



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



22.1 About Thanjavur

The Thanjavur district lies between 9° 50' and 11° 25' North latitude and between 78° 45' and 79° 25' East longitude. It is bounded on the north by Thiruchirapalli and Cuddalore districts, on the east by Tiruvarur and Nagapattinam districts, on the south by Palk Strait and Pudukottai district and on the west by Pudukottai district and Tiruchirapalli districts. Total geographical area of the district is 3602.86 sq. km.^{1,2,3}

22.2 Climate of Thanjavur

The climate of the Thanjavur district is humid and tropical. The mean maximum temperature of the district shows variation between 36.5°C in June, 27.8°C in May and 37.48°C during May – July. The mean minimum temperature shows variation from 22.1°C to 27.1°C in December and 20.8°C during November-January.^{2,3}

22.3 Temperature Projections for Thanjavur

The annual maximum and minimum temperature normal (1970-2000) of the district are 33.6°C and 24.3°C respectively.⁴ Projections of maximum temperature over Thanjavur for the periods 2010-2040 (2020s), 2040-2070 (2050s) and 2070-2100 (2080s) with reference to the baseline (1970-2000) indicate an increase of 1.0°C, 2.0°C and 3.0°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.

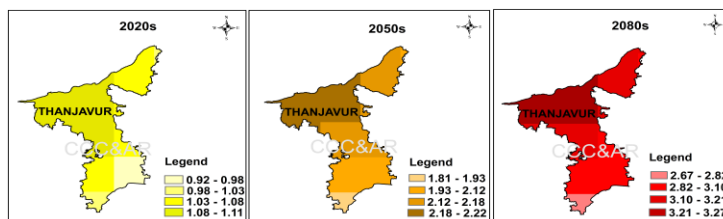


Fig 22.1 Changes in Max. Temperature for 2020s, 2050s & 2080s

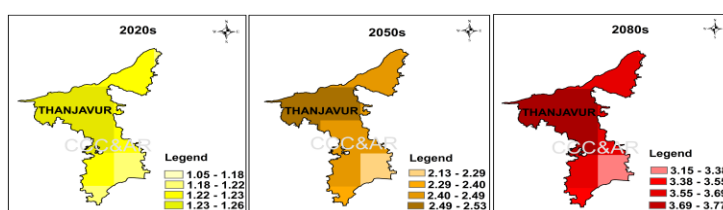


Fig 22.2 Changes in Min. Temperature for 2020s, 2050s & 2080s

Table 22.1 Changes in Temperature

Parameter	2020s	2050s	2080s
Maximum Temperature	+1.0°C	+2.0°C	+3.0°C
Minimum Temperature	+1.1°C	+2.3°C	+3.4°C

22.4 Key Findings

The average change of maximum and minimum temperature for Thanjavur district are expected to increase by 3.0°C and 3.4°C respectively by the end of the century.

22.5 References

1. <http://www.thanjavur.tn.nic.in/disprogeogra.html>
2. ENVIS 2015. Thanjavur District. ENVIS Centre Tamilnadu, Available at tnenvis.nic.in/files/THANJAVUR%20.pdf
3. Central Ground Water Board 2009. District ground water brochure Thanjavur district, Tamil nadu. Central Ground Water Board South Eastern Coastal Region, Chennai. Available at cgwb.gov.in/District_Profile/TamilNadu/Tiruvannamalai.pdf
4. IMD, 2013. Temperature of Thanjavur District. Regional Meteorological Centre, Chennai.