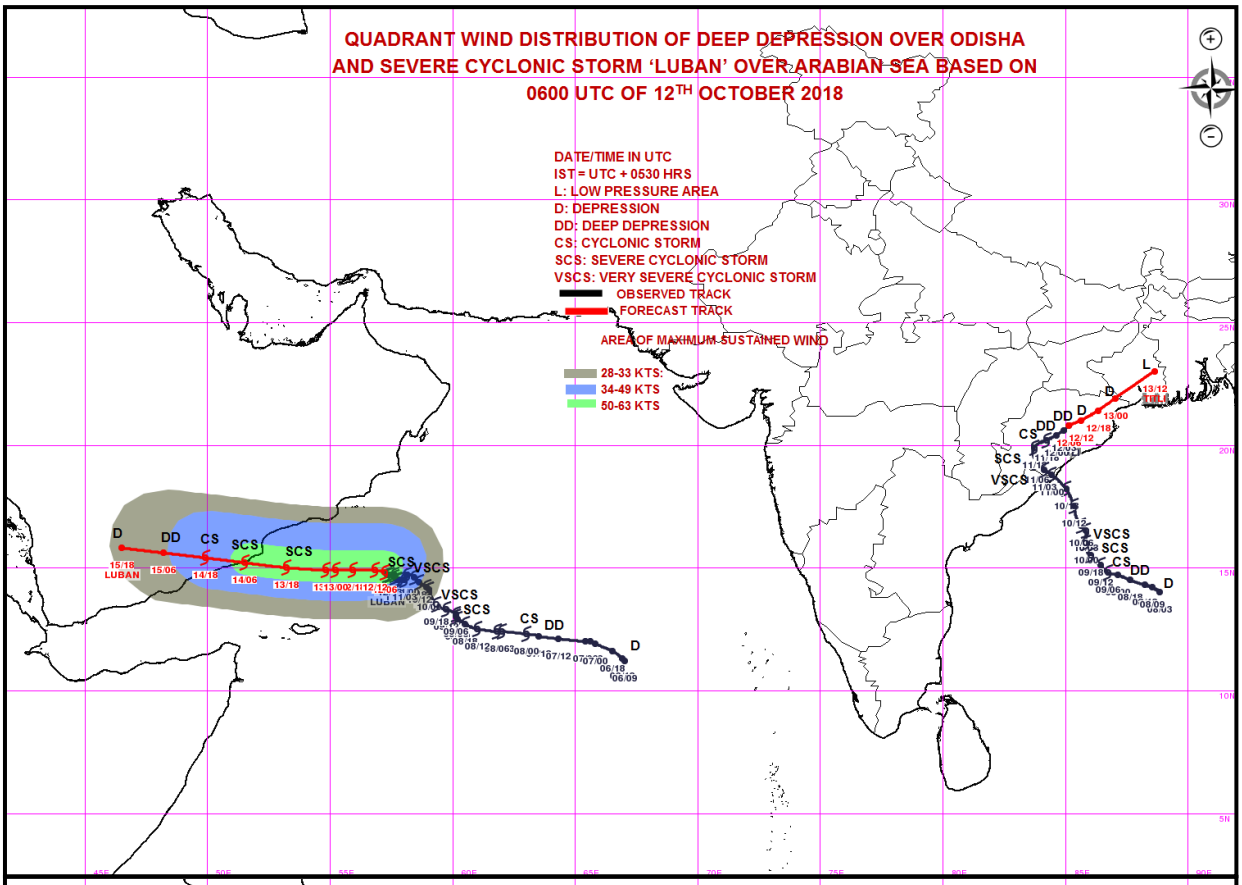
12-10-2018/06:00 GMT
12-10-2018/11:30 IST

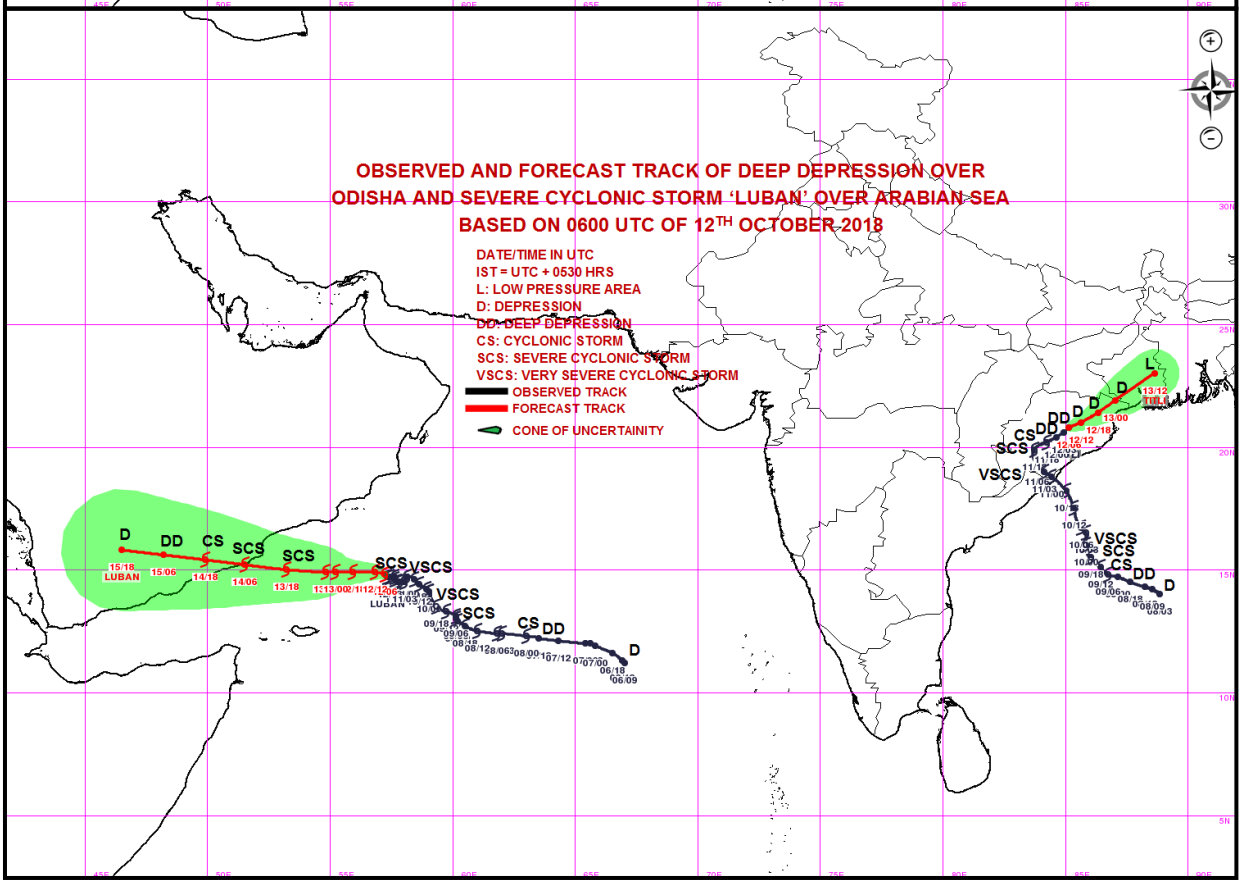


IMD/Delhi

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.





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.

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.

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.

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

BULLETIN NO.: 35 (BOB 08/2018) and BULLETIN NO. : 45 (ARB 04/2018)

TIME OF ISSUE: 1730 HOURS IST **DATED: 12.10.20180**

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)
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 (23421101)
DIRECTOR GENERAL, AIR (23421105, 23421219)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 24363261)
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. 04896-262184)
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)
CHIEF SECRETARY, ANDHRA PRADESH (FAX NO. 0866-2441029)
CHIEF SECRETARY, ODISHA (FAX NO. 0674 -2536660)
CHIEF SECRETARY, WEST BENGAL (FAX NO. 033 -22144328)
CHIEF SECRETARY, MIZORAM (FAX NO. 389 -2322745)
CHIEF SECRETARY, TRIPURA (FAX NO. 0381-2414013)
CHIEF SECRETARY, ASSAM (FAX NO. 0361-2237200)
CHIEF SECRETARY, MEGHALAYA (FAX NO. 0364 -2225978)
CHIEF SECRETARY, MANIPUR (FAX NO. 0385 2452629)

Sub: (a) Deep Depression over Odisha weakened into a Depression over Odisha
(b) Severe Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea

(a) Deep Depression over Odisha weakened into a Depression over Odisha: The Deep Depression over Odisha moved east-northeastwards in past six hours with a speed of 12 kmph, weakened into a Depression over Odisha and lay centred at 1430 hrs IST of today, the 12th October 2018 over Odisha near latitude 20.9°N and longitude 85.5°E about 80 km south of Keonjhargarh. It is very likely to continue to move northeastwards and weaken into a well marked low pressure area during next 18 hours.

Forecast track and intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
12.10.18/1430	20.9/85.5	45-55 gusting to 65	Depression
12.10.18/1730	21.0/86.0	45-55 gusting to 65	Depression
12.10.18/2330	21.4/86.7	40-50 gusting to 60	Depression
13.10.18/0530	21.9/87.4	35-45 gusting to 55	Depression
13.10.18/1730	23.0/88.9	25-35 gusting to 45	Well Marked Low

(i) Heavy rainfall warnings:

Region	12 Oct. 2018(Rainfall till 0830 IST of next day)	13 Oct. 2018(Rainfall till 0830 IST of next day)
North Odisha	Rainfall at many places with heavy falls at isolated places over north Odisha during next 12 hours.	Nil
Gangetic West Bengal	Rainfall at most places with heavy to very heavy falls at isolated places	Rainfall at most places with heavy to very heavy falls at isolated places
Assam & Meghalaya	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at most places with heavy to very heavy falls at Isolated Places
Mizoram, Tripura & Manipur	Rainfall at most places with heavy to very heavy falls at isolated places	Rainfall at most places with heavy to very heavy falls at isolated places

Legends: Red-Take Action; Orange- Be prepared; Yellow- be updated; Green: No warning

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.

(ii) Wind warning

Squally wind speed of 45-55 kmph gusting to 65 kmph very likely along & off Odisha and West Bengal and 35-45 kmph gusting to 55 kmph likely over adjoining areas of north interior Odisha during next 12 hours.

(iii) Sea condition

The Sea conditions will be rough to very rough along & off West Bengal and north Odisha Coasts during next 24 hours.

(iv) Action Suggested:

The fishermen are advised not to venture into Sea along and off Odisha and West Bengal coasts and north Bay of Bengal during next 24 hours.

(b) Severe Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea

The Severe Cyclonic Storm **'LUBAN'** over westcentral Arabian Sea moved further westwards during past 06 hours with a speed of 04 kmph and lay centered at 1430 hrs IST of today, the 12th October 2018 over westcentral Arabian Sea, near latitude 14.7°N and longitude 57.2°E, about 430 km east-southeast of Salalah (Oman), 420 km east-northeast of Socotra Islands (Yemen), 570 km east-southeast of Al-Ghaidah (Yemen) and 850 km east of Riyan (Mukalla). It is very likely to move west-northwestwards and cross Yemen Coast between Riyan (Mukalla) and Al-Ghaidah (Yemen), close to 15°N during noon/afternoon of 14th October 2018 as a severe cyclonic storm.

Forecast track & intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
12.10.18/1430	14.7/57.2	100-110 gusting to 125	Severe Cyclonic Storm
12.10.18/1730	14.8/57.0	100-110 gusting to 125	Severe Cyclonic Storm
12.10.18/2330	14.8/55.9	110-120 gusting to 135	Severe Cyclonic Storm
13.10.18/0530	14.9/55.2	110-120 gusting to 135	Severe Cyclonic Storm
13.10.18/1130	14.9/54.8	110-120 gusting to 135	Severe Cyclonic Storm
13.10.18/2330	15.0/53.2	110-120 gusting to 135	Severe Cyclonic Storm
14.10.18/1130	15.2/51.5	100-110 gusting to 125	Severe Cyclonic Storm
14.10.18/2330	15.4/59.9	90-100 gusting to 115	Severe Cyclonic Storm
15.10.18/1130	15.6/48.2	50-60 gusting to 70	Deep Depression
15.10.18/2330	15.8/45.5	35-45 gusting to 55	Depression

(i) Wind warning

- Gale wind speed reaching 100-110 kmph gusting to 125 prevails over westcentral Arabian Sea around system centre. It will become 110-120 kmph gusting to 135 kmph by 12th October 2018 midnight and continue till 14th October morning over westcentral Arabian Sea & adjoining Gulf of Aden around system centre.
- Gale wind speed reaching 110-120 kmph gusting to 135 is very likely along & off Yemen & adjoining south Oman coasts at the time of landfall.

(ii) Sea condition

The sea condition is very high around the system centre. It will continue to be very high westcentral Arabian Sea & adjoining Gulf of Aden till 14th October evening and improve rapidly thereafter.

(iii) Fishermen Warning

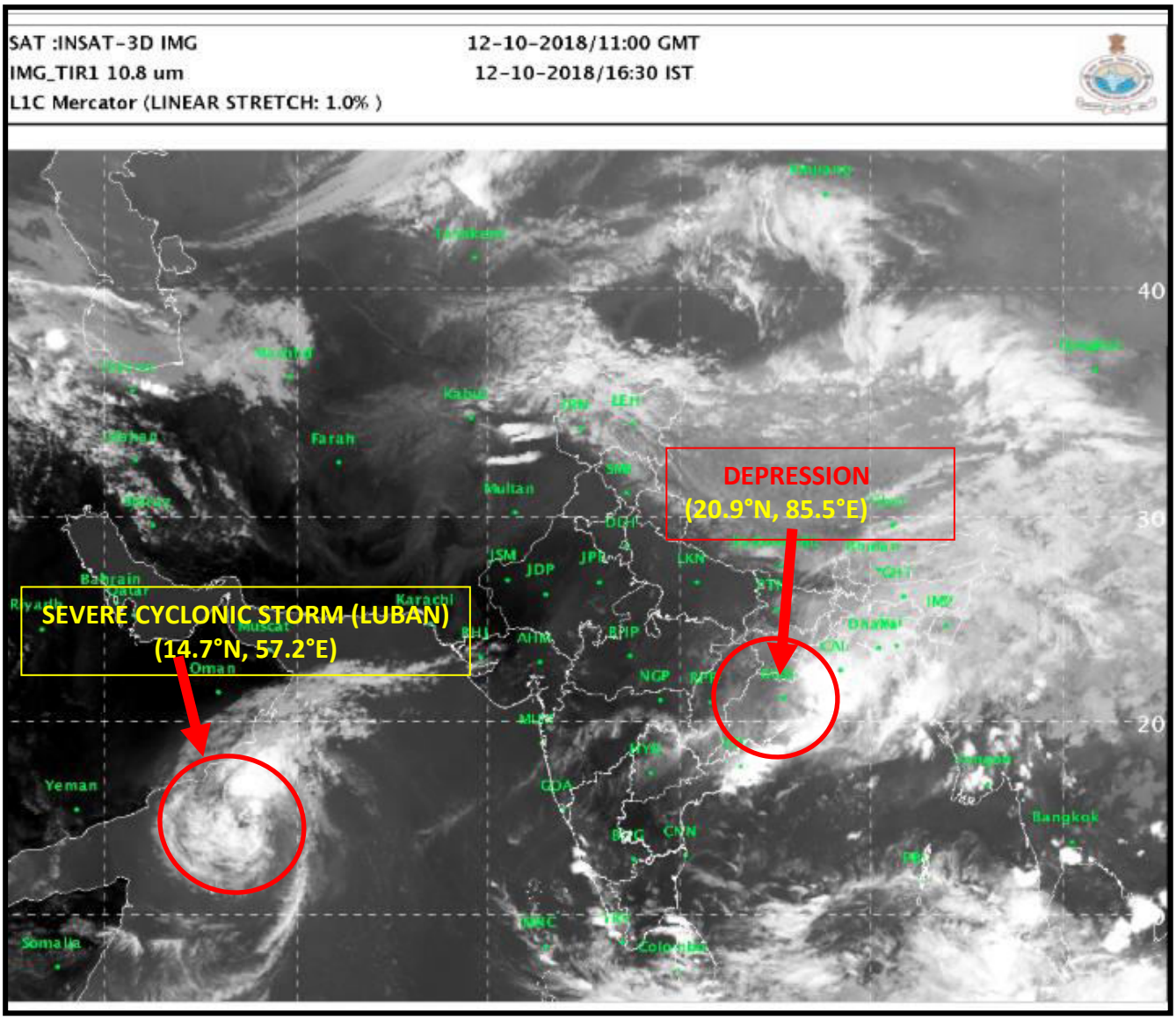
The fishermen are advised not to venture into westcentral Arabian Sea & Gulf of Aden till 14th October.

The next bulletin will be issued at 2030 hrs IST 12th October, 2018.

(Neetha K Gopal)
Scientist-E, RSMC, New Delhi

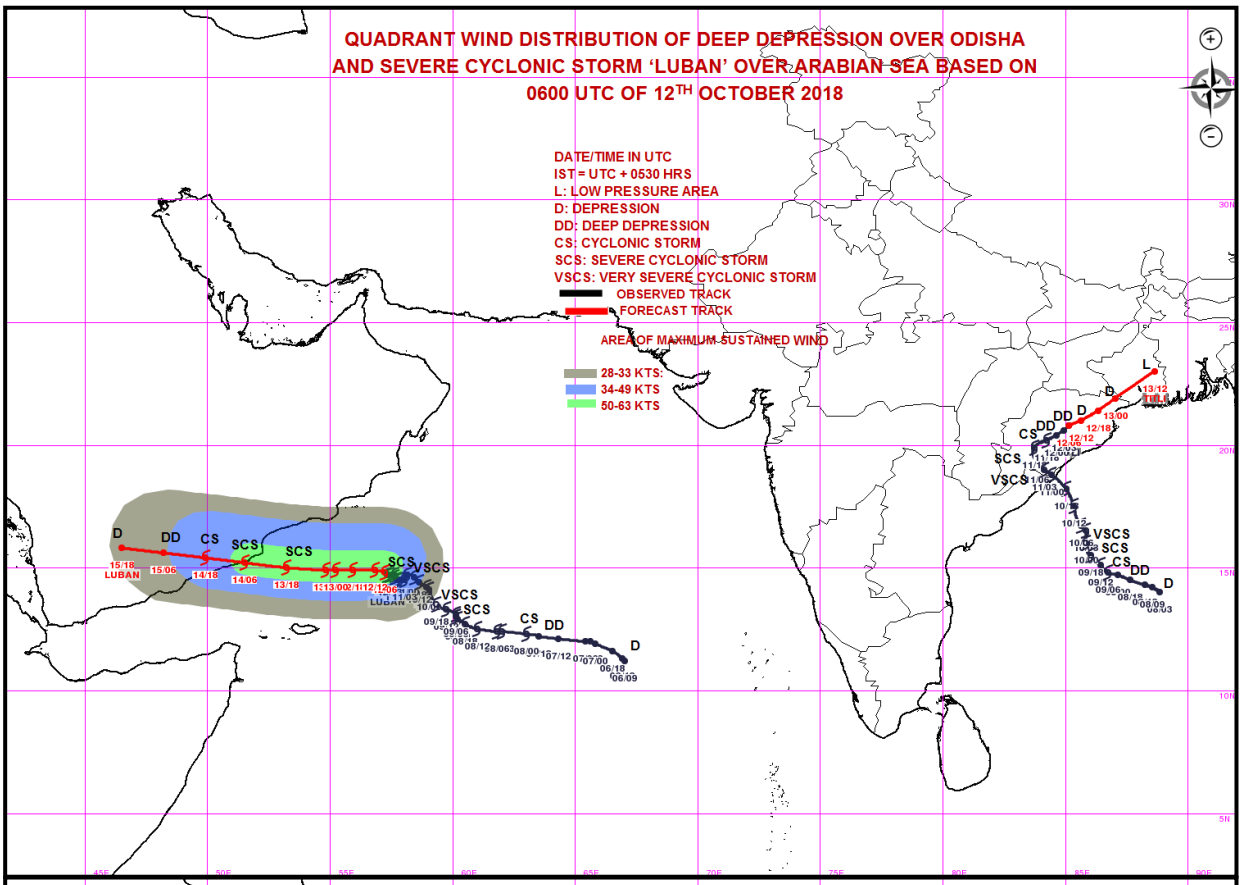
Copy to: CRS, Pune/RSMC Guwahati/ ACWC Chennai/ Kolkata/ Mumbai/MC Goa/Thiruvanathapuram/ Bengaluru/Agartala/ CWC Ahmedabad.

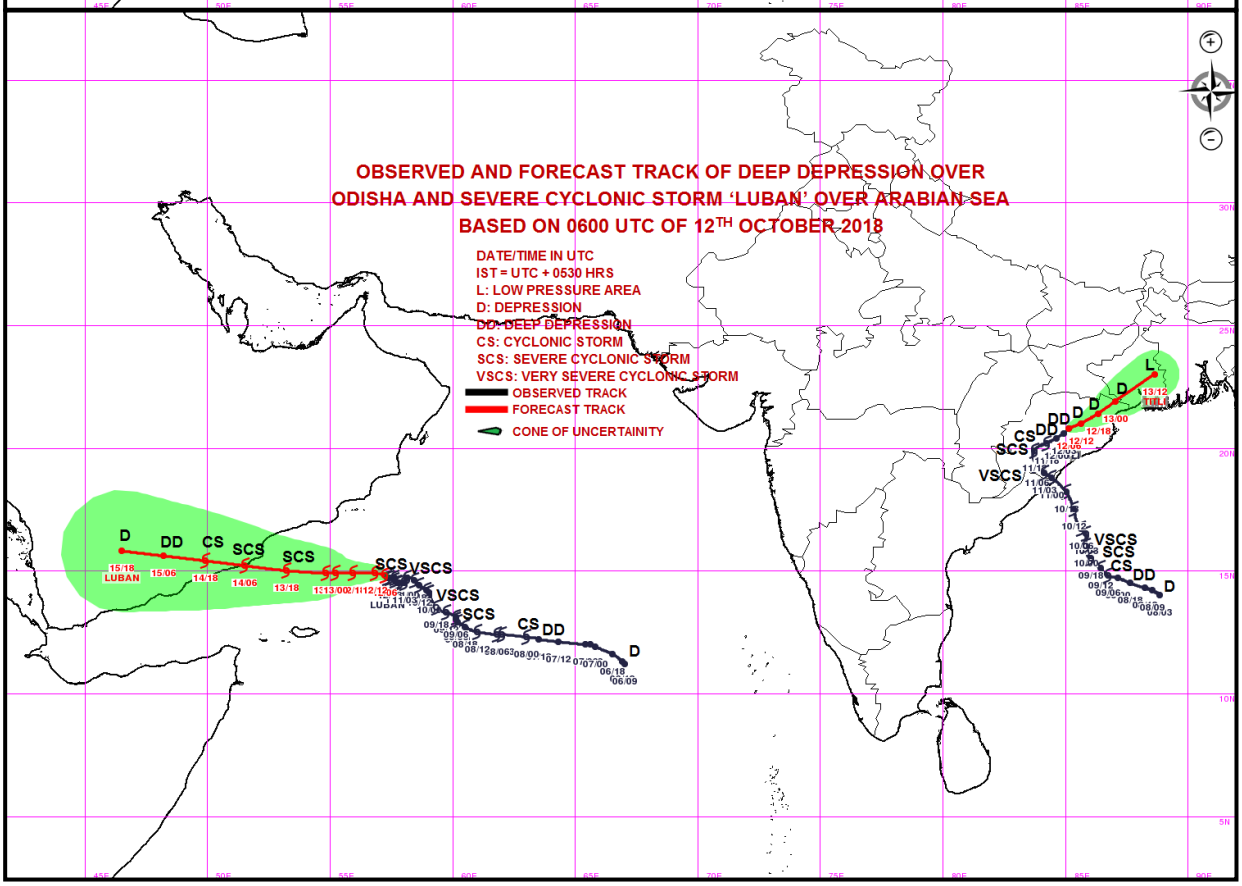
Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
Rainfall amount (mm): Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.



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.





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.

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

BULLETIN NO.: 36 (BOB 08/2018) and BULLETIN NO. : 46 (ARB 04/2018)

TIME OF ISSUE: 2130 HOURS IST **DATED: 12.10.20180**

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)
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 (23421101)
DIRECTOR GENERAL, AIR (23421105, 23421219)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 24363261)
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. 04896-262184)
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)
CHIEF SECRETARY, ANDHRA PRADESH (FAX NO. 0866-2441029)
CHIEF SECRETARY, ODISHA (FAX NO. 0674 -2536660)
CHIEF SECRETARY, WEST BENGAL (FAX NO. 033 -22144328)
CHIEF SECRETARY, MIZORAM (FAX NO. 389 -2322745)
CHIEF SECRETARY, TRIPURA (FAX NO. 0381-2414013)
CHIEF SECRETARY, ASSAM (FAX NO. 0361-2237200)
CHIEF SECRETARY, MEGHALAYA (FAX NO. 0364 -2225978)
CHIEF SECRETARY, MANIPUR (FAX NO. 0385 2452629)

Sub: (a) Depression over Odisha
(b) Severe Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea

(a) Depression over Odisha:

The Depression over Odisha moved east-northeastwards in past six hours with a speed of 17 kmph and lay centred at 1730 hrs IST of today, the 12th October 2018 over Odisha near latitude 21.2°N and longitude 86.0°E about 70 km south of Keonjhargarh. It is very likely to continue to move east-northeastwards. It is very likely to maintain its intensity as a depression for next 12 hours and weaken thereafter into a well marked low pressure area.
Forecast track and intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
12.10.18/1730	21.2/86.0	45-55 gusting to 65	Depression
12.10.18/2330	21.7/86.9	40-50 gusting to 60	Depression
13.10.18/0530	22.2/87.8	40-50 gusting to 60	Depression
13.10.18/1130	22.7/88.7	35-45 gusting to 55	Depression
13.10.18/1730	23.2/89.6	25-35 gusting to 45	Well marked low pressure area

(i) Heavy rainfall warnings:

Region	12 Oct. 2018(Rainfall till 0830 IST of next day)	13 Oct. 2018(Rainfall till 0830 IST of next day)
North Odisha	Rainfall at many places with heavy falls at isolated places over Balasore and Mayurbhanj districts of north Odisha during next 06 hours.	Nil
Gangetic West Bengal	Rainfall at most places with heavy to very heavy falls at isolated places	Rainfall at most places with heavy falls at isolated places
Assam & Meghalaya	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at most places with heavy falls at Isolated Places
Mizoram, Tripura & Manipur	Rainfall at most places with heavy to very heavy falls at isolated places	Rainfall at most places with heavy falls at isolated places

Legends: Red-Take Action; Orange- Be prepared; Yellow- be updated; Green: No warning

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.

(ii) Wind warning

- Squally wind speed of 40-50 kmph gusting to 60 kmph very likely along & off Odisha coast and 35-45 kmph gusting to 55 kmph likely over adjoining areas of north interior Odisha during next 12 hours.
- Squally wind speed of 40-50 kmph gusting to 60 kmph very likely along & off West Bengal coast during next 24 hours.

(iii) Sea condition

The Sea conditions will be rough to very rough along & off West Bengal coast during next 24 hours and Odisha Coast during next 12 hours.

(iv) Action Suggested:

The fishermen are advised not to venture into Sea along and off Odisha coast during next 12 hours and along & off West Bengal coasts and north Bay of Bengal during next 24 hours.

(b) Severe Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea

The Severe Cyclonic Storm **'LUBAN'** over westcentral Arabian Sea moved further westwards during past 06 hours with a speed of 04 kmph and lay centered at 1730 hrs IST of today, the 12th October 2018 over westcentral Arabian Sea, near latitude 14.7°N and longitude 57.1°E, about 410 km east-southeast of Salalah (Oman), 410 km east-northeast of Socotra Islands (Yemen), 550 km east-southeast of Al-Ghaidah (Yemen) and 840 km east of Riyan (Mukalla). It is very likely to move west-northwestwards and cross Yemen Coast between Riyan (Mukalla) and Al-Ghaidah (Yemen), close to 15°N during noon/afternoon of 14th October 2018 as a severe cyclonic storm.

Forecast track & intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
12.10.18/1730	14.7/57.1	90-100 gusting to 115	Severe Cyclonic Storm
12.10.18/2330	14.8/56.7	90-100 gusting to 115	Severe Cyclonic Storm
13.10.18/0530	14.9/56.0	80-90 gusting to 105	Cyclonic Storm
13.10.18/1130	14.9/55.2	90-100 gusting to 115	Severe Cyclonic Storm
13.10.18/1730	15.0/54.2	100-110 gusting to 120	Severe Cyclonic Storm
14.10.18/0530	15.0/52.0	100-110 gusting to 120	Severe Cyclonic Storm
14.10.18/1730	15.0/50.0	80-90 gusting to 100	Cyclonic Storm
15.10.18/0530	14.9/48.2	50-60 gusting to 70	Deep Depression
15.10.18/1730	14.7/46.6	35-45 gusting to 55	Depression

(i) Wind warning

- Gale wind speed reaching 90-100 kmph gusting to 115 prevails over westcentral Arabian Sea around system centre.
- Gale wind speed reaching 100-110 kmph gusting to 125 is very likely along & off Yemen & adjoining south Oman coasts at the time of landfall.

(ii) Sea condition

The sea condition is very high around the system centre. It will continue to be very high over westcentral Arabian Sea & adjoining Gulf of Aden till 14th October evening and improve rapidly thereafter.

(iii) Fishermen Warning

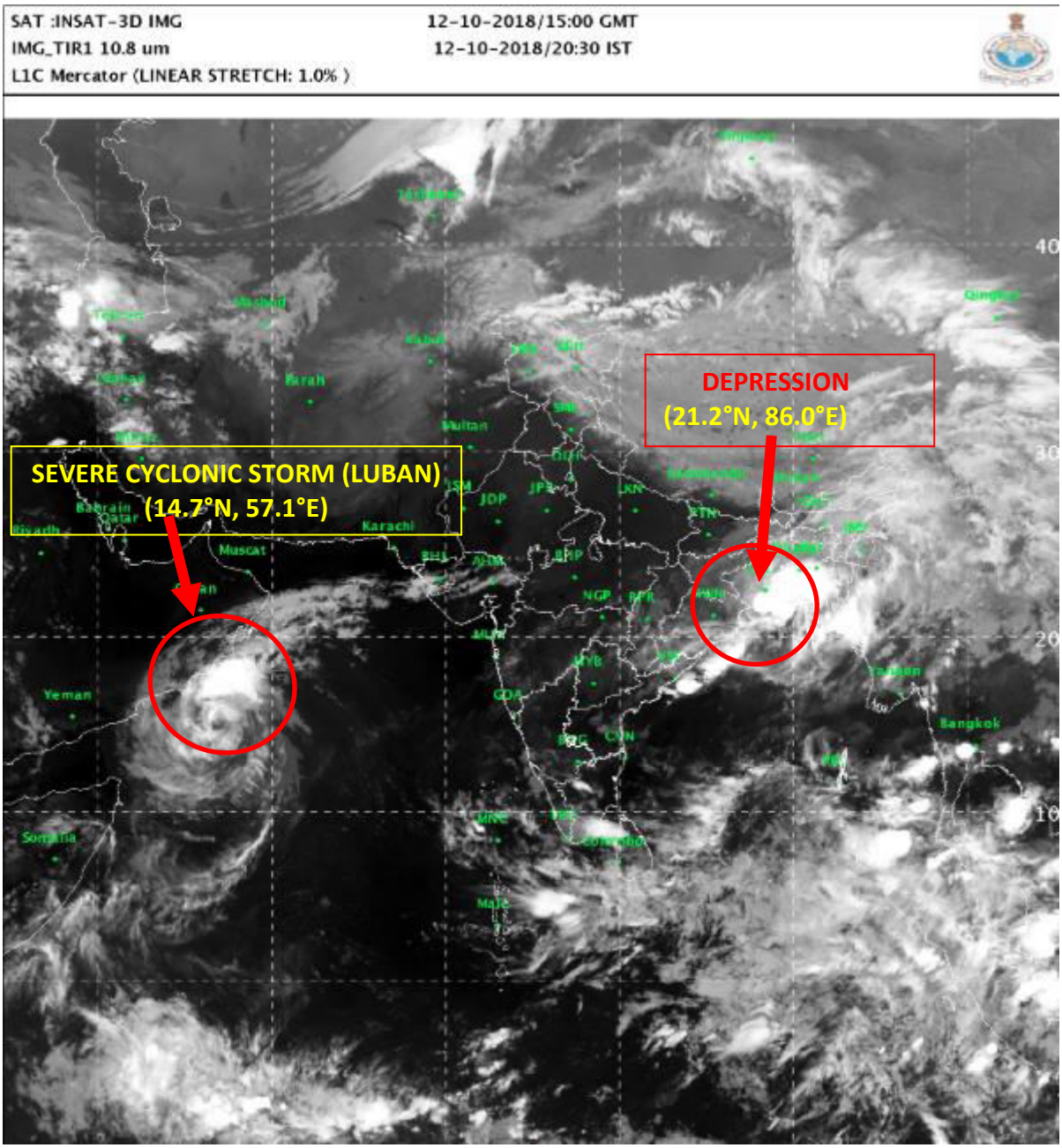
The fishermen are advised not to venture into westcentral Arabian Sea & Gulf of Aden till 14th October.

