



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



### 15.1 About Nagapattinam

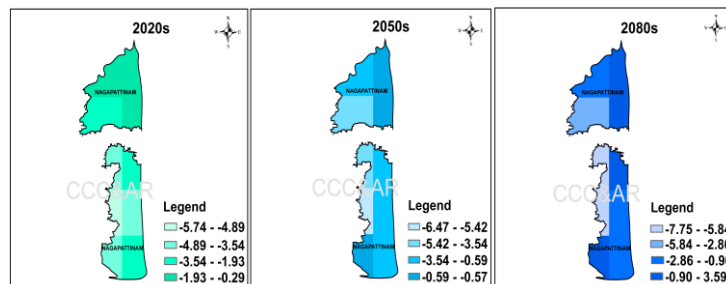
Nagapattinam is a coastal district situated on the eastern side of Tamil Nadu. The district lies on the east coast to the south of Cuddalore district and another part of the Nagapattinam district lies to the south of Karaikkal and Tiruvarur districts. This district lies on the shores of the Bay of Bengal 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.<sup>1,2,3</sup>

### 15.2 Climate of Nagapattinam

The Northeast monsoon contributes about 60% of the total annual rainfall. The Southwest monsoon rains from June to September and from March to May accounts equally for the rest of the annual rainfall. The average and actual rainfall is 265.2 and 250.6 mm respectively. During South west monsoon it is 908.8mm while it is 969.2 mm during Northeast monsoon.<sup>3</sup>

### 15.3 Rainfall Projections for Nagapattinam

The annual rainfall normal (1970-2000) of Nagapattinam district is 1341 mm.<sup>4</sup> Projections of rainfall over Nagapattinam for the periods 2010-2040 (2020s), 2040-2070 (2050s) and 2070-2100 (2080s) with reference to the baseline (1970-2000) indicate a decrease of **2.0%**, **1.0%** and **0.1%** respectively.



**Fig 15.1** Percent change in Annual Rainfall for the period 2020s, 2050s and 2080s

**Table 15.1** Percent change in Annual Rainfall

Parameter	2020s	2050s	2080s
Annual Rainfall	-2.0%	-1.0%	-0.1%

### 15.4 Key Findings

The annual rainfall for Nagapattinam district may reduce by **0.1%** by the end of the century as per the emission scenario of A1B.

### 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 [tnenvis.nic.in/files/NAGAPATTINAM%20%20.pdf](http://tnenvis.nic.in/files/NAGAPATTINAM%20%20.pdf)
- IMD, 2013. Rainfall of Nagapattinam District. Regional Meteorological Centre, Chennai.