

## TOUR OF SPAIN

One needs to predict the duration of a stage of *\La Vuelta ciclista a Espa~na*", *Time*, starting from the length of the stage in Kms, *Distance*), the difference between the heights at the end and at the start of the stage, (*HeightIncr*), the accumulated number of meters climbed, (*AccumIncr*), two variables indicating whether the stage precedes or follows a mountain stage, (*bef-mount* and *aft-mount*), two variables indicating whether the stage precedes or follows a time trial stage, (*bef-tt* and *aft-tt*), a variable indicating whether it is the last stage of the Vuelta, (*last*), a variable that indicates in which one of the three weeks the stage takes place, (*week*), four variables indicating the number of mountain passes of each category in that stage, (*ports\**), and the year of the stage, *year*.

In *Vuelta0.xlsx* you can find the data corresponding to the *\Vueltas*" from 1991 to 1996. Build a model for *Time* and compare the forecasts of your model with the ones made by an expert that can be found in the variable *ForecastedTime* of that file. Do you expect that model to hold now and be useful to predict the duration of a stage, more than fifteen Vueltas later?

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IMPORTANT: The exercise has to be upload at the RACO no later than the 4 of January 2019. You have to upload a markdown file with the name **student1student2.Rmd** with the analysis and the corresponding conclusions (special paragraph with the conclusions is required).