



**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 0600 UTC of 28<sup>TH</sup> OCTOBER 2015 BASED ON 0300 UTC**

**ARABIAN SEA**

YESTERDAYS LOW PRESSURE AREA OVER SOUTHEAST AND ADJOINING SOUTHWEST ARABIAN SEA CONCENTRATED INTO A DEPRESSION AND LAY CENTRED AT 0300 UTC OF TODAY THE 28<sup>TH</sup> OCTOBER 2015 OVER SOUTHEAST AND ADJOINING SOUTHWEST AND CENTRAL ARABIAN SEA NEAR LATITUDE 11.5<sup>0</sup> N AND LONGITUDE 65.0<sup>0</sup> E, ABOUT 1200 KM SOUTHWEST OF MUMBAI (43003) AND 1320 KM SOUTHEAST OF SALALAH (41316), OMAN. IT WOULD MOVE NORTH-NORTHWESTWARDS AND INTENSIFY INTO A DEEP DEPRESSION DURING NEXT 24 HRS AND INTO A CYCLONIC STORM DURING SUBSEQUENT 24 HOURS. IT WOULD THEN MOVE WESTWARDS TOWARDS YAMEN AND ADJOINING OMAN COAST.

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 10.0 DEGREE NORTH TO 16.0 DEGREE NORTH AND LONGITUDE 62.0 DEGREE EAST TO 70.0 DEGREE EAST.

**REMARKS:** THE CONVECTION INCREASED IN PAST 12 HOURS WITH INCREASE IN ORGANISATION. THE WINDS ARE HIGHER OVER THE NORTHEASTERN SECTOR. THE SEA SURFACE TEMPERATURE AROUND THE REGION OF DEPRESSION IS 30<sup>0</sup>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 GULF OF ADEN AND ADJOINING ARABIAN SEA. THE VERTICAL WIND SHEAR IS ABOUT 10-20 KNOTS (MODERATE) AROUND THE SYSTEM CENTRE. IT IS LESS AND 5-10 KNOTS TO THE WEST-NORTHWEST OF THE SYSTEM CENTRE. THE LOW LEVEL RELATIVE VORTICITY AND CONVERGENCE HAVE INCREASED DURING PAST 12 HRS. THERE IS FAVOURABLE POLEWARD 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 13<sup>0</sup>N. MOST OF THE NUMERICAL WEATHER PREDICTION MODELS ARE SUGGESTING GRADUAL INTENSIFICATION OF THE DEPRESSION INTO A DEEP DEPRESSION DURING NEXT 24 HRS AND INTO A CYCLONIC STORM IN SUBSEQUENT 24 HRS. DYNAMICAL STATISTICAL MODELS ALSO SUGGEST THE GRADUAL INTENSIFICATION OF THE SYSTEM. CONSIDERING THE MOVEMENT, MOST OF THE MODELS ARE UNANIMOUS ABOUT INITIAL NORTH-NORTHWESTWARD UPTO 1200 UTC OF 29 OCT. AND THEN WESTWARD/WEST-NORTHWESTWARD MOVEMENT TOWARDS YEMEN AND ADJOINING OMAN COAST ACROSS GULF OF ADEN. THE GLOBAL MODELS IN THEIR 10 DAYS FORECAST SUGGEST THE SYSTEM TO REACH NORTH YEMEN AND ADJOINING OMAN COAST BY 3<sup>RD</sup> NOVEMBER 2015.

**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**

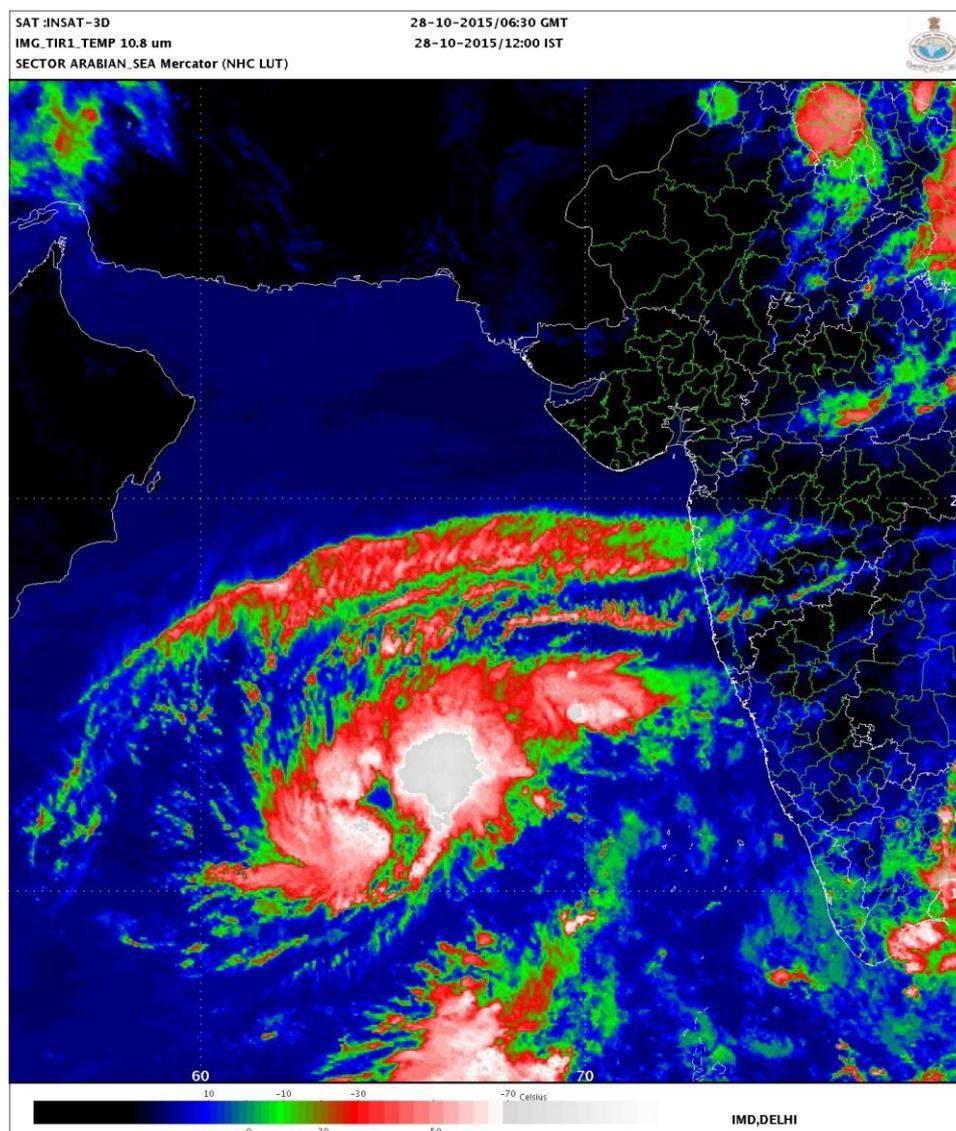
## BAY OF BENGAL

YEASTERDAYS LOW PRESSURE AREA OVER SOUTHWEST BAY OF ABENGAL NOW LIES OVER SOUTHWEST BAY AND ADJOINING SRI LANKA COAST. THE ENVIRONMENTAL CONDITIONS AND THE NUMERICAL GUIDANCE DO NOT SUGGEST INTENSIFICATION OF THE SYSTEM DURING NEXT 72 HRS.

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

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

(M.MOHAPATRA)  
HEAD-RSMC, NEW DELHI



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#### PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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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 1500 UTC of 28<sup>TH</sup> OCTOBER 2015 BASED ON 1200 UTC**

**ARABIAN SEA**

THE **DEPRESSION** OVER SOUTHEAST ARABIAN SEA AND ADJOINING AREAS OF SOUTHWEST AND CENTRAL ARABIAN SEA MOVED NORTH-NORTHWESTWARDS AND INTENSIFIED INTO A **DEEP DEPRESSION** AND LAY CENTERED AT 1200 UTC OF TODAY, THE 28TH OCTOBER 2015 OVER EAST CENTRAL AND ADJOINING WESTCENTRAL AND SOUTH ARABIAN SEA NEAR LATITUDE 12.5°N AND LONGITUDE 64.7°E, ABOUT 1350 KM SOUTHWEST OF MUMBAI(43003) AND ABOUT 1250 KM SOUTHEAST OF SALALAH (41316)(OMAN). IT WOULD MOVE NORTH-NORTHWESTWARDS AND INTENSIFY INTO A CYCLONIC STORM DURING NEXT 24 HOURS. IT WOULD THEN MOVE WESTWARDS TOWARDS YEMEN AND ADJOINING OMAN COAST.

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

Date/time(utc)	Position (lat. °n/ long. °e)	Maximum sustained surface Wind speed (kmph)	Category of cyclonic Disturbance
28-10-2015/1200	12.5/64.7	50-60 gusting to 70	Deep depression
28-10-2015/1800	12.7/64.5	55-65 gusting to 75	Deep depression
29-10-2015/0000	13.0/64.3	60-70 gusting to 80	Cyclonic storm
29-10-2015/0600	13.4/63.8	65-75 gusting to 85	Cyclonic storm
29-10-2015/1200	13.8/63.4	70-80 gusting to 90	Cyclonic storm
30-10-2015/0000	14.0/62.5	90-100 gusting to 110	Severe cyclonic storm
30-10-2015/1200	14.0/61.4	100-110 gusting to 120	Severe cyclonic storm
31-10-2015/0000	14.1/60.2	110-120 gusting to 130	Severe cyclonic storm
31-10-2015/1200	14.2/58.9	110-120 gusting to 130	Severe cyclonic storm
01-11-2015/0000	14.3/58.0	110-120 gusting to 130	Severe cyclonic storm
01-11-2015/1200	14.4/56.8	110-120 gusting to 130	Severe cyclonic storm
02-11-2015/0000	14.5/55.6	110-120 gusting to 130	Severe cyclonic storm
02-11-2015/1200	14.6/54.4	110-120 gusting to 130	Severe cyclonic storm

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 1003 HPA. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION OVER ARABIAN SEA LIE BETWEEN LATITUDE 9.0 DEGREE NORTH TO 15.0 DEGREE NORTH AND LONGITUDE 62.0 DEGREE EAST TO 70.0 DEGREE EAST. THE CLOUD TOP TEMPERATURE AROUND THE SYSTEM CENTRE IS MINUS 78°C.

**REMARKS:** THE CONVECTION INCREASED IN PAST 12 HOURS WITH INCREASE IN ORGANISATION. THE WINDS ARE HIGHER OVER THE NORTHEASTERN SECTOR. THE SEA

**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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SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS 30°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 GULF OF ADEN AND ADJOINING ARABIAN SEA. THE VERTICAL WIND SHEAR IS ABOUT 10-20 KNOTS (MODERATE) AROUND THE SYSTEM CENTRE. THE LOW LEVEL RELATIVE VORTICITY AND CONVERGENCE HAVE INCREASED DURING PAST 12 HRS. THERE IS FAVOURABLE POLEWARD 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 13<sup>0</sup>N. MOST OF THE NUMERICAL WEATHER PREDICTION MODELS ARE SUGGESTING GRADUAL INTENSIFICATION OF THE DEEP DEPRESSION INTO A CYCLONIC STORM IN NEXT 24 HRS. DYNAMICAL STATISTICAL MODELS ALSO SUGGEST THE GRADUAL INTENSIFICATION OF THE SYSTEM. CONSIDERING THE MOVEMENT, MOST OF THE MODELS ARE UNANIMOUS ABOUT INITIAL NORTH-NORTHWESTWARD UPTO 1200 UTC OF 29 OCT. AND THEN WESTWARD/WEST-NORTHWESTWARD MOVEMENT TOWARDS YEMEN AND ADJOINING OMAN COAST ACROSS GULF OF ADEN.

#### **BAY OF BENGAL**

THE LOW PRESSURE AREA OVER SOUTHWEST BAY OF ABENGAL NOW LIES OVER SOUTHWEST BAY AND ADJOINING SRI LANKA COAST. THE ENVIRONMENTAL CONDITIONS AND THE NUMERICAL GUIDANCE DO NOT SUGGEST INTENSIFICATION OF THE SYSTEM DURING NEXT 72 HRS.

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

<b>24 HOURS</b>	<b>24-48 HOURS</b>	<b>48-72 HOURS</b>
<b>NIL</b>	<b>NIL</b>	<b>NIL</b>

(M.MOHAPATRA)  
HEAD-RSMC, NEW DELHI

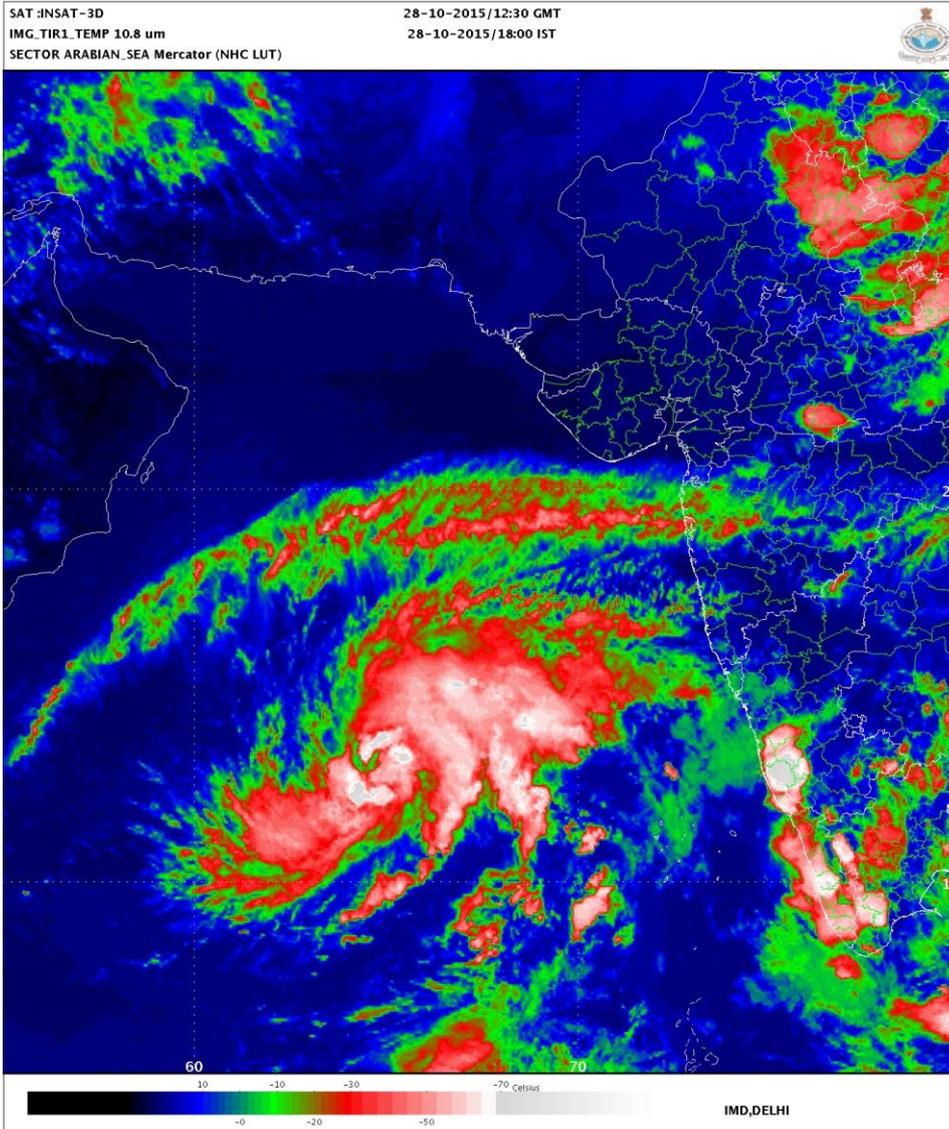
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**PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)**

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

**TROPICAL CYCLONE ADVISORY BULLETIN**

**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 'CHAPALA' ADVISORY NO. ONE ISSUED AT 0300 UTC OF 29TH OCTOBER 2015 BASED ON 0000 UTC CHARTS.**

THE DEEP **DEPRESSION** OVER EASTCENTRAL AND ADJOINING WESTCENTRAL & SOUTH ARABIAN SEA MOVED NORTH-NORTHWESTWARDS WITH A SPEED OF ABOUT 10 KMPH IN PAST 12 HOURS, INTENSIFIED INTO A **CYCLONIC STORM**, '**CHAPALA**' AND LAY CENTERED AT 0000 UTC OF TODAY, THE 29TH OCTOBER 2015 OVER EAST CENTRAL AND ADJOINING WESTCENTRAL & SOUTH ARABIAN SEA NEAR LATITUDE 13.7°N AND LONGITUDE 64.3°E, ABOUT 1080 KM SOUTHWEST OF MUMBAI (43003) AND ABOUT 1150 KM EAST-SOUTHEAST OF SALALAH (41316)(OMAN). IT WOULD MOVE NORTH-NORTHWESTWARDS AND INTENSIFY INTO A SEVERE CYCLONIC STORM DURING NEXT 24 HOURS. IT WOULD THEN MOVE WESTWARDS TOWARDS YEMEN AND ADJOINING OMAN COAST.

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

<b>Date/time(UTC)</b>	<b>Position (lat. °N/ long. °E)</b>	<b>Maximum sustained surface wind speed (kmph)</b>	<b>Category of cyclonic Disturbance</b>
29-10-2015/0000	13.7/64.3	60-70 gusting to 80	Cyclonic storm
29-10-2015/0600	14.0/64.1	70-80 gusting to 90	Cyclonic storm
29-10-2015/1200	14.2/63.6	80-90 gusting to 90	Cyclonic storm
29-10-2015/1800	14.3/63.1	90-100 gusting to 110	Severe cyclonic storm
30-10-2015/0000	14.4/62.6	100-110 gusting to 120	Severe cyclonic storm
30-10-2015/1200	14.6/61.6	120-130 gusting to 145	Very Severe cyclonic storm
31-10-2015/0000	14.7/60.3	130-140 gusting to 155	Very Severe cyclonic storm
31-10-2015/1200	14.8/59.0	150-160 gusting to 175	Very Severe cyclonic storm
01-11-2015/0000	15.0/57.7	160-170 gusting to 185	Very Severe cyclonic storm
01-11-2015/1200	15.2/56.2	170-180 gusting to 195	Extremely Severe cyclonic storm
02-11-2015/0000	15.4/54.7	170-180 gusting to 195	Extremely Severe cyclonic storm
02-11-2015/1200	15.7/53.2	160-170 gusting to 185	Very Severe cyclonic storm
03-11-2015/0000	16.0/51.7	140-150 gusting to 165	Very Severe cyclonic storm

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**REMARKS:** THE CONVECTION INCREASED IN PAST 12 HOURS WITH INCREASE IN ORGANISATION. THE WINDS ARE HIGHER OVER THE NORTHEASTERN SECTOR. THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS 30°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 GULF OF ADEN AND ADJOINING ARABIAN SEA. THE VERTICAL WIND SHEAR IS ABOUT 10-20 KNOTS (MODERATE) AROUND THE SYSTEM CENTRE. THE LOW LEVEL RELATIVE VORTICITY AND CONVERGENCE HAVE INCREASED DURING PAST 12 HRS. THERE IS FAVOURABLE POLEWARD 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 15°N. MOST OF THE NUMERICAL WEATHER PREDICTION MODELS ARE SUGGESTING GRADUAL INTENSIFICATION OF THE CYCLONIC STORM INTO SEVERE CYCLONIC STORM IN NEXT 24 HRS. DYNAMICAL STATISTICAL MODELS ALSO SUGGEST THE GRADUAL INTENSIFICATION OF THE SYSTEM. CONSIDERING THE MOVEMENT, MOST OF THE MODELS ARE UNANIMOUS ABOUT INITIAL NORTH-NORTHWESTWARD UPTO 1200 UTC OF 29 OCT. AND THEN WESTWARD/WEST-NORTHWESTWARD MOVEMENT TOWARDS YEMEN AND ADJOINING OMAN COAST ACROSS GULF OF ADEN.

(M.MOHAPATRA)  
HEAD-RSMC, NEW DELHI

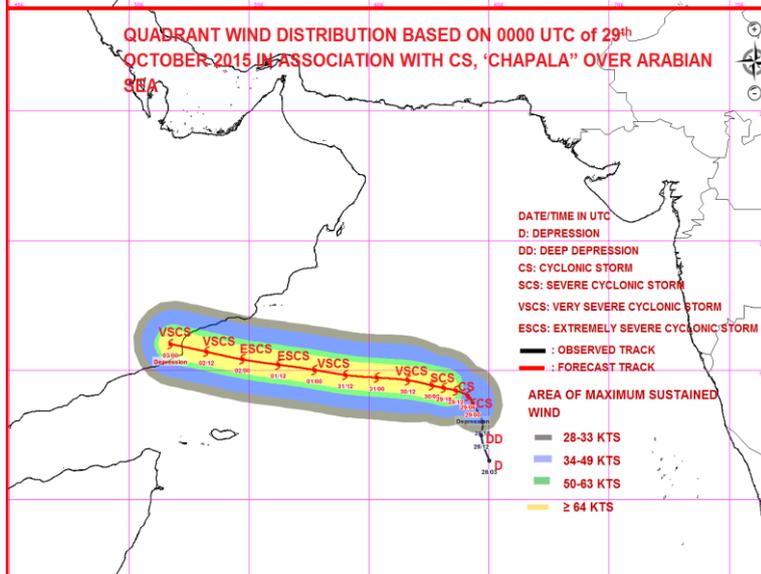
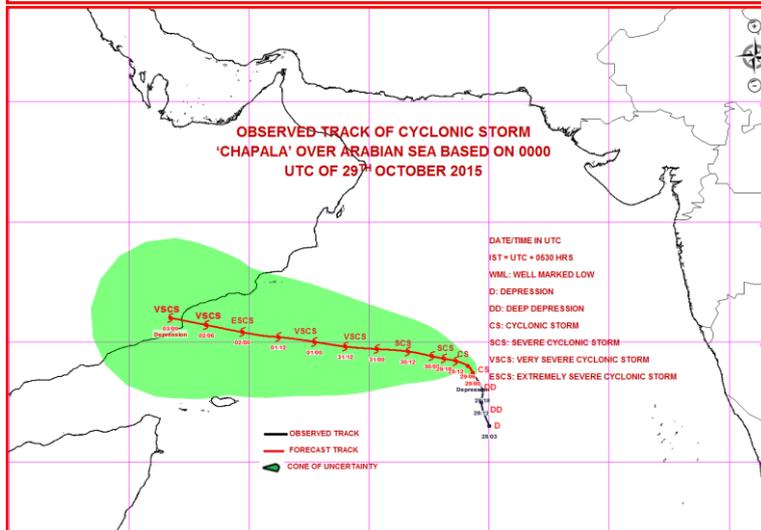
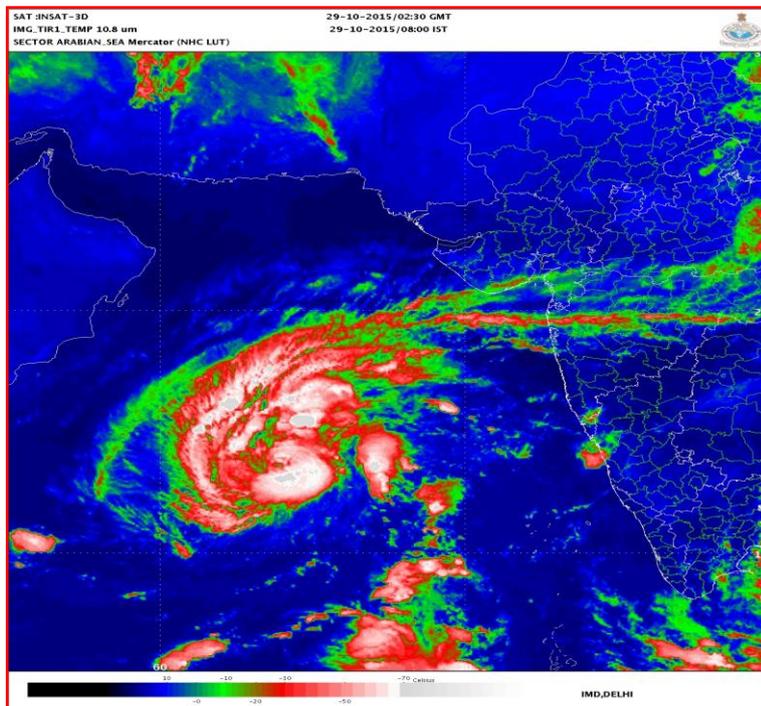
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**PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)**

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

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**FROM: RSMC –TROPICAL CYCLONES, NEW DELHI**

**TO: STORM WARNING CENTRE, NAYPYI TAW (MYANMAR)  
STORM WARNING CENTRE, BANGKOK (THAILAND)  
STORM WARNING CENTRE, COLOMBO (SRILANKA)  
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STORM WARNING CENTRE, KARACHI (PAKISTAN)  
METEOROLOGICAL OFFICE, MALE (MALDIVES)  
OMAN METEOROLOGICAL DEPARTMENT, MUSCAT (THROUGH RTH  
JEDDAH)**

**TROPICAL CYCLONE ADVISORY**

**RSMC – TROPICAL CYCLONES, NEW DELHI**

**ARABIAN SEA**

**TROPICAL STORM ‘CHAPALA’ ADVISORY NO. TWO ISSUED AT 0600 UTC OF 29TH OCTOBER 2015 BASED ON 0300 UTC CHARTS.**

THE **CYCLONIC STORM, ‘CHAPALA’** OVER EASTCENTRAL AND ADJOINING AREAS OF WESTCENTRAL & SOUTH ARABIAN SEA MOVED NORTHWESTWARDS WITH A SPEED OF ABOUT 10 KMPH DURING PAST 6 HOURS AND LAY CENTERED AT 0300 UTC OF TODAY, THE 29TH OCTOBER 2015 OVER EASTCENTRAL AND ADJOINING WESTCENTRAL & SOUTH ARABIAN SEA NEAR LATITUDE 13.8°N AND LONGITUDE 64.2°E, ABOUT 1090 KM SOUTHWEST OF MUMBAI (43003) AND ABOUT 1140 KM EAST-SOUTHEAST OF SALALAH (41316) (OMAN). IT WOULD MOVE NORTHWESTWARDS DURING NEXT 6 HOURS AND THEN MOVE WESTWARDS TOWARDS YEMEN AND ADJOINING OMAN COAST. IT WOULD INTENSIFY INTO A SEVERE CYCLONIC STORM DURING NEXT 24 HOURS AND INTO A VERY SEVERE CYCLONIC STORM IN SUBSEQUENT 12 HOURS.

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

<b>Date/time(UTC)</b>	<b>Position (lat. °N/ long. °E)</b>	<b>Maximum sustained surface wind speed (kmph)</b>	<b>Category of cyclonic Disturbance</b>
29-10-2015/0300	13.8/64.2	60-70 gusting to 80	Cyclonic storm
29-10-2015/0600	14.0/64.1	70-80 gusting to 90	Cyclonic storm
29-10-2015/1200	14.2/63.6	80-90 gusting to 90	Cyclonic storm
29-10-2015/1800	14.3/63.1	90-100 gusting to 110	Severe cyclonic storm
30-10-2015/0000	14.4/62.6	100-110 gusting to 120	Severe cyclonic storm
30-10-2015/1200	14.6/61.6	120-130 gusting to 145	Very Severe cyclonic storm
31-10-2015/0000	14.7/60.3	130-140 gusting to 155	Very Severe cyclonic storm
31-10-2015/1200	14.8/59.0	150-160 gusting to 175	Very Severe cyclonic storm
01-11-2015/0000	15.0/57.7	160-170 gusting to 185	Very Severe cyclonic storm
01-11-2015/1200	15.2/56.2	170-180 gusting to 195	Extremely Severe cyclonic storm
02-11-2015/0000	15.4/54.7	170-180 gusting to 195	Extremely Severe cyclonic storm
02-11-2015/1200	15.7/53.2	160-170 gusting to 185	Very Severe cyclonic storm

**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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03-11-2015/0000	16.0/51.7	140-150 gusting to 165	Very Severe cyclonic storm
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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 1000 HPA. SEA CONDITION IS HIGH AROUND SYSTEM CENTRE. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER ARABIAN SEA BETWEEN LATITUDE 11.0 DEGREE NORTH TO 19.0 DEGREE NORTH AND LONGITUDE 61.5 DEGREE EAST TO 68.0 DEGREE EAST. THE MINIMUM CLOUD TOP TEMPERATURE AROUND THE SYSTEM CENTRE IS MINUS 74°C.

A BUOY LOCATED NEAR LATITUDE 13.9<sup>0</sup> AND LONGITUDE 61.7<sup>0</sup> REPORTED MSLP OF 1008.8 HPA. ANOTHER BUOY LOCATED NEAR LATITUDE 15.0<sup>0</sup> AND LONGITUDE 68.8<sup>0</sup> REPORTED MSLP OF 1011.8 HPA AND SURFACE WIND OF 110/08 KTS. A SHIP LOCATED NEAR LATITUDE 11.0<sup>0</sup> AND LONGITUDE 56.2<sup>0</sup> REPORTED MSLP OF 1010.3 HPA AND SURFACE WIND OF 060/11 KTS.

**REMARKS:**

THE CONVECTION INCREASED IN PAST 12 HOURS WITH INCREASE IN ORGANISATION. THE WINDS ARE HIGHER OVER THE NORTHEASTERN SECTOR. THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS 30°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 GULF OF ADEN AND ADJOINING ARABIAN SEA. THE VERTICAL WIND SHEAR IS ABOUT 10-20 KNOTS (MODERATE) AROUND THE SYSTEM CENTRE AND LESS (5-10 KNOTS) TOWARDS WEST-SOUTHWEST OF THE SYSTEM CENTRE. THE LOW LEVEL RELATIVE VORTICITY AND CONVERGENCE HAVE INCREASED DURING PAST 12 HRS. THERE IS FAVOURABLE POLEWARD 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 15<sup>0</sup>N. THERE IS ANOTHER ANTI-CYCLONIC CIRCULATION TO THE NORTHWEST OF THE SYSTEM CENTRE AND THE CYCLONIC STORM LIES IN THE SOUTHEASTERN PERIPHERY OF THIS ANTICYCLONE. IT WILL HELP IN INCREASING MORE WESTWARD COMPONENT IN THE MOVEMENT OF THE SYSTEM. THE MADDEN JULLIAN OSCILLATION INDEX LIES IN PHASE 2 WITH AMPLITUDE GREATER THAN 2 AND IT WOULD CONTINUE TO REMAIN IN SAME PHASE WITH SIMILAR AMPLITUDE FOR NEXT 5 DAYS. IT IS HIGHLY FAVOURABLE FOR INTENSIFICATION OF THE SYSTEM. AS THE SYSTEM WOULD MOVE CLOSER TO YEMEN AND ADJOINING OMAN COAST, IT WOULD EXPERIENCE LOWER OCEAN THERMAL ENERGY AS WELL AS INTRUSION OF DRY AIR FROM NORTHWEST. AS A RESULT, THERE IS POSSIBILITY OF SLIGHT WEAKENING OF THE SYSTEM OVER THE SEA BEFORE THE LANDFALL.

MOST OF THE NUMERICAL WEATHER PREDICTION MODELS ARE SUGGESTING GRADUAL INTENSIFICATION OF THE CYCLONIC STORM INTO SEVERE CYCLONIC STORM IN NEXT 24 HRS. DYNAMICAL STATISTICAL MODELS ALSO SUGGEST THE GRADUAL INTENSIFICATION OF THE SYSTEM. CONSIDERING THE MOVEMENT, MOST OF THE MODELS ARE UNANIMOUS ABOUT INITIAL NORTH-NORTHWESTWARD UPTO 1200 UTC OF 29 OCT. AND THEN WESTWARD/WEST-NORTHWESTWARD MOVEMENT TOWARDS YEMEN AND ADJOINING OMAN COAST ACROSS GULF OF ADEN.

**BAY OF BENGAL**

THE LOW PRESSURE AREA OVER SOUTHWEST BAY OF BENGAL AND ADJOINING SRI LANKA COAST HAS BECOME LESS MARKED.

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

<b>24 HOURS</b>	<b>24-48 HOURS</b>	<b>48-72 HOURS</b>
NIL	NIL	NIL

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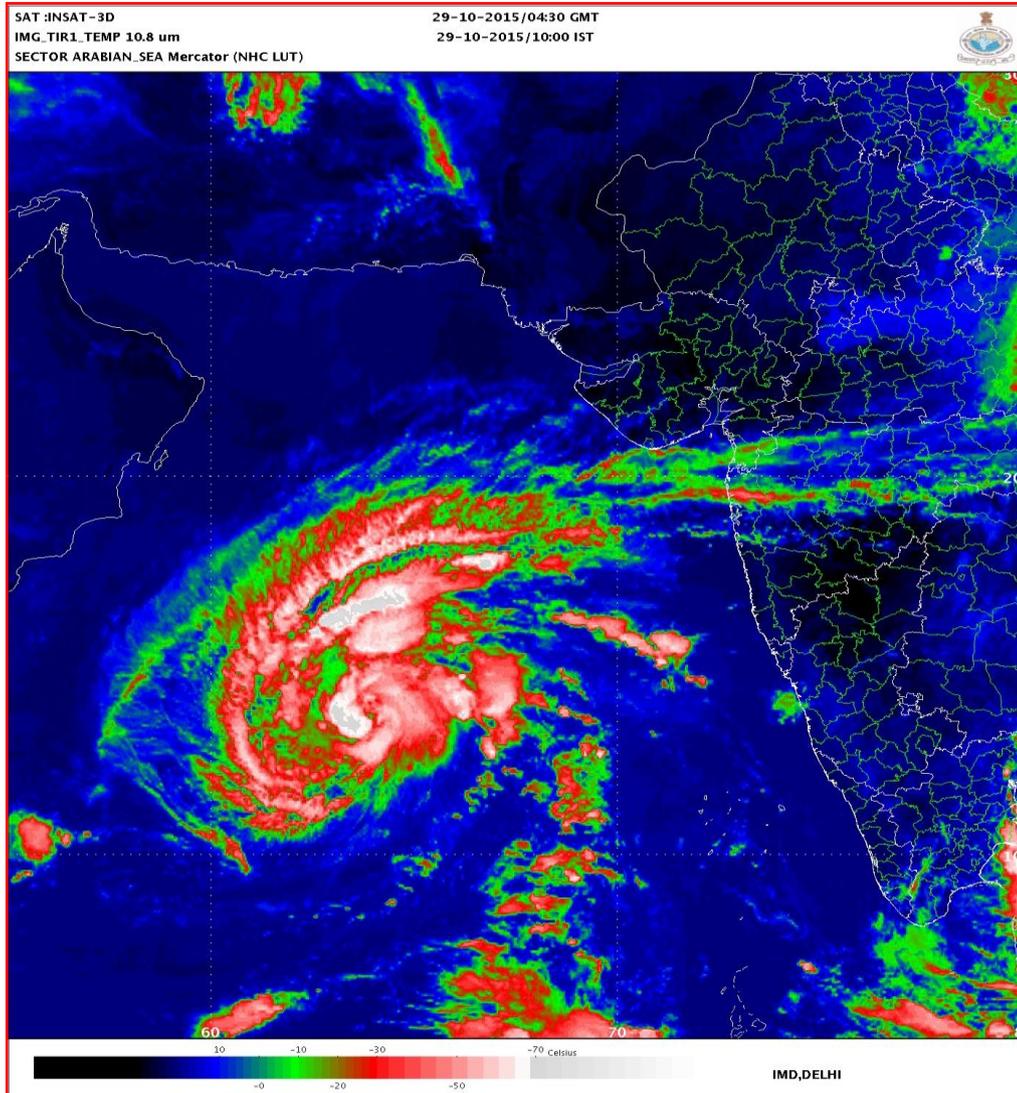
**PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)**

**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



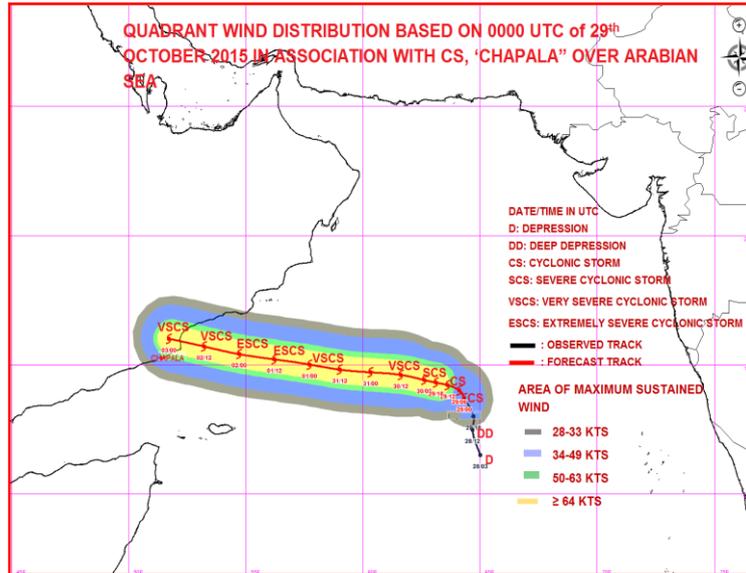
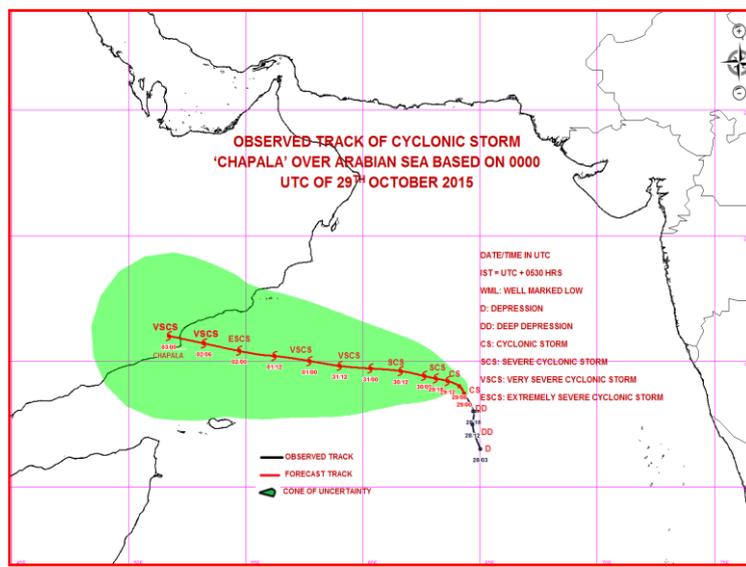
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**PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)**

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

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**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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**REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI  
TROPICAL CYCLONE ADVISORY BULLETIN**

**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**

**ARABIAN SEA**

**TROPICAL STORM ‘CHAPALA’ ADVISORY NO. THREE ISSUED AT 0900 UTC OF 29TH OCTOBER 2015 BASED ON 0600 UTC CHARTS.**

THE **CYCLONIC STORM, ‘CHAPALA’** OVER EASTCENTRAL AND ADJOINING AREAS OF WESTCENTRAL & SOUTH ARABIAN SEA MOVED WEST-NORTHWESTWARDS WITH A SPEED OF ABOUT 10 KMPH DURING PAST 6 HOURS AND LAY CENTERED AT 0600 UTC OF TODAY, THE 29TH OCTOBER 2015 OVER WESTCENTRAL AND ADJOINING EASTCENTRAL & SOUTH ARABIAN SEA NEAR LATITUDE 13.9°N AND LONGITUDE 63.8°E, ABOUT 1120 KM SOUTHWEST OF MUMBAI (43003) AND ABOUT 1100 KM EAST-SOUTHEAST OF SALALAH (41316) (OMAN). IT WOULD MOVE WEST-NORTHWESTWARDS AND INTENSIFY INTO A SEVERE CYCLONIC STORM DURING NEXT 24 HOURS AND INTO A VERY SEVERE CYCLONIC STORM IN SUBSEQUENT 12 HOURS. IT WOULD MOVE WEST-NORTHWESTWARD AND CROSS NORTH YEMEN AND ADJOINING OMAN COAST BETWEEN LATITUDE 15.0°N AND 17.0°N AROUND 1800 UTC OF 02 NOVEMBER 2015.

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

<b>Date/time(UTC)</b>	<b>Position (lat. °N/ long. °E)</b>	<b>Maximum sustained surface wind speed (kmph)</b>	<b>Category of cyclonic Disturbance</b>
29-10-2015/0600	13.9/63.8	75-85 gusting to 95	Cyclonic storm
29-10-2015/1200	14.0/63.3	80-90 gusting to 100	Cyclonic storm
29-10-2015/1800	14.2/62.8	90-100 gusting to 110	Severe cyclonic storm
30-10-2015/0000	14.3/62.3	100-110 gusting to 120	Severe cyclonic storm
30-10-2015/0600	14.4/61.8	110-120 gusting to 135	Severe cyclonic storm
30-10-2015/1800	14.3/60.8	120-130 gusting to 145	Very Severe cyclonic storm
31-10-2015/0600	14.3/59.4	140-150 gusting to 165	Very Severe cyclonic storm
31-10-2015/1800	14.2/57.8	160-170 gusting to 185	Very Severe cyclonic storm
01-11-2015/0600	14.2/56.4	170-180 gusting to 195	Extremely Severe cyclonic storm
01-11-2015/1800	14.4/55.1	160-170 gusting to 185	Very Severe cyclonic storm
02-11-2015/0600	14.9/53.5	150-160 gusting to 175	Very Severe cyclonic storm

**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**

02-11-2015/1800	15.5/51.9	140-150 gusting to 165	Very Severe cyclonic storm
03-11-2015/0600	16.2/50.3	110-120 gusting to 135	Severe cyclonic storm

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 3.0. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 40 KNOTS GUSTING TO 50 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 1000 HPA. SEA CONDITION IS HIGH AROUND SYSTEM CENTRE. ASSOCIATED LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTIVE CLOUDS AT MANY PLACES OVER AREA BETWEEN LAT 11.0°N TO 19.0°N AND LONG 61.0°E TO 68.0°E. THE MINIMUM CLOUD TOP TEMPERATURE AROUND THE SYSTEM CENTRE IS ABOUT MINUS 70°C. A BUOY LOCATED NEAR LATITUDE 13.9° AND LONGITUDE 61.7° REPORTED MSLP OF 1009.2 HPA. ANOTHER BUOY LOCATED NEAR LATITUDE 15.0° AND LONGITUDE 68.9° REPORTED MSLP OF 1011.1 HPA AND SURFACE WIND OF 100/10 KTS. A SHIP LOCATED NEAR LATITUDE 11.0° AND LONGITUDE 56.2° REPORTED MSLP OF 1011.5 HPA AND SURFACE WIND OF 050/08 KTS.

**REMARKS:**

THE CONVECTION INCREASED IN PAST 12 HOURS WITH INCREASE IN ORGANISATION. THE WINDS ARE HIGHER OVER THE NORTHEASTERN SECTOR. THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS 30°C. THE OCEAN THERMAL ENERGY IS ABOUT 50-75 KJ/CM<sup>2</sup> TO THE EAST AND NORTH OF THE SYSTEM CENTRE. IT GRADUALLY DECREASES WESTWARD AND IS ABOUT 15-35 KJ/CM<sup>2</sup> WEST OF 60°E. THE VERTICAL WIND SHEAR IS ABOUT 10 KNOTS (LOW) AROUND THE SYSTEM CENTRE. THE LOW LEVEL RELATIVE VORTICITY HAS INCREASED DURING PAST 06 HRS AND LOW LEVEL CONVERGENCE REMAINS THE SAME. THERE IS FAVOURABLE POLEWARD 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 15°N. THERE IS ANOTHER ANTI-CYCLONIC CIRCULATION TO THE NORTHWEST OF THE SYSTEM CENTRE AND THE CYCLONIC STORM LIES IN THE SOUTHEASTERN PERIPHERY OF THIS ANTICYCLONE. IT WILL HELP IN INCREASING MORE WESTWARD COMPONENT IN THE MOVEMENT OF THE SYSTEM. THE MADDEN JULLIAN OSCILLATION INDEX LIES IN PHASE 2 WITH AMPLITUDE GREATER THAN 2 AND IT WOULD CONTINUE TO REMAIN IN SAME PHASE WITH SIMILAR AMPLITUDE FOR NEXT 5 DAYS. IT IS HIGHLY FAVOURABLE FOR INTENSIFICATION OF THE SYSTEM. AS THE SYSTEM WOULD MOVE CLOSER TO YEMEN AND ADJOINING OMAN COAST, IT WOULD EXPERIENCE LOWER OCEAN THERMAL ENERGY AS WELL AS INTRUSION OF DRY AIR FROM NORTHWEST. AS A RESULT, THERE IS POSSIBILITY OF SLIGHT WEAKENING OF THE SYSTEM OVER THE SEA BEFORE THE LANDFALL.

MOST OF THE NUMERICAL WEATHER PREDICTION MODELS ARE SUGGESTING GRADUAL INTENSIFICATION OF THE CYCLONIC STORM INTO SEVERE CYCLONIC STORM IN NEXT 24 HRS. DYNAMICAL STATISTICAL MODELS ALSO SUGGEST THE GRADUAL INTENSIFICATION OF THE SYSTEM. CONSIDERING THE MOVEMENT, MOST OF THE MODELS ARE UNANIMOUS ABOUT INITIAL NORTH-NORTHWESTWARD UPTO 1200 UTC OF 29 OCT. AND THEN WESTWARD/WEST-NORTHWESTWARD MOVEMENT TOWARDS YEMEN AND ADJOINING OMAN COAST ACROSS GULF OF ADEN.

(M.MOHAPATRA)  
HEAD-RSMC, NEW DELHI

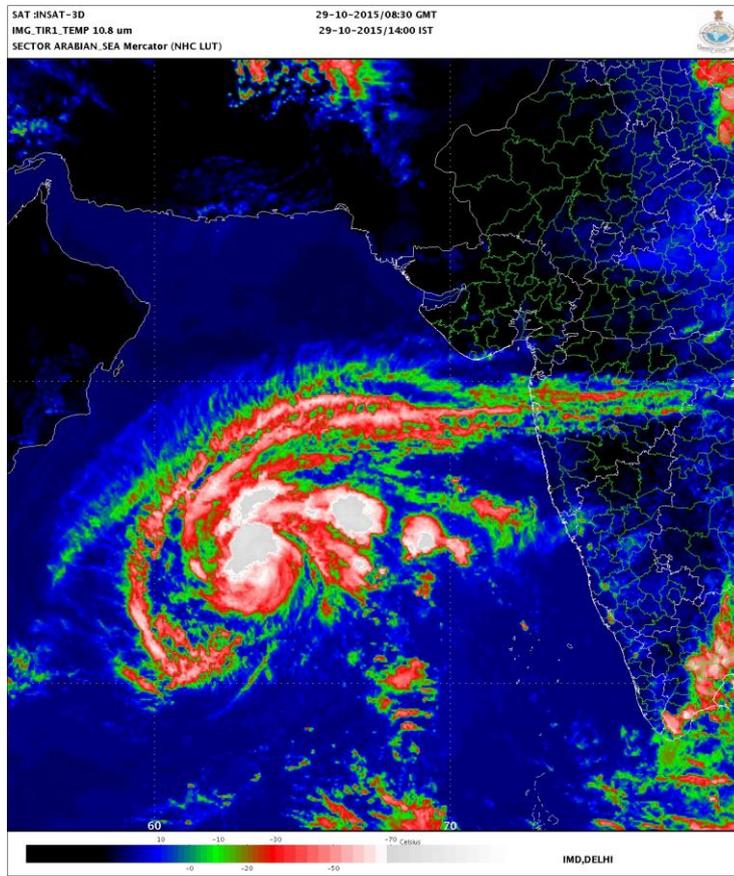
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**PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)**

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

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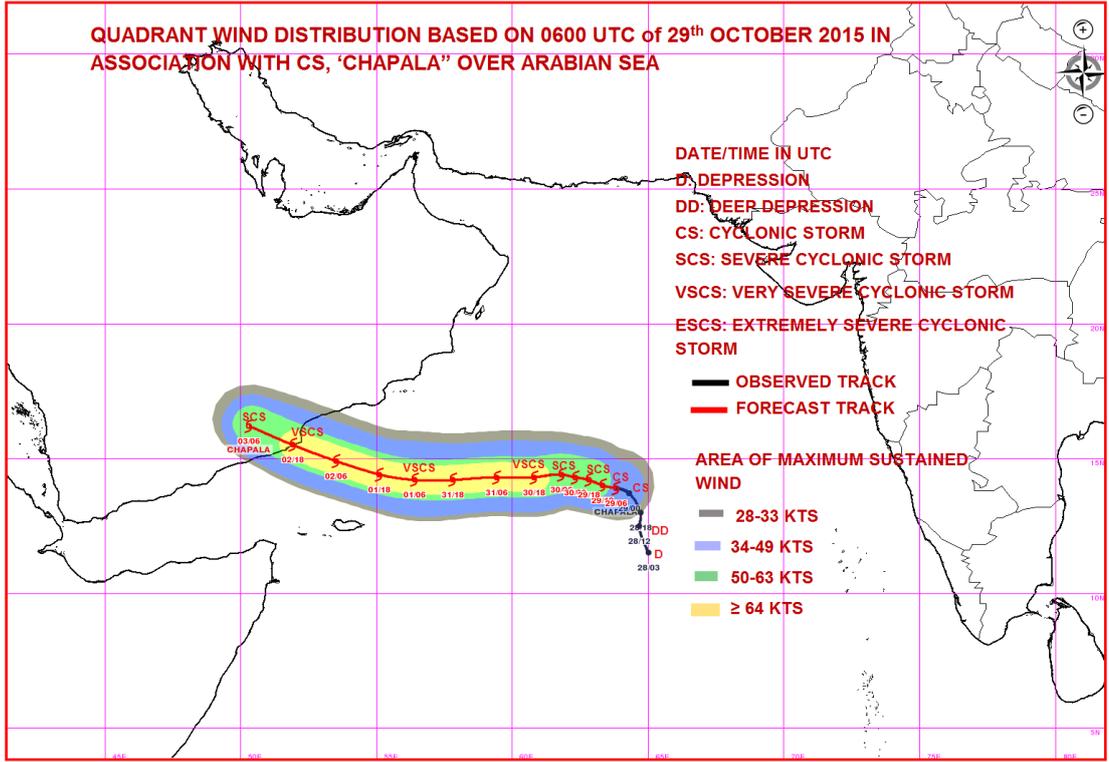
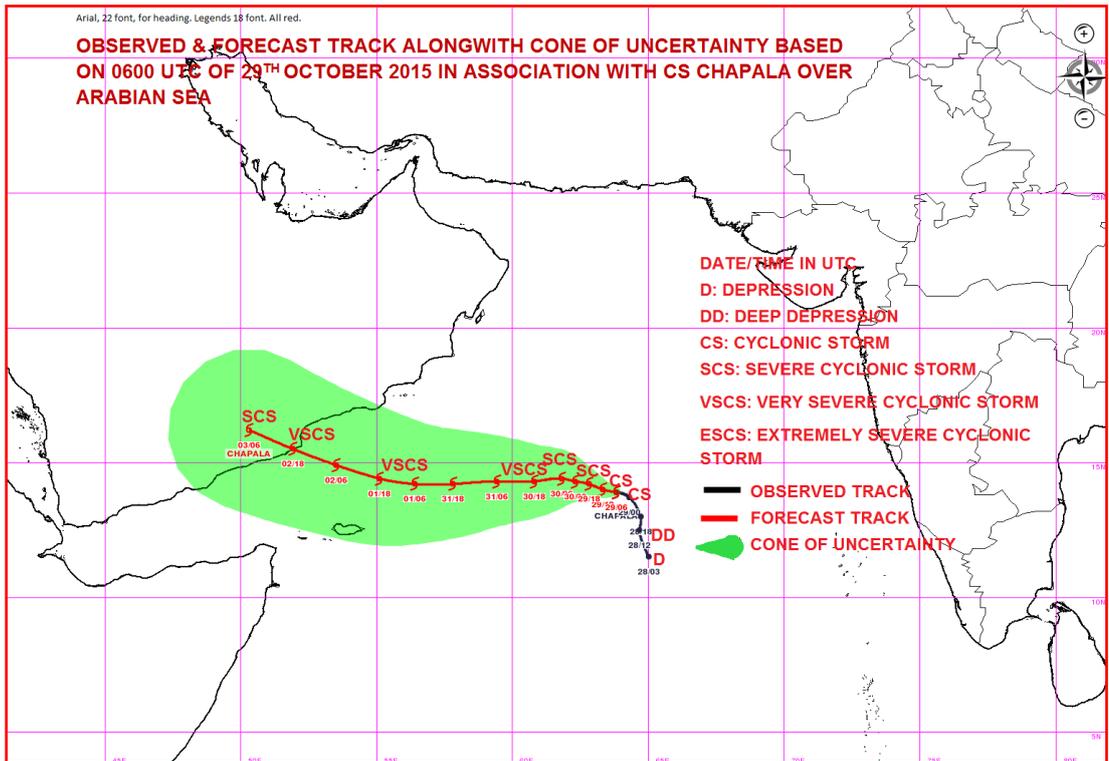
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**PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)**

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

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**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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**REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI  
TROPICAL CYCLONE ADVISORY BULLETIN**

**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 'CHAPALA' ADVISORY NO. FOUR ISSUED AT 1200 UTC OF 29TH OCTOBER 2015 BASED ON 0900 UTC CHARTS.**

THE **CYCLONIC STORM, 'CHAPALA'** OVER EASTCENTRAL AND ADJOINING AREAS OF WESTCENTRAL & SOUTH ARABIAN SEA MOVED WEST-NORTHWESTWARDS WITH A SPEED OF ABOUT 14 KMPH DURING PAST 6 HOURS AND LAY CENTERED AT 0900 UTC OF TODAY, THE 29TH OCTOBER 2015 OVER WESTCENTRAL AND ADJOINING EASTCENTRAL & SOUTH ARABIAN SEA NEAR LATITUDE 14.0°N AND LONGITUDE 63.5°E, ABOUT 1140 KM WEST-SOUTHWEST OF MUMBAI (43003) AND ABOUT 1060 KM EAST-SOUTHEAST OF SALALAH (41316) (OMAN). IT WOULD MOVE WEST-NORTHWESTWARDS AND INTENSIFY INTO A SEVERE CYCLONIC STORM DURING NEXT 12 HOURS AND INTO A VERY SEVERE CYCLONIC STORM IN SUBSEQUENT 12 HOURS. IT WOULD MOVE WEST-NORTHWESTWARD AND CROSS NORTH YEMEN AND ADJOINING OMAN COAST BETWEEN LATITUDE 15.0°N AND 17.0°N AROUND 1800 UTC OF 02 NOVEMBER 2015.

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

<b>Date/time(UTC)</b>	<b>Position (lat. °N/ long. °E)</b>	<b>Maximum sustained surface wind speed (kmph)</b>	<b>Category of cyclonic Disturbance</b>
29-10-2015/0900	14.0/63.5	75-85 gusting to 95	Cyclonic storm
29-10-2015/1200	14.1/63.3	80-90 gusting to 100	Cyclonic storm
29-10-2015/1800	14.2/62.8	90-100 gusting to 110	Severe cyclonic storm
30-10-2015/0000	14.3/62.3	100-110 gusting to 120	Severe cyclonic storm
30-10-2015/0600	14.4/61.8	110-120 gusting to 135	Severe cyclonic storm
30-10-2015/1800	14.3/60.8	120-130 gusting to 145	Very Severe cyclonic storm
31-10-2015/0600	14.3/59.4	140-150 gusting to 165	Very Severe cyclonic storm
31-10-2015/1800	14.2/57.8	160-170 gusting to 185	Very Severe cyclonic storm
01-11-2015/0600	14.2/56.4	170-180 gusting to 195	Extremely Severe cyclonic storm
01-11-2015/1800	14.4/55.1	160-170 gusting to 185	Very Severe cyclonic storm
02-11-2015/0600	14.9/53.5	150-160 gusting to 175	Very Severe cyclonic storm
02-11-2015/1800	15.5/51.9	140-150 gusting to 165	Very Severe cyclonic storm
03-11-2015/0600	16.2/50.3	110-120 gusting to 135	Severe cyclonic storm

**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**

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 3.0. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 45 KNOTS GUSTING TO 55 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 996 HPA. SEA CONDITION IS HIGH AROUND SYSTEM CENTRE. ASSOCIATED LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTIVE CLOUDS AT MANY PLACES OVER AREA BETWEEN LAT 11.0°N TO 19.0°N AND LONG 61.0°E TO 68.0°E. THE MINIMUM CLOUD TOP TEMPERATURE AROUND THE SYSTEM CENTRE IS ABOUT MINUS 84°C.

**REMARKS:**

THE CONVECTION INCREASED IN PAST 12 HOURS WITH INCREASE IN ORGANISATION. THE WINDS ARE HIGHER OVER THE NORTHEASTERN SECTOR. THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS 30°C. THE OCEAN THERMAL ENERGY IS ABOUT 50-75 KJ/CM<sup>2</sup> TO THE EAST AND NORTH OF THE SYSTEM CENTRE. IT GRADUALLY DECREASES WESTWARD AND IS ABOUT 15-35 KJ/CM<sup>2</sup> WEST OF 60°E. THE VERTICAL WIND SHEAR IS ABOUT 10 KNOTS (LOW) AROUND THE SYSTEM CENTRE. THE LOW LEVEL RELATIVE VORTICITY HAS INCREASED DURING PAST 06 HRS AND LOW LEVEL CONVERGENCE REMAINS THE SAME. THERE IS FAVOURABLE POLEWARD 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 15°N. THERE IS ANOTHER ANTI-CYCLONIC CIRCULATION TO THE NORTHWEST OF THE SYSTEM CENTRE AND THE CYCLONIC STORM LIES IN THE SOUTHEASTERN PERIPHERY OF THIS ANTICYCLONE. IT WILL HELP IN INCREASING MORE WESTWARD COMPONENT IN THE MOVEMENT OF THE SYSTEM. THE MADDEN JULLIAN OSCILLATION INDEX LIES IN PHASE 2 WITH AMPLITUDE GREATER THAN 2 AND IT WOULD CONTINUE TO REMAIN IN SAME PHASE WITH SIMILAR AMPLITUDE FOR NEXT 5 DAYS. IT IS HIGHLY FAVOURABLE FOR INTENSIFICATION OF THE SYSTEM. AS THE SYSTEM WOULD MOVE CLOSER TO YEMEN AND ADJOINING OMAN COAST, IT WOULD EXPERIENCE LOWER OCEAN THERMAL ENERGY AS WELL AS INTRUSION OF DRY AIR FROM NORTHWEST. AS A RESULT, THERE IS POSSIBILITY OF SLIGHT WEAKENING OF THE SYSTEM OVER THE SEA BEFORE THE LANDFALL.

MOST OF THE NUMERICAL WEATHER PREDICTION MODELS ARE SUGGESTING GRADUAL INTENSIFICATION OF THE CYCLONIC STORM INTO SEVERE CYCLONIC STORM IN NEXT 24 HRS. DYNAMICAL STATISTICAL MODELS ALSO SUGGEST THE GRADUAL INTENSIFICATION OF THE SYSTEM. CONSIDERING THE MOVEMENT, MOST OF THE MODELS ARE UNANIMOUS ABOUT INITIAL NORTH-NORTHWESTWARD UPTO 1200 UTC OF 29 OCT. AND THEN WESTWARD/WEST-NORTHWESTWARD MOVEMENT TOWARDS YEMEN AND ADJOINING OMAN COAST ACROSS GULF OF ADEN.

(M.MOHAPATRA)  
HEAD-RSMC, NEW DELHI

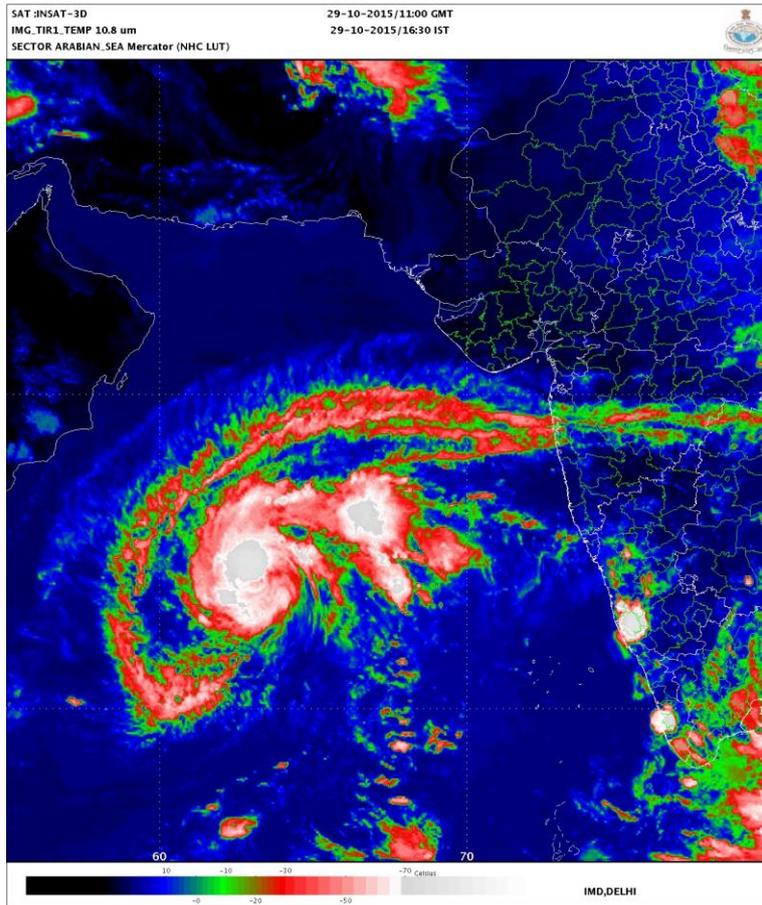
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**PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)**

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

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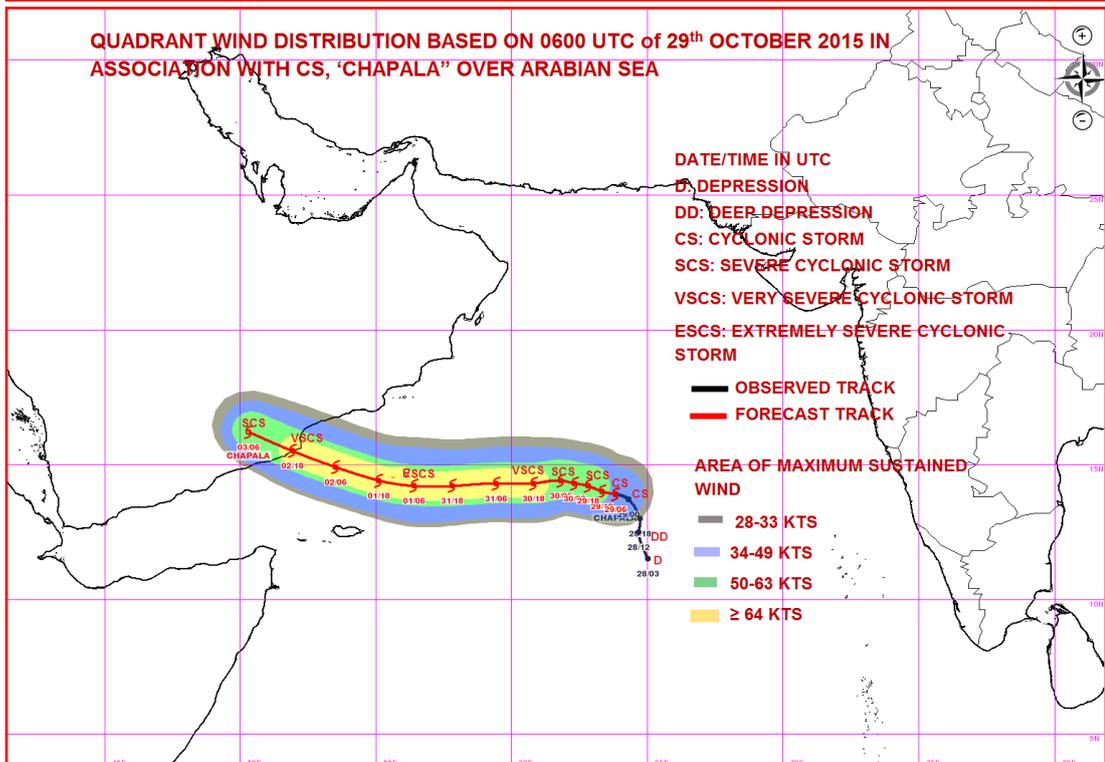
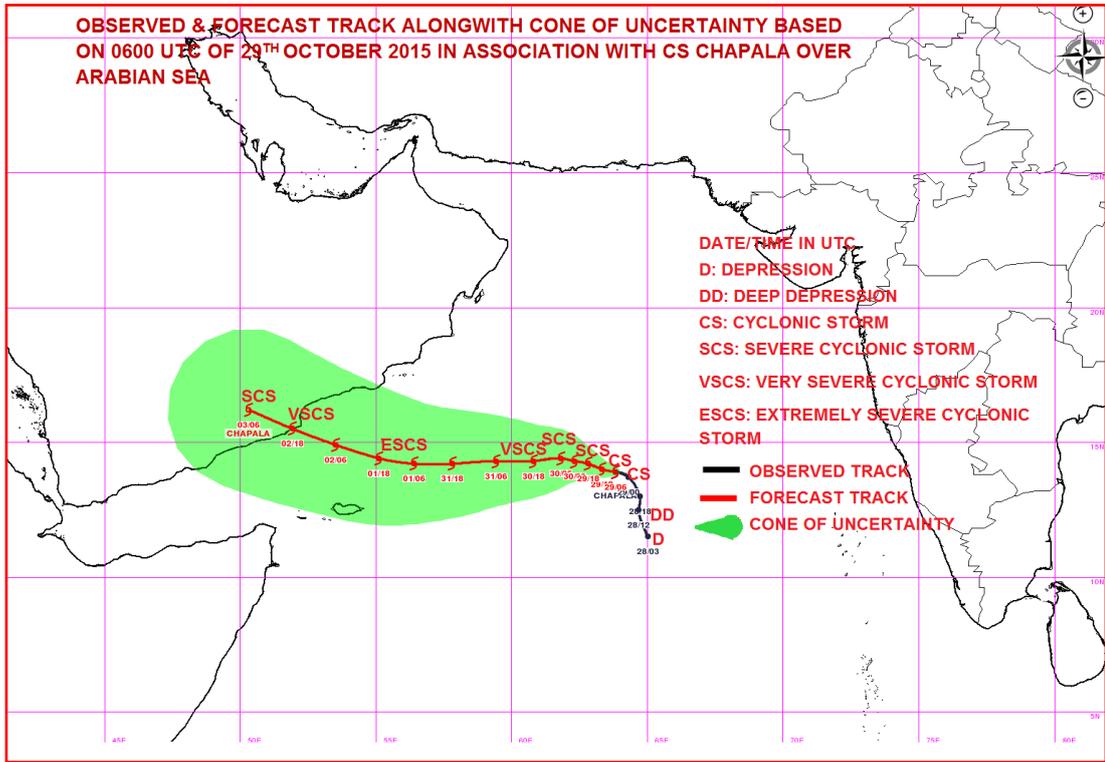
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**PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)**

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

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**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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**REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI  
TROPICAL CYCLONE ADVISORY BULLETIN**

**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 ‘CHAPALA’ ADVISORY NO. FIVE ISSUED AT 1500 UTC OF 29TH OCTOBER 2015 BASED ON 1200 UTC CHARTS.**

THE **CYCLONIC STORM**, ‘CHAPALA’ OVER WESTCENTRAL AND ADJOINING EASTCENTRAL ARABIAN SEA MOVED WEST-NORTHWESTWARDS WITH A SPEED OF ABOUT 12 KMPH DURING PAST 6 HOURS AND INTENSIFIED INTO A **SEVERE CYCLONIC STORM** AND LAY CENTERED AT 1200 UTC OF TODAY, THE 29TH OCTOBER 2015 OVER NEAR LATITUDE 14.1°N AND LONGITUDE 63.3°E, ABOUT 1150 KM WEST-SOUTHWEST OF MUMBAI(43003) AND ABOUT 1040 KM EAST-SOUTHEAST OF SALALAH (41316) (OMAN). IT WOULD MOVE WEST-NORTHWESTWARDS AND INTENSIFY INTO A VERY SEVERE CYCLONIC STORM DURING NEXT 12 HOURS. IT WOULD CROSS NORTH YEMEN AND ADJOINING OMAN COAST AS A VERY SEVERE CYCLONIC STORM BETWEEN LATITUDE 15.0°N AND 17.0°N AROUND 1800 UTC OF 2 NOVEMBER.

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

<b>Date/time(UTC)</b>	<b>Position (lat. °N/ long. °E)</b>	<b>Maximum sustained surface wind speed (kmph)</b>	<b>Category of cyclonic Disturbance</b>
29-10-2015/1200	14.1/63.3	95-105 gusting to 115	Severe Cyclonic storm
29-10-2015/1800	14.3/62.8	105-115 gusting to 125	Severe cyclonic storm
30-10-2015/0000	14.4/62.3	115-125 gusting to 140	Very severe cyclonic storm
30-10-2015/0600	14.5/61.8	125-135 gusting to 150	Very severe cyclonic storm
30-10-2015/1200	14.5/61.3	135-145 gusting to 160	Very severe cyclonic storm
31-10-2015/0000	14.3/60.1	155-165 gusting to 180	Very severe cyclonic storm
31-10-2015/1200	14.2/58.6	170-180 gusting to 195	Extremely severe cyclonic storm
01-11-2015/0000	14.2/57.1	170-180 gusting to 195	Extremely severe cyclonic storm
01-11-2015/1200	14.3/55.7	160-170 gusting to 185	Very severe cyclonic storm
02-11-2015/0000	14.7/54.3	150-160 gusting to 175	Very severe cyclonic storm
02-11-2015/1200	15.3/52.7	140-150 gusting to 165	Very severe cyclonic storm
03-11-2015/0000	15.9/51.1	110-120 gusting to 135	Severe Cyclonic storm
03-11-2015/1200	16.5/49.5	60-70 gusting to 80	Cyclonic storm

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 3.5. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 55 KNOTS GUSTING TO 65 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 992 HPA. SEA CONDITION IS VERY HIGH AROUND SYSTEM CENTRE. ASSOCIATED LOW

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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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AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTIVE CLOUDS AT MANY PLACES OVER AREA BETWEEN LAT 12.0°N TO 17.0°N AND LONG 60.0°E TO 66.0°E. THE MINIMUM CLOUD TOP TEMPERATURE AROUND THE SYSTEM CENTRE IS ABOUT MINUS 89°C.

