```
=== Run information ===
Scheme:
          weka.classifiers.trees.M5P -M 4.0 -num-decimal-places 4
Relation: WeatherForecast
Instances: 1062
Attributes: 6
      WindSpeedKmph
      WindDirection360
      RelativeHumidityPercent
      AmosphericPressureMb
      DewPointCelcius
      TemperatureCelcius
Test mode: user supplied test set: size unknown (reading incrementally)
=== Classifier model (full training set) ===
M5 pruned model tree:
(using smoothed linear models)
RelativeHumidityPercent <= 46.5 :
| DewPointCelcius <= 4.5 :
| RelativeHumidityPercent <= 29.5 :
| | RelativeHumidityPercent > 21.5 : LM2 (67/1.93%)
RelativeHumidityPercent > 29.5 : LM3 (99/1.728%)
| DewPointCelcius > 4.5:
| RelativeHumidityPercent <= 31.5 :
| | RelativeHumidityPercent <= 22.5 : LM4 (50/3.004%)
| | RelativeHumidityPercent > 22.5 : LM5 (136/2.152%)
| RelativeHumidityPercent > 31.5 :
```

```
| | DewPointCelcius > 9.5 : LM8 (74/1.354%)
RelativeHumidityPercent > 46.5:
| DewPointCelcius <= 4.5 :
| DewPointCelcius <= 0.5 :
| | RelativeHumidityPercent <= 62 : LM9 (41/0.865%)
| | RelativeHumidityPercent > 62 : LM10 (103/1.294%)
| DewPointCelcius > 0.5:
| DewPointCelcius > 4.5 :
| DewPointCelcius <= 9.5 :
DewPointCelcius > 9.5 :
| | RelativeHumidityPercent > 59 :
| | | RelativeHumidityPercent <= 70.5 :
LM num: 1
TemperatureCelcius =
```

+ 0.0089 \*

WindDirection360=270,100,150,280,160,110,240,290,230,120,190,180,300,340,310,220,60,130,200, 250,30,Variable,50,10,320,330,350,140,360,20,40

- 0.03 \*

WindDirection360=160,110,240,290,230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,5 0,10,320,330,350,140,360,20,40

- 0.0158 \*

WindDirection360=240,290,230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

+ 0.0327 \*

WindDirection360=290,230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

- 0.012 \*

WindDirection360=230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

+ 0.0137 \*

WindDirection360=120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

- 0.0146 \*

WindDirection360=340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

+ 0.011 \*

WindDirection360=310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

+ 0.1319 \*

WindDirection360=220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

- + 0.0503 \* WindDirection360=50,10,320,330,350,140,360,20,40
- 0.0488 \* WindDirection360=10,320,330,350,140,360,20,40
- 0.9391 \* RelativeHumidityPercent
- 0.0081 \* AmosphericPressureMb
- + 1.1881 \* DewPointCelcius
- + 51.3234

LM num: 2

TemperatureCelcius =

-0.0005 \* WindSpeedKmph

+ 0.0089 \*

WindDirection360=270,100,150,280,160,110,240,290,230,120,190,180,300,340,310,220,60,130,200, 250,30,Variable,50,10,320,330,350,140,360,20,40

- 0.03 \*

WindDirection360=160,110,240,290,230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,5 0,10,320,330,350,140,360,20,40

- 0.0158 \*

 $\label{thm:windDirection360=240,290,230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40$ 

+ 0.0327 \*

WindDirection360=290,230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

- 0.012 \*

WindDirection360=230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

+ 0.0137 \*

WindDirection360=120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

- 0.0146 \*

WindDirection360=340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

+ 0.011 \*

WindDirection360=310,220,60,130,200,250,30, Variable, 50,10,320,330,350,140,360,20,40

- + 0.0503 \* WindDirection360=50,10,320,330,350,140,360,20,40
- 0.0488 \* WindDirection360=10,320,330,350,140,360,20,40
- 0.6416 \* RelativeHumidityPercent
- 0.0081 \* AmosphericPressureMb
- + 1.1496 \* DewPointCelcius
- + 45.3218

