



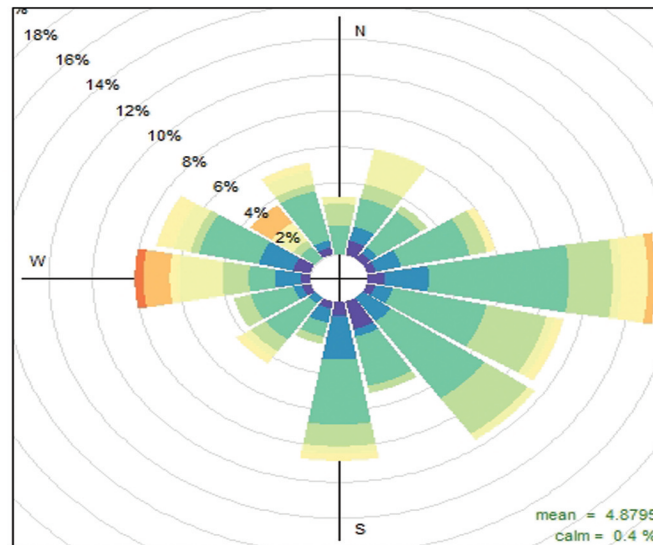
भारत सरकार / GOVERNMENT OF INDIA

पृथ्वी विज्ञान मंत्रालय/ MINISTRY OF EARTH SCIENCES

भारत मौसम विज्ञान भवन / INDIA METEOROLOGICAL DEPARTMENT

रेडियो सौण्डे और रेडियो विंड के मासिक सामान्य मूल्य (१९८१ - २०१०)  
तथा मासिक उपरिवायु के पवन दिग्दर्शक आरेख (२००० - २०१५)

MONTHLY NORMALS OF RADIOSONDE AND RADIOWIND (1981-2010) AND  
MONTHLY UPPER AIR WINDROSE DIAGRAMS (2000-2015)



भुबनेश्वर  
BHUBANESWAR

सितम्बर २०२०  
SEPTEMBER 2020



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जलवायु आंकड़ा प्रबंधन समूह / CLIMATE DATA MANAGEMENT AND SERVICES GROUP  
जलवायु अनुसंधान एवं सेवाएँ कार्यालय पुणे / OFFICE OF HEAD CLIMATE RESEARCH & SERVICES PUNE

सितम्बर २०२०  
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## PREFACE

India Meteorological Department (IMD), Ministry of Earth Sciences, brings out publications on varied meteorological topics. Normals of Radiosonde and Radiowind data has been published by the Climate Data Management and Services Group (CDMS), Office of Climate Research and Services (C R & S), IMD Pune since 1979. Four such publications have been published till date. The present publication 'Monthly Normals of Radiosonde and Radiowind (1981-2010) and Monthly Upper Air Windrose Diagrams (2000-2015)' is prepared using 0000 UTC (0530 IST) observation data from 35 Radiosonde and Radiowind (RS/RW) Upper Air stations for the period 1981-2010 and wind profile data of 34 RS/RW stations for the period 2000-2015 at eight different levels (1000, 925, 850, 700, 500, 300, 200, 100 hPa). The wind rose diagrams are prepared using R software after processing the RS/RW data by applying various quality checks. The present publication provides the climatology of different meteorological parameters at various levels over the station **Bhubaneswar** (Latitude 20° 15'N, Longitude 85° 50'E).

The first part of this publication contains wind roses which provide comprehensive wind frequency information from each direction with various ranges of wind speed. Wind rose is a graphical tool prepared in order to summarise the information about wind speed and wind direction for the station. The tables adjoining to each wind rose diagrams contain information of frequency of occurrence of wind speed in percentage at different ranges of wind direction. In wind roses, the most regular structure comprises of a circle from which eight or sixteen lines come out, one for each direction. The length of each line denotes the occurrence of wind from that direction and the occurrence of calm conditions is entered in the centre. The wind rose diagrams prepared in this publication will be an essential source of information to the distribution pattern of wind direction and wind speed over the station. The information generated in this publication regarding wind roses is expected to be useful and have several applications in the fields such as environmental impact assessment, industrial emissions measurements, wind energy, agriculture engineering, ambient air monitoring, air quality measurements, air dispersion modelling, etc.

The second part of the publication contains information related to station normals which comprises of altitude of standard pressure levels (mean, highest and lowest), normal values of upper air temperatures (mean, highest, lowest and dew point), resultant wind direction, resultant wind velocity and scalar wind speed at standard pressure levels. Besides, it also contains normal values of pressure and altitude of freezing level and pressure, altitude and temperature of tropopause.

The entire work of this publication has been done by a group of officers and staff members led by Shri. Sudeep Kumar B L, Scientist- C, Shri Nahush Kulkarni, Scientist- C, CDMS Group, O/o Climate Research & Services (C R & S), IMD Pune under the guidance of Shri. A.D. Tathe, Scientist E, Group Head, CDMS Group. The valuable contributions were made by Shri. G.S. Dhekne, Met. B, Shri.R.M. Walke, Met. A, Shri. S.H. Bhagwat, Met. A, Shri. R.V. Ghoge, Met. A, Smt. Geetha Harikumar, Met. A, Smt. Hasina Nisar, Met. A, Smt. Vaishali Jadhav, Met A, Smt. S.H.Joshi, Met A and S.H. Sangale S.A. towards the preparation of this publication. It is hoped that the information from this publication will be useful to the scientific community and operational activities at their particular stations.

Pune

September 2020

**Dr. D. S. Pai**

Head C R & S

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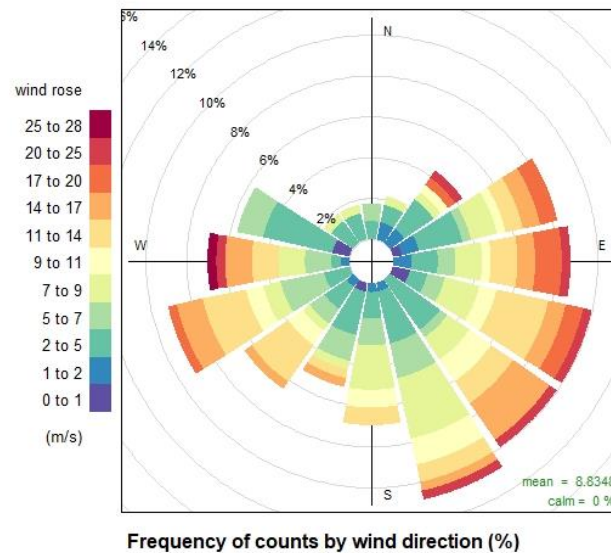
### Description of various terms used in the table (Normals of Radiosonde data)

| SN. | Terms                | Description                                                              |
|-----|----------------------|--------------------------------------------------------------------------|
| 1   | PRESSURE             | Standard Pressure levels in hPa (1000 to 7 hPa)                          |
| 2   | HEIGHT               | Mean altitude of isobaric levels in gpm.                                 |
| 3   | Hmax                 | Highest altitude of monthly mean values in gpm.                          |
| 4   | Hmin                 | Lowest altitude of monthly mean values in gpm.                           |
| 5   | TEMP                 | Mean dry bulb air temperature in °C.                                     |
| 6   | TMAX                 | Highest value of temperature in °C observed at particular isobaric level |
| 7   | TMIN                 | Lowest value of temperature in °C observed at particular isobaric level  |
| 8   | DEWPT                | Mean dew point temperature in °C.                                        |
| 9   | DIR                  | Mean resultant wind direction in degrees .                               |
| 10  | VELO                 | Mean resultant wind velocity in mps (vector mean).                       |
| 11  | U                    | The resolved part of wind velocity in East direction (East component)    |
| 12  | V                    | The resolved part of wind velocity in North direction (North component)  |
| 13  | VM                   | Mean wind speed irrespective of direction in mps (scalar mean).          |
| 14  | P                    | Mean pressure of freezing and tropopause levels in hPa .                 |
| 15  | Height               | Altitude of freezing and tropopause levels in gpm .                      |
| 16  | H_max                | Highest altitude of freezing level of monthly mean values in gpm.        |
| 17  | H_min                | Lowest altitude of freezing level of monthly mean values in gpm .        |
| 18  | SURFACE              | Station level atmospheric pressure in hPa.                               |
| 19  | FIRST<br>TROPOPAUSE  | Tropopause observed at altitude less than 14 Km .                        |
| 20  | SECOND<br>TROPOPAUSE | Tropopause observed at altitude more than 14 Km .                        |

### Description of terms used in the table (Wind rose table)

|   |           |                                    |
|---|-----------|------------------------------------|
| 1 | Speed     | Range of wind velocity in mps      |
| 2 | Direction | Range of wind direction in degrees |

## Interpretation of wind rose diagrams:



A wind rose diagrams at different upper air levels gives a very concise but information-laden view of how wind speed and direction are typically distributed at a particular location and month.

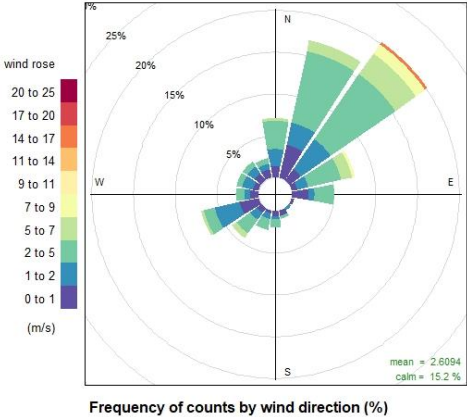
- The diagrams normally comprises of 8, 16 or 32 radiating spokes, which represent wind directions in terms of the cardinal wind directions (North East South West) and their intermediate directions.
- Presented in a circular format, the wind rose shows the frequency of winds blowing FROM particular directions.
- The length of each "spoke" around the circle is related to the frequency of time that the wind blows from a particular direction and each of the spokes are color-coded along their length to indicate the speed of the wind.
- Each concentric circle represents a different frequency, emanating from zero at the centre to increasing frequencies at the outer circles.

The circular format of the wind rose shows the direction the winds blew from and the length of each "spoke" around the circle shows how often the wind blew from that direction.

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January 1000 hPa level

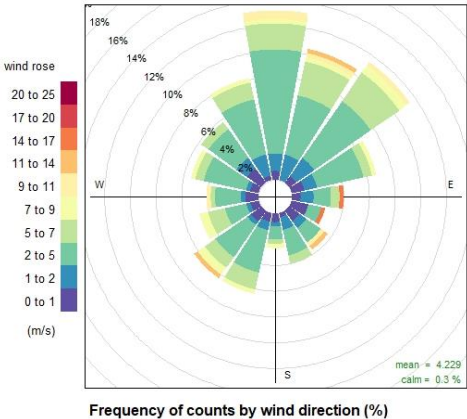
| <div>Speed</div> <div>Direction</div> | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|---------------------------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11                                | 15   | 1.3 | 2   | 3.4 | 0.3 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 12-33                                 |      | 4   | 2.7 | 8.8 | 1.3 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 34-56                                 |      | 1.7 | 4.4 | 9.4 | 3   | 1.3 | 0    | 0     | 0.3   | 0     | 0     | 0    |
| 57-78                                 |      | 0.7 | 1.3 | 4   | 1.3 | 0.3 | 0    | 0     | 0     | 0     | 0     | 0    |
| 79-101                                |      | 2   | 0.7 | 2.4 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 102-123                               |      | 0.3 | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 124-146                               |      | 0   | 0.3 | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 147-168                               |      | 0.7 | 0   | 0.3 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 168-191                               |      | 0.7 | 0.3 | 1   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 192-213                               |      | 0.3 | 0.7 | 1.3 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 214-236                               |      | 0.7 | 1   | 2   | 0.7 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 237-258                               |      | 2.4 | 3   | 1.3 | 0.3 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 259-281                               |      | 1   | 0.7 | 1   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 282-303                               |      | 0.7 | 1.3 | 0.7 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 304-326                               |      | 1   | 1   | 0.7 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 327-348                               |      | 1   | 0.7 | 0.7 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |



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January 925 hPa level

| <div>Speed</div> <div>Direction</div> | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|---------------------------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11                                | 0    | 0.7 | 1.3 | 8.1 | 2   | 0.3 | 0.7  | 0     | 0     | 0     | 0     | 0    |
| 12-33                                 |      | 0   | 2   | 4.7 | 2.7 | 0.3 | 0.3  | 0.3   | 0     | 0     | 0     | 0    |
| 34-56                                 |      | 0.7 | 1.7 | 5.4 | 2.7 | 0.7 | 0.3  | 0     | 0     | 0     | 0     | 0    |
| 57-78                                 |      | 1   | 1   | 3.7 | 0.7 | 0.3 | 0    | 0     | 0     | 0     | 0     | 0    |
| 79-101                                |      | 0.7 | 1   | 1.3 | 0.7 | 0   | 0    | 0     | 0.3   | 0     | 0     | 0    |
| 102-123                               |      | 1.3 | 0   | 1   | 0   | 0   | 0    | 0     | 0.3   | 0     | 0     | 0    |
| 124-146                               |      | 1   | 0.7 | 1.3 | 0   | 0   | 0.3  | 0.3   | 0     | 0     | 0     | 0    |
| 147-168                               |      | 0.3 | 1   | 1.7 | 0.3 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 168-191                               |      | 0.7 | 0.3 | 1.3 | 0.7 | 0.3 | 0    | 0     | 0     | 0     | 0     | 0    |
| 192-213                               |      | 0.7 | 0.7 | 3.4 | 1.3 | 0.3 | 0    | 0     | 0     | 0     | 0     | 0    |
| 214-236                               |      | 1   | 0.3 | 3   | 1   | 0.7 | 0    | 0.3   | 0     | 0     | 0     | 0    |
| 237-258                               |      | 0.7 | 0.3 | 1.7 | 1.3 | 0.7 | 0    | 0     | 0     | 0     | 0     | 0    |
| 259-281                               |      | 1   | 0.3 | 2   | 0.3 | 0   | 0.3  | 0     | 0     | 0     | 0     | 0    |
| 282-303                               |      | 0.7 | 0.3 | 3.4 | 0.7 | 0.3 | 0    | 0     | 0     | 0     | 0     | 0    |
| 304-326                               |      | 1.3 | 1   | 2.7 | 0.7 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 327-348                               |      | 0.3 | 1.7 | 4.4 | 1.3 | 0.3 | 0    | 0     | 0     | 0     | 0     | 0    |

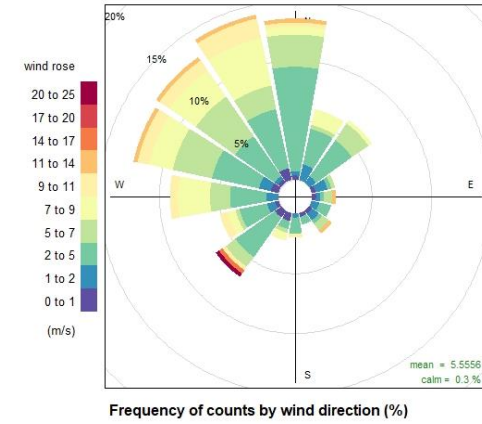


# Bhubaneswar

January

850 hPa level

| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0.3 | 0.3 | 8.8 | 2.7 | 0.7 | 0.3  | 0.3   | 0     | 0     | 0     | 0    |
| 12-33              |      | 0   | 1.3 | 3   | 0.3 | 1.3 | 0    | 0     | 0     | 0     | 0     | 0    |
| 34-56              |      | 0   | 0.7 | 3.7 | 1.7 | 0.3 | 0    | 0     | 0     | 0     | 0     | 0    |
| 57-78              |      | 0.3 | 1   | 0.3 | 0.3 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 79-101             |      | 0.3 | 0.3 | 0.3 | 0.7 | 0   | 0    | 0.3   | 0     | 0     | 0     | 0    |
| 102-123            |      | 0   | 0.7 | 1   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 124-146            |      | 0.3 | 0.7 | 0.3 | 0.7 | 0   | 0    | 0.3   | 0     | 0     | 0     | 0    |
| 147-168            |      | 0.3 | 0   | 0.7 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 168-191            |      | 0   | 0.3 | 1.3 | 0   | 0   | 0.3  | 0     | 0     | 0     | 0     | 0    |
| 192-213            |      | 0.7 | 0   | 0.7 | 0.3 | 0.7 | 0    | 0     | 0     | 0     | 0     | 0    |
| 214-236            |      | 0.7 | 0   | 4   | 1   | 0   | 0.3  | 0     | 0.3   | 0     | 0.3   | 0    |
| 237-258            |      | 0.3 | 0.7 | 2.4 | 0.3 | 0.7 | 0.7  | 0     | 0     | 0     | 0     | 0    |
| 259-281            |      | 0   | 1   | 3   | 1.7 | 2.7 | 0.7  | 0     | 0     | 0     | 0     | 0    |
| 282-303            |      | 0.7 | 1   | 4   | 3.4 | 2   | 1    | 0.3   | 0     | 0     | 0     | 0    |
| 304-326            |      | 0.3 | 0.3 | 4   | 4   | 2.7 | 1    | 0.3   | 0     | 0     | 0     | 0    |
| 327-348            |      | 1   | 0   | 5.1 | 2   | 4   | 1.7  | 0.3   | 0     | 0     | 0     | 0    |

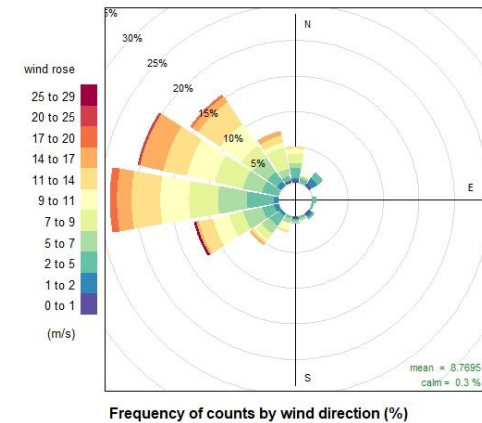


# Bhubaneswar

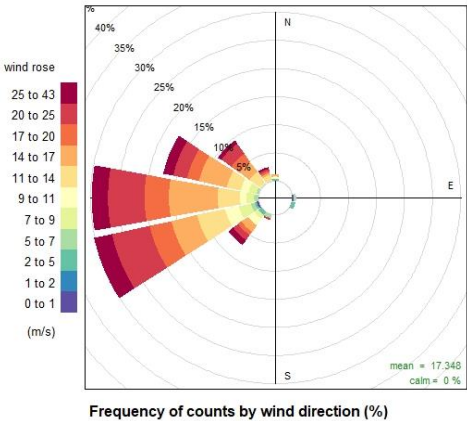
January

700 hPa level

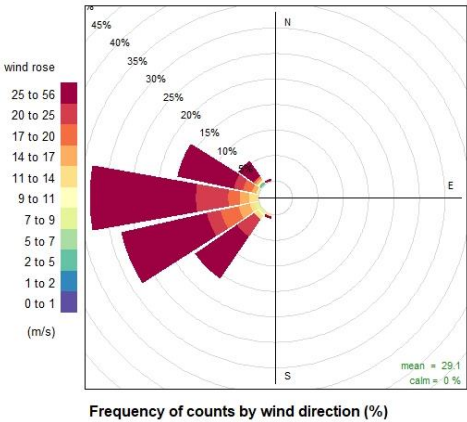
| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0.3 | 0.3 | 1.4 | 0.7 | 1.4 | 0.7  | 0.3   | 0     | 0     | 0     | 0    |
| 12-33              |      | 0   | 0   | 0.7 | 0.3 | 0   | 0.3  | 0     | 0     | 0     | 0     | 0    |
| 34-56              |      | 0.3 | 1   | 1   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 57-78              |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 79-101             |      | 0   | 0   | 0.7 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 102-123            |      | 0   | 0   | 0.3 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 124-146            |      | 0.3 | 0.3 | 0.3 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 147-168            |      | 0   | 0   | 0.3 | 0.3 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 168-191            |      | 0.3 | 0   | 0.3 | 0.3 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 192-213            |      | 0   | 0   | 0.3 | 0.7 | 0   | 1    | 0.3   | 0     | 0     | 0     | 0    |
| 214-236            |      | 0   | 0.3 | 1.7 | 1.4 | 1   | 0.3  | 0.3   | 0.3   | 0     | 0     | 0    |
| 237-258            |      | 0   | 0.7 | 1.7 | 2.7 | 2   | 2.4  | 2     | 0.3   | 0     | 0     | 0.3  |
| 259-281            |      | 0   | 0.7 | 3.7 | 4.1 | 4.1 | 4.1  | 4.1   | 2     | 1     | 0     | 0    |
| 282-303            |      | 0   | 0   | 2.4 | 2.7 | 4.1 | 4.1  | 3.4   | 3.4   | 0     | 0.3   | 0    |
| 304-326            |      | 0   | 0.7 | 1.7 | 2.4 | 2   | 3.7  | 3.7   | 1     | 0.3   | 0     | 0    |
| 327-348            |      | 0.3 | 0   | 0.7 | 1   | 3.1 | 0.7  | 1     | 0.7   | 0     | 0     | 0    |



| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0   | 0   | 0.4 | 0   | 0   | 0.4  | 0     | 0.4   | 0     | 0     | 0    |
| 12-33              |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 34-56              |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 57-78              |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 79-101             |      | 0.4 | 0   | 0   | 0.4 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 102-123            |      | 0   | 0   | 0.7 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 124-146            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 147-168            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 168-191            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 192-213            |      | 0   | 0   | 0   | 0.7 | 0   | 0    | 0     | 0     | 0     | 0.4   | 0    |
| 214-236            |      | 0   | 0   | 0.7 | 0   | 0.7 | 1.4  | 0     | 1.4   | 0.7   | 1.1   | 1.1  |
| 237-258            |      | 0.4 | 0   | 0.4 | 0.7 | 2.2 | 2.5  | 5.1   | 4.7   | 4     | 6.9   | 3.3  |
| 259-281            |      | 0   | 0   | 0   | 0.7 | 1.4 | 1.1  | 4     | 8.7   | 4.3   | 6.5   | 2.9  |
| 282-303            |      | 0   | 0   | 0   | 0.4 | 1.4 | 1.4  | 2.5   | 5.1   | 2.2   | 2.5   | 1.8  |
| 304-326            |      | 0   | 0   | 0   | 0   | 0.4 | 0    | 2.2   | 2.2   | 1.8   | 2.2   | 0.7  |
| 327-348            |      | 0   | 0   | 0   | 0   | 0   | 0    | 1.1   | 0.4   | 0.4   | 0.4   | 0.4  |



| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 12-33              |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 34-56              |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 57-78              |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 79-101             |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 102-123            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 124-146            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 147-168            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 168-191            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 192-213            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0.5   | 0     | 0     | 0     | 0.5  |
| 214-236            |      | 0   | 0   | 0   | 0   | 0.5 | 0.5  | 0.9   | 0     | 0     | 4.1   | 10   |
| 237-258            |      | 0   | 0   | 0   | 0   | 0.9 | 0    | 0.9   | 2.3   | 3.6   | 2.7   | 17.3 |
| 259-281            |      | 0   | 0   | 0   | 0   | 0   | 0    | 1.8   | 1.8   | 2.3   | 6.4   | 20.9 |
| 282-303            |      | 0   | 0   | 0   | 0   | 0.5 | 0    | 0     | 0.9   | 1.8   | 1.8   | 11.4 |
| 304-326            |      | 0   | 0   | 0.5 | 0   | 0   | 0.5  | 0     | 0.5   | 0.5   | 0     | 3.6  |
| 327-348            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0.5  |

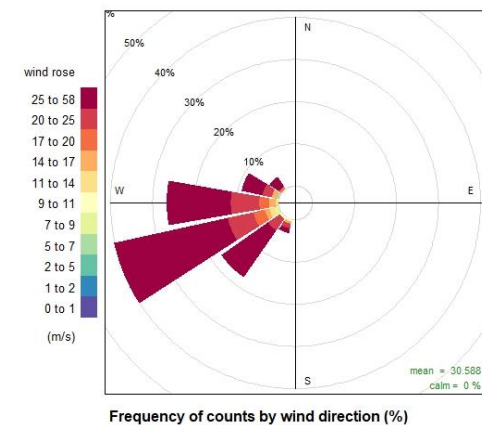


# Bhubaneswar

January

200 hPa level

| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 12-33              |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 34-56              |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 57-78              |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 79-101             |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 102-123            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 124-146            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 147-168            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 168-191            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 192-213            |      | 0   | 0   | 0   | 0   | 0   | 0.6  | 0     | 0.6   | 0     | 1.1   | 1.1  |
| 214-236            |      | 0   | 0   | 0   | 0   | 0   | 0.6  | 0     | 0     | 0     | 3.4   | 13.6 |
| 237-258            |      | 0   | 0   | 0   | 0   | 1.1 | 0    | 1.1   | 1.1   | 2.8   | 6.2   | 27.7 |
| 259-281            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0.6   | 1.7   | 2.3   | 6.8   | 15.3 |
| 282-303            |      | 0   | 0   | 0   | 0.6 | 0   | 0    | 0     | 1.1   | 0     | 2.3   | 5.1  |
| 304-326            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0.6   | 0     | 2.8  |
| 327-348            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |

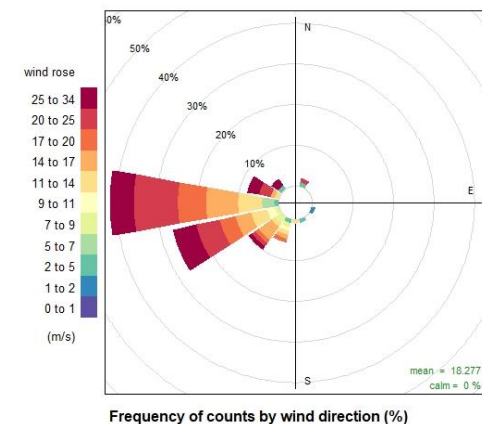


# Bhubaneswar

January

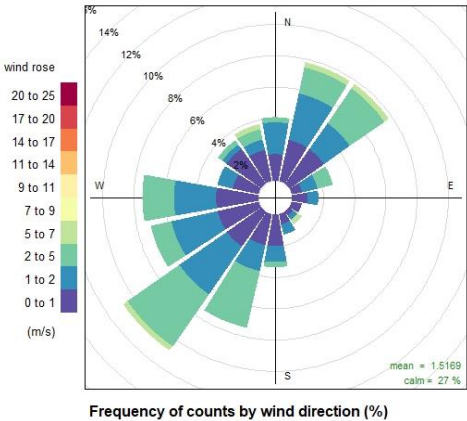
100 hPa level

| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 12-33              |      | 0   | 0   | 1   | 0   | 0   | 0    | 0     | 0     | 0     | 1     | 0    |
| 34-56              |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 57-78              |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 79-101             |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 102-123            |      | 0   | 1   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 124-146            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 147-168            |      | 0   | 0   | 1   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 168-191            |      | 0   | 0   | 0   | 0   | 0   | 0    | 1     | 0     | 0     | 0     | 0    |
| 192-213            |      | 0   | 0   | 1   | 0   | 1   | 1    | 1     | 1     | 1     | 0     | 0    |
| 214-236            |      | 0   | 0   | 0   | 0   | 2   | 0    | 1     | 4     | 1     | 1     | 1    |
| 237-258            |      | 0   | 0   | 0   | 0   | 1   | 2    | 4     | 4     | 4     | 5.9   | 5.9  |
| 259-281            |      | 0   | 0   | 1   | 3   | 0   | 0    | 5.9   | 7.9   | 6.9   | 10.9  | 5.9  |
| 282-303            |      | 0   | 0   | 0   | 0   | 0   | 0    | 1     | 1     | 0     | 3     | 3    |
| 304-326            |      | 0   | 0   | 1   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 2    |
| 327-348            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |

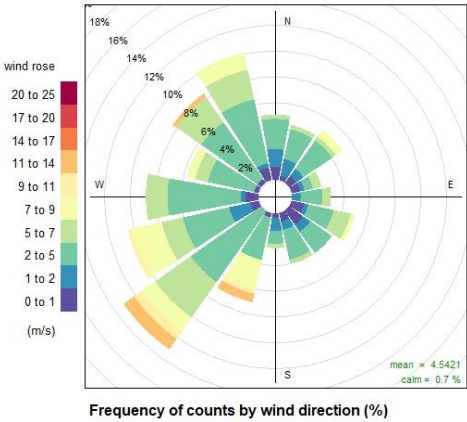




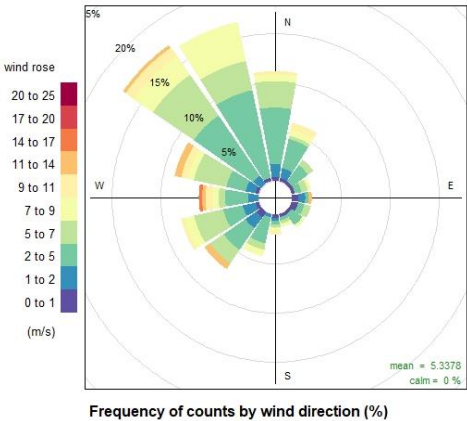
| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 27   | 1.7 | 2   | 0.3 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 12-33              |      | 2.7 | 3   | 1.7 | 0.3 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 34-56              |      | 2.7 | 2   | 2.7 | 0.3 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 57-78              |      | 0.7 | 1   | 1   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 79-101             |      | 1   | 0.7 | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 102-123            |      | 0.7 | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 124-146            |      | 0.3 | 0.3 | 0   | 0.3 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 147-168            |      | 0.7 | 0.7 | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 168-191            |      | 2   | 1   | 0.3 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 192-213            |      | 2   | 1.7 | 3.7 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 214-236            |      | 2.7 | 3.7 | 4.1 | 0.3 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 237-258            |      | 2.7 | 3   | 1.4 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 259-281            |      | 2.7 | 2.7 | 2   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 282-303            |      | 1.7 | 1   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 304-326            |      | 2.7 | 0.3 | 0.3 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 327-348            |      | 2   | 0.7 | 0.7 | 0.3 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |



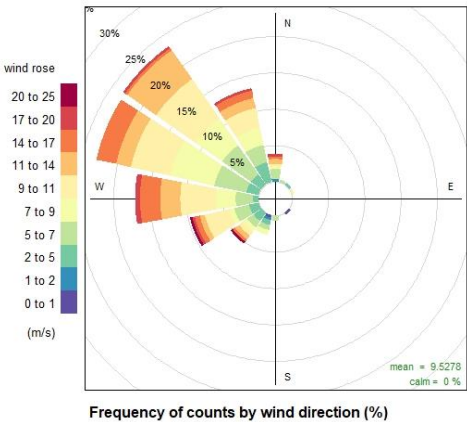
| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 1   | 1.3 | 2.4 | 0.3 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 12-33              |      | 0.3 | 1.3 | 2.4 | 0.3 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 34-56              |      | 0.7 | 0.7 | 2.7 | 0.3 | 0.7 | 0    | 0     | 0     | 0     | 0     | 0    |
| 57-78              |      | 0.7 | 0.3 | 0.7 | 0.7 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 79-101             |      | 0   | 0.7 | 1.7 | 0.7 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 102-123            |      | 1   | 0.3 | 2   | 1.3 | 0.3 | 0    | 0     | 0     | 0     | 0     | 0    |
| 124-146            |      | 1.3 | 0.7 | 2   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 147-168            |      | 0.7 | 0.7 | 2   | 0.3 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 168-191            |      | 0.3 | 1   | 1.3 | 0.3 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 192-213            |      | 0.3 | 0   | 3.4 | 0   | 2.4 | 0.3  | 0.7   | 0     | 0     | 0     | 0    |
| 214-236            |      | 0   | 0   | 6.7 | 3.4 | 1.3 | 0.7  | 1     | 0     | 0     | 0     | 0    |
| 237-258            |      | 0.7 | 1.7 | 3.7 | 1.7 | 2.4 | 0.3  | 0     | 0     | 0     | 0     | 0    |
| 259-281            |      | 1   | 0.3 | 5.7 | 1.7 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 282-303            |      | 0.3 | 0   | 3.7 | 1   | 0.7 | 0    | 0     | 0     | 0     | 0     | 0    |
| 304-326            |      | 0.3 | 0   | 5.4 | 2.4 | 0   | 0    | 0.3   | 0     | 0     | 0     | 0    |
| 327-348            |      | 1   | 0.3 | 5.1 | 2.4 | 1.3 | 0    | 0     | 0     | 0     | 0     | 0    |



| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0.3 | 1.4 | 5.7 | 2.7 | 0.7 | 0.3  | 0     | 0     | 0     | 0     | 0    |
| 12-33              |      | 0.3 | 1   | 3   | 0.3 | 0.7 | 0.7  | 0     | 0     | 0     | 0     | 0    |
| 34-56              |      | 0.3 | 0   | 2   | 0.7 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 57-78              |      | 0.3 | 0   | 0.7 | 0.7 | 0.3 | 0    | 0     | 0     | 0     | 0     | 0    |
| 79-101             |      | 0.7 | 0.7 | 0.3 | 0   | 0   | 0    | 0.3   | 0     | 0     | 0     | 0    |
| 102-123            |      | 0.7 | 0   | 0.7 | 0.7 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 124-146            |      | 0.3 | 0   | 1.4 | 0   | 0.3 | 0    | 0     | 0     | 0     | 0     | 0    |
| 147-168            |      | 0.3 | 0   | 0.3 | 0.3 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 168-191            |      | 0.3 | 0.3 | 0.3 | 0.3 | 0.7 | 0.3  | 0     | 0     | 0     | 0     | 0    |
| 192-213            |      | 0   | 0.3 | 2.7 | 0.7 | 0.7 | 0    | 0     | 0     | 0     | 0     | 0    |
| 214-236            |      | 0.7 | 1.4 | 2.7 | 1.7 | 0   | 0    | 0.7   | 0     | 0     | 0     | 0    |
| 237-258            |      | 0.3 | 1.4 | 2   | 3   | 1   | 0.3  | 0     | 0     | 0     | 0     | 0    |
| 259-281            |      | 0   | 1   | 2.4 | 0.7 | 0.7 | 0.7  | 0.3   | 0.3   | 0     | 0     | 0    |
| 282-303            |      | 0.3 | 1   | 2   | 3.4 | 0.7 | 0.7  | 0.7   | 0     | 0     | 0     | 0    |
| 304-326            |      | 0   | 1   | 7.4 | 5.1 | 2.4 | 1    | 0.3   | 0     | 0     | 0     | 0    |
| 327-348            |      | 0.3 | 0   | 9.1 | 3   | 4.1 | 0    | 0     | 0     | 0     | 0     | 0    |



| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0   | 0.3 | 0   | 1.4 | 0.3 | 0.3  | 0.7   | 0.3   | 0.3   | 0     | 0    |
| 12-33              |      | 0   | 0   | 0   | 0.3 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 34-56              |      | 0   | 0   | 0.3 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 57-78              |      | 0   | 0   | 0   | 0   | 0   | 0.3  | 0     | 0     | 0     | 0     | 0    |
| 79-101             |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 102-123            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 124-146            |      | 0.3 | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 147-168            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 168-191            |      | 0   | 0   | 0   | 0.7 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 192-213            |      | 0.3 | 0.3 | 0.7 | 0.7 | 0.7 | 0    | 0     | 0     | 0     | 0     | 0    |
| 214-236            |      | 0   | 0   | 1.4 | 1   | 0.7 | 0.7  | 0.7   | 0.3   | 0     | 0.3   | 0    |
| 237-258            |      | 0   | 0   | 1.4 | 2.1 | 0.7 | 3.5  | 0.7   | 0.7   | 0.3   | 0.3   | 0    |
| 259-281            |      | 0   | 0   | 0.7 | 2.4 | 2.8 | 4.9  | 2.8   | 2.8   | 0.7   | 0     | 0    |
| 282-303            |      | 0   | 0   | 1.7 | 4.5 | 6.2 | 5.6  | 2.1   | 2.8   | 0     | 0     | 0    |
| 304-326            |      | 0   | 0   | 1.7 | 4.9 | 4.5 | 6.6  | 4.9   | 0.3   | 0.3   | 0     | 0    |
| 327-348            |      | 0   | 0   | 2.8 | 2.4 | 2.4 | 2.8  | 1.4   | 1     | 0.3   | 0     | 0    |

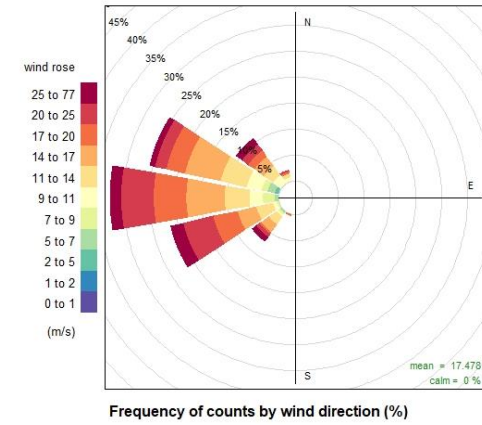


# Bhubaneswar

February

500 hPa level

| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 12-33              |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 34-56              |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 57-78              |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 79-101             |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 102-123            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 124-146            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 147-168            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 168-191            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 192-213            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0.4   | 0     | 0    |
| 214-236            |      | 0   | 0   | 0   | 0.4 | 0.4 | 0.4  | 1.9   | 1.9   | 0.4   | 0.7   | 1.1  |
| 237-258            |      | 0   | 0   | 0   | 0   | 0.4 | 0.7  | 3.3   | 3.7   | 4.8   | 5.9   | 2.6  |
| 259-281            |      | 0   | 0   | 0   | 0.7 | 2.2 | 2.6  | 4.8   | 7.4   | 6.3   | 6.3   | 2.2  |
| 282-303            |      | 0   | 0   | 0.7 | 1.5 | 1.1 | 3    | 5.2   | 7     | 3.7   | 2.2   | 1.1  |
| 304-326            |      | 0   | 0   | 0   | 0   | 0   | 1.9  | 2.2   | 2.2   | 1.5   | 1.5   | 1.5  |
| 327-348            |      | 0   | 0   | 0   | 0   | 0   | 0.7  | 0.7   | 0     | 0.4   | 0.4   | 0    |

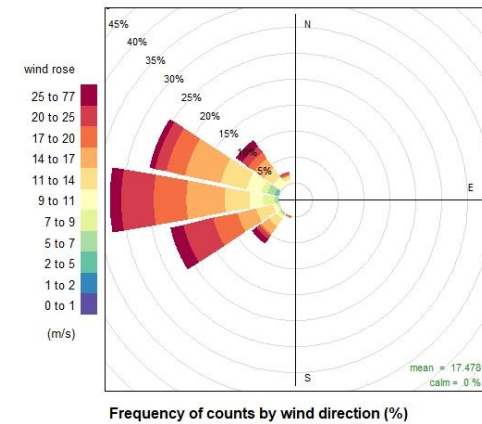


# Bhubaneswar

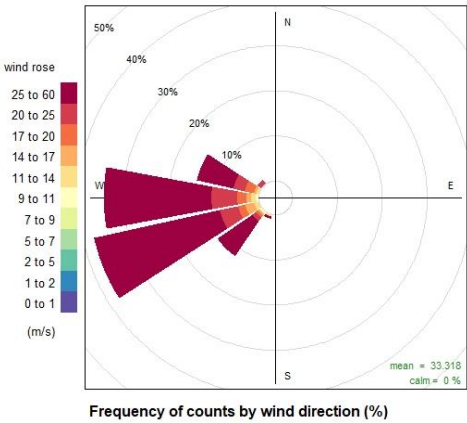
February

300 hPa level

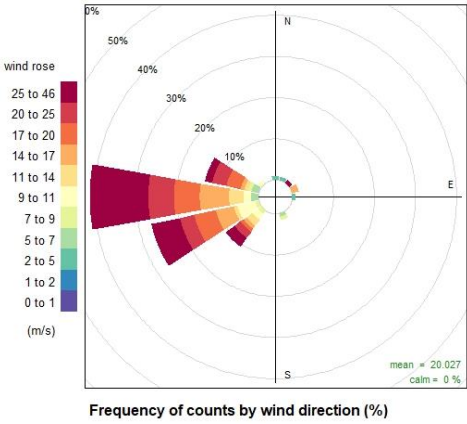
| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0.4   | 0     | 0     | 0    |
| 12-33              |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 34-56              |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 57-78              |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 79-101             |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 102-123            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 124-146            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 147-168            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 168-191            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 192-213            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 214-236            |      | 0   | 0   | 0   | 0   | 0   | 0.4  | 0     | 0     | 0.9   | 0.4   | 8.2  |
| 237-258            |      | 0   | 0   | 0   | 0.4 | 0   | 0.4  | 1.7   | 0.4   | 1.3   | 5.2   | 20.3 |
| 259-281            |      | 0   | 0   | 0   | 0   | 0   | 0.4  | 0.4   | 1.3   | 3.9   | 8.2   | 22.8 |
| 282-303            |      | 0   | 0   | 0   | 0   | 0.9 | 0    | 0.4   | 0.4   | 3.4   | 2.6   | 12.1 |
| 304-326            |      | 0   | 0   | 0   | 0   | 0   | 0.4  | 0     | 0     | 0     | 0.9   | 1.7  |
| 327-348            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |



| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 12-33              |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 34-56              |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 57-78              |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 79-101             |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 102-123            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 124-146            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 147-168            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 168-191            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 192-213            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0.5   | 0     | 0     | 0     | 0.5  |
| 214-236            |      | 0   | 0   | 0   | 0   | 0   | 0.5  | 0     | 0.5   | 0.5   | 1     | 9.4  |
| 237-258            |      | 0   | 0   | 0   | 0   | 0   | 0    | 1     | 2.1   | 1.6   | 4.2   | 28.6 |
| 259-281            |      | 0   | 0   | 0   | 0   | 0   | 0.5  | 1     | 1     | 2.1   | 5.7   | 24   |
| 282-303            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0.5   | 0.5   | 2.1   | 2.6   | 8.3  |
| 304-326            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 1     | 0    |
| 327-348            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |



| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0   | 0   | 0.9 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 12-33              |      | 0   | 0   | 0.9 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 34-56              |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0.9  |
| 57-78              |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 1.8   | 0     | 0     | 0    |
| 79-101             |      | 0   | 0   | 0.9 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 102-123            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 124-146            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 147-168            |      | 0   | 0   | 0   | 0.9 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 168-191            |      | 0   | 0   | 0   | 0   | 0.9 | 0    | 0     | 0     | 0     | 0     | 0    |
| 192-213            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 214-236            |      | 0   | 0   | 0   | 0   | 0.9 | 1.8  | 1.8   | 0.9   | 0.9   | 1.8   | 2.7  |
| 237-258            |      | 0   | 0   | 0   | 0   | 0.9 | 4.5  | 0.9   | 4.5   | 5.4   | 3.6   | 7.1  |
| 259-281            |      | 0   | 0   | 0   | 1.8 | 0   | 1.8  | 3.6   | 7.1   | 6.2   | 6.2   | 14.3 |
| 282-303            |      | 0   | 0   | 0   | 1.8 | 0.9 | 0    | 0.9   | 0.9   | 3.6   | 3.6   | 1.8  |
| 304-326            |      | 0   | 0   | 0   | 0   | 0   | 0.9  | 0     | 0     | 0     | 0     | 0    |
| 327-348            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |

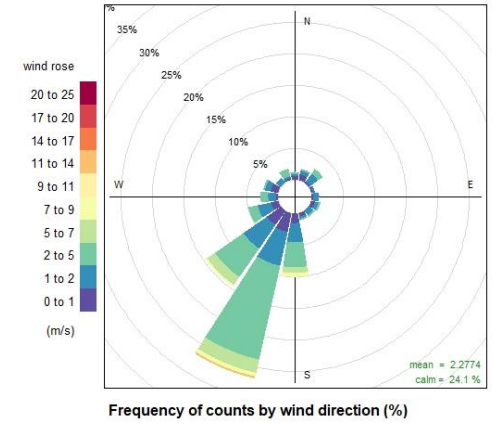


# Bhubaneswar

March

1000 hPa level

| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5  | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|------|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 24   | 0.6 | 0.3 | 0.3  | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 12-33              |      | 0.9 | 0.6 | 0.3  | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 34-56              |      | 0.3 | 1.5 | 0.9  | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 57-78              |      | 0.3 | 0.3 | 0    | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 79-101             |      | 0.3 | 0.9 | 0    | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 102-123            |      | 0.6 | 0.6 | 0.3  | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 124-146            |      | 0   | 0.9 | 0.3  | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 147-168            |      | 0.6 | 0.3 | 0.3  | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 168-191            |      | 1.5 | 3   | 4    | 0.9 | 0.6 | 0    | 0     | 0     | 0     | 0     | 0    |
| 192-213            |      | 3   | 5.5 | 15.2 | 2.1 | 0.6 | 0    | 0.3   | 0     | 0     | 0     | 0    |
| 214-236            |      | 2.7 | 4.6 | 5.5  | 1.5 | 0.3 | 0    | 0     | 0     | 0     | 0     | 0    |
| 237-258            |      | 1.2 | 2.1 | 1.5  | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 259-281            |      | 0.3 | 1.2 | 1.2  | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 282-303            |      | 1.2 | 0.9 | 0.3  | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 304-326            |      | 0   | 0.9 | 0    | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 327-348            |      | 0.3 | 0.3 | 1.2  | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |

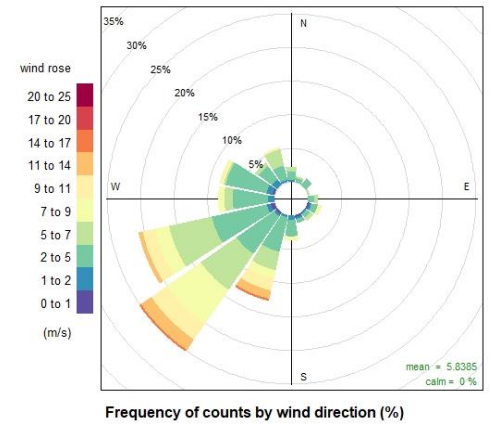


# Bhubaneswar

March

925 hPa level

| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0   | 0.3 | 1.2 | 0.6 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 12-33              |      | 0   | 0   | 0.6 | 0.3 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 34-56              |      | 0   | 0   | 1.2 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 57-78              |      | 0   | 0   | 0   | 0.3 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 79-101             |      | 0   | 0   | 0.9 | 0.6 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 102-123            |      | 0.3 | 0.3 | 0.9 | 0   | 0.3 | 0.3  | 0     | 0     | 0     | 0     | 0    |
| 124-146            |      | 0   | 0.3 | 0.6 | 0.6 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 147-168            |      | 0.3 | 0.3 | 0.6 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 168-191            |      | 0   | 0.6 | 2.5 | 0   | 0.6 | 0    | 0     | 0     | 0     | 0     | 0    |
| 192-213            |      | 0   | 0.3 | 5.3 | 2.8 | 1.2 | 1.9  | 1.2   | 0.3   | 0     | 0     | 0    |
| 214-236            |      | 0.3 | 0.3 | 6.8 | 6.5 | 6.2 | 2.8  | 1.9   | 0.3   | 0     | 0     | 0    |
| 237-258            |      | 0.6 | 0.6 | 8.4 | 6.5 | 2.2 | 1.9  | 0.6   | 0     | 0     | 0     | 0    |
| 259-281            |      | 0   | 0.9 | 5.3 | 1.2 | 0.9 | 0    | 0     | 0     | 0     | 0     | 0    |
| 282-303            |      | 0.3 | 0.9 | 6.2 | 0.3 | 0.3 | 0.3  | 0     | 0     | 0     | 0     | 0    |
| 304-326            |      | 0   | 0.9 | 2.5 | 0.6 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 327-348            |      | 0   | 0.3 | 2.2 | 2.5 | 0   | 0.3  | 0     | 0     | 0     | 0     | 0    |

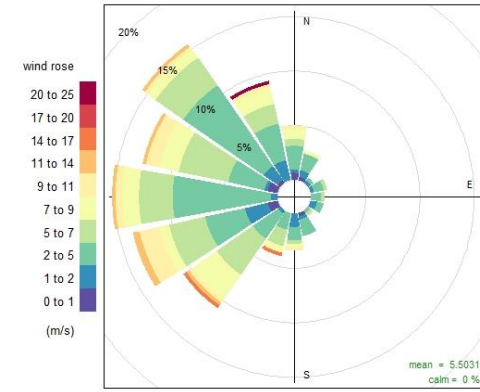


# Bhubaneswar

March

850 hPa level

| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0.6 | 0.3 | 2.2 | 0.6 | 0.9 | 0.3  | 0     | 0     | 0     | 0     | 0    |
| 12-33              |      | 0.3 | 0.6 | 1.6 | 0   | 0.3 | 0    | 0     | 0     | 0     | 0     | 0    |
| 34-56              |      | 0   | 0.3 | 0.3 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 57-78              |      | 0   | 0.3 | 0.9 | 0.3 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 79-101             |      | 0   | 0   | 0.9 | 0.3 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 102-123            |      | 0   | 0.6 | 0.6 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 124-146            |      | 0   | 0   | 0.3 | 0.3 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 147-168            |      | 0.3 | 0.3 | 1.6 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 168-191            |      | 0   | 1.2 | 1.2 | 0.3 | 0.3 | 0.3  | 0     | 0     | 0     | 0     | 0    |
| 192-213            |      | 0   | 0   | 1.6 | 1.6 | 0.6 | 0    | 0     | 0.3   | 0     | 0     | 0    |
| 214-236            |      | 0   | 0.3 | 2.8 | 4   | 2.8 | 0.3  | 0.3   | 0.3   | 0     | 0     | 0    |
| 237-258            |      | 0.9 | 2.2 | 3.7 | 3.4 | 0.9 | 1.9  | 0.6   | 0     | 0     | 0     | 0    |
| 259-281            |      | 0   | 0.6 | 9   | 3.1 | 1.6 | 0.6  | 0.3   | 0     | 0     | 0     | 0    |
| 282-303            |      | 0.9 | 0.3 | 3.4 | 4.7 | 1.9 | 1.2  | 0.3   | 0     | 0     | 0     | 0    |
| 304-326            |      | 0.3 | 1.6 | 9   | 3.1 | 0.9 | 0.3  | 0.3   | 0     | 0     | 0     | 0    |
| 327-348            |      | 0   | 1.9 | 3.4 | 1.9 | 1.6 | 0.3  | 0     | 0     | 0     | 0.3   | 0    |



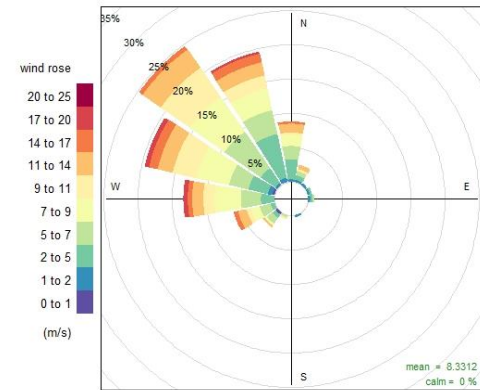
Frequency of counts by wind direction (%)

# Bhubaneswar

March

700 hPa level

| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0   | 0.3 | 2.9 | 1.9 | 1.6 | 0.3  | 1.3   | 0.3   | 0     | 0     | 0    |
| 12-33              |      | 0   | 0.3 | 0.6 | 0.6 | 0   | 0.3  | 0.6   | 0     | 0     | 0     | 0    |
| 34-56              |      | 0   | 0.3 | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 57-78              |      | 0   | 0.3 | 0.3 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 79-101             |      | 0   | 0.3 | 0.3 | 0.3 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 102-123            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 124-146            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 147-168            |      | 0   | 0.3 | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 168-191            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 192-213            |      | 0   | 0   | 0   | 0.3 | 0   | 0.3  | 0     | 0     | 0     | 0     | 0    |
| 214-236            |      | 0.3 | 0   | 0.6 | 1   | 0.3 | 0    | 0.3   | 0     | 0     | 0     | 0    |
| 237-258            |      | 0   | 0   | 0.6 | 1.6 | 1.3 | 0.6  | 1.3   | 0.6   | 0     | 0     | 0    |
| 259-281            |      | 0   | 0   | 1.9 | 2.9 | 3.9 | 1.6  | 1.6   | 0.6   | 0.6   | 0     | 0    |
| 282-303            |      | 0.3 | 0.6 | 2.9 | 2.9 | 4.9 | 3.6  | 2.3   | 1.3   | 0.6   | 0     | 0    |
| 304-326            |      | 0   | 0.3 | 2.6 | 6.5 | 6.2 | 5.2  | 3.2   | 0.6   | 0     | 0     | 0    |
| 327-348            |      | 0   | 0.6 | 6.5 | 3.6 | 3.2 | 1.9  | 1.9   | 1.3   | 0.3   | 0     | 0    |



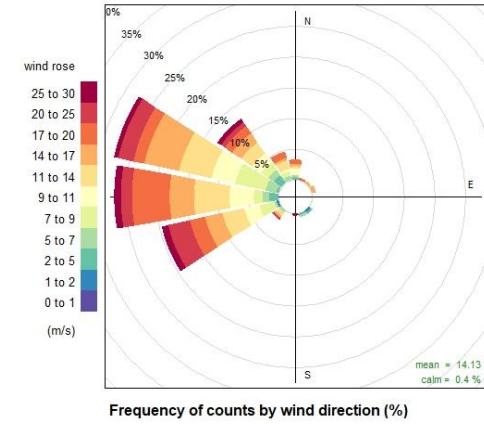
Frequency of counts by wind direction (%)

# Bhubaneswar

March

500 hPa level

| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0   | 0   | 0.4 | 0.4 | 0   | 1.1  | 0.4   | 0.4   | 0.7   | 0     | 0    |
| 12-33              |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0.4   | 0     | 0    |
| 34-56              |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0.4   | 0     | 0     | 0    |
| 57-78              |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0.7   | 0     | 0     | 0    |
| 79-101             |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 102-123            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 124-146            |      | 0   | 0.4 | 0.4 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 147-168            |      | 0   | 0   | 0.4 | 0.4 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 168-191            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0.4  |
| 192-213            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 214-236            |      | 0   | 0   | 0   | 0.4 | 0   | 0    | 0.7   | 0.4   | 0     | 0.4   | 0    |
| 237-258            |      | 0   | 0.4 | 0   | 0.4 | 2.5 | 2.5  | 3.6   | 2.9   | 2.5   | 3.6   | 1.1  |
| 259-281            |      | 0   | 0   | 1.4 | 1.1 | 1.4 | 4    | 5.8   | 4     | 6.2   | 1.8   | 1.1  |
| 282-303            |      | 0   | 0   | 0.4 | 1.8 | 5.1 | 4    | 5.4   | 5.8   | 1.8   | 2.5   | 0.7  |
| 304-326            |      | 0   | 0   | 1.4 | 1.1 | 1.4 | 1.8  | 2.2   | 1.8   | 1.4   | 0.7   | 0.7  |
| 327-348            |      | 0   | 0   | 0   | 0.7 | 0.7 | 0.4  | 1.4   | 0.4   | 1.1   | 0     | 0    |

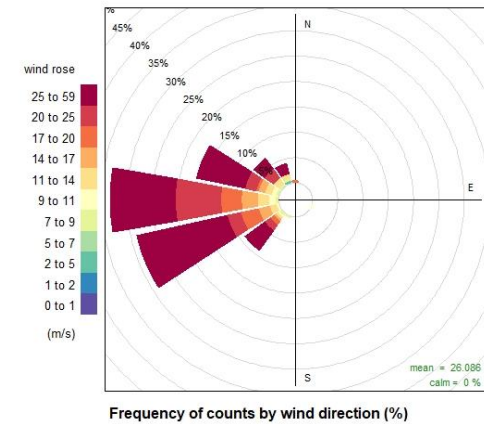


# Bhubaneswar

March

300 hPa level

| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0.5   | 0     | 0    |
| 12-33              |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 34-56              |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 57-78              |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 79-101             |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 102-123            |      | 0   | 0   | 0   | 0   | 0   | 0.5  | 0     | 0     | 0     | 0     | 0    |
| 124-146            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 147-168            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 168-191            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 192-213            |      | 0   | 0   | 0   | 0   | 0.5 | 0    | 0     | 0     | 0     | 0     | 0    |
| 214-236            |      | 0   | 0   | 0   | 0   | 0.5 | 0.5  | 0.5   | 0.5   | 0.9   | 1.4   | 5    |
| 237-258            |      | 0   | 0   | 0   | 0   | 0   | 0.5  | 1.4   | 2.3   | 3.6   | 2.7   | 18.5 |
| 259-281            |      | 0   | 0   | 0   | 0   | 0.5 | 1.4  | 2.3   | 3.2   | 4.1   | 9     | 13.1 |
| 282-303            |      | 0   | 0   | 0   | 0   | 0.5 | 0.9  | 1.4   | 1.4   | 0.5   | 2.3   | 9.9  |
| 304-326            |      | 0   | 0   | 0   | 0   | 0.5 | 0    | 1.4   | 0     | 0     | 2.3   | 2.7  |
| 327-348            |      | 0   | 0   | 0.5 | 0   | 0.5 | 0    | 0.9   | 0     | 0     | 0     | 2.3  |



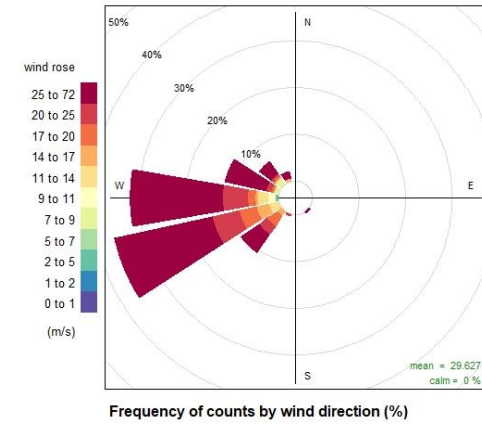


# Bhubaneswar

March

200 hPa level

| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 12-33              |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 34-56              |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 57-78              |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 79-101             |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 102-123            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 124-146            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0.5  |
| 147-168            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 168-191            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 192-213            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0.5   | 0    |
| 214-236            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 1.1   | 2.7   | 2.2   | 4.9  |
| 237-258            |      | 0   | 0   | 0   | 0   | 0   | 0    | 2.2   | 2.7   | 3.8   | 5.9   | 21.6 |
| 259-281            |      | 0   | 0   | 0.5 | 0   | 0   | 1.6  | 2.2   | 0.5   | 1.6   | 5.4   | 20   |
| 282-303            |      | 0   | 0   | 0   | 0   | 0.5 | 0    | 0.5   | 0     | 0.5   | 1.1   | 9.2  |
| 304-326            |      | 0   | 0   | 0   | 0   | 1.1 | 0    | 0.5   | 0     | 0.5   | 0.5   | 3.2  |
| 327-348            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0.5   | 0     | 0     | 1.6  |

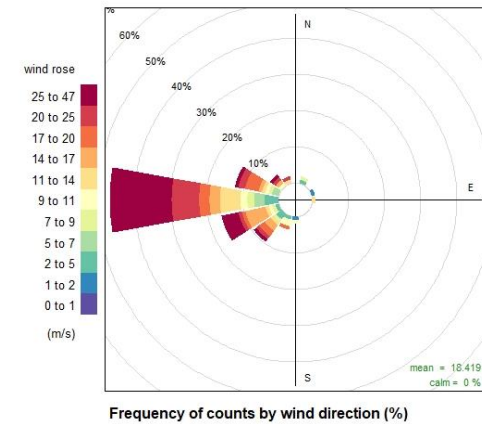


# Bhubaneswar

March

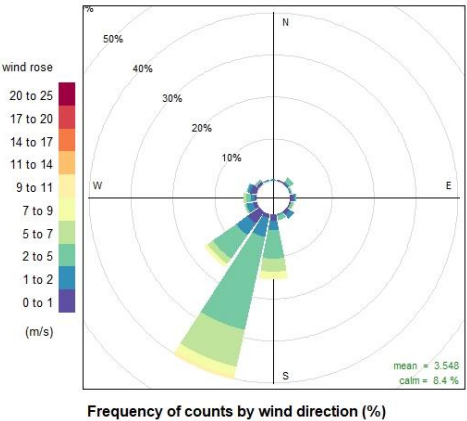
100 hPa level

| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 12-33              |      | 0   | 0   | 1   | 0   | 1   | 0    | 0     | 0     | 0     | 0     | 0    |
| 34-56              |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 57-78              |      | 0   | 1   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 79-101             |      | 0   | 0   | 0   | 0   | 0   | 0    | 1     | 0     | 0     | 0     | 0    |
| 102-123            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 124-146            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 147-168            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 168-191            |      | 0   | 1   | 0   | 0   | 0   | 1    | 0     | 0     | 0     | 0     | 0    |
| 192-213            |      | 0   | 0   | 1   | 0   | 0   | 1.9  | 0     | 0     | 1     | 0     | 0    |
| 214-236            |      | 0   | 0   | 1.9 | 0   | 1   | 0    | 1     | 1.9   | 1.9   | 1     | 1    |
| 237-258            |      | 0   | 0   | 1   | 0   | 1   | 1    | 1     | 5.7   | 1     | 1     | 4.8  |
| 259-281            |      | 0   | 0   | 3.8 | 2.9 | 1.9 | 1.9  | 5.7   | 2.9   | 2.9   | 7.6   | 17.1 |
| 282-303            |      | 0   | 0   | 0   | 1.9 | 1   | 1    | 1     | 1     | 3.8   | 1.9   | 1    |
| 304-326            |      | 0   | 0   | 0   | 0   | 0   | 1    | 0     | 1     | 0     | 1     | 1    |
| 327-348            |      | 0   | 0   | 0   | 0   | 0   | 0    | 1     | 0     | 0     | 1     | 0    |

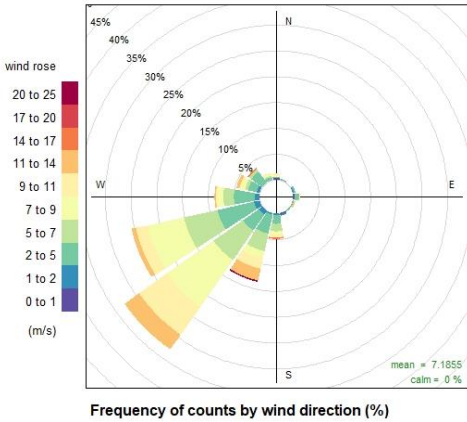




| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5  | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|------|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 8    | 0   | 0.3 | 0    | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 12-33              |      | 0.3 | 0   | 0    | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 34-56              |      | 0.3 | 0.3 | 1.2  | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 57-78              |      | 0   | 0.3 | 0.3  | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 79-101             |      | 0.9 | 0.3 | 0.3  | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 102-123            |      | 0.3 | 0   | 0.6  | 0.3 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 124-146            |      | 0.9 | 1.2 | 0    | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 147-168            |      | 0   | 0   | 0.9  | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 168-191            |      | 1.5 | 2.5 | 7.1  | 3.1 | 1.9 | 0    | 0     | 0     | 0     | 0     | 0    |
| 192-213            |      | 0.9 | 4.6 | 22.6 | 9   | 2.2 | 0.9  | 0     | 0     | 0     | 0     | 0    |
| 214-236            |      | 3.4 | 3.4 | 6.8  | 1.5 | 0.9 | 0    | 0     | 0     | 0     | 0     | 0    |
| 237-258            |      | 0.9 | 1.5 | 0.3  | 0.3 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 259-281            |      | 0.3 | 0.9 | 1.2  | 0.6 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 282-303            |      | 1.5 | 0.6 | 0.3  | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 304-326            |      | 0.6 | 0   | 0.6  | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 327-348            |      | 0   | 0.3 | 0    | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |



| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0.3 | 0   | 0.3 | 0   | 0.3 | 0.3  | 0     | 0     | 0     | 0     | 0    |
| 12-33              |      | 0   | 0   | 0.3 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 34-56              |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 57-78              |      | 0   | 0.3 | 0.3 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 79-101             |      | 0.3 | 0   | 0.9 | 0   | 0.3 | 0    | 0     | 0     | 0     | 0     | 0    |
| 102-123            |      | 0   | 0   | 0.3 | 0   | 0   | 0    | 0.3   | 0     | 0     | 0     | 0    |
| 124-146            |      | 0   | 0   | 0.3 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 147-168            |      | 0.3 | 0.3 | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 168-191            |      | 0   | 0.3 | 1.7 | 1.4 | 0.6 | 0.6  | 0     | 0.3   | 0     | 0     | 0    |
| 192-213            |      | 0   | 0.3 | 3.8 | 3.5 | 1.4 | 2    | 2.3   | 0     | 0     | 0.3   | 0    |
| 214-236            |      | 0   | 0.9 | 3.8 | 7   | 11  | 6.7  | 3.5   | 0     | 0     | 0     | 0    |
| 237-258            |      | 0   | 1.2 | 7.2 | 6.7 | 7.2 | 2.3  | 0.9   | 0     | 0     | 0     | 0    |
| 259-281            |      | 0   | 0.9 | 4.1 | 2   | 1.2 | 0.3  | 0.3   | 0     | 0     | 0     | 0    |
| 282-303            |      | 0   | 0.6 | 1.7 | 0.6 | 0.9 | 0.3  | 0.6   | 0     | 0     | 0     | 0    |
| 304-326            |      | 0   | 0   | 2.6 | 0.6 | 0   | 0    | 0     | 0.3   | 0     | 0     | 0    |
| 327-348            |      | 0   | 0   | 0.6 | 0.3 | 0.3 | 0.3  | 0     | 0     | 0     | 0     | 0    |

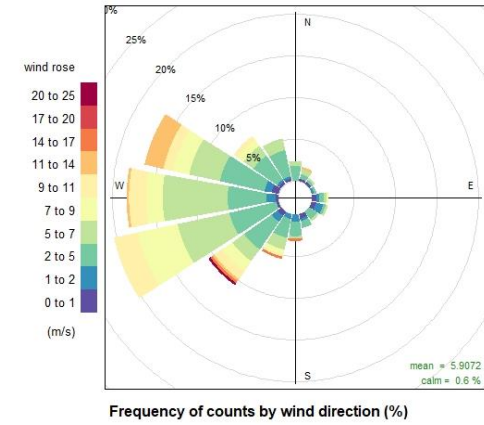


# Bhubaneswar

April

850 hPa level

| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0   | 0   | 1.7 | 0.6 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 12-33              |      | 0.3 | 0   | 0.6 | 0.6 | 0   | 0    | 0.3   | 0     | 0     | 0     | 0    |
| 34-56              |      | 0.3 | 0   | 0.3 | 0.3 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 57-78              |      | 0   | 0.3 | 0.3 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 79-101             |      | 0.6 | 0.3 | 0.6 | 0.3 | 0.3 | 0    | 0     | 0     | 0     | 0     | 0    |
| 102-123            |      | 0.6 | 0.9 | 0.3 | 0.3 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 124-146            |      | 0   | 0   | 1.2 | 0.3 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 147-168            |      | 0.6 | 0.3 | 0.9 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 168-191            |      | 0   | 0.9 | 1.7 | 0.3 | 0   | 0    | 0     | 0.3   | 0     | 0     | 0    |
| 192-213            |      | 0   | 0.6 | 2.3 | 1.4 | 0.6 | 0.3  | 0     | 0.3   | 0     | 0     | 0    |
| 214-236            |      | 0.6 | 0.9 | 4.1 | 1.7 | 1.4 | 1.2  | 0.3   | 0.3   | 0     | 0.3   | 0    |
| 237-258            |      | 0.3 | 0   | 5.8 | 6.4 | 4.9 | 2.9  | 0     | 0     | 0     | 0     | 0    |
| 259-281            |      | 0.3 | 1.2 | 4.6 | 7.8 | 2   | 2    | 0.3   | 0     | 0     | 0     | 0    |
| 282-303            |      | 0.9 | 0.9 | 5.5 | 3.8 | 2   | 1.2  | 2.3   | 0     | 0     | 0     | 0    |
| 304-326            |      | 0.3 | 0.3 | 3.5 | 1.4 | 0.9 | 0.6  | 0     | 0     | 0     | 0     | 0    |
| 327-348            |      | 0.3 | 0.3 | 3.2 | 1.4 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |

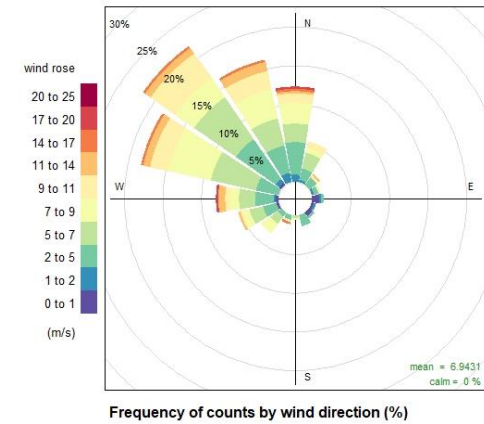


# Bhubaneswar

April

700 hPa level

| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0   | 0.9 | 4.2 | 2.4 | 2.7 | 1.2  | 0.3   | 0.3   | 0.3   | 0     | 0    |
| 12-33              |      | 0   | 0.3 | 1.5 | 2.1 | 0.6 | 0.9  | 0     | 0     | 0     | 0     | 0    |
| 34-56              |      | 0   | 0   | 1.2 | 0   | 0   | 0.3  | 0.3   | 0     | 0     | 0     | 0    |
| 57-78              |      | 0   | 0.3 | 0.6 | 0   | 0.3 | 0    | 0     | 0     | 0     | 0     | 0    |
| 79-101             |      | 0.9 | 0.3 | 0.3 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 102-123            |      | 0.3 | 0.3 | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 124-146            |      | 0.6 | 0   | 0.3 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 147-168            |      | 0   | 0   | 1.2 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 168-191            |      | 0   | 0   | 0.3 | 0.3 | 0.3 | 0    | 0     | 0     | 0     | 0     | 0    |
| 192-213            |      | 0   | 0   | 0.6 | 0   | 0   | 0.3  | 0     | 0.3   | 0     | 0     | 0    |
| 214-236            |      | 0   | 0   | 0.6 | 1.2 | 1.5 | 0    | 0     | 0     | 0     | 0     | 0    |
| 237-258            |      | 0.3 | 0   | 1.8 | 1.8 | 0.9 | 0.3  | 0.3   | 0     | 0     | 0     | 0    |
| 259-281            |      | 0.3 | 0.3 | 2.4 | 2.1 | 1.2 | 0.6  | 0.9   | 0     | 0.3   | 0     | 0    |
| 282-303            |      | 0   | 0   | 3   | 6   | 5.7 | 2.4  | 0.9   | 0.3   | 0     | 0     | 0    |
| 304-326            |      | 0.3 | 0.6 | 6.3 | 6.6 | 3   | 3.9  | 0.9   | 0.3   | 0     | 0     | 0    |
| 327-348            |      | 0   | 1.2 | 3.6 | 3.6 | 3.9 | 2.4  | 1.2   | 0.3   | 0     | 0     | 0    |

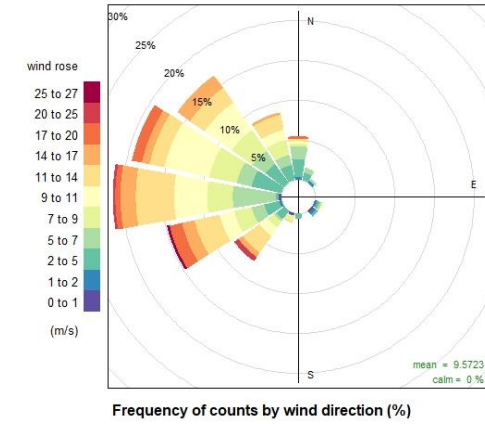


# Bhubaneswar

April

500 hPa level

| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0   | 0.3 | 2.3 | 1.6 | 0.3 | 0.3  | 0.3   | 0     | 0.3   | 0     | 0    |
| 12-33              |      | 0   | 0   | 1   | 0.6 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 34-56              |      | 0   | 0.3 | 0   | 0.3 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 57-78              |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 79-101             |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 102-123            |      | 0   | 0.3 | 0.3 | 0.3 | 0   | 0.3  | 0     | 0     | 0     | 0     | 0    |
| 124-146            |      | 0.3 | 0.3 | 0.3 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 147-168            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 168-191            |      | 0   | 0   | 0.6 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 192-213            |      | 0.3 | 0   | 0   | 0   | 0.6 | 0    | 0.3   | 0     | 0     | 0     | 0    |
| 214-236            |      | 0   | 0   | 1.3 | 0.3 | 1   | 1.3  | 2.6   | 0.6   | 0     | 0.6   | 0    |
| 237-258            |      | 0   | 0.3 | 1.9 | 1.6 | 2.3 | 1.9  | 3.2   | 1.6   | 1.6   | 0     | 0.3  |
| 259-281            |      | 0.3 | 0   | 0.3 | 5.5 | 3.2 | 4.2  | 4.8   | 1.9   | 0.6   | 0.3   | 0    |
| 282-303            |      | 0   | 0   | 3.9 | 1.9 | 3.5 | 5.8  | 1.9   | 1     | 1.3   | 0     | 0    |
| 304-326            |      | 0   | 0   | 2.9 | 1.9 | 3.2 | 4.2  | 2.3   | 1.9   | 0     | 0     | 0    |
| 327-348            |      | 0   | 0   | 1.9 | 1.3 | 1.9 | 1.3  | 1.9   | 0.3   | 0     | 0     | 0    |

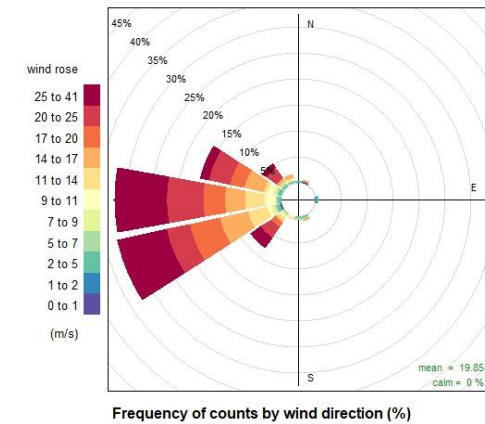


# Bhubaneswar

April

300 hPa level

| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0   | 0   | 0.3 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 12-33              |      | 0.3 | 0   | 0   | 0   | 0   | 0    | 0     | 0.3   | 0     | 0     | 0    |
| 34-56              |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 57-78              |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 79-101             |      | 0   | 0.3 | 0.3 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 102-123            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 124-146            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 147-168            |      | 0   | 0   | 0.3 | 0.3 | 0   | 0    | 0     | 0.3   | 0     | 0     | 0    |
| 168-191            |      | 0   | 0   | 0.3 | 0.3 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 192-213            |      | 0   | 0   | 0   | 0   | 0   | 0.3  | 0.3   | 0     | 0     | 0     | 0    |
| 214-236            |      | 0   | 0   | 0   | 0.3 | 0.3 | 0.3  | 0.7   | 0.3   | 1     | 2.4   | 2.4  |
| 237-258            |      | 0.3 | 0   | 0.7 | 0.3 | 0.7 | 0.7  | 3.8   | 5.6   | 5.9   | 4.5   | 9.8  |
| 259-281            |      | 0   | 0   | 0.7 | 0.3 | 0   | 2.1  | 3.8   | 3.8   | 4.2   | 7     | 10.1 |
| 282-303            |      | 0   | 0   | 0.7 | 0.3 | 0.7 | 1    | 0.7   | 3.8   | 2.8   | 4.2   | 1.7  |
| 304-326            |      | 0   | 0   | 0.3 | 0.3 | 0.3 | 0    | 0     | 0.7   | 0     | 2.4   | 1    |
| 327-348            |      | 0   | 0   | 0.3 | 0   | 0.3 | 0    | 0.3   | 0.7   | 0     | 0     | 0    |

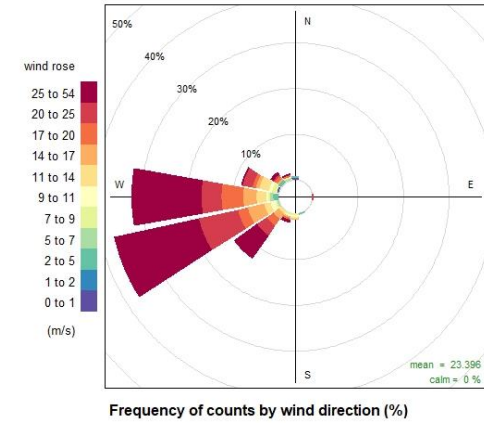


# Bhubaneswar

April

200 hPa level

| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0.4 | 0   | 0.4 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 12-33              |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 34-56              |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 57-78              |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 79-101             |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0.4   | 0    |
| 102-123            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 124-146            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 147-168            |      | 0   | 0   | 0.4 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 168-191            |      | 0   | 0   | 0   | 0   | 0.4 | 0.4  | 0.4   | 0.4   | 0     | 0     | 0    |
| 192-213            |      | 0   | 0   | 0   | 0   | 0.4 | 0.4  | 0     | 0.4   | 0.4   | 0     | 0.7  |
| 214-236            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0.7   | 1.5   | 1.8   | 2.6   | 6.2  |
| 237-258            |      | 0   | 0   | 0   | 0.4 | 0.4 | 1.1  | 1.5   | 3.7   | 2.2   | 8.8   | 19   |
| 259-281            |      | 0   | 0   | 1.1 | 0.7 | 0.4 | 0.4  | 2.2   | 2.9   | 4.8   | 4.4   | 15.4 |
| 282-303            |      | 0.4 | 0   | 0   | 0   | 1.1 | 0.7  | 2.2   | 0.7   | 0.7   | 2.2   | 0.4  |
| 304-326            |      | 0   | 0   | 0.7 | 0   | 0   | 0    | 0     | 0.4   | 0.7   | 0.4   | 0.7  |
| 327-348            |      | 0   | 0   | 0   | 0.4 | 0.4 | 0    | 0     | 0     | 0.4   | 0     | 0.4  |

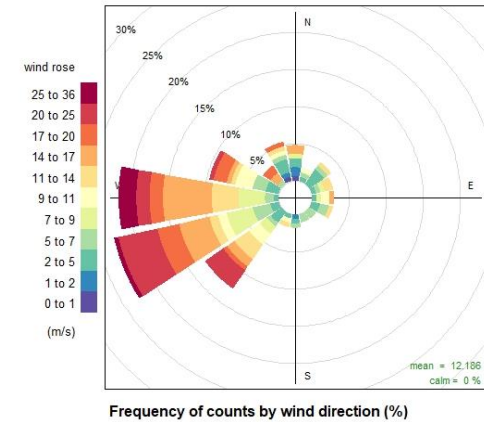


# Bhubaneswar

April

100 hPa level

| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0.6 | 1.2 | 1.2 | 0   | 0.6 | 0    | 0     | 1.2   | 0     | 0     | 0    |
| 12-33              |      | 0   | 0   | 0.6 | 0.6 | 0   | 0.6  | 0     | 0     | 0     | 0     | 0    |
| 34-56              |      | 0   | 0   | 2.4 | 0.6 | 0   | 0    | 0.6   | 0     | 0     | 0     | 0    |
| 57-78              |      | 0   | 0   | 0.6 | 0.6 | 0.6 | 0    | 1.2   | 0     | 0     | 0     | 0    |
| 79-101             |      | 0   | 0   | 0.6 | 0   | 0.6 | 1.2  | 0     | 0.6   | 0     | 0     | 0    |
| 102-123            |      | 0   | 0   | 1.2 | 1.2 | 0   | 0    | 0.6   | 0     | 0     | 0     | 0    |
| 124-146            |      | 0   | 0   | 0   | 1.2 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 147-168            |      | 0   | 0   | 0   | 1.2 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 168-191            |      | 0   | 0.6 | 0.6 | 0.6 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 192-213            |      | 0   | 0   | 0.6 | 0   | 0   | 0.6  | 0.6   | 0     | 0     | 0     | 0    |
| 214-236            |      | 0   | 0   | 1.8 | 0.6 | 1.2 | 1.8  | 2.4   | 1.2   | 0.6   | 3     | 0    |
| 237-258            |      | 0   | 0   | 1.2 | 2.4 | 3.6 | 1.2  | 1.2   | 4.2   | 3     | 5.4   | 0.6  |
| 259-281            |      | 0   | 0   | 0.6 | 1.2 | 3.6 | 0    | 3.6   | 6.6   | 1.8   | 1.8   | 2.4  |
| 282-303            |      | 0   | 0   | 1.8 | 1.8 | 0   | 2.4  | 0.6   | 0.6   | 1.8   | 0.6   | 0    |
| 304-326            |      | 0   | 0   | 0   | 0.6 | 0   | 0    | 0     | 1.2   | 1.2   | 0     | 0    |
| 327-348            |      | 0.6 | 0.6 | 1.8 | 0.6 | 0   | 0.6  | 0.6   | 0     | 0.6   | 0     | 0    |

