



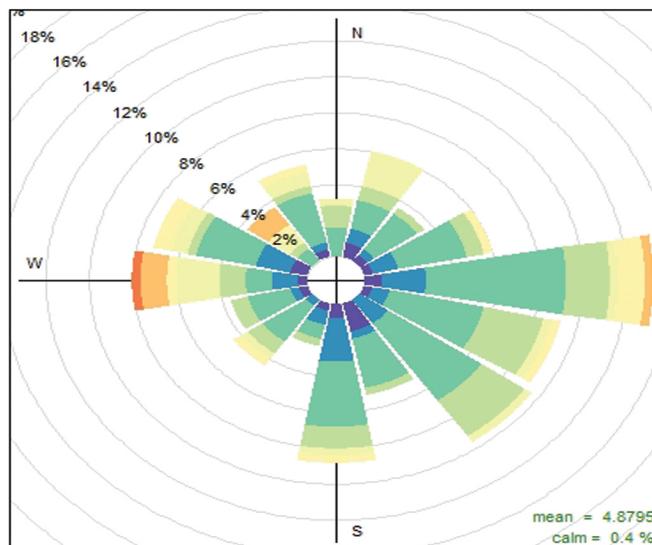
भारत सरकार / GOVERNMENT OF INDIA

पृथ्वी विज्ञान मंत्रालय/ MINISTRY OF EARTH SCIENCES

भारत मौसम विज्ञान भवन / INDIA METEOROLOGICAL DEPARTMENT

रेडियो सौन्डे 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)



ग्वालियर
GWALIOR

सितम्बर २०२०
SEPTEMBER 2020



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जलवायु आंकड़ां 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 **Gwalior** (Latitude 26° 14'N, Longitude 78° 15'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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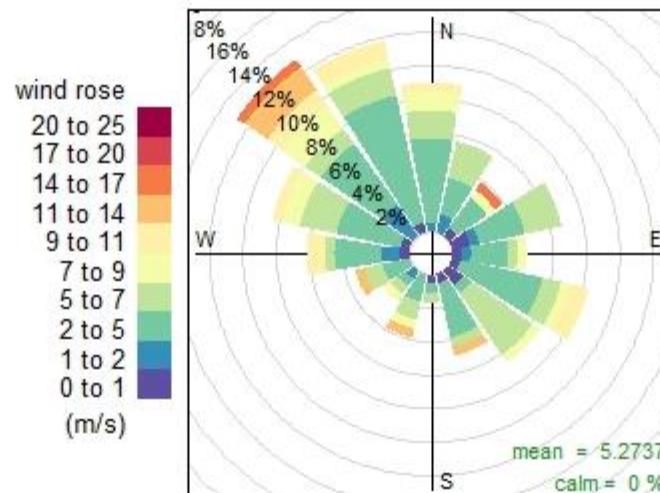
Description of various terms used in the table (Normals of Radiosonde data)

| 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 TROPOPAUSE | Tropopause observed at altitude less than 14 Km . |
| 20 | SECOND 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:



Frequency of counts by wind direction (%)

A wind rose diagrams at different upper air levels give 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 comprise 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.

Gwalior

January

1000 hPa level

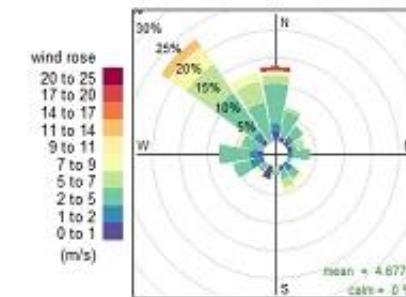
| Speed Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11 | | | | | | | | | | | | |
| 12-33 | | | | | | | | | | | | |
| 34-56 | | | | | | | | | | | | |
| 57-78 | | | | | | | | | | | | |
| 79-101 | | | | | | | | | | | | |
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| 237-258 | | | | | | | | | | | | |
| 259-281 | | | | | | | | | | | | |
| 282-303 | | | | | | | | | | | | |
| 304-326 | | | | | | | | | | | | |
| 327-348 | | | | | | | | | | | | |

Gwalior

January

925 hPa level

| Speed 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 | | 1.57 | 1.57 | 7.09 | 1.57 | 0.79 | 0 | 0 | 0 | 0.79 | 0 | 0 |
| 12-33 | | 0.79 | 0 | 4.72 | 0.79 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 34-56 | | 0.79 | 0.79 | 2.36 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 57-78 | | 0.79 | 0 | 0.79 | 1.57 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 79-101 | | 0 | 0.79 | 3.15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 102-123 | | 0 | 0 | 0.79 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 124-146 | | 0 | 1.57 | 1.57 | 0 | 0.79 | 0 | 0 | 0 | 0 | 0 | 0 |
| 147-168 | | 0.79 | 0 | 1.57 | 1.57 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 168-191 | | 0 | 0 | 1.57 | 0 | 0 | 0.79 | 0 | 0 | 0 | 0 | 0 |
| 192-213 | | 2.36 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 214-236 | | 0 | 0 | 1.57 | 0 | 0.79 | 0 | 0 | 0 | 0 | 0 | 0 |
| 237-258 | | 0 | 2.36 | 3.15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 259-281 | | 0.79 | 1.57 | 5.51 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 282-303 | | 0 | 0 | 3.94 | 0 | 0.79 | 0 | 0 | 0 | 0 | 0 | 0 |
| 304-326 | | 0.79 | 1.57 | 8.66 | 6.3 | 1.57 | 2.36 | 1.57 | 0 | 0 | 0 | 0 |
| 327-348 | | 0 | 0 | 7.09 | 3.94 | 1.57 | 0 | 0 | 0 | 0 | 0 | 0 |

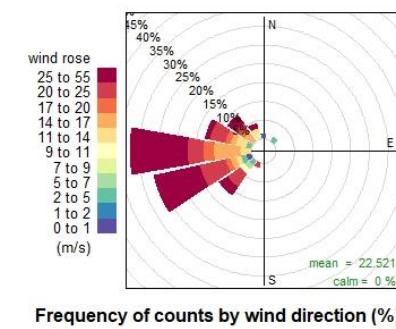


Gwalior

January

500 hPa level

| Speed 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 | | 1.41 | 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 | 1.41 | 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 | 1.41 | 0 | 0 |
| 214-236 | | 0 | 0 | 1.41 | 1.41 | 0 | 1.41 | 0 | 0 | 0 | 4.23 | 2.82 |
| 237-258 | | 1.41 | 0 | 1.41 | 0 | 0 | 0 | 1.41 | 1.41 | 1.41 | 7.04 | 12.68 |
| 259-281 | | 0 | 0 | 0 | 0 | 0 | 2.82 | 7.04 | 2.82 | 4.23 | 4.23 | 15.49 |
| 282-303 | | 0 | 0 | 1.41 | 0 | 0 | 0 | 2.82 | 1.41 | 1.41 | 4.23 | 1.41 |
| 304-326 | | 0 | 0 | 0 | 0 | 0 | 0 | 2.82 | 1.41 | 1.41 | 1.41 | 2.82 |
| 327-348 | | 0 | 0 | 0 | 0 | 1.41 | 0 | 1.41 | 0 | 0 | 0 | 1.41 |

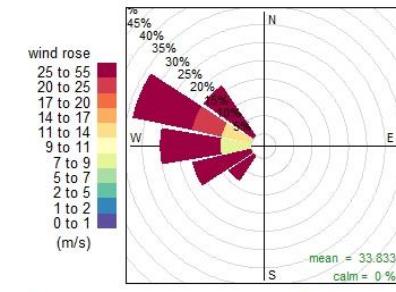


Gwalior

January

300 hPa level

| Speed 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 |
| 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 | 0 | 0 | 0 | 0 | 8.33 |
| 237-258 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16.67 |
| 259-281 | | 0 | 0 | 0 | 0 | 8.33 | 0 | 0 | 0 | 0 | 0 | 16.67 |
| 282-303 | | 0 | 0 | 0 | 0 | 0 | 8.33 | 0 | 0 | 8.33 | 0 | 16.67 |
| 304-326 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16.67 |
| 327-348 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |



Gwalior**January****200 hPa level**

| Speed 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 | | | | | | | | | | | | |
| 12-33 | | | | | | | | | | | | |
| 34-56 | | | | | | | | | | | | |
| 57-78 | | | | | | | | | | | | |
| 79-101 | | | | | | | | | | | | |
| 102-123 | | | | | | | | | | | | |
| 124-146 | | | | | | | | | | | | |
| 147-168 | | | | | | | | | | | | |
| 168-191 | | | | | | | | | | | | |
| 192-213 | | | | | | | | | | | | |
| 214-236 | | | | | | | | | | | | |
| 237-258 | | | | | | | | | | | | |
| 259-281 | | | | | | | | | | | | |
| 282-303 | | | | | | | | | | | | |
| 304-326 | | | | | | | | | | | | |
| 327-348 | | | | | | | | | | | | |

Gwalior**January****100 hPa level**

| Speed 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 | | | | | | | | | | | | |
| 12-33 | | | | | | | | | | | | |
| 34-56 | | | | | | | | | | | | |
| 57-78 | | | | | | | | | | | | |
| 79-101 | | | | | | | | | | | | |
| 102-123 | | | | | | | | | | | | |
| 124-146 | | | | | | | | | | | | |
| 147-168 | | | | | | | | | | | | |
| 168-191 | | | | | | | | | | | | |
| 192-213 | | | | | | | | | | | | |
| 214-236 | | | | | | | | | | | | |
| 237-258 | | | | | | | | | | | | |
| 259-281 | | | | | | | | | | | | |
| 282-303 | | | | | | | | | | | | |
| 304-326 | | | | | | | | | | | | |
| 327-348 | | | | | | | | | | | | |

Gwalior

February

1000 hPa level

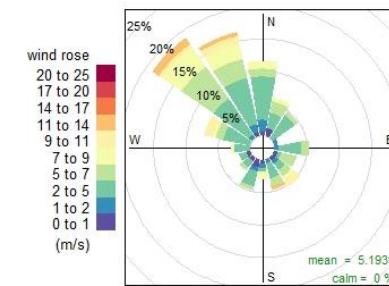
| Speed Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11 | | | | | | | | | | | | |
| 12-33 | | | | | | | | | | | | |
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| 282-303 | | | | | | | | | | | | |
| 304-326 | | | | | | | | | | | | |
| 327-348 | | | | | | | | | | | | |

Gwalior

February

925 hPa level

| Speed 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 | 0.61 | 1.82 | 6.67 | 1.21 | 1.21 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12-33 | 1.21 | 0 | 2.42 | 1.82 | 0.61 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 34-56 | 0 | 0 | 4.24 | 0.61 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 57-78 | 0 | 0.61 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 79-101 | 0 | 0.61 | 3.64 | 1.21 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 102-123 | 0.61 | 0 | 0.61 | 2.42 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 124-146 | 0.61 | 0.61 | 1.21 | 1.21 | 0.61 | 1.21 | 0 | 0 | 0 | 0 | 0 | 0 |
| 147-168 | 0 | 0.61 | 2.42 | 1.21 | 0 | 0 | 0.61 | 0 | 0 | 0 | 0 | 0 |
| 168-191 | 0.61 | 0.61 | 0.61 | 0 | 1.21 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 192-213 | 1.21 | 0.61 | 2.42 | 0.61 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 214-236 | 0.61 | 0 | 1.21 | 0.61 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 237-258 | 0.61 | 0 | 1.21 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 259-281 | 0 | 0 | 2.42 | 0 | 0.61 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 282-303 | 0 | 0 | 4.24 | 1.21 | 0.61 | 1.21 | 0 | 0 | 0 | 0 | 0 | 0 |
| 304-326 | 0 | 0.61 | 6.67 | 6.06 | 3.64 | 0.61 | 1.21 | 0 | 0 | 0 | 0 | 0 |
| 327-348 | 0.61 | 1.21 | 7.27 | 3.03 | 2.42 | 1.21 | 0.61 | 0 | 0 | 0 | 0 | 0 |

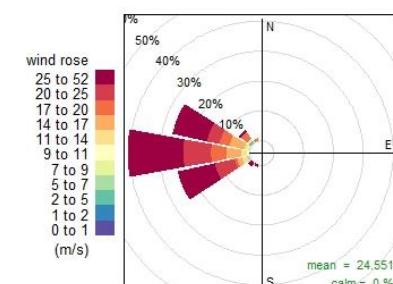


Gwalior

February

500 hPa level

| Speed 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 | 0 |
| 34-56 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 57-78 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 79-101 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 102-123 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 124-146 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 147-168 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 168-191 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 192-213 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.85 | |
| 214-236 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.69 | |
| 237-258 | 0 | 0 | 0 | 0.85 | 0 | 0 | 1.69 | 1.69 | 0.85 | 6.78 | 12.71 | |
| 259-281 | 0 | 0 | 0 | 0 | 0.85 | 0.85 | 1.69 | 5.08 | 5.08 | 9.32 | 18.64 | |
| 282-303 | 0 | 0 | 0 | 0 | 0.85 | 0 | 0.85 | 5.08 | 3.39 | 4.24 | 11.86 | |
| 304-326 | 0 | 0 | 0.85 | 0 | 0.85 | 0 | 0 | 0 | 2.54 | 0 | 0.85 | |
| 327-348 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.85 | 0 | 0 | |

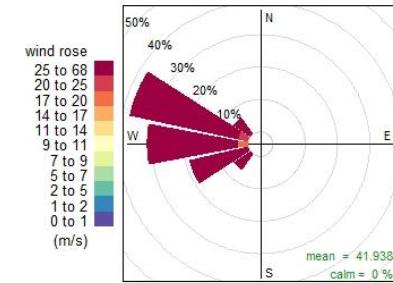


Gwalior

February

300 hPa level

| Speed 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 | 0 |
| 34-56 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 57-78 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 79-101 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 102-123 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 124-146 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 147-168 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 168-191 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 192-213 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 214-236 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6.25 | |
| 237-258 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18.75 | |
| 259-281 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3.12 | 0 | 28.12 | |
| 282-303 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3.12 | 34.38 | |
| 304-326 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6.25 | |
| 327-348 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

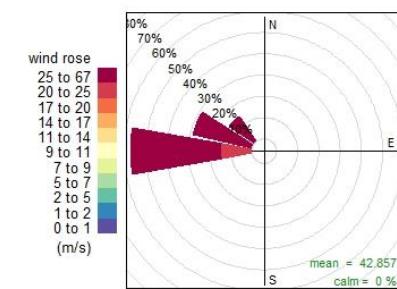


Gwalior

February

200 hPa level

| Speed 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 |
| 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 | 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 | 14.29 | 42.86 |
| 282-303 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 28.57 |
| 304-326 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14.29 |
| 327-348 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |



Gwalior

February

100 hPa level

| Speed 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 | | | | | | | | | | | | |
| 12-33 | | | | | | | | | | | | |
| 34-56 | | | | | | | | | | | | |
| 57-78 | | | | | | | | | | | | |
| 79-101 | | | | | | | | | | | | |
| 102-123 | | | | | | | | | | | | |
| 124-146 | | | | | | | | | | | | |
| 147-168 | | | | | | | | | | | | |
| 168-191 | | | | | | | | | | | | |
| 192-213 | | | | | | | | | | | | |
| 214-236 | | | | | | | | | | | | |
| 237-258 | | | | | | | | | | | | |
| 259-281 | | | | | | | | | | | | |
| 282-303 | | | | | | | | | | | | |
| 304-326 | | | | | | | | | | | | |
| 327-348 | | | | | | | | | | | | |

Gwalior

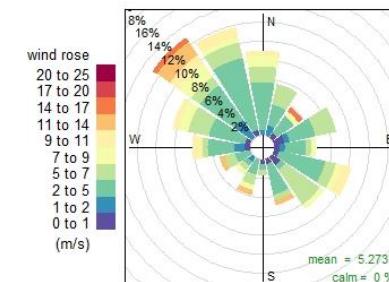
March 1000 hPa level

| Speed 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 | | | | | | | | | | | | |
| 12-33 | | | | | | | | | | | | |
| 34-56 | | | | | | | | | | | | |
| 57-78 | | | | | | | | | | | | |
| 79-101 | | | | | | | | | | | | |
| 102-123 | | | | | | | | | | | | |
| 124-146 | | | | | | | | | | | | |
| 147-168 | | | | | | | | | | | | |
| 168-191 | | | | | | | | | | | | |
| 192-213 | | | | | | | | | | | | |
| 214-236 | | | | | | | | | | | | |
| 237-258 | | | | | | | | | | | | |
| 259-281 | | | | | | | | | | | | |
| 282-303 | | | | | | | | | | | | |
| 304-326 | | | | | | | | | | | | |
| 327-348 | | | | | | | | | | | | |

Gwalior

March 925 hPa level

| Speed 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 | 0.56 | 5.03 | 1.68 | 1.12 | 0.56 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12-33 | 0 | 1.12 | 2.23 | 2.23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 34-56 | 0.56 | 0 | 2.23 | 0 | 0.56 | 0 | 0 | 0.56 | 0 | 0 | 0 | 0 |
| 57-78 | 1.12 | 0.56 | 2.79 | 2.23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 79-101 | 0.56 | 0.56 | 2.23 | 0.56 | 0.56 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 102-123 | 0.56 | 0 | 5.03 | 1.12 | 0.56 | 1.12 | 0 | 0 | 0 | 0 | 0 | 0 |
| 124-146 | 1.12 | 0 | 0.56 | 4.47 | 0.56 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 147-168 | 0.56 | 0 | 3.35 | 0.56 | 0 | 0 | 0.56 | 0 | 0 | 0 | 0 | 0 |
| 168-191 | 0.56 | 0 | 0.56 | 0.56 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 192-213 | 0 | 0 | 1.68 | 1.12 | 0.56 | 0 | 0.56 | 0 | 0 | 0 | 0 | 0 |
| 214-236 | 0 | 0.56 | 0.56 | 0.56 | 0.56 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 237-258 | 0 | 0 | 1.68 | 1.12 | 0 | 0 | 0.56 | 0 | 0 | 0 | 0 | 0 |
| 259-281 | 0.56 | 1.12 | 2.79 | 0.56 | 0 | 1.12 | 0 | 0 | 0 | 0 | 0 | 0 |
| 282-303 | 0.56 | 0 | 3.91 | 2.23 | 1.12 | 0.56 | 0 | 0 | 0 | 0 | 0 | 0 |
| 304-326 | 0 | 2.23 | 4.47 | 1.12 | 1.68 | 1.12 | 1.68 | 0.56 | 0 | 0 | 0 | 0 |
| 327-348 | 0.56 | 0 | 7.82 | 1.68 | 0.56 | 1.12 | 0 | 0 | 0 | 0 | 0 | 0 |

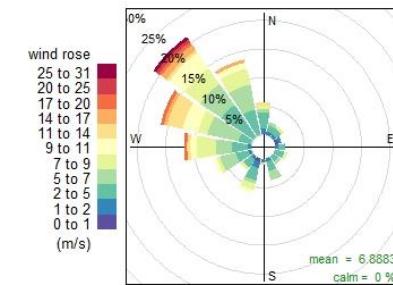


Frequency of counts by wind direction (%)

Gwalior

March 850 hPa level

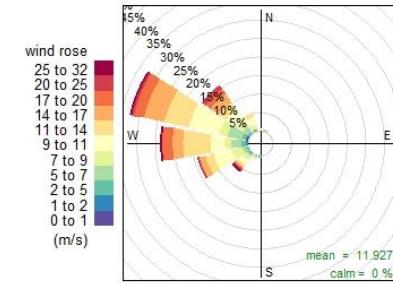
| Speed Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|------|------|------|------|------|------|-------|-------|-------|-------|------|
| 349-11 | 0 | 0 | 1.12 | 2.79 | 0.56 | 0.56 | 0 | 0.56 | 0 | 0 | 0 | 0 |
| 12-33 | | 0 | 0.56 | 1.12 | 0.56 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 34-56 | | 0 | 0.56 | 1.12 | 0 | 0.56 | 0 | 0 | 0 | 0 | 0 | 0 |
| 57-78 | | 0.56 | 0.56 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 79-101 | | 0 | 0.56 | 1.12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 102-123 | | 0 | 0 | 1.68 | 0 | 0.56 | 0 | 0 | 0 | 0 | 0 | 0 |
| 124-146 | | 0 | 0 | 1.12 | 0.56 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 147-168 | | 0 | 0.56 | 1.68 | 1.68 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 168-191 | | 0 | 0.56 | 0 | 0 | 0 | 0 | 0.56 | 0 | 0 | 0 | 0 |
| 192-213 | | 0.56 | 1.12 | 2.23 | 0.56 | 1.12 | 0.56 | 0 | 0 | 0 | 0 | 0 |
| 214-236 | | 0 | 0.56 | 1.68 | 0 | 0.56 | 0 | 0 | 0 | 0 | 0 | 0 |
| 237-258 | | 0 | 0.56 | 2.23 | 2.79 | 0.56 | 0.56 | 0 | 0 | 0 | 0 | 0 |
| 259-281 | | 0 | 0.56 | 2.79 | 2.79 | 3.35 | 1.12 | 0.56 | 0 | 0.56 | 0 | 0 |
| 282-303 | | 0 | 0 | 2.23 | 5.59 | 1.68 | 2.79 | 2.79 | 0.56 | 0.56 | 0 | 0 |
| 304-326 | | 0 | 0 | 6.7 | 4.47 | 3.35 | 3.35 | 0.56 | 1.12 | 0.56 | 0.56 | 0.56 |
| 327-348 | | 0 | 0 | 4.47 | 4.47 | 2.79 | 1.12 | 0 | 0.56 | 0 | 0 | 0 |



Frequency of counts by wind direction (%)

Gwalior March 700 hPa level

| | 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 | 0.56 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12-33 | | 0 | 0 | 0 | 0.56 | 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 | 0.56 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 192-213 | | 0 | 0 | 0 | 0.56 | 0.56 | 0 | 0 | 0 | 0 | 0 | 0 |
| 214-236 | | 0 | 0 | 0.56 | 0.56 | 1.12 | 1.69 | 0.56 | 0.56 | 0 | 0.56 | 0.56 |
| 237-258 | | 0 | 0 | 0.56 | 1.12 | 2.81 | 5.06 | 2.25 | 1.69 | 0 | 0.56 | 0 |
| 259-281 | | 0 | 0.56 | 1.12 | 2.81 | 1.69 | 3.93 | 7.3 | 2.81 | 2.81 | 0 | 0.56 |
| 282-303 | | 0.56 | 0 | 1.12 | 3.93 | 2.25 | 8.43 | 6.74 | 5.62 | 2.81 | 0.56 | 0.56 |
| 304-326 | | 0 | 0 | 0.56 | 1.69 | 2.25 | 3.37 | 2.25 | 2.81 | 1.69 | 1.12 | 0 |
| 327-348 | | 0 | 0 | 0.56 | 0 | 1.12 | 2.25 | 1.12 | 0 | 0 | 0 | 0 |

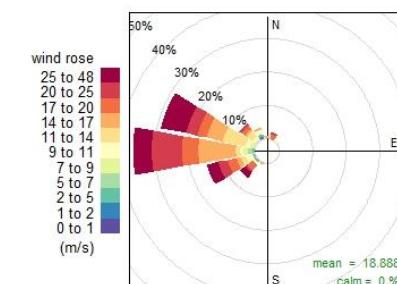


Frequency of counts by wind direction (%)

Gwalior

March 500 hPa level

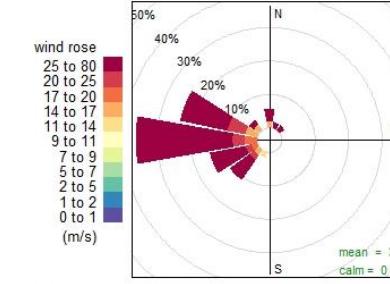
| Speed Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.7 | 0 | 0 | 0 | 0 |
| 12-33 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.4 | 0.7 | 0 | 0 |
| 34-56 | 0 | 0 | 0 | 0 | 0 | 0.7 | 0 | 0 | 0 | 0 | 0 | 0 |
| 57-78 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 79-101 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 102-123 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 124-146 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 147-168 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 168-191 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 192-213 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.7 | 0 | 0 | 0 | 0 |
| 214-236 | 0 | 0 | 0.7 | 0 | 0 | 0.7 | 0 | 0 | 2.1 | 0.7 | 0.7 | 2.1 |
| 237-258 | 0 | 0 | 0.7 | 0 | 0 | 2.1 | 1.4 | 1.4 | 2.8 | 2.8 | 2.8 | 3.5 |
| 259-281 | 0 | 0 | 0.7 | 1.4 | 1.4 | 0.7 | 1.4 | 11.19 | 4.9 | 9.09 | 5.59 | |
| 282-303 | 0 | 0 | 0 | 0 | 1.4 | 1.4 | 6.99 | 4.9 | 2.8 | 3.5 | 7.69 | |
| 304-326 | 0 | 0 | 0 | 0 | 0.7 | 0.7 | 2.1 | 0.7 | 1.4 | 0.7 | 0.7 | 0 |
| 327-348 | 0 | 0.7 | 0.7 | 0 | 0 | 1.4 | 0 | 0.7 | 0 | 0 | 0 | 0 |



Gwalior

March 300 hPa level

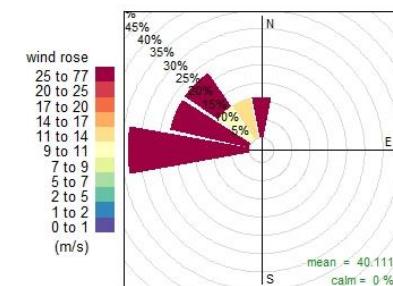
| Speed Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|-------|
| 349-11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.82 | 0 | 0 | 3.64 |
| 12-33 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.82 |
| 34-56 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.82 |
| 57-78 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 79-101 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 102-123 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 124-146 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 147-168 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 168-191 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 192-213 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.82 | 0 | 0 | 0 | 0 |
| 214-236 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.82 | 0 | 1.82 | 7.27 |
| 237-258 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.82 | 1.82 | 10.91 |
| 259-281 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3.64 | 3.64 | 29.09 |
| 282-303 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3.64 | 0 | 5.45 | 14.55 |
| 304-326 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.82 | 0 | 0 | 1.82 |
| 327-348 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |



Gwalior

March 200 hPa level

| Speed 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 | 11.11 |
| 12-33 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 34-56 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 57-78 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 79-101 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 102-123 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 124-146 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 147-168 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 168-191 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 192-213 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 214-236 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 237-258 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 259-281 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33.33 |
| 282-303 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22.22 |
| 304-326 | 0 | 0 | 0 | 0 | 0 | 11.11 | 0 | 0 | 0 | 0 | 0 | 11.11 |
| 327-348 | 0 | 0 | 0 | 0 | 0 | 0 | 11.11 | 0 | 0 | 0 | 0 | 0 |



Gwalior

March 100 hPa level

| Speed 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 | | | | | | | | | | | | |
| 12-33 | | | | | | | | | | | | |
| 34-56 | | | | | | | | | | | | |
| 57-78 | | | | | | | | | | | | |
| 79-101 | | | | | | | | | | | | |
| 102-123 | | | | | | | | | | | | |
| 124-146 | | | | | | | | | | | | |
| 147-168 | | | | | | | | | | | | |
| 168-191 | | | | | | | | | | | | |
| 192-213 | | | | | | | | | | | | |
| 214-236 | | | | | | | | | | | | |
| 237-258 | | | | | | | | | | | | |
| 259-281 | | | | | | | | | | | | |
| 282-303 | | | | | | | | | | | | |
| 304-326 | | | | | | | | | | | | |
| 327-348 | | | | | | | | | | | | |

Gwalior

April

1000 hPa level

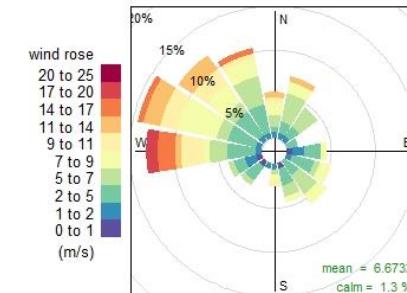
| Speed Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11 | | | | | | | | | | | | |
| 12-33 | | | | | | | | | | | | |
| 34-56 | | | | | | | |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

Gwalior

April

925 hPa level

| Speed 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 | 0.65 | 0.65 | 1.31 | 1.31 | 0.65 | 0.65 | 0 | 0 | 0 | 0 |
| 12-33 | | 0 | 0.65 | 1.31 | 3.27 | 1.31 | 0 | 0.65 | 0 | 0 | 0 | 0 |
| 34-56 | | 0 | 0.65 | 1.31 | 2.61 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 57-78 | | 0 | 0 | 1.31 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 79-101 | | 0.65 | 1.31 | 1.96 | 0 | 0.65 | 0 | 0 | 0 | 0 | 0 | 0 |
| 102-123 | | 0 | 0.65 | 2.61 | 0.65 | 1.31 | 0 | 0 | 0 | 0 | 0 | 0 |
| 124-146 | | 0 | 0 | 1.96 | 2.61 | 1.31 | 0 | 0 | 0 | 0 | 0 | 0 |
| 147-168 | | 0.65 | 0 | 1.96 | 0.65 | 0.65 | 0 | 0 | 0 | 0 | 0 | 0 |
| 168-191 | | 0 | 0.65 | 0 | 1.31 | 0.65 | 0.65 | 0 | 0 | 0 | 0 | 0 |
| 192-213 | | 0 | 0.65 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 214-236 | | 0.65 | 0 | 1.96 | 0.65 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 237-258 | | 0.65 | 1.31 | 1.31 | 0.65 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 259-281 | | 0 | 0.65 | 3.27 | 1.96 | 0.65 | 2.61 | 0.65 | 1.96 | 1.31 | 0 | 0 |
| 282-303 | | 0 | 0.65 | 3.27 | 1.31 | 4.58 | 1.96 | 1.96 | 0.65 | 0 | 0 | 0 |
| 304-326 | | 0 | 0.65 | 3.27 | 1.31 | 2.61 | 1.96 | 1.96 | 0 | 0 | 0 | 0 |
| 327-348 | | 0 | 0.65 | 3.27 | 3.27 | 1.96 | 0.65 | 0 | 0.65 | 0 | 0 | 0 |



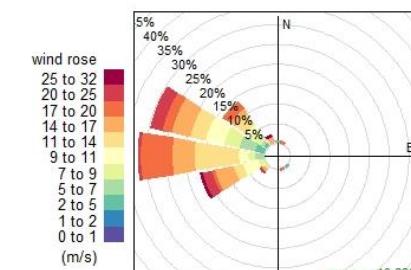
Frequency of counts by wind direction (%)

Gwalior

April

500 hPa level

| Speed 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 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12-33 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.8 | 0 | 0 | 0 |
| 34-56 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 57-78 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 79-101 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 102-123 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 124-146 | 0 | 0 | 0.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 147-168 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.8 | 0 | 0 | 0 |
| 168-191 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 192-213 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 214-236 | 0 | 0 | 0 | 0 | 0 | 0.8 | 0.8 | 0.8 | 0 | 0.8 | 0 | 0 |
| 237-258 | 0 | 0 | 0 | 0 | 1.6 | 4 | 2.4 | 4.8 | 0.8 | 2.4 | 0.8 | 0.8 |
| 259-281 | 0 | 0 | 0 | 2.4 | 1.6 | 2.4 | 11.2 | 5.6 | 8 | 0.8 | 0 | 0 |
| 282-303 | 0 | 0 | 2.4 | 4 | 4 | 4.8 | 4 | 4.8 | 2.4 | 3.2 | 0 | 0 |
| 304-326 | 0 | 0 | 0.8 | 0.8 | 3.2 | 1.6 | 3.2 | 1.6 | 2.4 | 0 | 0 | 0 |
| 327-348 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.6 | 0 | 0 | 0 | 0.8 |

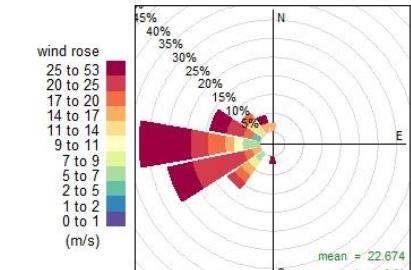


Gwalior

April

300 hPa level

| Speed 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 | 2.33 | 0 | 0 | 0 |
| 12-33 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 34-56 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 57-78 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 79-101 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 102-123 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 124-146 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 147-168 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 168-191 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2.33 |
| 192-213 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 214-236 | 0 | 0 | 0 | 2.33 | 2.33 | 0 | 0 | 2.33 | 2.33 | 2.33 | 2.33 | 0 |
| 237-258 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2.33 | 2.33 | 13.95 | 6.98 | |
| 259-281 | 0 | 0 | 0 | 4.65 | 0 | 2.33 | 0 | 2.33 | 4.65 | 4.65 | 4.65 | 13.95 |
| 282-303 | 0 | 0 | 2.33 | 0 | 0 | 0 | 0 | 0 | 2.33 | 4.65 | 4.65 | 4.65 |
| 304-326 | 0 | 0 | 0 | 0 | 0 | 0 | 4.65 | 0 | 2.33 | 0 | 0 | 0 |
| 327-348 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2.33 | 0 | 0 | 0 | 2.33 |

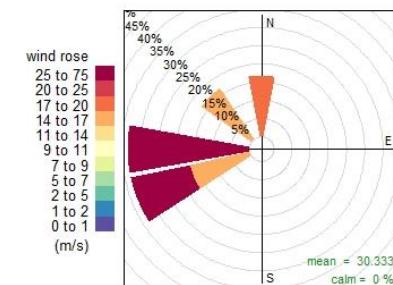


Gwalior

April

200 hPa level

| Speed 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 | 16.67 | 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 | 0 | 0 | 0 | 0 | 0 | |
| 237-258 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16.67 | 0 | 0 | 16.67 | |
| 259-281 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33.33 | |
| 282-303 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 304-326 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16.67 | 0 | 0 | 0 | |
| 327-348 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |



Gwalior

April

100 hPa level

| Speed 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 | | | | | | | | | | | | |
| 12-33 | | | | | | | | | | | | |
| 34-56 | | | | | | | | | | | | |
| 57-78 | | | | | | | | | | | | |
| 79-101 | | | | | | | | | | | | |
| 102-123 | | | | | | | | | | | | |
| 124-146 | | | | | | | | | | | | |
| 147-168 | | | | | | | | | | | | |
| 168-191 | | | | | | | | | | | | |
| 192-213 | | | | | | | | | | | | |
| 214-236 | | | | | | | | | | | | |
| 237-258 | | | | | | | | | | | | |
| 259-281 | | | | | | | | | | | | |
| 282-303 | | | | | | | | | | | | |
| 304-326 | | | | | | | | | | | | |
| 327-348 | | | | | | | | | | | | |

Gwalior

May

1000 hPa level

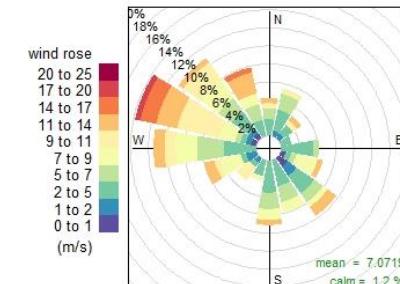
| Speed Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11 | | | | | | | | | | | | |
| 12-33 | | | | | | | | | | | | |
| 34-56 | | | | | | | |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

Gwalior

May

925 hPa level

| Speed 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 | 1.8 | 1.2 | 0 | 0.6 | 0.6 | 0 | 0 | 0 | 0 |
| 12-33 | | 0 | 0.6 | 2.4 | 1.8 | 0 | 0.6 | 0 | 0 | 0 | 0 | 0 |
| 34-56 | | 0 | 0.6 | 1.2 | 0 | 0 | 0.6 | 0.6 | 0 | 0 | 0 | 0 |
| 57-78 | | 0 | 0 | 1.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 79-101 | | 0 | 0 | 3.59 | 0.6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 102-123 | | 0.6 | 0 | 0.6 | 0.6 | 2.4 | 0 | 0.6 | 0 | 0 | 0 | 0 |
| 124-146 | 0 | 1.2 | 2.4 | 1.2 | 0.6 | 0 | 1.2 | 0 | 0 | 0 | 0 | 0 |
| 147-168 | | 0 | 0 | 2.99 | 1.2 | 1.2 | 0 | 0 | 0 | 0 | 0 | 0 |
| 168-191 | | 0 | 0 | 3.59 | 2.4 | 1.2 | 0 | 0.6 | 0 | 0 | 0 | 0 |
| 192-213 | | 0 | 0 | 1.8 | 0 | 0.6 | 0 | 0 | 0 | 0 | 0 | 0 |
| 214-236 | | 0 | 0.6 | 0.6 | 0 | 0 | 1.8 | 0 | 0 | 0 | 0 | 0 |
| 237-258 | | 0 | 1.2 | 0.6 | 0 | 2.4 | 0.6 | 1.2 | 0 | 0 | 0 | 0 |
| 259-281 | | 0 | 0 | 3.59 | 2.99 | 2.4 | 1.2 | 1.2 | 0 | 0 | 0 | 0 |
| 282-303 | | 0.6 | 0.6 | 0.6 | 0.6 | 1.8 | 4.79 | 2.4 | 1.8 | 0.6 | 0 | 0 |
| 304-326 | | 0.6 | 0.6 | 2.4 | 1.8 | 2.4 | 2.4 | 0.6 | 0 | 0 | 0 | 0 |
| 327-348 | | 0 | 0 | 1.8 | 1.8 | 1.2 | 0 | 2.4 | 0.6 | 0 | 0 | 0 |



Frequency of counts by wind direction (%)

Gwalior

May

850 hPa level

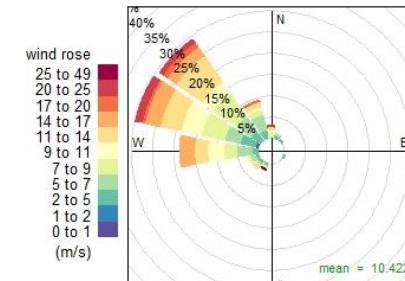
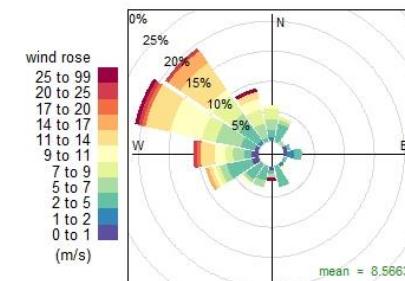
| Speed Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|------|------|------|------|-------|-------|-------|-------|------|
| 349-11 | 0 | 0 | 0.6 | 1.2 | 1.81 | 1.81 | 0.6 | 0 | 0 | 0 | 0 | 0 |
| 12-33 | | 0 | 0 | 3.01 | 0.6 | 0.6 | 0 | 0 | 0 | 0 | 0 | 0 |
| 34-56 | | 0 | 0 | 0 | 0.6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 57-78 | | 0.6 | 0 | 0.6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 79-101 | | 0.6 | 1.2 | 1.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 102-123 | | 0 | 0 | 0.6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 124-146 | | 0 | 0.6 | 0 | 0 | 0.6 | 0 | 0 | 0 | 0 | 0 | 0 |
| 147-168 | | 0 | 0 | 3.61 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 168-191 | | 0.6 | 0 | 0.6 | 0.6 | 0 | 0 | 0 | 0 | 0 | 0 | 0.6 |
| 192-213 | | 0 | 0 | 2.41 | 1.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 214-236 | | 0 | 0 | 3.01 | 0.6 | 0 | 0.6 | 0 | 0 | 0 | 0 | 0 |
| 237-258 | | 1.2 | 0 | 4.22 | 1.2 | 0.6 | 0.6 | 0.6 | 0.6 | 0 | 0 | 0 |
| 259-281 | | 1.2 | 0 | 1.2 | 1.81 | 1.2 | 1.81 | 2.41 | 0 | 0.6 | 0.6 | 0 |
| 282-303 | | 0.6 | 0 | 2.41 | 4.22 | 2.41 | 5.42 | 4.22 | 0 | 0.6 | 0.6 | 0.6 |
| 304-326 | | 0 | 0.6 | 3.61 | 1.81 | 3.61 | 1.2 | 5.42 | 2.41 | 0 | 0.6 | 0 |
| 327-348 | | 0 | 0 | 0.6 | 2.41 | 2.41 | 1.81 | 1.2 | 0 | 0 | 0 | 0.6 |

Gwalior

May

700 hPa level

| Speed 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 | 1.24 | 0.62 | 0.62 | 0 | 0 | 0.62 | 0 |
| 12-33 | | 0 | 0 | 0.62 | 0.62 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 34-56 | | 0 | 0 | 0.62 | 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 | 0.62 | 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 | 0.62 | 0 | 0.62 | 0 | 0 | 0 | 0 | 0 | 0.62 |
| 214-236 | | 0 | 0 | 0.62 | 0.62 | 0 | 0 | 1.24 | 0 | 0 | 0 | 0 |
| 237-258 | | 0 | 0 | 0.62 | 1.24 | 0.62 | 0.62 | 0 | 0 | 0 | 0 | 0 |
| 259-281 | | 0 | 0 | 1.24 | 3.73 | 3.11 | 3.73 | 3.11 | 3.73 | 0 | 0 | 0 |
| 282-303 | | 0.62 | 0 | 3.73 | 3.73 | 5.59 | 4.97 | 4.97 | 3.73 | 0.62 | 1.86 | 0 |
| 304-326 | | 0 | 0 | 2.48 | 4.35 | 6.83 | 3.11 | 7.45 | 2.48 | 1.24 | 1.24 | 0 |
| 327-348 | | 0 | 0 | 1.86 | 3.73 | 1.24 | 0.62 | 1.24 | 0 | 0.62 | 0 | 0 |

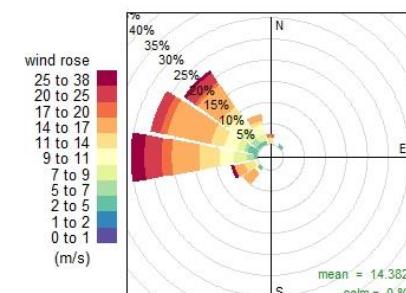


Gwalior

May

500 hPa level

| Speed 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 | 1.63 | 0 | 0.81 | 0 | 0 | 0 |
| 12-33 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 34-56 | 0 | 0 | 0.81 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 57-78 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 79-101 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 102-123 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 124-146 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 147-168 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 168-191 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 192-213 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 214-236 | 0 | 0 | 0.81 | 0 | 0 | 0.81 | 0 | 3.25 | 0 | 0 | 0 | 0 |
| 237-258 | 0 | 0 | 0 | 0 | 0 | 0.81 | 2.44 | 2.44 | 0 | 0 | 0 | 0.81 |
| 259-281 | 0 | 0 | 0.81 | 1.63 | 3.25 | 3.25 | 4.88 | 6.5 | 2.44 | 4.07 | 3.25 | 0 |
| 282-303 | 0 | 0 | 2.44 | 0.81 | 1.63 | 3.25 | 3.25 | 10.57 | 1.63 | 2.44 | 2.44 | 0 |
| 304-326 | 0 | 0 | 0.81 | 1.63 | 3.25 | 3.25 | 2.44 | 6.5 | 0.81 | 2.44 | 2.44 | 0.81 |
| 327-348 | 0 | 0 | 0.81 | 0 | 1.63 | 2.44 | 0.81 | 1.63 | 0 | 0 | 0 | 0 |

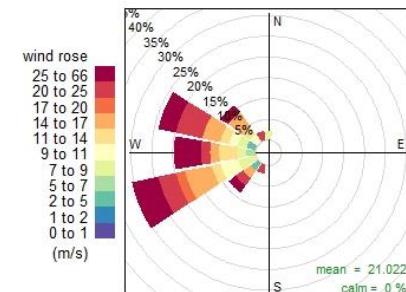


Gwalior

May

300 hPa level

| Speed 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 | 2.17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12-33 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 34-56 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 57-78 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 79-101 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 102-123 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 124-146 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 147-168 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 168-191 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 192-213 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2.17 | 0 | 0 |
| 214-236 | 0 | 0 | 2.17 | 0 | 0 | 0 | 0 | 2.17 | 0 | 2.17 | 2.17 | 2.17 |
| 237-258 | 0 | 0 | 0 | 0 | 4.35 | 4.35 | 2.17 | 6.52 | 2.17 | 4.35 | 6.52 | 6.52 |
| 259-281 | 0 | 0 | 0 | 2.17 | 2.17 | 0 | 4.35 | 2.17 | 0 | 2.17 | 6.52 | 4.35 |
| 282-303 | 0 | 0 | 2.17 | 0 | 2.17 | 2.17 | 2.17 | 4.35 | 0 | 6.52 | 4.35 | 0 |
| 304-326 | 0 | 0 | 0 | 0 | 2.17 | 2.17 | 2.17 | 4.35 | 0 | 0 | 2.17 | 0 |
| 327-348 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

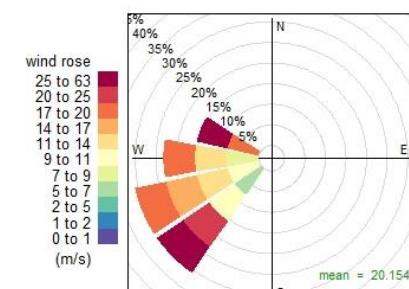


Gwalior

May

200 hPa level

| Speed 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 | 0 |
| 34-56 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 57-78 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 79-101 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 102-123 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 124-146 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 147-168 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 168-191 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 192-213 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 214-236 | 0 | 0 | 0 | 7.69 | 0 | 7.69 | 0 | 0 | 0 | 7.69 | 7.69 | 0 |
| 237-258 | 0 | 0 | 0 | 0 | 0 | 7.69 | 7.69 | 7.69 | 7.69 | 0 | 0 | 0 |
| 259-281 | 0 | 0 | 0 | 0 | 7.69 | 0 | 7.69 | 0 | 7.69 | 0 | 0 | 0 |
| 282-303 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7.69 | 0 | 7.69 | 0 |
| 304-326 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 327-348 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |



Gwalior

May

100 hPa level

| Speed 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 | | | | | | | | | | | | |
| 12-33 | | | | | | | | | | | | |
| 34-56 | | | | | | | | | | | | |
| 57-78 | | | | | | | | | | | | |
| 79-101 | | | | | | | | | | | | |
| 102-123 | | | | | | | | | | | | |
| 124-146 | | | | | | | | | | | | |
| 147-168 | | | | | | | | | | | | |
| 168-191 | | | | | | | | | | | | |
| 192-213 | | | | | | | | | | | | |
| 214-236 | | | | | | | | | | | | |
| 237-258 | | | | | | | | | | | | |
| 259-281 | | | | | | | | | | | | |
| 282-303 | | | | | | | | | | | | |
| 304-326 | | | | | | | | | | | | |
| 327-348 | | | | | | | | | | | | |

Gwalior

June

1000 hPa level

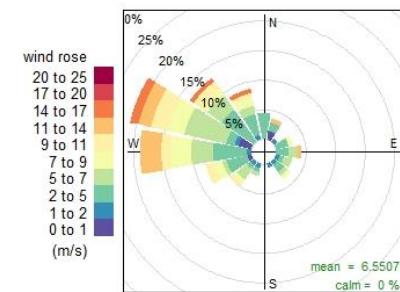
| Speed Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11 | | | | | | | | | | | | |
| 12-33 | | | | | | | | | | | | |
| 34-56 | | | | | | | |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

Gwalior

June

925 hPa level

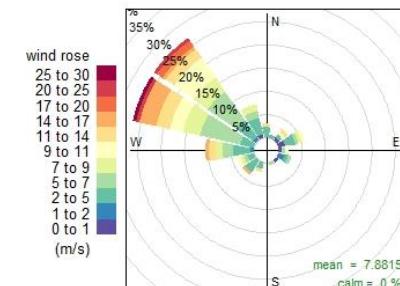
| Speed Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|------|------|------|------|------|------|-------|-------|-------|-------|------|
| 349-11 | | 0 | 0 | 4.35 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12-33 | 1.45 | 0 | 1.45 | 0 | 0 | 0 | 0 | 0.72 | 0 | 0 | 0 | 0 |
| 34-56 | 0 | 0.72 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 57-78 | 0 | 0 | 2.17 | 0 | 0.72 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 79-101 | 0 | 0 | 2.17 | 1.45 | 0 | 0 | 0 | 0.72 | 0 | 0 | 0 | 0 |
| 102-123 | 0 | 0.72 | 0.72 | 1.45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 124-146 | 0 | 0.72 | 1.45 | 0.72 | 0.72 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 147-168 | 0 | 0.72 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 168-191 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 192-213 | 0 | 0.72 | 0.72 | 0.72 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 214-236 | 0 | 0.72 | 0.72 | 2.17 | 0.72 | 0.72 | 0 | 0 | 0 | 0 | 0 | 0 |
| 237-258 | 0.72 | 0 | 3.62 | 0.72 | 1.45 | 1.45 | 0 | 0 | 0 | 0 | 0 | 0 |
| 259-281 | 0 | 0.72 | 5.8 | 3.62 | 3.62 | 1.45 | 3.62 | 0 | 0 | 0 | 0 | 0 |
| 282-303 | 2.17 | 0.72 | 1.45 | 7.25 | 2.9 | 2.9 | 2.17 | 1.45 | 0 | 0 | 0 | 0 |
| 304-326 | 0 | 0 | 6.52 | 2.9 | 1.45 | 1.45 | 0 | 0.72 | 0 | 0 | 0 | 0 |
| 327-348 | 0 | 0.72 | 3.62 | 1.45 | 1.45 | 0.72 | 0 | 0.72 | 0 | 0 | 0 | 0 |



Gwalior

June 850 hPa level

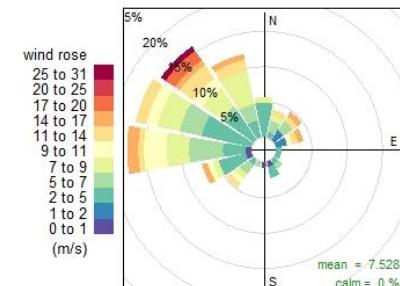
| Speed Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|------|------|------|------|------|------|-------|-------|-------|-------|------|
| 349-11 | | 0 | 0 | 2.22 | 0 | 0 | 0 | 0.74 | 0 | 0 | 0 | 0 |
| 12-33 | | 0 | 0 | 0.74 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 34-56 | | 0.74 | 0 | 0.74 | 0 | 0 | 0.74 | 0.74 | 0 | 0 | 0 | 0 |
| 57-78 | | 1.48 | 0 | 2.22 | 0.74 | 0.74 | 0.74 | 0 | 0 | 0 | 0 | 0 |
| 79-101 | | 0.74 | 0 | 0 | 0.74 | 0 | 0.74 | 0 | 0 | 0 | 0 | 0 |
| 102-123 | | 0 | 1.48 | 0.74 | 0.74 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 124-146 | | 0.74 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 147-168 | | 0 | 0 | 0 | 0.74 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 168-191 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 192-213 | | 0 | 0 | 1.48 | 0 | 0 | 0 | 0.74 | 0 | 0 | 0 | 0 |
| 214-236 | | 0 | 0 | 2.96 | 0 | 0 | 0 | 0 | 0.74 | 0 | 0 | 0 |
| 237-258 | | 0 | 0 | 1.48 | 0.74 | 0.74 | 0.74 | 0 | 0 | 0 | 0 | 0 |
| 259-281 | | 0 | 0.74 | 3.7 | 2.22 | 1.48 | 0 | 1.48 | 0.74 | 0 | 0 | 0 |
| 282-303 | | 0 | 0 | 2.96 | 8.89 | 3.7 | 2.96 | 2.96 | 3.7 | 0 | 0.74 | 0.74 |
| 304-326 | | 0 | 0.74 | 4.44 | 7.41 | 3.7 | 5.19 | 2.22 | 0.74 | 1.48 | 0.74 | 0 |
| 327-348 | | 0.74 | 0 | 3.7 | 1.48 | 1.48 | 0 | 0 | 0 | 0 | 0 | 0 |



Gwalior

June 700 hPa level

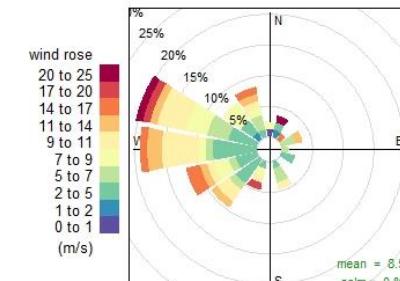
| Speed Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11 | | 0 | 0 | 4.8 | 0 | 0.8 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12-33 | | 0 | 0 | 0.8 | 1.6 |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



