MONTHLY CLIMATE BULLETIN JANUARY 2025

1. Introduction

This bulletin provides a summary of the January 2025 climate conditions across Mahe, Praslin, and La Digue. Overall, the islands experienced wet conditions throughout the month. Weak La Nina conditions were observed, with sea surface temperature anomalies in the Nino 3.4 region dropping to around -0.71°C. Meanwhile, the Indian Ocean Dipole (IOD) remained neutral. The Madden–Julian Oscillation (MJO) index moved from phase 8 through phase 5 over the course of January.

2. Monthly Rainfall Performance in January 2025

2.1 Distribution of Rainfall for January 2025

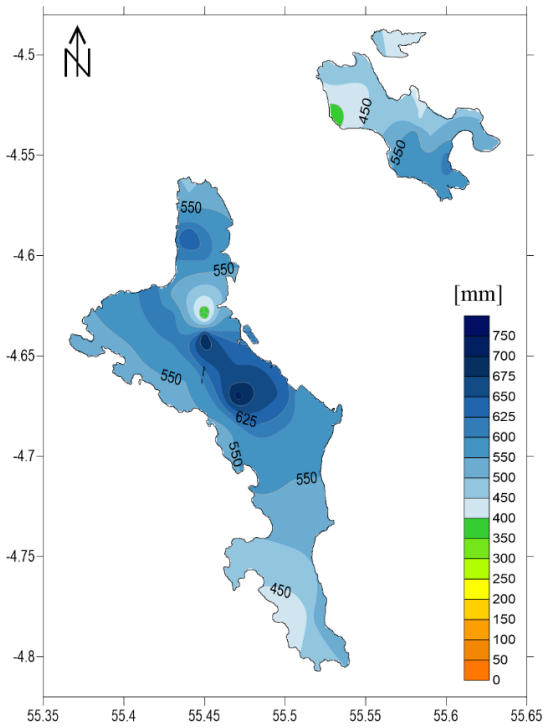

Figure 1: Monthly total rainfall in mm during January 2025

Figure 1 illustrates the spatial distribution of rainfall during January 2025. On Mahe, recorded amounts ranged from 340.6 mm to 713.3 mm, with the highest measured at La Misere-Rose Station and the lowest at Hermitage-Waterwork. Rainfall exceeding 600 mm was mostly recorded in the northern portion of eastern Mahe, as well as the southern part of central Mahe and the eastern area of western Mahe. Amounts gradually decreased toward the west and south, generally ranging between 400 mm and 600 mm, with the southwestern fringe receiving less than 450 mm.

On Praslin, rainfall totals varied from 369.1 mm to 613 mm, featuring a gradual increase from north to south and peaking at Baie-Ste-Anne-PUC Station. Over La Digue, observed rainfall ranged between 387.9 mm and 492.6 mm.

