

MAthesis

Table 1: Time bins with age range, epoch name, mean age and corresponding sample sizes (on individual, species and genus level)

bin	EpochBins	MeanBins	nIndividuals	nSpecies	nGenera
(0,1e-06]	Modern	0.0000005	240	58	17
(1e-06,0.0117]	Holocene	0.0058500	12	6	4
(0.0117,0.126]	Upper Pleistocene	0.0688500	46	15	7
(0.126,0.781]	Middle Pleistocene	0.4535000	46	9	6
(0.781,2.59]	Lower Pleistocene	1.6845000	68	24	11
(2.59,3.6]	Upper Pliocene	3.0940000	19	12	8
(3.6,5.33]	Lower Pliocene	4.4660000	23	13	8
(5.33,11.6]	Upper Miocene	8.4700000	41	21	9

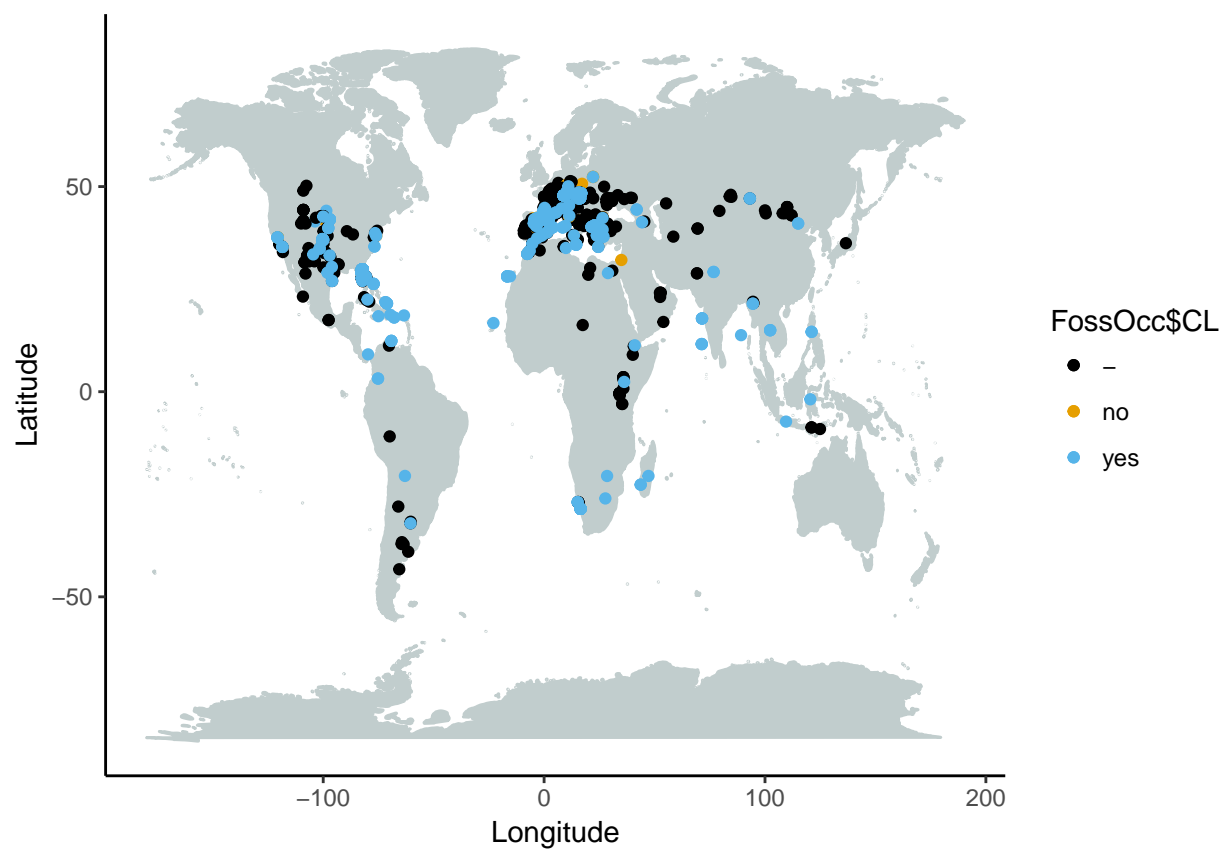


Figure 1: Map displaying all fossil occurrences of testudinids, with color indicating whether relevant literature was available (black if not) and if it was, whether body size data was available or not (yes and no, respectively).

