



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 04.01.2019 BASED ON 1200 UTC OF 04.01.2019.

TROPICAL CYCLONE 'PABUK' OVER THAILAND AND IT'S EMERGENCE INTO ANDAMAN SEA ON 05TH JANUARY, 2019

THE CYCLONIC STORM "PABUK" OVER GULF OF THAILAND & ADJOINING THAILAND MOVED WEST-NORTHWESTWARDS WITH A SPEED OF 16 KMPH IN PAST 06 HOURS. IT LAY CENTERED AT 1200 UTC OF TODAY, THE 04TH JANUARY, 2019 OVER THAILAND NEAR LATITUDE 8.5°N AND LONGITUDE 99.7°E, ABOUT 820 KM EAST-SOUTHEAST OF PORT BLAIR (43333). IT IS VERY LIKELY TO MOVE WEST-NORTHWESTWARDS AND EMERGE INTO ANDAMAN SEA BY FORENOON OF 05TH JANUARY, 2019. THEREAFTER, IT IS VERY LIKELY TO MOVE NORTHWESTWARDS AND CROSS ANDAMAN ISLANDS AROUND EVENING/NIGHT OF 6TH JANUARY AS A CYCLONIC STORM WITH A WIND SPEED OF 70-80 KMPH GUSTING TO 90 KMPH. THEREAFTER, IT IS VERY LIKELY TO MOVE NORTH-NORTHWESTWARDS AND THEN RECURVE NORTHEASTWARDS TOWARDS MYANMAR COAST AND WEAKEN GRADUALLY DURING 7TH-8TH JANUARY, 2019.

FORECAST TRACK AND INTENSITY ARE GIVEN IN THE FOLLOWING TABLE:

DATE/ TIME(UTC)	POSITION (LAT.°N/ LONG. °E)	MAXIMUM SUSTAINED SURFACE WIND SPEED (KMPH)	CATEGORY OF CYCLONIC DISTURBANCE
04.01.19/1200	8.5/99.7	80-90 GUSTING TO 100	CYCLONIC STORM
04.01.19/1800	8.6/99.0	80-90 GUSTING TO 100	CYCLONIC STORM
05.01.19/0000	8.9/98.2	80-90 GUSTING TO 100	CYCLONIC STORM
05.01.19/0600	9.2/97.5	80-90 GUSTING TO 100	CYCLONIC STORM
05.01.19/1200	9.5/96.8	75-85 GUSTING TO 95	CYCLONIC STORM
06.01.19/0000	10.4/95.3	75-85 GUSTING TO 95	CYCLONIC STORM
06.01.19/1200	11.3/93.3	70-80 GUSTING TO 90	CYCLONIC STORM
07.01.19/0000	12.2/91.3	70-80 GUSTING TO 90	CYCLONIC STORM
07.01.19/1200	13.7/90.7	65-75 GUSTING TO 85	CYCLONIC STORM
08.01.19/0000	15.4/91.0	50-60 GUSTING TO 70	DEEP DEPRESSION
08.01.19/1730	16.8/91.3	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%

AS PER THE SATELLITE IMAGERY OF 1200 UTC ON 04TH JANUARY, IN ASSOCIATION WITH THE SYSTEM, BROKEN LOW TO MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION OVER EAST ANDAMAN SEA, TENASSERIM COAST, THAILAND, WEST CAMBODIA AND GULF OF THAILAND. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 93° C.

THE ESTIMATED CENTRAL PRESSURE IS ABOUT 998 HPA AND THE MAXIMUM SUSTAINED SURFACE WIND SPEED IS 45 KNOTS GUSTING TO 50 KNOTS.

REMARKS:

CONSIDERING THE ENVIRONMENTAL CONDITIONS, THE THE SEA SURFACE TEMPERATURE IS AROUND 29-30 DEG. C OVER ANDAMAN SEA AND 27-28 DEG. C OVER ADJOINING BAY OF BENGAL. THE TROPICAL CYCLONE HEAT POTENTIAL IS AROUND 80-90 KJ/CM² OVER ANDAMAN SEA AND DECREASES NORTHWARDS. THE LOWER LEVEL CONVERGENCE IS 50×10^{-5} SECOND⁻¹ TOWARDS SOUTHEAST OF THE SYSTEM CENTER. LOWER LEVEL VORTICITY IS 250×10^{-6} SECOND⁻¹ AROUND THE SYSTEM CENTER. UPPER LEVEL DIVERGENCE IS 50×10^{-5} SECOND⁻¹ AROUND THE SYSTEM CENTER AND VERTICAL WIND SHEAR (20-25 KNOTS) OVER THE SYSTEM AREA AND INCREASES ALONG THE FORECAST TRACK. THE UPPER AIR RIDGE RUNS ALONG 14°N OVER THE SYSTEM REGION. THE MADDEN JULIAN OSCILLATION (MJO) INDEX LIES OVER PHASE 7 WITH AMPLITUDE MORE THAN 1.

HENCE, AS THE SYSTEM ENTERS INTO ANDAMAN SEA IT WILL EXPERIENCE WARMER SEA AND HIGHER OCEAN HEAT CONTENT. HOWEVER, IT WILL BECOME GRADUALLY UNFAVOURABLE OVER THE BAY OF BENGAL LEADING TO WEAKENING OF THE SYSTEM. THE WIND SHEAR WILL BE MODERATE TO HIGH OVER NORTH ANDAMAN SEA, WHICH COULD ALSO CAUSE WEAKENING OF THE SYSTEM OVER THE SEA AREA.

THE SYSTEM IS BEING STEERED BY THE ANTICYCLONE LOCATED TO THE EAST OF MALAY PENINSULA. AS THE SYSTEM MOVES AWAY FROM THE CENTRE OF ANTI-CYCLONIC CIRCULATION, IT WILL LIE IN THE PERIPHERY OF THE ANTICYCLONIC CIRCULATION AND RECURVE NORTHEASTWARDS ON 7TH AND 8TH. MOST OF THE NUMERICAL MODELS ARE IN AGREEMENT WITH THIS FORECAST.

(NEETHA K GOPAL)
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%

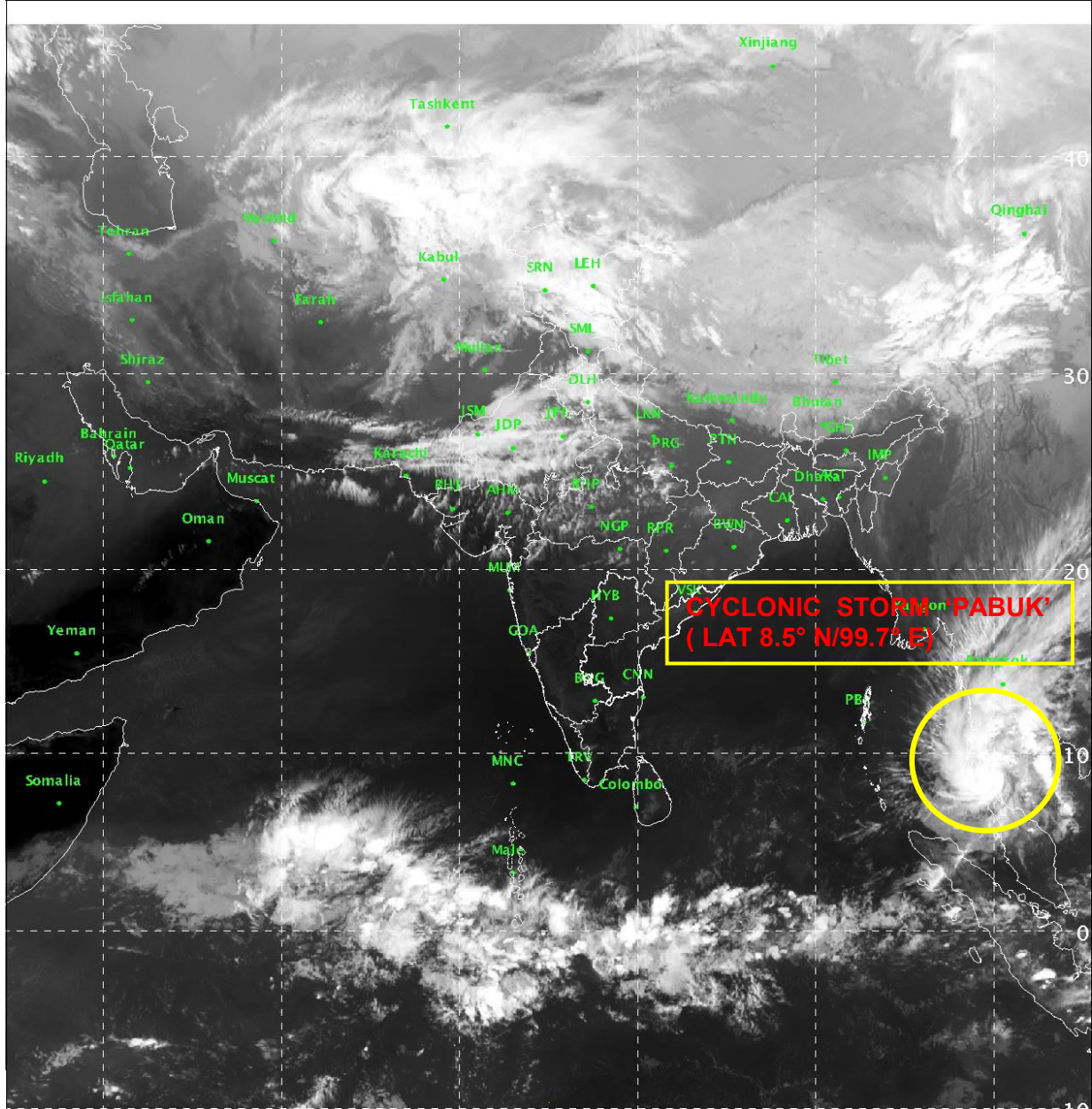
SAT :INSAT-3D IMG

IMG_TIR1 10.8 um

L1C Mercator (LINEAR STRETCH: 1.0%)

04-01-2019/12:00 GMT

04-01-2019/17:30 IST



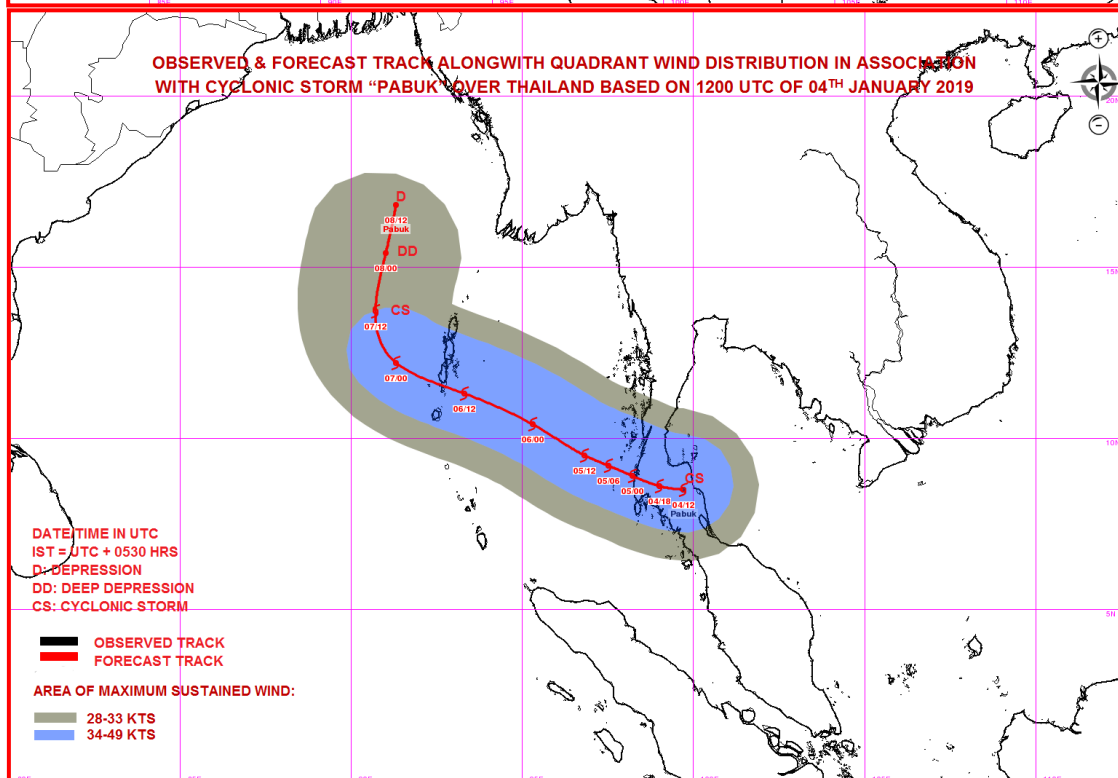
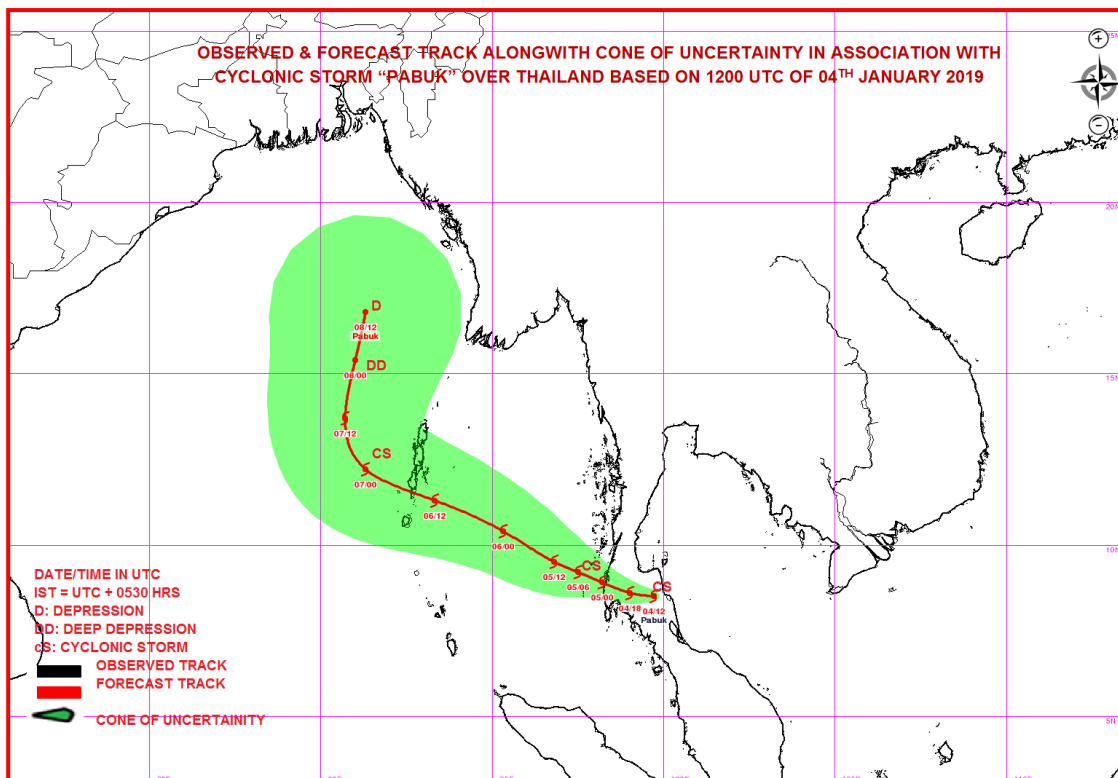
482

876

IMD/Delhi

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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



PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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



REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI
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 1630 UTC OF 04.01.2019 BASED ON 1500 UTC OF 04.01.2019.

TROPICAL CYCLONE ‘PABUK’ OVER THAILAND AND IT’S EMERGENCE INTO ANDAMAN SEA ON 05TH JANUARY, 2019

THE CYCLONIC STORM “**PABUK**” OVER GULF OF THAILAND & ADJOINING THAILAND MOVED WEST-NORTHWESTWARDS WITH A SPEED OF 10 KMPH IN PAST 06 HOURS. IT LAY CENTERED AT 1500 UTC OF TODAY, THE 04TH JANUARY, 2019 OVER THAILAND NEAR LATITUDE 8.6°N AND LONGITUDE 99.5°E, ABOUT 810 KM EAST-SOUTHEAST OF PORT BLAIR (43333). IT IS VERY LIKELY TO MOVE WEST-NORTHWESTWARDS AND EMERGE INTO ANDAMAN SEA BY FORENOON OF 05TH JANUARY, 2019. THEREAFTER, IT IS VERY LIKELY TO MOVE NORTHWESTWARDS AND CROSS ANDAMAN ISLANDS AROUND EVENING/NIGHT OF 6TH JANUARY AS A CYCLONIC STORM WITH A WIND SPEED OF 70-80 KMPH GUSTING TO 90 KMPH. THEREAFTER, IT IS VERY LIKELY TO MOVE NORTH-NORTHWESTWARDS AND THEN RECURVE NORTHEASTWARDS TOWARDS MYANMAR COAST AND WEAKEN GRADUALLY DURING 7TH-8TH JANUARY, 2019.

FORECAST TRACK AND INTENSITY ARE GIVEN IN THE FOLLOWING TABLE:

DATE/ TIME(UTC)	POSITION (LAT.°N/ LONG.°E)	MAXIMUM SUSTAINED SURFACE WIND SPEED (KMPH)	CATEGORY OF CYCLONIC DISTURBANCE
04.01.19/1500	8.6/99.5	80-90 GUSTING TO 100	CYCLONIC STORM
04.01.19/1800	8.6/99.0	80-90 GUSTING TO 100	CYCLONIC STORM
05.01.19/0000	8.9/98.2	80-90 GUSTING TO 100	CYCLONIC STORM
05.01.19/0600	9.2/97.5	80-90 GUSTING TO 100	CYCLONIC STORM
05.01.19/1200	9.5/96.8	75-85 GUSTING TO 95	CYCLONIC STORM
06.01.19/0000	10.4/95.3	75-85 GUSTING TO 95	CYCLONIC STORM
06.01.19/1200	11.3/93.3	70-80 GUSTING TO 90	CYCLONIC STORM
07.01.19/0000	12.2/91.3	70-80 GUSTING TO 90	CYCLONIC STORM
07.01.19/1200	13.7/90.7	65-75 GUSTING TO 85	CYCLONIC STORM
08.01.19/0000	15.4/91.0	50-60 GUSTING TO 70	DEEP DEPRESSION
08.01.19/1730	16.8/91.3	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%

AS PER THE SATELLITE IMAGERY OF 1500 UTC ON 04TH JANUARY, IN ASSOCIATION WITH THE SYSTEM, BROKEN LOW TO MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION OVER EAST ANDAMAN SEA, TENASSERIM COAST, THAILAND, WEST CAMBODIA AND GULF OF THAILAND. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 76° C.

THE ESTIMATED CENTRAL PRESSURE IS ABOUT 998 HPA AND THE MAXIMUM SUSTAINED SURFACE WIND SPEED IS 45 KNOTS GUSTING TO 50 KNOTS.

REMARKS:

CONSIDERING THE ENVIRONMENTAL CONDITIONS, THE THE SEA SURFACE TEMPERATURE IS AROUND 29-30 DEG. C OVER ANDAMAN SEA AND 27-28 DEG. C OVER ADJOINING BAY OF BENGAL. THE TROPICAL CYCLONE HEAT POTENTIAL IS AROUND 80-90 KJ/CM² OVER ANDAMAN SEA AND DECREASES NORTHWARDS. THE LOWER LEVEL CONVERGENCE IS 50×10^{-5} SECOND⁻¹ TOWARDS SOUTHEAST OF THE SYSTEM CENTER. LOWER LEVEL VORTICITY IS 250×10^{-6} SECOND⁻¹ AROUND THE SYSTEM CENTER. UPPER LEVEL DIVERGENCE IS 50×10^{-5} SECOND⁻¹ AROUND THE SYSTEM CENTER AND VERTICAL WIND SHEAR (20-25 KNOTS) OVER THE SYSTEM AREA AND INCREASES ALONG THE FORECAST TRACK. THE UPPER AIR RIDGE RUNS ALONG 14°N OVER THE SYSTEM REGION. THE MADDEN JULIAN OSCILLATION (MJO) INDEX LIES OVER PHASE 7 WITH AMPLITUDE MORE THAN 1.

HENCE, AS THE SYSTEM ENTERS INTO ANDAMAN SEA IT WILL EXPERIENCE WARMER SEA AND HIGHER OCEAN HEAT CONTENT. HOWEVER, IT WILL BECOME GRADUALLY UNFAVOURABLE OVER THE BAY OF BENGAL LEADING TO WEAKENING OF THE SYSTEM. THE WIND SHEAR WILL BE MODERATE TO HIGH OVER NORTH ANDAMAN SEA, WHICH COULD ALSO CAUSE WEAKENING OF THE SYSTEM OVER THE SEA AREA.

THE SYSTEM IS BEING STEERED BY THE ANTICYCLONE LOCATED TO THE EAST OF MALAY PENINSULA. AS THE SYSTEM MOVES AWAY FROM THE CENTRE OF ANTI-CYCLONIC CIRCULATION, IT WILL LIE IN THE PERIPHERY OF THE ANTICYCLONIC CIRCULATION AND RECURVE NORTHEASTWARDS ON 7TH AND 8TH. MOST OF THE NUMERICAL MODELS ARE IN AGREEMENT WITH THIS FORECAST.

(D R PATTANAİK)
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%

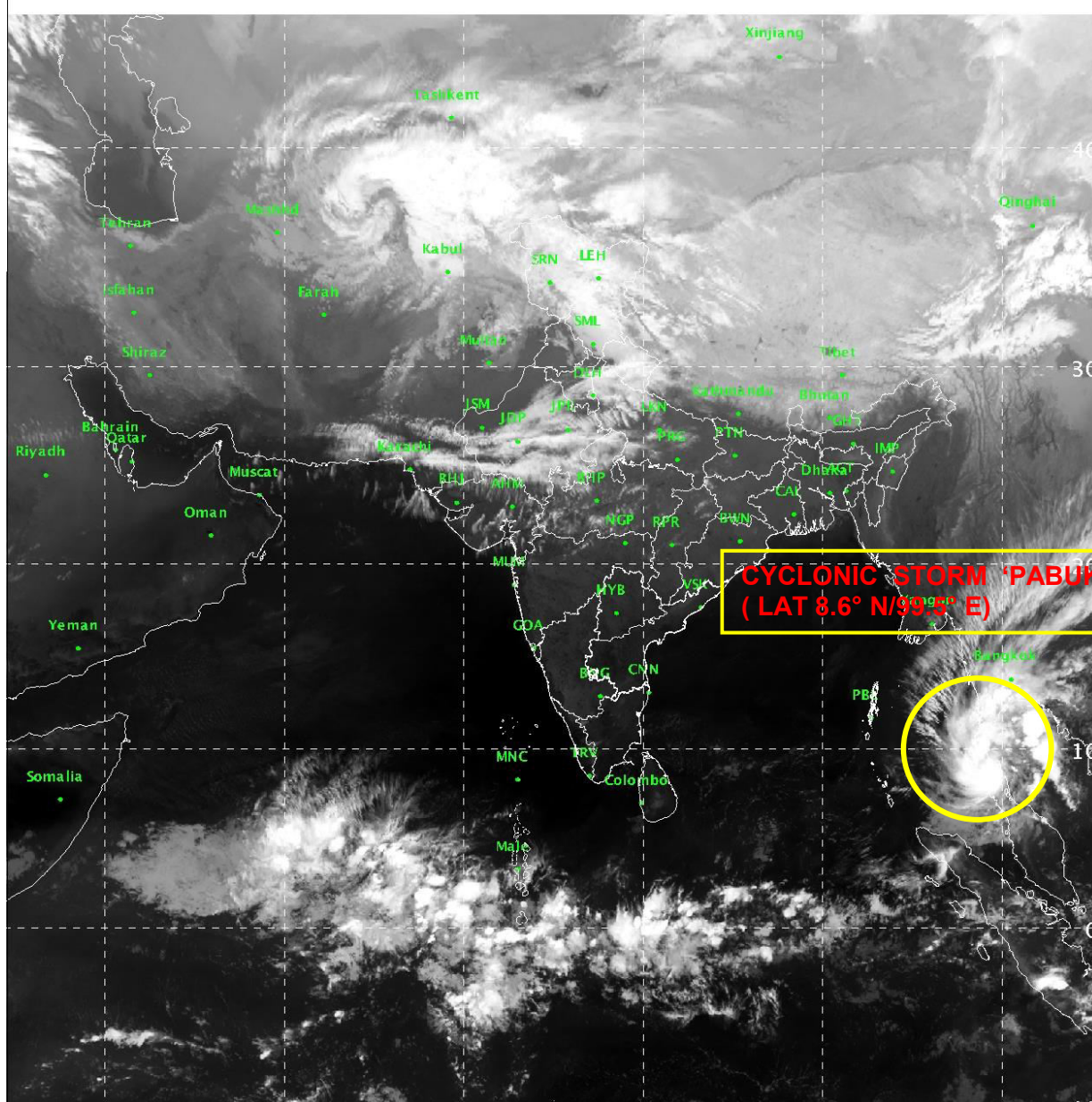
SAT :INSAT-3D IMG

IMG_TIR1 10.8 um

L1C Mercator (LINEAR STRETCH: 1.0%)

04-01-2019/14:30 GMT

04-01-2019/20:00 IST



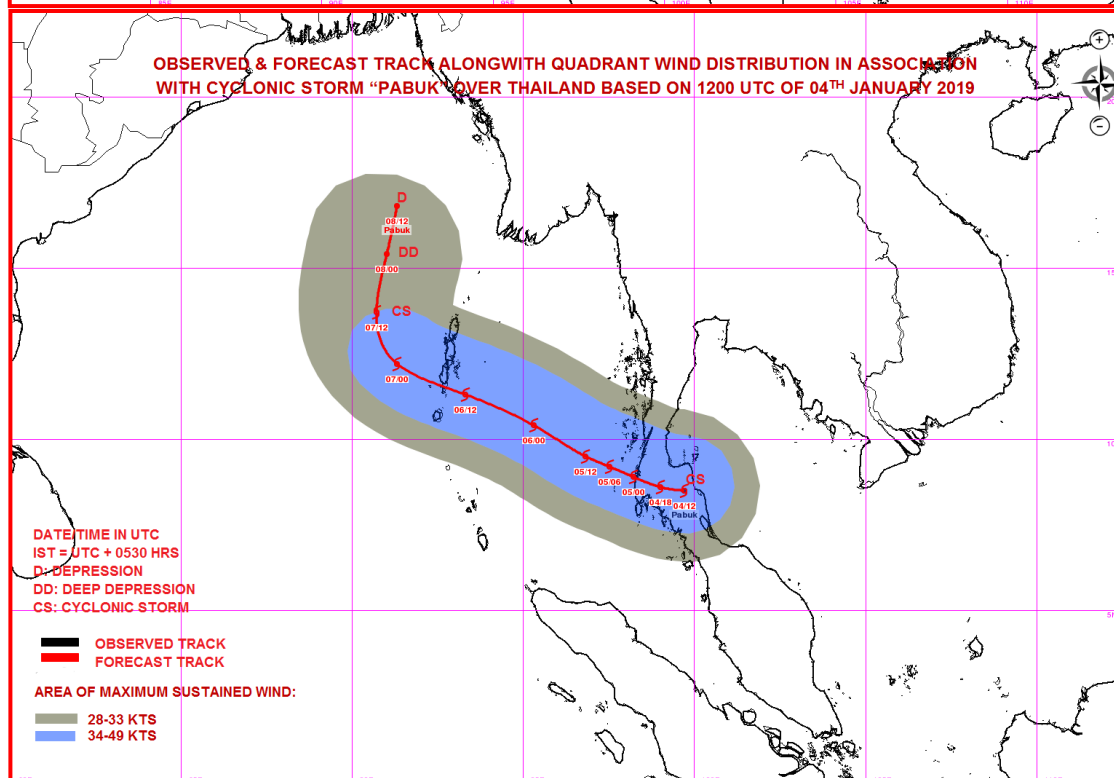
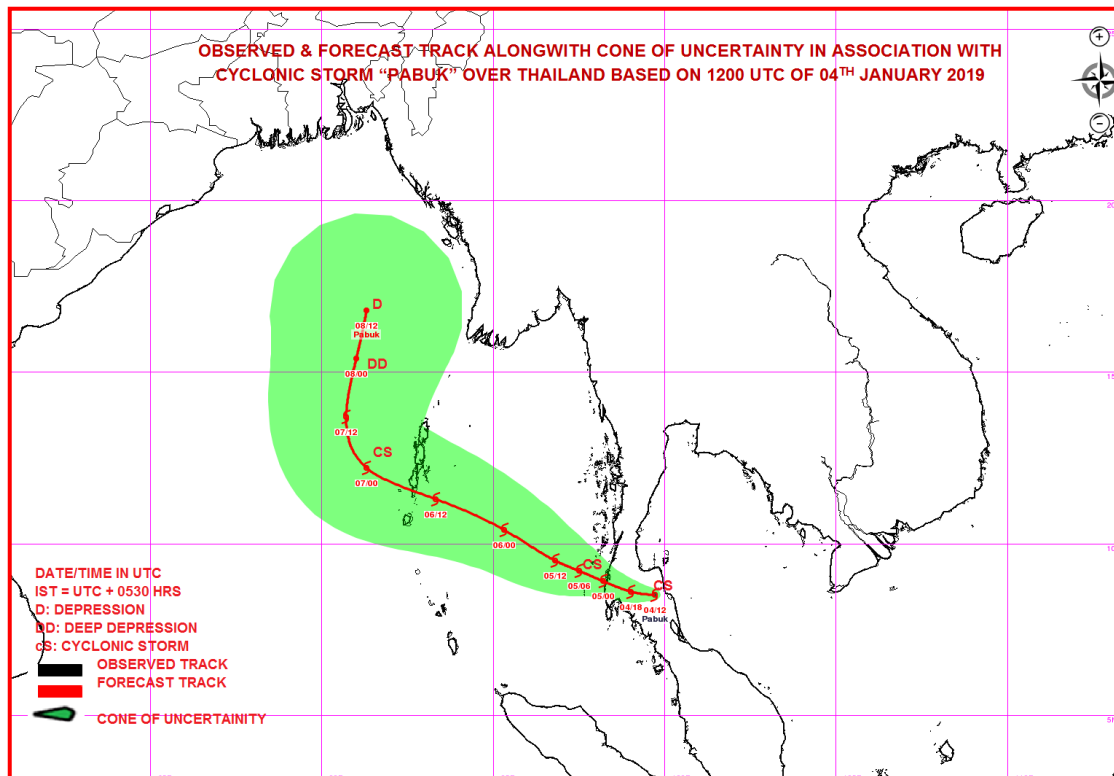
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IMD/Delhi

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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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)
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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 2000 UTC OF 04.01.2019 BASED ON 1800 UTC OF 04.01.2019.

TROPICAL CYCLONE ‘PABUK’ OVER THAILAND AND IT’S EMERGENCE INTO ANDAMAN SEA ON 05TH JANUARY, 2019

THE CYCLONIC STORM “**PABUK**” OVER GULF OF THAILAND & ADJOINING THAILAND MOVED WEST-NORTHWESTWARDS WITH A SPEED OF 10 KMPH IN PAST 06 HOURS. IT LAY CENTERED AT 1800 UTC OF TODAY, THE 04TH JANUARY, 2019 OVER THAILAND NEAR LATITUDE 8.7°N AND LONGITUDE 99.2°E, ABOUT 780 KM EAST-SOUTHEAST OF PORT BLAIR (43333). IT IS VERY LIKELY TO MOVE WEST-NORTHWESTWARDS AND EMERGE INTO ANDAMAN SEA BY FORENOON OF 05TH JANUARY, 2019. THEREAFTER, IT IS VERY LIKELY TO MOVE NORTHWESTWARDS AND CROSS ANDAMAN ISLANDS AROUND EVENING/NIGHT OF 6TH JANUARY AS A CYCLONIC STORM WITH A WIND SPEED OF 70-80 KMPH GUSTING TO 90 KMPH. THEREAFTER, IT IS VERY LIKELY TO MOVE NORTH-NORTHWESTWARDS AND THEN RECURVE NORTHEASTWARDS TOWARDS MYANMAR COAST AND WEAKEN GRADUALLY DURING 7TH-8TH JANUARY, 2019.

FORECAST TRACK AND INTENSITY ARE GIVEN IN THE FOLLOWING TABLE:

DATE/ TIME(UTC)	POSITION (LAT.°N/ LONG. °E)	MAXIMUM SUSTAINED SURFACE WIND SPEED (KMPH)	CATEGORY OF CYCLONIC DISTURBANCE
04.01.19/1800	8.7/99.2	80-90 GUSTING TO 100	CYCLONIC STORM
05.01.19/0000	8.9/98.2	80-90 GUSTING TO 100	CYCLONIC STORM
05.01.19/0600	9.2/97.5	80-90 GUSTING TO 100	CYCLONIC STORM
05.01.19/1200	9.5/96.8	75-85 GUSTING TO 95	CYCLONIC STORM
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06.01.19/1800	11.7/92.3	70-80 GUSTING TO 90	CYCLONIC STORM
07.01.19/0600	12.6/91.0	70-80 GUSTING TO 90	CYCLONIC STORM
07.01.19/1800	13.7/90.7	65-75 GUSTING TO 85	CYCLONIC STORM
08.01.19/0600	16.1/91.1	50-60 GUSTING TO 70	DEEP DEPRESSION
08.01.19/1800	17.2/91.5	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%

AS PER THE SATELLITE IMAGERY OF 1800 UTC ON 04TH JANUARY, IN ASSOCIATION WITH THE SYSTEM, BROKEN LOW TO MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION OVER EAST ANDAMAN SEA, TENASSERIM COAST, THAILAND, WEST CAMBODIA AND GULF OF THAILAND. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 66° C.

THE ESTIMATED CENTRAL PRESSURE IS ABOUT 998 HPA AND THE MAXIMUM SUSTAINED SURFACE WIND SPEED IS 45 KNOTS GUSTING TO 50 KNOTS.

REMARKS:

CONSIDERING THE ENVIRONMENTAL CONDITIONS, THE THE SEA SURFACE TEMPERATURE IS AROUND 29-30 DEG. C OVER ANDAMAN SEA AND 27-28 DEG. C OVER ADJOINING BAY OF BENGAL. THE TROPICAL CYCLONE HEAT POTENTIAL IS AROUND 80-90 KJ/CM² OVER ANDAMAN SEA AND DECREASES NORTHWARDS. THE LOWER LEVEL CONVERGENCE IS 50×10^{-5} SECOND⁻¹ TOWARDS SOUTHEAST OF THE SYSTEM CENTER. LOWER LEVEL VORTICITY IS 250×10^{-6} SECOND⁻¹ AROUND THE SYSTEM CENTER. UPPER LEVEL DIVERGENCE IS 50×10^{-5} SECOND⁻¹ AROUND THE SYSTEM CENTER AND VERTICAL WIND SHEAR (20-25 KNOTS) OVER THE SYSTEM AREA AND INCREASES ALONG THE FORECAST TRACK. THE UPPER AIR RIDGE RUNS ALONG 14°N OVER THE SYSTEM REGION. THE MADDEN JULIAN OSCILLATION (MJO) INDEX LIES OVER PHASE 7 WITH AMPLITUDE MORE THAN 1.

HENCE, AS THE SYSTEM ENTERS INTO ANDAMAN SEA IT WILL EXPERIENCE WARMER SEA AND HIGHER OCEAN HEAT CONTENT. HOWEVER, IT WILL BECOME GRADUALLY UNFAVOURABLE OVER THE BAY OF BENGAL LEADING TO WEAKENING OF THE SYSTEM. THE WIND SHEAR WILL BE MODERATE TO HIGH OVER NORTH ANDAMAN SEA, WHICH COULD ALSO CAUSE WEAKENING OF THE SYSTEM OVER THE SEA AREA.

THE SYSTEM IS BEING STEERED BY THE ANTICYCLONE LOCATED TO THE EAST OF MALAY PENINSULA. AS THE SYSTEM MOVES AWAY FROM THE CENTRE OF ANTI-CYCLONIC CIRCULATION, IT WILL LIE IN THE PERIPHERY OF THE ANTICYCLONIC CIRCULATION AND RECURVE NORTHEASTWARDS ON 7TH AND 8TH. MOST OF THE NUMERICAL MODELS ARE IN AGREEMENT WITH THIS FORECAST.

