



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



## 10.1 About Cuddalore

The Cuddalore district lies on the east coast between 78°38' and 80° East longitude and 5°5'11" and 12°35' North latitude. It is bounded on the north by Villupuram district, on the south by Nagapattinam district, on the west by Perambalur and Villupuram districts and on the east by Bay of Bengal. The Southern boundary follows for the greater part of the length of two rivers - the Vellar and the Coloroon. The total geographical area of the district is about 3,678 sq. km.<sup>1,2,3</sup>

## 10.2 Climate of Cuddalore

The Cuddalore district has a hot tropical climate. The summer season, which is very oppressive, is from March to May. The average maximum and the average minimum temperatures have been 36.8°C in May and 19.9°C in January, respectively.<sup>1,2,3</sup>

## 10.3 Temperature Projections for Cuddalore

The annual maximum and minimum temperature normal (1970-2000) of the district are 32.8°C and 23.4°C respectively.<sup>4</sup> Projections of maximum temperature over Cuddalore 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, 2.1°C and 3.1°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.

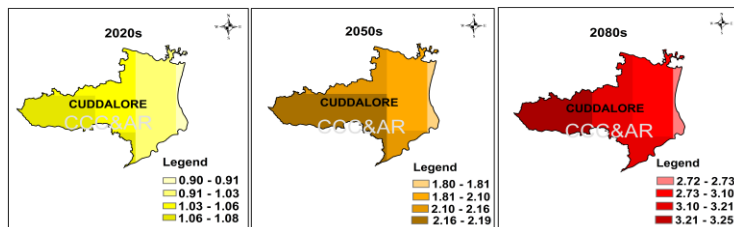


Fig 10.1 Changes in Max. Temperature for 2020s, 2050s & 2080s

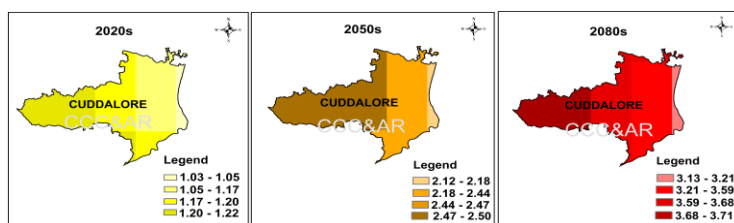


Fig 10.2 Changes in Min. Temperature for 2020s, 2050s & 2080s

Table 10.1 Changes in Temperature

Parameter	2020s	2050s	2080s
Maximum Temperature	+1.1°C	+2.1°C	+3.1°C
Minimum Temperature	+1.1°C	+2.3°C	+3.4°C

## 10.4 Key Findings

The average change of maximum and minimum temperature for Cuddalore district are expected to increase by 3.1°C and 3.4°C respectively by the end of the century.

## 10.5 References

- <http://cuddalore.tn.nic.in/profile.htm>
- Central Ground Water Board 2009. District ground water brochure Cuddalore district, Tamil nadu. Central Ground Water Board South Eastern Coastal Region, Chennai. Available at [cgwb.gov.in/District\\_Profile/TamilNadu/cuddalore.pdf](http://cgwb.gov.in/District_Profile/TamilNadu/cuddalore.pdf)
- ENVIS 2015. Cuddalore District. ENVIS Centre Tamilnadu, Available at [tnevis.nic.in/files/CUDDALORE.pdf](http://tnevis.nic.in/files/CUDDALORE.pdf)
- IMD, 2013. Temperature of Cuddalore District. Regional Meterological Centre, Chennai.