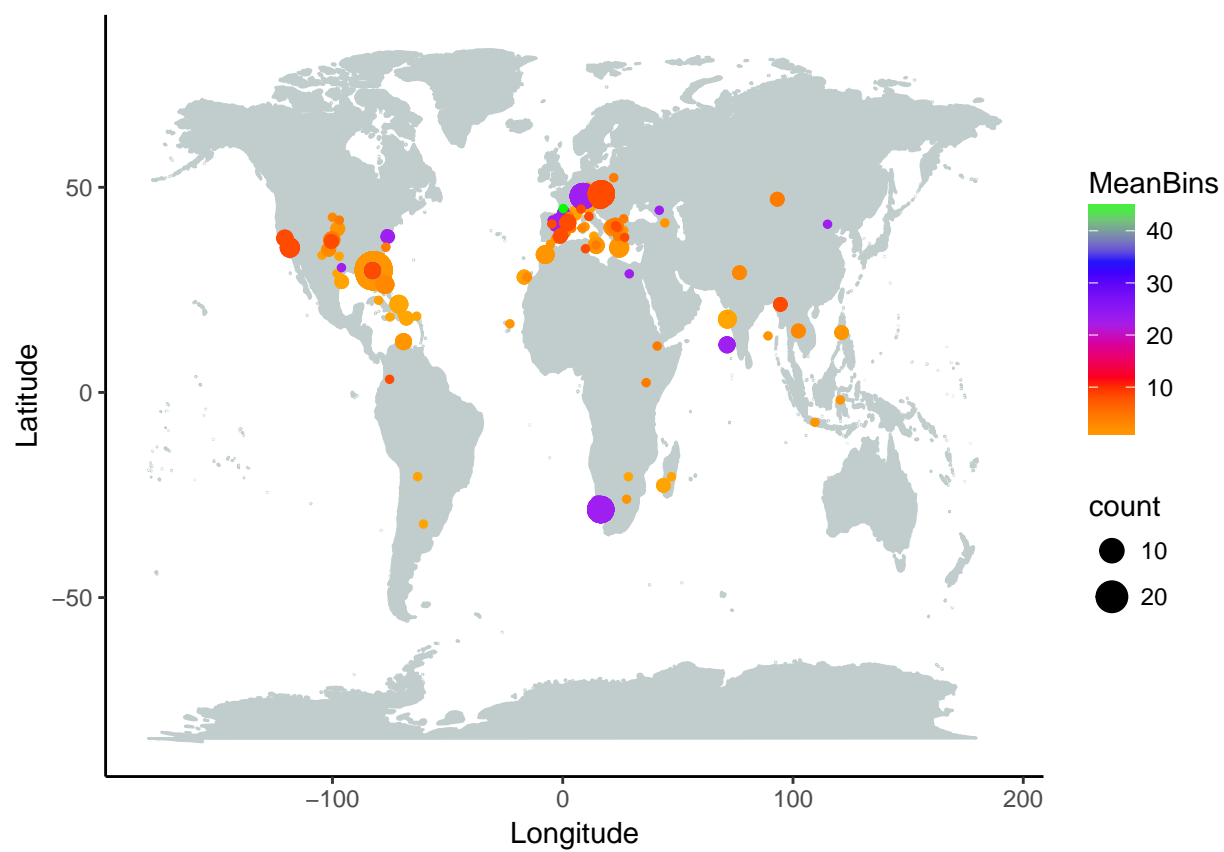


Figure 2: Map displaying all localities for which body size data for testudinids was available in the literature. Size of points denotes sample size, color denotes approximate age.

