

Discrete Response Model

Lecture 3

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Variable Transformation, Part 1: Interactions Among Explanatory Variables—An Example

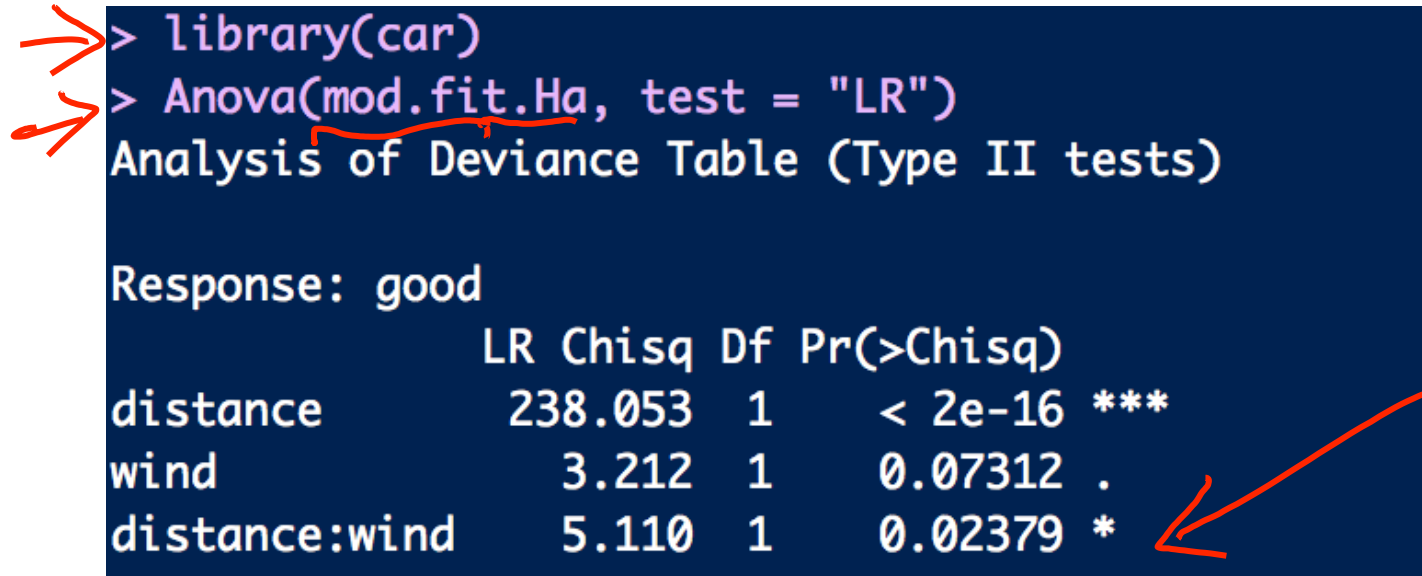
Example (Log-Likelihood Ratio Test)

- Another way to obtain the LRT information would be to use the Anova() function from the car package:

```
> library(car)
> Anova(mod.fit.Ha, test = "LR")
Analysis of Deviance Table (Type II tests)

Response: good

      LR Chisq Df Pr(>Chisq)
distance    238.053  1    < 2e-16 ***
wind         3.212  1    0.07312 .
distance:wind  5.110  1    0.02379 *
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

A red arrow points to the first line of code, `> library(car)`. Another red arrow points to the second line of code, `> Anova(mod.fit.Ha, test = "LR")`. A third red arrow points to the interaction term `distance:wind` in the ANOVA table, specifically to the asterisk indicating significance.

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