(D R PATTANAIAK)
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%

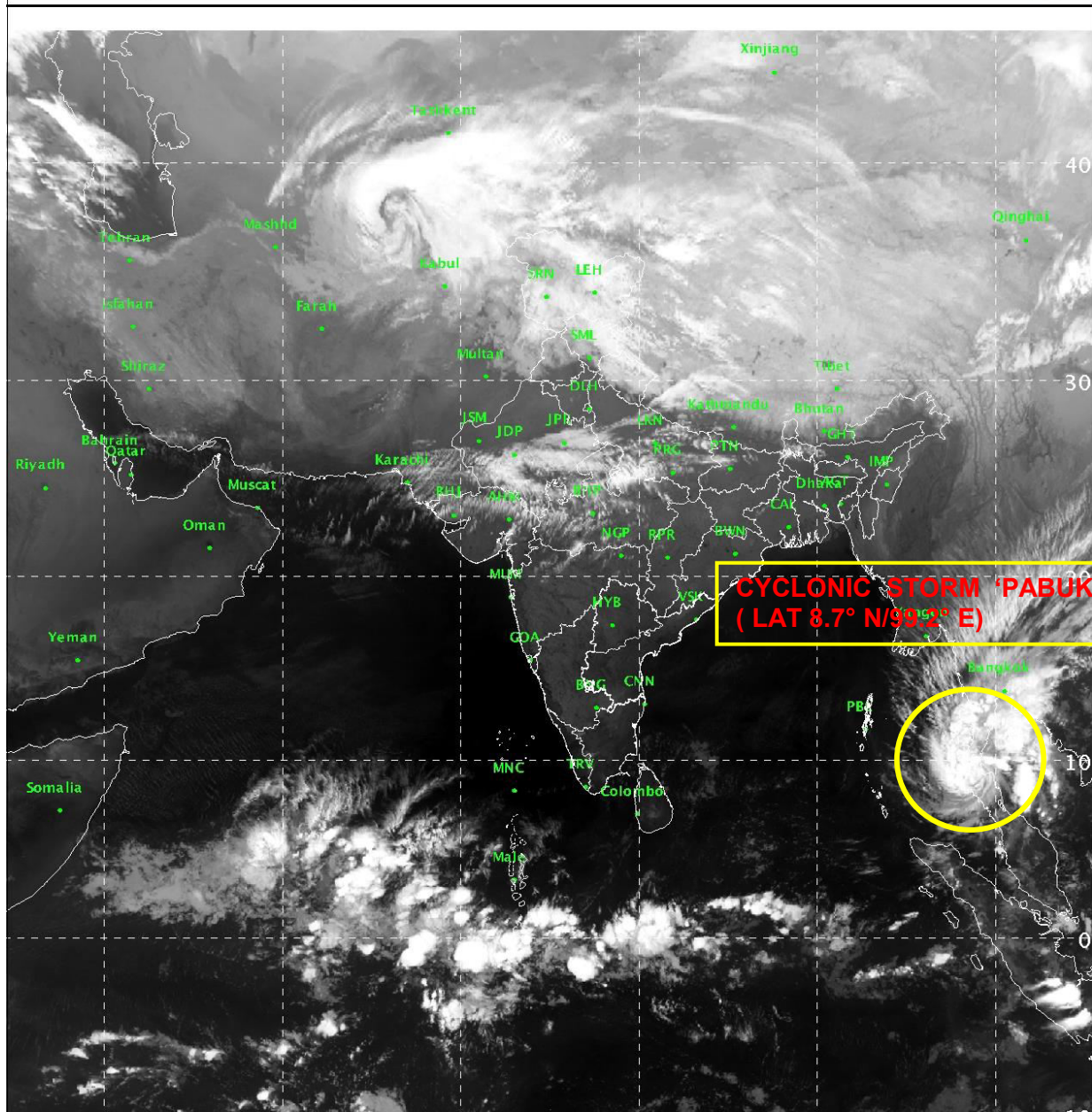
SAT :INSAT-3D IMG

IMG_TIR1 10.8 um

L1C Mercator (LINEAR STRETCH: 1.0%)

04-01-2019/18:30 GMT

05-01-2019/00:00 IST



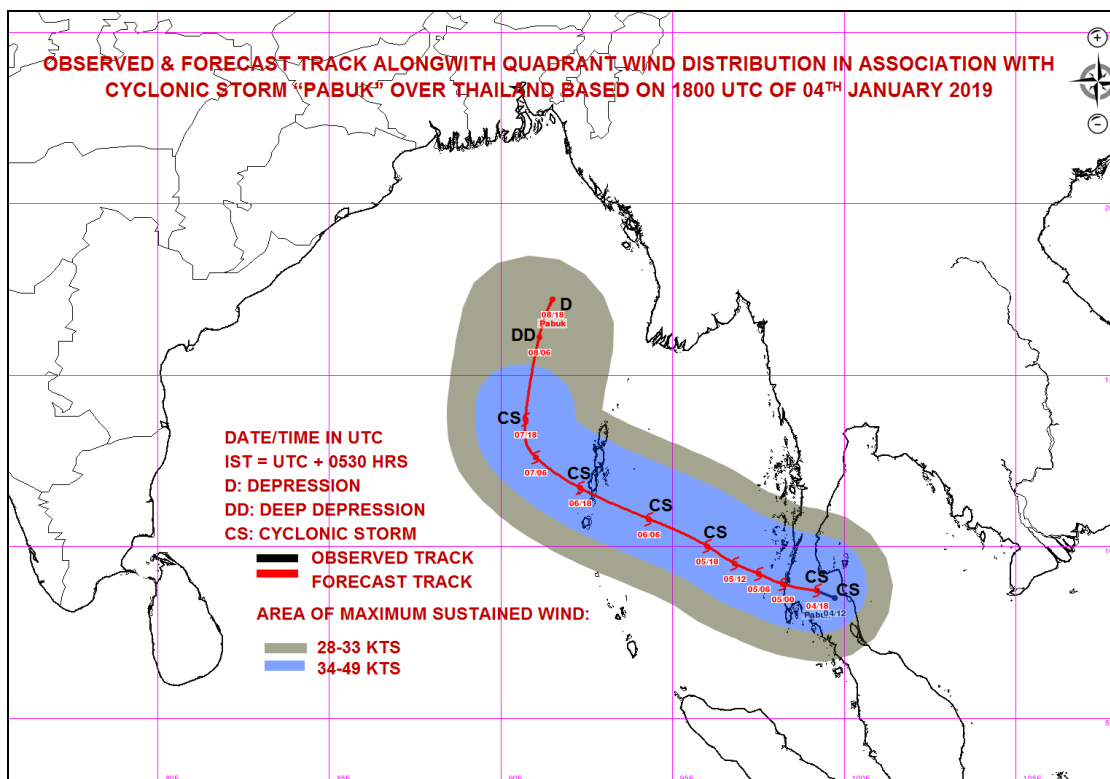
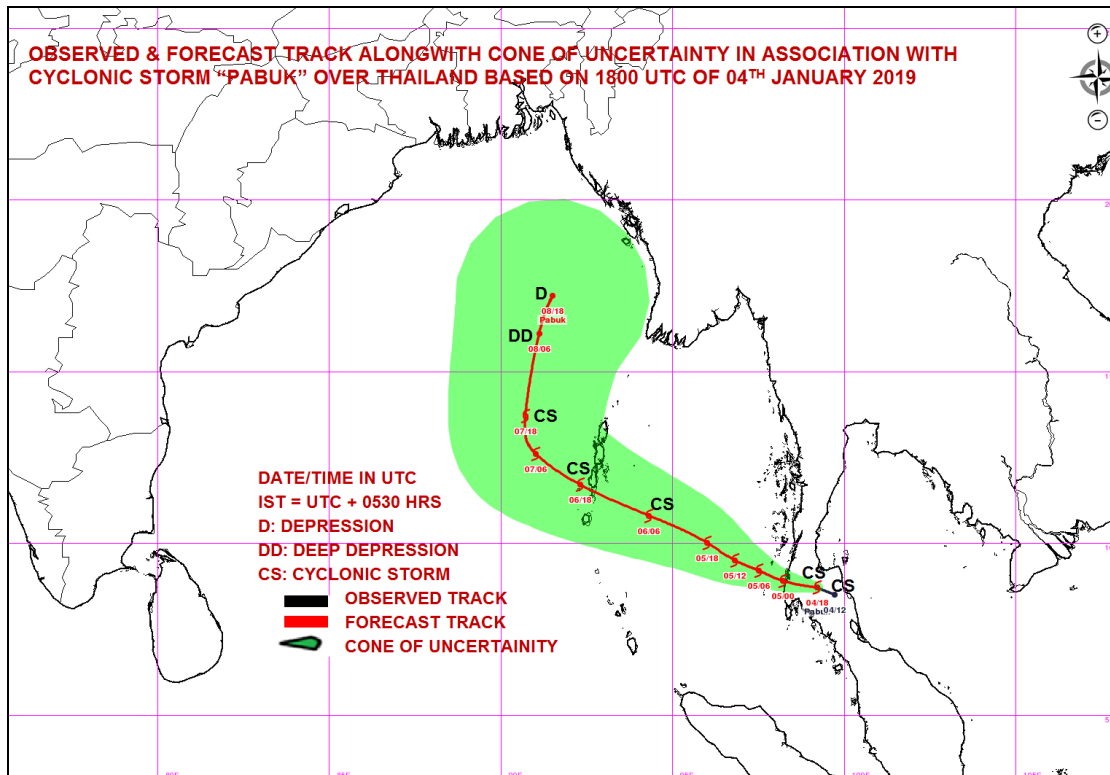
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884

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



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 2300 UTC OF 04.01.2019 BASED ON 2100 UTC OF 04.01.2019.

TROPICAL CYCLONE 'PABUK' OVER THAILAND AND IT'S EMERGENCE INTO ANDAMAN SEA ON 05TH JANUARY, 2019

THE CYCLONIC STORM "PABUK" OVER GULF OF THAILAND & ADJOINING THAILAND MOVED WEST-NORTHWESTWARDS WITH A SPEED OF 10 KMPH IN PAST 06 HOURS. IT LAY CENTERED AT 2100 UTC OF 04TH JANUARY, 2019 OVER THAILAND NEAR LATITUDE 8.8°N AND LONGITUDE 99.0°E, ABOUT 750 KM EAST-SOUTHEAST OF PORT BLAIR (43333). IT IS VERY LIKELY TO MOVE WEST-NORTHWESTWARDS AND EMERGE INTO ANDAMAN SEA BY FORENOON OF 05TH JANUARY, 2019. THEREAFTER, IT IS VERY LIKELY TO MOVE NORTHWESTWARDS AND CROSS ANDAMAN ISLANDS AROUND EVENING/NIGHT OF 6TH JANUARY AS A CYCLONIC STORM WITH A WIND SPEED OF 70-80 KMPH GUSTING TO 90 KMPH. THEREAFTER, IT IS VERY LIKELY TO MOVE NORTH-NORTHWESTWARDS AND THEN RECURVE NORTHEASTWARDS TOWARDS MYANMAR COAST AND WEAKEN GRADUALLY DURING 7TH-8TH JANUARY, 2019.

FORECAST TRACK AND INTENSITY ARE GIVEN IN THE FOLLOWING TABLE:

DATE/ TIME(UTC)	POSITION (LAT.°N/ LONG. °E)	MAXIMUM SUSTAINED SURFACE WIND SPEED (KMPH)	CATEGORY OF CYCLONIC DISTURBANCE
04.01.19/2100	8.8/99.0	80-90 GUSTING TO 100	CYCLONIC STORM
05.01.19/0000	8.9/98.2	80-90 GUSTING TO 100	CYCLONIC STORM
05.01.19/0600	9.2/97.5	80-90 GUSTING TO 100	CYCLONIC STORM
05.01.19/1200	9.5/96.8	75-85 GUSTING TO 95	CYCLONIC STORM
05.01.19/1800	10.0/96.0	75-85 GUSTING TO 95	CYCLONIC STORM
06.01.19/0600	10.8/94.3	75-85 GUSTING TO 95	CYCLONIC STORM
06.01.19/1800	11.7/92.3	70-80 GUSTING TO 90	CYCLONIC STORM
07.01.19/0600	12.6/91.0	70-80 GUSTING TO 90	CYCLONIC STORM
07.01.19/1800	13.7/90.7	65-75 GUSTING TO 85	CYCLONIC STORM
08.01.19/0600	16.1/91.1	50-60 GUSTING TO 70	DEEP DEPRESSION
08.01.19/1800	17.2/91.5	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%

AS PER THE SATELLITE IMAGERY OF 2100 UTC ON 04TH JANUARY, IN ASSOCIATION WITH THE SYSTEM, BROKEN LOW TO MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION OVER EAST ANDAMAN SEA, TENASSERIM COAST, THAILAND, WEST CAMBODIA AND GULF OF THAILAND. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 68° C.

THE ESTIMATED CENTRAL PRESSURE IS ABOUT 998 HPA AND THE MAXIMUM SUSTAINED SURFACE WIND SPEED IS 45 KNOTS GUSTING TO 50 KNOTS.

REMARKS:

CONSIDERING THE ENVIRONMENTAL CONDITIONS, THE THE SEA SURFACE TEMPERATURE IS AROUND 29-30 DEG. C OVER ANDAMAN SEA AND 27-28 DEG. C OVER ADJOINING BAY OF BENGAL. THE TROPICAL CYCLONE HEAT POTENTIAL IS AROUND 80-90 KJ/CM² OVER ANDAMAN SEA AND DECREASES NORTHWARDS. THE LOWER LEVEL CONVERGENCE IS 50×10^{-5} SECOND⁻¹ TOWARDS SOUTHEAST OF THE SYSTEM CENTER. LOWER LEVEL VORTICITY IS 250×10^{-6} SECOND⁻¹ AROUND THE SYSTEM CENTER. UPPER LEVEL DIVERGENCE IS 50×10^{-5} SECOND⁻¹ AROUND THE SYSTEM CENTER AND VERTICAL WIND SHEAR (20-25 KNOTS) OVER THE SYSTEM AREA AND INCREASES ALONG THE FORECAST TRACK. THE UPPER AIR RIDGE RUNS ALONG 14°N OVER THE SYSTEM REGION. THE MADDEN JULIAN OSCILLATION (MJO) INDEX LIES OVER PHASE 7 WITH AMPLITUDE MORE THAN 1.

HENCE, AS THE SYSTEM ENTERS INTO ANDAMAN SEA IT WILL EXPERIENCE WARMER SEA AND HIGHER OCEAN HEAT CONTENT. HOWEVER, IT WILL BECOME GRADUALLY UNFAVOURABLE OVER THE BAY OF BENGAL LEADING TO WEAKENING OF THE SYSTEM. THE WIND SHEAR WILL BE MODERATE TO HIGH OVER NORTH ANDAMAN SEA, WHICH COULD ALSO CAUSE WEAKENING OF THE SYSTEM OVER THE SEA AREA.

THE SYSTEM IS BEING STEERED BY THE ANTICYCLONE LOCATED TO THE EAST OF MALAY PENINSULA. AS THE SYSTEM MOVES AWAY FROM THE CENTRE OF ANTICYCLONIC CIRCULATION, IT WILL LIE IN THE PERIPHERY OF THE ANTICYCLONIC CIRCULATION AND RECURVE NORTHEASTWARDS ON 7TH AND 8TH. MOST OF THE NUMERICAL MODELS ARE IN AGREEMENT WITH THIS FORECAST.

(D R PATTANAIAK)
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%

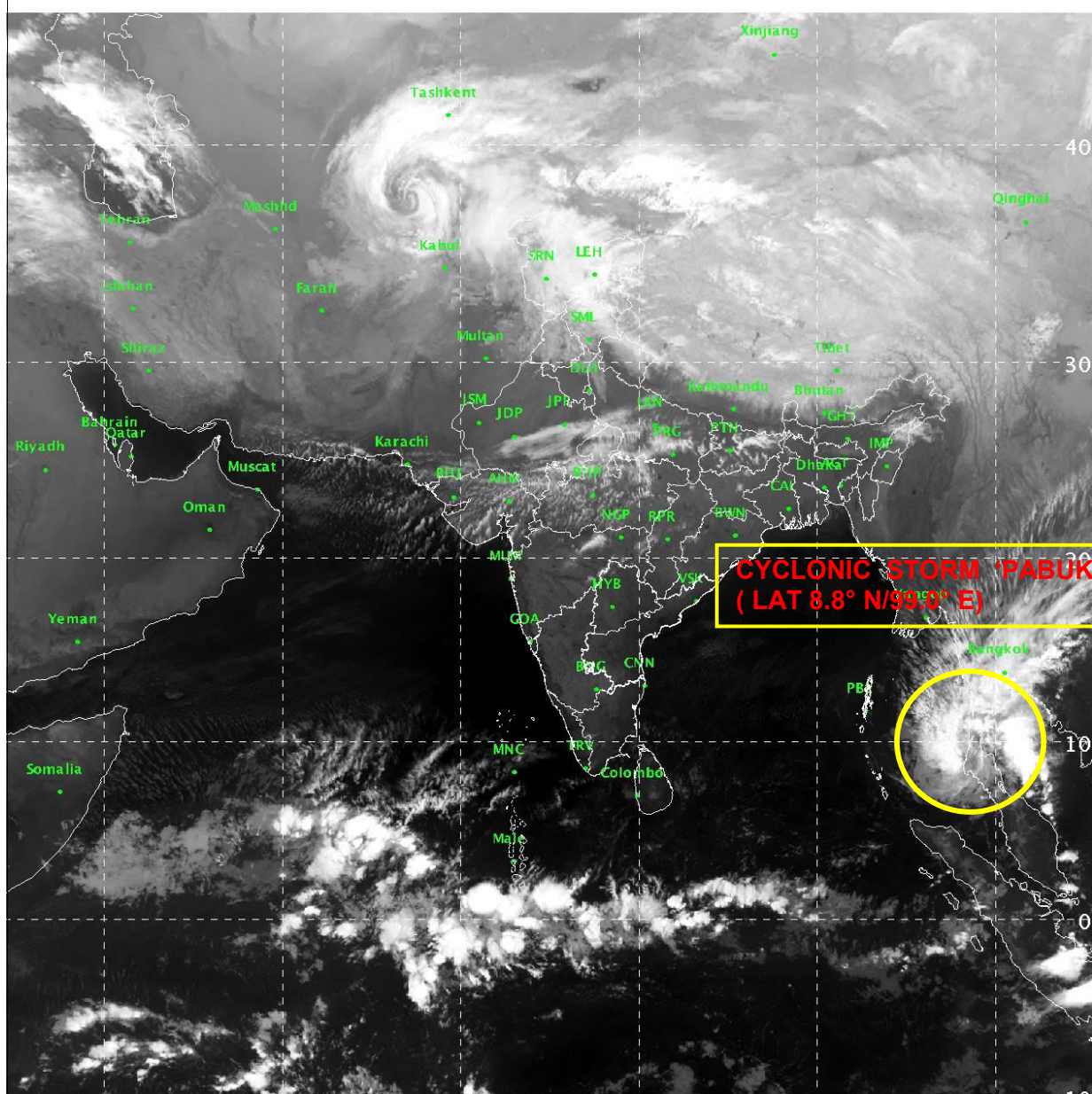
SAT :INSAT-3D IMG

IMG_TIR1 10.8 um

L1C Mercator (LINEAR STRETCH: 1.0%)

04-01-2019/23:00 GMT

05-01-2019/04:30 IST



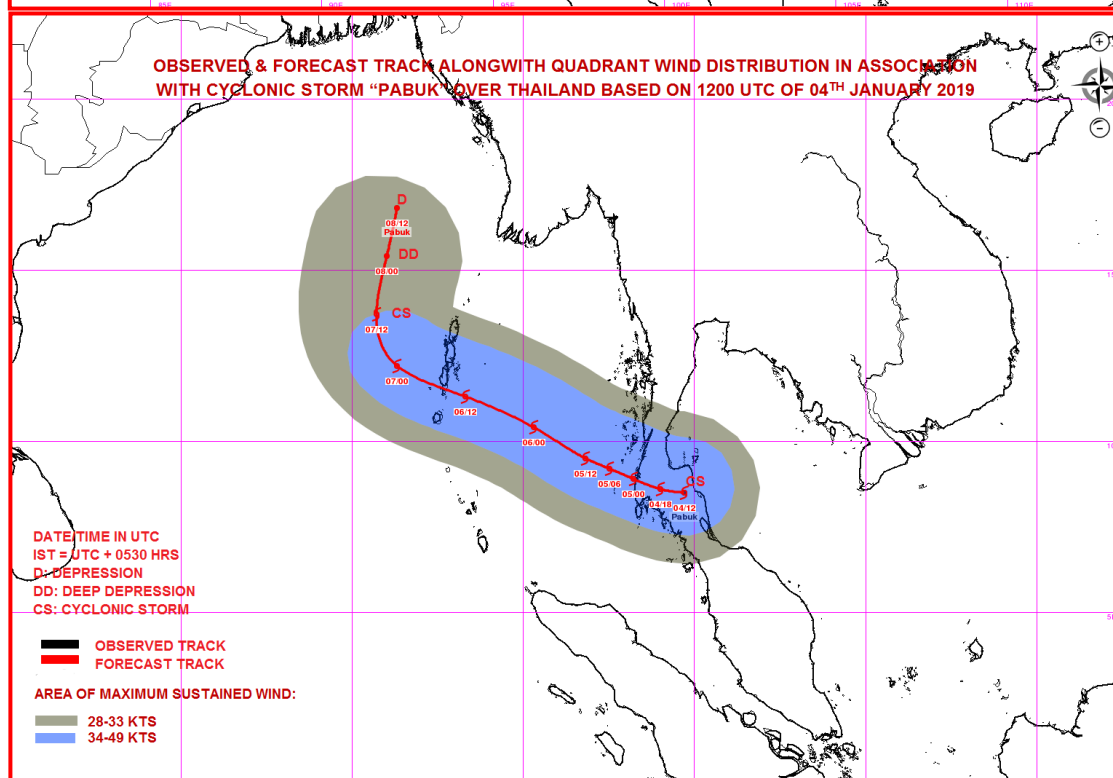
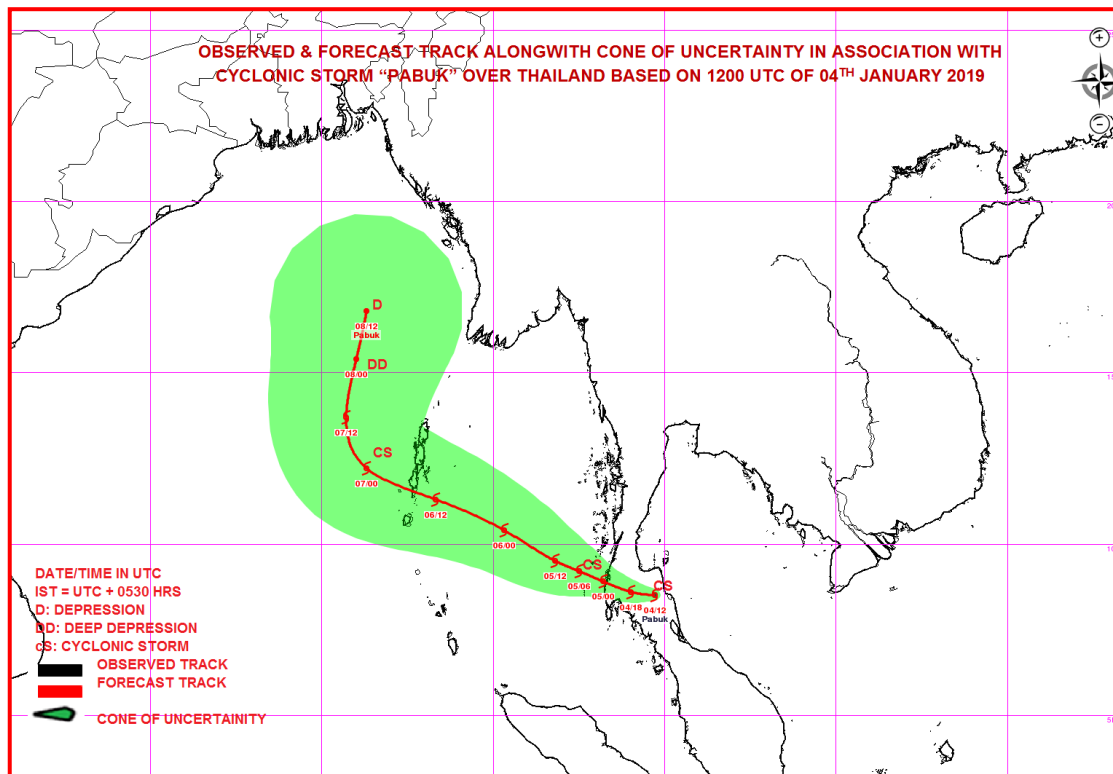
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IMD/Delhi

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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



PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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



REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI
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 05.01.2019 BASED ON 0000 UTC OF 05.01.2019.

TROPICAL CYCLONE ‘PABUK’ OVER THAILAND AND IT’S EMERGENCE INTO ANDAMAN SEA ON 05TH JANUARY, 2019

THE CYCLONIC STORM “**PABUK**” OVER GULF OF THAILAND & NEIGHBOURHOOD MOVED WEST-NORTHWESTWARDS WITH A SPEED OF 10 KMPH IN PAST 06 HOURS. IT LAY CENTERED AT 0000 UTC OF 05TH JANUARY, 2019 OVER THAILAND & NEIGHBOURHOOD NEAR LATITUDE 8.9°N AND LONGITUDE 98.7°E, ABOUT 720 KM EAST-SOUTHEAST OF PORT BLAIR (43333). IT IS VERY LIKELY TO MOVE WEST-NORTHWESTWARDS AND EMERGE INTO ANDAMAN SEA BY FORENOON OF 05TH JANUARY, 2019. THEREAFTER, IT IS VERY LIKELY TO MOVE NORTHWESTWARDS AND CROSS ANDAMAN ISLANDS AROUND EVENING/NIGHT OF 6TH JANUARY AS A CYCLONIC STORM WITH A WIND SPEED OF 70-80 KMPH GUSTING TO 90 KMPH. THEREAFTER, IT IS VERY LIKELY TO MOVE NORTH-NORTHWESTWARDS AND THEN RECURVE NORTHEASTWARDS TOWARDS MYANMAR COAST AND WEAKEN GRADUALLY DURING 7TH-8TH JANUARY, 2019.

FORECAST TRACK AND INTENSITY ARE GIVEN IN THE FOLLOWING TABLE:

DATE/ TIME(UTC)	POSITION (LAT.°N/ LONG. °E)	MAXIMUM SUSTAINED SURFACE WIND SPEED (KMPH)	CATEGORY OF CYCLONIC DISTURBANCE
05.01.19/0530	8.9/98.7	70-80 GUSTING TO 90	CYCLONIC STORM
05.01.19/1130	9.2/97.6	70-80 GUSTING TO 90	CYCLONIC STORM
05.01.19/1730	9.5/96.5	70-80 GUSTING TO 90	CYCLONIC STORM
05.01.19/2330	9.8/95.7	75-85 GUSTING TO 95	CYCLONIC STORM
06.01.19/0530	10.5/94.4	75-85 GUSTING TO 95	CYCLONIC STORM
06.01.19/1730	11.1/93.3	70-80 GUSTING TO 90	CYCLONIC STORM
07.01.19/0530	11.8/92.2	65-75 GUSTING TO 85	CYCLONIC STORM
07.01.19/1730	12.6/91.0	50-60 GUSTING TO 70	DEEP DEPRESSION
08.01.19/0530	13.7/90.7	50-60 GUSTING TO 70	DEEP DEPRESSION
08.01.19/1730	16.1/91.1	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%

AS PER THE SATELLITE IMAGERY OF 0000 UTC ON 05TH JANUARY, IN ASSOCIATION WITH THE SYSTEM, BROKEN LOW TO MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION OVER EAST ANDAMAN SEA, TENASSERIM COAST, THAILAND, WEST CAMBODIA AND GULF OF THAILAND. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 58° C.

THE ESTIMATED CENTRAL PRESSURE IS ABOUT 1004 HPA AND THE MAXIMUM SUSTAINED SURFACE WIND SPEED IS 40 KNOTS GUSTING TO 45 KNOTS.

REMARKS:

CONSIDERING THE ENVIRONMENTAL CONDITIONS, THE THE SEA SURFACE TEMPERATURE IS AROUND 29-30 DEG. C OVER ANDAMAN SEA AND 27-28 DEG. C OVER ADJOINING BAY OF BENGAL. THE TROPICAL CYCLONE HEAT POTENTIAL IS AROUND 80-90 KJ/CM² OVER ANDAMAN SEA AND DECREASES NORTHWARDS. THE LOWER LEVEL CONVERGENCE IS 50×10^{-5} SECOND⁻¹ TOWARDS SOUTHEAST OF THE SYSTEM CENTER. LOWER LEVEL VORTICITY IS 250×10^{-6} SECOND⁻¹ AROUND THE SYSTEM CENTER. UPPER LEVEL DIVERGENCE IS 50×10^{-5} SECOND⁻¹ AROUND THE SYSTEM CENTER AND VERTICAL WIND SHEAR (20-25 KNOTS) OVER THE SYSTEM AREA AND INCREASES ALONG THE FORECAST TRACK. THE UPPER AIR RIDGE RUNS ALONG 14°N OVER THE SYSTEM REGION. THE MADDEN JULIAN OSCILLATION (MJO) INDEX LIES OVER PHASE 7 WITH AMPLITUDE MORE THAN 1.

HENCE, AS THE SYSTEM ENTERS INTO ANDAMAN SEA IT WILL EXPERIENCE WARMER SEA AND HIGHER OCEAN HEAT CONTENT. HOWEVER, IT WILL BECOME GRADUALLY UNFAVOURABLE OVER THE BAY OF BENGAL LEADING TO WEAKENING OF THE SYSTEM. THE WIND SHEAR WILL BE MODERATE TO HIGH OVER NORTH ANDAMAN SEA, WHICH COULD ALSO CAUSE WEAKENING OF THE SYSTEM OVER THE SEA AREA.

THE SYSTEM IS BEING STEERED BY THE ANTICYCLONE LOCATED TO THE EAST OF MALAY PENINSULA. AS THE SYSTEM MOVES AWAY FROM THE CENTRE OF ANTI-CYCLONIC CIRCULATION, IT WILL LIE IN THE PERIPHERY OF THE ANTICYCLONIC CIRCULATION AND RECURVE NORTHEASTWARDS ON 7TH AND 8TH. MOST OF THE NUMERICAL MODELS ARE IN AGREEMENT WITH THIS FORECAST.

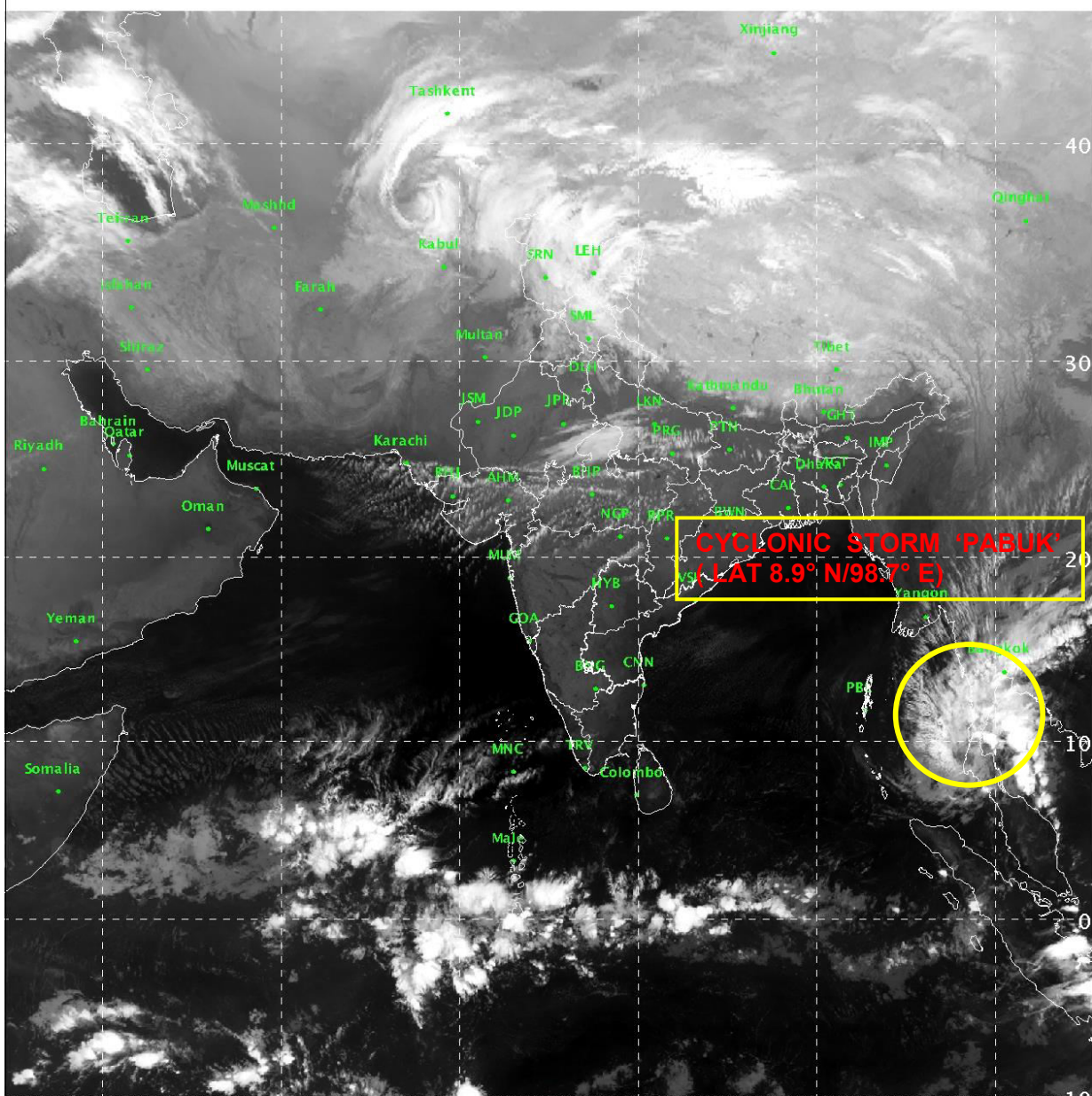
(D R PATTANAİK)
SCIENTIST-E, RSMC, NEW DELHI

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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

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

05-01-2019/01:30 GMT
05-01-2019/07:00 IST



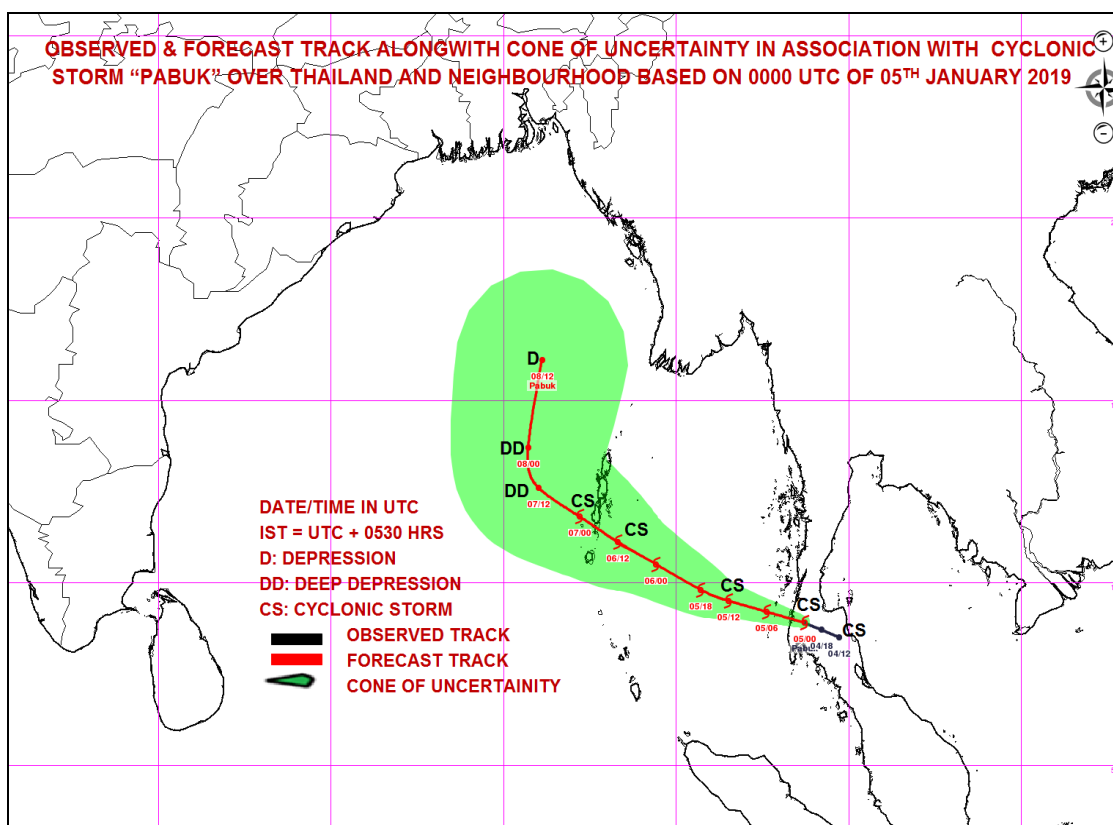
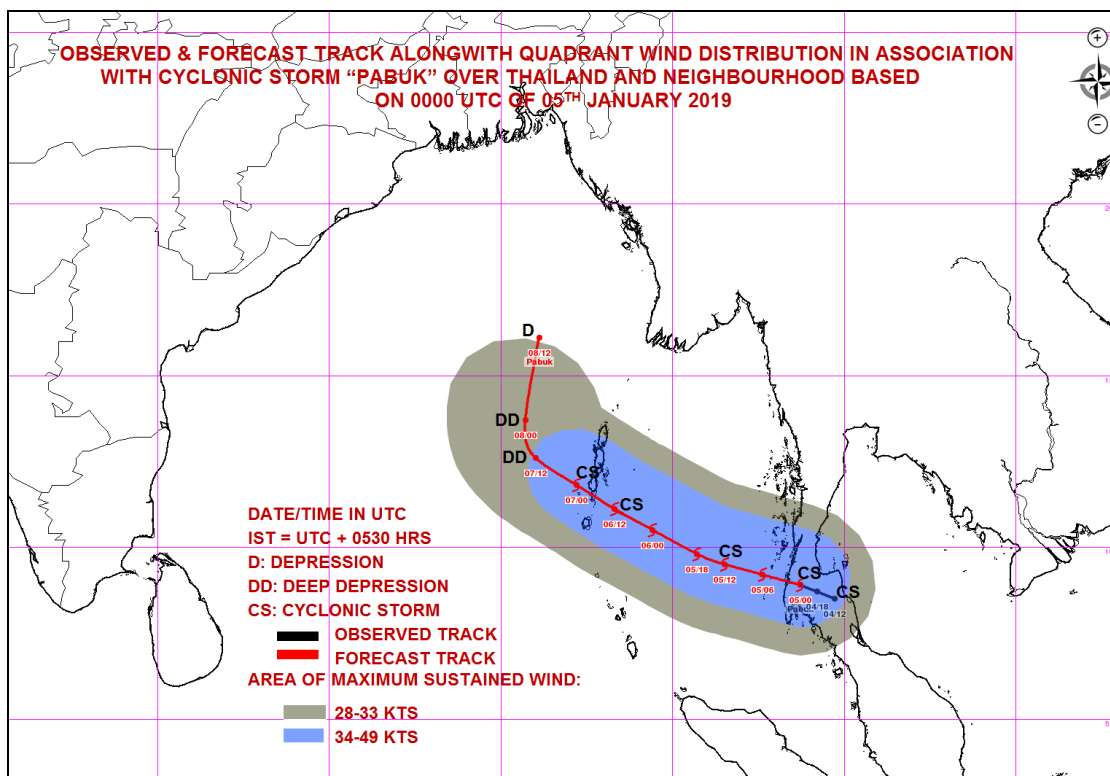
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IMD/Delhi

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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



PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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



REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI
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 05.01.2019 BASED ON 0300 UTC OF 05.01.2019.

TROPICAL CYCLONE 'PABUK' OVER ANDAMAN SEA AND NEIGHBOURHOOD

THE CYCLONIC STORM "PABUK" OVER GULF OF THAILAND & NEIGHBOURHOOD MOVED WEST-NORTHWESTWARDS WITH A SPEED OF 17 KMPH IN PAST 06 HOURS. IT LAY CENTERED AT 0300 UTC OF TODAY, THE 05TH JANUARY, 2019 OVER ANDAMAN SEA & NEIGHBOURHOOD NEAR LATITUDE 9.1°N AND LONGITUDE 98.1°E, ABOUT 650 KM EAST-SOUTHEAST OF PORT BLAIR (43333). IT IS VERY LIKELY TO MOVE WEST-NORTHWESTWARDS FOR SOME MORE TIME. THEREAFTER, IT IS VERY LIKELY TO MOVE NORTHWESTWARDS AND CROSS ANDAMAN ISLANDS BETWEEN 1200 UTC OF 6TH AND 0000 UTC OF 07TH JANUARY AS A CYCLONIC STORM WITH A WIND SPEED OF 70-80 KMPH GUSTING TO 90 KMPH. THEREAFTER, IT IS VERY LIKELY TO MOVE NORTH-NORTHWESTWARDS AND THEN RECURVE NORTHEASTWARDS TOWARDS MYANMAR COAST AND WEAKEN GRADUALLY DURING 7TH-8TH JANUARY, 2019.

FORECAST TRACK AND INTENSITY ARE GIVEN IN THE FOLLOWING TABLE:

DATE/TIME (UTC)	POSITION (LAT.°N/ LONG.°E)	MAXIMUM SUSTAINED SURFACE WIND SPEED (KMPH)	CATEGORY OF CYCLONIC DISTURBANCE
05.01.19/0300	9.1/98.1	70-80 GUSTING TO 90	CYCLONIC STORM
05.01.19/0600	9.2/97.6	70-80 GUSTING TO 90	CYCLONIC STORM
05.01.19/1200	9.6/96.7	70-80 GUSTING TO 90	CYCLONIC STORM
05.01.19/1800	10.1/95.8	75-85 GUSTING TO 95	CYCLONIC STORM
06.01.19/0000	10.5/94.8	75-85 GUSTING TO 95	CYCLONIC STORM
06.01.19/1200	11.6/92.8	70-80 GUSTING TO 90	CYCLONIC STORM
07.01.19/0000	12.3/91.7	65-75 GUSTING TO 85	CYCLONIC STORM
07.01.19/1200	13.1/90.5	50-60 GUSTING TO 70	DEEP DEPRESSION
08.01.19/0000	14.2/90.2	50-60 GUSTING TO 70	DEEP DEPRESSION
08.01.19/1200	16.1/91.1	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%

AS PER THE SATELLITE IMAGERY OF 0300 UTC ON 05TH JANUARY, IN ASSOCIATION WITH THE SYSTEM, BROKEN LOW TO MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION OVER EAST ANDAMAN SEA, TENASSERIM COAST, THAILAND, AND GULF OF THAILAND. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 60° C.

THE ESTIMATED CENTRAL PRESSURE IS ABOUT 1004 HPA AND THE MAXIMUM SUSTAINED SURFACE WIND SPEED IS 40 KNOTS GUSTING TO 45 KNOTS.