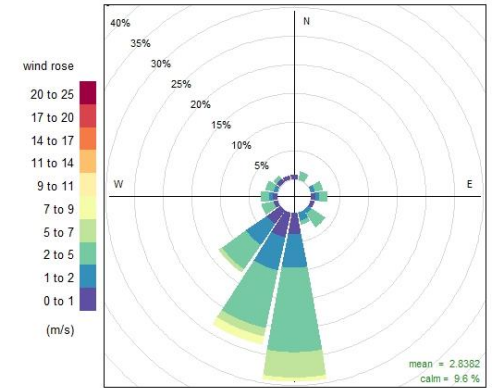


# Bhubaneswar

May

1000 hPa level

| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5  | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|------|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 10   | 0.7 | 0   | 0    | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 12-33              |      | 0   | 0   | 1.5  | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 34-56              |      | 0   | 0   | 0    | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 57-78              |      | 0   | 0.7 | 1.5  | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 79-101             |      | 0.7 | 0.7 | 1.5  | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 102-123            |      | 0.7 | 0   | 0    | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 124-146            |      | 0   | 0.7 | 2.9  | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 147-168            |      | 0   | 1.5 | 0.7  | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 168-191            |      | 3.7 | 5.9 | 14.7 | 4.4 | 0.7 | 0    | 0     | 0     | 0     | 0     | 0    |
| 192-213            |      | 4.4 | 5.9 | 10.3 | 1.5 | 1.5 | 0    | 0     | 0     | 0     | 0     | 0    |
| 214-236            |      | 2.9 | 4.4 | 5.1  | 0.7 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 237-258            |      | 0.7 | 0   | 2.2  | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 259-281            |      | 0.7 | 0.7 | 1.5  | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 282-303            |      | 0   | 0.7 | 1.5  | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 304-326            |      | 0.7 | 0   | 0.7  | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 327-348            |      | 0.7 | 0   | 0    | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |

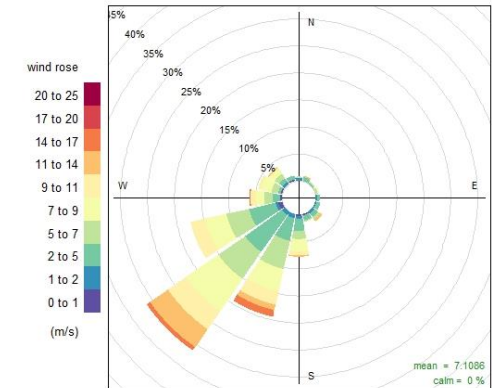


# Bhubaneswar

May

925 hPa level

| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0   | 0.5 | 0   | 0.3 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 12-33              |      | 0   | 0   | 0.8 | 0   | 0   | 0    | 0.3   | 0     | 0     | 0     | 0    |
| 34-56              |      | 0   | 0   | 0.3 | 0.3 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 57-78              |      | 0   | 0   | 0   | 0.5 | 0.3 | 0    | 0     | 0     | 0     | 0     | 0    |
| 79-101             |      | 0   | 0.3 | 0.5 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 102-123            |      | 0   | 0.3 | 0.8 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 124-146            |      | 0   | 0.5 | 0.8 | 0.5 | 0   | 0    | 0.5   | 0     | 0     | 0     | 0    |
| 147-168            |      | 0.3 | 0   | 1   | 0.3 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 168-191            |      | 0.3 | 0.5 | 2.3 | 1.5 | 2.3 | 0.8  | 0.3   | 0     | 0     | 0     | 0    |
| 192-213            |      | 0   | 0.8 | 4.3 | 5.3 | 4.3 | 2.5  | 1     | 1.3   | 0     | 0     | 0    |
| 214-236            |      | 0   | 0.8 | 8.3 | 6.1 | 7.3 | 4    | 4     | 0.8   | 0     | 0     | 0    |
| 237-258            |      | 0.8 | 0.5 | 5.1 | 4.3 | 4   | 2.8  | 0     | 0     | 0     | 0     | 0    |
| 259-281            |      | 0.3 | 0   | 1.5 | 1.5 | 1.5 | 1    | 0     | 0.3   | 0     | 0     | 0    |
| 282-303            |      | 0.3 | 0   | 0.5 | 1.3 | 2   | 0.5  | 0     | 0     | 0     | 0     | 0    |
| 304-326            |      | 0   | 0.5 | 0.8 | 1   | 1   | 0.3  | 0.3   | 0     | 0     | 0     | 0    |
| 327-348            |      | 0.3 | 0   | 0.8 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |

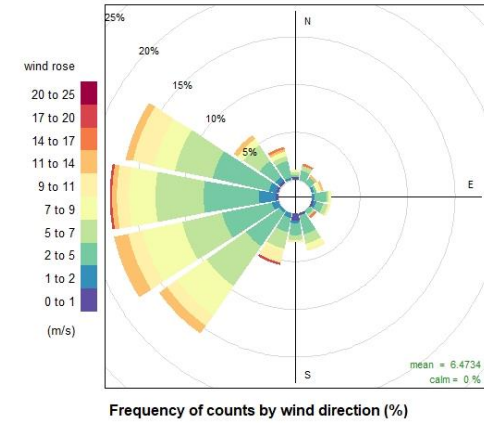


# Bhubaneswar

May

850 hPa level

| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0.3 | 0   | 0.3 | 0.3 | 0.3 | 0    | 0     | 0     | 0     | 0     | 0    |
| 12-33              |      | 0   | 0   | 1   | 0.5 | 0   | 0    | 0     | 0.3   | 0     | 0     | 0    |
| 34-56              |      | 0   | 0   | 0.8 | 0   | 0   | 0    | 0.3   | 0     | 0     | 0     | 0    |
| 57-78              |      | 0   | 0.3 | 0.3 | 0   | 0.3 | 0.3  | 0.3   | 0     | 0     | 0     | 0    |
| 79-101             |      | 0   | 0.3 | 1.3 | 0.3 | 0.3 | 0    | 0     | 0     | 0     | 0     | 0    |
| 102-123            |      | 0.3 | 0.3 | 0.8 | 0.5 | 0   | 0.3  | 0     | 0     | 0     | 0     | 0    |
| 124-146            |      | 0   | 0   | 0.5 | 0.3 | 0   | 0    | 0     | 0.3   | 0     | 0     | 0    |
| 147-168            |      | 0.3 | 0   | 2   | 1   | 0.5 | 0.3  | 0     | 0     | 0     | 0     | 0    |
| 168-191            |      | 0.8 | 0.3 | 1.3 | 0.5 | 0   | 0.3  | 0     | 0     | 0     | 0     | 0    |
| 192-213            |      | 0   | 0.5 | 1.5 | 1.8 | 0.3 | 1.3  | 0     | 0     | 0.3   | 0     | 0    |
| 214-236            |      | 0   | 0.3 | 4.3 | 5.1 | 3.8 | 1.3  | 1     | 0     | 0     | 0     | 0    |
| 237-258            |      | 0   | 0.8 | 5.3 | 4.3 | 4.3 | 1.5  | 1.5   | 0     | 0     | 0     | 0    |
| 259-281            |      | 0.3 | 1.8 | 5.8 | 5.1 | 2.8 | 1.3  | 0.5   | 0     | 0.3   | 0     | 0    |
| 282-303            |      | 0.3 | 0.8 | 6.1 | 4.1 | 2.3 | 2.3  | 0.8   | 0     | 0     | 0     | 0    |
| 304-326            |      | 0.3 | 0.5 | 2   | 2   | 0.8 | 0    | 0.5   | 0     | 0     | 0     | 0    |
| 327-348            |      | 0   | 0.3 | 1.8 | 0.5 | 0.5 | 0    | 0.3   | 0.3   | 0     | 0     | 0    |

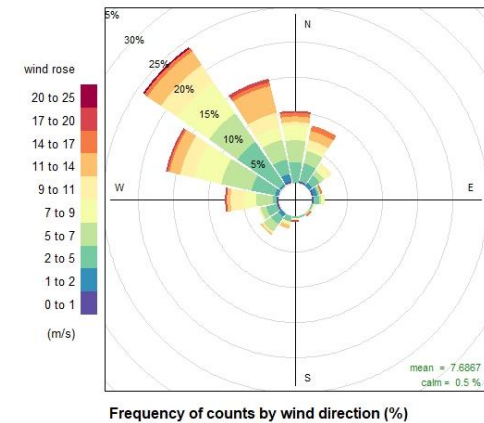


# Bhubaneswar

May

700 hPa level

| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0   | 0   | 2.9 | 3.1 | 2.1 | 0.5  | 0.8   | 0.5   | 0.3   | 0     | 0    |
| 12-33              |      | 0.3 | 0   | 2.6 | 1.8 | 0.5 | 1    | 1.3   | 0.8   | 0     | 0     | 0    |
| 34-56              |      | 0   | 0.5 | 1.3 | 0.8 | 0.8 | 0.5  | 0     | 0     | 0     | 0     | 0    |
| 57-78              |      | 0.3 | 0.5 | 0.3 | 0.3 | 0   | 0    | 0     | 0.3   | 0     | 0     | 0    |
| 79-101             |      | 0.3 | 0   | 0.8 | 0.3 | 0.5 | 0    | 0     | 0     | 0     | 0     | 0    |
| 102-123            |      | 0   | 0   | 0.3 | 0   | 0.3 | 0    | 0     | 0     | 0     | 0     | 0    |
| 124-146            |      | 0   | 0   | 0   | 0.3 | 0   | 0    | 0     | 0.3   | 0     | 0     | 0    |
| 147-168            |      | 0   | 0   | 0.3 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 168-191            |      | 0   | 0   | 0.3 | 0   | 0.3 | 0    | 0     | 0     | 0.3   | 0     | 0    |
| 192-213            |      | 0   | 0   | 0.8 | 0   | 0   | 0.5  | 0.5   | 0     | 0     | 0     | 0    |
| 214-236            |      | 0   | 0.5 | 1.3 | 1.3 | 0   | 0.3  | 0.3   | 0     | 0     | 0     | 0    |
| 237-258            |      | 0.3 | 0   | 1.6 | 0.8 | 0   | 0.3  | 0     | 0     | 0     | 0     | 0    |
| 259-281            |      | 0.3 | 0   | 0.5 | 2.3 | 1.8 | 1.8  | 0.5   | 0     | 0.3   | 0     | 0    |
| 282-303            |      | 0   | 0.5 | 3.4 | 4.4 | 3.9 | 2.1  | 1.6   | 0.3   | 0.3   | 0     | 0    |
| 304-326            |      | 0   | 0.3 | 7.3 | 5   | 5.5 | 2.9  | 2.3   | 0.5   | 0     | 0.3   | 0    |
| 327-348            |      | 0.3 | 1   | 2.1 | 2.9 | 1.8 | 2.1  | 3.9   | 0.5   | 0.5   | 0     | 0    |

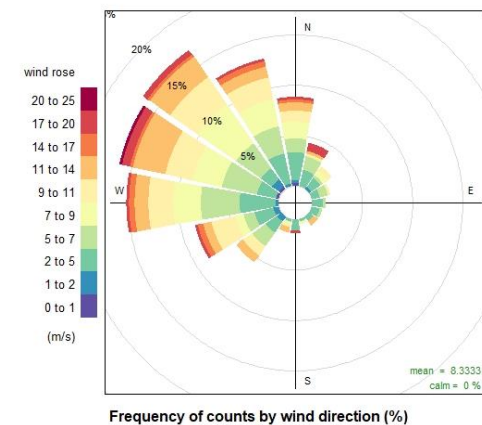


# Bhubaneswar

May

500 hPa level

| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0.3 | 0.3 | 2.8 | 1.4 | 1.7 | 1.1  | 0.8   | 0.3   | 0.3   | 0     | 0    |
| 12-33              |      | 0   | 0   | 1.7 | 1.4 | 0   | 0.3  | 0.3   | 0     | 0.8   | 0     | 0    |
| 34-56              |      | 0   | 0.3 | 1.1 | 0.3 | 0.6 | 0.6  | 0     | 0     | 0     | 0     | 0    |
| 57-78              |      | 0   | 0   | 0.8 | 0.8 | 0   | 0.3  | 0     | 0     | 0     | 0     | 0    |
| 79-101             |      | 0   | 0   | 1.1 | 0.3 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 102-123            |      | 0   | 0   | 0.8 | 0.3 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 124-146            |      | 0   | 0   | 0.6 | 0   | 0   | 0    | 0.6   | 0     | 0     | 0     | 0    |
| 147-168            |      | 0   | 0   | 0.3 | 0   | 0.3 | 0    | 0     | 0     | 0     | 0     | 0    |
| 168-191            |      | 0   | 0   | 1.1 | 0   | 0   | 0    | 0     | 0     | 0.3   | 0     | 0    |
| 192-213            |      | 0   | 0   | 0.3 | 0   | 0.3 | 0.3  | 0.6   | 0     | 0     | 0     | 0    |
| 214-236            |      | 0   | 0.6 | 1.4 | 1.7 | 0   | 1.1  | 0.8   | 0     | 0     | 0     | 0    |
| 237-258            |      | 0   | 0.6 | 1.9 | 1.1 | 0.8 | 2.5  | 0.8   | 0.6   | 0.3   | 0     | 0    |
| 259-281            |      | 0   | 0.3 | 3.6 | 3.9 | 2.8 | 2.5  | 1.4   | 0.6   | 0.3   | 0     | 0    |
| 282-303            |      | 0.3 | 0   | 1.9 | 3.6 | 3   | 2.8  | 3.3   | 0.3   | 0.8   | 0.3   | 0    |
| 304-326            |      | 0.3 | 0.8 | 1.4 | 3   | 4.7 | 3.3  | 2.5   | 0.3   | 0.6   | 0     | 0    |
| 327-348            |      | 0   | 0.3 | 3   | 2.8 | 2.8 | 2.2  | 1.1   | 0.6   | 0.3   | 0     | 0    |

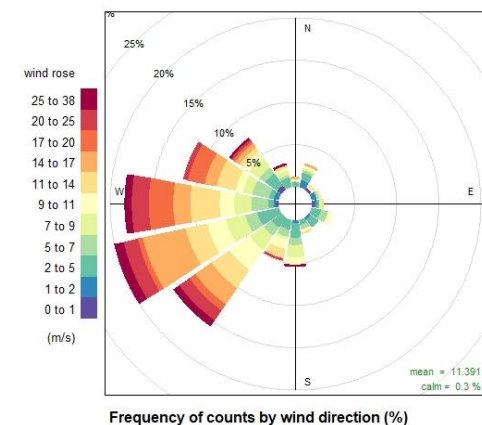


# Bhubaneswar

May

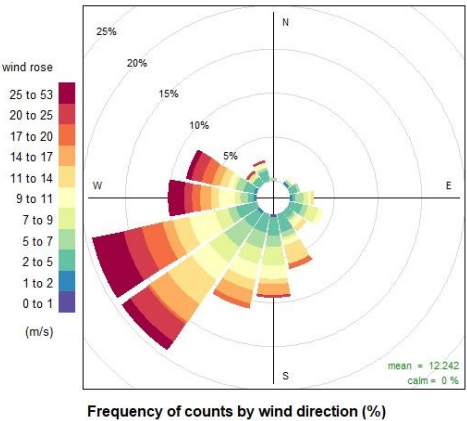
300 hPa level

| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0   | 0   | 0.6 | 0   | 0   | 0.3  | 0     | 0.3   | 0     | 0     | 0    |
| 12-33              |      | 0   | 0.9 | 0.9 | 0.3 | 0.3 | 0.3  | 0     | 0.3   | 0     | 0     | 0    |
| 34-56              |      | 0.3 | 0   | 0   | 0   | 0   | 0.3  | 0.3   | 0     | 0     | 0     | 0    |
| 57-78              |      | 0   | 0.6 | 0   | 0.3 | 0.3 | 0    | 0     | 0     | 0     | 0     | 0    |
| 79-101             |      | 0.3 | 0.3 | 0.3 | 0   | 0.3 | 0    | 0.3   | 0     | 0     | 0     | 0    |
| 102-123            |      | 0   | 0   | 1.2 | 0.9 | 0   | 0.6  | 0     | 0     | 0     | 0     | 0    |
| 124-146            |      | 0   | 0.3 | 1.2 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 147-168            |      | 0   | 0   | 0.6 | 0.3 | 0   | 0.3  | 0.3   | 0     | 0     | 0     | 0    |
| 168-191            |      | 0   | 0.3 | 1.7 | 1.2 | 1.4 | 0.9  | 0     | 0     | 0     | 0     | 0.3  |
| 192-213            |      | 0   | 0   | 1.2 | 0.9 | 0.3 | 1.2  | 1.2   | 0     | 0     | 0.3   | 0    |
| 214-236            |      | 0   | 0   | 1.4 | 1.2 | 2   | 2.9  | 2.6   | 2.3   | 0.9   | 1.4   | 0.9  |
| 237-258            |      | 0   | 0   | 2.6 | 1.4 | 2.3 | 2.3  | 2.6   | 5.2   | 0.6   | 1.7   | 1.2  |
| 259-281            |      | 0.3 | 0.3 | 0.6 | 2   | 2   | 1.7  | 3.5   | 2     | 2.9   | 2     | 0.9  |
| 282-303            |      | 0   | 0.6 | 0.6 | 2   | 1.2 | 0.9  | 2.3   | 1.4   | 2     | 0.6   | 0    |
| 304-326            |      | 0.6 | 0   | 1.7 | 0.9 | 1.4 | 0.9  | 0.6   | 0.6   | 0.3   | 0.3   | 0.3  |
| 327-348            |      | 0   | 0   | 1.2 | 0.3 | 0.6 | 0.3  | 0.3   | 0     | 0     | 0     | 0.3  |

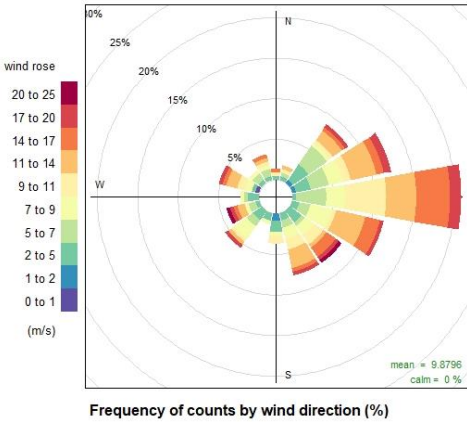




| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0   | 0   | 0   | 0.3 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 12-33              |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 34-56              |      | 0   | 0.3 | 0   | 0.3 | 0   | 0.3  | 0     | 0     | 0     | 0     | 0    |
| 57-78              |      | 0   | 0   | 0.9 | 0.3 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 79-101             |      | 0   | 0.3 | 0.3 | 0.9 | 0.6 | 0.3  | 0.3   | 0     | 0     | 0     | 0    |
| 102-123            |      | 0   | 0   | 1.5 | 0.6 | 1.2 | 0.6  | 0     | 0     | 0     | 0     | 0    |
| 124-146            |      | 0   | 0   | 0.9 | 0.3 | 0.3 | 0.6  | 0.6   | 0     | 0     | 0     | 0    |
| 147-168            |      | 0   | 0   | 2.1 | 0.6 | 0.3 | 0.3  | 2.1   | 0     | 0.6   | 0     | 0    |
| 168-191            |      | 0.3 | 0   | 2.1 | 1.2 | 2.1 | 1.8  | 0.6   | 1.2   | 0     | 0.3   | 0    |
| 192-213            |      | 0   | 0   | 2.1 | 1.8 | 1.8 | 1.8  | 1.2   | 1.5   | 0.6   | 0     | 0    |
| 214-236            |      | 0   | 0.3 | 1.8 | 2.8 | 2.1 | 2.4  | 3.4   | 2.4   | 0.3   | 2.4   | 1.2  |
| 237-258            |      | 0   | 0   | 2.4 | 0.9 | 1.5 | 3.1  | 1.8   | 1.2   | 2.4   | 2.1   | 3.7  |
| 259-281            |      | 0   | 0.3 | 0.6 | 0.9 | 0.6 | 1.8  | 0.9   | 1.2   | 0.9   | 0.9   | 1.8  |
| 282-303            |      | 0   | 0.3 | 1.2 | 0.9 | 0.3 | 0.6  | 0.9   | 0.9   | 1.2   | 1.2   | 0.6  |
| 304-326            |      | 0   | 0   | 0.9 | 0   | 0.3 | 0    | 0.3   | 0     | 0     | 0.3   | 0    |
| 327-348            |      | 0   | 0   | 1.2 | 0.3 | 0   | 0.6  | 0     | 0     | 0     | 0.3   | 0    |

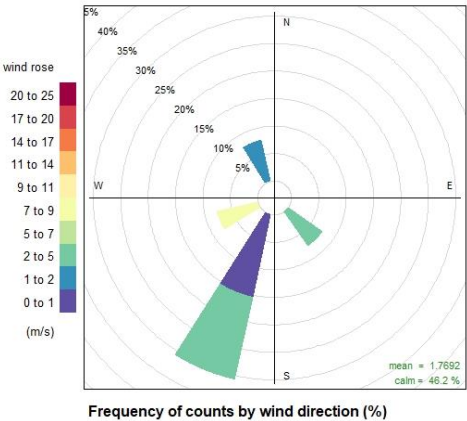


| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0   | 0   | 0.5 | 0   | 0   | 0.5  | 0     | 0.5   | 0     | 0     | 0    |
| 12-33              |      | 0   | 0   | 0.5 | 0.5 | 0   | 0.5  | 0.5   | 0     | 0     | 0     | 0    |
| 34-56              |      | 0   | 0.5 | 2.3 | 2.8 | 0.5 | 0.5  | 1.4   | 0.5   | 0.5   | 0     | 0    |
| 57-78              |      | 0   | 0.5 | 1.9 | 2.3 | 1.9 | 0.9  | 3.2   | 0.9   | 0.9   | 0     | 0    |
| 79-101             |      | 0   | 0   | 0.5 | 3.7 | 2.3 | 5.1  | 3.7   | 4.2   | 1.4   | 0     | 0    |
| 102-123            |      | 0   | 0   | 0.9 | 1.4 | 2.8 | 0.5  | 3.7   | 1.9   | 0.5   | 0     | 0    |
| 124-146            |      | 0   | 0   | 1.9 | 0.5 | 1.4 | 1.4  | 0.5   | 1.4   | 0.5   | 0.5   | 0    |
| 147-168            |      | 0   | 0   | 0.9 | 0.9 | 1.4 | 1.4  | 2.3   | 0.5   | 0.5   | 0     | 0    |
| 168-191            |      | 0   | 0.9 | 1.4 | 0   | 0.5 | 0.9  | 0     | 0     | 0     | 0     | 0    |
| 192-213            |      | 0   | 0   | 0.9 | 0   | 0.5 | 0    | 0     | 0     | 0     | 0     | 0    |
| 214-236            |      | 0   | 0   | 1.4 | 0.9 | 1.9 | 0.5  | 0.5   | 0     | 0.5   | 0     | 0    |
| 237-258            |      | 0   | 0   | 0.5 | 0.9 | 0.5 | 0    | 0.9   | 0.5   | 0.5   | 0.5   | 0    |
| 259-281            |      | 0   | 0   | 1.4 | 0.5 | 0.5 | 0    | 0     | 0     | 0     | 0     | 0    |
| 282-303            |      | 0.5 | 0   | 0.5 | 0   | 0.9 | 0.9  | 1.4   | 0.5   | 0.5   | 0     | 0    |
| 304-326            |      | 0   | 0   | 0.5 | 0.9 | 0.5 | 0    | 0     | 0     | 0     | 0     | 0    |
| 327-348            |      | 0   | 0   | 0.5 | 0.9 | 0.5 | 0.5  | 0.5   | 0.5   | 0     | 0     | 0    |

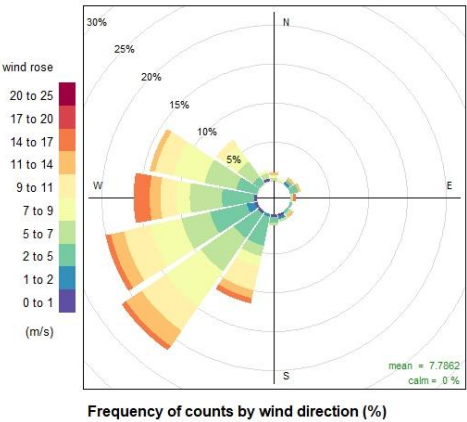




| <div>Speed</div> <div>Direction</div> | calm | 0-1  | 1-2 | 2-5  | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|---------------------------------------|------|------|-----|------|-----|-----|------|-------|-------|-------|-------|------|
| 349-11                                | 46   | 0    | 0   | 0    | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 12-33                                 |      | 0    | 0   | 0    | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 34-56                                 |      | 0    | 0   | 0    | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 57-78                                 |      | 0    | 0   | 0    | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 79-101                                |      | 0    | 0   | 0    | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 102-123                               |      | 0    | 0   | 0    | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 124-146                               |      | 0    | 0   | 7.7  | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 147-168                               |      | 0    | 0   | 0    | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 168-191                               |      | 0    | 0   | 0    | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 192-213                               |      | 15.4 | 0   | 15.4 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 214-236                               |      | 0    | 0   | 0    | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 237-258                               |      | 0    | 0   | 0    | 0   | 7.7 | 0    | 0     | 0     | 0     | 0     | 0    |
| 259-281                               |      | 0    | 0   | 0    | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 282-303                               |      | 0    | 0   | 0    | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 304-326                               |      | 0    | 0   | 0    | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 327-348                               |      | 0    | 7.7 | 0    | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |



| <div>Speed</div> <div>Direction</div> | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|---------------------------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11                                | 0    | 0   | 0   | 0   | 0.3 | 0.3 | 0    | 0.3   | 0     | 0     | 0     | 0    |
| 12-33                                 |      | 0   | 0   | 0   | 0   | 0.3 | 0    | 0     | 0     | 0     | 0     | 0    |
| 34-56                                 |      | 0   | 0.3 | 0.3 | 0   | 0   | 0    | 0.3   | 0     | 0     | 0     | 0    |
| 57-78                                 |      | 0   | 0   | 1   | 0   | 0   | 0    | 0.3   | 0     | 0     | 0     | 0    |
| 79-101                                |      | 0   | 0   | 0   | 0.3 | 0   | 0    | 0     | 0.3   | 0     | 0     | 0    |
| 102-123                               |      | 0   | 0   | 0.3 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 124-146                               |      | 0   | 0   | 0.3 | 0.3 | 0   | 0    | 0.3   | 0     | 0     | 0     | 0    |
| 147-168                               |      | 0.3 | 0.3 | 0   | 0.3 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 168-191                               |      | 0.3 | 0   | 0.7 | 0.3 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 192-213                               |      | 0   | 0.3 | 3.8 | 1.4 | 1.4 | 3.1  | 1     | 0.7   | 0     | 0     | 0    |
| 214-236                               |      | 0.3 | 0   | 3.8 | 5.2 | 5.5 | 3.8  | 2.4   | 0.7   | 0     | 0     | 0    |
| 237-258                               |      | 0.3 | 1   | 4.8 | 3.8 | 4.1 | 3.4  | 1.7   | 0.7   | 0     | 0     | 0    |
| 259-281                               |      | 0.3 | 0   | 4.1 | 4.1 | 1.7 | 2.1  | 1.4   | 2.1   | 0     | 0     | 0    |
| 282-303                               |      | 0   | 0   | 2.8 | 4.1 | 4.1 | 2.4  | 0.7   | 0     | 0     | 0     | 0    |
| 304-326                               |      | 0   | 0   | 1   | 2.4 | 2.4 | 1    | 0     | 0     | 0     | 0     | 0    |
| 327-348                               |      | 0.3 | 0   | 0   | 0.7 | 0.3 | 0    | 0     | 0     | 0     | 0     | 0    |

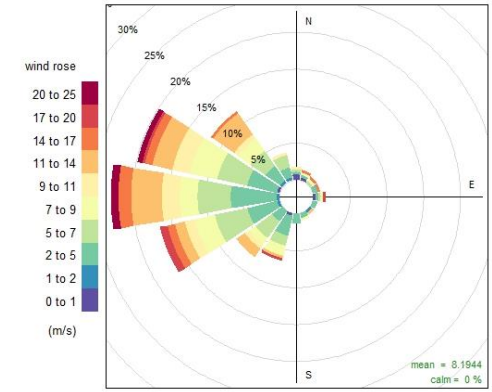


# Bhubaneswar

June

850 hPa level

| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0.7 | 0   | 0.3 | 0.3 | 0   | 0.3  | 0     | 0     | 0     | 0     | 0    |
| 12-33              |      | 0.3 | 0   | 0.3 | 0   | 0.3 | 0    | 0     | 0.3   | 0     | 0     | 0    |
| 34-56              |      | 0   | 0   | 0   | 0.3 | 0.3 | 0    | 0     | 0.3   | 0     | 0     | 0    |
| 57-78              |      | 0   | 0   | 0.7 | 0   | 0   | 0    | 0     | 0.3   | 0     | 0     | 0    |
| 79-101             |      | 0.3 | 0   | 0.3 | 0.3 | 0.3 | 0    | 0     | 0     | 0.3   | 0     | 0    |
| 102-123            |      | 0   | 0   | 0.7 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 124-146            |      | 0   | 0.3 | 0   | 0   | 0   | 0    | 0.3   | 0     | 0     | 0     | 0    |
| 147-168            |      | 0   | 0   | 0.3 | 0   | 0.3 | 0    | 0     | 0     | 0     | 0     | 0    |
| 168-191            |      | 0   | 0   | 1.7 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 192-213            |      | 0.3 | 0   | 2.8 | 1.4 | 1.4 | 0    | 0.3   | 0     | 0.3   | 0     | 0    |
| 214-236            |      | 0   | 0   | 1.7 | 2.8 | 1   | 0.7  | 1.4   | 0     | 0     | 0     | 0    |
| 237-258            |      | 0   | 0.3 | 4.2 | 4.5 | 2.8 | 1.4  | 1.4   | 1     | 1     | 0     | 0    |
| 259-281            |      | 0   | 0.3 | 6.2 | 4.5 | 2.4 | 2.4  | 4.2   | 1.7   | 0     | 1     | 0    |
| 282-303            |      | 0.3 | 0   | 4.2 | 4.2 | 3.8 | 2.4  | 2.8   | 1     | 0.3   | 0.7   | 0    |
| 304-326            |      | 0   | 0.3 | 2.4 | 2.4 | 2.1 | 0.7  | 3.5   | 0.3   | 0     | 0     | 0    |
| 327-348            |      | 0   | 0.3 | 1.4 | 1.7 | 0   | 0.3  | 0     | 0     | 0     | 0     | 0    |

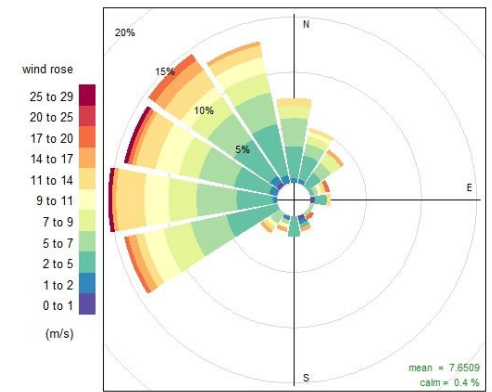


# Bhubaneswar

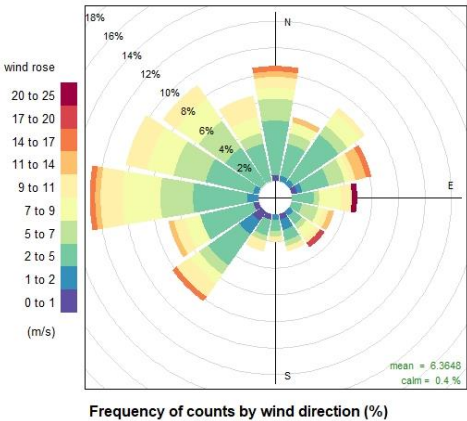
June

700 hPa level

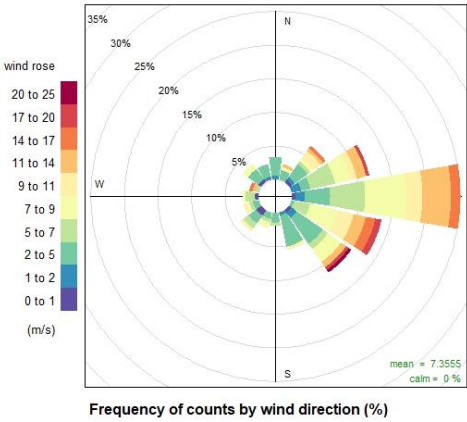
| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0   | 0.4 | 2.9 | 2.5 | 1.1 | 0    | 0.7   | 0     | 0     | 0     | 0    |
| 12-33              |      | 0   | 0.4 | 2.2 | 1.1 | 0.7 | 0.4  | 0.4   | 0     | 0     | 0     | 0    |
| 34-56              |      | 0   | 0   | 1.5 | 1.1 | 1.1 | 0    | 0     | 0.4   | 0     | 0     | 0    |
| 57-78              |      | 0   | 0   | 0.4 | 0.4 | 0   | 0.4  | 0.4   | 0     | 0.4   | 0     | 0    |
| 79-101             |      | 0.4 | 0   | 1.1 | 0   | 0   | 0    | 0.4   | 0     | 0     | 0     | 0    |
| 102-123            |      | 0   | 0   | 0   | 0.4 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 124-146            |      | 0   | 0   | 0   | 0.4 | 0   | 0    | 0     | 0     | 0.4   | 0     | 0    |
| 147-168            |      | 0.4 | 0.4 | 0.4 | 0   | 0   | 0    | 0     | 0.4   | 0     | 0     | 0    |
| 168-191            |      | 0   | 0   | 1.8 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 192-213            |      | 0   | 0.4 | 0   | 0.4 | 0   | 0.4  | 0     | 0.4   | 0     | 0     | 0    |
| 214-236            |      | 0   | 0   | 0   | 1.1 | 0   | 0.4  | 0.4   | 0.4   | 0     | 0     | 0    |
| 237-258            |      | 0   | 0   | 4.7 | 3.3 | 2.5 | 1.8  | 0.7   | 0.7   | 0.4   | 0     | 0    |
| 259-281            |      | 0   | 0.4 | 3.3 | 3.6 | 2.5 | 2.2  | 2.5   | 0.4   | 0     | 0     | 0.4  |
| 282-303            |      | 0   | 0.7 | 3.3 | 3.3 | 1.8 | 2.2  | 1.8   | 0.4   | 0.4   | 0     | 0.4  |
| 304-326            |      | 0.4 | 0.7 | 4   | 2.9 | 1.8 | 1.1  | 1.8   | 1.1   | 0.7   | 0     | 0    |
| 327-348            |      | 0   | 0.7 | 4.7 | 2.9 | 1.8 | 1.5  | 1.1   | 0.4   | 0     | 0     | 0    |



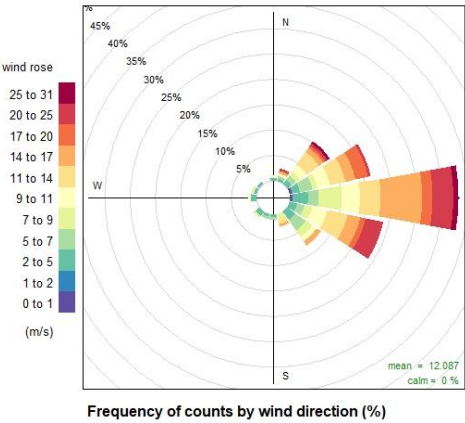
| <div>Speed</div> <div>Direction</div> | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|---------------------------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11                                | 0    | 0.4 | 0   | 4.1 | 1.6 | 0.8 | 0.8  | 0.4   | 0.4   | 0     | 0     | 0    |
| 12-33                                 |      | 0   | 0.4 | 2.5 | 0.8 | 0.8 | 0    | 0.4   | 0     | 0     | 0     | 0    |
| 34-56                                 |      | 0   | 0.4 | 4.1 | 0.8 | 1.2 | 0.4  | 0     | 0     | 0     | 0     | 0    |
| 57-78                                 |      | 0.4 | 0.4 | 2   | 1.2 | 0.4 | 0.4  | 0.8   | 0.4   | 0     | 0     | 0    |
| 79-101                                |      | 0   | 0   | 1.6 | 0.4 | 1.6 | 0.8  | 0     | 0     | 0     | 0.4   | 0    |
| 102-123                               |      | 0   | 0   | 0.8 | 1.2 | 0.4 | 0.4  | 0.4   | 0     | 0     | 0     | 0    |
| 124-146                               |      | 0   | 0.4 | 0.8 | 0.4 | 0.8 | 0.4  | 0     | 0     | 0.4   | 0     | 0    |
| 147-168                               |      | 0.4 | 0.8 | 0.8 | 0.4 | 0   | 0.4  | 0     | 0     | 0     | 0     | 0    |
| 168-191                               |      | 0   | 0.4 | 0.8 | 0.4 | 0   | 0.4  | 0     | 0     | 0     | 0     | 0    |
| 192-213                               |      | 0.4 | 0   | 1.2 | 0.4 | 0   | 0.8  | 0     | 0     | 0     | 0     | 0    |
| 214-236                               |      | 0.8 | 1.2 | 2.9 | 0.8 | 0.8 | 1.2  | 0     | 0.4   | 0     | 0     | 0    |
| 237-258                               |      | 0.4 | 0   | 4.1 | 0   | 1.2 | 0.8  | 0.4   | 0     | 0     | 0     | 0    |
| 259-281                               |      | 0   | 0.8 | 4.1 | 2.5 | 2.9 | 1.6  | 0.4   | 0.4   | 0     | 0     | 0    |
| 282-303                               |      | 0   | 0.4 | 3.7 | 2.5 | 2   | 1.6  | 0     | 0     | 0     | 0     | 0    |
| 304-326                               |      | 0   | 0   | 3.3 | 2.5 | 2   | 1.2  | 0     | 0     | 0     | 0     | 0    |
| 327-348                               |      | 0   | 0   | 2.9 | 0.8 | 1.2 | 1.6  | 0     | 0     | 0     | 0     | 0    |



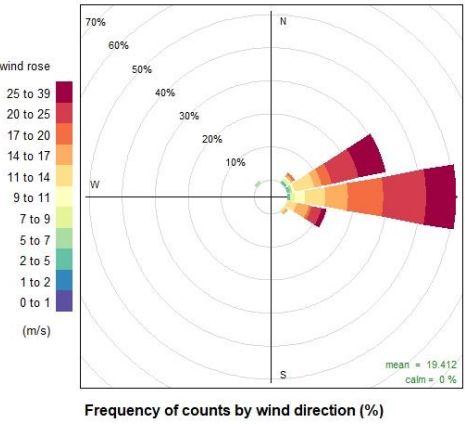
| <div>Speed</div> <div>Direction</div> | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|---------------------------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11                                | 0    | 0   | 0.5 | 2.8 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 12-33                                 |      | 0   | 0   | 1.4 | 0   | 0.5 | 0    | 0.5   | 0     | 0     | 0     | 0    |
| 34-56                                 |      | 0.5 | 0.5 | 2.4 | 0.5 | 0.5 | 1.4  | 0.5   | 0.5   | 0     | 0     | 0    |
| 57-78                                 |      | 0   | 1.4 | 1.4 | 3.8 | 2.4 | 0.9  | 1.4   | 0     | 0.5   | 0     | 0    |
| 79-101                                |      | 0.5 | 1.4 | 3.8 | 5.2 | 6.2 | 2.4  | 4.3   | 1.4   | 0     | 0     | 0    |
| 102-123                               |      | 0   | 0   | 0.5 | 2.4 | 4.3 | 2.4  | 1.9   | 1.4   | 0.9   | 0     | 0    |
| 124-146                               |      | 0.5 | 0.9 | 4.7 | 0.9 | 2.4 | 0    | 0.9   | 0     | 0.5   | 0.5   | 0    |
| 147-168                               |      | 0   | 0.5 | 4.7 | 0   | 0   | 0.5  | 0     | 0     | 0     | 0     | 0    |
| 168-191                               |      | 0   | 0   | 1.4 | 0.5 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 192-213                               |      | 0   | 0   | 0.9 | 0.5 | 0.9 | 0    | 0     | 0     | 0     | 0     | 0    |
| 214-236                               |      | 0.9 | 0   | 1.4 | 0.9 | 0   | 0.5  | 0     | 0     | 0     | 0     | 0    |
| 237-258                               |      | 0   | 0   | 0.9 | 0.5 | 0.5 | 0.5  | 0     | 0     | 0     | 0     | 0    |
| 259-281                               |      | 0.5 | 0   | 0   | 1.4 | 0.5 | 0    | 0     | 0     | 0     | 0     | 0    |
| 282-303                               |      | 0   | 0   | 0   | 0.5 | 0   | 0    | 0.5   | 0.5   | 0     | 0     | 0    |
| 304-326                               |      | 0.5 | 0   | 1.9 | 0   | 0.9 | 0    | 0     | 0     | 0     | 0     | 0    |
| 327-348                               |      | 0   | 0.5 | 1.9 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |



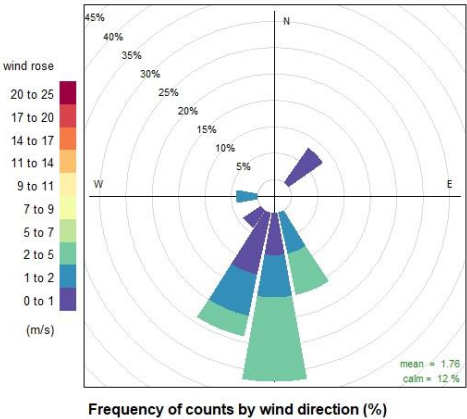
| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0   | 0   | 0.5 | 0   | 0   | 0.5  | 0     | 0     | 0     | 0     | 0    |
| 12-33              |      | 0   | 0   | 0.5 | 0.5 | 0   | 0.5  | 0     | 0.5   | 0     | 0.5   | 0    |
| 34-56              |      | 0   | 0   | 1   | 1   | 1   | 1.5  | 3.1   | 1     | 0.5   | 0.5   | 0.5  |
| 57-78              |      | 0.5 | 0   | 1.5 | 2.6 | 1   | 2.6  | 3.1   | 2.1   | 2.6   | 0.5   | 0    |
| 79-101             |      | 0.5 | 0   | 3.1 | 2.1 | 4.6 | 3.6  | 4.1   | 8.2   | 2.1   | 4.1   | 1    |
| 102-123            |      | 0   | 0   | 1.5 | 1.5 | 1.5 | 3.1  | 4.1   | 2.6   | 1     | 3.6   | 0    |
| 124-146            |      | 0   | 0   | 2.1 | 2.6 | 1.5 | 1    | 0     | 1     | 0     | 0     | 0    |
| 147-168            |      | 0   | 0   | 0   | 0   | 1   | 0    | 1     | 0.5   | 0     | 0     | 0    |
| 168-191            |      | 0   | 0   | 0.5 | 0.5 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 192-213            |      | 0   | 0   | 0.5 | 0.5 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 214-236            |      | 0   | 0   | 1   | 0   | 0.5 | 0    | 0     | 0     | 0     | 0     | 0    |
| 237-258            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 259-281            |      | 0   | 0   | 1   | 0   | 0   | 0.5  | 0     | 0     | 0     | 0     | 0    |
| 282-303            |      | 0   | 0   | 0.5 | 0   | 0.5 | 0    | 0     | 0     | 0     | 0     | 0    |
| 304-326            |      | 0   | 0   | 0.5 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 327-348            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |



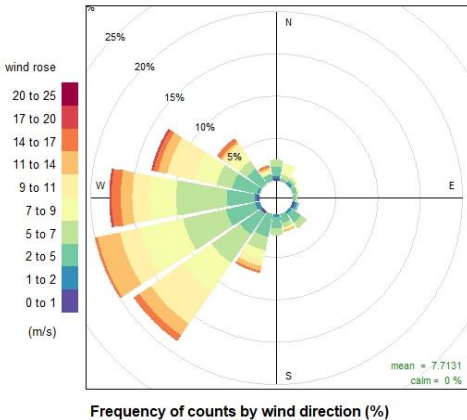
| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 12-33              |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 34-56              |      | 0   | 0   | 0.8 | 0   | 0.8 | 0.8  | 0     | 0.8   | 0.8   | 0     | 0    |
| 57-78              |      | 0   | 0   | 0.8 | 0.8 | 0   | 0.8  | 6.1   | 2.3   | 3.1   | 8.4   | 8.4  |
| 79-101             |      | 0   | 0   | 0.8 | 0   | 1.5 | 3.1  | 6.1   | 6.9   | 10.7  | 13    | 9.2  |
| 102-123            |      | 0   | 0   | 0   | 0   | 0   | 0    | 3.1   | 3.8   | 0.8   | 3.1   | 1.5  |
| 124-146            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0.8   | 0.8   | 0     | 0     | 0    |
| 147-168            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 168-191            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 192-213            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 214-236            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 237-258            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 259-281            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 282-303            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 304-326            |      | 0   | 0   | 0   | 0.8 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 327-348            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |



| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 12   | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 12-33              |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 34-56              |      | 8   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 57-78              |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 79-101             |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 102-123            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 124-146            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 147-168            |      | 0   | 8   | 8   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 168-191            |      | 8   | 8   | 16  | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 192-213            |      | 12  | 8   | 4   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 214-236            |      | 4   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 237-258            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 259-281            |      | 0   | 4   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 282-303            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 304-326            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 327-348            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |



| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0.3 | 0.3 | 1.1 | 0.8 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 12-33              |      | 0   | 0   | 0.3 | 0.5 | 1.4 | 0    | 0     | 0     | 0     | 0     | 0    |
| 34-56              |      | 0   | 0.3 | 0.3 | 0.3 | 0.3 | 0    | 0     | 0     | 0     | 0     | 0    |
| 57-78              |      | 0   | 0   | 0.5 | 0   | 0.3 | 0    | 0     | 0     | 0     | 0     | 0    |
| 79-101             |      | 0   | 0   | 0.3 | 0.3 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 102-123            |      | 0.3 | 0.3 | 0.3 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 124-146            |      | 0   | 0.3 | 1.4 | 0.8 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 147-168            |      | 0   | 0   | 1.1 | 0.5 | 0.3 | 0    | 0.3   | 0     | 0     | 0     | 0    |
| 168-191            |      | 0   | 0.3 | 1.4 | 0.8 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 192-213            |      | 0   | 0   | 2.7 | 1.6 | 1.1 | 0.8  | 0.5   | 0.3   | 0     | 0     | 0    |
| 214-236            |      | 0.3 | 0   | 3   | 4.1 | 4.1 | 4.6  | 1.6   | 0.8   | 0     | 0     | 0    |
| 237-258            |      | 0   | 0.5 | 3.6 | 5.2 | 5.2 | 2.5  | 2.7   | 0.3   | 0     | 0     | 0    |
| 259-281            |      | 0.3 | 0.3 | 3.3 | 6   | 3.3 | 1.9  | 1.4   | 1.1   | 0.3   | 0     | 0    |
| 282-303            |      | 0   | 0.3 | 3   | 1.9 | 2.7 | 3.3  | 1.1   | 0.5   | 0.3   | 0     | 0    |
| 304-326            |      | 0   | 0   | 2.2 | 1.1 | 1.4 | 1.1  | 0.3   | 0.5   | 0     | 0     | 0    |
| 327-348            |      | 0   | 0   | 0.8 | 0   | 0.5 | 0    | 0.3   | 0.3   | 0     | 0     | 0    |

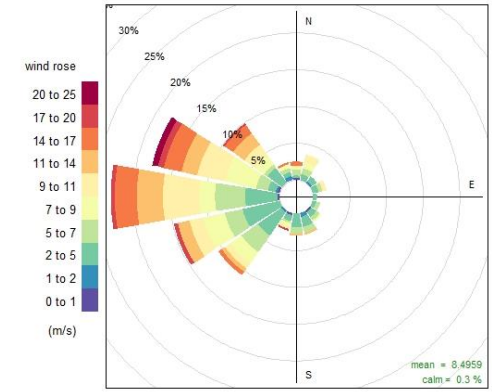


# Bhubaneswar

July

850 hPa level

| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0.3 | 0   | 0.3 | 0.8 | 0.3 | 0.3  | 0     | 0.5   | 0     | 0     | 0    |
| 12-33              |      | 0   | 0   | 0.8 | 0.8 | 0.8 | 1.1  | 0     | 0     | 0     | 0     | 0    |
| 34-56              |      | 0   | 0.3 | 0.8 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 57-78              |      | 0   | 0   | 0.8 | 0.5 | 0   | 0.5  | 0     | 0     | 0     | 0     | 0    |
| 79-101             |      | 0   | 0   | 0.5 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 102-123            |      | 0   | 0   | 0.5 | 0.5 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 124-146            |      | 0.3 | 0   | 0.8 | 0.5 | 0.3 | 0    | 0     | 0     | 0     | 0     | 0    |
| 147-168            |      | 0   | 0.5 | 1.4 | 0.8 | 0   | 0    | 0.3   | 0     | 0     | 0     | 0    |
| 168-191            |      | 0   | 0   | 1.9 | 0.8 | 0   | 0    | 0.3   | 0     | 0     | 0     | 0    |
| 192-213            |      | 0.3 | 0   | 0.8 | 0.3 | 0.5 | 0.3  | 0     | 0     | 0.3   | 0     | 0    |
| 214-236            |      | 0   | 0.3 | 3.8 | 2.7 | 1.9 | 0.8  | 0.5   | 0.5   | 0     | 0     | 0    |
| 237-258            |      | 0   | 0   | 5.2 | 2.5 | 3   | 1.9  | 1.6   | 0     | 0.5   | 0     | 0    |
| 259-281            |      | 0.3 | 0   | 4.4 | 4.1 | 2.2 | 4.9  | 3.6   | 3     | 0.5   | 0     | 0    |
| 282-303            |      | 0.3 | 0.3 | 1.1 | 1.6 | 4.4 | 3.8  | 2.2   | 2.5   | 0.8   | 0.8   | 0    |
| 304-326            |      | 0   | 0   | 2.5 | 0.5 | 1.4 | 1.9  | 1.9   | 1.4   | 0.3   | 0     | 0    |
| 327-348            |      | 0   | 0.5 | 0.5 | 0.5 | 0.5 | 0    | 0     | 0.3   | 0     | 0     | 0    |

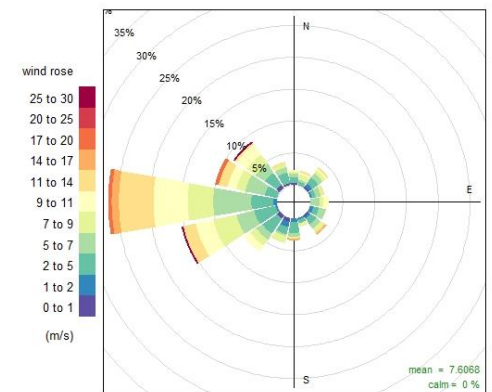


# Bhubaneswar

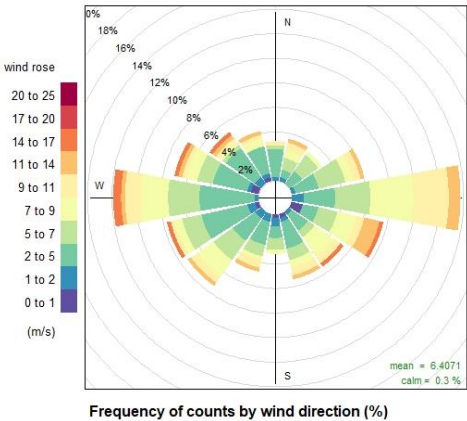
July

700 hPa level

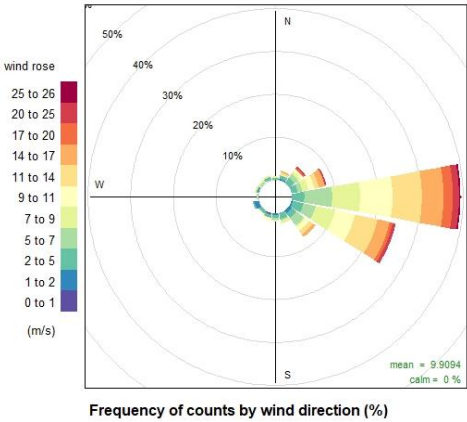
| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0.3 | 0   | 0.9 | 0.6 | 0.3 | 0.3  | 0     | 0     | 0     | 0     | 0    |
| 12-33              |      | 0   | 0   | 0.6 | 0.3 | 0.9 | 0.3  | 0.3   | 0     | 0     | 0     | 0    |
| 34-56              |      | 0.3 | 0.6 | 1.1 | 0.9 | 0.6 | 0.3  | 0.3   | 0     | 0     | 0     | 0    |
| 57-78              |      | 0   | 0.3 | 0.6 | 0.9 | 0.3 | 0    | 0.3   | 0     | 0     | 0     | 0    |
| 79-101             |      | 0   | 0   | 0   | 1.4 | 0.6 | 0.9  | 0     | 0     | 0     | 0     | 0    |
| 102-123            |      | 0   | 0.6 | 0.9 | 1.1 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 124-146            |      | 0.3 | 0.3 | 1.1 | 0.9 | 0.6 | 0    | 0.3   | 0.3   | 0     | 0     | 0    |
| 147-168            |      | 0   | 0.3 | 0.3 | 0   | 0.6 | 0    | 0     | 0     | 0     | 0     | 0    |
| 168-191            |      | 0   | 0.6 | 2   | 0.6 | 0.3 | 0    | 0     | 0.3   | 0     | 0     | 0    |
| 192-213            |      | 0.6 | 0.9 | 1.1 | 0.3 | 1.1 | 0    | 0     | 0     | 0     | 0     | 0    |
| 214-236            |      | 0.6 | 0   | 2.8 | 1.1 | 1.1 | 1.1  | 0     | 0     | 0     | 0     | 0    |
| 237-258            |      | 0   | 0.3 | 3.4 | 2.8 | 3.7 | 2.8  | 2     | 0     | 0     | 0     | 0.3  |
| 259-281            |      | 0   | 0.6 | 3.4 | 6   | 4   | 5.4  | 5.4   | 1.1   | 0.6   | 0     | 0    |
| 282-303            |      | 0   | 0   | 2   | 3.1 | 1.4 | 1.4  | 1.4   | 0     | 0.6   | 0     | 0    |
| 304-326            |      | 0.6 | 0   | 2.3 | 1.7 | 1.7 | 2    | 0.3   | 0     | 0     | 0     | 0.3  |
| 327-348            |      | 0.3 | 0   | 1.7 | 0.9 | 0.6 | 0    | 0.3   | 0     | 0     | 0     | 0    |



| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0   | 0.3 | 2.2 | 0.3 | 0   | 0.3  | 0     | 0     | 0     | 0     | 0    |
| 12-33              |      | 0   | 0.3 | 0.6 | 1   | 0.6 | 0.6  | 0.3   | 0     | 0     | 0     | 0    |
| 34-56              |      | 0   | 0   | 1.3 | 1.6 | 0.3 | 0    | 0     | 0     | 0     | 0     | 0    |
| 57-78              |      | 0   | 0.3 | 1.9 | 2.2 | 0.6 | 0.6  | 0.3   | 0     | 0     | 0     | 0    |
| 79-101             |      | 0   | 1   | 2.6 | 2.9 | 3.5 | 2.9  | 1     | 0     | 0     | 0     | 0    |
| 102-123            |      | 1   | 0   | 1.3 | 1.6 | 1.6 | 0.6  | 1.3   | 0.3   | 0     | 0     | 0    |
| 124-146            |      | 0   | 0.3 | 1.6 | 0.6 | 1.9 | 0.6  | 0     | 0.3   | 0     | 0     | 0    |
| 147-168            |      | 0.3 | 0.3 | 2.2 | 0.6 | 0.6 | 0.6  | 0.3   | 0     | 0     | 0     | 0    |
| 168-191            |      | 0.3 | 0.6 | 1   | 1.3 | 0.3 | 0    | 0     | 0     | 0     | 0     | 0    |
| 192-213            |      | 0   | 0.6 | 1.9 | 1   | 0.3 | 0.6  | 0.3   | 0     | 0     | 0     | 0    |
| 214-236            |      | 0   | 0.6 | 2.2 | 1.9 | 1.6 | 0.6  | 0.3   | 0     | 0     | 0     | 0    |
| 237-258            |      | 0.3 | 0.6 | 3.8 | 1.6 | 0.6 | 0.3  | 0     | 0.3   | 0     | 0     | 0    |
| 259-281            |      | 0   | 0.3 | 4.5 | 2.6 | 2.2 | 1.3  | 0.3   | 0.6   | 0     | 0     | 0    |
| 282-303            |      | 0.6 | 0.3 | 2.9 | 1.3 | 1   | 0.3  | 0.3   | 0.3   | 0     | 0     | 0    |
| 304-326            |      | 0   | 0.6 | 2.9 | 0.3 | 0.3 | 0.3  | 0.3   | 0.3   | 0     | 0     | 0    |
| 327-348            |      | 0.3 | 0.3 | 2.2 | 0   | 0.6 | 0.3  | 0.3   | 0     | 0     | 0     | 0    |

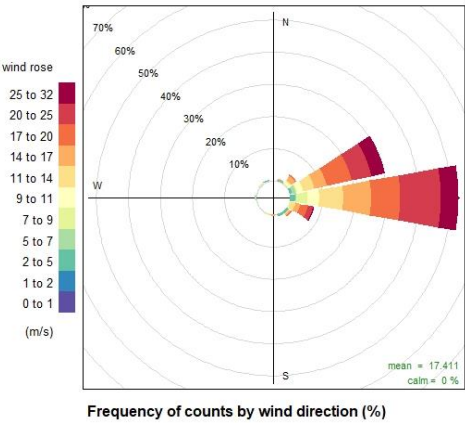


| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0   | 0   | 0.4 | 0   | 0.4 | 0    | 0     | 0     | 0     | 0     | 0    |
| 12-33              |      | 0   | 0.4 | 0.7 | 0   | 0.4 | 0    | 0.4   | 0.4   | 0     | 0     | 0    |
| 34-56              |      | 0   | 0   | 1.4 | 1.1 | 0.7 | 0.7  | 0     | 0     | 0.4   | 0.4   | 0    |
| 57-78              |      | 0   | 0   | 1.4 | 1.1 | 1.4 | 1.4  | 1.1   | 1.4   | 0     | 0.4   | 0    |
| 79-101             |      | 0   | 0   | 2.9 | 6.5 | 6.5 | 7.6  | 6.9   | 5.1   | 2.2   | 1.4   | 0.4  |
| 102-123            |      | 0   | 0.4 | 2.5 | 2.9 | 4.7 | 4.7  | 5.4   | 2.9   | 0.7   | 0.7   | 0    |
| 124-146            |      | 0   | 0.7 | 1.4 | 2.2 | 0.4 | 1.1  | 1.1   | 0.7   | 0     | 0     | 0    |
| 147-168            |      | 0   | 0   | 1.4 | 0.4 | 0.7 | 0    | 0     | 0     | 0     | 0     | 0    |
| 168-191            |      | 0   | 0.4 | 0.7 | 0.4 | 0.4 | 0    | 0     | 0     | 0     | 0     | 0    |
| 192-213            |      | 0.4 | 0   | 0.7 | 0   | 0   | 0.7  | 0     | 0     | 0     | 0     | 0    |
| 214-236            |      | 0   | 0   | 0.7 | 0   | 0   | 0.4  | 0     | 0     | 0     | 0     | 0    |
| 237-258            |      | 0   | 1.1 | 0.4 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 259-281            |      | 0   | 0   | 0   | 0.4 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 282-303            |      | 0   | 0.4 | 0   | 0.4 | 0   | 0.4  | 0     | 0     | 0     | 0     | 0    |
| 304-326            |      | 0   | 0   | 0   | 0.4 | 0.4 | 0    | 0     | 0     | 0     | 0     | 0    |
| 327-348            |      | 0   | 0   | 0.7 | 0   | 0.4 | 0    | 0     | 0     | 0     | 0     | 0    |

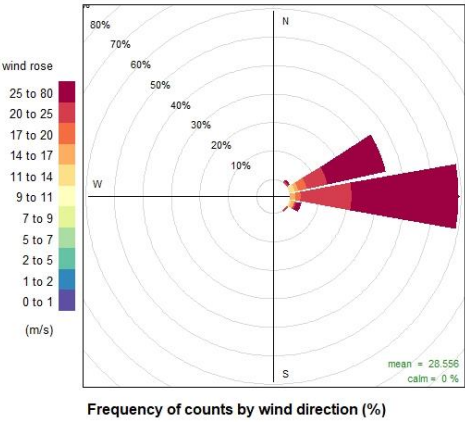




| <div>Speed</div> <div>Direction</div> | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|---------------------------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11                                | 0    | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 12-33                                 |      | 0   | 0   | 0.4 | 0   | 0   | 0    | 0     | 0.4   | 0     | 0     | 0    |
| 34-56                                 |      | 0   | 0   | 0   | 0   | 0.4 | 0.8  | 0.4   | 1.6   | 0.4   | 0     | 0    |
| 57-78                                 |      | 0   | 0   | 0.8 | 1.2 | 0.4 | 2    | 3.6   | 4     | 7.9   | 6.3   | 4.3  |
| 79-101                                |      | 0   | 0   | 1.6 | 0.4 | 3.6 | 3.6  | 7.5   | 8.7   | 9.1   | 12.6  | 5.5  |
| 102-123                               |      | 0   | 0   | 0   | 0   | 0.4 | 0    | 1.6   | 1.6   | 2.4   | 1.6   | 0.4  |
| 124-146                               |      | 0   | 0   | 0.8 | 0   | 0   | 0    | 0.4   | 0.4   | 0.4   | 0     | 0    |
| 147-168                               |      | 0   | 0   | 0.8 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 168-191                               |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0.4   | 0     | 0     | 0    |
| 192-213                               |      | 0   | 0   | 0   | 0   | 0   | 0    | 0.4   | 0     | 0     | 0     | 0    |
| 214-236                               |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 237-258                               |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 259-281                               |      | 0   | 0   | 0   | 0.4 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 282-303                               |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 304-326                               |      | 0   | 0   | 0   | 0   | 0.4 | 0    | 0     | 0     | 0     | 0     | 0    |
| 327-348                               |      | 0   | 0   | 0.4 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |

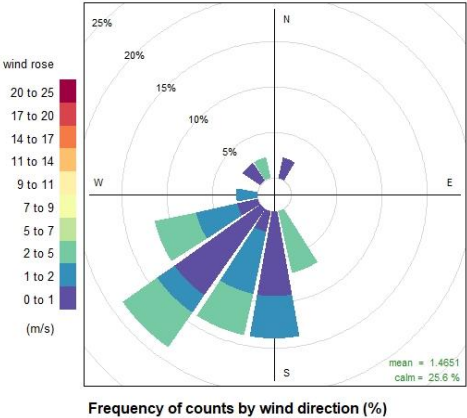


| <div>Speed</div> <div>Direction</div> | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|---------------------------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11                                | 0    | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 12-33                                 |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 34-56                                 |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0.6   | 0.6  |
| 57-78                                 |      | 0   | 0   | 0   | 0   | 0   | 0    | 1.9   | 1.2   | 3.1   | 7.4   | 21   |
| 79-101                                |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 1.9   | 1.9   | 17.9  | 37.7 |
| 102-123                               |      | 0   | 0   | 0   | 0   | 0   | 0    | 0.6   | 1.2   | 0     | 0.6   | 1.9  |
| 124-146                               |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0.6   | 0    |
| 147-168                               |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 168-191                               |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 192-213                               |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 214-236                               |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 237-258                               |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 259-281                               |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 282-303                               |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 304-326                               |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 327-348                               |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |

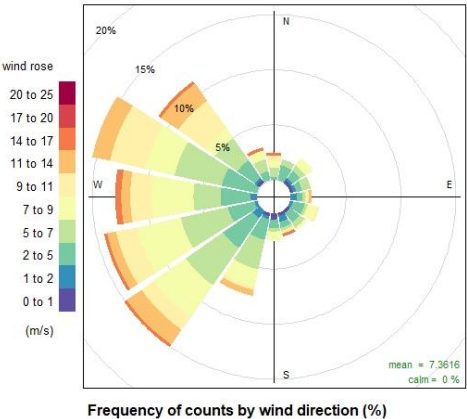




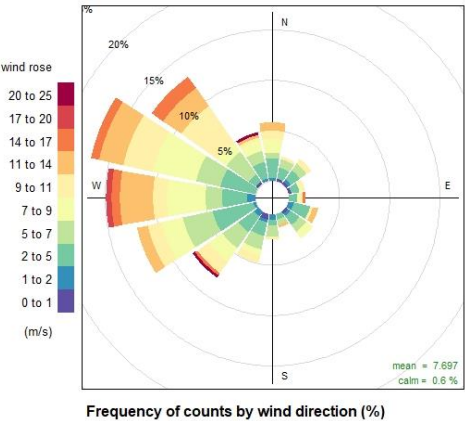
| Speed<br>Direction | calm | 0-1  | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|------|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 26   | 0    | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 12-33              |      | 2.3  | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 34-56              |      | 0    | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 57-78              |      | 0    | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 79-101             |      | 0    | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 102-123            |      | 0    | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 124-146            |      | 0    | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 147-168            |      | 0    | 0   | 7   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 168-191            |      | 9.3  | 4.7 | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 192-213            |      | 2.3  | 7   | 4.7 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 214-236            |      | 11.6 | 2.3 | 4.7 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 237-258            |      | 2.3  | 4.7 | 4.7 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 259-281            |      | 0    | 2.3 | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 282-303            |      | 0    | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 304-326            |      | 2.3  | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 327-348            |      | 0    | 0   | 2.3 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |



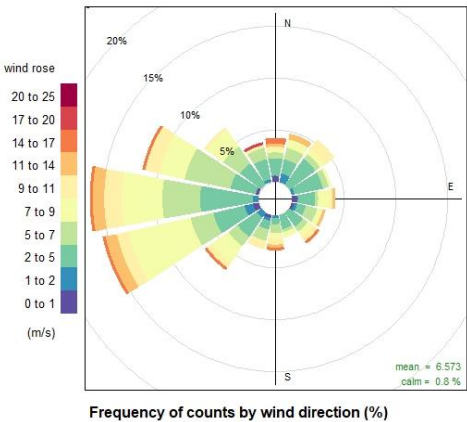
| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0   | 0   | 0.3 | 0.8 | 0.5 | 0.5  | 0     | 0.3   | 0     | 0     | 0    |
| 12-33              |      | 0   | 0   | 1.4 | 0.5 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 34-56              |      | 0.3 | 0.3 | 0.8 | 0.5 | 0.8 | 0    | 0     | 0     | 0     | 0     | 0    |
| 57-78              |      | 0.3 | 0.3 | 0.5 | 0.8 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 79-101             |      | 0   | 0.5 | 0.5 | 0.3 | 0   | 0.3  | 0.3   | 0     | 0     | 0     | 0    |
| 102-123            |      | 0   | 0.3 | 1.1 | 0.3 | 0.8 | 0.3  | 0     | 0     | 0     | 0     | 0    |
| 124-146            |      | 0.3 | 0   | 1.1 | 0.5 | 0.3 | 0    | 0     | 0     | 0     | 0     | 0    |
| 147-168            |      | 0.3 | 0.5 | 0.5 | 0.3 | 0   | 0.3  | 0     | 0.3   | 0     | 0     | 0    |
| 168-191            |      | 0.5 | 0   | 0.8 | 0.3 | 0.8 | 0    | 0     | 0     | 0     | 0     | 0    |
| 192-213            |      | 0.3 | 0.3 | 1.9 | 2.7 | 1.6 | 0.3  | 0.5   | 0     | 0     | 0     | 0    |
| 214-236            |      | 0   | 0.8 | 3.3 | 4.1 | 3.6 | 1.4  | 1.6   | 0.3   | 0     | 0     | 0    |
| 237-258            |      | 0   | 0.3 | 2.5 | 4.4 | 4.1 | 1.9  | 0.8   | 0.3   | 0     | 0     | 0    |
| 259-281            |      | 0   | 0.5 | 2.7 | 2.5 | 3.8 | 1.9  | 0.8   | 0.5   | 0     | 0     | 0    |
| 282-303            |      | 0   | 0   | 3.3 | 4.4 | 2.7 | 3.3  | 1.6   | 0     | 0     | 0     | 0    |
| 304-326            |      | 0.3 | 0.3 | 1.9 | 2.5 | 1.1 | 3    | 1.9   | 0.3   | 0     | 0     | 0    |
| 327-348            |      | 0   | 0   | 0.8 | 1.1 | 0.8 | 0    | 0     | 0.3   | 0     | 0     | 0    |



| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0   | 0.3 | 1.9 | 0.6 | 1.4 | 0.8  | 0.8   | 0     | 0     | 0     | 0    |
| 12-33              |      | 0.3 | 0   | 1.1 | 0.8 | 0   | 0.3  | 0     | 0     | 0     | 0     | 0    |
| 34-56              |      | 0.3 | 0.3 | 1.1 | 0.8 | 0   | 0.6  | 0     | 0     | 0     | 0     | 0    |
| 57-78              |      | 0.3 | 0   | 0.8 | 0   | 0.3 | 0.3  | 0     | 0     | 0     | 0     | 0    |
| 79-101             |      | 0   | 0   | 0.8 | 0   | 0.3 | 0.3  | 0     | 0.3   | 0     | 0     | 0    |
| 102-123            |      | 0   | 0.6 | 1.7 | 0   | 0   | 0.3  | 0.6   | 0     | 0     | 0     | 0    |
| 124-146            |      | 0.3 | 0.3 | 1.1 | 0.8 | 0.8 | 0    | 0     | 0     | 0     | 0     | 0    |
| 147-168            |      | 0   | 0   | 0.6 | 0.3 | 0   | 0    | 0.3   | 0     | 0     | 0     | 0    |
| 168-191            |      | 0   | 0.6 | 0.6 | 1.4 | 0   | 0.3  | 0     | 0     | 0     | 0     | 0    |
| 192-213            |      | 0.6 | 0.3 | 1.4 | 1.4 | 0.6 | 0.8  | 0     | 0     | 0     | 0     | 0    |
| 214-236            |      | 0   | 0.6 | 1.9 | 1.9 | 1.7 | 1.4  | 0     | 0.3   | 0     | 0.3   | 0    |
| 237-258            |      | 0   | 0.3 | 4.1 | 3   | 2.2 | 1.4  | 1.1   | 0     | 0     | 0     | 0    |
| 259-281            |      | 0   | 0.8 | 2.5 | 1.7 | 3.9 | 1.4  | 3.3   | 0.8   | 0.6   | 0     | 0    |
| 282-303            |      | 0   | 0   | 3.6 | 2.5 | 4.4 | 3    | 2.5   | 0.8   | 0     | 0     | 0    |
| 304-326            |      | 0.3 | 0   | 0.8 | 2.8 | 1.1 | 4.4  | 2.2   | 1.4   | 0     | 0     | 0    |
| 327-348            |      | 0   | 0.3 | 1.7 | 1.1 | 1.1 | 0.3  | 0.3   | 0     | 0     | 0.3   | 0    |



| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0.6 | 0   | 1.7 | 0.6 | 0.3 | 0.3  | 0.3   | 0.6   | 0     | 0     | 0    |
| 12-33              |      | 0   | 0.8 | 1.4 | 1.1 | 0.8 | 0    | 0.6   | 0     | 0     | 0     | 0    |
| 34-56              |      | 0   | 0   | 3.1 | 0.6 | 0.6 | 1.1  | 0     | 0     | 0     | 0     | 0    |
| 57-78              |      | 0   | 0.3 | 2.8 | 0.6 | 0.3 | 0    | 0     | 0     | 0     | 0     | 0    |
| 79-101             |      | 0.6 | 0   | 1.7 | 0.3 | 1.1 | 0.3  | 0.3   | 0     | 0     | 0     | 0    |
| 102-123            |      | 0.3 | 0.3 | 0.8 | 1.1 | 0.6 | 0    | 0.3   | 0     | 0     | 0     | 0    |
| 124-146            |      | 0   | 0   | 1.7 | 0.6 | 0.6 | 0.6  | 0     | 0.3   | 0     | 0     | 0    |
| 147-168            |      | 0   | 0   | 1.4 | 0.3 | 0.6 | 0    | 0     | 0     | 0     | 0     | 0    |
| 168-191            |      | 0   | 0.3 | 0.6 | 0.8 | 0.6 | 0.6  | 0.3   | 0.3   | 0     | 0     | 0    |
| 192-213            |      | 0.3 | 0.3 | 0.8 | 1.1 | 0   | 0.8  | 0     | 0     | 0     | 0     | 0    |
| 214-236            |      | 0   | 0.6 | 2.2 | 1.1 | 2   | 0.6  | 0     | 0.3   | 0     | 0     | 0    |
| 237-258            |      | 0.6 | 0.8 | 3.1 | 2.2 | 6.2 | 1.1  | 1.1   | 0.3   | 0     | 0     | 0    |
| 259-281            |      | 0   | 0.6 | 5.1 | 3.7 | 3.9 | 1.7  | 1.1   | 0.3   | 0     | 0     | 0    |
| 282-303            |      | 0.3 | 0   | 2.5 | 4.5 | 2.5 | 1.4  | 0     | 0.3   | 0     | 0     | 0    |
| 304-326            |      | 0   | 0   | 2.5 | 2   | 2   | 0.3  | 0     | 0     | 0     | 0     | 0    |
| 327-348            |      | 0   | 0.3 | 2   | 1.1 | 0   | 0.3  | 0     | 0     | 0.3   | 0     | 0    |

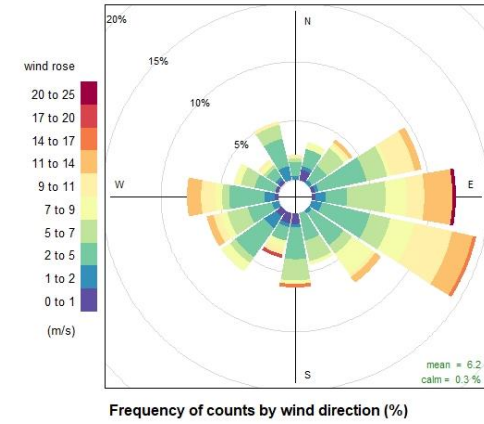


# Bhubaneswar

August

500 hPa level

| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0   | 0.3 | 1.2 | 0.3 | 0   | 0.3  | 0     | 0     | 0     | 0     | 0    |
| 12-33              |      | 0.9 | 0.3 | 1.5 | 0   | 0.6 | 0    | 0     | 0     | 0     | 0     | 0    |
| 34-56              |      | 0   | 0.3 | 1.5 | 1.8 | 0.3 | 0.3  | 0.3   | 0     | 0     | 0     | 0    |
| 57-78              |      | 0.3 | 0.3 | 4.2 | 1.8 | 0.3 | 2.1  | 0.6   | 0     | 0     | 0     | 0    |
| 79-101             |      | 0.3 | 0.9 | 1.8 | 3.3 | 1.8 | 1.5  | 2.4   | 0     | 0     | 0.3   | 0    |
| 102-123            |      | 0   | 0.9 | 4.2 | 1.8 | 2.1 | 3.3  | 1.8   | 0.3   | 0     | 0     | 0    |
| 124-146            |      | 0   | 0.3 | 3.3 | 0.9 | 2.1 | 0.3  | 0.6   | 0     | 0     | 0     | 0    |
| 147-168            |      | 0   | 0   | 2.4 | 1.5 | 0.3 | 0    | 0     | 0     | 0     | 0     | 0    |
| 168-191            |      | 0.9 | 0.3 | 2.7 | 2.1 | 0.3 | 0    | 0     | 0.3   | 0     | 0     | 0    |
| 192-213            |      | 0.9 | 0.3 | 1.2 | 0   | 0.6 | 0.6  | 0     | 0     | 0.3   | 0     | 0    |
| 214-236            |      | 0.6 | 1.2 | 3   | 0.6 | 0.9 | 0    | 0     | 0     | 0     | 0     | 0    |
| 237-258            |      | 0   | 0.6 | 2.1 | 1.8 | 0.6 | 0.6  | 0.6   | 0     | 0     | 0     | 0    |
| 259-281            |      | 0.3 | 0.9 | 3   | 0.6 | 0.6 | 1.2  | 1.2   | 0     | 0     | 0     | 0    |
| 282-303            |      | 0.3 | 0   | 1.8 | 1.2 | 0.6 | 0    | 0     | 0     | 0     | 0     | 0    |
| 304-326            |      | 0.3 | 0.3 | 0.9 | 0.3 | 0.3 | 0.3  | 0     | 0     | 0     | 0     | 0    |
| 327-348            |      | 0   | 1.2 | 2.4 | 1.2 | 0   | 0.3  | 0     | 0     | 0     | 0     | 0    |

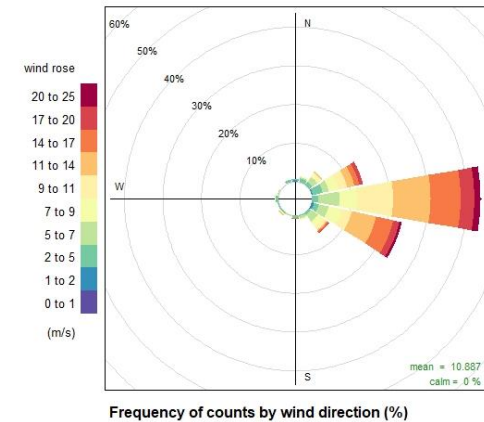


# Bhubaneswar

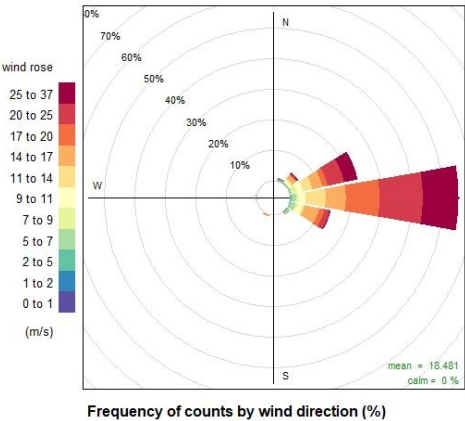
August

300 hPa level

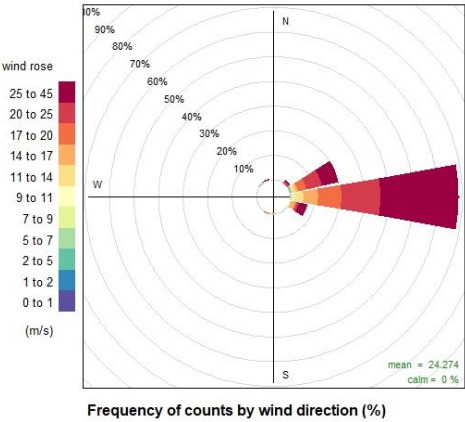
| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0   | 0.3 | 0.3 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 12-33              |      | 0   | 0   | 1   | 0.3 | 0.3 | 0    | 0     | 0     | 0     | 0     | 0    |
| 34-56              |      | 0   | 0   | 1   | 1.6 | 1   | 0.3  | 0.3   | 0     | 0     | 0     | 0    |
| 57-78              |      | 0   | 0.3 | 2.6 | 1.6 | 2.6 | 2.3  | 1.9   | 1.3   | 1     | 0     | 0    |
| 79-101             |      | 0   | 0   | 1.6 | 5.5 | 4.5 | 9.4  | 9.7   | 7.8   | 3.6   | 1.6   | 0    |
| 102-123            |      | 0   | 0.6 | 1.3 | 2.6 | 3.6 | 2.6  | 6.5   | 4.5   | 1.6   | 0.6   | 0    |
| 124-146            |      | 0   | 0   | 0.6 | 2.3 | 1.6 | 1    | 0.3   | 0.3   | 0.3   | 0     | 0    |
| 147-168            |      | 0   | 0   | 0.3 | 0.6 | 0.3 | 0    | 0     | 0     | 0     | 0     | 0    |
| 168-191            |      | 0   | 0   | 0.6 | 0   | 0   | 0    | 0     | 0.3   | 0     | 0     | 0    |
| 192-213            |      | 0   | 0   | 0   | 0.3 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 214-236            |      | 0   | 0   | 0.3 | 0   | 0.3 | 0    | 0.3   | 0     | 0     | 0     | 0    |
| 237-258            |      | 0   | 0   | 0.3 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 259-281            |      | 0   | 0   | 0.6 | 0   | 0.3 | 0    | 0     | 0     | 0     | 0     | 0    |
| 282-303            |      | 0   | 0   | 0   | 0.3 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 304-326            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 327-348            |      | 0   | 0   | 0.6 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |



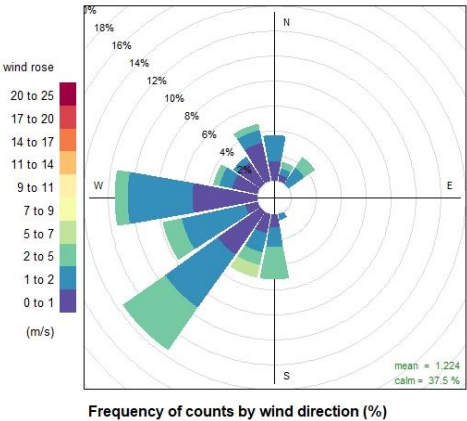
| <div>Speed</div> <div>Direction</div> | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|---------------------------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11                                | 0    | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 12-33                                 |      | 0   | 0   | 0.7 | 0   | 0   | 0    | 0     | 0     | 0     | 0.3   | 0    |
| 34-56                                 |      | 0   | 0   | 0.3 | 0   | 0   | 1    | 0.7   | 1.4   | 0.3   | 0.3   | 0.3  |
| 57-78                                 |      | 0   | 0   | 0.3 | 0.3 | 1.7 | 2.1  | 3.1   | 3.5   | 1.7   | 5.5   | 4.5  |
| 79-101                                |      | 0   | 0   | 0.7 | 1.4 | 0.7 | 2.4  | 6.6   | 6.6   | 11.1  | 14.2  | 11.8 |
| 102-123                               |      | 0   | 0   | 0.3 | 1.7 | 0.7 | 1.7  | 0.7   | 4.8   | 1.7   | 1.7   | 0.3  |
| 124-146                               |      | 0   | 0   | 0.7 | 0.3 | 0   | 0    | 0     | 0.3   | 0     | 0     | 0    |
| 147-168                               |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 168-191                               |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 192-213                               |      | 0   | 0   | 0   | 0   | 0   | 0    | 0.3   | 0     | 0.3   | 0     | 0    |
| 214-236                               |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 237-258                               |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 259-281                               |      | 0   | 0   | 0.3 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 282-303                               |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 304-326                               |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 327-348                               |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |



