

Variance in Condition vs Nest Size Instar As Number

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Run on 26 October, 2016

AIC Values of all possible models with instar included and sample size as weight and glmer

Rows removed with 2 or fewer data points

% Table created by stargazer v.5.2 by Marek Hlavac, Harvard University. E-mail: hlavac at fas.harvard.edu % Date and time: Wed, Oct 26, 2016 - 7:37:08 PM

Table 1: Anova of full model alone

	Chisq	Df	Pr(>Chisq)	names
logCtFm	6.807	1	0.009	logCtFm
InstarNumber	1.988	1	0.159	InstarNumber
I(InstarNumber^2)	3.043	1	0.081	I(InstarNumber^2)
InstarNumber:InstarSex	28.125	1	0.00000	InstarNumber:InstarSex
logCtFm:InstarNumber	0.032	1	0.859	logCtFm:InstarNumber
InstarSex:I(InstarNumber^2)	21.767	1	0.00000	InstarSex:I(InstarNumber^2)
logCtFm:I(InstarNumber^2)	0.046	1	0.831	logCtFm:I(InstarNumber^2)
logCtFm:InstarNumber:InstarSex	0.588	1	0.443	logCtFm:InstarNumber:InstarSex
logCtFm:InstarSex:I(InstarNumber^2)	0.856	1	0.355	logCtFm:InstarSex:I(InstarNumber^2)

term with highest p value, 0.859045072594666 is: logCtFm:InstarNumber % Table created by stargazer v.5.2 by Marek Hlavac, Harvard University. E-mail: hlavac at fas.harvard.edu % Date and time: Wed, Oct 26, 2016 - 7:37:09 PM

Table 2: Anova of full model alone

	Chisq	Df	Pr(>Chisq)	names
logCtFm	6.807	1	0.009	logCtFm
InstarNumber	1.988	1	0.159	InstarNumber
I(InstarNumber^2)	3.043	1	0.081	I(InstarNumber^2)
InstarNumber:InstarSex	28.106	1	0.00000	InstarNumber:InstarSex
InstarSex:I(InstarNumber^2)	21.767	1	0.00000	InstarSex:I(InstarNumber^2)
logCtFm:I(InstarNumber^2)	0.046	1	0.831	logCtFm:I(InstarNumber^2)
logCtFm:InstarNumber:InstarSex	0.620	2	0.733	logCtFm:InstarNumber:InstarSex
logCtFm:InstarSex:I(InstarNumber^2)	0.856	1	0.355	logCtFm:InstarSex:I(InstarNumber^2)

term with highest p value, 0.830803996940689 is: logCtFm:I(InstarNumber^2) % Table created by stargazer v.5.2 by Marek Hlavac, Harvard University. E-mail: hlavac at fas.harvard.edu % Date and time: Wed, Oct 26, 2016 - 7:37:09 PM

Table 3: Anova of full model alone

	Chisq	Df	Pr(>Chisq)	names
logCtFm	6.807	1	0.009	logCtFm
InstarNumber	1.988	1	0.159	InstarNumber
I(InstarNumber^2)	3.043	1	0.081	I(InstarNumber^2)
InstarNumber:InstarSex	28.106	1	0.00000	InstarNumber:InstarSex
InstarSex:I(InstarNumber^2)	21.735	1	0.00000	InstarSex:I(InstarNumber^2)
logCtFm:InstarNumber:InstarSex	0.620	2	0.733	logCtFm:InstarNumber:InstarSex
logCtFm:InstarSex:I(InstarNumber^2)	0.902	2	0.637	logCtFm:InstarSex:I(InstarNumber^2)

term with highest p value, 0.733465796060139 is: logCtFm:InstarNumber:InstarSex % Table created by stargazer v.5.2 by Marek Hlavac, Harvard University. E-mail: hlvac at fas.harvard.edu % Date and time: Wed, Oct 26, 2016 - 7:37:10 PM