The next bulletin will be issued at 2330 hrs IST 12th October, 2018.

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

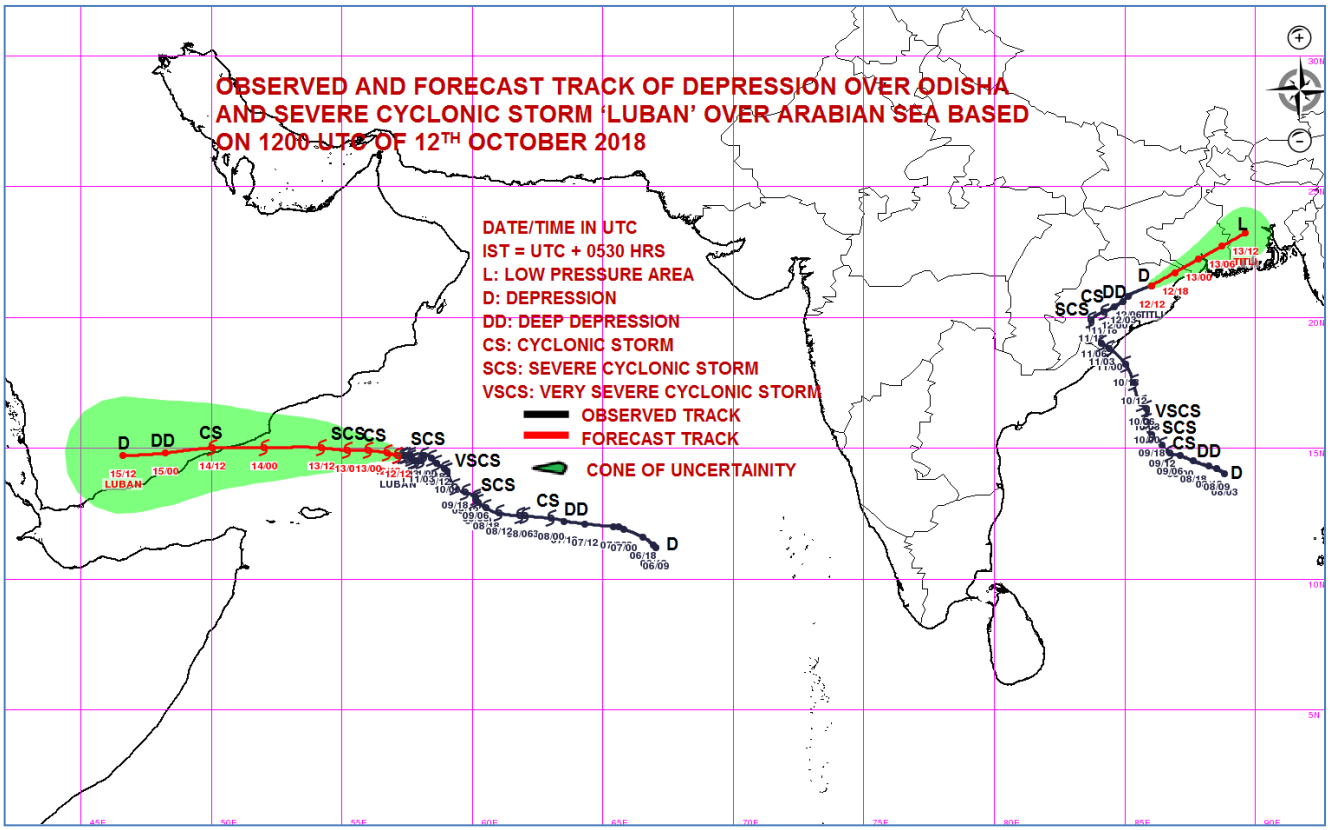
Copy to: CRS, Pune/RSMC Guwahati/ ACWC Chennai/ Kolkata/ Mumbai/MC Goa/Thiruvanathapuram/ Bengaluru/Agartala/ CWC Ahmedabad.

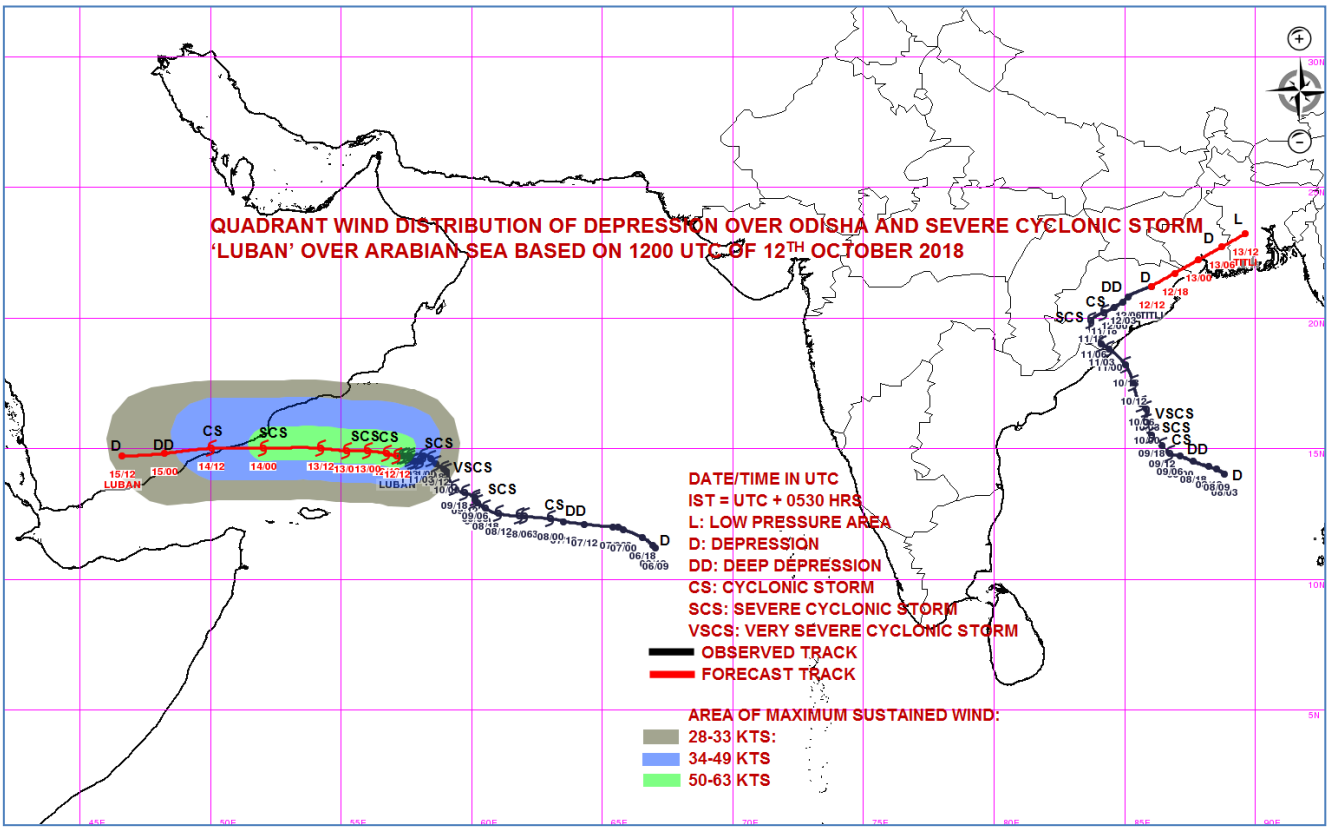
Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
Rainfall amount (mm): Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.



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.





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.

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

BULLETIN NO.: 37 (BOB 08/2018) and BULLETIN NO. : 47 (ARB 04/2018)

TIME OF ISSUE: 2345 HOURS IST **DATED: 12.10.20180**

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)
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 (23421101)
DIRECTOR GENERAL, AIR (23421105, 23421219)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 24363261)
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. 04896-262184)
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)
CHIEF SECRETARY, ANDHRA PRADESH (FAX NO. 0866-2441029)
CHIEF SECRETARY, ODISHA (FAX NO. 0674 -2536660)
CHIEF SECRETARY, WEST BENGAL (FAX NO. 033 -22144328)
CHIEF SECRETARY, MIZORAM (FAX NO. 389 -2322745)
CHIEF SECRETARY, TRIPURA (FAX NO. 0381-2414013)
CHIEF SECRETARY, ASSAM (FAX NO. 0361-2237200)
CHIEF SECRETARY, MEGHALAYA (FAX NO. 0364 -2225978)
CHIEF SECRETARY, MANIPUR (FAX NO. 0385 2452629)

Sub: (a) Depression over Odisha
(b) Severe Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea

(a) Depression over Odisha:

The Depression over Odisha moved east-northeastwards during past six hours with a speed of 09 kmph and lay centred at 2030 hrs IST of today, the 12th October 2018 over Odisha near latitude 21.4^{0}N and longitude 86.5°E about 100 km east-southeast of Keonjhargarh. It is very likely to continue to move east-northeastwards and maintain its intensity as a depression for next 09 hours and weaken thereafter into a well marked low pressure area.
Forecast track and intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
12.10.18/2030	21.4/86.5	45-55 gusting to 65	Depression
12.10.18/2330	21.7/86.9	40-50 gusting to 60	Depression
13.10.18/0530	22.2/87.8	40-50 gusting to 60	Depression
13.10.18/1130	22.7/88.7	35-45 gusting to 55	Depression
13.10.18/1730	23.2/89.6	25-35 gusting to 45	Well marked low pressure area

(i) Heavy rainfall warnings:

Region	12 Oct. 2018(Rainfall till 0830 IST of next day)	13 Oct. 2018(Rainfall till 0830 IST of next day)
North Odisha	Rainfall at many places with heavy falls at isolated places over Balasore and Mayurbhanj districts of north Odisha during next 06 hours.	Nil
Gangetic West Bengal	Rainfall at most places with heavy to very heavy falls at isolated places	Rainfall at most places with heavy falls at isolated places
Assam & Meghalaya	Rainfall at most places with heavy to very heavy falls at Isolated Places	Rainfall at most places with heavy falls at Isolated Places
Mizoram, Tripura & Manipur	Rainfall at most places with heavy to very heavy falls at isolated places	Rainfall at most places with heavy falls at isolated places

Legends: Red-Take Action; Orange- Be prepared; Yellow- be updated; Green: No warning

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.

(ii) Wind warning

- Squally wind speed of 40-50 kmph gusting to 60 kmph very likely along & off Odisha coast and 35-45 kmph gusting to 55 kmph likely over adjoining areas of north interior Odisha during next 12 hours.
- Squally wind speed of 40-50 kmph gusting to 60 kmph very likely along & off West Bengal coast during next 24 hours.

(iii) Sea condition

The Sea conditions will be rough to very rough along & off West Bengal coast during next 24 hours and Odisha Coast during next 12 hours.

(iv) Action Suggested:

The fishermen are advised not to venture into Sea along and off Odisha coast during next 12 hours and along & off West Bengal coasts and north Bay of Bengal during next 24 hours.

(b) Severe Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea

The Severe Cyclonic Storm **'LUBAN'** over westcentral Arabian Sea moved further westwards during past 06 hours with a speed of 05 kmph and lay centered at 2030 hrs IST of today, the 12th October 2018 over westcentral Arabian Sea, near latitude 14.7°N and longitude 56.9°E, about 390 km east-southeast of Salalah (Oman), 390 km, east-northeast of Socotra Islands (Yemen), 530 km east-southeast of Al-Ghaidah (Yemen) and 820 km east of Riyan (Mukalla). It is very likely to move west-northwestwards and cross Yemen Coast between Riyan (Mukalla) and Al-Ghaidah (Yemen), close to 15°N during noon/afternoon of 14th October 2018 as a severe cyclonic storm.

Forecast track & intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
12.10.18/2030	14.7/56.9	90-100 gusting to 115	Severe Cyclonic Storm
12.10.18/2330	14.8/56.7	90-100 gusting to 115	Severe Cyclonic Storm
13.10.18/0530	14.9/56.0	80-90 gusting to 105	Cyclonic Storm
13.10.18/1130	14.9/55.2	90-100 gusting to 115	Severe Cyclonic Storm
13.10.18/1730	15.0/54.2	100-110 gusting to 120	Severe Cyclonic Storm
14.10.18/0530	15.0/52.0	100-110 gusting to 120	Severe Cyclonic Storm
14.10.18/1730	15.0/50.0	80-90 gusting to 100	Cyclonic Storm
15.10.18/0530	14.9/48.2	50-60 gusting to 70	Deep Depression
15.10.18/1730	14.7/46.6	35-45 gusting to 55	Depression

(i) Wind warning

- Gale wind speed reaching 90-100 kmph gusting to 115 prevails over westcentral Arabian Sea around system centre.
- Gale wind speed reaching 100-110 kmph gusting to 125 is very likely along & off Yemen & adjoining south Oman coasts at the time of landfall.

(ii) Sea condition

The sea condition is very high around the system centre. It will continue to be very high over westcentral Arabian Sea & adjoining Gulf of Aden till 14th October evening and improve rapidly thereafter.

(iii) Fishermen Warning

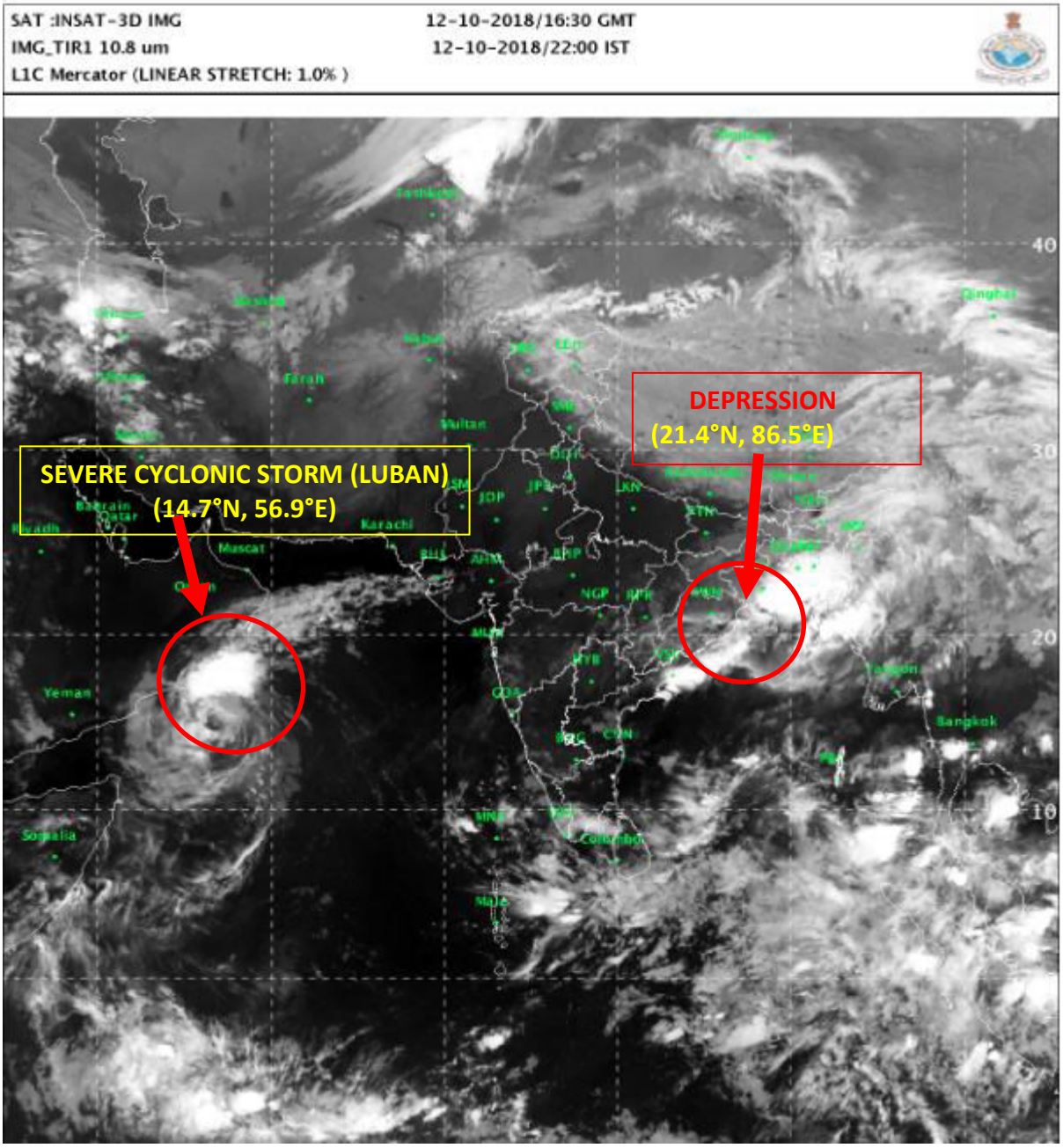
The fishermen are advised not to venture into westcentral Arabian Sea & Gulf of Aden till 14th October.

The next bulletin will be issued at 0230 hrs IST 13th October, 2018.

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

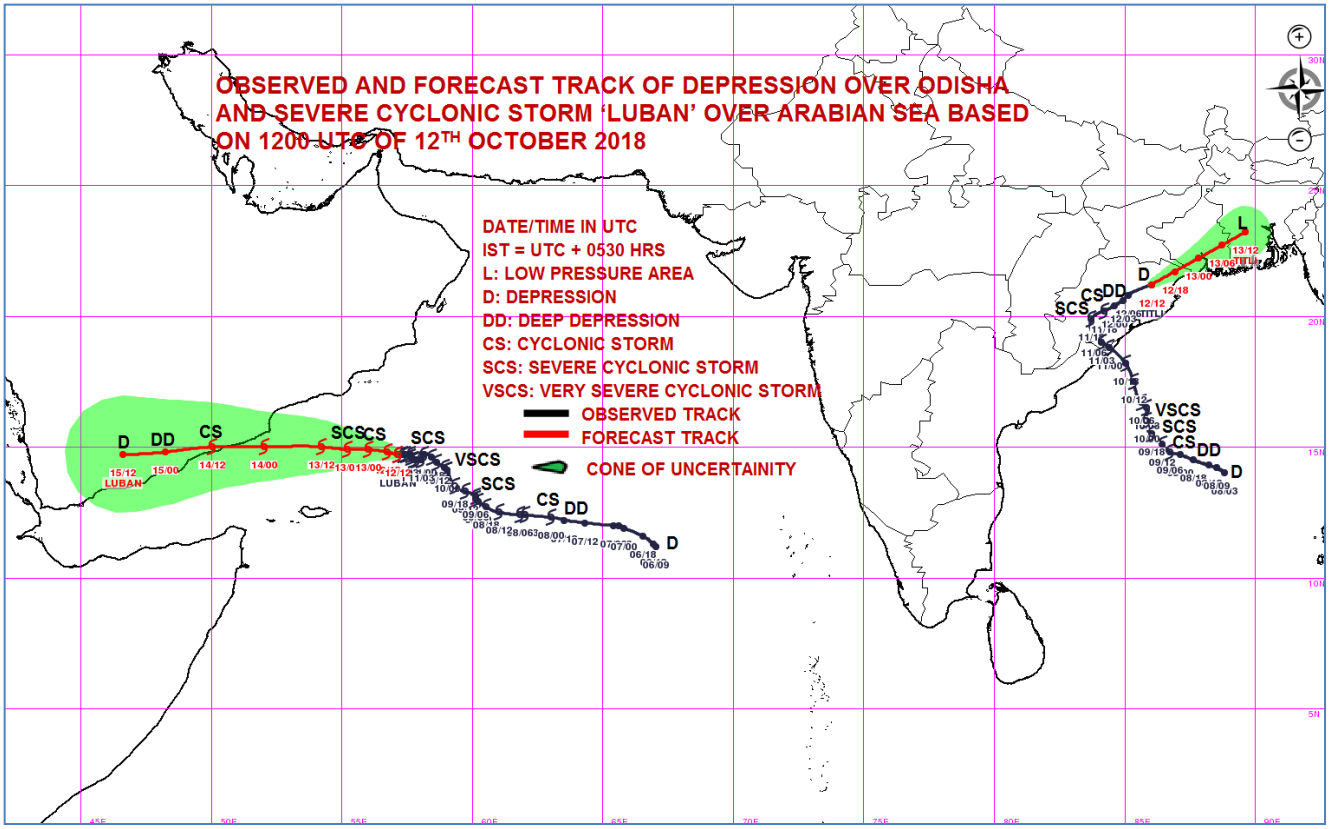
Copy to: CRS, Pune/RSMC Guwahati/ ACWC Chennai/ Kolkata/ Mumbai/MC Goa/Thiruvanathapuram/ Bengaluru/Agartala/ CWC Ahmedabad.

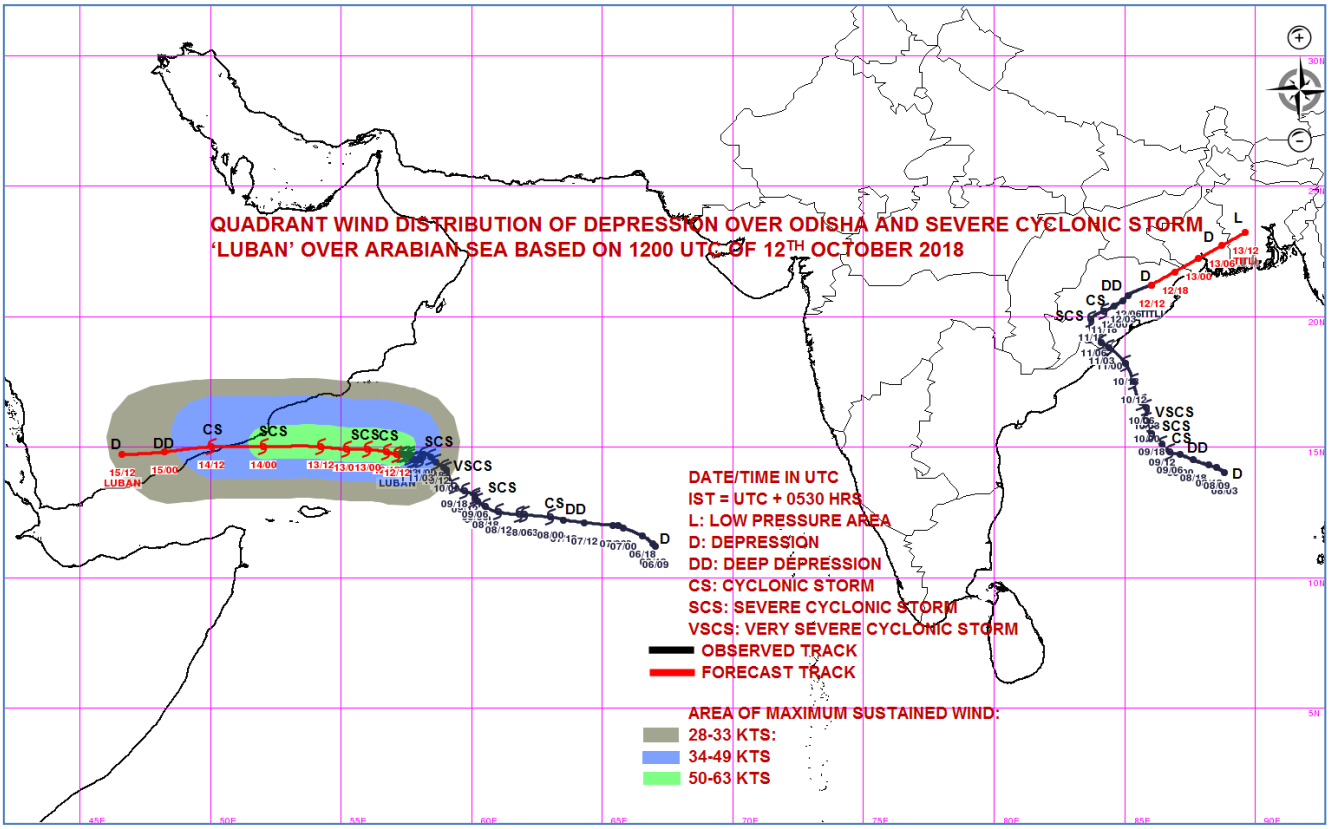
Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
Rainfall amount (mm): Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.



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.





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.

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

BULLETIN NO.: 38 (BOB 08/2018) and BULLETIN NO. : 48 (ARB 04/2018)

TIME OF ISSUE: 0330 HOURS IST **DATED: 13.10.20180**

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)
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 (23421101)
DIRECTOR GENERAL, AIR (23421105, 23421219)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 24363261)
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. 04896-262184)
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)
CHIEF SECRETARY, ANDHRA PRADESH (FAX NO. 0866-2441029)
CHIEF SECRETARY, ODISHA (FAX NO. 0674 -2536660)
CHIEF SECRETARY, WEST BENGAL (FAX NO. 033 -22144328)
CHIEF SECRETARY, MIZORAM (FAX NO. 389 -2322745)
CHIEF SECRETARY, TRIPURA (FAX NO. 0381-2414013)
CHIEF SECRETARY, ASSAM (FAX NO. 0361-2237200)
CHIEF SECRETARY, MEGHALAYA (FAX NO. 0364 -2225978)
CHIEF SECRETARY, MANIPUR (FAX NO. 0385 2452629)

Sub: (a) Depression over north Odisha and adjoining West Bengal
(b) Severe Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea weakened into a cyclonic storm

(a) Depression over north Odisha and adjoining West Bengal:

The Depression over Odisha moved east-northeastwards during past six hours with a speed of 17 kmph and lay centred at 2330 hrs IST of 12th October 2018 over north Odisha and adjoining West Bengal near latitude 21.8^{0}N and longitude 87.1°E about 50 km west-northwest of Digha. It is very likely to continue to move east-northeastwards and weaken into a well marked low pressure area during next 12 hours.

Forecast track and intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
12.10.18/2330	21.8/87.1	40-50 gusting to 60	Depression
13.10.18/0530	22.5/88.1	40-50 gusting to 60	Depression
13.10.18/1130	23.3/89.3	25-35 gusting to 45	Well marked low pressure area

(i) Heavy rainfall warnings:

Region	12 Oct. 2018(Rainfall till 0830 IST of next day)	13 Oct. 2018(Rainfall till 0830 IST of next day)
North Odisha	Nil	Nil
Gangetic West Bengal	Rainfall at many places with heavy falls at isolated places over coastal districts	Nil
Assam & Meghalaya	Rainfall at many places with heavy to very heavy falls at Isolated Places	Rainfall at many places with heavy falls at Isolated Places
Mizoram, Tripura & Manipur	Rainfall at most places with heavy to very heavy falls at isolated places	Rainfall at many places with heavy falls at isolated places

Legends: Red-Take Action; Orange- Be prepared; Yellow- be updated; Green: No warning

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.

(ii) Wind warning

- Squally wind speed of 40-50 kmph gusting to 60 kmph very likely along & off north Odisha during next 06 hours.
- Squally wind speed of 40-50 kmph gusting to 60 kmph very likely along & off West Bengal coast during next 12 hours.

(iii) Sea condition

The Sea conditions will be rough to very rough along & off West Bengal coast during next 12 hours and north Odisha Coast during next 06 hours.

(iv) Action Suggested:

The fishermen are advised not to venture into Sea along and off north Odisha & West Bengal coast and north Bay of Bengal during next 12 hours.

(b) Severe Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea weakened into a cyclonic storm

The Severe Cyclonic Storm **'LUBAN'** over westcentral Arabian Sea moved further west-northwestwards during past 06 hours with a speed of 09 kmph and weakened into a cyclonic storm and lay centered at 2330 hrs IST of today, the 12th October 2018 over westcentral Arabian Sea, near latitude 14.8°N and longitude 56.6°E, about 360 km east-southeast of Salalah (Oman), 370 km, east-northeast of Socotra Islands (Yemen), 500 km east-southeast of Al-Ghaidah (Yemen) and 790 km east-northeast of Riyan (Mukalla). It is very likely to move west-northwestwards and cross Yemen Coast between Riyan (Mukalla) and Al-Ghaidah (Yemen), close to 15°N during noon/afternoon of 14th October 2018 as a severe cyclonic storm.

Forecast track & intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
12.10.18/2330	14.8/56.6	80-90 gusting to 100	Cyclonic Storm
13.10.18/0530	14.9/56.0	80-90 gusting to 115	Cyclonic Storm
13.10.18/1130	14.9/55.2	90-100 gusting to 115	Severe Cyclonic Storm
13.10.18/1730	15.0/54.2	100-110 gusting to 120	Severe Cyclonic Storm
13.10.18/2330	15.0/53.1	105-115 gusting to 125	Severe Cyclonic Storm
14.10.18/1130	15.0/51.5	90-100 gusting to 110	Severe Cyclonic Storm
14.10.18/2330	14.9/49.1	60-70 gusting to 80	Cyclonic Storm
15.10.18/1130	14.8/47.4	40-50 gusting to 60	Depression

(i) Wind warning

- Gale wind speed reaching 80-90 kmph gusting to 100 prevails over westcentral Arabian Sea around system centre.
- Gale wind speed reaching 100-110 kmph gusting to 125 is very likely along & off Yemen & adjoining south Oman coasts at the time of landfall.

(ii) Sea condition

The sea condition is high around the system centre. It will be very high over westcentral Arabian Sea along & off south Oman and Yemen coast and also over Gulf of Aden during 13th October evening to 14th October evening. It will improve rapidly thereafter.

