



Friday, 22 January 2021

EXTENDED RANGE FORECAST FOR KERALA & MAHE AND LAKSHADWEEP

(Current weather status & outlook for next two weeks (22 Jan 2021 – 04 Feb 2021))

1. Realized rainfall scenario:

(i) Weekly Rainfall Scenario (14 January 2021 to 20 January 2021):

Actual rainfall along with departure from normal rainfall for Kerala & Mahe and Lakshadweep during the recent past week is shown in the table below.

Subdivision	Actual Rainfall (in mm)	Normal Rainfall (in mm)	Departure (%)
Kerala & Mahe	8.9	1.9	371
Lakshadweep (UT)	48.2	3.2	1406

Out of 14 districts in **Kerala**, 10 districts received large excess rainfall, 1 district received deficient rainfall, 2 districts received large deficient rainfall and 1 district received no rainfall. **Lakshadweep** received large excess rainfall and **Mahe** received large deficient rainfall.

(ii) Seasonal Rainfall Scenario (01 January 2021 to 20 January 2021):

Cumulative rainfall for Kerala & Mahe and Lakshadweep during this year's winter season from 1st January to 20th January 2021 is shown in the table below.

Subdivision	Actual Rainfall (in mm)	Normal Rainfall (in mm)	Departure (%)
Kerala & Mahe	104.2	5.8	1697
Lakshadweep (UT)	167.0	12.3	1258

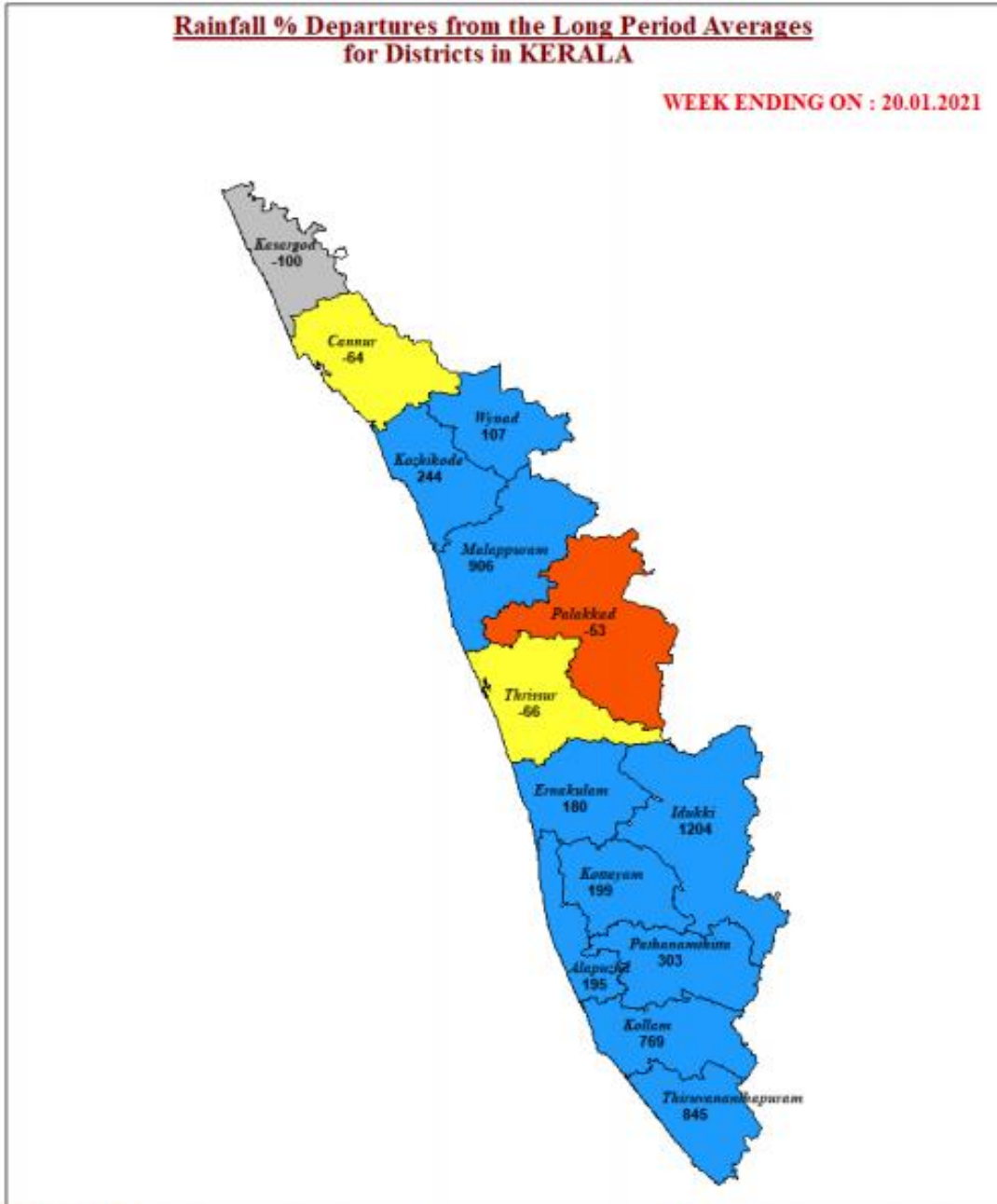
All 14 districts in **Kerala**, received large excess rainfall. **Lakshadweep** and **Mahe** also received large excess rainfall.