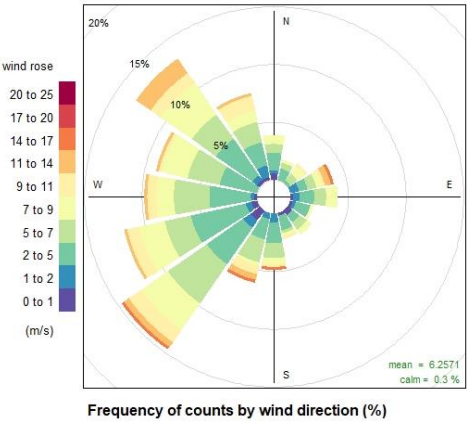
| <div>Speed</div> <div>Direction</div> | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|---------------------------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11                                | 0    | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 12-33                                 |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 34-56                                 |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 1     | 0.5  |
| 57-78                                 |      | 0   | 0   | 0.5 | 0.5 | 0   | 0    | 1.5   | 1     | 3.5   | 6.5   | 7    |
| 79-101                                |      | 0   | 0   | 0   | 0.5 | 1   | 0.5  | 3.5   | 6     | 9.5   | 15.9  | 31.8 |
| 102-123                               |      | 0   | 0   | 0   | 0   | 0   | 0.5  | 0     | 2     | 0.5   | 1     | 3.5  |
| 124-146                               |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 147-168                               |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 168-191                               |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0.5   | 0     | 0     | 0    |
| 192-213                               |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0.5   | 0     | 0    |
| 214-236                               |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 237-258                               |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 259-281                               |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 282-303                               |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 304-326                               |      | 0   | 0   | 0   | 0.5 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 327-348                               |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0.5  |



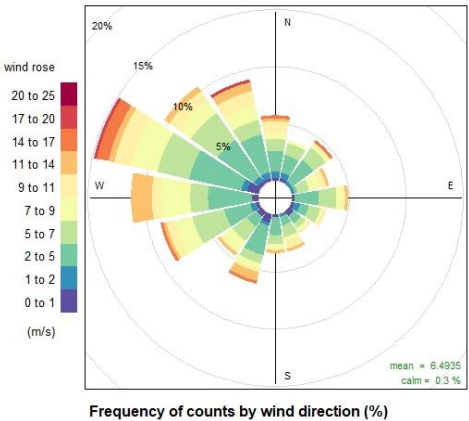
| <div>Speed</div> <div>Direction</div> | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|---------------------------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11                                | 38   | 1.6 | 2.1 | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 12-33                                 |      | 0.5 | 0.5 | 0.5 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 34-56                                 |      | 0   | 1.6 | 1   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 57-78                                 |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 79-101                                |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 102-123                               |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 124-146                               |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 147-168                               |      | 0   | 0.5 | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 168-191                               |      | 1   | 1.6 | 2.6 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 192-213                               |      | 1.6 | 1.6 | 1   | 1   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 214-236                               |      | 4.2 | 5.2 | 4.2 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 237-258                               |      | 1   | 5.2 | 1.6 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 259-281                               |      | 5.2 | 5.2 | 1   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 282-303                               |      | 2.1 | 1   | 0.5 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 304-326                               |      | 2.1 | 0.5 | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 327-348                               |      | 3.1 | 1   | 0.5 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |



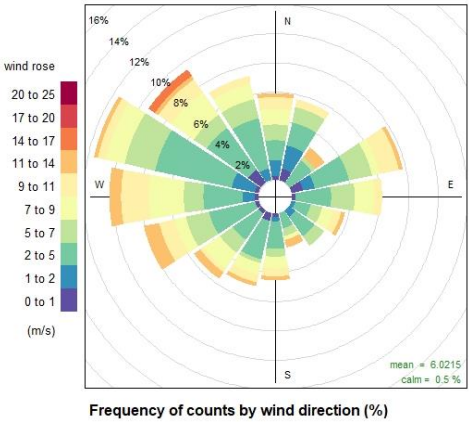
| <div>Speed</div> <div>Direction</div> | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|---------------------------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11                                | 0    | 0.5 | 0.3 | 1.5 | 0.8 | 0.8 | 0    | 0     | 0     | 0     | 0     | 0    |
| 12-33                                 |      | 0   | 0   | 1   | 0.5 | 0.3 | 0    | 0     | 0     | 0     | 0     | 0    |
| 34-56                                 |      | 0   | 0   | 0.3 | 0.8 | 0.8 | 0.3  | 0     | 0     | 0     | 0     | 0    |
| 57-78                                 |      | 0   | 0.8 | 0.8 | 0.8 | 0.5 | 0.3  | 0.5   | 0.3   | 0     | 0     | 0    |
| 79-101                                |      | 0.3 | 0.5 | 1.3 | 1   | 1   | 0    | 0     | 0     | 0     | 0     | 0    |
| 102-123                               |      | 0.3 | 0.3 | 1.3 | 0   | 0.3 | 0    | 0     | 0     | 0     | 0     | 0    |
| 124-146                               |      | 0.5 | 0   | 0.8 | 0.8 | 0.5 | 0    | 0     | 0     | 0     | 0     | 0    |
| 147-168                               |      | 0.3 | 0   | 1   | 0.3 | 0.3 | 0.3  | 0     | 0     | 0     | 0     | 0    |
| 168-191                               |      | 0   | 0.8 | 2.1 | 1.3 | 0.5 | 0.3  | 0     | 0.3   | 0     | 0     | 0    |
| 192-213                               |      | 0   | 0.5 | 1.8 | 2.1 | 0.3 | 0.8  | 0.5   | 0.3   | 0     | 0     | 0    |
| 214-236                               |      | 1   | 0.8 | 3.9 | 4.1 | 2.8 | 1.3  | 0.5   | 0.3   | 0     | 0     | 0    |
| 237-258                               |      | 0.5 | 0.5 | 4.9 | 2.3 | 2.3 | 1    | 0.3   | 0     | 0     | 0     | 0    |
| 259-281                               |      | 0.3 | 0.3 | 3.6 | 3.1 | 1.5 | 0.8  | 0.3   | 0     | 0     | 0     | 0    |
| 282-303                               |      | 0   | 0   | 3.3 | 2.8 | 2.3 | 0.3  | 0.3   | 0     | 0     | 0     | 0    |
| 304-326                               |      | 0.3 | 0.5 | 3.9 | 2.6 | 3.3 | 1    | 1.5   | 0     | 0     | 0     | 0    |
| 327-348                               |      | 0.3 | 1   | 2.1 | 1.8 | 1   | 1.3  | 0.3   | 0     | 0     | 0     | 0    |



| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0.3 | 0.5 | 1.8 | 1   | 0.5 | 1    | 0.3   | 0.3   | 0     | 0     | 0    |
| 12-33              |      | 0.3 | 0.5 | 1.6 | 1   | 0.3 | 0    | 0     | 0     | 0     | 0     | 0    |
| 34-56              |      | 0   | 0.3 | 2.3 | 1.3 | 0.3 | 0.3  | 0     | 0.3   | 0     | 0     | 0    |
| 57-78              |      | 0   | 0.3 | 0.3 | 1   | 1   | 0.5  | 0.3   | 0     | 0     | 0     | 0    |
| 79-101             |      | 0.3 | 0   | 2.1 | 1.6 | 0.5 | 0.3  | 0.3   | 0     | 0     | 0     | 0    |
| 102-123            |      | 0.3 | 0.5 | 0.8 | 1   | 0.3 | 0.3  | 0     | 0     | 0     | 0     | 0    |
| 124-146            |      | 0.5 | 0   | 0.8 | 0.5 | 0.3 | 0.3  | 0     | 0     | 0     | 0     | 0    |
| 147-168            |      | 0   | 0.3 | 0.8 | 1   | 0.3 | 0.8  | 0.3   | 0     | 0     | 0     | 0    |
| 168-191            |      | 0.3 | 0   | 1.6 | 0.8 | 0.5 | 0    | 0.3   | 0     | 0     | 0     | 0    |
| 192-213            |      | 0.8 | 0.3 | 2.6 | 0.8 | 0.5 | 0.3  | 0.8   | 0.3   | 0     | 0     | 0    |
| 214-236            |      | 0.5 | 0   | 1   | 1.6 | 1   | 0.3  | 0.3   | 0     | 0     | 0     | 0    |
| 237-258            |      | 0.3 | 0.5 | 2.3 | 2.9 | 1.6 | 0.8  | 0.3   | 0.3   | 0     | 0     | 0    |
| 259-281            |      | 0.5 | 0   | 3.9 | 1.6 | 2.6 | 0.8  | 1.8   | 0     | 0     | 0     | 0    |
| 282-303            |      | 1   | 0.5 | 4.7 | 2.9 | 2.3 | 1.6  | 0.5   | 1     | 0.3   | 0     | 0    |
| 304-326            |      | 0.3 | 0.5 | 3.9 | 2.9 | 1.3 | 1    | 0.5   | 0     | 0     | 0     | 0    |
| 327-348            |      | 0.3 | 0.5 | 3.4 | 1.3 | 1.3 | 1.3  | 0.8   | 0     | 0.3   | 0     | 0    |

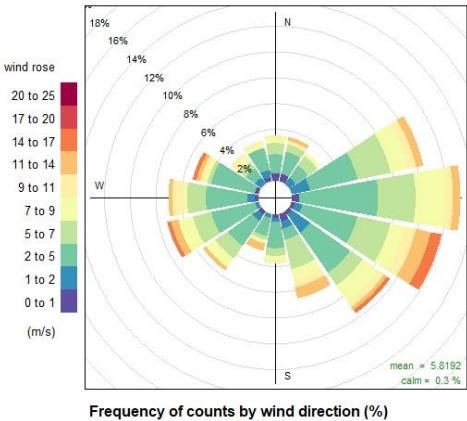


| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0.3 | 1.1 | 1.3 | 1.1 | 1.1 | 0.8  | 0.3   | 0     | 0     | 0     | 0    |
| 12-33              |      | 0.8 | 1.6 | 1.6 | 1.1 | 0   | 0.5  | 0     | 0     | 0     | 0     | 0    |
| 34-56              |      | 0   | 0   | 1.9 | 0.3 | 0   | 0    | 0.8   | 0     | 0     | 0     | 0    |
| 57-78              |      | 0.8 | 0.8 | 2.4 | 1.6 | 0.5 | 1.3  | 0.3   | 0     | 0     | 0     | 0    |
| 79-101             |      | 0.3 | 0   | 2.4 | 1.6 | 1.3 | 0.5  | 0     | 0     | 0     | 0     | 0    |
| 102-123            |      | 0   | 0.3 | 1.1 | 0.8 | 0.8 | 0.5  | 0.3   | 0     | 0     | 0     | 0    |
| 124-146            |      | 0   | 0.5 | 1.6 | 0.8 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 147-168            |      | 0   | 0   | 1.1 | 0.5 | 0.3 | 0    | 0.5   | 0     | 0     | 0     | 0    |
| 168-191            |      | 0.3 | 0.3 | 1.9 | 0.5 | 0.8 | 0.5  | 0.3   | 0     | 0     | 0     | 0    |
| 192-213            |      | 0.5 | 0   | 2.7 | 0.3 | 0.8 | 0.5  | 0.3   | 0     | 0     | 0     | 0    |
| 214-236            |      | 0.3 | 0   | 2.2 | 1.1 | 1.3 | 0.3  | 0.5   | 0     | 0     | 0     | 0    |
| 237-258            |      | 0.3 | 0   | 3.2 | 1.6 | 0.8 | 1.1  | 1.1   | 0     | 0     | 0     | 0    |
| 259-281            |      | 0.3 | 0.8 | 2.7 | 1.3 | 2.4 | 1.9  | 0.8   | 0     | 0     | 0     | 0    |
| 282-303            |      | 0.3 | 1.6 | 5.4 | 2.2 | 1.3 | 0.5  | 0.3   | 0     | 0     | 0     | 0    |
| 304-326            |      | 1.1 | 0   | 3.5 | 1.1 | 1.9 | 1.1  | 0.3   | 0.5   | 0     | 0     | 0    |
| 327-348            |      | 0   | 0.8 | 3.5 | 1.3 | 1.1 | 0.5  | 0     | 0     | 0     | 0     | 0    |

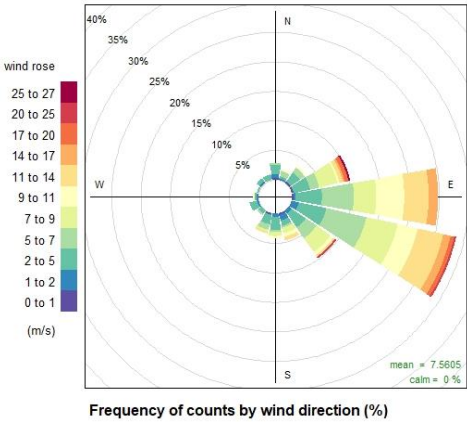




| <div>Speed</div> <div>Direction</div> | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|---------------------------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11                                | 0    | 0.6 | 0   | 1.5 | 0.9 | 0.3 | 0.3  | 0     | 0     | 0     | 0     | 0    |
| 12-33                                 |      | 0.6 | 0   | 1.7 | 0.6 | 0   | 0.3  | 0.3   | 0     | 0     | 0     | 0    |
| 34-56                                 |      | 0   | 0.6 | 1.2 | 0.9 | 0.3 | 0    | 0     | 0     | 0     | 0     | 0    |
| 57-78                                 |      | 0   | 1.5 | 3.8 | 2.6 | 1.5 | 0.6  | 0.6   | 0     | 0     | 0     | 0    |
| 79-101                                |      | 0.6 | 0   | 6.1 | 2.9 | 2.3 | 0.6  | 0.6   | 0     | 0     | 0     | 0    |
| 102-123                               |      | 0.3 | 0.6 | 4.4 | 2.6 | 1.2 | 0.9  | 1.2   | 0.9   | 0     | 0     | 0    |
| 124-146                               |      | 0.3 | 1.7 | 3.8 | 1.2 | 1.5 | 0.6  | 0.3   | 0.3   | 0     | 0     | 0    |
| 147-168                               |      | 0.3 | 0.6 | 0.9 | 2.3 | 0.9 | 0.6  | 0.9   | 0     | 0     | 0     | 0    |
| 168-191                               |      | 0.6 | 0.3 | 2   | 0.6 | 0.3 | 0.3  | 0     | 0     | 0     | 0     | 0    |
| 192-213                               |      | 0   | 0.3 | 1.5 | 0.3 | 0.3 | 0    | 0.6   | 0     | 0     | 0     | 0    |
| 214-236                               |      | 0.3 | 0.6 | 2.3 | 1.2 | 0.9 | 0    | 0.3   | 0     | 0     | 0     | 0    |
| 237-258                               |      | 0   | 0.3 | 3.5 | 1.5 | 1.2 | 0    | 0.6   | 0.3   | 0     | 0     | 0    |
| 259-281                               |      | 0.3 | 0.6 | 3.2 | 1.5 | 0.3 | 0.9  | 0.3   | 0     | 0     | 0     | 0    |
| 282-303                               |      | 0.3 | 0   | 3.5 | 0.3 | 0.3 | 0.3  | 0.3   | 0.3   | 0     | 0     | 0    |
| 304-326                               |      | 0   | 0.6 | 0.9 | 0.6 | 0.6 | 0.3  | 0     | 0     | 0     | 0     | 0    |
| 327-348                               |      | 0.3 | 0.6 | 1.7 | 0   | 0.3 | 0.3  | 0     | 0     | 0     | 0     | 0    |



| <div>Speed</div> <div>Direction</div> | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|---------------------------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11                                | 0    | 0.3 | 0.6 | 1.6 | 0.3 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 12-33                                 |      | 0   | 0.3 | 0.3 | 1   | 0   | 0.3  | 0     | 0     | 0     | 0     | 0    |
| 34-56                                 |      | 0.3 | 0   | 1.9 | 1   | 0   | 0.3  | 0     | 0     | 0     | 0     | 0    |
| 57-78                                 |      | 0.3 | 0   | 2.9 | 1.6 | 3.2 | 0.3  | 0.6   | 0.3   | 0.6   | 0     | 0.3  |
| 79-101                                |      | 0.3 | 0.3 | 4.5 | 5.4 | 3.8 | 4.8  | 4.1   | 1.6   | 0     | 0     | 0    |
| 102-123                               |      | 0   | 1.3 | 4.8 | 7   | 5.4 | 3.5  | 4.5   | 1.3   | 0.6   | 0.3   | 0    |
| 124-146                               |      | 0   | 0.6 | 2.9 | 2.2 | 2.9 | 0.6  | 0.3   | 0     | 0     | 0.3   | 0    |
| 147-168                               |      | 0.3 | 1   | 1   | 0.3 | 1   | 0.6  | 0.6   | 0     | 0     | 0     | 0    |
| 168-191                               |      | 0   | 0.6 | 2.2 | 0.3 | 0.6 | 0.3  | 0     | 0     | 0     | 0     | 0    |
| 192-213                               |      | 0.3 | 0   | 1.6 | 1   | 0.3 | 0    | 0.3   | 0     | 0     | 0     | 0    |
| 214-236                               |      | 0   | 0   | 0.6 | 0.3 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 237-258                               |      | 0   | 0.3 | 1.3 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 259-281                               |      | 0   | 0.3 | 0.3 | 0   | 0   | 0.3  | 0     | 0     | 0     | 0     | 0    |
| 282-303                               |      | 0   | 0   | 0.3 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 304-326                               |      | 0   | 0.3 | 0.6 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 327-348                               |      | 0   | 0   | 1   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |



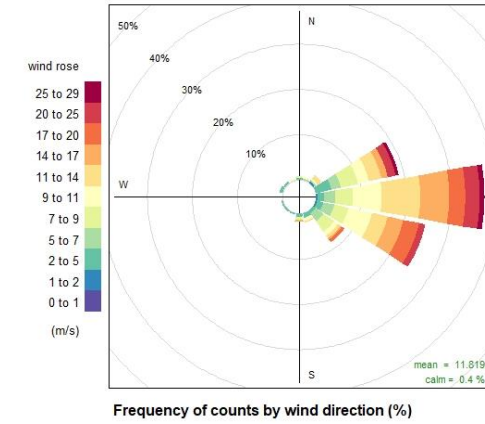


# Bhubaneswar

September

200 hPa level

| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0   | 0   | 0.4 | 0   | 0.4 | 0    | 0     | 0     | 0     | 0     | 0    |
| 12-33              |      | 0   | 0   | 0   | 0.4 | 0   | 0.4  | 0     | 0     | 0     | 0     | 0    |
| 34-56              |      | 0   | 0.4 | 0   | 0.4 | 0   | 0.4  | 1.1   | 0     | 0     | 0     | 0    |
| 57-78              |      | 0   | 0   | 3.6 | 2.1 | 3.9 | 2.5  | 2.8   | 1.4   | 0     | 1.8   | 0.7  |
| 79-101             |      | 0   | 0.4 | 1.4 | 2.5 | 3.9 | 6.4  | 8.5   | 6.4   | 3.6   | 3.2   | 1.1  |
| 102-123            |      | 0   | 0.4 | 1.4 | 2.5 | 3.2 | 5.3  | 3.6   | 3.6   | 3.6   | 1.4   | 0    |
| 124-146            |      | 0   | 0   | 0.7 | 2.1 | 2.8 | 1.1  | 0.7   | 0.4   | 0.7   | 0     | 0    |
| 147-168            |      | 0   | 0   | 0.7 | 0   | 0   | 0.7  | 0.4   | 0     | 0     | 0     | 0    |
| 168-191            |      | 0   | 0   | 1.1 | 0   | 0.7 | 0    | 0     | 0.4   | 0     | 0     | 0    |
| 192-213            |      | 0   | 0   | 0.4 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 214-236            |      | 0   | 0   | 0.4 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 237-258            |      | 0   | 0   | 0.4 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 259-281            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 282-303            |      | 0   | 0   | 0.7 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 304-326            |      | 0   | 0   | 0.4 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 327-348            |      | 0   | 0   | 0   | 0   | 0   | 0.4  | 0     | 0     | 0     | 0     | 0    |

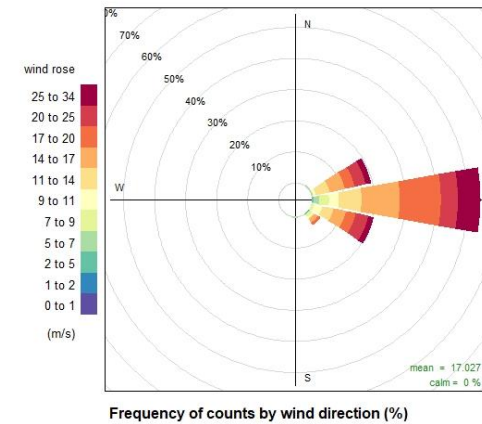


# Bhubaneswar

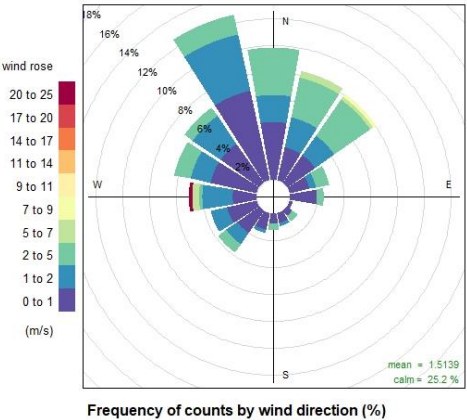
September

100 hPa level

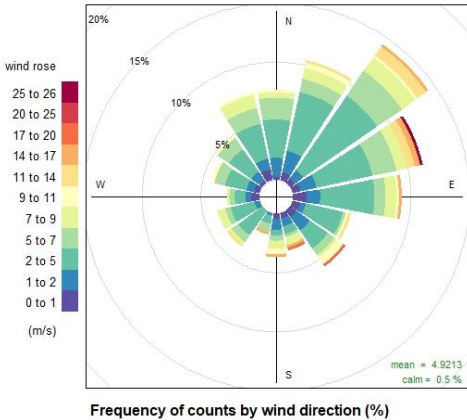
| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 12-33              |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 34-56              |      | 0   | 0   | 0   | 0.5 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 57-78              |      | 0   | 0   | 0   | 0.5 | 0   | 0.9  | 4.6   | 5     | 3.2   | 3.7   | 1.8  |
| 79-101             |      | 0   | 0   | 0.5 | 1.8 | 3.2 | 3.2  | 7.3   | 12.3  | 13.2  | 5.5   | 7.3  |
| 102-123            |      | 0   | 0   | 0   | 0   | 0.9 | 2.7  | 3.7   | 4.1   | 3.2   | 4.1   | 1.8  |
| 124-146            |      | 0   | 0   | 0.5 | 0   | 0.9 | 0.5  | 0.5   | 1.4   | 0.9   | 0     | 0    |
| 147-168            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 168-191            |      | 0   | 0   | 0   | 0.5 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 192-213            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 214-236            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 237-258            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 259-281            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 282-303            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 304-326            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 327-348            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |



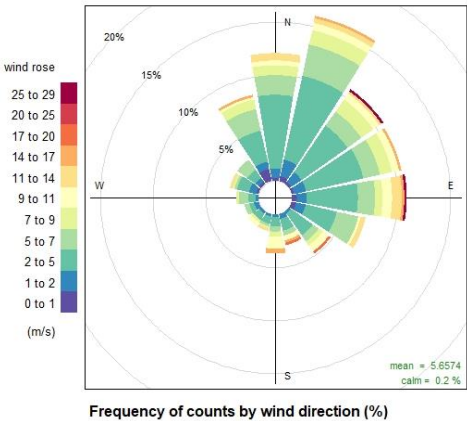
| <div>Speed</div> <div>Direction</div> | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|---------------------------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11                                | 25   | 4.3 | 2   | 3.5 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 12-33                                 |      | 2.5 | 2.3 | 3   | 0.5 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 34-56                                 |      | 2.5 | 1.8 | 3.3 | 0.3 | 0.3 | 0    | 0     | 0     | 0     | 0     | 0    |
| 57-78                                 |      | 1.5 | 0.5 | 1   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 79-101                                |      | 2   | 0   | 0.5 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 102-123                               |      | 0.3 | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 124-146                               |      | 0.5 | 0   | 0.5 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 147-168                               |      | 0.8 | 0.3 | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 168-191                               |      | 0.8 | 0   | 0.5 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 192-213                               |      | 1.3 | 0.3 | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 214-236                               |      | 2   | 1   | 0.8 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 237-258                               |      | 2.3 | 1.3 | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 259-281                               |      | 1.8 | 2.3 | 0.3 | 0.5 | 0   | 0    | 0     | 0     | 0     | 0.3   | 0    |
| 282-303                               |      | 3.5 | 1.5 | 1.3 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 304-326                               |      | 3.5 | 2.5 | 0.8 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 327-348                               |      | 6.8 | 4.3 | 1.5 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |



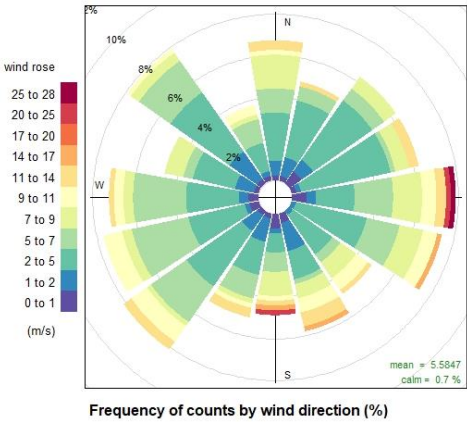
| <div>Speed</div> <div>Direction</div> | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|---------------------------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11                                | 0    | 0.2 | 1.6 | 3.2 | 1.9 | 0.5 | 0.2  | 0     | 0     | 0     | 0     | 0    |
| 12-33                                 |      | 0.7 | 1.9 | 5.1 | 1.2 | 0.9 | 0.5  | 0.2   | 0     | 0     | 0     | 0    |
| 34-56                                 |      | 0.5 | 0.9 | 7.6 | 2.5 | 1.4 | 0.2  | 0.9   | 0.2   | 0     | 0     | 0    |
| 57-78                                 |      | 0.7 | 1.4 | 4.9 | 2.1 | 0.9 | 0    | 0.7   | 0.5   | 0     | 0     | 0.2  |
| 79-101                                |      | 1.2 | 1.2 | 4.6 | 0.9 | 0.9 | 0.2  | 0     | 0.2   | 0     | 0     | 0    |
| 102-123                               |      | 0.7 | 0.5 | 3.2 | 0.2 | 0   | 0.2  | 0.2   | 0     | 0     | 0     | 0    |
| 124-146                               |      | 0.7 | 1.4 | 1.9 | 0.7 | 0.2 | 0.7  | 0     | 0     | 0.2   | 0     | 0    |
| 147-168                               |      | 0.5 | 0.7 | 0.7 | 0.2 | 0.7 | 0    | 0     | 0.2   | 0.2   | 0     | 0    |
| 168-191                               |      | 0.5 | 0.9 | 0.5 | 0.5 | 0.7 | 0.5  | 0     | 0.2   | 0     | 0     | 0    |
| 192-213                               |      | 0   | 0.2 | 0.7 | 0.7 | 0   | 0    | 0     | 0.2   | 0     | 0     | 0    |
| 214-236                               |      | 0   | 0   | 2.5 | 0.7 | 0.2 | 0    | 0.2   | 0     | 0     | 0     | 0    |
| 237-258                               |      | 0   | 0.5 | 2.1 | 0.5 | 0.7 | 0    | 0     | 0     | 0     | 0     | 0    |
| 259-281                               |      | 0.7 | 0.5 | 0.9 | 0.5 | 0.2 | 0    | 0     | 0     | 0     | 0     | 0    |
| 282-303                               |      | 0.5 | 0.7 | 1.9 | 0.9 | 0   | 0.2  | 0     | 0     | 0     | 0     | 0    |
| 304-326                               |      | 0.2 | 0.9 | 2.3 | 1.2 | 0   | 0.2  | 0     | 0     | 0     | 0     | 0    |
| 327-348                               |      | 0.9 | 0.9 | 3   | 1.4 | 1.2 | 0.2  | 0     | 0     | 0     | 0     | 0    |



| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0.2 | 0.9 | 6.9 | 1.9 | 0.9 | 0.5  | 0.7   | 0     | 0     | 0     | 0    |
| 12-33              |      | 0.5 | 1.6 | 8.1 | 3   | 1.4 | 0.7  | 0.5   | 0.2   | 0     | 0     | 0    |
| 34-56              |      | 0.2 | 1.2 | 5.3 | 1.6 | 1.4 | 0.7  | 0.2   | 0     | 0     | 0     | 0.2  |
| 57-78              |      | 0.2 | 1.2 | 5.6 | 1.6 | 1.2 | 0.7  | 0     | 0.2   | 0     | 0     | 0    |
| 79-101             |      | 0.5 | 0.9 | 4.9 | 1.6 | 0.7 | 0.9  | 0.9   | 0.2   | 0     | 0     | 0.2  |
| 102-123            |      | 0.5 | 0.9 | 3   | 2.1 | 0   | 0.2  | 0.5   | 0     | 0     | 0     | 0    |
| 124-146            |      | 0   | 0.2 | 2.5 | 0.7 | 0.5 | 0.7  | 0     | 0     | 0.2   | 0     | 0    |
| 147-168            |      | 0   | 0.5 | 1.2 | 0.5 | 0   | 0.5  | 0     | 0.2   | 0.2   | 0     | 0    |
| 168-191            |      | 0   | 0.2 | 0.9 | 0.5 | 0.5 | 1.2  | 0     | 0.5   | 0     | 0     | 0    |
| 192-213            |      | 0   | 0.2 | 0.7 | 0.2 | 0.2 | 0    | 0.2   | 0     | 0     | 0     | 0    |
| 214-236            |      | 0   | 0.2 | 0.7 | 0   | 0.2 | 0.5  | 0     | 0     | 0     | 0     | 0    |
| 237-258            |      | 0   | 0.5 | 0.5 | 0.5 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 259-281            |      | 0   | 0.2 | 0.7 | 0.9 | 0.2 | 0    | 0     | 0     | 0     | 0     | 0    |
| 282-303            |      | 0.2 | 0.7 | 1.2 | 0.2 | 0.2 | 0    | 0.2   | 0     | 0     | 0     | 0    |
| 304-326            |      | 0.2 | 0.5 | 0.9 | 1.2 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 327-348            |      | 1.2 | 0.7 | 3   | 2.1 | 0.9 | 0.2  | 0     | 0.2   | 0     | 0     | 0    |



| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0.2 | 0.7 | 2.3 | 1.2 | 1.6 | 0.2  | 0.5   | 0     | 0     | 0     | 0    |
| 12-33              |      | 0.2 | 0.9 | 2.8 | 0.7 | 0   | 0    | 0.2   | 0     | 0     | 0     | 0    |
| 34-56              |      | 0.7 | 0.7 | 3.5 | 0.7 | 0.7 | 0    | 0     | 0     | 0     | 0     | 0    |
| 57-78              |      | 0.2 | 0.2 | 4.4 | 0.2 | 0.7 | 0    | 0.5   | 0     | 0     | 0     | 0    |
| 79-101             |      | 0.7 | 0.5 | 1.9 | 1.9 | 1.4 | 0.7  | 0.5   | 0     | 0     | 0.2   | 0.2  |
| 102-123            |      | 0   | 0.2 | 3.5 | 1.6 | 1.2 | 0.7  | 0     | 0.2   | 0     | 0     | 0    |
| 124-146            |      | 0   | 0.2 | 2.3 | 0.5 | 0.9 | 0.7  | 0.2   | 0     | 0     | 0     | 0    |
| 147-168            |      | 0.5 | 1.4 | 1.2 | 0.2 | 0.7 | 0.5  | 0.7   | 0     | 0     | 0     | 0    |
| 168-191            |      | 0.7 | 0.2 | 1.2 | 0.9 | 1.2 | 0.5  | 0.2   | 0.5   | 0     | 0.2   | 0    |
| 192-213            |      | 0.2 | 1.2 | 1.6 | 1.2 | 0.2 | 0.2  | 0.5   | 0     | 0     | 0     | 0    |
| 214-236            |      | 0.2 | 0.9 | 3.2 | 2.1 | 0.2 | 0.9  | 0.5   | 0     | 0     | 0     | 0    |
| 237-258            |      | 0.5 | 0.2 | 2.8 | 2.8 | 0.5 | 0.9  | 0     | 0     | 0     | 0     | 0    |
| 259-281            |      | 0.5 | 0.5 | 2.6 | 2.6 | 0.5 | 0.5  | 0.2   | 0     | 0     | 0     | 0    |
| 282-303            |      | 0.2 | 0.9 | 2.1 | 0.5 | 0.9 | 0    | 0     | 0     | 0     | 0     | 0    |
| 304-326            |      | 0.2 | 1.6 | 3.5 | 1.9 | 0.5 | 0.2  | 0     | 0     | 0     | 0     | 0    |
| 327-348            |      | 0.2 | 0.2 | 1.4 | 1.2 | 0.2 | 0.5  | 0     | 0     | 0     | 0     | 0    |

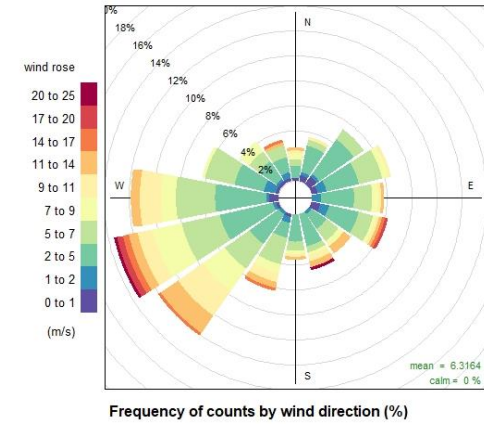


# Bhubaneswar

October

500 hPa level

| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0.2 | 0   | 1   | 0.5 | 0.5 | 0.2  | 0.2   | 0     | 0     | 0     | 0    |
| 12-33              |      | 0.5 | 0.2 | 2.2 | 0.5 | 0   | 0.2  | 0     | 0     | 0     | 0     | 0    |
| 34-56              |      | 0.7 | 0.2 | 3.4 | 1   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 57-78              |      | 0.5 | 0.7 | 2.7 | 1.9 | 0.5 | 0.2  | 0     | 0     | 0     | 0     | 0    |
| 79-101             |      | 0   | 0.7 | 2.7 | 1.4 | 0.5 | 0.2  | 0.2   | 0     | 0     | 0     | 0    |
| 102-123            |      | 0.7 | 0.7 | 2.4 | 1.2 | 0.2 | 0.2  | 0.2   | 0.2   | 0.2   | 0     | 0    |
| 124-146            |      | 0   | 0.2 | 1.4 | 1.2 | 0.5 | 0    | 0.7   | 0     | 0     | 0     | 0    |
| 147-168            |      | 0   | 0   | 2.7 | 0.5 | 0.2 | 0.5  | 0.5   | 0     | 0     | 0.2   | 0    |
| 168-191            |      | 0   | 0   | 2.2 | 0.7 | 0.2 | 0.2  | 0.2   | 0     | 0     | 0     | 0    |
| 192-213            |      | 0.2 | 0.5 | 1.2 | 2.2 | 0.7 | 0.7  | 0.5   | 0.2   | 0     | 0     | 0    |
| 214-236            |      | 0   | 0.2 | 2.9 | 2.4 | 2.2 | 2.4  | 1.7   | 0.2   | 0     | 0     | 0    |
| 237-258            |      | 0.2 | 0.2 | 4.3 | 3.1 | 2.4 | 1.2  | 0.7   | 0.5   | 0.5   | 0.2   | 0    |
| 259-281            |      | 0.7 | 0.2 | 4.1 | 3.1 | 1.2 | 1.7  | 0.7   | 0     | 0     | 0     | 0    |
| 282-303            |      | 0.2 | 1   | 2.4 | 2.4 | 0.2 | 0    | 0     | 0     | 0     | 0     | 0    |
| 304-326            |      | 0.2 | 0.2 | 1.7 | 1   | 1   | 0    | 0     | 0     | 0     | 0     | 0    |
| 327-348            |      | 0.2 | 0.5 | 1.2 | 1   | 0   | 0    | 0.2   | 0.2   | 0     | 0     | 0    |

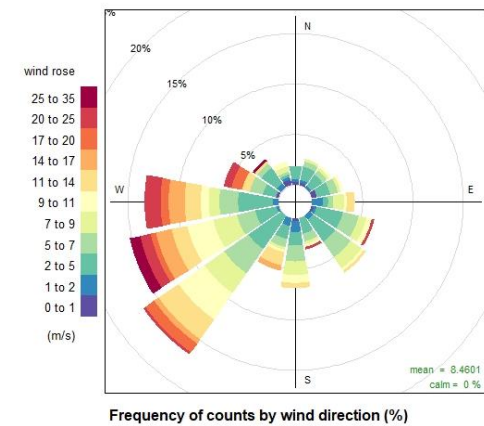


# Bhubaneswar

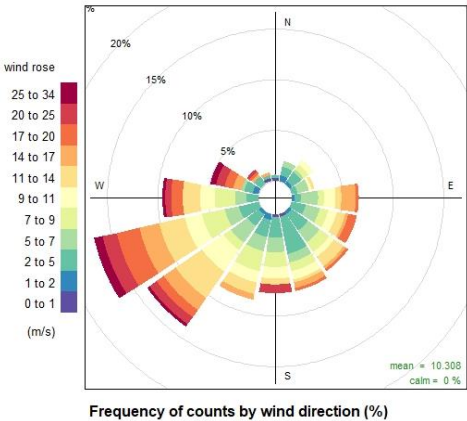
October

300 hPa level

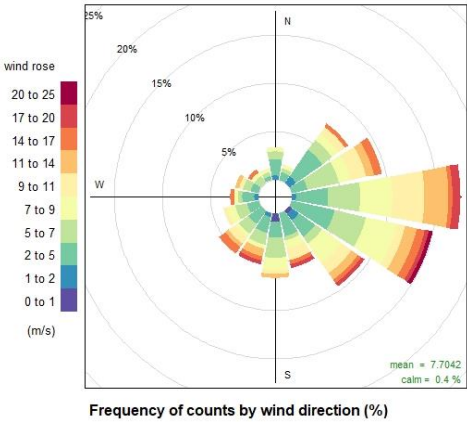
| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0.3 | 0.3 | 1.3 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 12-33              |      | 0.3 | 0.3 | 1.3 | 0.5 | 0.3 | 0    | 0     | 0     | 0     | 0     | 0    |
| 34-56              |      | 0   | 0.3 | 1.3 | 0.5 | 0.3 | 0.3  | 0     | 0     | 0     | 0     | 0    |
| 57-78              |      | 0.5 | 0   | 1.3 | 0.8 | 0.3 | 0.3  | 0     | 0     | 0     | 0     | 0    |
| 79-101             |      | 0   | 1.1 | 0.5 | 0.5 | 1.1 | 0.3  | 0.8   | 0     | 0     | 0     | 0    |
| 102-123            |      | 0.3 | 0.3 | 2.7 | 1.6 | 0.8 | 0.5  | 0     | 0     | 0     | 0.3   | 0    |
| 124-146            |      | 0   | 0.5 | 2.7 | 1.9 | 1.3 | 0.3  | 0.3   | 0     | 0     | 0     | 0    |
| 147-168            |      | 0   | 0   | 1.6 | 0.8 | 0.3 | 0.3  | 0     | 0     | 0     | 0.3   | 0    |
| 168-191            |      | 0.3 | 1.1 | 1.3 | 1.6 | 1.3 | 0.8  | 0.5   | 0     | 0     | 0     | 0    |
| 192-213            |      | 0   | 0.8 | 1.3 | 0.8 | 0.3 | 0.3  | 1.3   | 0.5   | 0     | 0     | 0    |
| 214-236            |      | 0   | 0   | 4   | 2.9 | 2.4 | 3.2  | 2.4   | 0.5   | 1.1   | 0.3   | 0    |
| 237-258            |      | 0   | 0.3 | 2.1 | 1.9 | 2.4 | 2.7  | 1.6   | 1.6   | 0.5   | 1.1   | 1.1  |
| 259-281            |      | 0   | 0.5 | 3.5 | 1.9 | 1.1 | 0.8  | 1.6   | 1.6   | 0.8   | 1.6   | 0    |
| 282-303            |      | 0.3 | 0   | 1.3 | 1.3 | 0   | 0    | 0.8   | 0     | 1.1   | 0.8   | 0    |
| 304-326            |      | 0   | 0.5 | 1.9 | 0.5 | 0   | 0    | 0.3   | 0     | 0     | 0     | 0.3  |
| 327-348            |      | 0.5 | 0.3 | 0.3 | 0.3 | 0.5 | 0.5  | 0     | 0     | 0     | 0     | 0    |