LM num: 3

TemperatureCelcius =

-0.0036 \* WindSpeedKmph

+ 0.0089 \*

 $\label{thm:windDirection360=270,100,150,280,160,110,240,290,230,120,190,180,300,340,310,220,60,130,200,\\ 250,30,\mbox{Variable}, 50,10,320,330,350,140,360,20,40$ 

- 0.03 \*

WindDirection360=160,110,240,290,230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,5 0,10,320,330,350,140,360,20,40

- 0.0158 \*

WindDirection360=240,290,230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

+ 0.0327 \*

WindDirection360=290,230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

- 0.0673 \*

WindDirection360=230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

+ 0.0137 \*

WindDirection360=120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

- 0.0146 \*

WindDirection360=340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

+ 0.011 \*

WindDirection360=310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

- + 0.0503 \* WindDirection360=50,10,320,330,350,140,360,20,40
- 0.0488 \* WindDirection360=10,320,330,350,140,360,20,40
- 0.4513 \* RelativeHumidityPercent
- 0.009 \* AmosphericPressureMb
- + 1.0962 \* DewPointCelcius
- + 40.7135

LM num: 4

TemperatureCelcius =

-0.0005 \* WindSpeedKmph

+ 0.0089 \*

WindDirection360=270,100,150,280,160,110,240,290,230,120,190,180,300,340,310,220,60,130,200, 250,30,Variable,50,10,320,330,350,140,360,20,40

- 0.0593 \*

WindDirection360=160,110,240,290,230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,5 0,10,320,330,350,140,360,20,40

- 0.0158 \*

WindDirection360=240,290,230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

+ 0.0327 \*

WindDirection360=290,230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

- 0.012 \*

WindDirection360=230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

+ 0.0137 \*

WindDirection360=120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

- 0.0146 \*

WindDirection360=340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

+ 0.0393 \*

WindDirection360=310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

- + 0.0125 \* WindDirection360=30, Variable, 50, 10, 320, 330, 350, 140, 360, 20, 40
- + 0.0749 \* WindDirection360=50,10,320,330,350,140,360,20,40
- 0.0763 \* WindDirection360=10,320,330,350,140,360,20,40
- 0.8199 \* RelativeHumidityPercent
- 0.0047 \* AmosphericPressureMb
- + 1.1692 \* DewPointCelcius
- + 45.6283

LM num: 5

TemperatureCelcius =

- -0.0005 \* WindSpeedKmph
- + 0.0089 \*

WindDirection360=270,100,150,280,160,110,240,290,230,120,190,180,300,340,310,220,60,130,200, 250,30,Variable,50,10,320,330,350,140,360,20,40

- 0.0426 \*

WindDirection360=160,110,240,290,230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,5 0,10,320,330,350,140,360,20,40

- 0.0158 \*

WindDirection360=240,290,230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

+ 0.0327 \*

WindDirection360=290,230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

- 0.012 \*

WindDirection360=230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

+ 0.0137 \*

WindDirection360=120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

- 0.0146 \*

WindDirection360=340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

+ 0.0232 \*

WindDirection360=310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

- + 0.0125 \* WindDirection360=30, Variable, 50, 10, 320, 330, 350, 140, 360, 20, 40
- + 0.0749 \* WindDirection360=50,10,320,330,350,140,360,20,40
- 0.0763 \* WindDirection360=10,320,330,350,140,360,20,40
- 0.6205 \* RelativeHumidityPercent
- + 0.0032 \* AmosphericPressureMb
- + 1.1483 \* DewPointCelcius
- + 33.2416

LM num: 6

TemperatureCelcius =

0.0008 \* WindSpeedKmph

+ 0.0089 \*

WindDirection360=270,100,150,280,160,110,240,290,230,120,190,180,300,340,310,220,60,130,200, 250,30,Variable,50,10,320,330,350,140,360,20,40

- 0.03 \*

WindDirection360=160,110,240,290,230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,5 0,10,320,330,350,140,360,20,40

