REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI

TROPICAL WEATHER OUTLOOK

DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 30.11.2020

TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 0430 UTC OF 30.11.2020 BASED ON 0000 UTC OF 30.11.2020 .

Sub: DEPRESSION OVER SOUTHEAST BAY OF BENGAL & NEIGHBOURHOOD

LATEST SATELLITE AND SHIP OBSERVATIONS INDICATE THAT THE WELL MARKED LOW PRESSURE AREA OVER SOUTHEAST BAY OF BENGAL & NEIGHBOURHOOD CONCENTRATED INTO A DEPRESSION AND LAY CENTERED AT 0000 UTC OF 30TH NOVEMBER 2020 OVER SOUTHEAST BAY OF BENGAL NEAR LAT. 7.5° N AND LONG. 88.0°E, ABOUT 750 KM EAST-SOUTHEAST OF TRINCOMALEE (434180) AND 1150 KM EAST-SOUTHEAST OF KANYAKUMARI (433770). IT IS VERY LIKELY TO INTENSIFY FURTHER INTO A DEEP DEPRESSION DURING NEXT 24 HOURS. IT IS ALSO LIKELY TO INTENSIFY FURTHER INTO A CYCLONIC STORM. IT IS VERY LIKELY TO MOVE WEST-NORTHWESTWARDS AND CROSS SRI LANKA COAST BETWEEN LATITUDE 7.5^{0} N AND 9.0^{0} N AROUND 1200 UTC OF 2ND DECEMBER. IT IS VERY LIKE TO MOVE NEARLY WESTWARDS THEREAFTER AND EMERGE INTO COMORIN AREA ON3RD DECEMBER MORNING. FORECAST TRACK AND INTENSITY ARE GIVEN BELOW:

Date/Time(UTC)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
30.11.20/0000	7.5/88.0	40-50 GUSTING TO 60	DEPRESSION
30.11.20/1200	7.7/87.0	50-60 GUSTING TO 70	DEEP DEPRESSION
01.12.20/0000	7.9/86.1	60-70 GUSTING TO 80	CYCLONIC STORM
01.12.20/1200	8.1/84.8	65-75 GUSTING TO 85	CYCLONIC STORM
02.12.20/0000	8.3/83.1	70-80 GUSTING TO 90	CYCLONIC STORM
02.12.20/1200	8.5/81.5	70-80 GUSTING TO 90	CYCLONIC STORM
03.12.20/0000	8.5/80.2	60-70 GUSTING TO 80	CYCLONIC STORM

THE ESTIMATED MAXIMUM SUSTAINED WIND SPEED IS 20 KNOTS GUSTING TO 30 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS 1003 HPA. THE SEA CONDITION IS ROUGH TO VERY ROUGH AROUND THE SYSTEM CENTRE.

SATELLITE BASED INTENSITY IS T1.5. BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER SOUTH EAST BAY OF BENGAL BETWEEN LAT 6.0N TO 10.5N LONG 83.0E TO 90.5 IN ASSOCIATION WITH THE SYSTEM. MINIMUN CTT IS MINUS 85^{0} C.

REMARKS:

CONSIDERING THE SEA CONDITIONS, SST IS AROUND 29-30°C OVER SOUTHEAST BAY OF BENGAL (BOB). THE TROPICAL CYCLONE HEAT POTENTIAL IS ABOUT 80-100 KJ/CM^2 OVER SOUTHWEST BOB. LOWER LEVEL POSITIVE RELATIVE VORTICITY (100X10^{-6}S^{-1}) PREVAILS AROUND SYSTEM CENTRE. UPPER LEVEL POSITIVE DIVERGENCE OF 20X10^{-5}S^{-1} PREVAILS AROUND THE SYSTEM CENTRE. THE LOWER LEVEL CONVERGENCE IS 10 X 20^{-5}S^{-1} AROUND SYSTEM CENTRE. THE VERTICAL WIND SHEAR (VWS) IS LOW TO MODERATE (05-15 KTS) OVER THE REGION. THE UPPER TROPOSPHERIC RIDGE AT UPPER AND MIDDLE TROPOSPHERIC LEVELS RUNS ALONG 17-18°N OVER THE BOB. THE SYSTEM LIES IN THE SOUTHERN PERIPHERRY OF THE ABOVE RIDGE. AS A RESULT, IT IS MOVING WEST NORTHWESTWARDS. IT IS EXPECTED TO BE STEERED BY THE ABOVE RIDGE RESULTING IN WEST-NORTHWESTWARD MOVEMENT FOR NEXT 2 DAYS AND THEN NEARLY WESTWARDS. THE ABOVE ENVIRONMENTAL CONDITIONS ARE FAVOURABLE FOR INTENSIFICATION OF THE SYSTEM INTO A CYCLONIC STORM GRADUALLY DURING NEXT 36 HOURS. MOST OF THE NWP MODELS LIKE ECMWF, IMD GFS, NCEP GFS, GEFS, NCUM AND NEPS ARE INDICATING INTENSIFICATION OF THE SYSTEM AND MOVEMENT TOWARDS SRILANKA COAST.

ARABIAN SEA:

THE LOW PRESSURE SYSTEM OVER BAY OF BENGAL AFTER MOVING ACROSS SRI LANKA IS LIKELY TO EMERGE INTO COMORIN AREA AND ADJOINING SOUTHEAST ARABIAN SEA ON 3RD DECEMBER.

SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER SOUTHEAST ARABIAN SEA AND MODERATE TO INTENSE CONVECTION OVER EAST CCENTRAL ARABIAN SEA.

PROBABILITY OF CYCLOGENESIS(FORMATION OF DEPRESSION) DURING NEXT 120 HRS :

24 HOURS	24-48 HOURS	48-72 HOURS	72-96 HOURS	96-120 HOURS
NIL	NIL	NIL	LOW	LOW

(SHASHI KANT)
Scientist-C, 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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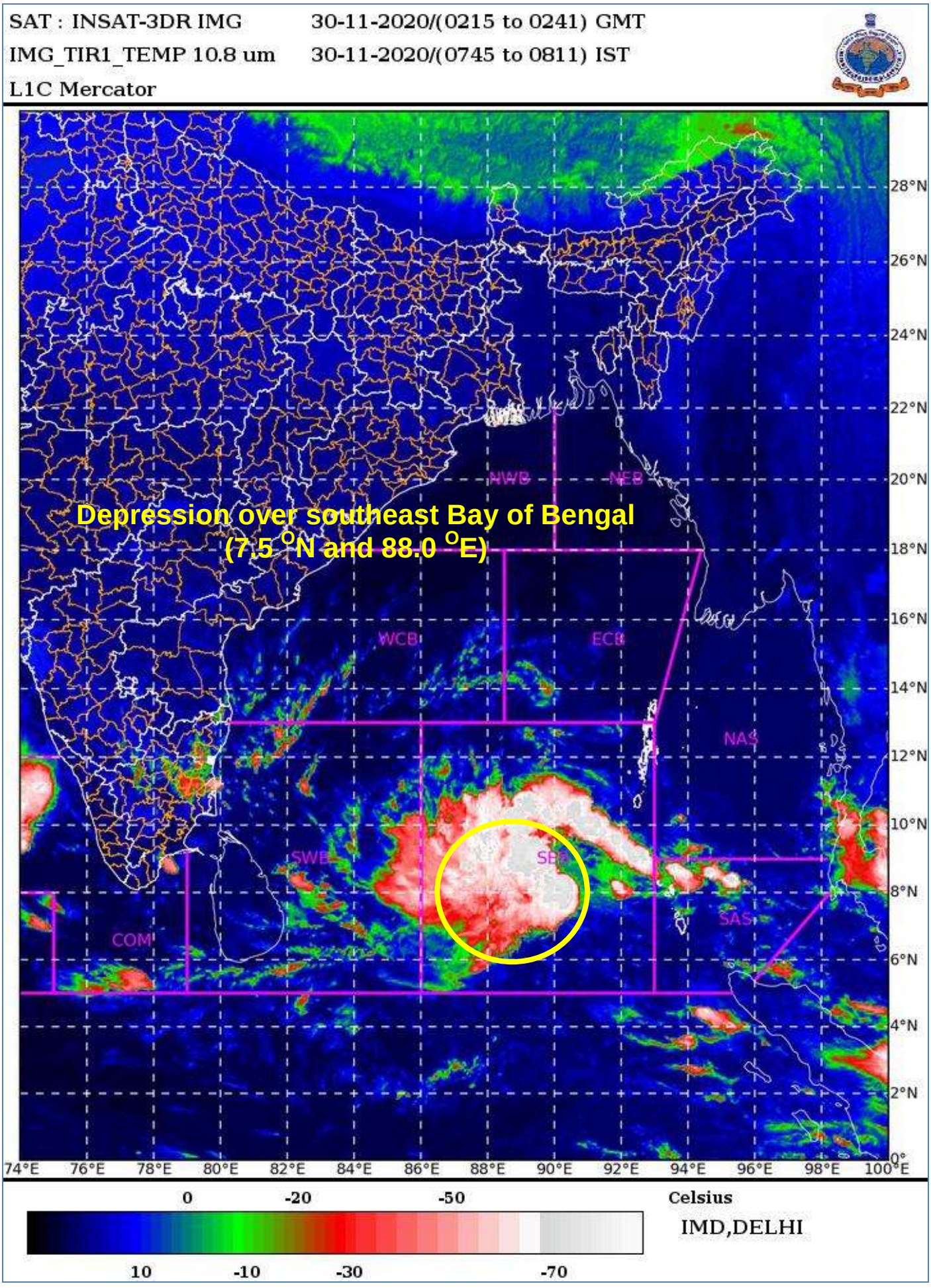

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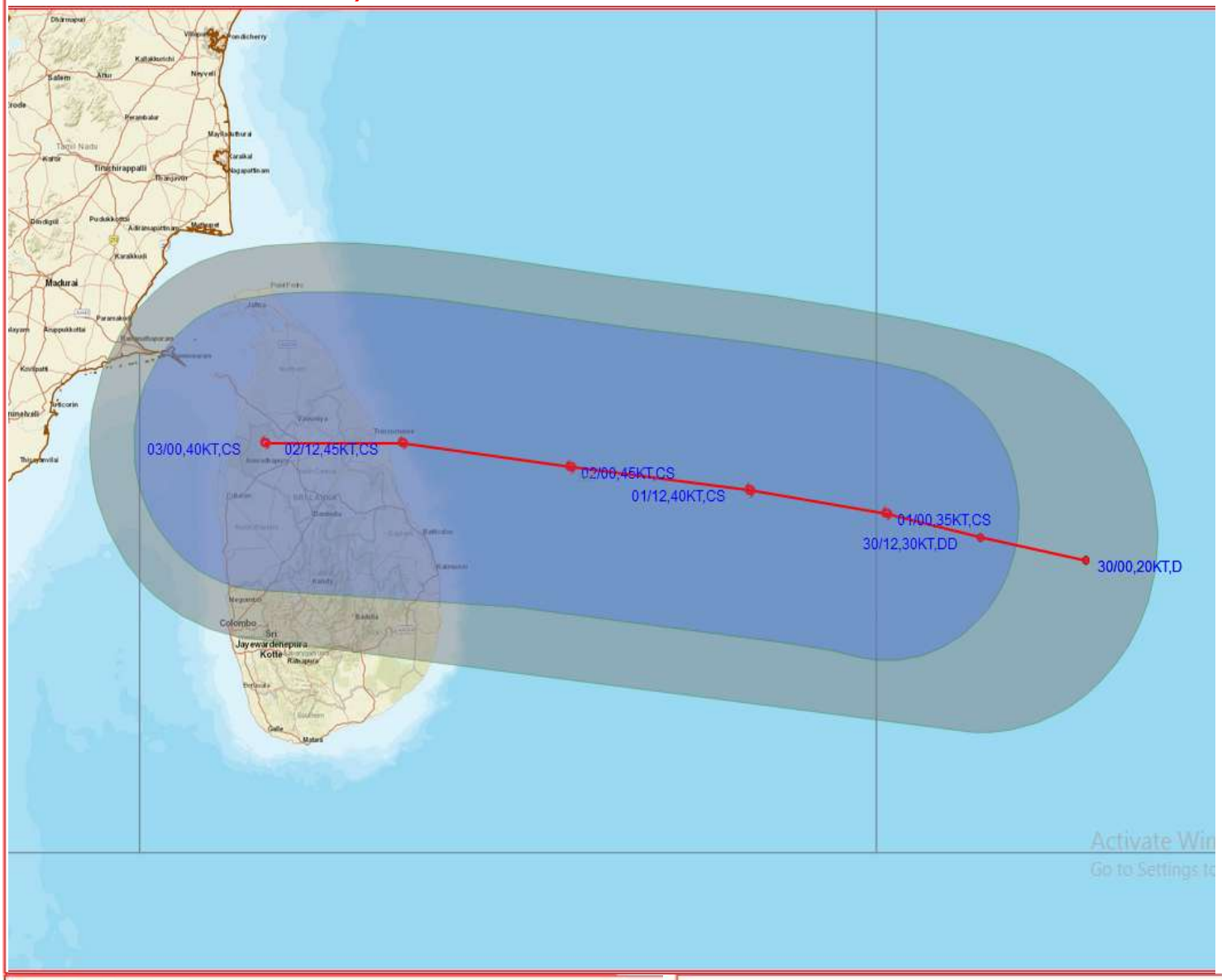
OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF DEPRESSION OVER SOUTHEAST BAY OF BENGAL BASED ON 0000 UTC OF 30TH NOVEMBER, 2020.



DATE/TIME IN UTC
IST=UTC + 0530
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VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
SuCS: SUPER CYCLONIC STORM (≥ 120 KT)

LESS THAN 34 KT
34-47 KT
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OBSERVED TRACK
FORECAST TRACK
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AREA OF MAXIMUM SUSTAINED WIND SPEED:
28-33 KT (52-61 KMPH)
34-49 KT (62-91 KMPH)
50-63 KT (92-117 KMPH)
≥ 64 KT (≥118 KMPH)

IMPACT OVER THE SEA

MSW (knot/kmph)	Impact	Action
28-33 (52-61)	Very rough seas	Total suspension of fishing operations
34-49 (62-91)	High to very high seas	Total suspension of fishing operations
50-63 (92-117)	Very high seas	Total suspension of fishing operations
≥ 64 (≥118)	Phenomenal	Total suspension of fishing operations

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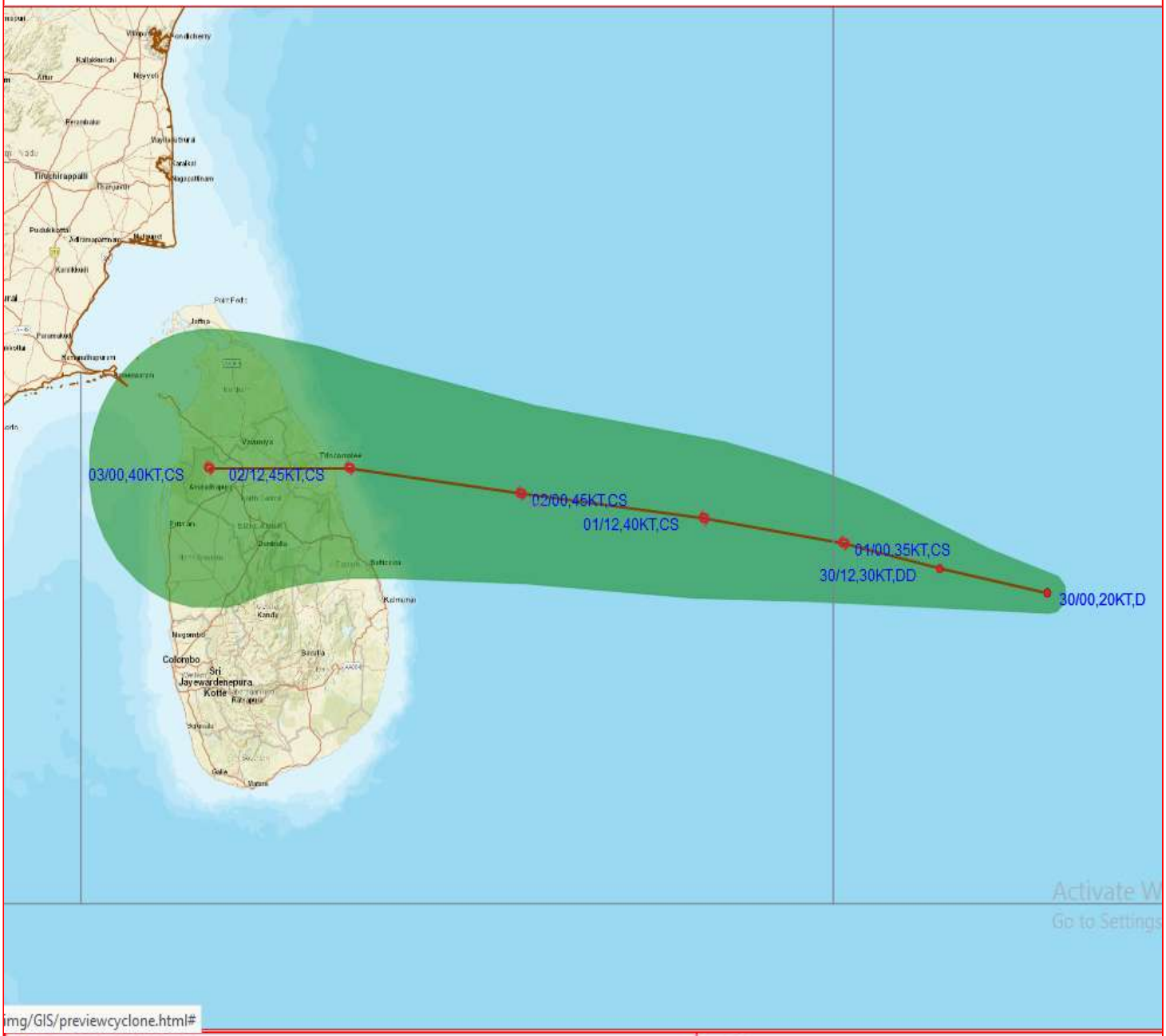

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REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI

TROPICAL WEATHER OUTLOOK

DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 30.11.2020

TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 0430 UTC OF 30.11.2020 BASED ON 0000 UTC OF 30.11.2020 .

Sub: DEPRESSION OVER SOUTHEAST BAY OF BENGAL & NEIGHBOURHOOD

LATEST SATELLITE AND SHIP OBSERVATIONS INDICATE THAT THE WELL MARKED LOW PRESSURE AREA OVER SOUTHEAST BAY OF BENGAL & NEIGHBOURHOOD CONCENTRATED INTO A DEPRESSION AND LAY CENTERED AT 0000 UTC OF 30TH NOVEMBER 2020 OVER SOUTHEAST BAY OF BENGAL NEAR LAT. 7.5° N AND LONG. 88.0°E, ABOUT 750 KM EAST-SOUTHEAST OF TRINCOMALEE (434180) AND 1150 KM EAST-SOUTHEAST OF KANYAKUMARI (433770). IT IS VERY LIKELY TO INTENSIFY FURTHER INTO A DEEP DEPRESSION DURING NEXT 24 HOURS. IT IS ALSO LIKELY TO INTENSIFY FURTHER INTO A CYCLONIC STORM. IT IS VERY LIKELY TO MOVE WEST-NORTHWESTWARDS AND CROSS SRI LANKA COAST BETWEEN LATITUDE 7.5^{0} N AND 9.0^{0} N AROUND 1200 UTC OF 2ND DECEMBER. IT IS VERY LIKE TO MOVE NEARLY WESTWARDS THEREAFTER AND EMERGE INTO COMORIN AREA ON3RD DECEMBER MORNING. FORECAST TRACK AND INTENSITY ARE GIVEN BELOW:

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REMARKS:

CONSIDERING THE SEA CONDITIONS, SST IS AROUND 29-30°C OVER SOUTHEAST BAY OF BENGAL (BOB). THE TROPICAL CYCLONE HEAT POTENTIAL IS ABOUT 80-100 KJ/CM^2 OVER SOUTHWEST BOB. LOWER LEVEL POSITIVE RELATIVE VORTICITY (100X10^{-6}S^{-1}) PREVAILS AROUND SYSTEM CENTRE. UPPER LEVEL POSITIVE DIVERGENCE OF 20X10^{-5}S^{-1} PREVAILS AROUND THE SYSTEM CENTRE. THE LOWER LEVEL CONVERGENCE IS 10 X 20^{-5}S^{-1} AROUND SYSTEM CENTRE. THE VERTICAL WIND SHEAR (VWS) IS LOW TO MODERATE (05-15 KTS) OVER THE REGION. THE UPPER TROPOSPHERIC RIDGE AT UPPER AND MIDDLE TROPOSPHERIC LEVELS RUNS ALONG 17-18°N OVER THE BOB. THE SYSTEM LIES IN THE SOUTHERN PERIPHERRY OF THE ABOVE RIDGE. AS A RESULT, IT IS MOVING WEST NORTHWESTWARDS. IT IS EXPECTED TO BE STEERED BY THE ABOVE RIDGE RESULTING IN WEST-NORTHWESTWARD MOVEMENT FOR NEXT 2 DAYS AND THEN NEARLY WESTWARDS. THE ABOVE ENVIRONMENTAL CONDITIONS ARE FAVOURABLE FOR INTENSIFICATION OF THE SYSTEM INTO A CYCLONIC STORM GRADUALLY DURING NEXT 36 HOURS. MOST OF THE NWP MODELS LIKE ECMWF, IMD GFS, NCEP GFS, GEFS, NCUM AND NEPS ARE INDICATING INTENSIFICATION OF THE SYSTEM AND MOVEMENT TOWARDS SRILANKA COAST.

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PROBABILITY OF CYCLOGENESIS(FORMATION OF DEPRESSION) DURING NEXT 120 HRS :

24 HOURS	24-48 HOURS	48-72 HOURS	72-96 HOURS	96-120 HOURS
NIL	NIL	NIL	LOW	LOW

(SHASHI KANT)
Scientist-C, RSMC, New Delhi

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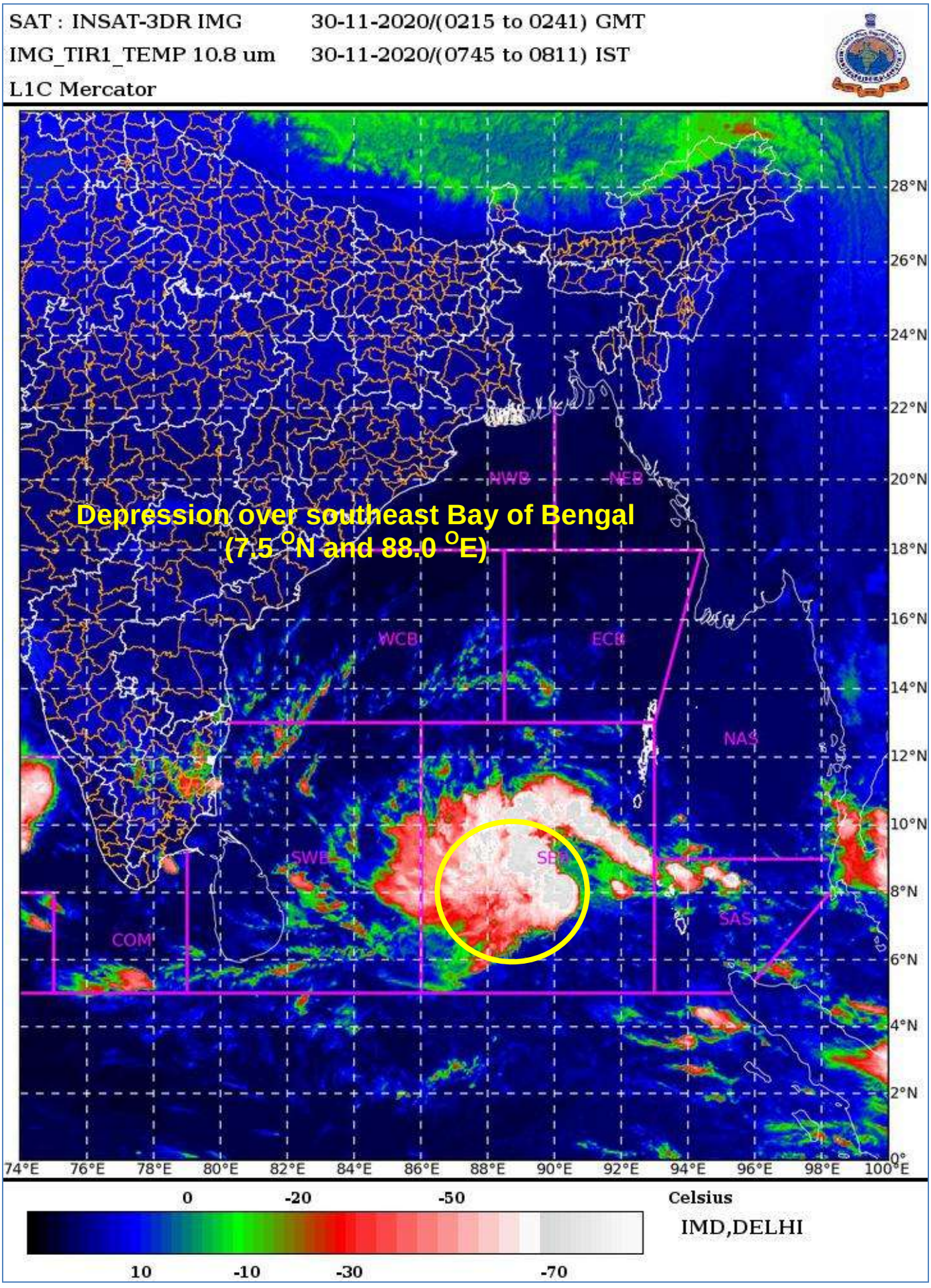

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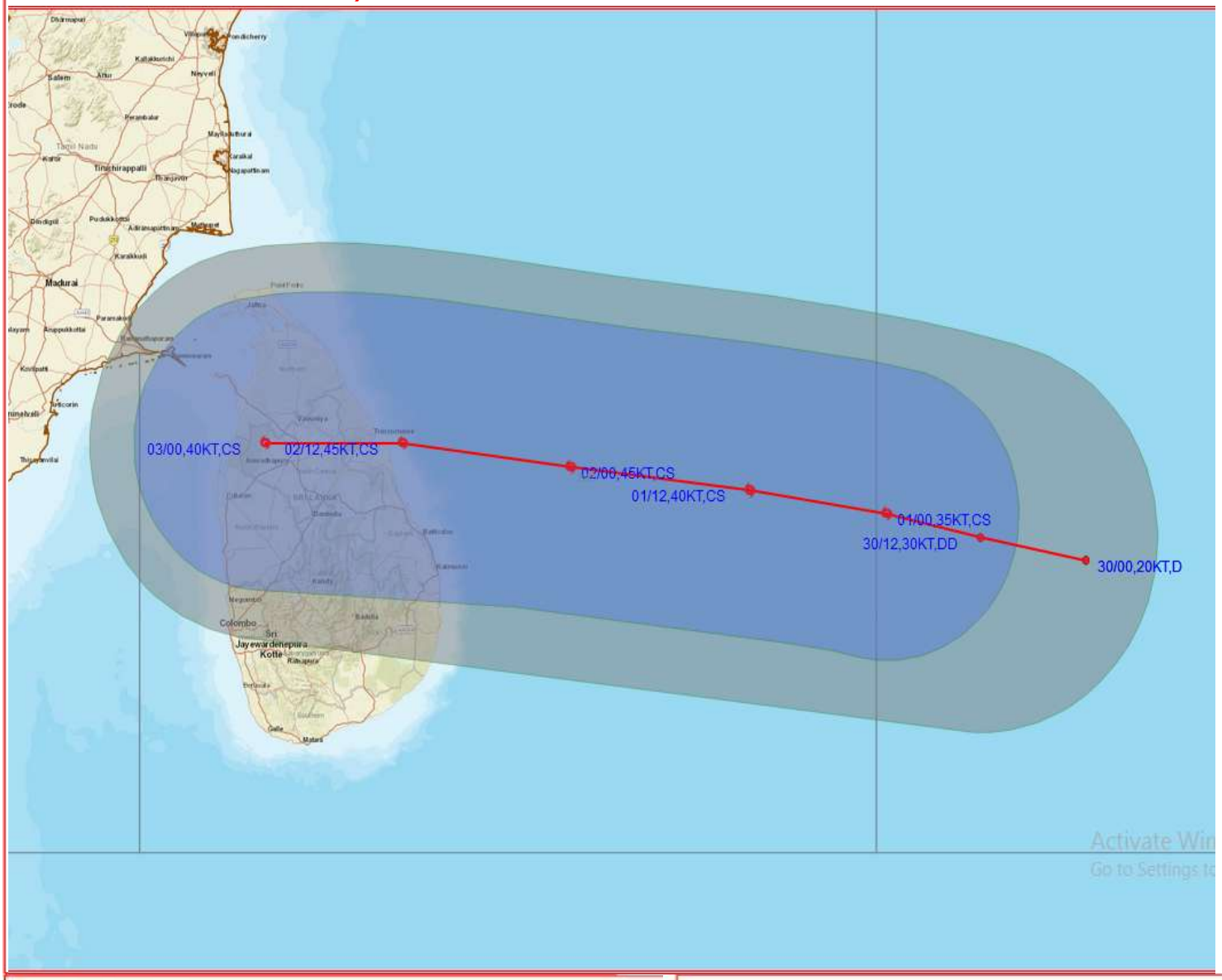

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34-49 KT (62-91 KMPH)
50-63 KT (92-117 KMPH)
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IMPACT OVER THE SEA

MSW (knot/kmph)	Impact	Action
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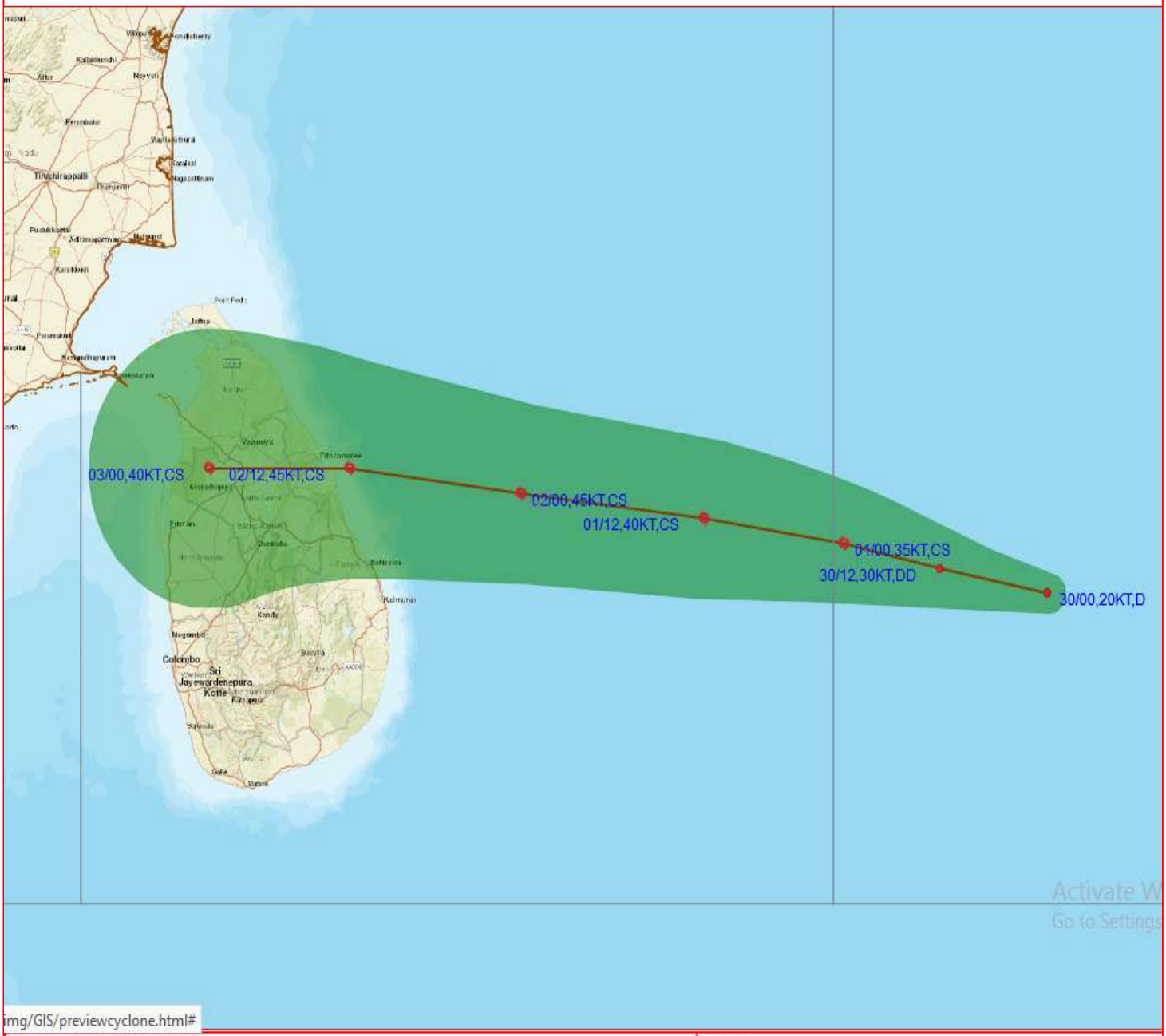

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REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI
SPECIAL TROPICAL WEATHER OUTLOOK

DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 30.11.2020

SPECIAL TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 0730 UTC OF 30.11.2020 BASED ON 0300 UTC OF 30.11.2020 .

Sub: DEPRESSION OVER SOUTHEAST BAY OF BENGAL & NEIGHBOURHOOD

THE **DEPRESSION** OVER SOUTHEAST BAY OF BENGAL MOVED WEST-NORTHWESTWARDS DURING PAST 3 HOURS AND LAY CENTERED AT 0300 UTC OF TODAY, THE 30TH NOVEMBER 2020 OVER THE SAME REGION NEAR LAT. 7.7° N AND LONG. 87.70°E, ABOUT 710 KM EAST-SOUTHEAST OF TRINCOMALEE (434180) AND 1120 KM EAST-SOUTHEAST OF KANNIYAKUMARI (433770). IT IS VERY LIKELY TO INTENSIFY FURTHER INTO A DEEP DEPRESSION DURING NEXT 12 HOURS AND INTO A CYCLONIC STORM DURING SUBSEQUENT 24 HOURS. IT IS VERY LIKELY TO MOVE WEST-NORTHWESTWARDS AND CROSS SRI LANKA COAST BETWEEN LATITUDE 7.5^{0} N AND 9.0^{0} N DURING EVENING-NIGHT(1200-1800 UTC) OF 2ND DECEMBER. IT IS VERY LIKE TO MOVE NEARLY WESTWARDS THEREAFTER AND EMERGE INTO COMORIN AREA ON 3RD DECEMBER MORNING.

Forecast track and intensity are given below:

Date/Time(UTC)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
30.11.20/0300	7.7/87.7	45-55 gusting to 65	Depression
30.11.20/1200	8.0/86.9	50-60 gusting to 70	Deep Depression
01.12.20/0000	8.2/86.0	60-70 gusting to 80	Cyclonic Storm
01.12.20/1200	8.4/84.7	65-75 gusting to 85	Cyclonic Storm
02.12.20/0000	8.5/83.0	70-80 gusting to 90	Cyclonic Storm
02.12.20/1200	8.6/81.4	70-80 gusting to 90	Cyclonic Storm
03.12.20/0000	8.5/79.5	60-70 gusting to 80	Cyclonic Storm

THE ESTIMATED MAXIMUM SUSTAINED WIND SPEED IS 25 KNOTS GUSTING TO 35 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS 1002 HPA. THE SEA CONDITION IS ROUGH TO VERY ROUGH AROUND THE SYSTEM CENTRE.

AS PER SATELLITE IMAGERY, THE INTENSITY OF THE SYSTEM IS T1.5/1.5. BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER SOUTH EAST BAY OF BENGAL AND NEIGHBOURHOOD BETWEEN LAT 6.0N TO 11.5N LONG 84.0E TO 91.0 IN ASSOCIATION WITH THE SYSTEM. MINIMUN CTT IS MINUS 86^{0} C.

STORM SURGE GUIDNACE FOR SRILANKA COAST: STORM SURGE OF ABOUT 1 METER HEIGHT ABOVE THE ASTRONOMICAL TIDE IS LIKELY TO INUNDENT LOW LYING AREAS OF EAST SRILANKA COAST DURING LANDFALL.

REMARKS:

CONSIDERING THE SEA CONDITIONS, SST IS AROUND 29-30°C OVER SOUTHEAST BAY OF BENGAL (BOB). THE TROPICAL CYCLONE HEAT POTENTIAL IS ABOUT 80-100 KJ/CM^2 OVER SOUTHWEST BOB. LOWER LEVEL POSITIVE RELATIVE VORTICITY ($100X10^{-6}S^{-1}$) PREVAILS TO THE SOUTHEAST OF THE SYSTEM CENTRE. THE UPPER LEVEL POSITIVE DIVERGENCE HAS INCREASED AND IS AROUND $50X10^{-5}S^{-1}$ TO THE NORTHEAST OF THE SYSTEM CENTRE. THE LOWER LEVEL CONVERGENCE HAS INCREASED AND IS AROUND 20 X $20^{-5}S^{-1}$ TO THE SOUTHEAST OF THE SYSTEM CENTRE. THE VERTICAL WIND SHEAR (VWS) IS MODERATE (15-20 KTS) OVER THE REGION. THE UPPER TROPOSPHERIC RIDGE AT UPPER AND MIDDLE TROPOSPHERIC LEVELS RUNS ALONG 11.5°N OVER THE BOB. THE SYSTEM LIES IN THE SOUTHERN PERIPHERRY OF THE ABOVE RIDGE. AS A RESULT, IT IS MOVING WEST NORTHWESTWARDS. IT IS EXPECTED TO BE STEERED BY THE ABOVE RIDGE RESULTING IN WEST-NORTHWESTWARD MOVEMENT FOR NEXT 2 DAYS AND THEN NEARLY WESTWARDS. THE ABOVE ENVIRONMENTAL CONDITIONS ARE FAVOURABLE FOR INTENSIFICATION OF THE SYSTEM INTO A CYCLONIC STORM GRADUALLY DURING NEXT 24 HOURS. MOST OF THE NWP MODELS LIKE ECMWF, IMD GFS, NCEP GFS, GEFS, NCUM AND NEPS ARE INDICATING INTENSIFICATION OF THE SYSTEM (UPTO DEEP DEPRESSION/CYCLONIC STORM) AND WEST-NORTHWESTWARDS MOVEMENT. THE SYSTEM WOULD CROSS SRILANKA COAST.

THERE IS ANOTHER CYCLONIC VORTEX OVER SOUTH INDIAN OCEAN NEAR 10.5^0N/89.0^0E WITH ESTIMATED MAXIMUM SUSTAINED WIND SPEED OF 25 KNOTS. THESE TWO VORTICES ON EITHER SIDE OF THE EQUATOR ARE INTERACTING WITH EACH OTHER.

MOST OF THE NWP MODELS ARE ALSO INDICATING THAT THE SYSTEM WOULD CROSS SRILANKA COAST AS PER DIFFERENT MODELS AND EMERGE INTO COMORIN AREA AFTER MOVING ACROSS SRI LANKA. HOWEVER, THERE IS LARGE VARIATION AMONG THE MODELS AND HENCE LACK OF CONSENSUS ABOUT THE TRACK AND INTENSITY OF THE SYSTEM OVER COMORIN AND ADJOINING AREAS. WHILE MOST OF THE MODELS SUGGEST WEST-NORTHWESTWARDS MOVEMENT SKIRTING SOUTH TAMILNADU-SOUTH KERALA COASTS, A FEW MODELS ARE ALSO INDICATING THE SYSTEM TO TOUCH EXTREME SOUTHERN TIP OF KERALA AND TAMILNADU. ALSO THE TIME OF COMING CLOSER TO SOUTHERN TIP OF KERALA AND TAMILNADU VARIES LARGELY FROM 3^{RD}-6^{TH} DECEMBER. CONSIDERING THE OCEANIC AND ENVIRONMENTAL CONDITIONS OVER COMORIN AREA, THE SEA CONDITIONS ARE FAVOURABLE FOR INTENSIFICATION DUE TO HIGHER SST (29-30^0C) AND HIGHER OCEAN HEAT CONTENT (80-100 KJ/CM^2). THE VERTICAL WIND SHEAR OVER COMORIN AREA IS ALSO EXPECTED TO BE LOW TO MODERATE FAVOURING INTENSIFICATION.

ARABIAN SEA:

THE CURRENT DEPRESSION OVER BAY OF BENGAL AFTER MOVING ACROSS SRI LANKA IS LIKELY TO EMERGE INTO COMORIN AREA ON 3^{RD} DECEMBER MORNING (0000-0300 UTC).

SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LAY OVER SOUTHEAST ARABIAN SEA AND ADJOINING COMORIN-MALDIVES AREA.

PROBABILITY OF CYCLOGENESIS(FORMATION OF DEPRESSION) DURING NEXT 120 HRS :

24 HOURS	24-48 HOURS	48-72 HOURS	72-96 HOURS	96-120 HOURS
NIL	NIL	MOD	HIGH	HIGH

(R.K. JENAMANI)
Scientist-F, RSMC, New Delhi

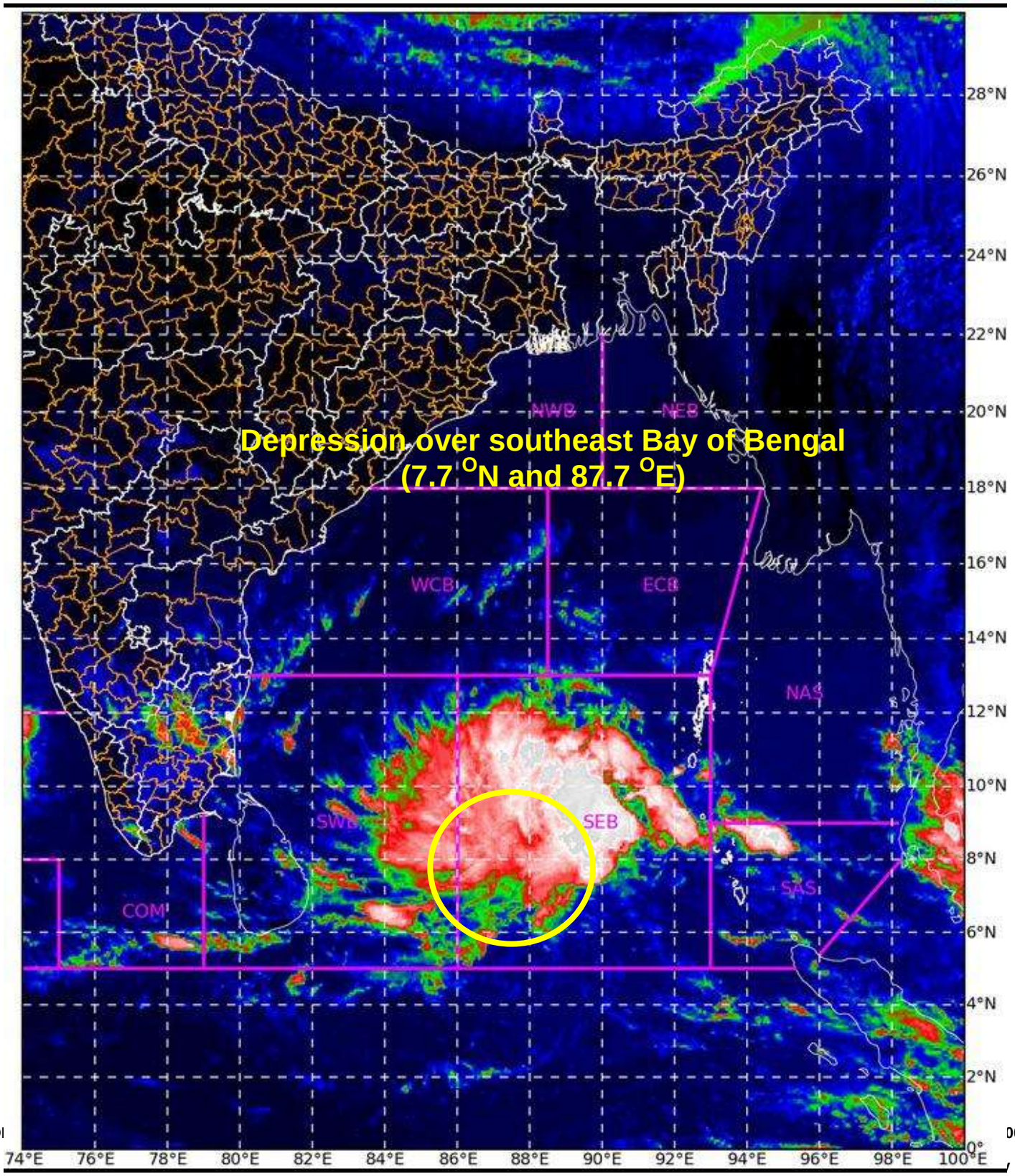
PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION):NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

- **This is a guidance Bulletin for the WMO/ESCAP Panel Member countries,. Please visit respective National websites for Country specific Bulletins**

SAT : INSAT-3D IMG 30-11-2020/(0530 to 0557) GMT

IMG_TIR1_TEMP 10.8 um 30-11-2020/(1100 to 1127) IST

L1C Mercator

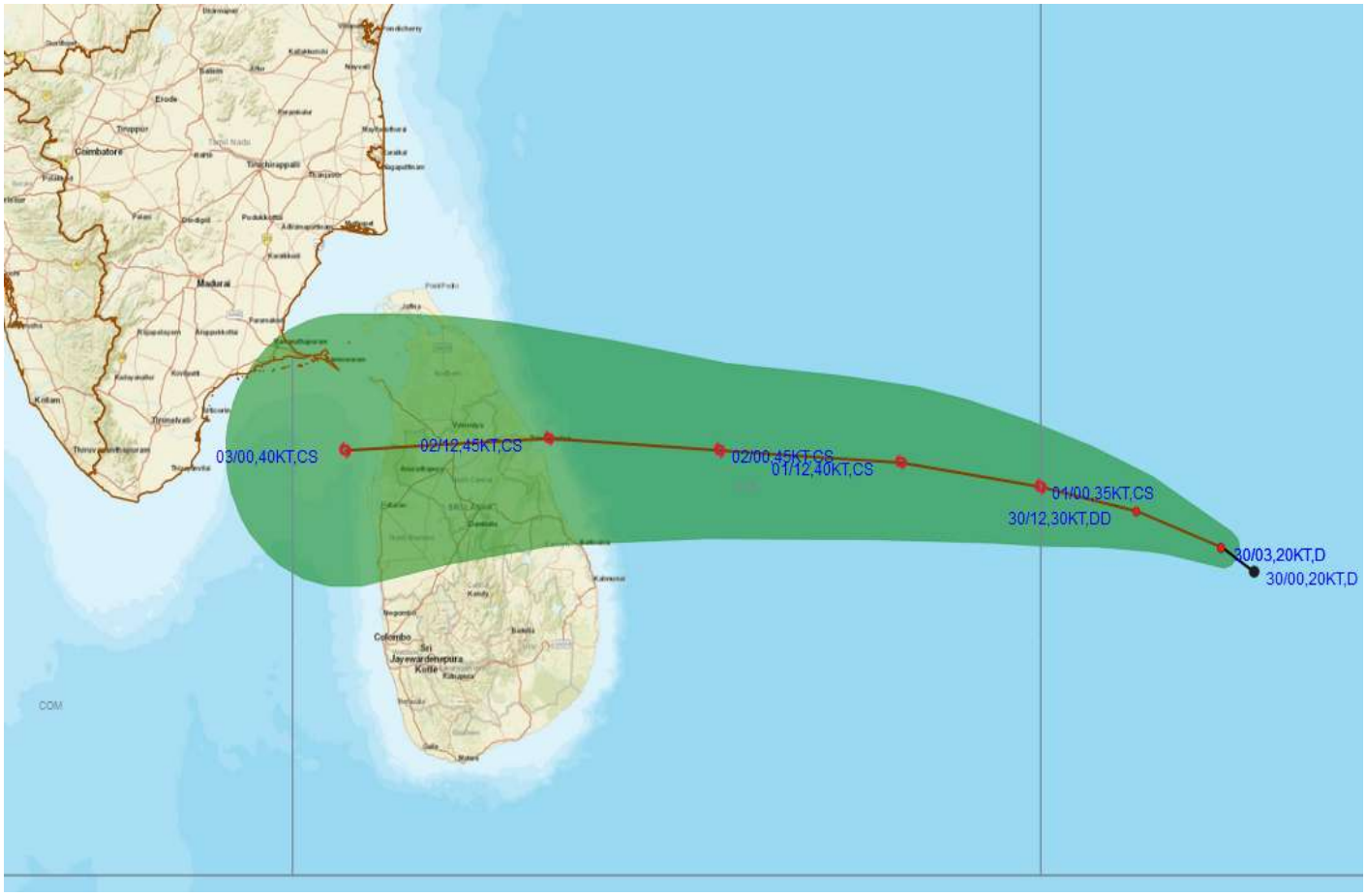


0 -20 -50 Celsius

IMD,DELHI

PROI 00%

OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINITY OF DEPRESSION OVER SOUTHEAST BAY OF BENGAL BASED ON 0300UTC OF 30TH NOVEMBER, 2020.



DATE/TIME IN UTC
IST=UTC + 0530
L: LOW PRESSURE AREA
WML: WELL MARKED LOW PRESSURE AREA
D: DEPRESSION (17-27 KT)
DD: DEEP DEPRESSION (28-33 KT)
CS: CYCLONIC STORM (34-47 KT)
SCS: SEVERE CYCLONIC STORM (48-63KT)
VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
SuCS: SUPER CYCLONIC STORM (≥ 120 KT)

LESS THAN 34 KT
34-47 KT
≥ 48 KT
OBSERVED TRACK
FORECAST TRACK
CONE OF UNCERTAINTY

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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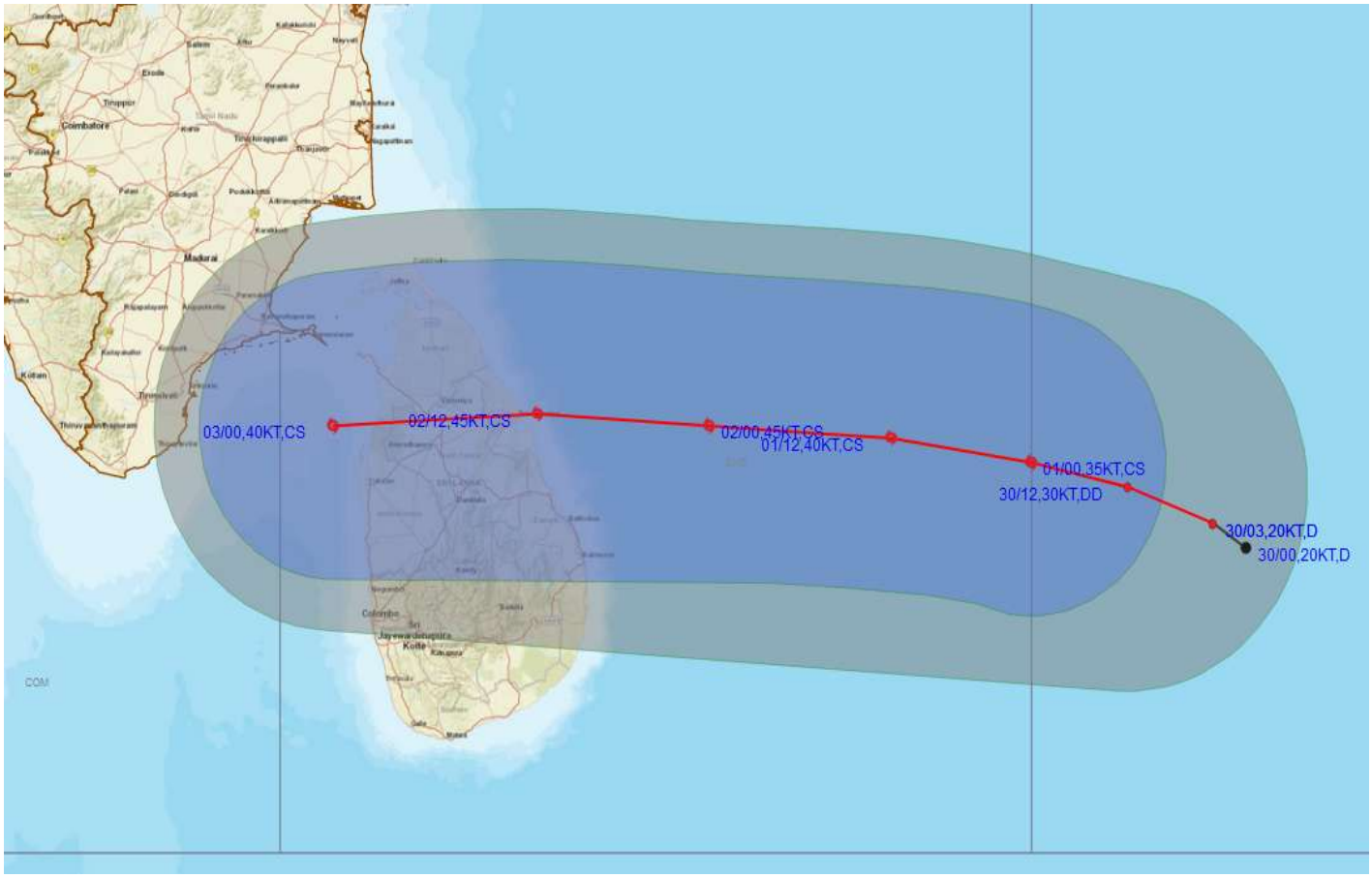
OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF DEPRESSION OVER SOUTHEAST BAY OF BENGAL BASED ON 0300UTC OF 30TH NOVEMBER, 2020.



DATE/TIME IN UTC
IST=UTC + 0530
L: LOW PRESSURE AREA
WML: WELL MARKED LOW PRESSURE AREA
D: DEPRESSION (17-27 KT)
DD: DEEP DEPRESSION (28-33 KT)
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SCS: SEVERE CYCLONIC STORM (48-63KT)
VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
SuCS: SUPER CYCLONIC STORM (≥ 120 KT)

LESS THAN 34 KT
34-47 KT
≥ 48 KT
OBSERVED TRACK
FORECAST TRACK
CONE OF UNCERTAINTY
AREA OF MAXIMUM SUSTAINED WIND SPEED:
28-33 KT (52-61 KMPH)
34-49 KT (62-91 KMPH)
50-63 KT (92-117 KMPH)
≥ 64 KT (≥118 KMPH)

IMPACT OVER THE SEA

MSW (knot/kmph)	Impact	Action
28-33 (52-61)	Very rough seas	Total suspension of fishing operations
34-49 (62-91)	High to very high seas	Total suspension of fishing operations
50-63 (92-117)	Very high seas	Total suspension of fishing operations
≥ 64 (≥118)	Phenomenal	Total suspension of fishing operations

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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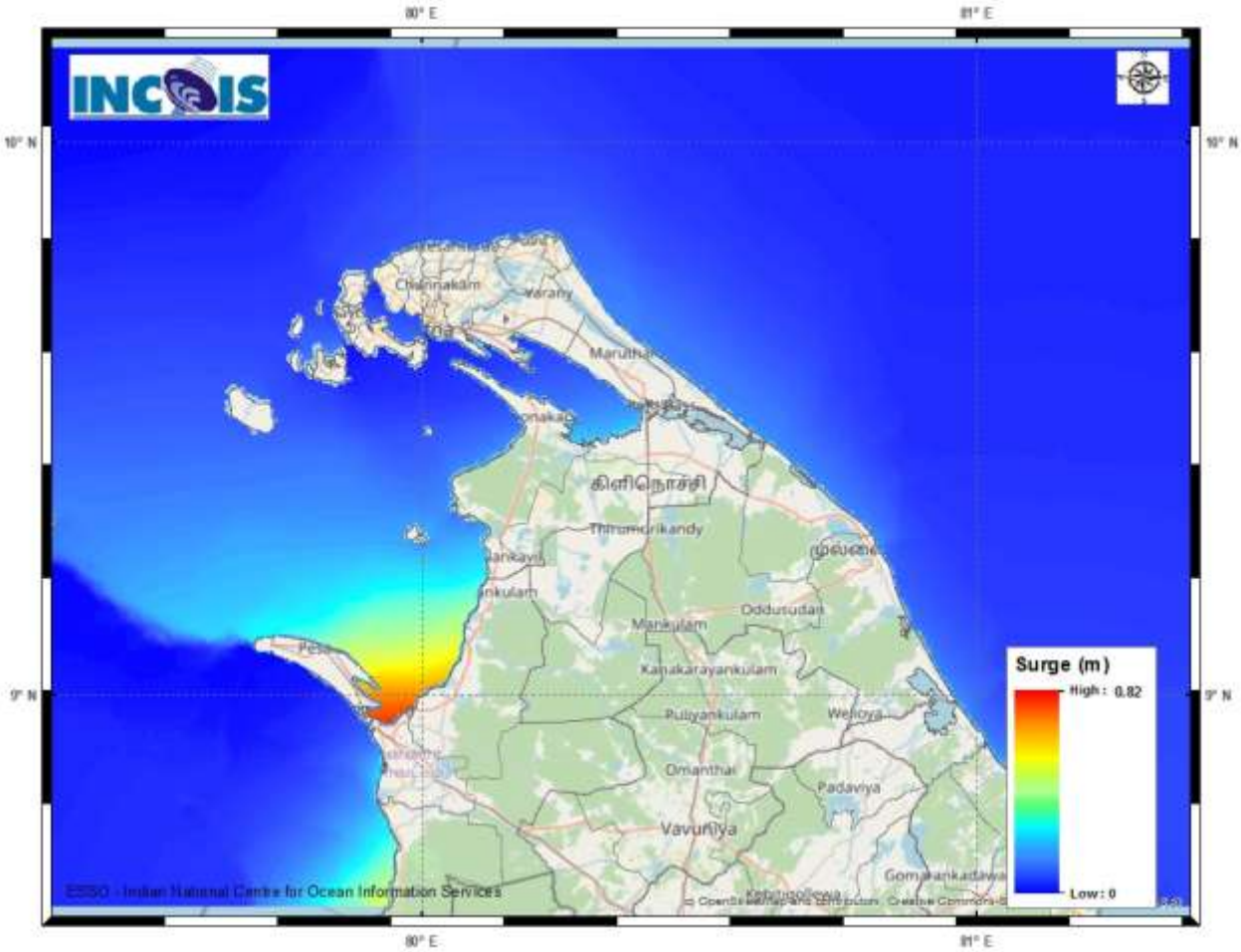

STORM SURGE FORECAST BY INCOIS MODEL

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 TROPICAL CYCLONES NEW DELHI DATED 30.11.2020

SPECIAL TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 0930 UTC OF 30.11.2020 BASED ON 0600 UTC OF 30.11.2020 .

Sub: DEPRESSION OVER SOUTHEAST BAY OF BENGAL & NEIGHBOURHOOD

THE **DEPRESSION** OVER SOUTHEAST BAY OF BENGAL MOVED WEST-NORTHWESTWARDS AT A SPEED OF 12KMPH DURING PAST 6 HOURS AND LAY CENTERED AT 0600 UTC OF TODAY, THE 30TH NOVEMBER 2020 OVER THE SAME REGION NEAR LAT. 7.8° N AND LONG. 87.40°E, ABOUT 680 KM EAST-SOUTHEAST OF TRINCOMALEE (434180) AND 1090 KM EAST OF KANNIYAKUMARI (433770). IT IS VERY LIKELY TO INTENSIFY FURTHER INTO A DEEP DEPRESSION DURING NEXT 12 HOURS AND INTO A CYCLONIC STORM DURING SUBSEQUENT 24 HOURS. IT IS VERY LIKELY TO MOVE WEST-NORTHWESTWARDS AND CROSS SRI LANKA COAST BETWEEN LATITUDE 7.5^{0} N AND 9.0^{0} N DURING EVENING-NIGHT(1200-1800 UTC) OF 2ND DECEMBER. IT IS VERY LIKE TO MOVE NEARLY WESTWARDS THEREAFTER AND EMERGE INTO COMORIN AREA ON 3RD DECEMBER MORNING.

Forecast track and intensity are given below:

DATE/TIME(UTC)	POSITION (LAT. ^{0}N/ LONG. ^{0}E)	MAXIMUM SUSTAINED SURFACE WIND SPEED (KMPH)	CATEGORY OF CYCLONIC DISTURBANCE
30.11.20/0600	7.8/87.4	45-55 GUSTING TO 65	DEPRESSION
30.11.20/1800	8.1/86.6	50-60 GUSTING TO 70	DEEP DEPRESSION
01.12.20/0600	8.4/85.3	60-70 GUSTING TO 80	CYCLONIC STORM
01.12.20/1800	8.5/83.8	65-75 GUSTING TO 85	CYCLONIC STORM
02.12.20/0600	8.6/82.2	70-80 GUSTING TO 90	CYCLONIC STORM
02.12.20/1800	8.6/80.5	70-80 GUSTING TO 90	CYCLONIC STORM
03.12.20/0600	8.4/79.3	60-70 GUSTING TO 80	CYCLONIC STORM

THE ESTIMATED MAXIMUM SUSTAINED WIND SPEED IS 25 KNOTS GUSTING TO 35 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS 1002 HPA. THE SEA CONDITION IS ROUGH TO VERY ROUGH AROUND THE SYSTEM CENTRE.

AS PER SATELLITE IMAGERY, THE INTENSITY OF THE SYSTEM IS T1.5/1.5. BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER SOUTH EAST BAY OF BENGAL AND NEIGHBOURHOOD BETWEEN LAT 6.0N TO 11.5N LONG 84.0E TO 91.0 IN ASSOCIATION WITH THE SYSTEM. MINIMUN CTT IS MINUS 86^{0} 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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STORM SURGE GUIDNACE FOR SRILANKA COAST: STORM SURGE OF ABOUT 1 METER HEIGHT ABOVE THE ASTRONOMICAL TIDE IS LIKELY TO INUNDENT LOW LYING AREAS OF EAST SRILANKA COAST DURING LANDFALL.

REMARKS:

CONSIDERING THE SEA CONDITIONS, SST IS AROUND 29-30°C OVER SOUTHEAST BAY OF BENGAL (BOB). THE TROPICAL CYCLONE HEAT POTENTIAL IS ABOUT 80-100 KJ/CM^2 OVER SOUTHWEST BOB. LOWER LEVEL POSITIVE RELATIVE VORTICITY (100X10^{-6}S^{-1}) PREVAILS TO THE SOUTHEAST OF THE SYSTEM CENTRE. THE UPPER LEVEL POSITIVE DIVERGENCE HAS INCREASED AND IS AROUND 50X10^{-5}S^{-1} TO THE NORTHEAST OF THE SYSTEM CENTRE. THE LOWER LEVEL CONVERGENCE HAS INCREASED AND IS AROUND 20 X 20^{-5}S^{-1} TO THE SOUTHEAST OF THE SYSTEM CENTRE. THE VERTICAL WIND SHEAR (VWS) IS MODERATE (15-20 KTS) OVER THE REGION. THE UPPER TROPOSPHERIC RIDGE AT UPPER AND MIDDLE TROPOSPHERIC LEVELS RUNS ALONG 11.5°N OVER THE BOB. THE SYSTEM LIES IN THE SOUTHERN PERIPHERRY OF THE ABOVE RIDGE. AS A RESULT, IT IS MOVING WEST NORTHWESTWARDS. IT IS EXPECTED TO BE STEERED BY THE ABOVE RIDGE RESULTING IN WEST-NORTHWESTWARD MOVEMENT FOR NEXT 2 DAYS AND THEN NEARLY WESTWARDS. THE ABOVE ENVIRONMENTAL CONDITIONS ARE FAVOURABLE FOR INTENSIFICATION OF THE SYSTEM INTO A CYCLONIC STORM GRADUALLY DURING NEXT 24 HOURS. MOST OF THE NWP MODELS LIKE ECMWF, IMD GFS, NCEP GFS, GEFS, NCUM AND NEPS ARE INDICATING INTENSIFICATION OF THE SYSTEM (UPTO DEEP DEPRESSION/CYCLONIC STORM) AND WEST-NORTHWESTWARDS MOVEMENT. THE SYSTEM WOULD CROSS SRILANKA COAST.

THERE IS ANOTHER CYCLONIC VORTEX OVER SOUTH INDIAN OCEAN NEAR 10.5^{0}N/89.0^{0}E WITH ESTIMATED MAXIMUM SUSTAINED WIND SPEED OF 25 KNOTS. THESE TWO VORTICES ON EITHER SIDE OF THE EQUATOR ARE INTERACTING WITH EACH OTHER.

MOST OF THE NWP MODELS ARE ALSO INDICATING THAT THE SYSTEM WOULD CROSS SRILANKA COAST AS PER DIFFERENT MODELS AND EMERGE INTO COMORIN AREA AFTER MOVING ACROSS SRI LANKA. HOWEVER, THERE IS LARGE VARIATION AMONG THE MODELS AND HENCE LACK OF CONSENSUS ABOUT THE TRACK AND INTENSITY OF THE SYSTEM OVER COMORIN AND ADJOINING AREAS. WHILE MOST OF THE MODELS SUGGEST WEST-NORTHWESTWARDS MOVEMENT SKIRTING SOUTH TAMILNADU-SOUTH KERALA COASTS, A FEW MODELS ARE ALSO INDICATING THE SYSTEM TO TOUCH EXTREME SOUTHERN TIP OF KERALA AND TAMILNADU. ALSO THE TIME OF COMING CLOSER TO SOUTHERN TIP OF KERALA AND TAMILNADU VARIES LARGELY FROM 3RD-6TH DECEMBER. CONSIDERING THE OCEANIC AND ENVIRONMENTAL CONDITIONS OVER COMORIN AREA, THE SEA CONDITIONS ARE FAVOURABLE FOR INTENSIFICATION DUE TO HIGHER SST (29-30^{0}C) AND HIGHER OCEAN HEAT CONTENT (80-100 KJ/CM^2). THE VERTICAL WIND SHEAR OVER COMORIN AREA IS ALSO EXPECTED TO BE LOW TO MODERATE FAVOURING INTENSIFICATION.

ARABIAN SEA:

THE SYSTEM OVER BAY OF BENGAL AFTER MOVING ACROSS SRI LANKA IS LIKELY TO EMERGE INTO COMORIN AREA ON 3RD DECEMBER MORNING (0000-0300 UTC).

SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LAY OVER SOUTHEAST ARABIAN SEA AND ADJOINING COMORIN-MALDIVES AREA.

PROBABILITY OF CYCLOGENESIS(FORMATION OF DEPRESSION) DURING NEXT 120 HRS :

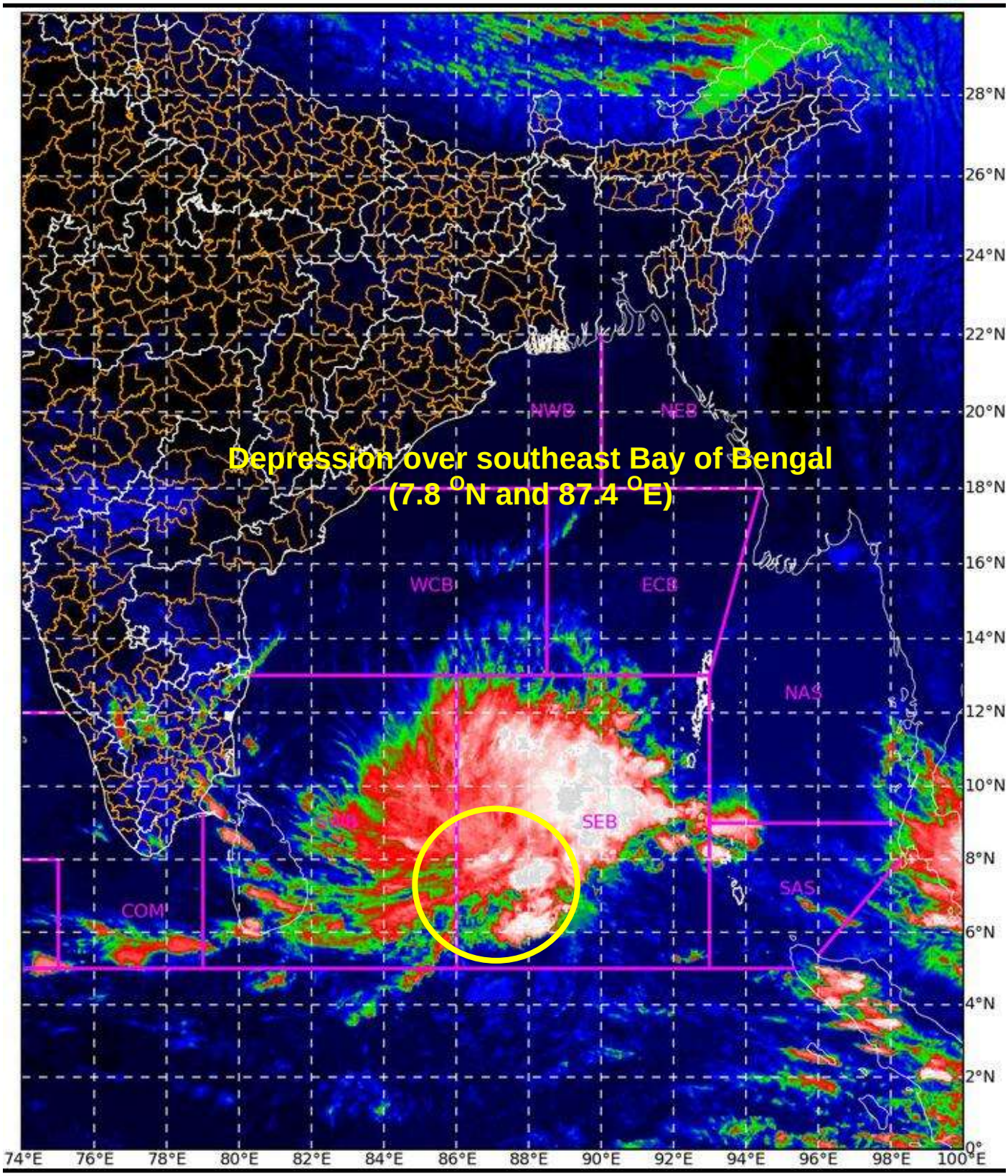
24 HOURS	24-48 HOURS	48-72 HOURS	72-96 HOURS	96-120 HOURS
NIL	NIL	MOD	HIGH	HIGH

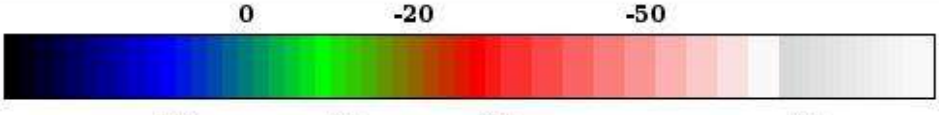
(R.K. JENAMANI)
Scientist-F, RSMC, New Delhi

SAT : INSAT-3DR IMG 30-11-2020/(0845 to 0911) GMT

IMG_TIR1_TEMP 10.8 um 30-11-2020/(1415 to 1441) IST

L1C Mercator





Celsius

IMD,DELHI

PROB)%

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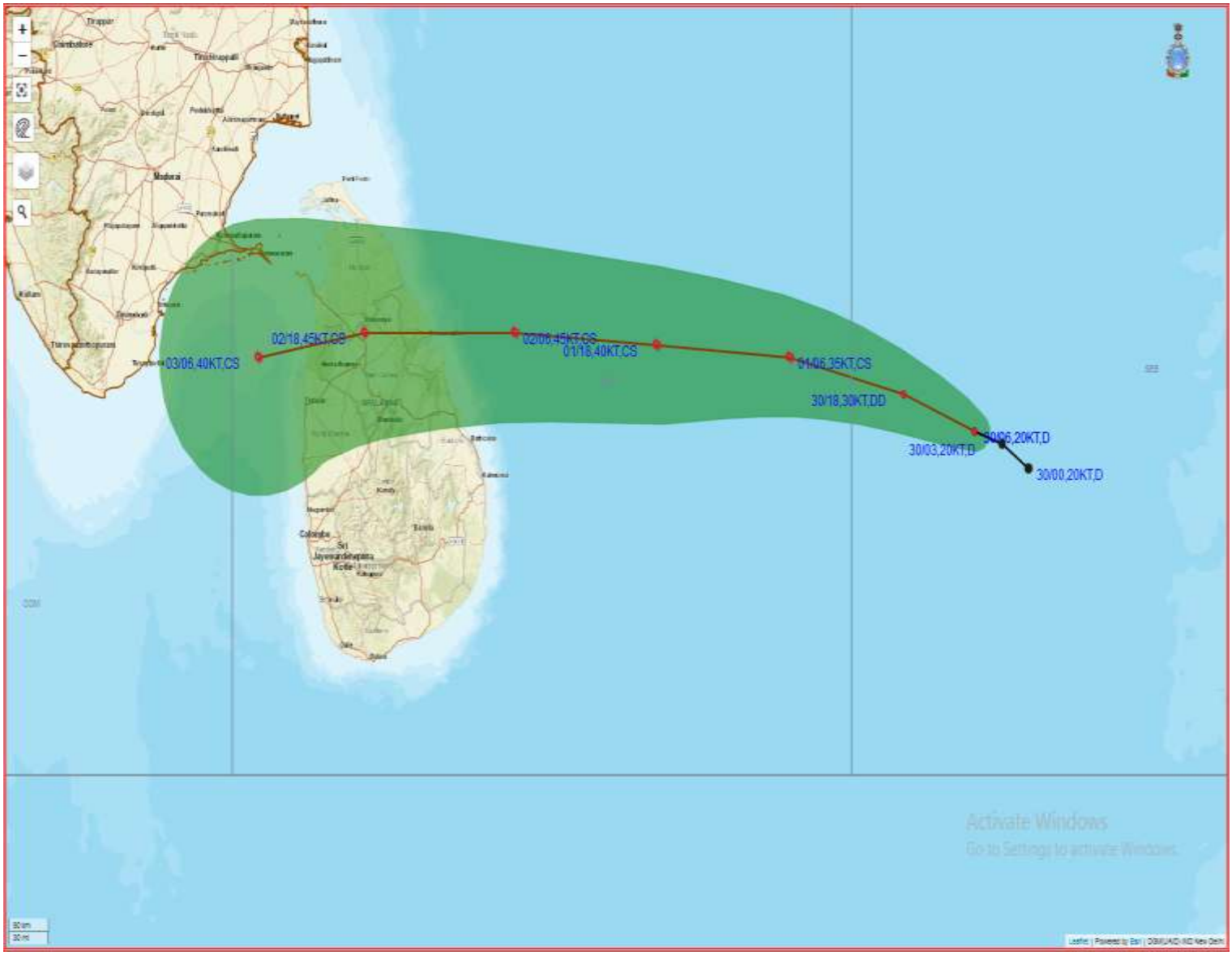
OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINITY OF DEPRESSION OVER SOUTHEAST BAY OF BENGAL BASED ON 0600 UTC OF 30TH NOVEMBER, 2020.



DATE/TIME IN UTC
IST=UTC + 0530
L: LOW PRESSURE AREA
WML: WELL MARKED LOW PRESSURE AREA
D: DEPRESSION (17-27 KT)
DD: DEEP DEPRESSION (28-33 KT)
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SCS: SEVERE CYCLONIC STORM (48-63KT)
VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
SuCS: SUPER CYCLONIC STORM (≥ 120 KT)

LESS THAN 34 KT
34-47 KT
≥ 48 KT
OBSERVED TRACK
FORECAST TRACK
CONE OF UNCERTAINTY

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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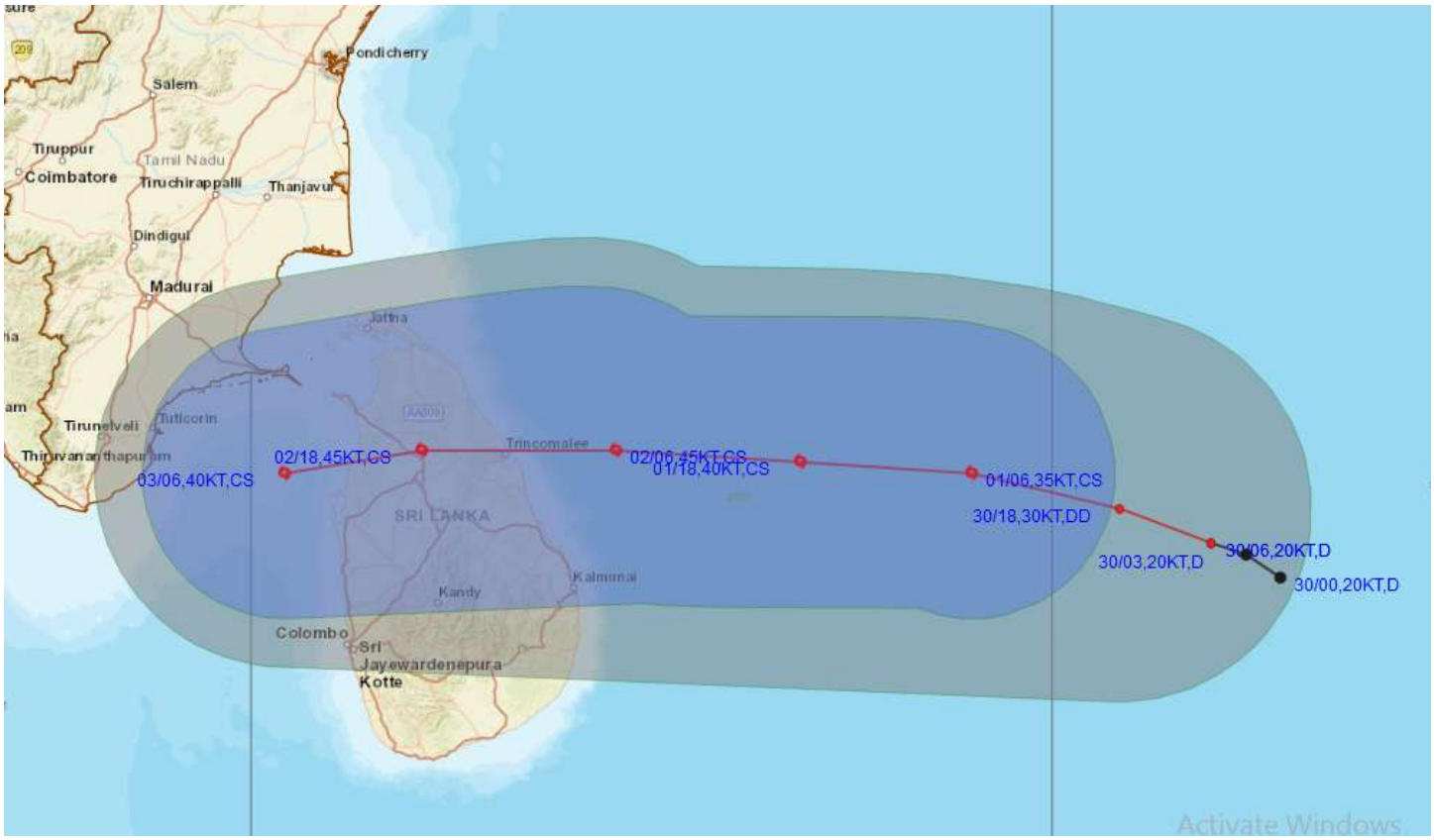
OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF DEPRESSION OVER SOUTHEAST BAY OF BENGAL BASED ON 0600 UTC OF 30TH NOVEMBER, 2020.



DATE/TIME IN UTC
IST=UTC + 0530
L: LOW PRESSURE AREA
WML: WELL MARKED LOW PRESSURE AREA
D: DEPRESSION (17-27 KT)
DD: DEEP DEPRESSION (28-33 KT)
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SCS: SEVERE CYCLONIC STORM (48-63KT)
VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
SuCS: SUPER CYCLONIC STORM (≥ 120 KT)

LESS THAN 34 KT
34-47 KT
≥ 48 KT
OBSERVED TRACK
FORECAST TRACK
CONE OF UNCERTAINTY
AREA OF MAXIMUM SUSTAINED WIND SPEED:
28-33 KT (52-61 KMPH)
34-49 KT (62-91 KMPH)
50-63 KT (92-117 KMPH)
≥ 64 KT (≥118 KMPH)

IMPACT OVER THE SEA

MSW (knot/kmph)	Impact	Action
28-33 (52-61)	Very rough seas	Total suspension of fishing operations
34-49 (62-91)	High to very high seas	Total suspension of fishing operations
50-63 (92-117)	Very high seas	Total suspension of fishing operations
≥ 64 (≥118)	Phenomenal	Total suspension of fishing operations

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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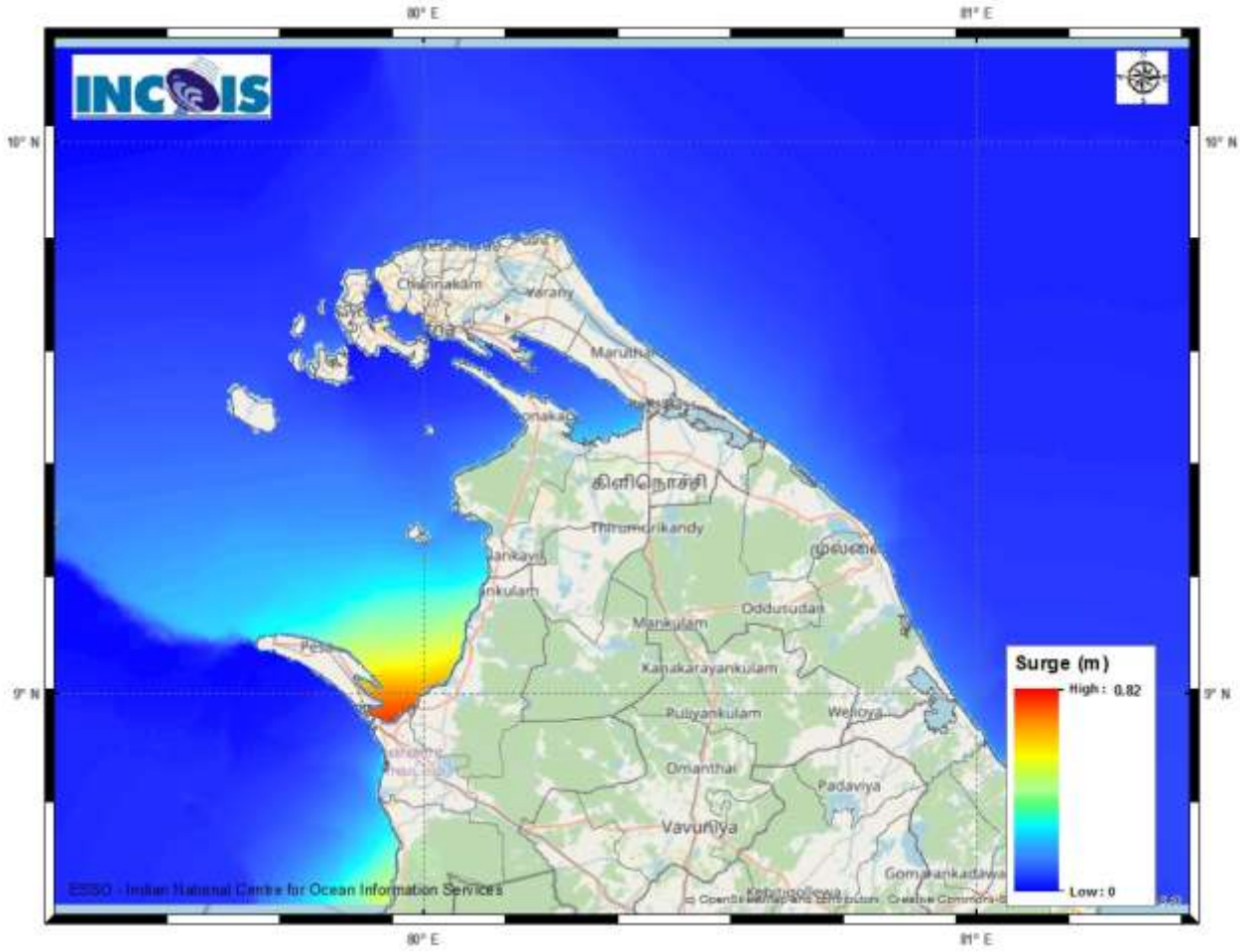

STORM SURGE FORECAST BY INCOIS MODEL

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 TROPICAL CYCLONES NEW DELHI DATED 30.11.2020

SPECIAL TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 1500 UTC OF 30.11.2020 BASED ON 1200 UTC OF 30.11.2020 .

Sub: DEPRESSION OVER SOUTHEAST & ADJOINING SOUTHWEST BAY OF BENGAL

THE **DEPRESSION** OVER SOUTHEAST BAY OF BENGAL MOVED WESTWARDS WITH A SPEED OF 07 KMPH DURING PAST 6 HOURS AND LAY CENTERED AT 1200 UTC OF TODAY, THE 30TH NOVEMBER 2020 OVER SOUTHEAST & ADJOINING SOUTHWEST BAY OF BENGAL NEAR LAT. 7.7° N AND LONG. 87.0°E, ABOUT 640 KM EAST-SOUTHEAST OF TRINCOMALEE (434180) AND 1040 KM EAST OF KANNIYAKUMARI (433770). IT IS VERY LIKELY TO INTENSIFY FURTHER INTO A DEEP DEPRESSION DURING NEXT 12 HOURS AND INTO A CYCLONIC STORM DURING SUBSEQUENT 12 HOURS. IT IS VERY LIKELY TO MOVE WEST-NORTHWESTWARDS AND CROSS SRI LANKA COAST BETWEEN LATITUDE 7.5^{0} N AND 9.0^{0} N, CLOSE TO TRINCOMALEE, DURING EVENING-NIGHT(1200-1800 UTC) OF 2ND DECEMBER. IT IS VERY LIKELY TO MOVE NEARLY WESTWARDS THEREAFTER AND EMERGE INTO COMORIN AREA ON 3RD DECEMBER MORNING.
Forecast track and intensity are given below:

Date/Time(UTC)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
30.11.20/1200	7.7/87.0	45-55 gusting to 65	DEPRESSION
30.11.20/1800	7.8/86.6	50-60 gusting to 70	DEEP DEPRESSION
01.12.20/0000	7.9/85.9	55-65 gusting to 75	DEEP DEPRESSION
01.12.20/0600	8.1/85.3	60-70 gusting to 80	CYCLONIC STORM
01.12.20/1200	8.2/84.6	65-75 gusting to 85	CYCLONIC STORM
02.12.20/0000	8.4/83.2	70-80 gusting to 90	CYCLONIC STORM
02.12.20/1200	8.6/81.7	75-85 gusting to 95	CYCLONIC STORM
03.12.20/0000	8.4/80.0	60-70 gusting to 80	CYCLONIC STORM
03.12.20/1200	8.2/79.0	70-80 gusting to 80	CYCLONIC STORM

THE ESTIMATED MAXIMUM SUSTAINED WIND SPEED IS 25 KNOTS GUSTING TO 35 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS 1002 HPA. THE SEA CONDITION IS ROUGH TO VERY ROUGH AROUND THE SYSTEM CENTRE.

AS PER SATELLITE IMAGERY, THE INTENSITY OF THE SYSTEM IS T1.5/1.5. BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER SOUTH EAST BAY OF BENGAL AND NEIGHBOURHOOD BETWEEN LAT 5.5N TO 12.5N LONG 83.0E TO 90.0 IN ASSOCIATION WITH THE SYSTEM. MINIMUN CTT IS MINUS 93^{0} C.

STORM SURGE GUIDNACE FOR SRILANKA COAST: STORM SURGE OF ABOUT 1 METER

HEIGHT ABOVE THE ASTRONOMICAL TIDE IS LIKELY TO INUNDENT LOW LYING AREAS OF EAST SRILANKA COAST DURING LANDFALL.

REMARKS:

CONSIDERING THE SEA CONDITIONS, SST IS AROUND 29-30°C OVER SOUTHEAST BAY OF BENGAL (BOB). THE TROPICAL CYCLONE HEAT POTENTIAL IS ABOUT 80-100 KJ/CM^2 OVER SOUTHWEST BOB. LOWER LEVEL POSITIVE RELATIVE VORTICITY (100X10^{-6}S^{-1}) PREVAILS TO THE SOUTHEAST OF THE SYSTEM CENTRE. UPPER LEVEL DIVERGENCE AND LOWER LEVEL CONVERGENCE HAVE INCREASED DURING PAST 12 HOURS AND WIND SHEAR REMAINS SAME DURING THE PERIOD. THESE FEATURES INDICATE THAT ENVIRONMENTAL FEATURES ARE FAVOURABLE FOR FURTHER INTENSIFICATION OF THE SYSTEM.THE UPPER LEVEL POSITIVE DIVERGENCE IS AROUND 30X10^{-5}S^{-1} TO THE NORTHEAST OF THE SYSTEM CENTRE. THE LOWER LEVEL CONVERGENCE IS AROUND 20 X 20^{-5}S^{-1} TO THE SOUTHEAST OF THE SYSTEM CENTRE. MJO INDEX LIES IN PHASE 4 AND ITS AMPLITUDE IS CLOSE TO 1. HENCE MJO INDEX IS FAVORABLE FOR MODERATE INTENSIFICATION OF THE SYSTEM. THE UPPER TROPOSPHERIC RIDGE AT UPPER AND MIDDLE TROPOSPHERIC LEVELS RUNS ALONG 11.5°N OVER THE BOB. THE SYSTEM LIES IN THE SOUTHERN PERIPHERRY OF THE ABOVE RIDGE. AS A RESULT, IT IS MOVING WEST NORTHWESTWARDS. IT IS EXPECTED TO BE STEERED BY THE ABOVE RIDGE RESULTING IN WEST-NORTHWESTWARD MOVEMENT FOR NEXT 2 DAYS AND THEN NEARLY WESTWARDS. THE ABOVE ENVIRONMENTAL CONDITIONS ARE FAVOURABLE FOR INTENSIFICATION OF THE SYSTEM INTO A CYCLONIC STORM GRADUALLY DURING NEXT 24 HOURS. MOST OF THE NWP MODELS LIKE ECMWF, IMD GFS, NCEP GFS, GEFS, NCUM AND NEPS ARE INDICATING INTENSIFICATION OF THE SYSTEM (UPTO DEEP DEPRESSION/CYCLONIC STORM) AND WEST-NORTHWESTWARDS MOVEMENT. THE SYSTEM WOULD CROSS SRILANKA COAST.

THERE IS ANOTHER CYCLONIC VORTEX OVER SOUTH INDIAN OCEAN NEAR 10.5^{0}N/89.0^{0}E WITH ESTIMATED MAXIMUM SUSTAINED WIND SPEED OF 25 KNOTS. THESE TWO VORTICES ON EITHER SIDE OF THE EQUATOR ARE INTERACTING WITH EACH OTHER.

MOST OF THE NWP MODELS (IMD GFS, GEFS, NCUM, NEPS, WRF, HWRF, ECMWF) ARE ALSO INDICATING THAT THE SYSTEM WOULD CROSS SRILANKA COAST AS PER DIFFERENT MODELS AND EMERGE INTO COMORIN AREA AFTER MOVING ACROSS SRI LANKA. HOWEVER, THERE IS LARGE VARIATION AMONG THE MODELS AND HENCE LACK OF CONSENSUS ABOUT THE TRACK AND INTENSITY OF THE SYSTEM OVER COMORIN AND ADJOINING AREAS. WHILE MOST OF THE MODELS SUGGEST WEST-NORTHWESTWARDS MOVEMENT SKIRTING SOUTH TAMILNADU-SOUTH KERALA COASTS, A FEW MODELS ARE ALSO INDICATING THE SYSTEM TO TOUCH EXTREME SOUTHERN TIP OF KERALA AND TAMILNADU. ALSO THE TIME OF COMING CLOSER TO SOUTHERN TIP OF KERALA AND TAMILNADU VARIES LARGELY FROM 3RD-6TH DECEMBER. CONSIDERING THE OCEANIC AND ENVIRONMENTAL CONDITIONS OVER COMORIN AREA, THE SEA CONDITIONS ARE FAVOURABLE FOR INTENSIFICATION DUE TO HIGHER SST (29-30^{0}C) AND HIGHER OCEAN HEAT CONTENT (80-100 KJ/CM^2). THE VERTICAL WIND SHEAR OVER COMORIN AREA IS ALSO EXPECTED TO BE LOW TO MODERATE FAVOURING INTENSIFICATION.

