



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



## 14.1 About Ariyalur

Ariyalur district came into existence by the bifurcation of Perambalur district. It is bounded on the north by Cuddalore, south by Thanjavur, east by Cuddalore and Thanjavur and west by Perambalur and Tiruchirapalli districts. Ariyalur has been functioning as a separate district since 2007. Ariyalur district is located in central Tamil Nadu and is 265 km away from Chennai. The district has an area of 1949 sq. km. It lies between 10°53' and 11°26' North latitudes and between 78°56' and 79°31' East longitudes.<sup>1,2,3</sup>

## 14.2 Climate of Ariyalur

The climate of Ariyalur district is sub-tropical. The average maximum and minimum temperatures for district have been 40°C and 22°C respectively.<sup>1,2,3</sup>

## 14.3 Temperature Projections for Ariyalur

The annual maximum and minimum temperature normal (1970-2000) of Ariyalur district are 33.7°C and 24.2°C respectively.<sup>4</sup> Projections of maximum temperature over Ariyalur 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, 2.2°C and 3.2°C respectively. Similarly, the projections of minimum temperature for the same periods indicate an increase of 1.2°C, 2.4°C and 3.7°C respectively.

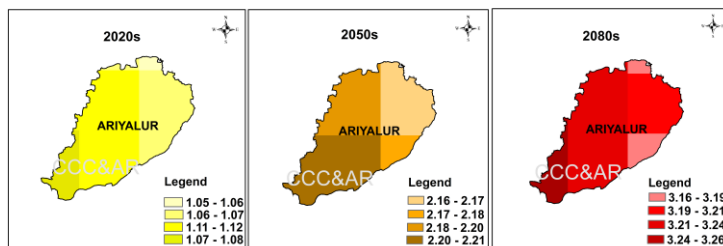


Fig 14.1 Changes in Max. Temperature for 2020s, 2050s & 2080s

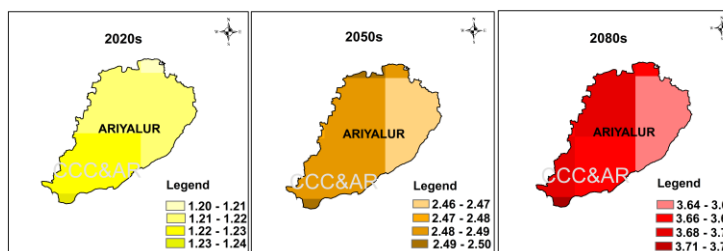


Fig 14.2 Changes in Min. Temperature for 2020s, 2050s & 2080s

Table 14.1 Changes in Temperature

Parameter	2020s	2050s	2080s
Maximum Temperature	+1.0°C	+2.2°C	+3.2°C
Minimum Temperature	+1.2°C	+2.4°C	+3.7°C

## 14.4 Key Findings

The average change of maximum and minimum temperature for Ariyalur district are expected to increase by 3.2°C and 3.7°C respectively by the end of the century.

## 14.5 References

- <http://www.ariyalur.nic.in/ataglancepage.htm>
- [http://www.twadboard.gov.in/twad/ariyalur\\_dist.aspx](http://www.twadboard.gov.in/twad/ariyalur_dist.aspx)
- <http://tnhorticulture.tn.gov.in/horti/ariyalur>
- IMD, 2013. Temperature of Ariyalur District. Regional Meteorological Centre, Chennai.