



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

BULLETIN NO.: 01 (BOB 05/2016)

TIME OF ISSUE: 2020 HOURS IST

DATED: 29.11.2016

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.23793144)
PS TO HON'BLE MINISTER FOR S & T AND EARTH SCIENCES (FAX NO.23316745)
SECRETARY, MOES, (FAX NO. 24629777)
SECRETARY, DST (FAX NO. 26863847/-2418)
H.Q. (INTEGRATED DEFENCE STAFF AND CDS) (FAX NO. 23005137/23005147)
DIRECTOR GENERAL, DOORDARSHAN (23385843)
DIRECTOR GENERAL, AIR (25843825)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 26105912)
DIRECTOR OF PUNCTUALITY, INDIAN RAILWAYS (FAX NO. 23388503)
CHIEF SECRETARY, GOVT. OF TAMILNADU (FAX NO.044-25672304)
CHIEF SECRETARY, GOVT. OF PUDUCHERRY (FAX NO.0413-2337575)
CHIEF SECRETARY, GOVT. OF ANDHRA PRADESH (FAX NO. 040-23453700)**

Sub: Depression over southeast Bay of Bengal.

Pre-Cyclone Watch for north Tamil Nadu and Puducherry coasts : Yellow Message

Latest observations & satellite imagery indicate that a depression has formed over southeast Bay of Bengal and lay centred at 1730 hrs IST of today, the 29th November, 2016 near Latitude 6.5°N and Longitude 87.5°E, about 1070 km east-southeast of Chennai, 1030 km east-southeast of Puducherry and 720 km east-southeast of Trincomalee (Srilanka). The system is very likely to move west-northwestwards, intensify into a deep depression during next 24 hrs and into a cyclonic storm in subsequent 24 hrs. It is very likely to cross north Tamil Nadu coast between Vedaranniyam and Chennai by 2nd December morning

Warning:

- (i) **Heavy Rainfall Warning:** Light to moderate rainfall at many places is very likely to commence over coastal Tamil Nadu from 30th November evening. The intensity of rainfall would increase with rainfall at most places and heavy to very heavy rainfall at a few places over coastal Tamil Nadu and Puducherry and isolated heavy to very heavy rainfall over interior Tamil Nadu on 1st and 2nd December.
Light to moderate rainfall at many places with isolated heavy falls is very likely over Kerala on 2nd and 3rd December 2016.
- (ii) **Wind warning:** Squally winds speed reaching 45-55 kmph gusting to 65 kmph would commence to prevail along & off Tamil Nadu and Puducherry coasts from 1st December morning.
- (iii) **Sea condition:** Sea condition would be rough to very rough along & off Tamil Nadu and Puducherry coasts from 1st December onward.
- (iv) **Fishermen Warning:** Fishermen are advised not to venture into sea along and off Tamil Nadu and Puducherry coasts from 30th evening onwards. Those at sea are advised to return to the coast.

Next bulletin will be issued at 0230 hrs IST of 30th November 2016.

**(Naresh Kumar)
Scientist-D
RSMC, New Delhi**

Copy to: DFDD, Pune/ACWC Kolkata /ACWC Chennai/CWC Vishakhapatnam/CWC
Bhubaneswar/MC Hyderabad.

Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
Rainfall amount (mm): Heavy rain: 64.5 – 124.4, Very heavy rain: 124.5 – 200.4, Extremely heavy rain: 200.5 or more.



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

BULLETIN NO.: 02 (BOB 05/2016)

TIME OF ISSUE: 0020 HOURS IST

DATED: 30.11.2016

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.23793144)
PS TO HON'BLE MINISTER FOR S & T AND EARTH SCIENCES (FAX NO.23316745)
SECRETARY, MOES, (FAX NO. 24629777)
SECRETARY, DST (FAX NO. 26863847/-2418)
H.Q. (INTEGRATED DEFENCE STAFF AND CDS) (FAX NO. 23005137/23005147)
DIRECTOR GENERAL, DOORDARSHAN (23385843)
DIRECTOR GENERAL, AIR (25843825)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 26105912)
DIRECTOR OF PUNCTUALITY, INDIAN RAILWAYS (FAX NO. 23388503)
CHIEF SECRETARY, GOVT. OF TAMILNADU (FAX NO.044-25672304)
CHIEF SECRETARY, GOVT. OF PUDUCHERRY (FAX NO.0413-2337575)
CHIEF SECRETARY, GOVT. OF ANDHRA PRADESH (FAX NO. 040-23453700)**

Sub: Depression over southeast Bay of Bengal.

Pre-Cyclone Watch for north Tamil Nadu and Puducherry coasts : Yellow Message

The depression over southeast Bay of Bengal moved west-northwesterwards for the past six hours with a speed about 10 kmph and lay centred at 2330 hrs IST of today, the 29th November, 2016 near Latitude 6.8°N and Longitude 87.0°E, about 1010 km east-southeast of Chennai, 970 km east-southeast of Puducherry and 660 km east-southeast of Trincomalee (Srilanka). The system is very likely to continue to move west-northwestward, and intensify into a deep depression during next 24 hrs and into a cyclonic storm in subsequent 24 hrs. It is very likely to cross north Tamil Nadu coast between Vedaranniyam and Chennai by 2nd December morning

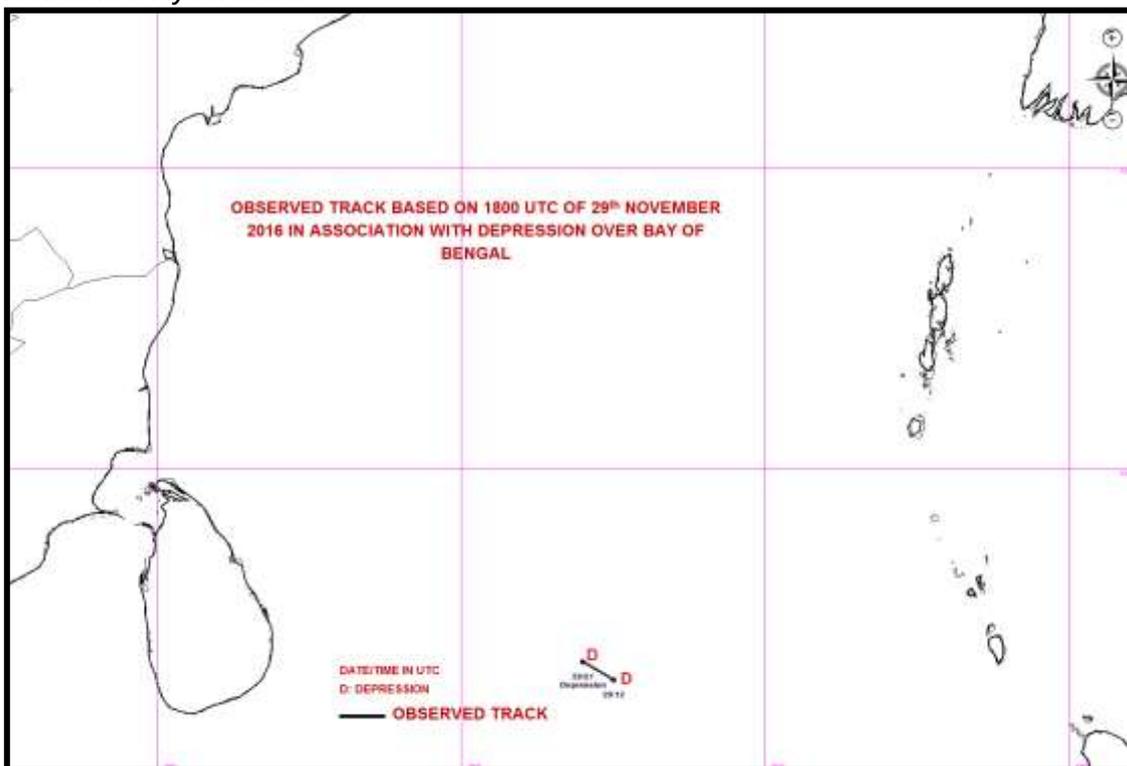
Warning:

- (v) **Heavy Rainfall Warning:** Light to moderate rainfall at many places is very likely to commence over coastal Tamil Nadu from 30th November evening. The intensity of rainfall would increase with rainfall at most places and heavy to very heavy rainfall at a few places over coastal Tamil Nadu and Puducherry and isolated heavy to very heavy rainfall over interior Tamil Nadu on 1st and 2nd December.
Light to moderate rainfall at many places with isolated heavy falls is very likely over Kerala on 2nd and 3rd December 2016.
- (vi) **Wind warning:** Squally winds speed reaching 45-55 kmph gusting to 65 kmph would commence to prevail along & off Tamil Nadu and Puducherry coasts from 1st December morning.
- (vii) **Sea condition:** Sea condition would be rough to very rough along & off Tamil Nadu and Puducherry coasts from 1st December onward.
- (viii) **Fishermen Warning:** Fishermen are advised not to venture into sea along and off Tamil Nadu and Puducherry coasts from 30th evening onwards. Those at sea are advised to return to the coast.

Next bulletin will be issued at 0830 hrs IST of 30th November 2016.

(Shivinder Singh)
Scientist-B
RSMC, New Delhi

Copy to: DFDD, Pune/ACWC Kolkata /ACWC Chennai/CWC Vishakhapatnam/CWC Bhubaneswar/MC Hyderabad.



Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
Rainfall amount (mm): Heavy rain: 64.5 – 124.4, Very heavy rain: 124.5 – 200.4, Extremely heavy rain: 200.5 or more.



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

BULLETIN NO.: 03 (BOB 05/2016)(Modified)

TIME OF ISSUE: 0820 HOURS IST

DATED: 30.11.2016

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.23793144)
PS TO HON'BLE MINISTER FOR S & T AND EARTH SCIENCES (FAX NO.23316745)
SECRETARY, MOES, (FAX NO. 24629777)
SECRETARY, DST (FAX NO. 26863847/-2418)
H.Q. (INTEGRATED DEFENCE STAFF AND CDS) (FAX NO. 23005137/23005147)
DIRECTOR GENERAL, DOORDARSHAN (23385843)
DIRECTOR GENERAL, AIR (25843825)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 26105912)
DIRECTOR OF PUNCTUALITY, INDIAN RAILWAYS (FAX NO. 23388503)
CHIEF SECRETARY, GOVT. OF TAMILNADU (FAX NO.044-25672304)
CHIEF SECRETARY, GOVT. OF PUDUCHERRY (FAX NO.0413-2337575)
CHIEF SECRETARY, GOVT. OF ANDHRA PRADESH (FAX NO. 040-23453700)
CHIEF SECRETARY, GOVT. OF KERALA (FAX NO.0471-2327176)**

**Sub: Depression over southeast Bay of Bengal intensified into a deep depression.
Pre-Cyclone Watch for north Tamil Nadu and Puducherry coasts: Yellow Message**

The depression over southeast Bay of Bengal moved west-northwesterwards for the past six hours with a speed about 15 kmph, intensified into a deep depression and lay centred at 0530 hrs IST of today, the 30th November, 2016 near Latitude 7.8°N and Longitude 85.7°E, about 830 km southeast of Chennai, 780 km east-southeast of Puducherry and 490 km east-southeast of Trincomalee (Srilanka). The system is very likely to continue to move west-northwestward and intensify further into a cyclonic storm during next 12 hrs. It is very likely to cross north Tamil Nadu coast between Vedaranniyam and Chennai, close to Cuddalore by early hours of 2nd December.

Date/time(IST)	Position (lat. °N/ long. °E)	Maximum sustained surface wind speed (kmph)	Category of cyclonic Disturbance
30-11-2016/0530	7.8/85.7	50-60 gusting to 70	Deep Depression
30-11-2016/1130	8.4/84.9	60-70 gusting to 80	Cyclonic Storm
30-11-2016/1730	9.0/84.1	65-75 gusting to 85	Cyclonic Storm
30-11-2016/2330	9.6/83.3	70-80 gusting to 90	Cyclonic Storm
01-12-2016/0530	10.1/82.5	75-85 gusting to 95	Cyclonic Storm
01-12-2016/1730	10.9/80.9	75-85 gusting to 95	Cyclonic Storm
02-12-2016/0530	11.6/79.3	60-70 gusting to 80	Cyclonic Storm
02-12-2016/1730	12.0/78.0	40-50 gusting to 60	Depression

Warning:

(ix) Heavy Rainfall Warning: Light to moderate rainfall at many places is very likely to commence over coastal Tamil Nadu from today, the 30th November evening. The intensity of rainfall would increase with rainfall at most places and heavy to very heavy rainfall at a few places

Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
Rainfall amount (mm): Heavy rain: 64.5 – 124.4, Very heavy rain: 124.5 – 200.4, Extremely heavy rain: 200.5 or more.

over coastal Tamil Nadu and Puducherry and isolated heavy to very heavy rainfall over interior Tamil Nadu on 1st and 2nd December.

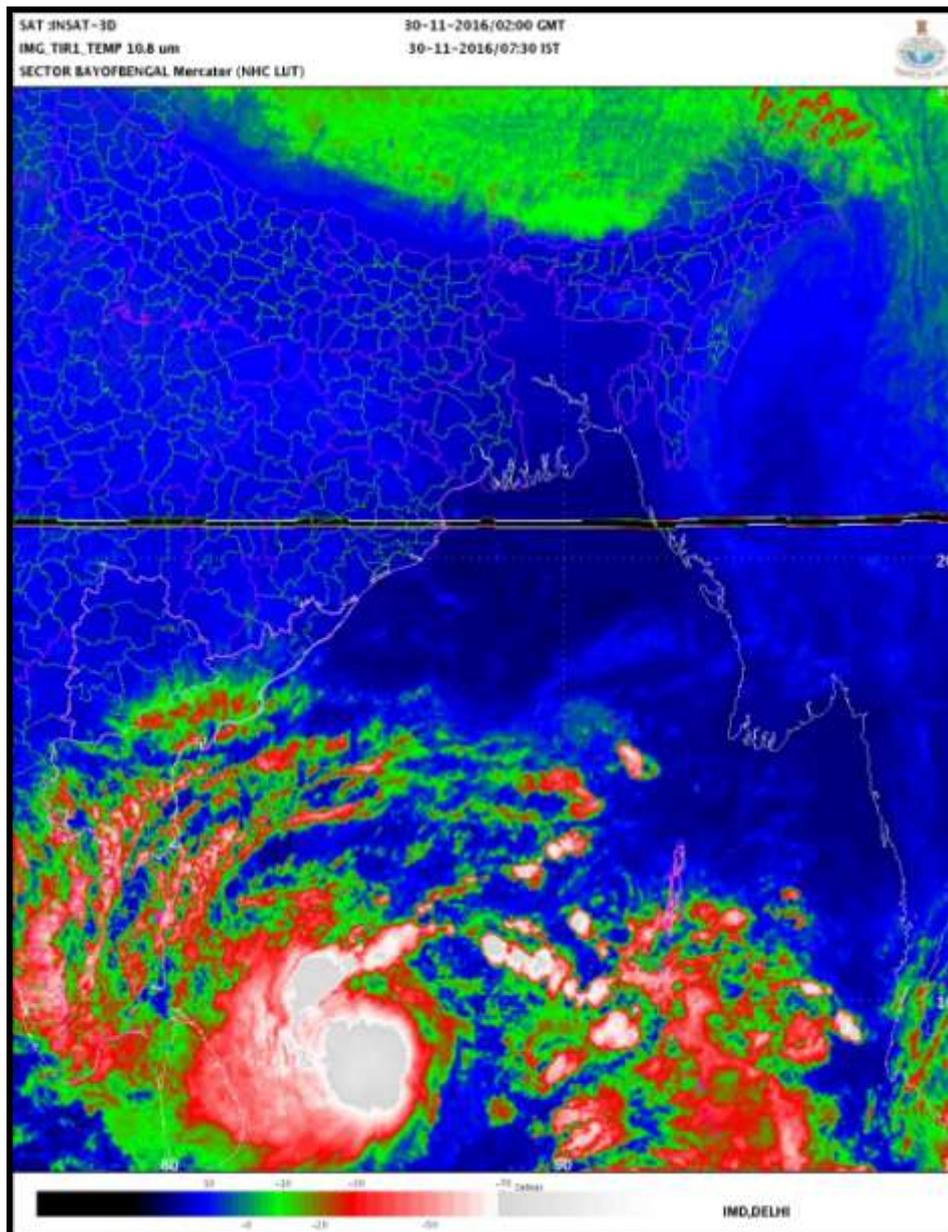
Light to moderate rainfall at many places with isolated heavy falls is very likely over Kerala on 2nd and 3rd December 2016.

- (x) **Wind warning:** Squally winds speed reaching 45-55 kmph gusting to 65 kmph would commence to prevail along & off Tamil Nadu and Puducherry coasts from 1st December morning.
- (xi) **Sea condition:** Sea condition would be rough to very rough along & off Tamil Nadu and Puducherry coasts from 1st December onward.
- (xii) **Fishermen Warning:** Fishermen are advised not to venture into sea along and off Tamil Nadu and Puducherry coasts from 30th evening onwards. Those at sea are advised to return to the coast.

Next bulletin will be issued at 1130 hrs IST of 30th November 2016.

(Naresh Kumar)
Scientist-D
RSMC, New Delhi

Copy to: DFDD, Pune/ACWC Kolkata /ACWC Chennai/CWC Vishakhapatnam/CWC
Bhubaneswar/MC Hyderabad/Thiruvananthapuram



Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
Rainfall amount (mm): Heavy rain: 64.5 – 124.4, Very heavy rain: 124.5 – 200.4, Extremely heavy rain: 200.5 or more.



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

BULLETIN NO. : 04 (BOB 05/2016)

TIME OF ISSUE: 1130 HOURS IST

DATED: 30.11.2016

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.23793144)
PS TO HON'BLE MINISTER FOR S & T AND EARTH SCIENCES (FAX NO.23316745)
SECRETARY, MOES, (FAX NO. 24629777)
SECRETARY, DST (FAX NO. 26863847/-2418)
H.Q. (INTEGRATED DEFENCE STAFF AND CDS) (FAX NO. 23005137/23005147)
DIRECTOR GENERAL, DOORDARSHAN (23385843)
DIRECTOR GENERAL, AIR (25843825)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 26105912)
DIRECTOR OF PUNCTUALITY, INDIAN RAILWAYS (FAX NO. 23388503)
CHIEF SECRETARY, GOVT. OF TAMILNADU (FAX NO.044-25672304)
CHIEF SECRETARY, GOVT. OF PUDUCHERRY (FAX NO.0413-2337575)
CHIEF SECRETARY, GOVT. OF ANDHRA PRADESH (FAX NO. 040-23453700)
CHIEF SECRETARY, GOVT. OF KERALA (FAX NO.0471-2327176)

Sub: Deep Depression over southeast Bay of Bengal intensified into cyclonic storm "Nada".