A BUOY LOCATED NEAR LATITUDE 13.8° AND LONGITUDE 61.6° REPORTED MSLP OF 1004.9 HPA. A SHIP LOCATED NEAR LATITUDE 11.6° AND LONGITUDE 58.2° REPORTED MSLP OF 1007.5 HPA AND SURFACE WIND OF 350/10 KTS.

**REMARKS:**

THE CONVECTION INCREASED IN PAST 12 HOURS WITH INCREASE IN CONVECTIVE BONDING AROUND THE CENTRE. THE WINDS ARE HIGHER OVER THE NORTHEASTERN SECTOR. THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS 30°C. THE OCEAN THERMAL ENERGY IS ABOUT 50-75 KJ/CM<sup>2</sup> TO THE EAST AND NORTH OF THE SYSTEM CENTRE. IT GRADUALLY DECREASES WESTWARD AND IS ABOUT 15-35 KJ/CM<sup>2</sup> WEST OF 60°E. THE VERTICAL WIND SHEAR IS ABOUT 10-15 KNOTS AROUND THE SYSTEM CENTRE. THE LOW LEVEL RELATIVE VORTICITY HAS INCREASED DURING PAST 06 HRS AND LOW LEVEL CONVERGENCE REMAINS THE SAME. THERE IS FAVOURABLE POLEWARD 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 15°N. THERE IS ANOTHER ANTI-CYCLONIC CIRCULATION TO THE NORTHWEST OF THE SYSTEM CENTRE AND THE CYCLONIC STORM LIES IN THE SOUTHEASTERN PERIPHERY OF THIS ANTICYCLONE. IT IS HELPING IN INCREASING MORE WESTWARD COMPONENT IN THE MOVEMENT OF THE SYSTEM. THE MADDEN JULLIAN OSCILLATION INDEX LIES IN PHASE 2 WITH AMPLITUDE GREATER THAN 2 AND IT WOULD CONTINUE TO REMAIN IN SAME PHASE WITH SIMILAR AMPLITUDE FOR NEXT 5 DAYS. IT IS HIGHLY FAVOURABLE FOR INTENSIFICATION OF THE SYSTEM. AS THE SYSTEM WOULD MOVE CLOSER TO YEMEN AND ADJOINING OMAN COAST, IT WOULD EXPERIENCE LOWER OCEAN THERMAL ENERGY AS WELL AS INTRUSION OF DRY AIR FROM NORTHWEST. AS A RESULT, THERE IS POSSIBILITY OF SLIGHT WEAKENING OF THE SYSTEM OVER THE SEA BEFORE THE LANDFALL.

MOST OF THE NUMERICAL WEATHER PREDICTION MODELS ARE SUGGESTING GRADUAL INTENSIFICATION OF THE SYSTEM IN NEXT 24 HRS. DYNAMICAL STATISTICAL MODELS ALSO SUGGEST THE GRADUAL INTENSIFICATION OF THE SYSTEM. CONSIDERING THE MOVEMENT, MOST OF THE MODELS ARE UNANIMOUS ABOUT WEST-NORTHWESTWARD TO WEST-SOUTHWESTWARD MOVEMENT TOWARDS YEMEN AND ADJOINING OMAN COAST ACROSS GULF OF ADEN. THE PREDICTED TRACK IS MAINLY BASED ON MULTIMODEL ENSEMBLE GUIDANCE.

(M.MOHAPATRA)  
HEAD-RSMC, NEW DELHI

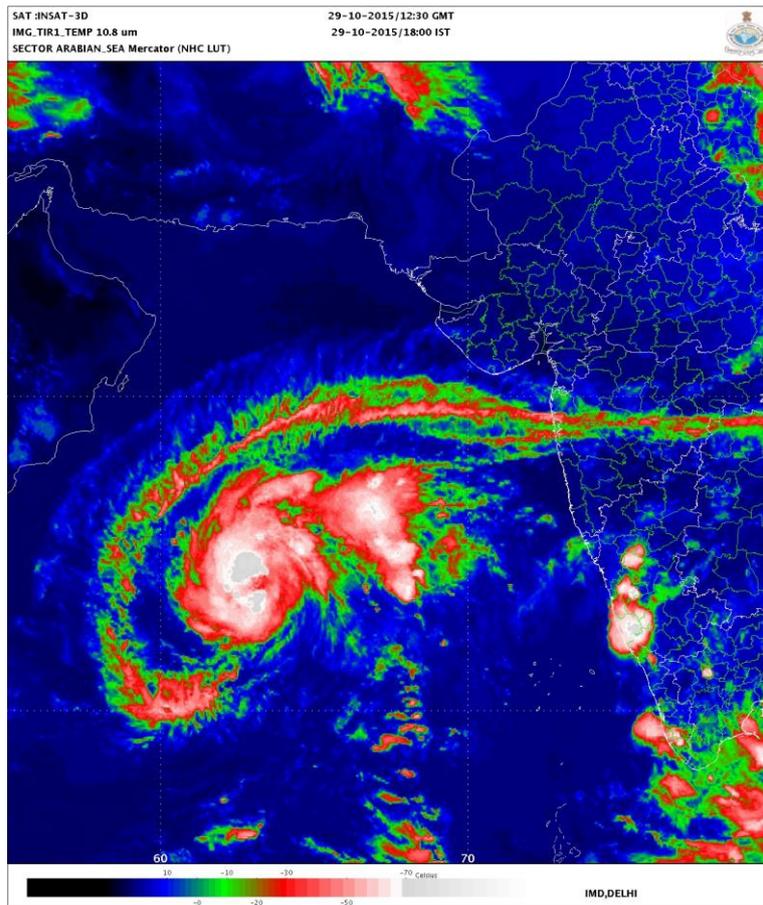
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**PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)**

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

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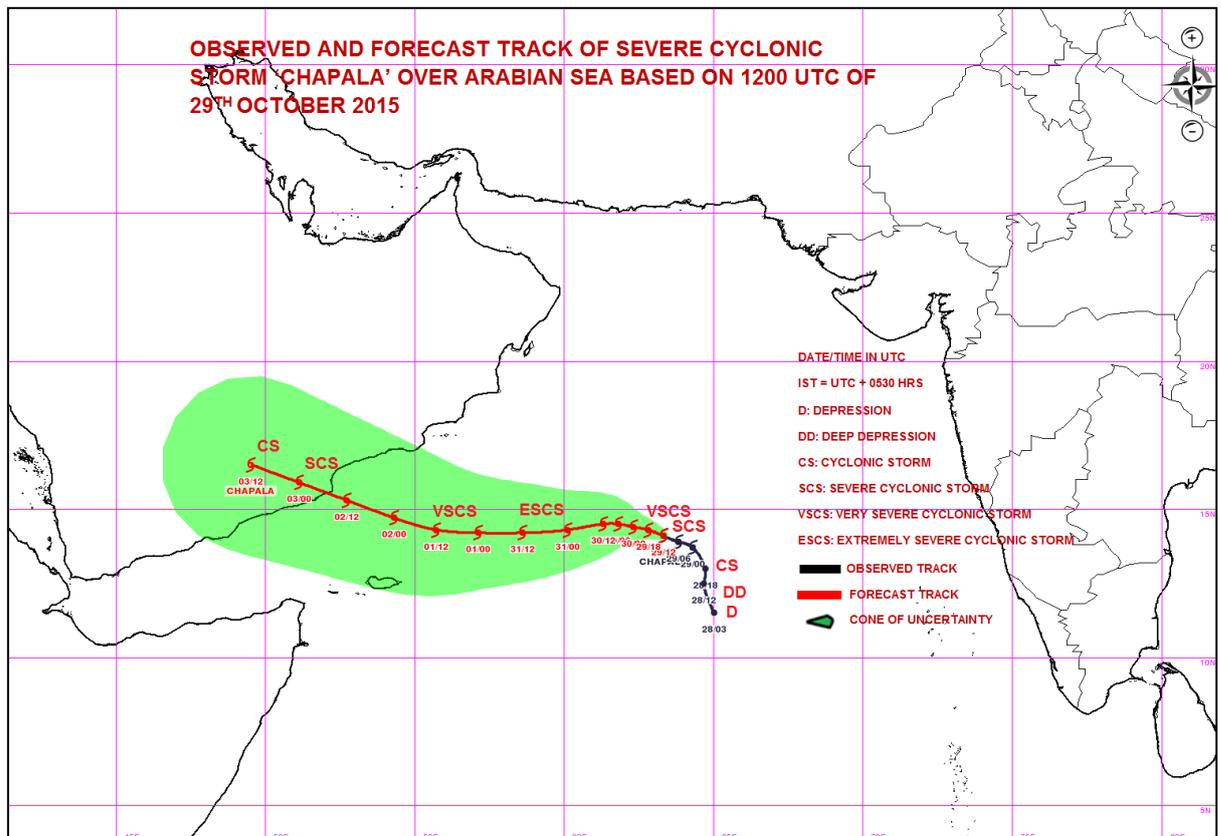
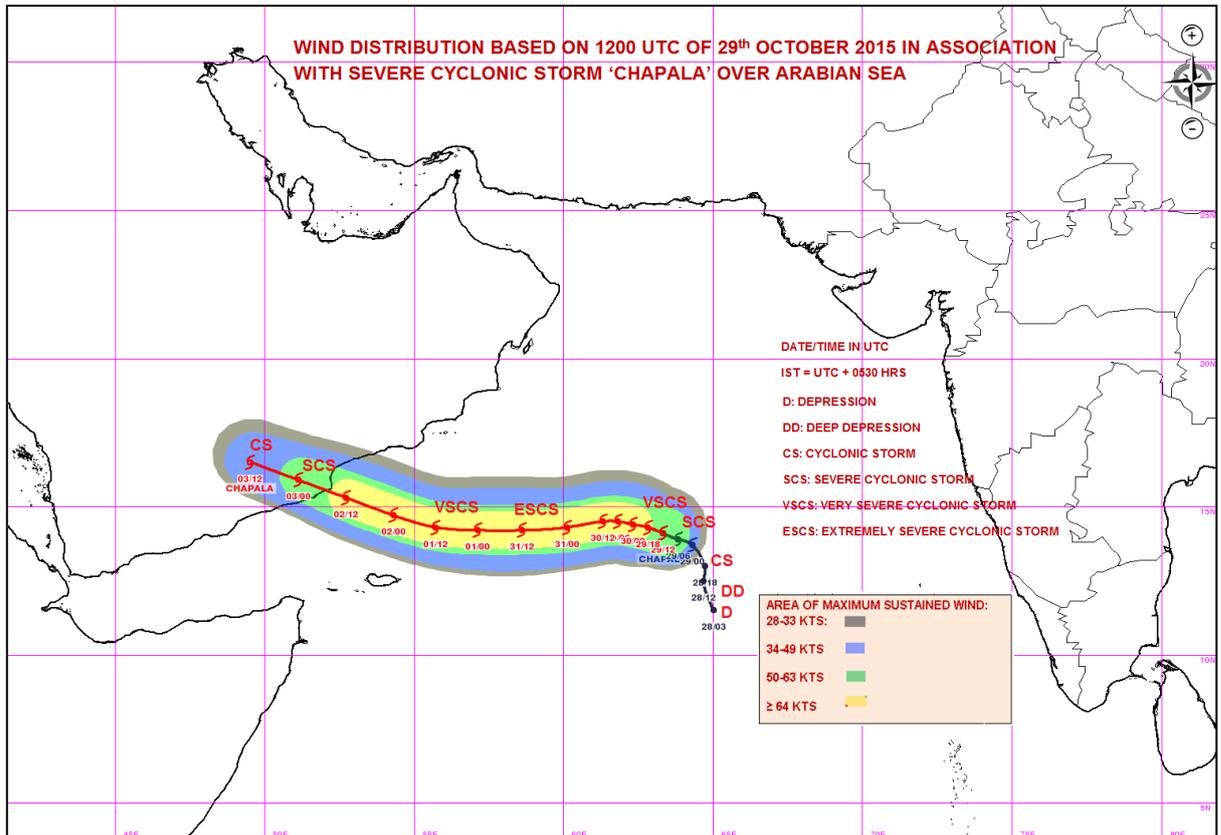
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**REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI  
TROPICAL CYCLONE ADVISORY BULLETIN**

**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 'CHAPALA' ADVISORY NO. SIX ISSUED AT 1700 UTC OF 29TH OCTOBER  
2015 BASED ON 1500 UTC CHARTS.**

THE SEVERE CYCLONIC STORM, 'CHAPALA' OVER WESTCENTRAL AND ADJOINING EASTCENTRAL ARABIAN SEA MOVED WEST-NORTHWESTWARDS WITH A SPEED OF ABOUT 14 KMPH DURING PAST 6 HOURS AND LAY CENTERED AT 1500 UTC OF TODAY, THE 29TH OCTOBER 2015 OVER NEAR LATITUDE 14.3°N AND LONGITUDE 62.8°E, ABOUT 1200 KM WEST-SOUTHWEST OF MUMBAI AND ABOUT 980 KM EAST-SOUTHEAST OF SALALAH (OMAN). IT WOULD MOVE WEST-NORTHWESTWARDS AND INTENSIFY INTO A VERY SEVERE CYCLONIC STORM DURING NEXT 6 HOURS. IT WOULD CROSS NORTH YEMEN AND ADJOINING OMAN COAST AS A VERY SEVERE CYCLONIC STORM BETWEEN LATITUDE 15.0°N AND 17.0°N AROUND 1800 UTC OF 2 NOVEMBER

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

Date/time(UTC)	Position (lat. °N/ long. °E)	Maximum sustained surface wind speed (kmph)	Category of cyclonic Disturbance
29-10-2015/1500	14.3/62.8	105-115 gusting to 125	Severe Cyclonic storm
29-10-2015/1800	14.4/62.6	115-125 gusting to 140	Very Severe cyclonic storm
30-10-2015/0000	14.4/62.1	115-125 gusting to 140	Very severe cyclonic storm
30-10-2015/0600	14.5/61.6	125-135 gusting to 150	Very severe cyclonic storm
30-10-2015/1200	14.5/61.1	135-145 gusting to 160	Very severe cyclonic storm
31-10-2015/0000	14.3/60.1	155-165 gusting to 180	Very severe cyclonic storm
31-10-2015/1200	14.2/58.6	170-180 gusting to 195	Extremely severe cyclonic storm
01-11-2015/0000	14.2/57.1	170-180 gusting to 195	Extremely severe cyclonic storm
01-11-2015/1200	14.3/55.7	160-170 gusting to 185	Very severe cyclonic storm
02-11-2015/0000	14.7/54.3	150-160 gusting to 175	Very severe cyclonic storm
02-11-2015/1200	15.3/52.7	140-150 gusting to 165	Very severe cyclonic storm
03-11-2015/0000	15.9/51.1	110-120 gusting to 135	Severe Cyclonic storm
03-11-2015/1200	16.5/49.5	60-70 gusting to 80	Cyclonic storm

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 3.5. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 60 KNOTS GUSTING TO 70 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 990 HPA. SEA CONDITION IS VERY HIGH AROUND SYSTEM CENTRE. ASSOCIATED LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTIVE CLOUDS AT

**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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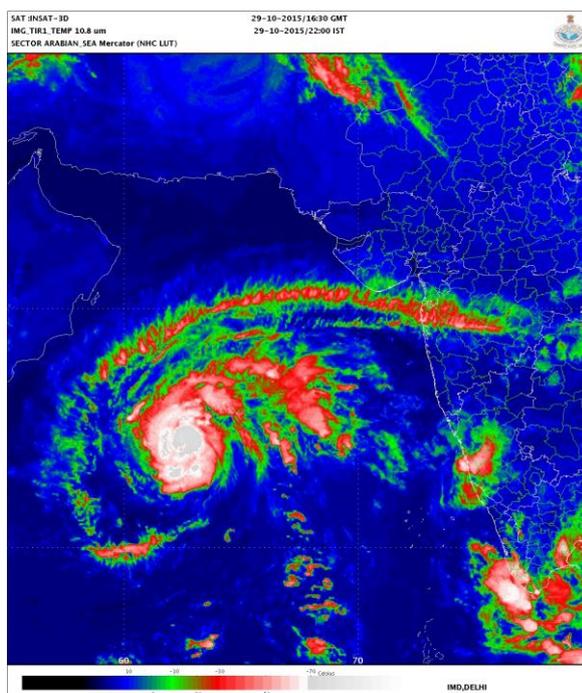
MANY PLACES OVER AREA BETWEEN LAT 12.5°N TO 18.0°N AND LONG 61.0°E TO 69.0°E. THE MINIMUM CLOUD TOP TEMPERATURE AROUND THE SYSTEM CENTRE IS ABOUT MINUS 73°C.

**REMARKS:**

THE CONVECTION INCREASED IN PAST 12 HOURS WITH INCREASE IN CONVECTIVE BONDING AROUND THE CENTRE. THE WINDS ARE HIGHER OVER THE NORTHEASTERN SECTOR. THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS 30°C. THE OCEAN THERMAL ENERGY IS ABOUT 50-75 KJ/CM<sup>2</sup> TO THE EAST AND NORTH OF THE SYSTEM CENTRE. IT GRADUALLY DECREASES WESTWARD AND IS ABOUT 15-35 KJ/CM<sup>2</sup> WEST OF 60°E. THE VERTICAL WIND SHEAR IS ABOUT 10-15 KNOTS AROUND THE SYSTEM CENTRE. THE LOW LEVEL RELATIVE VORTICITY HAS INCREASED DURING PAST 06 HRS AND LOW LEVEL CONVERGENCE REMAINS THE SAME. THERE IS FAVOURABLE POLEWARD 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 15°N. THERE IS ANOTHER ANTI-CYCLONIC CIRCULATION TO THE NORTHWEST OF THE SYSTEM CENTRE AND THE CYCLONIC STORM LIES IN THE SOUTHEASTERN PERIPHERY OF THIS ANTICYCLONE. IT IS HELPING IN INCREASING MORE WESTWARD COMPONENT IN THE MOVEMENT OF THE SYSTEM. THE MADDEN JULLIAN OSCILLATION INDEX LIES IN PHASE 2 WITH AMPLITUDE GREATER THAN 2 AND IT WOULD CONTINUE TO REMAIN IN SAME PHASE WITH SIMILAR AMPLITUDE FOR NEXT 5 DAYS. IT IS HIGHLY FAVOURABLE FOR INTENSIFICATION OF THE SYSTEM. AS THE SYSTEM WOULD MOVE CLOSER TO YEMEN AND ADJOINING OMAN COAST, IT WOULD EXPERIENCE LOWER OCEAN THERMAL ENERGY AS WELL AS INTRUSION OF DRY AIR FROM NORTHWEST. AS A RESULT, THERE IS POSSIBILITY OF SLIGHT WEAKENING OF THE SYSTEM OVER THE SEA BEFORE THE LANDFALL.

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(R.P. SHARMA)  
DUTY OFFICER



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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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**REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI  
TROPICAL CYCLONE ADVISORY BULLETIN**

**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 ‘CHAPALA’ ADVISORY NO. SEVEN ISSUED AT 2100 UTC OF 29TH OCTOBER  
2015 BASED ON 1800 UTC CHARTS.**

THE **SEVERE CYCLONIC STORM**, ‘CHAPALA’ OVER WESTCENTRAL AND ADJOINING EASTCENTRAL ARABIAN SEA MOVED WEST-NORTHWESTWARDS WITH A SPEED OF ABOUT 15 KMPH DURING PAST 6 HOURS , INTENSIFIED INTO VERY SEVERE CYCLONIC STORM AND LAY CENTERED AT 1800 UTC OF TODAY, THE 29TH OCTOBER 2015 OVER NEAR LATITUDE 14.3°N AND LONGITUDE 62.5°E, ABOUT 1220 KM WEST-SOUTHWEST OF MUMBAI(43003) AND ABOUT 950 KM EAST-SOUTHEAST OF SALALAH(41316) (OMAN). IT WOULD MOVE WEST-NORTHWESTWARDS DURING NEXT 12 HOURS. IT WOULD CROSS NORTH YEMEN AND ADJOINING OMAN COAST AS A VERY SEVERE CYCLONIC STORM BETWEEN LATITUDE 15.0°N AND 17.0°N AROUND 1800 UTC OF 2 NOVEMBER

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

<b>Date/time(UTC)</b>	<b>Position (lat. °N/ long. °E)</b>	<b>Maximum sustained surface wind speed (kmph)</b>	<b>Category of cyclonic Disturbance</b>
29-10-2015/1800	14.3/62.5	115-125 gusting to 140	Very severe cyclonic storm
30-10-2015/0000	14.4/62.1	115-125 gusting to 140	Very severe cyclonic storm
30-10-2015/0600	14.5/61.6	125-135 gusting to 150	Very severe cyclonic storm
30-10-2015/1200	14.5/61.1	135-145 gusting to 160	Very severe cyclonic storm
30-10-2015/1800	14.4/60.6	155-165 gusting to 180	Very severe cyclonic storm
31-10-2015/0600	14.2/59.3	155-165 gusting to 180	Very severe cyclonic storm
31-10-2015/1800	14.2/57.8	170-180 gusting to 195	Extremely severe cyclonic storm
01-11-2015/0600	14.3/56.4	170-180 gusting to 195	Extremely severe cyclonic storm
01-11-2015/1800	14.5/55.0	160-170 gusting to 185	Very severe cyclonic storm
02-11-2015/0600	15.0/53.5	135-145 gusting to 160	Very severe cyclonic storm
02-11-2015/1800	15.6/51.8	105-115 gusting to 125	Severe cyclonic storm
03-11-2015/0600	16.2/50.3	60-70 gusting to 80	Cyclonic storm
03-11-2015/1800	16.8/49.1	55-65 gusting to 80	Deep Depression

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 4.0. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 65 KNOTS GUSTING TO 75 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 988 HPA. SEA CONDITION IS PHENOMENAL AROUND THE SYSTEM CENTRE. ASSOCIATED

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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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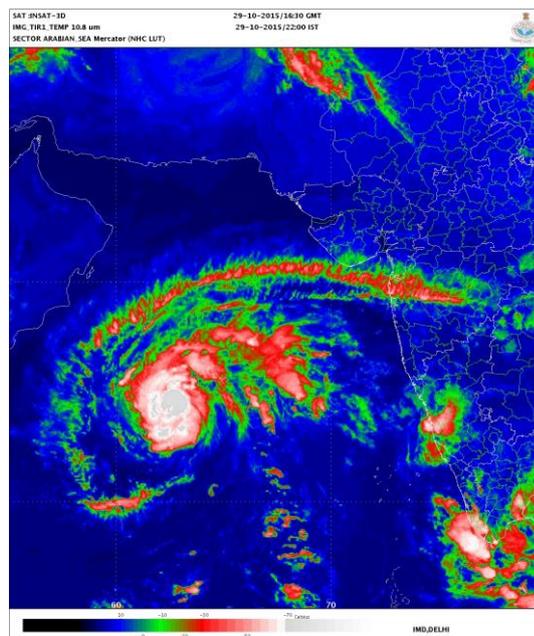
LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTIVE CLOUDS AT MANY PLACES OVER AREA BETWEEN LAT 12.5°N TO 18.0°N AND LONG 60.0°E TO 69.0°E. THE MINIMUM CLOUD TOP TEMPERATURE AROUND THE SYSTEM CENTRE IS ABOUT MINUS 76°C.

**REMARKS:**

THE CONVECTION INCREASED IN PAST 12 HOURS WITH INCREASE IN CONVECTIVE BONDING AROUND THE CENTRE. THE WINDS ARE HIGHER OVER THE NORTHEASTERN SECTOR. THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS 30°C. THE OCEAN THERMAL ENERGY IS ABOUT 50-75 KJ/CM<sup>2</sup> TO THE EAST AND NORTH OF THE SYSTEM CENTRE. IT GRADUALLY DECREASES WESTWARD AND IS ABOUT 15-35 KJ/CM<sup>2</sup> WEST OF 60°E. THE VERTICAL WIND SHEAR IS ABOUT 5-15 KNOTS AROUND THE SYSTEM CENTRE. THE LOW LEVEL RELATIVE VORTICITY HAS INCREASED DURING PAST 06 HRS AND LOW LEVEL CONVERGENCE REMAINS THE SAME. THERE IS FAVOURABLE POLEWARD 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 15°N. THERE IS ANOTHER ANTI-CYCLONIC CIRCULATION TO THE NORTHWEST OF THE SYSTEM CENTRE AND THE CYCLONIC STORM LIES IN THE SOUTHEASTERN PERIPHERY OF THIS ANTICYCLONE. IT IS HELPING IN INCREASING MORE WESTWARD COMPONENT IN THE MOVEMENT OF THE SYSTEM. THE MADDEN JULLIAN OSCILLATION INDEX LIES IN PHASE 2 WITH AMPLITUDE GREATER THAN 2 AND IT WOULD CONTINUE TO REMAIN IN SAME PHASE WITH SIMILAR AMPLITUDE FOR NEXT 5 DAYS. IT IS HIGHLY FAVOURABLE FOR INTENSIFICATION OF THE SYSTEM. AS THE SYSTEM WOULD MOVE CLOSER TO YEMEN AND ADJOINING OMAN COAST, IT WOULD EXPERIENCE LOWER OCEAN THERMAL ENERGY AS WELL AS INTRUSION OF DRY AIR FROM NORTHWEST. AS A RESULT, THERE IS POSSIBILITY OF SLIGHT WEAKENING OF THE SYSTEM OVER THE SEA BEFORE THE LANDFALL.

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(R.P. SHARMA)  
DUTY OFFICER



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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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OMAN METEOROLOGICAL DEPARTMENT, MUSCAT (THROUGH RTH  
JEDDAH)**

**TROPICAL CYCLONE ADVISORY**

**RSMC – TROPICAL CYCLONES, NEW DELHI**

**TROPICAL STORM ‘CHAPALA’ ADVISORY NO. EIGHT ISSUED AT 2300 UTC OF 29TH OCTOBER 2015 BASED ON 2100 UTC CHARTS.**

THE **VERY SEVERE CYCLONIC STORM**, ‘CHAPALA’ OVER WESTCENTRAL AND ADJOINING EASTCENTRAL ARABIAN SEA MOVED NEARLY WESTWARDS WITH A SPEED OF ABOUT 07 KMPH DURING PAST 6 HOURS , AND LAY CENTERED AT 2100 UTC OF TODAY, THE 29TH OCTOBER 2015 OVER NEAR LATITUDE 14.3°N AND LONGITUDE 62.3°E, ABOUT 1240 KM WEST-SOUTHWEST OF MUMBAI(43003) AND ABOUT 930 KM EAST-SOUTHEAST OF SALALAH(41316) (OMAN). IT WOULD MOVE WEST-NORTHWESTWARDS DURING NEXT 12 HOURS. IT WOULD CROSS NORTH YEMEN AND ADJOINING OMAN COAST AS A VERY SEVERE CYCLONIC STORM BETWEEN LATITUDE 15.0°N AND 17.0°N AROUND 1800 UTC OF 2 NOVEMBER

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

<b>Date/time(UTC)</b>	<b>Position (lat. °N/ long. °E)</b>	<b>Maximum sustained surface wind speed (kmph)</b>	<b>Category of cyclonic Disturbance</b>
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30-10-2015/0000	14.4/61.9	120-130 gusting to 140	Very severe cyclonic storm
30-10-2015/0600	14.5/61.6	125-135 gusting to 150	Very severe cyclonic storm
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ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 4.0. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 65 KNOTS GUSTING TO 75 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 988 HPA. SEA CONDITION IS PHENOMENAL AROUND THE SYSTEM CENTRE. ASSOCIATED LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTIVE CLOUDS

**PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)**

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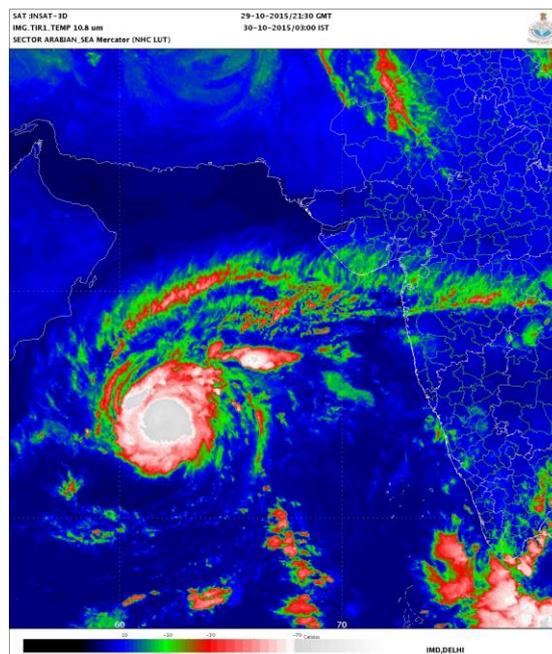
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(R.P. SHARMA)  
DUTY OFFICER



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



**REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI  
TROPICAL CYCLONE ADVISORY BULLETIN**

**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 'CHAPALA' ADVISORY NO. NINE ISSUED AT 0300 UTC OF 30TH OCTOBER 2015 BASED ON 0000 UTC CHARTS.**

THE **VERY SEVERE CYCLONIC STORM, 'CHAPALA'** OVER WESTCENTRAL ARABIAN SEA MOVED WESTWARDS WITH A SPEED OF ABOUT 12 KMPH DURING PAST 6 HOURS , AND LAY CENTERED AT 0000 UTC OF TODAY, THE 30TH OCTOBER 2015 OVER NEAR LATITUDE 14.3°N AND LONGITUDE 61.8°E, ABOUT 1290 KM WEST-SOUTHWEST OF MUMBAI(43003) AND ABOUT 880 KM EAST-SOUTHEAST OF SALALAH(41316) (OMAN). IT WOULD MOVE WEST-NORTHWESTWARDS,AND INTENSIFY FURTHER INTO AN EXTREMELY SEVERE CYCLONIC STORM AND CROSS NORTH YEMEN AND ADJOINING OMAN COAST AS A VERY SEVERE CYCLONIC STORM BETWEEN LATITUDE 15.0°N AND 16.0°N AROUND 1800 UTC OF 2 NOVEMBER 2015.

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

<b>Date/time(UTC)</b>	<b>Position (lat. °N/ long. °E)</b>	<b>Maximum sustained surface wind speed (kmph)</b>	<b>Category of cyclonic Disturbance</b>
30-10-2015/0000	14.3/61.8	140-150 gusting to 165	Very severe cyclonic storm
30-10-2015/0600	14.4/61.2	150-160 gusting to 175	Very severe cyclonic storm
30-10-2015/1200	14.5/60.6	160-170 gusting to 185	Extremely severe cyclonic storm
30-10-2015/1800	14.5/60.2	170-180 gusting to 195	Extremely severe cyclonic storm
31-10-2015/0000	14.4/59.6	180-190 gusting to 210	Extremely severe cyclonic storm
31-10-2015/1200	14.2/58.2	190-200 gusting to 220	Extremely severe cyclonic storm
01-11-2015/0000	14.2/56.9	190-200 gusting to 220	Extremely severe cyclonic storm
01-11-2015/1200	14.3/55.6	180-190 gusting to 210	Extremely severe cyclonic storm
02-11-2015/0000	14.5/54.1	170-180 gusting to 200	Extremely severe cyclonic storm
02-11-2015/1200	14.9/52.1	150-160 gusting to 175	Very severe cyclonic storm
03-11-2015/0000	15.3/50.1	100-110 gusting to 120	Severe cyclonic storm
03-11-2015/1200	15.8/48.5	50-60 gusting to 70	Depression

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 4.5. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 80 KNOTS GUSTING TO 90 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 978 HPA. SEA CONDITION IS PHENOMENAL AROUND THE SYSTEM CENTRE. ASSOCIATED

**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**

LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTIVE CLOUDS AT MANY PLACES OVER AREA BETWEEN LAT 12.0°N TO 17.0°N AND LONG 59.0°E TO 65.0°E. THE MINIMUM CLOUD TOP TEMPERATURE AROUND THE SYSTEM CENTRE IS ABOUT MINUS 90°C.

**REMARKS:**

THE CONVECTION INCREASED IN PAST 12 HOURS WITH INCREASE IN CONVECTIVE BONDING AROUND THE CENTRE AND IMPROVEMENT IN CENTRAL FEATURE. THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS 30°C. THE OCEAN THERMAL ENERGY IS ABOUT 50-75 KJ/CM<sup>2</sup> TO THE EAST AND NORTH OF THE SYSTEM CENTRE. IT GRADUALLY DECREASES WESTWARD AND IS ABOUT 15-35 KJ/CM<sup>2</sup> WEST OF 60°E. THE VERTICAL WIND SHEAR IS ABOUT 5-15 KNOTS AROUND THE SYSTEM CENTRE. THE LOW LEVEL RELATIVE VORTICITY HAS INCREASED DURING PAST 06 HRS AND LOW LEVEL CONVERGENCE REMAINS THE SAME. THERE IS FAVOURABLE POLEWARD 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 15°N. THERE IS ANOTHER ANTI-CYCLONIC CIRCULATION TO THE NORTHWEST OF THE SYSTEM CENTRE AND THE CYCLONIC STORM LIES IN THE SOUTHEASTERN PERIPHERY OF THIS ANTICYCLONE. IT IS HELPING IN INCREASING MORE WESTWARD COMPONENT IN THE MOVEMENT OF THE SYSTEM. THE MADDEN JULLIAN OSCILLATION INDEX LIES IN PHASE 2 WITH AMPLITUDE GREATER THAN 2 AND IT WOULD CONTINUE TO REMAIN IN SAME PHASE WITH SIMILAR AMPLITUDE FOR NEXT 5 DAYS. IT IS HIGHLY FAVOURABLE FOR INTENSIFICATION OF THE SYSTEM. AS THE SYSTEM WOULD MOVE CLOSER TO YEMEN AND ADJOINING OMAN COAST, IT WOULD EXPERIENCE LOWER OCEAN THERMAL ENERGY AS WELL AS INTRUSION OF DRY AIR FROM NORTHWEST. AS A RESULT, THERE IS POSSIBILITY OF SLIGHT WEAKENING OF THE SYSTEM OVER THE SEA BEFORE THE LANDFALL.

MOST OF THE NUMERICAL WEATHER PREDICTION MODELS ARE SUGGESTING GRADUAL INTENSIFICATION OF THE SYSTEM IN NEXT 24 HRS. DYNAMICAL STATISTICAL MODELS ALSO SUGGEST THE GRADUAL INTENSIFICATION OF THE SYSTEM. CONSIDERING THE MOVEMENT, MOST OF THE MODELS ARE UNANIMOUS ABOUT WEST-NORTHWESTWARD TO WEST-SOUTHWESTWARD MOVEMENT TOWARDS YEMEN AND ADJOINING OMAN COAST ACROSS GULF OF ADEN. THE PREDICTED TRACK IS MAINLY BASED ON MULTIMODEL ENSEMBLE GUIDANCE.

(M.MOHAPATRA)  
HEAD RSMC NEW DELHI

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**PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)**

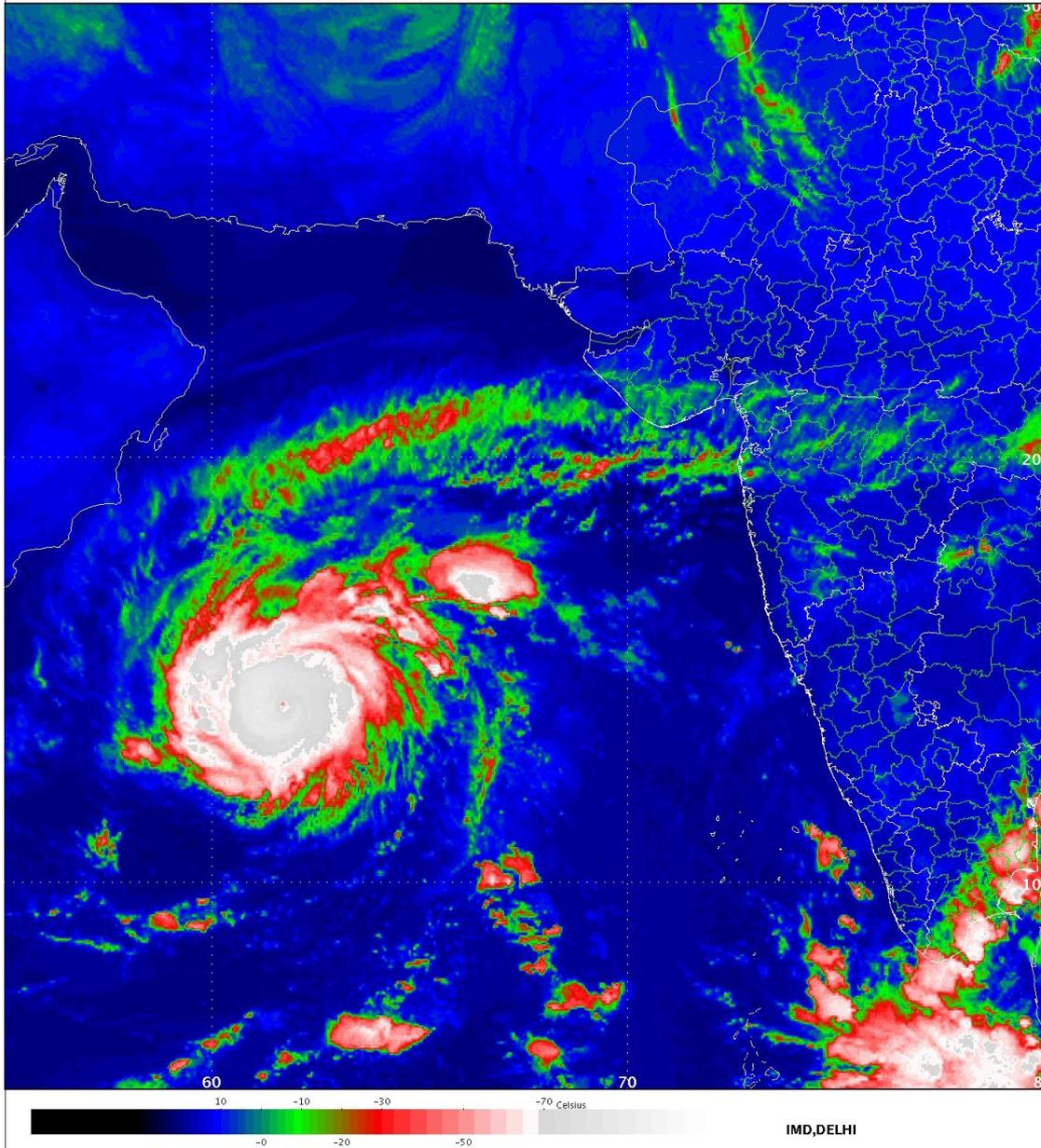
**NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%**

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SAT :INSAT-3D  
IMG\_TIR1\_TEMP 10.8 um  
SECTOR ARABIAN\_SEA Mercator (NHC LUT)

30-10-2015/00:30 GMT  
30-10-2015/06:00 IST



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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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REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL  
CYCLONES, NEW DELHI  
TROPICAL CYCLONE ADVISORY BULLETIN



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 'CHAPALA' ADVISORY NO. TEN ISSUED AT 0600 UTC OF 30TH OCTOBER 2015 BASED ON 0300 UTC CHARTS.

THE VERY SEVERE CYCLONIC STORM, 'CHAPALA' OVER WESTCENTRAL ARABIAN SEA MOVED WESTWARDS WITH A SPEED OF ABOUT 12 KMPH DURING PAST 6 HOURS , RAPIDLY INTENSIFIED INTO AN **EXTREMELY SEVERE CYCLONIC STORM** AND LAY CENTERED AT 0300 UTC OF TODAY, THE 30TH OCTOBER 2015 OVER NEAR LATITUDE **14.3°N** AND LONGITUDE **61.5°E**, ABOUT 1320 KM WEST-SOUTHWEST OF MUMBAI(43003) AND ABOUT 850 KM EAST-SOUTHEAST OF SALALAH(41316) (OMAN). IT WOULD MOVE WESTWARDS, INTENSIFY FURTHER INTO A **SUPER CYCLONIC STORM** DURING NEXT 24 HOURS AND CROSS NORTH YEMEN AND ADJOINING OMAN COAST BETWEEN LATITUDE 15.0°N AND 16.0°N AROUND MIDNIGHT OF 2<sup>ND</sup> NOVEMBER, 2015. DUE TO ENTRAINMENT OF DRY AIR AND LOWER OCEAN THERMAL ENERGY OVER GULF OF ADEN AND ADJOINING WESTCENTRAL ARABIAN SEA OFF YEMEN AND OMAN COAST, THERE IS POSSIBILITY OF SLIGHT WEAKENING OF THE SYSTEM BEFORE THE LANDFALL OVER NORTH YEMEN AND ADJOINING OMAN COAST.

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

Date/time(UTC)	Position (lat. °N/ long. °E)	Maximum sustained surface wind speed (kmph)	Category of cyclonic Disturbance
30-10-2015/0300	14.3/61.5	190-200 gusting to 220	Extremely severe cyclonic storm
30-10-2015/0600	14.4/61.2	195-205 gusting to 225	Extremely severe cyclonic storm
30-10-2015/1200	14.5/60.6	205-215 gusting to 230	Extremely severe cyclonic storm
30-10-2015/1800	14.5/60.2	210-220 gusting to 195	Extremely severe cyclonic storm
31-10-2015/0000	14.4/59.6	220-230 gusting to 250	Super cyclonic storm
31-10-2015/1200	14.2/58.2	220-230 gusting to 250	Super cyclonic storm
01-11-2015/0000	14.2/56.9	220-230 gusting to 250	Super cyclonic storm
01-11-2015/1200	14.3/55.6	180-190 gusting to 210	Extremely severe cyclonic storm
02-11-2015/0000	14.5/54.1	170-180 gusting to 200	Extremely severe cyclonic storm
02-11-2015/1200	14.9/52.1	150-160 gusting to 175	Very severe cyclonic storm
03-11-2015/0000	15.3/50.1	100-110 gusting to 120	Severe cyclonic storm
03-11-2015/1200	15.8/48.5	50-60 gusting to 70	Depression

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 5.5 AND CONVECTIVE CLOUD SHOWS EYE PATTERN WITH WELL-DEFINED EYE OF DIAMETER ABOUT 15 KM. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 105 KNOTS GUSTING TO 120 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 956 HPA. SEA CONDITION IS PHENOMENAL AROUND THE SYSTEM CENTRE.

**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**

ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION OVER AREA BETWEEN LATITUDE 12.0 DEGREE NORTH TO 17.0 DEGREE NORTH AND LONGITUDE 58.0 DEGREE EAST TO 64.5 DEGREE EAST. THE LOWEST CLOUD TOP TEMPERATURE IS MINUS 83 DEG C

**REMARKS:**

THE SYSTEM HAS INTENSIFIED RAPIDLY DURING THE PAST 12 HOURS DUE TO VERY LOW WIND SHEAR AND INCREASE IN LOWER LEVEL VORTICITY. THE EYE IS SEEN BOTH IN IR AND VISIBLE IMAGERIES. THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS ABOUT 30<sup>0</sup>C AND IT DECREASES TOWARDS THE WEST. THE OCEAN THERMAL ENERGY IS ABOUT 60-80 KJ/CM<sup>2</sup> AROUND THE SYSTEM CENTRE AND IT DECREASES TO THE WEST OF 60 DEGREE EAST. THE VERTICAL WIND SHEAR IS ABOUT 5-10 KNOTS AROUND THE SYSTEM CENTRE. IT IS 10-20 KNOTS TO THE WEST AND WEST-NORTHWEST. THE LOW LEVEL RELATIVE VORTICITY HAS IS >200 X 10<sup>-5</sup> SEC<sup>-1</sup>. UPPER LEVEL DIVERGENCE IS ABOUT 40 X 10<sup>-5</sup> SEC<sup>-1</sup> AND LOW LEVEL CONVERGENCE IS AROUND 20 X 10<sup>-5</sup> SEC<sup>-1</sup>. THERE IS FAVOURABLE POLEWARD 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 15<sup>0</sup>N. THERE IS ANOTHER ANTI-CYCLONIC CIRCULATION TO THE NORTHWEST OF THE SYSTEM CENTRE AND THE CYCLONIC STORM LIES IN THE SOUTHEASTERN PERIPHERY OF THIS ANTICYCLONE. IT IS HELPING IN INCREASING MORE WESTWARD COMPONENT IN THE MOVEMENT OF THE SYSTEM. THE MADDEN JULIAN OSCILLATION INDEX LIES IN PHASE 2 WITH AMPLITUDE GREATER THAN 2 AND IT WOULD CONTINUE TO REMAIN IN SAME PHASE WITH SIMILAR AMPLITUDE FOR NEXT 5 DAYS. IT IS HIGHLY FAVOURABLE FOR INTENSIFICATION OF THE SYSTEM. AS THE SYSTEM WOULD MOVE CLOSER TO YEMEN AND ADJOINING OMAN COAST, IT WOULD EXPERIENCE LOWER OCEAN THERMAL ENERGY AS WELL AS INTRUSION OF DRY AIR FROM NORTHWEST. AS A RESULT, THERE IS POSSIBILITY OF SLIGHT WEAKENING OF THE SYSTEM OVER THE SEA BEFORE THE LANDFALL.

MOST OF THE NUMERICAL WEATHER PREDICTION MODELS ARE SUGGESTING INTENSIFICATION OF THE SYSTEM IN NEXT 24 HRS. DYNAMICAL STATISTICAL MODELS ALSO SUGGEST INTENSIFICATION OF THE SYSTEM. CONSIDERING THE MOVEMENT, MOST OF THE MODELS ARE UNANIMOUS ABOUT WEST-NORTHWESTWARD TO WEST-SOUTHWESTWARD MOVEMENT TOWARDS YEMEN AND ADJOINING OMAN COAST ACROSS GULF OF ADEN. THE PREDICTED TRACK IS MAINLY BASED ON MULTIMODEL ENSEMBLE GUIDANCE.

(M.MOHAPATRA)  
HEAD RSMC NEW DELHI

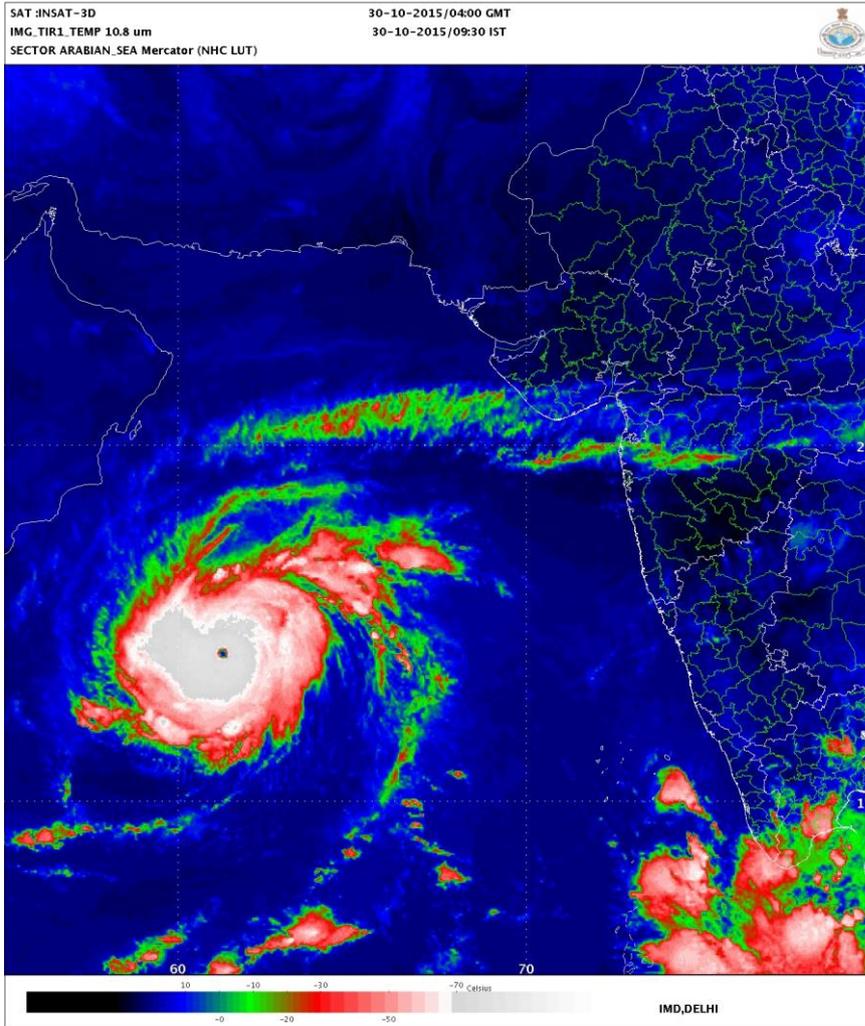
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**PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)**

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

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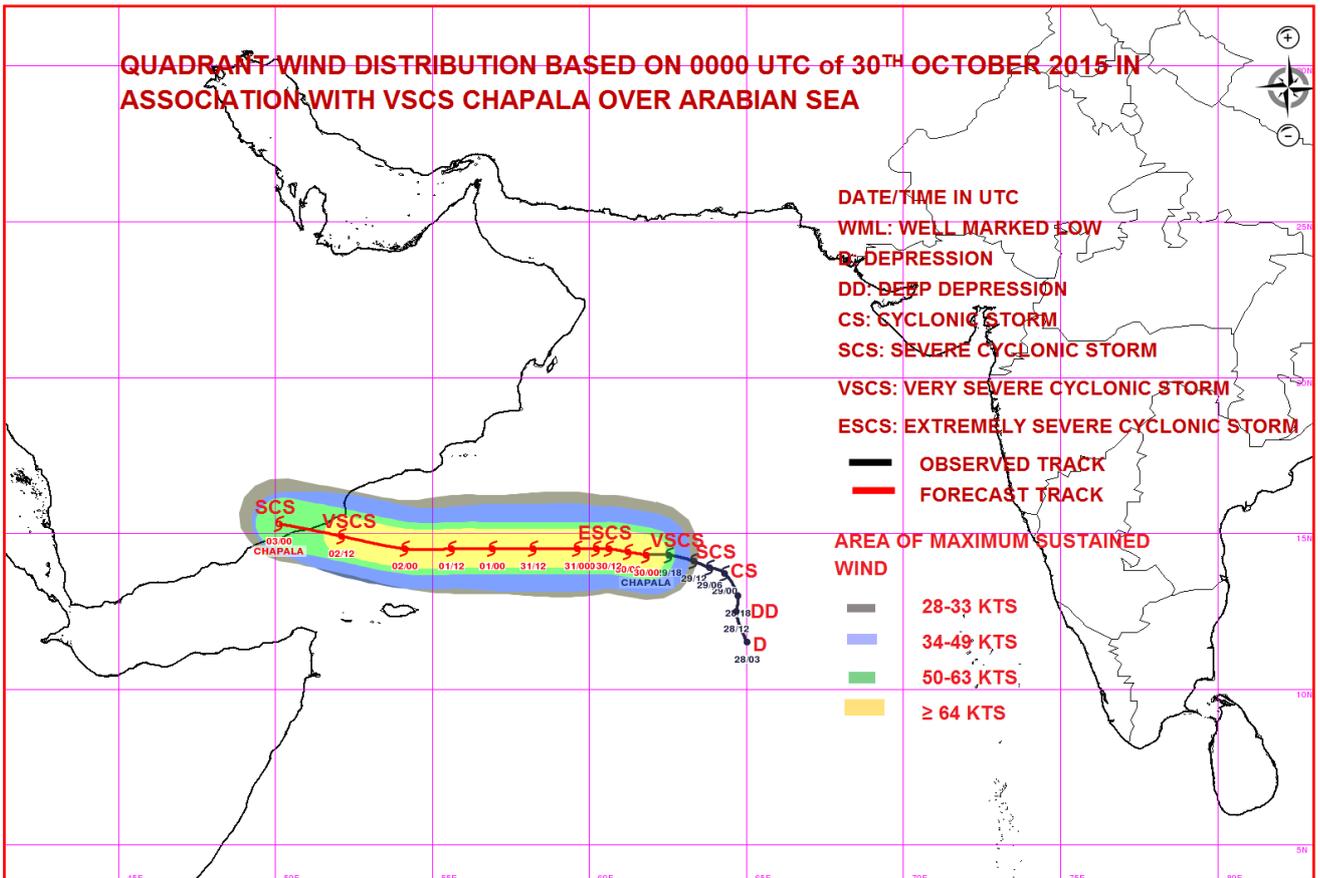
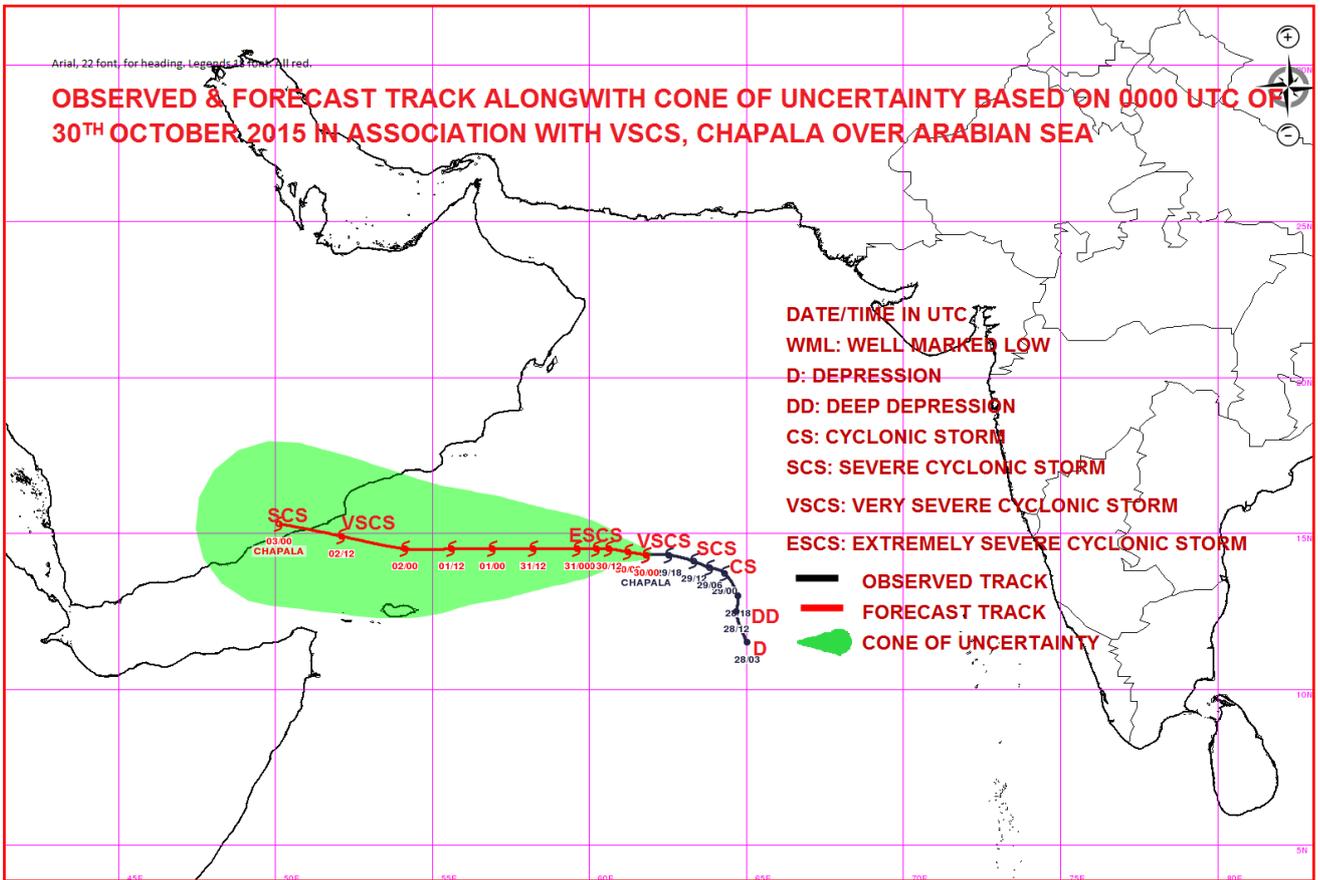
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**PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)**

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

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**PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)**  
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**REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI  
TROPICAL CYCLONE ADVISORY BULLETIN**

**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 'CHAPALA' ADVISORY NO. ELEVEN ISSUED AT 0900 UTC OF 30TH  
OCTOBER 2015 BASED ON 0600 UTC CHARTS.**

THE **EXTREMELY SEVERE CYCLONIC STORM**, 'CHAPALA' OVER WESTCENTRAL ARABIAN SEA MOVED WESTWARDS WITH A SPEED OF ABOUT 11 KMPH DURING PAST 6 HOURS AND LAY CENTERED AT 0600 UTC OF TODAY, THE 30TH OCTOBER 2015 OVER NEAR LATITUDE **14.3°N** AND LONGITUDE **61.1°E**, ABOUT 1350 KM WEST-SOUTHWEST OF MUMBAI(43003) AND ABOUT 800 KM EAST-SOUTHEAST OF SALALAH(41316) (OMAN). IT WOULD MOVE WESTWARDS, INTENSIFY FURTHER INTO A **SUPER CYCLONIC STORM** DURING NEXT 24 HOURS AND CROSS YEMEN AND ADJOINING OMAN COAST BETWEEN LATITUDE 15.0°N AND 16.0°N AROUND MIDNIGHT OF 2<sup>ND</sup> NOVEMBER, 2015. DUE TO ENTRAINMENT OF DRY AIR AND LOWER OCEAN THERMAL ENERGY OVER GULF OF ADEN AND ADJOINING WESTCENTRAL ARABIAN SEA OFF YEMEN AND OMAN COAST, THERE IS POSSIBILITY OF SLIGHT WEAKENING OF THE SYSTEM BEFORE THE LANDFALL OVER YEMEN AND ADJOINING OMAN COAST.

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

<b>Date/time(UTC)</b>	<b>Position (lat. °N/ long. °E)</b>	<b>Maximum sustained surface wind speed (kmph)</b>	<b>Category of cyclonic Disturbance</b>
30-10-2015/0600	14.3/61.1	195-205 gusting to 225	Extremely severe cyclonic storm
30-10-2015/1200	14.2/60.6	210-220 gusting to 240	Extremely severe cyclonic storm
30-10-2015/1800	14.1/60.2	215-225 gusting to 245	Extremely severe cyclonic storm
31-10-2015/0000	14.0/59.6	220-230 gusting to 250	Super cyclonic storm
31-10-2015/0600	13.9/58.9	220-230 gusting to 250	Super cyclonic storm
31-10-2015/1800	13.9/57.5	220-230 gusting to 250	Super cyclonic storm
01-11-2015/0600	14.1/56.0	210-220 gusting to 240	Extremely severe cyclonic storm
01-11-2015/1800	14.3/54.4	190-200 gusting to 220	Extremely severe cyclonic storm
02-11-2015/0600	14.6/52.9	170-180 gusting to 200	Extremely severe cyclonic storm
02-11-2015/1800	15.1/51.1	160-170 gusting to 185	Very severe cyclonic storm
03-11-2015/0600	15.6/49.4	80-90 gusting to 100	Cyclonic storm
03-11-2015/1800	16.1/47.7	45-55 gusting to 65	Depression

**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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ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 5.5 AND CONVECTIVE CLOUD SHOWS EYE PATTERN WITH WELL-DEFINED EYE OF DIAMETER ABOUT 15 KM. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 110 KNOTS GUSTING TO 120 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 950 HPA. SEA CONDITION IS PHENOMENAL AROUND THE SYSTEM CENTRE. ASSOCIATED LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTIVE CLOUDS OVER AREA BETWEEN LAT 11.0 DEGREE NORTH TO 17.5 DEGREE NORTH AND LONGITUDE 58.0 DEGREE EAST TO 64.0 DEGREE EAST. LOWEST CLOUD TOP TEMPERATURE IS MINUS 80 DEGREE C.

**REMARKS:**

THE SYSTEM HAS INTENSIFIED RAPIDLY DURING THE PAST 12 HOURS DUE TO VERY LOW WIND SHEAR AND INCREASE IN LOWER LEVEL VORTICITY. THE EYE IS SEEN BOTH IN IR AND VISIBLE IMAGERIES AND THE EYE TEMPERATURE IS +7.6 DEGREE C. THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS ABOUT 30<sup>0</sup>C AND IT DECREASES TOWARDS THE WEST. THE OCEAN THERMAL ENERGY IS ABOUT 60-80 KJ/CM<sup>2</sup> AROUND THE SYSTEM CENTRE AND IT DECREASES TO THE WEST OF 60 DEGREE EAST. THE VERTICAL WIND SHEAR IS ABOUT 5-10 KNOTS AROUND THE SYSTEM CENTRE. IT IS 10-20 KNOTS TO THE WEST AND WEST-NORTHWEST. THE LOW LEVEL RELATIVE VORTICITY HAS IS >200 X 10<sup>-5</sup> SEC<sup>-1</sup>. UPPER LEVEL DIVERGENCE IS ABOUT 40 X 10<sup>-5</sup> SEC<sup>-1</sup> AND LOW LEVEL CONVERGENCE IS AROUND 20 X 10<sup>-5</sup> SEC<sup>-1</sup>. THERE IS FAVOURABLE POLEWARD 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 15<sup>0</sup>N. THERE IS ANOTHER ANTI-CYCLONIC CIRCULATION TO THE NORTHWEST OF THE SYSTEM CENTRE AND THE CYCLONIC STORM LIES IN THE SOUTHEASTERN PERIPHERY OF THIS ANTICYCLONE. IT IS HELPING IN INCREASING MORE WESTWARD COMPONENT IN THE MOVEMENT OF THE SYSTEM. THE MADDEN JULLIAN OSCILLATION INDEX LIES IN PHASE 2 WITH AMPLITUDE GREATER THAN 2 AND IT WOULD CONTINUE TO REMAIN IN SAME PHASE WITH SIMILAR AMPLITUDE FOR NEXT 5 DAYS. IT IS HIGHLY FAVOURABLE FOR INTENSIFICATION OF THE SYSTEM. AS THE SYSTEM WOULD MOVE CLOSER TO YEMEN AND ADJOINING OMAN COAST, IT WOULD EXPERIENCE LOWER OCEAN THERMAL ENERGY AS WELL AS INTRUSION OF DRY AIR FROM NORTHWEST. AS A RESULT, THERE IS POSSIBILITY OF SLIGHT WEAKENING OF THE SYSTEM OVER THE SEA BEFORE THE LANDFALL.

MOST OF THE NUMERICAL WEATHER PREDICTION MODELS ARE SUGGESTING INTENSIFICATION OF THE SYSTEM IN NEXT 24 HRS. DYNAMICAL STATISTICAL MODELS ALSO SUGGEST INTENSIFICATION OF THE SYSTEM. CONSIDERING THE MOVEMENT, MOST OF THE MODELS ARE UNANIMOUS ABOUT WEST-NORTHWESTWARD TO WEST-SOUTHWESTWARD MOVEMENT TOWARDS YEMEN AND ADJOINING OMAN COAST ACROSS GULF OF ADEN. THE PREDICTED TRACK IS MAINLY BASED ON MULTIMODEL ENSEMBLE GUIDANCE.

(M.MOHAPATRA)  
HEAD RSMC NEW DELHI

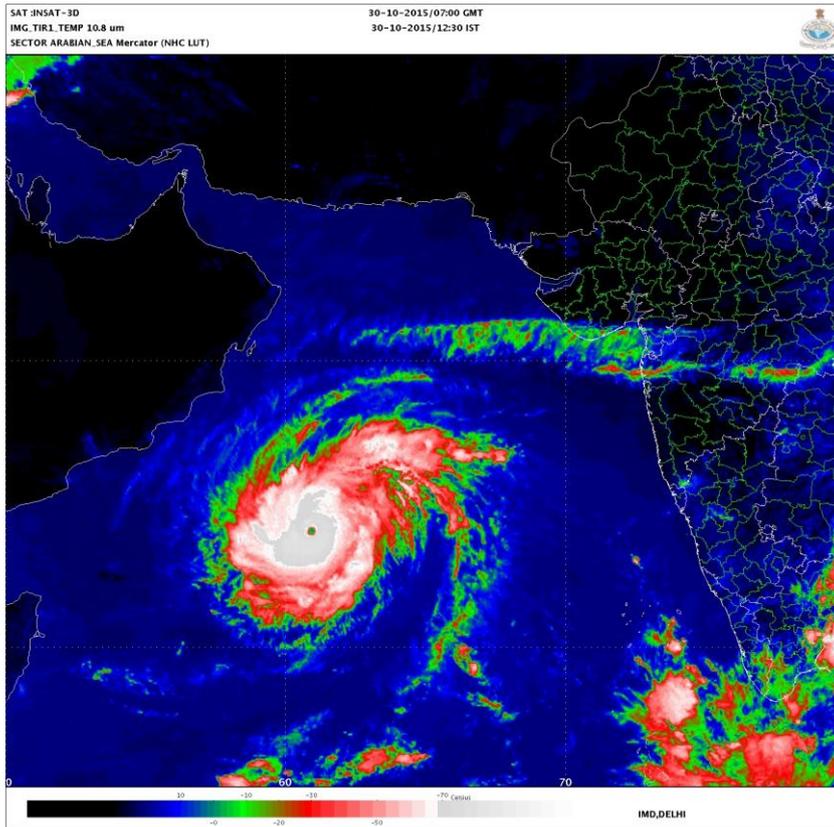
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**PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)**

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

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

**TROPICAL CYCLONE ADVISORY BULLETIN**

**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 'CHAPALA' ADVISORY NO. TWELVE ISSUED AT 1200 UTC OF 30TH OCTOBER 2015 BASED ON 0900 UTC CHARTS.**

THE **EXTREMELY SEVERE CYCLONIC STORM, 'CHAPALA'** OVER WESTCENTRAL ARABIAN SEA MOVED WEST-SOUTHWESTWARDS WITH A SPEED OF ABOUT 12 KMPH DURING PAST 6 HOURS, SLIGHTLY INTENSIFIED FURTHER AND LAY CENTERED AT 0900 UTC OF TODAY, THE 30TH OCTOBER 2015 NEAR LATITUDE **14.2°N** AND LONGITUDE **60.8°E**, ABOUT 1390 KM WEST-SOUTHWEST OF MUMBAI(43003) AND ABOUT 780 KM EAST-SOUTHEAST OF SALALAH (41316) (OMAN). IT WOULD MOVE WESTWARDS, INTENSIFY FURTHER DURING NEXT 12 HOURS AND CROSS YEMEN AND ADJOINING OMAN COAST BETWEEN LATITUDE 15.0°N AND 16.0°N AROUND MIDNIGHT OF 2<sup>ND</sup> NOVEMBER, 2015. DUE TO ENTRAINMENT OF DRY AIR AND LOWER OCEAN THERMAL ENERGY OVER GULF OF ADEN AND ADJOINING WESTCENTRAL ARABIAN SEA OFF YEMEN AND OMAN COAST, THERE IS POSSIBILITY OF SLIGHT WEAKENING OF THE SYSTEM BEFORE THE LANDFALL OVER YEMEN AND ADJOINING OMAN COAST.

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

<b>Date/time(UTC)</b>	<b>Position (lat. °N/ long. °E)</b>	<b>Maximum sustained surface wind speed (kmph)</b>	<b>Category of cyclonic Disturbance</b>
30-10-2015/0900	14.2/60.8	210-220 gusting to 240	Extremely severe cyclonic storm
30-10-2015/1200	14.2/60.6	215-225 gusting to 245	Extremely severe cyclonic storm
30-10-2015/1800	14.1/60.2	220-230 gusting to 250	Super cyclonic storm
31-10-2015/0000	14.0/59.6	220-230 gusting to 250	Super cyclonic storm
31-10-2015/0600	13.9/58.9	220-230 gusting to 250	Super cyclonic storm
31-10-2015/1800	13.9/57.5	220-230 gusting to 250	Super cyclonic storm
01-11-2015/0600	14.1/56.0	210-220 gusting to 240	Extremely severe cyclonic storm
01-11-2015/1800	14.3/54.4	190-200 gusting to 220	Extremely severe cyclonic storm
02-11-2015/0600	14.6/52.9	170-180 gusting to 200	Extremely severe cyclonic storm
02-11-2015/1800	15.1/51.1	160-170 gusting to 185	Very severe cyclonic storm
03-11-2015/0600	15.6/49.4	80-90 gusting to 100	Cyclonic storm

**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**

03-11-2015/1800	16.1/47.7	45-55 gusting to 65	Depression
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ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 6.0 AND CONVECTIVE CLOUD SHOWS EYE PATTERN WITH WELL-DEFINED EYE OF DIAMETER ABOUT 15 KM AND EYE TEMPERATURE IS +12.7°C

MAXIMUM SUSTAINED SURFACE WIND SPEED IS 115 KNOTS GUSTING TO 130 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 942 HPA. SEA CONDITION IS PHENOMENAL AROUND THE SYSTEM CENTRE. ASSOCIATED LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTIVE CLOUDS OVER AREA BETWEEN LAT 11.0 DEGREE NORTH TO 16.5 DEGREE NORTH AND LONGITUDE 58.0 DEGREE EAST TO 64.0 DEGREE EAST. LOWEST CLOUD TOP TEMPERATURE IS MINUS 80 DEGREE C.

