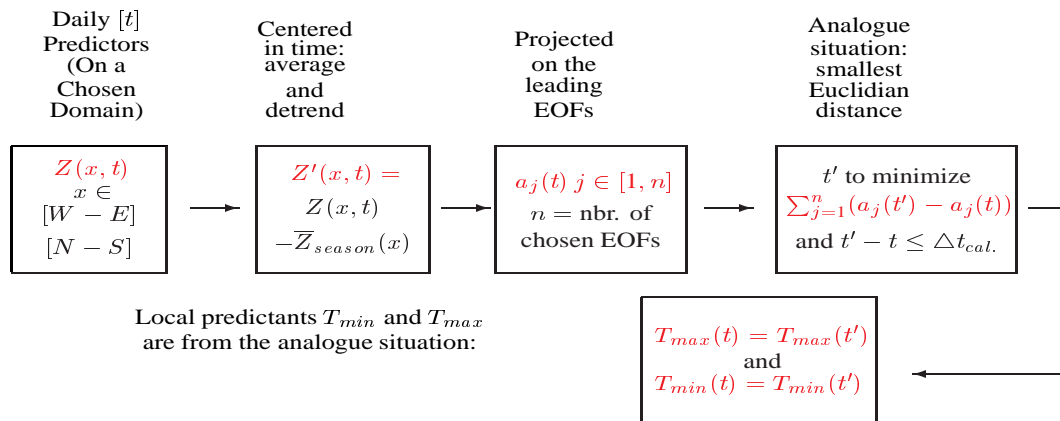


# Section I: The method used

Analogue situations have been used by meteorologists for forecasting as a recognition tool or simply as a main driver of the subjective forecaster process. More recently, analogue techniques have been successfully applied for downscaling in climate studies. They have been shown to be successful at mid-latitude, producing unbiased series with the right spatial correlation structure. The latter is a very important feature in Australian landscape



This method is validate against:

**Random:** analogue randomly chosen in the sample

**Persistence:** analogue is set to the following day

Finally the experience, gained by the Australian Bureau of Meteorology since 1980, while using analogues as a forecasting tool has shown the potential of this technique for many variables.

The available dataset is split in two sub sets of independent data: 1970-1981 and 1982-1993. The SM is applied on the second sample, the temperature series are reconstructed using analogue situations extracted from the first period.

The model is adapted for each season and location and parameters are set up during this validation. The main validation tool is the comparison of the reconstructed series with the observed one. Differences of mean and variance are compared, as well as the correlation between the two series and the Root Mean Square Error (RMSE).