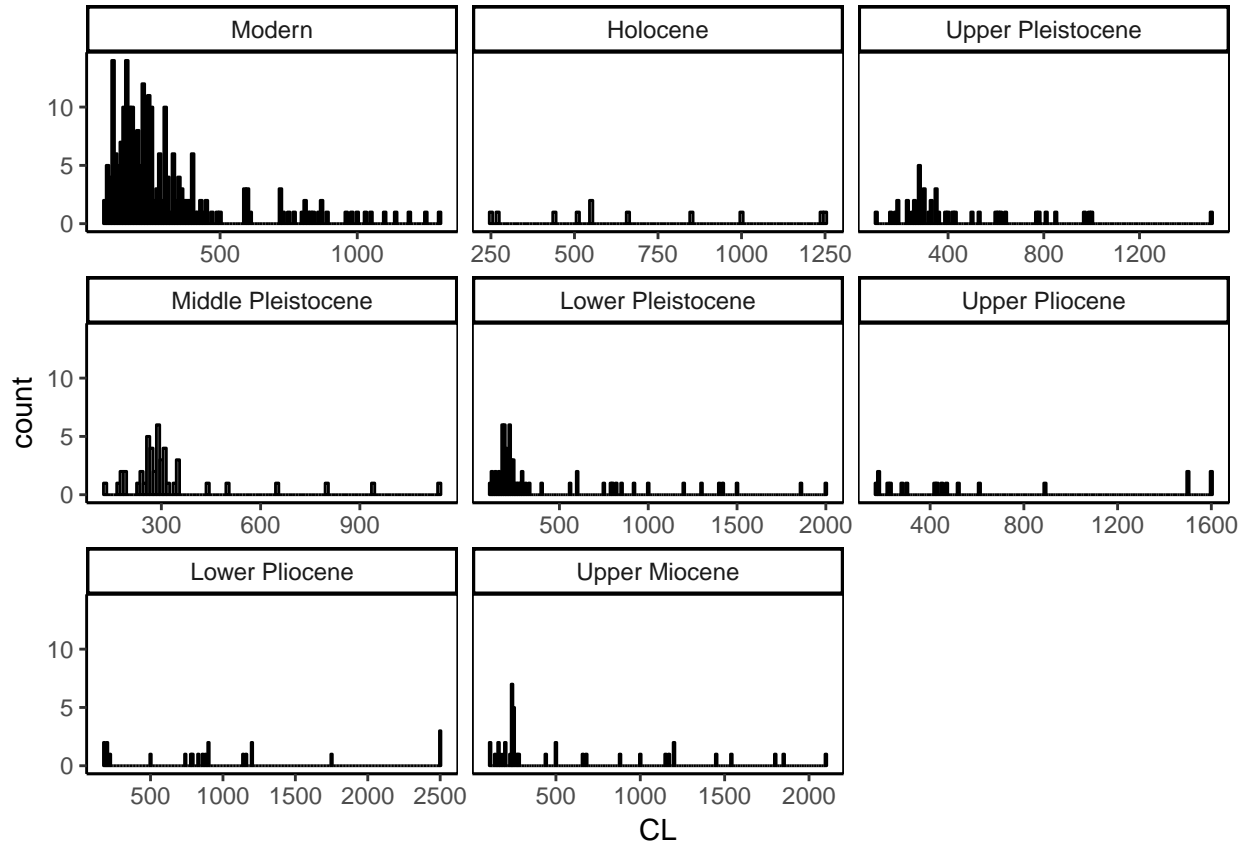
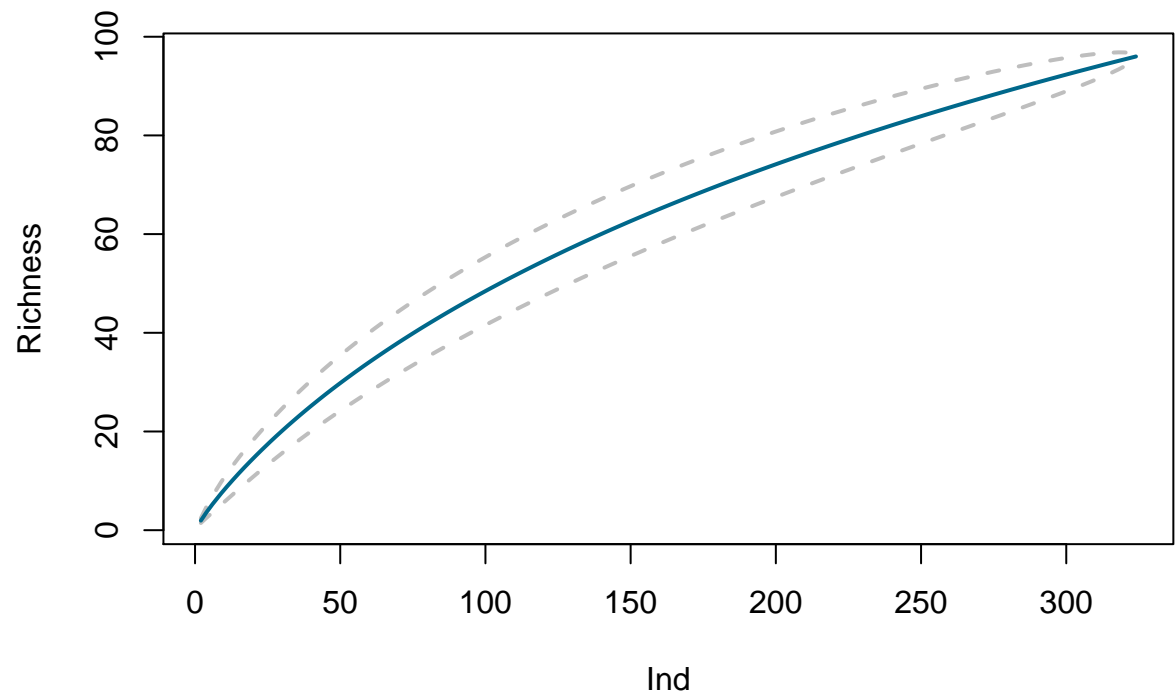
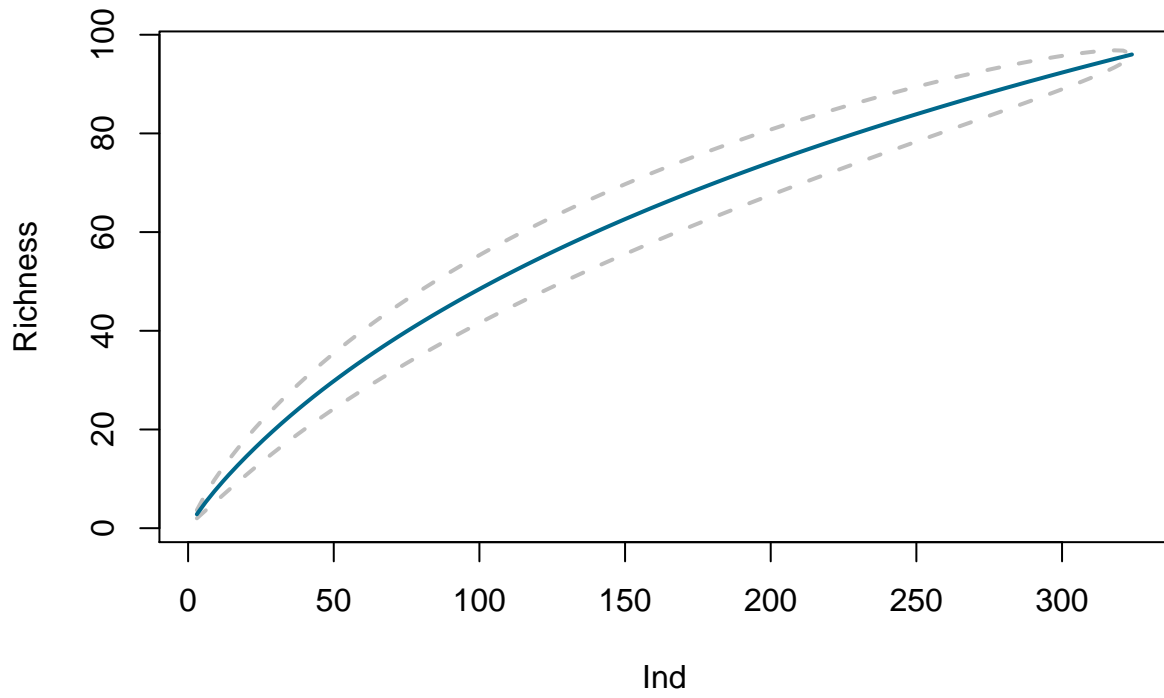