- 0.0158 \*

WindDirection360=240,290,230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

+ 0.0327 \*

WindDirection360=290,230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

- 0.012 \*

WindDirection360=230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

+ 0.0137 \*

WindDirection360=120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

- 0.0146 \*

WindDirection360=340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

+ 0.011 \*

WindDirection360=310,220,60,130,200,250,30, Variable, 50,10,320,330,350,140,360,20,40

- + 0.023 \* WindDirection360=30, Variable, 50, 10, 320, 330, 350, 140, 360, 20, 40
- + 0.0681 \* WindDirection360=50,10,320,330,350,140,360,20,40
- 0.0819 \* WindDirection360=10,320,330,350,140,360,20,40
- 0.4462 \* RelativeHumidityPercent
- 0.005 \* AmosphericPressureMb
- + 1.1028 \* DewPointCelcius
- + 36.4184

LM num: 7

TemperatureCelcius =

0.001 \* WindSpeedKmph

+ 0.0089 \*

 $\label{thm:prop:substitute} Wind Direction 360 = 270, 100, 150, 280, 160, 110, 240, 290, 230, 120, 190, 180, 300, 340, 310, 220, 60, 130, 200, 250, 30, Variable, 50, 10, 320, 330, 350, 140, 360, 20, 40\\$ 

- 0.03 \*

WindDirection360=160,110,240,290,230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,5 0,10,320,330,350,140,360,20,40

- 0.0158 \*

WindDirection360=240,290,230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

+ 0.0327 \*

WindDirection360=290,230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

- 0.012 \*

WindDirection360=230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

+ 0.0137 \*

WindDirection360=120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

- 0.0146 \*

+ 0.011 \*

WindDirection360=310,220,60,130,200,250,30, Variable, 50,10,320,330,350,140,360,20,40

- + 0.023 \* WindDirection360=30, Variable, 50, 10, 320, 330, 350, 140, 360, 20, 40
- + 0.0681 \* WindDirection360=50,10,320,330,350,140,360,20,40
- 0.0819 \* WindDirection360=10,320,330,350,140,360,20,40
- 0.4051 \* RelativeHumidityPercent
- 0.005 \* AmosphericPressureMb
- + 1.083 \* DewPointCelcius
- + 34.8999

LM num: 8

TemperatureCelcius =

-0 \* WindSpeedKmph

+ 0.0089 \*

WindDirection360=270,100,150,280,160,110,240,290,230,120,190,180,300,340,310,220,60,130,200, 250,30,Variable,50,10,320,330,350,140,360,20,40

- 0.03 \*

WindDirection360=160,110,240,290,230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,5 0,10,320,330,350,140,360,20,40

- 0.0158 \*

WindDirection360=240,290,230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

+ 0.0327 \*

WindDirection360=290,230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

- 0.012 \*

WindDirection360=230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

+ 0.0137 \*

WindDirection360=120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

- 0.0146 \*

WindDirection360=340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

+ 0.011 \*

+ 0.0881 \*

WindDirection360=220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

- + 0.0239 \* WindDirection360=30, Variable, 50, 10, 320, 330, 350, 140, 360, 20, 40
- 0.0155 \* WindDirection360=50,10,320,330,350,140,360,20,40
- 0.0819 \* WindDirection360=10,320,330,350,140,360,20,40
- 0.4385 \* RelativeHumidityPercent
- 0.005 \* AmosphericPressureMb
- + 1.1015 \* DewPointCelcius
- + 36.1531

LM num: 9

TemperatureCelcius =

-0.0006 \* WindSpeedKmph

+ 0.0549 \*

 $\label{thm:windDirection360=270,100,150,280,160,110,240,290,230,120,190,180,300,340,310,220,60,130,200,\\ 250,30, \mbox{Variable}, 50,10,320,330,350,140,360,20,40$ 

- 0.0047 \*

WindDirection360=100,150,280,160,110,240,290,230,120,190,180,300,340,310,220,60,130,200,250, 30,Variable,50,10,320,330,350,140,360,20,40

