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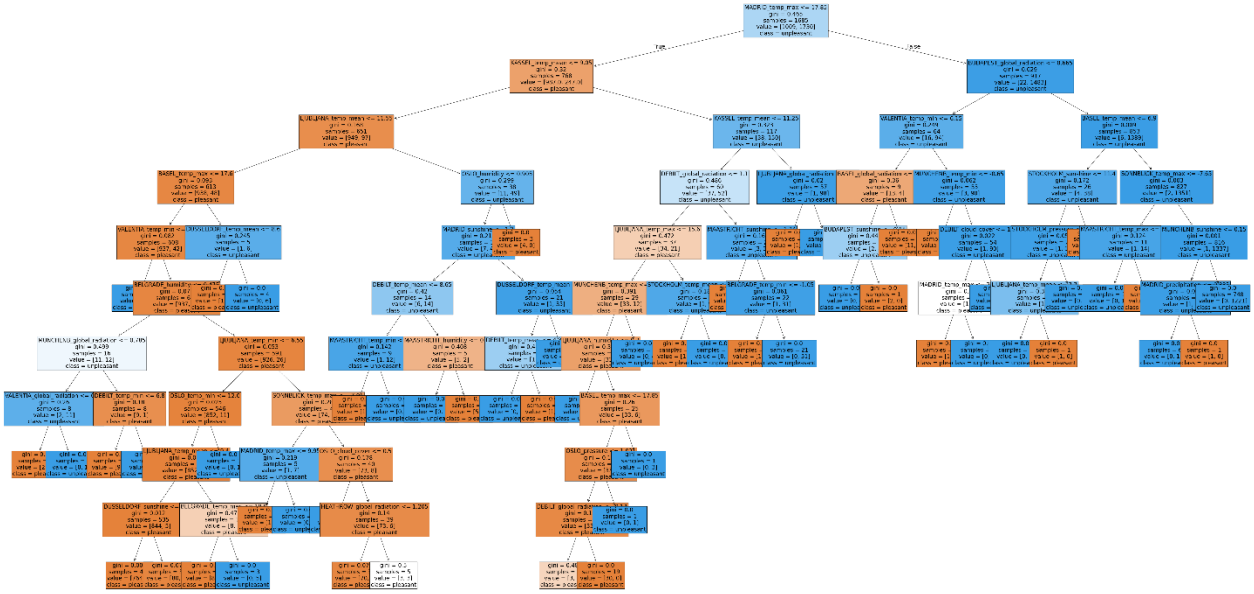
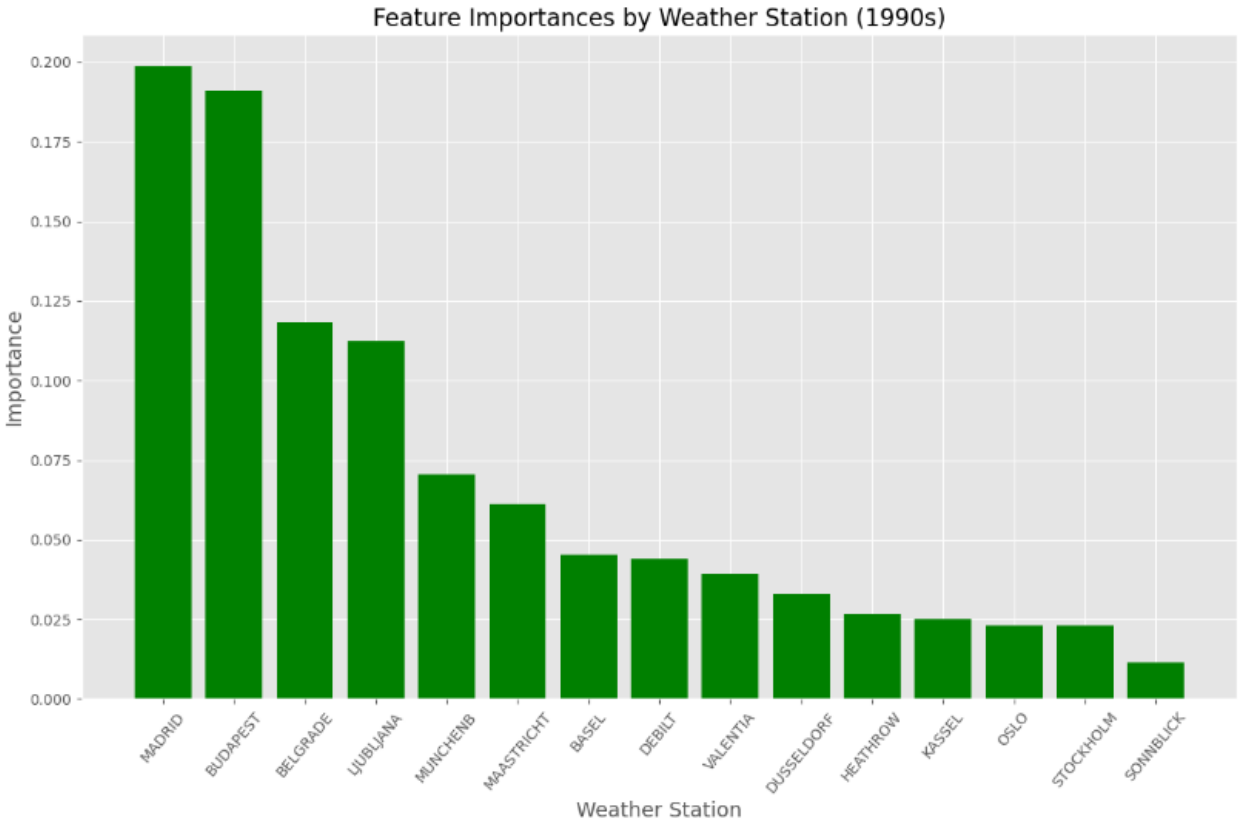
Task 2.3
CareerFoundry