REMARKS:

CONSIDERING THE ENVIRONMENTAL CONDITIONS, THE THE SEA SURFACE TEMPERATURE IS AROUND 29-30 DEG. C OVER ANDAMAN SEA AND 27-28 DEG. C OVER ADJOINING BAY OF BENGAL. THE TROPICAL CYCLONE HEAT POTENTIAL IS AROUND 80-90 KJ/CM² OVER ANDAMAN SEA AND IT DECREASES NORTHWARDS. THE LOWER LEVEL CONVERGENCE IS 20×10^{-5} SECOND⁻¹ TOWARDS SOUTHEAST AND SOUTHWEST OF THE SYSTEM CENTER. LOWER LEVEL VORTICITY IS 250×10^{-6} SECOND⁻¹ TO THE SOUTHWEST OF THE SYSTEM CENTER. UPPER LEVEL DIVERGENCE IS 10×10^{-5} SECOND⁻¹ AROUND THE SYSTEM CENTER AND VERTICAL WIND SHEAR (20-25 KNOTS) OVER THE SYSTEM AREA AND INCREASES ALONG THE FORECAST TRACK. THE UPPER AIR RIDGE RUNS ALONG 15°N OVER THE SYSTEM REGION. THE MADDEN JULIAN OSCILLATION (MJO) INDEX LIES OVER PHASE 8 WITH AMPLITUDE MORE THAN 1.

HENCE, THE SYSTEM IS EXPERIENCING WARMER SEA CONDITIONS AND HIGHER OCEAN HEAT CONTENT OVER ANDAMAN SEA. HOWEVER, IT WILL BECOME GRADUALLY UNFAVOURABLE OVER BAY OF BENGAL LEADING TO WEAKENING OF THE SYSTEM. THE WIND SHEAR WILL BE MODERATE TO HIGH OVER NORTH ANDAMAN SEA, WHICH COULD ALSO CAUSE WEAKENING OF THE SYSTEM OVER THE SEA AREA.

THE SYSTEM IS BEING STEERED BY THE ANTICYCLONE LOCATED TO THE EAST OF MALAY PENINSULA. AS THE SYSTEM HAS MOVED AWAY FROM THE CENTRE OF ANTICYCLONIC CIRCULATION, IT LIES IN THE PERIPHERY OF THE ANTICYCLONIC CIRCULATION AND IS LIKELY TO RECURVE NORTHEASTWARDS ON 7TH AND 8TH. MOST OF THE NUMERICAL MODELS ARE ALSO IN AGREEMENT WITH THIS FORECAST.

(NEETHA K GOPAL)
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%

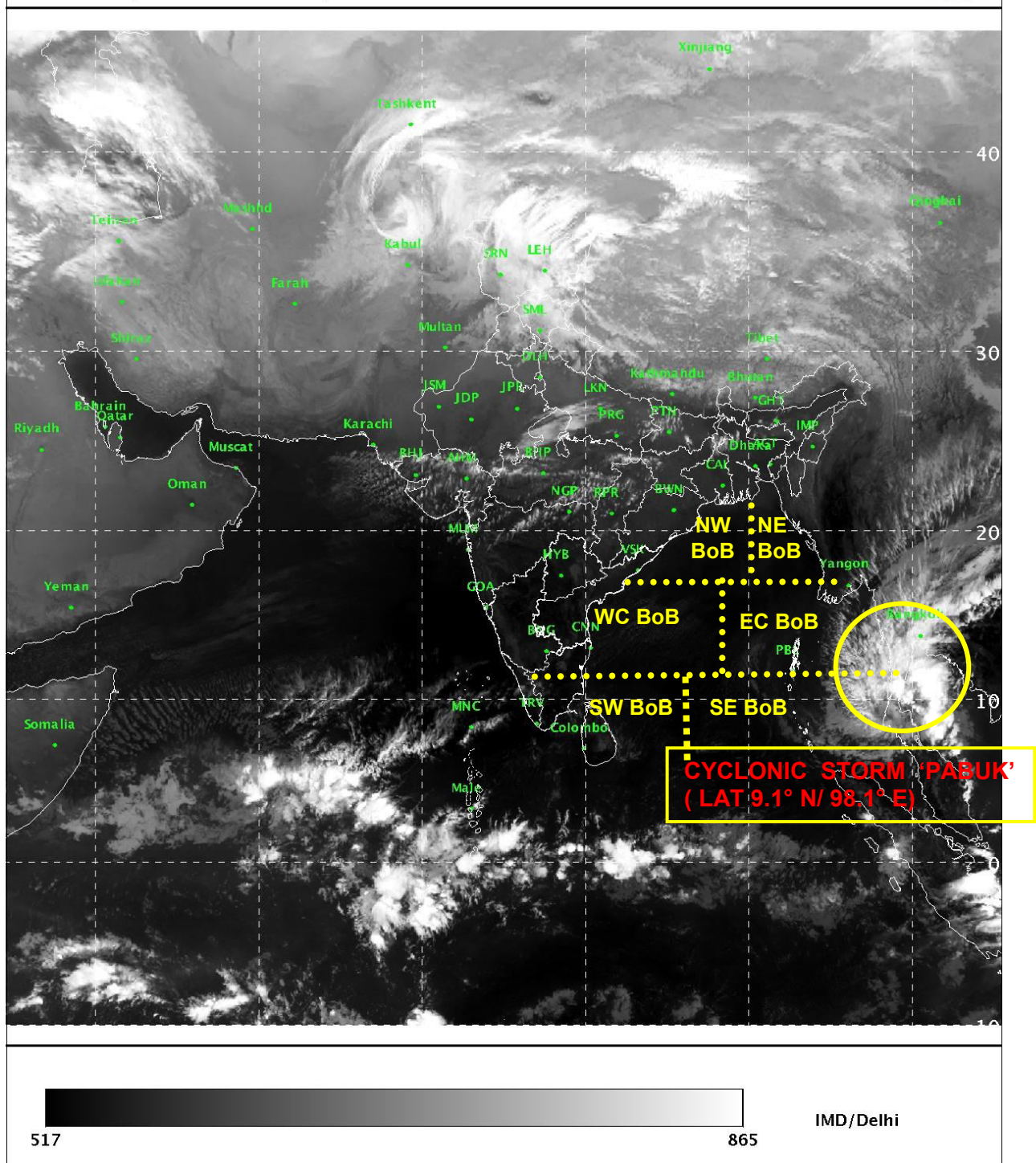
SAT :INSAT-3D IMG

IMG_TIR1 10.8 um

L1C Mercator (LINEAR STRETCH: 1.0%)

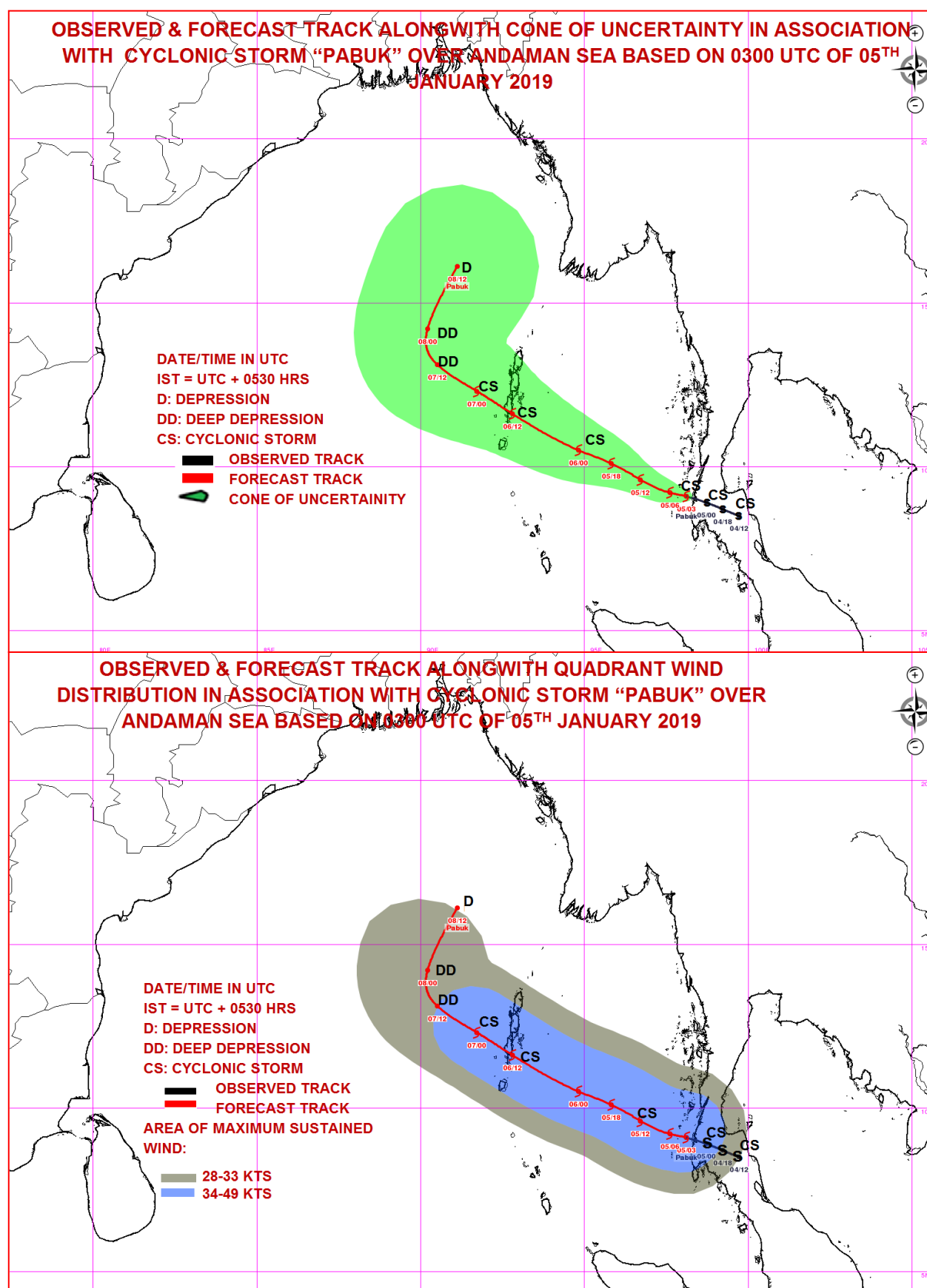
05-01-2019/03:30 GMT

05-01-2019/09:00 IST



PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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



PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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



REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI
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 0900 UTC OF 05.01.2019 BASED ON 0600 UTC OF 05.01.2019.

TROPICAL CYCLONE 'PABUK' OVER ANDAMAN SEA AND NEIGHBOURHOOD

THE CYCLONIC STORM “**PABUK**” OVER ANDAMAN SEA & NEIGHBOURHOOD MOVED FURTHER WEST-NORTHWESTWARDS WITH A SPEED OF 21 KMPH IN PAST 06 HOURS. IT LAY CENTERED AT 0600 UTC OF TODAY, THE 05TH JANUARY, 2019 OVER ANDAMAN SEA & NEIGHBOURHOOD NEAR LATITUDE 9.3°N AND LONGITUDE 97.7°E, ABOUT 590 KM EAST-SOUTHEAST OF PORT BLAIR (43333). IT IS VERY LIKELY TO MOVE WEST-NORTHWESTWARDS FOR SOME MORE TIME. THEREAFTER, IT IS VERY LIKELY TO MOVE NORTHWESTWARDS AND CROSS ANDAMAN ISLANDS BETWEEN 1200 TO 1500 UTC OF 6TH JANUARY AS A CYCLONIC STORM WITH A WIND SPEED OF 70-80 KMPH GUSTING TO 90 KMPH. THEREAFTER, IT IS VERY LIKELY TO MOVE NORTH-NORTHWESTWARDS AND THEN RECURVE NORTHEASTWARDS TOWARDS MYANMAR COAST AND WEAKEN GRADUALLY DURING 7TH-8TH JANUARY, 2019.

FORECAST TRACK AND INTENSITY ARE GIVEN IN THE FOLLOWING TABLE:

DATE/ TIME(UTC)	POSITION (LAT.°N/ LONG.°E)	MAXIMUM SUSTAINED SURFACE WIND SPEED (KMPH)	CATEGORY OF CYCLONIC DISTURBANCE
05.01.19/0600	9.3/97.6	70-80 GUSTING TO 90	CYCLONIC STORM
05.01.19/1200	9.7/96.7	70-80 GUSTING TO 90	CYCLONIC STORM
05.01.19/1800	10.1/95.8	75-85 GUSTING TO 95	CYCLONIC STORM
06.01.19/0000	10.5/94.8	75-85 GUSTING TO 95	CYCLONIC STORM
06.01.19/0600	11.0/93.8	70-80 GUSTING TO 90	CYCLONIC STORM
06.01.19/1800	11.9/92.3	70-80 GUSTING TO 90	CYCLONIC STORM
07.01.19/0600	12.7/91.1	65-75 GUSTING TO 85	CYCLONIC STORM
07.01.19/1800	13.6/90.3	55-65 GUSTING TO 75	DEEP DEPRESSION
08.01.19/0600	15.1/90.7	45-55 GUSTING TO 65	DEPRESSION
08.01.19/1800	17.0/91.7	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%

AS PER THE SATELLITE IMAGERY OF 0600 UTC ON 05TH JANUARY, IN ASSOCIATION WITH THE SYSTEM, BROKEN LOW TO MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION OVER EAST ANDAMAN SEA, TENASSERIM COAST, THAILAND, AND GULF OF THAILAND. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 60° C.

THE ESTIMATED CENTRAL PRESSURE IS ABOUT 1004 HPA AND THE MAXIMUM SUSTAINED SURFACE WIND SPEED IS 40 KNOTS GUSTING TO 45 KNOTS.

REMARKS:

CONSIDERING THE ENVIRONMENTAL CONDITIONS, THE THE SEA SURFACE TEMPERATURE IS AROUND 29-30 DEG. C OVER ANDAMAN SEA AND 27-28 DEG. C OVER ADJOINING BAY OF BENGAL. THE TROPICAL CYCLONE HEAT POTENTIAL IS AROUND 80-90 KJ/CM² OVER ANDAMAN SEA AND IT DECREASES NORTHWARDS. THE LOWER LEVEL CONVERGENCE IS 20×10^{-5} SECOND⁻¹ AROUND THE SYSTEM CENTER. LOWER LEVEL VORTICITY IS 200×10^{-6} SECOND⁻¹ TO THE SOUTHEAST OF THE SYSTEM CENTER. UPPER LEVEL DIVERGENCE IS 20×10^{-5} SECOND⁻¹ TO THE SOUTHEAST OF THE SYSTEM CENTER. VERTICAL WIND SHEAR IS (20-25 KNOTS) OVER THE SYSTEM AREA AND INCREASES ALONG THE FORECAST TRACK. THE UPPER AIR RIDGE RUNS ALONG 15°N OVER THE SYSTEM REGION. THE MADDEN JULIAN OSCILLATION (MJO) INDEX LIES OVER PHASE 8 WITH AMPLITUDE MORE THAN 1.

HENCE, THE SYSTEM IS EXPERIENCING WARMER SEA CONDITIONS AND HIGHER OCEAN HEAT CONTENT OVER ANDAMAN SEA. HOWEVER, IT WILL BECOME GRADUALLY UNFAVOURABLE OVER BAY OF BENGAL LEADING TO WEAKENING OF THE SYSTEM. THE WIND SHEAR WILL BE MODERATE TO HIGH OVER NORTH ANDAMAN SEA, WHICH COULD ALSO CAUSE WEAKENING OF THE SYSTEM OVER THE SEA AREA.

THE SYSTEM IS BEING STEERED BY THE ANTICYCLONE LOCATED TO THE EAST OF MALAY PENINSULA. AS THE SYSTEM HAS MOVED AWAY FROM THE CENTRE OF ANTI-CYCLONIC CIRCULATION, IT LIES IN THE PERIPHERY OF THE ANTICYCLONIC CIRCULATION AND IS LIKELY TO RECURVE NORTHEASTWARDS ON 7TH AND 8TH. MOST OF THE NUMERICAL MODELS ARE ALSO IN AGREEMENT WITH THIS FORECAST.

(NEETHA K GOPAL)
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%

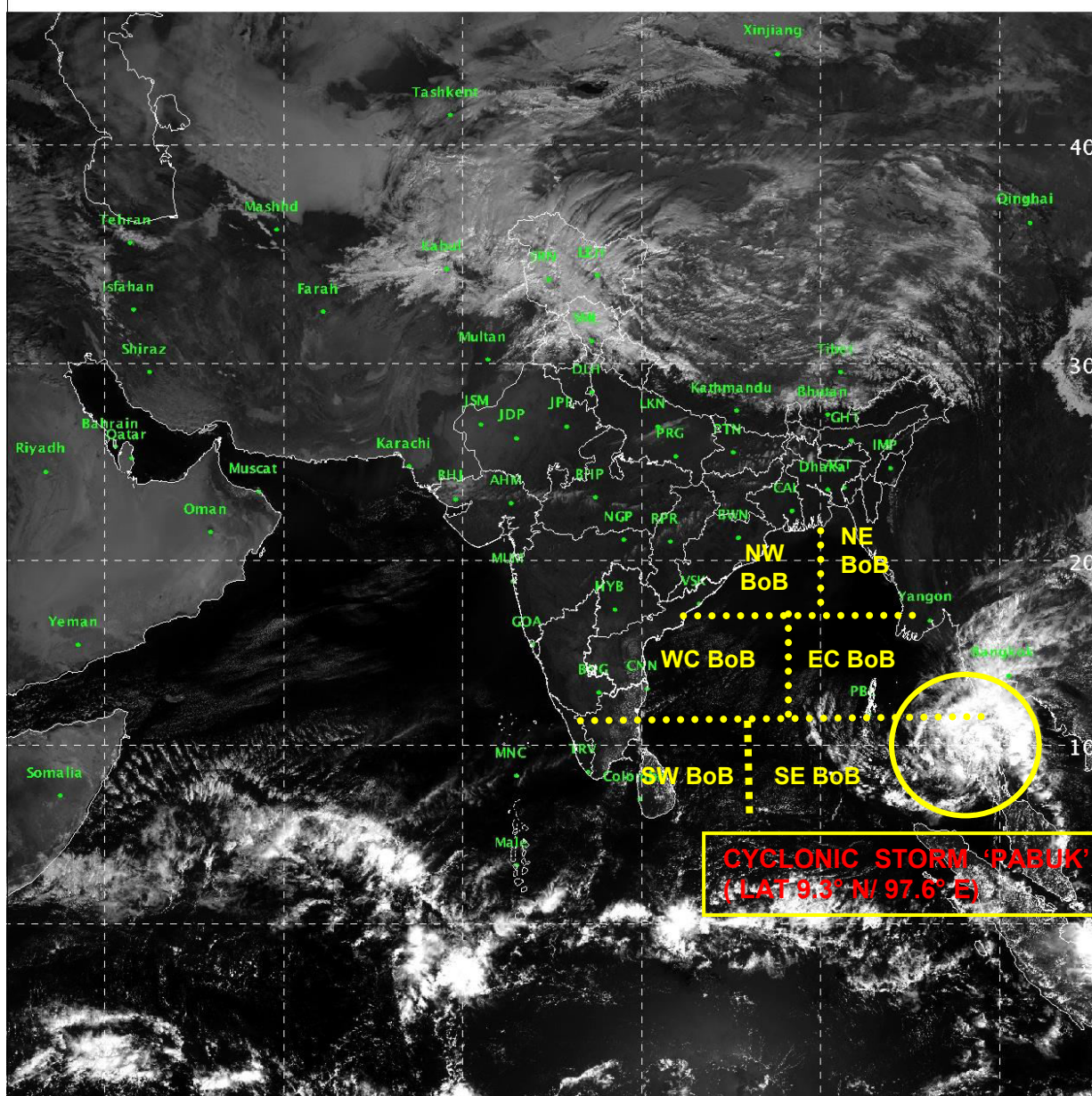
SAT :INSAT-3D IMG

IMG_VIS 0.65 um

L1C Mercator (LINEAR STRETCH: 1.0%)

05-01-2019/06:00 GMT

05-01-2019/11:30 IST



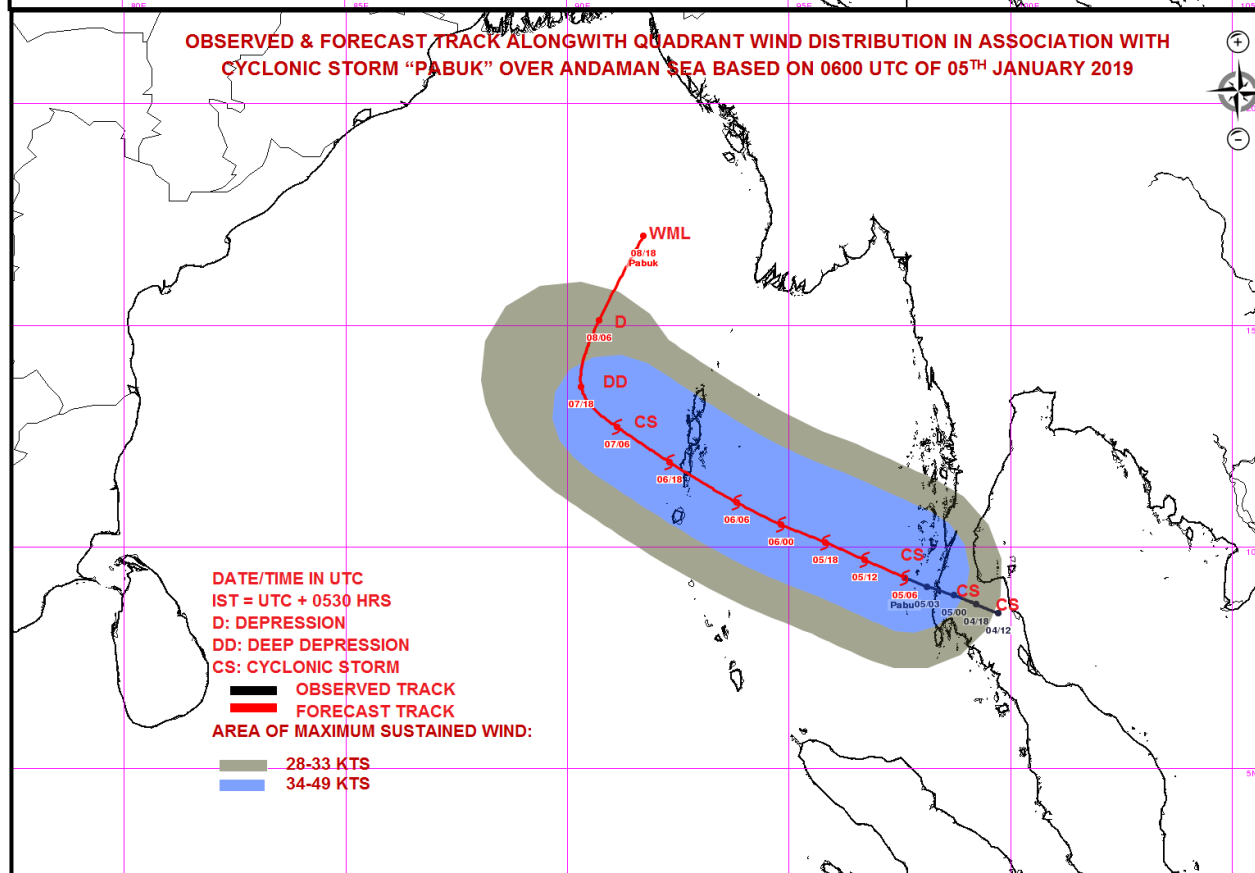
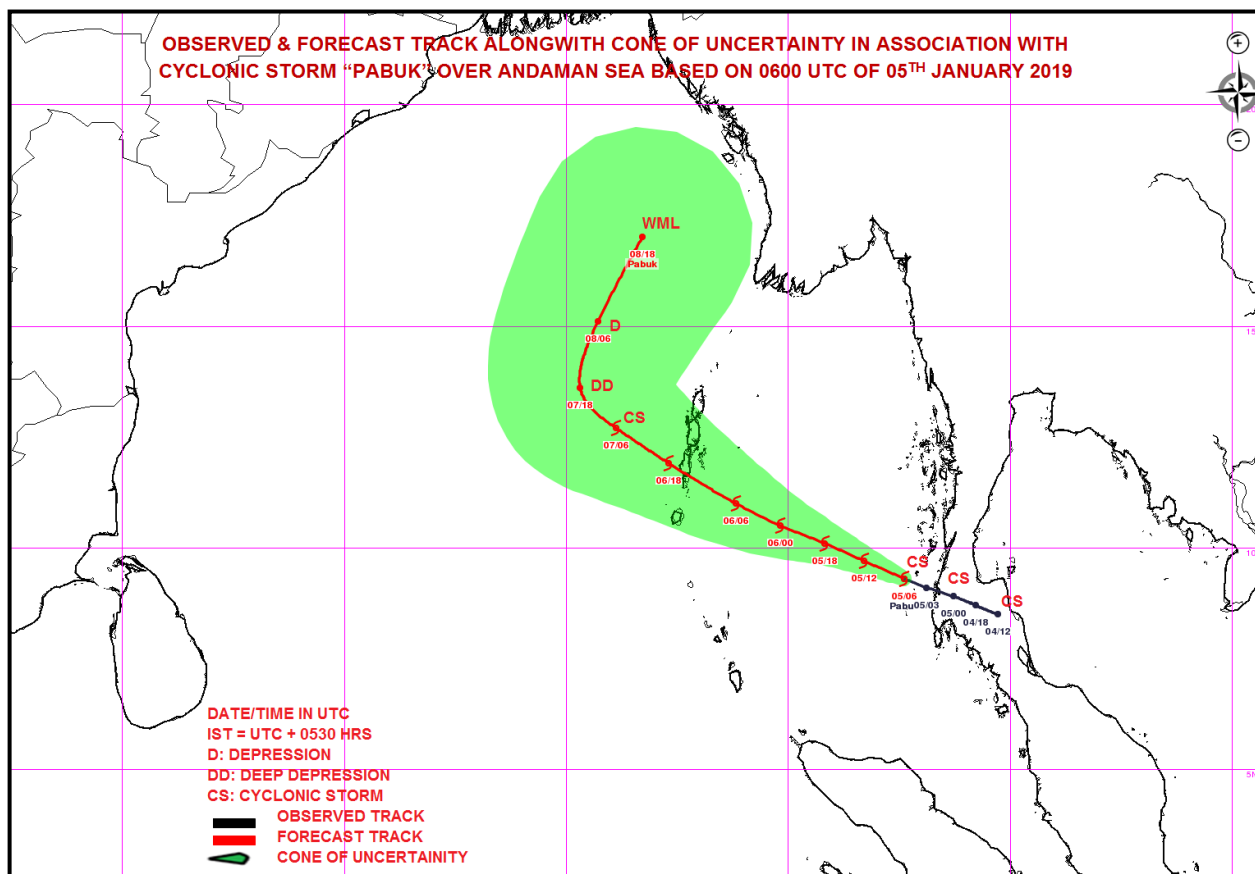
37

356

IMD/Delhi

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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



PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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



REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI
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)
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. 8 FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 1100 UTC OF 05.01.2019 BASED ON 0900 UTC OF 05.01.2019.

TROPICAL CYCLONE 'PABUK' OVER ANDAMAN SEA AND NEIGHBOURHOOD

THE CYCLONIC STORM "PABUK" OVER ANDAMAN SEA & NEIGHBOURHOOD MOVED FURTHER WEST-NORTHWESTWARDS WITH A SPEED OF 13 KMPH DURING PAST 06 HOURS. IT LAY CENTERED AT 0900 UTC OF TODAY, THE 05TH JANUARY, 2019 OVER ANDAMAN SEA & NEIGHBOURHOOD NEAR LATITUDE 9.5°N AND LONGITUDE 97.3°E, ABOUT 550 KM EAST-SOUTHEAST OF PORT BLAIR (43333). IT IS VERY LIKELY TO MOVE WEST-NORTHWESTWARDS FOR SOME MORE TIME. THEREAFTER, IT IS VERY LIKELY TO MOVE NORTHWESTWARDS AND CROSS ANDAMAN ISLANDS BETWEEN 1200 TO 1500 UTC OF 6TH JANUARY AS A CYCLONIC STORM WITH A WIND SPEED OF 70-80 KMPH GUSTING TO 90 KMPH. THEREAFTER, IT IS VERY LIKELY TO MOVE NORTH-NORTHWESTWARDS AND THEN RECURVE NORTHEASTWARDS TOWARDS MYANMAR COAST AND WEAKEN GRADUALLY DURING 7TH-8TH JANUARY, 2019.

FORECAST TRACK AND INTENSITY ARE GIVEN IN THE FOLLOWING TABLE:

DATE/ TIME(UTC)	POSITION (LAT.°N/ LONG. °E)	MAXIMUM SUSTAINED SURFACE WIND SPEED (KMPH)	CATEGORY OF CYCLONIC DISTURBANCE
05.01.19/0900	9.5/97.3	70-80 GUSTING TO 90	CYCLONIC STORM
05.01.19/1200	9.7/96.7	70-80 GUSTING TO 90	CYCLONIC STORM
05.01.19/1800	10.1/95.8	75-85 GUSTING TO 95	CYCLONIC STORM
06.01.19/0000	10.5/94.8	75-85 GUSTING TO 95	CYCLONIC STORM
06.01.19/0600	11.0/93.8	70-80 GUSTING TO 90	CYCLONIC STORM
06.01.19/1800	11.9/92.3	70-80 GUSTING TO 90	CYCLONIC STORM
07.01.19/0600	12.7/91.1	65-75 GUSTING TO 85	CYCLONIC STORM
07.01.19/1800	13.6/90.3	55-65 GUSTING TO 75	DEEP DEPRESSION
08.01.19/0600	15.1/90.7	45-55 GUSTING TO 65	DEPRESSION
08.01.19/1800	17.0/91.7	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%

AS PER THE SATELLITE IMAGERY OF 0900 UTC ON 05TH JANUARY, IN ASSOCIATION WITH THE SYSTEM, BROKEN LOW TO MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION OVER EAST ANDAMAN SEA, TENASSERIM COAST, THAILAND, AND GULF OF THAILAND. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 60° C.

THE ESTIMATED CENTRAL PRESSURE IS ABOUT 1004 HPA AND THE MAXIMUM SUSTAINED SURFACE WIND SPEED IS 40 KNOTS GUSTING TO 45 KNOTS.

REMARKS:

CONSIDERING THE ENVIRONMENTAL CONDITIONS, THE THE SEA SURFACE TEMPERATURE IS AROUND 29-30 DEG. C OVER ANDAMAN SEA AND 27-28 DEG. C OVER ADJOINING BAY OF BENGAL. THE TROPICAL CYCLONE HEAT POTENTIAL IS AROUND 80-90 KJ/CM² OVER ANDAMAN SEA AND IT DECREASES NORTHWARDS. THE LOWER LEVEL CONVERGENCE IS 30×10^{-5} SECOND⁻¹ TO THE EAST OF THE SYSTEM CENTRE. LOWER LEVEL VORTICITY IS 200×10^{-6} SECOND⁻¹ TO THE EAST OF THE SYSTEM CENTRE. UPPER LEVEL DIVERGENCE IS 40×10^{-5} SECOND⁻¹ TO THE EAST OF THE SYSTEM CENTRE. VERTICAL WIND SHEAR IS (20-25 KNOTS) OVER THE SYSTEM AREA AND INCREASES ALONG THE FORECAST TRACK. THE UPPER TROPOSPHERIC RIDGE RUNS ALONG 15°N OVER THE SYSTEM REGION. THE MADDEN JULIAN OSCILLATION (MJO) INDEX LIES OVER PHASE 8 WITH AMPLITUDE MORE THAN 1.

HENCE, THE SYSTEM IS EXPERIENCING WARMER SEA CONDITIONS AND HIGHER OCEAN HEAT CONTENT OVER ANDAMAN SEA. HOWEVER, IT WILL BECOME GRADUALLY UNFAVOURABLE OVER BAY OF BENGAL LEADING TO WEAKENING OF THE SYSTEM. THE WIND SHEAR WILL BE MODERATE TO HIGH OVER NORTH ANDAMAN SEA, WHICH COULD ALSO CAUSE WEAKENING OF THE SYSTEM OVER THE SEA AREA.

THE SYSTEM IS BEING STEERED BY THE ANTICYCLONE CENTERED TO THE NORTH OF GULF OF THAILAND. THE SYSTEM HAS MOVED AWAY FROM THE CENTRE OF ANTI-CYCLONIC CIRCULATION AND LIES IN THE PERIPHERY OF THE ANTICYCLONIC CIRCULATION. IT IS LIKELY TO RECURVE NORTHEASTWARDS ON 7TH AND 8TH. MOST OF THE NUMERICAL MODELS ARE ALSO IN AGREEMENT WITH THIS FORECAST.

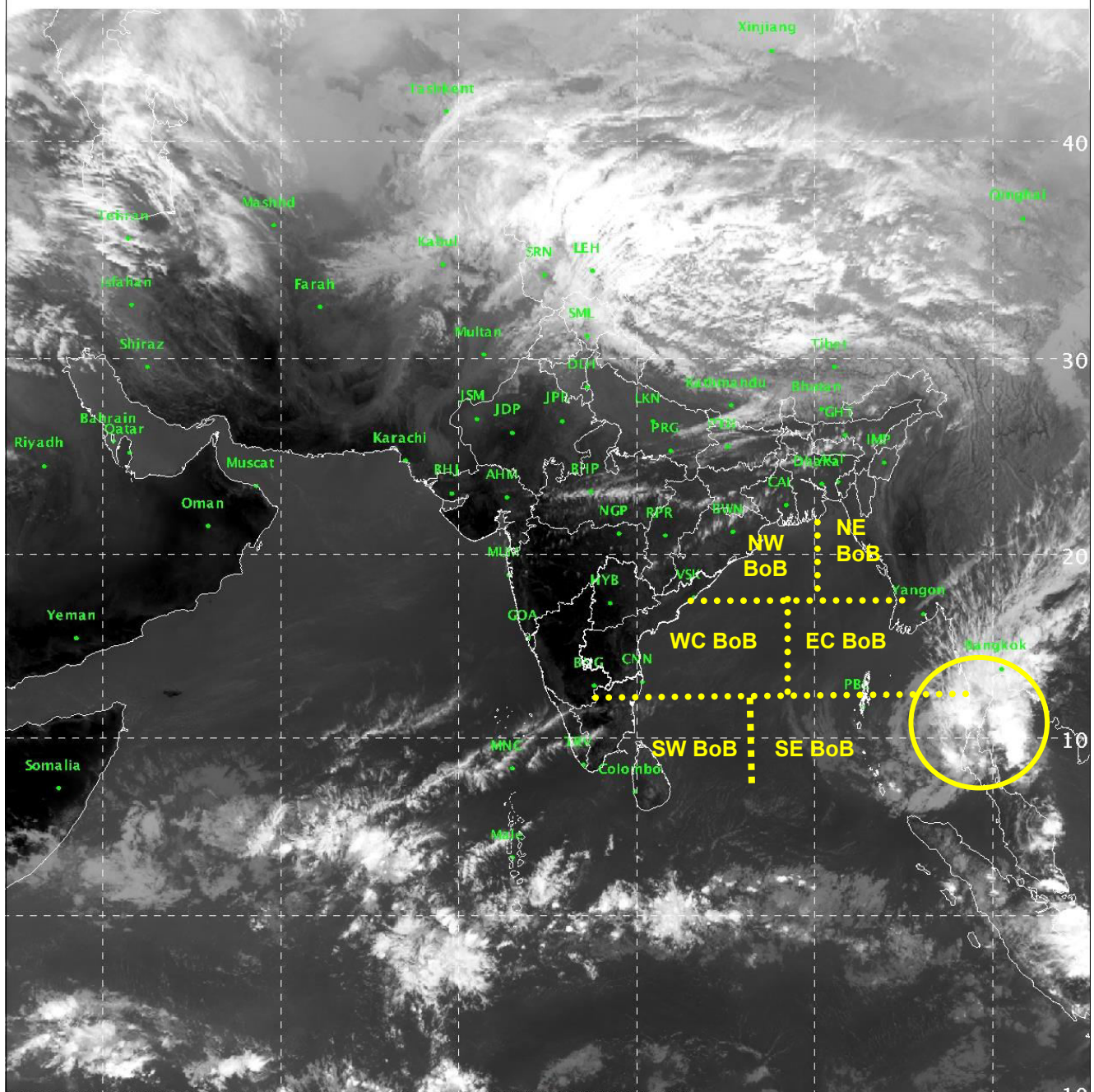
(NARESH KUMAR)
SCIENTIST-E, RSMC, NEW DELHI

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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

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

05-01-2019/09:00 GMT
 05-01-2019/14:30 IST



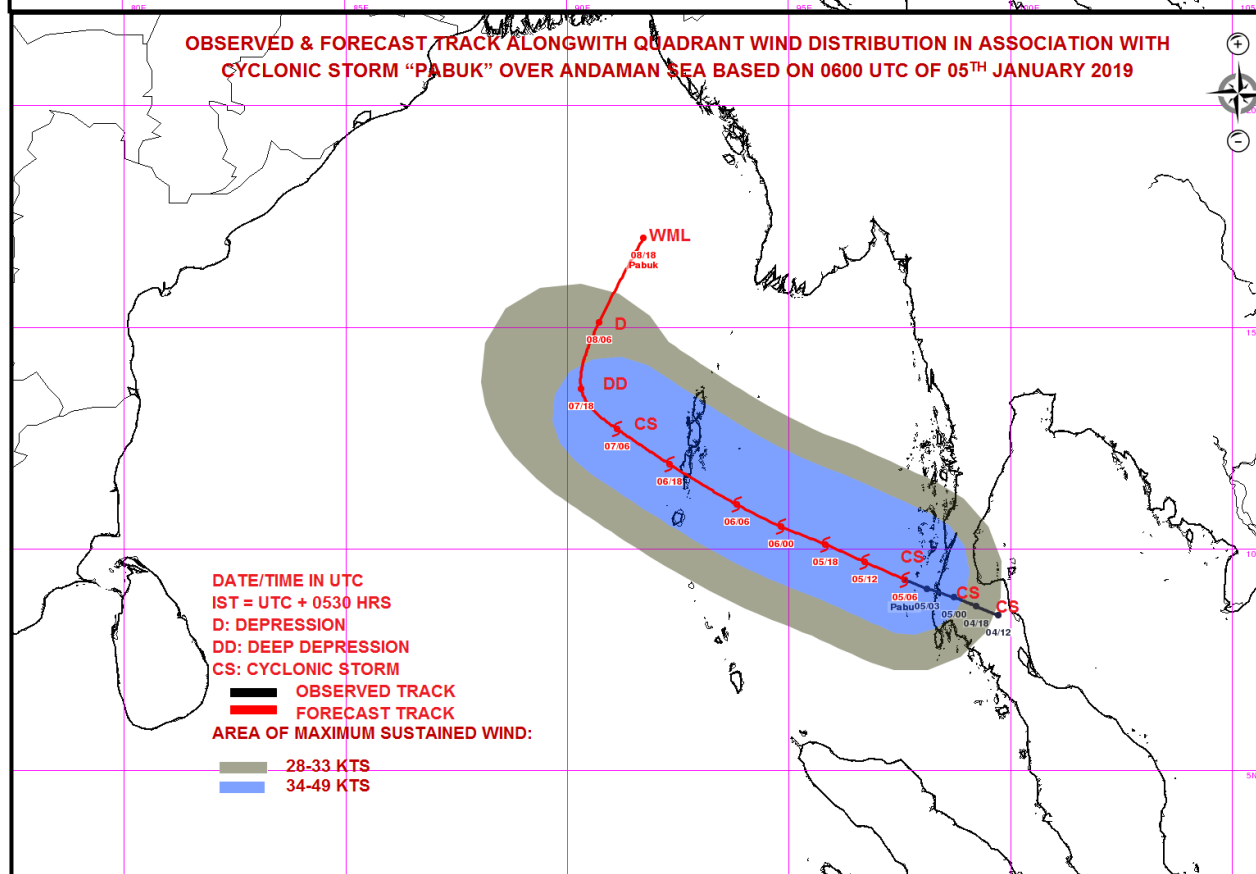
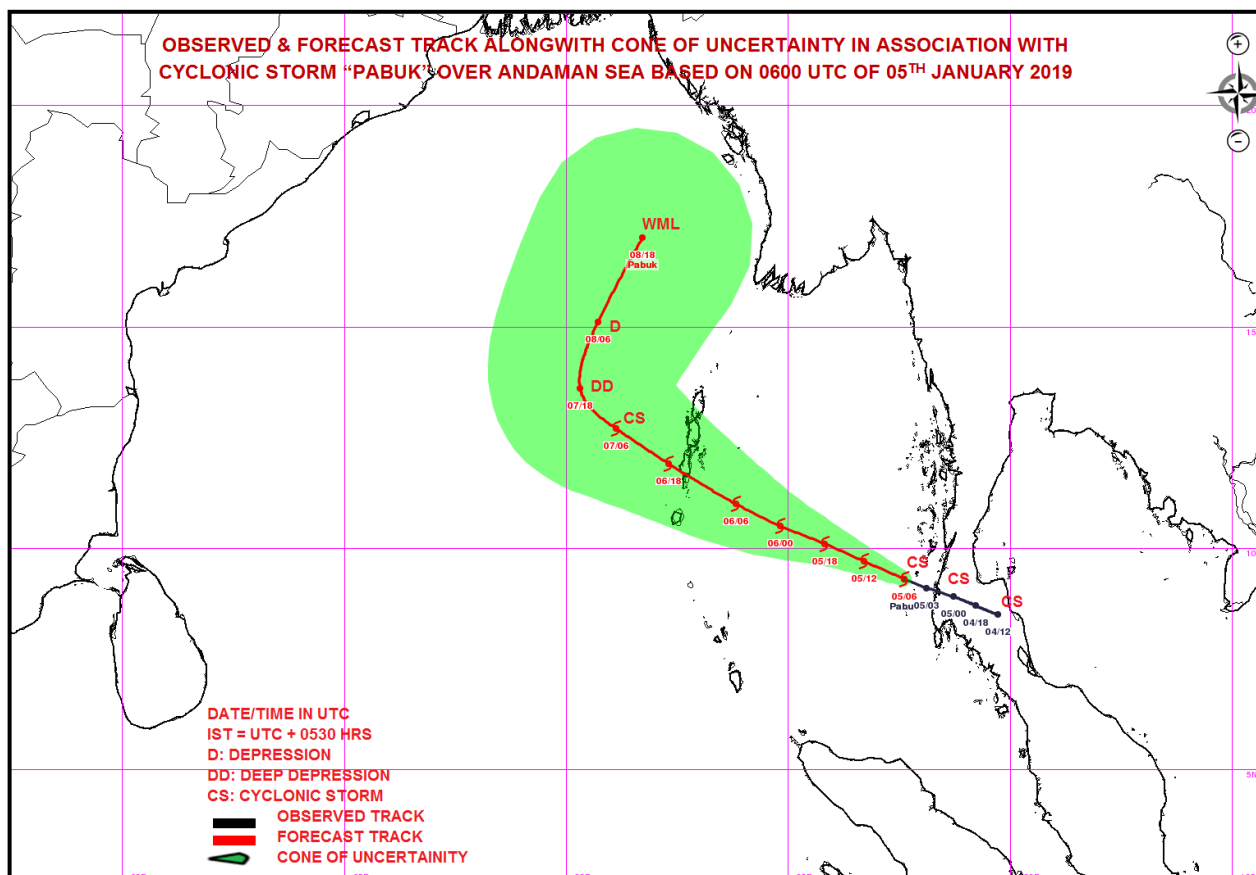
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865

IMD/Delhi

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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



PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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



REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI
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 1500 UTC OF 05.01.2019 BASED ON 1200 UTC OF 05.01.2019.