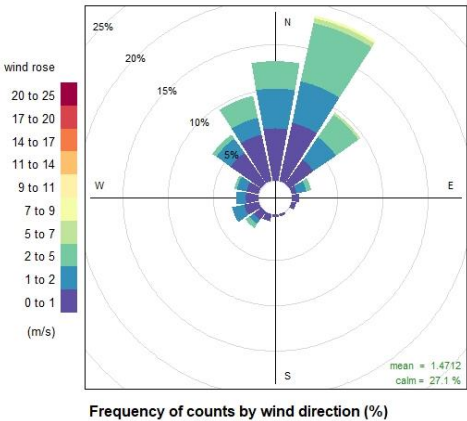
| <div>Speed</div> <div>Direction</div> | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|---------------------------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11                                | 0    | 0.3 | 0   | 0.3 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 12-33                                 |      | 0   | 0.6 | 0.9 | 0.6 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 34-56                                 |      | 0   | 0.3 | 1.2 | 0.3 | 0.6 | 0.6  | 0     | 0     | 0     | 0     | 0    |
| 57-78                                 |      | 0   | 0   | 0.6 | 1.2 | 0   | 0.3  | 0.3   | 0     | 0     | 0     | 0    |
| 79-101                                |      | 0   | 0.3 | 0.6 | 1.7 | 0.6 | 1.2  | 0.6   | 1.4   | 0.3   | 0     | 0    |
| 102-123                               |      | 0   | 0   | 1.4 | 1.4 | 0.9 | 0.9  | 0.9   | 0.3   | 0.9   | 0     | 0    |
| 124-146                               |      | 0   | 0.3 | 2   | 1.4 | 1.2 | 0.6  | 1.2   | 0.3   | 0.3   | 0     | 0    |
| 147-168                               |      | 0.3 | 0   | 3.7 | 0.9 | 0.9 | 0.9  | 0.3   | 0.6   | 0.3   | 0     | 0    |
| 168-191                               |      | 0.3 | 0   | 2   | 1.4 | 1.4 | 1.2  | 0.6   | 0     | 0     | 0.9   | 0    |
| 192-213                               |      | 0   | 0.6 | 1.7 | 1.4 | 2   | 1.2  | 1.2   | 0.6   | 0     | 0     | 0    |
| 214-236                               |      | 0   | 0.3 | 1.4 | 2   | 0.9 | 2.6  | 3.2   | 1.4   | 0.9   | 0.9   | 0.3  |
| 237-258                               |      | 0   | 0   | 2   | 1.4 | 2.3 | 1.7  | 2.6   | 2     | 2.3   | 1.4   | 0.9  |
| 259-281                               |      | 0   | 0   | 1.2 | 1.2 | 2   | 1.4  | 1.7   | 0     | 1.2   | 0.6   | 0.3  |
| 282-303                               |      | 0   | 0.6 | 0.9 | 0.3 | 0   | 0    | 0     | 0.9   | 0.9   | 0.9   | 0.6  |
| 304-326                               |      | 0   | 0   | 0.9 | 0   | 0   | 0    | 0     | 0.3   | 0.3   | 0.3   | 0    |
| 327-348                               |      | 0.3 | 0   | 0.3 | 0   | 0   | 0    | 0     | 0.3   | 0     | 0     | 0    |



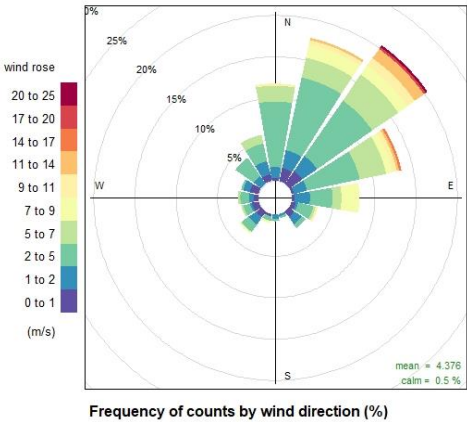
| <div>Speed</div> <div>Direction</div> | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|---------------------------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11                                | 0    | 0   | 0.4 | 1.7 | 0.8 | 0.4 | 0    | 0     | 0     | 0     | 0     | 0    |
| 12-33                                 |      | 0   | 0   | 0.8 | 0.4 | 0.4 | 0    | 0     | 0     | 0     | 0     | 0    |
| 34-56                                 |      | 0   | 0.8 | 3.3 | 1.2 | 0.8 | 0.8  | 0     | 0.4   | 0     | 0     | 0    |
| 57-78                                 |      | 0   | 0   | 1.7 | 3.3 | 1.2 | 1.7  | 0.8   | 0.8   | 0     | 0     | 0    |
| 79-101                                |      | 0   | 0.4 | 3.3 | 3.3 | 3.3 | 3.3  | 2.5   | 0.4   | 0.8   | 0     | 0    |
| 102-123                               |      | 0   | 0   | 4.6 | 3.3 | 3.3 | 0.8  | 1.2   | 0.8   | 0.4   | 0.4   | 0    |
| 124-146                               |      | 0.4 | 0.8 | 2.1 | 0.8 | 2.5 | 1.2  | 0.8   | 0.4   | 0.4   | 0     | 0    |
| 147-168                               |      | 0   | 0   | 2.5 | 0.4 | 0.8 | 1.2  | 0     | 0.4   | 0.4   | 0     | 0    |
| 168-191                               |      | 0.8 | 0   | 1.7 | 2.1 | 1.2 | 0.4  | 0.4   | 0     | 0     | 0     | 0    |
| 192-213                               |      | 0   | 0.4 | 1.7 | 1.2 | 0.4 | 0    | 0.8   | 0.4   | 0.4   | 0     | 0    |
| 214-236                               |      | 0   | 0   | 1.7 | 1.2 | 0.4 | 0.8  | 0.4   | 0.8   | 0     | 0     | 0    |
| 237-258                               |      | 0   | 0   | 1.2 | 1.2 | 0.8 | 0.4  | 0     | 0     | 0     | 0     | 0    |
| 259-281                               |      | 0   | 0.4 | 1.2 | 0.4 | 0.4 | 0    | 0     | 0.4   | 0     | 0     | 0    |
| 282-303                               |      | 0   | 0   | 0.8 | 0.8 | 0   | 0.4  | 0.4   | 0     | 0     | 0     | 0    |
| 304-326                               |      | 0   | 0   | 0   | 0.8 | 0.4 | 0    | 0     | 0.4   | 0     | 0     | 0    |
| 327-348                               |      | 0   | 0   | 0.4 | 0.4 | 0.4 | 0    | 0     | 0     | 0     | 0     | 0    |



| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 27   | 5.8 | 4.4 | 3   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 12-33              |      | 6.6 | 4.7 | 6.6 | 0.5 | 0.3 | 0    | 0     | 0     | 0     | 0     | 0    |
| 34-56              |      | 3.3 | 3   | 3   | 0.3 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 57-78              |      | 0.5 | 1.1 | 0.5 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 79-101             |      | 0.8 | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 102-123            |      | 0.5 | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 124-146            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 147-168            |      | 0.3 | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 168-191            |      | 0.3 | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 192-213            |      | 0.8 | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 214-236            |      | 1.1 | 0.5 | 0.5 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 237-258            |      | 1.6 | 1.4 | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 259-281            |      | 1.4 | 1.1 | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 282-303            |      | 1.4 | 1.1 | 0.3 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 304-326            |      | 4.1 | 1.9 | 0.5 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 327-348            |      | 5.2 | 1.9 | 2.5 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |



| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0.3 | 1.4 | 7.9 | 1.9 | 0   | 0.3  | 0     | 0     | 0     | 0     | 0    |
| 12-33              |      | 1.6 | 2.2 | 9   | 2.5 | 1.6 | 0.5  | 0.3   | 0     | 0     | 0     | 0    |
| 34-56              |      | 1.9 | 2.2 | 8.2 | 3.8 | 1.4 | 1.1  | 1.4   | 0     | 0.3   | 0.3   | 0    |
| 57-78              |      | 0.3 | 1.6 | 6.5 | 3.3 | 0.8 | 0.5  | 0.3   | 0.3   | 0     | 0     | 0    |
| 79-101             |      | 0.3 | 1.9 | 2.7 | 1.1 | 2.2 | 0    | 0     | 0     | 0     | 0     | 0    |
| 102-123            |      | 0.5 | 0.3 | 1.9 | 0.3 | 0   | 0.3  | 0     | 0     | 0     | 0     | 0    |
| 124-146            |      | 0.8 | 1.1 | 0.5 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 147-168            |      | 0   | 0.3 | 0.3 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 168-191            |      | 0   | 0.5 | 0.3 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 192-213            |      | 0.3 | 0   | 0.5 | 0   | 0.3 | 0    | 0     | 0     | 0     | 0     | 0    |
| 214-236            |      | 0.8 | 1.1 | 1.1 | 0   | 0.3 | 0    | 0     | 0     | 0     | 0     | 0    |
| 237-258            |      | 0.8 | 0.3 | 0.8 | 0.3 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 259-281            |      | 0.5 | 0.5 | 1.1 | 0.3 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 282-303            |      | 1.1 | 0.8 | 0.3 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 304-326            |      | 0   | 1.1 | 2.7 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 327-348            |      | 0.8 | 1.6 | 2.2 | 1.1 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |



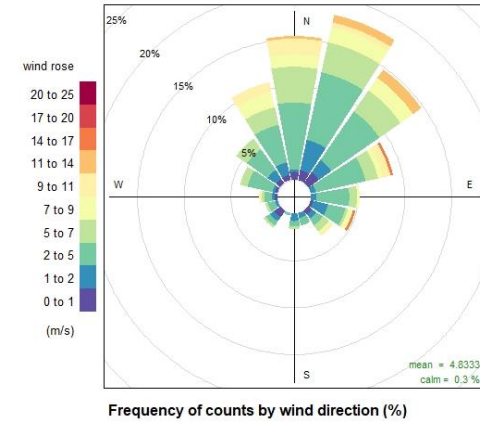


# Bhubaneswar

November

850 hPa level

| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0.8 | 0.3 | 7.1 | 3.8 | 1.4 | 1.6  | 0.3   | 0     | 0     | 0     | 0    |
| 12-33              |      | 1.1 | 3.3 | 7.4 | 3.3 | 1.6 | 0.5  | 0.8   | 0     | 0     | 0     | 0    |
| 34-56              |      | 1.4 | 1.6 | 6.3 | 2.7 | 1.6 | 0    | 1.1   | 0     | 0     | 0     | 0    |
| 57-78              |      | 0   | 0.5 | 5.5 | 1.4 | 0.5 | 0.8  | 0     | 0.3   | 0     | 0     | 0    |
| 79-101             |      | 0   | 0.5 | 3.6 | 0.8 | 0.3 | 0    | 0     | 0     | 0     | 0     | 0    |
| 102-123            |      | 0.3 | 1.6 | 1.9 | 0.3 | 0.5 | 0    | 0     | 0.3   | 0     | 0     | 0    |
| 124-146            |      | 0.5 | 0.5 | 0.8 | 0.8 | 0.3 | 0.3  | 0     | 0     | 0     | 0     | 0    |
| 147-168            |      | 0   | 0.5 | 0.8 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 168-191            |      | 0   | 0.8 | 0.5 | 0.3 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 192-213            |      | 0   | 0   | 0.3 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 214-236            |      | 0.8 | 0.5 | 0.5 | 0.3 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 237-258            |      | 0   | 0.3 | 0.8 | 0.3 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 259-281            |      | 0.3 | 0.3 | 0.8 | 0.3 | 0   | 0.3  | 0     | 0     | 0     | 0     | 0    |
| 282-303            |      | 0.3 | 0.3 | 2.7 | 0.8 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 304-326            |      | 0.5 | 1.1 | 2.7 | 1.4 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 327-348            |      | 0.5 | 1.4 | 4.1 | 1.9 | 1.6 | 1.1  | 0     | 0     | 0     | 0     | 0    |

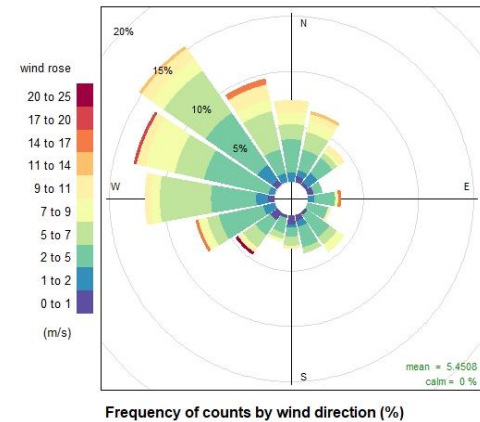


# Bhubaneswar

November

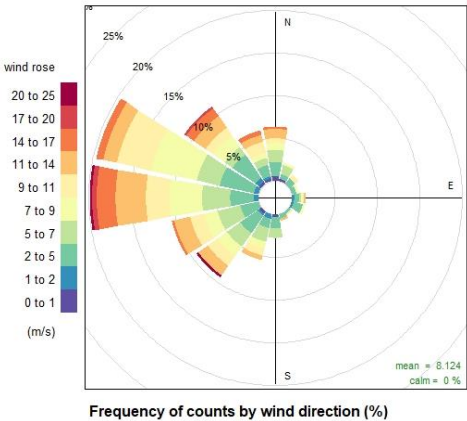
700 hPa level

| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0   | 0.8 | 3   | 1.4 | 1.1 | 1.1  | 0     | 0     | 0     | 0     | 0    |
| 12-33              |      | 0.5 | 0.5 | 1.9 | 1.6 | 1.1 | 0.5  | 0.3   | 0     | 0     | 0     | 0    |
| 34-56              |      | 0.3 | 1.1 | 1.6 | 0.5 | 0.3 | 0.5  | 0     | 0     | 0     | 0     | 0    |
| 57-78              |      | 0.5 | 0   | 0.8 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 79-101             |      | 0   | 0.5 | 1.9 | 0   | 0.3 | 0    | 0     | 0.3   | 0     | 0     | 0    |
| 102-123            |      | 0   | 0   | 1.9 | 0   | 0   | 0.3  | 0     | 0     | 0     | 0     | 0    |
| 124-146            |      | 0.3 | 0   | 2.5 | 0.8 | 0.8 | 0    | 0     | 0     | 0     | 0     | 0    |
| 147-168            |      | 0.5 | 0.5 | 1.9 | 0.5 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 168-191            |      | 0.8 | 0.3 | 0.8 | 0.8 | 0   | 0.3  | 0     | 0     | 0     | 0     | 0    |
| 192-213            |      | 0.3 | 0   | 1.4 | 0.5 | 0.3 | 0    | 0     | 0     | 0     | 0     | 0    |
| 214-236            |      | 0.8 | 0   | 1.6 | 1.4 | 0.3 | 0.3  | 0     | 0     | 0     | 0.3   | 0    |
| 237-258            |      | 0   | 1.1 | 4.1 | 1.1 | 0.8 | 0    | 0     | 0.3   | 0     | 0     | 0    |
| 259-281            |      | 0.5 | 1.1 | 4.1 | 4.6 | 0.8 | 0.5  | 0     | 0     | 0     | 0     | 0    |
| 282-303            |      | 0   | 0.5 | 6   | 2.7 | 2.7 | 0.8  | 0     | 0     | 0.3   | 0     | 0    |
| 304-326            |      | 0.5 | 1.6 | 5.7 | 4.6 | 1.4 | 1.1  | 0.3   | 0     | 0     | 0     | 0    |
| 327-348            |      | 0   | 0.8 | 2.2 | 3.6 | 1.1 | 1.4  | 0     | 0.5   | 0     | 0     | 0    |

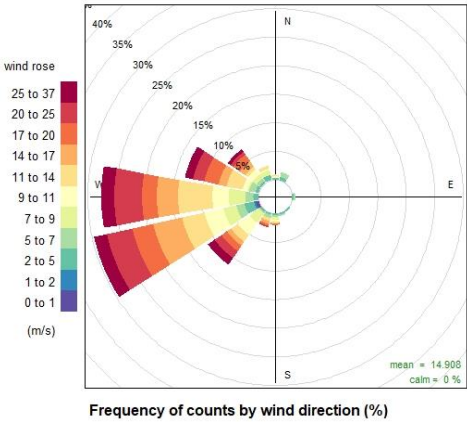




| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0.6 | 0   | 1.7 | 1.4 | 0.8 | 0.6  | 1.1   | 0.3   | 0     | 0     | 0    |
| 12-33              |      | 0.3 | 0   | 0.6 | 1.1 | 0.3 | 0    | 0     | 0     | 0     | 0     | 0    |
| 34-56              |      | 0   | 0   | 0.8 | 0   | 0   | 0.6  | 0     | 0     | 0     | 0     | 0    |
| 57-78              |      | 0   | 0   | 0.6 | 0   | 0.3 | 0    | 0     | 0     | 0     | 0     | 0    |
| 79-101             |      | 0   | 0.3 | 0.6 | 0.3 | 0.3 | 0    | 0.3   | 0     | 0     | 0     | 0    |
| 102-123            |      | 0   | 0.3 | 1.1 | 0   | 0.3 | 0    | 0     | 0     | 0     | 0     | 0    |
| 124-146            |      | 0   | 0   | 0.3 | 0   | 0   | 0.3  | 0     | 0     | 0     | 0     | 0    |
| 147-168            |      | 0   | 0   | 0.3 | 0   | 0   | 0    | 0.3   | 0     | 0     | 0     | 0    |
| 168-191            |      | 0.3 | 0   | 1.7 | 1.1 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 192-213            |      | 0   | 0.6 | 1.1 | 1.7 | 0.8 | 0.8  | 0.6   | 0     | 0     | 0     | 0    |
| 214-236            |      | 0.3 | 0.3 | 2.5 | 1.9 | 1.4 | 1.4  | 1.4   | 0     | 0     | 0.3   | 0    |
| 237-258            |      | 0   | 0   | 2.2 | 2.8 | 1.7 | 1.7  | 1.9   | 0.3   | 0     | 0     | 0    |
| 259-281            |      | 0   | 0.6 | 2.8 | 3.3 | 3.9 | 2.8  | 3.6   | 2.2   | 0.6   | 0.3   | 0    |
| 282-303            |      | 0   | 0.6 | 4.1 | 2.8 | 5.5 | 4.1  | 1.7   | 0.8   | 0     | 0     | 0    |
| 304-326            |      | 0.3 | 0.6 | 3.3 | 1.1 | 1.7 | 1.1  | 1.7   | 1.1   | 0.3   | 0     | 0    |
| 327-348            |      | 0.3 | 0.3 | 1.4 | 0.8 | 0.6 | 1.4  | 0.8   | 0.6   | 0     | 0     | 0    |



| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0   | 0   | 0.3 | 0   | 0   | 0.3  | 0.3   | 0     | 0     | 0     | 0    |
| 12-33              |      | 0   | 0   | 0.6 | 0.9 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 34-56              |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 57-78              |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 79-101             |      | 0   | 0   | 0.3 | 0.3 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 102-123            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 124-146            |      | 0   | 0   | 0.3 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 147-168            |      | 0   | 0   | 0.3 | 0.3 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 168-191            |      | 0   | 0   | 0.3 | 0.3 | 0.6 | 0.3  | 0.3   | 0     | 0.3   | 0     | 0    |
| 192-213            |      | 0   | 0   | 0.3 | 0.6 | 0   | 0    | 0.6   | 0.6   | 0.3   | 0.3   | 0    |
| 214-236            |      | 0   | 0   | 0.3 | 0.3 | 2   | 2.6  | 1.4   | 0.9   | 1.1   | 1.4   | 1.4  |
| 237-258            |      | 0.6 | 0.3 | 1.7 | 1.4 | 2.3 | 3.4  | 4     | 5.2   | 3.7   | 4.6   | 2.3  |
| 259-281            |      | 0   | 0   | 0.9 | 1.4 | 2.9 | 2.9  | 6     | 3.7   | 2.6   | 4.9   | 2.3  |
| 282-303            |      | 0   | 0   | 0.6 | 1.1 | 0.3 | 0.9  | 2.9   | 1.4   | 2.6   | 2     | 1.4  |
| 304-326            |      | 0   | 0   | 0.3 | 0.6 | 0.9 | 1.1  | 0.6   | 1.1   | 1.4   | 0.6   | 0.6  |
| 327-348            |      | 0   | 0   | 0.9 | 0   | 0.9 | 0.3  | 0.6   | 0     | 0     | 0     | 0    |

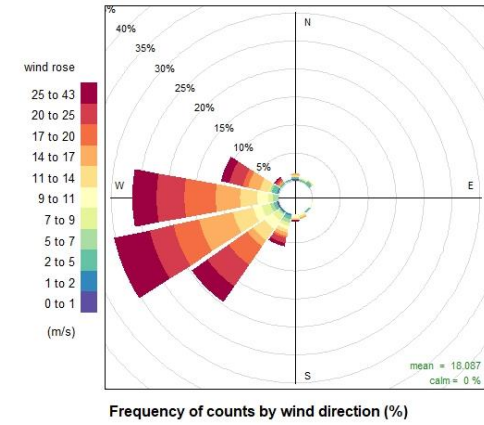


# Bhubaneswar

November

200 hPa level

| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0.3 | 0   | 0.3 | 0   | 0   | 0    | 0.3   | 0.3   | 0     | 0     | 0    |
| 12-33              |      | 0   | 0   | 0.3 | 0   | 0.3 | 0    | 0     | 0     | 0     | 0     | 0    |
| 34-56              |      | 0   | 0   | 0.6 | 0   | 0   | 0    | 0.3   | 0     | 0     | 0     | 0    |
| 57-78              |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 79-101             |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 102-123            |      | 0   | 0   | 0   | 0   | 0   | 0.3  | 0     | 0     | 0     | 0     | 0    |
| 124-146            |      | 0   | 0   | 0.3 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 147-168            |      | 0   | 0   | 0   | 0   | 0   | 0.3  | 0.3   | 0.3   | 0     | 0     | 0    |
| 168-191            |      | 0   | 0   | 0   | 0   | 0   | 0.6  | 0.3   | 0     | 0     | 0     | 0.3  |
| 192-213            |      | 0   | 0.3 | 0.6 | 0.6 | 0.6 | 0.6  | 0.6   | 0.6   | 0.3   | 0.9   | 0.6  |
| 214-236            |      | 0   | 0.3 | 0   | 0.3 | 1.2 | 1.9  | 2.5   | 1.2   | 4     | 4.7   | 3.4  |
| 237-258            |      | 0.3 | 0   | 0.6 | 0.6 | 1.6 | 1.6  | 3.7   | 6.2   | 4.7   | 4.4   | 6.5  |
| 259-281            |      | 0   | 0   | 0   | 0.9 | 0.9 | 1.9  | 3.1   | 4.4   | 5.6   | 5     | 4.4  |
| 282-303            |      | 0   | 0.3 | 0.9 | 0.3 | 0.3 | 0    | 1.6   | 2.2   | 0.9   | 2.5   | 1.6  |
| 304-326            |      | 0   | 0   | 0.3 | 0   | 0   | 0    | 0     | 0.3   | 0.3   | 0.3   | 0.3  |
| 327-348            |      | 0   | 0   | 0.3 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |

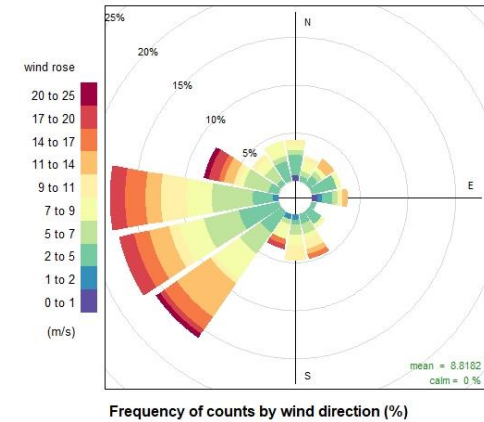


# Bhubaneswar

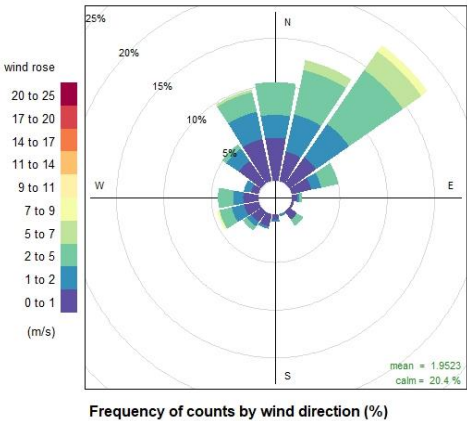
November

100 hPa level

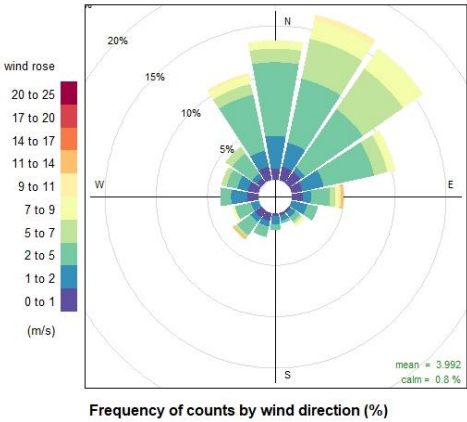
| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0.5 | 0   | 2.1 | 0.5 | 0.5 | 0.5  | 0     | 0     | 0     | 0     | 0    |
| 12-33              |      | 0   | 0   | 0.5 | 0.5 | 1.1 | 0.5  | 0     | 0     | 0     | 0     | 0    |
| 34-56              |      | 0   | 0   | 1.1 | 0.5 | 0.5 | 0    | 1.1   | 0     | 0     | 0     | 0    |
| 57-78              |      | 0   | 0   | 2.7 | 0   | 0.5 | 0    | 0     | 0     | 0     | 0     | 0    |
| 79-101             |      | 0.5 | 0.5 | 1.1 | 0.5 | 0   | 0.5  | 0.5   | 0     | 0     | 0     | 0    |
| 102-123            |      | 0   | 0   | 0.5 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 124-146            |      | 0   | 0   | 1.6 | 0   | 0.5 | 0    | 0     | 0     | 0     | 0     | 0    |
| 147-168            |      | 0   | 0   | 1.1 | 1.1 | 0.5 | 1.1  | 0.5   | 0.5   | 0     | 0     | 0    |
| 168-191            |      | 0   | 0.5 | 0.5 | 1.1 | 1.1 | 1.6  | 0     | 0     | 0     | 0     | 0    |
| 192-213            |      | 0   | 0.5 | 0   | 0.5 | 1.6 | 0    | 0     | 0.5   | 0.5   | 0     | 0    |
| 214-236            |      | 0   | 0   | 2.7 | 2.7 | 3.2 | 0.5  | 4.3   | 1.6   | 0.5   | 0.5   | 0    |
| 237-258            |      | 0   | 0   | 4.3 | 3.7 | 2.7 | 1.1  | 2.1   | 1.6   | 1.6   | 0     | 0    |
| 259-281            |      | 0   | 0.5 | 2.1 | 4.3 | 2.7 | 2.7  | 1.6   | 2.1   | 1.6   | 0     | 0    |
| 282-303            |      | 0   | 0   | 1.1 | 2.7 | 0.5 | 0.5  | 1.1   | 0.5   | 1.1   | 0.5   | 0    |
| 304-326            |      | 0   | 0   | 0.5 | 1.6 | 1.1 | 0.5  | 0     | 0     | 0     | 0     | 0    |
| 327-348            |      | 0   | 0   | 2.1 | 0.5 | 1.6 | 0    | 0     | 0     | 0     | 0     | 0    |



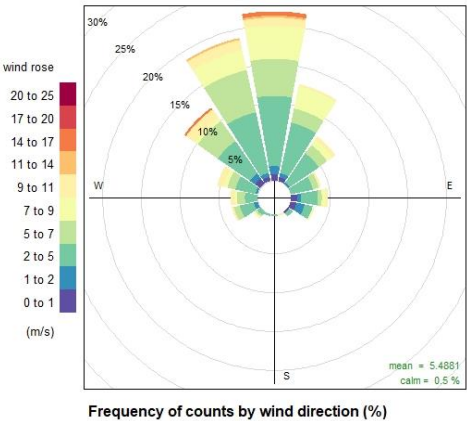
| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 20   | 4.5 | 2.4 | 3.4 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 12-33              |      | 3.2 | 4   | 4.8 | 1.1 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 34-56              |      | 3.4 | 4.2 | 6.9 | 2.4 | 0.8 | 0    | 0     | 0     | 0     | 0     | 0    |
| 57-78              |      | 2.1 | 1.1 | 1.9 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 79-101             |      | 0.5 | 0.3 | 0.3 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 102-123            |      | 0.3 | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 124-146            |      | 1.1 | 0   | 0.8 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 147-168            |      | 0   | 0.3 | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 168-191            |      | 0.5 | 0.3 | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 192-213            |      | 1.3 | 0.3 | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 214-236            |      | 1.3 | 0.5 | 0.5 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 237-258            |      | 1.6 | 1.3 | 1.3 | 0   | 0.3 | 0    | 0     | 0     | 0     | 0     | 0    |
| 259-281            |      | 1.6 | 1.1 | 1.6 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 282-303            |      | 0.8 | 0.8 | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 304-326            |      | 2.9 | 1.6 | 0.5 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 327-348            |      | 4.5 | 2.9 | 2.1 | 0.3 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |



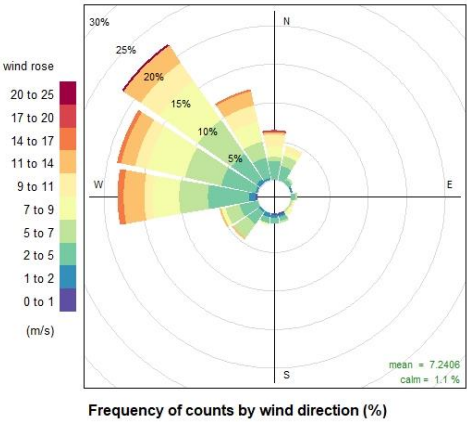
| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 1.1 | 3.2 | 7.2 | 1.3 | 0.8 | 0    | 0     | 0     | 0     | 0     | 0    |
| 12-33              |      | 1.3 | 2.4 | 6.4 | 4   | 1.9 | 0.5  | 0     | 0     | 0     | 0     | 0    |
| 34-56              |      | 1.3 | 0.5 | 6.9 | 4.8 | 2.4 | 0    | 0     | 0     | 0     | 0     | 0    |
| 57-78              |      | 1.1 | 2.1 | 5   | 1.3 | 0.8 | 0    | 0     | 0     | 0     | 0     | 0    |
| 79-101             |      | 1.1 | 0.8 | 1.9 | 0.5 | 0.3 | 0.3  | 0.3   | 0     | 0     | 0     | 0    |
| 102-123            |      | 0   | 1.6 | 1.1 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 124-146            |      | 0.3 | 0.5 | 0.5 | 0.3 | 0.3 | 0    | 0     | 0     | 0     | 0     | 0    |
| 147-168            |      | 0.3 | 0.5 | 0.3 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 168-191            |      | 0.3 | 0.8 | 0.5 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 192-213            |      | 0.8 | 0.5 | 1.1 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 214-236            |      | 0.8 | 0.5 | 1.6 | 0.3 | 0   | 0    | 0.3   | 0     | 0     | 0     | 0    |
| 237-258            |      | 0   | 0.8 | 1.6 | 0   | 0.3 | 0    | 0     | 0     | 0     | 0     | 0    |
| 259-281            |      | 1.1 | 1.6 | 1.1 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 282-303            |      | 1.1 | 1.1 | 1.1 | 0.5 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 304-326            |      | 0.5 | 0.5 | 2.4 | 0.8 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 327-348            |      | 1.3 | 1.6 | 5.6 | 1.1 | 0.8 | 0.3  | 0     | 0     | 0     | 0     | 0    |



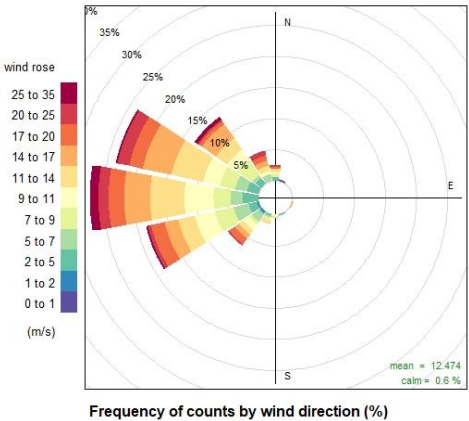
| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0.8 | 1.1 | 9   | 4.8 | 4.2 | 1.1  | 0.3   | 0.5   | 0     | 0     | 0    |
| 12-33              |      | 0.5 | 0.5 | 6.6 | 1.9 | 2.9 | 0.3  | 0     | 0     | 0     | 0     | 0    |
| 34-56              |      | 0   | 0.3 | 4.5 | 1.3 | 0.8 | 0.5  | 0     | 0     | 0     | 0     | 0    |
| 57-78              |      | 0   | 0   | 2.9 | 0.8 | 0   | 0.3  | 0     | 0     | 0     | 0     | 0    |
| 79-101             |      | 0.8 | 0.5 | 2.1 | 0.5 | 0.5 | 0.3  | 0     | 0     | 0     | 0     | 0    |
| 102-123            |      | 0.8 | 1.1 | 1.1 | 0   | 0.3 | 0    | 0     | 0     | 0     | 0     | 0    |
| 124-146            |      | 0.3 | 0   | 0.5 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 147-168            |      | 0   | 0   | 0   | 0   | 0   | 0.3  | 0     | 0     | 0     | 0     | 0    |
| 168-191            |      | 0   | 0   | 0.3 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 192-213            |      | 0   | 0   | 0.3 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 214-236            |      | 0   | 0   | 0.5 | 0.3 | 0.3 | 0    | 0     | 0     | 0     | 0     | 0    |
| 237-258            |      | 0   | 0.5 | 1.9 | 0.8 | 0   | 0.3  | 0     | 0     | 0     | 0     | 0    |
| 259-281            |      | 0   | 0   | 1.6 | 1.1 | 0.3 | 0.5  | 0     | 0     | 0     | 0     | 0    |
| 282-303            |      | 0   | 0.3 | 2.7 | 1.1 | 0.5 | 0.8  | 0     | 0     | 0     | 0     | 0    |
| 304-326            |      | 0.8 | 0.8 | 5   | 3.2 | 0.5 | 1.3  | 0     | 0.3   | 0     | 0     | 0    |
| 327-348            |      | 0.5 | 0.5 | 8   | 5.6 | 2.7 | 1.3  | 0.3   | 0     | 0     | 0     | 0    |



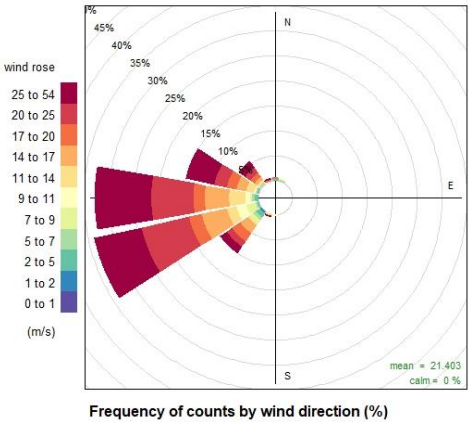
| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0   | 0   | 2.4 | 0.5 | 1.3 | 1.6  | 0.3   | 0     | 0.3   | 0     | 0    |
| 12-33              |      | 0   | 0   | 1.9 | 1.3 | 0.5 | 0.8  | 0     | 0     | 0     | 0     | 0    |
| 34-56              |      | 0   | 0   | 0.5 | 0.3 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 57-78              |      | 0   | 0.3 | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 79-101             |      | 0   | 0   | 0.5 | 0.3 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 102-123            |      | 0   | 0   | 0   | 0.3 | 0   | 0.3  | 0     | 0     | 0     | 0     | 0    |
| 124-146            |      | 0   | 0   | 0   | 0.3 | 0.5 | 0    | 0     | 0     | 0     | 0     | 0    |
| 147-168            |      | 0.3 | 0.3 | 0.3 | 0.3 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 168-191            |      | 0.3 | 0.3 | 1.1 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 192-213            |      | 0   | 0.5 | 0.8 | 0   | 0.3 | 0    | 0     | 0     | 0     | 0     | 0    |
| 214-236            |      | 0   | 0.3 | 1.9 | 2.1 | 0   | 0    | 0.3   | 0     | 0     | 0     | 0    |
| 237-258            |      | 0   | 0   | 2.4 | 1.9 | 0.5 | 0    | 0.3   | 0     | 0     | 0     | 0    |
| 259-281            |      | 0.3 | 0.8 | 5.3 | 3.7 | 3.5 | 1.1  | 2.7   | 0.8   | 0     | 0     | 0    |
| 282-303            |      | 0   | 0.3 | 4.5 | 4.8 | 5.1 | 1.6  | 1.9   | 0.5   | 0     | 0     | 0    |
| 304-326            |      | 0   | 0.5 | 4   | 5.3 | 6.1 | 2.9  | 2.7   | 0     | 0     | 0.3   | 0    |
| 327-348            |      | 0   | 0.3 | 2.7 | 2.1 | 2.7 | 2.1  | 1.9   | 0.3   | 0     | 0     | 0    |



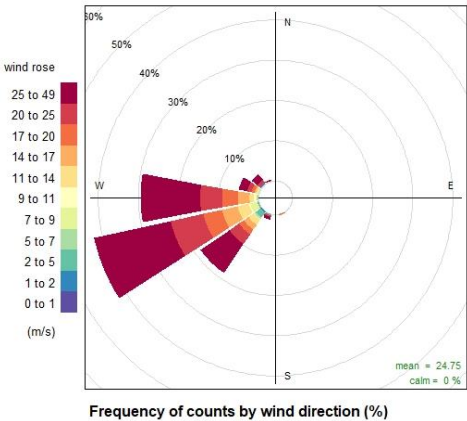
| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0   | 0   | 0.6 | 0   | 0.6 | 0.3  | 0.6   | 0     | 0.3   | 0.3   | 0    |
| 12-33              |      | 0.3 | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 34-56              |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 57-78              |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 79-101             |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 102-123            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0.3   | 0     | 0     | 0    |
| 124-146            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 147-168            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 168-191            |      | 0   | 0   | 0.3 | 0   | 0   | 0.3  | 0.3   | 0     | 0     | 0     | 0    |
| 192-213            |      | 0   | 0   | 0.3 | 0.3 | 0.6 | 0    | 0.6   | 0     | 0     | 0     | 0    |
| 214-236            |      | 0   | 0.3 | 0.3 | 1.4 | 0.6 | 1.1  | 0.8   | 0.8   | 1.1   | 0.3   | 0    |
| 237-258            |      | 0   | 0.3 | 1.4 | 2.5 | 3   | 3.3  | 2.8   | 2.2   | 2.2   | 0.6   | 0.3  |
| 259-281            |      | 0   | 0   | 2.5 | 1.9 | 2.8 | 4.7  | 5.5   | 4.2   | 2.5   | 1.7   | 1.4  |
| 282-303            |      | 0   | 0   | 1.9 | 1.9 | 2.5 | 2.8  | 5.3   | 4.7   | 2.2   | 1.9   | 0.3  |
| 304-326            |      | 0   | 0   | 1.1 | 0.6 | 3   | 1.9  | 2.2   | 2.8   | 0.6   | 0.3   | 0.6  |
| 327-348            |      | 0   | 0   | 0   | 1.1 | 0   | 0.6  | 0.8   | 0.8   | 0.8   | 0.8   | 0    |