Figure 3: Distribution of body site data per time bin

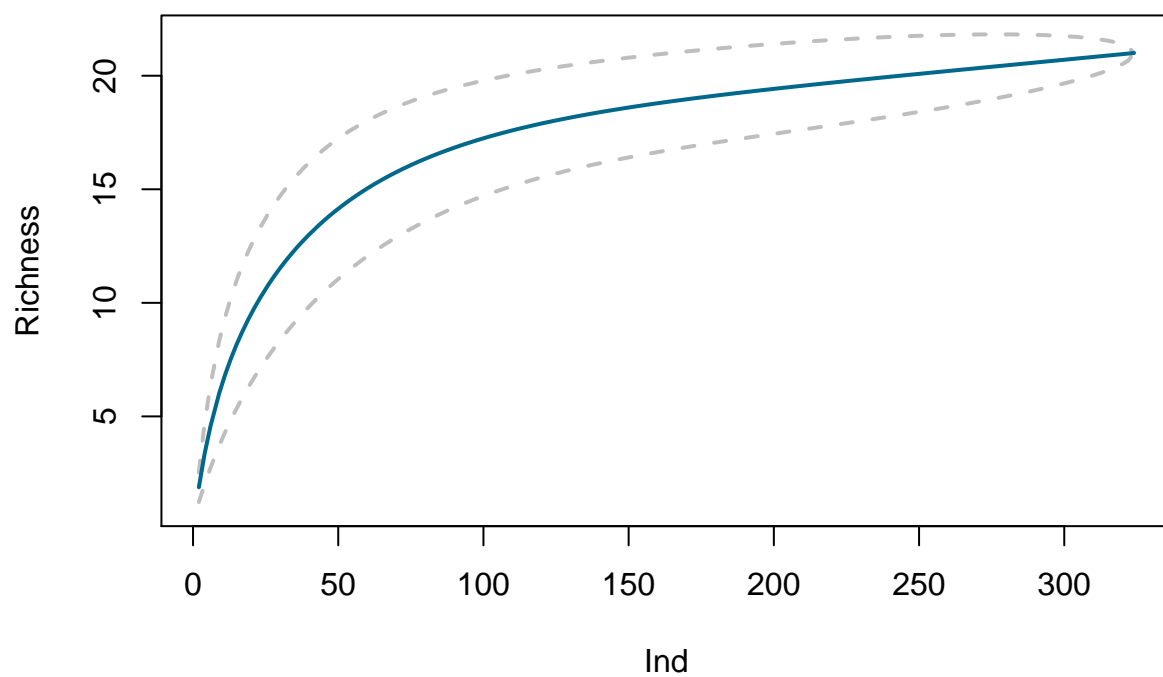
Fossil species, CL, per Locality



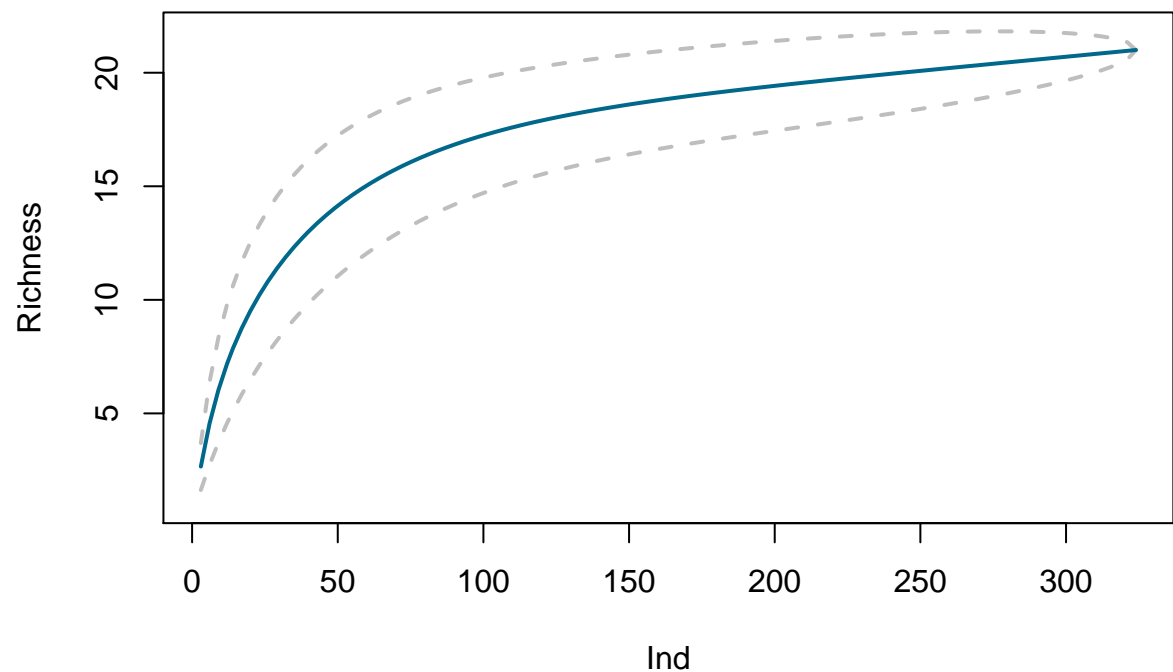
Fossil species, CL, per Reference



Fossil genera, CL, per Locality



Fossil genera, CL, per Reference