TROPICAL CYCLONE 'PABUK' OVER ANDAMAN SEA AND NEIGHBOURHOOD

THE CYCLONIC STORM 'PABUK' OVER ANDAMAN SEA & NEIGHBOURHOOD MOVED NORTHWESTWARDS WITH A SPEED OF 14 KMPH DURING PAST 06 HOURS. IT LAY CENTERED AT 1200 UTC OF TODAY, THE 05TH JANUARY, 2019 OVER ANDAMAN SEA & NEIGHBOURHOOD NEAR LATITUDE 9.8°N AND LONGITUDE 97.1°E, ABOUT 520 KM EAST-SOUTHEAST OF PORT BLAIR (43333). IT IS VERY LIKELY TO CONTINUE TO MOVE NORTHWESTWARDS FOR SOME MORE TIME AND CROSS ANDAMAN ISLANDS BETWEEN 1200 TO 1500 UTC OF 06TH JANUARY AS A CYCLONIC STORM WITH A WIND SPEED OF 70-80 KMPH GUSTING TO 90 KMPH. THEREAFTER, IT IS VERY LIKELY TO MOVE NORTH-NORTHWESTWARDS AND THEN RECURVE NORTHEASTWARDS TOWARDS MYANMAR COAST AND WEAKEN GRADUALLY DURING 07TH-08TH JANUARY, 2019.

FORECAST TRACK AND INTENSITY ARE GIVEN IN THE FOLLOWING TABLE:

DATE/TIME (UTC)	POSITION (LAT.°N/ LONG. °E)	MAXIMUM SUSTAINED SURFACE WIND SPEED (KMPH)	CATEGORY OF CYCLONIC DISTURBANCE
05.01.19/1200	9.8/97.1	70-80 GUSTING TO 90	CYCLONIC STORM
05.01.19/1800	10.2/95.8	75-85 GUSTING TO 95	CYCLONIC STORM
06.01.19/0000	10.5/94.8	75-85 GUSTING TO 95	CYCLONIC STORM
06.01.19/0600	11.0/93.8	70-80 GUSTING TO 90	CYCLONIC STORM
06.01.19/1200	11.5/93.0	70-80 GUSTING TO 90	CYCLONIC STORM
07.01.19/0000	12.3/91.7	65-75 GUSTING TO 85	CYCLONIC STORM
07.01.19/1200	13.2/90.8	55-65 GUSTING TO 75	DEEP DEPRESSION
08.01.19/0000	14.3/90.5	45-55 GUSTING TO 65	DEPRESSION
08.01.19/1200	16.0/91.2	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%

AS PER THE SATELLITE IMAGERY OF 1200 UTC ON 05TH JANUARY, THE INTENSITY OF THE SYSTEM IS C.I. 2.5. IN ASSOCIATION WITH THE SYSTEM, BROKEN LOW TO MEDIUM CLOUDS WITH EMBEDDED ISOLATED MODERATE TO INTENSE CONVECTION OVER EAST ANDAMAN SEA, TENASSERIM COAST, THAILAND, AND GULF OF THAILAND. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 61° C.

THE ESTIMATED CENTRAL PRESSURE IS ABOUT 1004 HPA AND THE MAXIMUM SUSTAINED SURFACE WIND SPEED IS 40 KNOTS GUSTING TO 45 KNOTS.

REMARKS:

CONSIDERING THE ENVIRONMENTAL CONDITIONS, THE THE SEA SURFACE TEMPERATURE IS AROUND 29-30 DEG. C OVER ANDAMAN SEA AND 27-28 DEG. C OVER ADJOINING BAY OF BENGAL. THE TROPICAL CYCLONE HEAT POTENTIAL IS AROUND 80-90 KJ/CM² OVER ANDAMAN SEA AND IT DECREASES NORTHWARDS. THE LOWER LEVEL CONVERGENCE IS 30×10^{-5} SECOND⁻¹ TO THE EAST OF THE SYSTEM CENTRE. LOWER LEVEL VORTICITY IS 200×10^{-6} SECOND⁻¹ TO THE EAST OF THE SYSTEM CENTRE. UPPER LEVEL DIVERGENCE IS 10×10^{-5} SECOND⁻¹ TO THE EAST OF THE SYSTEM CENTRE. VERTICAL WIND SHEAR IS (25-30 KNOTS) OVER THE SYSTEM AREA AND INCREASES ALONG THE FORECAST TRACK. THE UPPER TROPOSPHERIC RIDGE RUNS ALONG 15°N OVER THE SYSTEM REGION. THE MADDEN JULIAN OSCILLATION (MJO) INDEX LIES OVER PHASE 8 WITH AMPLITUDE MORE THAN 1.

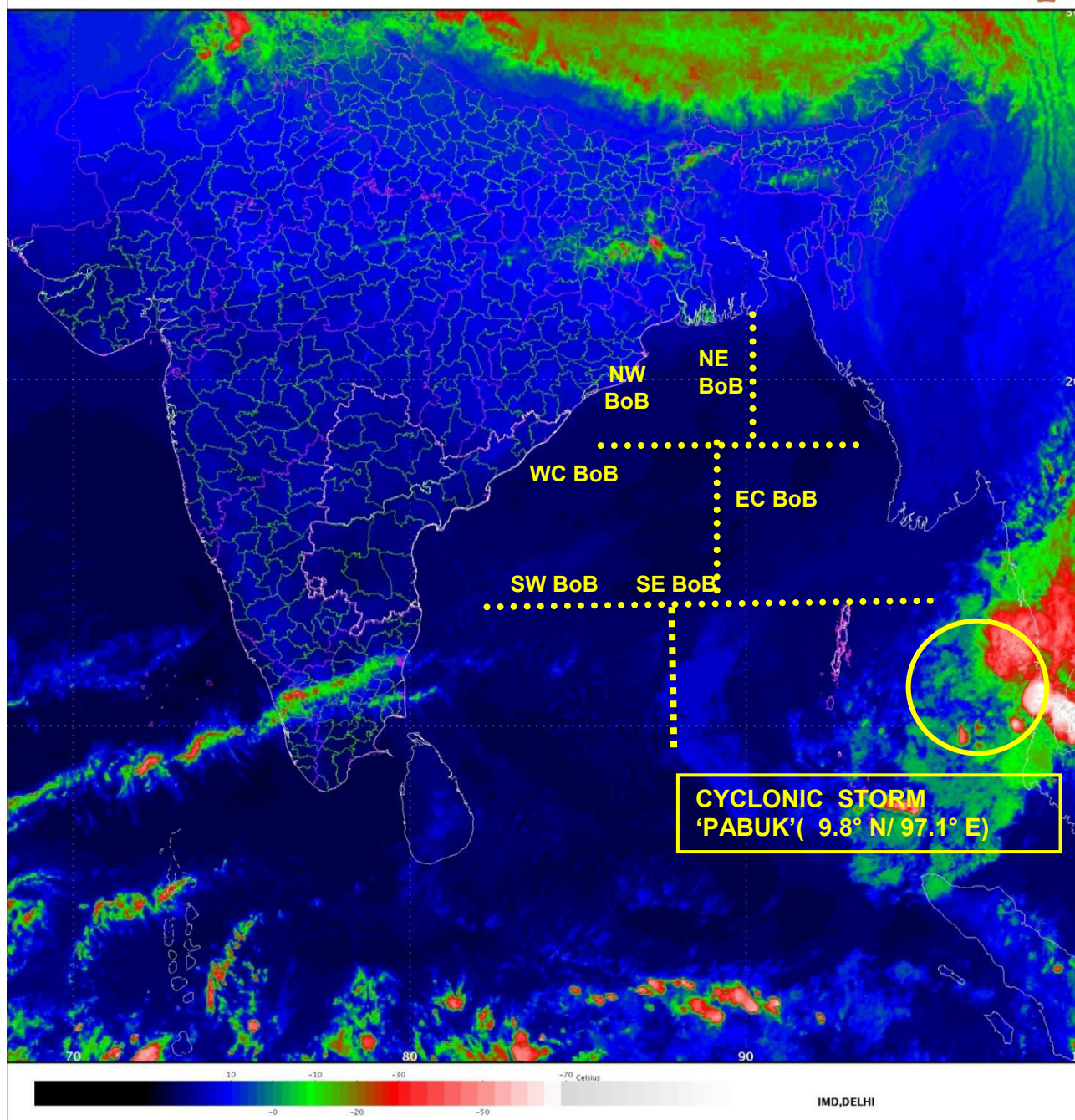
HENCE, THE SYSTEM IS EXPERIENCING WARMER SEA CONDITIONS AND HIGHER OCEAN HEAT CONTENT OVER ANDAMAN SEA. HOWEVER, IT WILL BECOME GRADUALLY UNFAVOURABLE OVER BAY OF BENGAL LEADING TO WEAKENING OF THE SYSTEM. THE WIND SHEAR WILL BE MODERATE TO HIGH OVER NORTH ANDAMAN SEA, WHICH COULD ALSO CAUSE WEAKENING OF THE SYSTEM OVER THE SEA AREA.

THE SYSTEM IS BEING STEERED BY THE ANTICYCLONE CENTERED TO THE NORTH OF GULF OF THAILAND. THE SYSTEM HAS MOVED AWAY FROM THE CENTRE OF ANTI-CYCLONIC CIRCULATION AND LIES IN THE PERIPHERY OF THE ANTICYCLONIC CIRCULATION. IT IS LIKELY TO RECURVE NORTHEASTWARDS ON 7TH AND 8TH. MOST OF THE NUMERICAL MODELS ARE ALSO IN AGREEMENT WITH THIS FORECAST.

(NEETHA K GOPAL)
SCIENTIST-E, RSMC, NEW DELHI

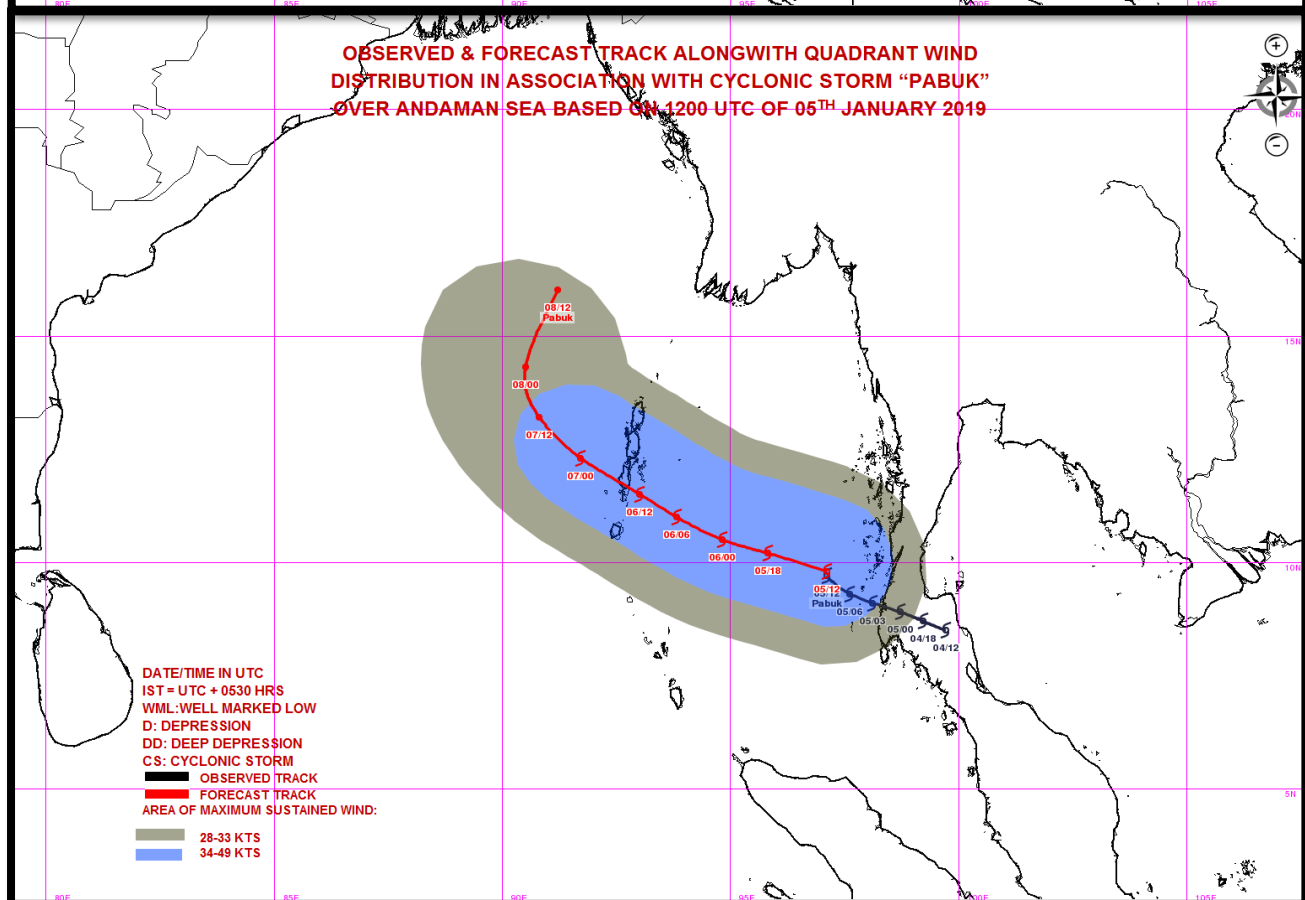
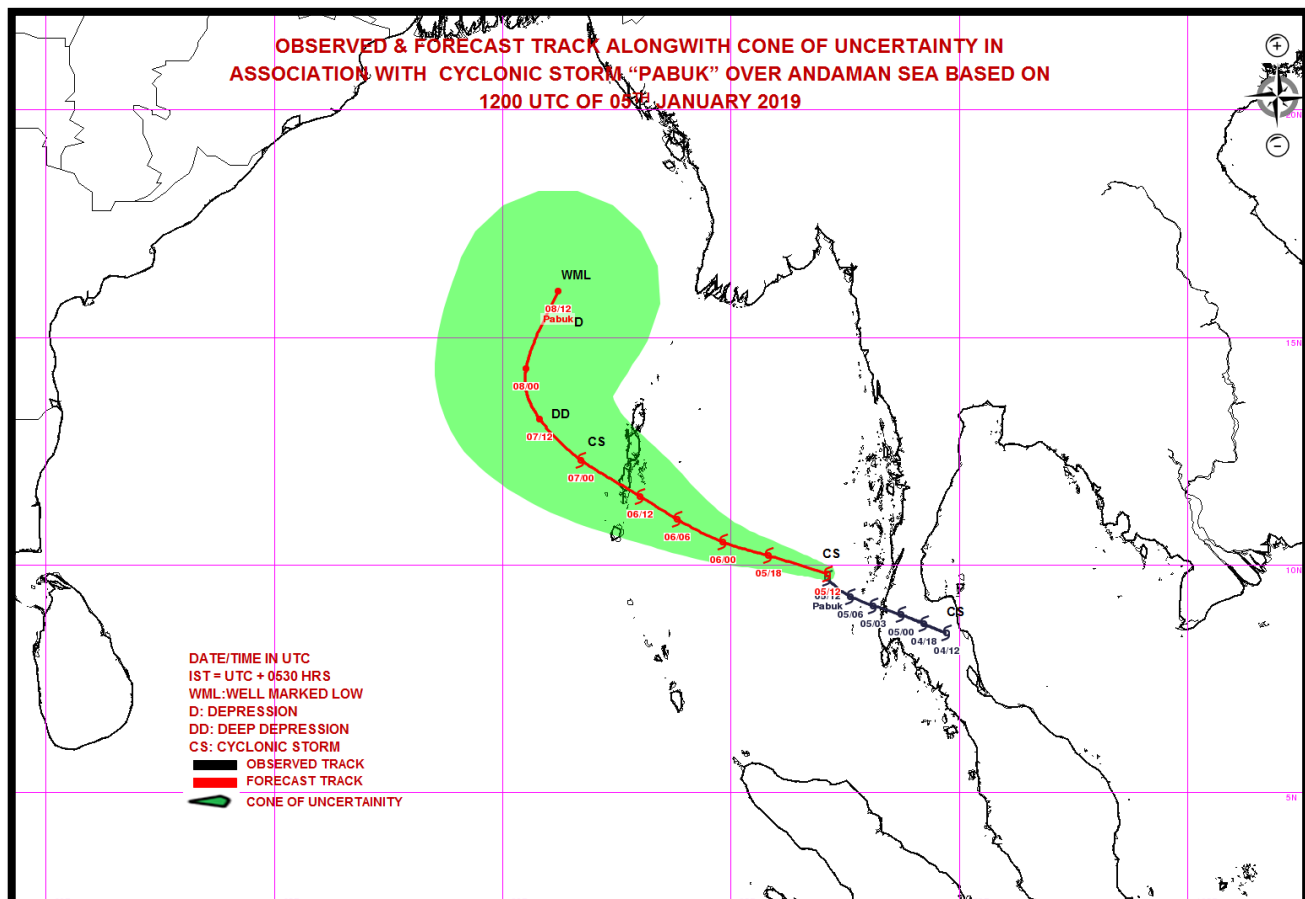
PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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



PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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



PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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



REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI
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)
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. 10 FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 1700 UTC OF 05.01.2019 BASED ON 1500 UTC OF 05.01.2019.

TROPICAL CYCLONE 'PABUK' OVER ANDAMAN SEA AND NEIGHBOURHOOD

THE CYCLONIC STORM 'PABUK' OVER ANDAMAN SEA & NEIGHBOURHOOD MOVED NORTH-NORTHWESTWARDS WITH A SPEED OF 14 KMPH DURING PAST 06 HOURS. IT LAY CENTERED AT 1500 UTC OF TODAY, THE 05TH JANUARY, 2019 OVER ANDAMAN SEA & NEIGHBOURHOOD NEAR LATITUDE 10.1°N AND LONGITUDE 96.8°E, ABOUT 480 KM EAST-SOUTHEAST OF PORT BLAIR (43333). IT IS VERY LIKELY TO CONTINUE TO MOVE NORTHWESTWARDS FOR SOME MORE TIME AND CROSS ANDAMAN ISLANDS BETWEEN 1200 TO 1500 UTC OF 06TH JANUARY AS A CYCLONIC STORM WITH A WIND SPEED OF 70-80 KMPH GUSTING TO 90 KMPH. THEREAFTER, IT IS VERY LIKELY TO MOVE NORTH-NORTHWESTWARDS AND THEN RECURVE NORTHEASTWARDS TOWARDS MYANMAR COAST AND WEAKEN GRADUALLY DURING 07TH-08TH JANUARY, 2019.

FORECAST TRACK AND INTENSITY ARE GIVEN IN THE FOLLOWING TABLE:

Date/Time(UTC)	POSITION (LAT.°N/ LONG. °E)	MAXIMUM SUSTAINED SURFACE WIND SPEED (KMPH)	CATEGORY OF CYCLONIC DISTURBANCE
05.01.19/1500	10.1/96.8	65-75 gusting to 85	Cyclonic Storm
05.01.19/1800	10.4/96.5	65-75 gusting to 85	Cyclonic Storm
06.01.19/0000	10.8/95.5	70-80 gusting to 90	Cyclonic Storm
06.01.19/0600	11.3/94.1	70-80 gusting to 90	Cyclonic Storm
06.01.19/1200	11.8/93.0	70-80 gusting to 90	Cyclonic Storm
07.01.19/0000	12.5/91.7	65-75 gusting to 85	Cyclonic Storm
07.01.19/1200	13.5/90.8	55-65 gusting to 75	Deep Depression
08.01.19/0000	14.6/90.5	45-55 gusting to 65	Depression
08.01.19/1200	16.1/91.2	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%

AS PER THE SATELLITE IMAGERY OF 1500 UTC ON 05TH JANUARY, THE INTENSITY OF THE SYSTEM IS C.I. 2.5. IN ASSOCIATION WITH THE SYSTEM, BROKEN LOW TO MEDIUM CLOUDS WITH EMBEDDED ISOLATED MODERATE TO INTENSE CONVECTION OVER EAST ANDAMAN SEA, TENASSERIM COAST, THAILAND, AND GULF OF THAILAND. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 61° C.

THE ESTIMATED CENTRAL PRESSURE IS ABOUT 1004 HPA AND THE MAXIMUM SUSTAINED SURFACE WIND SPEED IS 40 KNOTS GUSTING TO 45 KNOTS.

REMARKS:

CONSIDERING THE ENVIRONMENTAL CONDITIONS, THE THE SEA SURFACE TEMPERATURE IS AROUND 29-30 DEG. C OVER ANDAMAN SEA AND 27-28 DEG. C OVER ADJOINING BAY OF BENGAL. THE TROPICAL CYCLONE HEAT POTENTIAL IS AROUND 80-90 KJ/CM² OVER ANDAMAN SEA AND IT DECREASES NORTHWARDS. THE LOWER LEVEL CONVERGENCE IS 30×10^{-5} SECOND⁻¹ TO THE EAST OF THE SYSTEM CENTRE. LOWER LEVEL VORTICITY IS 200×10^{-6} SECOND⁻¹ TO THE EAST OF THE SYSTEM CENTRE. UPPER LEVEL DIVERGENCE IS 10×10^{-5} SECOND⁻¹ TO THE EAST OF THE SYSTEM CENTRE. VERTICAL WIND SHEAR IS (25-30 KNOTS) OVER THE SYSTEM AREA AND INCREASES ALONG THE FORECAST TRACK. THE UPPER TROPOSPHERIC RIDGE RUNS ALONG 15°N OVER THE SYSTEM REGION. THE MADDEN JULIAN OSCILLATION (MJO) INDEX LIES OVER PHASE 8 WITH AMPLITUDE MORE THAN 1.

HENCE, THE SYSTEM IS EXPERIENCING WARMER SEA CONDITIONS AND HIGHER OCEAN HEAT CONTENT OVER ANDAMAN SEA. HOWEVER, IT WILL BECOME GRADUALLY UNFAVOURABLE OVER BAY OF BENGAL LEADING TO WEAKENING OF THE SYSTEM. THE WIND SHEAR WILL BE MODERATE TO HIGH OVER NORTH ANDAMAN SEA, WHICH COULD ALSO CAUSE WEAKENING OF THE SYSTEM OVER THE SEA AREA.

THE SYSTEM IS BEING STEERED BY THE ANTICYCLONE CENTERED TO THE NORTH OF GULF OF THAILAND. THE SYSTEM HAS MOVED AWAY FROM THE CENTRE OF ANTI-CYCLONIC CIRCULATION AND LIES IN THE PERIPHERY OF THE ANTICYCLONIC CIRCULATION. IT IS LIKELY TO RECURVE NORTHEASTWARDS ON 7TH AND 8TH. MOST OF THE NUMERICAL MODELS ARE ALSO IN AGREEMENT WITH THIS FORECAST.

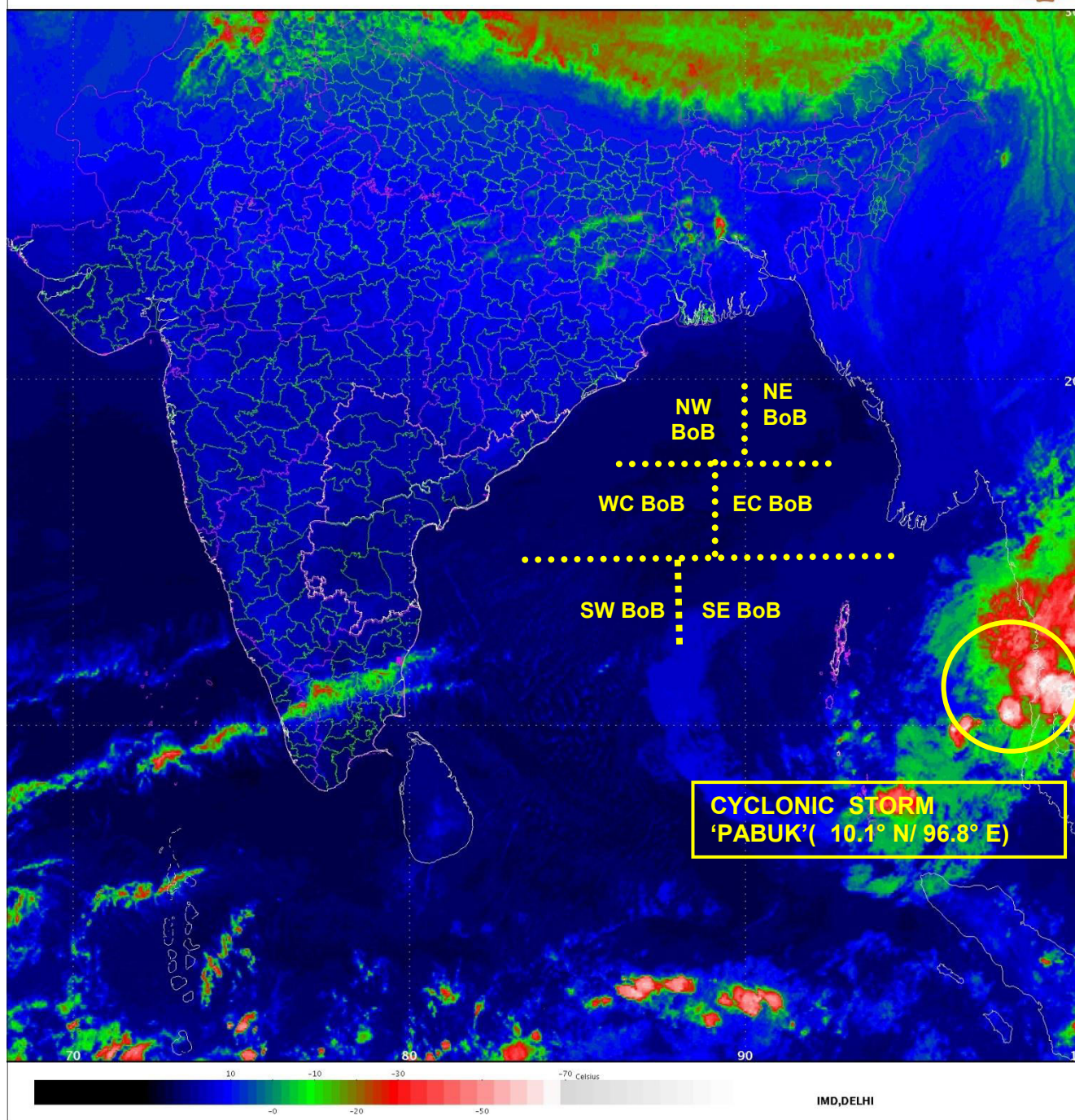
(D.JOARDAR)
SCIENTIST-E, RSMC, NEW DELHI

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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

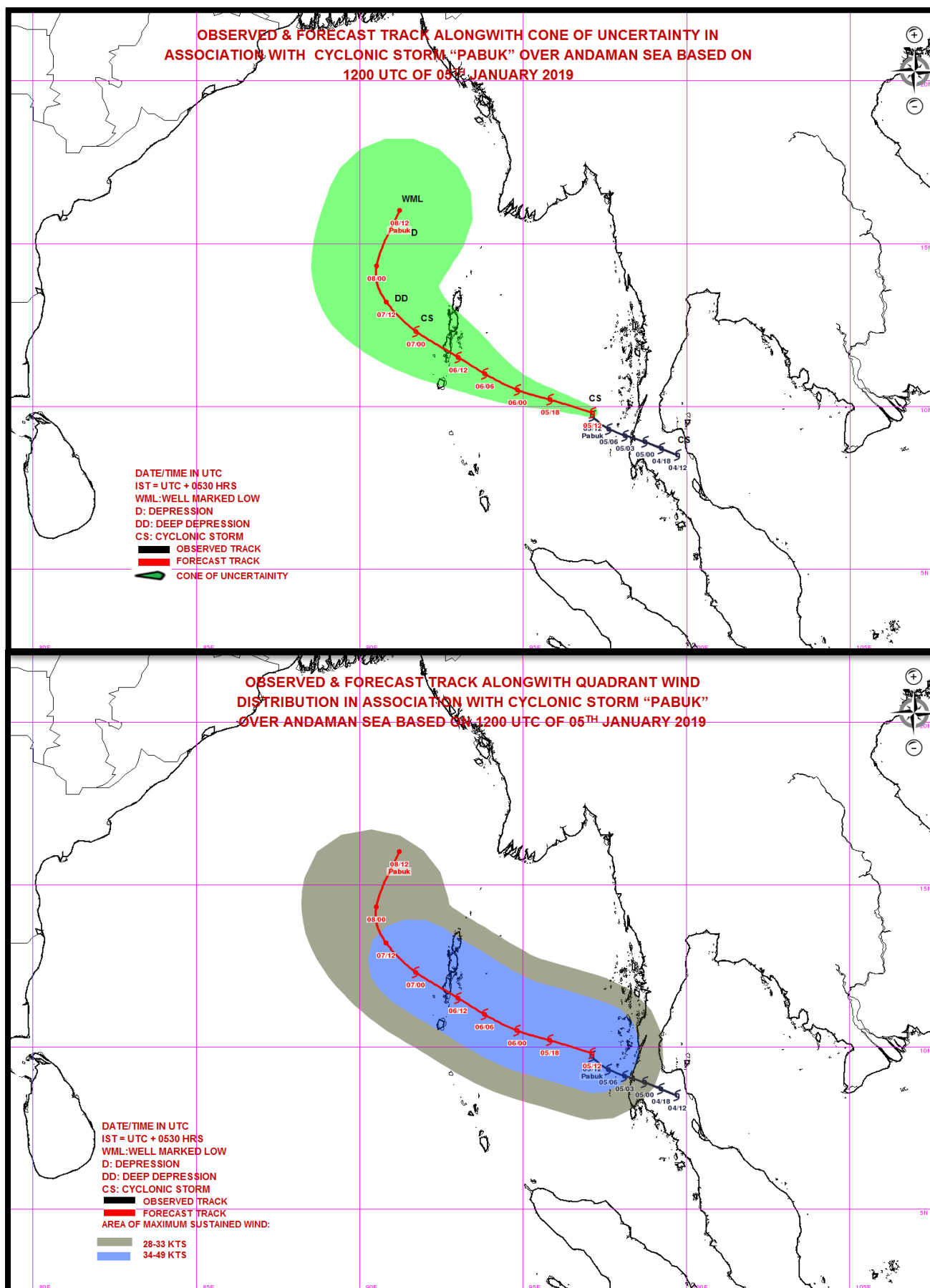
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SECTOR BAYOFBENGAL Mercator (NHC LUT)

05-01-2019/15:00 GMT
05-01-2019/20:30 IST



PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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



PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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



REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI
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 72 HOURS ISSUED AT 2000 UTC OF 05.01.2019 BASED ON 1800 UTC OF 05.01.2019.

TROPICAL CYCLONE 'PABUK' OVER ANDAMAN SEA AND NEIGHBOURHOOD

THE CYCLONIC STORM 'PABUK' OVER ANDAMAN SEA & NEIGHBOURHOOD MOVED NORTH-NORTHWESTWARDS WITH A SPEED OF 15 KMPH DURING PAST 06 HOURS. IT LAY CENTERED AT 1800 UTC OF TODAY, THE 05TH JANUARY, 2019 OVER ANDAMAN SEA & NEIGHBOURHOOD NEAR LATITUDE 10.4°N AND LONGITUDE 96.5°E, ABOUT 435 KM EAST-SOUTHEAST OF PORT BLAIR (43333). IT IS VERY LIKELY TO CONTINUE TO MOVE NORTHWESTWARDS FOR SOME MORE TIME AND CROSS ANDAMAN ISLANDS BETWEEN 1200 TO 1500 UTC OF 06TH JANUARY AS A CYCLONIC STORM WITH A WIND SPEED OF 70-80 KMPH GUSTING TO 90 KMPH. THEREAFTER, IT IS VERY LIKELY TO MOVE NORTH-NORTHWESTWARDS AND THEN RECURVE NORTHEASTWARDS TOWARDS MYANMAR COAST AND WEAKEN GRADUALLY DURING 07TH-08TH JANUARY, 2019.

FORECAST TRACK AND INTENSITY ARE GIVEN IN THE FOLLOWING TABLE:

DATE/TIME(UTC)	POSITION (LAT.°N/ LONG.°E)	MAXIMUM SUSTAINED SURFACE WIND SPEED (KMPH)	CATEGORY OF CYCLONIC DISTURBANCE
05.01.19/1800	10.4/96.5	65-75 GUSTING TO 85	CYCLONIC STORM
06.01.19/0000	11.0/95.5	65-75 GUSTING TO 85	CYCLONIC STORM
06.01.19/0600	11.5/94.1	65-75 GUSTING TO 85	CYCLONIC STORM
06.01.19/1200	12.0/93.0	65-75 GUSTING TO 85	CYCLONIC STORM
06.01.19/1800	12.3/92.2	65-75 GUSTING TO 85	CYCLONIC STORM
07.01.19/0600	13.0/91.3	50-60 GUSTING TO 70	DEEP DEPRESSION
07.01.19/1800	13.9/90.7	40-50 GUSTING TO 60	DEPRESSION
08.01.19/0600	15.5/90.8	30-40 GUSTING TO 50	DEPRESSION

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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

AS PER THE SATELLITE IMAGERY OF 1800 UTC ON 05TH JANUARY, THE INTENSITY OF THE SYSTEM IS C.I. 2.5. IN ASSOCIATION WITH THE SYSTEM, BROKEN LOW TO MEDIUM CLOUDS WITH EMBEDDED ISOLATED MODERATE TO INTENSE CONVECTION OVER EAST ANDAMAN SEA, TENASSERIM COAST, THAILAND, AND GULF OF THAILAND. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 79° C.

THE ESTIMATED CENTRAL PRESSURE IS ABOUT 1004 HPA AND THE MAXIMUM SUSTAINED SURFACE WIND SPEED IS 35 KNOTS GUSTING TO 45 KNOTS.

REMARKS:

CONSIDERING THE ENVIRONMENTAL CONDITIONS, THE SEA SURFACE TEMPERATURE IS AROUND 29-30 DEG. C OVER ANDAMAN SEA AND 27-28 DEG. C OVER ADJOINING BAY OF BENGAL. THE TROPICAL CYCLONE HEAT POTENTIAL IS AROUND 80-90 KJ/CM² OVER ANDAMAN SEA AND IT DECREASES NORTHWARDS. THE LOWER LEVEL CONVERGENCE IS 15×10^{-5} SECOND⁻¹ TO THE EAST OF THE SYSTEM CENTRE. LOWER LEVEL VORTICITY IS 200×10^{-6} SECOND⁻¹ TO THE EAST OF THE SYSTEM CENTRE. UPPER LEVEL DIVERGENCE IS 20×10^{-5} SECOND⁻¹ TO THE EAST OF THE SYSTEM CENTRE. VERTICAL WIND SHEAR IS (25-30 KNOTS) OVER THE SYSTEM AREA AND INCREASES ALONG THE FORECAST TRACK. THE UPPER TROPOSPHERIC RIDGE RUNS ALONG 15°N OVER THE SYSTEM REGION. THE MADDEN JULIAN OSCILLATION (MJO) INDEX LIES OVER PHASE 8 WITH AMPLITUDE MORE THAN 1.

HENCE, THE SYSTEM IS EXPERIENCING WARMER SEA CONDITIONS AND HIGHER OCEAN HEAT CONTENT OVER ANDAMAN SEA. HOWEVER, IT WILL BECOME GRADUALLY UNFAVOURABLE OVER BAY OF BENGAL LEADING TO WEAKENING OF THE SYSTEM. THE WIND SHEAR WILL BE MODERATE TO HIGH OVER NORTH ANDAMAN SEA, WHICH COULD ALSO CAUSE WEAKENING OF THE SYSTEM OVER THE SEA AREA.

THE SYSTEM IS BEING STEERED BY THE ANTICYCLONE CENTERED TO THE NORTH OF GULF OF THAILAND. THE SYSTEM HAS MOVED AWAY FROM THE CENTRE OF ANTI-CYCLONIC CIRCULATION AND LIES IN THE PERIPHERY OF THE ANTICYCLONIC CIRCULATION. IT IS LIKELY TO RECURVE NORTHEASTWARDS ON 7TH AND 8TH. MOST OF THE NUMERICAL MODELS ARE ALSO IN AGREEMENT WITH THIS FORECAST.