- 0.0338 \*

WindDirection360=160,110,240,290,230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,5 0,10,320,330,350,140,360,20,40

- 0.0514 \*

WindDirection360=240,290,230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

+ 0.0368 \*

WindDirection360=290,230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

- 0.0134 \*

WindDirection360=230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

+ 0.0155 \*

WindDirection360=120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

- 0.0164 \*

+ 0.0124 \*

WindDirection360=310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

- + 0.0353 \* WindDirection360=50,10,320,330,350,140,360,20,40
- 0.0357 \* WindDirection360=10,320,330,350,140,360,20,40
- 0.2505 \* RelativeHumidityPercent
- 0.0043 \* AmosphericPressureMb
- + 1.0705 \* DewPointCelcius
- + 26.8291

LM num: 10

TemperatureCelcius =

-0.0006 \* WindSpeedKmph

+ 0.01 \*

WindDirection360=270,100,150,280,160,110,240,290,230,120,190,180,300,340,310,220,60,130,200, 250,30,Variable,50,10,320,330,350,140,360,20,40

- 0.0047 \*

WindDirection360=100,150,280,160,110,240,290,230,120,190,180,300,340,310,220,60,130,200,250, 30,Variable,50,10,320,330,350,140,360,20,40

- 0.0338 \*

WindDirection360=160,110,240,290,230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,5 0,10,320,330,350,140,360,20,40

- 0.0389 \*

WindDirection360=240,290,230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

+ 0.0368 \*

WindDirection360=290,230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

- 0.0134 \*

WindDirection360=230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

+ 0.0155 \*

WindDirection360=120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

- 0.0164 \*

WindDirection360=340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

+ 0.0124 \*

- + 0.0353 \* WindDirection360=50,10,320,330,350,140,360,20,40
- 0.0357 \* WindDirection360=10,320,330,350,140,360,20,40
- 0.1901 \* RelativeHumidityPercent
- 0.0033 \* AmosphericPressureMb
- + 1.0353 \* DewPointCelcius
- + 21.8162

TemperatureCelcius =

-0.0006 \* WindSpeedKmph

+ 0.01 \*

WindDirection360=270,100,150,280,160,110,240,290,230,120,190,180,300,340,310,220,60,130,200, 250,30,Variable,50,10,320,330,350,140,360,20,40

- 0.0047 \*

WindDirection360=100,150,280,160,110,240,290,230,120,190,180,300,340,310,220,60,130,200,250, 30,Variable,50,10,320,330,350,140,360,20,40

- 0.0338 \*

WindDirection360=160,110,240,290,230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,5 0,10,320,330,350,140,360,20,40

- 0.0274 \*

WindDirection360=240,290,230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

+ 0.0368 \*

WindDirection360=290,230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

- 0.0134 \*

WindDirection360=230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

+ 0.0155 \*

WindDirection360=120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

- 0.0164 \*

WindDirection360=340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

+ 0.0124 \*

- + 0.0353 \* WindDirection360=50,10,320,330,350,140,360,20,40
- 0.0357 \* WindDirection360=10,320,330,350,140,360,20,40

- 0.2703 \* RelativeHumidityPercent
- 0.0013 \* AmosphericPressureMb
- + 1.0623 \* DewPointCelcius
- + 24.8846

TemperatureCelcius =

-0.0006 \* WindSpeedKmph

+ 0.01 \*

WindDirection360=270,100,150,280,160,110,240,290,230,120,190,180,300,340,310,220,60,130,200, 250,30,Variable,50,10,320,330,350,140,360,20,40

- 0.0047 \*

WindDirection360=100,150,280,160,110,240,290,230,120,190,180,300,340,310,220,60,130,200,250, 30,Variable,50,10,320,330,350,140,360,20,40

- 0.0338 \*

 $\label{thm:windDirection360=160,110,240,290,230,120,190,180,300,340,310,220,60,130,200,250,30, Variable, 50,10,320,330,350,140,360,20,40$ 

- 0.0274 \*

WindDirection360=240,290,230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