Gwalior

June 500 hPa level

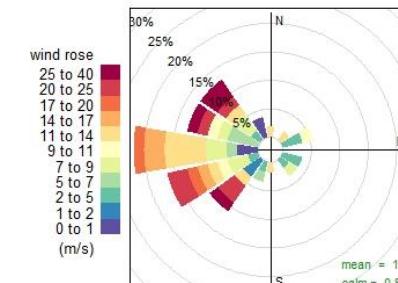
| Speed Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|------|------|------|------|------|------|-------|-------|-------|-------|------|
| 349-11 | | 1.19 | 0 | 0 | 0 | 1.19 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12-33 | | 0 | 1.19 | 1.19 | 0 | 0 | 0 | 0 | 0 | 0 | 1.19 | 0 |
| 34-56 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.19 | 0 | 0 | 0 |
| 57-78 | | 0 | 0 | 0 | 2.38 | 0 | 0 | 1.19 | 0 | 0 | 0 | 0 |
| 79-101 | | 0 | 0 | 0 | 1.19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 102-123 | | 0 | 0 | 2.38 | 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 | 2.38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 168-191 | | 0 | 0 | 1.19 | 0 | 0 | 1.19 | 0 | 0 | 0 | 0 | 0 |
| 192-213 | | 0 | 0 | 1.19 | 0 | 1.19 | 1.19 | 0 | 0 | 1.19 | 0 | 0 |
| 214-236 | | 0 | 0 | 4.76 | 1.19 | 0 | 2.38 | 1.19 | 0 | 0 | 0 | 0 |
| 237-258 | | 0 | 0 | 3.57 | 1.19 | 2.38 | 1.19 | 1.19 | 2.38 | 0 | 0 | 0 |
| 259-281 | | 0 | 0 | 7.14 | 1.19 | 1.19 | 5.95 | 2.38 | 1.19 | 0 | 0 | 0 |
| 282-303 | | 0 | 0 | 4.76 | 3.57 | 3.57 | 4.76 | 1.19 | 0 | 1.19 | 1.19 | 0 |
| 304-326 | | 0 | 1.19 | 2.38 | 0 | 3.57 | 0 | 0 | 0 | 0 | 0 | 0 |
| 327-348 | | 0 | 0 | 1.19 | 2.38 | 1.19 | 1.19 | 1.19 | 1.19 | 0 | 0 | 0 |



Frequency of counts by wind direction (%)

Gwalior June 300 hPa level

| Speed 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 | 1.82 | 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 | 1.82 | 0 | 0 | 0 | 0 |
| 57-78 | | 0 | 0 | 3.64 | 0 | 0 | 1.82 | 0 | 0 | 0 | 0 | 0 |
| 79-101 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 102-123 | | 0 | 0 | 3.64 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 124-146 | | 0 | 0 | 1.82 | 0 | 1.82 | 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 | 1.82 | 0 | 0 | 0 | 0 |
| 192-213 | | 0 | 0 | 1.82 | 1.82 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 214-236 | | 0 | 3.64 | 0 | 0 | 0 | 0 | 1.82 | 0 | 0 | 3.64 | 1.82 |
| 237-258 | | 0 | 0 | 1.82 | 0 | 3.64 | 1.82 | 1.82 | 1.82 | 1.82 | 3.64 | 0 |
| 259-281 | | 3.64 | 0 | 0 | 1.82 | 3.64 | 0 | 7.27 | 3.64 | 1.82 | 0 | 0 |
| 282-303 | | 0 | 0 | 0 | 5.45 | 1.82 | 1.82 | 0 | 0 | 0 | 1.82 | 1.82 |
| 304-326 | | 0 | 0 | 1.82 | 0 | 3.64 | 0 | 1.82 | 0 | 0 | 1.82 | 3.64 |
| 327-348 | | 3.64 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

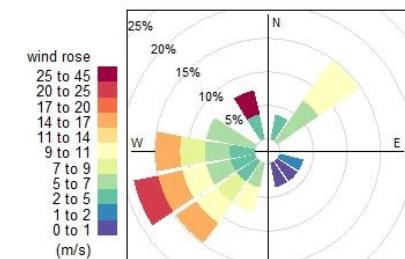


Frequency of counts by wind direction (%)

Gwalior

June 200 hPa level

| Speed 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 | 3.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 34-56 | 0 | 0 | 0 | 7.41 | 0 | 7.41 | 0 | 0 | 0 | 0 | 0 | 0 |
| 57-78 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 79-101 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 102-123 | 0 | 3.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 124-146 | 3.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 147-168 | 3.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 168-191 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 192-213 | 0 | 0 | 0 | 3.7 | 0 | 3.7 | 0 | 0 | 0 | 0 | 0 | 0 |
| 214-236 | 0 | 0 | 3.7 | 0 | 3.7 | 3.7 | 0 | 3.7 | 0 | 0 | 0 | 0 |
| 237-258 | 0 | 0 | 3.7 | 3.7 | 0 | 3.7 | 0 | 3.7 | 0 | 3.7 | 0 | 0 |
| 259-281 | 0 | 0 | 3.7 | 3.7 | 3.7 | 0 | 0 | 3.7 | 0 | 0 | 0 | 0 |
| 282-303 | 0 | 0 | 0 | 7.41 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 304-326 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 327-348 | 0 | 0 | 3.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3.7 |



Gwalior

June 100 hPa level

| Speed 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 | | | | | | | | | | | | |
| 12-33 | | | | | | | | | | | | |
| 34-56 | | | | | | | | | | | | |
| 57-78 | | | | | | | | | | | | |
| 79-101 | | | | | | | | | | | | |
| 102-123 | | | | | | | | | | | | |
| 124-146 | | | | | | | | | | | | |
| 147-168 | | | | | | | | | | | | |
| 168-191 | | | | | | | | | | | | |
| 192-213 | | | | | | | | | | | | |
| 214-236 | | | | | | | | | | | | |
| 237-258 | | | | | | | | | | | | |
| 259-281 | | | | | | | | | | | | |
| 282-303 | | | | | | | | | | | | |
| 304-326 | | | | | | | | | | | | |
| 327-348 | | | | | | | | | | | | |

Gwalior

July

1000 hPa level

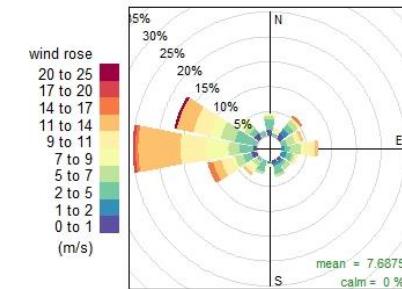
| Speed Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11 | | | | | | | | | | | | |
| 12-33 | | | | | | | | | | | | |
| 34-56 | | | | | | | |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

Gwalior

July

925 hPa level

| Speed 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 | | 1.14 | 0 | 2.27 | 0.57 | 0.57 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12-33 | | 0 | 0 | 0.57 | 0 | 0 | 1.14 | 0 | 0 | 0 | 0 | 0 |
| 34-56 | | 1.14 | 1.14 | 1.14 | 1.14 | 0 | 0.57 | 0 | 0.57 | 0 | 0 | 0 |
| 57-78 | | 0 | 0 | 1.14 | 1.7 | 0 | 1.14 | 0.57 | 0 | 0 | 0 | 0 |
| 79-101 | | 0 | 0.57 | 1.14 | 2.27 | 0.57 | 2.27 | 0.57 | 0 | 0 | 0 | 0 |
| 102-123 | | 0 | 1.14 | 1.14 | 0.57 | 0 | 0.57 | 0 | 0 | 0 | 0 | 0 |
| 124-146 | | 0.57 | 0.57 | 0.57 | 1.14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 147-168 | | 0.57 | 0.57 | 1.14 | 0.57 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 168-191 | | 0 | 0.57 | 0.57 | 0 | 0.57 | 0 | 0 | 0 | 0 | 0 | 0 |
| 192-213 | | 0 | 0 | 2.27 | 0.57 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 214-236 | | 0 | 0 | 0.57 | 1.14 | 1.14 | 0.57 | 0.57 | 0 | 0 | 0 | 0 |
| 237-258 | | 1.14 | 0 | 1.7 | 1.7 | 0.57 | 2.27 | 1.7 | 1.14 | 0 | 0 | 0 |
| 259-281 | | 0.57 | 0 | 2.84 | 2.27 | 4.55 | 5.11 | 8.52 | 0.57 | 0.57 | 0 | 0 |
| 282-303 | | 0 | 0 | 4.55 | 2.84 | 2.27 | 3.41 | 3.41 | 0 | 0 | 0.57 | 0 |
| 304-326 | | 1.14 | 0 | 1.14 | 1.14 | 1.7 | 0 | 0 | 0 | 0 | 0 | 0 |
| 327-348 | | 0 | 0 | 1.14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

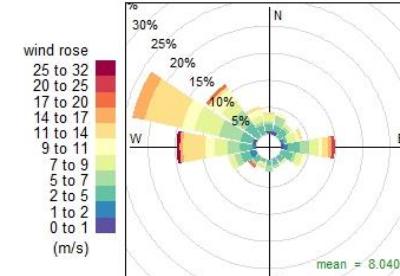


Gwalior

July

850 hPa level

| Speed 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 | 0.58 | 0 | 1.17 | 0.58 | 1.17 | 0 | 0.58 | 0 | 0 | 0 |
| 12-33 | | 0.58 | 0 | 1.17 | 1.75 | 0 | 0.58 | 0 | 0 | 0 | 0 |
| 34-56 | | 0 | 0 | 1.75 | 0.58 | 0.58 | 0 | 0 | 0 | 0 | 0 |
| 57-78 | | 0 | 0.58 | 0.58 | 0 | 1.75 | 0.58 | 0.58 | 0 | 0 | 0 |
| 79-101 | | 0.58 | 0.58 | 2.34 | 1.75 | 1.75 | 0.58 | 1.17 | 0.58 | 0 | 0.58 |
| 102-123 | | 0 | 0 | 2.34 | 0.58 | 1.17 | 0.58 | 0 | 0 | 0 | 0 |
| 124-146 | | 0 | 0 | 1.17 | 0 | 0.58 | 0 | 0 | 0 | 0 | 0 |
| 147-168 | | 0 | 0 | 1.17 | 0.58 | 0 | 0 | 0 | 0 | 0 | 0 |
| 168-191 | | 0 | 0 | 1.17 | 1.17 | 0 | 0 | 0 | 0 | 0 | 0 |
| 192-213 | | 0 | 0 | 0.58 | 0 | 0.58 | 0 | 0.58 | 0 | 0 | 0 |
| 214-236 | | 0 | 0 | 1.17 | 0.58 | 0 | 0 | 0 | 0.58 | 0 | 0 |
| 237-258 | | 0 | 1.17 | 1.75 | 1.17 | 1.17 | 0 | 0 | 0 | 0 | 0 |
| 259-281 | | 0 | 0.58 | 2.34 | 2.34 | 2.34 | 1.75 | 4.09 | 0.58 | 0 | 0.58 |
| 282-303 | | 0.58 | 0 | 2.34 | 4.09 | 4.68 | 2.34 | 7.02 | 2.34 | 0 | 0 |
| 304-326 | | 0 | 0 | 2.92 | 2.92 | 2.34 | 2.34 | 0.58 | 0 | 0.58 | 0 |
| 327-348 | | 0 | 0 | 1.75 | 0.58 | 1.17 | 1.17 | 0.58 | 0 | 0 | 0 |



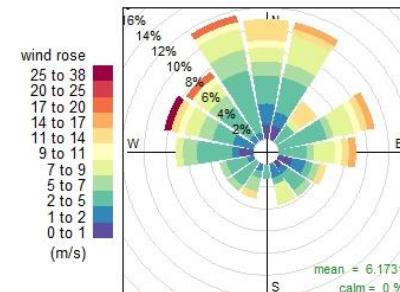
Frequency of counts by wind direction (%)

Gwalior

July

700 hPa level

| Speed 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 | 1.28 | 1.92 | 2.56 | 1.28 | 1.28 | 0.64 | 1.92 | 0 | 0 | 0 |
| 12-33 | | 1.28 | 1.28 | 3.21 | 1.28 | 2.56 | 0 | 0.64 | 0.64 | 0 | 0 |
| 34-56 | | 0 | 0 | 1.92 | 0 | 0.64 | 0 | 1.92 | 0 | 0 | 0 |
| 57-78 | | 0 | 0 | 4.49 | 0.64 | 1.92 | 0.64 | 0.64 | 0.64 | 0 | 0 |
| 79-101 | | 0 | 0 | 2.56 | 0.64 | 1.92 | 0.64 | 0.64 | 0.64 | 0 | 0 |
| 102-123 | | 1.28 | 1.28 | 0.64 | 0.64 | 0 | 0 | 0.64 | 0 | 0 | 0 |
| 124-146 | | 0.64 | 0.64 | 1.92 | 0.64 | 0 | 0 | 0 | 0 | 0 | 0 |
| 147-168 | | 0 | 1.28 | 0.64 | 0 | 1.92 | 0 | 0 | 0 | 0 | 0 |
| 168-191 | | 0 | 0 | 1.28 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 192-213 | | 0 | 0.64 | 0.64 | 1.28 | 0 | 0 | 0.64 | 0 | 0 | 0 |
| 214-236 | | 0 | 0 | 2.56 | 0.64 | 0 | 0 | 0 | 0 | 0 | 0 |
| 237-258 | | 0 | 0.64 | 1.92 | 0.64 | 0 | 0 | 0 | 0 | 0 | 0 |
| 259-281 | | 1.28 | 0.64 | 3.21 | 1.28 | 0.64 | 0 | 0 | 0 | 0 | 0 |
| 282-303 | | 0 | 1.92 | 1.92 | 1.28 | 1.28 | 0.64 | 0.64 | 0 | 0 | 0.64 |
| 304-326 | | 0 | 0.64 | 3.21 | 1.28 | 1.28 | 0.64 | 0 | 0 | 0.64 | 0 |
| 327-348 | | 0 | 0.64 | 5.77 | 1.92 | 1.92 | 0.64 | 0 | 0 | 0.64 | 0 |



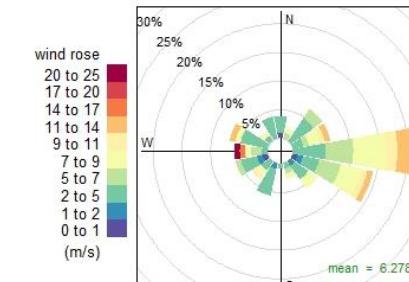
Frequency of counts by wind direction (%)

Gwalior

July

500 hPa level

| Speed 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 | 0.96 | 0 | 2.88 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12-33 | 0 | 0 | 0 | 0.96 | 0.96 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 34-56 | 0 | 0 | 4.81 | 1.92 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 57-78 | 0 | 0 | 1.92 | 0.96 | 1.92 | 0.96 | 0.96 | 0.96 | 0 | 0 | 0 | 0 |
| 79-101 | 0 | 0 | 5.77 | 4.81 | 5.77 | 1.92 | 3.85 | 0 | 0 | 0 | 0 | 0 |
| 102-123 | 0.96 | 0.96 | 2.88 | 3.85 | 3.85 | 0.96 | 0.96 | 0 | 0 | 0 | 0 | 0 |
| 124-146 | 0 | 0.96 | 2.88 | 0 | 1.92 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 147-168 | 0 | 0 | 0.96 | 0.96 | 0.96 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 168-191 | 0 | 0 | 0.96 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 192-213 | 0 | 0.96 | 4.81 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 214-236 | 0 | 0 | 1.92 | 0 | 0.96 | 0.96 | 0 | 0 | 0 | 0 | 0 | 0 |
| 237-258 | 0.96 | 0.96 | 2.88 | 0.96 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 259-281 | 0 | 0 | 0.96 | 1.92 | 0.96 | 0 | 0 | 0.96 | 0 | 0.96 | 0 | 0 |
| 282-303 | 0 | 0 | 4.81 | 0 | 0.96 | 0 | 0.96 | 0 | 0 | 0 | 0 | 0 |
| 304-326 | 0 | 0 | 0.96 | 0 | 0.96 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 327-348 | 0 | 0 | 3.85 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |



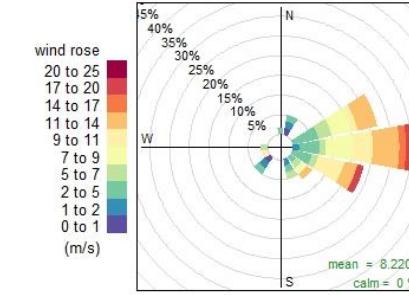
Frequency of counts by wind direction (%)

Gwalior

July

300 hPa level

| Speed 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 | 1.69 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12-33 | 1.69 | 1.69 | 1.69 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 34-56 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 57-78 | 0 | 0 | 6.78 | 3.39 | 5.08 | 1.69 | 5.08 | 0 | 0 | 0 | 0 | 0 |
| 79-101 | 0 | 1.69 | 5.08 | 1.69 | 6.78 | 5.08 | 6.78 | 1.69 | 3.39 | 0 | 0 | 0 |
| 102-123 | 0 | 0 | 5.08 | 1.69 | 0 | 6.78 | 3.39 | 0 | 1.69 | 0 | 0 | 0 |
| 124-146 | 0 | 0 | 1.69 | 1.69 | 1.69 | 0 | 1.69 | 0 | 0 | 0 | 0 | 0 |
| 147-168 | 0 | 1.69 | 1.69 | 1.69 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 168-191 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 192-213 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 214-236 | 1.69 | 1.69 | 1.69 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 237-258 | 0 | 0 | 0 | 0 | 0 | 1.69 | 0 | 0 | 0 | 0 | 0 | 0 |
| 259-281 | 0 | 0 | 0 | 1.69 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 282-303 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 304-326 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 327-348 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |



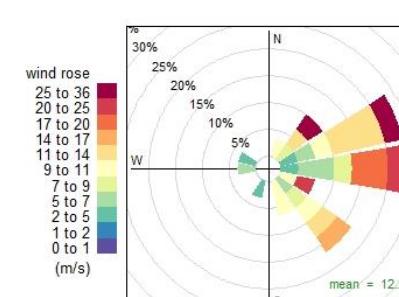
Frequency of counts by wind direction (%)

Gwalior

July

200 hPa level

| Speed 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 | 3.33 | 0 | 0 | 0 | 0 | 0 | 0 |
| 34-56 | 0 | 0 | 0 | 0 | 3.33 | 0 | 3.33 | 0 | 0 | 0 | 0 | 3.33 |
| 57-78 | 0 | 0 | 3.33 | 3.33 | 0 | 3.33 | 10 | 0 | 0 | 0 | 0 | 3.33 |
| 79-101 | 0 | 0 | 3.33 | 6.67 | 3.33 | 0 | 0 | 0 | 6.67 | 3.33 | 0 | 0 |
| 102-123 | 0 | 0 | 0 | 0 | 0 | 3.33 | 0 | 0 | 0 | 0 | 3.33 | 0 |
| 124-146 | 0 | 0 | 0 | 3.33 | 3.33 | 3.33 | 3.33 | 3.33 | 0 | 0 | 0 | 0 |
| 147-168 | 0 | 0 | 0 | 0 | 0 | 6.67 | 0 | 0 | 0 | 0 | 0 | 0 |
| 168-191 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 192-213 | 0 | 0 | 3.33 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 214-236 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 237-258 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 259-281 | 0 | 0 | 0 | 3.33 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 282-303 | 0 | 0 | 3.33 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 304-326 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 327-348 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |



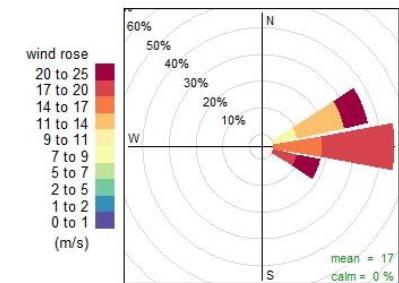
Frequency of counts by wind direction (%)

Gwalior

July

100 hPa level

| Speed 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 | 0 |
| 34-56 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 57-78 | 0 | 0 | 0 | 0 | 9.09 | 0 | 18.18 | 0 | 0 | 0 | 9.09 | 0 |
| 79-101 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18.18 | 27.27 | 0 | 0 | 0 |
| 102-123 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9.09 | 9.09 | 0 | 0 |
| 124-146 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 147-168 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 168-191 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 192-213 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 214-236 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 237-258 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 259-281 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 282-303 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 304-326 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 327-348 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |



Frequency of counts by wind direction (%)

Gwalior

August

1000 hPa level

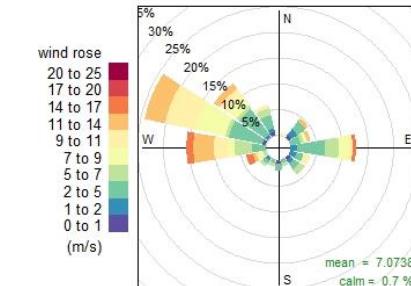
| Speed Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11 | | | | | | | | | | | | |
| 12-33 | | | | | | | | | | | | |
| 34-56 | | | | | | | |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

Gwalior

August

925 hPa level

| Speed 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 |
| 12-33 | | 0 | 0 | 0 | 0 | 0.67 | 0 | 0 | 0 | 0 | 0 | 0 |
| 34-56 | | 0.67 | 1.34 | 2.01 | 0 | 0 | 0 | 0.67 | 0 | 0 | 0 | 0 |
| 57-78 | | 0 | 0 | 2.01 | 0.67 | 0.67 | 0 | 0.67 | 0 | 0 | 0 | 0 |
| 79-101 | | 0 | 1.34 | 5.37 | 2.68 | 2.01 | 0.67 | 0 | 0.67 | 0 | 0 | 0 |
| 102-123 | | 0 | 1.34 | 1.34 | 0 | 0 | 1.34 | 0 | 0 | 0 | 0 | 0 |
| 124-146 | | 0.67 | 0.67 | 1.34 | 1.34 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 147-168 | | 0 | 0 | 0.67 | 0.67 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 168-191 | | 0.67 | 0 | 1.34 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 192-213 | | 0 | 0 | 0.67 | 0.67 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 214-236 | | 0 | 0.67 | 0.67 | 0.67 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 237-258 | | 0 | 0 | 0 | 0.67 | 0.67 | 0.67 | 0.67 | 1.34 | 0 | 0 | 0 |
| 259-281 | | 0 | 0 | 2.68 | 3.36 | 1.34 | 2.68 | 4.03 | 1.34 | 0 | 0 | 0 |
| 282-303 | | 0.67 | 0 | 6.71 | 0.67 | 6.04 | 6.04 | 4.03 | 0 | 0 | 0 | 0 |
| 304-326 | | 0 | 0.67 | 6.04 | 0.67 | 2.01 | 2.01 | 1.34 | 0 | 0 | 0 | 0 |
| 327-348 | | 0.67 | 0.67 | 2.68 | 1.34 | 0 | 0.67 | 0 | 0 | 0 | 0 | 0 |



Frequency of counts by wind direction (%)

Gwalior

August

850 hPa level

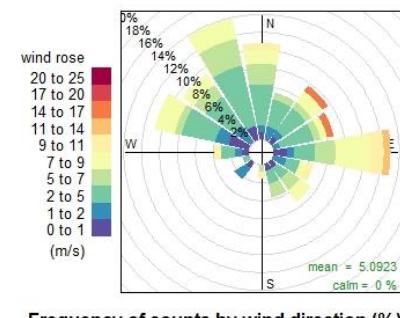
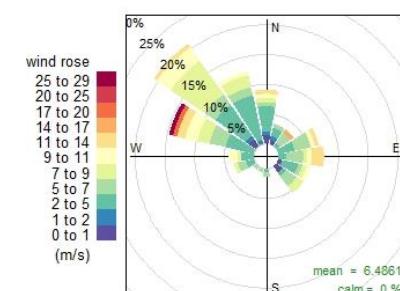
| Speed Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|------|------|------|------|------|------|-------|-------|-------|-------|------|
| 349-11 | 0 | 1.39 | 0.69 | 4.17 | 0.69 | 0.69 | 0.69 | 0.69 | 0 | 0 | 0 | 0 |
| 12-33 | | 0.69 | 0.69 | 1.39 | 0.69 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 34-56 | | 0 | 0 | 0.69 | 2.08 | 0 | 0 | 0 | 0.69 | 0 | 0 | 0 |
| 57-78 | | 0 | 0 | 2.78 | 2.78 | 0 | 0.69 | 0.69 | 0 | 0 | 0 | 0 |
| 79-101 | | 0 | 0 | 1.39 | 2.78 | 0.69 | 0.69 | 2.08 | 0 | 0 | 0 | 0 |
| 102-123 | | 0.69 | 0 | 2.78 | 0.69 | 0.69 | 0.69 | 0 | 0 | 0 | 0 | 0 |
| 124-146 | | 1.39 | 0 | 0.69 | 2.08 | 1.39 | 0 | 0 | 0 | 0 | 0 | 0 |
| 147-168 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 168-191 | | 0 | 0 | 0.69 | 0.69 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 192-213 | | 0 | 0 | 0 | 0.69 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 214-236 | | 0 | 0 | 0 | 0.69 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 237-258 | | 0 | 0 | 1.39 | 1.39 | 0.69 | 0 | 0 | 0 | 0 | 0 | 0 |
| 259-281 | | 0 | 0 | 2.08 | 0 | 0.69 | 1.39 | 0 | 0 | 0 | 0 | 0 |
| 282-303 | | 0 | 0 | 4.86 | 2.78 | 2.08 | 2.08 | 1.39 | 0 | 0.69 | 0 | 0.69 |
| 304-326 | | 1.39 | 0.69 | 6.25 | 2.08 | 6.94 | 2.78 | 0.69 | 0 | 0 | 0 | 0 |
| 327-348 | | 0 | 0.69 | 7.64 | 1.39 | 2.08 | 0.69 | 0 | 0 | 0 | 0 | 0 |