Cyclone Alert for north Tamil Nadu & Puducherry coasts: Orange Message

The deep depression over southeast Bay of Bengal moved northwestwards during past six hours with a speed about 25 kmph, intensified into a cyclonic storm "Nada" over southwest & adjoining southeast Bay of Bengal and lay centred at 0830 hrs IST of today, the 30th November, 2016 near Latitude 8.2°N and Longitude 85.3°E, about 770 km southeast of Chennai, 730 km east-southeast of Puducherry and 450 km east-southeast of Trincomalee (Srilanka). The system is very likely to move west-northwestward, intensify further and cross north Tamil Nadu coast between Vedaranniyam and Puducherry, close to Cuddalore by early hours of 2nd December.

Date/time(IST)	Position (lat. °N/ long. °E)	Maximum sustained surface wind speed (kmph)	Category of cyclonic Disturbance
30-11-2016/0830	8.2/85.3	60-70 gusting to 80	Cyclonic Storm
30-11-2016/1130	8.4/84.9	60-70 gusting to 80	Cyclonic Storm
30-11-2016/1730	9.0/84.1	65-75 gusting to 85	Cyclonic Storm
30-11-2016/2330	9.6/83.3	70-80 gusting to 90	Cyclonic Storm
01-12-2016/0530	10.1/82.5	75-85 gusting to 95	Cyclonic Storm
01-12-2016/1730	10.9/80.9	75-85 gusting to 95	Cyclonic Storm
02-12-2016/0530	11.6/79.3	60-70 gusting to 80	Cyclonic Storm
02-12-2016/1730	12.0/78.0	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 – 124.4, Very heavy rain: 124.5 – 200.4, Extremely heavy rain: 200.5 or more.

Warning:

- (xiii) **Heavy Rainfall Warning:** Light to moderate rainfall at many places is very likely to commence over coastal Tamil Nadu from today, the 30th November evening. The intensity of rainfall would increase with rainfall at most places and heavy to very heavy rainfall at a few places over coastal Tamil Nadu & Puducherry and isolated heavy to very heavy rainfall over interior Tamil Nadu on 1st and 2nd December. Light to moderate rainfall at many places with isolated heavy falls is very likely over Kerala on 2nd and 3rd December 2016.
- (xiv) **Wind warning:** Squally winds speed reaching 45-55 kmph gusting to 65 kmph would commence to prevail along & off Tamil Nadu and Puducherry coasts from 1st December morning.
- (xv) **Sea condition:** Sea condition would be rough to very rough along & off Tamil Nadu and Puducherry coasts from 1st December onward.
- (xvi) **Damage Expected:** Damage to thatched huts. Minor damage to power & 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.
- (xvii) **Action Suggested:** Fishermen are advised not to venture into sea along and off Tamil Nadu and Puducherry coasts from today, 30th evening onwards. Those at sea are advised to return to the coast.

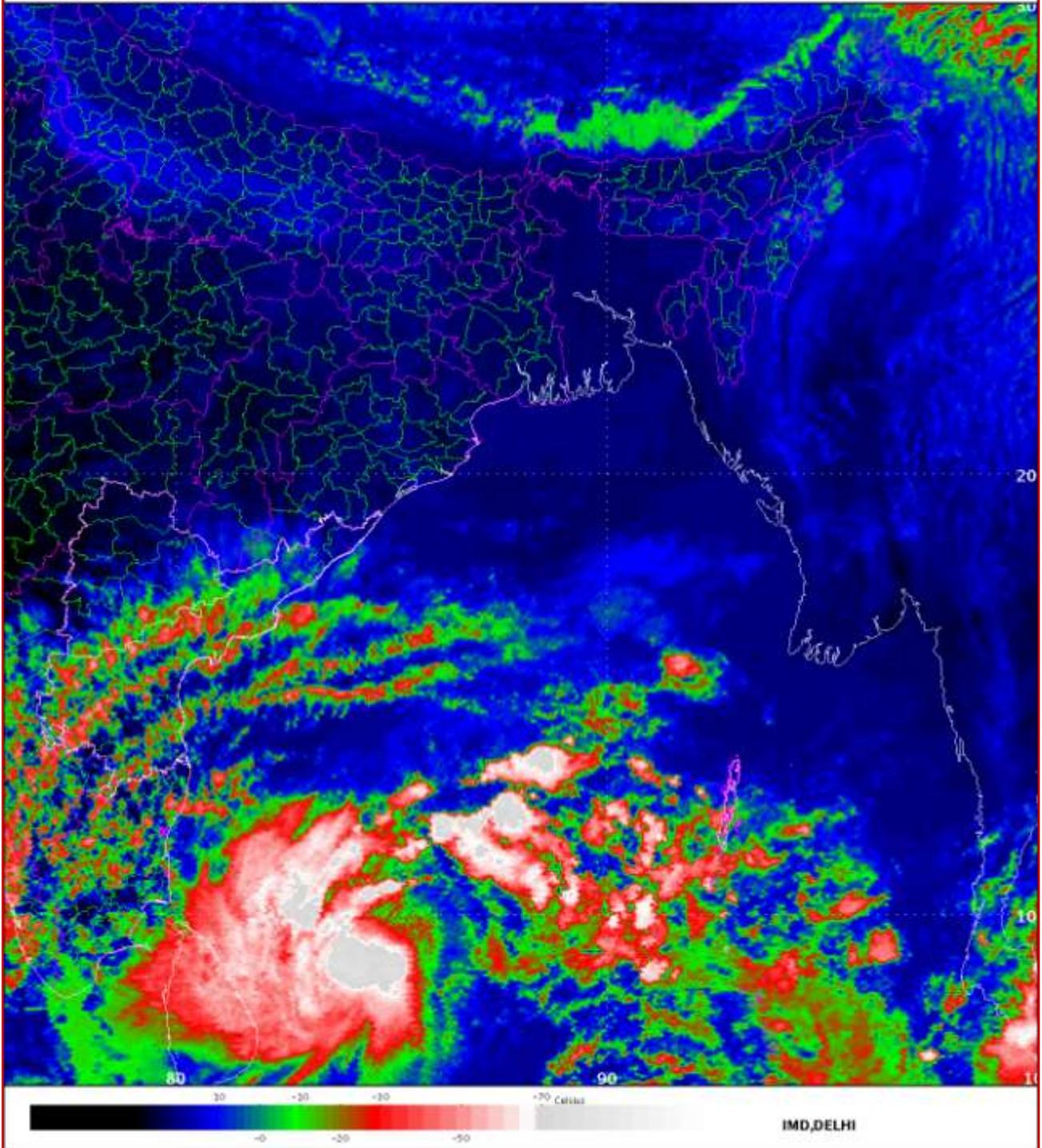
Next bulletin will be issued at 1430 hrs IST of 30th November 2016.

(Naresh Kumar)
Scientist-D
RSMC, New Delhi

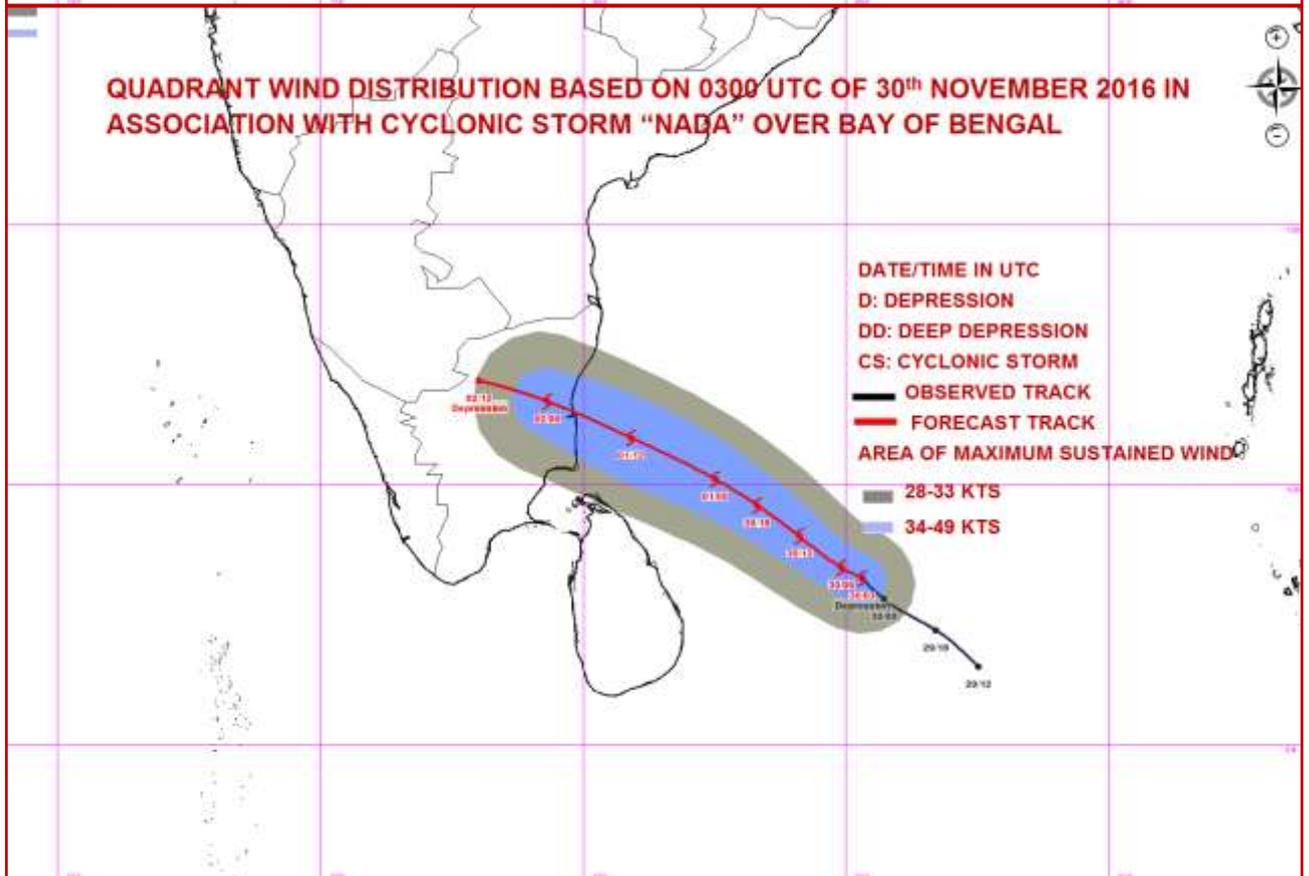
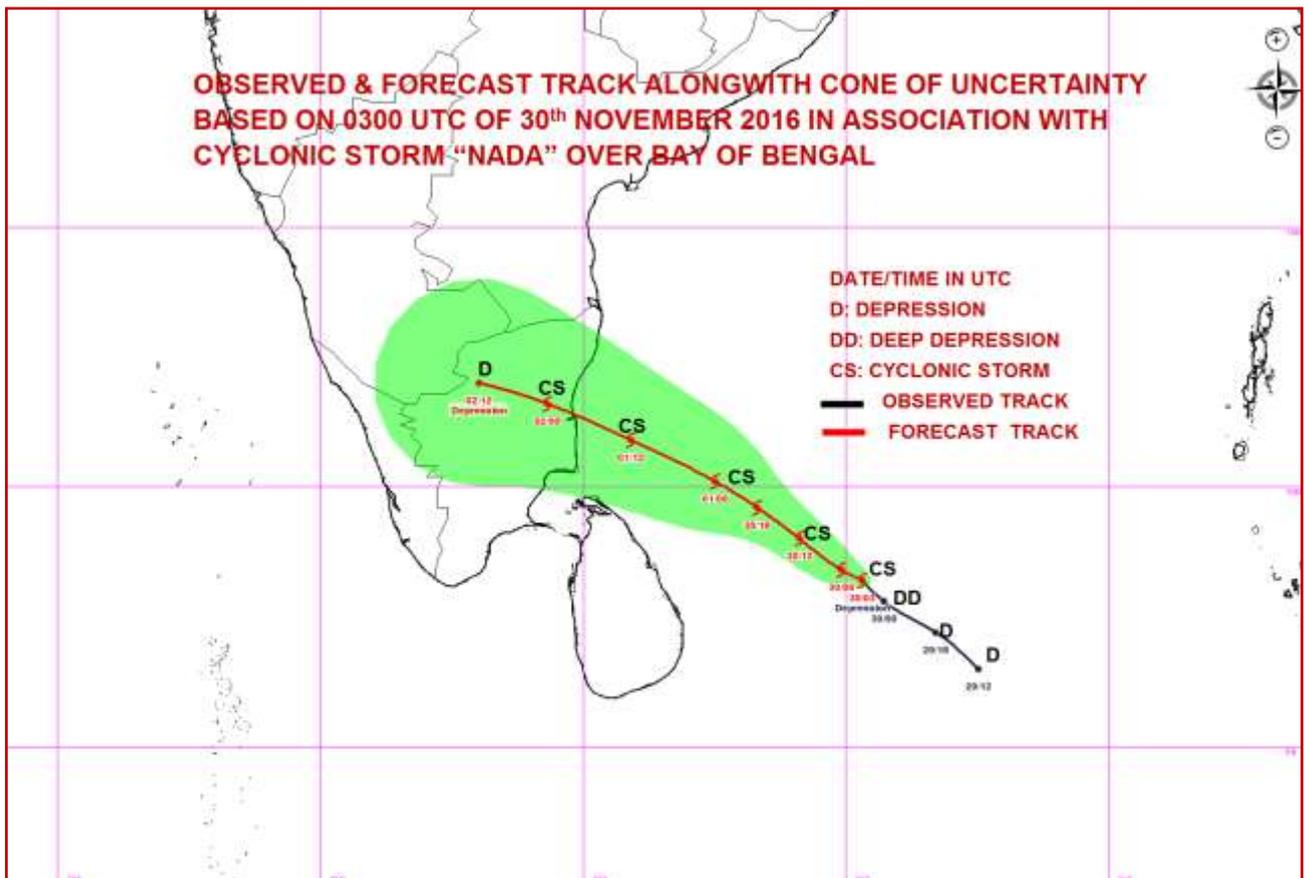
Copy to: DFDD, Pune/ACWC Kolkata /ACWC Chennai/CWC Vishakhapatnam/CWC
Bhubaneswar/MC Hyderabad/Thiruvananthapuram

SAT :INSAT-3D
IMG_TIR1_TEMP 10.8 um
SECTOR BAYOFBENGAL Mercator (NHC LUT)

30-11-2016/05:00 GMT
30-11-2016/10:30 IST



Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
Rainfall amount (mm): Heavy rain: 64.5 – 124.4, Very heavy rain: 124.5 – 200.4, Extremely heavy rain: 200.5 or more.



Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
 Rainfall amount (mm): Heavy rain: 64.5 – 124.4, Very heavy rain: 124.5 – 200.4, Extremely heavy rain: 200.5 or more.



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

BULLETIN NO. : 05 (BOB 05/2016)

TIME OF ISSUE: 1430 HOURS IST

DATED: 30.11.2016

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.23793144)
PS TO HON'BLE MINISTER FOR S & T AND EARTH SCIENCES (FAX NO.23316745)
SECRETARY, MOES, (FAX NO. 24629777)
SECRETARY, DST (FAX NO. 26863847/-2418)
H.Q. (INTEGRATED DEFENCE STAFF AND CDS) (FAX NO. 23005137/23005147)
DIRECTOR GENERAL, DOORDARSHAN (23385843)
DIRECTOR GENERAL, AIR (25843825)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 26105912)
DIRECTOR OF PUNCTUALITY, INDIAN RAILWAYS (FAX NO. 23388503)
CHIEF SECRETARY, GOVT. OF TAMILNADU (FAX NO.044-25672304)
CHIEF SECRETARY, GOVT. OF PUDUCHERRY (FAX NO.0413-2337575)
CHIEF SECRETARY, GOVT. OF ANDHRA PRADESH (FAX NO. 040-23453700)
CHIEF SECRETARY, GOVT. OF KERALA (FAX NO.0471-2327176)**

**Sub: Cyclonic storm “Nada” over southwest & adjoining southeast Bay of Bengal
Cyclone Alert for north Tamil Nadu & Puducherry coasts: Orange Message**

The cyclonic storm “Nada” over southwest & adjoining southeast Bay of Bengal moved nearly northwestwards during past six hours with a speed about 21 kmph and lay centred at 1130 hrs IST of today, the 30th November, 2016 near Latitude 8.7°N and Longitude 85.0°E, about 710 km southeast of Chennai, 670 km east-southeast of Puducherry and 410 km east of Trincomalee (Srilanka). The system is very likely to move west-northwestward, intensify further and cross north Tamil Nadu coast between Vedaranniyam and Puducherry, close to Cuddalore by early hours of 2nd December.

Date/time(IST)	Position (lat. °N/ long. °E)	Maximum sustained surface wind speed (kmph)	Category of cyclonic Disturbance
30-11-2016/1130	8.7/85.0	60-70 gusting to 80	Cyclonic Storm
30-11-2016/1730	9.2/84.2	65-75 gusting to 85	Cyclonic Storm
30-11-2016/2330	9.7/83.3	70-80 gusting to 90	Cyclonic Storm
01-12-2016/0530	10.1/82.5	75-85 gusting to 95	Cyclonic Storm
01-12-2016/1130	10.5/81.7	75-85 gusting to 95	Cyclonic Storm
01-12-2016/2330	11.3/79.9	70-80 gusting to 90	Cyclonic Storm
02-12-2016/1130	11.8/78.6	40-50 gusting to 60	Depression
02-12-2016/2330	12.0/77.4	20-30 gusting to 40	Low

Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
Rainfall amount (mm): Heavy rain: 64.5 – 124.4, Very heavy rain: 124.5 – 200.4, Extremely heavy rain: 200.5 or more.

Warning:

- (xviii) **Heavy Rainfall Warning:** Light to moderate rainfall at many places is very likely to commence over coastal Tamil Nadu from today, the 30th November evening. The intensity of rainfall would increase with rainfall at most places and heavy to very heavy rainfall at a few places over coastal Tamil Nadu & Puducherry and isolated heavy to very heavy rainfall over interior Tamil Nadu on 1st and 2nd December. Light to moderate rainfall at many places with isolated heavy falls is very likely over Kerala on 2nd and 3rd December 2016.
- (xix) **Wind warning:** Squally winds speed reaching 45-55 kmph gusting to 65 kmph would commence to prevail along & off Tamil Nadu and Puducherry coasts from 1st December morning.
- (xx) **Sea condition:** Sea condition would be rough to very rough along & off Tamil Nadu and Puducherry coasts from 1st December onward.
- (xxi) **Damage Expected:** Damage to thatched huts. Minor damage to power & 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.
- (xxii) **Action Suggested:** Fishermen are advised not to venture into sea along and off Tamil Nadu and Puducherry coasts from today, 30th evening onwards. Those at sea are advised to return to the coast.

