



## REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI

### SPECIAL TROPICAL WEATHER OUTLOOK

DEMS-RSMC SPECIAL TROPICAL CYCLONES NEW DELHI DATED 28-10-2015

TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 72 HOURS ISSUED AT 0300 UTC of  $5^{\rm TH}$  NOVEMBER 2015 BASED ON 0000 UTC of  $5^{\rm TH}$  NOVEMBER 2015

YESTERDAYS LOW PRESSURE AREA OVER EAST CENTRAL ARABIAN SEA CONCENTRATED INTO A DEPRESSION AND LAY CENTRED AT 0000 UTC OF TODAY THE  $5^{\rm TH}$  NOVEMBER 2015 OVER EAST CENTRAL ARABIAN SEA NEAR LATITUDE 14.1° N AND LONGITUDE  $66.0^{\rm O}$  E, ABOUT 920 KM SOUTHWEST OF MUMBAI (43003) AND 1310 KM EAST-SOUTHEAST OF SALALAH (41316), OMAN. IT WOULD MOVE WEST-NORTHWESTWARDS AND INTENSIFY INTO A DEEP DEPRESSION DURING NEXT 24 HRS.

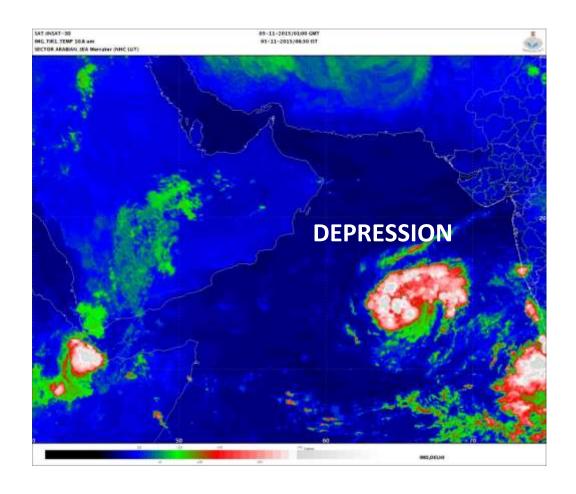
ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 1.5. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 25 KNOTS GUSTING TO 35 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 1006 HPA. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION OVER ARABIAN SEA LIE BETWEEN LATITUDE 12.0 DEGREE NORTH TO 17.5 DEGREE NORTH AND LONGITUDE 63.0 DEGREE EAST TO 69.5 DEGREE EAST. MINIMUM CTT IS-81 OCC

REMARKS: THE ASSOCIATED CONVECTION HAS INCREASED IN PAST 12 HOURS WITH INCREASE IN ORGANISATION AND DEPTH. THE WINDS ARE HIGHER OVER THE NORTHEASTERN SECTOR. THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS 29°C. THE OCEAN THERMAL ENERGY IS ABOUT 60-80 KJ/CM2 AROUND SYSTEM CENTRE AND IS LESS THAN 50 KJ/CM2 OVER NORTHERN PARTS OF WESTCENTRAL ARABIAN SEA ADJACENT TO OMAN AND YEMEN COAST. THE VERTICAL WIND SHEAR IS ABOUT 5-10 KNOTS (LOW) AROUND THE SYSTEM CENTRE. THE LOW LEVEL RELATIVE VORTICITY AND CONVERGENCE HAVE INCREASED DURING PAST 12 HRS. THERE IS FAVOURABLE POLEWARD AND WESTWARD OUTFLOW IN ASSOCIATION WITH THE ANTI-CYCLONIC CIRCULATION LYING TO THE NORTHEAST OF THE SYSTEM CENTRE. THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 16°N. MOST OF THE NUMERICAL WEATHER PREDICTION MODELS ARE SUGGESTING GRADUAL INTENSIFICATION OF THE SYSTEM LEADING TO FORMATION OF DEEP DEPRESSION DURING NEXT 24 HOURS. DYNAMICAL STATISTICAL MODELS ALSO SUGGEST THE GRADUAL INTENSIFICATION OF THE SYSTEM. CONSIDERING THE MOVEMENT, MOST OF THE MODELS ARE UNANIMOUS ABOUT NORTHWESTWARD/ WEST-NORTHWESTWARD MOVEMENT.

> M. MOHAPATRA HEAD, RSMC, NEW DELHI

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%



PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)
NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%





# REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI

### SPECIAL TROPICAL WEATHER OUTLOOK

### DEMS-RSMC SPECIAL TROPICAL CYCLONES NEW DELHI DATED 05-11-2015

TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 72 HOURS ISSUED AT 0600 UTC of  $5^{\rm TH}$  NOVEMBER 2015 BASED ON 0300 UTC of  $5^{\rm TH}$  NOVEMBER 2015

### **ARABIAN SEA**

THE DEPRESSION OVER EAST CENTRAL ARABIAN SEA MOVED WESTWARD AT A SPEED OF 14 KMPH AND LAY CENTRED AT 0300 UTC OF TODAY THE 5<sup>TH</sup> NOVEMBER 2015 OVER EASTCENTRAL ARABIAN SEA NEAR LATITUDE **14.1**<sup>0</sup> N AND LONGITUDE **65.6**<sup>0</sup> E, ABOUT **950** KM SOUTHWEST OF MUMBAI (43003) AND **1280** KM EAST-SOUTHEAST OF SALALAH (41316), OMAN. IT WOULD MOVE WESTWARDS AND INTENSIFY INTO A DEEP DEPRESSION DURING NEXT 24 HRS.

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 1.5. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 25 KNOTS GUSTING TO 35 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 1004 HPA. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION OVER AREA BETWEEN LATITUDE 12.5 DEGREE NORTH TO 17.5 DEGREE NORTH AND LONGITUDE 62.5 DEGREE EAST TO 69.5 DEGREE EAST. MINIMUM CTT IS  $-81^{0}$ °C

#### REMARKS:

A BUOY (LAT 15.1/LONG 68.9 ) RECOREDED MAXIMUM SUUSTAINED SURFACE WIND OF 120 DEG 10KNOTS, THE ASSOCIATED CONVECTION HAS INCREASED IN PAST 12 HOURS WITH INCREASE IN ORGANISATION AND DEPTH. THE WINDS ARE HIGHER OVER THE NORTHERN SECTOR. THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS 29°C. THE OCEAN THERMAL ENERGY IS ABOUT 60-80 KJ/CM<sup>2</sup> AROUND SYSTEM CENTRE AND IS LESS THAN 50 KJ/CM<sup>2</sup> OVER NORTHERN PARTS OF WESTCENTRAL ARABIAN SEA ADJACENT TO OMAN AND YEMEN COAST. THE VERTICAL WIND SHEAR IS ABOUT 5-10 KNOTS (LOW) AROUND THE SYSTEM CENTRE. THE LOW LEVEL RELATIVE VORTICITY AND CONVERGENCE HAVE INCREASED DURING PAST 12 HRS. THERE IS FAVOURABLE POLEWARD AND WESTWARD OUTFLOW IN ASSOCIATION WITH THE ANTI-CYCLONIC CIRCULATION LYING TO THE NORTHEAST OF THE SYSTEM CENTRE. THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 16<sup>0</sup>N. MOST OF THE NUMERICAL WEATHER PREDICTION MODELS ARE SUGGESTING GRADUAL INTENSIFICATION OF THE SYSTEM LEADING TO FORMATION OF DEEP DEPRESSION DURING NEXT 24 HOURS. DYNAMICAL STATISTICAL MODELS ALSO SUGGEST THE GRADUAL INTENSIFICATION OF THE SYSTEM. CONSIDERING THE MOVEMENT, MOST OF THE MODELS ARE UNANIMOUS ABOUT WESTWARD MOVEMENT.

#### **BAY OF BENGAL & ANDAMAN SEA**

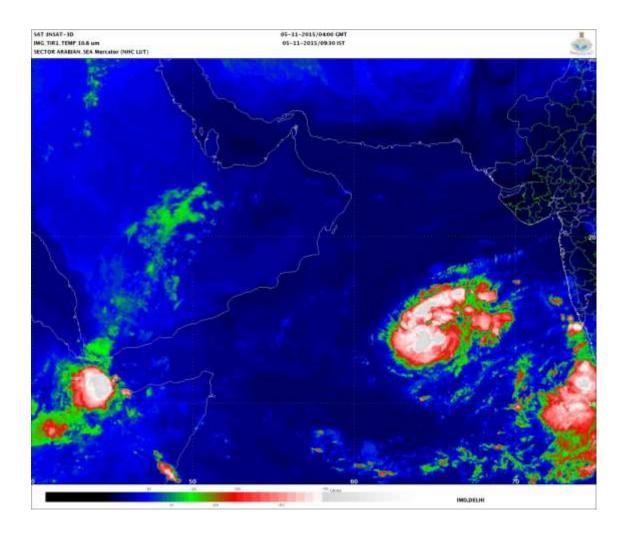
BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LIE OVER SOUTH BAY OF BENGAL AND SOUTH ANDAMAN SEA.

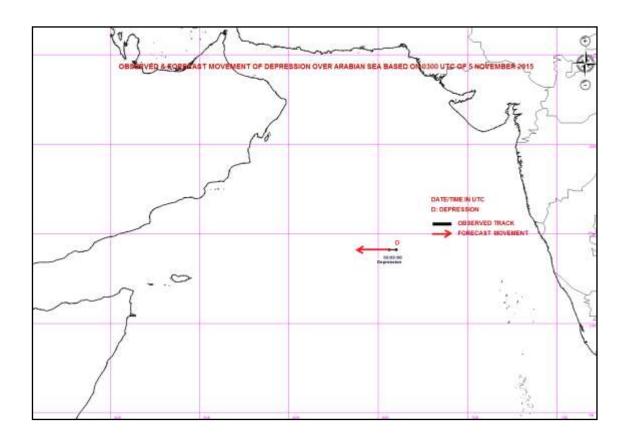
PROBABILITY OF CYCLOGENESIS OVER BAY OF BENGAL AND ANDAMAN SEA DURING NEXT 72 HOURS:

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)
NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

24 HOURS	24-48 HOURS	48-72 HOURS
NIL	NIL	NIL

M. MOHAPATRA HEAD, RSMC, NEW DELHI





NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%





## REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI

### SPECIAL TROPICAL WEATHER OUTLOOK

DEMS-RSMC SPECIAL TROPICAL CYCLONES NEW DELHI DATED 05-11-2015

TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 72 HOURS ISSUED AT 0900 UTC of  $5^{\rm TH}$  NOVEMBER 2015 BASED ON 0600 UTC of  $5^{\rm TH}$  NOVEMBER 2015

### ARABIAN SEA

THE DEPRESSION OVER EASTCENTRAL ARABIAN SEA MOVED WESTWARD AT A SPEED OF 22 KMPH IN PAST SIX HOURS, INTENSIFIED INTO DEEP DEPRESSION AND LAY CENTRED AT 0600 UTC OF TODAY THE 5<sup>TH</sup> NOVEMBER 2015 OVER EASTCENTRAL ARABIAN SEA NEAR LATITUDE **14.1**<sup>0</sup> N AND LONGITUDE **64.8**<sup>0</sup> E, ABOUT **1020** KM SOUTHWEST OF MUMBAI (43003) AND **1200** KM EAST-SOUTHEAST OF SALALAH (41316), OMAN. IT WOULD MOVE NEARLY WESTWARDS AND INTENSIFY INTO A CYCLONIC STORM DURING NEXT 12 HRS. THEREAFTER IT WOULD MOVE WEST-SOUTHWESTWARDS TOWARDS GULF OF ADEN.

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 2.0. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 30 KNOTS GUSTING TO 40 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 1002 HPA. STATE OF SEA AROUND SYTEM CENTRE IS VERY ROUGH. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION OVER AREA BETWEEN LATITUDE 12.0 DEGREE NORTH TO 17.0 DEGREE NORTH AND LONGITUDE 62.0 DEGREE EAST TO 67.0 DEGREE EAST. MINIMUM CTT IS  $-70^{0c}$ C

FORECAST FOR TRACK AND INTENSITY OF THE SYSTEM ARE GIVEN IN THE TABLE BELOW

Date/time(UTC)	Position (lat. <sup>0</sup> N/ long. <sup>0</sup> E)	Maximum sustained surface wind speed (kmph)	Category of cyclonic Disturbance
05-11-2015/0600	14.1/64.8	50-60 gusting to 70	Deep Depression
05-11-2015/1200	14.0/64.0	60-70 gusting to 80	Cyclonic Storm
05-11-2015/1800	13.9/63.2	70-80 gusting to -90	Cyclonic Storm
05-11-2015/0000	13.7/62.3	80-90 gusting to 100	Cyclonic Storm
06-11-2015/0600	13.5/61.5	80-90 gusting to 100	Cyclonic Storm
06-11-2015/1800	13.2/59.8	90-100 gusting to 110	Severe Cyclonic Storm
07-11-2015/0600	13.0/58.0	90-100 gusting to 110	Severe Cyclonic Storm
07-11-2015/1800	12.7/56.1	90-100 gusting to 110	Severe Cyclonic Storm
08-11-2015/0600	12.6/54.3	80-90 gusting to 100	Cyclonic Storm
08-11-2015/1800	12.7/52.6	70-80 gusting to 90	Cyclonic Storm
09-11-2015/0600	12.8/50.9	60-70 gusting to 80	Cyclonic Storm
09-11-2015/1800	13.0/49.7	50-60 gusting to 70	Deep Depression
10-11-2015/0600	13.3/48.5	40-50 gusting to 60	Depression

#### **REMARKS:**

THE ASSOCIATED CONVECTION HAS INCREASED IN PAST 12 HOURS WITH INCREASE IN ORGANISATION AND DEPTH. THE WINDS ARE HIGHER OVER THE NORTHERN SECTOR. THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS  $29^{\circ}$ C. THE OCEAN THERMAL ENERGY

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

IS ABOUT 60-80 KJ/CM² AROUND SYSTEM CENTRE AND IS LESS THAN 50 KJ/CM² OVER NORTHERN PARTS OF WESTCENTRAL ARABIAN SEA ADJACENT TO OMAN AND YEMEN COAST. THE VERTICAL WIND SHEAR IS ABOUT 5-10 KNOTS (LOW) AROUND THE SYSTEM CENTRE. THE LOW LEVEL RELATIVE VORTICITY AND CONVERGENCE HAVE INCREASED DURING PAST 12 HRS. THERE IS FAVOURABLE POLEWARD AND WESTWARD OUTFLOW IN ASSOCIATION WITH THE ANTI-CYCLONIC CIRCULATION LYING TO THE NORTHEAST OF THE SYSTEM CENTRE. THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 16<sup>0</sup>N. MOST OF THE NUMERICAL WEATHER PREDICTION MODELS ARE SUGGESTING GRADUAL INTENSIFICATION OF THE SYSTEM LEADING TO FORMATION OF DEEP DEPRESSION DURING NEXT 24 HOURS. DYNAMICAL STATISTICAL MODELS ALSO SUGGEST THE GRADUAL INTENSIFICATION OF THE SYSTEM. CONSIDERING THE MOVEMENT, MOST OF THE MODELS ARE UNANIMOUS ABOUT WESTWARD MOVEMENT.

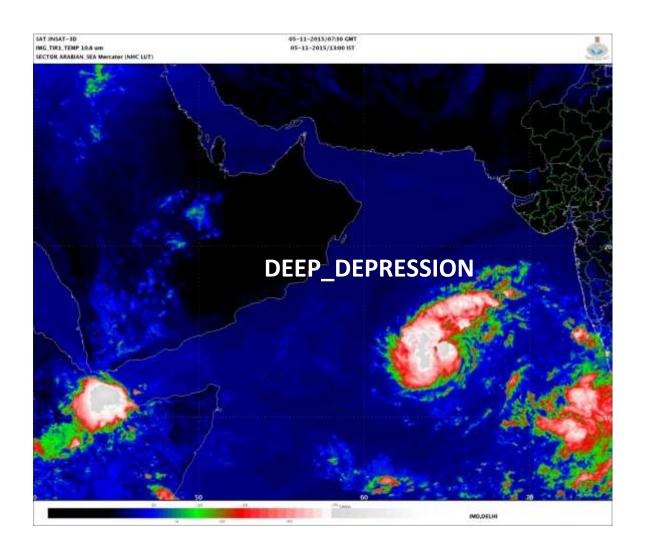
### **BAY OF BENGAL & ANDAMAN SEA**

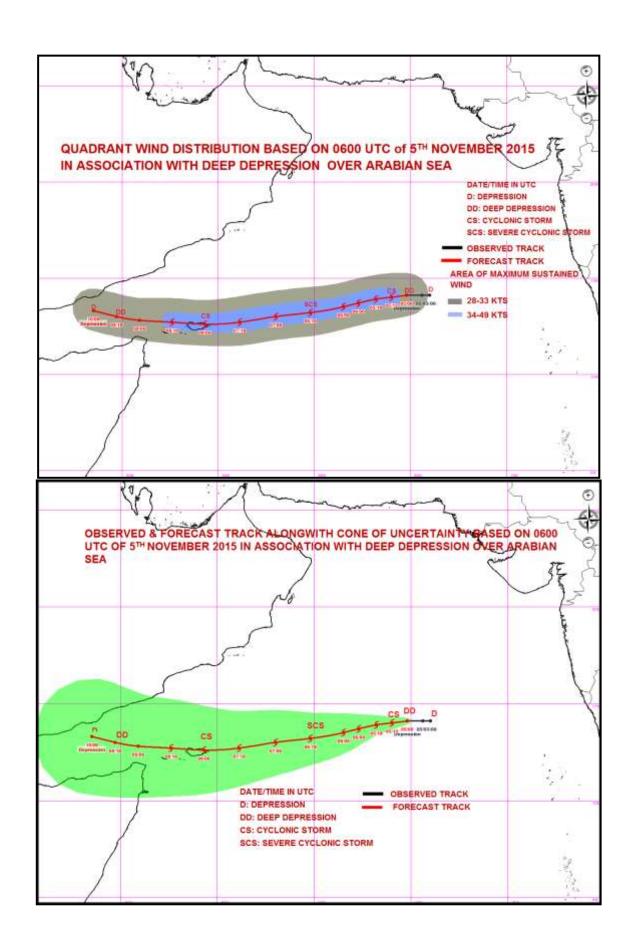
BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LIE OVER SOUTH BAY OF BENGAL AND SOUTH ANDAMAN SEA.

PROBABILITY OF CYCLOGENESIS OVER BAY OF BENGAL AND ANDAMAN SEA DURING NEXT 72 HOURS:

24 HOURS	24-48 HOURS	48-72 HOURS
NIL	NIL	LOW

M. MOHAPATRA HEAD, RSMC, NEW DELHI









FROM: RSMC -TROPICAL CYCLONES, NEW DELHI

TO: STORM WARNING CENTRE, NAYPYI TAW (MYANMAR)

STORM WARNING CENTRE, BANGKOK (THAILAND)
STORM WARNING CENTRE, COLOMBO (SRILANKA)
STORM WARNING CENTRE, DHAKA (BANGLADESH)
STORM WARNING CENTRE, KARACHI (PAKISTAN)
METEOROLOGICAL OFFICE, MALE (MALDIVES)

OMAN METEOROLOGICAL DEPARTMENT, MUSCAT (7

(THROUGH RTH JEDDAH)

TROPICAL CYCLONE ADVISORY

RSMC - TROPICAL CYCLONES, NEW DELHI

TROPICAL STORM 'MEGH' ADVISORY NO. ONE ISSUED AT 1500 UTC OF  $5^{TH}$  NOVEMBER 2015 BASED ON 1200 UTC CHARTS OF  $5^{TH}$  NOVEMBER 2015.

THE DEEP DEPRESSION OVER EASTCENTRAL ARABIAN SEA MOVED WESTWARD AT A SPEED OF 15 KMPH IN PAST SIX HOURS, INTENSIFIED INTO **CYCLONIC STORM 'MEGH'** AND LAY CENTRED AT 1200 UTC OF TODAY THE  $5^{\rm TH}$  NOVEMBER 2015 OVER CENTRAL ARABIAN SEA NEAR LATITUDE **14.0** $^{\rm O}$  N AND LONGITUDE **64.0** $^{\rm O}$  E, ABOUT **1090** KM SOUTHWEST OF MUMBAI (43003) AND **1120** KM EAST-SOUTHEAST OF SALALAH (41316), OMAN. IT WOULD MOVE WEST-SOUTHWESTWARDS AND INTENSIFY INTO A SEVERE CYCLONIC STORM DURING NEXT 24 HRS. THEREAFTER IT WOULD MOVE WEST-SOUTHWESTWARDS TOWARDS GULF OF ADEN.

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 2.5. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 35 KNOTS GUSTING TO 45 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 998 HPA. STATE OF SEA AROUND SYTEM CENTRE IS HIGH. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION OVER AREA BETWEEN LATITUDE 12.0 DEGREE NORTH TO 17.0 DEGREE NORTH AND LONGITUDE 62.0 DEGREE EAST TO 66.0 DEGREE EAST. MINIMUM CTT IS -83°C, THE CLOUD SHOWS CURVED BAND PATTERN.

FORECAST FOR TRACK AND INTENSITY OF THE SYSTEM ARE GIVEN IN THE TABLE BELOW

Date/time(UTC)	Position (lat. <sup>0</sup> N/ long. <sup>0</sup> E)	Maximum sustained surface wind speed (kmph)	Category of cyclonic Disturbance
05-11-2015/1200	14.0/64.0	60-70 gusting to 80	Cyclonic Storm
05-11-2015/1800	13.9/63.2	70-80 gusting to 90	Cyclonic Storm
05-11-2015/0000	13.7/62.3	80-90 gusting to 100	Cyclonic Storm
06-11-2015/0600	13.5/61.5	90-100 gusting to 110	Severe Cyclonic Storm
06-11-2015/1200	13.3/60.6	90-100 gusting to 110	Severe Cyclonic Storm
07-11-2015/0000	12.9/58.8	90-100 gusting to 110	Severe Cyclonic Storm
07-11-2015/1200	12.7/57.3	90-100 gusting to 110	Severe Cyclonic Storm
08-11-2015/0000	12.5/55.5	90-100 gusting to 110	Severe Cyclonic Storm
08-11-2015/1200	12.4/53.7	80-90 gusting to 100	Cyclonic Storm
09-11-2015/0000	12.4/52.0	70-80 gusting to 90	Cyclonic Storm
09-11-2015/1200	12.6/50.5	60-70 gusting to 80	Deep Depression
10-11-2015/0000	12.8/49.5	50-60 gusting to 70	Depression
10-11-2015/1200	13.2/48.2	40-50 gusting to 60	Depression

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

THE ASSOCIATED CONVECTION HAS INCREASED IN PAST 12 HOURS WITH INCREASE IN ORGANISATION AND CONVECTIVE BANDING. THE WINDS ARE HIGHER OVER THE NORTHERN SECTOR. THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS 29°C. THE OCEAN THERMAL ENERGY IS ABOUT 60-80 KJ/CM² AROUND SYSTEM CENTRE AND IS LESS THAN 50 KJ/CM² OVER NORTHERN PARTS OF WESTCENTRAL ARABIAN SEA ADJACENT TO OMAN AND YEMEN COAST. THE VERTICAL WIND SHEAR IS ABOUT 5-10 KNOTS (LOW) AROUND THE SYSTEM CENTRE AND TO THE WEST. THE LOW LEVEL RELATIVE VORTICITY AND CONVERGENCE HAVE INCREASED DURING PAST 12 HRS. THERE IS FAVOURABLE POLEWARD AND WESTWARD OUTFLOW IN ASSOCIATION WITH THE ANTI-CYCLONIC CIRCULATION LYING TO THE NORTHEAST OF THE SYSTEM CENTRE. THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 16°N. MOST OF THE NUMERICAL WEATHER PREDICTION MODELS ARE SUGGESTING GRADUAL INTENSIFICATION OF THE SYSTEM. CONSIDERING THE MOVEMENT, MOST OF THE MODELS ARE UNANIMOUS ABOUT WEST-SOUTHWESTWARD MOVEMENT. THE FORECAST IS MAINLY BASED ON MULTIMODEL ENSEMBLE GUIDENCE.

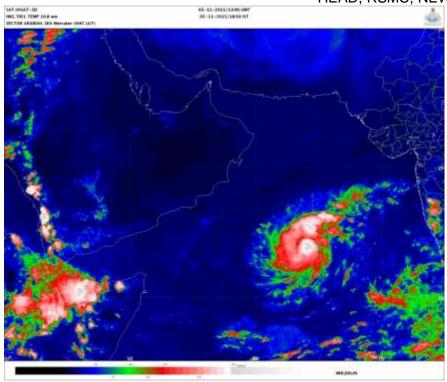
#### **BAY OF BENGAL & ANDAMAN SEA**

BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LIE OVER SOUTH BAY OF BENGAL AND SOUTH ANDAMAN SEA.

PROBABILITY OF CYCLOGENESIS OVER BAY OF BENGAL AND ANDAMAN SEA DURING NEXT 72 HOURS:

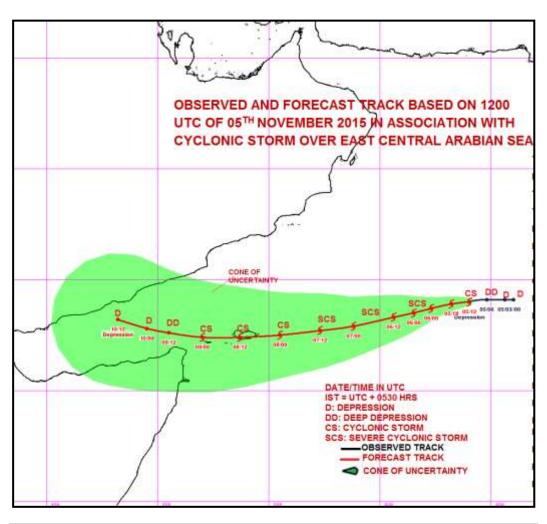
24 HOURS	24-48 HOURS	48-72 HOURS
NIL	NIL	LOW

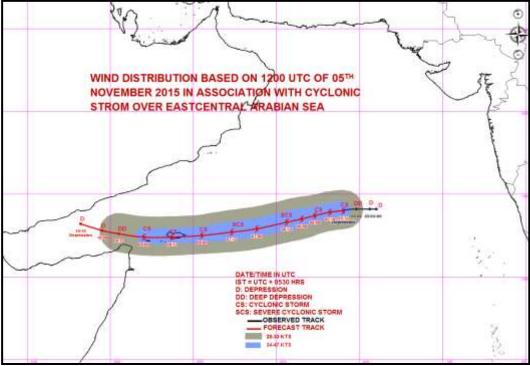
M. MOHAPATRA HEAD, RSMC, NEW DELHI



PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%









FROM: RSMC -TROPICAL CYCLONES, NEW DELHI

TO: STORM WARNING CENTRE, NAYPYI TAW (MYANMAR)

STORM WARNING CENTRE, BANGKOK (THAILAND)
STORM WARNING CENTRE, COLOMBO (SRILANKA)
STORM WARNING CENTRE, DHAKA (BANGLADESH)
STORM WARNING CENTRE, KARACHI (PAKISTAN)
METEOROLOGICAL OFFICE, MALE (MALDIVES)

OMAN METEOROLOGICAL DEPARTMENT, MUSCAT

(THROUGH RTH JEDDAH)

TROPICAL CYCLONE ADVISORY

RSMC - TROPICAL CYCLONES, NEW DELHI

TROPICAL STORM 'MEGH' ADVISORY NO. TWO ISSUED AT 1700 UTC OF  $5^{TH}$  NOVEMBER 2015 BASED ON 1500 UTC CHARTS OF  $5^{TH}$  NOVEMBER 2015.

THE CYCLONIC STORM 'MEGH' OVER EASTCENTRAL ARABIAN SEA MOVED WEST-SOUTHWESTWARDS AT A SPEED OF 15 KMPH IN PAST SIX HOURS AND LAY CENTRED AT 1500 UTC OF TODAY THE 5<sup>TH</sup> NOVEMBER 2015 OVER CENTRAL ARABIAN SEA NEAR LATITUDE 13.9<sup>0</sup> N AND LONGITUDE 63.7<sup>0</sup> E, ABOUT 1130 KM SOUTHWEST OF MUMBAI (43003) AND 1080 KM EAST-SOUTHEAST OF SALALAH (41316), OMAN. IT WOULD MOVE WEST-SOUTHWESTWARDS AND INTENSIFY INTO A SEVERE CYCLONIC STORM DURING NEXT 24 HRS. IT WOULD CONTINUE TO MOVE WEST-SOUTHWESTWARDS TOWARDS GULF OF ADEN.

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 2.5. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 35 KNOTS GUSTING TO 45 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 998 HPA. STATE OF SEA AROUND SYTEM CENTRE IS HIGH. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION OVER AREA BETWEEN LATITUDE 12.0 DEGREE NORTH TO 17.0 DEGREE NORTH AND LONGITUDE 62.0 DEGREE EAST TO 66.0 DEGREE EAST. MINIMUM CTT IS -75°C, THE CLOUD SHOWS CURVED BAND PATTERN.

FORECAST FOR TRACK AND INTENSITY OF THE SYSTEM ARE GIVEN IN THE TABLE BELOW

Date/time(UTC)	Position (lat. <sup>0</sup> N/ long. <sup>0</sup> E)	Maximum sustained	Category of cyclonic Disturbance
07.11.2017/1700		surface wind speed (kmph)	
05-11-2015/1500	13.9/63.7	60-70 gusting to 80	Cyclonic Storm
05-11-2015/1800	13.9/63.2	70-80 gusting to 90	Cyclonic Storm
05-11-2015/0000	13.7/62.3	80-90 gusting to 100	Cyclonic Storm
06-11-2015/0600	13.5/61.5	90-100 gusting to 110	Severe Cyclonic Storm
06-11-2015/1200	13.3/60.6	90-100 gusting to 110	Severe Cyclonic Storm
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08-11-2015/0000	12.5/55.5	90-100 gusting to 110	Severe Cyclonic Storm
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09-11-2015/1200	12.6/50.5	60-70 gusting to 80	Deep Depression
10-11-2015/0000	12.8/49.5	50-60 gusting to 70	Depression
10-11-2015/1200	13.2/48.2	40-50 gusting to 60	Depression

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

THE ASSOCIATED CONVECTION HAS INCREASED IN PAST 12 HOURS WITH INCREASE IN ORGANISATION AND CONVECTIVE BANDING. THE WINDS ARE HIGHER OVER THE NORTHERN SECTOR. THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS 29°C. THE OCEAN THERMAL ENERGY IS ABOUT 60-80 KJ/CM² AROUND SYSTEM CENTRE AND IS LESS THAN 50 KJ/CM² OVER NORTHERN PARTS OF WESTCENTRAL ARABIAN SEA ADJACENT TO OMAN AND YEMEN COAST. THE VERTICAL WIND SHEAR IS ABOUT 5-10 KNOTS (LOW) AROUND THE SYSTEM CENTRE AND TO THE WEST. THE LOW LEVEL RELATIVE VORTICITY AND CONVERGENCE HAVE INCREASED DURING PAST 12 HRS. THERE IS FAVOURABLE POLEWARD AND WESTWARD OUTFLOW IN ASSOCIATION WITH THE ANTI-CYCLONIC CIRCULATION LYING TO THE NORTHEAST OF THE SYSTEM CENTRE. THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 16°N. MOST OF THE NUMERICAL WEATHER PREDICTION MODELS ARE SUGGESTING GRADUAL INTENSIFICATION OF THE SYSTEM. CONSIDERING THE MOVEMENT, MOST OF THE MODELS ARE UNANIMOUS ABOUT WEST-SOUTHWESTWARD MOVEMENT. THE FORECAST IS MAINLY BASED ON MULTIMODEL ENSEMBLE GUIDENCE.

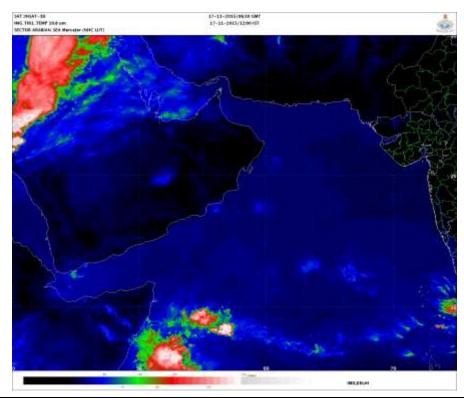
#### **BAY OF BENGAL & ANDAMAN SEA**

BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LIE OVER SOUTH BAY OF BENGAL AND SOUTH ANDAMAN SEA.

PROBABILITY OF CYCLOGENESIS OVER BAY OF BENGAL AND ANDAMAN SEA DURING NEXT 72 HOURS:

24 HOURS	24-48 HOURS	48-72 HOURS
NIL	NIL	LOW

# (R.P. SHARMA) DUTY OFFICER



PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%





FROM: RSMC -TROPICAL CYCLONES, NEW DELHI

TO: STORM WARNING CENTRE, NAYPYI TAW (MYANMAR)

STORM WARNING CENTRE, BANGKOK (THAILAND)
STORM WARNING CENTRE, COLOMBO (SRILANKA)
STORM WARNING CENTRE, DHAKA (BANGLADESH)
STORM WARNING CENTRE, KARACHI (PAKISTAN)
METEOROLOGICAL OFFICE, MALE (MALDIVES)

OMAN METEOROLOGICAL DEPARTMENT, MUSCAT (THROUGH RTH JEDDAH)

TROPICAL CYCLONE ADVISORY

RSMC - TROPICAL CYCLONES, NEW DELHI

TROPICAL STORM 'MEGH' ADVISORY NO. THREE ISSUED AT 2000 UTC OF  $5^{\rm TH}$  NOVEMBER 2015 BASED ON 1800 UTC CHARTS OF  $5^{\rm TH}$  NOVEMBER 2015.

THE CYCLONIC STORM 'MEGH' OVER EASTCENTRAL ARABIAN SEA MOVED WEST-SOUTHWESTWARDS AT A SPEED OF 12 KMPH IN PAST SIX HOURS AND LAY CENTRED AT 1800 UTC OF TODAY THE 5<sup>TH</sup> NOVEMBER 2015 OVER WESTCENTRAL ARABIAN SEA NEAR LATITUDE 13.9<sup>0</sup> N AND LONGITUDE 63.4<sup>0</sup> E, ABOUT 1150 KM SOUTHWEST OF MUMBAI (43003) AND 1050 KM EAST-SOUTHEAST OF SALALAH (41316), OMAN. IT WOULD MOVE WEST-SOUTHWESTWARDS AND INTENSIFY INTO A SEVERE CYCLONIC STORM DURING NEXT 24 HRS. IT WOULD CONTINUE TO MOVE WEST-SOUTHWESTWARDS TOWARDS GULF OF ADEN.

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 2.5. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 40 KNOTS GUSTING TO 50 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 99 HPA. STATE OF SEA AROUND SYTEM CENTRE IS HIGH. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION OVER AREA BETWEEN LATITUDE 12.0 DEGREE NORTH TO 17.0 DEGREE NORTH AND LONGITUDE 62.0 DEGREE EAST TO 66.5 DEGREE EAST. MINIMUM CTT IS -74°C, THE CLOUD SHOWS CURVED BAND PATTERN.

FORECAST FOR TRACK AND INTENSITY OF THE SYSTEM ARE GIVEN IN THE TABLE BELOW

Date/time(UTC)	Position	Maximum sustained	Category of cyclonic
	(lat. <sup>0</sup> N/ long. <sup>0</sup> E)	surface wind speed (kmph)	Disturbance
05-11-2015/1800	13.9/63.4	80-90 gusting to 100	Cyclonic Storm
06-11-2015/0000	13.7/62.5	90-100 gusting to 110	Severe Cyclonic Storm
06-11-2015/0600	13.5/61.7	90-100 gusting to 110	Severe Cyclonic Storm
06-11-2015/1200	13.3/60.8	90-100 gusting to 110	Severe Cyclonic Storm
06-11-2015/1800	13.1/59.8	90-100 gusting to 110	Severe Cyclonic Storm
07-11-2015/0600	12.8/58.0	90-100 gusting to 110	Severe Cyclonic Storm
07-11-2015/1800	12.6/56.4	90-100 gusting to 110	Severe Cyclonic Storm
08-11-2015/0600	12.4/54.6	85-95 gusting to 105	Cyclonic Storm
08-11-2015/1800	12.4/52.8	80-90 gusting to 100	Cyclonic Storm
09-11-2015/0600	12.5/51.2	60-70 gusting to 80	Deep Depression
09-11-2015/1800	12.7/50.0	50-60 gusting to 70	Depression
10-11-2015/0600	13.0/48.8	40-50 gusting to 60	Depression
10-11-2015/1800	13.4/47.6	30-40 gusting to 50	Low

**REMARKS:** 

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

THE ASSOCIATED CONVECTION HAS INCREASED IN PAST 12 HOURS WITH INCREASE IN ORGANISATION AND CONVECTIVE BANDING. THE WINDS ARE HIGHER OVER THE NORTHERN SECTOR. THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS 29°C. THE OCEAN THERMAL ENERGY IS ABOUT 60-80 KJ/CM² AROUND SYSTEM CENTRE AND IS LESS THAN 50 KJ/CM² OVER NORTHERN PARTS OF WESTCENTRAL ARABIAN SEA ADJACENT TO OMAN AND YEMEN COAST. THE VERTICAL WIND SHEAR IS ABOUT 5-10 KNOTS (LOW) AROUND THE SYSTEM CENTRE AND TO THE WEST. THE LOW LEVEL RELATIVE VORTICITY AND CONVERGENCE HAVE INCREASED DURING PAST 12 HRS. THERE IS FAVOURABLE POLEWARD AND WESTWARD OUTFLOW IN ASSOCIATION WITH THE ANTI-CYCLONIC CIRCULATION LYING TO THE NORTHEAST OF THE SYSTEM CENTRE. THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 16°N. MOST OF THE NUMERICAL WEATHER PREDICTION MODELS ARE SUGGESTING GRADUAL INTENSIFICATION OF THE SYSTEM. CONSIDERING THE MOVEMENT, MOST OF THE MODELS ARE UNANIMOUS ABOUT WEST-SOUTHWESTWARD MOVEMENT. THE FORECAST IS MAINLY BASED ON MULTIMODEL ENSEMBLE GUIDENCE.

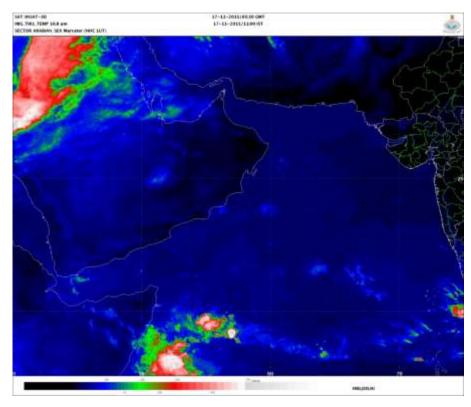
#### **BAY OF BENGAL & ANDAMAN SEA**

BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LIE OVER SOUTH BAY OF BENGAL AND SOUTH ANDAMAN SEA.

### PROBABILITY OF CYCLOGENESIS OVER BAY OF BENGAL AND ANDAMAN SEA DURING NEXT 72 HOURS:

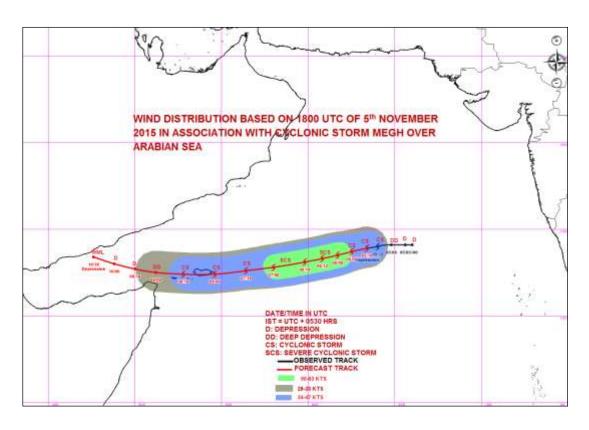
24 HOURS	24-48 HOURS	48-72 HOURS
NIL	NIL	LOW

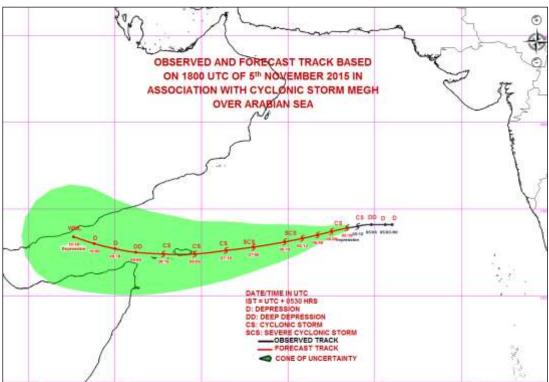
# (R.P. SHARMA) DUTY OFFICER



PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%









FROM: RSMC -TROPICAL CYCLONES, NEW DELHI

TO: STORM WARNING CENTRE, NAYPYI TAW (MYANMAR)

STORM WARNING CENTRE, BANGKOK (THAILAND)
STORM WARNING CENTRE, COLOMBO (SRILANKA)
STORM WARNING CENTRE, DHAKA (BANGLADESH)
STORM WARNING CENTRE, KARACHI (PAKISTAN)
METEOROLOGICAL OFFICE, MALE (MALDIVES)

OMAN METEOROLOGICAL DEPARTMENT, MUSCAT

(THROUGH RTH JEDDAH)

TROPICAL CYCLONE ADVISORY

RSMC - TROPICAL CYCLONES, NEW DELHI

TROPICAL STORM 'MEGH' ADVISORY NO. FOUR ISSUED AT 0000 UTC OF  $6^{\rm TH}$  NOVEMBER 2015 BASED ON 2100 UTC CHARTS OF  $5^{\rm TH}$  NOVEMBER 2015.

THE CYCLONIC STORM 'MEGH' OVER WESTCENTRAL ARABIAN SEA MOVED WEST-SOUTHWESTWARDS AT A SPEED OF 11 KMPH IN PAST SIX HOURS AND LAY CENTRED AT 2100 UTC OF TODAY THE 5<sup>TH</sup> NOVEMBER 2015 NEAR LATITUDE 13.8°N AND LONGITUDE 63.1°E, ABOUT 1190 KM SOUTHWEST OF MUMBAI (43003) AND 1040 KM EAST-SOUTHEAST OF SALALAH (41316), OMAN. IT WOULD MOVE WEST-SOUTHWESTWARDS AND INTENSIFY INTO A SEVERE CYCLONIC STORM DURING NEXT 24 HRS. IT WOULD CONTINUE TO MOVE WEST-SOUTHWESTWARDS TOWARDS GULF OF ADEN.

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 2.5. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 40 KNOTS GUSTING TO 50 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 998 HPA. STATE OF SEA AROUND SYTEM CENTRE IS HIGH. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION OVER AREA BETWEEN LATITUDE 12.0 DEGREE NORTH TO 17.0 DEGREE NORTH AND LONGITUDE 61.0 DEGREE EAST TO 65.0 DEGREE EAST. MINIMUM CTT IS -72°C, THE CLOUD SHOWS CURVED BAND PATTERN.

FORECAST FOR TRACK AND INTENSITY OF THE SYSTEM ARE GIVEN IN THE TABLE BELOW

FORECAST FOR TRACK AND INTENSITY OF THE STSTEM ARE GIVEN IN THE TABLE BELOW			THE TABLE BELOW
Date/time(UTC)	Position	Maximum sustained	Category of cyclonic
	(lat. <sup>0</sup> N/ long. <sup>0</sup> E)	surface wind speed (kmph)	Disturbance
05-11-2015/2100	13.8/63.1	80-90 gusting to 100	Cyclonic Storm
06-11-2015/0000	13.7/62.5	80-90 gusting to 100	Cyclonic Storm
06-11-2015/0600	13.5/61.7	80-90 gusting to 100	Cyclonic Storm
06-11-2015/1200	13.3/60.8	80-90 gusting to 100	Cyclonic Storm
06-11-2015/1800	13.1/59.8	90-100 gusting to 110	Severe Cyclonic Storm
07-11-2015/0600	12.8/58.0	90-100 gusting to 110	Severe Cyclonic Storm
07-11-2015/1800	12.6/56.4	85-95 gusting to 105	Cyclonic Storm
08-11-2015/0600	12.4/54.6	80-90 gusting to 100	Cyclonic Storm
08-11-2015/1800	12.4/52.8	80-90 gusting to 100	Cyclonic Storm
09-11-2015/0600	12.5/51.2	60-70 gusting to 80	Deep Depression
09-11-2015/1800	12.7/50.0	50-60 gusting to 70	Depression
10-11-2015/0600	13.0/48.8	40-50 gusting to 60	Depression
10-11-2015/1800	13.4/47.6	30-40 gusting to 50	Low

**REMARKS:** 

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

THE ASSOCIATED CONVECTION HAS INCREASED IN PAST 12 HOURS WITH INCREASE IN ORGANISATION AND CONVECTIVE BANDING. THE WINDS ARE HIGHER OVER THE NORTHERN SECTOR. THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS 29°C. THE OCEAN THERMAL ENERGY IS ABOUT 60-80 KJ/CM² AROUND SYSTEM CENTRE AND IS LESS THAN 50 KJ/CM² OVER NORTHERN PARTS OF WESTCENTRAL ARABIAN SEA ADJACENT TO OMAN AND YEMEN COAST. THE VERTICAL WIND SHEAR IS ABOUT 5-10 KNOTS (LOW) AROUND THE SYSTEM CENTRE AND TO THE WEST. THE LOW LEVEL RELATIVE VORTICITY AND CONVERGENCE HAVE INCREASED DURING PAST 12 HRS. THERE IS FAVOURABLE POLEWARD AND WESTWARD OUTFLOW IN ASSOCIATION WITH THE ANTI-CYCLONIC CIRCULATION LYING TO THE NORTHEAST OF THE SYSTEM CENTRE. THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 16°N. MOST OF THE NUMERICAL WEATHER PREDICTION MODELS ARE SUGGESTING GRADUAL INTENSIFICATION OF THE SYSTEM. CONSIDERING THE MOVEMENT, MOST OF THE MODELS ARE UNANIMOUS ABOUT WEST-SOUTHWESTWARD MOVEMENT. THE FORECAST IS MAINLY BASED ON MULTIMODEL ENSEMBLE GUIDENCE.

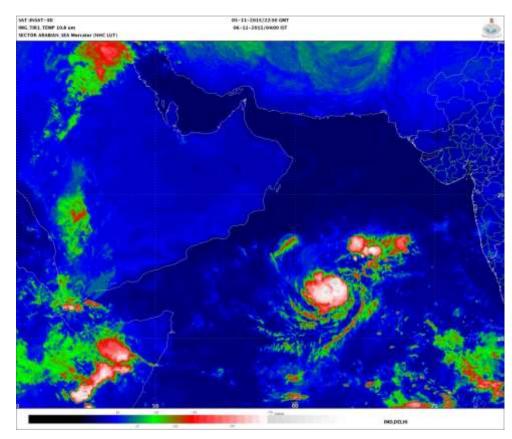
### **BAY OF BENGAL & ANDAMAN SEA**

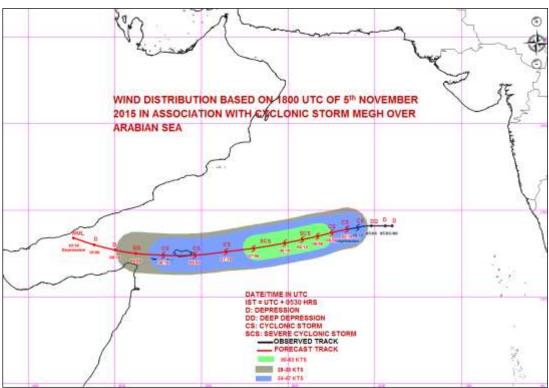
BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LIE OVER SOUTH BAY OF BENGAL AND ANDAMAN SEA.

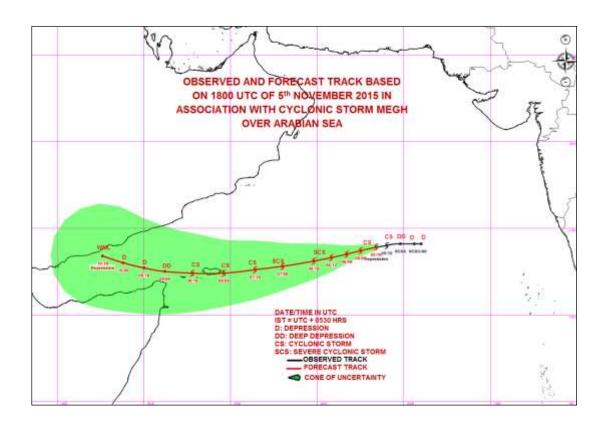
PROBABILITY OF CYCLOGENESIS OVER BAY OF BENGAL AND ANDAMAN SEA DURING NEXT 72 HOURS:

24 HOURS	24-48 HOURS	48-72 HOURS
NIL	NIL	LOW

(R.P. SHARMA)
DUTY OFFICER











FROM: RSMC -TROPICAL CYCLONES, NEW DELHI

TO: STORM WARNING CENTRE, NAYPYI TAW (MYANMAR)

STORM WARNING CENTRE, BANGKOK (THAILAND)
STORM WARNING CENTRE, COLOMBO (SRILANKA)
STORM WARNING CENTRE, DHAKA (BANGLADESH)
STORM WARNING CENTRE, KARACHI (PAKISTAN)
METEOROLOGICAL OFFICE, MALE (MALDIVES)

OMAN METEOROLOGICAL DEPARTMENT, MUSCAT

(THROUGH RTH JEDDAH)

TROPICAL CYCLONE ADVISORY

RSMC - TROPICAL CYCLONES, NEW DELHI

TROPICAL STORM 'MEGH' ADVISORY NO. FIVE ISSUED AT 0300 UTC OF  $6^{TH}$  NOVEMBER 2015 BASED ON 0000 UTC CHARTS OF  $6^{TH}$  NOVEMBER 2015.

