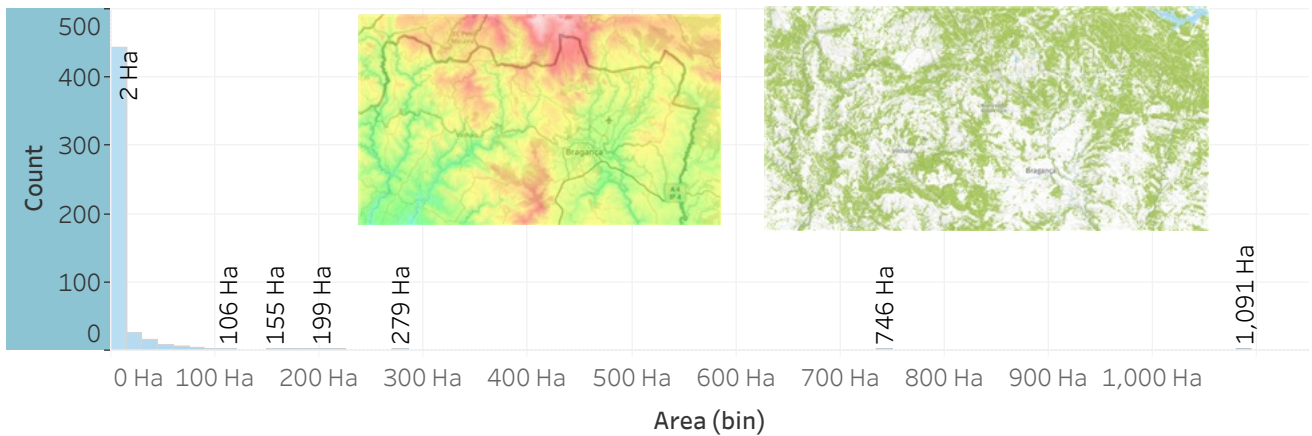


Montesinho Natural Park Fires

Montesinho Natural Park ..	Intro to Data	Fire Indexes	Drought Code EDA
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513 Fires in Montesinho Natural Park, Portugal over 3 years



- **X Y** spatial coordinates within the Montesinho park map: 1 to 9
- **month** - month of the year: "jan" to "dec"
- **day** - day of the week: "mon" to "sun"
- **fire indexes** four different fire weather indexes
- **temp** - temperature in Celsius degrees: 2.2 to 33.30
- **RH** - relative humidity in %: 15.0 to 100
- **wind** - wind speed in km/h: 0.40 to 9.40
- **rain** - outside rain in mm/m2: 0.0 to 6.4
- **area** - the burned area of the forest (in ha): 0.00 to 1090.84

Montesinho Natural Park Fires

Montesinho
Natural Park ..

Intro to Data

Fire Indexes

Drought Code
EDA

Fire Sizes

■ Large (600+ sq m)

■ Moderate (9+ sq..)

■ Small (0 sq m)

Important properties of the dataset:

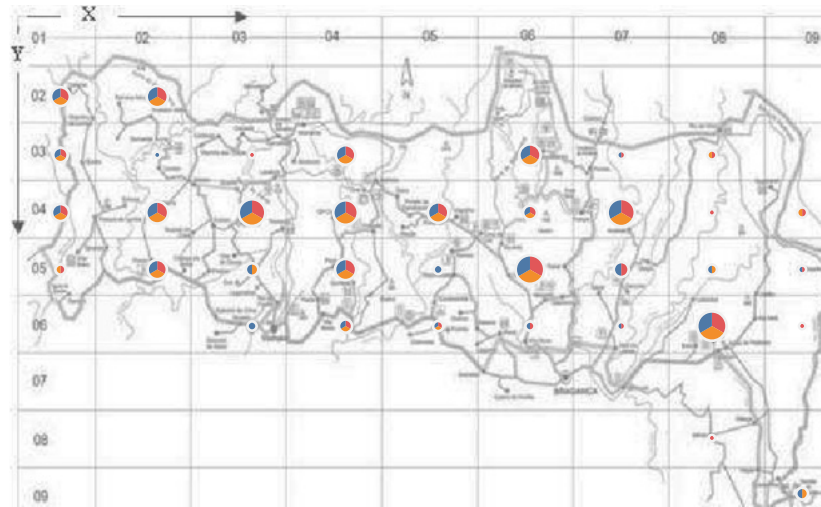
- variables are only entered when there is a fire
- We have month variable but not year variable, so we can't look at trends over time
- If we had the same data for days there were no fires, there would be more questions we could answer

So what might we predict?

