

Condition vs Nest Size Up Step model addition

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Model Addition

- logCtFm + InstarNumber (1 | NestID)

vs

- logCtFm + InstarNumber + (1 | NestID) logCtFm:InstarNumber

*****NOT SIGNIFICANT — STOP HERE *****

	Df	AIC	BIC	logLik	deviance	Chisq	Chi Df	Pr(>Chisq)	stars
object	5.00	-2085.73	-2060.01	1047.87	-2095.73				
..1	6.00	-2084.93	-2054.06	1048.47	-2096.93	1.20	1.00	0.27	

- logCtFm + InstarNumber + (1 | NestID) logCtFm:InstarNumber

vs

- logCtFm + InstarNumber + (1 | NestID) + logCtFm:InstarNumber InstarNumber:InstarSex

*****NOT SIGNIFICANT — STOP HERE *****

	Df	AIC	BIC	logLik	deviance	Chisq	Chi Df	Pr(>Chisq)	stars
object	6.00	-2084.93	-2054.06	1048.47	-2096.93				
..1	7.00	-2083.06	-2047.05	1048.53	-2097.06	0.13	1.00	0.72	

- logCtFm + InstarNumber + (1 | NestID) + logCtFm:InstarNumber InstarNumber:InstarSex

vs

- logCtFm + InstarNumber + (1 | NestID) + logCtFm:InstarNumber + InstarNumber:InstarSex logCtFm:InstarNumber:InstarSex

*****NOT SIGNIFICANT — STOP HERE *****

	Df	AIC	BIC	logLik	deviance	Chisq	Chi Df	Pr(>Chisq)	stars
object	7.00	-2083.06	-2047.05	1048.53	-2097.06				
..1	8.00	-2083.39	-2042.24	1049.70	-2099.39	2.33	1.00	0.13	

- logCtFm + InstarNumber + (1 | NestID) + logCtFm:InstarNumber + InstarNumber:InstarSex logCtFm:InstarNumber:InstarSex

vs

- logCtFm + InstarNumber + (1 | NestID) + logCtFm:InstarNumber + InstarNumber:InstarSex + logCtFm:InstarNumber:InstarSex I(logCtFm^2)

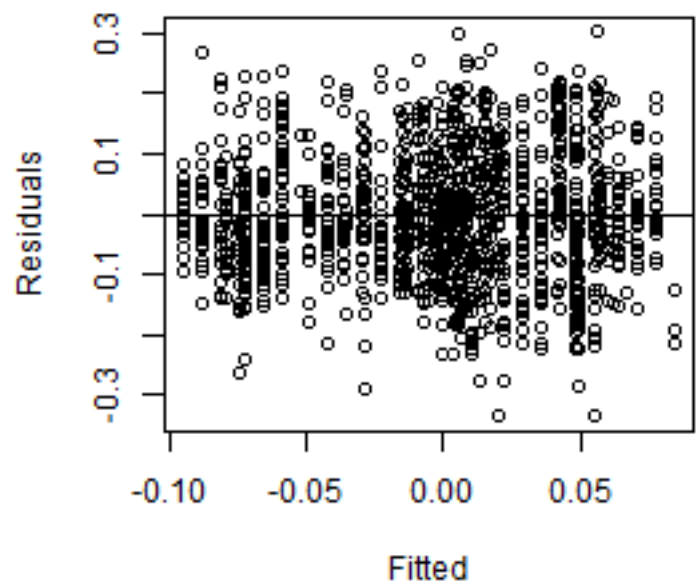
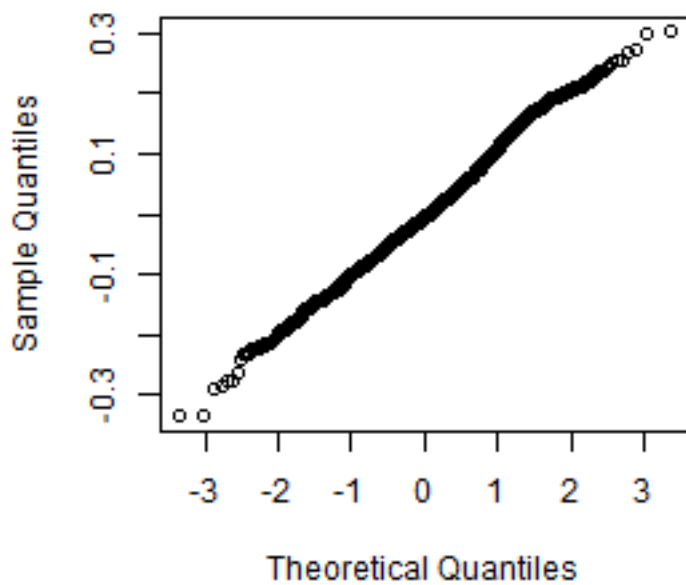
*****NOT SIGNIFICANT — STOP HERE *****