(iii) Fishermen Warning

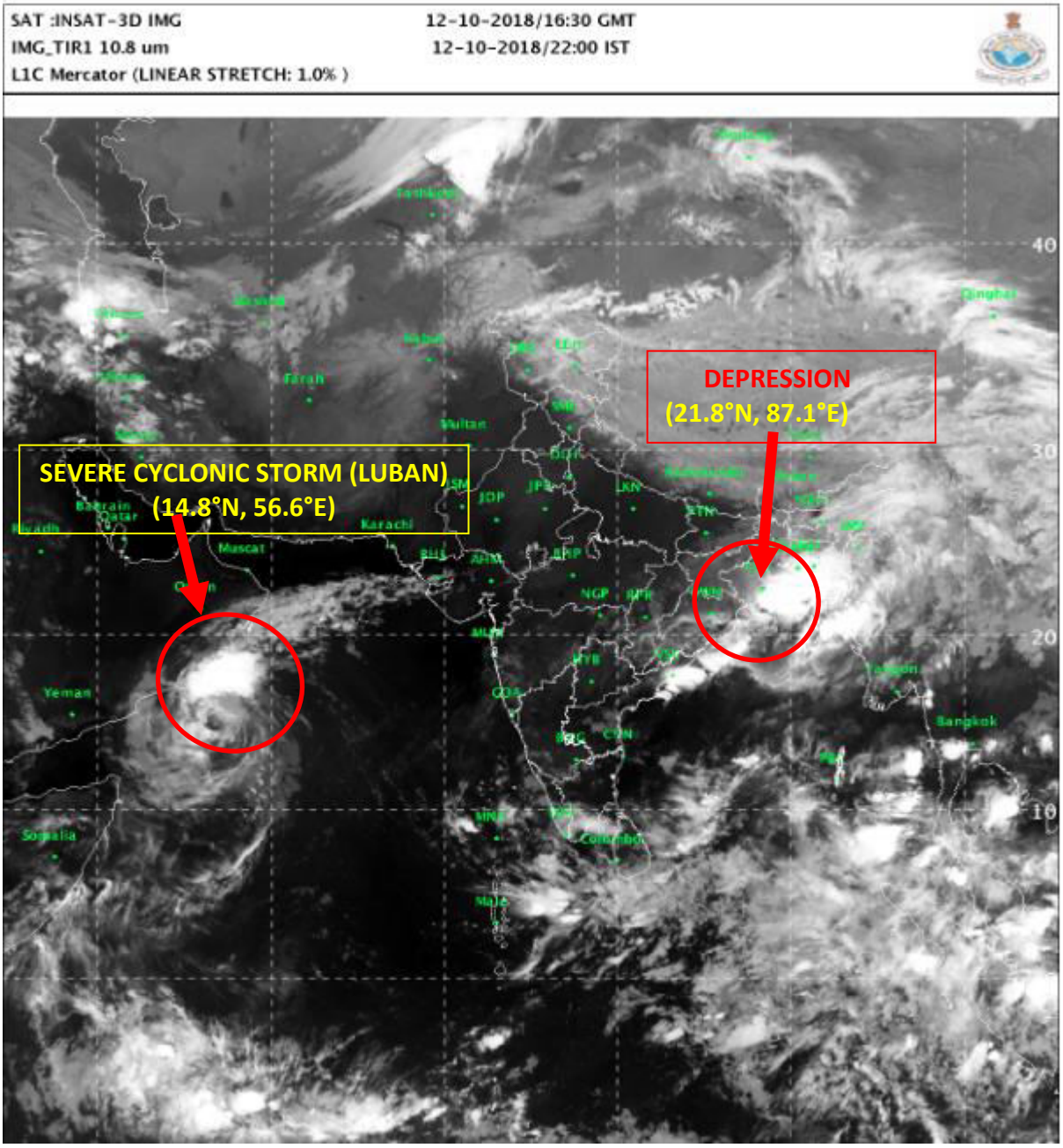
The fishermen are advised not to venture into westcentral Arabian Sea along & off south Oman and Yemen coast and also over Gulf of Aden till 14th October.

The next bulletin will be issued at 0530 hrs IST 13th October, 2018.

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

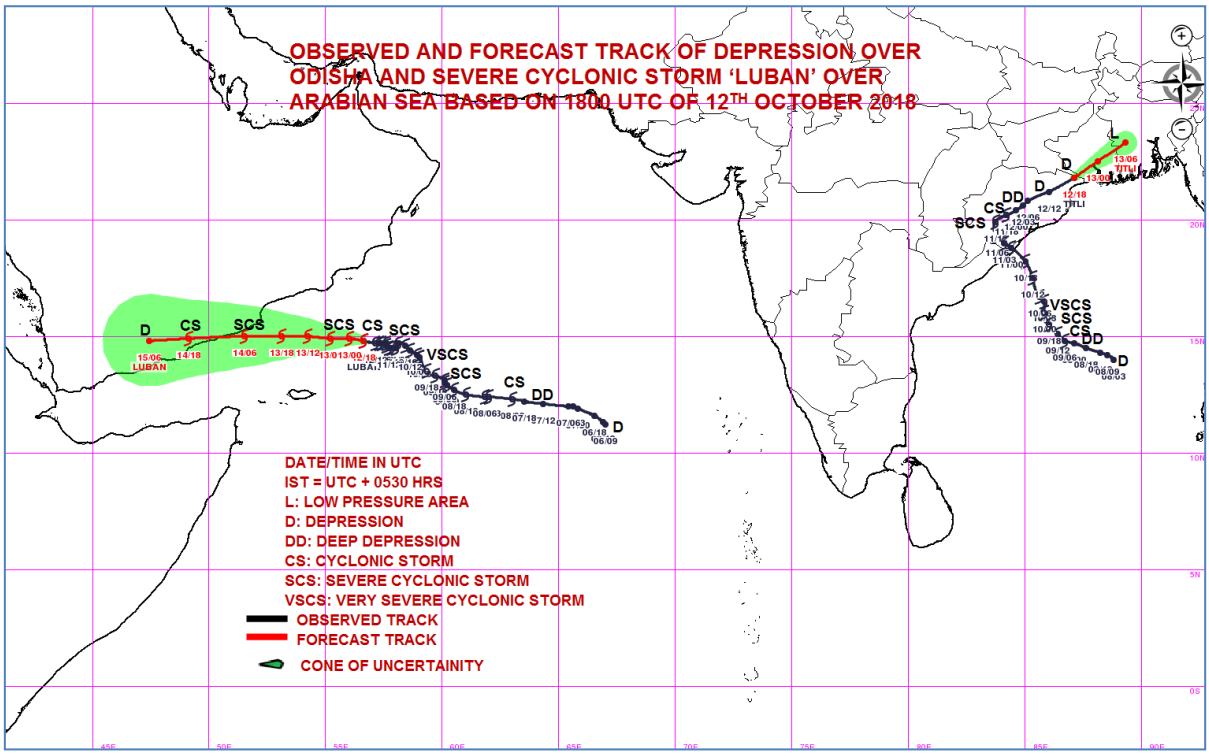
Copy to: CRS, Pune/RSMC Guwahati/ ACWC Chennai/ Kolkata/ Mumbai/MC Goa/Thiruvanathapuram/ Bengaluru/Agartala/ CWC Ahmedabad.

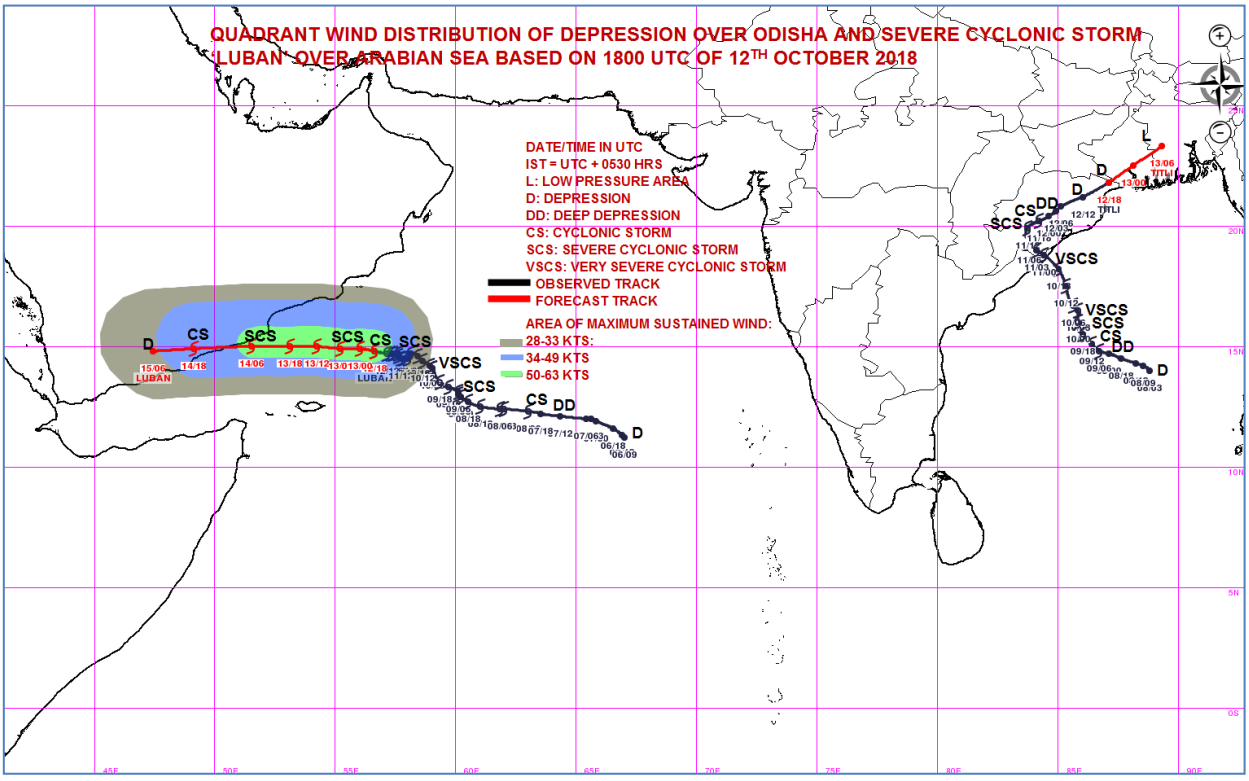
Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
Rainfall amount (mm): Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.



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.





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.

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

BULLETIN NO.: 39 (BOB 08/2018) and BULLETIN NO. : 49 (ARB 04/2018)

TIME OF ISSUE: 0630 HOURS IST **DATED: 13.10.20180**

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)
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 (23421101)
DIRECTOR GENERAL, AIR (23421105, 23421219)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 24363261)
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. 04896-262184)
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)
CHIEF SECRETARY, ANDHRA PRADESH (FAX NO. 0866-2441029)
CHIEF SECRETARY, ODISHA (FAX NO. 0674 -2536660)
CHIEF SECRETARY, WEST BENGAL (FAX NO. 033 -22144328)
CHIEF SECRETARY, MIZORAM (FAX NO. 389 -2322745)
CHIEF SECRETARY, TRIPURA (FAX NO. 0381-2414013)
CHIEF SECRETARY, ASSAM (FAX NO. 0361-2237200)
CHIEF SECRETARY, MEGHALAYA (FAX NO. 0364 -2225978)
CHIEF SECRETARY, MANIPUR (FAX NO. 0385 2452629)

Sub: (a) Depression over north Odisha and adjoining West Bengal
(b) Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea

(a) Depression over north Odisha and adjoining West Bengal:

The Depression over Odisha moved east-northeastwards during past six hours with a speed of 23 kmph and lay centred at 0230 hrs IST of 13th October 2018 over north Odisha and adjoining West Bengal near latitude 22.3^{0}N and longitude 87.5°E about 70 km north of Digha. It is very likely to continue to move east-northeastwards and weaken into a well marked low pressure area during next 12 hours.

Forecast track and intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
13.10.18/0230	22.3/87.5	40-50 gusting to 60	Depression
13.10.18/0530	22.5/88.1	40-50 gusting to 60	Depression
13.10.18/1130	23.3/89.3	25-35 gusting to 45	Well marked low pressure area

(i) Heavy rainfall warnings:

Region	12 Oct. 2018(Rainfall till 0830 IST of next day)	13 Oct. 2018(Rainfall till 0830 IST of next day)
North Odisha	Nil	Nil
Gangetic West Bengal	Rainfall at many places with heavy falls at isolated places over coastal districts	Nil
Assam & Meghalaya	Rainfall at many places with heavy to very heavy falls at Isolated Places	Rainfall at many places with heavy falls at Isolated Places
Mizoram, Tripura & Manipur	Rainfall at most places with heavy to very heavy falls at isolated places	Rainfall at many places with heavy falls at isolated places

Legends: Red-Take Action; Orange- Be prepared; Yellow- be updated; Green: No warning

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.

(ii) Wind warning

- Squally wind speed of 40-50 kmph gusting to 60 kmph very likely along & off north Odisha during next 06 hours.
- Squally wind speed of 40-50 kmph gusting to 60 kmph very likely along & off West Bengal coast during next 12 hours.

(iii) Sea condition

The Sea conditions will be rough to very rough along & off West Bengal coast during next 12 hours and north Odisha Coast during next 06 hours.

(iv) Action Suggested:

The fishermen are advised not to venture into Sea along and off north Odisha & West Bengal coast and north Bay of Bengal during next 12 hours.

(b) Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea

The Cyclonic Storm **'LUBAN'** over westcentral Arabian Sea moved further west-northwestwards during past 06 hours with a speed of 11 kmph and lay centered at 0230 hrs IST of today, the 13th October 2018 over westcentral Arabian Sea, near latitude 14.8°N and longitude 56.3°E, about 340 km east-southeast of Salalah (Oman), 350 km east-northeast of Socotra Islands (Yemen), 470 km east-southeast of Al-Ghaidah (Yemen) and 760 km east-northeast of Riyan (Mukalla). It is very likely to move west-northwestwards and cross Yemen Coast between Riyan (Mukalla) and Al-Ghaidah (Yemen), close to 15°N during noon/afternoon of 14th October 2018 as a severe cyclonic storm.

Forecast track & intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
13.10.18/0230	14.8/56.3	80-90 gusting to 100	Cyclonic Storm
13.10.18/0530	14.9/56.0	80-90 gusting to 115	Cyclonic Storm
13.10.18/1130	14.9/55.2	90-100 gusting to 115	Severe Cyclonic Storm
13.10.18/1730	15.0/54.2	100-110 gusting to 120	Severe Cyclonic Storm
13.10.18/2330	15.0/53.1	105-115 gusting to 125	Severe Cyclonic Storm
14.10.18/1130	15.0/51.5	90-100 gusting to 110	Severe Cyclonic Storm
14.10.18/2330	14.9/49.1	60-70 gusting to 80	Cyclonic Storm
15.10.18/1130	14.8/47.4	40-50 gusting to 60	Depression

(i) Wind warning

- Gale wind speed reaching 80-90 kmph gusting to 100 prevails over westcentral Arabian Sea around system centre.
- Gale wind speed reaching 100-110 kmph gusting to 125 is very likely along & off Yemen & adjoining south Oman coasts at the time of landfall.

(ii) Sea condition

The sea condition is high around the system centre. It will be very high over westcentral Arabian Sea along & off south Oman and Yemen coast and also over Gulf of Aden during 13th October evening to 14th October evening. It will improve rapidly thereafter.

(iii) Fishermen Warning

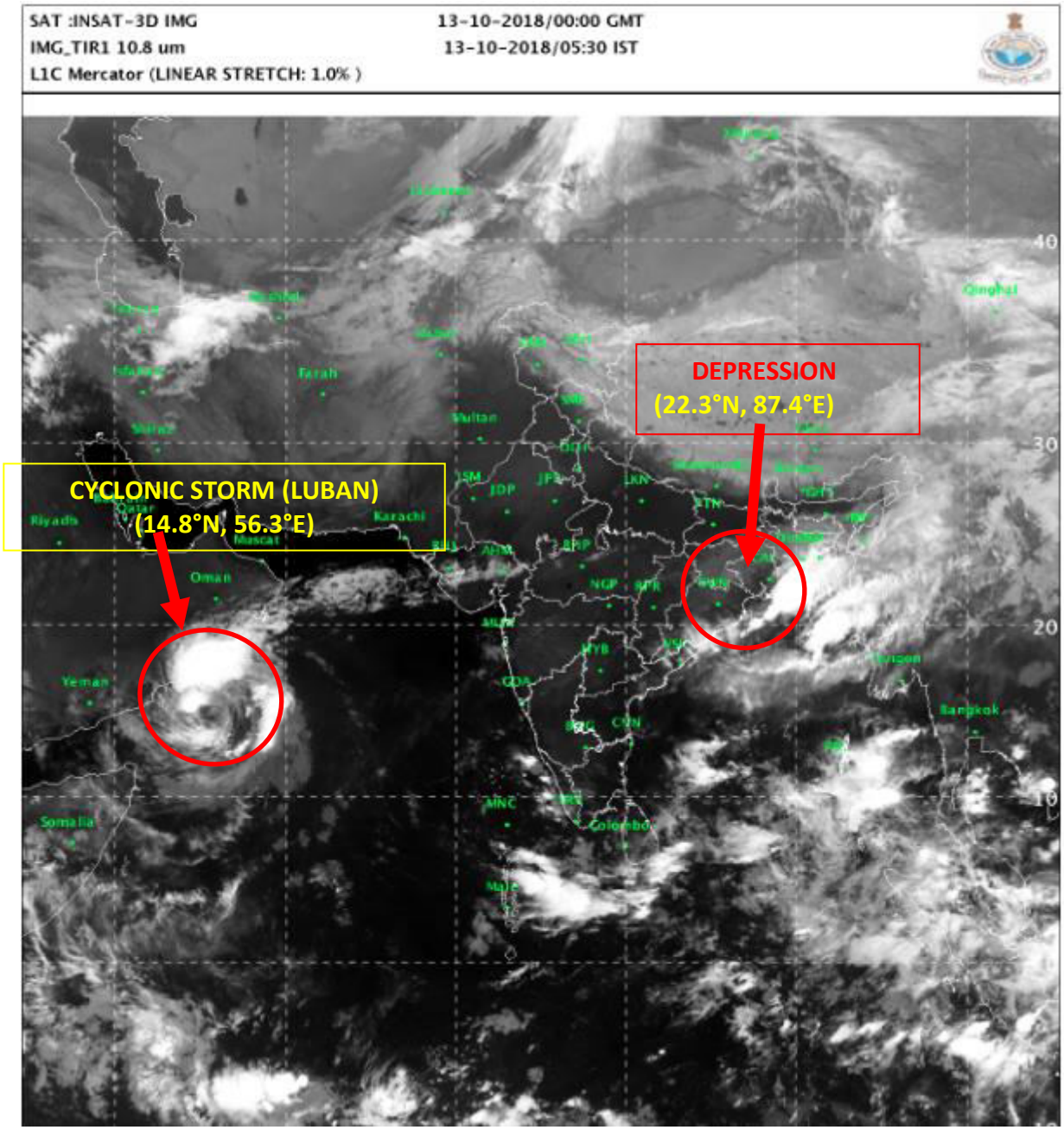
The fishermen are advised not to venture into westcentral Arabian Sea along & off south Oman and Yemen coast and also over Gulf of Aden till 14th October.

The next bulletin will be issued at 0830 hrs IST 13th October, 2018.

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

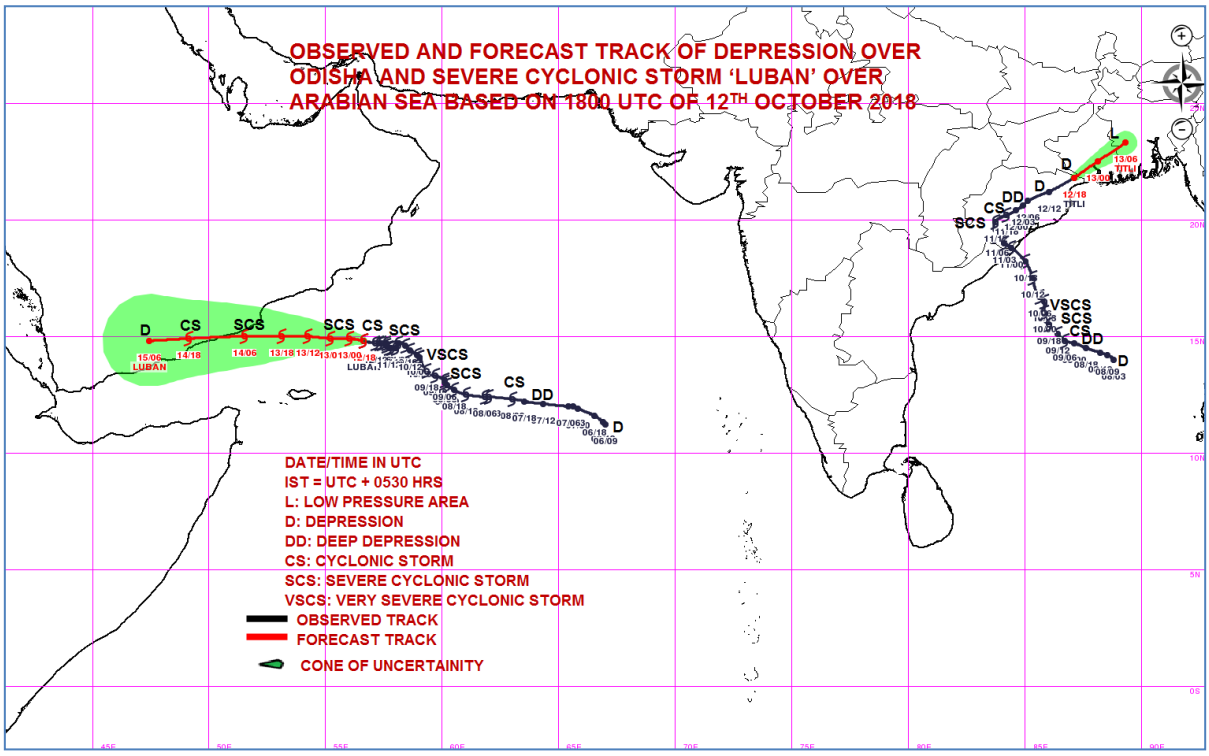
Copy to: CRS, Pune/RSMC Guwahati/ ACWC Chennai/ Kolkata/ Mumbai/MC Goa/Thiruvanathapuram/ Bengaluru/Agartala/ CWC Ahmedabad.

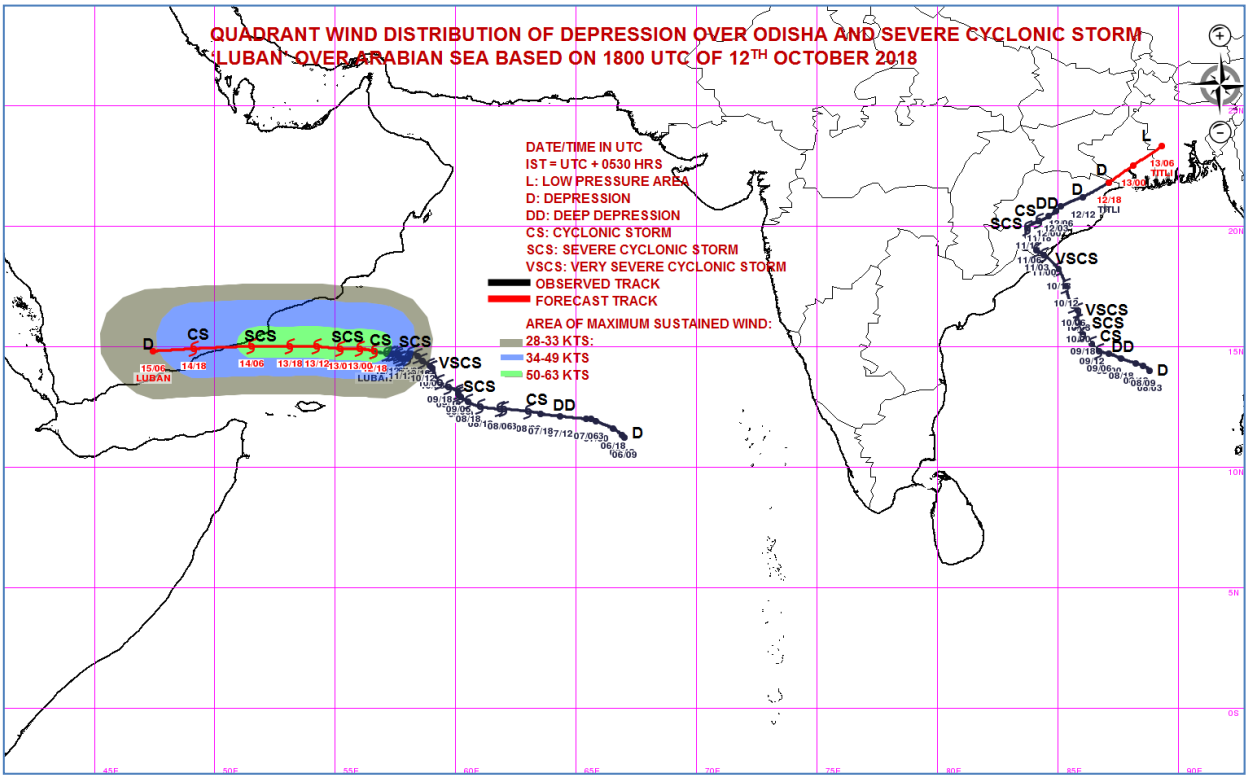
Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
Rainfall amount (mm): Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.



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.





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.

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

BULLETIN NO.: 40 (BOB 08/2018) and BULLETIN NO. : 50 (ARB 04/2018)

TIME OF ISSUE: 0915 HOURS IST **DATED: 13.10.20180**

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)
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 (23421101)
DIRECTOR GENERAL, AIR (23421105, 23421219)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 24363261)
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. 04896-262184)
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)
CHIEF SECRETARY, ANDHRA PRADESH (FAX NO. 0866-2441029)
CHIEF SECRETARY, ODISHA (FAX NO. 0674 -2536660)
CHIEF SECRETARY, WEST BENGAL (FAX NO. 033 -22144328)
CHIEF SECRETARY, MIZORAM (FAX NO. 389 -2322745)
CHIEF SECRETARY, TRIPURA (FAX NO. 0381-2414013)
CHIEF SECRETARY, ASSAM (FAX NO. 0361-2237200)
CHIEF SECRETARY, MEGHALAYA (FAX NO. 0364 -2225978)
CHIEF SECRETARY, MANIPUR (FAX NO. 0385 2452629)

Sub: (a) Depression weakened into a well marked low pressure area over Gangetic West Bengal and neighbourhood:

(b) Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea

(a) Depression weakened into a well marked low pressure area over Gangetic West Bengal and neighbourhood:

The Depression over Gangetic West Bengal moved northeastwards during past six hours and weakened into a well marked low pressure area over Gangetic West Bengal and neighbourhood at 0530 hrs IST of today, the 13th October 2018.

(i) Heavy rainfall warnings:
Rainfall at many places with heavy falls at isolated Places very likely over south Assam, east Meghalaya, Mizoram, Tripura and Manipur during next 24 hours.

(ii) Wind warning:
Strong wind speed of 30-40 kmph gusting to 50 kmph very likely along & off West Bengal coast during next 12 hours.

(iii) Sea condition:
The Sea conditions will be moderate to rough along & off West Bengal coast during next 12 hours.

(b) Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea

The Cyclonic Storm **'LUBAN'** over westcentral Arabian Sea moved westwards during past 06 hours with a speed of 11 kmph and lay centered at 0530 hrs IST of today, the 13th October 2018 over westcentral Arabian Sea, near latitude 14.8°N and longitude 56.0°E, about 320 km southeast of Salalah (Oman), 330 km northeast of Socotra Islands (Yemen), 440 km east-southeast of Al-Ghaidah (Yemen) and 720 km east-northeast of Riyan (Mukalla). It is very likely to move west-northwestwards and cross Yemen Coast between Riyan (Mukalla) and Al-Ghaidah (Yemen), close to 15°N during noon/afternoon of 14th October 2018 as a severe cyclonic storm.

Forecast track & intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
13.10.18/0530	14.8/56.0	70-80 gusting to 90	Cyclonic Storm
13.10.18/1130	14.9/55.2	70-80 gusting to 90	Cyclonic Storm
13.10.18/1730	15.0/54.2	75-85 gusting to 95	Cyclonic Storm
13.10.18/2330	15.0/53.2	80-90 gusting to 100	Cyclonic Storm
14.10.18/0530	15.0/52.0	90-100 gusting to 110	Severe Cyclonic Storm
14.10.18/1730	15.0/49.6	80-90 gusting to 100	Cyclonic Storm
15.10.18/0530	15.2/47.2	45-55 gusting to 65	Depression

(i) Wind warning

- Gale wind speed reaching 70-80 kmph gusting to 90 prevails over westcentral Arabian Sea around system centre.
- Gale wind speed reaching 90-100 kmph gusting to 115 is very likely along & off Yemen & adjoining south Oman coasts at the time of landfall.

(ii) Sea condition

The sea conditions will be high to very high over westcentral Arabian Sea along & off south Oman and Yemen coast and also over Gulf of Aden till 14th October evening and improve rapidly thereafter.

(iii) Fishermen Warning

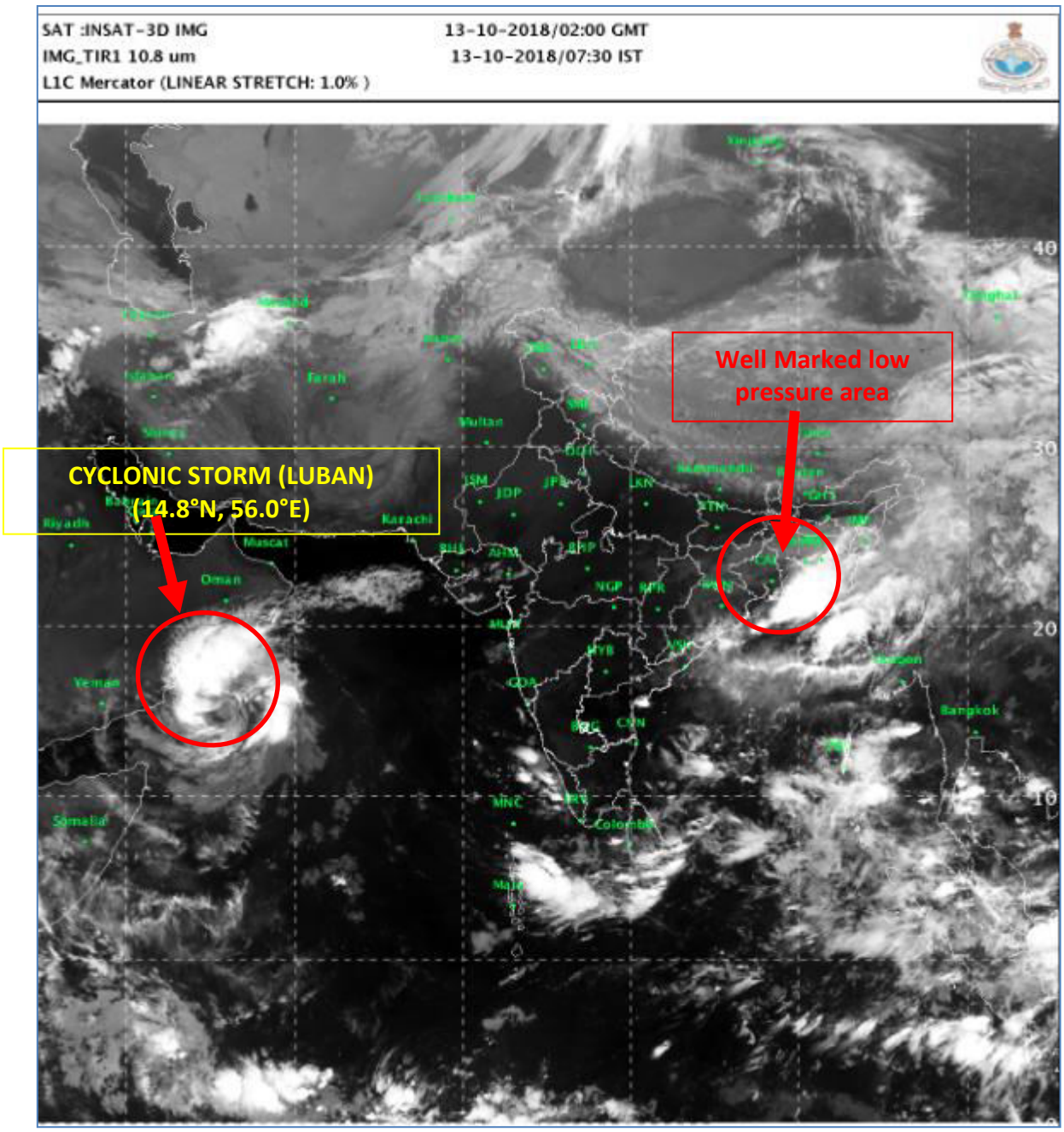
The fishermen are advised not to venture into westcentral Arabian Sea along & off south Oman and Yemen coast and also over Gulf of Aden till 14th October.

The next bulletin will be issued at 1130 hrs IST 13th October, 2018.