Gwalior

August

700 hPa level

| Speed 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 | 0.77 | 0.77 | 4.62 | 2.31 | 1.54 | 0.77 | 0 | 0 | 0 | 0 | 0 |
| 12-33 | | 0 | 1.54 | 3.08 | 0.77 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 34-56 | | 0.77 | 0.77 | 3.08 | 0.77 | 1.54 | 0 | 0 | 0.77 | 0 | 0 | 0 |
| 57-78 | | 0 | 0.77 | 3.85 | 0.77 | 0.77 | 0 | 0 | 0.77 | 0 | 0 | 0 |
| 79-101 | | 1.54 | 0.77 | 2.31 | 2.31 | 3.85 | 1.54 | 0.77 | 0 | 0 | 0 | 0 |
| 102-123 | | 0 | 1.54 | 1.54 | 0 | 0.77 | 0.77 | 0 | 0 | 0 | 0 | 0 |
| 124-146 | | 0.77 | 0 | 1.54 | 1.54 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 147-168 | | 0.77 | 0 | 1.54 | 1.54 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 168-191 | | 0 | 0 | 0 | 0.77 | 0 | 0.77 | 0 | 0 | 0 | 0 | 0 |
| 192-213 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 214-236 | | 0.77 | 1.54 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 237-258 | | 0 | 0 | 0.77 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 259-281 | | 0.77 | 0.77 | 1.54 | 0 | 0 | 0.77 | 0 | 0 | 0 | 0 | 0 |
| 282-303 | | 2.31 | 1.54 | 3.85 | 0.77 | 2.31 | 0 | 0 | 0 | 0 | 0 | 0 |
| 304-326 | | 0 | 2.31 | 3.85 | 1.54 | 1.54 | 0 | 0 | 0 | 0 | 0 | 0 |
| 327-348 | | 1.54 | 0 | 6.92 | 3.08 | 2.31 | 0 | 0 | 0 | 0 | 0 | 0 |

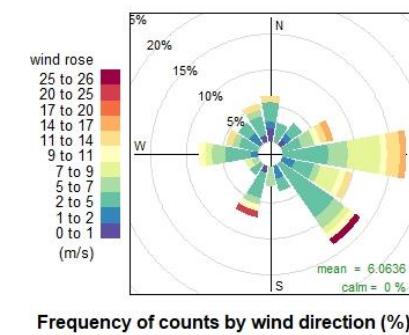


Gwalior

August

500 hPa level

| Speed 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 | 1.82 | 0.91 | 2.73 | 0 | 0 | 0 | 0.91 | 0 | 0 | 0 | 0 |
| 12-33 | | 0 | 0 | 2.73 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 34-56 | | 0.91 | 0.91 | 1.82 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 57-78 | | 0 | 0 | 2.73 | 1.82 | 0 | 0.91 | 0.91 | 0.91 | 0 | 0 | 0 |
| 79-101 | | 0 | 0 | 6.36 | 2.73 | 4.55 | 0.91 | 1.82 | 0.91 | 0 | 0 | 0 |
| 102-123 | | 0 | 1.82 | 2.73 | 0.91 | 2.73 | 0.91 | 0.91 | 0 | 0 | 0 | 0 |
| 124-146 | | 0 | 0 | 9.09 | 1.82 | 0.91 | 0.91 | 0 | 0 | 0 | 0 | 0.91 |
| 147-168 | | 0 | 1.82 | 1.82 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 168-191 | | 0 | 0 | 0 | 2.73 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 192-213 | | 0.91 | 0 | 3.64 | 0.91 | 0 | 0.91 | 0 | 0 | 0 | 0.91 | 0 |
| 214-236 | | 0 | 0 | 1.82 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 237-258 | | 0 | 0 | 0 | 0.91 | 0.91 | 0 | 0 | 0 | 0 | 0 | 0 |
| 259-281 | | 0 | 0.91 | 3.64 | 1.82 | 0.91 | 0.91 | 0 | 0 | 0 | 0 | 0 |
| 282-303 | | 0 | 0 | 2.73 | 0.91 | 0 | 0 | 0.91 | 0 | 0 | 0 | 0 |
| 304-326 | | 0 | 1.82 | 1.82 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 327-348 | | 0.91 | 0 | 2.73 | 0.91 | 0 | 0 | 0.91 | 0 | 0 | 0 | 0 |

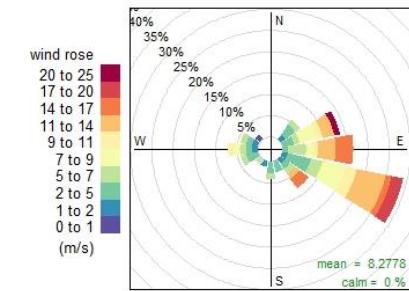


Gwalior

August

300 hPa level

| Speed 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 | 1.39 | 2.78 | 1.39 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 57-78 | | 0 | 0 | 2.78 | 1.39 | 4.17 | 1.39 | 2.78 | 0 | 0 | 1.39 | 0 |
| 79-101 | | 0 | 0 | 1.39 | 4.17 | 1.39 | 1.39 | 4.17 | 4.17 | 0 | 0 | 0 |
| 102-123 | | 0 | 1.39 | 5.56 | 2.78 | 5.56 | 2.78 | 6.94 | 1.39 | 2.78 | 0 | 0 |
| 124-146 | | 0 | 1.39 | 1.39 | 1.39 | 0 | 0 | 1.39 | 2.78 | 0 | 0 | 0 |
| 147-168 | | 0 | 0 | 2.78 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 168-191 | | 0 | 0 | 2.78 | 1.39 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 192-213 | | 0 | 1.39 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 214-236 | | 0 | 0 | 0 | 1.39 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 237-258 | | 0 | 0 | 2.78 | 1.39 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 259-281 | | 0 | 1.39 | 1.39 | 1.39 | 1.39 | 1.39 | 0 | 0 | 0 | 0 | 0 |
| 282-303 | | 0 | 1.39 | 1.39 | 1.39 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 304-326 | | 1.39 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 327-348 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

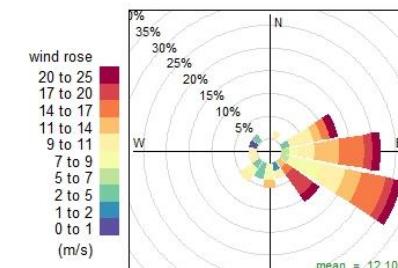


Gwalior

August

200 hPa level

| Speed 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 | 1.82 | 0 | 0 | 0 | 0 | 0 | 0 |
| 34-56 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 57-78 | 0 | 0 | 1.82 | 0 | 0 | 5.45 | 1.82 | 1.82 | 0 | 1.82 | 0 | 0 |
| 79-101 | 0 | 0 | 0 | 1.82 | 1.82 | 3.64 | 5.45 | 5.45 | 1.82 | 1.82 | 0 | 0 |
| 102-123 | 0 | 0 | 0 | 1.82 | 7.27 | 5.45 | 3.64 | 5.45 | 1.82 | 1.82 | 0 | 0 |
| 124-146 | 0 | 0 | 0 | 0 | 0 | 0 | 1.82 | 1.82 | 5.45 | 1.82 | 0 | 0 |
| 147-168 | 0 | 1.82 | 0 | 0 | 0 | 1.82 | 0 | 0 | 0 | 0 | 0 | 0 |
| 168-191 | 0 | 0 | 0 | 0 | 3.64 | 0 | 1.82 | 0 | 0 | 0 | 0 | 0 |
| 192-213 | 0 | 0 | 3.64 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 214-236 | 0 | 0 | 1.82 | 0 | 1.82 | 1.82 | 0 | 0 | 0 | 0 | 0 | 0 |
| 237-258 | 0 | 0 | 0 | 0 | 0 | 1.82 | 0 | 0 | 0 | 0 | 0 | 0 |
| 259-281 | 0 | 0 | 0 | 0 | 0 | 1.82 | 0 | 0 | 0 | 0 | 0 | 0 |
| 282-303 | 1.82 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 304-326 | 0 | 0 | 1.82 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 327-348 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

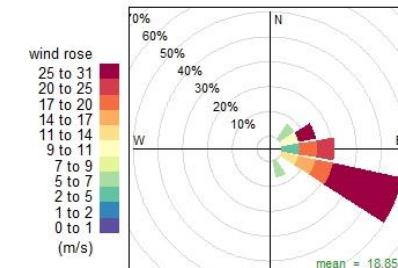


Gwalior

August

100 hPa level

| Speed 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 | 0 |
| 34-56 | 0 | 0 | 0 | 7.14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 57-78 | 0 | 0 | 0 | 0 | 0 | 7.14 | 0 | 0 | 0 | 0 | 0 | 7.14 |
| 79-101 | 0 | 0 | 7.14 | 0 | 0 | 0 | 0 | 0 | 0 | 7.14 | 7.14 | 0 |
| 102-123 | 0 | 0 | 0 | 0 | 0 | 0 | 7.14 | 7.14 | 7.14 | 0 | 28.57 | 0 |
| 124-146 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 147-168 | 0 | 0 | 0 | 7.14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 168-191 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 192-213 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 214-236 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 237-258 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 259-281 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 282-303 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 304-326 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 327-348 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |



Gwalior

September

1000 hPa level

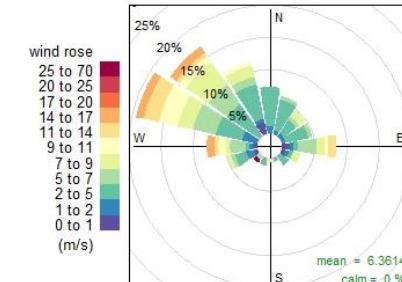
| Speed Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11 | | | | | | | | | | | | |
| 12-33 | | | | | | | | | | | | |
| 34-56 | | | | | | | |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

Gwalior

September

925 hPa level

| Speed 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 | 1.2 | 6.02 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12-33 | | 0 | 0.6 | 4.82 | 0.6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 34-56 | | 0 | 0.6 | 2.41 | 0.6 | 1.2 | 0 | 0 | 0 | 0 | 0 | 0 |
| 57-78 | | 0 | 0.6 | 3.61 | 0.6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 79-101 | | 1.2 | 0.6 | 0.6 | 3.01 | 1.2 | 0.6 | 1.2 | 0 | 0 | 0 | 0 |
| 102-123 | | 0.6 | 0.6 | 0.6 | 0 | 1.2 | 0 | 0 | 0 | 0 | 0 | 0 |
| 124-146 | | 0 | 0 | 1.81 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 147-168 | | 0 | 0 | 0.6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 168-191 | | 0 | 0 | 0 | 0 | 0.6 | 0 | 0 | 0 | 0 | 0 | 0 |
| 192-213 | | 0 | 0 | 1.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 214-236 | | 0 | 0 | 0 | 0.6 | 0 | 0 | 0 | 0 | 0 | 0 | 0.6 |
| 237-258 | | 0.6 | 1.2 | 1.81 | 0.6 | 0.6 | 0 | 0 | 0 | 0 | 0 | 0 |
| 259-281 | | 0.6 | 0.6 | 0.6 | 2.41 | 0.6 | 1.2 | 0.6 | 1.2 | 0 | 0 | 0 |
| 282-303 | | 0 | 2.41 | 4.22 | 3.61 | 2.41 | 3.01 | 2.41 | 1.2 | 0.6 | 1.2 | 0 |
| 304-326 | | 0 | 0 | 6.02 | 3.61 | 4.22 | 1.2 | 0.6 | 0.6 | 0 | 0 | 0 |
| 327-348 | | 1.81 | 0.6 | 5.42 | 1.2 | 1.81 | 0.6 | 0 | 0 | 0 | 0 | 0 |

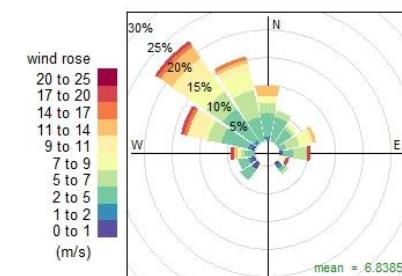


Frequency of counts by wind direction (%)

Gwalior

September 850 hPa level

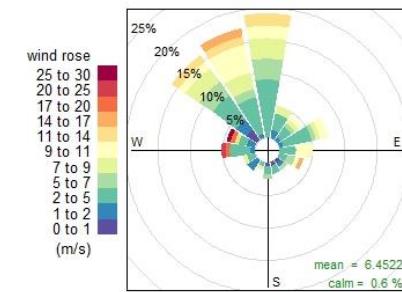
| Speed Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|------|------|------|------|------|------|-------|-------|-------|-------|------|
| 349-11 | 0 | 0 | 0.62 | 4.35 | 1.86 | 1.24 | 0 | 1.86 | 0 | 0 | 0 | 0 |
| 12-33 | | 0 | 0 | 4.35 | 1.24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 34-56 | | 0 | 0 | 3.11 | 0.62 | 0.62 | 0 | 0 | 0 | 0 | 0 | 0 |
| 57-78 | | 0 | 0 | 1.24 | 2.48 | 1.86 | 0.62 | 0.62 | 0 | 0 | 0 | 0 |
| 79-101 | | 0.62 | 0 | 1.86 | 2.48 | 0 | 0 | 0 | 0 | 0.62 | 0 | 0 |
| 102-123 | | 0 | 0 | 0 | 0 | 1.24 | 0 | 0 | 0 | 0.62 | 0 | 0 |
| 124-146 | | 0.62 | 0.62 | 0.62 | 0.62 | 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 | 0.62 | 0 | 0 | 0 | 0 | 0 | 0 |
| 214-236 | | 1.24 | 0 | 2.48 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 237-258 | | 0.62 | 0.62 | 1.86 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 259-281 | | 0 | 0 | 1.86 | 0.62 | 0.62 | 0 | 0.62 | 0 | 0.62 | 0 | 0 |
| 282-303 | | 0.62 | 0.62 | 4.97 | 2.48 | 0.62 | 3.11 | 0 | 0.62 | 0.62 | 0 | 0 |
| 304-326 | | 0 | 0.62 | 6.83 | 3.73 | 3.73 | 3.73 | 2.48 | 0.62 | 0.62 | 0 | 0 |
| 327-348 | | 0 | 0 | 4.35 | 4.97 | 3.73 | 1.24 | 0.62 | 0.62 | 0 | 0 | 0 |



Gwalior

September 700 hPa level

| Speed 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 | 8.92 | 3.18 | 3.18 | 1.91 | 1.91 | 0 | 0 | 0 | 0 |
| 12-33 | | 0 | 1.27 | 2.55 | 0 | 1.27 | 0 | 0 | 0 | 0 | 0 | 0 |
| 34-56 | | 0 | 0.64 | 1.91 | 0.64 | 0.64 | 0.64 | 0 | 0 | 0 | 0 | 0 |
| 57-78 | | 0 | 0.64 | 4.46 | 0.64 | 0.64 | 1.27 | 0 | 0 | 0 | 0 | 0 |
| 79-101 | | 0 | 0 | 2.55 | 0 | 0 | 2.55 | 0 | 0 | 0 | 0 | 0 |
| 102-123 | | 0 | 0 | 1.27 | 1.27 | 0 | 0.64 | 0 | 0.64 | 0 | 0 | 0 |
| 124-146 | | 0.64 | 0.64 | 0 | 0.64 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 147-168 | | 0.64 | 0 | 1.27 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 168-191 | | 0.64 | 0 | 1.27 | 0.64 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 192-213 | | 0 | 0 | 0.64 | 0 | 0.64 | 0 | 0 | 0 | 0 | 0 | 0 |
| 214-236 | | 0 | 1.91 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 237-258 | | 0 | 0 | 1.27 | 0 | 0.64 | 0 | 0 | 0 | 0 | 0 | 0 |
| 259-281 | | 0 | 0.64 | 3.18 | 0 | 0 | 0 | 0 | 0 | 0.64 | 0.64 | 0 |
| 282-303 | | 0 | 1.27 | 1.27 | 0 | 0 | 0 | 0.64 | 0 | 0.64 | 0 | 0.64 |
| 304-326 | | 1.91 | 1.91 | 4.46 | 2.55 | 2.55 | 1.27 | 1.27 | 0 | 0 | 0 | 0 |
| 327-348 | | 0 | 0.64 | 5.73 | 1.27 | 2.55 | 4.46 | 1.27 | 1.27 | 0 | 0 | 0 |

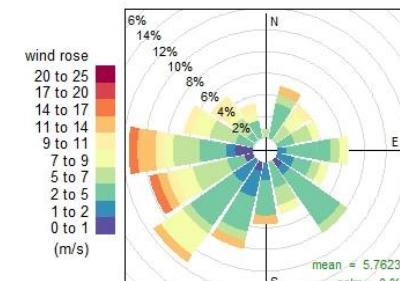


Gwalior

September

500 hPa level

| Speed 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 | 0.82 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12-33 | | 0 | 0 | 3.28 | 0.82 | 0 | 0 | 0.82 | 0 | 0 | 0 | 0 |
| 34-56 | | 0 | 0 | 0 | 1.64 | 1.64 | 0.82 | 0 | 0 | 0 | 0 | 0 |
| 57-78 | | 0 | 0 | 1.64 | 1.64 | 0.82 | 0 | 0 | 0 | 0 | 0 | 0 |
| 79-101 | | 0 | 0.82 | 4.1 | 0.82 | 0.82 | 0 | 0 | 0 | 0 | 0 | 0 |
| 102-123 | | 0 | 1.64 | 1.64 | 0.82 | 0.82 | 0 | 0 | 0 | 0 | 0 | 0 |
| 124-146 | | 0.82 | 0.82 | 5.74 | 0.82 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 147-168 | | 0 | 0 | 2.46 | 1.64 | 0.82 | 0 | 0 | 0 | 0 | 0 | 0 |
| 168-191 | | 0 | 1.64 | 3.28 | 0 | 0 | 0 | 0.82 | 0 | 0 | 0 | 0 |
| 192-213 | | 0.82 | 2.46 | 3.28 | 0.82 | 0 | 0 | 0.82 | 0 | 0 | 0 | 0 |
| 214-236 | | 0 | 2.46 | 4.92 | 0.82 | 2.46 | 0 | 0.82 | 0 | 0 | 0 | 0 |
| 237-258 | | 0.82 | 0 | 1.64 | 3.28 | 1.64 | 0.82 | 0.82 | 0.82 | 0 | 0 | 0 |
| 259-281 | | 1.64 | 0.82 | 2.46 | 2.46 | 0.82 | 0.82 | 1.64 | 0.82 | 0 | 0 | 0 |
| 282-303 | | 0 | 0 | 1.64 | 2.46 | 1.64 | 0.82 | 0 | 0 | 0 | 0 | 0 |
| 304-326 | | 0 | 0 | 0.82 | 1.64 | 0.82 | 1.64 | 0 | 0 | 0 | 0 | 0 |
| 327-348 | | 0 | 0 | 1.64 | 0 | 0.82 | 0.82 | 0 | 0 | 0 | 0 | 0 |



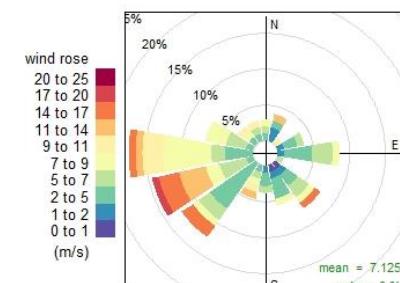
Frequency of counts by wind direction (%)

Gwalior

September

300 hPa level

| Speed 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 | 0.96 | 0.96 | 0.96 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12-33 | | 0 | 1.92 | 0.96 | 0 | 0 | 0 | 0.96 | 0 | 0 | 0 | 0 |
| 34-56 | | 0 | 0 | 0 | 0 | 0 | 0.96 | 0 | 0 | 0 | 0 | 0 |
| 57-78 | | 0 | 0.96 | 1.92 | 0.96 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 79-101 | | 0 | 0.96 | 3.85 | 2.88 | 0.96 | 0 | 0 | 0 | 0 | 0 | 0 |
| 102-123 | | 0 | 0 | 0 | 0.96 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 124-146 | | 0.96 | 0.96 | 1.92 | 1.92 | 0.96 | 0 | 0 | 0.96 | 0 | 0 | 0 |
| 147-168 | | 0.96 | 0.96 | 2.88 | 0 | 0.96 | 0 | 0 | 0 | 0 | 0 | 0 |
| 168-191 | | 0 | 0.96 | 1.92 | 0.96 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 192-213 | | 0 | 0 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0 | 0 | 0 | 0 |
| 214-236 | | 0 | 0 | 7.69 | 1.92 | 0.96 | 0 | 0 | 1.92 | 0 | 0 | 0 |
| 237-258 | | 0 | 0 | 0.96 | 3.85 | 1.92 | 0 | 3.85 | 2.88 | 0.96 | 0 | 0 |
| 259-281 | | 0 | 0 | 3.85 | 1.92 | 6.73 | 2.88 | 0.96 | 0.96 | 0 | 0 | 0 |
| 282-303 | | 0 | 0 | 0.96 | 2.88 | 2.88 | 0 | 0 | 0 | 0 | 0 | 0 |
| 304-326 | | 0 | 0 | 0.96 | 0 | 0.96 | 0.96 | 0 | 0 | 0 | 0 | 0 |
| 327-348 | | 0 | 0 | 0.96 | 0.96 | 0 | 0.96 | 0 | 0 | 0 | 0 | 0 |



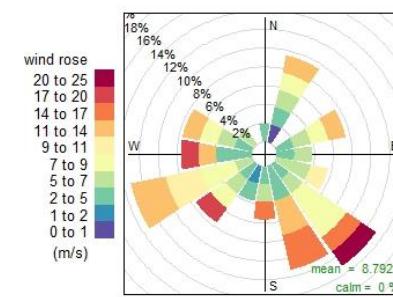
Frequency of counts by wind direction (%)

Gwalior

September

200 hPa level

| Speed 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 | 1.89 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12-33 | 1.89 | 0 | 1.89 | 1.89 | 1.89 | 0 | 1.89 | 0 | 0 | 0 | 0 | 0 |
| 34-56 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 57-78 | 0 | 0 | 1.89 | 1.89 | 1.89 | 0 | 1.89 | 0 | 0 | 0 | 0 | 0 |
| 79-101 | 0 | 0 | 1.89 | 1.89 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 102-123 | 0 | 0 | 0 | 3.77 | 0 | 1.89 | 0 | 0 | 0 | 0 | 0 | 0 |
| 124-146 | 0 | 0 | 1.89 | 1.89 | 5.66 | 0 | 0 | 1.89 | 0 | 1.89 | 0 | 0 |
| 147-168 | 0 | 0 | 3.77 | 0 | 0 | 0 | 3.77 | 3.77 | 0 | 0 | 0 | 0 |
| 168-191 | 0 | 0 | 1.89 | 1.89 | 0 | 0 | 0 | 1.89 | 0 | 0 | 0 | 0 |
| 192-213 | 0 | 1.89 | 1.89 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 214-236 | 0 | 0 | 1.89 | 1.89 | 1.89 | 0 | 0 | 0 | 1.89 | 0 | 0 | 0 |
| 237-258 | 0 | 0 | 0 | 1.89 | 3.77 | 3.77 | 3.77 | 0 | 0 | 0 | 0 | 0 |
| 259-281 | 0 | 0 | 3.77 | 0 | 0 | 0 | 1.89 | 0 | 1.89 | 0 | 0 | 0 |
| 282-303 | 0 | 0 | 1.89 | 1.89 | 1.89 | 0 | 1.89 | 0 | 0 | 0 | 0 | 0 |
| 304-326 | 0 | 0 | 0 | 1.89 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 327-348 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

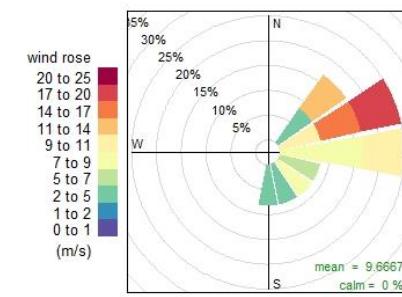


Gwalior

September

100 hPa level

| Speed 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 | 0 |
| 34-56 | 0 | 0 | 8.33 | 0 | 0 | 0 | 8.33 | 0 | 0 | 0 | 0 | 0 |
| 57-78 | 0 | 0 | 0 | 0 | 0 | 8.33 | 0 | 8.33 | 8.33 | 0 | 0 | 0 |
| 79-101 | 0 | 0 | 0 | 0 | 16.67 | 8.33 | 0 | 0 | 0 | 0 | 0 | 0 |
| 102-123 | 0 | 0 | 0 | 8.33 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 124-146 | 0 | 0 | 0 | 0 | 8.33 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 147-168 | 0 | 0 | 8.33 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 168-191 | 0 | 0 | 8.33 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 192-213 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 214-236 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 237-258 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 259-281 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 282-303 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 304-326 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 327-348 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |



Gwalior

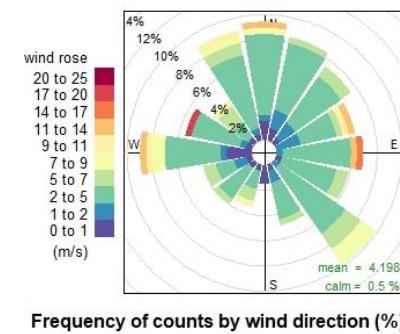
October

1000 hPa level

| Speed 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 | | | | | | | | | | | | |
| 12-33 | | | | | | | | | | | | |
| 34-56 | | | | | | | | | | | | |
| 57-78 | | | | | | | | | | | | |
| 79-101 | | | | | | | | | | | | |
| 102-123 | | | | | | | | | | | | |
| 124-146 | | | | | | | | | | | | |
| 147-168 | | | | | | | | | | | | |
| 168-191 | | | | | | | | | | | | |
| 192-213 | | | | | | | | | | | | |
| 214-236 | | | | | | | | | | | | |
| 237-258 | | | | | | | | | | | | |
| 259-281 | | | | | | | | | | | | |
| 282-303 | | | | | | | | | | | | |
| 304-326 | | | | | | | | | | | | |
| 327-348 | | | | | | | | | | | | |