	Df	AIC	BIC	logLik	deviance	Chisq	Chi Df	Pr(>Chisq)	stars
object	8.00	-2083.39	-2042.24	1049.70	-2099.39				
..1	9.00	-2081.44	-2035.14	1049.72	-2099.44	0.05	1.00	0.82	

Final model is condResiduals ~ logCtFm + InstarNumber + (1 | NestID)

Checking full model fit

Condition=log(ColonySize) + InstarAge + (1|Colony)



Graph with full model superimposed

Model:

```
condResiduals ~ logCtFm + InstarNumber + (1 | NestID)
```

Note: If line on graph is blue R could not plot the lmer, plotting a simple lm instead[1] "lmer"

Warning: Removed 1 rows containing missing values (geom_point).

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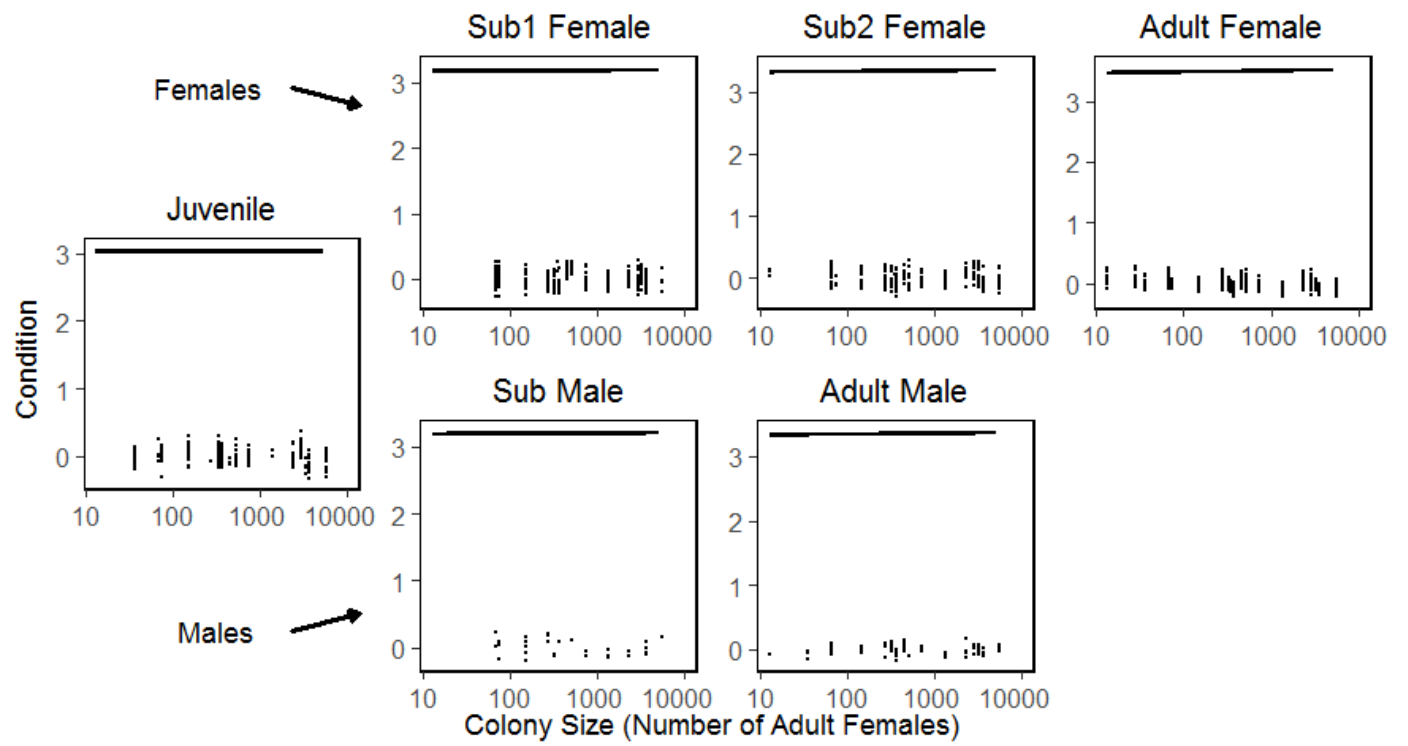


Figure 1: plot of chunk Graph