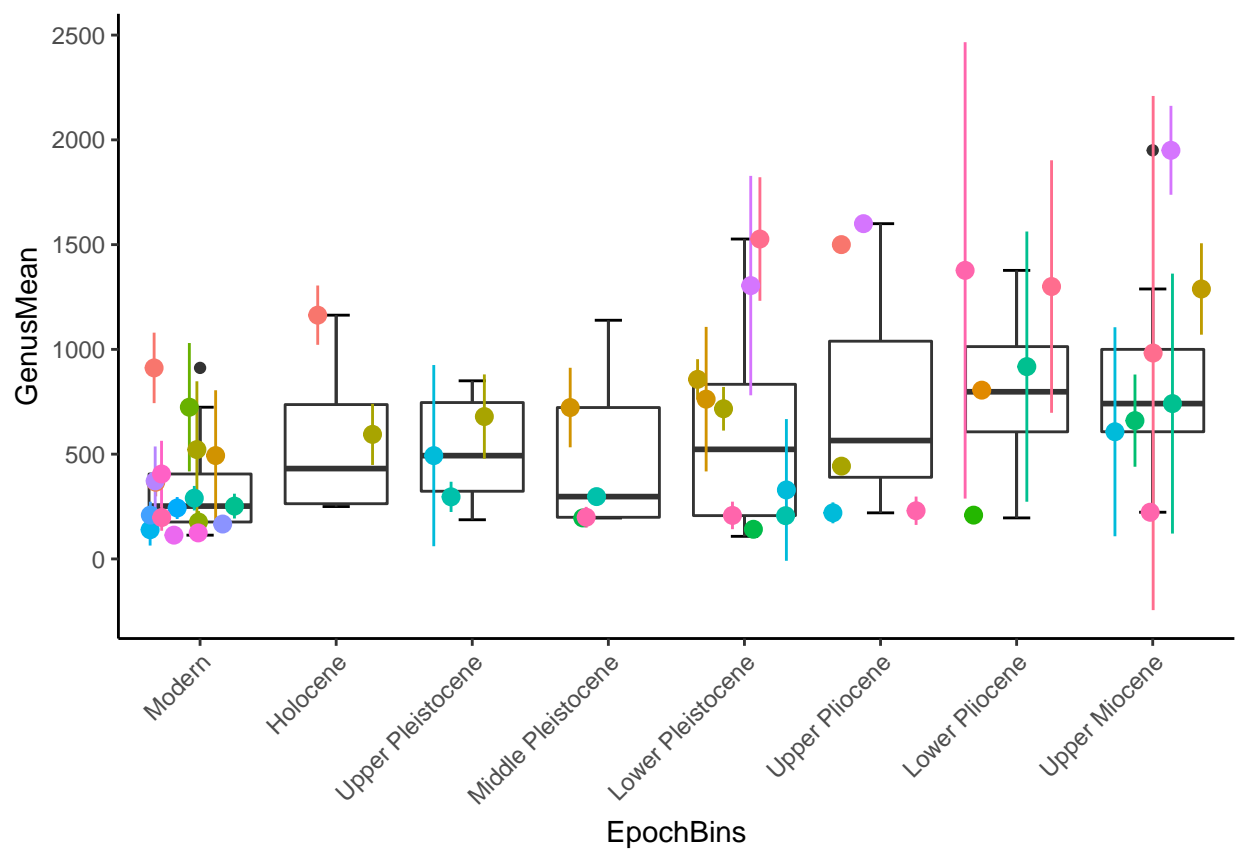


Figure 4: Boxplots of each genus per time bin, for colors see Fig. 4.

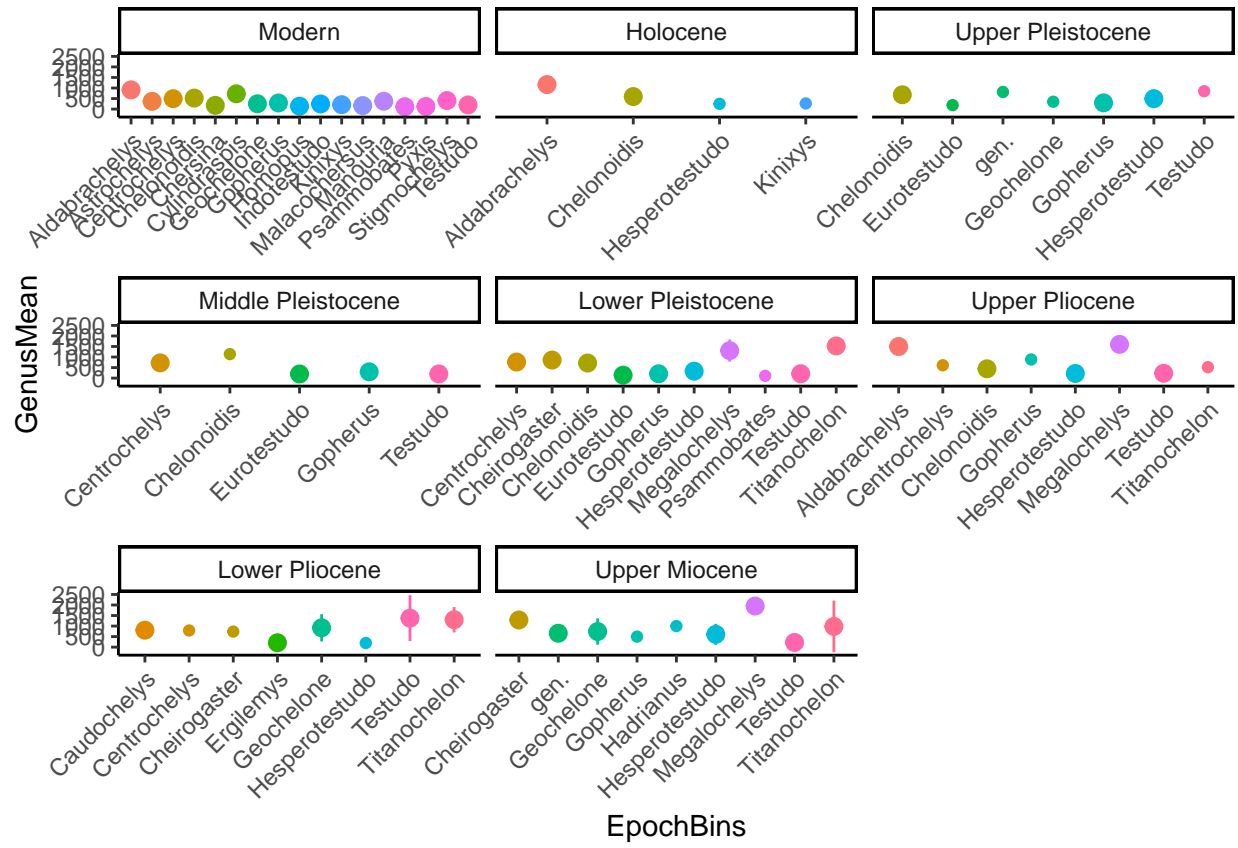


Figure 5: Mean body size and standard deviation per genus in each time bin

1 paleoTS analysis

1.1 all (continental and insular)

1.1.1 individuals (all)