Random Forest & Feature Importance – 1990's (All Weather Stations)

Accuracy = 95.8%





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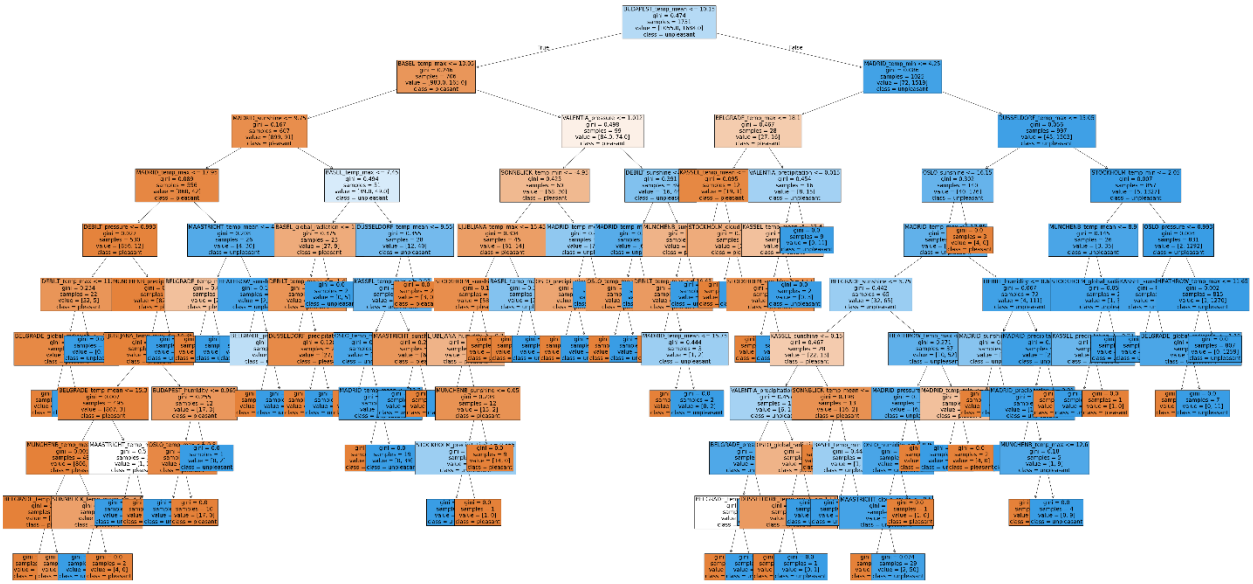
