

## CLIMATIC FEATURES OF RAIPUR DURING MAY

The following are general climatic features during the month of May for Raipur based on past data Raipur experiences the peak of summer in this month. Average Maximum Temperature of this month rises 39.0 °c from the end of April and continues to rise to 42.0°C till the end of May . The Mean Wind Speed is form 8 Kmph to 9.3 Kmph and the wind is more or less blows from Westerly to Southwesterly direction. The normal Minimum Temperature during the month is 27.7°C. May is generally one of the driest months of Raipur with the highest and lowest Relative humidity varying between 40% to 26% respectively. The average rainfall during the month is 31.6 mm and number of rainy days are 2.6.

The mean frequency of occurrence of thunderstorm accompanied with gusty wind are 4.0 days. The thundershowers, which account for most of the wet spells during this month and bring in considerable relief from the summer heat are mostly associated with local development of heat low, wind discontinuity and sometimes due to western disturbances moving across the extreme north of the country.

**On the basis of available records in this month Bhopal experiences the following extreme values :**

- 1 The Highest Maximum Temperature of 47.9°C on 30<sup>th</sup> May 1988.
- 2 The Lowest Minimum Temperature of 14.4°C on 27<sup>th</sup> May 1904.
- 3 The Highest Monthly Rainfall of 147.1 mm in the year 1933.
- 4 The Heaviest fall in 24 hrs was 80.3 mm on 27<sup>th</sup> May 1904.

The mean maximum temperature of the month and highest maximum temperature in degree celsius with date during the last decade are given in the following table

| YEAR  | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---|------|------|------|------|------|------|------|------|------|------|------|
| Mean max temp in °c                                   | 40.3 | 41.7 | 42.4 | 43.4 | 42.3 | 41.7 | 43.2 | 43.5 | 40.5 | 42.0 | 41.4 |
| Highest max temp in °c                                | 44.2 | 43.9 | 43.9 | 46.1 | 45.8 | 43.8 | 46.3 | 46.6 | 45.3 | 46.2 | 44.1 |
| Recorded date .                                       | 13   | 12   | 02   | 02   | 13   | 26   | 27   | 23   | 31   | 28   | 15   |
| Number of days when max temp exceed 44.0 deg. celsius | 03   | 0    | 0    | 18   | 16   | 0    | 13   | 13   | 02   | 12   | 01   |

## रायपुर का माह मई का जलवायु लक्षण

माह में रायपुर में ग्रीष्म ऋतु अपने चरम सीमा पर होती है । औसत अधिकतम तापमान 39.0 से बढ़ते बढ़ते 42.0 डिग्री सेल्सियस होता है ,जो माह के अंत तक कायम रहता है । औसत न्यूनतम तापमान 27.7 डिग्री सेल्सियस तक पहुंच जाता है जिससे राते असुविधाजनक होती है । औसत वायु कि 8 किमी प्रती घंटा से 9.3 किमी प्रती घंटा के बीच होती है ।

यह माह सामान्यतः शुष्क रहता है । माह की औसत वर्षा 31.6 मि मी तथा वर्षा के दिनों की औसत सं 2.6 दिन है । गर्जन होनेवाले दिनों की औसत संख्या 4.0 है, जो सामान्यतः अल्पकालीन झंझा से जुड़ी हुई होती है गर्जन की घटना के साथ हल्की वर्षा से तापमान में कमी आती है, जिसकी वजहसे राहत महसूस होती है । ये घटनाएं सामान्यतः स्थानीय निम्नदाब के कारण होता है , हवा का बदलाव या कभी कभी उत्तरी भारत से होकर जानेवाले पश्चिमी विक्षोभों के प्रभावसे होती है । यह माह सामान्यतः शुष्क रहता है । इस माह में सबसे अधिकतम तथा न्यूनतम आद्रता 40% -26% के बीच होता है ।

उपलब्ध अभिलेख के आधार पर रायपुर का इम माह सबसे अधिकतम तापमान 47.9 डिग्री सेल्सियस 30 मई 1988 में, सबसे न्यूनतम तापमान 27 मई 1904 को 14.4 डिग्री सेल्सियस रिकार्ड किया गया, सन 1933 में सर्वाधिक कुल मासिक वर्षा 147.1 मि.मी. और 27 मई 1904 में 24 घंटों में 80.3 मि.मी. है ।