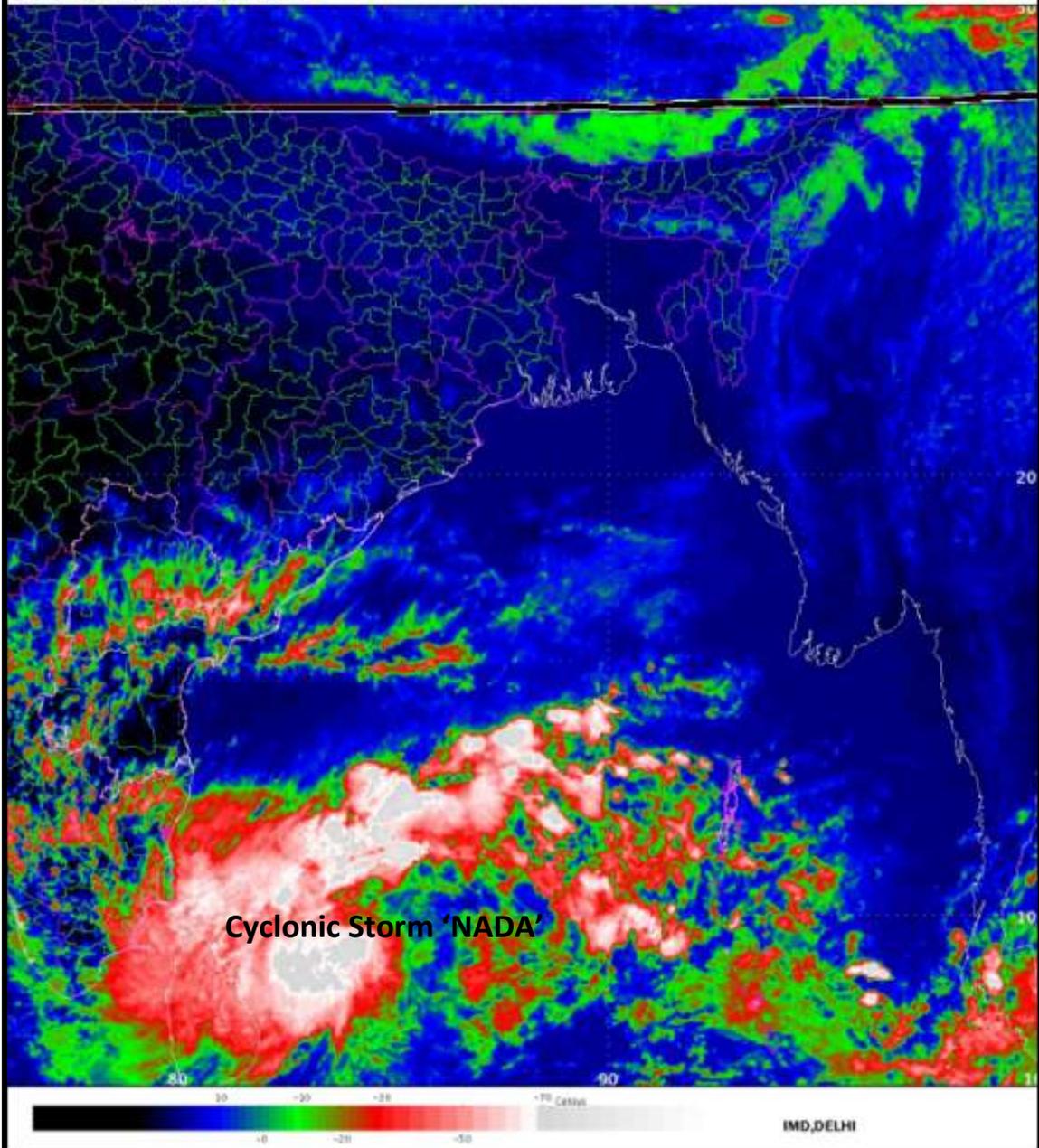
Next bulletin will be issued at 1730 hrs IST of 30th November 2016.

(Naresh Kumar)
Scientist-D
RSMC, New Delhi

Copy to: DFDD, Pune/ACWC Kolkata /ACWC Chennai/CWC Vishakhapatnam/CWC
Bhubaneswar/MC Hyderabad/Thiruvananthapuram

SAT :INSAT-3D
IMG. TIR1_TEMP 10.8 um
SECTOR BAYOFBENGAL Mercator (NHC LUT)

30-11-2016/08:00 GMT
30-11-2016/13:30 IST



Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
Rainfall amount (mm): Heavy rain: 64.5 – 124.4, Very heavy rain: 124.5 – 200.4, Extremely heavy rain: 200.5 or more.



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

BULLETIN NO. : 06 (BOB 05/2016)

TIME OF ISSUE: 1730 HOURS IST

DATED: 30.11.2016

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.23793144)
PS TO HON'BLE MINISTER FOR S & T AND EARTH SCIENCES (FAX NO.23316745)
SECRETARY, MOES, (FAX NO. 24629777)
SECRETARY, DST (FAX NO. 26863847/-2418)
H.Q. (INTEGRATED DEFENCE STAFF AND CDS) (FAX NO. 23005137/23005147)
DIRECTOR GENERAL, DOORDARSHAN (23385843)
DIRECTOR GENERAL, AIR (25843825)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 26105912)
DIRECTOR OF PUNCTUALITY, INDIAN RAILWAYS (FAX NO. 23388503)
CHIEF SECRETARY, GOVT. OF TAMILNADU (FAX NO.044-25672304)
CHIEF SECRETARY, GOVT. OF PUDUCHERRY (FAX NO.0413-2337575)
CHIEF SECRETARY, GOVT. OF ANDHRA PRADESH (FAX NO. 040-23453700)
CHIEF SECRETARY, GOVT. OF KERALA (FAX NO.0471-2327176)**

**Sub: Cyclonic storm "Nada" over southwest Bay of Bengal
Cyclone Alert for north Tamil Nadu & Puducherry coasts: Orange Message**

The cyclonic storm "Nada" over southwest & adjoining southeast Bay of Bengal moved nearly northwestwards during past six hours with a speed about 30 kmph and lay centred at 1430 hrs IST of today, the 30th November, 2016 near Latitude 9.5°N and Longitude 84.3°E over southwest Bay of Bengal, about 590 km southeast of Chennai, 560 km east-southeast of Puducherry and 350 km east-northeast of Trincomalee (Srilanka). The system is very likely to move west-northwestward, intensify further and cross north Tamil Nadu coast between Vedaranniyam and Puducherry, close to Cuddalore by early hours of 2nd December.

Date/time(IST)	Position (lat. °N/ long. °E)	Maximum sustained surface wind speed (kmph)	Category of cyclonic Disturbance
30-11-2016/1430	9.5/84.3	60-70 gusting to 80	Cyclonic Storm
30-11-2016/1730	9.7/84.0	65-75 gusting to 85	Cyclonic Storm
30-11-2016/2330	9.9/83.3	70-80 gusting to 90	Cyclonic Storm
01-12-2016/0530	10.1/82.5	75-85 gusting to 95	Cyclonic Storm
01-12-2016/1130	10.5/81.7	75-85 gusting to 95	Cyclonic Storm
01-12-2016/2330	11.3/79.9	70-80 gusting to 90	Cyclonic Storm
02-12-2016/1130	11.8/78.6	40-50 gusting to 60	Depression
02-12-2016/2330	12.0/77.4	20-30 gusting to 40	Low

Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
Rainfall amount (mm): Heavy rain: 64.5 – 124.4, Very heavy rain: 124.5 – 200.4, Extremely heavy rain: 200.5 or more.

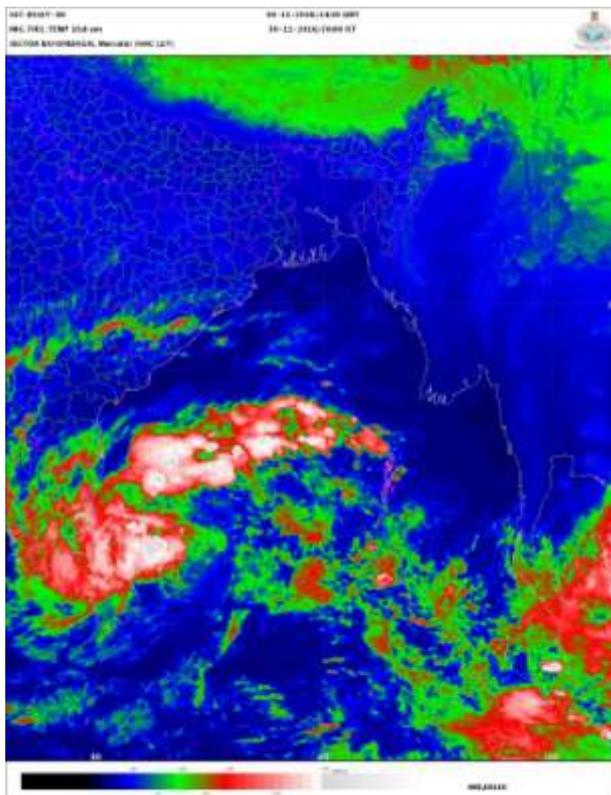
Warning:

- (xxiii) **Heavy Rainfall Warning:** Light to moderate rainfall at many places is very likely to commence over coastal Tamil Nadu from today, the 30th November evening. The intensity of rainfall would increase with rainfall at most places and heavy to very heavy rainfall at a few places over coastal Tamil Nadu & Puducherry and isolated heavy to very heavy rainfall over interior Tamil Nadu on 1st and 2nd December. Light to moderate rainfall at many places with isolated heavy falls is very likely over Kerala on 2nd and 3rd December 2016.
- (xxiv) **Wind warning:** Squally winds speed reaching 45-55 kmph gusting to 65 kmph would commence to prevail along & off Tamil Nadu and Puducherry coasts from 1st December morning.
- (xxv) **Sea condition:** Sea condition would be rough to very rough along & off Tamil Nadu and Puducherry coasts from 1st December onward.
- (xxvi) **Damage Expected:** Damage to thatched huts. Minor damage to power & 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.
- (xxvii) **Action Suggested:** Fishermen are advised not to venture into sea along and off Tamil Nadu and Puducherry coasts from today, 30th evening onwards. Those at sea are advised to return to the coast.

Next bulletin will be issued at 2030 hrs IST of 30th November 2016.

(Naresh Kumar)
Scientist-D
RSMC, New Delhi

Copy to: DFDD, Pune/ACWC Kolkata /ACWC Chennai/CWC Vishakhapatnam/CWC
Bhubaneswar/MC Hyderabad/Thiruvananthapuram



Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
Rainfall amount (mm): Heavy rain: 64.5 – 124.4, Very heavy rain: 124.5 – 200.4, Extremely heavy rain: 200.5 or more.



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

BULLETIN NO. : 07 (BOB 05/2016)

TIME OF ISSUE: 2030 HOURS IST

DATED: 30.11.2016

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.23793144)
PS TO HON'BLE MINISTER FOR S & T AND EARTH SCIENCES (FAX NO.23316745)
SECRETARY, MOES, (FAX NO. 24629777)
SECRETARY, DST (FAX NO. 26863847/-2418)
H.Q. (INTEGRATED DEFENCE STAFF AND CDS) (FAX NO. 23005137/23005147)
DIRECTOR GENERAL, DOORDARSHAN (23385843)
DIRECTOR GENERAL, AIR (25843825)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 26105912)
DIRECTOR OF PUNCTUALITY, INDIAN RAILWAYS (FAX NO. 23388503)
CHIEF SECRETARY, GOVT. OF TAMILNADU (FAX NO.044-25672304)
CHIEF SECRETARY, GOVT. OF PUDUCHERRY (FAX NO.0413-2337575)
CHIEF SECRETARY, GOVT. OF ANDHRA PRADESH (FAX NO. 040-23453700)
CHIEF SECRETARY, GOVT. OF KERALA (FAX NO.0471-2327176)

**Sub: Cyclonic storm "Nada" over southwest Bay of Bengal
Cyclone Alert for north Tamil Nadu & Puducherry coasts: Orange Message**

The cyclonic storm "Nada" over southwest Bay of Bengal moved northwestwards during past six hours with a speed of about 27 kmph and lay centred at 1730 hrs IST of today, the 30th November, 2016 near Latitude 9.8°N and Longitude 84.0°E over southwest Bay of Bengal, about 550 km southeast of Chennai, 520 km east-southeast of Puducherry and 330 km east-northeast of Trincomalee (Srilanka). The system is very likely to move west-northwestward and cross north Tamil Nadu coast between Vedaranniyam and Puducherry, close to Cuddalore by early hours of 2nd December.

Date/time(IST)	Position (lat. °N/ long. °E)	Maximum sustained surface wind speed (kmph)	Category of cyclonic Disturbance
30-11-2016/1730	9.8/84.0	70-80 gusting to 90	Cyclonic Storm
30-11-2016/2330	10.4/83.2	70-80 gusting to 90	Cyclonic Storm
01-12-2016/0530	10.8/82.4	70-80 gusting to 90	Cyclonic Storm
01-12-2016/1130	11.0/81.7	70-80 gusting to 90	Cyclonic Storm
01-12-2016/1730	11.2/81.0	65-75 gusting to 85	Cyclonic Storm
02-12-2016/0530	11.4/79.5	55-65 gusting to 75	Deep Depression
02-12-2016/1730	11.5/77.9	25-35 gusting to 45	Low

Warning:

(xxviii) **Heavy Rainfall Warning:** Light to moderate rainfall at most places very likely over Tamil Nadu & Puducherry till 2nd December along with heavy to very heavy

Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
Rainfall amount (mm): Heavy rain: 64.5 – 124.4, Very heavy rain: 124.5 – 200.4, Extremely heavy rain: 200.5 or more.

rainfall at a few places over coastal Tamil Nadu & Puducherry and isolated heavy to very heavy rainfall over interior Tamil Nadu on 1st and 2nd December.

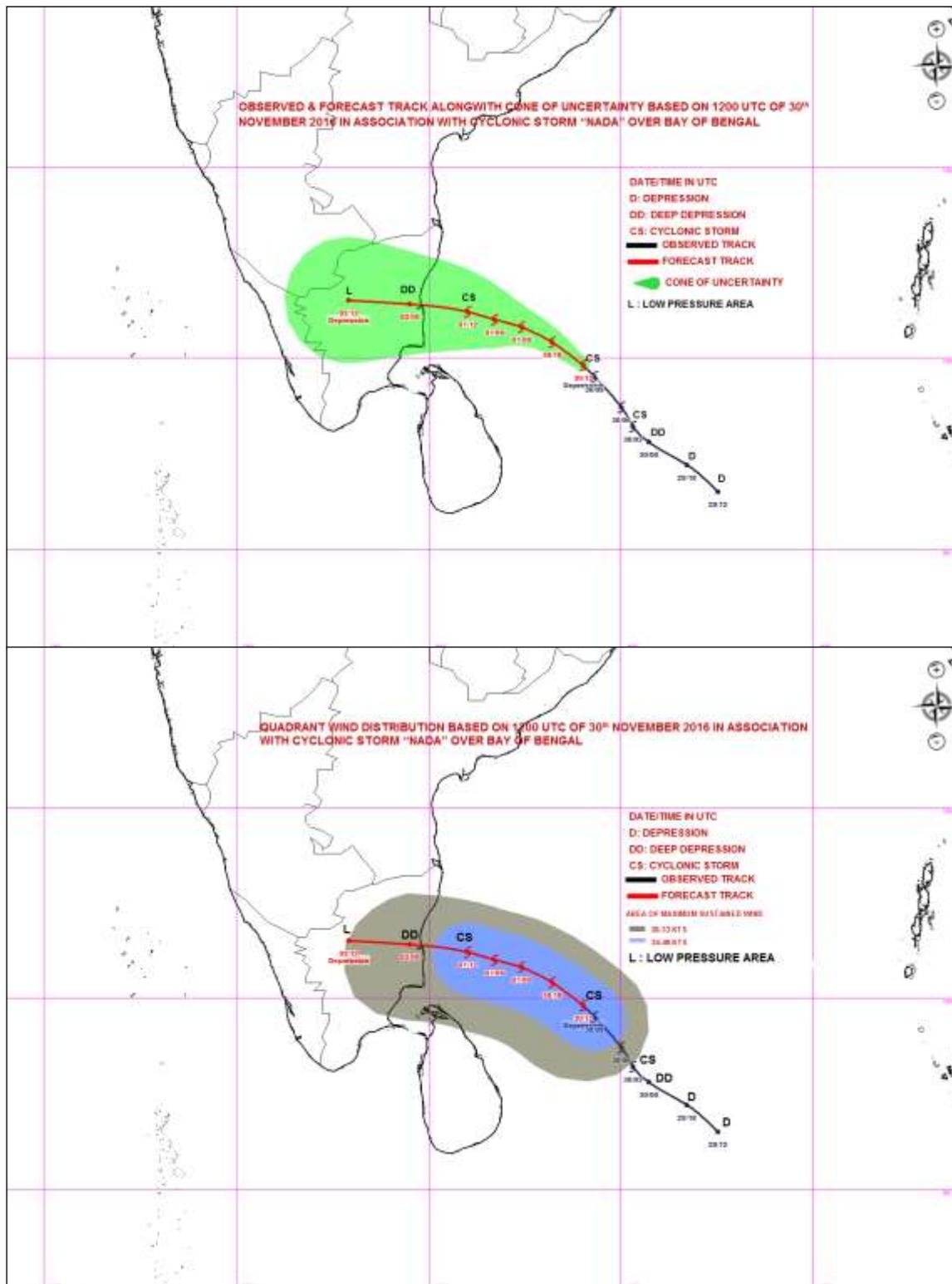
Light to moderate rainfall at many places with isolated heavy falls is very likely over Kerala on 2nd and 3rd December 2016.

- (xxix) **Wind warning:** Squally winds speed reaching 45-55 kmph gusting to 65 kmph would commence to prevail along & off Tamil Nadu and Puducherry coasts from 1st December morning.
- (xxx) **Sea condition:** Sea condition would be rough to very rough along & off Tamil Nadu and Puducherry coasts from 1st December onward.
- (xxxii) **Damage Expected:** Damage to thatched huts. Minor damage to power & 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.
- (xxxiii) **Action Suggested:** Fishermen are advised not to venture into sea along and off Tamil Nadu and Puducherry coasts from today, 30th evening onwards. Those at sea are advised to return to the coast.

Next bulletin will be issued at 2330 hrs IST of 30th November 2016.

(Naresh Kumar)
Scientist-D
RSMC, New Delhi

Copy to: DFDD, Pune/ACWC Kolkata /ACWC Chennai/CWC Vishakhapatnam/CWC
Bhubaneswar/MC Hyderabad/Thiruvananthapuram



Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
Rainfall amount (mm): Heavy rain: 64.5 – 124.4, Very heavy rain: 124.5 – 200.4, Extremely heavy rain: 200.5 or more.