2.2 Monthly rainfall anomaly and Percentage of normal rainfall during January 2025

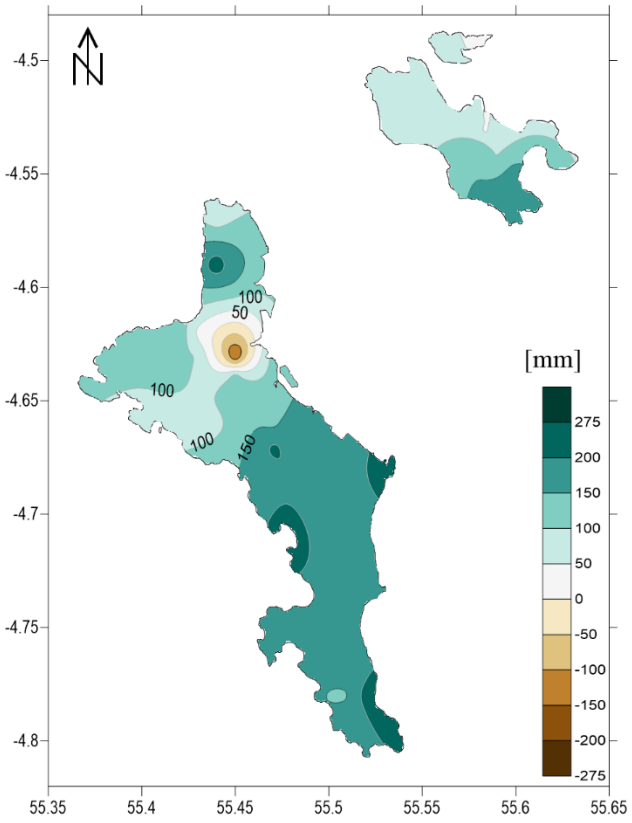

Figure 2: Monthly rainfall anomaly in mm during January 2025

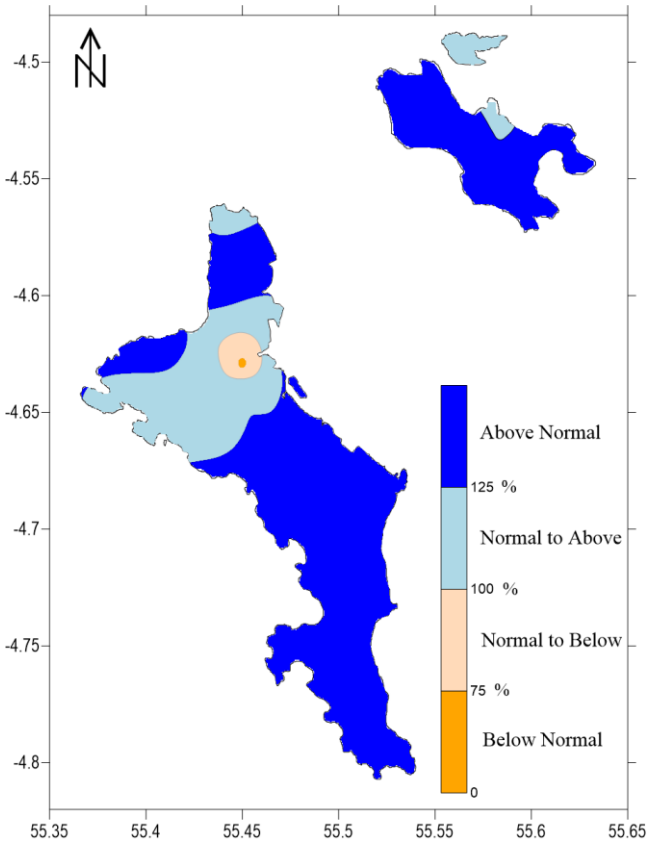

Figure 3: Percent of mean rainfall during January 2025

Figure 2 presents the rainfall anomalies for January 2025. Across Mahe, anomalies were predominantly positive, ranging from +50 mm to +240 mm. However, portions of the central region recorded negative anomalies of -157.4 mm. Over Praslin and La Digue, positive anomalies were also observed, showing a gradual increase from north to south.

As shown in Figure 3, Most areas of Mahe experienced generally wet conditions throughout January 2025. Above-normal precipitations were observed in much of the north, east, and south, as well as the southern portion of the west and the northern fringe of the western of Mahe.

Normal to above-normal conditions were also recorded in the northern tip, the central area, and the northern section of the west. However, certain central parts of Mahe experienced pockets of normal to below-normal rainfall. Meanwhile, above-normal precipitation prevailed across most of Praslin and La Digue.