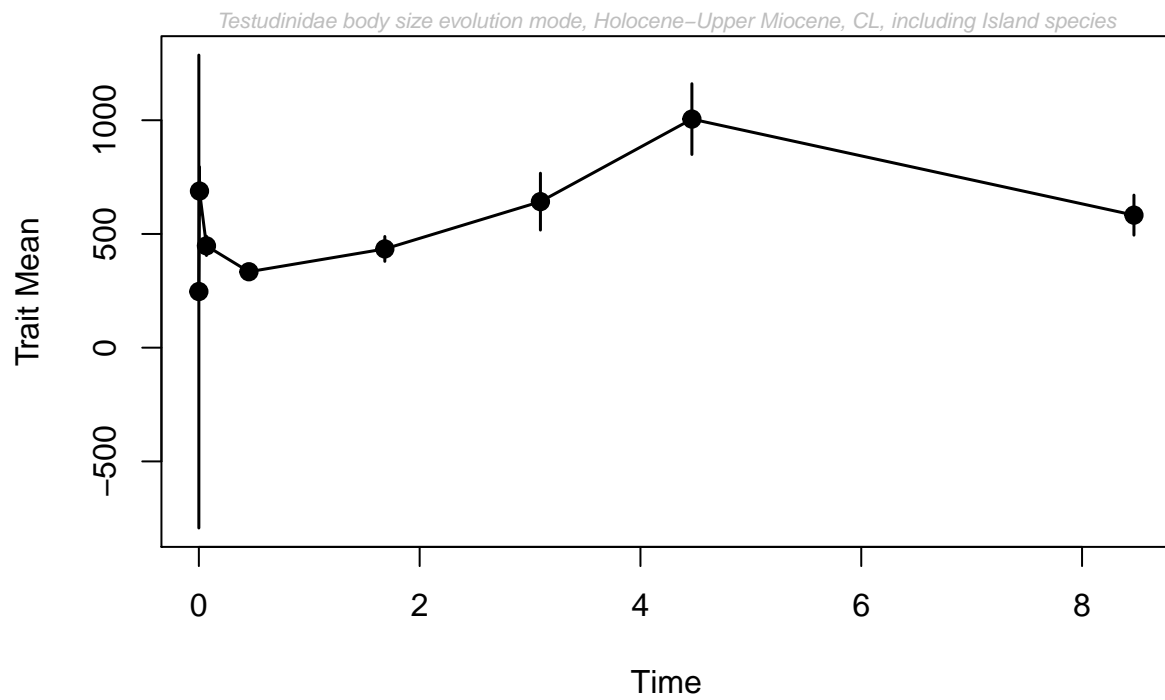


Figure 6: individuals, including island species

Table 2: Model-fitting results for testudinidae, individuals, including island species

	logL	K	AICc	Akaike.wt
GRW	-49.84924	2	106.6985	0.044
URW	-50.76566	1	104.3313	0.145
Stasis	-46.94604	2	100.8921	0.810

1.1.2 species (all)

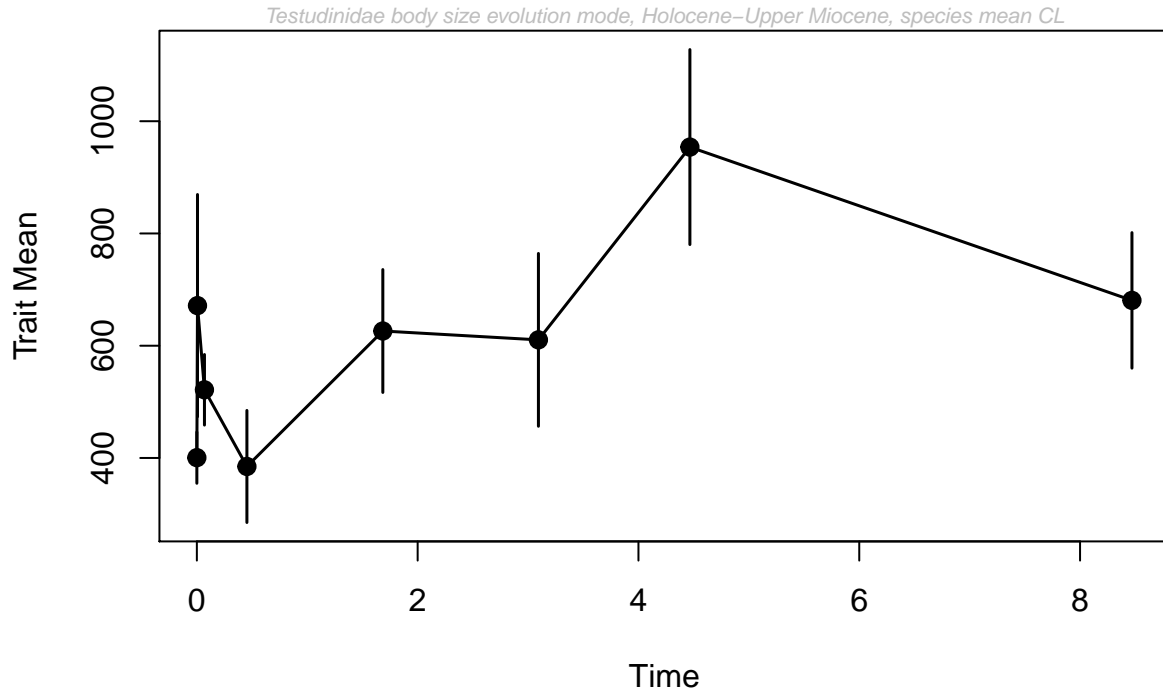


Figure 7: paleoTS plot with species mean, including island species

Table 3: Model-fitting results for testudinidae, species, including island species

	logL	K	AICc	Akaike.wt
GRW	-47.67834	2	102.35667	0.048
URW	-47.74028	1	98.28056	0.371
Stasis	-45.19334	2	97.38669	0.580

1.1.3 genera (all)

