



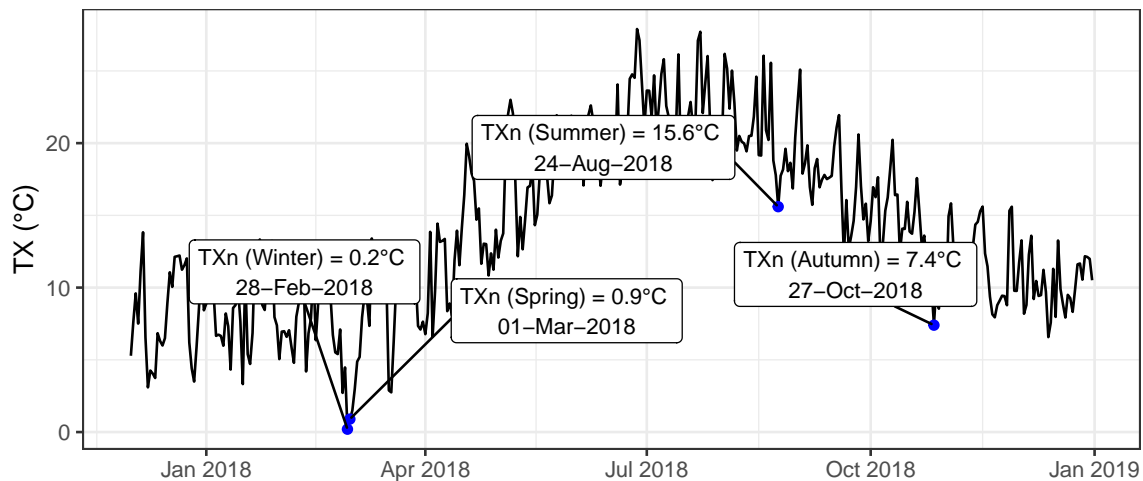
Coldest Day (TXn)

Key Message

- The coldest daytime maximum temperature of the year is tending to become warmer at the majority of weather stations in Ireland.

Definition

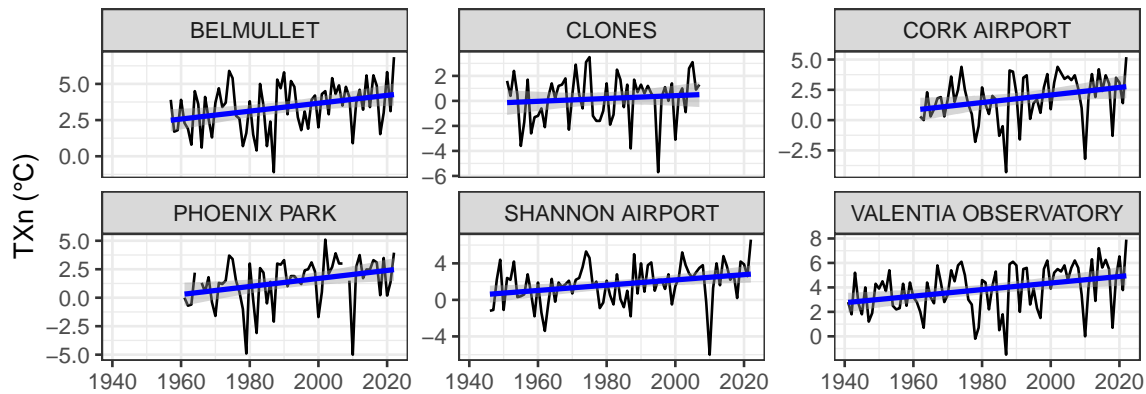
- Daily maximum temperature (**TX**), based on 09UTC - 09UTC observations, are used to calculate the index.
- The **TXn** index represents the minimum value of daily maximum temperature (TX) during the period of interest (year, season or month).
- Illustrated example below for seasonal values in 2018 at Phoenix Park. The annual **TXn** value for 2018 at Phoenix Park was 0.2°C.





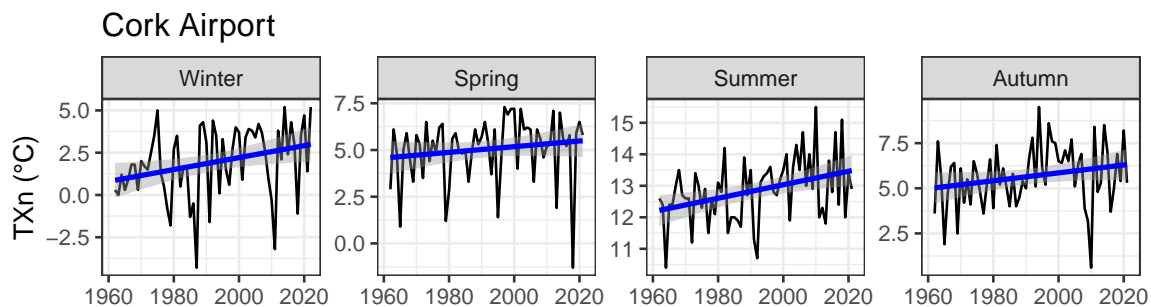
Trends

- There is an increasing trend in **TX_n** at the majority of Met Éireann's synoptic weather stations, as shown in the graphs below.
- The 30-year average value of **TX_n** has increased by 0.9°C, between 1961-1990 and 1991-2020, at the six stations shown in the graphs below.
- These are in agreement with global trends for this index, [Dunn et al., 2020].



Seasonality

- Annual **TX_n** values typically occur in winter.
- When separated seasonally, warming is generally seen for this index in most seasons. This is shown below at Cork Airport as an example.



Data Access

Data for this index can be downloaded through the web-page below (or the QR code in the header):

- <https://www.met.ie/climate/climate-change-indices-etccdi/>

For further information contact Met Éireann Climate Enquiries: enquiries@met.ie



References

Robert JH Dunn et al. Development of an updated global land in situ-based data set of temperature and precipitation extremes: HadEX3. *Journal of Geophysical Research: Atmospheres*, 125(16):e2019JD032263, 2020. doi: <https://doi.org/10.1029/2019JD032263>.