**REMARKS:**

THE SYSTEM HAS INTENSIFIED RAPIDLY DURING THE PAST 12 HOURS DUE TO VERY LOW WIND SHEAR AND INCREASE IN LOWER LEVEL VORTICITY. THE EYE IS SEEN BOTH IN IR AND VISIBLE IMAGERIES AND THE EYE TEMPERATURE IS +7.6 DEGREE C. THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS ABOUT 30°C AND IT DECREASES TOWARDS THE WEST. THE OCEAN THERMAL ENERGY IS ABOUT 60-80 KJ/CM<sup>2</sup> AROUND THE SYSTEM CENTRE AND IT DECREASES TO THE WEST OF 60 DEGREE EAST. THE VERTICAL WIND SHEAR IS ABOUT 5-10 KNOTS AROUND THE SYSTEM CENTRE. IT IS 10-20 KNOTS TO THE WEST AND WEST-NORTHWEST. THE LOW LEVEL RELATIVE VORTICITY HAS IS  $>200 \times 10^{-5} \text{ SEC}^{-1}$ . UPPER LEVEL DIVERGENCE IS ABOUT  $40 \times 10^{-5} \text{ SEC}^{-1}$  AND LOW LEVEL CONVERGENCE IS AROUND  $20 \times 10^{-5} \text{ SEC}^{-1}$ . THERE IS FAVOURABLE POLEWARD 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 15°N. THERE IS ANOTHER ANTI-CYCLONIC CIRCULATION TO THE NORTHWEST OF THE SYSTEM CENTRE AND THE CYCLONIC STORM LIES IN THE SOUTHEASTERN PERIPHERY OF THIS ANTICYCLONE. IT IS HELPING IN INCREASING MORE WESTWARD COMPONENT IN THE MOVEMENT OF THE SYSTEM. THE MADDEN JULLIAN OSCILLATION INDEX LIES IN PHASE 2 WITH AMPLITUDE GREATER THAN 2 AND IT WOULD CONTINUE TO REMAIN IN SAME PHASE WITH SIMILAR AMPLITUDE FOR NEXT 5 DAYS. IT IS HIGHLY FAVOURABLE FOR INTENSIFICATION OF THE SYSTEM. AS THE SYSTEM WOULD MOVE CLOSER TO YEMEN AND ADJOINING OMAN COAST, IT WOULD EXPERIENCE LOWER OCEAN THERMAL ENERGY AS WELL AS INTRUSION OF DRY AIR FROM NORTHWEST. AS A RESULT, THERE IS POSSIBILITY OF SLIGHT WEAKENING OF THE SYSTEM OVER THE SEA BEFORE THE LANDFALL.

MOST OF THE NUMERICAL WEATHER PREDICTION MODELS ARE SUGGESTING INTENSIFICATION OF THE SYSTEM IN NEXT 24 HRS. DYNAMICAL STATISTICAL MODELS ALSO SUGGEST INTENSIFICATION OF THE SYSTEM. CONSIDERING THE MOVEMENT, MOST OF THE MODELS ARE UNANIMOUS ABOUT WEST-NORTHWESTWARD TO WEST-SOUTHWESTWARD MOVEMENT TOWARDS YEMEN AND ADJOINING OMAN COAST ACROSS GULF OF ADEN. THE PREDICTED TRACK IS MAINLY BASED ON MULTIMODEL ENSEMBLE GUIDANCE.

(M.MOHAPATRA)  
HEAD RSMC NEW DELHI

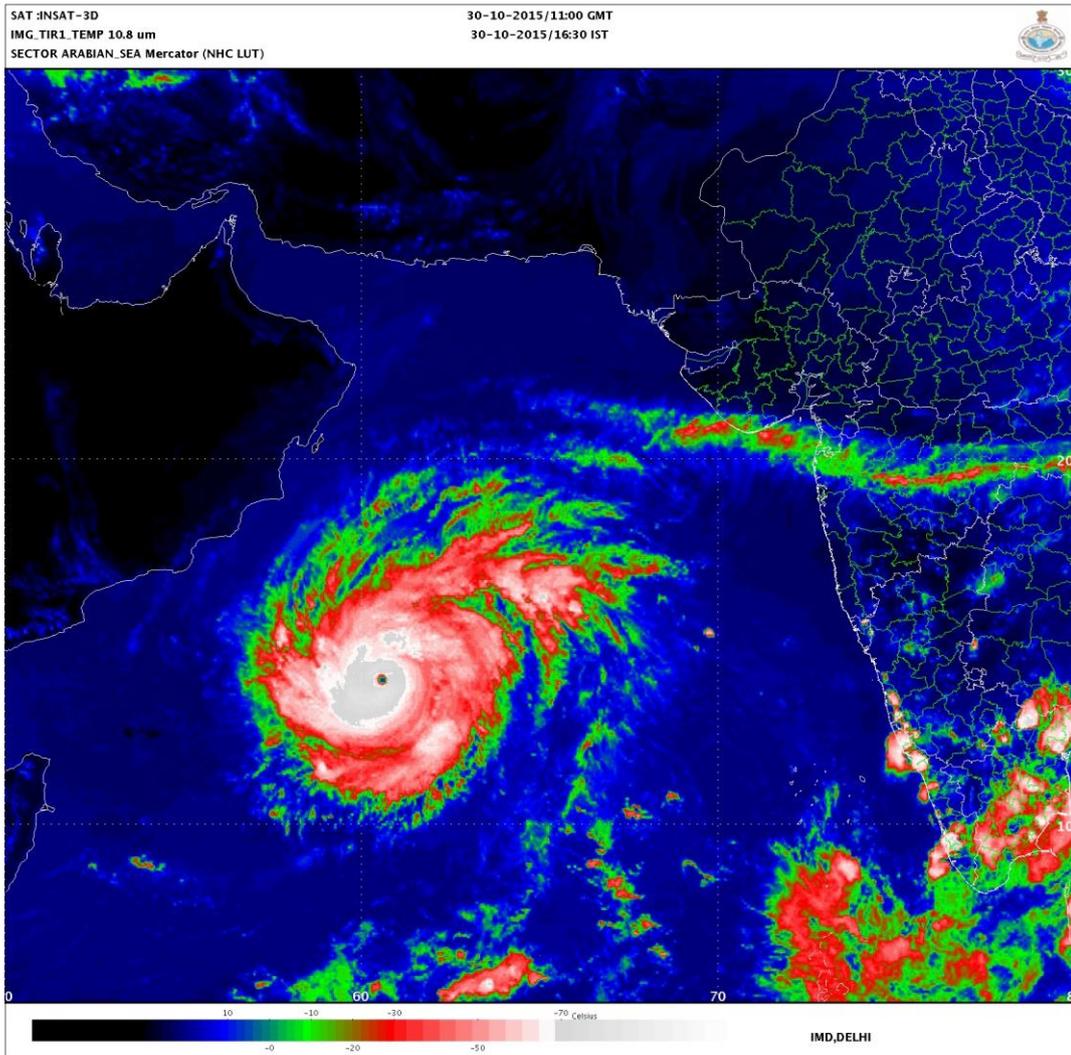
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**PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)**

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

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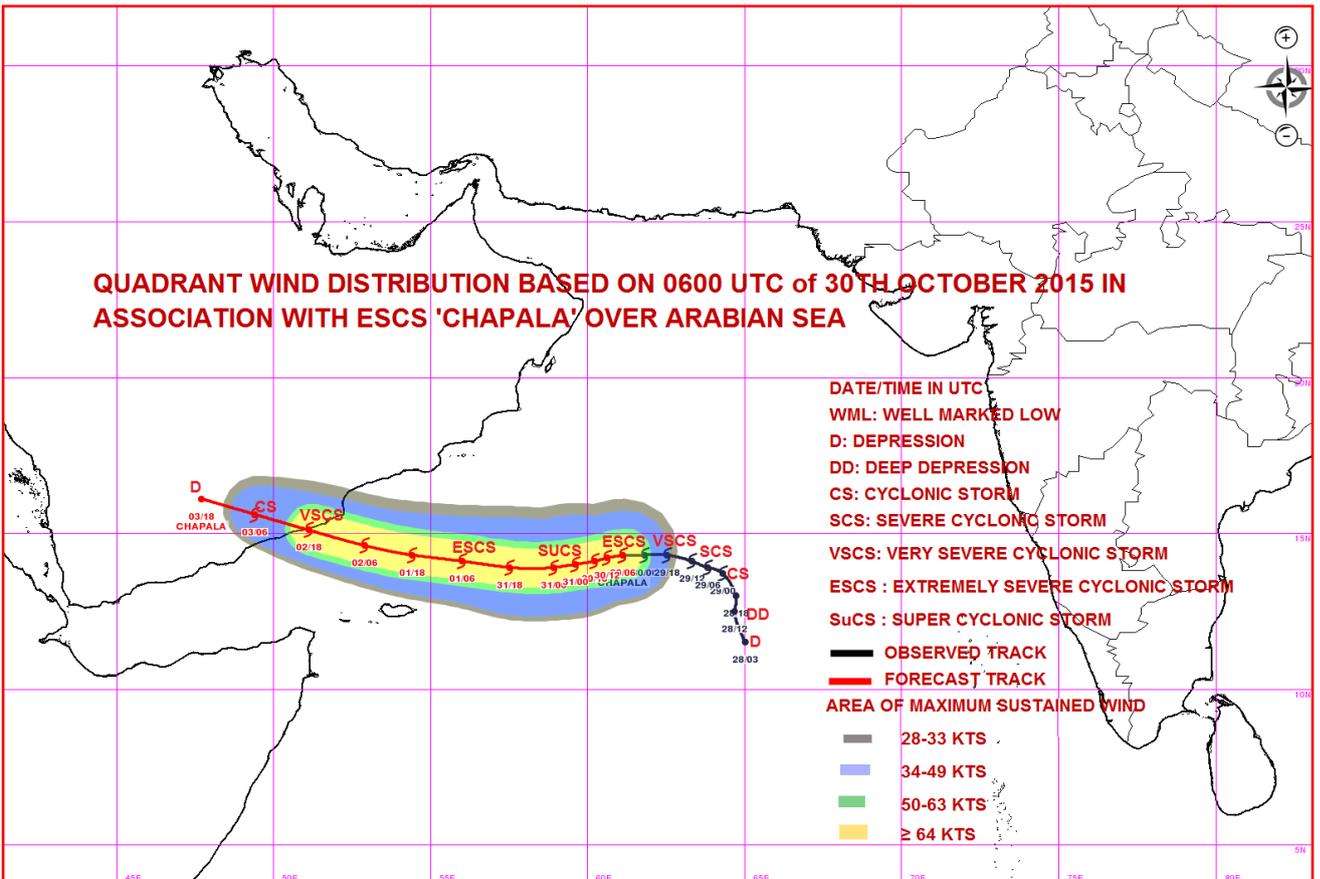
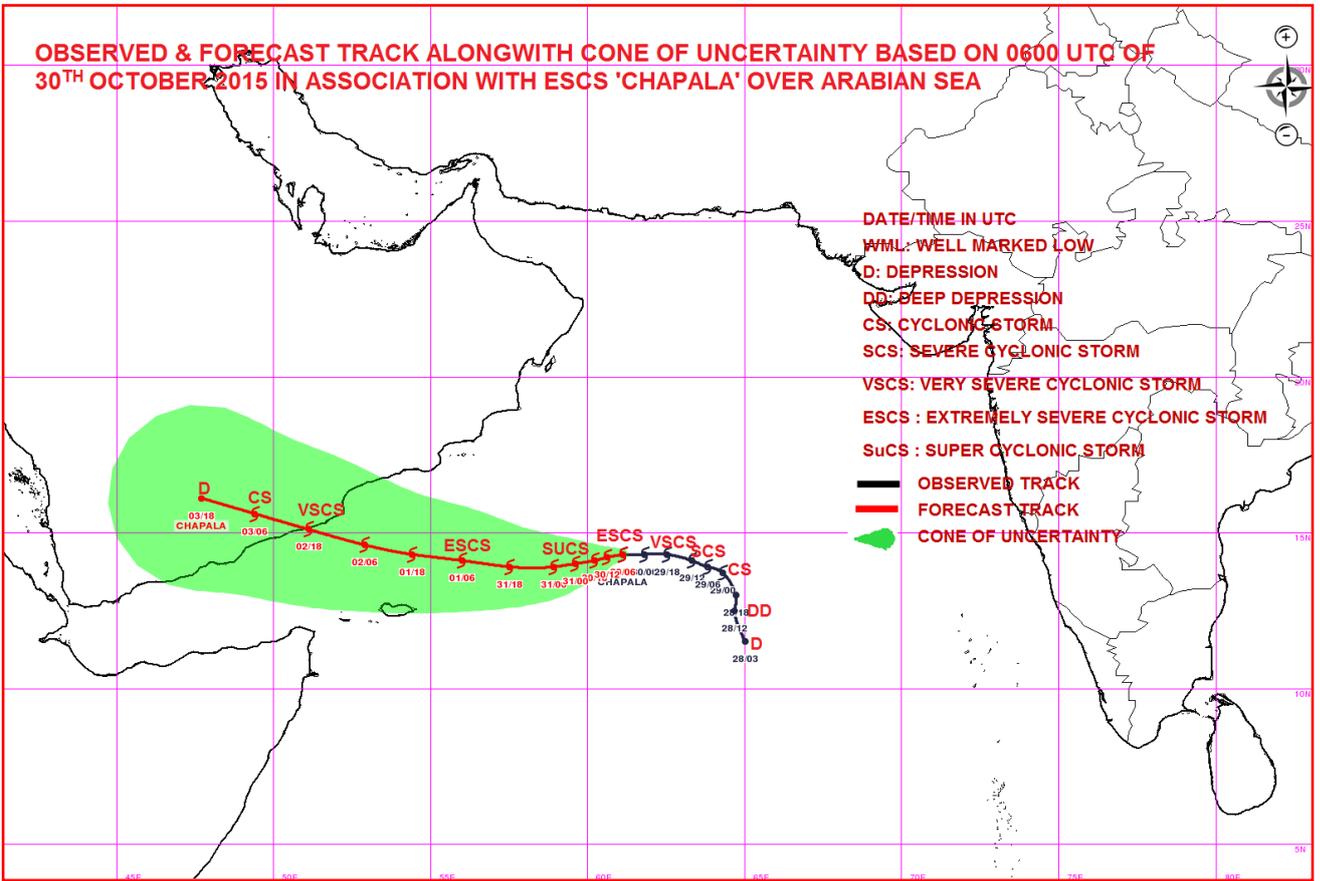
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**PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)**

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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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**REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI  
TROPICAL CYCLONE ADVISORY BULLETIN**

**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 'CHAPALA' ADVISORY NO. THIRTEEN ISSUED AT 1500 UTC OF 30TH OCTOBER 2015 BASED ON 1200 UTC CHARTS.**

THE **EXTREMELY SEVERE CYCLONIC STORM**, 'CHAPALA' OVER WESTCENTRAL ARABIAN SEA MOVED WEST-SOUTHWESTWARDS WITH A SPEED OF ABOUT 12 KMPH DURING PAST 6 HOURS, AND LAY CENTERED AT 1200 UTC OF TODAY, THE 30TH OCTOBER 2015 NEAR LATITUDE **14.1°N** AND LONGITUDE **60.6°E**, ABOUT 1410 KM WEST-SOUTHWEST OF MUMBAI (43003) AND ABOUT 770 KM EAST-SOUTHEAST OF SALALAH (41316) (OMAN). IT WOULD MOVE WESTWARDS, INTENSIFY FURTHER DURING NEXT 12 HOURS AND CROSS YEMEN AND ADJOINING OMAN COAST BETWEEN LATITUDE 15.0°N AND 16.0°N AROUND MIDNIGHT OF 2<sup>ND</sup> NOVEMBER, 2015. DUE TO ENTRAINMENT OF DRY AIR AND LOWER OCEAN THERMAL ENERGY OVER GULF OF ADEN AND ADJOINING WESTCENTRAL ARABIAN SEA OFF YEMEN AND OMAN COAST, THERE IS POSSIBILITY OF SLIGHT WEAKENING OF THE SYSTEM BEFORE THE LANDFALL AND IT WOULD CROSS YEMEN AND ADJOINING OMAN COAST AS A VERY SEVERE CYCLONIC STORM.

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

<b>Date/time(UTC)</b>	<b>Position (lat. °N/ long. °E)</b>	<b>Maximum sustained surface wind speed (kmph)</b>	<b>Category of cyclonic Disturbance</b>
30-10-2015/1200	14.1/60.6	210-220 gusting to 235	Extremely severe cyclonic storm
30-10-2015/1800	14.0/60.1	220-230 gusting to 250	Super cyclonic storm
31-10-2015/0000	13.9/59.5	220-230 gusting to 250	Super cyclonic storm
31-10-2015/0600	13.8/58.9	220-230 gusting to 250	Super cyclonic storm
31-10-2015/1200	13.7/58.2	210-220 gusting to 235	Extremely severe cyclonic storm
01-11-2015/0000	13.8/56.7	190-200 gusting to 220	Extremely severe cyclonic storm
01-11-2015/1200	14.1/55.3	170-180 gusting to 200	Extremely severe cyclonic storm
02-11-2015/0000	14.5/53.6	150-160 gusting to 175	Very severe cyclonic storm
02-11-2015/1200	14.9/52.0	140-150 gusting to 165	Very severe cyclonic storm
03-11-2015/0000	15.4/50.3	90-100 gusting to 115	Severe cyclonic storm
03-11-2015/1200	16.1/48.4	50-60 gusting to 70	Deep Depression

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 6.0 AND CONVECTIVE CLOUD SHOWS EYE PATTERN WITH WELL-DEFINED EYE OF DIAMETER ABOUT 15 KM AND EYE TEMPERATURE IS +12°C.

**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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MAXIMUM SUSTAINED SURFACE WIND SPEED IS 115 KNOTS GUSTING TO 130 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 940 HPA. SEA CONDITION IS PHENOMENAL AROUND THE SYSTEM CENTRE. ASSOCIATED LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTIVE CLOUDS OVER AREA BETWEEN LAT 11.0 DEGREE NORTH TO 16.5 DEGREE NORTH AND LONGITUDE 58.0 DEGREE EAST TO 64.0 DEGREE EAST. LOWEST CLOUD TOP TEMPERATURE IS MINUS 80 DEGREE C.

**REMARKS:**

THE EYE IS SEEN BOTH IN IR AND VISIBLE IMAGERIES. THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS ABOUT 30°C AND IT DECREASES TOWARDS THE WEST. THE OCEAN THERMAL ENERGY IS ABOUT 60-80 KJ/CM<sup>2</sup> AROUND THE SYSTEM CENTRE AND IT DECREASES TO THE WEST OF 60 DEGREE EAST. THE VERTICAL WIND SHEAR IS ABOUT 5-10 KNOTS AROUND THE SYSTEM CENTRE. IT IS 10-20 KNOTS TO THE WEST AND WEST-NORTHWEST. THE LOW LEVEL RELATIVE VORTICITY HAS IS ABOUT  $250 \times 10^{-5} \text{ SEC}^{-1}$ . UPPER LEVEL DIVERGENCE IS ABOUT  $30 \times 10^{-5} \text{ SEC}^{-1}$  AND LOW LEVEL CONVERGENCE IS AROUND  $30 \times 10^{-5} \text{ SEC}^{-1}$ . THERE IS FAVOURABLE POLEWARD 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. THE MADDEN JULLIAN OSCILLATION INDEX LIES IN PHASE 2 WITH AMPLITUDE GREATER THAN 2 AND IT WOULD CONTINUE TO REMAIN IN SAME PHASE WITH SIMILAR AMPLITUDE FOR NEXT 3 DAYS. AS THE SYSTEM WOULD MOVE CLOSER TO YEMEN AND ADJOINING OMAN COAST, IT WOULD EXPERIENCE LOWER OCEAN THERMAL ENERGY AS WELL AS INTRUSION OF DRY AIR FROM NORTHWEST. AS A RESULT, THERE IS POSSIBILITY OF SLIGHT WEAKENING OF THE SYSTEM OVER THE SEA BEFORE THE LANDFALL.

MOST OF THE NUMERICAL WEATHER PREDICTION MODELS ARE SUGGESTING INTENSIFICATION OF THE SYSTEM IN NEXT 24 HRS. DYNAMICAL STATISTICAL MODELS ALSO SUGGEST INTENSIFICATION OF THE SYSTEM. CONSIDERING THE MOVEMENT, MOST OF THE MODELS ARE UNANIMOUS ABOUT WEST-NORTHWESTWARD TO WEST-SOUTHWESTWARD MOVEMENT TOWARDS YEMEN AND ADJOINING OMAN COAST ACROSS GULF OF ADEN. THE PREDICTED TRACK IS MAINLY BASED ON MULTIMODEL ENSEMBLE GUIDANCE.

(M.MOHAPATRA)  
HEAD RSMC NEW DELHI

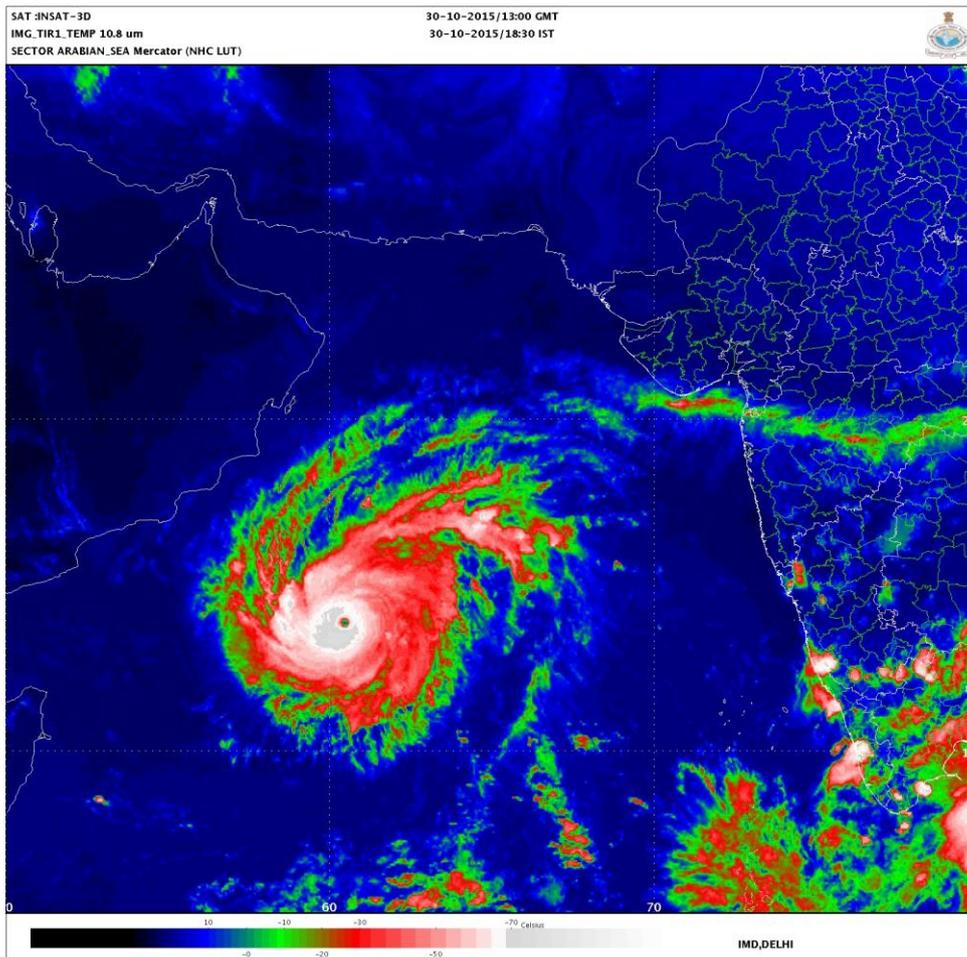
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**PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)**

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

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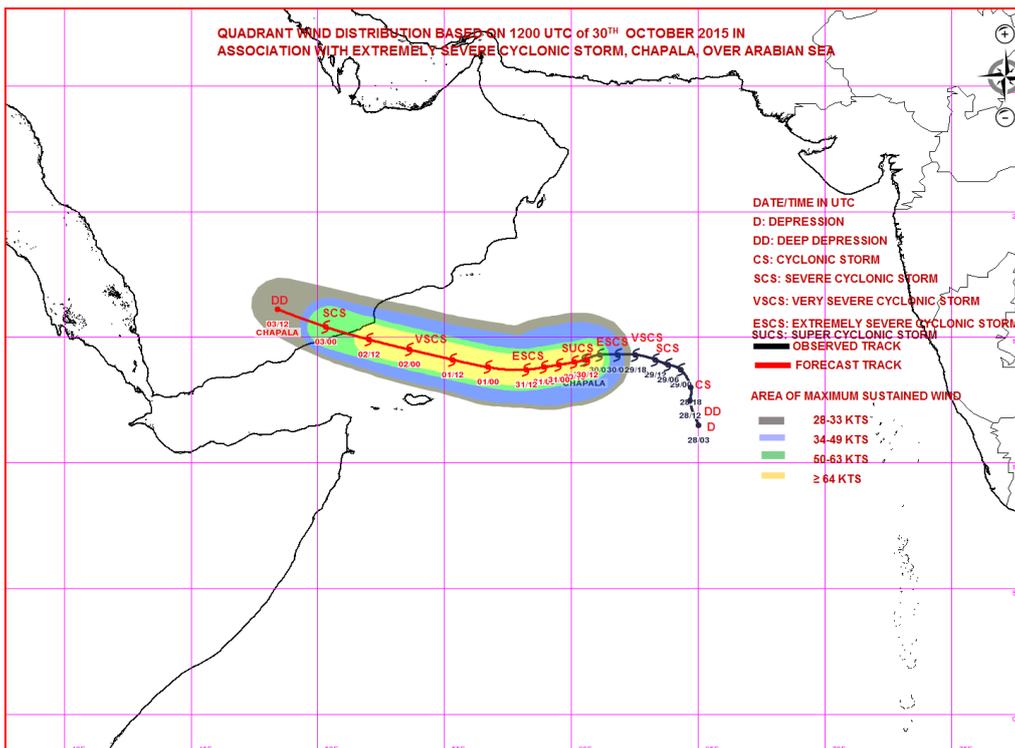
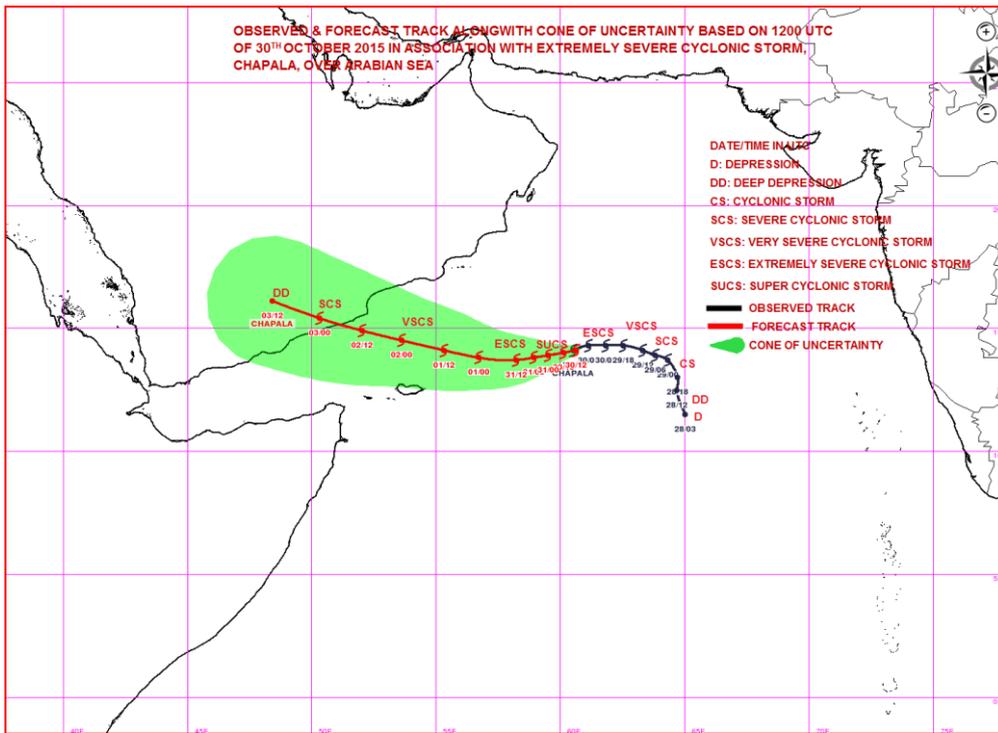
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**REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI**

**TROPICAL CYCLONE ADVISORY BULLETIN**

**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 'CHAPALA' ADVISORY NO. FOURTEEN ISSUED AT 1800 UTC OF 30TH OCTOBER 2015 BASED ON 1500 UTC CHARTS.**

THE **EXTREMELY SEVERE CYCLONIC STORM, 'CHAPALA'** OVER WESTCENTRAL ARABIAN SEA MOVED WEST-SOUTHWESTWARDS WITH A SPEED OF ABOUT 08 KMPH DURING PAST 6 HOURS, AND LAY CENTERED AT 1500 UTC OF TODAY, THE 30TH OCTOBER 2015 NEAR LATITUDE **14.0°N** AND LONGITUDE **60.4°E**, ABOUT 1450 KM WEST-SOUTHWEST OF MUMBAI (43003) AND ABOUT 750 KM EAST-SOUTHEAST OF SALALAH (41316) (OMAN). IT WOULD MOVE WESTWARDS, INTENSIFY FURTHER DURING NEXT 12 HOURS AND CROSS YEMEN AND ADJOINING OMAN COAST BETWEEN LATITUDE 15.0°N AND 16.0°N AROUND MIDNIGHT OF 2<sup>ND</sup> NOVEMBER, 2015. DUE TO ENTRAINMENT OF DRY AIR AND LOWER OCEAN THERMAL ENERGY OVER GULF OF ADEN AND ADJOINING WESTCENTRAL ARABIAN SEA OFF YEMEN AND OMAN COAST, THERE IS POSSIBILITY OF SLIGHT WEAKENING OF THE SYSTEM BEFORE THE LANDFALL AND IT WOULD CROSS YEMEN AND ADJOINING OMAN COAST AS A VERY SEVERE CYCLONIC STORM.

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

<b>Date/time(UTC)</b>	<b>Position (lat. °N/ long. °E)</b>	<b>Maximum sustained surface wind speed (kmph)</b>	<b>Category of cyclonic Disturbance</b>
30-10-2015/1500	14.0/60.4	210-220 gusting to 235	Extremely severe cyclonic storm
30-10-2015/1800	14.0/60.1	220-230 gusting to 250	Super cyclonic storm
31-10-2015/0000	13.9/59.5	220-230 gusting to 250	Super cyclonic storm
31-10-2015/0600	13.8/58.9	220-230 gusting to 250	Super cyclonic storm
31-10-2015/1200	13.7/58.2	210-220 gusting to 235	Extremely severe cyclonic storm
01-11-2015/0000	13.8/56.7	190-200 gusting to 220	Extremely severe cyclonic storm
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03-11-2015/0000	15.4/50.3	90-100 gusting to 115	Severe cyclonic storm
03-11-2015/1200	16.1/48.4	50-60 gusting to 70	Deep Depression

**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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ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 6.0 AND CONVECTIVE CLOUD SHOWS EYE PATTERN WITH WELL-DEFINED EYE OF DIAMETER ABOUT 16 KM AND EYE TEMPERATURE IS -6°C.

MAXIMUM SUSTAINED SURFACE WIND SPEED IS 115 KNOTS GUSTING TO 130 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 940 HPA. SEA CONDITION IS PHENOMENAL AROUND THE SYSTEM CENTRE. ASSOCIATED LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTIVE CLOUDS OVER AREA BETWEEN LAT 11.0 DEGREE NORTH TO 16.5 DEGREE NORTH AND LONGITUDE 57.0 DEGREE EAST TO 64.0 DEGREE EAST. LOWEST CLOUD TOP TEMPERATURE IS MINUS 76 DEGREE C.

**REMARKS:**

THE EYE IS SEEN BOTH IN IR AND VISIBLE IMAGERIES. THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS ABOUT 30°C AND IT DECREASES TOWARDS THE WEST. THE OCEAN THERMAL ENERGY IS ABOUT 60-80 KJ/CM<sup>2</sup> AROUND THE SYSTEM CENTRE AND IT DECREASES TO THE WEST OF 60 DEGREE EAST. THE VERTICAL WIND SHEAR IS ABOUT 5-10 KNOTS AROUND THE SYSTEM CENTRE. IT IS 10-20 KNOTS TO THE WEST AND WEST-NORTHWEST. THE LOW LEVEL RELATIVE VORTICITY HAS IS ABOUT 250 X 10<sup>-5</sup> SEC<sup>-1</sup>. UPPER LEVEL DIVERGENCE IS ABOUT 30 X 10<sup>-5</sup> SEC<sup>-1</sup> AND LOW LEVEL CONVERGENCE IS AROUND 30 X 10<sup>-5</sup> SEC<sup>-1</sup>. THERE IS FAVOURABLE POLEWARD 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. THE MADDEN JULLIAN OSCILLATION INDEX LIES IN PHASE 2 WITH AMPLITUDE GREATER THAN 2 AND IT WOULD CONTINUE TO REMAIN IN SAME PHASE WITH SIMILAR AMPLITUDE FOR NEXT 3 DAYS. AS THE SYSTEM WOULD MOVE CLOSER TO YEMEN AND ADJOINING OMAN COAST, IT WOULD EXPERIENCE LOWER OCEAN THERMAL ENERGY AS WELL AS INTRUSION OF DRY AIR FROM NORTHWEST. AS A RESULT, THERE IS POSSIBILITY OF SLIGHT WEAKENING OF THE SYSTEM OVER THE SEA BEFORE THE LANDFALL.

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(RANJEET SINGH)  
RSMC NEW DELHI

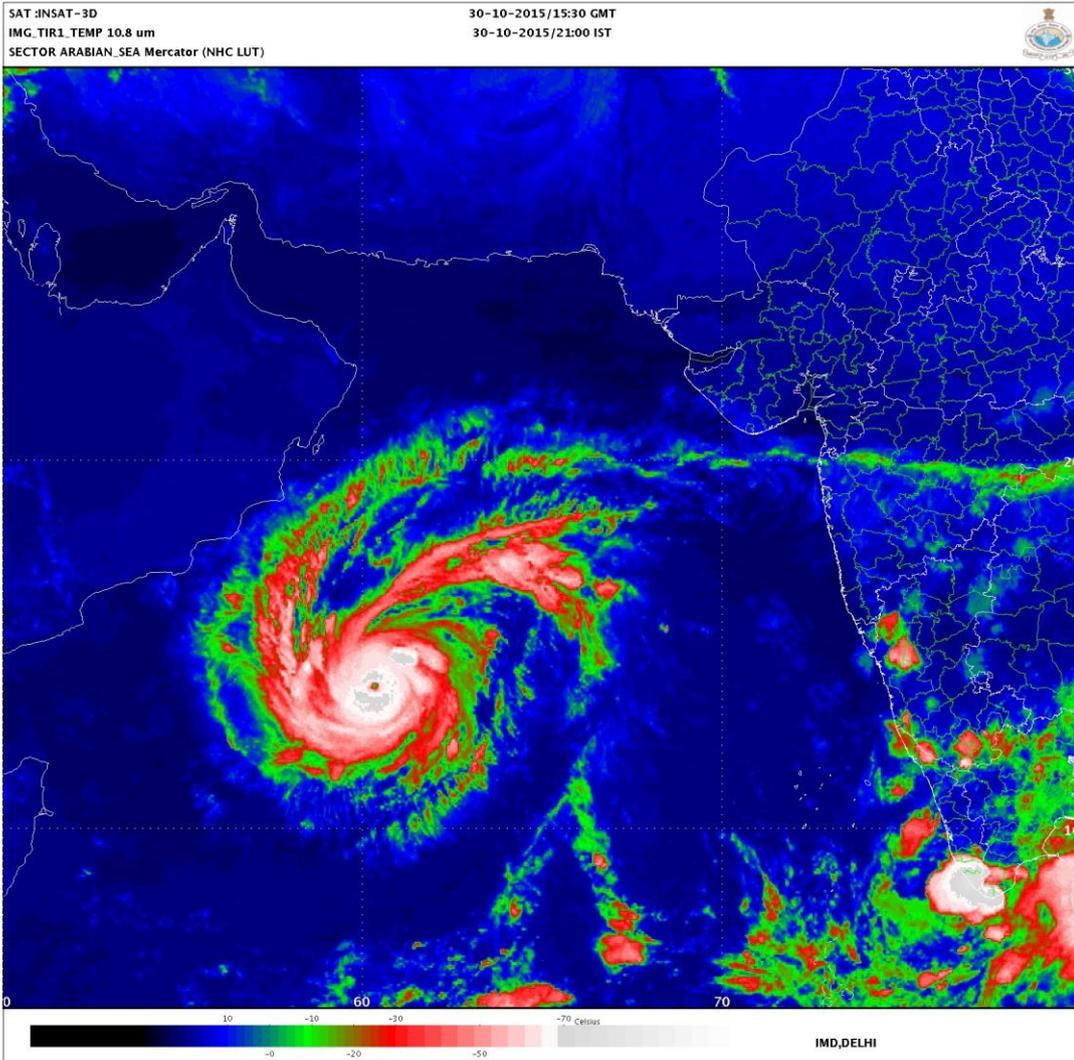
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**PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)**

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

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**PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)**

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**REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI  
TROPICAL CYCLONE ADVISORY BULLETIN**

**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 'CHAPALA' ADVISORY NO. FIFTEEN ISSUED AT 2100 UTC OF 30TH  
OCTOBER 2015 BASED ON 1800 UTC CHARTS.**

THE **EXTREMELY SEVERE CYCLONIC STORM**, 'CHAPALA' OVER WESTCENTRAL ARABIAN SEA MOVED WEST-SOUTHWESTWARDS WITH A SPEED OF ABOUT 08 KMPH DURING PAST 6 HOURS, AND LAY CENTERED AT 1800 UTC OF TODAY, THE 30TH OCTOBER 2015 NEAR LATITUDE **13.9°N** AND LONGITUDE **60.2°E**, ABOUT 1470 KM WEST-SOUTHWEST OF MUMBAI (43003) AND ABOUT 740 KM EAST-SOUTHEAST OF SALALAH (41316) (OMAN). IT WOULD MOVE NEARLY WESTWARDS, INTENSIFY FURTHER DURING NEXT 12 HOURS AND CROSS YEMEN AND ADJOINING OMAN COAST BETWEEN LATITUDE 15.0°N AND 16.0°N AROUND MIDNIGHT OF 2<sup>ND</sup> NOVEMBER, 2015. DUE TO ENTRAINMENT OF DRY AIR AND LOWER OCEAN THERMAL ENERGY OVER GULF OF ADEN AND ADJOINING WESTCENTRAL ARABIAN SEA OFF YEMEN AND OMAN COAST, THERE IS POSSIBILITY OF SLIGHT WEAKENING OF THE SYSTEM BEFORE THE LANDFALL AND IT WOULD CROSS YEMEN AND ADJOINING OMAN COAST AS A VERY SEVERE CYCLONIC STORM.

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

<b>Date/time(UTC)</b>	<b>Position (lat. °N/ long. °E)</b>	<b>Maximum sustained surface wind speed (kmph)</b>	<b>Category of cyclonic Disturbance</b>
30-10-2015/1800	13.9/60.2	210-220 gusting to 235	Extremely severe cyclonic storm
31-10-2015/0000	13.8/59.6	210-220 gusting to 235	Extremely severe cyclonic storm
31-10-2015/0600	13.7/58.9	220-230 gusting to 250	Super cyclonic storm
31-10-2015/1200	13.7/58.2	220-230 gusting to 250	Super cyclonic storm
31-10-2015/1800	13.7/57.3	210-220 gusting to 235	Extremely severe cyclonic storm
01-11-2015/0600	13.9/56.0	190-200 gusting to 220	Extremely severe cyclonic storm
01-11-2015/1800	14.2/54.5	170-180 gusting to 200	Extremely severe cyclonic storm
02-11-2015/0600	14.7/52.8	150-160 gusting to 175	Very severe cyclonic storm
02-11-2015/1800	15.2/51.3	140-150 gusting to 165	Very severe cyclonic storm
03-11-2015/0600	15.6/50.0	90-100 gusting to 115	Severe cyclonic storm
03-11-2015/1800	16.3/48.0	50-60 gusting to 70	Deep Depression

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 6.0 AND CONVECTIVE CLOUD SHOWS EYE PATTERN WITH WELL-DEFINED EYE OF DIAMETER ABOUT 15 KM AND EYE TEMPERATURE IS -23°C.

**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**

MAXIMUM SUSTAINED SURFACE WIND SPEED IS 115 KNOTS GUSTING TO 130 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 940 HPA. SEA CONDITION IS PHENOMENAL AROUND THE SYSTEM CENTRE. ASSOCIATED LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTIVE CLOUDS OVER AREA BETWEEN LAT 11.5 DEGREE NORTH TO 16.5 DEGREE NORTH AND LONGITUDE 57.0 DEGREE EAST TO 63.0 DEGREE EAST. LOWEST CLOUD TOP TEMPERATURE IS MINUS 77 DEGREE C.

**REMARKS:**

THE EYE IS SEEN BOTH IN IR AND VISIBLE IMAGERIES. THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS ABOUT 30°C AND IT DECREASES TOWARDS THE WEST. THE OCEAN THERMAL ENERGY IS ABOUT 60-80 KJ/CM<sup>2</sup> AROUND THE SYSTEM CENTRE AND IT DECREASES TO THE WEST OF 60 DEGREE EAST. THE VERTICAL WIND SHEAR IS ABOUT 5-10 KNOTS AROUND THE SYSTEM CENTRE. IT IS 10-20 KNOTS TO THE WEST AND WEST-NORTHWEST. THE LOW LEVEL RELATIVE VORTICITY HAS IS ABOUT 250 X 10<sup>-5</sup> SEC<sup>-1</sup>. UPPER LEVEL DIVERGENCE IS ABOUT 30 X 10<sup>-5</sup> SEC<sup>-1</sup> AND LOW LEVEL CONVERGENCE IS AROUND 30 X 10<sup>-5</sup> SEC<sup>-1</sup>. THERE IS FAVOURABLE POLEWARD 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. THE MADDEN JULLIAN OSCILLATION INDEX LIES IN PHASE 2 WITH AMPLITUDE GREATER THAN 2 AND IT WOULD CONTINUE TO REMAIN IN SAME PHASE WITH SIMILAR AMPLITUDE FOR NEXT 3 DAYS. AS THE SYSTEM WOULD MOVE CLOSER TO YEMEN AND ADJOINING OMAN COAST, IT WOULD EXPERIENCE LOWER OCEAN THERMAL ENERGY AS WELL AS INTRUSION OF DRY AIR FROM NORTHWEST. AS A RESULT, THERE IS POSSIBILITY OF SLIGHT WEAKENING OF THE SYSTEM OVER THE SEA BEFORE THE LANDFALL.

MOST OF THE NUMERICAL WEATHER PREDICTION MODELS ARE SUGGESTING INTENSIFICATION OF THE SYSTEM IN NEXT 24 HRS. DYNAMICAL STATISTICAL MODELS ALSO SUGGEST INTENSIFICATION OF THE SYSTEM. CONSIDERING THE MOVEMENT, MOST OF THE MODELS ARE UNANIMOUS ABOUT WEST-NORTHWESTWARD TO WEST-SOUTHWESTWARD MOVEMENT TOWARDS YEMEN AND ADJOINING OMAN COAST ACROSS GULF OF ADEN. THE PREDICTED TRACK IS MAINLY BASED ON MULTIMODEL ENSEMBLE GUIDANCE.

(RANJEET SINGH)  
RSMC NEW DELHI

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



**REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI  
TROPICAL CYCLONE ADVISORY BULLETIN**

**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 'CHAPALA' ADVISORY NO. SIXTEEN ISSUED AT 0000 UTC OF 31<sup>ST</sup> OCTOBER 2015 BASED ON 2100 UTC CHARTS OF 30<sup>TH</sup> OCTOBER 2015.**

THE **EXTREMELY SEVERE CYCLONIC STORM**, 'CHAPALA' OVER WESTCENTRAL ARABIAN SEA MOVED WEST-SOUTHWESTWARDS WITH A SPEED OF ABOUT 09 KMPH DURING PAST 6 HOURS, AND LAY CENTERED AT 2100 UTC OF TODAY, THE 30<sup>TH</sup> OCTOBER 2015 NEAR LATITUDE 13.9°N AND LONGITUDE 59.9°E, ABOUT 1490 KM WEST-SOUTHWEST OF MUMBAI (43003) AND ABOUT 710 KM EAST-SOUTHEAST OF SALALAH (41316) (OMAN). IT WOULD MOVE NEARLY WESTWARDS AND CROSS YEMEN AND ADJOINING OMAN COAST BETWEEN LATITUDE 15.0°N AND 16.0°N AROUND MIDNIGHT OF 2<sup>ND</sup> NOVEMBER, 2015. DUE TO ENTRAINMENT OF DRY AIR AND LOWER OCEAN THERMAL ENERGY OVER GULF OF ADEN AND ADJOINING WESTCENTRAL ARABIAN SEA OFF YEMEN AND OMAN COAST, THERE IS POSSIBILITY OF SLIGHT WEAKENING OF THE SYSTEM BEFORE THE LANDFALL AND IT WOULD CROSS YEMEN AND ADJOINING OMAN COAST AS A VERY SEVERE CYCLONIC STORM.

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

<b>Date/time(UTC)</b>	<b>Position (lat. °N/ long. °E)</b>	<b>Maximum sustained surface wind speed (kmph)</b>	<b>Category of cyclonic Disturbance</b>
30-10-2015/2100	13.9/59.9	210-220 gusting to 235	Extremely severe cyclonic storm
31-10-2015/0000	13.8/59.6	210-220 gusting to 235	Extremely severe cyclonic storm
31-10-2015/0600	13.7/58.9	210-220 gusting to 235	Extremely severe cyclonic storm
31-10-2015/1200	13.7/58.2	210-220 gusting to 235	Extremely severe cyclonic storm
31-10-2015/1800	13.7/57.3	210-220 gusting to 235	Extremely severe cyclonic storm
01-11-2015/0600	13.9/56.0	190-200 gusting to 220	Extremely severe cyclonic storm
01-11-2015/1800	14.2/54.5	170-180 gusting to 200	Extremely severe cyclonic storm
02-11-2015/0600	14.7/52.8	150-160 gusting to 175	Very severe cyclonic storm
02-11-2015/1800	15.2/51.3	140-150 gusting to 165	Very severe cyclonic storm
03-11-2015/0600	15.6/50.0	90-100 gusting to 115	Severe cyclonic storm
03-11-2015/1800	16.3/48.0	50-60 gusting to 70	Deep Depression

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 6.0 AND CONVECTIVE CLOUD SHOWS EYE PATTERN WITH RAGGED EYE AND EYE TEMPERATURE IS -57°C.

MAXIMUM SUSTAINED SURFACE WIND SPEED IS 115 KNOTS GUSTING TO 130 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 940 HPA. SEA CONDITION IS PHENOMENAL AROUND

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

THE SYSTEM CENTRE. ASSOCIATED LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTIVE CLOUDS OVER AREA BETWEEN LAT 11.5 DEGREE NORTH TO 16.5 DEGREE NORTH AND LONGITUDE 57.0 DEGREE EAST TO 63.0 DEGREE EAST. LOWEST CLOUD TOP TEMPERATURE IS MINUS 76 DEGREE C.

**REMARKS:**

THE RAGGED EYE IS SEEN SATELLITE IMAGERY. THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS ABOUT 30<sup>0</sup>C AND IT DECREASES TOWARDS THE WEST. THE OCEAN THERMAL ENERGY IS ABOUT 60-80 KJ/CM<sup>2</sup> AROUND THE SYSTEM CENTRE AND IT DECREASES TO THE WEST OF 60 DEGREE EAST. THE VERTICAL WIND SHEAR IS ABOUT 5-10 KNOTS AROUND THE SYSTEM CENTRE. IT IS 10-20 KNOTS TO THE WEST AND WEST-NORTHWEST. THE LOW LEVEL RELATIVE VORTICITY HAS IS ABOUT 250 X 10<sup>-5</sup> SEC<sup>-1</sup>. UPPER LEVEL DIVERGENCE IS ABOUT 30 X 10<sup>-5</sup> SEC<sup>-1</sup> AND LOW LEVEL CONVERGENCE IS AROUND 30 X 10<sup>-5</sup> SEC<sup>-1</sup>. THERE IS FAVOURABLE POLEWARD 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. THE MADDEN JULLIAN OSCILLATION INDEX LIES IN PHASE 2 WITH AMPLITUDE GREATER THAN 2 AND IT WOULD CONTINUE TO REMAIN IN SAME PHASE WITH SIMILAR AMPLITUDE FOR NEXT 3 DAYS. AS THE SYSTEM WOULD MOVE CLOSER TO YEMEN AND ADJOINING OMAN COAST, IT WOULD EXPERIENCE LOWER OCEAN THERMAL ENERGY AS WELL AS INTRUSION OF DRY AIR FROM NORTHWEST. AS A RESULT, THERE IS POSSIBILITY OF SLIGHT WEAKENING OF THE SYSTEM OVER THE SEA BEFORE THE LANDFALL.

MOST OF THE NUMERICAL WEATHER PREDICTION MODELS ARE SUGGESTING INTENSIFICATION OF THE SYSTEM IN NEXT 24 HRS. DYNAMICAL STATISTICAL MODELS ALSO SUGGEST INTENSIFICATION OF THE SYSTEM. CONSIDERING THE MOVEMENT, MOST OF THE MODELS ARE UNANIMOUS ABOUT WEST-NORTHWESTWARD TO WEST-SOUTHWESTWARD MOVEMENT TOWARDS YEMEN AND ADJOINING OMAN COAST ACROSS GULF OF ADEN. THE PREDICTED TRACK IS MAINLY BASED ON MULTIMODEL ENSEMBLE GUIDANCE.

(RANJEET SINGH)  
RSMC NEW DELHI

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



**REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI  
TROPICAL CYCLONE ADVISORY BULLETIN**

**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 ‘CHAPALA’ ADVISORY NO. SEVENTEEN ISSUED AT 0300 UTC OF 31<sup>ST</sup>  
OCTOBER 2015 BASED ON 0000 UTC CHARTS OF 31<sup>ST</sup> OCTOBER 2015.**

THE **EXTREMELY SEVERE CYCLONIC STORM**, ‘CHAPALA’ OVER WESTCENTRAL ARABIAN SEA MOVED WESTWARDS WITH A SPEED OF ABOUT 10 KMPH DURING PAST 6 HOURS AND LAY CENTERED AT 0000 UTC OF TODAY, THE 31TH OCTOBER 2015 NEAR LATITUDE 13.9°N AND LONGITUDE 59.6°E, ABOUT 1530 KM WEST-SOUTHWEST OF MUMBAI (43003) AND ABOUT 680 KM EAST-SOUTHEAST OF SALALAH (41316) (OMAN). IT WOULD MOVE NEARLY WESTWARDS DURING NEXT 36 HOURS AND THEN WEST-NORTHWESTWARDS AND CROSS YEMEN AND ADJOINING OMAN COAST NEAR LATITUDE 15.0°N AROUND MIDNIGHT OF 2<sup>ND</sup> NOVEMBER, 2015. DUE TO ENTRAINMENT OF DRY AIR AND LOWER OCEAN THERMAL ENERGY OVER GULF OF ADEN AND ADJOINING WESTCENTRAL ARABIAN SEA OFF YEMEN AND OMAN COAST, THE SYSTEM WOULD WEAKEN GRADUALLY INTO A VERY SEVERE CYCLONIC STORM DURING NEXT 24HOURS AND FURTHER INTO A SEVERE CYCLONIC STORM IN SUBSEQUENT 24 HOURS.AND CROSS YEMEN AND ADJOINING OMAN COAST AS A SEVERE CYCLONIC STORM.

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

<b>Date/time(UTC)</b>	<b>Position (lat. °N/ long. °E)</b>	<b>Maximum sustained surface wind speed (kmph)</b>	<b>Category of cyclonic Disturbance</b>
31-10-2015/0000	13.9/59.6	205-215 gusting to 235	Extremely severe cyclonic storm
31-10-2015/0600	13.8/59.0	190-200 gusting to 210	Extremely severe cyclonic storm
31-10-2015/1200	13.7/58.3	180-190 gusting to 200	Extremely severe cyclonic storm
31-10-2015/1800	13.7/57.5	165-175 gusting to 195	Extremely severe cyclonic storm
01-11-2015/0000	13.8/56.7	155-165 gusting to 185	Very severe cyclonic storm
01-11-2015/1200	14.0/55.3	135*145 gusting to 165	Very severe cyclonic storm
02-11-2015/0000	14.3/53.6	115-125 gusting to 140	Very severe cyclonic storm
02-11-2015/1200	14.7/52.0	110-110 gusting to 120	Very severe cyclonic storm
03-11-2015/0000	15.3/50.2	90-100 gusting to 115	Severe cyclonic storm
03-11-2015/1200	16.0/48.5	45-55 gusting to 65	Depression

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 5.5 AND CI 6.0 .MAXIMUM SUSTAINED SURFACE WIND SPEED IS 115 KNOTS GUSTING TO 130 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 942 HPA. SEA CONDITION IS PHENOMENAL AROUND THE SYSTEM CENTRE. ASSOCIATED LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE

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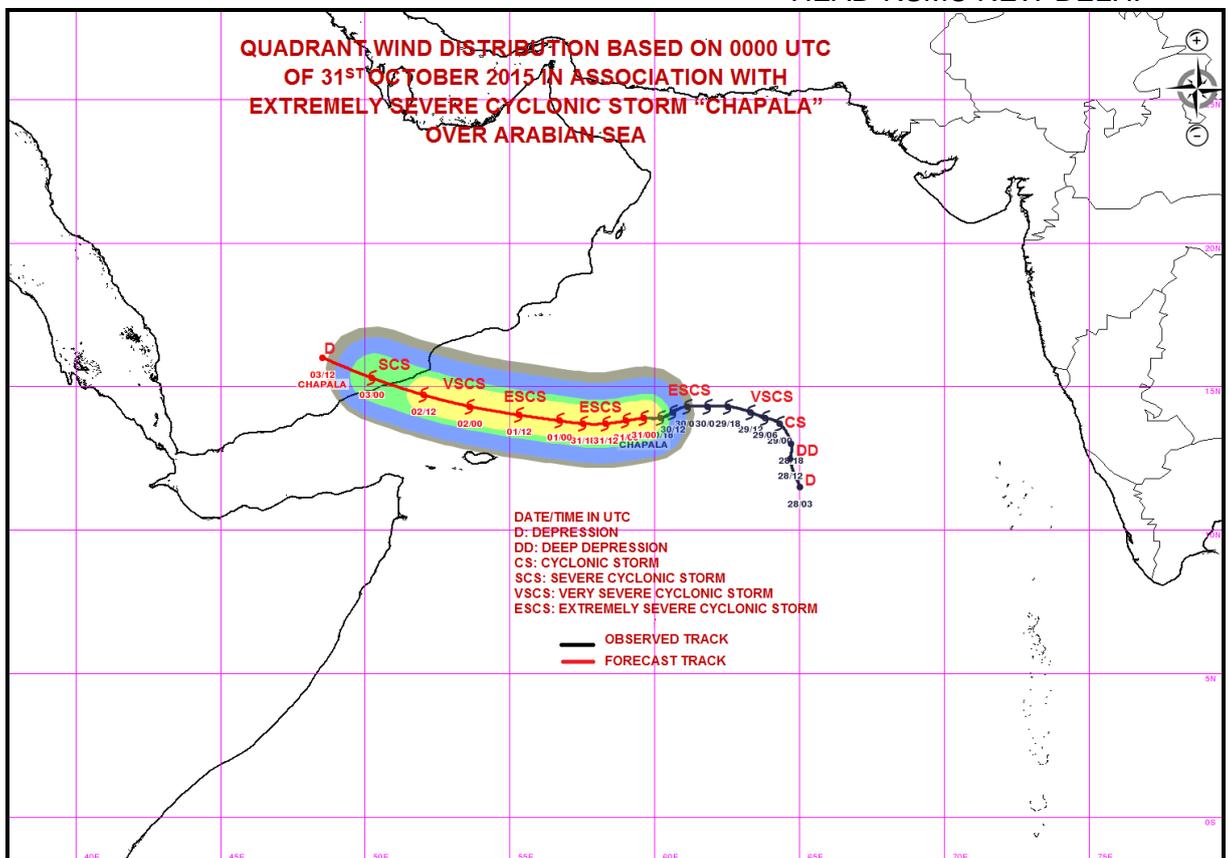
**Contact: Phone: (91) 11-246524844 FAX: (91) 11-24623220 e-mail :cwdhq2008@gmail.com**

CONVECTIVE CLOUDS OVER AREA BETWEEN LAT 11.5 DEGREE NORTH TO 16.5 DEGREE NORTH AND LONGITUDE 57.0 DEGREE EAST TO 63.0 DEGREE EAST. WALL CLOUD REGION TEMPERATURE IS MINUS 82 DEG CEL.

**REMARKS:**

THE EYE IS NOT WELL DEFINED IN SATELLITE IMAGERY. THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS ABOUT 30°C AND IT DECREASES TOWARDS THE WEST. THE OCEAN THERMAL ENERGY IS ABOUT 50-70 KJ/CM<sup>2</sup> AROUND THE SYSTEM CENTRE AND IT DECREASES TO THE WEST. THE VERTICAL WIND SHEAR IS ABOUT 5-10 KNOTS AROUND THE SYSTEM CENTRE. IT IS 10-20 KNOTS TO THE WEST AND WEST-NORTHWEST. THE LOW LEVEL RELATIVE VORTICITY IS ABOUT 250 X 10<sup>-5</sup> SEC<sup>-1</sup>. UPPER LEVEL DIVERGENCE IS ABOUT 30 X 10<sup>-5</sup> SEC<sup>-1</sup> AND LOW LEVEL CONVERGENCE IS AROUND 50 X 10<sup>-5</sup> SEC<sup>-1</sup>. THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 16°N. THE SYSTEM WOULD EXPERIENCE LOWER OCEAN THERMAL ENERGY AS WELL AS INTRUSION OF DRY AIR FROM NORTHWEST. AS A RESULT, THE SYSTEM WOULD GRADUALLY WEAKEN.

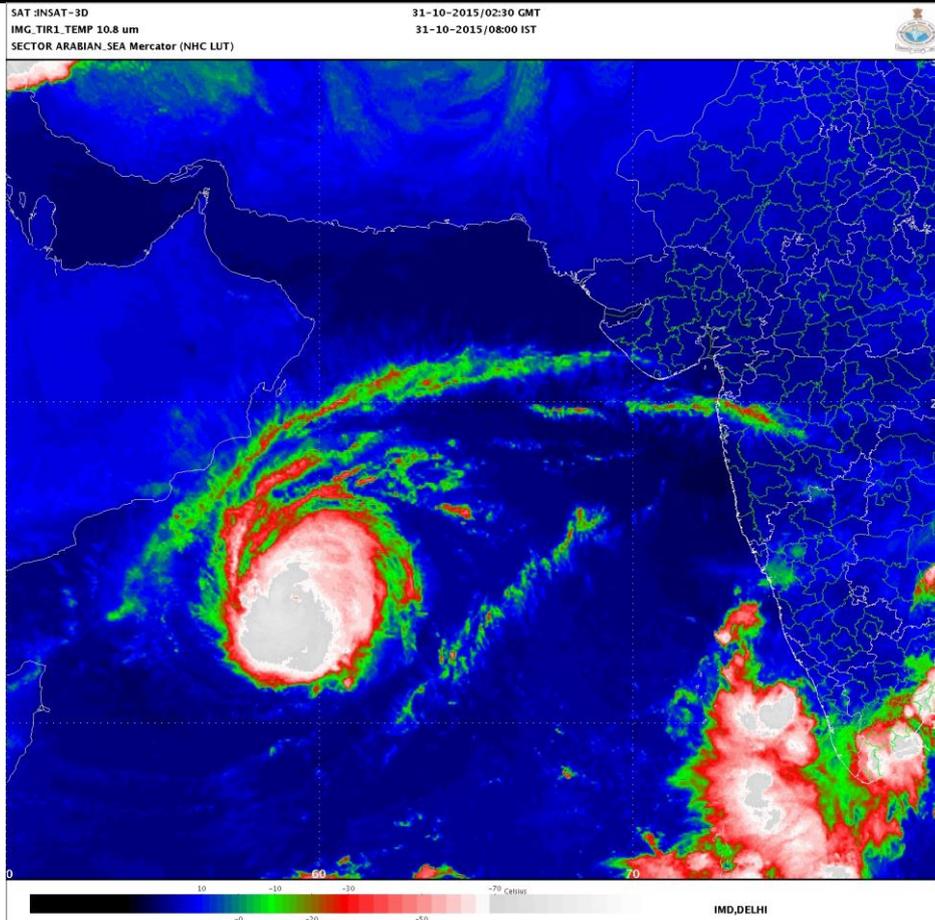
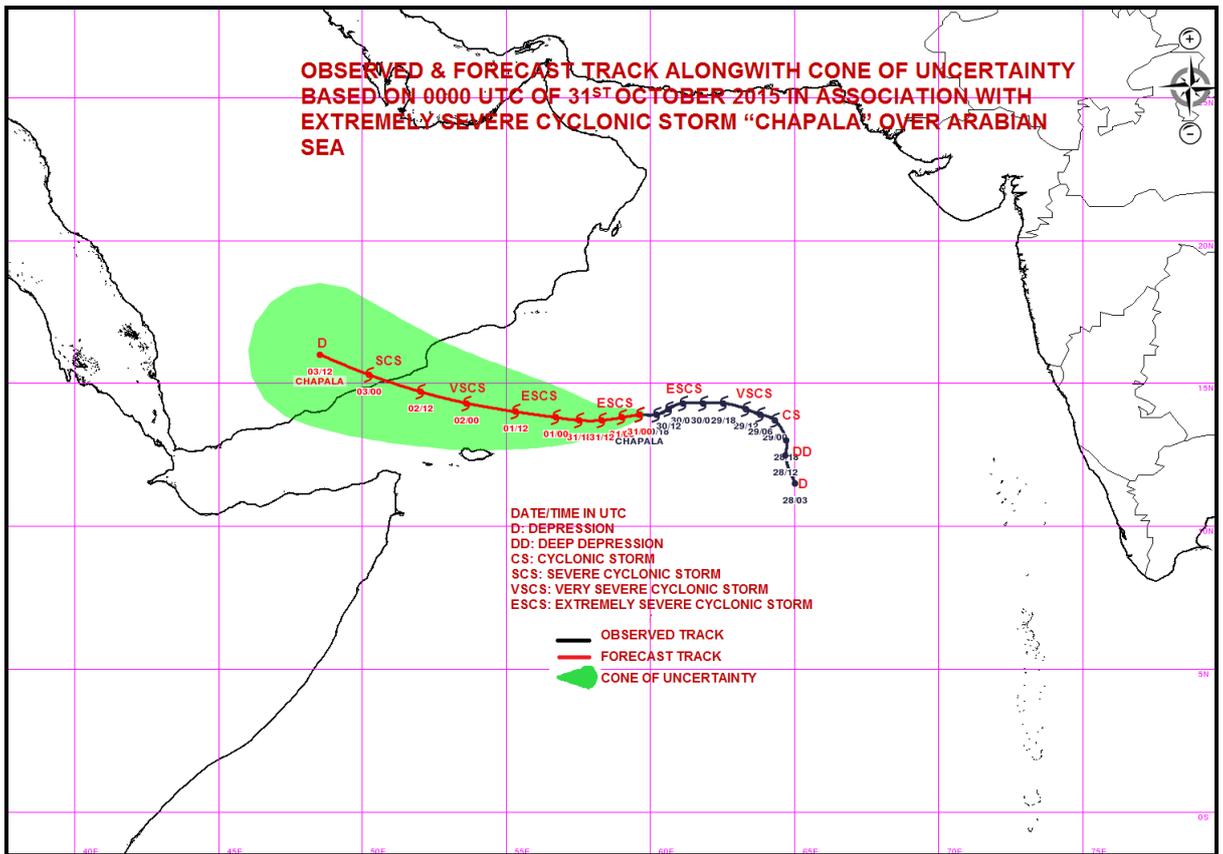
(M. MOHAPATRA)  
HEAD-RSMC NEW DELHI



**PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)**

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

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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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**REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI  
TROPICAL CYCLONE ADVISORY BULLETIN**

**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 ‘CHAPALA’ ADVISORY NO. EIGHTEEN ISSUED AT 0600 UTC OF 31<sup>ST</sup>  
OCTOBER 2015 BASED ON 0300 UTC CHARTS OF 31<sup>ST</sup> OCTOBER 2015.**

THE **EXTREMELY SEVERE CYCLONIC STORM**, ‘CHAPALA’ OVER WESTCENTRAL ARABIAN SEA MOVED WEST-SOUTHWESTWARDS WITH A SPEED OF ABOUT 12 KMPH DURING PAST 6 HOURS AND LAY CENTERED AT 0300 UTC OF TODAY, THE 31TH OCTOBER 2015 NEAR LATITUDE 13.8 DEGREE NORTH AND LONGITUDE 59.2 DEGREE EAST, ABOUT 1560 KM WEST-SOUTHWEST OF MUMBAI (43003) AND ABOUT 650 KM SOUTHEAST OF SALALAH (41316) (OMAN). IT WOULD MOVE NEARLY WESTWARDS DURING NEXT 24 HOURS AND THEN WEST-NORTHWESTWARDS AND CROSS YEMEN AND ADJOINING OMAN COAST NEAR LATITUDE 15.0°N AROUND 1800 UTC OF 2<sup>ND</sup> NOVEMBER, 2015. DUE TO ENTRAINMENT OF DRY AIR AND LOWER OCEAN THERMAL ENERGY, THE EXTREMELY SEVERE CYCLONIC STORM WOULD WEAKEN GRADUALLY INTO A VERY SEVERE CYCLONIC STORM DURING NEXT 24 HOURS, FURTHER INTO A SEVERE CYCLONIC STORM IN SUBSEQUENT 24 HOURS. **CROSS YEMEN AND ADJOINING OMAN COAST AS A SEVERE CYCLONIC STORM.**

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

Date/time(UTC)	Position (lat. °N/ long. °E)	Maximum sustained surface wind speed (kmph)	Category of cyclonic Disturbance
31-10-2015/0300	13.8/59.2	200-210 gusting to 235	Extremely severe cyclonic storm
31-10-2015/0600	13.8/59.0	190-200 gusting to 210	Extremely severe cyclonic storm
31-10-2015/1200	13.7/58.3	180-190 gusting to 200	Extremely severe cyclonic storm
31-10-2015/1800	13.7/57.5	165-175 gusting to 195	Extremely severe cyclonic storm
01-11-2015/0000	13.8/56.7	155-165 gusting to 185	Very severe cyclonic storm
01-11-2015/1200	14.0/55.3	135-145 gusting to 165	Very severe cyclonic storm
02-11-2015/0000	14.3/53.6	115-125 gusting to 140	Very severe cyclonic storm
02-11-2015/1200	14.7/52.0	110-110 gusting to 120	Very severe cyclonic storm
03-11-2015/0000	15.3/50.2	90-100 gusting to 115	Severe cyclonic storm
03-11-2015/1200	16.0/48.5	45-55 gusting to 65	Depression

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 5.5 AND CI 6.0 .MAXIMUM SUSTAINED SURFACE WIND SPEED IS 110 KNOTS GUSTING TO 125 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 946 HPA. SEA CONDITION IS PHENOMENAL AROUND THE SYSTEM CENTRE. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE

**PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)**

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

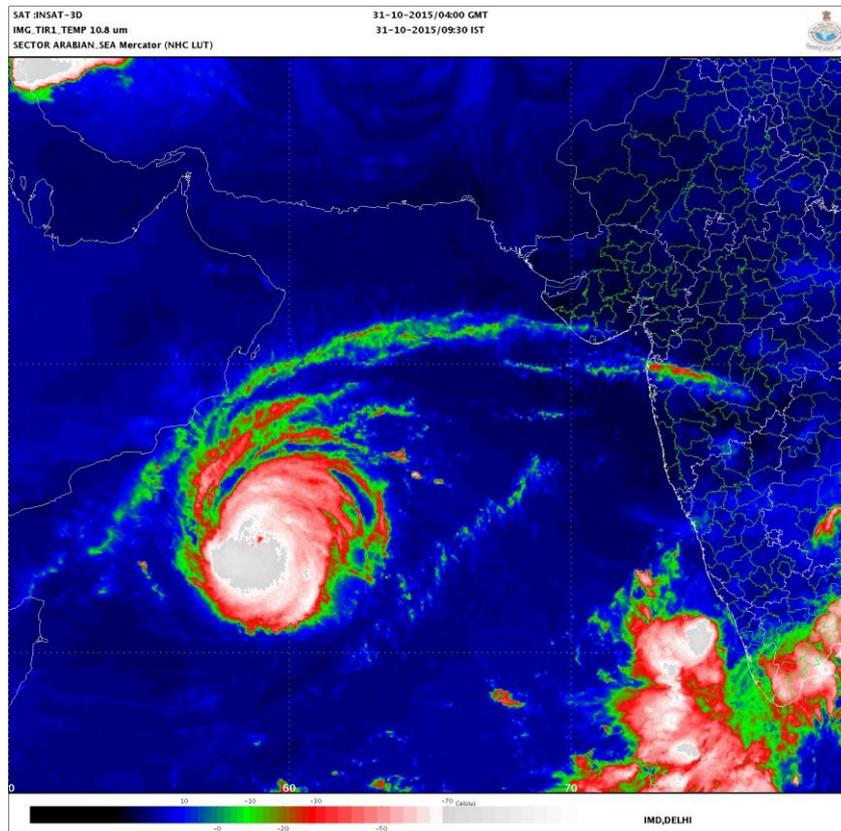
**Contact: Phone: (91) 11-246524844 FAX: (91) 11-24623220 e-mail :cwdhq2008@gmail.com**

CONVECTION LIE OVER AREA BETWEEN LATITUDE 11.0 DEGREE NORTH TO 16.5 DEGREE NORTH AND LONGITUDE 57.0 DEGREE EAST TO 62.0 DEGREE EAST. MINIMUM WALL CLOUD REGION TEMPERATURE IS MINUS 88 DEG C.