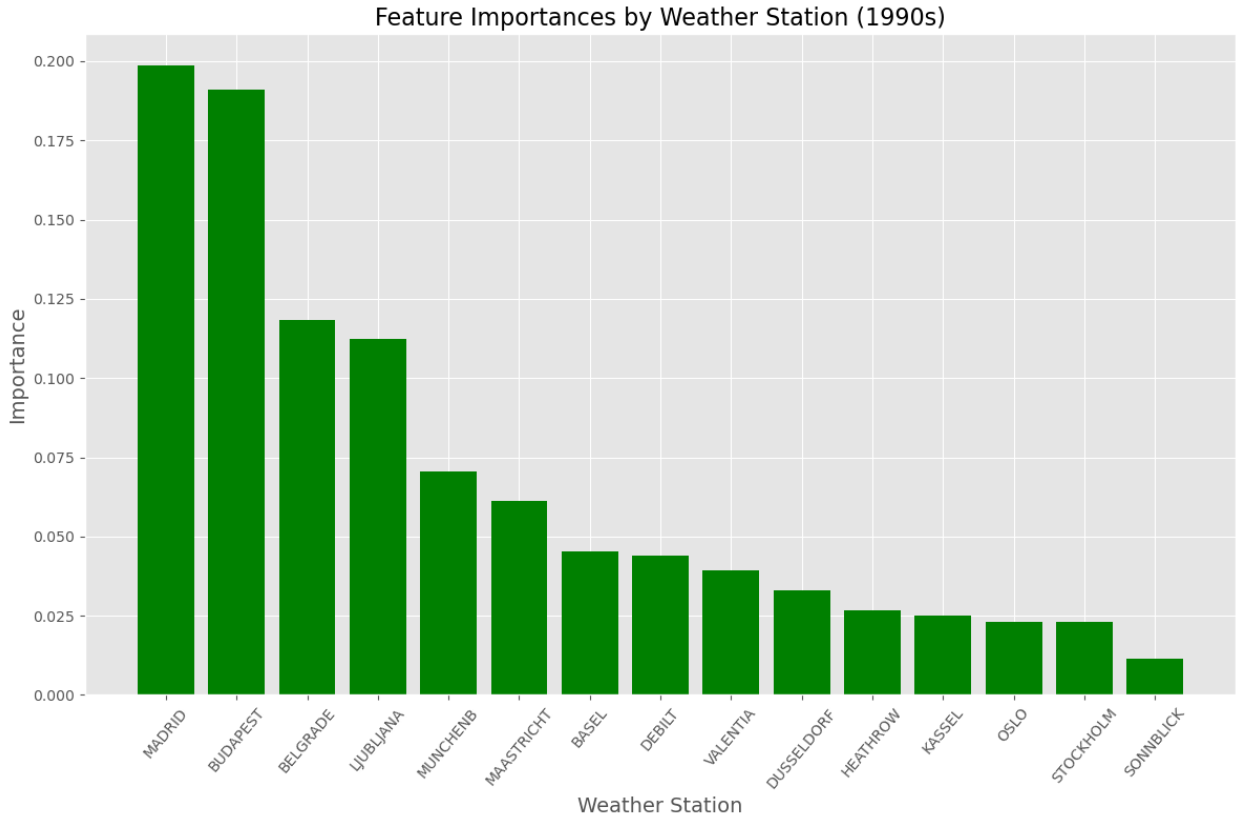
Random Forest & Feature Importance – 2000's (All Weather Stations)

Accuracy = 95.5%





Budapest, Madrid, and Belgrade have the greatest influence on the model from 1990-2009.