- how frequent fires are by month/season?
- Fire size chance of any given fire will be a large fire

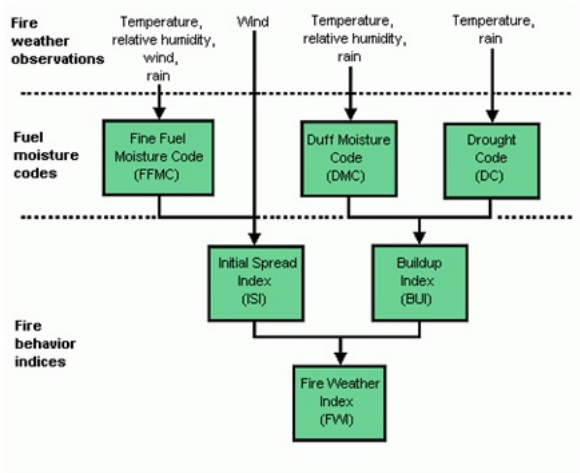
For a variable to predict large fires...

- an increase in the variable must increase the size of fires while also not increasing number of small fires...



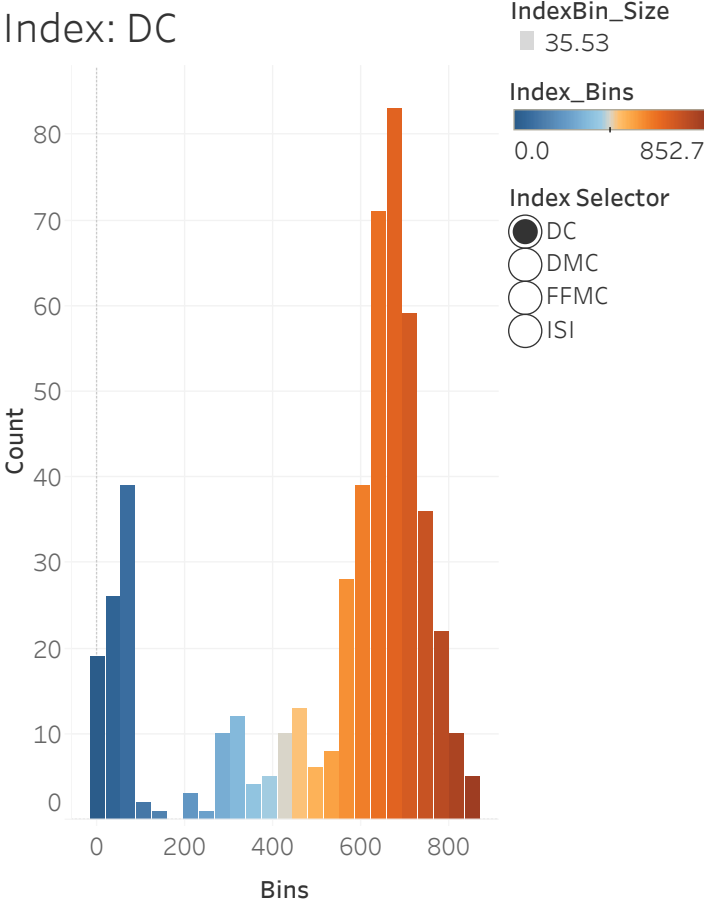
Montesinho Natural Park Fires

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DC

Subtle bimodal distribution, related to seasonality. Summer fires vs spring+winter fires



DC: Drought Code: FUEL MOISTURE rating of the average moisture content of deep, compact, organic layers

Montesinho Natural Park Fires

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Count of Fire Types with DC

