**Weather forecast in Australia**

**Relevant training course:** Data Scientist

**Level of difficulty:** 06/10

**Description of the project:**

*This dataset contains approximately 10 years of daily weather observations from many locations in Australia.*

*So there are different interesting visualizations possible.*

*The first objective would be to predict the target variable: RainTomorrow. It means: did it rain the next day, yes or no? This column is Yes if the rain for that day was 1mm or more.*

*The same goes for wind or temperature predictions.*

*In a second step, we can make long-term predictions, using mathematical techniques for the analysis of time series, and/or recurrent neural networks.*

**Resources to consult:**

* **Data:**
  + <https://www.kaggle.com/jsphyg/weather-dataset-rattle-package>
* **Bibliography:**
* Observations come from many weather stations. Daily observations are available at: <http://www.bom.gov.au/climate/data>.
* An example of the latest weather observations in Canberra: <http://www.bom.gov.au/climate/dwo/IDCJDW2801.latest.shtml>
* Definitions adapted from <http://www.bom.gov.au/climate/dwo/IDCJDW0000.shtml>
* Data source: http://www.bom.gov.au/climate/dwo/ and <http://www.bom.gov.au/climate/data>.

**Validation conditions for the project:**

* an exploration, data visualization and data pre-processing **report** ;
* a modeling **report** ;
* a final **report** and associated **GitHub**.