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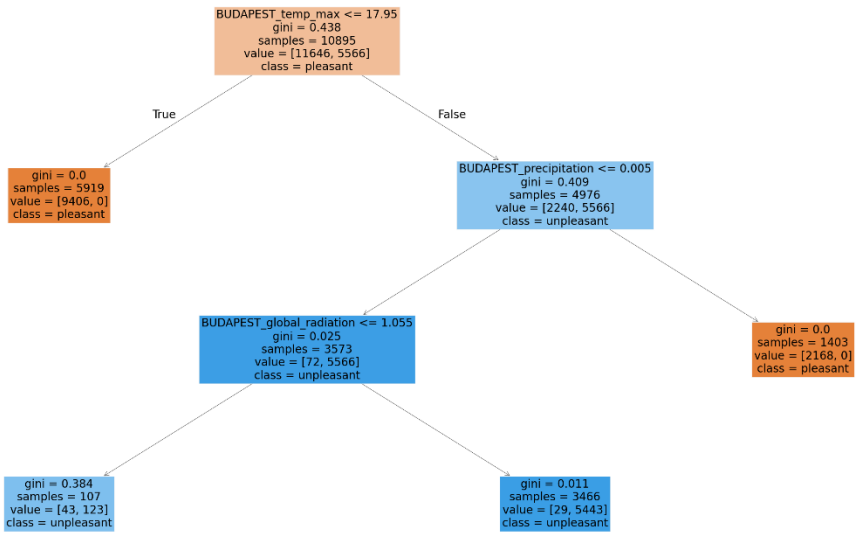
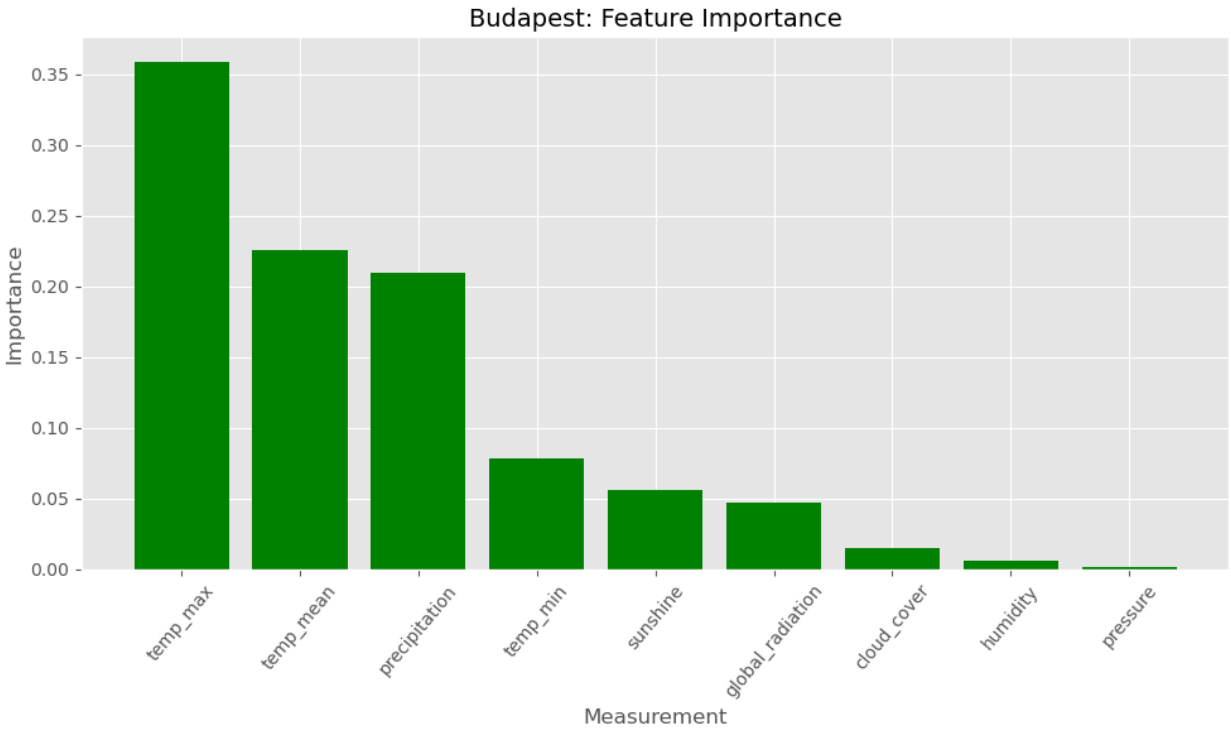
Budapest – Accuracy = 99.7%





