

MIERCOLES: EJERCICIOS 3 – funciones simples

Exercise 1. The use of the tapply, sapply, and lapply functions to calculate mean temperature per month.

The file temperature.xls contains temperature observations made at 31 locations along the Dutch coastline. The data were collected and provided by the Dutch institute RIKZ (under the monitoring program MWTL; Monitoring Waterstaatkundige Toestand des Lands). Sampling began in 1990, and the final measurements in the spreadsheet were taken in December 2005, a period of 16 years. Sampling frequency was 0–4 times per month, depending on the season. Calculate a one-time series of monthly averages using data from all stations. The end result should be a variable of dimension 16 × 12. Also calculate the standard deviation and number of observations per month.

Exercise 2. The use of the table function for the temperature data.

Using the data in Exercise 1, determine the number of observations per station. How many observations were made per year? How many observations were made at each station per year?