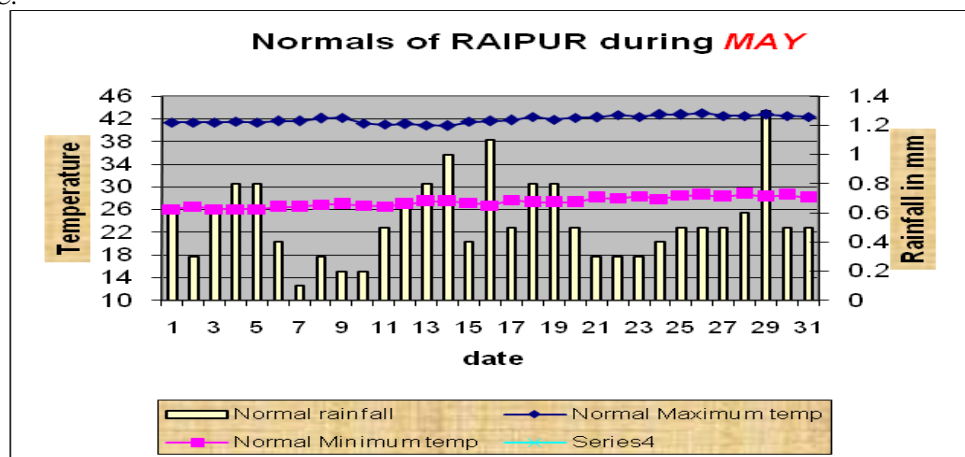
इस माह में पिछले दस वर्ष में अभिलेखित औसत अधिकतम तापमान . और उसकी दिनांक दी गई है । तथा अधिकतम तापमान 44 डि.से. से ज्यादा दिनों कि संख्या दर्शित की गई है ।

| वर्ष   | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|--|------|------|------|------|------|------|------|------|------|------|------|
| औसत अधिकतम तापमान, डिग्री .से                      | 40.3 | 41.7 | 42.4 | 43.4 | 42.3 | 41.7 | 43.2 | 43.5 | 40.5 | 42.0 | 41.4 |
| सबसे अधिकतम तापमान, डिग्री .से                     | 44.2 | 43.9 | 43.9 | 46.1 | 45.8 | 43.8 | 46.3 | 46.6 | 45.3 | 46.2 | 44.1 |
| दिनांक   | 13   | 12   | 02   | 02   | 13   | 26   | 27   | 23   | 31   | 28   | 15   |
| अधिकतम तापमान 44 डिग्री .से ज्यादा दिनों कि संख्या | 03   | 0    | 0    | 18   | 16   | 0    | 13   | 13   | 02   | 12   |      |

## CLIMATIC FEATURES OF RAIPUR (Graphical) DURING MAY

### Daily Temperature

The following are general climatic features during the month of May for Raipur based on past data, data Raipur experiences the peak of summer in this month. Average Maximum Temperature of this month rises 39.0 °c from the end of April and continues to rise to 42.0°C till the end of May . The Mean Wind Speed is form 8 Kmph to 9.3 Kmph and the wind is more or less blows from Westerly to Southwesterly direction. The normal Minimum Temperature during the month is 27.7°C.



### Extreme Temperature

- 1 The Highest Maximum Temperature of 47.9°C on 30th May 1988.
- 2 The Lowest Minimum Temperature of 14.4°C on 27th May 1904.

The mean maximum temperature of the month and highest maximum temperature in degree celsius with date during the last decade are given in the following table

| YEAR  | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---|------|------|------|------|------|------|------|------|------|------|------|
| Mean max temp in °c                                   | 40.3 | 41.7 | 42.4 | 43.4 | 42.3 | 41.7 | 43.2 | 43.5 | 40.5 | 42.0 | 41.4 |
| Highest max temp in °c                                | 44.2 | 43.9 | 43.9 | 46.1 | 45.8 | 43.8 | 46.3 | 46.6 | 45.3 | 46.2 | 44.1 |
| Recorded date .                                       | 13   | 12   | 02   | 02   | 13   | 26   | 27   | 23   | 31   | 28   | 15   |
| Number of days when max temp exceed 44.0 deg. celsius | 03   | 0    | 0    | 18   | 16   | 0    | 13   | 13   | 02   | 12   | 01   |

### Rainfall

May is generally one of the driest months of Raipur with the highest and lowest Relative humidity varying between 40% to 26% respectively. The average rainfall during the month is 31.6 mm and number of rainy days are 2.6.