ARABIAN SEA:

THE SYSTEM OVER BAY OF BENGAL AFTER MOVING ACROSS SRI LANKA IS LIKELY TO EMERGE INTO COMORIN AREA ON 3RD DECEMBER MORNING (0000-0300 UTC).

SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LAY OVER SOUTHEAST ARABIAN SEA AND ADJOINING COMORIN-MALDIVES AREA.

PROBABILITY OF CYCLOGENESIS(FORMATION OF DEPRESSION) DURING NEXT 120 HRS :

24 HOURS	24-48 HOURS	48-72 HOURS	72-96 HOURS	96-120 HOURS
NIL	NIL	MOD	HIGH	HIGH

(R.K. JENAMANI)
Scientist-F, RSMC, New Delhi

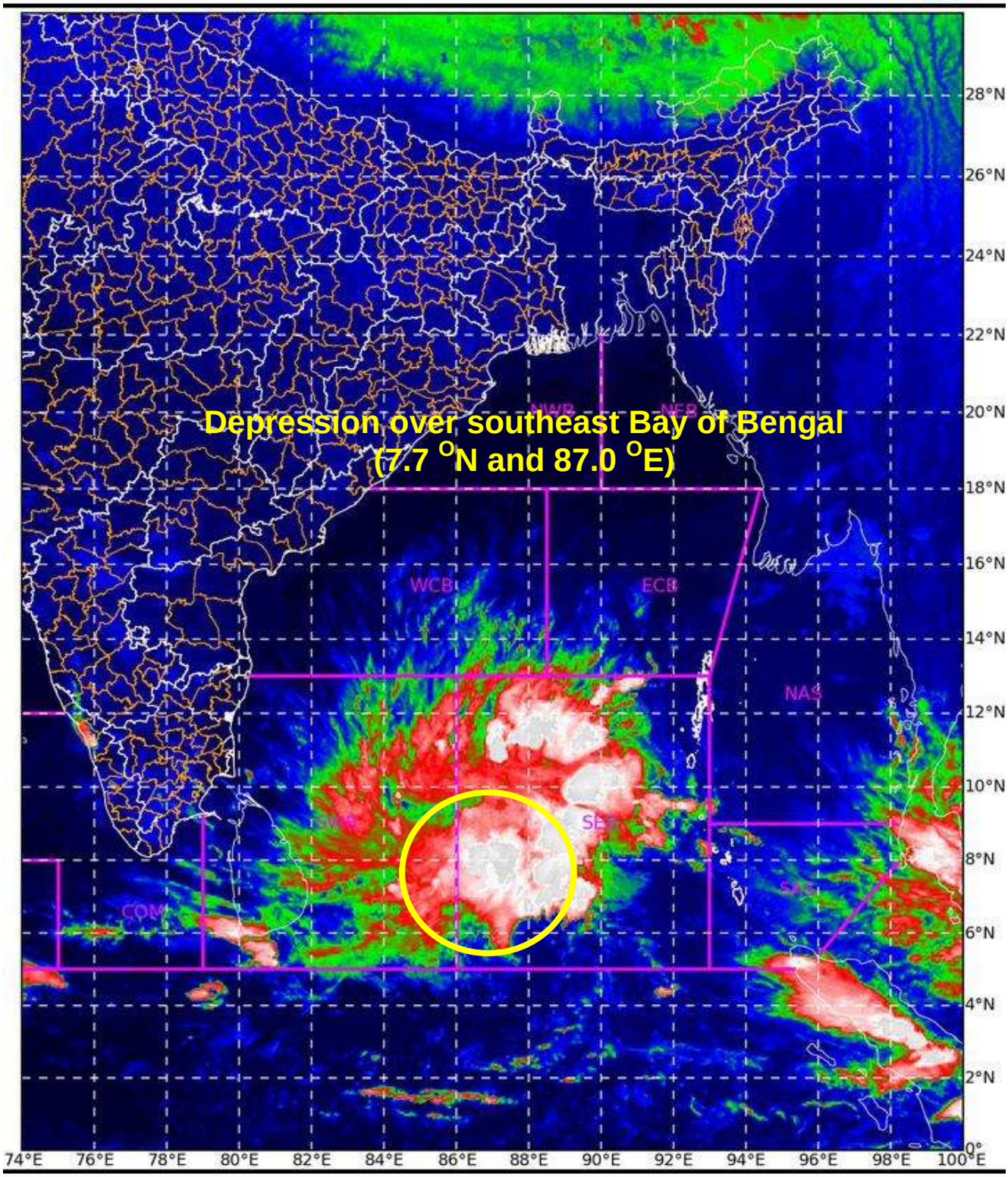
PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION):NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

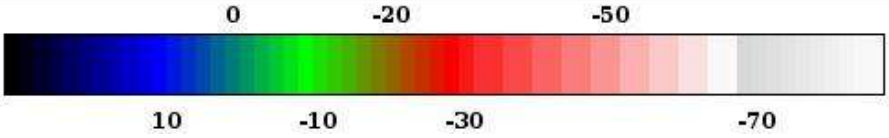
- **This is a guidance Bulletin for the WMO/ESCAP Panel Member countries,. Please visit respective National websites for Country specific Bulletins**

SAT : INSAT-3DR IMG 30-11-2020/(1315 to 1341) GMT

IMG_TIR1_TEMP 10.8 um 30-11-2020/(1845 to 1911) IST

L1C Mercator





Celsius

IMD,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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OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINITY OF DEPRESSION OVER SOUTHEAST AND ADJOING SOUTHWEST BAY OF BENGAL BASED ON 1200 UTC

DATE/TIME IN UTC
IST=UTC + 0530
L: LOW PRESSURE AREA
WML: WELL MARKED LOW PRESSURE AREA
D: DEPRESSION (17-27 KT)
DD: DEEP DEPRESSION (28-33 KT)
CS: CYCLONIC STORM (34-47 KT)
SCS: SEVERE CYCLONIC STORM (48-63KT)
VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
SuCS: SUPER CYCLONIC STORM (≥ 120 KT)

LESS THAN 34 KT
34-47 KT
≥ 48 KT
OBSERVED TRACK
FORECAST TRACK
CONE OF UNCERTAINTY

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 AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF DEPRESSION OVER SOUTHEAST AND ADJOING SOUTHWEST BAY OF BENGAL BASED ON 1200 UTC OF 30TH NOVEMBER,

DATE/TIME IN UTC
IST=UTC + 0530
L: LOW PRESSURE AREA
WML: WELL MARKED LOW PRESSURE AREA
D: DEPRESSION (17-27 KT)
DD: DEEP DEPRESSION (28-33 KT)
CS: CYCLONIC STORM (34-47 KT)
SCS: SEVERE CYCLONIC STORM (48-63KT)
VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
SuCS: SUPER CYCLONIC STORM (≥ 120 KT)

LESS THAN 34 KT
34-47 KT
≥ 48 KT
OBSERVED TRACK
FORECAST TRACK
CONE OF UNCERTAINTY
AREA OF MAXIMUM SUSTAINED WIND SPEED:
28-33 KT (52-61 KMPH)
34-49 KT (62-91 KMPH)
50-63 KT (92-117 KMPH)
≥ 64 KT (≥118 KMPH)

IMPACT OVER THE SEA

MSW (knot/kmph)	Impact	Action
28-33 (52-61)	Very rough seas	Total suspension of fishing operations
34-49 (62-91)	High to very high seas	Total suspension of fishing operations
50-63 (92-117)	Very high seas	Total suspension of fishing operations
≥ 64 (≥118)	Phenomenal	Total suspension of fishing operations

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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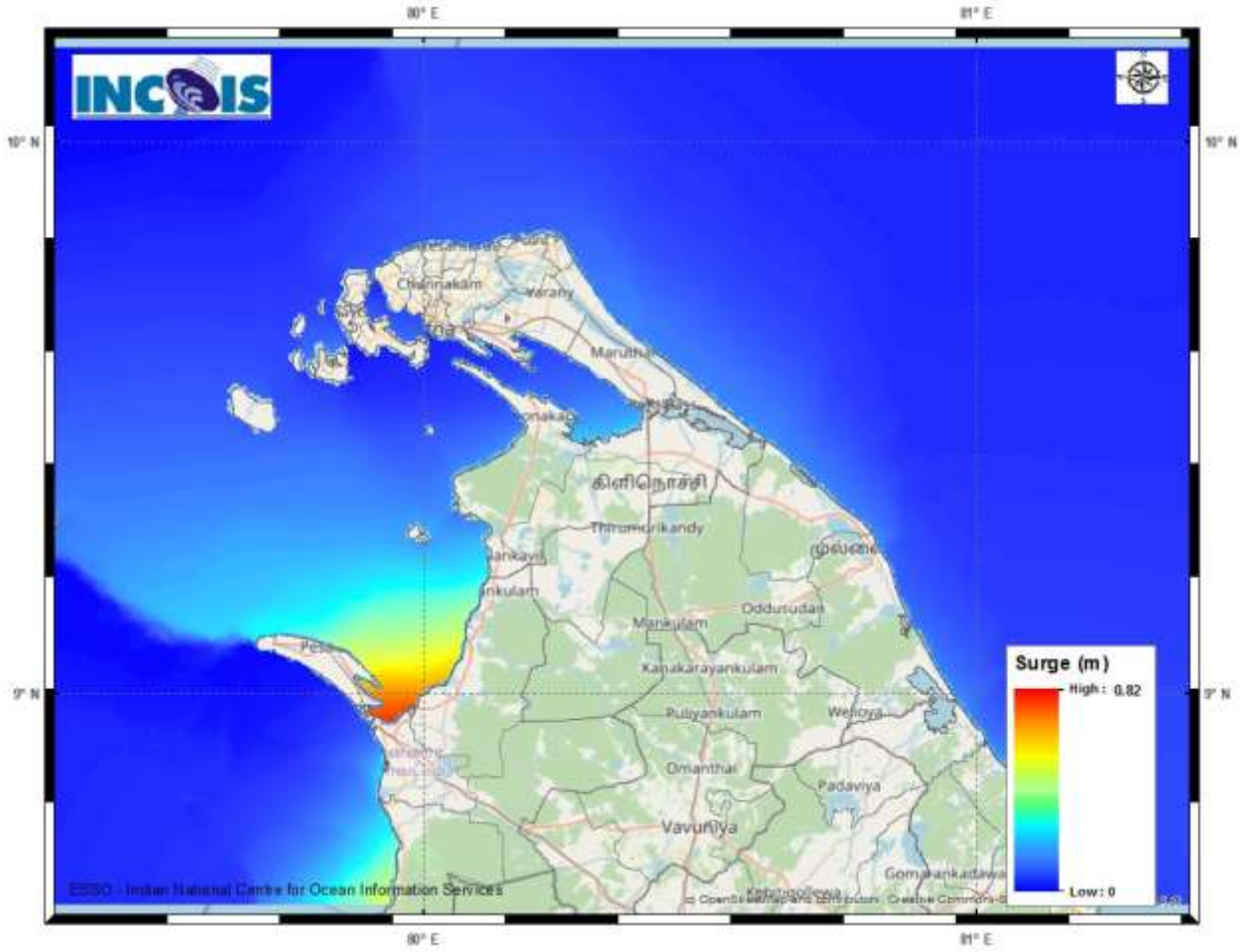

STORM SURGE FORECAST BY INCOIS MODEL

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 TROPICAL CYCLONES NEW DELHI DATED 30.11.2020

SPECIAL TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 2030 UTC OF 30.11.2020 BASED ON 1800 UTC OF 30.11.2020.

Sub: DEPRESSION OVER SOUTHEAST & ADJOINING SOUTHWEST BAY OF BENGAL

THE **DEPRESSION** OVER SOUTHEAST BAY OF BENGAL MOVED NEARLY WESTWARDS WITH A SPEED OF 07 KMPH DURING PAST 6 HOURS AND LAY CENTERED AT 1800 UTC OF 30TH NOVEMBER 2020 OVER SOUTHEAST & ADJOINING SOUTHWEST BAY OF BENGAL NEAR LAT. 7.8° N AND LONG. 86.6°E, ABOUT 590 KM EAST-SOUTHEAST OF TRINCOMALEE (434180) AND 1000 KM EAST OF KANNIYAKUMARI (433770). IT IS VERY LIKELY TO INTENSIFY FURTHER INTO A DEEP DEPRESSION DURING NEXT 06 HOURS AND INTO A CYCLONIC STORM DURING SUBSEQUENT 12 HOURS. IT IS VERY LIKELY TO MOVE WEST-NORTHWESTWARDS AND CROSS SRI LANKA COAST BETWEEN LATITUDE 7.5^{0}N AND 9.0^{0}N, CLOSE TO TRINCOMALEE, DURING EVENING-NIGHT(1200-1800 UTC) OF 2ND DECEMBER. IT IS VERY LIKELY TO MOVE NEARLY WESTWARDS THEREAFTER, EMERGE INTO COMORIN AREA ON 3RD DECEMBER MORNING AND MOVE WESTWARDS TOWRDS SOUTH TAMILNADU COAST.

FORECAST TRACK AND INTENSITY ARE GIVEN BELOW:

Date/Time(UTC)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
30.11.20/1800	7.8/86.6	45-55 GUSTING TO 65	DEPRESSION
01.12.20/0000	8.0/86.0	55-65 GUSTING TO 75	DEEP DEPRESSION
01.12.20/0600	8.1/85.3	60-70 GUSTING TO 80	CYCLONIC STORM
01.12.20/1200	8.2/84.6	65-75 GUSTING TO 85	CYCLONIC STORM
01.12.20/1800	8.3/83.9	70-80 GUSTING TO 90	CYCLONIC STORM
02.12.20/0600	8.5/82.5	75-85 GUSTING TO 95	CYCLONIC STORM
02.12.20/1800	8.5/80.8	75-85 GUSTING TO 95	CYCLONIC STORM
03.12.20/0600	8.4/79.5	65-75 GUSTING TO 85	CYCLONIC STORM
03.12.20/1800	8.3/78.4	70-80 GUSTING TO 90	CYCLONIC STORM

THE ESTIMATED MAXIMUM SUSTAINED WIND SPEED IS 25 KNOTS GUSTING TO 35 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS 1002 HPA. THE SEA CONDITION IS ROUGH TO VERY ROUGH AROUND THE SYSTEM CENTRE.

AS PER SATELLITE IMAGERY, THE INTENSITY OF THE SYSTEM IS T1.5/1.5. BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER SOUTH BAY OF BENGAL BETWEEN LAT 5.6^{0}N TO 13.5^{0}N LONG 82.0^{0}E TO 93.0^{0}IN ASSOCIATION WITH THE SYSTEM. MINIMUN CTT IS MINUS 93^{0}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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STORM SURGE GUIDNACE FOR SRILANKA COAST: STORM SURGE OF ABOUT 1 METER HEIGHT ABOVE THE ASTRONOMICAL TIDE IS LIKELY TO INUNDATE LOW LYING AREAS OF EAST SRILANKA COAST DURING LANDFALL.

REMARKS:

CONSIDERING THE SEA CONDITIONS, SST IS AROUND 29-30°C OVER SOUTHEAST BAY OF BENGAL (BOB). THE TROPICAL CYCLONE HEAT POTENTIAL IS ABOUT 80-100 KJ/CM^2 OVER SOUTHWEST BOB. LOWER LEVEL POSITIVE RELATIVE VORTICITY (100X10^{-6}S^{-1}) PREVAILS TO THE SOUTHEAST OF THE SYSTEM CENTRE. THE UPPER LEVEL POSITIVE DIVERGENCE IS AROUND 20X10^{-5}S^{-1} OF THE SYSTEM CENTRE. THE LOWER LEVEL CONVERGENCE IS AROUND 20 X 20^{-5}S^{-1} TO THE SOUTHEAST OF THE SYSTEM CENTRE. THESE FEATURES INDICATE THAT ENVIRONMENTAL FEATURES ARE FAVOURABLE FOR FURTHER INTENSIFICATION OF THE SYSTEM. MJO INDEX LIES IN PHASE 4 AND ITS AMPLITUDE IS CLOSE TO 1 HENCE FAVORABLE FOR MODERATE INTENSIFICATION OF THE SYSTEM. THE UPPER TROPOSPHERIC RIDGE AT UPPER AND MIDDLE TROPOSPHERIC LEVELS RUNS ALONG 11.5°N OVER THE BOB. THE SYSTEM LIES IN THE SOUTHERN PERIPHERRY OF THE ABOVE RIDGE. AS A RESULT, IT IS MOVING WEST NORTHWESTWARDS. IT IS EXPECTED TO BE STEERED BY THE ABOVE RIDGE RESULTING IN WEST-NORTHWESTWARD MOVEMENT FOR NEXT 2 DAYS AND THEN NEARLY WESTWARDS. THE ABOVE ENVIRONMENTAL CONDITIONS ARE FAVOURABLE FOR INTENSIFICATION OF THE SYSTEM INTO A CYCLONIC STORM GRADUALLY DURING NEXT 24 HOURS. MOST OF THE NWP MODELS LIKE ECMWF, IMD GFS, NCEP GFS, GEFS, NCUM AND NEPS ARE INDICATING INTENSIFICATION OF THE SYSTEM (UPTO DEEP DEPRESSION/CYCLONIC STORM) AND WEST-NORTHWESTWARDS MOVEMENT. THE SYSTEM WOULD CROSS SRILANKA COAST.

THERE IS ANOTHER CYCLONIC VORTEX OVER SOUTH INDIAN OCEAN NEAR 10.5^{0}N/89.0^{0}E WITH ESTIMATED MAXIMUM SUSTAINED WIND SPEED OF 25 KNOTS. THESE TWO VORTICES ON EITHER SIDE OF THE EQUATOR ARE INTERACTING WITH EACH OTHER.

MOST OF THE NWP MODELS (IMD GFS, GEFS, NCUM, NEPS, WRF, HWRF, ECMWF) ARE ALSO INDICATING THAT THE SYSTEM WOULD CROSS SRILANKA COAST AS PER DIFFERENT MODELS AND EMERGE INTO COMORIN AREA AFTER MOVING ACROSS SRI LANKA. HOWEVER, THERE IS LARGE VARIATION AMONG THE MODELS AND HENCE LACK OF CONSENSUS ABOUT THE TRACK AND INTENSITY OF THE SYSTEM OVER COMORIN AND ADJOINING AREAS. WHILE MOST OF THE MODELS SUGGEST WEST-NORTHWESTWARDS MOVEMENT SKIRTING SOUTH TAMILNADU-SOUTH KERALA COASTS, A FEW MODELS ARE ALSO INDICATING THE SYSTEM TO TOUCH EXTREME SOUTHERN TIP OF KERALA AND TAMILNADU. ALSO THE TIME OF COMING CLOSER TO SOUTHERN TIP OF KERALA AND TAMILNADU VARIES LARGELY FROM 3RD-6TH DECEMBER. CONSIDERING THE OCEANIC AND ENVIRONMENTAL CONDITIONS OVER COMORIN AREA, THE SEA CONDITIONS ARE FAVOURABLE FOR INTENSIFICATION DUE TO HIGHER SST (29-30^{0}C) AND HIGHER OCEAN HEAT CONTENT (80-100 KJ/CM^2). THE VERTICAL WIND SHEAR OVER COMORIN AREA IS ALSO EXPECTED TO BE LOW TO MODERATE FAVOURING INTENSIFICATION.

ARABIAN SEA:

THE SYSTEM OVER BAY OF BENGAL AFTER MOVING ACROSS SRI LANKA IS LIKELY TO EMERGE INTO COMORIN AREA ON 3RD DECEMBER MORNING (0000-0300 UTC).

SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LAY OVER SOUTHEAST ARABIAN SEA AND ADJOINING COMORIN-MALDIVES AREA.

PROBABILITY OF CYCLOGENESIS(FORMATION OF DEPRESSION) DURING NEXT 120 HRS :

24 HOURS	24-48 HOURS	48-72 HOURS	72-96 HOURS	96-120 HOURS
NIL	NIL	MOD	HIGH	HIGH

(A.K. DAS)
Scientist-E, 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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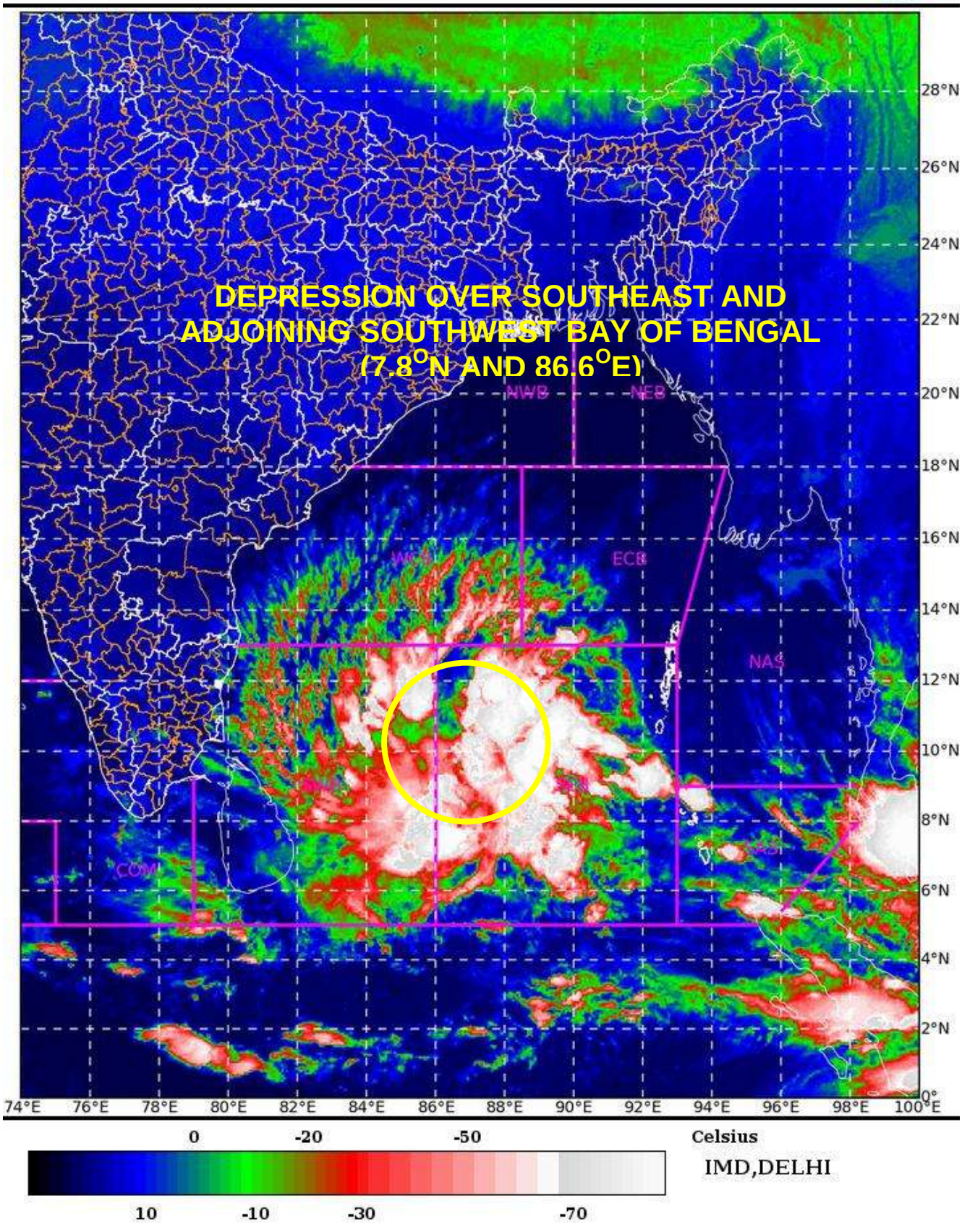
SAT : INSAT-3D IMG 30-11-2020/(1800 to 1826) GMT

IMG_TIR1_TEMP 10.8 um 30-11-2020/(2330 to 2356) IST

L1C Mercator



Celsius

IMD,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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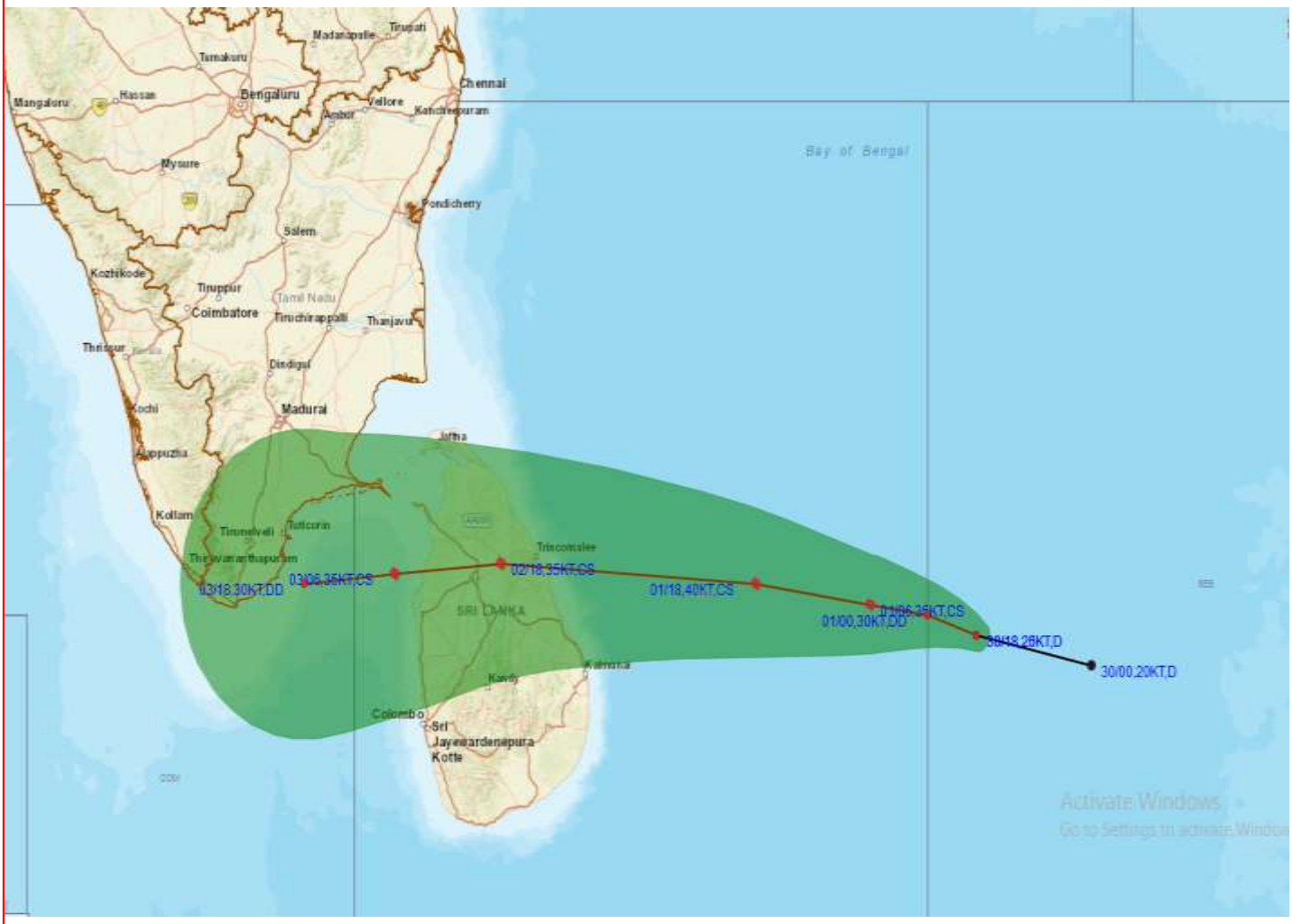
OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINITY OF DEPRESSION OVER SOUTHEAST AND ADJOING SOUTHWEST BAY OF BENGAL BASED ON 1800 UTC OF 30TH NOVEMBER, 2020.



DATE/TIME IN UTC
IST=UTC +0530
L: LOW PRESSURE AREA
WML: WELL MARKED LOW PRESSURE AREA
D: DEPRESSION (17-27 KT)
DD: DEEP DEPRESSION (28-33 KT)
CS: CYCLONIC STORM (34-47 KT)
SCS: SEVERE CYCLONIC STORM (48-63KT)
VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
SuCS: SUPER CYCLONIC STORM (≥ 120 KT)

LESS THAN 34 KT
34-47 KT
≥ 48 KT
OBSERVED TRACK
FORECAST TRACK
CONE OF UNCERTAINTY

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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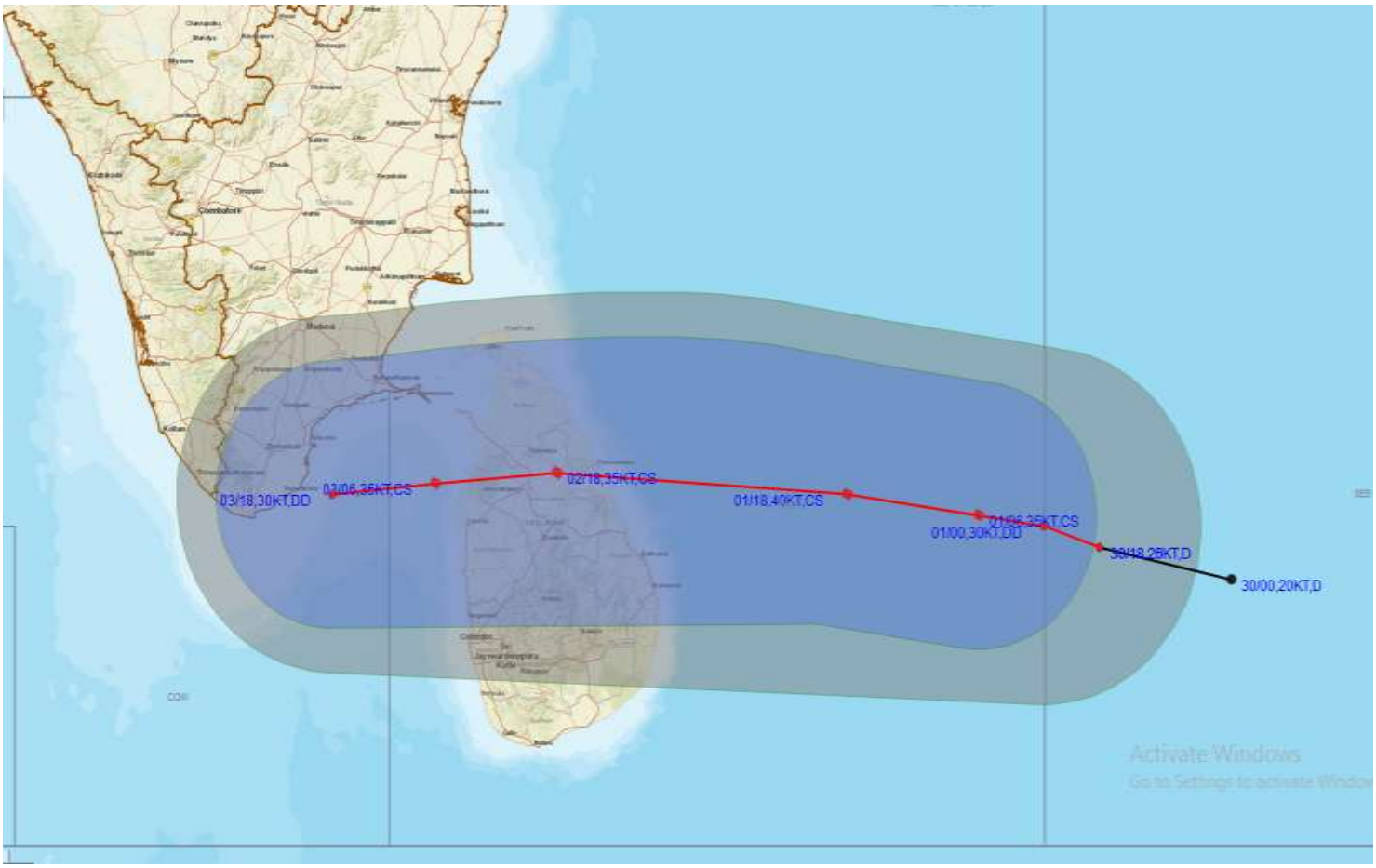
OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF DEPRESSION OVER SOUTHEAST AND ADJOING SOUTHWEST BAY OF BENGAL BASED ON 1800 UTC OF 30TH NOVEMBER, 2020.



DATE/TIME IN UTC
IST=UTC + 0530
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WML: WELL MARKED LOW PRESSURE AREA
D: DEPRESSION (17-27 KT)
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SCS: SEVERE CYCLONIC STORM (48-63KT)
VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
SuCS: SUPER CYCLONIC STORM (≥ 120 KT)

LESS THAN 34 KT
34-47 KT
≥ 48 KT
OBSERVED TRACK
FORECAST TRACK
CONE OF UNCERTAINTY
AREA OF MAXIMUM SUSTAINED WIND SPEED:
28-33 KT (52-61 KMPH)
34-49 KT (62-91 KMPH)
50-63 KT (92-117 KMPH)
≥ 64 KT (≥118 KMPH)

IMPACT OVER THE SEA

MSW (knot/kmph)	Impact	Action
28-33 (52-61)	Very rough seas	Total suspension of fishing operations
34-49 (62-91)	High to very high seas	Total suspension of fishing operations
50-63 (92-117)	Very high seas	Total suspension of fishing operations
≥ 64 (≥118)	Phenomenal	Total suspension of fishing operations

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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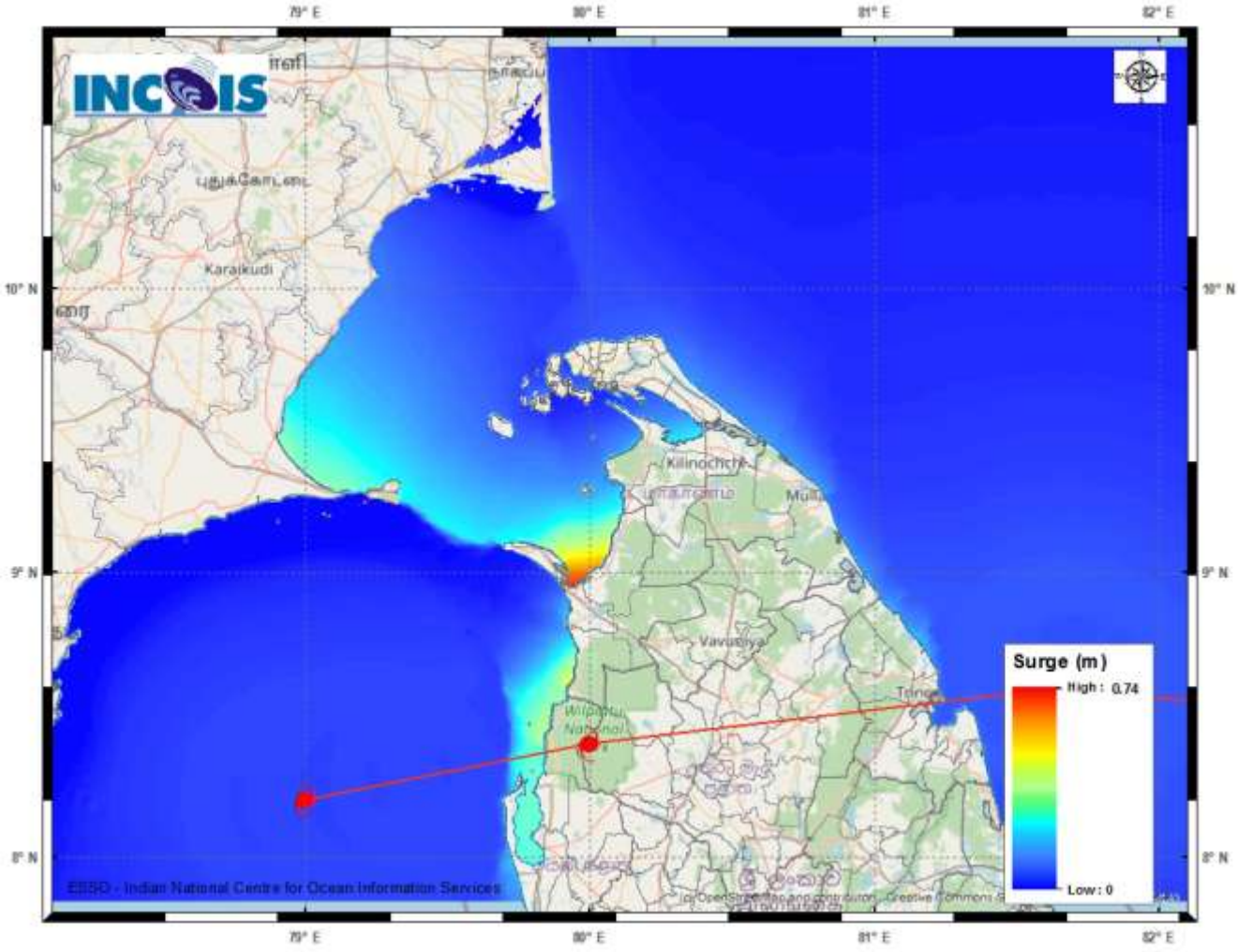
STORM SURGE FORECAST BY INCOIS MODEL



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

DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 01.12.2020

SPECIAL TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 0300 UTC OF 01.12.2020 BASED ON 0000 UTC OF 01.12.2020.

Sub: DEPRESSION OVER SOUTHWEST BAY AND ADJOINING SOUTHEAST BAY OF BENGAL INTENSIFIED INTO A DEEP DEPRESSION

THE **DEPRESSION** OVER SOUTHEAST AND ADJOINING SOUTHWEST BAY OF BENGAL MOVED NEARLY WESTWARDS WITH A SPEED OF 10 KMPH DURING PAST SIX HOURS, INTENSIFIED INTO A **DEEP DEPRESSION** AND LAY CENTERED AT 0000 UTC OF 01ST DECEMBER 2020 OVER SOUTHWEST AND ADJOINING SOUTHEAST BAY OF BENGAL NEAR LAT. 7.8° N AND LONG. 86.0°E, ABOUT 530 KM EAST-SOUTHEAST OF TRINCOMALEE (434180) AND 930 KM EAST-SOUTHEAST OF KANNIYAKUMARI (433770). IT IS VERY LIKELY TO INTENSIFY FURTHER INTO A CYCLONIC STORM DURING NEXT 24 HOURS. IT IS VERY LIKELY TO MOVE WEST-NORTHWESTWARDS AND CROSS SRI LANKA COAST BETWEEN LATITUDE 7.5^{0}N AND 9.0^{0}N CLOSE TO TRINCOMALEE DURING EVENING/NIGHT OF 2ND DECEMBER. IT IS VERY LIKEY TO MOVE NEARLY WESTWARDS THEREAFTER, EMERGE INTO COMORIN AREA ON 3RD DECEMBER MORNING AND MOVE WESTWARD TOWARDS SOUTH TAMILNADU COAST.

FORECAST TRACK AND INTENSITY ARE GIVEN BELOW:

Date/Time(UTC)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
01.12.20/0000	7.8/86.0	50-60 GUSTING TO 70	DEEP DEPRESSION
01.12.20/0600	7.9/85.3	55-65 GUSTING TO 75	DEEP DEPRESSION
01.12.20/1200	8.1/84.6	60-70 GUSTING TO 75	CYCLONIC STORM
01.12.20/1800	8.3/83.9	65-75 GUSTING TO 85	CYCLONIC STORM
02.12.20/0000	8.4/83.2	75-85 GUSTING TO 95	CYCLONIC STORM
02.12.20/1200	8.6/81.7	75-85 GUSTING TO 95	CYCLONIC STORM
03.12.20/0000	8.7/80.3	65-75 GUSTING TO 85	CYCLONIC STORM
03.12.20/1200	8.7/79.3	70-80 GUSTING TO 90	CYCLONIC STORM
04.12.20/0000	8.5/78.5	70-80 GUSTING TO 90	CYCLONIC STORM

THE ESTIMATED MAXIMUM SUSTAINED WIND SPEED IS 30 KNOTS GUSTING TO 40 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS 1000 HPA. THE SEA CONDITION IS ROUGH TO VERY ROUGH AROUND THE SYSTEM CENTRE.

AS PER SATELLITE IMAGERY, THE INTENSITY OF THE SYSTEM IS T2.0/2.0. CENTRE NOT CLEARLY DEFINED IN SATELLITE IMAGERY. BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER SOUTH BAY OF BENGAL BETWEEN LAT 4.5^{0}N TO 14.5^{0}N LONG 81.5^{0}E TO 92.5^{0}E ASSOCIATION WITH THE SYSTEM. MINIMUN CTT IS MINUS 93^{0}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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STORM SURGE GUIDNACE FOR SRILANKA COAST: STORM SURGE OF ABOUT 1 METER HEIGHT ABOVE THE ASTRONOMICAL TIDE IS LIKELY TO INUNDATE LOW LYING AREAS OF EAST SRILANKA COAST DURING LANDFALL.

REMARKS:

CONSIDERING THE SEA CONDITIONS, SST IS AROUND 29-30°C OVER SOUTHEAST BAY OF BENGAL (BOB). THE TROPICAL CYCLONE HEAT POTENTIAL IS ABOUT 80-100 KJ/CM^2 OVER SOUTHWEST BOB. LOWER LEVEL POSITIVE RELATIVE VORTICITY (100X10^{-6}S^{-1}) PREVAILS TO THE SOUTHEAST OF THE SYSTEM CENTRE. THE UPPER LEVEL POSITIVE DIVERGENCE IS AROUND 20X10^{-5}S^{-1} OF THE SYSTEM CENTRE. THE LOWER LEVEL CONVERGENCE IS AROUND 20 X 10^{-5}S^{-1} TO THE NORTHWEST OF THE SYSTEM CENTRE. THESE FEATURES INDICATE THAT ENVIRONMENTAL FEATURES ARE FAVOURABLE FOR FURTHER INTENSIFICATION OF THE SYSTEM. MJO INDEX LIES IN PHASE 4 AND ITS AMPLITUDE IS CLOSE TO 1 HENCE FAVORABLE FOR MODERATE INTENSIFICATION OF THE SYSTEM. THE UPPER TROPOSPHERIC RIDGE AT UPPER AND MIDDLE TROPOSPHERIC LEVELS RUNS ALONG 11.5°N OVER THE BOB. THE SYSTEM LIES IN THE SOUTHERN PERIPHERRY OF THE ABOVE RIDGE. AS A RESULT, IT IS MOVING WEST NORTHWESTWARDS. IT IS EXPECTED TO BE STEERED BY THE ABOVE RIDGE RESULTING IN WEST-NORTHWESTWARD MOVEMENT FOR NEXT 2 DAYS AND THEN NEARLY WESTWARDS. THE ABOVE ENVIRONMENTAL CONDITIONS ARE FAVOURABLE FOR INTENSIFICATION OF THE SYSTEM INTO A CYCLONIC STORM GRADUALLY DURING NEXT 24 HOURS. MOST OF THE NWP MODELS LIKE ECMWF, IMD GFS, NCEP GFS, GEFS, NCUM AND NEPS ARE INDICATING INTENSIFICATION OF THE SYSTEM (UPTO DEEP DEPRESSION/CYCLONIC STORM) AND WEST-NORTHWESTWARDS MOVEMENT. THE SYSTEM WOULD CROSS SRILANKA COAST.

THERE IS ANOTHER CYCLONIC VORTEX OVER SOUTH INDIAN OCEAN NEAR 10.5^{0}S/89.0^{0}E WITH ESTIMATED MAXIMUM SUSTAINED WIND SPEED OF 25 KNOTS. THESE TWO VORTICES ON EITHER SIDE OF THE EQUATOR ARE INTERACTING WITH EACH OTHER.

MOST OF THE NWP MODELS (IMD GFS, GEFS, NCUM, NEPS, WRF, HWRF, ECMWF) ARE ALSO INDICATING THAT THE SYSTEM WOULD CROSS SRILANKA COAST AS PER DIFFERENT MODELS AND EMERGE INTO COMORIN AREA AFTER MOVING ACROSS SRI LANKA. HOWEVER, THERE IS LARGE VARIATION AMONG THE MODELS AND HENCE LACK OF CONSENSUS ABOUT THE TRACK AND INTENSITY OF THE SYSTEM OVER COMORIN AND ADJOINING AREAS. WHILE MOST OF THE MODELS SUGGEST WEST-NORTHWESTWARDS MOVEMENT SKIRTING SOUTH TAMILNADU-SOUTH KERALA COASTS, A FEW MODELS ARE ALSO INDICATING THE SYSTEM TO TOUCH EXTREME SOUTHERN TIP OF KERALA AND TAMILNADU. ALSO THE TIME OF COMING CLOSER TO SOUTHERN TIP OF KERALA AND TAMILNADU VARIES LARGELY FROM 3RD-6TH DECEMBER. CONSIDERING THE OCEANIC AND ENVIRONMENTAL CONDITIONS OVER COMORIN AREA, THE SEA CONDITIONS ARE FAVOURABLE FOR INTENSIFICATION DUE TO HIGHER SST (29-30^{0}C) AND HIGHER OCEAN HEAT CONTENT (80-100 KJ/CM^2). THE VERTICAL WIND SHEAR OVER COMORIN AREA IS ALSO EXPECTED TO BE LOW TO MODERATE FAVOURING INTENSIFICATION.

ARABIAN SEA:

THE SYSTEM OVER BAY OF BENGAL AFTER MOVING ACROSS SRI LANKA IS LIKELY TO EMERGE INTO COMORIN AREA ON 3RD DECEMBER MORNING (0000-0300 UTC).

SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LAY OVER SOUTHEAST ARABIAN SEA AND ADJOINING COMORIN-MALDIVES AREA.

PROBABILITY OF CYCLOGENESIS(FORMATION OF DEPRESSION) DURING NEXT 120 HRS :

24 HOURS	24-48 HOURS	48-72 HOURS	72-96 HOURS	96-120 HOURS
NIL	NIL	MOD	HIGH	HIGH

(A.K. DAS)
Scientist-E, 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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SAT : INSAT-3D IMG 01-12-2020/(0200 to 0226) GMT

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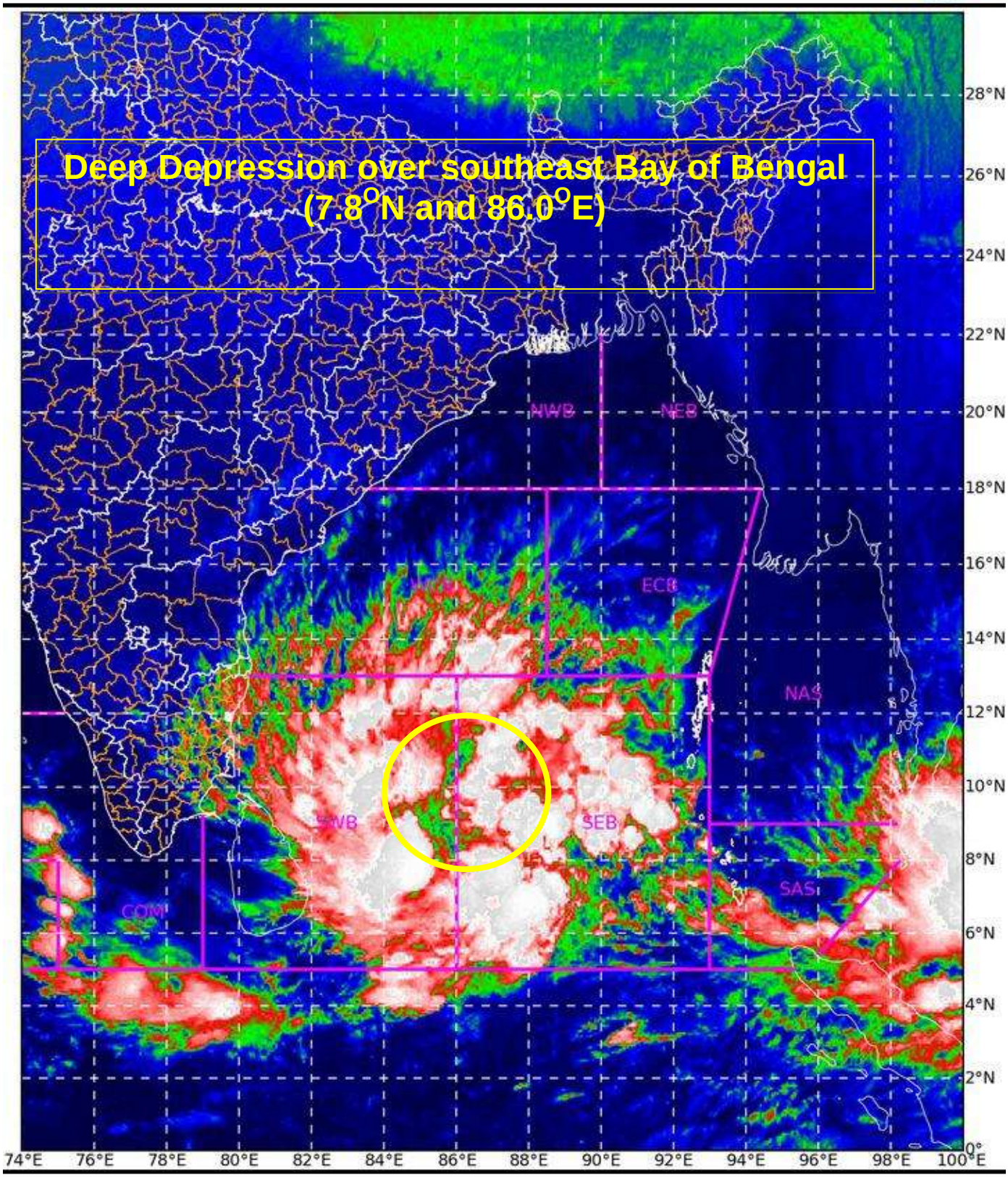
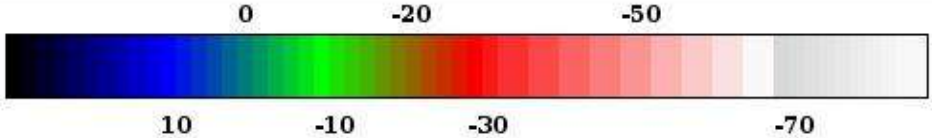
L1C Mercator





Celsius

IMD,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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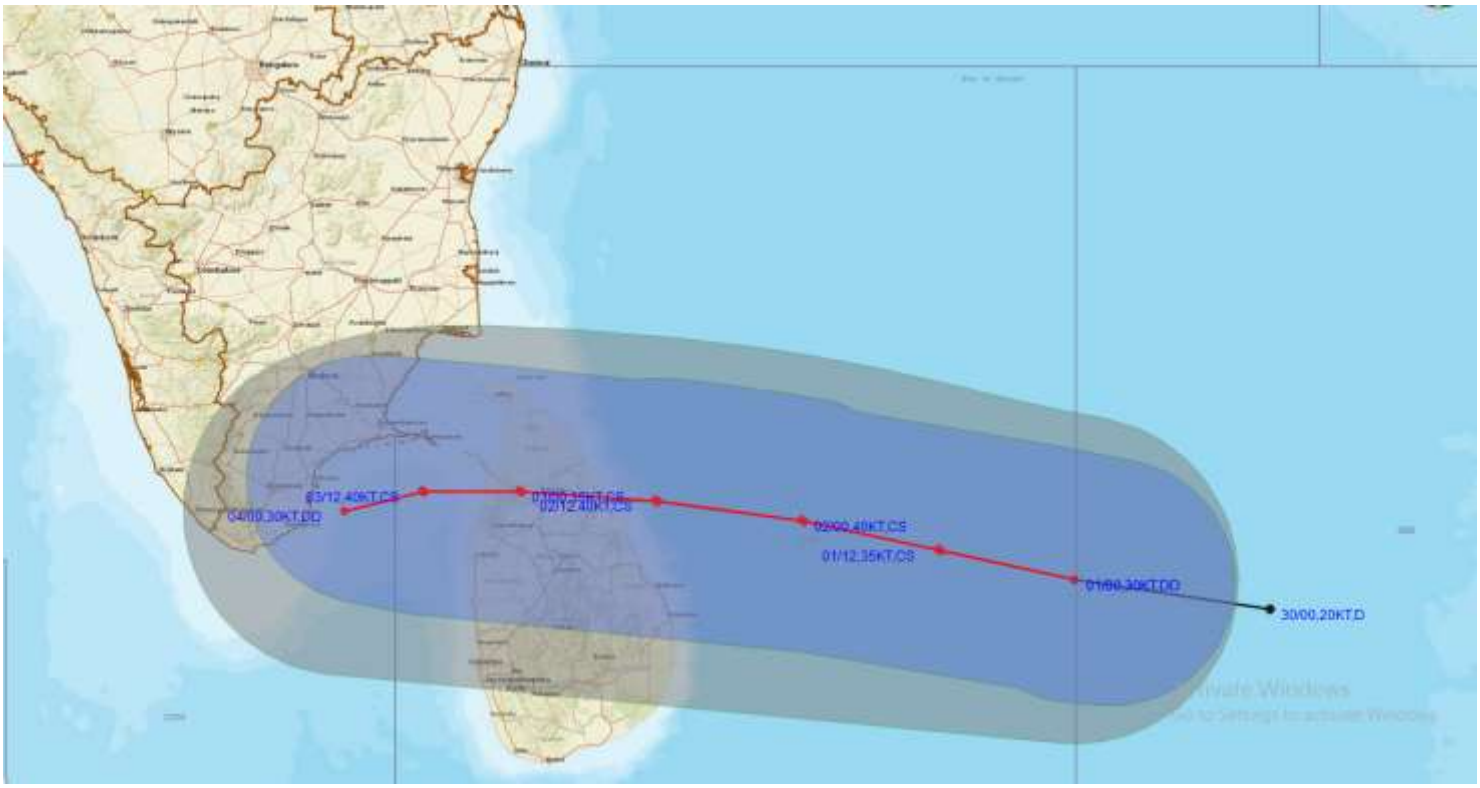
OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF DEEP DEPRESSION OVER SOUTHWEST AND ADJOINING SOUTHEAST BAY OF BENGAL BASED ON 0000 UTC OF 1st DECEMBER, 2020.



DATE/TIME IN UTC
IST=UTC + 0530
L: LOW PRESSURE AREA
WML: WELL MARKED LOW PRESSURE AREA
D: DEPRESSION (17-27 KT)
DD: DEEP DEPRESSION (28-33 KT)
CS: CYCLONIC STORM (34-47 KT)
SCS: SEVERE CYCLONIC STORM (48-63KT)
VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
SuCS: SUPER CYCLONIC STORM (≥ 120 KT)

- LESS THAN 34 KT
- 34-47 KT
- ≥ 48 KT
- OBSERVED TRACK
- FORECAST TRACK
- CONE OF UNCERTAINTY

AREA OF MAXIMUM SUSTAINED WIND SPEED:
- 28-33 KT (52-61 KMPH)
- 34-49 KT (62-91 KMPH)
- 50-63 KT (92-117 KMPH)
- ≥ 64 KT (≥118 KMPH)

IMPACT OVER THE SEA

MSW (knot/kmph)	Impact	Action
28-33 (52-61)	Very rough seas	Total suspension of fishing operations
34-49 (62-91)	High to very high seas	Total suspension of fishing operations
50-63 (92-117)	Very high seas	Total suspension of fishing operations
≥ 64 (≥118)	Phenomenal	Total suspension of fishing operations

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 AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINITY OF DEEP DEPRESSION OVER SOUTHWEST AND ADJOINING SOUTHEAST BAY OF BENGAL BASED ON 0000 UTC OF 1st DECEMBER, 2020.

DATE/TIME IN UTC
IST=UTC + 0530
L: LOW PRESSURE AREA
WML: WELL MARKED LOW PRESSURE AREA
D: DEPRESSION (17-27 KT)
DD: DEEP DEPRESSION (28-33 KT)
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SuCS: SUPER CYCLONIC STORM (≥ 120 KT)

LESS THAN 34 KT
34-47 KT
≥ 48 KT
OBSERVED TRACK
FORECAST TRACK
CONE OF UNCERTAINTY

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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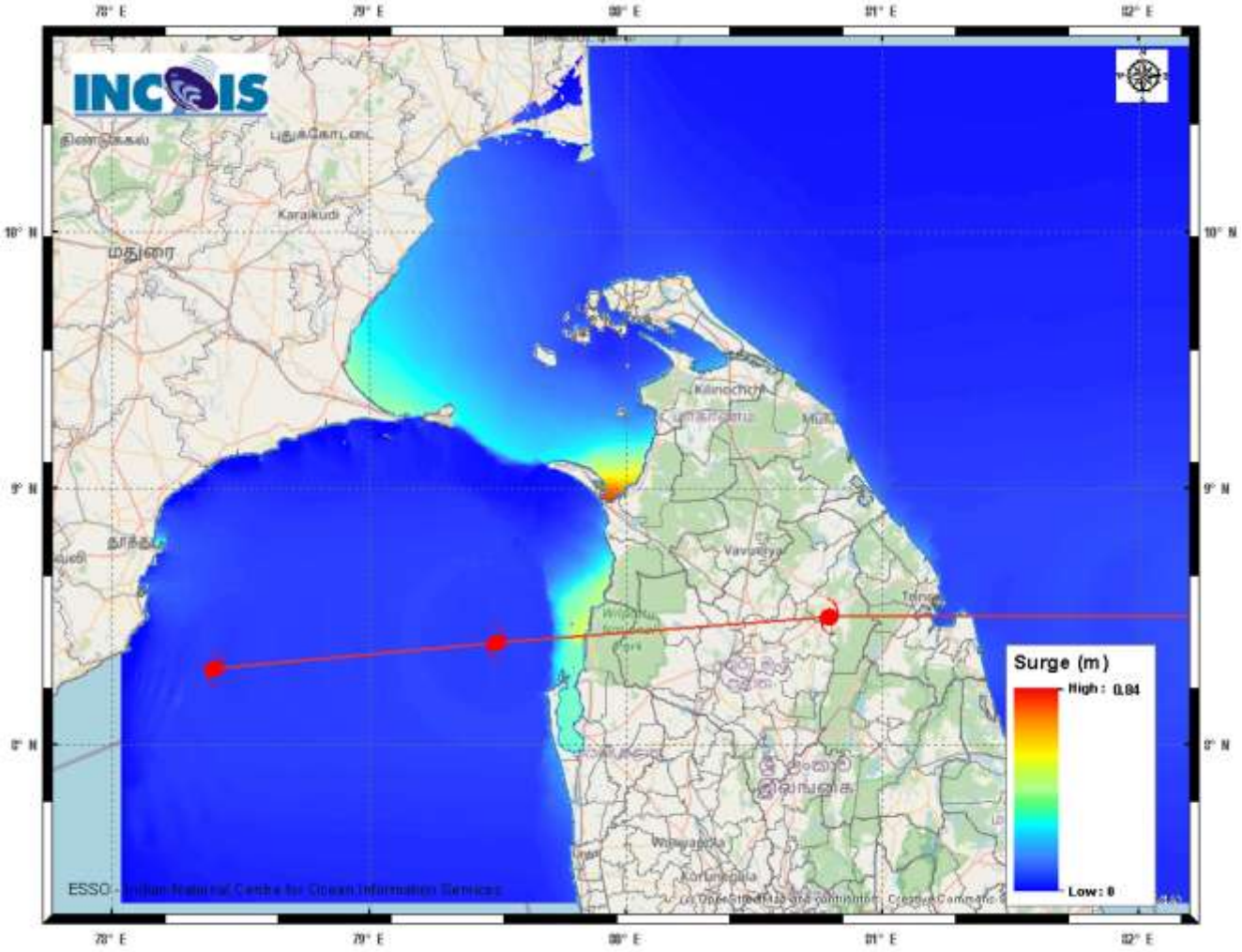
STORM SURGE FORECAST BY INCOIS MODEL



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 TROPICAL CYCLONES NEW DELHI DATED 01.12.2020

SPECIAL TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 0600 UTC OF 01.12.2020 BASED ON 0300 UTC OF 01.12.2020.

SUB: DEEP DEPRESSION OVER SOUTHWEST AND ADJOINING SOUTHEAST BAY OF BENGAL

THE **DEEP DEPRESSION** OVER SOUTHWEST AND ADJOINING SOUTHEAST BAY OF BENGAL MOVED WESTWARDS WITH A SPEED OF 11 KMPH DURING PAST SIX HOURS AND LAY CENTERED AT 0300 UTC OF 01ST DECEMBER 2020 OVER THE SAME REGION NEAR LAT. 7.8° N AND LONG. 85.7°E, ABOUT 500 KM EAST-SOUTHEAST OF TRINCOMALEE (434180) AND 900 KM EAST-SOUTHEAST OF KANNIYAKUMARI (433770).

IT IS VERY LIKELY TO INTENSIFY FURTHER INTO A CYCLONIC STORM DURING NEXT 24 HOURS. IT IS VERY LIKELY TO MOVE WEST-NORTHWESTWARDS AND CROSS SRI LANKA COAST BETWEEN LATITUDE 7.5^{0}N AND 9.0^{0}N CLOSE TO TRINCOMALEE DURING EVENING/NIGHT (1200-1800 UTC) OF 2ND DECEMBER. IT IS VERY LIKELY TO MOVE NEARLY WESTWARDS THEREAFTER, EMERGE INTO GULF OF MANNAR AND ADJOINING COMORIN AREA ON 3RD DECEMBER MORNING AND MOVE WESTWARD TOWARDS SOUTH TAMILNADU COAST.

FORECAST TRACK AND INTENSITY ARE GIVEN BELOW:

Date/Time(UTC)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
01.12.20/0300	7.8/85.7	50-60 GUSTING TO 70	DEEP DEPRESSION
01.12.20/0600	7.9/85.3	55-65 GUSTING TO 75	DEEP DEPRESSION
01.12.20/1200	8.1/84.6	60-70 GUSTING TO 75	CYCLONIC STORM
01.12.20/1800	8.3/83.9	65-75 GUSTING TO 85	CYCLONIC STORM
02.12.20/0000	8.4/83.2	75-85 GUSTING TO 95	CYCLONIC STORM
02.12.20/1200	8.6/81.7	75-85 GUSTING TO 95	CYCLONIC STORM
03.12.20/0000	8.7/80.3	65-75 GUSTING TO 85	CYCLONIC STORM
03.12.20/1200	8.7/79.3	70-80 GUSTING TO 90	CYCLONIC STORM
04.12.20/0000	8.5/78.5	70-80 GUSTING TO 90	CYCLONIC STORM

THE ESTIMATED MAXIMUM SUSTAINED WIND SPEED IS 30 KNOTS GUSTING TO 40 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS 1000 HPA. THE SEA CONDITION IS ROUGH TO VERY ROUGH AROUND THE SYSTEM CENTRE.

AS PER SATELLITE IMAGERY, THE INTENSITY OF THE SYSTEM IS T2.0/2.0. CENTRE IS BETTER DEFINED IN VISIBLE IMAGERY. BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER SOUTH BAY OF BENGAL BETWEEN LAT 5.0^{0}N TO 13.0^{0}N LONG 81.0^{0}E TO 92.0^{0}E IN ASSOCIATION WITH THE SYSTEM. MINIMUN CTT IS MINUS 93^{0}C.

STORM SURGE GUIDNACE FOR SRILANKA COAST: STORM SURGE OF ABOUT 1 METER HEIGHT ABOVE THE ASTRONOMICAL TIDE IS LIKELY TO INUNDATE LOW LYING AREAS OF EAST SRILANKA COAST DURING LANDFALL.

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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REMARKS:

CONSIDERING THE SEA CONDITIONS, SST IS AROUND 29-30°C OVER SOUTHEAST BAY OF BENGAL (BOB). THE TROPICAL CYCLONE HEAT POTENTIAL IS ABOUT 80-100 KJ/CM^2 OVER SOUTHWEST BOB. LOWER LEVEL POSITIVE RELATIVE VORTICITY (100X10^{-6}S^{-1}) PREVAILS TO THE SOUTHEAST OF THE SYSTEM CENTRE. THE UPPER LEVEL POSITIVE DIVERGENCE IS AROUND 20X10^{-5}S^{-1} TO THE NORTHEAST OF THE SYSTEM CENTRE. THE LOWER LEVEL CONVERGENCE IS AROUND 20 X 10^{-5}S^{-1} TO THE NORTH OF THE SYSTEM CENTRE. THESE FEATURES INDICATE THAT ENVIRONMENTAL FEATURES ARE FAVOURABLE FOR FURTHER INTENSIFICATION OF THE SYSTEM. MJO INDEX LIES IN PHASE 4 AND ITS AMPLITUDE IS CLOSE TO 1 HENCE FAVORABLE FOR MODERATE INTENSIFICATION OF THE SYSTEM. THE UPPER TROPOSPHERIC RIDGE AT UPPER AND MIDDLE TROPOSPHERIC LEVELS RUNS ALONG 12.5°N OVER THE BOB. THE SYSTEM LIES IN THE SOUTHERN PERIPHERRY OF THE ABOVE RIDGE. AS A RESULT, IT IS MOVING WEST NORTHWESTWARDS. IT IS EXPECTED TO BE STEERED BY THE ABOVE RIDGE RESULTING IN WEST-NORTHWESTWARD MOVEMENT FOR NEXT 2 DAYS AND THEN NEARLY WESTWARDS. THE ABOVE ENVIRONMENTAL CONDITIONS ARE FAVOURABLE FOR INTENSIFICATION OF THE SYSTEM INTO A CYCLONIC STORM GRADUALLY DURING NEXT 24 HOURS. MOST OF THE NWP MODELS LIKE ECMWF, IMD GFS, NCEP GFS, GEFS, NCUM AND NEPS ARE INDICATING INTENSIFICATION OF THE SYSTEM (UPTO DEEP DEPRESSION/CYCLONIC STORM) AND WEST-NORTHWESTWARDS MOVEMENT. THE SYSTEM WOULD CROSS SRILANKA COAST.

THE VORTEX OVER SOUTH INDIAN OCEAN HAS MOVED WEST-SOUTHWESTWARDS AND LAY NEAR 10.6^{0}S/87.1^{0}E WITH ESTIMATED MAXIMUM SUSTAINED WIND SPEED OF 25 KNOTS. THESE TWO VORTICES ON EITHER SIDE OF THE EQUATOR ARE INTERACTING WITH EACH OTHER.

MOST OF THE NWP MODELS (IMD GFS, GEFS, NCUM, NEPS, WRF, HWRF, ECMWF) ARE ALSO INDICATING THAT THE SYSTEM WOULD CROSS SRILANKA COAST AND EMERGE INTO COMORIN AREA AFTER MOVING ACROSS SRI LANKA. HOWEVER, THERE IS LARGE VARIATION AMONG THE MODELS AND HENCE LACK OF CONSENSUS ABOUT THE TRACK AND INTENSITY OF THE SYSTEM OVER COMORIN AND ADJOINING AREAS. WHILE MOST OF THE MODELS SUGGEST WEST-NORTHWESTWARDS MOVEMENT SKIRTING SOUTH TAMILNADU-SOUTH KERALA COASTS, A FEW MODELS ARE ALSO INDICATING THE SYSTEM TO TOUCH EXTREME SOUTHERN TIP OF KERALA AND TAMILNADU. ALSO THE TIME OF COMING CLOSER TO SOUTHERN TIP OF KERALA AND TAMILNADU VARIES LARGELY FROM 3RD-6TH DECEMBER. CONSIDERING THE OCEANIC AND ENVIRONMENTAL CONDITIONS OVER COMORIN AREA, THE SEA CONDITIONS ARE FAVOURABLE FOR INTENSIFICATION DUE TO HIGHER SST (29-30^{0}C) AND HIGHER OCEAN HEAT CONTENT (80-100 KJ/CM^2). THE VERTICAL WIND SHEAR OVER COMORIN AREA IS ALSO EXPECTED TO BE LOW TO MODERATE FAVOURING INTENSIFICATION.

ARABIAN SEA:

THE SYSTEM OVER BAY OF BENGAL AFTER MOVING ACROSS SRI LANKA IS LIKELY TO EMERGE INTO COMORIN AREA ON 3RD DECEMBER MORNING (0000-0300 UTC).

SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LAY OVER SOUTHEAST ARABIAN SEA OFF SOUTH KERALA COAST BETWEEN LAT 5.0^{0}N TO 10.0^{0}N LONG 73.5^{0}E TO 75.5^{0}E.

PROBABILITY OF CYCLOGENESIS(FORMATION OF DEPRESSION AND ABOVE INTENSITY SYSTEM) DURING NEXT 120 HRS :

24 HOURS	24-48 HOURS	48-72 HOURS	72-96 HOURS	96-120 HOURS
NIL	MOD	MOD	HIGH	HIGH

(R.K.JENAMANI)
Scientist-E, 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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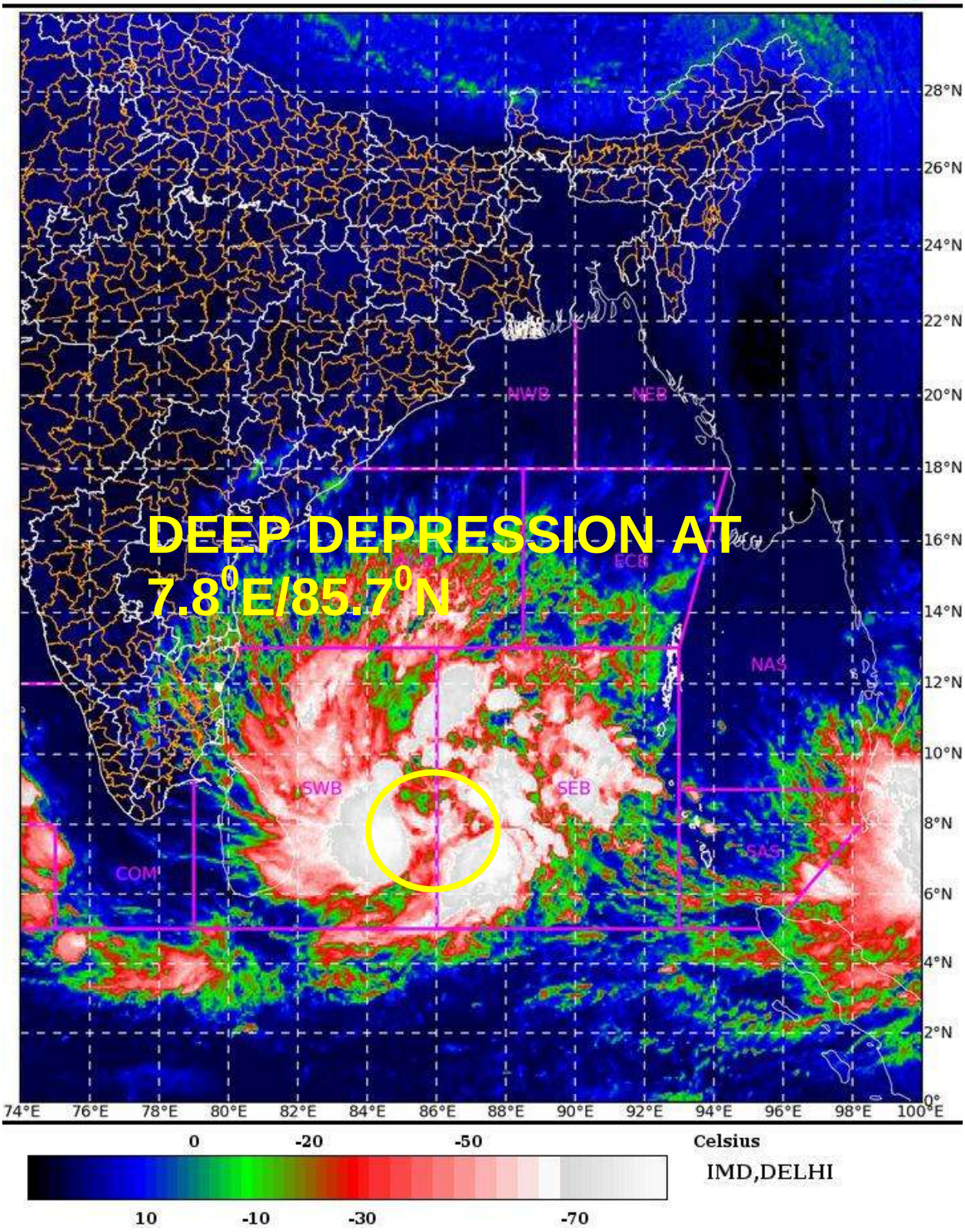
SAT : INSAT-3D IMG 01-12-2020/(0400 to 0427) GMT

IMG_TIR1_TEMP 10.8 um 01-12-2020/(0930 to 0957) IST

L1C Mercator



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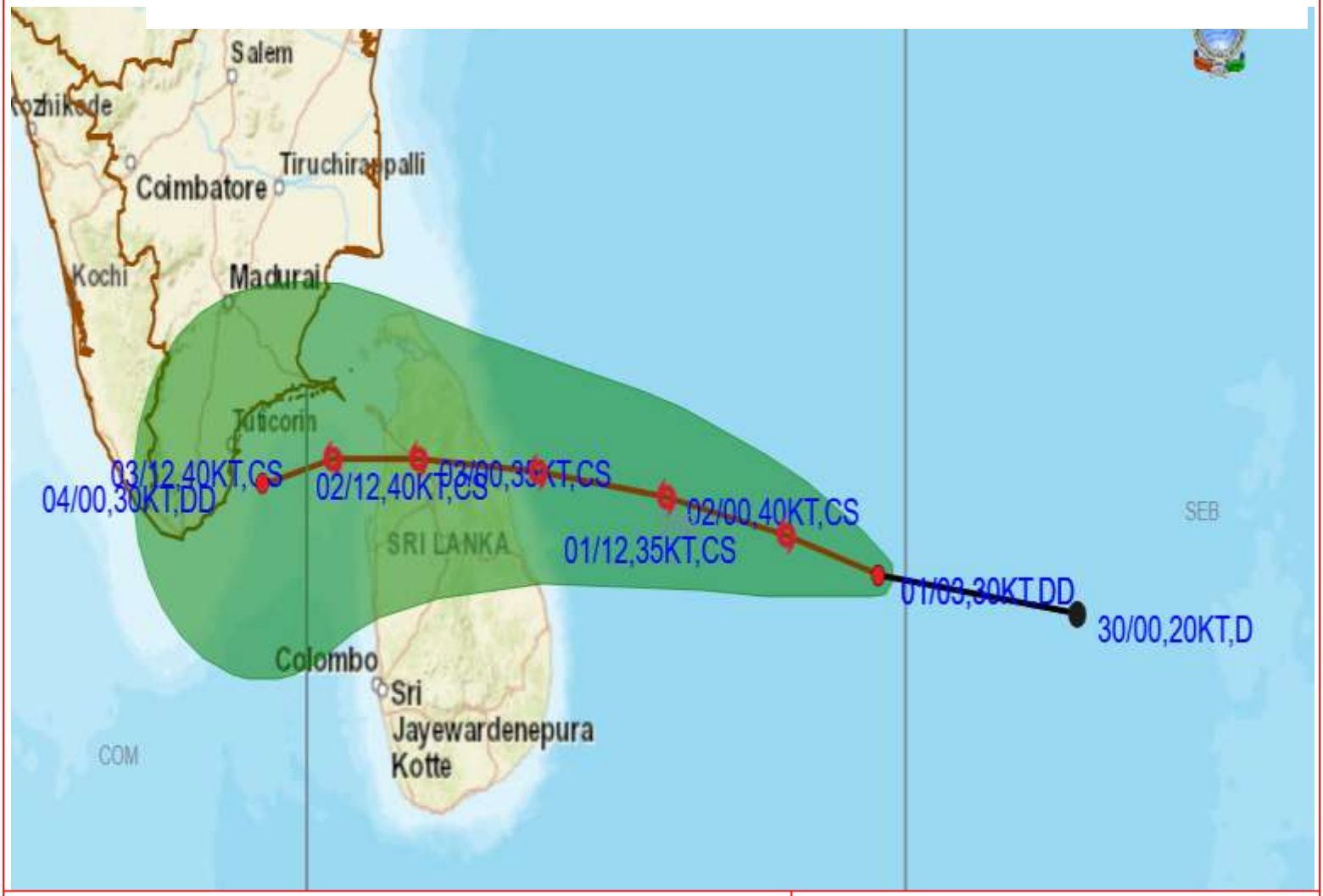
OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINITY OF DEEP DEPRESSION OVER SOUTHWEST AND ADJOINING SOUTHEAST BAY OF BENGAL BASED ON 0300 UTC OF 1st DECEMBER, 2020.



DATE/TIME IN UTC
IST=UTC + 0530
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WML: WELL MARKED LOW PRESSURE AREA
D: DEPRESSION (17-27 KT)
DD: DEEP DEPRESSION (28-33 KT)
CS: CYCLONIC STORM (34-47 KT)
SCS: SEVERE CYCLONIC STORM (48-63KT)
VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
SuCS: SUPER CYCLONIC STORM (≥20 KT)

LESS THAN 34 KT
34-47 KT
≥ 48 KT
OBSERVED TRACK
FORECAST TRACK
CONE OF UNCERTAINTY

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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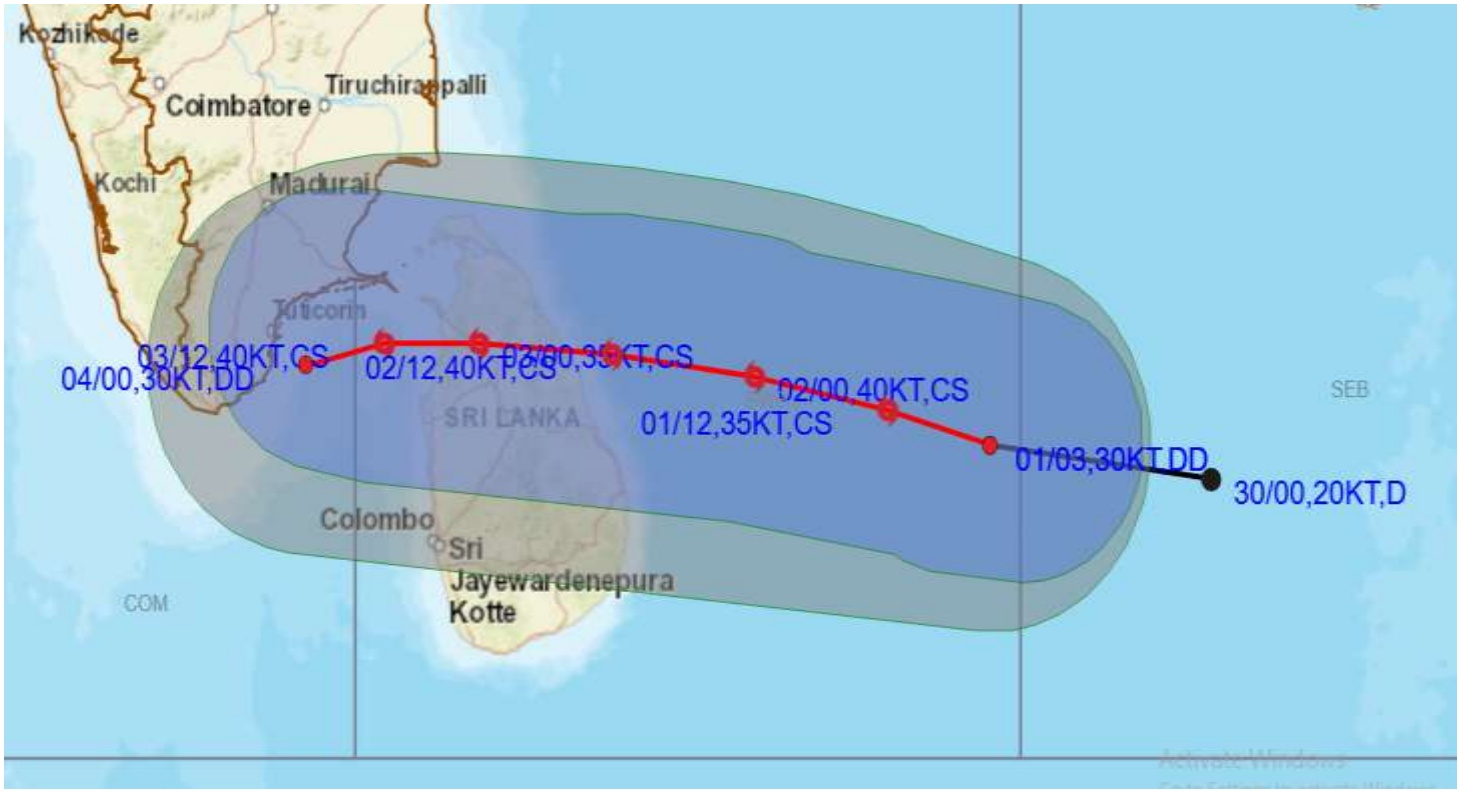
OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF DEEP DEPRESSION OVER SOUTHWEST AND ADJOINING SOUTHEAST BAY OF BENGAL BASED ON 0300 UTC OF 1st DECEMBER, 2020.



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LESS THAN 34 KT
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OBSERVED TRACK
FORECAST TRACK
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AREA OF MAXIMUM SUSTAINED WIND SPEED:
28-33 KT (52-61 KMPH)
34-49 KT (62-91 KMPH)
50-63 KT (92-117 KMPH)
≥ 64 KT (≥118 KMPH)

IMPACT OVER THE SEA

MSW (knot/kmph)	Impact	Action
28-33 (52-61)	Very rough seas	Total suspension of fishing operations
34-49 (62-91)	High to very high seas	Total suspension of fishing operations
50-63 (92-117)	Very high seas	Total suspension of fishing operations
≥ 64 (≥118)	Phenomenal	Total suspension of fishing operations

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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STORM SURGE HEIGHT INFORMATION:

* The below listed surge heights are over and above astronomical tide.

MANDAL/TALUK	DISTRICT	STATE / UNION TERRITORY	NEAREST PLACE OF HABITATION	STORM SURGE (m) *	EXPECTED INUNDATION EXTENT (km)
Arantangi	Pudukkottai	Tamil Nadu	Manamelkudi	0.2-0.3	Nil
Peravurani	Thanjavur	Tamil Nadu	Adaikkathevan	0.2-0.3	Nil
Ramanathapuram	Ramanathapuram	Tamil Nadu	Devipattinam	0.2-0.6	Upto 0.57
Tiruvadanai	Ramanathapuram	Tamil Nadu	Vattanam	0.3-0.5	Upto 0.12

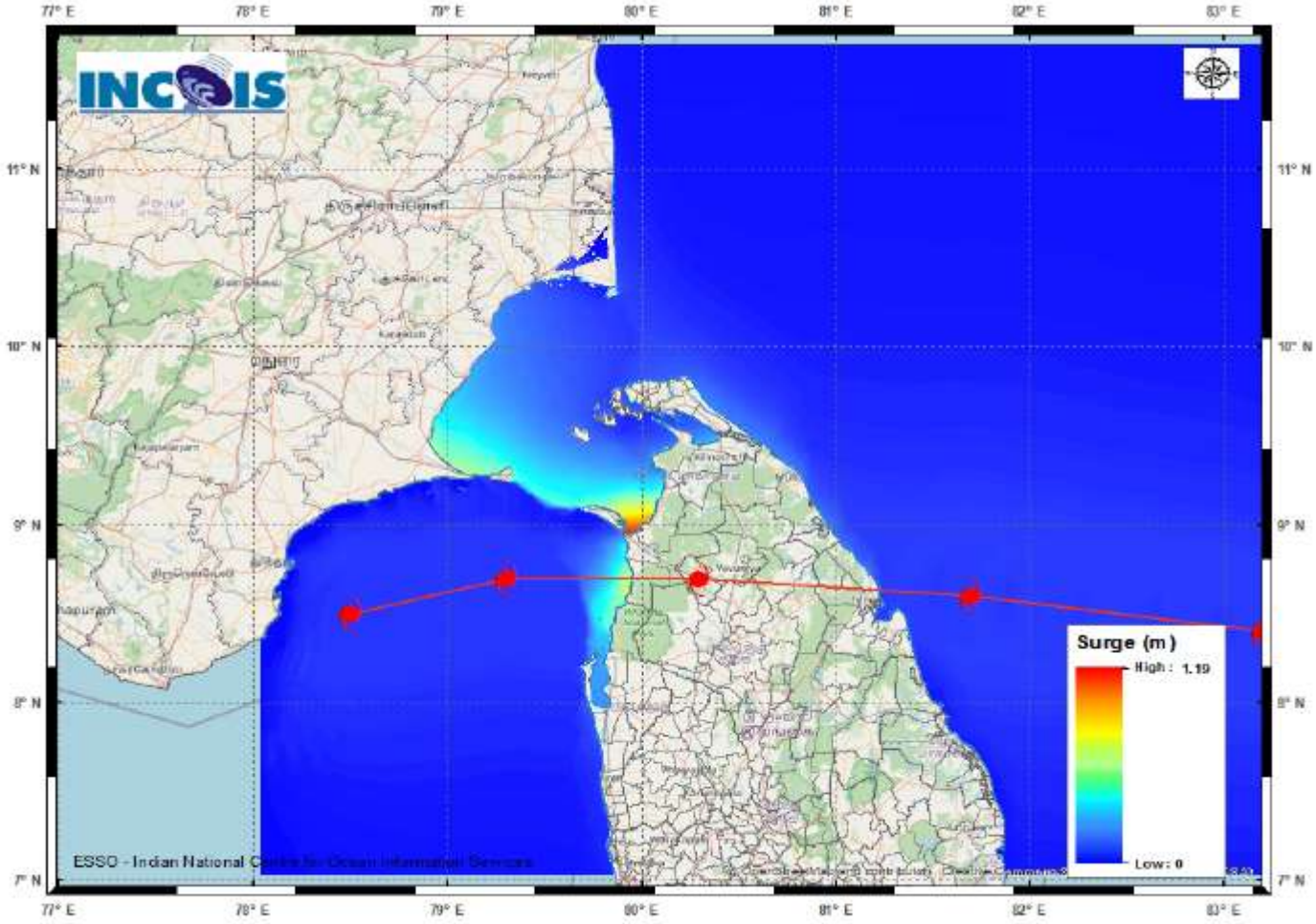

Figure:Storm Surge Map

Storm Surge Forecast by INCOIS Model

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 TROPICAL CYCLONES NEW DELHI DATED 01.12.2020

SPECIAL TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 0900 UTC OF 01.12.2020 BASED ON 0600 UTC OF 01.12.2020.

SUB: DEEP DEPRESSION OVER SOUTHWEST BAY OF BENGAL

THE **DEEP DEPRESSION** OVER SOUTHWEST AND ADJOINING SOUTHEAST BAY OF BENGAL MOVED WESTWARDS WITH A SPEED OF 13 KMPH DURING PAST SIX HOURS AND LAY CENTERED AT 0600 UTC OF 01ST DECEMBER 2020 OVER SOUTHWEST BAY OF BENGAL NEAR LAT. 7.8° N AND LONG. 85.3°E, ABOUT 460 KM TRINCOMALEE (434180) AND 860 KM EAST-SOUTHEAST OF KANNIYAKUMARI (433770).

IT IS VERY LIKELY TO INTENSIFY FURTHER INTO A CYCLONIC STORM DURING NEXT 12 HOURS. IT IS VERY LIKELY TO MOVE WEST-NORTHWESTWARDS AND CROSS SRI LANKA COAST BETWEEN LATITUDE 7.5^{0}N AND 9.0^{0}N CLOSE TO TRINCOMALEE DURING EVENING/NIGHT(1200-1800UTC) OF 2ND DECEMBER AS A CYCLONIC STORM WITH A WIND SPEED OF 75-85 KMPH GUSTING TO 95 KMPH. IT IS VERY LIKELY TO MOVE NEARLY WESTWARDS THEREAFTER, EMERGE INTO GULF OF MANNAR AND ADJOINING COMORIN AREA ON 3RD DECEMBER MORNING. IT WOULD THEN MOVE NEARLY WEST-SOUTHWESTWARDS AND CROSS SOUTH TAMILNADU COAST BETWEEN KANNIYAKUMARI AND PAMBAN AROUND EARLY MORNING 2100 UTC OF 3rd to 0000UTC OF 4TH DECEMBER. FORECAST TRACK AND INTENSITY ARE GIVEN BELOW:

Date/Time(UTC)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
01.12.20/0600	7.8/85.3	55-65 gusting to 75	Deep Depression
01.12.20/1200	7.9/84.6	60-70 gusting to 75	Cyclonic Storm
01.12.20/1800	8.1/84.0	65-75 gusting to 85	Cyclonic Storm
02.12.20/0000	8.3/83.2	70-80 gusting to 90	Cyclonic Storm
02.12.20/0600	8.5/82.4	75-85 gusting to 95	Cyclonic Storm
02.12.20/1800	8.7/80.8	70-80 gusting to 90	Cyclonic Storm
03.12.20/0600	8.8/79.7	65-75 gusting to 85	Cyclonic Storm
03.12.20/1800	8.8/78.7	70-80 gusting to 90	Cyclonic Storm
04.12.20/0600	8.2/77.5	65-75 gusting to 85	Cyclonic Storm

THE ESTIMATED MAXIMUM SUSTAINED WIND SPEED IS 30 KNOTS GUSTING TO 40 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS 1000 HPA. THE SEA CONDITION IS ROUGH TO VERY ROUGH AROUND THE SYSTEM CENTRE.

AS PER SATELLITE IMAGERY, THE INTENSITY OF THE SYSTEM IS T2.0/2.0. CENTRE IS BETTER DEFINED IN VISIBLE IMAGERY. BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER SOUTH BAY OF BENGAL BETWEEN LAT 5.0^{0}N TO 13.0^{0}N LONG 81.0^{0}E TO 92.0^{0}E IN ASSOCIATION WITH THE SYSTEM. MINIMUN CTT IS MINUS 93^{0}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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STORM SURGE GUIDNACE FOR SRILANKA COAST: STORM SURGE OF ABOUT 1 METER HEIGHT ABOVE THE ASTRONOMICAL TIDE IS LIKELY TO INUNDATE LOW LYING AREAS OF EAST SRILANKA COAST DURING LANDFALL.

REMARKS:

CONSIDERING THE SEA CONDITIONS, SST IS AROUND 29-30°C OVER SOUTHEAST BAY OF BENGAL (BOB). THE TROPICAL CYCLONE HEAT POTENTIAL IS ABOUT 80-100 KJ/CM^2 OVER SOUTHWEST BOB. LOWER LEVEL POSITIVE RELATIVE VORTICITY (100X10^{-6}S^{-1}) PREVAILS TO THE SOUTHEAST OF THE SYSTEM CENTRE. THE UPPER LEVEL POSITIVE DIVERGENCE IS AROUND 20X10^{-5}S^{-1} TO THE NORTHEAST OF THE SYSTEM CENTRE. THE LOWER LEVEL CONVERGENCE IS AROUND 20 X 10^{-5}S^{-1} TO THE NORTH OF THE SYSTEM CENTRE. THESE FEATURES INDICATE THAT ENVIRONMENTAL FEATURES ARE FAVOURABLE FOR FURTHER INTENSIFICATION OF THE SYSTEM. MJO INDEX LIES IN PHASE 4 AND ITS AMPLITUDE IS CLOSE TO 1 HENCE FAVORABLE FOR MODERATE INTENSIFICATION OF THE SYSTEM. THE UPPER TROPOSPHERIC RIDGE AT UPPER AND MIDDLE TROPOSPHERIC LEVELS RUNS ALONG 12.5°N OVER THE BOB. THE SYSTEM LIES IN THE SOUTHERN PERIPHERRY OF THE ABOVE RIDGE. AS A RESULT, IT IS MOVING WEST NORTHWESTWARDS. IT IS EXPECTED TO BE STEERED BY THE ABOVE RIDGE RESULTING IN WEST-NORTHWESTWARD MOVEMENT FOR NEXT 2 DAYS AND THEN NEARLY WESTWARDS. THE ABOVE ENVIRONMENTAL CONDITIONS ARE FAVOURABLE FOR INTENSIFICATION OF THE SYSTEM INTO A CYCLONIC STORM DURING NEXT 12 HOURS. MOST OF THE NWP MODELS LIKE ECMWF, IMD GFS, NCEP GFS, GEFS, NCUM AND NEPS ARE INDICATING INTENSIFICATION OF THE SYSTEM (UPTO DEEP DEPRESSION/CYCLONIC STORM) AND WEST-NORTHWESTWARDS MOVEMENT. THE SYSTEM WOULD CROSS SRILANKA COAST.

