

# Simple Decision Tree

MilesRemaining  $\sim$  GaugeLevel + Light + Distance

Uses:

- All available variables
  - The model only actually uses GaugeLevel

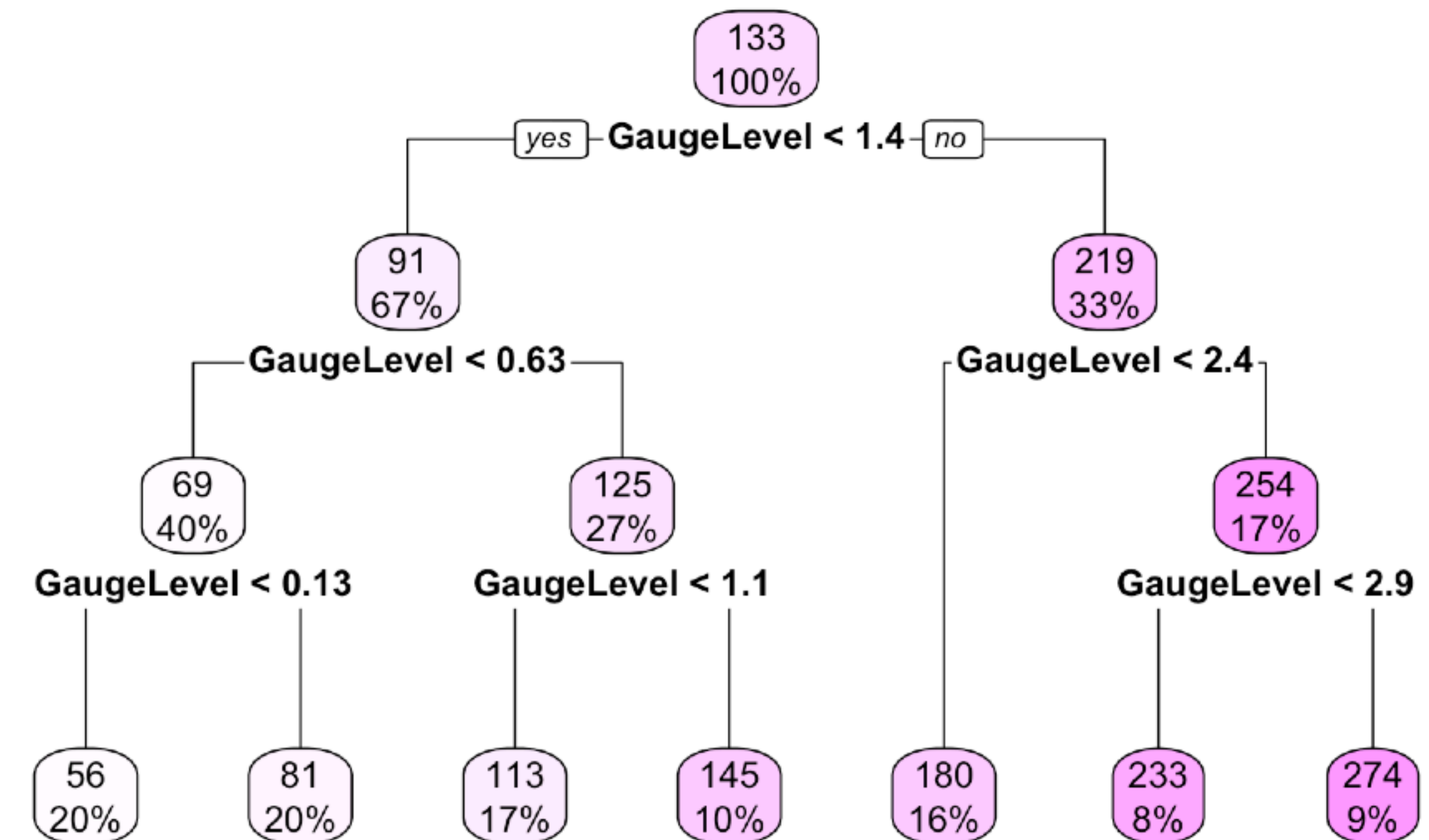
- 1 tree

Pros:

- Easy to understand
- Easy to execute

Cons:

- Could be better
- Distance + GaugeLevel implies MPG
- A little bit of memorization