- 3 The Highest Monthly Rainfall of 147.1 mm in the year 1933.
- 4 The Heaviest fall in 24 hrs was 80.3 mm on 27th May 1904.

**Weather Phenomena :** The mean frequency of occurrence of thunderstorm accompanied with gusty wind are 4.0 days. The thundershowers, which account for most of the wet spells during this month and bring in considerable relief from the summer heat are mostly associated with local development of heat low, wind discontinuity . Average number of days with different Weather phenomena is given below in the table.

| Rainy Days | Drizzle/Rain (>0.3mm) | Hail | Thunder | Squall | Duststorm | Gale | Fog |
|------------|-----------------------|------|---------|--------|-----------|------|-----|
| 2.6        | 4.7                   | 0.0  | 4.0     | 0.9    | 0.0       | 02   | 0.0 |

| Raipur                               |                       | May                  |                         | DNA- Data Not Available |  |
|--------------------------------------|-----------------------|----------------------|-------------------------|-------------------------|--|
| EXTREME WEATHER EVENTS FOR THE MONTH |                       |                      |                         |                         |  |
| Year                                 | Temperature(oC)       |                      | Rainfall (mm)           |                         |  |
|                                      | Highest Maximum(Date) | Lowest Minimum(Date) | 24 Hours Highest (Date) | Monthly Total(mm)       |  |
| 2016                                 | 44.1(15)              | 23.7(6)              | 16.5(27)                | 34.2                    |  |
| 2015                                 | 46.2(28)              | 24.7(04,07,16)       | 4.4(4)                  | 5.8                     |  |
| 2014                                 | 45.3(31)              | 23.9(26)             | 22.3(26)                | 28.1                    |  |
| 2013                                 | 46.6(23)              | 26.3(28)             | 2(28)                   | 2.1                     |  |
| 2012                                 | 46.3(27)              | 25.1(4)              | 1.6(8)                  | 1.6                     |  |
| 2011                                 | 43.8(26)              | 24.6(4)              | 1.5(20)                 | 2.9                     |  |
| 2010                                 | 45.8(13)              | 25.3(4)              | 5.6(28)                 | 14.3                    |  |
| 2009                                 | 46.1(2)               | 26.7(5)              | 0.6(15)                 | 2.2                     |  |
| 2008                                 | 43.9(2)               | 24.6(3)              | 2.2(14)                 | 2.7                     |  |
| 2007                                 | 43.9(12)              | 26(9)                | 3.9(23)                 | 9.6                     |  |
| ALL TIME RECORD                      | 47.9(30.05.1988)      | 14.4(27.05.1904)     | 80.3(27.05.1904)        | 147.1 (1933)            |  |

| Bilaspur                             |                       | May                  |                         | DNA- Data Not Available |  |
|--------------------------------------|-----------------------|----------------------|-------------------------|-------------------------|--|
| EXTREME WEATHER EVENTS FOR THE MONTH |                       |                      |                         |                         |  |
| Year                                 | Temperature(oC)       |                      | Rainfall (mm)           |                         |  |
|                                      | Highest Maximum(Date) | Lowest Minimum(Date) | 24 Hours Highest (Date) | Monthly Total(mm)       |  |
| 2016                                 | 45.1(15)              | 23(7)                | 5.6(26)                 | 21.8                    |  |
| 2015                                 | 46.9(24)              | 23.7(17)             | 0.4(04,16)              | 0.2                     |  |
| 2014                                 | 43.8(24)              | 21.5(26)             | 26.6(26)                | 32.2                    |  |
| 2013                                 | 47.4(25)              | 23.5(4)              | 12.7(28)                | 13.1                    |  |
| 2012                                 | 46.4(26)              | 22.2(3)              | 0.3(20)                 | 0.4                     |  |
| 2011                                 | 44.3(14)              | 23.8(4)              | 5.8(23)                 | 7.9                     |  |
| 2010                                 | 46.5(18)              | 21(6)                | 18(6)                   | 36.8                    |  |
| 2009                                 | 46(1)                 | 23.8(8)              | 15.6(30)                | 18.0                    |  |
| 2008                                 | DNA(DNA)              | DNA(DNA)             | DNA(DNA)                | DNA                     |  |
| 2007                                 | DNA(DNA)              | DNA(DNA)             | DNA(DNA)                | DNA                     |  |
| ALL TIME RECORD                      | 47.4(25.05.2013)      | 21(06.05.2010)       | 26.6(26.05.2014)        | 36.8 (2010)             |  |