Weekly Rainfall map

INDIA METEOROLOGICAL DEPARTMENT MC THIRUVANANTHAPURAM

Rainfall % Departures from the Long Period Averages for Districts in KERALA

WEEK ENDING ON : 20.01.2021



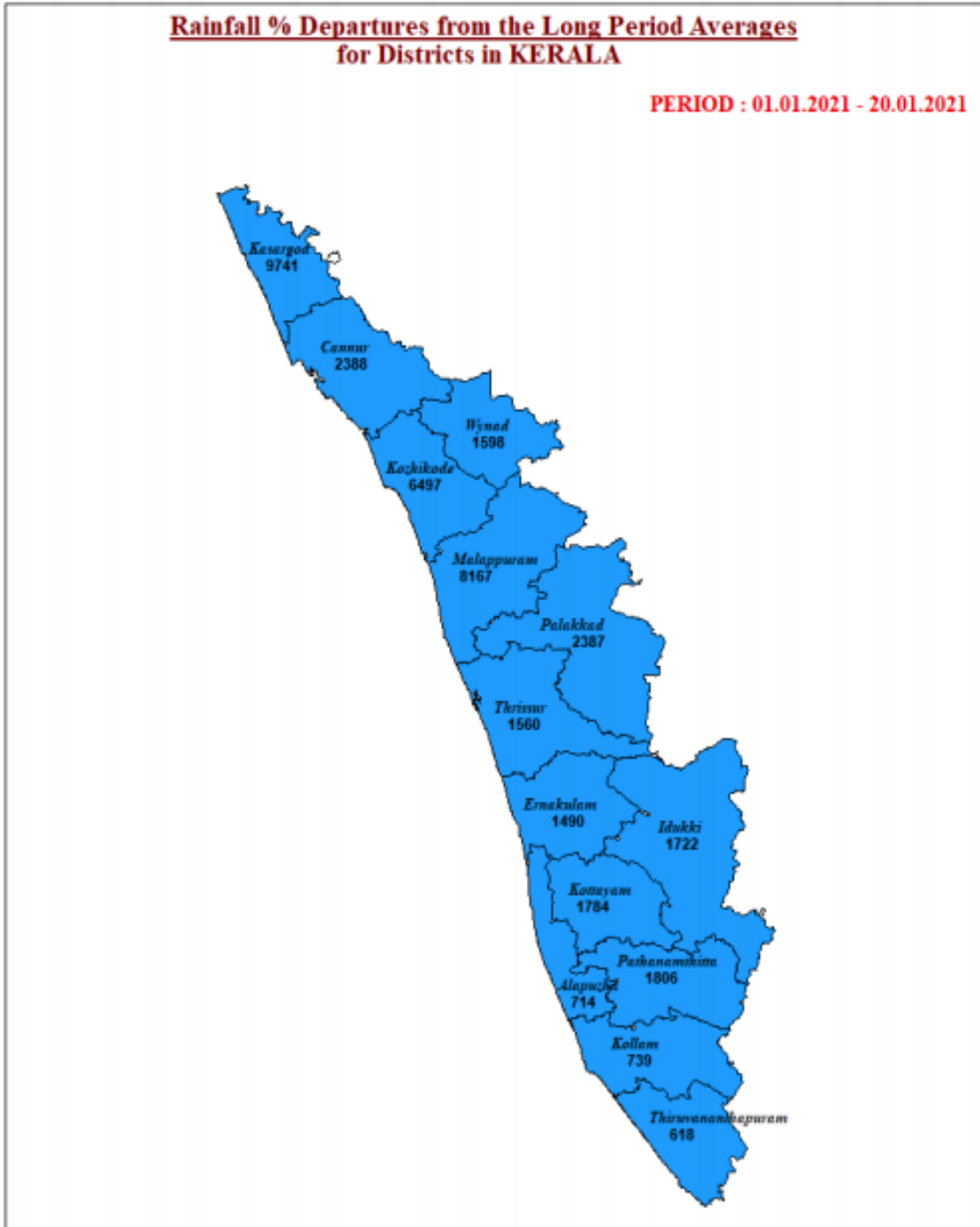
LEGEND: ■ L. EXCESS (+60% OR MORE) ■ EXCESS (+20% TO +59%) ■ NORMAL (+19% TO -19%)
■ DEFICIENT (-20% TO -59%) ■ L. DEFICIENT (-60% TO -99%) ■ NO RAIN [-100%] ■ NO DATA