+ 0.0368 \*

 $\label{thm:windDirection360=290,230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40$ 

- 0.0134 \*

WindDirection360=230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

+ 0.0155 \*

WindDirection360=120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

- 0.0164 \*

WindDirection360=340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

+ 0.0124 \*

- + 0.0353 \* WindDirection360=50,10,320,330,350,140,360,20,40
- 0.0357 \* WindDirection360=10,320,330,350,140,360,20,40
- 0.2498 \* RelativeHumidityPercent
- 0.0013 \* AmosphericPressureMb

- + 1.0192 \* DewPointCelcius
- + 23.8695

TemperatureCelcius =

-0.0006 \* WindSpeedKmph

+ 0.01 \*

WindDirection360=270,100,150,280,160,110,240,290,230,120,190,180,300,340,310,220,60,130,200, 250,30,Variable,50,10,320,330,350,140,360,20,40

- 0.041 \*

WindDirection360=100,150,280,160,110,240,290,230,120,190,180,300,340,310,220,60,130,200,250, 30,Variable,50,10,320,330,350,140,360,20,40

- 0.0338 \*

WindDirection360=160,110,240,290,230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,5 0,10,320,330,350,140,360,20,40

- 0.0274 \*

WindDirection360=240,290,230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

+ 0.0368 \*

WindDirection360=290,230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

- 0.0134 \*

WindDirection360=230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

+ 0.0155 \*

WindDirection360=120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

- 0.0164 \*

WindDirection360=340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

+ 0.0124 \*

- + 0.0353 \* WindDirection360=50,10,320,330,350,140,360,20,40
- 0.0357 \* WindDirection360=10,320,330,350,140,360,20,40
- 0.1978 \* RelativeHumidityPercent
- 0.0017 \* AmosphericPressureMb
- + 0.9877 \* DewPointCelcius
- + 20.8887

TemperatureCelcius =

-0.0006 \* WindSpeedKmph

+ 0.01 \*

Wind Direction 360 = 270, 100, 150, 280, 160, 110, 240, 290, 230, 120, 190, 180, 300, 340, 310, 220, 60, 130, 200, 250, 30, Variable, 50, 10, 320, 330, 350, 140, 360, 20, 40

- 0.0066 \*

WindDirection360=100,150,280,160,110,240,290,230,120,190,180,300,340,310,220,60,130,200,250, 30,Variable,50,10,320,330,350,140,360,20,40

- 0.0338 \*

WindDirection360=160,110,240,290,230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,5 0,10,320,330,350,140,360,20,40

- 0.0177 \*

WindDirection360=240,290,230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

+ 0.0368 \*

WindDirection360=290,230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

- 0.0134 \*

WindDirection360=230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

+ 0.0155 \*

WindDirection360=120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

- 0.0164 \*

WindDirection360=340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

+ 0.0124 \*

- + 0.0487 \* WindDirection360=50,10,320,330,350,140,360,20,40
- 0.0357 \* WindDirection360=10,320,330,350,140,360,20,40
- 0.2725 \* RelativeHumidityPercent
- 0.0011 \* AmosphericPressureMb
- + 1.0605 \* DewPointCelcius
- + 24.9354

LM num: 15

TemperatureCelcius =

-0.0006 \* WindSpeedKmph

+ 0.01 \*

WindDirection360=270,100,150,280,160,110,240,290,230,120,190,180,300,340,310,220,60,130,200, 250,30,Variable,50,10,320,330,350,140,360,20,40

- 0.0066 \*

WindDirection360=100,150,280,160,110,240,290,230,120,190,180,300,340,310,220,60,130,200,250, 30,Variable,50,10,320,330,350,140,360,20,40

- 0.0338 \*

WindDirection360=160,110,240,290,230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,5 0,10,320,330,350,140,360,20,40

- 0.0177 \*

WindDirection360=240,290,230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