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

BULLETIN NO. : 08 (BOB 05/2016)

TIME OF ISSUE: 2230 HOURS IST

DATED: 30.11.2016

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.23793144)
PS TO HON'BLE MINISTER FOR S & T AND EARTH SCIENCES (FAX NO.23316745)
SECRETARY, MOES, (FAX NO. 24629777)
SECRETARY, DST (FAX NO. 26863847/-2418)
H.Q. (INTEGRATED DEFENCE STAFF AND CDS) (FAX NO. 23005137/23005147)
DIRECTOR GENERAL, DOORDARSHAN (23385843)
DIRECTOR GENERAL, AIR (25843825)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 26105912)
DIRECTOR OF PUNCTUALITY, INDIAN RAILWAYS (FAX NO. 23388503)
CHIEF SECRETARY, GOVT. OF TAMILNADU (FAX NO.044-25672304)
CHIEF SECRETARY, GOVT. OF PUDUCHERRY (FAX NO.0413-2337575)
CHIEF SECRETARY, GOVT. OF ANDHRA PRADESH (FAX NO. 040-23453700)
CHIEF SECRETARY, GOVT. OF KERALA (FAX NO.0471-2327176)

**Sub: Cyclonic storm "Nada" over southwest Bay of Bengal
Cyclone Alert for north Tamil Nadu & Puducherry coasts: Orange Message**

The cyclonic storm "Nada" over southwest Bay of Bengal moved west-northwestwards during past six hours with a speed of about 17 kmph and lay centred at 2030 hrs IST of today, the 30th November, 2016 near Latitude 10.0°N and Longitude 83.5°E over southwest Bay of Bengal, about 490 km southeast of Chennai, 460 km east-southeast of Puducherry and 290 km northeast of Trincomalee (Srilanka). The system is very likely to move west-northwestward and cross north Tamil Nadu coast between Vedaranniyam and Puducherry, close to Cuddalore by early hours of 2nd December.

Date/time(IST)	Position (lat. °N/ long. °E)	Maximum sustained surface wind speed (kmph)	Category of cyclonic Disturbance
30-11-2016/2030	10.0/83.5	70-80 gusting to 90	Cyclonic Storm
30-11-2016/2330	10.4/83.2	70-80 gusting to 90	Cyclonic Storm
01-12-2016/0530	10.8/82.4	70-80 gusting to 90	Cyclonic Storm
01-12-2016/1130	11.0/81.7	70-80 gusting to 90	Cyclonic Storm
01-12-2016/1730	11.2/81.0	65-75 gusting to 85	Cyclonic Storm
02-12-2016/0530	11.4/79.5	55-65 gusting to 75	Deep Depression
02-12-2016/1730	11.5/77.9	25-35 gusting to 45	Low

Warning:

(xxxiii) **Heavy Rainfall Warning:** Light to moderate rainfall at most places very likely over Tamil Nadu & Puducherry till 2nd December along with heavy to very heavy

Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
Rainfall amount (mm): Heavy rain: 64.5 – 124.4, Very heavy rain: 124.5 – 200.4, Extremely heavy rain: 200.5 or more.

rainfall at a few places over coastal Tamil Nadu & Puducherry and isolated heavy to very heavy rainfall over interior Tamil Nadu on 1st and 2nd December.

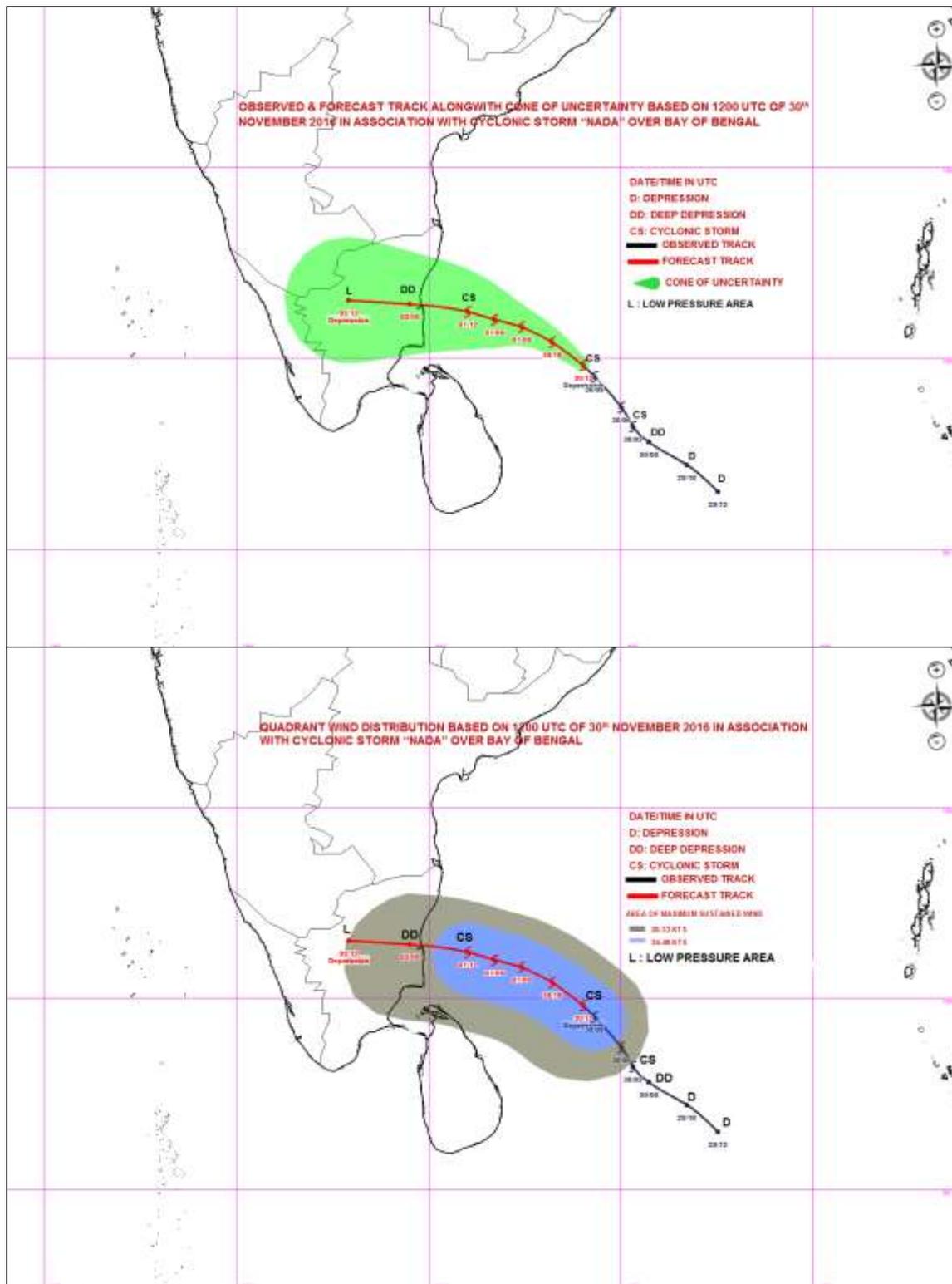
Light to moderate rainfall at many places with isolated heavy falls is very likely over Kerala on 2nd and 3rd December 2016.

- (xxxiv) **Wind warning:** Squally winds speed reaching 45-55 kmph gusting to 65 kmph would commence to prevail along & off Tamil Nadu and Puducherry coasts from 1st December morning.
- (xxxv) **Sea condition:** Sea condition would be rough to very rough along & off Tamil Nadu and Puducherry coasts from 1st December onward.
- (xxxvi) **Damage Expected:** Damage to thatched huts. Minor damage to power & 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.
- (xxxvii) **Action Suggested:** Fishermen are advised not to venture into sea along and off Tamil Nadu and Puducherry coasts from today, 30th evening onwards. Those at sea are advised to return to the coast.

Next bulletin will be issued at 0230 hrs IST of 1st December 2016.

(Shambu Ravindren)
Scientist-B
NWFC, New Delhi

Copy to: DFDD, Pune/ACWC Kolkata /ACWC Chennai/CWC Vishakhapatnam/CWC
Bhubaneswar/MC Hyderabad/Thiruvananthapuram



Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
Rainfall amount (mm): Heavy rain: 64.5 – 124.4, Very heavy rain: 124.5 – 200.4, Extremely heavy rain: 200.5 or more.



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

BULLETIN NO. : 09 (BOB 05/2016)

TIME OF ISSUE: 0230 HOURS IST

DATED: 01.12.2016

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.23793144)
PS TO HON'BLE MINISTER FOR S & T AND EARTH SCIENCES (FAX NO.23316745)
SECRETARY, MOES, (FAX NO. 24629777)
SECRETARY, DST (FAX NO. 26863847/-2418)
H.Q. (INTEGRATED DEFENCE STAFF AND CDS) (FAX NO. 23005137/23005147)
DIRECTOR GENERAL, DOORDARSHAN (23385843)
DIRECTOR GENERAL, AIR (25843825)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 26105912)
DIRECTOR OF PUNCTUALITY, INDIAN RAILWAYS (FAX NO. 23388503)
CHIEF SECRETARY, GOVT. OF TAMILNADU (FAX NO.044-25672304)
CHIEF SECRETARY, GOVT. OF PUDUCHERRY (FAX NO.0413-2337575)
CHIEF SECRETARY, GOVT. OF ANDHRA PRADESH (FAX NO. 040-23453700)
CHIEF SECRETARY, GOVT. OF KERALA (FAX NO.0471-2327176)**

**Sub: Cyclonic storm "Nada" over southwest Bay of Bengal
Cyclone Alert for north Tamil Nadu & Puducherry coasts: Orange Message**

The cyclonic storm "Nada" over southwest Bay of Bengal moved west-northwestwards during past six hours with a speed of about 20 kmph and lay centred at 2330 hrs IST of yesterday, the 30th November, 2016 near Latitude 10.3°N and Longitude 83.0°E over southwest Bay of Bengal, about 430 km southeast of Chennai, 390 km east-southeast of Puducherry and 270 km northeast of Trincomalee (Srilanka). The system is very likely to move west-northwestward and cross north Tamil Nadu coast between Vedaranniyam and Puducherry, close to Cuddalore by early hours of 2nd December.

Date/time(IST)	Position (lat. °N/ long. °E)	Maximum sustained surface wind speed (kmph)	Category of cyclonic Disturbance
30-11-2016/2330	10.3/83.0	70-80 GUSTING TO 90	CYCLONIC STORM
01-12-2016/0530	10.6/82.4	70-80 GUSTING TO 90	CYCLONIC STORM
01-12-2016/1130	11.0/81.7	70-80 GUSTING TO 90	CYCLONIC STORM
01-12-2016/1730	11.2/81.0	65-75 GUSTING TO 85	CYCLONIC STORM
01-12-2016/2330	11.3/80.3	65-75 GUSTING TO 85	CYCLONIC STORM
02-12-2016/1130	11.4/78.8	40-50 GUSTING TO 60	DEPRESSION
02-12-2016/2330	11.5/77.4	20-30 GUSTING TO 40	LOW

Warning:

(xxxviii) Heavy Rainfall Warning: Light to moderate rainfall at most places very likely over Tamil Nadu & Puducherry till 2nd December along with heavy to very heavy

Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
Rainfall amount (mm): Heavy rain: 64.5 – 124.4, Very heavy rain: 124.5 – 200.4, Extremely heavy rain: 200.5 or more.

rainfall at a few places over coastal Tamil Nadu & Puducherry and isolated heavy to very heavy rainfall over interior Tamil Nadu on 1st and 2nd December.

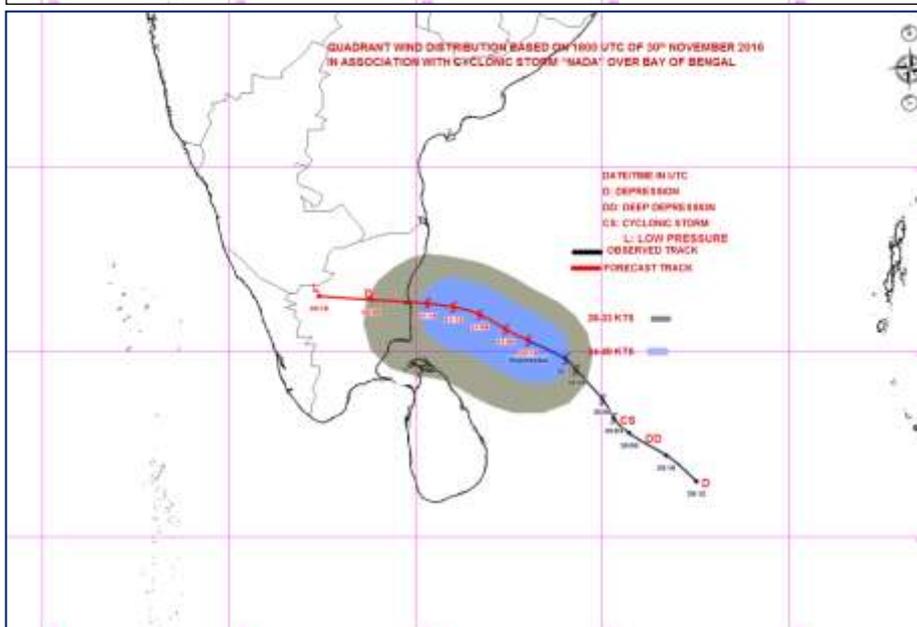
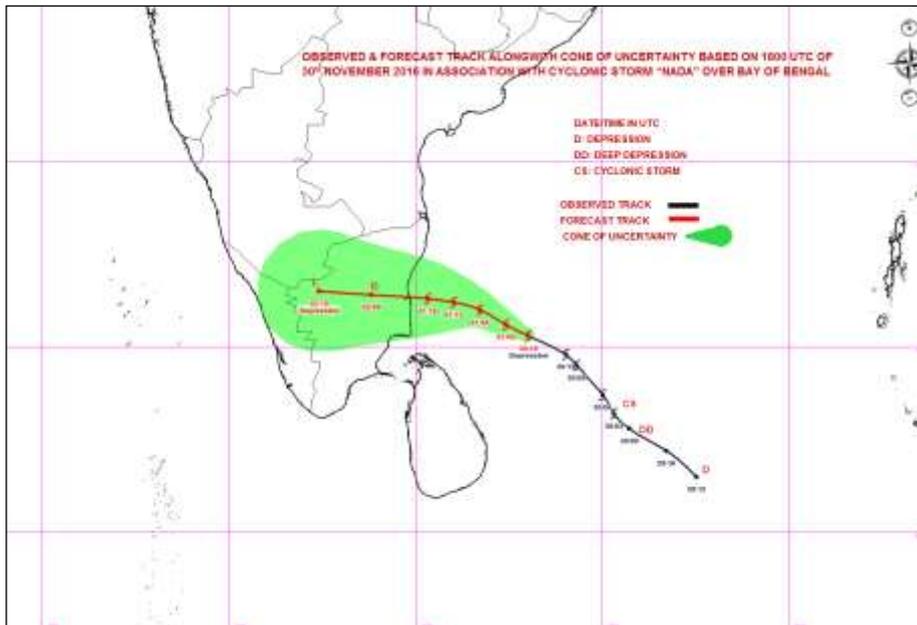
Light to moderate rainfall at many places with isolated heavy falls is very likely over Kerala on 2nd and 3rd December 2016.

- (xxxix) **Wind warning:** Squally winds speed reaching 45-55 kmph gusting to 65 kmph would commence to prevail along & off Tamil Nadu and Puducherry coasts from 1st December morning.
- (xl) **Sea condition:** Sea condition would be rough to very rough along & off Tamil Nadu and Puducherry coasts from 1st December onward.
- (xli) **Damage Expected:** Damage to thatched huts. Minor damage to power & 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.
- (xlii) **Action Suggested:** Fishermen are advised not to venture into sea along and off Tamil Nadu and Puducherry coasts from today, 30th evening onwards. Those at sea are advised to return to the coast.

Next bulletin will be issued at 0530 hrs IST of 1st December 2016.

(Shambu Ravindren)
Scientist-B
NWFC, New Delhi

Copy to: DFDD, Pune/ACWC Kolkata /ACWC Chennai/CWC Vishakhapatnam/CWC
Bhubaneswar/MC Hyderabad/Thiruvananthapuram



Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
Rainfall amount (mm): Heavy rain: 64.5 – 124.4, Very heavy rain: 124.5 – 200.4, Extremely heavy rain: 200.5 or more.



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

BULLETIN NO. : 10 (BOB 05/2016)

TIME OF ISSUE: 0630 HOURS IST

DATED: 01.12.2016

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.23793144)
PS TO HON'BLE MINISTER FOR S & T AND EARTH SCIENCES (FAX NO.23316745)
SECRETARY, MOES, (FAX NO. 24629777)
SECRETARY, DST (FAX NO. 26863847/-2418)
H.Q. (INTEGRATED DEFENCE STAFF AND CDS) (FAX NO. 23005137/23005147)
DIRECTOR GENERAL, DOORDARSHAN (23385843)
DIRECTOR GENERAL, AIR (25843825)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 26105912)
DIRECTOR OF PUNCTUALITY, INDIAN RAILWAYS (FAX NO. 23388503)
CHIEF SECRETARY, GOVT. OF TAMILNADU (FAX NO.044-25672304)
CHIEF SECRETARY, GOVT. OF PUDUCHERRY (FAX NO.0413-2337575)
CHIEF SECRETARY, GOVT. OF ANDHRA PRADESH (FAX NO. 040-23453700)
CHIEF SECRETARY, GOVT. OF KERALA (FAX NO.0471-2327176)

**Sub: Cyclonic storm "Nada" over southwest Bay of Bengal
Cyclone Alert for north Tamil Nadu & Puducherry coasts: Orange Message**

The cyclonic storm "Nada" over southwest Bay of Bengal moved west-northwestwards during past six hours with a speed of about 28 kmph and lay centred at 0230 hrs IST of today, the 1st December, 2016 near Latitude 10.4°N and Longitude 82.0°E over southwest Bay of Bengal, about 350 km south-southeast of Chennai, 290 km southeast of Puducherry and 210 km north-northeast of Trincomalee (Srilanka). The system is very likely to move west-northwestward and cross north Tamil Nadu coast between Vedaranniyam and Puducherry, south of Cuddalore by early hours of 2nd December. There is possibility of slight weakening of the system before landfall due to high vertical wind shear

Date/time(IST)	Position (lat. °N/ long. °E)	Maximum sustained surface wind speed (kmph)	Category of cyclonic Disturbance
01-12-2016/0230	10.4/82.0	70-80 GUSTING TO 90	CYCLONIC STORM
01-12-2016/0530	10.5/81.6	70-80 GUSTING TO 90	CYCLONIC STORM
01-12-2016/1130	10.7/81.2	70-80 GUSTING TO 90	CYCLONIC STORM
01-12-2016/1730	10.9/80.6	65-75 GUSTING TO 85	CYCLONIC STORM
01-12-2016/2330	11.1 /80.0	60-70 GUSTING TO 80	CYCLONIC STORM
02-12-2016/1130	11.2/78.8	40-50 GUSTING TO 60	DEPRESSION
02-12-2016/2330	11.3/77.4	20-30 GUSTING TO 40	LOW

Warning:

(xl) Heavy Rainfall Warning: Light to moderate rainfall at most places very likely over Tamil Nadu & Puducherry till 2nd December along with heavy to very heavy rainfall at a

Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
Rainfall amount (mm): Heavy rain: 64.5 – 124.4, Very heavy rain: 124.5 – 200.4, Extremely heavy rain: 200.5 or more.

few places over coastal Tamil Nadu & Puducherry and isolated heavy to very heavy rainfall over interior Tamil Nadu on 1st and 2nd December.