Seasonal Rainfall map

INDIA METEOROLOGICAL DEPARTMENT MC THIRUVANANTHAPURAM

**Rainfall % Departures from the Long Period Averages
for Districts in KERALA**

PERIOD : 01.01.2021 - 20.01.2021



LEGEND: ■ L. EXCESS (+60% OR MORE) ■ EXCESS (+20% TO +59%) ■ NORMAL (+19% TO -19%)
■ DEFICIENT (-20% TO -59%) ■ L. DEFICIENT (-60% TO -99%) ■ NO RAIN (-100%) ■ NO DATA

2. Chief synoptic conditions as on 22 January, 2021

- An upper air cyclonic circulation at 0.9 km above mean sea level over Comorin area and neighbourhood persists.

3. Large scale features

- Currently, moderate La Niña conditions are prevailing over equatorial Pacific and Sea Surface Temperatures (SSTs) are below normal over central and eastern equatorial Pacific Ocean. The latest Monsoon Mission Climate Forecasting System (MMCFS) forecast indicates that colder than normal SST anomaly is most likely to persist over Niño 3.4 region and La Niña conditions likely to continue during coming seasons.
- At present, neutral Indian Ocean Dipole (IOD) conditions are observed over Indian Ocean and the latest MMCFS forecast indicates neutral IOD conditions are likely to continue during the coming months.
- The Madden Julian Oscillation (MJO) index is in Western Pacific (Phase 7) with amplitude nearly one. As per the latest projections, it is likely to be in same phase with high amplitude during next one week.

4. Forecast for next two weeks

Based on the present synoptic features, dynamical scenario and model guidance, the rainfall prediction is as follows:

Rainfall forecast for week 1: (22 January 2021 - 28 January 2021)

Isolated rainfall activity is likely over **Kerala & Mahe** and **no rainfall activity** is likely over **Lakshadweep** during **week 1**.

- Cumulatively, **above normal rainfall** is likely over **Kerala, Mahe** and **Lakshadweep** during **week 1**.