THE CYCLONIC STORM 'MEGH' OVER WESTCENTRAL ARABIAN SEA MOVED WEST-SOUTHWESTWARDS AT A SPEED OF 16 KMPH IN PAST SIX HOURS AND LAY CENTRED AT 0000 UTC OF TODAY THE 6<sup>TH</sup> NOVEMBER 2015 NEAR LATITUDE 13.7°N AND LONGITUDE 62.5°E, ABOUT 1250 KM SOUTHWEST OF MUMBAI (43003) AND 980 KM EAST-SOUTHEAST OF SALALAH (41316), OMAN. IT WOULD MOVE WEST-SOUTHWESTWARDS AND INTENSIFY INTO A SEVERE CYCLONIC STORM DURING NEXT 24 HRS. IT WOULD CONTINUE TO MOVE WEST-SOUTHWESTWARDS TOWARDS GULF OF ADEN.

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 2.5. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 40 KNOTS GUSTING TO 50 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 996 HPA. STATE OF SEA AROUND SYTEM CENTRE IS HIGH. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION OVER AREA BETWEEN LATITUDE 12.0 DEGREE NORTH TO 17.0 DEGREE NORTH AND LONGITUDE 61.0 DEGREE EAST TO 65.0 DEGREE EAST. MINIMUM CTT IS  $-72^{0c}$ C, THE CLOUD SHOWS CURVED BAND PATTERN.

FORECAST FOR TRACK AND INTENSITY OF THE SYSTEM ARE GIVEN IN THE TABLE BELOW

. OILLONG! ! OIL!	TOTO TO THE INTERIOR	OF THE OTOTEM AND OTTEM IN	THE TABLE BLEON
Date/time(UTC)	Position	Maximum sustained	Category of cyclonic
	(lat. ${}^{0}N/$ long. ${}^{0}E)$	surface wind speed (kmph)	Disturbance
06-11-2015/0000	13.7/62.5	80-90 gusting to 100	Cyclonic Storm
06-11-2015/0600	13.5/61.7	80-90 gusting to 100	Cyclonic Storm
06-11-2015/1200	13.3/60.8	80-90 gusting to 100	Cyclonic Storm
06-11-2015/1800	13.1/59.8	90-100 gusting to 110	Severe Cyclonic Storm
07-11-2015/0000	12.9/58.8	90-100 gusting to 110	Severe Cyclonic Storm
07-11-2015/1200	12.7/57.3	80-90 gusting to 100	Cyclonic Storm
08-11-2015/0000	12.4/55.5	80-90 gusting to 100	Cyclonic Storm
08-11-2015/1200	12.3/53.7	70-80 gusting to 90	Cyclonic Storm
09-11-2015/0000	12.4/52.0	60-70 gusting to 80	Cyclonic Storm
09-11-2015/1200	12.6/50.5	50-60 gusting to 70	Deep Depression
10-11-2015/0000	13.0/49.0	40-50 gusting to 60	Depression
10-11-2015/1200	13.4/47.5	30-40 gusting to 50	Low

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

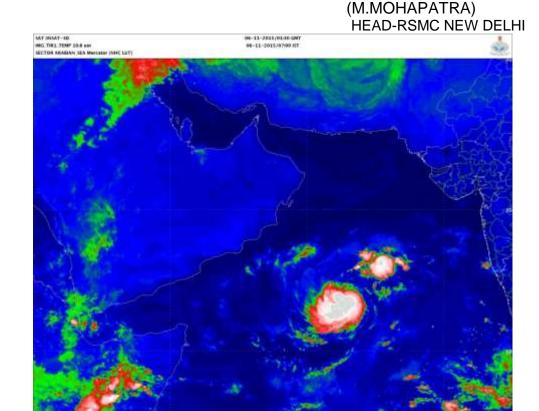
THE ASSOCIATED CONVECTION REMAINED ALMOST SAME IN PAST 12 HOURS WITH CONVECTIVE BANDING. THE WINDS ARE HIGHER OVER THE NORTHERN SECTOR. THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS 29°C. THE OCEAN THERMAL ENERGY IS ABOUT 60-80 KJ/CM² AROUND SYSTEM CENTRE AND IS LESS THAN 50 KJ/CM² OVER NORTHERN PARTS OF WESTCENTRAL ARABIAN SEA AND GULF OF ADEN. THE VERTICAL WIND SHEAR IS ABOUT 5-10 KNOTS (LOW) AROUND THE SYSTEM CENTRE AND TO THE WEST. THE LOW LEVEL RELATIVE VORTICITY AND CONVERGENCE REMAINED SAME DURING PAST 12 HRS. THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 16°N. MOST OF THE NUMERICAL WEATHER PREDICTION MODELS ARE SUGGESTING GRADUAL INTENSIFICATION OF THE SYSTEM DURING NEXT 24 HOURS. DYNAMICAL STATISTICAL MODELS ALSO SUGGEST THE GRADUAL INTENSIFICATION OF THE SYSTEM. CONSIDERING THE MOVEMENT, MOST OF THE MODELS ARE UNANIMOUS ABOUT WEST-SOUTHWESTWARD MOVEMENT. THE FORECAST IS MAINLY BASED ON MULTIMODEL ENSEMBLE GUIDENCE.

#### **BAY OF BENGAL & ANDAMAN SEA**

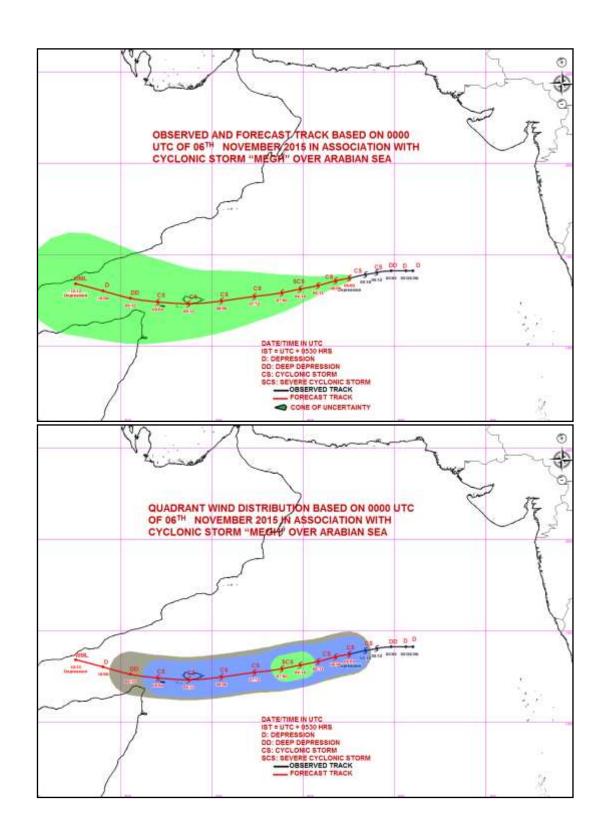
BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LIE OVER SOUTH BAY OF BENGAL AND ANDAMAN SEA.

PROBABILITY OF CYCLOGENESIS OVER BAY OF BENGAL AND ANDAMAN SEA DURING NEXT 72 HOURS:

24 HOURS	24-48 HOURS	48-72 HOURS
NIL	LOW	MODERATE



PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)
NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%







FROM: RSMC -TROPICAL CYCLONES, NEW DELHI

TO: STORM WARNING CENTRE, NAYPYI TAW (MYANMAR) STORM WARNING CENTRE, BANGKOK (THAILAND)

STORM WARNING CENTRE, COLOMBO (SRILANKA)
STORM WARNING CENTRE, DHAKA (BANGLADESH)
STORM WARNING CENTRE, KARACHI (PAKISTAN)
METEOROLOGICAL OFFICE, MALE (MALDIVES)

OMAN METEOROLOGICAL DEPARTMENT, MUSCAT (THROUGH RTH JEDDAH)

TROPICAL CYCLONE ADVISORY

**RSMC - TROPICAL CYCLONES, NEW DELHI** 

TROPICAL STORM 'MEGH' ADVISORY NO. SIX ISSUED AT 0600 UTC OF  $6^{TH}$  NOVEMBER 2015 BASED ON 0300 UTC CHARTS OF  $6^{TH}$  NOVEMBER 2015.

THE **CYCLONIC STORM 'MEGH'** MOVED WEST-SOUTHWESTWARDS AT A SPEED OF 10 KMPH IN PAST SIX HOURS AND LAY CENTRED AT 0300 UTC OF TODAY THE 6<sup>TH</sup> NOVEMBER 2015 OVER WESTCENTRAL ARABIAN SEA NEAR LATITUDE **13.5°** N AND LONGITUDE **62.4°** E, ABOUT **920** KM EAST-NORTHEAST OF SOCOTRA ISLAND (41494) (YEMEN), **1270** KM SOUTHWEST OF MUMBAI (43003), AND **970** KM SOUTHEAST OF SALALAH (41316) (OMAN). IT WOULD MOVE WEST-SOUTHWESTWARDS AND INTENSIFY INTO A SEVERE CYCLONIC STORM DURING NEXT 24 HRS. THEREAFTER IT WOULD CONTINUE TO MOVE WEST-SOUTHWESTWARDS TOWARDS GULF OF ADEN AND WEAKEN GRADUALLY FROM 8<sup>TH</sup> NOVEMBER MORNING ONWARDS.

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 2.5. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 40 KNOTS GUSTING TO 50 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 994 HPA. STATE OF SEA AROUND SYTEM CENTRE IS HIGH. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER THE AREA BETWEEN LATITUDE 12.0 DEGREE NORTH TO 17.0 DEGREE NORTH AND LONGITUDE 60.0 DEGREE EAST TO 65.0 DEGREE EAST. MINIMUM CLOUD TOP TEMPERATURE IS -74°C. THE CLOUD SHOWS CURVED BAND PATTERN.

FORECAST FOR TRACK AND INTENSITY OF THE SYSTEM ARE GIVEN IN THE TABLE BELOW

Date/time(UTC)	Position (lat. ⁰N/ long. ºE)	Maximum sustained surface wind speed (kmph)	Category of cyclonic Disturbance
06-11-2015/0300	13.5/62.4	80-90 gusting to 100	Cyclonic Storm (CS)
06-11-2015/0600	13.4/61.9	80-90 gusting to 100	Cyclonic Storm (CS)
06-11-2015/1200	13.3/60.8	80-90 gusting to 100	Cyclonic Storm (CS)
06-11-2015/1800	13.1/59.8	90-100 gusting to 110	Severe Cyclonic Storm (SCS)
07-11-2015/0000	12.9/58.8	90-100 gusting to 110	Severe Cyclonic Storm (SCS)
07-11-2015/1200	12.7/57.3	80-90 gusting to 100	Cyclonic Storm (CS)
08-11-2015/0000	12.4/55.5	80-90 gusting to 100	Cyclonic Storm (CS)
08-11-2015/1200	12.3/53.7	70-80 gusting to 90	Cyclonic Storm (CS)
09-11-2015/0000	12.4/52.0	60-70 gusting to 80	Cyclonic Storm (CS)
09-11-2015/1200	12.6/50.5	50-60 gusting to 70	Deep Depression (DD)

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

10-11-2015/0000	13.0/49.0	40-50 gusting to 60	Depression (D)
10-11-2015/1200	13.4/47.5	30-40 gusting to 50	Low

THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 16°N IN ASSOCIATION WITH AN ANTICYCLONIC CIRCULATION LOCATED TO THE NORTH-NORTHWEST OF THE SYSTEM CENTRE. THE SYSTEM IS BEING GUIDED WEST-SOUTHWESTWARDS UNDER INFLUENCE OF THE ABOVE RIDGE AND ANTI-CYCLONIC CIRCULATION. MOST OF THE MODELS ARE UNANIMOUS ABOUT WEST-SOUTHWESTWARD MOVEMENT. THE FORECAST IS MAINLY BASED ON MULTIMODEL ENSEMBLE GUIDANCE.

THE ASSOCIATED CONVECTION REMAINED ALMOST SAME IN PAST 12 HOURS WITH CONVECTIVE BANDING. THE WINDS ARE HIGHER OVER THE NORTHERN SECTOR. THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS 29°C. THE OCEAN THERMAL ENERGY IS ABOUT 35-50 KJ/CM2 AROUND SYSTEM CENTRE AND 50-75 KJ/CM2 TO WEST-SOUTHWEST OF THE SYSTEM CENTRE OVER A LIMITED AREA AND THEN DECREASES TOWARDS GULF OF ADEN. THE VERTICAL WIND SHEAR IS ABOUT 5-10 KNOTS (LOW) AROUND THE SYSTEM CENTRE AND TO THE WEST. IT INCREASES TOWARDS THE WEST-SOUTHWEST/SOUTHWEST. THE LOW LEVEL RELATIVE VORTICITY AND CONVERGENCE REMAINED SAME DURING PAST 12 HRS. THE ANIMATION OF TOTAL PRECIPITABLE WATER (TPW) INDICATE DRY AIR INTRUSION HAS COMMENCED AND IN COVERING NORTHERN, WESTERN AND SOUTHWESTERN SECTORS IN THE OUTER CORE. THE WARM MOIST AIR INCURSION CONTINUES FROM SOUTHEAST SECTOR. ONCE THE CYCLONIC STORM REACHES WEST OF LONGITUDE 58°N, THE INFLUENCE OF TPW WOULD INCREASE SIGNIFICANTLY. IN ASSOCIATION WITH THE ABOVE SCENARIO THE SYSTEM WOULD INTENSIFY FURTHER DURING NEXT 24 HOURS AND START WEAKENING GRADUALLY FROM 8TH NOVEMBER ONWARDS UNDER THE INFLUENCE OF COLDER OCEAN THERMAL ENERGY, DRY AIR INTRUSION FROM NORTHWEST AND POSSILBLE INCREASE IN VERTICAL WIND SHEAR.

### BAY OF BENGAL & ANDAMAN SEA LOW LEVEL CIRCULATION:

BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LIE OVER SOUTHWEST BAY OF BENGAL AND NEIGHBOURHOOD. IN ASSOCIATION WITH LOW LEVEL CIRCULATION OVER THE AREA.

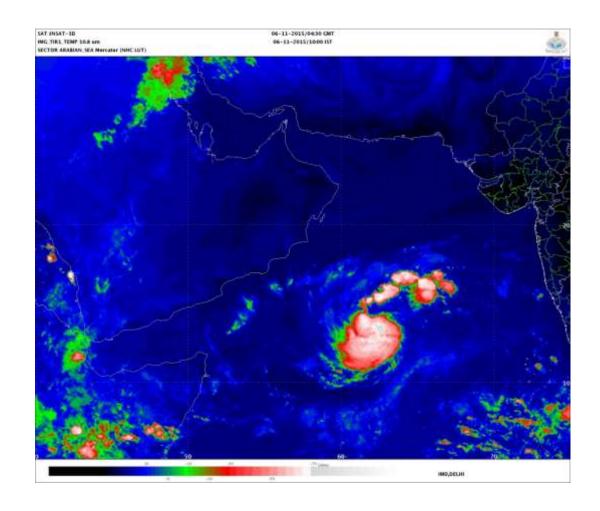
### PROBABILITY OF CYCLOGENESIS OVER BAY OF BENGAL AND ANDAMAN SEA DURING NEXT 72 HOURS:

24 HOURS	24-48 HOURS	48-72 HOURS
NIL	LOW	MODERATE

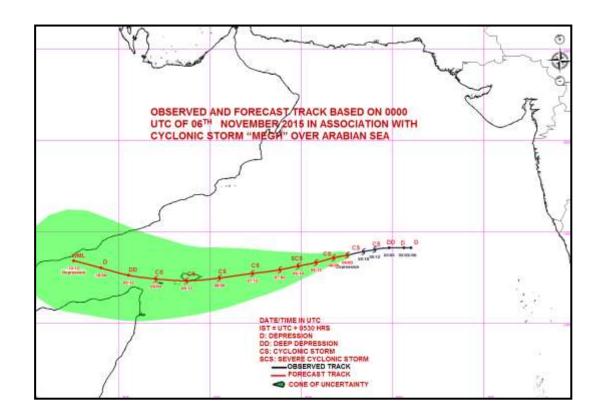
(M.MOHAPATRA)
HEAD-RSMC NEW DELHI

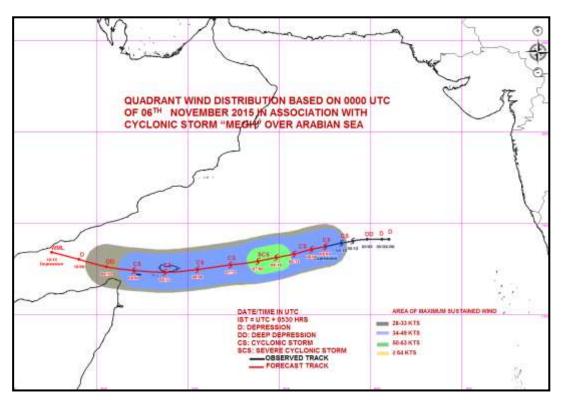
PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%



PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)
NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%









FROM: RSMC -TROPICAL CYCLONES, NEW DELHI

TO: STORM WARNING CENTRE, NAYPYI TAW (MYANMAR)
STORM WARNING CENTRE, BANGKOK (THAILAND)
STORM WARNING CENTRE, COLOMBO (SRILANKA)
STORM WARNING CENTRE, DHAKA (BANGLADESH)
STORM WARNING CENTRE, KARACHI (PAKISTAN)

METEOROLOGICAL OFFICE, MALE (MALDIVES)

OMAN METEOROLOGICAL DEPARTMENT, MUSCAT (THROUGH RTH JEDDAH)

TROPICAL CYCLONE ADVISORY

RSMC - TROPICAL CYCLONES. NEW DELHI

TROPICAL STORM 'MEGH' ADVISORY NO. SEVEN ISSUED AT 0900 UTC OF  $6^{TH}$  NOVEMBER 2015 BASED ON 0600 UTC CHARTS OF  $6^{TH}$  NOVEMBER 2015.

THE **CYCLONIC STORM 'MEGH'** MOVED WEST-SOUTHWESTWARDS AT A SPEED OF 17 KMPH DURING PAST SIX HOURS AND LAY CENTRED AT 0600 UTC OF TODAY THE  $6^{\text{TH}}$  NOVEMBER 2015 OVER WESTCENTRAL ARABIAN SEA NEAR LATITUDE **13.2°** N AND LONGITUDE **61.9°** E, ABOUT **860** KM EAST-NORTHEAST OF SOCOTRA ISLAND (41494) (YEMEN), **1320** KM SOUTHWEST OF MUMBAI (43003), AND **940** KM EAST-SOUTHEAST OF SALALAH (41316) (OMAN). IT WOULD MOVE WEST-SOUTHWESTWARDS AND INTENSIFY INTO A SEVERE CYCLONIC STORM DURING NEXT 24 HRS. THEREAFTER IT WOULD CONTINUE TO MOVE WEST-SOUTHWESTWARDS TOWARDS GULF OF ADEN AND WEAKEN GRADUALLY FROM  $8^{\text{TH}}$  NOVEMBER MORNING ONWARDS.

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 2.5. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 40 KNOTS GUSTING TO 50 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 994 HPA. STATE OF SEA AROUND SYTEM CENTRE IS HIGH. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER THE AREA BETWEEN LATITUDE 11.0 DEGREE NORTH TO 15.0 DEGREE NORTH AND LONGITUDE 60.0 DEGREE EAST TO 64.0 DEGREE EAST. MINIMUM CLOUD TOP TEMPERATURE IS -75°C. THE CLOUD SHOWS CURVED BAND PATTERN.

FORECAST FOR TRACK AND INTENSITY OF THE SYSTEM ARE GIVEN IN THE TABLE BELOW

Date/time(UTC)	Position	Maximum sustained	Category of cyclonic
	(lat. ⁰N/ long. ºE)	surface wind speed (kmph)	Disturbance
06-11-2015/0600	13.2/61.9	80-90 gusting to 100	Cyclonic Storm (CS)
06-11-2015/1200	12.8/60.8	80-90 gusting to 100	Cyclonic Storm (CS)
06-11-2015/1800	12.6/59.8	90-100 gusting to 110	Severe Cyclonic Storm (SCS)
07-11-2015/0000	12.5/58.8	90-100 gusting to 110	Severe Cyclonic Storm (SCS)
07-11-2015/0600	12.4/57.9	90-100 gusting to 110	Severe Cyclonic Storm (SCS)
07-11-2015/1800	12.3/56.2	80-90 gusting to 100	Cyclonic Storm (CS)
08-11-2015/0600	12.3/54.5	70-80 gusting to 90	Cyclonic Storm (CS)
08-11-2015/1800	12.4/52.9	60-70 gusting to 80	Cyclonic Storm (CS)
09-11-2015/0600	12.7/51.2	50-60 gusting to 70	Deep Depression (DD)

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

09-11-2015/1800	13.1/49.7	40-50 gusting to 60	Depression (D)
10-11-2015/0600	13.7/48.7	30-40 gusting to 50	Depression (D)

THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 16°N IN ASSOCIATION WITH AN ANTICYCLONIC CIRCULATION LOCATED TO THE NORTH-NORTHWEST OF THE SYSTEM CENTRE. THE SYSTEM IS BEING GUIDED WEST-SOUTHWESTWARDS UNDER INFLUENCE OF THE ABOVE RIDGE AND ANTI-CYCLONIC CIRCULATION. MOST OF THE MODELS ARE UNANIMOUS ABOUT WEST-SOUTHWESTWARD MOVEMENT. THE FORECAST IS MAINLY BASED ON MULTIMODEL ENSEMBLE GUIDANCE.

THE ASSOCIATED CONVECTION REMAINED ALMOST SAME IN PAST 12 HOURS WITH CONVECTIVE BANDING. THE WINDS ARE HIGHER OVER THE NORTHERN SECTOR. THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS 29°C. THE OCEAN THERMAL ENERGY IS ABOUT 35-50 KJ/CM2 AROUND SYSTEM CENTRE AND 50-75 KJ/CM2 TO WEST-SOUTHWEST OF THE SYSTEM CENTRE OVER A LIMITED AREA AND THEN DECREASES TOWARDS GULF OF ADEN. THE VERTICAL WIND SHEAR IS ABOUT 5-10 KNOTS (LOW) AROUND THE SYSTEM CENTRE AND TO THE WEST. IT INCREASES TOWARDS THE WEST-SOUTHWEST/SOUTHWEST. THE LOW LEVEL RELATIVE VORTICITY AND CONVERGENCE REMAINED SAME DURING PAST 12 HRS. THE ANIMATION OF TOTAL PRECIPITABLE WATER (TPW) INDICATES DRY AIR INTRUSION HAS COMMENCED AND IS COVERING NORTHERN, WESTERN AND SOUTHWESTERN SECTORS IN THE OUTER CORE. THE WARM MOIST AIR INCURSION CONTINUES FROM SOUTHEAST SECTOR. ONCE THE CYCLONIC STORM REACHES WEST OF LONGITUDE 58°N, THE INFLUENCE OF TPW WOULD INCREASE SIGNIFICANTLY. IN ASSOCIATION WITH THE ABOVE SCENARIO THE SYSTEM WOULD INTENSIFY FURTHER DURING NEXT 24 HOURS AND START WEAKENING GRADUALLY FROM 8TH NOVEMBER ONWARDS UNDER THE INFLUENCE OF COLDER OCEAN THERMAL ENERGY, DRY AIR INTRUSION FROM NORTHWEST AND POSSILBLE INCREASE IN VERTICAL WIND SHEAR.

### BAY OF BENGAL & ANDAMAN SEA LOW LEVEL CIRCULATION:

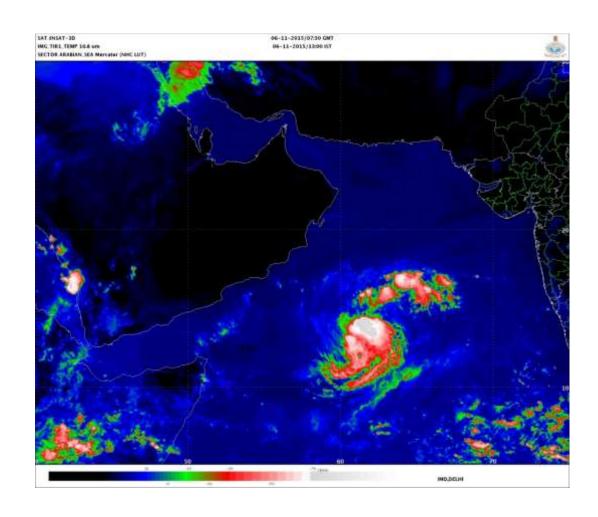
BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LIE OVER SOUTHWEST BAY OF BENGAL AND NEIGHBOURHOOD. IN ASSOCIATION WITH LOW LEVEL CIRCULATION OVER THE AREA.

### PROBABILITY OF CYCLOGENESIS OVER BAY OF BENGAL AND ANDAMAN SEA DURING NEXT 72 HOURS:

24 HOURS	24-48 HOURS	48-72 HOURS
NIL	LOW	MODERATE

(M.MOHAPATRA) HEAD-RSMC NEW DELHI

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)
NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%







FROM: RSMC -TROPICAL CYCLONES, NEW DELHI

TO: STORM WARNING CENTRE, NAYPYI TAW (MYANMAR)
STORM WARNING CENTRE, BANGKOK (THAILAND)
STORM WARNING CENTRE, COLOMBO (SRILANKA)
STORM WARNING CENTRE, DHAKA (BANGLADESH)

STORM WARNING CENTRE, KARACHI (PAKISTAN)
METEOROLOGICAL OFFICE, MALE (MALDIVES)

OMAN METEOROLOGICAL DEPARTMENT, MUSCAT (THROUGH RTH JEDDAH)

TROPICAL CYCLONE ADVISORY

RSMC - TROPICAL CYCLONES, NEW DELHI

TROPICAL STORM 'MEGH' ADVISORY NO. EIGHT ISSUED AT 1200 UTC OF 6<sup>TH</sup> NOVEMBER 2015 BASED ON 0900 UTC CHARTS OF 6<sup>TH</sup> NOVEMBER 2015.

THE **CYCLONIC STORM 'MEGH'** MOVED WEST-SOUTHWESTWARDS AT A SPEED OF 17 KMPH DURING PAST SIX HOURS AND LAY CENTRED AT 0900 UTC OF TODAY THE  $6^{\text{TH}}$  NOVEMBER 2015 OVER WESTCENTRAL ARABIAN SEA NEAR LATITUDE **13.1** $^{\circ}$ N AND LONGITUDE **61.6** $^{\circ}$ E, ABOUT **840** KM EAST-NORTHEAST OF SOCOTRA ISLAND (41494) (YEMEN), **1370** KM WEST-SOUTHWEST OF MUMBAI (43003), AND **910** KM EAST-SOUTHEAST OF SALALAH (41316) (OMAN). IT WOULD MOVE WEST-SOUTHWESTWARDS AND INTENSIFY INTO A SEVERE CYCLONIC STORM DURING NEXT 12 HRS. THEREAFTER IT WOULD CONTINUE TO MOVE WEST-SOUTHWESTWARDS TOWARDS GULF OF ADEN AND WEAKEN GRADUALLY FROM  $8^{\text{TH}}$  NOVEMBER MORNING ONWARDS.

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 2.5. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 40 KNOTS GUSTING TO 50 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 994 HPA. STATE OF SEA AROUND SYTEM CENTRE IS HIGH. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER THE AREA BETWEEN LATITUDE 11.0 DEGREE NORTH TO 15.0 DEGREE NORTH AND LONGITUDE 60.0 DEGREE EAST TO 64.0 DEGREE EAST. MINIMUM CLOUD TOP TEMPERATURE IS -75°C.

FORECAST FOR TRACK AND INTENSITY OF THE SYSTEM ARE GIVEN IN THE TABLE BELOW

Date/time(UTC)	Position	Maximum sustained	Category of cyclonic
	(lat. ⁰N/ long. ºE)	surface wind speed (kmph)	Disturbance
06-11-2015/0900	13.1/61.6	80-90 gusting to 100	Cyclonic Storm (CS)
06-11-2015/1200	12.8/60.8	80-90 gusting to 100	Cyclonic Storm (CS)
06-11-2015/1800	12.6/59.8	90-100 gusting to 110	Severe Cyclonic Storm (SCS)
07-11-2015/0000	12.5/58.8	90-100 gusting to 110	Severe Cyclonic Storm (SCS)
07-11-2015/0600	12.4/57.9	90-100 gusting to 110	Severe Cyclonic Storm (SCS)
07-11-2015/1800	12.3/56.2	80-90 gusting to 100	Cyclonic Storm (CS)
08-11-2015/0600	12.3/54.5	70-80 gusting to 90	Cyclonic Storm (CS)
08-11-2015/1800	12.4/52.9	60-70 gusting to 80	Cyclonic Storm (CS)
09-11-2015/0600	12.7/51.2	50-60 gusting to 70	Deep Depression (DD)

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

09-11-2015/1800	13.1/49.7	40-50 gusting to 60	Depression (D)
10-11-2015/0600	13.7/48.7	30-40 gusting to 50	Depression (D)

THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 16°N IN ASSOCIATION WITH AN ANTICYCLONIC CIRCULATION LOCATED TO THE NORTH-NORTHWEST OF THE SYSTEM CENTRE. THE SYSTEM IS BEING GUIDED WEST-SOUTHWESTWARDS UNDER THE INFLUENCE OF ABOVE RIDGE AND ANTI-CYCLONIC CIRCULATION. MOST OF THE MODELS ARE UNANIMOUS ABOUT WEST-SOUTHWESTWARD MOVEMENT. THE FORECAST IS MAINLY BASED ON MULTIMODEL ENSEMBLE GUIDANCE.

THE ASSOCIATED CONVECTION REMAINED ALMOST SAME IN PAST 12 HOURS WITH CONVECTIVE BANDING. THE WINDS ARE HIGHER OVER THE NORTHERN SECTOR. THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS 29°C. THE OCEAN THERMAL ENERGY IS ABOUT 35-50 KJ/CM2 AROUND SYSTEM CENTRE AND 50-75 KJ/CM2 TO WEST-SOUTHWEST OF THE SYSTEM CENTRE OVER A LIMITED AREA AND THEN DECREASES TOWARDS GULF OF ADEN. THE VERTICAL WIND SHEAR IS ABOUT 5-10 KNOTS (LOW) AROUND THE SYSTEM CENTRE AND TO THE WEST. IT INCREASES TOWARDS THE WEST-SOUTHWEST/SOUTHWEST. THE LOW LEVEL RELATIVE VORTICITY AND CONVERGENCE REMAINED SAME DURING PAST 12 HRS. THE ANIMATION OF TOTAL PRECIPITABLE WATER (TPW) INDICATES DRY AIR INTRUSION HAS COMMENCED AND IS COVERING NORTHERN, WESTERN AND SOUTHWESTERN SECTORS IN THE OUTER CORE. AT THE SAME TIME, THE WARM MOIST AIR INCURSION FROM SOUTHEAST SECTOR IS REDUCING GRADUALLY. ONCE THE CYCLONIC STORM REACHES WEST OF LONGITUDE 58°N, THE INFLUENCE OF TPW WOULD INCREASE SIGNIFICANTLY. IN ASSOCIATION WITH THE ABOVE SCENARIO THE SYSTEM WOULD START WEAKENING GRADUALLY FROM 8TH NOVEMBER ONWARDS UNDER THE INFLUENCE OF COLDER OCEAN THERMAL ENERGY, DRY AIR INTRUSION FROM NORTHWEST AND POSSILBLE INCREASE IN VERTICAL WIND SHEAR.

### BAY OF BENGAL & ANDAMAN SEA LOW LEVEL CIRCULATION:

BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LIE OVER SOUTHWEST BAY OF BENGAL AND NEIGHBOURHOOD. IN ASSOCIATION WITH LOW LEVEL CIRCULATION OVER THE AREA.

### PROBABILITY OF CYCLOGENESIS OVER BAY OF BENGAL AND ANDAMAN SEA DURING NEXT 72 HOURS:

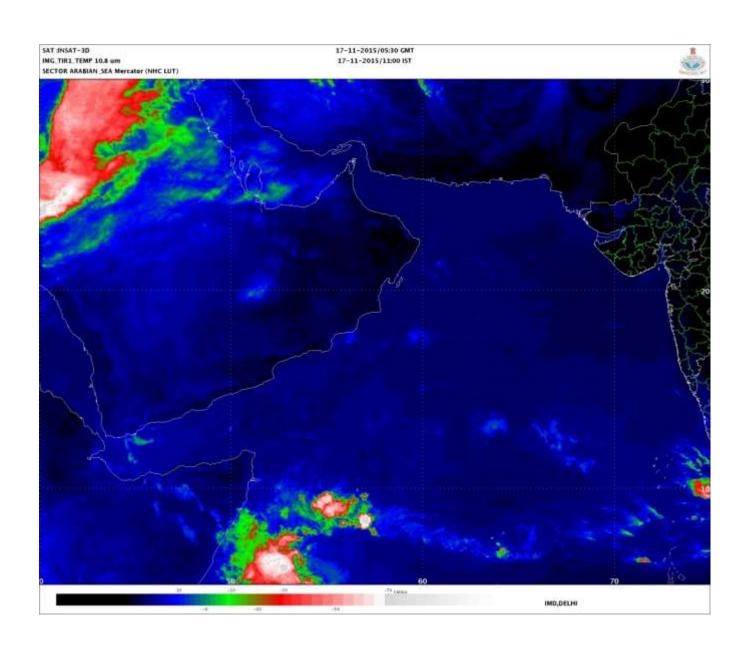
24 HOURS	24-48 HOURS	48-72 HOURS
NIL	MODERATE	HIGH

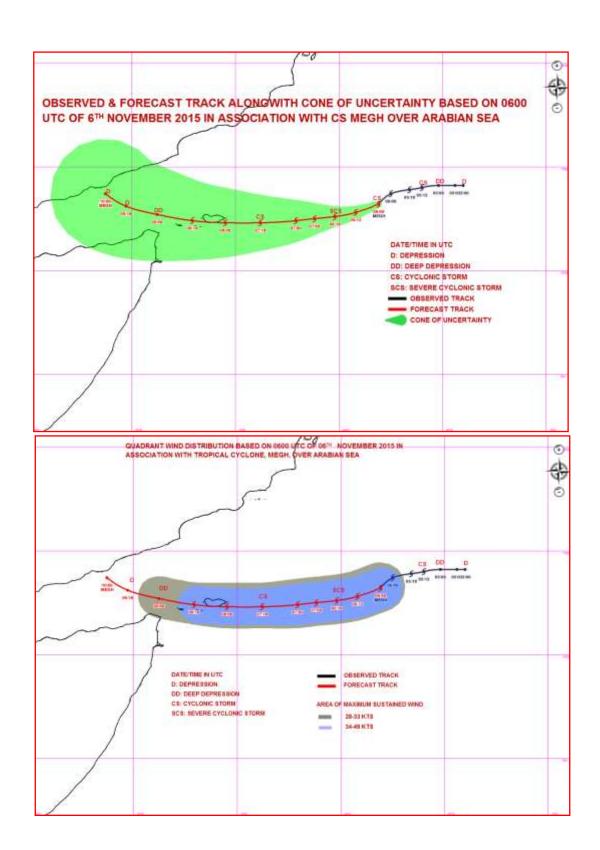
(M.MOHAPATRA)
HEAD-RSMC NEW DELHI

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

Contact: Phone: (91) 11-246524844 FAX: (91) 11-24623220 e-mail :cwdhq2008@gmail.com









FROM: RSMC -TROPICAL CYCLONES, NEW DELHI

TO: STORM WARNING CENTRE, NAYPYI TAW (MYANMAR)
STORM WARNING CENTRE, BANGKOK (THAILAND)
STORM WARNING CENTRE, COLOMBO (SRILANKA)
STORM WARNING CENTRE, DHAKA (BANGLADESH)

STORM WARNING CENTRE, KARACHI (PAKISTAN)
METEOROLOGICAL OFFICE, MALE (MALDIVES)

OMAN METEOROLOGICAL DEPARTMENT, MUSCAT (THROUGH RTH JEDDAH)

TROPICAL CYCLONE ADVISORY

**RSMC - TROPICAL CYCLONES, NEW DELHI** 

TROPICAL STORM 'MEGH' ADVISORY NO. NINE ISSUED AT 1500 UTC OF  $6^{TH}$  NOVEMBER 2015 BASED ON 1200 UTC CHARTS OF  $6^{TH}$  NOVEMBER 2015.

THE **CYCLONIC STORM 'MEGH'** MOVED WEST-SOUTHWESTWARDS AT A SPEED OF 17 KMPH DURING PAST SIX HOURS AND LAY CENTRED AT 1200 UTC OF TODAY THE  $6^{\text{TH}}$  NOVEMBER 2015 OVER WESTCENTRAL ARABIAN SEA NEAR LATITUDE **13.0°** N AND LONGITUDE **61.0°** E, ABOUT **770 KM** EAST-NORTHEAST OF SOCOTRA ISLAND (41494) (YEMEN), **1430 KM** WEST-SOUTHWEST OF MUMBAI (43003), AND **860 KM** EAST-SOUTHEAST OF SALALAH (41316) (OMAN). IT WOULD CONTINUE TO MOVE WEST-SOUTHWESTWARDS TOWARDS GULF OF ADEN, REACHING CLOSE TO NORTHERN TIP OF SOMALIA BY 0600 UTC OF  $9^{\text{TH}}$  NOVEMBER. THE SYSTEM WOULD WEAKEN GRADUALLY FROM 0600 UTC OF  $7^{\text{TH}}$  NOVEMBER MAINLY DUE TO COLD AND DRY AIR INTRUSION FROM THE ARABIAN PENINSULA.

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 2.5. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 40 KNOTS GUSTING TO 50 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 994 HPA. STATE OF SEA AROUND SYTEM CENTRE IS HIGH. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER THE AREA BETWEEN LATITUDE 11.0 DEGREE NORTH TO 15.5 DEGREE NORTH AND LONGITUDE 59.5 DEGREE EAST TO 63.0 DEGREE EAST. MINIMUM CLOUD TOP TEMPERATURE IS -70°C.

FORECAST FOR TRACK AND INTENSITY OF THE SYSTEM ARE GIVEN IN THE TABLE BELOW

Date/time(UTC)	Position	Maximum sustained	Category of cyclonic
	(lat. ⁰N/ long. ºE)	surface wind speed (kmph)	Disturbance
06-11-2015/1200	13.0/61.0	80-90 gusting to 100	Cyclonic Storm (CS)
06-11-2015/1800	12.8/60.1	80-90 gusting to 100	Cyclonic Storm (CS)
07-11-2015/0000	12.6/59.2	80-90 gusting to 100	Cyclonic Storm (CS)
07-11-2015/0600	12.4/58.3	70-80 gusting to 90	Cyclonic Storm (CS)
07-11-2015/1200	12.2/57.4	60-70 gusting to 80	Cyclonic Storm (CS)
08-11-2015/0000	12.0/55.6	50-60 gusting to 70	Deep Depression (DD)
08-11-2015/1200	12.0/54.0	40-50 gusting to 60	Depression (D)
09-11-2015/0000	12.1/52.5	30-40 gusting to 45	Depression (D)
09-11-2015/1200	12.3/51.0	20-30 gusting to 35	Low

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG  $16^{\circ}N$  IN ASSOCIATION WITH AN ANTICYCLONIC CIRCULATION LOCATED TO THE NORTH OF THE SYSTEM CENTRE. THE SYSTEM WOULD CONTINUE TO BE GUIDED WEST-SOUTHWESTWARDS UNDER THE INFLUENCE OF THE ABOVE RIDGE AND ANTI-CYCLONIC CIRCULATION TILL 1200 UTC OF  $7^{TH}$  NOVEMBER. THEREAFTER IT WOULD MOVE INITIALLY WESTWARDS AND THEN WEST-NORTHWESTWARDS TOWARDS GULF OF ADEN, CLOSE TO NORTHERN TIP OF SOMALIA. THE FORECAST IS MAINLY BASED ON MULTIMODEL ENSEMBLE GUIDANCE.

THE ASSOCIATED CONVECTION REMAINED ALMOST SAME IN PAST 12 HOURS. THE WINDS ARE HIGHER OVER THE NORTHERN SECTOR. THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS 29°C. THE OCEAN THERMAL ENERGY IS ABOUT 35-50 KJ/CM² AROUND SYSTEM CENTRE AND 50-75 KJ/CM² TO WEST-SOUTHWEST OF THE SYSTEM CENTRE OVER A LIMITED AREA AND THEN DECREASES TOWARDS GULF OF ADEN. THE VERTICAL WIND SHEAR IS ABOUT 10 KNOTS (LOW) AROUND THE SYSTEM CENTRE AND ALONG THE PREDICTED TRACK UPTO 48 HOURS FORECAST PERIOD. THEREAFTER, IT INCREASES. THE LOW LEVEL RELATIVE VORTICITY IS  $100 \times 10^{-5} \ SEC^{-1}$ , CONVERGENCE IS 5- $10 \times 10^{-5} \ SEC^{-1}$ , AND DIVERGENCE IS 5- $10 \times 10^{-5} \ SEC^{-1}$ . THE ANIMATION OF TOTAL PRECIPITABLE WATER (TPW) INDICATES COLD AND DRY AIR INTRUSION FROM ARABIAN PENINSULA IS CONTINUING AND THE WARM MOIST AIR INCURSION FROM SOUTHEAST SECTOR IS REDUCING GRADUALLY. IN ASSOCIATION WITH THE ABOVE THE SYSTEM WOULD START WEAKENING GRADUALLY FROM 7TH NOVEMBER ONWARDS

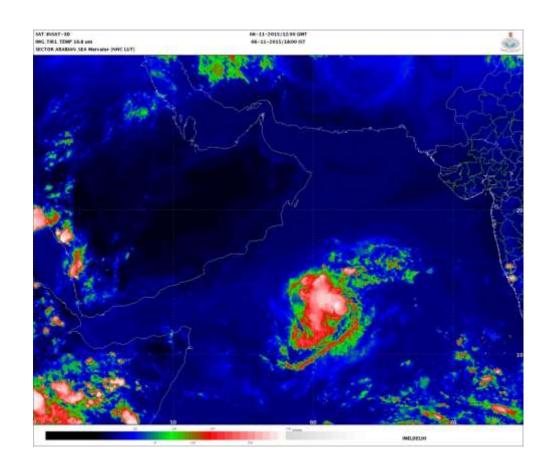
# BAY OF BENGAL & ANDAMAN SEA LOW LEVEL CIRCULATION:

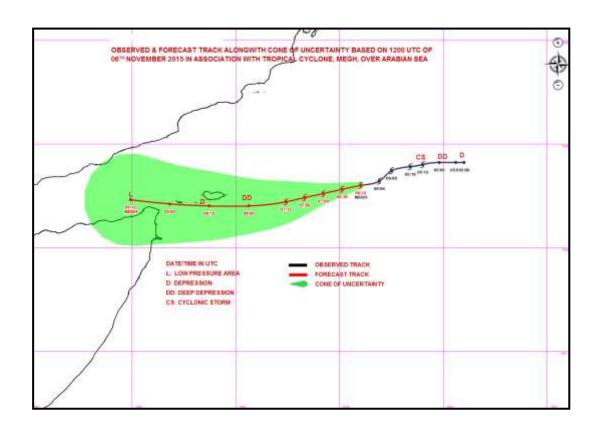
BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LIE OVER SOUTHWEST BAY OF BENGAL AND NEIGHBOURHOOD BETWEEN LATITUDE 5.0 DEGREE NORTH TO 12.5 DEGREE NORTH AND LONGITUDE 83.0 DEGREE EAST TO 93.0 DEGREE EAST IN ASSOCIATION WITH LOW LEVEL CIRCULATION OVER THE AREA.

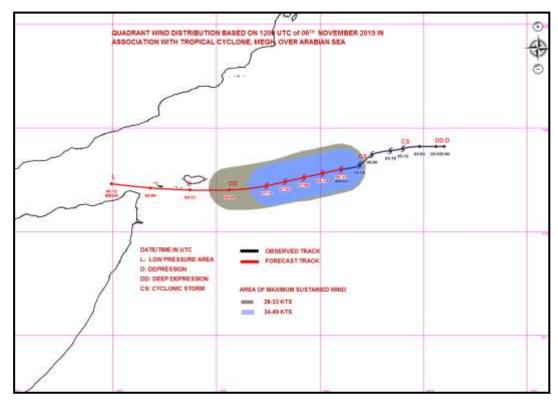
# PROBABILITY OF CYCLOGENESIS OVER BAY OF BENGAL AND ANDAMAN SEA DURING NEXT 72 HOURS:

24 HOURS	24-48 HOURS	48-72 HOURS
NIL	MODERATE	HIGH

(M.MOHAPATRA) HEAD-RSMC NEW DELHI











FROM: RSMC -TROPICAL CYCLONES, NEW DELHI

TO: STORM WARNING CENTRE, NAYPYI TAW (MYANMAR)
STORM WARNING CENTRE, BANGKOK (THAILAND)
STORM WARNING CENTRE, COLOMBO (SRILANKA)
STORM WARNING CENTRE, DHAKA (BANGLADESH)

STORM WARNING CENTRE, KARACHI (PAKISTAN)
METEOROLOGICAL OFFICE, MALE (MALDIVES)

OMAN METEOROLOGICAL DEPARTMENT, MUSCAT (THROUGH RTH JEDDAH)

TROPICAL CYCLONE ADVISORY

RSMC - TROPICAL CYCLONES. NEW DELHI

TROPICAL STORM 'MEGH' ADVISORY NO. TEN ISSUED AT 1800 UTC OF  $6^{TH}$  NOVEMBER 2015 BASED ON 1500 UTC CHARTS OF  $6^{TH}$  NOVEMBER 2015.

THE **CYCLONIC STORM 'MEGH'** MOVED WEST-SOUTHWESTWARDS AT A SPEED OF 15 KMPH DURING PAST SIX HOURS AND LAY CENTRED AT 1500 UTC OF TODAY THE  $6^{\text{TH}}$  NOVEMBER 2015 OVER WESTCENTRAL ARABIAN SEA NEAR LATITUDE **12.9°** N AND LONGITUDE **60.8°** E, ABOUT **750 KM** EAST-NORTHEAST OF SOCOTRA ISLAND (41494) (YEMEN), **1450 KM** WEST-SOUTHWEST OF MUMBAI (43003), AND **850 KM** EAST-SOUTHEAST OF SALALAH (41316) (OMAN). IT WOULD CONTINUE TO MOVE WEST-SOUTHWESTWARDS TOWARDS GULF OF ADEN, REACHING CLOSE TO NORTHERN TIP OF SOMALIA BY 0600 UTC OF  $9^{\text{TH}}$  NOVEMBER. THE SYSTEM WOULD WEAKEN GRADUALLY FROM 0600 UTC OF  $7^{\text{TH}}$  NOVEMBER MAINLY DUE TO COLD AND DRY AIR INTRUSION FROM THE ARABIAN PENINSULA.

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 2.5. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 40 KNOTS GUSTING TO 50 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 994 HPA. STATE OF SEA AROUND SYTEM CENTRE IS HIGH. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER THE AREA BETWEEN LATITUDE 12.5 DEGREE NORTH TO 16.0 DEGREE NORTH AND LONGITUDE 58.5 DEGREE EAST TO 62.0 DEGREE EAST. MINIMUM CLOUD TOP TEMPERATURE IS -64°C.