Gwalior **October** **925 hPa level**

| Speed 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 | | 1.5 | 0 | 10.6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12-33 | | 1.5 | 3 | 7.6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 34-56 | | 0 | 1.5 | 1.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 57-78 | | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 79-101 | | 0 | 0 | 7.6 | 0 | 0 | 0 | 1.5 | 1.5 | 0 | 0 | 0 |
| 102-123 | | 1.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 124-146 | | 0 | 0 | 7.6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 147-168 | | 1.5 | 0 | 1.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 168-191 | | 1.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 192-213 | | 0 | 0 | 1.5 | 1.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 214-236 | | 1.5 | 0 | 3 | 1.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 237-258 | | 1.5 | 1.5 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 259-281 | | 3 | 0 | 4.5 | 0 | 0 | 1.5 | 1.5 | 0 | 0 | 0 | 0 |
| 282-303 | | 0 | 0 | 3 | 0 | 0 | 1.5 | 0 | 0 | 1.5 | 0 | 0 |
| 304-326 | | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 327-348 | | 1.5 | 0 | 6.1 | 1.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

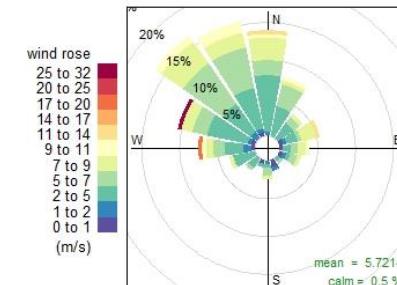


Gwalior

October

850 hPa level

| Speed 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 | 7.46 | 1.99 | 2.99 | 0.5 | 0.5 | 0 | 0 | 0 | 0 |
| 12-33 | | 0 | 0 | 3.98 | 2.99 | 0.5 | 0.5 | 0 | 0 | 0 | 0 | 0 |
| 34-56 | | 0 | 0 | 2.49 | 1 | 0.5 | 0 | 0 | 0 | 0 | 0 | 0 |
| 57-78 | | 0.5 | 0.5 | 1.49 | 0.5 | 1.99 | 0 | 0.5 | 0 | 0 | 0 | 0 |
| 79-101 | | 0.5 | 0 | 1 | 1 | 1 | 0.5 | 0 | 0 | 0 | 0 | 0 |
| 102-123 | | 0.5 | 0.5 | 0.5 | 1 | 0.5 | 0 | 0 | 0 | 0 | 0 | 0 |
| 124-146 | | 0 | 0 | 0.5 | 0.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 147-168 | | 1 | 0.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 168-191 | | 0 | 0.5 | 0.5 | 1 | 0.5 | 0 | 0 | 0 | 0 | 0 | 0 |
| 192-213 | | 0.5 | 0 | 0.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 214-236 | | 0 | 0 | 1.49 | 0.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 237-258 | | 0 | 0 | 2.99 | 0 | 0.5 | 0 | 0 | 0 | 0 | 0 | 0 |
| 259-281 | | 0.5 | 1 | 2.49 | 1.49 | 1 | 0.5 | 0 | 0 | 0.5 | 0 | 0 |
| 282-303 | | 0.5 | 0.5 | 5.47 | 1.99 | 1.49 | 0 | 0 | 0 | 0 | 0 | 0.5 |
| 304-326 | | 0 | 1 | 4.48 | 6.47 | 3.48 | 1 | 0 | 0 | 0 | 0 | 0 |
| 327-348 | | 0.5 | 0.5 | 5.47 | 5.47 | 1.99 | 1.49 | 0 | 0 | 0 | 0 | 0 |

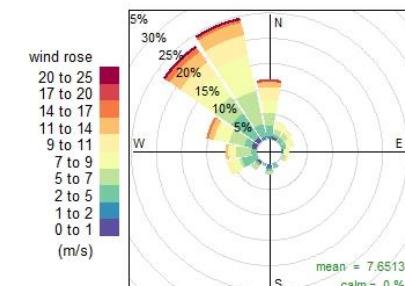


Gwalior

October

700 hPa level

| Speed 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 | 0.51 | 2.05 | 2.56 | 2.56 | 2.56 | 1.03 | 0 | 0.51 | 0 | 0 |
| 12-33 | | 0.51 | 0 | 0.51 | 1.03 | 1.03 | 0.51 | 0 | 0 | 0 | 0 | 0 |
| 34-56 | | 0 | 0 | 1.03 | 1.03 | 0 | 1.03 | 0 | 0 | 0 | 0 | 0 |
| 57-78 | | 0 | 0 | 1.03 | 0 | 1.03 | 0.51 | 0 | 0 | 0 | 0 | 0 |
| 79-101 | | 0 | 0.51 | 0 | 0 | 0.51 | 0.51 | 0 | 0 | 0 | 0 | 0 |
| 102-123 | | 0 | 0 | 0 | 1.03 | 0 | 0.51 | 0 | 0 | 0 | 0 | 0 |
| 124-146 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 147-168 | | 0 | 0 | 1.03 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 168-191 | | 0.51 | 0.51 | 0.51 | 0.51 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 192-213 | | 0 | 0 | 0.51 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 214-236 | | 0.51 | 0 | 0.51 | 1.03 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 237-258 | | 0 | 0 | 3.08 | 0.51 | 1.54 | 1.03 | 0 | 0 | 0 | 0 | 0 |
| 259-281 | | 0 | 0 | 1.03 | 3.08 | 1.03 | 0.51 | 0.51 | 0 | 0 | 0 | 0 |
| 282-303 | | 1.03 | 0 | 1.54 | 3.08 | 2.56 | 0.51 | 1.03 | 0.51 | 0 | 0 | 0 |
| 304-326 | | 1.03 | 0 | 5.64 | 4.1 | 5.13 | 3.08 | 2.56 | 1.03 | 0 | 0.51 | 0 |
| 327-348 | | 0 | 0.51 | 2.56 | 6.67 | 7.18 | 4.1 | 2.56 | 0.51 | 0 | 0.51 | 0 |

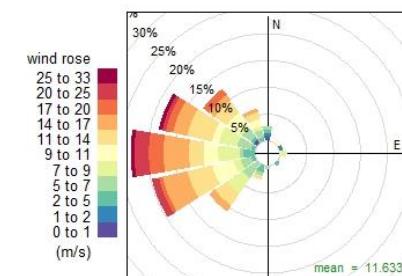


Gwalior

October

500 hPa level

| Speed 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 | 0.68 | 0.68 | 0.68 | 0.68 | 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 | 0.68 | 0 | 0 | 0 | 0 | 0 |
| 57-78 | | 0 | 0.68 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 79-101 | | 0 | 0 | 0 | 0 | 1.36 | 0 | 0 | 0 | 0 | 0 | 0 |
| 102-123 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 124-146 | | 0 | 0 | 0.68 | 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 | 0.68 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 192-213 | | 0 | 0 | 1.36 | 0.68 | 0 | 0 | 0.68 | 0 | 0 | 0 | 0 |
| 214-236 | | 0 | 0 | 0 | 3.4 | 3.4 | 0 | 2.72 | 1.36 | 0 | 0 | 0 |
| 237-258 | | 0 | 0 | 0.68 | 2.04 | 1.36 | 4.08 | 4.76 | 4.76 | 0.68 | 1.36 | 0 |
| 259-281 | | 0 | 0 | 2.04 | 0.68 | 4.08 | 2.72 | 2.72 | 4.76 | 2.72 | 2.72 | 0.68 |
| 282-303 | | 0 | 0 | 0.68 | 2.72 | 3.4 | 1.36 | 4.76 | 2.72 | 1.36 | 0.68 | 0.68 |
| 304-326 | | 0.68 | 0 | 0.68 | 2.04 | 0.68 | 2.72 | 2.72 | 1.36 | 1.36 | 0 | 0 |
| 327-348 | | 0 | 0 | 0.68 | 1.36 | 0.68 | 1.36 | 1.36 | 0.68 | 0 | 0 | 0 |



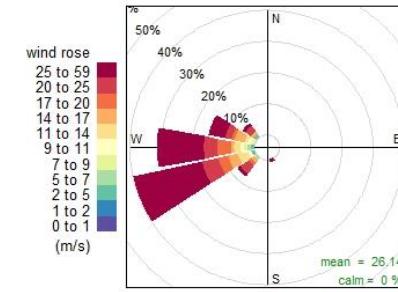
Frequency of counts by wind direction (%)

Gwalior

October

300 hPa level

| Speed 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 | 1.08 |
| 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 | 1.08 | 0 | 0 | 0 | 1.08 | 1.08 | 3.23 | 1.08 |
| 237-258 | | 0 | 0 | 1.08 | 0 | 0 | 1.08 | 3.23 | 3.23 | 3.23 | 5.38 | 22.58 |
| 259-281 | | 0 | 0 | 1.08 | 1.08 | 1.08 | 1.08 | 2.15 | 1.08 | 4.3 | 4.3 | 15.05 |
| 282-303 | | 0 | 0 | 0 | 1.08 | 1.08 | 1.08 | 1.08 | 3.23 | 1.08 | 2.15 | 5.38 |
| 304-326 | | 0 | 0 | 1.08 | 0 | 0 | 0 | 0 | 1.08 | 0 | 2.15 | 1.08 |
| 327-348 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |



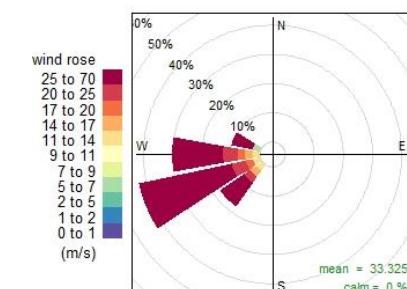
Frequency of counts by wind direction (%)

Gwalior

October

200 hPa level

| Speed 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 | 0 |
| 34-56 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 57-78 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 79-101 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 102-123 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 124-146 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 147-168 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 168-191 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 192-213 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 214-236 | 0 | 0 | 0 | 0 | 0 | 0 | 2.5 | 2.5 | 0 | 2.5 | 10 | |
| 237-258 | 0 | 0 | 0 | 0 | 0 | 0 | 2.5 | 0 | 2.5 | 5 | 32.5 | |
| 259-281 | 0 | 0 | 0 | 0 | 0 | 0 | 2.5 | 2.5 | 2.5 | 5 | 17.5 | |
| 282-303 | 0 | 0 | 0 | 2.5 | 0 | 0 | 0 | 0 | 0 | 0 | 7.5 | |
| 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 | |

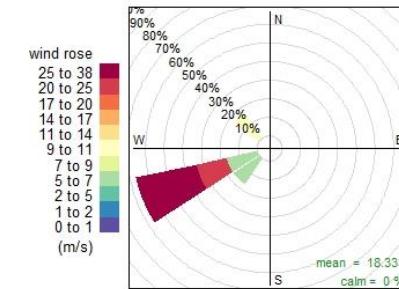


Gwalior

October

100 hPa level

| Speed 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 | 0 |
| 34-56 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 57-78 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 79-101 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 102-123 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 124-146 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 147-168 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 168-191 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 192-213 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 214-236 | 0 | 0 | 0 | 16.67 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 237-258 | 0 | 0 | 0 | 16.67 | 0 | 0 | 0 | 0 | 0 | 16.67 | 33.33 | |
| 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 | 16.67 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 327-348 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |



Gwalior

November

1000 hPa level

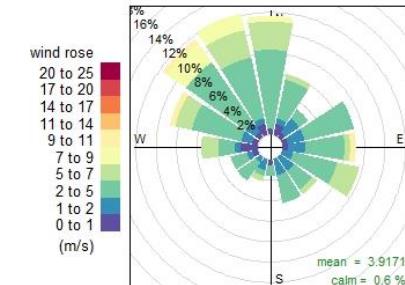
| Speed Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|------|
| 349-11 | | | | | | | | | | | | |
| 12-33 | | | | | | | | | | | | |
| 34-56 | | | | | | | |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

Gwalior

November

925 hPa level

| Speed 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 | | 0.55 | 0 | 7.73 | 2.76 | 0.55 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12-33 | | 1.1 | 0.55 | 3.87 | 0.55 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 34-56 | | 0.55 | 1.66 | 1.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 57-78 | | 0.55 | 1.66 | 4.97 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 79-101 | | 0.55 | 1.66 | 3.87 | 0.55 | 0 | 0.55 | 0 | 0 | 0 | 0 | 0 |
| 102-123 | 0 | 1.1 | 4.42 | 2.21 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 124-146 | | 0 | 1.66 | 2.21 | 0.55 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 147-168 | | 0 | 0.55 | 2.76 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 168-191 | | 0.55 | 1.1 | 1.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 192-213 | | 0 | 1.1 | 0.55 | 0.55 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 214-236 | | 0 | 0.55 | 2.21 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 237-258 | | 0.55 | 0.55 | 1.66 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 259-281 | | 1.66 | 0.55 | 1.66 | 1.66 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 282-303 | | 0.55 | 1.1 | 4.97 | 1.66 | 0 | 0.55 | 0 | 0 | 0 | 0 | 0 |
| 304-326 | | 0.55 | 1.1 | 7.18 | 0 | 2.21 | 0.55 | 0 | 0 | 0 | 0 | 0 |
| 327-348 | | 1.1 | 0.55 | 6.08 | 2.76 | 1.66 | 0 | 0 | 0 | 0 | 0 | 0 |

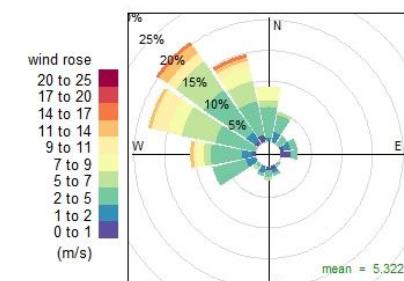


Gwalior

November

850 hPa level

| Speed 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 | 0.56 | 5.08 | 1.13 | 2.26 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12-33 | | 0 | 1.69 | 2.82 | 0.56 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 34-56 | | 0 | 0 | 1.69 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 57-78 | | 0.56 | 1.13 | 1.13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 79-101 | | 1.69 | 0 | 1.13 | 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 | 0.56 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 147-168 | | 0.56 | 0.56 | 0.56 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 168-191 | | 0.56 | 0 | 1.13 | 0.56 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 192-213 | | 0 | 1.13 | 0.56 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 214-236 | | 0 | 0 | 0.56 | 0.56 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 237-258 | | 0 | 1.69 | 5.65 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 259-281 | | 0.56 | 1.69 | 5.08 | 1.13 | 1.13 | 0.56 | 0.56 | 0 | 0 | 0 | 0 |
| 282-303 | | 0 | 0 | 6.78 | 5.65 | 2.26 | 2.82 | 0.56 | 0 | 0 | 0 | 0 |
| 304-326 | | 0.56 | 1.69 | 8.47 | 5.65 | 0 | 1.69 | 1.69 | 0.56 | 0 | 0 | 0 |
| 327-348 | | 1.13 | 0 | 5.65 | 3.39 | 2.26 | 1.13 | 0.56 | 0.56 | 0 | 0 | 0 |

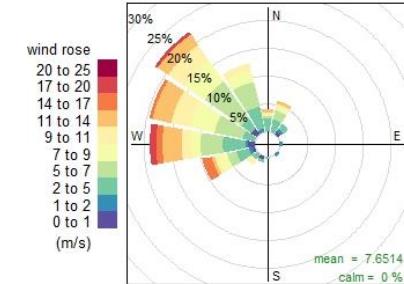


Gwalior

November

700 hPa level

| Speed 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 | 2.29 | 0.57 | 0 | 0.57 | 0.57 | 0 | 0 | 0 | 0 |
| 12-33 | | 0 | 0 | 2.29 | 1.71 | 0.57 | 0.57 | 0.57 | 0 | 0 | 0 | 0 |
| 34-56 | | 0.57 | 0.57 | 1.14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 57-78 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 79-101 | | 0 | 0.57 | 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 | 0.57 | 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 | 0.57 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 192-213 | | 0.57 | 0 | 0.57 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 214-236 | | 0 | 0 | 1.14 | 0 | 0.57 | 0.57 | 0 | 0 | 0 | 0 | 0 |
| 237-258 | | 0.57 | 0.57 | 2.29 | 1.71 | 1.71 | 0.57 | 0.57 | 1.71 | 0 | 0 | 0 |
| 259-281 | | 1.14 | 0.57 | 4 | 4 | 1.71 | 1.71 | 3.43 | 1.14 | 1.14 | 0 | 0 |
| 282-303 | | 0 | 0 | 2.29 | 5.14 | 4.57 | 3.43 | 3.43 | 0.57 | 0 | 0 | 0 |
| 304-326 | | 1.14 | 0 | 2.29 | 8 | 4.57 | 3.43 | 2.29 | 0 | 0.57 | 0 | 0 |
| 327-348 | | 0 | 0.57 | 4 | 4.57 | 2.29 | 1.14 | 0 | 0 | 0 | 0 | 0 |

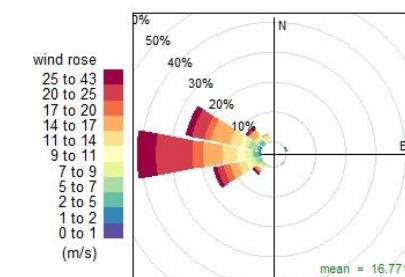


Gwalior

November

500 hPa level

| Speed 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 | 0.71 | 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 | 0.71 | 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 | 0.71 | 0 | 0 | 0 | 0 | 0 |
| 214-236 | | 0 | 0 | 0 | 0.71 | 0.71 | 0.71 | 0 | 0.71 | 0.71 | 0 | 0.71 |
| 237-258 | | 0 | 0 | 0.71 | 1.43 | 1.43 | 1.43 | 2.86 | 2.86 | 2.14 | 2.14 | 1.43 |
| 259-281 | | 0 | 0.71 | 1.43 | 0.71 | 2.14 | 2.86 | 5 | 6.43 | 3.57 | 12.14 | 6.43 |
| 282-303 | | 0 | 0.71 | 0.71 | 2.86 | 1.43 | 1.43 | 3.57 | 6.43 | 2.14 | 4.29 | 2.14 |
| 304-326 | | 0 | 0 | 1.43 | 0.71 | 0 | 0.71 | 0.71 | 2.14 | 0 | 0.71 | 0.71 |
| 327-348 | | 0 | 0 | 0 | 0 | 2.14 | 0 | 0 | 0.71 | 0 | 0 | 0 |



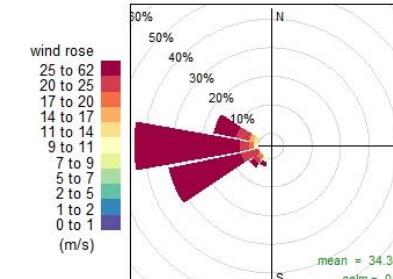
Frequency of counts by wind direction (%)

Gwalior

November

300 hPa level

| Speed 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 | 1.61 | 0 | 0 | 0 | 0 | 1.61 |
| 214-236 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.61 | 1.61 | 1.61 |
| 237-258 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6.45 | 25.81 |
| 259-281 | | 0 | 0 | 0 | 0 | 0 | 1.61 | 0 | 0 | 1.61 | 3.23 | 37.1 |
| 282-303 | | 0 | 0 | 0 | 0 | 0 | 0 | 1.61 | 1.61 | 0 | 4.84 | 8.06 |
| 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 |

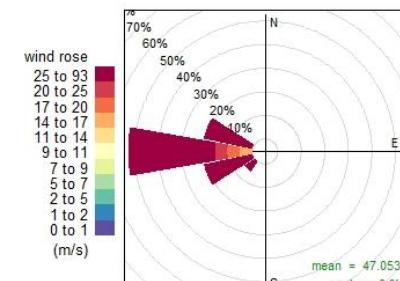


Frequency of counts by wind direction (%)

Gwalior

November 200 hPa level

| Speed 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 |
| 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 | 0 | 0 | 0 | 5.26 | |
| 237-258 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21.05 |
| 259-281 | | 0 | 0 | 0 | 0 | 0 | 0 | 5.26 | 5.26 | 5.26 | 36.84 | |
| 282-303 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21.05 |
| 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 |



Frequency of counts by wind direction (%)

Gwalior

November 100 hPa level

| Speed 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 | | | | | | | | | | | | |
| 12-33 | | | | | | | | | | | | |
| 34-56 | | | | | | | | | | | | |
| 57-78 | | | | | | | | | | | | |
| 79-101 | | | | | | | | | | | | |
| 102-123 | | | | | | | | | | | | |
| 124-146 | | | | | | | | | | | | |
| 147-168 | | | | | | | | | | | | |
| 168-191 | | | | | | | | | | | | |
| 192-213 | | | | | | | | | | | | |
| 214-236 | | | | | | | | | | | | |
| 237-258 | | | | | | | | | | | | |
| 259-281 | | | | | | | | | | | | |
| 282-303 | | | | | | | | | | | | |
| 304-326 | | | | | | | | | | | | |
| 327-348 | | | | | | | | | | | | |

Gwalior

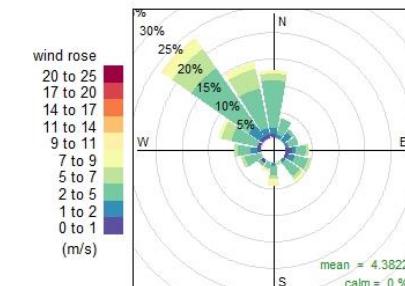
December 1000 hPa level

| Speed 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 | | | | | | | | | | | | |
| 12-33 | | | | | | | | | | | | |
| 34-56 | | | | | | | | | | | | |
| 57-78 | | | | | | | | | | | | |
| 79-101 | | | | | | | | | | | | |
| 102-123 | | | | | | | | | | | | |
| 124-146 | | | | | | | | | | | | |
| 147-168 | | | | | | | | | | | | |
| 168-191 | | | | | | | | | | | | |
| 192-213 | | | | | | | | | | | | |
| 214-236 | | | | | | | | | | | | |
| 237-258 | | | | | | | | | | | | |
| 259-281 | | | | | | | | | | | | |
| 282-303 | | | | | | | | | | | | |
| 304-326 | | | | | | | | | | | | |
| 327-348 | | | | | | | | | | | | |

Gwalior

December 925 hPa level

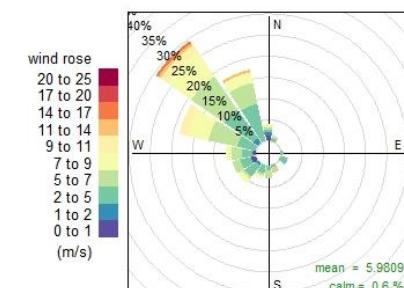
| Speed Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|------|-------|------|------|------|------|-------|-------|-------|-------|------|
| 349-11 | 0.64 | 1.27 | 8.92 | 1.27 | 0.64 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12-33 | 0 | 0.64 | 3.18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 34-56 | 0 | 1.91 | 0.64 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 57-78 | 0 | 0.64 | 1.91 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 79-101 | 1.27 | 0.64 | 1.91 | 0.64 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 102-123 | 0.64 | 1.27 | 2.55 | 0.64 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 124-146 | 0 | 0.64 | 3.18 | 0.64 | 0.64 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 147-168 | 0 | 0 | 0 | 0.64 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 168-191 | 0 | 0.64 | 1.91 | 0.64 | 0.64 | 0.64 | 0 | 0 | 0 | 0 | 0 | 0 |
| 192-213 | 0 | 0 | 1.27 | 0 | 0 | 0.64 | 0 | 0 | 0 | 0 | 0 | 0 |
| 214-236 | 0.64 | 0 | 0.64 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 237-258 | 0 | 0 | 3.18 | 0.64 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 259-281 | 0.64 | 1.27 | 2.55 | 0.64 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 282-303 | 0.64 | 0 | 5.1 | 1.91 | 0.64 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 304-326 | 0.64 | 2.55 | 13.38 | 4.46 | 1.91 | 0.64 | 0 | 0 | 0 | 0 | 0 | 0 |
| 327-348 | 0.64 | 1.27 | 7.64 | 3.82 | 1.27 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |



Gwalior

December 850 hPa level

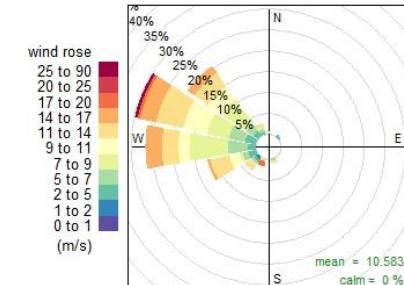
| Speed Direction | calm | 0-1 | 1-2 | 2-5 | 5-7 | 7-9 | 9-11 | 11-14 | 14-17 | 17-20 | 20-25 | 25 + |
|--------------------|------|------|------|------|------|------|------|-------|-------|-------|-------|------|
| 349-11 | 0 | 1.27 | 0.64 | 0.64 | 0.64 | 0.64 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12-33 | | 0 | 0 | 0.64 | 0.64 | 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 | 0.64 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 102-123 | | 0 | 0 | 1.91 | 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 | 0.64 | 0.64 | 0 | 0 | 0.64 | 0 | 0 | 0 | 0 |
| 168-191 | | 0 | 0 | 1.27 | 1.91 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 192-213 | | 0 | 0 | 1.91 | 0.64 | 0.64 | 0 | 0 | 0 | 0 | 0 | 0 |
| 214-236 | | 0 | 0.64 | 3.18 | 0.64 | 1.27 | 0 | 0 | 0 | 0 | 0 | 0 |
| 237-258 | | 1.27 | 0 | 2.55 | 1.91 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 259-281 | | 0.64 | 0 | 2.55 | 2.55 | 1.27 | 0 | 0 | 0 | 0 | 0 | 0 |
| 282-303 | | 0 | 0 | 4.46 | 7.01 | 5.1 | 1.91 | 0 | 0 | 0 | 0 | 0 |
| 304-326 | | 0 | 1.27 | 8.28 | 9.55 | 7.01 | 1.91 | 0.64 | 0.64 | 0 | 0 | 0 |
| 327-348 | | 0 | 0 | 8.92 | 5.1 | 2.55 | 0 | 0.64 | 0 | 0 | 0 | 0 |



Gwalior

December 700 hPa level

| Speed 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 | 0.66 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12-33 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 34-56 | | 0 | 0 | 0.66 | 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 | 0.66 | 0.66 | 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 | 0.66 | 0 | 1.32 | 0 | 0 |
| 214-236 | | 0 | 0.66 | 0.66 | 0.66 | 0.66 | 0 | 1.32 | 0 | 0 | 0 | 0 |
| 237-258 | | 0 | 0 | 1.99 | 1.32 | 0.66 | 2.65 | 4.64 | 0.66 | 0 | 0 | 0 |
| 259-281 | | 0 | 0 | 1.99 | 4.64 | 9.27 | 2.65 | 3.97 | 3.97 | 0 | 0 | 0 |
| 282-303 | | 0 | 0 | 2.65 | 3.97 | 5.3 | 5.96 | 6.62 | 3.97 | 0.66 | 0 | 0.66 |
| 304-326 | | 0 | 0 | 1.32 | 1.99 | 7.28 | 3.97 | 3.97 | 1.99 | 0 | 0 | 0 |
| 327-348 | | 0 | 0 | 0.66 | 0.66 | 0.66 | 0 | 0.66 | 0 | 0 | 0 | 0 |