**REMARKS:**

THE EYE IS NOT WELL DEFINED IN SATELLITE IMAGERY. THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS ABOUT 30°C AND IT DECREASES TOWARDS THE WEST. THE OCEAN THERMAL ENERGY IS ABOUT 50-70 KJ/CM<sup>2</sup> AROUND THE SYSTEM CENTRE AND IT DECREASES TO THE WEST. THE VERTICAL WIND SHEAR AROUND THE SYSTEM CENTRE HAS SLIGHTLY INCREASED AND IS ABOUT 10-15 KNOTS. IT IS 10-20 KNOTS TO THE WEST AND WEST-NORTHWEST. THE LOW LEVEL RELATIVE VORTICITY IS ABOUT 250 X 10<sup>-5</sup> SEC<sup>-1</sup>. UPPER LEVEL DIVERGENCE IS ABOUT 30 X 10<sup>-5</sup> SEC<sup>-1</sup> AND LOW LEVEL CONVERGENCE IS AROUND 30 X 10<sup>-5</sup> SEC<sup>-1</sup>. THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 16°N. AS THE SYSTEM MOVES WESTWARDS, THE SYSTEM WOULD EXPERIENCE FURTHER LOWER OCEAN THERMAL ENERGY AND HIGHER WERTICAL WIND SHEAR. ALSO, INTRUSION OF DRY AIR FROM THE NORTHWEST HAS ALREADY COVERED THE PERIPHERY OF THE SYSTEM FROM THE SOUTHERN AND WESTERN SECTORS. AS A RESULT, THE SYSTEM WOULD GRADUALLY WEAKEN.

(M. MOHAPATRA)  
HEAD-RSMC NEW DELHI



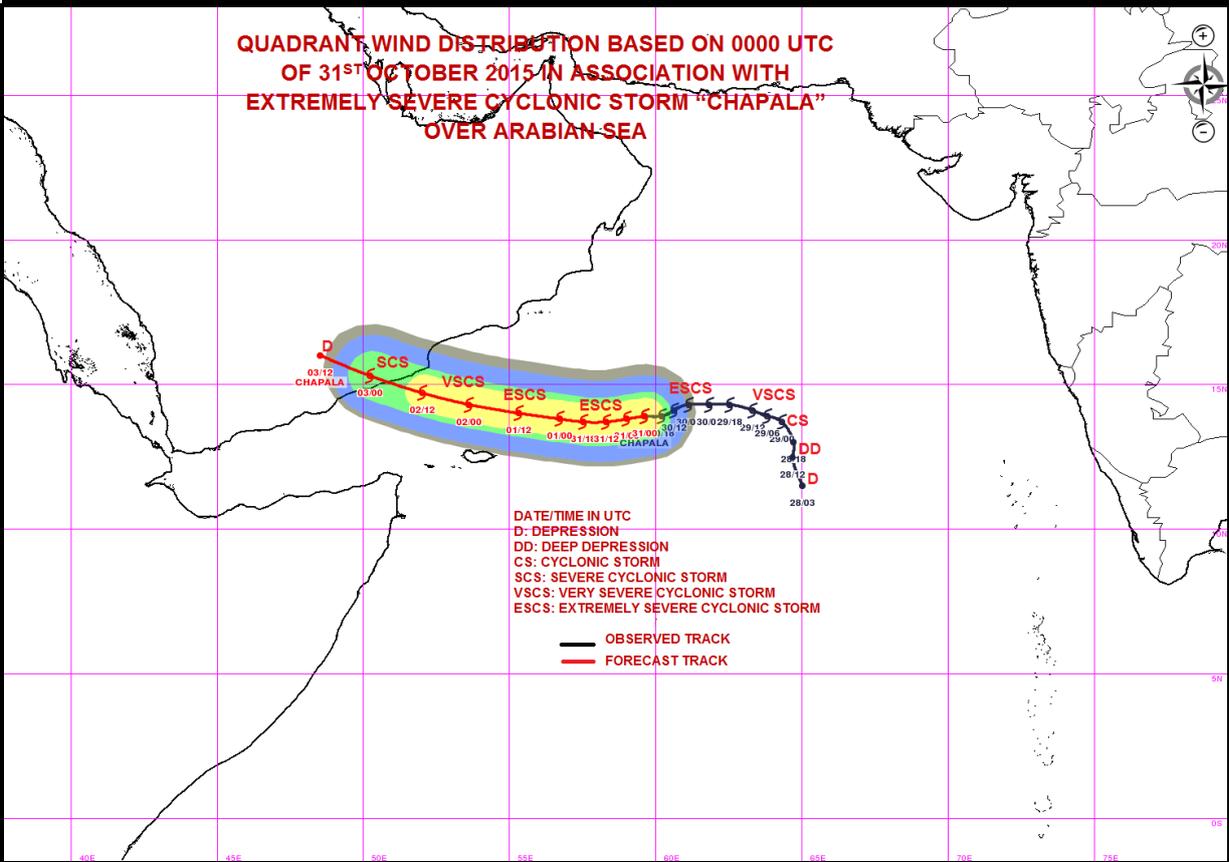
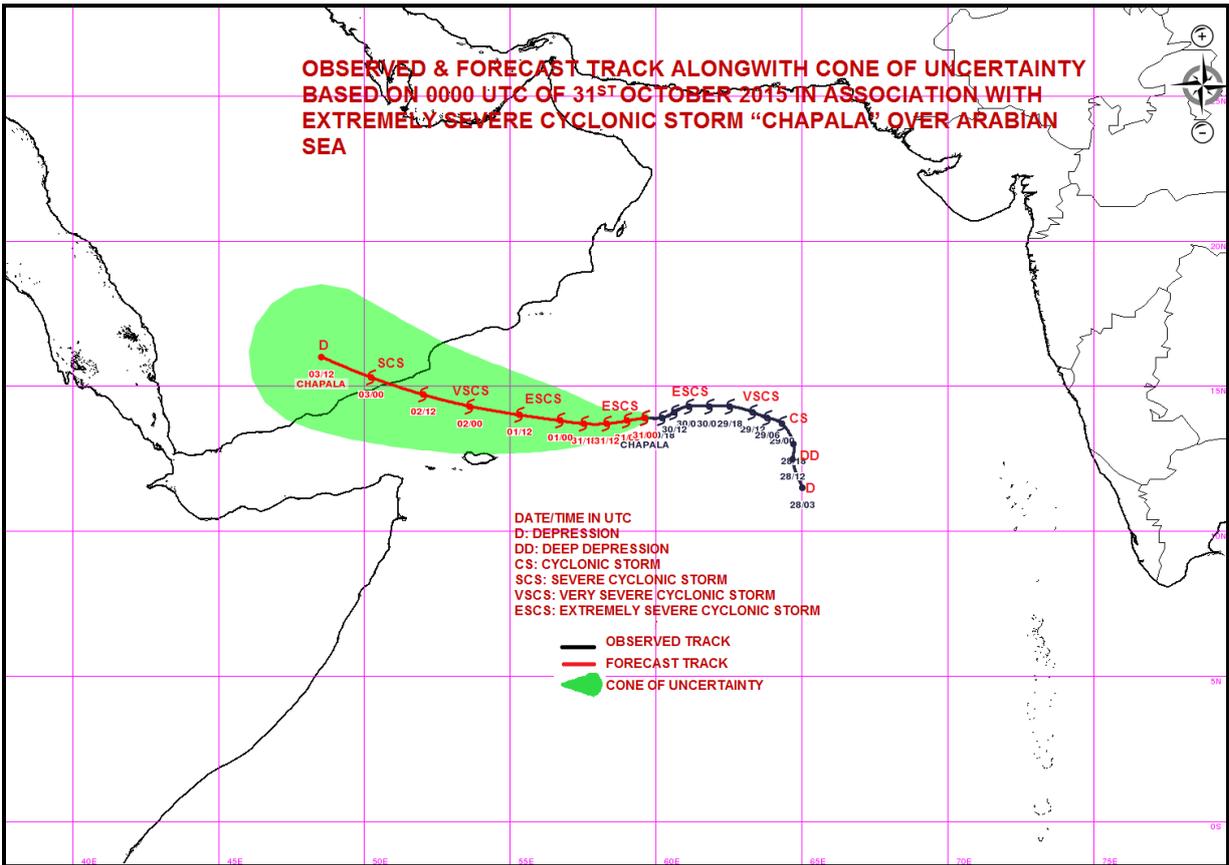
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**PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)**

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

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



**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**



**REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI  
TROPICAL CYCLONE ADVISORY BULLETIN**

**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 ‘CHAPALA’ ADVISORY NO. NINETEEN ISSUED AT 0900 UTC OF 31<sup>ST</sup>  
OCTOBER 2015 BASED ON 0600 UTC CHARTS OF 31<sup>ST</sup> OCTOBER 2015.**

THE **EXTREMELY SEVERE CYCLONIC STORM**, ‘CHAPALA’ OVER WESTCENTRAL ARABIAN SEA MOVED WEST-SOUTHWESTWARDS WITH A SPEED OF ABOUT 14 KMPH DURING PAST 6 HOURS AND LAY CENTERED AT 0600 UTC OF TODAY, THE 31<sup>ST</sup> OCTOBER 2015 NEAR LATITUDE 13.8 DEGREE NORTH AND LONGITUDE 58.7 DEGREE EAST, ABOUT 1610 KM WEST-SOUTHWEST OF MUMBAI (43003) AND ABOUT 610 KM SOUTHEAST OF SALALAH (41316) (OMAN). IT WOULD MOVE NEARLY WESTWARDS DURING NEXT 24 HOURS AND THEN WEST-NORTHWESTWARDS AND CROSS YEMEN COAST NEAR LATITUDE 15.0°N AROUND 1800 UTC OF 2<sup>ND</sup> NOVEMBER, 2015. DUE TO ENTRAINMENT OF DRY AIR AND LOWER OCEAN THERMAL ENERGY, THE EXTREMELY SEVERE CYCLONIC STORM WOULD WEAKEN GRADUALLY INTO A VERY SEVERE CYCLONIC STORM DURING NEXT 24 HOURS, FURTHER INTO A SEVERE CYCLONIC STORM IN SUBSEQUENT 24 HOURS AND WOULD **CROSS YEMEN COAST AS A SEVERE CYCLONIC STORM**.

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

<b>Date/time(UTC)</b>	<b>Position (lat. °N/ long. °E)</b>	<b>Maximum sustained surface wind speed (kmph)</b>	<b>Category of cyclonic Disturbance</b>
31-10-2015/0600	13.8/58.7	190-200 gusting to 220	Extremely severe cyclonic storm
31-10-2015/1200	13.7/58.0	180-190 gusting to 210	Extremely severe cyclonic storm
31-10-2015/1800	13.7/57.3	170-180 gusting to 195	Extremely severe cyclonic storm
01-11-2015/0000	13.7/56.6	160-170 gusting to 185	Extremely severe cyclonic storm
01-11-2015/0600	13.8/55.9	150-160 gusting to 175	Very severe cyclonic storm
01-11-2015/1800	14.1/54.4	130-140 gusting to 155	Very severe cyclonic storm
02-11-2015/0600	14.5/52.8	110-120 gusting to 135	Very severe cyclonic storm
02-11-2015/1800	15.0/51.1	100-110 gusting to 120	Severe cyclonic storm
03-11-2015/0600	15.7/49.4	80-90 gusting to 100	Cyclonic storm
03-11-2015/1800	16.4/47.8	45-55 gusting to 65	Depression

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 5.0 AND CI 6.0. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 105 KNOTS GUSTING TO 115 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 950 HPA. SEA CONDITION IS PHENOMENAL AROUND THE SYSTEM CENTRE. ASSOCIATED LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER AREA BETWEEN LATITUDE 11.0 DEGREE NORTH TO 16.5 DEGREE NORTH

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

AND LONGITUDE 57.0 DEGREE EAST TO 62.0 DEGREE EAST. THE MINIMUM TEMPERATURE IN WALL CLOUD REGION IS MINUS 80 DEGREE C. THE EYE IS DEFINED IN INFRA-RED & VISIBLE SATELLITE IMAGERY. IT'S A RAGGED EYE WITH EYE TEMP MINUS 28 DEGREE C.

**REMARKS:**

THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS ABOUT 30<sup>0</sup>C AND IT DECREASES TOWARDS THE WEST. THE OCEAN THERMAL ENERGY IS ABOUT 50-70 KJ/CM<sup>2</sup> AROUND THE SYSTEM CENTRE AND IT DECREASES TO THE WEST. THE VERTICAL WIND SHEAR AROUND THE SYSTEM CENTRE HAS SLIGHTLY INCREASED AND IS ABOUT 10-15 KNOTS. IT IS 10-20 KNOTS TO THE WEST AND WEST-NORTHWEST. THE LOW LEVEL RELATIVE VORTICITY IS ABOUT  $250 \times 10^{-5} \text{ SEC}^{-1}$ . UPPER LEVEL DIVERGENCE IS ABOUT  $30 \times 10^{-5} \text{ SEC}^{-1}$  AND LOW LEVEL CONVERGENCE IS AROUND  $30 \times 10^{-5} \text{ SEC}^{-1}$ . THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 16<sup>0</sup>N. THE SYSTEM WOULD MOVE NEARLY WESTWARDS DURING NEXT 24 HOURS UNDER THE INFLUENCE OF ABOVE RIDGE AND THEN IT WOULD MOVE WEST-NORTHWESTWARDS AS IT WOULD LIE IN THE SOUTHWESTERN PERIPHERY OF THE RIDGE. AS THE SYSTEM MOVES WESTWARDS, THE SYSTEM WOULD EXPERIENCE FURTHER LOWER OCEAN THERMAL ENERGY AND HIGHER WERTICAL WIND SHEAR. ALSO, INTRUSION OF DRY AIR FROM THE NORTHWEST HAS ALREADY COVERED THE PERIPHERY OF THE SYSTEM FROM THE SOUTHERN AND WESTERN SECTORS. AS A RESULT, THE SYSTEM WOULD WEAKEN GRADUALLY.

(M. MOHAPATRA)  
HEAD-RSMC NEW DELHI

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**PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)**

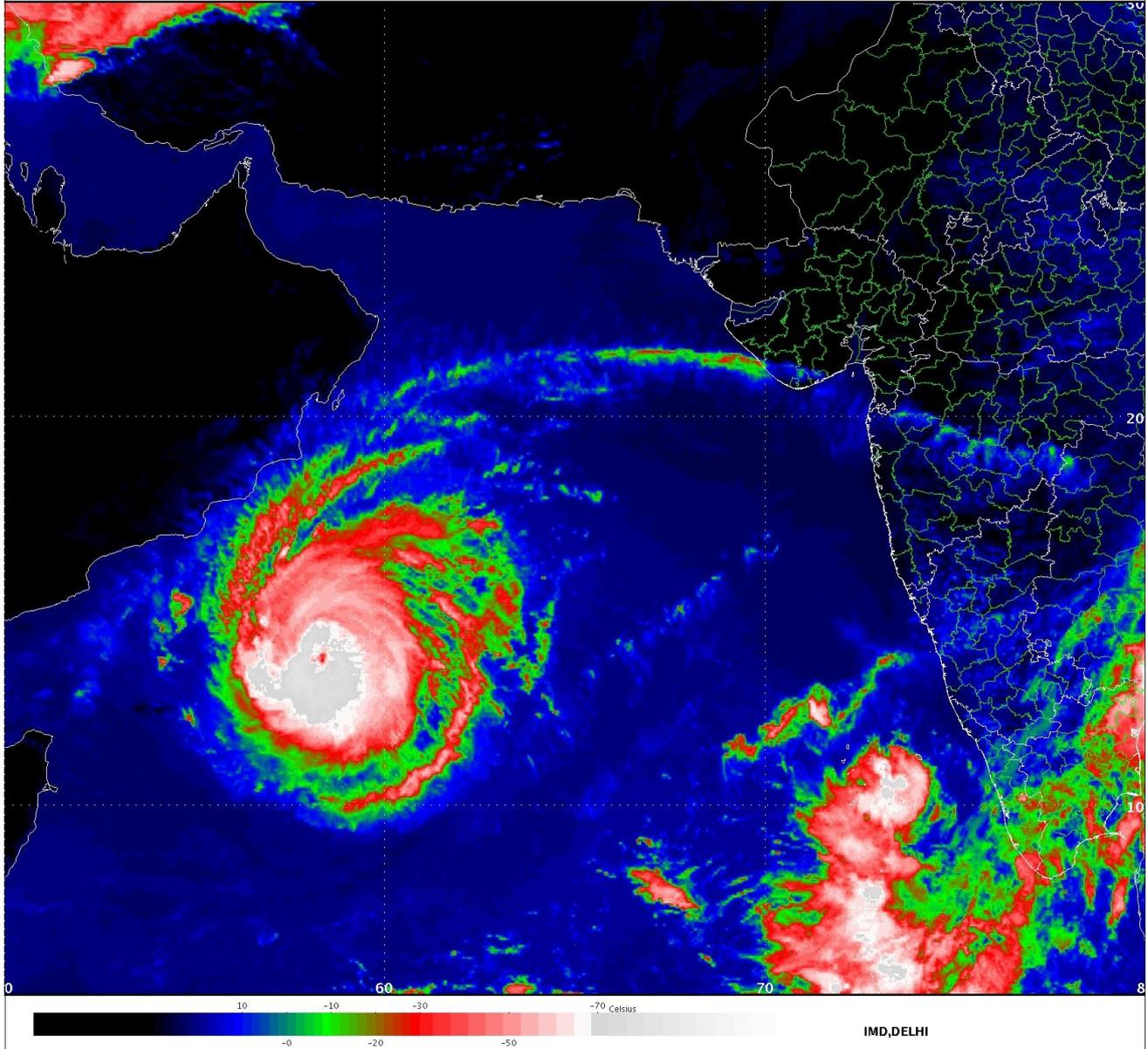
**NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%**

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

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IMG\_TIR1\_TEMP 10.8 um  
SECTOR ARABIAN\_SEA Mercator (NHC LUT)

31-10-2015/08:00 GMT  
31-10-2015/13:30 IST



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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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**REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI  
TROPICAL CYCLONE ADVISORY BULLETIN**

**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 'CHAPALA' ADVISORY NO. TWENTY ISSUED AT 1200 UTC OF 31<sup>ST</sup> OCTOBER 2015 BASED ON 0900 UTC CHARTS OF 31<sup>ST</sup> OCTOBER 2015.**

THE **EXTREMELY SEVERE CYCLONIC STORM**, 'CHAPALA' OVER WESTCENTRAL ARABIAN SEA MOVED WESTWARDS WITH A SPEED OF ABOUT 16 KMPH DURING PAST 6 HOURS AND LAY CENTERED AT 0900 UTC OF TODAY, THE 31<sup>ST</sup> OCTOBER 2015 NEAR LATITUDE 13.8 DEGREE NORTH AND LONGITUDE 58.3 DEGREE EAST, ABOUT 1650 KM WEST-SOUTHWEST OF MUMBAI (43003) AND ABOUT 570 KM SOUTHEAST OF SALALAH (41316) (OMAN). IT WOULD MOVE NEARLY WESTWARDS DURING NEXT 24 HOURS AND THEN WEST-NORTHWESTWARDS AND CROSS YEMEN COAST NEAR LATITUDE 15.0°N AROUND 1800 UTC OF 2<sup>ND</sup> NOVEMBER, 2015. DUE TO ENTRAINMENT OF DRY AIR AND LOWER OCEAN THERMAL ENERGY, THE EXTREMELY SEVERE CYCLONIC STORM WOULD WEAKEN GRADUALLY INTO A VERY SEVERE CYCLONIC STORM DURING NEXT 24 HOURS, FURTHER INTO A SEVERE CYCLONIC STORM IN SUBSEQUENT 24 HOURS AND WOULD **CROSS YEMEN COAST AS A SEVERE CYCLONIC STORM**.

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

<b>Date/time(UTC)</b>	<b>Position (lat. °N/ long. °E)</b>	<b>Maximum sustained surface wind speed (kmph)</b>	<b>Category of cyclonic Disturbance</b>
31-10-2015/0900	13.8/58.3	190-200 gusting to 220	Extremely severe cyclonic storm
31-10-2015/1200	13.7/58.0	180-190 gusting to 210	Extremely severe cyclonic storm
31-10-2015/1800	13.7/57.3	170-180 gusting to 195	Extremely severe cyclonic storm
01-11-2015/0000	13.7/56.6	160-170 gusting to 185	Extremely severe cyclonic storm
01-11-2015/0600	13.8/55.9	150-160 gusting to 175	Very severe cyclonic storm
01-11-2015/1800	14.1/54.4	130-140 gusting to 155	Very severe cyclonic storm
02-11-2015/0600	14.5/52.8	110-120 gusting to 135	Very severe cyclonic storm
02-11-2015/1800	15.0/51.1	100-110 gusting to 120	Severe cyclonic storm
03-11-2015/0600	15.7/49.4	80-90 gusting to 100	Cyclonic storm
03-11-2015/1800	16.4/47.8	45-55 gusting to 65	Depression

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 5.0 AND CI 6.0. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 105 KNOTS GUSTING TO 115 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 950 HPA. SEA CONDITION IS PHENOMENAL AROUND THE SYSTEM CENTRE.

**PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)**

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

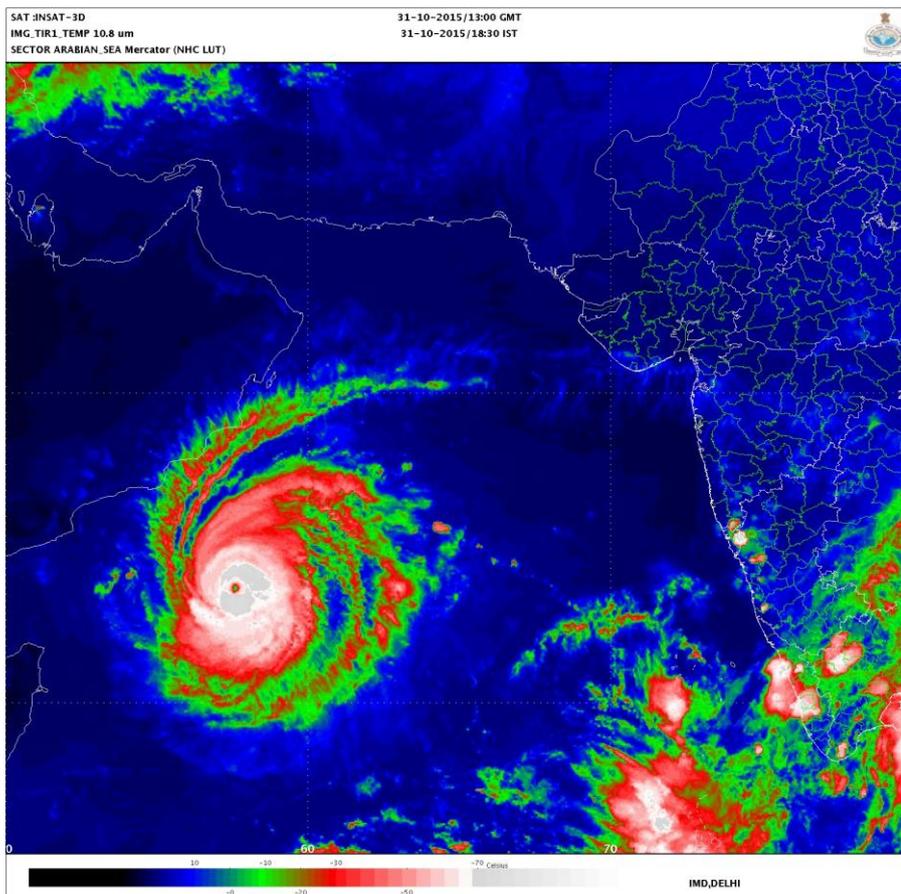
**Contact: Phone: (91) 11-246524844 FAX: (91) 11-24623220 e-mail :cwdhq2008@gmail.com**

ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER AREA BETWEEN LATITUDE 11.5 DEGREE NORTH TO 17.0 DEGREE NORTH AND LONGITUDE 56.0 DEGREE EAST TO 62.5 DEGREE EAST. THE MINIMUM TEMPERATURE IN WALL CLOUD REGION IS MINUS 80 DEGREE C. THE EYE IS DEFINED IN INFRA-RED & VISIBLE SATELLITE IMAGERIES. IT'S A RAGGED EYE WITH EYE TEMP MINUS 18 DEGREE C. HOWEVER, CONVECTION SHOWS WEAKENING TREND.

**REMARKS:**

THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS ABOUT 30°C AND IT DECREASES TOWARDS THE WEST. THE OCEAN THERMAL ENERGY IS ABOUT 50-70 KJ/CM<sup>2</sup> AROUND THE SYSTEM CENTRE AND IT DECREASES TO THE WEST. THE VERTICAL WIND SHEAR AROUND THE SYSTEM CENTRE IS ABOUT 10-15 KNOTS. IT IS 10-20 KNOTS TO THE WEST AND WEST-NORTHWEST. THE LOW LEVEL RELATIVE VORTICITY IS ABOUT 250 X 10<sup>-5</sup> SEC<sup>-1</sup>. UPPER LEVEL DIVERGENCE IS ABOUT 30 X 10<sup>-5</sup> SEC<sup>-1</sup> AND LOW LEVEL CONVERGENCE HAS DECREASED DURING PAST 12 HOURS AND IS AROUND 20 X 10<sup>-5</sup> SEC<sup>-1</sup>. THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 16°N. THE SYSTEM WOULD MOVE NEARLY WESTWARDS DURING NEXT 24 HOURS UNDER THE INFLUENCE OF ABOVE RIDGE AND THEN IT WOULD MOVE WEST-NORTHWESTWARDS, AS IT WOULD LIE IN THE SOUTHWESTERN PERIPHERY OF THE RIDGE. AS THE SYSTEM MOVES WESTWARDS, THE SYSTEM WOULD EXPERIENCE FURTHER LOWER OCEAN THERMAL ENERGY AND HIGHER VERTICAL WIND SHEAR. ALSO, INTRUSION OF DRY AIR FROM THE NORTHWEST HAS ALREADY COVERED THE PERIPHERY OF THE SYSTEM FROM THE SOUTHERN AND WESTERN SECTORS. AS A RESULT, THE SYSTEM WOULD WEAKEN GRADUALLY.

(M. MOHAPATRA)  
HEAD-RSMC NEW DELHI



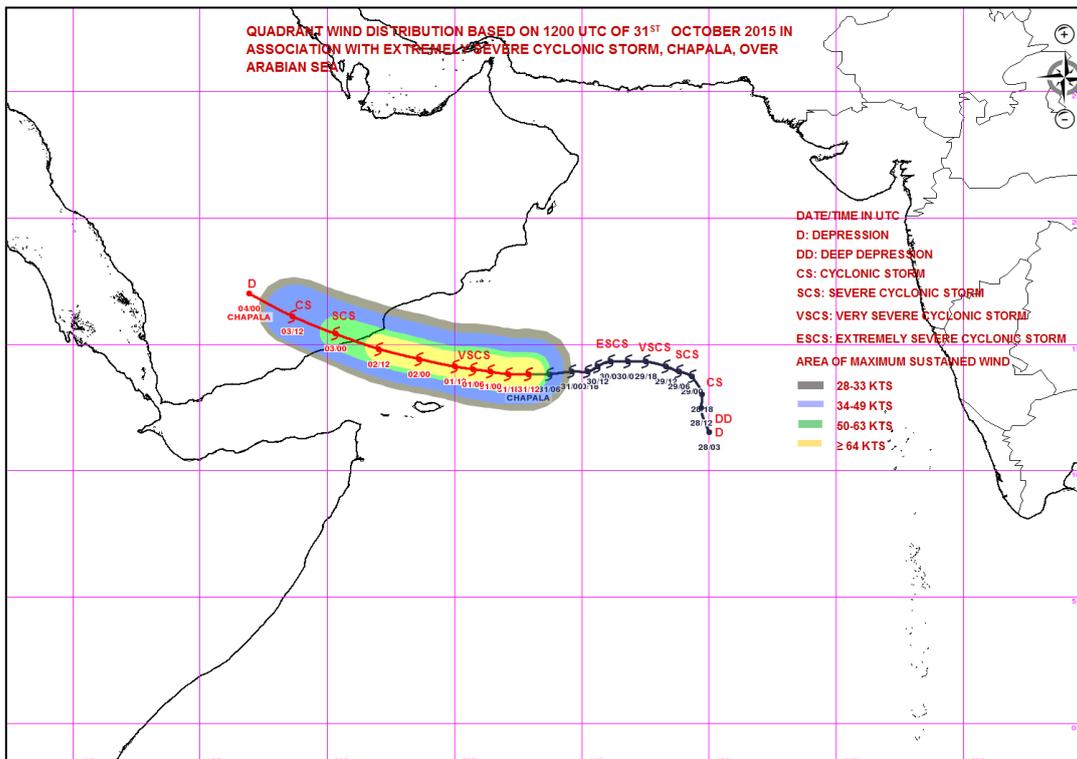
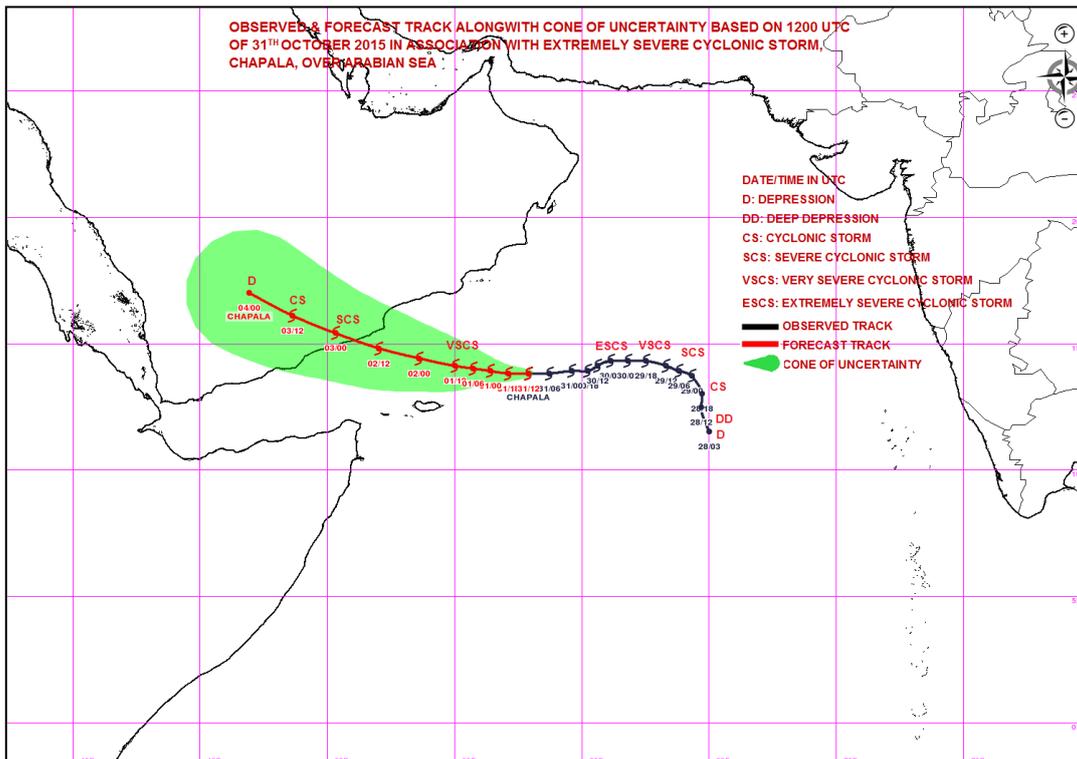
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**PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)**

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

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

**TROPICAL CYCLONE ADVISORY BULLETIN**

**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 'CHAPALA' ADVISORY NO. TWENTY ONE ISSUED AT 1500 UTC OF 31<sup>ST</sup> OCTOBER 2015 BASED ON 1200 UTC CHARTS OF 31<sup>ST</sup> OCTOBER 2015.**

THE **EXTREMELY SEVERE CYCLONIC STORM, 'CHAPALA'** OVER WESTCENTRAL ARABIAN SEA MOVED WESTWARDS WITH A SPEED OF ABOUT 15 KMPH DURING PAST 6 HOURS AND LAY CENTERED AT 1200 UTC OF TODAY, THE 31<sup>ST</sup> OCTOBER 2015 NEAR LATITUDE 13.8 DEGREE NORTH AND LONGITUDE 57.9 DEGREE EAST, ABOUT 1690 KM WEST-SOUTHWEST OF MUMBAI (43003) AND ABOUT 540 KM SOUTHEAST OF SALALAH (41316) (OMAN). IT WOULD MOVE NEARLY WESTWARDS DURING NEXT 12 HOURS AND THEN WEST-NORTHWESTWARDS AND CROSS YEMEN COAST NEAR LATITUDE 15.0°N AROUND 1800 UTC OF 2<sup>ND</sup> NOVEMBER, 2015. DUE TO ENTRAINMENT OF DRY AIR AND LOWER OCEAN THERMAL ENERGY, THE EXTREMELY SEVERE CYCLONIC STORM WOULD WEAKEN GRADUALLY INTO A VERY SEVERE CYCLONIC STORM DURING NEXT 24 HOURS, FURTHER INTO A SEVERE CYCLONIC STORM IN SUBSEQUENT 24 HOURS AND WOULD **CROSS YEMEN COAST AS A SEVERE CYCLONIC STORM.**

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

<b>Date/time(UTC)</b>	<b>Position (lat. °N/ long. °E)</b>	<b>Maximum sustained surface wind speed (kmph)</b>	<b>Category of cyclonic Disturbance</b>
31-10-2015/1200	13.8/57.9	190-200 gusting to 220	Extremely severe cyclonic storm
31-10-2015/1800	13.8/57.1	180-190 gusting to 210	Extremely severe cyclonic storm
01-11-2015/0000	13.9/56.4	170-180 gusting to 195	Extremely severe cyclonic storm
01-11-2015/0600	14.0/55.7	160-170 gusting to 185	Extremely severe cyclonic storm
01-11-2015/1200	14.1/55.0	150-160 gusting to 175	Very severe cyclonic storm
02-11-2015/0000	14.4/53.6	130-140 gusting to 155	Very severe cyclonic storm
02-11-2015/1200	14.8/52.0	110-120 gusting to 135	Severe cyclonic storm
03-11-2015/0000	15.4/50.3	100-110 gusting to 120	Severe cyclonic storm
03-11-2015/1200	16.1/48.6	65-75 gusting to 85	Cyclonic storm
04-11-2015/0000	17.0/46.9	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%**

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

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 5.0 AND CI 6.0. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 105 KNOTS GUSTING TO 115 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 950 HPA. SEA CONDITION IS PHENOMENAL AROUND THE SYSTEM CENTRE. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER AREA BETWEEN LATITUDE 11.0 DEGREE NORTH TO 17.0 DEGREE NORTH AND LONGITUDE 55.5 DEGREE EAST TO 61.5 DEGREE EAST. THE MINIMUM TEMPERATURE IN WALL CLOUD REGION IS MINUS 82 DEGREE C. THE EYE IS DEFINED IN INFRA-RED & VISIBLE SATELLITE IMAGERIES. EYE TEMPERATURE MINUS 10 DEGREE C. HOWEVER, CONVECTION SHOWS WEAKENING TREND.

**REMARKS:**

THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS ABOUT 30<sup>0</sup>C AND IT DECREASES TOWARDS THE WEST. THE OCEAN THERMAL ENERGY IS ABOUT 50-70 KJ/CM<sup>2</sup> AROUND THE SYSTEM CENTRE AND IT DECREASES TO THE WEST. THE VERTICAL WIND SHEAR AROUND THE SYSTEM CENTRE IS ABOUT 10-15 KNOTS. IT IS 10-20 KNOTS TO THE WEST AND WEST-NORTHWEST. THE LOW LEVEL RELATIVE VORTICITY IS ABOUT 250 X 10<sup>-5</sup> SEC<sup>-1</sup>. UPPER LEVEL DIVERGENCE IS ABOUT 30 X 10<sup>-5</sup> SEC<sup>-1</sup> AND LOW LEVEL CONVERGENCE HAS DECREASED DURING PAST 12 HOURS AND IS AROUND 20 X 10<sup>-5</sup> SEC<sup>-1</sup>. THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 16<sup>0</sup>N. THE SYSTEM WOULD MOVE NEARLY WESTWARDS DURING NEXT 24 HOURS UNDER THE INFLUENCE OF ABOVE RIDGE AND THEN IT WOULD MOVE WEST-NORTHWESTWARDS, AS IT WOULD LIE IN THE SOUTHWESTERN PERIPHERY OF THE RIDGE. AS THE SYSTEM MOVES WESTWARDS, THE SYSTEM WOULD EXPERIENCE FURTHER LOWER OCEAN THERMAL ENERGY AND HIGHER VERTICAL WIND SHEAR. ALSO, INTRUSION OF DRY AIR FROM THE NORTHWEST HAS ALREADY COVERED THE PERIPHERY OF THE SYSTEM FROM THE SOUTHERN AND WESTERN SECTORS. AS A RESULT, THE SYSTEM WOULD WEAKEN GRADUALLY.

(M. MOHAPATRA)  
HEAD-RSMC NEW DELHI

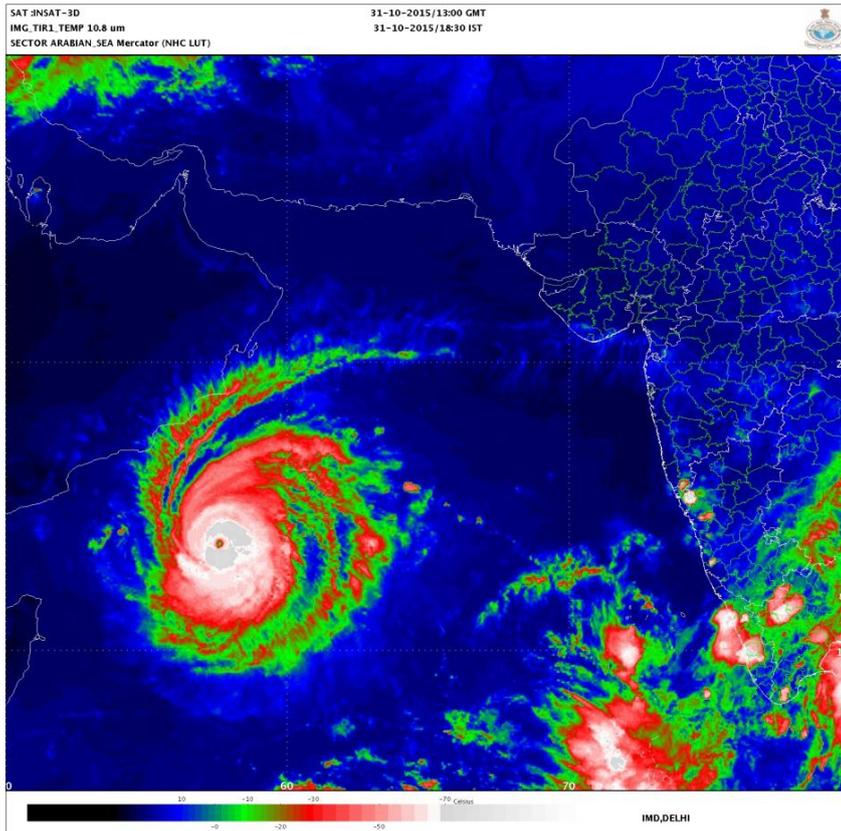
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**PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)**

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

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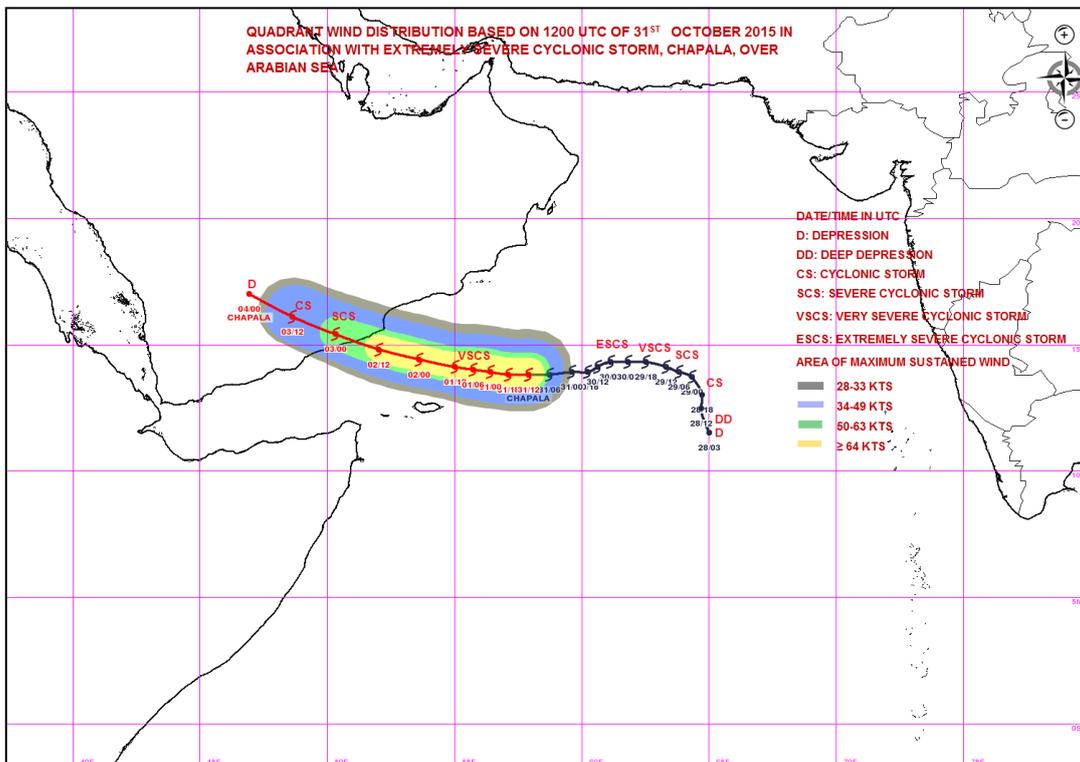
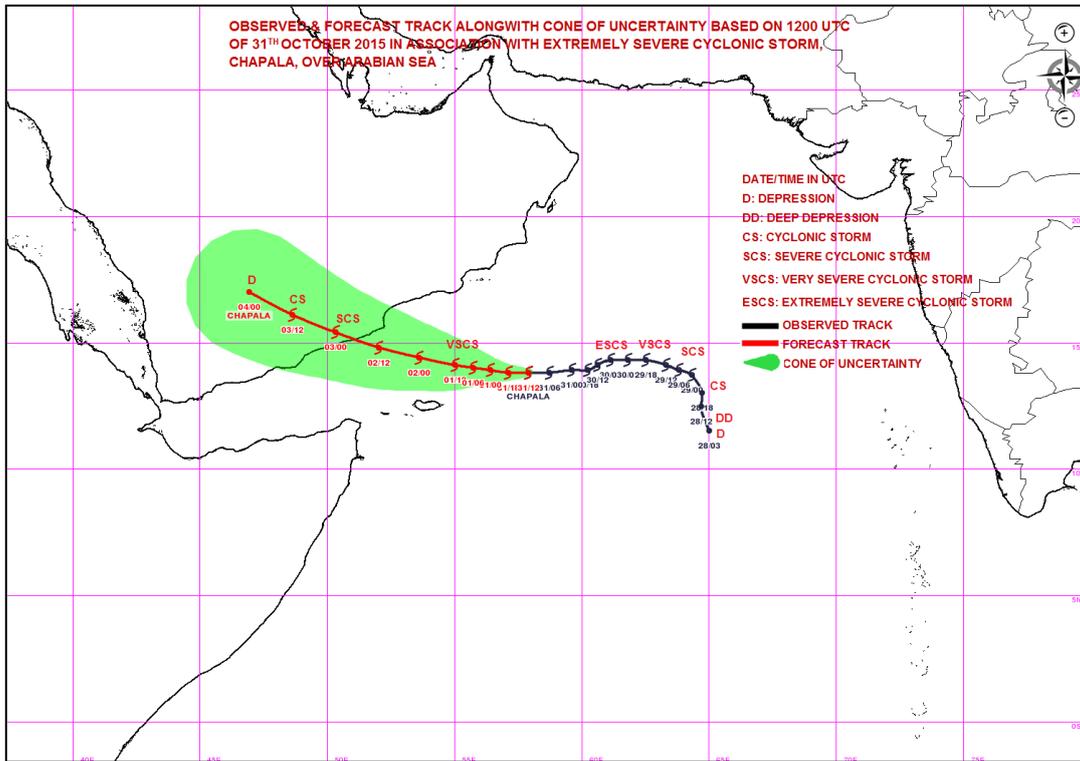
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**PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)**

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

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**PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)**  
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**REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI  
TROPICAL CYCLONE ADVISORY BULLETIN**

**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 'CHAPALA' ADVISORY NO. TWENTY TWO ISSUED AT 1800 UTC OF 31<sup>ST</sup> OCTOBER 2015 BASED ON 1500 UTC CHARTS OF 31<sup>ST</sup> OCTOBER 2015.**

THE **EXTREMELY SEVERE CYCLONIC STORM**, 'CHAPALA' OVER WESTCENTRAL ARABIAN SEA MOVED WESTWARDS WITH A SPEED OF ABOUT 15 KMPH DURING PAST 6 HOURS AND LAY CENTERED AT 1500 UTC OF TODAY, THE 31<sup>ST</sup> OCTOBER 2015 NEAR LATITUDE 13.8 DEGREE NORTH AND LONGITUDE 57.5 DEGREE EAST, ABOUT 1730 KM WEST-SOUTHWEST OF MUMBAI (43003) AND ABOUT 510 KM SOUTHEAST OF SALALAH (41316) (OMAN). IT WOULD MOVE NEARLY WESTWARDS DURING NEXT 12 HOURS AND THEN WEST-NORTHWESTWARDS AND CROSS YEMEN COAST NEAR LATITUDE 15.0°N AROUND 1800 UTC OF 2<sup>ND</sup> NOVEMBER, 2015. DUE TO ENTRAINMENT OF DRY AIR AND LOWER OCEAN THERMAL ENERGY, THE EXTREMELY SEVERE CYCLONIC STORM WOULD WEAKEN GRADUALLY INTO A VERY SEVERE CYCLONIC STORM DURING NEXT 24 HOURS, FURTHER INTO A SEVERE CYCLONIC STORM IN SUBSEQUENT 24 HOURS AND WOULD **CROSS YEMEN COAST AS A SEVERE CYCLONIC STORM**.

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

<b>Date/time(UTC)</b>	<b>Position (lat. °N/ long. °E)</b>	<b>Maximum sustained surface wind speed (kmph)</b>	<b>Category of cyclonic Disturbance</b>
31-10-2015/1500	13.8/57.5	190-200 gusting to 220	Extremely severe cyclonic storm
31-10-2015/1800	13.8/56.9	180-190 gusting to 210	Extremely severe cyclonic storm
01-11-2015/0000	13.9/56.2	170-180 gusting to 195	Extremely severe cyclonic storm
01-11-2015/0600	14.0/55.5	160-170 gusting to 185	Extremely severe cyclonic storm
01-11-2015/1200	14.1/54.8	150-160 gusting to 175	Very severe cyclonic storm
02-11-2015/0000	14.3/53.4	130-140 gusting to 155	Very severe cyclonic storm
02-11-2015/1200	14.7/51.8	110-120 gusting to 135	Severe cyclonic storm
03-11-2015/0000	15.3/50.1	100-110 gusting to 120	Severe cyclonic storm
03-11-2015/1200	16.1/48.4	65-75 gusting to 85	Cyclonic storm
04-11-2015/0000	17.0/46.7	40-50 gusting to 60	Depression

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 5.5 AND CI 6.0. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 105 KNOTS GUSTING TO 115 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 950 HPA. SEA CONDITION IS PHENOMENAL AROUND THE SYSTEM CENTRE. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER AREA BETWEEN LATITUDE 11.0 DEGREE NORTH TO 17.0 DEGREE NORTH

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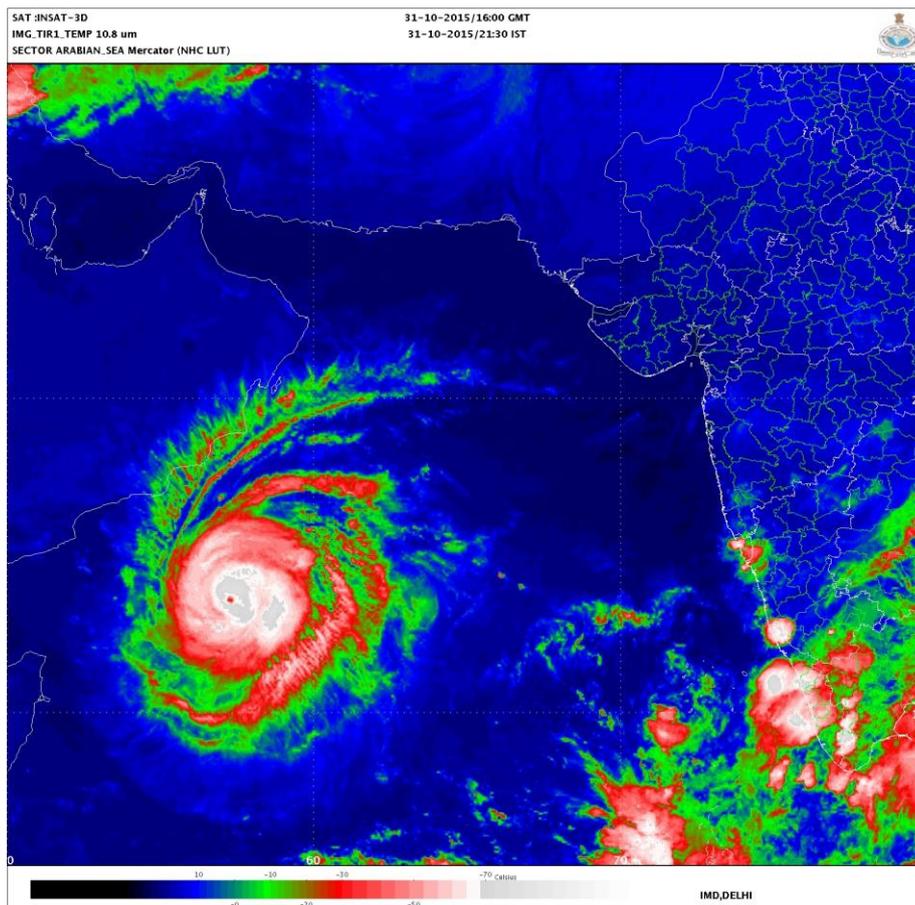
**Contact: Phone: (91) 11-246524844 FAX: (91) 11-24623220 e-mail :cwdhq2008@gmail.com**

AND LONGITUDE 55.5 DEGREE EAST TO 61.5 DEGREE EAST. THE MINIMUM TEMPERATURE IN WALL CLOUD REGION IS MINUS 83 DEGREE C. THE EYE IS DEFINED IN INFRA-RED & VISIBLE SATELLITE IMAGERIES. EYE TEMPERATURE MINUS 13 DEGREE C. HOWEVER, CONVECTION SHOWS WEAKENING TREND.

**REMARKS:**

THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS ABOUT 30<sup>0</sup>C AND IT DECREASES TOWARDS THE WEST. THE OCEAN THERMAL ENERGY IS ABOUT 50-70 KJ/CM<sup>2</sup> AROUND THE SYSTEM CENTRE AND IT DECREASES TO THE WEST. THE VERTICAL WIND SHEAR AROUND THE SYSTEM CENTRE IS ABOUT 10-15 KNOTS. IT IS 10-20 KNOTS TO THE WEST AND WEST-NORTHWEST. THE LOW LEVEL RELATIVE VORTICITY IS ABOUT 250 X 10<sup>-5</sup> SEC<sup>-1</sup>. UPPER LEVEL DIVERGENCE IS ABOUT 30 X 10<sup>-5</sup> SEC<sup>-1</sup> AND LOW LEVEL CONVERGENCE HAS DECREASED DURING PAST 12 HOURS AND IS AROUND 20 X 10<sup>-5</sup> SEC<sup>-1</sup>. THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 16<sup>0</sup>N. THE SYSTEM WOULD MOVE NEARLY WESTWARDS DURING NEXT 24 HOURS UNDER THE INFLUENCE OF ABOVE RIDGE AND THEN IT WOULD MOVE WEST-NORTHWESTWARDS, AS IT WOULD LIE IN THE SOUTHWESTERN PERIPHERY OF THE RIDGE. AS THE SYSTEM MOVES WESTWARDS, THE SYSTEM WOULD EXPERIENCE FURTHER LOWER OCEAN THERMAL ENERGY AND HIGHER VERTICAL WIND SHEAR. ALSO, INTRUSION OF DRY AIR FROM THE NORTHWEST HAS ALREADY COVERED THE PERIPHERY OF THE SYSTEM FROM THE SOUTHERN AND WESTERN SECTORS. AS A RESULT, THE SYSTEM WOULD WEAKEN GRADUALLY.

(S.D. KOTAL)  
SCIENTIST 'E'



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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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**REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI  
TROPICAL CYCLONE ADVISORY BULLETIN**

**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 ‘CHAPALA’ ADVISORY NO. TWENTY THREE ISSUED AT 2000 UTC OF 31<sup>ST</sup> OCTOBER 2015 BASED ON 1800 UTC CHARTS OF 31<sup>ST</sup> OCTOBER 2015.**

THE **EXTREMELY SEVERE CYCLONIC STORM**, ‘CHAPALA’ OVER WESTCENTRAL ARABIAN SEA MOVED WESTWARDS WITH A SPEED OF ABOUT 15 KMPH DURING PAST 6 HOURS AND LAY CENTERED AT 1800 UTC OF TODAY, THE 31<sup>ST</sup> OCTOBER 2015 NEAR LATITUDE 13.8 DEGREE NORTH AND LONGITUDE 57.3 DEGREE EAST, ABOUT 1750 KM WEST-SOUTHWEST OF MUMBAI (43003) AND ABOUT 490 KM SOUTHEAST OF SALALAH (41316) (OMAN). IT WOULD MOVE NEARLY WESTWARDS DURING NEXT 12 HOURS AND THEN WEST-NORTHWESTWARDS AND CROSS YEMEN COAST NEAR LATITUDE 15.0°N AROUND 1800 UTC OF 2<sup>ND</sup> NOVEMBER, 2015. DUE TO ENTRAINMENT OF DRY AIR AND LOWER OCEAN THERMAL ENERGY, THE EXTREMELY SEVERE CYCLONIC STORM WOULD WEAKEN GRADUALLY INTO A VERY SEVERE CYCLONIC STORM DURING NEXT 24 HOURS, FURTHER INTO A SEVERE CYCLONIC STORM IN SUBSEQUENT 24 HOURS AND WOULD **CROSS YEMEN COAST AS A SEVERE CYCLONIC STORM**.

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

<b>Date/time(UTC)</b>	<b>Position (lat. °N/ long. °E)</b>	<b>Maximum sustained surface wind speed (kmph)</b>	<b>Category of cyclonic Disturbance</b>
31-10-2015/1800	13.8/57.3	190-200 gusting to 220	Extremely severe cyclonic storm
01-11-2015/0000	13.9/56.2	170-180 gusting to 195	Extremely severe cyclonic storm
01-11-2015/0600	14.0/55.5	160-170 gusting to 185	Extremely severe cyclonic storm
01-11-2015/1200	14.1/54.8	150-160 gusting to 175	Very severe cyclonic storm
01-11-2015/1800	14.2/54.1	150-160 gusting to 175	Very severe cyclonic storm
02-11-2015/0600	14.5/52.6	130-140 gusting to 155	Very severe cyclonic storm
02-11-2015/1800	15.0/50.9	110-120 gusting to 135	Severe cyclonic storm
03-11-2015/0600	15.7/49.2	100-110 gusting to 120	Severe cyclonic storm
03-11-2015/1800	16.5/47.5	65-75 gusting to 85	Cyclonic storm
04-11-2015/0600	17.3/45.8	40-50 gusting to 60	Depression

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 5.5 AND CI 6.0. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 105 KNOTS GUSTING TO 115 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 950 HPA. SEA CONDITION IS PHENOMENAL AROUND THE SYSTEM CENTRE. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER AREA BETWEEN LATITUDE 11.0 DEGREE NORTH TO 17.0 DEGREE NORTH

**PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)**

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

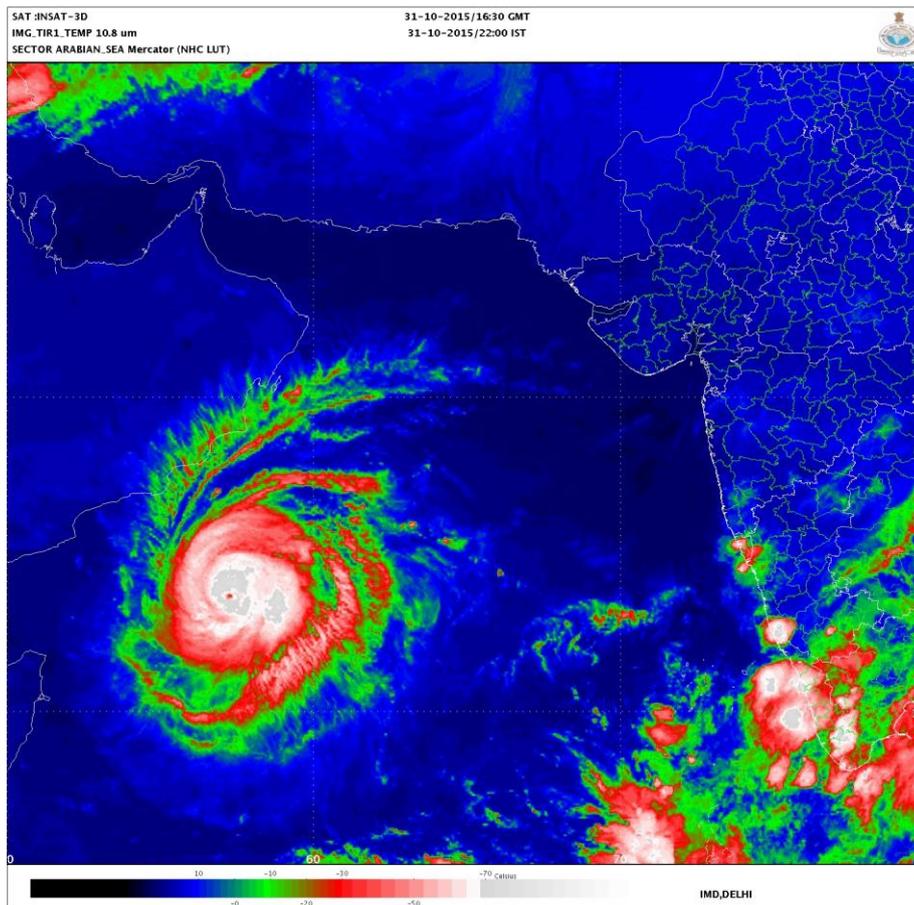
**Contact: Phone: (91) 11-246524844 FAX: (91) 11-24623220 e-mail :cwdhq2008@gmail.com**

AND LONGITUDE 55.5 DEGREE EAST TO 61.5 DEGREE EAST. THE MINIMUM TEMPERATURE IN WALL CLOUD REGION IS MINUS 77 DEGREE C. THE EYE IS DEFINED IN INFRA-RED & VISIBLE SATELLITE IMAGERIES. EYE TEMPERATURE MINUS 24 DEGREE C. HOWEVER, CONVECTION SHOWS WEAKENING TREND.

**REMARKS:**

THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS ABOUT 30<sup>0</sup>C AND IT DECREASES TOWARDS THE WEST. THE OCEAN THERMAL ENERGY IS ABOUT 50-70 KJ/CM<sup>2</sup> AROUND THE SYSTEM CENTRE AND IT DECREASES TO THE WEST. THE VERTICAL WIND SHEAR AROUND THE SYSTEM CENTRE IS ABOUT 10-15 KNOTS. IT IS 10-20 KNOTS TO THE WEST AND WEST-NORTHWEST. THE LOW LEVEL RELATIVE VORTICITY IS ABOUT 250 X 10<sup>-5</sup> SEC<sup>-1</sup>. UPPER LEVEL DIVERGENCE IS ABOUT 30 X 10<sup>-5</sup> SEC<sup>-1</sup> AND LOW LEVEL CONVERGENCE HAS DECREASED DURING PAST 12 HOURS AND IS AROUND 20 X 10<sup>-5</sup> SEC<sup>-1</sup>. THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 16<sup>0</sup>N. THE SYSTEM WOULD MOVE NEARLY WESTWARDS DURING NEXT 24 HOURS UNDER THE INFLUENCE OF ABOVE RIDGE AND THEN IT WOULD MOVE WEST-NORTHWESTWARDS, AS IT WOULD LIE IN THE SOUTHWESTERN PERIPHERY OF THE RIDGE. AS THE SYSTEM MOVES WESTWARDS, THE SYSTEM WOULD EXPERIENCE FURTHER LOWER OCEAN THERMAL ENERGY AND HIGHER VERTICAL WIND SHEAR. ALSO, INTRUSION OF DRY AIR FROM THE NORTHWEST HAS ALREADY COVERED THE PERIPHERY OF THE SYSTEM FROM THE SOUTHERN AND WESTERN SECTORS. AS A RESULT, THE SYSTEM WOULD WEAKEN GRADUALLY.

(S.D. KOTAL)  
SCIENTIST 'E'



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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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**REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI  
TROPICAL CYCLONE ADVISORY BULLETIN**

**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 'CHAPALA' ADVISORY NO. TWENTY FOUR ISSUED AT 0000 UTC OF 1<sup>ST</sup> NOVEMBER 2015 BASED ON 2100 UTC CHARTS OF 31<sup>ST</sup> OCTOBER 2015.**

THE **EXTREMELY SEVERE CYCLONIC STORM**, 'CHAPALA' OVER WESTCENTRAL ARABIAN SEA MOVED WESTWARDS WITH A SPEED OF ABOUT 15 KMPH DURING PAST 6 HOURS AND LAY CENTERED AT 2100 UTC OF TODAY, THE 31<sup>ST</sup> OCTOBER 2015 NEAR LATITUDE 13.7 DEGREE NORTH AND LONGITUDE 56.8 DEGREE EAST, ABOUT 1810 KM WEST-SOUTHWEST OF MUMBAI (43003) AND ABOUT 470 KM SOUTHEAST OF SALALAH (41316) (OMAN). IT WOULD MOVE NEARLY WESTWARDS DURING NEXT 12 HOURS AND THEN WEST-NORTHWESTWARDS AND CROSS YEMEN COAST NEAR LATITUDE 15.0°N AROUND 1800 UTC OF 2<sup>ND</sup> NOVEMBER, 2015. DUE TO ENTRAINMENT OF DRY AIR AND LOWER OCEAN THERMAL ENERGY, THE EXTREMELY SEVERE CYCLONIC STORM WOULD WEAKEN GRADUALLY INTO A VERY SEVERE CYCLONIC STORM DURING NEXT 24 HOURS, FURTHER INTO A SEVERE CYCLONIC STORM IN SUBSEQUENT 24 HOURS AND WOULD **CROSS YEMEN COAST AS A SEVERE CYCLONIC STORM**.

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

Date/time(UTC)	Position (lat. °N/ long. °E)	Maximum sustained surface wind speed (kmph)	Category of cyclonic Disturbance
31-10-2015/2100	13.7/56.8	190-200 gusting to 220	Extremely severe cyclonic storm
01-11-2015/0000	13.8/56.2	170-180 gusting to 195	Extremely severe cyclonic storm
01-11-2015/0600	13.9/55.5	160-170 gusting to 185	Extremely severe cyclonic storm
01-11-2015/1200	14.0/54.8	150-160 gusting to 175	Very severe cyclonic storm
01-11-2015/1800	14.1/54.1	150-160 gusting to 175	Very severe cyclonic storm
02-11-2015/0600	14.4/52.6	130-140 gusting to 155	Very severe cyclonic storm
02-11-2015/1800	14.9/50.9	110-120 gusting to 135	Severe cyclonic storm
03-11-2015/0600	15.6/49.2	100-110 gusting to 120	Severe cyclonic storm
03-11-2015/1800	16.4/47.5	65-75 gusting to 85	Cyclonic storm
04-11-2015/0600	17.2/45.8	40-50 gusting to 60	Depression

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 5.5 AND CI 6.0. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 105 KNOTS GUSTING TO 115 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 950 HPA. SEA CONDITION IS PHENOMENAL AROUND THE SYSTEM CENTRE. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER AREA BETWEEN LATITUDE 11.0 DEGREE NORTH TO 17.5 DEGREE NORTH

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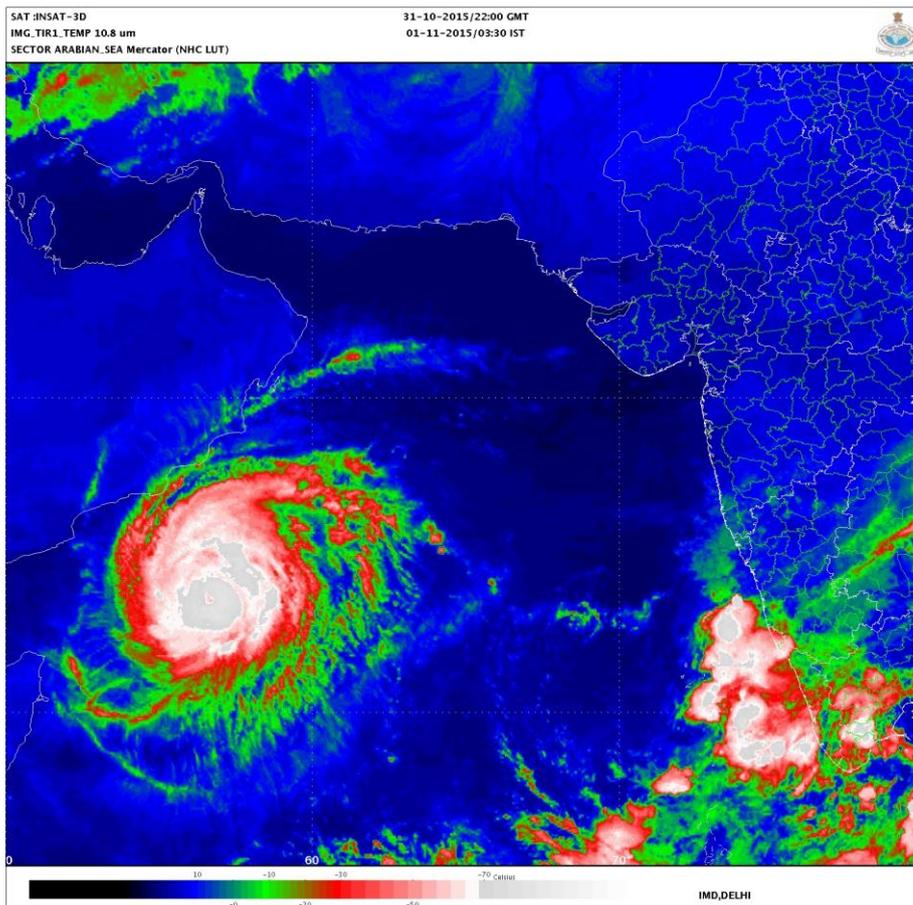
**Contact: Phone: (91) 11-246524844 FAX: (91) 11-24623220 e-mail :cwdhq2008@gmail.com**

AND LONGITUDE 54.0 DEGREE EAST TO 60.5 DEGREE EAST. THE MINIMUM TEMPERATURE IN WALL CLOUD REGION IS MINUS 83 DEGREE C. THE EYE IS DEFINED IN INFRA-RED & VISIBLE SATELLITE IMAGERIES. HOWEVER, CONVECTION SHOWS WEAKENING TREND.

**REMARKS:**

THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS ABOUT 30<sup>0</sup>C AND IT DECREASES TOWARDS THE WEST. THE OCEAN THERMAL ENERGY IS ABOUT 50-70 KJ/CM<sup>2</sup> AROUND THE SYSTEM CENTRE AND IT DECREASES TO THE WEST. THE VERTICAL WIND SHEAR AROUND THE SYSTEM CENTRE IS ABOUT 10-15 KNOTS. IT IS 10-20 KNOTS TO THE WEST AND WEST-NORTHWEST. THE LOW LEVEL RELATIVE VORTICITY IS ABOUT 250 X 10<sup>-5</sup> SEC<sup>-1</sup>. UPPER LEVEL DIVERGENCE IS ABOUT 30 X 10<sup>-5</sup> SEC<sup>-1</sup> AND LOW LEVEL CONVERGENCE HAS DECREASED DURING PAST 12 HOURS AND IS AROUND 20 X 10<sup>-5</sup> SEC<sup>-1</sup>. THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 16<sup>0</sup>N. THE SYSTEM WOULD MOVE NEARLY WESTWARDS DURING NEXT 24 HOURS UNDER THE INFLUENCE OF ABOVE RIDGE AND THEN IT WOULD MOVE WEST-NORTHWESTWARDS, AS IT WOULD LIE IN THE SOUTHWESTERN PERIPHERY OF THE RIDGE. AS THE SYSTEM MOVES WESTWARDS, THE SYSTEM WOULD EXPERIENCE FURTHER LOWER OCEAN THERMAL ENERGY AND HIGHER VERTICAL WIND SHEAR. ALSO, INTRUSION OF DRY AIR FROM THE NORTHWEST HAS ALREADY COVERED THE PERIPHERY OF THE SYSTEM FROM THE SOUTHERN AND WESTERN SECTORS. AS A RESULT, THE SYSTEM WOULD WEAKEN GRADUALLY.