FORECAST FOR TRACK AND INTENSITY OF THE SYSTEM ARE GIVEN IN THE TABLE BELOW

Date/time(UTC)	Position	Maximum sustained	Category of cyclonic
	(lat. ⁰N/ long. ºE)	surface wind speed (kmph)	Disturbance
06-11-2015/1500	12.9/60.8	80-90 gusting to 100	Cyclonic Storm (CS)
06-11-2015/1800	12.8/60.1	80-90 gusting to 100	Cyclonic Storm (CS)
07-11-2015/0000	12.6/59.2	80-90 gusting to 100	Cyclonic Storm (CS)
07-11-2015/0600	12.4/58.3	70-80 gusting to 90	Cyclonic Storm (CS)
07-11-2015/1200	12.2/57.4	60-70 gusting to 80	Cyclonic Storm (CS)
08-11-2015/0000	12.0/55.6	50-60 gusting to 70	Deep Depression (DD)
08-11-2015/1200	12.0/54.0	40-50 gusting to 60	Depression (D)
09-11-2015/0000	12.1/52.5	30-40 gusting to 45	Depression (D)
09-11-2015/1200	12.3/51.0	20-30 gusting to 35	Low

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 16°N IN ASSOCIATION WITH AN ANTICYCLONIC CIRCULATION LOCATED TO THE NORTH OF THE SYSTEM CENTRE. THE SYSTEM WOULD CONTINUE TO BE GUIDED WEST-SOUTHWESTWARDS UNDER THE INFLUENCE OF THE ABOVE RIDGE AND ANTI-CYCLONIC CIRCULATION TILL 1200 UTC OF 7<sup>TH</sup> NOVEMBER. THEREAFTER IT WOULD MOVE INITIALLY WESTWARDS AND THEN WEST-NORTHWESTWARDS TOWARDS GULF OF ADEN, CLOSE TO NORTHERN TIP OF SOMALIA. THE FORECAST IS MAINLY BASED ON MULTIMODEL ENSEMBLE GUIDANCE.

THE ASSOCIATED CONVECTION REMAINED ALMOST SAME IN PAST 12 HOURS. THE WINDS ARE HIGHER OVER THE NORTHERN SECTOR. THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS 29°C. THE OCEAN THERMAL ENERGY IS ABOUT 35-50 KJ/CM² AROUND SYSTEM CENTRE AND 50-75 KJ/CM² TO WEST-SOUTHWEST OF THE SYSTEM CENTRE OVER A LIMITED AREA AND THEN DECREASES TOWARDS GULF OF ADEN. THE VERTICAL WIND SHEAR IS ABOUT 10 KNOTS (LOW) AROUND THE SYSTEM CENTRE AND ALONG THE PREDICTED TRACK UPTO 48 HOURS FORECAST PERIOD. THEREAFTER, IT INCREASES. THE LOW LEVEL RELATIVE VORTICITY IS  $100 \times 10^{-5} \ SEC^{-1}$ , CONVERGENCE IS 5- $10 \times 10^{-5} \ SEC^{-1}$ , AND DIVERGENCE IS 5- $10 \times 10^{-5} \ SEC^{-1}$ . THE ANIMATION OF TOTAL PRECIPITABLE WATER (TPW) INDICATES COLD AND DRY AIR INTRUSION FROM ARABIAN PENINSULA IS CONTINUING AND THE WARM MOIST AIR INCURSION FROM SOUTHEAST SECTOR IS REDUCING GRADUALLY. IN ASSOCIATION WITH THE ABOVE THE SYSTEM WOULD START WEAKENING GRADUALLY FROM 7TH NOVEMBER ONWARDS.

# BAY OF BENGAL & ANDAMAN SEA LOW LEVEL CIRCULATION:

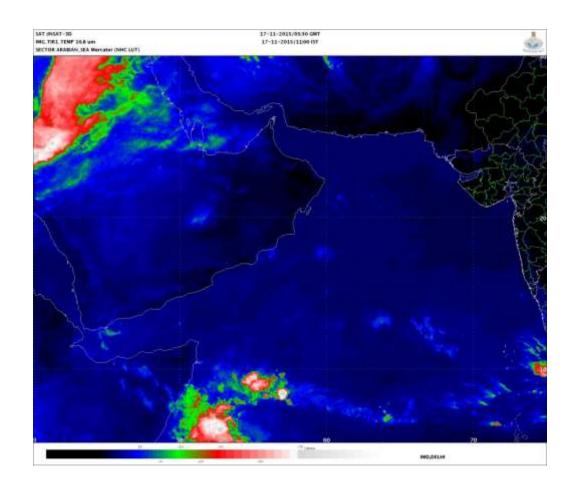
BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LIE OVER SOUTHWEST BAY OF BENGAL AND NEIGHBOURHOOD BETWEEN LATITUDE 5.5 DEGREE NORTH TO 10.5 DEGREE NORTH AND LONGITUDE 85.0 DEGREE EAST TO 91.0 DEGREE EAST IN ASSOCIATION WITH LOW LEVEL CIRCULATION OVER THE AREA.

BROKEN LOW /MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION OVER REST SOUTH BAY OF BENGAL, TENASSERIM COAST AND ANDAMAN SEA.

# PROBABILITY OF CYCLOGENESIS OVER BAY OF BENGAL AND ANDAMAN SEA DURING NEXT 72 HOURS:

24 HOURS	24-48 HOURS	48-72 HOURS
NIL	MODERATE	HIGH

(DUTY OFFICER) RSMC NEW DELHI







FROM: RSMC -TROPICAL CYCLONES, NEW DELHI

TO: STORM WARNING CENTRE, NAYPYI TAW (MYANMAR)

STORM WARNING CENTRE, BANGKOK (THAILAND)
STORM WARNING CENTRE, COLOMBO (SRILANKA)
STORM WARNING CENTRE, DHAKA (BANGLADESH)
STORM WARNING CENTRE, KARACHI (PAKISTAN)
METEOROLOGICAL OFFICE, MALE (MALDIVES)

OMAN METEOROLOGICAL DEPARTMENT, MUSCAT (THROUGH RTH JEDDAH)

TROPICAL CYCLONE ADVISORY

RSMC - TROPICAL CYCLONES, NEW DELHI

TROPICAL STORM 'MEGH' ADVISORY NO. ELEVEN ISSUED AT 2100 UTC OF  $6^{TH}$  NOVEMBER 2015 BASED ON 1800 UTC CHARTS OF  $6^{TH}$  NOVEMBER 2015.

THE CYCLONIC STORM 'MEGH' MOVED WESTWARDS AT A SPEED OF 8 KMPH DURING PAST SIX HOURS AND LAY CENTRED AT 1800 UTC OF TODAY THE 6TH NOVEMBER 2015 OVER WESTCENTRAL ARABIAN SEA NEAR LATITUDE 12.9°N AND LONGITUDE 60.6°E, ABOUT 730 KM EAST-NORTHEAST OF SOCOTRA ISLAND (41494) (YEMEN), 1470 KM WEST-SOUTHWEST OF MUMBAI (43003), AND 830 KM EAST-SOUTHEAST OF SALALAH (41316) (OMAN). IT WOULD CONTINUE TO MOVE WEST-SOUTHWESTWARDS TOWARDS GULF OF ADEN. THE SYSTEM WOULD WEAKEN GRADUALLY FROM 0600 UTC OF 7TH NOVEMBER MAINLY DUE TO COLD AND DRY AIR INTRUSION FROM THE ARABIAN PENINSULA.

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 2.5. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 40 KNOTS GUSTING TO 50 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 994 HPA. STATE OF SEA AROUND SYTEM CENTRE IS HIGH. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER THE AREA BETWEEN LATITUDE 12.5 DEGREE NORTH TO 16.0 DEGREE NORTH AND LONGITUDE 59.0 DEGREE EAST TO 62.0 DEGREE EAST. MINIMUM CLOUD TOP TEMPERATURE IS -64°C.

### FORECAST FOR TRACK AND INTENSITY OF THE SYSTEM ARE GIVEN IN THE TABLE BELOW

DATE/TIME(UTC)	POSITION	MAXIMUM SUSTAINED	CATEGORY OF CYCLONIC
	(LAT. <sup>0</sup> N/ LONG. <sup>0</sup> E)	SURFACE WIND SPEED (KMPH)	DISTURBANCE
06-11-2015/1800	12.9/60.6	80-90 GUSTING TO 100	CYCLONIC STORM (CS)
07-11-2015/0000	12.8/60.0	80-90 GUSTING TO 100	CYCLONIC STORM (CS)
07-11-2015/0600	12.7/59.3	70-80 GUSTING TO 90	CYCLONIC STORM (CS)
07-11-2015/1200	12.5/58.5	60-70 GUSTING TO 80	CYCLONIC STORM (CS)
07-11-2015/1800	12.3/57.7	50-60 GUSTING TO 70	DEEP DEPRESSION (DD)
08-11-2015/0600	12.1/56.1	50-60 GUSTING TO 70	DEEP DEPRESSION (DD)

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

08-11-2015/1800	12.0/54.5	40-50 GUSTING TO 60	DEPRESSION (D)
09-11-2015/0600	12.0/52.9	30-40 GUSTING TO 45	DEPRESSION (D)
09-11-2015/1800	12.1/51.3	20-30 GUSTING TO 35	LOW

THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 16°N IN ASSOCIATION WITH AN ANTICYCLONIC CIRCULATION LOCATED TO THE NORTH OF THE SYSTEM CENTRE. THE SYSTEM WOULD CONTINUE TO BE GUIDED WEST-SOUTHWESTWARDS UNDER THE INFLUENCE OF THE ABOVE RIDGE AND ANTI-CYCLONIC CIRCULATION TILL 1200 UTC OF 7TH NOVEMBER. THEREAFTER IT WOULD MOVE INITIALLY WESTWARDS AND THEN WEST-NORTHWESTWARDS TOWARDS GULF OF ADEN, CLOSE TO NORTHERN TIP OF SOMALIA. THE FORECAST IS MAINLY BASED ON MULTIMODEL ENSEMBLE GUIDANCE.

THE ASSOCIATED CONVECTION REMAINED ALMOST SAME IN PAST 12 HOURS. THE WINDS ARE HIGHER OVER THE NORTHERN SECTOR. THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS 29°C. THE OCEAN THERMAL ENERGY IS ABOUT 35-50 KJ/CM2 AROUND SYSTEM CENTRE AND 50-75 KJ/CM2 TO WEST-SOUTHWEST OF THE SYSTEM CENTRE OVER A LIMITED AREA AND THEN DECREASES TOWARDS GULF OF ADEN. THE VERTICAL WIND SHEAR IS ABOUT 10 KNOTS (LOW) AROUND THE SYSTEM CENTRE AND ALONG THE PREDICTED TRACK UPTO 48 HOURS FORECAST PERIOD. THEREAFTER, IT INCREASES. THE LOW LEVEL RELATIVE VORTICITY IS 100 x 10-5 SEC-1, CONVERGENCE IS 5-10 x 10-5 SEC-1, AND DIVERGENCE IS 5-10 x 10-5 SEC-1. THE ANIMATION OF TOTAL PRECIPITABLE WATER (TPW) INDICATES COLD AND DRY AIR INTRUSION FROM ARABIAN PENINSULA IS CONTINUING AND THE WARM MOIST AIR INCURSION FROM SOUTHEAST SECTOR IS REDUCING GRADUALLY. IN ASSOCIATION WITH THE ABOVE THE SYSTEM WOULD START WEAKENING GRADUALLY FROM 7TH NOVEMBER ONWARDS.

# BAY OF BENGAL & ANDAMAN SEA LOW LEVEL CIRCULATION:

BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LIE OVER SOUTHWEST BAY OF BENGAL AND NEIGHBOURHOOD BETWEEN LATITUDE 5.5 DEGREE NORTH TO 10.5 DEGREE NORTH AND LONGITUDE 85.0 DEGREE EAST TO 91.0 DEGREE EAST IN ASSOCIATION WITH LOW LEVEL CIRCULATION OVER THE AREA.

BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION OVER REST SOUTH BAY OF BENGAL, TENASSERIM COAST AND ANDAMAN SEA.

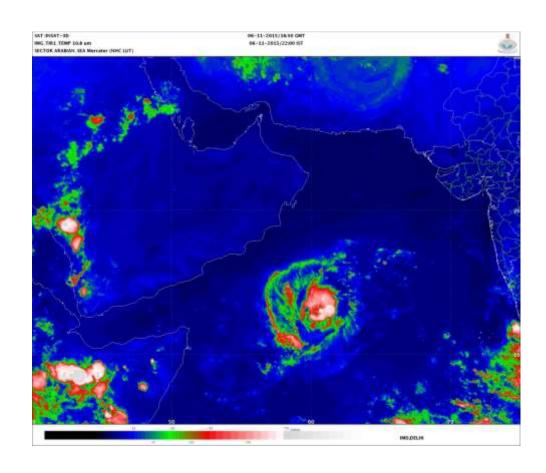
# PROBABILITY OF CYCLOGENESIS OVER BAY OF BENGAL AND ANDAMAN SEA DURING NEXT 72 HOURS:

24 HOURS	24-48 HOURS	48-72 HOURS
NIL	MODERATE	HIGH

(DUTY OFFICER) RSMC NEW DELHI

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%







FROM: RSMC -TROPICAL CYCLONES, NEW DELHI

TO: STORM WARNING CENTRE, NAYPYI TAW (MYANMAR)
STORM WARNING CENTRE, BANGKOK (THAILAND)

STORM WARNING CENTRE, COLOMBO (SRILANKA)
STORM WARNING CENTRE, DHAKA (BANGLADESH)
STORM WARNING CENTRE, KARACHI (PAKISTAN)
METEOROLOGICAL OFFICE, MALE (MALDIVES)

OMAN METEOROLOGICAL DEPARTMENT, MUSCAT (THROUGH RTH JEDDAH)

TROPICAL CYCLONE ADVISORY

RSMC - TROPICAL CYCLONES, NEW DELHI

TROPICAL STORM 'MEGH' ADVISORY NO. TWELVE ISSUED AT 0000 UTC OF  $7^{TH}$  NOVEMBER 2015 BASED ON 2100 UTC CHARTS OF  $6^{TH}$  NOVEMBER 2015.

THE CYCLONIC STORM 'MEGH' MOVED WEST-SOUTHWESTWARDS AT A SPEED OF 7 KMPH DURING PAST SIX HOURS AND LAY CENTRED AT 2100 UTC OF TODAY THE 6TH NOVEMBER 2015 OVER WESTCENTRAL ARABIAN SEA NEAR LATITUDE 12.8°N AND LONGITUDE 60.4°E, ABOUT 700 KM EAST-NORTHEAST OF SOCOTRA ISLAND (41494) (YEMEN), 1490 KM WEST-SOUTHWEST OF MUMBAI (43003), AND 815 KM EAST-SOUTHEAST OF SALALAH (41316) (OMAN). IT WOULD CONTINUE TO MOVE WEST-SOUTHWESTWARDS TOWARDS GULF OF ADEN. THE SYSTEM WOULD WEAKEN GRADUALLY FROM 0600 UTC OF 7TH NOVEMBER MAINLY DUE TO COLD AND DRY AIR INTRUSION FROM THE ARABIAN PENINSULA.

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 2.5. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 40 KNOTS GUSTING TO 50 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 994 HPA. STATE OF SEA AROUND SYTEM CENTRE IS HIGH. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER THE AREA BETWEEN LATITUDE 11.5 DEGREE NORTH TO 15.0 DEGREE NORTH AND LONGITUDE 58.5 DEGREE EAST TO 61.5 DEGREE EAST. MINIMUM CLOUD TOP TEMPERATURE IS -76°C.

### FORECAST FOR TRACK AND INTENSITY OF THE SYSTEM ARE GIVEN IN THE TABLE BELOW

DATE/TIME(UTC)	POSITION	MAXIMUM SUSTAINED	CATEGORY OF CYCLONIC
	(LAT. <sup>0</sup> N/LONG. <sup>0</sup> E)	SURFACE WIND SPEED (KMPH)	DISTURBANCE
06-11-2015/2100	12.8/60.4	80-90 GUSTING TO 100	CYCLONIC STORM (CS)
07-11-2015/0000	12.8/60.0	80-90 GUSTING TO 100	CYCLONIC STORM (CS)
07-11-2015/0600	12.7/59.3	70-80 GUSTING TO 90	CYCLONIC STORM (CS)
07-11-2015/1200	12.5/58.5	60-70 GUSTING TO 80	CYCLONIC STORM (CS)
07-11-2015/1800	12.3/57.7	50-60 GUSTING TO 70	DEEP DEPRESSION (DD)
08-11-2015/0600	12.1/56.1	50-60 GUSTING TO 70	DEEP DEPRESSION (DD)

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

08-11-2015/1800	12.0/54.5	40-50 GUSTING TO 60	DEPRESSION (D)
09-11-2015/0600	12.0/52.9	30-40 GUSTING TO 45	DEPRESSION (D)
09-11-2015/1800	12.1/51.3	20-30 GUSTING TO 35	LOW

THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 16°N IN ASSOCIATION WITH AN ANTICYCLONIC CIRCULATION LOCATED TO THE NORTH OF THE SYSTEM CENTRE. THE SYSTEM WOULD CONTINUE TO BE GUIDED WEST-SOUTHWESTWARDS UNDER THE INFLUENCE OF THE ABOVE RIDGE AND ANTI-CYCLONIC CIRCULATION TILL 1200 UTC OF 7TH NOVEMBER. THEREAFTER IT WOULD MOVE INITIALLY WESTWARDS AND THEN WEST-NORTHWESTWARDS TOWARDS GULF OF ADEN, CLOSE TO NORTHERN TIP OF SOMALIA. THE FORECAST IS MAINLY BASED ON MULTIMODEL ENSEMBLE GUIDANCE.

THE ASSOCIATED CONVECTION REMAINED ALMOST SAME IN PAST 12 HOURS. THE WINDS ARE HIGHER OVER THE NORTHERN SECTOR. THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS 29°C. THE OCEAN THERMAL ENERGY IS ABOUT 35-50 KJ/CM2 AROUND SYSTEM CENTRE AND 50-75 KJ/CM2 TO WEST-SOUTHWEST OF THE SYSTEM CENTRE OVER A LIMITED AREA AND THEN DECREASES TOWARDS GULF OF ADEN. THE VERTICAL WIND SHEAR IS ABOUT 10 KNOTS (LOW) AROUND THE SYSTEM CENTRE AND ALONG THE PREDICTED TRACK UPTO 48 HOURS FORECAST PERIOD. THEREAFTER, IT INCREASES. THE LOW LEVEL RELATIVE VORTICITY IS 100 x 10-5 SEC-1, CONVERGENCE IS 5-10 x 10-5 SEC-1, AND DIVERGENCE IS 5-10 x 10-5 SEC-1. THE ANIMATION OF TOTAL PRECIPITABLE WATER (TPW) INDICATES COLD AND DRY AIR INTRUSION FROM ARABIAN PENINSULA IS CONTINUING AND THE WARM MOIST AIR INCURSION FROM SOUTHEAST SECTOR IS REDUCING GRADUALLY. IN ASSOCIATION WITH THE ABOVE THE SYSTEM WOULD START WEAKENING GRADUALLY FROM 7TH NOVEMBER ONWARDS.

# BAY OF BENGAL & ANDAMAN SEA LOW LEVEL CIRCULATION:

BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LIE OVER SOUTHWEST BAY OF BENGAL AND NEIGHBOURHOOD BETWEEN LATITUDE 5.0 DEGREE NORTH TO 11.0 DEGREE NORTH AND LONGITUDE 84.0 DEGREE EAST TO 93.0 DEGREE EAST IN ASSOCIATION WITH LOW LEVEL CIRCULATION OVER THE AREA.

BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION OVER REST SOUTH BAY OF BENGAL, TENASSERIM COAST AND ANDAMAN SEA.

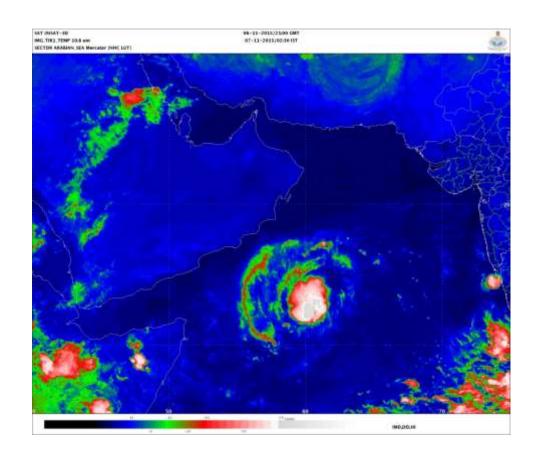
# PROBABILITY OF CYCLOGENESIS OVER BAY OF BENGAL AND ANDAMAN SEA DURING NEXT 72 HOURS:

24 HOURS	24-48 HOURS	48-72 HOURS
NIL	MODERATE	HIGH

(DUTY OFFICER) RSMC NEW DELHI

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%







FROM: RSMC -TROPICAL CYCLONES, NEW DELHI

TO: STORM WARNING CENTRE, NAYPYI TAW (MYANMAR)

STORM WARNING CENTRE, BANGKOK (THAILAND)
STORM WARNING CENTRE, COLOMBO (SRILANKA)
STORM WARNING CENTRE, DHAKA (BANGLADESH)
STORM WARNING CENTRE, KARACHI (PAKISTAN)
METEOROLOGICAL OFFICE, MALE (MALDIVES)

OMAN METEOROLOGICAL DEPARTMENT, MUSCAT (THROUGH RTH JEDDAH)

TROPICAL CYCLONE ADVISORY

RSMC - TROPICAL CYCLONES, NEW DELHI

TROPICAL STORM 'MEGH' ADVISORY NO. THIRTEEN ISSUED AT 0300 UTC OF  $7^{TH}$  NOVEMBER 2015 BASED ON 0000 UTC CHARTS OF  $7^{TH}$  NOVEMBER 2015.

THE **CYCLONIC STORM 'MEGH'** MOVED WEST-SOUTHWESTWARDS AT A SPEED OF 09 KMPH DURING PAST SIX HOURS AND LAY CENTRED AT 0000 UTC OF TODAY THE 7TH NOVEMBER 2015 OVER WESTCENTRAL ARABIAN SEA NEAR LATITUDE 12.8°N AND LONGITUDE 60.1°E, ABOUT 670 KM EAST-NORTHEAST OF SOCOTRA ISLAND (41494) (YEMEN), 1520 KM WEST-SOUTHWEST OF MUMBAI (43003), AND 790 KM EAST-SOUTHEAST OF SALALAH (41316) (OMAN). IT WOULD CONTINUE TO MOVE WEST-SOUTHWESTWARDS TOWARDS GULF OF ADEN. THE SYSTEM WOULD MAINTAIN THE INTENSITY OF CYCLONIC STORM DURING NEXT 24 HOURS AND WEAKEN INTO A DEEP DEPRESSIION THEREAFTER GRADUALLY.

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 2.5. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 40 KNOTS GUSTING TO 50 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 994 HPA. STATE OF SEA AROUND SYTEM CENTRE IS HIGH. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER THE AREA BETWEEN LATITUDE 11.0 DEGREE NORTH TO 15.0 DEGREE NORTH AND LONGITUDE 58.0 DEGREE EAST TO 61.5 DEGREE EAST. MINIMUM CLOUD TOP TEMPERATURE IS -90°C.

### FORECAST FOR TRACK AND INTENSITY OF THE SYSTEM ARE GIVEN IN THE TABLE BELOW

DATE/TIME(UTC)	POSITION	MAXIMUM SUSTAINED	CATEGORY OF CYCLONIC
	(LAT. <sup>0</sup> N/LONG. <sup>0</sup> E)	SURFACE WIND SPEED (KMPH)	DISTURBANCE
07-11-2015/0000	12.8/60.1	80-90 GUSTING TO 100	CYCLONIC STORM (CS)
07-11-2015/0600	12.7/59.3	80-90 GUSTING TO 100	CYCLONIC STORM (CS)
07-11-2015/1200	12.5/58.4	70-80 GUSTING TO 90	CYCLONIC STORM (CS)
07-11-2015/1800	12.3/57.5	65-75 GUSTING TO 85	CYCLONIC STORM (CS)
08-11-2015/0000	12.2/56.6	60-70 GUSTING TO 80	CYCLONIC STORM (CS)
08-11-2015/1200	12.1/54.6	50-60 GUSTING TO 70	DEEP DEPRESSION (DD)

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

09-11-2015/0000	12.2/52.5	40-50 GUSTING TO 60	DEPRESSION (D)
09-11-2015/1200	12.4/50.5	25-35 GUSTING TO 45	LOW

THE CYCLONIC STORM MOVED SLOWLY DURING PAST 12 HOURS AS ITS LAY CLOSE TO THE SOUTH OF THE ANTICYCLONIC CIRCULATION. HOWEVER IT SPEED WOULD INCREASE GRADUALLY AS IT MOVES WEST-SOUTHWESTWARDS.THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 16°N IN ASSOCIATION WITH AN ANTICYCLONIC CIRCULATION LOCATED TO THE NORTH OF THE SYSTEM CENTRE. THE SYSTEM WOULD CONTINUE TO BE GUIDED WEST-SOUTHWESTWARDS UNDER THE INFLUENCE OF THE ABOVE RIDGE AND ANTICYCLONIC CIRCULATION DURING NEXT 24 HOURS. THEREAFTER IT WOULD MOVE INITIALLY WESTWARDS AND THEN WEST-NORTHWESTWARDS TOWARDS GULF OF ADEN, CLOSE TO NORTHERN TIP OF SOMALIA. THE FORECAST IS MAINLY BASED ON MULTIMODEL ENSEMBLE GUIDANCE.

MICROWAVE IMAGERY OF SSMIS-16 AT 0042UTC OF 06 NOV SHOWS WELL DEVELOPED CONVECTIVE BANDING AROUND THE LLCC. THE CONVECTION IS MORE IN THE EASTERN SEMICIRCLE. THE POLEWARD OUT FLOW HAS DECEREASED .THE WINDS ARE HIGHER OVER THE NORTHERN SECTOR. THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS 28°C. THE OCEAN THERMAL ENERGY IS ABOUT 35-50 KJ/CM2 AROUND SYSTEM CENTRE AND 50-75 KJ/CM2 TO WEST-SOUTHWEST OF THE SYSTEM CENTRE OVER A LIMITED AREA AND THEN DECREASES TOWARDS GULF OF ADEN. THE VERTICAL WIND SHEAR IS ABOUT 10 KNOTS (LOW) AROUND THE SYSTEM CENTRE AND ALONG THE PREDICTED TRACK UPTO 24 HOURS FORECAST PERIOD. THEREAFTER, IT INCREASES. THE LOW LEVEL RELATIVE VORTICITY IS 100 x 10-5 SEC-1, CONVERGENCE IS 5-10 x 10-5 SEC-1, AND DIVERGENCE IS 5-10 x 10-5 SEC-1. THE ANIMATION OF TOTAL PRECIPITABLE WATER (TPW) INDICATES COLD AND DRY AIR INTRUSION FROM ARABIAN PENINSULA IS CONTINUING AND THE WARM MOIST AIR INCURSION FROM SOUTHEAST SECTOR IS REDUCING GRADUALLY IN ASSOCIATION WITH THE ABOVE THE SYSTEM. THE SYSTEM WOULD MAINTAIN THE INTENSITY OF THE CYCLONIC STORM DURING NEXT 24 HOURS AND WEAKEN INTO A DEEP DEPRESSION THEREAFTER.

# BAY OF BENGAL & ANDAMAN SEA LOW LEVEL CIRCULATION:

BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER SOUTHWEST BAY OF BENGAL AND NEIGHBOURHOOD BETWEEN LATITUDE 5.0 DEGREE NORTH TO 11.0 DEGREE NORTH AND LONGITUDE 84.0 DEGREE EAST TO 93.0 DEGREE EAST IN ASSOCIATION WITH LOW LEVEL CIRCULATION OVER THE AREA.

BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION OVER REST SOUTH BAY OF BENGAL, SOUTH TENASSERIM COAST AND ANDAMAN SEA.

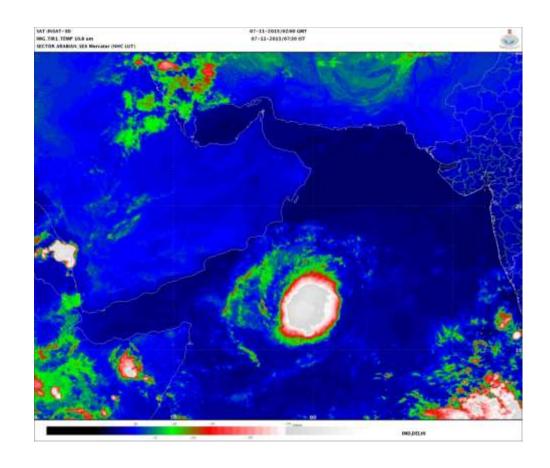
# PROBABILITY OF CYCLOGENESIS OVER BAY OF BENGAL AND ANDAMAN SEA DURING NEXT 72 HOURS:

24 HOURS	24-48 HOURS	48-72 HOURS
NIL	MODERATE	HIGH

(M.MOHAPATRA)
HEAD-RSMC NEW DELHI

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%



PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)
NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%





FROM: RSMC -TROPICAL CYCLONES, NEW DELHI

TO: STORM WARNING CENTRE, NAYPYI TAW (MYANMAR)

STORM WARNING CENTRE, BANGKOK (THAILAND)
STORM WARNING CENTRE, COLOMBO (SRILANKA)
STORM WARNING CENTRE, DHAKA (BANGLADESH)
STORM WARNING CENTRE, KARACHI (PAKISTAN)

**METEOROLOGICAL OFFICE, MALE (MALDIVES)** 

OMAN METEOROLOGICAL DEPARTMENT, MUSCAT (THROUGH RTH JEDDAH)

TROPICAL CYCLONE ADVISORY

RSMC - TROPICAL CYCLONES, NEW DELHI

TROPICAL STORM 'MEGH' ADVISORY NO. FOURTEEN ISSUED AT 0600 UTC OF  $7^{TH}$  NOVEMBER 2015 BASED ON 0300 UTC CHARTS OF  $7^{TH}$  NOVEMBER 2015.

THE CYCLONIC STORM 'MEGH' MOVED WESTWARDS AT A SPEED OF 15 KMPH DURING PAST SIX HOURS AND LAY CENTRED AT  $0300~\rm UTC$  OF TODAY THE 7TH NOVEMBER 2015 OVER WESTCENTRAL ARABIAN SEA NEAR LATITUDE  $12.8^{\circ}$ N AND LONGITUDE  $59.6^{\circ}$ E, ABOUT  $620~\rm KM$  EAST-SOUTHEAST OF SOCOTRA ISLAND (41494) (YEMEN),  $1580~\rm KM$  WEST-SOUTHWEST OF MUMBAI (43003), AND  $750~\rm KM$  SOUTHEAST OF SALALAH (41316) (OMAN). IT WOULD MOVE WEST-SOUTHWESTWARDS TOWARDS GULF OF ADEN, REACHING CLOSE TO NORTHERN TIP OF SOMALIA AROUND NOON OF 9TH NOVEMBER. THE SYSTEM WOULD INTENSIFY FURTHER INTO A SEVERE CYCLONIC STORM DURING NEXT 12 HOURS. IT WOULD MAINTAIN ITS INTENSITY TILL 0000 UTC OF  $8^{\rm TH}$  NOVEMBER AND WEAKEN GRADUALLY THEREAFTER.

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 3.0. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 45 KNOTS GUSTING TO 55 KNOTS. THE WINDS ARE HIGHER OVER THE NORTHERN SECTOR. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 994 HPA. STATE OF SEA AROUND SYTEM CENTRE IS HIGH. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER THE AREA BETWEEN LATITUDE 11.0 DEGREE NORTH TO 15.0 DEGREE NORTH AND LONGITUDE 57.0 DEGREE EAST TO 61.5 DEGREE EAST. MINIMUM CLOUD TOP TEMPERATURE IS -89°C.

## FORECAST FOR TRACK AND INTENSITY OF THE SYSTEM ARE GIVEN IN THE TABLE BELOW

DATE/TIME(UTC)	POSITION	MAXIMUM SUSTAINED	CATEGORY OF CYCLONIC
	(LAT. <sup>0</sup> N/LONG. <sup>0</sup> E)	SURFACE WIND SPEED (KMPH)	DISTURBANCE
07-11-2015/0300	12.8/59.6	80-90 GUSTING TO 100	CYCLONIC STORM (CS)
07-11-2015/0600	12.7/59.3	80-90 GUSTING TO 100	CYCLONIC STORM (CS)
07-11-2015/1200	12.5/58.4	90-100 GUSTING TO 110	SEVERE CYCLONIC STORM (SCS)
07-11-2015/1800	12.3/57.5	100-110 GUSTING TO 120	SEVERE CYCLONIC STORM (SCS)

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

08-11-2015/0000	12.2/56.6	100-110 GUSTING TO 120	SEVERE CYCLONIC STORM (SCS)
08-11-2015/1200	12.1/54.6	90-100 GUSTING TO 110	SEVERE CYCLONIC STORM (SCS)
09-11-2015/0000	12.2/52.5	80-90 GUSTING TO 100	CYCLONIC STORM (CS)
09-11-2015/1200	12.4/50.7	70-80 GUSTING TO 90	CYCLONIC STORM (CS)
10-11-2015/0000	12.6/49.2	60-70 GUSTING TO 80	CYCLONIC STORM (CS)
10-11-2015/1200	12.9/48.0	50-60 GUSTING TO 70	DEEP DEPRESSION (DD)
11-11-2015/0000	13.3/47.0	40-50 GUSTING TO 70	DEPRESSION (D)

THE CYCLONIC STORM HAS AGAIN PEAKED UP THE SPEED OF MOVEMENT AS IT MOVED WITH A SPEED OF 15KMPH PAST SIX HOURS. IT WAS DUE TO THE STEERING ANTICYCLONIC CIRCULATION SHIFTING TO THE NORTHEAST OF THE SYSTEM CENTRE FROM ITS PREVIOUSLY NORTHERLY POSITION. ITS SPEED WOULD SLOWLY INCREASE AS IT MOVES WEST-SOUTHWESTWARDS. THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 16°N IN ASSOCIATION WITH AN ANTICYCLONIC CIRCULATION LOCATED TO THE NORTHEAST OF THE SYSTEM CENTRE. THE SYSTEM WOULD CONTINUE TO BE GUIDED WEST-SOUTHWESTWARDS UNDER THE INFLUENCE OF THE ABOVE RIDGE AND ANTI-CYCLONIC CIRCULATION DURING NEXT 24 HOURS. THEREAFTER IT WOULD MOVE INITIALLY WESTWARDS AND THEN WEST-NORTHWESTWARDS TOWARDS GULF OF ADEN, CLOSE TO NORTHERN TIP OF SOMALIA BY 0600 UTC OF 9 NOVEMBER. THE FORECAST IS MAINLY BASED ON MULTIMODEL ENSEMBLE GUIDANCE.

MICROWAVE IMAGERY OF F-19 AT 0213 UTC OF 07 NOVEMBER SHOWS THAT THE CONVECTION HAS SHIFTED CYCLONICALLY AND NOW LIES OVER THE NORTHERN SEMICIRCLE OF THE SYSTEM CENTRE. THE RADIAL OUT FLOW HAS INCEREASED ESPECIALLY IN WESTERN AND NORTHERN QUADRANTS. AS A RESULT, THE UPPER AIR DIVERGENCE AND LOW LEVEL VORTICITY HAS INCREASED DURING PAST 6 HOURS. THE LOW LEVEL RELATIVE VORTICITY IS 150 x 10-5 SEC-1, CONVERGENCE IS 5-10 x 10-5 SEC-1, AND DIVERGENCE IS 30 x 10-5 SEC-1. THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS 29°C. THE OCEAN THERMAL ENERGY IS ABOUT 35-50 KJ/CM<sup>2</sup> AROUND SYSTEM CENTRE AND 50-75 KJ/CM2 TO WEST-SOUTHWEST OF THE SYSTEM CENTRE OVER A LIMITED AREA AND THEN DECREASES TOWARDS GULF OF ADEN. THE VERTICAL WIND SHEAR IS ABOUT 10 KNOTS (LOW) AROUND THE SYSTEM CENTRE AND ALONG THE PREDICTED TRACK UPTO 24 HOURS FORECAST PERIOD. THE ANIMATION OF TOTAL PRECIPITABLE WATER (TPW) INDICATES COLD AND DRY AIR INTRUSION FROM ARABIAN PENINSULA IS CONTINUING AND THE WARM MOIST AIR INCURSION FROM SOUTHEAST SECTOR IS REDUCING GRADUALLY IN ASSOCIATION WITH THE ABOVE THE SYSTEM. THE SYSTEM WOULD INTENSIFY FURTHER INTO A SEVERE CYCLONIC STORM DURING NEXT 12 HOURS. IT WOULD MAINTAIN ITS INTENSITY TILL 0000 UTC OF 8<sup>TH</sup> NOVEMBER AND WEAKEN GRADUALLY THEREAFTER.

### **BAY OF BENGAL & ANDAMAN SEA**

LOW PRESSURE AREA: A LOW PRESSURE AREA LIES OVER SOUTHWEST BAY OF BENGAL AT 0300 UTC OF TODAY, THE  $7^{\rm TH}$  NOVEMBER 2015. IT WOULD BECOME WELL MARKED AND FURTHER CONCENTRATE INTO A DEPRESSION DURING NEXT 48 HOURS.

BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER SOUTH BAY OF BENGAL, BETWEEN LATITUDE 6.0 DEGREE NORTH TO 12.5 DEGREE NORTH AND LONGITUDE 84.0 DEGREE EAST TO 90.0 DEGREE EAST IN ASSOCIATION WITH LOW PRESSURE AREA.

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

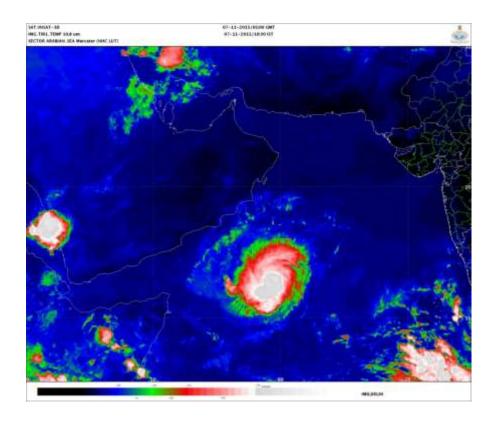
NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

THE ENVIRONMENTAL, ATMOSPHERIC AND OCEANIC CONDITIONS ARE FAVOURABLE FOR INTENSIFICATION OF THE SYSTEM AND NORTHWESTWARD MOVEMENT REACHING TAMIL NADU AND SRILANKA COAST BY  $9^{\text{TH}}$  NIGHT/ $10^{\text{TH}}$  MORNING.

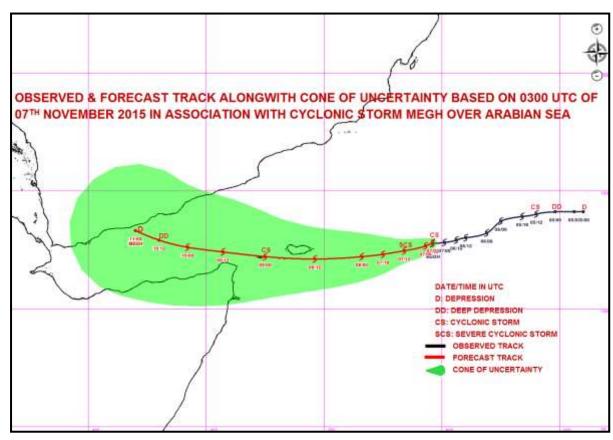
# PROBABILITY OF CYCLOGENESIS OVER BAY OF BENGAL AND ANDAMAN SEA DURING NEXT 72 HOURS:

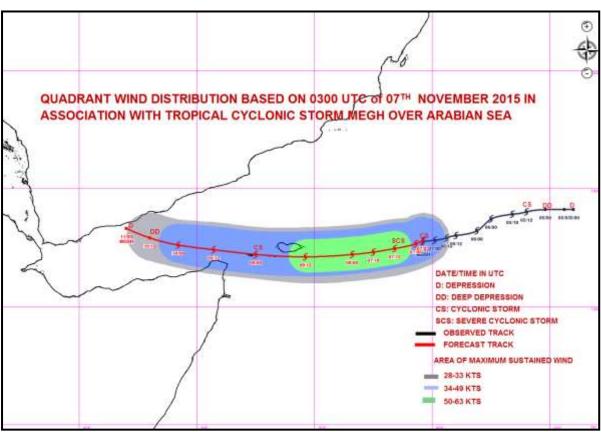
24 HOURS	24-48 HOURS	48-72 HOURS
LOW	MODERATE	HIGH

# (M.MOHAPATRA) HEAD-RSMC NEW DELHI



NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%





NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%





FROM: RSMC -TROPICAL CYCLONES, NEW DELHI

TO: STORM WARNING CENTRE, NAYPYI TAW (MYANMAR)

STORM WARNING CENTRE, BANGKOK (THAILAND)
STORM WARNING CENTRE, COLOMBO (SRILANKA)
STORM WARNING CENTRE, DHAKA (BANGLADESH)
STORM WARNING CENTRE, KARACHI (PAKISTAN)
METEOROLOGICAL OFFICE, MALE (MALDIVES)

OMAN METEOROLOGICAL DEPARTMENT, MUSCAT (THROUGH RTH JEDDAH)

TROPICAL CYCLONE ADVISORY

**RSMC - TROPICAL CYCLONES, NEW DELHI** 

TROPICAL STORM 'MEGH' ADVISORY NO. FIFTEEN ISSUED AT 0900 UTC OF  $7^{TH}$  NOVEMBER 2015 BASED ON 0600 UTC CHARTS OF  $7^{TH}$  NOVEMBER 2015.

THE CYCLONIC STORM 'MEGH' MOVED WEST-SOUTHWESTWARDS AT A SPEED OF 17 KMPH DURING PAST SIX HOURS AND LAY CENTRED AT **0600** UTC OF TODAY THE 7TH NOVEMBER 2015 OVER WESTCENTRAL ARABIAN SEA NEAR LATITUDE **12.7**°N AND LONGITUDE **59.2**°E, ABOUT 570 KM EAST-SOUTHEAST OF SOCOTRA ISLAND (41494) (YEMEN), **1610** KM WEST-SOUTHWEST OF MUMBAI (43003), AND **730** KM SOUTHEAST OF SALALAH (41316) (OMAN). IT WOULD MOVE WEST-SOUTHWESTWARDS PASSING CLOSE TO SOUTH OF SOCOTRA ISLAND DURING 1200 TO 1800 UTC OF 8<sup>TH</sup> NOVEMBER 2015. IT WOULD THEN MOVE WEST-NORTHWESTWARDS TOWARDS GULF OF ADEN, REACHING CLOSE TO NORTHERN TIP OF SOMALIA AROUND 0600 UTC OF 9TH NOVEMBER. THE SYSTEM WOULD INTENSIFY FURTHER INTO A SEVERE CYCLONIC STORM DURING NEXT 12 HOURS. IT WOULD MAINTAIN ITS INTENSITY TILL 0000 UTC OF 8<sup>TH</sup> NOVEMBER AND WEAKEN GRADUALLY THEREAFTER.

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 3.0. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 45 KNOTS GUSTING TO 55 KNOTS. THE WINDS ARE HIGHER OVER THE NORTHERN SECTOR. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 994 HPA. STATE OF SEA AROUND SYTEM CENTRE IS HIGH. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER THE AREA BETWEEN LATITUDE 10.5 DEGREE NORTH TO 15.0 DEGREE NORTH AND LONGITUDE 57.0 DEGREE EAST TO 61.0 DEGREE EAST. MINIMUM CLOUD TOP TEMPERATURE IS -80°C.

## FORECAST FOR TRACK AND INTENSITY OF THE SYSTEM ARE GIVEN IN THE TABLE BELOW

DATE/TIME(UTC)	POSITION	MAXIMUM SUSTAINED	CATEGORY OF CYCLONIC
	(LAT. <sup>0</sup> N/LONG. <sup>0</sup> E)	SURFACE WIND SPEED (KMPH)	DISTURBANCE
07-11-2015/0600	12.7/59.2	80-90 GUSTING TO 100	CYCLONIC STORM (CS)
07-11-2015/1200	12.5/58.4	90-100 GUSTING TO 110	SEVERE CYCLONIC STORM (SCS)
07-11-2015/1800	12.3/57.5	100-110 GUSTING TO 120	SEVERE CYCLONIC STORM (SCS)
08-11-2015/0000	12.2/56.6	100-110 GUSTING TO 120	SEVERE CYCLONIC STORM (SCS)

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

08-11-2015/0600	12.1/55.6	95-105 GUSTING TO 115	SEVERE CYCLONIC STORM (SCS)
08-11-2015/1800	12.1/53.5	90-100 GUSTING TO 110	SEVERE CYCLONIC STORM (SCS)
09-11-2015/0600	12.3/51.4	80-90 GUSTING TO 100	CYCLONIC STORM (CS)
09-11-2015/1800	12.5/49.9	70-80 GUSTING TO 90	CYCLONIC STORM (CS)
10-11-2015/0600	12.7/48.6	60-70 GUSTING TO 80	CYCLONIC STORM (CS)
10-11-2015/1800	13.0/47.5	50-60 GUSTING TO 70	DEEP DEPRESSION (DD)
11-11-2015/0600	13.4/46.5	40-50 GUSTING TO 70	DEPRESSION (D)

THE CYCLONIC STORM HAS AGAIN PICKED UP THE SPEED OF MOVEMENT AS IT MOVED WITH A SPEED OF 15KMPH PAST SIX HOURS. IT WAS DUE TO THE STEERING ANTICYCLONIC CIRCULATION SHIFTING TO THE NORTHEAST OF THE SYSTEM CENTRE FROM ITS PREVIOUSLY NORTHERLY POSITION. ITS SPEED WOULD SLOWLY INCREASE AS IT MOVES WEST-SOUTHWESTWARDS. THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 16°N IN ASSOCIATION WITH AN ANTICYCLONIC CIRCULATION LOCATED TO THE NORTHEAST OF THE SYSTEM CENTRE. THE SYSTEM WOULD CONTINUE TO BE GUIDED WEST-SOUTHWESTWARDS UNDER THE INFLUENCE OF THE ABOVE RIDGE AND ANTI-CYCLONIC CIRCULATION DURING NEXT 24 HOURS. THEREAFTER IT WOULD MOVE INITIALLY WESTWARDS AND THEN WEST-NORTHWESTWARDS TOWARDS GULF OF ADEN, CLOSE TO NORTHERN TIP OF SOMALIA BY 0600 UTC OF 9 NOVEMBER. THE FORECAST IS MAINLY BASED ON MULTIMODEL ENSEMBLE GUIDANCE.

MICROWAVE IMAGERY OF F-19 AT 0213 UTC OF 07 NOVEMBER SHOWS THAT THE CONVECTION HAS SHIFTED CYCLONICALLY AND NOW LIES OVER THE NORTHERN SEMICIRCLE OF THE SYSTEM CENTRE. THE RADIAL OUT FLOW HAS INCEREASED ESPECIALLY IN WESTERN AND NORTHERN QUADRANTS. AS A RESULT, THE UPPER AIR DIVERGENCE AND LOW LEVEL VORTICITY HAS INCREASED DURING PAST 6 HOURS. THE LOW LEVEL RELATIVE VORTICITY IS 150 x 10-5 SEC-1, CONVERGENCE IS 5-10 x 10-5 SEC-1, AND DIVERGENCE IS 30 x 10-5 SEC-1. THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS 29°C. THE OCEAN THERMAL ENERGY IS ABOUT 35-50 KJ/CM<sup>2</sup> AROUND SYSTEM CENTRE AND 50-75 KJ/CM2 TO WEST-SOUTHWEST OF THE SYSTEM CENTRE OVER A LIMITED AREA AND THEN DECREASES TOWARDS GULF OF ADEN. THE VERTICAL WIND SHEAR IS ABOUT 10 KNOTS (LOW) AROUND THE SYSTEM CENTRE AND ALONG THE PREDICTED TRACK UPTO 24 HOURS FORECAST PERIOD. THE ANIMATION OF TOTAL PRECIPITABLE WATER (TPW) INDICATES COLD AND DRY AIR INTRUSION FROM ARABIAN PENINSULA IS CONTINUING AND THE WARM MOIST AIR INCURSION FROM SOUTHEAST SECTOR IS REDUCING GRADUALLY IN ASSOCIATION WITH THE ABOVE THE SYSTEM. THE SYSTEM WOULD INTENSIFY FURTHER INTO A SEVERE CYCLONIC STORM DURING NEXT 12 HOURS. IT WOULD MAINTAIN ITS INTENSITY TILL 0000 UTC OF 8<sup>TH</sup> NOVEMBER AND WEAKEN GRADUALLY THEREAFTER.

### **BAY OF BENGAL & ANDAMAN SEA**

LOW PRESSURE AREA: A LOW PRESSURE AREA LIES OVER SOUTHWEST BAY OF BENGAL AT 0300 UTC OF TODAY, THE  $7^{\rm TH}$  NOVEMBER 2015. IT WOULD BECOME WELL MARKED AND FURTHER CONCENTRATE INTO A DEPRESSION DURING NEXT 48 HOURS.

BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER SOUTH BAY OF BENGAL, BETWEEN LATITUDE 6.0 DEGREE NORTH TO 12.5 DEGREE NORTH AND LONGITUDE 84.0 DEGREE EAST TO 90.0 DEGREE EAST IN ASSOCIATION WITH LOW PRESSURE AREA.