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

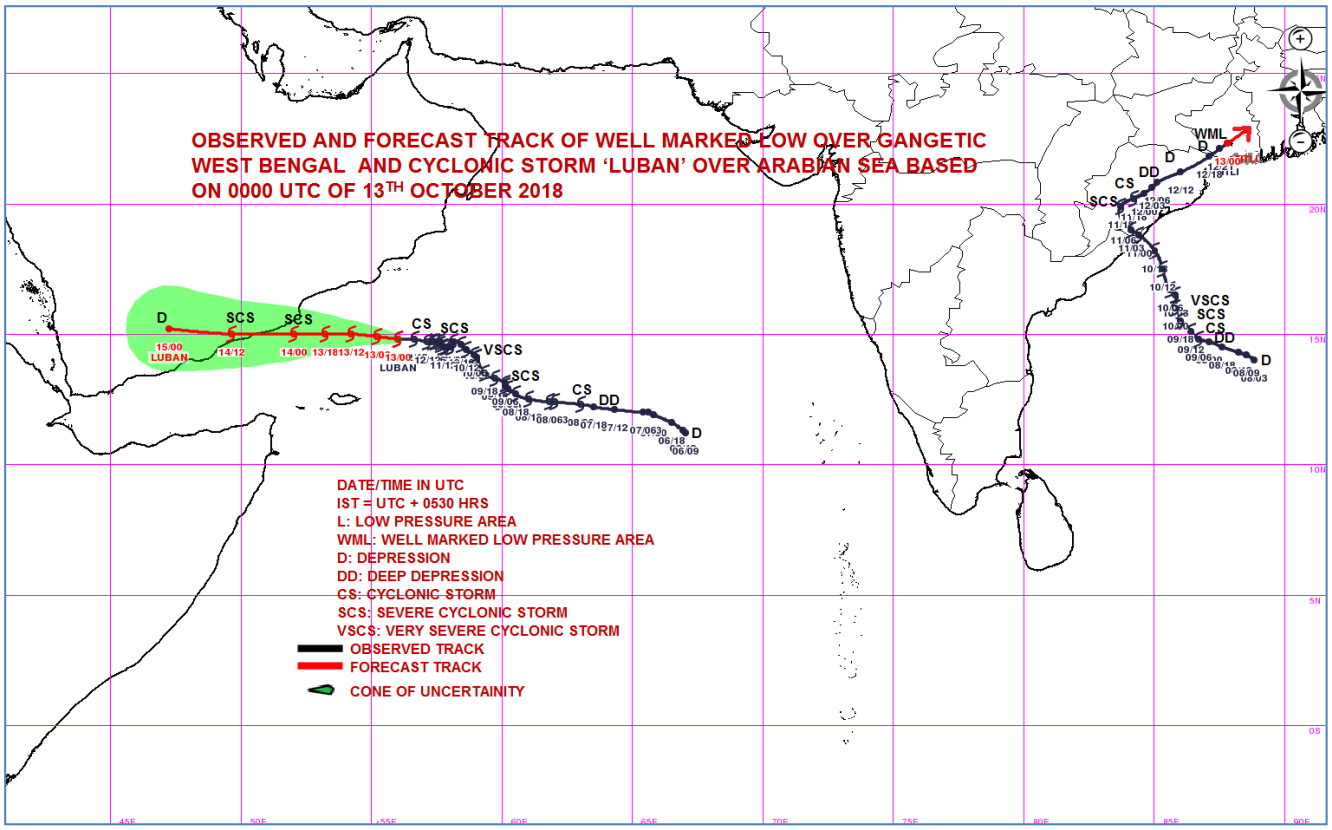
Copy to: CRS, Pune/RSMC Guwahati/ ACWC Chennai/ Kolkata/ Mumbai/MC Goa/Thiruvanathapuram/ Bengaluru/Agartala/ CWC Ahmedabad.

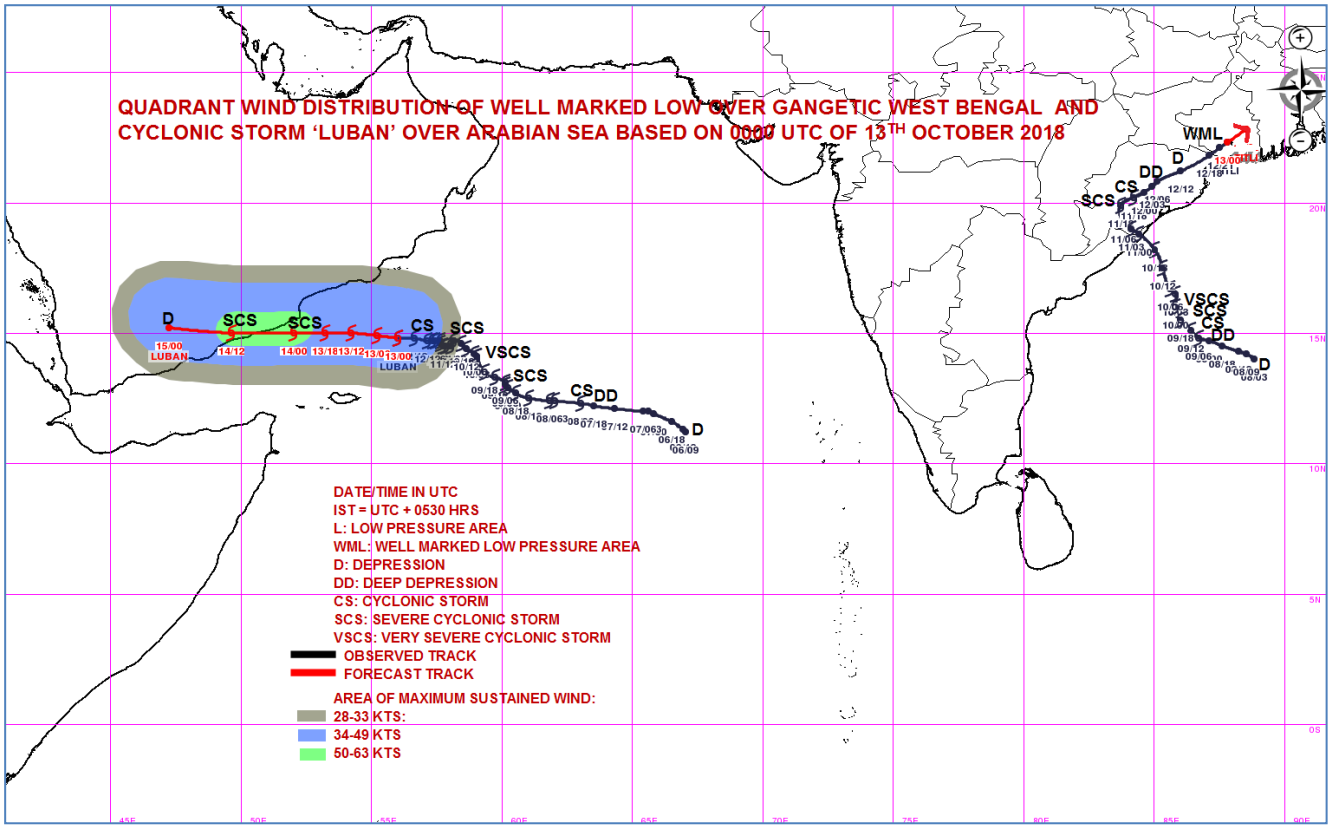
Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
Rainfall amount (mm): Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.



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.





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.

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

BULLETIN NO.: 41 (BOB 08/2018) and BULLETIN NO. : 51 (ARB 04/2018)

TIME OF ISSUE: 1130 HOURS IST **DATED: 13.10.20180**

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)
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 (23421101)
DIRECTOR GENERAL, AIR (23421105, 23421219)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 24363261)
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. 04896-262184)
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)
CHIEF SECRETARY, ANDHRA PRADESH (FAX NO. 0866-2441029)
CHIEF SECRETARY, ODISHA (FAX NO. 0674 -2536660)
CHIEF SECRETARY, WEST BENGAL (FAX NO. 033 -22144328)
CHIEF SECRETARY, MIZORAM (FAX NO. 389 -2322745)
CHIEF SECRETARY, TRIPURA (FAX NO. 0381-2414013)
CHIEF SECRETARY, ASSAM (FAX NO. 0361-2237200)
CHIEF SECRETARY, MEGHALAYA (FAX NO. 0364 -2225978)
CHIEF SECRETARY, MANIPUR (FAX NO. 0385 2452629)

Sub: (a) Well marked low pressure area weakened into a low pressure area over Gangetic West Bengal and adjoining Bangladesh and north Bay

(b) Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea

(a) Well marked low pressure area weakened into a low pressure area over Gangetic West Bengal and adjoining Bangladesh and north Bay

The Well marked low pressure area over Gangetic West Bengal and neighbourhood weakened further into a low pressure area and lay over Gangetic West Bengal and adjoining Bangladesh & North Bay of Bengal at 0830 hrs IST of today, the 13th October 2018.

(i) Heavy rainfall warnings:
Rainfall at many places with heavy falls at isolated Places very likely over south Assam, east Meghalaya, Mizoram, Tripura and Manipur during next 24 hours.

(ii) Wind warning:
Strong wind speed of 30-40 kmph gusting to 50 kmph very likely along & off West Bengal & Bangladesh coast during next 12 hours.

(iii) Sea condition:
The Sea conditions will be moderate to rough along & off West Bengal and Bangladesh coast during next 12 hours.

This is the last bulletin for this system (BOB 08/2018). However, regular bulletin will continue from Regional Meteorological Centre, Kolkata & Guwahati and Meteorological Centre, Agartala.

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.

(b) Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea

The Cyclonic Storm **'LUBAN'** over westcentral Arabian Sea moved westwards during past 06 hours with a speed of 12 kmph and lay centered at 0830 hrs IST of today, the 13th October 2018 over westcentral Arabian Sea, near latitude 14.8°N and longitude 55.6°E, about 290 km south-southeast of Salalah (Oman), 300 km northeast of Socotra Islands (Yemen), 400 km east-southeast of Al-Ghaidah (Yemen) and 680 km east-northeast of Riyan (Mukalla). It is very likely to move west-northwestwards and cross Yemen Coast between Riyan (Mukalla) and Al-Ghaidah (Yemen), close to 15°N during noon/afternoon of 14th October 2018 as a severe cyclonic storm.

Forecast track & intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
13.10.18/0830	14.8/55.6	70-80 gusting to 90	Cyclonic Storm
13.10.18/1130	14.9/55.2	70-80 gusting to 90	Cyclonic Storm
13.10.18/1730	15.0/54.2	75-85 gusting to 95	Cyclonic Storm
13.10.18/2330	15.0/53.2	80-90 gusting to 100	Cyclonic Storm
14.10.18/0530	15.0/52.0	90-100 gusting to 110	Severe Cyclonic Storm
14.10.18/1730	15.0/49.6	80-90 gusting to 100	Cyclonic Storm
15.10.18/0530	15.2/47.2	45-55 gusting to 65	Depression

(i) Wind warning

- Gale wind speed reaching 70-80 kmph gusting to 90 prevails over westcentral Arabian Sea around system centre.
- Gale wind speed reaching 90-100 kmph gusting to 115 is very likely along & off Yemen & adjoining south Oman coasts at the time of landfall.

(ii) Sea condition

The sea condition will be high to very high over westcentral Arabian Sea along & off south Oman and Yemen coast and also over Gulf of Aden till 14th October evening and improve rapidly thereafter.

(iii) Fishermen Warning

The fishermen are advised not to venture into westcentral Arabian Sea along & off south Oman and Yemen coasts and also into Gulf of Aden till 14th October.

The next bulletin will be issued at 1430 hrs IST 13th October, 2018.

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

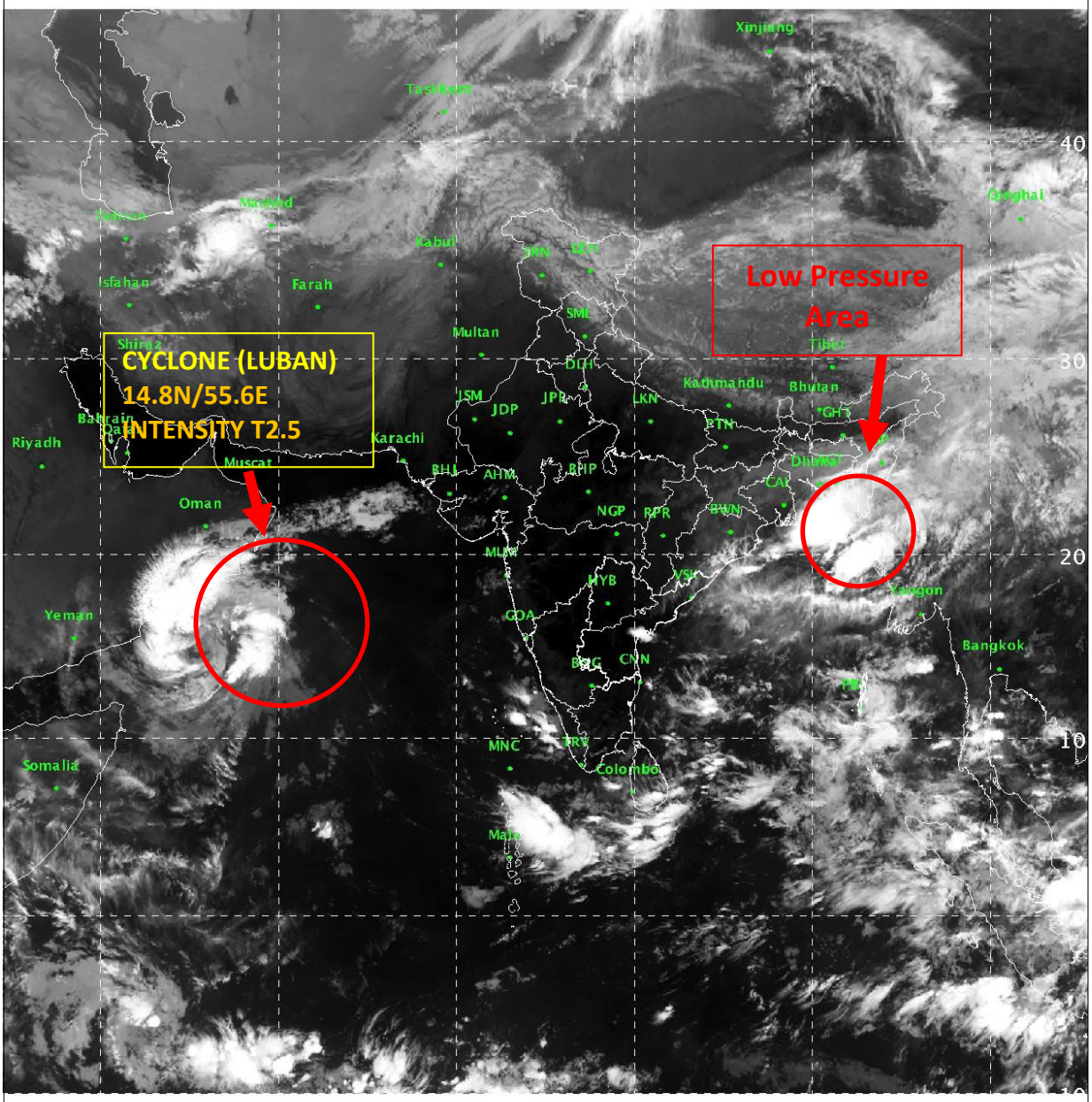
Copy to: CRS, Pune/RSMC Guwahati/ ACWC Chennai/ Kolkata/ Mumbai/MC Goa/Thiruvanathapuram/ Bengaluru/Agartala/ CWC Ahmedabad.

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.

13.10.2018 TIME 0300 UTC

SAT :INSAT-3D IMG
IMG_TIR1 10.8 um
L1C Mercator (LINEAR STRETCH: 1.0%)

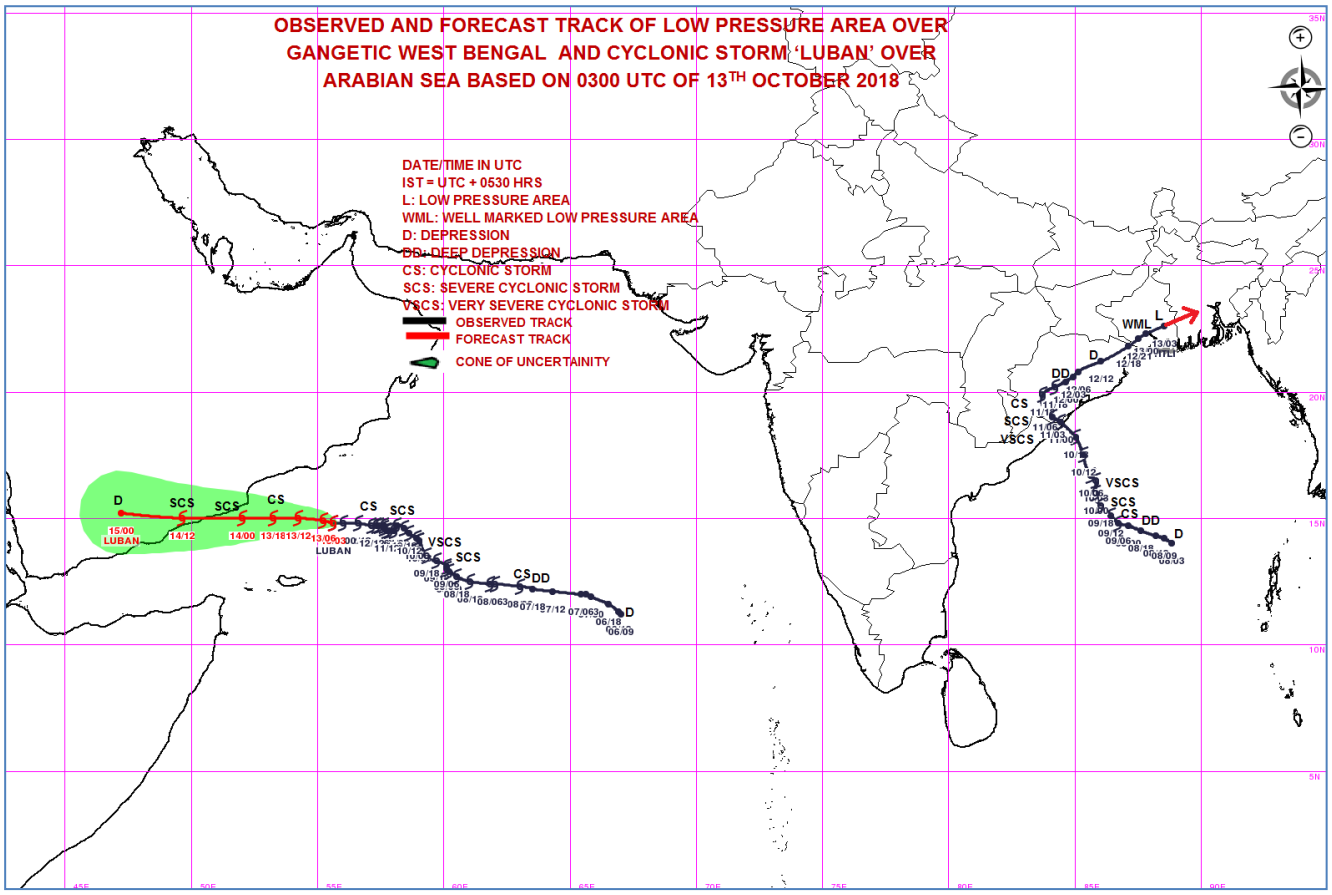
13-10-2018/03:00 GMT
13-10-2018/08:30 IST

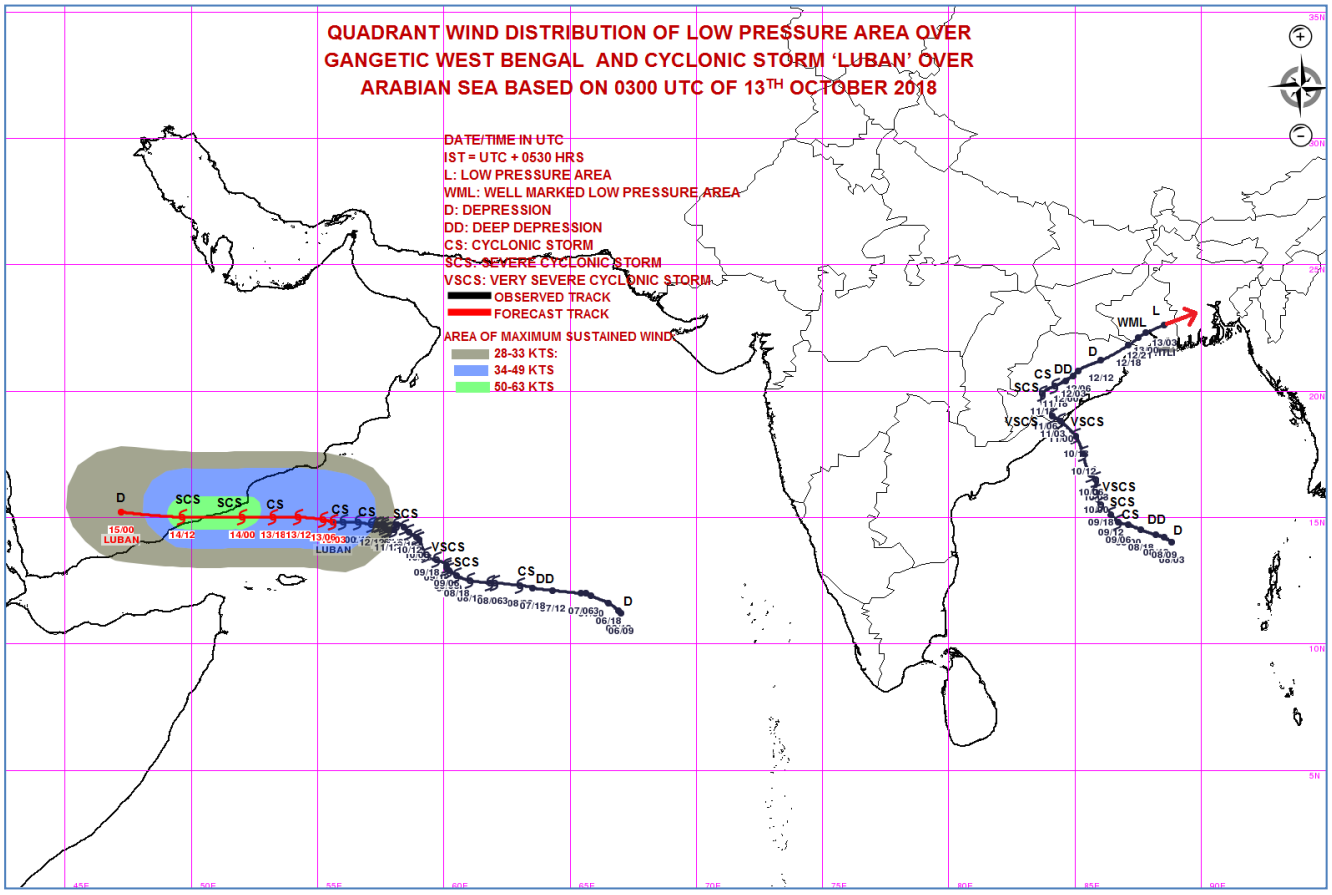


IMD/Delhi

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.





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.

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

BULLETIN NO.: BULLETIN NO. : 52 (ARB 04/2018)

TIME OF ISSUE: 1430 HOURS IST **DATED: 13.10.20180**

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)
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 (23421101)
DIRECTOR GENERAL, AIR (23421105, 23421219)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 24363261)
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. 04896-262184)
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: Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea

The Cyclonic Storm **'LUBAN'** over westcentral Arabian Sea moved nearly westwards during past 06 hours with a speed of 14 kmph and lay centered at 1130 hrs IST of today, the 13th October 2018 over westcentral Arabian Sea, near latitude 14.9°N and longitude 55.2°E, about 260 km south-southeast of Salalah (Oman), 280 km northeast of Socotra Islands (Yemen), 350 km east-southeast of Al-Ghaidah (Yemen) and 640 km east-northeast of Riyan (Mukalla). It is very likely to move west-northwestwards and cross Yemen Coast between Riyan (Mukalla) and Al-Ghaidah (Yemen), close to 15°N during noon/afternoon of 14th October 2018 as a severe cyclonic storm.
Forecast track & intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
13.10.18/1130	14.9/55.2	80-90 gusting to 100	Cyclonic Storm
13.10.18/1730	15.0/54.2	90-100 gusting to 110	Severe Cyclonic Storm
13.10.18/2330	15.0/53.2	100-110 gusting to 125	Severe Cyclonic Storm
14.10.18/0530	15.0/52.0	100-110 gusting to 125	Severe Cyclonic Storm
14.10.18/1130	15.0/50.8	100-110 gusting to 125	Severe Cyclonic Storm
14.10.18/2330	15.1/48.4	70-80 gusting to 90	Cyclonic Storm
15.10.18/0530	15.2/46.0	40-50 gusting to 60	Depression

(i) Wind warning

- Gale wind speed reaching 80-90 kmph gusting to 100 prevails over westcentral Arabian Sea around system centre.

- Gale wind speed reaching 100-110 kmph gusting to 125 is very likely along & off Yemen & adjoining south Oman coasts at the time of landfall.

(ii) Sea condition

The sea condition will be high to very high over westcentral Arabian Sea along & off south Oman and Yemen coast and also over Gulf of Aden till 14th October evening and improve rapidly thereafter.

(iii) Fishermen Warning

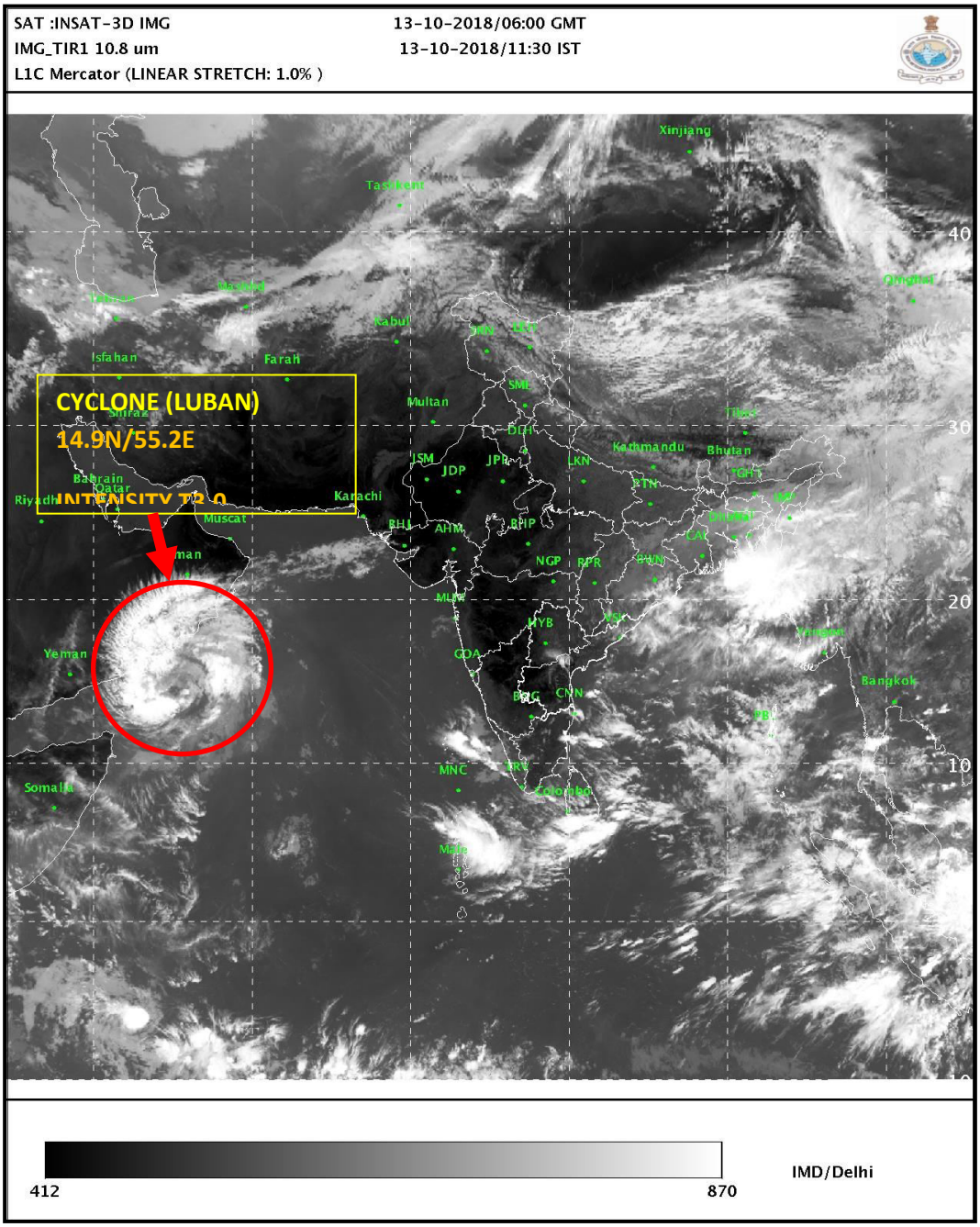
The fishermen are advised not to venture into westcentral Arabian Sea along & off south Oman and Yemen coasts and also into Gulf of Aden till 14th October.

The next bulletin will be issued at 1730 hrs IST 13th October, 2018.

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

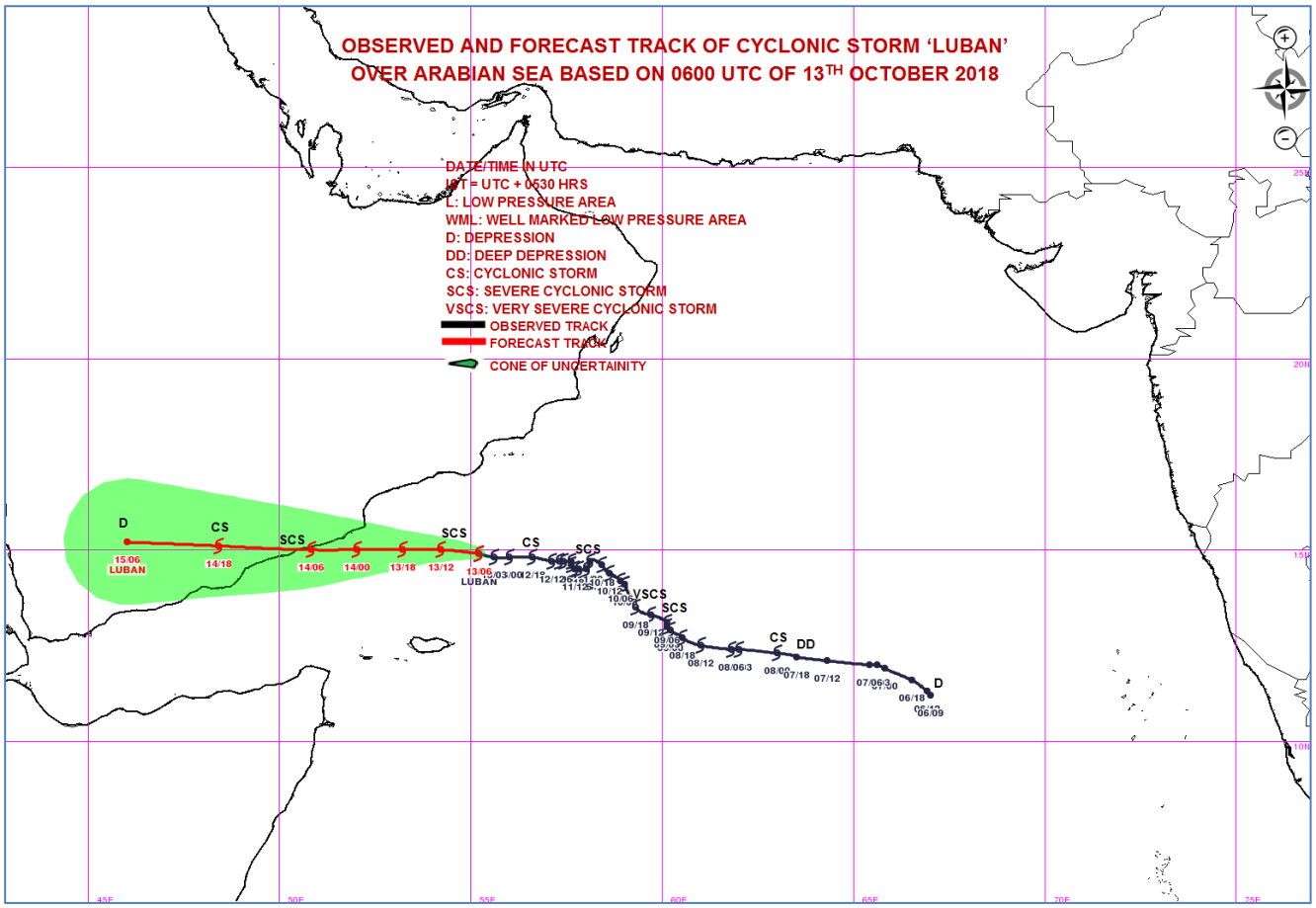
Copy to: CRS, Pune/RSMC Guwahati/ ACWC Chennai/ Kolkata/ Mumbai/MC Goa/Thiruvanathapuram/ Bengaluru/Agartala/ CWC Ahmedabad.