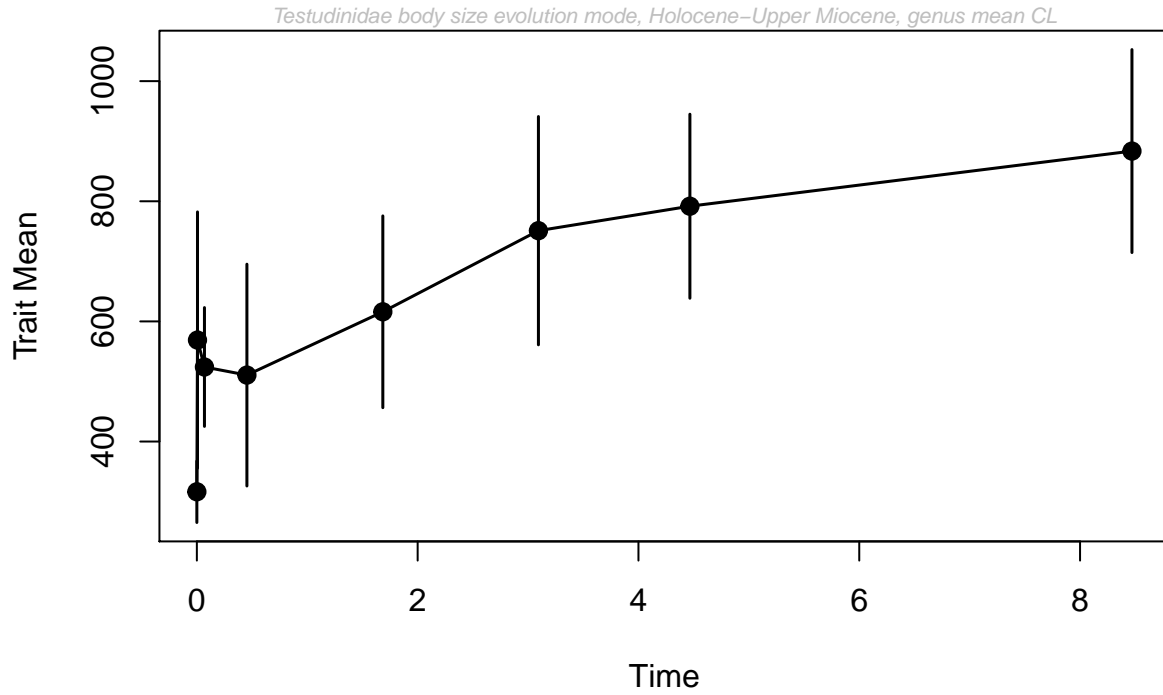


Figure 8: paleoTS plot with genus mean, including island species

Table 4: Model-fitting results for testudinidae, genera, including island species

	logL	K	AICc	Akaike.wt
GRW	-45.37058	2	97.74116	0.107
URW	-45.58571	1	93.97143	0.702
Stasis	-44.78886	2	96.57771	0.191

1.2 continental (excluding insular species)

1.2.1 individuals (continental)

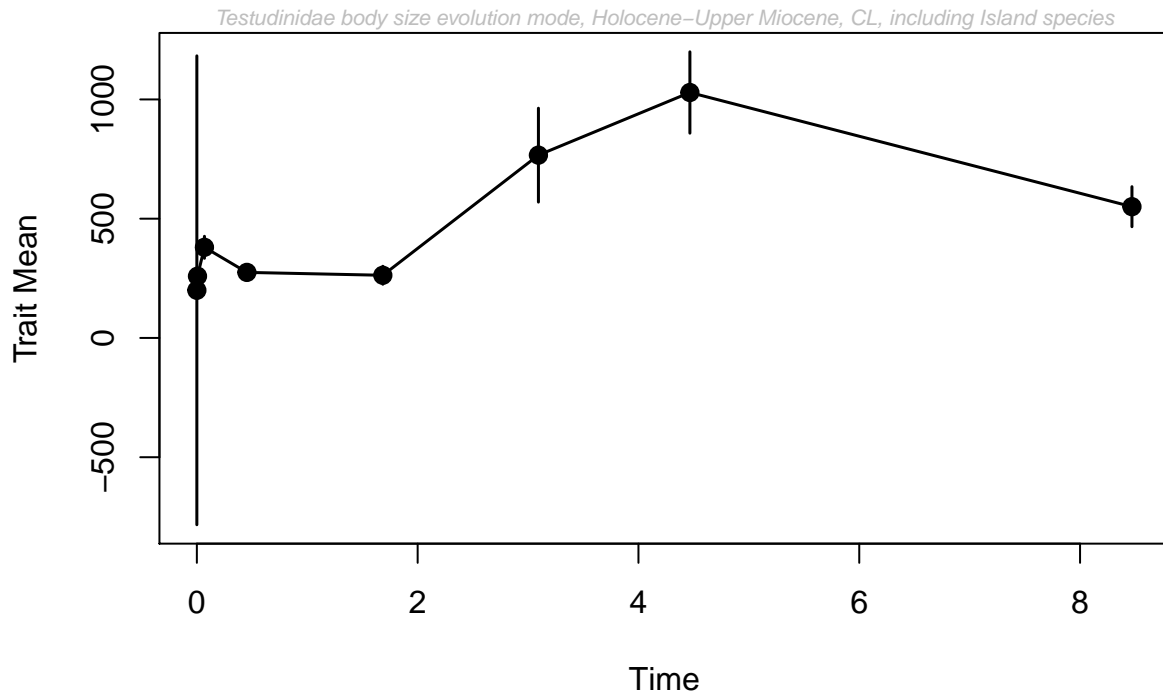


Figure 9: individuals, excluding island species

Table 5: Model-fitting results for testudinidae, individuals, excluding island species

	logL	K	AICc	Akaike.wt
GRW	-50.91308	2	108.8262	0.054
URW	-50.33951	1	103.4790	0.784
Stasis	-49.81453	2	106.6291	0.162

1.2.2 species (continental)

