

**Trends in mean monthly temperature for St. John's 1874-1991**  
(Poster)

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Temperature data have been collected at various sites in the St. John's area on a regular basis since 1874. Using periods of overlapping observations for various older observatories and the continuous records since 1942 from Torbay Airport, a time series of mean monthly temperatures has been

assembled for the period 1874-1991. This data set was then analysed to determine (i) the trend and (ii) the existence of cycles having periods up to 50 years.

The trend extracted indicates a warming of approximately 1°C/ century based on both the complete record and

two 50 year sections of the record, one prior to 1942 and the other for the period 1942 to 1991. This suggests the warming trend has been consistent and persistent over the total observational period.

There is evidence in the records for the presence of

several cycles having periods in the 7 to 8, 12 to 15, 20 to 24 and 40 to 45 year ranges. These cycles were determined using simple autocorrelation techniques on each of the monthly data sets and corroborate earlier evidence from the full data set for their existence.