THE VORTEX OVER SOUTH INDIAN OCEAN HAS MOVED WEST-SOUTHWESTWARDS AND LAY NEAR 10.6^{0}S/87.1^{0}E WITH ESTIMATED MAXIMUM SUSTAINED WIND SPEED OF 25 KNOTS. THESE TWO VORTICES ON EITHER SIDE OF THE EQUATOR ARE INTERACTING WITH EACH OTHER.

MOST OF THE NWP MODELS (IMD GFS, GEFS, NCUM, NEPS, WRF, HWRF, ECMWF) ARE ALSO INDICATING THAT THE SYSTEM WOULD CROSS SRILANKA COAST AND EMERGE INTO COMORIN AREA AFTER MOVING ACROSS SRI LANKA. HOWEVER, THERE IS LARGE VARIATION AMONG THE MODELS AND HENCE LACK OF CONSENSUS ABOUT THE TRACK AND INTENSITY OF THE SYSTEM OVER COMORIN AND ADJOINING AREAS. WHILE MOST OF THE MODELS SUGGEST WEST-NORTHWESTWARDS MOVEMENT SKIRTING SOUTH TAMILNADU-SOUTH KERALA COASTS, A FEW MODELS ARE ALSO INDICATING THE SYSTEM TO TOUCH EXTREME SOUTHERN TIP OF KERALA AND TAMILNADU. ALSO THE TIME OF COMING CLOSER TO SOUTHERN TIP OF KERALA AND TAMILNADU VARIES LARGELY FROM 3RD-6TH DECEMBER. CONSIDERING THE OCEANIC AND ENVIRONMENTAL CONDITIONS OVER COMORIN AREA, THE SEA CONDITIONS ARE FAVOURABLE FOR INTENSIFICATION DUE TO HIGHER SST (29-30^{0}C) AND HIGHER OCEAN HEAT CONTENT (80-100 KJ/CM^2). THE VERTICAL WIND SHEAR OVER COMORIN AREA IS ALSO EXPECTED TO BE LOW TO MODERATE FAVOURING INTENSIFICATION.

ARABIAN SEA:

THE SYSTEM OVER BAY OF BENGAL AFTER MOVING ACROSS SRI LANKA IS LIKELY TO EMERGE INTO COMORIN AREA ON 3RD DECEMBER MORNING (0000-0300 UTC).

SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LAY OVER SOUTHEAST ARABIAN SEA OFF SOUTH KERALA COAST BETWEEN LAT 5.0^{0}N TO 10.0^{0}N LONG 73.5^{0}E TO 75.5^{0}E.

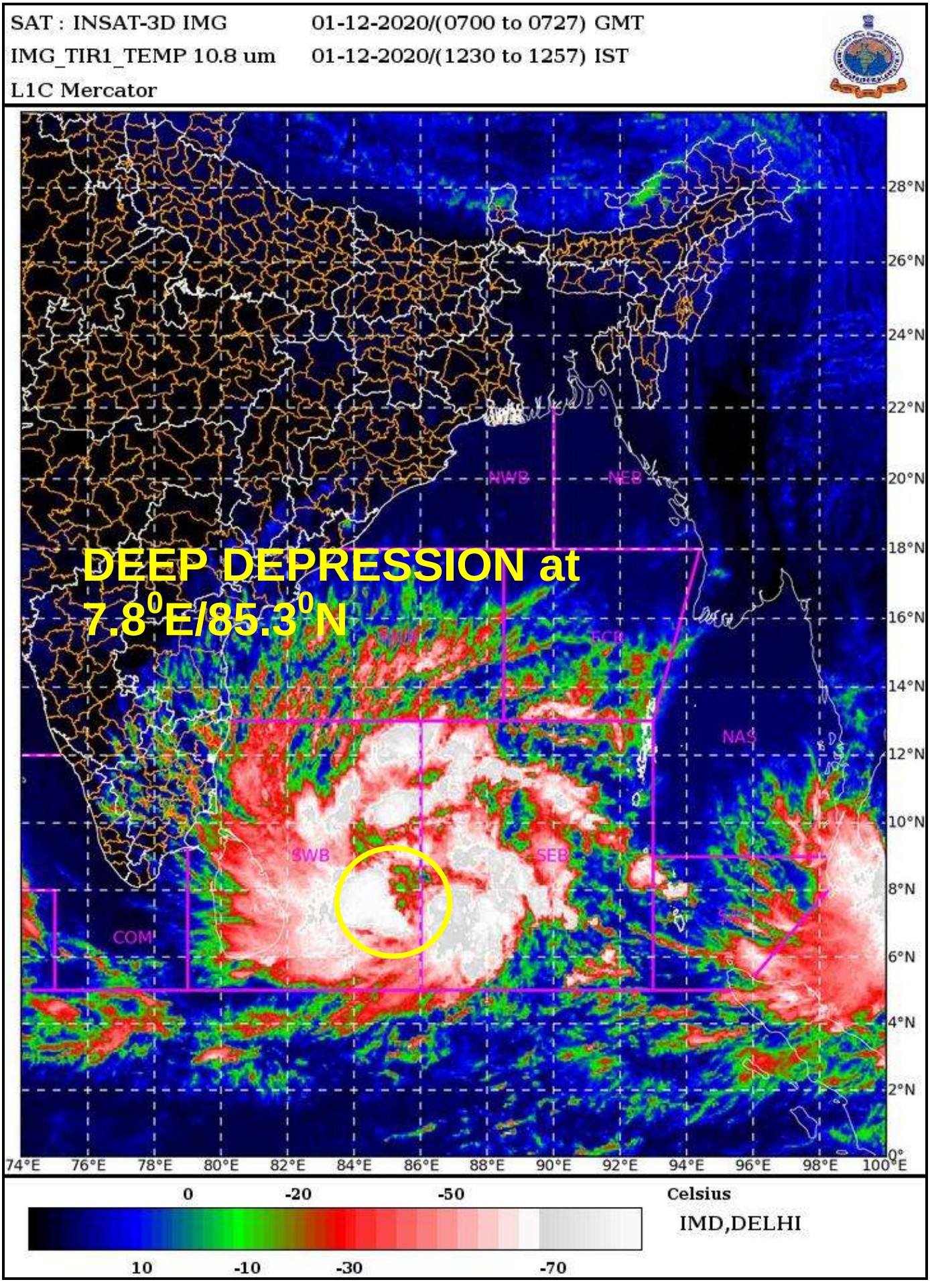
PROBABILITY OF CYCLOGENESIS(FORMATION OF DEPRESSION AND ABOVE INTENSITY SYSTEM) DURING NEXT 120 HRS :

24 HOURS	24-48 HOURS	48-72 HOURS	72-96 HOURS	96-120 HOURS
NIL	MOD	MOD	HIGH	HIGH

(R.K.JENAMANI)
Scientist-E, RSMC, New Delhi

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

- **This is a guidance Bulletin for the WMO/ESCAP Panel Member countries,. Please visit respective National websites for Country specific Bulletins**



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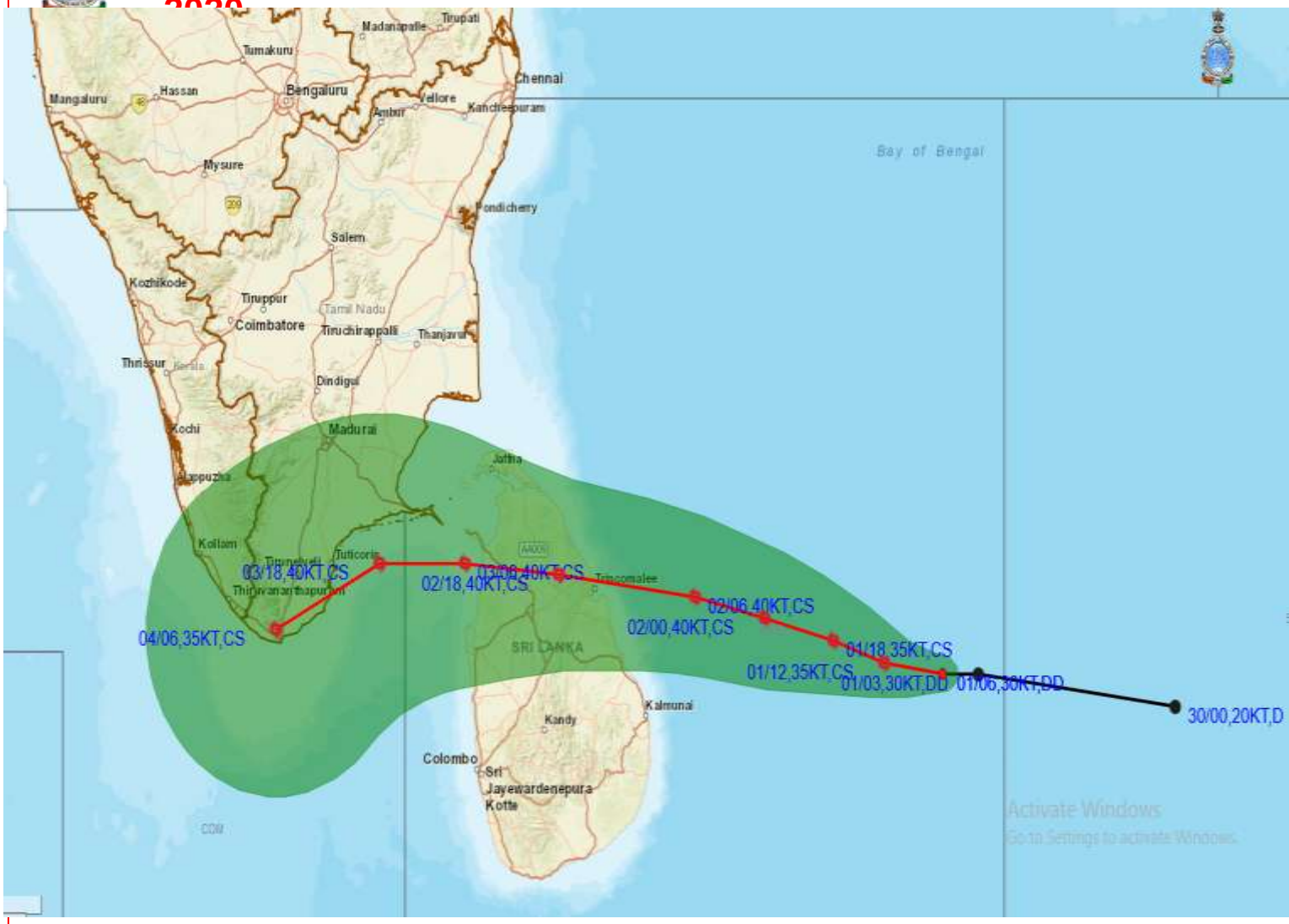
OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINITY OF DEEP DEPRESSION OVER SOUTHWEST BAY OF BENGAL BASED ON 0600 UTC OF 1st DECEMBER, 2020



DATE/TIME IN UTC
IST=UTC + 0530
L: LOW PRESSURE AREA
WML: WELL MARKED LOW PRESSURE AREA
D: DEPRESSION (17-27 KT)
DD: DEEP DEPRESSION (28-33 KT)
CS: CYCLONIC STORM (34-47 KT)
SCS: SEVERE CYCLONIC STORM (48-63KT)
VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
SuCS: SUPER CYCLONIC STORM (≥ 120 KT)

LESS THAN 34 KT
34-47 KT
≥ 48 KT
OBSERVED TRACK
FORECAST TRACK
CONE OF UNCERTAINTY

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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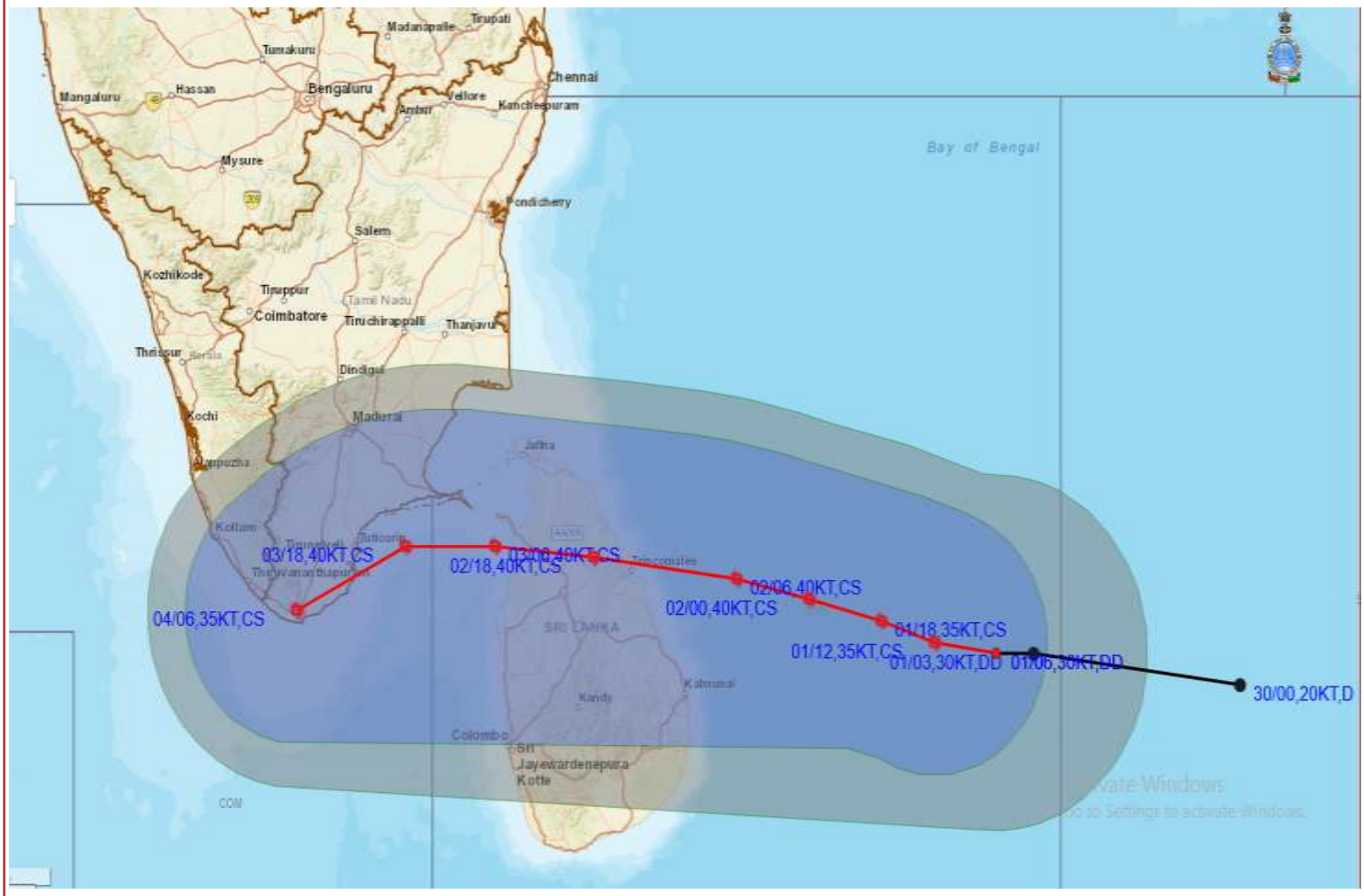
OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF DEEP DEPRESSION OVER SOUTHWEST BAY OF BENGAL BASED ON 0600 UTC OF 1st DECEMBER, 2020.



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LESS THAN 34 KT
34-47 KT
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OBSERVED TRACK
FORECAST TRACK
CONE OF UNCERTAINTY
AREA OF MAXIMUM SUSTAINED WIND SPEED:
28-33 KT (52-61 KMPH)
34-49 KT (62-91 KMPH)
50-63 KT (92-117 KMPH)
≥ 64 KT (≥118 KMPH)

IMPACT OVER THE SEA

MSW (knot/kmph)	Impact	Action
28-33 (52-61)	Very rough seas	Total suspension of fishing operations
34-49 (62-91)	High to very high seas	Total suspension of fishing operations
50-63 (92-117)	Very high seas	Total suspension of fishing operations
≥ 64 (≥118)	Phenomenal	Total suspension of fishing operations

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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STORM SURGE HEIGHT INFORMATION:

* The below listed surge heights are over and above astronomical tide.

MANDAL/TALUK	DISTRICT	STATE / UNION TERRITORY	NEAREST PLACE OF HABITATION	STORM SURGE (m) *	EXPECTED INUNDATION EXTENT (km)
Arantangi	Pudukkottai	Tamil Nadu	Manamelkudi	0.2-0.3	Nil
Peravurani	Thanjavur	Tamil Nadu	Adaikkathevan	0.2-0.3	Nil
Ramanathapuram	Ramanathapuram	Tamil Nadu	Devipattinam	0.2-0.6	Upto 0.57
Tiruvadanai	Ramanathapuram	Tamil Nadu	Vattanam	0.3-0.5	Upto 0.12

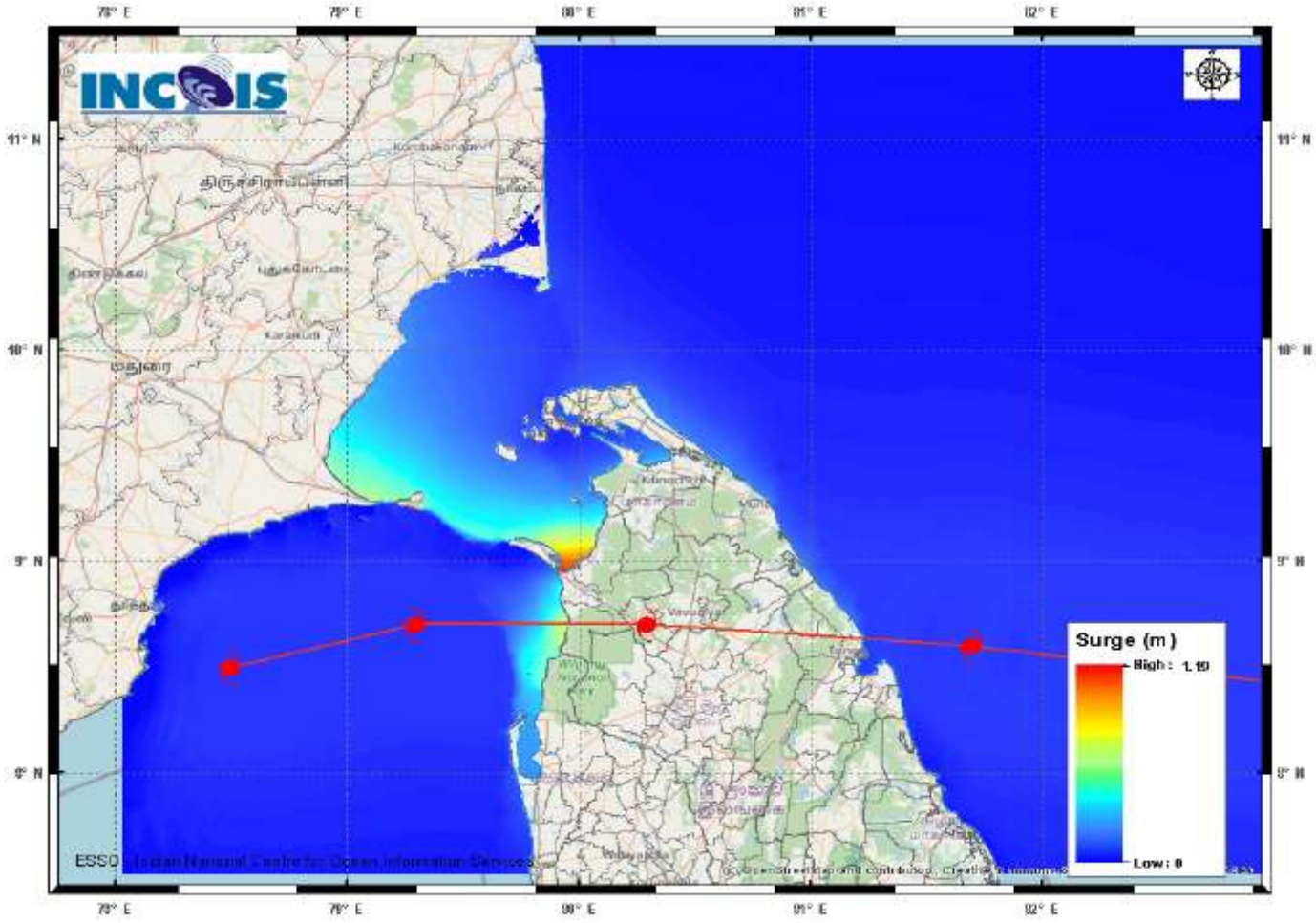

Figure:Storm Surge Map

Storm Surge Forecast by INCOIS Model

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 NO. 1

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)
YEMEN METEOROLOGICAL SERVICES, REPUBLIC OF YEMEN (THROUGH RTH JEDDAH)
NATIONAL CENTRE FOR METEOROLOGY, UAE (THROUGH RTH JEDDAH)
PRESIDENCY OF METEOROLOGY AND ENVIRONMENT, SAUDI ARABIA (THROUGH RTH JEDDAH)
IRAN METEOROLOGICAL ORGANISATION, (THROUGH RTH JEDDAH)
QATAR METEOROLOGICAL DEPARTMENT (THROUGH RTH JEDDAH)

TROPICAL CYCLONE ADVISORY NO. 1 FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 1500 UTC OF 01.12.2020 BASED ON 1200 UTC OF 01.12.2020.

SUB: CYCLONIC STORM 'BUREVI' OVER SOUTHWEST BAY OF BENGAL

THE **DEEP DEPRESSION** OVER SOUTHWEST BAY OF BENGAL MOVED WEST-NORTHWESTWARDS WITH A SPEED OF 09 KMPH DURING PAST SIX HOURS, INTENSIFIED INTO **CYCLONIC STORM 'BUREVI'** AND LAY CENTERED AT 1200 UTC OF TODAY, THE 01ST DECEMBER 2020 OVER SOUTHWEST BAY OF BENGAL NEAR LAT. 7.9° N AND LONG. 84.8°E, ABOUT 400 KM EAST-SOUTHEAST OF TRINCOMALEE (434180) AND 800 KM EAST-SOUTHEAST OF KANNIYAKUMARI (43377).

IT IS VERY LIKELY TO INTENSIFY FURTHER DURING NEXT 12 HOURS. IT IS VERY LIKELY TO MOVE WEST-NORTHWESTWARDS AND CROSS SRI LANKA COAST BETWEEN LATITUDE 7.5^{0}N AND 9.0^{0}N, CLOSE TO TRINCOMALEE DURING EVENING/NIGHT (1200-1800UTC) OF 2ND DECEMBER AS A CYCLONIC STORM WITH A WIND SPEED OF 75-85 KMPH GUSTING TO 95 KMPH. IT IS VERY LIKELY TO MOVE NEARLY WESTWARDS THEREAFTER, EMERGE INTO GULF OF MANNAR AND ADJOINING COMORIN AREA ON 3RD DECEMBER MORNING. IT WOULD THEN MOVE NEARLY WEST-SOUTHWESTWARDS AND CROSS SOUTH TAMILNADU COAST BETWEEN KANNIYAKUMARI AND PAMBAN AROUND EARLY MORNING 2100 UTC OF 3rd to 0000UTC OF 4TH DECEMBER.

FORECAST TRACK AND INTENSITY ARE GIVEN BELOW:

DATE/TIME(UTC)	POSITION (LAT. 0N/ LONG. 0E)	MAXIMUM SUSTAINED SURFACE WIND SPEED (KMPH)	CATEGORY OF CYCLONIC DISTURBANCE
01.12.20/1200	7.9/84.8	60-70 gusting to 75	CYCLONIC STORM
01.12.20/1800	8.1/84.2	65-75 gusting to 85	CYCLONIC STORM
02.12.20/0000	8.3/83.4	70-80 gusting to 90	CYCLONIC STORM
02.12.20/0600	8.5/82.6	75-85 gusting to 95	CYCLONIC STORM
02.12.20/1200	8.7/81.3	75-85 gusting to 95	CYCLONIC STORM
03.12.20/0000	8.8/80.2	65-75 gusting to 85	CYCLONIC STORM
03.12.20/1200	8.8/79.3	70-80 gusting to 90	CYCLONIC STORM

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04.12.20/0000	8.6/78.2	70-80 gusting to 90	CYCLONIC STORM
04.12.20/1200	8.0/77.1	65-75 gusting to 85	CYCLONIC STORM

THE ESTIMATED MAXIMUM SUSTAINED WIND SPEED IS 35 KNOTS GUSTING TO 40 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS 999 HPA. THE SEA CONDITION IS VERY ROUGH TO HIGH AROUND THE SYSTEM CENTRE.

AS PER SATELLITE IMAGERY, THE INTENSITY OF THE SYSTEM IS T2.5/2.5 WITH SHEAR PATTERN. BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER SOUTH BAY OF BENGAL BETWEEN LAT 5.0^{0}N TO 13.5^{0}N LONG 80.0^{0}E TO 90.0^{0}E AND ALSO OVER SRI LANKA IN ASSOCIATION WITH THE SYSTEM. MINIMUN CTT IS MINUS 93^{0}C.

STORM SURGE GUIDNACE FOR SRILANKA COAST: STORM SURGE OF ABOUT 1 METER HEIGHT ABOVE THE ASTRONOMICAL TIDE IS LIKELY TO INUNDATE LOW LYING AREAS OF EAST SRILANKA COAST DURING LANDFALL.

REMARKS:

CONSIDERING THE SEA CONDITIONS, SST IS AROUND 29-30°C OVER SOUTHEAST BAY OF BENGAL (BOB). THE TROPICAL CYCLONE HEAT POTENTIAL IS ABOUT 80-100 KJ/CM^2 OVER SOUTHWEST BOB. LOWER LEVEL POSITIVE RELATIVE VORTICITY (100X10^{-6}S^{-1}) PREVAILS TO THE SOUTHEAST OF THE SYSTEM CENTRE. THE UPPER LEVEL POSITIVE DIVERGENCE IS AROUND 20X10^{-5}S^{-1} TO THE NORTHEAST OF THE SYSTEM CENTRE. THE LOWER LEVEL CONVERGENCE IS AROUND 20 X 10^{-5}S^{-1} TO THE NORTH OF THE SYSTEM CENTRE. THESE FEATURES INDICATE THAT ENVIRONMENTAL FEATURES ARE FAVOURABLE FOR FURTHER INTENSIFICATION OF THE SYSTEM. MJO INDEX LIES IN PHASE 4 AND ITS AMPLITUDE IS CLOSE TO 1 HENCE FAVORABLE THE SYSTEM TO REMAIN AS A CYCLONIC STORM DURING THE FORECAST PERIOD. THE UPPER TROPOSPHERIC RIDGE AT UPPER AND MIDDLE TROPOSPHERIC LEVELS RUNS ALONG 12.5°N OVER THE BOB. THE SYSTEM LIES IN THE SOUTHERN PERIPHERRY OF THE ABOVE RIDGE. AS A RESULT, IT IS MOVING WEST NORTHWESTWARDS. IT IS EXPECTED TO BE STEERED BY THE ABOVE RIDGE RESULTING IN WEST-NORTHWESTWARD MOVEMENT FOR NEXT 2 DAYS AND THEN NEARLY WESTWARDS. MOST OF THE NWP MODELS LIKE ECMWF, IMD GFS, NCEP GFS, GEFS, NCUM AND NEPS ARE INDICATING WEST-NORTHWESTWARDS MOVEMENT. THE SYSTEM WOULD CROSS SRILANKA COAST.

THE VORTEX OVER SOUTH INDIAN OCEAN HAS MOVED WEST-SOUTHWESTWARDS AND LAY NEAR 10.6^{0}S/87.1^{0}E WITH ESTIMATED MAXIMUM SUSTAINED WIND SPEED OF 25 KNOTS. THESE TWO VORTICES ON EITHER SIDE OF THE EQUATOR ARE INTERACTING WITH EACH OTHER.

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ARABIAN SEA:

THE SYSTEM OVER BAY OF BENGAL AFTER MOVING ACROSS SRI LANKA IS LIKELY TO EMERGE INTO COMORIN AREA ON 3RD DECEMBER MORNING (0000-0300 UTC).

SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LAY OVER SOUTHEAST ARABIAN SEA OFF SOUTH KERALA COAST BETWEEN

LAT 5.0^0N TO 10.0^0N LONG 73.5^0E TO 75.5^0E.

PROBABILITY OF CYCLOGENESIS(FORMATION OF DEPRESSION AND ABOVE INTENSITY SYSTEM) DURING NEXT 120 HRS :

24 HOURS	24-48 HOURS	48-72 HOURS	72-96 HOURS	96-120 HOURS
NIL	MOD	MOD	HIGH	HIGH

(R.K.JENAMANI)
Scientist-F, 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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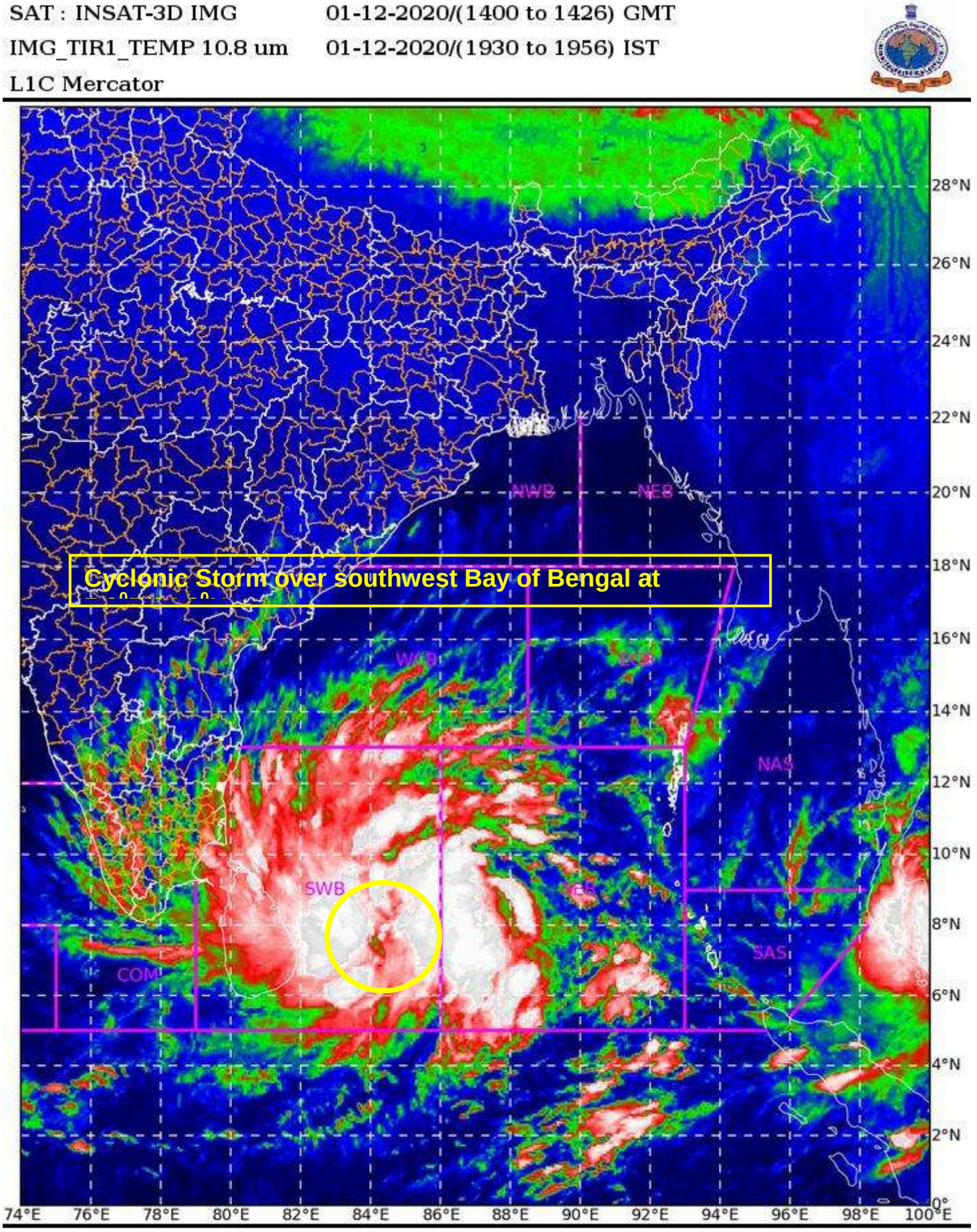

PROB

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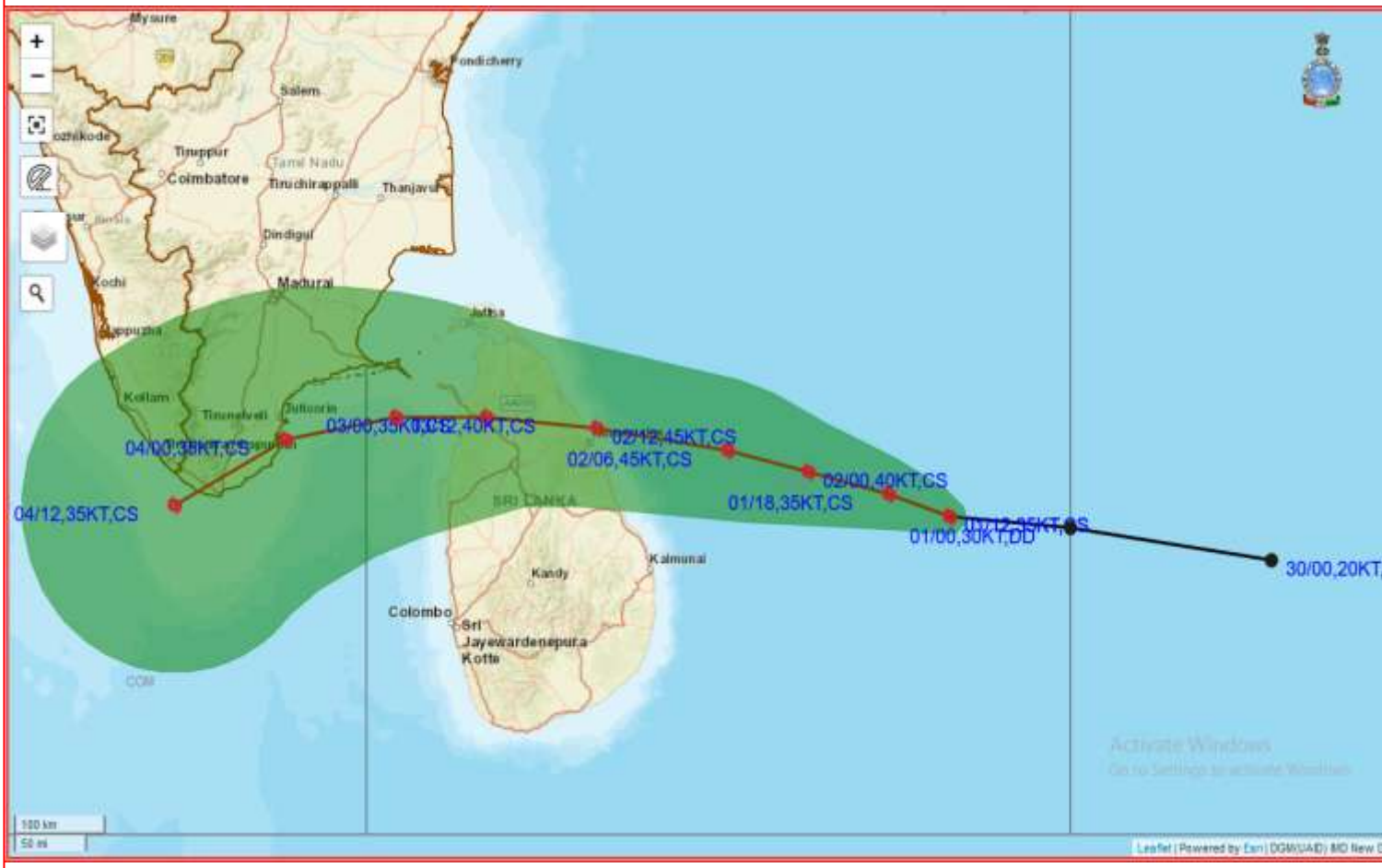
OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINITY OF CYCLONIC STORM "BUREVI" OVER SOUTHWEST BAY OF BENGAL BASED ON 1200 UTC OF 1st DECEMBER 2020



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LESS THAN 34 KT
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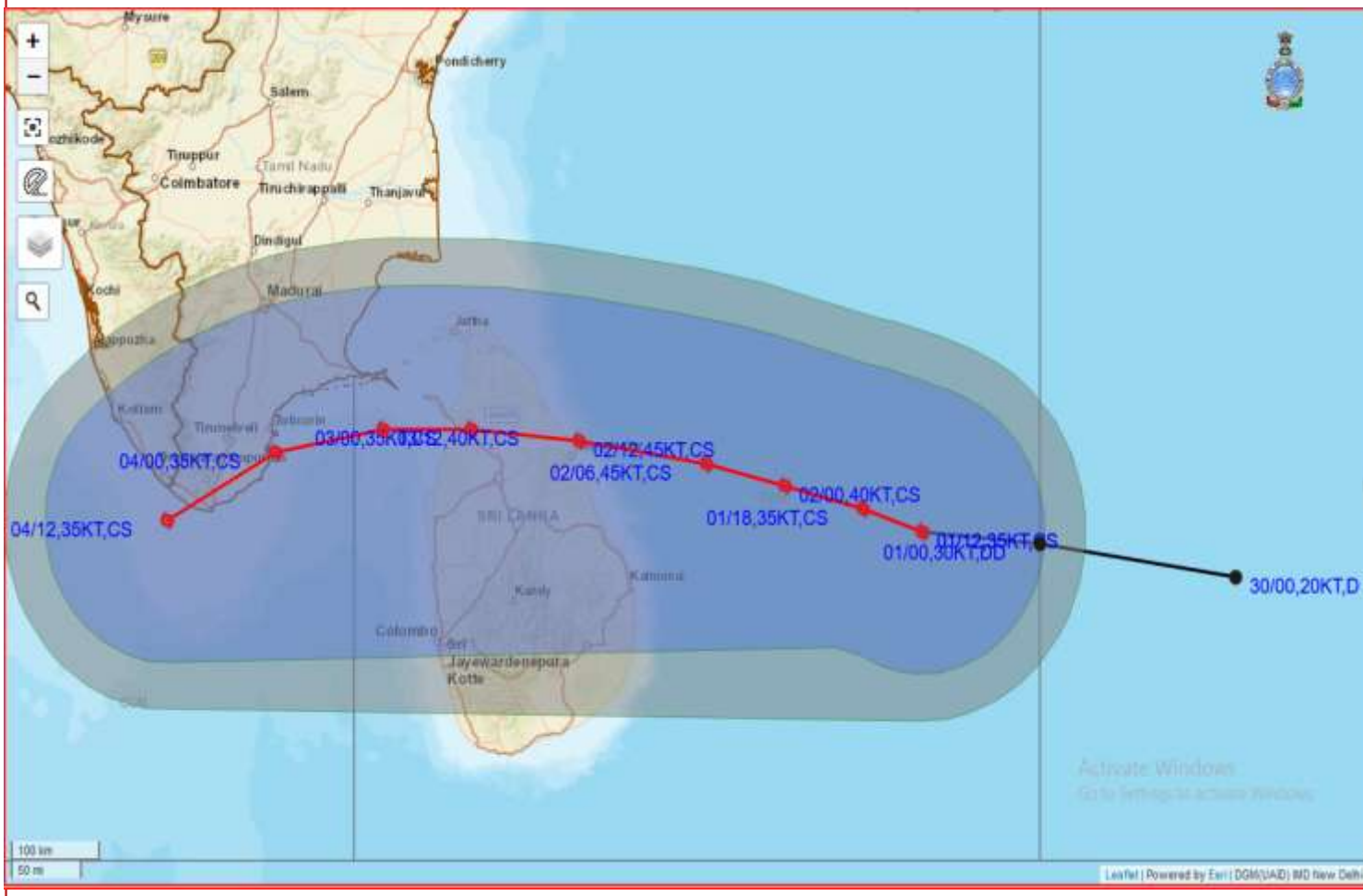
OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF CYCLONIC STORM "BUREVI" OVER SOUTHWEST BAY OF BENGAL BASED ON 1200 UTC OF 1st DECEMBER, 2020.



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- LESS THAN 34 KT
- 34-47 KT
- ≥ 48 KT
- OBSERVED TRACK
- FORECAST TRACK
- CONE OF UNCERTAINTY

AREA OF MAXIMUM SUSTAINED WIND SPEED:
- 28-33 KT (52-61 KMPH)
- 34-49 KT (62-91 KMPH)
- 50-63 KT (92-117 KMPH)
- ≥ 64 KT (≥118 KMPH)

IMPACT OVER THE SEA

MSW (knot/kmph)	Impact	Action
28-33 (52-61)	Very rough seas	Total suspension of fishing operations
34-49 (62-91)	High to very high seas	Total suspension of fishing operations
50-63 (92-117)	Very high seas	Total suspension of fishing operations
≥ 64 (≥118)	Phenomenal	Total suspension of fishing operations

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STORM SURGE HEIGHT INFORMATION:

* The below listed surge heights are over and above astronomical tide.

MANDAL/TALUK	DISTRICT	STATE / UNION TERRITORY	NEAREST PLACE OF HABITATION	STORM SURGE (m) *	EXPECTED INUNDATION EXTENT (km)
Arantangi	Pudukkottai	Tamil Nadu	Manamelkudi	0.2-0.3	Nil
Peravurani	Thanjavur	Tamil Nadu	Adaikkathevan	0.2-0.3	Nil
Ramanathapuram	Ramanathapuram	Tamil Nadu	Devipattinam	0.2-0.6	Upto 0.57
Tiruvadanai	Ramanathapuram	Tamil Nadu	Vattanam	0.3-0.5	Upto 0.12

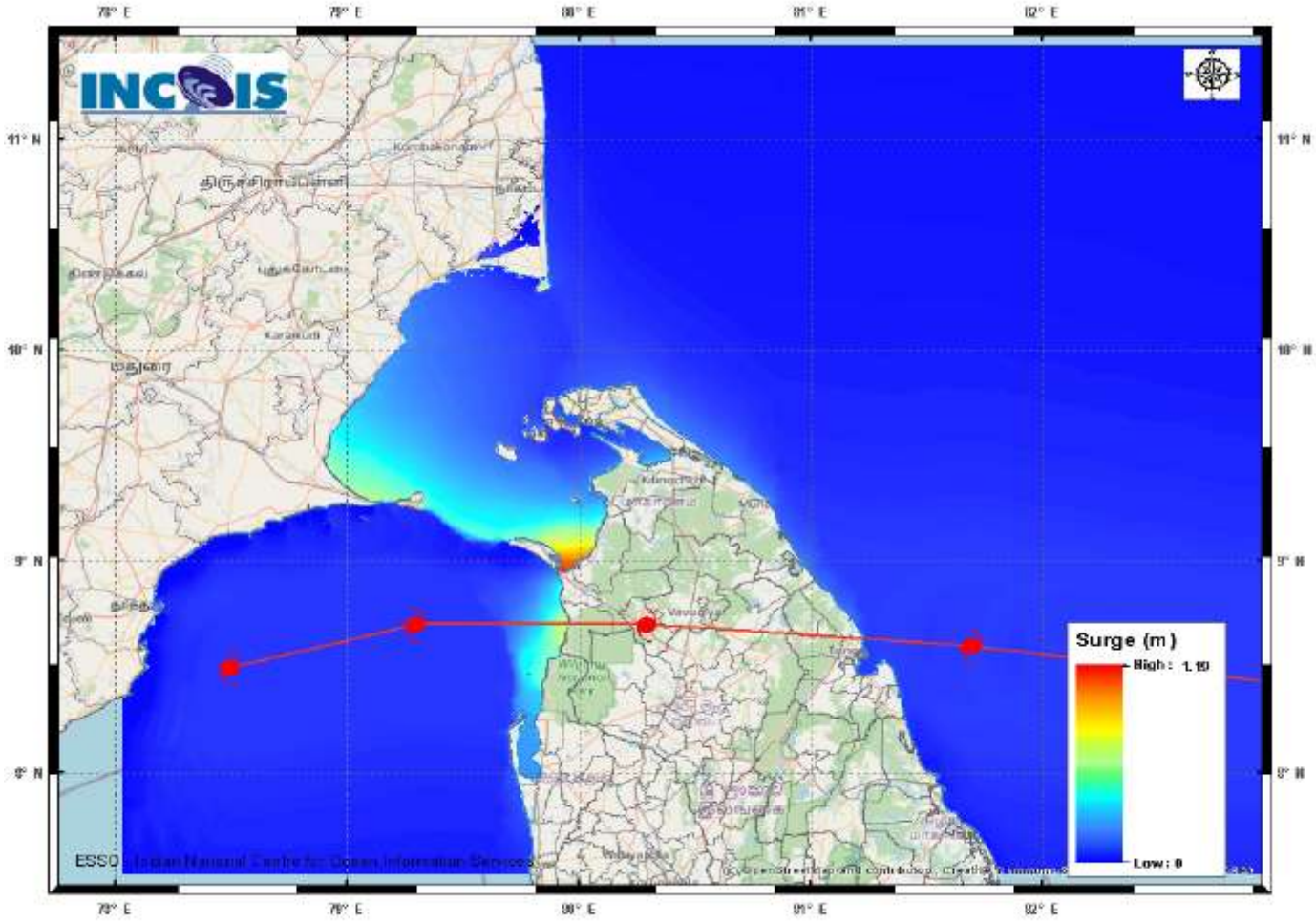

Figure:Storm Surge Map

Storm Surge Forecast by INCOIS Model

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REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI

TROPICAL CYCLONE ADVISORY BULLETIN NO. 2

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)
YEMEN METEOROLOGICAL SERVICES, REPUBLIC OF YEMEN (THROUGH RTH JEDDAH)
NATIONAL CENTRE FOR METEOROLOGY, UAE (THROUGH RTH JEDDAH)
PRESIDENCY OF METEOROLOGY AND ENVIRONMENT, SAUDI ARABIA (THROUGH RTH JEDDAH)
IRAN METEOROLOGICAL ORGANISATION, (THROUGH RTH JEDDAH)
QATAR METEOROLOGICAL DEPARTMENT (THROUGH RTH JEDDAH)

TROPICAL CYCLONE ADVISORY NO. 2 FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 1800 UTC OF 01.12.2020 BASED ON 1500 UTC OF 01.12.2020.

SUB: CYCLONIC STORM 'BUREVI' OVER SOUTHWEST BAY OF BENGAL

THE **CYCLONIC STORM 'BUREVI'** OVER SOUTHWEST BAY OF BENGAL MOVED WEST-NORTHWESTWARDS WITH A SPEED OF 10 KMPH DURING PAST SIX HOURS AND LAY CENTERED AT 1500 UTC OF TODAY, THE 01ST DECEMBER 2020 OVER SOUTHWEST BAY OF BENGAL NEAR LAT. 7.9°N AND LONG. 84.5°E, ABOUT 370 KM EAST-SOUTHEAST OF TRINCOMALEE (43418), 600 KM EAST-SOUTHEAST OF PAMBAN (43363) AND 770 KM EAST-SOUTHEAST OF KANNIYAKUMARI (43377).

IT IS VERY LIKELY TO INTENSIFY FURTHER DURING NEXT 12 HOURS. IT IS VERY LIKELY TO MOVE WEST-NORTHWESTWARDS AND CROSS SRI LANKA COAST BETWEEN LATITUDE 7.5^{0}N AND 9.0^{0}N, CLOSE TO TRINCOMALEE DURING EVENING/NIGHT (1200-1800UTC) OF 2ND DECEMBER AS A CYCLONIC STORM WITH A WIND SPEED OF 75-85 KMPH GUSTING TO 95 KMPH. IT IS VERY LIKELY TO MOVE NEARLY WESTWARDS THEREAFTER, EMERGE INTO GULF OF MANNAR AND ADJOINING COMORIN AREA ON 3RD DECEMBER MORNING. IT WOULD THEN MOVE NEARLY WEST-SOUTHWESTWARDS AND CROSS SOUTH TAMILNADU COAST BETWEEN KANNIYAKUMARI AND PAMBAN AROUND EARLY MORNING (2100 UTC OF 3rd to 0000 UTC OF 4TH DECEMBER).

FORECAST TRACK AND INTENSITY ARE GIVEN BELOW:

DATE/TIME(UTC)	POSITION (LAT. 0N/ LONG. 0E)	MAXIMUM SUSTAINED SURFACE WIND SPEED (KMPH)	CATEGORY OF CYCLONIC DISTURBANCE
01.12.20/1500	7.9/84.5	60-70 GUSTING TO 80	CYCLONIC STORM
01.12.20/1800	8.1/84.2	65-75 GUSTING TO 85	CYCLONIC STORM
02.12.20/0000	8.3/83.4	70-80 GUSTING TO 90	CYCLONIC STORM
02.12.20/0600	8.5/82.6	75-85 GUSTING TO 95	CYCLONIC STORM
02.12.20/1200	8.7/81.3	75-85 GUSTING TO 95	CYCLONIC STORM
03.12.20/0000	8.8/80.2	65-75 GUSTING TO 85	CYCLONIC STORM
03.12.20/1200	8.8/79.3	70-80 GUSTING TO 90	CYCLONIC STORM
04.12.20/0000	8.6/78.2	70-80 GUSTING TO 90	CYCLONIC STORM
04.12.20/1200	8.0/77.1	65-75 GUSTING TO 85	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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THE ESTIMATED MAXIMUM SUSTAINED WIND SPEED IS 35 KNOTS GUSTING TO 40 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS 999 HPA. THE SEA CONDITION IS VERY ROUGH TO HIGH AROUND THE SYSTEM CENTRE.

AS PER SATELLITE IMAGERY, THE INTENSITY OF THE SYSTEM IS T2.5/2.5 WITH SHEAR PATTERN. BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER SOUTH BAY OF BENGAL BETWEEN LAT 5.5^0N TO 13.5^0N LONG 80.0^0E TO 90.0^0E AND ALSO OVER SRI LANKA IN ASSOCIATION WITH THE SYSTEM. MINIMUN CTT IS MINUS 93^0C.

STORM SURGE GUIDNACE FOR SRILANKA COAST: STORM SURGE OF ABOUT 1 METER HEIGHT ABOVE THE ASTRONOMICAL TIDE IS LIKELY TO INUNDATE LOW LYING AREAS OF EAST SRILANKA COAST DURING LANDFALL.

REMARKS:

CONSIDERING THE SEA CONDITIONS, SST IS AROUND 29-30°C OVER SOUTHEAST BAY OF BENGAL (BOB). THE TROPICAL CYCLONE HEAT POTENTIAL IS ABOUT 80-90 KJ/CM^2 OVER SOUTHWEST BOB. LOWER LEVEL POSITIVE RELATIVE VORTICITY ($100X10^{-6}S^{-1}$) PREVAILS TO THE SOUTHEAST OF THE SYSTEM CENTRE. THE UPPER LEVEL POSITIVE DIVERGENCE IS AROUND $20X10^{-5}S^{-1}$ TO THE NORTHEAST OF THE SYSTEM CENTRE. THE LOWER LEVEL CONVERGENCE IS AROUND 20 X $10^{-5}S^{-1}$ AROUND THE SYSTEM CENTRE. THESE FEATURES INDICATE THAT ENVIRONMENTAL FEATURES ARE FAVOURABLE FOR FURTHER INTENSIFICATION OF THE SYSTEM. MJO INDEX LIES IN PHASE 4 AND ITS AMPLITUDE IS CLOSE TO 1 HENCE FAVORABLE FOR THE SYSTEM TO REMAIN AS A CYCLONIC STORM DURING THE FORECAST PERIOD. THE UPPER TROPOSPHERIC RIDGE AT UPPER AND MIDDLE TROPOSPHERIC LEVELS RUNS ALONG 12°N OVER THE BOB. THE SYSTEM LIES IN THE SOUTHERN PERIPHERRY OF THE ABOVE RIDGE. AS A RESULT, IT IS MOVING WEST NORTHWESTWARDS. IT IS EXPECTED TO BE STEERED BY THE ABOVE RIDGE RESULTING IN WEST-NORTHWESTWARD MOVEMENT FOR NEXT 2 DAYS AND THEN NEARLY WESTWARDS. MOST OF THE NWP MODELS LIKE ECMWF, IMD GFS, NCEP GFS, GEFS, NCUM AND NEPS ARE INDICATING WEST-NORTHWESTWARDS MOVEMENT. THE SYSTEM WOULD CROSS SRILANKA COAST.

THE VORTEX OVER SOUTH INDIAN OCEAN HAS MOVED WEST-SOUTHWESTWARDS AND LAY NEAR 9.9^0S/85.3^0E WITH ESTIMATED MAXIMUM SUSTAINED WIND SPEED OF 25 KNOTS. THESE TWO VORTICES ON EITHER SIDE OF THE EQUATOR ARE INTERACTING WITH EACH OTHER.

MOST OF THE NWP MODELS (IMD GFS, GEFS, NCUM, NEPS, WRF, HWRF, ECMWF) ARE ALSO INDICATING THAT THE SYSTEM WOULD CROSS SRILANKA COAST AND EMERGE INTO COMORIN AREA AFTER MOVING ACROSS SRI LANKA. HOWEVER, THERE IS LARGE VARIATION AMONG THE MODELS AND HENCE LACK OF CONSENSUS ABOUT THE TRACK AND INTENSITY OF THE SYSTEM OVER COMORIN AND ADJOINING AREAS. WHILE MOST OF THE MODELS SUGGEST WEST-NORTHWESTWARDS MOVEMENT SKIRTING SOUTH TAMILNADU-SOUTH KERALA COASTS, A FEW MODELS ARE ALSO INDICATING THE SYSTEM TO TOUCH EXTREME SOUTHERN TIP OF KERALA AND TAMILNADU. ALSO THE TIME OF COMING CLOSER TO SOUTHERN TIP OF KERALA AND TAMILNADU VARIES LARGELY FROM 3RD-6TH DECEMBER. CONSIDERING THE OCEANIC AND ENVIRONMENTAL CONDITIONS OVER COMORIN AREA, THE SEA CONDITIONS ARE FAVOURABLE FOR INTENSIFICATION DUE TO HIGHER SST (29-30^0C) AND HIGHER OCEAN HEAT CONTENT (80-90 KJ/CM^2). THE VERTICAL WIND SHEAR OVER COMORIN AREA IS ALSO EXPECTED TO BE LOW TO MODERATE FAVOURING INTENSIFICATION.

ARABIAN SEA:

THE SYSTEM OVER BAY OF BENGAL AFTER MOVING ACROSS SRI LANKA IS LIKELY TO EMERGE INTO COMORIN AREA ON 3RD DECEMBER MORNING (0000-0300 UTC).

SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LAY OVER SOUTHEAST ARABIAN SEA OFF KERALA COAST.

PROBABILITY OF CYCLOGENESIS(FORMATION OF DEPRESSION AND ABOVE INTENSITY SYSTEM) DURING NEXT 120 HRS :

24 HOURS	24-48 HOURS	48-72 HOURS	72-96 HOURS	96-120 HOURS
NIL	MOD	MOD	HIGH	HIGH

(D. R. PATTANAIK)
Scientist-F, 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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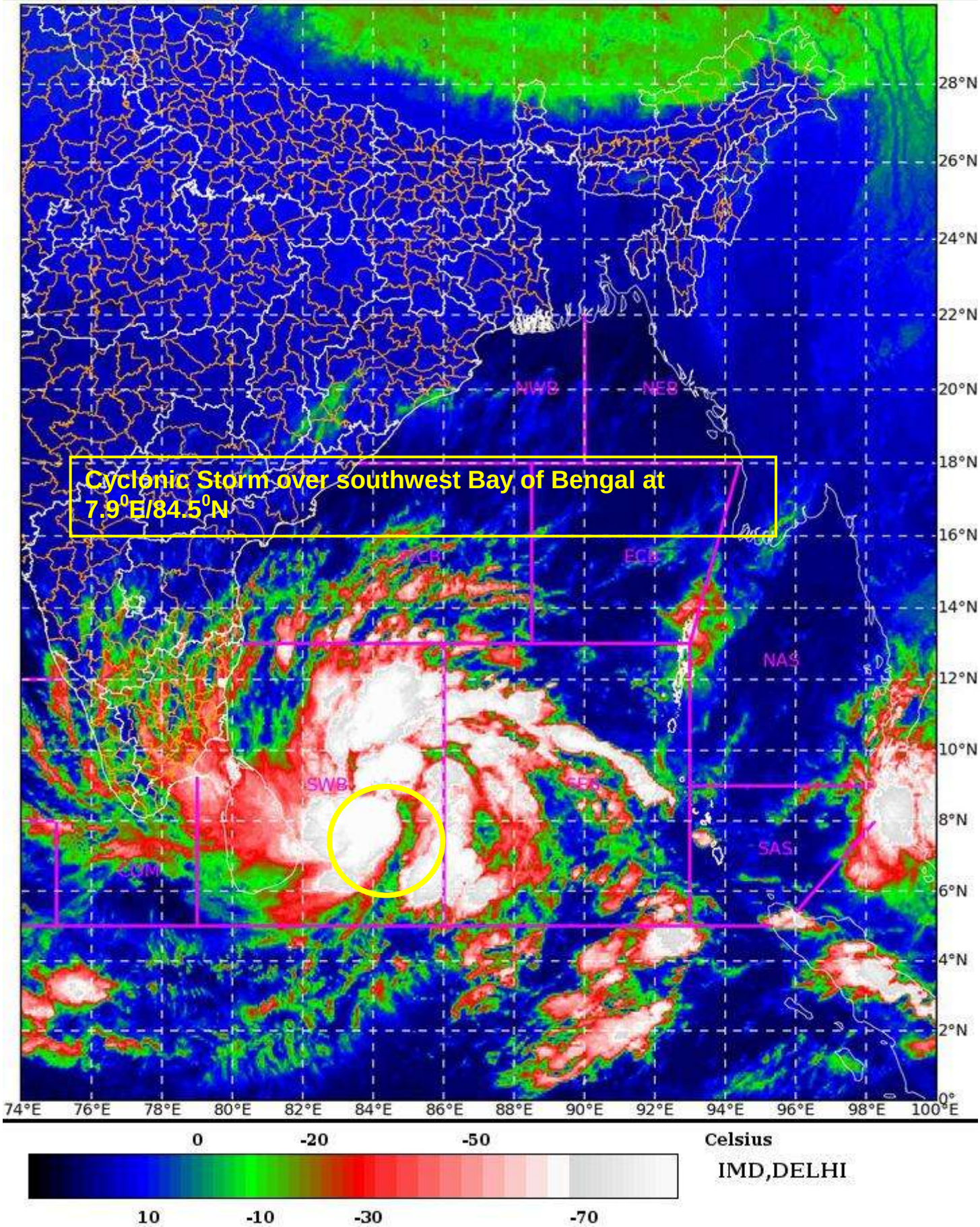
SAT : INSAT-3D IMG 01-12-2020/(1730 to 1756) GMT

IMG_TIR1_TEMP 10.8 um 01-12-2020/(2300 to 2326) IST

L1C Mercator



Celsius

IMD,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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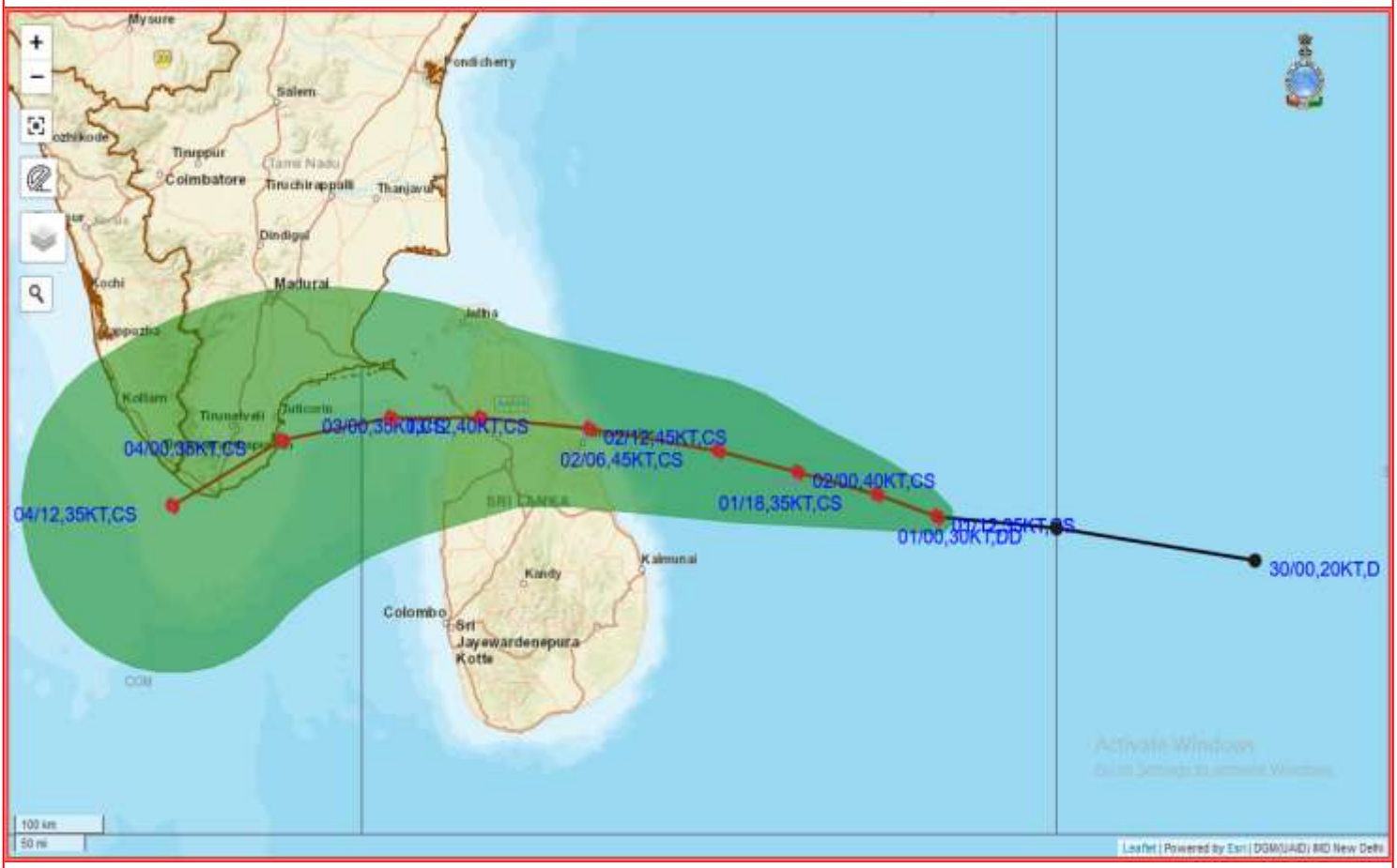
OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINITY OF CYCLONIC STORM "BUREVI" OVER SOUTHWEST BAY OF BENGAL BASED ON 1200 UTC OF 1st DECEMBER 2020



DATE/TIME IN UTC
IST=UTC + 0530
L: LOW PRESSURE AREA
WML: WELL MARKED LOW PRESSURE AREA
D: DEPRESSION (17-27 KT)
DD: DEEP DEPRESSION (28-33 KT)
CS: CYCLONIC STORM (34-47 KT)
SCS: SEVERE CYCLONIC STORM (48-63KT)
VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
SuCS: SUPER CYCLONIC STORM (≥ 120 KT)

LESS THAN 34 KT
34-47 KT
≥ 48 KT
OBSERVED TRACK
FORECAST TRACK
CONE OF UNCERTAINTY

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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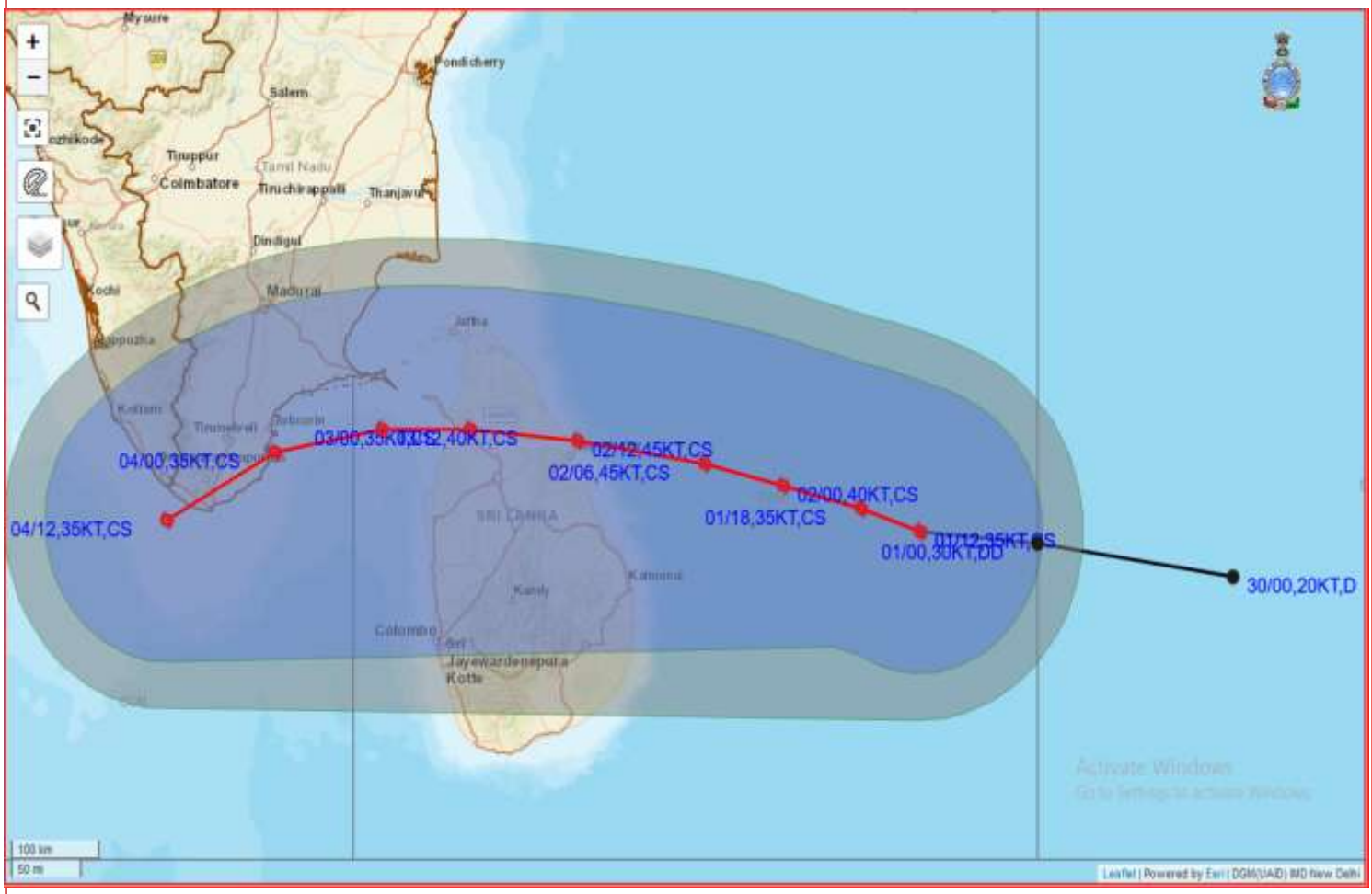
OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF CYCLONIC STORM "BUREVI" OVER SOUTHWEST BAY OF BENGAL BASED ON 1200 UTC OF 1st DECEMBER, 2020.



DATE/TIME IN UTC
IST=UTC + 0530
L: LOW PRESSURE AREA
WML: WELL MARKED LOW PRESSURE AREA
D: DEPRESSION (17-27 KT)
DD: DEEP DEPRESSION (28-33 KT)
CS: CYCLONIC STORM (34-47 KT)
SCS: SEVERE CYCLONIC STORM (48-63KT)
VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
SuCS: SUPER CYCLONIC STORM (≥ 120 KT)

LESS THAN 34 KT
34-47 KT
≥ 48 KT
OBSERVED TRACK
FORECAST TRACK
CONE OF UNCERTAINTY
AREA OF MAXIMUM SUSTAINED WIND SPEED:
28-33 KT (52-61 KMPH)
34-49 KT (62-91 KMPH)
50-63 KT (92-117 KMPH)
≥ 64 KT (≥118 KMPH)

IMPACT OVER THE SEA

MSW (knot/kmph)	Impact	Action
28-33 (52-61)	Very rough seas	Total suspension of fishing operations
34-49 (62-91)	High to very high seas	Total suspension of fishing operations
50-63 (92-117)	Very high seas	Total suspension of fishing operations
≥ 64 (≥118)	Phenomenal	Total suspension of fishing operations

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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STORM SURGE HEIGHT INFORMATION:

* The below listed surge heights are over and above astronomical tide.

MANDAL/TALUK	DISTRICT	STATE / UNION TERRITORY	NEAREST PLACE OF HABITATION	STORM SURGE (m) *	EXPECTED INUNDATION EXTENT (km)
Arantangi	Pudukkottai	Tamil Nadu	Manamelkudi	0.2-0.3	Nil
Peravurani	Thanjavur	Tamil Nadu	Adaikkathevan	0.2-0.3	Nil
Ramanathapuram	Ramanathapuram	Tamil Nadu	Devipattinam	0.2-0.6	Upto 0.57
Tiruvadanai	Ramanathapuram	Tamil Nadu	Vattanam	0.3-0.5	Upto 0.12

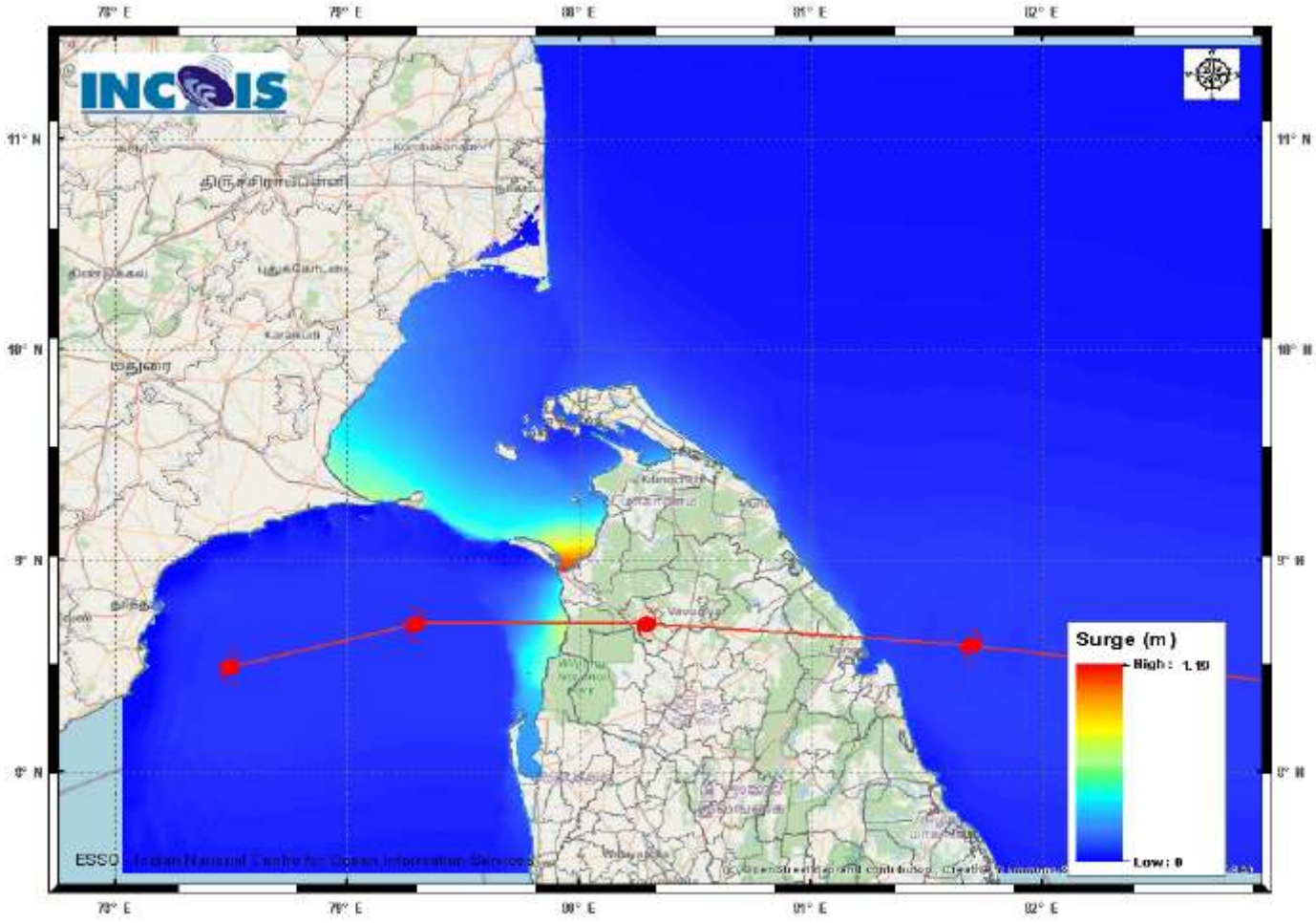

Figure:Storm Surge Map

Storm Surge Forecast by INCOIS Model

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 NO. 3

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)
YEMEN METEOROLOGICAL SERVICES, REPUBLIC OF YEMEN (THROUGH RTH JEDDAH)
NATIONAL CENTRE FOR METEOROLOGY, UAE (THROUGH RTH JEDDAH)
PRESIDENCY OF METEOROLOGY AND ENVIRONMENT, SAUDI ARABIA (THROUGH RTH JEDDAH)
IRAN METEOROLOGICAL ORGANISATION, (THROUGH RTH JEDDAH)
QATAR METEOROLOGICAL DEPARTMENT (THROUGH RTH JEDDAH)

TROPICAL CYCLONE ADVISORY NO. 3 FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 2100 UTC OF 01.12.2020 BASED ON 1800 UTC OF 01.12.2020.

SUB: CYCLONIC STORM 'BUREVI' OVER SOUTHWEST BAY OF BENGAL

THE **CYCLONIC STORM 'BUREVI'** OVER SOUTHWEST BAY OF BENGAL MOVED WEST-NORTHWESTWARDS WITH A SPEED OF 11 KMPH DURING PAST SIX HOURS AND LAY CENTERED AT 1800 UTC OF TODAY, THE 01ST DECEMBER 2020 OVER SOUTHWEST BAY OF BENGAL NEAR LAT. 8.1°N AND LONG. 84.2°E, ABOUT 330 KM EAST-SOUTHEAST OF TRINCOMALEE (43418), 560 KM EAST-SOUTHEAST OF PAMBAN (43363) AND 740 KM EAST OF KANNIYAKUMARI (43377).

IT IS VERY LIKELY TO INTENSIFY FURTHER DURING NEXT 12 HOURS. IT IS VERY LIKELY TO MOVE WEST-NORTHWESTWARDS AND CROSS SRI LANKA COAST BETWEEN LATITUDE 7.5^{0}N AND 9.0^{0}N, CLOSE TO TRINCOMALEE DURING EVENING/NIGHT (1200-1800 UTC) OF 2ND DECEMBER AS A CYCLONIC STORM WITH A WIND SPEED OF 75-85 KMPH GUSTING TO 95 KMPH. IT IS VERY LIKELY TO MOVE NEARLY WESTWARDS THEREAFTER, EMERGE INTO GULF OF MANNAR AND ADJOINING COMORIN AREA ON 3RD DECEMBER MORNING. IT WOULD THEN MOVE NEARLY WEST-SOUTHWESTWARDS AND CROSS SOUTH TAMILNADU COAST BETWEEN KANNIYAKUMARI AND PAMBAN AROUND EARLY MORNING (2100 UTC OF 3rd to 0000 UTC OF 4TH DECEMBER).

FORECAST TRACK AND INTENSITY ARE GIVEN BELOW:

Forecast track and intensity are given below:

Date/Time(UTC)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
01.12.20/1800	8.1/84.2	65-75 gusting to 85	Cyclonic Storm
02.12.20/0000	8.3/83.4	70-80 gusting to 90	Cyclonic Storm
02.12.20/0600	8.5/82.6	75-85 gusting to 95	Cyclonic Storm
02.12.20/1200	8.7/81.3	75-85 gusting to 95	Cyclonic Storm
02.12.20/1800	8.8/80.7	70-80 gusting to 90	Cyclonic Storm
03.12.20/0600	8.8/79.7	70-80 gusting to 90	Cyclonic Storm
03.12.20/1800	8.7/78.7	70-80 gusting to 90	Cyclonic Storm
04.12.20/0600	8.4/77.5	65-75 gusting to 85	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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THE ESTIMATED MAXIMUM SUSTAINED WIND SPEED IS 35 KNOTS GUSTING TO 40 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS 999 HPA. THE SEA CONDITION IS VERY ROUGH TO HIGH AROUND THE SYSTEM CENTRE.

AS PER SATELLITE IMAGERY, THE INTENSITY OF THE SYSTEM IS T2.5/2.5. BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER SOUTH BAY OF BENGAL BETWEEN LAT 5.5^0N TO 13.5^0N LONG 80.0^0E TO 90.0^0E AND ALSO OVER SRI LANKA IN ASSOCIATION WITH THE SYSTEM. MINIMUN CTT IS MINUS 93^0C.

STORM SURGE GUIDNACE FOR SRILANKA COAST: STORM SURGE OF ABOUT 1 METER HEIGHT ABOVE THE ASTRONOMICAL TIDE IS LIKELY TO INUNDATE LOW LYING AREAS OF EAST SRILANKA COAST DURING LANDFALL.

REMARKS:

CONSIDERING THE SEA CONDITIONS, SST IS AROUND 29-30°C OVER SOUTHEAST BAY OF BENGAL (BOB). THE TROPICAL CYCLONE HEAT POTENTIAL IS ABOUT 80-90 KJ/CM^2 OVER SOUTHWEST BOB. LOWER LEVEL POSITIVE RELATIVE VORTICITY ($100X10^{-6}S^{-1}$) PREVAILS TO THE SOUTHEAST OF THE SYSTEM CENTRE. THE UPPER LEVEL POSITIVE DIVERGENCE IS AROUND $20X10^{-5}S^{-1}$ TO THE NORTHEAST OF THE SYSTEM CENTRE. THE LOWER LEVEL CONVERGENCE IS AROUND 20 X $10^{-5}S^{-1}$ AROUND THE SYSTEM CENTRE. THESE FEATURES INDICATE THAT ENVIRONMENTAL FEATURES ARE FAVOURABLE FOR FURTHER INTENSIFICATION OF THE SYSTEM. MJO INDEX LIES IN PHASE 4 AND ITS AMPLITUDE IS CLOSE TO 1 HENCE FAVORABLE FOR THE SYSTEM TO REMAIN AS A CYCLONIC STORM DURING THE FORECAST PERIOD. THE UPPER TROPOSPHERIC RIDGE AT UPPER AND MIDDLE TROPOSPHERIC LEVELS RUNS ALONG 12°N OVER THE BOB. THE SYSTEM LIES IN THE SOUTHERN PERIPHERRY OF THE ABOVE RIDGE. AS A RESULT, IT IS MOVING WEST NORTHWESTWARDS. IT IS EXPECTED TO BE STEERED BY THE ABOVE RIDGE RESULTING IN WEST-NORTHWESTWARD MOVEMENT FOR NEXT 2 DAYS AND THEN NEARLY WESTWARDS. MOST OF THE NWP MODELS LIKE ECMWF, IMD GFS, NCEP GFS, GEFS, NCUM AND NEPS ARE INDICATING WEST-NORTHWESTWARDS MOVEMENT. THE SYSTEM WOULD CROSS SRILANKA COAST.

THE VORTEX OVER SOUTH INDIAN OCEAN HAS MOVED WEST-SOUTHWESTWARDS AND LAY NEAR 9.9^0S/85.3^0E WITH ESTIMATED MAXIMUM SUSTAINED WIND SPEED OF 25 KNOTS. THESE TWO VORTICES ON EITHER SIDE OF THE EQUATOR ARE INTERACTING WITH EACH OTHER.

MOST OF THE NWP MODELS (IMD GFS, GEFS, NCUM, NEPS, WRF, HWRF, ECMWF) ARE ALSO INDICATING THAT THE SYSTEM WOULD CROSS SRILANKA COAST AND EMERGE INTO COMORIN AREA AFTER MOVING ACROSS SRI LANKA. HOWEVER, THERE IS LARGE VARIATION AMONG THE MODELS AND HENCE LACK OF CONSENSUS ABOUT THE TRACK AND INTENSITY OF THE SYSTEM OVER COMORIN AND ADJOINING AREAS. WHILE MOST OF THE MODELS SUGGEST WEST-NORTHWESTWARDS MOVEMENT SKIRTING SOUTH TAMILNADU-SOUTH KERALA COASTS, A FEW MODELS ARE ALSO INDICATING THE SYSTEM TO TOUCH EXTREME SOUTHERN TIP OF KERALA AND TAMILNADU. ALSO THE TIME OF COMING CLOSER TO SOUTHERN TIP OF KERALA AND TAMILNADU VARIES LARGELY FROM 3RD-6TH DECEMBER. CONSIDERING THE OCEANIC AND ENVIRONMENTAL CONDITIONS OVER COMORIN AREA, THE SEA CONDITIONS ARE FAVOURABLE FOR INTENSIFICATION DUE TO HIGHER SST (29-30^0C) AND HIGHER OCEAN HEAT CONTENT (80-90 KJ/CM^2). THE VERTICAL WIND SHEAR OVER COMORIN AREA IS ALSO EXPECTED TO BE LOW TO MODERATE FAVOURING INTENSIFICATION.

ARABIAN SEA:

THE SYSTEM OVER BAY OF BENGAL AFTER MOVING ACROSS SRI LANKA IS LIKELY TO EMERGE INTO COMORIN AREA ON 3RD DECEMBER MORNING (0000-0300 UTC).

SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LAY OVER SOUTHEAST ARABIAN SEA OFF KERALA COAST.

PROBABILITY OF CYCLOGENESIS(FORMATION OF DEPRESSION AND ABOVE INTENSITY SYSTEM) DURING NEXT 120 HRS :

24 HOURS	24-48 HOURS	48-72 HOURS	72-96 HOURS	96-120 HOURS
NIL	MOD	MOD	HIGH	HIGH

(D. R. PATTANAIK)
Scientist-F, 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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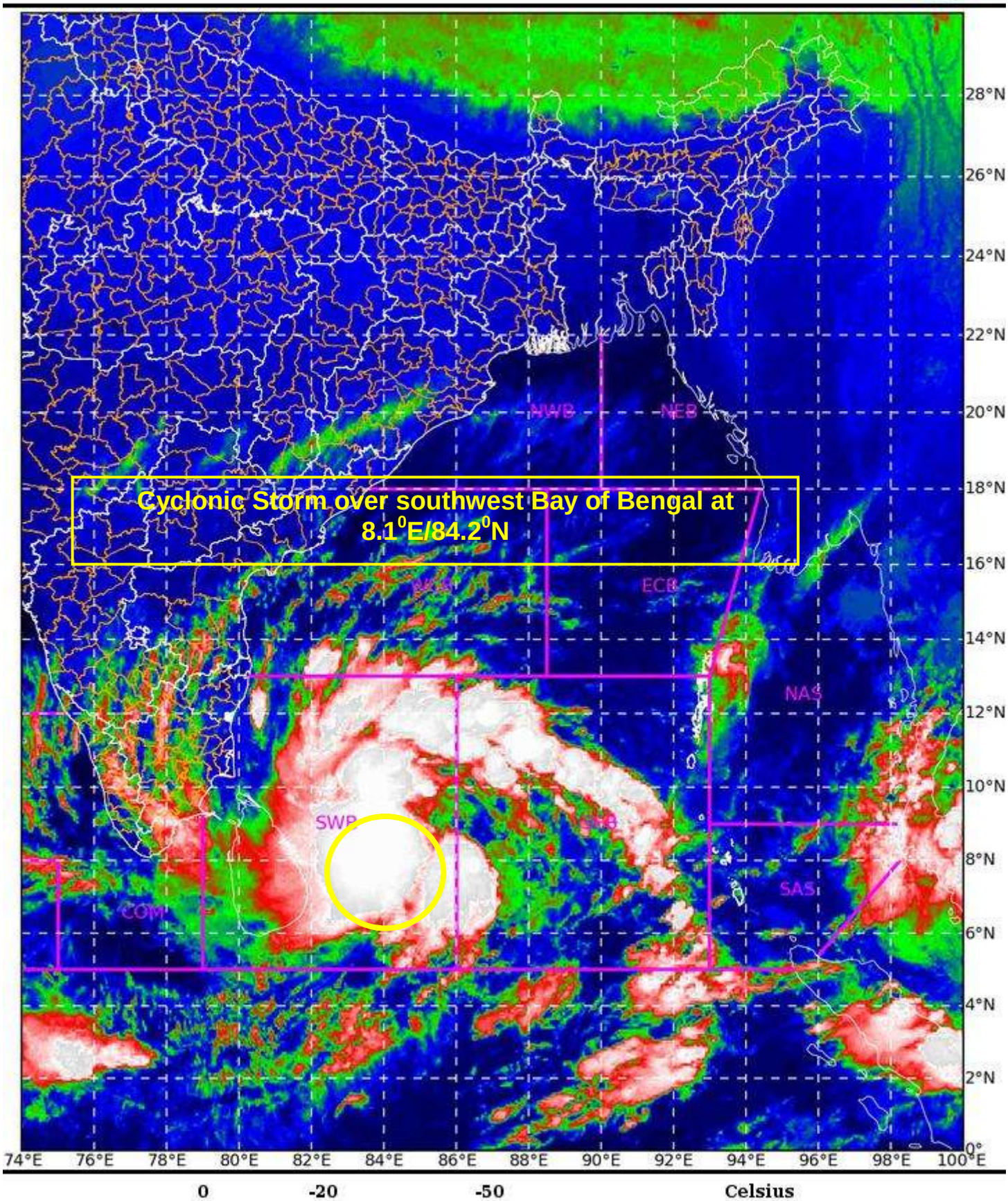
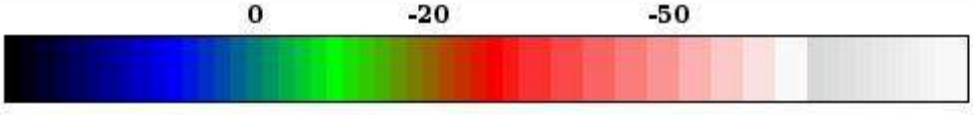
SAT : INSAT-3D IMG 01-12-2020/(2000 to 2026) GMT

IMG_TIR1_TEMP 10.8 um 02-12-2020/(0130 to 0156) IST

L1C Mercator





Celsius

IMD,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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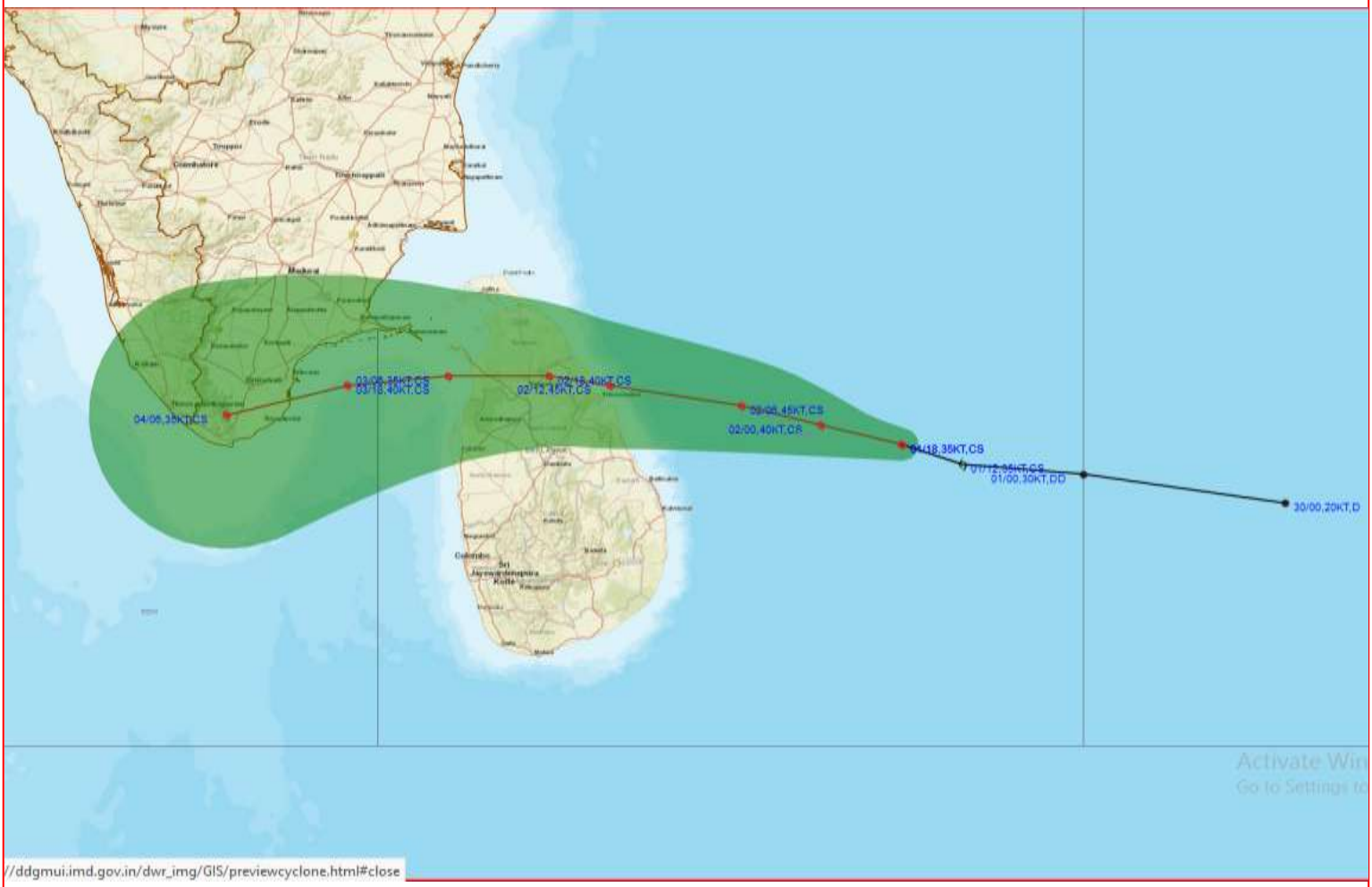
OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINITY OF CYCLONIC STORM "BUREVI" OVER SOUTHWEST BAY OF BENGAL BASED ON 1800 UTC OF 1st DECEMBER, 2020.



