

# Linear Forest

Marlin

2023-06-15

## Random Linear Forest

This part of the package creates a semi-novel

```
form <- conf_case ~ N1 + N2 | . - N1 - N2

forest_model <- random_linear_forest(data = randomForest::na.roughfix(model_data),
                                     num_tree = 20,
                                     model_formula = form,
                                     max_depth = Inf,
                                     verbose = FALSE)

forest_model
```

```
## [[1]]
## conf_case ~ N1 + N2 | regions + date + pop + PMMoV + flow + conductivity +
##   temperature + ph + tests
## <environment: 0x000001e2f9f16df0>
##
## [[2]]
## [1] "size of data: 8953"
##
## [[3]]
## [1] "Number of trees: 20"
##
## [[4]]
## [1] "Mean of squared residuals: 0.279874938392769"
##
## [[5]]
## [1] "% Var explained: 87.2966163703772"
##
## attr(,"class")
## [1] "summary.random_linear_forest"
```

These functions are used in this analysis Random Linear Forst