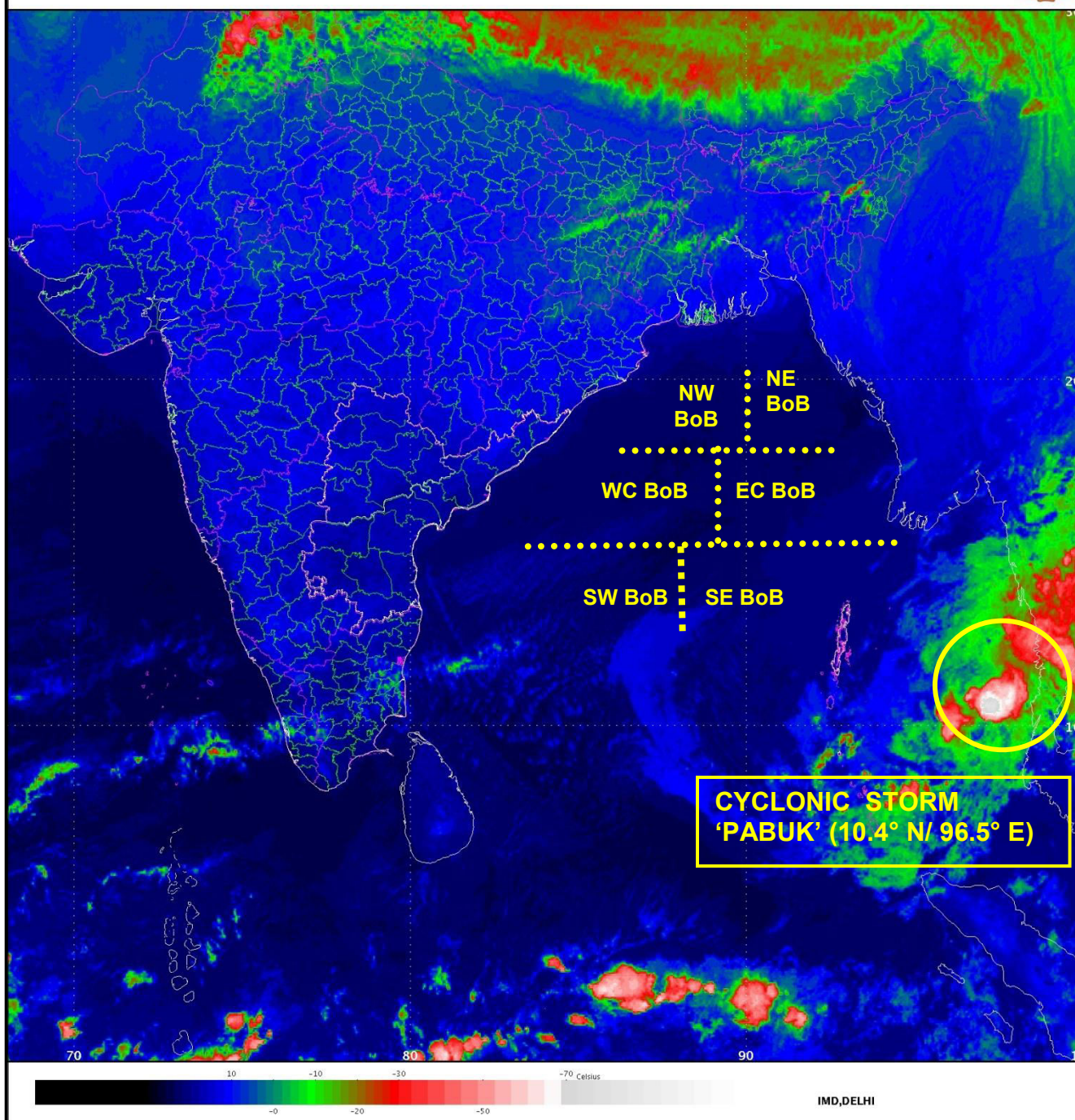
(D.JOARDAR)
SCIENTIST-E, RSMC, NEW DELHI

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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

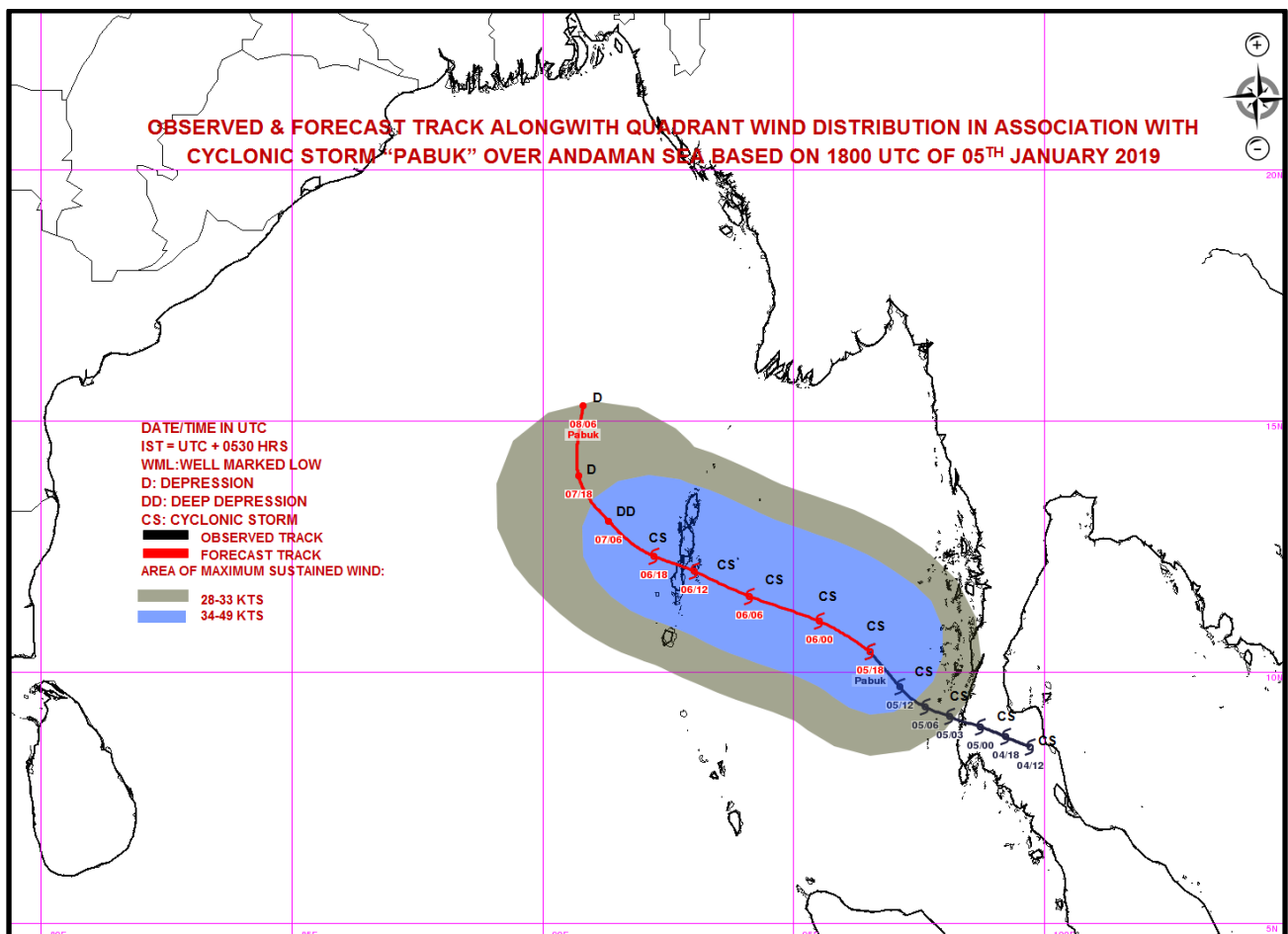
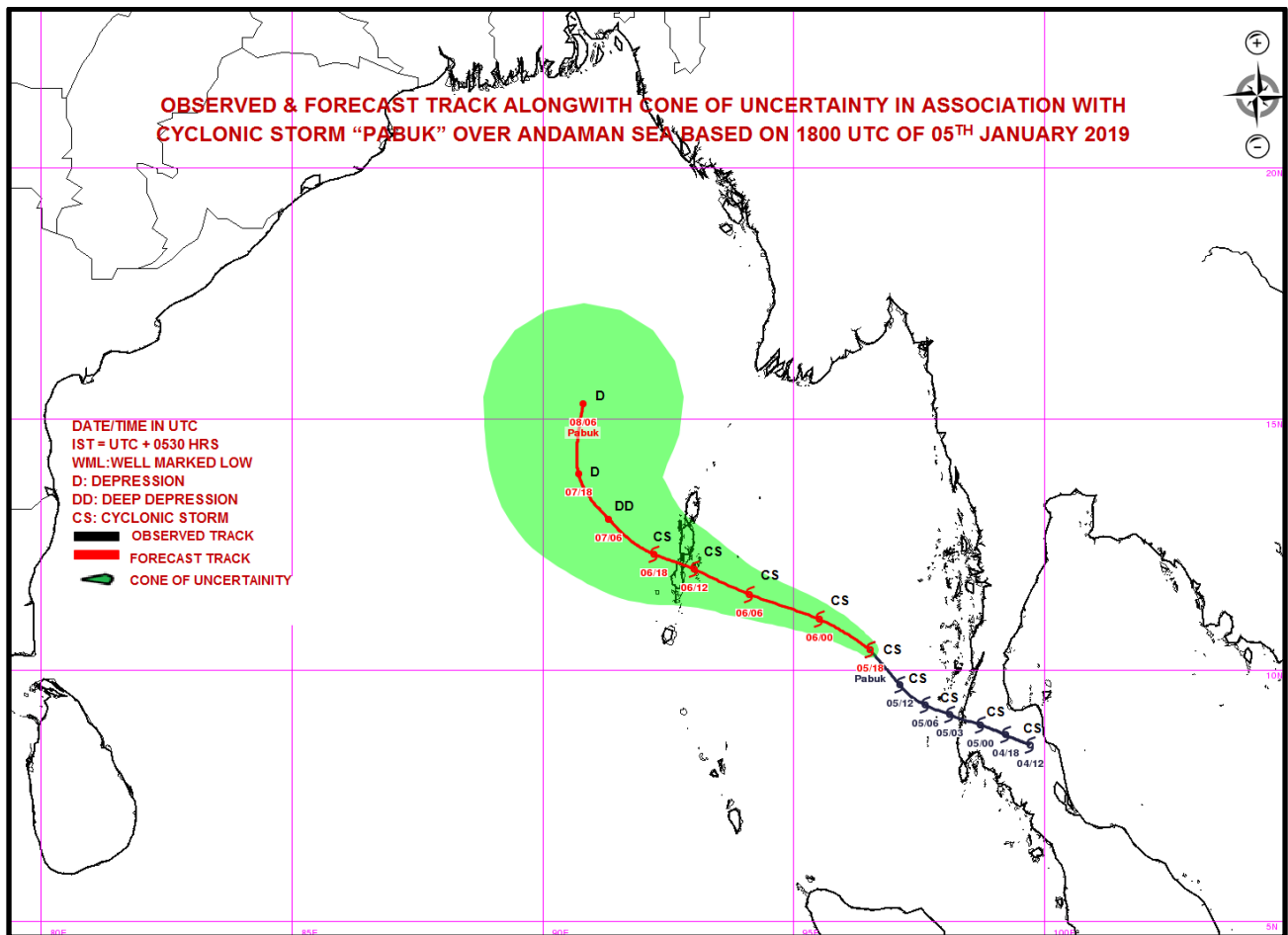
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SECTOR BAY OF BENGAL Mercator (NHC LUT)

05-01-2019/18:00 GMT
05-01-2019/23:30 IST



PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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



PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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



REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI
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)
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. 12 FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 72 HOURS ISSUED AT 0000 UTC OF 06.01.2019 BASED ON 2100 UTC OF 05.01.2019.

TROPICAL CYCLONE 'PABUK' OVER ANDAMAN SEA AND NEIGHBOURHOOD

THE CYCLONIC STORM 'PABUK' OVER ANDAMAN SEA & NEIGHBOURHOOD MOVED NORTH-NORTHWESTWARDS WITH A SPEED OF 18 KMPH DURING PAST 06 HOURS. IT LAY CENTERED AT 2100 UTC OF THE 05TH JANUARY, 2019 OVER ANDAMAN SEA & NEIGHBOURHOOD NEAR LATITUDE 10.7°N AND LONGITUDE 96.0°E, ABOUT 370 KM EAST-SOUTHEAST OF PORT BLAIR (43333). IT IS VERY LIKELY TO CONTINUE TO MOVE NORTHWESTWARDS FOR SOME MORE TIME AND CROSS ANDAMAN ISLANDS BETWEEN 1200 TO 1500 UTC OF 06TH JANUARY AS A CYCLONIC STORM WITH A WIND SPEED OF 70-80 KMPH GUSTING TO 90 KMPH. THEREAFTER, IT IS VERY LIKELY TO MOVE NORTH-NORTHWESTWARDS AND THEN RECURVE NORTHEASTWARDS TOWARDS MYANMAR COAST AND WEAKEN GRADUALLY DURING 07TH-08TH JANUARY, 2019.

FORECAST TRACK AND INTENSITY ARE GIVEN IN THE FOLLOWING TABLE:

DATE/TIME(UTC)	POSITION (LAT.°N/ LONG.°E)	MAXIMUM SUSTAINED SURFACE WIND SPEED (KMPH)	CATEGORY OF CYCLONIC DISTURBANCE
06.01.19/2100	10.7/96.0	65-75 GUSTING TO 85	CYCLONIC STORM
06.01.19/0000	11.0/95.5	65-75 GUSTING TO 85	CYCLONIC STORM
06.01.19/0600	11.5/94.1	65-75 GUSTING TO 85	CYCLONIC STORM
06.01.19/1200	12.0/93.0	65-75 GUSTING TO 85	CYCLONIC STORM
06.01.19/1800	12.3/92.2	65-75 GUSTING TO 85	CYCLONIC STORM
07.01.19/0600	13.0/91.3	50-60 GUSTING TO 70	DEEP DEPRESSION
07.01.19/1800	13.9/90.7	40-50 GUSTING TO 60	DEPRESSION
08.01.19/0600	15.5/90.8	30-40 GUSTING TO 50	DEPRESSION
08.01.19/1800	16.0/91.0	30-40 GUSTING TO 50	DEPRESSION

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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

AS PER THE SATELLITE IMAGERY OF 2100 UTC ON 05TH JANUARY, THE INTENSITY OF THE SYSTEM IS C.I. 2.5. IN ASSOCIATION WITH THE SYSTEM, BROKEN LOW TO MEDIUM CLOUDS WITH EMBEDDED ISOLATED MODERATE TO INTENSE CONVECTION OVER EAST ANDAMAN SEA, TENASSERIM COAST, THAILAND, AND GULF OF THAILAND. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 90° C.

THE ESTIMATED CENTRAL PRESSURE IS ABOUT 1004 HPA AND THE MAXIMUM SUSTAINED SURFACE WIND SPEED IS 35 KNOTS GUSTING TO 45 KNOTS.

REMARKS:

CONSIDERING THE ENVIRONMENTAL CONDITIONS, THE SEA SURFACE TEMPERATURE IS AROUND 29-30 DEG. C OVER ANDAMAN SEA AND 27-28 DEG. C OVER ADJOINING BAY OF BENGAL. THE TROPICAL CYCLONE HEAT POTENTIAL IS AROUND 80-90 KJ/CM² OVER ANDAMAN SEA AND IT DECREASES NORTHWARDS. THE LOWER LEVEL CONVERGENCE IS 15×10^{-5} SECOND⁻¹ TO THE EAST OF THE SYSTEM CENTRE. LOWER LEVEL VORTICITY IS 200×10^{-6} SECOND⁻¹ TO THE EAST OF THE SYSTEM CENTRE. UPPER LEVEL DIVERGENCE IS 20×10^{-5} SECOND⁻¹ TO THE EAST OF THE SYSTEM CENTRE. VERTICAL WIND SHEAR IS (25-30 KNOTS) OVER THE SYSTEM AREA AND INCREASES ALONG THE FORECAST TRACK. THE UPPER TROPOSPHERIC RIDGE RUNS ALONG 15°N OVER THE SYSTEM REGION. THE MADDEN JULIAN OSCILLATION (MJO) INDEX LIES OVER PHASE 8 WITH AMPLITUDE MORE THAN 1.

HENCE, THE SYSTEM IS EXPERIENCING WARMER SEA CONDITIONS AND HIGHER OCEAN HEAT CONTENT OVER ANDAMAN SEA. HOWEVER, IT WILL BECOME GRADUALLY UNFAVOURABLE OVER BAY OF BENGAL LEADING TO WEAKENING OF THE SYSTEM. THE WIND SHEAR WILL BE MODERATE TO HIGH OVER NORTH ANDAMAN SEA, WHICH COULD ALSO CAUSE WEAKENING OF THE SYSTEM OVER THE SEA AREA.

THE SYSTEM IS BEING STEERED BY THE ANTICYCLONE CENTERED TO THE NORTH OF GULF OF THAILAND. THE SYSTEM HAS MOVED AWAY FROM THE CENTRE OF ANTI-CYCLONIC CIRCULATION AND LIES IN THE PERIPHERY OF THE ANTICYCLONIC CIRCULATION. IT IS LIKELY TO RECURVE NORTHEASTWARDS ON 7TH AND 8TH. MOST OF THE NUMERICAL MODELS ARE ALSO IN AGREEMENT WITH THIS FORECAST.

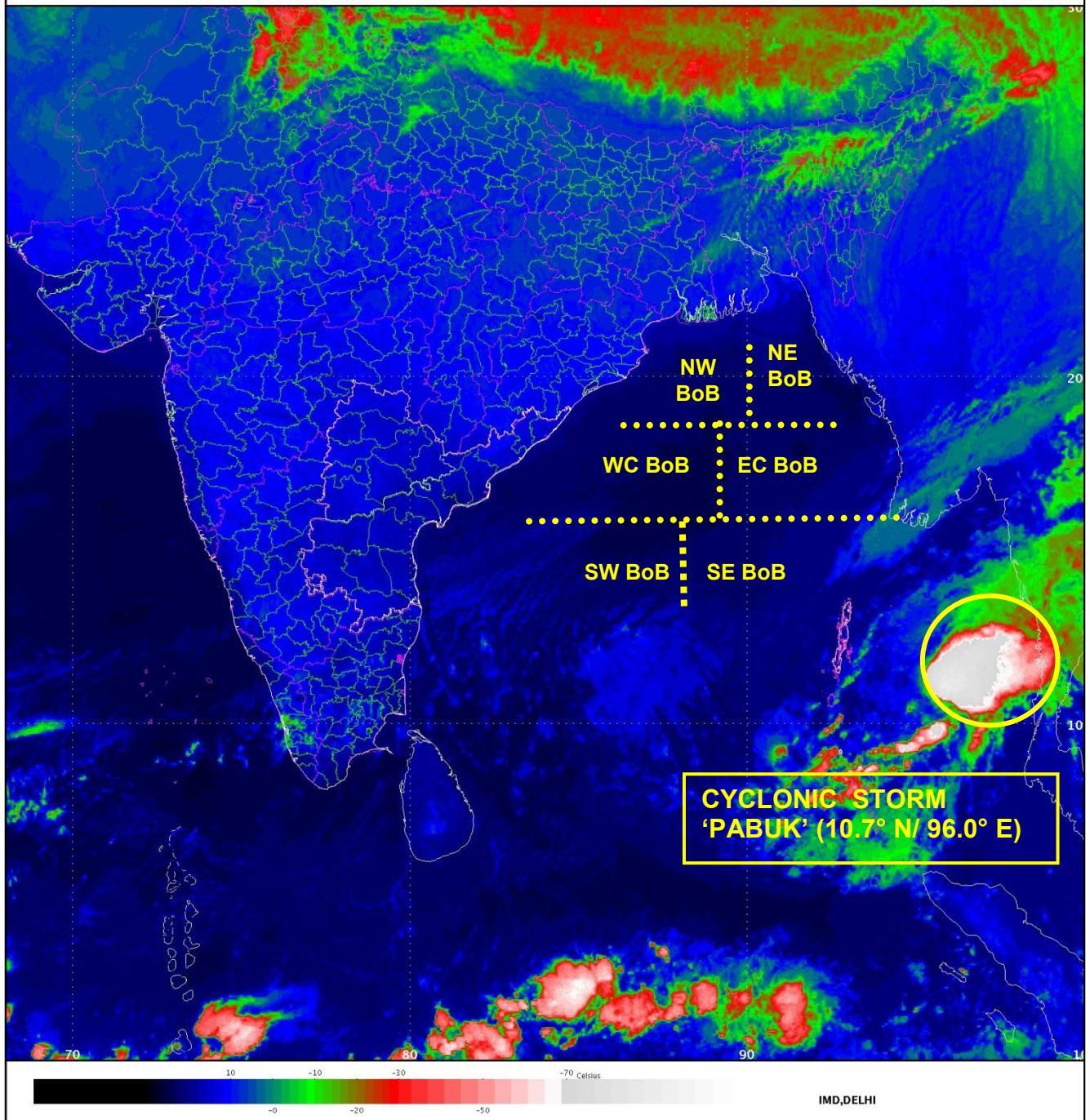
(D.JOARDAR)
SCIENTIST-E, RSMC, NEW DELHI

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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

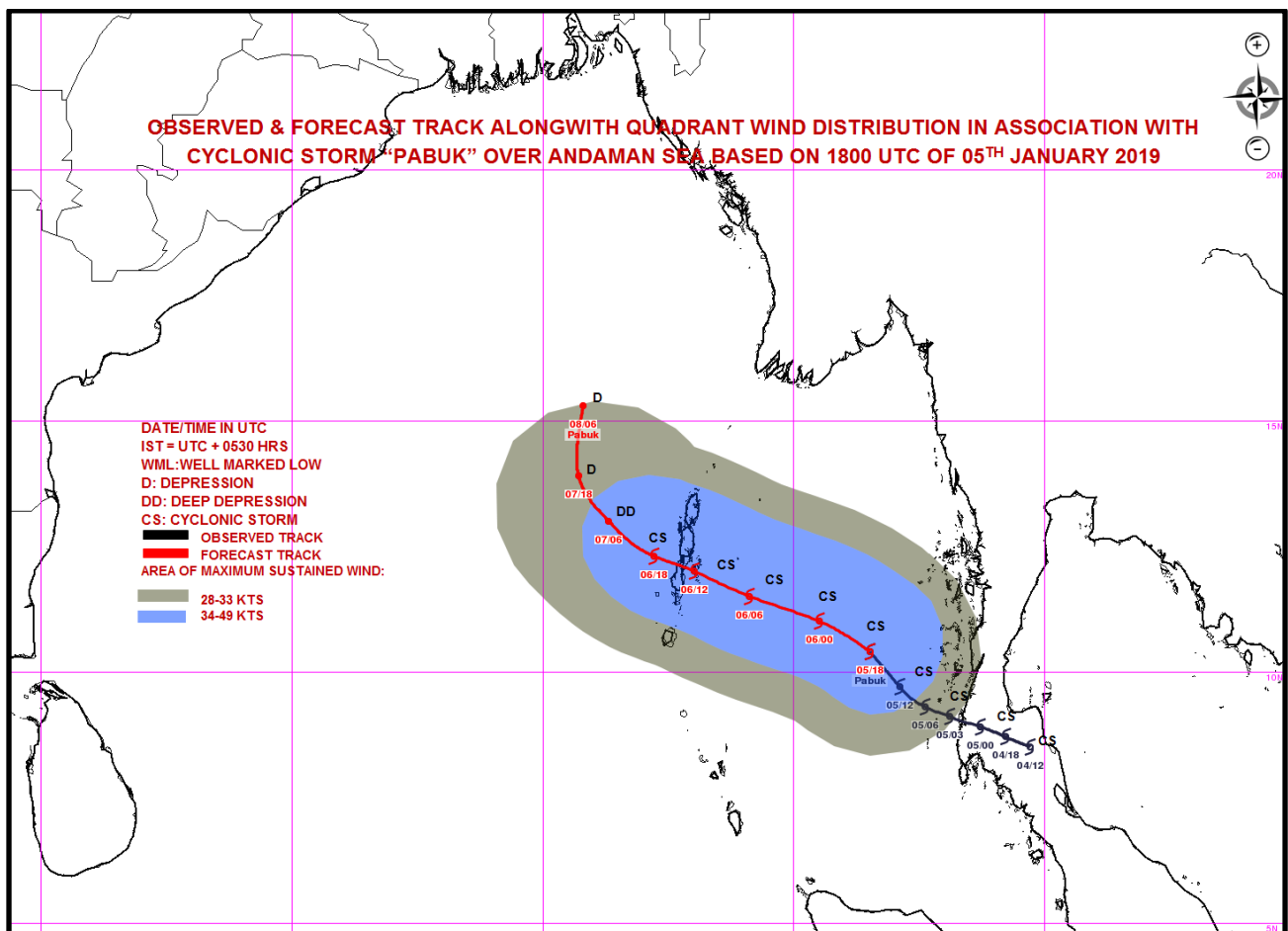
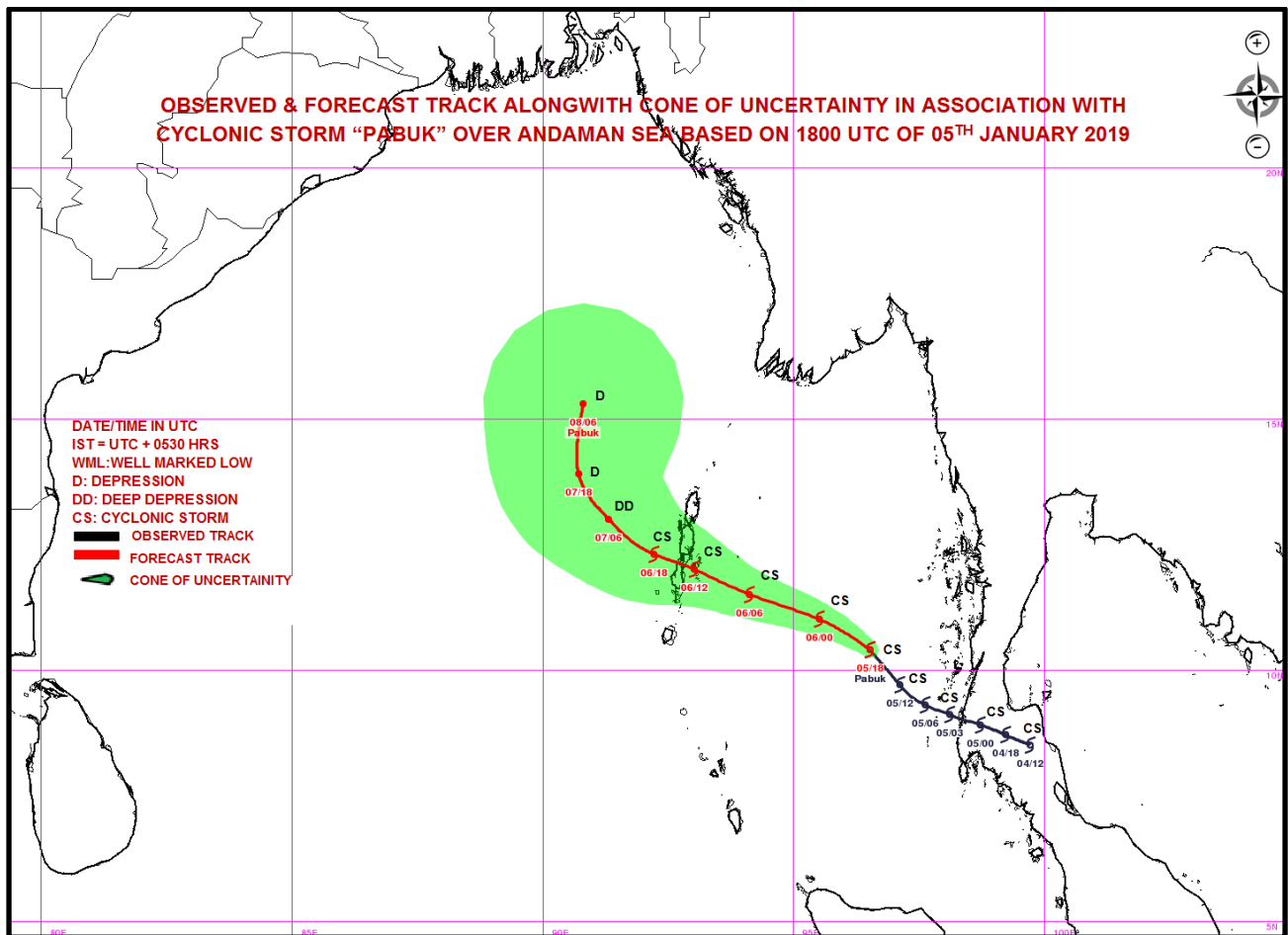
SAT :INSAT-3D
IMG_TIR1_TEMP 10.8 um
SECTOR BAY OF BENGAL Mercator (NHC LUT)

05-01-2019/22:30 GMT
06-01-2019/04:00 IST



PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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



PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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



REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI
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 72 HOURS ISSUED AT 0300 UTC OF 06.01.2019 BASED ON 0000 UTC OF 06.01.2019.

TROPICAL CYCLONE 'PABUK' OVER ANDAMAN SEA AND NEIGHBOURHOOD

THE CYCLONIC STORM 'PABUK' OVER ANDAMAN SEA & NEIGHBOURHOOD MOVED NORTH-NORTHWESTWARDS WITH A SPEED OF 20 KMPH DURING PAST 06 HOURS. IT LAY CENTERED AT 0000 UTC OF THE 06TH JANUARY, 2019 OVER ANDAMAN SEA & NEIGHBOURHOOD NEAR LATITUDE 11.0°N AND LONGITUDE 95.5°E, ABOUT 310 KM EAST-SOUTHEAST OF PORT BLAIR (43333). IT IS VERY LIKELY TO CONTINUE TO MOVE NORTHWESTWARDS AND CROSS ANDAMAN ISLANDS BETWEEN 1300 TO 1600 UTC OF 06TH JANUARY AS A CYCLONIC STORM WITH A WIND SPEED OF 65-75 KMPH GUSTING TO 85 KMPH. THEREAFTER, IT IS VERY LIKELY TO MOVE NORTH-NORTHWESTWARDS AND THEN RECURVE NORTHEASTWARDS TOWARDS MYANMAR COAST AND WEAKEN GRADUALLY THEREAFTER.

FORECAST TRACK AND INTENSITY ARE GIVEN IN THE FOLLOWING TABLE:

DATE/TIME(UTC)	POSITION (LAT.°N/ LONG.°E)	MAXIMUM SUSTAINED SURFACE WIND SPEED (KMPH)	CATEGORY OF CYCLONIC DISTURBANCE
06.01.19/0000	11.0/95.5	65-75 GUSTING TO 85	CYCLONIC STORM
06.01.19/0600	11.5/94.1	65-75 GUSTING TO 85	CYCLONIC STORM
06.01.19/1200	11.9/93.0	65-75 GUSTING TO 85	CYCLONIC STORM
06.01.19/1800	12.3/92.2	50-60 GUSTING TO 70	DEEP DEPRESSION
07.01.19/0000	13.0/92.1	40-50 GUSTING TO 50	DEPRESSION
07.01.19/1200	14.0/92.8	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%

AS PER THE SATELLITE IMAGERY OF 0000 UTC ON 06TH JANUARY, THE INTENSITY OF THE SYSTEM IS C.I. 2.5. IN ASSOCIATION WITH THE SYSTEM, BROKEN LOW TO MEDIUM CLOUDS WITH EMBEDDED ISOLATED MODERATE TO INTENSE CONVECTION OVER EAST ANDAMAN SEA, TENASSERIM COAST, THAILAND, AND GULF OF THAILAND. MINIMUM CLOUD TOP TEMPERATURE IS MINUS -85° C.

THE ESTIMATED CENTRAL PRESSURE IS ABOUT 1004 HPA AND THE MAXIMUM SUSTAINED SURFACE WIND SPEED IS 35 KNOTS GUSTING TO 45 KNOTS.

REMARKS:

CONSIDERING THE ENVIRONMENTAL CONDITIONS, THE SEA SURFACE TEMPERATURE IS AROUND 29-30 DEG. C OVER ANDAMAN SEA AND 27-28 DEG. C OVER ADJOINING BAY OF BENGAL. THE TROPICAL CYCLONE HEAT POTENTIAL IS AROUND 80-90 KJ/CM² OVER ANDAMAN SEA AND IT DECREASES NORTHWARDS. THE LOWER LEVEL CONVERGENCE IS $(15-20) \times 10^{-5}$ SECOND⁻¹ TO THE EAST OF THE SYSTEM CENTRE. LOWER LEVEL VORTICITY IS $(140-160) \times 10^{-6}$ SECOND⁻¹ TO THE EAST OF THE SYSTEM CENTRE. UPPER LEVEL DIVERGENCE IS $(15-20) \times 10^{-5}$ SECOND⁻¹ TO THE EAST OF THE SYSTEM CENTRE. VERTICAL WIND SHEAR IS (10-15 KNOTS) OVER THE SYSTEM AREA AND INCREASES ALONG THE FORECAST TRACK. THE UPPER TROPOSPHERIC RIDGE RUNS ALONG 15°N OVER THE SYSTEM REGION. THE MADDEN JULIAN OSCILLATION (MJO) INDEX LIES OVER PHASE 8 WITH AMPLITUDE MORE THAN 1.

HENCE, THE SYSTEM IS EXPERIENCING WARMER SEA CONDITIONS AND HIGHER OCEAN HEAT CONTENT OVER ANDAMAN SEA. HOWEVER, IT WILL BECOME GRADUALLY UNFAVOURABLE OVER BAY OF BENGAL LEADING TO WEAKENING OF THE SYSTEM. THE WIND SHEAR WILL BE MODERATE OVER NORTH ANDAMAN SEA.

THE SYSTEM IS BEING STEERED BY THE ANTICYCLONE CENTERED TO THE NORTH OF GULF OF THAILAND. THE SYSTEM HAS MOVED AWAY FROM THE CENTRE OF ANTICYCLONIC CIRCULATION AND LIES IN THE PERIPHERY OF THE ANTICYCLONIC CIRCULATION. IT IS LIKELY TO RECURVE NORTHEASTWARDS AFTER CROSSING THE ANDAMAN ISLANDS. MOST OF THE NUMERICAL MODELS ARE ALSO IN AGREEMENT WITH THIS FORECAST.

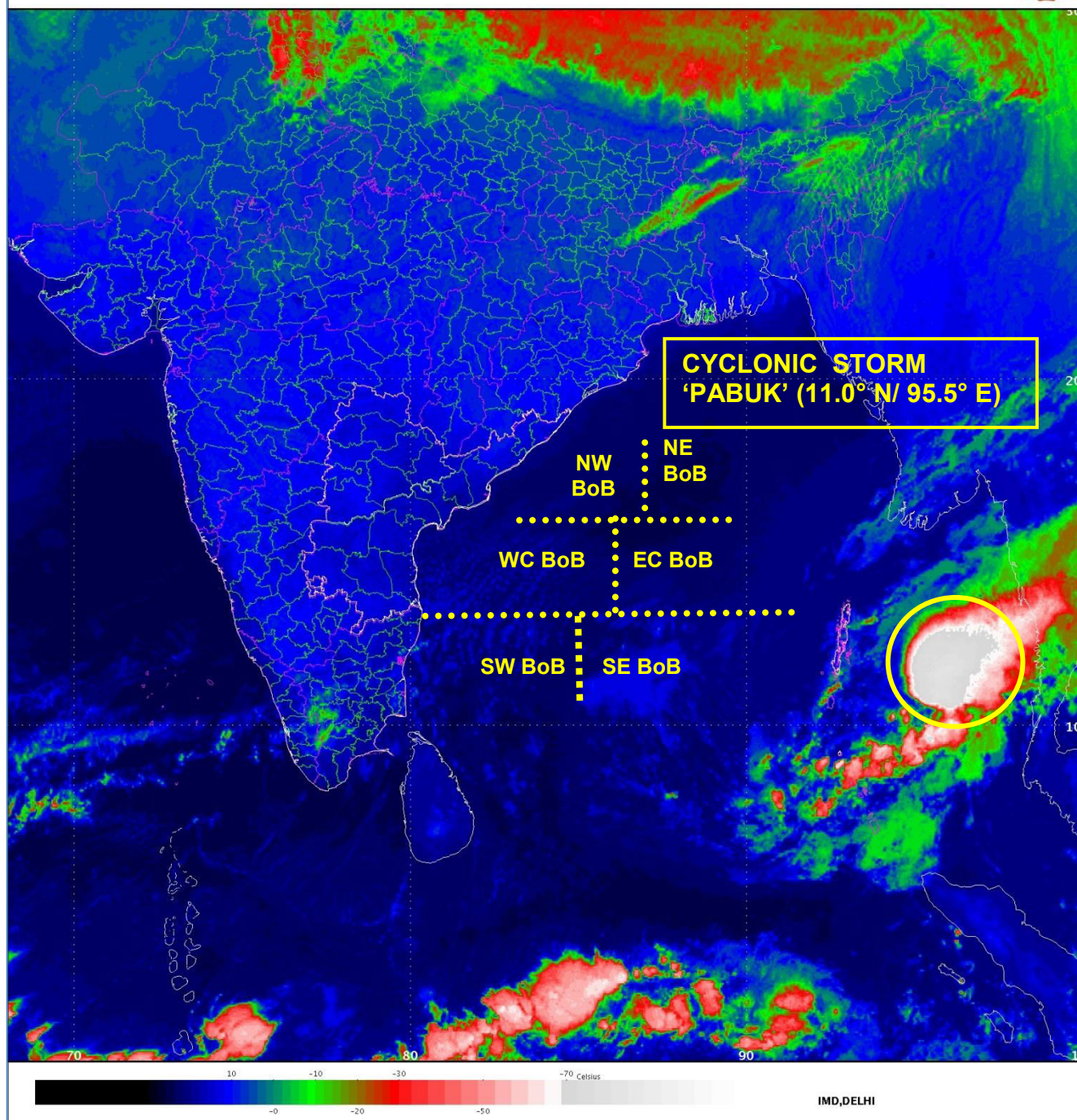
(Charan Singh)
SCIENTIST-F, RSMC, NEW DELHI

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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

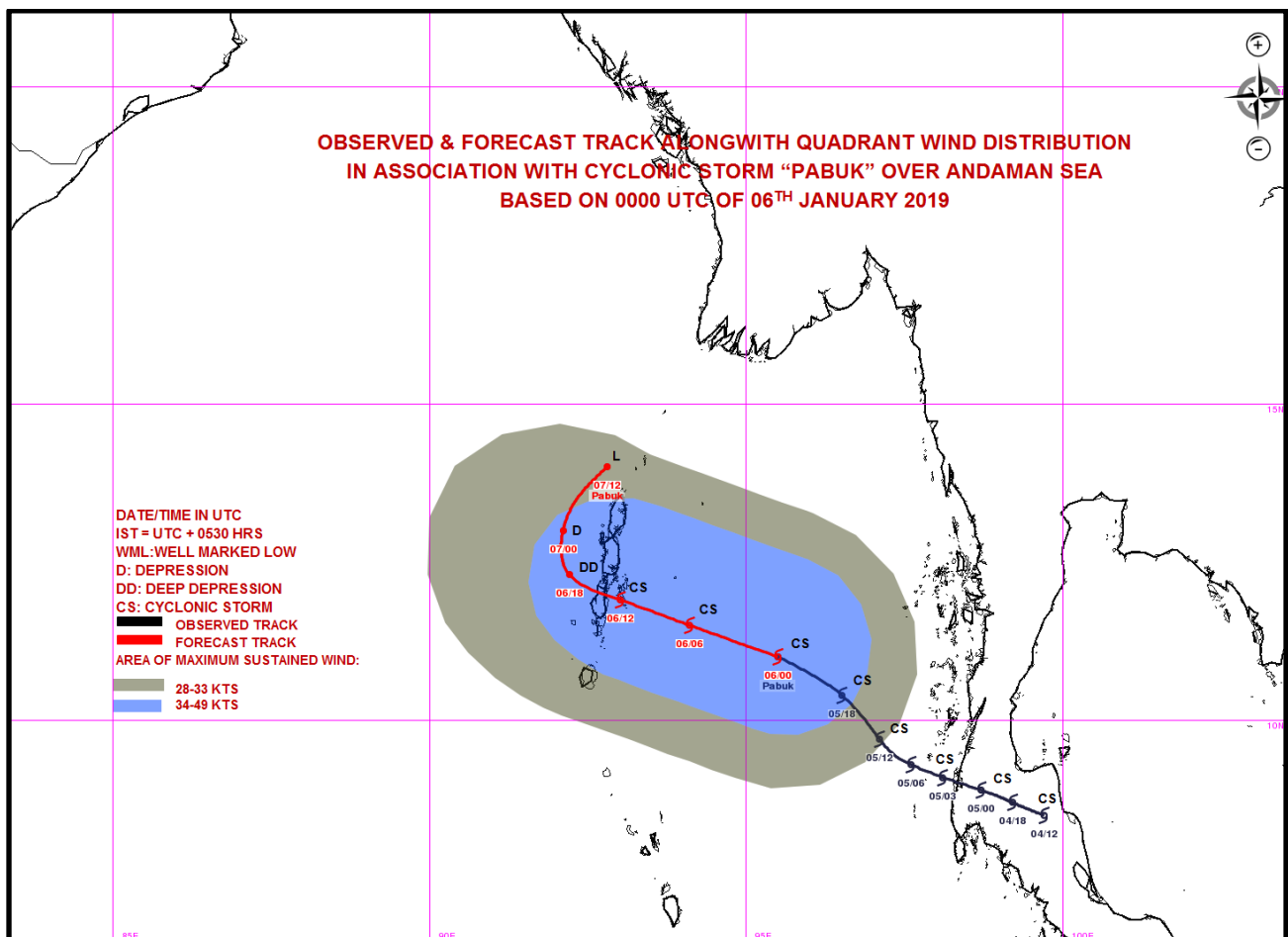
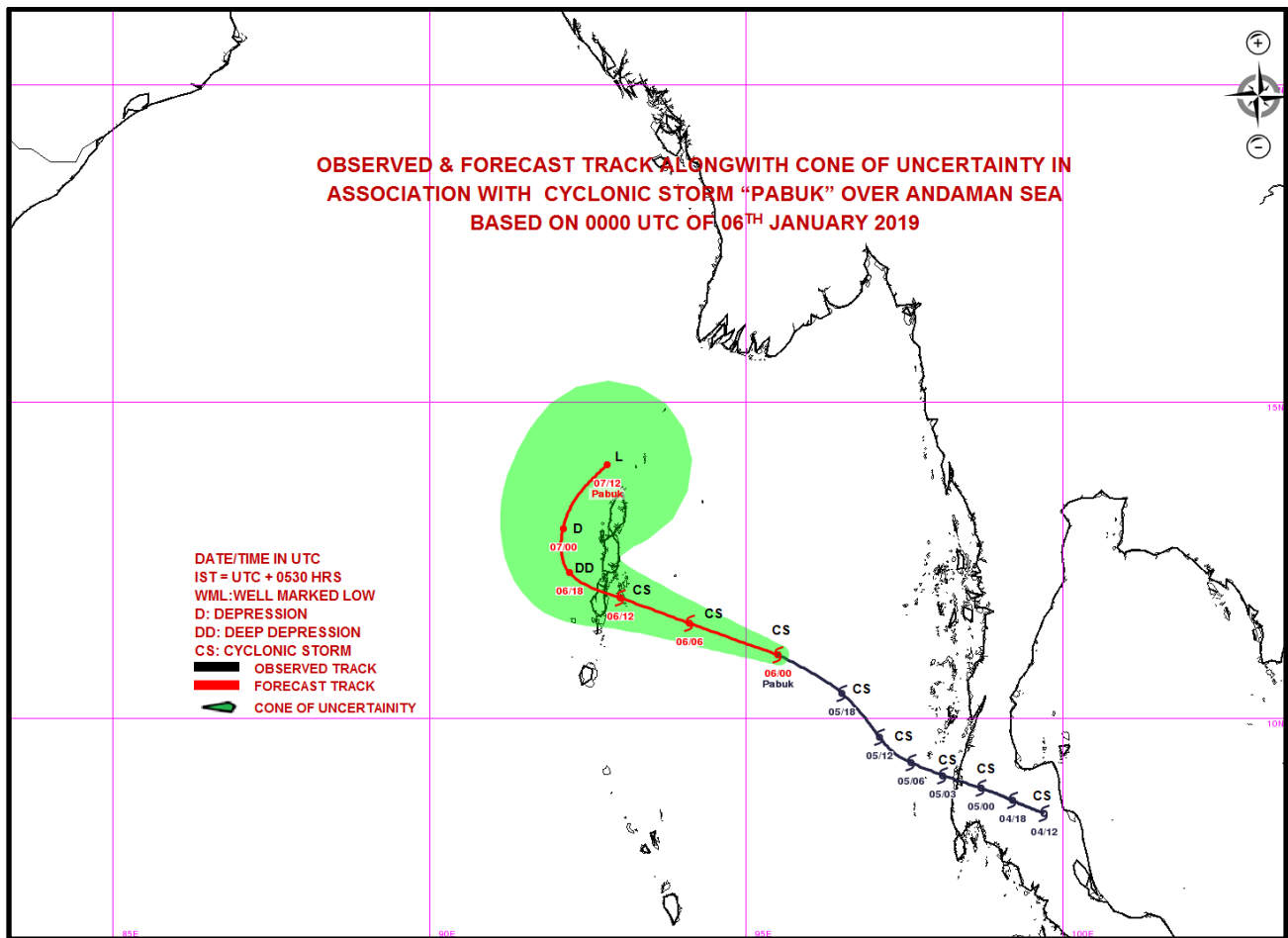
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IMG_TIR1_TEMP 10.8 um
SECTOR BAY OF BENGAL Mercator (NHC LUT)

06-01-2019/00:30 GMT
06-01-2019/06:00 IST



PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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



PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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



REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI
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 72 HOURS ISSUED AT 0600 UTC OF 06.01.2019 BASED ON 0300 UTC OF 06.01.2019.