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

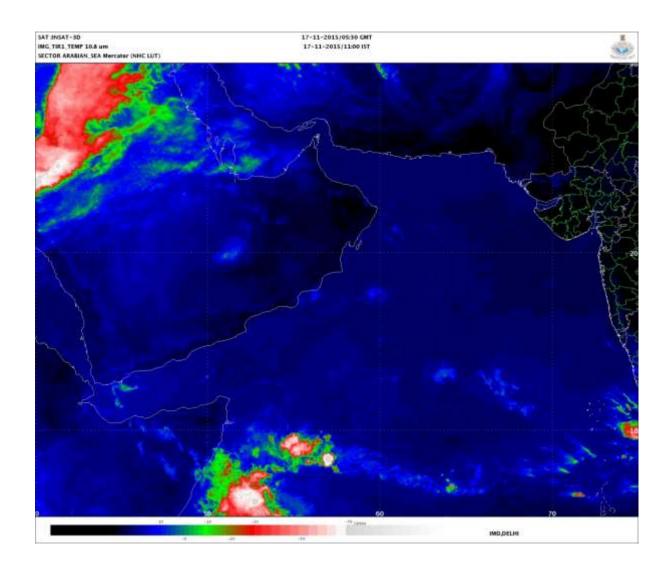
NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

THE ENVIRONMENTAL, ATMOSPHERIC AND OCEANIC CONDITIONS ARE FAVOURABLE FOR INTENSIFICATION OF THE SYSTEM AND NORTHWESTWARD MOVEMENT REACHING TAMIL NADU AND SRILANKA COAST BY  $9^{\text{TH}}$  NIGHT/ $10^{\text{TH}}$  MORNING.

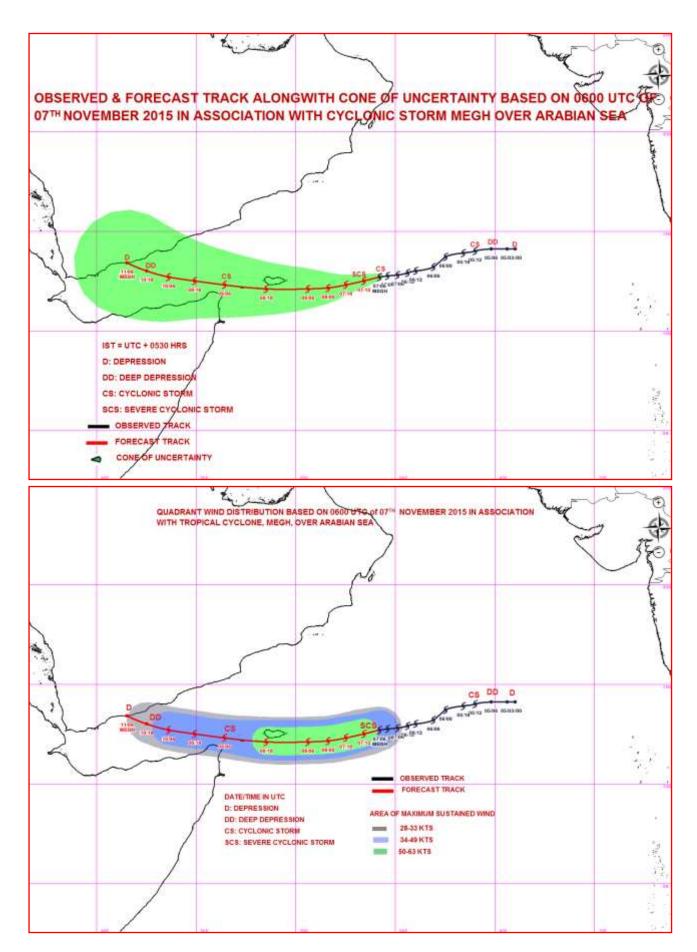
# PROBABILITY OF CYCLOGENESIS OVER BAY OF BENGAL AND ANDAMAN SEA DURING NEXT 72 HOURS:

24 HOURS	24-48 HOURS	48-72 HOURS
LOW	MODERATE	HIGH

# (M.MOHAPATRA) HEAD-RSMC NEW DELHI



NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%



PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)
NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%





FROM: RSMC -TROPICAL CYCLONES, NEW DELHI

TO: STORM WARNING CENTRE, NAYPYI TAW (MYANMAR)
STORM WARNING CENTRE, BANGKOK (THAILAND)

STORM WARNING CENTRE, COLOMBO (SRILANKA)
STORM WARNING CENTRE, DHAKA (BANGLADESH)
STORM WARNING CENTRE, KARACHI (PAKISTAN)
METEOROLOGICAL OFFICE, MALE (MALDIVES)

OMAN METEOROLOGICAL DEPARTMENT, MUSCAT (THROUGH RTH JEDDAH)

TROPICAL CYCLONE ADVISORY

RSMC - TROPICAL CYCLONES. NEW DELHI

TROPICAL STORM 'MEGH' ADVISORY NO. SIXTEEN ISSUED AT 1200 UTC OF 7<sup>TH</sup> NOVEMBER 2015 BASED ON 0900 UTC CHARTS OF 7<sup>TH</sup> NOVEMBER 2015.

THE CYCLONIC STORM 'MEGH' MOVED WEST-SOUTHWESTWARDS AT A SPEED OF 15 KMPH DURING PAST SIX HOURS, INTENSIFIED INTO A SEVERE CYCLONIC STORM AND LAY CENTRED AT 0900 UTC OF TODAY THE 7TH NOVEMBER 2015 OVER WESTCENTRAL AND ADJOINING SOUTHWEST ARABIAN SEA NEAR LATITUDE 12.6°N AND LONGITUDE 58.8°E, ABOUT 530 KM EAST OF SOCOTRA ISLAND (41494) (YEMEN), 1660 KM WEST-SOUTHWEST OF MUMBAI (43003), AND 700 KM SOUTHEAST OF SALALAH (41316) (OMAN). IT WOULD MOVE WEST-SOUTHWESTWARDS PASSING CLOSE TO SOUTH OF SOCOTRA ISLAND DURING 1200 TO 1800 UTC OF 8<sup>TH</sup> NOVEMBER 2015. IT WOULD THEN MOVE WEST-NORTHWESTWARDS TOWARDS GULF OF ADEN, REACHING CLOSE TO NORTHERN TIP OF SOMALIA AROUND 0600 UTC OF 9TH NOVEMBER. THE SYSTEM WOULD INTENSIFY FURTHER INTO A VERY SEVERE CYCLONIC STORM DURING NEXT 12 HOURS. IT WOULD MAINTAIN ITS INTENSITY TILL 0600 UTC OF 8<sup>TH</sup> NOVEMBER AND WEAKEN GRADUALLY THEREAFTER.

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 3.5. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 55 KNOTS GUSTING TO 65 KNOTS. THE WINDS ARE HIGHER OVER THE NORTHERN SECTOR. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 990 HPA. STATE OF SEA AROUND SYTEM CENTRE IS HIGH. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER THE AREA BETWEEN LATITUDE 10.5 DEGREE NORTH TO 15.0 DEGREE NORTH AND LONGITUDE 56.5 DEGREE EAST TO 60.5 DEGREE EAST. MINIMUM CLOUD TOP TEMPERATURE IS -80°C. THE CONVECTION SHOWS EYE PATTERN. THE RAGGED EYE IS SEEN IN VISIBLE IMAGERY. MINIMUM CLOUD TOP TEMPERATURE IN WALL CLOUD REGION IS MINUS 81°C.

## FORECAST FOR TRACK AND INTENSITY OF THE SYSTEM ARE GIVEN IN THE TABLE BELOW

DATE/TIME(UTC)	POSITION	MAXIMUM SUSTAINED	CATEGORY OF CYCLONIC
	(LAT. <sup>0</sup> N/LONG. <sup>0</sup> E)	SURFACE WIND SPEED (KMPH)	DISTURBANCE
07-11-2015/0900	12.6/58.8	95-105 GUSTING TO 115	SEVERE CYCLONIC STORM (SCS)
07-11-2015/1200	12.5/58.4	100-110 GUSTING TO 120	SEVERE CYCLONIC STORM (SCS)
07-11-2015/1800	12.3/57.5	110-120 GUSTING TO 130	SEVERE CYCLONIC STORM (SCS)

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

08-11-2015/0000	12.2/56.6	120-130 GUSTING TO 145	VERY SEVERE CYCLONIC STORM (VSCS)
08-11-2015/0600	12.1/55.6	120-130 GUSTING TO 145	VERY SEVERE CYCLONIC STORM (VSCS)
08-11-2015/1800	12.1/53.5	110-120 GUSTING TO 130	SEVERE CYCLONIC STORM (SCS)
09-11-2015/0600	12.3/51.4	90-100 GUSTING TO 110	SEVERE CYCLONIC STORM (SCS)
09-11-2015/1800	12.5/49.9	70-80 GUSTING TO 90	CYCLONIC STORM (CS)
10-11-2015/0600	12.7/48.6	60-70 GUSTING TO 80	CYCLONIC STORM (CS)
10-11-2015/1800	13.0/47.5	50-60 GUSTING TO 70	DEEP DEPRESSION (DD)
11-11-2015/0600	13.4/46.5	40-50 GUSTING TO 70	DEPRESSION (D)

THE CYCLONIC STORM HAS AGAIN PICKED UP THE SPEED OF MOVEMENT AS IT MOVED WITH A SPEED OF 15 KMPH PAST SIX HOURS. IT WAS DUE TO THE STEERING ANTICYCLONIC CIRCULATION SHIFTING TO THE NORTHEAST OF THE SYSTEM CENTRE FROM ITS PREVIOUSLY NORTHERLY POSITION. THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 16°N IN ASSOCIATION WITH AN ANTICYCLONIC CIRCULATION LOCATED TO THE NORTHEAST OF THE SYSTEM CENTRE. THE SYSTEM WOULD CONTINUE TO BE GUIDED WEST-SOUTHWESTWARDS UNDER THE INFLUENCE OF THE ABOVE RIDGE AND ANTI-CYCLONIC CIRCULATION DURING NEXT 24 HOURS. THEREAFTER IT WOULD MOVE INITIALLY WESTWARDS AND THEN WEST-NORTHWESTWARDS TOWARDS GULF OF ADEN, CLOSE TO NORTHERN TIP OF SOMALIA BY 0600 UTC OF 9 NOVEMBER. THE FORECAST IS MAINLY BASED ON MULTIMODEL ENSEMBLE GUIDANCE.

THE RADIAL OUT FLOW HAS INCEREASED ESPECIALLY IN PAST SIX HOURS. THE LOW LEVEL RELATIVE VORTICITY IS 100 x 10-5 SEC-1, CONVERGENCE IS 5-10 x 10-5 SEC-1, AND UPPER LEVEL DIVERGENCE IS 20 x 10-5 SEC-1. THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS 29°C. THE OCEAN THERMAL ENERGY IS 50-75 KJ/CM2 AROUNDTHE SYSTEM CENTRE AND THEN DECREASES TOWARDS GULF OF ADEN. THE VERTICAL WIND SHEAR IS ABOUT 10 KNOTS (LOW) AROUND THE SYSTEM CENTRE AND ALONG THE PREDICTED TRACK UPTO 24 HOURS FORECAST PERIOD. THE ANIMATION OF TOTAL PRECIPITABLE WATER (TPW) INDICATES COLD AND DRY AIR INTRUSION FROM ARABIAN PENINSULA IS CONTINUING AND THE WARM MOIST AIR INCURSION FROM SOUTHEAST SECTOR IS REDUCING GRADUALLY IN ASSOCIATION WITH THE ABOVE THE SYSTEM. HOWEVER THE LOW VERTICAL WIND SHEAR IS MITIGATING THE ADVERSE IMPACT OF TOTAL PRECIPITABLE WATER (TPW). AS A RESULT, THE SYSTEM WOULD INTENSIFY FURTHER INTO A VERY SEVERE CYCLONIC STORM DURING NEXT 12 HOURS. IT WOULD MAINTAIN ITS INTENSITY TILL 0600 UTC OF 8<sup>TH</sup> NOVEMBER AND WEAKEN GRADUALLY THEREAFTER.

### **BAY OF BENGAL & ANDAMAN SEA**

**LOW PRESSURE AREA:** A LOW PRESSURE AREA LIES OVER SOUTHWEST BAY OF BENGAL AT 0300 UTC OF TODAY, THE  $7^{\text{TH}}$  NOVEMBER 2015. IT WOULD CONCENTRATE INTO A DEPRESSION DURING NEXT 48 HOURS.

BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER SOUTH BAY OF BENGAL, BETWEEN LATITUDE 6.0 DEGREE NORTH TO 13.0 DEGREE NORTH AND LONGITUDE 81.0 DEGREE EAST TO 90.0 DEGREE EAST IN ASSOCIATION WITH LOW PRESSURE AREA.

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

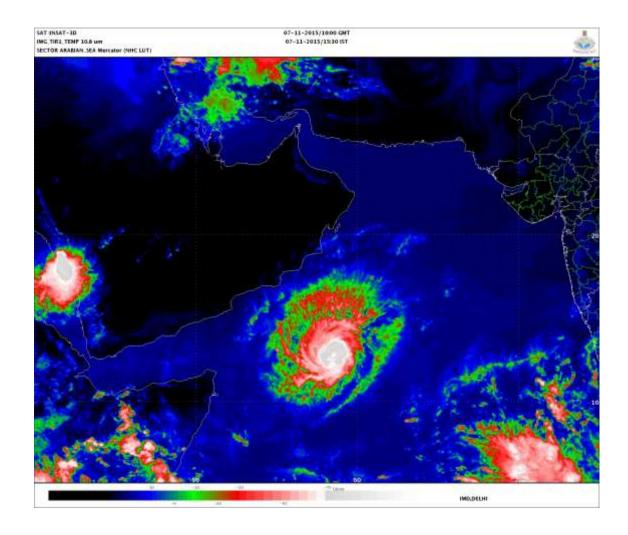
NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

THE ENVIRONMENTAL, ATMOSPHERIC AND OCEANIC CONDITIONS ARE FAVOURABLE FOR INTENSIFICATION OF THE SYSTEM AND NORTHWESTWARD MOVEMENT REACHING TAMIL NADU AND SRILANKA COAST BY  $9^{\text{TH}}$  NIGHT/ $10^{\text{TH}}$  MORNING.

# PROBABILITY OF CYCLOGENESIS OVER BAY OF BENGAL AND ANDAMAN SEA DURING NEXT 72 HOURS:

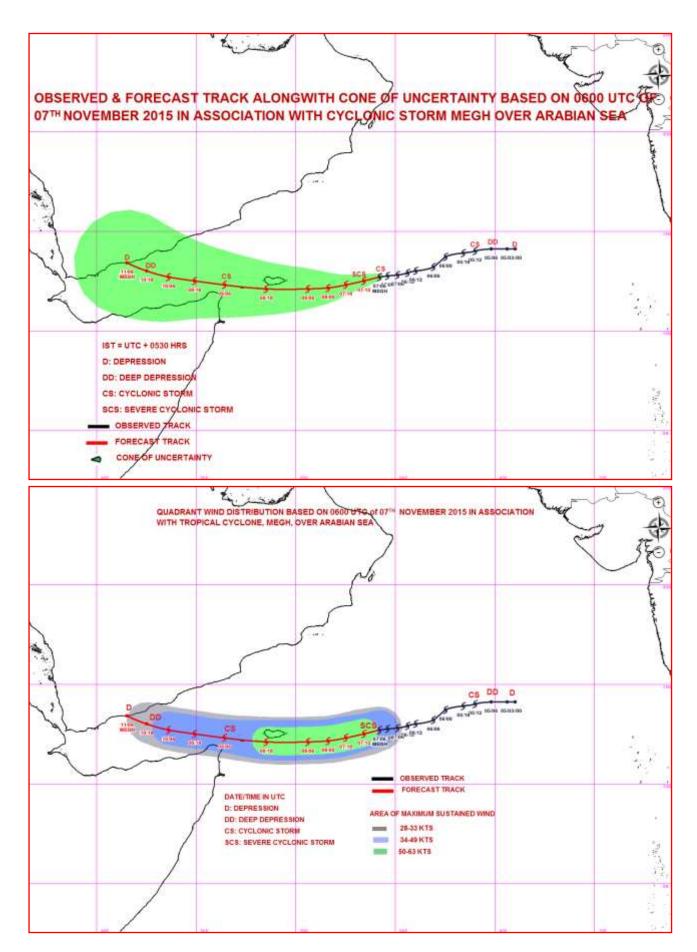
24 HOURS	24-48 HOURS	48-72 HOURS
LOW	MODERATE	HIGH

# (M.MOHAPATRA) HEAD-RSMC NEW DELHI



PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%



PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)
NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%





FROM: RSMC -TROPICAL CYCLONES, NEW DELHI

TO: STORM WARNING CENTRE, NAYPYI TAW (MYANMAR)
STORM WARNING CENTRE, BANGKOK (THAILAND)
STORM WARNING CENTRE, COLOMBO (SRILANKA)

STORM WARNING CENTRE, COLOMBO (SRILANKA)
STORM WARNING CENTRE, DHAKA (BANGLADESH)
STORM WARNING CENTRE, KARACHI (PAKISTAN)
METEOROLOGICAL OFFICE, MALE (MALDIVES)

OMAN METEOROLOGICAL DEPARTMENT, MUSCAT (THROUGH RTH JEDDAH)

TROPICAL CYCLONE ADVISORY

**RSMC - TROPICAL CYCLONES, NEW DELHI** 

TROPICAL STORM 'MEGH' ADVISORY NO. SEVENTEEN ISSUED AT 1500 UTC OF  $7^{TH}$  NOVEMBER 2015 BASED ON 1200 UTC CHARTS OF  $7^{TH}$  NOVEMBER 2015.

THE **SEVERE CYCLONIC STORM 'MEGH'** MOVED WEST-SOUTHWESTWARDS WITH A SPEED OF 16 KMPH DURING PAST SIX HOURS, INTENSIFIED FURTHER AND LAY CENTRED AT **1200** UTC OF TODAY THE 7TH NOVEMBER 2015 OVER WESTCENTRAL AND ADJOINING SOUTHWEST ARABIAN SEA NEAR LATITUDE **12.6**°N AND LONGITUDE **58.4**°E, ABOUT **470** KM EAST OF SOCOTRA ISLAND (41494) (YEMEN), **1710** KM WEST-SOUTHWEST OF MUMBAI (43003), AND **660** KM SOUTHEAST OF SALALAH (41316) (OMAN). IT WOULD MOVE WEST-SOUTHWESTWARDS PASSING ALONG SOUTHERN COAST OF SOCOTRA ISLAND AROUND 1200 UTC OF 8<sup>TH</sup> NOVEMBER 2015. IT WOULD THEN MOVE WEST-NORTHWESTWARDS TOWARDS GULF OF ADEN, REACHING CLOSE TO NORTHERN TIP OF SOMALIA AROUND 0600 UTC OF 9TH NOVEMBER AND WOULD CROSS YEMEN COAST BETWEEN LATITUDE 13.0 - 14 DEGREE NORTH DURING 0600-1200 UTC OF 10<sup>TH</sup> NOVEMBER. THE SYSTEM WOULD INTENSIFY FURTHER INTO A **VERY SEVERE CYCLONIC STORM** DURING NEXT 6 HOURS. IT WOULD MAINTAIN ITS INTENSITY TILL 1200 UTC OF 8<sup>TH</sup> NOVEMBER AND WEAKEN GRADUALLY THEREAFTER.

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 3.5. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 60 KNOTS GUSTING TO 70 KNOTS. THE WINDS ARE HIGHER OVER THE NORTHERN SECTOR. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 988 HPA. STATE OF SEA AROUND SYTEM CENTRE IS HIGH. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER THE AREA BETWEEN LATITUDE 11.0 DEGREE NORTH TO 15.0 DEGREE NORTH AND LONGITUDE 55.0 DEGREE EAST TO 60.0 DEGREE EAST. MINIMUM CLOUD TOP TEMPERATURE IS -80°C. THE CONVECTION SHOWS EYE PATTERN. THE RAGGED EYE IS SEEN IN BOTH VISIBLE AND IR IMAGERY. MINIMUM CLOUD TOP TEMPERATURE IN WALL CLOUD REGION IS MINUS 81°C.

## FORECAST FOR TRACK AND INTENSITY OF THE SYSTEM ARE GIVEN IN THE TABLE BELOW

DATE/TIME(UTC)	POSITION	MAXIMUM SUSTAINED	CATEGORY OF CYCLONIC
	(LAT. <sup>0</sup> N/ LONG. <sup>0</sup> E)	SURFACE WIND SPEED (KMPH)	DISTURBANCE
07-11-2015/1200	12.6/58.3	110-120 gusting to 130	Severe Cyclonic Storm (SCS)
07-11-2015/1800	12.5/57.3	120-130 gusting to 145	Very Severe Cyclonic Storm (VSCS)
08-11-2015/0000	12.4/56.3	130-140 gusting to 155	Very Severe Cyclonic Storm (VSCS)
08-11-2015/0600	12.3/55.1	130-140 gusting to 155	Very Severe Cyclonic Storm (VSCS)
08-11-2015/1200	12.3/54.0	120-130 gusting to 145	Very Severe Cyclonic Storm (VSCS)

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

09-11-2015/0000	12.4/51.8	110-120 gusting to 130	Severe Cyclonic Storm (SCS)
09-11-2015/1200	12.6/49.7	100-110 gusting to 120	Severe Cyclonic Storm (SCS)
10-11-2015/0000	13.0/47.9	80-90 gusting to 100	Cyclonic Storm (CS)
10-11-2015/1200	13.6/46.6	60-70 gusting to 80	Cyclonic Storm (CS)
11-11-2015/0000	14.3/45.8	40-50 gusting to 60	Depression (D)
11-11-2015/1200	15.0/45.2	25-35 gusting to 45	Low

THE CYCLONIC STORM MOVED WITH A SPEED OF 16 KMPH PAST SIX HOURS. IT WAS DUE TO THE STEERING ANTICYCLONIC CIRCULATION TO THE NORTHEAST OF THE SYSTEM CENTRE. THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 16°N IN ASSOCIATION WITH AN ANTICYCLONIC CIRCULATION LOCATED TO THE NORTHEAST OF THE SYSTEM CENTRE. THE SYSTEM WOULD CONTINUE TO BE GUIDED WEST-SOUTHWESTWARDS UNDER THE INFLUENCE OF THE ABOVE RIDGE AND ANTI-CYCLONIC CIRCULATION DURING NEXT 24 HOURS. THEREAFTER IT WOULD MOVE INITIALLY WESTWARDS AND THEN WEST-NORTHWESTWARDS TOWARDS GULF OF ADEN.

THE RADIAL OUT FLOW HAS INCEREASED ESPECIALLY IN PAST SIX HOURS. THE LOW LEVEL RELATIVE VORTICITY IS 100 x 10-5 SEC-1, CONVERGENCE IS 5-10 x 10-5 SEC-1, AND UPPER LEVEL DIVERGENCE IS 20 x 10-5 SEC-1. THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS 29°C. THE OCEAN THERMAL ENERGY IS 50-75 KJ/CM2 AROUNDTHE SYSTEM CENTRE AND THEN DECREASES TOWARDS GULF OF ADEN. THE VERTICAL WIND SHEAR IS ABOUT 10 KNOTS (LOW) AROUND THE SYSTEM CENTRE AND ALONG THE PREDICTED TRACK UPTO 24 HOURS FORECAST PERIOD. THE ANIMATION OF TOTAL PRECIPITABLE WATER (TPW) INDICATES COLD AND DRY AIR INTRUSION FROM ARABIAN PENINSULA IS CONTINUING AND THE WARM MOIST AIR INCURSION FROM SOUTHEAST SECTOR IS REDUCING GRADUALLY IN ASSOCIATION WITH THE ABOVE THE SYSTEM. HOWEVER THE LOW VERTICAL WIND SHEAR IS MITIGATING THE ADVERSE IMPACT OF TOTAL PRECIPITABLE WATER (TPW). AS A RESULT, THE SYSTEM WOULD INTENSIFY FURTHER INTO A VERY SEVERE CYCLONIC STORM DURING NEXT SIX HOURS. IT WOULD MAINTAIN ITS INTENSITY TILL 1200 UTC OF 8<sup>TH</sup> NOVEMBER AND WEAKEN GRADUALLY THEREAFTER.

## **BAY OF BENGAL & ANDAMAN SEA**

**LOW PRESSURE AREA:** THE LOW PRESSURE AREA OVER SOUTHWEST BAY OF BENGAL HAS BECOME WELL MARKED LOW PRESSURE AREA AT 1200 UTC OF TODAY, THE 7<sup>TH</sup> NOVEMBER. IT WOULD CONCENTRATE INTO A DEPRESSION DURING NEXT 24 HOURS.

BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER SOUTH BAY OF BENGAL, BETWEEN LATITUDE 6.0 DEGREE NORTH TO 13.0 DEGREE NORTH AND LONGITUDE 81.0 DEGREE EAST TO 90.0 DEGREE EAST IN ASSOCIATION WITH WELL MARKED LOW PRESSURE AREA. THE ASSOCIATED WIND SPEED IS ABOUT 15-20 KTS. WINDS ARE HIGHER IN NORTHEAST SECTOR.

THE ENVIRONMENTAL, ATMOSPHERIC AND OCEANIC CONDITIONS ARE FAVOURABLE FOR INTENSIFICATION OF THE SYSTEM AND NORTHWESTWARD MOVEMENT REACHING TAMIL NADU AND SRILANKA COAST BY  $9^{\text{TH}}$  NIGHT/ $10^{\text{TH}}$  MORNING.

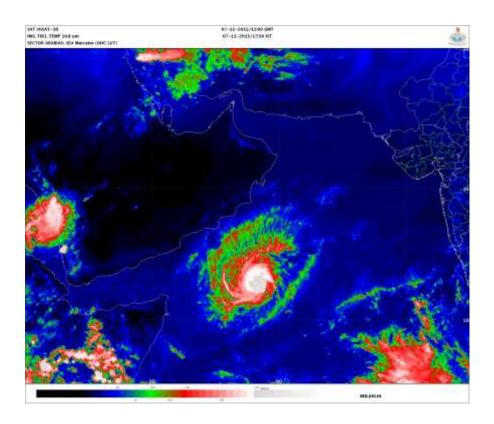
PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

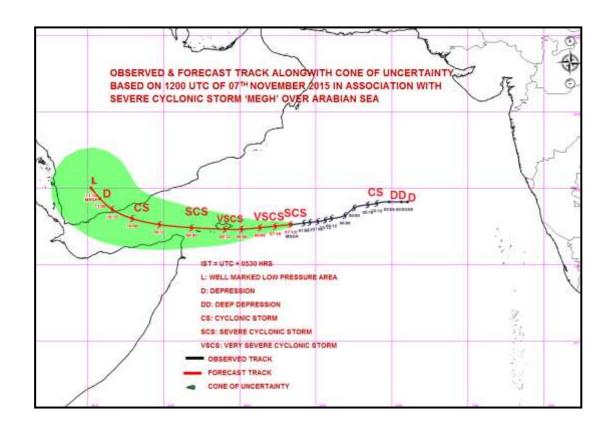
PROBABILITY OF CYCLOGENESIS OVER BAY OF BENGAL AND ANDAMAN SEA DURING NEXT 72 HOURS:

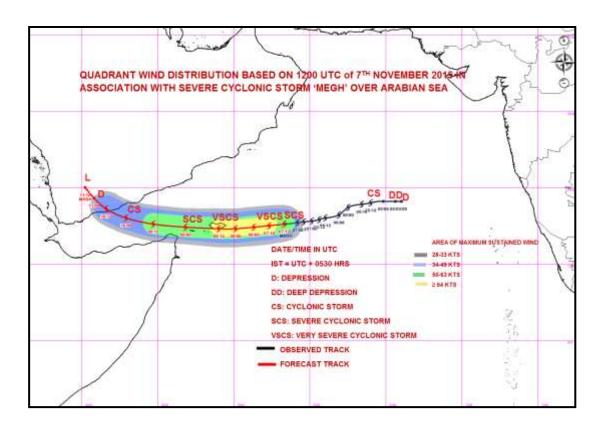
24 HOURS	24-48 HOURS	48-72 HOURS
MODERATE	HIGH	HIGH

## (M.MOHAPATRA ) HEAD-RSMC NEW DELHI



NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%





NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%





FROM: RSMC -TROPICAL CYCLONES, NEW DELHI

TO: STORM WARNING CENTRE, NAYPYI TAW (MYANMAR)

STORM WARNING CENTRE, BANGKOK (THAILAND) STORM WARNING CENTRE, COLOMBO (SRILANKA) STORM WARNING CENTRE, DHAKA (BANGLADESH) STORM WARNING CENTRE, KARACHI (PAKISTAN)

**METEOROLOGICAL OFFICE, MALE (MALDIVES)** 

OMAN METEOROLOGICAL DEPARTMENT, MUSCAT (THROUGH RTH JEDDAH)

TROPICAL CYCLONE ADVISORY

**RSMC - TROPICAL CYCLONES, NEW DELHI** 

TROPICAL STORM 'MEGH' ADVISORY NO. EIGHTEEN ISSUED AT 1800 UTC OF 7TH NOVEMBER 2015 BASED ON 1500 UTC CHARTS OF 7<sup>TH</sup> NOVEMBER 2015.

THE SEVERE CYCLONIC STORM 'MEGH' MOVED WEST WARDS WITH A SPEED OF 16 KMPH DURING PAST SIX HOURS, INTENSIFIED INTO A VERY SEVERE CYCLONIC STORM AND LAY CENTRED AT 1500 UTC OF TODAY THE 7TH NOVEMBER 2015 OVER WESTCENTRAL AND ADJOINING SOUTHWEST ARABIAN SEA NEAR LATITUDE 12.6°N AND LONGITUDE 57.9°E, ABOUT 430 KM EAST OF SOCOTRA ISLAND (41494) (YEMEN), 1750 KM WEST-SOUTHWEST OF MUMBAI (43003), AND 640 KM SOUTHEAST OF SALALAH (41316) (OMAN). IT WOULD MOVE WEST-SOUTHWESTWARDS PASSING ALONG SOUTHERN COAST OF SOCOTRA ISLAND AROUND 1200 UTC OF 8<sup>TH</sup> NOVEMBER 2015. IT WOULD THEN MOVE WEST-NORTHWESTWARDS TOWARDS GULF OF ADEN, REACHING CLOSE TO NORTHERN TIP OF SOMALIA AROUND 0600 UTC OF 9TH NOVEMBER AND WOULD CROSS YEMEN COAST BETWEEN LATITUDE 13.0 -14 DEGREE NORTH DURING 0600-1200 UTC OF  $10^{TH}$  NOVEMBER. IT WOULD INTENSIFY FURTHER DURING NEXT 12 HOURS AND IT WOULD MAINTAIN ITS INTENSITY TILL 1200 UTC OF  $8^{TH}$  NOVEMBER AND WEAKEN GRADUALLY THEREAFTER.

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 4.0. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 65 KNOTS GUSTING TO 75 KNOTS. THE WINDS ARE HIGHER OVER THE NORTHERN SECTOR. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 984 HPA. STATE OF SEA AROUND SYTEM CENTRE IS PHENOMENAL. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER THE AREA BETWEEN LATITUDE 11.0 DEGREE NORTH TO 14.5 DEGREE NORTH AND LONGITUDE 55.0 DEGREE EAST TO 59.0 DEGREE EAST.. THE CONVECTION SHOWS EYE PATTERN. THE RAGGED EYE IS SEEN IN BOTH VISIBLE AND IR IMAGERY. MINIMUM CLOUD TOP TEMPERATURE IN WALL CLOUD REGION IS MINUS 81°C.

### FORECAST FOR TRACK AND INTENSITY OF THE SYSTEM ARE GIVEN IN THE TABLE BELOW

DATE/TIME(UTC)	POSITION	MAXIMUM SUSTAINED	CATEGORY OF CYCLONIC
	(LAT. <sup>0</sup> N/LONG. <sup>0</sup> E)	SURFACE WIND SPEED (KMPH)	DISTURBANCE
07-11-2015/1500	12.6/57.9	120-130 gusting to 140	Very Severe Cyclonic Storm (VSCS)
07-11-2015/1800	12.5/57.3	130-140 gusting to 155	Very Severe Cyclonic Storm (VSCS)
08-11-2015/0000	12.4/56.3	140-150 gusting to 165	Very Severe Cyclonic Storm (VSCS)
08-11-2015/0600	12.3/55.1	140-150 gusting to 165	Very Severe Cyclonic Storm (VSCS)
08-11-2015/1200	12.3/54.0	130-140 gusting to 155	Very Severe Cyclonic Storm (VSCS)

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

09-11-2015/0000	12.4/51.8	120-130 gusting to 140	Very Severe Cyclonic Storm (VSCS)
09-11-2015/1200	12.6/49.7	110-120 gusting to 120	Severe Cyclonic Storm (SCS)
10-11-2015/0000	13.0/47.9	80-90 gusting to 100	Cyclonic Storm (CS)
10-11-2015/1200	13.6/46.6	60-70 gusting to 80	Cyclonic Storm (CS)
11-11-2015/0000	14.3/45.8	40-50 gusting to 60	Depression (D)
11-11-2015/1200	15.0/45.2	25-35 gusting to 45	Low

THE CYCLONIC STORM MOVED WITH A SPEED OF 16 KMPH PAST SIX HOURS. IT WAS DUE TO THE STEERING ANTICYCLONIC CIRCULATION TO THE NORTHEAST OF THE SYSTEM CENTRE. THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 16°N IN ASSOCIATION WITH AN ANTICYCLONIC CIRCULATION LOCATED TO THE NORTHEAST OF THE SYSTEM CENTRE. THE SYSTEM WOULD CONTINUE TO BE GUIDED WEST-SOUTHWESTWARDS UNDER THE INFLUENCE OF THE ABOVE RIDGE AND ANTI-CYCLONIC CIRCULATION DURING NEXT 24 HOURS. THEREAFTER IT WOULD MOVE INITIALLY WESTWARDS AND THEN WEST-NORTHWESTWARDS TOWARDS GULF OF ADEN.

THE RADIAL OUT FLOW HAS INCEREASED ESPECIALLY IN PAST SIX HOURS. THE LOW LEVEL RELATIVE VORTICITY IS 100 x 10<sup>-5</sup> SEC<sup>-1</sup>, CONVERGENCE IS 5-10 x 10-5 SEC-1, AND UPPER LEVEL DIVERGENCE IS 20 x 10<sup>-5</sup> SEC<sup>-1</sup>. THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS 29°C. THE OCEAN THERMAL ENERGY IS 50-75 KJ/CM² AROUNDTHE SYSTEM CENTRE AND THEN DECREASES TOWARDS GULF OF ADEN. THE VERTICAL WIND SHEAR IS ABOUT 10 KNOTS (LOW) AROUND THE SYSTEM CENTRE AND ALONG THE PREDICTED TRACK UPTO 24 HOURS FORECAST PERIOD. THE ANIMATION OF TOTAL PRECIPITABLE WATER (TPW) INDICATES COLD AND DRY AIR INTRUSION FROM ARABIAN PENINSULA IS CONTINUING AND THE WARM MOIST AIR INCURSION FROM SOUTHEAST SECTOR IS REDUCING GRADUALLY IN ASSOCIATION WITH THE ABOVE THE SYSTEM. HOWEVER THE LOW VERTICAL WIND SHEAR IS MITIGATING THE ADVERSE IMPACT OF TOTAL PRECIPITABLE WATER (TPW). AS A RESULT, THE SYSTEM WOULD INTENSIFY FURTHER INTO A VERY SEVERE CYCLONIC STORM DURING NEXT SIX HOURS. IT WOULD MAINTAIN ITS INTENSITY TILL 1200 UTC OF 8<sup>TH</sup> NOVEMBER AND WEAKEN GRADUALLY THEREAFTER.

## **BAY OF BENGAL & ANDAMAN SEA**

**LOW PRESSURE AREA:** THE LOW PRESSURE AREA OVER SOUTHWEST BAY OF BENGAL HAS BECOME WELL MARKED LOW PRESSURE AREA AT 1500 UTC OF TODAY, THE 7<sup>TH</sup> NOVEMBER. IT WOULD CONCENTRATE INTO A DEPRESSION DURING NEXT 24 HOURS.

BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER SOUTH BAY OF BENGAL, BETWEEN LATITUDE 6.0 DEGREE NORTH TO 15.0 DEGREE NORTH AND LONGITUDE 81.0 DEGREE EAST TO 91.0 DEGREE EAST IN ASSOCIATION WITH WELL MARKED LOW PRESSURE AREA. THE ASSOCIATED WIND SPEED IS ABOUT 15-20 KTS. WINDS ARE HIGHER IN NORTHEAST SECTOR.

THE ENVIRONMENTAL, ATMOSPHERIC AND OCEANIC CONDITIONS ARE FAVOURABLE FOR INTENSIFICATION OF THE SYSTEM AND NORTHWESTWARD MOVEMENT REACHING TAMIL NADU AND SRILANKA COAST BY  $9^{\text{TH}}$  NIGHT/ $10^{\text{TH}}$  MORNING.

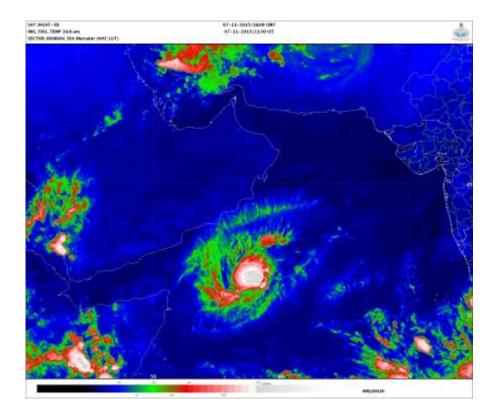
PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

PROBABILITY OF CYCLOGENESIS OVER BAY OF BENGAL AND ANDAMAN SEA DURING NEXT 72 HOURS:

24 HOURS	24-48 HOURS	48-72 HOURS
MODERATE	HIGH	HIGH

(DUTY OFFICER) RSMC NEW DELHI



NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%





FROM: RSMC -TROPICAL CYCLONES, NEW DELHI

TO: STORM WARNING CENTRE, NAYPYI TAW (MYANMAR) STORM WARNING CENTRE, BANGKOK (THAILAND)

STORM WARNING CENTRE, COLOMBO (SRILANKA) STORM WARNING CENTRE, DHAKA (BANGLADESH) STORM WARNING CENTRE, KARACHI (PAKISTAN) METEOROLOGICAL OFFICE, MALE (MALDIVES)

OMAN METEOROLOGICAL DEPARTMENT, MUSCAT (THROUGH RTH JEDDAH)

TROPICAL CYCLONE ADVISORY

**RSMC - TROPICAL CYCLONES, NEW DELHI** 

TROPICAL STORM 'MEGH' ADVISORY NO. NINETEEN ISSUED AT 2100 UTC OF 7<sup>TH</sup> NOVEMBER 2015 BASED ON 1800 UTC CHARTS OF 7<sup>TH</sup> NOVEMBER 2015.

THE **VERY SEVERE CYCLONIC STORM 'MEGH'** MOVED WEST WARDS WITH A SPEED OF 17 KMPH DURING PAST SIX HOURS AND LAY CENTRED AT **1800** UTC OF TODAY THE 7TH NOVEMBER 2015 OVER WESTCENTRAL AND ADJOINING SOUTHWEST ARABIAN SEA NEAR LATITUDE **12.7**°N AND LONGITUDE **57.3**°E, ABOUT **370** KM EAST OF SOCOTRA ISLAND (41494) (YEMEN), **1800** KM WEST-SOUTHWEST OF MUMBAI (43003), AND **590** KM SOUTHEAST OF SALALAH (41316) (OMAN). IT WOULD MOVE WEST-SOUTHWESTWARDS PASSING ALONG SOUTHERN COAST OF SOCOTRA ISLAND AROUND 1200 UTC OF 8<sup>TH</sup> NOVEMBER 2015. IT WOULD THEN MOVE WEST-NORTHWESTWARDS TOWARDS GULF OF ADEN, REACHING CLOSE TO NORTHERN TIP OF SOMALIA AROUND 0600 UTC OF 9TH NOVEMBER AND WOULD CROSS YEMEN COAST BETWEEN LATITUDE 13.0 - 14 DEGREE NORTH DURING 0600-1200 UTC OF 10<sup>TH</sup> NOVEMBER. IT WOULD INTENSIFY FURTHER DURING NEXT 12 HOURS AND IT WOULD MAINTAIN ITS INTENSITY TILL 1200 UTC OF 8<sup>TH</sup> NOVEMBER AND WEAKEN GRADUALLY THEREAFTER.

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 4.0. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 70 KNOTS GUSTING TO 80 KNOTS. THE WINDS ARE HIGHER OVER THE NORTHERN SECTOR. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 982 HPA. STATE OF SEA AROUND SYTEM CENTRE IS PHENOMENAL. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER THE AREA BETWEEN LATITUDE 12.0 DEGREE NORTH TO 14.5 DEGREE NORTH AND LONGITUDE 55.0 DEGREE EAST TO 59.0 DEGREE EAST.. THE CONVECTION SHOWS EYE PATTERN. THE RAGGED EYE IS SEEN IN BOTH VISIBLE AND IR IMAGERY. MINIMUM CLOUD TOP TEMPERATURE IN WALL CLOUD REGION IS MINUS 78°C.

### FORECAST FOR TRACK AND INTENSITY OF THE SYSTEM ARE GIVEN IN THE TABLE BELOW

DATE/TIME(UTC)	POSITION	MAXIMUM SUSTAINED	CATEGORY OF CYCLONIC
	(LAT. <sup>0</sup> N/ LONG. <sup>0</sup> E)	SURFACE WIND SPEED (KMPH)	DISTURBANCE
07-11-2015/1800	12.7/57.3	130-140 gusting to 155	Very Severe Cyclonic Storm (VSCS)
08-11-2015/0000	12.6/56.3	140-150 gusting to 165	Very Severe Cyclonic Storm (VSCS)
08-11-2015/0600	12.5/55.1	140-150 gusting to 165	Very Severe Cyclonic Storm (VSCS)
08-11-2015/1200	12.5/54.0	130-140 gusting to 155	Very Severe Cyclonic Storm (VSCS)
08-11-2015/1800	12.6/52.9	120-130 gusting to 140	Very Severe Cyclonic Storm (VSCS)

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

09-11-2015/0600	12.8/50.7	110-120 gusting to 120	Severe Cyclonic Storm (SCS)
09-11-2015/1800	13.4/48.8	80-90 gusting to 100	Cyclonic Storm (CS)
10-11-2015/0600	13.9/47.6	60-70 gusting to 80	Cyclonic Storm (CS)
10-11-2015/1800	14.7/46.2	40-50 gusting to 60	Depression (D)
11-11-2015/0600	15.4/45.5	25-35 gusting to 45	Low

THE SYSTEM MOVED WITH A SPEED OF 17 KMPH PAST SIX HOURS. IT WAS DUE TO THE STEERING ANTICYCLONIC CIRCULATION TO THE NORTHEAST OF THE SYSTEM CENTRE. THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 16°N IN ASSOCIATION WITH AN ANTICYCLONIC CIRCULATION LOCATED TO THE NORTHEAST OF THE SYSTEM CENTRE. THE SYSTEM WOULD CONTINUE TO BE GUIDED WEST-SOUTHWESTWARDS UNDER THE INFLUENCE OF THE ABOVE RIDGE AND ANTI-CYCLONIC CIRCULATION DURING NEXT 24 HOURS. THEREAFTER IT WOULD MOVE INITIALLY WESTWARDS AND THEN WEST-NORTHWESTWARDS TOWARDS GULF OF ADEN.

THE RADIAL OUT FLOW HAS INCEREASED ESPECIALLY IN PAST SIX HOURS. THE LOW LEVEL RELATIVE VORTICITY IS 100 x 10<sup>-5</sup> SEC<sup>-1</sup>, CONVERGENCE IS 5-10 x 10-5 SEC-1, AND UPPER LEVEL DIVERGENCE IS 20 x 10<sup>-5</sup> SEC<sup>-1</sup>. THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS 29°C. THE OCEAN THERMAL ENERGY IS 50-75 KJ/CM² AROUNDTHE SYSTEM CENTRE AND THEN DECREASES TOWARDS GULF OF ADEN. THE VERTICAL WIND SHEAR IS ABOUT 10 KNOTS (LOW) AROUND THE SYSTEM CENTRE AND ALONG THE PREDICTED TRACK UPTO 24 HOURS FORECAST PERIOD. THE ANIMATION OF TOTAL PRECIPITABLE WATER (TPW) INDICATES COLD AND DRY AIR INTRUSION FROM ARABIAN PENINSULA IS CONTINUING AND THE WARM MOIST AIR INCURSION FROM SOUTHEAST SECTOR IS REDUCING GRADUALLY IN ASSOCIATION WITH THE ABOVE THE SYSTEM. HOWEVER THE LOW VERTICAL WIND SHEAR IS MITIGATING THE ADVERSE IMPACT OF TOTAL PRECIPITABLE WATER (TPW). AS A RESULT, THE SYSTEM WOULD INTENSIFY FURTHER INTO A VERY SEVERE CYCLONIC STORM DURING NEXT SIX HOURS. IT WOULD MAINTAIN ITS INTENSITY TILL 1200 UTC OF 8<sup>TH</sup> NOVEMBER AND WEAKEN GRADUALLY THEREAFTER.

### **BAY OF BENGAL & ANDAMAN SEA**

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BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER SOUTH BAY OF BENGAL, BETWEEN LATITUDE 6.0 DEGREE NORTH TO 15.0 DEGREE NORTH AND LONGITUDE 80.0 DEGREE EAST TO 91.0 DEGREE EAST IN ASSOCIATION WITH WELL MARKED LOW PRESSURE AREA. THE ASSOCIATED WIND SPEED IS ABOUT 15-20 KTS. WINDS ARE HIGHER IN NORTHEAST SECTOR. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 68 DEG C

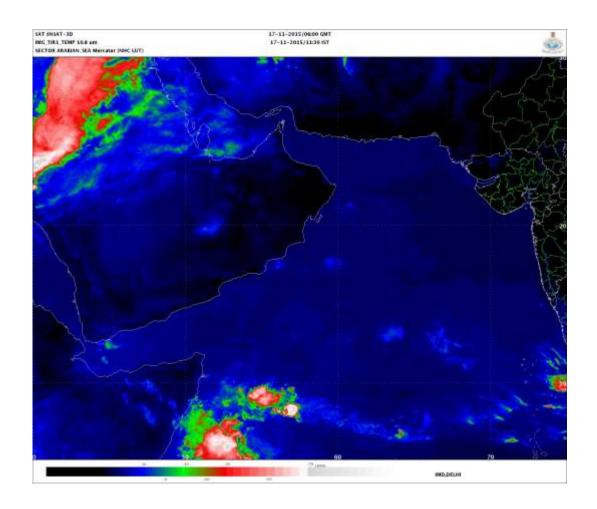
THE ENVIRONMENTAL, ATMOSPHERIC AND OCEANIC CONDITIONS ARE FAVOURABLE FOR INTENSIFICATION OF THE SYSTEM AND NORTHWESTWARD MOVEMENT REACHING TAMIL NADU AND SRILANKA COAST BY  $9^{\rm TH}$  NIGHT/ $10^{\rm TH}$  MORNING.

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)
NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

PROBABILITY OF CYCLOGENESIS OVER BAY OF BENGAL AND ANDAMAN SEA DURING NEXT 72 HOURS:

24 HOURS	24-48 HOURS	48-72 HOURS
MODERATE	HIGH	HIGH

(DUTY OFFICER) RSMC NEW DELHI



PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%





FROM: RSMC -TROPICAL CYCLONES, NEW DELHI

TO: STORM WARNING CENTRE, NAYPYI TAW (MYANMAR)
STORM WARNING CENTRE, BANGKOK (THAILAND)
STORM WARNING CENTRE, COLOMBO (SRILANKA)
STORM WARNING CENTRE, DHAKA (BANGLADESH)

STORM WARNING CENTRE, KARACHI (PAKISTAN)
METEOROLOGICAL OFFICE, MALE (MALDIVES)

OMAN METEOROLOGICAL DEPARTMENT, MUSCAT (THROUGH RTH JEDDAH)

TROPICAL CYCLONE ADVISORY

RSMC - TROPICAL CYCLONES, NEW DELHI

TROPICAL STORM 'MEGH' ADVISORY NO. TWENTY ISSUED AT 0000 UTC OF  $8^{TH}$  NOVEMBER 2015 BASED ON 2100 UTC CHARTS OF  $7^{TH}$  NOVEMBER 2015.