DATE/TIME IN UTC
IST=UTC + 0530
L: LOW PRESSURE AREA
WML: WELL MARKED LOW PRESSURE AREA
D: DEPRESSION (17-27 KT)
DD: DEEP DEPRESSION (28-33 KT)
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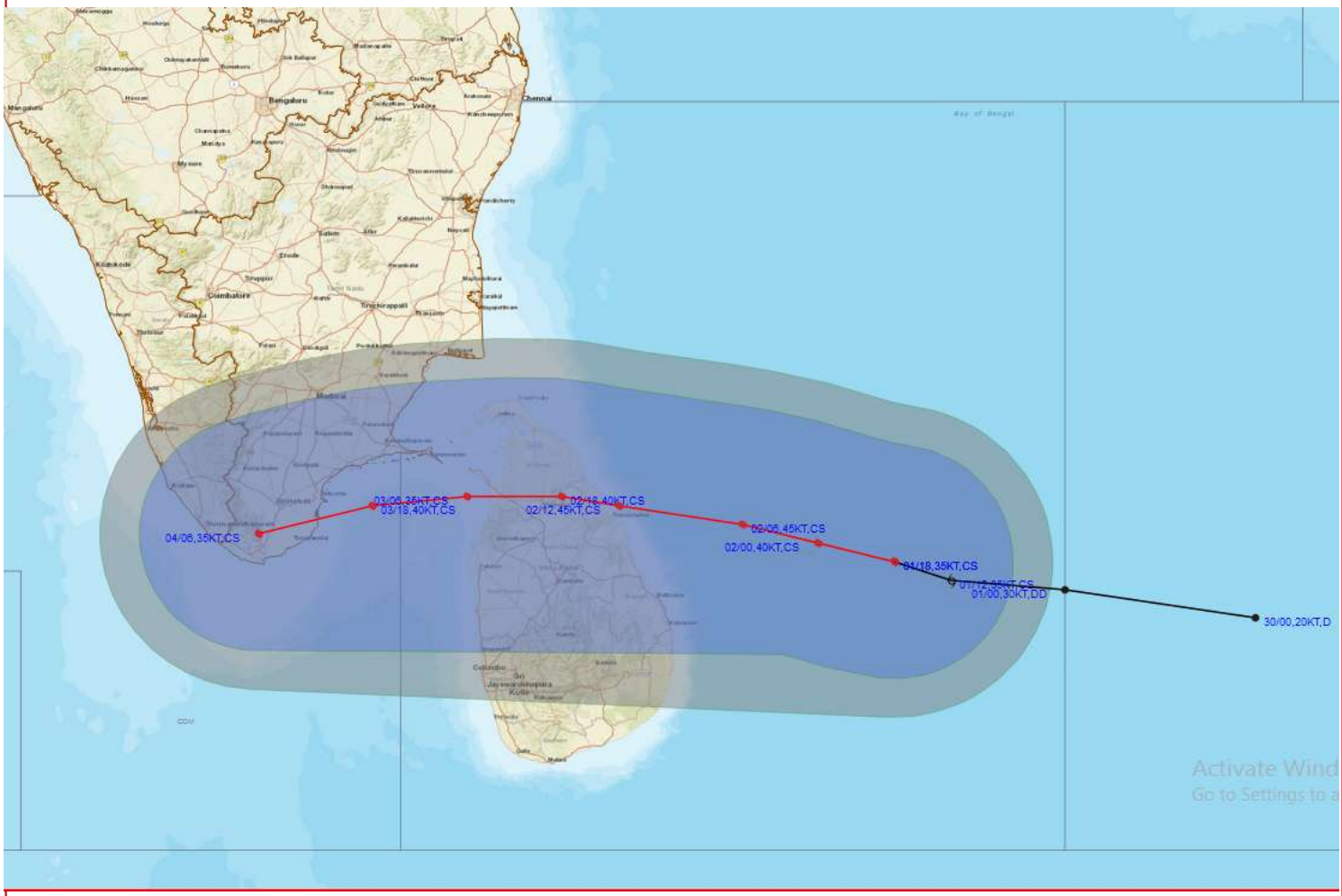
SCS: SEVERE CYCLONIC STORM (48-63KT)
VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
SuCS: SUPER CYCLONIC STORM (≥ 120 KT)

LESS THAN 34 KT
34-47 KT
≥ 48 KT
OBSERVED TRACK
FORECAST TRACK
CONE OF UNCERTAINTY

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

- **This is a guidance Bulletin for the WMO/ESCAP Panel Member countries,. Please visit respective National websites for Country specific Bulletins**

OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF CYCLONIC STORM "BUREVI" OVER SOUTHWEST BAY OF BENGAL BASED ON 1800 UTC OF 1st DECEMBER, 2020.



DATE/TIME IN UTC
IST=UTC + 0530
L: LOW PRESSURE AREA
WML: WELL MARKED LOW PRESSURE AREA
D: DEPRESSION (17-27 KT)
DD: DEEP DEPRESSION (28-33 KT)
CS: CYCLONIC STORM (34-47 KT)
SCS: SEVERE CYCLONIC STORM (48-63KT)
VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
SuCS: SUPER CYCLONIC STORM (≥ 120 KT)

- LESS THAN 34 KT
- 34-47 KT
- ≥ 48 KT
- OBSERVED TRACK
- FORECAST TRACK
- CONE OF UNCERTAINTY

AREA OF MAXIMUM SUSTAINED WIND SPEED:
- 28-33 KT (52-61 KMPH)
- 34-49 KT (62-91 KMPH)
- 50-63 KT (92-117 KMPH)
- ≥ 64 KT (≥118 KMPH)

IMPACT OVER THE SEA

MSW (knot/kmph)	Impact	Action
28-33 (52-61)	Very rough seas	Total suspension of fishing operations
34-49 (62-91)	High to very high seas	Total suspension of fishing operations
50-63 (92-117)	Very high seas	Total suspension of fishing operations
≥ 64 (≥118)	Phenomenal	Total suspension of fishing operations

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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STORM SURGE HEIGHT INFORMATION:

* The below listed surge heights are over and above astronomical tide.

MANDAL/TALUK	DISTRICT	STATE / UNION TERRITORY	NEAREST PLACE OF HABITATION	STORM SURGE (m) *	EXPECTED INUNDATION EXTENT (km)
Arantangi	Pudukkottai	Tamil Nadu	Manamelkudi	0.2-0.3	Nil
Peravurani	Thanjavur	Tamil Nadu	Adaikkathevan	0.2-0.3	Nil
Ramanathapuram	Ramanathapuram	Tamil Nadu	Devipattinam	0.2-0.6	Upto 0.57
Tiruvadanai	Ramanathapuram	Tamil Nadu	Vattanam	0.3-0.5	Upto 0.12

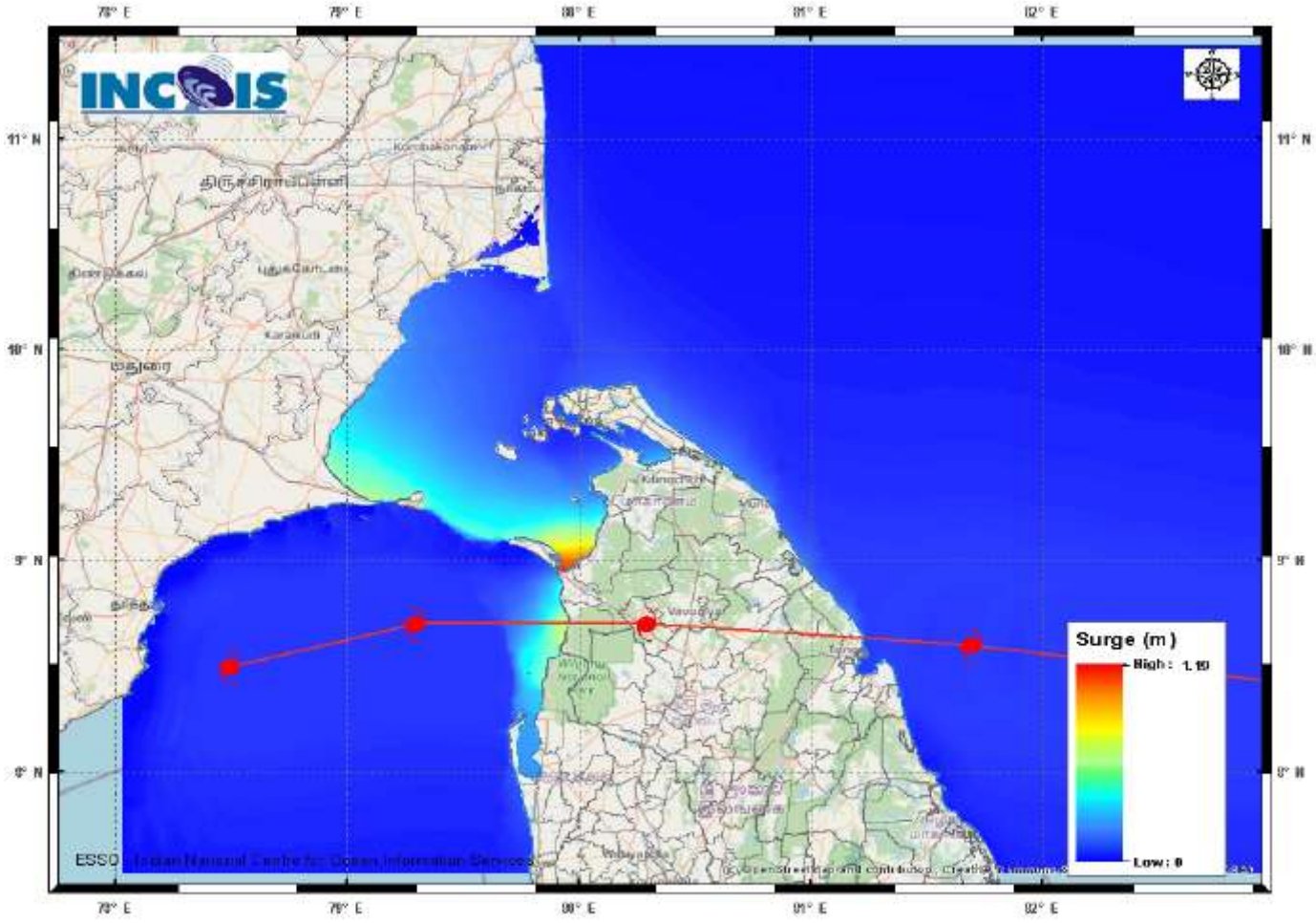

Figure:Storm Surge Map

Storm Surge Forecast by INCOIS Model

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 NO. 4

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)
YEMEN METEOROLOGICAL SERVICES, REPUBLIC OF YEMEN (THROUGH RTH JEDDAH)
NATIONAL CENTRE FOR METEOROLOGY, UAE (THROUGH RTH JEDDAH)
PRESIDENCY OF METEOROLOGY AND ENVIRONMENT, SAUDI ARABIA (THROUGH RTH JEDDAH)
IRAN METEOROLOGICAL ORGANISATION, (THROUGH RTH JEDDAH)
QATAR METEOROLOGICAL DEPARTMENT (THROUGH RTH JEDDAH)

TROPICAL CYCLONE ADVISORY NO. 4 FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 0000 UTC OF 02.12.2020 BASED ON 2100 UTC OF 01.12.2020.

SUB: CYCLONIC STORM 'BUREVI' OVER SOUTHWEST BAY OF BENGAL

THE **CYCLONIC STORM 'BUREVI'** OVER SOUTHWEST BAY OF BENGAL MOVED WEST-NORTHWESTWARDS WITH A SPEED OF 12 KMPH DURING PAST SIX HOURS AND LAY CENTERED AT 2100 UTC OF 01ST DECEMBER 2020 OVER SOUTHWEST BAY OF BENGAL NEAR LAT. 8.2°N AND LONG. 83.9°E, ABOUT 300 KM EAST-SOUTHEAST OF TRINCOMALEE (43418), 530 KM EAST-SOUTHEAST OF PAMBAN (43363) AND 700 KM NEARLY EAST OF KANNIYAKUMARI (43377).

IT IS VERY LIKELY TO INTENSIFY FURTHER DURING NEXT 06 HOURS. IT IS VERY LIKELY TO MOVE WEST-NORTHWESTWARDS AND CROSS SRI LANKA COAST BETWEEN LATITUDE 7.5^{0}N AND 9.0^{0}N, CLOSE TO TRINCOMALEE DURING EVENING/NIGHT (1200-1800 UTC) OF 2ND DECEMBER AS A CYCLONIC STORM WITH A WIND SPEED OF 75-85 KMPH GUSTING TO 95 KMPH. IT IS VERY LIKELY TO MOVE NEARLY WESTWARDS THEREAFTER, EMERGE INTO GULF OF MANNAR AND ADJOINING COMORIN AREA ON 3RD DECEMBER MORNING. IT WOULD THEN MOVE NEARLY WEST-SOUTHWESTWARDS AND CROSS SOUTH TAMILNADU COAST BETWEEN KANNIYAKUMARI AND PAMBAN AROUND EARLY MORNING (2100 UTC OF 3rd to 0000 UTC OF 4TH DECEMBER).
FORECAST TRACK AND INTENSITY ARE GIVEN BELOW:

Forecast track and intensity are given below:

Date/Time(UTC)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
01.12.20/2100	8.2/83.9	65-75 gusting to 85	Cyclonic Storm
02.12.20/0000	8.3/83.4	70-80 gusting to 90	Cyclonic Storm
02.12.20/0600	8.5/82.6	75-85 gusting to 95	Cyclonic Storm
02.12.20/1200	8.7/81.3	75-85 gusting to 95	Cyclonic Storm
02.12.20/1800	8.8/80.7	70-80 gusting to 90	Cyclonic Storm
03.12.20/0600	8.8/79.7	70-80 gusting to 90	Cyclonic Storm
03.12.20/1800	8.7/78.7	70-80 gusting to 90	Cyclonic Storm
04.12.20/0600	8.4/77.5	65-75 gusting to 85	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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THE ESTIMATED MAXIMUM SUSTAINED WIND SPEED IS 35 KNOTS GUSTING TO 40 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS 999 HPA. THE SEA CONDITION IS VERY ROUGH TO HIGH AROUND THE SYSTEM CENTRE.

AS PER SATELLITE IMAGERY, THE INTENSITY OF THE SYSTEM IS T2.5/2.5. BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER SOUTH BAY OF BENGAL BETWEEN LAT 6.0^0N TO 13.5^0N LONG 81.5^0E TO 90.0^0E AND MODERATE TO INTENSE CONVECTION OVER SRI LANKA IN ASSOCIATION WITH THE SYSTEM. MINIMUN CTT IS MINUS 93^0C.

STORM SURGE GUIDNACE FOR SRILANKA COAST: STORM SURGE OF ABOUT 1 METER HEIGHT ABOVE THE ASTRONOMICAL TIDE IS LIKELY TO INUNDATE LOW LYING AREAS OF EAST SRILANKA COAST DURING LANDFALL.

REMARKS:

CONSIDERING THE SEA CONDITIONS, SST IS AROUND 29-30°C OVER SOUTHEAST BAY OF BENGAL (BOB). THE TROPICAL CYCLONE HEAT POTENTIAL IS ABOUT 80-90 KJ/CM^2 OVER SOUTHWEST BOB. LOWER LEVEL POSITIVE RELATIVE VORTICITY ($100X10^{-6}S^{-1}$) PREVAILS TO THE SOUTHEAST OF THE SYSTEM CENTRE. THE UPPER LEVEL POSITIVE DIVERGENCE IS AROUND $20X10^{-5}S^{-1}$ TO THE NORTHEAST OF THE SYSTEM CENTRE. THE LOWER LEVEL CONVERGENCE IS AROUND 20 X $10^{-5}S^{-1}$ AROUND THE SYSTEM CENTRE. THESE FEATURES INDICATE THAT ENVIRONMENTAL FEATURES ARE FAVOURABLE FOR FURTHER INTENSIFICATION OF THE SYSTEM. MJO INDEX LIES IN PHASE 4 AND ITS AMPLITUDE IS CLOSE TO 1 HENCE FAVORABLE FOR THE SYSTEM TO REMAIN AS A CYCLONIC STORM DURING THE FORECAST PERIOD. THE UPPER TROPOSPHERIC RIDGE AT UPPER AND MIDDLE TROPOSPHERIC LEVELS RUNS ALONG 12°N OVER THE BOB. THE SYSTEM LIES IN THE SOUTHERN PERIPHERRY OF THE ABOVE RIDGE. AS A RESULT, IT IS MOVING WEST NORTHWESTWARDS. IT IS EXPECTED TO BE STEERED BY THE ABOVE RIDGE RESULTING IN WEST-NORTHWESTWARD MOVEMENT FOR NEXT 2 DAYS AND THEN NEARLY WESTWARDS. MOST OF THE NWP MODELS LIKE ECMWF, IMD GFS, NCEP GFS, GEFS, NCUM AND NEPS ARE INDICATING WEST-NORTHWESTWARDS MOVEMENT. THE SYSTEM WOULD CROSS SRILANKA COAST.

THE VORTEX OVER SOUTH INDIAN OCEAN HAS MOVED WEST-SOUTHWESTWARDS AND LAY NEAR 9.9^0S/85.3^0E WITH ESTIMATED MAXIMUM SUSTAINED WIND SPEED OF 25 KNOTS. THESE TWO VORTICES ON EITHER SIDE OF THE EQUATOR ARE INTERACTING WITH EACH OTHER.

MOST OF THE NWP MODELS (IMD GFS, GEFS, NCUM, NEPS, WRF, HWRF, ECMWF) ARE ALSO INDICATING THAT THE SYSTEM WOULD CROSS SRILANKA COAST AND EMERGE INTO COMORIN AREA AFTER MOVING ACROSS SRI LANKA. HOWEVER, THERE IS LARGE VARIATION AMONG THE MODELS AND HENCE LACK OF CONSENSUS ABOUT THE TRACK AND INTENSITY OF THE SYSTEM OVER COMORIN AND ADJOINING AREAS. WHILE MOST OF THE MODELS SUGGEST WEST-NORTHWESTWARDS MOVEMENT SKIRTING SOUTH TAMILNADU-SOUTH KERALA COASTS, A FEW MODELS ARE ALSO INDICATING THE SYSTEM TO TOUCH EXTREME SOUTHERN TIP OF KERALA AND TAMILNADU. ALSO THE TIME OF COMING CLOSER TO SOUTHERN TIP OF KERALA AND TAMILNADU VARIES LARGELY FROM 3RD-6TH DECEMBER. CONSIDERING THE OCEANIC AND ENVIRONMENTAL CONDITIONS OVER COMORIN AREA, THE SEA CONDITIONS ARE FAVOURABLE FOR INTENSIFICATION DUE TO HIGHER SST (29-30^0C) AND HIGHER OCEAN HEAT CONTENT (80-90 KJ/CM^2). THE VERTICAL WIND SHEAR OVER COMORIN AREA IS ALSO EXPECTED TO BE LOW TO MODERATE FAVOURING INTENSIFICATION.

ARABIAN SEA:

THE SYSTEM OVER BAY OF BENGAL AFTER MOVING ACROSS SRI LANKA IS LIKELY TO EMERGE INTO COMORIN AREA ON 3RD DECEMBER MORNING (0000-0300 UTC).

SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LAY OVER SOUTHEAST ARABIAN SEA OFF KERALA COAST.

PROBABILITY OF CYCLOGENESIS(FORMATION OF DEPRESSION AND ABOVE INTENSITY SYSTEM) DURING NEXT 120 HRS :

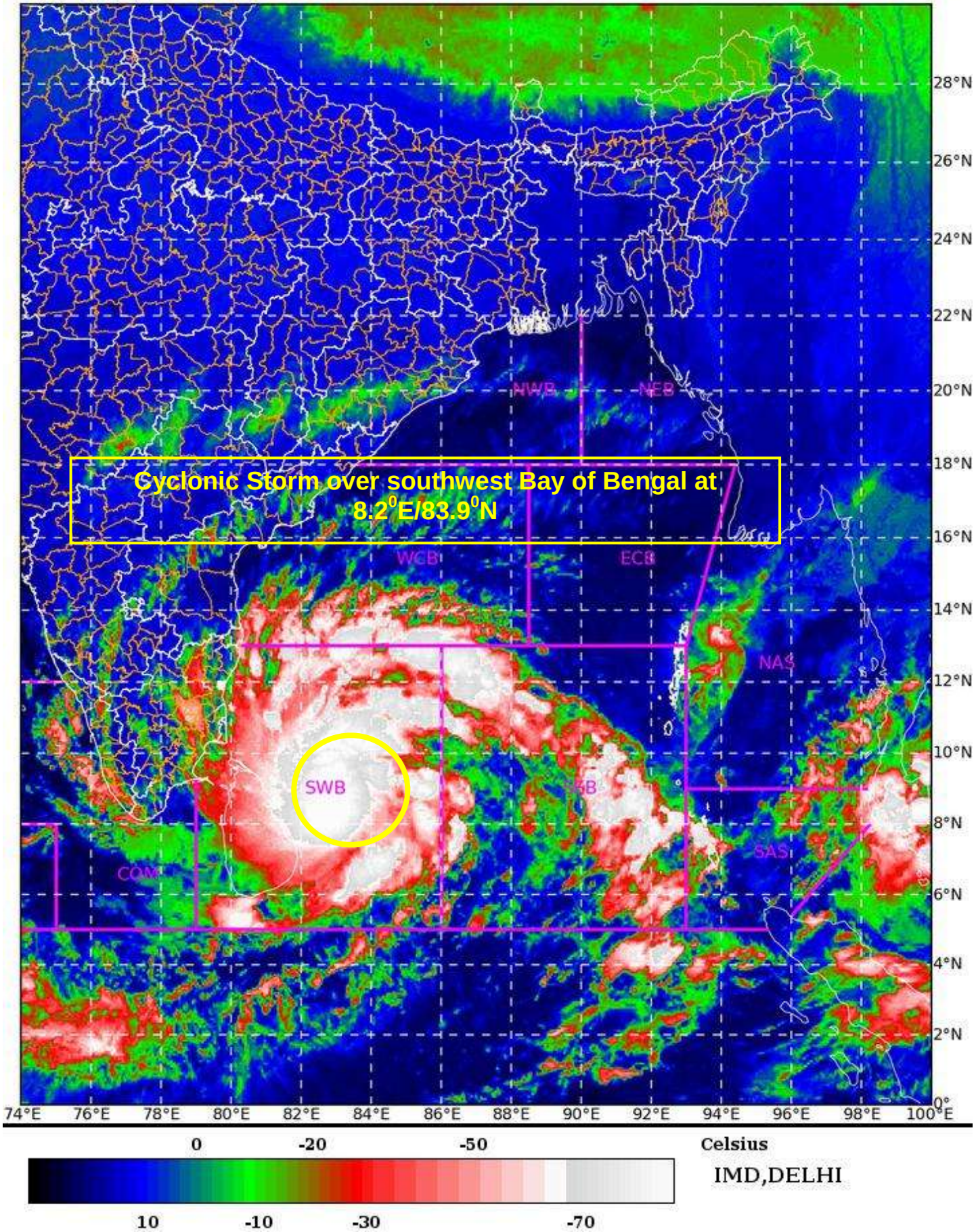
24 HOURS	24-48 HOURS	48-72 HOURS	72-96 HOURS	96-120 HOURS
NIL	MOD	MOD	HIGH	HIGH

(D. R. PATTANAIK)
Scientist-F, RSMC, New Delhi

SAT : INSAT-3D IMG 01-12-2020/(2330 to 2356) GMT

IMG_TIR1_TEMP 10.8 um 02-12-2020/(0500 to 0526) IST

L1C Mercator



Celsius

IMD,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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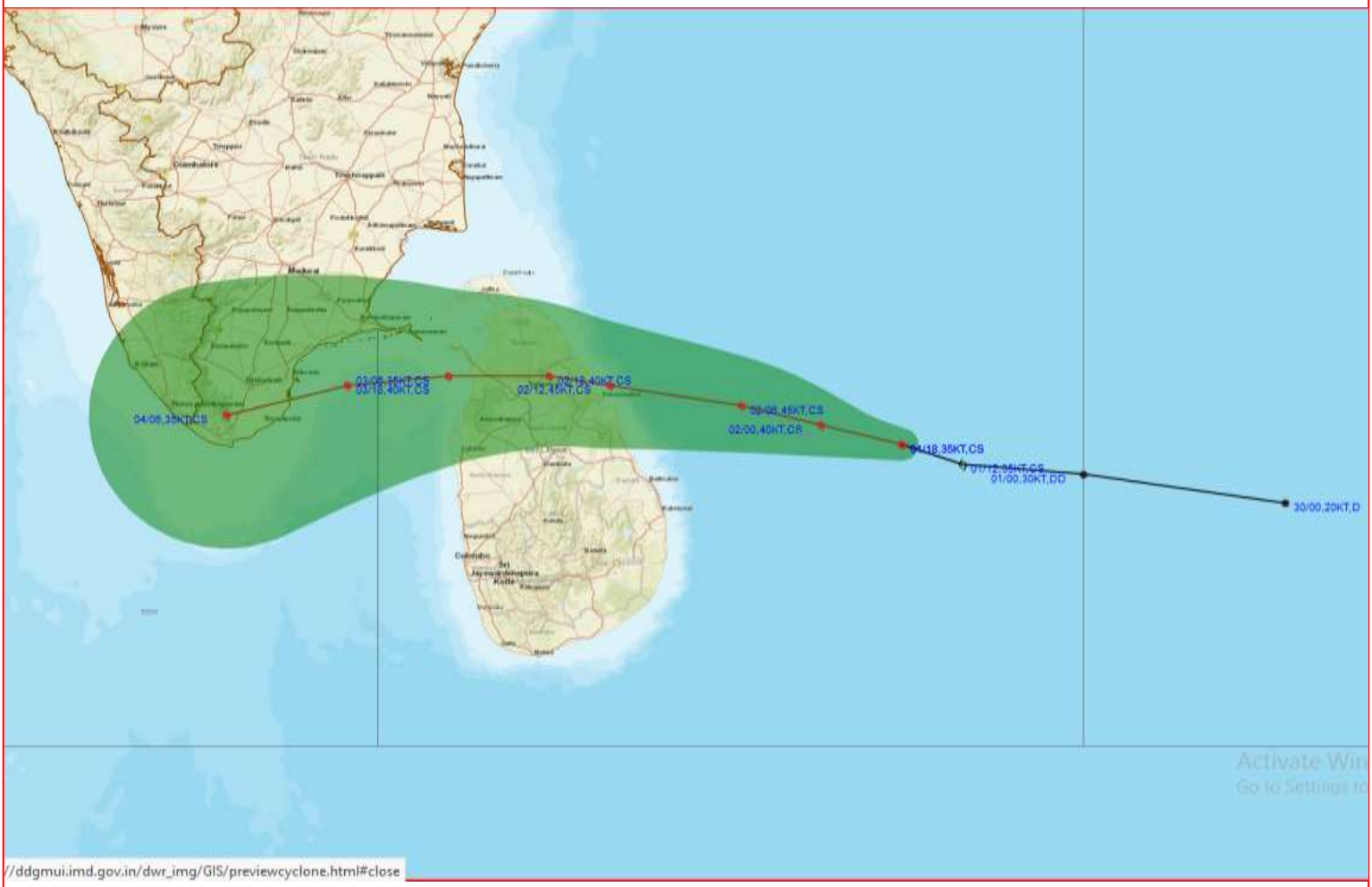
OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINITY OF CYCLONIC STORM "BUREVI" OVER SOUTHWEST BAY OF BENGAL BASED ON 1800 UTC OF 1st DECEMBER, 2020.



DATE/TIME IN UTC
IST=UTC + 0530
L: LOW PRESSURE AREA
WML: WELL MARKED LOW PRESSURE AREA
D: DEPRESSION (17-27 KT)
DD: DEEP DEPRESSION (28-33 KT)
CS: CYCLONIC STORM (34-47 KT)
SCS: SEVERE CYCLONIC STORM (48-63KT)
VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
SuCS: SUPER CYCLONIC STORM (≥ 120 KT)

LESS THAN 34 KT
34-47 KT
≥ 48 KT
OBSERVED TRACK
FORECAST TRACK
CONE OF UNCERTAINTY

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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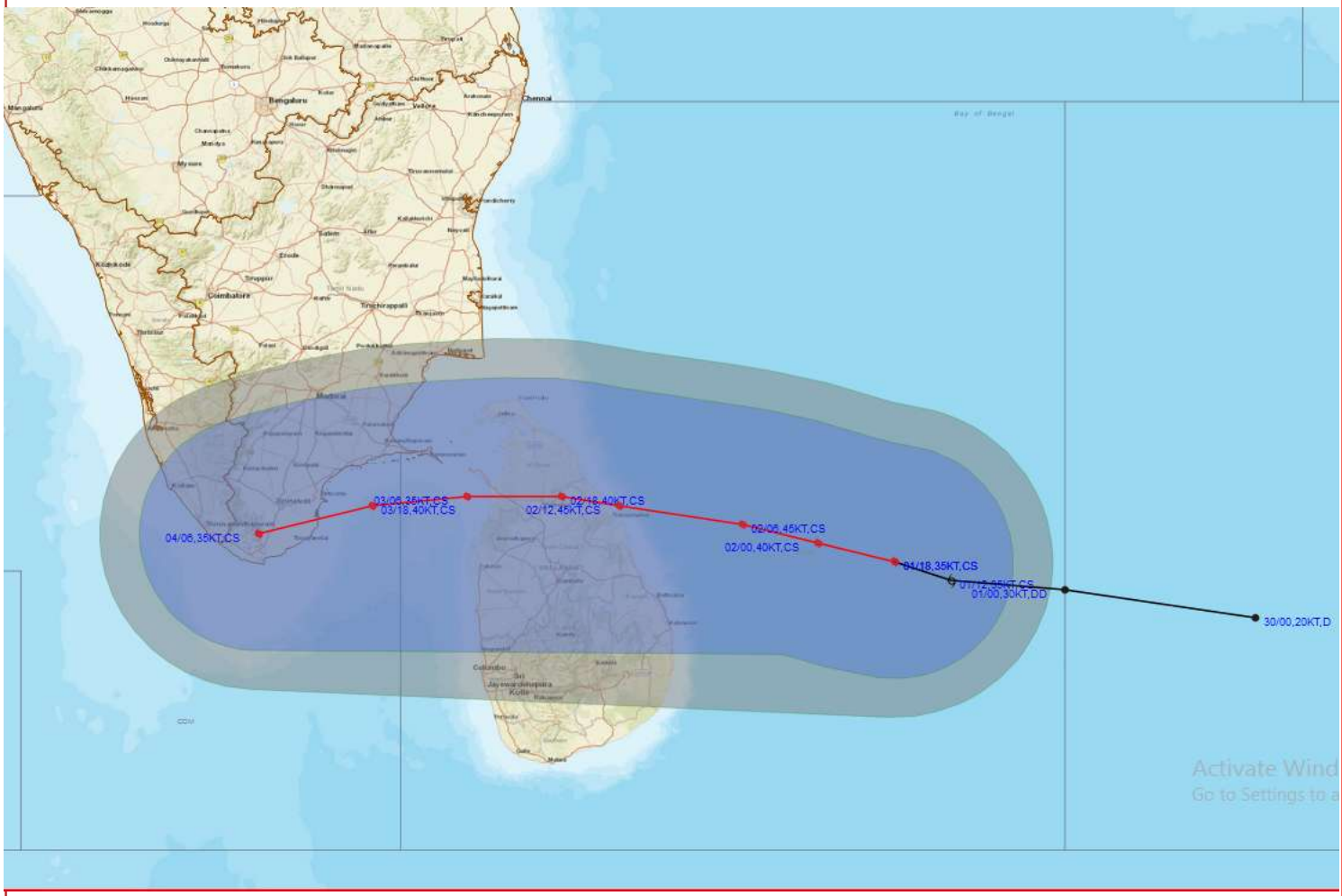
OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF CYCLONIC STORM "BUREVI" OVER SOUTHWEST BAY OF BENGAL BASED ON 1800 UTC OF 1st DECEMBER, 2020.



DATE/TIME IN UTC
IST=UTC + 0530
L: LOW PRESSURE AREA
WML: WELL MARKED LOW PRESSURE AREA
D: DEPRESSION (17-27 KT)
DD: DEEP DEPRESSION (28-33 KT)
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SCS: SEVERE CYCLONIC STORM (48-63KT)
VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
SuCS: SUPER CYCLONIC STORM (≥ 120 KT)

- LESS THAN 34 KT
- 34-47 KT
- ≥ 48 KT
- OBSERVED TRACK
- FORECAST TRACK
- CONE OF UNCERTAINTY

AREA OF MAXIMUM SUSTAINED WIND SPEED:

- 28-33 KT (52-61 KMPH)
- 34-49 KT (62-91 KMPH)
- 50-63 KT (92-117 KMPH)
- ≥ 64 KT (≥118 KMPH)

IMPACT OVER THE SEA

MSW (knot/kmph)	Impact	Action
28-33 (52-61)	Very rough seas	Total suspension of fishing operations
34-49 (62-91)	High to very high seas	Total suspension of fishing operations
50-63 (92-117)	Very high seas	Total suspension of fishing operations
≥ 64 (≥118)	Phenomenal	Total suspension of fishing operations

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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STORM SURGE HEIGHT INFORMATION:

* The below listed surge heights are over and above astronomical tide.

MANDAL/TALUK	DISTRICT	STATE / UNION TERRITORY	NEAREST PLACE OF HABITATION	STORM SURGE (m) *	EXPECTED INUNDATION EXTENT (km)
Arantangi	Pudukkottai	Tamil Nadu	Manamelkudi	0.2-0.3	Nil
Peravurani	Thanjavur	Tamil Nadu	Adaikkathevan	0.2-0.3	Nil
Ramanathapuram	Ramanathapuram	Tamil Nadu	Devipattinam	0.2-0.6	Upto 0.57
Tiruvadanai	Ramanathapuram	Tamil Nadu	Vattanam	0.3-0.5	Upto 0.12

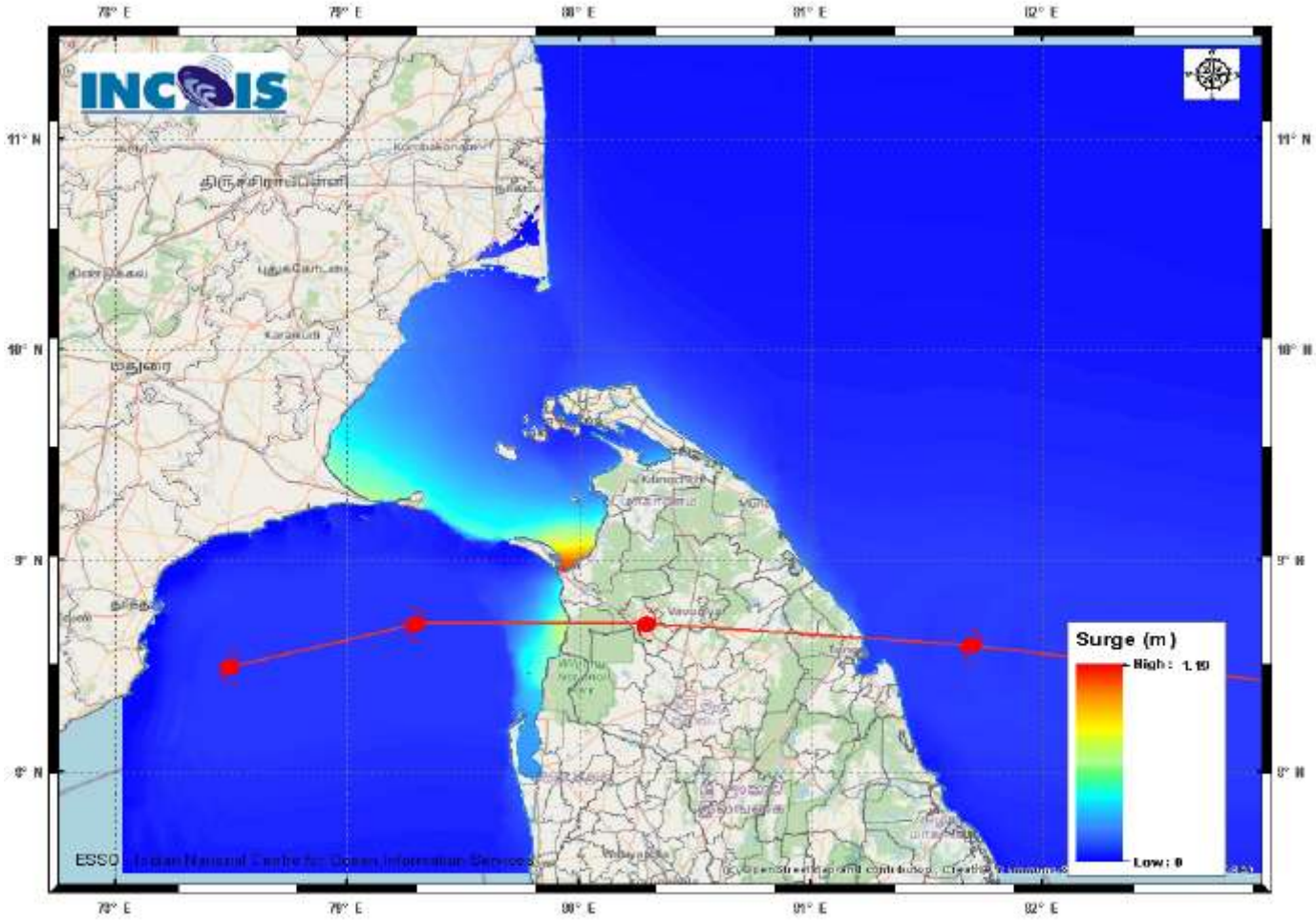

Figure:Storm Surge Map

Storm Surge Forecast by INCOIS Model

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 NO. 5

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)
YEMEN METEOROLOGICAL SERVICES, REPUBLIC OF YEMEN (THROUGH RTH JEDDAH)
NATIONAL CENTRE FOR METEOROLOGY, UAE (THROUGH RTH JEDDAH)
PRESIDENCY OF METEOROLOGY AND ENVIRONMENT, SAUDI ARABIA (THROUGH RTH JEDDAH)
IRAN METEOROLOGICAL ORGANISATION, (THROUGH RTH JEDDAH)
QATAR METEOROLOGICAL DEPARTMENT (THROUGH RTH JEDDAH)

TROPICAL CYCLONE ADVISORY NO. 5 FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 0300 UTC OF 02.12.2020 BASED ON 0000 UTC OF 02.12.2020.

SUB: CYCLONIC STORM 'BUREVI' OVER SOUTHWEST BAY OF BENGAL

THE **CYCLONIC STORM 'BUREVI'** OVER SOUTHWEST BAY OF BENGAL MOVED WEST-NORTHWESTWARDS WITH A SPEED OF 15 KMPH DURING PAST SIX HOURS AND LAY CENTERED AT 0000 UTC OF TODAY, THE 02ND DECEMBER 2020 OVER SOUTHWEST BAY OF BENGAL NEAR LAT. 8.4°N AND LONG. 83.4°E, ABOUT 240 KM EAST-SOUTHEAST OF TRINCOMALEE (43418), 470 KM EAST-SOUTHEAST OF PAMBAN (43363) AND 650 KM NEARLY EAST-NORTHEAST OF KANNIYAKUMARI (43377).

IT IS VERY LIKELY TO INTENSIFY FURTHER DURING NEXT 12 HOURS. IT IS VERY LIKELY TO MOVE WEST-NORTHWESTWARDS AND CROSS SRI LANKA COAST AROUND LATITUDE 9.0^{0}N, CLOSE TO NORTH OF TRINCOMALEE AROUND 1500 UTC OF 2ND DECEMBER AS A CYCLONIC STORM WITH A WIND SPEED OF 80-90 KMPH GUSTING TO 100 KMPH. IT IS VERY LIKELY TO MOVE NEARLY WEST-NORTHWESTWARDS THEREAFTER, EMERGE INTO GULF OF MANNAR AND ADJOINING COMORIN AREA ON 3RD DECEMBER MORNING.

THE CYCLONIC STORM WITH WIND SPEED OF 70-80 GUSTING TO 90 KMPH WOULD BE CENTERED VERY CLOSE TO PAMBAN AROUND 7000 UTC OF 3RD DECEMBER. IT WOULD THEN MOVE NEARLY WEST-SOUTHWESTWARDS AND CROSS SOUTH TAMILNADU COAST BETWEEN KANNIYAKUMARI AND PAMBAN AROUND 0000 UTC OF 4TH DECEMBER AS A CYCLONIC STORM WITH WIND SPEED OF 70-80 GUSTING TO 90 KMPH.

Forecast track and intensity are given below:

Date/Time(UTC)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
02.12.20/0000	8.4/83.4	70-80 gusting to 90	Cyclonic Storm
02.12.20/0600	8.7/82.4	75-85 gusting to 95	Cyclonic Storm
02.12.20/1200	9.0/81.3	80-90 gusting to 100	Cyclonic Storm
02.12.20/1800	9.1/80.7	80-90 gusting to 100	Cyclonic Storm
03.12.20/0000	9.2/80.2	70-80 gusting to 90	Cyclonic Storm
03.12.20/1200	9.1/79.2	70-80 gusting to 90	Cyclonic Storm
04.12.20/0000	8.9/78.4	70-80 gusting to 90	Cyclonic Storm
04.12.20/1200	8.5/77.4	65-75 gusting to 85	Cyclonic Storm
05.12.20/0000	8.1/76.4	55-65 gusting to 75	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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THE ESTIMATED MAXIMUM SUSTAINED WIND SPEED IS 40 KNOTS GUSTING TO 45 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS 998 HPA. THE SEA CONDITION IS VERY ROUGH TO HIGH AROUND THE SYSTEM CENTRE.

AS PER SATELLITE IMAGERY, THE INTENSITY OF THE SYSTEM IS T2.5/2.5. BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER SOUTH BAY OF BENGAL BETWEEN LAT 6.0^0N TO 13.5^0N LONG 81.5^0E TO 90.0^0E AND MODERATE TO INTENSE CONVECTION OVER SRI LANKA IN ASSOCIATION WITH THE SYSTEM. MINIMUN CTT IS MINUS 93^0C.

STORM SURGE GUIDNACE FOR SRILANKA COAST: STORM SURGE OF ABOUT 1 METER HEIGHT ABOVE THE ASTRONOMICAL TIDE IS LIKELY TO INUNDATE LOW LYING AREAS OF EAST SRILANKA COAST DURING LANDFALL.

REMARKS:

CONSIDERING THE SEA CONDITIONS, SST IS AROUND 29-30°C OVER SOUTHWEST BAY OF BENGAL (BOB). THE TROPICAL CYCLONE HEAT POTENTIAL IS ABOUT 80-90 KJ/CM^2 OVER SOUTHWEST BOB. LOWER LEVEL POSITIVE RELATIVE VORTICITY (100-150X$10^{-6}S^{-1}$) PREVAILS TO THE SOUTHE OF THE SYSTEM CENTRE. THE UPPER LEVEL POSITIVE DIVERGENCE IS AROUND 30-40X$10^{-5}S^{-1}$ TO THE SOUTHWEST OF THE SYSTEM CENTRE. THE LOWER LEVEL CONVERGENCE IS AROUND 30-40 X $10^{-5}S^{-1}$ TO THE SOUTHWEST OF THE SYSTEM CENTRE. THESE FEATURES INDICATE THAT ENVIRONMENTAL FEATURES ARE FAVOURABLE FOR FURTHER INTENSIFICATION OF THE SYSTEM. MJO INDEX LIES IN PHASE 4 AND ITS AMPLITUDE IS CLOSE TO 1 HENCE FAVORABLE FOR THE SYSTEM TO REMAIN AS A CYCLONIC STORM DURING THE FORECAST PERIOD. THE UPPER TROPOSPHERIC RIDGE AT UPPER AND MIDDLE TROPOSPHERIC LEVELS RUNS ALONG 12°N OVER THE BOB. THE SYSTEM LIES IN THE SOUTHERN PERIPHERRY OF THE ABOVE RIDGE. AS A RESULT, IT IS MOVING WEST NORTHWESTWARDS. IT IS EXPECTED TO BE STEERED BY THE ABOVE RIDGE RESULTING IN WEST-NORTHWESTWARD MOVEMENT FOR NEXT 2 DAYS AND THEN NEARLY WESTWARDS. MOST OF THE NWP MODELS LIKE ECMWF, IMD GFS, NCEP GFS, GEFS, NCUM AND NEPS ARE INDICATING WEST-NORTHWESTWARDS MOVEMENT. THE SYSTEM WOULD CROSS SRILANKA COAST.

THE VORTEX OVER SOUTH INDIAN OCEAN LAY NEAR 8.3^0S/83.3^0E WITH ESTIMATED MAXIMUM SUSTAINED WIND SPEED OF 20 KNOTS. THESE TWO VORTICES ON EITHER SIDE OF THE EQUATOR ARE INTERACTING WITH EACH OTHER.

MOST OF THE NWP MODELS (IMD GFS, GEFS, NCUM, NEPS, WRF, HWRF, ECMWF) ARE ALSO INDICATING THAT THE SYSTEM WOULD CROSS SRILANKA COAST AND EMERGE INTO COMORIN AREA AFTER MOVING ACROSS SRI LANKA. HOWEVER, THERE IS LARGE VARIATION AMONG THE MODELS AND HENCE LACK OF CONSENSUS ABOUT THE TRACK AND INTENSITY OF THE SYSTEM OVER COMORIN AND ADJOINING AREAS. WHILE MOST OF THE MODELS SUGGEST WEST-NORTHWESTWARDS MOVEMENT SKIRTING SOUTH TAMILNADU-SOUTH KERALA COASTS, A FEW MODELS ARE ALSO INDICATING THE SYSTEM TO TOUCH EXTREME SOUTHERN TIP OF KERALA AND TAMILNADU. ALSO THE TIME OF COMING CLOSER TO SOUTHERN TIP OF KERALA AND TAMILNADU VARIES LARGELY FROM 3RD-6TH DECEMBER. CONSIDERING THE OCEANIC AND ENVIRONMENTAL CONDITIONS OVER COMORIN AREA, THE SEA CONDITIONS ARE FAVOURABLE FOR INTENSIFICATION DUE TO HIGHER SST (29-30^0C) AND HIGHER OCEAN HEAT CONTENT (80-90 KJ/CM^2). THE VERTICAL WIND SHEAR OVER COMORIN AREA IS ALSO EXPECTED TO BE LOW TO MODERATE FAVOURING INTENSIFICATION.

ARABIAN SEA:

THE SYSTEM OVER BAY OF BENGAL AFTER MOVING ACROSS SRI LANKA IS LIKELY TO EMERGE INTO COMORIN AREA ON 3RD DECEMBER MORNING (0000-0300 UTC).

SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LAY OVER SOUTHEAST ARABIAN SEA OFF KERALA COAST.

PROBABILITY OF CYCLOGENESIS(FORMATION OF DEPRESSION AND ABOVE INTENSITY SYSTEM) DURING NEXT 120 HRS :

24 HOURS	24-48 HOURS	48-72 HOURS	72-96 HOURS	96-120 HOURS
NIL	MOD	MOD	HIGH	HIGH

(D. R. PATTANAIK)
Scientist-F, 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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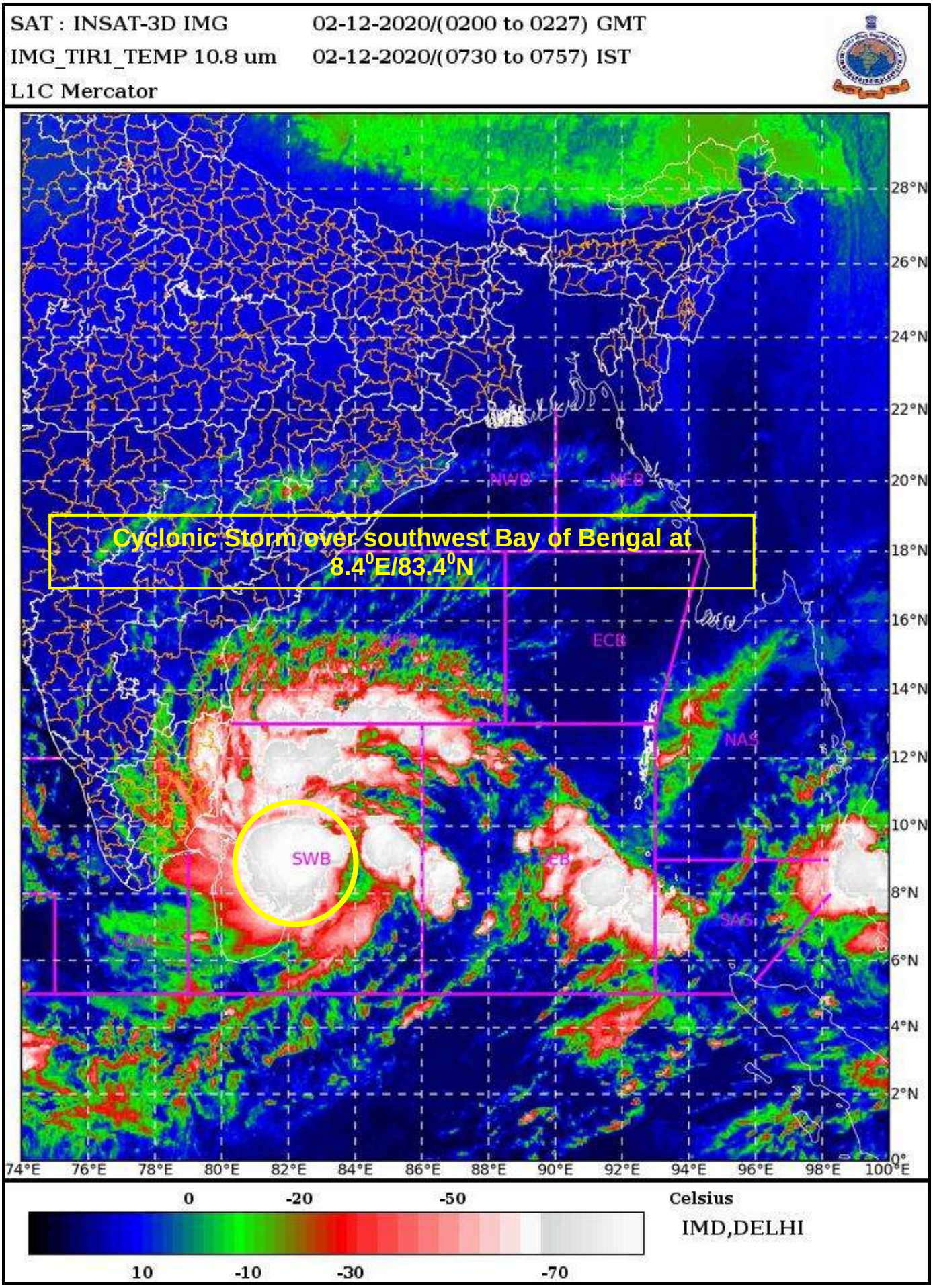

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OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINITY OF CYCLONIC STORM "BUREVI" OVER SOUTHWEST BAY OF BENGAL BASED ON 0000 UTC OF 02nd DECEMBER, 2020.

DATE/TIME IN UTC
IST=UTC +0530
L: LOW PRESSURE AREA
WML: WELL MARKED LOW PRESSURE AREA
D: DEPRESSION (17-27 KT)
DD: DEEP DEPRESSION (28-33 KT)
CS: CYCLONIC STORM (34-47 KT)
SCS: SEVERE CYCLONIC STORM (48-63KT)
VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
SuCS: SUPER CYCLONIC STORM (≥ 120 KT)

LESS THAN 34 KT
34-47 KT
≥ 48 KT
OBSERVED TRACK
FORECAST TRACK
CONE OF UNCERTAINTY

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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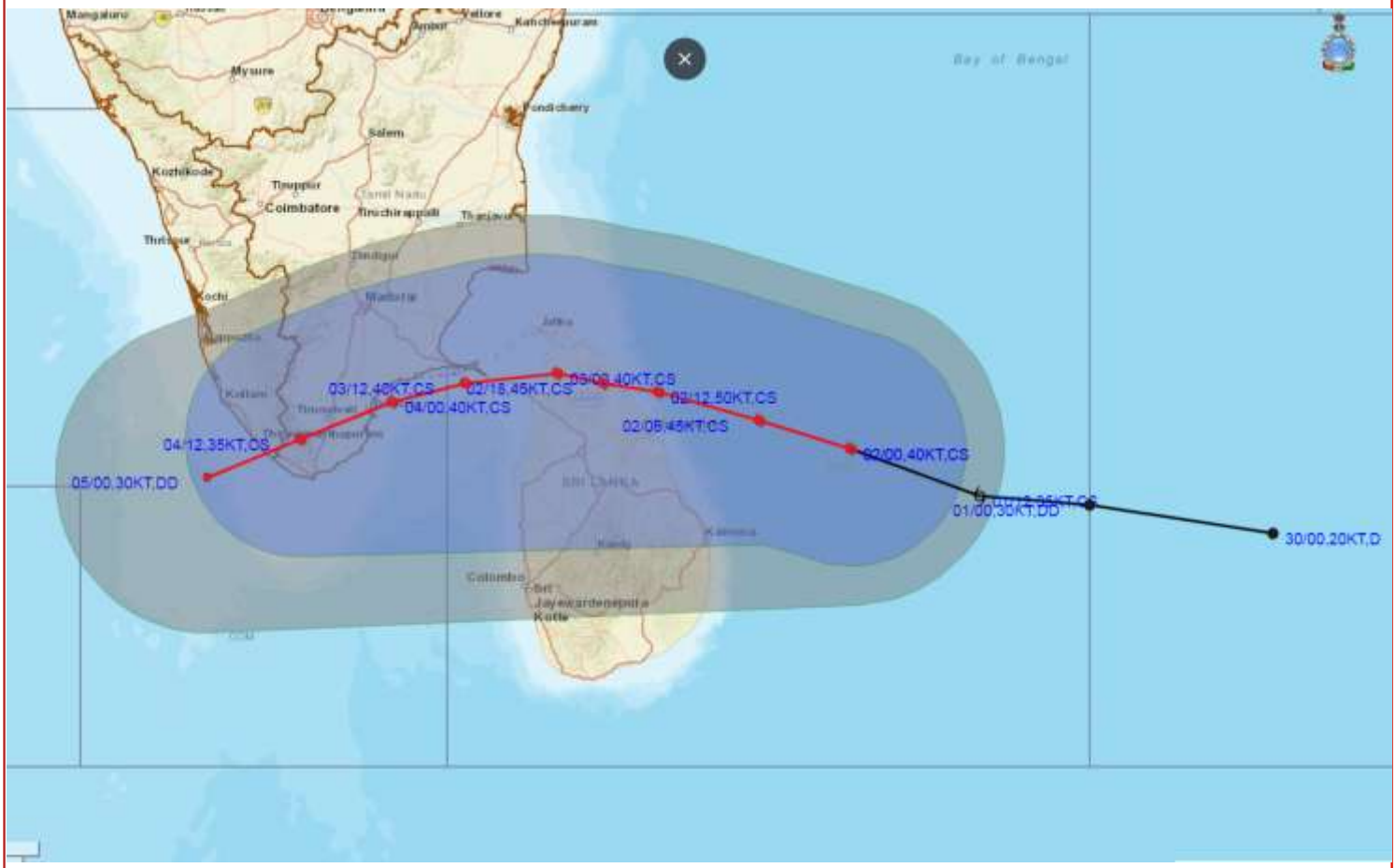
OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF CYCLONIC STORM "BUREVI" OVER SOUTHWEST BAY OF BENGAL BASED ON 0000 UTC OF 02nd DECEMBER, 2020.



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- LESS THAN 34 KT
- 34-47 KT
- ≥ 48 KT
- OBSERVED TRACK
- FORECAST TRACK
- CONE OF UNCERTAINTY

AREA OF MAXIMUM SUSTAINED WIND SPEED:

- 28-33 KT (52-61 KMPH)
- 34-49 KT (62-91 KMPH)
- 50-63 KT (92-117 KMPH)
- ≥ 64 KT (≥118 KMPH)

IMPACT OVER THE SEA

MSW (knot/kmph)	Impact	Action
28-33 (52-61)	Very rough seas	Total suspension of fishing operations
34-49 (62-91)	High to very high seas	Total suspension of fishing operations
50-63 (92-117)	Very high seas	Total suspension of fishing operations
≥ 64 (≥118)	Phenomenal	Total suspension of fishing operations

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STORM SURGE HEIGHT INFORMATION:

* The below listed surge heights are over and above astronomical tide.

MANDAL/TALUK	DISTRICT	STATE / UNION TERRITORY	NEAREST PLACE OF HABITATION	STORM SURGE (m) *	EXPECTED INUNDATION EXTENT (km)
Ramanathapuram	Ramanathapuram	Tamil Nadu	Nagachi	0.7-0.9	Upto 0.31
Tiruvadanai	Ramanathapuram	Tamil Nadu	Marungur	0.5-0.6	Upto 0.69
Thoothukkudi	Tuticorin	Tamil Nadu	Hare Island	0.4-0.6	Nil
Thoothukkudi	Tuticorin	Tamil Nadu	Tuticorin Bay	0.4-0.6	Upto 0.2
Ottapidaram	Thoothukkudi	Tamil Nadu	Pattanamarudur	0.4-0.5	Nil
Arantangi	Pudukkottai	Tamil Nadu	Enadi	0.4-0.5	Upto 0.39
Pattukkottai	Thanjavur	Tamil Nadu	Palanjur	0.2-0.4	Upto 0.18
Peravurani	Thanjavur	Tamil Nadu	Sendalaivayal	0.3-0.5	Nil
Srivaikuntam	Thoothukkudi	Tamil Nadu	Palayakkayal	0.4-0.5	Nil
Tiruchchendur	Thoothukkudi	Tamil Nadu	Kayalpattinam	0.3-0.5	Upto 0.28
Tuticorin	Thoothukkudi	Tamil Nadu	Mappilaiurani	0.3-0.6	Upto 0.8

Figure: Latest Track issued by IMD

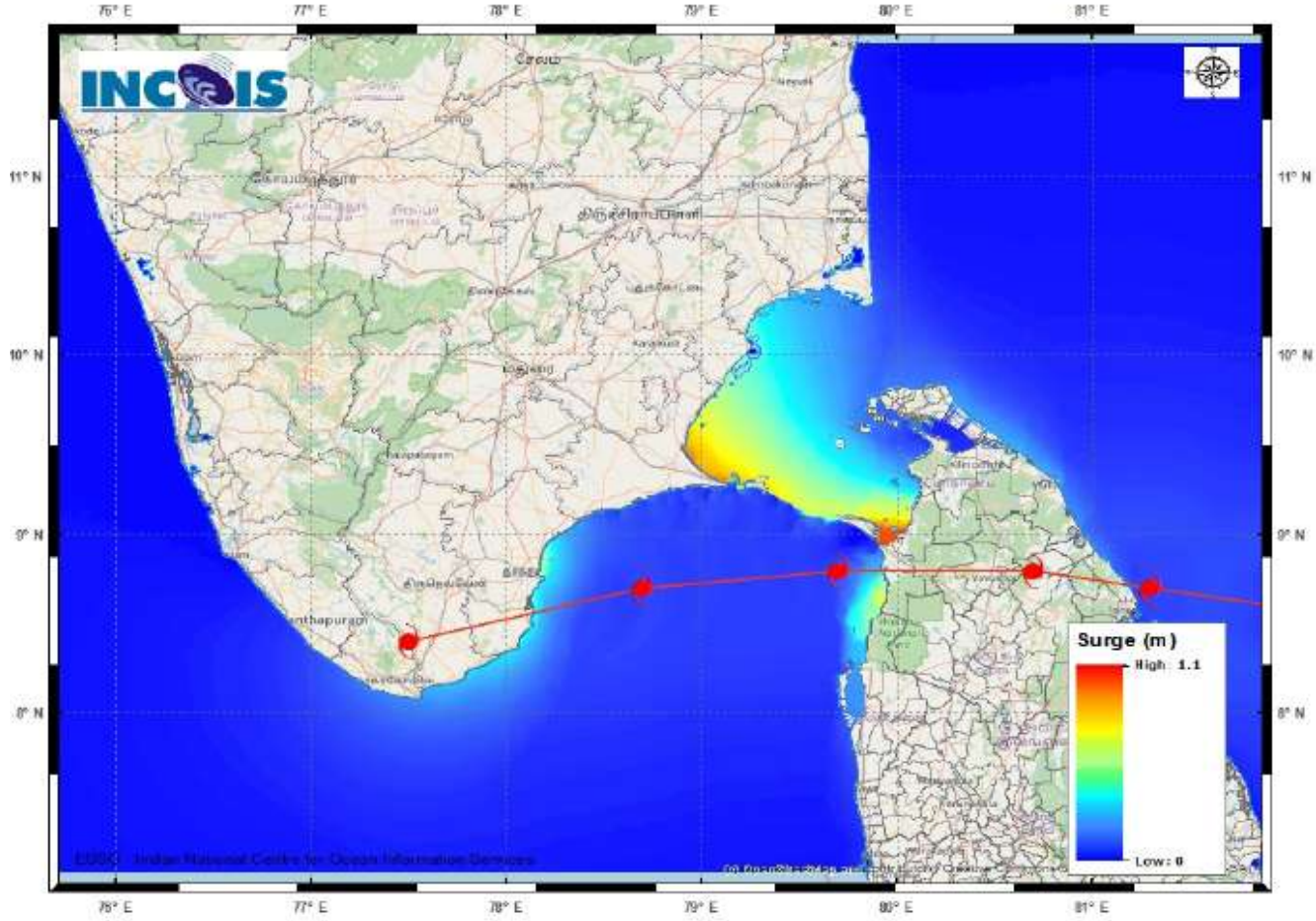

Figure:Storm Surge Map

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 NO. 6

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)
YEMEN METEOROLOGICAL SERVICES, REPUBLIC OF YEMEN (THROUGH RTH JEDDAH)
NATIONAL CENTRE FOR METEOROLOGY, UAE (THROUGH RTH JEDDAH)
PRESIDENCY OF METEOROLOGY AND ENVIRONMENT, SAUDI ARABIA (THROUGH RTH JEDDAH)
IRAN METEOROLOGICAL ORGANISATION, (THROUGH RTH JEDDAH)
QATAR METEOROLOGICAL DEPARTMENT (THROUGH RTH JEDDAH)

TROPICAL CYCLONE ADVISORY NO. 6 FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 0600 UTC OF 02.12.2020 BASED ON 0300 UTC OF 02.12.2020.

SUB: CYCLONIC STORM 'BUREVI' OVER SOUTHWEST BAY OF BENGAL

THE **CYCLONIC STORM 'BUREVI'** OVER SOUTHWEST BAY OF BENGAL MOVED WEST-NORTHWESTWARDS WITH A SPEED OF 18 KMPH DURING PAST SIX HOURS AND LAY CENTERED AT 0300UTC OF TODAY, THE 02ND DECEMBER 2020 OVER SOUTHWEST BAY OF BENGAL NEAR LAT. 8.6°N AND LONG. 83.0°E, ABOUT 200 KM EAST OF TRINCOMALEE(43418), 420 KM EAST-SOUTHEAST OF PAMBAN (43363) AND 600 KM NEARLY EAST-NORTHEAST OF KANNIYAKUMARI (43377).

IT IS VERY LIKELY TO INTENSIFY FURTHER DURING NEXT 12 HOURS. IT IS VERY LIKELY TO MOVE WEST-NORTHWESTWARDS AND CROSS SRI LANKA COAST AROUND LATITUDE 9.0^{0}N, TO NORTH OF TRINCOMALEE DURING AROUND 1500 UTC OF 2ND DECEMBER AS A CYCLONIC STORM WITH A WIND SPEED OF 80-90 KMPH GUSTING TO 100 KMPH. IT IS VERY LIKELY TO MOVE NEARLY WEST-NORTHWESTWARDS THEREAFTER, EMERGE INTO GULF OF MANNAR AND ADJOINING COMORIN AREA ON 3RD DECEMBER MORNING.

THE CYCLONIC STORM WITH WIND SPEED OF 70-80 GUSTING TO 90 KMPH WOULD BE CENTERED VERY CLOSE TO PAMBAN AROUND NOON OF 3RD DECEMBER. IT WOULD THEN MOVE NEARLY WEST-SOUTHWESTWARDS VERY CLOSE TO COAST SLOWLY AND CROSS SOUTH TAMILNADU COAST BETWEEN KANNIYAKUMARI AND PAMBAN DURING 3RD DECEMBER NIGHT AND 4TH DECEMBER EARLY MORNING AS A CYCLONIC STORM WITH WIND SPEED OF 70-80 GUSTING TO 90 KMPH. THUS ITS IMPACT ON SOUTH TAMILNADU COASTAL DISTRICTS IS VERY LIKELY TO COMMENCE FROM 3RD DECEMBER FORENOON INITIALLY OVER RAMANATHAPURAM DISTRICT AND GRADUALLY TOWARDS KANNIYAKUMARI DISTRICT.

FORECAST TRACK AND INTENSITY ARE GIVEN BELOW:

Date/Time(UTC)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
02.12.20/0300	8.6/83.0	75-85 gusting to 95	Cyclonic Storm
02.12.20/0600	8.8/82.5	75-85 gusting to 95	Cyclonic Storm
02.12.20/1200	9.0/81.3	80-90 gusting to 100	Cyclonic Storm
02.12.20/1800	9.1/80.7	80-90 gusting to 100	Cyclonic Storm
03.12.20/0000	9.2/80.2	70-80 gusting to 90	Cyclonic Storm
03.12.20/1200	9.1/79.2	70-80 gusting to 90	Cyclonic Storm
04.12.20/0000	8.9/78.4	70-80 gusting to 90	Cyclonic Storm
04.12.20/1200	8.5/77.4	65-75 gusting to 85	Cyclonic Storm
05.12.20/0000	8.1/76.4	55-65 gusting to 75	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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THE ESTIMATED MAXIMUM SUSTAINED WIND SPEED IS 40 KNOTS GUSTING TO 45 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS 998 HPA. THE SEA CONDITION IS VERY ROUGH TO HIGH AROUND THE SYSTEM CENTRE.

AS PER SATELLITE IMAGERY, THE INTENSITY OF THE SYSTEM IS T2.5/2.5. BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER SOUTH BAY OF BENGAL BETWEEN LAT 6.0^0N TO 13.5^0N LONG 81.5^0E TO 90.0^0E AND MODERATE TO INTENSE CONVECTION OVER SRI LANKA IN ASSOCIATION WITH THE SYSTEM. MINIMUN CTT IS MINUS 93^0C.

STORM SURGE GUIDNACE FOR SRILANKA COAST: STORM SURGE OF ABOUT 1 METER HEIGHT ABOVE THE ASTRONOMICAL TIDE IS LIKELY TO INUNDATE LOW LYING AREAS OF EAST SRILANKA COAST DURING LANDFALL.

REMARKS:

CONSIDERING THE SEA CONDITIONS, SST IS AROUND 29-30°C OVER SOUTHWEST BAY OF BENGAL (BOB). THE TROPICAL CYCLONE HEAT POTENTIAL IS ABOUT 80-90 KJ/CM^2 OVER SOUTHWEST BOB. LOWER LEVEL POSITIVE RELATIVE VORTICITY (100-150X$10^{-6}S^{-1}$) PREVAILS TO THE SOUTHE OF THE SYSTEM CENTRE. THE UPPER LEVEL POSITIVE DIVERGENCE IS AROUND 30X$10^{-5}S^{-1}$ TO THE SOUTHWEST OF THE SYSTEM CENTRE. THE LOWER LEVEL CONVERGENCE IS AROUND 20 X $10^{-5}S^{-1}$ TO THE SOUTHWEST OF THE SYSTEM CENTRE. THESE FEATURES INDICATE THAT ENVIRONMENTAL FEATURES ARE FAVOURABLE FOR FURTHER INTENSIFICATION OF THE SYSTEM. MJO INDEX LIES IN PHASE 4 AND ITS AMPLITUDE IS CLOSE TO 1 HENCE FAVORABLE FOR THE SYSTEM TO REMAIN AS A CYCLONIC STORM DURING THE FORECAST PERIOD. THE UPPER TROPOSPHERIC RIDGE AT UPPER AND MIDDLE TROPOSPHERIC LEVELS RUNS ALONG 12°N OVER THE BOB. THE SYSTEM LIES IN THE SOUTHERN PERIPHERRY OF THE ABOVE RIDGE. AS A RESULT, IT IS MOVING WEST NORTHWESTWARDS. IT IS EXPECTED TO BE STEERED BY THE ABOVE RIDGE RESULTING IN WEST-NORTHWESTWARD MOVEMENT FOR NEXT 2 DAYS AND THEN NEARLY WESTWARDS. MOST OF THE NWP MODELS LIKE ECMWF, IMD GFS, NCEP GFS, GEFS, NCUM AND NEPS ARE INDICATING WEST-NORTHWESTWARDS MOVEMENT. THE SYSTEM WOULD CROSS SRILANKA COAST.

THE VORTEX OVER SOUTH INDIAN OCEAN LAY NEAR 8.3^0S/83.3^0E WITH ESTIMATED MAXIMUM SUSTAINED WIND SPEED OF 20 KNOTS. THESE TWO VORTICES ON EITHER SIDE OF THE EQUATOR ARE INTERACTING WITH EACH OTHER.

MOST OF THE NWP MODELS (IMD GFS, GEFS, NCUM, NEPS, WRF, HWRF, ECMWF) ARE ALSO INDICATING THAT THE SYSTEM WOULD CROSS SRILANKA COAST AND EMERGE INTO COMORIN AREA AFTER MOVING ACROSS SRI LANKA. HOWEVER, THERE IS LARGE VARIATION AMONG THE MODELS AND HENCE LACK OF CONSENSUS ABOUT THE TRACK AND INTENSITY OF THE SYSTEM OVER COMORIN AND ADJOINING AREAS. WHILE MOST OF THE MODELS SUGGEST WEST-NORTHWESTWARDS MOVEMENT SKIRTING SOUTH TAMILNADU-SOUTH KERALA COASTS, A FEW MODELS ARE ALSO INDICATING THE SYSTEM TO TOUCH EXTREME SOUTHERN TIP OF KERALA AND TAMILNADU. ALSO THE TIME OF COMING CLOSER TO SOUTHERN TIP OF KERALA AND TAMILNADU VARIES LARGELY FROM 3^{RD}-6^{TH} DECEMBER. CONSIDERING THE OCEANIC AND ENVIRONMENTAL CONDITIONS OVER COMORIN AREA, THE SEA CONDITIONS ARE FAVOURABLE FOR INTENSIFICATION DUE TO HIGHER SST (29-30^0C) AND HIGHER OCEAN HEAT CONTENT (80-90 KJ/CM^2).

ARABIAN SEA:

THE SYSTEM OVER BAY OF BENGAL AFTER MOVING ACROSS SRI LANKA IS LIKELY TO EMERGE INTO COMORIN AREA ON 3^{RD} DECEMBER MORNING (0000-0300 UTC).

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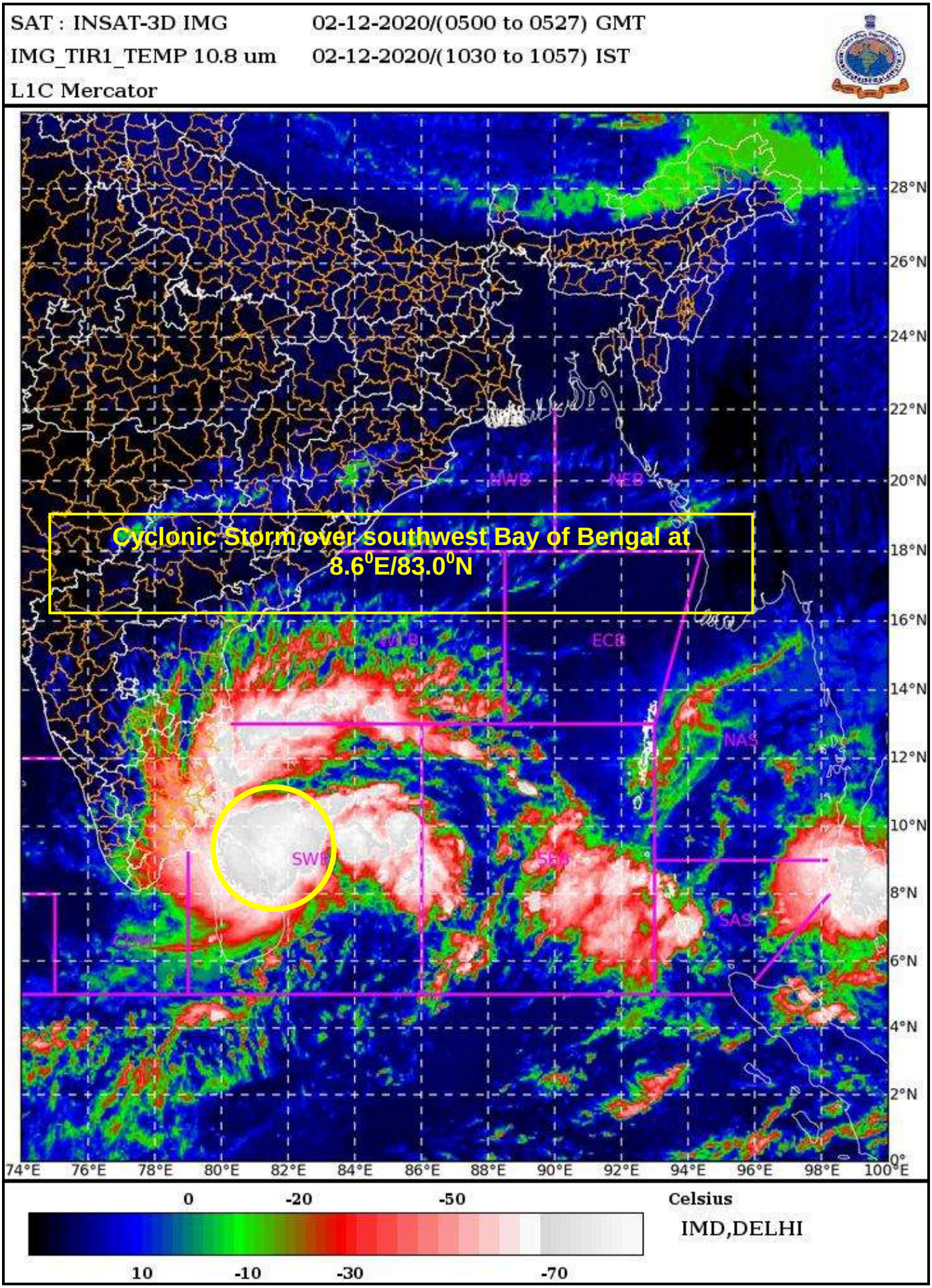
24 HOURS	24-48 HOURS	48-72 HOURS	72-96 HOURS	96-120 HOURS
NIL	MOD	MOD	HIGH	HIGH

(R K JENAMANI)
Scientist-F, RSMC, New Delhi



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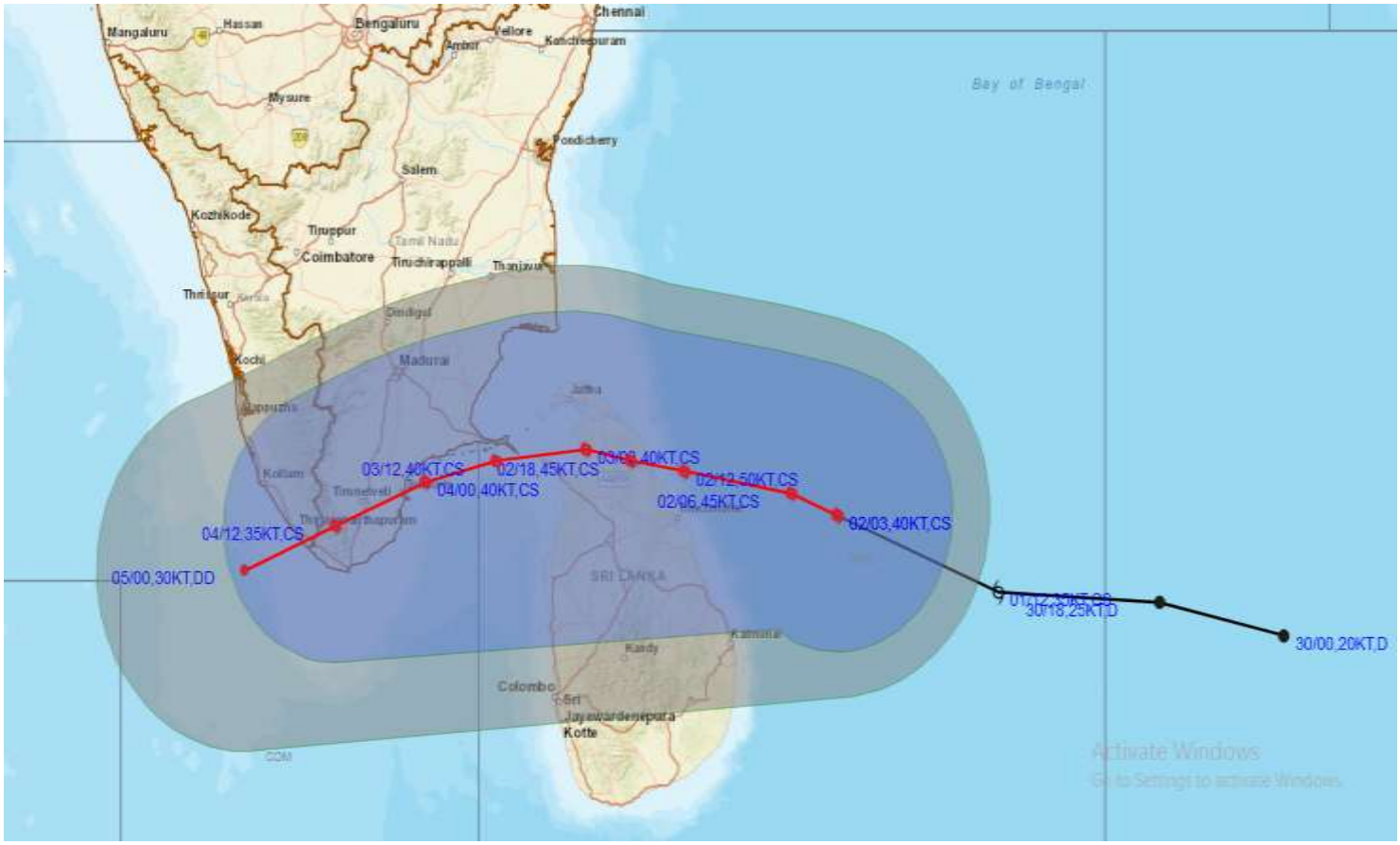

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50-63 KT (92-117 KMPH)
≥ 64 KT (≥118 KMPH)

IMPACT OVER THE SEA

MSW (knot/kmph)	Impact	Action
28-33 (52-61)	Very rough seas	Total suspension of fishing operations
34-49 (62-91)	High to very high seas	Total suspension of fishing operations
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STORM SURGE HEIGHT INFORMATION:

* The below listed surge heights are over and above astronomical tide.

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Ramanathapuram	Ramanathapuram	Tamil Nadu	Nagachi	0.7-0.9	Upto 0.31
Tiruvadanai	Ramanathapuram	Tamil Nadu	Marungur	0.5-0.6	Upto 0.69
Thoothukkudi	Tuticorin	Tamil Nadu	Hare Island	0.4-0.6	Nil
Thoothukkudi	Tuticorin	Tamil Nadu	Tuticorin Bay	0.4-0.6	Upto 0.2
Ottapidaram	Thoothukkudi	Tamil Nadu	Pattanamarudur	0.4-0.5	Nil
Arantangi	Pudukkottai	Tamil Nadu	Enadi	0.4-0.5	Upto 0.39
Pattukkottai	Thanjavur	Tamil Nadu	Palanjur	0.2-0.4	Upto 0.18
Peravurani	Thanjavur	Tamil Nadu	Sendalaivayal	0.3-0.5	Nil
Srivaikuntam	Thoothukkudi	Tamil Nadu	Palayakkayal	0.4-0.5	Nil
Tiruchchendur	Thoothukkudi	Tamil Nadu	Kayalpattinam	0.3-0.5	Upto 0.28
Tuticorin	Thoothukkudi	Tamil Nadu	Mappilaiurani	0.3-0.6	Upto 0.8

Figure: Latest Track issued by IMD

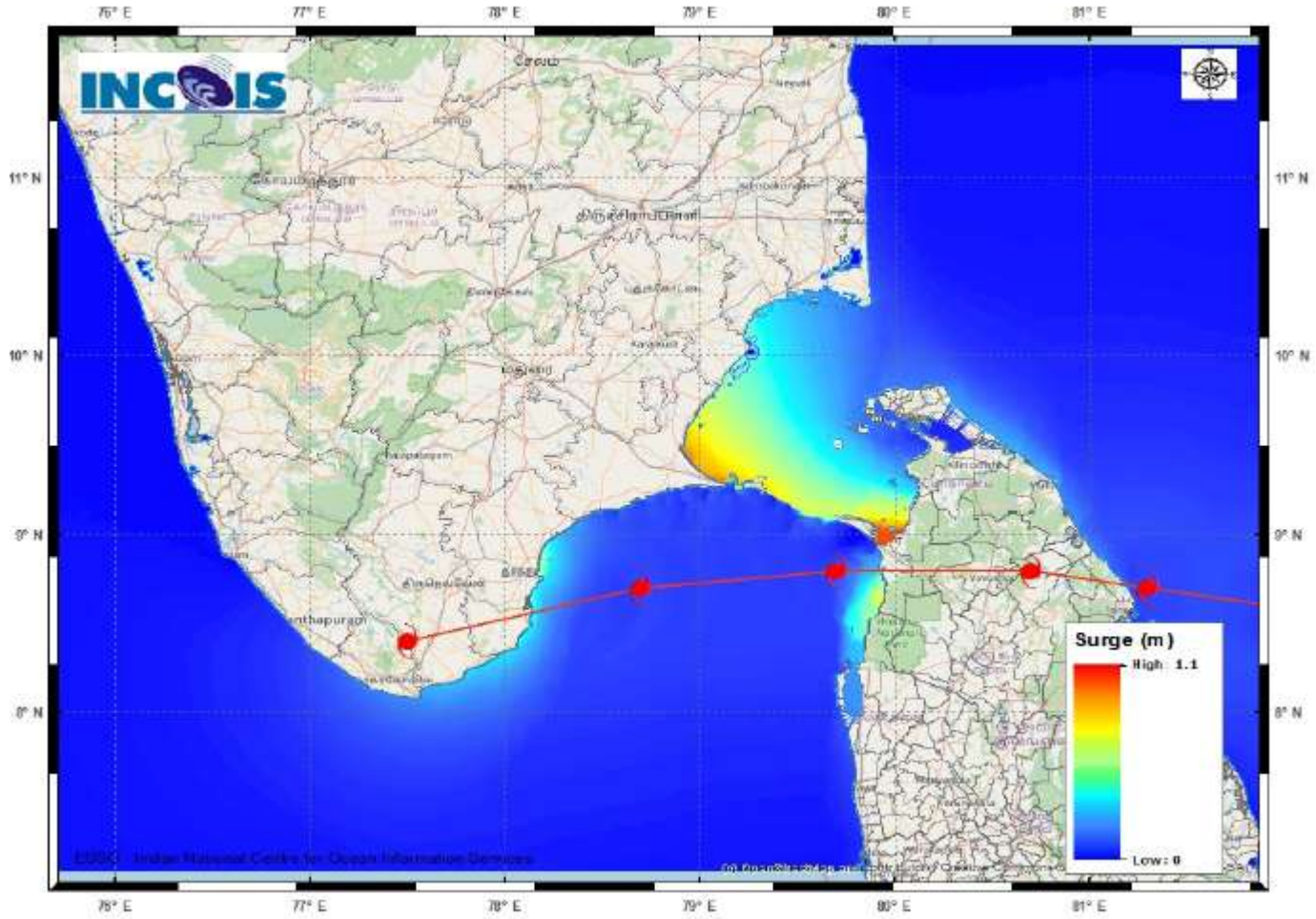

Figure:Storm Surge Map

Storm Surge Forecast by INCOIS Model

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REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI

TROPICAL CYCLONE ADVISORY BULLETIN NO.7

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)
YEMEN METEOROLOGICAL SERVICES, REPUBLIC OF YEMEN (THROUGH RTH JEDDAH)
NATIONAL CENTRE FOR METEOROLOGY, UAE (THROUGH RTH JEDDAH)
PRESIDENCY OF METEOROLOGY AND ENVIRONMENT, SAUDI ARABIA (THROUGH RTH JEDDAH)
IRAN METEOROLOGICAL ORGANISATION, (THROUGH RTH JEDDAH)
QATAR METEOROLOGICAL DEPARTMENT (THROUGH RTH JEDDAH)

TROPICAL CYCLONE ADVISORY NO. 7 FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 0930 UTC OF 02.12.2020 BASED ON 0600 UTC OF 02.12.2020.

SUB: CYCLONIC STORM 'BUREVI' OVER SOUTHWEST BAY OF BENGAL

THE **CYCLONIC STORM 'BUREVI'** OVER SOUTHWEST BAY OF BENGAL MOVED WEST-NORTHWESTWARDS WITH A SPEED OF 25 KMPH DURING PAST SIX HOURS AND LAY CENTERED AT 0600 UTC OF TODAY, THE 02ND DECEMBER 2020 OVER SOUTHWEST BAY OF BENGAL NEAR LAT. 8.7°N AND LONG. 82.5°E, ABOUT 140 KM NEARLY EAST OF TRINCOMALEE (43418), 370 KM EAST-SOUTHEAST OF PAMBAN (43363) AND 550 KM NEARLY EAST-NORTHEAST OF KANNIYAKUMARI (43377).

IT IS VERY LIKELY TO MOVE WEST-NORTHWESTWARDS AND CROSS SRI LANKA COAST AROUND LATITUDE 9.0^{0}N, TO NORTH OF TRINCOMALEE DURING EVENING/NIGHT OF 2ND DECEMBER AS A CYCLONIC STORM WITH A WIND SPEED OF 80-90 KMPH GUSTING TO 100 KMPH. IT IS VERY LIKELY TO MOVE NEARLY WEST-NORTHWESTWARDS THEREAFTER, EMERGE INTO GULF OF MANNAR AND ADJOINING COMORIN AREA ON 3RD DECEMBER MORNING.

THE CYCLONIC STORM WITH WIND SPEED OF 70-80 GUSTING TO 90 KMPH WOULD BE CENTERED VERY CLOSE TO PAMBAN AROUND NOON OF 3RD DECEMBER. IT WOULD THEN MOVE NEARLY WEST-SOUTHWESTWARDS ACROSS PAMBAN AREA BY AFTERNOON AND CROSS SOUTH TAMILNADU COAST BETWEEN PAMBAN AND KANNIYAKUMARI DURING 3RD DECEMBER NIGHT AND 4TH DECEMBER EARLY MORNING AS A CYCLONIC STORM WITH WIND SPEED OF 70-80 GUSTING TO 90 KMPH. THUS ITS IMPACT ON SOUTH TAMILNADU COASTAL DISTRICTS IS VERY LIKELY TO COMMENCE FROM 3RD DECEMBER FORENOON INITIALLY OVER RAMANATHAPURAM DISTRICT AND GRADUALLY TOWARDS KANNIYAKUMARI DISTRICT.

FORECAST TRACK AND INTENSITY ARE GIVEN BELOW:

Date/Time(UTC)	Position (Lat. ^{0}N/ long. ^{0}E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
02.12.20/0600	8.7/82.5	80-90 gusting to 100	Cyclonic Storm
02.12.20/1200	9.0/81.4	80-90 gusting to 100	Cyclonic Storm
02.12.20/1800	9.1/80.6	75-85 gusting to 95	Cyclonic Storm
03.12.20/0000	9.2/80.0	70-80 gusting to 90	Cyclonic Storm
03.12.20/0600	9.2/79.3	70-80 gusting to 90	Cyclonic Storm
03.12.20/1800	9.1/78.6	70-80 gusting to 90	Cyclonic Storm
04.12.20/0600	9.0/78.0	60-70 gusting to 80	Cyclonic Storm
04.12.20/1800	8.8/77.3	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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THE ESTIMATED MAXIMUM SUSTAINED WIND SPEED IS 45 KNOTS GUSTING TO 55 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS 996 HPA. THE SEA CONDITION IS VERY ROUGH TO HIGH AROUND THE SYSTEM CENTRE.

AS PER SATELLITE IMAGERY, THE INTENSITY OF THE SYSTEM IS T3.0/3.0. BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER SOUTH & ADJOINING CENTRAL BAY OF BENGAL BETWEEN LAT 7.0^0N TO 14.0^0N LONG 80.0^0E TO 87.0^0E AND OVER EAST TAMILNADU, PALK STRAIT AND SRILANKA. MINIMUN CTT IS MINUS 93^0C.

STORM SURGE GUIDNACE FOR SRILANKA COAST:

STORM SURGE OF ABOUT 1 METER HEIGHT ABOVE THE ASTRONOMICAL TIDE IS LIKELY TO INUNDATE LOW LYING AREAS OF NORTHEAST SRILANKA COAST DURING LANDFALL.

FURTHER, DURING EMERGENCE OF THE SYSTEM INTO GULF OF MANNAR ON 3^{RD} MORNING AND ITS MOVEMENT TOWARDS SOUTH TAMILNADU COAST THERAFTER, THE STORM SURGE HEIGHT OF ABOUT 1 METER HEIGHT ABOVE THE ASTRONOMICAL TIDE IS LIKELY TO INUNDATE LOW LYING AREAS OF NORTHWEST SRILANKA AND SOUTH TAMILNADU COAST.

REMARKS:

CONSIDERING THE SEA CONDITIONS, SST IS AROUND 28-29°C OVER SOUTHWEST BAY OF BENGAL (BOB). THE TROPICAL CYCLONE HEAT POTENTIAL IS ABOUT 60-80 KJ/CM^2 OVER SOUTHWEST BOB. LOWER LEVEL POSITIVE RELATIVE VORTICITY ($150X10^{-6}S^{-1}$) PREVAILS TO THE SOUTH OF THE SYSTEM CENTRE. THE UPPER LEVEL POSITIVE DIVERGENCE IS AROUND $30X10^{-5}S^{-1}$ AROUND THE SYSTEM CENTRE. THE LOWER LEVEL CONVERGENCE IS AROUND 30 X $10^{-5}S^{-1}$ TO THE SOUTHWEST OF THE SYSTEM CENTRE. MJO INDEX LIES IN PHASE 4 AND ITS AMPLITUDE IS CLOSE TO 1, HENCE FAVORABLE FOR THE SYSTEM TO REMAIN AS A CYCLONIC STORM DURING THE FORECAST PERIOD. THE UPPER TROPOSPHERIC RIDGE AT UPPER AND MIDDLE TROPOSPHERIC LEVELS RUNS ALONG 13°N OVER THE BOB. THE SYSTEM LIES IN THE SOUTHERN PERIPHERRY OF THE ABOVE RIDGE. AS A RESULT, IT IS MOVING WEST NORTHWESTWARDS. IT IS EXPECTED TO BE STEERED BY THE ABOVE RIDGE RESULTING IN WEST-NORTHWESTWARD MOVEMENT FOR NEXT 1 DAYS AND THEN NEARLY WESTWARDS. MOST OF THE NWP MODELS LIKE ECMWF, IMD GFS, NCEP GFS, GEFS, NCUM AND NEPS ARE INDICATING WEST-NORTHWESTWARDS MOVEMENT.

THE VORTEX OVER SOUTH INDIAN OCEAN LAY NEAR 8.3^0S/83.3^0E WITH ESTIMATED MAXIMUM SUSTAINED WIND SPEED OF 20 KNOTS. THESE TWO VORTICES ON EITHER SIDE OF THE EQUATOR ARE INTERACTING WITH EACH OTHER.

MOST OF THE NWP MODELS (IMD GFS, GEFS, NCUM, NEPS, WRF, HWRF, ECMWF) ARE ALSO INDICATING THE SYSTEM SUGGEST WEST-NORTHWESTWARDS DURING NEXT 24 HOURS AND THEN WEST-SOUTHWEST WARDS MOVEMENT SKIRTING SOUTH TAMILNADU-SOUTH KERALA COASTS, A FEW MODELS ARE ALSO INDICATING THE SYSTEM TO TOUCH EXTREME SOUTHERN TIP OF KERALA AND TAMILNADU. ALSO THE TIME OF COMING CLOSER TO SOUTHERN TIP OF KERALA AND TAMILNADU VARIES LARGELY FROM 3^{RD}-5^{TH} DECEMBER.