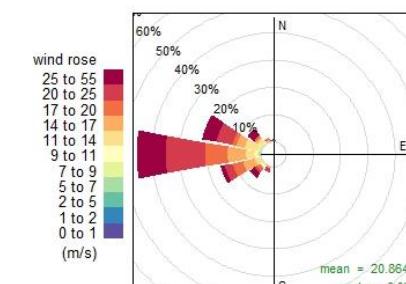


Gwalior

December

500 hPa level

| Speed 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 | | 0.76 | 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 | 0.76 | 0 | 1.52 | 0 | 0 |
| 214-236 | | 0 | 0 | 0 | 0 | 0.76 | 0.76 | 0 | 0 | 1.52 | 0.76 | 2.27 |
| 237-258 | | 0 | 0 | 0 | 0 | 0 | 0 | 2.27 | 4.55 | 3.79 | 3.03 | 1.52 |
| 259-281 | | 0 | 0 | 0 | 0.76 | 0 | 1.52 | 3.03 | 6.82 | 8.33 | 14.39 | 10.61 |
| 282-303 | | 0 | 0 | 0 | 0 | 1.52 | 0 | 4.55 | 3.03 | 1.52 | 6.06 | 5.3 |
| 304-326 | | 0 | 0 | 0 | 0 | 0.76 | 0 | 1.52 | 0.76 | 0.76 | 0 | 3.03 |
| 327-348 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.76 | 0.76 | 0 | 0 |

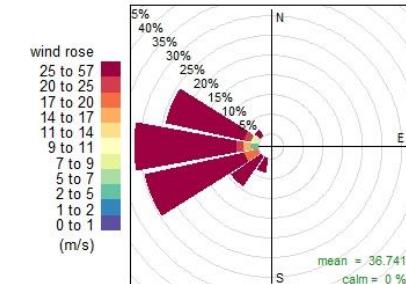


Gwalior

December

300 hPa level

| Speed 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 |
| 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 | 3.7 |
| 214-236 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9.26 |
| 237-258 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3.7 | 0 | 25.93 |
| 259-281 | | 0 | 0 | 1.85 | 0 | 0 | 0 | 0 | 1.85 | 0 | 1.85 | 25.93 |
| 282-303 | | 0 | 0 | 0 | 0 | 1.85 | 0 | 0 | 0 | 0 | 1.85 | 20.37 |
| 304-326 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.85 |
| 327-348 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

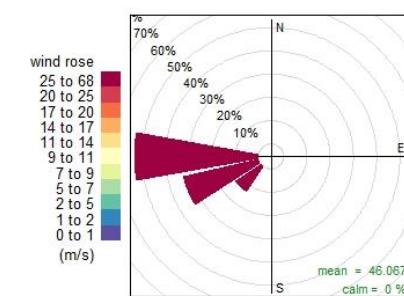


Gwalior

December

200 hPa level

| Speed 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 |
| 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 | 0 | 0 | 0 | 0 | 13.33 |
| 237-258 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33.33 |
| 259-281 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 53.33 |
| 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 |



Gwalior

December

100 hPa level

| Speed 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 | | | | | | | | | | | | |
| 12-33 | | | | | | | | | | | | |
| 34-56 | | | | | | | | | | | | |
| 57-78 | | | | | | | | | | | | |
| 79-101 | | | | | | | | | | | | |
| 102-123 | | | | | | | | | | | | |
| 124-146 | | | | | | | | | | | | |
| 147-168 | | | | | | | | | | | | |
| 168-191 | | | | | | | | | | | | |
| 192-213 | | | | | | | | | | | | |
| 214-236 | | | | | | | | | | | | |
| 237-258 | | | | | | | | | | | | |
| 259-281 | | | | | | | | | | | | |
| 282-303 | | | | | | | | | | | | |
| 304-326 | | | | | | | | | | | | |
| 327-348 | | | | | | | | | | | | |

Gwalior**42361****Station height****211****January**

| PRESSURE | HEIGHT | Hmax | Hmin | TEMP | TMAX | TMIN | DEWPT | DIR | VELO | U | V | VM |
|----------|--------|-------|-------|-------|-------|-------|-------|-----|------|------|------|------|
| SURFACE | 992.3 | 1000 | 982 | 8.7 | 19 | 2 | 6.4 | 360 | 0.2 | 0 | -0.2 | 0.4 |
| 1000 | 140 | 195 | 90 | | | | | | | | | |
| 950 | 559 | 624 | 420 | 14.1 | 26.5 | 3.8 | 5.1 | 356 | 1.6 | 0.1 | -1.6 | 4.3 |
| 925 | 790 | 850 | 670 | 13.9 | 31.6 | 4.2 | 3.1 | 325 | 1.9 | 1.1 | -1.6 | 4.3 |
| 900 | 1026 | 1088 | 943 | 13.4 | 27.2 | -0.2 | 1 | 318 | 2.4 | 1.6 | -1.8 | 4.9 |
| 850 | 1505 | 1570 | 1423 | 11.2 | 28.2 | -3.4 | -2.5 | 291 | 4 | 3.7 | -1.4 | 6.1 |
| 800 | 2009 | 2113 | 1926 | 8.9 | 25 | -4.5 | -4.9 | 282 | 5.3 | 5.2 | -1.1 | 7.2 |
| 750 | 2539 | 2640 | 2440 | 6.3 | 20.4 | -7.6 | -7.8 | 277 | 6.7 | 6.7 | -0.8 | 8.5 |
| 700 | 3102 | 3215 | 2989 | 3.3 | 15 | -9.2 | -10.9 | 274 | 8.4 | 8.4 | -0.6 | 10.1 |
| 650 | 3698 | 3830 | 3567 | 0 | 12.8 | -12.2 | -14.5 | 273 | 10.1 | 10.1 | -0.5 | 11.8 |
| 600 | 4336 | 4498 | 4187 | -3.8 | 10.2 | -17.8 | -18.2 | 271 | 12.2 | 12.2 | -0.3 | 13.8 |
| 550 | 5019 | 5230 | 4859 | -7.8 | 6.8 | -24.1 | -21.9 | 271 | 14.7 | 14.7 | -0.2 | 16.3 |
| 500 | 5752 | 5980 | 5565 | -12.6 | 4.1 | -24.3 | -26.3 | 271 | 16.6 | 16.6 | -0.2 | 18.3 |
| 450 | 6549 | 6820 | 6327 | -18 | 1.9 | -28.7 | -30.7 | 269 | 18.3 | 18.3 | 0.3 | 20 |
| 400 | 7421 | 7728 | 7167 | -23.7 | 4.1 | -35.5 | -35.1 | 270 | 20.1 | 20.1 | -0.1 | 21.7 |
| 350 | 8381 | 8740 | 8031 | -30.2 | -17.5 | -41.1 | -41 | 267 | 19.9 | 19.9 | 0.9 | 21.4 |
| 300 | 9463 | 9860 | 9158 | -37.3 | -24 | -49.3 | -48.8 | 267 | 19.7 | 19.7 | 1 | 21.3 |
| 250 | 10701 | 11093 | 10357 | -45 | -31.1 | -59.5 | -56.8 | 266 | 18.7 | 18.6 | 1.4 | 19.7 |
| 200 | 12165 | 12762 | 11777 | -53.2 | -37.2 | -67.9 | -59.1 | 265 | 15 | 14.9 | 1.4 | 15.8 |
| 175 | 13010 | 13602 | 12612 | -57.5 | -46.3 | -69.7 | -69.1 | 264 | 14.5 | 14.4 | 1.4 | 15.4 |
| 150 | 13961 | 14560 | 13546 | -62 | -49.1 | -73.5 | | 264 | 14.3 | 14.2 | 1.4 | 15.1 |
| 125 | 15065 | 15662 | 14625 | -66.9 | -56.7 | -78.7 | | 267 | 14.4 | 14.4 | 0.7 | 15.1 |
| 100 | 16397 | 17033 | 15926 | -70.2 | -58.3 | -80.5 | | 266 | 10.3 | 10.3 | 0.8 | 11 |
| 80 | 17708 | 18159 | 17235 | -70.1 | -58.5 | -79.5 | | 263 | 7 | 6.9 | 0.9 | 7.9 |
| 70 | 18499 | 19000 | 18027 | -68.3 | -52.3 | -79.7 | | 265 | 4.4 | 4.4 | 0.4 | 5.2 |
| 60 | 19432 | 19932 | 18952 | -65.1 | -52.1 | -75.9 | | 270 | 2.4 | 2.4 | 0 | 5 |
| 50 | 20559 | 21045 | 20127 | -61 | -44.3 | -71.1 | | 261 | 2 | 2 | 0.3 | 4.5 |
| 40 | 21950 | 22402 | 21527 | -57.1 | -43.9 | -67.9 | | 261 | 1.3 | 1.3 | 0.2 | 5.6 |
| 30 | 23777 | 24244 | 23306 | -53 | -34.5 | -62.1 | | 76 | 0.4 | -0.4 | -0.1 | 4.2 |
| 25 | 24957 | 25482 | 24439 | -50.5 | -28.1 | -61.7 | | 309 | 1.4 | 1.1 | -0.9 | 4 |
| 20 | 26402 | 26988 | 25845 | -48.6 | -35.9 | -61.9 | | 270 | 1.6 | 1.6 | 0 | 3.5 |
| 15 | 28259 | 28899 | 27676 | -46.9 | -35.7 | -64.1 | | 280 | 1.7 | 1.7 | -0.3 | 1.8 |
| 10 | 30929 | 31486 | 30424 | -46.3 | -38.3 | -64.9 | | | | | | |
| 7 | 33171 | 33171 | 33171 | -45.3 | -45.3 | -45.3 | | | | | | |

FREEZING LEVEL

| P | Height | H_max | H_min |
|-----|--------|-------|-------|
| 656 | 3659 | 6321 | 1578 |

FIRST TROPOPAUSE

| P | Height | Temp |
|-----|--------|-------|
| 222 | 11481 | -55.8 |

SECOND TROPOPAUSE

| P | Height | Temp |
|-----|--------|------|
| 105 | 16178 | -72 |

Gwalior**42361****Station height****211****February**

| PRESSURE | HEIGHT | Hmax | Hmin | TEMP | TMAX | TMIN | DEWPT | DIR | VELO | U | V | VM |
|----------|--------|-------|-------|-------|-------|-------|-------|-----|------|------|------|------|
| SURFACE | 990 | 998 | 951 | 11.5 | 25 | 3.8 | 7.9 | 342 | 0.3 | 0.1 | -0.3 | 0.5 |
| 1000 | 113 | 153 | 66 | | | | | | | | | |
| 950 | 543 | 608 | 370 | 16.9 | 30 | 1.8 | 6 | 4 | 1.6 | -0.1 | -1.6 | 5.2 |
| 925 | 775 | 832 | 600 | 16.7 | 28 | 1 | 4 | 336 | 1.7 | 0.7 | -1.6 | 5.2 |
| 900 | 1013 | 1090 | 928 | 15.7 | 27 | 3.8 | 2 | 315 | 2.1 | 1.5 | -1.5 | 5.7 |
| 850 | 1496 | 1579 | 1401 | 13.1 | 26.6 | 3.2 | -1.3 | 288 | 4.1 | 3.9 | -1.3 | 6.9 |
| 800 | 2003 | 2629 | 1907 | 10 | 23.8 | 0.6 | -3.8 | 282 | 5.8 | 5.7 | -1.2 | 8.4 |
| 750 | 2533 | 2690 | 2400 | 6.7 | 22.2 | -6.9 | -6.3 | 275 | 7.4 | 7.4 | -0.7 | 10 |
| 700 | 3097 | 3228 | 2978 | 3.2 | 19.4 | -6.5 | -9.8 | 272 | 9.2 | 9.2 | -0.4 | 11.6 |
| 650 | 3692 | 3870 | 3557 | -0.4 | 15.4 | -10.1 | -13.9 | 271 | 10.8 | 10.8 | -0.2 | 13.4 |
| 600 | 4330 | 4478 | 4160 | -4.2 | 7.2 | -16.1 | -17.4 | 270 | 13.1 | 13.1 | 0 | 15.6 |
| 550 | 5013 | 5500 | 4819 | -8.3 | 6.3 | -21.5 | -21.6 | 270 | 15.6 | 15.6 | 0 | 18 |
| 500 | 5743 | 5951 | 5530 | -13.2 | 3 | -28.1 | -25.7 | 270 | 17.9 | 17.9 | -0.1 | 20.7 |
| 450 | 6537 | 6800 | 5580 | -18.4 | -2.1 | -38.1 | -30.6 | 271 | 20.2 | 20.2 | -0.4 | 23 |
| 400 | 7406 | 7671 | 7138 | -23.9 | -5.7 | -37.3 | -35.6 | 272 | 22.1 | 22.1 | -0.6 | 24.8 |
| 350 | 8368 | 8683 | 8066 | -30.3 | -9.4 | -43.7 | -41.8 | 274 | 22.8 | 22.7 | -1.6 | 25.2 |
| 300 | 9449 | 9818 | 9099 | -37.1 | -14.8 | -50.5 | -47.6 | 276 | 21.2 | 21.1 | -2.1 | 23.1 |
| 250 | 10687 | 11181 | 10302 | -44.6 | -19.2 | -58.9 | -52.8 | 274 | 19 | 19 | -1.2 | 20.9 |
| 200 | 12152 | 12620 | 11762 | -52.8 | -29.1 | -67 | -59.5 | 272 | 16 | 16 | -0.6 | 17.4 |
| 175 | 13001 | 13507 | 12558 | -57.2 | -28.9 | -73.1 | -62.3 | 273 | 14.2 | 14.2 | -0.8 | 15.6 |
| 150 | 13963 | 14541 | 13509 | -62 | -40.6 | -74.5 | -66.5 | 272 | 12.2 | 12.2 | -0.5 | 13.2 |
| 125 | 15068 | 15523 | 14611 | -66.7 | -49.1 | -76.9 | -68.7 | 271 | 8.7 | 8.7 | -0.1 | 9.5 |
| 100 | 16398 | 16910 | 15978 | -71.1 | -52.5 | -83.3 | | 275 | 7.6 | 7.6 | -0.6 | 8.1 |
| 80 | 17710 | 18170 | 17296 | -71.6 | -58.9 | -85.7 | | 269 | 5 | 5 | 0.1 | 5.6 |
| 70 | 18511 | 18989 | 18071 | -69.4 | -56.1 | -81.7 | | 272 | 3.4 | 3.4 | -0.1 | 4.8 |
| 60 | 19434 | 19969 | 18980 | -65.9 | -50.5 | -77.5 | | 282 | 1.9 | 1.9 | -0.4 | 3.8 |
| 50 | 20543 | 21092 | 20079 | -61.6 | -46.9 | -76.5 | | 291 | 1.4 | 1.3 | -0.5 | 3.4 |
| 40 | 21940 | 22453 | 21504 | -57.4 | -43.5 | -69.1 | | 162 | 0.6 | -0.2 | 0.6 | 4.7 |
| 30 | 23766 | 24335 | 23340 | -53.6 | -43.9 | -64.5 | | 114 | 1.2 | -1.1 | 0.5 | 4.1 |
| 25 | 24927 | 25479 | 24400 | -51.4 | -41.7 | -61.1 | | 239 | 0.6 | 0.5 | 0.3 | 4 |
| 20 | 26397 | 26997 | 25864 | -50.1 | -35.5 | -70.1 | | 239 | 1.2 | 1 | 0.6 | 2.6 |
| 15 | 28253 | 28924 | 27670 | -48.1 | -37.9 | -57.1 | | 277 | 1.7 | 1.7 | -0.2 | 1.8 |
| 10 | 30948 | 31373 | 30497 | -46.2 | -40.1 | -52.3 | | 279 | 4.3 | 4.2 | -0.7 | 4.3 |
| 7 | 33193 | 33746 | 32845 | -47.9 | -44.9 | -51.1 | | | | | | |

FREEZING LEVEL

| P | Height | H_max | H_min |
|-----|--------|-------|-------|
| 657 | 3635 | 6600 | 2040 |

FIRST TROPOPAUSE

| P | Height | Temp |
|-----|--------|-------|
| 215 | 11676 | -57.1 |

SECOND ROPOPAUSE

| P | Height | Temp |
|-----|--------|-------|
| 102 | 16367 | -72.5 |

Gwalior

42361

Station height

211

March

| PRESSURE | HEIGHT | Hmax | Hmin | TEMP | TMAX | TMIN | DEWPT | DIR | VELO | U | V | VM |
|----------|--------|-------|-------|-------|-------|-------|-------|-----|------|------|------|------|
| SURFACE | 987 | 998 | 978 | 16.9 | 28.4 | 8.4 | 10.2 | 315 | 0.3 | 0.2 | -0.2 | 0.5 |
| 1000 | 88 | 150 | 22 | | | | | | | | | |
| 950 | 524 | 805 | 400 | 21.7 | 35 | 8 | 7.7 | 352 | 1.5 | 0.2 | -1.5 | 5.5 |
| 925 | 761 | 978 | 670 | 21.9 | 34.3 | 10.6 | 6 | 338 | 1.8 | 0.7 | -1.7 | 5.5 |
| 900 | 1001 | 1077 | 797 | 20.7 | 33.4 | 6.2 | 3.8 | 315 | 2.5 | 1.8 | -1.8 | 6.1 |
| 850 | 1491 | 1561 | 1292 | 17.6 | 31.3 | 0.8 | 1 | 290 | 4.6 | 4.3 | -1.6 | 7.3 |
| 800 | 2005 | 2087 | 1885 | 13.9 | 27.7 | -3.3 | -1.6 | 283 | 6.7 | 6.5 | -1.5 | 8.9 |
| 750 | 2543 | 2640 | 2420 | 9.8 | 23.1 | -4 | -4.5 | 279 | 8.5 | 8.4 | -1.4 | 10.8 |
| 700 | 3113 | 3223 | 2988 | 5.7 | 18 | -4.7 | -7.5 | 276 | 10 | 9.9 | -1.1 | 12.3 |
| 650 | 3712 | 3846 | 3570 | 1.5 | 16.9 | -8.1 | -11.7 | 274 | 11.4 | 11.4 | -0.7 | 13.7 |
| 600 | 4353 | 4513 | 4196 | -2.6 | 12.9 | -13.3 | -15.7 | 272 | 12.7 | 12.7 | -0.4 | 15.1 |
| 550 | 5038 | 5250 | 4858 | -6.9 | 10.2 | -16.5 | -19.6 | 271 | 14.1 | 14.1 | -0.3 | 16.5 |
| 500 | 5773 | 6000 | 5576 | -11.7 | 6.8 | -20.3 | -23.7 | 271 | 16.2 | 16.2 | -0.2 | 18.4 |
| 450 | 6573 | 6839 | 6350 | -17.1 | 2.2 | -27.1 | -28.2 | 271 | 17.9 | 17.9 | -0.3 | 20 |
| 400 | 7445 | 7774 | 7198 | -23.3 | -0.6 | -39.1 | -34 | 272 | 19.6 | 19.6 | -0.6 | 21.8 |
| 350 | 8408 | 8800 | 8151 | -30.1 | -9.6 | -43.3 | -39.9 | 271 | 19.2 | 19.2 | -0.4 | 21.2 |
| 300 | 9490 | 9973 | 9206 | -37.6 | -17.1 | -51.5 | -46.9 | 273 | 19.2 | 19.2 | -0.9 | 21.3 |
| 250 | 10724 | 11300 | 10435 | -45.7 | -25.6 | -58.1 | -54.1 | 273 | 19.3 | 19.3 | -1 | 21 |
| 200 | 12182 | 12877 | 11842 | -53 | -34.4 | -67.9 | -59.5 | 273 | 18.4 | 18.4 | -0.9 | 19.7 |
| 175 | 13029 | 13762 | 12669 | -56.7 | -43.9 | -70.5 | -58.2 | 271 | 17.5 | 17.5 | -0.4 | 18.4 |
| 150 | 13994 | 14786 | 13583 | -61 | -47.4 | -76.9 | -60.3 | 270 | 15.3 | 15.3 | 0.1 | 16 |
| 125 | 15107 | 15987 | 14686 | -65.9 | -45.8 | -79.3 | -70.8 | 269 | 14 | 14 | 0.3 | 14.6 |
| 100 | 16442 | 16935 | 16009 | -69.9 | -55.9 | -83.3 | | 268 | 10.8 | 10.8 | 0.3 | 11.5 |
| 80 | 17763 | 18277 | 17311 | -70.4 | -48.5 | -83.9 | | 271 | 7.5 | 7.5 | -0.1 | 8.2 |
| 70 | 18551 | 19077 | 15295 | -68.9 | -47.1 | -80.3 | | 270 | 5.9 | 5.9 | 0 | 7 |
| 60 | 19409 | 19993 | 18992 | -65.6 | -42.9 | -81.7 | | 272 | 3.4 | 3.4 | -0.1 | 5.1 |
| 50 | 20611 | 21217 | 20089 | -61 | -45.1 | -79.5 | | 282 | 2.4 | 2.3 | -0.5 | 4.5 |
| 40 | 22014 | 22711 | 21449 | -56.3 | -43.5 | -71.7 | | 297 | 0.7 | 0.6 | -0.3 | 3.5 |
| 30 | 23862 | 24652 | 23254 | -52.1 | -37.1 | -65.3 | | 329 | 0.6 | 0.3 | -0.5 | 4.9 |
| 25 | 25039 | 25870 | 24400 | -49.6 | -32.7 | -62.9 | | 300 | 0.8 | 0.7 | -0.4 | 4.1 |
| 20 | 26511 | 27722 | 25417 | -47.2 | -24.5 | -60.5 | | 264 | 1 | 1 | 0.1 | 3.5 |
| 15 | 28410 | 29298 | 27579 | -45.1 | -19.7 | -58.3 | | 273 | 2 | 2 | -0.1 | 2.6 |
| 10 | 31191 | 32156 | 30171 | -41.9 | -24.5 | -53.9 | | | | | | |
| 7 | 33422 | 33728 | 32933 | -42.8 | -38.1 | -46.5 | | | | | | |

FREEZING LEVEL

| P | Height | H_max | H_min |
|-----|--------|-------|-------|
| 633 | 3943 | 6568 | 2300 |

FIRST TROPOPAUSE

| P | Height | Temp |
|-----|--------|-------|
| 215 | 11716 | -57.2 |

SECOND TROPOPAUSE

| P | Height | Temp |
|-----|--------|-------|
| 101 | 16457 | -71.7 |

Gwalior

42361

Station height

211

April

| PRESSURE | HEIGHT | Hmax | Hmin | TEMP | TMAX | TMIN | DEWPt | DIR | VELO | U | V | VM |
|----------|--------|-------|-------|-------|-------|-------|-------|-----|------|------|------|------|
| SURFACE | 983.2 | 999 | 976 | 22.7 | 36.2 | 13.4 | 10.8 | 297 | 0.4 | 0.4 | -0.2 | 0.7 |
| 1000 | 46 | 103 | -12 | | | | | | | | | |
| 950 | 493 | 593 | 327 | 27.3 | 39 | 16.2 | 7.6 | 326 | 1.1 | 0.6 | -0.9 | 5.8 |
| 925 | 737 | 816 | 590 | 27.8 | 37.4 | 15.6 | 6.5 | 325 | 1.2 | 0.7 | -1 | 6.2 |
| 900 | 980 | 1070 | 870 | 26.2 | 38 | 13.2 | 5 | 317 | 2.3 | 1.6 | -1.7 | 6.4 |
| 850 | 1480 | 1588 | 1372 | 22.7 | 35.4 | 10.6 | 2.5 | 298 | 3.6 | 3.2 | -1.7 | 6.6 |
| 800 | 2002 | 2096 | 1892 | 18.6 | 30.6 | 7.4 | 0 | 289 | 5.3 | 5 | -1.7 | 7.7 |
| 750 | 2547 | 2700 | 2390 | 13.9 | 26.6 | 3.8 | -2.5 | 282 | 6.8 | 6.7 | -1.4 | 9 |
| 700 | 3126 | 3260 | 3017 | 9 | 19.8 | -2.1 | -5.6 | 277 | 8.1 | 8 | -1 | 10.3 |
| 650 | 3731 | 3930 | 3480 | 4.1 | 14.4 | -9.3 | -8.8 | 274 | 8.6 | 8.6 | -0.6 | 11.1 |
| 600 | 4379 | 4556 | 4223 | -0.5 | 10.8 | -16.5 | -13 | 273 | 9.6 | 9.6 | -0.5 | 11.9 |
| 550 | 5071 | 5280 | 4900 | -4.9 | 7.8 | -18.9 | -17.7 | 272 | 10.3 | 10.3 | -0.3 | 12.7 |
| 500 | 5812 | 6034 | 5249 | -9.7 | 4.5 | -25.5 | -22.8 | 272 | 11.5 | 11.5 | -0.4 | 13.9 |
| 450 | 6618 | 6850 | 6354 | -15.2 | -0.4 | -33.1 | -27.8 | 273 | 12.5 | 12.5 | -0.6 | 14.9 |
| 400 | 7497 | 7764 | 7168 | -21.5 | -6 | -39.9 | -32.9 | 273 | 14.3 | 14.3 | -0.8 | 16.4 |
| 350 | 8466 | 8754 | 8066 | -28.4 | -12 | -46.9 | -38.7 | 273 | 15.4 | 15.4 | -0.7 | 17.6 |
| 300 | 9555 | 9901 | 9081 | -36 | -15.7 | -50.3 | -45.3 | 272 | 16.6 | 16.6 | -0.7 | 18.5 |
| 250 | 10799 | 11224 | 10434 | -44.1 | -29.5 | -58.1 | -54.2 | 272 | 16.4 | 16.4 | -0.6 | 18.3 |
| 200 | 12270 | 12773 | 11829 | -51.6 | -37.5 | -65.5 | -60.7 | 271 | 16.6 | 16.6 | -0.3 | 18.2 |
| 175 | 13127 | 13640 | 12629 | -55.2 | -39.7 | -72.3 | -61.6 | 270 | 15.7 | 15.7 | -0.1 | 17 |
| 150 | 14096 | 14625 | 13524 | -59.7 | -42.9 | -75.9 | -62.1 | 267 | 14.1 | 14.1 | 0.7 | 15 |
| 125 | 15215 | 15791 | 14573 | -65.2 | -48.9 | -77.7 | | 269 | 12.1 | 12.1 | 0.3 | 12.7 |
| 100 | 16552 | 17178 | 15843 | -69.7 | -46.1 | -80.9 | | 269 | 8.8 | 8.8 | 0.1 | 9.7 |
| 80 | 17868 | 18572 | 17273 | -70.5 | -43.9 | -81.7 | | 272 | 5.3 | 5.3 | -0.2 | 6.9 |
| 70 | 18664 | 19380 | 18090 | -68.6 | -42.1 | -80.9 | | 276 | 3.7 | 3.7 | -0.4 | 6.1 |
| 60 | 19225 | 19983 | 18963 | -64.8 | -40.1 | -78.7 | | 287 | 2.1 | 2 | -0.6 | 5.2 |
| 50 | 20717 | 21498 | 20046 | -60.1 | -40.1 | -71.9 | | 312 | 1.3 | 1 | -0.9 | 4.6 |
| 40 | 22124 | 22818 | 21417 | -55 | -38.3 | -69.9 | | 98 | 0.7 | -0.7 | 0.1 | 4 |
| 30 | 23981 | 24698 | 23234 | -50.2 | -32.1 | -62.5 | | 27 | 0.7 | -0.3 | -0.6 | 3.2 |
| 25 | 25153 | 25830 | 24410 | -48.3 | -37.3 | -58.9 | | 328 | 0.9 | 0.5 | -0.8 | 3.2 |
| 20 | 26630 | 27465 | 25865 | -46.1 | -33.9 | -58.5 | | 292 | 1.1 | 1 | -0.4 | 3.4 |
| 15 | 28555 | 29460 | 28039 | -43.5 | -25.3 | -56.7 | | 273 | 2 | 2 | -0.1 | 3.7 |
| 10 | 31369 | 32095 | 30765 | -40.2 | -33.7 | -57.5 | | 283 | 0.9 | 0.9 | -0.2 | 2.2 |
| 7 | 34115 | 34585 | 33407 | -36.2 | -29.7 | -46.7 | | 170 | 2.3 | -0.4 | 2.3 | 2.3 |

