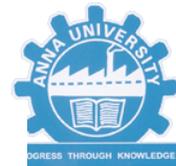




# DISTRICT WISE CLIMATE CHANGE INFORMATION FOR THE STATE OF TAMIL NADU TEMPERATURE PROJECTIONS FOR KANYAKUMARI



## 32.1 About Kanyakumari

Kanyakumari is the southernmost district of Tamil Nadu. The district lies between 77°15' and 77°36' of the Eastern longitudes and 8°03' and 8°35' of the Northern latitudes. The district is bound by Tirunelveli district on the north and the east. The southeastern boundary is the Gulf of Mannar. On the south and the south west, the boundaries are the Indian Ocean and the Arabian Sea. On the west and north west it is bound by Kerala. With an area of 1672 sq. km it occupies 1.29% of the total extent of Tamil Nadu.<sup>1,2</sup>

## 32.2 Climate of Kanyakumari

The average maximum temperature during May is 35.93°C. The average minimum temperature recorded is 23.85°C during January. The annual mean minimum and maximum temperatures are 23.78 and 33.95°C respectively.<sup>1,2</sup>

## 32.3 Temperature Projections for Kanyakumari

The annual maximum and minimum temperature normal (1970-2000) of the district are 31.1°C and 24.5°C respectively.<sup>3</sup> Projections of maximum temperature over Kanyakumari 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 **2.8°C** respectively. Similarly, the projections of minimum temperature for the same periods indicate an increase of **1.0°C**, **2.0°C** and **3.0°C** respectively.

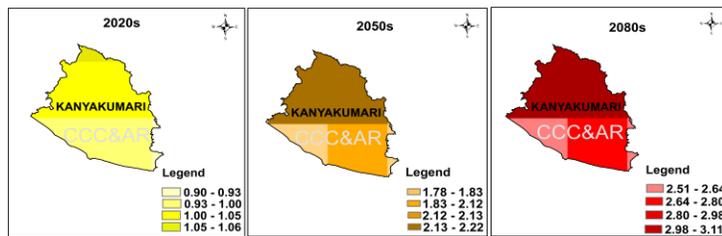


Fig 32.1 Changes in Max. Temperature for 2020s, 2050s & 2080s

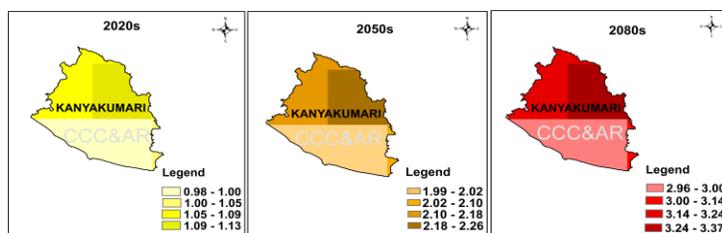


Fig 32.2 Changes in Min. Temperature for 2020s, 2050s & 2080s

Table 32.1 Changes in Temperature

Parameter	2020s	2050s	2080s
Maximum Temperature	+1.0°C	+2.0°C	+2.8°C
Minimum Temperature	+1.0°C	+2.0°C	+3.0°C

## 32.4 Key Findings

The average change of maximum and minimum temperature for Kanyakumari district are expected to increase by **2.8 °C** and **3.0 °C** respectively by the end of the century.

## 32.5 References

1. ENVIS 2015. Kanyakumari District. ENVIS Centre Tamilnadu, Available at [tnvis.nic.in/files/KANYAKUMARI%20%20.pdf](http://tnvis.nic.in/files/KANYAKUMARI%20%20.pdf)
2. Central Ground Water Board 2009. District ground water brochure Kanyakumari district, Tamil nadu. Central Ground Water Board South Eastern Coastal Region, Chennai. Available at [cgwb.gov.in/District\\_Profile/TamilNadu/Kanyakumari.pdf](http://cgwb.gov.in/District_Profile/TamilNadu/Kanyakumari.pdf)
3. IMD, 2013. Temperature of Kanyakumari District. Regional Meteorological Centre, Chennai.