Table 4: Anova of full model alone

	Chisq	Df	Pr(>Chisq)	names
logCtFm	7.190	1	0.007	logCtFm
InstarNumber	1.913	1	0.167	InstarNumber
I(InstarNumber^2)	2.845	1	0.092	I(InstarNumber^2)
InstarNumber:InstarSex	29.455	1	0.00000	InstarNumber:InstarSex
InstarSex:I(InstarNumber^2)	20.790	1	0.00001	InstarSex:I(InstarNumber^2)
logCtFm:InstarSex:I(InstarNumber^2)	3.187	2	0.203	logCtFm:InstarSex:I(InstarNumber^2)

term with highest p value, 0.203208887871501 is: logCtFm:InstarSex:I(InstarNumber^2) % Table created by stargazer v.5.2 by Marek Hlavac, Harvard University. E-mail: hlvac at fas.harvard.edu % Date and time: Wed, Oct 26, 2016 - 7:37:10 PM

Table 5: Anova of full model alone

	Chisq	Df	Pr(>Chisq)	names
logCtFm	7.244	1	0.007	logCtFm
InstarNumber	1.344	1	0.246	InstarNumber
I(InstarNumber^2)	2.235	1	0.135	I(InstarNumber^2)
InstarNumber:InstarSex	29.181	1	0.00000	InstarNumber:InstarSex
InstarSex:I(InstarNumber^2)	23.080	1	0.00000	InstarSex:I(InstarNumber^2)

term with highest p value, 0.246359090128936 is: InstarNumber % Table created by stargazer v.5.2 by Marek Hlavac, Harvard University. E-mail: hlvac at fas.harvard.edu % Date and time: Wed, Oct 26, 2016 - 7:37:11 PM

Table 6: Anova of full model alone

	Chisq	Df	Pr(>Chisq)	names
logCtFm	7.244	1	0.007	logCtFm
I(InstarNumber^2)	2.235	1	0.135	I(InstarNumber^2)
InstarNumber:InstarSex	30.525	2	0.00000	InstarNumber:InstarSex
InstarSex:I(InstarNumber^2)	23.080	1	0.00000	InstarSex:I(InstarNumber^2)

term with highest p value, 0.134912346027408 is: I(InstarNumber^2) % Table created by stargazer v.5.2 by Marek Hlavac, Harvard University. E-mail: hlvac at fas.harvard.edu % Date and time: Wed, Oct 26, 2016 - 7:37:11 PM

Table 7: Anova of full model alone

	Chisq	Df	Pr(>Chisq)	names
logCtFm	7.244	1	0.007	logCtFm
InstarNumber:InstarSex	30.525	2	0.00000	InstarNumber:InstarSex
InstarSex:I(InstarNumber^2)	25.315	2	0.00000	InstarSex:I(InstarNumber^2)

term with highest p value, 0.00711544920609045 is: logCtFm[1] “still want to have Instar Number”

% Table created by stargazer v.5.2 by Marek Hlavac, Harvard University. E-mail: hlvac at fas.harvard.edu % Date and time: Wed, Oct 26, 2016 - 7:37:11 PM

term with highest p value, 0.246359090128986 is: InstarNumber

Statistical models

Model 1

(Intercept)

-15.15 (7.47)*

Table 8: Anova of full model alone

	Chisq	Df	Pr(>Chisq)	names
InstarNumber	1.344	1	0.246	InstarNumber
logCtFm	7.244	1	0.007	logCtFm
InstarNumber:InstarSex	29.181	1	0.00000	InstarNumber:InstarSex
InstarSex:I(InstarNumber^2)	25.315	2	0.00000	InstarSex:I(InstarNumber^2)

InstarNumber

6.72 (2.64)*

logCtFm

-0.40 (0.15)*

InstarNumber:InstarSexM

1.74 (0.33)***

InstarSexF:I(InstarNumber^2)

-0.60 (0.23)*

InstarSexM:I(InstarNumber^2)

-0.88 (0.25)***

AIC

BIC

Log Likelihood

Num. obs.