| Pendra                               |                       | May                  |                         | DNA- Data Not Available |  |
|--------------------------------------|-----------------------|----------------------|-------------------------|-------------------------|--|
| EXTREME WEATHER EVENTS FOR THE MONTH |                       |                      |                         |                         |  |
| Year                                 | Temperature(oC)       |                      | Rainfall (mm)           |                         |  |
|                                      | Highest Maximum(Date) | Lowest Minimum(Date) | 24 Hours Highest (Date) | Monthly Total(mm)       |  |
| 2016                                 | 41.8(15)              | 17.2(4)              | 57.7(18)                | 156.8                   |  |
| 2015                                 | 44(30)                | 21.5(5)              | 3(11)                   | 5.4                     |  |
| 2014                                 | 43.3(1)               | 19.8(6)              | 7.6(26)                 | 17.0                    |  |
| 2013                                 | 44.1(25)              | 21.2(3)              | 0.6(30)                 | 0.7                     |  |
| 2012                                 | 43.7(27)              | 21(6)                | 6(14)                   | 12.7                    |  |
| 2011                                 | 41.1(17)              | 18.9(23)             | 25.3(22)                | 94.0                    |  |
| 2010                                 | 44.1(18)              | 18.7(6)              | 9.1(6)                  | 24.0                    |  |
| 2009                                 | 43.6(1)               | 21.6(31)             | 35.7(31)                | 52.3                    |  |
| 2008                                 | 41.6(2)               | 20.6(22)             | 3.5(30)                 | 7.6                     |  |
| 2007                                 | 42.5(26)              | 22(29)               | 13.7(23)                | 37.0                    |  |
| ALL TIME RECORD                      | 46.2(29.05.1988)      | 15.5(04.05.1987)     | 88.6(28.05.1997)        | 156.8 (2016)            |  |

| Jagdalpur                            |                       | May                           |                         | DNA- Data Not Available |  |
|--------------------------------------|-----------------------|-------------------------------|-------------------------|-------------------------|--|
| EXTREME WEATHER EVENTS FOR THE MONTH |                       |                               |                         |                         |  |
| Year                                 | Temperature(oC)       |                               | Rainfall (mm)           |                         |  |
|                                      | Highest Maximum(Date) | Lowest Minimum(Date)          | 24 Hours Highest (Date) | Monthly Total(mm)       |  |
| 2016                                 | 42.3(23)              | 19.5(4)                       | 21.8(14)                | 48.4                    |  |
| 2015                                 | 43.1(24)              | 19.6(4)                       | 31.1(2)                 | 86.7                    |  |
| 2014                                 | 40.6(24)              | 20.6(5)                       | 55.8(19)                | 94.6                    |  |
| 2013                                 | 42.8(24)              | 20(31)                        | 20.7(21)                | 44.4                    |  |
| 2012                                 | 42.9(30)              | 19.6(07,13)                   | 54.7(13)                | 88.5                    |  |
| 2011                                 | 39.8(23)              | 19.3(3)                       | 61.6(3)                 | 172.9                   |  |
| 2010                                 | 41.3(31)              | 20.9(4)                       | 50.1(22)                | 76.4                    |  |
| 2009                                 | 41.5(13)              | 20.4(5)                       | 37.4(30)                | 100.4                   |  |
| 2008                                 | 41.1(20)              | 19.56(24)                     | 22.9(24)                | 42.1                    |  |
| 2007                                 | 41(13)                | 22(29)                        | 18.3(8)                 | 49.2                    |  |
| ALL TIME RECORD                      | 46.1(22.05.1912)      | 17.2(21.05.1917 & 04.05.1981) | 96.8(14.05.1976)        | 172.9 (2011)            |  |

