

International Multidisciplinary
Research Journal

Golden Research
Thoughts

Chief Editor
Dr.Tukaram Narayan Shinde

Publisher
Mrs.Laxmi Ashok Yakkaldevi

Associate Editor
Dr.Rajani Dalvi

Honorary
Mr.Ashok Yakkaldevi

Welcome to GRT

RNI MAHMUL/2011/38595

ISSN No.2231-5063

Golden Research Thoughts Journal is a multidisciplinary research journal, published monthly in English, Hindi & Marathi Language. All research papers submitted to the journal will be double - blind peer reviewed referred by members of the editorial board. Readers will include investigator in universities, research institutes government and industry with research interest in the general subjects.

International Advisory Board

Flávio de São Pedro Filho
Federal University of Rondonia, Brazil

Mohammad Hailat
Dept. of Mathematical Sciences,
University of South Carolina Aiken

Hasan Baktir
English Language and Literature
Department, Kayseri

Kamani Perera
Regional Center For Strategic Studies, Sri
Lanka

Abdullah Sabbagh
Engineering Studies, Sydney

Ghayoor Abbas Chotana
Dept of Chemistry, Lahore University of
Management Sciences[PK]

Janaki Sinnasamy
Librarian, University of Malaya

Ecaterina Patrascu
Spiru Haret University, Bucharest

Anna Maria Constantinovici
AL. I. Cuza University, Romania

Romona Mihaila
Spiru Haret University, Romania

Loredana Bosca
Spiru Haret University, Romania

Ilie Pinteau,
Spiru Haret University, Romania

Delia Serbescu
Spiru Haret University, Bucharest,
Romania

Fabricio Moraes de Almeida
Federal University of Rondonia, Brazil

Xiaohua Yang
PhD, USA

Anurag Misra
DBS College, Kanpur

George - Calin SERITAN
Faculty of Philosophy and Socio-Political
Sciences Al. I. Cuza University, Iasi

.....More

Titus PopPhD, Partium Christian
University, Oradea, Romania

Editorial Board

Pratap Vyamktrao Naikwade
ASP College Devrukh, Ratnagiri, MS India Ex - VC. Solapur University, Solapur

Iresh Swami

Rajendra Shendge
Director, B.C.U.D. Solapur University,
Solapur

R. R. Patil
Head Geology Department Solapur
University, Solapur

N.S. Dhaygude
Ex. Prin. Dayanand College, Solapur

R. R. Yallickar
Director Management Institute, Solapur

Rama Bhosale
Prin. and Jt. Director Higher Education,
Panvel

Narendra Kadu
Jt. Director Higher Education, Pune

Umesh Rajderkar
Head Humanities & Social Science
YCMOU, Nashik

Salve R. N.
Department of Sociology, Shivaji
University, Kolhapur

K. M. Bhandarkar
Praful Patel College of Education, Gondia

S. R. Pandya
Head Education Dept. Mumbai University,
Mumbai

Govind P. Shinde
Bharati Vidyapeeth School of Distance
Education Center, Navi Mumbai

G. P. Patankar
S. D. M. Degree College, Honavar, Karnataka

Alka Darshan Shrivastava
Shaskiya Snatkottar Mahavidyalaya, Dhar

Chakane Sanjay Dnyaneshwar
Arts, Science & Commerce College,
Indapur, Pune

Maj. S. Bakhtiar Choudhary
Director, Hyderabad AP India.

Rahul Shriram Sudke
Devi Ahilya Vishwavidyalaya, Indore

Awadhesh Kumar Shirotriya
Secretary, Play India Play, Meerut (U.P.)

S. Parvathi Devi
Ph.D.-University of Allahabad

S. KANNAN
Annamalai University, TN

Sonal Singh,
Vikram University, Ujjain

Satish Kumar Kalhotra
Maulana Azad National Urdu University

Address:- Ashok Yakkaldevi 258/34, Raviwar Peth, Solapur - 413 005 Maharashtra, India
Cell : 9595 359 435, Ph No: 02172372010 Email: ayisrj@yahoo.in Website: www.aygrt.isrj.org



A STUDY OF SOLAPUR CITY CLIMATE

Shinde Tukaram Vittal

Assistant Professor, Geography , A.R. Burla Mahila Varishtha Mahavidyalaya , Solapur.