ARABIAN SEA:

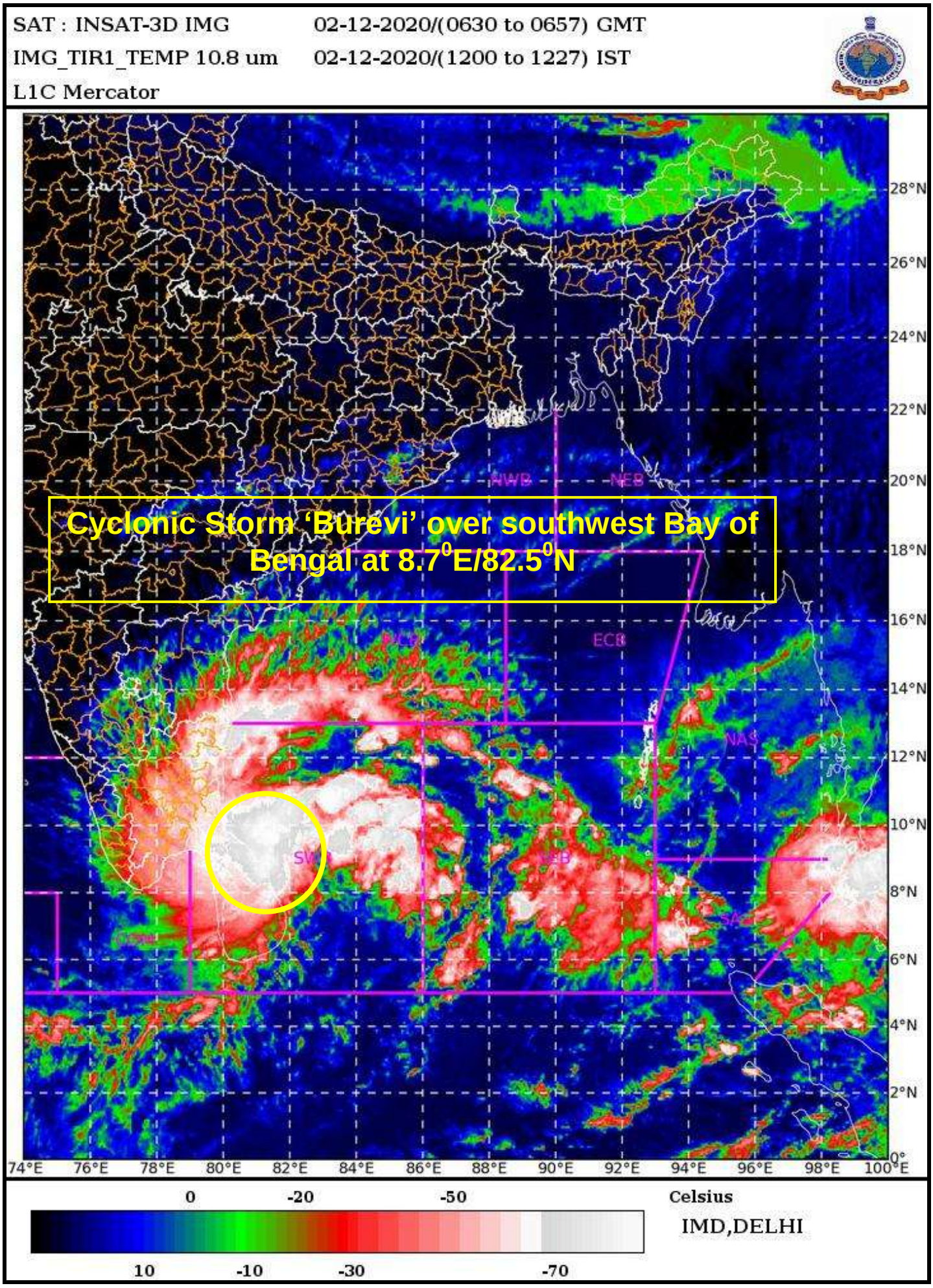
THE SYSTEM OVER BAY OF BENGAL AFTER MOVING ACROSS SRI LANKA IS LIKELY TO EMERGE INTO COMORIN AREA ON 3^{RD} DECEMBER MORNING (0000-0300 UTC).

SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LAY OVER SOUTHEAST ARABIAN SEA OFF KERALA COAST.

PROBABILITY OF CYCLOGENESIS(FORMATION OF DEPRESSION AND ABOVE INTENSITY SYSTEM) DURING NEXT 120 HRS :

24 HOURS	24-48 HOURS	48-72 HOURS	72-96 HOURS	96-120 HOURS
NIL	MOD	MOD	HIGH	HIGH

(R K JENAMANI)
Scientist-F, 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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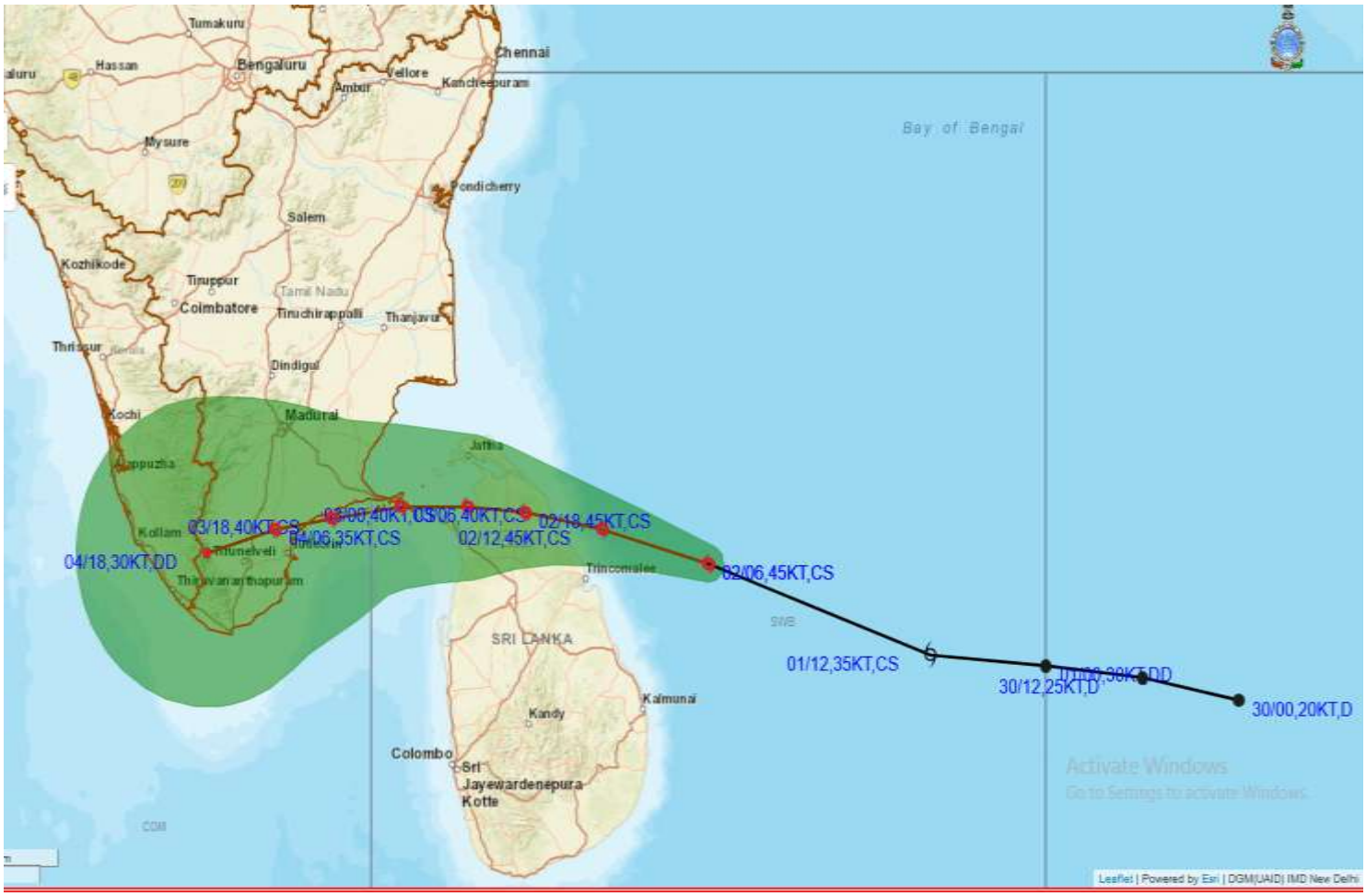
OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINITY OF CYCLONIC STORM "BUREVI" OVER SOUTHWEST BAY OF BENGAL BASED ON 0600 UTC OF 2nd DECEMBER 2020



DATE/TIME IN UTC
IST=UTC + 0530
L: LOW PRESSURE AREA
WML: WELL MARKED LOW PRESSURE AREA
D: DEPRESSION (17-27 KT)
DD: DEEP DEPRESSION (28-33 KT)
CS: CYCLONIC STORM (34-47 KT)
SCS: SEVERE CYCLONIC STORM (48-63KT)
VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
SuCS: SUPER CYCLONIC STORM (≥ 120 KT)

LESS THAN 34 KT
34-47 KT
≥ 48 KT
OBSERVED TRACK
FORECAST TRACK
CONE OF UNCERTAINTY

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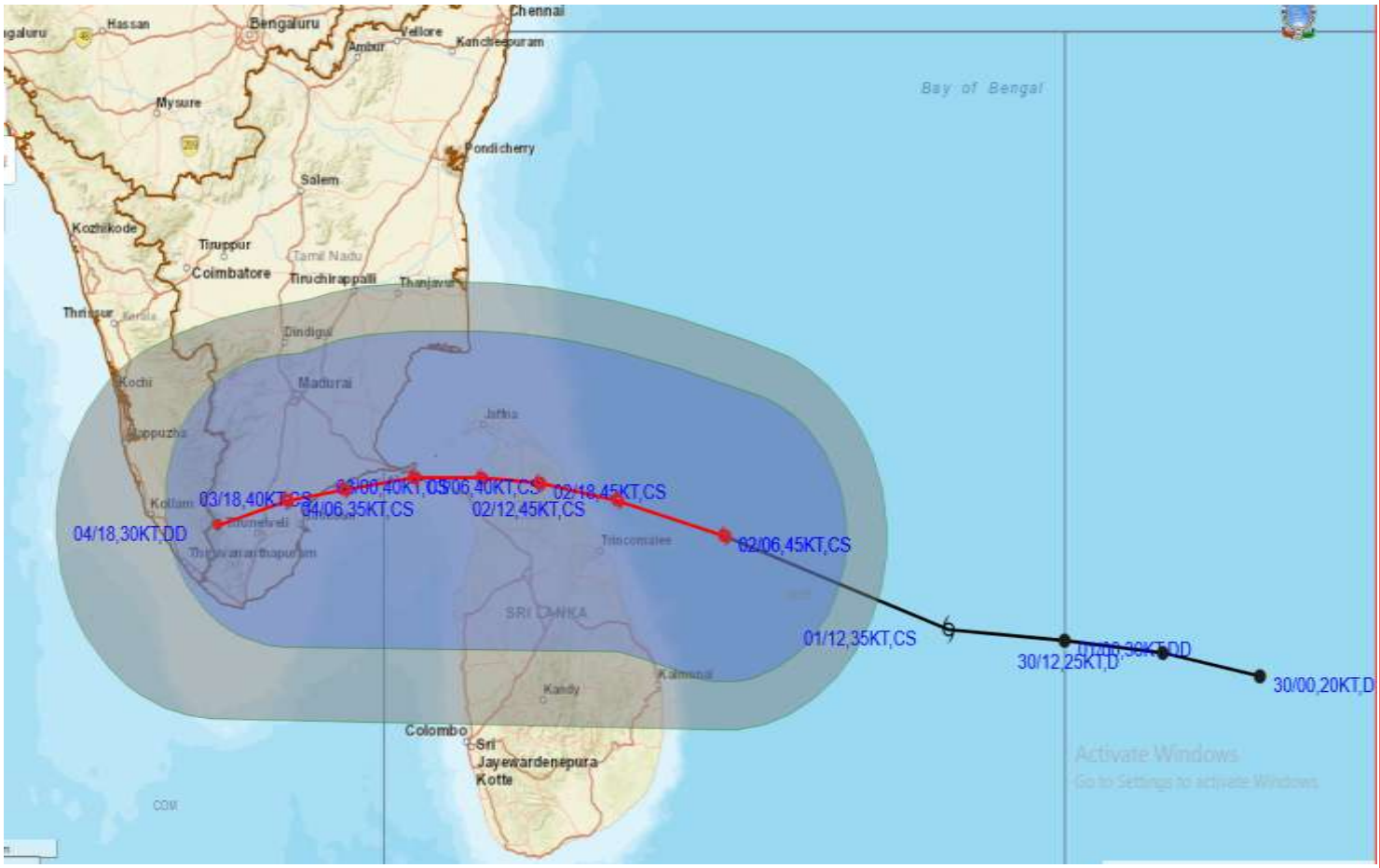
OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF CYCLONIC STORM "BUREVI" OVER SOUTHWEST BAY OF BENGAL BASED ON 0600 UTC OF 2nd DECEMBER, 2020.



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SuCS: SUPER CYCLONIC STORM (≥ 120 KT)

- LESS THAN 34 KT
- 34-47 KT
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- OBSERVED TRACK
- FORECAST TRACK
- CONE OF UNCERTAINTY

AREA OF MAXIMUM SUSTAINED WIND SPEED:
- 28-33 KT (52-61 KMPH)
- 34-49 KT (62-91 KMPH)
- 50-63 KT (92-117 KMPH)
- ≥ 64 KT (≥118 KMPH)

IMPACT OVER THE SEA

MSW (knot/kmph)	Impact	Action
28-33 (52-61)	Very rough seas	Total suspension of fishing operations
34-49 (62-91)	High to very high seas	Total suspension of fishing operations
50-63 (92-117)	Very high seas	Total suspension of fishing operations
≥ 64 (≥118)	Phenomenal	Total suspension of fishing operations

STORM SURGE HEIGHT INFORMATION:

* The below listed surge heights are over and above astronomical tide.

MANDAL/TALUK	DISTRICT	STATE / UNION TERRITORY	NEAREST PLACE OF HABITATION	STORM SURGE (m) *	EXPECTED INUNDATION EXTENT (km)
Ramanathapuram	Ramanathapuram	Tamil Nadu	Nagachi	1.1-1.3	Upto 0.47
Tiruvadanai	Ramanathapuram	Tamil Nadu	Marungur	0.7-1.1	Upto 0.69
Arantangi	Pudukkottai	Tamil Nadu	Enadi	0.5-0.8	Upto 0.39
Tuticorin	Thoothukkudi	Tamil Nadu	Mappilaiurani	0.4-0.8	Upto 1.2
Ottapidaram	Thoothukkudi	Tamil Nadu	Pattanamarudur	0.5-0.7	Nil
Peravurani	Thanjavur	Tamil Nadu	Sendalaivayal	0.6-0.7	Nil
Thoothukkudi	Tuticorin	Tamil Nadu	Hare Island	0.4-0.6	Nil
Thoothukkudi	Tuticorin	Tamil Nadu	Tuticorin Bay	0.4-0.6	Upto 0.2
Pattukkottai	Thanjavur	Tamil Nadu	Palanjur	0.4-0.5	Upto 0.18
Srivaikuntam	Thoothukkudi	Tamil Nadu	Palayakkayal	0.4-0.4	Upto 0.23
Tiruchchendur	Thoothukkudi	Tamil Nadu	Kayalpattinam	0.2-0.3	Upto 0.28
Vilattikulam	Thoothukkudi	Tamil Nadu	Vaippar	0.3-0.4	Nil

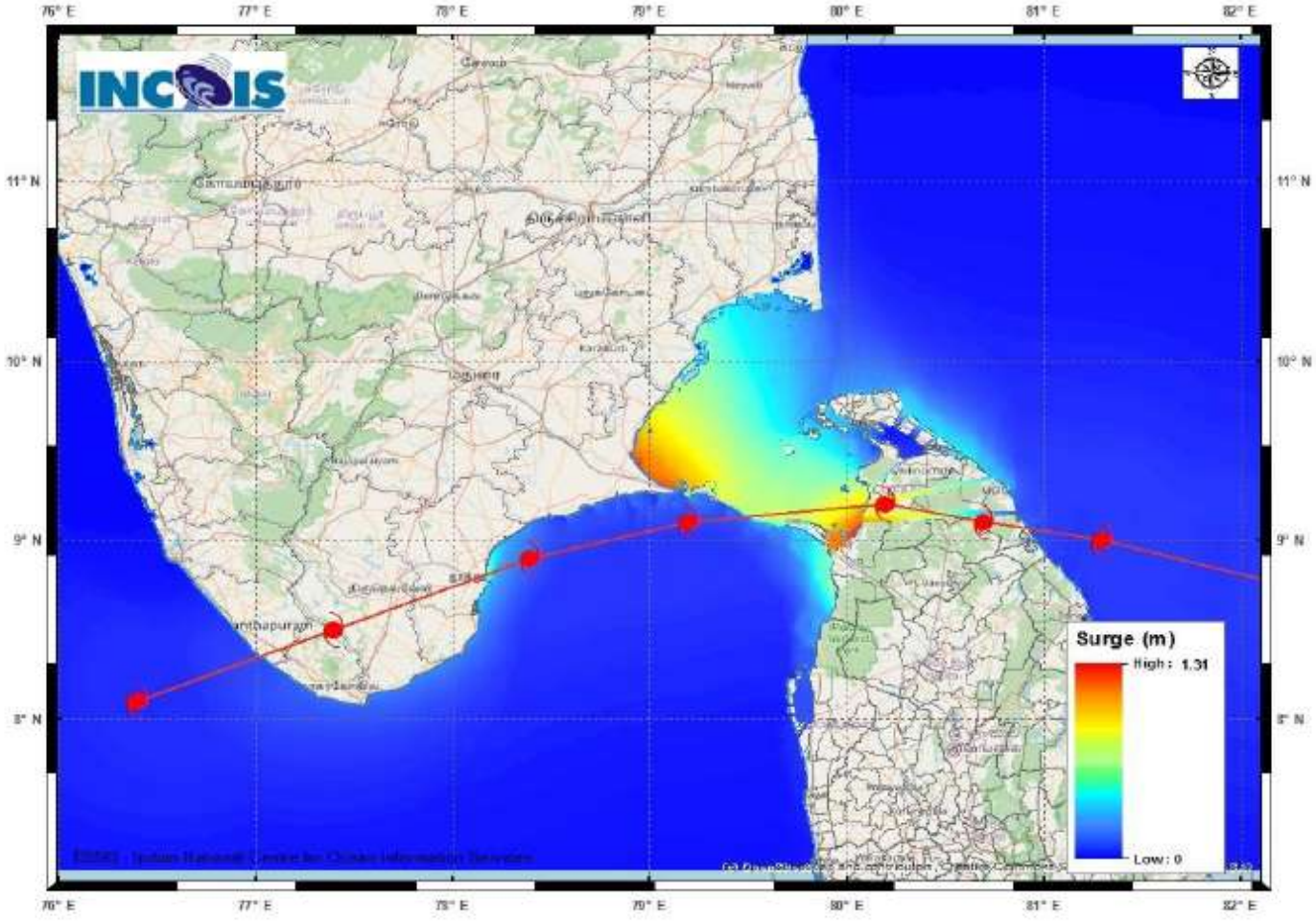

Figure: Storm Surge Map

Storm Surge Forecast by INCOIS Model

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REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI

TROPICAL CYCLONE ADVISORY BULLETIN NO.8

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)
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PRESIDENCY OF METEOROLOGY AND ENVIRONMENT, SAUDI ARABIA (THROUGH RTH JEDDAH)
IRAN METEOROLOGICAL ORGANISATION, (THROUGH RTH JEDDAH)
QATAR METEOROLOGICAL DEPARTMENT (THROUGH RTH JEDDAH)

TROPICAL CYCLONE ADVISORY NO. 8 FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 1100 UTC OF 02.12.2020 BASED ON 0900 UTC OF 02.12.2020.

SUB: CYCLONIC STORM 'BUREVI' OVER SOUTHWEST BAY OF BENGAL

THE **CYCLONIC STORM 'BUREVI'** OVER SOUTHWEST BAY OF BENGAL MOVED WEST-NORTHWESTWARDS WITH A SPEED OF 15 KMPH DURING PAST SIX HOURS AND LAY CENTERED AT 0900 UTC OF TODAY, THE 02ND DECEMBER 2020 OVER SOUTHWEST BAY OF BENGAL NEAR LAT. 8.8°N AND LONG. 82.2°E, ABOUT 110 KM EAST-NORTHEAST OF TRINCOMALEE (43418), 330 KM EAST-EAST-SOUTHEAST OF PAMBAN (43363) AND 520 KM EAST-NORTHEAST OF KANNIYAKUMARI (43377).

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FORECAST TRACK AND INTENSITY ARE GIVEN BELOW:

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AS PER SATELLITE IMAGERY, THE INTENSITY OF THE SYSTEM IS T3.0/3.0. BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER SOUTH & ADJOINING CENTRAL BAY OF BENGAL BETWEEN LAT 7.0^0N TO 14.0^0N LONG 80.0^0E TO 87.0^0E AND OVER EAST TAMILNADU, PALK STRAIT AND SRILANKA. MINIMUN CTT IS MINUS 93^0C.

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REMARKS:

CONSIDERING THE SEA CONDITIONS, SST IS AROUND 28-29°C OVER SOUTHWEST BAY OF BENGAL (BOB). THE TROPICAL CYCLONE HEAT POTENTIAL IS ABOUT 60-80 KJ/CM^2 OVER SOUTHWEST BOB. LOWER LEVEL POSITIVE RELATIVE VORTICITY ($150X10^{-6}S^{-1}$) PREVAILS TO THE SOUTH OF THE SYSTEM CENTRE. THE UPPER LEVEL POSITIVE DIVERGENCE IS AROUND $30X10^{-5}S^{-1}$ AROUND THE SYSTEM CENTRE. THE LOWER LEVEL CONVERGENCE IS AROUND 30 X $10^{-5}S^{-1}$ TO THE SOUTHWEST OF THE SYSTEM CENTRE. MJO INDEX LIES IN PHASE 4 AND ITS AMPLITUDE IS CLOSE TO 1, HENCE FAVORABLE FOR THE SYSTEM TO REMAIN AS A CYCLONIC STORM DURING THE FORECAST PERIOD. THE UPPER TROPOSPHERIC RIDGE AT UPPER AND MIDDLE TROPOSPHERIC LEVELS RUNS ALONG 13°N OVER THE BOB. THE SYSTEM LIES IN THE SOUTHERN PERIPHERRY OF THE ABOVE RIDGE. AS A RESULT, IT IS MOVING WEST NORTHWESTWARDS. IT IS EXPECTED TO BE STEERED BY THE ABOVE RIDGE RESULTING IN WEST-NORTHWESTWARD MOVEMENT FOR NEXT 1 DAYS AND THEN NEARLY WESTWARDS. MOST OF THE NWP MODELS LIKE ECMWF, IMD GFS, NCEP GFS, GEFS, NCUM AND NEPS ARE INDICATING WEST-NORTHWESTWARDS MOVEMENT.

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THE SYSTEM OVER BAY OF BENGAL AFTER MOVING ACROSS SRI LANKA IS LIKELY TO EMERGE INTO COMORIN AREA ON 3^{RD} DECEMBER MORNING (0000-0300 UTC).

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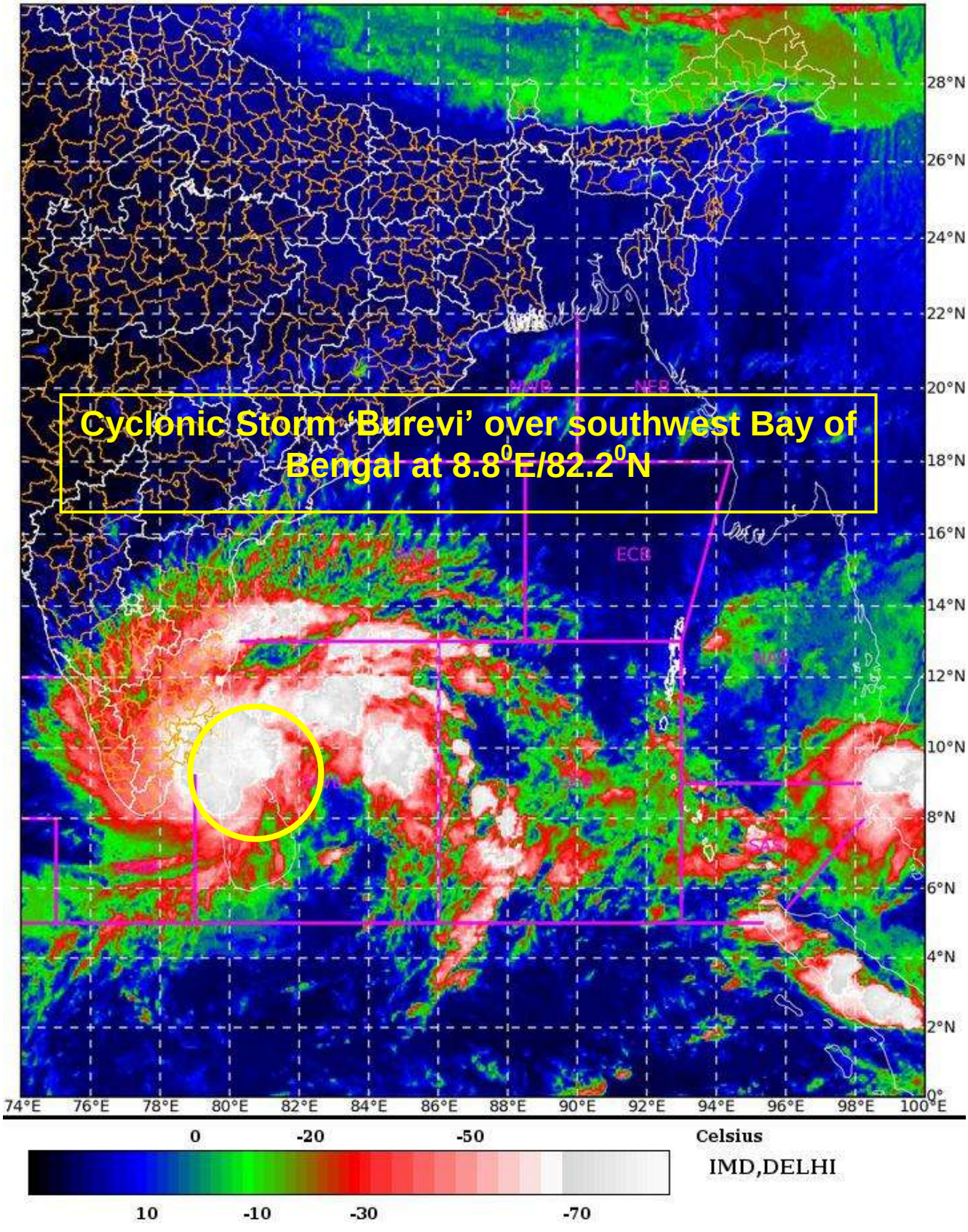
24 HOURS	24-48 HOURS	48-72 HOURS	72-96 HOURS	96-120 HOURS
NIL	MOD	MOD	HIGH	HIGH

(R K JENAMANI)
Scientist-F, RSMC, New Delhi

SAT : INSAT-3D IMG 02-12-2020/(1030 to 1056) GMT

IMG_TIR1_TEMP 10.8 um 02-12-2020/(1600 to 1626) IST

L1C Mercator



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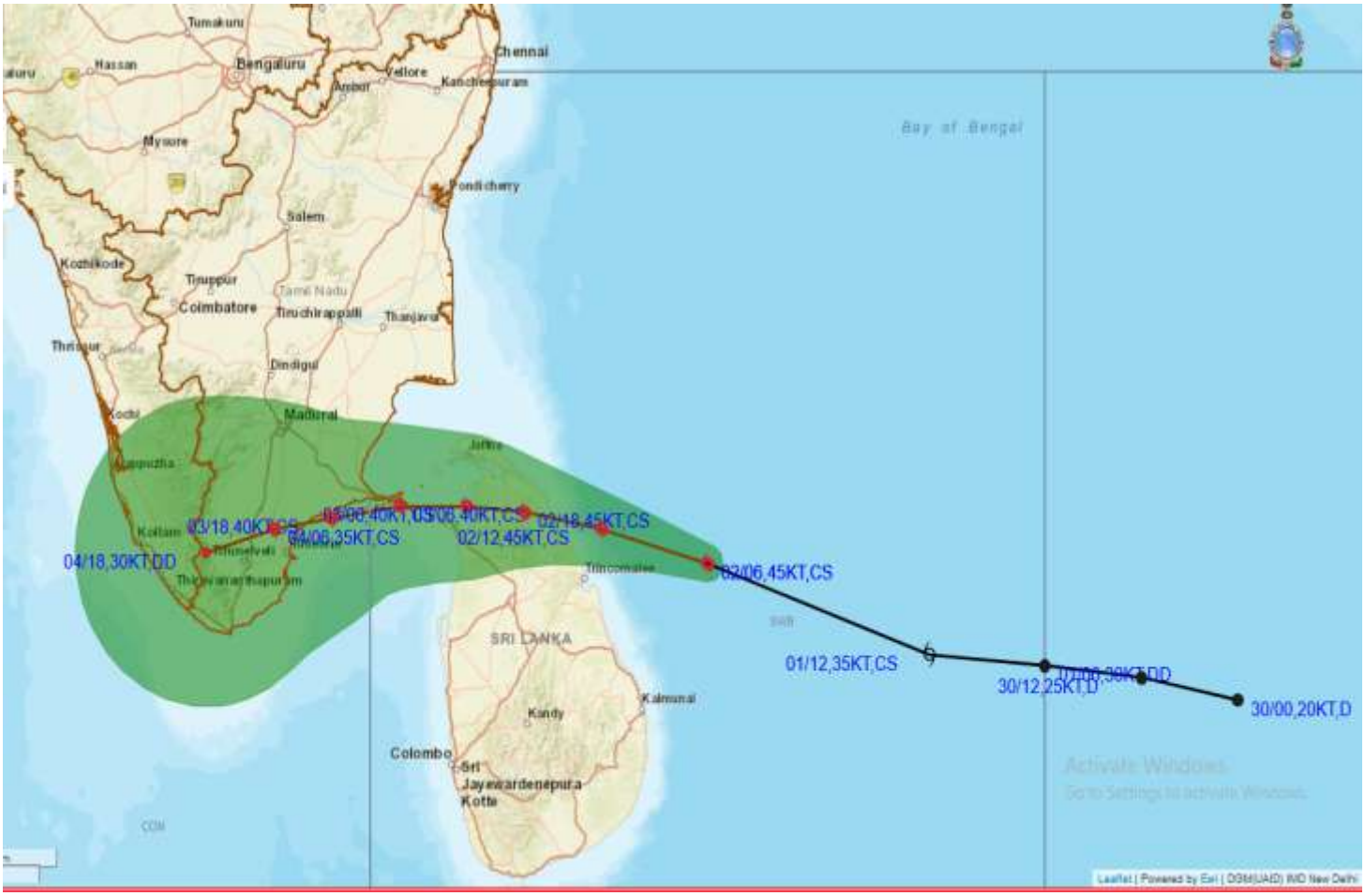
OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINITY OF CYCLONIC STORM "BUREVI" OVER SOUTHWEST BAY OF BENGAL BASED ON 0600 UTC OF 2nd DECEMBER, 2020



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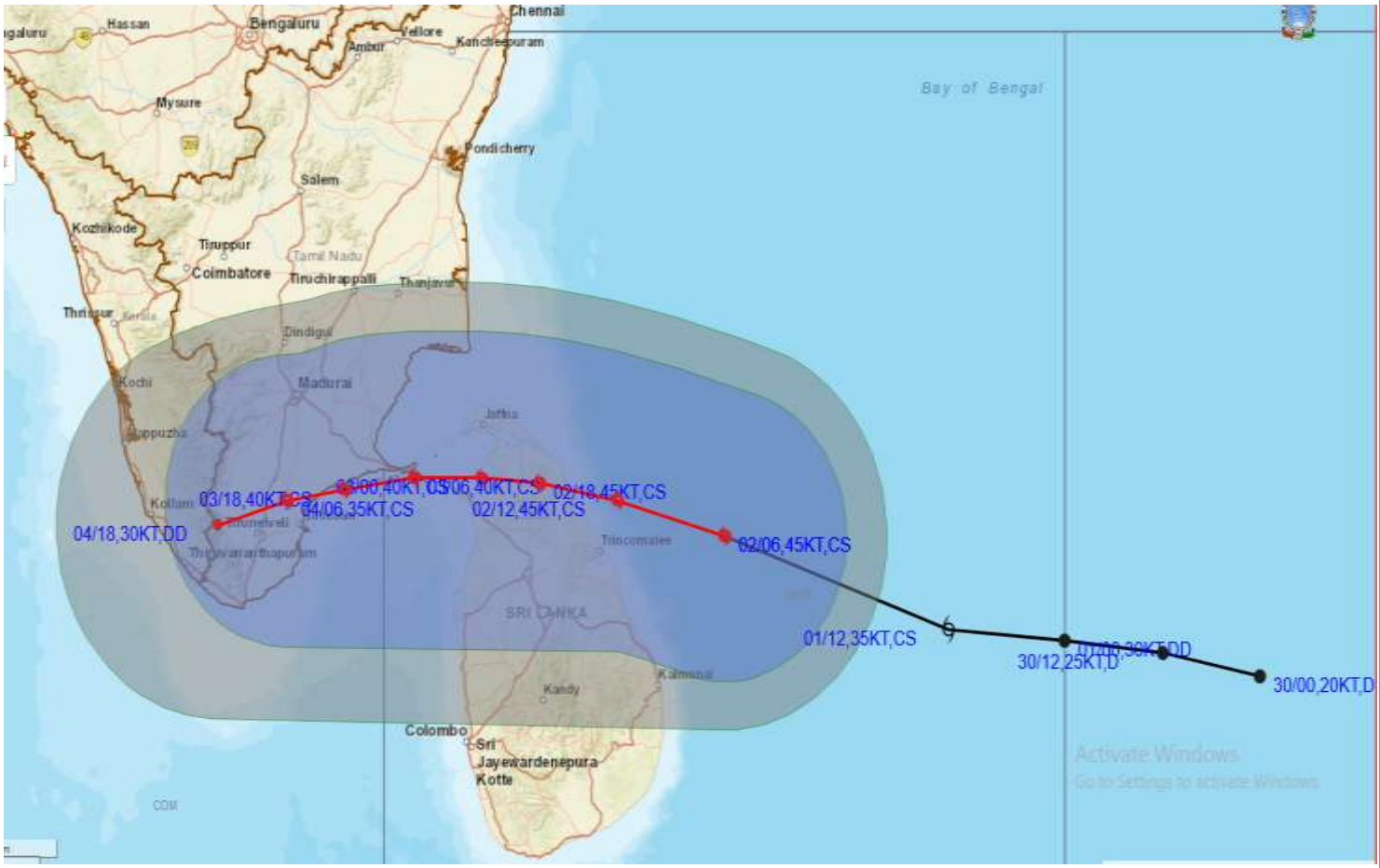
OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF CYCLONIC STORM "BUREVI" OVER SOUTHWEST BAY OF BENGAL BASED ON 0600 UTC OF 2nd DECEMBER, 2020.



DATE/TIME IN UTC
IST=UTC + 0530
L: LOW PRESSURE AREA
WML: WELL MARKED LOW PRESSURE AREA
D: DEPRESSION (17-27 KT)
DD: DEEP DEPRESSION (28-33 KT)
CS: CYCLONIC STORM (34-47 KT)
SCS: SEVERE CYCLONIC STORM (48-63KT)
VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
SuCS: SUPER CYCLONIC STORM (≥ 120 KT)

- LESS THAN 34 KT
- 34-47 KT
- ≥ 48 KT
- OBSERVED TRACK
- FORECAST TRACK
- CONE OF UNCERTAINTY

AREA OF MAXIMUM SUSTAINED WIND SPEED:
- 28-33 KT (52-61 KMPH)
- 34-49 KT (62-91 KMPH)
- 50-63 KT (92-117 KMPH)
- ≥ 64 KT (≥118 KMPH)

IMPACT OVER THE SEA

MSW (knot/kmph)	Impact	Action
28-33 (52-61)	Very rough seas	Total suspension of fishing operations
34-49 (62-91)	High to very high seas	Total suspension of fishing operations
50-63 (92-117)	Very high seas	Total suspension of fishing operations
≥ 64 (≥118)	Phenomenal	Total suspension of fishing operations

STORM SURGE HEIGHT INFORMATION:

* The below listed surge heights are over and above astronomical tide.

MANDAL/TALUK	DISTRICT	STATE / UNION TERRITORY	NEAREST PLACE OF HABITATION	STORM SURGE (m) *	EXPECTED INUNDATION EXTENT (km)
Ramanathapuram	Ramanathapuram	Tamil Nadu	Nagachi	1.1-1.3	Upto 0.47
Tiruvadanai	Ramanathapuram	Tamil Nadu	Marungur	0.7-1.1	Upto 0.69
Arantangi	Pudukkottai	Tamil Nadu	Enadi	0.5-0.8	Upto 0.39
Tuticorin	Thoothukkudi	Tamil Nadu	Mappilaiurani	0.4-0.8	Upto 1.2
Ottapidaram	Thoothukkudi	Tamil Nadu	Pattanamarudur	0.5-0.7	Nil
Peravurani	Thanjavur	Tamil Nadu	Sendalaivayal	0.6-0.7	Nil
Thoothukkudi	Tuticorin	Tamil Nadu	Hare Island	0.4-0.6	Nil
Thoothukkudi	Tuticorin	Tamil Nadu	Tuticorin Bay	0.4-0.6	Upto 0.2
Pattukkottai	Thanjavur	Tamil Nadu	Palanjur	0.4-0.5	Upto 0.18
Srivaikuntam	Thoothukkudi	Tamil Nadu	Palayakkayal	0.4-0.4	Upto 0.23
Tiruchchendur	Thoothukkudi	Tamil Nadu	Kayalpattinam	0.2-0.3	Upto 0.28
Vilattikulam	Thoothukkudi	Tamil Nadu	Vaippar	0.3-0.4	Nil

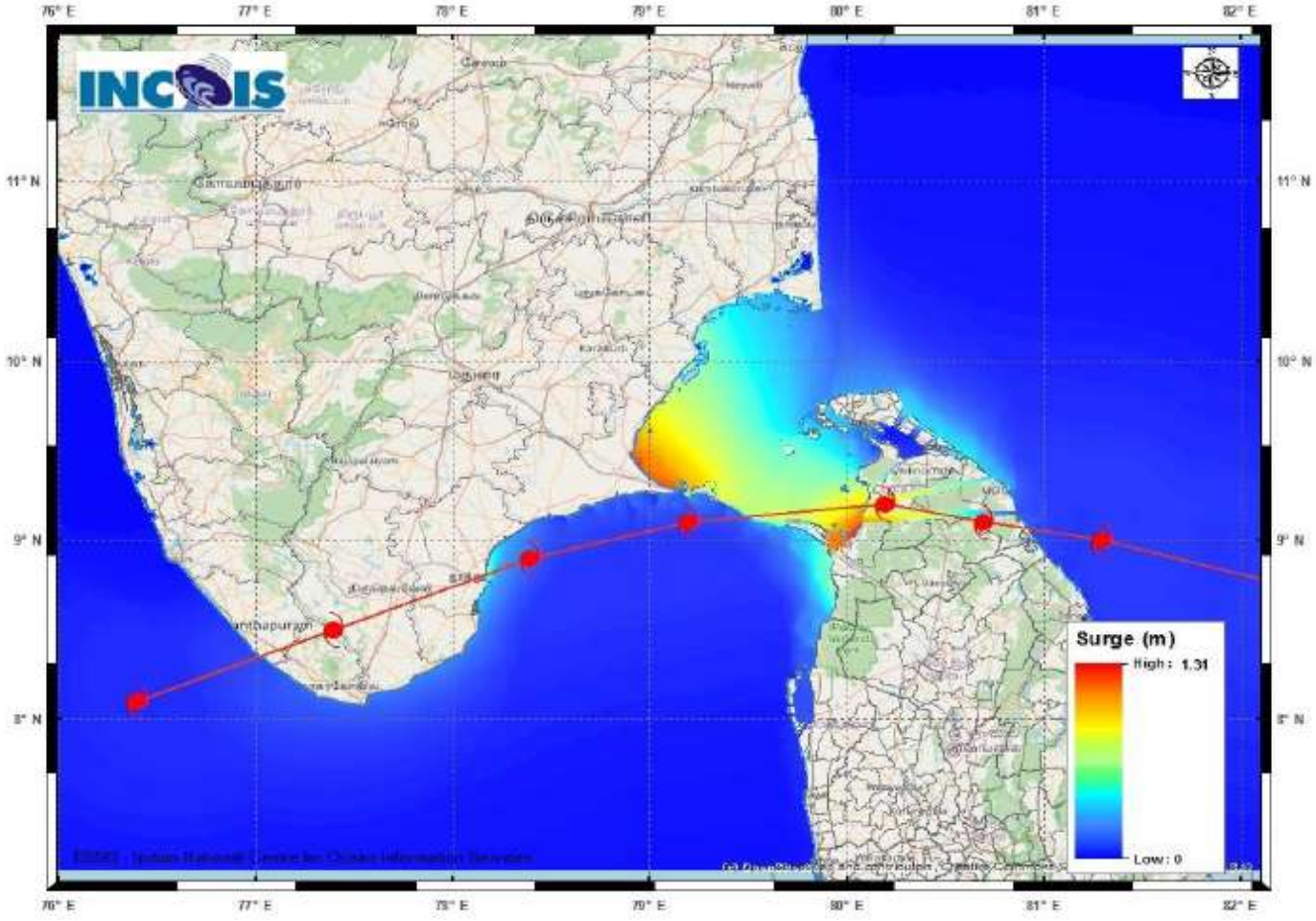


Figure: Storm Surge Map

Storm Surge Forecast by INCOIS Model Based on 0300 UTC of 2nd Dec, 2020.

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 NO.9

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)
YEMEN METEOROLOGICAL SERVICES, REPUBLIC OF YEMEN (THROUGH RTH JEDDAH)
NATIONAL CENTRE FOR METEOROLOGY, UAE (THROUGH RTH JEDDAH)
PRESIDENCY OF METEOROLOGY AND ENVIRONMENT, SAUDI ARABIA (THROUGH RTH JEDDAH)
IRAN METEOROLOGICAL ORGANISATION, (THROUGH RTH JEDDAH)
QATAR METEOROLOGICAL DEPARTMENT (THROUGH RTH JEDDAH)

TROPICAL CYCLONE ADVISORY NO. 9 FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 1530 UTC OF 02.12.2020 BASED ON 1200 UTC OF 02.12.2020.

SUB: CYCLONIC STORM 'BUREVI' OVER SOUTHWEST BAY OF BENGAL

THE **CYCLONIC STORM 'BUREVI'** OVER SOUTHWEST BAY OF BENGAL MOVED WEST-NORTHWESTWARDS WITH A SPEED OF 13 KMPH DURING PAST SIX HOURS AND LAY CENTERED AT 1200UTC OF TODAY, THE 02ND DECEMBER 2020 OVER SOUTHWEST BAY OF BENGAL NEAR LAT. 8.8°N AND LONG. 81.8°E, ABOUT 70 KM EAST-NORTHEAST OF TRINCOMALEE (43418), 290 KM EAST-SOUTHEAST OF PAMBAN (43363) AND 480 KM EAST-NORTHEAST OF KANNIYAKUMARI (43377).

IT IS VERY LIKELY TO MOVE WEST-NORTHWESTWARDS AND CROSS SRI LANKA COAST AROUND LATITUDE 9.0^0N, TO NORTH OF TRINCOMALEE BY MIDNIGHT OF 2ND DECEMBER AS A CYCLONIC STORM WITH A WIND SPEED OF 80-90 KMPH GUSTING TO 100 KMPH. IT IS VERY LIKELY TO MOVE NEARLY WEST-NORTHWESTWARDS THEREAFTER, EMERGE INTO GULF OF MANNAR AND ADJOINING COMORIN AREA ON 3RD DECEMBER MORNING.

THE CYCLONIC STORM WITH WIND SPEED OF 70-80 GUSTING TO 90 KMPH WOULD BE CENTERED VERY CLOSE TO PAMBAN AROUND NOON OF 3RD DECEMBER. IT WOULD THEN MOVE NEARLY WEST-SOUTHWESTWARDS ACROSS PAMBAN AREA BY AFTERNOON AND CROSS SOUTH TAMILNADU COAST BETWEEN PAMBAN AND KANNIYAKUMARI DURING 3RD DECEMBER NIGHT AND 4TH DECEMBER EARLY MORNING AS A CYCLONIC STORM WITH WIND SPEED OF 70-80 GUSTING TO 90 KMPH. THUS ITS IMPACT ON SOUTH TAMILNADU COASTAL DISTRICTS IS VERY LIKELY TO COMMENCE FROM 3RD DECEMBER FORENOON INITIALLY OVER RAMANATHAPURAM DISTRICT AND GRADUALLY TOWARDS KANNIYAKUMARI DISTRICT.

FORECAST TRACK AND INTENSITY ARE GIVEN BELOW:

DATE/TIME (UTC)	POSITION (LAT. ^{0}N/ LONG. ^{0}E)	MAXIMUM SUSTAINED SURFACE WIND SPEED (KMPH)	CATEGORY OF CYCLONIC DISTURBANCE
02.12.20/1200	8.8/81.8	80-90 GUSTING TO 100	CYCLONIC STORM
02.12.20/1800	9.0/81.0	80-90 GUSTING TO 100	CYCLONIC STORM
03.12.20/0000	9.2/80.1	70-80 GUSTING TO 90	CYCLONIC STORM
03.12.20/0600	9.2/79.5	70-80 GUSTING TO 90	CYCLONIC STORM
03.12.20/1200	9.1/78.9	70-80 GUSTING TO 90	CYCLONIC STORM
04.12.20/0000	9.0/78.1	60-70 GUSTING TO 80	CYCLONIC STORM
04.12.20/1200	8.8/77.3	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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THE ESTIMATED MAXIMUM SUSTAINED WIND SPEED IS 45 KNOTS GUSTING TO 55 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS 996 HPA. THE SEA CONDITION IS VERY ROUGH TO HIGH AROUND THE SYSTEM CENTRE.

AS PER SATELLITE IMAGERY, THE INTENSITY OF THE SYSTEM IS T3.0/3.0. BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER SOUTH & ADJOINING CENTRAL BAY OF BENGAL BETWEEN LAT 7.0^0N TO 14.0^0N LONG 80.0^0E TO 87.0^0E AND OVER EAST TAMILNADU, PALK STRAIT AND SRILANKA. MINIMUN CTT IS MINUS 93^0C. AS THE SYSTEM IS APPROACHING COAST THE INTENSE CONVECTIVE CLOUD IS FOUND OVER SRI LANKA AND CLOUD BAND IS INTERACTING WITH LAND. ANOTHER CLOUD BAND ASSOCIATED WITH THE SYSTEM IS ALSO LYING OVER COASTAL TAMILNADU AND GULF OF MANNAR.

STORM SURGE GUIDNACE FOR SRILANKA COAST:

STORM SURGE OF ABOUT 1 METER HEIGHT ABOVE THE ASTRONOMICAL TIDE IS LIKELY TO INUNDATE LOW LYING AREAS OF NORTHEAST SRILANKA COAST DURING LANDFALL.

FURTHER, DURING EMERGENCE OF THE SYSTEM INTO GULF OF MANNAR ON 3^{RD} MORNING AND ITS MOVEMENT TOWARDS SOUTH TAMILNADU COAST THERAFTER, THE STORM SURGE HEIGHT OF ABOUT 1 METER HEIGHT ABOVE THE ASTRONOMICAL TIDE IS LIKELY TO INUNDATE LOW LYING AREAS OF NORTHWEST SRILANKA AND SOUTH TAMILNADU COAST.

REMARKS:

CONSIDERING THE SEA CONDITIONS, SST IS AROUND 28-29°C OVER SOUTHWEST BAY OF BENGAL (BOB). THE TROPICAL CYCLONE HEAT POTENTIAL IS ABOUT 60-80 KJ/CM^2 OVER SOUTHWEST BOB. LOWER LEVEL POSITIVE RELATIVE VORTICITY ($150X10^{-6}S^{-1}$) PREVAILS TO THE SOUTH OF THE SYSTEM CENTRE. THE UPPER LEVEL POSITIVE DIVERGENCE IS AROUND $30X10^{-5}S^{-1}$ AROUND THE SYSTEM CENTRE. THE LOWER LEVEL CONVERGENCE IS AROUND 30 X $10^{-5}S^{-1}$ TO THE SOUTHWEST OF THE SYSTEM CENTRE. MJO INDEX LIES IN PHASE 4 AND ITS AMPLITUDE IS CLOSE TO 1, HENCE FAVORABLE FOR THE SYSTEM TO REMAIN AS A CYCLONIC STORM DURING THE FORECAST PERIOD. THE UPPER TROPOSPHERIC RIDGE AT UPPER AND MIDDLE TROPOSPHERIC LEVELS RUNS ALONG 13°N OVER THE BOB. THE SYSTEM LIES IN THE SOUTHERN PERIPHERRY OF THE ABOVE RIDGE. AS A RESULT, IT IS MOVING WEST NORTHWESTWARDS. IT IS EXPECTED TO BE STEERED BY THE ABOVE RIDGE RESULTING IN WEST-NORTHWESTWARD MOVEMENT FOR NEXT 1 DAYS AND THEN NEARLY WESTWARDS. MOST OF THE NWP MODELS LIKE ECMWF, IMD GFS, NCEP GFS, GEFS, NCUM AND NEPS ARE INDICATING WEST-NORTHWESTWARDS MOVEMENT.

THE VORTEX OVER SOUTH INDIAN OCEAN LAY NEAR 8.3^0S/83.3^0E WITH ESTIMATED MAXIMUM SUSTAINED WIND SPEED OF 20 KNOTS. THESE TWO VORTICES ON EITHER SIDE OF THE EQUATOR ARE INTERACTING WITH EACH OTHER.

MOST OF THE NWP MODELS (IMD GFS, GEFS, NCUM, NEPS, WRF, HWRF, ECMWF) ARE ALSO INDICATING THE SYSTEM SUGGEST WEST-NORTHWESTWARDS DURING NEXT 24 HOURS AND THEN WEST-SOUTHWEST WARDS MOVEMENT SKIRTING SOUTH TAMILNADU-SOUTH KERALA COASTS, A FEW MODELS ARE ALSO INDICATING THE SYSTEM TO TOUCH EXTREME SOUTHERN TIP OF KERALA AND TAMILNADU. ALSO THE TIME OF COMING CLOSER TO SOUTHERN TIP OF KERALA AND TAMILNADU VARIES LARGELY FROM 3^{RD}-5^{TH} DECEMBER.

ARABIAN SEA:

THE SYSTEM OVER BAY OF BENGAL AFTER MOVING ACROSS SRI LANKA IS LIKELY TO EMERGE INTO COMORIN AREA ON 3^{RD} DECEMBER MORNING (0000-0300 UTC).

SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LAY OVER SOUTHEAST ARABIAN SEA OFF KERALA COAST.

PROBABILITY OF CYCLOGENESIS(FORMATION OF DEPRESSION AND ABOVE INTENSITY SYSTEM) DURING NEXT 120 HRS :

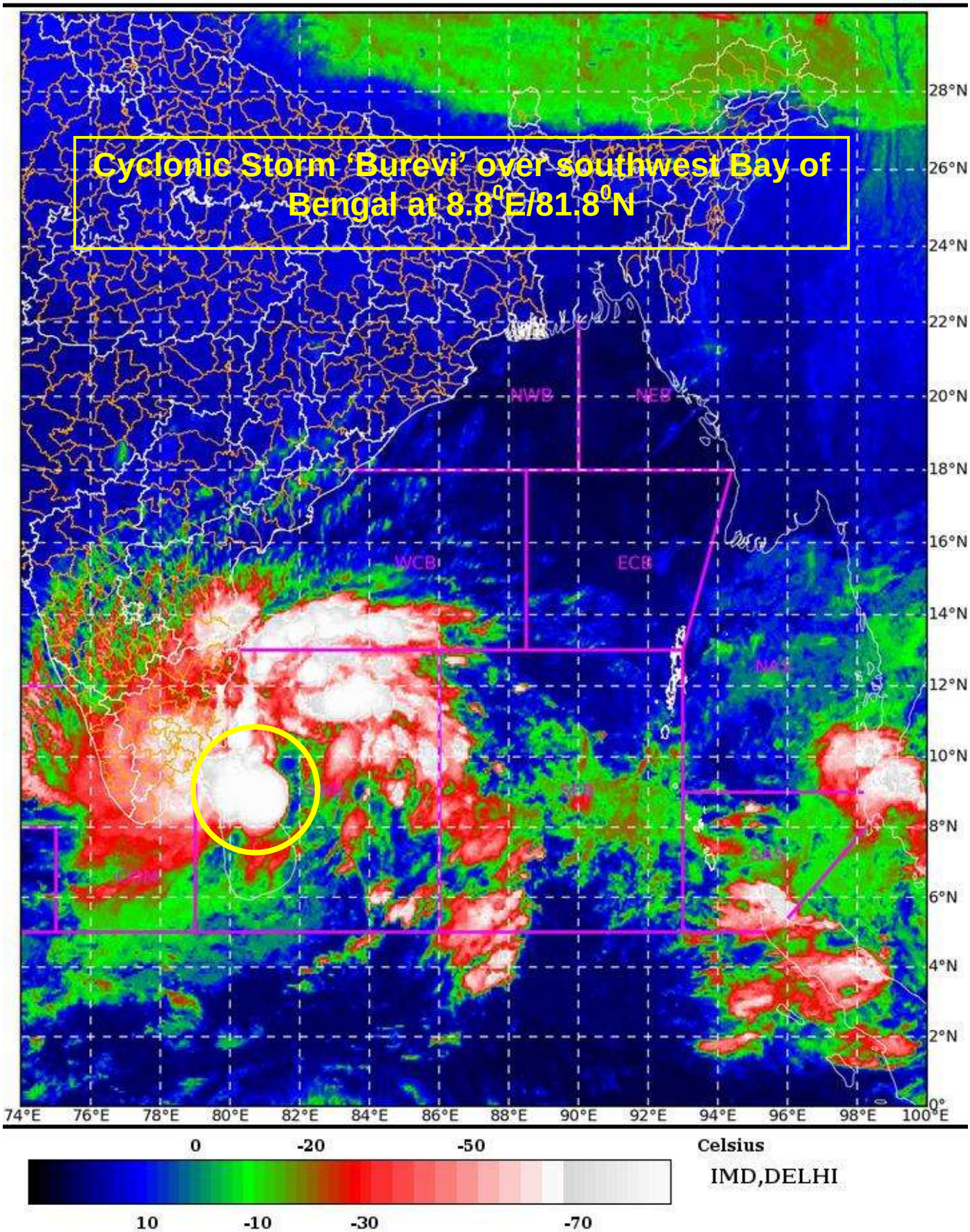
24 HOURS	24-48 HOURS	48-72 HOURS	72-96 HOURS	96-120 HOURS
NIL	MOD	MOD	HIGH	HIGH

(R K JENAMANI)
Scientist-F, RSMC, New Delhi

SAT : INSAT-3D IMG 02-12-2020/(1430 to 1456) GMT

IMG_TIR1_TEMP 10.8 um 02-12-2020/(2000 to 2026) IST

L1C Mercator



Celsius

IMD,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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OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINITY OF CYCLONIC STORM "BUREVI" OVER SOUTHWEST BAY OF BENGAL BASED ON 1200 UTC OF 2nd DECEMBER, 2020.

DATE/TIME IN UTC
IST=UTC + 0530
L: LOW PRESSURE AREA
WML: WELL MARKED LOW PRESSURE AREA
D: DEPRESSION (17-27 KT)
DD: DEEP DEPRESSION (28-33 KT)
CS: CYCLONIC STORM (34-47 KT)
SCS: SEVERE CYCLONIC STORM (48-63KT)
VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
SuCS: SUPER CYCLONIC STORM (≥ 120 KT)

LESS THAN 34 KT
34-47 KT
≥ 48 KT
OBSERVED TRACK
FORECAST TRACK
CONE OF UNCERTAINTY

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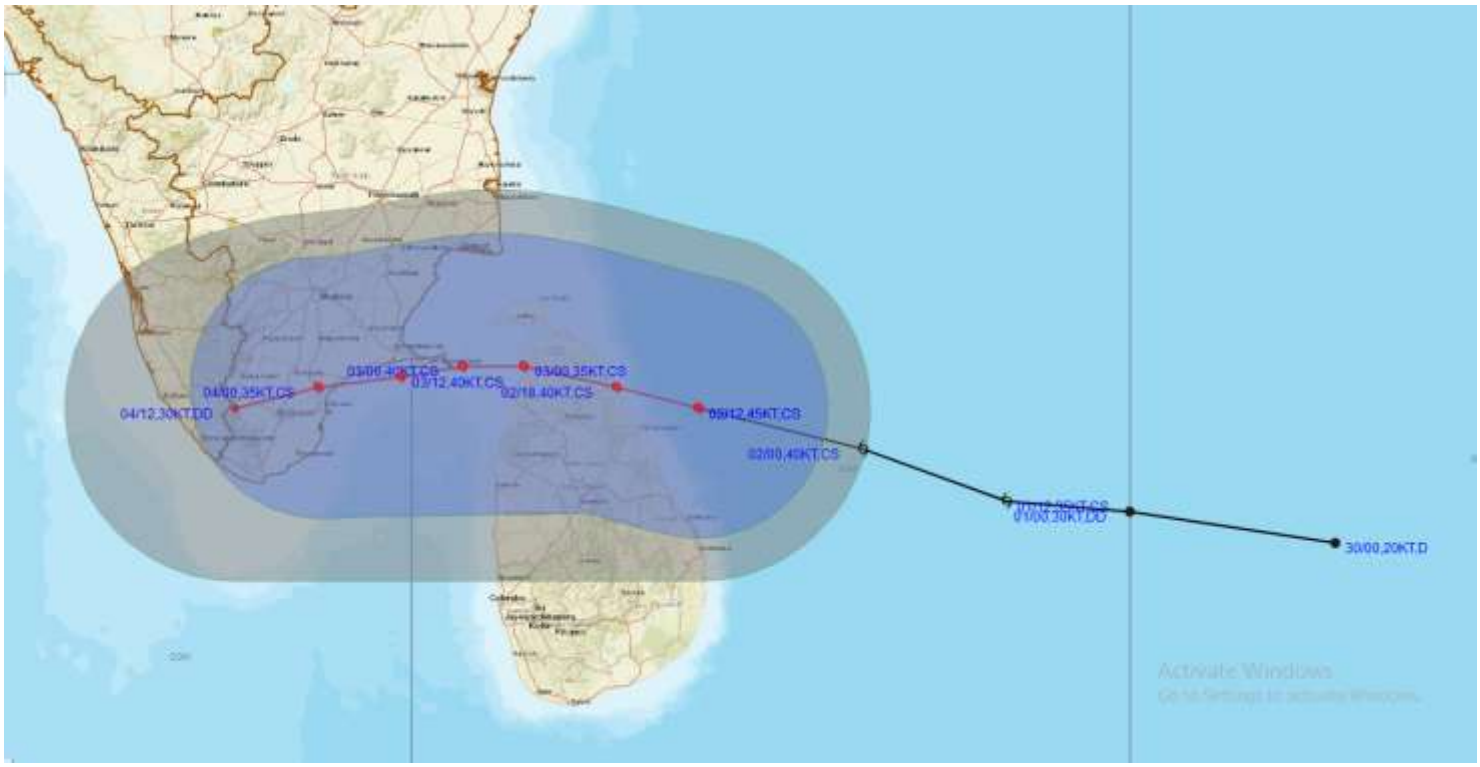
OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF CYCLONIC STORM "BUREVI" OVER SOUTHWEST BAY OF BENGAL BASED ON 1200 UTC OF 2nd DECEMBER, 2020.



DATE/TIME IN UTC
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D: DEPRESSION (17-27 KT)
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OBSERVED TRACK
FORECAST TRACK
CONE OF UNCERTAINTY
AREA OF MAXIMUM SUSTAINED WIND SPEED:
28-33 KT (52-61 KMPH)
34-49 KT (62-91 KMPH)
50-63 KT (92-117 KMPH)
≥ 64 KT (≥118 KMPH)

IMPACT OVER THE SEA

MSW (knot/kmph)	Impact	Action
28-33 (52-61)	Very rough seas	Total suspension of fishing operations
34-49 (62-91)	High to very high seas	Total suspension of fishing operations
50-63 (92-117)	Very high seas	Total suspension of fishing operations
≥ 64 (≥118)	Phenomenal	Total suspension of fishing operations

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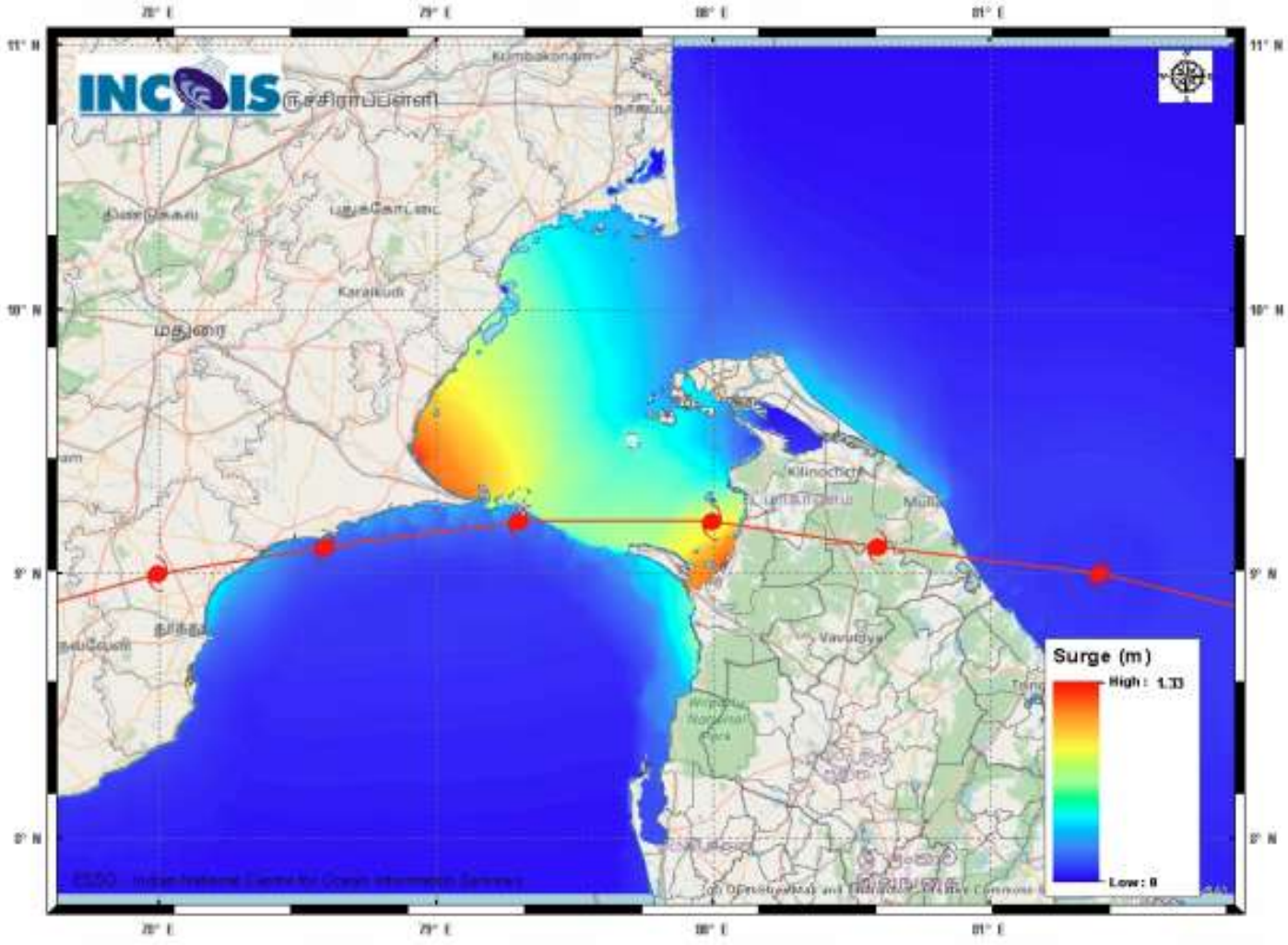
STORM SURGE HEIGHT INFORMATION:

* The below listed surge heights are over and above astronomical tide.

MANDAL/TALUK	DISTRICT	STATE / UNION TERRITORY	NEAREST PLACE OF HABITATION	STORM SURGE (m) *	EXPECTED INUNDATION EXTENT (km)
Tiruvadanai	Ramanathapuram	Tamil Nadu	Marungur	0.8-1.3	Upto 0.69
Ramanathapuram	Ramanathapuram	Tamil Nadu	Pathanendal	0.3-1.2	Upto 0.47
Arantangi	Pudukkottai	Tamil Nadu	Enadi	0.5-0.9	Upto 0.39
Peravurani	Thanjavur	Tamil Nadu	Sendalaivayal	0.6-0.7	Nil
Ottapidaram	Thoothukkudi	Tamil Nadu	Pattanamarudur	0.5-0.6	Nil
Pattukkottai	Thanjavur	Tamil Nadu	Palanjur	0.4-0.6	Upto 0.18
Tuticorin	Thoothukkudi	Tamil Nadu	Mappilaiurani	0.2-0.5	Upto 1.94
Vilattikulam	Thoothukkudi	Tamil Nadu	Vaippar	0.4-0.5	Nil



Storm Surge Forecast by INCOIS Model based on 0600 UTC of 2nd December

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REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI

TROPICAL CYCLONE ADVISORY BULLETIN NO.10

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)
YEMEN METEOROLOGICAL SERVICES, REPUBLIC OF YEMEN (THROUGH RTH JEDDAH)
NATIONAL CENTRE FOR METEOROLOGY, UAE (THROUGH RTH JEDDAH)
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IRAN METEOROLOGICAL ORGANISATION, (THROUGH RTH JEDDAH)
QATAR METEOROLOGICAL DEPARTMENT (THROUGH RTH JEDDAH)

TROPICAL CYCLONE ADVISORY NO. 10 FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 1730 UTC OF 02.12.2020 BASED ON 1500 UTC OF 02.12.2020.

SUB: CYCLONIC STORM 'BUREVI' OVER SOUTHWEST BAY OF BENGAL

THE **CYCLONIC STORM 'BUREVI'** OVER SOUTHWEST BAY OF BENGAL MOVED NEARLY WESTWARDS WITH A SPEED OF 15 KMPH DURING PAST SIX HOURS AND LAY CENTERED AT 1500UTC OF TODAY, THE 02ND DECEMBER 2020 OVER SOUTHWEST BAY OF BENGAL NEAR LAT. 8.8°N AND LONG. 81.4°E, ABOUT 30 KM NORTHEAST OF TRINCOMALEE (43418), 250 KM EAST-SOUTHEAST OF PAMBAN (43363) AND 430 KM EAST-NORTHEAST OF KANNIYAKUMARI (43377).

IT IS VERY LIKELY TO MOVE WEST-NORTHWESTWARDS AND CROSS SRI LANKA COAST AROUND LATITUDE 9.0^0N, TO NORTH OF TRINCOMALEE BY MIDNIGHT OF 2ND DECEMBER AS A CYCLONIC STORM WITH A WIND SPEED OF 80-90 KMPH GUSTING TO 100 KMPH. IT IS VERY LIKELY TO MOVE NEARLY WEST-NORTHWESTWARDS THEREAFTER, EMERGE INTO GULF OF MANNAR AND ADJOINING COMORIN AREA ON 3RD DECEMBER MORNING.

THE CYCLONIC STORM WITH WIND SPEED OF 70-80 GUSTING TO 90 KMPH WOULD BE CENTERED VERY CLOSE TO PAMBAN AROUND NOON OF 3RD DECEMBER. IT WOULD THEN MOVE NEARLY WEST-SOUTHWESTWARDS ACROSS PAMBAN AREA BY AFTERNOON AND CROSS SOUTH TAMILNADU COAST BETWEEN PAMBAN AND KANNIYAKUMARI DURING 3RD DECEMBER NIGHT AND 4TH DECEMBER EARLY MORNING AS A CYCLONIC STORM WITH WIND SPEED OF 70-80 GUSTING TO 90 KMPH. THUS ITS IMPACT ON SOUTH TAMILNADU COASTAL DISTRICTS IS VERY LIKELY TO COMMENCE FROM 3RD DECEMBER FORENOON INITIALLY OVER RAMANATHAPURAM DISTRICT AND GRADUALLY TOWARDS KANNIYAKUMARI DISTRICT.

FORECAST TRACK AND INTENSITY ARE GIVEN BELOW:

DATE/TIME (UTC)	POSITION (LAT. ^{0}N/ LONG. ^{0}E)	MAXIMUM SUSTAINED SURFACE WIND SPEED (KMPH)	CATEGORY OF CYCLONIC DISTURBANCE
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02.12.20/1800	9.0/81.0	80-90 GUSTING TO 100	CYCLONIC STORM
03.12.20/0000	9.2/80.1	70-80 GUSTING TO 90	CYCLONIC STORM
03.12.20/0600	9.2/79.5	70-80 GUSTING TO 90	CYCLONIC STORM
03.12.20/1200	9.1/78.9	70-80 GUSTING TO 90	CYCLONIC STORM
04.12.20/0000	9.0/78.1	60-70 GUSTING TO 80	CYCLONIC STORM
04.12.20/1200	8.8/77.3	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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AS PER SATELLITE IMAGERY, THE INTENSITY OF THE SYSTEM IS T3.0/3.0. BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER SOUTH & ADJOINING CENTRAL BAY OF BENGAL BETWEEN LAT 7.0^0N TO 14.5^0N LONG 80.0^0E TO 86.0^0E AND OVER EAST TAMILNADU, PALK STRAIT AND SRILANKA. MINIMUN CTT IS MINUS 93^0C. AS THE SYSTEM IS APPROACHING COAST THE INTENSE CONVECTIVE CLOUD IS FOUND OVER SRI LANKA AND CLOUD BAND IS INTERACTING WITH LAND. ANOTHER CLOUD BAND ASSOCIATED WITH THE SYSTEM IS ALSO LYING OVER COASTAL TAMILNADU AND GULF OF MANNAR.

STORM SURGE GUIDNACE FOR SRILANKA COAST:

STORM SURGE OF ABOUT 1 METER HEIGHT ABOVE THE ASTRONOMICAL TIDE IS LIKELY TO INUNDATE LOW LYING AREAS OF NORTHEAST SRILANKA COAST DURING LANDFALL.
FURTHER, DURING EMERGENCE OF THE SYSTEM INTO GULF OF MANNAR ON 3^{RD} MORNING AND ITS MOVEMENT TOWARDS SOUTH TAMILNADU COAST THERAFTER, THE STORM SURGE HEIGHT OF ABOUT 1 METER HEIGHT ABOVE THE ASTRONOMICAL TIDE IS LIKELY TO INUNDATE LOW LYING AREAS OF NORTHWEST SRILANKA AND SOUTH TAMILNADU COAST.

REMARKS:

IN THE SEA CONDITIONS, SST IS AROUND 28-29°C OVER SOUTHWEST BAY OF BENGAL (BOB) AND THE TROPICAL CYCLONE HEAT POTENTIAL IS ABOUT 60-80 KJ/CM^2 OVER SOUTHWEST BOB. LOWER LEVEL POSITIVE RELATIVE VORTICITY ($200X10^{-6}S^{-1}$) PREVAILS AROUND THE SYSTEM CENTRE. THE UPPER LEVEL POSITIVE DIVERGENCE IS AROUND $30X10^{-5}S^{-1}$ AND THE LOWER LEVEL CONVERGENCE IS AROUND $30 X 10^{-5}S^{-1}$ TO THE SOUTHWEST OF THE SYSTEM CENTRE. THE WIND SHEAR IS MODERATE WITH VALUE 10-15 KNOTS FAVORABLE TO SUSTAIN THE SYSTEM. MJO INDEX LIES IN PHASE 4 AND ITS AMPLITUDE IS CLOSE TO 1, HENCE FAVORABLE FOR THE SYSTEM TO REMAIN AS A CYCLONIC STORM DURING THE FORECAST PERIOD.

THE VORTEX OVER SOUTH INDIAN OCEAN LAY NEAR 7.3^0S/82.4^0E WITH ESTIMATED MAXIMUM SUSTAINED WIND SPEED OF 20 KNOTS. THESE TWO VORTICES ON EITHER SIDE OF THE EQUATOR ARE ALSO INTERACTING WITH EACH OTHER.

THE UPPER TROPOSPHERIC RIDGE AT UPPER AND MIDDLE TROPOSPHERIC LEVELS RUNS ALONG 13°N OVER THE BOB. THE SYSTEM LIES IN THE SOUTHERN PERIPHERRY OF THE ABOVE RIDGE. AS A RESULT, IT IS MOVING WEST NORTHWESTWARDS. IT IS EXPECTED TO BE STEERED BY THE ABOVE RIDGE RESULTING IN NEARLY WESTWARD MOVEMENT FOR NEXT 24 HOURS. MOST OF THE NWP MODELS LIKE ECMWF, IMD GFS, NCEP GFS, GEFS, NCUM AND NEPS ARE INDICATING WEST-NORTHWESTWARDS MOVEMENT.

MOST OF THE NWP MODELS (IMD GFS, GEFS, NCUM, NEPS, WRF, HWRF, ECMWF) ARE ALSO INDICATING THE SYSTEM SUGGEST WEST-NORTHWESTWARDS DURING NEXT 24 HOURS AND THEN WEST-SOUTHWEST WARDS MOVEMENT ACROSS SOUTH TAMILNADU-SOUTH KERALA COASTS, A FEW MODELS ARE ALSO INDICATING THE SYSTEM TO TOUCH EXTREME SOUTHERN TIP OF KERALA AND TAMILNADU. ALSO THE TIME OF COMING CLOSER TO SOUTHERN TIP OF KERALA AND TAMILNADU VARIES LARGELY FROM 3^{RD}-5^{TH} DECEMBER.

ARABIAN SEA:

THE SYSTEM OVER BAY OF BENGAL AFTER MOVING ACROSS SRI LANKA IS LIKELY TO EMERGE INTO COMORIN AREA ON 3^{RD} DECEMBER MORNING (0000-0300 UTC).
SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LAY OVER SOUTHEAST ARABIAN SEA OFF KERALA COAST.

PROBABILITY OF CYCLOGENESIS(FORMATION OF DEPRESSION AND ABOVE INTENSITY SYSTEM) DURING NEXT 120 HRS :

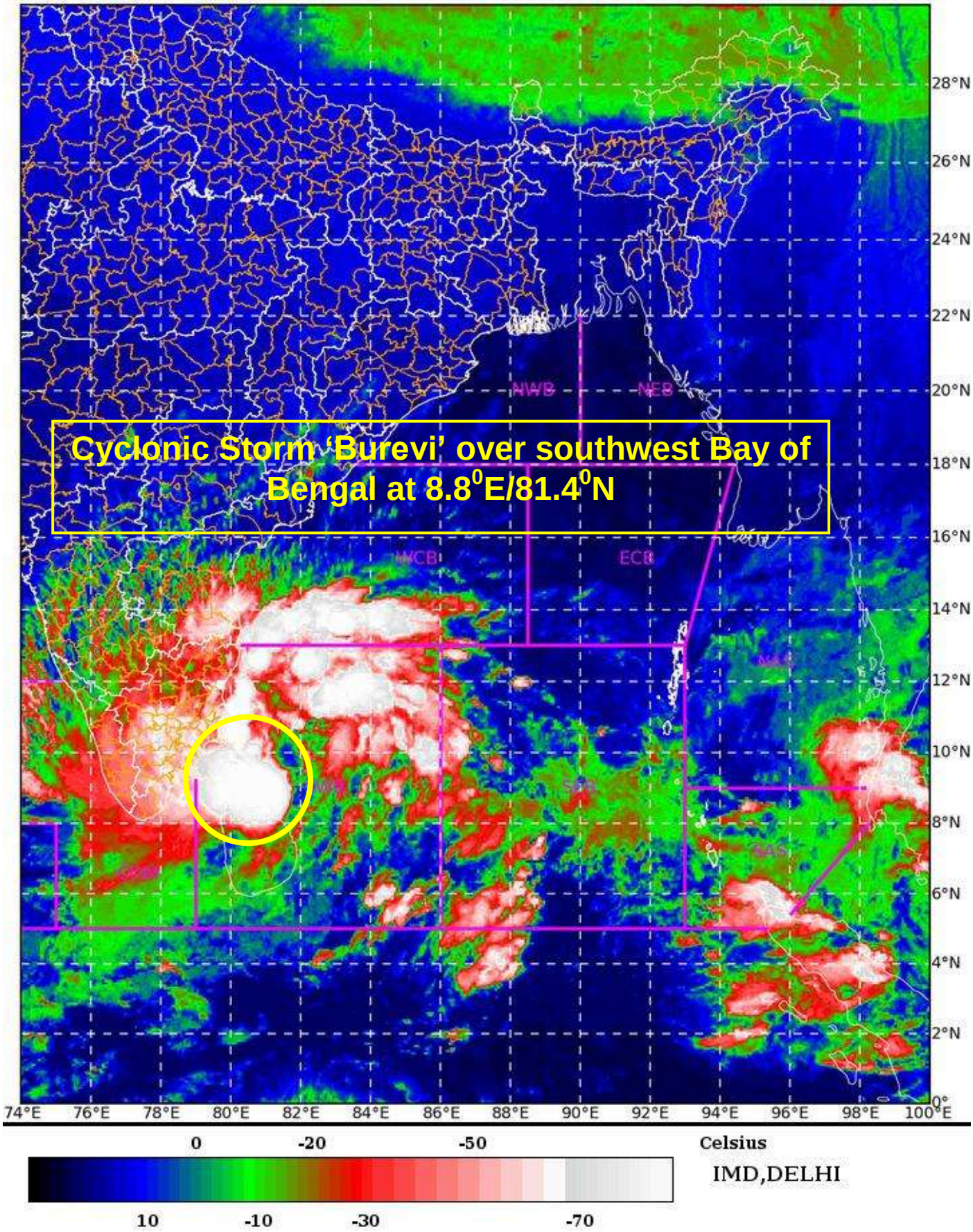
24 HOURS	24-48 HOURS	48-72 HOURS	72-96 HOURS	96-120 HOURS
NIL	MOD	MOD	HIGH	HIGH

(ANANDA KUMAR DAS)
Scientist-E, RSMC, New Delhi

SAT : INSAT-3D IMG 02-12-2020/(1500 to 1526) GMT

IMG_TIR1_TEMP 10.8 um 02-12-2020/(2030 to 2056) IST

L1C Mercator



Celsius

IMD,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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OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINITY OF CYCLONIC STORM "BUREVI" OVER SOUTHWEST BAY OF BENGAL BASED ON 1200 UTC OF 2nd DECEMBER, 2020.

DATE/TIME IN UTC
IST=UTC +0530
L: LOW PRESSURE AREA
WML: WELL MARKED LOW PRESSURE AREA
D: DEPRESSION (17-27 KT)
DD: DEEP DEPRESSION (28-33 KT)
CS: CYCLONIC STORM (34-47 KT)
SCS: SEVERE CYCLONIC STORM (48-63KT)
VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
SuCS: SUPER CYCLONIC STORM (≥ 120 KT)

LESS THAN 34 KT
34-47 KT
≥ 48 KT
OBSERVED TRACK
FORECAST TRACK
CONE OF UNCERTAINTY

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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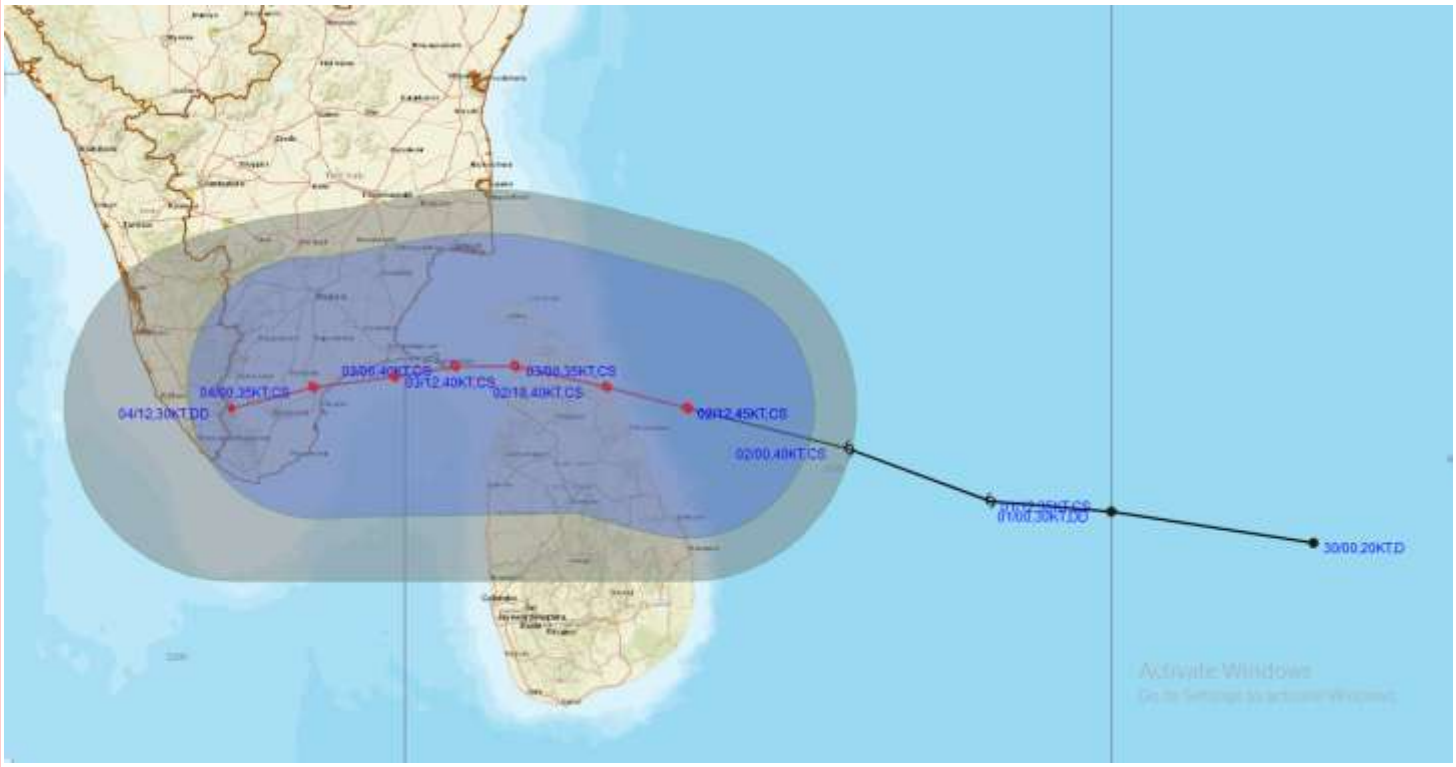
OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF CYCLONIC STORM "BUREVI" OVER SOUTHWEST BAY OF BENGAL BASED ON 1200 UTC OF 2nd DECEMBER, 2020.



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ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
SuCS: SUPER CYCLONIC STORM (≥ 120 KT)

- LESS THAN 34 KT
- 34-47 KT
- ≥ 48 KT
- OBSERVED TRACK
- FORECAST TRACK
- CONE OF UNCERTAINTY

AREA OF MAXIMUM SUSTAINED WIND SPEED:
- 28-33 KT (52-61 KMPH)
- 34-49 KT (62-91 KMPH)
- 50-63 KT (92-117 KMPH)
- ≥ 64 KT (≥118 KMPH)

IMPACT OVER THE SEA

MSW (knot/kmph)	Impact	Action
28-33 (52-61)	Very rough seas	Total suspension of fishing operations
34-49 (62-91)	High to very high seas	Total suspension of fishing operations
50-63 (92-117)	Very high seas	Total suspension of fishing operations
≥ 64 (≥118)	Phenomenal	Total suspension of fishing operations

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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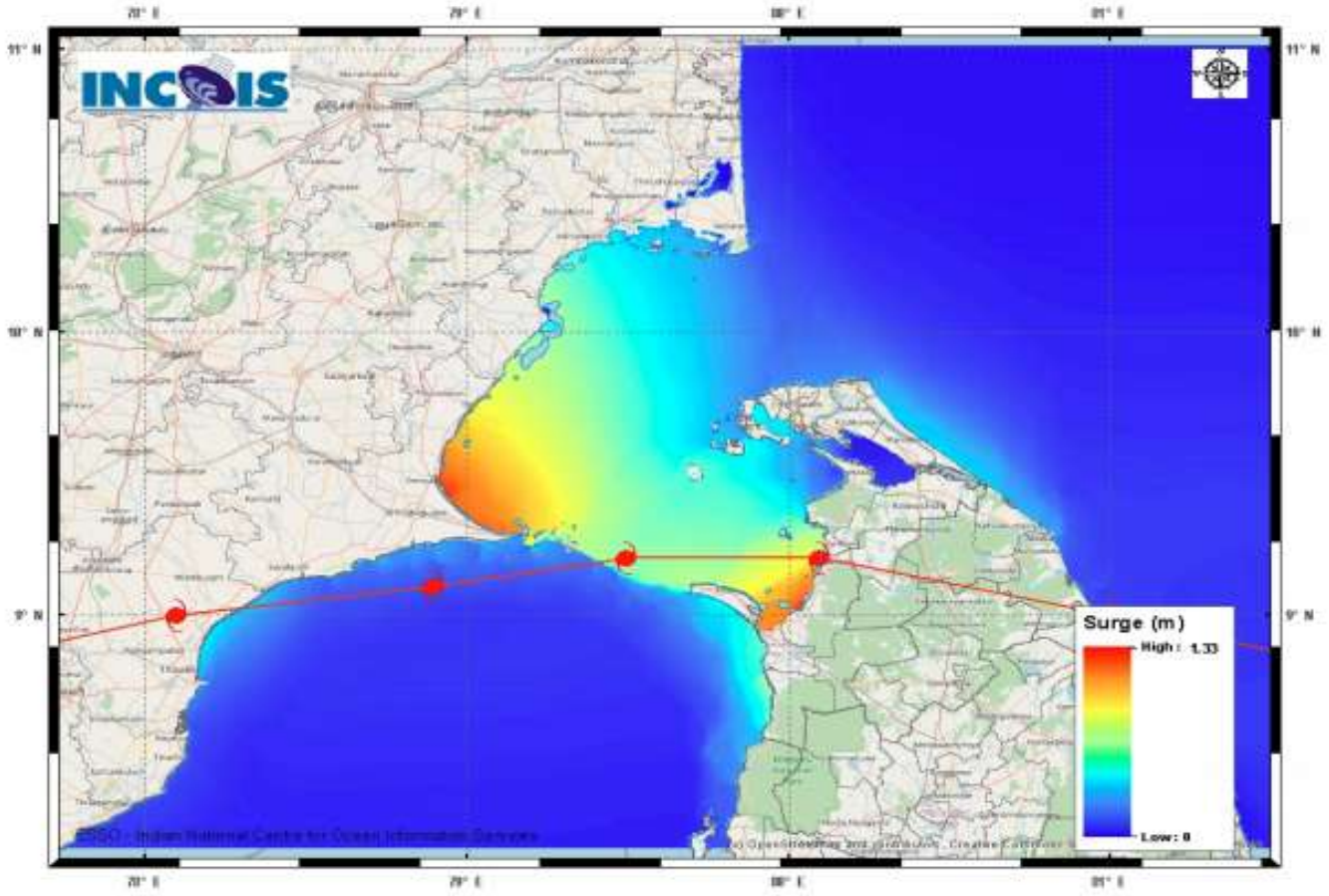
Storm Surge Forecast by INCOIS Model based on 1200 UTC of 2nd December

STORM SURGE HEIGHT INFORMATION:

* The below listed surge heights are over and above astronomical tide.

MANDAL/TALUK	DISTRICT	STATE / UNION TERRITORY	NEAREST PLACE OF HABITATION	STORM SURGE (m) *	EXPECTED INUNDATION EXTENT (km)
Tiruvadanai	Ramanathapuram	Tamil Nadu	Marungur	0.8-1.3	Upto 0.69
Ramanathapuram	Ramanathapuram	Tamil Nadu	Pathanendal	0.3-1.2	Upto 0.47
Arantangi	Pudukkottai	Tamil Nadu	Enadi	0.5-0.8	Upto 0.39
Peravurani	Thanjavur	Tamil Nadu	Sendalaivayal	0.6-0.7	Nil
Ottapidaram	Thoothukkudi	Tamil Nadu	Pattanamarudur	0.5-0.6	Nil
Pattukkottai	Thanjavur	Tamil Nadu	Palanjur	0.4-0.6	Upto 0.18
Thoothukkudi	Tuticorin	Tamil Nadu	Hare Island	0.4-0.5	Nil
Thoothukkudi	Tuticorin	Tamil Nadu	Tuticorin Bay	0.4-0.5	Upto 0.2
Tuticorin	Thoothukkudi	Tamil Nadu	Mappilaiurani	0.2-0.5	Upto 1.94
Vilattikulam	Thoothukkudi	Tamil Nadu	Vaippar	0.4-0.5	Nil



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 NO.11

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)
YEMEN METEOROLOGICAL SERVICES, REPUBLIC OF YEMEN (THROUGH RTH JEDDAH)
NATIONAL CENTRE FOR METEOROLOGY, UAE (THROUGH RTH JEDDAH)
PRESIDENCY OF METEOROLOGY AND ENVIRONMENT, SAUDI ARABIA (THROUGH RTH JEDDAH)
IRAN METEOROLOGICAL ORGANISATION, (THROUGH RTH JEDDAH)
QATAR METEOROLOGICAL DEPARTMENT (THROUGH RTH JEDDAH)

TROPICAL CYCLONE ADVISORY NO. 11 FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 2130 UTC OF 02.12.2020 BASED ON 1800 UTC OF 02.12.2020.

SUB: CYCLONIC STORM 'BUREVI' OVER SRI LANKA

THE **CYCLONIC STORM 'BUREVI'** OVER SOUTHWEST BAY OF BENGAL MOVED WEST-NORTHWESTWARDS WITH A SPEED OF 15 KMPH DURING PAST SIX HOURS AND CROSSED SRI LANKA COAST CLOSE TO NORTH OF TRINCOMALEE NEAR LAT. 8.85°N AND LONG. 81.0°E BETWEEN 1700 AND 1800 UTC OF 2ND DECEMBER 2020 AS A CYCLONIC STORM WITH A WIND SPEED OF 80-90 KMPH GUSTING TO 100 KMPH. IT LAY CENTERED AT 1800 UTC OF 02ND DECEMBER OVER SRI LANKA (CLOSE TO NORTH OF TRINCOMALEE-43418) NEAR LAT. 8.9°N AND LONG. 80.9°E, ABOUT 40 KM NORTH-NORTHWEST OF TRINCOMALEE (43418), 190 KM EAST-SOUTHEAST OF PAMBAN (43363) AND 380 KM EAST-NORTHEAST OF KANNIYAKUMARI (43377).

IT IS VERY LIKELY TO MOVE NEARLY WEST-NORTHWESTWARDS AND EMERGE INTO GULF OF MANNAR ON 3RD DECEMBER MORNING.

THE CYCLONIC STORM WITH WIND SPEED OF 70-80 GUSTING TO 90 KMPH WOULD BE CENTERED VERY CLOSE TO PAMBAN AROUND NOON OF 3RD DECEMBER. IT WOULD THEN MOVE NEARLY WEST-SOUTHWESTWARDS ACROSS PAMBAN (43363) AREA BY AFTERNOON AND CROSS SOUTH TAMILNADU COAST BETWEEN PAMBAN (43363) AND KANNIYAKUMARI (43377) DURING 3RD DECEMBER NIGHT AND 4TH DECEMBER EARLY MORNING AS A CYCLONIC STORM WITH WIND SPEED OF 70-80 GUSTING TO 90 KMPH. THUS ITS IMPACT ON SOUTH TAMILNADU COASTAL DISTRICTS IS VERY LIKELY TO COMMENCE FROM 3RD DECEMBER FORENOON INITIALLY OVER RAMANATHAPURAM DISTRICT AND GRADUALLY TOWARDS KANNIYAKUMARI DISTRICT.