(S.D. KOTAL)  
SCIENTIST 'E'



**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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**REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI  
TROPICAL CYCLONE ADVISORY BULLETIN**

**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 'CHAPALA' ADVISORY NO. TWENTY FIVE ISSUED AT 0300 UTC OF 1<sup>ST</sup> NOVEMBER 2015 BASED ON 0000 UTC CHARTS OF 1<sup>ST</sup> NOVEMBER 2015.**

THE **EXTREMELY SEVERE CYCLONIC STORM**, 'CHAPALA' OVER WESTCENTRAL ARABIAN SEA MOVED WESTWARDS WITH A SPEED OF ABOUT 15 KMPH DURING PAST 6 HOURS AND LAY CENTERED AT 0000 UTC OF TODAY, THE 1<sup>ST</sup> NOVEMBER 2015 NEAR LATITUDE 13.7 DEGREE NORTH AND LONGITUDE 56.4 DEGREE EAST, ABOUT 1850 KM WEST-SOUTHWEST OF MUMBAI (43003) AND ABOUT 440 KM SOUTHEAST OF SALALAH (41316) (OMAN). IT WOULD MOVE NEARLY WESTWARDS DURING NEXT 12 HOURS AND THEN WEST-NORTHWESTWARDS AND CROSS YEMEN COAST NEAR LATITUDE 15.0°N AROUND 2100 UTC OF 2<sup>ND</sup> NOVEMBER, 2015. DUE TO ENTRAINMENT OF DRY AIR AND LOWER OCEAN THERMAL ENERGY, THE EXTREMELY SEVERE CYCLONIC STORM WOULD WEAKEN GRADUALLY INTO A VERY SEVERE CYCLONIC STORM DURING NEXT 24 HOURS, FURTHER INTO A SEVERE CYCLONIC STORM IN SUBSEQUENT 24 HOURS AND WOULD **CROSS YEMEN COAST AS A VERY SEVERE CYCLONIC STORM**.

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

Date/time(UTC)	Position (lat. °N/ long. °E)	Maximum sustained surface wind speed (kmph)	Category of cyclonic Disturbance
01-11-2015/0000	13.7/56.4	190-200 gusting to 220	Extremely severe cyclonic storm
01-11-2015/0600	13.6/55.7	180-190 gusting to 210	Extremely severe cyclonic storm
01-11-2015/1200	13.6/54.9	160-170 gusting to 185	Extremely severe cyclonic storm
01-11-2015/1800	13.7/54.1	150-160 gusting to 175	Very severe cyclonic storm
02-11-2015/0000	13.8/53.4	135-145 gusting to 160	Very severe cyclonic storm
02-11-2015/1200	14.3/51.6	120-130 gusting to 145	Very severe cyclonic storm
03-11-2015/0000	15.0/49.8	100-110 gusting to 120	Severe cyclonic storm
03-11-2015/1200	15.7/48.2	55-65 gusting to 75	Deep Depression
04-11-2015/0000	16.6/46.6	40-50 gusting to 60	Depression

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 5.5 AND CI 6.0. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 105 KNOTS GUSTING TO 115 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 950 HPA. SEA CONDITION IS PHENOMENAL AROUND THE SYSTEM CENTRE. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER AREA BETWEEN LATITUDE 11.0 DEGREE NORTH TO 17.5 DEGREE NORTH

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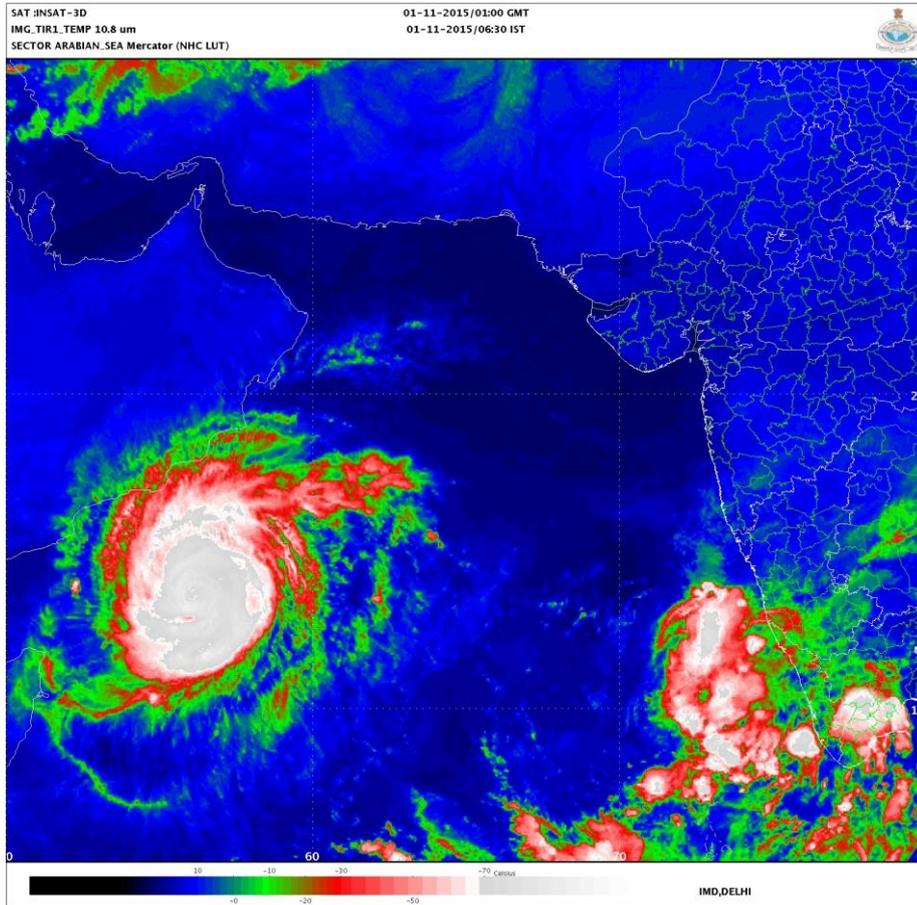
**Contact: Phone: (91) 11-246524844 FAX: (91) 11-24623220 e-mail :cwdhq2008@gmail.com**

AND LONGITUDE 53.0 DEGREE EAST TO 59.0 DEGREE EAST. THE MINIMUM TEMPERATURE IN WALL CLOUD REGION IS MINUS 84 DEGREE C. HOWEVER, CONVECTION SHOWS WEAKENING TREND.

**REMARKS:**

THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS ABOUT 29<sup>0</sup>C AND IT DECREASES TOWARDS THE WEST. THE OCEAN THERMAL ENERGY IS ABOUT 50-70 KJ/CM<sup>2</sup> AROUND THE SYSTEM CENTRE AND IT DECREASES TO THE WEST. THE VERTICAL WIND SHEAR AROUND THE SYSTEM CENTRE IS ABOUT 5-10 KNOTS. IT IS 10-20 KNOTS NEAR YEMEN AND OMAN COAST. THE LOW LEVEL RELATIVE VORTICITY IS ABOUT 300 X 10<sup>-5</sup> SEC<sup>-1</sup>. UPPER LEVEL DIVERGENCE IS ABOUT 40 X 10<sup>-5</sup> SEC<sup>-1</sup> AND LOW LEVEL CONVERGENCE IS AROUND 20 X 10<sup>-5</sup> SEC<sup>-1</sup>. THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 15<sup>0</sup>N. THE SYSTEM WOULD MOVE NEARLY WESTWARDS DURING NEXT 24 HOURS UNDER THE INFLUENCE OF ABOVE RIDGE AND THEN IT WOULD MOVE WEST-NORTHWESTWARDS, AS IT WOULD LIE IN THE SOUTHWESTERN PERIPHERY OF THE RIDGE. AS THE SYSTEM MOVES WESTWARDS, THE SYSTEM WOULD EXPERIENCE FURTHER LOWER OCEAN THERMAL ENERGY AND HIGHER VERTICAL WIND SHEAR. ALSO, INTRUSION OF DRY AIR FROM THE NORTHWEST CONTINUES WHICH WILL HELP IN WEAKENING OF THE SYSTEM

(S.D. KOTAL)  
SCIENTIST 'E'



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

**TROPICAL CYCLONE ADVISORY BULLETIN**

**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 'CHAPALA' ADVISORY NO. TWENTY SIX ISSUED AT 0600 UTC OF 1<sup>ST</sup> NOVEMBER 2015 BASED ON 0300 UTC CHARTS OF 1<sup>ST</sup> NOVEMBER 2015.**

THE **EXTREMELY SEVERE CYCLONIC STORM, 'CHAPALA'** OVER WESTCENTRAL ARABIAN SEA MOVED WEST-SOUTHWESTWARDS WITH A SPEED OF ABOUT 14 KMPH DURING PAST 6 HOURS AND LAY CENTERED AT 0300 UTC OF TODAY, THE 1<sup>ST</sup> NOVEMBER 2015 NEAR LATITUDE 13.6 DEGREE NORTH AND LONGITUDE 56.1 DEGREE EAST, ABOUT 430 KM SOUTH-SOUTHEAST OF SALALAH (OMAN) (41316), 740 KM EAST-SOUTHEAST OF RIYAN (YEMEN) (41443) AND ABOUT 260 KM EAST-NORTHEAST OF SOCOTRA ISLAND (41494) (YEMEN). DUE TO ENTRAINMENT OF DRY AIR AND LOWER OCEAN THERMAL ENERGY, THE EXTREMELY SEVERE CYCLONIC STORM WOULD WEAKEN GRADUALLY INTO A VERY SEVERE CYCLONIC STORM DURING NEXT 24 HOURS. IT WOULD MOVE NEARLY WESTWARDS DURING NEXT 12 HOURS, THEN WEST-NORTHWESTWARDS AND CROSS YEMEN COAST AS A VERY SEVERE CYCLONIC STORM NEAR LATITUDE 15.0°N (ABOUT 100 KM NORTHEAST OF RIYAN) AROUND 2100 UTC 2<sup>ND</sup> NOVEMBER, 2015.

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

<b>Date/time(UTC)</b>	<b>Position (lat. °N/ long. °E)</b>	<b>Maximum sustained surface wind speed (kmph)</b>	<b>Category of cyclonic Disturbance</b>
01-11-2015/0300	13.6/56.1	190-200 gusting to 220	Extremely severe cyclonic storm
01-11-2015/0600	13.6/55.7	180-190 gusting to 210	Extremely severe cyclonic storm
01-11-2015/1200	13.6/54.9	160-170 gusting to 185	Extremely severe cyclonic storm
01-11-2015/1800	13.7/54.1	150-160 gusting to 175	Very severe cyclonic storm
02-11-2015/0000	13.8/53.4	135-145 gusting to 160	Very severe cyclonic storm
02-11-2015/1200	14.3/51.6	120-130 gusting to 145	Very severe cyclonic storm
03-11-2015/0000	15.0/49.8	100-110 gusting to 120	Severe cyclonic storm
03-11-2015/1200	15.7/48.2	55-65 gusting to 75	Deep Depression
04-11-2015/0000	16.6/46.6	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%**

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

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 5.5 AND CI 6.0. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 105 KNOTS GUSTING TO 115 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 950 HPA. SEA CONDITION IS PHENOMENAL AROUND THE SYSTEM CENTRE. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER AREA BETWEEN LATITUDE 11.0 DEGREE NORTH TO 17.5 DEGREE NORTH AND LONGITUDE 53.0 DEGREE EAST TO 59.0 DEGREE EAST. CONVECTION IS EYE PATTERN. EYE IS RAGGED. THE MINIMUM TEMPERATURE IN WALL CLOUD REGION IS MINUS 90 DEGREE C.

**REMARKS:**

THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS ABOUT 29<sup>0</sup>C AND IT DECREASES TOWARDS THE WEST. THE OCEAN THERMAL ENERGY IS ABOUT 50-70 KJ/CM<sup>2</sup> AROUND THE SYSTEM CENTRE AND IT DECREASES TO THE WEST-NORTHWEST. THE VERTICAL WIND SHEAR AROUND THE SYSTEM CENTRE IS ABOUT 5-15 KNOTS. IT IS 10-20 KNOTS NEAR YEMEN AND OMAN COAST. THE LOW LEVEL RELATIVE VORTICITY DECREASED SLIGHTLY AND IS ABOUT  $250 \times 10^{-5} \text{ SEC}^{-1}$ . UPPER LEVEL DIVERGENCE ALSO DECREASED SLIGHTLY AND IS ABOUT  $30 \times 10^{-5} \text{ SEC}^{-1}$  AND LOW LEVEL CONVERGENCE REMAINED SAME AND IS AROUND  $30 \times 10^{-5} \text{ SEC}^{-1}$ . THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 15<sup>0</sup>N. THE SYSTEM WOULD MOVE NEARLY WESTWARDS DURING NEXT 24 HOURS UNDER THE INFLUENCE OF ABOVE RIDGE AND THEN IT WOULD MOVE WEST-NORTHWESTWARDS. AS THE SYSTEM MOVES WESTWARDS, THE SYSTEM WOULD EXPERIENCE FURTHER LOWER OCEAN THERMAL ENERGY. ALSO, INTRUSION OF DRY AIR FROM THE NORTHWEST CONTINUES SURROUNDING THE CONVECTIVE RING WHICH WILL HELP IN WEAKENING OF THE SYSTEM. HOWEVER, DUE TO PREVALENCE OF WEAK VERTICAL WIND SHEAR TO THE WEST AND WEST-SOUTHWEST OF THE SYSTEM CENTRE, THE ADVERSE IMPACT OF DRY AIR INTRUSION WILL BE SLOW. HENCE THE EXTREMELY SEVERE CYCLONIC STORM WOULD WEAKEN SLOWLY DURING NEXT 24 HOURS.

(M. MOHAPATRA)  
HEAD RSMC

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**PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)**

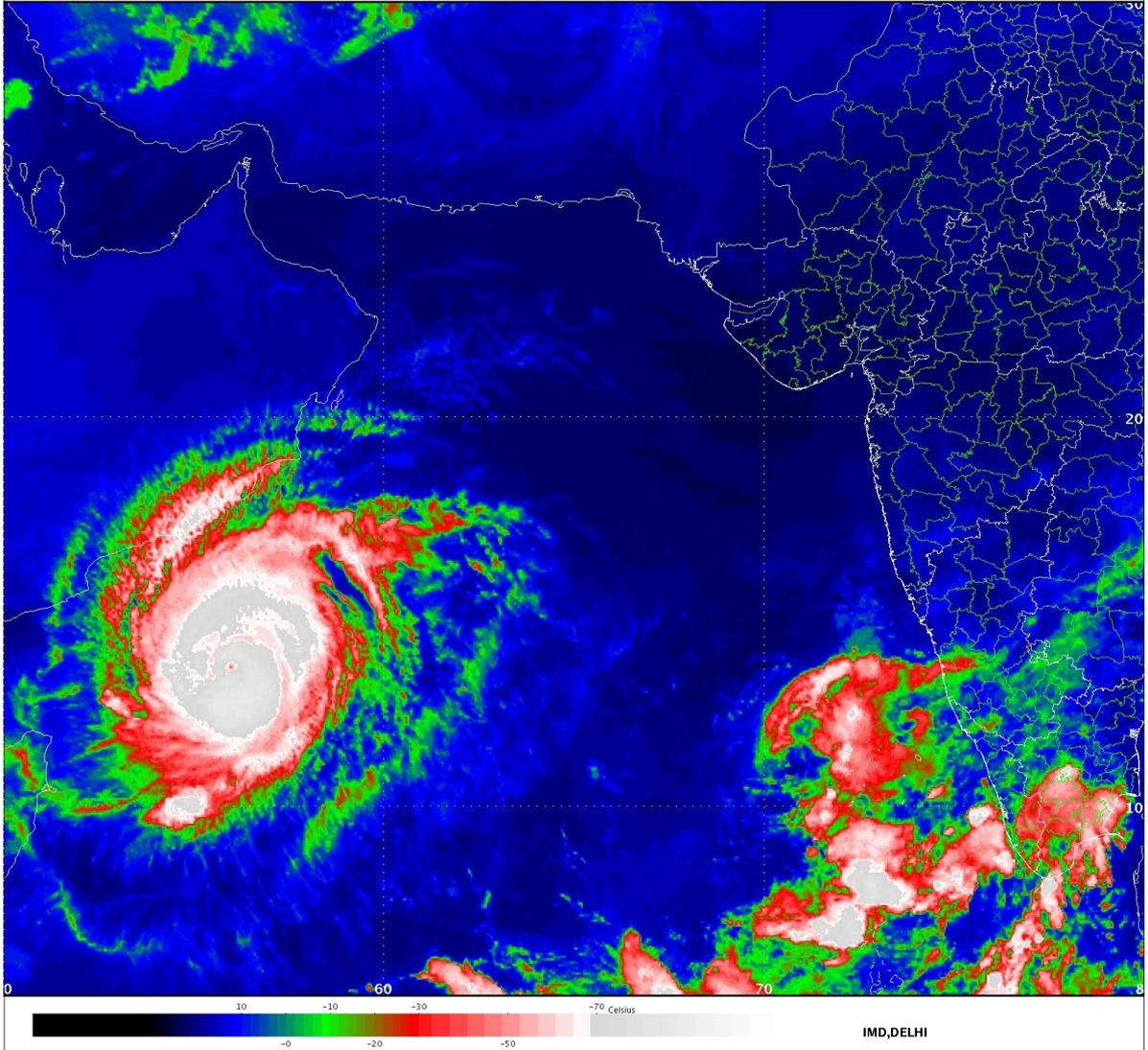
**NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%**

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SAT :INSAT-3D  
IMG\_TIR1\_TEMP 10.8 um  
SECTOR ARABIAN\_SEA Mercator (NHC LUT)

01-11-2015/03:30 GMT  
01-11-2015/09:00 IST



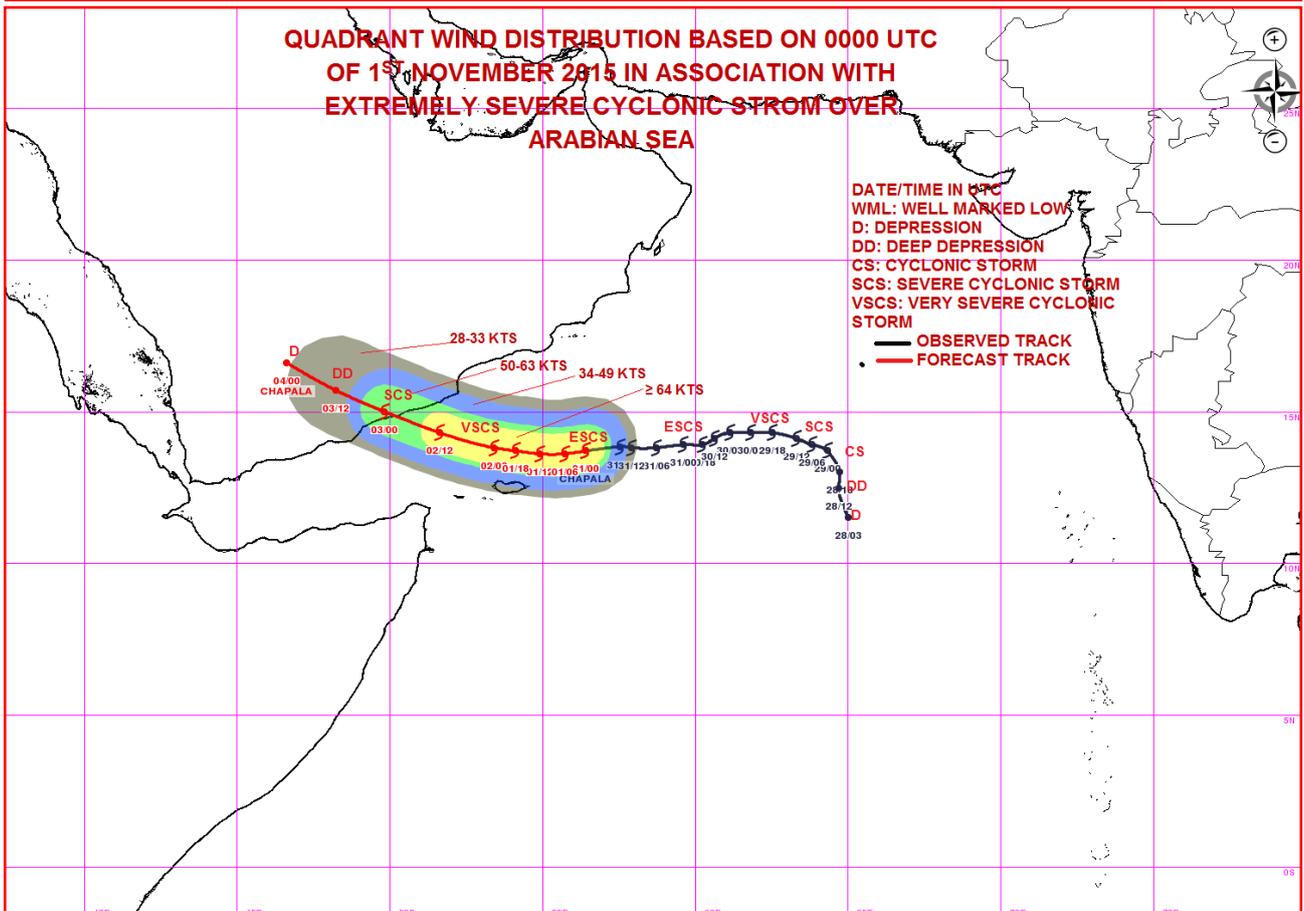
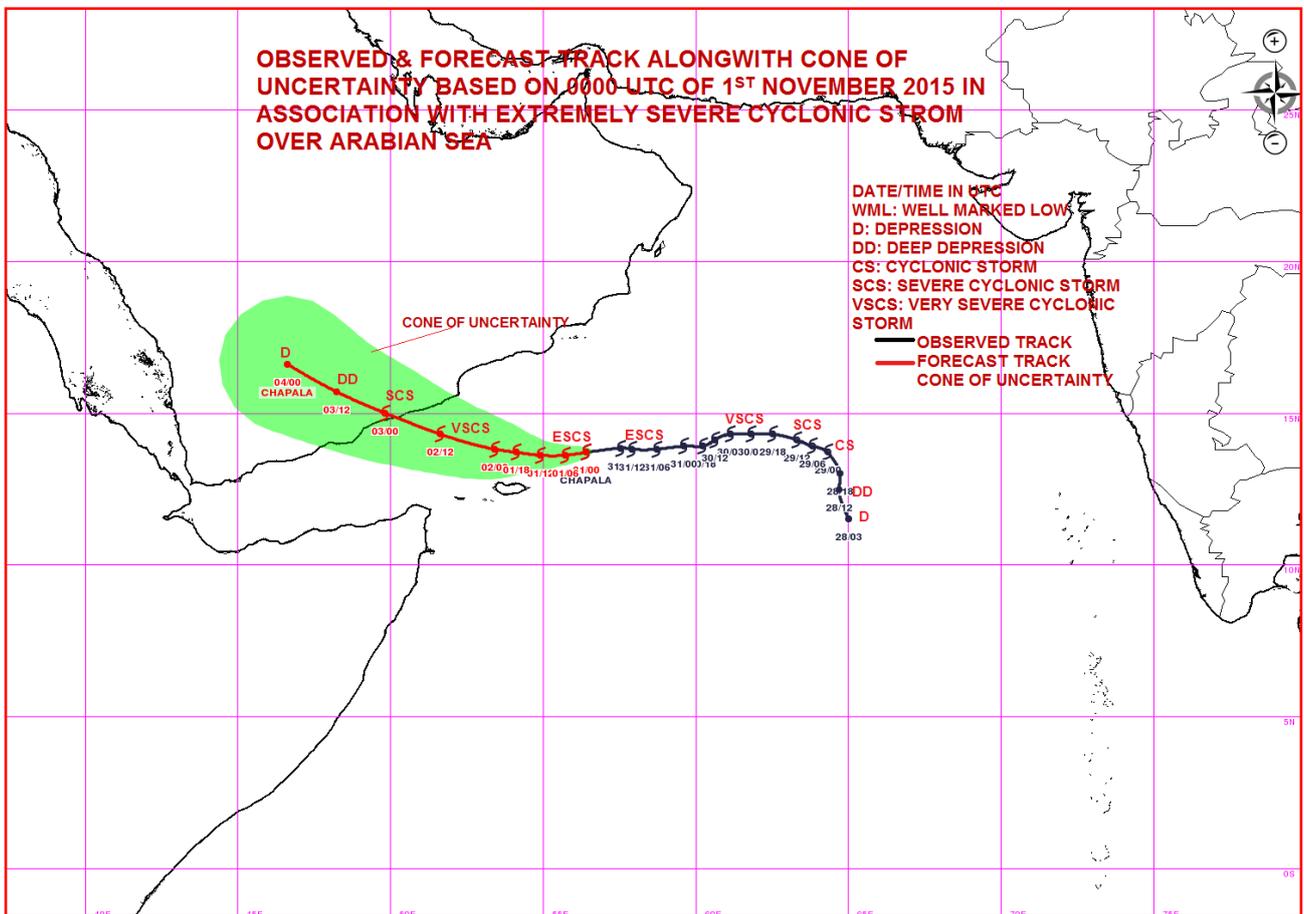
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**PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)**

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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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**REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI  
TROPICAL CYCLONE ADVISORY BULLETIN**

**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 ‘CHAPALA’ ADVISORY NO. TWENTY SEVEN ISSUED AT 0900 UTC OF 1<sup>ST</sup> NOVEMBER 2015 BASED ON 0600 UTC CHARTS OF 1<sup>ST</sup> NOVEMBER 2015.**

THE **EXTREMELY SEVERE CYCLONIC STORM**, ‘CHAPALA’ OVER WESTCENTRAL ARABIAN SEA MOVED WEST-SOUTHWESTWARDS WITH A SPEED OF ABOUT 15 KMPH DURING PAST 6 HOURS AND LAY CENTERED AT 0600 UTC OF TODAY, THE 1<sup>ST</sup> NOVEMBER 2015 NEAR LATITUDE 13.6 DEGREE NORTH AND LONGITUDE 55.6 DEGREE EAST, ABOUT 410 KM SOUTH-SOUTHEAST OF SALALAH (OMAN) (41316), 690 KM EAST-SOUTHEAST OF RIYAN (YEMEN) (41443) AND ABOUT 210 KM NORTHEAST OF SOCOTRA ISLAND (41494) (YEMEN). DUE TO ENTRAINMENT OF DRY AIR AND LOWER OCEAN THERMAL ENERGY, THE EXTREMELY SEVERE CYCLONIC STORM WOULD WEAKEN GRADUALLY INTO A VERY SEVERE CYCLONIC STORM DURING NEXT 24 HOURS. IT WOULD MOVE NEARLY WESTWARDS DURING NEXT 24 HOURS, THEN WEST-NORTHWESTWARDS AND CROSS YEMEN COAST AS A VERY SEVERE CYCLONIC STORM NEAR LATITUDE 15.0°N (ABOUT 100 KM NORTHEAST OF RIYAN) AROUND 2100 UTC 2<sup>ND</sup> NOVEMBER, 2015.

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

<b>Date/time(UTC)</b>	<b>Position (lat. °N/ long. °E)</b>	<b>Maximum sustained surface wind speed (kmph)</b>	<b>Category of cyclonic Disturbance</b>
01-11-2015/0600	13.6/55.6	190-200 gusting to 220	Extremely severe cyclonic storm
01-11-2015/1200	13.5/54.8	180-190 gusting to 210	Extremely severe cyclonic storm
01-11-2015/1800	13.4/54.0	170-180 gusting to 195	Extremely severe cyclonic storm
02-11-2015/0000	13.5/53.2	150-160 gusting to 175	Very severe cyclonic storm
02-11-2015/0600	13.7/52.3	140-150 gusting to 165	Very severe cyclonic storm
02-11-2015/1800	14.3/50.6	120-130 gusting to 145	Very severe cyclonic storm
03-11-2015/0600	15.0/48.8	100-110 gusting to 120	Severe cyclonic storm
03-11-2015/1800	15.6/47.2	55-65 gusting to 75	Deep Depression
04-11-2015/0600	16.2/45.6	40-50 gusting to 60	Depression

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 5.5 AND CI 5.5. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 105 KNOTS GUSTING TO 115 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 950 HPA. SEA CONDITION IS PHENOMENAL AROUND THE SYSTEM CENTRE. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER AREA BETWEEN LATITUDE 11.0 DEGREE NORTH TO 18.0 DEGREE NORTH

**PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)**

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

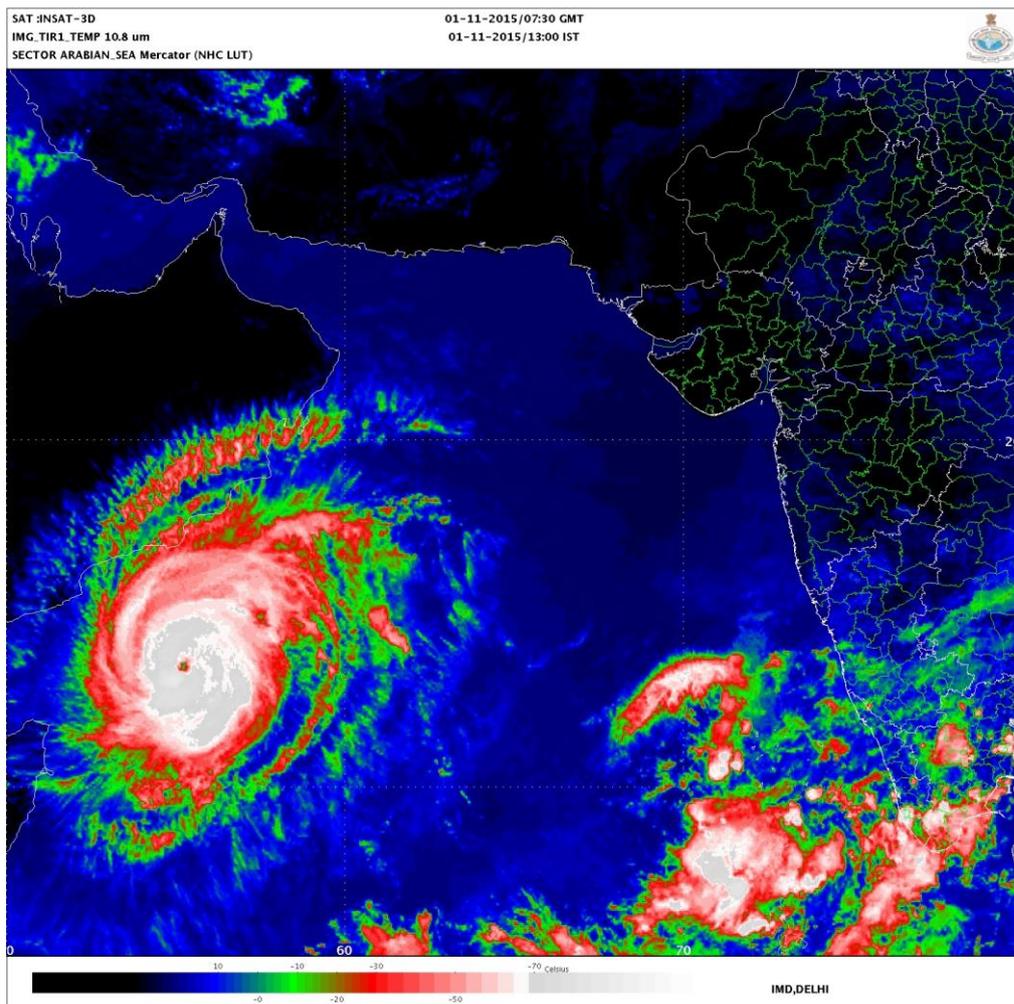
**Contact: Phone: (91) 11-246524844 FAX: (91) 11-24623220 e-mail :cwdhq2008@gmail.com**

AND LONGITUDE 53.0 DEGREE EAST TO 59.0 DEGREE EAST. CONVECTION IS EYE PATTERN. EYE IS RAGGED. EYE TEMPERATURE IS MINUS 7 DEGREE C. THE MINIMUM TEMPERATURE IN WALL CLOUD REGION IS MINUS 82 DEGREE C.

**REMARKS:**

THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS ABOUT 29<sup>0</sup>C AND IT DECREASES TOWARDS THE WEST. THE OCEAN THERMAL ENERGY IS ABOUT 50-70 KJ/CM<sup>2</sup> AROUND THE SYSTEM CENTRE AND IT DECREASES TO THE WEST-NORTHWEST. THE VERTICAL WIND SHEAR AROUND THE SYSTEM CENTRE IS ABOUT 5-15 KNOTS. IT IS 10-20 KNOTS NEAR YEMEN AND OMAN COAST. THE LOW LEVEL RELATIVE VORTICITY IS ABOUT 250 X 10<sup>-5</sup> SEC<sup>-1</sup>. UPPER LEVEL DIVERGENCE ALSO DECREASED SLIGHTLY AND IS ABOUT 20 X 10<sup>-5</sup> SEC<sup>-1</sup> AND LOW LEVEL CONVERGENCE IS AROUND 40 X 10<sup>-5</sup> SEC<sup>-1</sup>. THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 15<sup>0</sup>N. THE SYSTEM WOULD MOVE NEARLY WESTWARDS DURING NEXT 24 HOURS UNDER THE INFLUENCE OF ABOVE RIDGE AND THEN IT WOULD MOVE WEST-NORTHWESTWARDS. AS THE SYSTEM MOVES WESTWARDS, THE SYSTEM WOULD EXPERIENCE FURTHER LOWER OCEAN THERMAL ENERGY. ALSO, INTRUSION OF DRY AIR FROM THE NORTHWEST CONTINUES SURROUNDING THE CONVECTIVE RING WHICH WILL HELP IN WEAKENING OF THE SYSTEM. HOWEVER, DUE TO PREVALENCE OF WEAK VERTICAL WIND SHEAR TO THE WEST AND WEST-SOUTHWEST OF THE SYSTEM CENTRE, THE ADVERSE IMPACT OF DRY AIR INTRUSION WILL BE SLOW. HENCE THE EXTREMELY SEVERE CYCLONIC STORM WOULD WEAKEN SLOWLY DURING NEXT 24 HOURS.

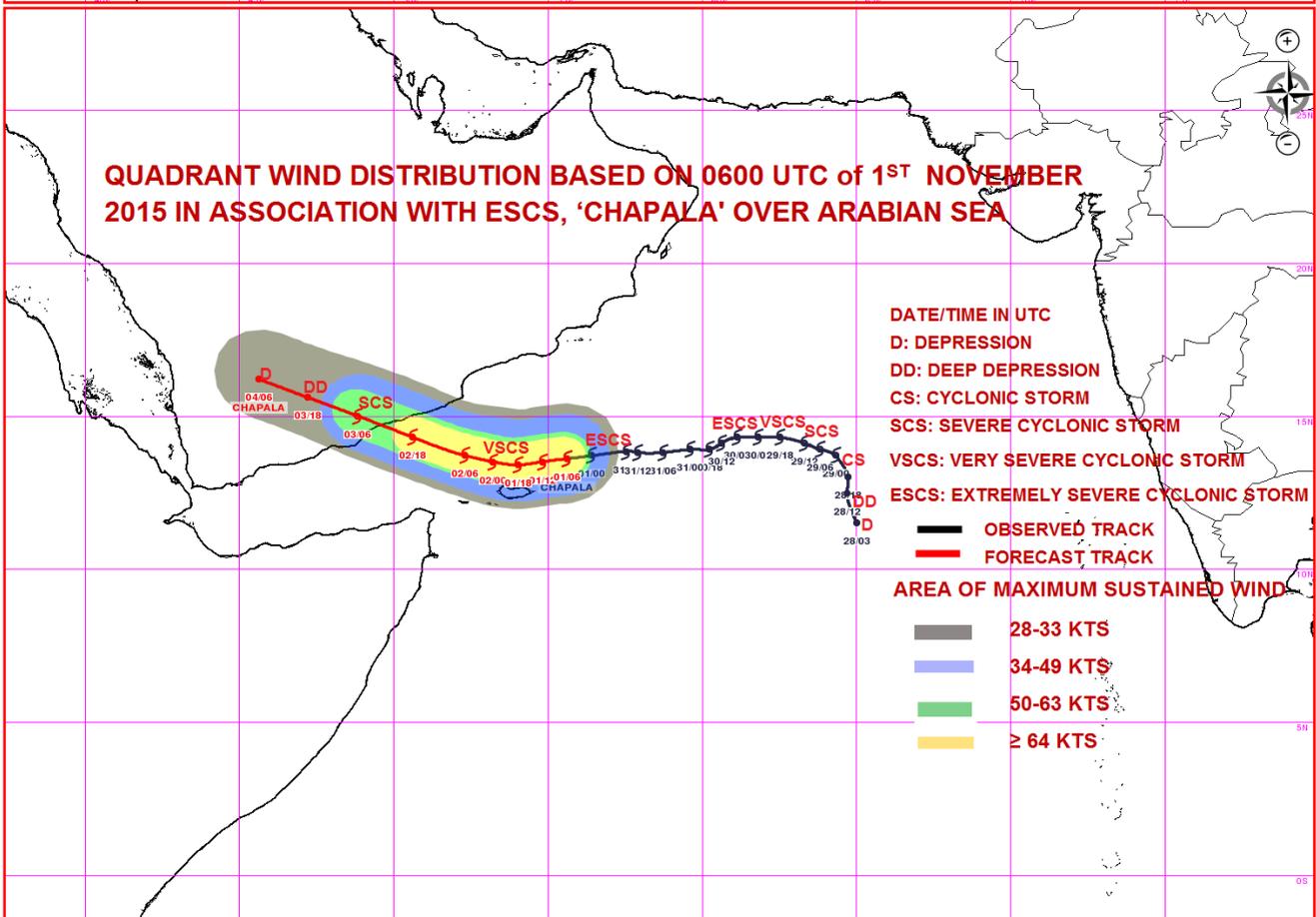
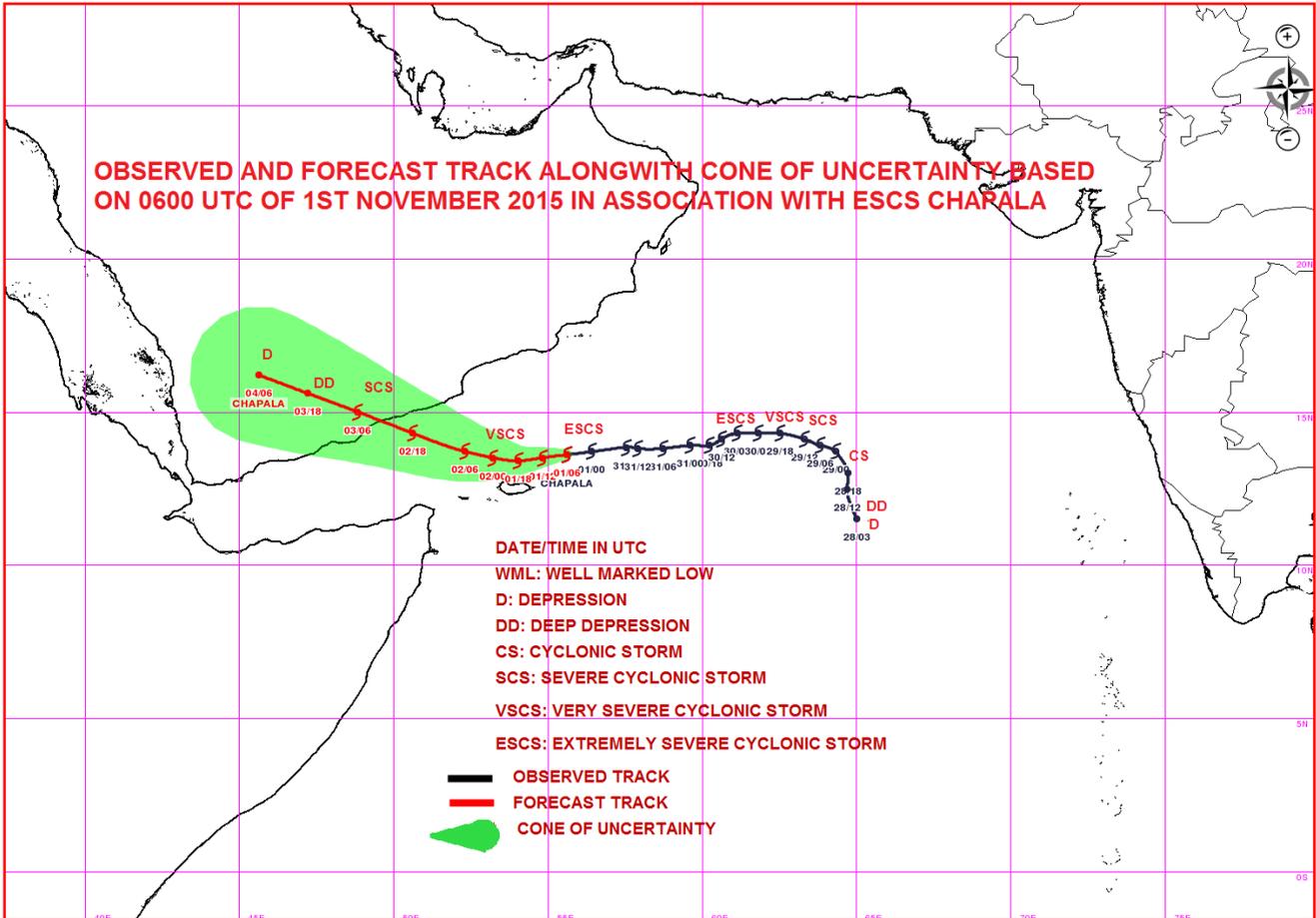
(M. MOHAPATRA)  
HEAD RSMC



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

**TROPICAL CYCLONE ADVISORY BULLETIN**

**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 'CHAPALA' ADVISORY NO. TWENTY EIGHT ISSUED AT 1200 UTC OF 1<sup>ST</sup> NOVEMBER 2015 BASED ON 0900 UTC CHARTS OF 1<sup>ST</sup> NOVEMBER 2015.**

THE **EXTREMELY SEVERE CYCLONIC STORM, 'CHAPALA'** OVER WESTCENTRAL ARABIAN SEA MOVED WESTWARDS WITH A SPEED OF ABOUT 18 KMPH DURING PAST 6 HOURS AND LAY CENTERED AT 0900 UTC OF TODAY, THE 1<sup>ST</sup> NOVEMBER 2015 NEAR LATITUDE 13.6 DEGREE NORTH AND LONGITUDE 55.1 DEGREE EAST, ABOUT 390 KM SOUTH-SOUTHEAST OF SALALAH (OMAN) (41316), 640 KM EAST-SOUTHEAST OF RIYAN (YEMEN) (41443) AND ABOUT 170 KM NORTHEAST OF SOCOTRA ISLAND (41494) (YEMEN). DUE TO ENTRAINMENT OF DRY AIR AND LOWER OCEAN THERMAL ENERGY, THE EXTREMELY SEVERE CYCLONIC STORM SHOWS SIGNS OF WEAKENING. IT WOULD WEAKEN GRADUALLY INTO A VERY SEVERE CYCLONIC STORM DURING NEXT 12 HOURS. IT WOULD MOVE NEARLY WESTWARDS DURING NEXT 24 HOURS, THEN WEST-NORTHWESTWARDS AND CROSS YEMEN COAST AS A VERY SEVERE CYCLONIC STORM NEAR RIYAN AROUND 2100 UTC 2<sup>ND</sup> NOVEMBER, 2015.

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

<b>Date/time(UTC)</b>	<b>Position (lat. °N/ long. °E)</b>	<b>Maximum sustained surface wind speed (kmph)</b>	<b>Category of cyclonic Disturbance</b>
01-11-2015/0900	13.6/55.1	180-190 gusting to 210	Extremely severe cyclonic storm
01-11-2015/1200	13.5/54.7	170-180 gusting to 200	Extremely severe cyclonic storm
01-11-2015/1800	13.4/54.0	160-170 gusting to 185	Extremely severe cyclonic storm
02-11-2015/0000	13.5/53.2	150-160 gusting to 175	Very severe cyclonic storm
02-11-2015/0600	13.7/52.3	140-150 gusting to 165	Very severe cyclonic storm
02-11-2015/1800	14.3/50.6	120-130 gusting to 145	Very severe cyclonic storm
03-11-2015/0600	15.0/48.8	100-110 gusting to 120	Severe cyclonic storm
03-11-2015/1800	15.6/47.2	55-65 gusting to 75	Deep Depression
04-11-2015/0600	16.2/45.6	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%**

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

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 5.5 AND CI 5.5. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 100 KNOTS GUSTING TO 110 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 956 HPA. SEA CONDITION IS PHENOMENAL AROUND THE SYSTEM CENTRE. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER AREA BETWEEN LATITUDE 10.5 DEGREE NORTH TO 17.0 DEGREE NORTH AND LONGITUDE 52.0 DEGREE EAST TO 58.0 DEGREE EAST. CONVECTION IS EYE PATTERN. EYE IS RAGGED AS SEEN IN VISIBLE AND INFRA-RED IMAGERY. EYE TEMPERATURE IS MINUS 22 DEGREE C. THE MINIMUM TEMPERATURE IN WALL CLOUD REGION IS MINUS 86 DEGREE C.

**REMARKS:**

THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS ABOUT 29<sup>0</sup>C AND IT DECREASES TOWARDS THE WEST. THE OCEAN THERMAL ENERGY IS ABOUT 50-70 KJ/CM<sup>2</sup> AROUND THE SYSTEM CENTRE AND IT DECREASES TO THE WEST-NORTHWEST. THE VERTICAL WIND SHEAR AROUND THE SYSTEM CENTRE IS ABOUT 5-15 KNOTS. IT IS 10-20 KNOTS NEAR YEMEN AND OMAN COAST. THE LOW LEVEL RELATIVE VORTICITY IS ABOUT 250 X 10<sup>-5</sup> SEC<sup>-1</sup>. UPPER LEVEL DIVERGENCE IS ABOUT 40 X 10<sup>-5</sup> SEC<sup>-1</sup> AND LOW LEVEL CONVERGENCE IS AROUND 40 X 10<sup>-5</sup> SEC<sup>-1</sup>. THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 15<sup>0</sup>N. THE SYSTEM WOULD MOVE NEARLY WESTWARDS DURING NEXT 24 HOURS UNDER THE INFLUENCE OF ABOVE RIDGE AND THEN IT WOULD MOVE WEST-NORTHWESTWARDS. AS THE SYSTEM MOVES WESTWARDS, THE SYSTEM WOULD EXPERIENCE FURTHER LOWER OCEAN THERMAL ENERGY. ALSO, INTRUSION OF DRY AIR FROM THE NORTHWEST CONTINUES SURROUNDING THE CONVECTIVE RING WHICH WILL HELP IN WEAKENING OF THE SYSTEM. HOWEVER, DUE TO PREVALENCE OF WEAK VERTICAL WIND SHEAR TO THE WEST AND WEST-SOUTHWEST OF THE SYSTEM CENTRE, THE ADVERSE IMPACT OF DRY AIR INTRUSION WILL BE SLOW. HENCE THE EXTREMELY SEVERE CYCLONIC STORM WOULD WEAKEN SLOWLY DURING NEXT 24 HOURS.

(M. MOHAPATRA)  
HEAD RSMC

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**PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)**

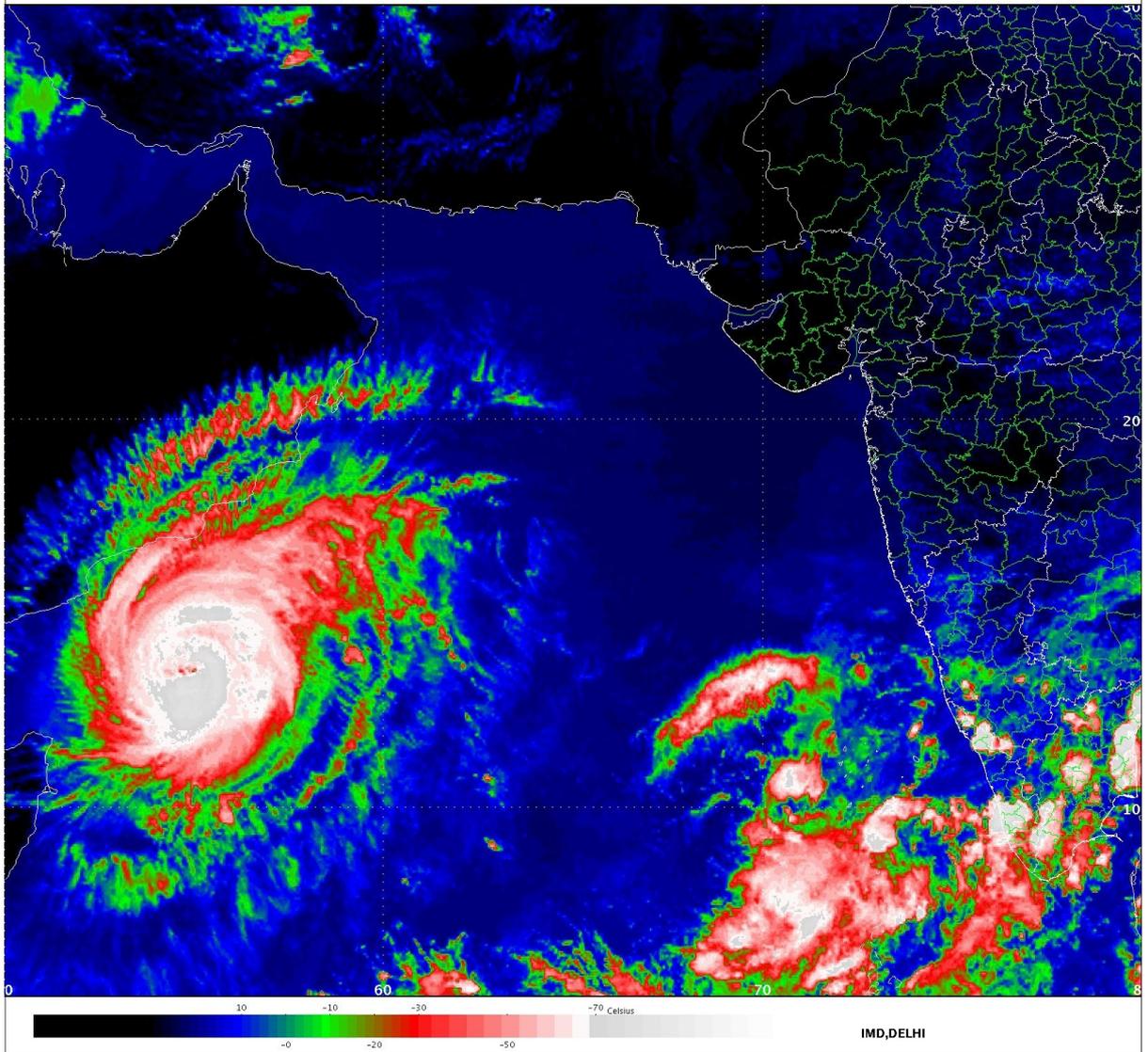
**NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%**

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SAT :INSAT-3D  
IMG\_TIR1\_TEMP 10.8 um  
SECTOR ARABIAN\_SEA Mercator (NHC LUT)

01-11-2015/09:00 GMT  
01-11-2015/14:30 IST



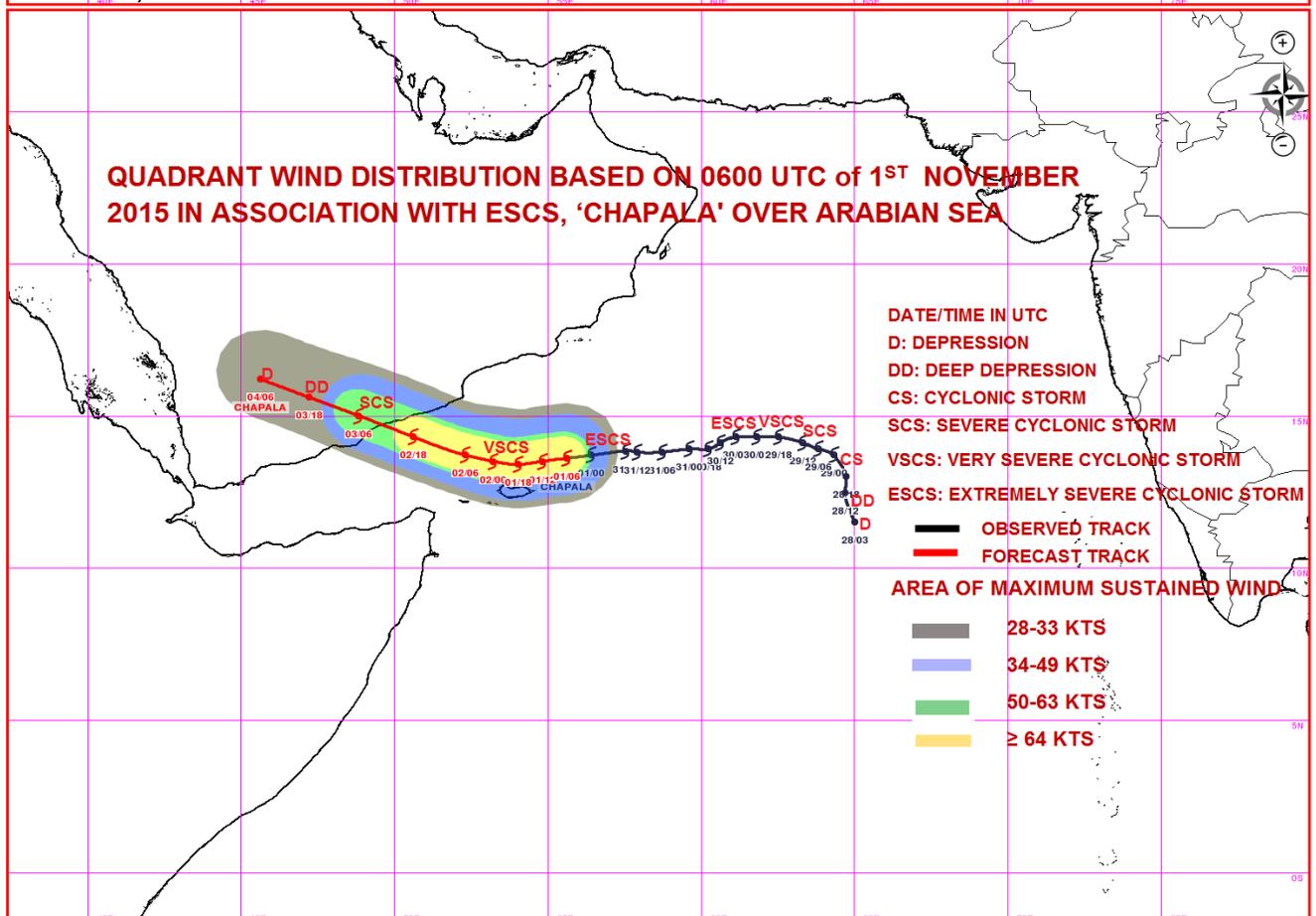
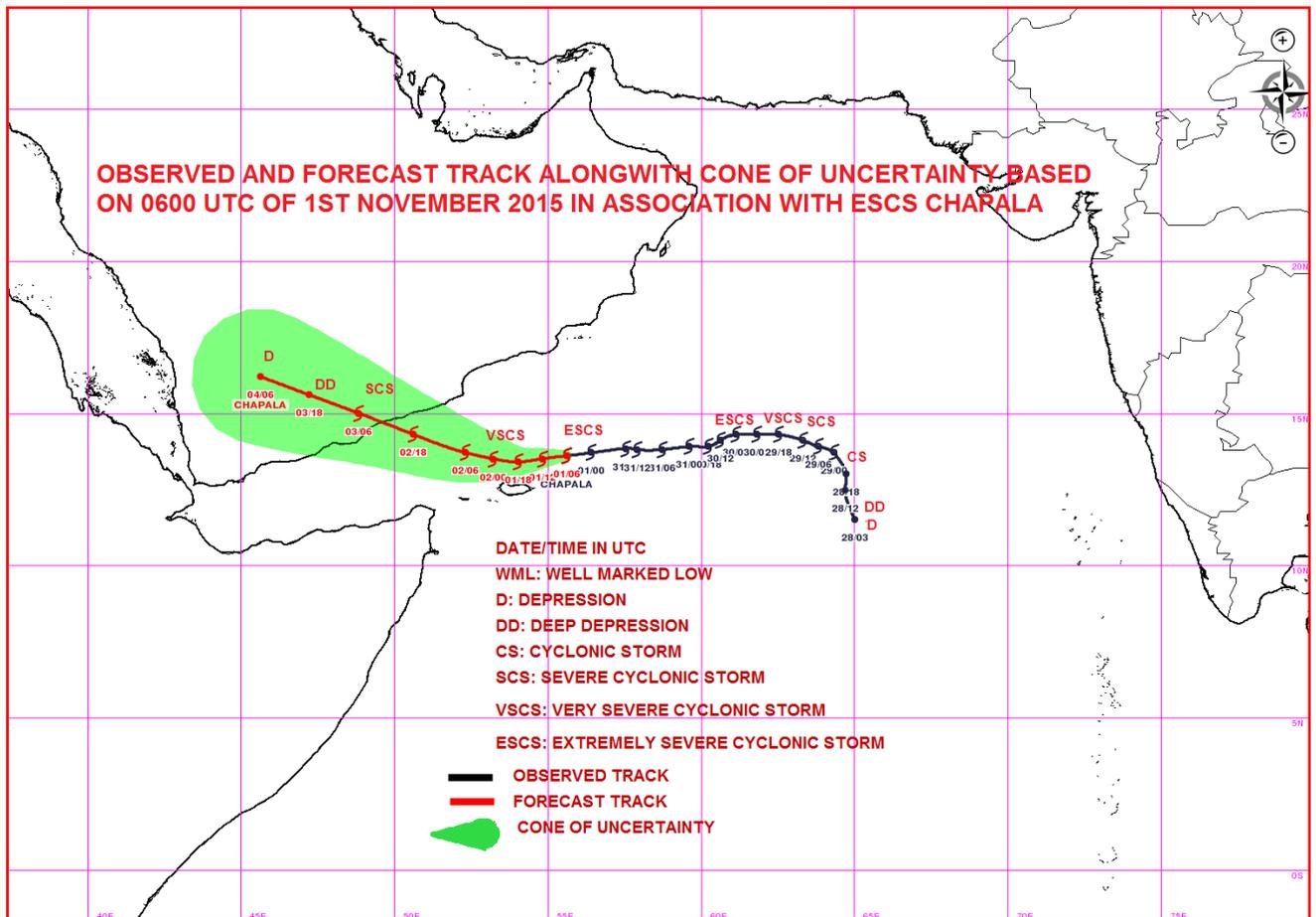
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**PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)**

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

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**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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**REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI  
TROPICAL CYCLONE ADVISORY BULLETIN**

**FROM: RSMC –TROPICAL CYCLONES, NEW DELHI**

**TO: STORM WARNING CENTRE, NAYPYI TAW (MYANMAR)  
STORM WARNING CENTRE, BANGKOK (THAILAND)  
STORM WARNING CENTRE, COLOMBO (SRILANKA)  
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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 ‘CHAPALA’ ADVISORY NO. TWENTY NINE ISSUED AT 1500 UTC OF 1<sup>ST</sup> NOVEMBER 2015 BASED ON 1200 UTC CHARTS OF 1<sup>ST</sup> NOVEMBER 2015.**

THE **EXTREMELY SEVERE CYCLONIC STORM**, ‘CHAPALA’ OVER WESTCENTRAL ARABIAN SEA MOVED WESTWARDS WITH A SPEED OF ABOUT 18 KMPH DURING PAST 6 HOURS AND LAY CENTERED AT 1200 UTC OF TODAY, THE 1<sup>ST</sup> NOVEMBER 2015 NEAR LATITUDE 13.6 DEGREE NORTH AND LONGITUDE 54.6 DEGREE EAST, ABOUT 380 KM SOUTH-SOUTHEAST OF SALALAH (OMAN) (41316), 590 KM EAST-SOUTHEAST OF RIYAN (YEMEN) (41443) AND ABOUT 130 KM NORTH-NORTHEAST OF SOCOTRA ISLAND (41494) (YEMEN). DUE TO ENTRAINMENT OF DRY AIR AND LOWER OCEAN THERMAL ENERGY, THE EXTREMELY SEVERE CYCLONIC STORM SHOWS SIGNS OF WEAKENING. IT WOULD WEAKEN GRADUALLY INTO A VERY SEVERE CYCLONIC STORM DURING NEXT 24 HOURS. IT WOULD MOVE NEARLY WESTWARDS DURING NEXT 12 HOURS, THEN WEST-NORTHWESTWARDS AND CROSS YEMEN COAST NEAR RIYAN AS A VERY SEVERE CYCLONIC STORM AROUND 2100 UTC 2<sup>ND</sup> NOVEMBER, 2015.

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

<b>Date/time(UTC)</b>	<b>Position (lat. °N/ long. °E)</b>	<b>Maximum sustained surface wind speed (kmph)</b>	<b>Category of cyclonic Disturbance</b>
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02-11-2015/0600	13.9/51.9	140-150 gusting to 165	Very severe cyclonic storm
02-11-2015/1200	14.1/51.0	125-135 gusting to 150	Very severe cyclonic storm
03-11-2015/0000	14.7/49.2	110-120 gusting to 130	Severe cyclonic storm
03-11-2015/1200	15.3/47.4	55-65 gusting to 75	Deep Depression
04-11-2015/0000	15.9/45.8	40-50 gusting to 60	Depression

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 5.5 AND CI 5.5. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 100 KNOTS GUSTING TO 110 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 956 HPA. SEA CONDITION IS PHENOMENAL AROUND THE SYSTEM CENTRE. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER AREA BETWEEN LATITUDE 10.0 DEGREE NORTH TO 17.0 DEGREE NORTH AND LONGITUDE 51.0 DEGREE EAST TO 57.5 DEGREE EAST. CONVECTION IS EYE PATTERN. EYE

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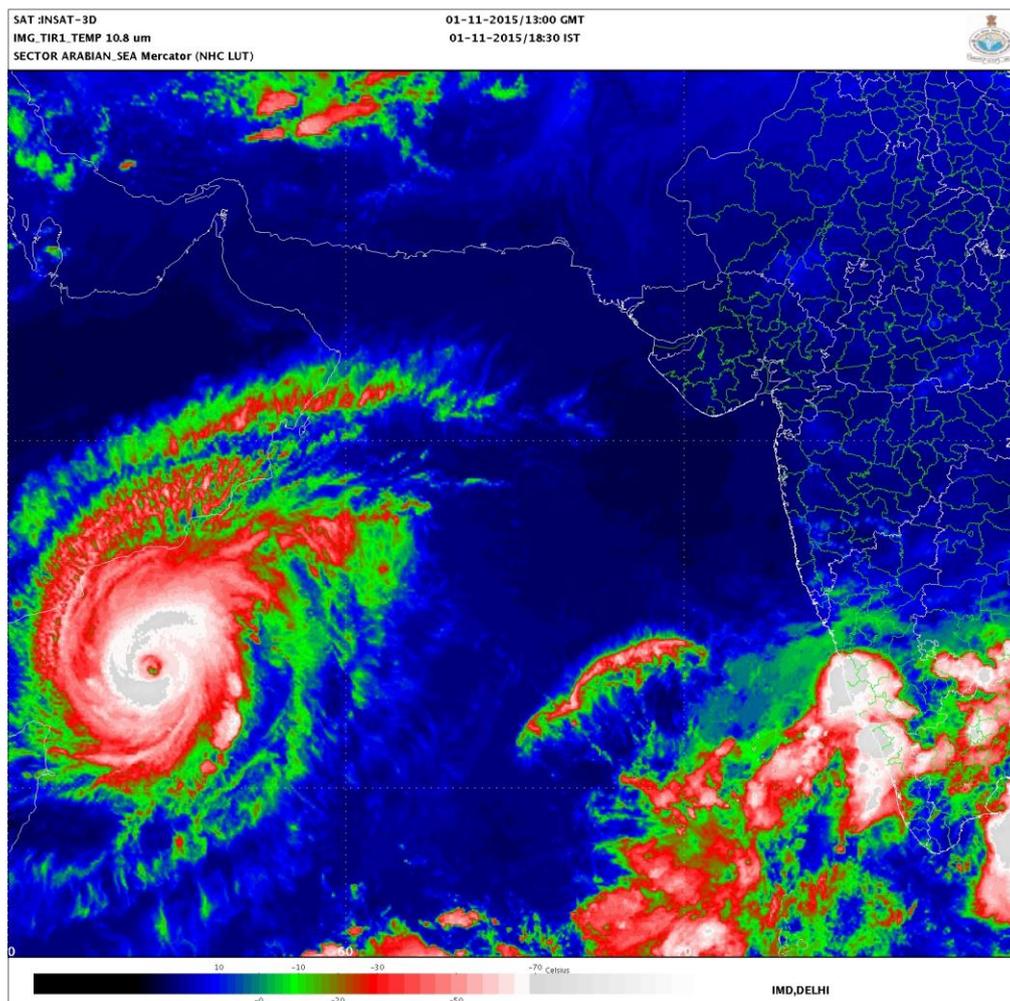
**Contact: Phone: (91) 11-246524844 FAX: (91) 11-24623220 e-mail :cwdhq2008@gmail.com**

IS RAGGED AS SEEN IN INFRA-RED IMAGERY. EYE TEMPERATURE IS MINUS 17 DEGREE C. THE MINIMUM TEMPERATURE IN WALL CLOUD REGION IS MINUS 80 DEGREE C.

**REMARKS:**

THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS ABOUT 29°C AND IT DECREASES TOWARDS THE WEST. THE OCEAN THERMAL ENERGY IS ABOUT 50-70 KJ/CM<sup>2</sup> AROUND THE SYSTEM CENTRE AND IT DECREASES TO THE WEST-NORTHWEST. THE VERTICAL WIND SHEAR AROUND THE SYSTEM CENTRE IS ABOUT 5-15 KNOTS. IT IS 10-20 KNOTS NEAR YEMEN AND OMAN COAST. THE LOW LEVEL RELATIVE VORTICITY IS ABOUT 250 X 10<sup>-5</sup> SEC<sup>-1</sup>. UPPER LEVEL DIVERGENCE IS ABOUT 40 X 10<sup>-5</sup> SEC<sup>-1</sup> AND LOW LEVEL CONVERGENCE IS AROUND 40 X 10<sup>-5</sup> SEC<sup>-1</sup>. THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 15°N. THE SYSTEM WOULD MOVE NEARLY WESTWARDS DURING NEXT 24 HOURS UNDER THE INFLUENCE OF ABOVE RIDGE AND THEN IT WOULD MOVE WEST-NORTHWESTWARDS. AS THE SYSTEM MOVES WESTWARDS, THE SYSTEM WOULD EXPERIENCE FURTHER LOWER OCEAN THERMAL ENERGY. ALSO, INTRUSION OF DRY AIR FROM THE NORTHWEST CONTINUES SURROUNDING THE CONVECTIVE RING WHICH WILL HELP IN WEAKENING OF THE SYSTEM. HOWEVER, DUE TO PREVALENCE OF WEAK VERTICAL WIND SHEAR TO THE WEST AND WEST-SOUTHWEST OF THE SYSTEM CENTRE, THE ADVERSE IMPACT OF DRY AIR INTRUSION WILL BE SLOW. HENCE THE EXTREMELY SEVERE CYCLONIC STORM WOULD WEAKEN SLOWLY DURING NEXT 24 HOURS.