+ 0.0368 \*

WindDirection360=290,230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

- 0.0134 \*

WindDirection360=230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

+ 0.0155 \*

WindDirection360=120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

- 0.0164 \*

WindDirection360=340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

+ 0.0124 \*

- + 0.0777 \* WindDirection360=50,10,320,330,350,140,360,20,40
- 0.0357 \* WindDirection360=10,320,330,350,140,360,20,40
- 0.2441 \* RelativeHumidityPercent
- 0.0011 \* AmosphericPressureMb
- + 1.0368 \* DewPointCelcius
- + 23.4438

LM num: 16

TemperatureCelcius =

 $\label{thm:windDirection360=270,100,150,280,160,110,240,290,230,120,190,180,300,340,310,220,60,130,200,\\ 250,30, \mbox{Variable}, 50,10,320,330,350,140,360,20,40$ 

- 0.0066 \*

WindDirection360=100,150,280,160,110,240,290,230,120,190,180,300,340,310,220,60,130,200,250, 30,Variable,50,10,320,330,350,140,360,20,40

- 0.0338 \*

WindDirection360=160,110,240,290,230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,5 0,10,320,330,350,140,360,20,40

- 0.0177 \*

WindDirection360=240,290,230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

+ 0.0368 \*

WindDirection360=290,230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

- 0.0134 \*

WindDirection360=230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

+ 0.0155 \*

WindDirection360=120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

- 0.0164 \*

WindDirection360=340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

+ 0.0124 \*

WindDirection360=310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

- + 0.0487 \* WindDirection360=50,10,320,330,350,140,360,20,40
- 0.0357 \* WindDirection360=10,320,330,350,140,360,20,40
- 0.1997 \* RelativeHumidityPercent
- 0.0009 \* AmosphericPressureMb
- + 1.0384 \* DewPointCelcius
- + 19.9593

LM num: 17

TemperatureCelcius =

Wind Direction 360 = 270, 100, 150, 280, 160, 110, 240, 290, 230, 120, 190, 180, 300, 340, 310, 220, 60, 130, 200, 250, 30, Variable, 50, 10, 320, 330, 350, 140, 360, 20, 40

- 0.0066 \*

WindDirection360=100,150,280,160,110,240,290,230,120,190,180,300,340,310,220,60,130,200,250, 30,Variable,50,10,320,330,350,140,360,20,40

- 0.0338 \*

WindDirection360=160,110,240,290,230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,5 0,10,320,330,350,140,360,20,40

- 0.0177 \*

WindDirection360=240,290,230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

+ 0.0368 \*

WindDirection360=290,230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

- 0.0134 \*

WindDirection360=230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

+ 0.0155 \*

WindDirection360=120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

- 0.0164 \*

WindDirection360=340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

+ 0.0124 \*

WindDirection360=310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

- + 0.0551 \* WindDirection360=50,10,320,330,350,140,360,20,40
- 0.0357 \* WindDirection360=10,320,330,350,140,360,20,40
- 0.2858 \* RelativeHumidityPercent
- 0.0024 \* AmosphericPressureMb
- + 1.0607 \* DewPointCelcius
- + 26.9287

LM num: 18

TemperatureCelcius =

Wind Direction 360 = 270, 100, 150, 280, 160, 110, 240, 290, 230, 120, 190, 180, 300, 340, 310, 220, 60, 130, 200, 250, 30, Variable, 50, 10, 320, 330, 350, 140, 360, 20, 40

- 0.0066 \*

WindDirection360=100,150,280,160,110,240,290,230,120,190,180,300,340,310,220,60,130,200,250, 30,Variable,50,10,320,330,350,140,360,20,40

- 0.0338 \*

WindDirection360=160,110,240,290,230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,5 0,10,320,330,350,140,360,20,40

- 0.0177 \*

WindDirection360=240,290,230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

+ 0.0368 \*

WindDirection360=290,230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

- 0.0134 \*

WindDirection360=230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

+ 0.0155 \*

WindDirection360=120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

- 0.0164 \*

WindDirection360=340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

+ 0.0124 \*

WindDirection360=310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

- + 0.0551 \* WindDirection360=50,10,320,330,350,140,360,20,40
- 0.0357 \* WindDirection360=10,320,330,350,140,360,20,40
- 0.2419 \* RelativeHumidityPercent
- 0.0024 \* AmosphericPressureMb
- + 1.0464 \* DewPointCelcius
- + 24.515