FREEZING LEVEL

| P | Height | H_max | H_min |
|-----|--------|-------|-------|
| 605 | 4327 | 6576 | 2890 |

FIRST TROPOPAUSE

| P | Height | Temp |
|-----|--------|-------|
| 221 | 11651 | -54.1 |

SECOND TROPOPAUSE

| P | Height | Temp |
|----|--------|-------|
| 99 | 16682 | -71.8 |

Gwalior

42361

Station height

211

May

| PRESSURE | HEIGHT | Hmax | Hmin | TEMP | TMAX | TMIN | DEWP | DIR | VELO | U | V | VM |
|----------|--------|-------|-------|-------|-------|-------|-------|-----|------|------|------|------|
| SURFACE | 979 | 988 | 925 | 28.2 | 38.6 | 20.4 | 14.8 | 277 | 0.8 | 0.8 | -0.1 | 1.2 |
| 1000 | 14 | 63 | -56 | | | | | | | | | |
| 950 | 462 | 551 | 310 | 30 | 42 | 15.4 | 12.5 | 281 | 2 | 2 | -0.4 | 6.4 |
| 925 | 705 | 778 | 590 | 30 | 43.8 | 18.4 | 11 | 290 | 3.3 | 3.1 | -1.1 | 7.4 |
| 900 | 954 | 1051 | 868 | 28.8 | 41 | 15.2 | 9.7 | 292 | 3.5 | 3.2 | -1.3 | 7.1 |
| 850 | 1459 | 1539 | 1378 | 25.4 | 38.2 | 9.8 | 7 | 295 | 4.5 | 4.1 | -1.9 | 7.2 |
| 800 | 1986 | 2081 | 1903 | 21.4 | 33.6 | 8.2 | 4.6 | 296 | 5.1 | 4.6 | -2.2 | 7.5 |
| 750 | 2537 | 2658 | 2400 | 16.8 | 33.5 | 2.6 | 1.7 | 293 | 6 | 5.5 | -2.3 | 8.5 |
| 700 | 3122 | 3263 | 3000 | 11.8 | 32.9 | -4.7 | -1.4 | 290 | 6.6 | 6.2 | -2.2 | 9.3 |
| 650 | 3733 | 3898 | 3593 | 6.4 | 19.6 | -10.3 | -5 | 287 | 6.7 | 6.4 | -1.9 | 9.5 |
| 600 | 4385 | 4564 | 4205 | 1.5 | 15.8 | -14.5 | -9.6 | 286 | 7.1 | 6.8 | -1.9 | 9.9 |
| 550 | 5082 | 5300 | 4865 | -3 | 13.6 | -16.3 | -15 | 284 | 7.2 | 7 | -1.8 | 9.9 |
| 500 | 5827 | 6060 | 5601 | -7.5 | 8.2 | -26.4 | -20.4 | 282 | 7.8 | 7.6 | -1.6 | 10.6 |
| 450 | 6642 | 6900 | 6394 | -12.3 | 5 | -31.2 | -25.1 | 280 | 8.9 | 8.8 | -1.6 | 11.4 |
| 400 | 7530 | 7875 | 7280 | -17.9 | -1.3 | -38.8 | -29.5 | 279 | 10.1 | 10 | -1.6 | 12.4 |
| 350 | 8515 | 8895 | 8226 | -24.4 | -7.5 | -46.2 | -35.3 | 276 | 11.7 | 11.6 | -1.3 | 13.6 |
| 300 | 9607 | 9934 | 9236 | -31.4 | -14.9 | -52.2 | -43.1 | 272 | 12.6 | 12.6 | -0.4 | 14.5 |
| 250 | 10891 | 11458 | 10408 | -40 | -25.1 | -54.5 | -51.5 | 266 | 13.3 | 13.3 | 0.9 | 15 |
| 200 | 12380 | 13040 | 11832 | -49.7 | -34.8 | -73 | -57.9 | 264 | 12.1 | 12 | 1.2 | 13.8 |
| 175 | 13242 | 13952 | 12675 | -55.1 | -32.9 | -71.1 | -58.2 | 263 | 11.3 | 11.2 | 1.4 | 12.8 |
| 150 | 14209 | 14966 | 13636 | -60.9 | -36.2 | -74.9 | -58.9 | 261 | 10 | 9.9 | 1.6 | 11.3 |
| 125 | 15321 | 16123 | 14816 | -67.3 | -53.1 | -79.1 | | 259 | 7.7 | 7.6 | 1.5 | 9.1 |
| 100 | 16644 | 17501 | 16096 | -72.4 | -58.9 | -83.7 | | 261 | 5.6 | 5.5 | 0.9 | 7 |
| 80 | 17957 | 18855 | 17370 | -72.3 | -54.5 | -83.1 | | 257 | 1.3 | 1.3 | 0.3 | 4.7 |
| 70 | 18750 | 19700 | 18140 | -69.3 | -49.9 | -82.1 | | 45 | 0.1 | -0.1 | -0.1 | 4.6 |
| 60 | 18874 | 19996 | 19072 | -64.5 | -43.9 | -78.7 | | 69 | 1.4 | -1.3 | -0.5 | 4.2 |
| 50 | 20803 | 21880 | 20199 | -58.9 | -38.9 | -73.9 | | 85 | 2.4 | -2.4 | -0.2 | 4 |
| 40 | 22222 | 23391 | 21603 | -53.5 | -32.9 | -69.3 | | 92 | 2.6 | -2.6 | 0.1 | 3.6 |
| 30 | 24088 | 25182 | 23453 | -48.2 | -26.1 | -58.5 | | 86 | 2.8 | -2.8 | -0.2 | 3.7 |
| 25 | 25288 | 26504 | 24727 | -46 | -22.9 | -56.1 | | 82 | 2.1 | -2.1 | -0.3 | 3.3 |
| 20 | 26771 | 27811 | 26207 | -43.9 | -28.7 | -52.1 | | 93 | 1.8 | -1.8 | 0.1 | 3.3 |
| 15 | 28717 | 29768 | 28128 | -41.9 | -28.9 | -50.7 | | 66 | 1 | -0.9 | -0.4 | 3.2 |
| 10 | 31504 | 32578 | 30877 | -38.5 | -28.5 | -48.5 | | 98 | 1.5 | -1.5 | 0.2 | 3.2 |
| 7 | 34079 | 35074 | 33291 | -34.9 | -28.1 | -41.7 | | 198 | 1.6 | 0.5 | 1.5 | 2.6 |

FREEZING LEVEL

| P | Height | H_max | H_min |
|-----|--------|-------|-------|
| 584 | 4615 | 6830 | 2670 |

FIRST TROPOPAUSE

| P | Height | Temp |
|-----|--------|-------|
| 203 | 12336 | -53.5 |

SECOND TROPOPAUSE

| P | Height | Temp |
|----|--------|-------|
| 97 | 16904 | -74.2 |

Gwalior**42361****Station height****211****June**

| PRESSURE | HEIGHT | Hmax | Hmin | TEMP | TMAX | TMIN | DEWPT | DIR | VELO | U | V | VM |
|----------|--------|-------|-------|-------|-------|-------|-------|-----|------|------|------|-----|
| SURFACE | 975.3 | 985 | 968 | 30.2 | 37.4 | 22.6 | 20.2 | 265 | 1.2 | 1.2 | 0.1 | 1.8 |
| 1000 | -7 | 33 | -62 | | | | | | | | | |
| 950 | 429 | 530 | 280 | 29.9 | 38 | 20.8 | 17.7 | 272 | 3.2 | 3.2 | -0.1 | 6.6 |
| 925 | 672 | 763 | 500 | 28.9 | 38.6 | 18.8 | 16.9 | 277 | 3.3 | 3.3 | -0.4 | 7.2 |
| 900 | 923 | 1017 | 819 | 27.9 | 38 | 16.8 | 15 | 287 | 4.1 | 3.9 | -1.2 | 7.7 |
| 850 | 1427 | 1525 | 1319 | 24.8 | 35.2 | 11.4 | 12.1 | 302 | 4.1 | 3.5 | -2.2 | 7.3 |
| 800 | 1957 | 2053 | 1850 | 21.1 | 32.6 | 8.8 | 9.6 | 314 | 4 | 2.9 | -2.8 | 6.9 |
| 750 | 2510 | 2608 | 2360 | 17 | 26.9 | 5.4 | 6.6 | 320 | 4 | 2.6 | -3.1 | 6.8 |
| 700 | 3094 | 3197 | 2963 | 12.5 | 23.4 | 1.4 | 3 | 320 | 3.9 | 2.5 | -3 | 6.8 |
| 650 | 3710 | 3827 | 3530 | 8.1 | 18.8 | -8.2 | -1.1 | 322 | 3.9 | 2.4 | -3.1 | 6.8 |
| 600 | 4367 | 4486 | 4208 | 3.6 | 16.4 | -12.7 | -5.6 | 316 | 3.6 | 2.5 | -2.6 | 6.5 |
| 550 | 5072 | 5240 | 4893 | -0.5 | 11.8 | -15 | -9.7 | 307 | 3.4 | 2.7 | -2 | 6.4 |
| 500 | 5824 | 5979 | 5627 | -4.2 | 5.2 | -19.3 | -13.5 | 288 | 3.2 | 3 | -1 | 6.2 |
| 450 | 6653 | 6840 | 6425 | -8.1 | 6.8 | -21.1 | -17.9 | 279 | 3 | 3 | -0.5 | 6.5 |
| 400 | 7557 | 7764 | 7307 | -12.7 | -1.3 | -25.1 | -23.3 | 273 | 3.3 | 3.3 | -0.2 | 7.2 |
| 350 | 8554 | 8882 | 8286 | -18.5 | -6.5 | -32.5 | -29.2 | 273 | 3.4 | 3.4 | -0.2 | 7.2 |
| 300 | 9668 | 9972 | 9393 | -26 | -13.9 | -41.1 | -36.2 | 265 | 3.5 | 3.5 | 0.3 | 7.4 |
| 250 | 10995 | 11360 | 10629 | -35.3 | -23.3 | -48.1 | -44.4 | 258 | 3.8 | 3.7 | 0.8 | 7.1 |
| 200 | 12512 | 12886 | 12076 | -47.2 | -30.9 | -62.1 | -55 | 244 | 3.2 | 2.9 | 1.4 | 6.8 |
| 175 | 13383 | 13777 | 12946 | -54.1 | -35.9 | -67.7 | -59.4 | 235 | 2.8 | 2.3 | 1.6 | 6.7 |
| 150 | 14350 | 14771 | 13849 | -61.7 | -41.2 | -75.5 | -66 | 221 | 2.1 | 1.4 | 1.6 | 6.6 |
| 125 | 15457 | 15918 | 14928 | -69.4 | -46.5 | -82.1 | -74.3 | 162 | 1.3 | -0.4 | 1.2 | 5.9 |
| 100 | 16761 | 17279 | 16189 | -75.1 | -60.9 | -87.1 | | 84 | 2 | -2 | -0.2 | 5.4 |
| 80 | 18055 | 18664 | 17489 | -74.5 | -52.1 | -86.9 | | 80 | 3.9 | -3.8 | -0.7 | 5.1 |
| 70 | 18836 | 19500 | 18271 | -71 | -52.1 | -86.5 | | 83 | 4.8 | -4.8 | -0.6 | 5.5 |
| 60 | 18776 | 19993 | 19189 | -66 | -46.1 | -82.1 | | 83 | 5.7 | -5.7 | -0.7 | 6.1 |
| 50 | 20877 | 21648 | 20190 | -59.4 | -39.3 | -72.5 | | 86 | 5.8 | -5.8 | -0.4 | 6.3 |
| 40 | 22293 | 23111 | 21601 | -54.1 | -33.3 | -64.5 | | 84 | 6.4 | -6.4 | -0.7 | 6.8 |
| 30 | 24137 | 25025 | 23461 | -49.4 | -34.9 | -60.1 | | 89 | 6.9 | -6.9 | -0.1 | 7.3 |
| 25 | 25323 | 26240 | 24630 | -46.8 | -31.3 | -58.7 | | 88 | 7.1 | -7.1 | -0.2 | 7.8 |
| 20 | 26828 | 27763 | 26107 | -44.6 | -32.7 | -54.7 | | 87 | 8 | -8 | -0.4 | 8.4 |
| 15 | 28747 | 29768 | 28002 | -42.3 | -29.7 | -54.5 | | 89 | 8.1 | -8.1 | -0.1 | 8.3 |
| 10 | 31580 | 32162 | 30840 | -37.8 | -24.9 | -49.5 | | 95 | 6.3 | -6.3 | 0.6 | 6.6 |
| 7 | 34105 | 34363 | 33801 | -34.3 | -29.3 | -43.1 | | | | | | |

FREEZING LEVEL

| P | Height | H_max | H_min |
|-----|--------|-------|-------|
| 553 | 5044 | 6980 | 3145 |

FIRST TROPOPAUSE

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

SECOND TROPOPAUSE

| P | Height | Temp |
|----|--------|-------|
| 98 | 16930 | -76.9 |

Gwalior

42361

Station height

211

July

| PRESSURE | HEIGHT | Hmax | Hmin | TEMP | TMAX | TMIN | DEWP | DIR | VELO | U | V | VM |
|----------|--------|-------|-------|-------|-------|-------|-------|-----|------|-------|------|------|
| SURFACE | 975.2 | 982 | 969 | 28.1 | 35.4 | 22.8 | 23.9 | 264 | 0.9 | 0.9 | 0.1 | 1.5 |
| 1000 | -20 | 28 | -56 | | | | | | | | | |
| 950 | 421 | 565 | 310 | 27.3 | 35.4 | 18.8 | 22.7 | 266 | 2.8 | 2.8 | 0.2 | 6.2 |
| 925 | 662 | 723 | 550 | 26.3 | 39 | 16 | 21.8 | 268 | 2.8 | 2.8 | 0.1 | 7.4 |
| 900 | 915 | 988 | 853 | 25.2 | 37 | 14.6 | 20.4 | 282 | 3.4 | 3.3 | -0.7 | 7.3 |
| 850 | 1415 | 1487 | 1349 | 22.5 | 33.2 | 9.4 | 17.9 | 301 | 2.6 | 2.2 | -1.3 | 6.7 |
| 800 | 1941 | 2026 | 1804 | 19.4 | 30 | -0.3 | 15.4 | 331 | 1.8 | 0.9 | -1.6 | 6 |
| 750 | 2492 | 2610 | 2350 | 16.1 | 26 | -5.6 | 12.3 | 353 | 1.6 | 0.2 | -1.6 | 5.6 |
| 700 | 3077 | 3188 | 2932 | 12.8 | 21.8 | -1.9 | 8.4 | 7 | 1.6 | -0.2 | -1.6 | 5.4 |
| 650 | 3694 | 3830 | 3510 | 9.5 | 19.2 | -3.7 | 4.4 | 24 | 1.2 | -0.5 | -1.1 | 5 |
| 600 | 4356 | 4513 | 4150 | 6 | 15.3 | -7.5 | -0.3 | 37 | 1 | -0.6 | -0.8 | 4.9 |
| 550 | 5068 | 5248 | 4850 | 2.3 | 14.3 | -11.5 | -4.3 | 63 | 0.9 | -0.8 | -0.4 | 4.7 |
| 500 | 5829 | 6043 | 5603 | -1.5 | 12.7 | -17.5 | -8.6 | 95 | 1.1 | -1.1 | 0.1 | 4.9 |
| 450 | 6666 | 6920 | 6410 | -5.8 | 7.8 | -18 | -13.7 | 101 | 1.5 | -1.5 | 0.3 | 5.1 |
| 400 | 7578 | 7842 | 7295 | -10.7 | 1.8 | -24.9 | -19.2 | 103 | 2.3 | -2.2 | 0.5 | 5.2 |
| 350 | 8591 | 8883 | 8000 | -16.9 | -4.1 | -36.3 | -26 | 100 | 2.7 | -2.7 | 0.5 | 5 |
| 300 | 9702 | 9972 | 9382 | -24.7 | -12.3 | -45.3 | -33.5 | 94 | 3 | -3 | 0.2 | 5.1 |
| 250 | 11035 | 11365 | 10578 | -34.5 | -24.9 | -54.8 | -42.6 | 93 | 3.6 | -3.6 | 0.2 | 5.6 |
| 200 | 12555 | 12921 | 11975 | -46.9 | -37.5 | -66.1 | -54.3 | 91 | 4.9 | -4.9 | 0.1 | 6.8 |
| 175 | 13427 | 13814 | 12895 | -54.4 | -42.1 | -75.1 | -58.8 | 86 | 5.3 | -5.3 | -0.4 | 7.2 |
| 150 | 14396 | 14807 | 13790 | -62.2 | -48.1 | -79.5 | -65.9 | 80 | 6.7 | -6.6 | -1.2 | 8.3 |
| 125 | 15497 | 15977 | 15031 | -70.1 | -48.2 | -83.1 | -70.2 | 73 | 7.7 | -7.4 | -2.3 | 9 |
| 100 | 16798 | 17383 | 16361 | -75.4 | -60.1 | -89.5 | | 72 | 9.1 | -8.7 | -2.8 | 10.1 |
| 80 | 18091 | 18644 | 17609 | -73.7 | -50.3 | -88.1 | | 75 | 10.1 | -9.8 | -2.6 | 10.5 |
| 70 | 18881 | 19468 | 18350 | -69.9 | -45.5 | -82.7 | | 81 | 9.7 | -9.6 | -1.6 | 10 |
| 60 | 18641 | 19996 | 19004 | -65 | -46.5 | -81.1 | | 84 | 8.9 | -8.8 | -1 | 9.3 |
| 50 | 20932 | 21676 | 20168 | -59.7 | -42.5 | -73.3 | | 84 | 8.2 | -8.2 | -0.9 | 8.5 |
| 40 | 22331 | 23195 | 21654 | -55 | -36.3 | -69.7 | | 80 | 8.7 | -8.6 | -1.5 | 9 |
| 30 | 24173 | 25011 | 23453 | -50.7 | -34.9 | -64.7 | | 83 | 10.1 | -10 | -1.2 | 10.2 |
| 25 | 25355 | 26210 | 24613 | -48.4 | -36.9 | -61.1 | | 86 | 10.3 | -10.3 | -0.8 | 10.5 |
| 20 | 26829 | 27818 | 26067 | -46.1 | -32.3 | -57.1 | | 88 | 10.1 | -10.1 | -0.4 | 10.6 |
| 15 | 28754 | 29812 | 28068 | -43.6 | -28.5 | -52.9 | | 88 | 10.3 | -10.3 | -0.4 | 10.5 |
| 10 | 31439 | 32289 | 30723 | -40.9 | -23.9 | -48.9 | | 87 | 5.1 | -5.1 | -0.3 | 5.2 |
| 7 | 33814 | 33914 | 33749 | -41.8 | -39.7 | -44.7 | | | | | | |

FREEZING LEVEL

| P | Height | H_max | H_min |
|-----|--------|-------|-------|
| 522 | 5517 | 6960 | 3450 |

FIRST TROPOPAUSE

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

SECOND TROPOPAUSE

| P | Height | Temp |
|-----|--------|-------|
| 101 | 16765 | -77.2 |

Gwalior

42361

Station height

211

August

| PRESSURE | HEIGHT | Hmax | Hmin | TEMP | TMAX | TMIN | DEWPT | DIR | VELO | U | V | VM |
|----------|--------|-------|-------|-------|-------|-------|-------|-----|------|------|------|------|
| SURFACE | 976.8 | 998 | 779 | 26.9 | 34.6 | 22.6 | 24 | 277 | 0.8 | 0.8 | -0.1 | 1.4 |
| 1000 | 2 | 41 | -50 | | | | | | | | | |
| 950 | 439 | 554 | 320 | 26.2 | 33 | 21 | 22.9 | 282 | 2.5 | 2.4 | -0.5 | 5.8 |
| 925 | 682 | 743 | 590 | 25.4 | 34.6 | 19.6 | 21.7 | 289 | 2.8 | 2.6 | -0.9 | 6.9 |
| 900 | 930 | 985 | 804 | 24.1 | 32 | 17.2 | 20.4 | 311 | 2.1 | 1.6 | -1.4 | 6.4 |
| 850 | 1430 | 1488 | 1360 | 21.4 | 29.6 | 13.2 | 17.8 | 351 | 1.8 | 0.3 | -1.8 | 6.1 |
| 800 | 1954 | 2020 | 1876 | 18.4 | 28 | 10.2 | 15.2 | 18 | 2 | -0.6 | -1.9 | 5.7 |
| 750 | 2505 | 2600 | 2415 | 15.4 | 26 | 8 | 11.7 | 31 | 2.1 | -1.1 | -1.8 | 5.4 |
| 700 | 3087 | 3181 | 2995 | 12.3 | 23 | 3.4 | 7.8 | 41 | 2 | -1.3 | -1.5 | 5.2 |
| 650 | 3705 | 3815 | 3600 | 9.3 | 18.7 | 2.4 | 3.6 | 52 | 1.8 | -1.4 | -1.1 | 4.9 |
| 600 | 4366 | 4490 | 4259 | 6 | 15.7 | -5.1 | -0.7 | 65 | 1.4 | -1.3 | -0.6 | 5 |
| 550 | 5079 | 5220 | 4950 | 2.4 | 12.7 | -7.3 | -4.9 | 82 | 1.5 | -1.5 | -0.2 | 5 |
| 500 | 5839 | 5992 | 5701 | -1.6 | 10.1 | -9.1 | -9.5 | 93 | 2 | -2 | 0.1 | 5.2 |
| 450 | 6676 | 6850 | 6410 | -6 | 2.8 | -15.1 | -14.1 | 98 | 2.2 | -2.2 | 0.3 | 5.3 |
| 400 | 7585 | 7769 | 7428 | -11.3 | -1.9 | -25.7 | -19.9 | 94 | 2.9 | -2.9 | 0.2 | 5.6 |
| 350 | 8598 | 8810 | 8399 | -17.4 | -8.5 | -28.5 | -26.5 | 97 | 3.3 | -3.3 | 0.4 | 5.4 |
| 300 | 9738 | 9991 | 9489 | -25.2 | -15.1 | -36.1 | -34.3 | 100 | 3.9 | -3.8 | 0.7 | 5.6 |
| 250 | 11037 | 11350 | 10723 | -35 | -23.9 | -47.9 | -43.8 | 99 | 4.4 | -4.3 | 0.7 | 6.1 |
| 200 | 12559 | 12941 | 12167 | -47.2 | -34.9 | -60.5 | -56.4 | 97 | 5.5 | -5.5 | 0.7 | 7.4 |
| 175 | 13427 | 13858 | 12996 | -54.5 | -41.9 | -75.1 | -61.7 | 93 | 5.7 | -5.7 | 0.3 | 7.4 |
| 150 | 14393 | 14880 | 13920 | -62.5 | -49.9 | -76.3 | -67.3 | 86 | 6.3 | -6.3 | -0.4 | 8 |
| 125 | 15495 | 16044 | 14977 | -70.5 | -57.1 | -81.7 | -77.7 | 83 | 7.7 | -7.6 | -1 | 8.9 |
| 100 | 16801 | 17398 | 16264 | -74.9 | -63.1 | -85.1 | | 79 | 8.6 | -8.4 | -1.7 | 9.5 |
| 80 | 18106 | 18712 | 17587 | -72.6 | -56.1 | -84.9 | | 76 | 8.4 | -8.2 | -2 | 9 |
| 70 | 18904 | 19510 | 17860 | -68.7 | -54.1 | -81.5 | | 81 | 8 | -7.9 | -1.3 | 8.3 |
| 60 | 17866 | 19997 | 19294 | -64.1 | -49.9 | -82.7 | | 85 | 7.4 | -7.4 | -0.7 | 7.7 |
| 50 | 20969 | 21547 | 20396 | -59.3 | -46.3 | -71.3 | | 84 | 7.2 | -7.2 | -0.8 | 7.7 |
| 40 | 22378 | 22980 | 21755 | -55 | -39.1 | -66.9 | | 82 | 7.8 | -7.7 | -1.1 | 8.2 |
| 30 | 24211 | 24903 | 23543 | -51.1 | -37.1 | -65.1 | | 85 | 9.5 | -9.5 | -0.9 | 9.8 |
| 25 | 25392 | 26200 | 24640 | -48.6 | -34.9 | -62.3 | | 84 | 10 | -9.9 | -1 | 10.3 |
| 20 | 26872 | 27662 | 26114 | -46.3 | -34.1 | -59.1 | | 87 | 10 | -10 | -0.6 | 10.4 |
| 15 | 28796 | 29642 | 27988 | -43.6 | -31.5 | -55.3 | | 85 | 8.6 | -8.6 | -0.8 | 8.7 |
| 10 | 31607 | 32479 | 30681 | -40.4 | -31.3 | -49.9 | | 85 | 6 | -6 | -0.5 | 6.4 |
| 7 | 34030 | 34600 | 33619 | -42.2 | -37.7 | -44.5 | | 82 | 4.8 | -4.7 | -0.7 | 4.7 |

