



DISTRICT WISE CLIMATE CHANGE INFORMATION FOR THE STATE OF TAMIL NADU RAINFALL 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

Within the Thanjavur district the rainfall is uneven. The annual normal (1988 – 1996) varies partially from 1179 mm (Lower Anaicut) to 763 mm (Budalur). The rainfall is high on the eastern part of the district compared to the western part. The district receives major portion of its annual rainfall during Northeastern monsoon (Oct-Dec). The Northeast monsoon provides much rainfall with 545.7 mm. Since the Northeast monsoon rainfall is dominating, its effect is felt on the eastern part of the district.^{2,3}

22.3 Rainfall Projections for Thanjavur

The annual rainfall normal (1970-2000) of Thanjavur district is 1053 mm.³ Projections of rainfall over Thanjavur for the periods 2010-2040 (2020s), 2040-2070 (2050s) and 2070-2100 (2080s) with reference to the baseline (1970-2000) indicate a general decrease of **3.0%**, **2.0%** and **2.0%** respectively.

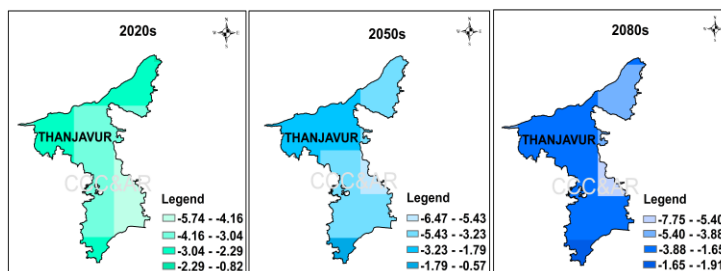


Fig 22.1 Percent change in Annual Rainfall for the period 2020s, 2050s and 2080s

Table 22.1 Percent change in Annual Rainfall

Parameter	2020s	2050s	2080s
Annual Rainfall	-3.0%	-2.0%	-2.0%

22.4 Key Findings

The annual rainfall for Thanjavur district may reduce by **2.0%** by the end of the century as per the emission scenario of A1B.

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. Rainfall of Thanjavur District. Regional Meteorological Centre, Chennai.