

Explanation of Columns

- Id - Each set of measurements has a single identification number. First measurement set starts at zero, and the Id's count up by one.
- Date - The date of the measurement. DD/MM/YYYY. Measurements were taken every fifteen minutes starting at 11:45 am of March 13, 2012, and ending at 6:30 am of April 11, 2012. Came initially as a string, which we converted to a datetime object.
- Time - time of the measurement in 24 hour clock format. Measurements were taken every fifteen minutes. Came as a string initially. We condensed this into the date column.
- CO2_(dinning-room) - The concentration of carbon dioxide in the air of the dining room, measured in parts per million (ppm). Vast quantities of CO₂ are known to contribute to rising temperatures, as in the context of global warming. Light from the sun passes into our atmosphere where solar radiation is reflected. The atmospheric carbon dioxide absorbs some of the energy of this reflected radiation, resulting in an insulating effect. In our present context the effect of CO₂ may be similar, albeit on a vastly smaller scale. Must have a lower limit of zero (no CO₂).
- CO2_room - The concentration of carbon dioxide in the air of the room who's temperature we're trying to predict, measured in parts per million (ppm).
- Relative_humidity_(dinning-room) - Relative humidity in the dining room, expressed as a percentage. Absolute humidity is measured as the mass of water vapor present in the air. Relative humidity is the ratio of the absolute humidity (how much water vapor there is currently) and the amount of water vapor that *could* be in the air at a given temperature. Must range between 0 and 100.
- Relative_humidity_room - Relative humidity of the target room, in %.
- Lighting_(dinning-room) - The amount of lighting in the dining room, measured in lux. Lux is the SI unit of illuminance, and measures lumens per square meter. Lumens measure the total quantity of visible light emitted by a source per unit of time. In more familiar terms, this lighting column basically tracks the intensity of light that hits or passes through a surface. Must have a lower limit of zero.
- Lighting_room - The amount of lighting in the target room, measured in lux.
- Meteo_Rain - Rain, the proportion of the last 15 minutes where rain was detected (a value in range [0,1]). A number of 0.75, for instance, means it was raining for 75% of the fifteen minute interval since the last reading.

- Meteo_Sun_dusk - Sun dusk.
- Meteo_Wind - Wind speed outside the house, in m/s.
- Meteo_Sun_light_in_west_facade - The amount of light in the west facade, in Lux. Must have a lower limit of zero.
- Meteo_Sun_light_in_east_facade - The amount of light in the east facade, in Lux.
- Meteo_Sun_light_in_south_facade - The amount of light in the south facade, in Lux.
- Meteo_Sun_irradiance - Sun irradiance, measured in watts per square meters (W/m²). Solar, or sun irradiance is the power per unit area received from the sun in the form of electromagnetic radiation. It seems to be relatively common to have small negative values at night time due to measurement error, but these should usually be positive values.
- Outdoor_relative_humidity_Sensor - Outdoor relative humidity, in %.
- Day_of_the_week - Day of the week (computed from the date), 1=Monday, 7=Sunday