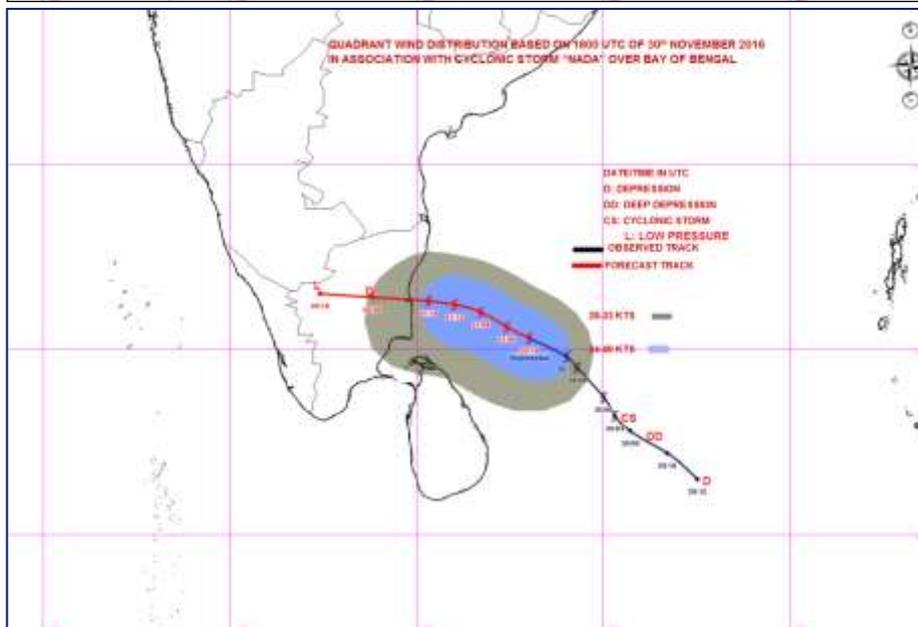
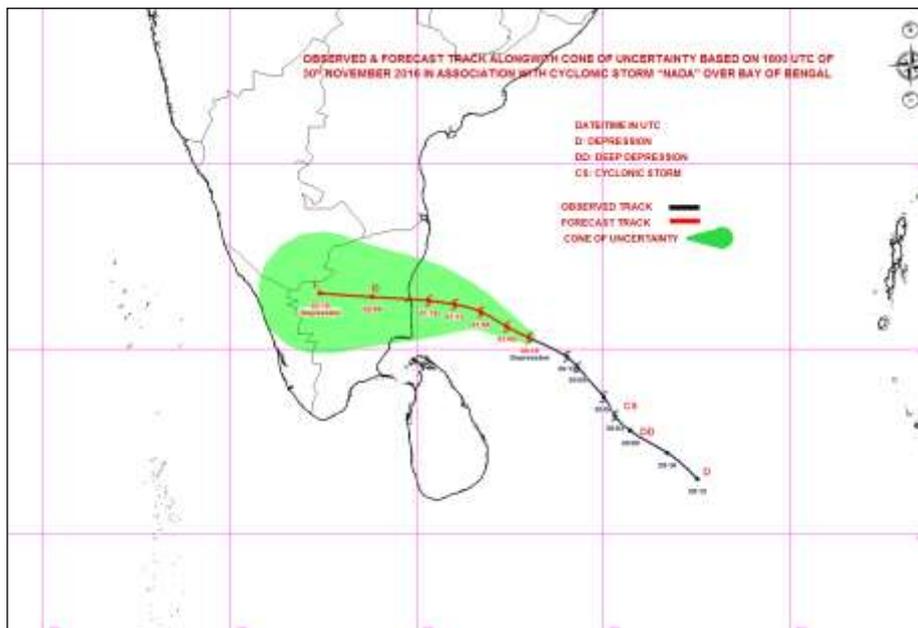
Light to moderate rainfall at many places with isolated heavy falls is very likely over Kerala on 2nd and 3rd December 2016.

- (xliv) **Wind warning:** Squally winds speed reaching 45-55 kmph gusting to 65 kmph would commence to prevail along & off Tamil Nadu and Puducherry coasts from 1st December morning.
- (xlv) **Sea condition:** Sea condition would be rough to very rough along & off Tamil Nadu and Puducherry coasts from 1st December onward.
- (xlvi) **Damage Expected:** Damage to thatched huts. Minor damage to power & 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.
- (xlvii) **Action Suggested:** Fishermen are advised not to venture into sea along and off Tamil Nadu and Puducherry coasts. Those at sea are advised to return to the coast.

Next bulletin will be issued at 0830 hrs IST of 1st December 2016.

(Shambu Ravindren)
Scientist-B
NWFC, New Delhi

Copy to: DFDD, Pune/ACWC Kolkata /ACWC Chennai/CWC Vishakhapatnam/CWC
Bhubaneswar/MC Hyderabad/Thiruvananthapuram



Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
Rainfall amount (mm): Heavy rain: 64.5 – 124.4, Very heavy rain: 124.5 – 200.4, Extremely heavy rain: 200.5 or more.



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

BULLETIN NO. : 11 (BOB 05/2016)

TIME OF ISSUE: 0830 HOURS IST

DATED: 01.12.2016

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.23793144)
PS TO HON'BLE MINISTER FOR S & T AND EARTH SCIENCES (FAX NO.23316745)
SECRETARY, MOES, (FAX NO. 24629777)
SECRETARY, DST (FAX NO. 26863847/-2418)
H.Q. (INTEGRATED DEFENCE STAFF AND CDS) (FAX NO. 23005137/23005147)
DIRECTOR GENERAL, DOORDARSHAN (23385843)
DIRECTOR GENERAL, AIR (25843825)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 26105912)
DIRECTOR OF PUNCTUALITY, INDIAN RAILWAYS (FAX NO. 23388503)
CHIEF SECRETARY, GOVT. OF TAMILNADU (FAX NO.044-25672304)
CHIEF SECRETARY, GOVT. OF PUDUCHERRY (FAX NO.0413-2337575)
CHIEF SECRETARY, GOVT. OF ANDHRA PRADESH (FAX NO. 040-23453700)
CHIEF SECRETARY, GOVT. OF KERALA (FAX NO.0471-2327176)

Sub: Cyclonic storm "Nada" over southwest Bay of Bengal

The cyclonic storm "Nada" over southwest Bay of Bengal moved west-northwestwards during past six hours with a speed of about 22 kmph and lay centred at 0530 hrs IST of today, the 1st December, 2016 near Latitude 10.4°N and Longitude 81.8°E over southwest Bay of Bengal, about 330 km south-southeast of Chennai, 270 km southeast of Puducherry and 210 km north-northeast of Trincomalee (Srilanka). The system is very likely to move west-northwestward, weaken gradually into a deep depression during next 12 hours and cross north Tamil Nadu coast between Vedaranniyam and Puducherry, south of Cuddalore by early hours of 2nd December.

Date/time(IST)	Position (lat. °N/ long. °E)	Maximum sustained surface wind speed (kmph)	Category of cyclonic Disturbance
01-12-2016/0530	10.4/81.8	70-80 GUSTING TO 90	CYCLONIC STORM
01-12-2016/1130	10.6/81.1	60-70 GUSTING TO 80	CYCLONIC STORM
01-12-2016/1730	10.8/80.4	55-65 GUSTING TO 75	DEEP DEPRESSION
01-12-2016/2330	11.0 /79.8	50-60 GUSTING TO 70	DEEP DEPRESSION
02-12-2016/0530	11.2/79.1	40-50 GUSTING TO 60	DEPRESSION
02-12-2016/1730	11.3/77.7	20-30 GUSTING TO 40	LOW

Warning:

(xlvi) Heavy Rainfall Warning: Light to moderate rainfall at most places with isolated heavy to very heavy rainfall is very likely over Tamil Nadu & Puducherry during next 48 hours.

Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
Rainfall amount (mm): Heavy rain: 64.5 – 124.4, Very heavy rain: 124.5 – 200.4, Extremely heavy rain: 200.5 or more.

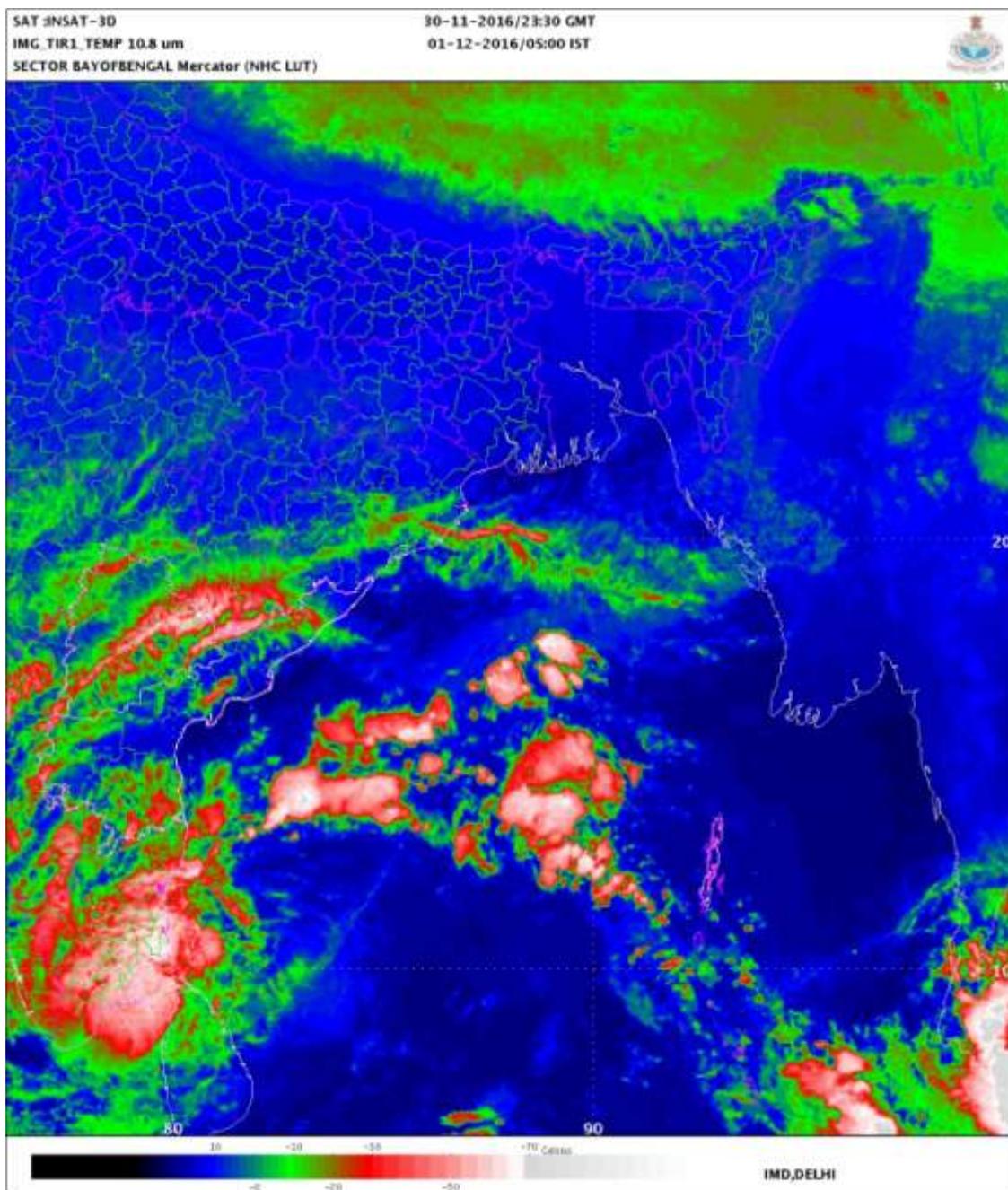
Light to moderate rainfall at many places with isolated heavy falls is very likely over Kerala on 2nd and 3rd December 2016.

- (xlix) **Wind warning:** Squally winds speed reaching 45-55 kmph gusting to 65 kmph would prevail along & off Tamil Nadu and Puducherry coasts during next 24 hours.
- (l) **Sea condition:** Sea condition would be rough to very rough along & off Tamil Nadu and Puducherry coasts during next 24 hours.
- (li) **Action Suggested:** Fishermen are advised not to venture into sea along and off Tamil Nadu and Puducherry coasts.

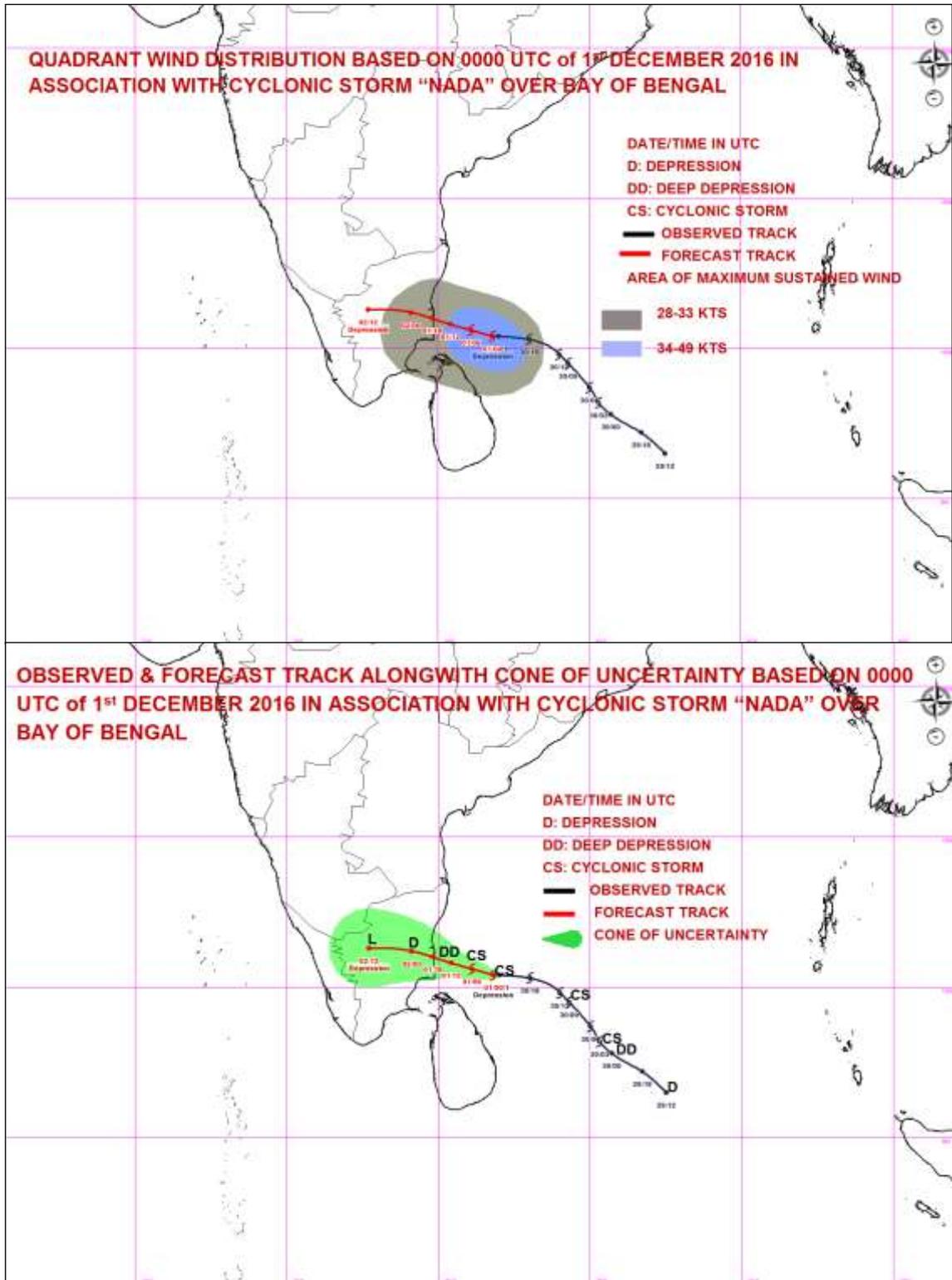
Next bulletin will be issued at 1130 hrs IST of 1st December 2016.

(Shambu Ravindren)
Scientist-B
NWFC, New Delhi

Copy to: DFDD, Pune/ACWC Kolkata /ACWC Chennai/CWC Vishakhapatnam/CWC
Bhubaneswar/MC Hyderabad/Thiruvananthapuram



Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
Rainfall amount (mm): Heavy rain: 64.5 – 124.4, Very heavy rain: 124.5 – 200.4, Extremely heavy rain: 200.5 or more.



Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
 Rainfall amount (mm): Heavy rain: 64.5 – 124.4, Very heavy rain: 124.5 – 200.4, Extremely heavy rain: 200.5 or more.



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

BULLETIN NO. : 12 (BOB 05/2016)

TIME OF ISSUE: 1130 HOURS IST

DATED: 01.12.2016

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.23793144)
PS TO HON'BLE MINISTER FOR S & T AND EARTH SCIENCES (FAX NO.23316745)
SECRETARY, MOES, (FAX NO. 24629777)
SECRETARY, DST (FAX NO. 26863847/-2418)
H.Q. (INTEGRATED DEFENCE STAFF AND CDS) (FAX NO. 23005137/23005147)
DIRECTOR GENERAL, DOORDARSHAN (23385843)
DIRECTOR GENERAL, AIR (25843825)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 26105912)
DIRECTOR OF PUNCTUALITY, INDIAN RAILWAYS (FAX NO. 23388503)
CHIEF SECRETARY, GOVT. OF TAMILNADU (FAX NO.044-25672304)
CHIEF SECRETARY, GOVT. OF PUDUCHERRY (FAX NO.0413-2337575)
CHIEF SECRETARY, GOVT. OF ANDHRA PRADESH (FAX NO. 040-23453700)
CHIEF SECRETARY, GOVT. OF KERALA (FAX NO.0471-2327176)

Sub: Cyclonic storm "Nada" over southwest Bay of Bengal

The cyclonic storm "Nada" over southwest Bay of Bengal moved westwards during past six hours with a speed of about 5 kmph and lay centred at 0830 hrs IST of today, the 1st December, 2016 near Latitude 10.4°N and Longitude 81.7°E over southwest Bay of Bengal, about 330 km south-southeast of Chennai, 270 km southeast of Puducherry and 210 km north-northeast of Trincomalee (Srilanka). The system is very likely to move west-northwestward, weaken gradually into a deep depression during next 12 hours and cross north Tamil Nadu coast between Vedaranniyam and Puducherry, south of Cuddalore by early hours of 2nd December.

Date/time(IST)	Position (lat. °N/ long. °E)	Maximum sustained surface wind speed (kmph)	Category of cyclonic Disturbance
01-12-2016/0830	10.4/81.7	65-75 GUSTING TO 85	CYCLONIC STORM
01-12-2016/1130	10.6/81.1	60-70 GUSTING TO 80	CYCLONIC STORM
01-12-2016/1730	10.8/80.4	55-65 GUSTING TO 75	DEEP DEPRESSION
01-12-2016/2330	11.0 /79.8	50-60 GUSTING TO 70	DEEP DEPRESSION
02-12-2016/0530	11.2/79.1	40-50 GUSTING TO 60	DEPRESSION
02-12-2016/1730	11.3/77.7	20-30 GUSTING TO 40	LOW

Warning:

- (iii) **Heavy Rainfall Warning:** Light to moderate rainfall at most places with isolated heavy to very heavy rainfall is very likely during next 24 hours and rainfall at many places with isolated heavy falls during subsequent 24 hours over Tamil Nadu & Puducherry.

Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
Rainfall amount (mm): Heavy rain: 64.5 – 124.4, Very heavy rain: 124.5 – 200.4, Extremely heavy rain: 200.5 or more.

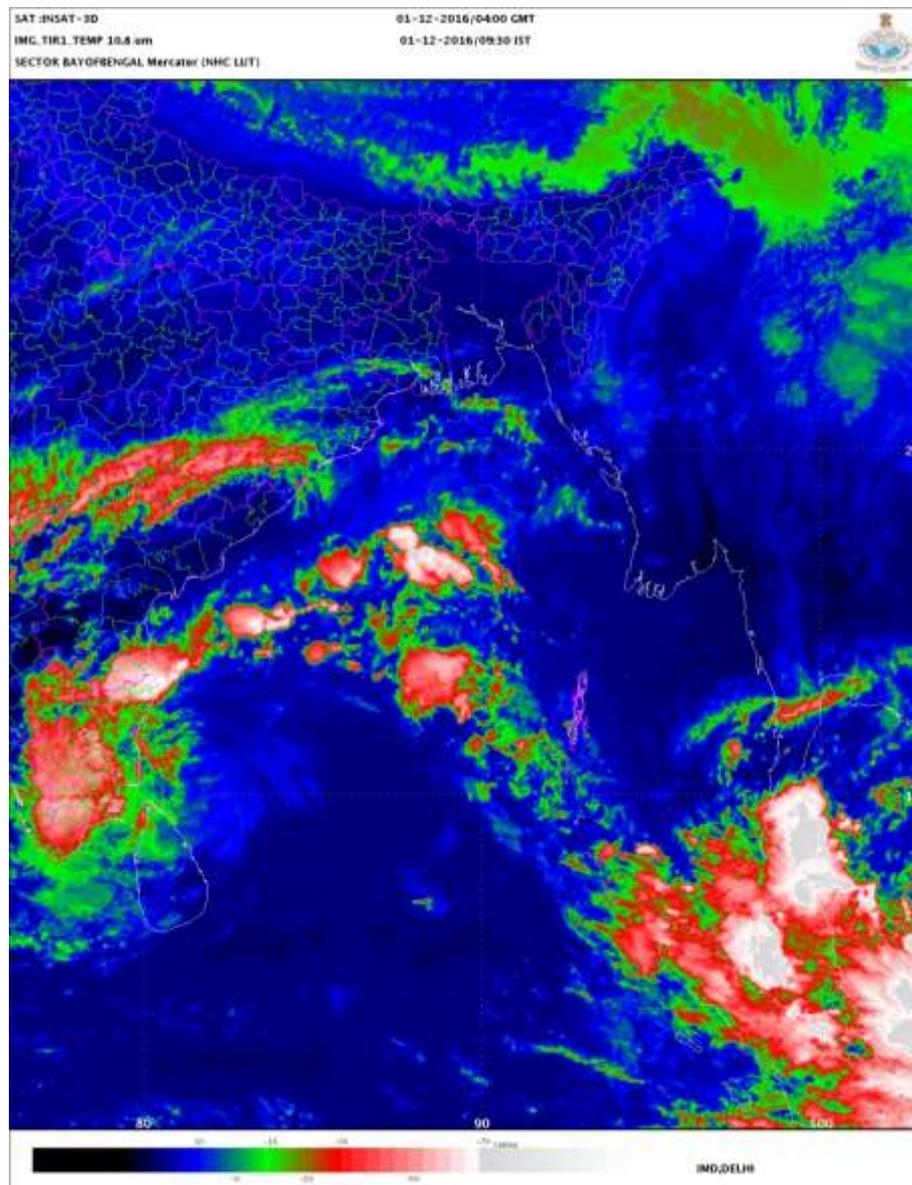
Light to moderate rainfall at many places with isolated heavy falls is very likely over Kerala on 2nd and 3rd December 2016.

- (liii) **Wind warning:** Squally winds speed reaching 45-55 kmph gusting to 65 kmph would prevail along & off Tamil Nadu and Puducherry coasts during next 24 hours.
- (liv) **Sea condition:** Sea condition would be rough to very rough along & off Tamil Nadu and Puducherry coasts during next 24 hours.
- (lv) **Action Suggested:** Fishermen are advised not to venture into sea along & off Tamil Nadu and Puducherry coasts during next 24 hours.

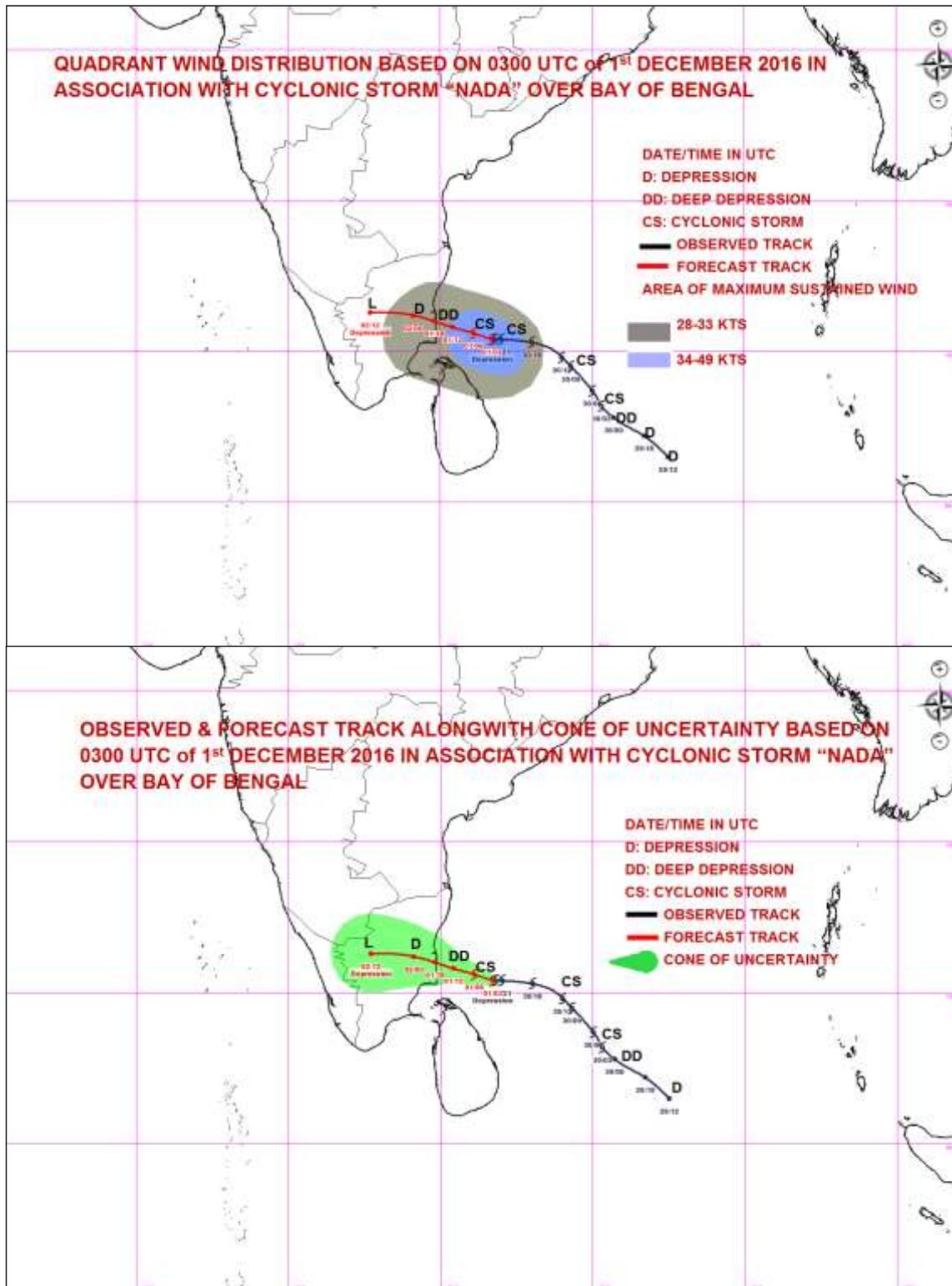
Next bulletin will be issued at 1430 hrs IST of 1st December 2016.

(Naresh Kumar)
Scientist-D
NWFC, New Delhi

Copy to: DFDD, Pune/ACWC Kolkata /ACWC Chennai/CWC Vishakhapatnam/CWC
Bhubaneswar/MC Hyderabad/Thiruvananthapuram



Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
Rainfall amount (mm): Heavy rain: 64.5 – 124.4, Very heavy rain: 124.5 – 200.4, Extremely heavy rain: 200.5 or more.



Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
 Rainfall amount (mm): Heavy rain: 64.5 – 124.4, Very heavy rain: 124.5 – 200.4, Extremely heavy rain: 200.5 or more.



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

BULLETIN NO. : 13 (BOB 05/2016)

TIME OF ISSUE: 1430 HOURS IST

DATED: 01.12.2016

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.23793144)
PS TO HON'BLE MINISTER FOR S & T AND EARTH SCIENCES (FAX NO.23316745)
SECRETARY, MOES, (FAX NO. 24629777)
SECRETARY, DST (FAX NO. 26863847/-2418)
H.Q. (INTEGRATED DEFENCE STAFF AND CDS) (FAX NO. 23005137/23005147)
DIRECTOR GENERAL, DOORDARSHAN (23385843)
DIRECTOR GENERAL, AIR (25843825)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 26105912)
DIRECTOR OF PUNCTUALITY, INDIAN RAILWAYS (FAX NO. 23388503)
CHIEF SECRETARY, GOVT. OF TAMILNADU (FAX NO.044-25672304)
CHIEF SECRETARY, GOVT. OF PUDUCHERRY (FAX NO.0413-2337575)
CHIEF SECRETARY, GOVT. OF ANDHRA PRADESH (FAX NO. 040-23453700)
CHIEF SECRETARY, GOVT. OF KERALA (FAX NO.0471-2327176)

Sub: Cyclonic storm "Nada" weakened into deep depression over southwest Bay of Bengal

The cyclonic storm "Nada" over southwest Bay of Bengal moved west-northwestwards during past six hours with a speed of about 12 kmph, weakened into a deep depression and lay centred at 1130 hrs IST of today, the 1st December, 2016 near Latitude 10.6°N and Longitude 81.2°E over southwest Bay of Bengal, about 290 km south-southeast of Chennai, 210 km southeast of Puducherry and 220 km north of Trincomalee (Srilanka). The system is very likely to continue to move west-northwestward, weaken further gradually into a depression during next 24 hours and cross north Tamil Nadu coast between Vedaranniyam and Puducherry, south of Cuddalore by early hours of 2nd December.

Date/time(IST)	Position (lat. °N/ long. °E)	Maximum sustained surface wind speed (kmph)	Category of cyclonic Disturbance
01-12-2016/1130	10.6/81.2	55-65 GUSTING TO 75	DEEP DEPRESSION
01-12-2016/1730	10.8/80.4	55-65 GUSTING TO 75	DEEP DEPRESSION
01-12-2016/2330	11.0 /79.8	50-60 GUSTING TO 70	DEEP DEPRESSION
02-12-2016/0530	11.2/79.1	40-50 GUSTING TO 60	DEPRESSION
02-12-2016/1130	11.3/78.3	20-30 GUSTING TO 40	LOW

Warning:

(Ivi) Heavy Rainfall Warning: Light to moderate rainfall at most places with isolated heavy to very heavy rainfall is very likely during next 24 hours and rainfall at many places with isolated heavy falls during subsequent 24 hours over Tamil Nadu & Puducherry. Light to moderate rainfall at many places with isolated heavy falls is very likely over Kerala on 2nd and 3rd December 2016.

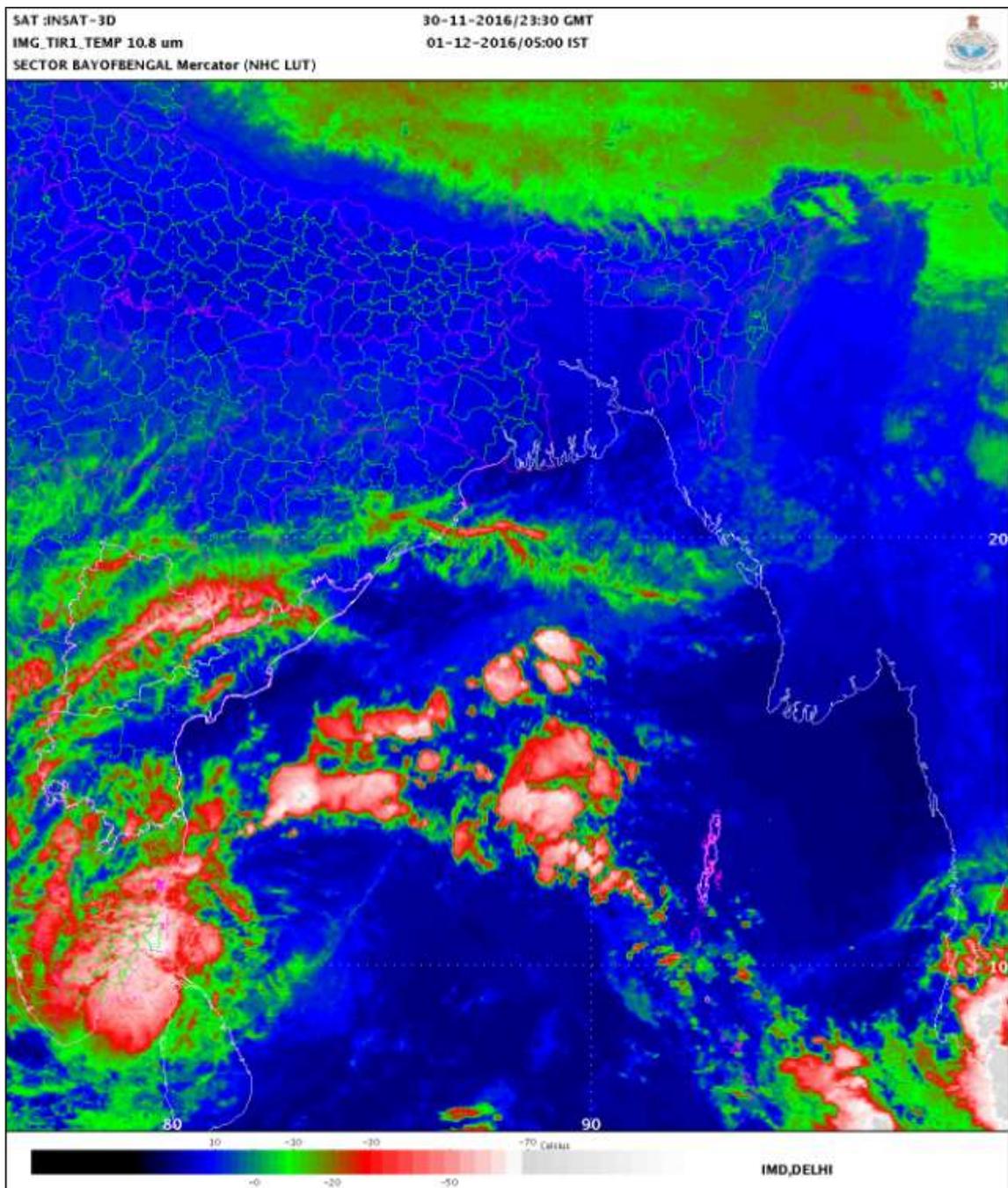
Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
Rainfall amount (mm): Heavy rain: 64.5 – 124.4, Very heavy rain: 124.5 – 200.4, Extremely heavy rain: 200.5 or more.

- (lvii) **Wind warning:** Squally winds speed reaching 45-55 kmph gusting to 65 kmph would prevail along & off Tamil Nadu and Puducherry coasts during next 24 hours.
- (lviii) **Sea condition:** Sea condition would be rough to very rough along & off Tamil Nadu and Puducherry coasts during next 24 hours.
- (lix) **Action Suggested:** Fishermen are advised not to venture into sea along & off Tamil Nadu and Puducherry coasts during next 24 hours.

Next bulletin will be issued at 2030 hrs IST of 1st December 2016.

(Naresh Kumar)
Scientist-D
NWFC, New Delhi

Copy to: DFDD, Pune/ACWC Kolkata /ACWC Chennai/CWC Vishakhapatnam/CWC
Bhubaneswar/MC Hyderabad/Thiruvananthapuram



Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
Rainfall amount (mm): Heavy rain: 64.5 – 124.4, Very heavy rain: 124.5 – 200.4, Extremely heavy rain: 200.5 or more.



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

BULLETIN NO. : 14

(BOB 05/2016)

TIME OF ISSUE: 2030 HOURS IST

DATED: 01.12.2016

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.23793144)
PS TO HON'BLE MINISTER FOR S & T AND EARTH SCIENCES (FAX NO.23316745)
SECRETARY, MOES, (FAX NO. 24629777)
SECRETARY, DST (FAX NO. 26863847/-2418)
H.Q. (INTEGRATED DEFENCE STAFF AND CDS) (FAX NO. 23005137/23005147)
DIRECTOR GENERAL, DOORDARSHAN (23385843)
DIRECTOR GENERAL, AIR (25843825)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 26105912)
DIRECTOR OF PUNCTUALITY, INDIAN RAILWAYS (FAX NO. 23388503)
CHIEF SECRETARY, GOVT. OF TAMILNADU (FAX NO.044-25672304)
CHIEF SECRETARY, GOVT. OF PUDUCHERRY (FAX NO.0413-2337575)
CHIEF SECRETARY, GOVT. OF ANDHRA PRADESH (FAX NO. 040-23453700)
CHIEF SECRETARY, GOVT. OF KERALA (FAX NO.0471-2327176)**

Sub: Deep depression over southwest Bay of Bengal

The Deep Depression over southwest Bay of Bengal moved west-northwestwards during past six hours with a speed of about 10 kmph and lay centred at 1730 hrs IST of today, the 1st December, 2016 over southwest Bay of Bengal near Latitude 10.7°N and Longitude 80.7°E, about 90 km east-southeast of Karaikal and 150 km southeast of Cuddalore. The system is very likely to continue to move west-northwestward and cross north Tamil Nadu coast to the south of Cuddalore, close to Karaikal by early hours of 2nd December. It is very likely to weaken further into a depression during next 12 hours.