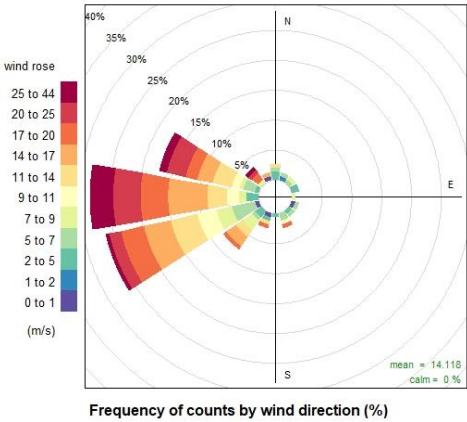
| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0   | 0   | 0.3 | 0   | 0   | 0    | 0     | 0     | 0.3   | 0     | 0    |
| 12-33              |      | 0   | 0   | 0   | 0.3 | 0   | 0.3  | 0     | 0     | 0     | 0     | 0    |
| 34-56              |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 57-78              |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 79-101             |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 102-123            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 124-146            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 147-168            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 168-191            |      | 0   | 0   | 0   | 0   | 0   | 0.3  | 0     | 0     | 0     | 0     | 0    |
| 192-213            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0.3   | 0     | 0     | 0     | 0.3  |
| 214-236            |      | 0   | 0.3 | 1   | 0.6 | 1   | 0    | 0.3   | 1.9   | 1.9   | 1.3   | 1.6  |
| 237-258            |      | 0   | 0   | 0.3 | 0.3 | 1.9 | 1.9  | 1.9   | 5.2   | 2.6   | 9.7   | 9.7  |
| 259-281            |      | 0   | 0   | 0.6 | 0.6 | 0.3 | 1    | 3.2   | 4.9   | 2.3   | 8.4   | 11.4 |
| 282-303            |      | 0   | 0   | 0.3 | 0.3 | 0   | 0.3  | 1.6   | 1.9   | 1.9   | 2.6   | 5.8  |
| 304-326            |      | 0   | 0   | 0   | 0.3 | 0   | 0    | 0.6   | 0.6   | 1     | 1.3   | 1.6  |
| 327-348            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0.3   | 0     | 0.3  |



| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 12-33              |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 34-56              |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 57-78              |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 79-101             |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 102-123            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 124-146            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 147-168            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0.4   | 0     | 0    |
| 168-191            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 192-213            |      | 0   | 0   | 0.4 | 0   | 0   | 0    | 0     | 0     | 0     | 0.4   | 0.7  |
| 214-236            |      | 0   | 0.4 | 1.4 | 0.4 | 0.4 | 0    | 1.4   | 1.4   | 1.4   | 2.9   | 8.7  |
| 237-258            |      | 0   | 0   | 0.4 | 0   | 1.8 | 0.4  | 2.9   | 4     | 4.7   | 8.3   | 19.6 |
| 259-281            |      | 0   | 0   | 0   | 0.4 | 0   | 0.7  | 1.1   | 2.9   | 4     | 5.4   | 14.9 |
| 282-303            |      | 0   | 0   | 0   | 0   | 0.4 | 0    | 0.4   | 0.4   | 0.7   | 1.1   | 2.2  |
| 304-326            |      | 0   | 0.4 | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0.7   | 1.8  |
| 327-348            |      | 0   | 0   | 0   | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0.4  |



| Speed<br>Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11             | 0    | 0   | 0   | 1.3 | 0.7 | 0   | 0    | 0.7   | 0     | 0     | 0     | 0    |
| 12-33              |      | 0   | 0.7 | 0   | 0.7 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 34-56              |      | 0   | 0   | 0   | 0.7 | 0.7 | 0    | 0     | 0     | 0     | 0     | 0    |
| 57-78              |      | 0   | 0   | 1.3 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 79-101             |      | 0   | 0   | 0   | 0   | 0.7 | 0    | 0     | 0     | 0     | 0     | 0    |
| 102-123            |      | 0.7 | 0   | 0   | 0.7 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 124-146            |      | 0   | 0   | 0.7 | 0.7 | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 147-168            |      | 0   | 0   | 0   | 1.3 | 0   | 0.7  | 0     | 0     | 0.7   | 0     | 0    |
| 168-191            |      | 0   | 0   | 0.7 | 0   | 0   | 0    | 0     | 0     | 0     | 0     | 0    |
| 192-213            |      | 0.7 | 0   | 0.7 | 0   | 0   | 0    | 0.7   | 0     | 0.7   | 0     | 0    |
| 214-236            |      | 0   | 0   | 1.3 | 0.7 | 2   | 0    | 1.3   | 2     | 0.7   | 0     | 0    |
| 237-258            |      | 0.7 | 0   | 0   | 3.9 | 2.6 | 3.3  | 4.6   | 4.6   | 3.9   | 2     | 0.7  |
| 259-281            |      | 0   | 0   | 2   | 0   | 1.3 | 2    | 3.3   | 6.6   | 4.6   | 4.6   | 3.9  |
| 282-303            |      | 0   | 0   | 0.7 | 2   | 0.7 | 1.3  | 3.3   | 2.6   | 2     | 3.3   | 1.3  |
| 304-326            |      | 0   | 0   | 0   | 0   | 0.7 | 0    | 0     | 0     | 1.3   | 0.7   | 0.7  |
| 327-348            |      | 0.7 | 0   | 0   | 0   | 0   | 0    | 0     | 0.7   | 0     | 0     | 0    |



| PRESSURE | HEIGHT | Hmax  | Hmin  | TEMP  | TMAX  | TMIN  | DEWPT | DIR | VELO | U    | V    | VM   |
|----------|--------|-------|-------|-------|-------|-------|-------|-----|------|------|------|------|
| SURFACE  | 1009.5 | 1016  | 1003  | 16.8  | 23.2  | 9     | 14.6  | 31  | 0.6  | -0.3 | -0.5 | 1.4  |
| 1000     | 125    | 190   | 29    | 17.6  | 27.1  | 10    | 14.4  | 45  | 0.7  | -0.5 | -0.5 | 2.2  |
| 950      | 560    | 624   | 458   | 18.5  | 29.8  | 9.2   | 11.1  | 22  | 0.5  | -0.2 | -0.5 | 4.1  |
| 925      | 792    | 842   | 714   | 17.3  | 25.1  | 7.8   | 8.6   | 7   | 0.8  | -0.1 | -0.8 | 4    |
| 900      | 1027   | 1080  | 914   | 16.3  | 24.2  | 6.2   | 6.6   | 337 | 1.3  | 0.5  | -1.2 | 4.4  |
| 850      | 1512   | 1594  | 1399  | 13.9  | 22.4  | 6.4   | 2.2   | 318 | 2.7  | 1.8  | -2   | 5.3  |
| 800      | 2021   | 2118  | 1943  | 11.7  | 21.6  | 2.6   | -1.5  | 311 | 4    | 3    | -2.6 | 6.3  |
| 750      | 2555   | 2670  | 2450  | 9.4   | 17.8  | 0.4   | -4.7  | 302 | 5.2  | 4.4  | -2.7 | 7.5  |
| 700      | 3127   | 3232  | 2998  | 6.9   | 16.2  | -0.9  | -8.6  | 289 | 6.4  | 6    | -2.1 | 8.8  |
| 650      | 3728   | 3850  | 3600  | 4     | 12.2  | -6.1  | -11.9 | 281 | 7.9  | 7.8  | -1.5 | 10.3 |
| 600      | 4378   | 4512  | 4232  | 0.6   | 10.4  | -7.9  | -15.8 | 274 | 9.5  | 9.5  | -0.7 | 11.9 |
| 550      | 5081   | 5240  | 4950  | -3.3  | 7.8   | -12.5 | -19.8 | 271 | 11.5 | 11.5 | -0.2 | 13.9 |
| 500      | 5819   | 5995  | 5649  | -7.9  | 3.4   | -18.1 | -23.9 | 270 | 13.3 | 13.3 | 0.1  | 16   |
| 450      | 6631   | 6810  | 6495  | -13   | -2.1  | -24.9 | -29   | 267 | 15.1 | 15.1 | 0.9  | 18   |
| 400      | 7519   | 7730  | 7274  | -19   | -7.3  | -29.3 | -34.5 | 266 | 17.1 | 17.1 | 1.1  | 20.2 |
| 350      | 8501   | 8750  | 8270  | -25.7 | -13.1 | -39.3 | -41.4 | 264 | 19.2 | 19.1 | 1.9  | 22.4 |
| 300      | 9602   | 9862  | 9334  | -33.5 | -21.5 | -46.9 | -49.3 | 262 | 21.6 | 21.4 | 2.9  | 24.7 |
| 250      | 10857  | 11142 | 10555 | -42.8 | -33.1 | -54.3 | -59   | 258 | 22.5 | 22   | 4.7  | 25.2 |
| 200      | 12328  | 12668 | 11976 | -53.6 | -43.7 | -68.7 | -68.9 | 256 | 21.2 | 20.6 | 5.2  | 23.7 |
| 175      | 13174  | 13544 | 12788 | -59.7 | -50.3 | -74.3 |       | 256 | 19.3 | 18.7 | 4.8  | 21.5 |
| 150      | 14125  | 14522 | 13695 | -65.8 | -55.5 | -79.3 |       | 257 | 16.8 | 16.4 | 3.8  | 18.6 |
| 125      | 15213  | 15619 | 14731 | -71.7 | -60.9 | -84.5 |       | 258 | 13.3 | 13   | 2.8  | 14.7 |
| 100      | 16515  | 16976 | 15953 | -76.5 | -62.3 | -88.7 |       | 261 | 9.7  | 9.6  | 1.6  | 10.9 |
| 80       | 17803  | 18286 | 17160 | -75.5 | -59.3 | -90.1 |       | 267 | 5.6  | 5.6  | 0.3  | 6.7  |
| 70       | 18589  | 19076 | 17891 | -72.4 | -56.4 | -85.7 |       | 269 | 4.2  | 4.2  | 0.1  | 5.4  |
| 60       | 19476  | 19975 | 18776 | -68.2 | -47.2 | -82.9 |       | 272 | 3    | 3    | -0.1 | 4.2  |
| 50       | 20601  | 21171 | 19845 | -63.4 | -48.1 | -77.9 |       | 284 | 2.1  | 2    | -0.5 | 3.4  |
| 40       | 21979  | 22588 | 21171 | -58.9 | -43.3 | -73.5 |       | 301 | 1.2  | 1    | -0.6 | 2.6  |
| 30       | 23788  | 24442 | 22942 | -55   | -41.5 | -68.5 |       | 321 | 0.6  | 0.4  | -0.5 | 2.3  |
| 25       | 24939  | 25628 | 24345 | -52.9 | -36.3 | -67.1 |       | 349 | 0.5  | 0.1  | -0.5 | 2    |
| 20       | 26379  | 27062 | 25784 | -51   | -37.5 | -65.1 |       | 326 | 0.4  | 0.2  | -0.3 | 1.9  |
| 15       | 28262  | 28991 | 27689 | -48.7 | -38.7 | -61.9 |       | 333 | 0.2  | 0.1  | -0.2 | 1.6  |
| 10       | 30929  | 31751 | 30330 | -45.9 | -31.7 | -56.1 |       | 117 | 0.2  | -0.2 | 0.1  | 1.4  |
| 7        | 33278  | 33950 | 32678 | -44.2 | -33.1 | -53.1 |       | 270 | 0.6  | 0.6  | 0    | 2    |

## FREEZING LEVEL

| P   | Height | H_max | H_min |
|-----|--------|-------|-------|
| 594 | 4466   | 6350  | 2370  |

## FIRST TROPOPAUSE

| P | Height | Temp |
|---|--------|------|
|   |        |      |

## SECOND TROPOPAUSE

| P  | Height | Temp  |
|----|--------|-------|
| 97 | 16758  | -78.8 |



| PRESSURE | HEIGHT | Hmax  | Hmin  | TEMP  | TMAX  | TMIN  | DEWPT | DIR | VELO | U    | V    | VM   |
|----------|--------|-------|-------|-------|-------|-------|-------|-----|------|------|------|------|
| SURFACE  | 1007.4 | 1014  | 999   | 20    | 25.6  | 11.6  | 18.1  | 225 | 0.3  | 0.2  | 0.2  | 1.7  |
| 1000     | 108    | 167   | 49    | 20.4  | 26    | 13    | 17.7  | 219 | 0.6  | 0.4  | 0.5  | 2.1  |
| 950      | 547    | 607   | 436   | 21.2  | 31    | 11.2  | 13.6  | 237 | 2    | 1.7  | 1.1  | 4.8  |
| 925      | 783    | 833   | 709   | 20.2  | 29.3  | 10.2  | 11.7  | 245 | 1.9  | 1.7  | 0.8  | 4.8  |
| 900      | 1019   | 1098  | 946   | 19    | 29.8  | 9.8   | 8.9   | 267 | 1.8  | 1.8  | 0.1  | 4.9  |
| 850      | 1508   | 1577  | 1428  | 16    | 27.8  | 7.2   | 4.8   | 291 | 2.6  | 2.4  | -0.9 | 5.5  |
| 800      | 2020   | 2096  | 1953  | 12.8  | 25.4  | 3.6   | 1.2   | 297 | 3.9  | 3.5  | -1.8 | 6.7  |
| 750      | 2551   | 2630  | 2420  | 9.6   | 19.8  | 1.5   | -2.6  | 293 | 5.3  | 4.9  | -2.1 | 8.1  |
| 700      | 3128   | 3236  | 3012  | 6.6   | 16.8  | -2.1  | -7    | 289 | 6.9  | 6.5  | -2.3 | 9.5  |
| 650      | 3726   | 3855  | 3599  | 3.5   | 12    | -5.7  | -10.7 | 285 | 8.3  | 8    | -2.1 | 10.6 |
| 600      | 4378   | 4511  | 4275  | 0.2   | 8.4   | -9.9  | -15.1 | 280 | 10.1 | 9.9  | -1.8 | 12.4 |
| 550      | 5079   | 5220  | 4950  | -3.6  | 7     | -13.5 | -19.3 | 277 | 12.1 | 12   | -1.4 | 14.4 |
| 500      | 5818   | 5983  | 5682  | -8    | 2.6   | -19.7 | -23.3 | 274 | 14.3 | 14.3 | -0.9 | 16.8 |
| 450      | 6629   | 6800  | 6475  | -13.1 | -3.7  | -25.7 | -29.1 | 272 | 16.3 | 16.3 | -0.5 | 18.8 |
| 400      | 7516   | 7725  | 7347  | -19.1 | -8.9  | -34.5 | -34.6 | 270 | 18.8 | 18.8 | -0.1 | 21.4 |
| 350      | 8498   | 8700  | 8299  | -25.9 | -16.1 | -37.9 | -41.7 | 270 | 21   | 21   | 0.1  | 23.7 |
| 300      | 9597   | 9850  | 9346  | -33.6 | -23.1 | -47.3 | -49.3 | 267 | 23.5 | 23.5 | 1.3  | 26.5 |
| 250      | 10852  | 11134 | 10538 | -42.7 | -31.5 | -55.1 | -60.4 | 263 | 25.1 | 24.9 | 3.1  | 27.9 |
| 200      | 12324  | 12654 | 11968 | -53.3 | -41.5 | -67.1 | -69.5 | 261 | 24.6 | 24.3 | 4    | 27.2 |
| 175      | 13172  | 13538 | 12805 | -59.1 | -47.9 | -71.3 |       | 259 | 22.9 | 22.5 | 4.3  | 25.2 |
| 150      | 14123  | 14533 | 13706 | -65.2 | -53.1 | -75.7 |       | 259 | 20.8 | 20.4 | 3.8  | 22.6 |
| 125      | 15213  | 15665 | 14744 | -71.4 | -61.3 | -82.3 |       | 261 | 17.1 | 16.9 | 2.8  | 18.8 |
| 100      | 16507  | 16996 | 15926 | -76.6 | -56.1 | -89.5 |       | 264 | 13.3 | 13.2 | 1.3  | 14.8 |
| 80       | 17791  | 18302 | 17229 | -75.8 | -59.5 | -86.3 |       | 267 | 8.3  | 8.3  | 0.4  | 9.5  |
| 70       | 18577  | 19147 | 18039 | -72.9 | -53.9 | -84.5 |       | 271 | 6.5  | 6.5  | -0.1 | 7.8  |
| 60       | 19457  | 19965 | 18860 | -68.7 | -50.1 | -89.1 |       | 274 | 4.6  | 4.6  | -0.3 | 6    |
| 50       | 20584  | 21120 | 20098 | -63.6 | -46.1 | -80.3 |       | 276 | 3.6  | 3.6  | -0.4 | 5.2  |
| 40       | 21957  | 22577 | 21445 | -59   | -40.7 | -76.1 |       | 291 | 1.7  | 1.6  | -0.6 | 4    |
| 30       | 23766  | 24430 | 23210 | -54.9 | -39.9 | -72.1 |       | 312 | 1.2  | 0.9  | -0.8 | 3.3  |
| 25       | 24922  | 25660 | 24353 | -52.7 | -35.1 | -69.5 |       | 319 | 0.9  | 0.6  | -0.7 | 2.9  |
| 20       | 26363  | 26882 | 25710 | -50.9 | -28.9 | -67.7 |       | 270 | 0.7  | 0.7  | 0    | 2.7  |
| 15       | 28260  | 28828 | 27446 | -48.5 | -34.1 | -65.3 |       | 277 | 0.8  | 0.8  | -0.1 | 3    |
| 10       | 31055  | 39944 | 30026 | -45.5 | -35.9 | -58.9 |       | 274 | 1.3  | 1.3  | -0.1 | 3.1  |
| 7        | 33322  | 34012 | 32200 | -43.9 | -35.5 | -55.5 |       | 262 | 2.7  | 2.7  | 0.4  | 3.8  |

## FREEZING LEVEL

| P   | Height | H_max | H_min |
|-----|--------|-------|-------|
| 599 | 4407   | 6200  | 2850  |

## FIRST TROPOPAUSE

| P | Height | Temp |
|---|--------|------|
|   |        |      |

## SECOND ROPOPAUSE

| P  | Height | Temp  |
|----|--------|-------|
| 95 | 16854  | -78.7 |

| PRESSURE | HEIGHT | Hmax  | Hmin  | TEMP  | TMAX  | TMIN  | DEWPT | DIR | VELO | U    | V    | VM   |
|----------|--------|-------|-------|-------|-------|-------|-------|-----|------|------|------|------|
| SURFACE  | 1004.6 | 1011  | 997   | 23.6  | 33.2  | 18    | 21.6  | 207 | 1.8  | 0.8  | 1.6  | 2.6  |
| 1000     | 87     | 144   | 23    | 23.9  | 30.8  | 18.2  | 21.5  | 215 | 1.9  | 1.1  | 1.6  | 2.7  |
| 950      | 529    | 598   | 448   | 24.7  | 33    | 13.1  | 16.2  | 233 | 4.3  | 3.4  | 2.6  | 5.9  |
| 925      | 767    | 821   | 678   | 24.4  | 32.4  | 13    | 13.4  | 236 | 3.7  | 3.1  | 2.1  | 5.5  |
| 900      | 1007   | 1082  | 890   | 23.2  | 31.7  | 11.8  | 10.1  | 246 | 3.7  | 3.4  | 1.5  | 5.7  |
| 850      | 1503   | 1587  | 1435  | 20.1  | 29.6  | 8.6   | 6     | 272 | 3.2  | 3.2  | -0.1 | 5.5  |
| 800      | 2022   | 2118  | 1912  | 16.2  | 23.4  | 5.8   | 2.8   | 295 | 3.8  | 3.4  | -1.6 | 5.9  |
| 750      | 2555   | 2665  | 2430  | 12    | 19.4  | 2.8   | -0.1  | 301 | 4.8  | 4.1  | -2.5 | 7.1  |
| 700      | 3139   | 3248  | 3016  | 7.8   | 18.6  | -0.7  | -3.5  | 301 | 6    | 5.1  | -3.1 | 8.3  |
| 650      | 3735   | 3860  | 3600  | 4.1   | 13    | -3.9  | -8.2  | 298 | 6.7  | 5.9  | -3.2 | 9    |
| 600      | 4392   | 4538  | 4251  | 0.7   | 8.2   | -9.7  | -12.8 | 292 | 7.3  | 6.8  | -2.7 | 9.8  |
| 550      | 5092   | 5215  | 4931  | -3.2  | 5.6   | -12.1 | -17.2 | 284 | 8.3  | 8.1  | -2   | 10.9 |
| 500      | 5834   | 6007  | 5666  | -7.6  | 1.8   | -17.3 | -22.3 | 278 | 10.2 | 10.1 | -1.4 | 12.6 |
| 450      | 6645   | 6800  | 6428  | -12.8 | -2.1  | -22.9 | -27.6 | 275 | 11.7 | 11.7 | -1   | 14.4 |
| 400      | 7535   | 7882  | 7330  | -18.8 | -7.1  | -29.9 | -33.3 | 272 | 13.3 | 13.3 | -0.4 | 16.2 |
| 350      | 8518   | 8875  | 8288  | -25.7 | -14.5 | -39.5 | -39.1 | 270 | 15.1 | 15.1 | 0.1  | 17.9 |
| 300      | 9618   | 9986  | 9365  | -33.4 | -21.9 | -44.5 | -46.3 | 266 | 17.6 | 17.6 | 1.3  | 20.6 |
| 250      | 10874  | 11252 | 10574 | -42.4 | -29.9 | -55.5 | -56.7 | 262 | 19.5 | 19.3 | 2.7  | 22.3 |
| 200      | 12346  | 12649 | 11993 | -52.9 | -41.5 | -65.3 | -66.4 | 260 | 19.6 | 19.3 | 3.5  | 22.3 |
| 175      | 13195  | 13545 | 12810 | -58.7 | -46.9 | -69.5 |       | 260 | 18.5 | 18.2 | 3.3  | 20.5 |
| 150      | 14148  | 14556 | 13734 | -64.7 | -51.9 | -77.5 |       | 260 | 16.7 | 16.4 | 3    | 18.4 |
| 125      | 15243  | 15699 | 14863 | -70.8 | -56.5 | -84.7 |       | 262 | 13.9 | 13.8 | 1.9  | 15.4 |
| 100      | 16543  | 17045 | 16108 | -76.1 | -62.1 | -88.1 |       | 264 | 10.9 | 10.8 | 1.2  | 12.2 |
| 80       | 17833  | 18348 | 17417 | -75.6 | -60.9 | -89.3 |       | 267 | 6.8  | 6.8  | 0.4  | 8.1  |
| 70       | 18622  | 19155 | 18174 | -72.6 | -55.3 | -88.1 |       | 270 | 5.2  | 5.2  | 0    | 6.7  |
| 60       | 19507  | 19986 | 19042 | -68.1 | -48.7 | -83.9 |       | 272 | 3.6  | 3.6  | -0.1 | 5.4  |
| 50       | 20635  | 21163 | 20077 | -62.7 | -48.5 | -81.9 |       | 285 | 2.7  | 2.6  | -0.7 | 4.7  |
| 40       | 22025  | 22587 | 21393 | -57.4 | -39.1 | -76.3 |       | 288 | 1.6  | 1.5  | -0.5 | 3.3  |
| 30       | 23859  | 24482 | 23102 | -52.6 | -39.9 | -69.7 |       | 324 | 0.9  | 0.5  | -0.7 | 3.3  |
| 25       | 25020  | 25710 | 24250 | -50.4 | -37.1 | -62.9 |       | 360 | 0.5  | 0    | -0.5 | 2.8  |
| 20       | 26478  | 27224 | 25642 | -48   | -33.9 | -61.5 |       | 67  | 0.8  | -0.7 | -0.3 | 2.5  |
| 15       | 28385  | 29128 | 27782 | -45.6 | -30.9 | -59.1 |       | 81  | 0.6  | -0.6 | -0.1 | 2.4  |
| 10       | 31122  | 31978 | 30427 | -42   | -25.3 | -53.9 |       | 117 | 0.9  | -0.8 | 0.4  | 2.8  |
| 7        | 33571  | 34589 | 32778 | -39.6 | -20.1 | -51.1 |       | 105 | 2    | -1.9 | 0.5  | 3.6  |

## FREEZING LEVEL

| P   | Height | H_max | H_min |
|-----|--------|-------|-------|
| 591 | 4523   | 6270  | 2950  |

## FIRST TROPOPAUSE

| P | Height | Temp |
|---|--------|------|
|   |        |      |

## SECOND TROPOPAUSE

| P  | Height | Temp  |
|----|--------|-------|
| 94 | 16947  | -78.1 |

| PRESSURE | HEIGHT | Hmax  | Hmin  | TEMP  | TMAX  | TMIN  | DEWPT | DIR | VELO | U    | V    | VM   |
|----------|--------|-------|-------|-------|-------|-------|-------|-----|------|------|------|------|
| SURFACE  | 1001.8 | 1009  | 992   | 26.1  | 29.4  | 19.6  | 23.5  | 203 | 3.4  | 1.3  | 3.1  | 3.9  |
| 1000     | 66     | 124   | 6     | 26.1  | 33.1  | 20    | 23.9  | 216 | 3.1  | 1.8  | 2.5  | 3.9  |
| 950      | 508    | 587   | 425   | 26.5  | 36    | 17.8  | 19.7  | 227 | 6    | 4.4  | 4.1  | 7.2  |
| 925      | 749    | 805   | 687   | 26.7  | 35.9  | 17    | 16.4  | 229 | 5.5  | 4.2  | 3.6  | 6.8  |
| 900      | 989    | 1080  | 908   | 26    | 35.2  | 15.4  | 13.1  | 238 | 5.5  | 4.7  | 2.9  | 7.1  |
| 850      | 1489   | 1555  | 1385  | 23.4  | 31.3  | 12.5  | 8.8   | 255 | 4.2  | 4.1  | 1.1  | 6.3  |
| 800      | 2014   | 2085  | 1914  | 19.5  | 28.4  | 9.8   | 5.5   | 275 | 3.4  | 3.4  | -0.3 | 5.9  |
| 750      | 2552   | 2682  | 2450  | 15.1  | 25.4  | 5.6   | 2.2   | 293 | 3.3  | 3    | -1.3 | 6.3  |
| 700      | 3143   | 3231  | 3057  | 10.4  | 21.8  | 1.4   | -0.8  | 304 | 3.6  | 3    | -2   | 6.9  |
| 650      | 3743   | 3885  | 3615  | 5.6   | 17.4  | -3.9  | -4.4  | 306 | 4.1  | 3.3  | -2.4 | 7.4  |
| 600      | 4403   | 4525  | 4000  | 1.3   | 15.6  | -8.1  | -9.3  | 301 | 4.4  | 3.8  | -2.3 | 7.9  |
| 550      | 5101   | 5292  | 4977  | -2.6  | 9.2   | -12.3 | -15   | 290 | 5.1  | 4.8  | -1.7 | 8.4  |
| 500      | 5848   | 6009  | 5695  | -6.8  | 4     | -15.5 | -20.2 | 279 | 6.2  | 6.1  | -1   | 9.4  |
| 450      | 6664   | 6867  | 6500  | -11.7 | -0.5  | -20.3 | -25   | 271 | 7    | 7    | -0.1 | 10.3 |
| 400      | 7556   | 7762  | 7369  | -17.6 | -2.3  | -27.5 | -30.7 | 265 | 8.8  | 8.8  | 0.7  | 12.2 |
| 350      | 8542   | 8784  | 8327  | -24.4 | -9.1  | -37.9 | -37.1 | 262 | 10.3 | 10.2 | 1.5  | 13.8 |
| 300      | 9649   | 9954  | 9399  | -32.2 | -18.1 | -48.2 | -44.7 | 258 | 12.7 | 12.4 | 2.7  | 16.4 |
| 250      | 10911  | 11284 | 10617 | -41.2 | -30.3 | -55.1 | -55   | 252 | 14.4 | 13.7 | 4.4  | 18   |
| 200      | 12392  | 12834 | 12007 | -51.9 | -39.1 | -66.7 | -65.3 | 250 | 15.3 | 14.4 | 5.2  | 18.3 |
| 175      | 13245  | 13721 | 12803 | -57.9 | -44.1 | -74.7 | -62.9 | 250 | 14.7 | 13.8 | 5.1  | 17.4 |
| 150      | 14202  | 14713 | 13787 | -64.1 | -49.5 | -86.1 |       | 252 | 13   | 12.3 | 4.1  | 15.6 |
| 125      | 15299  | 15836 | 14731 | -70.6 | -53.9 | -88.9 |       | 253 | 10.3 | 9.9  | 3    | 12.8 |
| 100      | 16603  | 17200 | 15996 | -76.1 | -60.9 | -85.9 |       | 258 | 6.9  | 6.8  | 1.4  | 9.3  |
| 80       | 17888  | 18536 | 17299 | -75.6 | -60.1 | -92.3 |       | 272 | 3.2  | 3.2  | -0.1 | 5.9  |
| 70       | 18676  | 19316 | 18081 | -72   | -54.9 | -87.8 |       | 283 | 1.8  | 1.8  | -0.4 | 4.7  |
| 60       | 19490  | 19971 | 18953 | -67   | -48.1 | -80.5 |       | 312 | 1.2  | 0.9  | -0.8 | 3.9  |
| 50       | 20700  | 21411 | 20038 | -61.1 | -46.1 | -78.5 |       | 339 | 0.9  | 0.3  | -0.8 | 3.6  |
| 40       | 22099  | 22856 | 21397 | -55.6 | -38.5 | -68.3 |       | 49  | 0.9  | -0.7 | -0.6 | 3    |
| 30       | 23947  | 24748 | 23219 | -50.7 | -36.8 | -64.5 |       | 74  | 1.5  | -1.4 | -0.4 | 3    |
| 25       | 25118  | 25850 | 24360 | -48.6 | -35.3 | -60.5 |       | 79  | 1.5  | -1.5 | -0.3 | 2.9  |
| 20       | 26595  | 27373 | 25782 | -46.2 | -31.5 | -59.3 |       | 82  | 1.5  | -1.5 | -0.2 | 2.8  |
| 15       | 28522  | 29360 | 27639 | -43.5 | -28.3 | -57.9 |       | 94  | 1.3  | -1.3 | 0.1  | 2.5  |
| 10       | 31319  | 32215 | 30279 | -38.9 | -22.1 | -49.2 |       | 104 | 2.1  | -2   | 0.5  | 3.9  |
| 7        | 33790  | 34500 | 32661 | -36.3 | -22.5 | -51.2 |       | 94  | 2.8  | -2.8 | 0.2  | 4.3  |

## FREEZING LEVEL

| P   | Height | H_max | H_min |
|-----|--------|-------|-------|
| 581 | 4673   | 6670  | 3230  |

## FIRST TROPOPAUSE

| P | Height | Temp |
|---|--------|------|
|   |        |      |

## SECOND TROPOPAUSE

| P  | Height | Temp  |
|----|--------|-------|
| 93 | 17043  | -78.3 |

| PRESSURE | HEIGHT | Hmax  | Hmin  | TEMP  | TMAX  | TMIN  | DEWPT | DIR | VELO | U    | V    | VM   |
|----------|--------|-------|-------|-------|-------|-------|-------|-----|------|------|------|------|
| SURFACE  | 998.4  | 1005  | 985   | 27.5  | 33    | 21.4  | 25.2  | 198 | 3.5  | 1.1  | 3.3  | 4.1  |
| 1000     | 49     | 107   | -41   | 26.9  | 31.2  | 21.8  | 24.6  | 207 | 2.7  | 1.2  | 2.4  | 3.5  |
| 950      | 479    | 563   | 367   | 27    | 40    | 19    | 22.4  | 222 | 5.9  | 4    | 4.4  | 7.3  |
| 925      | 718    | 799   | 628   | 27    | 36.2  | 18.4  | 19.1  | 232 | 5.5  | 4.3  | 3.4  | 7    |
| 900      | 962    | 1052  | 846   | 26.4  | 36.6  | 15.2  | 16.6  | 233 | 5.3  | 4.2  | 3.2  | 7.2  |
| 850      | 1464   | 1562  | 1336  | 24.2  | 33.2  | 12.2  | 11.9  | 249 | 4    | 3.7  | 1.4  | 6.4  |
| 800      | 1991   | 2095  | 1851  | 20.8  | 29    | 9.8   | 8.2   | 282 | 3    | 2.9  | -0.6 | 6    |
| 750      | 2534   | 2607  | 2360  | 16.7  | 26    | 7     | 4.9   | 311 | 3    | 2.3  | -2   | 6.4  |
| 700      | 3126   | 3237  | 2966  | 12.1  | 22.9  | 4     | 1.6   | 328 | 3.6  | 1.9  | -3.1 | 7.2  |
| 650      | 3730   | 3880  | 3560  | 7.3   | 15.8  | -3.7  | -1.9  | 333 | 3.9  | 1.8  | -3.5 | 7.7  |
| 600      | 4394   | 4520  | 4229  | 2.7   | 12    | -8.1  | -5.8  | 331 | 4.1  | 2    | -3.6 | 8    |
| 550      | 5099   | 5233  | 4925  | -1.4  | 8     | -10.3 | -11   | 324 | 3.9  | 2.3  | -3.2 | 7.6  |
| 500      | 5846   | 5998  | 5662  | -5.3  | 5.2   | -13.3 | -16.5 | 309 | 3.6  | 2.8  | -2.3 | 7.4  |
| 450      | 6670   | 6827  | 6502  | -9.5  | -1.5  | -18.5 | -21.1 | 287 | 3.7  | 3.5  | -1.1 | 7.7  |
| 400      | 7569   | 7885  | 7362  | -14.6 | -3.5  | -24.3 | -26.5 | 273 | 4.5  | 4.5  | -0.2 | 8.4  |
| 350      | 8569   | 8875  | 8361  | -21.1 | -10.5 | -32.6 | -33   | 262 | 5.3  | 5.3  | 0.7  | 9    |
| 300      | 9690   | 9991  | 9466  | -29   | -18.5 | -41.1 | -40.7 | 254 | 6.6  | 6.3  | 1.8  | 9.9  |
| 250      | 10969  | 11273 | 10729 | -38.6 | -27.9 | -49.9 | -50.9 | 248 | 7.4  | 6.9  | 2.8  | 10.3 |
| 200      | 12463  | 12793 | 12177 | -50.1 | -38.5 | -63.1 | -63.5 | 241 | 7.7  | 6.8  | 3.7  | 10.6 |
| 175      | 13323  | 13701 | 12984 | -56.7 | -44.5 | -70.1 | -61.8 | 237 | 6.9  | 5.8  | 3.8  | 10.2 |
| 150      | 14284  | 14696 | 13886 | -63.8 | -36.9 | -77.2 | -62.6 | 235 | 5.2  | 4.3  | 3    | 9.1  |
| 125      | 15381  | 15848 | 14939 | -71.3 | -54.3 | -87.4 | -65.5 | 225 | 3.1  | 2.2  | 2.2  | 8.1  |
| 100      | 16679  | 17256 | 16216 | -76.8 | -63.3 | -87.9 |       | 139 | 0.9  | -0.6 | 0.7  | 7.3  |
| 80       | 17966  | 18638 | 17461 | -74.8 | -51.7 | -87.9 |       | 83  | 3.2  | -3.2 | -0.4 | 6.5  |
| 70       | 18760  | 19509 | 18230 | -70.8 | -49.2 | -87.1 |       | 79  | 4.2  | -4.1 | -0.8 | 6.3  |
| 60       | 19312  | 19998 | 19042 | -65.5 | -45.9 | -81.1 |       | 78  | 4.7  | -4.6 | -1   | 6    |
| 50       | 20797  | 21697 | 20193 | -59.7 | -40.1 | -72.1 |       | 74  | 4.8  | -4.6 | -1.3 | 6.1  |
| 40       | 22202  | 23170 | 21604 | -55   | -39.6 | -66.3 |       | 81  | 4.9  | -4.8 | -0.8 | 6    |
| 30       | 24055  | 25120 | 23416 | -50.4 | -34.7 | -63.1 |       | 80  | 5.6  | -5.5 | -1   | 6.7  |
| 25       | 25231  | 26375 | 24565 | -48.3 | -33.2 | -62.5 |       | 88  | 5.4  | -5.4 | -0.2 | 6.2  |
| 20       | 26715  | 27911 | 25996 | -45.8 | -29.9 | -61.1 |       | 90  | 5.7  | -5.7 | 0    | 6.4  |
| 15       | 28615  | 29337 | 27846 | -43.3 | -30.3 | -58.7 |       | 89  | 4.7  | -4.7 | -0.1 | 5.5  |
| 10       | 31355  | 32068 | 30509 | -40   | -25.1 | -57.1 |       | 90  | 5.4  | -5.4 | 0    | 5.8  |
| 7        | 33861  | 34508 | 32874 | -37.2 | -25.9 | -45.5 |       | 88  | 6.5  | -6.5 | -0.2 | 7    |

## FREEZING LEVEL

| P   | Height | H_max | H_min |
|-----|--------|-------|-------|
| 566 | 4876   | 6410  | 3420  |

## FIRST TROPOPAUSE

| P | Height | Temp |
|---|--------|------|
|   |        |      |

## SECOND TROPOPAUSE

| P  | Height | Temp |
|----|--------|------|
| 95 | 17006  | -79  |

| PRESSURE | HEIGHT | Hmax  | Hmin  | TEMP  | TMAX  | TMIN  | DEWPT | DIR | VELO | U     | V    | VM   |
|----------|--------|-------|-------|-------|-------|-------|-------|-----|------|-------|------|------|
| SURFACE  | 994.8  | 1002  | 947   | 27.3  | 32    | 23.4  | 25.1  | 215 | 2.4  | 1.4   | 2    | 3.3  |
| 1000     | 13     | 66    | -68   | 27.7  | 30.6  | 25.2  | 24.1  | 196 | 2.9  | 0.8   | 2.8  | 3.3  |
| 950      | 448    | 519   | 350   | 26.8  | 36.2  | 18.6  | 23.3  | 235 | 5.5  | 4.5   | 3.1  | 7.3  |
| 925      | 691    | 753   | 583   | 26.3  | 36    | 16.4  | 21.5  | 236 | 5.4  | 4.5   | 3    | 7.7  |
| 900      | 930    | 996   | 821   | 25.2  | 35    | 14.4  | 19.7  | 253 | 5.5  | 5.3   | 1.6  | 8.3  |
| 850      | 1430   | 1497  | 1314  | 22.6  | 30.6  | 12.4  | 16.3  | 266 | 5.4  | 5.4   | 0.4  | 8.5  |
| 800      | 1955   | 2035  | 1832  | 19.4  | 26.6  | 8.3   | 13.2  | 278 | 4.4  | 4.4   | -0.6 | 7.7  |
| 750      | 2503   | 2607  | 2300  | 16    | 24.6  | 4.3   | 10    | 291 | 3.6  | 3.4   | -1.3 | 7.2  |
| 700      | 3089   | 3211  | 2958  | 12.3  | 20.8  | 0.7   | 6.4   | 302 | 3.4  | 2.9   | -1.8 | 7.3  |
| 650      | 3698   | 3850  | 3560  | 8.4   | 16    | -1.3  | 2.8   | 312 | 3.1  | 2.3   | -2.1 | 7.3  |
| 600      | 4362   | 4526  | 4212  | 4.6   | 12.6  | -6.1  | -0.8  | 322 | 2.8  | 1.7   | -2.2 | 7.2  |
| 550      | 5077   | 5250  | 4911  | 0.8   | 8.6   | -9.7  | -4.9  | 326 | 2.3  | 1.3   | -1.9 | 6.7  |
| 500      | 5827   | 6027  | 5694  | -3    | 4.4   | -11.5 | -9.3  | 328 | 1.5  | 0.8   | -1.3 | 6    |
| 450      | 6660   | 6865  | 6500  | -7.2  | 0     | -19.7 | -14.2 | 352 | 0.7  | 0.1   | -0.7 | 5.6  |
| 400      | 7567   | 7785  | 7403  | -12.1 | -4.5  | -27.5 | -19.9 | 45  | 0.8  | -0.6  | -0.6 | 5.5  |
| 350      | 8577   | 8808  | 8370  | -18.3 | -9.3  | -36.3 | -27   | 83  | 1.7  | -1.7  | -0.2 | 5.8  |
| 300      | 9715   | 9944  | 9488  | -26.3 | -15.9 | -41.7 | -35   | 92  | 2.9  | -2.9  | 0.1  | 6.4  |
| 250      | 11007  | 11282 | 10708 | -36.3 | -27.1 | -45.1 | -44.9 | 90  | 4.6  | -4.6  | 0    | 7.7  |
| 200      | 12515  | 12766 | 12160 | -48.5 | -38.7 | -58.3 | -58.6 | 84  | 7    | -7    | -0.7 | 10   |
| 175      | 13381  | 13638 | 13135 | -55.6 | -46.1 | -65.3 | -62.6 | 83  | 8.3  | -8.2  | -1   | 11   |
| 150      | 14344  | 14651 | 14068 | -63.5 | -52.3 | -74.1 | -69.5 | 82  | 9.8  | -9.7  | -1.4 | 12.5 |
| 125      | 15440  | 15789 | 15120 | -71.6 | -55.5 | -85.5 | -87.4 | 80  | 11.5 | -11.3 | -2   | 13.9 |
| 100      | 16731  | 17134 | 16370 | -77.7 | -58.5 | -89.6 |       | 80  | 13   | -12.8 | -2.2 | 15.2 |
| 80       | 18015  | 18407 | 17635 | -74.6 | -57.5 | -88.1 |       | 82  | 12.2 | -12.1 | -1.6 | 13.9 |
| 70       | 18811  | 19210 | 18402 | -70.5 | -53.7 | -90.7 |       | 81  | 11.5 | -11.4 | -1.8 | 12.8 |
| 60       | 19341  | 19996 | 19187 | -65.4 | -49.5 | -82.5 |       | 82  | 10.9 | -10.8 | -1.6 | 11.7 |
| 50       | 20848  | 21363 | 20350 | -60.2 | -45.9 | -80.5 |       | 83  | 10.3 | -10.2 | -1.2 | 11   |
| 40       | 22252  | 22858 | 21677 | -55.5 | -39.9 | -73.9 |       | 86  | 9.7  | -9.7  | -0.7 | 10.3 |
| 30       | 24098  | 24795 | 23603 | -51   | -36.9 | -65.1 |       | 88  | 10   | -10   | -0.3 | 10.5 |
| 25       | 25267  | 26070 | 24700 | -48.9 | -34.3 | -58.9 |       | 90  | 10   | -10   | 0    | 10.4 |
| 20       | 26744  | 27645 | 26143 | -47.3 | -34.6 | -57.1 |       | 92  | 9.8  | -9.8  | 0.3  | 10   |
| 15       | 28646  | 29354 | 27979 | -44.9 | -33.7 | -55.1 |       | 91  | 10.5 | -10.5 | 0.2  | 10.8 |
| 10       | 31388  | 32217 | 30602 | -41.7 | -29.1 | -52.5 |       | 93  | 10.3 | -10.3 | 0.5  | 10.6 |
| 7        | 33793  | 34754 | 32982 | -39.7 | -28.5 | -52.1 |       | 91  | 9.1  | -9.1  | 0.2  | 9.6  |