(M. MOHAPATRA)  
HEAD RSMC



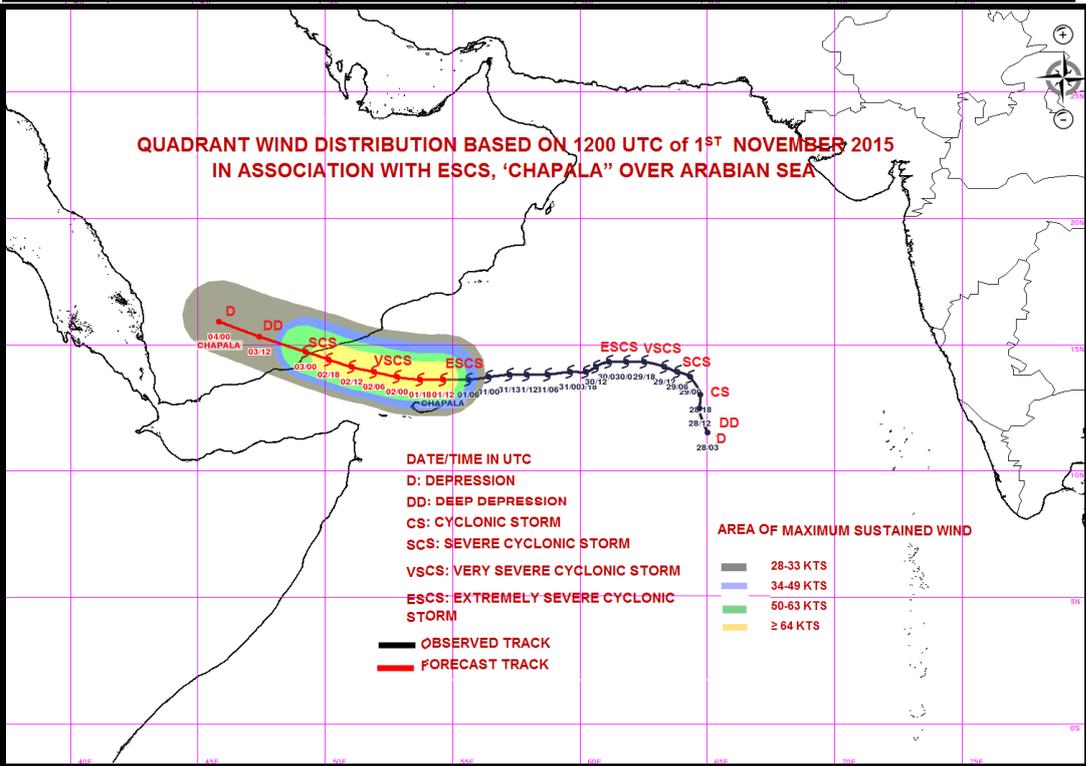
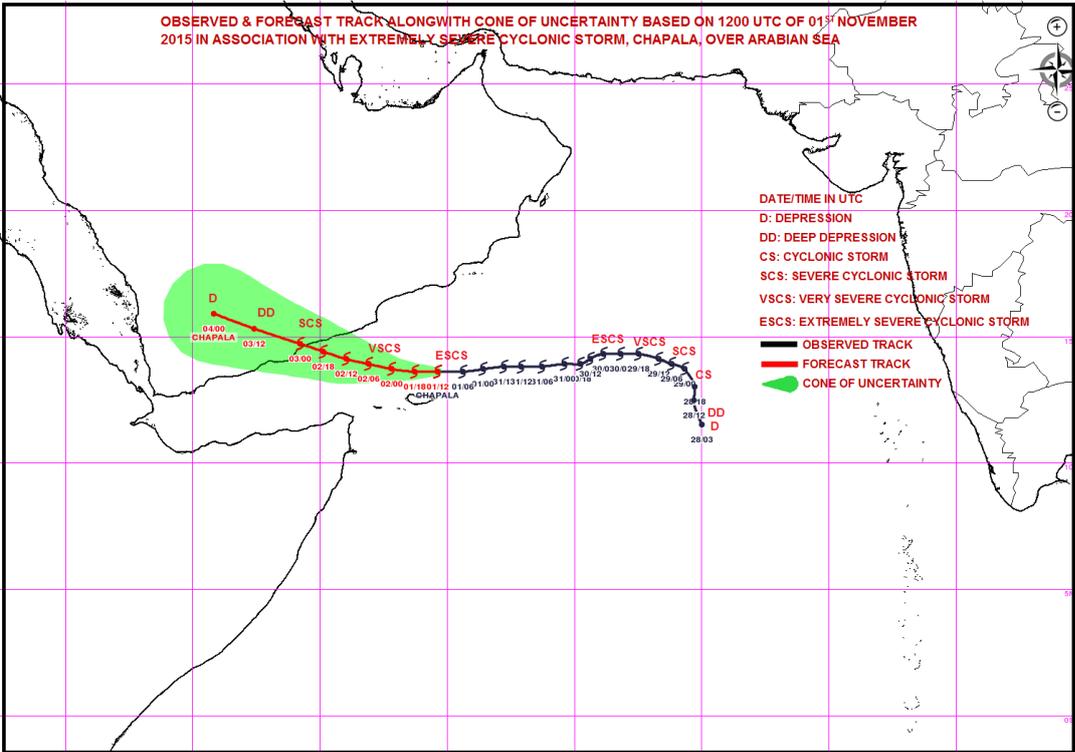
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**PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)**

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

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



**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**



**REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI  
TROPICAL CYCLONE ADVISORY BULLETIN**

**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 'CHAPALA' ADVISORY NO. THIRTY ISSUED AT 1800 UTC OF 1<sup>ST</sup> NOVEMBER 2015 BASED ON 1500 UTC CHARTS OF 1<sup>ST</sup> NOVEMBER 2015.**

THE **EXTREMELY SEVERE CYCLONIC STORM**, 'CHAPALA' OVER WESTCENTRAL ARABIAN SEA MOVED WESTWARDS WITH A SPEED OF ABOUT 16 KMPH DURING PAST 6 HOURS AND LAY CENTERED AT 1500 UTC OF TODAY, THE 1<sup>ST</sup> NOVEMBER 2015 NEAR LATITUDE 13.6 DEGREE NORTH AND LONGITUDE 54.2 DEGREE EAST, ABOUT 380 KM SOUTH OF SALALAH (OMAN) (41316), 550 KM EAST-SOUTHEAST OF RIYAN (YEMEN) (41443) AND ABOUT 120 KM NORTH-NORTHEAST OF SOCOTRA ISLAND (41494) (YEMEN). DUE TO ENTRAINMENT OF DRY AIR AND LOWER OCEAN THERMAL ENERGY, THE EXTREMELY SEVERE CYCLONIC STORM SHOWS SIGNS OF WEAKENING. IT WOULD WEAKEN GRADUALLY INTO A VERY SEVERE CYCLONIC STORM DURING NEXT 24 HOURS. IT WOULD MOVE NEARLY WESTWARDS DURING NEXT 12 HOURS, THEN WEST-NORTHWESTWARDS AND CROSS YEMEN COAST NEAR RIYAN AS A VERY SEVERE CYCLONIC STORM AROUND 2100 UTC OF 2<sup>ND</sup> NOVEMBER, 2015.

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

<b>Date/time(UTC)</b>	<b>Position (lat. °N/ long. °E)</b>	<b>Maximum sustained surface wind speed (kmph)</b>	<b>Category of cyclonic Disturbance</b>
01-11-2015/1500	13.6/54.2	180-190 gusting to 210	Extremely severe cyclonic storm
01-11-2015/1800	13.6/53.7	170-180 gusting to 200	Extremely severe cyclonic storm
02-11-2015/0000	13.7/52.8	160-170 gusting to 185	Extremely severe cyclonic storm
02-11-2015/0600	13.9/51.9	140-150 gusting to 165	Very severe cyclonic storm
02-11-2015/1200	14.1/51.0	125-135 gusting to 150	Very severe cyclonic storm
03-11-2015/0000	14.7/49.2	110-120 gusting to 130	Severe cyclonic storm
03-11-2015/1200	15.3/47.4	55-65 gusting to 75	Deep Depression
04-11-2015/0000	15.9/45.8	40-50 gusting to 60	Depression

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 5.5 AND CI 5.5. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 100 KNOTS GUSTING TO 110 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 956 HPA. SEA CONDITION IS PHENOMENAL AROUND THE SYSTEM CENTRE. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER AREA BETWEEN LATITUDE 10.0 DEGREE NORTH TO 17.0 DEGREE NORTH AND LONGITUDE 51.0 DEGREE EAST TO 57.0 DEGREE EAST. CONVECTION IS EYE PATTERN. EYE

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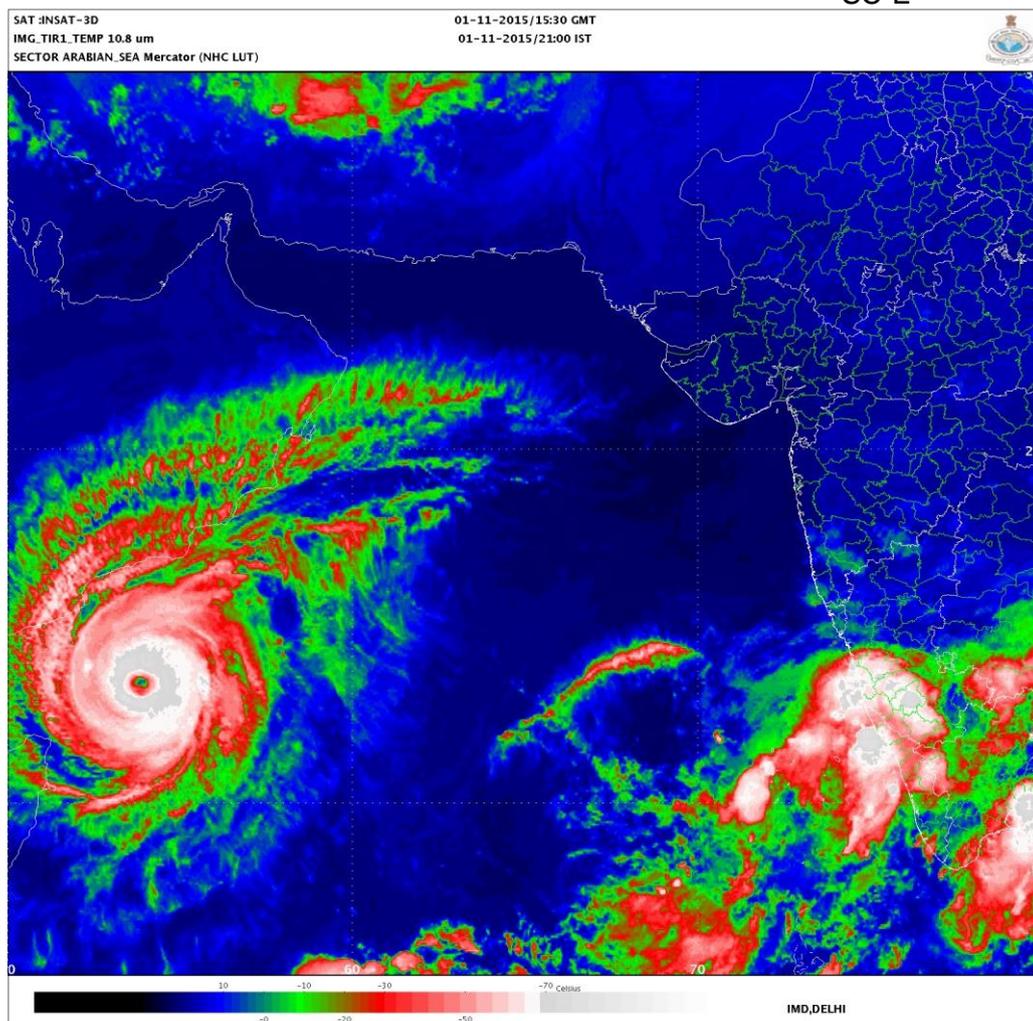
**Contact: Phone: (91) 11-246524844 FAX: (91) 11-24623220 e-mail :cwdhq2008@gmail.com**

IS RAGGED AS SEEN IN INFRA-RED IMAGERY. EYE TEMPERATURE IS +6 DEGREE C. THE MINIMUM TEMPERATURE IN WALL CLOUD REGION IS MINUS 77 DEGREE C.

**REMARKS:**

THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS ABOUT 29°C AND IT DECREASES TOWARDS THE WEST. THE OCEAN THERMAL ENERGY IS ABOUT 50-70 KJ/CM<sup>2</sup> AROUND THE SYSTEM CENTRE AND IT DECREASES TO THE WEST-NORTHWEST. THE VERTICAL WIND SHEAR AROUND THE SYSTEM CENTRE IS ABOUT 5-15 KNOTS. IT IS 10-20 KNOTS NEAR YEMEN AND OMAN COAST. THE LOW LEVEL RELATIVE VORTICITY IS ABOUT 250 X 10<sup>-5</sup> SEC<sup>-1</sup>. UPPER LEVEL DIVERGENCE IS ABOUT 40 X 10<sup>-5</sup> SEC<sup>-1</sup> AND LOW LEVEL CONVERGENCE IS AROUND 40 X 10<sup>-5</sup> SEC<sup>-1</sup>. THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 15°N. THE SYSTEM WOULD MOVE NEARLY WESTWARDS DURING NEXT 24 HOURS UNDER THE INFLUENCE OF ABOVE RIDGE AND THEN IT WOULD MOVE WEST-NORTHWESTWARDS. AS THE SYSTEM MOVES WESTWARDS, THE SYSTEM WOULD EXPERIENCE FURTHER LOWER OCEAN THERMAL ENERGY. ALSO, INTRUSION OF DRY AIR FROM THE NORTHWEST CONTINUES SURROUNDING THE CONVECTIVE RING WHICH WILL HELP IN WEAKENING OF THE SYSTEM. HOWEVER, DUE TO PREVALENCE OF WEAK VERTICAL WIND SHEAR TO THE WEST AND WEST-SOUTHWEST OF THE SYSTEM CENTRE, THE ADVERSE IMPACT OF DRY AIR INTRUSION WILL BE SLOW. HENCE THE EXTREMELY SEVERE CYCLONIC STORM WOULD WEAKEN SLOWLY DURING NEXT 24 HOURS.

(D. R. PATTANAİK)  
SC-E



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



**REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI  
TROPICAL CYCLONE ADVISORY BULLETIN**

**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 'CHAPALA' ADVISORY NO. THIRTY ONE ISSUED AT 2100 UTC OF 1<sup>ST</sup> NOVEMBER 2015 BASED ON 1800 UTC CHARTS OF 1<sup>ST</sup> NOVEMBER 2015.**

THE **EXTREMELY SEVERE CYCLONIC STORM**, 'CHAPALA' OVER WESTCENTRAL ARABIAN SEA MOVED WEST-SOUTHWESTWARDS WITH A SPEED OF ABOUT 16 KMPH DURING PAST 6 HOURS AND LAY CENTERED AT 1800 UTC OF TODAY, THE 1<sup>ST</sup> NOVEMBER 2015 NEAR LATITUDE 13.5 DEGREE NORTH AND LONGITUDE 53.7 DEGREE EAST, ABOUT 390 KM SOUTH OF SALALAH (OMAN) (41316), 500 KM EAST-SOUTHEAST OF RIYAN (YEMEN) (41443) AND ABOUT 100 KM NORTH-NORTHEAST OF SOCOTRA ISLAND (41494) (YEMEN). DUE TO ENTRAINMENT OF DRY AIR AND LOWER OCEAN THERMAL ENERGY, THE EXTREMELY SEVERE CYCLONIC STORM SHOWS SIGNS OF WEAKENING. IT WOULD WEAKEN GRADUALLY INTO A VERY SEVERE CYCLONIC STORM DURING NEXT 24 HOURS. IT WOULD MOVE NEARLY WESTWARDS DURING NEXT 12 HOURS, THEN WEST-NORTHWESTWARDS AND CROSS YEMEN COAST NEAR RIYAN AS A VERY SEVERE CYCLONIC STORM AROUND 2100 UTC OF 2<sup>ND</sup> NOVEMBER, 2015.

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

<b>Date/time(UTC)</b>	<b>Position (lat. °N/ long. °E)</b>	<b>Maximum sustained surface wind speed (kmph)</b>	<b>Category of cyclonic Disturbance</b>
01-11-2015/1800	13.5/53.7	180-190 gusting to 210	Extremely severe cyclonic storm
02-11-2015/0000	13.7/52.8	170-180 gusting to 190	Extremely severe cyclonic storm
02-11-2015/0600	13.9/51.9	160-170 gusting to 185	Extremely severe cyclonic storm
02-11-2015/1200	14.1/51.0	140-150 gusting to 160	Very severe cyclonic storm
02-11-2015/1800	14.4/50.0	120-130 gusting to 140	Very severe cyclonic storm
03-11-2015/0600	15.0/48.3	100-110 gusting to 120	Severe cyclonic storm
03-11-2015/1800	15.5/46.9	55-65 gusting to 75	Deep Depression
04-11-2015/0600	16.0/45.4	40-50 gusting to 60	Depression

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 5.5 AND CI 5.5. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 100 KNOTS GUSTING TO 110 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 956 HPA. SEA CONDITION IS PHENOMENAL AROUND THE SYSTEM CENTRE. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER AREA BETWEEN LATITUDE 10.0 DEGREE NORTH TO 17.0 DEGREE NORTH AND LONGITUDE 51.0 DEGREE EAST TO 57.0 DEGREE EAST. CONVECTION IS EYE PATTERN. EYE

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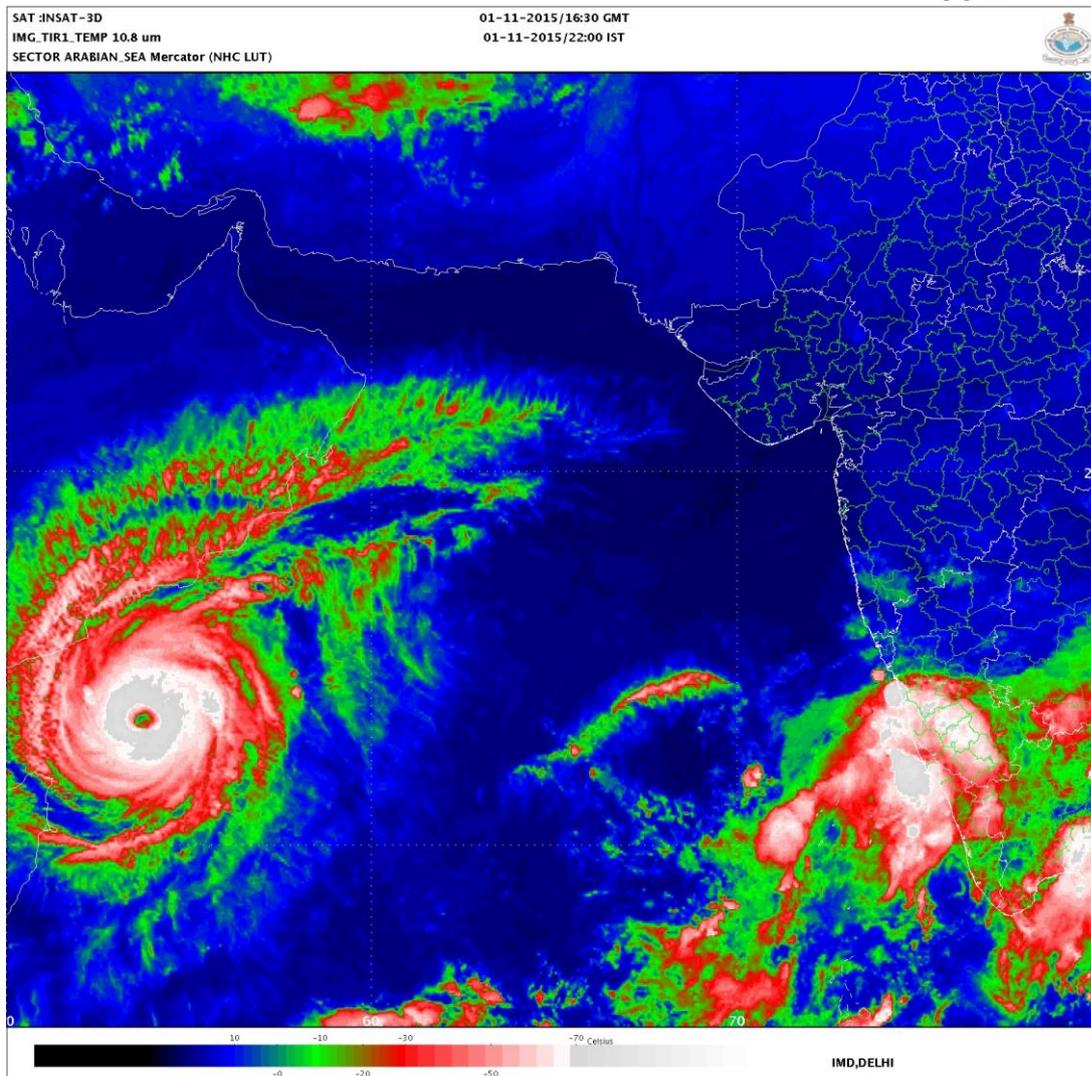
**Contact: Phone: (91) 11-246524844 FAX: (91) 11-24623220 e-mail :cwdhq2008@gmail.com**

IS RAGGED AS SEEN IN INFRA-RED IMAGERY. EYE TEMPERATURE IS +2 DEGREE C. THE MINIMUM TEMPERATURE IN WALL CLOUD REGION IS MINUS 81 DEGREE C.

**REMARKS:**

THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS ABOUT 29°C AND IT DECREASES TOWARDS THE WEST. THE OCEAN THERMAL ENERGY IS ABOUT 50-70 KJ/CM<sup>2</sup> AROUND THE SYSTEM CENTRE AND IT DECREASES TO THE WEST-NORTHWEST. THE VERTICAL WIND SHEAR AROUND THE SYSTEM CENTRE IS ABOUT 5-10 KNOTS. IT IS 10-20 KNOTS NEAR YEMEN AND OMAN COAST. THE LOW LEVEL RELATIVE VORTICITY IS ABOUT 250 X 10<sup>-5</sup> SEC<sup>-1</sup>. UPPER LEVEL DIVERGENCE IS ABOUT 40 X 10<sup>-5</sup> SEC<sup>-1</sup> AND LOW LEVEL CONVERGENCE IS AROUND 40 X 10<sup>-5</sup> SEC<sup>-1</sup>. THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 15°N. THE SYSTEM WOULD MOVE NEARLY WESTWARDS DURING NEXT 24 HOURS UNDER THE INFLUENCE OF ABOVE RIDGE AND THEN IT WOULD MOVE WEST-NORTHWESTWARDS. AS THE SYSTEM MOVES WESTWARDS, THE SYSTEM WOULD EXPERIENCE FURTHER LOWER OCEAN THERMAL ENERGY. ALSO, INTRUSION OF DRY AIR FROM THE NORTHWEST CONTINUES SURROUNDING THE CONVECTIVE RING WHICH WILL HELP IN WEAKENING OF THE SYSTEM. HOWEVER, DUE TO PREVALENCE OF WEAK VERTICAL WIND SHEAR TO THE WEST AND WEST-SOUTHWEST OF THE SYSTEM CENTRE, THE ADVERSE IMPACT OF DRY AIR INTRUSION WILL BE SLOW. HENCE THE EXTREMELY SEVERE CYCLONIC STORM WOULD WEAKEN SLOWLY DURING NEXT 24 HOURS.

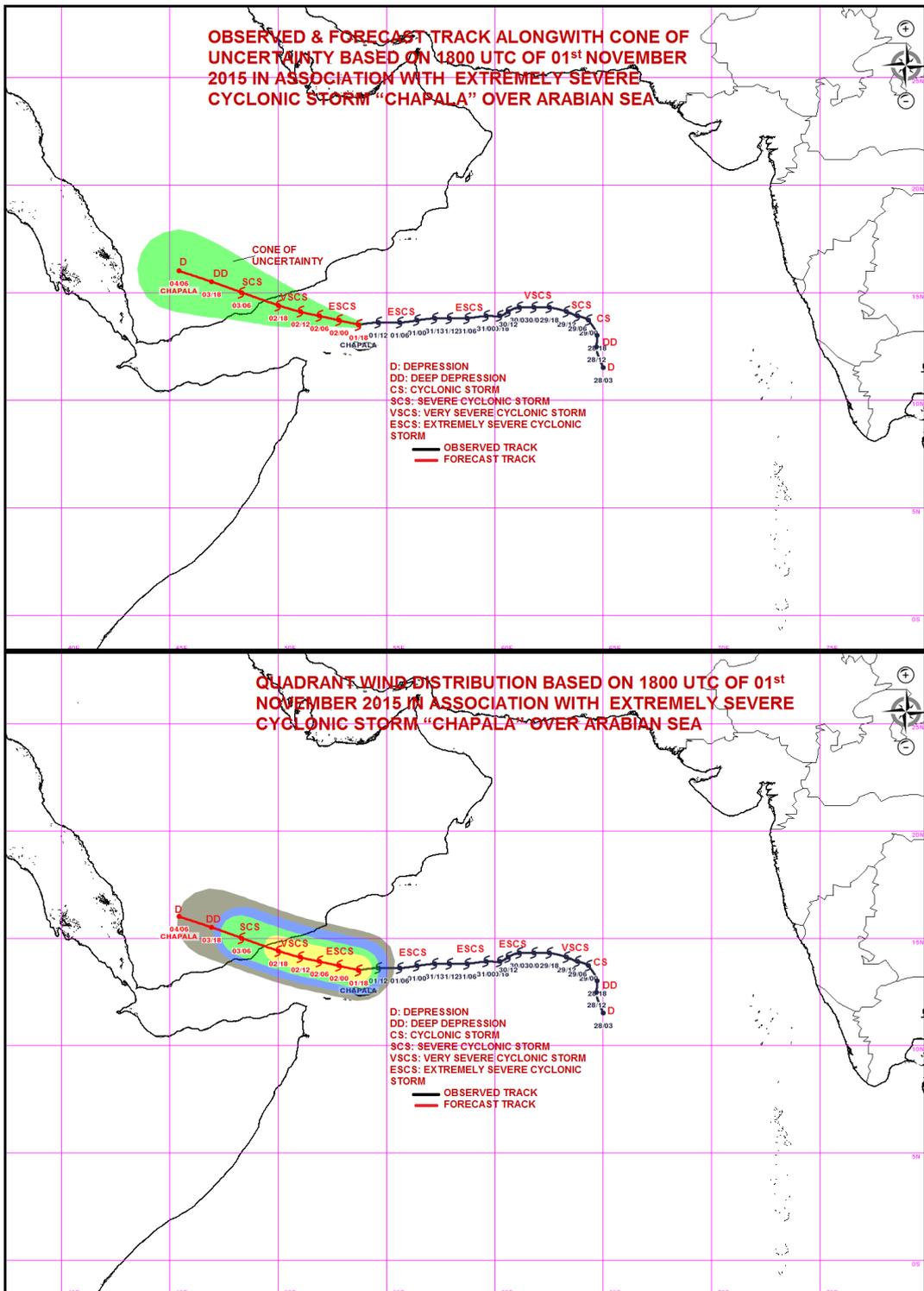
(D. R. PATTANAİK)  
SC-E



**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**



**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**



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

**TROPICAL CYCLONE ADVISORY BULLETIN**

**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 'CHAPALA' ADVISORY NO. THIRTY TWO ISSUED AT 0000 UTC OF 2<sup>ND</sup> NOVEMBER 2015 BASED ON 2100 UTC CHARTS OF 1<sup>ST</sup> NOVEMBER 2015.**

THE **EXTREMELY SEVERE CYCLONIC STORM, 'CHAPALA'** OVER WESTCENTRAL ARABIAN SEA MOVED WEST-SOUTHWESTWARDS WITH A SPEED OF ABOUT 20 KMPH DURING PAST 6 HOURS AND LAY CENTERED AT 2100 UTC OF TODAY, THE 1<sup>ST</sup> NOVEMBER 2015 NEAR LATITUDE **13.3** DEGREE NORTH AND LONGITUDE **53.1** DEGREE EAST, ABOUT 420 KM SOUTH-SOUTHWEST OF SALALAH (OMAN) (41316), 440 KM -SOUTHEAST OF RIYAN (YEMEN) (41443) AND ABOUT 100 KM NORTHWEST OF SOCOTRA ISLAND (41494) (YEMEN). DUE TO ENTRAINMENT OF DRY AIR AND LOWER OCEAN THERMAL ENERGY, THE EXTREMELY SEVERE CYCLONIC STORM SHOWS SIGNS OF WEAKENING. IT WOULD WEAKEN GRADUALLY INTO A VERY SEVERE CYCLONIC STORM DURING NEXT 24 HOURS. IT WOULD MOVE NEARLY WESTWARDS DURING NEXT 12 HOURS, THEN WEST-NORTHWESTWARDS AND CROSS YEMEN COAST NEAR RIYAN AS A VERY SEVERE CYCLONIC STORM AROUND 2100 UTC OF 2<sup>ND</sup> NOVEMBER, 2015.

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

<b>Date/time(UTC)</b>	<b>Position (lat. °N/ long. °E)</b>	<b>Maximum sustained surface wind speed (kmph)</b>	<b>Category of cyclonic Disturbance</b>
01-11-2015/2100	13.3/53.1	180-190 gusting to 210	Extremely severe cyclonic storm
02-11-2015/0000	13.7/52.8	170-180 gusting to 190	Extremely severe cyclonic storm
02-11-2015/0600	13.9/51.9	160-170 gusting to 185	Extremely severe cyclonic storm
02-11-2015/1200	14.1/51.0	140-150 gusting to 160	Very severe cyclonic storm
02-11-2015/1800	14.4/50.0	120-130 gusting to 140	Very severe cyclonic storm
03-11-2015/0600	15.0/48.3	100-110 gusting to 120	Severe cyclonic storm
03-11-2015/1800	15.5/46.9	55-65 gusting to 75	Deep Depression
04-11-2015/0600	16.0/45.4	40-50 gusting to 60	Depression

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 5.5 AND CI 5.5. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 100 KNOTS GUSTING TO 110 KNOTS. THE ESTIMATED CENTRAL

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

PRESSURE IS ABOUT 956 HPA. SEA CONDITION IS PHENOMENAL AROUND THE SYSTEM CENTRE. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER AREA BETWEEN LATITUDE 10.0 DEGREE NORTH TO 17.0 DEGREE NORTH AND LONGITUDE 51.0 DEGREE EAST TO 57.0 DEGREE EAST. CONVECTION IS EYE PATTERN. EYE IS RAGGED AS SEEN IN INFRA-RED IMAGERY. EYE TEMPERATURE IS +7 DEGREE C. THE MINIMUM TEMPERATURE IN WALL CLOUD REGION IS MINUS 77 DEGREE C.

**REMARKS:**

THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS ABOUT 29<sup>0</sup>C AND IT DECREASES TOWARDS THE WEST. THE OCEAN THERMAL ENERGY IS ABOUT 50-70 KJ/CM<sup>2</sup> AROUND THE SYSTEM CENTRE AND IT DECREASES TO THE WEST-NORTHWEST. THE VERTICAL WIND SHEAR AROUND THE SYSTEM CENTRE IS ABOUT 5-10 KNOTS. IT IS 10-20 KNOTS NEAR YEMEN AND OMAN COAST. THE LOW LEVEL RELATIVE VORTICITY IS ABOUT 250 X 10<sup>-5</sup> SEC<sup>-1</sup>. UPPER LEVEL DIVERGENCE IS ABOUT 30 X 10<sup>-5</sup> SEC<sup>-1</sup> AND LOW LEVEL CONVERGENCE IS AROUND 30 X 10<sup>-5</sup> SEC<sup>-1</sup>. THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 15<sup>0</sup>N. THE SYSTEM WOULD MOVE NEARLY WESTWARDS DURING NEXT 24 HOURS UNDER THE INFLUENCE OF ABOVE RIDGE AND THEN IT WOULD MOVE WEST-NORTHWESTWARDS. AS THE SYSTEM MOVES WESTWARDS, THE SYSTEM WOULD EXPERIENCE FURTHER LOWER OCEAN THERMAL ENERGY. ALSO, INTRUSION OF DRY AIR FROM THE NORTHWEST CONTINUES SURROUNDING THE CONVECTIVE RING WHICH WILL HELP IN WEAKENING OF THE SYSTEM. HOWEVER, DUE TO PREVALENCE OF WEAK VERTICAL WIND SHEAR TO THE WEST AND WEST-SOUTHWEST OF THE SYSTEM CENTRE, THE ADVERSE IMPACT OF DRY AIR INTRUSION WILL BE SLOW. HENCE THE EXTREMELY SEVERE CYCLONIC STORM WOULD WEAKEN SLOWLY DURING NEXT 24 HOURS.

(D. R. PATTANAİK)  
SC-E

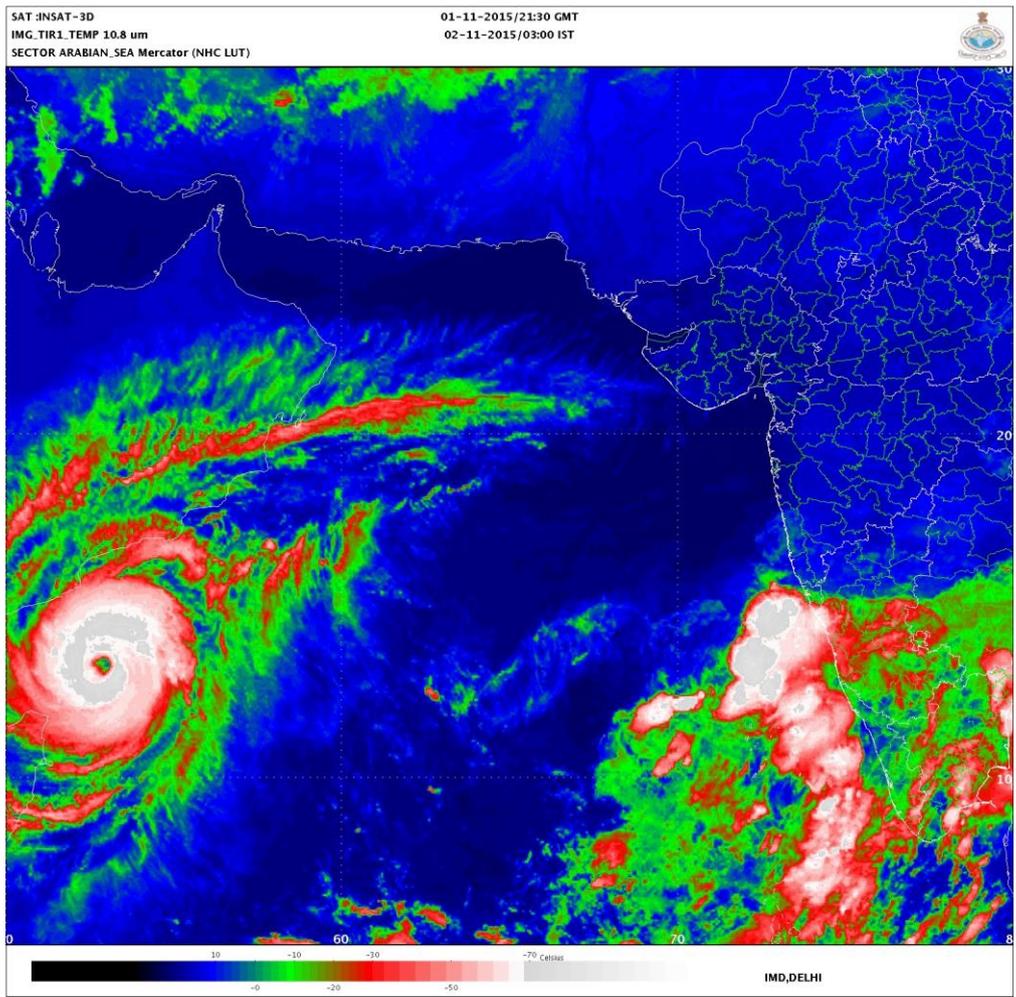
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**PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)**

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

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



**REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI  
TROPICAL CYCLONE ADVISORY BULLETIN**

**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 'CHAPALA' ADVISORY NO. THIRTY THREE ISSUED AT 0300 UTC OF 2<sup>ND</sup>  
NOVEMBER 2015 BASED ON 0000 UTC CHARTS OF 2<sup>ND</sup> NOVEMBER 2015.**

THE **EXTREMELY SEVERE CYCLONIC STORM**, 'CHAPALA' OVER WESTCENTRAL ARABIAN SEA MOVED WEST-SOUTHWESTWARDS WITH A SPEED OF ABOUT 20 KMPH DURING PAST 6 HOURS AND LAY CENTERED AT 0000 UTC OF TODAY, THE 2<sup>ND</sup> NOVEMBER 2015 NEAR LATITUDE **13.2** DEGREE NORTH AND LONGITUDE **52.6** DEGREE EAST, ABOUT **450** KM SOUTH-SOUTHWEST OF SALALAH (OMAN) (41316), **400**KM SOUTHEAST OF RIYAN (YEMEN) (41443) AND ABOUT **140** KM WEST-NORTHWEST OF SOCOTRA ISLAND (41494) (YEMEN).IT WOULD WEAKEN GRADUALLY INTO A VERY SEVERE CYCLONIC STORM DURING NEXT 24 HOURS. IT WOULD MOVE NEARLY WESTWARDS DURING NEXT 24 HOURS, THEN WEST-NORTHWESTWARDS AND CROSS YEMEN COAST SOUTH OF RIYAN AS A VERY SEVERE CYCLONIC STORM AROUND 0600 UTC OF 3<sup>RD</sup> NOVEMBER, 2015.

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

<b>Date/time(UTC)</b>	<b>Position (lat. °N/ long. °E)</b>	<b>Maximum sustained surface wind speed (kmph)</b>	<b>Category of cyclonic Disturbance</b>
02-11-2015/0000	13.2/52.6	180-190 gusting to 210	Extremely severe cyclonic storm
02-11-2015/0600	13.1/51.5	170-180 gusting to 190	Extremely severe cyclonic storm
02-11-2015/1200	13.1/50.5	160-170 gusting to 185	Extremely severe cyclonic storm
02-11-2015/1800	13.2/49.5	150-160 gusting to 175	Very severe cyclonic storm
03-11-2015/0000	13.5/48.5	140-150 gusting to 165	Very severe cyclonic storm
03-11-2015/1200	14.2/46.7	100-110 gusting to 120	Severe cyclonic storm
04-11-2015/0000	14.9/45.4	55-65 gusting to 75	Deep Depression
04-11-2015/1200	15.6/44.2	40-50 gusting to 60	Depression

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 5.5 AND CI 5.5. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 100 KNOTS GUSTING TO 110 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 956 HPA. SEA CONDITION IS PHENOMENAL AROUND THE SYSTEM CENTRE. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LIE OVER AREA BETWEEN LATITUDE 10.5 DEGREE NORTH TO 16.5 DEGREE NORTH AND LONGITUDE 50.0 DEGREE EAST TO 56.0 DEGREE EAST. CONVECTION IS EYE PATTERN. EYE

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

IS RAGGED AS SEEN IN INFRA-RED IMAGERY. EYE DIAMETER IS ABOUT 45KM.THE MINIMUM TEMPERATURE IN WALL CLOUD REGION IS MINUS 80 DEGREE C.

**REMARKS:**

THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS ABOUT 29<sup>0</sup>C AND IT DECREASES TOWARDS THE WEST. THE OCEAN THERMAL ENERGY IS ABOUT 50-70 KJ/CM<sup>2</sup> AROUND THE SYSTEM CENTRE AND IT DECREASES TO THE WEST-NORTHWEST. THE VERTICAL WIND SHEAR AROUND THE SYSTEM CENTRE IS ABOUT 5-10 KNOTS. THE LOW LEVEL RELATIVE VORTICITY IS ABOUT 250 X 10<sup>-5</sup> SEC<sup>-1</sup>. UPPER LEVEL DIVERGENCE IS ABOUT 50 X 10<sup>-5</sup> SEC<sup>-1</sup> AND LOW LEVEL CONVERGENCE IS AROUND 60 X 10<sup>-5</sup> SEC<sup>-1</sup>. THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 16<sup>0</sup>N. THE SYSTEM WOULD MOVE NEARLY WESTWARDS DURING NEXT 24 HOURS UNDER THE INFLUENCE OF ABOVE RIDGE AND THEN IT WOULD MOVE WEST-NORTHWESTWARDS. AS THE SYSTEM MOVES WESTWARDS, IT WOULD EXPERIENCE FURTHER LOWER OCEAN THERMAL ENERGY. ALSO, INTRUSION OF DRY AIR FROM THE NORTHWEST CONTINUES SURROUNDING THE WALL CLOUD REGION WHICH WILL HELP IN WEAKENING OF THE SYSTEM. THE SYSTEM HAS STARTED INTERACTING WITH LAND SURFACE. HOWEVER, DUE TO PREVALENCE OF WEAK VERTICAL WIND SHEAR AND LAND SURFACE INTERACTION, THE ADVERSE IMPACT OF DRY AIR INTRUSION WILL BE SLOW. HENCE THE EXTREMELY SEVERE CYCLONIC STORM WOULD WEAKEN SLOWLY DURING NEXT 24 HOURS.

(D. R. PATTANAİK)  
SC-E

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**PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)**

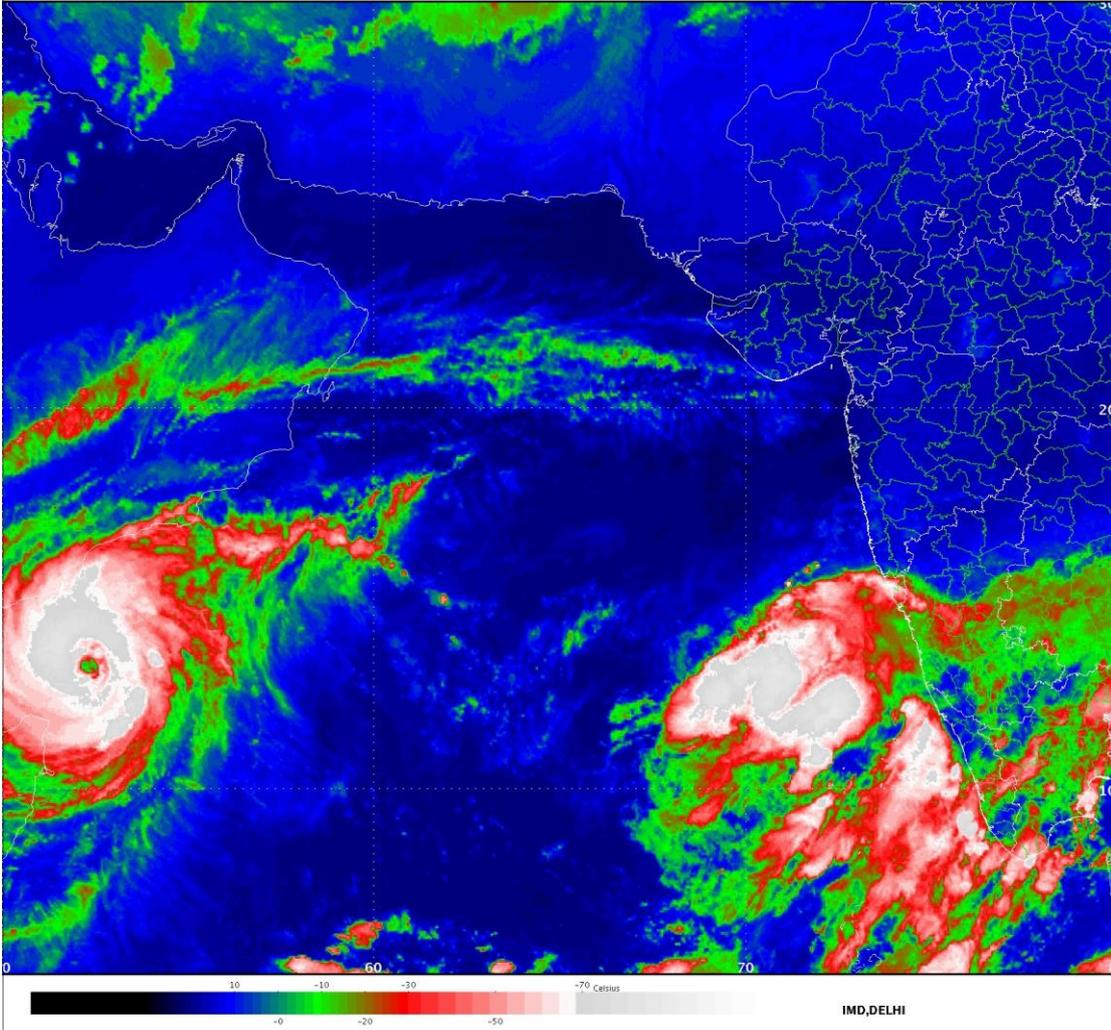
**NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%**

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

SAT :INSAT-3D  
IMG\_TIR1\_TEMP 10.8 um  
SECTOR ARABIAN\_SEA Mercator (NHC LUT)

02-11-2015/02:00 GMT  
02-11-2015/07:30 IST



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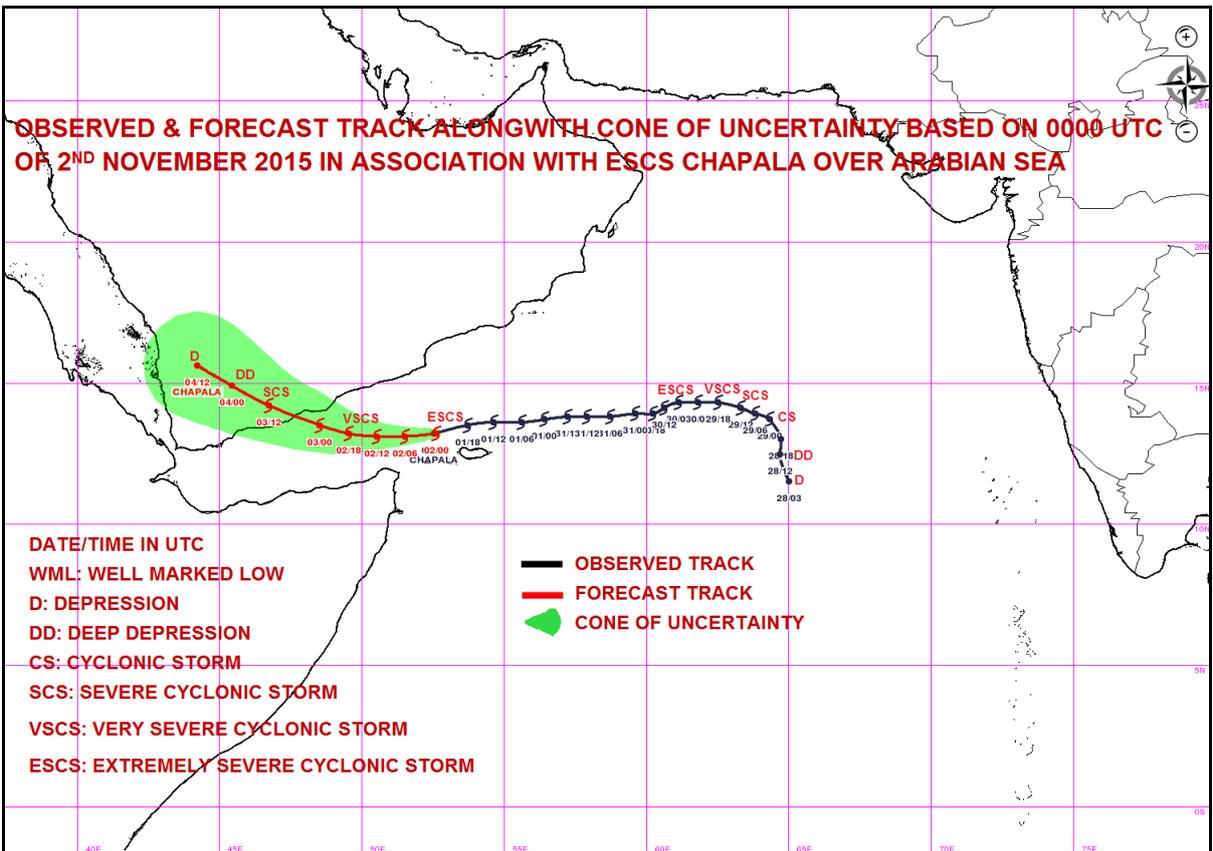
**PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)**

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

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

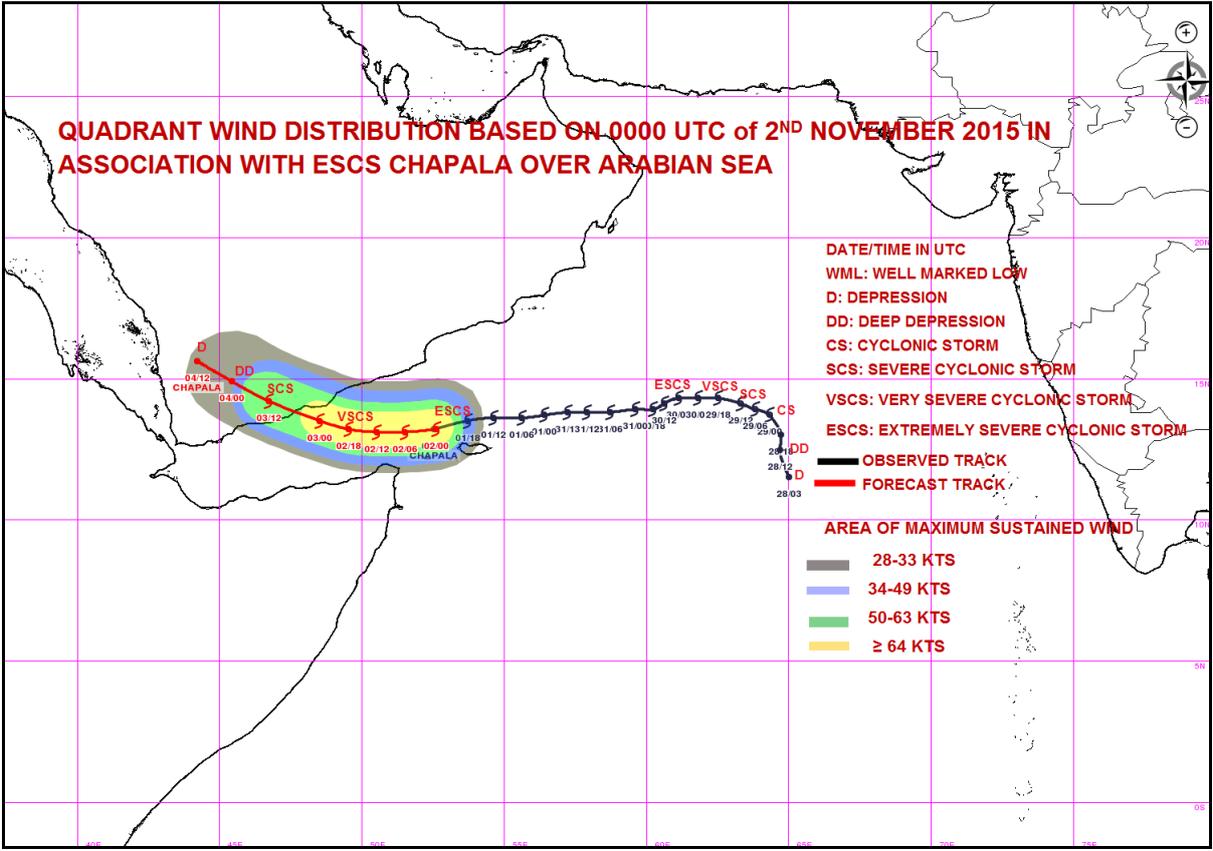
**OBSERVED & FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY BASED ON 0000 UTC OF 2<sup>ND</sup> NOVEMBER 2015 IN ASSOCIATION WITH ESCS CHAPALA OVER ARABIAN SEA**



DATE/TIME IN UTC  
 WML: WELL MARKED LOW  
 D: DEPRESSION  
 DD: DEEP DEPRESSION  
 CS: CYCLONIC STORM  
 SCS: SEVERE CYCLONIC STORM  
 VSCS: VERY SEVERE CYCLONIC STORM  
 ESCS: EXTREMELY SEVERE CYCLONIC STORM

— OBSERVED TRACK  
 — FORECAST TRACK  
 ◀ CONE OF UNCERTAINTY

**QUADRANT WIND DISTRIBUTION BASED ON 0000 UTC OF 2<sup>ND</sup> NOVEMBER 2015 IN ASSOCIATION WITH ESCS CHAPALA OVER ARABIAN SEA**



DATE/TIME IN UTC  
 WML: WELL MARKED LOW  
 D: DEPRESSION  
 DD: DEEP DEPRESSION  
 CS: CYCLONIC STORM  
 SCS: SEVERE CYCLONIC STORM  
 VSCS: VERY SEVERE CYCLONIC STORM  
 ESCS: EXTREMELY SEVERE CYCLONIC STORM

— OBSERVED TRACK  
 — FORECAST TRACK

AREA OF MAXIMUM SUSTAINED WIND

- 28-33 KTS
- 34-49 KTS
- 50-63 KTS
- ≥ 64 KTS



**REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI  
TROPICAL CYCLONE ADVISORY BULLETIN**

**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 ‘CHAPALA’ ADVISORY NO. THIRTY FOUR ISSUED AT 0600 UTC OF 2<sup>ND</sup> NOVEMBER 2015 BASED ON 0300 UTC CHARTS OF 2<sup>ND</sup> NOVEMBER 2015.**

THE **EXTREMELY SEVERE CYCLONIC STORM**, ‘CHAPALA’ OVER WESTCENTRAL ARABIAN SEA MOVED WEST-SOUTHWESTWARDS WITH A SPEED OF ABOUT 20 KMPH DURING PAST 6 HOURS AND LAY CENTERED AT 0300 UTC OF TODAY, THE 2<sup>ND</sup> NOVEMBER 2015 NEAR LATITUDE **13.2** DEGREE NORTH AND LONGITUDE **52.2** DEGREE EAST, ABOUT **470** KM SOUTH-SOUTHWEST OF SALALAH (OMAN) (41316), **350** KM SOUTHEAST OF RIYAN (YEMEN) (41443) AND ABOUT **190** KM WEST-NORTHWEST OF SOCOTRA ISLAND (41494) (YEMEN).IT WOULD WEAKEN GRADUALLY INTO A VERY SEVERE CYCLONIC STORM DURING NEXT 12 HOURS. IT WOULD MOVE NEARLY WESTWARDS DURING NEXT 12 HOURS, THEN WEST-NORTHWESTWARDS AND CROSS YEMEN COAST SOUTH OF RIYAN AS A VERY SEVERE CYCLONIC STORM AROUND 0600 UTC OF 3<sup>RD</sup> NOVEMBER, 2015.

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

<b>Date/time(UTC)</b>	<b>Position (lat. °N/ long. °E)</b>	<b>Maximum sustained surface wind speed (kmph)</b>	<b>Category of cyclonic Disturbance</b>
02-11-2015/0300	13.2/52.2	170-180 gusting to 195	Extremely severe cyclonic storm
02-11-2015/0600	13.1/51.5	160-170 gusting to 185	Extremely severe cyclonic storm
02-11-2015/1200	13.1/50.5	150-160 gusting to 175	Very severe cyclonic storm
02-11-2015/1800	13.2/49.5	140-150 gusting to 155	Very severe cyclonic storm
03-11-2015/0000	13.5/48.5	130-140 gusting to 155	Very severe cyclonic storm
03-11-2015/1200	14.2/46.7	100-110 gusting to 120	Severe cyclonic storm
04-11-2015/0000	14.9/45.4	55-65 gusting to 75	Deep Depression
04-11-2015/1200	15.6/44.2	40-50 gusting to 60	Depression

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 5.0 AND CI 5.5. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 95 KNOTS GUSTING TO 105 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 960 HPA. SEA CONDITION IS PHENOMENAL AROUND THE SYSTEM CENTRE. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER AREA BETWEEN LATITUDE 10.5 DEGREE NORTH TO 17.0 DEGREE NORTH AND LONGITUDE 49.0 DEGREE EAST TO 55.0 DEGREE EAST. CONVECTION IS EYE PATTERN. EYE IS RAGGED AS SEEN IN INFRA-RED IMAGERY. EYE DIAMETER IS ABOUT 45KM.THE MINIMUM

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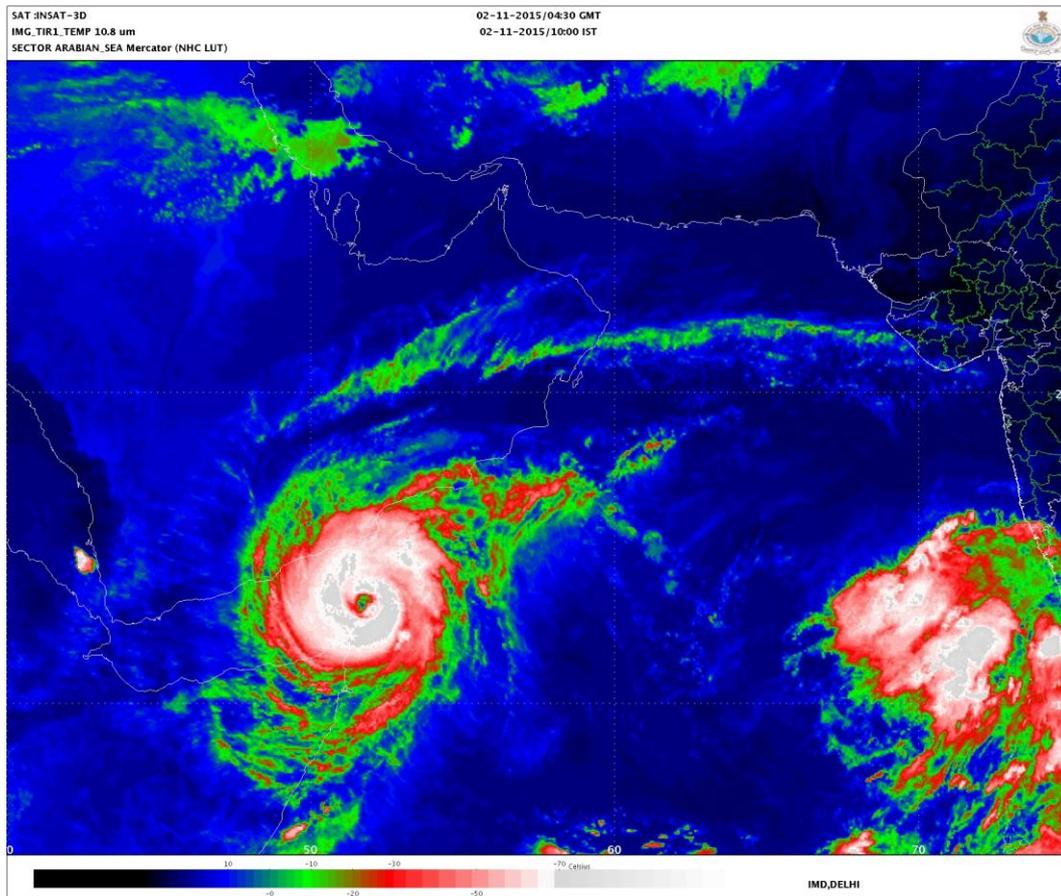
**Contact: Phone: (91) 11-246524844 FAX: (91) 11-24623220 e-mail :cwdhq2008@gmail.com**

TEMPERATURE IN WALL CLOUD REGION IS MINUS 75 DEGREE C. THE CONVECTION IN WALL CLOUD REGION SHOWS SIGN OF DISORGANISATION INDICATING WEAKENING TREND OF THE SYSTEM.

**REMARKS:**

THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS ABOUT 29°C AND IT DECREASES TOWARDS THE WEST. THE OCEAN THERMAL ENERGY IS ABOUT 40-60 KJ/CM<sup>2</sup> AROUND THE SYSTEM CENTRE AND IT DECREASES FURTHER TO THE WEST-NORTHWEST. THE VERTICAL WIND SHEAR AROUND THE SYSTEM CENTRE IS ABOUT 5-10 KNOTS. THE LOW LEVEL RELATIVE VORTICITY REMAINED SAME AND IS ABOUT 250 X 10<sup>-5</sup> SEC<sup>-1</sup>. UPPER LEVEL DIVERGENCE HAS DECREASED SLIGHTLY AND IS ABOUT 40 X 10<sup>-5</sup> SEC<sup>-1</sup> AND LOW LEVEL CONVERGENCE REMAINED SAME AND IS AROUND 60 X 10<sup>-5</sup> SEC<sup>-1</sup>. THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 16°N. THE SYSTEM WOULD MOVE NEARLY WESTWARDS DURING NEXT 12 HOURS UNDER THE INFLUENCE OF ABOVE RIDGE AND THEN IT WOULD MOVE WEST-NORTHWESTWARDS. AS THE SYSTEM MOVES WESTWARDS, IT WOULD EXPERIENCE FURTHER LOWER OCEAN THERMAL ENERGY. ALSO, INTRUSION OF DRY AIR FROM THE NORTHWEST CONTINUES SURROUNDING THE WALL CLOUD REGION WHICH IS HELPING IN WEAKENING OF THE SYSTEM. THE SYSTEM HAS STARTED INTERACTING WITH LAND SURFACE. HOWEVER, DUE TO PREVALENCE OF WEAK VERTICAL WIND SHEAR THE ADVERSE IMPACT OF DRY AIR INTRUSION AND LAND SURFACE INTERACTION WILL BE SLOW. HENCE THE EXTREMELY SEVERE CYCLONIC STORM WOULD WEAKEN SLOWLY DURING NEXT 24 HOURS.

(M. MOHAPATRA)  
HEAD RSMC



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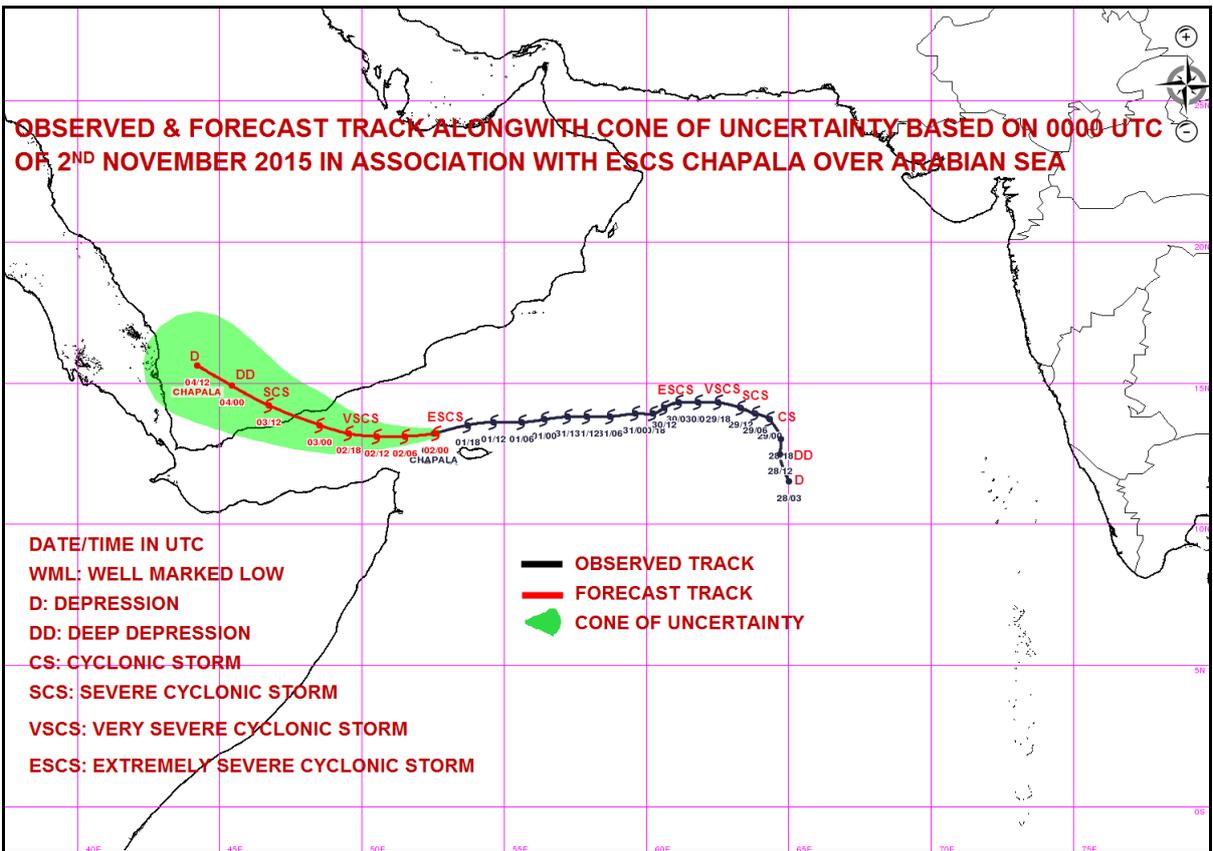
**PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)**

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

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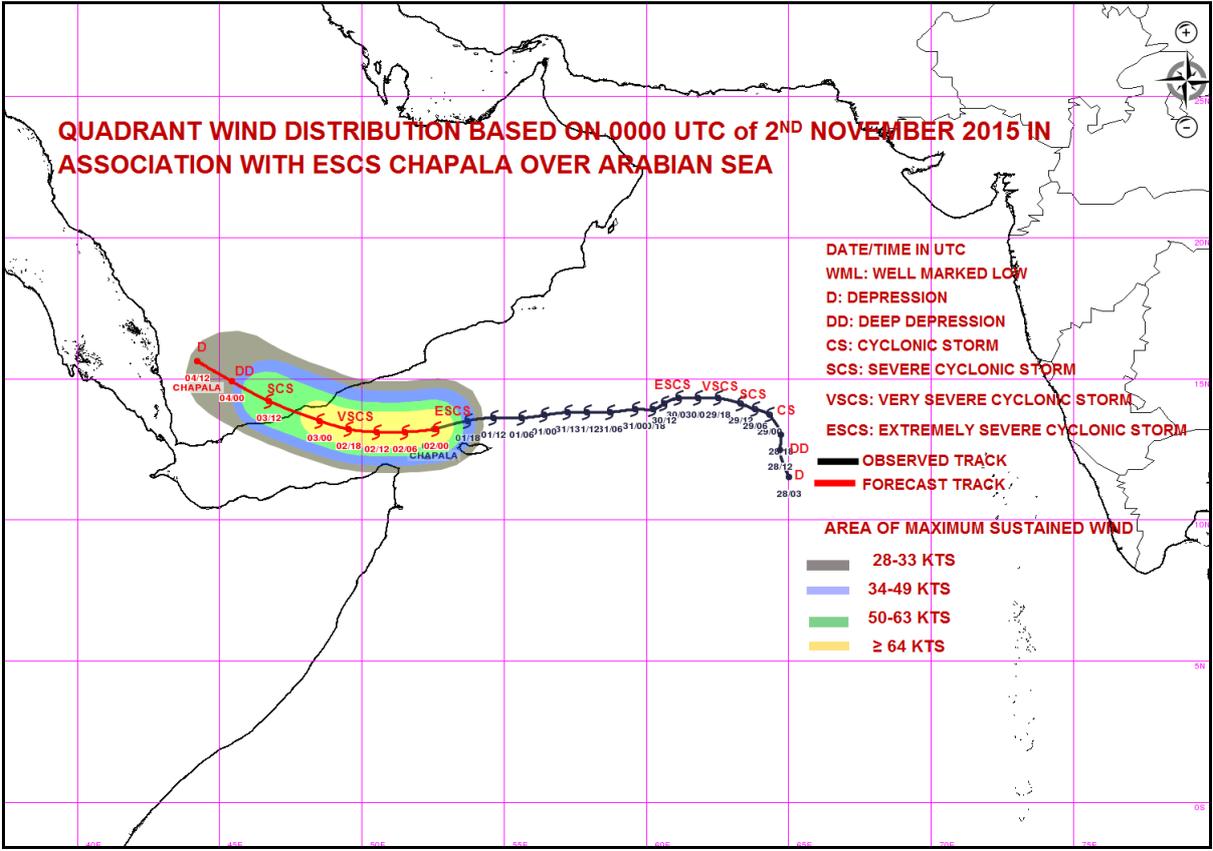
**OBSERVED & FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY BASED ON 0000 UTC OF 2<sup>ND</sup> NOVEMBER 2015 IN ASSOCIATION WITH ESCS CHAPALA OVER ARABIAN SEA**



DATE/TIME IN UTC  
 WML: WELL MARKED LOW  
 D: DEPRESSION  
 DD: DEEP DEPRESSION  
 CS: CYCLONIC STORM  
 SCS: SEVERE CYCLONIC STORM  
 VSCS: VERY SEVERE CYCLONIC STORM  
 ESCS: EXTREMELY SEVERE CYCLONIC STORM

— OBSERVED TRACK  
 — FORECAST TRACK  
 ■ CONE OF UNCERTAINTY

**QUADRANT WIND DISTRIBUTION BASED ON 0000 UTC OF 2<sup>ND</sup> NOVEMBER 2015 IN ASSOCIATION WITH ESCS CHAPALA OVER ARABIAN SEA**



DATE/TIME IN UTC  
 WML: WELL MARKED LOW  
 D: DEPRESSION  
 DD: DEEP DEPRESSION  
 CS: CYCLONIC STORM  
 SCS: SEVERE CYCLONIC STORM  
 VSCS: VERY SEVERE CYCLONIC STORM  
 ESCS: EXTREMELY SEVERE CYCLONIC STORM

— OBSERVED TRACK  
 — FORECAST TRACK

AREA OF MAXIMUM SUSTAINED WIND

- 28-33 KTS
- 34-49 KTS
- 50-63 KTS
- ≥ 64 KTS

**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



**REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI  
TROPICAL CYCLONE ADVISORY BULLETIN**

**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 'CHAPALA' ADVISORY NO. THIRTY FIVE ISSUED AT 0900 UTC OF 2<sup>ND</sup> NOVEMBER 2015 BASED ON 0600 UTC CHARTS OF 2<sup>ND</sup> NOVEMBER 2015.**

THE **EXTREMELY SEVERE CYCLONIC STORM, 'CHAPALA'** OVER WESTCENTRAL ARABIAN SEA MOVED WEST-NORTHWESTWARDS WITH A SPEED OF ABOUT 20 KMPH DURING PAST 6 HOURS AND LAY CENTERED AT 0600 UTC OF TODAY, THE 2<sup>ND</sup> NOVEMBER 2015 NEAR LATITUDE **13.3** DEGREE NORTH AND LONGITUDE **51.6** DEGREE EAST, ABOUT **500** KM SOUTH-SOUTHWEST OF SALALAH (OMAN) (41316), **300** KM EAST-SOUTHEAST OF RIYAN (YEMEN) (41443) AND ABOUT **250** KM WEST-NORTHWEST OF SOCOTRA ISLAND (41494) (YEMEN).IT WOULD WEAKEN GRADUALLY INTO A VERY SEVERE CYCLONIC STORM DURING NEXT 6 HOURS. IT WOULD MOVE WEST-NORTHWESTWARDS AND CROSS YEMEN COAST SOUTH OF RIYAN AS A VERY SEVERE CYCLONIC STORM WITH A MAXIMUM SUSTAINED SURFACE WIND SPEED OF 120-130 KMPH GUSTING TO 145 KMPH AROUND 0600 UTC OF 3<sup>RD</sup> NOVEMBER, 2015.

