

Trends in seasonal precipitation and temperature in Slovenia during 1951-2007

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During the period 1951-2007, mean annual temperatures in Slovenia have increased significantly by 0.15 to 0.29°C/decade. Seasons show different trends:

- **Spring and summer:** A significant increase of 0.3-0.4°C per decade was observed in extended areas of central and north-eastern Slovenia during spring and summer.
- **Autumn:** No significant trends were observed in autumn over most of the Slovenian area.
- **Winter:** A significant increase of 0.2-0.3°C/decade was observed in central and north-eastern parts of Slovenia.

The strong warming in summer and spring, that is almost twice the trend observed in neighbouring countries, could be enhanced by drier soils caused by the decrease in winter precipitation in Slovenia.

During the period 1951-2007, changes in mean annual precipitation were observed only in the north-western part, where precipitation decreased at a rate of 3-6% per decade.

Observed trends for the seasons are:

- **Spring and summer: Significant trends were observed in the western part of Slovenia only: a decrease of 3-6 % per decade.**
- **In autumn: Trends were non-significant throughout Slovenia.**
- **Winter: Precipitation significantly decreased by 3-12% per decade; this trend was especially intense in the north-western part of Slovenia.**

Source: De Luis et al. (2012). Regional Environmental Change. Published online 20 October 2012.

Photo: Monitotxi (www.stckr.com)