LM num: 19

TemperatureCelcius =

Wind Direction 360 = 270, 100, 150, 280, 160, 110, 240, 290, 230, 120, 190, 180, 300, 340, 310, 220, 60, 130, 200, 250, 30, Variable, 50, 10, 320, 330, 350, 140, 360, 20, 40

- 0.0066 \*

WindDirection360=100,150,280,160,110,240,290,230,120,190,180,300,340,310,220,60,130,200,250, 30,Variable,50,10,320,330,350,140,360,20,40

- 0.0338 \*

WindDirection360=160,110,240,290,230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,5 0,10,320,330,350,140,360,20,40

- 0.0177 \*

WindDirection360=240,290,230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

+ 0.0368 \*

WindDirection360=290,230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

- 0.0134 \*

WindDirection360=230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

+ 0.0155 \*

WindDirection360=120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

- 0.0164 \*

WindDirection360=340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

+ 0.0124 \*

WindDirection360=310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

- + 0.0551 \* WindDirection360=50,10,320,330,350,140,360,20,40
- 0.0357 \* WindDirection360=10,320,330,350,140,360,20,40
- 0.2266 \* RelativeHumidityPercent
- 0.0024 \* AmosphericPressureMb
- + 0.9886 \* DewPointCelcius
- + 24.4186

LM num: 20

TemperatureCelcius =

WindDirection360=270,100,150,280,160,110,240,290,230,120,190,180,300,340,310,220,60,130,200, 250,30,Variable,50,10,320,330,350,140,360,20,40

- 0.0066 \*

WindDirection360=100,150,280,160,110,240,290,230,120,190,180,300,340,310,220,60,130,200,250, 30,Variable,50,10,320,330,350,140,360,20,40

- 0.0338 \*

WindDirection360=160,110,240,290,230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,5 0,10,320,330,350,140,360,20,40

- 0.0177 \*

WindDirection360=240,290,230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

+ 0.0368 \*

WindDirection360=290,230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

- 0.0134 \*

WindDirection360=230,120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

+ 0.0155 \*

WindDirection360=120,190,180,300,340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

+ 0.0056 \*

WindDirection360=340,310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

+ 0.0124 \*

WindDirection360=310,220,60,130,200,250,30,Variable,50,10,320,330,350,140,360,20,40

- + 0.0551 \* WindDirection360=50,10,320,330,350,140,360,20,40
- 0.0357 \* WindDirection360=10,320,330,350,140,360,20,40
- 0.2258 \* RelativeHumidityPercent
- 0.0024 \* AmosphericPressureMb
- + 1.051 \* DewPointCelcius
- + 23.3022

Number of Rules: 20

Time taken to build model: 0.53 seconds

```
inst# actual predicted error
```

- 1 14 14.008 0.008
- 2 17 17.025 0.025
- 3 28 27.915 -0.085
- 4 30 29.886 -0.114
- 5 21 21.078 0.078
- 6 18 17.829 -0.171
- 7 24 23.914 -0.086
- 8 9 9.039 0.039
- 9 19 19.008 0.008
- 10 8 8.071 0.071
- 11 30 29.495 -0.505
- 12 9 9.027 0.027
- 13 6 6.086 0.086
- 14 29 28.758 -0.242
- 15 4 3.758 -0.242
- 16 1 1.099 0.099
- 17 10 10.044 0.044
- 18 33 32.706 -0.294
- 19 6 5.934 -0.066
- 20 21 21.277 0.277
- 21 25 25.26 0.26
- 22 10 10.089 0.089
- 23 14 14.229 0.229
- 24 28 28.205 0.205
- 25 9 9.14 0.14
- 26 13 13.112 0.112
- 27 35 34.772 -0.228
- 28 19 18.865 -0.135
- 29 18 18.221 0.221