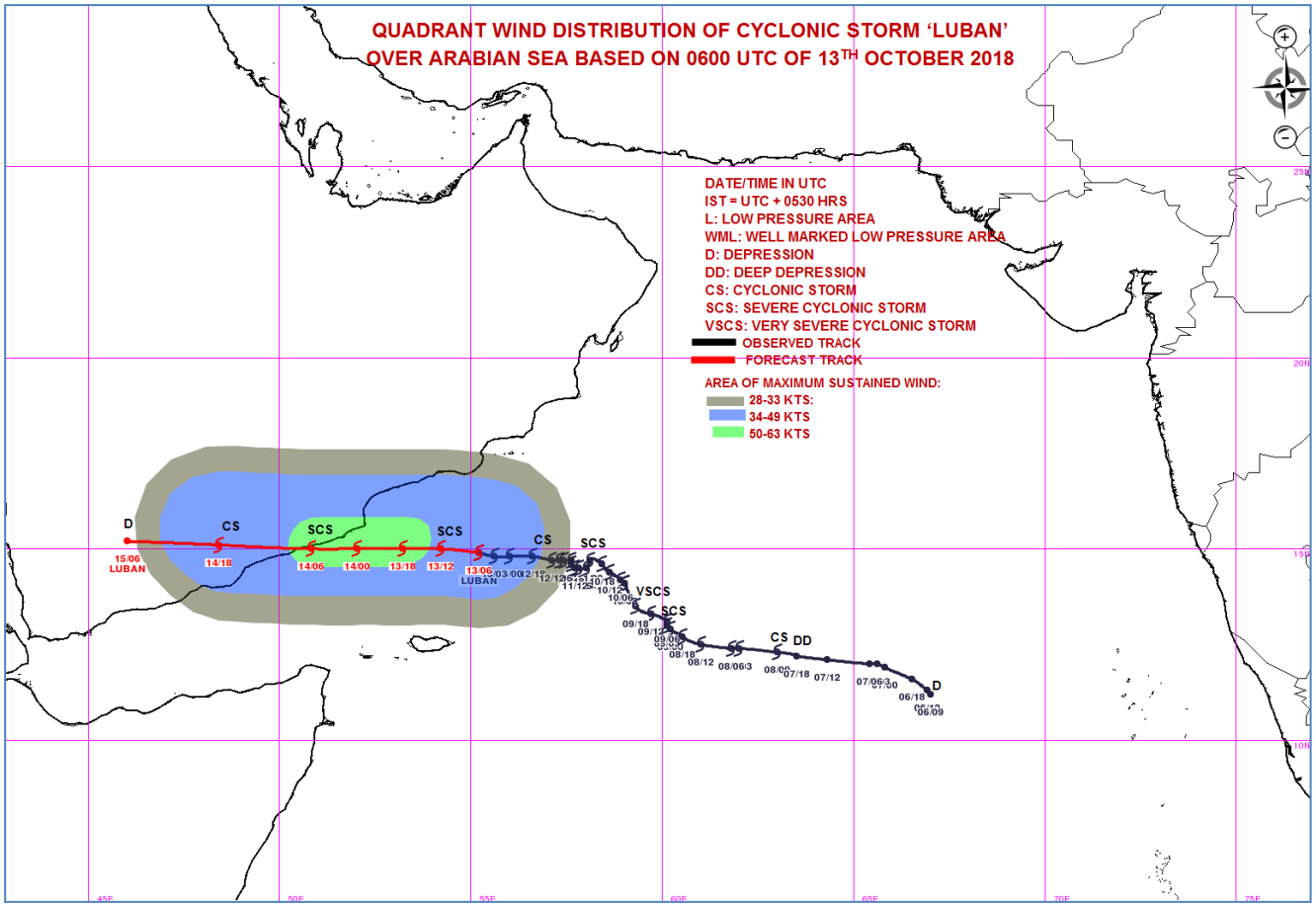
Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
Rainfall amount (mm): Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.



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.





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.

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

BULLETIN NO. : 53 (ARB 04/2018)

TIME OF ISSUE: 1630 HOURS IST **DATED: 13.10.20180**

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)
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 (23421101)
DIRECTOR GENERAL, AIR (23421105, 23421219)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 24363261)
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. 04896-262184)
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: Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea

The Cyclonic Storm **'LUBAN'** over westcentral Arabian Sea moved nearly westwards during past 06 hours with a speed of 14 kmph and lay centered at 1430 hrs IST of today, the 13th October 2018 over westcentral Arabian Sea, near latitude 14.9°N and longitude 54.8°E, about 250 km south-southeast of Salalah (Oman), 270 km northeast of Socotra Islands (Yemen), 320 km east-southeast of Al-Ghaidah (Yemen) and 600 km east-northeast of Riyan (Mukalla). It is very likely to move west-northwestwards and cross Yemen Coast between Riyan (Mukalla) and Al-Ghaidah (Yemen), close to 15°N during noon/afternoon of 14th October 2018 as a severe cyclonic storm.

Forecast track & intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
13.10.18/1430	14.9/54.8	80-90 gusting to 100	Cyclonic Storm
13.10.18/1730	15.0/54.2	90-100 gusting to 110	Severe Cyclonic Storm
13.10.18/2330	15.0/53.2	100-110 gusting to 125	Severe Cyclonic Storm
14.10.18/0530	15.0/52.0	100-110 gusting to 125	Severe Cyclonic Storm
14.10.18/1130	15.0/50.8	100-110 gusting to 125	Severe Cyclonic Storm
14.10.18/2330	15.1/48.4	70-80 gusting to 90	Cyclonic Storm
15.10.18/0530	15.2/46.0	40-50 gusting to 60	Depression

(i) Wind warning

- Gale wind speed reaching 80-90 kmph gusting to 100 prevails over westcentral Arabian Sea around system centre.

- Gale wind speed reaching 100-110 kmph gusting to 125 is very likely along & off Yemen & adjoining south Oman coasts at the time of landfall.

(ii) Sea condition

The sea condition will be high to very high over westcentral Arabian Sea along & off south Oman and Yemen coast and also over Gulf of Aden till 14th October evening and improve rapidly thereafter.

(iii) Fishermen Warning

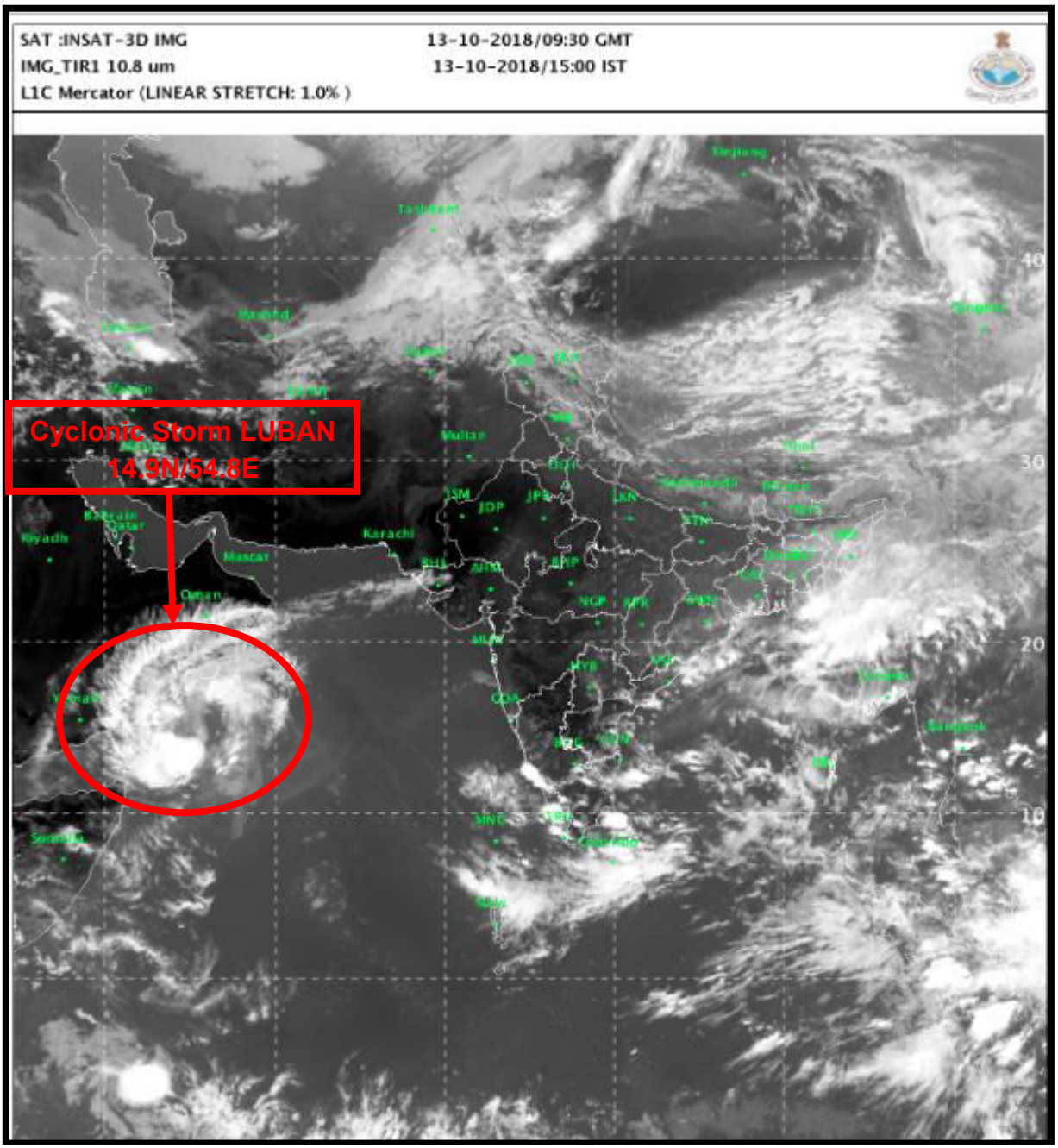
The fishermen are advised not to venture into westcentral Arabian Sea along & off south Oman and Yemen coasts and also into Gulf of Aden till 14th October.

The next bulletin will be issued at 2030 hrs IST 13th October, 2018.

(Neetha K Gopal)
Scientist-E, RSMC, New Delhi

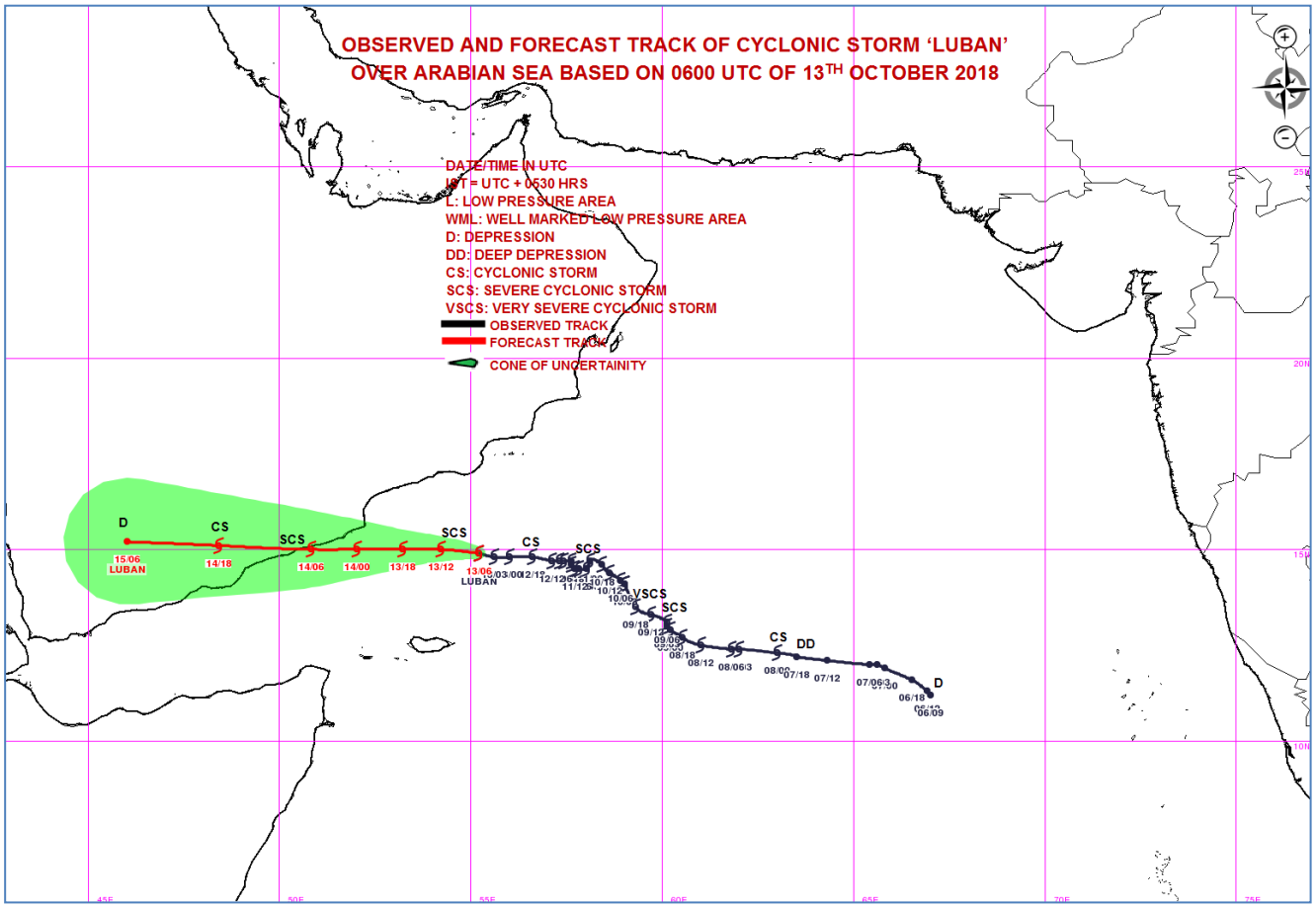
Copy to: CRS, Pune/ RSMC Guwahati/ ACWC Chennai/ Kolkata/ Mumbai/MC Goa/ Thiruvanathapuram/ Bengaluru/ CWC Ahmedabad.

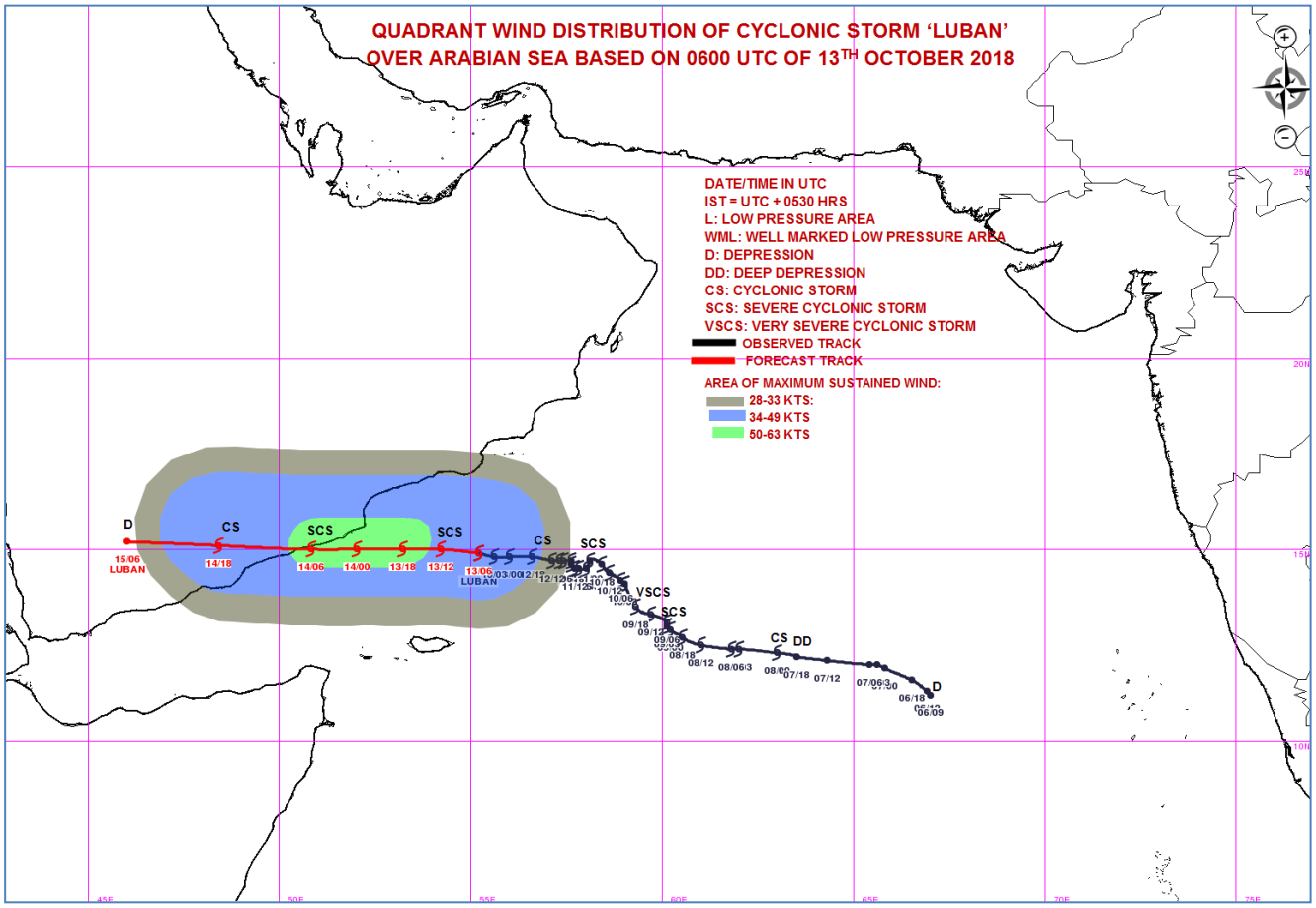
Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
Rainfall amount (mm): Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.



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.





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.

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

BULLETIN NO. : 54 (ARB 04/2018)

TIME OF ISSUE: 1930 HOURS IST **DATED: 13.10.20180**

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)
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 (23421101)
DIRECTOR GENERAL, AIR (23421105, 23421219)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 24363261)
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. 04896-262184)
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: Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea

The Cyclonic Storm **'LUBAN'** over westcentral Arabian Sea moved westwards during past 06 hours with a speed of 14 kmph and lay centered at 1730 hrs IST of today, the 13th October 2018 over westcentral Arabian Sea, near latitude 14.9°N and longitude 54.4°E, about 240 km south-southeast of Salalah (Oman), 260 km northeast of Socotra Islands (Yemen), 280 km east-southeast of Al-Ghaidah (Yemen) and 550 km east-northeast of Riyan (Mukalla). It is very likely to move west-northwestwards and cross Yemen Coast between Riyan (Mukalla) and Al-Ghaidah (Yemen), close to 15°N by noon/afternoon of 14th October 2018 as a Severe Cyclonic Storm.

Forecast track & intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
13.10.18/1730	14.9/54.4	80-90 gusting to 100	Cyclonic Storm
13.10.18/2330	15.0/53.5	85-95 gusting to 110	Cyclonic Storm
14.10.18/0530	15.1/52.4	90-100 gusting to 115	Severe Cyclonic Storm
14.10.18/1130	15.2/51.4	90-100 gusting to 115	Severe Cyclonic Storm
14.10.18/1730	15.3/50.2	70-80 gusting to 90	Cyclonic Storm
15.10.18/0530	15.7/48.7	40-50 gusting to 60	Depression

(i) Wind warning

- Gale wind speed reaching 80-90 kmph gusting to 100 prevails over westcentral Arabian Sea around system centre.

- Gale wind speed reaching 90-100 kmph gusting to 115 is very likely along & off Yemen & adjoining south Oman coasts at the time of landfall.

(ii) Sea condition

The sea condition will be high to very high over westcentral Arabian Sea along & off south Oman and Yemen coast and also over Gulf of Aden till 14th October evening and improve rapidly thereafter.

(iii) Fishermen Warning

The fishermen are advised not to venture into westcentral Arabian Sea along & off south Oman and Yemen coasts and also into Gulf of Aden till 14th October.

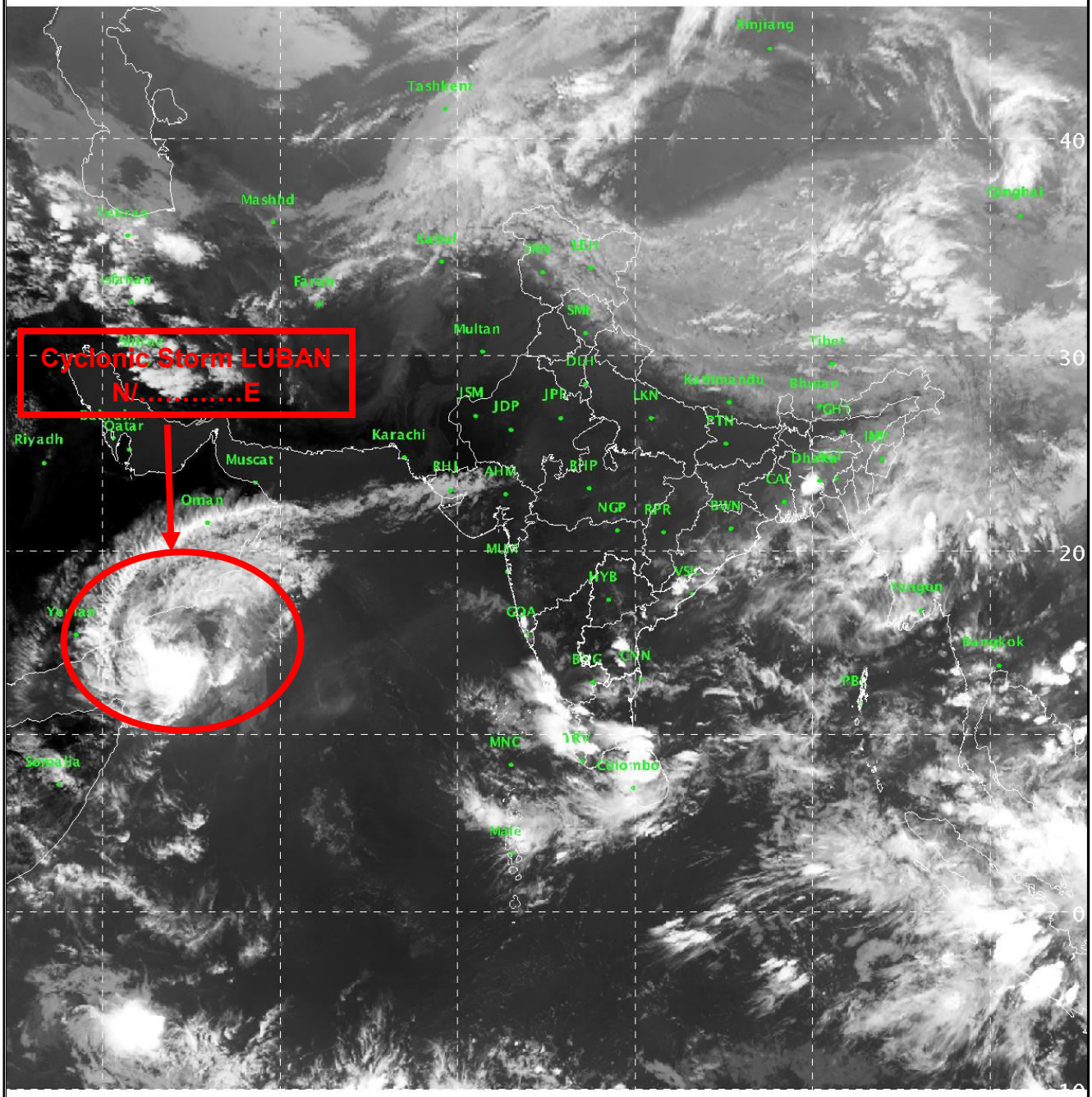
The next bulletin will be issued at 2330 hrs IST 13th October, 2018.

(Neetha K Gopal)
Scientist-E, RSMC, New Delhi

Copy to: CRS, Pune/ RSMC Guwahati/ ACWC Chennai/ Kolkata/ Mumbai/MC Goa/ Thiruvanathapuram/ Bengaluru/ CWC Ahmedabad.

SAT :INSAT-3D IMG
IMG_TIR1 10.8 um
L1C Mercator (LINEAR STRETCH: 1.0%)

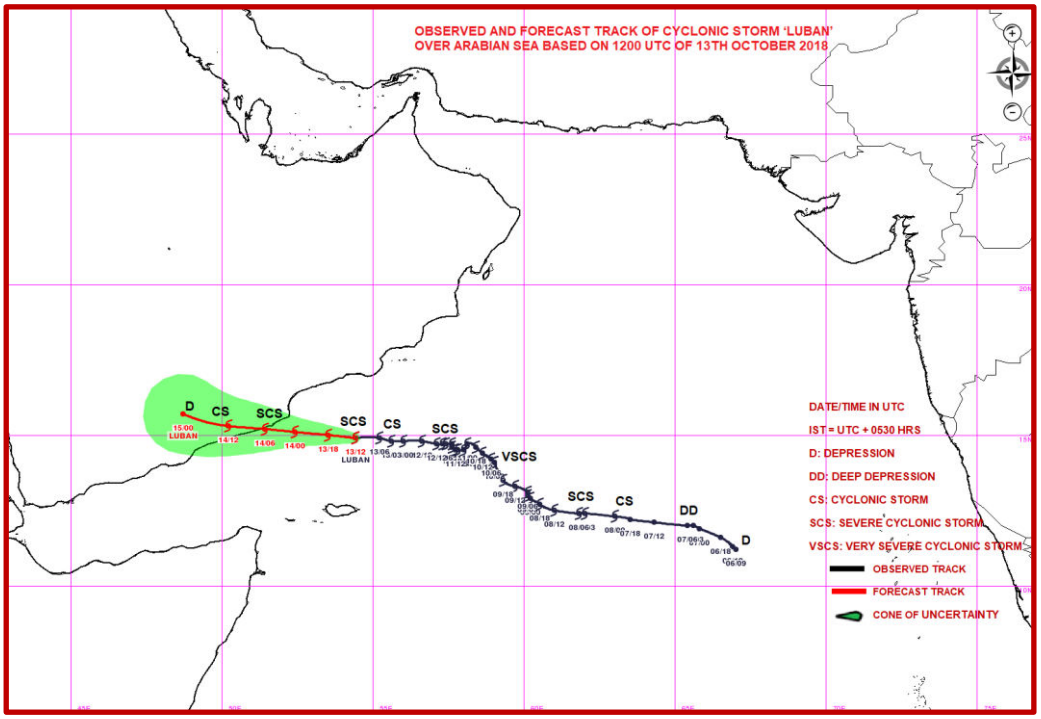
13-10-2018/12:00 GMT
13-10-2018/17:30 IST

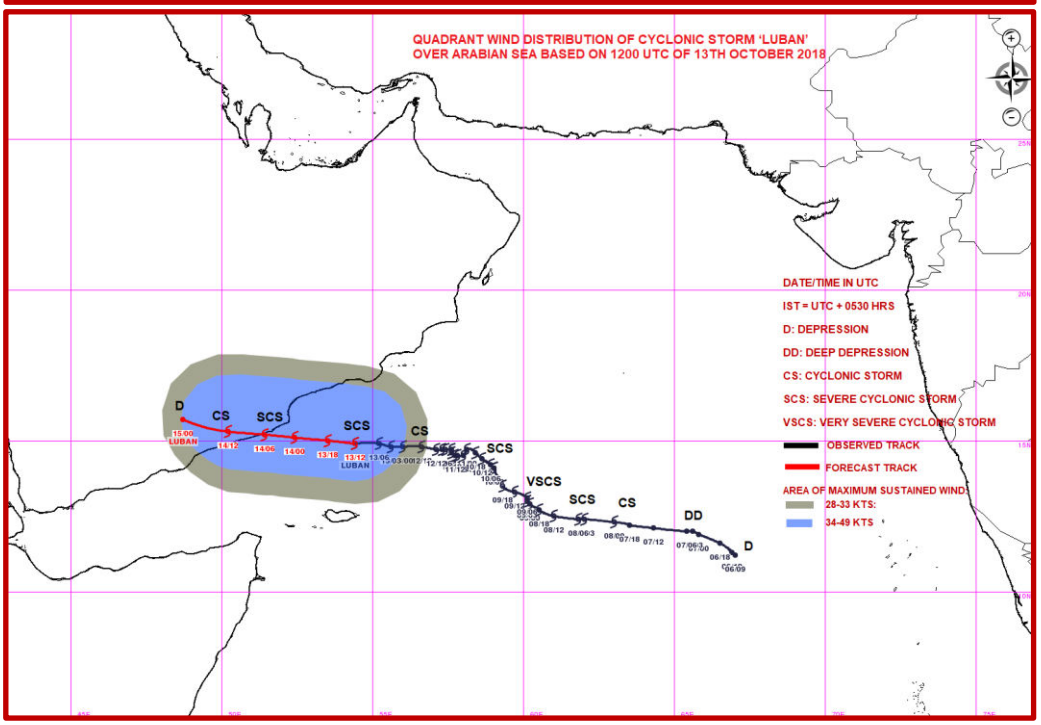


458 885 IMD/Delhi

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.





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.

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

BULLETIN NO. : 55 (ARB 04/2018)

TIME OF ISSUE: 2300 HOURS IST **DATED: 13.10.20180**

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)
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 (23421101)
DIRECTOR GENERAL, AIR (23421105, 23421219)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 24363261)
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. 04896-262184)
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: Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea

The Cyclonic Storm **'LUBAN'** over westcentral Arabian Sea moved westwards during past 06 hours with a speed of 14 kmph and lay centered at 2030 hrs IST of today, the 13th October 2018 over westcentral Arabian Sea, near latitude 14.9°N and longitude 54.0°E, about 230 km south of Salalah (Oman), 250 km north of Socotra Islands (Yemen), 240 km east-southeast of Al-Ghaidah (Yemen) and 510 km east-northeast of Riyan (Mukalla). It is very likely to move west-northwestwards and cross Yemen Coast between Riyan (Mukalla) and Al-Ghaidah (Yemen), close to 15°N by noon/afternoon of 14th October 2018 as a Severe Cyclonic Storm.

Forecast track & intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
13.10.18/2030	14.9/54.0	80-90 gusting to 100	Cyclonic Storm
13.10.18/2330	15.0/53.5	85-95 gusting to 110	Cyclonic Storm
14.10.18/0530	15.1/52.4	90-100 gusting to 115	Severe Cyclonic Storm
14.10.18/1130	15.2/51.4	90-100 gusting to 115	Severe Cyclonic Storm
14.10.18/1730	15.3/50.2	70-80 gusting to 90	Cyclonic Storm
15.10.18/0530	15.7/48.7	40-50 gusting to 60	Depression

(i) Wind warning

- Gale wind speed reaching 80-90 kmph gusting to 100 prevails over westcentral Arabian Sea around system centre.