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

<b>Date/time(UTC)</b>	<b>Position (lat. °N/ long. °E)</b>	<b>Maximum sustained surface wind speed (kmph)</b>	<b>Category of cyclonic Disturbance</b>
02-11-2015/0600	13.3/51.6	160-170 gusting to 185	Extremely severe cyclonic storm
02-11-2015/1200	13.4/50.5	150-160 gusting to 175	Very severe cyclonic storm
02-11-2015/1800	13.5/49.5	140-150 gusting to 155	Very severe cyclonic storm
03-11-2015/0000	13.7/48.5	130-140 gusting to 155	Very severe cyclonic storm
03-11-2015/0600	14.0/47.5	120-130 gusting to 145	Very severe cyclonic storm
03-11-2015/1800	14.6/46.0	80-90 gusting to 100	Cyclonic storm
04-11-2015/0600	15.3/44.7	40-50 gusting to 60	Depression

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 5.0 AND CI 5.5. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 90 KNOTS GUSTING TO 105 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 964 HPA. SEA CONDITION IS PHENOMENAL AROUND THE SYSTEM CENTRE. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER AREA BETWEEN LATITUDE 11.0 DEGREE NORTH TO 16.5 DEGREE NORTH AND LONGITUDE 48.0 DEGREE EAST TO 54.5 DEGREE EAST. CONVECTION IS EYE PATTERN. EYE IS RAGGED AS SEEN IN INFRA-RED IMAGERY. EYE DIAMETER IS ABOUT 45KM.THE MINIMUM

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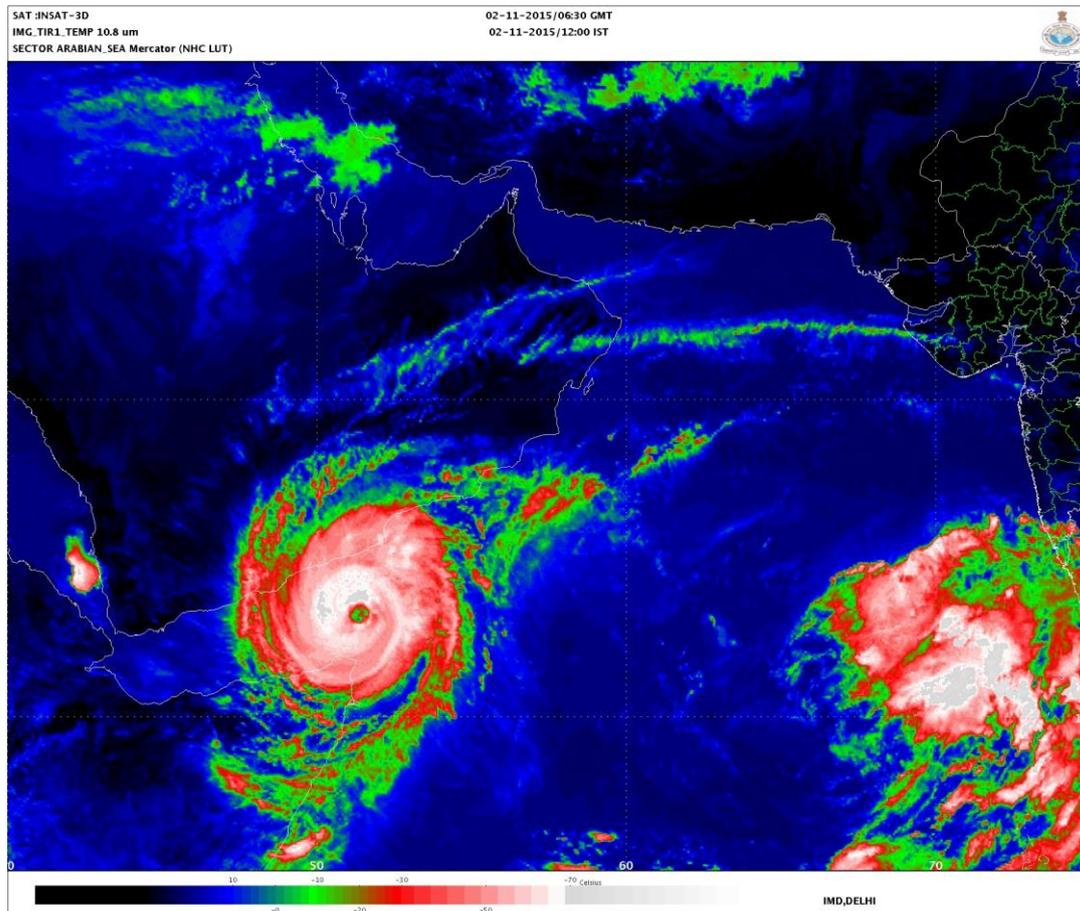
**Contact: Phone: (91) 11-246524844 FAX: (91) 11-24623220 e-mail :cwdhq2008@gmail.com**

TEMPERATURE IN WALL CLOUD REGION IS MINUS 73 DEGREE C. THE CONVECTION IN WALL CLOUD REGION CONTINUES THE SIGN OF DISORGANISATION INDICATING WEAKENING TREND OF THE SYSTEM.

**REMARKS:**

THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS ABOUT 29°C AND IT DECREASES TOWARDS THE WEST. THE OCEAN THERMAL ENERGY IS ABOUT 40-60 KJ/CM<sup>2</sup> AROUND THE SYSTEM CENTRE AND IT DECREASES FURTHER TO THE WEST-NORTHWEST. THE VERTICAL WIND SHEAR AROUND THE SYSTEM CENTRE IS ABOUT 5-10 KNOTS. THE LOW LEVEL RELATIVE VORTICITY REMAINED SAME AND IS ABOUT 250 X 10<sup>-5</sup> SEC<sup>-1</sup>. UPPER LEVEL DIVERGENCE HAS DECREASED SLIGHTLY AND IS ABOUT 40 X 10<sup>-5</sup> SEC<sup>-1</sup> AND LOW LEVEL CONVERGENCE REMAINED SAME AND IS AROUND 60 X 10<sup>-5</sup> SEC<sup>-1</sup>. THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 16°N. THE SYSTEM WOULD MOVE NEARLY WESTWARDS DURING NEXT 12 HOURS UNDER THE INFLUENCE OF ABOVE RIDGE AND THEN IT WOULD MOVE WEST-NORTHWESTWARDS. AS THE SYSTEM MOVES WESTWARDS, IT WOULD EXPERIENCE FURTHER LOWER OCEAN THERMAL ENERGY. ALSO, INTRUSION OF DRY AIR FROM THE NORTHWEST CONTINUES SURROUNDING THE WALL CLOUD REGION WHICH IS HELPING IN WEAKENING OF THE SYSTEM. THE SYSTEM IS INTERACTING WITH LAND SURFACE WITH OUTER SPIRAL BAND LYING OVER COASTAL YEMEN. HOWEVER, DUE TO PREVALENCE OF WEAK VERTICAL WIND SHEAR THE ADVERSE IMPACT OF DRY AIR INTRUSION AND LAND SURFACE INTERACTION WILL BE SLOW. HENCE THE EXTREMELY SEVERE CYCLONIC STORM WOULD WEAKEN GRADUALLY REACHING MAXIMUM SUSTAINED WIND SPEED OF ABOUT 70 KNOTS AT THE TIME OF LANDFALL.

(M. MOHAPATRA)  
HEAD RSMC



**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**



**REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI  
TROPICAL CYCLONE ADVISORY BULLETIN**

**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 'CHAPALA' ADVISORY NO. THIRTY SIX ISSUED AT 1200 UTC OF 2<sup>ND</sup> NOVEMBER 2015 BASED ON 0900 UTC CHARTS OF 2<sup>ND</sup> NOVEMBER 2015.**

THE **EXTREMELY SEVERE CYCLONIC STORM**, 'CHAPALA' OVER WESTCENTRAL ARABIAN SEA MOVED WEST-NORTHWESTWARDS WITH A SPEED OF ABOUT 22 KMPH DURING PAST 6 HOURS AND LAY CENTERED AT 0900 UTC OF TODAY, THE 2<sup>ND</sup> NOVEMBER 2015 NEAR LATITUDE **13.3** DEGREE NORTH AND LONGITUDE **51.0** DEGREE EAST, ABOUT **530** KM SOUTH-SOUTHWEST OF SALALAH (OMAN) (41316), **235** KM EAST-SOUTHEAST OF RIYAN (YEMEN) (41443) AND ABOUT **320** KM WEST-NORTHWEST OF SOCOTRA ISLAND (41494) (YEMEN). IT WOULD WEAKEN GRADUALLY INTO A VERY SEVERE CYCLONIC STORM DURING NEXT 6 HOURS. IT WOULD MOVE WEST-NORTHWESTWARDS AND CROSS YEMEN COAST SOUTH OF RIYAN AS A VERY SEVERE CYCLONIC STORM WITH A MAXIMUM SUSTAINED SURFACE WIND SPEED OF 120-130 KMPH GUSTING TO 145 KMPH AROUND 0600 UTC OF 3<sup>RD</sup> NOVEMBER, 2015.

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

<b>Date/time(UTC)</b>	<b>Position (lat. °N/ long. °E)</b>	<b>Maximum sustained surface wind speed (kmph)</b>	<b>Category of cyclonic Disturbance</b>
02-11-2015/0900	13.3/51.0	160-170 gusting to 185	Extremely severe cyclonic storm
02-11-2015/1200	13.4/50.5	150-160 gusting to 175	Very severe cyclonic storm
02-11-2015/1800	13.5/49.5	140-150 gusting to 155	Very severe cyclonic storm
03-11-2015/0000	13.7/48.5	130-140 gusting to 155	Very severe cyclonic storm
03-11-2015/0600	14.0/47.5	120-130 gusting to 145	Very severe cyclonic storm
03-11-2015/1800	14.6/46.0	80-90 gusting to 100	Cyclonic storm
04-11-2015/0600	15.3/44.7	40-50 gusting to 60	Depression

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 5.0 AND CI 5.5. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 90 KNOTS GUSTING TO 105 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 966 HPA. SEA CONDITION IS PHENOMENAL AROUND THE SYSTEM CENTRE. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER AREA BETWEEN LATITUDE 10.5 DEGREE NORTH TO 17.0 DEGREE NORTH AND LONGITUDE 48.0 DEGREE EAST TO 54.0 DEGREE EAST AND NORTH COASTAL YEMEN. CONVECTION IS EYE PATTERN. EYE IS RAGGED AND IS WELL DEFINED IN INFRA-RED AND VISIBLE IMAGERIES. EYE DIAMETER IS ABOUT 45 KM.THE MINIMUM TEMPERATURE IN WALL

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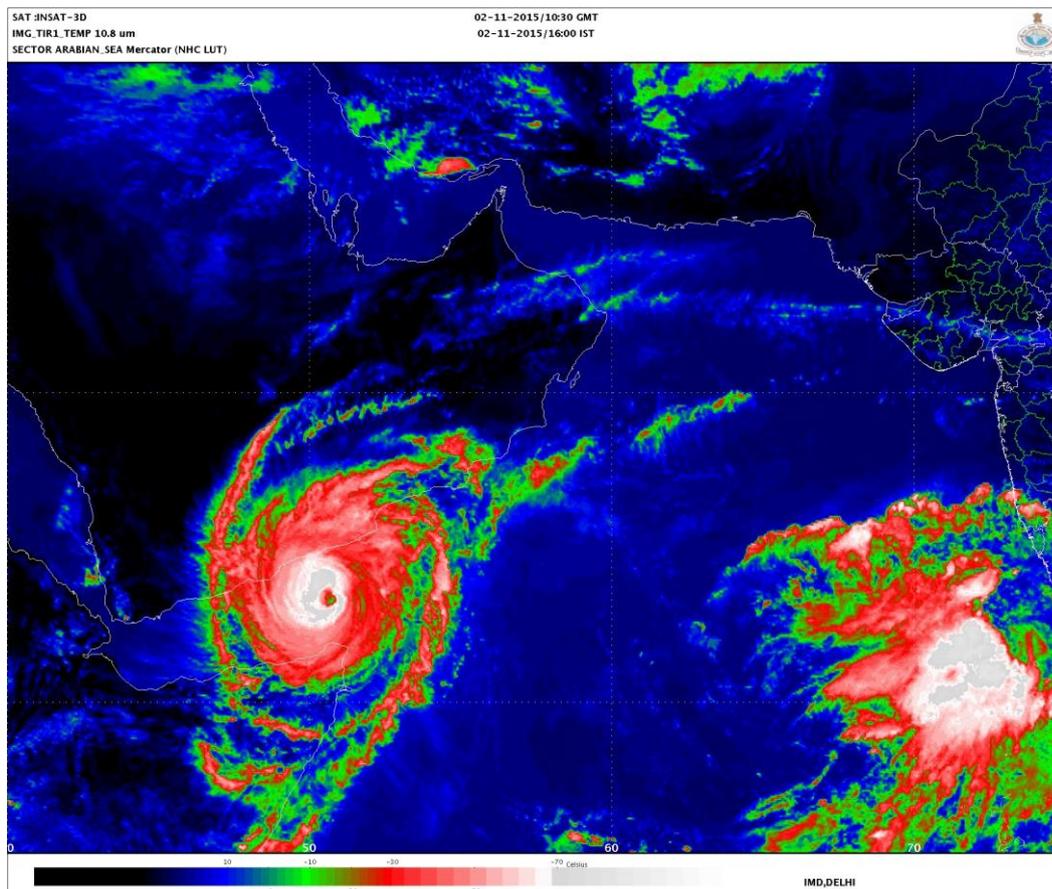
**Contact: Phone: (91) 11-246524844 FAX: (91) 11-24623220 e-mail :cwdhq2008@gmail.com**

CLOUD REGION IS MINUS 74 DEGREE C. THE CONVECTION IN WALL CLOUD REGION CONTINUES DISORGANISATION INDICATING WEAKENING TREND OF THE SYSTEM.

**REMARKS:**

THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS ABOUT 29°C AND IT DECREASES TOWARDS THE WEST. THE OCEAN THERMAL ENERGY IS ABOUT 30-50 KJ/CM<sup>2</sup> AROUND THE SYSTEM CENTRE AND IT DECREASES FURTHER TO THE WEST-NORTHWEST. THE VERTICAL WIND SHEAR AROUND THE SYSTEM CENTRE IS ABOUT 5-10 KNOTS. THE LOW LEVEL RELATIVE VORTICITY REMAINED SAME AND IS ABOUT 150 X 10<sup>-5</sup> SEC<sup>-1</sup>. UPPER LEVEL DIVERGENCE HAS DECREASED AND IS ABOUT 10 X 10<sup>-5</sup> SEC<sup>-1</sup> AND LOW LEVEL CONVERGENCE REMAINED SAME AND IS AROUND 20 X 10<sup>-5</sup> SEC<sup>-1</sup>. THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 16°N. THE SYSTEM WOULD MOVE NEARLY WESTWARDS DURING NEXT 12 HOURS UNDER THE INFLUENCE OF ABOVE RIDGE AND THEN IT WOULD MOVE WEST-NORTHWESTWARDS. AS THE SYSTEM MOVES WESTWARDS, IT WOULD EXPERIENCE FURTHER LOWER OCEAN THERMAL ENERGY. ALSO, INTRUSION OF DRY AIR FROM THE NORTHWEST CONTINUES SURROUNDING THE WALL CLOUD REGION WHICH IS HELPING IN WEAKENING OF THE SYSTEM. THE SYSTEM IS INTERACTING WITH LAND SURFACE WITH OUTER SPIRAL BAND LYING OVER COASTAL YEMEN. HOWEVER, DUE TO PREVALENCE OF WEAK VERTICAL WIND SHEAR THE ADVERSE IMPACT OF DRY AIR INTRUSION AND LAND SURFACE INTERACTION HAS BEEN SLOW. HOWEVER, DUE TO DECREASE IN UPPER LEVEL DIVERGENCE AND EXPECTED INCREASE IN VERTICAL WIND SHEAR DUE TO WEST-NORTHWESTWARD MOVEMENT, THE RATE OF WEAKENING WILL NOW INCREASE GRADUALLY.

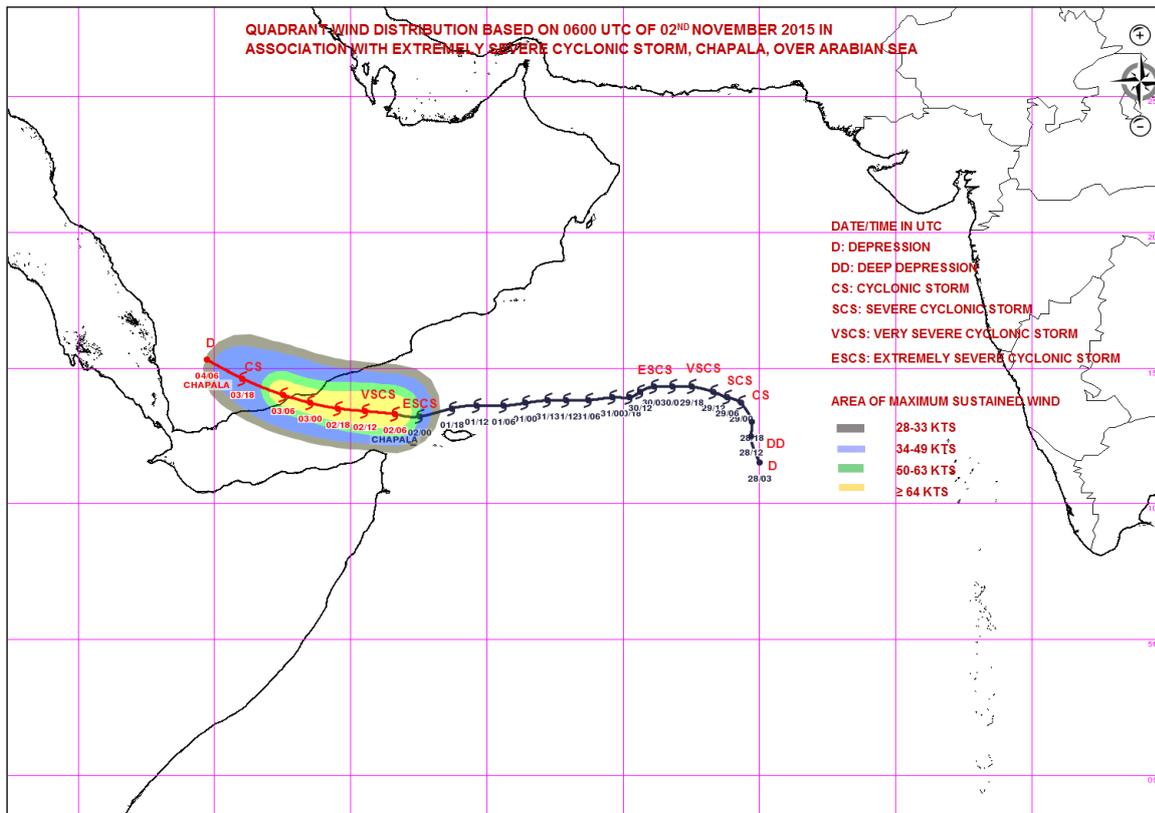
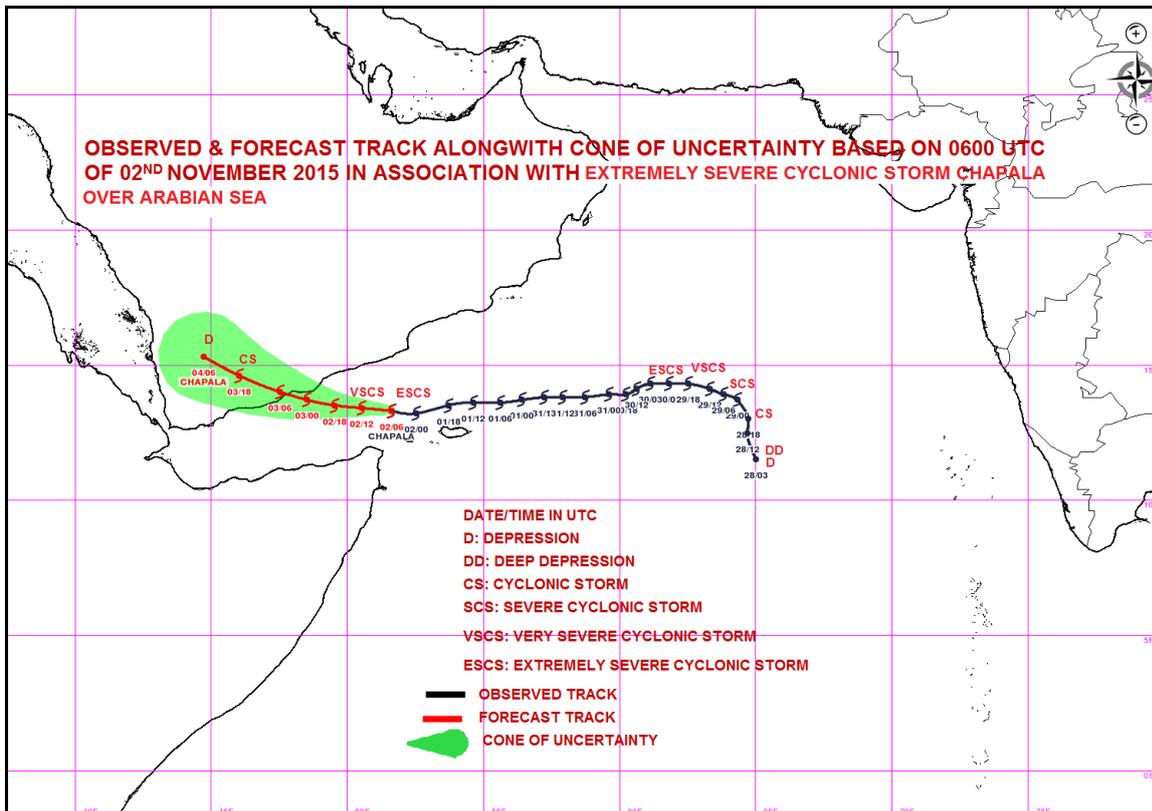
(M. MOHAPATRA)  
HEAD RSMC



**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**



**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



**REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI  
TROPICAL CYCLONE ADVISORY BULLETIN**

**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 'CHAPALA' ADVISORY NO. THIRTY SEVEN ISSUED AT 1500 UTC OF 2<sup>ND</sup> NOVEMBER 2015 BASED ON 1200 UTC CHARTS OF 2<sup>ND</sup> NOVEMBER 2015.**

THE **EXTREMELY SEVERE CYCLONIC STORM**, 'CHAPALA' OVER WESTCENTRAL ARABIAN SEA MOVED WEST-NORTHWESTWARDS WITH A SPEED OF ABOUT 20 KMPH DURING PAST 6 HOURS AND WEAKENED INTO A **VERY SEVERE CYCLONIC STORM** AND LAY CENTERED AT 1200 UTC OF TODAY, THE 2<sup>ND</sup> NOVEMBER 2015 OVER GULF OF ADEN AND ADJOINING WESTCENTRAL ARABIAN SEA NEAR LATITUDE 13.4 DEGREE NORTH AND LONGITUDE 50.5 DEGREE EAST, ABOUT 180 KM SOUTHEAST OF RIYAN (YEMEN) (41443) AND 550 KM SOUTHWEST OF SALALAH (OMAN) (41316). IT WOULD MOVE WEST-NORTHWESTWARDS, WEAKEN FURTHER AND CROSS YEMEN COAST TO THE SOUTH OF RIYAN AS A VERY SEVERE CYCLONIC STORM WITH MAXIMUM SUSTAINED WIND SPEED OF 120 TO 130 KMPH GUSTING TO 145 KMPH BY 0600 UTC OF 3<sup>RD</sup> NOVEMBER, 2015.

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

<b>Date/time(UTC)</b>	<b>Position (lat. °N/ long. °E)</b>	<b>Maximum sustained surface wind speed (kmph)</b>	<b>Category of cyclonic Disturbance</b>
02-11-2015/1200	13.4/50.5	150-160 gusting to 175	Very severe cyclonic storm
02-11-2015/1800	13.6/49.5	140-150 gusting to 165	Very severe cyclonic storm
03-11-2015/0000	13.8/48.6	130-140 gusting to 155	Very severe cyclonic storm
03-11-2015/0600	14.2/47.8	110-120 gusting to 135	Severe cyclonic storm
03-11-2015/1200	14.7/47.1	70-80 gusting to 90	Cyclonic storm
04-11-2015/0000	15.9/45.6	40-50 gusting to 60	Depression

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 4.5 AND CI 5.5. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 85 KNOTS GUSTING TO 95 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 970 HPA. SEA CONDITION IS PHENOMENAL AROUND THE SYSTEM CENTRE. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER AREA BETWEEN LATITUDE 10.5 DEGREE NORTH TO 18.0 DEGREE NORTH AND LONGITUDE 47.0 DEGREE EAST TO 53.0 DEGREE EAST AND NORTH COASTAL YEMEN. CONVECTION IS EYE PATTERN. EYE IS RAGGED AND IS WELL DEFINED IN INFRA-RED AND VISIBLE IMAGERIES. EYE DIAMETER IS ABOUT 45 KM. THE MINIMUM TEMPERATURE IN WALL CLOUD REGION IS MINUS 73 DEGREE C. THE CONVECTION IN WALL CLOUD REGION CONTINUES DISORGANISATION INDICATING WEAKENING TREND OF THE SYSTEM.

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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%**

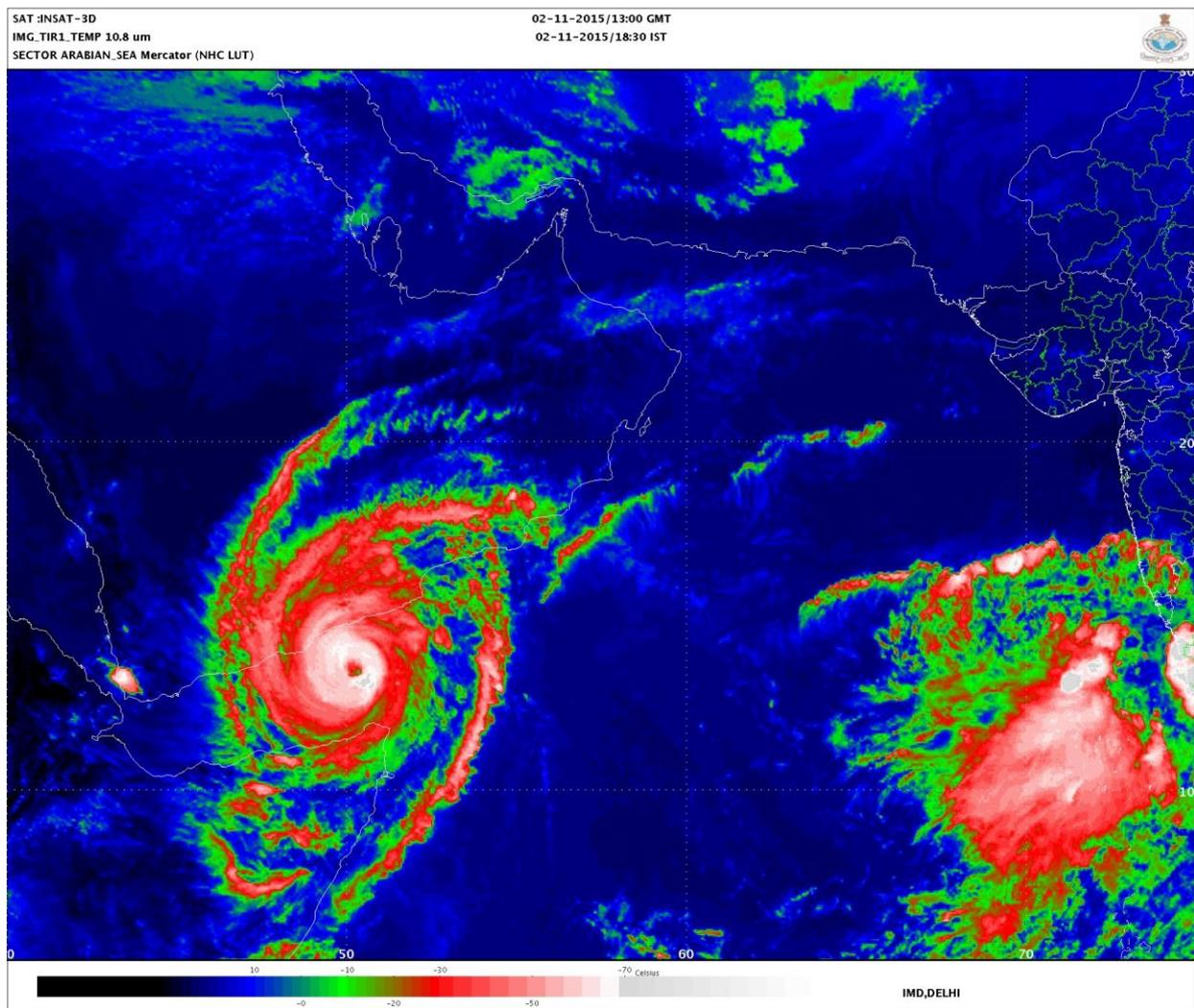
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**Contact: Phone: (91) 11-246524844 FAX: (91) 11-24623220 e-mail :cwdhq2008@gmail.com**

**REMARKS:**

THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS ABOUT 29<sup>0</sup>C AND IT DECREASES TOWARDS THE WEST. THE OCEAN THERMAL ENERGY IS ABOUT 30-50 KJ/CM<sup>2</sup> AROUND THE SYSTEM CENTRE AND IT DECREASES FURTHER TO THE WEST-NORTHWEST. THE VERTICAL WIND SHEAR AROUND THE SYSTEM CENTRE HAS SLIGHTLY INCREASED AND IS ABOUT 5-15 KNOTS. IT FURTHER INCREASES TOWARDS THE NORTHWEST. THE LOW LEVEL RELATIVE VORTICITY REMAINED SAME AND IS ABOUT 150 X 10<sup>-5</sup> SEC<sup>-1</sup>. UPPER LEVEL DIVERGENCE IS ABOUT 10 X 10<sup>-5</sup> SEC<sup>-1</sup> AND LOW LEVEL CONVERGENCE IS AROUND 30 X 10<sup>-5</sup> SEC<sup>-1</sup>. THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 16<sup>0</sup>N. THE SYSTEM WOULD MOVE WEST-NORTHWESTWARDS. INTRUSION OF DRY AIR FROM THE NORTHWEST CONTINUES SURROUNDING THE WALL CLOUD REGION WHICH IS HELPING IN WEAKENING OF THE SYSTEM. THE SYSTEM IS INTERACTING WITH LAND SURFACE WITH SPIRAL BAND LYING OVER YEMEN. HOWEVER, DUE TO PREVALENCE OF WEAK VERTICAL WIND SHEAR THE ADVERSE IMPACT OF DRY AIR INTRUSION AND LAND SURFACE INTERACTION HAS BEEN SLOW. HOWEVER, DUE TO DECREASE IN UPPER LEVEL DIVERGENCE AND INCREASE IN VERTICAL WIND SHEAR DUE TO WEST-NORTHWESTWARD MOVEMENT, THE RATE OF WEAKENING WILL NOW INCREASE GRADUALLY.

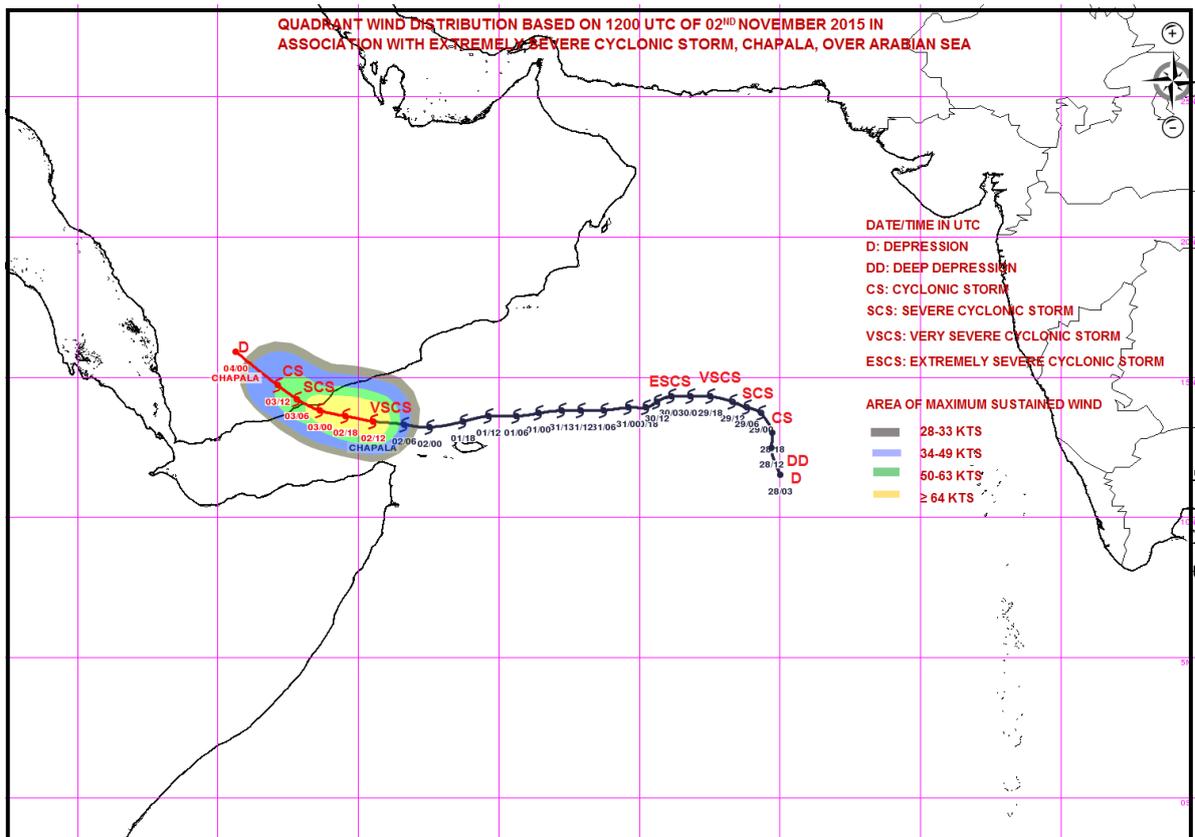
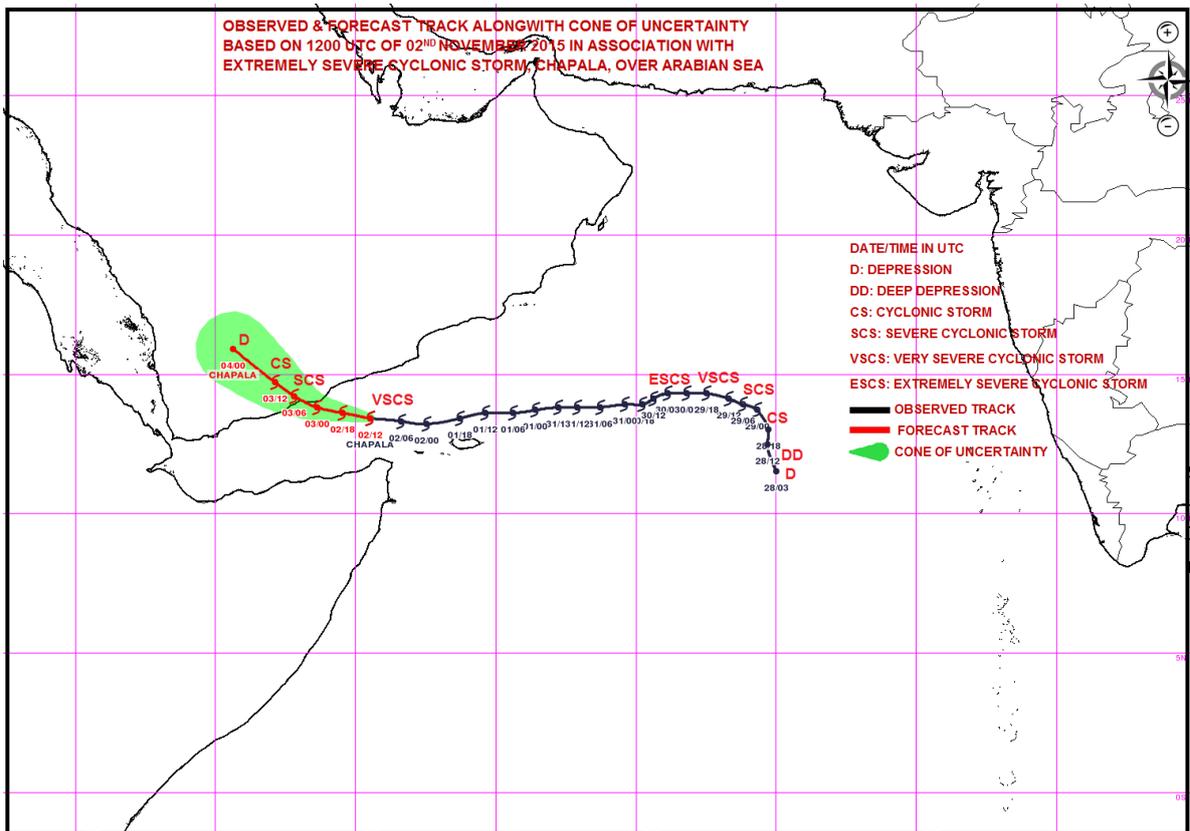
(M. MOHAPATRA)  
HEAD RSMC



**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**



**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**



**REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI  
TROPICAL CYCLONE ADVISORY BULLETIN**

**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 'CHAPALA' ADVISORY NO. THIRTY EIGHT ISSUED AT 1800 UTC OF 2<sup>ND</sup> NOVEMBER 2015 BASED ON 1500 UTC CHARTS OF 2<sup>ND</sup> NOVEMBER 2015.**

THE **VERY SEVERE CYCLONIC STORM, 'CHAPALA'** OVER WESTCENTRAL ARABIAN SEA MOVED WEST-NORTHWESTWARDS WITH A SPEED OF ABOUT **18 KMPH** DURING PAST 6 HOURS AND LAY CENTERED AT 1500 UTC OF TODAY, THE 2<sup>ND</sup> NOVEMBER 2015 OVER GULF OF ADEN AND ADJOINING WESTCENTRAL ARABIAN SEA NEAR LATITUDE **13.5 DEGREE NORTH** AND LONGITUDE **50.0 DEGREE EAST**, ABOUT **150 KM** SOUTHEAST OF RIYAN (YEMEN) (41443) AND **590 KM** SOUTHWEST OF SALALAH (OMAN) (41316). IT WOULD MOVE WEST-NORTHWESTWARDS, WEAKEN FURTHER AND CROSS YEMEN COAST TO THE SOUTH OF RIYAN WITH MAXIMUM SUSTAINED WIND SPEED OF 120 TO 130 KMPH GUSTING TO 145 KMPH BY 0600 UTC OF 3<sup>RD</sup> NOVEMBER, 2015.

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

<b>Date/time(UTC)</b>	<b>Position (lat. °N/ long. °E)</b>	<b>Maximum sustained surface wind speed (kmph)</b>	<b>Category of cyclonic Disturbance</b>
02-11-2015/1500	13.5/50.0	150-160 gusting to 175	Very severe cyclonic storm
02-11-2015/1800	13.6/49.5	140-150 gusting to 165	Very severe cyclonic storm
03-11-2015/0000	13.8/48.6	130-140 gusting to 155	Very severe cyclonic storm
03-11-2015/0600	14.2/47.8	110-120 gusting to 135	Severe cyclonic storm
03-11-2015/1200	14.7/47.1	70-80 gusting to 90	Cyclonic storm
04-11-2015/0000	15.9/45.6	40-50 gusting to 60	Depression

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 4.5 AND CI 5.5. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 85 KNOTS GUSTING TO 95 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 970 HPA. SEA CONDITION IS PHENOMENAL AROUND THE SYSTEM CENTRE. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER AREA BETWEEN LATITUDE 10.5 DEGREE NORTH TO 18.0 DEGREE NORTH AND LONGITUDE 47.0 DEGREE EAST TO 53.0 DEGREE EAST AND NORTH COASTAL YEMEN. CONVECTION IS EYE PATTERN. EYE IS RAGGED AND IS WELL DEFINED IN INFRA-RED AND VISIBLE IMAGERIES. EYE DIAMETER IS ABOUT 30 KM. THE MINIMUM TEMPERATURE IN WALL CLOUD REGION IS MINUS 67 DEGREE C. THE CONVECTION IN WALL CLOUD REGION CONTINUES DISORGANISATION INDICATING WEAKENING TREND OF THE SYSTEM.

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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%**

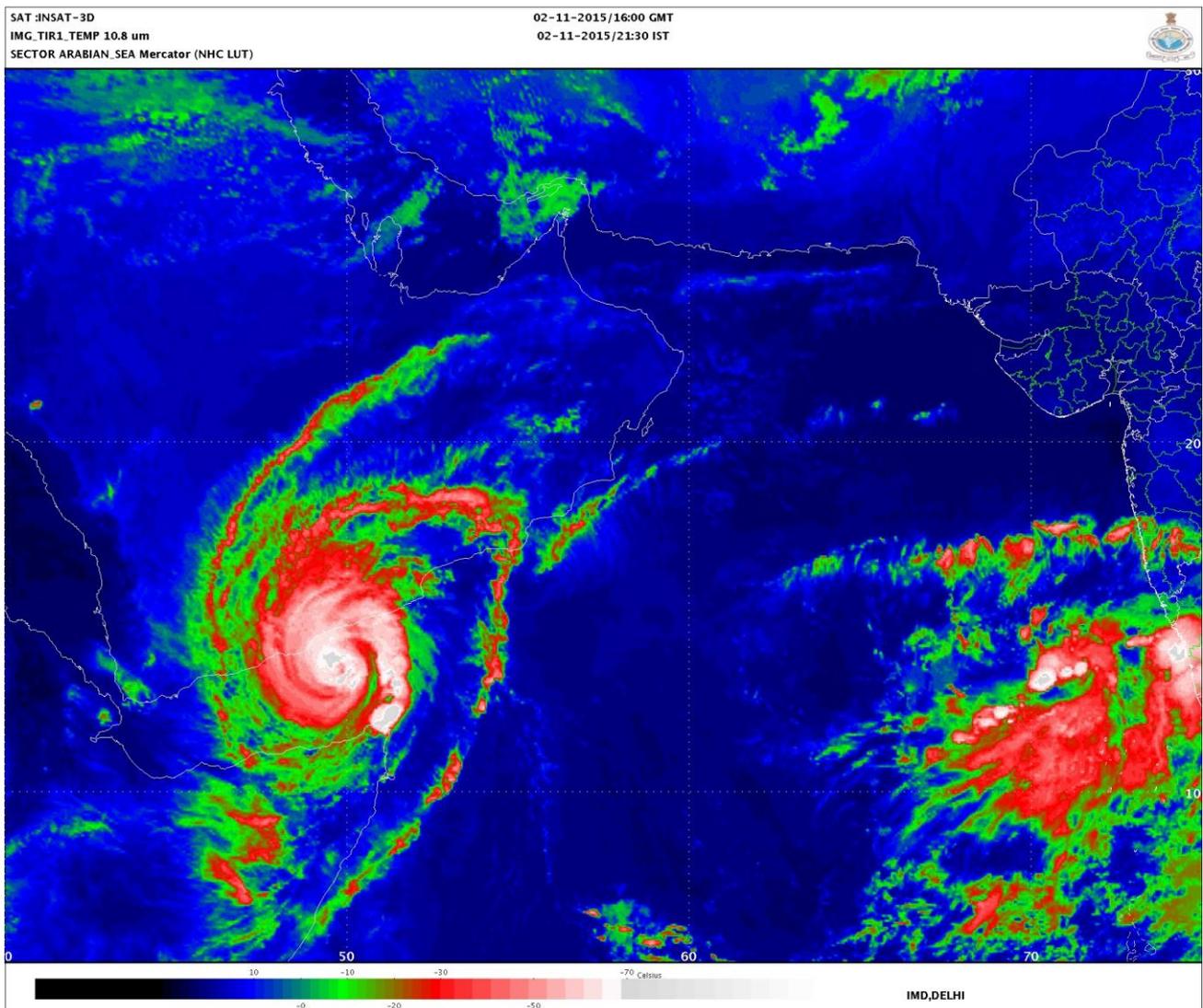
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**Contact: Phone: (91) 11-246524844 FAX: (91) 11-24623220 e-mail :cwdhq2008@gmail.com**

**REMARKS:**

THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS ABOUT 29<sup>0</sup>C AND IT DECREASES TOWARDS THE WEST. THE OCEAN THERMAL ENERGY IS ABOUT 30-50 KJ/CM<sup>2</sup> AROUND THE SYSTEM CENTRE AND IT DECREASES FURTHER TO THE WEST-NORTHWEST. THE VERTICAL WIND SHEAR AROUND THE SYSTEM CENTRE HAS SLIGHTLY INCREASED AND IS ABOUT 5-15 KNOTS. IT FURTHER INCREASES TOWARDS THE NORTHWEST. THE LOW LEVEL RELATIVE VORTICITY REMAINED SAME AND IS ABOUT 150 X 10<sup>-5</sup> SEC<sup>-1</sup>. UPPER LEVEL DIVERGENCE IS ABOUT 10 X 10<sup>-5</sup> SEC<sup>-1</sup> AND LOW LEVEL CONVERGENCE IS AROUND 30 X 10<sup>-5</sup> SEC<sup>-1</sup>. THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 16<sup>0</sup>N. THE SYSTEM WOULD MOVE WEST-NORTHWESTWARDS. INTRUSION OF DRY AIR FROM THE NORTHWEST CONTINUES SURROUNDING THE WALL CLOUD REGION WHICH IS HELPING IN WEAKENING OF THE SYSTEM. THE SYSTEM IS INTERACTING WITH LAND SURFACE WITH SPIRAL BAND LYING OVER YEMEN. HOWEVER, DUE TO PREVALENCE OF WEAK VERTICAL WIND SHEAR THE ADVERSE IMPACT OF DRY AIR INTRUSION AND LAND SURFACE INTERACTION HAS BEEN SLOW. HOWEVER, DUE TO DECREASE IN UPPER LEVEL DIVERGENCE AND INCREASE IN VERTICAL WIND SHEAR DUE TO WEST-NORTHWESTWARD MOVEMENT, THE RATE OF WEAKENING WILL NOW INCREASE GRADUALLY.

(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%**

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



**REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI  
TROPICAL CYCLONE ADVISORY BULLETIN**

**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 'CHAPALA' ADVISORY NO. THIRTY NINE ISSUED AT 2100 UTC OF 2<sup>ND</sup>  
NOVEMBER 2015 BASED ON 1800 UTC CHARTS OF 2<sup>ND</sup> NOVEMBER 2015.**

THE **VERY SEVERE CYCLONIC STORM, 'CHAPALA'** OVER WESTCENTRAL ARABIAN SEA MOVED WEST-NORTHWESTWARDS WITH A SPEED OF ABOUT **18 KMPH** DURING PAST 6 HOURS AND LAY CENTERED AT 1800 UTC OF TODAY, THE 2<sup>ND</sup> NOVEMBER 2015 OVER GULF OF ADEN AND ADJOINING WESTCENTRAL ARABIAN SEA NEAR LATITUDE **13.7 DEGREE NORTH** AND LONGITUDE **49.6 DEGREE EAST**, ABOUT **110 KM SOUTH OF RIYAN (YEMEN) (41443)** AND **600 KM SOUTHWEST OF SALALAH (OMAN) (41316)**. IT WOULD MOVE WEST-NORTHWESTWARDS, WEAKEN FURTHER AND CROSS YEMEN COAST TO THE SOUTH OF RIYAN WITH MAXIMUM SUSTAINED WIND SPEED OF 120 TO 130 KMPH GUSTING TO 145 KMPH BY 0600 UTC OF 3<sup>RD</sup> NOVEMBER, 2015.

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

<b>Date/time(UTC)</b>	<b>Position (lat. °N/ long. °E)</b>	<b>Maximum sustained surface wind speed (kmph)</b>	<b>Category of cyclonic Disturbance</b>
02-11-2015/1800	13.7/49.6	140-150 gusting to 165	Very severe cyclonic storm
03-11-2015/0000	13.9/48.7	130-140 gusting to 155	Very severe cyclonic storm
03-11-2015/0600	14.2/47.9	110-120 gusting to 135	Severe cyclonic storm
03-11-2015/1200	14.8/47.2	70-80 gusting to 90	Cyclonic storm
03-11-2015/1800	16.0/45.7	40-50 gusting to 60	Depression
04-11-2015/0600	18.1/42.4	30-40 gusting to 45	Well marked low pressure area

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 4.5 AND CI 5.5. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 80 KNOTS GUSTING TO 90 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 972 HPA. SEA CONDITION IS PHENOMENAL AROUND THE SYSTEM CENTRE. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER AREA BETWEEN LATITUDE 10.5 DEGREE NORTH TO 16.5 DEGREE NORTH AND LONGITUDE 47.5 DEGREE EAST TO 52.0 DEGREE EAST AND NORTH COASTAL YEMEN. CONVECTION IS EYE PATTERN. EYE IS RAGGED AND IS WELL DEFINED IN INFRA-RED AND VISIBLE IMAGERIES. EYE DIAMETER IS ABOUT 30 KM. THE MINIMUM TEMPERATURE IN WALL CLOUD REGION IS MINUS 68 DEGREE C. THE CONVECTION IN WALL CLOUD REGION CONTINUES DISORGANISATION INDICATING WEAKENING TREND OF THE SYSTEM.

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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%**

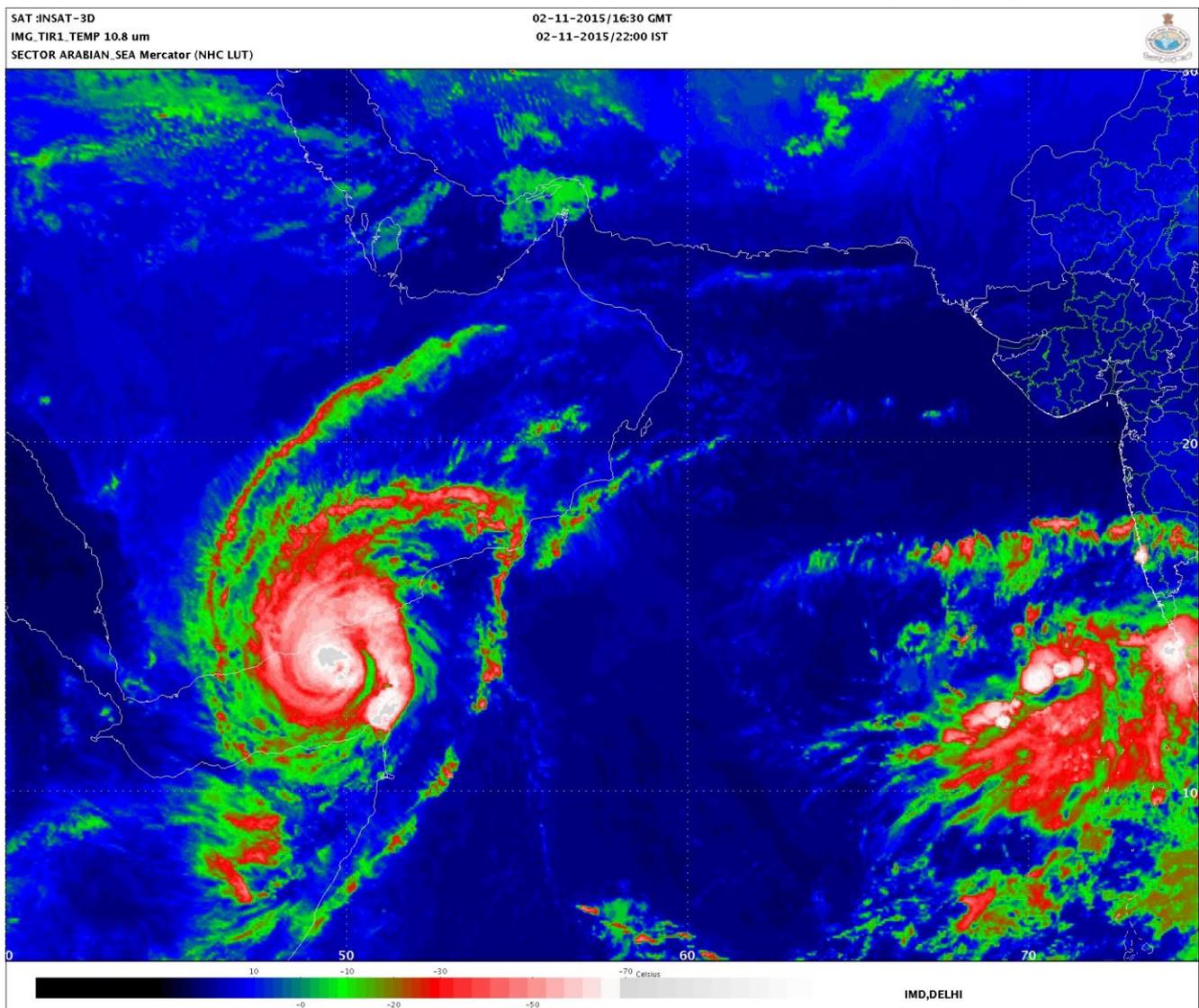
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**Contact: Phone: (91) 11-246524844 FAX: (91) 11-24623220 e-mail :cwdhq2008@gmail.com**

**REMARKS:**

THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS ABOUT 29°C AND IT DECREASES TOWARDS THE WEST. THE OCEAN THERMAL ENERGY IS ABOUT 30-50 KJ/CM<sup>2</sup> AROUND THE SYSTEM CENTRE AND IT DECREASES FURTHER TO THE WEST-NORTHWEST. THE VERTICAL WIND SHEAR AROUND THE SYSTEM CENTRE HAS SLIGHTLY INCREASED AND IS ABOUT 5-15 KNOTS. IT FURTHER INCREASES TOWARDS THE NORTHWEST. THE LOW LEVEL RELATIVE VORTICITY REMAINED SAME AND IS ABOUT 150 X 10<sup>-5</sup> SEC<sup>-1</sup>. UPPER LEVEL DIVERGENCE IS ABOUT 10 X 10<sup>-5</sup> SEC<sup>-1</sup> AND LOW LEVEL CONVERGENCE IS AROUND 30 X 10<sup>-5</sup> SEC<sup>-1</sup>. THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 16°N. THE SYSTEM WOULD MOVE WEST-NORTHWESTWARDS. INTRUSION OF DRY AIR FROM THE NORTHWEST CONTINUES SURROUNDING THE WALL CLOUD REGION WHICH IS HELPING IN WEAKENING OF THE SYSTEM. THE SYSTEM IS INTERACTING WITH LAND SURFACE WITH SPIRAL BAND LYING OVER YEMEN. HOWEVER, DUE TO PREVALENCE OF WEAK VERTICAL WIND SHEAR THE ADVERSE IMPACT OF DRY AIR INTRUSION AND LAND SURFACE INTERACTION HAS BEEN SLOW. HOWEVER, DUE TO DECREASE IN UPPER LEVEL DIVERGENCE AND INCREASE IN VERTICAL WIND SHEAR DUE TO WEST-NORTHWESTWARD MOVEMENT, THE RATE OF WEAKENING WILL NOW INCREASE GRADUALLY.

(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%**

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**REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI  
TROPICAL CYCLONE ADVISORY BULLETIN**

**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 'CHAPALA' ADVISORY NO. FOURTY ISSUED AT 0000 UTC OF 3<sup>RD</sup> NOVEMBER  
2015 BASED ON 2100 UTC CHARTS OF 2<sup>ND</sup> NOVEMBER 2015.**

THE **VERY SEVERE CYCLONIC STORM, 'CHAPALA'** OVER WESTCENTRAL ARABIAN SEA MOVED WEST-NORTHWESTWARDS WITH A SPEED OF ABOUT 14 KMPH DURING PAST 6 HOURS AND LAY CENTERED AT 2100 UTC OF TODAY, THE 2<sup>ND</sup> NOVEMBER 2015 OVER GULF OF ADEN AND ADJOINING WESTCENTRAL ARABIAN SEA NEAR LATITUDE 13.8 DEGREE NORTH AND LONGITUDE 49.3 DEGREE EAST, ABOUT 90 KM SOUTH OF RIYAN (YEMEN) (41443) AND 620 KM SOUTHWEST OF SALALAH (OMAN) (41316). IT WOULD MOVE WEST-NORTHWESTWARDS, WEAKEN FURTHER AND CROSS YEMEN COAST TO THE SOUTH OF RIYAN WITH MAXIMUM SUSTAINED WIND SPEED OF 120 TO 130 KMPH GUSTING TO 145 KMPH BY 0600 UTC OF 3RD NOVEMBER, 2015.

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

Date/time(UTC)	Position (lat. °N/ long. °E)	Maximum sustained surface wind speed (kmph)	Category of cyclonic Disturbance
02-11-2015/2100	13.8/49.3	130-140 gusting to 155	Very severe cyclonic storm
03-11-2015/0000	13.9/48.8	120-130 gusting to 145	Very severe cyclonic storm
03-11-2015/0600	14.2/47.9	110-120 gusting to 135	Severe cyclonic storm
03-11-2015/1200	14.8/47.2	70-80 gusting to 90	Cyclonic storm
03-11-2015/1800	16.0/45.7	40-50 gusting to 60	Depression
04-11-2015/0600	18.1/42.4	30-40 gusting to 45	Well marked low pressure area

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T 4.0 AND CI 4.5. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 80 KNOTS GUSTING TO 90 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 974 HPA. SEA CONDITION IS PHENOMENAL AROUND THE SYSTEM CENTRE. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER AREA BETWEEN LATITUDE 11.5 DEGREE NORTH TO 19.0 DEGREE NORTH AND LONGITUDE 46.0 DEGREE EAST TO 52.0 DEGREE EAST OF YEMEN. CONVECTION IS EYE PATTERN. EYE IS RAGGED AND IS WELL DEFINED IN INFRA-RED AND VISIBLE IMAGERIES. EYE DIAMETER IS ABOUT 30 KM. THE MINIMUM TEMPERATURE IN WALL CLOUD REGION IS MINUS 72 DEGREE C. THE CONVECTION IN WALL CLOUD REGION CONTINUES DISORGANISATION INDICATING WEAKENING TREND OF THE SYSTEM.

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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%**

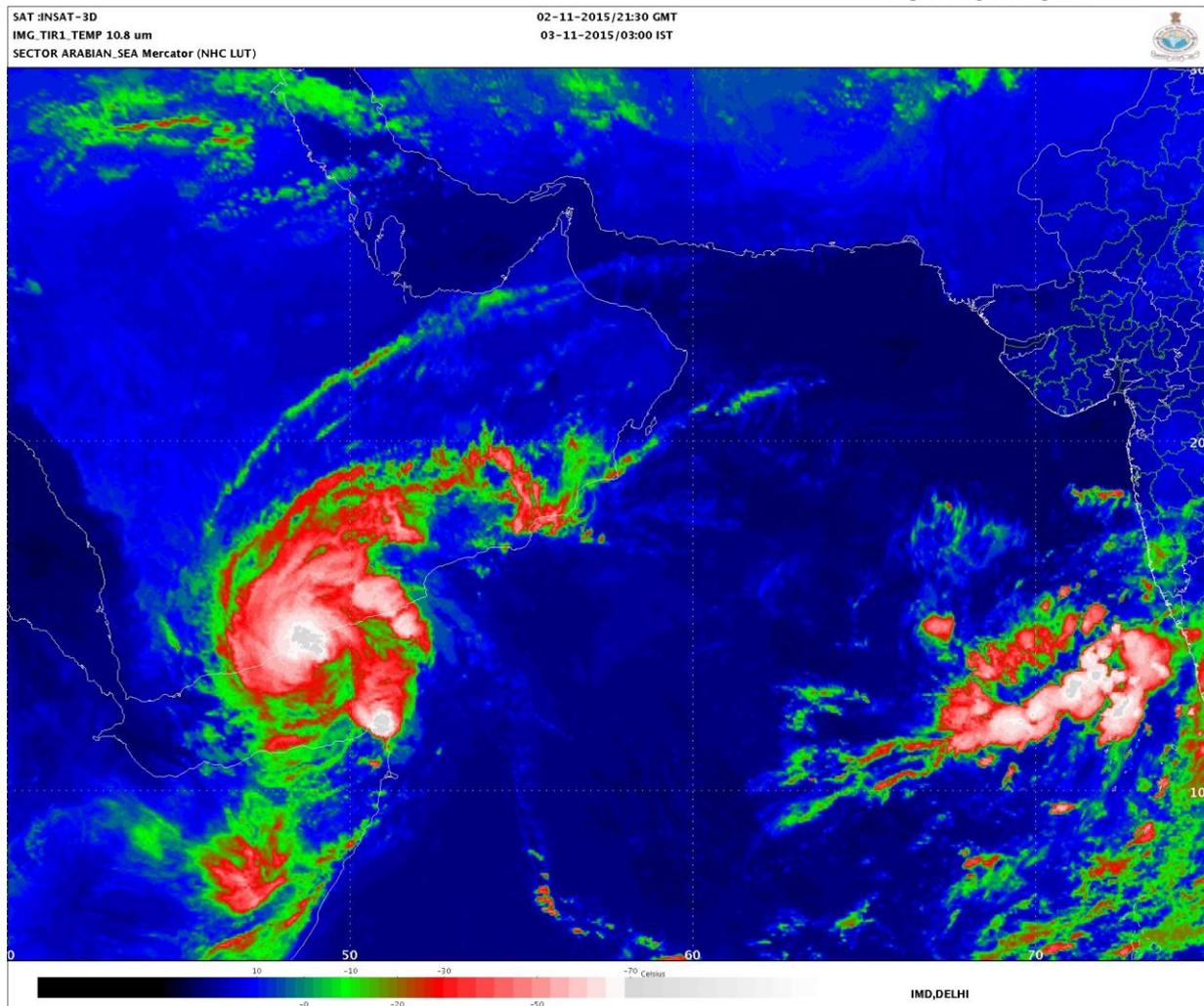
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**Contact: Phone: (91) 11-246524844 FAX: (91) 11-24623220 e-mail :cwdhq2008@gmail.com**

**REMARKS:**

THE SEA SURFACE TEMPERATURE AROUND THE SYSTEM CENTRE IS ABOUT 29<sup>0</sup>C AND IT DECREASES TOWARDS THE WEST. THE OCEAN THERMAL ENERGY IS ABOUT 30-50 KJ/CM<sup>2</sup> AROUND THE SYSTEM CENTRE AND IT DECREASES FURTHER TO THE WEST-NORTHWEST. THE VERTICAL WIND SHEAR AROUND THE SYSTEM CENTRE HAS SLIGHTLY INCREASED AND IS ABOUT 5-15 KNOTS. IT FURTHER INCREASES TOWARDS THE NORTHWEST. THE LOW LEVEL RELATIVE VORTICITY REMAINED SAME AND IS ABOUT 150 X 10<sup>-5</sup> SEC<sup>-1</sup>. UPPER LEVEL DIVERGENCE IS ABOUT 10 X 10<sup>-5</sup> SEC<sup>-1</sup> AND LOW LEVEL CONVERGENCE IS AROUND 30 X 10<sup>-5</sup> SEC<sup>-1</sup>. THE UPPER TROPOSPHERIC RIDGE AT 200 HPA LEVEL RUNS ALONG 16<sup>0</sup>N. THE SYSTEM WOULD MOVE WEST-NORTHWESTWARDS. INTRUSION OF DRY AIR FROM THE NORTHWEST CONTINUES SURROUNDING THE WALL CLOUD REGION WHICH IS HELPING IN WEAKENING OF THE SYSTEM. THE SYSTEM IS INTERACTING WITH LAND SURFACE WITH SPIRAL BAND LYING OVER YEMEN. HOWEVER, DUE TO PREVALENCE OF WEAK VERTICAL WIND SHEAR THE ADVERSE IMPACT OF DRY AIR INTRUSION AND LAND SURFACE INTERACTION HAS BEEN SLOW. HOWEVER, DUE TO DECREASE IN UPPER LEVEL DIVERGENCE AND INCREASE IN VERTICAL WIND SHEAR DUE TO WEST-NORTHWESTWARD MOVEMENT, THE RATE OF WEAKENING WILL NOW INCREASE GRADUALLY.

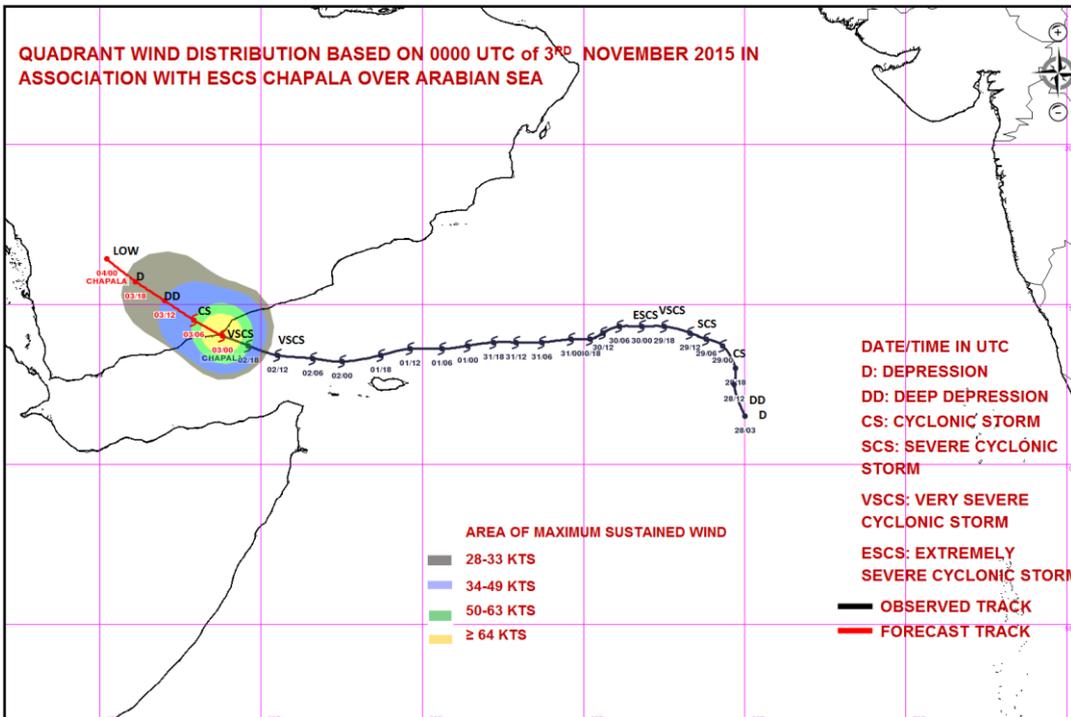
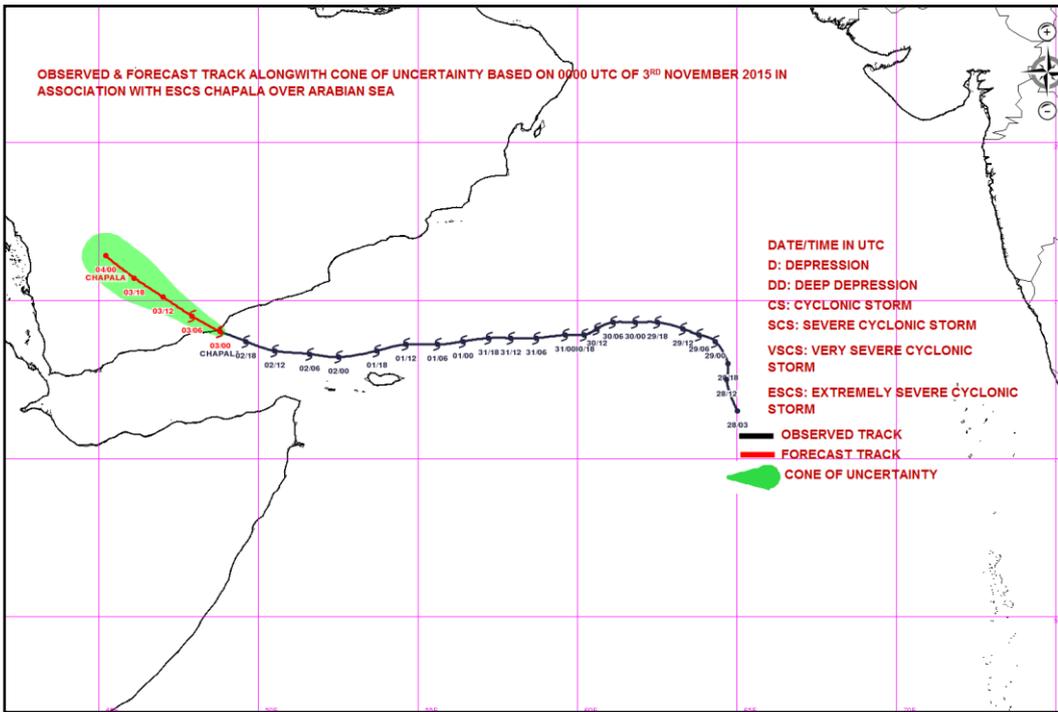
(R.P. SHARMA)  
DUTY OFFICER



**PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)**

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

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



**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**



**REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI  
TROPICAL CYCLONE ADVISORY BULLETIN**

**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 'CHAPALA' ADVISORY NO. FOURTY ONE ISSUED AT 0300 UTC OF 3<sup>RD</sup>  
NOVEMBER 2015 BASED ON 0000 UTC CHARTS OF 3<sup>RD</sup> NOVEMBER 2015.**

THE **VERY SEVERE CYCLONIC STORM**, 'CHAPALA' OVER GULF OF ADEN AND ADJOINING WESTCENTRAL ARABIAN SEA MOVED WEST-NORTHWESTWARDS WITH A SPEED OF ABOUT **15** KMPH DURING PAST 6 HOURS AND LAY CENTERED AT 0000 UTC OF TODAY, THE **3<sup>RD</sup>** NOVEMBER 2015 OVER GULF OF ADEN, NEAR LATITUDE **14.0** DEGREE NORTH AND LONGITUDE **48.8** DEGREE EAST, CLOSE TO YEMEN COAST ABOUT **80** KM SOUTH SOUTHWEST OF RIYAN (YEMEN) (41443) . IT WOULD MOVE WEST-NORTHWESTWARDS AND CROSS YEMEN COAST TO THE SOUTHWEST OF RIYAN WITH MAXIMUM SUSTAINED WIND SPEED OF 120 TO 130 KMPH GUSTING TO 145 KMPH WITHIN A FEW HOURS.THEREAFTER IT WOULD CONTINUE TO MOVE WESTNORTHWESTWARDS AND WEAKEN GRADUALLY.