| Ambikapur                            |                       | May                  |                         | DNA- Data Not Available |  |
|--------------------------------------|-----------------------|----------------------|-------------------------|-------------------------|--|
| EXTREME WEATHER EVENTS FOR THE MONTH |                       |                      |                         |                         |  |
| Year                                 | Temperature(oC)       |                      | Rainfall (mm)           |                         |  |
|                                      | Highest Maximum(Date) | Lowest Minimum(Date) | 24 Hours Highest (Date) | Monthly Total(mm)       |  |
| 2016                                 | 42.3(23)              | 21.4(7)              | 7.4(24)                 | 27.5                    |  |
| 2015                                 | 43.6(24)              | 21.2(17)             | 4.6(17)                 | 4.6                     |  |
| 2014                                 | 42.3(31)              | 21.1(28)             | 24.1(26)                | 43.0                    |  |
| 2013                                 | 44.8(25)              | 21.8(4)              | 2.8(27)                 | 2.8                     |  |
| 2012                                 | 43.7(27)              | 21.8(6)              | 0()                     | 0.0                     |  |
| 2011                                 | 42.5(13)              | 22.1(22)             | 14.5(22)                | 39.9                    |  |
| 2010                                 | 43.8(31)              | 21.2(8)              | 10.2(8)                 | 27.1                    |  |
| 2009                                 | 43.9(2)               | 22(26)               | 2.2(31)                 | 5.4                     |  |
| 2008                                 | 41.8(01,02,18)        | 22.3(22)             | 2(23,27)                | 10.3                    |  |
| 2007                                 | 41.8(28)              | 21(7)                | 8.2(7)                  | 15.5                    |  |
| ALL TIME RECORD                      | 44.8(25.05.2013)      | 16.1(04.05.1987)     | 58.4(25.05.1999)        | 140.8 (1990)            |  |

| Durg                                 |                       | May                  |                         | DNA- Data Not Available |  |
|--------------------------------------|-----------------------|----------------------|-------------------------|-------------------------|--|
| EXTREME WEATHER EVENTS FOR THE MONTH |                       |                      |                         |                         |  |
| Year                                 | Temperature(oC)       |                      | Rainfall (mm)           |                         |  |
|                                      | Highest Maximum(Date) | Lowest Minimum(Date) | 24 Hours Highest (Date) | Monthly Total(mm)       |  |
| 2016                                 | 44.8(28)              | 21.2(7)              | 9.8(05,10)              | 29.6                    |  |
| 2015                                 | 46.4(27)              | 21.6(4)              | 5.2(17)                 | 12.2                    |  |
| 2014                                 | 43.6(25,31)           | 20.6(27)             | 47.6(27)                | 57.4                    |  |
| 2013                                 | 46.2(26)              | 24.6(10)             | 2.2(12)                 | 3.4                     |  |
| 2012                                 | 45.7(28)              | 20(4)                | 0()                     | 0.0                     |  |
| 2011                                 | 43.2(31)              | 21.3(4)              | 14.6(6)                 | 25.2                    |  |
| 2010                                 | 45(26,30)             | 23.4(4)              | 3.8(8)                  | 4.0                     |  |
| 2009                                 | DNA(DNA)              | DNA(DNA)             | DNA(DNA)                | DNA                     |  |
| 2008                                 | DNA(DNA)              | DNA(DNA)             | DNA(DNA)                | DNA                     |  |
| 2007                                 | DNA(DNA)              | DNA(DNA)             | DNA(DNA)                | DNA                     |  |
| ALL TIME RECORD                      | 47.4(31.05.1988)      | 19.7(02.05.2005)     | 65.5(08.05.1977)        | 92.8 (2006)             |  |