- Gale wind speed reaching 90-100 kmph gusting to 115 is very likely along & off Yemen & adjoining south Oman coasts at the time of landfall.

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.

(ii) Sea condition

The sea condition will be high to very high over westcentral Arabian Sea along & off south Oman and Yemen coast and also over Gulf of Aden till 14th October evening and improve rapidly thereafter.

(iii) Fishermen Warning

The fishermen are advised not to venture into westcentral Arabian Sea along & off south Oman and Yemen coasts and also into Gulf of Aden till 14th October.

The next bulletin will be issued at 0200 hrs IST 14th October, 2018.

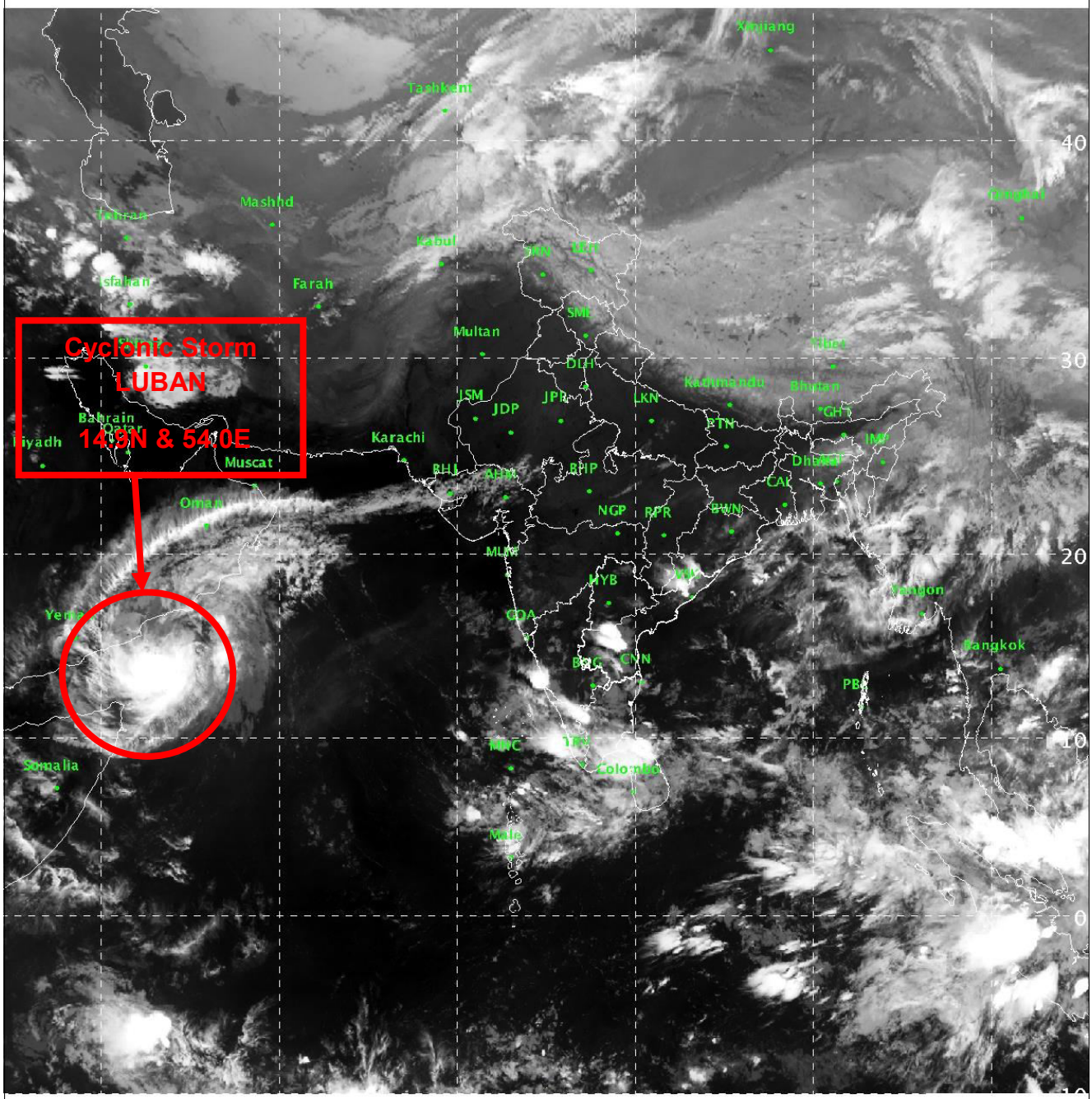
(D. R. Pattanaik)
Scientist-E, RSMC, New Delhi

Copy to: CRS, Pune/ RSMC Guwahati/ ACWC Chennai/ Kolkata/ Mumbai/MC Goa/ Thiruvanathapuram/ Bengaluru/ CWC Ahmedabad.

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.

SAT :INSAT-3D IMG
IMG_TIR1 10.8 um
L1C Mercator (LINEAR STRETCH: 1.0%)

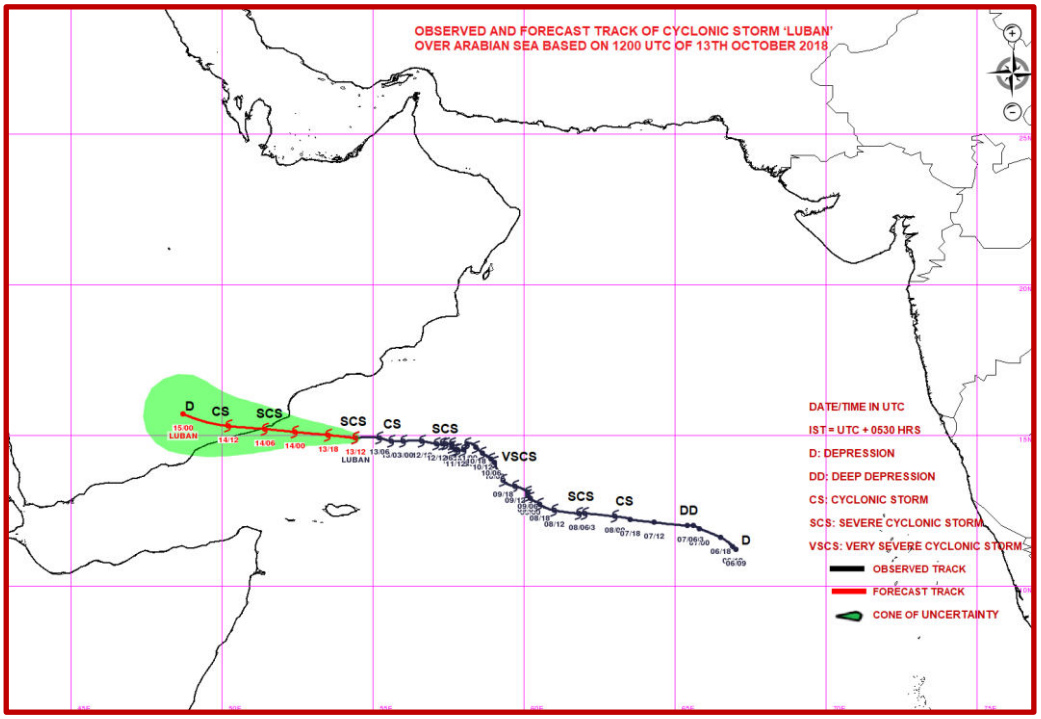
13-10-2018/15:00 GMT
13-10-2018/20:30 IST

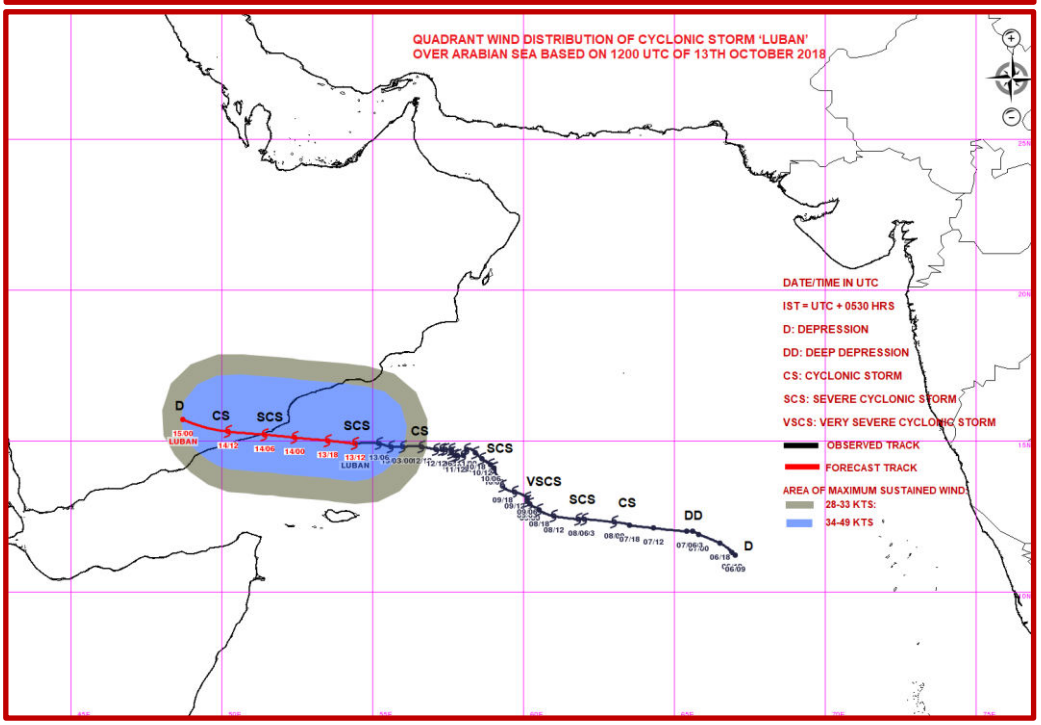


521 884 IMD/Delhi

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.





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.

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

BULLETIN NO. : 56 (ARB 04/2018)

TIME OF ISSUE: 0100 HOURS IST **DATED: 14.10.20180**

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)
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 (23421101)
DIRECTOR GENERAL, AIR (23421105, 23421219)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 24363261)
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. 04896-262184)
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: Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea

The Cyclonic Storm **'LUBAN'** over westcentral Arabian Sea moved west-northwestwards during past 06 hours with a speed of 12 kmph and lay centered at 2330 hrs IST of 13th October 2018 over westcentral Arabian Sea, near latitude 15.0°N and longitude 53.7°E, about 220 km south-southwest of Salalah (Oman), 260 km north of Socotra Islands (Yemen), 210 km east-southeast of Al-Ghaidah (Yemen) and 480 km east-northeast of Riyan (Mukalla). It is very likely to move west-northwestwards and cross Yemen Coast between Riyan (Mukalla) and Al-Ghaidah (Yemen), close to 15°N by noon/afternoon of 14th October 2018 as a Severe Cyclonic Storm.

Forecast track & intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
13.10.18/2330	15.0/53.7	85-95 gusting to 110	Cyclonic Storm
14.10.18/0530	15.1/52.5	90-100 gusting to 115	Severe Cyclonic Storm
14.10.18/1130	15.2/51.4	90-100 gusting to 115	Severe Cyclonic Storm
14.10.18/1730	15.3/50.2	70-80 gusting to 90	Cyclonic Storm
14.10.18/2330	15.5/49.3	50-60 gusting to 70	Deep Depression
15.10.18/1130	15.7/48.1	35-45 gusting to 55	Depression

(i) Wind warning

- Gale wind speed reaching 80-90 kmph gusting to 100 prevails over westcentral Arabian Sea around system centre.

- Gale wind speed reaching 90-100 kmph gusting to 115 is very likely along & off Yemen & adjoining south Oman coasts at the time of landfall.

(ii) Sea condition

The sea condition will be high to very high over westcentral Arabian Sea along & off south Oman and Yemen coast and also over Gulf of Aden till 14th October evening and improve rapidly thereafter.

(iii) Fishermen Warning

The fishermen are advised not to venture into westcentral Arabian Sea along & off south Oman and Yemen coasts and also into Gulf of Aden till 14th October.

The next bulletin will be issued at 0530 hrs IST 14th October, 2018.

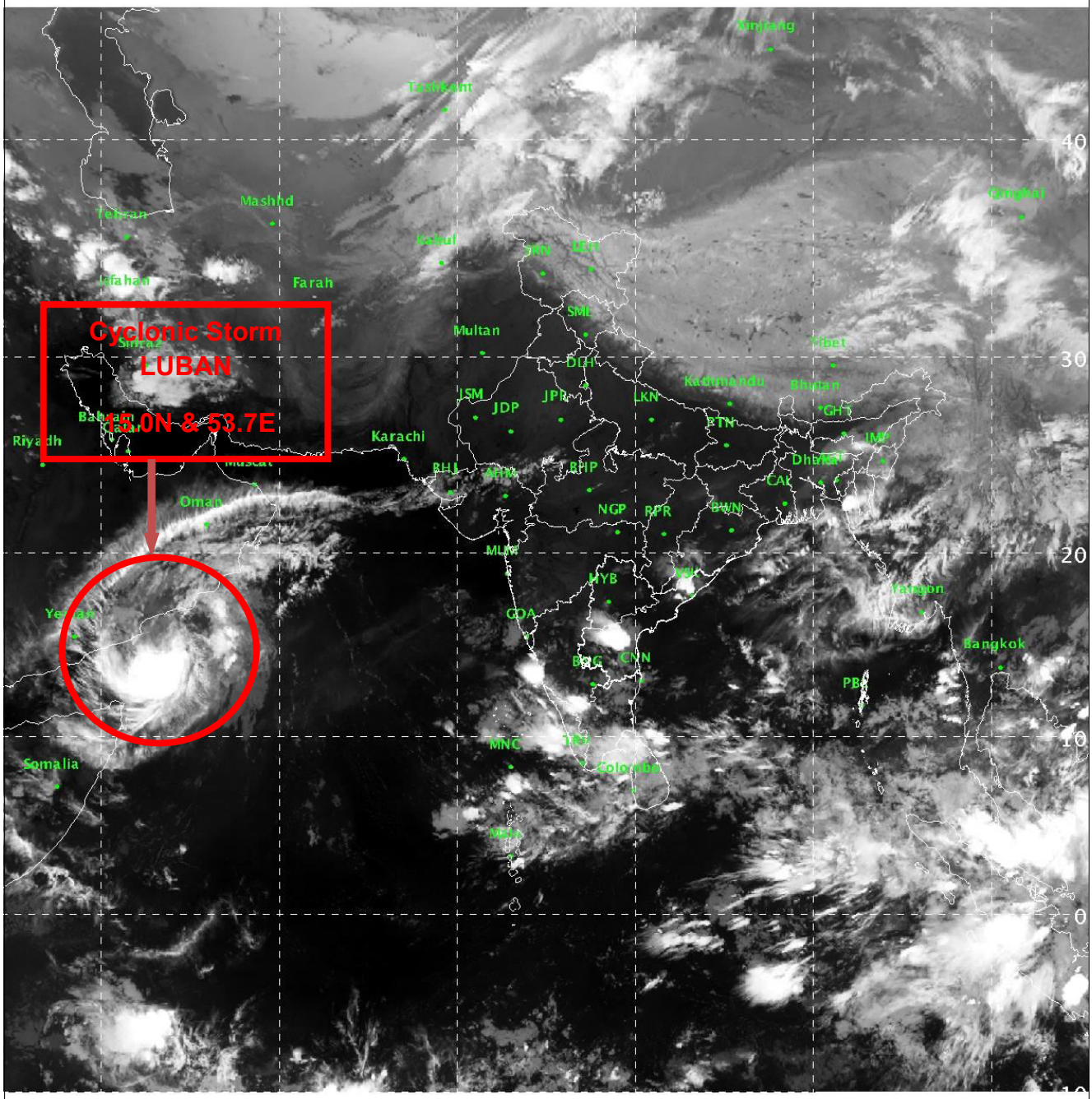
(D. R. Pattanaik)
Scientist-E, RSMC, New Delhi

Copy to: CRS, Pune/ RSMC Guwahati/ ACWC Chennai/ Kolkata/ Mumbai/MC Goa/ Thiruvanathapuram/ Bengaluru/ CWC Ahmedabad.

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.

SAT :INSAT-3D IMG
IMG_TIR1 10.8 um
L1C Mercator (LINEAR STRETCH: 1.0%)

13-10-2018/16:30 GMT
13-10-2018/22:00 IST

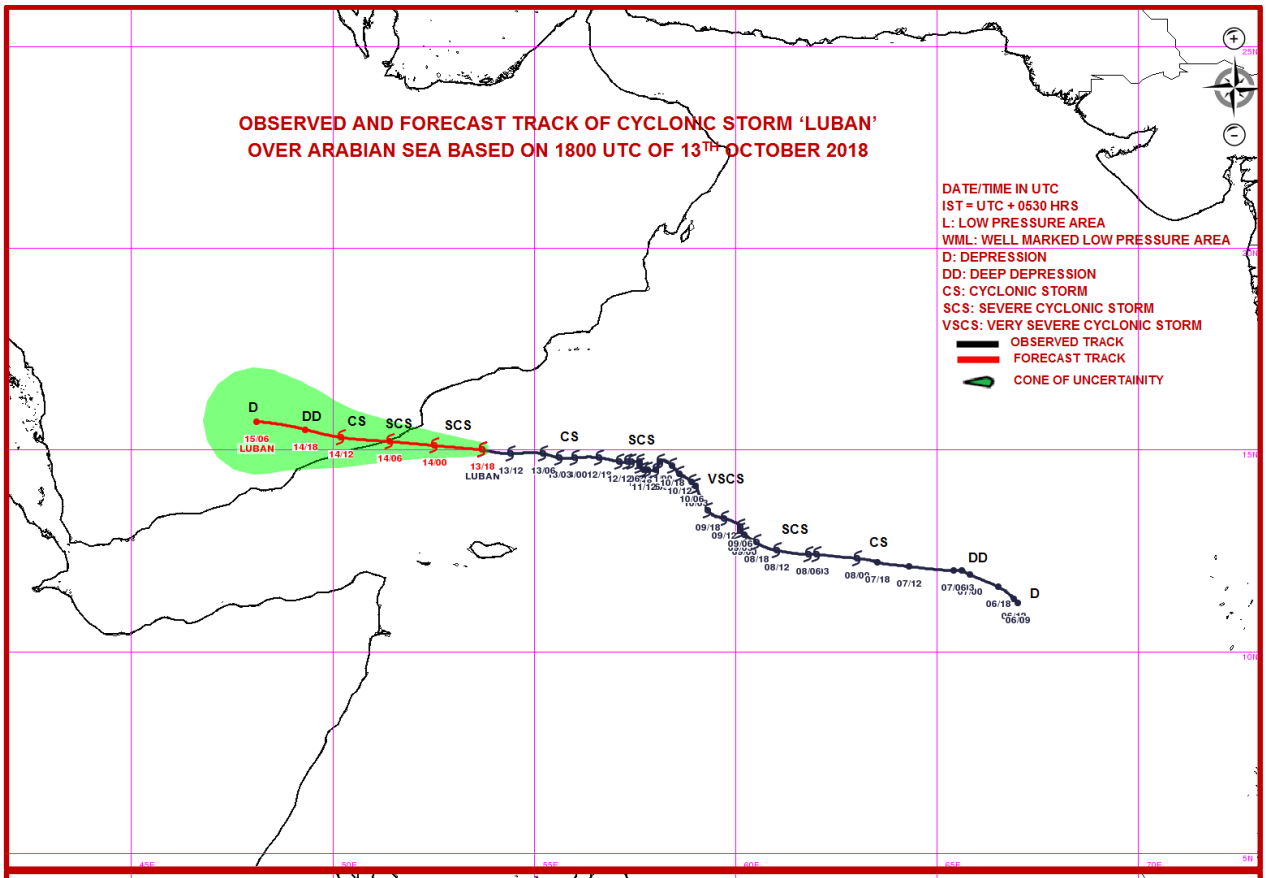


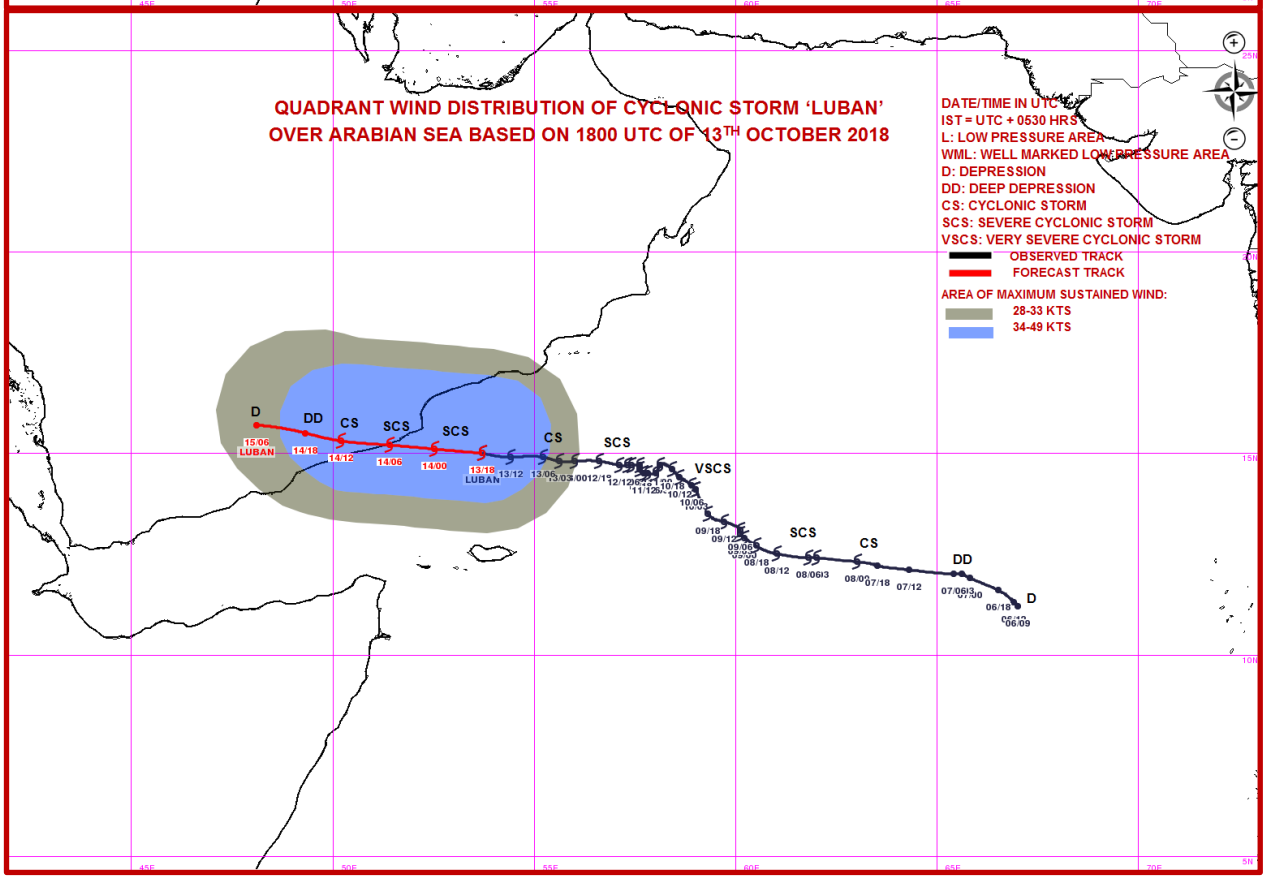
534 886

IMD/Delhi

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.





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.

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

BULLETIN NO. : 57 (ARB 04/2018)

TIME OF ISSUE: 0530 HOURS IST **DATED: 14.10.20180**

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)
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 (23421101)
DIRECTOR GENERAL, AIR (23421105, 23421219)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 24363261)
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. 04896-262184)
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: Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea

The Cyclonic Storm **'LUBAN'** over westcentral Arabian Sea moved west-northwestwards during past 06 hours with a speed of 13 kmph and lay centered at 0230 hrs IST of 14th October 2018 over westcentral Arabian Sea, near latitude 15.1°N and longitude 53.3°E, about 230 km south-southwest of Salalah (Oman), 280 km north-northwest of Socotra Islands (Yemen), 160 km east-southeast of Al-Ghaidah (Yemen) and 430 km east-northeast of Riyan (Mukalla). It is very likely to move west-northwestwards and cross Yemen Coast between Riyan (Mukalla) and Al-Ghaidah (Yemen), close to 15°N by noon/afternoon of 14th October 2018 as a Severe Cyclonic Storm.

Forecast track & intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
14.10.18/0230	15.1/53.3	85-95 gusting to 110	Cyclonic Storm
14.10.18/0530	15.1/52.5	90-100 gusting to 115	Severe Cyclonic Storm
14.10.18/1130	15.2/51.4	90-100 gusting to 115	Severe Cyclonic Storm
14.10.18/1730	15.3/50.2	70-80 gusting to 90	Cyclonic Storm
14.10.18/2330	15.5/49.3	50-60 gusting to 70	Deep Depression
15.10.18/1130	15.7/48.1	35-45 gusting to 55	Depression

(i) Wind warning

- Gale wind speed reaching 80-90 kmph gusting to 100 prevails over westcentral Arabian Sea around system centre.

- Gale wind speed reaching 90-100 kmph gusting to 115 is very likely along & off Yemen & adjoining south Oman coasts at the time of landfall.

(ii) Sea condition

The sea condition will be high to very high over westcentral Arabian Sea along & off south Oman and Yemen coast and also over Gulf of Aden till 14th October evening and improve rapidly thereafter.

(iii) Fishermen Warning

The fishermen are advised not to venture into westcentral Arabian Sea along & off south Oman and Yemen coasts and also into Gulf of Aden till 14th October.

The next bulletin will be issued at 0830 hrs IST 14th October, 2018.

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

Copy to: CRS, Pune/ RSMC Guwahati/ ACWC Chennai/ Kolkata/ Mumbai/MC Goa/ Thiruvanathapuram/ Bengaluru/ CWC Ahmedabad.

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.

SAT :INSAT-3D IMG
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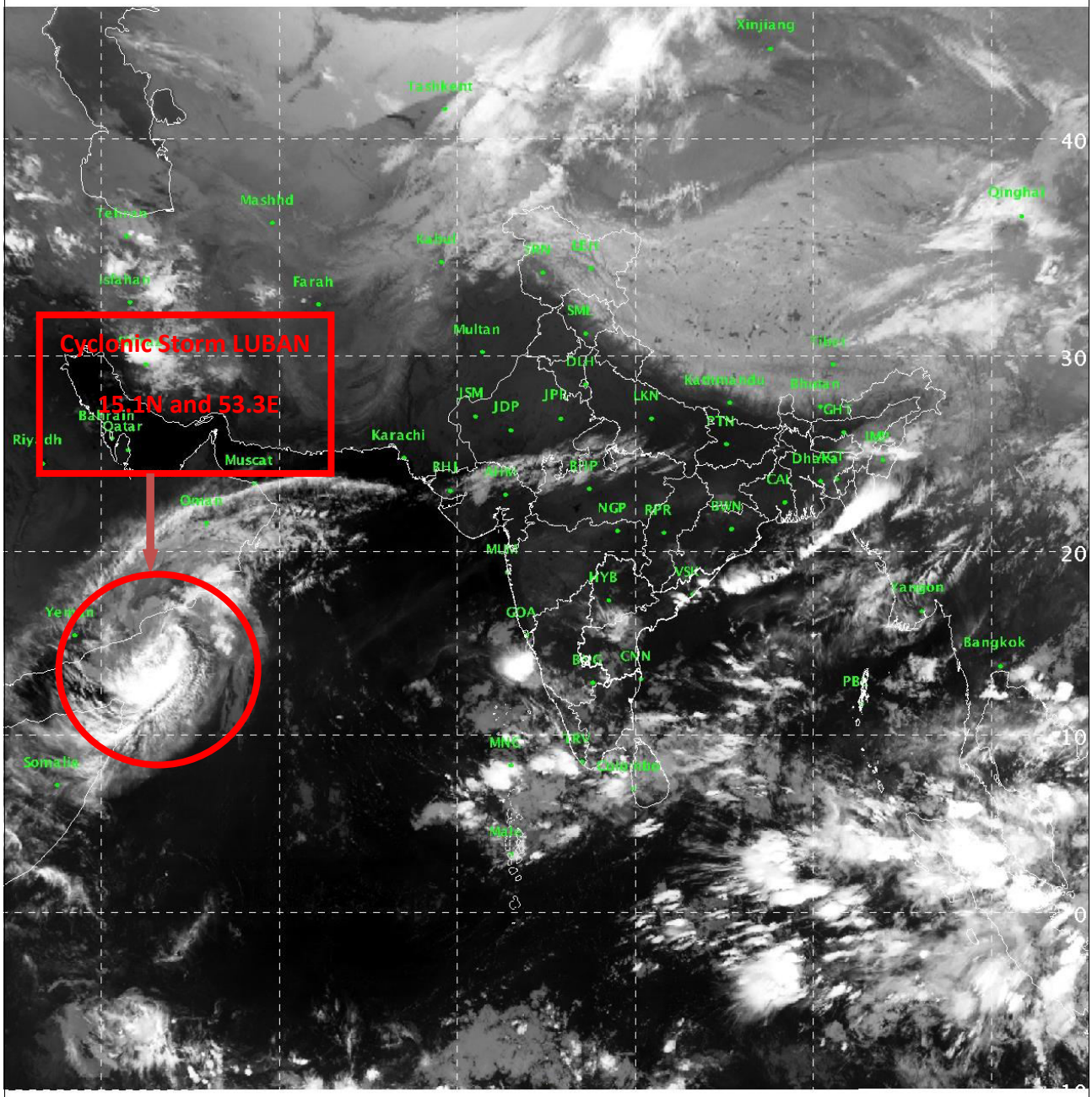
L1C Mercator (LINEAR STRETCH: 1.0%)