Date/time(IST)	Position (lat. °N/ long. °E)	Maximum sustained surface wind speed (kmph)	Category of cyclonic Disturbance
01-12-2016/1730	10.7/80.7	55-65 GUSTING TO 75	DEEP DEPRESSION
01-12-2016/2330	10.9 /80.0	50-60 GUSTING TO 70	DEEP DEPRESSION
02-12-2016/0530	11.1/79.3	40-50 GUSTING TO 60	DEPRESSION
02-12-2016/1130	11.2/78.6	20-30 GUSTING TO 40	LOW

Warning:

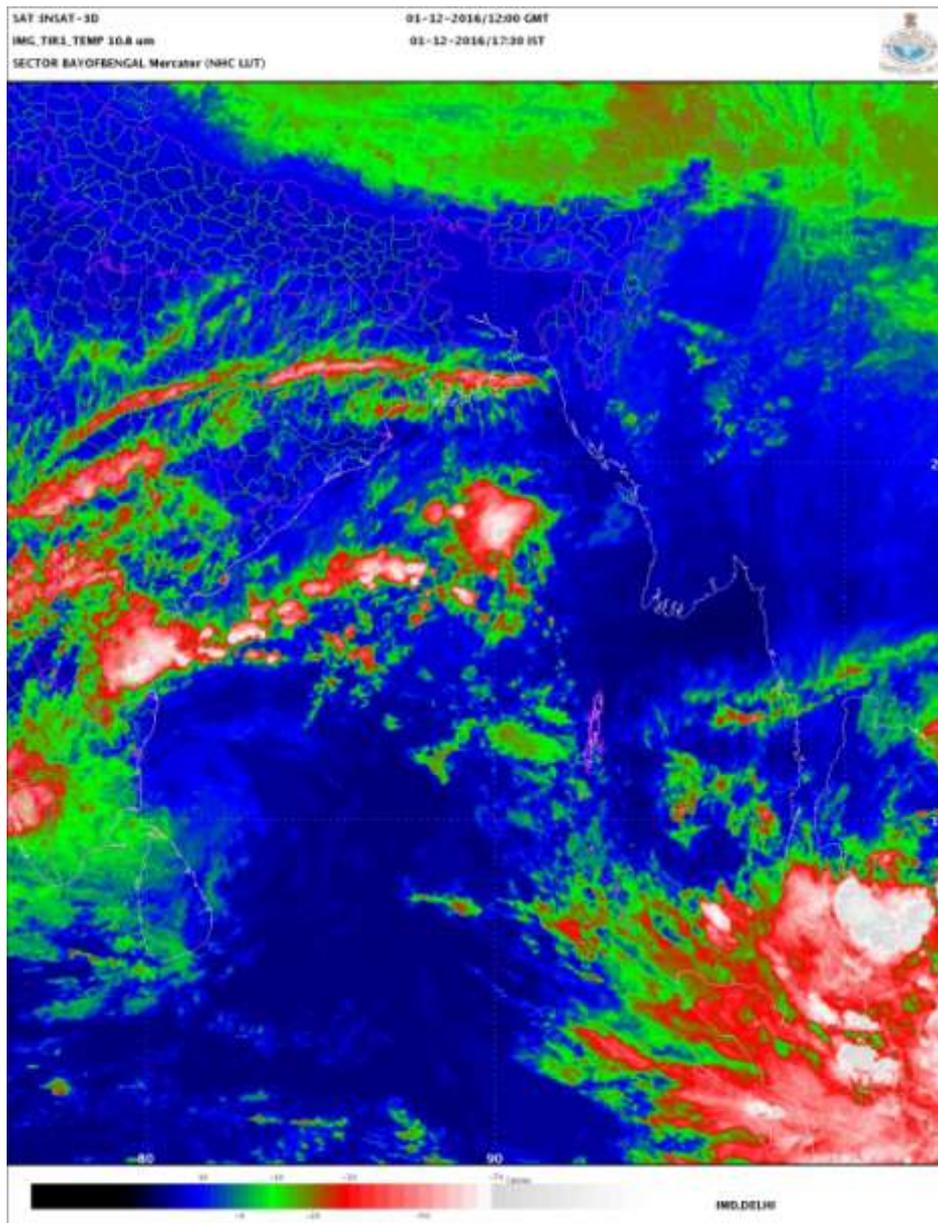
- (Ix) Heavy Rainfall Warning:** Light to moderate rainfall at many places with isolated heavy rainfall is very likely over Tamil Nadu, Puducherry and Kerala during next 24 hours.
- (Ixi) Wind warning:** Squally winds speed reaching 45-55 kmph gusting to 65 kmph would prevail along & off Tamil Nadu and Puducherry coasts during next 24 hours.
- (Ixii) Sea condition:** Sea condition would be rough to very rough along & off Tamil Nadu and Puducherry coasts during next 24 hours.
- (Ixiii) Action Suggested:** Fishermen are advised not to venture into sea along & off Tamil Nadu and Puducherry coasts during next 24 hours.

Next bulletin will be issued at 0230 hrs IST of 2nd December 2016.

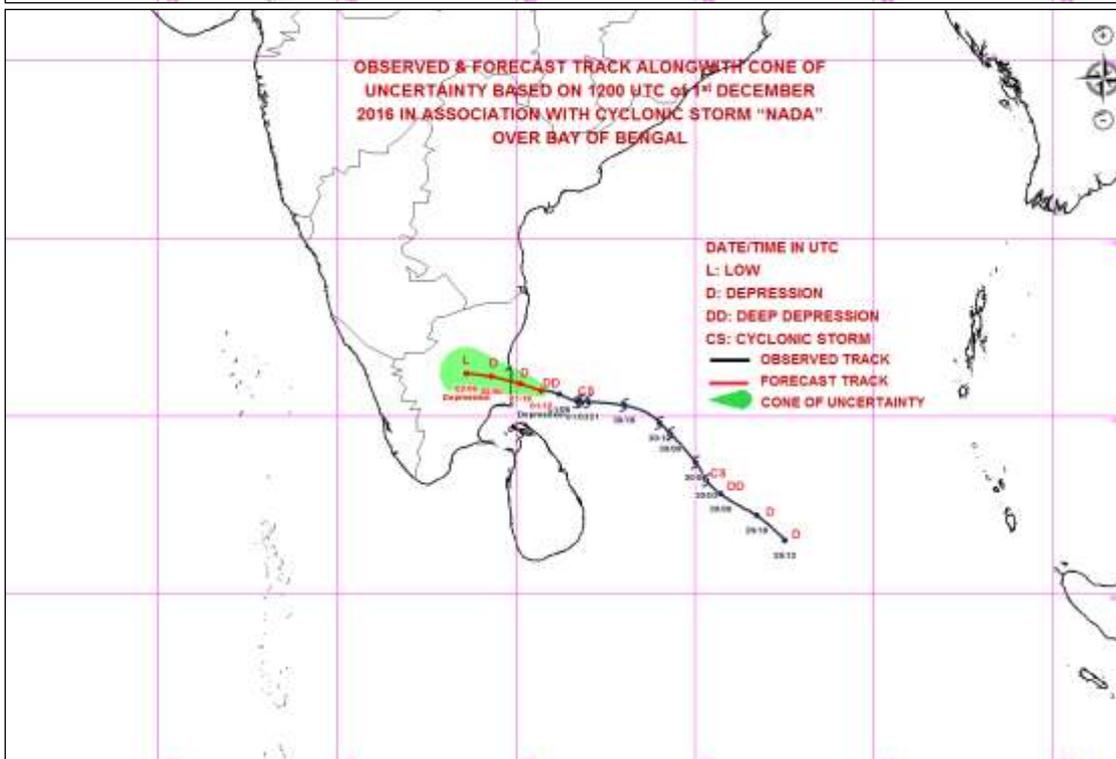
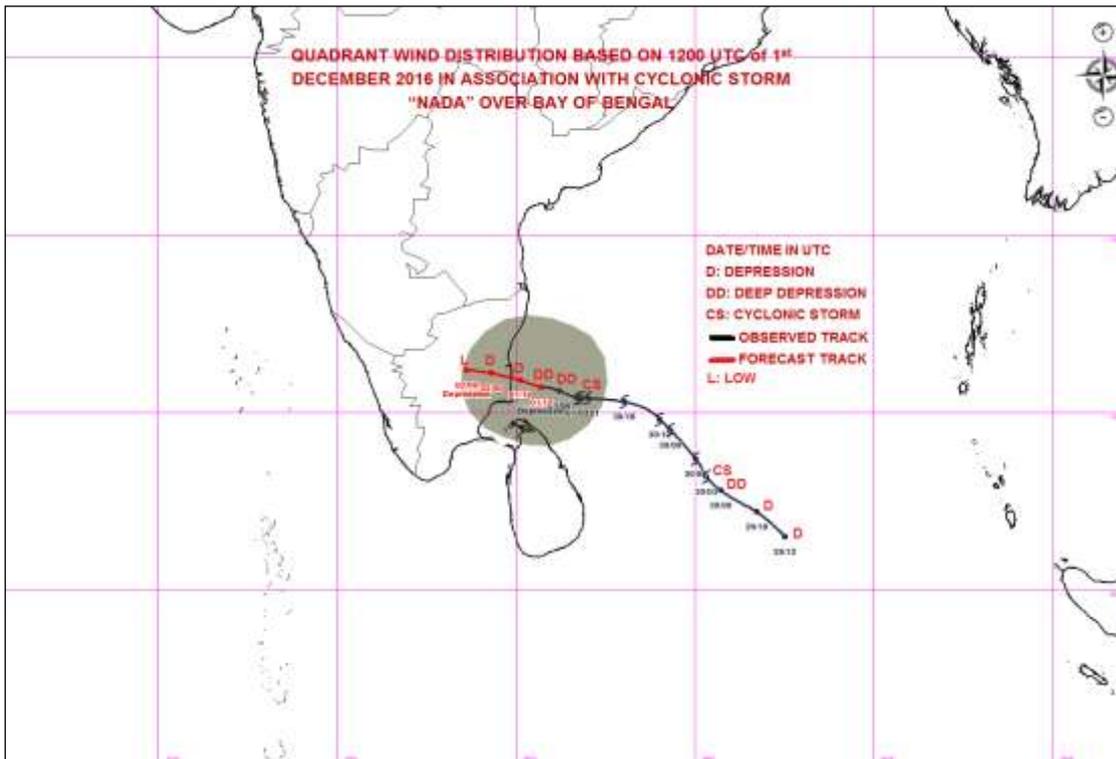
**(D. R. Pattanaik)
Scientist-E, IMD, New Delhi**

Copy to: DFDD, Pune/ACWC Kolkata /ACWC Chennai/CWC Vishakhapatnam/CWC Bhubaneswar/MC
Hyderabad/Thiruvananthapuram

Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
Rainfall amount (mm): Heavy rain: 64.5 – 124.4, Very heavy rain: 124.5 – 200.4, Extremely heavy rain: 200.5 or more.



Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
Rainfall amount (mm): Heavy rain: 64.5 – 124.4, Very heavy rain: 124.5 – 200.4, Extremely heavy rain: 200.5 or more.



Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
Rainfall amount (mm): Heavy rain: 64.5 – 124.4, Very heavy rain: 124.5 – 200.4, Extremely heavy rain: 200.5 or more.



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

BULLETIN NO. : 15

(BOB 05/2016)

TIME OF ISSUE: 0230 HOURS IST

DATED: 02.12.2016

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.23793144)
PS TO HON'BLE MINISTER FOR S & T AND EARTH SCIENCES (FAX NO.23316745)
SECRETARY, MOES, (FAX NO. 24629777)
SECRETARY, DST (FAX NO. 26863847/-2418)
H.Q. (INTEGRATED DEFENCE STAFF AND CDS) (FAX NO. 23005137/23005147)
DIRECTOR GENERAL, DOORDARSHAN (23385843)
DIRECTOR GENERAL, AIR (25843825)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 26105912)
DIRECTOR OF PUNCTUALITY, INDIAN RAILWAYS (FAX NO. 23388503)
CHIEF SECRETARY, GOVT. OF TAMILNADU (FAX NO.044-25672304)
CHIEF SECRETARY, GOVT. OF PUDUCHERRY (FAX NO.0413-2337575)
CHIEF SECRETARY, GOVT. OF ANDHRA PRADESH (FAX NO. 040-23453700)
CHIEF SECRETARY, GOVT. OF KERALA (FAX NO.0471-2327176)**

Sub: Deep depression over southwest Bay of Bengal weakened into a Depression

The Deep Depression over southwest Bay of Bengal moved west-northwestwards during past six hours with a speed of about 10 kmph, weakened into a depression and lay centred at 2330 hrs IST of the 1st December, 2016 over southwest Bay of Bengal near Latitude 10.8°N and Longitude 80.2°E, about 40 km east-southeast of Karaikal. The system is very likely to continue to move west-northwestward and cross north Tamil Nadu coast, close to south of Karaikal within a few hours.

Warning:

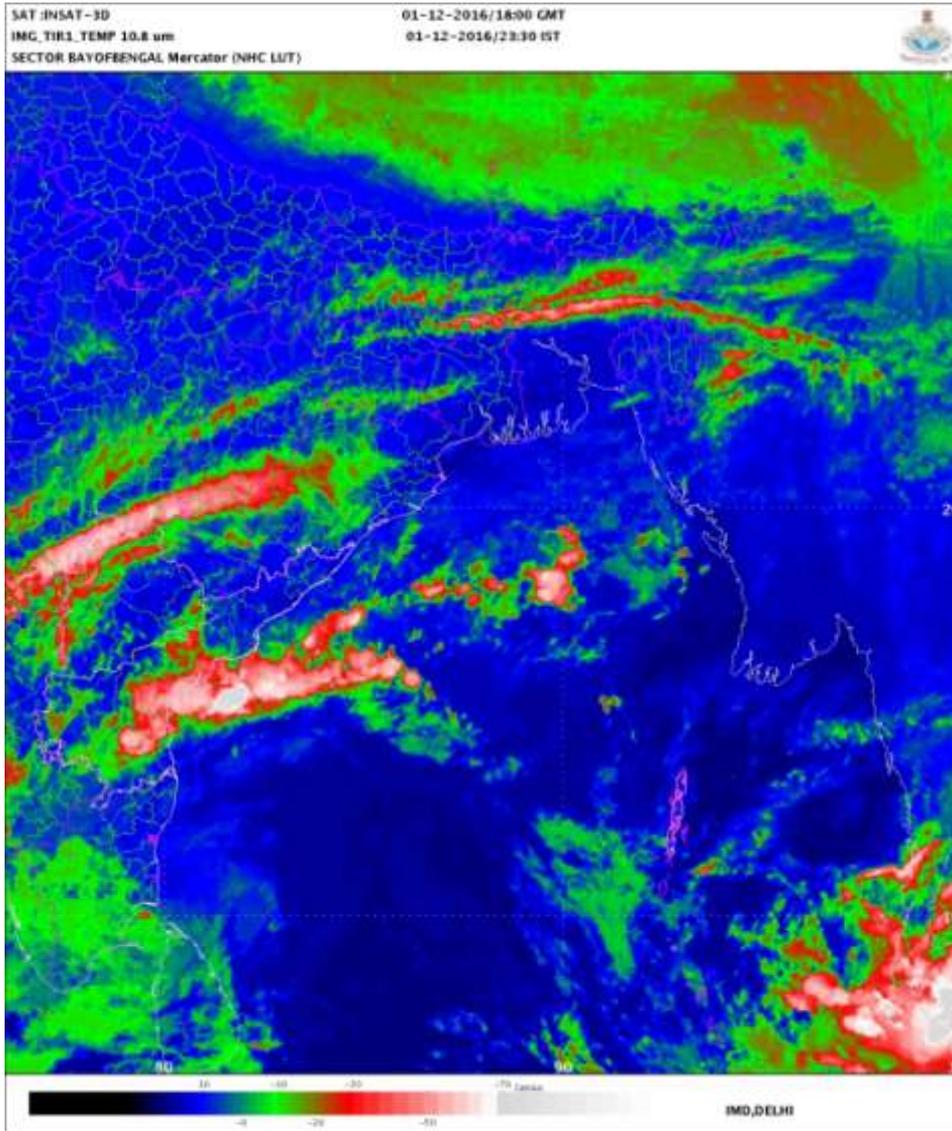
- (Ixiv) Heavy Rainfall Warning:** Light to moderate rainfall at many places with isolated heavy rainfall is very likely over Tamil Nadu, Puducherry and Kerala during next 24 hours.
- (Ixv) Wind warning:** Squally winds speed reaching 40-50 kmph gusting to 60 kmph would prevail along & off Tamil Nadu and Puducherry coasts during next 12 hours.
- (Ixvi) Sea condition:** Sea condition would be rough to very rough along & off Tamil Nadu and Puducherry coasts during next 12 hours.
- (Ixvii) Action Suggested:** Fishermen are advised not to venture into sea along & off Tamil Nadu and Puducherry coasts during next 12 hours.

Next bulletin will be issued at 0830 hrs IST of 2nd December 2016.

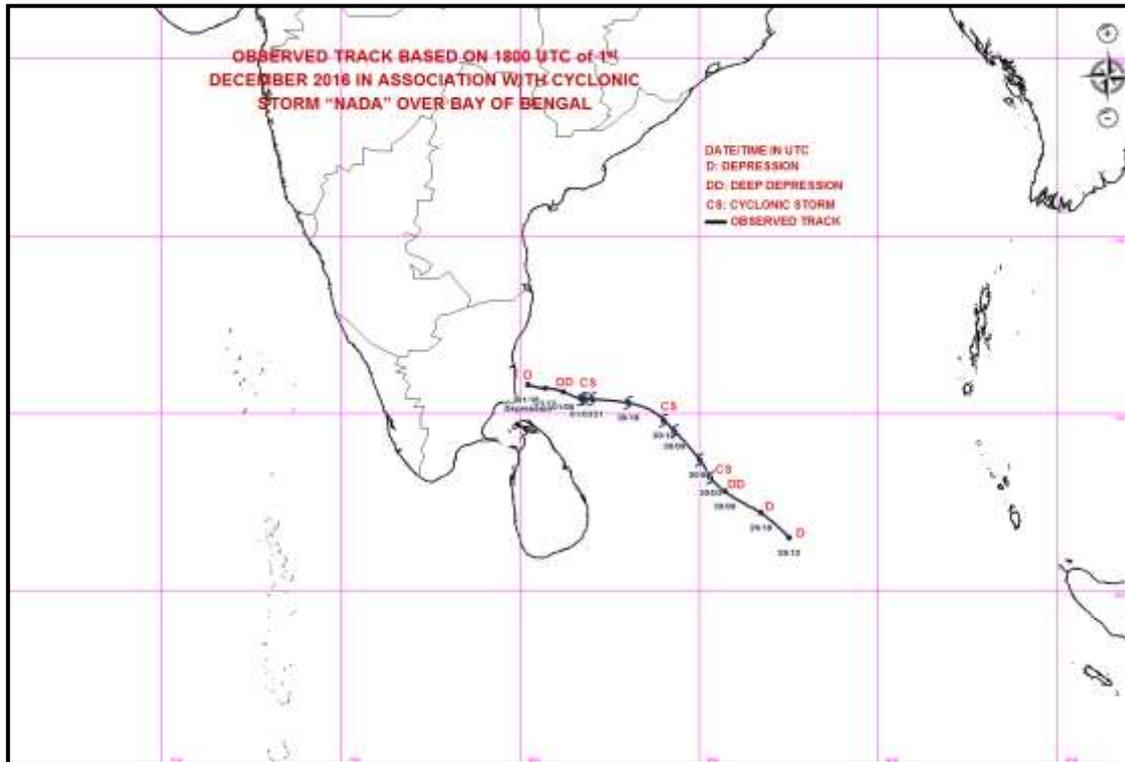
**(D. R. Pattanaik)
Scientist-E, IMD, New Delhi**

Copy to: DFDD, Pune/ACWC Kolkata /ACWC Chennai/CWC Vishakhapatnam/CWC Bhubaneswar/MC Hyderabad/Thiruvananthapuram

Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
Rainfall amount (mm): Heavy rain: 64.5 – 124.4, Very heavy rain: 124.5 – 200.4, Extremely heavy rain: 200.5 or more.



Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
Rainfall amount (mm): Heavy rain: 64.5 – 124.4, Very heavy rain: 124.5 – 200.4, Extremely heavy rain: 200.5 or more.



Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
Rainfall amount (mm): Heavy rain: 64.5 – 124.4, Very heavy rain: 124.5 – 200.4, Extremely heavy rain: 200.5 or more.



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

BULLETIN NO. : 16

(BOB 05/2016)

TIME OF ISSUE: 0700 HOURS IST

DATED: 02.12.2016

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.23793144)
PS TO HON'BLE MINISTER FOR S & T AND EARTH SCIENCES (FAX NO.23316745)
SECRETARY, MOES, (FAX NO. 24629777)
SECRETARY, DST (FAX NO. 26863847/-2418)
H.Q. (INTEGRATED DEFENCE STAFF AND CDS) (FAX NO. 23005137/23005147)
DIRECTOR GENERAL, DOORDARSHAN (23385843)
DIRECTOR GENERAL, AIR (25843825)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 26105912)
DIRECTOR OF PUNCTUALITY, INDIAN RAILWAYS (FAX NO. 23388503)
CHIEF SECRETARY, GOVT. OF TAMILNADU (FAX NO.044-25672304)
CHIEF SECRETARY, GOVT. OF PUDUCHERRY (FAX NO.0413-2337575)
CHIEF SECRETARY, GOVT. OF ANDHRA PRADESH (FAX NO. 040-23453700)
CHIEF SECRETARY, GOVT. OF KERALA (FAX NO.0471-2327176)**

Sub: Depression over southwest Bay of Bengal crossed Tamil Nadu coast

The Depression over southwest Bay of Bengal moved westwards during past six hours with a speed of about 10 kmph, crossed north Tamil Nadu coast near Nagapattinam (about 20 km south of Karaikal) between 0400 and 0500 IST and lay centred at 0530 hrs IST of the 2nd December, 2016 over north Tamil Nadu near Latitude 10.8°N and Longitude 79.7°E, about 15 km west of Nagapattinam and 20 km southwest of Karaikal. It is very likely to move nearly westward and weaken into a well marked low pressure area during next 12 hours.

Warning:

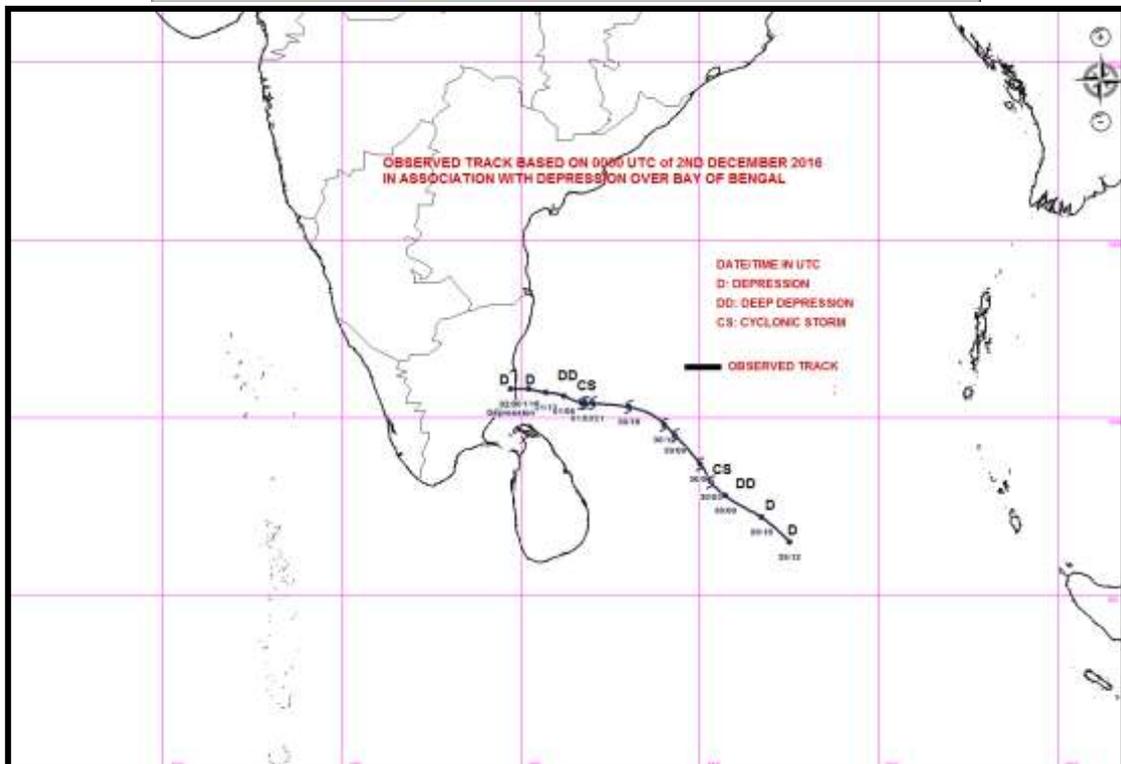
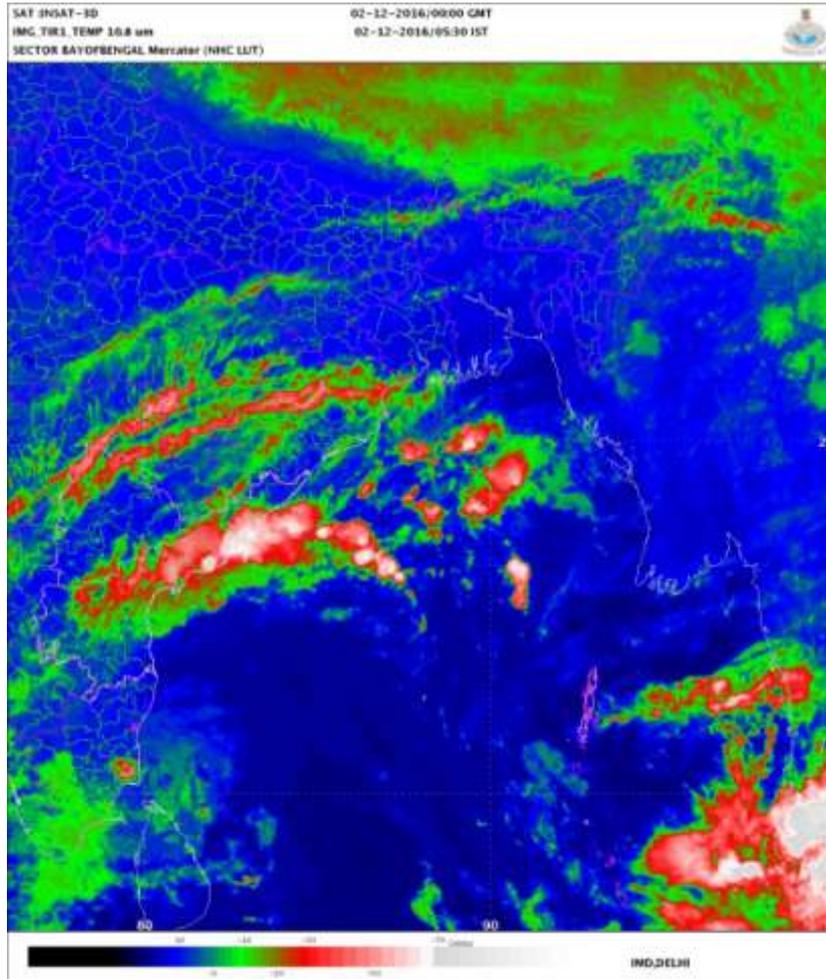
- (I xviii) Heavy Rainfall Warning:** Light to moderate rainfall at many places with isolated heavy rainfall is very likely over interior Tamil Nadu, and Kerala during next 24 hours. Light to moderate rainfall at many places is also likely over coastal Tamil Nadu and Puducherry during next 12 hours.
- (I xix) Wind warning:** Squally winds speed reaching 40-50 kmph gusting to 60 kmph would prevail along & off Tamil Nadu and Puducherry coasts during next 12 hours.
- (I xx) Sea condition:** Sea condition would be rough to very rough along & off Tamil Nadu and Puducherry coasts during next 12 hours.
- (I xxi) Action Suggested:** Fishermen are advised not to venture into sea along & off Tamil Nadu and Puducherry coasts during next 12 hours.

Next bulletin will be issued at 1130 hrs IST of 2nd December 2016.

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

Copy to: DFDD, Pune/ACWC Kolkata /ACWC Chennai/CWC Vishakhapatnam/CWC Bhubaneswar/MC Hyderabad/Thiruvananthapuram

Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
Rainfall amount (mm): Heavy rain: 64.5 – 124.4, Very heavy rain: 124.5 – 200.4, Extremely heavy rain: 200.5 or more.



Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
 Rainfall amount (mm): Heavy rain: 64.5 – 124.4, Very heavy rain: 124.5 – 200.4, Extremely heavy rain: 200.5 or more.



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

BULLETIN NO. : 17 (BOB 05/2016)

TIME OF ISSUE: 1130 HOURS IST

DATED: 02.12.2016

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.23793144)
PS TO HON'BLE MINISTER FOR S & T AND EARTH SCIENCES (FAX NO.23316745)
SECRETARY, MOES, (FAX NO. 24629777)
SECRETARY, DST (FAX NO. 26863847/-2418)
H.Q. (INTEGRATED DEFENCE STAFF AND CDS) (FAX NO. 23005137/23005147)
DIRECTOR GENERAL, DOORDARSHAN (23385843)
DIRECTOR GENERAL, AIR (25843825)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 26105912)
DIRECTOR OF PUNCTUALITY, INDIAN RAILWAYS (FAX NO. 23388503)
CHIEF SECRETARY, GOVT. OF TAMILNADU (FAX NO.044-25672304)
CHIEF SECRETARY, GOVT. OF PUDUCHERRY (FAX NO.0413-2337575)
CHIEF SECRETARY, GOVT. OF ANDHRA PRADESH (FAX NO. 040-23453700)
CHIEF SECRETARY, GOVT. OF KERALA (FAX NO.0471-2327176)

Sub: Depression over north Tamil Nadu weakened into a well marked low pressure area

The Depression over north Tamil Nadu moved westwards, weakened into a well marked low pressure area and lay over Interior Tamilnadu & neighbourhood at 0830 hrs IST of the 2nd December, 2016.

Warning:

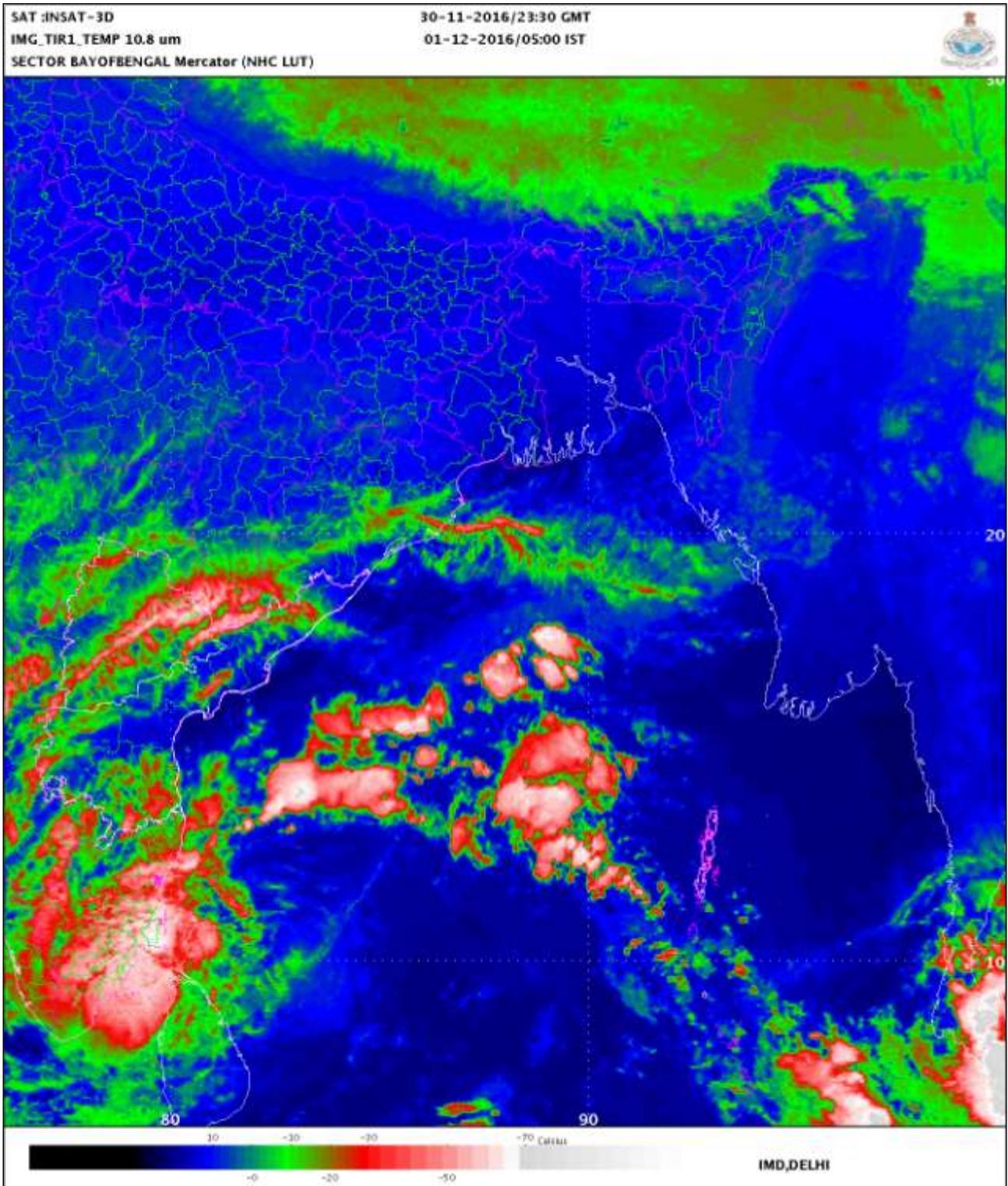
Heavy Rainfall Warning: Light to moderate rainfall at many places with isolated heavy rainfall is very likely over interior Tamil Nadu during next 24 hours and over Kerala during next 48 hours.

This is the last bulletin of this system. However, regular bulletins will be issued from National Weather Forecasting Centre New Delhi, Regional Meteorological Centre Chennai.

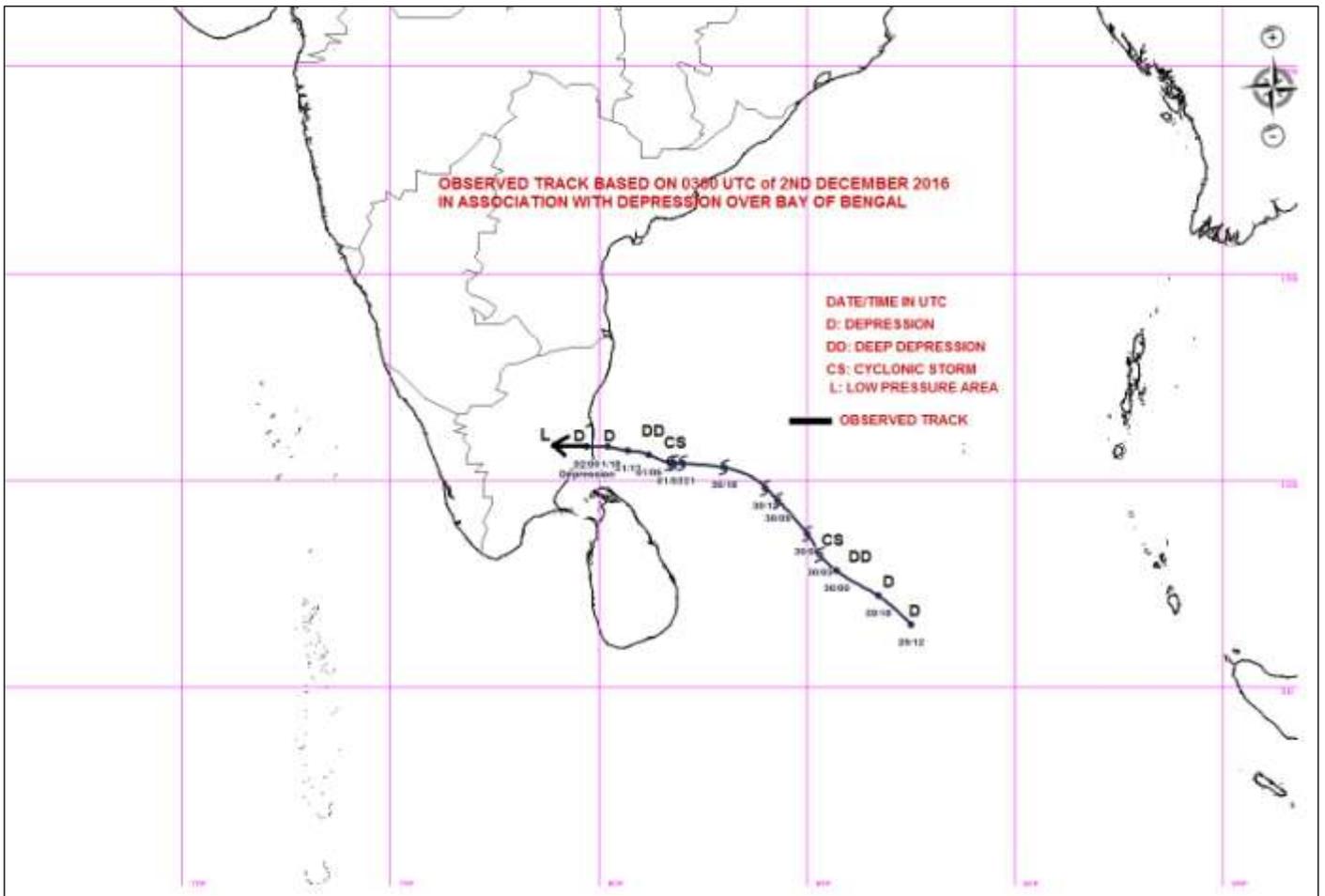
(Naresh Kumar)
Scientist-D
RSMC, New Delhi

Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
Rainfall amount (mm): Heavy rain: 64.5 – 124.4, Very heavy rain: 124.5 – 200.4, Extremely heavy rain: 200.5 or more.

Copy to: DFDD, Pune/ACWC Kolkata /ACWC Chennai/CWC Vishakhapatnam/CWC Bhubaneswar/MC Hyderabad/Thiruvananthapuram



Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
Rainfall amount (mm): Heavy rain: 64.5 – 124.4, Very heavy rain: 124.5 – 200.4, Extremely heavy rain: 200.5 or more.



Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
Rainfall amount (mm): Heavy rain: 64.5 – 124.4, Very heavy rain: 124.5 – 200.4, Extremely heavy rain: 200.5 or more.