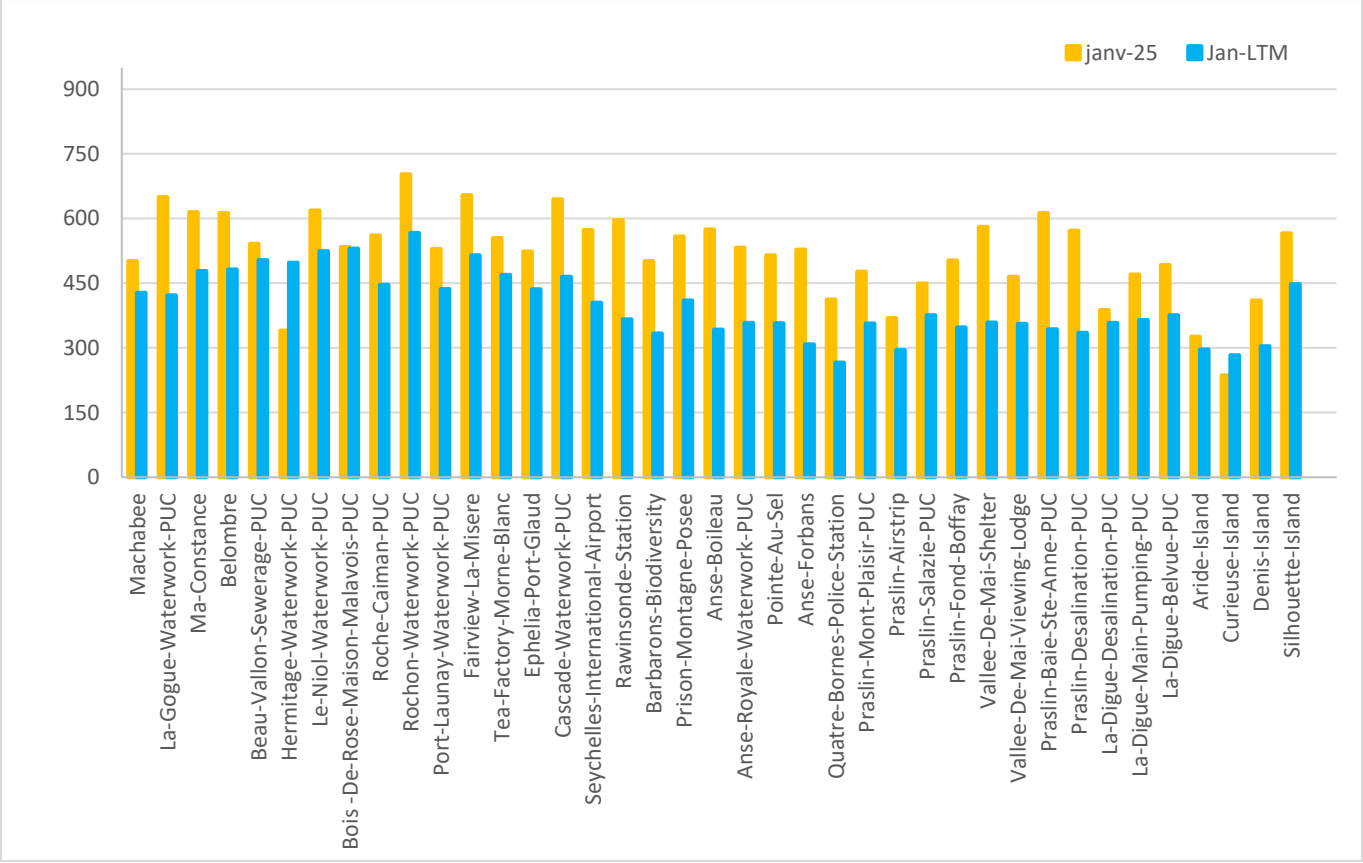

Figure 4: January 2025 rainfall total against January Long Term Mean (LTM)

3. Daily Weather for January 2025 at Seychelles International Airport

3.1 Daily rainfall, relative humidity, maximum and minimum temperature in January 2025

The Seychelles International Airport station recorded 573.9 mm of rainfall in January 2025, significantly exceeding the long-term mean of 405.2 mm for this month. The highest daily total, 95.3 mm, occurred on January 21st. Rainfall distribution indicates that the first dekad (1–10 January) received 224.3 mm, the second dekad (11–20 January) recorded 216.4 mm, and the third dekad (21–31 January) totaled 133.2 mm. Notably, much of the precipitation fell from the middle of the second dekad through the first few days of the third dekad. Five consecutive dry days were observed from 11–15 January.

The relative humidity in January 2025 ranged between 80% and 98%. The highest humidity was recorded on January 2nd, while the lowest occurred on January 31st. Overall, the atmospheric conditions remained notably humid throughout the month.

Maximum temperatures in January 2025 ranged from 29.2°C to 31.6°C, with the highest readings on January 31st. Observations show a gradual increase in daily maximum temperatures from the 1st to the 31st. The average maximum temperature for the month was 30.5°C.

