



DISTRICT WISE CLIMATE CHANGE INFORMATION FOR THE STATE OF TAMIL NADU TEMPERATURE PROJECTIONS FOR VIRUDHUNAGAR



28.1 About Virudhunagar

Virudhunagar district occupies an area of 4243 km². It is bounded by Madurai district on the north, Sivaganga district on the northeast, Ramanathapuram district on the southeast, Thoothukudi district to the south, Tirunelveli district to the southwest, Kerala State to the west, and Theni district to the northwest. It lies between 09°12' and 09°47' North latitude and 77°20' and 78°26' East longitude.^{1,2,3}

28.2 Climate of Virudhunagar

The district enjoys a subtropical climate. The period from April to June is generally hot and dry. The annual mean minimum and maximum temperatures are 23.78 and 33.95°C respectively. The daytime heat is oppressive and the temperature is as high as 40.2°C. The lowest temperature recorded is of the order of 19.3°C.³

28.3 Temperature Projections for Virudhunagar

The annual maximum and minimum temperature normal (1970-2000) of the district are 33.1°C and 24.9°C respectively.⁴ Projections of maximum temperature over Virudhunagar for the periods 2010-2040 (2020s), 2040-2070 (2050s) and 2070-2100 (2080s) with reference to the baseline (1970-2000) indicate an increase of **1.1°C**, **2.2°C** and **3.2°C** respectively. Similarly, the projections of minimum temperature for the same periods indicate an increase of **1.1°C**, **2.3°C** and **3.4°C** respectively.

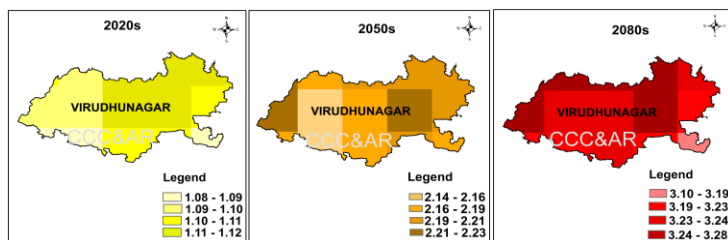


Fig 28.1 Changes in Max. Temperature for 2020s, 2050s & 2080s

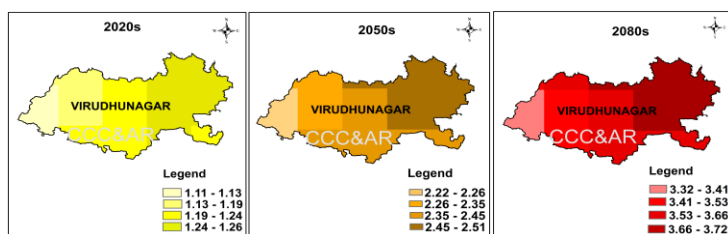


Fig 28.2 Changes in Min. Temperature for 2020s, 2050s & 2080s

Table 28.1 Changes in Temperature

Parameter	2020s	2050s	2080s
Maximum Temperature	+1.1°C	+2.2°C	+3.2°C
Minimum Temperature	+1.1°C	+2.3°C	+3.4°C

28.4 Key Findings

The average change of maximum and minimum temperature for Virudhunagar district are expected to increase by **3.2°C** and **3.4°C** respectively by the end of the century.

28.5 References

- <http://virudhunagar.tn.nic.in/>
- <http://www.virudhunagar.in/district.php>
- Central Ground Water Board 2009. District ground water brochure Virudhunagar district, Tamil nadu. Central Ground Water Board South Eastern Coastal Region, Chennai. Available at cgwb.gov.in/District_Profile/TamilNadu/Virudhunagar.pdf
- IMD, 2013. Temperature of Virudhunagar District. Regional Meteorological Centre, Chennai.