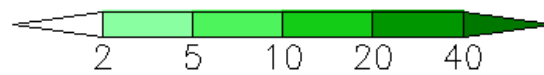
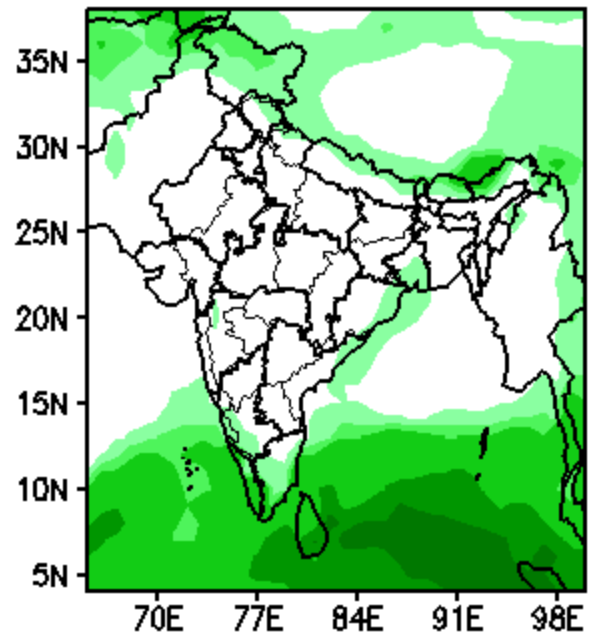
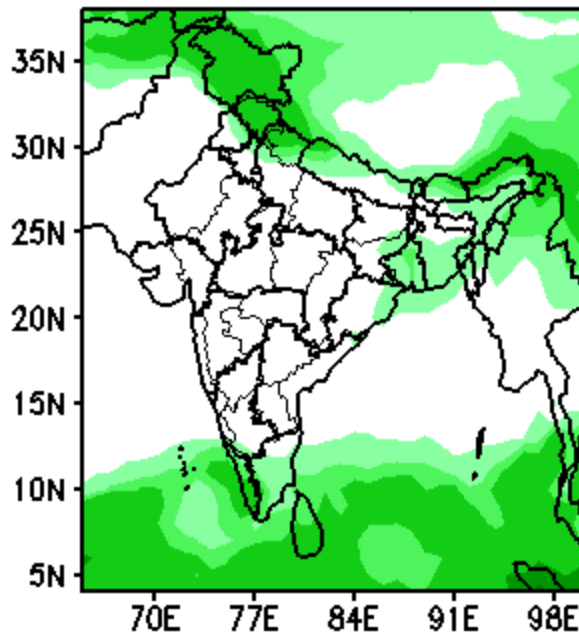
Rainfall forecast for week 2: (29 January 2021 - 04 February 2021)

- Cumulatively, **above normal rainfall** is likely over **Kerala & Mahe** and **Lakshadweep** during **week 2**.

Forecast Rainfall (mm/day)

(Week1: 22Jan-28Jan)

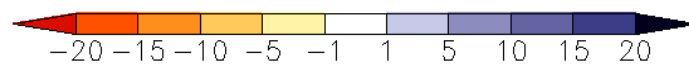
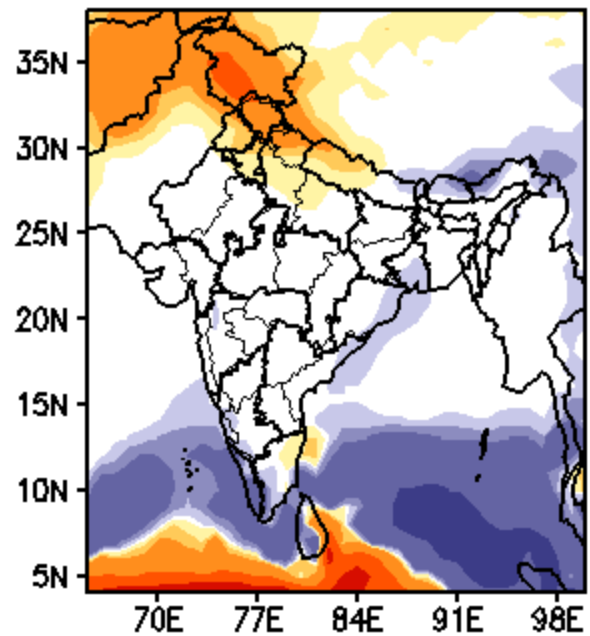
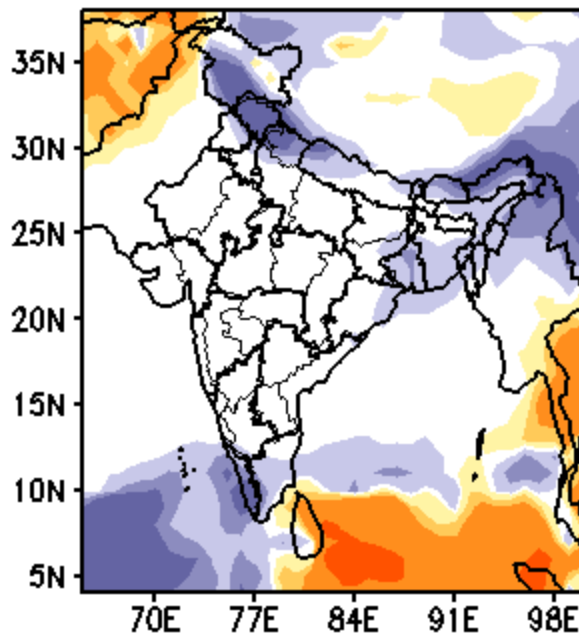
(Week2: 29Jan-04Feb)