TROPICAL CYCLONE 'PABUK' OVER ANDAMAN SEA

THE CYCLONIC STORM '**PABUK**' OVER ANDAMAN SEA & NEIGHBOURHOOD MOVED WEST-NORTHWESTWARDS WITH A SPEED OF 26 KMPH DURING PAST 06 HOURS. IT LAY CENTERED AT 0300 UTC OF TODAY, THE 06TH JANUARY, 2019 OVER ANDAMAN SEA NEAR LATITUDE 11.1°N AND LONGITUDE 94.6°E, ABOUT 210 KM EAST-SOUTHEAST OF PORT BLAIR (43333). DUE TO UNFAVOURABLE CONDITIONS, THE SYSTEM IS VERY LIKELY TO WEAKEN INTO A DEEP DEPRESSION DURING NEXT 06 HOURS AND FURTHER INTO A DEPRESSION DURING SUBSEQUENT 12 HOURS.

IT IS VERY LIKELY TO CONTINUE TO MOVE WEST-NORTHWESTWARDS AND CROSS ANDAMAN ISLANDS BETWEEN 1300 TO 1600 UTC OF TODAY, 06TH JANUARY, 2019 AS A DEEP DEPRESSION WITH A WIND SPEED OF 55-65 KMPH GUSTING TO 75 KMPH. THEREAFTER, IT IS VERY LIKELY TO MOVE NORTH-NORTHWESTWARDS AND THEN RECURVE NORTHEASTWARDS TOWARDS MYANMAR COAST AND WEAKEN GRADUALLY.

FORECAST TRACK AND INTENSITY ARE GIVEN IN THE FOLLOWING TABLE:

DATE/ TIME(UTC)	POSITION (LAT.°N/ LONG.°E)	MAXIMUM SUSTAINED SURFACE WIND SPEED (KMPH)	CATEGORY OF CYCLONIC DISTURBANCE
06.01.19/0300	11.1/94.6	60-70 GUSTING TO 80	CYCLONIC STORM
06.01.19/0600	11.3/94.1	55-65 GUSTING TO 75	DEEP DEPRESSION
06.01.19/1200	11.8/93.1	55-65 GUSTING TO 75	DEEP DEPRESSION
06.01.19/1800	12.3/92.2	50-60 GUSTING TO 70	DEEP DEPRESSION
07.01.19/0000	13.0/92.1	40-50 GUSTING TO 60	DEPRESSION
07.01.19/1200	14.0/92.8	25-35 GUSTING TO 45	WELL MARKED LOW

AS PER THE SATELLITE IMAGERY OF 0300 UTC ON 06TH JANUARY, THE INTENSITY OF THE SYSTEM IS C.I. 2.5 WITH SHEAR PATTERN. IN ASSOCIATION WITH THE SYSTEM, BROKEN LOW TO MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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

CONVECTION OVER AREA BETWEEN LATITUDE 9.5° N TO 15.0° N AND LONGITUDE 92.0° E TO 15.0° E AND ANDAMAN SEA AND TENASSERIM COAST,. MINIMUM CLOUD TOP TEMPERATURE IS MINUS -63° C.

THE ESTIMATED CENTRAL PRESSURE IS ABOUT 1004 HPA AND THE MAXIMUM SUSTAINED SURFACE WIND SPEED IS 35 KNOTS GUSTING TO 45 KNOTS.

REMARKS:

CONSIDERING THE ENVIRONMENTAL CONDITIONS, THE SEA SURFACE TEMPERATURE IS AROUND 29-30 DEG. C OVER ANDAMAN SEA AND 27-28 DEG. C OVER ADJOINING BAY OF BENGAL. THE TROPICAL CYCLONE HEAT POTENTIAL IS AROUND 80-90 KJ/CM² OVER ANDAMAN SEA AND IT DECREASES NORTHWARDS. THE LOWER LEVEL CONVERGENCE IS (30×10^{-5}) SECOND⁻¹ TO THE SOUTHWEST OF THE SYSTEM CENTRE. LOWER LEVEL VORTICITY IS $(100-140) \times 10^{-6}$ SECOND⁻¹ AROUND THE SYSTEM CENTRE. UPPER LEVEL DIVERGENCE IS (40×10^{-5}) SECOND⁻¹ TO THE NORTHEAST OF THE SYSTEM CENTRE. VERTICAL WIND SHEAR IS (20-25 KNOTS) OVER THE SYSTEM AREA AND INCREASES ALONG THE FORECAST TRACK. THE UPPER TROPOSPHERIC RIDGE RUNS ALONG 15°N OVER THE SYSTEM REGION. THE MADDEN JULIAN OSCILLATION (MJO) INDEX LIES OVER PHASE 8 WITH AMPLITUDE MORE THAN 1.

PRESENTLY THE SYSTEM IS EXPERIENCING WARMER SEA CONDITIONS AND HIGHER OCEAN HEAT CONTENT OVER ANDAMAN SEA. HOWEVER, IT WILL BECOME GRADUALLY UNFAVOURABLE OVER BAY OF BENGAL LEADING TO WEAKENING OF THE SYSTEM. ALSO, THE WIND SHEAR IS INCEASING ALONG THE FORECAST TRACK. AS A RESULT OF THESE UNFAVOURABLE ENVIRONMENTAL CONDITIONS, THE SYSTEM IS VERY LIKELY TO WEAKEN INTO A DEEP DEPRESSION IN 6 HOURS AND FURTHER INTO A DEPRESSION IN SUBSEQUENT 12 HOURS.

THE SYSTEM IS BEING STEERED BY THE ANTICYCLONE CENTERED TO THE NORTH OF GULF OF THAILAND. AS THE SYSTEM HAS MOVED AWAY FROM THE CENTRE OF ANTI-CYCLONIC CIRCULATION AND LIES IN THE PERIPHERY OF THE ANTICYCLONIC CIRCULATION, IT IS LIKELY TO RECURVE NORTHEASTWARDS AFTER CROSSING THE ANDAMAN ISLANDS. MOST OF THE NUMERICAL MODELS ARE ALSO IN AGREEMENT WITH THIS FORECAST.

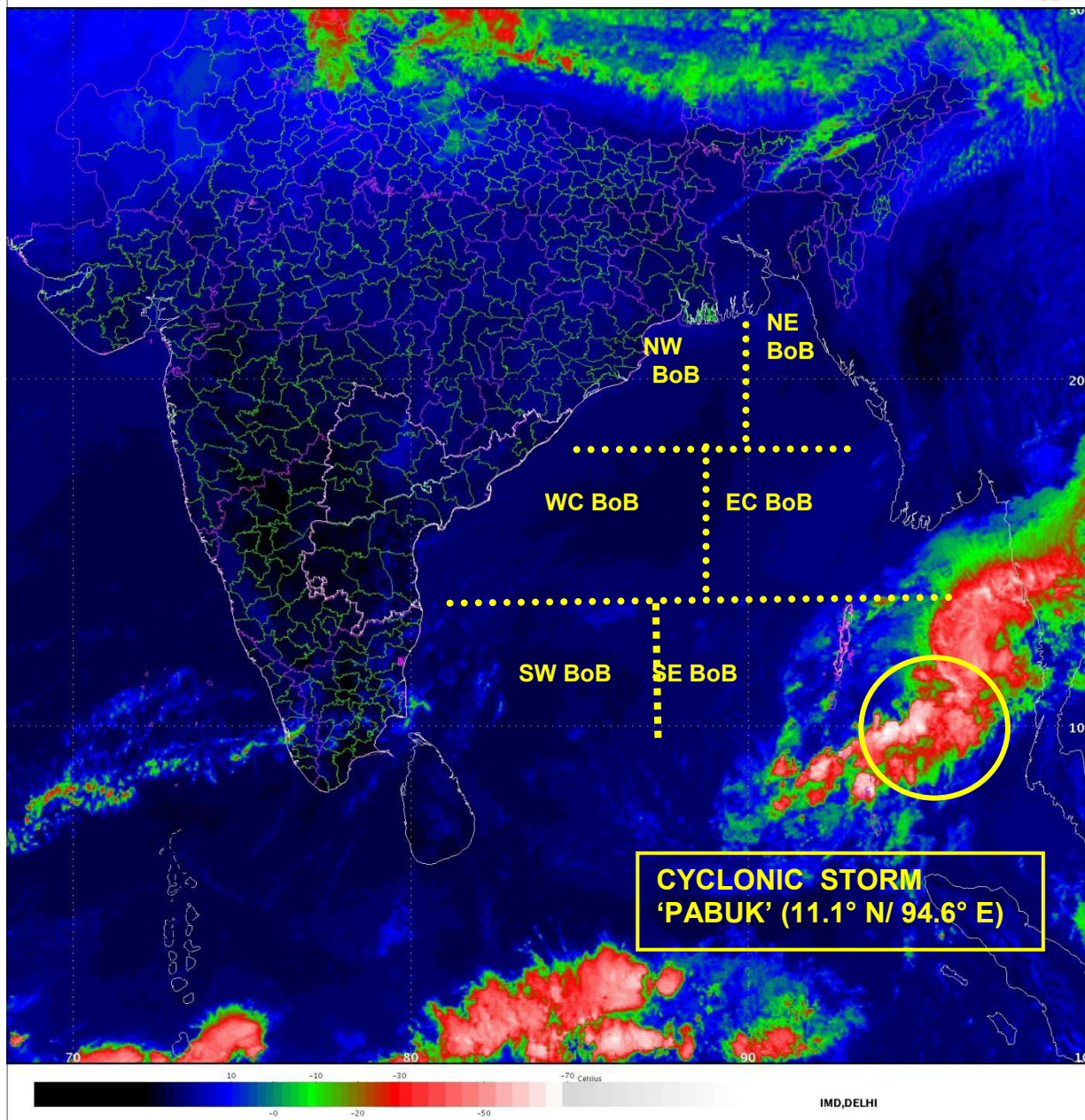
(NEETHA K GOPAL)
SCIENTIST-F, RSMC, NEW DELHI

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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

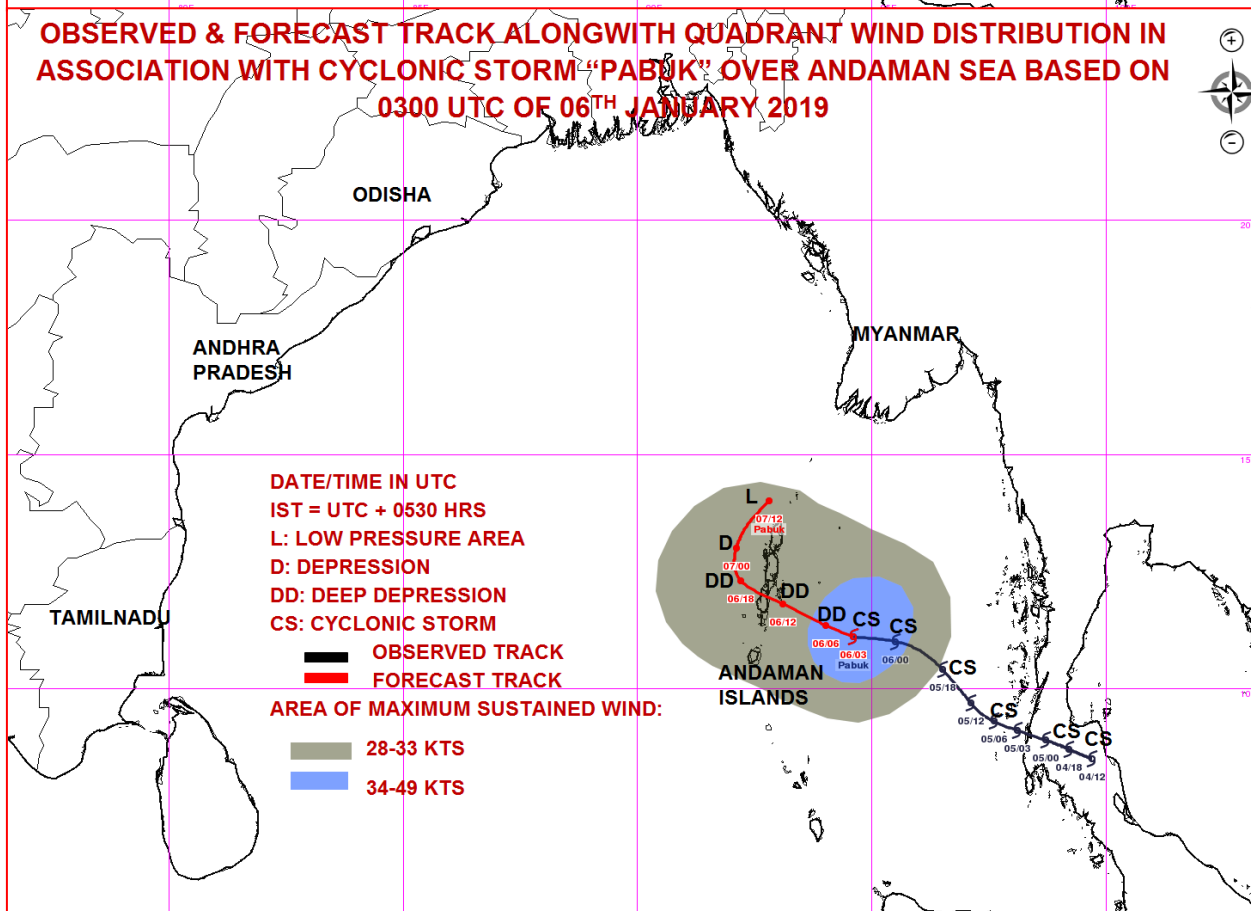
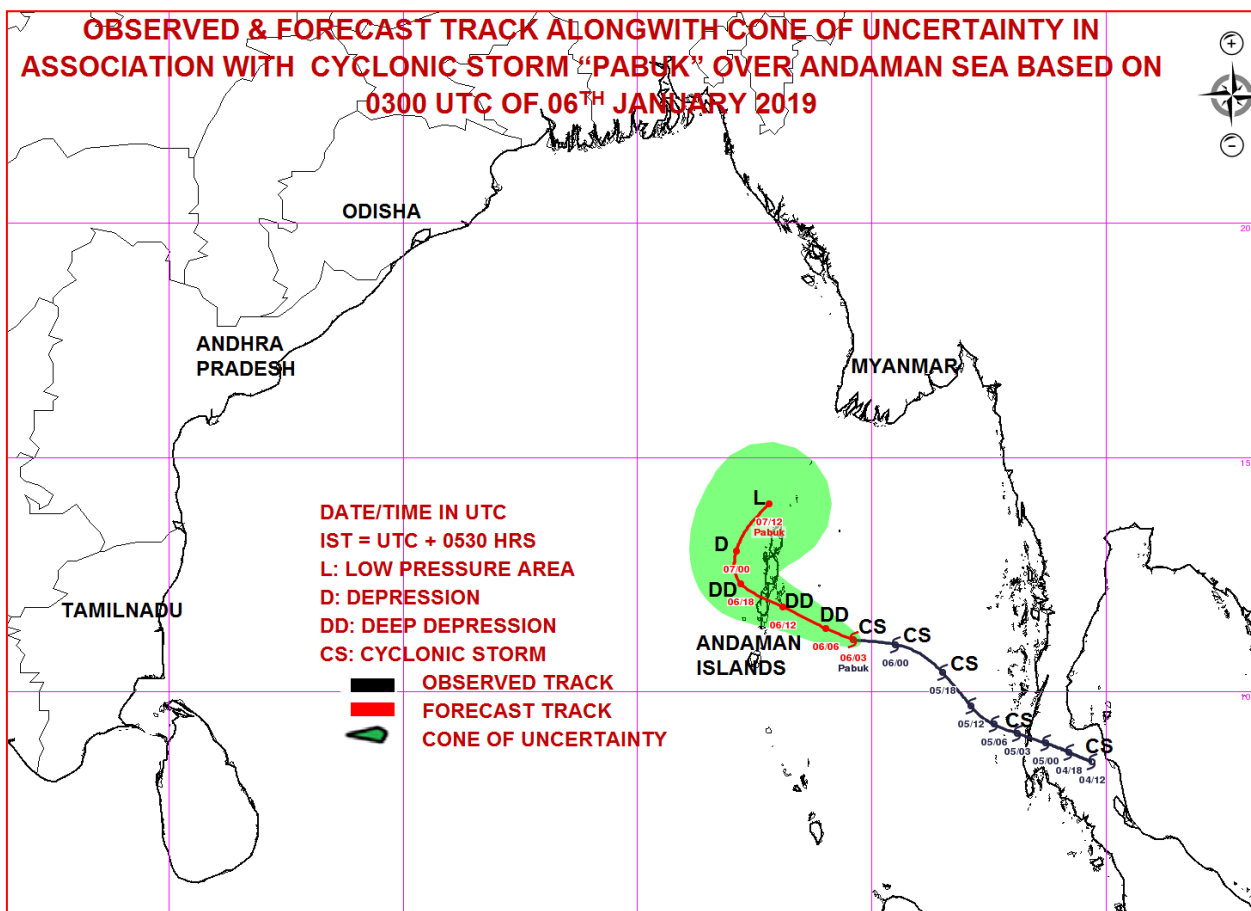
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SECTOR BAYOFBENGAL Mercator (NHC LUT)

06-01-2019/04:30 GMT
06-01-2019/10:00 IST



PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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



PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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



REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI
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 72 HOURS ISSUED AT 0800 UTC OF 06.01.2019 BASED ON 0600 UTC OF 06.01.2019.

TROPICAL CYCLONE 'PABUK' OVER ANDAMAN SEA WEAKENED INTO A DEEP DEPRESSION

THE CYCLONIC STORM 'PABUK' OVER ANDAMAN SEA MOVED WEST-NORTHWESTWARDS WITH A SPEED OF 27 KMPH DURING PAST 06 HOURS AND WEAKENED INTO A DEEP DEPRESSION. IT LAY CENTERED AT 0600 UTC OF TODAY, THE 06TH JANUARY, 2019 OVER ANDAMAN SEA NEAR LATITUDE 11.2°N AND LONGITUDE 94.0°E, ABOUT 150 KM EAST-SOUTHEAST OF PORT BLAIR (43333). THE SYSTEM IS VERY LIKELY TO WEAKEN FURTHER INTO A DEPRESSION DURING NEXT 24 HOURS.

IT IS VERY LIKELY TO CONTINUE TO MOVE WEST-NORTHWESTWARDS AND CROSS ANDAMAN ISLANDS BETWEEN 1300 TO 1600 UTC OF TODAY, 06TH JANUARY, 2019 AS A DEEP DEPRESSION WITH A WIND SPEED OF 55-65 KMPH GUSTING TO 75 KMPH. THEREAFTER, IT IS VERY LIKELY TO MOVE NORTH-NORTHWESTWARDS AND THEN RECURVE NORTHEASTWARDS TOWARDS MYANMAR COAST AND WEAKEN GRADUALLY.

FORECAST TRACK AND INTENSITY ARE GIVEN IN THE FOLLOWING TABLE:

DATE/TIME(UTC)	POSITION (LAT.°N/ LONG.°E)	MAXIMUM SUSTAINED SURFACE WIND SPEED (KMPH)	CATEGORY OF CYCLONIC DISTURBANCE
06.01.19/0600	11.2/94.0	55-65 GUSTING TO 75	DEEP DEPRESSION
06.01.19/1200	11.7/93.1	55-65 GUSTING TO 75	DEEP DEPRESSION
06.01.19/1800	12.3/92.2	50-60 GUSTING TO 70	DEEP DEPRESSION
07.01.19/0000	13.0/92.1	40-50 GUSTING TO 60	DEPRESSION
07.01.19/0600	13.5/92.4	35-45 GUSTING TO 55	DEPRESSION
07.01.19/1200	14.0/92.8	25-35 GUSTING TO 45	WELL MARKED LOW

THE ESTIMATED CENTRAL PRESSURE IS ABOUT 1005 HPA AND THE MAXIMUM SUSTAINED SURFACE WIND SPEED IS 30 KNOTS GUSTING TO 40 KNOTS.

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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

REMARKS:

CONSIDERING THE ENVIRONMENTAL CONDITIONS, THE SEA SURFACE TEMPERATURE IS AROUND 29-30 DEG. C OVER ANDAMAN SEA AND 27-28 DEG. C OVER ADJOINING BAY OF BENGAL. THE TROPICAL CYCLONE HEAT POTENTIAL IS AROUND 80-90 KJ/CM² OVER ANDAMAN SEA AND IT DECREASES NORTHWARDS. THE LOWER LEVEL CONVERGENCE IS (15x10⁻⁵) SECOND⁻¹ TO THE SOUTHWEST OF THE SYSTEM CENTRE. LOWER LEVEL VORTICITY IS (100-140)x10⁻⁶ SECOND⁻¹ AROUND THE SYSTEM CENTRE. UPPER LEVEL DIVERGENCE IS (20x10⁻⁵) SECOND⁻¹ TO THE NORTHEAST OF THE SYSTEM CENTRE. VERTICAL WIND SHEAR IS (25-30 KNOTS) OVER THE SYSTEM AREA AND INCREASES ALONG THE FORECAST TRACK. THE UPPER TROPOSPHERIC RIDGE RUNS ALONG 15°N OVER THE SYSTEM REGION. THE MADDEN JULIAN OSCILLATION (MJO) INDEX LIES OVER PHASE 8 WITH AMPLITUDE MORE THAN 1.

DUE TO THE UNFAVOURABLE VERTICAL WIND SHEAR AND OTHER ENVIRONMENTAL FACTORS OVER THE SYSTEM AREA, THE CYCLONIC STORM HAS WEAKENED INTO A DEEP DEPRESSION AND IS VERY LIKELY TO WEAKEN FURTHER INTO A DEPRESSION IN SUBSEQUENT 24 HOURS.

THE SYSTEM IS BEING STEERED BY THE ANTICYCLONE CENTERED TO THE NORTH OF GULF OF THAILAND. AS THE SYSTEM HAS MOVED AWAY FROM THE CENTRE OF ANTI-CYCLONIC CIRCULATION AND LIES IN THE PERIPHERY OF THE ANTICYCLONIC CIRCULATION, IT IS LIKELY TO RECURVE NORTHEASTWARDS AFTER CROSSING THE ANDAMAN ISLANDS. MOST OF THE NUMERICAL MODELS ARE ALSO IN AGREEMENT WITH THIS FORECAST.

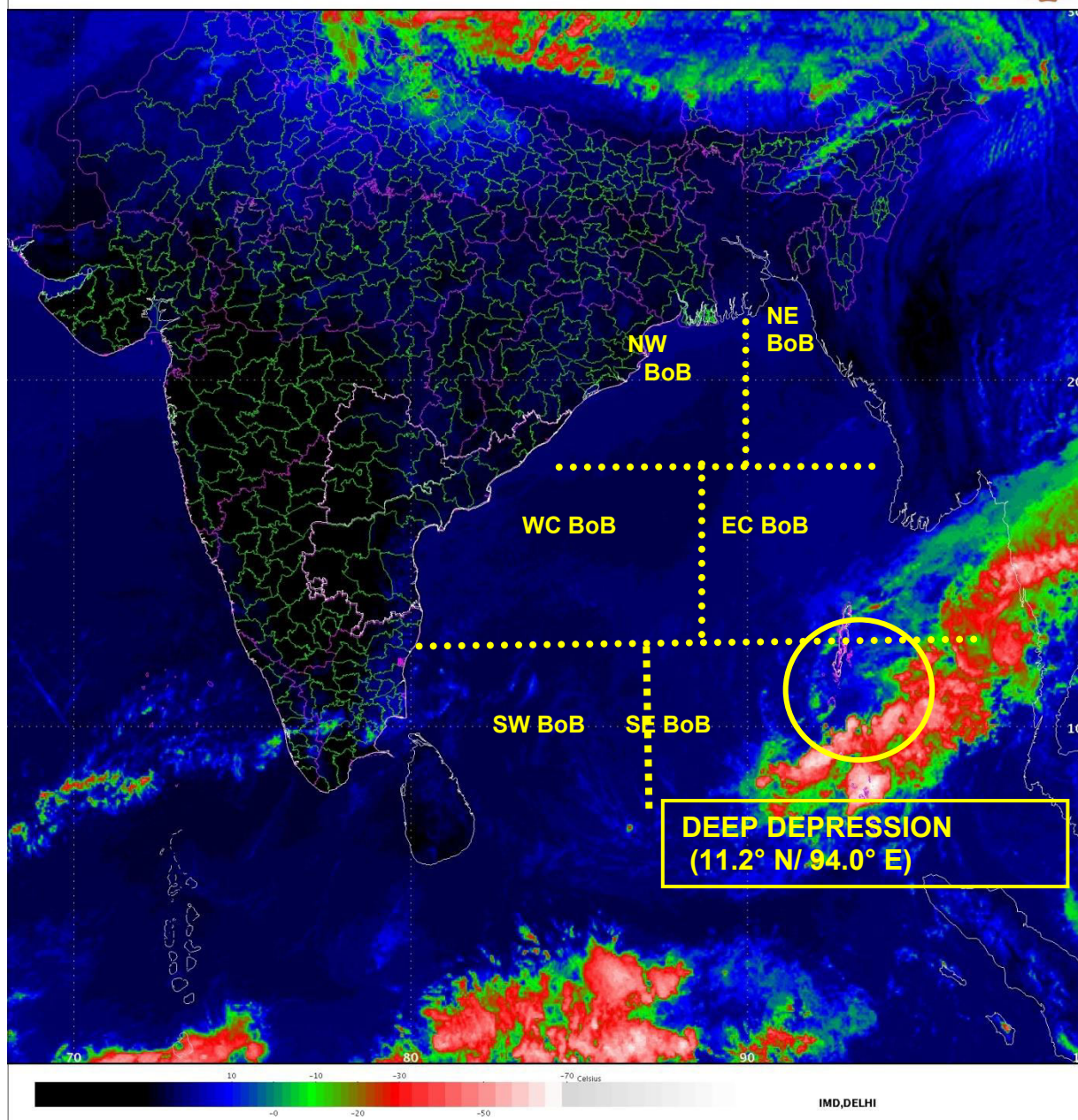
(NEETHA K GOPAL)
SCIENTIST-F, RSMC, NEW DELHI

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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

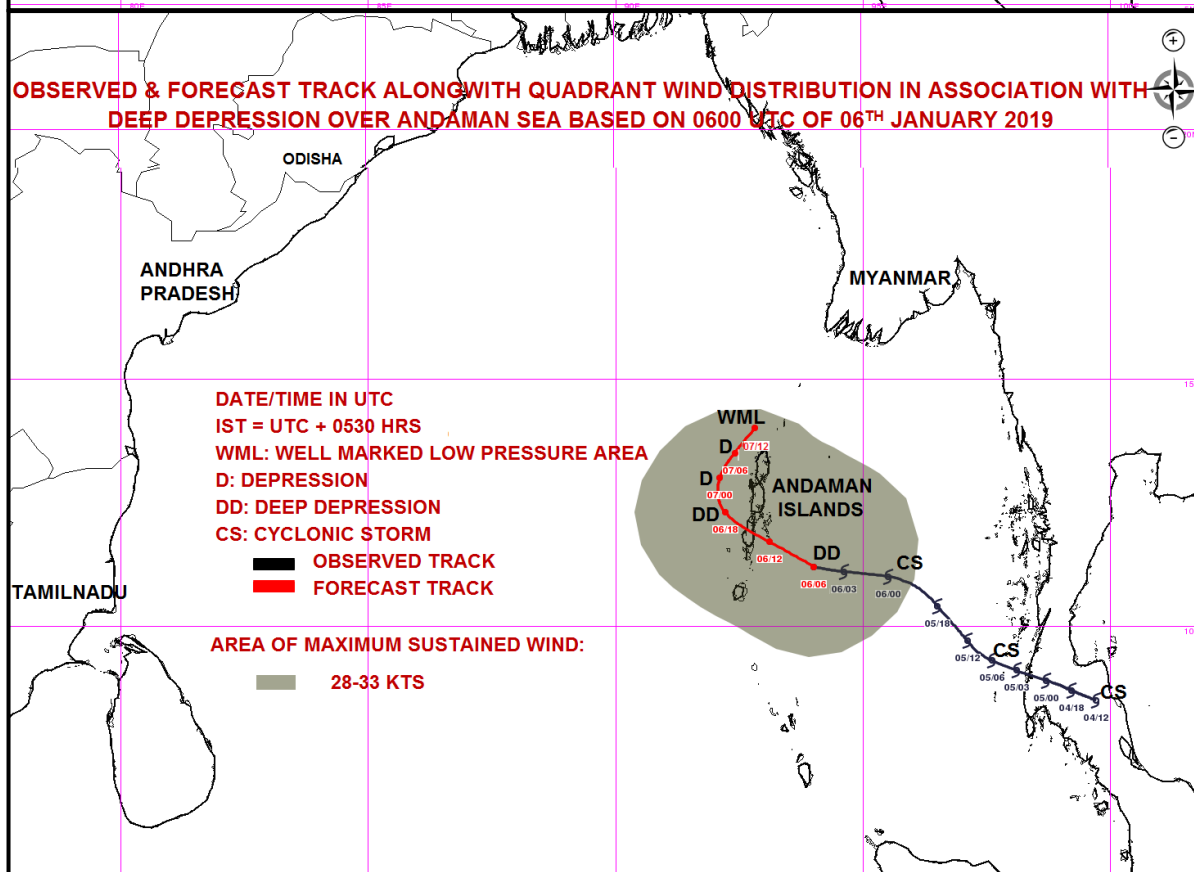
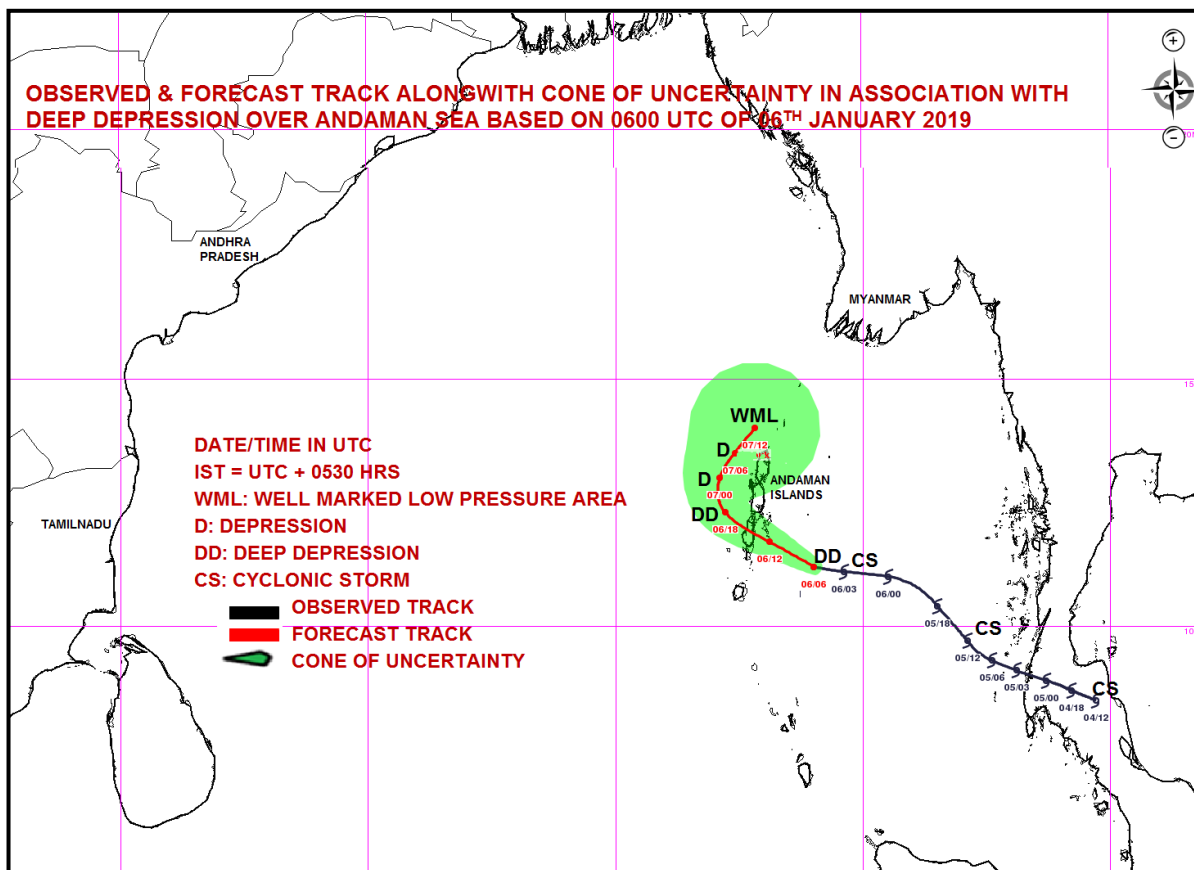
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SECTOR BAYOFBENGAL Mercator (NHC LUT)

06-01-2019/06:30 GMT
06-01-2019/12:00 IST



PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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



PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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



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

DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 06.01.2019

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 06.01.2019 BASED ON 1200 UTC OF 06.01.2019.

BAY OF BENGAL:

THE DEEP DEPRESSION OVER ANDAMAN SEA MOVED FURTHER WEST-NORTHWESTWARDS WITH A SPEED OF 21 KMPH DURING PAST 06 HOURS AND LAY CENTERED AT 1200 UTC OF TODAY, THE 06TH JANUARY, 2019 OVER ANDAMAN SEA NEAR LATITUDE 11.5°N AND LONGITUDE 92.9°E, ABOUT 25 KM SOUTHEAST OF PORT BLAIR (43333). **LATEST OBSERVATIONS INDICATE THAT THE SYSTEM IS CROSSING ANDAMAN ISLANDS** AS A DEEP DEPRESSION WITH A WIND SPEED OF 55-65 KMPH GUSTING TO 75 KMPH CLOSE TO PORT BLAIR (43333). ENTIRE PROCESS OF CROSSING THE ANDAMAN ISLANDS WILL TAKE ABOUT TWO HOURS. THE SYSTEM IS VERY LIKELY TO WEAKEN INTO A DEPRESSION DURING NEXT 12 HOURS. IT IS VERY LIKELY TO MOVE NORTH-NORTHWESTWARDS AND THEN RECURVE NORTHEASTWARDS TOWARDS MYANMAR COAST AND WEAKEN GRADUALLY.

