



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



15.1 About Nagapattinam

Nagapattinam is a coastal district situated on the eastern side of Tamil Nadu. The district lies on the east coast to the south of Cuddalore district and another part of the Nagapattinam district lies to the south of Karaikkal and Tiruvarur districts. This district lies on the shores of the Bay of Bengal between 10°35' and 11°25' North latitudes and 79°35' and 79°50' East longitudes. The district town spreads over an area of 2715.83 sq. km. It is one of the richest regions of biodiversity in the country.^{1,2,3}

15.2 Climate of Nagapattinam

The average maximum temperature of the district as a whole is about 32°C and the average minimum temperature is 24.6°C. The Southwest winds sets in during April, it is strongest in June and continues till September.^{1,3}

15.3 Temperature Projections for Nagapattinam

The annual maximum and minimum temperature normal (1970-2000) of the district are 32.9°C and 24.5°C respectively.⁴ Projections of maximum temperature over Nagapattinam for the periods 2010-2040 (2020s), 2040-2070 (2050s) and 2070-2100 (2080s) with reference to the baseline (1970-2000) indicate an increase of **0.9°C**, **1.8°C** and **2.8°C** respectively. Similarly, the projections of minimum temperature for the same periods indicate an increase of **1.1°C**, **2.2°C** and **3.2°C** respectively.

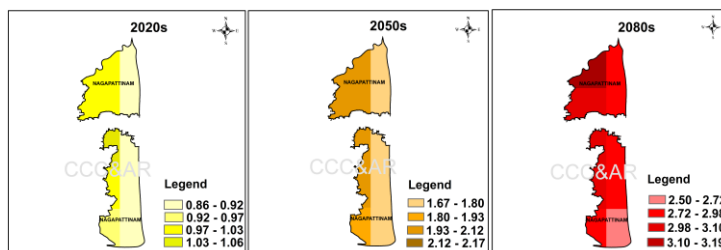


Fig 15.1 Changes in Max. Temperature for 2020s, 2050s & 2080s

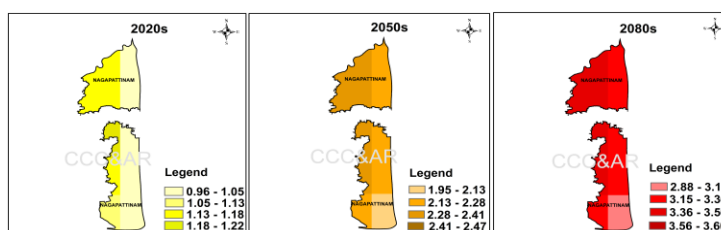


Fig 15.2 Changes in Min. Temperature for 2020s, 2050s & 2080s

Table 15.1 Changes in Temperature

Parameter	2020s	2050s	2080s
Maximum Temperature	+0.9°C	+1.8°C	+2.8°C
Minimum Temperature	+1.1°C	+2.2°C	+3.2°C

15.4 Key Findings

The average change of maximum and minimum temperature for Nagapattinam district are expected to increase by **2.8°C** and **3.2°C** respectively by the end of the century.

15.5 References

- <http://www.ncrc.in/nagapattinam.php>
- <http://www.mapsofindia.com/maps/tamilnadu/districts/nagapattinam.htm>
- ENVIS 2015. Nagapattinam District. ENVIS Centre Tamilnadu, Available at tnvis.nic.in/files/NAGAPATTINAM%20%20.pdf
- IMD, 2013. Temperature of Nagapattinam District. Regional Meteorological Centre, Chennai.