13-10-2018/20:30 GMT
14-10-2018/02:00 IST

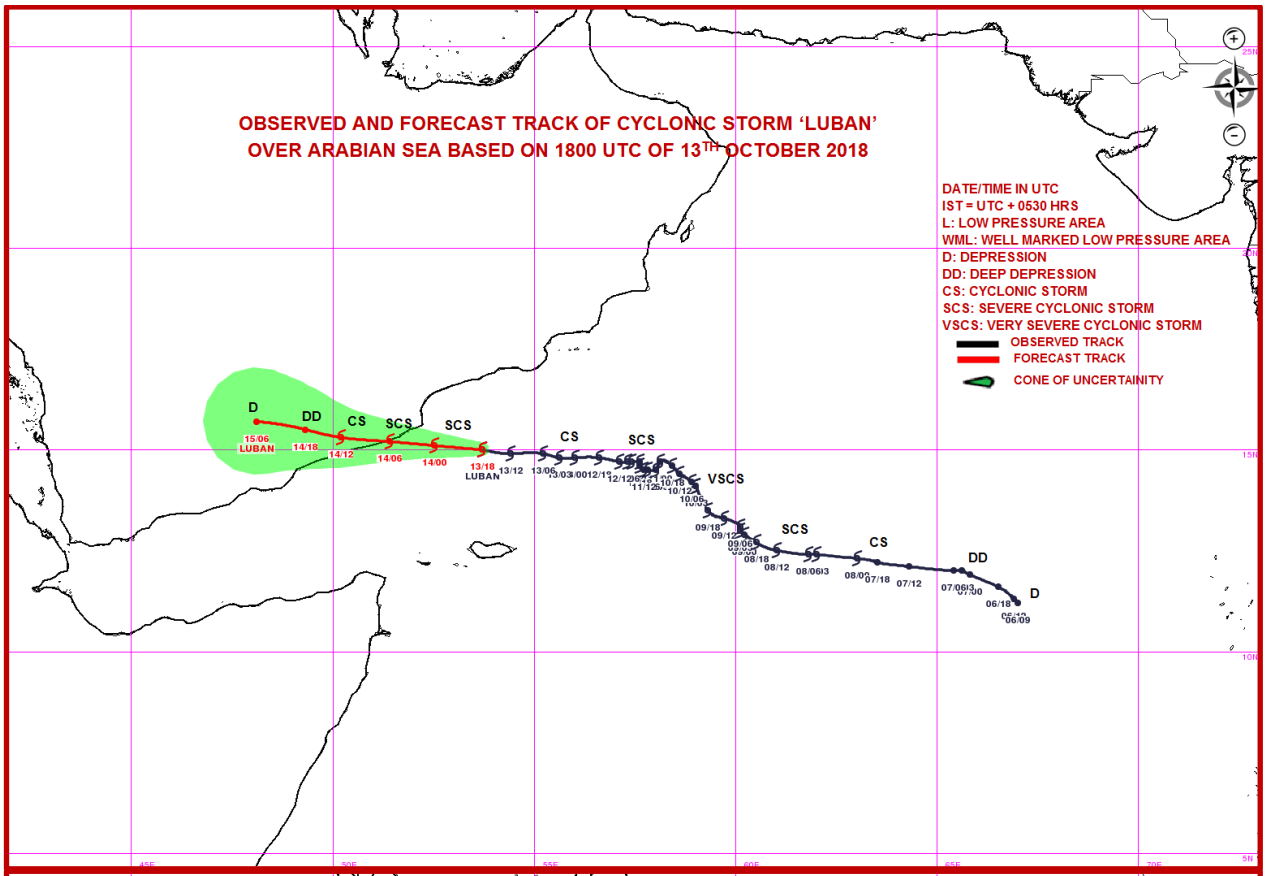


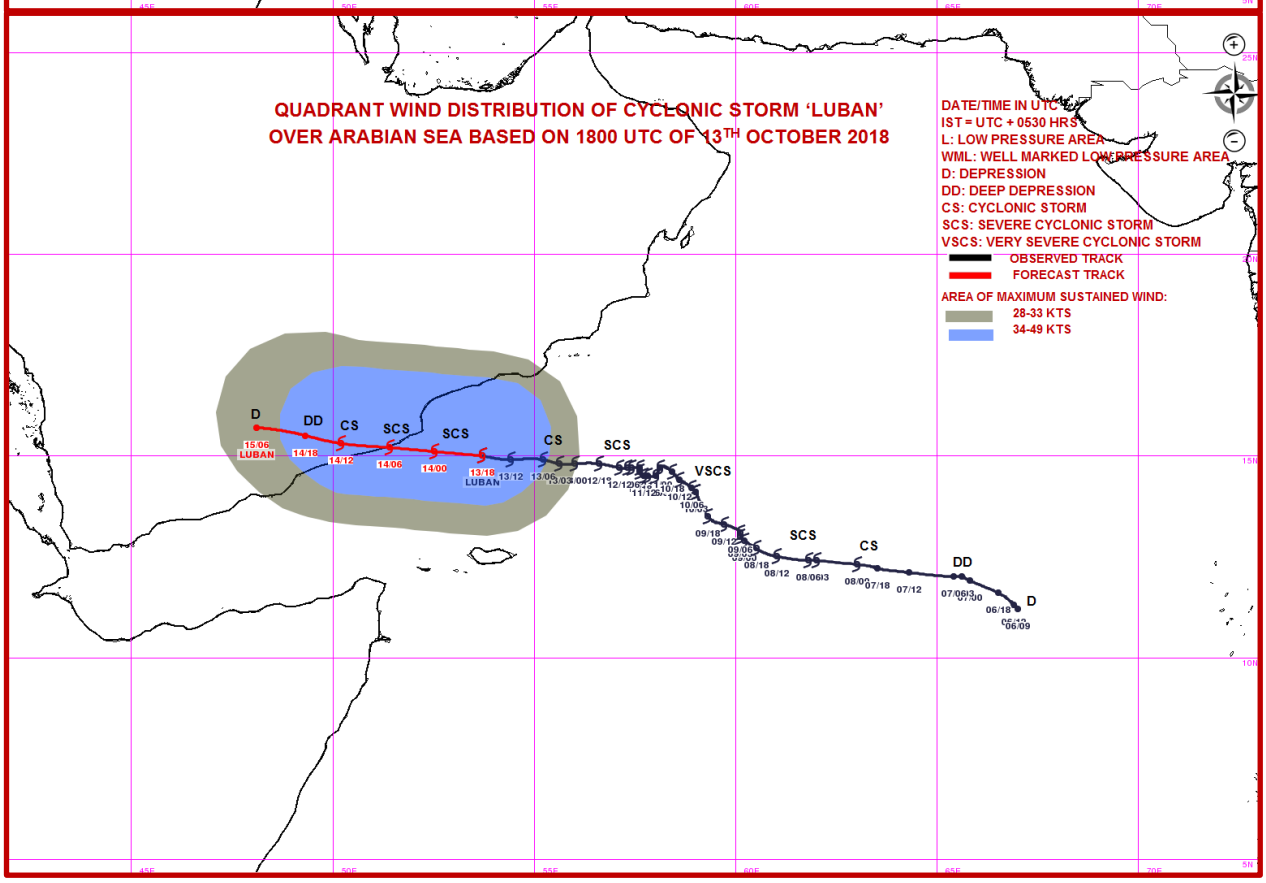
553 893

IMD/Delhi

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.





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.

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.

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

BULLETIN NO. : 58 (ARB 04/2018)

TIME OF ISSUE: 0830 HOURS IST **DATED: 14.10.2018**

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)
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 (23421101)
DIRECTOR GENERAL, AIR (23421105, 23421219)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 24363261)
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. 04896-262184)
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: Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea

The Cyclonic Storm **'LUBAN'** over westcentral Arabian Sea moved west-northwestwards during past 06 hours with a speed of 17 kmph and lay centered at 0530 hrs IST of today, the 14th October 2018 over westcentral Arabian Sea, near latitude 15.3°N and longitude 52.8°E, about 110 km southeast of Al-Ghaidah (Yemen) and 230 km south-southwest of Salalah (Oman). It is very likely to move west-northwestwards and cross Yemen Coast near 15.6°N (south of Al-Ghaidah), around noon of 14th October 2018.

Forecast track & intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
14.10.18/0530	15.3/52.8	70-80 gusting to 90	Cyclonic Storm
14.10.18/1130	15.6/52.0	65-75 gusting to 85	Cyclonic Storm
14.10.18/1730	15.9/51.3	50-60 gusting to 70	Deep Depression
14.10.18/2330	16.2/50.7	35-45 gusting to 55	Depression
15.10.18/0530	16.5/50.1	20-30 gusting to 40	Low

(i) Wind warning

Gale wind speed reaching 70-80 kmph gusting to 90 kmph is very likely along & off Yemen & adjoining south Oman coasts and adjoining areas of Gulf of Aden and west-central Arabian Sea during next 06 hours and gradually decrease thereafter.

(ii) Sea condition

The sea condition will be high over westcentral Arabian Sea along & off south Oman and Yemen coasts and also over adjoining areas of Gulf of Aden during next 06 hours. It will improve rapidly thereafter.

(iii) Fishermen Warning

The fishermen are advised not to venture into westcentral Arabian Sea along & off south Oman and Yemen coasts and also into Gulf of Aden till 14th October evening.

The next bulletin will be issued at 1130 hrs IST 14th October, 2018.

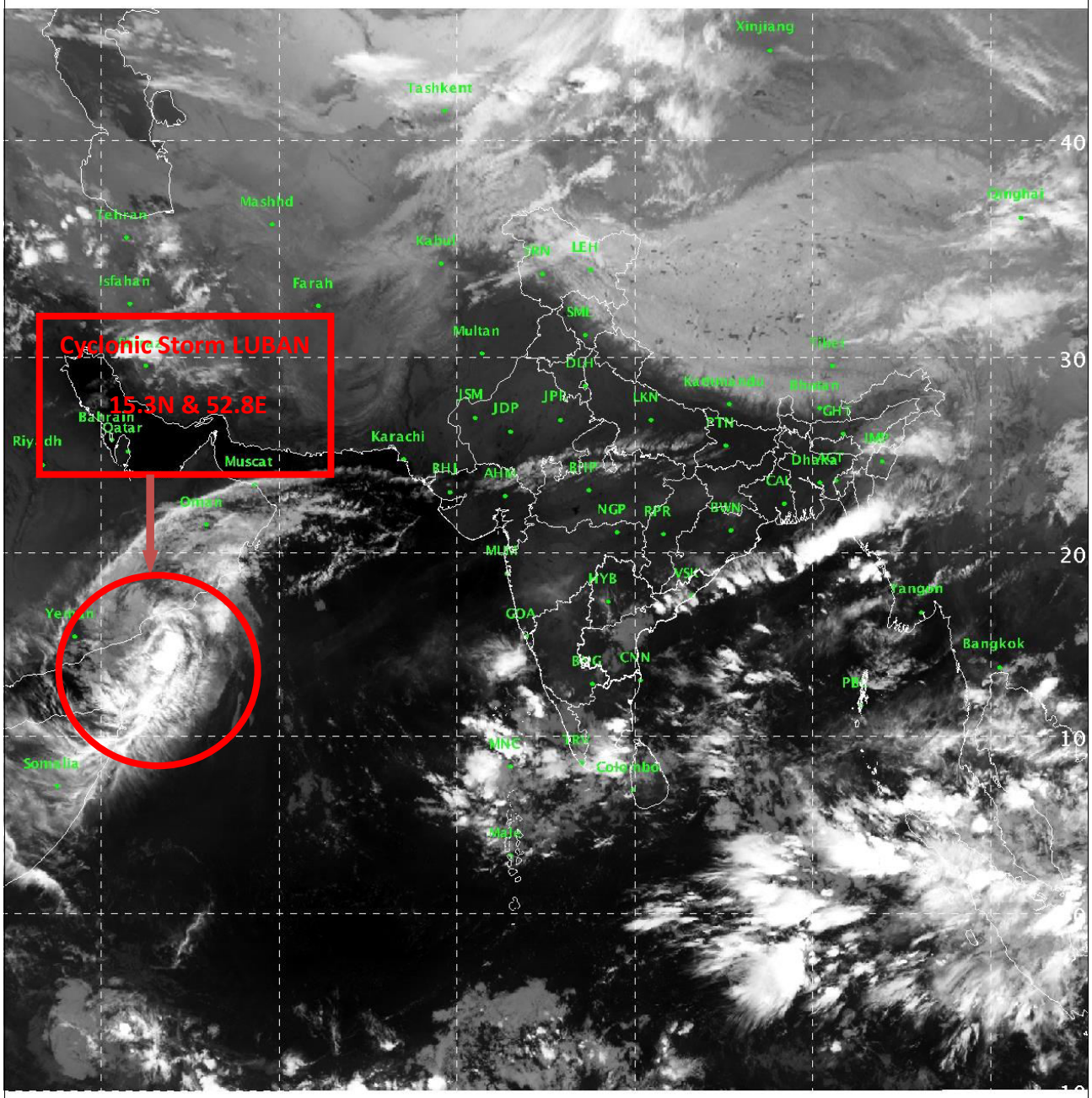
(D. R. Pattanaik)
Scientist-E, RSMC, New Delhi

Copy to: CRS, Pune/ RSMC Guwahati/ ACWC Chennai/ Kolkata/ Mumbai/MC Goa/ Thiruvanathapuram/ Bengaluru/ CWC Ahmedabad.

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.

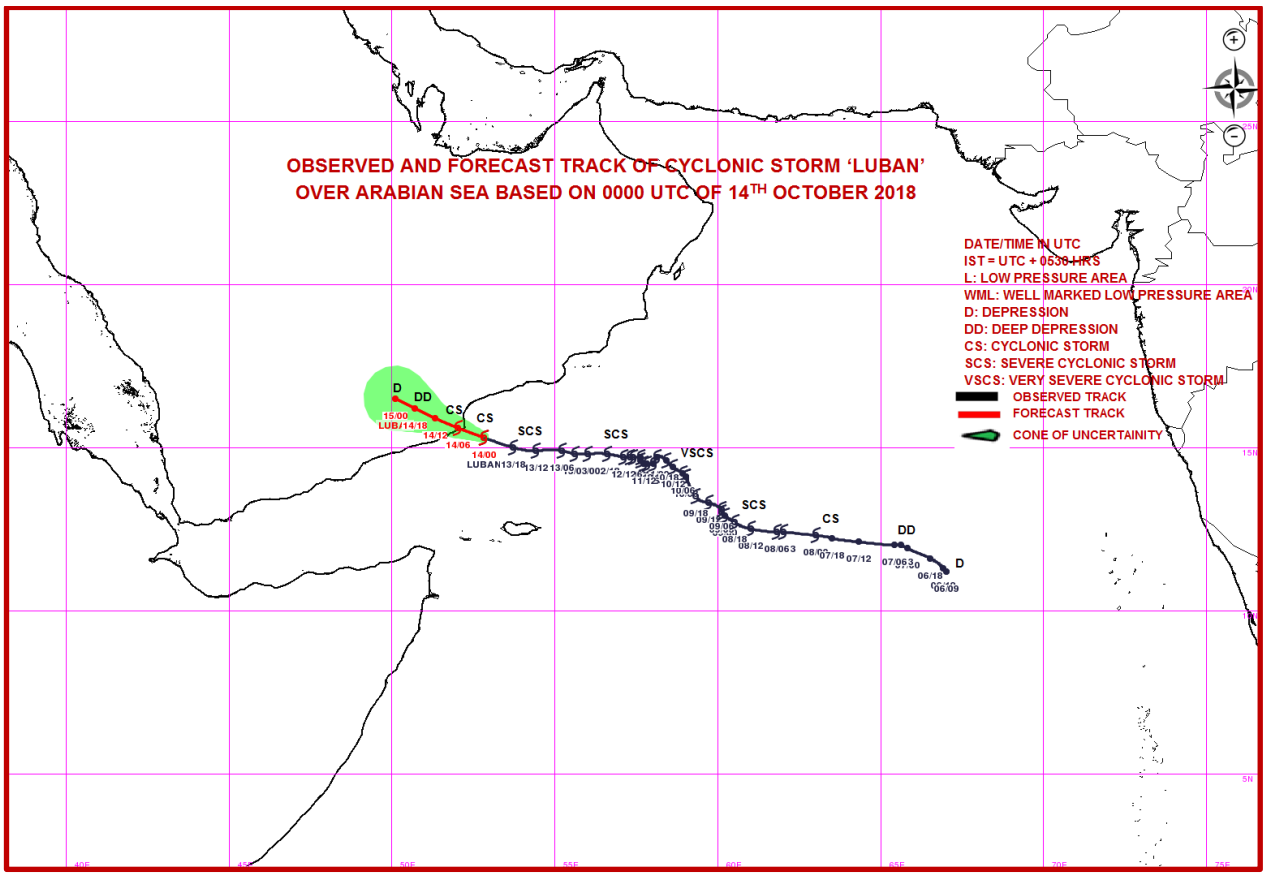
SAT :INSAT-3D IMG
IMG_TIR1 10.8 um
L1C Mercator (LINEAR STRETCH: 1.0%)

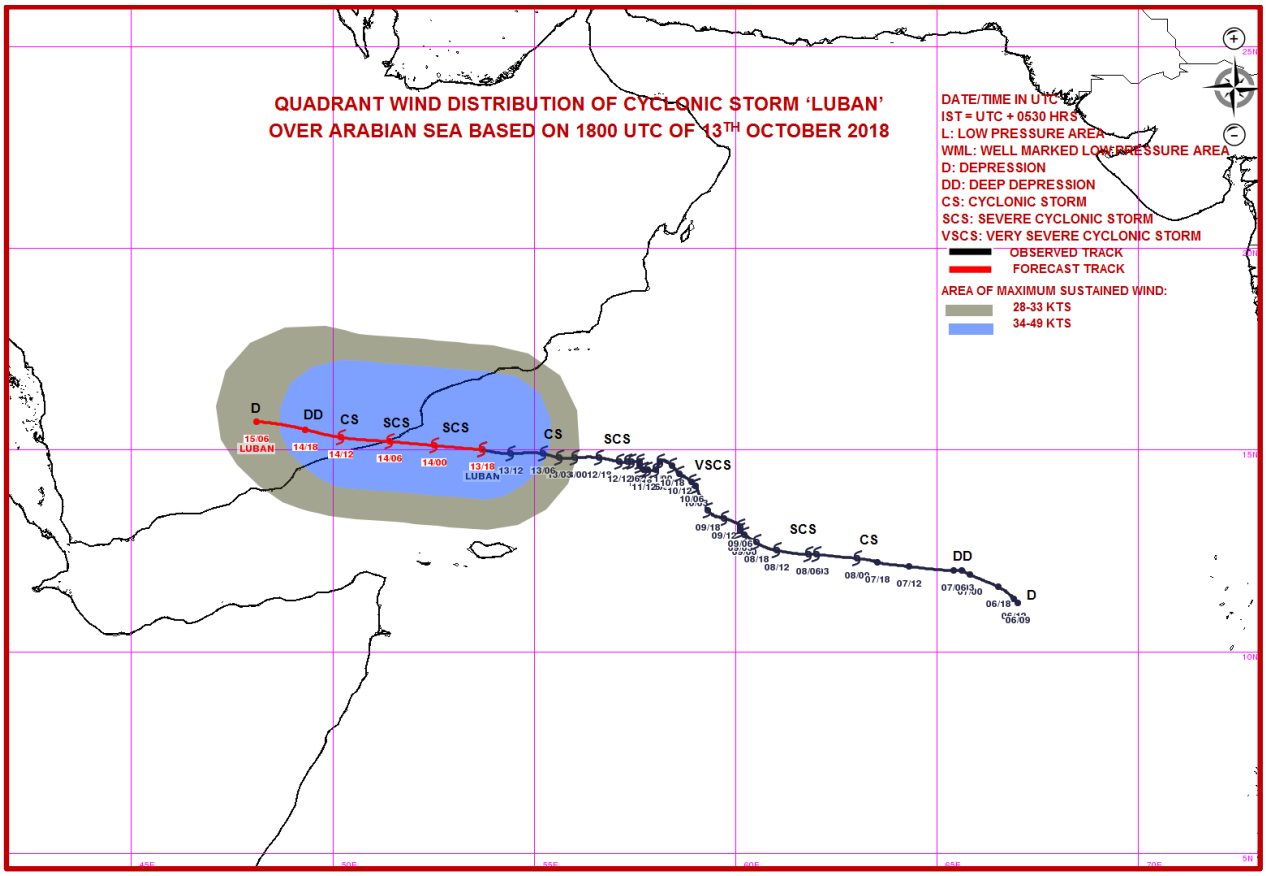
14-10-2018/00:00 GMT
14-10-2018/05:30 IST



539 886 IMD/Delhi

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.





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.

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

BULLETIN NO. : 59 (ARB 04/2018)

TIME OF ISSUE: 1045 HOURS IST **DATED: 14.10.2018**

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)
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 (23421101)
DIRECTOR GENERAL, AIR (23421105, 23421219)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 24363261)
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. 04896-262184)
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: Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea

The Cyclonic Storm **'LUBAN'** over westcentral Arabian Sea moved further west-northwestwards during past 06 hours with a speed of 17 kmph and lay centered at 0830 hrs IST of today, the 14th October 2018 over westcentral Arabian Sea, near latitude 15.6°N and longitude 52.5°E, about 70 km southeast of Al-Ghaidah (Yemen) and 230 km south-southwest of Salalah (Oman). It is very likely to move west-northwestwards and cross Yemen Coast near Al-Ghaidah, around noon of 14th October 2018.

Forecast track & intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
14.10.18/0830	15.6/52.5	70-80 gusting to 90	Cyclonic Storm
14.10.18/1130	15.9/52.2	65-75 gusting to 85	Cyclonic Storm
14.10.18/1730	16.4/51.5	50-60 gusting to 70	Deep Depression
14.10.18/2330	16.9/50.7	35-45 gusting to 55	Depression

(i) Wind warning

Gale wind speed reaching 70-80 kmph gusting to 90 kmph is very likely along & off Yemen & adjoining south Oman coasts and adjoining areas of Gulf of Aden and west-central Arabian Sea during next 06 hours and gradually decrease thereafter.

(ii) Sea condition

The sea condition will be high over westcentral Arabian Sea along & off south Oman and Yemen coasts and also over adjoining areas of Gulf of Aden during next 06 hours. It will improve rapidly thereafter.

(iii) Fishermen Warning

The fishermen are advised not to venture into westcentral Arabian Sea along & off south Oman and Yemen coasts and also into Gulf of Aden till 14th October evening.

The next bulletin will be issued at 1430 hrs IST 14th October, 2018.

(Naresh KUmar)
Scientist-E, RSMC, New Delhi

Copy to: CRS, Pune/ RSMC Guwahati/ ACWC Chennai/ Kolkata/ Mumbai/MC Goa/ Thiruvanathapuram/ Bengaluru/ CWC Ahmedabad.

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.

SAT :INSAT-3D IMG
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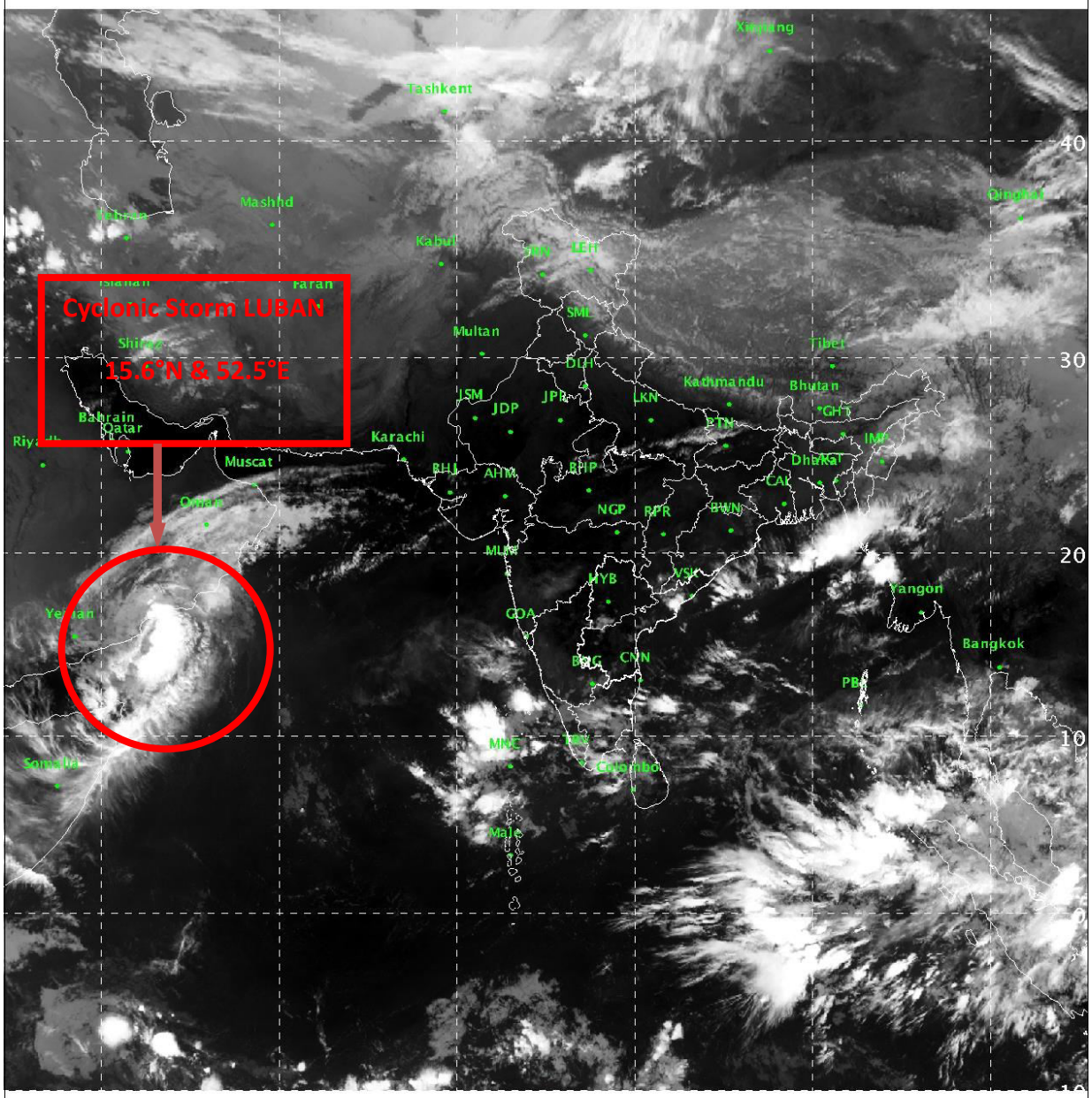
L1C Mercator (LINEAR STRETCH: 1.0%)

14-10-2018/03:00 GMT
14-10-2018/08:30 IST

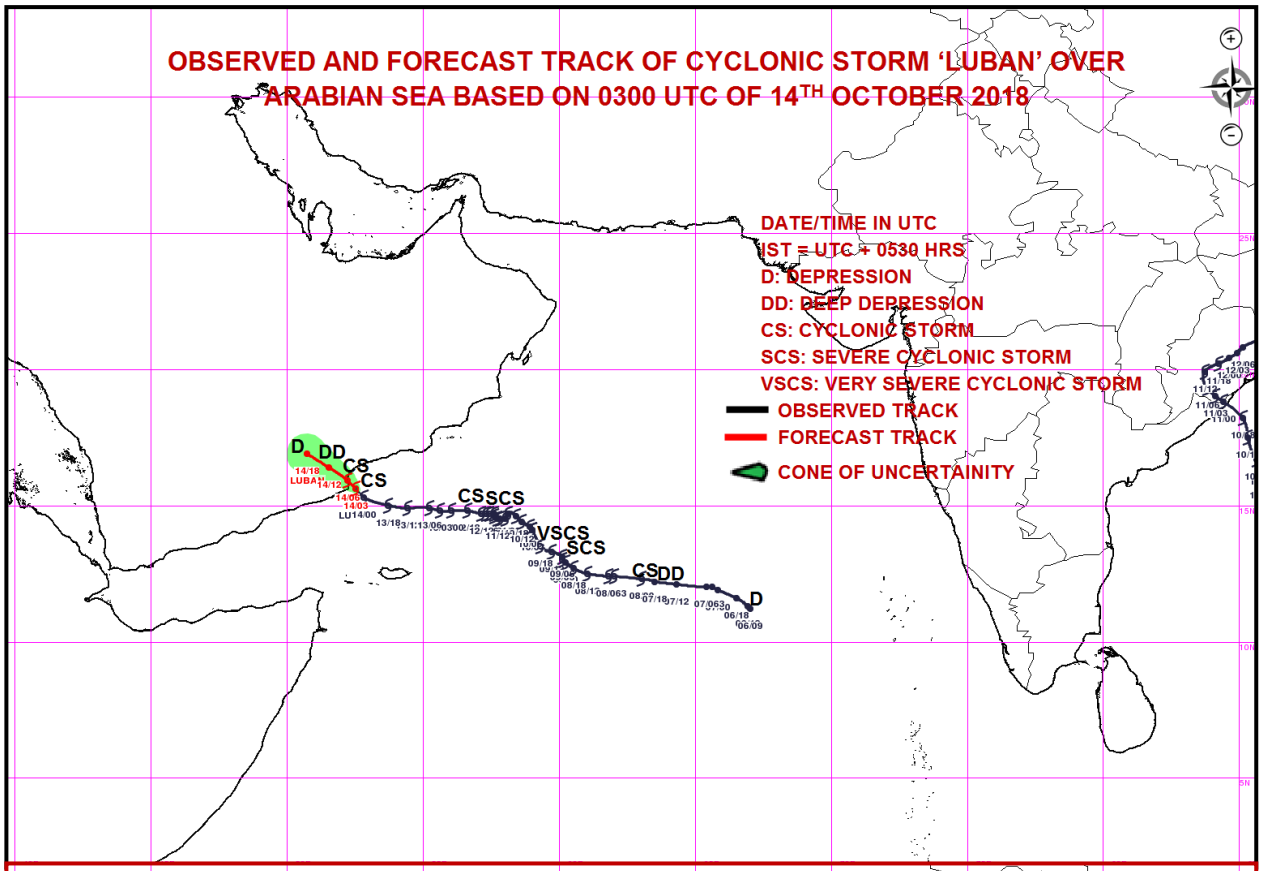


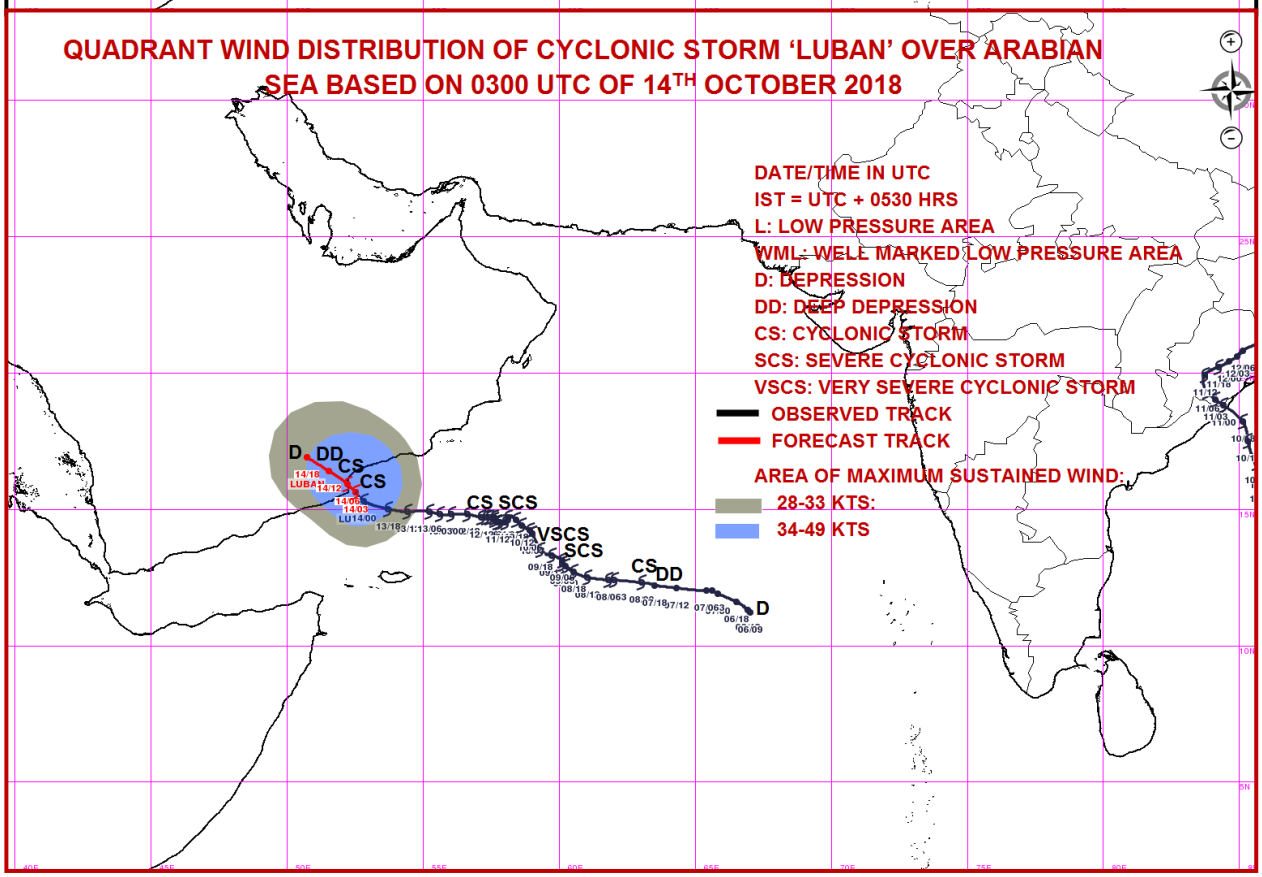
520 878

IMD/Delhi

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.