Abstract:-Solapur is a city in South Western Maharashtra, India administered by metropolitan corporation. Solapur is one of the four regions that shape the locale of Western Maharashtra (the other three areas are Satara, Kolhapur and Sangli). It is the fourth biggest area in Maharashtra regarding area range and seventh biggest as far as populace. Solapur falls under the class of dry (bone-dry and Semiarid) atmosphere. The city encounters three unmistakable seasons: summer, storm and winter.

Keywords:Solapur city, Solapur climate.

INTRODUCTION

Solapur falls under the class of (dry and semiarid) atmosphere as per the Köppen atmosphere order. The city encounters three particular seasons: summer, rainstorm and winter. Average summer months are from March to May, with greatest temperatures going from 30 to 40 °C (86 to 104 °F). The hottest months in Solapur are April and May. The commonplace most extreme temperatures being 40 °C (104 °F) or more. The most elevated temperature ever recorded is 46.0 °C (114.8 °F) in May 1988.[45] Although summer does not end until May or even the middle of June, the city regularly gets generally grew overwhelming thundershowers in May (despite the fact that moistness stays high). The rainstorm endures from June to the end of September, with moderate precipitation. The city of Solapur gets a normal precipitation of 545 mm (21.5 in) per year.[46] Winter starts in November and keeps going until the end of February, with the temperatures once in a while dropping beneath 10 °C (50 °F). Solapur lies near to the seismically dynamic zone around Killari, Latur District, around 100 km (62 mi) east of the city.

A general weather condition over the region during the whole year varies with the season. Climate is the most important factor influencing land use, cropping pattern, economic activity as well as distribution and density of human being. It also affects transportation network and the settlement pattern. The climate of the study region is essentially of a tropical monsoon type. The variations in climatic conditions are seen during the year. The north-south orientation of Sahyadris as well as northeast orientation of Balaghat and Mahadeo ranges determines the climatic conditions of the region. The proximity of the Sahyadri to Arabian Sea restricts the coastal climate to a narrow strip on the west coast of Konkan that stands in sharp contrast to the continental climate over the entire region. Sahyadri runs across nearly at right angle to the monsoon streams forming an important climatic divide. Naturally, the windward slopes of Sahyadris and its crest gets copious rainfall while to the eastward of Ghat section, rainfall decreases rapidly over a short distance. The monsoon dominated climatic characteristics of the region has four seasons, which, over rest of India are same one, these are,

- (I)The Cold Weather Period 51 (December to February),
- (II)The Hot Weather Period (March to May),
- (III)South-West Monsoon Period (June to September) and
- (IV)Post-Monsoon Period (October to November).

1. COLD WEATHER PERIOD

December to February is a coolest period of the year and mainly continental tropical air prevails over the

region. There is very little rainfall during this period. The mean daily minimum temperature is low in the lower reaches of the region and in between 25°C to 30°C. The mean daily minimum temperature is highest over the eastern part of the region. It is the lowest in the upper reaches of the region. The daily range of temperature is very high in the eastern part i.e. 19°C to 29°C. This is also, a season of low humidity, mean relative humidity in the morning is 43 per cent and it decreases to as low as 18 to 28 per cent in the afternoon when maximum temperature is reached. Evening winds are light and are north-easterly over the region. Throughout the entire Cold Weather Season, climate is cool and bracing, bright and variable winds, fair and sunny weather with clear skies. Local inversion of temperature develops in the enclosed regions during the early morning hours when the minimum temperature has a general tendency to reach below the dew point, then air gets saturated resulting in the formation of dew and mist.

2. HOT WEATHER PERIOD

During March, April and May is the hottest period of the year coinciding with passage of the sun over latitude. The mean daily minimum temperature during the month of May varies between 37°C to 47°C. The highest temperature recorded on any day at Solapur is 41°C on many occasions. The lowest value of minimum temperature of 22.50°C is observed at Pune. The diurnal range of temperature in the interior of the region is 19°C to 20°C. This is the hot season of the region. This is a period of thunderstorm activity and thundershowers account for 2 cm to 5 cm of rain. 52 53

3. SOUTH-WEST MONSOON PERIOD

Towards the end of May, when the weather is at its hottest, in India Southeast Trade Winds of South Indian Ocean extend rapidly across the equator into the Arabian Sea and south of Bay of Bengal. Later in the course of about two weeks they establish as southwest winds or Southwest Monsoon. This hot humid air current frequently ushers in the group of cyclonic storms either in the Bay of Bengal or in the Arabian Sea, which are associated with heavy rainfall. On an average 75 per cent of the total rainfall of the study region occurs during this period. There is less variation in daily mean temperature because of cloudiness; temperature varies between 20°C to 23°C, while the mean daily temperature ranges between 28°C to 31°C at Solapur. July is the rainiest month for western and eastern margins of the region while September account for more rain in the interior of the region.