Meanwhile, minimum temperatures varied between 22.7°C and 26.9°C, dipping to their lowest on January 2nd and 3rd, and reaching a peak on January 11th. The average minimum temperature for January 2025 was 24.4°C.

The average mean temperature for January was 27.4°C, which is very close to the monthly long term mean of the month.

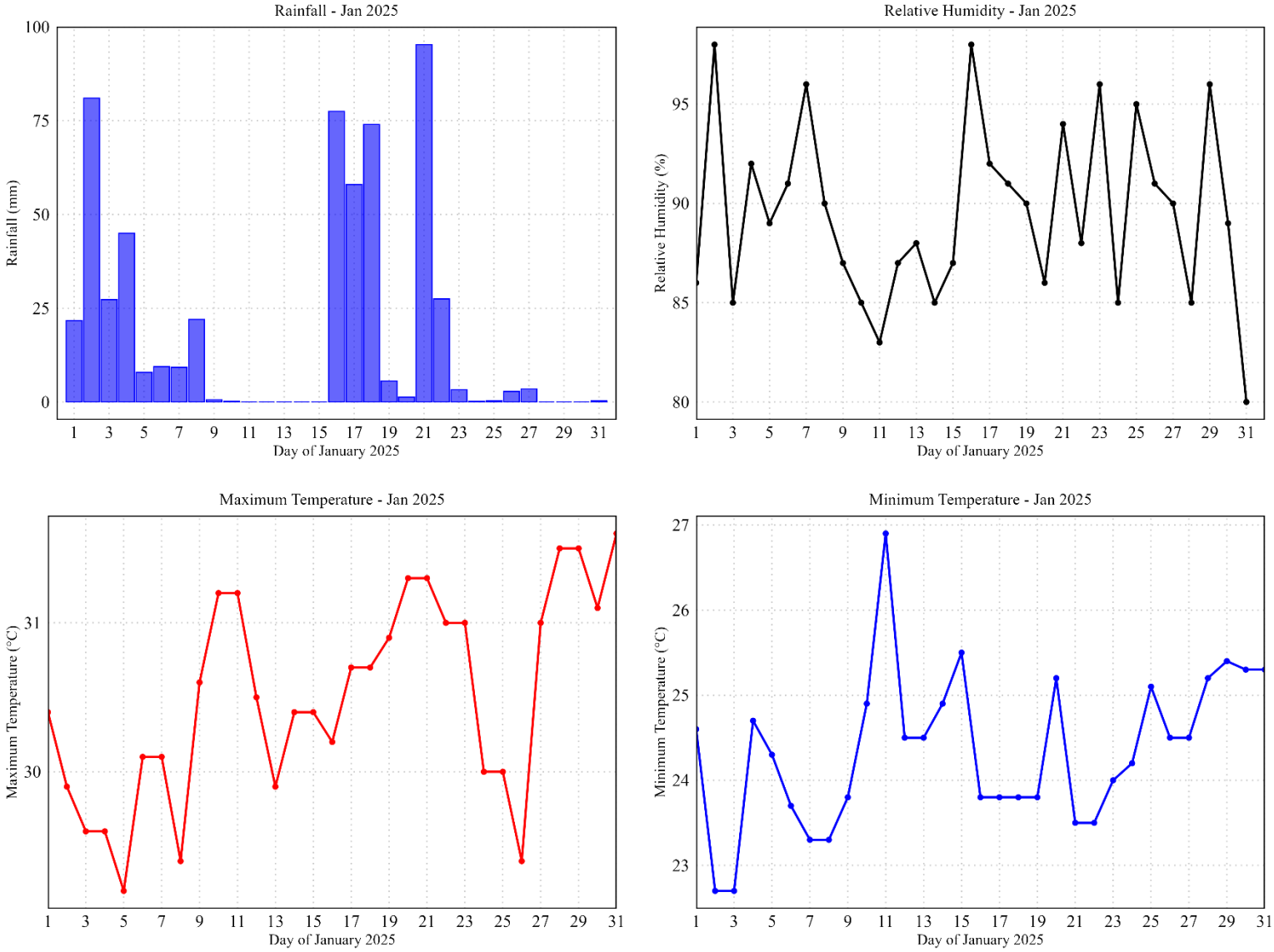

Figure 5: Daily Rainfall, Relative humidity, Maximum temperature, Minimum temperature in January 2025