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

<b>Date/time(UTC)</b>	<b>Position (lat. °N/ long. °E)</b>	<b>Maximum sustained surface wind speed (kmph)</b>	<b>Category of cyclonic Disturbance</b>
03-11-2015/0000	14.0/48.8	120-130 gusting to 145	Very severe cyclonic storm
03-11-2015/0600	14.5/47.9	80-90 gusting to 100	Cyclonic storm
03-11-2015/1200	15.1/47.0	55-65 gusting to 75	Deep Depression
03-11-2015/1800	15.7/46.1	40-50 gusting to 60	Depression
04-11-2015/0000	16.4/45.2	20-30 gusting to 40	Low Pressure Area

ACCORDING TO SATELLITE IMAGERY, INTENSITY IS T **4.0** AND CI 4.5. MAXIMUM SUSTAINED SURFACE WIND SPEED IS 65 KNOTS GUSTING TO 75 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 980 HPA. SEA CONDITION IS PHENOMENAL AROUND THE SYSTEM CENTRE. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER AREA BETWEEN LATITUDE 11.5 DEGREE NORTH TO 19.0 DEGREE NORTH AND LONGITUDE 46.0 DEGREE EAST TO 52.0 DEGREE EAST OF YEMEN..THE CONVECTION CONTINUES DISORGANISATION INDICATING WEAKENING TREND OF THE SYSTEM. THE CONVECTION IS SHEARED TO THE NORTHWEST DUE TO INCREASE IN VERTICAL WIND SHEAR.

(M.MOHAPATRA)

HEAD-RSMC NEW DELHI

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**PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)**

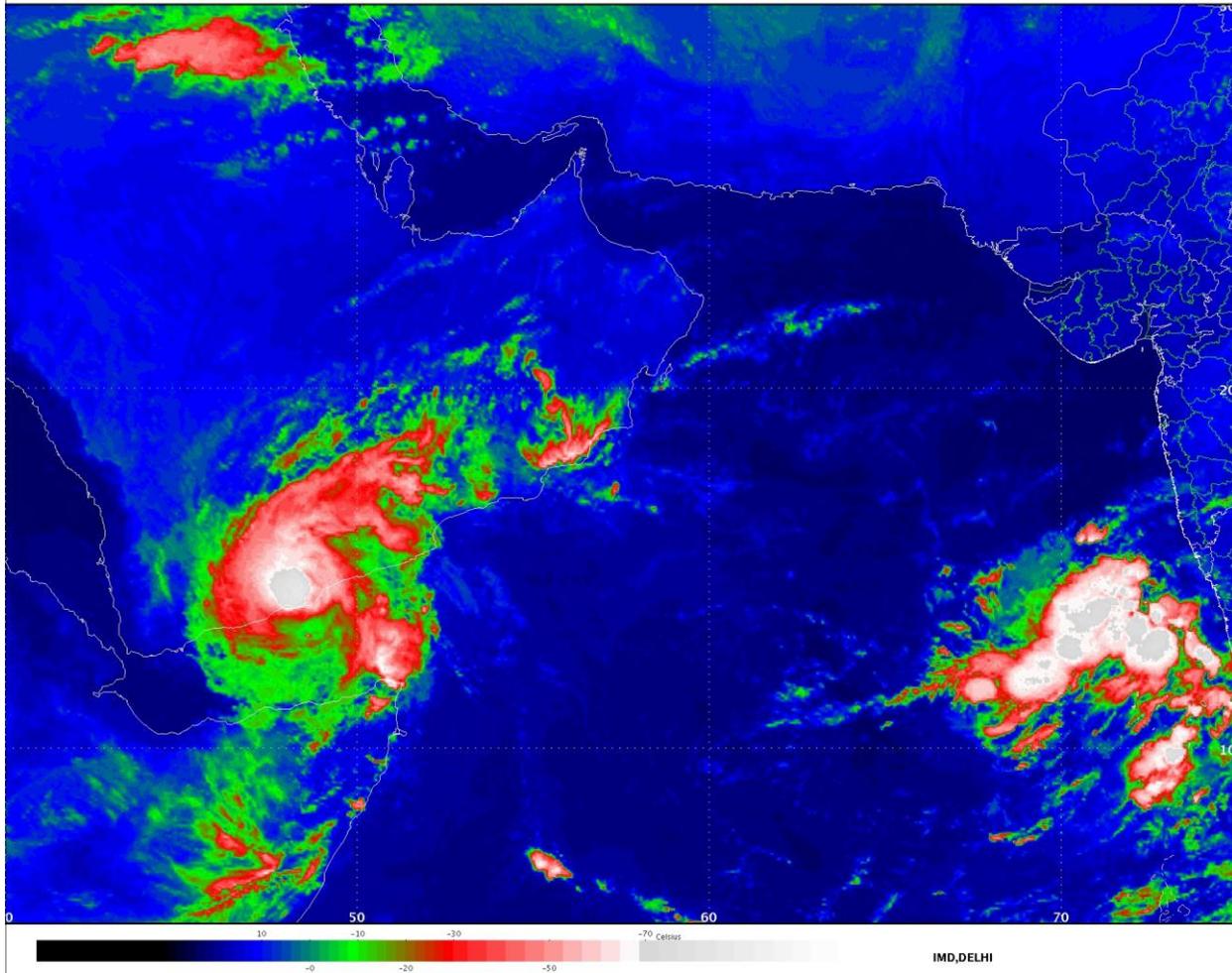
**NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%**

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

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SECTOR ARABIAN\_SEA Mercator (NHC LUT)

03-11-2015/00:30 GMT  
03-11-2015/06:00 IST



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



**REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI  
TROPICAL CYCLONE ADVISORY BULLETIN**

**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 ‘CHAPALA’ ADVISORY NO. FOURTY TWO ISSUED AT 0600 UTC OF 3<sup>RD</sup>  
NOVEMBER 2015 BASED ON 0300 UTC CHARTS OF 3<sup>RD</sup> NOVEMBER 2015.**

THE **VERY SEVERE CYCLONIC STORM, ‘CHAPALA’** OVER GULF OF ADEN AND ADJOINING WESTCENTRAL ARABIAN SEA MOVED WEST-NORTHWESTWARDS, CROSSED YEMEN COAST TO THE SOUTHWEST OF RYAN, NEAR LATITUDE **14.1** DEGREE NORTH AND LONGITUDE **48.65** DEGREE EAST DURING **0100-0200 UTC** OF TODAY AS A VERY SEVERE CYCLONIC STORM WITH A MAXIMUM SUSTAINED SURFACE WIND SPEED OF 120-130 KMPH GUSTING TO 145 KMPH. IT THEN CONTINUED TO MOVE WEST-NORTHWESTWARDS, WEAKENED INTO A SEVERE CYCLONIC STORM AND LAY CENTERED AT 0300 UTC OF TODAY, THE **3<sup>RD</sup>** NOVEMBER 2015 OVER YEMEN, NEAR LATITUDE **14.2** DEGREE NORTH AND LONGITUDE **48.4** DEGREE EAST ABOUT 100 KM SOUTHWEST OF RIYAN (YEMEN) (41443) . IT WOULD MOVE WEST-NORTHWESTWARDS AND WEAKEN FURTHER RAPIDLY INTO A CYCLONIC STORM AND SUBSEQUENTLY INTO A DEPRESSION DURING NEXT 12 HOURS.

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

<b>Date/time(UTC)</b>	<b>Position (lat. °N/ long. °E)</b>	<b>Maximum sustained surface wind speed (kmph)</b>	<b>Category of cyclonic Disturbance</b>
03-11-2015/0300	14.2/48.4	100-110 gusting to 125	Severe cyclonic storm
03-11-2015/0600	14.5/47.9	80-90 gusting to 100	Cyclonic storm
03-11-2015/1200	15.1/47.0	55-65 gusting to 75	Deep Depression
03-11-2015/1800	15.7/46.1	40-50 gusting to 60	Depression
04-11-2015/0000	16.4/45.2	20-30 gusting to 40	Low Pressure Area

MAXIMUM SUSTAINED SURFACE WIND SPEED IS 55 KNOTS GUSTING TO 65 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 988 HPA. SEA CONDITION IS HIGH. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LAY OVER AREA BETWEEN LATITUDE 12.0 DEGREE NORTH TO 18.5 DEGREE NORTH AND LONGITUDE 46.0 DEGREE EAST TO 51.0 DEGREE AND CENTRAL YEMEN. THE CONVECTION CONTINUES DISORGANISATION INDICATING WEAKENING TREND OF THE SYSTEM. MINIMUM CLOUD TOP TEMPERATURE IS 75 DEGREE N. DUE TO RUGGED TERRAIN, DRY AIR INTRUSION, INCREASE IN

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**PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)**

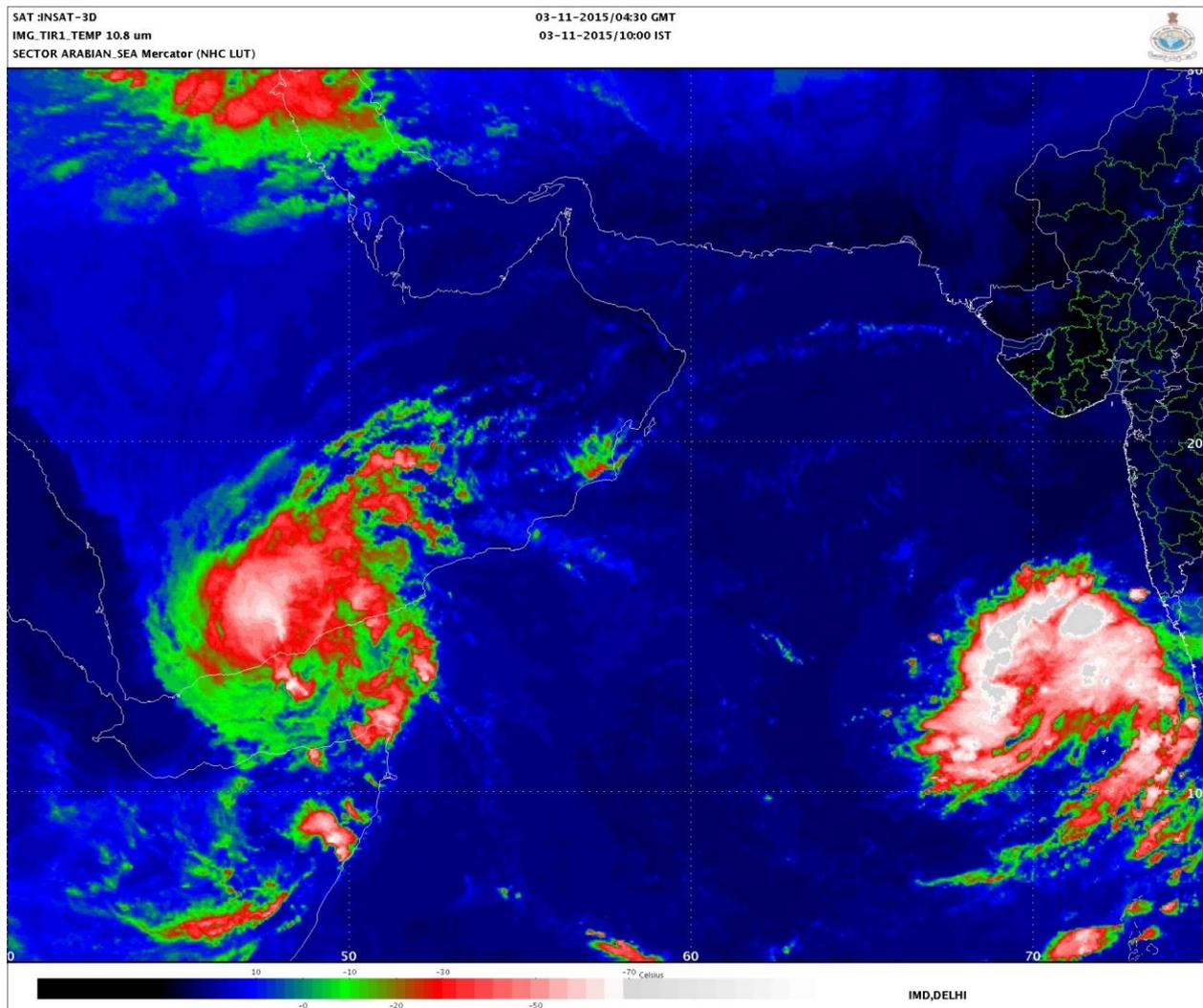
**NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%**

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

VERTICAL WIND SHEAR AND DECREASE IN DIVERGENCE, THE SYSTEM WOULD WEAKEN RAPIDLY INTO A DEPRESSION DURING NEXT 12 HOURS.

(M.MOHAPATRA)  
HEAD-RSMC NEW DELHI



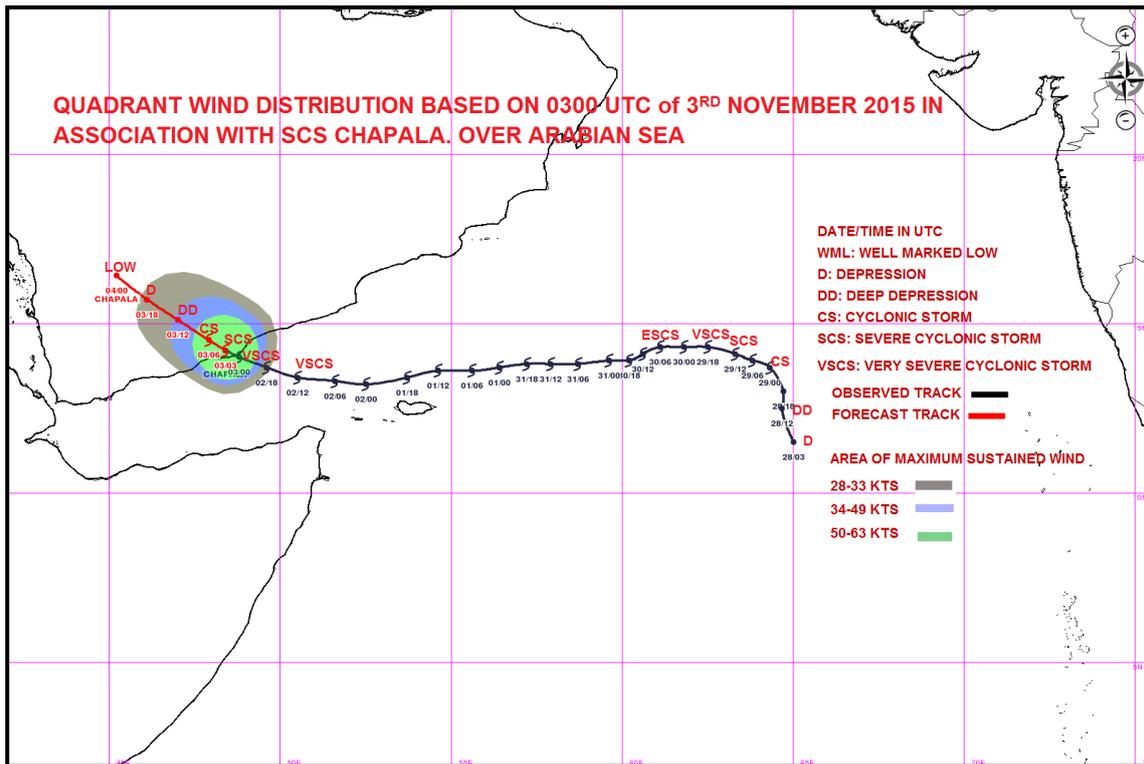
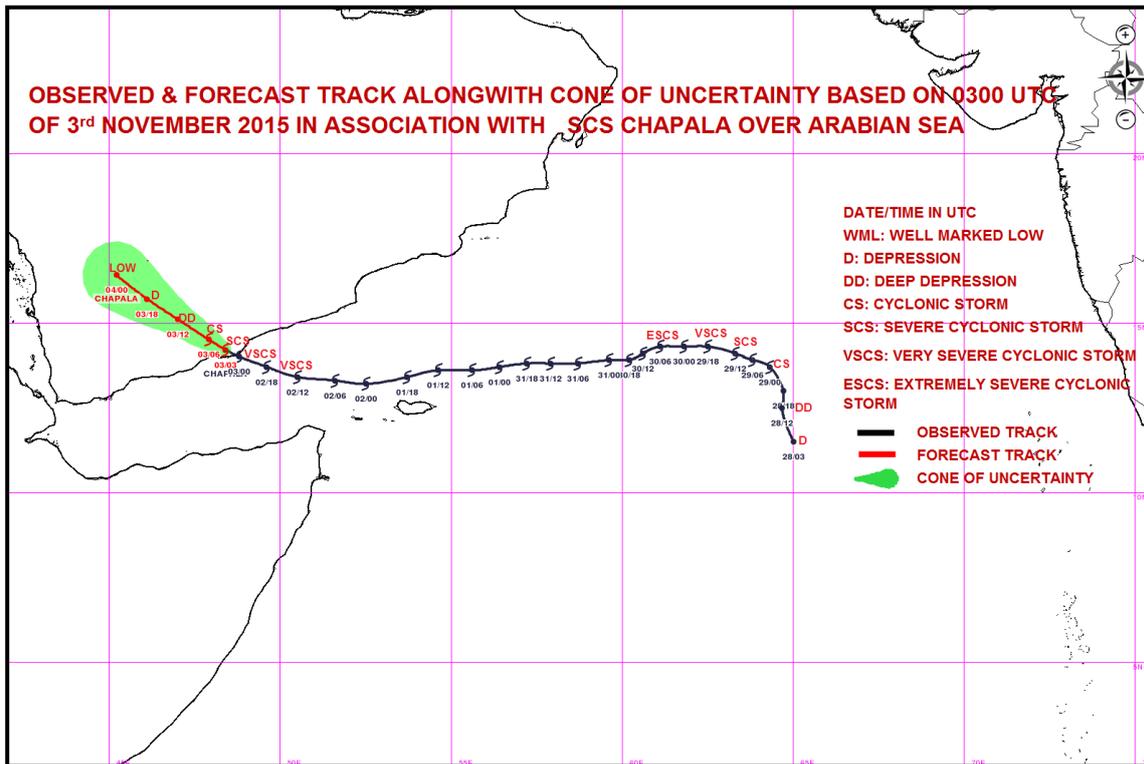
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**PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)**

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

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



**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



**REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI  
TROPICAL CYCLONE ADVISORY BULLETIN**

**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 'CHAPALA' ADVISORY NO. FORTY THREE ISSUED AT 0900 UTC OF 3<sup>RD</sup>  
NOVEMBER 2015 BASED ON 0600 UTC CHARTS OF 3<sup>RD</sup> NOVEMBER 2015.**

THE **SEVERE CYCLONIC STORM**, 'CHAPALA' OVER YEMEN MOVED WESTWARDS WITH A SPEED OF 20 KMPH, WEAKENED INTO A **CYCLONIC STORM** AND LAY CENTERED AT 0600 UTC OF TODAY, THE 3<sup>RD</sup> NOVEMBER 2015 OVER YEMEN, NEAR LATITUDE **14.2** DEGREE NORTH AND LONGITUDE **47.8** DEGREE EAST ABOUT 100 KM EAST-SOUTHEAST OF ATAQ (YEMEN) (41437) . IT WOULD MOVE WEST-NORTHWESTWARDS AND WEAKEN FURTHER INTO A DEPRESSION DURING NEXT 12 HOURS.

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

<b>Date/time(UTC)</b>	<b>Position (lat. °N/ long. °E)</b>	<b>Maximum sustained surface wind speed (kmph)</b>	<b>Category of cyclonic Disturbance</b>
03-11-2015/0600	14.2/47.8	80-90 gusting to 100	Cyclonic storm
03-11-2015/1200	14.4/47.0	55-65 gusting to 75	Deep Depression
03-11-2015/1800	14.7/46.1	40-50 gusting to 60	Depression
04-11-2015/0000	15.1/45.2	20-30 gusting to 40	Low Pressure Area

MAXIMUM SUSTAINED SURFACE WIND SPEED IS 45 KNOTS GUSTING TO 55 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 996 HPA. SEA CONDITION NEAR YEMEN COAST IS HIGH. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LIE OVER YEMEN AND ADJOINING GULF OF ADEN BETWEEN LATITUDE 12.0 DEGREE NORTH TO 17.5 DEGREE NORTH AND LONGITUDE 44.5 DEGREE EAST TO 51.5 DEGREE E. THE CONVECTION SHOWS SHEAR PATTERN INDICATING FURTHER WEAKENING OF THE SYSTEM. THE DEPTH OF CONVECTION HAS SIGNIFICANTLY DECREASED. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 62 DEGREE C. DUE TO RUGGED TERRAIN, DRY AIR INTRUSION, INCREASE IN VERTICAL WIND SHEAR AND DECREASE IN DIVERGENCE, THE SYSTEM WEAKENED RAPIDLY INTO A CYCLONIC STORM AND WILL FURTHER WEAKEN INTO A DEPRESSION DURING NEXT 12 HOURS.

(M.MOHAPATRA)  
HEAD-RSMC NEW DELHI

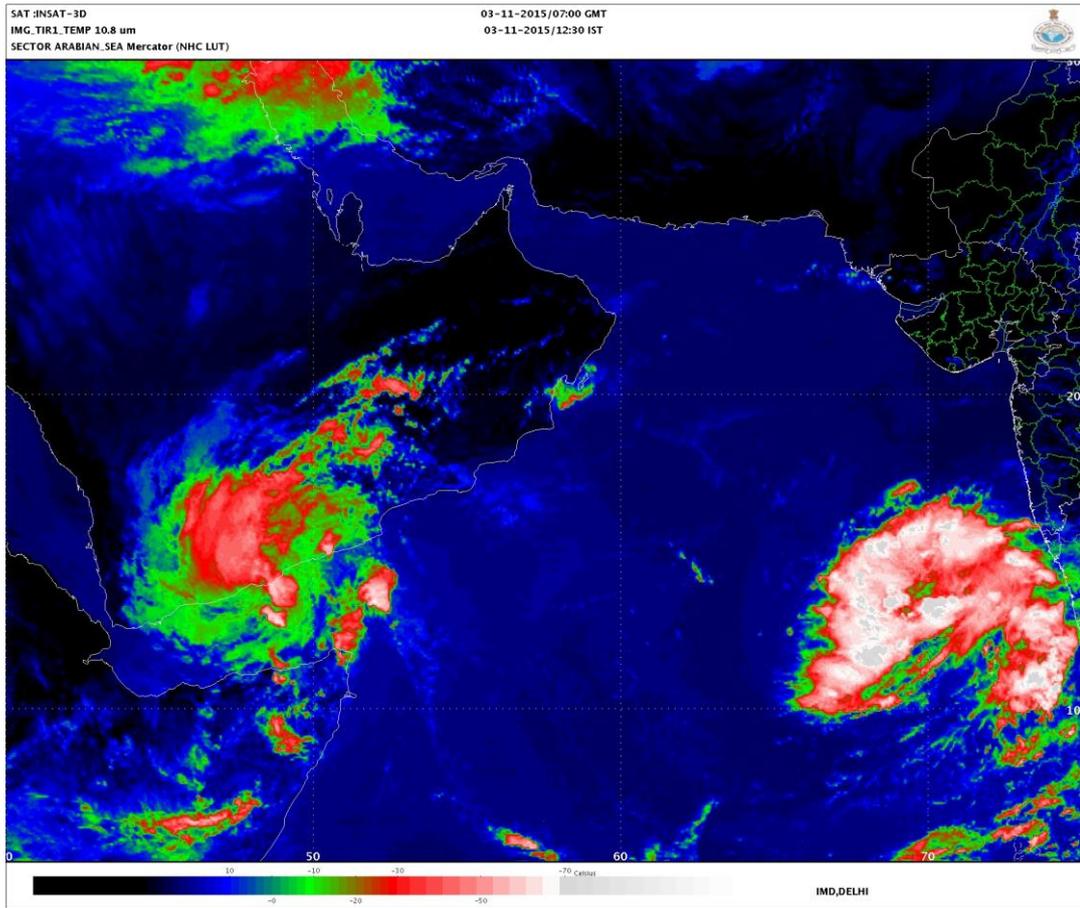
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**PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)**

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

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



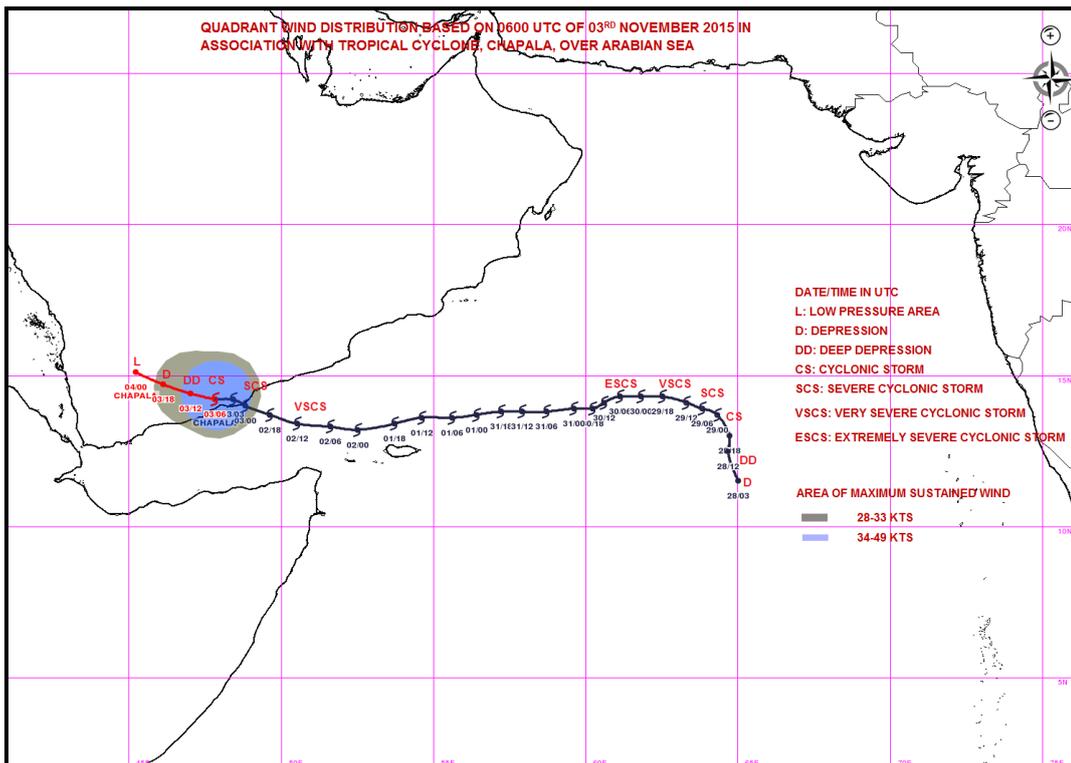
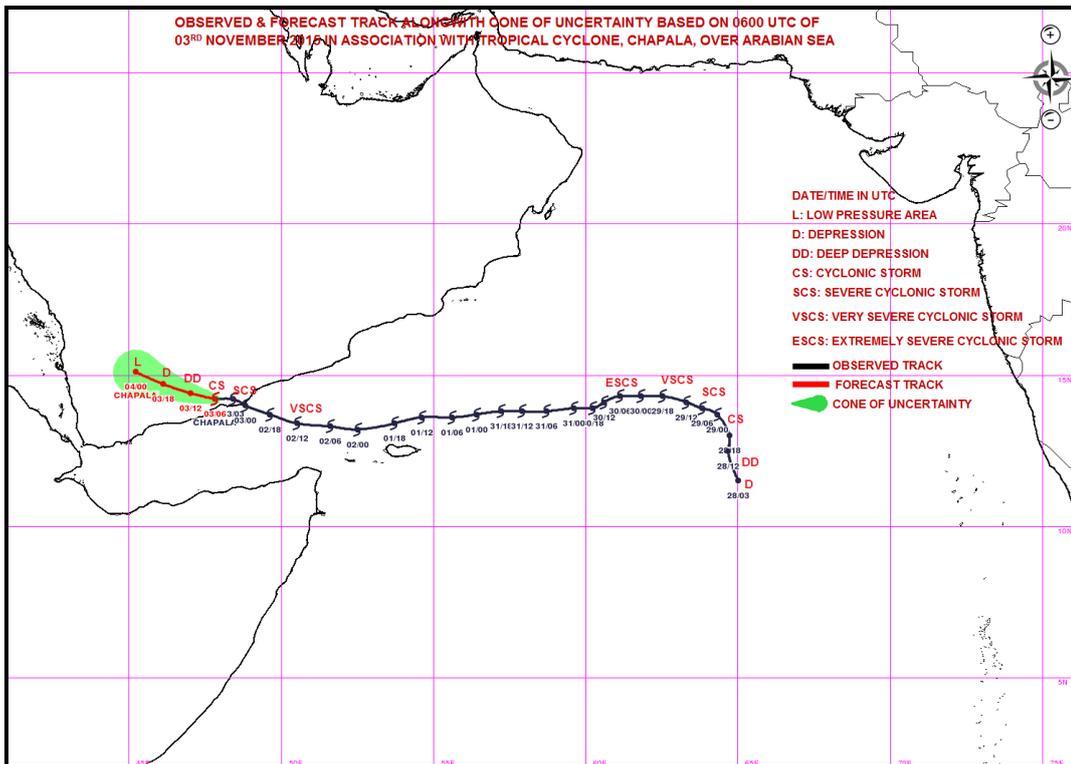
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**PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)**

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

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



**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**



**REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI  
TROPICAL CYCLONE ADVISORY BULLETIN**

**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 'CHAPALA' ADVISORY NO. FORTY FOUR ISSUED AT 1200 UTC OF 3<sup>RD</sup>  
NOVEMBER 2015 BASED ON 0900 UTC CHARTS OF 3<sup>RD</sup> NOVEMBER 2015.**

THE **CYCLONIC STORM**, 'CHAPALA' OVER YEMEN MOVED WESTWARDS WITH A SPEED OF 15 KMPH, AND LAY CENTERED AT 0900 UTC OF TODAY, THE 3<sup>RD</sup> NOVEMBER 2015 OVER YEMEN, NEAR LATITUDE 14.2 DEGREE NORTH AND LONGITUDE 47.6 DEGREE EAST ABOUT 80 KM EAST-SOUTHEAST OF ATAQ (YEMEN) (41437) . IT WOULD MOVE WEST-NORTHWESTWARDS AND WEAKEN FURTHER INTO A DEPRESSION DURING NEXT 12 HOURS.

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

<b>Date/time(UTC)</b>	<b>Position (lat. °N/ long. °E)</b>	<b>Maximum sustained surface wind speed (kmph)</b>	<b>Category of cyclonic Disturbance</b>
03-11-2015/0900	14.2/47.6	75-85 gusting to 90	Cyclonic storm
03-11-2015/1200	14.4/47.3	55-65 gusting to 75	Deep Depression
03-11-2015/1800	14.7/46.6	40-50 gusting to 60	Depression
04-11-2015/0000	15.1/45.7	20-30 gusting to 40	Low Pressure Area

MAXIMUM SUSTAINED SURFACE WIND SPEED IS 45 KNOTS GUSTING TO 55 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 998 HPA. SEA CONDITION ALONG AND OFF YEMEN COAST IS VERY ROUGH TO HIGH. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LIE OVER THE AREA BETWEEN LATITUDE 12.0 DEGREE NORTH TO 17.5 DEGREE NORTH AND LONGITUDE 44.5 DEGREE EAST TO 51.5 DEGREE E. THE CONVECTION SHOWS SHEAR PATTERN INDICATING FURTHER WEAKENING OF THE SYSTEM. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 61 DEGREE C. DUE TO RUGGED TERRAIN, DRY AIR INTRUSION, INCREASE IN VERTICAL WIND SHEAR AND DECREASE IN UPPER LEVEL DIVERGENCE, THE CYCLONIC STORM WILL FURTHER WEAKEN INTO A DEPRESSION DURING NEXT 12 HOURS.

(M.MOHAPATRA)  
HEAD-RSMC NEW DELHI

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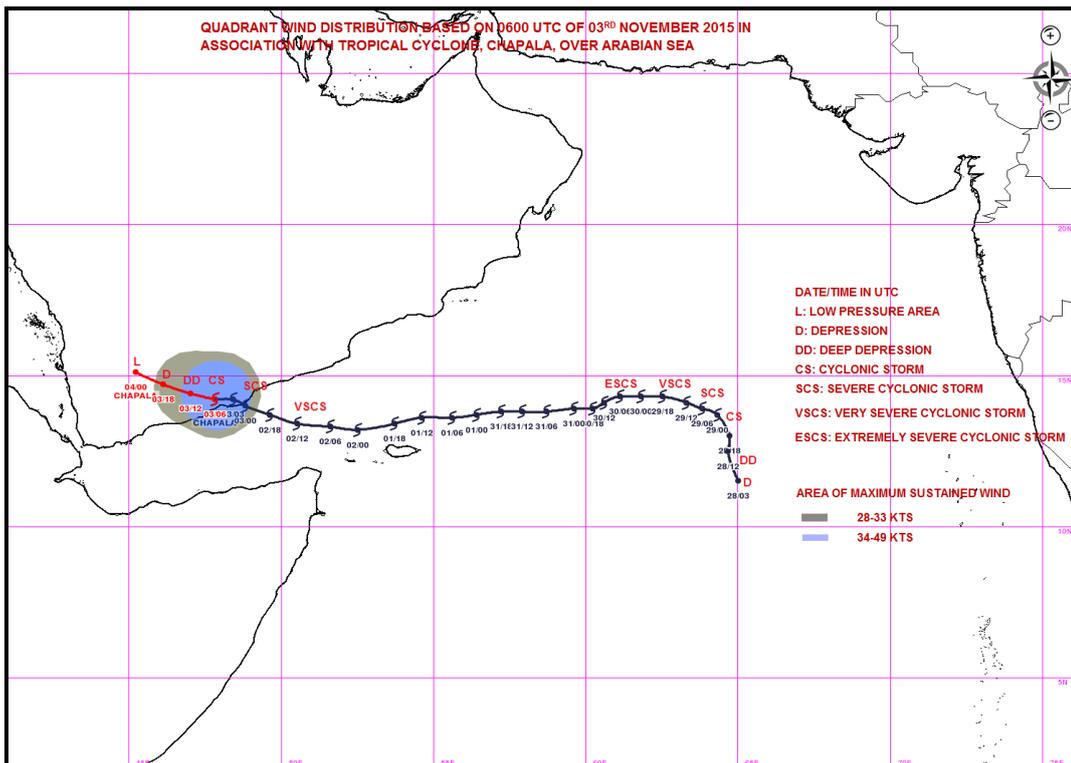
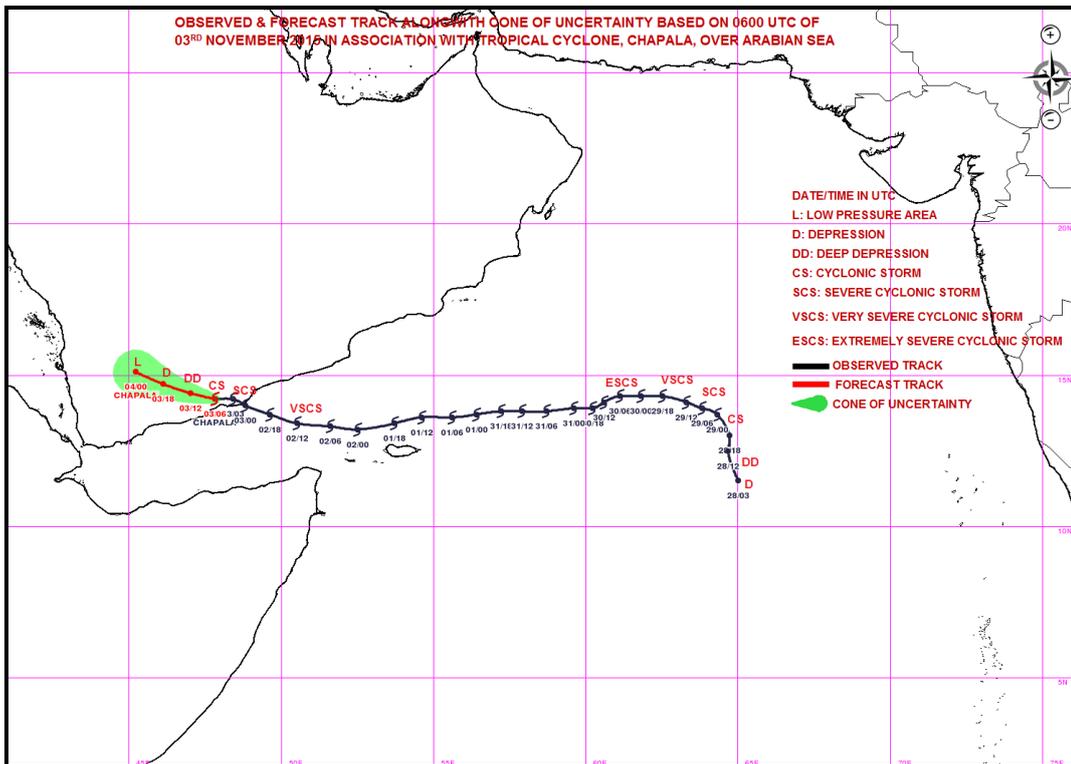
**PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)**

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

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





**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**



**REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI  
TROPICAL CYCLONE ADVISORY BULLETIN**

**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 ‘CHAPALA’ ADVISORY NO. FORTY FIVE ISSUED AT 1500 UTC OF 3<sup>RD</sup>  
NOVEMBER 2015 BASED ON 1200 UTC CHARTS OF 3<sup>RD</sup> NOVEMBER 2015.**

THE **CYCLONIC STORM**, ‘CHAPALA’ OVER YEMEN MOVED WESTWARDS WITH A SPEED OF 10 KMPH DURING PAST 6 HOURS, AND LAY CENTERED AT 1200 UTC OF TODAY, THE 3<sup>RD</sup> NOVEMBER 2015 OVER YEMEN, NEAR LATITUDE **14.2** DEGREE NORTH AND LONGITUDE **47.3** DEGREE EAST ABOUT 60 KM SOUTH-SOUTHEAST OF ATAQ (YEMEN) (41437) . IT WOULD MOVE WEST-NORTHWESTWARDS AND WEAKEN FURTHER INTO A DEPRESSION DURING NEXT 12 HOURS.

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

<b>Date/time(UTC)</b>	<b>Position (lat. °N/ long. °E)</b>	<b>Maximum sustained surface wind speed (kmph)</b>	<b>Category of cyclonic Disturbance</b>
03-11-2015/1200	14.2/47.3	70-80 gusting to 90	Cyclonic Storm
03-11-2015/1800	14.4/46.6	55-65 gusting to 75	Deep Depression
04-11-2015/0000	14.7/45.9	40-50 gusting to 60	Depression
04-11-2015/0600	15.0/45.2	20-30 gusting to 40	Low pressure area

MAXIMUM SUSTAINED SURFACE WIND SPEED IS 40 KNOTS GUSTING TO 50 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 998 HPA. SEA CONDITION ALONG AND OFF YEMEN COAST IS VERY ROUGH TO HIGH. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LIE OVER THE AREA BETWEEN LATITUDE 11.0 DEGREE NORTH TO 18.5 DEGREE NORTH AND LONGITUDE 44.5 DEGREE EAST TO 51.5 DEGREE E. THE CONVECTION SHOWS SHEAR PATTERN INDICATING FURTHER WEAKENING OF THE SYSTEM. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 57 DEGREE C. DUE TO RUGGED TERRAIN, DRY AIR INTRUSION, INCREASE IN VERTICAL WIND SHEAR AND DECREASE IN UPPER LEVEL DIVERGENCE, THE CYCLONIC STORM WILL FURTHER WEAKEN INTO A DEPRESSION DURING NEXT 12 HOURS.

(M.MOHAPATRA)  
HEAD-RSMC NEW DELHI

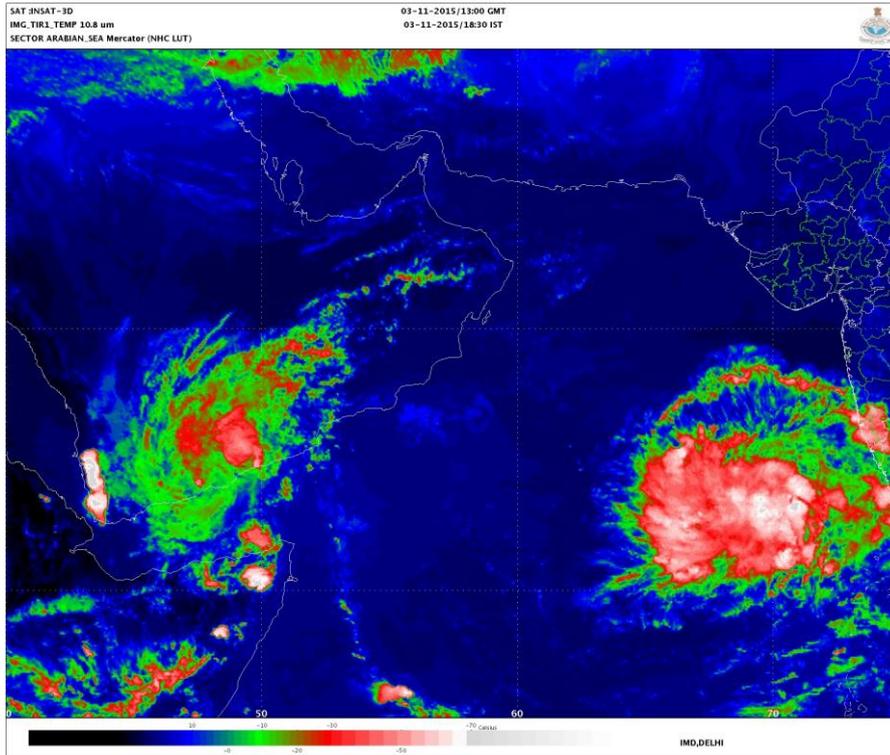
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**PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)**

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

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



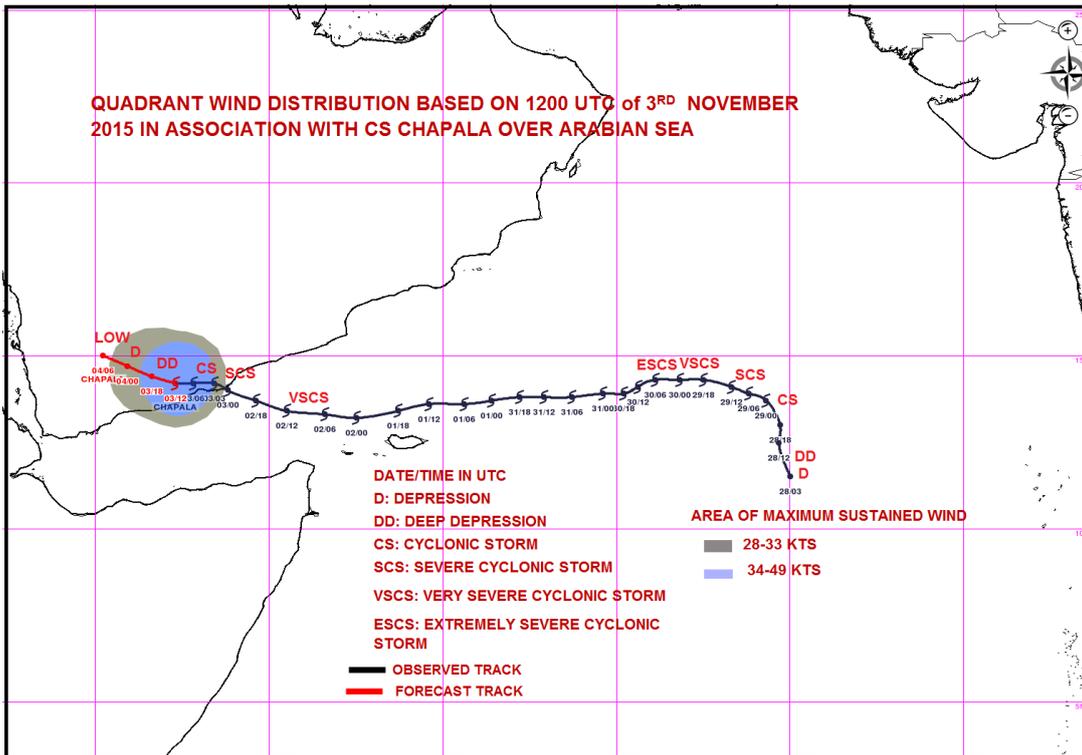
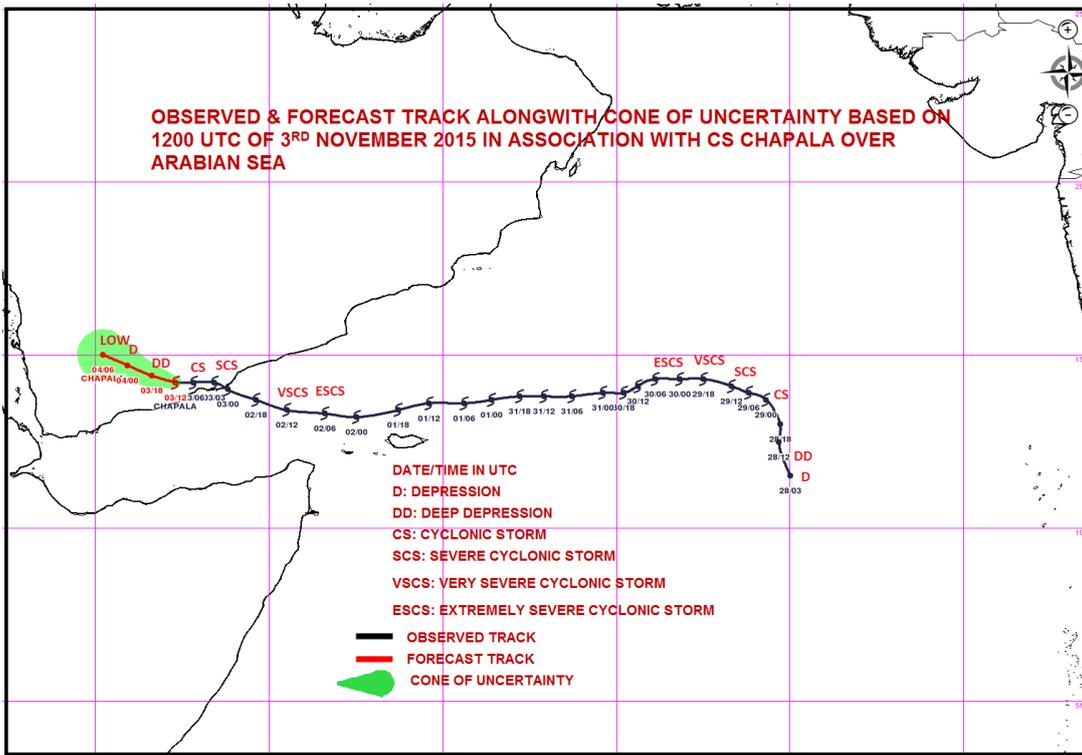
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**PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)**

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

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**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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**REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI  
TROPICAL CYCLONE ADVISORY BULLETIN**

**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 ‘CHAPALA’ ADVISORY NO. FORTY SIX ISSUED AT 1800 UTC OF 3<sup>RD</sup>  
NOVEMBER 2015 BASED ON 1500 UTC CHARTS OF 3<sup>RD</sup> NOVEMBER 2015.**

THE **CYCLONIC STORM, ‘CHAPALA’** OVER YEMEN MOVED WESTWARDS WITH A SPEED OF 10 KMPH DURING PAST 6 HOURS, AND LAY CENTERED AT 1500 UTC OF TODAY, THE 3<sup>RD</sup> NOVEMBER 2015 OVER YEMEN, NEAR LATITUDE **14.2** DEGREE NORTH AND LONGITUDE **47.1** DEGREE EAST ABOUT 45 KM SOUTH-SOUTHEAST OF ATAQ (YEMEN) (41437) . IT WOULD MOVE WEST-NORTHWESTWARDS AND WEAKEN FURTHER INTO A DEPRESSION DURING NEXT 12 HOURS.

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

<b>Date/time(UTC)</b>	<b>Position (lat. °N/ long. °E)</b>	<b>Maximum sustained surface wind speed (kmph)</b>	<b>Category of cyclonic Disturbance</b>
03-11-2015/1500	14.2/47.1	60-70 gusting to 80	Cyclonic Storm
03-11-2015/1800	14.4/46.8	55-65 gusting to 75	Deep Depression
04-11-2015/0000	14.7/46.1	40-50 gusting to 60	Depression
04-11-2015/0600	15.0/45.4	20-30 gusting to 40	Low pressure area

MAXIMUM SUSTAINED SURFACE WIND SPEED IS 40 KNOTS GUSTING TO 50 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 998 HPA. SEA CONDITION ALONG AND OFF YEMEN COAST IS VERY ROUGH TO HIGH. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LIE OVER THE AREA BETWEEN LATITUDE 11.0 DEGREE NORTH TO 20.0 DEGREE NORTH AND LONGITUDE 43.5 DEGREE EAST TO 53.5 DEGREE E. THE CONVECTION SHOWS SHEAR PATTERN INDICATING FURTHER WEAKENING OF THE SYSTEM. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 51 DEGREE C. DUE TO RUGGED TERRAIN, DRY AIR INTRUSION, INCREASE IN VERTICAL WIND SHEAR AND DECREASE IN UPPER LEVEL DIVERGENCE, THE CYCLONIC STORM WILL FURTHER WEAKEN INTO A DEPRESSION DURING NEXT 12 HOURS.

(DUTY OFFICER)  
RSMC NEW DELHI

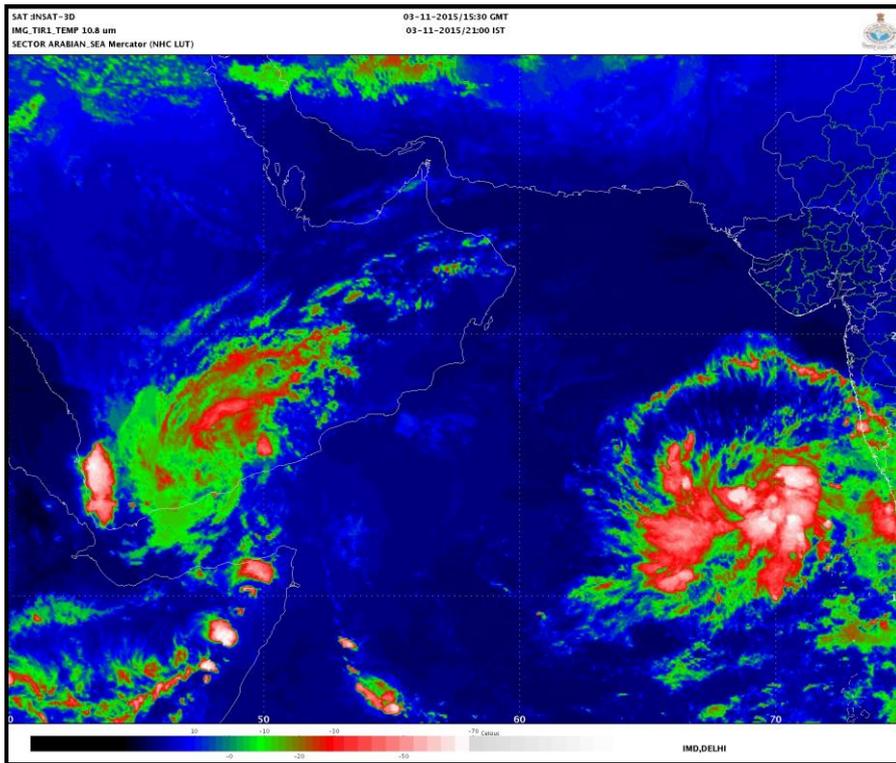
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**PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)**

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

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**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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**REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI  
TROPICAL CYCLONE ADVISORY BULLETIN**

**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 'CHAPALA' ADVISORY NO. FORTY SEVEN ISSUED AT 2100 UTC OF 3<sup>RD</sup> NOVEMBER 2015 BASED ON 1800 UTC CHARTS OF 3<sup>RD</sup> NOVEMBER 2015.**

THE **CYCLONIC STORM, 'CHAPALA'** OVER YEMEN MOVED WESTSOUTH WEST WARDS WITH A SPEED OF 6 KMPH DURING PAST 6 HOURS, AND LAY CENTERED AT 1800 UTC OF TODAY, THE 3<sup>RD</sup> NOVEMBER 2015 OVER YEMEN, NEAR LATITUDE **14.3** DEGREE NORTH AND LONGITUDE **47.0** DEGREE EAST ABOUT 25 KM SOUTH-SOUTHEAST OF ATAQ (YEMEN) (41437) . IT WOULD MOVE WEST NORTHWESTWARDS AND WEAKEN FURTHER INTO A DEPRESSION DURING NEXT 12 HOURS.

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

<b>Date/time(UTC)</b>	<b>Position (lat. °N/ long. °E)</b>	<b>Maximum sustained surface wind speed (kmph)</b>	<b>Category of cyclonic Disturbance</b>
03-11-2015/1800	14.3/47.0	55-65 gusting to 75	Deep Depression
04-11-2015/0000	14.5/46.5	40-50 gusting to 60	Depression
04-11-2015/0600	14.8/45.8	20-30 gusting to 40	Low pressure area

MAXIMUM SUSTAINED SURFACE WIND SPEED IS 30 KNOTS GUSTING TO 40 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 1000 HPA. SEA CONDITION ALONG AND OFF YEMEN COAST IS ROUGH TO VERY ROUGH. ASSOCIATED BROKEN LOW AND 'MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LIE OVER THE AREA BETWEEN LATITUDE 11.0 DEGREE NORTH TO 22.0 DEGREE NORTH AND LONGITUDE 43.0 DEGREE EAST TO 57.5 DEGREE E. THE CONVECTION SHOWS SHEAR PATTERN INDICATING FURTHER WEAKENING OF THE SYSTEM. DUE TO RUGGED TERRAIN, DRY AIR INTRUSION, INCREASE IN VERTICAL WIND SHEAR AND DECREASE IN UPPER LEVEL

DIVERGENCE, THE CYCLONIC STORM WILL FURTHER WEAKEN INTO A DEPRESSION DURING NEXT 12 HOURS.

(DUTY OFFICER)  
RSMC NEW DELHI

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

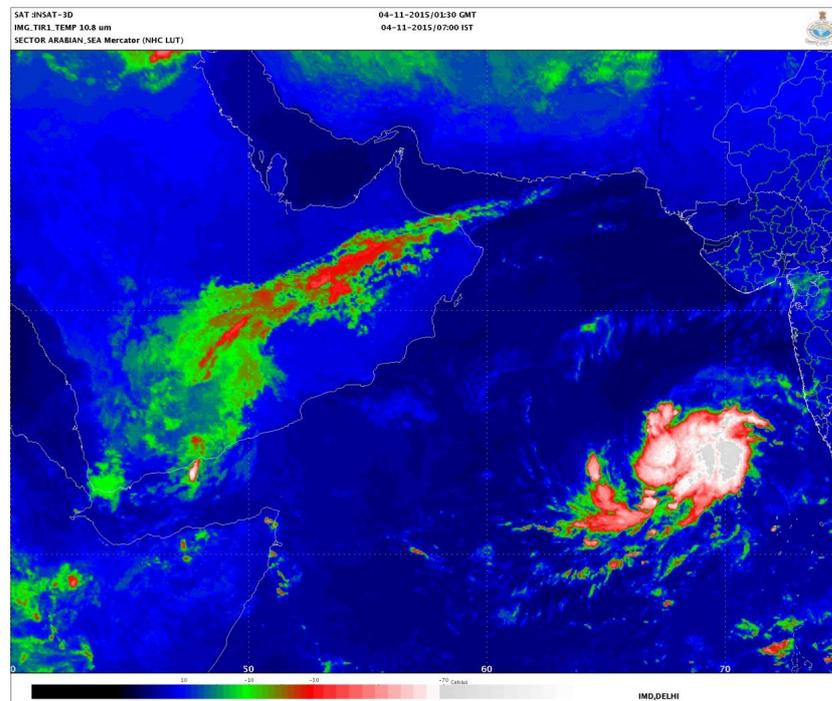
**DEMS-RSMC SPECIAL TROPICAL CYCLONES NEW DELHI DATED 04-11-2015**

**TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 72 HOURS ISSUED AT 0300 UTC OF 04<sup>TH</sup> NOVEMBER 2015 BASED ON 0000 UTC OF 04<sup>TH</sup> NOVEMBER 2015**

THE DEEP DEPRESSION OVER YEMEN MOVED NORTHWESTWARDS WITH A SPEED OF 10 KMPH DURING PAST 6 HOURS, WEAKEND INTO A DEPRESSION AND LAY CENTERED AT 0000 UTC OF TODAY, THE 4<sup>TH</sup> NOVEMBER 2015 OVER YEMEN, NEAR LATITUDE 14.8 DEGREE NORTH AND LONGITUDE 46.5 DEGREE EAST ABOUT 50 KM NORTHWEST OF ATAQ (YEMEN) (41437) . IT WOULD MOVE NORTHWESTWARDS AND WEAKEN FURTHER INTO A WELL MARKED LOW PRESSURE AREA DURING NEXT 6 HOURS.

MAXIMUM SUSTAINED SURFACE WIND SPEED IS 25 KNOTS GUSTING TO 35 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 1002 HPA. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE SCATTERED CONVECTION LIE OVER THE AREA BETWEEN LATITUDE 11.0 DEGREE NORTH TO 20.0 DEGREE NORTH AND LONGITUDE 43.0 DEGREE EAST TO 50.5 DEGREE E.

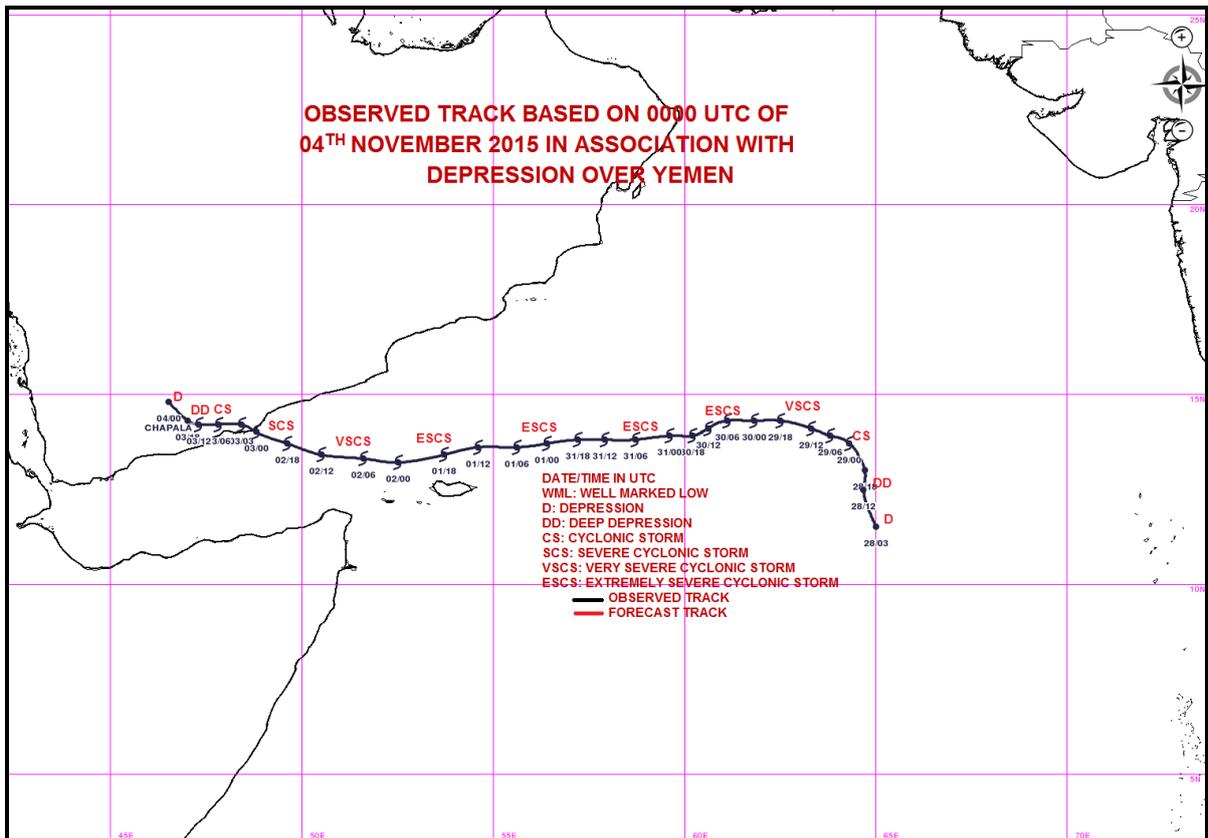
(M. MOHAPATRA)  
HEAD-RSMC NEW Delhi



**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**



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

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**DEMS-RSMC SPECIAL TROPICAL CYCLONES NEW DELHI DATED 04-11-2015**

**TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 72 HOURS ISSUED AT 0600 UTC OF 04<sup>TH</sup> NOVEMBER 2015 BASED ON 0300 UTC OF 04<sup>TH</sup> NOVEMBER 2015**

THE DEEP DEPRESSION OVER YEMEN MOVED NORTHWESTWARDS WITH A SPEED OF 10 KMPH DURING PAST 6 HOURS, WEAKEND INTO A DEPRESSION AND LAY CENTERED AT 0000 UTC OF TODAY, THE 4<sup>TH</sup> NOVEMBER 2015 OVER YEMEN, NEAR LATITUDE 14.8 DEGREE NORTH AND LONGITUDE 46.5 DEGREE EAST ABOUT 50 KM NORTHWEST OF ATAQ (YEMEN) (41437) . IT WOULD MOVE NORTHWESTWARDS AND WEAKEN FURTHER INTO A WELL MARKED LOW PRESSURE AREA DURING NEXT 6 HOURS.

MAXIMUM SUSTAINED SURFACE WIND SPEED IS 25 KNOTS GUSTING TO 35 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 1002 HPA. ASSOCIATED BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE SCATTERED CONVECTION LIE OVER THE AREA BETWEEN LATITUDE 11.0 DEGREE NORTH TO 20.0 DEGREE NORTH AND LONGITUDE 43.0 DEGREE EAST TO 50.5 DEGREE E.

(M. MOHAPATRA)  
HEAD-RSMC NEW DELHI

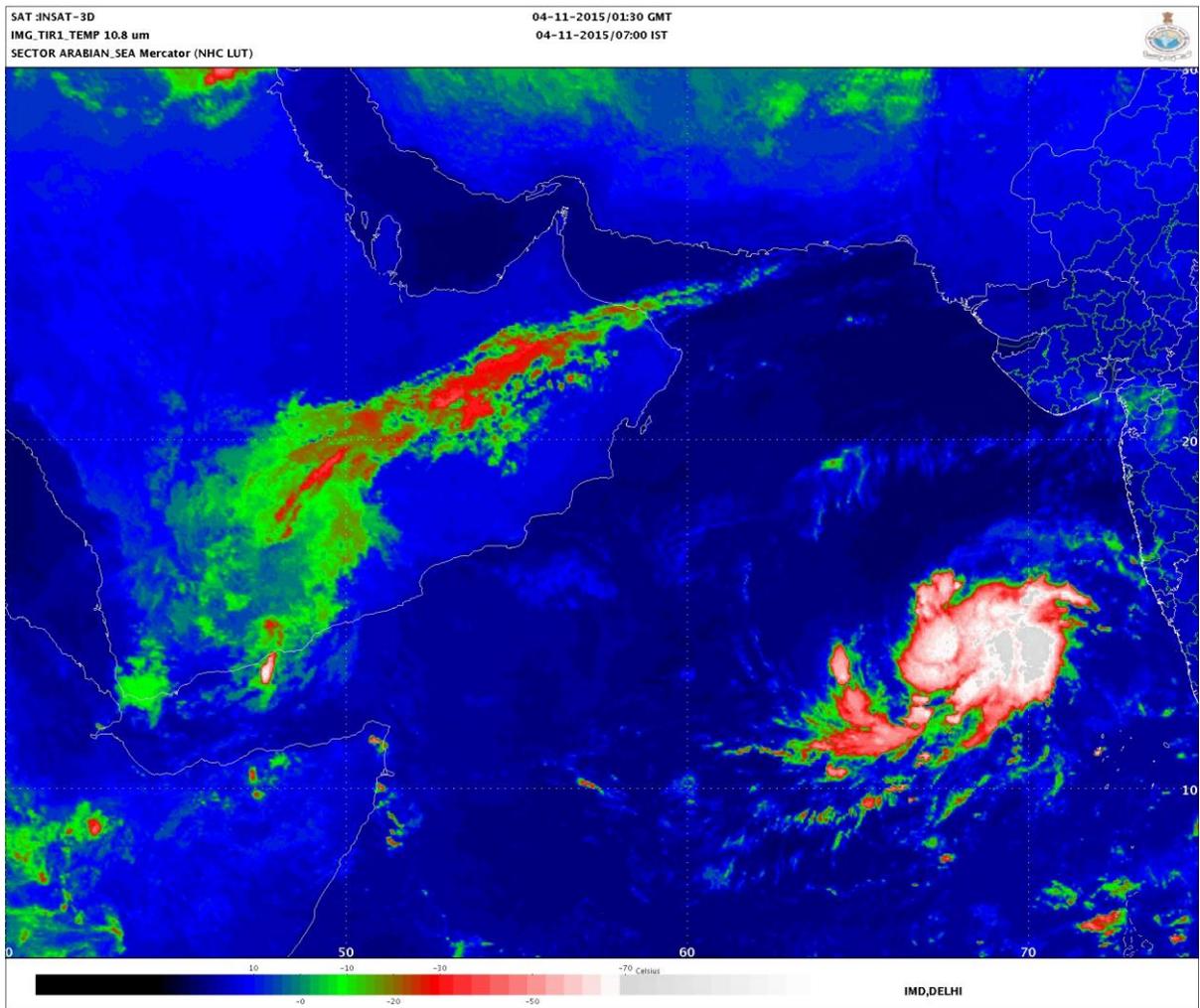
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**PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)**

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

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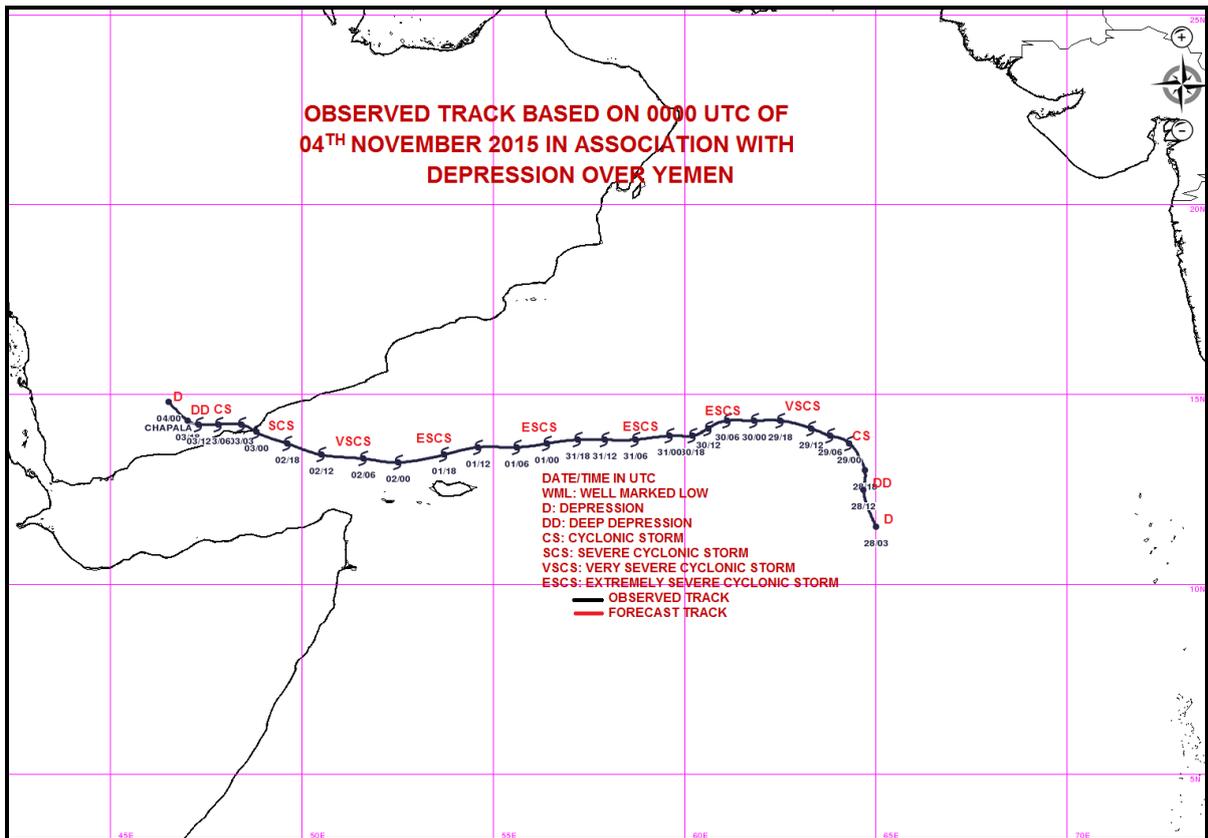
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**PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)**

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

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**PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)**

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