THE **VERY SEVERE CYCLONIC STORM 'MEGH'** MOVED WEST WARDS WITH A SPEED OF 21 KMPH DURING PAST SIX HOURS INTENSIFIED FURTHER AND LAY CENTRED AT **2100** UTC OF TODAY THE 7TH NOVEMBER 2015 OVER WESTCENTRAL AND ADJOINING SOUTHWEST ARABIAN SEA NEAR LATITUDE **12.7**°N AND LONGITUDE **56.7**°E, ABOUT **300 KM** EAST OF SOCOTRA ISLAND (41494) (YEMEN), **550** KM SOUTHEAST OF SALALAH (41316) (OMAN).AND **1860** KM WEST-SOUTHWEST OF MUMBAI (43003) IT WOULD MOVE WESTWARDS PASSING ALONG SOUTHERN COAST OF SOCOTRA ISLAND AROUND 1200 UTC OF 8<sup>TH</sup> NOVEMBER 2015. IT WOULD THEN MOVE WEST-NORTHWESTWARDS TOWARDS GULF OF ADEN, REACHING CLOSE TO NORTHERN TIP OF SOMALIA AROUND 0600 UTC OF 9TH NOVEMBER AND WOULD CROSS YEMEN COAST BETWEEN LATITUDE 13 AND-14 DEGREE NORTH DURING 0600-1200 UTC OF 10<sup>TH</sup> NOVEMBER. IT WOULD MAINTAIN ITS INTENSITY TILL 1200 UTC OF 8<sup>TH</sup> NOVEMBER AND WEAKEN GRADUALLY THEREAFTER.

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 4.5. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 80 KNOTS GUSTING TO 90 KNOTS. THE WINDS ARE HIGHER OVER THE NORTHERN SECTOR. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 976 HPA. STATE OF SEA AROUND SYTEM CENTRE IS PHENOMENAL. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER THE AREA BETWEEN LATITUDE 11.5 DEGREE NORTH TO 14.5 DEGREE NORTH AND LONGITUDE 55.0 DEGREE EAST TO 58.0 DEGREE EAST.. THE CONVECTION SHOWS EYE PATTERN. THE RAGGED EYE IS SEEN IN BOTH VISIBLE AND IR IMAGERY. MINIMUM CLOUD TOP TEMPERATURE IN WALL CLOUD REGION IS MINUS 83°C.

#### FORECAST FOR TRACK AND INTENSITY OF THE SYSTEM ARE GIVEN IN THE TABLE BELOW

DATE/TIME(UTC)	POSITION	MAXIMUM SUSTAINED	CATEGORY OF CYCLONIC
	(LAT. <sup>0</sup> N/ LONG. <sup>0</sup> E)	SURFACE WIND SPEED (KMPH)	DISTURBANCE
07-11-2015/2100	12.7/56.7	150-160 gusting to 170	Very Severe Cyclonic Storm (VSCS)
08-11-2015/0000	12.6/56.3	150-160 gusting to 170	Very Severe Cyclonic Storm (VSCS)
08-11-2015/0600	12.6/55.1	150-160 gusting to 170	Very Severe Cyclonic Storm (VSCS)
08-11-2015/1200	12.6/54.0	150-160 gusting to 170	Very Severe Cyclonic Storm (VSCS)
08-11-2015/1800	12.6/52.9	130-140 gusting to 140	Very Severe Cyclonic Storm (VSCS)

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

09-11-2015/0600	12.8/50.7	110-120 gusting to 120	Severe Cyclonic Storm (SCS)
09-11-2015/1800	13.4/48.8	80-90 gusting to 100	Cyclonic Storm (CS)
10-11-2015/0600	13.9/47.6	60-70 gusting to 80	Cyclonic Storm (CS)
10-11-2015/1800	14.7/46.2	40-50 gusting to 60	Depression (D)
11-11-2015/0600	15.4/45.5	25-35 gusting to 45	Low

THE SYSTEM MOVED WITH A SPEED OF 21 KMPH PAST SIX HOURS. IT WAS DUE TO THE STEERING ANTICYCLONIC CIRCULATION TO THE NORTHEAST OF THE SYSTEM CENTRE. THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 16°N IN ASSOCIATION WITH AN ANTICYCLONIC CIRCULATION LOCATED TO THE NORTHEAST OF THE SYSTEM CENTRE. THE SYSTEM WOULD CONTINUE TO BE GUIDED WEST-SOUTHWESTWARDS UNDER THE INFLUENCE OF THE ABOVE RIDGE AND ANTI-CYCLONIC CIRCULATION DURING NEXT 24 HOURS. THEREAFTER IT WOULD MOVE INITIALLY WESTWARDS AND THEN WEST-NORTHWESTWARDS TOWARDS GULF OF ADEN.

THE RADIAL OUT FLOW HAS INCEREASED ESPECIALLY IN PAST SIX HOURS. THE LOW LEVEL RELATIVE VORTICITY IS  $100 \times 10^{-5} \text{ SEC}^{-1}$ , CONVERGENCE IS  $5\text{-}10 \times 10\text{-}5 \text{ SEC}^{-1}$ , AND UPPER LEVEL DIVERGENCE IS  $20 \times 10^{-5} \text{ SEC}^{-1}$ . THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS  $29^{\circ}$ C. THE OCEAN THERMAL ENERGY IS  $50\text{-}75 \text{ KJ/CM}^2$  AROUNDTHE SYSTEM CENTRE AND THEN DECREASES TOWARDS GULF OF ADEN. THE VERTICAL WIND SHEAR IS ABOUT  $10 \times 100$  KNOTS (LOW) AROUND THE SYSTEM CENTRE AND ALONG THE PREDICTED TRACK UPTO  $24 \times 100$  HOURS FORECAST PERIOD. THE ANIMATION OF TOTAL PRECIPITABLE WATER (TPW) INDICATES COLD AND DRY AIR INTRUSION FROM ARABIAN PENINSULA IS CONTINUING AND THE WARM MOIST AIR INCURSION FROM SOUTHEAST SECTOR IS REDUCING GRADUALLY IN ASSOCIATION WITH THE ABOVE THE SYSTEM. HOWEVER THE LOW VERTICAL WIND SHEAR IS MITIGATING THE ADVERSE IMPACT OF TOTAL PRECIPITABLE WATER (TPW). THE SYSTEM WOULD MAINTAIN ITS INTENSITY TILL  $1200 \times 100 \times 100$  UTC OF  $8^{TH}$  NOVEMBER AND WEAKEN GRADUALLY THEREAFTER.

# **BAY OF BENGAL & ANDAMAN SEA**

**LOW PRESSURE AREA:** THE LOW PRESSURE AREA OVER SOUTHWEST BAY OF BENGAL HAS BECOME WELL MARKED LOW PRESSURE AREA AT 1200 UTC OF TODAY, THE  $7^{\text{TH}}$  NOVEMBER. IT WOULD CONCENTRATE INTO A DEPRESSION DURING NEXT 24 HOURS.

BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER SOUTH BAY OF BENGAL, BETWEEN LATITUDE 6.0 DEGREE NORTH TO 15.0 DEGREE NORTH AND LONGITUDE 80.0 DEGREE EAST TO 90.0 DEGREE EAST IN ASSOCIATION WITH WELL MARKED LOW PRESSURE AREA. THE ASSOCIATED WIND SPEED IS ABOUT 15-20 KTS. WINDS ARE HIGHER IN NORTHEAST SECTOR. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 68 DEG C

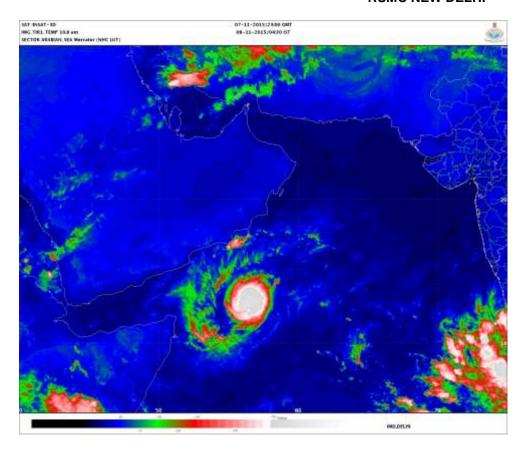
THE ENVIRONMENTAL, ATMOSPHERIC AND OCEANIC CONDITIONS ARE FAVOURABLE FOR INTENSIFICATION OF THE SYSTEM AND NORTHWESTWARD MOVEMENT REACHING TAMIL NADU AND SRILANKA COAST BY  $9^{\text{TH}}$  NIGHT/ $10^{\text{TH}}$  MORNING.

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)
NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

PROBABILITY OF CYCLOGENESIS OVER BAY OF BENGAL AND ANDAMAN SEA DURING NEXT 72 HOURS:

24 HOURS	24-48 HOURS	48-72 HOURS
MODERATE	HIGH	HIGH

# (DUTY OFFICER) RSMC NEW DELHI



NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%





FROM: RSMC -TROPICAL CYCLONES, NEW DELHI

TO: STORM WARNING CENTRE, NAYPYI TAW (MYANMAR)

STORM WARNING CENTRE, BANGKOK (THAILAND) STORM WARNING CENTRE, COLOMBO (SRILANKA) STORM WARNING CENTRE, DHAKA (BANGLADESH) STORM WARNING CENTRE, KARACHI (PAKISTAN)

**METEOROLOGICAL OFFICE, MALE (MALDIVES)** 

OMAN METEOROLOGICAL DEPARTMENT, MUSCAT (THROUGH RTH JEDDAH)

TROPICAL CYCLONE ADVISORY

**RSMC - TROPICAL CYCLONES. NEW DELHI** 

TROPICAL STORM 'MEGH' ADVISORY NO. TWENTY ONE ISSUED AT 0300 UTC OF 8<sup>TH</sup> NOVEMBER 2015 BASED ON 0000 UTC CHARTS OF 8<sup>TH</sup> NOVEMBER 2015.

THE VERY SEVERE CYCLONIC STORM 'MEGH' MOVED WESTWARDS WITH A SPEED OF 21 KMPH DURING PAST SIX HOURS AND LAY CENTRED AT 0000 UTC OF TODAY THE 8TH NOVEMBER 2015 OVER WESTCENTRAL AND ADJOINING SOUTHWEST ARABIAN SEA NEAR LATITUDE 12.7°N AND LONGITUDE 56.1°E, ABOUT 240 KM EAST OF SOCOTRA ISLAND (41494) (YEMEN), 520 KM SOUTH-SOUTHEAST OF SALALAH (41316) (OMAN) AND 1920 KM WEST-SOUTHWEST OF MUMBAI (43003). IT WOULD MOVE WESTWARDS PASSING CLOSE TO SOCOTRA ISLAND AROUND 1200 UTC OF  $8^{TH}$ NOVEMBER 2015. IT WOULD THEN MOVE WEST-NORTHWESTWARDS ACROSS GULF OF ADEN AND WOULD CROSS YEMEN COAST BETWEEN LATITUDE 13 AND 14 DEGREE NORTH AROUND 1200 UTC OF 10<sup>TH</sup> NOVEMBER.AS A CYCLONIC STORM.

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 4.5. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 85 KNOTS GUSTING TO 95 KNOTS. THE WINDS ARE HIGHER OVER THE NORTHERN SECTOR. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 974 HPA. STATE OF SEA AROUND SYTEM CENTRE IS PHENOMENAL. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER THE AREA BETWEEN LATITUDE 11.0 DEGREE NORTH TO 14.5 DEGREE NORTH AND LONGITUDE 55.0 DEGREE EAST TO 58.0 DEGREE EAST. THE CONVECTION SHOWS EYE PATTERN. THE EYE IS SEEN IN IR IMAGERY. MINIMUM CLOUD TOP TEMPERATURE IN WALL CLOUD REGION IS MINUS 85°C.

## FORECAST FOR TRACK AND INTENSITY OF THE SYSTEM ARE GIVEN IN THE TABLE BELOW

DATE/TIME(UTC)	POSITION	MAXIMUM SUSTAINED	CATEGORY OF CYCLONIC
	(LAT. <sup>0</sup> N/LONG. <sup>0</sup> E)	SURFACE WIND SPEED (KMPH)	DISTURBANCE
08-11-2015/0000	12.7/56.1	150-160 gusting to 170	Very Severe Cyclonic Storm (VSCS)
08-11-2015/0600	12.7/55.1	155-165 gusting to 175	Very Severe Cyclonic Storm (VSCS)
08-11-2015/1200	12.7/54.0	145-155 gusting to 165	Very Severe Cyclonic Storm (VSCS)
08-11-2015/1800	12.7/52.9	135-145 gusting to 155	Very Severe Cyclonic Storm (VSCS)
09-11-2015/0000	12.7/51.7	125-135 gusting to 145	Very Severe Cyclonic Storm (VSCS)
09-11-2015/1200	12.9/49.6	105-115 gusting to 125	Severe Cyclonic Storm (CS)
10-11-2015/0000	13.1/48.2	85-105 gusting to 115	Cyclonic Storm (CS)

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

10-11-2015/1200	13.4/46.8	65-75 gusting to 85	Cyclonic Storm (CS)
11-11-2015/0000	13.8/46.0	45-55 gusting to 65	Depression (D)
11-11-2015/1200	14.3/45.3	25-35 gusting to 45	Low

THE SYSTEM MOVED WITH A SPEED OF 21 KMPH DURING PAST SIX HOURS. IT WAS DUE TO THE STEERING ANTICYCLONIC CIRCULATION TO THE NORTHEAST OF THE SYSTEM CENTRE. THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 16°N IN ASSOCIATION WITH AN ANTICYCLONIC CIRCULATION LOCATED TO THE NORTHEAST OF THE SYSTEM CENTRE. THE SYSTEM WOULD CONTINUE TO BE GUIDED WESTWARDS FOR NEXT 24 HOURS AND THEN WESTNOTHWESTWARDS UNDER THE INFLUENCE OF THE ABOVE RIDGE AND ANTI-CYCLONIC CIRCULATION.

THE LOW LEVEL RELATIVE VORTICITY IS  $150 \times 10^{-5}$  SEC-1, CONVERGENCE IS  $5-10 \times 10-5$  SEC-1, AND UPPER LEVEL DIVERGENCE IS  $10 \times 10^{-5}$  SEC-1. THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS  $28^{\circ}$ C. THE OCEAN THERMAL ENERGY IS 50-75 KJ/CM² AROUNDTHE SYSTEM CENTRE AND THEN DECREASES TOWARDS GULF OF ADEN. THE VERTICAL WIND SHEAR IS ABOUT 10 KNOTS AROUND THE SYSTEM CENTRE. THE LOW VERTICAL WIND SHEAR IS MITIGATING THE ADVERSE IMPACT OF TOTAL PRECIPITABLE WATER (TPW). THE SYSTEM WOULD MAINTAIN ITS INTENSITY TILL 1200 UTC OF  $8^{TH}$  NOVEMBER AND WEAKEN GRADUALLY THEREAFTER DUE TO LOWER OCEAN THERMAL ENERGY OVER GULF OF ADEN AND INTERACTION WITH LAND SURFACE AS IT WILL PASS NEAR SOCOTRA ISLAND AND NORTHERN TIP OF SOMALIA.

#### **BAY OF BENGAL & ANDAMAN SEA**

**THE WELL MARKED LOW PRESSURE AREA** OVER SOUTHWEST BAY OF BENGAL PERSISTS. IT WOULD CONCENTRATE INTO A DEPRESSION DURING NEXT 24 HOURS.

BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER SOUTH BAY OF BENGAL, BETWEEN LATITUDE 6.0 DEGREE NORTH TO 15.0 DEGREE NORTH AND LONGITUDE 80.0 DEGREE EAST TO 90.0 DEGREE EAST IN ASSOCIATION WITH WELL MARKED LOW PRESSURE AREA. THE ASSOCIATED WIND SPEED IS ABOUT 15-20 KTS. WINDS ARE HIGHER IN NORTHEAST SECTOR. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 68 DEG C

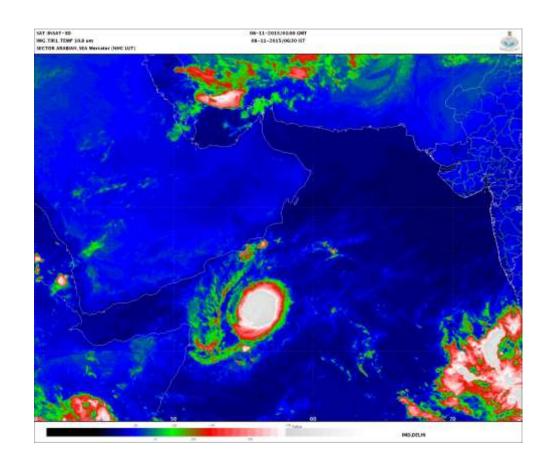
THE ENVIRONMENTAL, ATMOSPHERIC AND OCEANIC CONDITIONS ARE FAVOURABLE FOR INTENSIFICATION OF THE SYSTEM AND NORTHWESTWARD MOVEMENT REACHING TAMIL NADU AND SRILANKA COAST BY  $9^{\text{TH}}$  NIGHT/ $10^{\text{TH}}$  MORNING.

# PROBABILITY OF CYCLOGENESIS OVER BAY OF BENGAL AND ANDAMAN SEA DURING NEXT 72 HOURS:

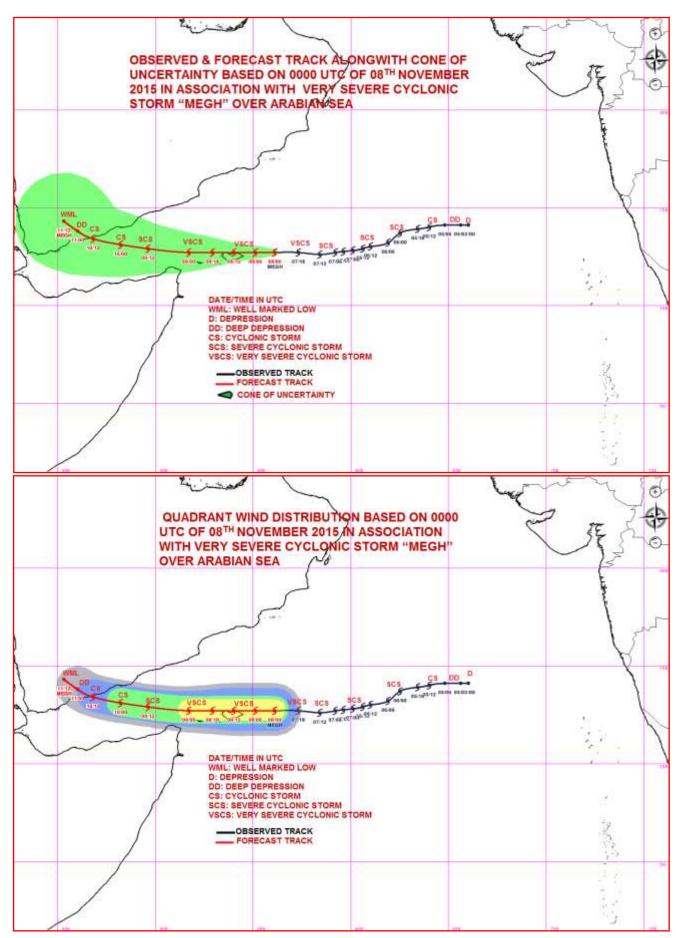
24 HOURS	24-48 HOURS	48-72 HOURS
HIGH	HIGH	HIGH

(M.MOHAPATRA)
HEAD RSMC NEW DELHI

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)
NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%



PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)
NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%



PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%





FROM: RSMC -TROPICAL CYCLONES, NEW DELHI

TO: STORM WARNING CENTRE, NAYPYI TAW (MYANMAR)

STORM WARNING CENTRE, BANGKOK (THAILAND)
STORM WARNING CENTRE, COLOMBO (SRILANKA)
STORM WARNING CENTRE, DHAKA (BANGLADESH)
STORM WARNING CENTRE, KARACHI (PAKISTAN)
METEOROLOGICAL OFFICE, MALE (MALDIVES)

OMAN METEOROLOGICAL DEPARTMENT, MUSCAT (THROUGH RTH JEDDAH)

TROPICAL CYCLONE ADVISORY

**RSMC - TROPICAL CYCLONES, NEW DELHI** 

TROPICAL STORM 'MEGH' ADVISORY NO. TWENTY TWO ISSUED AT 0600 UTC OF 8<sup>TH</sup> NOVEMBER 2015 BASED ON 0300 UTC CHARTS OF 8<sup>TH</sup> NOVEMBER 2015.

THE VERY SEVERE CYCLONIC STORM 'MEGH' MOVED WESTWARDS WITH A SPEED OF 20 KMPH DURING PAST SIX HOURS, INTENSIFIED INTO AN EXTREMELY SEVERE CYCLONIC STORM AND LAY CENTRED AT 0300 UTC OF TODAY THE 8TH NOVEMBER 2015 OVER WESTCENTRAL AND ADJOINING SOUTHWEST ARABIAN SEA NEAR LATITUDE 12.7°N AND LONGITUDE 55.6°E, ABOUT 180 KM EAST OF SOCOTRA ISLAND (41494) (YEMEN) AND 510 KM SOUTH-SOUTHEAST OF SALALAH (41316) (OMAN). IT WOULD MOVE WESTWARDS PASSING CLOSE TO SOCOTRA ISLAND AROUND 1200 UTC OF 8<sup>TH</sup> NOVEMBER 2015. IT WOULD THEN MOVE WESTNORTHWESTWARDS ACROSS GULF OF ADEN AND WOULD CROSS YEMEN COAST BETWEEN LATITUDE 13 AND 14 DEGREE NORTH AROUND 1200 UTC OF 10<sup>TH</sup> NOVEMBER AS A CYCLONIC STORM.

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 5.0. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 90 KNOTS GUSTING TO 100 KNOTS. THE WINDS ARE HIGHER OVER THE NORTHERN SECTOR. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 968 HPA. STATE OF SEA AROUND SYTEM CENTRE IS PHENOMENAL. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER THE AREA BETWEEN LATITUDE 11.0 DEGREE NORTH TO 14.5 DEGREE NORTH AND LONGITUDE 54.0 DEGREE EAST TO 57.0 DEGREE EAST. THE CONVECTION SHOWS EYE PATTERN. THE EYE IS SEEN IN BOTH IR AND VISIBLE IMAGERIES. MINIMUM CLOUD TOP TEMPERATURE IN WALL CLOUD REGION IS MINUS 85°C.

## FORECAST FOR TRACK AND INTENSITY OF THE SYSTEM ARE GIVEN IN THE TABLE BELOW

DATE/TIME(UTC)	POSITION	MAXIMUM SUSTAINED	CATEGORY OF CYCLONIC
	(LAT. <sup>0</sup> N/ LONG. <sup>0</sup> E)	SURFACE WIND SPEED (KMPH)	DISTURBANCE
08-11-2015/0300	12.7/55.6	160-170 gusting to 185	Extremely Severe Cyclonic Storm (ESCS)
08-11-2015/0600	12.7/55.1	165-175 gusting to 190	Extremely Severe Cyclonic Storm (VSCS)
08-11-2015/1200	12.7/54.0	160-170 gusting to 185	Extremely Severe Cyclonic Storm (VSCS)
08-11-2015/1800	12.7/52.9	150-160 gusting to 175	Very Severe Cyclonic Storm (VSCS)
09-11-2015/0000	12.7/51.7	140-150 gusting to 165	Very Severe Cyclonic Storm (VSCS)

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

09-11-2015/1200	12.9/49.6	120-130 gusting to 140	Very Severe Cyclonic Storm (VSCS)
10-11-2015/0000	13.1/48.2	100-110 gusting to 120	Severe Cyclonic Storm (SCS)
10-11-2015/1200	13.4/46.8	80-90 gusting to 100	Cyclonic Storm (CS)
11-11-2015/0000	13.8/46.0	55-65 gusting to 75	Deep Depression (DD)
11-11-2015/1200	14.3/45.3	35-45 gusting to 55	Depression (D)

THE SYSTEM MOVED WITH A SPEED OF 20 KMPH DURING PAST SIX HOURS. IT WAS DUE TO THE STEERING ANTICYCLONIC CIRCULATION TO THE NORTHEAST OF THE SYSTEM CENTRE. THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 16°N IN ASSOCIATION WITH AN ANTICYCLONIC CIRCULATION LOCATED TO THE NORTHEAST OF THE SYSTEM CENTRE. THE SYSTEM WOULD CONTINUE TO BE GUIDED WESTWARDS FOR NEXT 24 HOURS AND THEN WESTNOTHWESTWARDS UNDER THE INFLUENCE OF THE ABOVE RIDGE AND ANTI-CYCLONIC CIRCULATION.

THE LOW LEVEL RELATIVE VORTICITY IS  $150 \times 10^{-5}$  SEC<sup>-1</sup>, CONVERGENCE IS  $5 \times 10^{-5}$  SEC-1, AND UPPER LEVEL DIVERGENCE IS  $10 \times 10^{-5}$  SEC<sup>-1</sup>. THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS  $28^{\circ}$ C. THE OCEAN THERMAL ENERGY IS 50-75 KJ/CM<sup>2</sup> AROUNDTHE SYSTEM CENTRE AND THEN DECREASES TOWARDS GULF OF ADEN. THE VERTICAL WIND SHEAR IS ABOUT 10 KNOTS AROUND THE SYSTEM CENTRE. THE LOW VERTICAL WIND SHEAR IS MITIGATING THE ADVERSE IMPACT OF TOTAL PRECIPITABLE WATER (TPW). THE SYSTEM WOULD MAINTAIN ITS INTENSITY TILL 1200 UTC OF  $8^{TH}$  NOVEMBER AND WEAKEN GRADUALLY THEREAFTER DUE TO LOWER OCEAN THERMAL ENERGY OVER GULF OF ADEN AND INTERACTION WITH LAND SURFACE AS IT WILL PASS NEAR SOCOTRA ISLAND AND NORTHERN TIP OF SOMALIA.

## **BAY OF BENGAL & ANDAMAN SEA**

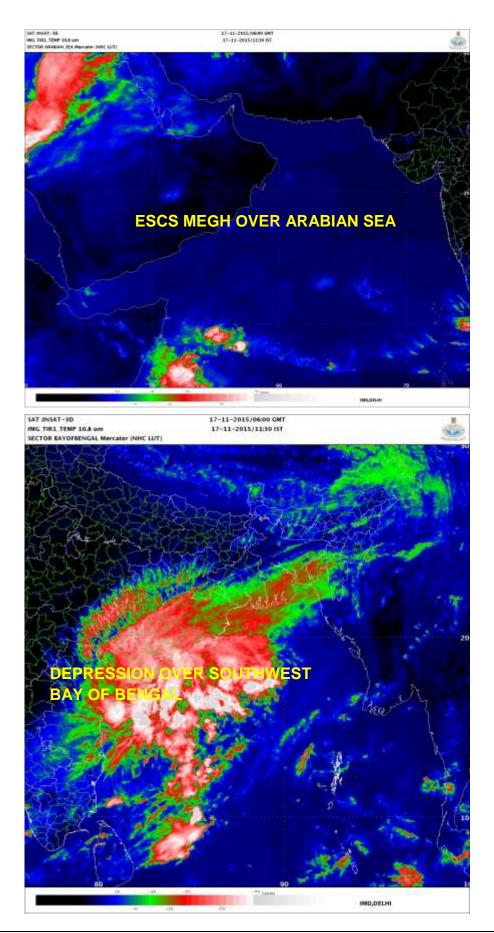
THE WELL MARKED LOW PRESSURE AREA OVER SOUTHWEST BAY OF BENGAL CONCENTRATED INTO A DEPRESSION AND LAY CENTRED AT 0300 UTC OF TODAY THE 8TH NOVEMBER 2015 OVER SOUTHWEST BAY OF BENGAL NEAR LATITUDE 10.7°N AND LONGITUDE 83.7°E, ABOUT 450 KM SOUTHEAST OF CHENNAI (43278), 440 KM EAST-SOUTHEAST OF PUDUCHERRY (43331), 420 KM EAST OF KARAIKAL (43346) AND 480 KM EAST-NORTHEAST OF JAFNA (43404) (SRILANKA), IT WOULD MOVE WEST-NORTHWESTWARDS AND INTENSIFY INTO A DEEP DEPRESSION DURING NEXT 24 HOURS AND SUBSEQUENTLY INTO A CYCLONIC STORM. IT WOULD CROSS NORTH TAMIL NADU COAST BETWEEN KARAIKAL AND CHENNAI BY 1800 UTC of 9<sup>TH</sup> NOVEMBER, CLOSE TO PUDUCHERRY.

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 1.5. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 25 KNOTS GUSTING TO 35 KNOTS. THE WINDS ARE HIGHER OVER THE NORTHEAST SECTOR. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 1004 HPA. STATE OF SEA AROUND SYTEM CENTRE IS ROUGH TO VERY ROUGH. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER SOUTH BAY OF BENGAL, BETWEEN LATITUDE 6.0 DEGREE NORTH TO 15.0 DEGREE NORTH AND LONGITUDE 78.0 DEGREE EAST TO 90.0 DEGREE EAST. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 88 DEG C. WINDS ARE HIGHER IN NORTHEAST SECTOR.

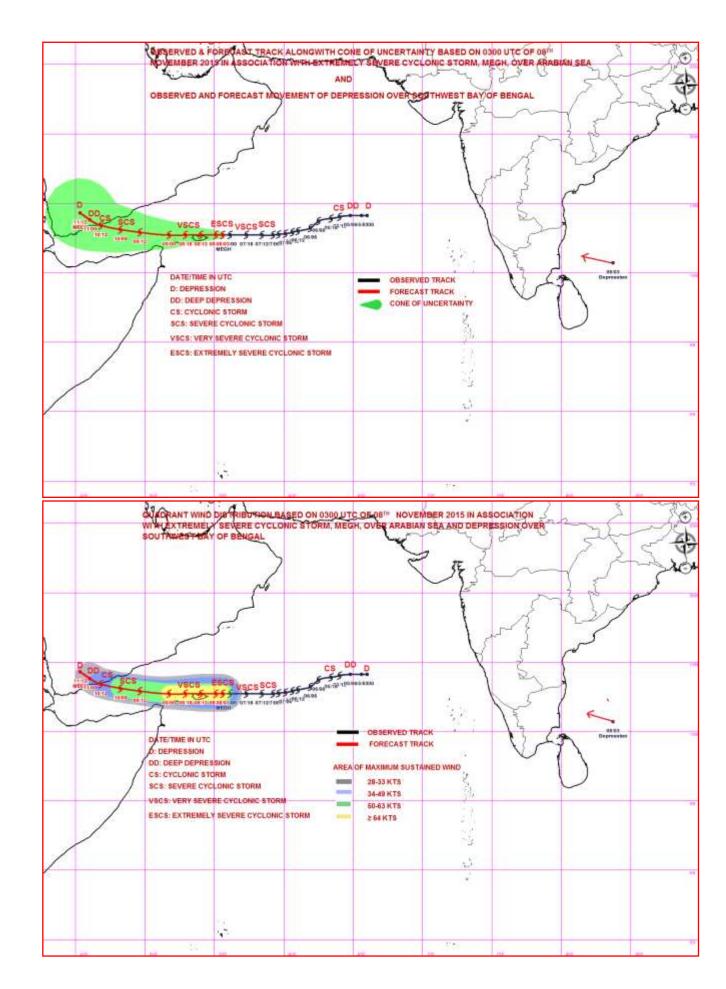
PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)
NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

THE CONVECTION HAS BECOME MORE ORGANISED DURING PAST SIX HOURS. THE LOW LEVEL RELATIVE VORTICITY IS 100 x 10<sup>-5</sup> SEC<sup>-1</sup>, CONVERGENCE IS 20 x 10-5 SEC-1, AND UPPER LEVEL DIVERGENCE IS 20 x 10<sup>-5</sup> SEC<sup>-1</sup>. THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 16°N. THE SEA SURFACE TEMPERATURE AROUND THE REGION OF DEPRESSION IS 29-30°C. THE VERTICAL WIND SHEAR IS ABOUT 10-20 KNOTS (MODERATE) AROUND THE SYSTEM CENTRE. MJO LIES IN PAHSE 3 WITH AMPLITUDE GREATER THAN 1. IT IS LIKELY TO CONTINUE IN PHASE 3 FOR THE NEXT 2-3 DAYS WHICH IS FAVOURABLE FOR INTENSIFICATION OF THE SYSTEM. MOST OF THE MODEL SUGGESTS WEST-NORTHWESTWARD MOVEMENT REACHING NORTH TAMIL NADU COAST BY 9TH NIGHT /10TH MORNING. BUT THERE IS DIVERGENCE AMONG THE NWP MODELS REGARDING THE PEAK INTENSITY WHICH VARIES FROM DEEP DEPRSSION TO CYCLONIC STORM. UNDER THE SCENARIO, THE SYSTEM WOULD MOVE WEST-NORTHWESTARDS AND INTENSIFY INTO A DEEP DEPRESSION DURING NEXT 24 HOURS.

(M.MOHAPATRA) HEAD RSMC NEW DELHI



PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)
NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%







FROM: RSMC -TROPICAL CYCLONES, NEW DELHI

TO: STORM WARNING CENTRE, NAYPYI TAW (MYANMAR) STORM WARNING CENTRE, BANGKOK (THAILAND)

STORM WARNING CENTRE, COLOMBO (SRILANKA)
STORM WARNING CENTRE, DHAKA (BANGLADESH)
STORM WARNING CENTRE, KARACHI (PAKISTAN)
METEOROLOGICAL OFFICE, MALE (MALDIVES)

OMAN METEOROLOGICAL DEPARTMENT, MUSCAT (THROUGH RTH JEDDAH)

TROPICAL CYCLONE ADVISORY

**RSMC - TROPICAL CYCLONES, NEW DELHI** 

TROPICAL STORM 'MEGH' ADVISORY NO. TWENTY THREE ISSUED AT 0900 UTC OF  $8^{TH}$  NOVEMBER 2015 BASED ON 0600 UTC CHARTS OF  $8^{TH}$  NOVEMBER 2015.

THE **EXTREMELY SEVERE CYCLONIC STORM 'MEGH'** MOVED WESTWARDS WITH A SPEED OF 22 KMPH DURING PAST SIX HOURS AND LAY CENTRED AT **0600** UTC OF TODAY THE 8TH NOVEMBER 2015 OVER WESTCENTRAL AND ADJOINING SOUTHWEST ARABIAN SEA NEAR LATITUDE **12.7**°N AND LONGITUDE **54.9**°E, ABOUT **110 KM** EAST OF SOCOTRA ISLAND (41494) (YEMEN) AND **490** KM SOUTH-SOUTHEAST OF SALALAH (41316) (OMAN). IT WOULD MOVE WESTWARDS PASSING CLOSE TO SOCOTRA ISLAND AROUND 1200 UTC OF 8<sup>TH</sup> NOVEMBER 2015. IT WOULD THEN MOVE NEARLY WESTWARDS INITIALLY & THEN WEST-NORTHWESTWARDS ACROSS GULF OF ADEN AND CROSS YEMEN COAST BETWEEN LATITUDE 13 & 14 DEGREE NORTH AROUND 1200 UTC OF 10<sup>TH</sup> NOVEMBER AS A **SEVERE CYCLONIC STORM**.

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 5.0. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 95 KNOTS GUSTING TO 105 KNOTS. THE WINDS ARE HIGHER OVER THE NORTHERN SECTOR. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 964 HPA. STATE OF SEA AROUND SYTEM CENTRE IS PHENOMENAL. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER THE AREA BETWEEN LATITUDE 11.0 DEGREE NORTH TO 14.5 DEGREE NORTH AND LONGITUDE 53.0 DEGREE EAST TO 57.0 DEGREE EAST. THE CONVECTION SHOWS EYE PATTERN. THE EYE IS SEEN IN BOTH IR AND VISIBLE IMAGERIES. MINIMUM CLOUD TOP TEMPERATURE IN WALL CLOUD REGION IS MINUS 72°C.

## FORECAST FOR TRACK AND INTENSITY OF THE SYSTEM ARE GIVEN IN THE TABLE BELOW

DATE/TIME(UTC)	POSITION	MAXIMUM SUSTAINED	CATEGORY OF CYCLONIC
	(LAT. <sup>0</sup> N/LONG. <sup>0</sup> E)	SURFACE WIND SPEED (KMPH)	DISTURBANCE
08-11-2015/0600	12.7/54.9	170-180 gusting to 200	Extremely Severe Cyclonic Storm (ESCS)
08-11-2015/1200	12.6/53.7	170-180 gusting to 200	Extremely Severe Cyclonic Storm (ESCS)
08-11-2015/1800	12.5/52.5	160-170 gusting to 185	Extremely Severe Cyclonic Storm (ESCS)
09-11-2015/0000	12.5/51.3	150-160 gusting to 175	Very Severe Cyclonic Storm (VSCS)
09-11-2015/0600	12.6/50.1	140-150 gusting to 165	Very Severe Cyclonic Storm (VSCS)
09-11-2015/1800	12.8/48.4	120-130 gusting to 140	Very Severe Cyclonic Storm (VSCS)

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

10-11-2015/0600	13.2/46.8	100-110 gusting to 120	Severe Cyclonic Storm (SCS)
10-11-2015/1800	13.7/45.7	80-90 gusting to 100	Cyclonic Storm (CS)
11-11-2015/0600	14.3/45.0	55-65 gusting to 75	Deep Depression (DD)
11-11-2015/1800	15.0/44.4	35-45 gusting to 55	Depression (D)

THE SYSTEM MOVED WITH A SPEED OF 20 KMPH DURING PAST SIX HOURS. IT WAS DUE TO THE STEERING ANTICYCLONIC CIRCULATION TO THE NORTHEAST OF THE SYSTEM CENTRE. THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 16°N IN ASSOCIATION WITH AN ANTICYCLONIC CIRCULATION LOCATED TO THE NORTHEAST OF THE SYSTEM CENTRE. THE SYSTEM WOULD CONTINUE TO BE GUIDED WESTWARDS FOR NEXT 24 HOURS AND THEN WESTNOTHWESTWARDS UNDER THE INFLUENCE OF THE ABOVE RIDGE AND ANTI-CYCLONIC CIRCULATION.

THE LOW LEVEL RELATIVE VORTICITY IS  $150 \times 10^{-5}$  SEC<sup>-1</sup>, CONVERGENCE IS  $5 \times 10^{-5}$  SEC-1, AND UPPER LEVEL DIVERGENCE IS  $10 \times 10^{-5}$  SEC<sup>-1</sup>. THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS  $28^{\circ}$ C. THE OCEAN THERMAL ENERGY IS 50-75 KJ/CM<sup>2</sup> AROUNDTHE SYSTEM CENTRE AND THEN DECREASES TOWARDS GULF OF ADEN. THE VERTICAL WIND SHEAR IS ABOUT 10 KNOTS AROUND THE SYSTEM CENTRE. THE LOW VERTICAL WIND SHEAR IS MITIGATING THE ADVERSE IMPACT OF TOTAL PRECIPITABLE WATER (TPW). THE SYSTEM WOULD MAINTAIN ITS INTENSITY TILL 1200 UTC OF  $8^{TH}$  NOVEMBER AND WEAKEN GRADUALLY THEREAFTER DUE TO LOWER OCEAN THERMAL ENERGY OVER GULF OF ADEN AND INTERACTION WITH LAND SURFACE AS IT WILL PASS NEAR SOCOTRA ISLAND AND NORTHERN TIP OF SOMALIA.

## **BAY OF BENGAL & ANDAMAN SEA**

THE DEPRESSION OVER SOUTHWEST BAY OF BENGAL MOVED WEST-NORTHWESTWARDS AND LAY CENTRED AT 0600 UTC OF TODAY THE 8TH NOVEMBER 2015 OVER SOUTHWEST BAY OF BENGAL NEAR LATITUDE 10.8°N AND LONGITUDE 83.2°E, ABOUT 400 KM SOUTHEAST OF CHENNAI (43278), 390 KM EAST-SOUTHEAST OF PUDUCHERRY (43331) AND 370 KM EAST-NORTHEAST OF JAFFNA (43404) (SRILANKA), IT WOULD MOVE WEST-NORTHWESTWARDS AND INTENSIFY INTO A DEEP DEPRESSION DURING NEXT 24 HOURS AND SUBSEQUENTLY INTO A CYCLONIC STORM. IT WOULD CROSS NORTH TAMIL NADU COAST BETWEEN KARAIKAL AND CHENNAI BY 1800 UTC of 9<sup>TH</sup> NOVEMBER, CLOSE TO PUDUCHERRY.

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 1.5. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 25 KNOTS GUSTING TO 35 KNOTS. THE WINDS ARE HIGHER OVER THE NORTHEAST SECTOR. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 1004 HPA. STATE OF SEA AROUND SYTEM CENTRE IS ROUGH TO VERY ROUGH. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER SOUTH BAY OF BENGAL, BETWEEN LATITUDE 6.0 DEGREE NORTH TO 16.0 DEGREE NORTH AND LONGITUDE 78.0 DEGREE EAST TO 90.0 DEGREE EAST. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 83 DEG C. WINDS ARE HIGHER IN NORTHEAST SECTOR.

# **REMARKS:**

THE CONVECTION HAS BECOME MORE ORGANISED DURING PAST SIX HOURS. THE LOW LEVEL RELATIVE VORTICITY IS  $100 \times 10^{-5} \text{ SEC}^{-1}$ , CONVERGENCE IS  $20 \times 10^{-5} \text{ SEC}^{-1}$ , AND UPPER LEVEL DIVERGENCE IS  $20 \times 10^{-5} \text{ SEC}^{-1}$ . THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

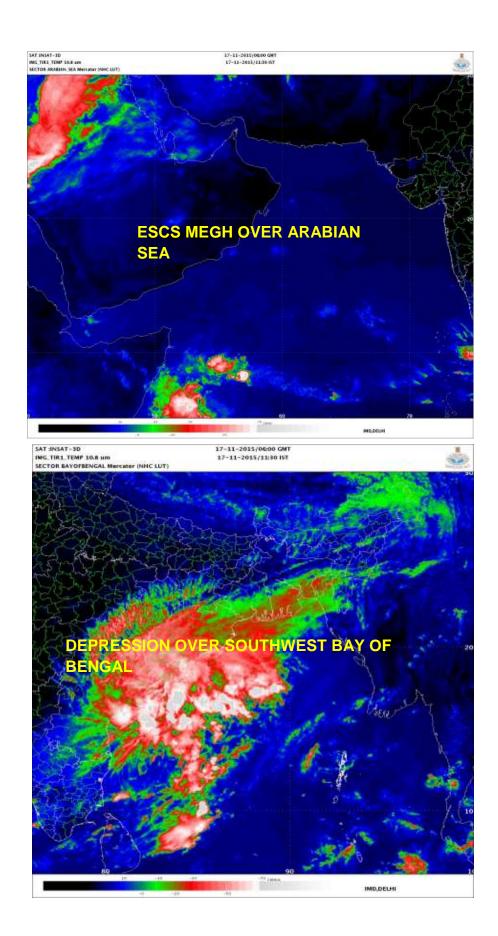
NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

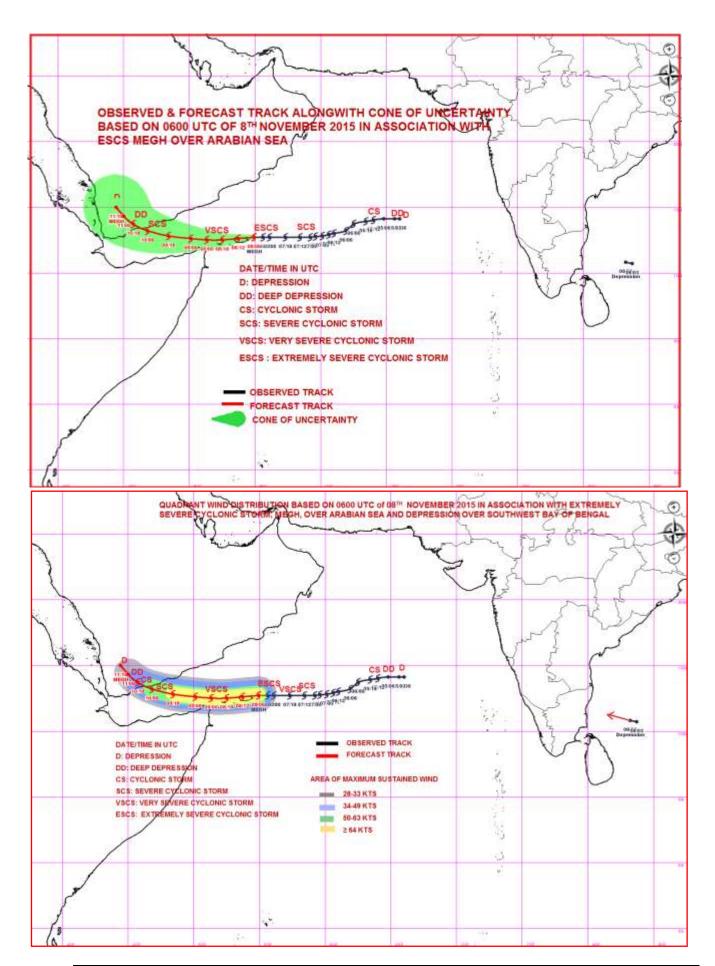
ALONG 16°N. THE SEA SURFACE TEMPERATURE AROUND THE REGION OF DEPRESSION IS 29-30°C. THE VERTICAL WIND SHEAR IS ABOUT 10-20 KNOTS (MODERATE) AROUND THE SYSTEM CENTRE. MJO LIES IN PAHSE 3 WITH AMPLITUDE GREATER THAN 1. IT IS LIKELY TO CONTINUE IN PHASE 3 FOR THE NEXT 2-3 DAYS WHICH IS FAVOURABLE FOR INTENSIFICATION OF THE SYSTEM. MOST OF THE MODEL SUGGESTS WEST-NORTHWESTWARD MOVEMENT REACHING NORTH TAMIL NADU COAST BY 9TH NIGHT /10TH MORNING. BUT THERE IS DIVERGENCE AMONG THE NWP MODELS REGARDING THE PEAK INTENSITY WHICH VARIES FROM DEEP DEPRSSION TO CYCLONIC STORM. UNDER THE SCENARIO, THE SYSTEM WOULD MOVE WEST-NORTHWESTARDS AND INTENSIFY INTO A DEEP DEPRESSION DURING NEXT 24 HOURS.

(M. MOHAPATRA) HEAD RSMC NEW DELHI

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%





PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)
NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%





FROM: RSMC -TROPICAL CYCLONES, NEW DELHI

TO: STORM WARNING CENTRE, NAYPYI TAW (MYANMAR)

STORM WARNING CENTRE, BANGKOK (THAILAND)
STORM WARNING CENTRE, COLOMBO (SRILANKA)
STORM WARNING CENTRE, DHAKA (BANGLADESH)
STORM WARNING CENTRE, KARACHI (PAKISTAN)
METEOROLOGICAL OFFICE, MALE (MALDIVES)

OMAN METEOROLOGICAL DEPARTMENT, MUSCAT (THROUGH RTH JEDDAH)

TROPICAL CYCLONE ADVISORY

**RSMC - TROPICAL CYCLONES, NEW DELHI** 

TROPICAL STORM 'MEGH' ADVISORY NO. TWENTY FOUR ISSUED AT 1200 UTC OF 8<sup>TH</sup> NOVEMBER 2015 BASED ON 0900 UTC CHARTS OF 8<sup>TH</sup> NOVEMBER 2015.

THE **EXTREMELY SEVERE CYCLONIC STORM 'MEGH'** MOVED WESTWARDS WITH A SPEED OF 24 KMPH DURING PAST SIX HOURS AND LAY CENTRED AT **0900** UTC OF TODAY, THE 8TH NOVEMBER 2015 OVER WESTCENTRAL AND ADJOINING SOUTHWEST ARABIAN SEA NEAR LATITUDE **12.7°**N AND LONGITUDE **54.2°E**, ABOUT **30 KM** EAST OF SOCOTRA ISLAND (41494) (YEMEN) AND **480** KM SOUTH-SOUTHEAST OF SALALAH (41316) (OMAN). IT WOULD MOVE WESTWARDS PASSING CLOSE TO SOCOTRA ISLAND AROUND 1200 UTC OF 8<sup>TH</sup> NOVEMBER 2015. IT WOULD THEN MOVE NEARLY WESTWARDS INITIALLY & THEN WEST-NORTHWESTWARDS ACROSS GULF OF ADEN AND CROSS YEMEN COAST BETWEEN LATITUDE 13 & 14 DEGREE NORTH AROUND 1200 UTC OF 10<sup>TH</sup> NOVEMBER AS A **SEVERE CYCLONIC STORM**.

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 5.0. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 95 KNOTS GUSTING TO 105 KNOTS. THE WINDS ARE HIGHER OVER THE NORTHERN SECTOR. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 964 HPA. STATE OF SEA AROUND SYTEM CENTRE IS PHENOMENAL. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER THE AREA BETWEEN LATITUDE 11.0 DEGREE NORTH TO 14.5 DEGREE NORTH AND LONGITUDE 52.5 DEGREE EAST TO 55.5 DEGREE EAST. THE CONVECTION SHOWS EYE PATTERN. THE EYE IS SEEN IN BOTH IR AND VISIBLE IMAGERIES. MINIMUM CLOUD TOP TEMPERATURE IN WALL CLOUD REGION IS MINUS 77°C.