3.2 Daily Sunshine hours, Mean Sea level pressure and surface wind in January 2025

During January 2025, wind speeds at the airport station ranged from 2.8 to 9.9 knots. The monthly average was 6 knots, slightly, below the long-term mean of 6.3 knots. The monthly average of the mean sea level pressure was 1012.3hPa. A gradual decrease in daily sea level pressure was observed from January 1st to January 31st.

Sunshine duration averaged 4.5 hours per day, slightly below the long-term mean of 5 hours. The shortest sunshine was 0 hours on January 26th, while the longest reached 10.8 hours on January 14th. Overall, 29% of the days in January recorded more than six hours of sunshine.

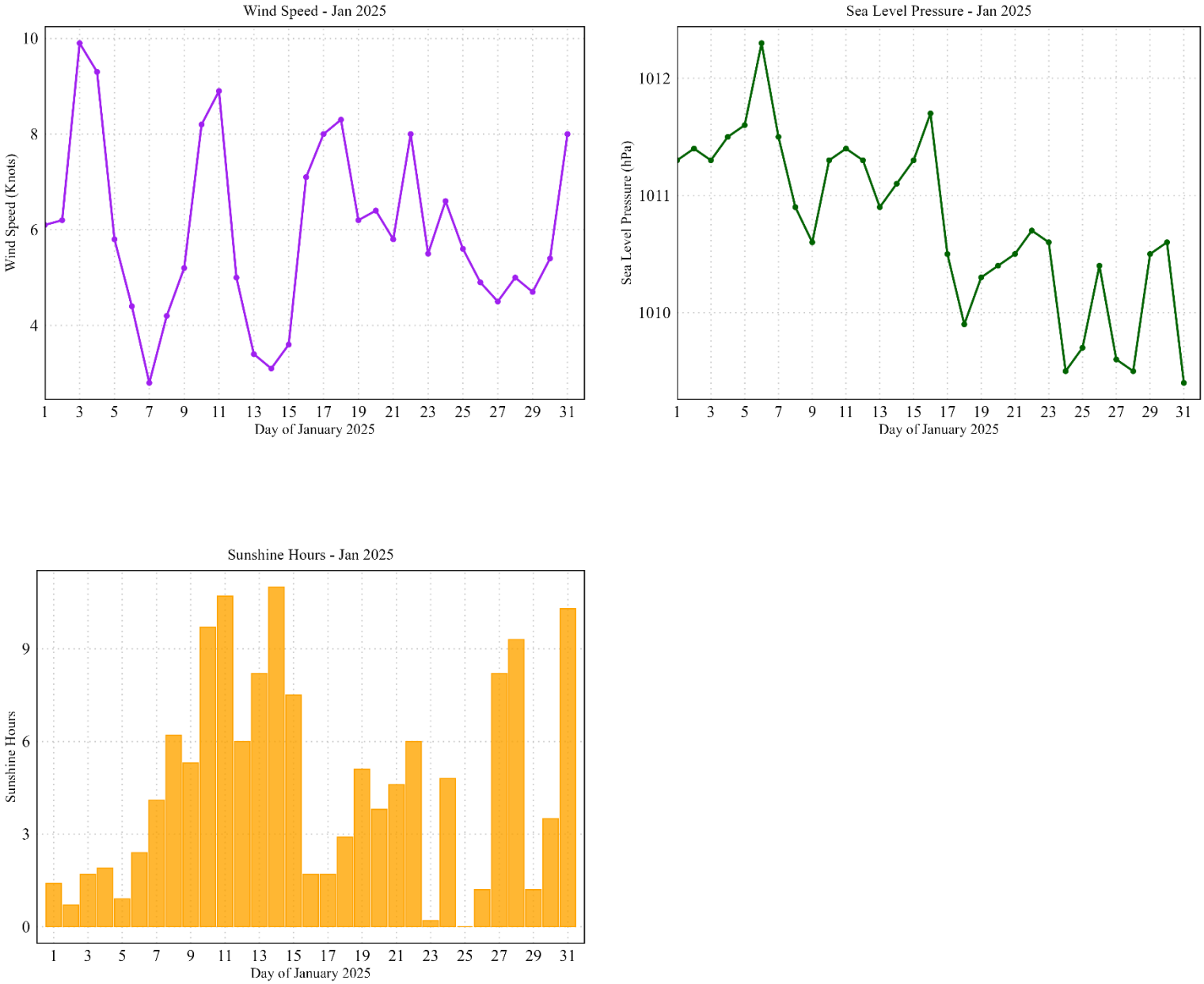