The most important measurements for Budapest are temp_max, temp_mean, and precipitation.

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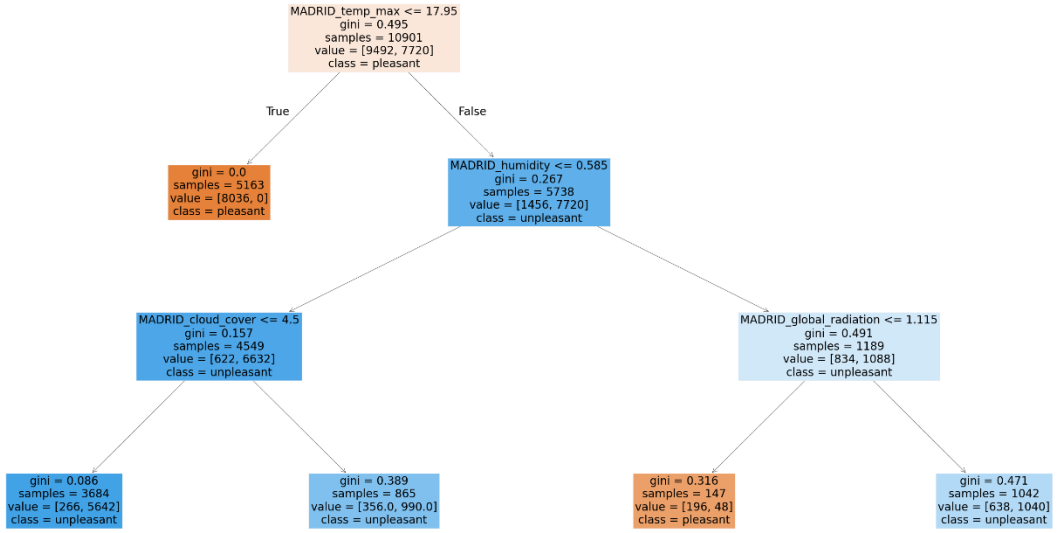
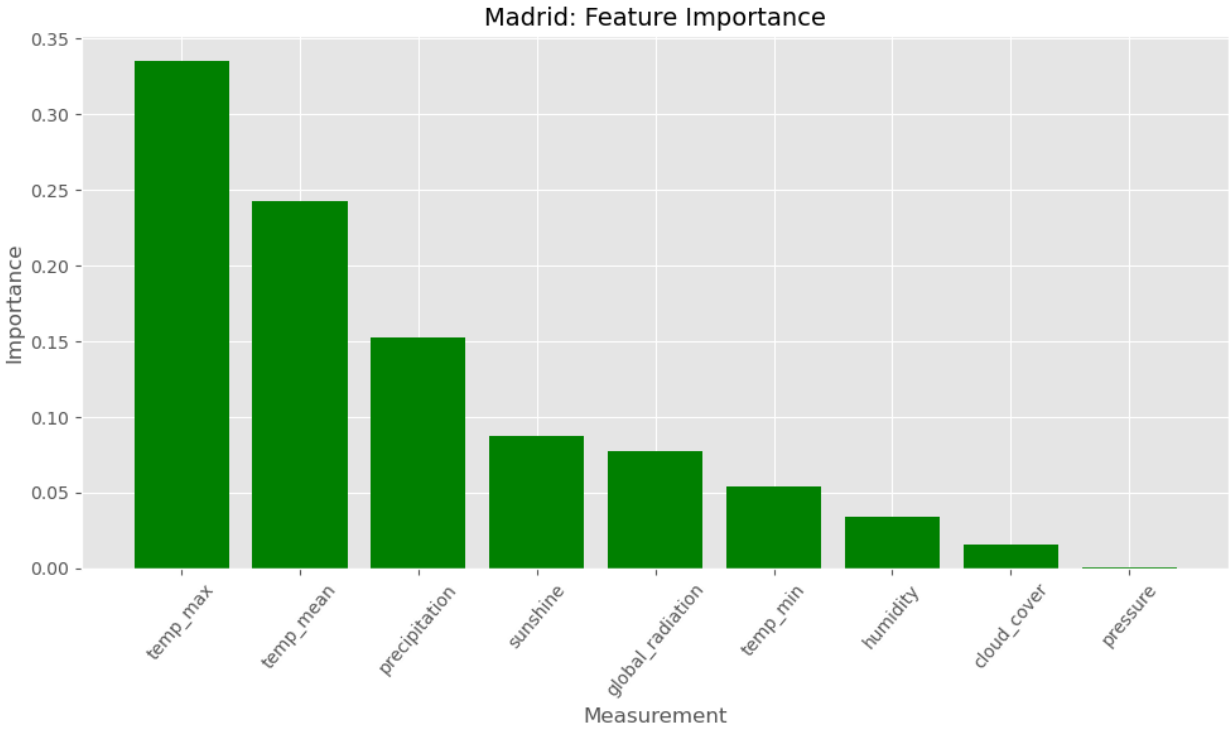
Madrid – Accuracy = 99.6%