## FORECAST FOR TRACK AND INTENSITY OF THE SYSTEM ARE GIVEN IN THE TABLE BELOW

DATE/TIME(UTC)	POSITION	MAXIMUM SUSTAINED	CATEGORY OF CYCLONIC
	(LAT. <sup>0</sup> N/LONG. <sup>0</sup> E)	SURFACE WIND SPEED (KMPH)	DISTURBANCE
08-11-2015/0900	12.7/54.2	170-180 gusting to 200	Extremely Severe Cyclonic Storm (ESCS)
08-11-2015/1200	12.6/53.7	170-180 gusting to 200	Extremely Severe Cyclonic Storm (ESCS)
08-11-2015/1800	12.5/52.5	160-170 gusting to 185	Extremely Severe Cyclonic Storm (ESCS)
09-11-2015/0000	12.5/51.3	150-160 gusting to 175	Very Severe Cyclonic Storm (VSCS)
09-11-2015/0600	12.6/50.1	140-150 gusting to 165	Very Severe Cyclonic Storm (VSCS)
09-11-2015/1800	12.8/48.4	120-130 gusting to 140	Very Severe Cyclonic Storm (VSCS)

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

10-11-2015/0600	13.2/46.8	100-110 gusting to 120	Severe Cyclonic Storm (SCS)
10-11-2015/1800	13.7/45.7	80-90 gusting to 100	Cyclonic Storm (CS)
11-11-2015/0600	14.3/45.0	55-65 gusting to 75	Deep Depression (DD)
11-11-2015/1800	15.0/44.4	35-45 gusting to 55	Depression (D)

THE SYSTEM MOVED WITH A SPEED OF 20 KMPH DURING PAST SIX HOURS. IT WAS DUE TO THE STEERING ANTICYCLONIC CIRCULATION TO THE NORTHEAST OF THE SYSTEM CENTRE. THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 16°N IN ASSOCIATION WITH AN ANTICYCLONIC CIRCULATION LOCATED TO THE NORTHEAST OF THE SYSTEM CENTRE. THE SYSTEM WOULD CONTINUE TO BE GUIDED WESTWARDS FOR NEXT 24 HOURS AND THEN WESTNOTHWESTWARDS UNDER THE INFLUENCE OF THE ABOVE RIDGE AND ANTI-CYCLONIC CIRCULATION.

THE LOW LEVEL RELATIVE VORTICITY IS  $150 \times 10^{-5}$  SEC<sup>-1</sup>, CONVERGENCE IS  $5 \times 10^{-5}$  SEC-1, AND UPPER LEVEL DIVERGENCE IS  $10 \times 10^{-5}$  SEC<sup>-1</sup>. THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS  $28^{\circ}$ C. THE OCEAN THERMAL ENERGY IS  $50^{\circ}$ 75 KJ/CM<sup>2</sup> AROUNDTHE SYSTEM CENTRE AND THEN DECREASES TOWARDS GULF OF ADEN. THE VERTICAL WIND SHEAR IS ABOUT 10 KNOTS AROUND THE SYSTEM CENTRE. THE LOW VERTICAL WIND SHEAR IS MITIGATING THE ADVERSE IMPACT OF TOTAL PRECIPITABLE WATER (TPW). THE SYSTEM WOULD MAINTAIN ITS INTENSITY TILL 1200 UTC OF  $8^{TH}$  NOVEMBER AND WEAKEN GRADUALLY THEREAFTER DUE TO LOWER OCEAN THERMAL ENERGY OVER GULF OF ADEN AND INTERACTION WITH LAND SURFACE AS IT WILL PASS NEAR SOCOTRA ISLAND AND NORTHERN TIP OF SOMALIA.

### **BAY OF BENGAL & ANDAMAN SEA**

THE DEPRESSION OVER SOUTHWEST BAY OF BENGAL MOVED WEST-NORTHWESTWARDS AND LAY CENTRED AT 0600 UTC OF TODAY THE 8TH NOVEMBER 2015 OVER SOUTHWEST BAY OF BENGAL NEAR LATITUDE 10.8°N AND LONGITUDE 83.2°E, ABOUT 400 KM SOUTHEAST OF CHENNAI (43278), 390 KM EAST-SOUTHEAST OF PUDUCHERRY (43331) AND 370 KM EAST-NORTHEAST OF JAFFNA (43404) (SRILANKA), IT WOULD MOVE WEST-NORTHWESTWARDS AND INTENSIFY INTO A DEEP DEPRESSION DURING NEXT 24 HOURS AND SUBSEQUENTLY INTO A CYCLONIC STORM. IT WOULD CROSS NORTH TAMIL NADU COAST BETWEEN KARAIKAL AND CHENNAI BY 1800 UTC of 9<sup>TH</sup> NOVEMBER, CLOSE TO PUDUCHERRY.

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 1.5. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 25 KNOTS GUSTING TO 35 KNOTS. THE WINDS ARE HIGHER OVER THE NORTHEAST SECTOR. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 1004 HPA. STATE OF SEA AROUND SYTEM CENTRE IS ROUGH TO VERY ROUGH. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER SOUTH BAY OF BENGAL, BETWEEN LATITUDE 9.0 DEGREE NORTH TO 17.0 DEGREE NORTH AND WEST OF LONGITUDE 88.0 DEGREE EAST. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 85 DEG C. WINDS ARE HIGHER IN NORTHEAST SECTOR.

## **REMARKS:**

THE CONVECTION HAS BECOME MORE ORGANISED DURING PAST SIX HOURS. THE LOW LEVEL RELATIVE VORTICITY IS  $100 \times 10^{-5}$  SEC<sup>-1</sup>, CONVERGENCE IS  $20 \times 10^{-5}$  SEC<sup>-1</sup>, AND UPPER

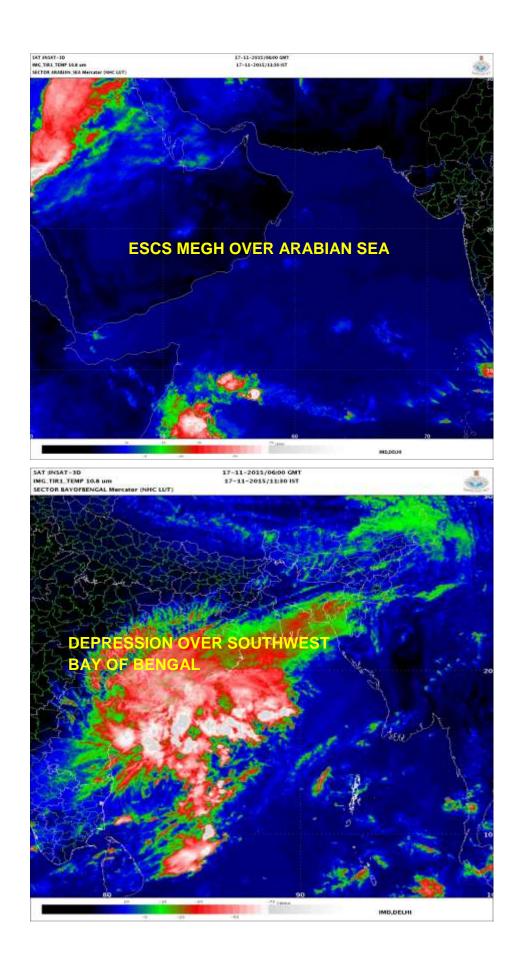
PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

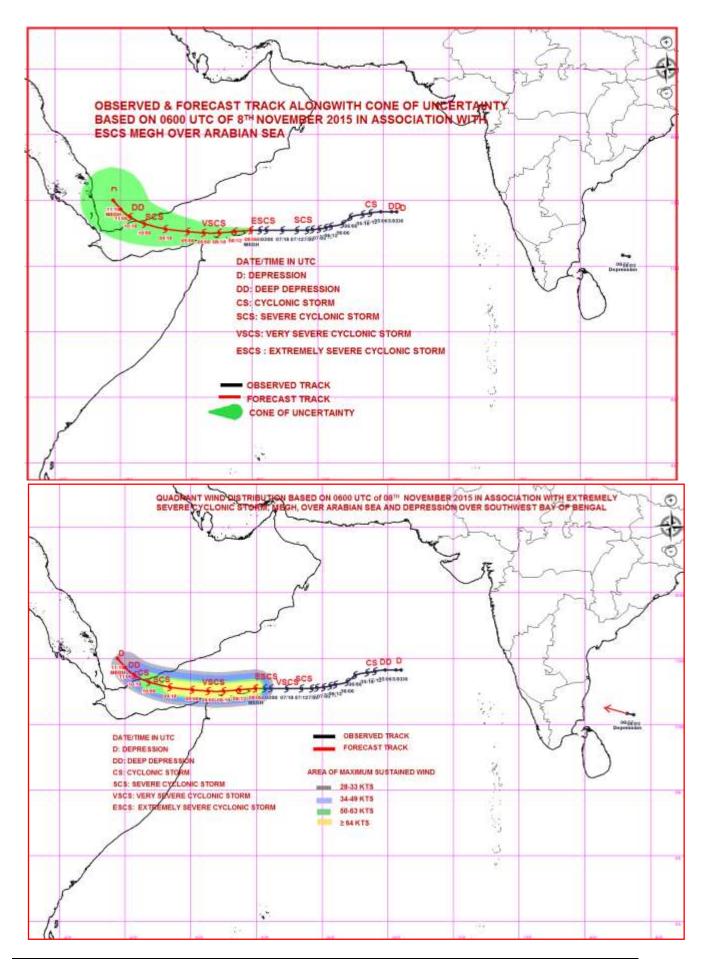
NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

LEVEL DIVERGENCE IS 20 x 10<sup>-5</sup> SEC<sup>-1</sup>. THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 16°N. THE SEA SURFACE TEMPERATURE AROUND THE REGION OF DEPRESSION IS 29-30°C. THE VERTICAL WIND SHEAR IS ABOUT 10-20 KNOTS (MODERATE) AROUND THE SYSTEM CENTRE. MJO LIES IN PAHSE 3 WITH AMPLITUDE GREATER THAN 1. IT IS LIKELY TO CONTINUE IN PHASE 3 FOR THE NEXT 2-3 DAYS WHICH IS FAVOURABLE FOR INTENSIFICATION OF THE SYSTEM. MOST OF THE MODEL SUGGESTS WEST-NORTHWESTWARD MOVEMENT REACHING NORTH TAMIL NADU COAST BY 9TH NIGHT /10TH MORNING. BUT THERE IS DIVERGENCE AMONG THE NWP MODELS REGARDING THE PEAK INTENSITY WHICH VARIES FROM DEEP DEPRSSION TO CYCLONIC STORM. UNDER THE SCENARIO, THE SYSTEM WOULD MOVE WEST-NORTHWESTARDS AND INTENSIFY INTO A DEEP DEPRESSION DURING NEXT 24 HOURS.

(M.MOHAPATRA) HEAD RSMC NEW DELHI

NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%





PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)
NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%





FROM: RSMC -TROPICAL CYCLONES, NEW DELHI

TO: STORM WARNING CENTRE, NAYPYI TAW (MYANMAR)
STORM WARNING CENTRE, BANGKOK (THAILAND)

STORM WARNING CENTRE, COLOMBO (SRILANKA)
STORM WARNING CENTRE, DHAKA (BANGLADESH)
STORM WARNING CENTRE, KARACHI (PAKISTAN)
METEOROLOGICAL OFFICE, MALE (MALDIVES)

METEOROLOGICAL DITIOL, MALE (MALDIVES)

OMAN METEOROLOGICAL DEPARTMENT, MUSCAT (THROUGH RTH JEDDAH)

TROPICAL CYCLONE ADVISORY

RSMC - TROPICAL CYCLONES, NEW DELHI

TROPICAL STORM 'MEGH' ADVISORY NO. TWENTY FIVE ISSUED AT 1500 UTC OF 8<sup>TH</sup> NOVEMBER 2015 BASED ON 1200 UTC CHARTS OF 8<sup>TH</sup> NOVEMBER 2015.

THE EXTREMELY SEVERE CYCLONIC STORM 'MEGH' MOVED WESTWARDS WITH A SPEED OF 25 KMPH DURING PAST SIX HOURS, PASSING CLOSE TO SOCOTRA AROUND 1030 UTC AND LAY CENTRED AT 1200 UTC OF TODAY, THE 8TH NOVEMBER 2015 OVER WESTCENTRAL AND ADJOINING SOUTHWEST ARABIAN SEA NEAR LATITUDE 12.7°N AND LONGITUDE 53.5°E, ABOUT 40 KM WEST OF SOCOTRA (41494) (YEMEN) AND 480 KM SOUTH-SOUTHWEST OF SALALAH (41316) (OMAN). IT WOULD THEN MOVE WESTWARDS INITIALLY & THEN WEST-NORTHWESTWARDS ACROSS GULF OF ADEN, WEAKEN GRADUALLY AND CROSS YEMEN COAST BETWEEN LATITUDE 13 & 14 DEGREE NORTH AROUND 1200 UTC OF 10<sup>TH</sup> NOVEMBER AS A SEVERE CYCLONIC STORM.

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 5.0. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 90 KNOTS GUSTING TO 100 KNOTS. THE WINDS ARE HIGHER OVER THE NORTHERN SECTOR. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 966 HPA. STATE OF SEA AROUND SYTEM CENTRE IS PHENOMENAL. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER THE AREA BETWEEN LATITUDE 11.0 DEGREE NORTH TO 14.5 DEGREE NORTH AND LONGITUDE 51.0 DEGREE EAST TO 55.5 DEGREE EAST. THE CONVECTION SHOWS EYE PATTERN. MINIMUM CLOUD TOP TEMPERATURE IN WALL CLOUD REGION IS MINUS 84°C. THE CLOUD ORGANISATION SHOWS SIGNS OF WEAKENING.

# FORECAST FOR TRACK AND INTENSITY OF THE SYSTEM ARE GIVEN IN THE TABLE BELOW

DATE/TIME(UTC)	POSITION	MAXIMUM SUSTAINED	CATEGORY OF CYCLONIC
	(LAT. <sup>0</sup> N/LONG. <sup>0</sup> E)	SURFACE WIND SPEED (KMPH)	DISTURBANCE
08-11-2015/1200	12.7/53.5	160-170 gusting to 185	Extremely Severe Cyclonic Storm (ESCS)
08-11-2015/1800	12.7/52.3	150-160 gusting to 175	Very Severe Cyclonic Storm (VSCS)
09-11-2015/0000	12.7/51.2	140-150 gusting to 165	Very Severe Cyclonic Storm (VSCS)
09-11-2015/0600	12.8/50.2	130-140 gusting to 155	Very Severe Cyclonic Storm (VSCS)
09-11-2015/1200	12.9/49.3	120-130 gusting to 145	Very Severe Cyclonic Storm (VSCS)
10-11-2015/0000	13.1/47.8	110-120 gusting to 135	Severe Cyclonic Storm (SCS)

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

10-11-2015/1200	13.5/46.6	90-100 gusting to 110	Severe Cyclonic Storm (SCS)
11-11-2015/0000	14.2/45.6	65-75 gusting to 85	Cyclonic Storm (CS)
11-11-2015/1200	15.0/44.8	40-50 gusting to 60	Depression (D)

THE SYSTEM MOVED WITH A SPEED OF 25 KMPH DURING PAST SIX HOURS. IT WAS DUE TO THE STEERING ANTICYCLONIC CIRCULATION TO THE NORTHEAST OF THE SYSTEM CENTRE. THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 16°N IN ASSOCIATION WITH AN ANTICYCLONIC CIRCULATION LOCATED TO THE NORTHEAST OF THE SYSTEM CENTRE. THE SYSTEM WOULD CONTINUE TO BE GUIDED WESTWARDS FOR NEXT 24 HOURS AND THEN WESTNOTHWESTWARDS UNDER THE INFLUENCE OF THE ABOVE RIDGE AND ANTI-CYCLONIC CIRCULATION.

THE LOW LEVEL RELATIVE VORTICITY IS  $150 \times 10^{-5}$  SEC<sup>-1</sup>, CONVERGENCE IS  $20 \times 10^{-5}$  SEC-1, AND UPPER LEVEL DIVERGENCE IS  $10 \times 10^{-5}$  SEC<sup>-1</sup>. THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS  $28^{\circ}$ C. THE OCEAN THERMAL ENERGY IS  $40-50 \text{ KJ/CM}^2$  AROUNDTHE SYSTEM CENTRE AND THEN DECREASES TOWARDS GULF OF ADEN. THE VERTICAL WIND SHEAR IS ABOUT 10 KNOTS AROUND THE SYSTEM CENTRE. THE LOW VERTICAL WIND SHEAR IS MITIGATING THE ADVERSE IMPACT OF TOTAL PRECIPITABLE WATER (TPW). THE SYSTEM WOULD WEAKEN GRADUALLY, DUE TO LOWER OCEAN THERMAL ENERGY OVER GULF OF ADEN AND INTERACTION WITH LAND SURFACE.

## **BAY OF BENGAL & ANDAMAN SEA**

THE DEPRESSION OVER SOUTHWEST BAY OF BENGAL MOVED WEST-NORTHWESTWARDS WITH A SPEED OF 15 KMPH DURING PAST SIX HOURS AND LAY CENTRED AT 1200 UTC OF TODAY THE 8TH NOVEMBER 2015 OVER SOUTHWEST BAY OF BENGAL NEAR LATITUDE 11.2°N AND LONGITUDE 82.5°E, ABOUT 320 KM SOUTHEAST OF CHENNAI (43278), 300 KM EAST-SOUTHEAST OF PUDUCHERRY (43331) AND 320 KM EAST-NORTHEAST OF JAFFNA (43404) (SRILANKA), IT WOULD MOVE WEST-NORTHWESTWARDS AND INTENSIFY INTO A DEEP DEPRESSION DURING NEXT 12 HOURS AND SUBSEQUENTLY INTO A CYCLONIC STORM. IT WOULD CROSS NORTH TAMIL NADU COAST BETWEEN KARAIKAL AND CHENNAI CLOSE TO PUDUCHERRY AROUND 1500 UTC of 9<sup>TH</sup> NOVEMBER.

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 1.5. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 25 KNOTS GUSTING TO 35 KNOTS. THE WINDS ARE HIGHER OVER THE NORTHEAST SECTOR. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 1004 HPA. STATE OF SEA AROUND SYTEM CENTRE IS ROUGH TO VERY ROUGH. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER BAY OF BENGAL, BETWEEN LATITUDE 9.0 DEGREE NORTH TO 17.0 DEGREE NORTH AND WEST OF LONGITUDE 88.0 DEGREE EAST. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 84 DEG C.

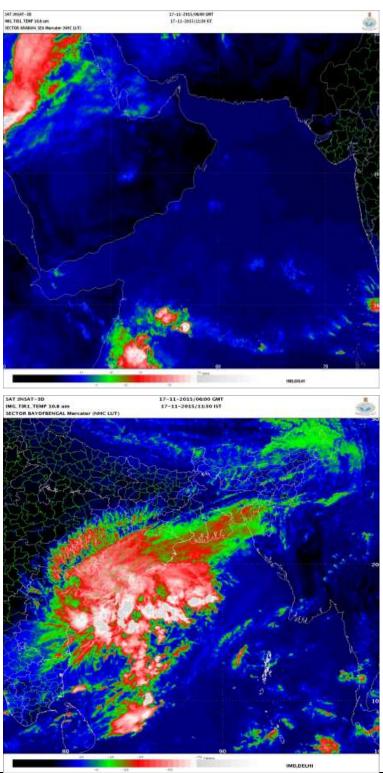
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PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)
NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

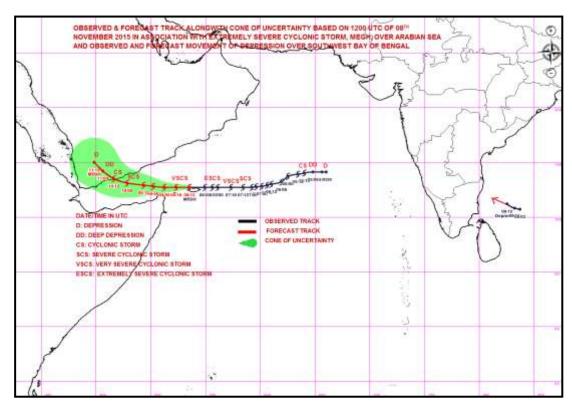
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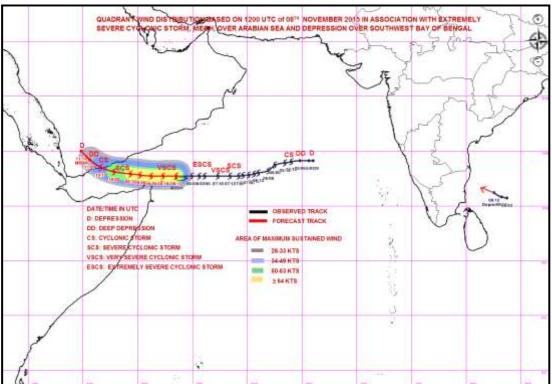
# (M.MOHAPATRA) HEAD RSMC NEW DELHI



PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%









FROM: RSMC -TROPICAL CYCLONES, NEW DELHI

TO: STORM WARNING CENTRE, NAYPYI TAW (MYANMAR)
STORM WARNING CENTRE, BANGKOK (THAILAND)
STORM WARNING CENTRE, COLOMBO (SRILANKA)

STORM WARNING CENTRE, DHAKA (BANGLADESH) STORM WARNING CENTRE, KARACHI (PAKISTAN) METEOROLOGICAL OFFICE, MALE (MALDIVES)

OMAN METEOROLOGICAL DEPARTMENT, MUSCAT (THROUGH RTH JEDDAH)

TROPICAL CYCLONE ADVISORY

**RSMC - TROPICAL CYCLONES, NEW DELHI** 

TROPICAL STORM 'MEGH' ADVISORY NO. TWENTY SIX ISSUED AT 1800 UTC OF 8<sup>TH</sup> NOVEMBER 2015 BASED ON 1500 UTC CHARTS OF 8<sup>TH</sup> NOVEMBER 2015.

THE **EXTREMELY SEVERE CYCLONIC STORM 'MEGH'** MOVED WESTWARDS WITH A SPEED OF 25 KMPH DURING PAST SIX HOURS, AND LAY CENTRED AT **1500** UTC OF TODAY, THE 8TH NOVEMBER 2015 OVER WESTCENTRAL AND ADJOINING SOUTHWEST ARABIAN SEA NEAR LATITUDE **12.7**°N AND LONGITUDE **52.9**°E, ABOUT **110 KM** WEST OF SOCOTRA (41494) (YEMEN) AND 500 KM SOUTH-SOUTHWEST OF SALALAH (41316) (OMAN). IT WOULD MOVE WESTWARDS INITIALLY & THEN WEST-NORTHWESTWARDS ACROSS GULF OF ADEN, WEAKEN GRADUALLY AND CROSS YEMEN COAST BETWEEN LATITUDE 13 & 14 DEGREE NORTH AROUND 1200 UTC OF 10<sup>TH</sup> NOVEMBER AS A **SEVERE CYCLONIC STORM**.

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 5.0. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 90 KNOTS GUSTING TO 100 KNOTS. THE WINDS ARE HIGHER OVER THE NORTHERN SECTOR. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 966 HPA. STATE OF SEA AROUND SYTEM CENTRE IS PHENOMENAL. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER THE AREA BETWEEN LATITUDE 11.5 DEGREE NORTH TO 14.5 DEGREE NORTH AND LONGITUDE 51.0 DEGREE EAST TO 54.0 DEGREE EAST. THE CONVECTION SHOWS EYE PATTERN. MINIMUM CLOUD TOP TEMPERATURE IN WALL CLOUD REGION IS MINUS 77°C. THE CLOUD ORGANISATION SHOWS SIGNS OF WEAKENING.

# FORECAST FOR TRACK AND INTENSITY OF THE SYSTEM ARE GIVEN IN THE TABLE BELOW

DATE/TIME(UTC)	POSITION	MAXIMUM SUSTAINED	CATEGORY OF CYCLONIC
	(LAT. <sup>0</sup> N/LONG. <sup>0</sup> E)	SURFACE WIND SPEED (KMPH)	DISTURBANCE
08-11-2015/1500	12.7/52.9	160-170 gusting to 185	Extremely Severe Cyclonic Storm (ESCS)
08-11-2015/1800	12.7/52.3	150-160 gusting to 175	Very Severe Cyclonic Storm (VSCS)
09-11-2015/0000	12.7/51.2	140-150 gusting to 165	Very Severe Cyclonic Storm (VSCS)
09-11-2015/0600	12.8/50.2	130-140 gusting to 155	Very Severe Cyclonic Storm (VSCS)
09-11-2015/1200	12.9/49.3	120-130 gusting to 145	Very Severe Cyclonic Storm (VSCS)
10-11-2015/0000	13.1/47.8	110-120 gusting to 135	Severe Cyclonic Storm (SCS)

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

10-11-2015/1200	13.5/46.6	90-100 gusting to 110	Severe Cyclonic Storm (SCS)
11-11-2015/0000	14.2/45.6	65-75 gusting to 85	Cyclonic Storm (CS)
11-11-2015/1200	15.0/44.8	40-50 gusting to 60	Depression (D)

THE SYSTEM MOVED WITH A SPEED OF 25 KMPH DURING PAST SIX HOURS. IT WAS DUE TO THE STEERING ANTICYCLONIC CIRCULATION TO THE NORTHEAST OF THE SYSTEM CENTRE. THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 16°N IN ASSOCIATION WITH AN ANTICYCLONIC CIRCULATION LOCATED TO THE NORTHEAST OF THE SYSTEM CENTRE. THE SYSTEM WOULD CONTINUE TO BE GUIDED WESTWARDS FOR NEXT 24 HOURS AND THEN WESTNOTHWESTWARDS UNDER THE INFLUENCE OF THE ABOVE RIDGE AND ANTI-CYCLONIC CIRCULATION.

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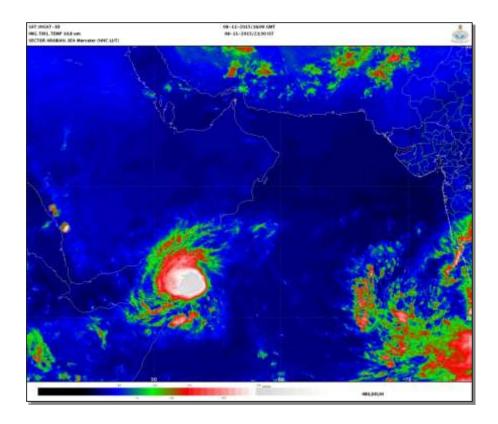
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NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

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(RANJIT SINGH), Sc.E RSMC NEW DELHI







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STORM WARNING CENTRE, BANGKOK (THAILAND)
STORM WARNING CENTRE, COLOMBO (SRILANKA)
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METEOROLOGICAL OFFICE, MALE (MALDIVES)

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TROPICAL CYCLONE ADVISORY

**RSMC - TROPICAL CYCLONES, NEW DELHI** 

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DATE/TIME(UTC)	POSITION	MAXIMUM SUSTAINED	CATEGORY OF CYCLONIC
	(LAT. <sup>0</sup> N/LONG. <sup>0</sup> E)	SURFACE WIND SPEED (KMPH)	DISTURBANCE
08-11-2015/1800	12.7/52.4	160-170 gusting to 185	Extremely Severe Cyclonic Storm (ESCS)
09-11-2015/0000	12.7/51.2	150-160 gusting to 175	Very Severe Cyclonic Storm (VSCS)
09-11-2015/0600	12.8/50.2	140-150 gusting to 165	Very Severe Cyclonic Storm (VSCS)
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PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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10-11-2015/1800	13.9/46.1	90-100 gusting to 110	Severe Cyclonic Storm (SCS)
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## **BAY OF BENGAL & ANDAMAN SEA**

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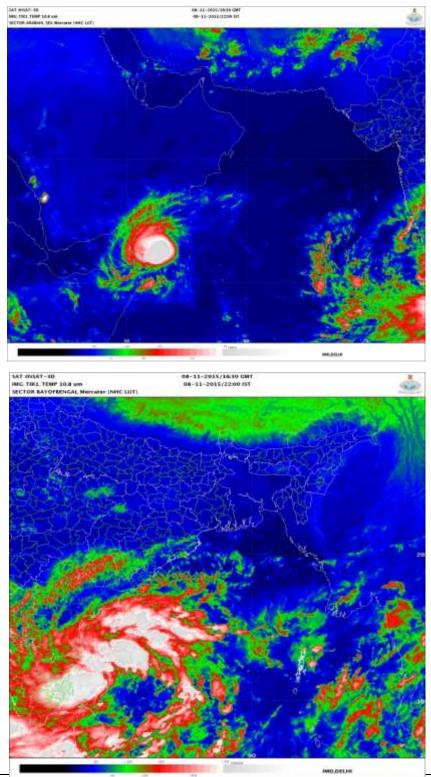
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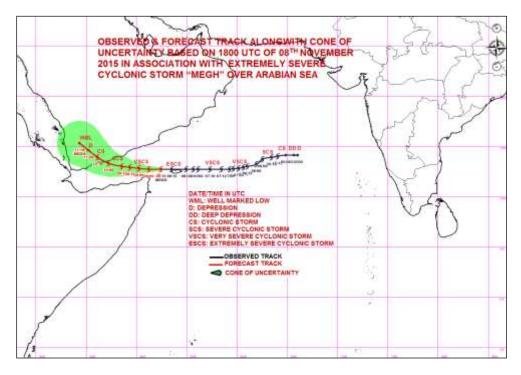
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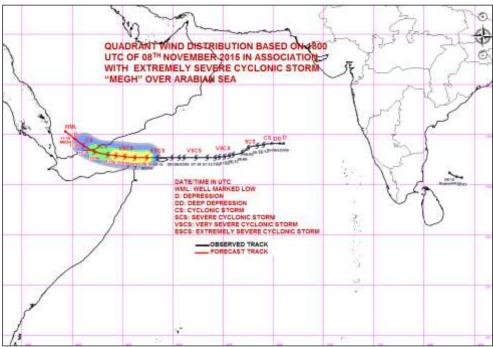
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# (RANJIT SINGH), Sc.E RSMC NEW DELHI



PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)
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TROPICAL CYCLONE ADVISORY

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08-11-2015/2100	12.5/51.8	160-170 gusting to 185	Extremely Severe Cyclonic Storm (ESCS)
09-11-2015/0000	12.4/51.2	150-160 gusting to 175	Very Severe Cyclonic Storm (VSCS)
09-11-2015/0600	12.3/50.2	140-150 gusting to 165	Very Severe Cyclonic Storm (VSCS)
09-11-2015/1200	12.4/49.3	130-140 gusting to 155	Very Severe Cyclonic Storm (VSCS)
09-11-2015/1800	12.6/48.5	120-130 gusting to 145	Very Severe Cyclonic Storm (VSCS)
10-11-2015/0600	13.0/47.2	110-120 gusting to 135	Severe Cyclonic Storm (SCS)
10-11-2015/1800	13.8/46.1	90-100 gusting to 110	Severe Cyclonic Storm (SCS)

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

11-11-2015/0600	14.6/45.2	65-75 gusting to 85	Cyclonic Storm (CS)
11-11-2015/1800	15.3/44.3	40-50 gusting to 60	Depression (D)

THE SYSTEM MOVED WITH A SPEED OF 20 KMPH DURING PAST SIX HOURS. IT WAS DUE TO THE STEERING ANTICYCLONIC CIRCULATION TO THE NORTHEAST OF THE SYSTEM CENTRE. THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 16°N IN ASSOCIATION WITH AN ANTICYCLONIC CIRCULATION LOCATED TO THE NORTHEAST OF THE SYSTEM CENTRE. THE SYSTEM WOULD CONTINUE TO BE GUIDED WESTWARDS FOR NEXT 24 HOURS AND THEN WESTNOTHWESTWARDS UNDER THE INFLUENCE OF THE ABOVE RIDGE AND ANTI-CYCLONIC CIRCULATION.

THE LOW LEVEL RELATIVE VORTICITY IS  $150 \times 10^{-5}$  SEC<sup>-1</sup>, CONVERGENCE IS  $20 \times 10^{-5}$  SEC-1, AND UPPER LEVEL DIVERGENCE IS  $10 \times 10^{-5}$  SEC<sup>-1</sup>. THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS  $28^{\circ}$ C. THE OCEAN THERMAL ENERGY IS  $40-50 \text{ KJ/CM}^2$  AROUNDTHE SYSTEM CENTRE AND THEN DECREASES TOWARDS GULF OF ADEN. THE VERTICAL WIND SHEAR IS ABOUT 10 KNOTS AROUND THE SYSTEM CENTRE. THE LOW VERTICAL WIND SHEAR IS MITIGATING THE ADVERSE IMPACT OF TOTAL PRECIPITABLE WATER (TPW). THE SYSTEM WOULD WEAKEN GRADUALLY, DUE TO LOWER OCEAN THERMAL ENERGY OVER GULF OF ADEN AND INTERACTION WITH LAND SURFACE.

#### **BAY OF BENGAL & ANDAMAN SEA**

THE DEPRESSION OVER SOUTHWEST BAY OF **BENGAL MOVED** WEST-NORTHWESTWARDS WITH A SPEED OF 10 KMPH DURING PAST SIX HOURS AND LAY CENTRED AT 1800 UTC OF 8TH NOVEMBER 2015 OVER SOUTHWEST BAY OF BENGAL NEAR LATITUDE 11.5°N AND LONGITUDE 82.0°E, ABOUT260 KM SOUTHEAST OF CHENNAI (43278), 250 KM EAST-SOUTHEAST OF PUDUCHERRY (43331) AND 325 KM NORTHEAST OF JAFFNA (43404) (SRILANKA), IT WOULD MOVE WEST-NORTHWESTWARDS AND INTENSIFY INTO A DEEP DEPRESSION DURING NEXT 12 HOURS AND SUBSEQUENTLY INTO A CYCLONIC STORM. IT WOULD CROSS NORTH TAMIL NADU COAST BETWEEN KARAIKAL AND CHENNAI CLOSE TO PUDUCHERRY AROUND 1500 UTC of 9<sup>TH</sup> NOVEMBER.

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 1.5. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 25 KNOTS GUSTING TO 35 KNOTS. THE WINDS ARE HIGHER OVER THE NORTHEAST SECTOR. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 1004 HPA. STATE OF SEA AROUND SYTEM CENTRE IS ROUGH TO VERY ROUGH. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER BAY OF BENGAL, BETWEEN LATITUDE 9.0 DEGREE NORTH TO 17.0 DEGREE NORTH AND WEST OF LONGITUDE 88.5 DEGREE EAST. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 89 DEG C.

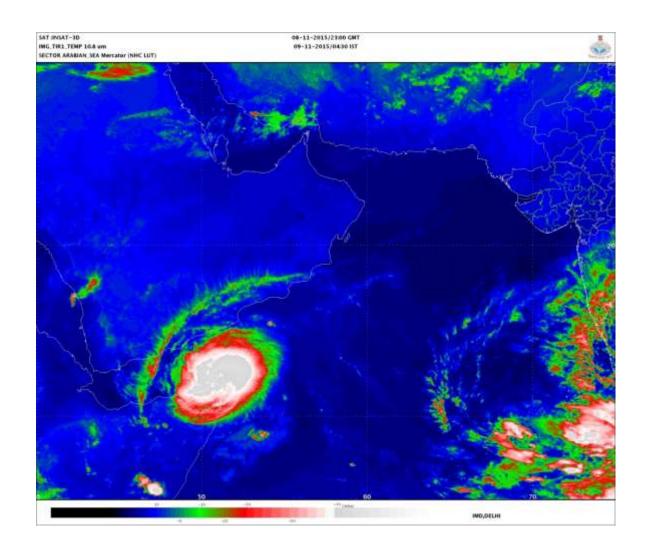
# **REMARKS:**

THE CONVECTION IS CONTINOUSLY ORGANISING. THE LOW LEVEL RELATIVE VORTICITY IS  $100 \times 10^{-5} \text{ SEC}^{-1}$ , CONVERGENCE IS  $20 \times 10^{-5} \text{ SEC}^{-1}$ , AND UPPER LEVEL DIVERGENCE IS  $30 \times 10^{-5} \text{ SEC}^{-1}$ . THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG  $16^{\circ}\text{N}$  IN ASSOCIATION WITH THE ANTI-CYCLONIC CIRCULATION TO THE NORTHEAST. THE MIDDLE AND UPPER TROPOSPHERIC WINDS ARE EAST-SOUTHEASTERLY WHICH WILL STEER THE SYSTEM WEST-NORTHWESTWARDS.. THE SEA SURFACE TEMPERATURE AROUND THE REGION OF DEPRESSION IS 29-30°C. THE VERTICAL WIND SHEAR IS ABOUT 5-10 KNOTS (LOW) AROUND THE SYSTEM CENTRE. MJO LIES IN PAHSE 3 WITH AMPLITUDE GREATER THAN 1. IT IS LIKELY TO CONTINUE IN PHASE 3 FOR THE NEXT 2-3 DAYS WHICH IS FAVOURABLE FOR INTENSIFICATION OF THE SYSTEM. MOST OF THE MODEL SUGGESTS WEST-NORTHWESTWARD MOVEMENT REACHING NORTH TAMIL NADU COAST BY 9TH EVENING/NIGHT. BUT THERE IS DIVERGENCE AMONG THE NWP MODELS

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)
NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

REGARDING THE PEAK INTENSITY WHICH VARIES FROM DEEP DEPRSSION TO CYCLONIC STORM. UNDER THE SCENARIO, THE SYSTEM WOULD MOVE WEST-NORTHWESTARDS AND INTENSIFY INTO A DEEP DEPRESSION DURING NEXT 12 HOURS.

# (RANJIT SINGH), Sc.E RSMC NEW DELHI



NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%





FROM: RSMC -TROPICAL CYCLONES, NEW DELHI

TO: STORM WARNING CENTRE, NAYPYI TAW (MYANMAR) STORM WARNING CENTRE, BANGKOK (THAILAND)

STORM WARNING CENTRE, COLOMBO (SRILANKA)
STORM WARNING CENTRE, DHAKA (BANGLADESH)
STORM WARNING CENTRE, KARACHI (PAKISTAN)

METEOROLOGICAL OFFICE, MALE (MALDIVES)

OMAN METEOROLOGICAL DEPARTMENT, MUSCAT (THROUGH RTH JEDDAH)

TROPICAL CYCLONE ADVISORY

RSMC - TROPICAL CYCLONES, NEW DELHI

TROPICAL STORM 'MEGH' ADVISORY NO. TWENTY NINE ISSUED AT 0300 UTC OF 9<sup>TH</sup> NOVEMBER 2015 BASED ON 0000 UTC CHARTS OF 9<sup>TH</sup> NOVEMBER 2015.

THE **EXTREMELY SEVERE CYCLONIC STORM 'MEGH'** MOVED WEST-SOUTHWESTWARDS WITH A SPEED OF 20 KMPH DURING PAST SIX HOURS, WEAKEND INTO VERY SEVERE CYCLONIC STORM AND LAY CENTRED AT 0000 UTC OF TODAY, THE 9TH NOVEMBER 2015 OVER WESTCENTRAL AND ADJOINING SOUTHWEST ARABIAN SEA NEAR LATITUDE 12.3°N AND LONGITUDE **51.0°E**, ABOUT **320 KM** WEST OF SOCOTRA (41494) (YEMEN) AND **620 KM** SOUTH-SOUTHWEST OF SALALAH (41316) (OMAN). IT WOULD MOVE WEST-SOUTHWESTWARDS INITIALLY & THEN WEST-NORTHWESTWARDS ACROSS GULF OF ADEN, WEAKEN GRADUALLY AND CROSS YEMEN COAST BETWEEN LATITUDE 13 & 14 DEGREE NORTH AROUND 1200 UTC OF 10<sup>TH</sup> NOVEMBER AS A **SEVERE CYCLONIC STORM**.

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 5.0. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 90 KNOTS GUSTING TO 100 KNOTS. THE WINDS ARE HIGHER OVER THE NORTHERN SECTOR. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 966 HPA. STATE OF SEA AROUND SYTEM CENTRE IS PHENOMENAL. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER THE AREA BETWEEN LATITUDE 10.5 DEGREE NORTH TO 14.5 DEGREE NORTH AND LONGITUDE 48.0 DEGREE EAST TO 53.5 DEGREE EAST. THE CONVECTION SHOWS EYE PATTERN. MINIMUM CLOUD TOP TEMPERATURE IN WALL CLOUD REGION IS MINUS 81°C. THE CLOUD ORGANISATION SHOWS SIGNS OF WEAKENING.

### FORECAST FOR TRACK AND INTENSITY OF THE SYSTEM ARE GIVEN IN THE TABLE BELOW

DATE/TIME(UTC)	POSITION	MAXIMUM SUSTAINED	CATEGORY OF CYCLONIC
	(LAT. <sup>0</sup> N/LONG. <sup>0</sup> E)	SURFACE WIND SPEED (KMPH)	DISTURBANCE
09-11-2015/0000	12.3/51.0	155-165 gusting to 180	Very Severe Cyclonic Storm (VSCS)
09-11-2015/0600	12.3/50.0	145-155 gusting to 170	Very Severe Cyclonic Storm (VSCS)
09-11-2015/1200	12.3/49.0	135-145 gusting to 160	Very Severe Cyclonic Storm (VSCS)
09-11-2015/1800	12.5/48.0	125-135 gusting to 150	Very Severe Cyclonic Storm (VSCS)
10-11-2015/0000	12.7/47.0	115-125 gusting to 140	Very Severe Cyclonic Storm (VSCS)
10-11-2015/1200	13.3/45.5	100-110 gusting to 120	Severe Cyclonic Storm (SCS)

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

11-11-2015/0000	14.1/44.6	70-80 gusting to 90	Cyclonic Storm (CS)
11-11-2015/1200	15.0/43.8	40-50 gusting to 60	Depression (D)

THE SYSTEM MOVED WITH A SPEED OF 20 KMPH DURING PAST SIX HOURS. IT WAS DUE TO THE STEERING ANTICYCLONIC CIRCULATION TO THE NORTHEAST OF THE SYSTEM CENTRE. THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 16°N IN ASSOCIATION WITH AN ANTICYCLONIC CIRCULATION LOCATED TO THE NORTHEAST OF THE SYSTEM CENTRE. THE SYSTEM WOULD CONTINUE TO BE GUIDED WESTWARDS FOR NEXT 24 HOURS AND THEN WESTNOTHWESTWARDS UNDER THE INFLUENCE OF THE ABOVE RIDGE AND ANTI-CYCLONIC CIRCULATION.

THE LOW LEVEL RELATIVE VORTICITY IS  $150 \times 10^{-5}$  SEC<sup>-1</sup>, CONVERGENCE IS  $20 \times 10^{-5}$  SEC-1, AND UPPER LEVEL DIVERGENCE IS  $10 \times 10^{-5}$  SEC<sup>-1</sup>. THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS  $28^{\circ}$ C. THE OCEAN THERMAL ENERGY IS  $40-50 \text{ KJ/CM}^2$  AROUNDTHE SYSTEM CENTRE AND THEN DECREASES TOWARDS GULF OF ADEN. THE VERTICAL WIND SHEAR IS ABOUT  $10 \times 10^{-5}$  AROUND THE SYSTEM CENTRE. THE LOW VERTICAL WIND SHEAR IS MITIGATING THE ADVERSE IMPACT OF TOTAL PRECIPITABLE WATER (TPW). THE SYSTEM WOULD WEAKEN GRADUALLY, DUE TO LOWER OCEAN THERMAL ENERGY OVER GULF OF ADEN AND INTERACTION WITH LAND SURFACE.

## **BAY OF BENGAL & ANDAMAN SEA**

THE DEPRESSION OVER SOUTHWEST BAY OF BENGAL MOVED WEST-NORTHWESTWARDS WITH A SPEED OF 15 KMPH DURING PAST 12 HOURS, INTENSIFIED INTO A DEEP DEPRESSION AND LAY CENTRED AT 0000 UTC OF TODAY, THE 9TH NOVEMBER 2015 OVER SOUTHWEST BAY OF BENGAL NEAR LATITUDE 11.5°N AND LONGITUDE 80.7°E, ABOUT 110 KM EAST-SOUTHEAST OF PUDUCHERRY (43331) AND 180 KM SOUTHEAST OF CHENNAI (43278) IT WOULD MOVE WEST-NORTHWESTWARDS AND CROSS NORTH TAMIL NADU COAST NEAR PUDUCHERRY AROUND 0700-0900 UTC of 9<sup>TH</sup> NOVEMBER.

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 2.0. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 30 KNOTS GUSTING TO 40 KNOTS. THE WINDS ARE HIGHER OVER THE NORTHEAST SECTOR. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 1000 HPA. STATE OF SEA AROUND SYTEM CENTRE IS VERY ROUGH. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER BAY OF BENGAL, BETWEEN LATITUDE 9.0 DEGREE NORTH TO 17.0 DEGREE NORTH AND WEST OF LONGITUDE 87.5 DEGREE EAST. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 93 DEG C.

## FORECAST FOR TRACK AND INTENSITY OF THE SYSTEM ARE GIVEN IN THE TABLE BELOW

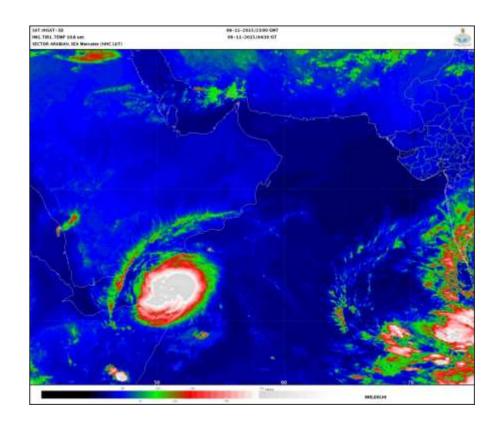
DATE/TIME(UTC)	POSITION	MAXIMUM SUSTAINED	CATEGORY OF CYCLONIC
	(LAT. <sup>0</sup> N/ LONG. <sup>0</sup> E)	SURFACE WIND SPEED (KMPH)	DISTURBANCE
09-11-2015/0000	11.5/80.7	55-65 GUSTING TO 75	DEEP DEPRESSION (DD)
09-11-2015/0600	11.7/80.0	55-65 GUSTING TO 75	DEEP DEPRESSION (DD)
09-11-2015/1200	11.9/79.3	50-60 GUSTING TO 70	DEEP DEPRESSION (DD)
09-11-2015/1800	12.1/78.6	50-60 GUSTING TO 70	DEEP DEPRESSION (DD)
10-11-2015/0000	12.3/77.9	45-55 GUSTING TO 65	DEPRESSION (D)

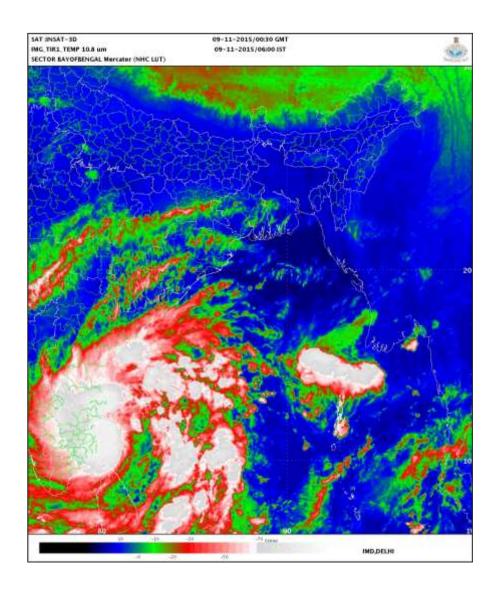
PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

THE CONVECTION IS CONTINOUSLY ORGANISING. THE LOW LEVEL RELATIVE VORTICITY IS  $100 \times 10^{-5} \text{ SEC}^{-1}$ , Convergence is  $20 \times 10^{-5} \text{ SEC}^{-1}$ , and upper level divergence is  $30 \times 10^{-5} \text{ SEC}^{-1}$ . The upper tropospheric ridge at 200 Hpa level runs along  $16^{\circ}\text{N}$  in association with the anti-cyclonic circulation to the northeast. The middle and upper tropospheric winds are east-southeasterly which will steer the system west-northwestwards. The sea surface temperature around the region of depression is  $29\text{-}30^{\circ}\text{C}$ . The vertical wind shear is about 5-10 knots (low) around the system centre. MJO lies in pahse 3 with amplitude greater than 1. It is likely to continue in phase 3 for the next 2-3 days which is favourable for intensification of the system. Most of the model suggests west-northwestward movement reaching north tamil nadu coast by 9th evening/night. But there is divergence among the nwp models regarding the peak intensity which varies from deep depression to cyclonic storm. Under the scenario, the system would move west-northwestards and cross north tamil nadu coast near puducherry around 0700-0900 utc of  $9^{\text{th}}$  november.

### (M.MOHAPATRA) HEAD RSMC NEW DELHI









FROM: RSMC -TROPICAL CYCLONES, NEW DELHI

TO: STORM WARNING CENTRE, NAYPYI TAW (MYANMAR)
STORM WARNING CENTRE, BANGKOK (THAILAND)

STORM WARNING CENTRE, COLOMBO (SRILANKA)
STORM WARNING CENTRE, DHAKA (BANGLADESH)
STORM WARNING CENTRE, KARACHI (PAKISTAN)
METEOROLOGICAL OFFICE, MALE (MALDIVES)

OMAN METEOROLOGICAL DEPARTMENT, MUSCAT (THROUGH RTH JEDDAH)

TROPICAL CYCLONE ADVISORY

**RSMC - TROPICAL CYCLONES, NEW DELHI** 

TROPICAL STORM 'MEGH' ADVISORY NO. THIRTY ISSUED AT 0600 UTC OF  $9^{TH}$  NOVEMBER 2015 BASED ON 0300 UTC CHARTS OF  $9^{TH}$  NOVEMBER 2015.