85

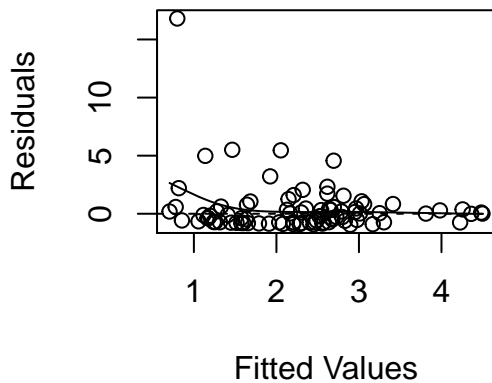
Num. groups

19

***p < 0.001, **p < 0.01, *p < 0.05

note: Argument ‘method’ is deprecated. Use the nAGQ argument to specify Laplace (nAGQ=1) or adaptive Gauss-Hermite quadrature (nAGQ>1)

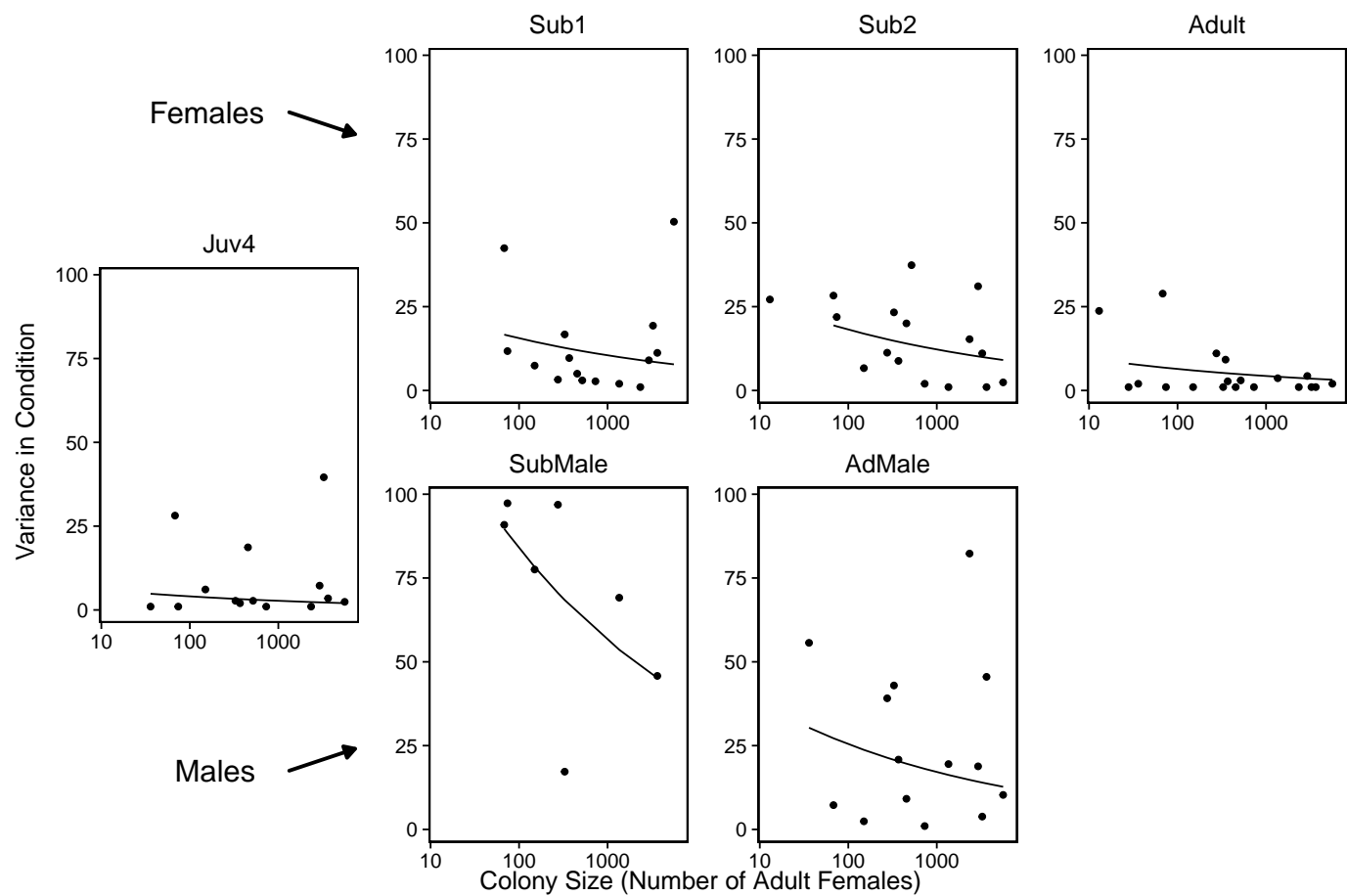
Checking final model fit



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



Graph of condition variance against instar