Forecast Rainfall Anomaly (mm/day)

(Week1: 22Jan-28Jan)

(Week2: 29Jan-04Feb)



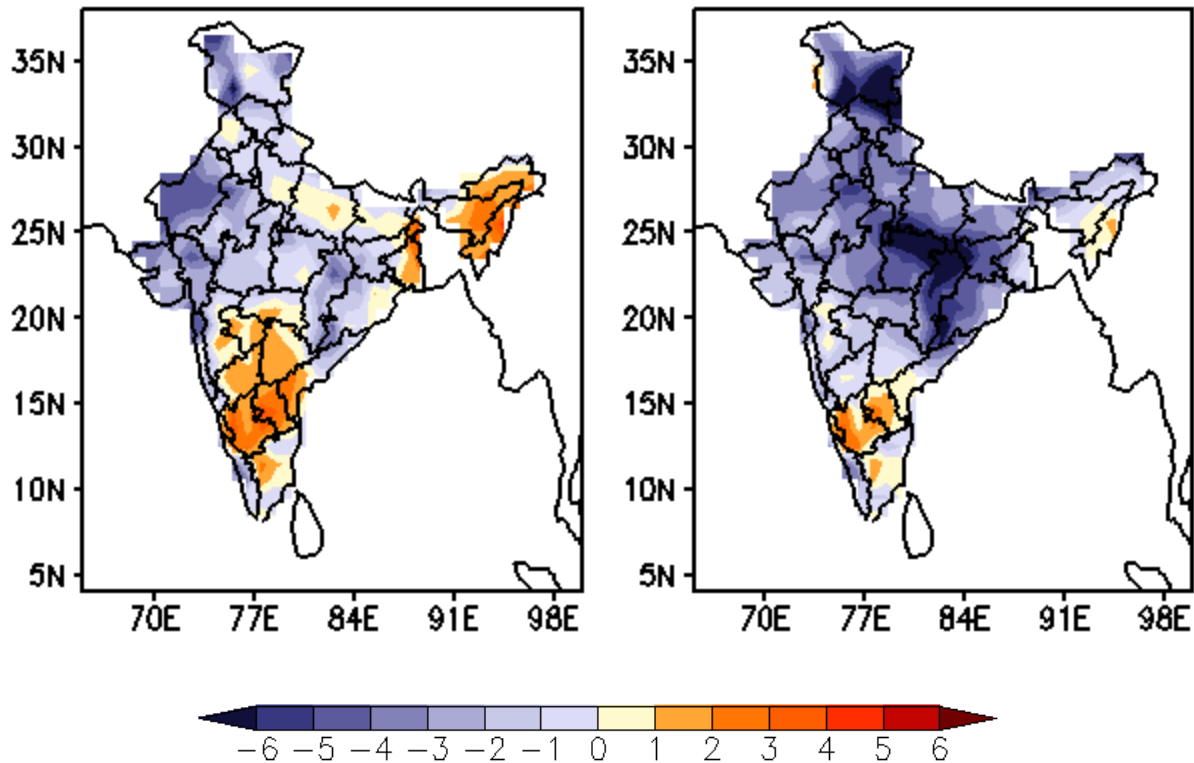
Min. Temperature forecast for week 1 & week 2: (22 January 2021 - 04 February 2021)

- The minimum temperatures are likely to be **normal to below normal** over Kerala & Mahe during week 1 and week 2.