4. THE POST MONSOON PERIOD

The southwest monsoon withdraws from the region by the first half of October and the Northeast Trades set in thereafter. There is a certain amount of rainfall during this period associated with thundershowers. October marks the transition in temperature, which remains less than 19°C, in the western part of the region; mean daily minimum temperature remains higher over eastern part particularly in Solapur district. Temperature increases in this month and it varies between 38°C to 45°C. The general drying up of land and greater sunshine produce the phenomena of 'October Heat'. Winds during this period are generally light to moderate in the interior. Day temperature shows an increase but there after both day and night temperatures drop appreciably.

Summer season : Solapur experiences a warm but bearable summer with temperature reaching up to 40 °C.

Monsoon or Rainy season : The monsoon lasts from June to end of September, with moderate rainfall.

Winter season : Winter are quiet pleasant with temperature ranging between 15 °C to 37°C.

What to wear : While visiting the place one can wear clothing like light cotton and woollen in winters.

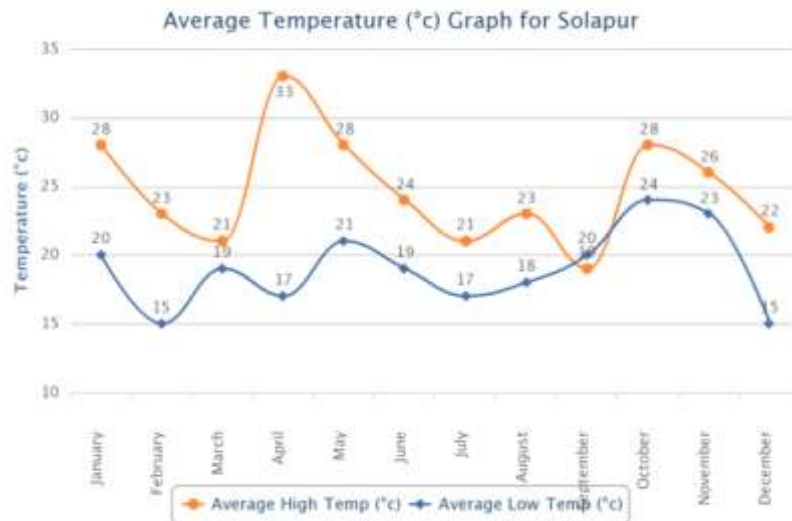
1. Minimum Temperature: 22° C (Summer), 15° C (Winter)
2. Maximum Temperature: 40° C (Summer), 37° C (Winter)
3. Best Time to Visit : October to March.

Climate Solapur average temperature & rainfall chart (Month wise)

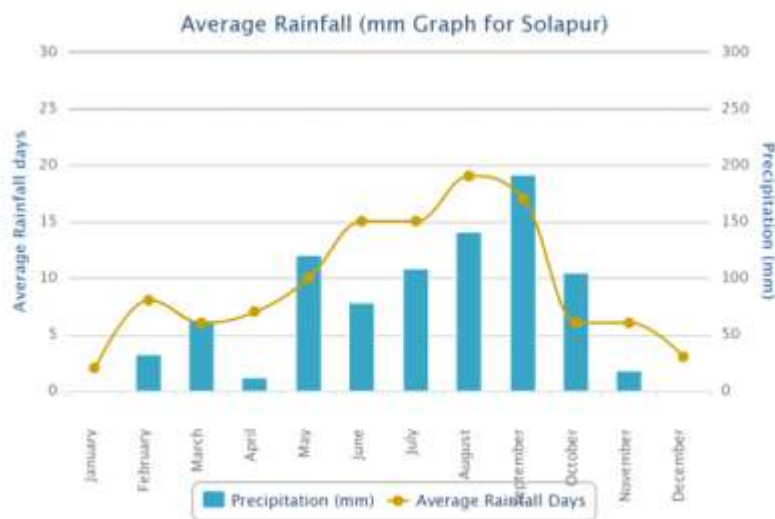
	City	Month	Max Temp	Min Temp	Mean Rainfall mm
Weather / climate / temperature / rainfall	Solapur	January	30.8	15.8	4.7
Weather / climate / temperature / rainfall	Solapur	February	33.6	17.6	4.4
Weather / climate / temperature / rainfall	Solapur	March	37.3	21.2	5
Weather / climate / temperature / rainfall	Solapur	April	39.6	24.3	12.4
Weather / climate / temperature / rainfall	Solapur	May	40.2	25.1	27.6
Weather / climate / temperature / rainfall	Solapur	June	35	23.3	116.9
Weather / climate / temperature / rainfall	Solapur	July	31.7	22.3	129.9
Weather / climate / temperature / rainfall	Solapur	August	31.3	21.8	119.8
Weather / climate / temperature / rainfall	Solapur	September	31.7	21.6	182.4