FORECAST TRACK AND INTENSITY ARE GIVEN BELOW:

DATE/TIME (UTC)	POSITION (LAT. ^{0}N/ LONG. ^{0}E)	MAXIMUM SUSTAINED SURFACE WIND SPEED (KMPH)	CATEGORY OF CYCLONIC DISTURBANCE
02.12.20/1800	8.9/80.9	80-90 GUSTING TO 100	CYCLONIC STORM
03.12.20/0000	9.1/80.1	70-80 GUSTING TO 90	CYCLONIC STORM
03.12.20/0600	9.2/79.5	70-80 GUSTING TO 90	CYCLONIC STORM
03.12.20/1200	9.1/78.9	70-80 GUSTING TO 90	CYCLONIC STORM
03.12.20/1800	9.0/78.4	70-80 GUSTING TO 90	CYCLONIC STORM
04.12.20/0600	8.9/77.7	60-70 GUSTING TO 80	CYCLONIC STORM
04.12.20/1800	8.7/77.0	45-55 GUSTING TO 65	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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THE ESTIMATED MAXIMUM SUSTAINED WIND SPEED IS 45 KNOTS GUSTING TO 55 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS 996 HPA. THE SEA CONDITION IS VERY ROUGH TO HIGH AROUND THE SYSTEM CENTRE.

AS PER SATELLITE IMAGERY, THE INTENSITY OF THE SYSTEM IS T3.0/3.0. BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER SOUTH & ADJOINING CENTRAL BAY OF BENGAL BETWEEN LAT 8.0^0N TO 15.0^0N LONG 80.0^0E TO 86.0^0E AND OVER EAST TAMILNADU, PALK STRAIT AND SRILANKA. MINIMUN CTT IS MINUS 93^0C. AS THE SYSTEM CROSSED SRI LANKA COAST THE INTENSE CONVECTIVE CLOUD IS FOUND OVER SRI LANKA AND CLOUD BAND IS INTERACTING WITH LAND. ANOTHER CLOUD BAND ASSOCIATED WITH THE SYSTEM IS ALSO LYING OVER COASTAL TAMILNADU AND GULF OF MANNAR.

STORM SURGE GUIDNACE FOR SRILANKA COAST:

STORM SURGE OF ABOUT 1 METER HEIGHT ABOVE THE ASTRONOMICAL TIDE IS LIKELY TO INUNDATE LOW LYING AREAS OF NORTHEAST SRILANKA COAST DURING LANDFALL.

FURTHER, DURING EMERGENCE OF THE SYSTEM INTO GULF OF MANNAR ON 3RD MORNING AND ITS MOVEMENT TOWARDS SOUTH TAMILNADU COAST THERAFTER, THE STORM SURGE HEIGHT OF ABOUT 1 METER HEIGHT ABOVE THE ASTRONOMICAL TIDE IS LIKELY TO INUNDATE LOW LYING AREAS OF NORTHWEST SRILANKA AND SOUTH TAMILNADU COAST.

REMARKS:

IN THE SEA CONDITIONS, SST IS AROUND 28-29°C OVER SOUTHWEST BAY OF BENGAL (BOB) AND THE TROPICAL CYCLONE HEAT POTENTIAL IS ABOUT 60-80 KJ/CM^2 OVER SOUTHWEST BOB. LOWER LEVEL POSITIVE RELATIVE VORTICITY ($200X10^{-6}S^{-1}$) PREVAILS AROUND THE SYSTEM CENTRE. THE UPPER LEVEL POSITIVE DIVERGENCE IS AROUND $30X10^{-5}S^{-1}$ AND THE LOWER LEVEL CONVERGENCE IS AROUND 30 X $10^{-5}S^{-1}$ TO THE SOUTHWEST OF THE SYSTEM CENTRE. THE WIND SHEAR IS MODERATE WITH VALUE 10-15 KNOTS FAVORABLE TO SUSTAIN THE SYSTEM. MJO INDEX LIES IN PHASE 4 AND ITS AMPLITUDE IS CLOSE TO 1, HENCE FAVORABLE FOR THE SYSTEM TO REMAIN AS A CYCLONIC STORM DURING THE FORECAST PERIOD.

THE VORTEX OVER SOUTH INDIAN OCEAN LAY CENTERED AT 1200 UTC OF 2ND DECEMBER NEAR 7.3^0S/82.4^0E WITH ESTIMATED MAXIMUM SUSTAINED WIND SPEED OF 20 KNOTS. THESE TWO VORTICES ON EITHER SIDE OF THE EQUATOR ARE ALSO INTERACTING WITH EACH OTHER.

THE UPPER TROPOSPHERIC RIDGE AT UPPER AND MIDDLE TROPOSPHERIC LEVELS RUNS ALONG 13°N OVER THE BOB. THE SYSTEM LIES IN THE SOUTHERN PERIPHERRY OF THE ABOVE RIDGE. AS A RESULT, IT IS MOVING WEST NORTHWESTWARDS. IT IS EXPECTED TO BE STEERED BY THE ABOVE RIDGE RESULTING IN NEARLY WESTWARD MOVEMENT FOR NEXT 24 HOURS. MOST OF THE NWP MODELS LIKE ECMWF, IMD GFS, NCEP GFS, GEFS, NCUM AND NEPS ARE INDICATING WEST-NORTHWESTWARDS MOVEMENT.

MOST OF THE NWP MODELS (IMD GFS, GEFS, NCUM, NEPS, WRF, HWRF, ECMWF) ARE ALSO INDICATING THE SYSTEM SUGGEST WEST-NORTHWESTWARDS DURING NEXT 24 HOURS AND THEN WEST-SOUTHWEST WARDS MOVEMENT ACROSS SOUTH TAMILNADU-SOUTH KERALA COASTS, A FEW MODELS ARE ALSO INDICATING THE SYSTEM TO TOUCH EXTREME SOUTHERN TIP OF KERALA AND TAMILNADU. ALSO THE TIME OF COMING CLOSER TO SOUTHERN TIP OF KERALA AND TAMILNADU VARIES LARGELY FROM 3RD-5TH DECEMBER.

ARABIAN SEA:

THE SYSTEM MOVING ACROSS SRI LANKA IS LIKELY TO EMERGE INTO COMORIN AREA ON 3RD DECEMBER MORNING (0000-0300 UTC).

SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LAY OVER SOUTHEAST ARABIAN SEA OFF KERALA COAST.

PROBABILITY OF CYCLOGENESIS(FORMATION OF DEPRESSION AND ABOVE INTENSITY SYSTEM) DURING NEXT 120 HRS :

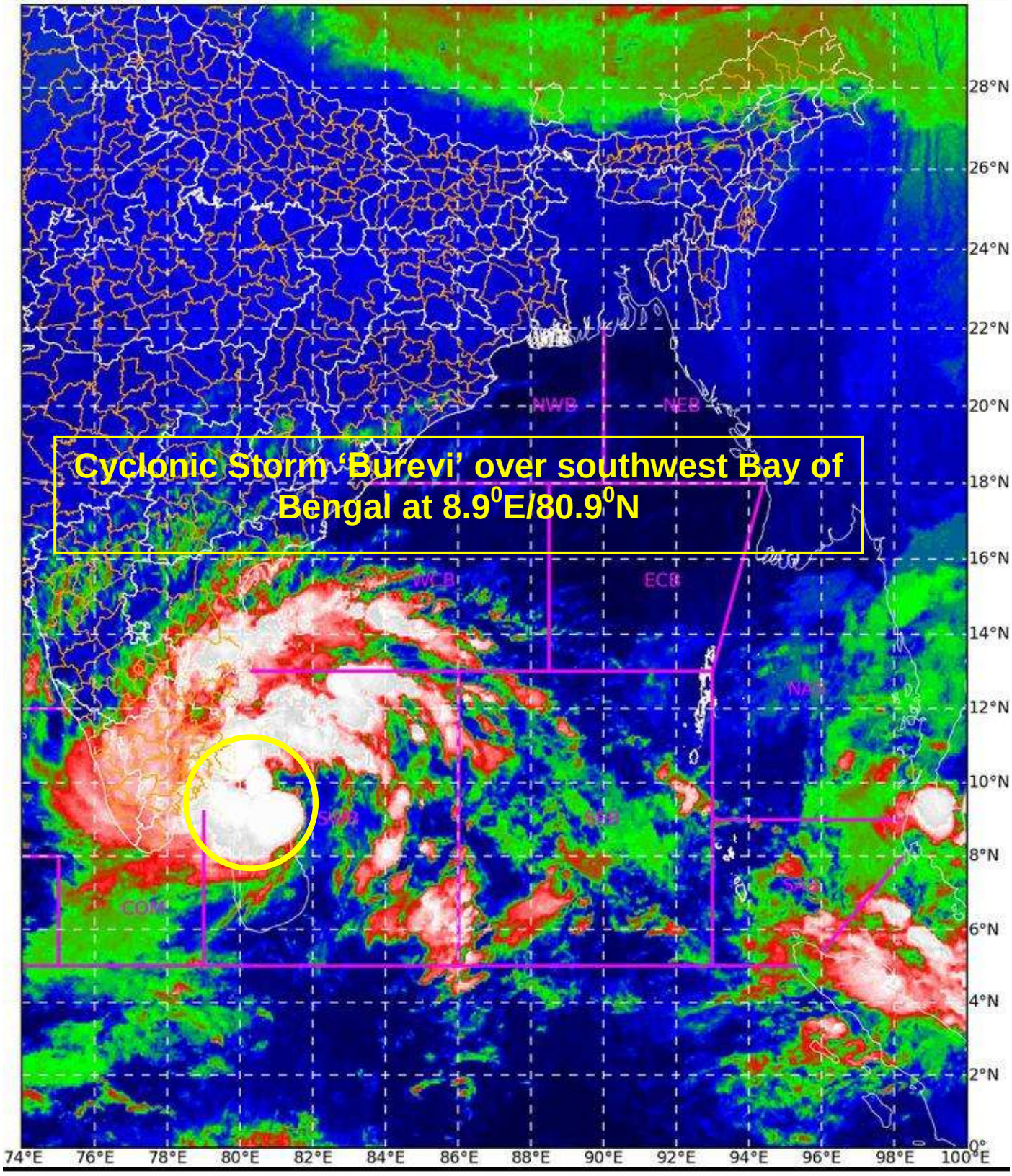
24 HOURS	24-48 HOURS	48-72 HOURS	72-96 HOURS	96-120 HOURS
NIL	MOD	MOD	HIGH	HIGH

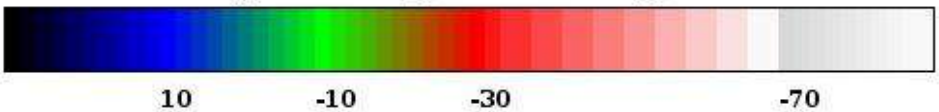
(ANANDA KUMAR DAS)
Scientist-E, RSMC, New Delhi

SAT : INSAT-3D IMG 02-12-2020/(1930 to 1956) GMT

IMG_TIR1_TEMP 10.8 um 03-12-2020/(0100 to 0126) IST

L1C Mercator





Celsius

IMD,DELHI

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OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINITY OF CYCLONIC STORM "BUREVI" OVER SRI LANKA BASED ON 1800 UTC OF 2nd DECEMBER, 2020.

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OBSERVED TRACK
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28-33 KT (52-61 KMPH)
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50-63 KT (92-117 KMPH)
≥ 64 KT (≥118 KMPH)

IMPACT OVER THE SEA

MSW (knot/kmph)	Impact	Action
28-33 (52-61)	Very rough seas	Total suspension of fishing operations
34-49 (62-91)	High to very high seas	Total suspension of fishing operations
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Storm Surge Forecast by INCOIS Model based on 1200 UTC of 2nd December

STORM SURGE HEIGHT INFORMATION:

* The below listed surge heights are over and above astronomical tide.

MANDAL/TALUK	DISTRICT	STATE / UNION TERRITORY	NEAREST PLACE OF HABITATION	STORM SURGE (m) *	EXPECTED INUNDATION EXTENT (km)
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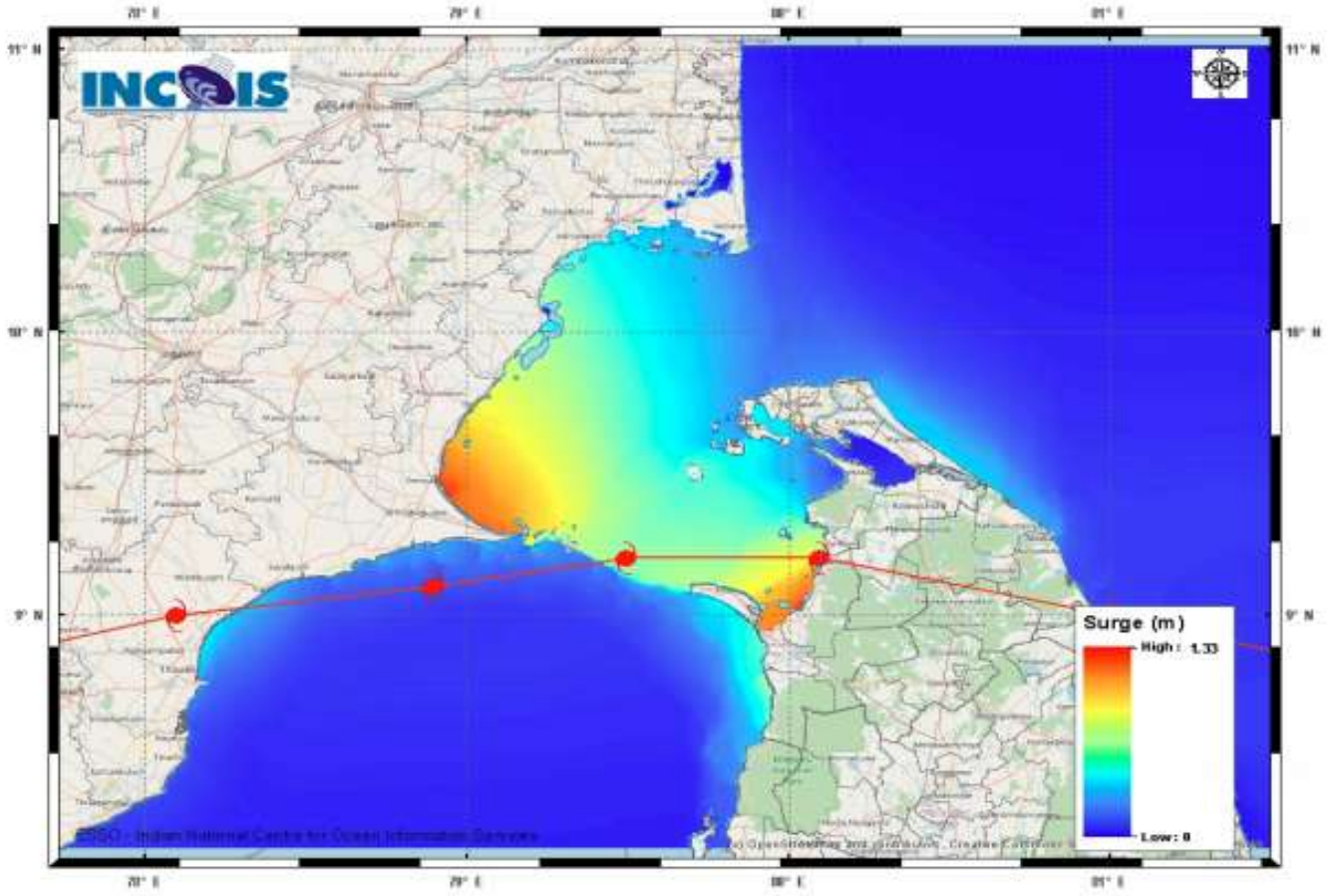
Ramanathapuram	Ramanathapuram	Tamil Nadu	Pathanendal	0.3-1.2	Upto 0.47
Arantangi	Pudukkottai	Tamil Nadu	Enadi	0.5-0.8	Upto 0.39
Peravurani	Thanjavur	Tamil Nadu	Sendalaivayal	0.6-0.7	Nil
Ottapidaram	Thoothukkudi	Tamil Nadu	Pattanamarudur	0.5-0.6	Nil
Pattukkottai	Thanjavur	Tamil Nadu	Palanjur	0.4-0.6	Upto 0.18
Thoothukkudi	Tuticorin	Tamil Nadu	Hare Island	0.4-0.5	Nil
Thoothukkudi	Tuticorin	Tamil Nadu	Tuticorin Bay	0.4-0.5	Upto 0.2
Tuticorin	Thoothukkudi	Tamil Nadu	Mappilaiurani	0.2-0.5	Upto 1.94
Vilattikulam	Thoothukkudi	Tamil Nadu	Vaippar	0.4-0.5	Nil



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REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI

TROPICAL CYCLONE ADVISORY BULLETIN NO.12

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)
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PRESIDENCY OF METEOROLOGY AND ENVIRONMENT, SAUDI ARABIA (THROUGH RTH JEDDAH)
IRAN METEOROLOGICAL ORGANISATION, (THROUGH RTH JEDDAH)
QATAR METEOROLOGICAL DEPARTMENT (THROUGH RTH JEDDAH)

TROPICAL CYCLONE ADVISORY NO. 12 FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 2300 UTC OF 02.12.2020 BASED ON 2100 UTC OF 02.12.2020.

SUB: CYCLONIC STORM 'BUREVI' OVER SRI LANKA

THE **CYCLONIC STORM 'BUREVI'** OVER SRI LANKA (CLOSE TO NORTH OF TRINCOMALEE) MOVED WEST-NORTHWESTWARDS WITH A SPEED OF 12 KMPH DURING PAST SIX HOURS AND LAY CENTERED AT 2100 UTC OF 03RD DECEMBER OVER SRI LANKA NEAR LAT. 9.0°N AND LONG. 80.8°E, ABOUT 60 KM NORTHWEST OF TRINCOMALEE (43418), 180 KM EAST-SOUTHEAST OF PAMBAN (43363) AND 380 KM EAST-NORTHEAST OF KANNIYAKUMARI (43377).

IT IS VERY LIKELY TO MOVE NEARLY WEST-NORTHWESTWARDS AND EMERGE INTO GULF OF MANNAR ON 3RD DECEMBER MORNING.

THE CYCLONIC STORM WITH WIND SPEED OF 70-80 GUSTING TO 90 KMPH WOULD BE CENTERED VERY CLOSE TO PAMBAN AROUND NOON OF 3RD DECEMBER. IT WOULD THEN MOVE NEARLY WEST-SOUTHWESTWARDS ACROSS PAMBAN AREA BY AFTERNOON AND CROSS SOUTH TAMILNADU COAST BETWEEN PAMBAN AND KANNIYAKUMARI DURING 3RD DECEMBER NIGHT AND 4TH DECEMBER EARLY MORNING AS A CYCLONIC STORM WITH WIND SPEED OF 70-80 GUSTING TO 90 KMPH. THUS ITS IMPACT ON SOUTH TAMILNADU COASTAL DISTRICTS IS VERY LIKELY TO COMMENCE FROM 3RD DECEMBER FORENOON INITIALLY OVER RAMANATHAPURAM DISTRICT AND GRADUALLY TOWARDS KANNIYAKUMARI DISTRICT.

FORECAST TRACK AND INTENSITY ARE GIVEN BELOW:

DATE/TIME (UTC)	POSITION (LAT. ^{0}N/ LONG. ^{0}E)	MAXIMUM SUSTAINED SURFACE WIND SPEED (KMPH)	CATEGORY OF CYCLONIC DISTURBANCE
02.12.20/2100	9.0/80.8	70-80 GUSTING TO 90	CYCLONIC STORM
03.12.20/0000	9.1/80.1	70-80 GUSTING TO 90	CYCLONIC STORM
03.12.20/0600	9.2/79.5	70-80 GUSTING TO 90	CYCLONIC STORM
03.12.20/1200	9.1/78.9	70-80 GUSTING TO 90	CYCLONIC STORM
03.12.20/1800	9.0/78.4	70-80 GUSTING TO 90	CYCLONIC STORM
04.12.20/0600	8.9/77.7	60-70 GUSTING TO 80	CYCLONIC STORM
04.12.20/1800	8.7/77.0	45-55 GUSTING TO 65	DEEP DEPRESSION

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

- **This is a guidance Bulletin for the WMO/ESCAP Panel Member countries,. Please visit respective National websites for Country specific Bulletins**

THE ESTIMATED MAXIMUM SUSTAINED WIND SPEED IS 40 KNOTS GUSTING TO 50 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS 998 HPA. THE SEA CONDITION IS VERY ROUGH TO HIGH AROUND THE SYSTEM CENTRE.

AS PER SATELLITE IMAGERY, THE SYSTEM IS OVERLAND OF SRI LANKA. THE CENTRE IS NOT CLEARLY DEFINED AND ASSOCIATED BROKEN LOW/MED CLOUDS WITH EMBEDED INTENSE TO VERY INTENSE CONVECTIVE CLOUD OVER SOUTHWEST AND ADJOINING WEST CENTRAL BAY OF BENGAL BET LAT 8.0N TO 15.0N LONG 80.0E TO 86.0E AND ALSO OVER TAMILNADU AND ADJOINING ANDHRA PRADESH, GULF OF MANNAR & N SRI LANKA WITH MINIMUN CLOUD TOP TEMPERATURE MINUS 93 DEG CELCIUS.

STORM SURGE GUIDNACE FOR SRILANKA COAST:

STORM SURGE OF ABOUT 1 METER HEIGHT ABOVE THE ASTRONOMICAL TIDE IS LIKELY TO INUNDATE LOW LYING AREAS OF NORTHEAST SRILANKA COAST DURING LANDFALL.
FURTHER, DURING EMERGENCE OF THE SYSTEM INTO GULF OF MANNAR ON 3RD MORNING AND ITS MOVEMENT TOWARDS SOUTH TAMILNADU COAST THERAFTER, THE STORM SURGE HEIGHT OF ABOUT 1 METER HEIGHT ABOVE THE ASTRONOMICAL TIDE IS LIKELY TO INUNDATE LOW LYING AREAS OF NORTHWEST SRILANKA AND SOUTH TAMILNADU COAST.

REMARKS:

IN THE SEA CONDITIONS, SST IS AROUND 28-29°C OVER SOUTHWEST BAY OF BENGAL (BOB) AND THE TROPICAL CYCLONE HEAT POTENTIAL IS ABOUT 60-80 KJ/CM^2 OVER SOUTHWEST BOB. LOWER LEVEL POSITIVE RELATIVE VORTICITY (150X10^{-6}S^{-1}) PREVAILS AROUND THE SYSTEM CENTRE. THE UPPER LEVEL POSITIVE DIVERGENCE IS AROUND 30X10^{-5}S^{-1} AND THE LOWER LEVEL CONVERGENCE IS AROUND 30 X 10^{-5}S^{-1} TO THE SOUTHWEST OF THE SYSTEM CENTRE. THE WIND SHEAR IS INCREASED WITH VALUE 15-20 KNOTS BUT FAVORABLE TO SUSTAIN THE SYSTEM. MJO INDEX LIES IN PHASE 4 AND ITS AMPLITUDE IS CLOSE TO 1, HENCE FAVORABLE FOR THE SYSTEM TO REMAIN AS A CYCLONIC STORM DURING THE FORECAST PERIOD.

THE UPPER TROPOSPHERIC RIDGE AT UPPER AND MIDDLE TROPOSPHERIC LEVELS RUNS ALONG 13°N OVER THE BOB. THE SYSTEM LIES IN THE SOUTHERN PERIPHERRY OF THE ABOVE RIDGE. AS A RESULT, IT IS MOVING WEST NORTHWESTWARDS. IT IS EXPECTED TO BE STEERED BY THE ABOVE RIDGE RESULTING IN NEARLY WESTWARD MOVEMENT FOR NEXT 24 HOURS. MOST OF THE NWP MODELS LIKE ECMWF, IMD GFS, NCEP GFS, GEFS, NCUM AND NEPS ARE INDICATING WEST-NORTHWESTWARDS MOVEMENT.

MOST OF THE NWP MODELS (IMD GFS, GEFS, NCUM, NEPS, WRF, HWRF, ECMWF) ARE ALSO INDICATING THE SYSTEM SUGGEST WEST-NORTHWESTWARDS DURING NEXT 12 HOURS AND THEN WEST-SOUTHWEST WARDS MOVEMENT ACROSS SOUTH TAMILNADU-SOUTH KERALA COASTS, A FEW MODELS ARE ALSO INDICATING THE SYSTEM TO TOUCH EXTREME SOUTHERN TIP OF KERALA AND TAMILNADU. ALSO THE TIME OF COMING CLOSER TO SOUTHERN TIP OF KERALA AND TAMILNADU VARIES LARGELY FROM 3RD-5TH DECEMBER.

ARABIAN SEA:

THE SYSTEM MOVING ACROSS SRI LANKA IS LIKELY TO EMERGE INTO COMORIN AREA ON 3RD DECEMBER MORNING (0000-0300 UTC).
SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LAY OVER SOUTHEAST ARABIAN SEA OFF KERALA COAST.

PROBABILITY OF CYCLOGENESIS(FORMATION OF DEPRESSION AND ABOVE INTENSITY SYSTEM) DURING NEXT 120 HRS :

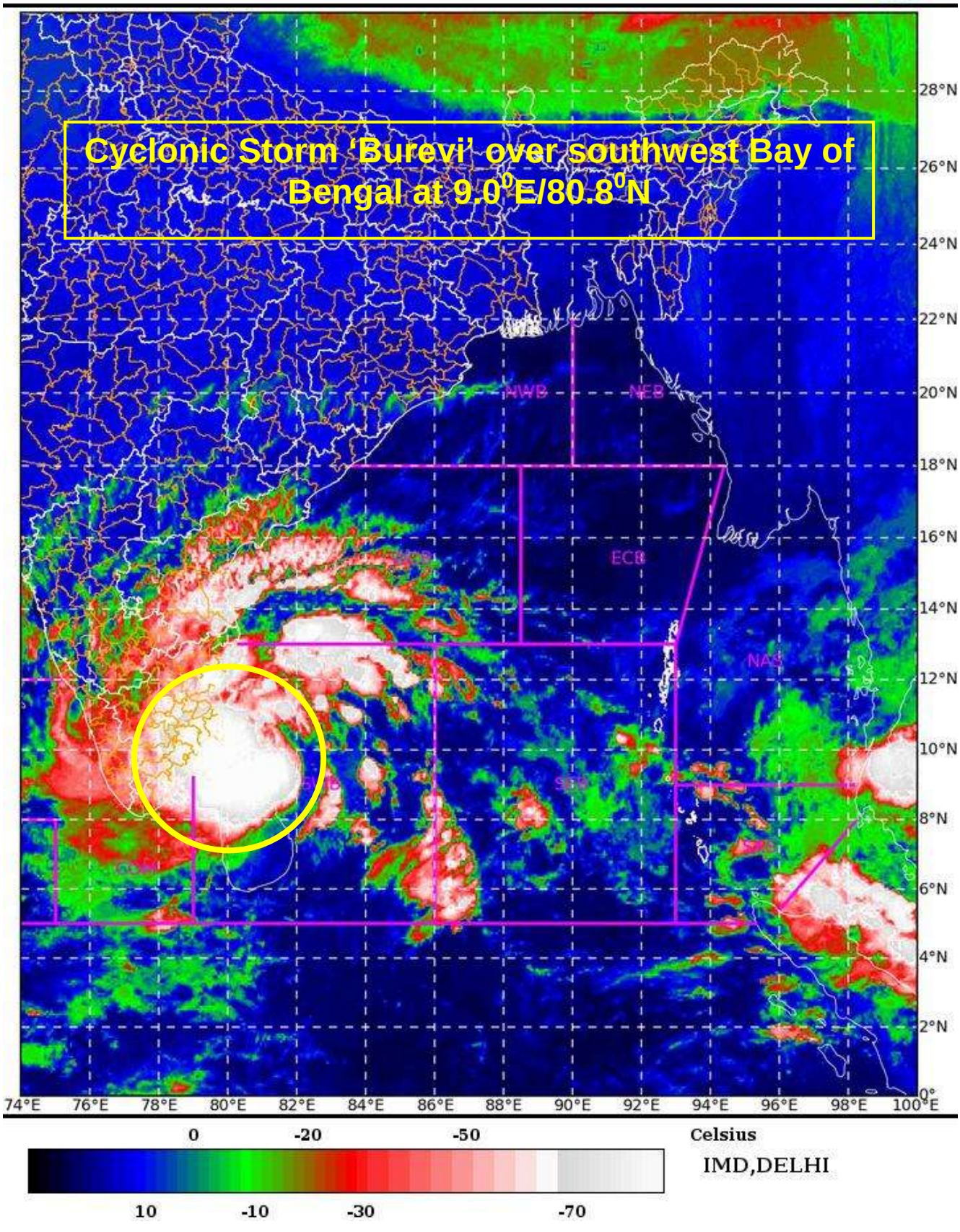
24 HOURS	24-48 HOURS	48-72 HOURS	72-96 HOURS	96-120 HOURS
NIL	MOD	MOD	HIGH	HIGH

(ANANDA KUMAR DAS)
Scientist-E, RSMC, New Delhi

SAT : INSAT-3D IMG 02-12-2020/(2200 to 2226) GMT

IMG_TIR1_TEMP 10.8 um 03-12-2020/(0330 to 0356) IST

L1C Mercator



Celsius

IMD,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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OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINITY OF CYCLONIC STORM "BUREVI" OVER SRI LANKA BASED ON 1800 UTC OF 2nd DECEMBER, 2020.

DATE/TIME IN UTC
IST=UTC + 0530
L: LOW PRESSURE AREA
WML: WELL MARKED LOW PRESSURE AREA
D: DEPRESSION (17-27 KT)
DD: DEEP DEPRESSION (28-33 KT)
CS: CYCLONIC STORM (34-47 KT)
SCS: SEVERE CYCLONIC STORM (48-63KT)
VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
SuCS: SUPER CYCLONIC STORM (≥ 120 KT)

LESS THAN 34 KT
34-47 KT
≥ 48 KT
OBSERVED TRACK
FORECAST TRACK
CONE OF UNCERTAINTY

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 AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF CYCLONIC STORM "BUREVI" OVER SRI LANKA BASED ON 1800 UTC OF 2nd DECEMBER, 2020.

DATE/TIME IN UTC
IST=UTC + 0530
L: LOW PRESSURE AREA
WML: WELL MARKED LOW PRESSURE AREA
D: DEPRESSION (17-27 KT)
DD: DEEP DEPRESSION (28-33 KT)
CS: CYCLONIC STORM (34-47 KT)
SCS: SEVERE CYCLONIC STORM (48-63KT)
VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
SuCS: SUPER CYCLONIC STORM (≥ 120 KT)

LESS THAN 34 KT
34-47 KT
≥ 48 KT
OBSERVED TRACK
FORECAST TRACK
CONE OF UNCERTAINTY
AREA OF MAXIMUM SUSTAINED WIND SPEED:
28-33 KT (52-61 KMPH)
34-49 KT (62-91 KMPH)
50-63 KT (92-117 KMPH)
≥ 64 KT (≥118 KMPH)

IMPACT OVER THE SEA

MSW (knot/kmph)	Impact	Action
28-33 (52-61)	Very rough seas	Total suspension of fishing operations
34-49 (62-91)	High to very high seas	Total suspension of fishing operations
50-63 (92-117)	Very high seas	Total suspension of fishing operations
≥ 64 (≥118)	Phenomenal	Total suspension of fishing operations

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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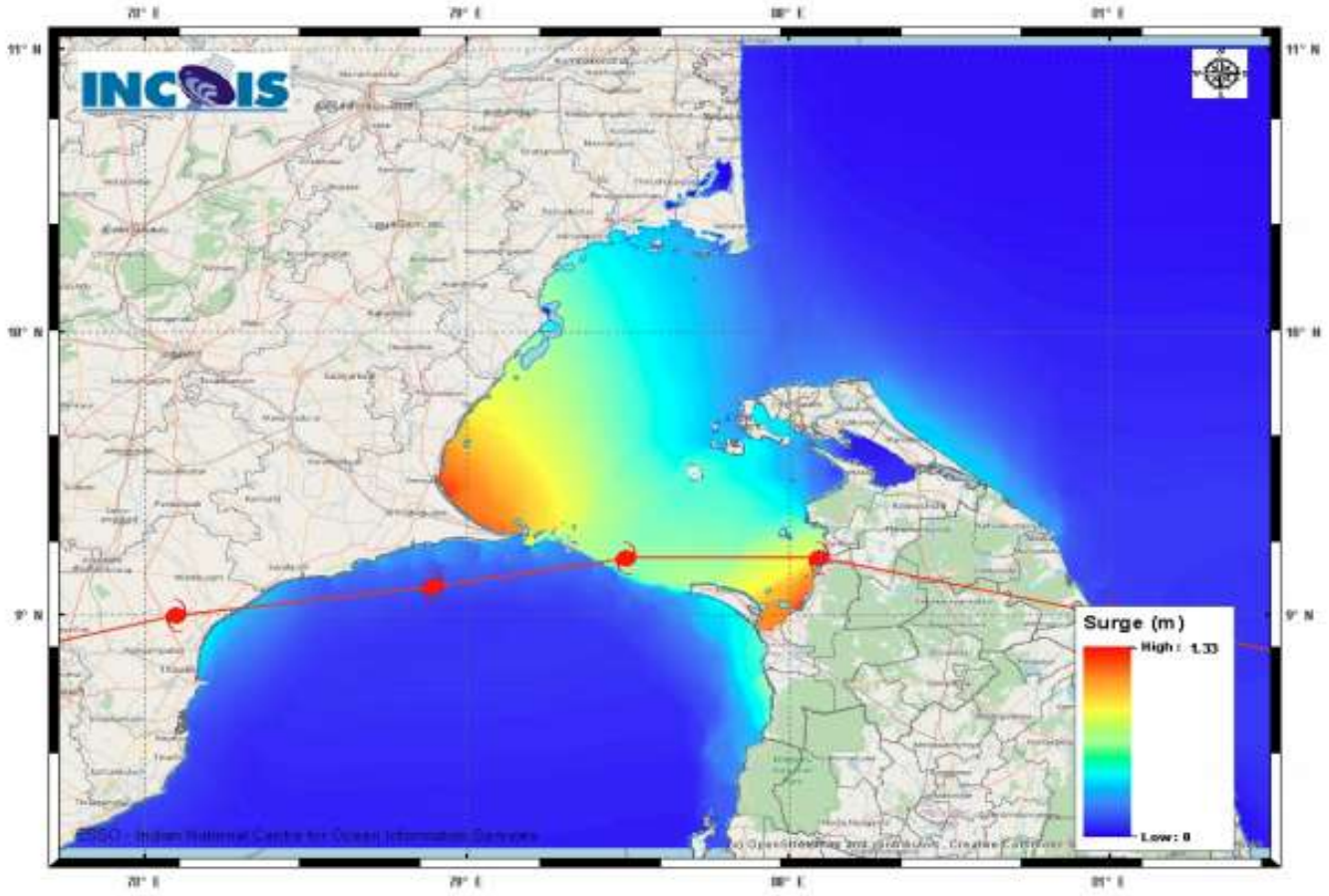
Storm Surge Forecast by INCOIS Model based on 1200 UTC of 2nd December

STORM SURGE HEIGHT INFORMATION:

* The below listed surge heights are over and above astronomical tide.

MANDAL/TALUK	DISTRICT	STATE / UNION TERRITORY	NEAREST PLACE OF HABITATION	STORM SURGE (m) *	EXPECTED INUNDATION EXTENT (km)
Tiruvadanai	Ramanathapuram	Tamil Nadu	Marungur	0.8-1.3	Upto 0.69
Ramanathapuram	Ramanathapuram	Tamil Nadu	Pathanendal	0.3-1.2	Upto 0.47
Arantangi	Pudukkottai	Tamil Nadu	Enadi	0.5-0.8	Upto 0.39
Peravurani	Thanjavur	Tamil Nadu	Sendalaivayal	0.6-0.7	Nil
Ottapidaram	Thoothukkudi	Tamil Nadu	Pattanamarudur	0.5-0.6	Nil
Pattukkottai	Thanjavur	Tamil Nadu	Palanjur	0.4-0.6	Upto 0.18
Thoothukkudi	Tuticorin	Tamil Nadu	Hare Island	0.4-0.5	Nil
Thoothukkudi	Tuticorin	Tamil Nadu	Tuticorin Bay	0.4-0.5	Upto 0.2
Tuticorin	Thoothukkudi	Tamil Nadu	Mappilaiurani	0.2-0.5	Upto 1.94
Vilattikulam	Thoothukkudi	Tamil Nadu	Vaippar	0.4-0.5	Nil



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 NO.13

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)
YEMEN METEOROLOGICAL SERVICES, REPUBLIC OF YEMEN (THROUGH RTH JEDDAH)
NATIONAL CENTRE FOR METEOROLOGY, UAE (THROUGH RTH JEDDAH)
PRESIDENCY OF METEOROLOGY AND ENVIRONMENT, SAUDI ARABIA (THROUGH RTH JEDDAH)
IRAN METEOROLOGICAL ORGANISATION, (THROUGH RTH JEDDAH)
QATAR METEOROLOGICAL DEPARTMENT (THROUGH RTH JEDDAH)

TROPICAL CYCLONE ADVISORY NO. 13 FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 0300 UTC OF 03.12.2020 BASED ON 0000 UTC OF 03.12.2020.

SUB: CYCLONIC STORM 'BUREVI' OVER SRI LANKA

THE **CYCLONIC STORM 'BUREVI'** OVER SRI LANKA MOVED WEST-NORTHWESTWARDS WITH A SPEED OF 11 KMPH DURING PAST SIX HOURS AND LAY CENTERED AT 0000 UTC OF 03RD DECEMBER OVER SRI LANKA NEAR LAT. 9.0°N AND LONG. 80.3°E, ABOUT 40 KM EAST OF MANNAR (43413), 120 KM EAST-SOUTHEAST OF PAMBAN (43363) AND 320 KM EAST-NORTHEAST OF KANNIYAKUMARI (43377). IT IS VERY LIKELY TO MOVE WEST-NORTHWESTWARDS AND EMERGE INTO GULF OF MANNAR NEAR MANNAR COAST DURING NEXT 3 HOURS.

THE CYCLONIC STORM WITH WIND SPEED OF 70-80 GUSTING TO 90 KMPH WOULD BE CENTERED VERY CLOSE TO PAMBAN AROUND NOON OF 3RD DECEMBER. IT WOULD THEN MOVE NEARLY WEST-SOUTHWESTWARDS ACROSS PAMBAN AREA BY AFTERNOON AND CROSS SOUTH TAMILNADU COAST BETWEEN PAMBAN AND KANNIYAKUMARI DURING 3RD DECEMBER NIGHT AND 4TH DECEMBER EARLY MORNING AS A CYCLONIC STORM WITH WIND SPEED OF 70-80 GUSTING TO 90 KMPH. THUS ITS IMPACT ON SOUTH TAMILNADU COASTAL DISTRICTS IS VERY LIKELY TO COMMENCE FROM 3RD DECEMBER FORENOON INITIALLY OVER RAMANATHAPURAM DISTRICT AND GRADUALLY TOWARDS KANNIYAKUMARI DISTRICT.

FORECAST TRACK AND INTENSITY ARE GIVEN BELOW:

DATE/TIME (UTC)	POSITION (LAT. ^{0}N/ LONG. ^{0}E)	MAXIMUM SUSTAINED SURFACE WIND SPEED (KMPH)	CATEGORY OF CYCLONIC DISTURBANCE
03.12.20/0000	9.0/80.3	70-80 GUSTING TO 90	CYCLONIC STORM
03.12.20/0600	9.2/79.5	70-80 GUSTING TO 90	CYCLONIC STORM
03.12.20/1200	9.1/78.9	70-80 GUSTING TO 90	CYCLONIC STORM
03.12.20/1800	9.0/78.4	70-80 GUSTING TO 90	CYCLONIC STORM
04.12.20/0600	8.9/77.7	60-70 GUSTING TO 80	CYCLONIC STORM
04.12.20/1800	8.7/77.0	45-55 GUSTING TO 65	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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THE ESTIMATED MAXIMUM SUSTAINED WIND SPEED IS 40 KNOTS GUSTING TO 50 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS 998 HPA. THE SEA CONDITION IS VERY ROUGH TO HIGH AROUND THE SYSTEM CENTRE.

AS PER SATELLITE IMAGERY, THE SYSTEM IS OVER LAND OF SRI LANKA. THE CENTRE IS NOT CLEARLY DEFINED AND ASSOCIATED BROKEN LOW/MED CLOUDS WITH EMBEDED INTENSE TO VERY INTENSE CONVECTIVE CLOUD OVER SOUTHWEST AND ADJOINING WEST CENTRAL BAY OF BENGAL BET LAT 8.0N TO 14.0N LONG 77.0E TO 84.0E AND ALSO OVER TAMILNADU AND ADJOINING ANDHRA PRADESH, GULF OF MANNAR & N SRI LANKA WITH MINIMUN CLOUD TOP TEMPERATURE MINUS 93 DEG CELCIUS.

STORM SURGE GUIDNACE FOR SRILANKA COAST:

THE SYSTEM AFTER ITS EMERGENCEW INTO GULF OF MANNAR ON 3RD AND ITS MOVEMENT TOWARDS SOUTH TAMILNADU COAST THERAFTER, THE STORM SURGE HEIGHT OF ABOUT 1 METER HEIGHT ABOVE THE ASTRONOMICAL TIDE IS LIKELY TO INUNDATE LOW LYING AREAS OF NORTHWEST SRILANKA AND SOUTH TAMILNADU COAST.

REMARKS:

IN THE SEA CONDITIONS, SST IS AROUND 28-29°C OVER SOUTHWEST BAY OF BENGAL (BOB) AND THE TROPICAL CYCLONE HEAT POTENTIAL IS ABOUT 60-80 KJ/CM^2 OVER SOUTHWEST BOB. LOWER LEVEL POSITIVE RELATIVE VORTICITY (2000X10^{-6}S^{-1}) PREVAILS AROUND THE SYSTEM CENTRE. THE UPPER LEVEL POSITIVE DIVERGENCE IS AROUND 30X10^{-5}S^{-1} AND THE LOWER LEVEL CONVERGENCE IS AROUND 30 X 10^{-5}S^{-1} TO OVER THE SYSTEM CENTRE. THE WIND SHEAR IS INCREASED WITH VALUE 15-20 KNOTS BUT FAVORABLE TO SUSTAIN THE SYSTEM. MJO INDEX LIES IN PHASE 4 AND ITS AMPLITUDE IS CLOSE TO 1, HENCE FAVORABLE FOR THE SYSTEM TO REMAIN AS A CYCLONIC STORM DURING THE FORECAST PERIOD.

THE UPPER TROPOSPHERIC RIDGE AT UPPER AND MIDDLE TROPOSPHERIC LEVELS RUNS ALONG 13°N OVER THE BOB. THE SYSTEM LIES IN THE SOUTHERN PERIPHERRY OF THE ABOVE RIDGE. AS A RESULT, IT IS MOVING WEST NORTHWESTWARDS. IT IS EXPECTED TO BE STEERED BY THE ABOVE RIDGE RESULTING IN WESTWARD MOVEMENT FOR NEXT 24 HOURS. MOST OF THE NWP MODELS LIKE ECMWF, IMD GFS, NCEP GFS, GEFS, NCUM AND NEPS ARE INDICATING WEST-NORTHWESTWARDS MOVEMENT.

MOST OF THE NWP MODELS (IMD GFS, GEFS, NCUM, NEPS, WRF, HWRF, ECMWF) ARE ALSO INDICATING THE SYSTEM SUGGEST WEST-NORTHWESTWARDS DURING NEXT 12 HOURS AND THEN WEST-SOUTHWEST WARDS MOVEMENT ACROSS SOUTH TAMILNADU-SOUTH KERALA COASTS, A FEW MODELS ARE ALSO INDICATING THE SYSTEM TO TOUCH EXTREME SOUTHERN TIP OF KERALA AND TAMILNADU. ALSO THE TIME OF COMING CLOSER TO SOUTHERN TIP OF KERALA AND TAMILNADU VARIES LARGELY FROM 3RD-5TH DECEMBER.

ARABIAN SEA:

THE SYSTEM MOVING ACROSS SRI LANKA IS LIKELY TO EMERGE INTO COMORIN AREA ON 3RD DECEMBER MORNING (0000-0300 UTC).

SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LAY OVER SOUTHEAST ARABIAN SEA OFF KERALA COAST.

PROBABILITY OF CYCLOGENESIS(FORMATION OF DEPRESSION AND ABOVE INTENSITY SYSTEM) DURING NEXT 120 HRS :

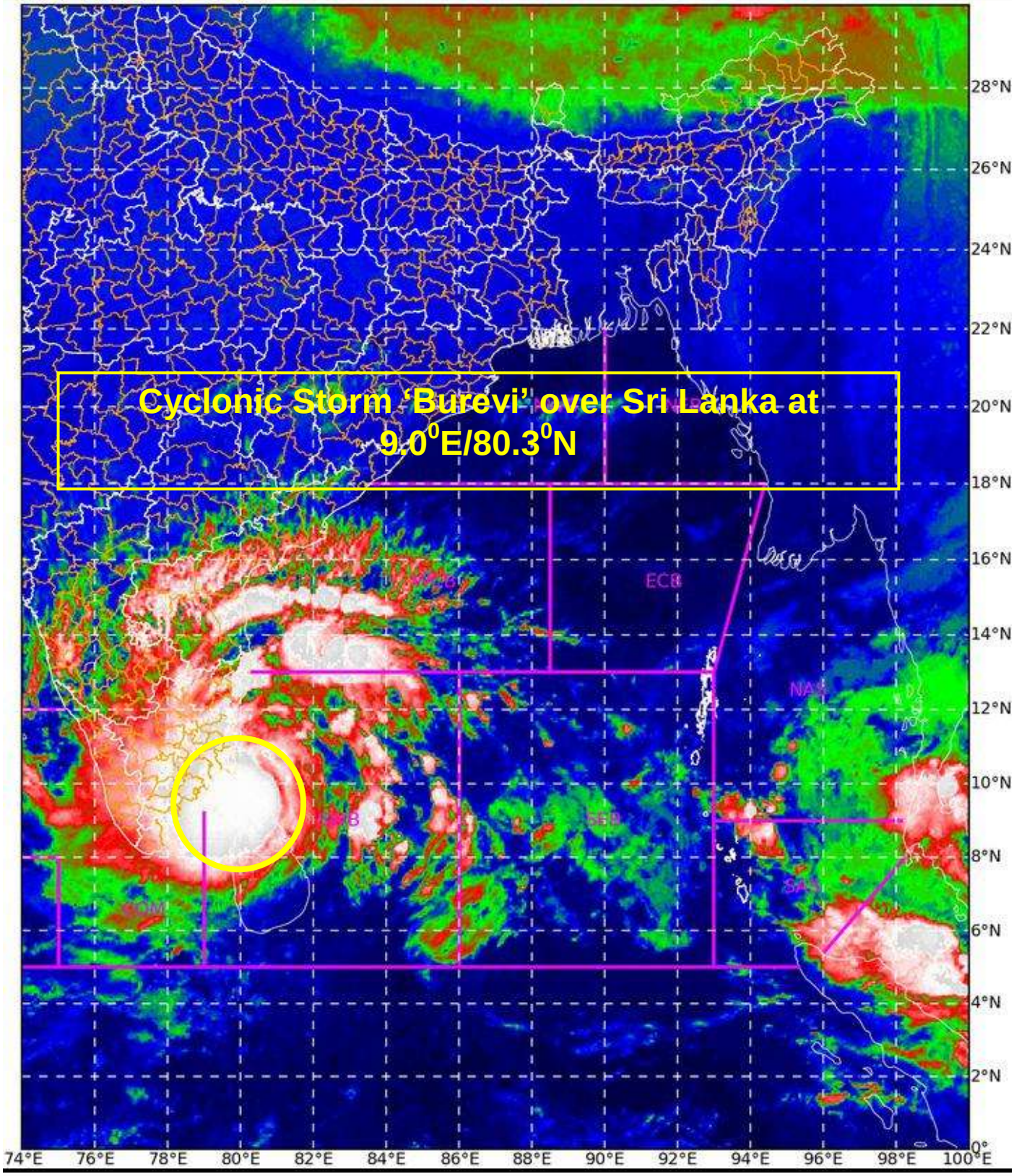
24 HOURS	24-48 HOURS	48-72 HOURS	72-96 HOURS	96-120 HOURS
NIL	MOD	MOD	HIGH	HIGH

(ANANDA KUMAR DAS)
Scientist-E, RSMC, New Delhi

SAT : INSAT-3D IMG 03-12-2020/(0030 to 0057) GMT

IMG_TIR1_TEMP 10.8 um 03-12-2020/(0600 to 0627) IST

L1C Mercator



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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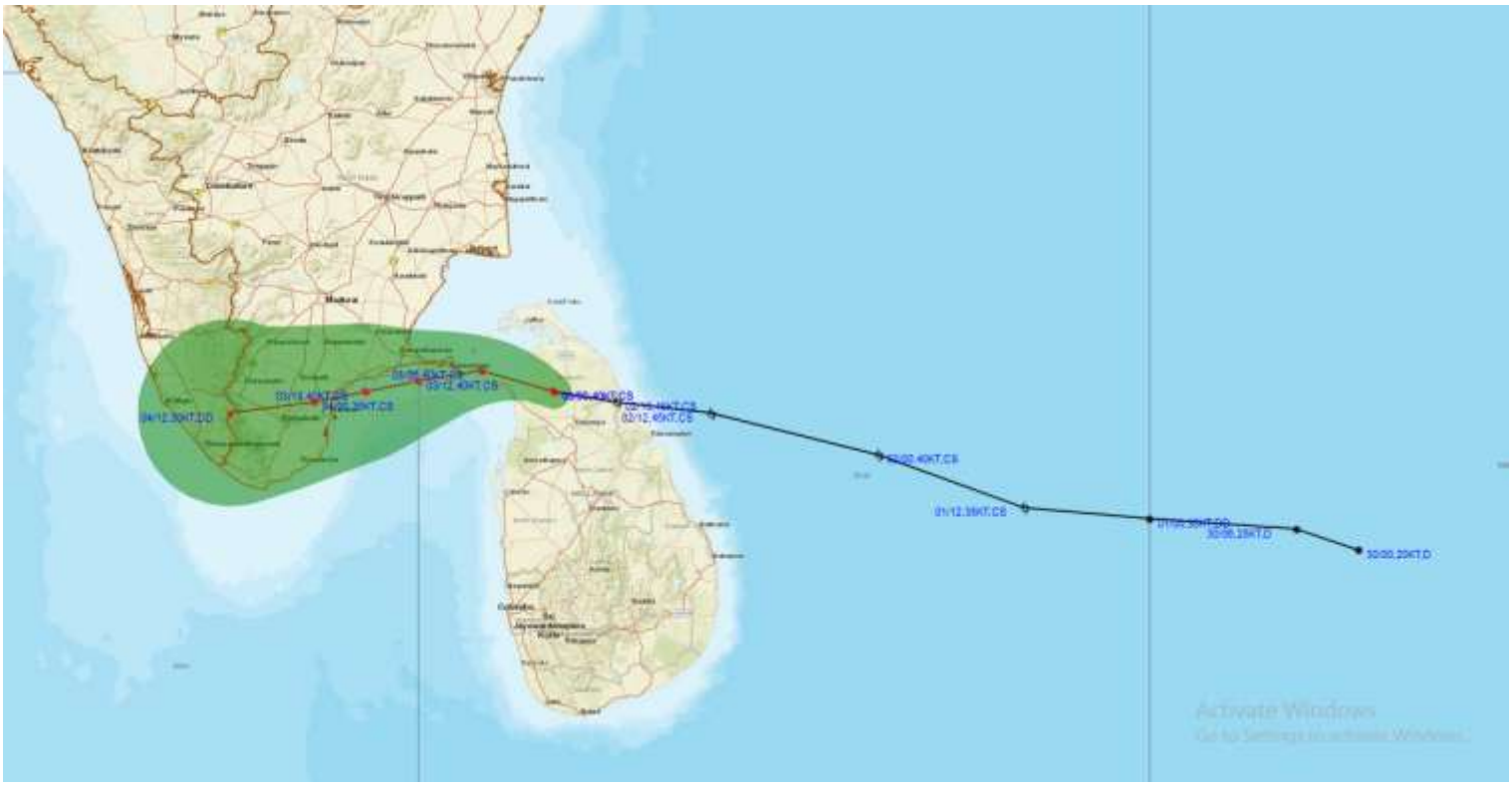
OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINITY OF CYCLONIC STORM "BUREVI" OVER SRI LANKA BASED ON 0000 UTC OF 3rd DECEMBER, 2020.



DATE/TIME IN UTC
IST=UTC +0530
L: LOW PRESSURE AREA
WML: WELL MARKED LOW PRESSURE AREA
D: DEPRESSION (17-27 KT)
DD: DEEP DEPRESSION (28-33 KT)
CS: CYCLONIC STORM (34-47 KT)
SCS: SEVERE CYCLONIC STORM (48-63KT)
VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
SuCS: SUPER CYCLONIC STORM (≥ 120 KT)

LESS THAN 34 KT
34-47 KT
≥ 48 KT
OBSERVED TRACK
FORECAST TRACK
CONE OF UNCERTAINTY

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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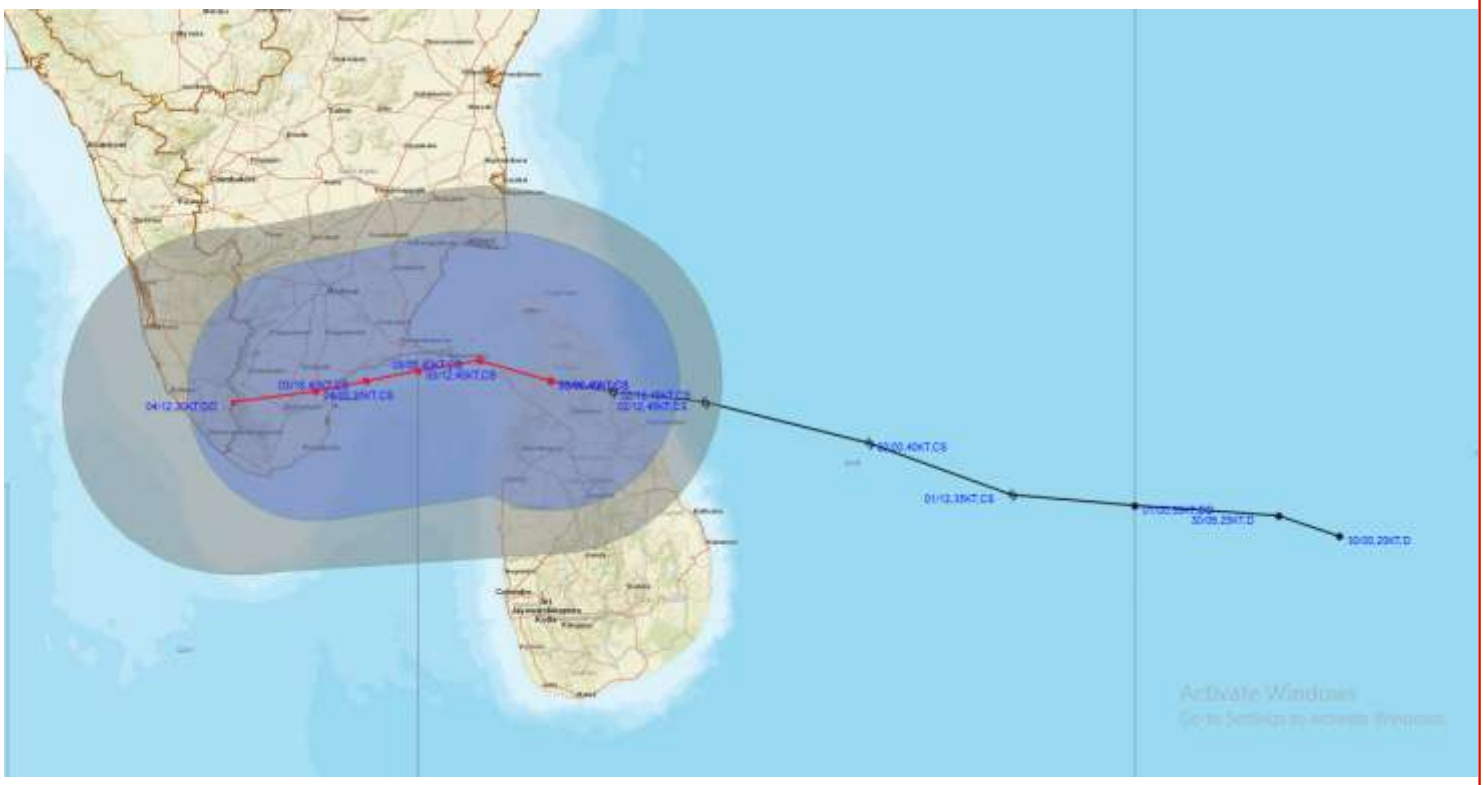
OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF CYCLONIC STORM "BUREVI" OVER SRI LANKA BASED ON 0000 UTC OF 3rd DECEMBER, 2020.



DATE/TIME IN UTC
IST=UTC + 0530
L: LOW PRESSURE AREA
WML: WELL MARKED LOW PRESSURE AREA
D: DEPRESSION (17-27 KT)
DD: DEEP DEPRESSION (28-33 KT)
CS: CYCLONIC STORM (34-47 KT)
SCS: SEVERE CYCLONIC STORM (48-63KT)
VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
SuCS: SUPER CYCLONIC STORM (≥ 120 KT)

LESS THAN 34 KT
34-47 KT
≥ 48 KT
OBSERVED TRACK
FORECAST TRACK
CONE OF UNCERTAINTY
AREA OF MAXIMUM SUSTAINED WIND SPEED:
28-33 KT (52-61 KMPH)
34-49 KT (62-91 KMPH)
50-63 KT (92-117 KMPH)
≥ 64 KT (≥118 KMPH)

IMPACT OVER THE SEA

MSW (knot/kmph)	Impact	Action
28-33 (52-61)	Very rough seas	Total suspension of fishing operations
34-49 (62-91)	High to very high seas	Total suspension of fishing operations
50-63 (92-117)	Very high seas	Total suspension of fishing operations
≥ 64 (≥118)	Phenomenal	Total suspension of fishing operations

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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Storm Surge Forecast by INCOIS Model based on 1800 UTC of 2nd December

STORM SURGE HEIGHT INFORMATION:

* The below listed surge heights are over and above astronomical tide.

MANDAL/TALUK	DISTRICT	STATE / UNION TERRITORY	NEAREST PLACE OF HABITATION	STORM SURGE (m) *	EXPECTED INUNDATION EXTENT (km)
Tiruvadanai	Ramanathapuram	Tamil Nadu	Marungur	0.8-1.2	Upto 0.69
Ramanathapuram	Ramanathapuram	Tamil Nadu	Pathanendal	0.2-1.2	Upto 0.47
Arantangi	Pudukkottai	Tamil Nadu	Enadi	0.4-0.7	Upto 0.39
Peravurani	Thanjavur	Tamil Nadu	Sendalaivayal	0.6-0.6	Nil
Ottapidaram	Thoothukkudi	Tamil Nadu	Pattanamarudur	0.5-0.6	Upto 0.14
Pattukkottai	Thanjavur	Tamil Nadu	Palanjur	0.4-0.5	Upto 0.18
Tuticorin	Thoothukkudi	Tamil Nadu	Mappilaiurani	0.2-0.5	Upto 1.9
Vilattikulam	Thoothukkudi	Tamil Nadu	Vaippar	0.4-0.5	Nil

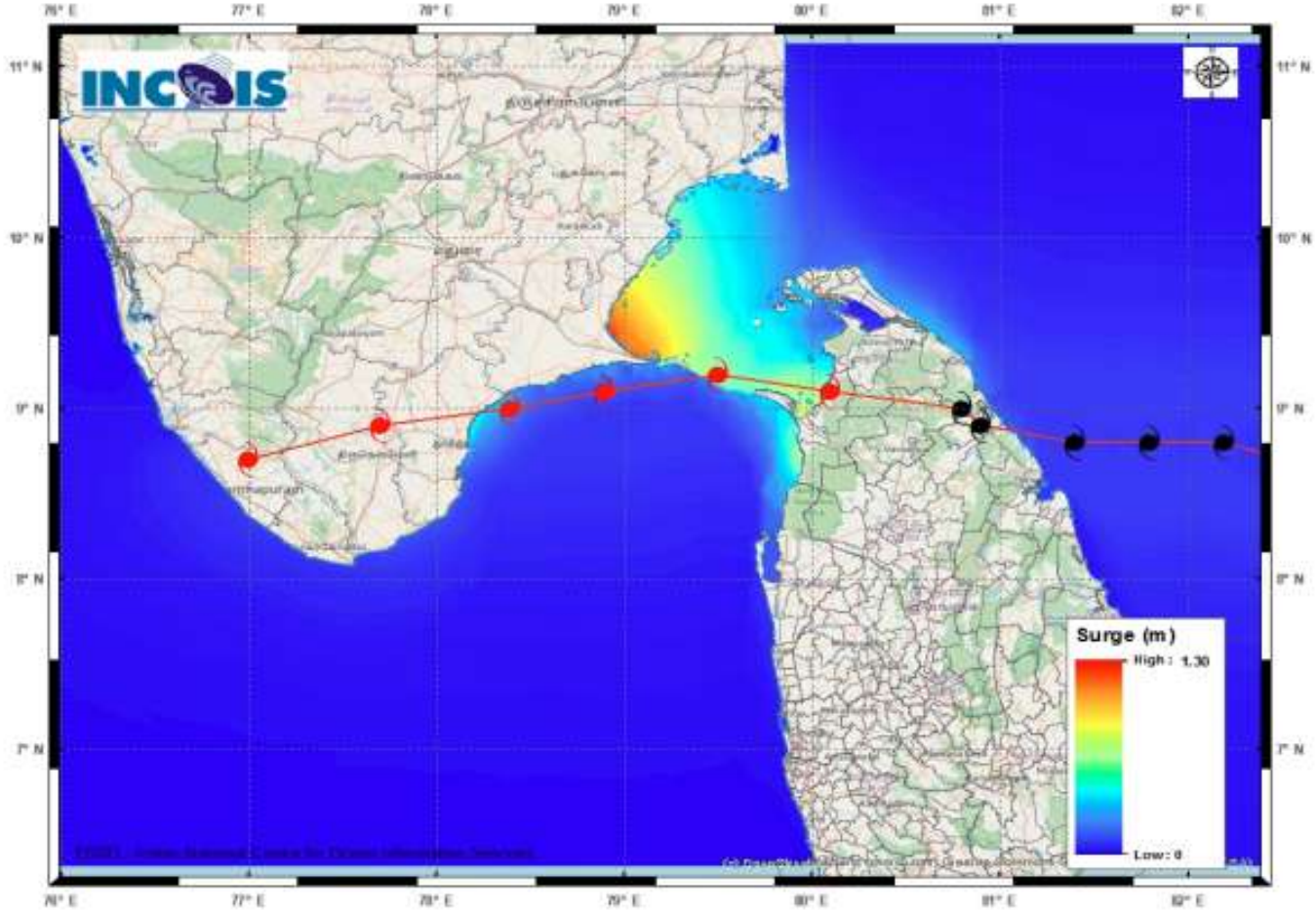

Figure:Storm Surge Map

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

- **This is a guidance Bulletin for the WMO/ESCAP Panel Member countries,. Please visit respective National websites for Country specific Bulletins**

REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI

TROPICAL CYCLONE ADVISORY BULLETIN NO.14

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)
YEMEN METEOROLOGICAL SERVICES, REPUBLIC OF YEMEN (THROUGH RTH JEDDAH)
NATIONAL CENTRE FOR METEOROLOGY, UAE (THROUGH RTH JEDDAH)
PRESIDENCY OF METEOROLOGY AND ENVIRONMENT, SAUDI ARABIA (THROUGH RTH JEDDAH)
IRAN METEOROLOGICAL ORGANISATION, (THROUGH RTH JEDDAH)
QATAR METEOROLOGICAL DEPARTMENT (THROUGH RTH JEDDAH)

TROPICAL CYCLONE ADVISORY NO. 14 FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 0600 UTC OF 03.12.2020 BASED ON 0300 UTC OF 03.12.2020.

SUB: CYCLONIC STORM 'BUREVI' OVER NORTH SRI LANKA AND ADJOINING GULF OF MANNAR

THE **CYCLONIC STORM 'BUREVI'** OVER NORTH SRI LANKA MOVED WEST-NORTHWESTWARDS WITH A SPEED OF 11 KMPH DURING PAST SIX HOURS AND LAY CENTERED AT 0300 UTC OF 03RD DECEMBER OVER NORTH SRI LANKA AND ADJOINING GULF OF MANNAR NEAR LAT. 9.1°N AND LONG. 80.2°E, ABOUT 30 KM EAST-NORTHEAST OF MANNAR (43413), 110 KM EAST-SOUTHEAST OF PAMBAN (43363) AND 310 KM EAST-NORTHEAST OF KANNIYAKUMARI (43377). IT IS VERY LIKELY TO MOVE WEST-NORTHWESTWARDS AND EMERGE INTO GULF OF MANNAR DURING NEXT 3 HOURS.

THE CYCLONIC STORM WITH WIND SPEED OF 70-80 GUSTING TO 90 KMPH WOULD BE CENTERED VERY CLOSE TO PAMBAN AROUND NOON OF 3RD DECEMBER. IT WOULD THEN MOVE NEARLY WEST-SOUTHWESTWARDS ACROSS PAMBAN AREA BY AFTERNOON AND CROSS SOUTH TAMILNADU COAST BETWEEN PAMBAN (43363) AND KANNIYAKUMARI (43377) DURING 3RD DECEMBER NIGHT AND 4TH DECEMBER EARLY MORNING AS A CYCLONIC STORM WITH WIND SPEED OF 70-80 GUSTING TO 90 KMPH. THUS ITS IMPACT ON SOUTH TAMILNADU COASTAL DISTRICTS IS VERY LIKELY TO COMMENCE FROM 3RD DECEMBER FORENOON INITIALLY OVER RAMANATHAPURAM DISTRICT AND GRADUALLY TOWARDS KANNIYAKUMARI DISTRICT.

FORECAST TRACK AND INTENSITY ARE GIVEN BELOW:

DATE/TIME (UTC)	POSITION (LAT. ^{0}N/ LONG. ^{0}E)	MAXIMUM SUSTAINED SURFACE WIND SPEED (KMPH)	CATEGORY OF CYCLONIC DISTURBANCE
03.12.20/0300	9.1/80.2	70-80 GUSTING TO 90	CYCLONIC STORM
03.12.20/0600	9.2/79.7	70-80 GUSTING TO 90	CYCLONIC STORM
03.12.20/1200	9.1/78.9	70-80 GUSTING TO 90	CYCLONIC STORM
03.12.20/1800	9.0/78.4	70-80 GUSTING TO 90	CYCLONIC STORM
04.12.20/0600	8.9/77.7	60-70 GUSTING TO 80	CYCLONIC STORM
04.12.20/1800	8.7/77.0	45-55 GUSTING TO 65	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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THE ESTIMATED MAXIMUM SUSTAINED WIND SPEED IS 40 KNOTS GUSTING TO 50 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS 998 HPA. THE SEA CONDITION IS VERY ROUGH TO HIGH AROUND THE SYSTEM CENTRE.

AS PER SATELLITE IMAGERY, THE SYSTEM IS OVER NORTH SRI LANKA AND NEIGHBOURHOOD. ASSOCIATED BROKEN LOW/MED CLOUDS WITH EMBEDED INTENSE TO VERY INTENSE CONVECTIVE CLOUD OVER NORTH SRILANKA, PALK STRAIT, GULF OF MANNAR, TAMILNADU & ADJOINING ANDHRA PRADESH AND OVER SOUTHWEST & ADJOINING WESTCENTRAL BAY OF BENGAL BETWEEN LAT 8.0N TO 14.0N & LONG 77.0E TO 84.0E WITH MINIMUN CLOUD TOP TEMPERATURE MINUS 93 DEG CELCIUS.

STORM SURGE GUIDNACE FOR SRILANKA COAST:

STORM SURGE OF ABOUT 1.0 M HEIGHT ABOVE ASTRONOMICAL TIDE IS VERY LIKELY TO INUNDATE LOW LYING AREAS OF SOUTH COASTAL TAMILNADU DURING THE TIME OF LANDFALL AND NORTHWEST SRI LANKA COAST DURING NEXT 06 HOURS.

REMARKS:

IN THE SEA CONDITIONS, SST IS AROUND 28-29°C OVER SOUTHWEST BAY OF BENGAL (BOB) AND THE TROPICAL CYCLONE HEAT POTENTIAL IS ABOUT 60-80 KJ/CM^2 OVER SOUTHWEST BOB. LOWER LEVEL POSITIVE RELATIVE VORTICITY (150X10^{-6}S^{-1}) TO THE WEST OF SYSTEM CENTRE. THE UPPER LEVEL POSITIVE DIVERGENCE IS AROUND 30X10^{-5}S^{-1} TO THE NORTHWEST OF SYSTEM CENTRE AND THE LOWER LEVEL CONVERGENCE IS AROUND 20 X 10^{-5}S^{-1} TO THE WEST OF SYSTEM CENTRE. THE WIND SHEAR HAS INCREASED WITH VALUE 20-25 KNOTS ALONG THE FORECAST TRACK. MJO INDEX LIES IN PHASE 4 AND ITS AMPLITUDE IS CLOSE TO 1, HENCE FAVORABLE FOR THE SYSTEM TO REMAIN AS A CYCLONIC STORM DURING THE FORECAST PERIOD. THE UPPER TROPOSPHERIC RIDGE AT UPPER AND MIDDLE TROPOSPHERIC LEVELS RUNS ALONG 13.5°N OVER THE BOB. THE SYSTEM LIES IN THE SOUTHERN PERIPHERRY OF THE ABOVE RIDGE. AS A RESULT, IT IS MOVING WEST-NORTHWESTWARDS.

MOST OF THE NWP MODELS (IMD GFS, GEFS, NCUM, NEPS, WRF, HWRF, ECMWF) ARE ALSO INDICATING THE SYSTEM TO MOVE WEST-NORTHWESTWARDS DURING NEXT 12 HOURS AND THEN WEST-SOUTHWESTWARDS ACROSS SOUTH TAMILNADU-SOUTH KERALA COASTS. A FEW MODELS ARE ALSO INDICATING THE SYSTEM TO EMERGE INTO SOUTHEAST ARABIAN SEA AS A REMNANT LOW PRESSURE SYSTEM ON 5TH DECEMBER.

(R.K.JENAMANI)
Scientist-F, 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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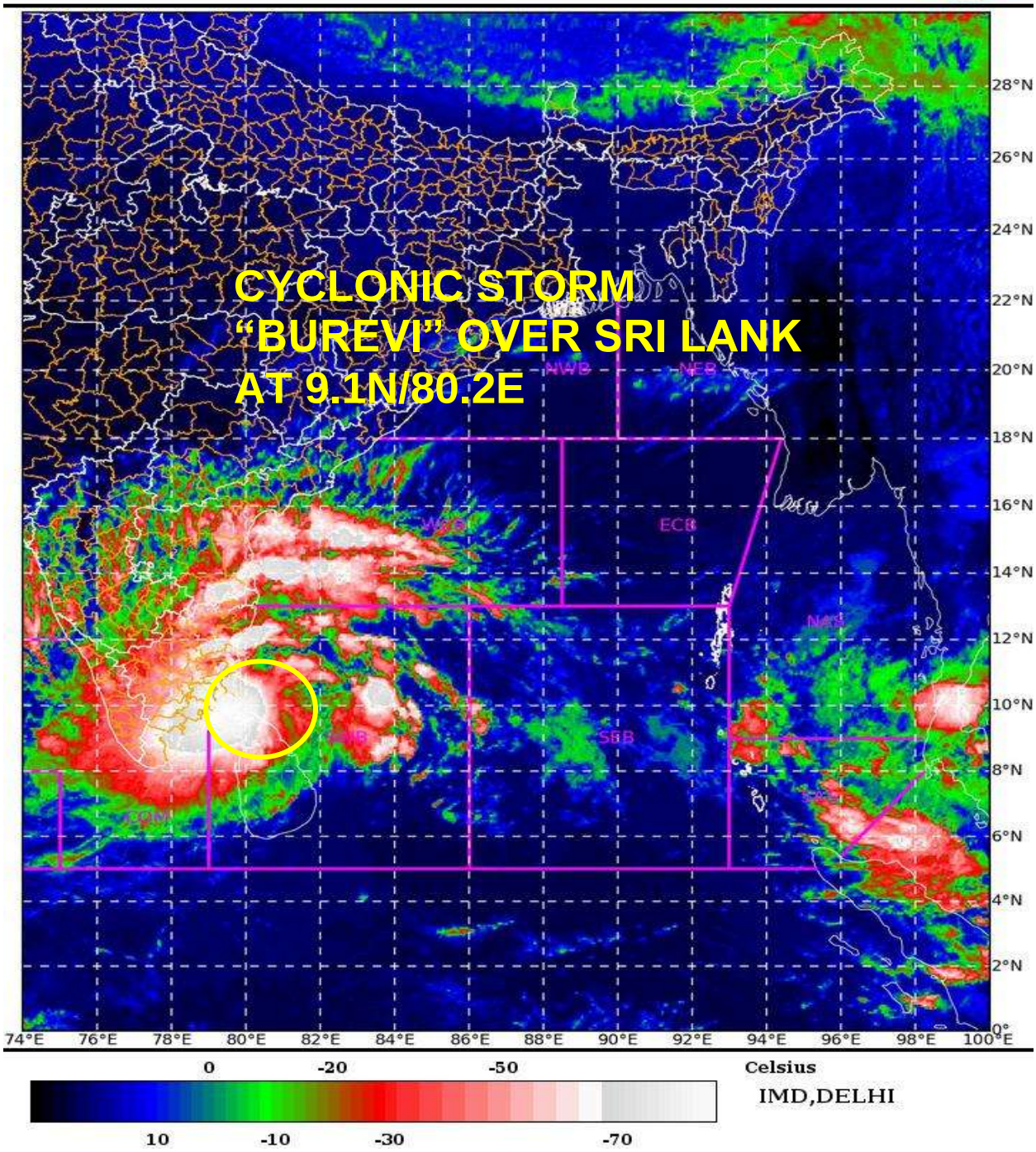
SAT : INSAT-3D IMG 03-12-2020/(0400 to 0427) GMT
IMG_TIR1_TEMP 10.8 um 03-12-2020/(0930 to 0957) IST
L1C Mercator



Celsius
IMD,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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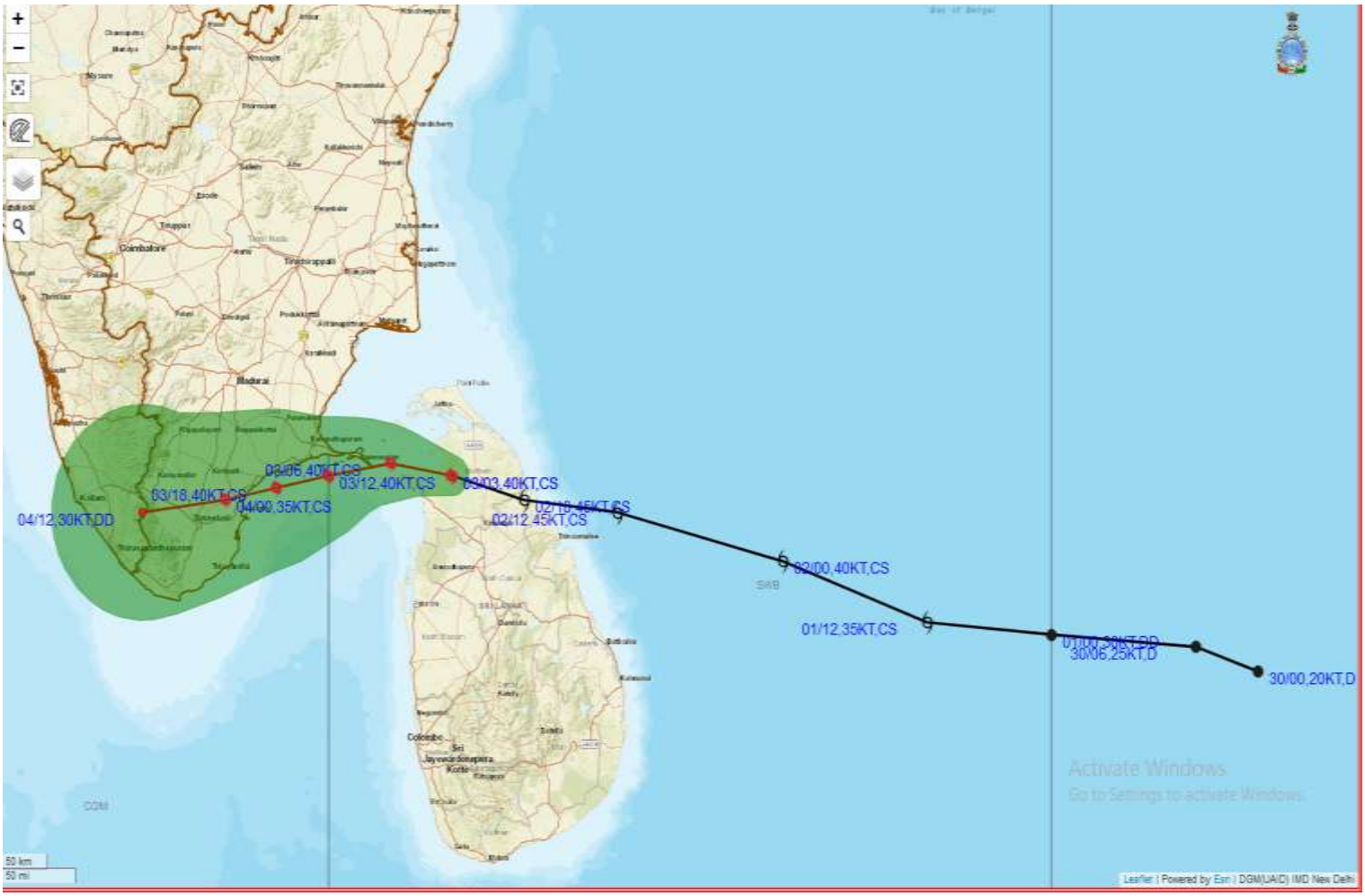
OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINITY OF CYCLONIC STORM "BUREVI" OVER SRI LANKA BASED ON 0300 UTC OF 3rd DECEMBER, 2020.



DATE/TIME IN UTC
IST=UTC +0530
L: LOW PRESSURE AREA
WML: WELL MARKED LOW PRESSURE AREA
D: DEPRESSION (17-27 KT)
DD: DEEP DEPRESSION (28-33 KT)
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SCS: SEVERE CYCLONIC STORM (48-63KT)
VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
SuCS: SUPER CYCLONIC STORM (≥ 120 KT)

LESS THAN 34 KT
34-47 KT
≥ 48 KT
OBSERVED TRACK
FORECAST TRACK
CONE OF UNCERTAINTY

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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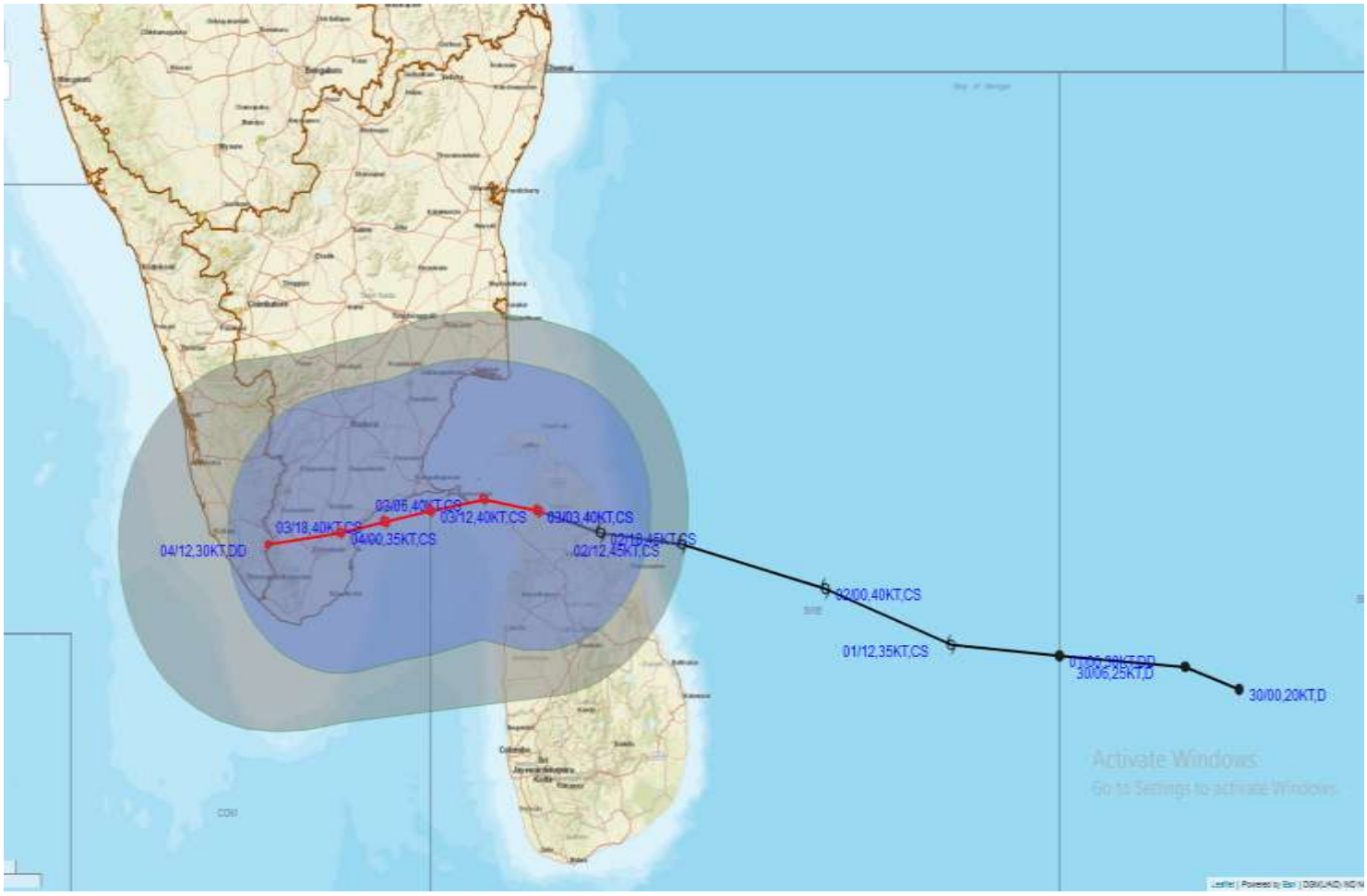
OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF CYCLONIC STORM "BUREVI" OVER SRI LANKA BASED ON 0300 UTC OF 3rd DECEMBER, 2020.



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SuCS: SUPER CYCLONIC STORM (≥ 120 KT)

LESS THAN 34 KT
34-47 KT
≥ 48 KT
OBSERVED TRACK
FORECAST TRACK
CONE OF UNCERTAINTY

AREA OF MAXIMUM SUSTAINED WIND SPEED:
28-33 KT (52-61 KMPH)
34-49 KT (62-91 KMPH)
50-63 KT (92-117 KMPH)
≥ 64 KT (≥118 KMPH)

IMPACT OVER THE SEA

MSW (knot/kmph)	Impact	Action
28-33 (52-61)	Very rough seas	Total suspension of fishing operations
34-49 (62-91)	High to very high seas	Total suspension of fishing operations
50-63 (92-117)	Very high seas	Total suspension of fishing operations
≥ 64 (≥118)	Phenomenal	Total suspension of fishing operations

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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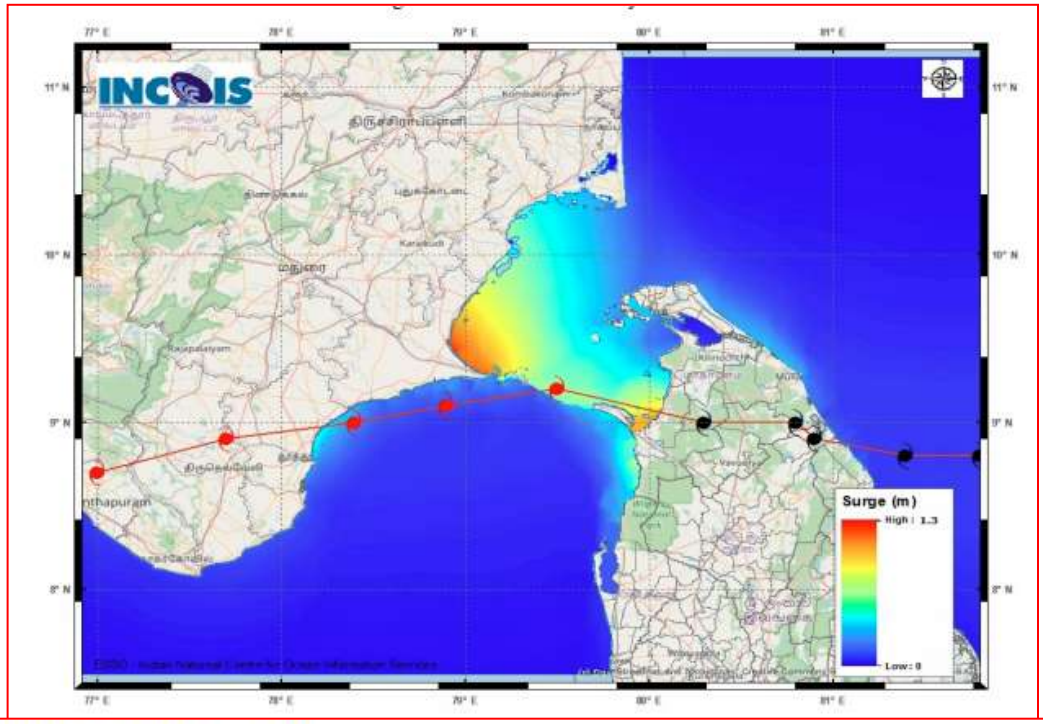
Storm Surge Forecast by INCOIS Model based on 0000 UTC of 3rd December



STORM SURGE HEIGHT INFORMATION:

* The below listed surge heights are over and above astronomical tide.

MANDAL/TALUK	DISTRICT	STATE / UNION TERRITORY	NEAREST PLACE OF HABITATION	STORM SURGE (m) *	EXPECTED INUNDATION EXTENT (km)
Tiruvadanai	Ramanathapuram	Tamil Nadu	Marungur	0.8-1.3	Upto 0.69
Ramanathapuram	Ramanathapuram	Tamil Nadu	Pathanendal	0.2-1.2	Upto 0.47
Arantangi	Pudukkottai	Tamil Nadu	Enadi	0.4-0.7	Upto 0.39
Peravurani	Thanjavur	Tamil Nadu	Sendalaivayal	0.6-0.6	Nil
Ottapidaram	Thoothukkudi	Tamil Nadu	Pattanamarudur	0.5-0.6	Upto 0.14
Pattukkottai	Thanjavur	Tamil Nadu	Palanjur	0.4-0.5	Upto 0.18
Tuticorin	Thoothukkudi	Tamil Nadu	Mappilaiurani	0.2-0.5	Upto 1.9
Vilattikulam	Thoothukkudi	Tamil Nadu	Vaippar	0.4-0.5	Nil

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 NO.15

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)
YEMEN METEOROLOGICAL SERVICES, REPUBLIC OF YEMEN (THROUGH RTH JEDDAH)
NATIONAL CENTRE FOR METEOROLOGY, UAE (THROUGH RTH JEDDAH)
PRESIDENCY OF METEOROLOGY AND ENVIRONMENT, SAUDI ARABIA (THROUGH RTH JEDDAH)
IRAN METEOROLOGICAL ORGANISATION, (THROUGH RTH JEDDAH)
QATAR METEOROLOGICAL DEPARTMENT (THROUGH RTH JEDDAH)

TROPICAL CYCLONE ADVISORY NO. 15 FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 0900 UTC OF 03.12.2020 BASED ON 0600 UTC OF 03.12.2020.

SUB: CYCLONIC STORM 'BUREVI' OVER GULF OF MANNAR

THE **CYCLONIC STORM 'BUREVI'** OVER NORTH SRI LANKA MOVED WEST-NORTHWESTWARDS WITH A SPEED OF 13 KMPH DURING PAST SIX HOURS AND LAY CENTERED AT 0600 UTC OF 03RD DECEMBER OVER GULF OF MANNAR NEAR LAT. 9.2°N AND LONG. 79.6°E, ABOUT 40 KM WEST-NORTHWEST OF MANNAR(43413), 40KM EAST-SOUTHEAST OF PAMBAN(43363) AND 260 KM EAST-NORTHEAST OF KANNIYAKUMARI(43377). **THE ASSOCIATED WIND SPEED IS ABOUT 70-80 GUSTING TO 90 KMPH.**

THE CYCLONIC STORM **'BUREVI'** WOULD MOVE NEARLY WESTWARDS ACROSS PAMBAN AREA BY AFTERNOON. IT WOULD THAN MOVE WEST-SOUTHWESTWARDS AND CROSS SOUTH TAMILNADU COAST BETWEEN PAMBAN AND KANNIYAKUMARI DURING 3RD DECEMBER NIGHT AND 4TH DECEMBER EARLY HOURS AS A CYCLONIC STORM WITH WIND SPEED OF 70-80 GUSTING TO 90 KMPH. THUS, ITS IMPACT WOULD CONTINUE OVER RAMANATHAPURAM, THOOTHUKUDI, TIRUNELVELI AND KANNIYAKUMARI DISTRICTS OF SOUTH TAMILNADU AND ADJOINING DISTRICTS OF SOUTH KERALA TILL EARLY HOURS OF 4TH DECEMBER.

FORECAST TRACK AND INTENSITY ARE GIVEN BELOW:

DATE/TIME(UTC)	POSITION (LAT. ^{0}N/ LONG. ^{0}E)	MAXIMUM SUSTAINED SURFACE WIND SPEED (KMPH)	CATEGORY OF CYCLONIC DISTURBANCE
03.12.20/0600	9.2/79.6	70-80 GUSTING TO 90	CYCLONIC STORM
03.12.20/1200	9.2/79.1	70-80 GUSTING TO 90	CYCLONIC STORM
03.12.20/1800	9.0/78.5	70-80 GUSTING TO 90	CYCLONIC STORM
04.12.20/0000	8.9/78.0	60-70 GUSTING TO 80	CYCLONIC STORM
04.12.20/0600	8.8/77.4	50-60 GUSTING TO 70	DEEP DEPRESSION
04.12.20/1800	8.7/76.3	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%

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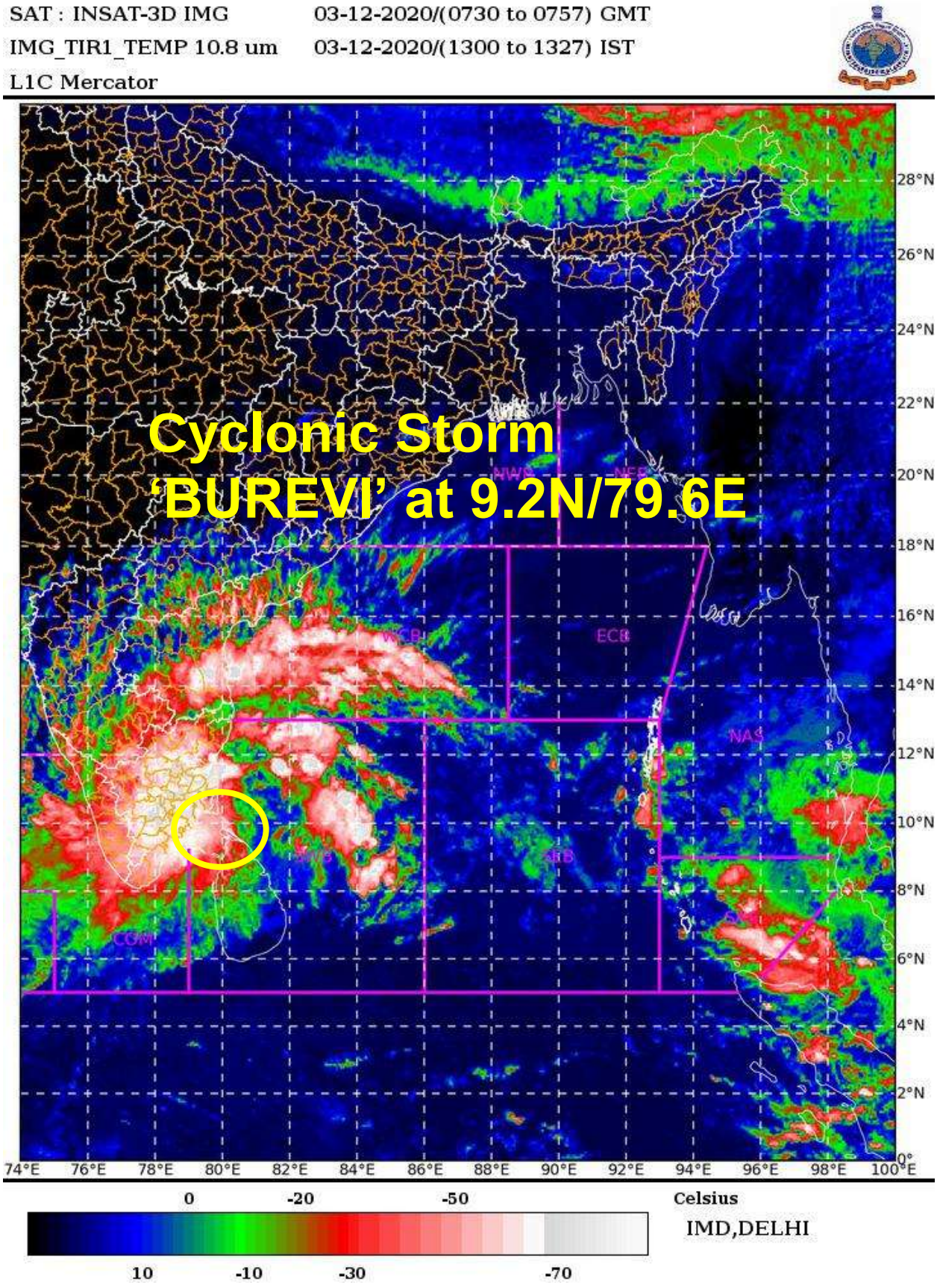

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION):NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

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OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINITY OF CYCLONIC STORM "BUREVI" OVER SRI LANKA BASED ON 0600 UTC OF 3rd DECEMBER, 2020.

