

Description of Minute Weather Dataset

The minute weather dataset comes from the same source as the daily weather dataset that was used for the hands-on activities in the previous modules. The difference is that the minute weather dataset contains raw sensor measurements captured at one-minute intervals, not processed like the daily weather dataset. The data is in the file *minute_weather.csv*, which is a comma-separated file.

As with the daily weather data, this data comes from a weather station located in San Diego, California. The weather station is equipped with sensors that capture weather-related measurements such as air temperature, air pressure, and relative humidity. Data was collected for a period of three years, from September 2011 to September 2014, to ensure that sufficient data for different seasons and weather conditions is captured.

Each row in *minute_weather.csv* contains weather data captured for a one-minute interval. Each row, or sample, consists of the following variables:

Variable	Description	Unit of Measure
rowID	unique number for each row	NA
hpwren_timest amp	timestamp of measure	year-month-day hour:minute:second
air_pressure	air pressure measured at the timestamp	hectopascals
air_temp	air temperature measure at the timestamp	degrees Fahrenheit
avg_wind_dire ction	wind direction averaged over the minute before the timestamp	degrees, with 0 means coming from the North, and increasing clockwise

avg_wind_speed	wind speed averaged over the minute before the timestamp	meters per second
max_wind_direction	highest wind direction in the minute before the timestamp	degrees, with 0 being North and increasing clockwise
max_wind_speed	highest wind speed in the minute before the timestamp	meters per second
min_wind_direction	smallest wind direction in the minute before the timestamp	degrees, with 0 being North and inceasing clockwise
min_wind_speed	smallest wind speed in the minute before the timestamp	meters per second
rain_accumulation	amount of accumulated rain measured at the timestamp	millimeters
rain_duration	length of time rain has fallen as measured at the timestamp	seconds
relative_humidity	relative humidity measured at the timestamp	percent