THE **VERY SEVERE CYCLONIC STORM 'MEGH'** MOVED WESTWARDS WITH A SPEED OF 25 KMPH DURING PAST SIX HOURS, AND LAY CENTRED AT 0300 UTC OF TODAY, THE 9TH NOVEMBER 2015 OVER WESTCENTRAL AND ADJOINING SOUTHWEST ARABIAN SEA NEAR LATITUDE **12.3**°N AND LONGITUDE **50.4**°E, ABOUT **380 KM** WEST-SOUTHWEST OF SOCOTRA (41494) (YEMEN) AND 650 **KM** SOUTH-SOUTHWEST OF SALALAH (41316) (OMAN). IT WOULD MOVE WEST-SOUTHWESTWARDS INITIALLY & THEN WEST-NORTHWESTWARDS ACROSS GULF OF ADEN, WEAKEN GRADUALLY AND CROSS YEMEN COAST BETWEEN LATITUDE 13 & 14 DEGREE NORTH AROUND 1200 UTC OF 10<sup>TH</sup> NOVEMBER AS A **SEVERE CYCLONIC STORM**.

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 4.5. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 80 KNOTS GUSTING TO 90 KNOTS. THE WINDS ARE HIGHER OVER THE NORTHERN SECTOR. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 970 HPA. STATE OF SEA AROUND SYTEM CENTRE IS PHENOMENAL. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER THE AREA BETWEEN LATITUDE 10.0 DEGREE NORTH TO 14.5 DEGREE NORTH AND LONGITUDE 47.0 DEGREE EAST TO 53.0 DEGREE EAST. MINIMUM CLOUD TOP TEMPERATURE IN WALL CLOUD REGION IS MINUS 82°C. THE CLOUD ORGANISATION SHOWS SIGNS OF WEAKENING.

## FORECAST FOR TRACK AND INTENSITY OF THE SYSTEM ARE GIVEN IN THE TABLE BELOW

DATE/TIME(UTC)	POSITION	MAXIMUM SUSTAINED	CATEGORY OF CYCLONIC
	(LAT. <sup>0</sup> N/ LONG. <sup>0</sup> E)	SURFACE WIND SPEED (KMPH)	DISTURBANCE
09-11-2015/0300	12.3/50.4	145-155 gusting to 170	Very Severe Cyclonic Storm (VSCS)
09-11-2015/0600	12.3/50.0	135-145 gusting to 160	Very Severe Cyclonic Storm (VSCS)
09-11-2015/1200	12.3/49.0	125-135 gusting to 145	Very Severe Cyclonic Storm (VSCS)
09-11-2015/1800	12.5/48.0	115-125 gusting to 140	Very Severe Cyclonic Storm (VSCS)
10-11-2015/0000	12.7/47.0	105-115 gusting to 125	Severe Cyclonic Storm (SCS)
10-11-2015/1200	13.3/45.5	85-95 gusting to 105	Severe Cyclonic Storm (SCS)
11-11-2015/0000	14.1/44.6	60-70 gusting to 80	Cyclonic Storm (CS)

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

11-11-2015/1200	15.0/43.8	45-65 gusting to 75	Depression (D)

THE SYSTEM MOVED WITH A SPEED OF 25 KMPH DURING PAST SIX HOURS. IT WAS DUE TO THE STEERING ANTICYCLONIC CIRCULATION TO THE NORTHEAST OF THE SYSTEM CENTRE. THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 16°N IN ASSOCIATION WITH AN ANTICYCLONIC CIRCULATION LOCATED TO THE NORTHEAST OF THE SYSTEM CENTRE. THE SYSTEM WOULD CONTINUE TO BE GUIDED WESTWARDS FOR NEXT 12 HOURS AND THEN WESTNOTHWESTWARDS UNDER THE INFLUENCE OF THE ABOVE RIDGE AND ANTI-CYCLONIC CIRCULATION.

THE LOW LEVEL RELATIVE VORTICITY IS  $100 \times 10^{-5}$  SEC<sup>-1</sup>, CONVERGENCE IS  $10 \times 10^{-5}$  SEC-1 AND UPPER LEVEL DIVERGENCE IS  $30 \times 10^{-5}$  SEC<sup>-1</sup>. THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS  $28\text{-}29^{\circ}\text{C}$ . THE OCEAN THERMAL ENERGY IS  $30\text{-}40 \text{ KJ/CM}^2$  AROUNDTHE SYSTEM CENTRE AND THEN DECREASES TOWARDS GULF OF ADEN. THE VERTICAL WIND SHEAR IS ABOUT 10 KNOTS AROUND THE SYSTEM CENTRE. THE LOW VERTICAL WIND SHEAR IS MITIGATING THE ADVERSE IMPACT OF TOTAL PRECIPITABLE WATER (TPW). THE SYSTEM WOULD WEAKEN GRADUALLY, DUE TO LOWER OCEAN THERMAL ENERGY OVER GULF OF ADEN AND INTERACTION WITH LAND SURFACE.

### **BAY OF BENGAL & ANDAMAN SEA**

THE DEEP DEPRESSION OVER SOUTHWEST BAY OF BENGAL MOVED WEST-NORTHWESTWARDS WITH A SPEED OF 18 KMPH DURING PAST 6 HOURS AND LAY CENTRED AT 0300 UTC OF TODAY, THE 9TH NOVEMBER 2015 OVER SOUTHWEST BAY OF BENGAL NEAR LATITUDE 11.6°N AND LONGITUDE 80.3°E, ABOUT 60 KM EAST-SOUTHEAST OF PUDUCHERRY AND 150 KM SOUTHEAST OF CHENNAI. IT WOULD MOVE WEST-NORTHWESTWARDS AND CROSS NORTH TAMIL NADU COAST TO THE SOUTH OF PUDUCHERRY, CLOSE TO CUDDALORE AROUND NOON OF TODAY, THE 9TH NOVEMBER.

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 2.0. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 30 KNOTS GUSTING TO 40 KNOTS. THE WINDS ARE HIGHER OVER THE NORTHEAST SECTOR. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 999 HPA. STATE OF SEA AROUND SYTEM CENTRE IS VERY ROUGH. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER TAMIL NADU, SOUTH INTERIOR KARNATAKA, COASTAL ANDHRA PRADESH, RAYALASEEMA, PALK STRAIT AND ADJOINING BAY OF BENGAL BETWEEN LATITUDE 9.0 DEGREE NORTH TO 16.0 DEGREE NORTH AND WEST OF LONGITUDE 87.5 DEGREE EAST. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 93 DEG C.

## FORECAST FOR TRACK AND INTENSITY OF THE SYSTEM ARE GIVEN IN THE TABLE BELOW

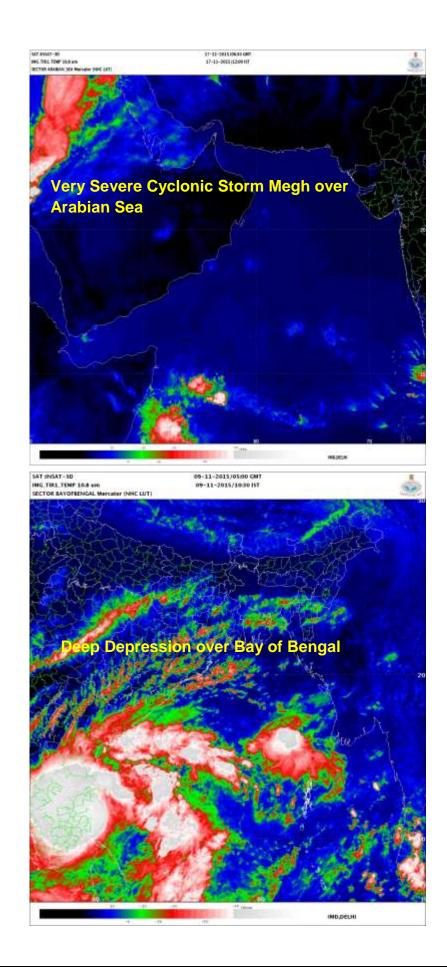
DATE/TIME(UTC)	POSITION	MAXIMUM SUSTAINED	CATEGORY OF CYCLONIC
	(LAT. <sup>0</sup> N/ LONG. <sup>0</sup> E)	SURFACE WIND SPEED (KMPH)	DISTURBANCE
09-11-2015/0300	11.6/80.3	55-65 GUSTING TO 75	DEEP DEPRESSION (DD)
09-11-2015/0600	11.7/80.0	55-65 GUSTING TO 75	DEEP DEPRESSION (DD)
09-11-2015/1200	11.9/79.3	55-65 GUSTING TO 75	DEEP DEPRESSION (DD)
09-11-2015/1800	12.1/78.6	55-65 GUSTING TO 75	DEEP DEPRESSION (DD)
10-11-2015/0000	12.3/77.9	45-55 GUSTING TO 65	DEPRESSION (D)

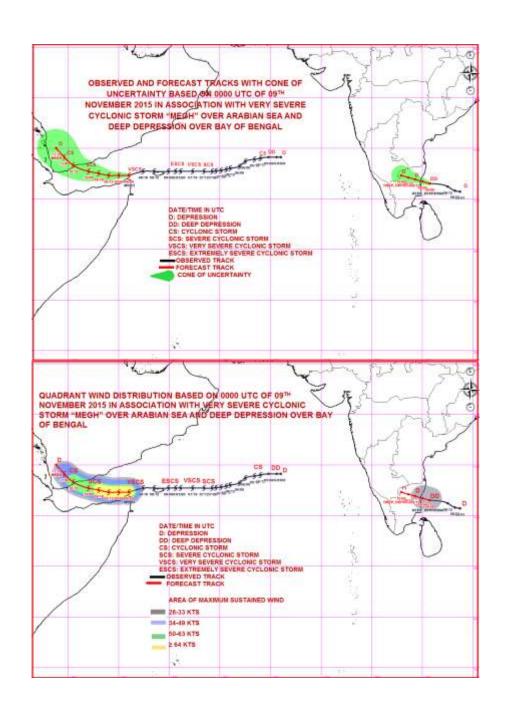
PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

THE LOW LEVEL RELATIVE VORTICITY IS  $150 \times 10^{-5}$  SEC<sup>-1</sup>, CONVERGENCE IS  $20 \times 10^{-5}$  SEC-1, AND UPPER LEVEL DIVERGENCE IS  $30 \times 10^{-5}$  SEC<sup>-1</sup>. THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG  $16^{\circ}$ N IN ASSOCIATION WITH THE ANTI-CYCLONIC CIRCULATION TO THE NORTHEAST. THE MIDDLE AND UPPER TROPOSPHERIC WINDS ARE EAST-SOUTHEASTERLY WHICH WILL STEER THE SYSTEM WEST-NORTHWESTWARDS. THE SEA SURFACE TEMPERATURE AROUND THE REGION OF DEPRESSION IS 29-30°C. THE VERTICAL WIND SHEAR IS ABOUT 10 KNOTS AROUND THE SYSTEM CENTRE. MOST OF THE MODEL SUGGESTS WEST-NORTHWESTWARD MOVEMENT UNDER THE SCENARIO, THE SYSTEM WOULD MOVE WEST-NORTHWESTARDS AND CROSS NORTH TAMIL NADU COAST TO THE SOUTH OF PUDUCHERRY CLOSE TO CUDDALORE AROUND 0700-0900 UTC of  $9^{TH}$  NOVEMBER.

(M.MOHAPATRA) HEAD RSMC NEW DELHI









FROM: RSMC -TROPICAL CYCLONES, NEW DELHI

TO: STORM WARNING CENTRE, NAYPYI TAW (MYANMAR) STORM WARNING CENTRE, BANGKOK (THAILAND)

STORM WARNING CENTRE, COLOMBO (SRILANKA)
STORM WARNING CENTRE, DHAKA (BANGLADESH)
STORM WARNING CENTRE, KARACHI (PAKISTAN)
METEOROLOGICAL OFFICE, MALE (MALDIVES)

OMAN METEOROLOGICAL DEPARTMENT, MUSCAT (THROUGH RTH JEDDAH)

TROPICAL CYCLONE ADVISORY

**RSMC - TROPICAL CYCLONES, NEW DELHI** 

TROPICAL STORM 'MEGH' ADVISORY NO. THIRTY ONE ISSUED AT 0900 UTC OF 9<sup>TH</sup> NOVEMBER 2015 BASED ON 0600 UTC CHARTS OF 9<sup>TH</sup> NOVEMBER 2015.

THE **VERY SEVERE CYCLONIC STORM 'MEGH'** MOVED WESTWARDS WITH A SPEED OF 25 KMPH DURING PAST SIX HOURS, AND LAY CENTRED AT 0600 HOURS UTC OF TODAY, THE 9TH NOVEMBER 2015 OVER GULF OF ADEN NEAR LATITUDE **12.3°N** AND LONGITUDE **49.6°E**, ABOUT **260 KM** SOUTH RIYAN (OMAN). IT WOULD MOVE WEST-NORTHWESTWARDS ,WEAKEN GRADUALLY AND CROSS YEMEN COAST BETWEEN LATITUDE 13 & 14 DEGREE NORTH AROUND 0600 UTC OF 10<sup>TH</sup> NOVEMBER AS A **SEVERE CYCLONIC STORM**.

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 4.5. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 80 KNOTS GUSTING TO 90 KNOTS. THE WINDS ARE HIGHER OVER THE NORTHERN SECTOR. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 972 HPA. STATE OF SEA AROUND SYTEM CENTRE IS PHENOMENAL. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER THE AREA BETWEEN LATITUDE 10.0 DEGREE NORTH TO 14.5 DEGREE NORTH AND LONGITUDE 47.0 DEGREE EAST TO 53.0 DEGREE EAST. MINIMUM CLOUD TOP TEMPERATURE IN WALL CLOUD REGION IS MINUS 82°C. THE CLOUD ORGANISATION CONTINUED TO SHOWS SIGNS OF WEAKENING.

## FORECAST FOR TRACK AND INTENSITY OF THE SYSTEM ARE GIVEN IN THE TABLE BELOW

DATE/TIME(UTC)	POSITION	MAXIMUM SUSTAINED	CATEGORY OF CYCLONIC
	(LAT. <sup>0</sup> N/LONG. <sup>0</sup> E)	SURFACE WIND SPEED (KMPH)	DISTURBANCE
09-11-2015/0600	12.3/49.6	145-155 gusting to 170	Very Severe Cyclonic Storm (VSCS)
09-11-2015/1200	12.4/48.4	135-145 gusting to 165	Very Severe Cyclonic Storm (VSCS)
09-11-2015/1800	12.6/47.2	125-135 gusting to 145	Very Severe Cyclonic Storm (VSCS)
10-11-2015/0000	12.9/46.2	115-125 gusting to 140	Very Severe Cyclonic Storm (VSCS)
10-11-2015/0600	13.2/45.6	105-115 gusting to 125	Severe Cyclonic Storm (SCS)
11-11-2015/1800	13.7/45.1	75-85 gusting to 95	Cyclonic Storm (CS)
11-11-2015/0600	14.5/44.6	35-45 gusting to 55	Depression (D)

#### **REMARKS:**

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

THE SYSTEM MOVED WITH A SPEED OF 25 KMPH DURING PAST SIX HOURS. IT WAS DUE TO THE STEERING ANTICYCLONIC CIRCULATION TO THE NORTHEAST OF THE SYSTEM CENTRE. THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 16°N IN ASSOCIATION WITH AN ANTICYCLONIC CIRCULATION LOCATED TO THE NORTHEAST OF THE SYSTEM CENTRE. THE SYSTEM WOULD MOVE WEST-NOTHWESTWARDS UNDER THE INFLUENCE OF THE ABOVE RIDGE AND ANTI-CYCLONIC CIRCULATION.

THE LOW LEVEL RELATIVE VORTICITY IS  $100 \times 10^{-5}$  SEC<sup>-1</sup>, CONVERGENCE IS  $10 \times 10^{-5}$  SEC-1 AND UPPER LEVEL DIVERGENCE IS  $30 \times 10^{-5}$  SEC<sup>-1</sup>. THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS  $28\text{-}29^{\circ}\text{C}$ . THE OCEAN THERMAL ENERGY IS  $30\text{-}40 \text{ KJ/CM}^2$  AROUNDTHE SYSTEM CENTRE AND THEN DECREASES TOWARDS GULF OF ADEN. THE VERTICAL WIND SHEAR IS ABOUT 10 KNOTS AROUND THE SYSTEM CENTRE. THE LOW VERTICAL WIND SHEAR IS MITIGATING THE ADVERSE IMPACT OF TOTAL PRECIPITABLE WATER (TPW). THE SYSTEM WOULD WEAKEN GRADUALLY, DUE TO LOWER OCEAN THERMAL ENERGY OVER GULF OF ADEN AND INTERACTION WITH LAND SURFACE.

### **BAY OF BENGAL & ANDAMAN SEA**

THE **DEEP DEPRESSION** OVER SOUTHWEST BAY OF BENGAL MOVED WEST-NORTHWESTWARDS WITH A SPEED OF 15 KMPH DURING PAST 6 HOURS AND LAY CENTRED AT **1130 HOURS IST** OF TODAY, THE 9TH NOVEMBER 2015 OVER SOUTHWEST BAY OF BENGAL NEAR LATITUDE **11.7°N** AND LONGITUDE **80.1°E**, ABOUT **40 KM** EAST-SOUTHEAST OF PUDUCHERRY. IT WOULD MOVE WEST-NORTHWESTWARDS AND CROSS NORTH TAMIL NADU COAST NEAR PUDUCHERRY WITHIN A FEW HOURS.

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 2.0. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 30 KNOTS GUSTING TO 40 KNOTS. THE WINDS ARE HIGHER OVER THE NORTHEAST SECTOR. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 999 HPA. STATE OF SEA AROUND SYTEM CENTRE IS VERY ROUGH. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER TAMIL NADU, SOUTH INTERIOR KARNATAKA, COASTAL ANDHRA PRADESH, RAYALASEEMA, PALK STRAIT AND ADJOINING BAY OF BENGAL BETWEEN LATITUDE 9.0 DEGREE NORTH TO 16.0 DEGREE NORTH AND WEST OF LONGITUDE 87.5 DEGREE EAST. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 93 DEG C.

### FORECAST FOR TRACK AND INTENSITY OF THE SYSTEM ARE GIVEN IN THE TABLE BELOW

DATE/TIME(UTC)	POSITION	MAXIMUM SUSTAINED	CATEGORY OF CYCLONIC
	(LAT. <sup>0</sup> N/ LONG. <sup>0</sup> E)	SURFACE WIND SPEED (KMPH)	DISTURBANCE
09-11-2015/0600	11.7/80.1	55-65 gusting to 75	Deep Depression (DD)
09-11-2015/1200	11.9/79.3	55-65 gusting to 75	Deep Depression (DD)
09-11-2015/1800	12.1/78.6	55-65 gusting to 75	Deep Depression (DD)
10-11-2015/0000	12.3/77.9	45-55 gusting to 65	Depression (D)
10-11-2015/0600	12.5/77.2	34-45 gusting to 65	Depression (D)

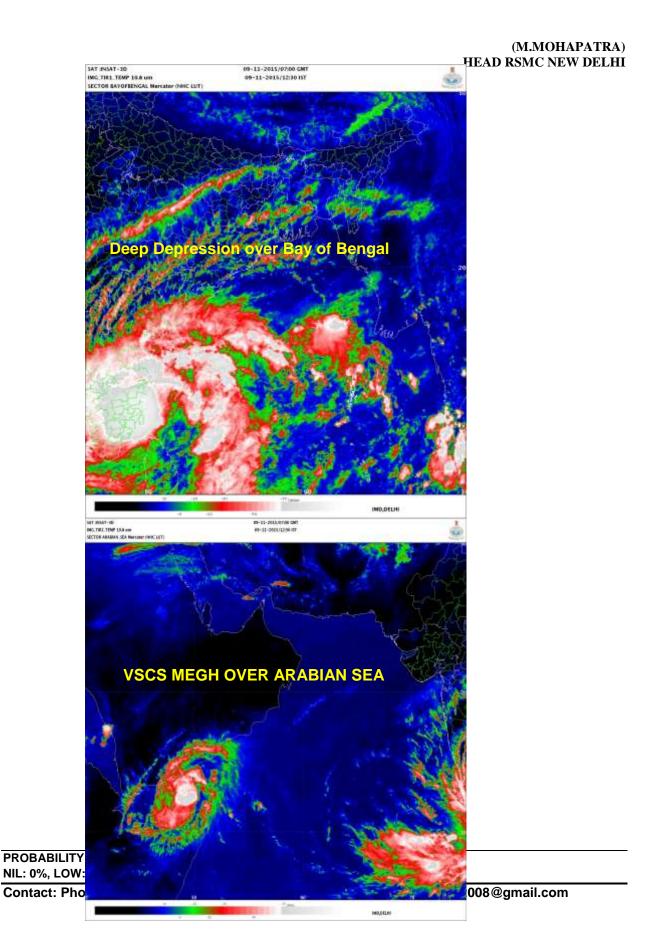
## **REMARKS:**

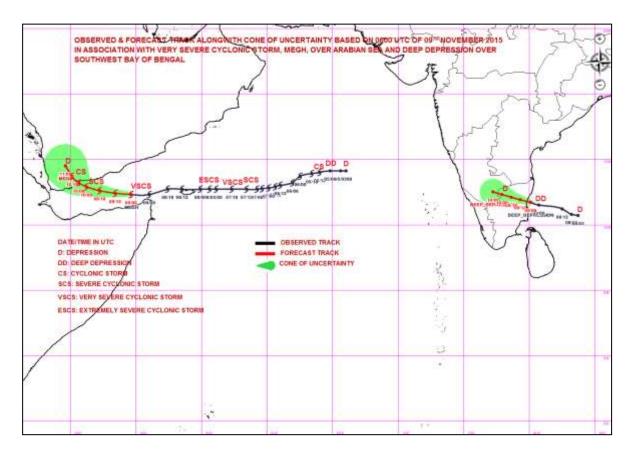
THE LOW LEVEL RELATIVE VORTICITY IS  $150 \times 10^{-5}$  SEC<sup>-1</sup>, CONVERGENCE IS  $20 \times 10^{-5}$  SEC-1, AND UPPER LEVEL DIVERGENCE IS  $30 \times 10^{-5}$  SEC<sup>-1</sup>. THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG  $16^{\circ}$ N IN ASSOCIATION WITH THE ANTI-CYCLONIC CIRCULATION TO THE NORTHEAST. THE MIDDLE AND UPPER TROPOSPHERIC WINDS ARE EAST-SOUTHEASTERLY WHICH WILL STEER THE SYSTEM WEST-NORTHWESTWARDS. THE SEA SURFACE TEMPERATURE AROUND THE REGION OF DEPRESSION IS 29-30°C. THE VERTICAL WIND SHEAR IS ABOUT 10

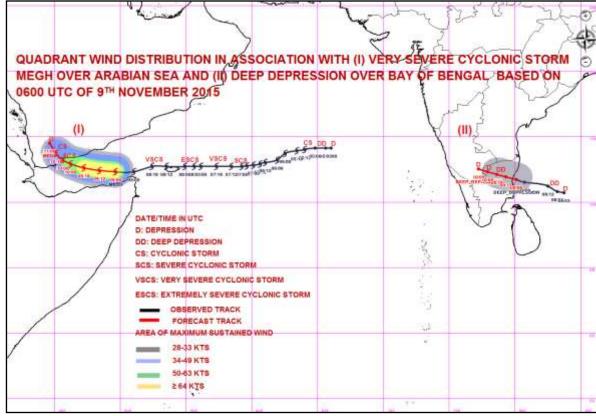
PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

KNOTS AROUND THE SYSTEM CENTRE. MOST OF THE MODEL SUGGESTS WEST-NORTHWESTWARD MOVEMENT UNDER THE SCENARIO, THE SYSTEM WOULD MOVE WEST-NORTHWESTARDS AND CROSS NORTH TAMIL NADU COAST NEAR PUDUCHERRY WITHIN A FEW HOURS.











FROM: RSMC -TROPICAL CYCLONES, NEW DELHI

TO: STORM WARNING CENTRE, NAYPYI TAW (MYANMAR) STORM WARNING CENTRE, BANGKOK (THAILAND)

STORM WARNING CENTRE, COLOMBO (SRILANKA)
STORM WARNING CENTRE, DHAKA (BANGLADESH)
STORM WARNING CENTRE, KARACHI (PAKISTAN)
METEOROLOGICAL OFFICE, MALE (MALDIVES)

OMAN METEOROLOGICAL DEPARTMENT, MUSCAT (THROUGH RTH JEDDAH)

TROPICAL CYCLONE ADVISORY

**RSMC - TROPICAL CYCLONES, NEW DELHI** 

TROPICAL STORM 'MEGH' ADVISORY NO. THIRTY TWO ISSUED AT 1200 UTC OF 9<sup>TH</sup> NOVEMBER 2015 BASED ON 0900 UTC CHARTS OF 9<sup>TH</sup> NOVEMBER 2015.

THE **VERY SEVERE CYCLONIC STORM 'MEGH'** MOVED NEARLY WESTWARDS WITH A SPEED OF 15 KMPH DURING PAST SIX HOURS, AND LAY CENTRED AT 0900 HOURS UTC OF TODAY, THE 9TH NOVEMBER 2015 OVER GULF OF ADEN NEAR LATITUDE **12.4°N** AND LONGITUDE **49.2°E**, ABOUT **240 KM** SOUTH OF RIYAN (YEMEN) (41443). IT WOULD MOVE WEST-NORTHWESTWARDS, WEAKEN GRADUALLY AND CROSS YEMEN COAST BETWEEN LATITUDE 13 & 14 DEGREE NORTH AROUND 0600 UTC OF 10<sup>TH</sup> NOVEMBER AS A **SEVERE CYCLONIC STORM**.

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 4.5. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 80 KNOTS GUSTING TO 90 KNOTS. THE WINDS ARE HIGHER OVER THE NORTHERN SECTOR. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 972 HPA. STATE OF SEA AROUND SYTEM CENTRE IS PHENOMENAL. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER THE AREA BETWEEN LATITUDE 10.5 DEGREE NORTH TO 14.5 DEGREE NORTH AND LONGITUDE 47.0 DEGREE EAST TO 52.0 DEGREE EAST. MINIMUM CLOUD TOP TEMPERATURE IN WALL CLOUD REGION IS MINUS 81°C. THE CLOUD ORGANISATION CONTINUED TO SHOWS SIGNS OF WEAKENING.

## FORECAST FOR TRACK AND INTENSITY OF THE SYSTEM ARE GIVEN IN THE TABLE BELOW

DATE/TIME(UTC)	POSITION	MAXIMUM SUSTAINED	CATEGORY OF CYCLONIC
	(LAT. <sup>0</sup> N/LONG. <sup>0</sup> E)	SURFACE WIND SPEED (KMPH)	DISTURBANCE
09-11-2015/0900	12.4/49.2	140-150 gusting to 165	Very Severe Cyclonic Storm (VSCS)
09-11-2015/1200	12.4/48.4	135-145 gusting to 165	Very Severe Cyclonic Storm (VSCS)
09-11-2015/1800	12.6/47.2	125-135 gusting to 145	Very Severe Cyclonic Storm (VSCS)
10-11-2015/0000	12.9/46.2	115-125 gusting to 140	Very Severe Cyclonic Storm (VSCS)
10-11-2015/0600	13.2/45.6	105-115 gusting to 125	Severe Cyclonic Storm (SCS)
10-11-2015/1800	13.7/45.1	75-85 gusting to 95	Cyclonic Storm (CS)
11-11-2015/0600	14.5/44.6	35-45 gusting to 55	Depression (D)

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

THE SYSTEM MOVED WITH A SPEED OF 15 KMPH DURING PAST SIX HOURS. IT WAS DUE TO THE STEERING ANTICYCLONIC CIRCULATION TO THE NORTHEAST OF THE SYSTEM CENTRE. THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 12°N IN ASSOCIATION WITH AN ANTICYCLONIC CIRCULATION LOCATED TO THE NORTHEAST OF THE SYSTEM CENTRE. THE SYSTEM WOULD MOVE WEST-NOTHWESTWARDS UNDER THE INFLUENCE OF THE ABOVE RIDGE AND ANTI-CYCLONIC CIRCULATION.

THE LOW LEVEL RELATIVE VORTICITY IS  $100 \times 10^{-5}$  SEC<sup>-1</sup>, CONVERGENCE IS  $10 \times 10^{-5}$  SEC-1 AND UPPER LEVEL DIVERGENCE IS  $20 \times 10^{-5}$  SEC<sup>-1</sup>. THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS  $28\text{-}29^{\circ}\text{C}$ . THE OCEAN THERMAL ENERGY IS  $30\text{-}40 \text{ KJ/CM}^2$  AROUNDTHE SYSTEM CENTRE AND THEN DECREASES TOWARDS GULF OF ADEN. THE VERTICAL WIND SHEAR IS ABOUT 5-10 KNOTS AROUND THE SYSTEM CENTRE. THE LOW VERTICAL WIND SHEAR IS MITIGATING THE ADVERSE IMPACT OF TOTAL PRECIPITABLE WATER (TPW). THE SYSTEM WOULD WEAKEN GRADUALLY, DUE TO LOWER OCEAN THERMAL ENERGY OVER GULF OF ADEN AND INTERACTION WITH LAND SURFACE.

#### **BAY OF BENGAL & ANDAMAN SEA**

THE **DEEP DEPRESSION** OVER SOUTHWEST BAY OF BENGAL MOVED NORTH-NORTHWESTWARDS WITH A SPEED OF 11 KMPH DURING PAST 6 HOURS AND LAY CENTRED AT **0900 UTC** OF TODAY, THE 9TH NOVEMBER 2015 OVER SOUTHWEST BAY OF BENGAL NEAR LATITUDE **12.0°N** AND LONGITUDE **80.0°E**, VERY CLOSE TO NORTH TAMIL NADU COAST NEAR PUDUCHERRY. IT WOULD MOVE WEST-NORTHWESTWARDS, WEAKEN GRADUALLY AND CROSS YEMEN COAST BETWEEN LATITUDE 13 & 14 DEGREE NORTH AROUND 0600 UTC OF 10<sup>TH</sup> NOVEMBER AS A **SEVERE CYCLONIC STORM**.

CURRENT INTENSITY (C.I.) IS 2.0. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 30 KNOTS GUSTING TO 40 KNOTS. THE WINDS ARE HIGHER OVER THE NORTHEAST SECTOR. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 991 HPA. STATE OF SEA AROUND SYTEM CENTRE IS VERY ROUGH. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER AREA BETWEEN LATITUDE 9.0 DEGREE NORTH TO 16.0 DEGREE NORTH AND WEST OF LONGITUDE 87.0 DEGREE EAST.

### FORECAST FOR TRACK AND INTENSITY OF THE SYSTEM ARE GIVEN IN THE TABLE BELOW

Date/time(UTC)	Position	Maximum sustained	Category of cyclonic
	(lat.ºN/ long. ºE)	Surface wind speed (kmph)	Disturbance
09-11-2015/0900	12.0/80.0	55-65 gusting to 75	Deep Depression (DD)
09-11-2015/1200	12.2/79.8	55-65 gusting to 75	Deep Depression (DD)
09-11-2015/1800	12.5/79.4	55-65 gusting to 75	Deep Depression (DD)
10-11-2015/0000	12.8/78.7	45-55 gusting to 65	Depression (D)
10-11-2015/0600	13.1/78.0	34-45 gusting to 65	Depression (D)

## REMARKS:

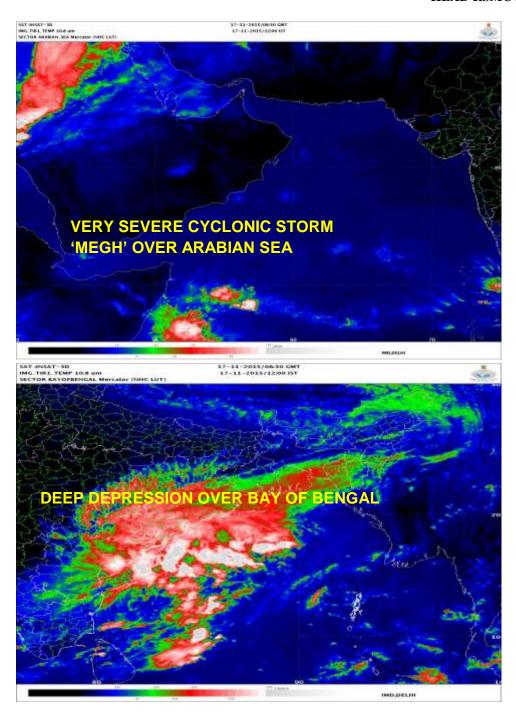
THE LOW LEVEL RELATIVE VORTICITY IS  $200 \times 10^{-5}$  SEC<sup>-1</sup>, CONVERGENCE IS  $30 \times 10^{-5}$  SEC-1, AND UPPER LEVEL DIVERGENCE IS  $40 \times 10^{-5}$  SEC<sup>-1</sup> TO THE NORTH OF SYSTEM CENTRE. THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG  $12^{\circ}$ N IN ASSOCIATION WITH THE ANTI-

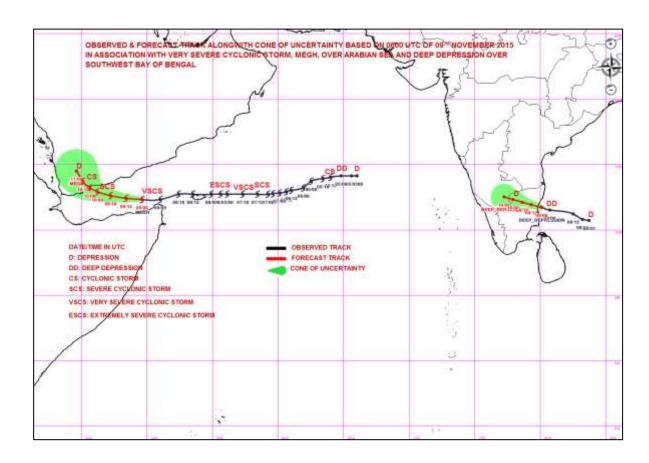
PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

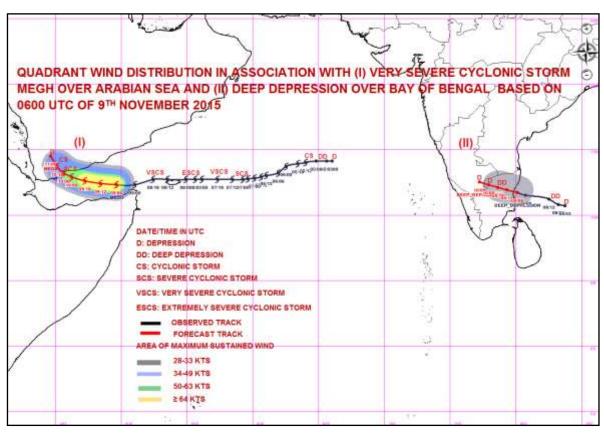
NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

CYCLONIC CIRCULATION TO THE NORTHEAST. THE SEA SURFACE TEMPERATURE AROUND THE REGION OF DEPRESSION IS 29-30 $^{\circ}$ C. THE VERTICAL WIND SHEAR IS ABOUT 20-30 KNOTS AROUND THE SYSTEM CENTRE.

## (M.MOHAPATRA) HEAD RSMC NEW DELHI











FROM: RSMC -TROPICAL CYCLONES, NEW DELHI

TO: STORM WARNING CENTRE, NAYPYI TAW (MYANMAR) STORM WARNING CENTRE, BANGKOK (THAILAND)

STORM WARNING CENTRE, COLOMBO (SRILANKA)
STORM WARNING CENTRE, DHAKA (BANGLADESH)
STORM WARNING CENTRE, KARACHI (PAKISTAN)
METEOROLOGICAL OFFICE, MALE (MALDIVES)

WEIEUROLOGICAL OFFICE, WALE (WALDIVES)

OMAN METEOROLOGICAL DEPARTMENT, MUSCAT (THROUGH RTH JEDDAH)

TROPICAL CYCLONE ADVISORY

**RSMC - TROPICAL CYCLONES, NEW DELHI** 

TROPICAL STORM 'MEGH' ADVISORY NO. THIRTY THREE ISSUED AT 1500 UTC OF 9<sup>TH</sup> NOVEMBER 2015 BASED ON 1200 UTC CHARTS OF 9<sup>TH</sup> NOVEMBER 2015.

THE VERY SEVERE CYCLONIC STORM 'MEGH' MOVED WEST-NORTHWESTWARDS WITH A SPEED OF 28 KMPH DURING PAST SIX HOURS, AND LAY CENTRED AT 1200 HOURS UTC OF TODAY, THE 9TH NOVEMBER 2015 OVER GULF OF ADEN NEAR LATITUDE 12.5°N AND LONGITUDE 48.0°E, ABOUT 320 KM EAST OF ADEN. IT WOULD MOVE WEST-NORTHWESTWARDS, WEAKEN GRADUALLY AND CROSS YEMEN COAST NEAR LATITUDE 13 DEGREE NORTH AROUND 0600 UTC OF 10<sup>TH</sup> NOVEMBER AS A SEVERE CYCLONIC STORM.

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 3.5/CI 4.5. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 70 KNOTS GUSTING TO 80 KNOTS. THE WINDS ARE HIGHER OVER THE NORTHERN SECTOR. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 982 HPA. STATE OF SEA AROUND SYTEM CENTRE IS PHENOMENAL. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER THE AREA BETWEEN LATITUDE 12.5 DEGREE NORTH TO 14.5 DEGREE NORTH AND LONGITUDE 45.0 DEGREE EAST TO 51.0 DEGREE EAST. MINIMUM CLOUD TOP TEMPERATURE IN WALL CLOUD REGION IS MINUS 75°C. THE CLOUD ORGANISATION CONTINUED TO SHOWS SIGNS OF WEAKENING.

### FORECAST FOR TRACK AND INTENSITY OF THE SYSTEM ARE GIVEN IN THE TABLE BELOW

DATE/TIME(UTC)	POSITION	MAXIMUM SUSTAINED	CATEGORY OF CYCLONIC
	(LAT. <sup>0</sup> N/ LONG. <sup>0</sup> E)	SURFACE WIND SPEED (KMPH)	DISTURBANCE
09-11-2015/1200	12.5/48.0	130-140 gusting to 155	Very Severe Cyclonic Storm (VSCS)
09-11-2015/1800	12.6/46.8	120-130 gusting to 145	Very Severe Cyclonic Storm (VSCS)
10-11-2015/0000	12.9/45.8	110-120 gusting to 130	Very Severe Cyclonic Storm (VSCS)
10-11-2015/0600	13.2/45.2	100-110 gusting to 120	Severe Cyclonic Storm (SCS)
10-11-2015/1200	13.7/44.6	80-90 gusting to 100	Cyclonic Storm (CS)
11-11-2015/0000	14.5/44.0	50-60 gusting to 70	Deep Depression (DD)
11-11-2015/1200	15.3/43.5	25-35 gusting to 45	Low(L)

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

THE SYSTEM MOVED WITH A SPEED OF 29 KMPH DURING PAST SIX HOURS. IT WAS DUE TO THE STEERING ANTICYCLONIC CIRCULATION TO THE NORTHEAST OF THE SYSTEM CENTRE. THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 14°N IN ASSOCIATION WITH AN ANTICYCLONIC CIRCULATION LOCATED TO THE NORTHEAST OF THE SYSTEM CENTRE. THE SYSTEM WOULD MOVE WEST-NOTHWESTWARDS UNDER THE INFLUENCE OF THE ABOVE RIDGE AND ANTI-CYCLONIC CIRCULATION.

THE LOW LEVEL RELATIVE VORTICITY IS  $100 \times 10^{-5}$  SEC<sup>-1</sup>, CONVERGENCE IS  $10 \times 10^{-5}$  SEC-1 AND UPPER LEVEL DIVERGENCE IS  $20 \times 10^{-5}$  SEC<sup>-1</sup>. THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS  $28\text{-}29^{\circ}\text{C}$ . THE OCEAN THERMAL ENERGY IS  $30\text{-}40 \text{ KJ/CM}^2$  AROUNDTHE SYSTEM CENTRE AND THEN DECREASES TOWARDS GULF OF ADEN. THE VERTICAL WIND SHEAR IS ABOUT 5-10 KNOTS AROUND THE SYSTEM CENTRE. THE LOW VERTICAL WIND SHEAR IS MITIGATING THE ADVERSE IMPACT OF TOTAL PRECIPITABLE WATER (TPW). THE SYSTEM WOULD WEAKEN GRADUALLY, DUE TO LOWER OCEAN THERMAL ENERGY OVER GULF OF ADEN AND INTERACTION WITH LAND SURFACE.

#### **BAY OF BENGAL & ANDAMAN SEA**

THE **DEEP DEPRESSION** OVER SOUTHWEST BAY OF BENGAL MOVED SLOWLY NORTHWARDS WITH A SPEED OF 7 KMPH DURING PAST 6 HOURS AND LAY CENTRED AT **1200** HOURS UTC OF TODAY, THE 9TH NOVEMBER 2015 OVER SOUTHWEST BAY OF BENGAL NEAR LATITUDE **12.1°N** AND LONGITUDE **80.0°E**, VERY CLOSE TO NORTH TAMIL NADU COAST NEAR PUDUCHERRY. LATEST COASTAL AND RADAR OBSERVATION INDICATE THAT THE DEEP DEPRESSION CONTINUE TO MOVE NORTHWARDS AND CROSSED NORTH TAMILNADU COAST CLOSE TO NORTH OF PUDUCHERRY (NEAR LATITUDE 12.2° N LONGITUDE 80.0°E) AROUND 1400 HRS UTC OF TODAY WITH A WIND SPEED OF 55-65 KMPH.

MAXIMUM SUSTAINED SURFACE WIND SPEED IS 30 KNOTS GUSTING TO 40 KNOTS. THE WINDS ARE HIGHER OVER THE NORTHEAST SECTOR. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 995 HPA. STATE OF SEA AROUND SYTEM CENTRE IS VERY ROUGH. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER AREA BETWEEN LATITUDE 9.0 DEGREE NORTH TO 16.0 DEGREE NORTH AND WEST OF LONGITUDE 87.0 DEGREE EAST.

FORECAST FOR TRACK AND INTENSITY OF THE SYSTEM ARE GIVEN IN THE TABLE BELOW

Date/time(UTC)	Position	Maximum sustained	Category of cyclonic
	(lat. <sup>0</sup> N/ long. <sup>0</sup> E)	Surface wind speed (kmph)	Disturbance
09-11-2015/1200	12.1/80.0	55-65 gusting to 75	Deep Depression (DD)
09-11-2015/1800	12.5/79.9	55-65 gusting to 75	Deep Depression (DD)
10-11-2015/0000	12.6/79.7	55-65 gusting to 75	Deep Depression (DD)
10-11-2015/0600	12.7/79.0	50-60 gusting to 70	Deep Depression (DD)
10-11-2015/1200	12.8/78.5	40-50 gusting to 60	Depression (D)

# **REMARKS:**

THE LOW LEVEL RELATIVE VORTICITY IS  $200 \times 10^{-5}$  SEC<sup>-1</sup>, CONVERGENCE IS  $30 \times 10^{-5}$  SEC-1, AND UPPER LEVEL DIVERGENCE IS  $30 \times 10^{-5}$  SEC<sup>-1</sup> TO THE NORTH OF SYSTEM CENTRE. THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG  $13^{\circ}$ N IN ASSOCIATION WITH THE ANTI-

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

CYCLONIC CIRCULATION TO THE NORTHEAST. THE VERTICAL WIND SHEAR IS ABOUT 20-30 KNOTS AROUND THE SYSTEM CENTRE. DUE TO LAND INTERACTION AND HIGH VERTICAL WIND SHEAR THE DEEP DEPRESSION WOULD WEAKEN GRADUALLY.

(M.MOHAPATRA) HEAD RSMC NEW DELHI

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%





FROM: RSMC -TROPICAL CYCLONES, NEW DELHI

TO: STORM WARNING CENTRE, NAYPYI TAW (MYANMAR)

STORM WARNING CENTRE, BANGKOK (THAILAND)
STORM WARNING CENTRE, COLOMBO (SRILANKA)
STORM WARNING CENTRE, DHAKA (BANGLADESH)
STORM WARNING CENTRE, KARACHI (PAKISTAN)
METEOROLOGICAL OFFICE, MALE (MALDIVES)

OMAN METEOROLOGICAL DEPARTMENT, MUSCAT (THROUGH RTH JEDDAH)

TROPICAL CYCLONE ADVISORY

**RSMC - TROPICAL CYCLONES, NEW DELHI** 

TROPICAL STORM 'MEGH' ADVISORY NO. THIRTY FOUR ISSUED AT 1800 UTC OF 9<sup>TH</sup> NOVEMBER 2015 BASED ON 1500 UTC CHARTS OF 9<sup>TH</sup> NOVEMBER 2015.

THE VERY SEVERE CYCLONIC STORM 'MEGH' MOVED WEST-NORTHWESTWARDS WITH A SPEED OF 30 KMPH DURING PAST SIX HOURS, AND LAY CENTRED AT 1500 HOURS UTC OF TODAY, THE 9TH NOVEMBER 2015 OVER GULF OF ADEN NEAR LATITUDE 12.5°N AND LONGITUDE 47.5°E, ABOUT 270 KM EAST OF ADEN. IT WOULD MOVE WEST-NORTHWESTWARDS, WEAKEN GRADUALLY AND CROSS YEMEN COAST NEAR LATITUDE 13 DEGREE NORTH AROUND 0600 UTC OF 10<sup>TH</sup> NOVEMBER AS A SEVERE CYCLONIC STORM.

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 3.0/CI 4.0. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 65 KNOTS GUSTING TO 75 KNOTS. THE WINDS ARE HIGHER OVER THE NORTHERN SECTOR. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 984 HPA. STATE OF SEA AROUND SYTEM CENTRE IS PHENOMENAL. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER THE AREA BETWEEN LATITUDE 10.5 DEGREE NORTH TO 15.0 DEGREE NORTH AND LONGITUDE 45.0 DEGREE EAST TO 51.0 DEGREE EAST. MINIMUM CLOUD TOP TEMPERATURE IN WALL CLOUD REGION IS MINUS 68°C. THE CLOUD ORGANISATION CONTINUED TO SHOWS SIGNS OF WEAKENING.

# FORECAST FOR TRACK AND INTENSITY OF THE SYSTEM ARE GIVEN IN THE TABLE BELOW

DATE/TIME(UTC)	POSITION	MAXIMUM SUSTAINED	CATEGORY OF CYCLONIC
	(LAT. <sup>0</sup> N/LONG. <sup>0</sup> E)	SURFACE WIND SPEED (KMPH)	DISTURBANCE
09-11-2015/1500	12.5/47.5	115-125 gusting to 135	Very Severe Cyclonic Storm (VSCS)
09-11-2015/1800	12.6/46.8	115-125 gusting to 135	Very Severe Cyclonic Storm (VSCS)
10-11-2015/0000	12.9/45.8	105-115 gusting to 125	Very Severe Cyclonic Storm (VSCS)
10-11-2015/0600	13.2/45.2	95-105 gusting to 115	Severe Cyclonic Storm (SCS)
10-11-2015/1200	13.7/44.6	70-80 gusting to 90	Cyclonic Storm (CS)
11-11-2015/0000	14.5/44.0	50-60 gusting to 70	Deep Depression (DD)
11-11-2015/1200	15.3/43.5	25-30 gusting to 40	Low(L)

### **REMARKS:**

THE SYSTEM MOVED WITH A SPEED OF 30 KMPH DURING PAST SIX HOURS. IT WAS DUE TO THE STEERING ANTICYCLONIC CIRCULATION TO THE NORTHEAST OF THE SYSTEM CENTRE.

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 14°N IN ASSOCIATION WITH AN ANTICYCLONIC CIRCULATION LOCATED TO THE NORTHEAST OF THE SYSTEM CENTRE. THE SYSTEM WOULD MOVE WEST-NOTHWESTWARDS UNDER THE INFLUENCE OF THE ABOVE RIDGE AND ANTI-CYCLONIC CIRCULATION.

THE LOW LEVEL RELATIVE VORTICITY IS  $100 \times 10^{-5}$  SEC<sup>-1</sup>, CONVERGENCE IS  $10 \times 10^{-5}$  SEC-1 AND UPPER LEVEL DIVERGENCE IS  $20 \times 10^{-5}$  SEC<sup>-1</sup>. THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS  $28\text{-}29^{\circ}\text{C}$ . THE OCEAN THERMAL ENERGY IS  $30\text{-}40 \text{ KJ/CM}^2$  AROUNDTHE SYSTEM CENTRE AND THEN DECREASES TOWARDS GULF OF ADEN. THE VERTICAL WIND SHEAR IS ABOUT 5-10 KNOTS AROUND THE SYSTEM CENTRE. THE LOW VERTICAL WIND SHEAR IS MITIGATING THE ADVERSE IMPACT OF TOTAL PRECIPITABLE WATER (TPW). THE SYSTEM WOULD WEAKEN GRADUALLY, DUE TO LOWER OCEAN THERMAL ENERGY OVER GULF OF ADEN AND INTERACTION WITH LAND SURFACE.

