Variance in Condition vs Nest Size Instar As Number

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Run on 17 November, 2016 at 2016-11-17 12:22:39

glmmPRQ model - not able to get AIC value

Rows removed with 2 or fewer data points

	Chisq	Df	p_value
logCtFm	6.81	1.00	0.009**
InstarNumber	1.99	1.00	0.159
I(InstarNumber^2)	3.04	1.00	0.081.
InstarNumber:InstarSex	28.12	1.00	0.000***
logCtFm:InstarNumber	0.03	1.00	0.859 RMVD
InstarSex:I(InstarNumber^2)	21.77	1.00	0.000***
logCtFm:I(InstarNumber^2)	0.05	1.00	0.831
logCtFm:InstarNumber:InstarSex	0.59	1.00	0.443
logCtFm:InstarSex:I(InstarNumber^2)	0.86	1.00	0.355

[1] "term with highest p value is: logCtFm:InstarNumber"

	Chisq	Df	p_value
logCtFm	6.81	1.00	0.009**
InstarNumber	1.99	1.00	0.159
I(InstarNumber^2)	3.04	1.00	0.081.
InstarNumber:InstarSex	28.11	1.00	0.000***
InstarSex:I(InstarNumber^2)	21.77	1.00	0.000***
logCtFm:I(InstarNumber^2)	0.05	1.00	0.831 RMVD
logCtFm:InstarNumber:InstarSex	0.62	2.00	0.733
logCtFm:InstarSex:I(InstarNumber^2)	0.86	1.00	0.355

[1] "term with highest p value is: logCtFm:I(InstarNumber^2)"

	Chisq	Df	p_value
logCtFm	6.81	1.00	0.009**
InstarNumber	1.99	1.00	0.159
I(InstarNumber^2)	3.04	1.00	0.081.
InstarNumber:InstarSex	28.11	1.00	0.000***
InstarSex:I(InstarNumber^2)	21.73	1.00	0.000***
logCtFm:InstarNumber:InstarSex	0.62	2.00	0.733 RMVD
logCtFm:InstarSex:I(InstarNumber^2)	0.90	2.00	0.637

[1] "term with highest p value is: logCtFm:InstarNumber:InstarSex"

	Chisq	Df	p_value
logCtFm	7.19	1.00	0.007**
InstarNumber	1.91	1.00	0.167
I(InstarNumber^2)	2.85	1.00	0.092.
InstarNumber:InstarSex	29.45	1.00	0.000***
InstarSex:I(InstarNumber^2)	20.79	1.00	0.000***
logCtFm:InstarSex:I(InstarNumber^2)	3.19	2.00	0.203 RMVD

[1] "term with highest p value is: logCtFm:InstarSex:I(InstarNumber^2)"

	Chisq	Df	p_value
logCtFm	7.24	1.00	0.007**
InstarNumber	1.34	1.00	0.246 RMVD
I(InstarNumber^2)	2.23	1.00	0.135
InstarNumber:InstarSex	29.18	1.00	0.000***
InstarSex:I(InstarNumber^2)	23.08	1.00	0.000***

[1] "term with highest p value is: InstarNumber"

	Chisq	Df	p_value
logCtFm	7.24	1.00	0.007**
I(InstarNumber^2)	2.23	1.00	0.135 RMVD
InstarNumber:InstarSex	30.52	2.00	0.000***
InstarSex:I(InstarNumber^2)	23.08	1.00	0.000***

[1] "term with highest p value is: I(InstarNumber^2)"

	Chisq	Df	p_value
logCtFm	7.24	1.00	0.007**
InstarNumber:InstarSex	30.52	2.00	0.000***
InstarSex:I(InstarNumber^2)	25.32	2.00	0.000***

[1] "term with highest p value is: logCtFm"