FREEZING LEVEL

| P | Height | H_max | H_min |
|-----|--------|-------|-------|
| 521 | 5522 | 6970 | 4110 |

FIRST TROPOPAUSE

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

SECOND TROPOPAUSE

| P | Height | Temp |
|-----|--------|-------|
| 102 | 16736 | -76.2 |

Gwalior

42361

Station height

211

September

| PRESSURE | HEIGHT | H max | H min | TEMP | TMAX | TMIN | DEWPT | DIR | VELO | U | V | VM |
|----------|--------|-------|-------|-------|-------|-------|-------|-----|------|------|------|-----|
| SURFACE | 981.2 | 997 | 881 | 25.4 | 30.2 | 17 | 22.4 | 288 | 0.6 | 0.6 | -0.2 | 1.1 |
| 1000 | 37 | 89 | 4 | | | | | | | | | |
| 950 | 478 | 547 | 370 | 26.1 | 35.2 | 18.6 | 20.6 | 303 | 2 | 1.7 | -1.1 | 5.5 |
| 925 | 719 | 786 | 608 | 25.3 | 34.6 | 17 | 18.7 | 317 | 1.8 | 1.2 | -1.3 | 6.2 |
| 900 | 966 | 1122 | 847 | 24.2 | 33.6 | 16 | 17.6 | 329 | 2.3 | 1.2 | -2 | 6 |
| 850 | 1464 | 1619 | 1341 | 21.2 | 32.4 | 12.4 | 14.5 | 347 | 2.8 | 0.6 | -2.7 | 6.3 |
| 800 | 1986 | 2086 | 1864 | 17.9 | 29.6 | 9.8 | 11.2 | 357 | 3.3 | 0.2 | -3.3 | 6.6 |
| 750 | 2534 | 2651 | 2400 | 14.4 | 26.4 | 4.6 | 7.2 | 360 | 3.4 | 0 | -3.4 | 6.8 |
| 700 | 3115 | 3246 | 2998 | 11.1 | 22.6 | 3.4 | 2.5 | 6 | 2.9 | -0.3 | -2.9 | 6.3 |
| 650 | 3728 | 3876 | 3600 | 7.5 | 19.7 | -6.9 | -2 | 360 | 2 | 0 | -2 | 5.6 |
| 600 | 4385 | 4576 | 4274 | 4.1 | 16.5 | -11.4 | -5.3 | 353 | 0.8 | 0.1 | -0.8 | 5.2 |
| 550 | 5091 | 5280 | 4960 | 0.7 | 13.7 | -16 | -8.5 | 256 | 0.4 | 0.4 | 0.1 | 5.1 |
| 500 | 5848 | 6061 | 5708 | -3 | 10.4 | -20.3 | -12.2 | 243 | 0.9 | 0.8 | 0.4 | 5.4 |
| 450 | 6677 | 6895 | 6483 | -7.5 | 5.7 | -23.5 | -17.3 | 247 | 1.5 | 1.4 | 0.6 | 5.6 |
| 400 | 7585 | 7811 | 7339 | -12.9 | -4.7 | -25.9 | -22.9 | 248 | 2.2 | 2 | 0.8 | 6 |
| 350 | 8590 | 8820 | 8303 | -19.2 | -8 | -31.8 | -29.2 | 246 | 3 | 2.7 | 1.2 | 6.5 |
| 300 | 9721 | 9991 | 9390 | -27.1 | -15.7 | -43.3 | -36.2 | 246 | 3.5 | 3.2 | 1.4 | 6.9 |
| 250 | 11011 | 11319 | 10710 | -36.8 | -27.3 | -51.3 | -45.4 | 241 | 4.3 | 3.8 | 2.1 | 7.6 |
| 200 | 12517 | 12879 | 12139 | -49 | -37.7 | -64.3 | -57.8 | 234 | 4.1 | 3.3 | 2.4 | 8 |
| 175 | 13376 | 13780 | 12949 | -56.3 | -45.1 | -74.9 | -61.6 | 233 | 3.5 | 2.8 | 2.1 | 7.7 |
| 150 | 14339 | 14792 | 13853 | -63.8 | -51.9 | -76.1 | -77.3 | 219 | 2.2 | 1.4 | 1.7 | 7 |
| 125 | 15438 | 15952 | 14890 | -70.9 | -58.1 | -81.9 | | 143 | 0.5 | -0.3 | 0.4 | 6.1 |
| 100 | 16744 | 17327 | 16132 | -74.8 | -61.9 | -84.7 | | 82 | 2.7 | -2.7 | -0.4 | 5.6 |
| 80 | 18050 | 18690 | 17412 | -71.9 | -55.9 | -81.9 | | 78 | 4.2 | -4.1 | -0.9 | 5.3 |
| 70 | 18854 | 19490 | 18213 | -67.8 | -50.5 | -80.7 | | 76 | 4.5 | -4.4 | -1.1 | 5.2 |
| 60 | 18751 | 19996 | 19149 | -63.1 | -50.1 | -76.3 | | 83 | 4.8 | -4.8 | -0.6 | 5.3 |
| 50 | 20917 | 21605 | 19822 | -58.6 | -44.5 | -73.7 | | 86 | 5.2 | -5.2 | -0.4 | 5.5 |
| 40 | 22335 | 23096 | 21698 | -54.5 | -41.9 | -68.3 | | 83 | 5.7 | -5.7 | -0.7 | 6 |
| 30 | 24200 | 25055 | 23543 | -50.2 | -35.7 | -63.5 | | 87 | 5.8 | -5.8 | -0.3 | 6.1 |
| 25 | 25383 | 26280 | 24818 | -48 | -35.9 | -61.7 | | 88 | 6 | -6 | -0.2 | 6.3 |
| 20 | 26884 | 27858 | 26257 | -45.8 | -34.9 | -58.3 | | 88 | 6.1 | -6.1 | -0.2 | 6.3 |
| 15 | 28807 | 29867 | 28140 | -43.3 | -31.1 | -56.1 | | 85 | 4.9 | -4.9 | -0.4 | 5.1 |
| 10 | 31688 | 32706 | 30998 | -39.8 | -30.5 | -54.3 | | 92 | 3.6 | -3.6 | 0.1 | 4 |
| 7 | 34126 | 34850 | 33292 | -39.9 | -30.5 | -52.3 | | 63 | 2.7 | -2.4 | -1.2 | 2.9 |

FREEZING LEVEL

| P | Height | H max | H min |
|-----|--------|-------|-------|
| 545 | 5182 | 6890 | 3499 |

FIRST TROPOPAUSE

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

SECOND TROPOPAUSE

| P | Height | Temp |
|-----|--------|-------|
| 105 | 16531 | -76.1 |

Gwalior

42361

Station height

211

October

| PRESSURE | HEIGHT | H max | H min | TEMP | TMAX | TMIN | DEWPT | DIR | VELO | U | V | VM |
|----------|--------|-------|-------|-------|-------|-------|-------|-----|------|------|------|------|
| SURFACE | 986.9 | 996 | 979 | 19.7 | 30.4 | 12.8 | 16.4 | 360 | 0.1 | 0 | -0.1 | 0.3 |
| 1000 | 86 | 135 | 21 | | | | | | | | | |
| 950 | 521 | 618 | 400 | 24.4 | 34.6 | 14.6 | 12.1 | 333 | 0.2 | 0.1 | -0.2 | 4.2 |
| 925 | 764 | 849 | 650 | 24.4 | 35.1 | 11.1 | 10.8 | 16 | 0.7 | -0.2 | -0.7 | 4.1 |
| 900 | 1008 | 1089 | 926 | 22.8 | 34.2 | 8.2 | 8.1 | 342 | 1.3 | 0.4 | -1.2 | 4.7 |
| 850 | 1502 | 1576 | 1423 | 19.4 | 31.3 | 6.2 | 4.5 | 333 | 2.7 | 1.2 | -2.4 | 5.7 |
| 800 | 2020 | 2088 | 1919 | 15.5 | 28.3 | 0.7 | 1.5 | 330 | 3.8 | 1.9 | -3.3 | 6.8 |
| 750 | 2559 | 2639 | 2454 | 11.5 | 23.8 | -2.8 | -1.9 | 329 | 4.4 | 2.3 | -3.8 | 7.6 |
| 700 | 3135 | 3223 | 3030 | 7.7 | 19 | -9.3 | -5.6 | 324 | 4.3 | 2.5 | -3.5 | 7.5 |
| 650 | 3739 | 3820 | 3627 | 4.3 | 16.6 | -13.7 | -9.9 | 317 | 4.1 | 2.8 | -3 | 7.3 |
| 600 | 4388 | 4637 | 4233 | 1.1 | 12.6 | -17.1 | -13 | 296 | 4.3 | 3.9 | -1.9 | 7.3 |
| 550 | 5086 | 5336 | 4883 | -2.5 | 10 | -19.8 | -15.8 | 279 | 6 | 5.9 | -0.9 | 8.8 |
| 500 | 5833 | 6090 | 5588 | -6.8 | 5.3 | -22.9 | -19.8 | 273 | 8.2 | 8.2 | -0.4 | 10.7 |
| 450 | 6650 | 6902 | 6361 | -11.7 | 0.9 | -31.3 | -25.8 | 270 | 10.8 | 10.8 | 0 | 13.4 |
| 400 | 7542 | 7756 | 7358 | -17.3 | -2.4 | -33.1 | -29.6 | 267 | 13.5 | 13.5 | 0.6 | 15.9 |
| 350 | 8529 | 8799 | 8300 | -23.8 | -9.8 | -35.3 | -34.5 | 264 | 15.2 | 15.1 | 1.5 | 17.2 |
| 300 | 9640 | 9968 | 9364 | -31.2 | -15.7 | -44.5 | -40.4 | 261 | 17.2 | 17 | 2.6 | 19 |
| 250 | 10906 | 11299 | 10561 | -40.3 | -22.9 | -54.3 | -48.9 | 258 | 18.2 | 17.8 | 3.8 | 19.7 |
| 200 | 12390 | 12857 | 11985 | -51.3 | -25.4 | -65.1 | -55.2 | 258 | 17.8 | 17.4 | 3.8 | 19.1 |
| 175 | 13243 | 13633 | 12830 | -57.5 | -44.7 | -72.7 | -67.9 | 257 | 15.7 | 15.3 | 3.5 | 16.6 |
| 150 | 14203 | 14624 | 13765 | -63.9 | -47.9 | -79.5 | | 257 | 13 | 12.7 | 2.9 | 13.9 |
| 125 | 15304 | 15756 | 14808 | -69.9 | -54.1 | -82.5 | | 259 | 10.4 | 10.2 | 2 | 11.3 |
| 100 | 16612 | 17113 | 16071 | -73.3 | -58.5 | -83.1 | | 259 | 6.1 | 6 | 1.2 | 7.2 |
| 80 | 17926 | 18531 | 17351 | -70.4 | -50.9 | -80.7 | | 273 | 1.9 | 1.9 | -0.1 | 4.9 |
| 70 | 18735 | 19435 | 18150 | -66.8 | -42.9 | -78.1 | | 326 | 0.4 | 0.2 | -0.3 | 4.1 |
| 60 | 19054 | 19987 | 19039 | -62.8 | -47.9 | -74.5 | | 90 | 1 | -1 | 0 | 4 |
| 50 | 20803 | 21427 | 20138 | -58.6 | -44.1 | -70.5 | | 72 | 0.9 | -0.9 | -0.3 | 3.9 |
| 40 | 22212 | 22782 | 21523 | -54.8 | -40.1 | -64.9 | | 81 | 1.9 | -1.9 | -0.3 | 3.6 |
| 30 | 24055 | 24656 | 23354 | -51.1 | -38.5 | -61.9 | | 82 | 2.7 | -2.7 | -0.4 | 3.9 |
| 25 | 25240 | 25920 | 24520 | -48.8 | -34.1 | -60.5 | | 86 | 2.8 | -2.8 | -0.2 | 3.8 |
| 20 | 26699 | 27427 | 25560 | -46.6 | -32.7 | -57.9 | | 90 | 1.4 | -1.4 | 0 | 3 |
| 15 | 28599 | 29343 | 27934 | -44 | -31.3 | -55.1 | | 95 | 2.1 | -2.1 | 0.2 | 2.8 |
| 10 | 31333 | 32228 | 30840 | -41 | -27.1 | -49.9 | | 270 | 0.1 | 0.1 | 0 | 1 |
| 7 | 33719 | 34327 | 33243 | -41.4 | -37.1 | -47.5 | | 270 | 0.1 | 0.1 | 0 | 0.1 |

FREEZING LEVEL

| P | Height | H max | H min |
|-----|--------|-------|-------|
| 588 | 4587 | 6750 | 2463 |

FIRST TROPOPAUSE

| P | Height | Temp |
|-----|--------|-------|
| 182 | 13014 | -58.3 |

SECOND TROPOPAUSE

| P | Height | Temp |
|-----|--------|-------|
| 108 | 16200 | -74.4 |

Gwalior

42361

Station height

211

November

| PRESSURE | HEIGHT | H max | H min | TEMP | TMAX | TMIN | DEWPT | DIR | VELO | U | V | VM |
|----------|--------|-------|-------|-------|-------|-------|-------|-----|------|------|------|------|
| SURFACE | 990.7 | 997 | 982 | 13.5 | 21.4 | 7.6 | 10.4 | 0 | 0 | 0 | 0 | 0.1 |
| 1000 | 118 | 155 | 64 | | | | | | | | | |
| 950 | 550 | 617 | 400 | 20.5 | 32 | 9 | 6.8 | 6 | 1 | -0.1 | -1 | 4 |
| 925 | 787 | 848 | 680 | 20.2 | 29.2 | 9.8 | 5.2 | 351 | 1.3 | 0.2 | -1.3 | 3.9 |
| 900 | 1028 | 1140 | 965 | 18.7 | 30.4 | 8.8 | 3.2 | 339 | 1.9 | 0.7 | -1.8 | 4.3 |
| 850 | 1515 | 1624 | 1450 | 15.5 | 25.8 | 6.4 | 0.1 | 323 | 3.1 | 1.9 | -2.5 | 5.5 |
| 800 | 2026 | 2162 | 1902 | 12.4 | 21.7 | 2.8 | -3.2 | 316 | 4.2 | 2.9 | -3 | 6.7 |
| 750 | 2563 | 2702 | 2437 | 9.5 | 21 | -3.9 | -6.2 | 309 | 4.8 | 3.7 | -3 | 7.3 |
| 700 | 3133 | 3273 | 3007 | 6.6 | 17.6 | -3.7 | -9.5 | 300 | 5.3 | 4.6 | -2.7 | 7.7 |
| 650 | 3736 | 3877 | 3630 | 3.5 | 14.6 | -7.7 | -12.8 | 291 | 6.2 | 5.8 | -2.2 | 8.6 |
| 600 | 4383 | 4526 | 4231 | 0.1 | 10.6 | -10.5 | -16.2 | 283 | 7.8 | 7.6 | -1.8 | 10.3 |
| 550 | 5075 | 5250 | 4937 | -4.1 | 6.2 | -13.7 | -20.8 | 277 | 10 | 9.9 | -1.3 | 12.5 |
| 500 | 5820 | 6011 | 5650 | -8.8 | 6.2 | -20.8 | -24.2 | 276 | 12.5 | 12.4 | -1.2 | 15 |
| 450 | 6626 | 6842 | 6433 | -14.3 | -3.7 | -26.1 | -29.5 | 273 | 15 | 15 | -0.7 | 17.6 |
| 400 | 7510 | 7747 | 7278 | -20.4 | -8.5 | -33.3 | -35 | 271 | 18 | 18 | -0.4 | 20.6 |
| 350 | 8486 | 8744 | 8216 | -27.2 | -14.2 | -38.5 | -40.3 | 269 | 19.8 | 19.8 | 0.2 | 22.3 |
| 300 | 9580 | 9893 | 9263 | -34.8 | -17.5 | -48.5 | -47 | 267 | 22.1 | 22.1 | 1.1 | 24.3 |
| 250 | 10829 | 11191 | 10453 | -43.5 | -33.1 | -55.8 | -56.6 | 265 | 22.7 | 22.6 | 2.1 | 24.5 |
| 200 | 12297 | 12631 | 11876 | -53.1 | -38.9 | -65.3 | -60.2 | 265 | 21.7 | 21.6 | 1.9 | 23 |
| 175 | 13148 | 13524 | 12707 | -58.5 | -45.9 | -72.1 | -63.3 | 264 | 18.3 | 18.2 | 2 | 19.4 |
| 150 | 14105 | 14532 | 13651 | -63.7 | -48.5 | -75.9 | -67.5 | 269 | 14.9 | 14.9 | 0.3 | 15.8 |
| 125 | 15208 | 15685 | 14742 | -68.5 | -53.5 | -81.1 | | 271 | 10.8 | 10.8 | -0.1 | 11.5 |
| 100 | 16539 | 17057 | 16048 | -71.5 | -56.1 | -83.1 | | 271 | 8.7 | 8.7 | -0.2 | 9.3 |
| 80 | 17869 | 18409 | 17478 | -70.3 | -57.5 | -81.3 | | 280 | 4.2 | 4.1 | -0.7 | 5.7 |
| 70 | 18674 | 19220 | 18250 | -67.6 | -53.1 | -79.5 | | 283 | 2.8 | 2.7 | -0.6 | 4.7 |
| 60 | 19300 | 19996 | 19140 | -63.8 | -49.7 | -75.9 | | 298 | 1.5 | 1.3 | -0.7 | 4.1 |
| 50 | 20739 | 21316 | 20231 | -59.5 | -41.1 | -70.1 | | 319 | 0.9 | 0.6 | -0.7 | 3.5 |
| 40 | 22137 | 22792 | 20593 | -55 | -32.3 | -66.7 | | 310 | 0.8 | 0.6 | -0.5 | 2.7 |
| 30 | 23986 | 24655 | 23420 | -51 | -36.1 | -60.7 | | 307 | 0.5 | 0.4 | -0.3 | 2.7 |
| 25 | 25157 | 25900 | 24520 | -49.3 | -33.8 | -62.1 | | 284 | 0.8 | 0.8 | -0.2 | 2.2 |
| 20 | 26601 | 27336 | 26020 | -47.1 | -34.3 | -59.7 | | 287 | 1 | 1 | -0.3 | 1.9 |
| 15 | 28517 | 29332 | 27988 | -44.7 | -34.1 | -57.3 | | 319 | 0.9 | 0.6 | -0.7 | 1.3 |
| 10 | 31205 | 32126 | 30597 | -42.4 | -29.5 | -52.3 | | 304 | 0.7 | 0.6 | -0.4 | 0.8 |
| 7 | 33695 | 33695 | 33695 | -37.1 | -37.1 | -37.1 | | | | | | |

FREEZING LEVEL

| P | Height | H_max | H_min |
|-----|--------|-------|-------|
| 606 | 4327 | 6350 | 2420 |

FIRST TROPOPAUSE

| P | Height | Temp |
|-----|--------|-------|
| 206 | 12367 | -55.5 |

SECOND TROPOPAUSE

| P | Height | Temp |
|-----|--------|-------|
| 108 | 16135 | -72.3 |

Gwalior

42361

Station height

211

December

| PRESSURE | HEIGHT | H max | H min | TEMP | TMAX | TMIN | DEWPT | DIR | VELO | U | V | VM |
|----------|--------|-------|-------|-------|-------|-------|-------|-----|------|------|------|------|
| SURFACE | 992.9 | 1000 | 975 | 9.2 | 18 | 2.2 | 6.4 | 360 | 0.1 | 0 | -0.1 | 0.2 |
| 1000 | 135 | 182 | 78 | | | | | | | | | |
| 950 | 562 | 626 | 400 | 16 | 25.8 | 5.6 | 4.8 | 4 | 1.5 | -0.1 | -1.5 | 4.2 |
| 925 | 796 | 848 | 697 | 15.6 | 26.4 | 5.4 | 2.7 | 339 | 1.7 | 0.6 | -1.6 | 4.2 |
| 900 | 1034 | 1101 | 933 | 14.9 | 27.8 | 4.2 | 0.5 | 325 | 2.1 | 1.2 | -1.7 | 4.7 |
| 850 | 1516 | 1592 | 1415 | 12.7 | 23.2 | 1.4 | -3 | 304 | 3.4 | 2.8 | -1.9 | 5.8 |
| 800 | 2022 | 2110 | 1910 | 10.5 | 20.8 | -1.7 | -5.5 | 290 | 4.6 | 4.3 | -1.6 | 6.9 |
| 750 | 2555 | 2680 | 2442 | 7.9 | 19 | -3.7 | -8.3 | 285 | 6 | 5.8 | -1.6 | 8.2 |
| 700 | 3123 | 3276 | 3000 | 5.1 | 17.2 | -6.9 | -11.4 | 279 | 7.3 | 7.2 | -1.2 | 9.6 |
| 650 | 3720 | 3859 | 3560 | 1.8 | 13.8 | -11.1 | -14.7 | 276 | 9.1 | 9 | -1 | 11.2 |
| 600 | 4364 | 4536 | 4193 | -1.9 | 10.6 | -14.3 | -18.2 | 272 | 11 | 11 | -0.4 | 13.4 |
| 550 | 5050 | 5240 | 4869 | -6.2 | 9.4 | -15.7 | -22.9 | 270 | 13.4 | 13.4 | -0.1 | 15.8 |
| 500 | 5789 | 5997 | 5586 | -11.1 | 6.4 | -21.5 | -26.1 | 269 | 16.3 | 16.3 | 0.2 | 18.8 |
| 450 | 6589 | 6822 | 6369 | -16.7 | 2.2 | -28.1 | -30.8 | 269 | 19.4 | 19.4 | 0.2 | 22 |
| 400 | 7464 | 7823 | 7220 | -23 | -4.8 | -35.5 | -36 | 269 | 21.4 | 21.4 | 0.4 | 23.7 |
| 350 | 8426 | 8801 | 8152 | -29.7 | -12.1 | -43.7 | -41.5 | 268 | 22.2 | 22.2 | 0.7 | 23.9 |
| 300 | 9510 | 9912 | 9185 | -37.4 | -15.6 | -53.9 | -47.7 | 266 | 22.3 | 22.3 | 1.4 | 24.1 |
| 250 | 10760 | 16853 | 10313 | -46 | -24 | -57.9 | -55.6 | 266 | 20.8 | 20.7 | 1.6 | 22.1 |
| 200 | 12191 | 12598 | 11836 | -55.4 | -42.3 | -66.5 | -63.1 | 262 | 17.2 | 17 | 2.5 | 18 |
| 175 | 13036 | 13470 | 12679 | -59.7 | -46.5 | -72.7 | -68.6 | 261 | 14.6 | 14.4 | 2.3 | 15.2 |
| 150 | 13983 | 14475 | 13616 | -63.6 | -51.1 | -75.1 | | 262 | 12.5 | 12.4 | 1.7 | 12.8 |
| 125 | 15084 | 15641 | 14705 | -67.6 | -56.1 | -79.3 | | 264 | 11.2 | 11.1 | 1.2 | 11.6 |
| 100 | 16413 | 17040 | 16003 | -70.8 | -60.5 | -83.1 | | 263 | 9.3 | 9.2 | 1.2 | 9.6 |
| 80 | 17734 | 18436 | 17361 | -70.6 | -56.7 | -84.9 | | 269 | 7.7 | 7.7 | 0.1 | 8.2 |
| 70 | 18533 | 19296 | 18148 | -68.6 | -46.9 | -81.3 | | 270 | 6 | 6 | 0 | 7.1 |
| 60 | 19406 | 19979 | 19032 | -65.7 | -55.1 | -75.7 | | 269 | 4.1 | 4.1 | 0.1 | 6.1 |
| 50 | 20585 | 21426 | 20103 | -61.9 | -49.5 | -70.5 | | 272 | 2.4 | 2.4 | -0.1 | 5.7 |
| 40 | 21989 | 22882 | 21464 | -57.8 | -46.1 | -68.3 | | 288 | 1.3 | 1.2 | -0.4 | 4.4 |
| 30 | 23827 | 24795 | 23260 | -53.3 | -40.1 | -61.5 | | 301 | 0.6 | 0.5 | -0.3 | 3.8 |
| 25 | 24998 | 25980 | 24403 | -51.3 | -35.3 | -63.7 | | 51 | 1.3 | -1 | -0.8 | 3.9 |
| 20 | 26457 | 27528 | 25826 | -48.5 | -34.1 | -60.5 | | 48 | 1.5 | -1.1 | -1 | 3.4 |
| 15 | 28302 | 29476 | 24805 | -47 | -28.1 | -56.3 | | 9 | 0.6 | -0.1 | -0.6 | 1.9 |
| 10 | 31073 | 32000 | 30554 | -44.7 | -35.3 | -55.1 | | 34 | 1.1 | -0.6 | -0.9 | 1.5 |
| 7 | 33226 | 33951 | 33024 | -49.3 | -41.5 | -54.1 | | | | | | |

FREEZING LEVEL

| P | Height | H_max | H_min |
|-----|--------|-------|-------|
| 630 | 3995 | 6544 | 1640 |

FIRST TROPOPAUSE

| P | Height | Temp |
|-----|--------|-------|
| 193 | 12368 | -60.6 |

SECOND TROPOPAUSE

| P | Height | Temp |
|-----|--------|------|
| 107 | 16104 | -72 |