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- LESS THAN 34 KT
- 34-47 KT
- ≥ 48 KT
- OBSERVED TRACK
- FORECAST TRACK
- CONE OF UNCERTAINTY

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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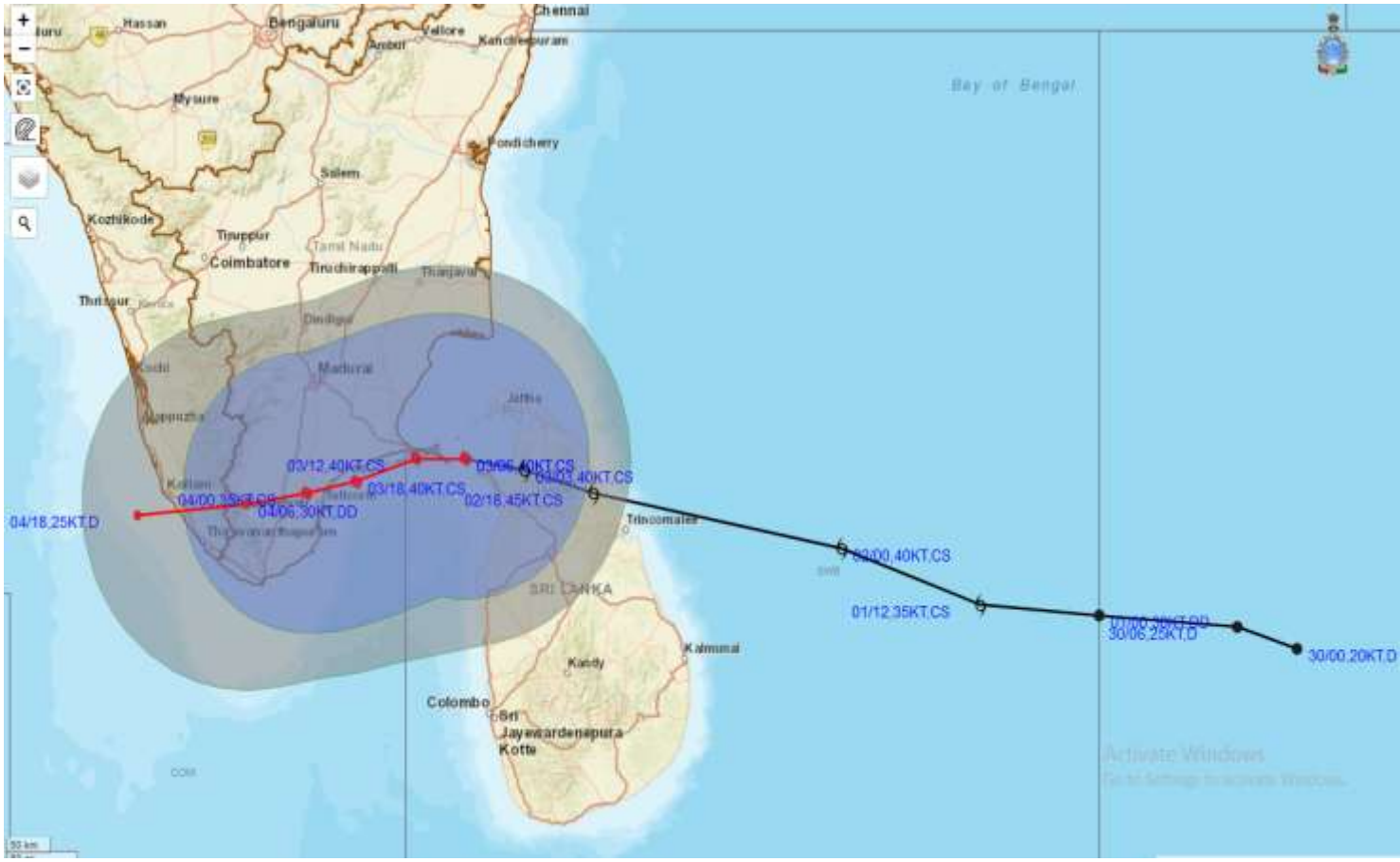
OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF CYCLONIC STORM "BUREVI" OVER SRI LANKA BASED ON 0600 UTC OF 3rd DECEMBER, 2020.



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LESS THAN 34 KT
34-47 KT
≥ 48 KT
OBSERVED TRACK
FORECAST TRACK
CONE OF UNCERTAINTY
AREA OF MAXIMUM SUSTAINED WIND SPEED:
28-33 KT (52-61 KMPH)
34-49 KT (62-91 KMPH)
50-63 KT (92-117 KMPH)
≥ 64 KT (≥118 KMPH)

IMPACT OVER THE SEA

MSW (knot/kmph)	Impact	Action
28-33 (52-61)	Very rough seas	Total suspension of fishing operations
34-49 (62-91)	High to very high seas	Total suspension of fishing operations
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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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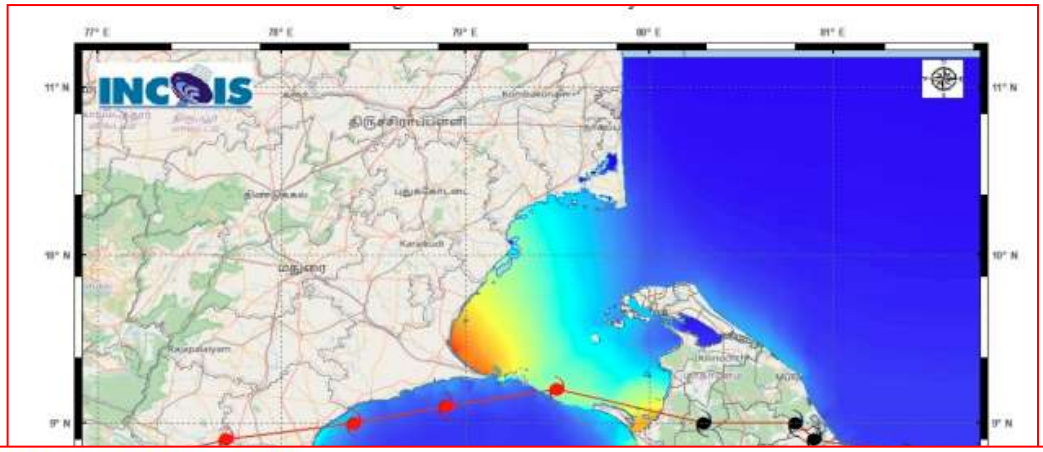
Storm Surge Forecast by INCOIS Model based on 0000 UTC of 3rd December



STORM SURGE HEIGHT INFORMATION:

* The below listed surge heights are over and above astronomical tide.

MANDAL/TALUK	DISTRICT	STATE / UNION TERRITORY	NEAREST PLACE OF HABITATION	STORM SURGE (m) *	EXPECTED INUNDATION EXTENT (km)
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Arantangi	Pudukkottai	Tamil Nadu	Enadi	0.4-0.7	Upto 0.39
Peravurani	Thanjavur	Tamil Nadu	Sendalaivayal	0.6-0.6	Nil
Ottapidaram	Thoothukkudi	Tamil Nadu	Pattanamarudur	0.5-0.6	Upto 0.14
Pattukkottai	Thanjavur	Tamil Nadu	Palanjur	0.4-0.5	Upto 0.18
Tuticorin	Thoothukkudi	Tamil Nadu	Mappilaiurani	0.2-0.5	Upto 1.9
Vilattikulam	Thoothukkudi	Tamil Nadu	Vaippar	0.4-0.5	Nil

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 NO.16

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)
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PRESIDENCY OF METEOROLOGY AND ENVIRONMENT, SAUDI ARABIA (THROUGH RTH JEDDAH)
IRAN METEOROLOGICAL ORGANISATION, (THROUGH RTH JEDDAH)
QATAR METEOROLOGICAL DEPARTMENT (THROUGH RTH JEDDAH)

TROPICAL CYCLONE ADVISORY NO. 16 FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 1100 UTC OF 03.12.2020 BASED ON 0900 UTC OF 03.12.2020.

SUB: CYCLONIC STORM 'BUREVI' OVER GULF OF MANNAR

THE **CYCLONIC STORM 'BUREVI'** OVER GULF OF MANNAR MOVED WESTWARDS WITH A SPEED OF 16 KMPH DURING PAST SIX HOURS AND LAY CENTERED AT 0900 UTC OF 03RD DECEMBER OVER THE SAME REGION NEAR LAT. 9.2°N AND LONG. 79.3°E, CLOSE TO PAMBAN (43363) ABOUT 70 KM WEST-NORTHWEST OF MANNAR (43413), AND 230 KM EAST-NORTHEAST OF KANNIYAKUMARI (43377). **THE ASSOCIATED WIND SPEED IS ABOUT 70-80 GUSTING TO 90 KMPH.**

THE CYCLONIC STORM **'BUREVI'** WOULD MOVE ACROSS PAMBAN AREA DURING NEXT 3 HOURS. IT WOULD THAN MOVE WEST-SOUTHWESTWARDS AND CROSS SOUTH TAMILNADU COAST BETWEEN PAMBAN AND KANNIYAKUMARI DURING 3RD DECEMBER NIGHT AND 4TH DECEMBER EARLY HOURS AS A CYCLONIC STORM WITH WIND SPEED OF 70-80 GUSTING TO 90 KMPH. THUS, ITS IMPACT WOULD CONTINUE OVER RAMANATHAPURAM AND THOOTHUKUDI DISTRICTS AND GRADUALLY OVER TIRUNELVELI AND KANNIYAKUMARI DISTRICTS OF SOUTH TAMILNADU AND ADJOINING DISTRICTS OF SOUTH KERALA TILL EARLY HOURS OF 4TH DECEMBER.

FORECAST TRACK AND INTENSITY ARE GIVEN BELOW:

DATE/TIME(UTC)	POSITION (LAT. ^{0}N/ LONG. ^{0}E)	MAXIMUM SUSTAINED SURFACE WIND SPEED (KMPH)	CATEGORY OF CYCLONIC DISTURBANCE
03.12.20/0900	9.2/79.3	70-80 GUSTING TO 90	CYCLONIC STORM
03.12.20/1200	9.2/79.1	70-80 GUSTING TO 90	CYCLONIC STORM
03.12.20/1800	9.0/78.5	70-80 GUSTING TO 90	CYCLONIC STORM
04.12.20/0000	8.9/78.0	60-70 GUSTING TO 80	CYCLONIC STORM
04.12.20/0600	8.8/77.4	50-60 GUSTING TO 70	DEEP DEPRESSION
04.12.20/1800	8.7/76.3	40-50 GUSTING TO 60	DEPRESSION

THE ESTIMATED MAXIMUM SUSTAINED WIND SPEED IS 40 KNOTS GUSTING TO 50 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS 998 HPA. THE SEA CONDITION IS VERY ROUGH TO HIGH 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%

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AS PER SATELLITE IMAGERY, THE INTENSITY OF THE SYSTEM IS T2.5. ASSOCIATED BROKEN LOW/MED CLOUDS WITH EMBEDED INTENSE TO VERY INTENSE CONVECTIVE CLOUD LAY OVER NORTH SRILANKA, PALK STRAIT, GULF OF MANNAR, TAMILNADU & ADJOINING ANDHRA PRADESH AND OVER SOUTHWEST & ADJOINING WESTCENTRAL BAY OF BENGAL BETWEEN LAT 8.0N TO 16.0N & LONG 80.0E TO 86.0E WITH MINIMUN CLOUD TOP TEMPERATURE MINUS 82 DEG CELCIUS.

STORM SURGE GUIDNACE FOR SRILANKA COAST:

STORM SURGE OF ABOUT 1.0 M HEIGHT ABOVE ASTRONOMICAL TIDE IS VERY LIKELY TO INUNDATE LOW LYING AREAS OF SOUTH COASTAL TAMILNADU (RAMANATHAPURAM, THOOTHUKUDI, TIRUNELVELI AND KANNIYAKUMARI DISTRICTS) DURING THE TIME OF LANDFALL AND NORTHWEST SRI LANKA COAST DURING NEXT 06 HOURS.

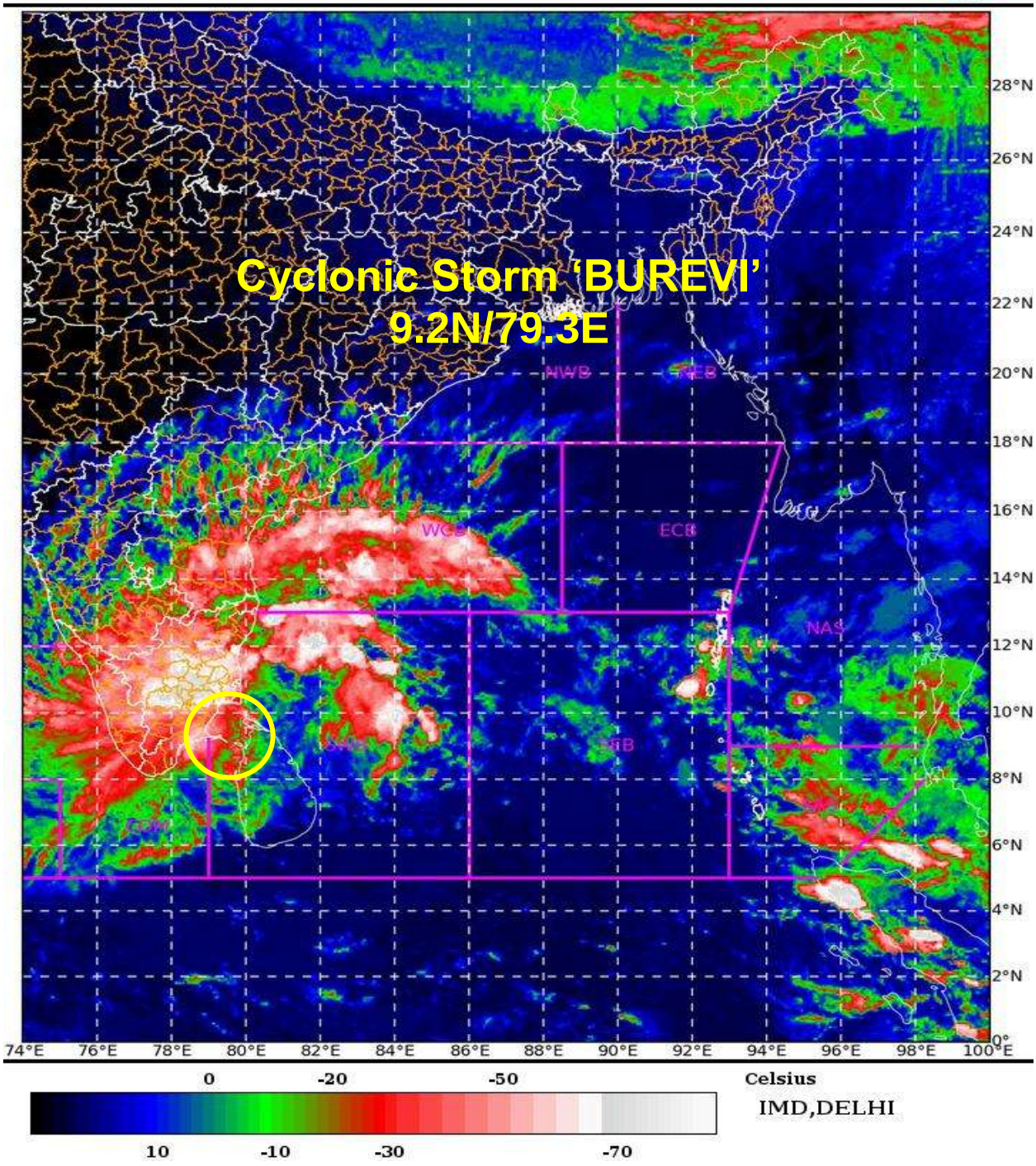
REMARKS:

THE SEA CONDITIONS, SST IS AROUND 28-29°C OVER SOUTHWEST BAY OF BENGAL (BOB) AND THE TROPICAL CYCLONE HEAT POTENTIAL IS ABOUT 60-80 KJ/CM^2 OVER SOUTHWEST BOB. LOWER LEVEL POSITIVE RELATIVE VORTICITY (150X10^{-6}S^{-1}) OVER THE SYSTEM CENTRE. THE UPPER LEVEL POSITIVE DIVERGENCE HAS DECREASED SLIGHTLY AND IS AROUND 20X10^{-5}S^{-1} TO THE NORTHWEST OF SYSTEM CENTRE AND THE LOWER LEVEL CONVERGENCE HAS ALSO DECREASED AND IS AROUND 10 X 10^{-5}S^{-1} TO THE NORTHWEST OF SYSTEM CENTRE. THE WIND SHEAR HAS ALSO INCREASED WITH VALUE 25-30 KNOTS ALONG THE FORECAST TRACK. MJO INDEX LIES IN PHASE 4 AND ITS AMPLITUDE IS CLOSE TO 1, HENCE FAVORABLE FOR THE SYSTEM TO REMAIN AS A CYCLONIC STORM DURING THE FORECAST PERIOD. THE UPPER TROPOSPHERIC RIDGE AT UPPER AND MIDDLE TROPOSPHERIC LEVELS RUNS ALONG 13.5°N OVER THE BOB. THE SYSTEM LIES IN THE SOUTHERN PERIPHERRY OF THE ABOVE RIDGE. AS A RESULT, IT IS MOVING WEST-NORTHWESTWARDS.

MOST OF THE NWP MODELS (IMD GFS, GEFS, NCUM, NEPS, WRF, HWRF, ECMWF) ARE ALSO INDICATING THE SYSTEM TO MOVE WEST-NORTHWESTWARDS DURING NEXT 12 HOURS AND THEN WEST-SOUTHWESTWARDS ACROSS SOUTH TAMILNADU-SOUTH KERALA COASTS. A FEW MODELS ARE ALSO INDICATING THE SYSTEM TO EMERGE INTO SOUTHEAST ARABIAN SEA AS A REMNANT LOW PRESSURE SYSTEM ON 5TH DECEMBER.

(R.K.JENAMANI)
Scientist-F, RSMC, New Delhi

SAT : INSAT-3D IMG 03-12-2020/(0930 to 0956) GMT
IMG_TIR1_TEMP 10.8 um 03-12-2020/(1500 to 1526) IST
L1C Mercator



Celsius
IMD,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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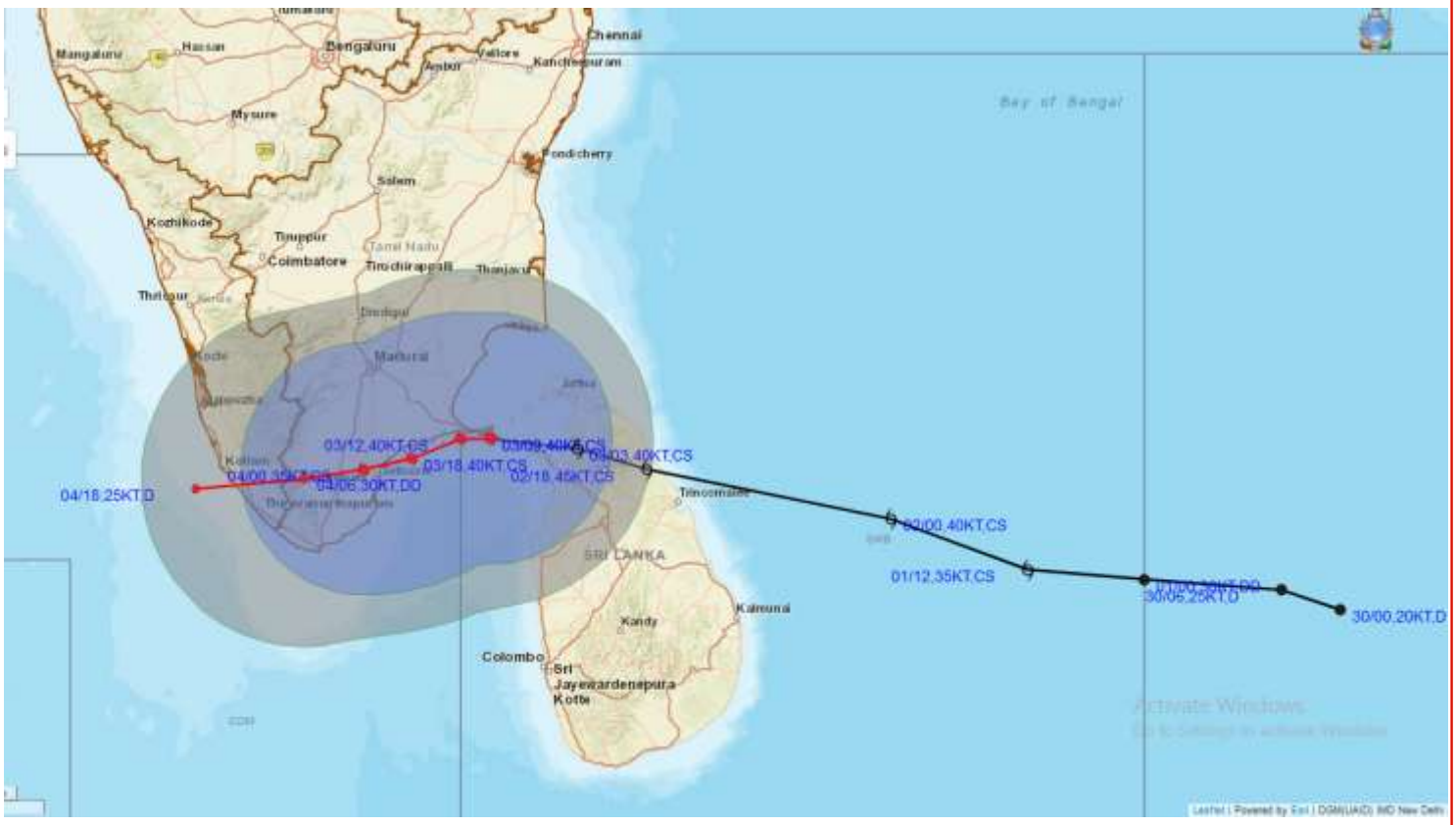
OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF CYCLONIC STORM "BUREVI" OVER SRI LANKA BASED ON 0900 UTC OF 3rd DECEMBER, 2020.



DATE/TIME IN UTC
IST=UTC + 0530
L: LOW PRESSURE AREA
WML: WELL MARKED LOW PRESSURE AREA
D: DEPRESSION (17-27 KT)
DD: DEEP DEPRESSION (28-33 KT)
CS: CYCLONIC STORM (34-47 KT)
SCS: SEVERE CYCLONIC STORM (48-63KT)
VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
SuCS: SUPER CYCLONIC STORM (≥ 120 KT)

LESS THAN 34 KT
34-47 KT
≥ 48 KT
OBSERVED TRACK
FORECAST TRACK
CONE OF UNCERTAINTY
AREA OF MAXIMUM SUSTAINED WIND SPEED:
28-33 KT (52-61 KMPH)
34-49 KT (62-91 KMPH)
50-63 KT (92-117 KMPH)
≥ 64 KT (≥118 KMPH)

IMPACT OVER THE SEA

MSW (knot/kmph)	Impact	Action
28-33 (52-61)	Very rough seas	Total suspension of fishing operations
34-49 (62-91)	High to very high seas	Total suspension of fishing operations
50-63 (92-117)	Very high seas	Total suspension of fishing operations
≥ 64 (≥118)	Phenomenal	Total suspension of fishing operations

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OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINITY OF CYCLONIC STORM "BUREVI" OVER SRI LANKA BASED ON 0900 UTC OF 3rd DECEMBER, 2020.

DATE/TIME IN UTC
IST=UTC + 0530
L: LOW PRESSURE AREA
WML: WELL MARKED LOW PRESSURE AREA
D: DEPRESSION (17-27 KT)
DD: DEEP DEPRESSION (28-33 KT)
CS: CYCLONIC STORM (34-47 KT)
SCS: SEVERE CYCLONIC STORM (48-63KT)
VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
SuCS: SUPER CYCLONIC STORM (≥ 120 KT)

LESS THAN 34 KT
34-47 KT
≥ 48 KT
OBSERVED TRACK
FORECAST TRACK
CONE OF UNCERTAINTY

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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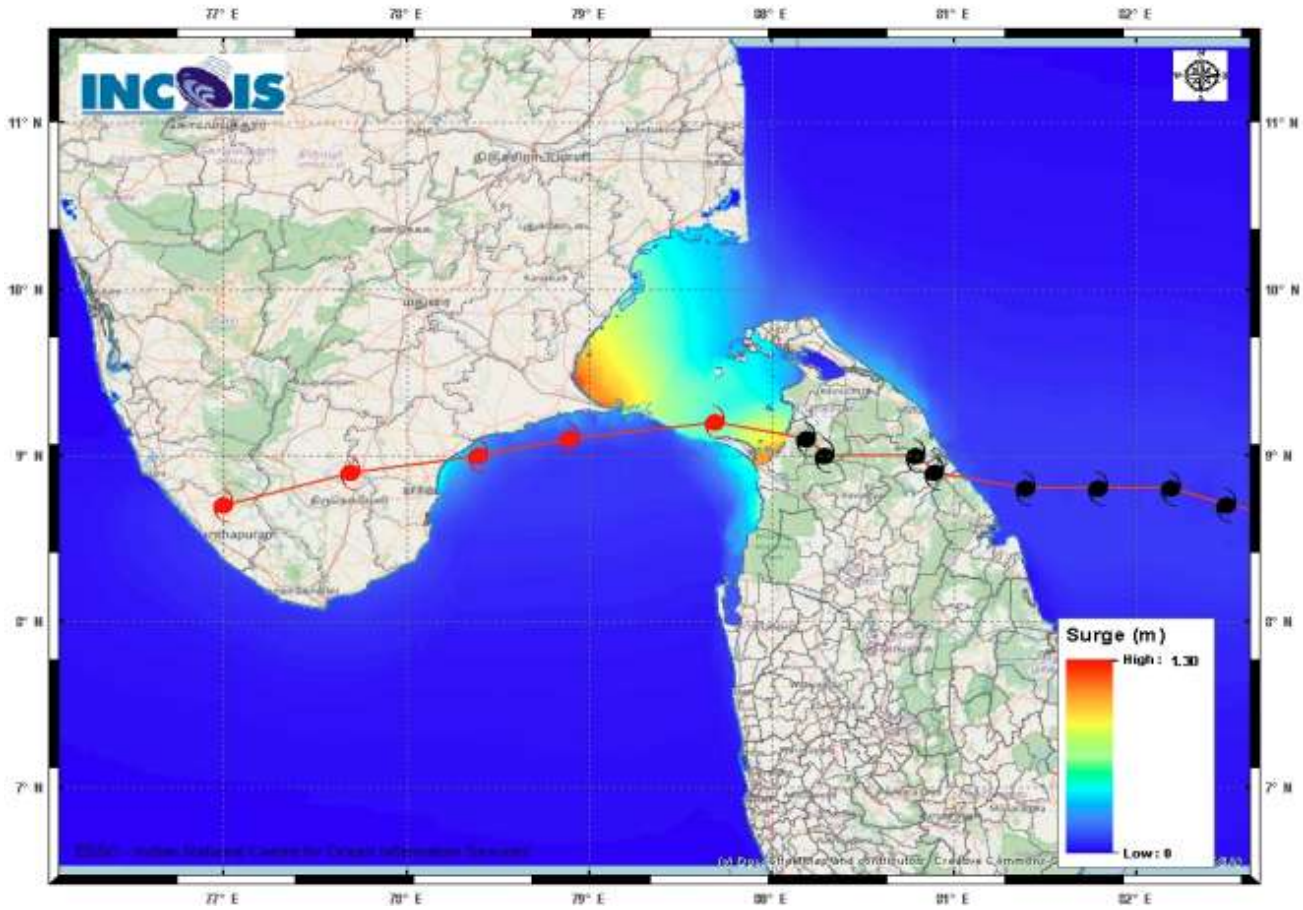
Storm Surge Forecast by INCOIS Model based on 0300 UTC of 3rd December

MANDAL/TALUK	DISTRICT	STATE / UNION TERRITORY	NEAREST PLACE OF HABITATION	STORM SURGE (m) *	EXPECTED INUNDATION EXTENT (km)
Tiruvadanai	Ramanathapuram	Tamil Nadu	Marungur	0.8-1.3	Upto 0.69
Ramanathapuram	Ramanathapuram	Tamil Nadu	Pathanendal	0.2-1.1	Upto 0.47
Tirutturaippundi	Nagappattinam	Tamil Nadu	Pointkalimere R.F.	0.7-1.0	Upto 0.20
Arantangi	Pudukkottai	Tamil Nadu	Enadi	0.4-0.8	Upto 0.39
Peravurani	Thanjavur	Tamil Nadu	Sendalaivayal	0.6-0.6	Nil
Ottapidaram	Thoothukkudi	Tamil Nadu	Pattanamarudur	0.5-0.6	Upto 0.14
Pattukkottai	Thanjavur	Tamil Nadu	Palanjur	0.4-0.5	Upto 0.18
Tuticorin	Thoothukkudi	Tamil Nadu	Mappilaiurani	0.2-0.5	Upto 1.9
Vilattikulam	Thoothukkudi	Tamil Nadu	Vaippar	0.4-0.5	Nil



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 NO.17

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)
YEMEN METEOROLOGICAL SERVICES, REPUBLIC OF YEMEN (THROUGH RTH JEDDAH)
NATIONAL CENTRE FOR METEOROLOGY, UAE (THROUGH RTH JEDDAH)
PRESIDENCY OF METEOROLOGY AND ENVIRONMENT, SAUDI ARABIA (THROUGH RTH JEDDAH)
IRAN METEOROLOGICAL ORGANISATION, (THROUGH RTH JEDDAH)
QATAR METEOROLOGICAL DEPARTMENT (THROUGH RTH JEDDAH)

TROPICAL CYCLONE ADVISORY NO. 17 FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 1500 UTC OF 03.12.2020 BASED ON 1200 UTC OF 03.12.2020.

SUB: CYCLONIC STORM 'BUREVI' WEAKENED INTO A DEEP DEPRESSION OVER GULF OF MANNAR

THE **CYCLONIC STORM 'BUREVI'** OVER GULF OF MANNAR CLOSE TO PAMBAN MOVED WESTWARDS WITH A SPEED OF 09 KMPH DURING PAST SIX HOURS, WEAKENED INTO A **DEEP DEPRESSION** AND LAY CENTERED AT 1200 UTC OF 03RD DECEMBER OVER GULF OF MANNAR NEAR LAT. 9.2°N AND LONG. 79.1°E CLOSE TO RAMANATHAPURAM DISTRICT COAST, ABOUT 20KM SOUTHWEST OF PAMBAN (43363) AND 210 KM EAST-NORTHEAST OF KANNIYAKUMARI (43377). THE ASSOCIATED WIND SPEED IS ABOUT 55-65 GUSTING TO 75 KMPH.

THE DEEP DEPRESSION WOULD MOVE WEST-SOUTHWESTWARDS AND CROSS RAMANATHAPURAM AND THOOTHUKUDI DISTRICTS DURING 3RD DECEMBER NIGHT TO 4TH DECEMBER EARLY HOURS WITH WIND SPEED OF 50-60 GUSTING TO 70 KMPH. IT IS VERY LIKELY TO WEAKEN FURTHER INTO A DEPRESSION (WIND SPEED 40-50KMPH GUSTING TO 60 KMPH) BY 0000 UTC 4TH DECEMBER.

FORECAST TRACK AND INTENSITY ARE GIVEN BELOW:

DATE/TIME(UTC)	POSITION (LAT. ^{0}N/ LONG. ^{0}E)	MAXIMUM SUSTAINED SURFACE WIND SPEED (KMPH)	CATEGORY OF CYCLONIC DISTURBANCE
03.12.20/1200	9.2/79.1	55-65 GUSTING TO 75	DEEP DEPRESSION
03.12.20/1800	9.1/78.5	50-60 GUSTING TO 70	DEEP DEPRESSION
04.12.20/0000	8.9/78.0	45-55 GUSTING TO 65	DEPRESSION
04.12.20/0600	8.8/77.4	40-50 GUSTING TO 60	DEPRESSION
04.12.20/1200	8.7/76.8	30-40 GUSTING TO 50	WELL MARKED LOW

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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THE ESTIMATED MAXIMUM SUSTAINED WIND SPEED IS 30 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS 1000 HPA. THE SEA CONDITION IS ROUGH TO VERY ROUGH TO THE SYSTEM CENTRE.

AS PER SATELLITE IMAGERY, THE INTENSITY OF THE SYSTEM IS T2.0. ASSOCIATED BROKEN SCATTERED TO BROKEN LOW/MEDIUM CLOUDS WITH EMBEDED INTENSE TO VERY INTENSE CONVECTIVE CLOUD LAY OVER TAMILNADU AND MODERATE TO INTENSE CONVECTION OVER PALK STRAIT, GULF OF MANNAR & COMORIN AREA WITH MINIMUN CLOUD TOP TEMPERATURE MINUS 93 DEG CELCIUS.

REMARKS:

THE CYCLONIC STRORM 'BUREVI' CONTINUES TO INTERACT WITH LAND SURFACE AS IT LIES VERY CLOSE TO SOUTH TAMILNADU COAST. AS AS RESULT SYSTEM WEAKENED INTO A DEEP DEPRESSION AT 1200 UTC. AS IT WILL MOVE WESTWARDS THIS CONTINUES LAND INTERACTION WOULD LEAD TO FURTHER WEAKIENING INTO A DEPRESSION DURING NEXT 12 HOURS. ALSO THE HIGH WIND SHEAR OVER THE REGION IS FAVOURING FURTHER WEAKENING OF THE SYSTEM. THE CONVECTIVE CLOUD MASS IS SHEARED TO THE NORTH FROM THE LLCC. THE WINDS ARE HIGHER IN THE NORTHERN SECTOR.
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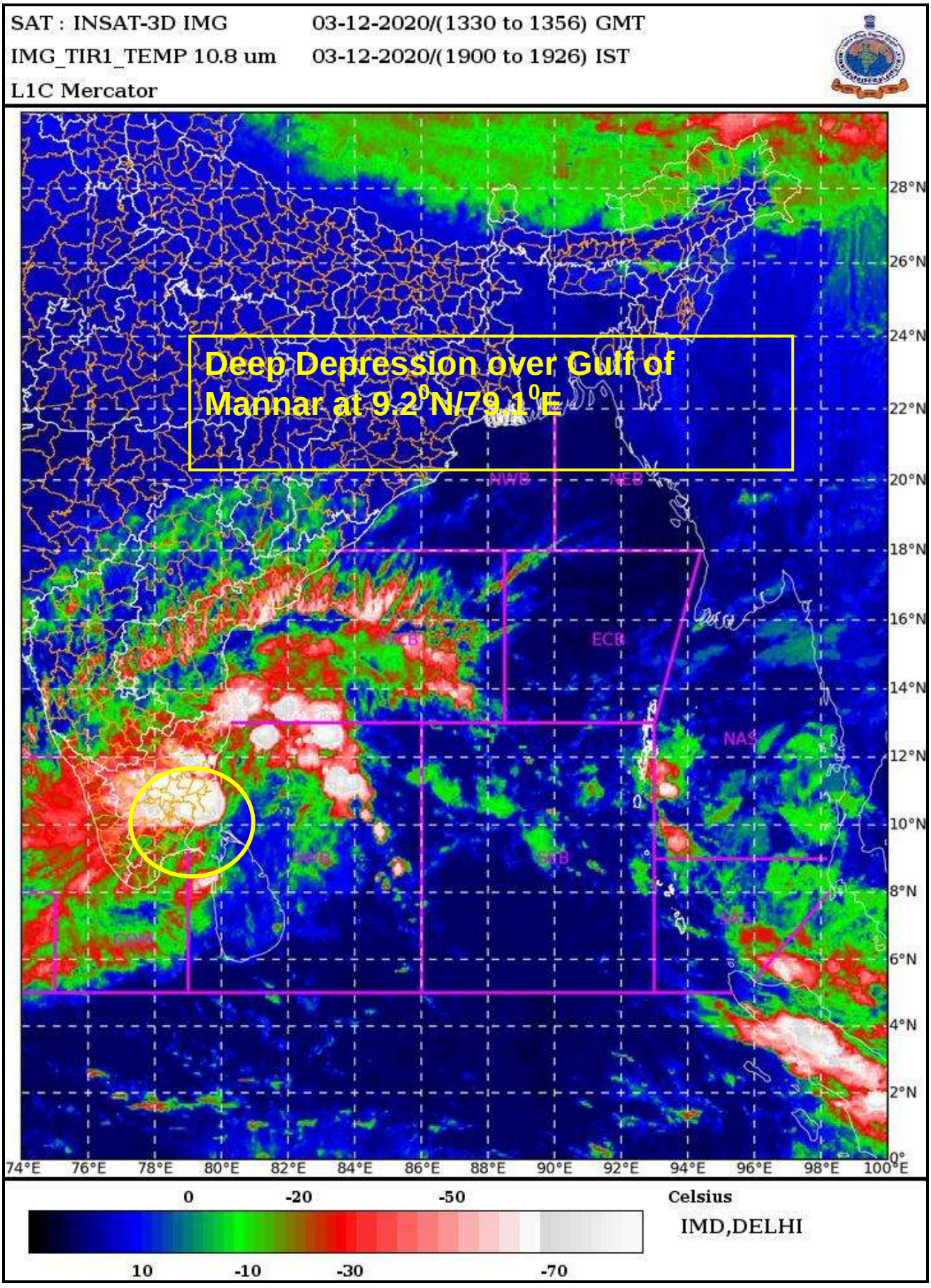
(R.K.JENAMANI)
Scientist-F, RSMC, New Delhi



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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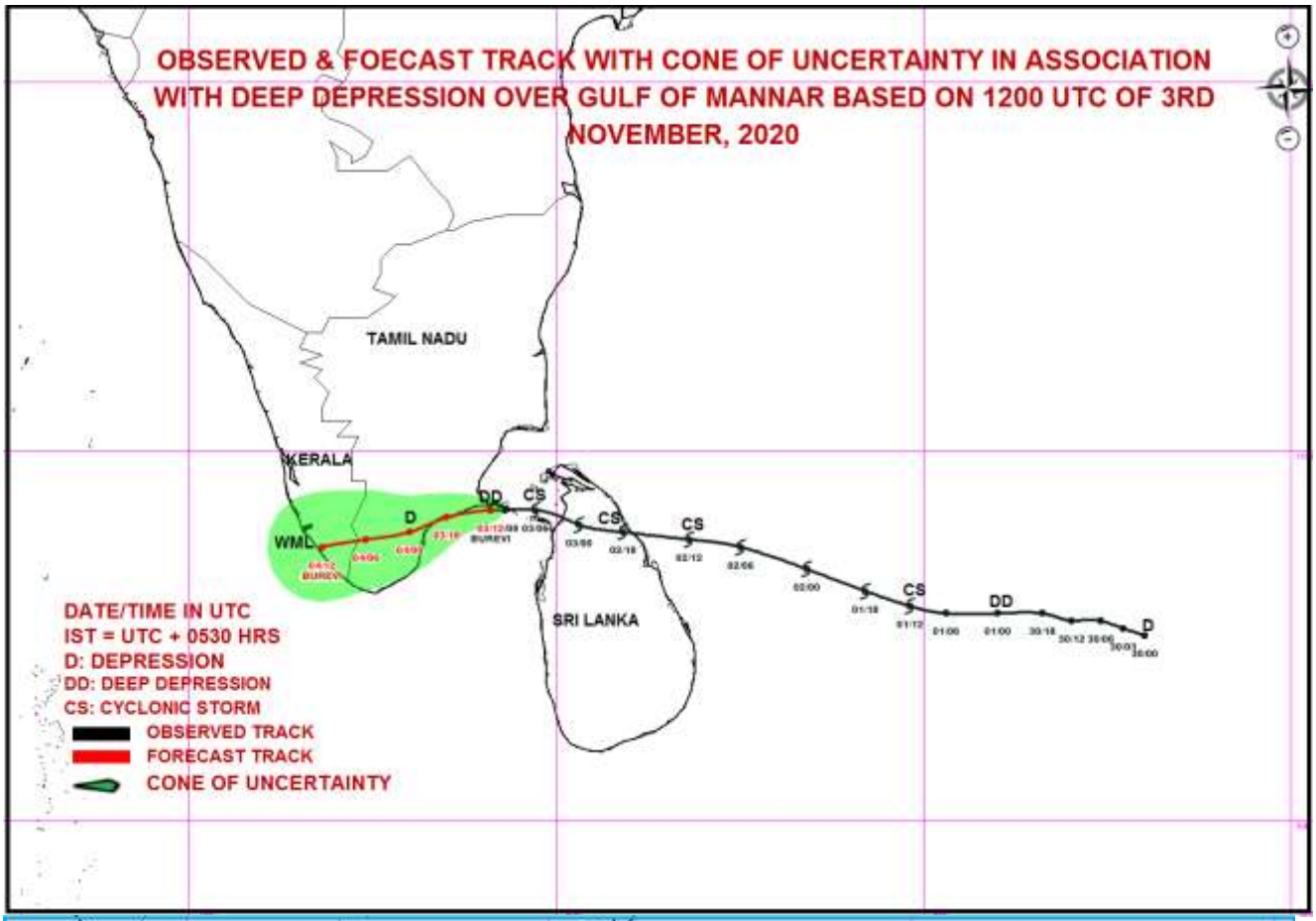

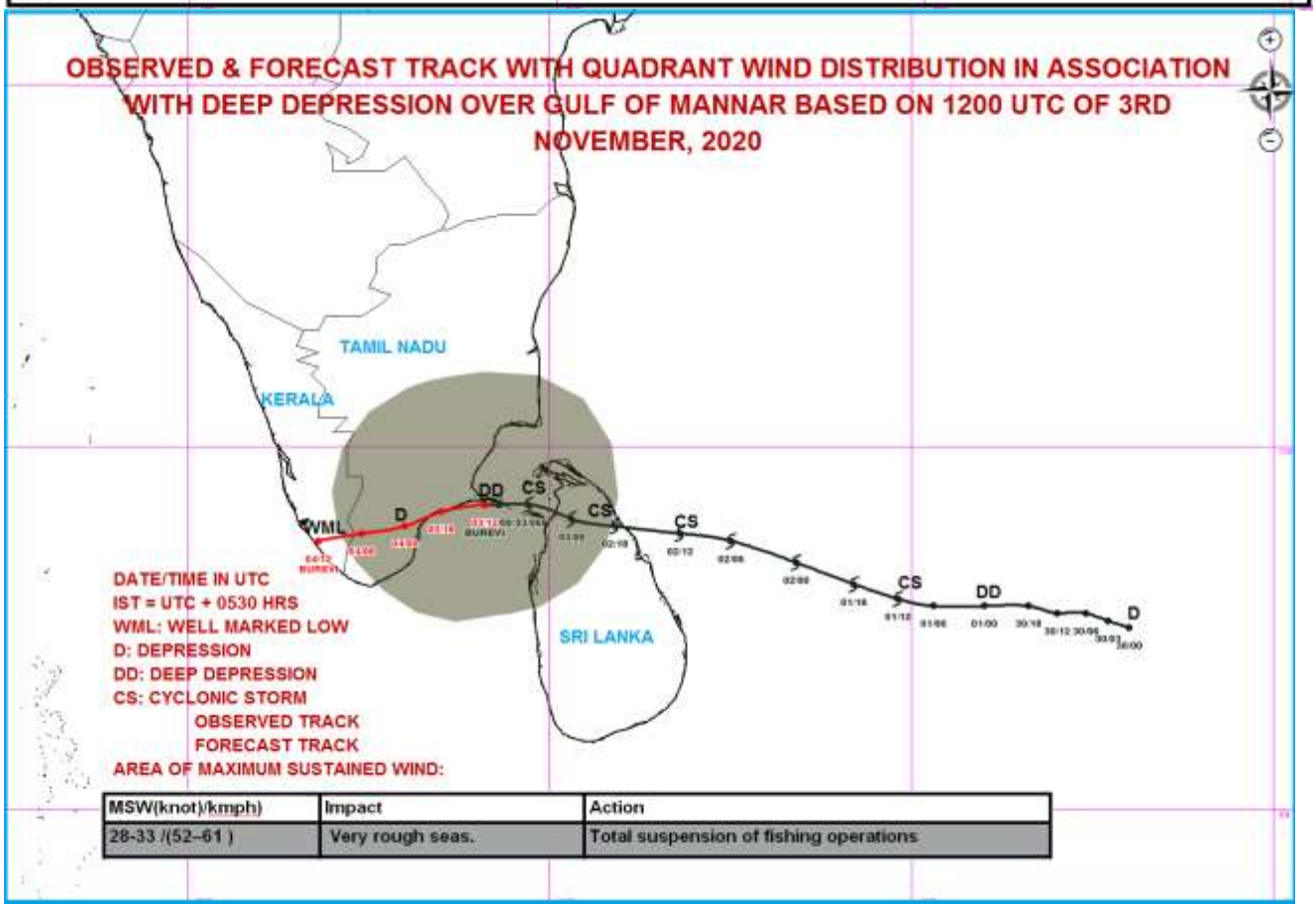

MSW(knot)/kmph)	Impact	Action
28-33 /(52–61)	Very rough seas.	Total suspension of fishing operations

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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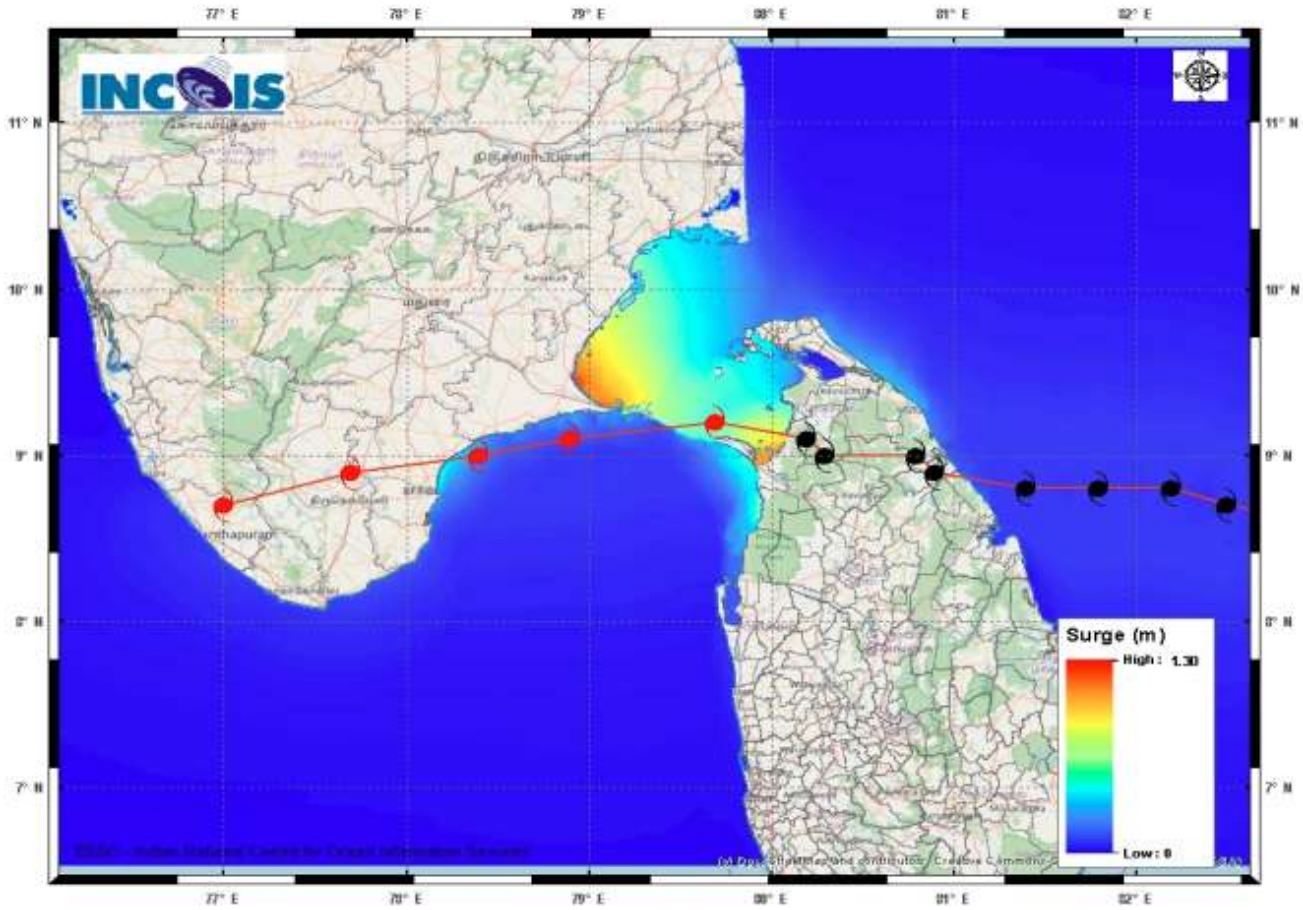
Storm Surge Forecast by INCOIS Model based on 0300 UTC of 3rd December

MANDAL/TALUK	DISTRICT	STATE / UNION TERRITORY	NEAREST PLACE OF HABITATION	STORM SURGE (m) *	EXPECTED INUNDATION EXTENT (km)
Tiruvadanai	Ramanathapuram	Tamil Nadu	Marungur	0.8-1.3	Upto 0.69
Ramanathapuram	Ramanathapuram	Tamil Nadu	Pathanendal	0.2-1.1	Upto 0.47
Tirutturaippundi	Nagappattinam	Tamil Nadu	Pointkalimere R.F.	0.7-1.0	Upto 0.20
Arantangi	Pudukkottai	Tamil Nadu	Enadi	0.4-0.8	Upto 0.39
Peravurani	Thanjavur	Tamil Nadu	Sendalaivayal	0.6-0.6	Nil
Ottapidaram	Thoothukkudi	Tamil Nadu	Pattanamarudur	0.5-0.6	Upto 0.14
Pattukkottai	Thanjavur	Tamil Nadu	Palanjur	0.4-0.5	Upto 0.18
Tuticorin	Thoothukkudi	Tamil Nadu	Mappilaiurani	0.2-0.5	Upto 1.9
Vilattikulam	Thoothukkudi	Tamil Nadu	Vaippar	0.4-0.5	Nil



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 TROPICAL CYCLONES NEW DELHI DATED 03.12.2020

SPECIAL TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 1700 UTC OF 03.12.2020 BASED ON 1500 UTC OF 03.12.2020 .

DEEP DEPRESSION OVER GULF OF MANNAR

THE DEEP DEPRESSION OVER GULF OF MANNAR CLOSE TO RAMANATHAPURAM DISTRICT COAST MOVED WESTWARDS WITH A SPEED OF 07 KMPH DURING PAST SIX HOURS AND LAY CENTERED AT 1500 UTC OF 03RD DECEMBER OVER GULF OF MANNAR NEAR LAT. 9.2°N AND LONG. 78.9°E CLOSE TO RAMANATHAPURAM DISTRICT COAST, ABOUT 20 KM SOUTH OF RAMANATHAPURAM, 30 KM WEST-SOUTHWEST OF PAMBAN AND 190 KM EAST-NORTHEAST OF KANNIYAKUMARI. THE ASSOCIATED WIND SPEED IS ABOUT 55-65 GUSTING TO 75 KMPH.

THE DEEP DEPRESSION WOULD MOVE WEST-SOUTHWESTWARDS AND CROSS RAMANATHAPURAM AND THOOTHUKUDI DISTRICTS BY EARLY HOURS OF 4TH DECEMBER WITH WIND SPEED OF 50-60 GUSTING TO 70 KMPH. IT IS VERY LIKELY TO WEAKEN FURTHER INTO A DEPRESSION (WIND SPEED 40-50KMPH GUSTING TO 60 KMPH) BY 4TH DECEMBER MORNING.

FORECAST TRACK AND INTENSITY ARE GIVEN BELOW:

DATE/TIME(UTC)	POSITION (LAT. ^{0}N/ LONG. ^{0}E)	MAXIMUM SUSTAINED SURFACE WIND SPEED (KMPH)	CATEGORY OF CYCLONIC DISTURBANCE
03.12.20/1500	9.2/78.9	55-65 GUSTING TO 75	DEEP DEPRESSION
03.12.20/1800	9.1/78.5	50-60 GUSTING TO 70	DEEP DEPRESSION
04.12.20/0000	8.9/78.0	45-55 GUSTING TO 65	DEPRESSION
04.12.20/0600	8.8/77.4	40-50 GUSTING TO 60	DEPRESSION
04.12.20/1200	8.7/76.8	30-40 GUSTING TO 50	WELL MARKED LOW

THE ESTIMATED MAXIMUM SUSTAINED WIND SPEED IS 30 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS 1000 HPA. THE SEA CONDITION IS ROUGH TO VERY ROUGH TO THE SYSTEM CENTRE.

AS PER SATELLITE IMAGERY, ASSOCIATED BROKEN SCATTERED TO BROKEN LOW/MEDIUM CLOUDS WITH EMBEDED INTENSE TO VERY INTENSE CONVECTIVE CLOUD LAY OVER TAMILNADU AND MODERATE TO INTENSE CONVECTION OVER PALK STRAIT, GULF OF MANNAR & COMORIN AREA WITH MINIMUN CLOUD TOP TEMPERATURE MINUS 93 DEG CELCIUS.

REMARKS:

THE CYCLONIC STRORM 'BUREVI' CONTINUES TO INTERACT WITH LAND SURFACE AS IT LIES VERY CLOSE TO SOUTH TAMILNADU COAST. AS AS RESULT SYSTEM WEAKENED INTO A DEEP DEPRESSION AT 1200 UTC. AS IT WILL MOVE WEST-SOUTHWESTWARDS, THIS CONTINUES LAND INTERACTION WOULD LEAD TO FURTHER WEAKIENING INTO A DEPRESSION DURING NEXT 12 HOURS. ALSO THE HIGH WIND SHEAR OVER THE REGION IS FAVOURING FURTHER WEAKENING OF THE SYSTEM. THE CONVECTIVE CLOUD MASS IS SHEARED TO THE NORTH FROM THE LLCC. THE WINDS ARE HIGHER IN THE NORTHERN SECTOR.

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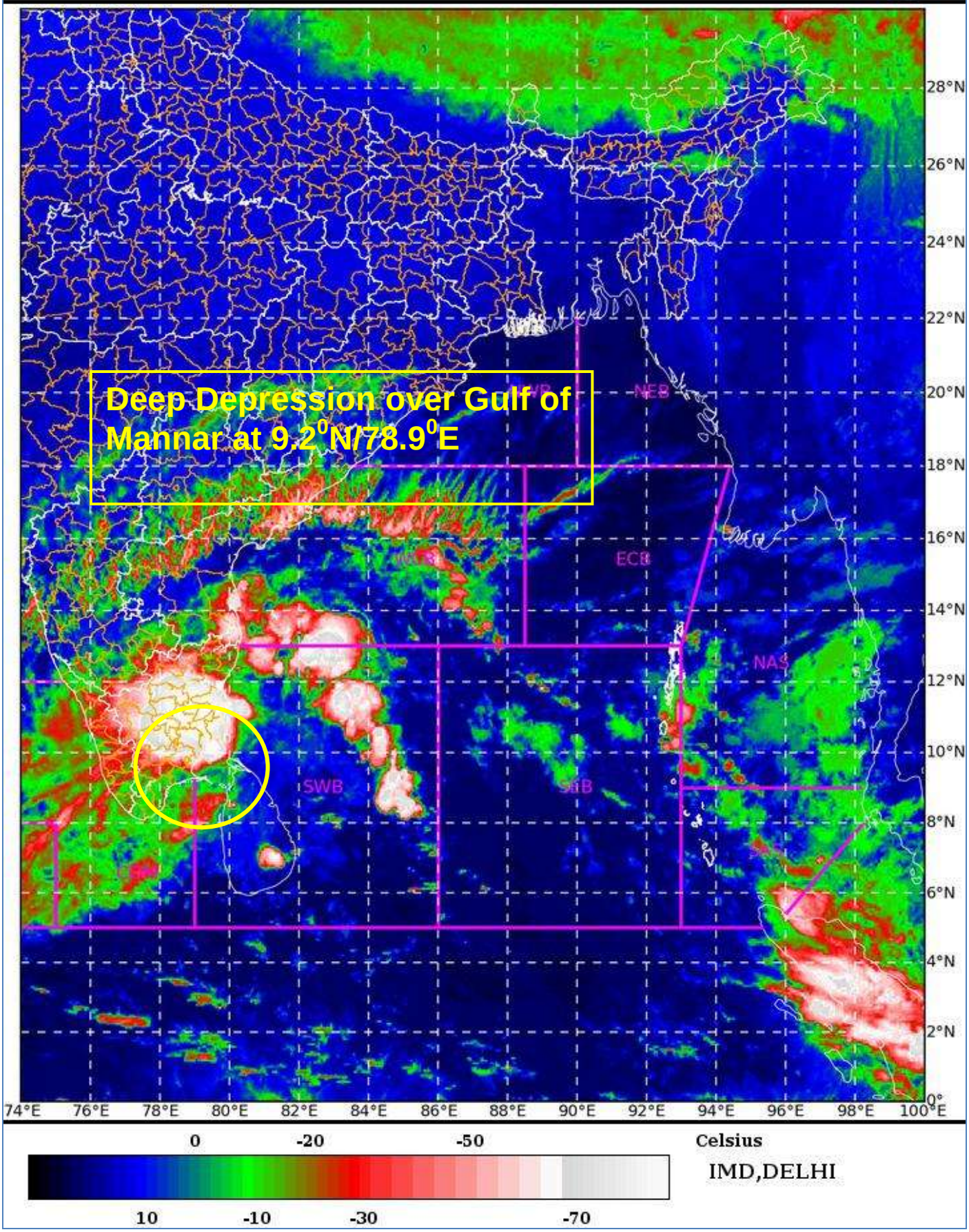
(D.R. PATTANAIK)
Scientist-F, RSMC, New Delhi

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

SAT : INSAT-3D IMG 03-12-2020/(1530 to 1556) GMT

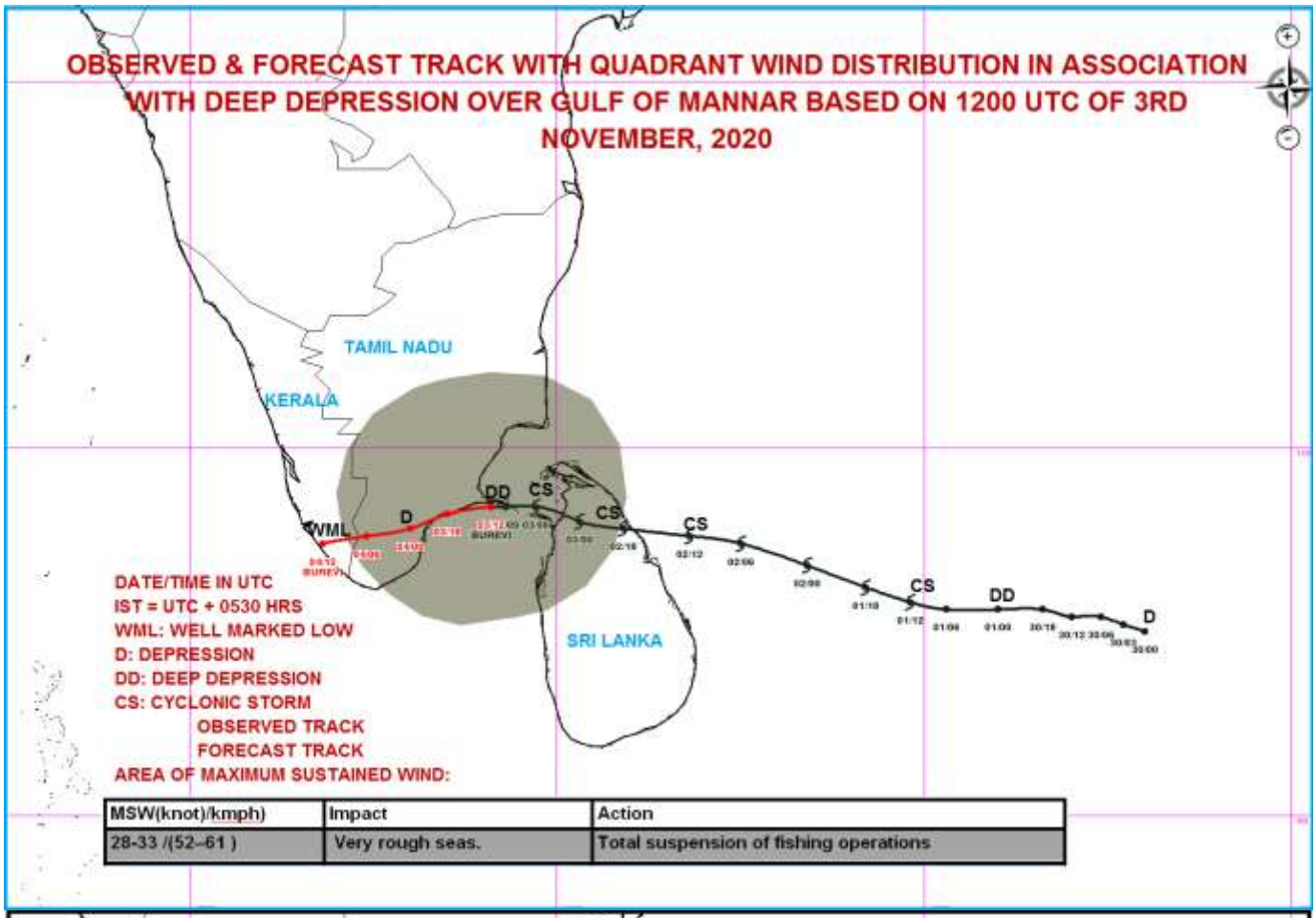
IMG_TIR1_TEMP 10.8 um 03-12-2020/(2100 to 2126) IST

L1C Mercator

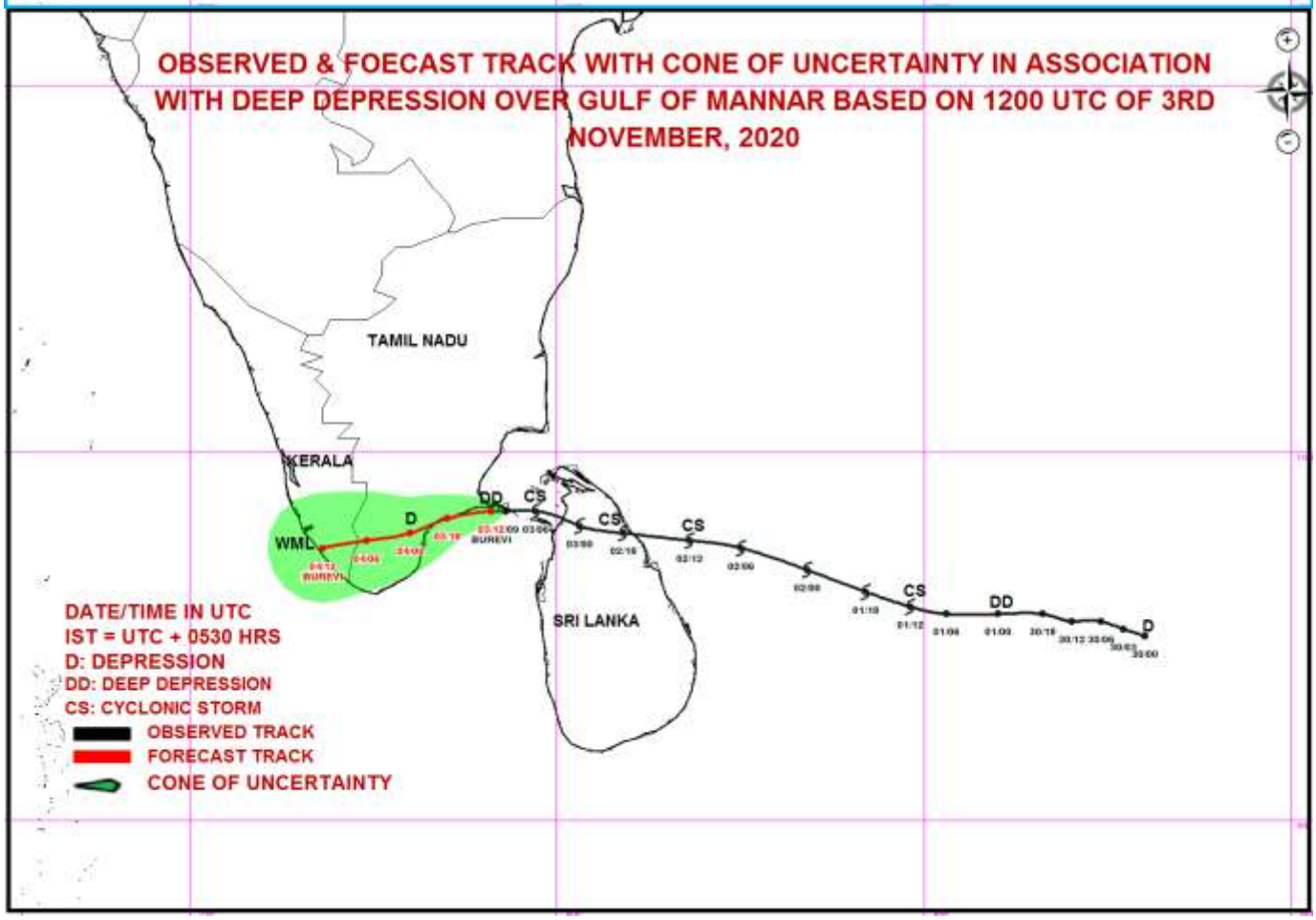


PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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



MSW(knot)/kmph)	Impact	Action
28-33 /(52--61)	Very rough seas.	Total suspension of fishing operations



PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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

STORM SURGE HEIGHT INFORMATION:

* The below listed surge heights are over and above astronomical tide.

MANDAL/TALUK	DISTRICT	STATE / UNION TERRITORY	NEAREST PLACE OF HABITATION	STORM SURGE (m) *	EXPECTED INUNDATION EXTENT (km)
Tiruvadanai	Ramanathapuram	Tamil Nadu	Marungur	0.5-0.9	Upto 0.7
Ramanathapuram	Ramanathapuram	Tamil Nadu	Nagachi	0.6-0.8	Upto 0.3
Arantangi	Pudukkottai	Tamil Nadu	Enadi	0.4-0.7	Upto 0.4
Ottapidaram	Thoothukkudi	Tamil Nadu	Tharuvaikulam	0.3-0.4	Nil
Pattukkottai	Thanjavur	Tamil Nadu	Palanjur	0.2-0.4	Upto 0.18
Peravurani	Thanjavur	Tamil Nadu	Sendalaivayal	0.3-0.4	Nil
Tuticorin	Thoothukkudi	Tamil Nadu	Mappilaiurani	0.3-0.4	Nil

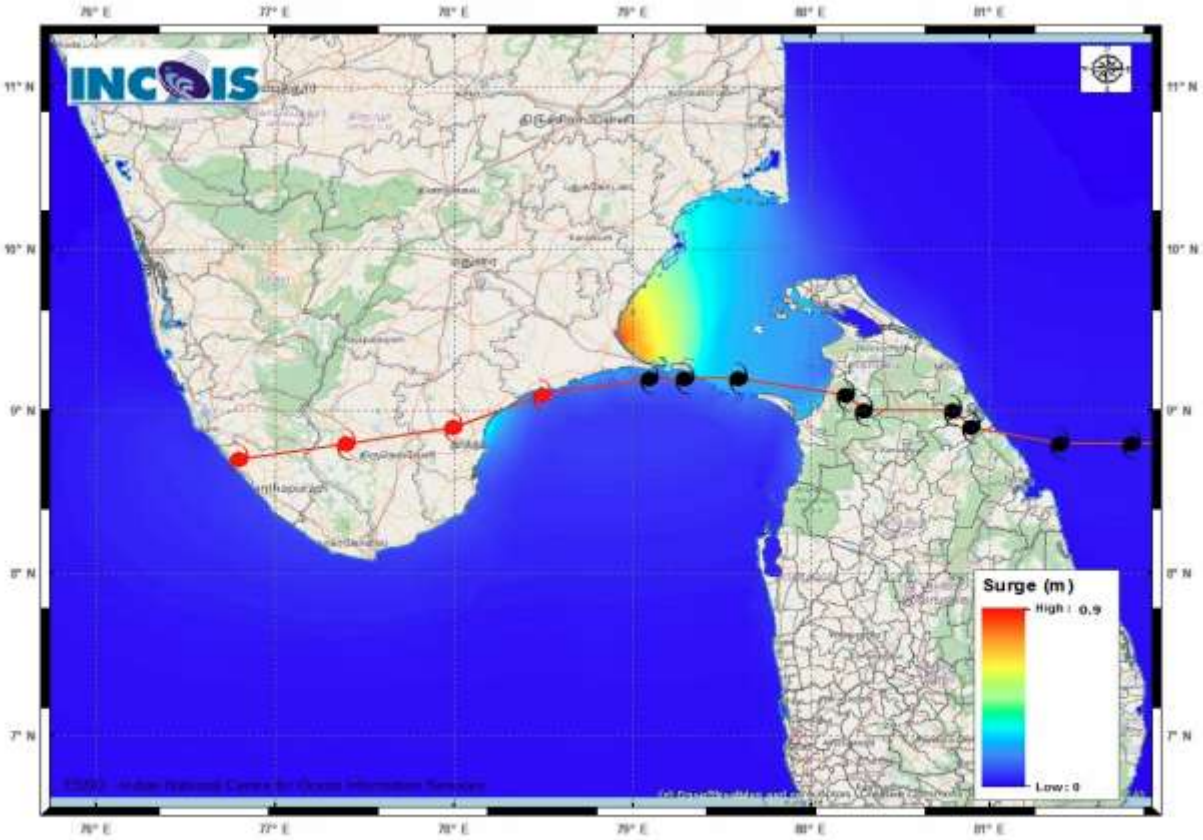


Figure:Storm Surge Map

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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

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

DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 03.12.2020

SPECIAL TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 2100 UTC OF 03.12.2020 BASED ON 1800 UTC OF 03.12.2020 .

DEEP DEPRESSION OVER GULF OF MANNAR

THE DEEP DEPRESSION OVER GULF OF MANNAR CLOSE TO RAMANATHAPURAM DISTRICT COAST MOVED WEST-SOUTH WESTWARDS WITH A SPEED OF 09 KMPH DURING PAST SIX HOURS AND LAY CENTERED AT 1800 UTC OF 03RD DECEMBER OVER GULF OF MANNAR NEAR LAT. 9.1°N AND LONG. 78.6°E CLOSE TO RAMANATHAPURAM DISTRICT COAST, ABOUT 40 KM SOUTHWEST OF RAMANATHAPURAM, 70 KM WEST-SOUTHWEST OF PAMBAN AND 160 KM NORTHEAST OF KANNIYAKUMARI. THE ASSOCIATED WIND SPEED IS ABOUT 50-60 GUSTING TO 70 KMPH.

THE DEEP DEPRESSION WOULD MOVE WEST-SOUTHWESTWARDS AND CROSS RAMANATHAPURAM AND ADJOINING THOOTHUKUDI DISTRICTS WITHIN A FEW HOURS WITH WIND SPEED OF 50-60 GUSTING TO 70 KMPH. IT IS VERY LIKELY TO WEAKEN FURTHER INTO A DEPRESSION (WIND SPEED 40-50KMPH GUSTING TO 60 KMPH) BY 4TH DECEMBER MORNING.

FORECAST TRACK AND INTENSITY ARE GIVEN BELOW:

DATE/TIME(UTC)	POSITION (LAT. ^{0}N/ LONG. ^{0}E)	MAXIMUM SUSTAINED SURFACE WIND SPEED (KMPH)	CATEGORY OF CYCLONIC DISTURBANCE
03.12.20/1800	9.1/78.6	50-60 GUSTING TO 70	DEEP DEPRESSION
04.12.20/0000	8.9/78.0	45-55 GUSTING TO 65	DEPRESSION
04.12.20/0600	8.8/77.4	40-50 GUSTING TO 60	DEPRESSION
04.12.20/1200	8.7/76.8	30-40 GUSTING TO 50	WELL MARKED LOW

THE ESTIMATED MAXIMUM SUSTAINED WIND SPEED IS 30 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS 1000 HPA. THE SEA CONDITION IS ROUGH TO VERY ROUGH TO THE SYSTEM CENTRE.

AS PER SATELLITE IMAGERY, ASSOCIATED BROKEN SCATTERED TO BROKEN LOW/MEDIUM CLOUDS WITH EMBEDED INTENSE TO VERY INTENSE CONVECTIVE CLOUD LAY OVER TAMILNADU AND MODERATE TO INTENSE CONVECTION OVER PALK STRAIT, GULF OF MANNAR & COMORIN AREA WITH MINIMUN CLOUD TOP TEMPERATURE MINUS 93 DEG CELCIUS.

REMARKS:

THE CYCLONIC STRORM 'BUREVI' CONTINUES TO INTERACT WITH LAND SURFACE AS IT LIES VERY CLOSE TO SOUTH TAMILNADU COAST. AS AS RESULT SYSTEM WEAKENED INTO A DEEP DEPRESSION AT 1200 UTC. AS IT WILL MOVE WEST-SOUTHWESTWARDS, THIS CONTINUES LAND INTERACTION WOULD LEAD TO FURTHER WEAKIENING INTO A DEPRESSION DURING NEXT 06 HOURS. ALSO THE HIGH WIND SHEAR OVER THE REGION IS FAVOURING FURTHER WEAKENING OF THE SYSTEM. THE CONVECTIVE CLOUD MASS IS SHEARED TO THE NORTH FROM THE LLCC. THE WINDS ARE HIGHER IN THE NORTHERN SECTOR.

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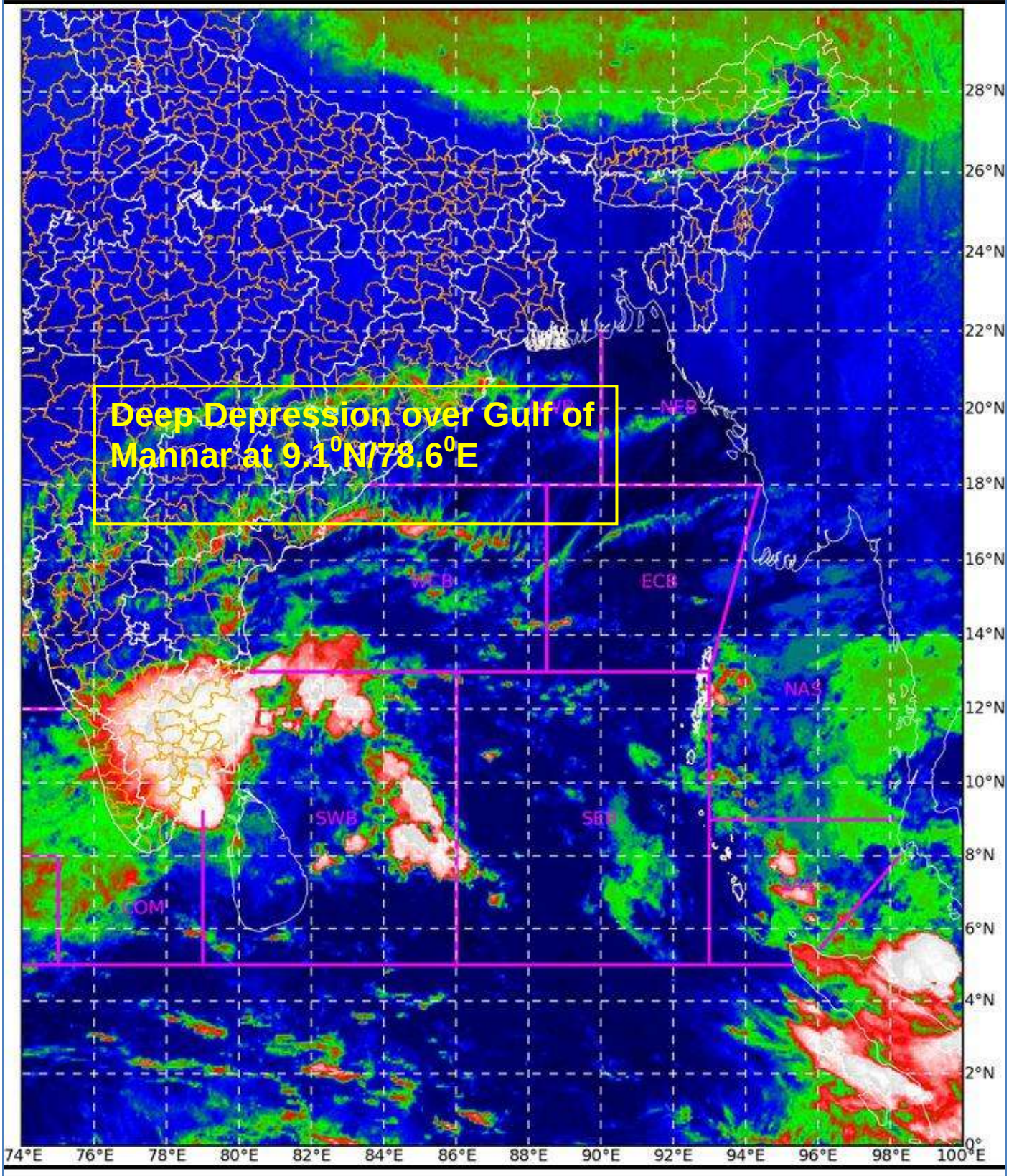
(D.R. PATTANAIK)
Scientist-F, RSMC, New Delhi

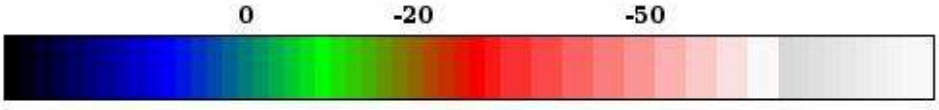
PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)
NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

SAT : INSAT-3D IMG 03-12-2020/(1930 to 1956) GMT

IMG_TIR1_TEMP 10.8 um 04-12-2020/(0100 to 0126) IST

L1C Mercator





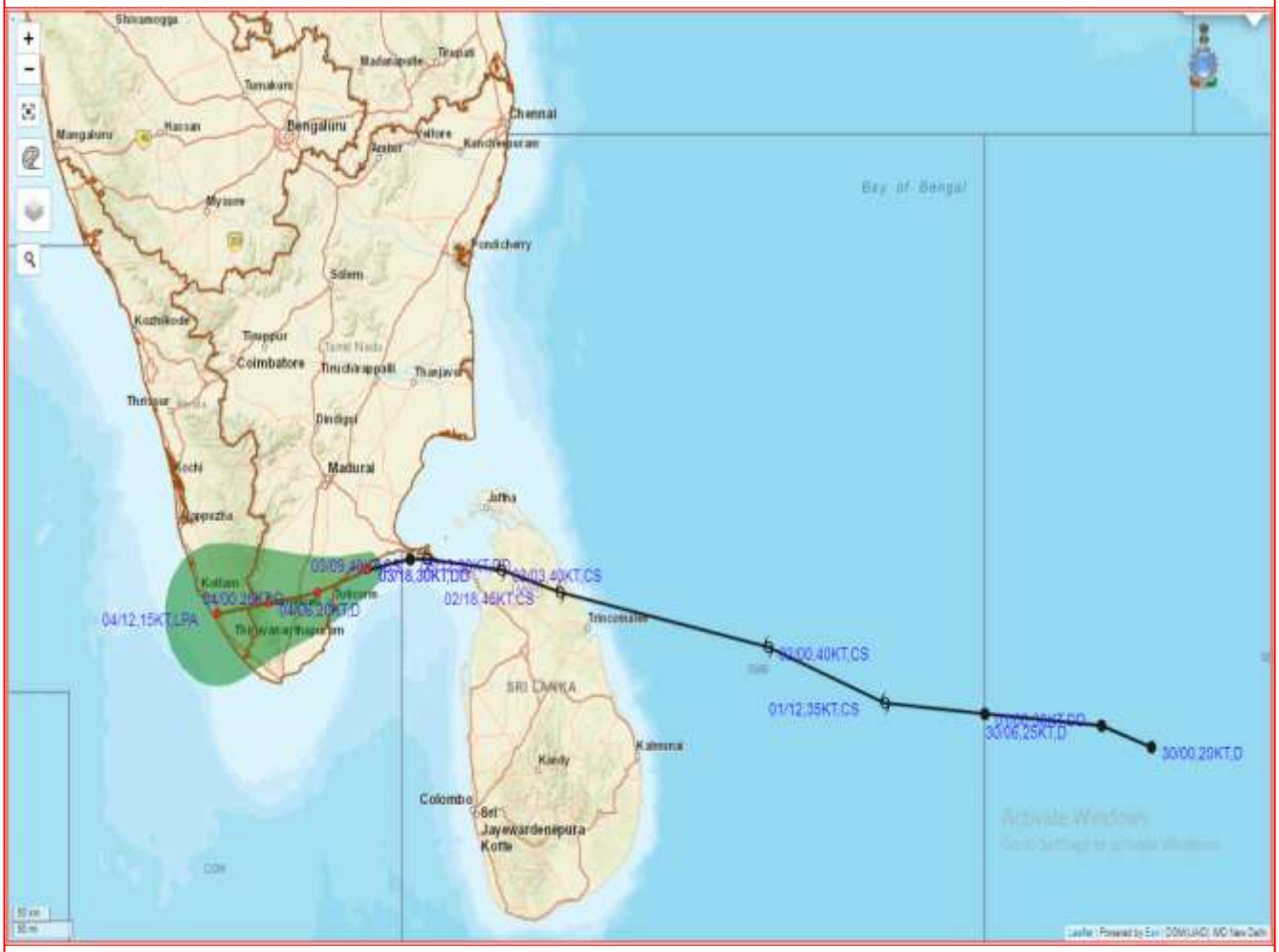
Celsius

IMD,DELHI

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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

OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINITY OF DEEP DEPRESSION OVER GULF OF MANNAR BASED ON 1800 UTC OF 3rd DECEMBER, 2020.



DATE/TIME IN UTC
IST=UTC + 0530
L: LOW PRESSURE AREA
WML: WELL MARKED LOW PRESSURE AREA
D: DEPRESSION (17-27 KT)
DD: DEEP DEPRESSION (28-33 KT)
CS: CYCLONIC STORM (34-47 KT)
SCS: SEVERE CYCLONIC STORM (48-63KT)
VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
SuCS: SUPER CYCLONIC STORM (≥20 KT)

LESS THAN 34 KT
34-47 KT
≥ 48 KT
OBSERVED TRACK
FORECAST TRACK
CONE OF UNCERTAINTY

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

OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF DEEP DEPRESSION OVER GULF OF MANNAR BASED ON 1800 UTC OF 3rd DECEMBER, 2020.

DATE/TIME IN UTC
IST=UTC + 0530
L: LOW PRESSURE AREA
WML: WELL MARKED LOW PRESSURE AREA
D: DEPRESSION (17-27 KT)
DD: DEEP DEPRESSION (28-33 KT)
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SCS: SEVERE CYCLONIC STORM (48-63KT)
VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
SuCS: SUPER CYCLONIC STORM (≥ 120 KT)

LESS THAN 34 KT
34-47 KT
≥ 48 KT
OBSERVED TRACK
FORECAST TRACK
CONE OF UNCERTAINTY
AREA OF MAXIMUM SUSTAINED WIND SPEED:
28-33 KT (52-61 KMPH)
34-49 KT (62-91 KMPH)
50-63 KT (92-117 KMPH)
≥ 64 KT (≥118 KMPH)

IMPACT OVER THE SEA

MSW (knot/kmph)	Impact	Action
28-33 (52-61)	Very rough seas	Total suspension of fishing operations
34-49 (62-91)	High to very high seas	Total suspension of fishing operations
50-63 (92-117)	Very high seas	Total suspension of fishing operations
≥ 64 (≥118)	Phenomenal	Total suspension of fishing operations

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

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

DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 03.12.2020

SPECIAL TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 2300 UTC OF 03.12.2020 BASED ON 2100 UTC OF 03.12.2020 .

DEEP DEPRESSION OVER GULF OF MANNAR

THE **DEEP DEPRESSION** OVER GULF OF MANNAR CLOSE TO RAMANATHAPURAM DISTRICT COAST **REMAINS PRACTICALLY STATIONARY** DURING PAST THREE HOURS AND LAY CENTERED AT 2100 UTC OF 03RD DECEMBER OVER GULF OF MANNAR NEAR LAT. 9.1°N AND LONG. 78.6°E CLOSE TO RAMANATHAPURAM DISTRICT COAST, ABOUT 40 KM SOUTHWEST OF RAMANATHAPURAM, 70 KM WEST-SOUTHWEST OF PAMBAN AND 160 KM NORTHEAST OF KANNIYAKUMARI. **THE ASSOCIATED WIND SPEED IS ABOUT 55-65 GUSTING TO 75 KMPH.**

THE DEEP DEPRESSION LIKELY TO MOVE WEST-SOUTHWESTWARDS AND CROSS RAMANATHAPURAM AND ADJOINING THOOTHUKUDI DISTRICTS DURING NEXT 06 HOURS WITH WIND SPEED OF 50-60 GUSTING TO 70 KMPH. IT IS VERY LIKELY TO WEAKEN FURTHER INTO A DEPRESSION (WIND SPEED 45-55 KMPH GUSTING TO 65 KMPH) DURING NEXT 24 HOURS.

FORECAST TRACK AND INTENSITY ARE GIVEN BELOW:

DATE/TIME(UTC)	POSITION (LAT. ^{0}N/ LONG. ^{0}E)	MAXIMUM SUSTAINED SURFACE WIND SPEED (KMPH)	CATEGORY OF CYCLONIC DISTURBANCE
03.12.20/2100	9.1/78.6	55-65 GUSTING TO 75	DEEP DEPRESSION
04.12.20/0000	8.9/78.0	55-65 GUSTING TO 75	DEEP DEPRESSION
04.12.20/0600	8.8/77.4	50-60 GUSTING TO 70	DEEP DEPRESSION
04.12.20/1200	8.7/76.8	45-55 GUSTING TO 65	DEPRESSION

THE ESTIMATED MAXIMUM SUSTAINED WIND SPEED IS 30 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS 1000 HPA. THE SEA CONDITION IS ROUGH TO VERY ROUGH TO THE SYSTEM CENTRE.

AS PER SATELLITE IMAGERY, ASSOCIATED BROKEN LOW/MEDIUM CLOUDS WITH EMBEDED INTENSE TO VERY INTENSE CONVECTIVE CLOUD LAY OVER TAMILNADU, GULF OF MANNAR AND PALK STRAIT WITH MINIMUN CLOUD TOP TEMPERATURE MINUS 93 DEG CELCIUS.

REMARKS:

THE CYCLONIC STRORM 'BUREVI' CONTINUES TO INTERACT WITH LAND SURFACE AS IT LIES VERY CLOSE TO SOUTH TAMILNADU COAST. AS AS RESULT SYSTEM WEAKENED INTO A DEEP DEPRESSION AT 1200 UTC. AS IT WILL MOVE WEST-SOUTHWESTWARDS, THIS CONTINUES LAND INTERACTION WOULD LEAD TO FURTHER WEAKIENING INTO A DEPRESSION DURING NEXT 24 HOURS. ALSO THE HIGH WIND SHEAR OVER THE REGION IS FAVOURING FURTHER WEAKENING OF THE SYSTEM DURING NEXT 24 HOURS. THE CONVECTIVE CLOUD MASS IS SHEARED TO THE NORTH FROM THE LLCC. THE WINDS ARE HIGHER IN THE NORTHERN SECTOR.