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.

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

BULLETIN NO. : 60 (ARB 04/2018)

TIME OF ISSUE: 1330 HOURS IST **DATED: 14.10.2018**

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)
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 (23421101)
DIRECTOR GENERAL, AIR (23421105, 23421219)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 24363261)
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. 04896-262184)
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: Cyclonic Storm, 'LUBAN' over westcentral Arabian Sea crossed Yemen coast

The Cyclonic Storm **'LUBAN'** over westcentral Arabian Sea moved further west-northwestwards during past 06 hours with a speed of 17 kmph and crossed Yemen coast near latitude 15.8°N and longitude 52.2°E about 30 km south of Al-Ghaidah during 1100 - 1130 hrs IST of today with an estimated sustained maximum wind speed of 70-80 kmph gusting to 90 kmph. It lay centered at 1130 hrs IST of today, the 14th October 2018 over coastal Yemen near latitude 15.9°N and longitude 52.1°E, about 20 km south of Al-Ghaidah (Yemen). It is very likely to move northwestwards and weaken into a deep depression during next 6 hours.

Forecast track & intensity are given in the following table:

Date/Time(IST)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
14.10.18/1130	15.9/52.1	65-75 gusting to 85	Cyclonic Storm
14.10.18/1730	16.4/51.5	50-60 gusting to 70	Deep Depression
14.10.18/2330	16.9/50.8	35-45 gusting to 55	Depression

(i) Wind warning

Gale wind speed reaching 60-70 kmph gusting to 80 kmph is very likely over coastal areas of east Yemen & adjoining areas of Oman, Gulf of Aden and westcentral Arabian Sea during next 03 hours. it is very likely to decrease gradually thereafter becoming squally wind speed of 35 to 45 kmph gusting to 55 kmph by today midnight.

(ii) Sea condition

The sea condition will be high over westcentral Arabian Sea along & off south Oman and Yemen coasts and also over adjoining areas of Gulf of Aden during next 03 hours. It will improve rapidly thereafter becoming moderate to rough by today midnight.

(iii) Fishermen Warning

The fishermen are advised not to venture into westcentral Arabian Sea along & off south Oman and Yemen coasts and also into Gulf of Aden till today, the 14th October night.

The next bulletin will be issued at 1730 hrs IST 14th October, 2018.

(Naresh Kumar)
Scientist-E, RSMC, New Delhi

Copy to: CRS, Pune/ RSMC Guwahati/ ACWC Chennai/ Kolkata/ Mumbai/MC Goa/ Thiruvanathapuram/ Bengaluru/ CWC Ahmedabad.

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.

SAT :INSAT-3D IMG
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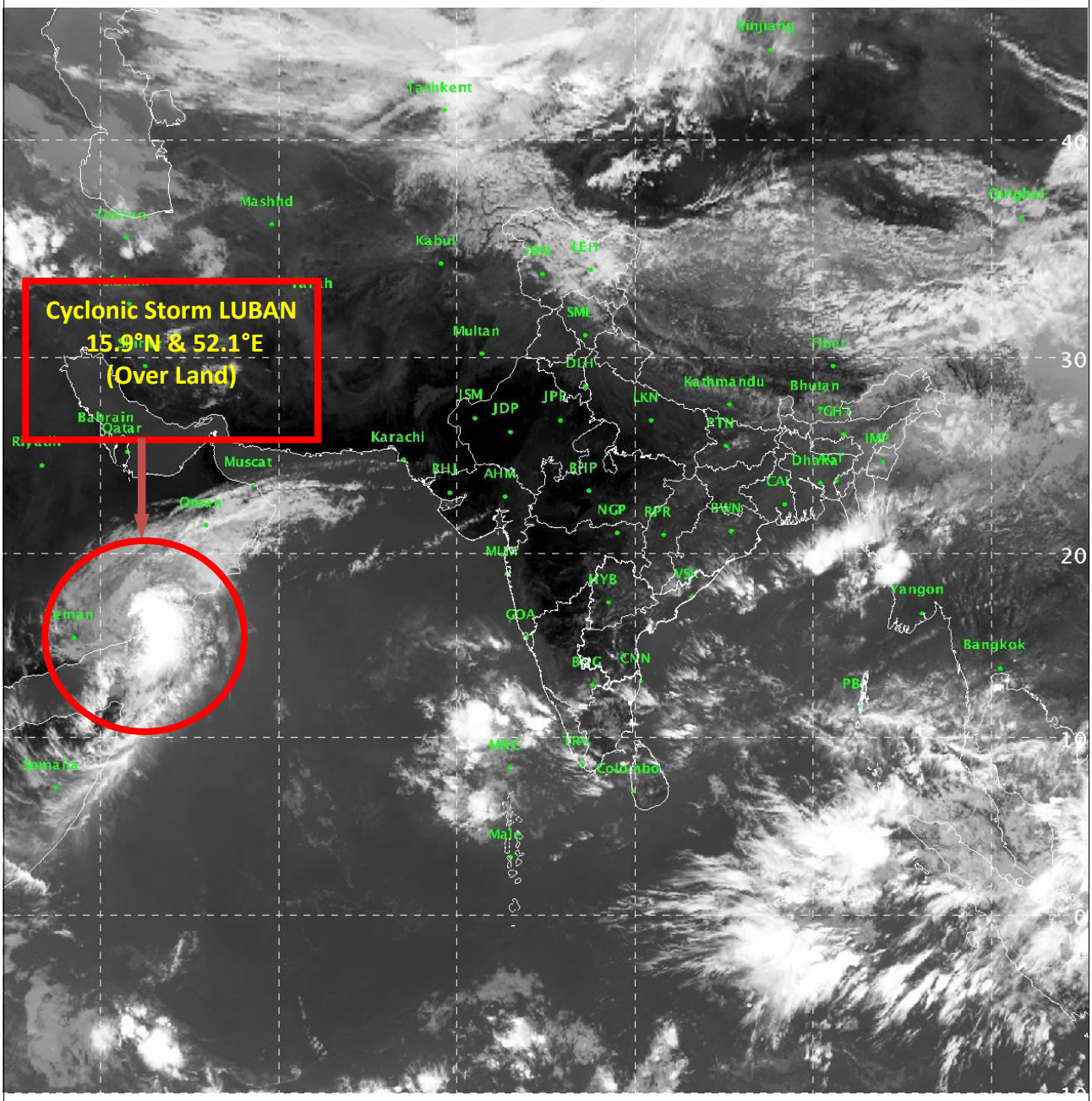
L1C Mercator (LINEAR STRETCH: 1.0%)

14-10-2018/06:00 GMT
14-10-2018/11:30 IST

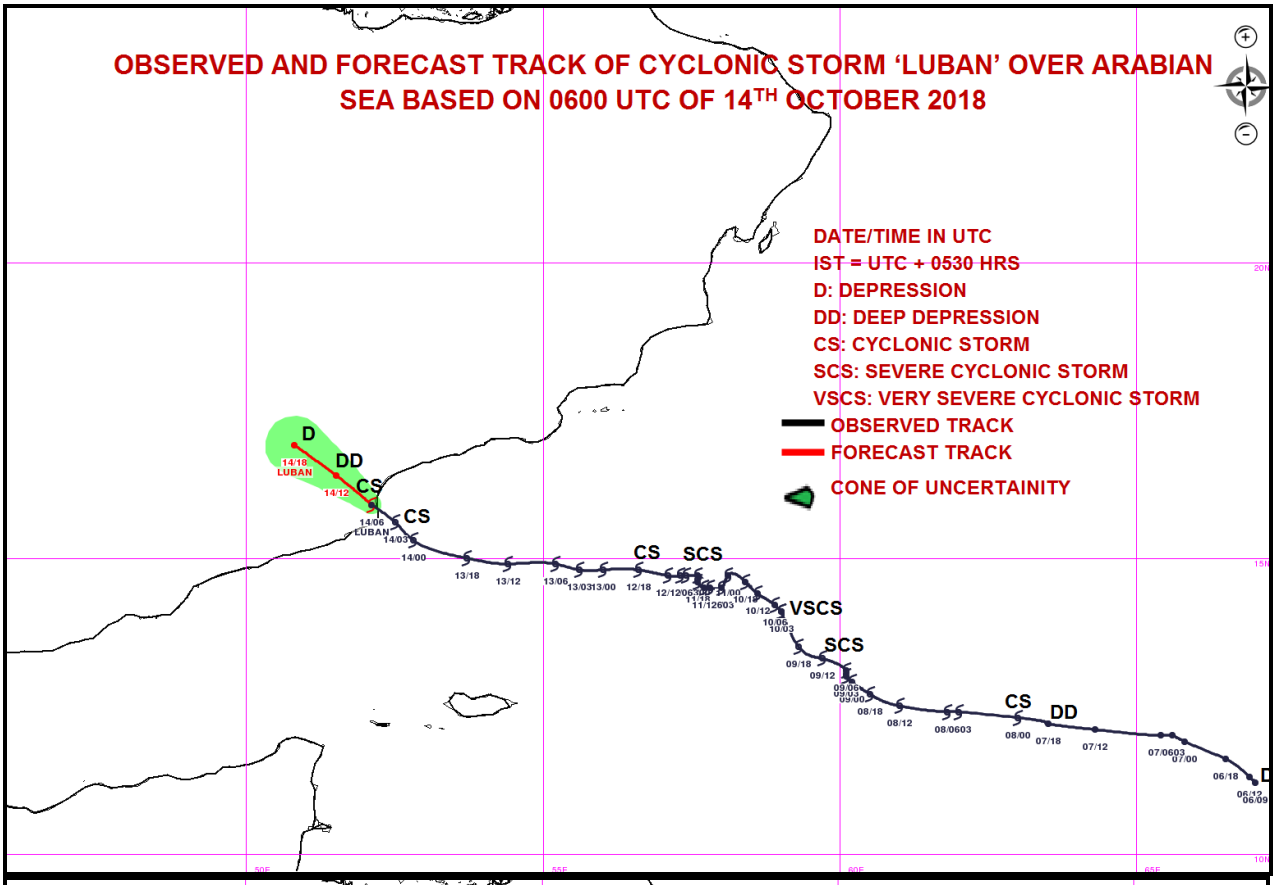


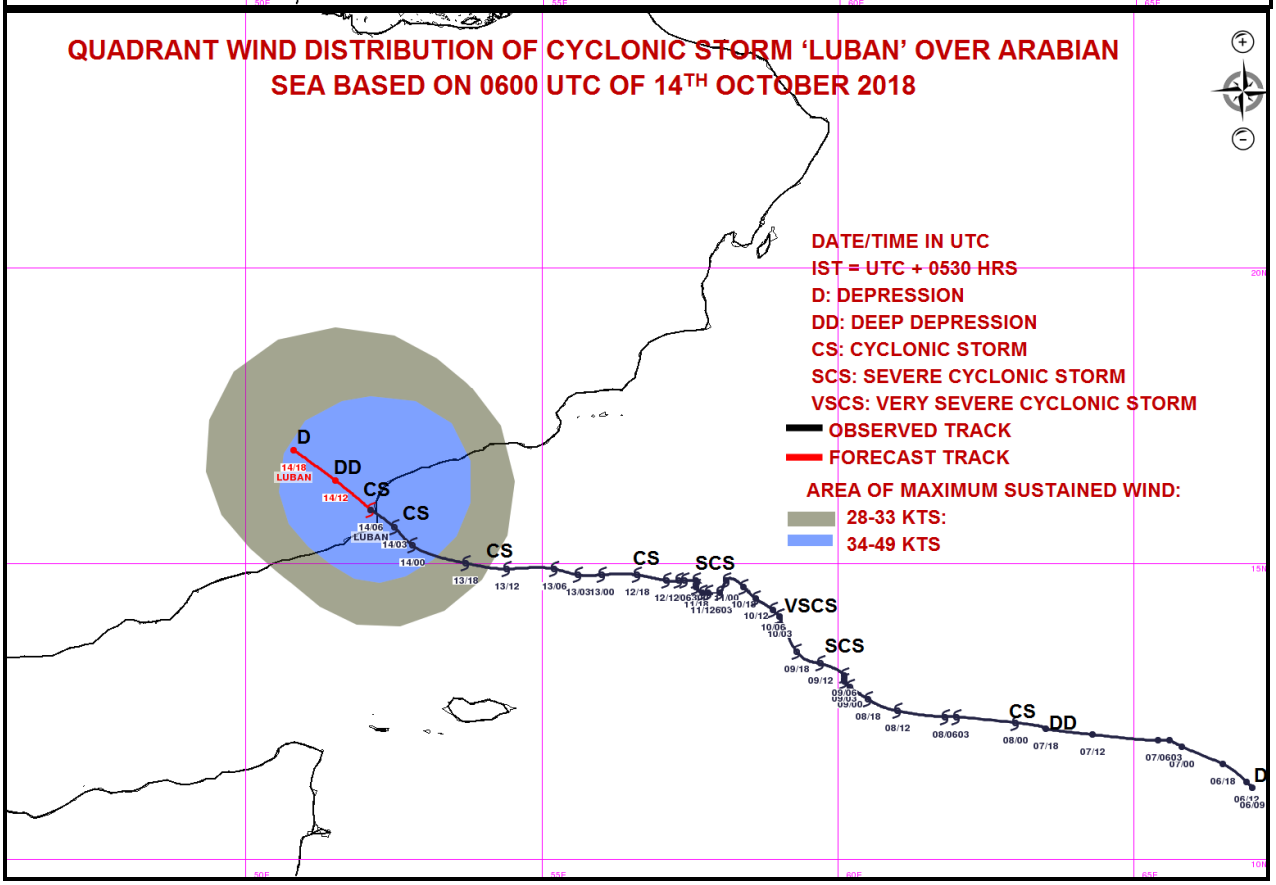
416 873

IMD/Delhi

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.





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.

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

BULLETIN NO. : 61 (ARB 04/2018)

TIME OF ISSUE: 1630 HOURS IST **DATED: 14.10.2018**

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)
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 (23421101)
DIRECTOR GENERAL, AIR (23421105, 23421219)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 24363261)
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. 04896-262184)
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: Cyclonic Storm, 'LUBAN' weakened into a deep depression over Yemen

The Cyclonic Storm **'LUBAN'** over coastal Yemen moved further west-northwestwards during past 06 hours with a speed of 15 kmph, weakened into a deep depression and lay centered at 1430 hrs IST of today, the 14th October 2018 over Yemen near latitude 15.9°N and longitude 51.7°E, about 40 km west-southwest of Al-Ghaidah (Yemen). It is very likely to move west-northwestwards and weaken further into a depression during next 6 hours.

(i) Wind warning

Squally wind speed reaching 40-50 kmph gusting to 60 kmph is very likely over coastal areas of east Yemen & adjoining areas of Oman, Gulf of Aden and westcentral Arabian Sea during next 06 hours and it is very likely to decrease thereafter.

(ii) Sea condition

The sea condition will be rough to very rough over westcentral Arabian Sea along & off south Oman and Yemen coasts and also over adjoining areas of Gulf of Aden during next 06 hours. It will improve rapidly thereafter.

(iii) Fishermen Warning

The fishermen are advised not to venture into westcentral Arabian Sea along & off south Oman and Yemen coasts and also into Gulf of Aden during next 06 hours.

The next bulletin will be issued at 2030 hrs IST 14th October, 2018.

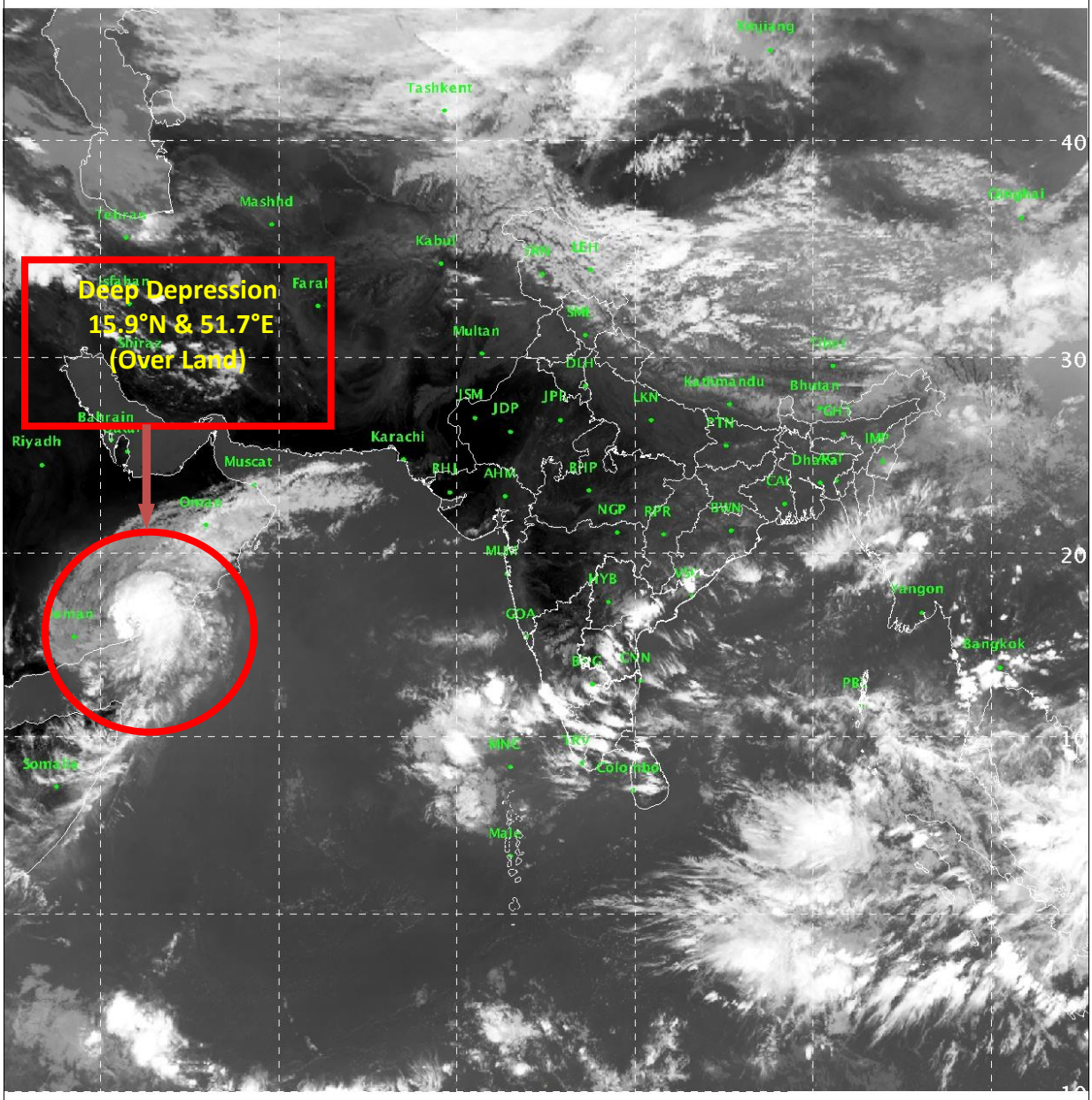
(Naresh Kumar)
Scientist-E, RSMC, New Delhi

Copy to: CRS, Pune/ RSMC Guwahati/ ACWC Chennai/ Kolkata/ Mumbai/MC Goa/ Thiruvanathapuram/ Bengaluru/ CWC Ahmedabad.

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.

SAT :INSAT-3D IMG
IMG_TIR1 10.8 um
L1C Mercator (LINEAR STRETCH: 1.0%)

14-10-2018/09:00 GMT
14-10-2018/14:30 IST

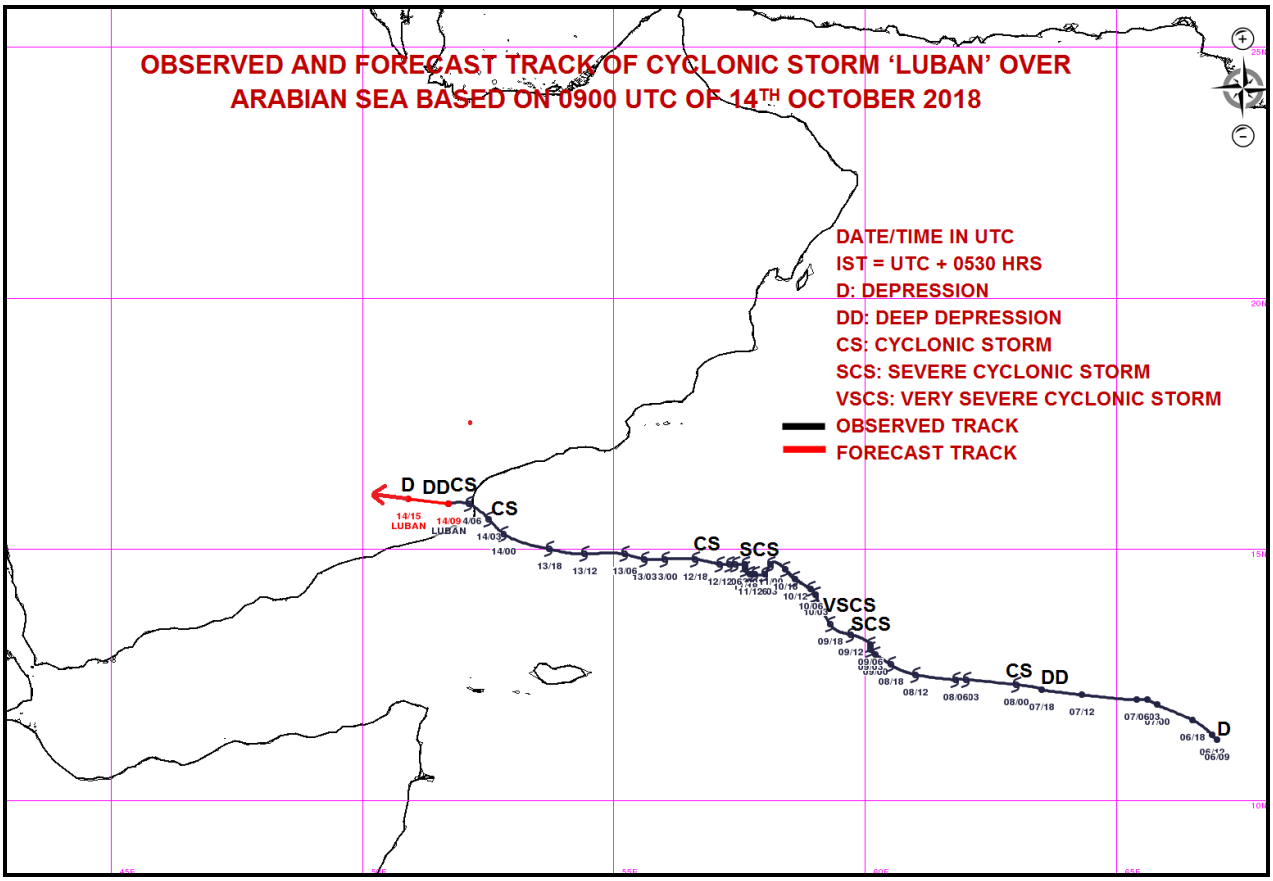


401 881

IMD/Delhi

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.



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.

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

BULLETIN NO. : 62 (ARB 04/2018)

TIME OF ISSUE: 1930 HOURS IST **DATED: 14.10.2018**

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)
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 (23421101)
DIRECTOR GENERAL, AIR (23421105, 23421219)
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CHIEF SECRETARY, GOA (FAX NO. 0832-2415201)
CHIEF SECRETARY, MAHARASHTRA (FAX NO. 022- 22028594)
CHIEF SECRETARY, GUJARAT (FAX NO. 079-23250305)

Sub: Deep depression over Yemen

The deep depression over Yemen moved westwards during past 06 hours with a speed of 16 kmph and lay centered at 1730 hrs IST of today, the 14th October 2018 over Yemen near latitude 15.9°N and longitude 51.2°E, about 90 km west-southwest of Al-Ghaidah (Yemen). It is very likely to move west-northwestwards and weaken further into a depression during next 6 hours.

No adverse weather is likely over Arabian Ocean due to this system.

This is the last bulletin for this system.

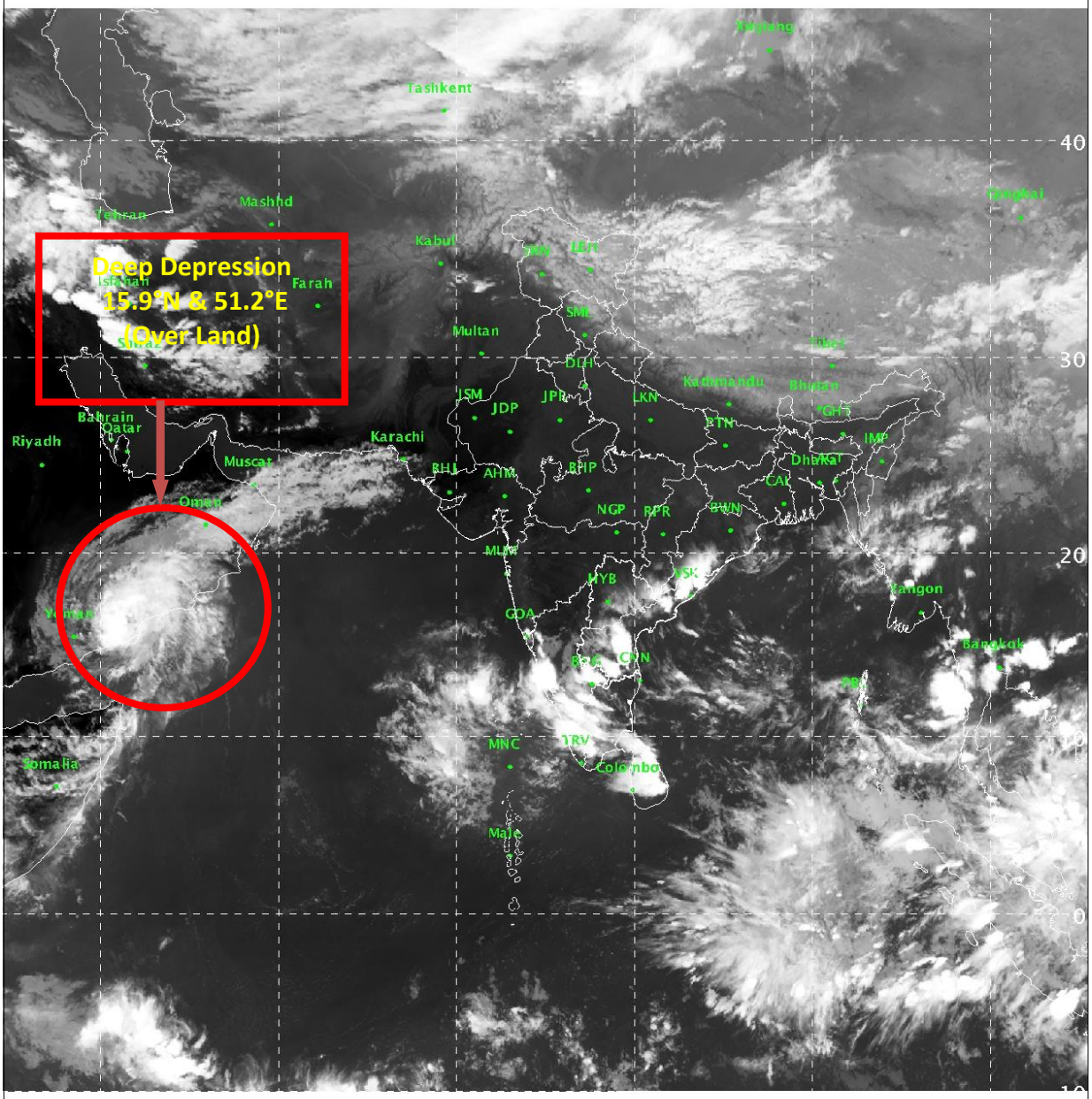
(Naresh Kumar)
Scientist-E, RSMC, New Delhi

Copy to: CRS, Pune/ RSMC Guwahati/ ACWC Chennai/ Kolkata/ Mumbai/MC Goa/ Thiruvanathapuram/ Bengaluru/ CWC Ahmedabad.

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.

SAT :INSAT-3D IMG
IMG_TIR1 10.8 um
L1C Mercator (LINEAR STRETCH: 1.0%)

14-10-2018/12:00 GMT
14-10-2018/17:30 IST



465 889 IMD/Delhi

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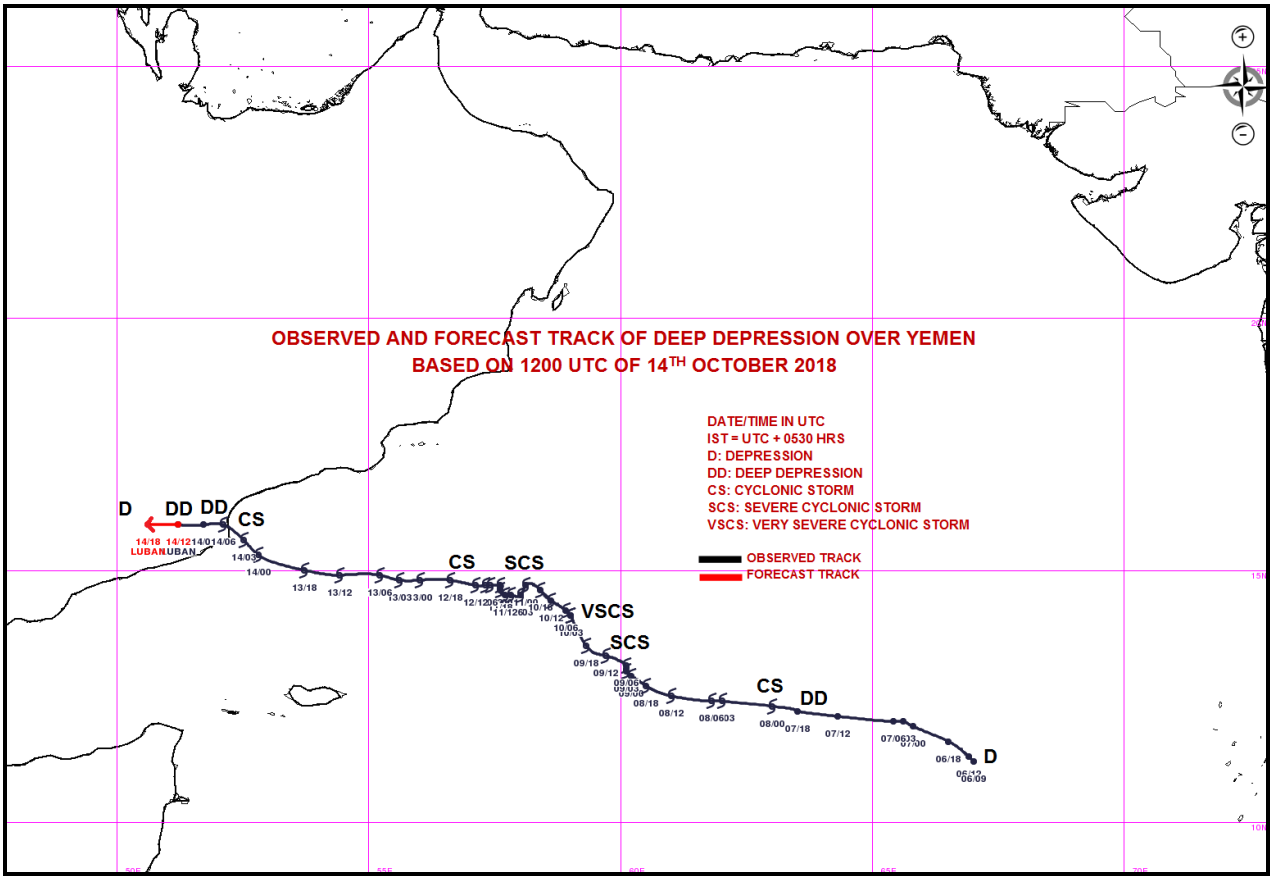

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