Figure 6: Daily Wind speed, Sea Level pressure, sunshine hours in January 2025

3.3 Wind Pattern in January 2025

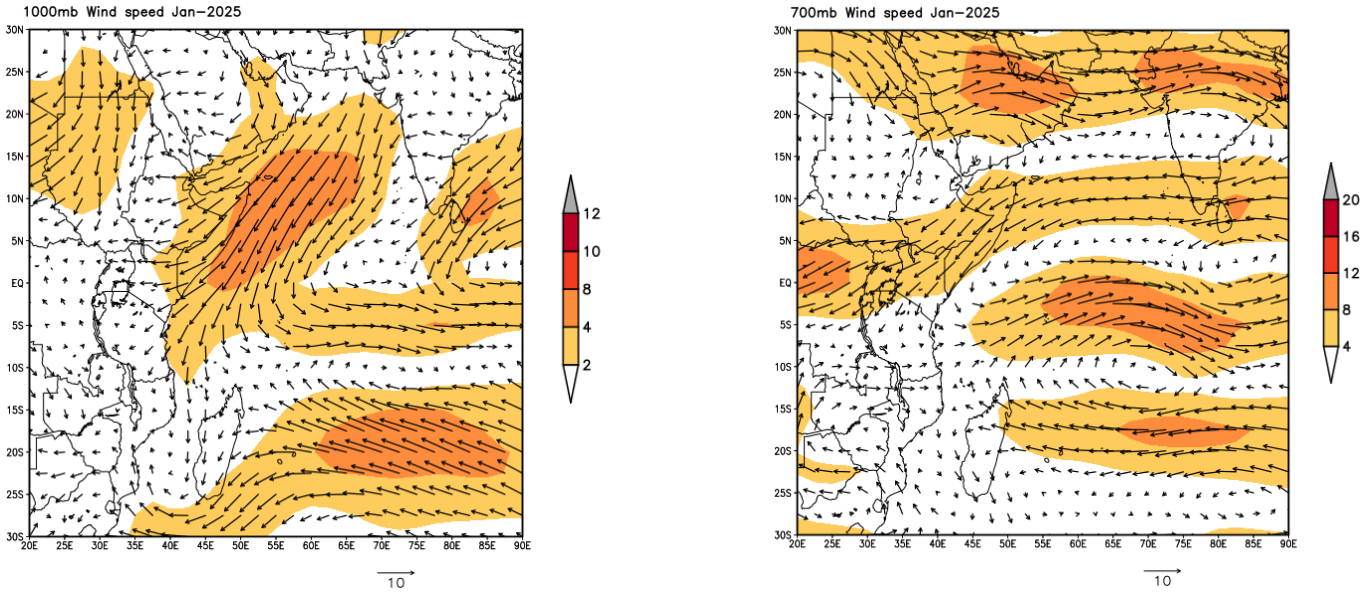

Figure 7: Surface wind flow (left) and wind flow at 700mb (right)

Figure 7 illustrates the wind vectors at 1000 mb (near-surface) and 700 mb (mid-level) for January 2025. Over Mahe, the surface flow is predominantly north-westerly, influenced by the northeast monsoon, with speeds of about 2–4 m/s. The Intertropical Convergence Zone (ITCZ) extends from roughly 7° S to 13° S, positioned south of Mahe. At 700 mb, winds become more south-westerly toward Mahe, ranging between 4 m/s and 8 m/s and indicating gentle to moderate conditions in the mid-levels.