#### **BAY OF BENGAL & ANDAMAN SEA**

THE **DEEP DEPRESSION** OVER NORTH COASTAL TAMIL NADU MOVED NORTHWARDS WITH A SPEED OF 5 KMPH DURING PAST 6 HOURS AND LAY CENTRED AT **1500** HOURS UTC OF TODAY, THE 9TH NOVEMBER 2015 OVER NORTH COASTAL TAMIL NADU NEAR LATITUDE **12.3°N** AND LONGITUDE **80.0°E**. IT WOULD MOVE NORTH-NORTHWESTWARD DURING NEXT 12 HRS AND THEN WESTNORTHWEST WARD AND WEEKEN GRADUALLY.

MAXIMUM SUSTAINED SURFACE WIND SPEED IS 30 KNOTS GUSTING TO 40 KNOTS. THE WINDS ARE HIGHER OVER THE NORTHEAST SECTOR. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 995 HPA. STATE OF SEA AROUND SYTEM CENTRE IS VERY ROUGH. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER AREA BETWEEN LATITUDE 9.0 DEGREE NORTH TO 16.0 DEGREE NORTH AND WEST OF LONGITUDE 87.0 DEGREE EAST.

### FORECAST FOR TRACK AND INTENSITY OF THE SYSTEM ARE GIVEN IN THE TABLE BELOW

Date/time(UTC)	Position	Maximum sustained	Category of cyclonic
	(lat. <sup>0</sup> N/ long. <sup>0</sup> E)	Surface wind speed (kmph)	Disturbance
09-11-2015/1500	12.3/80.0	55-65 gusting to 75	Deep Depression (DD)
09-11-2015/1800	12.5/79.9	55-65 gusting to 75	Deep Depression (DD)
10-11-2015/0000	12.6/79.7	55-65 gusting to 75	Deep Depression (DD)
10-11-2015/0600	12.7/79.0	50-60 gusting to 70	Deep Depression (DD)
10-11-2015/1200	12.8/78.5	40-50 gusting to 60	Depression (D)

### **REMARKS:**

THE LOW LEVEL RELATIVE VORTICITY IS  $200 \times 10^{-5}$  SEC<sup>-1</sup>, CONVERGENCE IS  $30 \times 10^{-5}$  SEC-1, AND UPPER LEVEL DIVERGENCE IS  $30 \times 10^{-5}$  SEC<sup>-1</sup> TO THE NORTH OF SYSTEM CENTRE. THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG  $13^{\circ}$ N IN ASSOCIATION WITH THE ANTICYCLONIC CIRCULATION TO THE NORTHEAST. THE VERTICAL WIND SHEAR IS ABOUT 20-30 KNOTS AROUND THE SYSTEM CENTRE. DUE TO LAND INTERACTION AND HIGH VERTICAL WIND SHEAR THE DEEP DEPRESSION WOULD WEAKEN GRADUALLY.

(DUTY OFFICER) RSMC NEW DELHI

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)
NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%





FROM: RSMC -TROPICAL CYCLONES, NEW DELHI

TO: STORM WARNING CENTRE, NAYPYI TAW (MYANMAR)

STORM WARNING CENTRE, BANGKOK (THAILAND)
STORM WARNING CENTRE, COLOMBO (SRILANKA)
STORM WARNING CENTRE, DHAKA (BANGLADESH)
STORM WARNING CENTRE, KARACHI (PAKISTAN)
METEOROLOGICAL OFFICE, MALE (MALDIVES)

OMAN METEOROLOGICAL DEPARTMENT, MUSCAT (THROUGH RTH JEDDAH)

TROPICAL CYCLONE ADVISORY

**RSMC - TROPICAL CYCLONES, NEW DELHI** 

TROPICAL STORM 'MEGH' ADVISORY NO. THIRTY FIVE ISSUED AT 2100 UTC OF 9<sup>TH</sup> NOVEMBER 2015 BASED ON 1800 UTC CHARTS OF 9<sup>TH</sup> NOVEMBER 2015.

THE VERY SEVERE CYCLONIC STORM 'MEGH' MOVED WEST-NORTHWESTWARDS WITH A SPEED OF 15 KMPH DURING PAST SIX HOURS, AND LAY CENTRED AT **1800** HOURS UTC OF TODAY, THE 9TH NOVEMBER 2015 OVER GULF OF ADEN NEAR LATITUDE **12.6°N** AND LONGITUDE **47.2°E**, ABOUT **240 KM** EAST OF ADEN. IT WOULD MOVE WEST-NORTHWESTWARDS, WEAKEN GRADUALLY AND CROSS YEMEN COAST NEAR LATITUDE 13 DEGREE NORTH AROUND 0600 UTC OF 10<sup>TH</sup> NOVEMBER AS A **SEVERE CYCLONIC STORM**.

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 3.0/CI 4.0. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 65 KNOTS GUSTING TO 75 KNOTS. THE WINDS ARE HIGHER OVER THE NORTHERN SECTOR. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 986 HPA. STATE OF SEA AROUND SYTEM CENTRE IS PHENOMENAL. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER THE AREA BETWEEN LATITUDE 11.5 DEGREE NORTH TO 15.5 DEGREE NORTH AND LONGITUDE 45.0 DEGREE EAST TO 50.0 DEGREE EAST. MINIMUM CLOUD TOP TEMPERATURE IN WALL CLOUD REGION IS MINUS 46°C. THE CLOUD ORGANISATION CONTINUED TO SHOWS SIGNS OF WEAKENING.

## FORECAST FOR TRACK AND INTENSITY OF THE SYSTEM ARE GIVEN IN THE TABLE BELOW

DATE/TIME(UTC)	POSITION	MAXIMUM SUSTAINED	CATEGORY OF CYCLONIC
	(LAT. <sup>0</sup> N/LONG. <sup>0</sup> E)	SURFACE WIND SPEED (KMPH)	DISTURBANCE
09-11-2015/1800	12.6/47.2	115-125 gusting to 135	Very Severe Cyclonic Storm (VSCS)
10-11-2015/0000	12.9/46.2	105-115 gusting to 125	Severe Cyclonic Storm (SCS)
10-11-2015/0600	13.3/45.3	95-105 gusting to 115	Severe Cyclonic Storm (SCS)
10-11-2015/1200	13.7/44.7	70-80 gusting to 90	Cyclonic Storm (CS)
11-11-2015/0000	14.3/44.0	50-60 gusting to 70	Deep Depression (DD)
11-11-2015/1200	14.9/43.6	25-30 gusting to 40	Low(L)

## REMARKS:

THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 14°N IN ASSOCIATION WITH AN ANTICYCLONIC CIRCULATION LOCATED TO THE NORTHEAST OF THE SYSTEM CENTRE.

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

THE SYSTEM WOULD MOVE WEST-NOTHWESTWARDS UNDER THE INFLUENCE OF THE ABOVE RIDGE AND ANTI-CYCLONIC CIRCULATION.

THE LOW LEVEL RELATIVE VORTICITY IS  $100 \times 10^{-5}$  SEC<sup>-1</sup>, CONVERGENCE IS  $10 \times 10^{-5}$  SEC-1 AND UPPER LEVEL DIVERGENCE IS  $20 \times 10^{-5}$  SEC<sup>-1</sup>. THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS  $28\text{-}29^{\circ}\text{C}$ . THE OCEAN THERMAL ENERGY IS  $30\text{-}40 \text{ KJ/CM}^2$  AROUNDTHE SYSTEM CENTRE AND THEN DECREASES TOWARDS GULF OF ADEN. THE VERTICAL WIND SHEAR IS ABOUT 5-10 KNOTS AROUND THE SYSTEM CENTRE. THE LOW VERTICAL WIND SHEAR IS MITIGATING THE ADVERSE IMPACT OF TOTAL PRECIPITABLE WATER (TPW). THE SYSTEM WOULD WEAKEN GRADUALLY, DUE TO LOWER OCEAN THERMAL ENERGY OVER GULF OF ADEN AND INTERACTION WITH LAND SURFACE.

### **BAY OF BENGAL & ANDAMAN SEA**

THE **DEEP DEPRESSION** OVER NORTH COASTAL TAMIL NADU MOVED NORTHWARDS WITH A SPEED OF 6 KMPH DURING PAST 6 HOURS AND LAY CENTRED AT **1800** HOURS UTC OF TODAY, THE 9TH NOVEMBER 2015 OVER NORTH EAST TAMIL NADU AND ADJOINING SOUTH INTERIOR KARNATAKA NEAR LATITUDE **12.4°N** AND LONGITUDE **79.9°E**. IT WOULD MOVE NORTH-NORTHWESTWARD DURING NEXT 12 HRS AND THEN WEST-NORTHWESTWARD AND WEAKEN GRADUALLY.

MAXIMUM SUSTAINED SURFACE WIND SPEED IS 30 KNOTS GUSTING TO 40 KNOTS. THE WINDS ARE HIGHER OVER THE NORTHEAST SECTOR. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 995 HPA. STATE OF SEA AROUND SYTEM CENTRE IS VERY ROUGH. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER AREA BETWEEN LATITUDE 9.0 DEGREE NORTH TO 16.0 °N AND WEST OF LONGITUDE 85.0 °E. MINIMUM CTT MINUS 80.0 °C.

#### FORECAST FOR TRACK AND INTENSITY OF THE SYSTEM ARE GIVEN IN THE TABLE BELOW

Date/time(UTC)	Position	Maximum sustained	Category of cyclonic
	(lat. <sup>0</sup> N/ long. <sup>0</sup> E)	Surface wind speed (kmph)	Disturbance
09-11-2015/1800	12.4/79.9	55-65 gusting to 75	Deep Depression (DD)
10-11-2015/0000	12.6/79.7	55-65 gusting to 75	Deep Depression (DD)
10-11-2015/0600	12.7/79.0	50-60 gusting to 70	Deep Depression (DD)
10-11-2015/1200	12.8/78.5	40-50 gusting to 60	Depression (D)

#### **REMARKS:**

THE LOW LEVEL RELATIVE VORTICITY IS  $200 \times 10^{-5}$  SEC<sup>-1</sup>, CONVERGENCE IS  $30 \times 10^{-5}$  SEC-1, AND UPPER LEVEL DIVERGENCE IS  $30 \times 10^{-5}$  SEC<sup>-1</sup> TO THE NORTH OF SYSTEM CENTRE. THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG  $13^{\circ}$ N IN ASSOCIATION WITH THE ANTICYCLONIC CIRCULATION TO THE NORTHEAST. THE VERTICAL WIND SHEAR IS ABOUT 20-30 KNOTS AROUND THE SYSTEM CENTRE. DUE TO LAND INTERACTION AND HIGH VERTICAL WIND SHEAR THE DEEP DEPRESSION WOULD WEAKEN GRADUALLY.

(DUTY OFFICER) RSMC NEW DELHI

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)
NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%





FROM: RSMC -TROPICAL CYCLONES, NEW DELHI

TO: STORM WARNING CENTRE, NAYPYI TAW (MYANMAR)
STORM WARNING CENTRE, BANGKOK (THAILAND)
STORM WARNING CENTRE, COLOMBO (SRILANKA)

STORM WARNING CENTRE, DHAKA (BANGLADESH)
STORM WARNING CENTRE, KARACHI (PAKISTAN)
METEOROLOGICAL OFFICE, MALE (MALDIVES)

OMAN METEOROLOGICAL DEPARTMENT, MUSCAT (THROUGH RTH JEDDAH)

TROPICAL CYCLONE ADVISORY

**RSMC - TROPICAL CYCLONES, NEW DELHI** 

TROPICAL STORM 'MEGH' ADVISORY NO. THIRTY SIX ISSUED AT 0000 UTC OF 10<sup>TH</sup> NOVEMBER 2015 BASED ON 2100 UTC CHARTS OF 9<sup>TH</sup> NOVEMBER 2015.

THE VERY SEVERE CYCLONIC STORM 'MEGH' MOVED WEST-NORTHWESTWARDS WITH A SPEED OF 17 KMPH DURING PAST SIX HOURS, WEAKENED INTO A SEVERE CYCLONIC STORM AND LAY CENTRED AT 2100 HOURS UTC OF TODAY, THE 9TH NOVEMBER 2015 OVER GULF OF ADEN NEAR LATITUDE 12.8°N AND LONGITUDE 46.6°E, ABOUT 170 KM EAST OF ADEN. IT WOULD MOVE WEST-NORTHWESTWARDS AND CROSS YEMEN COAST NEAR LATITUDE 13 DEGREE NORTH AROUND 0600 UTC OF 10<sup>TH</sup> NOVEMBER AS A SEVERE CYCLONIC STORM AND THEN WEAKEN GRADUALLY.

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 3.0/CI 4.0. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 60 KNOTS GUSTING TO 70 KNOTS. THE WINDS ARE HIGHER OVER THE NORTHERN SECTOR. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 988 HPA. STATE OF SEA AROUND SYTEM CENTRE IS VERY HIGH. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER THE AREA BETWEEN LATITUDE 11.5 DEGREE NORTH TO 15.5 DEGREE NORTH AND LONGITUDE 45.0 DEGREE EAST TO 50.0 DEGREE EAST. MINIMUM CLOUD TOP TEMPERATURE IN WALL CLOUD REGION IS MINUS 60°C. THE CLOUD ORGANISATION CONTINUED TO SHOWS SIGNS OF WEAKENING.

### FORECAST FOR TRACK AND INTENSITY OF THE SYSTEM ARE GIVEN IN THE TABLE BELOW

DATE/TIME(UTC)	POSITION	MAXIMUM SUSTAINED	CATEGORY OF CYCLONIC
	(LAT. <sup>0</sup> N/ LONG. <sup>0</sup> E)	SURFACE WIND SPEED (KMPH)	DISTURBANCE
09-11-2015/2100	12.8/46.6	110-120 gusting to 130	Severe Cyclonic Storm (SCS)
10-11-2015/0000	12.9/46.2	105-115 gusting to 125	Severe Cyclonic Storm (SCS)
10-11-2015/0600	13.3/45.3	95-105 gusting to 115	Severe Cyclonic Storm (SCS)
10-11-2015/1200	13.7/44.7	70-80 gusting to 90	Cyclonic Storm (CS)
11-11-2015/0000	14.3/44.0	50-60 gusting to 70	Deep Depression (DD)
11-11-2015/1200	14.9/43.6	25-30 gusting to 40	Low(L)

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 14°N IN ASSOCIATION WITH AN ANTICYCLONIC CIRCULATION LOCATED TO THE NORTHEAST OF THE SYSTEM CENTRE. THE SYSTEM WOULD MOVE WEST-NOTHWESTWARDS UNDER THE INFLUENCE OF THE ABOVE RIDGE AND ANTI-CYCLONIC CIRCULATION.

THE LOW LEVEL RELATIVE VORTICITY IS  $100 \times 10^{-5}$  SEC<sup>-1</sup>, CONVERGENCE IS  $10 \times 10^{-5}$  SEC-1 AND UPPER LEVEL DIVERGENCE IS  $20 \times 10^{-5}$  SEC<sup>-1</sup>. THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS  $28-29^{\circ}$ C. THE OCEAN THERMAL ENERGY IS  $30-40 \text{ KJ/CM}^2$  AROUND THE SYSTEM CENTRE AND THEN DECREASES TOWARDS GULF OF ADEN. THE VERTICAL WIND SHEAR IS ABOUT 5-10 KNOTS AROUND THE SYSTEM CENTRE. THE LOW VERTICAL WIND SHEAR IS MITIGATING THE ADVERSE IMPACT OF TOTAL PRECIPITABLE WATER (TPW). THE SYSTEM WOULD WEAKEN GRADUALLY, DUE TO LOWER OCEAN THERMAL ENERGY OVER GULF OF ADEN AND INTERACTION WITH LAND SURFACE.

# BAY OF BENGAL & ANDAMAN SEA (BASED ON 1800 UTC CHARTS OF 9<sup>TH</sup> NOVEMBER 2015)

THE **DEEP DEPRESSION** OVER NORTH COASTAL TAMIL NADU MOVED NORTHWARDS WITH A SPEED OF 6 KMPH DURING PAST 6 HOURS AND LAY CENTRED AT **1800** HOURS UTC OF TODAY, THE 9TH NOVEMBER 2015 OVER NORTH EAST TAMIL NADU AND ADJOINING SOUTH INTERIOR KARNATAKA NEAR LATITUDE **12.4°N** AND LONGITUDE **79.9°E**. IT WOULD MOVE NORTH-NORTHWESTWARD DURING NEXT 12 HRS AND THEN WEST-NORTHWESTWARD AND WEAKEN GRADUALLY.

MAXIMUM SUSTAINED SURFACE WIND SPEED IS 30 KNOTS GUSTING TO 40 KNOTS. THE WINDS ARE HIGHER OVER THE NORTHEAST SECTOR. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 995 HPA. STATE OF SEA AROUND SYTEM CENTRE IS VERY ROUGH. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER AREA BETWEEN LATITUDE 9.0 DEGREE NORTH TO 16.0 °N AND WEST OF LONGITUDE 85.0 °E. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 80.0 °C.

FORECAST FOR TRACK AND INTENSITY OF THE SYSTEM ARE GIVEN IN THE TABLE BELOW

Date/time(UTC)	Position	Maximum sustained	Category of cyclonic
	(lat. <sup>0</sup> N/ long. <sup>0</sup> E)	Surface wind speed (kmph)	Disturbance
09-11-2015/1800	12.4/79.9	55-65 gusting to 75	Deep Depression (DD)
10-11-2015/0000	12.6/79.7	55-65 gusting to 75	Deep Depression (DD)
10-11-2015/0600	12.7/79.0	50-60 gusting to 70	Deep Depression (DD)
10-11-2015/1200	12.8/78.5	40-50 gusting to 60	Depression (D)

### **REMARKS:**

THE LOW LEVEL RELATIVE VORTICITY IS  $200 \times 10^{-5}$  SEC<sup>-1</sup>, CONVERGENCE IS  $30 \times 10^{-5}$  SEC-1, AND UPPER LEVEL DIVERGENCE IS  $30 \times 10^{-5}$  SEC<sup>-1</sup> TO THE NORTH OF SYSTEM CENTRE. THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG  $13^{\circ}$ N IN ASSOCIATION WITH THE ANTI-CYCLONIC CIRCULATION TO THE NORTHEAST. THE VERTICAL WIND SHEAR IS ABOUT 20-30 KNOTS AROUND THE SYSTEM CENTRE. DUE TO LAND INTERACTION AND HIGH VERTICAL WIND SHEAR THE DEEP DEPRESSION WOULD WEAKEN GRADUALLY.

(DUTY OFFICER) RSMC NEW DELHI

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)
NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%





FROM: RSMC -TROPICAL CYCLONES, NEW DELHI

TO: STORM WARNING CENTRE, NAYPYI TAW (MYANMAR)

STORM WARNING CENTRE, BANGKOK (THAILAND)
STORM WARNING CENTRE, COLOMBO (SRILANKA)
STORM WARNING CENTRE, DHAKA (BANGLADESH)
STORM WARNING CENTRE, KARACHI (PAKISTAN)
METEOROLOGICAL OFFICE, MALE (MALDIVES)

OMAN METEOROLOGICAL DEPARTMENT, MUSCAT (THROUGH RTH JEDDAH)

TROPICAL CYCLONE ADVISORY

**RSMC - TROPICAL CYCLONES, NEW DELHI** 

TROPICAL STORM 'MEGH' ADVISORY NO. THIRTY SEVEN ISSUED AT 0300 UTC OF 10<sup>TH</sup> NOVEMBER 2015 BASED ON 0000 UTC CHARTS OF 10<sup>TH</sup> NOVEMBER 2015.

THE **SEVERE CYCLONIC STORM 'MEGH'** MOVED WEST-NORTHWESTWARDS WITH A SPEED OF 25KMPH DURING PAST SIX HOURS AND LAY CENTRED AT **0000** HOURS UTC OF TODAY, THE 10TH NOVEMBER 2015 OVER **GULF OF ADEN** NEAR LATITUDE **12.9°N** AND LONGITUDE **45.8°E**, ABOUT **90 KM** EAST-NORTHEAST OF ADEN. IT WOULD MOVE WEST-NORTHWESTWARDS AND CROSS YEMEN COAST NEAR LATITUDE 13 DEGREE NORTH (NORTHEAST OF ADEN) AROUND 0600 UTC OF 10<sup>TH</sup> NOVEMBER AND THEN WEAKEN GRADUALLY.

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 2.5/CI 3.0. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 50 KNOTS GUSTING TO 60 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 992 HPA. STATE OF SEA AROUND SYTEM CENTRE IS VERY HIGH. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER THE AREA BETWEEN LATITUDE 11.5 DEGREE NORTH TO 15.5 DEGREE NORTH AND LONGITUDE 45.0 DEGREE EAST TO 50.0 DEGREE EAST. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 84°C. THE CLOUD ORGANISATION CONTINUES TO SHOW SIGNS OF WEAKENING.

#### FORECAST FOR TRACK AND INTENSITY OF THE SYSTEM ARE GIVEN IN THE TABLE BELOW

DATE/TIME(UTC)	POSITION	MAXIMUM SUSTAINED	CATEGORY OF CYCLONIC
	(LAT. <sup>0</sup> N/ LONG. <sup>0</sup> E)	SURFACE WIND SPEED (KMPH)	DISTURBANCE
10-11-2015/0000	12.9/45.8	90-100 gusting to 115	Severe Cyclonic Storm (SCS)
10-11-2015/0600	13.2/45.2	70-80 gusting to 90	Cyclonic Storm (CS)
10-11-2015/1200	13.6/44.6	50-60 gusting to 70	Deep Depression (DD)
10-11-2015/1800	14.2/44.0	25-35 gusting to 45	Low(L)

## **REMARKS:**

THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 14°N IN ASSOCIATION WITH AN ANTICYCLONIC CIRCULATION LOCATED TO THE NORTHEAST OF THE SYSTEM CENTRE. THE SYSTEM WOULD MOVE WEST-NOTHWESTWARDS UNDER THE INFLUENCE OF THE ABOVE RIDGE AND ANTI-CYCLONIC CIRCULATION.

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

THE LOW LEVEL RELATIVE VORTICITY IS  $50 \times 10^{-5}$  SEC<sup>-1</sup>, CONVERGENCE IS  $10\text{-}20 \times 10\text{-}5$  SEC<sup>-1</sup> AND UPPER LEVEL DIVERGENCE IS  $20 \times 10^{-5}$  SEC<sup>-1</sup>. THE VERTICAL WIND SHEAR IS ABOUT 5-10 KNOTS AROUND THE SYSTEM CENTRE. THE SYSTEM WOULD WEAKEN RAPIDLY, DUE TO LOWER OCEAN THERMAL ENERGY OVER GULF OF ADEN AND INTERACTION WITH LAND SURFACE.

### **BAY OF BENGAL & ANDAMAN SEA**

THE **DEEP DEPRESSION** OVER NORTH COASTAL TAMIL NADU MOVED WESTWARDS WITH A SPEED OF 5 KMPH DURING PAST 6 HOURS AND LAY CENTRED AT **0000** UTC OF TODAY, THE 10TH NOVEMBER 2015 OVER NORTH TAMILNADU NEAR LATITUDE **12.4°N** AND LONGITUDE **79.6°E**,ABOUT 90 KM SOUTHWEST OF CHENNAI AND 70KM SOUTHEAST OF VELLORE. IT WOULD MOVE WESTWARDS AND WEAKEN INTO A DEPRESSION DURING NEXT 12 HRS.

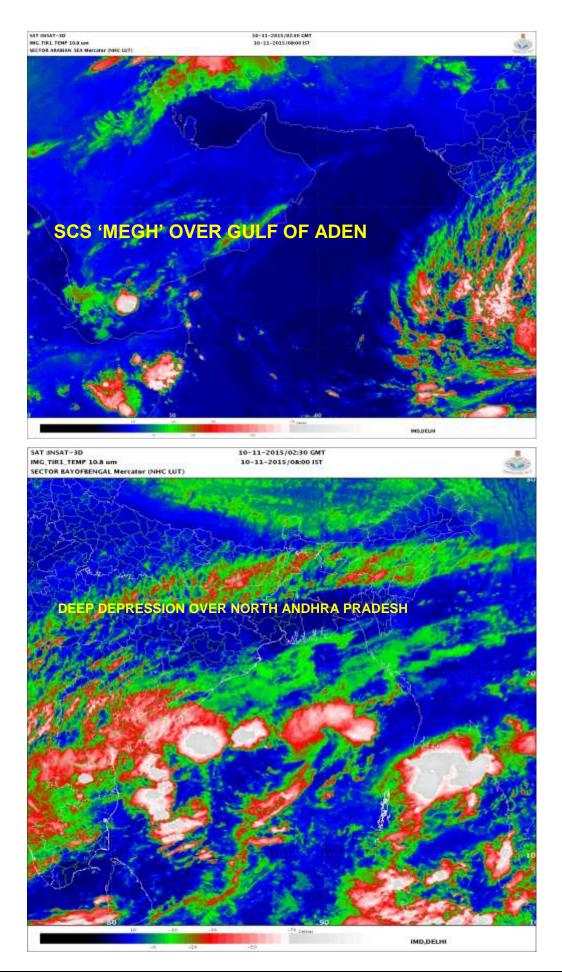
MAXIMUM SUSTAINED SURFACE WIND SPEED IS 30 KNOTS GUSTING TO 40 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 1002 HPA. STATE OF SEA ALONG AND OFF NORTH TAMILNADU COAST AND PUDUCHERRY COAST IS ROUGH TO VERY ROUGH. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER AREA BETWEEN LATITUDE 9.0 DEGREE NORTH TO 16.0 °N AND WEST OF LONGITUDE 85.0 °E. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 71.0 °C.

#### **REMARKS:**

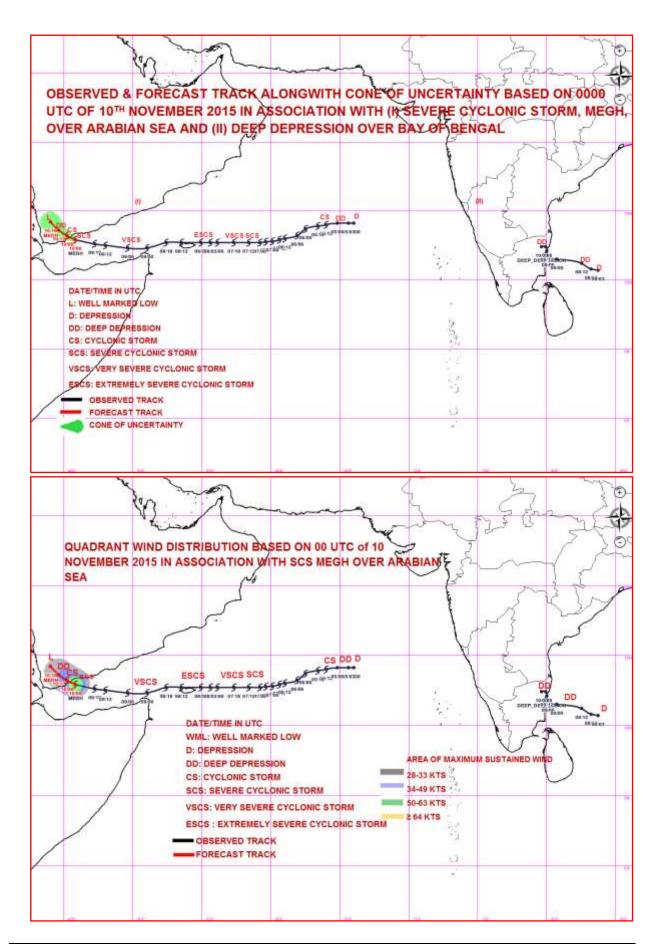
THE LOW LEVEL RELATIVE VORTICITY IS  $150 \times 10^{-5}$  SEC<sup>-1</sup>, CONVERGENCE IS  $20 \times 10^{-5}$  SEC-1, AND UPPER LEVEL DIVERGENCE IS  $20 \times 10^{-5}$  SEC<sup>-1</sup> TO THE NORTH OF SYSTEM CENTRE. THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 17°N IN ASSOCIATION WITH THE ANTI-CYCLONIC CIRCULATION TO THE NORTHEAST. THE VERTICAL WIND SHEAR IS ABOUT 20-30 KNOTS AROUND THE SYSTEM CENTRE. DUE TO LAND INTERACTION AND HIGH VERTICAL WIND SHEAR THE DEEP DEPRESSION WOULD WEAKEN INTO A DEPRESSION DURING NEXT 12 HOURS.

(M.MOHAPATRA) HEAD-RSMC NEW DELHI

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)
NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%



PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)
NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%



PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)
NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%





FROM: RSMC -TROPICAL CYCLONES, NEW DELHI

TO: STORM WARNING CENTRE, NAYPYI TAW (MYANMAR) STORM WARNING CENTRE, BANGKOK (THAILAND)

STORM WARNING CENTRE, COLOMBO (SRILANKA)
STORM WARNING CENTRE, DHAKA (BANGLADESH)
STORM WARNING CENTRE, KARACHI (PAKISTAN)
METEOROLOGICAL OFFICE, MALE (MALDIVES)

OMAN METEOROLOGICAL DEPARTMENT, MUSCAT (THROUGH RTH JEDDAH)

TROPICAL CYCLONE ADVISORY

**RSMC - TROPICAL CYCLONES, NEW DELHI** 

TROPICAL STORM 'MEGH' ADVISORY NO. THIRTY EIGHT ISSUED AT 0600 UTC OF 10<sup>TH</sup> NOVEMBER 2015 BASED ON 0300 UTC CHARTS OF 10<sup>TH</sup> NOVEMBER 2015.

THE **SEVERE CYCLONIC STORM 'MEGH'** MOVED WEST-NORTHWESTWARDS WITH A SPEED OF 14 KMPH DURING PAST SIX HOURS, FURTHER WEAKENED INTO A CYCLONIC STORM AND LAY CENTRED AT **0300** HOURS UTC OF TODAY, THE 10TH NOVEMBER 2015 OVER **GULF OF ADEN** NEAR LATITUDE **13.1°N** AND LONGITUDE **45.6°E**, ABOUT **70 KM** EAST-NORTHEAST OF ADEN. IT WOULD MOVE WEST-NORTHWESTWARDS AND CROSS YEMEN COAST NEAR LATITUDE 13.2 DEGREE NORTH (NORTHEAST OF ADEN) AROUND 0600 UTC OF 10<sup>TH</sup> NOVEMBER AND THEN WEAKEN GRADUALLY.

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 2.0/CI 3.0. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 45 KNOTS GUSTING TO 55 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 994 HPA. STATE OF SEA AROUND SYTEM CENTRE IS VERY HIGH. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER THE AREA BETWEEN LATITUDE 12.5 DEGREE NORTH TO 14.5 DEGREE NORTH AND LONGITUDE 46.0 DEGREE EAST TO 48.0 DEGREE EAST. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 80°C. THE CLOUD ORGANISATION CONTINUES TO SHOW SIGNS OF WEAKENING.

#### FORECAST FOR TRACK AND INTENSITY OF THE SYSTEM ARE GIVEN IN THE TABLE BELOW

DATE/TIME(UTC)	POSITION	MAXIMUM SUSTAINED	CATEGORY OF CYCLONIC
	(LAT. <sup>0</sup> N/ LONG. <sup>0</sup> E)	SURFACE WIND SPEED (KMPH)	DISTURBANCE
10-11-2015/0830	13.1/45.6	80-90 gusting to 100	Cyclonic Storm (CS)
10-11-2015/1130	13.3/45.2	60-70 gusting to 80	Cyclonic Storm (CS)
10-11-2015/1730	13.8/44.6	40-50 gusting to 60	Depression (D)
10-11-2015/2330	14.2/44.0	20-30 gusting to 40	Low(L)

## **REMARKS:**

THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 14°N IN ASSOCIATION WITH AN ANTICYCLONIC CIRCULATION LOCATED TO THE NORTHEAST OF THE SYSTEM CENTRE.

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

THE SYSTEM WOULD MOVE WEST-NOTHWESTWARDS UNDER THE INFLUENCE OF THE ABOVE RIDGE AND ANTI-CYCLONIC CIRCULATION.

THE LOW LEVEL RELATIVE VORTICITY IS  $50 \times 10^{-5}$  SEC<sup>-1</sup>, CONVERGENCE IS  $10 \times 10^{-5}$  SEC-1 AND UPPER LEVEL DIVERGENCE IS  $20 \times 10^{-5}$  SEC<sup>-1</sup>. THE VERTICAL WIND SHEAR IS ABOUT 5-10 KNOTS AROUND THE SYSTEM CENTRE. THE SYSTEM WOULD WEAKEN RAPIDLY, DUE TO LOWER OCEAN THERMAL ENERGY OVER GULF OF ADEN AND INTERACTION WITH LAND SURFACE.

#### **BAY OF BENGAL & ANDAMAN SEA**

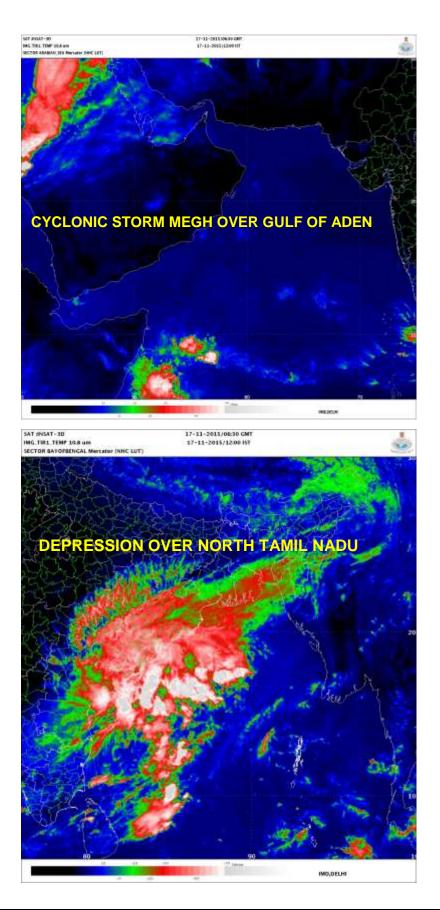
THE **DEEP DEPRESSION** OVER NORTH TAMIL NADU MOVED SLOWLY WESTWARDS WITH A SPEED OF 7 KMPH DURING PAST 6 HOURS, WEAKENED INTO A DEPRESSION AND LAY CENTRED AT **0300** UTC OF TODAY, THE 10TH NOVEMBER 2015 OVER NORTH TAMILNADU NEAR LATITUDE **12.4°N** AND LONGITUDE **79.3°E,**ABOUT 80 KM EAST OF TIRUPPATTUR AND 60 KM SOUTH-SOUTHEAST OF VELLORE. IT WOULD MOVE WESTWARDS AND WEAKEN FURTHER INTO A WELL MARKED LOW PRESSURE AREA DURING NEXT 12 HRS.

MAXIMUM SUSTAINED SURFACE WIND SPEED IS 25 KNOTS GUSTING TO 35 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 1003 HPA. STATE OF SEA ALONG AND OFF NORTH TAMILNADU COAST AND PUDUCHERRY COAST IS ROUGH. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDEDMODERATE TO INTENSE CONVECTION LIE OVER TAMIL NADU, KERALA, SOUTHINTERIOR KARNATAKA, SOUTH COASTAL ANDHRA PRADESH, RAYALASEEMA AND BAY OF BENGAL OVER AREA BETWEEN LATITUDE 10.0 DEGREE NORTH TO 16.0 °N AND WEST OF LONGITUDE 84.0 °E. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 70.0 °C.

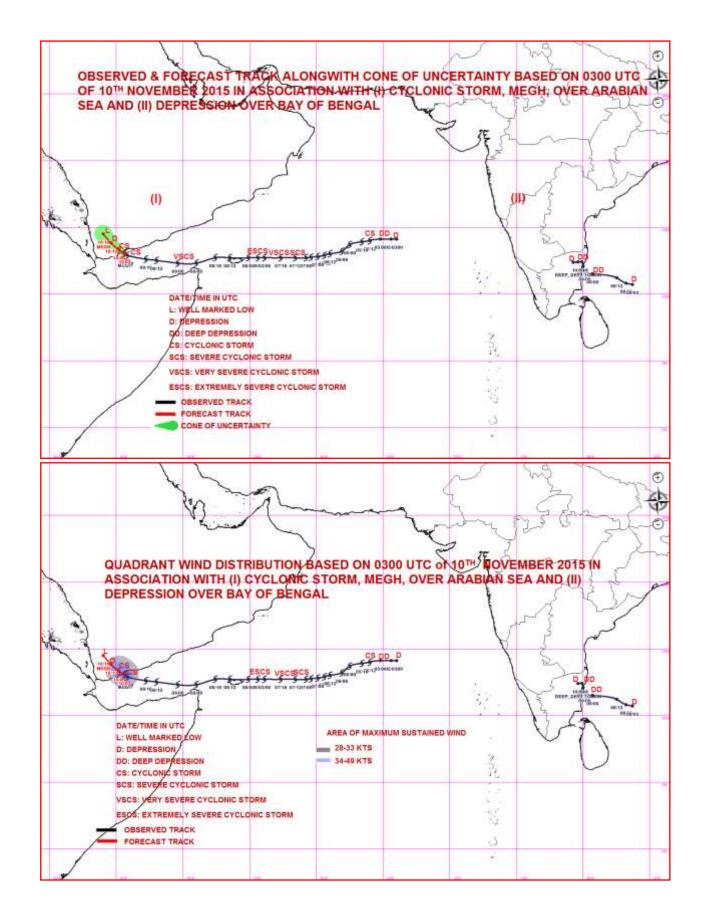
#### **REMARKS:**

THE LOW LEVEL RELATIVE VORTICITY IS  $150 \times 10^{-5}$  SEC<sup>-1</sup>, CONVERGENCE IS  $20 \times 10^{-5}$  SEC-1, AND UPPER LEVEL DIVERGENCE IS  $20 \times 10^{-5}$  SEC<sup>-1</sup> TO THE NORTH OF SYSTEM CENTRE. THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 17°N IN ASSOCIATION WITH THE ANTI-CYCLONIC CIRCULATION TO THE NORTHEAST. THE VERTICAL WIND SHEAR IS ABOUT 20-30 KNOTS AROUND THE SYSTEM CENTRE. DUE TO LAND INTERACTION AND HIGH VERTICAL WIND SHEAR THE THE DEPRESSION WOULD WEAKEN INTO A WELL MARKED LOW PRESSURE AREA DURING NEXT 12 HOURS.

(M.MOHAPATRA) HEAD-RSMC NEW DELHI



PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)
NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%







FROM: RSMC-TROPICAL CYCLONES, NEW DELHI

TO: STORM WARNING CENTRE, NAYPYI TAW (MYANMAR)

STORM WARNING CENTRE, BANGKOK (THAILAND)
STORM WARNING CENTRE, COLOMBO (SRILANKA)
STORM WARNING CENTRE, DHAKA (BANGLADESH)
STORM WARNING CENTRE, KARACHI (PAKISTAN)

METEOROLOGICAL OFFICE, MALE (MALDIVES)

OMAN METEOROLOGICAL DEPARTMENT, MUSCAT (THROUGH RTH JEDDAH)

TROPICAL CYCLONE ADVISORY

**RSMC - TROPICAL CYCLONES, NEW DELHI** 

TROPICAL STORM 'MEGH' ADVISORY NO. THIRTY NINE ISSUED AT 0900 UTC OF 10<sup>TH</sup> NOVEMBER 2015 BASED ON 0600 UTC CHARTS OF 10<sup>TH</sup> NOVEMBER 2015.

THE CYCLONIC STORM 'MEGH' MOVED WEST-NORTHWESTWARDS WITH A SPEED OF 5 KMPH DURING PAST SIX HOURS, RAPIDLY WEAKENED INTO A **DEEP DEPRESSION** AND LAY CENTRED AT **0600** HOURS UTC OF TODAY, THE 10TH NOVEMBER 2015 OVER **GULF OF ADEN** NEAR LATITUDE **13.1°N** AND LONGITUDE **45.6°E**, ABOUT **70 KM** EAST-NORTHEAST OF ADEN. IT WOULD MOVE NORTHWESTWARDS, WEAKEN FURTHER AND CROSS YEMEN COAST NEAR LATITUDE 13.3 DEGREE NORTH (NORTHEAST OF ADEN) AROUND 0600 UTC OF 10<sup>TH</sup> NOVEMBER. DUE TO RAPID WEAKENING OF THE SYSTEM, THERE IS ALSO POSSIBILITY OF THE DISSIPATION OF THE DEEP DEPRESSION OVER GULF OF ADEN CLOSE TO YEMEN COAST.

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 2.0. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 30 KNOTS GUSTING TO 40 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 1000 HPA. STATE OF SEA AROUND SYTEM CENTRE IS VERY ROUGH. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LIE OVER THE AREA BETWEEN LATITUDE 12.5 DEGREE NORTH TO 14.5 DEGREE NORTH AND LONGITUDE 46.0 DEGREE EAST TO 48.0 DEGREE EAST. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 60°C. THE CLOUD ORGANISATION SHOWS RAPID WEAKENING.

#### FORECAST FOR TRACK AND INTENSITY OF THE SYSTEM ARE GIVEN IN THE TABLE BELOW

DATE/TIME(UTC)	POSITION	MAXIMUM SUSTAINED	CATEGORY OF CYCLONIC
	(LAT. <sup>0</sup> N/ LONG. <sup>0</sup> E)	SURFACE WIND SPEED (KMPH)	DISTURBANCE
10-11-2015/0600	13.1/45.6	55-65 gusting to 75	Deep Depression (DD)
10-11-2015/1200	13.6/45.1	40-50 gusting to 60	Depression (D)
10-11-2015/1800	14.4/44.8	20-30 gusting to 40	Low(L)

## **REMARKS:**

THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 14°N IN ASSOCIATION WITH AN ANTICYCLONIC CIRCULATION LOCATED TO THE NORTHEAST OF THE SYSTEM CENTRE. IT WOULD STEER THE SYSTEM NORTH-NOTHWESTWARDS. THE LOW LEVEL RELATIVE VORTICITY IS 50 x  $10^{-5}$  SEC<sup>-1</sup>, CONVERGENCE IS  $20 \times 10^{-5}$  SEC<sup>-1</sup> AND UPPER LEVEL DIVERGENCE IS  $10 \times 10^{-5}$  SEC<sup>-1</sup>. THE VERTICAL WIND SHEAR IS ABOUT 5-10 KNOTS AROUND THE SYSTEM CENTRE. THE SYSTEM WOULD WEAKEN RAPIDLY, DUE TO LOWER OCEAN THERMAL ENERGY OVER GULF OF ADEN AND INTERACTION WITH LAND SURFACE.

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

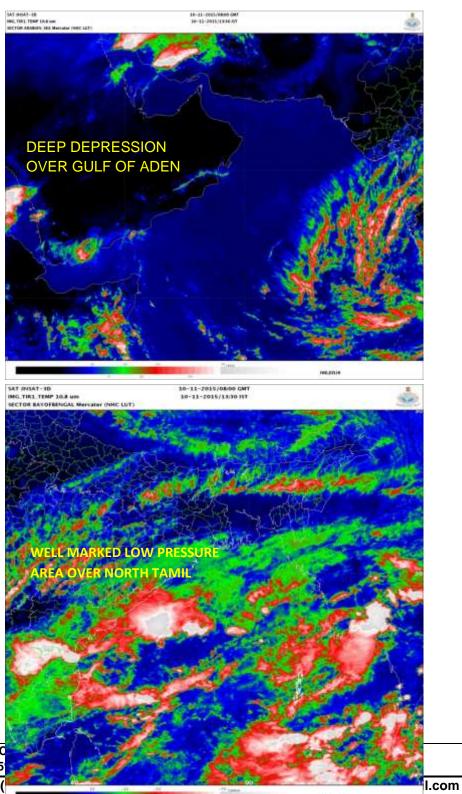
NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

## **BAY OF BENGAL & ANDAMAN SEA**

THE **DEPRESSION** OVER NORTH TAMIL NADU MOVED SLOWLY WESTWARDS AND WEAKENED INTO A **WELL MARKED LOW PRESSURE AREA** AT **0600 UTC** OF TODAY, THE 10TH NOVEMBER 2015 OVER NORTH TAMIL NADU AND NEIGHBOURHOOD IT WOULD MOVE WESTWARDS AND WEAKEN FURTHER DURING NEXT 24 HRS.

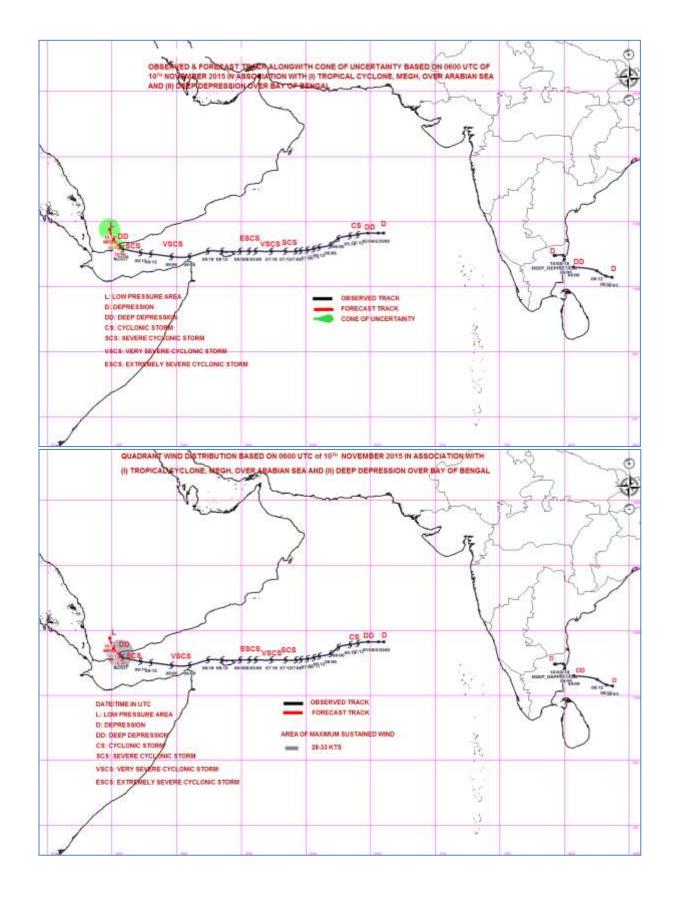
## THIS IS THE LAST BULLETIN FOR THIS SYSTEM.

(M.MOHAPATRA) HEAD-RSMC NEW DELHI



PROBABILITY OF C NIL: 0%, LOW: 1-25

Contact: Phone: (







# REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI SPECIAL TROPICAL WEATHER OUTLOOK

## DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 10-11-2015

TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 72 HOURS ISSUED AT 1500 UTC OF 10<sup>th</sup> NOVEMBER 2015 BASED ON 1200 UTC OF 10<sup>th</sup> NOVEMBER.

THE **DEEP DEPRESSION** OVER GULF OF ADEN MOVED NORTHEASTWARDS WITH A SPEED OF 12 KMPH DURING PAST SIX HOURS, CROSSED **YEMEN COAST** NEAR LATITUDE 13.4 DEGREE NORTH AND LONGITUDE 46.1 DEGREE EAST, ABOUT 120 KMS, EAST-NORTHEAST OF ADEN AROUND 0900 UTC OF TODAY, THE 10TH NOVEMBER 2015. AFTER LANDFALL, THE DEEP DEPRESSION MOVED EAST-NORTHEASTWARDS, WEAKENED INTO A **DEPRESSION** AND LAY CENTRED AT **1200** UTC OF TODAY, THE 10TH NOVEMBER 2015 OVER COASTAL **YEMEN** NEAR LATITUDE **13.6** DEGREE NORTH AND LONGITUDE **46.5** DEGREE EAST, ABOUT 180 KM EAST-NORTHEAST OF ADEN. IT WOULD MOVE EAST-NORTHEASTWARDS AND WEAKEN FURTHER INTO A LOW PRESSURE AREA DURING NEXT TWELVE HOURS.

MAXIMUM SUSTAINED SURFACE WIND SPEED IS 20 KNOTS GUSTING TO 30 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 1002 HPA. STATE OF SEA ALONG AND OFF YEMEN COAST IS ROUGH. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LIE OVER THE AREA BETWEEN LATITUDE 13.0 DEGREE NORTH TO 14.5 DEGREE NORTH AND LONGITUDE 45.0 DEGREE EAST TO 47.5 DEGREE EAST. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 49°C.

# NEXT BULLETIN WILL BE ISSUED AT 0600 UTC OF 11<sup>TH</sup> NOVEMBER 2015

(M.MOHAPATRA) HEAD-RSMC NEW DELHI

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