FORECAST TRACK AND INTENSITY ARE GIVEN IN THE FOLLOWING TABLE:

DATE/TIME(UTC)	POSITION (LAT.°N/ LONG.°E)	MAXIMUM SUSTAINED SURFACE WIND SPEED (KMPH)	CATEGORY OF CYCLONIC DISTURBANCE
06.01.19/1200	11.5/92.9	55-65 GUSTING TO 75	DEEP DEPRESSION
06.01.19/1800	12.3/92.2	50-60 GUSTING TO 70	DEEP DEPRESSION
07.01.19/0000	13.0/92.1	40-50 GUSTING TO 60	DEPRESSION
07.01.19/0600	13.5/92.4	35-45 GUSTING TO 55	DEPRESSION
07.01.19/1200	14.0/92.8	25-35 GUSTING TO 45	WELL MARKED LOW

REMARKS:

CONSIDERING THE ENVIRONMENTAL CONDITIONS, THE SEA SURFACE TEMPERATURE IS AROUND 29-30 DEG. C OVER ANDAMAN SEA AND 27-28 DEG. C OVER ADJOINING BAY OF BENGAL. THE TROPICAL CYCLONE HEAT POTENTIAL IS AROUND 80-90 KJ/CM² OVER ANDAMAN SEA AND IT DECREASES NORTHWARDS. THE LOWER LEVEL CONVERGENCE IS (15x10⁻⁵) SECOND⁻¹ TO THE SOUTH OF THE SYSTEM CENTRE. LOWER LEVEL VORTICITY IS (100x10⁻⁶) SECOND⁻¹ TO THE SOUTH OF THE SYSTEM CENTRE. UPPER LEVEL DIVERGENCE DECREASED AND IS (10x10⁻⁵) SECOND⁻¹ TO THE EAST OF THE SYSTEM CENTRE. VERTICAL WIND SHEAR IS (30-40 KNOTS) OVER THE SYSTEM AREA AND IT INCREASES ALONG THE FORECAST TRACK. THE UPPER TROPOSPHERIC RIDGE RUNS ALONG 12°N OVER THE SYSTEM REGION. THE MADDEN JULIAN OSCILLATION (MJO) INDEX LIES OVER PHASE 8 WITH AMPLITUDE MORE THAN 1.

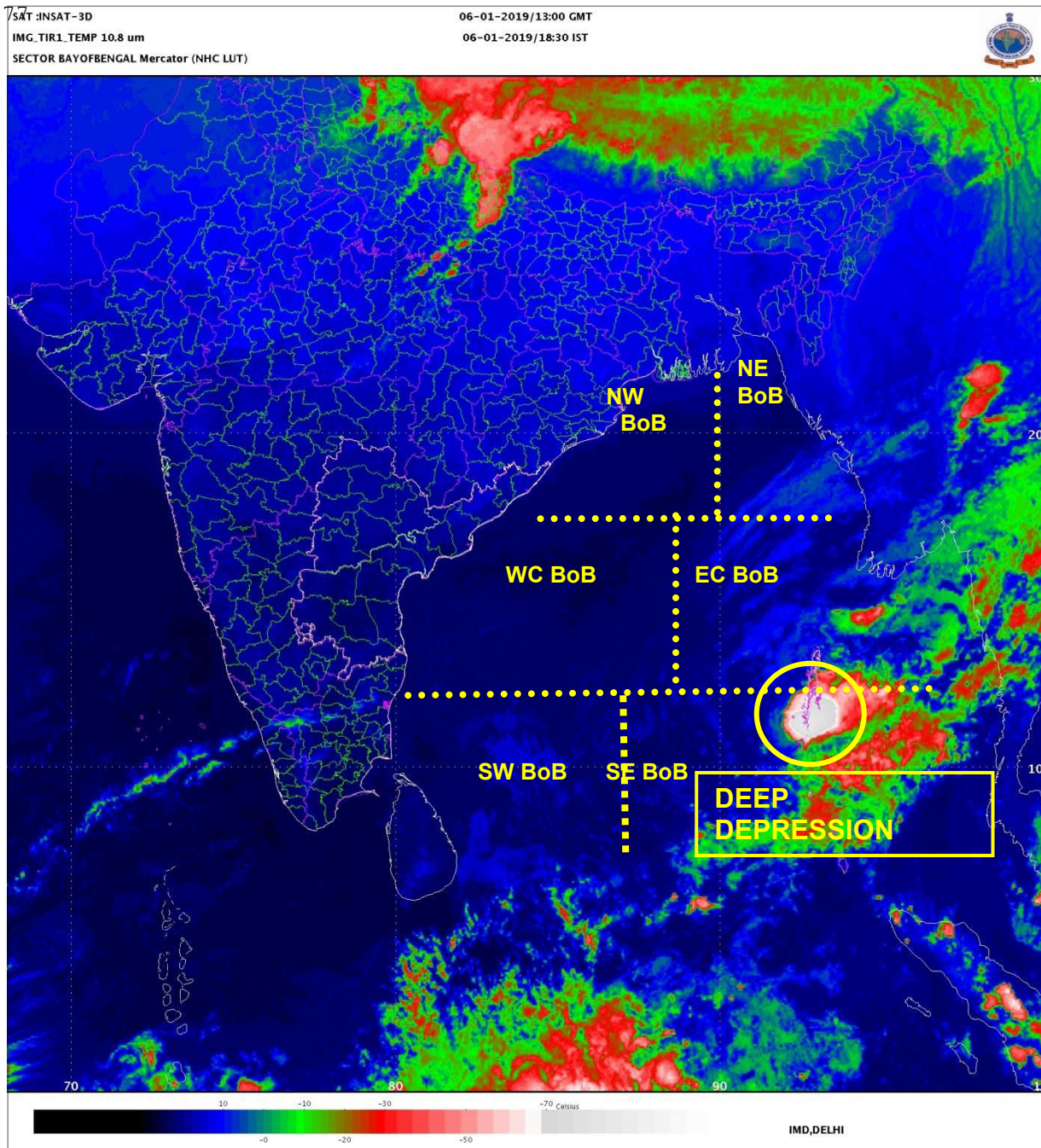
DUE TO THE UNFAVOURABLE VERTICAL WIND SHEAR AND OTHER ENVIRONMENTAL FACTORS OVER THE SYSTEM AREA, THE DEEP DEPRESSION IS VERY LIKELY TO WEAKEN INTO A DEPRESSION DURING NEXT 12 HOURS.

THE SYSTEM IS BEING STEERED BY THE ANTICYCLONE CENTERED TO THE NORTH OF GULF OF THAILAND. AS THE SYSTEM HAS MOVED AWAY FROM THE CENTRE OF ANTI-CYCLONIC CIRCULATION AND LIES IN THE PERIPHERY OF THE ANTICYCLONIC CIRCULATION, IT IS LIKELY TO RECURVE NORTHEASTWARDS AFTER CROSSING THE ANDAMAN ISLANDS. MOST OF THE NUMERICAL MODELS ARE ALSO IN AGREEMENT WITH THIS FORECAST.

(NEETHA K GOPAL)
SCIENTIST-F, RSMC, NEW DELHI

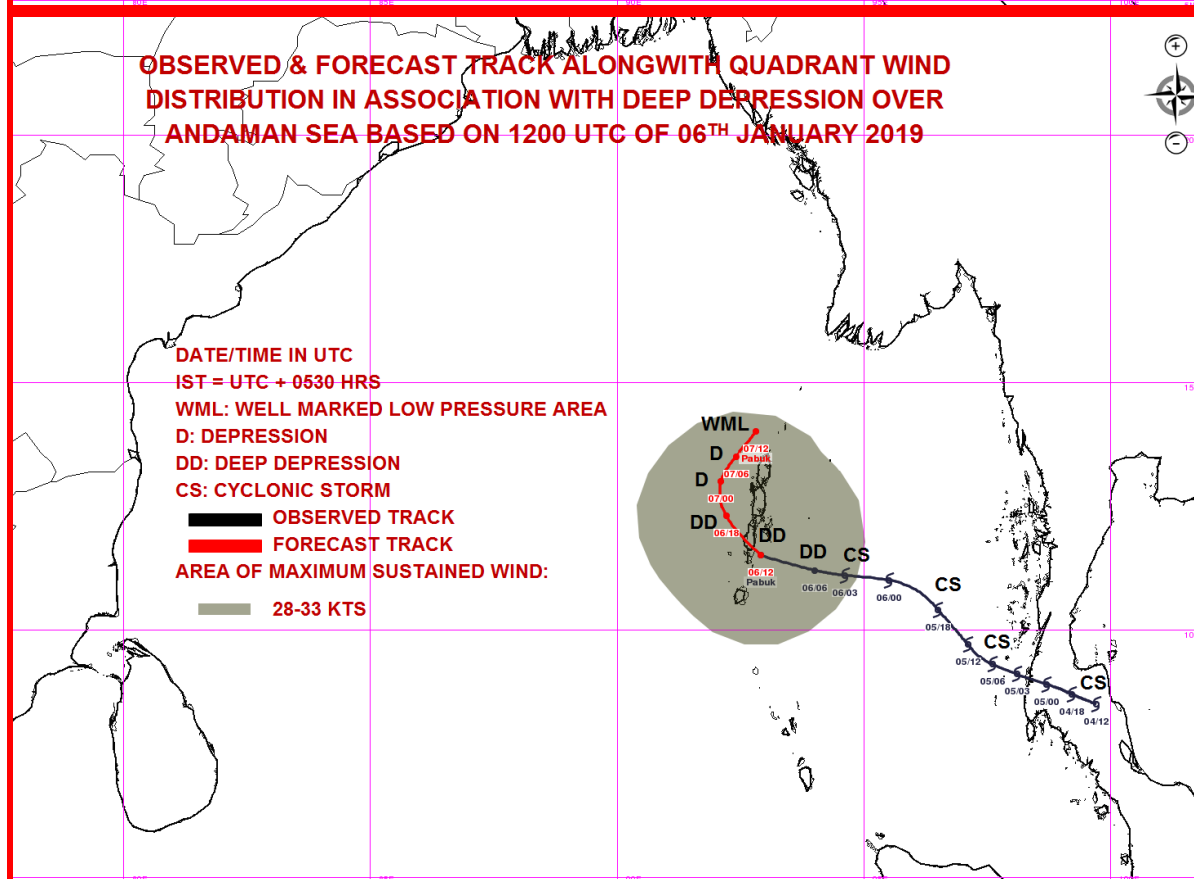
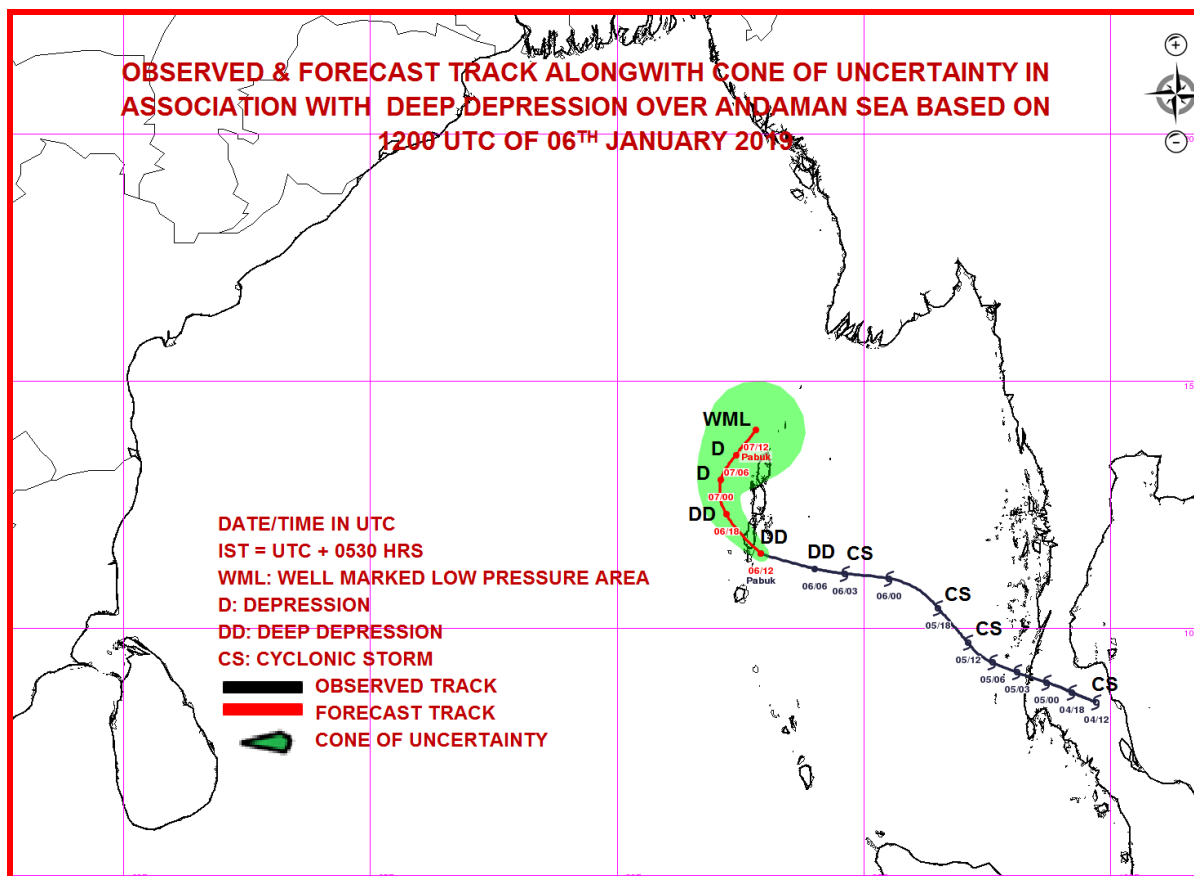
PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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%



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 06.01.2019

SPECIAL TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 72 HOURS ISSUED AT 1630 UTC OF 06.01.2019 BASED ON 1500 UTC OF 06.01.2019.

BAY OF BENGAL:

THE DEEP DEPRESSION OVER ANDAMAN SEA MOVED FURTHER WEST-NORTHWESTWARDS WITH A SPEED OF 13 KMPH DURING PAST 06 HOURS, CROSSED ANDAMAN ISLANDS AS A DEEP DEPRESSION WITH A WIND SPEED OF 55-65 KMPH GUSTING TO 75 KMPH NEAR LATITUDE 11.6°N AND LONGITUDE 92.7°E, CLOSE TO SOUTH OF PORT BLAIR BETWEEN 1300 AND 1500 UTC OF 06TH JANUARY, 2019. IT LAY CENTERED AT 1500 UTC OF 06TH JANUARY, 2019 OVER SOUTHEAST BAY OF BENGAL NEAR LATITUDE 11.6°N AND LONGITUDE 92.6°E, ABOUT 15 KM SOUTHWEST OF PORT BLAIR. THE SYSTEM IS VERY LIKELY TO WEAKEN INTO A DEPRESSION DURING NEXT 12 HOURS. IT IS VERY LIKELY TO MOVE NORTHWESTWARDS FOR SOME MORE TIME AND THEN RECURVE NORTHEASTWARDS TOWARDS MYANMAR COAST AND WEAKEN GRADUALLY.

FORECAST TRACK AND INTENSITY ARE GIVEN IN THE FOLLOWING TABLE:

DATE/TIME(UTC)	POSITION (LAT.°N/ LONG.°E)	MAXIMUM SUSTAINED SURFACE WIND SPEED (KMPH)	CATEGORY OF CYCLONIC DISTURBANCE
06.01.19/1500	11.6/92.6	55-65 GUSTING TO 75	DEEP DEPRESSION
06.01.19/1800	12.3/92.2	50-60 GUSTING TO 70	DEEP DEPRESSION
07.01.19/0000	13.0/92.1	40-50 GUSTING TO 60	DEPRESSION
07.01.19/0600	13.5/92.4	35-45 GUSTING TO 55	DEPRESSION
07.01.19/1200	14.0/92.8	25-35 GUSTING TO 45	WELL MARKED LOW

REMARKS:

CONSIDERING THE ENVIRONMENTAL CONDITIONS, THE SEA SURFACE TEMPERATURE IS AROUND 29-30 DEG. C OVER ANDAMAN SEA AND 27-28 DEG. C OVER ADJOINING BAY OF BENGAL. THE TROPICAL CYCLONE HEAT POTENTIAL IS AROUND 80-90 KJ/CM² OVER ANDAMAN SEA AND IT DECREASES NORTHWARDS. THE LOWER LEVEL CONVERGENCE IS (15x10⁻⁵) SECOND⁻¹ TO THE SOUTH OF THE SYSTEM CENTRE. LOWER LEVEL VORTICITY IS (100x10⁻⁶) SECOND⁻¹ AROUND THE SYSTEM CENTRE. UPPER LEVEL DIVERGENCE IS (10x10⁻⁵) SECOND⁻¹ TO THE EAST OF THE SYSTEM CENTRE. VERTICAL WIND SHEAR IS (30-40 KNOTS) OVER THE SYSTEM AREA AND IT INCREASES ALONG THE FORECAST TRACK. THE UPPER TROPOSPHERIC RIDGE RUNS ALONG 10°N OVER THE SYSTEM REGION. THE MADDEN JULIAN OSCILLATION (MJO) INDEX LIES OVER PHASE 8 WITH AMPLITUDE MORE THAN 1.

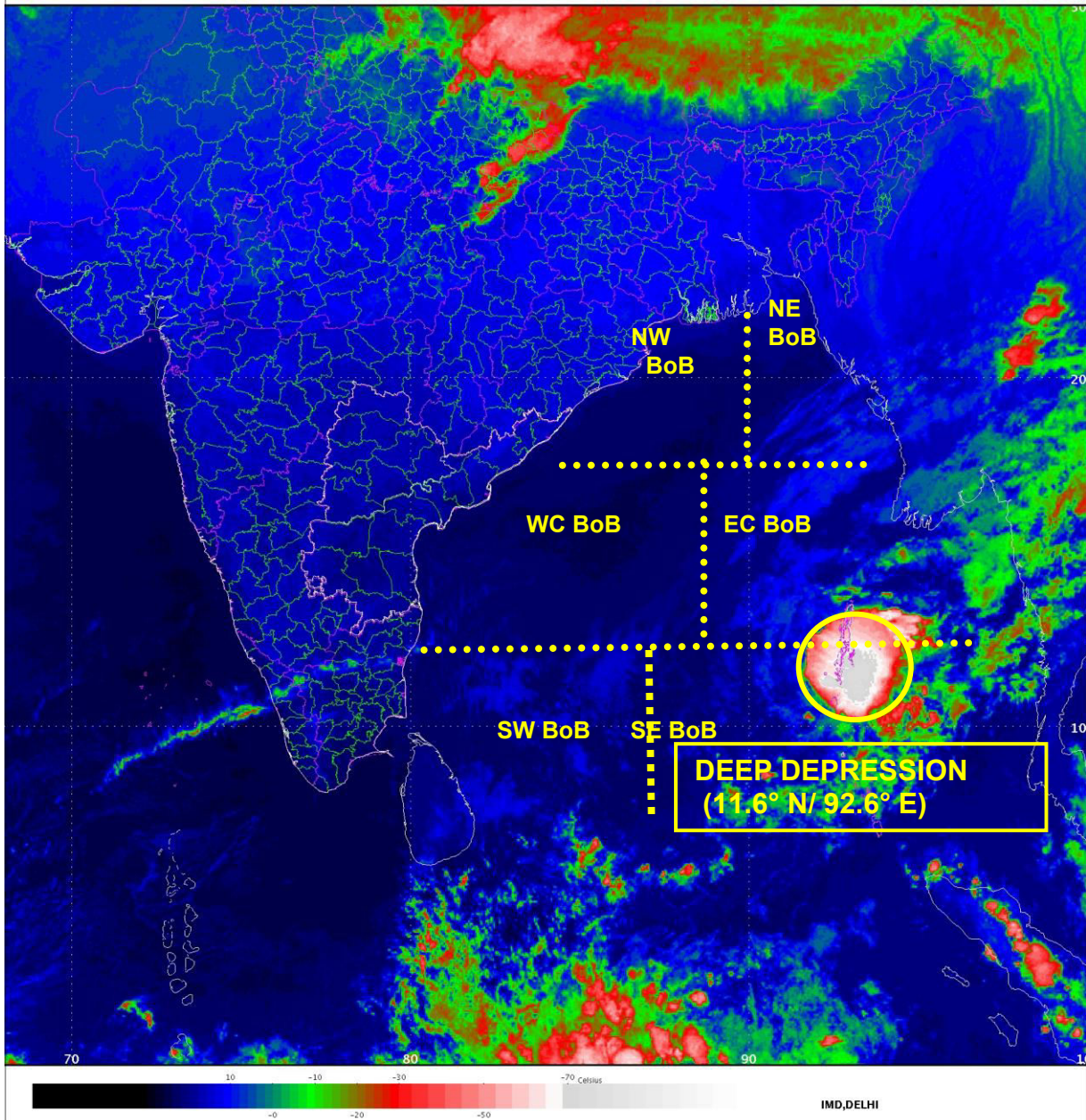
DUE TO THE UNFAVOURABLE VERTICAL WIND SHEAR AND OTHER ENVIRONMENTAL FACTORS OVER THE SYSTEM AREA, THE DEEP DEPRESSION IS VERY LIKELY TO WEAKEN INTO A DEPRESSION DURING NEXT 12 HOURS.

THE SYSTEM IS BEING STEERED BY THE ANTICYCLONE CENTERED TO THE NORTH OF GULF OF THAILAND. AS THE SYSTEM HAS MOVED AWAY FROM THE CENTRE OF ANTI-CYCLONIC CIRCULATION AND LIES IN THE PERIPHERY OF THE ANTICYCLONIC CIRCULATION THUS IT IS LIKELY TO RECURVE NORTHEASTWARDS. MOST OF THE NUMERICAL MODELS ARE ALSO IN AGREEMENT WITH THIS FORECAST.

(ANANDA KUMAR DAS)
SCIENTIST-E, RSMC, NEW DELHI

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

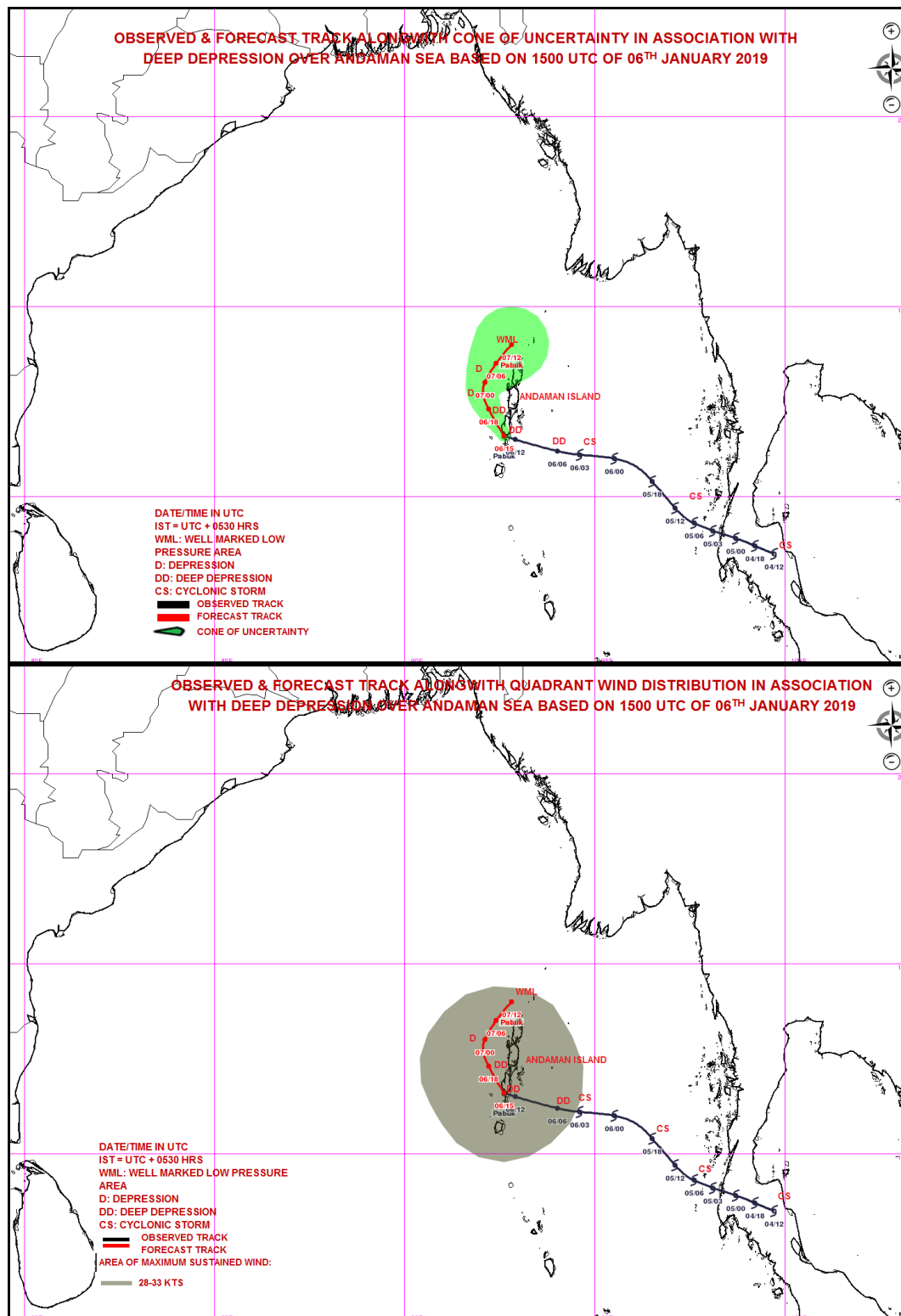
NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%



77

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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



PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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



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

DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 06.01.2019

SPECIAL TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 72 HOURS ISSUED AT 1930 UTC OF 06.01.2019 BASED ON 1800 UTC OF 06.01.2019.

BAY OF BENGAL:

THE DEEP DEPRESSION OVER SOUTHEAST BAY OF BENGAL MOVED FURTHER NORTHWESTWARDS WITH A SPEED OF 15 KMPH DURING PAST 06 HOURS AND LAY CENTERED AT 1800 UTC OF 06TH JANUARY, 2019 OVER SOUTHEAST BAY OF BENGAL CLOSE TO ANDAMAN ISLANDS NEAR LATITUDE 12.0°N AND LONGITUDE 92.2°E, ABOUT 65 KM WEST-NORTHWEST OF PORT BLAIR. THE SYSTEM IS VERY LIKELY TO WEAKEN INTO A DEPRESSION DURING NEXT 12 HOURS. IT IS VERY LIKELY TO MOVE NORTHWESTWARDS FOR SOME MORE TIME AND THEN RECURVE NORTHEASTWARDS TOWARDS MYANMAR COAST AND WEAKEN GRADUALLY. FORECAST TRACK AND INTENSITY ARE GIVEN IN THE FOLLOWING TABLE:

DATE/TIME(UTC)	POSITION (LAT.°N/ LONG.°E)	MAXIMUM SUSTAINED SURFACE WIND SPEED (KMPH)	CATEGORY OF CYCLONIC DISTURBANCE
06.01.19/1800	12.0/92.2	50-60 GUSTING TO 70	DEEP DEPRESSION
07.01.19/0000	12.6/92.0	50-60 GUSTING TO 70	DEEP DEPRESSION
07.01.19/0600	13.2/92.1	35-45 GUSTING TO 55	DEPRESSION
07.01.19/1200	13.7/92.4	25-35 GUSTING TO 45	WELL MARKED LOW

REMARKS:

CONSIDERING THE ENVIRONMENTAL CONDITIONS, THE SEA SURFACE TEMPERATURE IS AROUND 29-30 DEG. C OVER ANDAMAN SEA AND 27-28 DEG. C OVER ADJOINING BAY OF BENGAL. THE TROPICAL CYCLONE HEAT POTENTIAL IS AROUND 80-90 KJ/CM² OVER ANDAMAN SEA AND IT DECREASES NORTHWARDS. THE LOWER LEVEL CONVERGENCE IS (10x10⁻⁵) SECOND⁻¹ TO THE SOUTH OF THE SYSTEM CENTRE. LOWER LEVEL VORTICITY IS (100x10⁻⁶) SECOND⁻¹ TO THE SOUTH OF SYSTEM CENTRE. UPPER LEVEL DIVERGENCE IS (20x10⁻⁵) SECOND⁻¹ AROUND THE SYSTEM CENTRE. VERTICAL WIND SHEAR IS (30-40 KNOTS) OVER THE SYSTEM AREA AND IT INCREASES ALONG THE FORECAST TRACK. THE UPPER TROPOSPHERIC RIDGE RUNS ALONG 10°N OVER THE SYSTEM REGION. THE MADDEN JULIAN OSCILLATION (MJO) INDEX LIES OVER PHASE 8 WITH AMPLITUDE MORE THAN 1.

DUE TO THE UNFAVOURABLE VERTICAL WIND SHEAR AND OTHER ENVIRONMENTAL FACTORS OVER THE SYSTEM AREA, THE DEEP DEPRESSION IS VERY LIKELY TO WEAKEN INTO A DEPRESSION DURING NEXT 12 HOURS.

THE SYSTEM IS BEING STEERED BY THE ANTICYCLONE CENTERED TO THE NORTH OF GULF OF THAILAND. AS THE SYSTEM HAS MOVED AWAY FROM THE CENTRE OF ANTI-CYCLONIC CIRCULATION AND LIES IN THE PERIPHERY OF THE ANTICYCLONIC CIRCULATION THUS IT IS LIKELY TO RECURVE NORTHEASTWARDS. MOST OF THE NUMERICAL MODELS ARE ALSO IN AGREEMENT WITH THIS FORECAST.

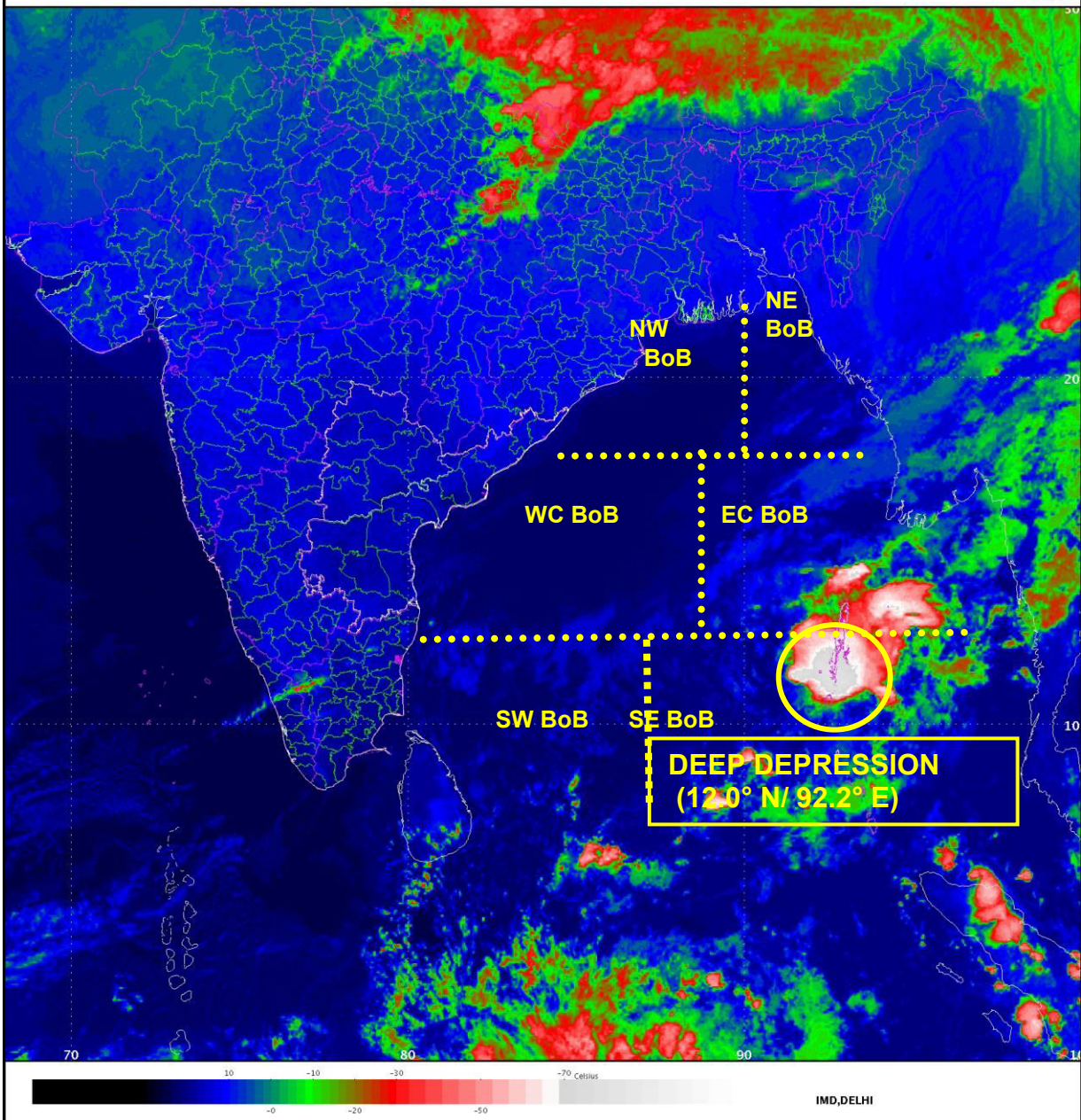
(ANANDA KUMAR DAS)
SCIENTIST-E, RSMC, NEWDELHI

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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

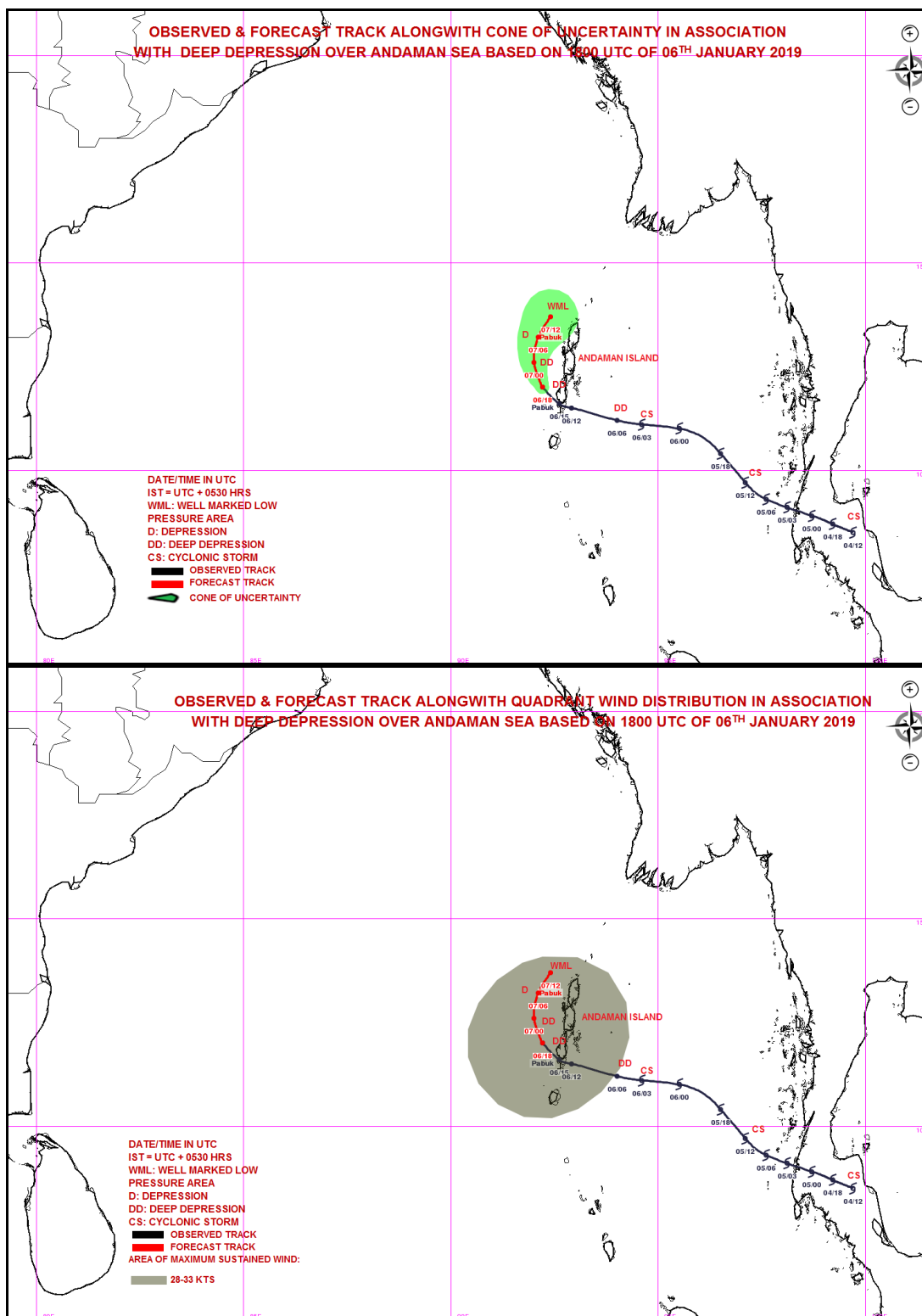
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06-01-2019/18:30 GMT
07-01-2019/00:00 IST



PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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



PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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



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

DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 06.01.2019

SPECIAL TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 72 HOURS ISSUED AT 0300 UTC OF 07.01.2019 BASED ON 0000 UTC OF 07.01.2019.

BAY OF BENGAL:

THE DEEP DEPRESSION OVER SOUTHEAST BAY OF BENGAL MOVED NEARLY NORTHWARDS WITH A SPEED OF 12 KMPH DURING PAST 06 HOURS; WEAKENED INTO A DEPRESSION AND LAY CENTERED AT 0000 UTC OF 07TH JANUARY, 2019 OVER SOUTHEAST BAY OF BENGAL ADJOINING EASTCENTRAL BAY OF BENGAL NEAR ANDAMAN ISLANDS NEAR LATITUDE 12.6°N AND LONGITUDE 92.0°E, ABOUT 130 KM NORTHWEST OF PORT BLAIR. IT IS VERY LIKELY TO MOVE NORTHWARDS FOR SOME MORE TIME AND THEN RECURVE NORTHEASTWARDS TOWARDS MYANMAR COAST. IT IS LIKELY WEAKEN FURTHER INTO A WELL MARKED LOW PRESSURE AREA DURING NEXT 12 HOURS.

FORECAST TRACK AND INTENSITY ARE GIVEN IN THE FOLLOWING TABLE:

Date/Time(IST)	Position (Lat.°N/ long.°E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
07.01.19/0530	12.6/92.0	45-55 gusting to 65	Depression
07.01.19/1130	13.0/92.1	40-50 gusting to 60	Depression
07.01.19/1730	13.7/92.4	25-35 gusting to 45	Well marked low

REMARKS:

CONSIDERING THE ENVIRONMENTAL CONDITIONS, THE SEA SURFACE TEMPERATURE IS AROUND 29-30 DEG. C OVER ANDAMAN SEA AND 27-28 DEG. C OVER ADJOINING BAY OF BENGAL. THE TROPICAL CYCLONE HEAT POTENTIAL IS AROUND 80-90 KJ/CM² OVER ANDAMAN SEA AND IT DECREASES NORTHWARDS. THE LOWER LEVEL CONVERGENCE IS (20x10⁻⁵) SECOND⁻¹ TO THE NORTH OF THE SYSTEM CENTRE. LOWER LEVEL VORTICITY IS (80x10⁻⁶) SECOND⁻¹ TO THE SOUTH-SOUTHWEST OF SYSTEM CENTRE. UPPER LEVEL DIVERGENCE IS (10x10⁻⁵) SECOND⁻¹ AROUND THE SYSTEM CENTRE. VERTICAL WIND SHEAR IS (30-40 KNOTS) OVER THE SYSTEM AREA AND IT INCREASES ALONG THE FORECAST TRACK. THE UPPER TROPOSPHERIC RIDGE RUNS ALONG 11°N OVER THE SYSTEM REGION. THE MADDEN JULIAN OSCILLATION (MJO) INDEX LIES OVER PHASE 8 WITH AMPLITUDE MORE THAN 1.