## FREEZING LEVEL

| P   | Height | H_max | H_min |
|-----|--------|-------|-------|
| 539 | 5241   | 6990  | 3490  |

## FIRST TROPOPAUSE

| P | Height | Temp |
|---|--------|------|
|   |        |      |

## SECOND TROPOPAUSE

| P  | Height | Temp  |
|----|--------|-------|
| 97 | 16977  | -79.5 |

| PRESSURE | HEIGHT | Hmax  | Hmin  | TEMP  | TMAX  | TMIN  | DEWPT | DIR | VELO | U     | V    | VM   |
|----------|--------|-------|-------|-------|-------|-------|-------|-----|------|-------|------|------|
| SURFACE  | 995    | 1003  | 955   | 26.4  | 30    | 2.8   | 25.2  | 227 | 2.1  | 1.5   | 1.4  | 2.8  |
| 1000     | 8      | 70    | -75   | 26.7  | 28.8  | 24.4  | 25.5  | 220 | 1.6  | 1     | 1.2  | 2.4  |
| 950      | 450    | 519   | 328   | 25.6  | 32    | 19.8  | 23    | 244 | 5.2  | 4.7   | 2.3  | 7.1  |
| 925      | 685    | 752   | 560   | 24.7  | 31.4  | 18.7  | 21.5  | 246 | 5.5  | 5     | 2.2  | 7.8  |
| 900      | 928    | 1052  | 798   | 23.3  | 32.2  | 16.9  | 20.1  | 256 | 5.6  | 5.4   | 1.3  | 8.5  |
| 850      | 1425   | 1547  | 1292  | 20.4  | 28.4  | 11.7  | 17.3  | 265 | 5.2  | 5.2   | 0.5  | 8.7  |
| 800      | 1946   | 2067  | 1814  | 17.6  | 26.2  | 8.6   | 14.6  | 266 | 4.5  | 4.5   | 0.3  | 8.1  |
| 750      | 2495   | 2600  | 2364  | 14.6  | 21.8  | 4.8   | 11.5  | 263 | 4.1  | 4.1   | 0.5  | 7.5  |
| 700      | 3075   | 3193  | 2948  | 11.5  | 18.8  | 3.2   | 8.1   | 261 | 3.7  | 3.7   | 0.6  | 7.3  |
| 650      | 3689   | 3810  | 3522  | 8.3   | 15.8  | 0.6   | 4.2   | 257 | 3.2  | 3.1   | 0.7  | 7    |
| 600      | 4350   | 4466  | 4220  | 5     | 12.2  | -2.3  | 0.5   | 255 | 2.3  | 2.2   | 0.6  | 6.3  |
| 550      | 5067   | 5210  | 4899  | 1.3   | 9     | -7.3  | -3.4  | 246 | 1.2  | 1.1   | 0.5  | 5.8  |
| 500      | 5817   | 5963  | 5668  | -2.6  | 5.4   | -9.5  | -8.1  | 194 | 0.4  | 0.1   | 0.4  | 5.5  |
| 450      | 6652   | 6800  | 6500  | -7    | 1.6   | -14.7 | -13.3 | 110 | 1.2  | -1.1  | 0.4  | 5.5  |
| 400      | 7558   | 7753  | 7373  | -12.2 | -2.7  | -20.7 | -19.5 | 99  | 2.4  | -2.4  | 0.4  | 5.9  |
| 350      | 8568   | 8797  | 8363  | -18.6 | -6.1  | -28.9 | -26.8 | 93  | 4.4  | -4.4  | 0.2  | 7    |
| 300      | 9700   | 9964  | 9483  | -26.8 | -16.5 | -38.5 | -35.3 | 87  | 6.3  | -6.3  | -0.3 | 8.6  |
| 250      | 10990  | 11285 | 10732 | -36.9 | -25.7 | -48.9 | -45.4 | 84  | 9.5  | -9.4  | -1   | 11.7 |
| 200      | 12493  | 12836 | 12150 | -49.3 | -37.5 | -63.5 | -60.3 | 78  | 13.3 | -13   | -2.8 | 15.4 |
| 175      | 13355  | 13726 | 12952 | -56.5 | -41.9 | -72.1 | -61.9 | 76  | 15.7 | -15.2 | -3.8 | 17.6 |
| 150      | 14315  | 14725 | 13844 | -64.4 | -47.9 | -79.5 | -69.6 | 75  | 17.6 | -17   | -4.6 | 19.8 |
| 125      | 15407  | 15823 | 14862 | -72.4 | -50.7 | -87.5 |       | 76  | 19.8 | -19.2 | -4.7 | 21.8 |
| 100      | 16702  | 17162 | 16057 | -77   | -58.5 | -91.1 |       | 80  | 20.5 | -20.2 | -3.7 | 22.4 |
| 80       | 17996  | 18491 | 17281 | -72.6 | -54.1 | -89.9 |       | 83  | 17.7 | -17.6 | -2.3 | 18.8 |
| 70       | 18799  | 19329 | 18033 | -68.5 | -50.9 | -83.1 |       | 84  | 16   | -15.9 | -1.8 | 16.7 |
| 60       | 19266  | 19997 | 18912 | -64.3 | -46   | -78.9 |       | 85  | 14.9 | -14.8 | -1.4 | 15.3 |
| 50       | 20841  | 21337 | 19975 | -60.1 | -46.1 | -71.9 |       | 84  | 13.6 | -13.5 | -1.3 | 14.1 |
| 40       | 22243  | 22770 | 21308 | -56.2 | -42.1 | -66.1 |       | 87  | 12.8 | -12.8 | -0.7 | 13.1 |
| 30       | 24079  | 24641 | 23106 | -52.3 | -33.5 | -62.3 |       | 90  | 12.8 | -12.8 | -0.1 | 13   |
| 25       | 25249  | 25906 | 24590 | -50.1 | -36.1 | -59.9 |       | 91  | 12.2 | -12.2 | 0.2  | 12.4 |
| 20       | 26723  | 27372 | 26097 | -47.9 | -34.7 | -59.5 |       | 92  | 11   | -11   | 0.4  | 11.1 |
| 15       | 28624  | 29344 | 27954 | -45.7 | -30.9 | -56.5 |       | 89  | 10.3 | -10.3 | -0.2 | 10.7 |
| 10       | 31312  | 32148 | 30570 | -43   | -31.9 | -52.9 |       | 91  | 10.5 | -10.5 | 0.2  | 10.7 |
| 7        | 33740  | 34667 | 32924 | -40.9 | -29.7 | -53.3 |       | 94  | 6.2  | -6.2  | 0.4  | 6.3  |

## FREEZING LEVEL

| P   | Height | H_max | H_min |
|-----|--------|-------|-------|
| 533 | 5329   | 6970  | 3770  |

## FIRST TROPOPAUSE

| P | Height | Temp |
|---|--------|------|
|   |        |      |

## SECOND TROPOPAUSE

| P   | Height | Temp  |
|-----|--------|-------|
| 101 | 16697  | -79.1 |

| PRESSURE | HEIGHT | Hmax  | Hmin  | TEMP  | TMAX  | TMIN  | DEWPT | DIR | VELO | U     | V    | VM   |
|----------|--------|-------|-------|-------|-------|-------|-------|-----|------|-------|------|------|
| SURFACE  | 995.7  | 1005  | 980   | 26.3  | 32.4  | 23.6  | 25.3  | 233 | 1.5  | 1.2   | 0.9  | 2.5  |
| 1000     | 25     | 85    | -62   | 26.7  | 29.4  | 23.6  | 25.6  | 207 | 1.6  | 0.7   | 1.4  | 1.9  |
| 950      | 456    | 554   | 321   | 25.2  | 33    | 17.2  | 22.8  | 252 | 3.9  | 3.7   | 1.2  | 6.7  |
| 925      | 697    | 772   | 612   | 24.2  | 31.2  | -26.3 | 21.2  | 255 | 3.8  | 3.7   | 1    | 7.2  |
| 900      | 934    | 1016  | 811   | 22.7  | 30.8  | -25.3 | 19.8  | 269 | 4.1  | 4.1   | 0.1  | 7.9  |
| 850      | 1430   | 1514  | 1310  | 20.1  | 29.6  | 4.3   | 17.2  | 277 | 3.9  | 3.9   | -0.5 | 8    |
| 800      | 1951   | 2037  | 1832  | 17.3  | 25.4  | -3.4  | 14.5  | 275 | 3.4  | 3.4   | -0.3 | 7.3  |
| 750      | 2500   | 2592  | 2370  | 14.5  | 23.8  | 6.6   | 11.3  | 268 | 2.9  | 2.9   | 0.1  | 6.8  |
| 700      | 3080   | 3185  | 2955  | 11.6  | 20    | 5     | 7.9   | 266 | 2.6  | 2.6   | 0.2  | 6.7  |
| 650      | 3694   | 3805  | 3525  | 8.5   | 16.2  | 1.8   | 4     | 258 | 1.9  | 1.9   | 0.4  | 6.4  |
| 600      | 4355   | 4485  | 4211  | 5.1   | 12.8  | -2.7  | 0.2   | 250 | 1.2  | 1.1   | 0.4  | 5.9  |
| 550      | 5074   | 5205  | 4936  | 1.5   | 10    | -5.7  | -3.8  | 198 | 0.3  | 0.1   | 0.3  | 5.7  |
| 500      | 5823   | 5984  | 5651  | -2.6  | 5.6   | -9.1  | -8.3  | 108 | 0.9  | -0.9  | 0.3  | 5.6  |
| 450      | 6659   | 6818  | 6500  | -7.1  | 1.2   | -13.7 | -14   | 99  | 2    | -2    | 0.3  | 5.9  |
| 400      | 7564   | 7757  | 7359  | -12.3 | -4.5  | -20.4 | -20.4 | 96  | 3.1  | -3.1  | 0.3  | 6.5  |
| 350      | 8572   | 8801  | 8400  | -18.8 | -9.9  | -27.7 | -27.6 | 91  | 4.6  | -4.6  | 0.1  | 7.4  |
| 300      | 9705   | 9957  | 9454  | -26.9 | -16.9 | -35.1 | -35.9 | 87  | 6.3  | -6.3  | -0.3 | 8.7  |
| 250      | 10994  | 11283 | 10725 | -37.1 | -23.9 | -46.3 | -46.2 | 82  | 9    | -8.9  | -1.2 | 11.3 |
| 200      | 12495  | 12830 | 12190 | -49.7 | -39.7 | -61.1 | -60.4 | 76  | 11.8 | -11.4 | -2.9 | 13.9 |
| 175      | 13357  | 13715 | 13020 | -56.9 | -44.4 | -70.7 | -62   | 74  | 13.3 | -12.8 | -3.6 | 15.5 |
| 150      | 14315  | 14701 | 13934 | -64.8 | -53.9 | -79.1 | -78.1 | 73  | 15.1 | -14.4 | -4.5 | 17.3 |
| 125      | 15407  | 15822 | 14955 | -72.5 | -58.1 | -84.1 |       | 74  | 16   | -15.4 | -4.3 | 18.1 |
| 100      | 16701  | 17156 | 16170 | -76.5 | -53.6 | -90.7 |       | 79  | 16.7 | -16.4 | -3.3 | 18.6 |
| 80       | 18006  | 18472 | 17396 | -71.4 | -48.7 | -85.5 |       | 82  | 14.4 | -14.3 | -1.9 | 15.5 |
| 70       | 18811  | 19277 | 18180 | -67.2 | -48.2 | -80.1 |       | 84  | 13.6 | -13.5 | -1.4 | 14.3 |
| 60       | 19152  | 19995 | 19061 | -63.2 | -47.8 | -75.7 |       | 84  | 11.8 | -11.7 | -1.2 | 12.4 |
| 50       | 20867  | 21339 | 20157 | -59.5 | -42.9 | -72.1 |       | 84  | 10.7 | -10.6 | -1.1 | 11.1 |
| 40       | 22273  | 22757 | 21527 | -55.8 | -40.7 | -69.9 |       | 87  | 9.9  | -9.9  | -0.5 | 10.1 |
| 30       | 24115  | 24628 | 23334 | -52.1 | -34.9 | -64.5 |       | 90  | 9.3  | -9.3  | 0    | 9.6  |
| 25       | 25281  | 25829 | 24615 | -50.4 | -37.7 | -61.9 |       | 90  | 8.7  | -8.7  | 0    | 8.8  |
| 20       | 26739  | 27355 | 25677 | -48.4 | -35.7 | -60.1 |       | 91  | 8.6  | -8.6  | 0.1  | 8.7  |
| 15       | 28630  | 29317 | 27565 | -46.6 | -33.9 | -58.5 |       | 92  | 7.4  | -7.4  | 0.2  | 7.5  |
| 10       | 31320  | 32120 | 30275 | -43.9 | -30.9 | -54.5 |       | 90  | 6.2  | -6.2  | 0    | 6.2  |
| 7        | 33733  | 34655 | 32698 | -41.7 | -32.9 | -51.9 |       | 93  | 5.9  | -5.9  | 0.3  | 6.1  |

## FREEZING LEVEL

| P   | Height | H_max | H_min |
|-----|--------|-------|-------|
| 532 | 5349   | 6670  | 3980  |

## FIRST TROPOPAUSE

| P | Height | Temp |
|---|--------|------|
|   |        |      |

## SECOND TROPOPAUSE

| P   | Height | Temp  |
|-----|--------|-------|
| 103 | 16595  | -78.7 |



| PRESSURE | HEIGHT | H max | H min | TEMP  | TMAX  | TMIN  | DEWPT | DIR | VELO | U     | V    | VM   |
|----------|--------|-------|-------|-------|-------|-------|-------|-----|------|-------|------|------|
| SURFACE  | 999.6  | 1020  | 986   | 26    | 28.4  | 23.4  | 24.9  | 238 | 0.9  | 0.8   | 0.5  | 1.8  |
| 1000     | 57     | 105   | -31   | 25.9  | 30.1  | 22    | 24.5  | 221 | 1.1  | 0.7   | 0.8  | 1.6  |
| 950      | 486    | 584   | 366   | 25.2  | 31    | 20.2  | 22.2  | 245 | 2.6  | 2.4   | 1.1  | 5.5  |
| 925      | 724    | 787   | 619   | 24    | 28.7  | 18.6  | 20.3  | 246 | 2.2  | 2     | 0.9  | 5.4  |
| 900      | 965    | 1030  | 844   | 22.7  | 31    | 16.4  | 18.9  | 257 | 2.3  | 2.2   | 0.5  | 6.1  |
| 850      | 1461   | 1537  | 1343  | 20    | 28.4  | 13.6  | 15.7  | 274 | 1.6  | 1.6   | -0.1 | 6    |
| 800      | 1981   | 2074  | 1859  | 17.1  | 26    | 10.6  | 12.5  | 284 | 1.2  | 1.2   | -0.3 | 5.8  |
| 750      | 2523   | 2639  | 2390  | 14.2  | 23.2  | 8.6   | 8.9   | 276 | 1    | 1     | -0.1 | 5.6  |
| 700      | 3108   | 3213  | 2974  | 11.1  | 21    | 5.2   | 5.3   | 264 | 0.9  | 0.9   | 0.1  | 5.5  |
| 650      | 3716   | 3870  | 3580  | 7.9   | 16.4  | 1.2   | 1.4   | 249 | 0.9  | 0.8   | 0.3  | 5.3  |
| 600      | 4379   | 4496  | 4234  | 4.4   | 13.2  | -2.7  | -2.4  | 214 | 0.7  | 0.4   | 0.6  | 5    |
| 550      | 5094   | 5220  | 4933  | 0.7   | 10    | -5.7  | -6.7  | 180 | 0.7  | 0     | 0.7  | 5    |
| 500      | 5843   | 5982  | 5688  | -3.4  | 5.8   | -9.7  | -11   | 139 | 0.9  | -0.6  | 0.7  | 5    |
| 450      | 6674   | 6833  | 6505  | -8    | 2     | -15.7 | -16.5 | 122 | 1.5  | -1.3  | 0.8  | 5.1  |
| 400      | 7577   | 7740  | 7403  | -13.3 | -4    | -23.1 | -22.6 | 105 | 2.3  | -2.2  | 0.6  | 5.4  |
| 350      | 8580   | 8800  | 8376  | -19.9 | -10.9 | -32.7 | -29.5 | 97  | 3.1  | -3.1  | 0.4  | 5.8  |
| 300      | 9709   | 9945  | 9436  | -28.1 | -18.9 | -46.5 | -37.6 | 96  | 4.1  | -4.1  | 0.4  | 6.5  |
| 250      | 10992  | 11274 | 10770 | -38.2 | -28.5 | -49.9 | -47.8 | 91  | 5.4  | -5.4  | 0.1  | 7.6  |
| 200      | 12488  | 12794 | 12240 | -50.5 | -40.1 | -60.1 | -61.6 | 85  | 7.7  | -7.7  | -0.7 | 9.8  |
| 175      | 13343  | 13678 | 13059 | -57.8 | -45.7 | -68.9 | -64.5 | 83  | 8.6  | -8.5  | -1.1 | 10.6 |
| 150      | 14296  | 14663 | 14006 | -65.6 | -50.1 | -76.8 | -74.9 | 81  | 9.5  | -9.4  | -1.5 | 11.7 |
| 125      | 15382  | 15777 | 14760 | -73.2 | -53.7 | -86.3 |       | 81  | 10.3 | -10.2 | -1.6 | 12.3 |
| 100      | 16675  | 17074 | 16315 | -76.8 | -62.3 | -89.5 |       | 84  | 10.7 | -10.6 | -1.1 | 12.4 |
| 80       | 17973  | 18386 | 17595 | -71.3 | -58.7 | -84.9 |       | 81  | 9.3  | -9.2  | -1.4 | 10.6 |
| 70       | 18780  | 19210 | 18392 | -67.3 | -53.5 | -82.5 |       | 80  | 8.4  | -8.3  | -1.4 | 9.5  |
| 60       | 19320  | 19994 | 19222 | -63.4 | -49.5 | -76.1 |       | 78  | 7.9  | -7.7  | -1.7 | 8.9  |
| 50       | 20834  | 21324 | 20342 | -59.5 | -47.2 | -74.1 |       | 81  | 8.3  | -8.2  | -1.3 | 9    |
| 40       | 22243  | 22794 | 21747 | -55.8 | -42.4 | -67.1 |       | 86  | 7.7  | -7.7  | -0.5 | 8    |
| 30       | 24080  | 24659 | 23553 | -52   | -35.1 | -62.5 |       | 90  | 8.2  | -8.2  | 0    | 8.6  |
| 25       | 25243  | 25829 | 24705 | -50.4 | -32.5 | -62.1 |       | 90  | 8.5  | -8.5  | 0    | 8.9  |
| 20       | 26707  | 27378 | 26124 | -48.9 | -33.3 | -58.5 |       | 91  | 8.4  | -8.4  | 0.2  | 8.7  |
| 15       | 28592  | 29417 | 27968 | -46.5 | -28.5 | -55.7 |       | 89  | 7.9  | -7.9  | -0.1 | 8.2  |
| 10       | 31272  | 32085 | 30653 | -44.2 | -30.7 | -56.7 |       | 88  | 8.5  | -8.5  | -0.3 | 9.3  |
| 7        | 33663  | 34195 | 32847 | -41.9 | -31.5 | -57.7 |       | 88  | 7.1  | -7.1  | -0.2 | 7.5  |

## FREEZING LEVEL

| P   | Height | H max | H min |
|-----|--------|-------|-------|
| 542 | 5219   | 6800  | 3800  |

## FIRST TROPOPAUSE

| P | Height | Temp |
|---|--------|------|
|   |        |      |

## SECOND TROPOPAUSE

| P   | Height | Temp |
|-----|--------|------|
| 103 | 16524  | -79  |

| PRESSURE | HEIGHT | H max | H min | TEMP  | TMAX  | TMIN  | DEWPT | DIR | VELO | U    | V    | VM  |
|----------|--------|-------|-------|-------|-------|-------|-------|-----|------|------|------|-----|
| SURFACE  | 1004.2 | 1011  | 984   | 24.1  | 28    | 18    | 22.8  | 351 | 0.6  | 0.1  | -0.6 | 1.5 |
| 1000     | 85     | 136   | -15   | 24.2  | 30    | 18.2  | 22.4  | 9   | 0.6  | -0.1 | -0.6 | 1.6 |
| 950      | 525    | 585   | 403   | 24.2  | 30.8  | 17.6  | 18.7  | 42  | 1.2  | -0.8 | -0.9 | 4.7 |
| 925      | 763    | 818   | 648   | 23    | 30    | 16.2  | 17.2  | 62  | 1.9  | -1.7 | -0.9 | 5   |
| 900      | 1002   | 1070  | 874   | 21.5  | 29.2  | 12    | 14.8  | 53  | 2    | -1.6 | -1.2 | 5.2 |
| 850      | 1495   | 1556  | 1372  | 18.5  | 25.2  | 11    | 11.2  | 58  | 2.2  | -1.9 | -1.2 | 5.6 |
| 800      | 2013   | 2094  | 1892  | 15.6  | 23.4  | 8     | 7.7   | 60  | 2    | -1.7 | -1   | 5.5 |
| 750      | 2552   | 2630  | 2400  | 12.7  | 22.4  | 3.4   | 4.1   | 72  | 1.3  | -1.2 | -0.4 | 5.5 |
| 700      | 3133   | 3213  | 3014  | 9.8   | 19    | 2.2   | 0.7   | 104 | 0.4  | -0.4 | 0.1  | 5.3 |
| 650      | 3740   | 3826  | 3620  | 6.8   | 16    | -2.3  | -3    | 211 | 0.6  | 0.3  | 0.5  | 5.2 |
| 600      | 4398   | 4494  | 4284  | 3.4   | 13    | -4.5  | -6.5  | 218 | 1.1  | 0.7  | 0.9  | 5.2 |
| 550      | 5109   | 5230  | 4996  | -0.3  | 8.6   | -8.8  | -10.7 | 225 | 1.6  | 1.1  | 1.1  | 5.4 |
| 500      | 5856   | 5974  | 5732  | -4.5  | 4.2   | -12.5 | -15.3 | 227 | 1.8  | 1.3  | 1.2  | 5.8 |
| 450      | 6682   | 6840  | 6520  | -9.3  | -0.7  | -18.3 | -20.4 | 231 | 2.2  | 1.7  | 1.4  | 6.1 |
| 400      | 7581   | 7747  | 7435  | -14.8 | -6.1  | -24.9 | -26.1 | 231 | 2.7  | 2.1  | 1.7  | 6.5 |
| 350      | 8577   | 8800  | 8400  | -21.6 | -12.3 | -31.5 | -33.1 | 233 | 3.1  | 2.5  | 1.9  | 6.9 |
| 300      | 9698   | 9949  | 9468  | -29.8 | -19.5 | -40.1 | -41.4 | 231 | 3.8  | 3    | 2.4  | 7.5 |
| 250      | 10971  | 11221 | 10683 | -39.9 | -29.1 | -51.1 | -51.9 | 231 | 4.4  | 3.4  | 2.8  | 8.2 |
| 200      | 12457  | 12756 | 12106 | -51.9 | -40.5 | -66.7 | -65.2 | 223 | 4.7  | 3.2  | 3.4  | 9.2 |
| 175      | 13308  | 13640 | 12957 | -58.8 | -47.3 | -71.9 | -57.2 | 218 | 4.1  | 2.5  | 3.2  | 9.3 |
| 150      | 14259  | 14641 | 13854 | -66.2 | -55.1 | -83   | -75.4 | 207 | 3.5  | 1.6  | 3.1  | 9.1 |
| 125      | 15342  | 15778 | 14794 | -73.6 | -52.7 | -87.7 |       | 178 | 2.7  | -0.1 | 2.7  | 8.3 |
| 100      | 16630  | 17127 | 16080 | -77   | -60.3 | -88.1 |       | 124 | 2.5  | -2.1 | 1.4  | 7   |
| 80       | 17926  | 18499 | 17382 | -72.1 | -54.7 | -85.1 |       | 97  | 3.4  | -3.4 | 0.4  | 5.9 |
| 70       | 18731  | 19416 | 18147 | -67.9 | -53.3 | -84.9 |       | 84  | 3.8  | -3.8 | -0.4 | 5.8 |
| 60       | 19430  | 19999 | 19017 | -63.6 | -47.7 | -81.1 |       | 80  | 4.1  | -4   | -0.7 | 5.6 |
| 50       | 20783  | 21369 | 20169 | -59.5 | -43.1 | -73.9 |       | 79  | 4.9  | -4.8 | -0.9 | 6   |
| 40       | 22187  | 22826 | 21576 | -55.8 | -38.1 | -68.7 |       | 83  | 5    | -5   | -0.6 | 5.6 |
| 30       | 24025  | 24736 | 23391 | -52.2 | -37.7 | -66.3 |       | 87  | 6    | -6   | -0.3 | 6.6 |
| 25       | 25181  | 25970 | 24562 | -50.6 | -35.1 | -62.3 |       | 89  | 6.6  | -6.6 | -0.1 | 7   |
| 20       | 26645  | 27496 | 26007 | -48.9 | -32.8 | -59.9 |       | 93  | 6.3  | -6.3 | 0.3  | 6.7 |
| 15       | 28549  | 29484 | 27913 | -46.6 | -31.5 | -58.7 |       | 94  | 5.7  | -5.7 | 0.4  | 6.3 |
| 10       | 31230  | 32291 | 30599 | -43.8 | -26.9 | -57.9 |       | 93  | 4.2  | -4.2 | 0.2  | 5.4 |
| 7        | 33685  | 34833 | 32894 | -40.5 | -28.5 | -54.9 |       | 91  | 4.2  | -4.2 | 0.1  | 5.2 |

## FREEZING LEVEL

| P   | Height | H max | H min |
|-----|--------|-------|-------|
| 555 | 5045   | 6730  | 3400  |

## FIRST TROPOPAUSE

| P | Height | Temp |
|---|--------|------|
|   |        |      |

## SECOND TROPOPAUSE

| P   | Height | Temp  |
|-----|--------|-------|
| 102 | 16538  | -79.3 |

| PRESSURE | HEIGHT | H max | H min | TEMP  | TMAX  | TMIN  | DEWPT | DIR | VELO | U    | V    | VM   |
|----------|--------|-------|-------|-------|-------|-------|-------|-----|------|------|------|------|
| SURFACE  | 1007.7 | 1014  | 995   | 20.1  | 26.8  | 12.8  | 17.6  | 14  | 1.2  | -0.3 | -1.2 | 1.6  |
| 1000     | 111    | 168   | 12    | 20.8  | 28.2  | 14.8  | 17.6  | 23  | 1.3  | -0.5 | -1.2 | 1.9  |
| 950      | 552    | 634   | 445   | 21.6  | 28.8  | 14    | 13    | 40  | 3.3  | -2.1 | -2.5 | 4.8  |
| 925      | 785    | 835   | 705   | 20.3  | 28.8  | 12.4  | 12    | 44  | 3.3  | -2.3 | -2.4 | 4.7  |
| 900      | 1022   | 1108  | 910   | 18.8  | 27    | 12.2  | 9.1   | 43  | 3.8  | -2.6 | -2.8 | 5.3  |
| 850      | 1510   | 1574  | 1427  | 15.9  | 23.8  | 9     | 5.3   | 39  | 3.3  | -2.1 | -2.6 | 5.3  |
| 800      | 2023   | 2092  | 1906  | 13.5  | 21.6  | 4.2   | 1.5   | 29  | 2.3  | -1.1 | -2   | 5.2  |
| 750      | 2560   | 2638  | 2442  | 11.3  | 19.2  | 3     | -1.1  | 347 | 1.3  | 0.3  | -1.3 | 5.2  |
| 700      | 3137   | 3223  | 3015  | 8.8   | 16.8  | -0.1  | -3.9  | 302 | 1.5  | 1.3  | -0.8 | 5.5  |
| 650      | 3743   | 3846  | 3618  | 5.9   | 14.7  | -2.9  | -6.9  | 278 | 2.2  | 2.2  | -0.3 | 6    |
| 600      | 4397   | 4571  | 4275  | 2.6   | 9.8   | -6.1  | -11.2 | 270 | 3.2  | 3.2  | 0    | 6.6  |
| 550      | 5106   | 5240  | 4993  | -1.3  | 5.6   | -9.7  | -15   | 269 | 4.1  | 4.1  | 0.1  | 7.5  |
| 500      | 5849   | 5996  | 5724  | -5.7  | 4.6   | -17.3 | -18.9 | 266 | 5.2  | 5.2  | 0.4  | 8.5  |
| 450      | 6669   | 6832  | 6510  | -10.8 | -2.1  | -23.5 | -24.2 | 265 | 6.8  | 6.8  | 0.6  | 10.2 |
| 400      | 7563   | 7748  | 7381  | -16.6 | -7.9  | -29.3 | -29.9 | 261 | 8.7  | 8.6  | 1.3  | 12   |
| 350      | 8553   | 8770  | 8310  | -23.5 | -11.1 | -36.7 | -36.6 | 258 | 11.2 | 10.9 | 2.4  | 14.2 |
| 300      | 9664   | 9891  | 9383  | -31.5 | -22.3 | -45.1 | -45.8 | 253 | 13.5 | 12.9 | 4    | 16.6 |
| 250      | 10928  | 11192 | 10593 | -41.4 | -31.1 | -54.3 | -56.6 | 249 | 15   | 14   | 5.5  | 18.2 |
| 200      | 12403  | 12725 | 12019 | -53   | -40.9 | -64.1 | -67.5 | 244 | 16   | 14.3 | 7.1  | 18.9 |
| 175      | 13251  | 13592 | 12834 | -59.6 | -46.5 | -74.9 | -59.3 | 241 | 15.6 | 13.7 | 7.5  | 18.3 |
| 150      | 14199  | 14586 | 13759 | -66.5 | -54.5 | -82.6 |       | 244 | 13.9 | 12.5 | 6.1  | 16.3 |
| 125      | 15284  | 15726 | 14794 | -73   | -51.1 | -89.3 |       | 249 | 10.5 | 9.8  | 3.8  | 12.7 |
| 100      | 16573  | 17281 | 16059 | -77.2 | -62.1 | -87.7 |       | 254 | 5.9  | 5.7  | 1.6  | 8.7  |
| 80       | 17863  | 18577 | 17264 | -74   | -54.5 | -88.5 |       | 279 | 1.9  | 1.9  | -0.3 | 5.9  |
| 70       | 18656  | 19371 | 18027 | -70.2 | -50.7 | -87.3 |       | 293 | 1.3  | 1.2  | -0.5 | 4.9  |
| 60       | 19438  | 19996 | 18945 | -65.7 | -46.5 | -82.5 |       | 333 | 0.9  | 0.4  | -0.8 | 4.7  |
| 50       | 20687  | 21474 | 20002 | -60.8 | -42.1 | -79.1 |       | 45  | 0.3  | -0.2 | -0.2 | 4.4  |
| 40       | 22085  | 22937 | 21404 | -56.6 | -41.7 | -75.5 |       | 72  | 1.3  | -1.2 | -0.4 | 4.1  |
| 30       | 23911  | 24894 | 23180 | -53   | -35   | -68.9 |       | 90  | 2.3  | -2.3 | 0    | 4.6  |
| 25       | 25067  | 26170 | 24321 | -51.4 | -35.3 | -66.7 |       | 94  | 2.8  | -2.8 | 0.2  | 4.9  |
| 20       | 26522  | 27557 | 25873 | -49.6 | -35.7 | -63.7 |       | 94  | 3.1  | -3.1 | 0.2  | 5    |
| 15       | 28417  | 29156 | 27712 | -47.5 | -34.9 | -59.9 |       | 99  | 1.9  | -1.9 | 0.3  | 3.9  |
| 10       | 31123  | 31938 | 30324 | -44.1 | -30.5 | -55.9 |       | 63  | 1.3  | -1.2 | -0.6 | 3.9  |
| 7        | 33502  | 34331 | 30000 | -40.9 | -30.3 | -54.1 |       | 51  | 1.4  | -1.1 | -0.9 | 3.9  |

## FREEZING LEVEL

| P   | Height | H_max | H_min |
|-----|--------|-------|-------|
| 567 | 4864   | 6170  | 3080  |

## FIRST TROPOPAUSE

| P | Height | Temp |
|---|--------|------|
|   |        |      |

## SECOND TROPOPAUSE

| P   | Height | Temp  |
|-----|--------|-------|
| 101 | 16595  | -78.9 |

| PRESSURE | HEIGHT | H max | H min | TEMP  | TMAX  | TMIN  | DEWPT | DIR | VELO | U    | V    | VM   |
|----------|--------|-------|-------|-------|-------|-------|-------|-----|------|------|------|------|
| SURFACE  | 1010.1 | 1015  | 1001  | 16.3  | 23.2  | 10.8  | 13.9  | 18  | 0.9  | -0.3 | -0.9 | 1.4  |
| 1000     | 129    | 177   | 52    | 17.4  | 23.8  | 11.3  | 13.3  | 32  | 1.3  | -0.7 | -1.1 | 2    |
| 950      | 564    | 639   | 475   | 18.8  | 27.8  | 10.4  | 9.5   | 38  | 2.4  | -1.5 | -1.9 | 4.1  |
| 925      | 794    | 837   | 717   | 17.4  | 25    | 9     | 8.2   | 35  | 2.4  | -1.4 | -2   | 3.9  |
| 900      | 1031   | 1095  | 952   | 16.2  | 25.4  | 7.2   | 5.9   | 31  | 2.7  | -1.4 | -2.3 | 4.5  |
| 850      | 1515   | 1590  | 1426  | 13.9  | 22.6  | 6     | 1.3   | 13  | 2.6  | -0.6 | -2.5 | 5.1  |
| 800      | 2024   | 2102  | 1905  | 12.4  | 24.6  | 3.2   | -3    | 343 | 2.4  | 0.7  | -2.3 | 5.6  |
| 750      | 2561   | 2650  | 2450  | 10.6  | 19.3  | 2.2   | -5.6  | 315 | 2.7  | 1.9  | -1.9 | 6.1  |
| 700      | 3135   | 3232  | 3017  | 8.2   | 17    | -1.9  | -8.3  | 299 | 3.5  | 3.1  | -1.7 | 6.8  |
| 650      | 3739   | 3842  | 3600  | 5.2   | 13.2  | -6.1  | -11.8 | 284 | 4.9  | 4.7  | -1.2 | 7.9  |
| 600      | 4392   | 4497  | 4264  | 1.7   | 8.8   | -9.9  | -15.4 | 275 | 6.1  | 6.1  | -0.5 | 9.1  |
| 550      | 5096   | 5213  | 4929  | -2.3  | 5     | -14.5 | -19   | 273 | 7.6  | 7.6  | -0.4 | 10.5 |
| 500      | 5838   | 5970  | 5682  | -6.9  | 0.8   | -17.3 | -23.5 | 269 | 9.2  | 9.2  | 0.2  | 12.2 |
| 450      | 6653   | 6800  | 6460  | -12.1 | -1.1  | -23.9 | -28.8 | 267 | 11   | 11   | 0.6  | 14.1 |
| 400      | 7543   | 7734  | 7345  | -18.3 | -9.1  | -29.7 | -33.9 | 264 | 13.1 | 13   | 1.3  | 16.1 |
| 350      | 8526   | 8730  | 8300  | -25.3 | -14.7 | -37.7 | -40.1 | 261 | 15.2 | 15   | 2.4  | 18.3 |
| 300      | 9629   | 9897  | 9348  | -33.4 | -21.5 | -49.7 | -47.6 | 259 | 17.4 | 17.1 | 3.3  | 20.6 |
| 250      | 10884  | 11142 | 10523 | -42.9 | -31.1 | -56.9 | -57.8 | 254 | 19.3 | 18.6 | 5.3  | 22.5 |
| 200      | 12354  | 12777 | 11911 | -54   | -41.3 | -69.7 | -69.5 | 249 | 19.7 | 18.4 | 6.9  | 22.5 |
| 175      | 13200  | 13620 | 12709 | -60   | -47.7 | -77.1 | -69.9 | 249 | 19.3 | 18.1 | 6.8  | 21.5 |
| 150      | 14146  | 14569 | 13608 | -66.2 | -53.5 | -78.7 |       | 251 | 17.3 | 16.3 | 5.7  | 19.1 |
| 125      | 15236  | 15710 | 14675 | -71.8 | -56.9 | -85.4 |       | 253 | 15   | 14.3 | 4.4  | 16.4 |
| 100      | 16536  | 17038 | 15968 | -76.2 | -62.7 | -89.9 |       | 262 | 10.3 | 10.2 | 1.4  | 11.7 |
| 80       | 17827  | 18261 | 17191 | -74.9 | -59.7 | -90.5 |       | 265 | 5.4  | 5.4  | 0.5  | 7.8  |
| 70       | 18613  | 19091 | 17951 | -71.9 | -53.2 | -88.1 |       | 273 | 3.5  | 3.5  | -0.2 | 6.5  |
| 60       | 19506  | 19988 | 18883 | -67.8 | -43.3 | -85.5 |       | 287 | 1.4  | 1.3  | -0.4 | 4.8  |
| 50       | 20635  | 21143 | 19937 | -62.9 | -43.5 | -78.1 |       | 320 | 0.8  | 0.5  | -0.6 | 4.4  |
| 40       | 22021  | 22570 | 21251 | -58.5 | -43.1 | -72.7 |       | 14  | 0.4  | -0.1 | -0.4 | 3.6  |
| 30       | 23841  | 24516 | 23010 | -54.5 | -38.1 | -67.5 |       | 79  | 1    | -1   | -0.2 | 3.8  |
| 25       | 24990  | 25750 | 24148 | -52.7 | -37.7 | -66.3 |       | 82  | 1.5  | -1.5 | -0.2 | 3.6  |
| 20       | 26439  | 27095 | 25551 | -50.7 | -36.9 | -64.9 |       | 85  | 1.1  | -1.1 | -0.1 | 3.7  |
| 15       | 28315  | 29057 | 27555 | -48.1 | -30.3 | -63.1 |       | 135 | 0.1  | -0.1 | 0.1  | 3.3  |
| 10       | 31021  | 31873 | 30053 | -44.7 | -32.3 | -62.3 |       | 281 | 0.5  | 0.5  | -0.1 | 4.1  |
| 7        | 33468  | 34303 | 32266 | -41.9 | -32.1 | -59.9 |       | 310 | 0.8  | 0.6  | -0.5 | 3.1  |

## FREEZING LEVEL

| P   | Height | H_max | H_min |
|-----|--------|-------|-------|
| 578 | 4704   | 6430  | 2820  |

## FIRST TROPOPAUSE

| P | Height | Temp |
|---|--------|------|
|   |        |      |

## SECOND TROPOPAUSE

| P  | Height | Temp  |
|----|--------|-------|
| 96 | 16804  | -78.2 |