Alternative Models

Full Model

Second Model

Final Model

```
> AIC(lm(Gen~.,data=data))
[1] -818.1044
```

```
> AIC(lm(Gen~Euclidean+Seasonality+Precipitation+HotPrecipitation,data=data))
[1] -820.0998
```

```
> AIC(lm(Gen~Euclidean+Precipitation+HotPrecipitation,data=data))
[1] -819.9399
```

$$\Delta_1 = 2.00$$

$$\Delta_2 = 0.00$$

$$\Delta_3 = 0.16$$

$$w_1 = \frac{exp(-\frac{\Delta_1}{2})}{\sum_{j=1}^{3} exp(-\frac{\Delta_j}{2})} = 0.16$$

$$w_2 = 0.44$$

$$w_3 = 0.40$$

Alternative Models

Full Model

```
> AIC(lm(Gen~.,data=data))
[1] -818.1044
```

$$\Delta_1 = 2.00$$

$$w_1 = \frac{exp(-\frac{\Delta_1}{2})}{\sum_{j=1}^{3} exp(-\frac{\Delta_j}{2})} = 0.16$$

Second Model

```
> AIC(lm(Gen~Euclidean+Seasonality+Precipitation+HotPrecipitation,data=data))
[1] -820.0998
```

$$\Delta_2 = 0.00$$

$$w_2 = 0.44$$

Final Model

```
> AIC(lm(Gen~Euclidean+Precipitation+HotPrecipitation,data=data))
[1] -819.9399
```

$$\Delta_3 = 0.16$$

$$w_3 = 0.40$$

Summary

- The proper model is the one that best describes your data. It may be a complicated model, iteratively defined, or a simple one.

- There is currently a lot of work going on surrounding model selection in distance-based approaches—stay tuned things will change.