Weather / climate / temperature / rainfall	Solapur	October	32.6	20.7	85.4
Weather / climate / temperature / rainfall	Solapur	November	31	17.6	26.4
Weather / climate / temperature / rainfall	Solapur	December	29.9	15.2	7.8

Average High/Low Temperature for Solapur, India



Average Rainfall for Solapur, India



The mean annual rainfall at Solapur is 723.4 mm (highest and lowest is 1292.4 mm and 270.3mm respectively). There are 43 rainy days (>2.5 mm rainfall) at Solapur. The rainfall is scanty, erratic & ill-distributed.

CONCLUSION:

The most elevated temperature ever recorded is 46.0 C (114.8 F) in May 1988.[45] Although summer does not end until May or even the middle of June, the city regularly gets generally heavy overwhelming thundershowers in May (despite the fact that moistness stays high).

The city of Solapur gets a normal precipitation of 545 mm (21.5 in) per year.[46] Winter starts in November and keeps going until the end of February, with the temperatures once in a while dropping beneath 10 C (50 F).

The monsoon dominated climatic characteristics of the region has four seasons, which, over rest of India are same one, these are, (I) The Cold Weather Period 51 (December to February), (II) The Hot Weather Period (March to May), (III) South-West Monsoon Period (June to September) and (IV) Post-Monsoon Period (October to November).

The mean daily minimum temperature is low in the lower reaches of the region and in between 250C to 300C. The mean daily minimum temperature is highest over the eastern part of the region.

Local inversion of temperature develops in the enclosed regions during the early morning hours when the minimum temperature has a general tendency to reach below the dew point, then air gets saturated resulting in the formation of dew and mist.

There is less variation in daily mean temperature because of cloudiness; temperature varies between 200C to 230C, while the mean daily temperature ranges between 280C to 310C at Solapur.

October marks the transition in temperature, which remains less than 190C, in the western part of the region; mean daily minimum temperature remains higher over eastern part particularly in Solapur district.

Summer season : Solapur experiences a warm but bearable summer with temperature reaching up to 40 C. Winter season : Winter are quiet pleasant with temperature ranging between 15 C to 37 C.

REFERENCE

- 1."Ever recorded Maximum and minimum temperatures up to 2010" (PDF).India Meteorological Department.Retrieved April 10, 2015.
- 2.A geographical profile of the study region of CHAPTER II
- 3.Deshpande, C.D. (1971): 'Geography of Maharashtra', National Book Trust, New Delhi.

Online

<http://delhitourism.com/climate-solapur.html>



Shinde Tukaram Vittal

Assistant Professor, Geography , A.R. Burla Mahila Varishtha Mahavidyalaya , Solapur.

Publish Research Article

International Level Multidisciplinary Research Journal For All Subjects

Dear Sir/Mam,

We invite unpublished Research Paper, Summary of Research Project, Theses, Books and Book Review for publication, you will be pleased to know that our journals are

Associated and Indexed, India

- ★ International Scientific Journal Consortium
- ★ OPEN J-GATE

Associated and Indexed, USA

- EBSCO
- Index Copernicus
- Publication Index
- Academic Journal Database
- Contemporary Research Index
- Academic Paper Database
- Digital Journals Database
- Current Index to Scholarly Journals
- Elite Scientific Journal Archive
- Directory Of Academic Resources
- Scholar Journal Index
- Recent Science Index
- Scientific Resources Database
- Directory Of Research Journal Indexing

Golden Research Thoughts
258/34 Raviwar Peth Solapur-413005, Maharashtra
Contact-9595359435
E-Mail-ayisrj@yahoo.in/ayisrj2011@gmail.com
Website : www.aygrt.isrj.org