MME forecast Tmin anomaly (Deg C)

(Week1: 22Jan–28Jan)

(Week2: 29Jan–04Feb)



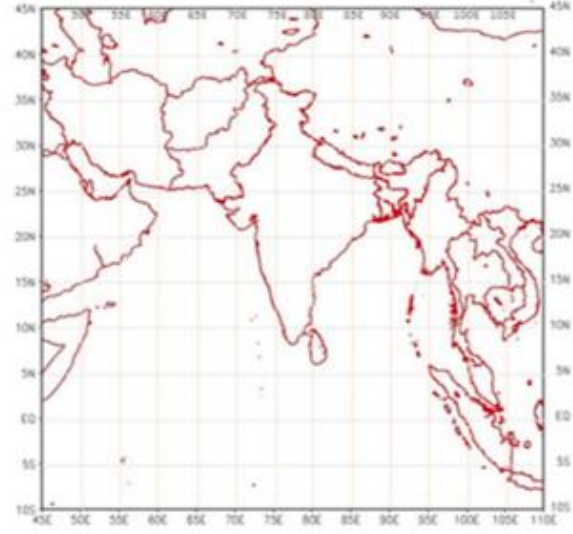
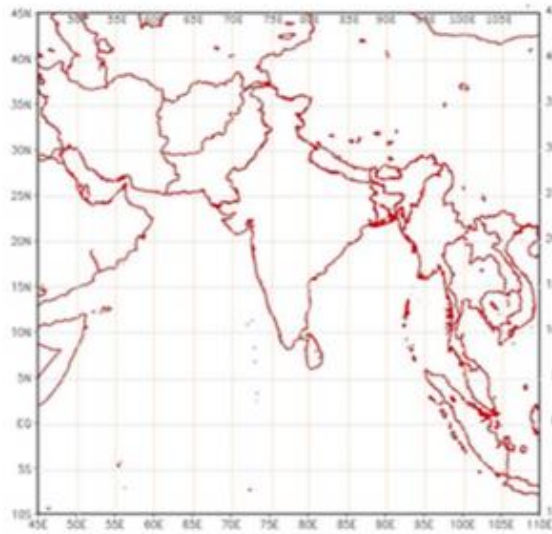
5. Cyclogenesis

The Madden Julian Oscillation (MJO) index is currently in Phase 7 with amplitude more than 1. It is likely remain in phase 7 with amplitude more than 1, during next 2 weeks. Hence the MJO will not support convection over the Indian Seas (Bay of Bengal & Arabian Sea) during weeks 1 & 2. Most of the numerical models including IMD GFS, GEFS, ECMWF, NCEP GFS, NEPS, and CGEPS (MME), NCUM & NEPS are not indicating any cyclogenesis during the forecast period. The Genesis Potential Parameter (GPP) based on IMD GFS is not indicating any potential zone for cyclogenesis over the north Indian Ocean during the forecast period. Considering all the above, it may be concluded that no cyclogenesis is predicted over the north Indian Ocean during next two weeks.

NORTH INDIAN OCEAN EXTENDED RANGE OUTLOOK FOR CYCLOGENESIS

WEEK 1: 22.01.2021-28.01.2021

WEEK2: 29.01.2021-04.02.2021



PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION OR HIGHER INTENSITY)

LOW (1-33% PROBABILITY)
MODERATE (34-67% PROBABILITY)
HIGH (68-100% PROBABILITY)

CONFIDENCE



K Santhosh
Head
Meteorological Centre
Thiruvananthapuram

(Next bulletin will be issued on 29 January 2021)

Web: www.imdtvm.gov.in Email: mc.trv@imd.gov.in, mctrivandrum@gmail.com Ph: 2322894/2330025 Fax: 2332330