- 30 10 9.843 -0.157
- 31 7 7.062 0.062
- 32 4 4.223 0.223
- 33 25 25.035 0.035
- 34 4 3.904 -0.096
- 35 9 8.93 -0.07
- 36 -1 -0.96 0.04
- 37 29 28.928 -0.072
- 38 6 5.876 -0.124
- 39 23 22.993 -0.007
- 40 30 29.989 -0.011
- 41 6 6.076 0.076
- 42 19 19.415 0.415
- 43 14 13.966 -0.034
- 44 16 15.955 -0.045
- 45 19 19.076 0.076
- 46 17 17.04 0.04
- 47 18 17.882 -0.118
- 48 1 0.969 -0.031
- 49 16 16.478 0.478
- 50 2 1.899 -0.101
- 51 6 5.949 -0.051
- 52 30 30.154 0.154
- 53 15 15.133 0.133
- 54 10 10.031 0.031
- 55 13 13.009 0.009
- 56 3 2.95 -0.05
- 57 22 21.914 -0.086
- 58 27 27.144 0.144
- 59 7 6.75 -0.25
- 60 29 28.599 -0.401

- 61 30 29.799 -0.201
- 62 14 14.085 0.085
- 63 8 8.05 0.05
- 64 25 24.997 -0.003
- 65 28 27.582 -0.418
- 66 20 20.03 0.03
- 67 21 21.299 0.299
- 68 23 22.705 -0.295
- 69 21 21.126 0.126
- 70 30 30.297 0.297
- 71 0 0.177 0.177
- 72 28 28.226 0.226
- 73 29 28.749 -0.251
- 74 16 16.14 0.14
- 75 6 5.866 -0.134
- 76 15 14.502 -0.498
- 77 16 16.227 0.227
- 78 23 23.05 0.05
- 79 19 19.457 0.457
- 80 9 8.945 -0.055
- 81 10 9.831 -0.169
- 82 9 8.98 -0.02
- 83 19 18.602 -0.398
- 84 25 24.986 -0.014
- 85 20 20.489 0.489
- 86 16 15.962 -0.038
- 87 15 15.111 0.111
- 88 7 7.044 0.044
- 89 12 11.89 -0.11
- 90 27 27.005 0.005
- 91 22 22.162 0.162

| 92  | 22 | 21.883 -0.117 |
|-----|----|---------------|
| 93  | 20 | 20.147 0.147  |
| 94  | 17 | 17.486 0.486  |
| 95  | 13 | 12.9 -0.1     |
| 96  | 18 | 18.058 0.058  |
| 97  | 17 | 17.468 0.468  |
| 98  | 4  | 3.734 -0.266  |
| 99  | 8  | 7.896 -0.104  |
| 100 | 29 | 29.242 0.242  |
| 101 | 9  | 9.056 0.056   |
| 102 | 31 | 31.178 0.178  |
| 103 | 36 | 35.69 -0.31   |
| 104 | 20 | 19.98 -0.02   |
| 105 | 19 | 19.133 0.133  |
| 106 | 14 | 14.226 0.226  |
| 107 | 30 | 29.984 -0.016 |
| 108 | 20 | 19.961 -0.039 |
| 109 | 28 | 28.204 0.204  |
| 110 | 15 | 15.224 0.224  |
| 111 | 23 | 23.031 0.031  |
| 112 | 3  | 2.764 -0.236  |
| 113 | 17 | 16.991 -0.009 |
| 114 | 18 | 17.844 -0.156 |
| 115 | 14 | 14.085 0.085  |
| 116 | 7  | 7.056 0.056   |
| 117 | 12 | 11.904 -0.096 |
|     |    |               |

=== Evaluation on test set ===

118 18 18.064 0.064

Time taken to test model on supplied test set: 0.13 seconds

## === Summary ===

Correlation coefficient 0.9998

Mean absolute error 0.1484

Root mean squared error 0.1961

Relative absolute error 2.0277 %

Root relative squared error 2.2162 %

Total Number of Instances 118