The most important measurements for Madrid are temp_max, temp_mean, and precipitation.

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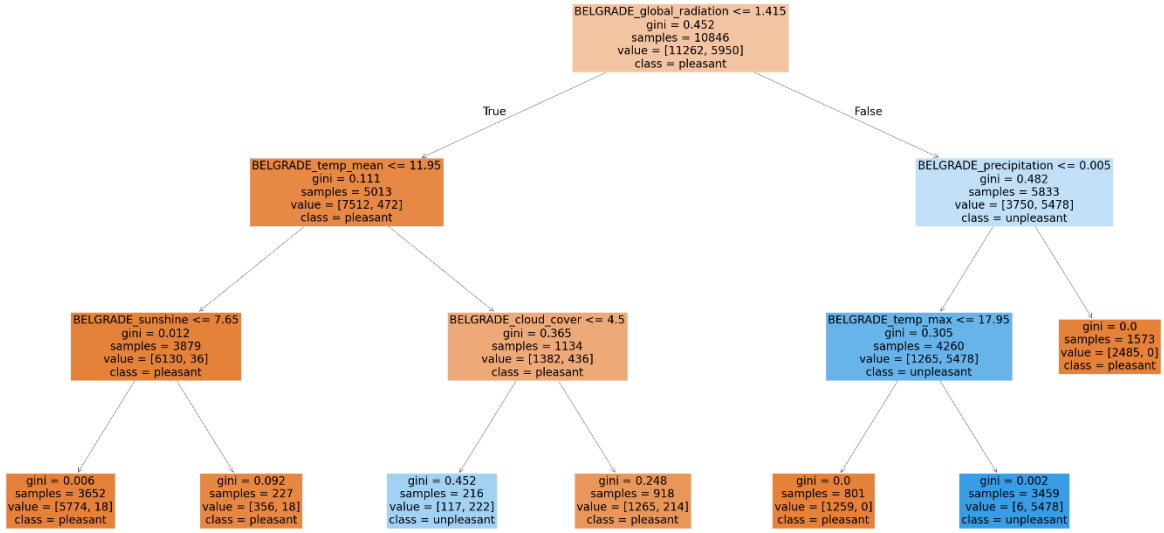
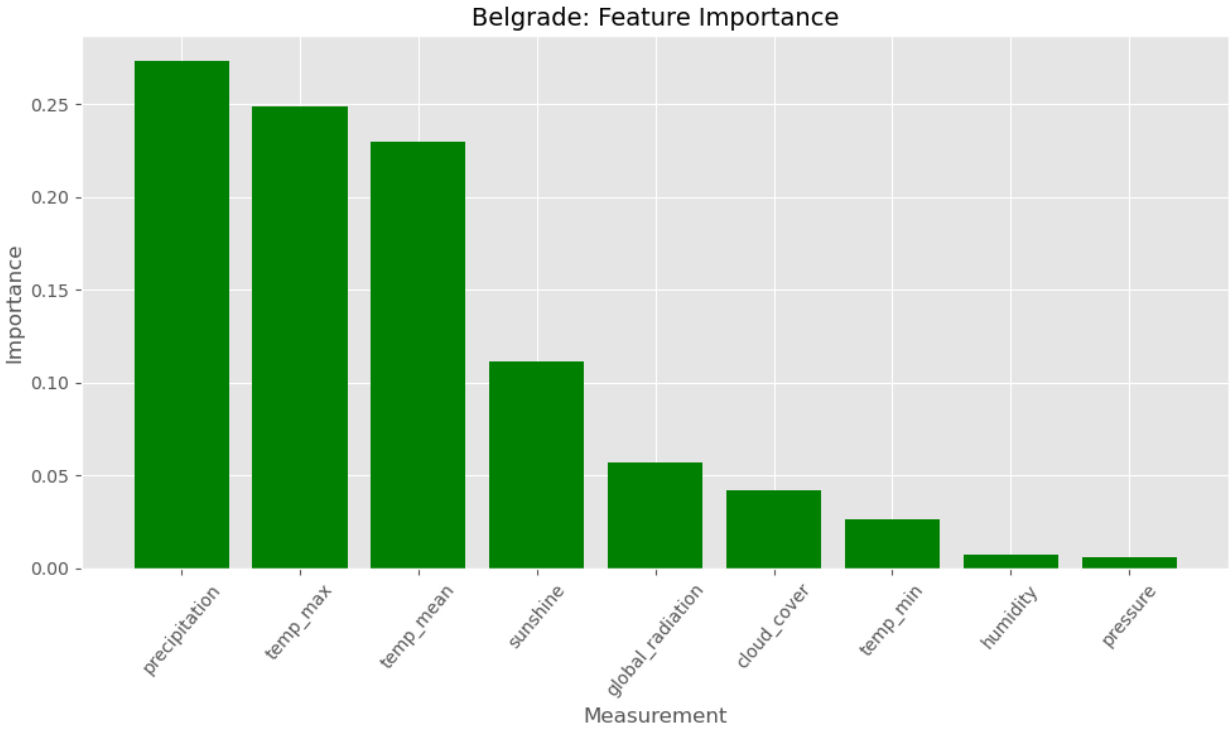
Belgrade – Accuracy = 99.6%





The most important measurements for Belgrade are precipitation, temp_max, and temp_mean.

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Budapest and Madrid have the same top three important measurements affecting their models; 1. Temp_max, 2. temp_mean, and 3. precipitation. Meanwhile, the most important measurements, while still the same three variables, is different in Belgrade, where precipitation is the most important measurement, followed closely by temp_max, and temp_mean. When digging a little deeper into this, one can ascertain that Belgrade has more precipitation per annum than Budapest or Madrid, therefore it makes sense as to why precipitation matters more for Belgrade than it does Budapest and Madrid.

The maximum temperature (temp_max), average temperature (temp_mean), and precipitation are the three most important factors in determining pleasant weather for ClimateWins. Given that the average temperature has been increasing over time in most areas across Europe, which is directly impacted by the maximum temperatures reaching record highs in regions year after year, the amount of pleasant days is likely to decrease in many regions across Europe. It will be imperative to locate not only the most pleasant areas, but also the most unpleasant, as the residents of these areas may find themselves immigrating due to climate. Local and national governments will need to be aware of these trends in order to adequately prepare customs, immigration, and law enforcement for the movement of people across borders and ensure they are prepared to investigate the potential outcomes on their respective economies.