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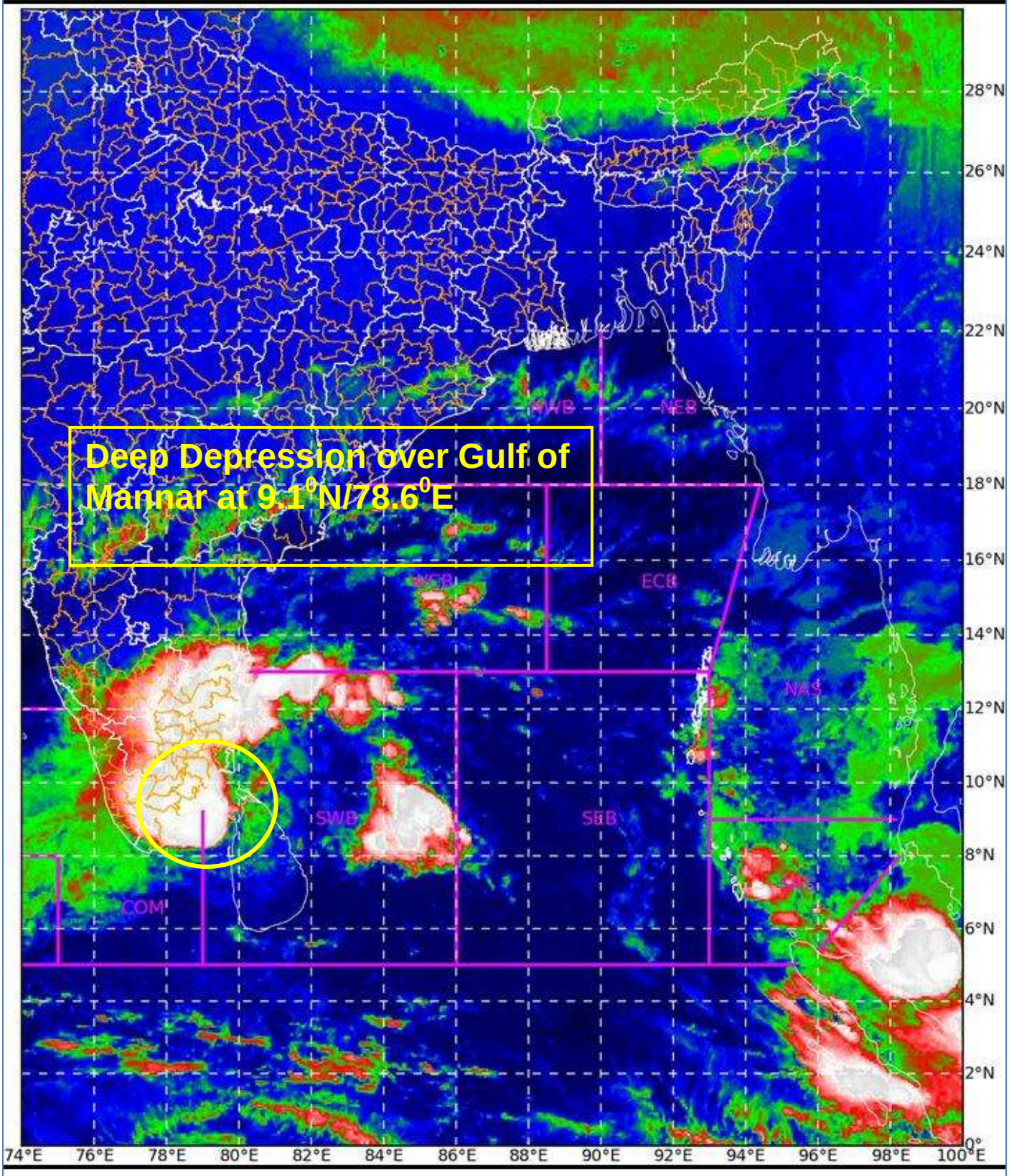
(D.R. PATTANAIK)
Scientist-F, RSMC, New Delhi

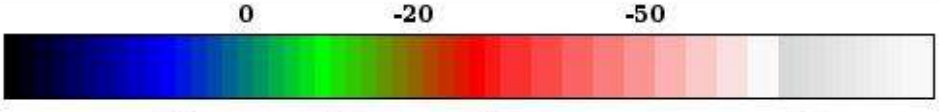
PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)
NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

SAT : INSAT-3D IMG 03-12-2020/(2200 to 2226) GMT

IMG_TIR1_TEMP 10.8 um 04-12-2020/(0330 to 0356) IST

L1C Mercator





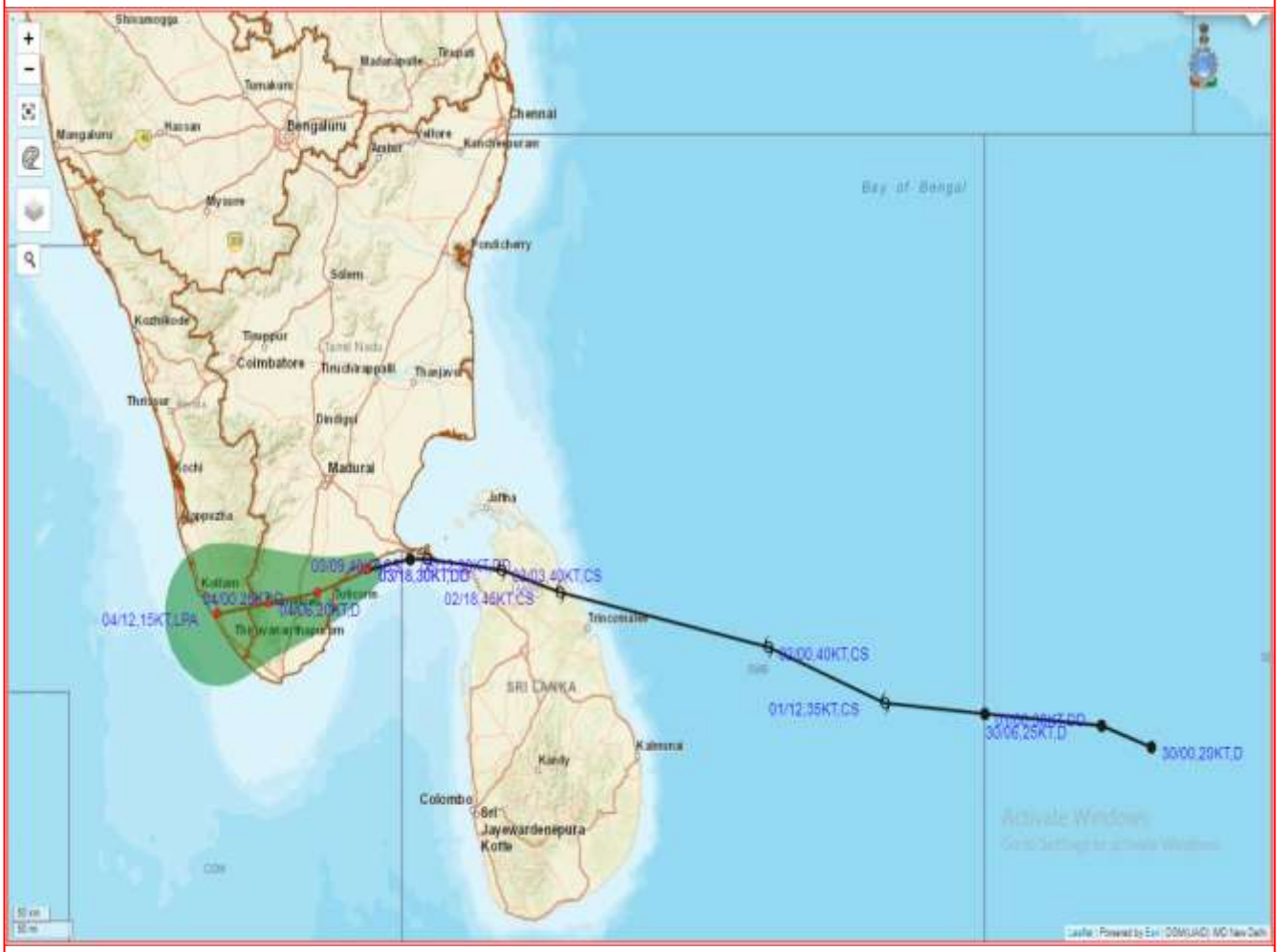
Celsius

IMD,DELHI

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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

OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINITY OF DEEP DEPRESSION OVER GULF OF MANNAR BASED ON 1800 UTC OF 3rd DECEMBER, 2020.



DATE/TIME IN UTC
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DD: DEEP DEPRESSION (28-33 KT)
CS: CYCLONIC STORM (34-47 KT)
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ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
SuCS: SUPER CYCLONIC STORM (≥20 KT)

LESS THAN 34 KT
34-47 KT
≥ 48 KT
OBSERVED TRACK
FORECAST TRACK
CONE OF UNCERTAINTY

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

OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF DEEP DEPRESSION OVER GULF OF MANNAR BASED ON 1800 UTC OF 3rd DECEMBER, 2020.

DATE/TIME IN UTC
IST=UTC + 0530
L: LOW PRESSURE AREA
WML: WELL MARKED LOW PRESSURE AREA
D: DEPRESSION (17-27 KT)
DD: DEEP DEPRESSION (28-33 KT)
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VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
SuCS: SUPER CYCLONIC STORM (≥ 120 KT)

LESS THAN 34 KT
34-47 KT
≥ 48 KT
OBSERVED TRACK
FORECAST TRACK
CONE OF UNCERTAINTY
AREA OF MAXIMUM SUSTAINED WIND SPEED:
28-33 KT (52-61 KMPH)
34-49 KT (62-91 KMPH)
50-63 KT (92-117 KMPH)
≥ 64 KT (≥118 KMPH)

IMPACT OVER THE SEA

MSW (knot/kmph)	Impact	Action
28-33 (52-61)	Very rough seas	Total suspension of fishing operations
34-49 (62-91)	High to very high seas	Total suspension of fishing operations
50-63 (92-117)	Very high seas	Total suspension of fishing operations
≥ 64 (≥118)	Phenomenal	Total suspension of fishing operations

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

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

DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 04.12.2020

SPECIAL TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 0300 UTC OF 04.12.2020 BASED ON 0000 UTC OF 04.12.2020.

DEEP DEPRESSION OVER GULF OF MANNAR

THE **DEEP DEPRESSION** OVER GULF OF MANNAR CLOSE TO RAMANATHAPURAM DISTRICT COAST **REMAINED PRACTICALLY STATIONARY** DURING PAST THREE HOURS AND LAY CENTERED AT 0000 UTC OF 04TH DECEMBER OVER GULF OF MANNAR NEAR LAT. 9.1°N AND LONG. 78.6°E CLOSE TO RAMANATHAPURAM DISTRICT COAST, ABOUT 40 KM SOUTHWEST OF RAMANATHAPURAM, 70 KM WEST-SOUTHWEST OF PAMBAN AND 160 KM NORTHEAST OF KANNIYAKUMARI. **THE ASSOCIATED WIND SPEED IS ABOUT 55-65 GUSTING TO 75 KMPH.**

THE DEEP DEPRESSION LIKELY TO MOVE SLOWLY WEST-SOUTHWESTWARDS AND CROSS RAMANATHAPURAM AND ADJOINING THOOTHUKUDI DISTRICTS DURING NEXT 06 HOURS WITH WIND SPEED OF 50-60 GUSTING TO 70 KMPH. IT IS VERY LIKELY TO WEAKEN FURTHER INTO A DEPRESSION (WIND SPEED 45-55 KMPH GUSTING TO 65 KMPH) DURING NEXT 12 HOURS.

FORECAST TRACK AND INTENSITY ARE GIVEN BELOW:

DATE/TIME(UTC)	POSITION (LAT. ^{0}N/ LONG. ^{0}E)	MAXIMUM SUSTAINED SURFACE WIND SPEED (KMPH)	CATEGORY OF CYCLONIC DISTURBANCE
04.12.20/0000	9.1/78.6	55-65 GUSTING TO 75	DEEP DEPRESSION
04.12.20/0600	9.0/78.2	50-60 GUSTING TO 70	DEEP DEPRESSION
04.12.20/1200	8.9/77.8	45-55 GUSTING TO 65	DEPRESSION
04.12.20/1800	8.8/77.4	25-35 GUSTING TO 45	LOW PRESSURE AREA

THE ESTIMATED MAXIMUM SUSTAINED WIND SPEED IS 30 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS 1000 HPA. THE SEA CONDITION IS ROUGH TO VERY ROUGH TO THE SYSTEM CENTRE.
AS PER SATELLITE IMAGERY, ASSOCIATED BROKEN LOW/MEDIUM CLOUDS WITH EMBEDED INTENSE TO VERY INTENSE CONVECTIVE CLOUD LAY OVER TAMILNADU, GULF OF MANNAR AND PALK STRAIT WITH MINIMUN CLOUD TOP TEMPERATURE MINUS 93 DEG CELCIUS.

REMARKS:

THE CYCLONIC STRORM 'BUREVI' CONTINUES TO INTERACT WITH LAND SURFACE AS IT LIES VERY CLOSE TO SOUTH TAMILNADU COAST. AS IT WILL MOVE WEST-SOUTHWESTWARDS, THIS CONTINUES LAND INTERACTION WOULD LEAD TO FURTHER WEAKIENING INTO A DEPRESSION DURING NEXT 12 HOURS. ALSO THE HIGH WIND SHEAR OVER THE REGION IS FAVOURING FURTHER WEAKENING OF THE SYSTEM DURING NEXT 12 HOURS.

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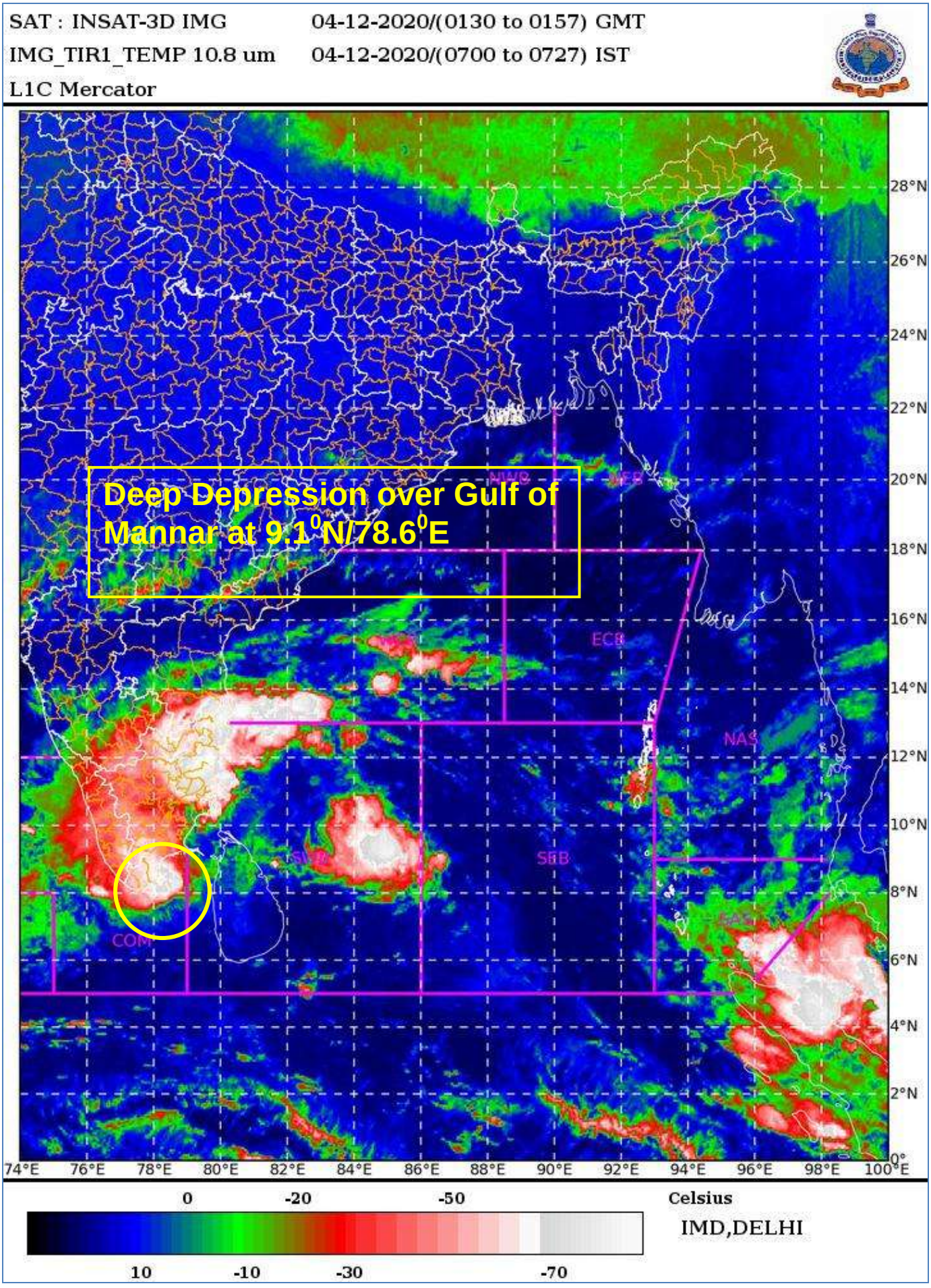
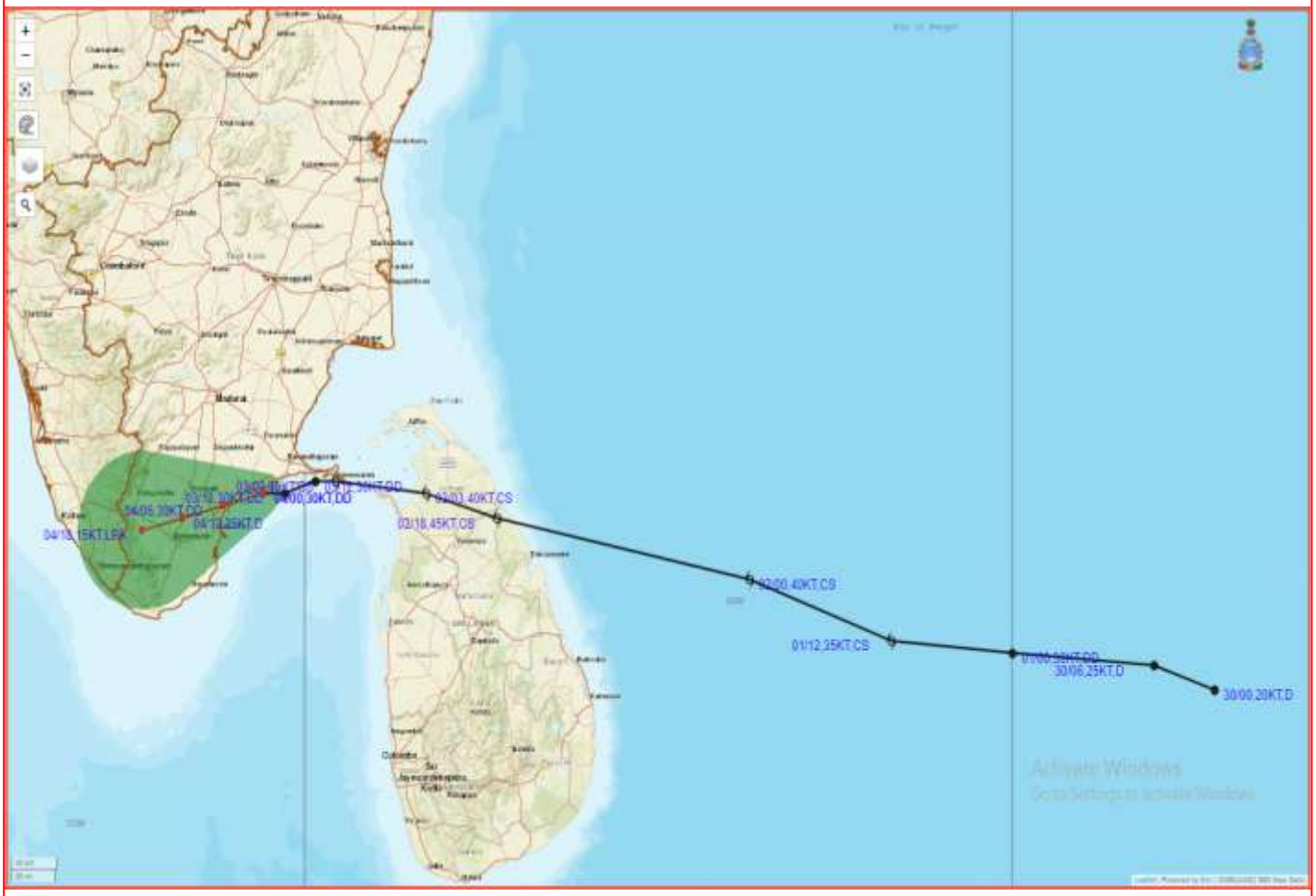
(D.R. PATTANAIK)
Scientist-F, RSMC, New Delhi

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



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

OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINITY OF DEEP DEPRESSION OVER GULF OF MANNAR BASED ON 0000 UTC OF 4TH DECEMBER, 2020.



DATE/TIME IN UTC
IST=UTC + 0530
L: LOW PRESSURE AREA
WML: WELL MARKED LOW PRESSURE AREA
D: DEPRESSION (17-27 KT)
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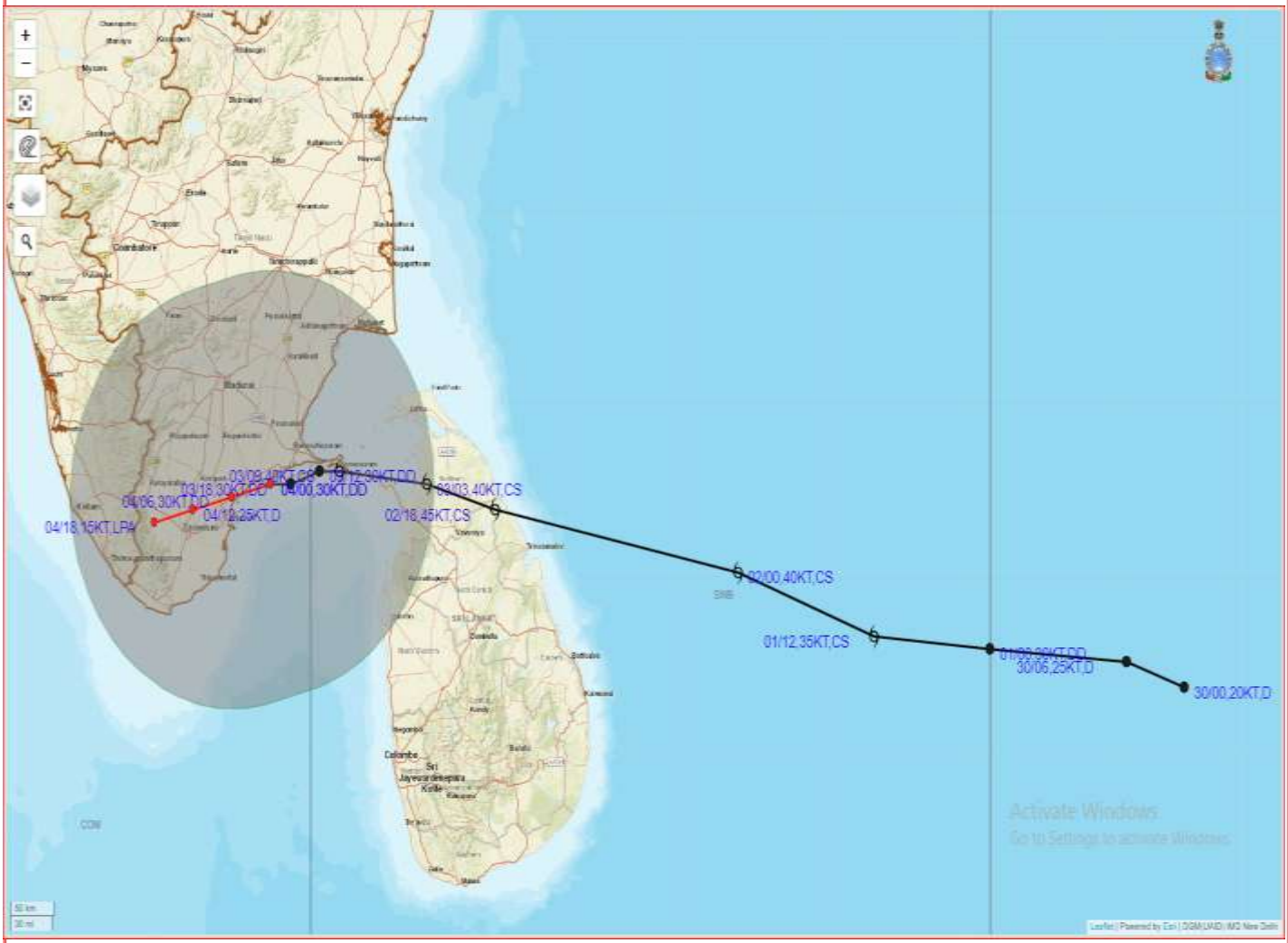
VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
SuCS: SUPER CYCLONIC STORM (≥20 KT)

LESS THAN 34 KT
34-47 KT
≥ 48 KT
OBSERVED TRACK
FORECAST TRACK
CONE OF UNCERTAINTY

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

OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF DEEP DEPRESSION OVER GULF OF MANNAR BASED ON 0000 UTC OF 4TH DECEMBER, 2020.



DATE/TIME IN UTC
IST=UTC + 0530
L: LOW PRESSURE AREA
WML: WELL MARKED LOW PRESSURE AREA
D: DEPRESSION (17-27 KT)
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ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
SuCS: SUPER CYCLONIC STORM (≥ 120 KT)

LESS THAN 34 KT
34-47 KT
≥ 48 KT
OBSERVED TRACK
FORECAST TRACK
CONE OF UNCERTAINTY
AREA OF MAXIMUM SUSTAINED WIND SPEED:
28-33 KT (52-61 KMPH)
34-49 KT (62-91 KMPH)
50-63 KT (92-117 KMPH)
≥ 64 KT (≥118 KMPH)

IMPACT OVER THE SEA

MSW (knot/kmph)	Impact	Action
28-33 (52-61)	Very rough seas	Total suspension of fishing operations
34-49 (62-91)	High to very high seas	Total suspension of fishing operations
50-63 (92-117)	Very high seas	Total suspension of fishing operations
≥ 64 (≥118)	Phenomenal	Total suspension of fishing operations

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

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

DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 04.12.2020

SPECIAL TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 0600 UTC OF 04.12.2020 BASED ON 0300 UTC OF 04.12.2020.

SUB: DEEP DEPRESSION OVER GULF OF MANNAR

THE DEEP DEPRESSION OVER GULF OF MANNAR CLOSE TO RAMANATHAPURAM DISTRICT COAST REMAINED PRACTICALLY STATIONARY DURING PAST SIX HOURS AND LAY CENTERED AT 0830 HRS IST OF TODAY, THE 04TH DECEMBER OVER GULF OF MANNAR NEAR LAT. 9.1°N AND LONG. 78.6°E CLOSE TO RAMANATHAPURAM DISTRICT COAST, ABOUT 40 KM SOUTHWEST OF RAMANATHAPURAM, 70 KM WEST-SOUTHWEST OF PAMBAN AND 160 KM NORTHEAST OF KANNIYAKUMARI. THE ASSOCIATED WIND SPEED IS ABOUT 50-60 GUSTING TO 70 KMPH.

THE DEEP DEPRESSION IS LIKELY TO REMAIN PRACTICALLY STATIONARY OVER THE SAME REGION AND WEAKEN INTO A DEPRESSION DURING NEXT 12 HOURS. THEREAFTER IT WILL MOVE SLOWLY WEST-SOUTHWESTWARDS ACROSS RAMANATHAPURAM DISTRICT TOWARDS SOUTH KERALA AND WEAKEN INTO A WELL MARKED LOW PRESSURE AREA DURING SUBSEQUENT 24 HOURS.

THE ESTIMATED MAXIMUM SUSTAINED WIND SPEED IS 30 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS 1000 HPA. THE SEA CONDITION IS ROUGH TO VERY ROUGH TO THE SYSTEM CENTRE.

AS PER SATELLITE IMAGERY, ASSOCIATED BROKEN LOW/MEDIUM CLOUDS WITH EMBEDED INTENSE TO VERY INTENSE CONVECTIVE CLOUD LAY OVER TAMILNADU, GULF OF MANNAR, PALK STRAIT AND COMORIN WITH MINIMUN CLOUD TOP TEMPERATURE MINUS 93 DEG CELCIUS.

REMARKS:

THE DEEP DEPRESSION (REMNANT OF CYCLONIC STRORM 'BUREVI') CONTINUES TO INTERACT WITH LAND SURFACE AS IT LIES VERY CLOSE TO SOUTH TAMILNADU COAST. AS IT WILL MOVE WEST-SOUTHWESTWARDS, THE CONTINUOUS INTERACTION WITH LAND WOULD LEAD TO FURTHER WEAKENING OF THE SYSTEM INTO A DEPRESSION DURING NEXT 12 HOURS AND INTO A WELL MARKED LOW PRESSURE AREA DURING SUBSEQUENT 24 HOURS. ALSO THE HIGH WIND SHEAR OVER THE REGION IS ALSO FURTHER LEADING TO WEAKENING OF THE SYSTEM DURING NEXT 12 HOURS.

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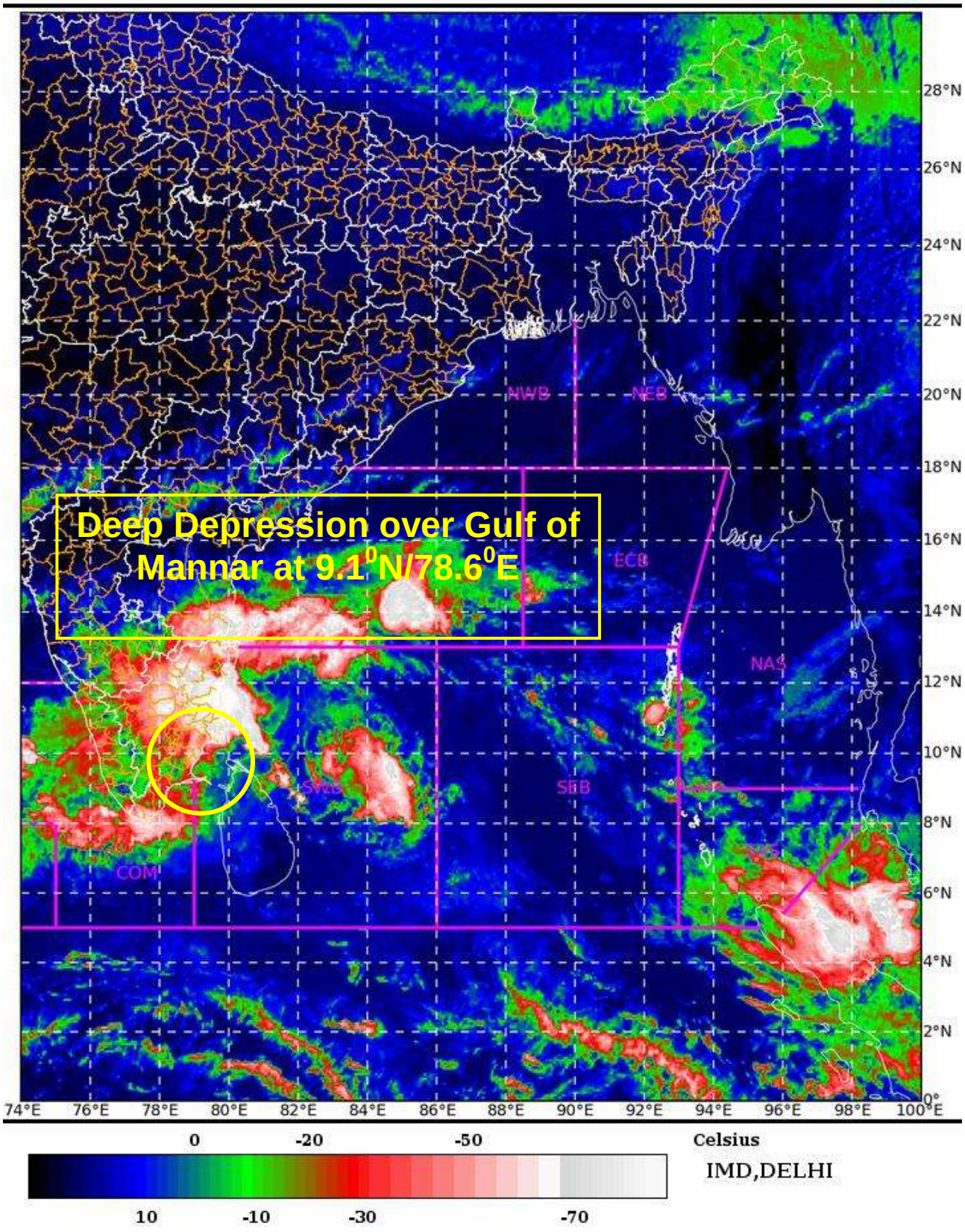
(R.K.JENAMANI)
Scientist-F, RSMC, New Delhi

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

SAT : INSAT-3D IMG 04-12-2020/(0430 to 0457) GMT

IMG_TIR1_TEMP 10.8 um 04-12-2020/(1000 to 1027) IST

L1C Mercator



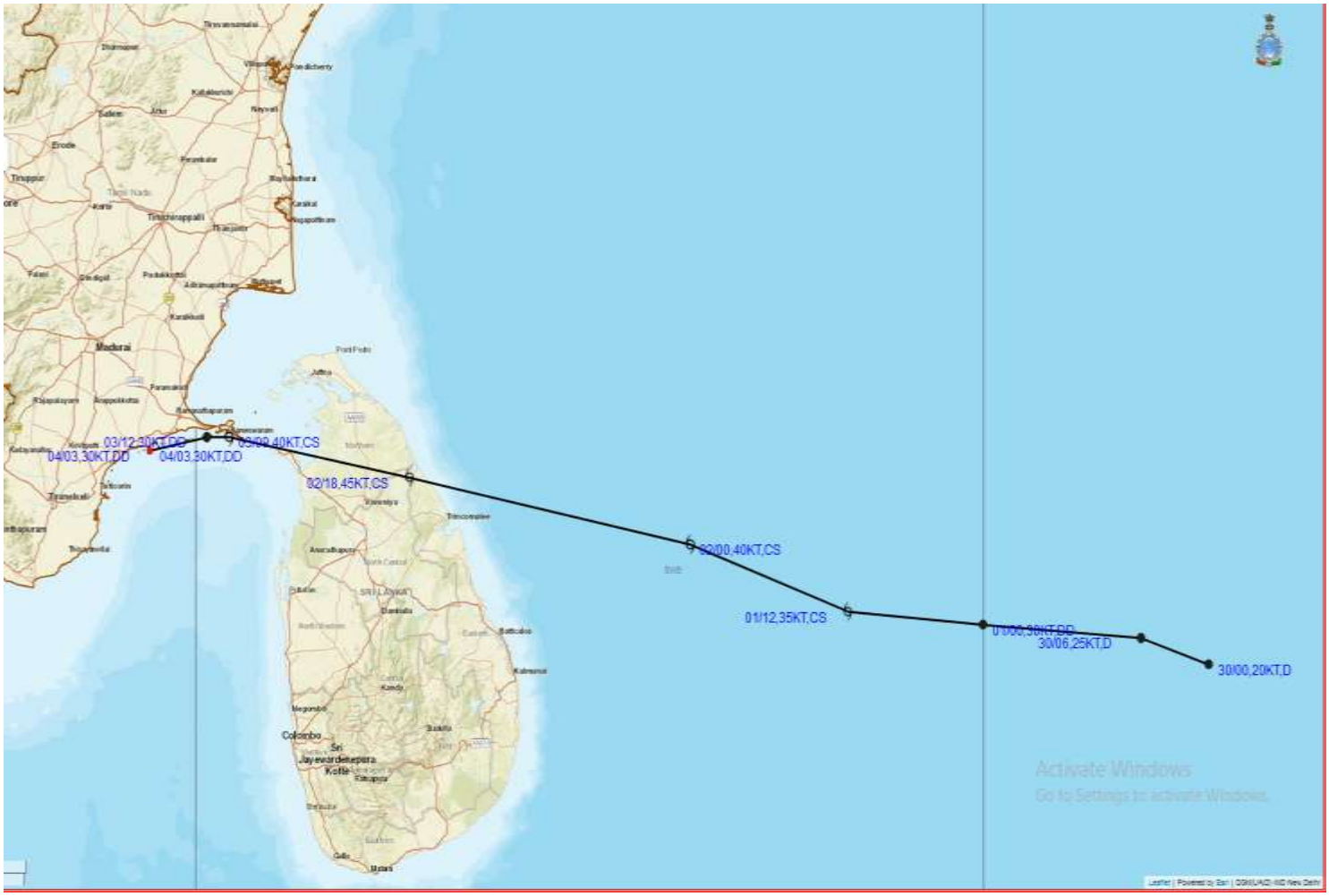
Celsius

IMD,DELHI

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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

OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINITY OF DEEP DEPRESSION OVER GULF OF MANNAR BASED ON 0300 UTC OF 4TH DECEMBER, 2020.



DATE/TIME IN UTC
IST=UTC + 0530
L: LOW PRESSURE AREA
WML: WELL MARKED LOW PRESSURE AREA
D: DEPRESSION (17-27 KT)
DD: DEEP DEPRESSION (28-33 KT)
CS: CYCLONIC STORM (34-47 KT)
SCS: SEVERE CYCLONIC STORM (48-63KT)
VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
SuCS: SUPER CYCLONIC STORM (≥20 KT)

LESS THAN 34 KT
34-47 KT
≥ 48 KT
OBSERVED TRACK
FORECAST TRACK
CONE OF UNCERTAINTY

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

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

DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 04.12.2020

SPECIAL TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 0900 UTC OF 04.12.2020 BASED ON 0600 UTC OF 04.12.2020.

SUB: DEEP DEPRESSION OVER GULF OF MANNAR

THE DEEP DEPRESSION OVER GULF OF MANNAR CLOSE TO RAMANATHAPURAM DISTRICT COAST REMAINED PRACTICALLY STATIONARY DURING PAST TWELVE HOURS AND LAY CENTERED AT 0600 UTC OF TODAY, THE 04TH DECEMBER OVER GULF OF MANNAR NEAR LAT. 9.1°N AND LONG. 78.6°E CLOSE TO RAMANATHAPURAM DISTRICT COAST, ABOUT 40 KM SOUTHWEST OF RAMANATHAPURAM, 70 KM WEST-SOUTHWEST OF PAMBAN AND 160 KM NORTHEAST OF KANNIYAKUMARI. THE ASSOCIATED WIND SPEED IS ABOUT 50-60 GUSTING TO 70 KMPH.

THE DEEP DEPRESSION IS LIKELY TO REMAIN PRACTICALLY STATIONARY OVER THE SAME REGION AND WEAKEN INTO A DEPRESSION DURING NEXT 12 HOURS. THEREAFTER IT WILL MOVE SLOWLY WEST-SOUTHWESTWARDS ACROSS RAMANATHAPURAM DISTRICT TOWARDS SOUTH KERALA AND WEAKEN INTO A WELL MARKED LOW PRESSURE AREA DURING SUBSEQUENT 24 HOURS.

THE ESTIMATED MAXIMUM SUSTAINED WIND SPEED IS 30 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS 1000 HPA. THE SEA CONDITION IS ROUGH TO VERY ROUGH TO THE SYSTEM CENTRE.

AS PER SATELLITE IMAGERY, ASSOCIATED BROKEN LOW/MEDIUM CLOUDS WITH EMBEDED INTENSE TO VERY INTENSE CONVECTIVE CLOUD LAY OVER TAMILNADU, GULF OF MANNAR, PALK STRAIT AND COMORIN WITH MINIMUN CLOUD TOP TEMPERATURE MINUS 93 DEG CELCIUS.

REMARKS:

THE DEEP DEPRESSION (REMNANT OF CYCLONIC STRORM 'BUREVI') CONTINUES TO INTERACT WITH LAND SURFACE AS IT LIES VERY CLOSE TO SOUTH TAMILNADU COAST. AS IT WILL MOVE WEST-SOUTHWESTWARDS, THE CONTINUOUS INTERACTION WITH LAND WOULD LEAD TO FURTHER WEAKENING OF THE SYSTEM INTO A DEPRESSION DURING NEXT 12 HOURS AND INTO A WELL MARKED LOW PRESSURE AREA DURING SUBSEQUENT 24 HOURS. ALSO THE HIGH WIND SHEAR OVER THE REGION IS ALSO FURTHER LEADING TO WEAKENING OF THE SYSTEM DURING NEXT 12 HOURS.

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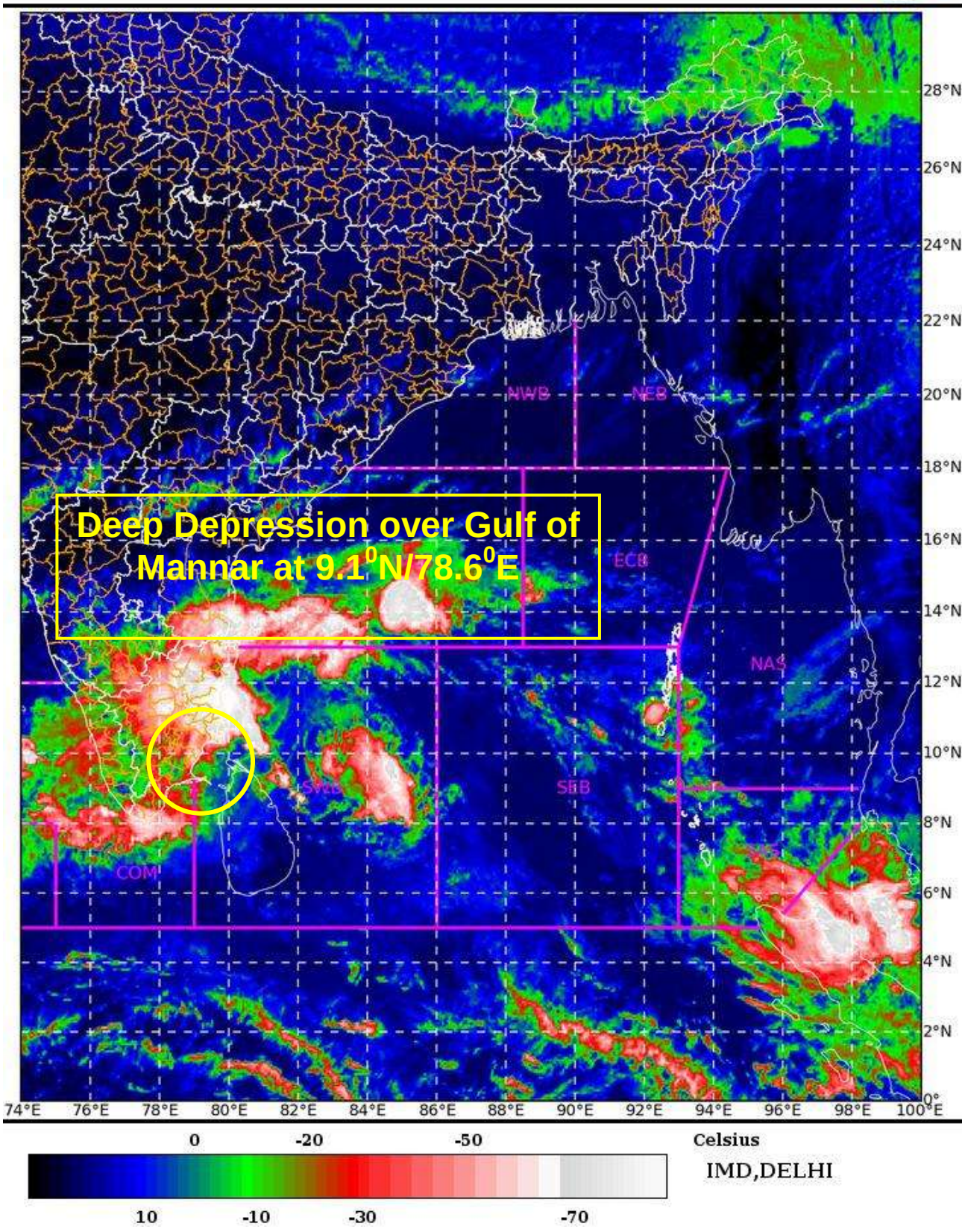
(R.K.JENAMANI)
Scientist-F, RSMC, New Delhi

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

SAT : INSAT-3D IMG 04-12-2020/(0430 to 0457) GMT

IMG_TIR1_TEMP 10.8 um 04-12-2020/(1000 to 1027) IST

L1C Mercator



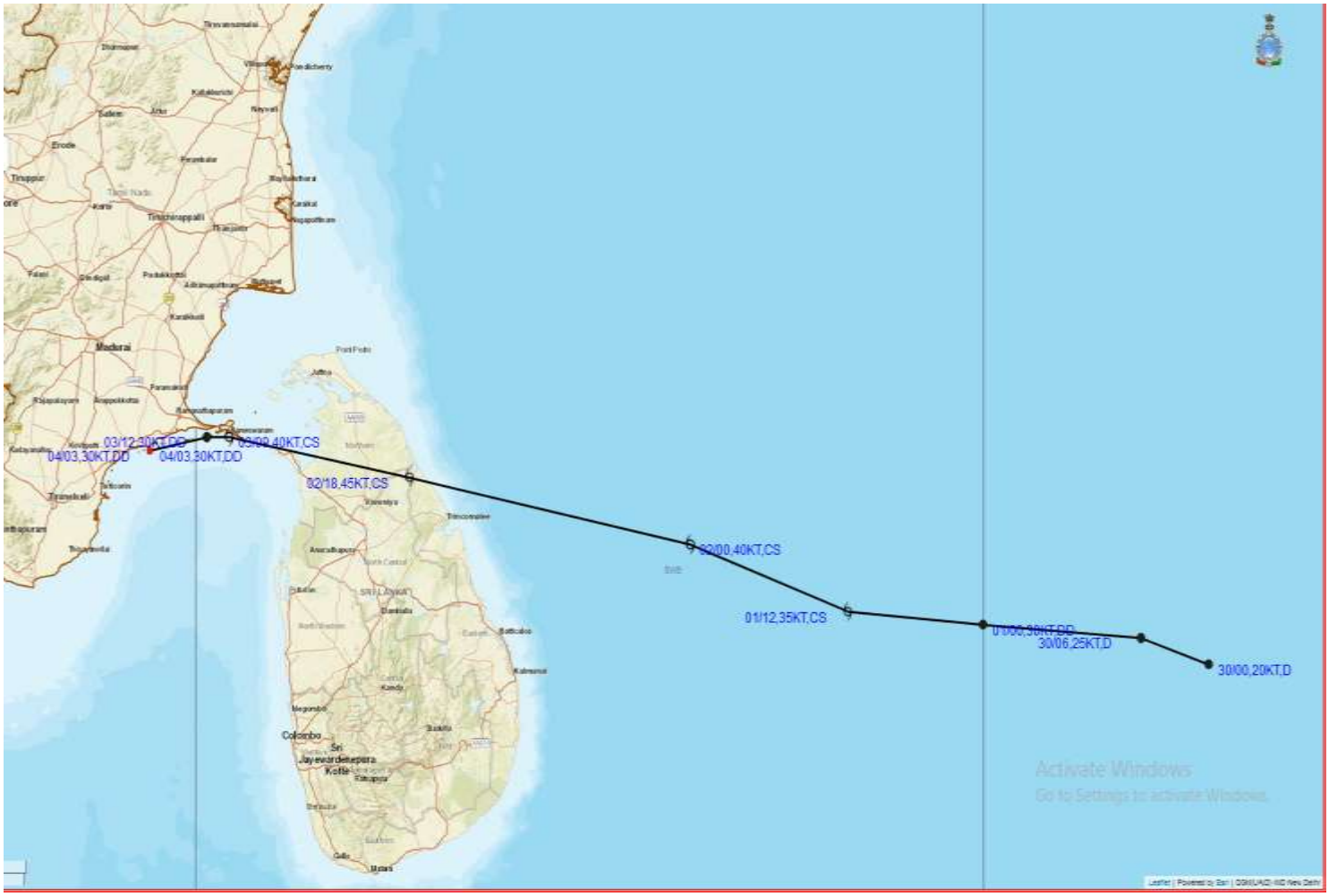
Celsius

IMD,DELHI

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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

OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINITY OF DEEP DEPRESSION OVER GULF OF MANNAR BASED ON 0600 UTC OF 4TH DECEMBER, 2020.



DATE/TIME IN UTC
IST=UTC + 0530
L: LOW PRESSURE AREA
WML: WELL MARKED LOW PRESSURE AREA
D: DEPRESSION (17-27 KT)
DD: DEEP DEPRESSION (28-33 KT)
CS: CYCLONIC STORM (34-47 KT)
SCS: SEVERE CYCLONIC STORM (48-63KT)
VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
SuCS: SUPER CYCLONIC STORM (≥20 KT)

LESS THAN 34 KT
34-47 KT
≥ 48 KT
OBSERVED TRACK
FORECAST TRACK
CONE OF UNCERTAINTY

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

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

DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 04.12.2020

SPECIAL TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 1500 UTC OF 04.12.2020 BASED ON 1200 UTC OF 04.12.2020.

SUB:DEEP DEPRESSION WEAKENED INTO A DEPRESSION OVER GULF OF MANNAR

THE DEEP DEPRESSION OVER GULF OF MANNAR CLOSE TO RAMANATHAPURAM DISTRICT COAST REMAINED PRACTICALLY STATIONARY DURING PAST 18 HOURS, WEAKENED INTO A DEPRESSION AND LAY CENTERED AT 1200UTC OF TODAY, THE 04TH DECEMBER OVER GULF OF MANNAR NEAR LAT. 9.1°N AND LONG. 78.6°E CLOSE TO RAMANATHAPURAM DISTRICT COAST, ABOUT 40 KM SOUTHWEST OF RAMANATHAPURAM, 70 KM WEST-SOUTHWEST OF PAMBAN. THE ASSOCIATED WIND SPEED IS ABOUT 45-55 GUSTING TO 65 KMPH.

THE DEPRESSION IS LIKELY TO REMAIN PRACTICALLY STATIONARY OVER THE SAME REGION AND WEAKEN INTO A WELL MARKED LOW PRESSURE AREA DURING NEXT 12 HOURS.

THE ESTIMATED MAXIMUM SUSTAINED WIND SPEED IS 25 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS 1000 HPA. THE SEA CONDITION IS ROUGH TO VERY ROUGH TO THE SYSTEM CENTRE.

AS PER SATELLITE IMAGERY, ASSOCIATED BROKEN LOW/MEDIUM CLOUDS WITH EMBEDED INTENSE TO VERY INTENSE CONVECTIVE CLOUD LAY OVER TAMILNADU, GULF OF MANNAR, PALK STRAIT AND COMORIN WITH MINIMUN CLOUD TOP TEMPERATURE MINUS 93 DEG CELCIUS.

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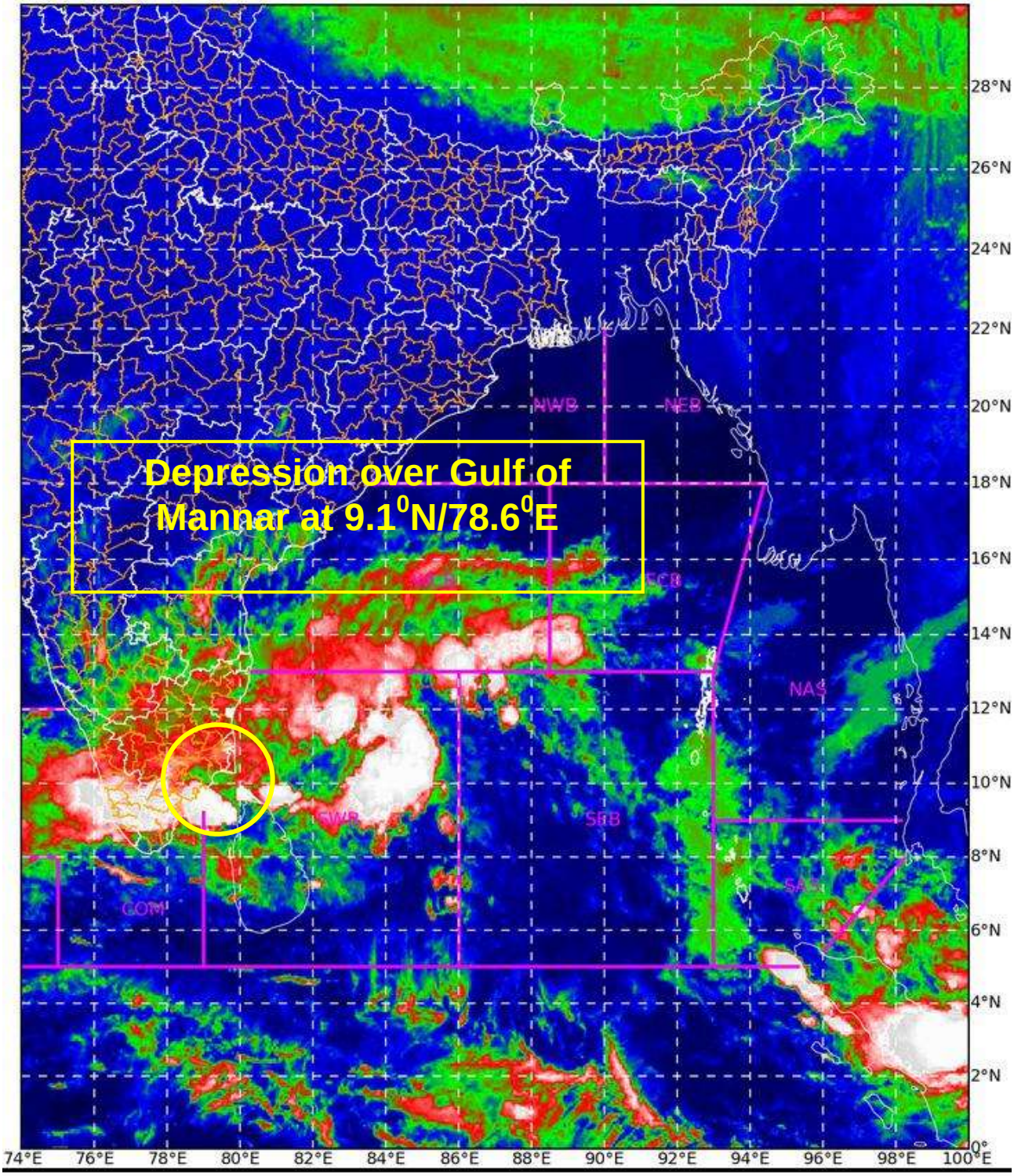
(R.K.JENAMANI)
Scientist-F, RSMC, New Delhi

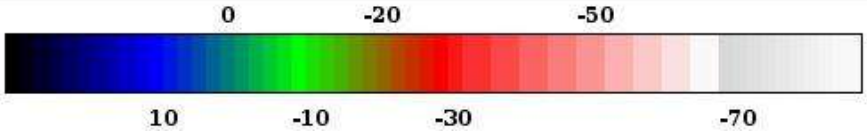
PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)
NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

SAT : INSAT-3D IMG 04-12-2020/(1400 to 1426) GMT

IMG_TIR1_TEMP 10.8 um 04-12-2020/(1930 to 1956) IST

L1C Mercator





Celsius

IMD,DELHI

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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

OBSERVED TRACK OF DEPRESSIONOVER GULF OF MANNAR BASED ON 1200 UTC OF 4TH DECEMBER, 2020.

DATE/TIME IN UTC
IST=UTC + 0530
L: LOW PRESSURE AREA
WML: WELL MARKED LOW PRESSURE AREA
D: DEPRESSION (17-27 KT)
DD: DEEP DEPRESSION (28-33 KT)
CS: CYCLONIC STORM (34-47 KT)
SCS: SEVERE CYCLONIC STORM (48-63KT)
VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
SuCS: SUPER CYCLONIC STORM (≥ 120 KT)

LESS THAN 34 KT
34-47 KT
≥ 48 KT
OBSERVED TRACK
FORECAST TRACK
CONE OF UNCERTAINTY

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

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

DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 04.12.2020

SPECIAL TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 1930 UTC OF 04.12.2020 BASED ON 1800 UTC OF 04.12.2020.

SUB: DEPRESSION OVER GULF OF MANNAR

THE DEPRESSION OVER GULF OF MANNAR CLOSE TO RAMANATHAPURAM DISTRICT COAST REMAINED PRACTICALLY STATIONARY DURING PAST 24 HOURS AND LAY CENTERED AT 1800 UTC OF TODAY, THE 04TH DECEMBER OVER GULF OF MANNAR NEAR LAT. 9.1°N AND LONG. 78.6°E CLOSE TO RAMANATHAPURAM DISTRICT COAST, ABOUT 40 KM SOUTHWEST OF RAMANATHAPURAM, 70 KM WEST-SOUTHWEST OF PAMBAN. THE ASSOCIATED WIND SPEED IS ABOUT 45-55 GUSTING TO 65 KMPH.

THE DEPRESSION IS LIKELY TO REMAIN PRACTICALLY STATIONARY OVER THE SAME REGION AND WEAKEN INTO A WELL MARKED LOW PRESSURE AREA DURING NEXT 12 HOURS.

THE ESTIMATED MAXIMUM SUSTAINED WIND SPEED IS 25 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS 1000 HPA. THE SEA CONDITION IS ROUGH TO VERY ROUGH TO THE SYSTEM CENTRE.

AS PER SATELLITE IMAGERY, ASSOCIATED BROKEN LOW/MEDIUM CLOUDS WITH EMBEDED INTENSE TO VERY INTENSE CONVECTIVE CLOUD LAY OVER TAMILNADU, GULF OF MANNAR, PALK STRAIT AND COMORIN WITH MINIMUN CLOUD TOP TEMPERATURE MINUS 93 DEG CELCIUS.

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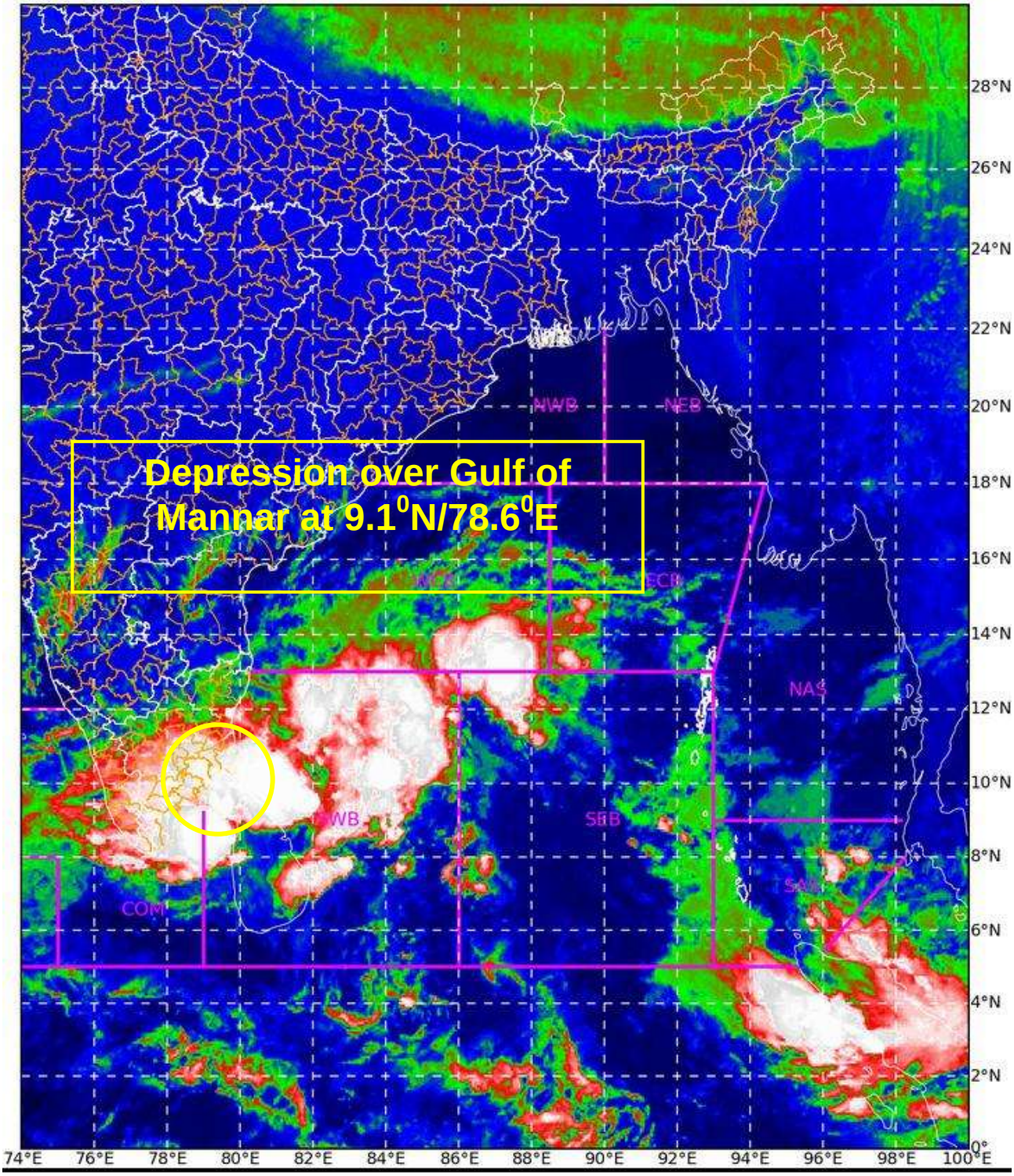
(S.P.SINGH)
SCIENTIST-C, RSMC,
NEW DELHI

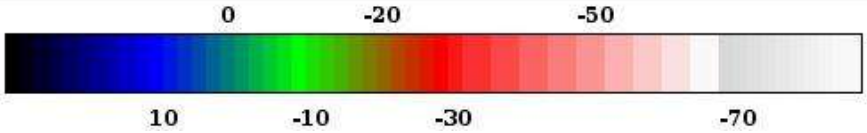
PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)
NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

SAT : INSAT-3D IMG 04-12-2020/(1800 to 1826) GMT

IMG_TIR1_TEMP 10.8 um 04-12-2020/(2330 to 2356) IST

L1C Mercator





Celsius

IMD,DELHI

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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

OBSERVED TRACK OF DEPRESSION OVER GULF OF MANNAR BASED ON 1800 UTC OF 4TH DECEMBER, 2020.

DATE/TIME IN UTC
IST=UTC + 0530
L: LOW PRESSURE AREA
WML: WELL MARKED LOW PRESSURE AREA
D: DEPRESSION (17-27 KT)
DD: DEEP DEPRESSION (28-33 KT)
CS: CYCLONIC STORM (34-47 KT)
SCS: SEVERE CYCLONIC STORM (48-63KT)
VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
SuCS: SUPER CYCLONIC STORM (≥ 120 KT)

LESS THAN 34 KT
34-47 KT
≥ 48 KT
OBSERVED TRACK
FORECAST TRACK
CONE OF UNCERTAINTY

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

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

DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 05.12.2020

SPECIAL TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 0200 UTC OF 05.12.2020 BASED ON 0000 UTC OF 05.12.2020.

SUB: DEPRESSION OVER GULF OF MANNAR

THE DEPRESSION OVER GULF OF MANNAR CLOSE TO RAMANATHAPURAM DISTRICT COAST REMAINED PRACTICALLY STATIONARY DURING PAST 30 HOURS AND LAY CENTERED AT 0000 UTC OF TODAY, THE 05TH DECEMBER OVER GULF OF MANNAR NEAR LAT. 9.1°N AND LONG. 78.6°E CLOSE TO RAMANATHAPURAM DISTRICT COAST, ABOUT 40 KM SOUTHWEST OF RAMANATHAPURAM, 70 KM WEST-SOUTHWEST OF PAMBAN. THE ASSOCIATED WIND SPEED IS ABOUT 40-50 GUSTING TO 60 KMPH.

THE DEPRESSION IS LIKELY TO REMAIN PRACTICALLY STATIONARY OVER THE SAME REGION AND WEAKEN INTO A WELL MARKED LOW PRESSURE AREA DURING NEXT 12 HOURS.

THE ESTIMATED MAXIMUM SUSTAINED WIND SPEED IS 25 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS 1002 HPA. THE SEA CONDITION IS ROUGH TO VERY ROUGH TO THE SYSTEM CENTRE.

AS PER SATELLITE IMAGERY, ASSOCIATED BROKEN LOW/MEDIUM CLOUDS WITH EMBEDED INTENSE TO VERY INTENSE CONVECTIVE CLOUD LAY OVER SOUTH TAMILNADU, GULF OF MANNAR, PALK STRAIT AND COMORIN WITH MINIMUN CLOUD TOP TEMPERATURE MINUS 93 DEG CELCIUS.

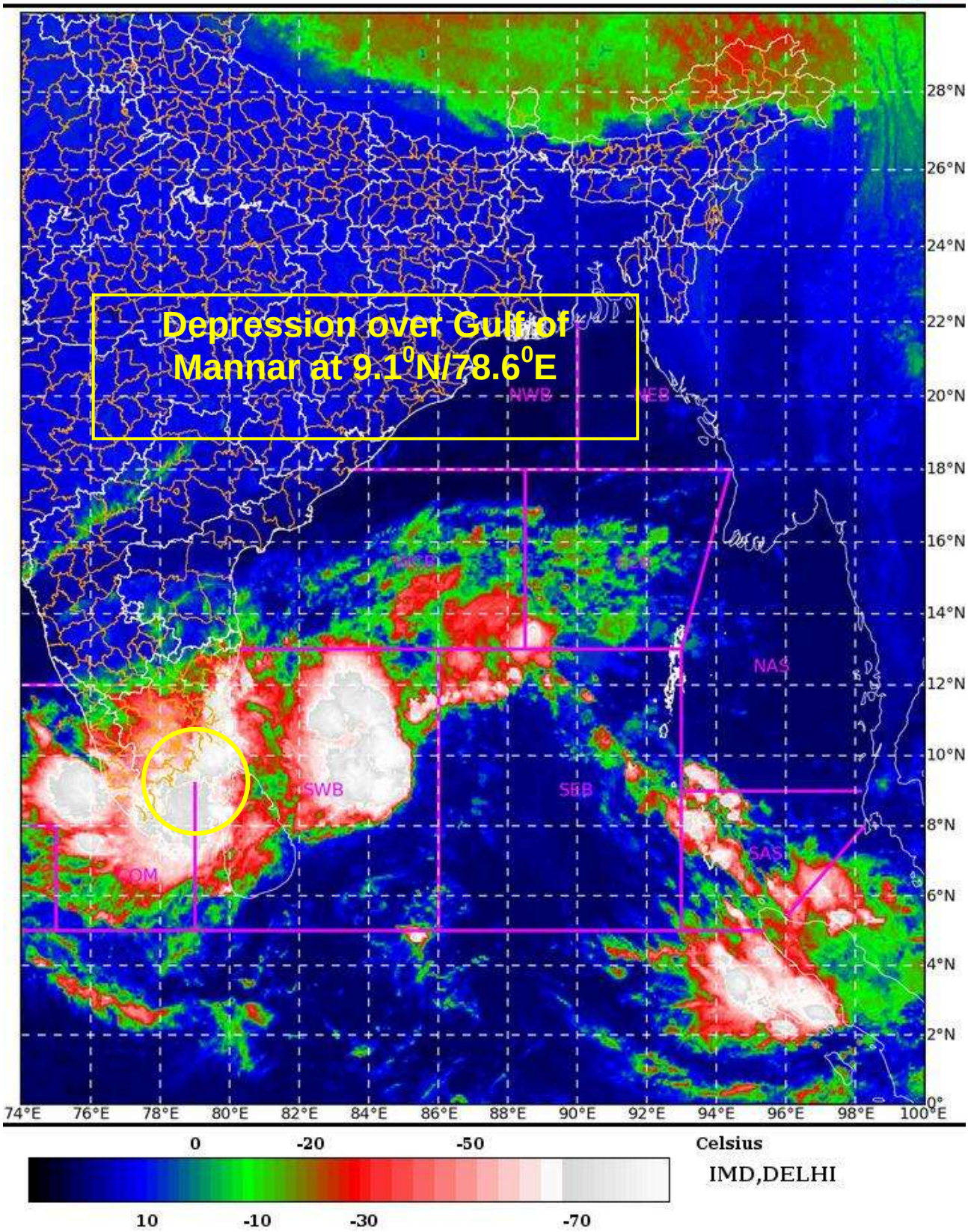
(S.P.SINGH)
SCIENTIST-C, RSMC,
NEW DELHI

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

SAT : INSAT-3D IMG 05-12-2020/(0100 to 0126) GMT

IMG_TIR1_TEMP 10.8 um 05-12-2020/(0630 to 0656) IST

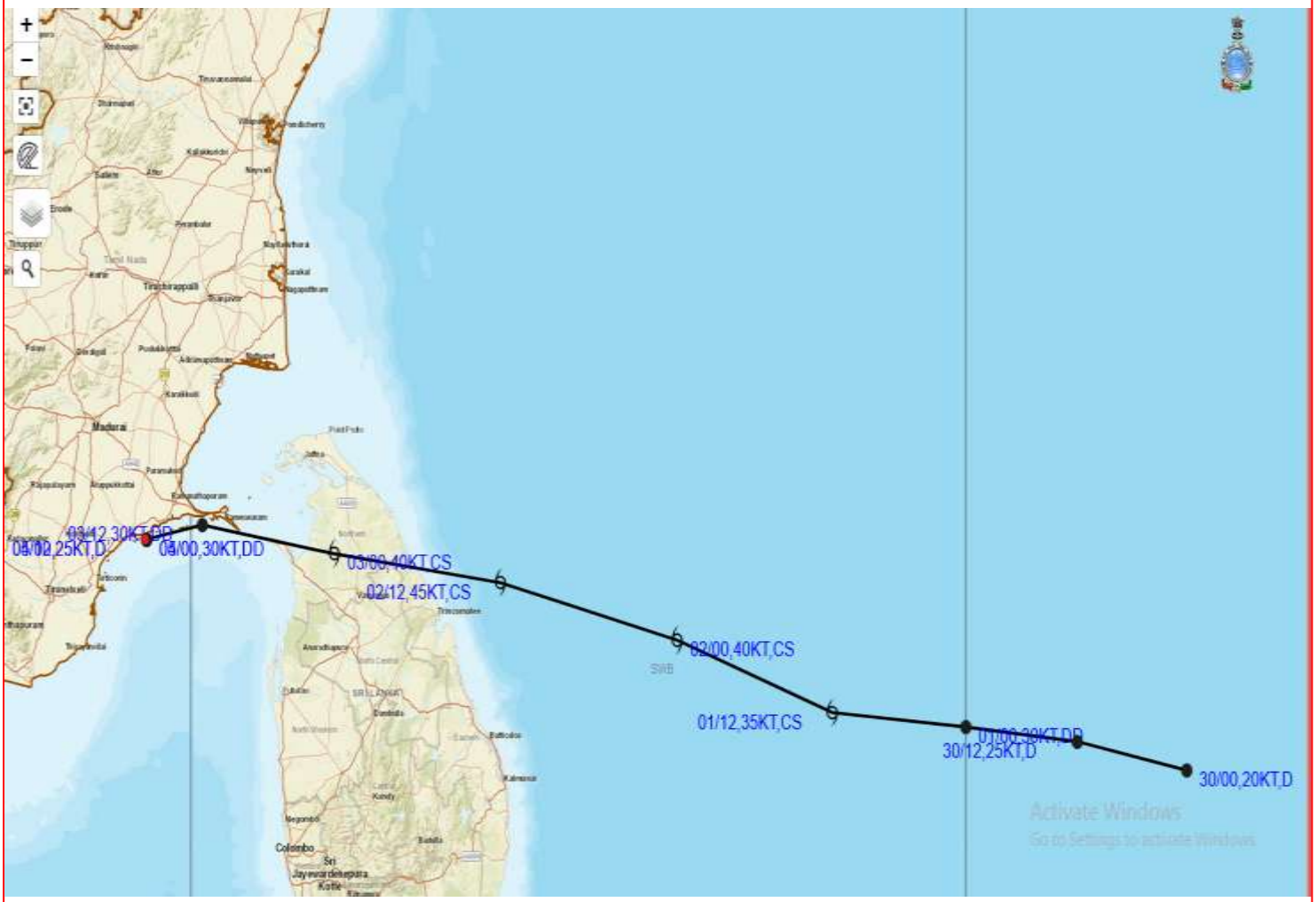
L1C Mercator



PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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

OBSERVED TRACK OF DEPRESSIONOVER GULF OF MANNAR BASED ON 0000 UTC OF 5TH DECEMBER, 2020.



DATE/TIME IN UTC
IST=UTC + 0530
L: LOW PRESSURE AREA
WML: WELL MARKED LOW PRESSURE AREA
D: DEPRESSION (17-27 KT)
DD: DEEP DEPRESSION (28-33 KT)
CS: CYCLONIC STORM (34-47 KT)
SCS: SEVERE CYCLONIC STORM (48-63KT)
VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
SuCS: SUPER CYCLONIC STORM (≥ 120 KT)

LESS THAN 34 KT
34-47 KT
≥ 48 KT
OBSERVED TRACK
FORECAST TRACK
CONE OF UNCERTAINTY

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

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

DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 05.12.2020

SPECIAL TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 0600 UTC OF 05.12.2020 BASED ON 0300 UTC OF 05.12.2020.

SUB: (A) DEPRESSION OVER GULF OF MANNAR
(B) UPPER AIR CYCLONIC CIRCULATION OVER MALDIVES AREA OFF SOUTH KERALA COAST

THE DEPRESSION OVER GULF OF MANNAR CLOSE TO RAMANATHAPURAM DISTRICT COAST REMAINED PRACTICALLY STATIONARY DURING PAST 33 HOURS AND LAY CENTERED AT 0300 UTC OF TODAY, THE 05TH DECEMBER OVER GULF OF MANNAR NEAR LAT. 9.1°N AND LONG. 78.6°E CLOSE TO RAMANATHAPURAM DISTRICT COAST, ABOUT 40 KM SOUTHWEST OF RAMANATHAPURAM, 70 KM WEST-SOUTHWEST OF PAMBAN (43363). THE ASSOCIATED WIND SPEED IS ABOUT 40-50 GUSTING TO 60 KMPH.

THE DEPRESSION IS LIKELY TO REMAIN PRACTICALLY STATIONARY OVER THE SAME REGION AND WEAKEN INTO A WELL MARKED LOW PRESSURE AREA DURING NEXT 12 HOURS.

THE ESTIMATED MAXIMUM SUSTAINED WIND SPEED IS 25 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS 1002 HPA. THE SEA CONDITION IS ROUGH TO VERY ROUGH AROUND THE SYSTEM CENTRE.

AS PER SATELLITE IMAGERY, ASSOCIATED BROKEN LOW/MEDIUM CLOUDS WITH EMBEDED INTENSE TO VERY INTENSE CONVECTIVE CLOUD LAY OVER SOUTH TAMILNADU, GULF OF MANNAR, PALK STRAIT AND COMORIN WITH MINIMUN CLOUD TOP TEMPERATURE MINUS 93 DEG CELCIUS.

(B) UPPER AIR CYCLONIC CIRCULATION OVER MALDIVES AREA OFF SOUTH KERALA COAST

AN UPPER AIR CYCLONIC CIRCULATION LAY OVER MALDIVES AREA OFF SOUTH KERALA COAST EXTENDING UPTO 3.1. KM A.S.L. AT 0300 UTC OF TODAY, THE 5TH DECEMBER.

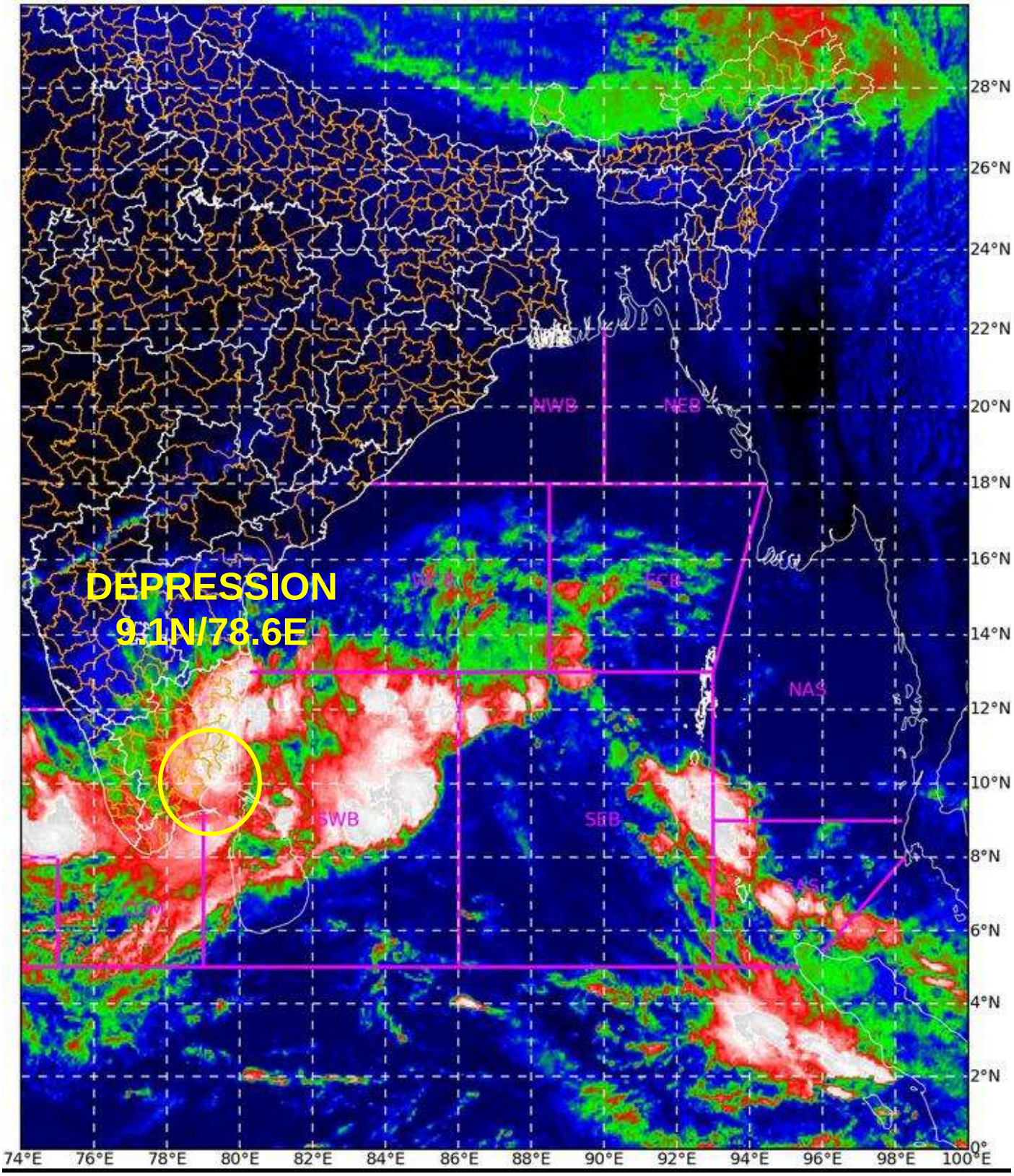
(R K JENAMANI)
SCIENTIST-F
RSMC NEW DELHI

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

SAT : INSAT-3D IMG 05-12-2020/(0430 to 0457) GMT

IMG_TIR1_TEMP 10.8 um 05-12-2020/(1000 to 1027) IST

L1C Mercator



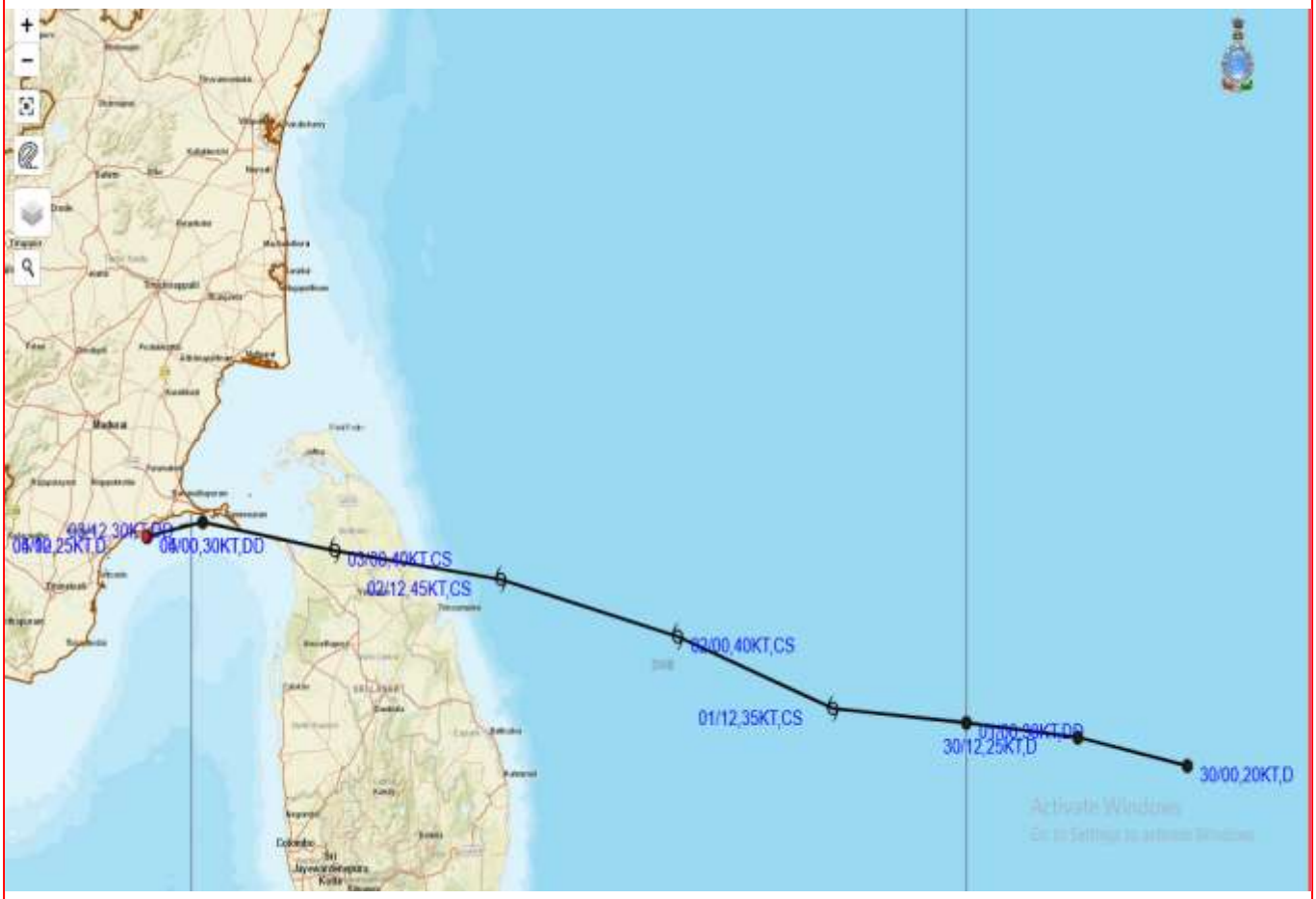
0 -20 -50 Celsius

IMD,DELHI

10 -10 -30 -70

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

OBSERVED TRACK OF DEPRESSIONOVER GULF OF MANNAR BASED ON 0300 UTC OF 5TH DECEMBER, 2020.



DATE/TIME IN UTC
IST=UTC + 0530
L: LOW PRESSURE AREA
WML: WELL MARKED LOW PRESSURE AREA
D: DEPRESSION (17-27 KT)
DD: DEEP DEPRESSION (28-33 KT)
CS: CYCLONIC STORM (34-47 KT)
SCS: SEVERE CYCLONIC STORM (48-63KT)
VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
SuCS: SUPER CYCLONIC STORM (≥ 120 KT)

LESS THAN 34 KT
34-47 KT
≥ 48 KT
OBSERVED TRACK
FORECAST TRACK
CONE OF UNCERTAINTY

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

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

DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 05.12.2020

SPECIAL TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 0900 UTC OF 05.12.2020 BASED ON 0600 UTC OF 05.12.2020.

SUB: (A) DEPRESSION WEAKENED INTO WELL MARKED LOW PRESSURE AREA OVER GULF OF MANNAR
(B) UPPER AIR CYCLONIC CIRCULATION OVER MALDIVES AREA OFF SOUTH KERALA COAST

THE DEPRESSION OVER GULF OF MANNAR CLOSE TO RAMANATHAPURAM DISTRICT COAST REMAINED PRACTICALLY STATIONARY, WEAKENED INTO A WELL MARKED LOW PRESSURE AREA AND LAY CENTERED OVER GULF OF MANNAR AT 0600 UTC OF TODAY, THE 05TH DECEMBER. THE ASSOCIATED WIND SPEED IS ABOUT 30-40 GUSTING TO 50 KMPH.

THE ESTIMATED MAXIMUM SUSTAINED WIND SPEED IS 15 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS 1007 HPA. THE SEA CONDITION IS ROUGH TO VERY ROUGH AROUND THE SYSTEM CENTRE.

AS PER SATELLITE IMAGERY, ASSOCIATED BROKEN LOW/MEDIUM CLOUDS WITH EMBEDED MODERATE TO INTENSE CONVECTION OVER TAMILNADU, GULF OF MANNAR, PALK STRAIT, COMORIN AND SRI LANKA.

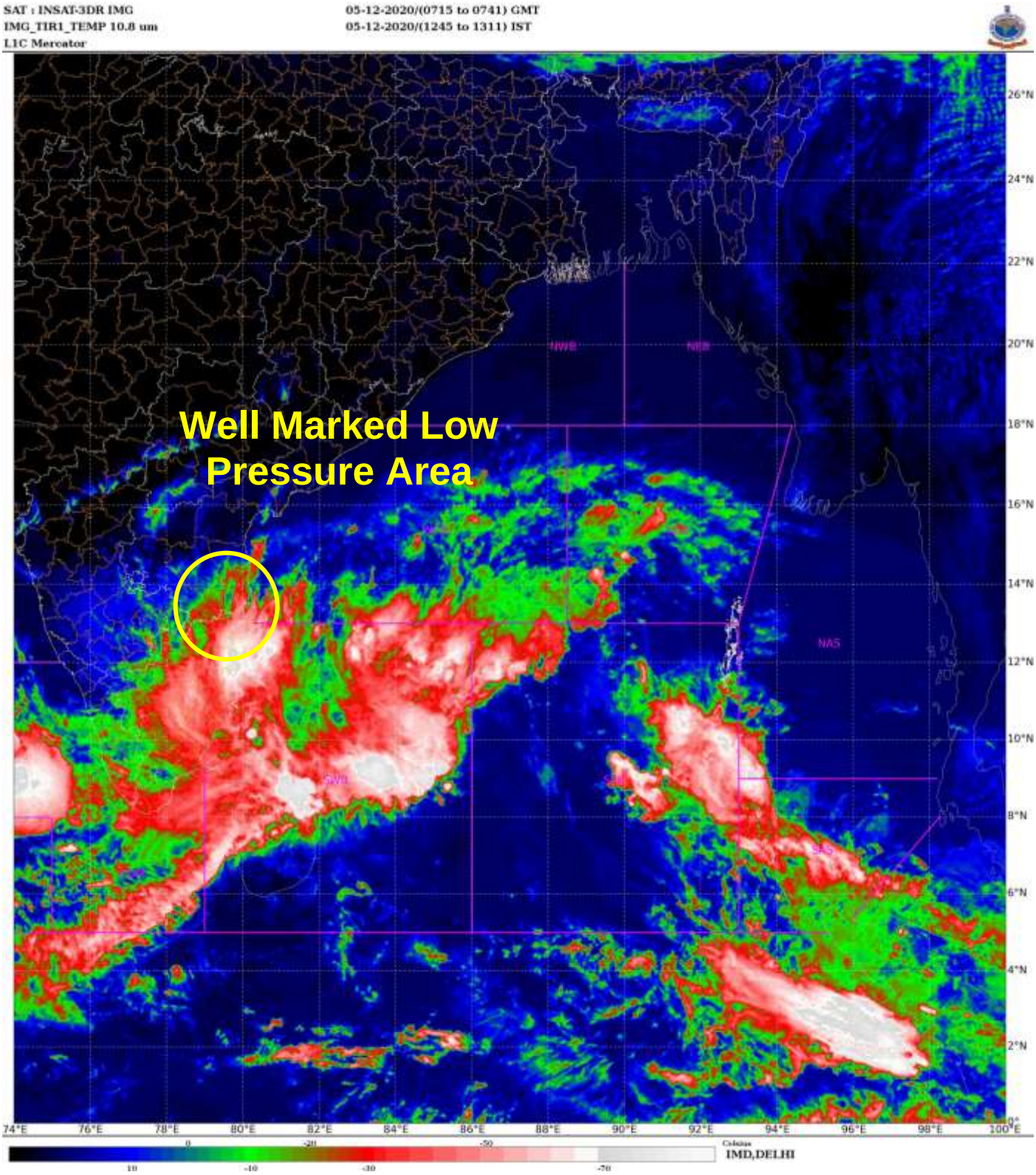
(B) UPPER AIR CYCLONIC CIRCULATION OVER LAKSHADWEEP-MALDIVES AREA OFF SOUTH KERALA COAST

AN UPPER AIR CYCLONIC CIRCULATION LAY OVER LAKSHADWEEP-MALDIVES AREA OFF SOUTH KERALA COAST EXTENDING UPTO 3.1. KM A.S.L. AT 0600 UTC OF TODAY, THE 5TH DECEMBER.

THIS IS THE LAST SPECIAL TROPICAL WEATHER OUTLOOK IN ASSOCIATION WITH THIS SYSTEM. HOWEVER, REGULAR TROPICAL WEATHER OUTLOOK WILL CONTINUE FROM TOMORROW ONWARDS.

(KRISHNA MISHRA)
SCIENTIST-C
RSMC NEW DELHI

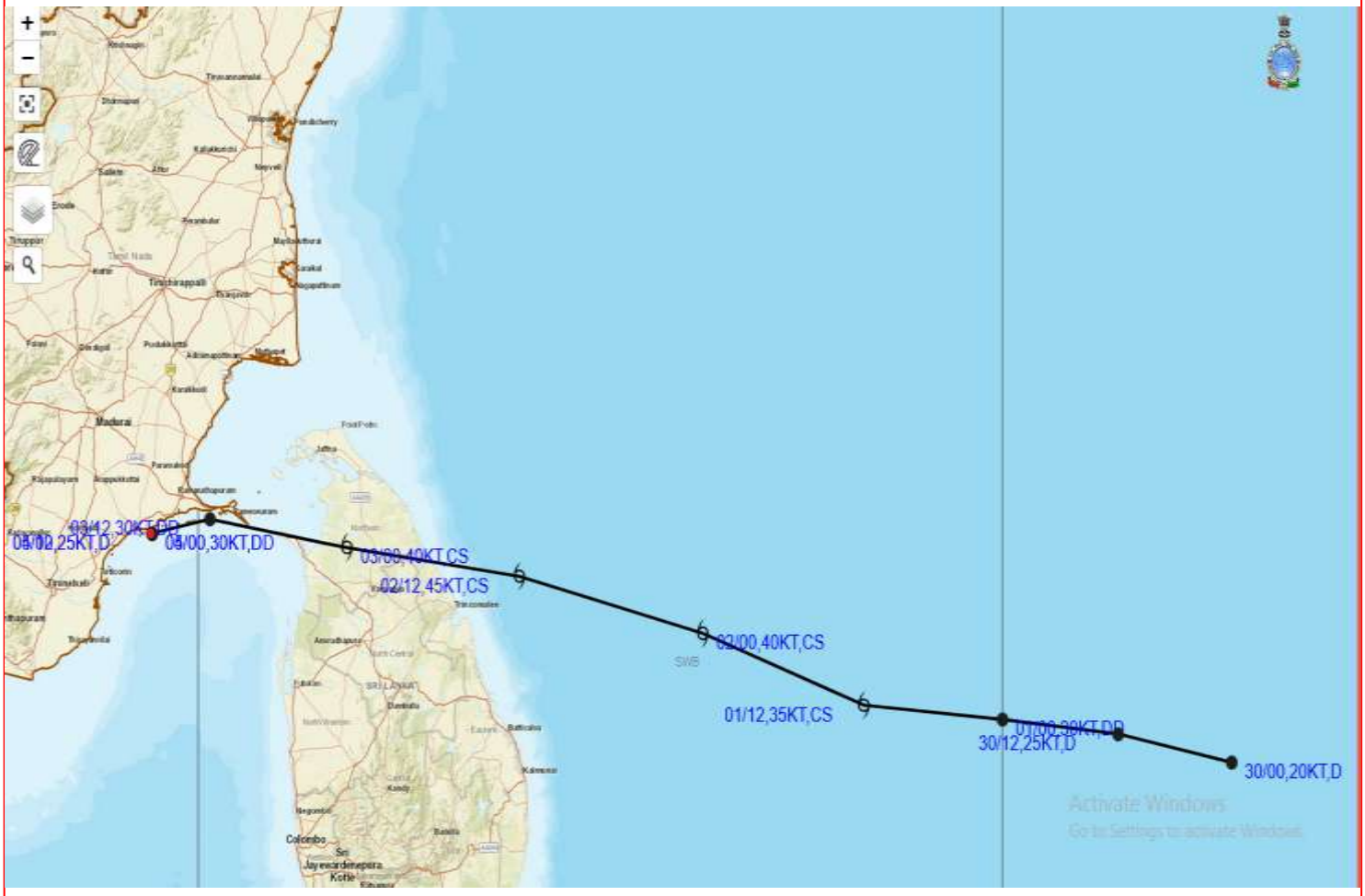
PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)
NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%



PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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

OBSERVED TRACK OF CYCLONIC STORM BUREVI OVER BAY OF BENGAL DURING 30TH NOVEMBER - 05TH DECEMBER, 2020.



DATE/TIME IN UTC
IST=UTC + 0530
L: LOW PRESSURE AREA
WML: WELL MARKED LOW PRESSURE AREA
D: DEPRESSION (17-27 KT)
DD: DEEP DEPRESSION (28-33 KT)
CS: CYCLONIC STORM (34-47 KT)
SCS: SEVERE CYCLONIC STORM (48-63KT)
VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
SuCS: SUPER CYCLONIC STORM (≥ 120 KT)

LESS THAN 34 KT
34-47 KT
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PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)
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