RMSE  $\approx$  15.18

# Random Forest

MilesRemaining  $\sim$  GaugeLevel + Light + Distance

Uses:

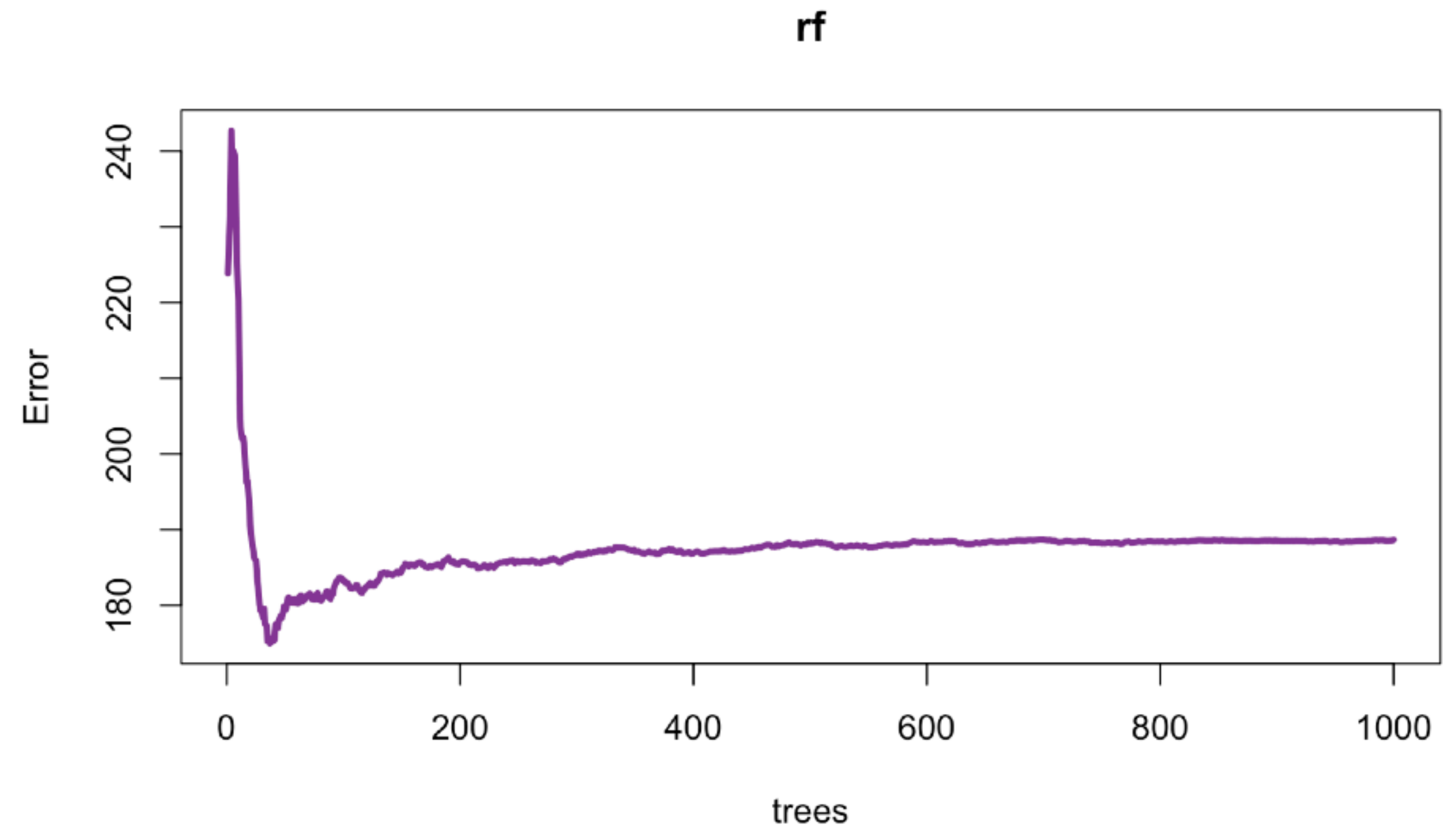
- All available variables
- 1000 trees

Pros:

- Very accurate
- Not computationally expensive

Cons:

- Not easy to do on the fly
- Difficult to communicate



RMSE  $\approx 7.3$