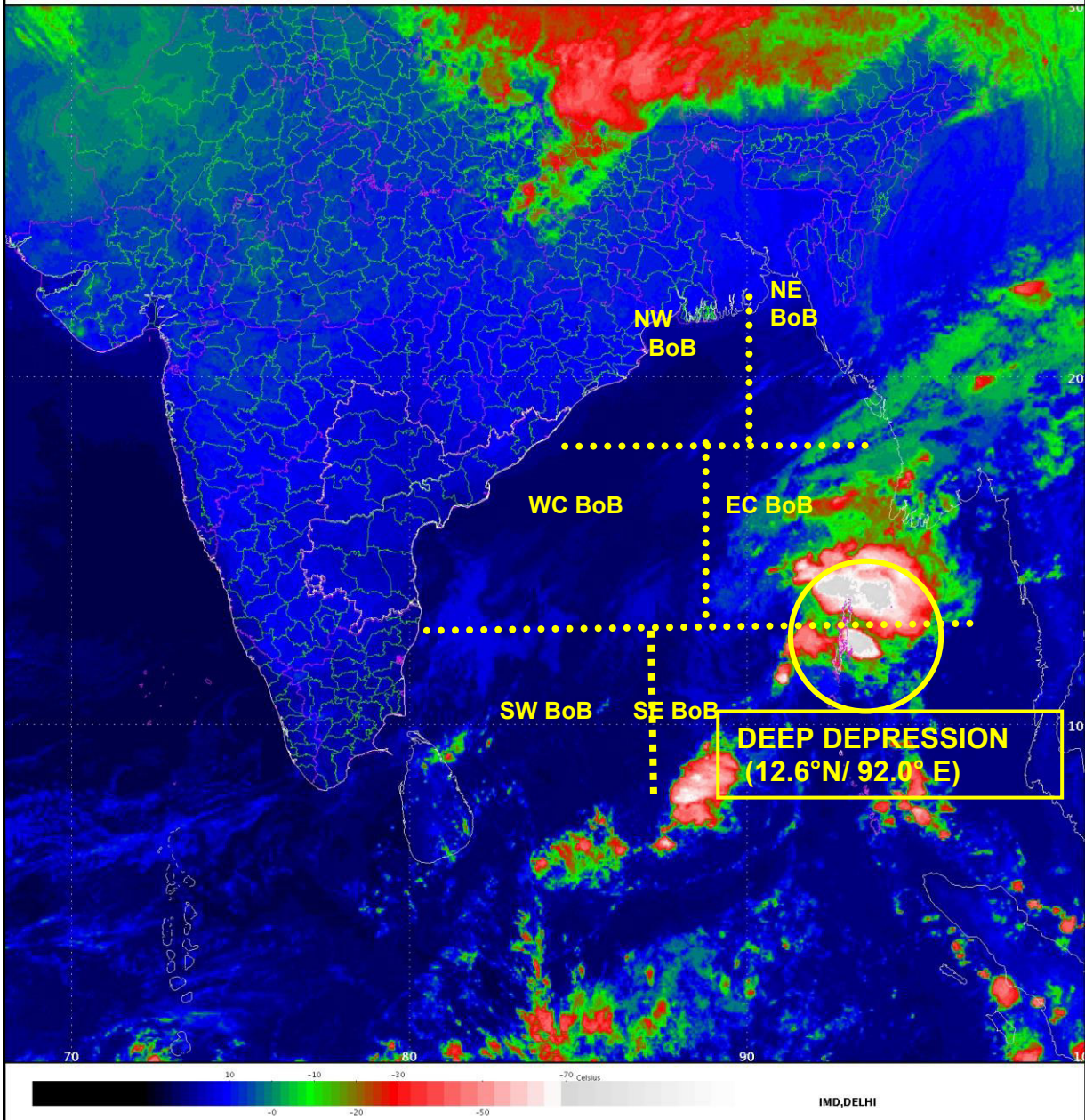
DUE TO THE UNFAVOURABLE VERTICAL WIND SHEAR AND OTHER ENVIRONMENTAL FACTORS OVER THE SYSTEM AREA, DEPRESSION IS VERY LIKELY TO WEAKEN INTO A WELL MARKED LOW PRESSURE AREA DURING NEXT 12 HOURS.

THE SYSTEM IS BEING STEERED BY THE ANTICYCLONE CENTERED TO THE NORTH OF GULF OF THAILAND. AS THE SYSTEM HAS MOVED AWAY FROM THE CENTRE OF ANTI-CYCLONIC CIRCULATION AND LIES IN THE PERIPHERY OF THE ANTICYCLONIC CIRCULATION THUS IT IS LIKELY TO RECURVE NORTHEASTWARDS. MOST OF THE NUMERICAL MODELS ARE ALSO IN AGREEMENT WITH THIS FORECAST.

(ANANDA KUMAR DAS)
SCIENTIST-E, RSMC, NEWDELHI

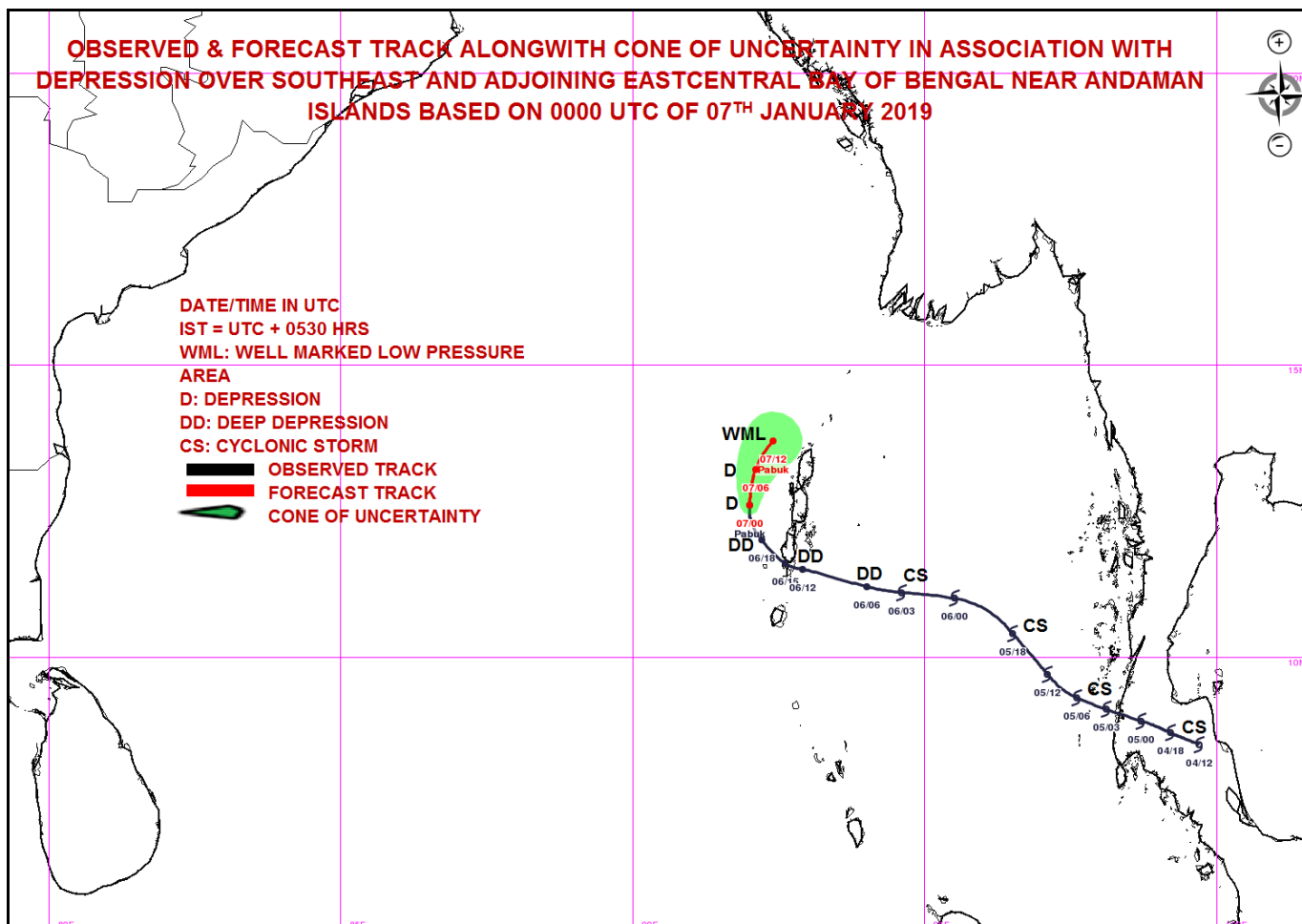
PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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



PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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



PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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



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

DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 07.01.2019

SPECIAL TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 72 HOURS ISSUED AT 0600 UTC OF 07.01.2019 BASED ON 0300 UTC OF 07.01.2019.

BAY OF BENGAL:

THE DEPRESSION OVER SOUTHEAST BAY OF BENGAL AND ADJOINING EASTCENTRAL BAY OF BENGAL NEAR ANDAMAN ISLANDS MOVED NEARLY NORTHWARDS WITH A SPEED OF 15 KMPH DURING PAST 06 HOURS; AND LAY CENTERED AT 0300 UTC OF 07TH JANUARY, 2019 NEAR LATITUDE 12.8°N AND LONGITUDE 92.0°E, ABOUT 150 KM NORTH-NORTHWEST OF PORT BLAIR (43333). IT IS VERY LIKELY TO MOVE NORTHWARDS FOR SOME MORE TIME AND THEN RECURVE NORTHEASTWARDS TOWARDS MYANMAR COAST. IT IS LIKELY TO WEAKEN INTO A WELL MARKED LOW PRESSURE AREA DURING NEXT 12 HOURS.

FORECAST TRACK AND INTENSITY ARE GIVEN IN THE FOLLOWING TABLE:

Date/Time(UTC)	Position (Lat.°N/ long.°E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
07.01.19/0300	12.8/92.0	45-55 gusting to 65	Depression
07.01.19/0600	13.0/92.1	40-50 gusting to 60	Depression
07.01.19/1200	13.7/92.4	25-35 gusting to 45	Well marked low

ACCORDING TO SATELLITE IMAGERY BASED ON 0300 UTC OF TODAY, THE 7TH JANUARY, BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LAY OVER SOUTHEAST BAY OF BENGAL AND ADJOINING ANDAMAN ISLANDS & NORTH ANDAMAN SEA BETWEEN LATITUDE 11.5°N & 16.0°E AND LONGITUDE 90.5°E & 95.3°E. MINIMUM CLOUD TOP TEMPERATURE IS -74°C.

REMARKS:

CONSIDERING THE ENVIRONMENTAL CONDITIONS, THE SEA SURFACE TEMPERATURE IS AROUND 27-28 DEG. C OVER THE SYSTEM REGION AND IS DECREASING SLIGHTLY ALONG THE EXPECTED TRACK. THE LOWER LEVEL CONVERGENCE IS (20×10^{-5}) SECOND⁻¹ TO THE NORTHEAST OF THE SYSTEM CENTRE. LOWER LEVEL VORTICITY IS $(70-80 \times 10^{-6})$ SECOND⁻¹ TO THE WEST OF SYSTEM CENTRE. UPPER LEVEL DIVERGENCE IS (30×10^{-5}) SECOND⁻¹ TO THE NORTH OF SYSTEM CENTRE. VERTICAL WIND SHEAR IS (30-40 KNOTS) OVER THE SYSTEM AREA AND IS INCREASING ALONG THE FORECAST TRACK. THE UPPER TROPOSPHERIC RIDGE RUNS ALONG 8°N OVER THE SYSTEM AREA. THE MADDEN JULIAN OSCILLATION (MJO) INDEX LIES OVER PHASE 8 WITH AMPLITUDE MORE THAN 1.

DUE TO THE HIGH VERTICAL WIND SHEAR AND OTHER UNFAVOURABLE ENVIRONMENTAL FACTORS OVER THE SYSTEM AREA, THE SYSTEM IS VERY LIKELY TO WEAKEN INTO A WELL MARKED LOW PRESSURE AREA DURING NEXT 12 HOURS.

THE SYSTEM CURRENTLY LIES IN THE PERIPHERY OF THE ANTICYCLONIC CIRCULATION OVER SOUTHEAST ASIA, THUS IT IS LIKELY TO MOVE NORTHWARDS FOR SOME MORE TIME AND RECURVE NORTHEASTWARDS TOWARDS MYANMAR COAST THEREAFTER.

(NEETHA GOPAL)
SCIENTIST-E, RSMC, NEWDELHI

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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

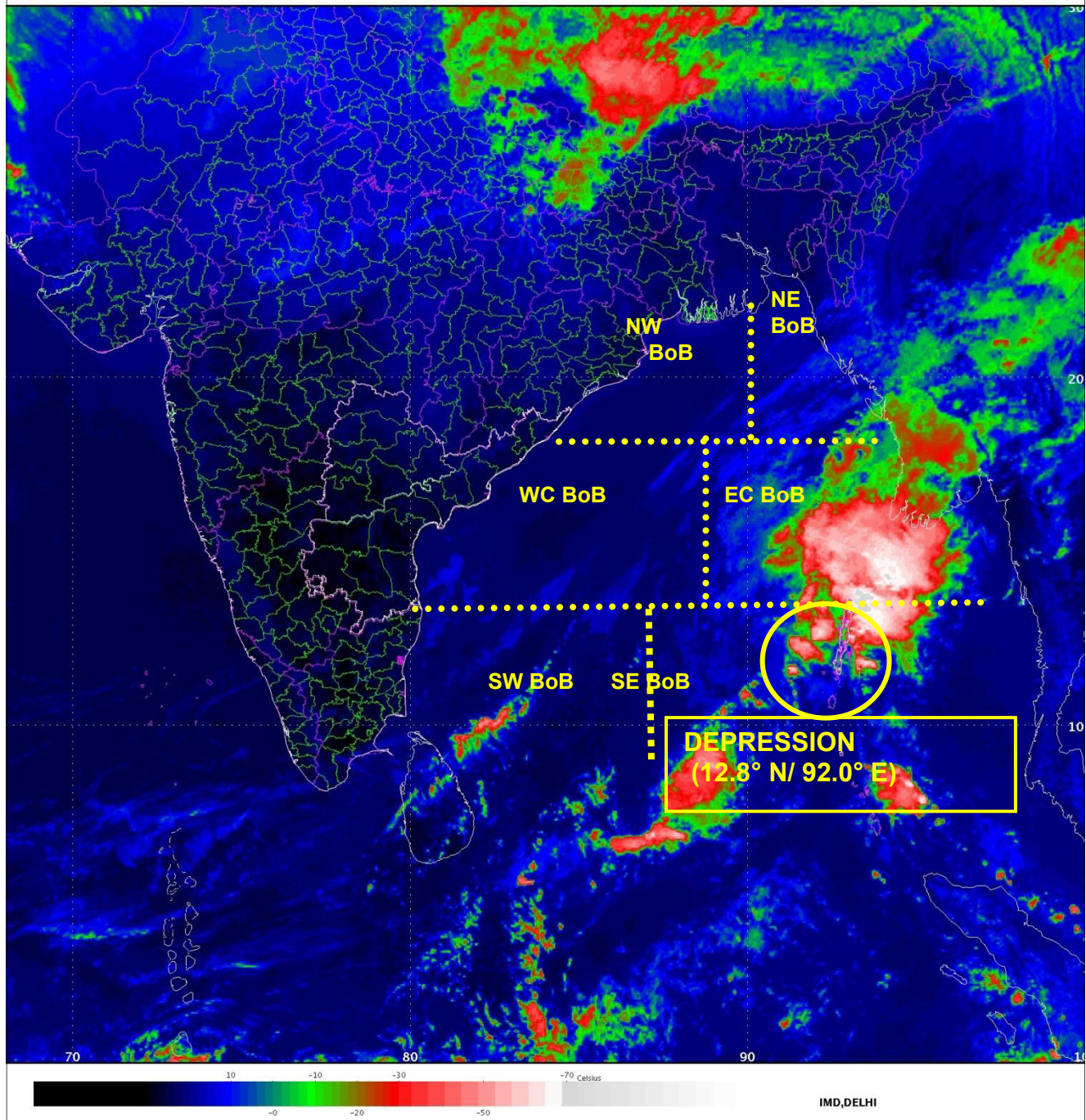
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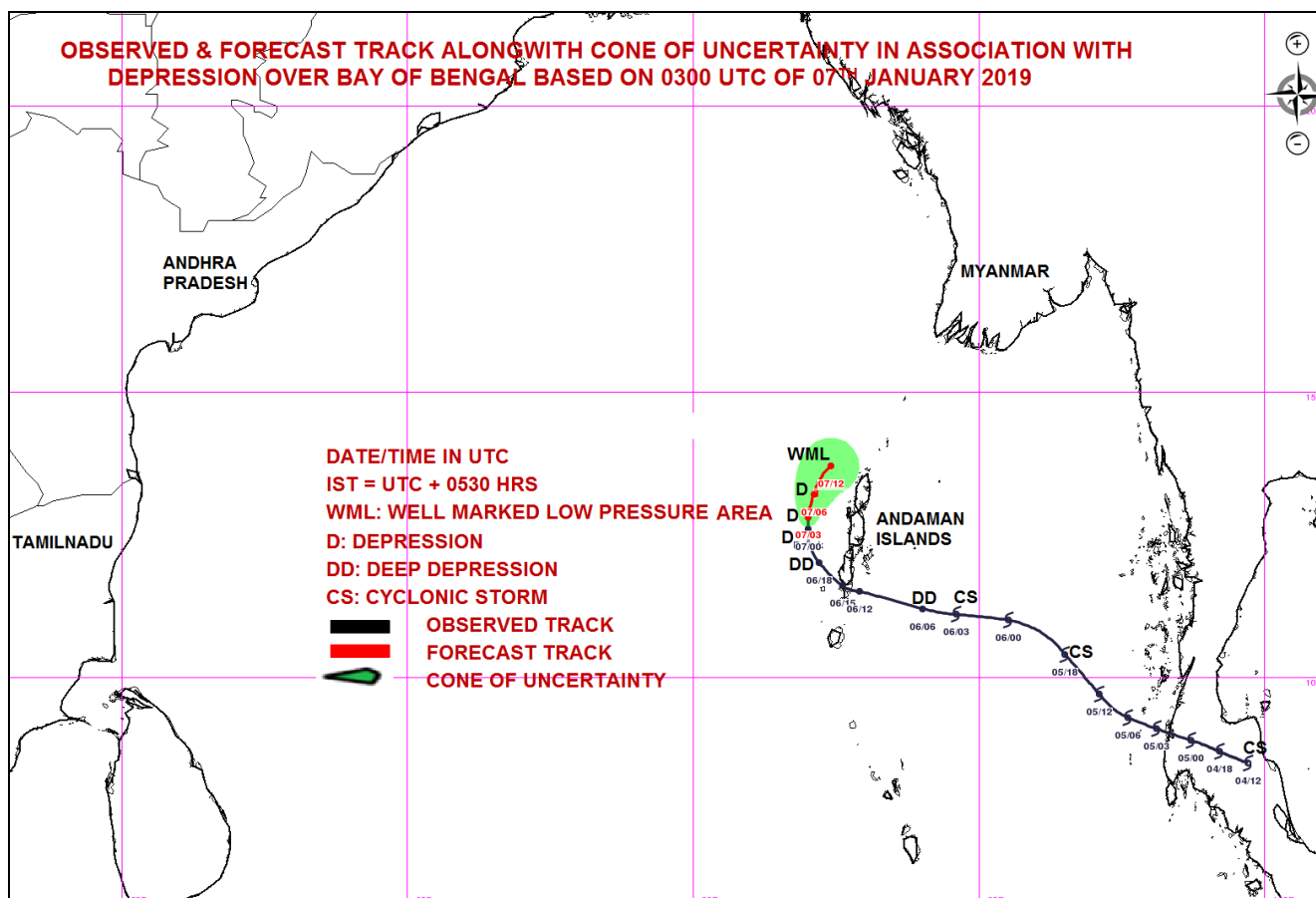
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07-01-2019/10:00 IST



PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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



PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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



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

DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 07.01.2019

SPECIAL TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 72 HOURS ISSUED AT 1500 UTC OF 07.01.2019 BASED ON 1200 UTC OF 07.01.2019.

BAY OF BENGAL:

THE DEPRESSION OVER SOUTHEAST AND ADJOINING EASTCENTRAL BAY OF BENGAL MOVED NORTHWARDS DURING PAST 06 HOURS; WITH A SPEED OF 05 KMPH AND LAY CENTERED AT 1200 UTC OF 07TH JANUARY, 2019 OVER EASTCENTRAL AND ADJOINING SOUTHEAST BAY OF BENGAL NEAR ANDAMAN ISLANDS NEAR LATITUDE 13.1°N AND LONGITUDE 92.0°E, ABOUT 170 KM NORTH-NORTHWEST OF PORT BLAIR (43333). IT IS VERY LIKELY TO CONTINUE TO MOVE NORTHWARDS FOR SOME MORE TIME AND RECURVE NORTHEASTWARDS TOWARDS MYANMAR COAST THEREAFTER. IT IS LIKELY TO WEAKEN INTO A WELL MARKED LOW PRESSURE AREA DURING NEXT 12 HOURS.

FORECAST TRACK AND INTENSITY ARE GIVEN IN THE FOLLOWING TABLE:

DATE/TIME(UTC)	POSITION (LAT.°N/ LONG.°E)	MAXIMUM SUSTAINED SURFACE WIND SPEED (KMPH)	CATEGORY OF CYCLONIC DISTURBANCE
07.01.19/1200	13.1/92.0	40-50 GUSTING TO 60	DEPRESSION
07.01.19/1800	13.4/92.1	40-50 GUSTING TO 60	DEPRESSION
08.01.19/0000	13.7/92.3	35-45 GUSTING TO 55	DEPRESSION

ACCORDING TO SATELLITE IMAGERY BASED ON 1200 UTC OF TODAY, THE 7TH JANUARY, BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LAY OVER SOUTHEAST BAY OF BENGAL AND ADJOINING ANDAMAN ISLANDS & NORTH ANDAMAN SEA BETWEEN LATITUDE 11.5°N & 16.5°E AND LONGITUDE 91.0°E & 95.5°E. MINIMUM CLOUD TOP TEMPERATURE IS -76°C.

REMARKS:

CONSIDERING THE ENVIRONMENTAL CONDITIONS, THE SEA SURFACE TEMPERATURE IS AROUND 27-28 DEG. C OVER THE SYSTEM REGION AND IS DECREASING SLIGHTLY ALONG THE EXPECTED TRACK. THE LOWER LEVEL CONVERGENCE IS (30×10^{-5}) SECOND⁻¹ TO THE NORTHEAST OF THE SYSTEM CENTRE. LOWER LEVEL VORTICITY IS $(70-80 \times 10^{-6})$ SECOND⁻¹ TO THE WEST OF SYSTEM CENTRE. UPPER LEVEL DIVERGENCE IS (30×10^{-5}) SECOND⁻¹ TO THE NORTHEAST OF SYSTEM CENTRE. VERTICAL WIND SHEAR IS (20-25 KNOTS) OVER THE SYSTEM AREA AND IS INCREASING ALONG THE FORECAST TRACK. THE UPPER TROPOSPHERIC RIDGE RUNS ALONG 8°N OVER THE SYSTEM AREA. THE MADDEN JULIAN OSCILLATION (MJO) INDEX LIES OVER PHASE 8 WITH AMPLITUDE MORE THAN 1.

DUE TO THE marginally FAVOURABLE ENVIRONMENTAL FACTORS OVER THE SYSTEM AREA, THE SYSTEM IS VERY LIKELY TO MAINTAIN THE INTENSITY AS DEPRESSION FOR NEXT 12 HOURS AND WEAKEN INTO A WELL MARKED LOW PRESSURE AREA THEREAFTER DUE TO THE HIGH VERTICAL WIND SHEAR.

THE SYSTEM CURRENTLY LIES IN THE PERIPHERY OF THE ANTICYCLONIC CIRCULATION OVER SOUTHEAST ASIA. A DEEP TROUGH IN THE MID AND UPPER TROPOSPHERIC WESTERLIES LIES TO THE WEST OF THE SYSTEM. UNDER THE STEERING INFLUENCE OF THE APPROACHING TROUGH AND THE ANTICYCLONE, THE SYSTEM IS LIKELY TO MOVE NORTHWARDS FOR SOME MORE TIME AND RECURVE NORTHEASTWARDS TOWARDS MYANMAR COAST THEREAFTER.

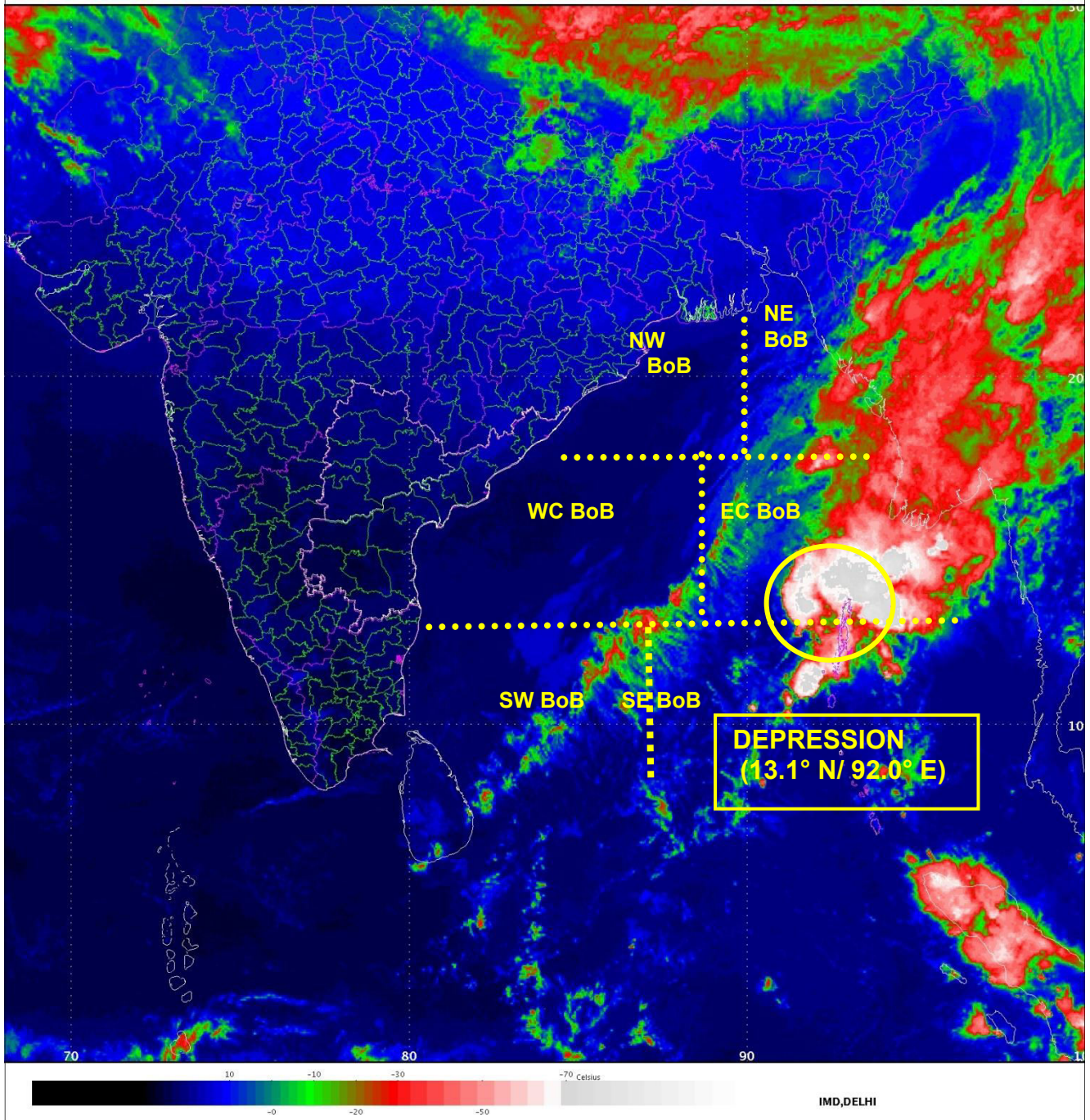
(NEETHA GOPAL)
SCIENTIST-E, RSMC, NEWDELHI

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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

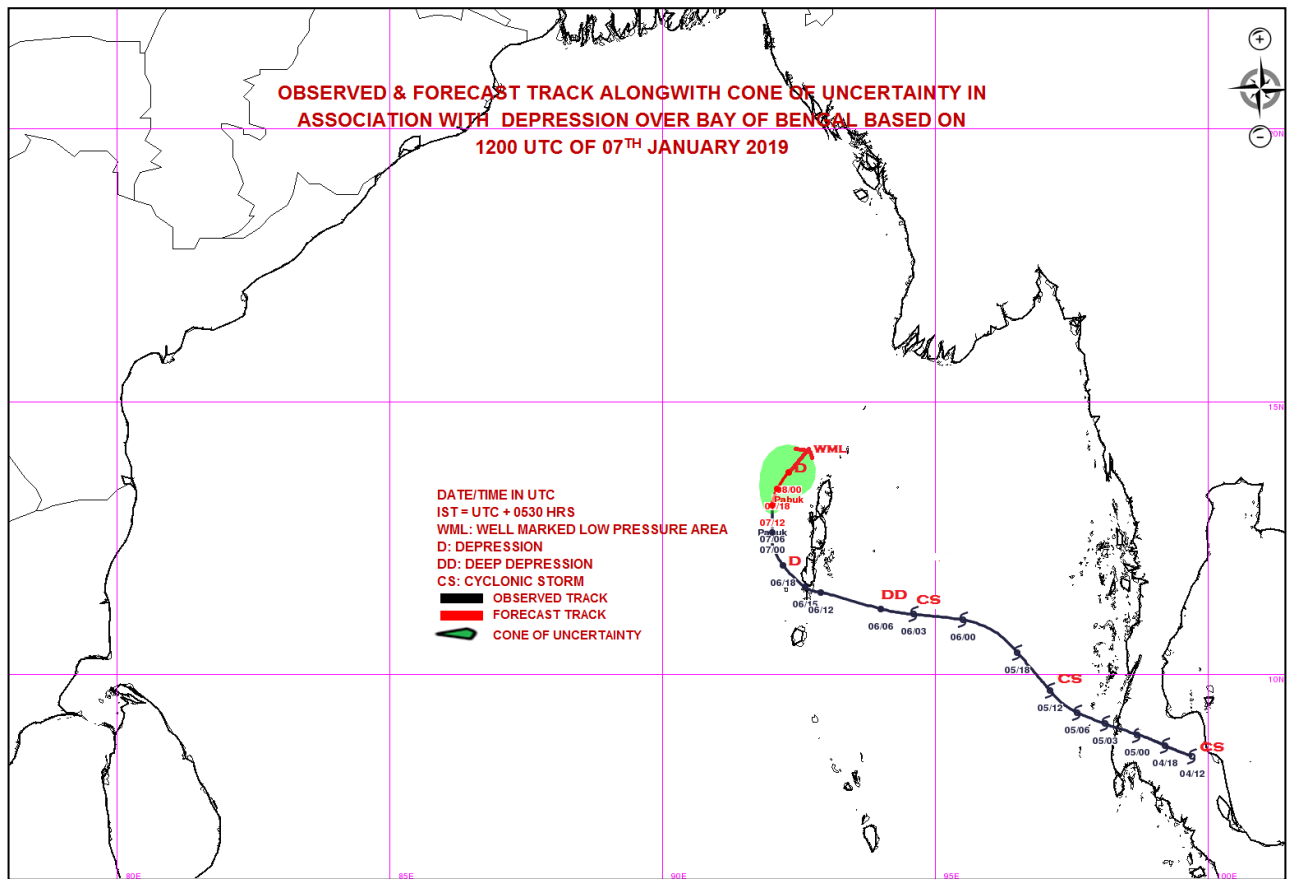
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07-01-2019/12:00 GMT
07-01-2019/17:30 IST



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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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 08.01.2019

SPECIAL TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 72 HOURS ISSUED AT 0300 UTC OF 08.01.2019 BASED ON 0000 UTC OF 08.01.2019.

BAY OF BENGAL:

THE DEPRESSION OVER SOUTHEAST AND ADJOINING EASTCENTRAL BAY OF BENGAL MOVED NORTHEASTWARDS DURING PAST 06 HOURS; WEAKENED INTO A WELL MARKED LOW PRESSURE AREA OVER EASTCENTRAL BAY OF BENGAL AND ADJOINING NORTH ANDAMAN SEA OFF MYANMAR COAST AT 0000 UTC OF 08TH JANUARY, 2019. IT IS VERY LIKELY TO CONTINUE TO MOVE NORTHEASTWARDS AND WEAKEN INTO A LOW PRESSURE AREA DURING NEXT 12 HOURS.

ACCORDING TO SATELLITE IMAGERY BASED ON 0000 UTC OF TODAY, THE 08TH JANUARY, BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LAY OVER EASTCENTRAL BAY OF BENGAL AND ADJOINING NORTH ANDAMAN SEA TO THE NORTH OF LATITUDE 14.5°N AND BETWEEN LONGITUDE 91.0°E & 95.5°E. MINIMUM CLOUD TOP TEMPERATURE IS -76°C.

REMARKS:

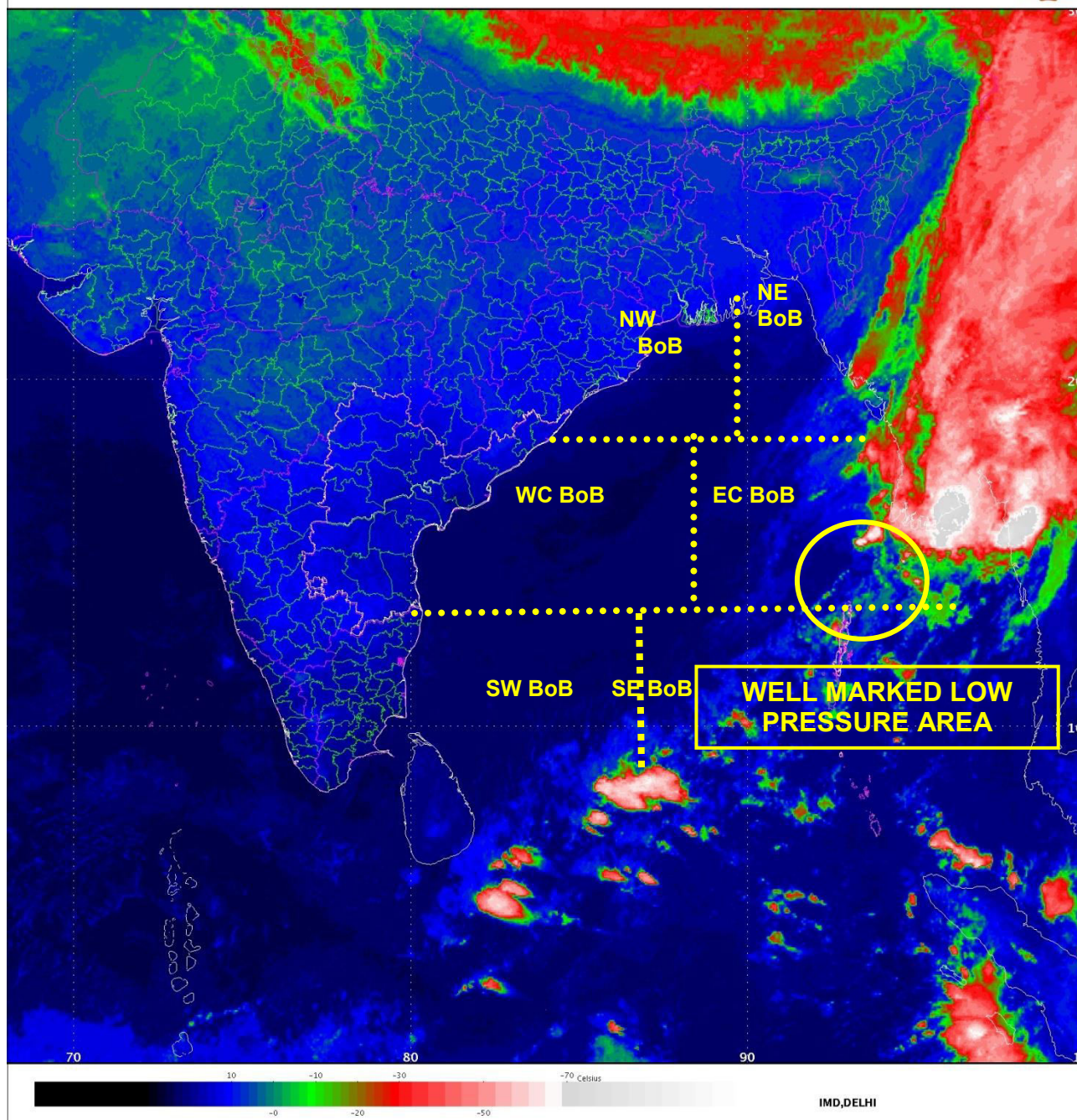
CURRENT OBSERVATIONS, MODEL GUIDANCE AND ENVIRONMENTAL CONDITIONS SUGGESTS THAT THE SYSTEM LIKELY TO MOVE NORTHEASTWARDS AND WEAKEN FURTHER INTO A LOW PRESSURE AREA DURING NEXT 12 HOURS.

THIS IS THE LAST BULLETIN OF THIS SYSTEM.

(V R DURAI)
SCIENTIST-E, RSMC, NEWDELHI

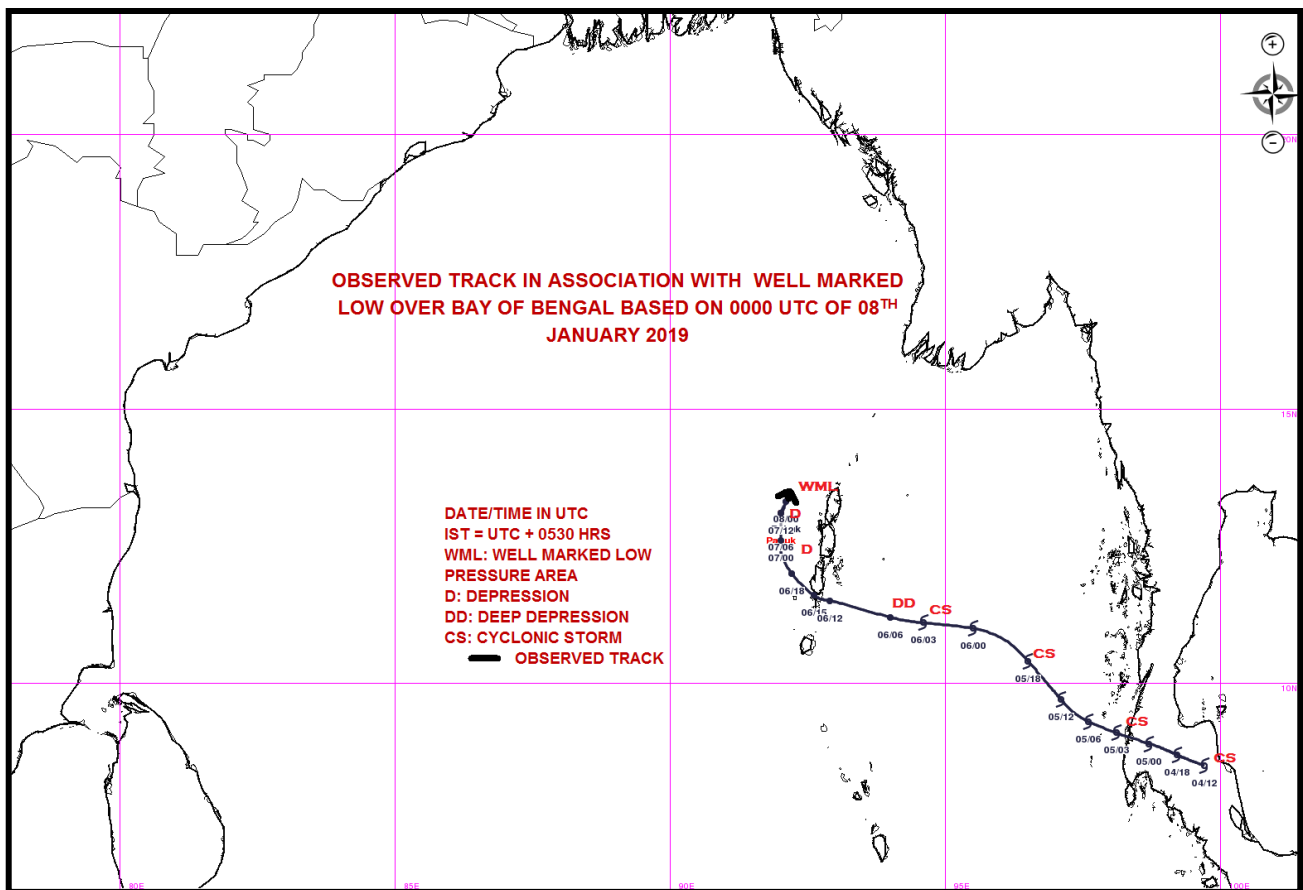
PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

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