Final Model is: bootVarTrans ~ InstarNumber:InstarSex + InstarSex:I(InstarNumber^2)
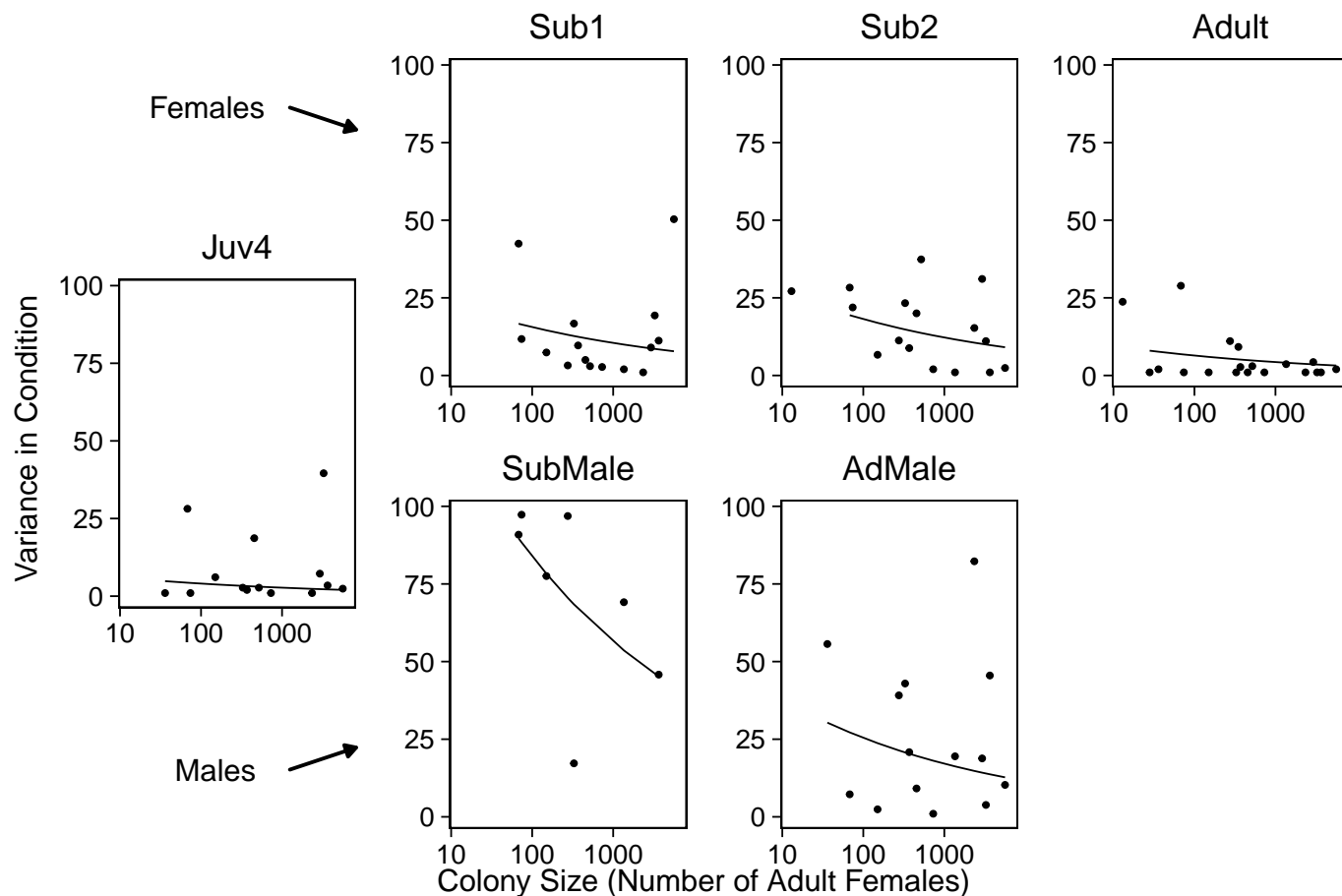
Checking final model fit

Graph

note: blue line just lm model

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

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

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Testing Individual Instars

As the three way interaction is significant testing instar individually

Table 1: Adult not significant

	LR Chisq	Df	Pr(>Chisq)
logCtFm	3.17281	1	0.0748735

Table 2: Sub2 not significant

	LR Chisq	Df	Pr(>Chisq)
logCtFm	2.501769	1	0.1137185

Table 3: Sub1 not significant

	LR Chisq	Df	Pr(>Chisq)
logCtFm	1.857951	1	0.1728615

Table 4: Juv4 not significant

	LR Chisq	Df	Pr(>Chisq)
logCtFm	0.0500654	1	0.8229495

Table 5: AdMale not significant

	LR Chisq	Df	Pr(>Chisq)
logCtFm	0.0484084	1	0.8258564

Table 6: SubMale not significant

	LR Chisq	Df	Pr(>Chisq)
logCtFm	2.674368	1	0.1019758

Graph of condition variance against instar