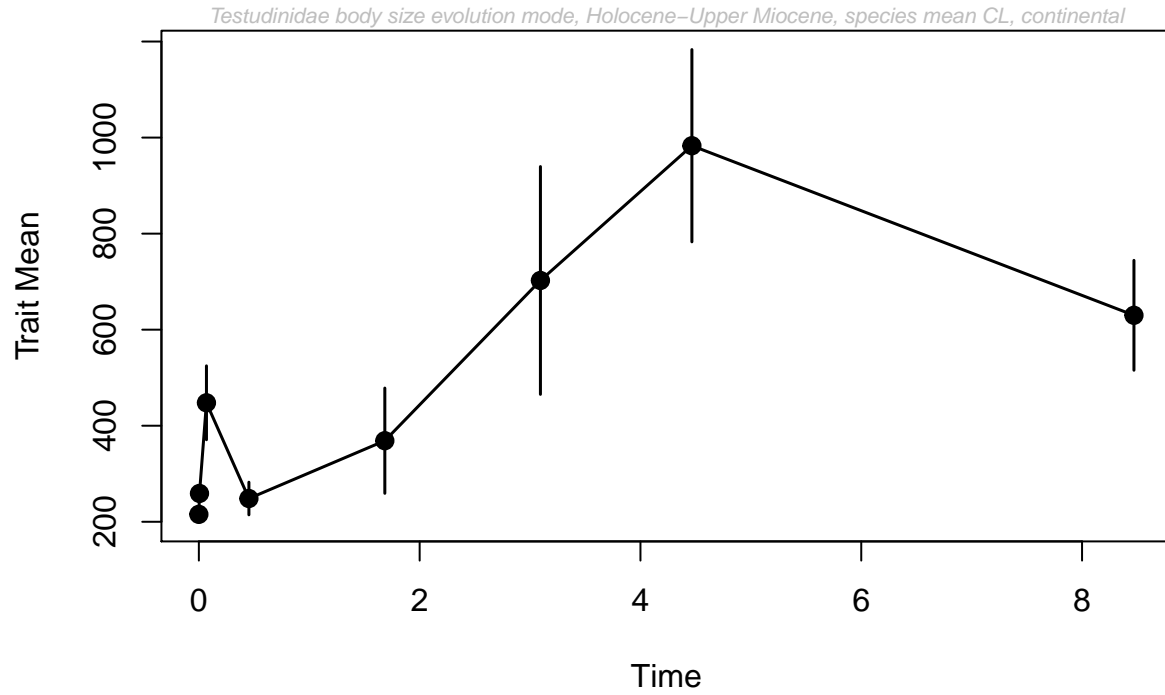


Figure 10: paleoTS plot with species mean, excluding island species

Table 6: Model-fitting results for testudinidae, species, excluding island species

	logL	K	AICc	Akaike.wt
GRW	-48.11009	2	103.2202	0.155
URW	-48.73586	1	100.2717	0.678
Stasis	-48.03479	2	103.0696	0.167

1.2.3 genera (continental)

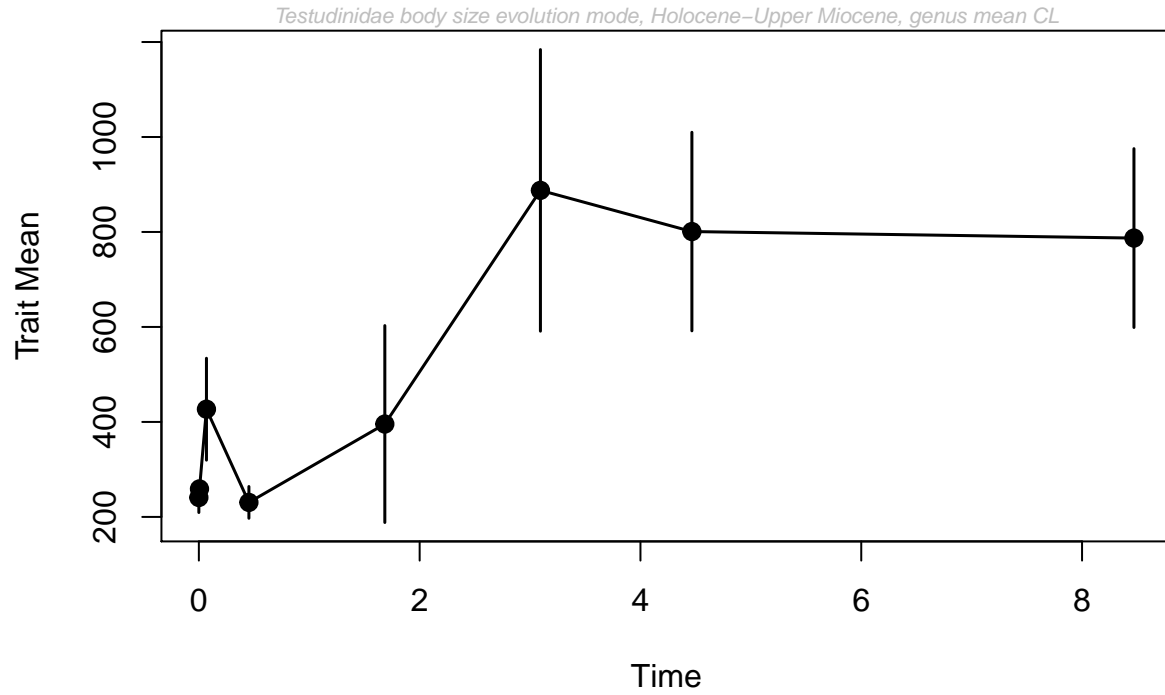


Figure 11: paleoTS plot with genus mean, excluding island species

Table 7: Model-fitting results for testudinidae, genera, excluding insular species

	logL	K	AICc	Akaike.wt
GRW	-46.23366	2	99.46732	0.110
URW	-46.25371	1	95.30742	0.880
Stasis	-48.57439	2	104.14878	0.011

1.3 insular (excluding continental)

1.3.1 individuals (insular)

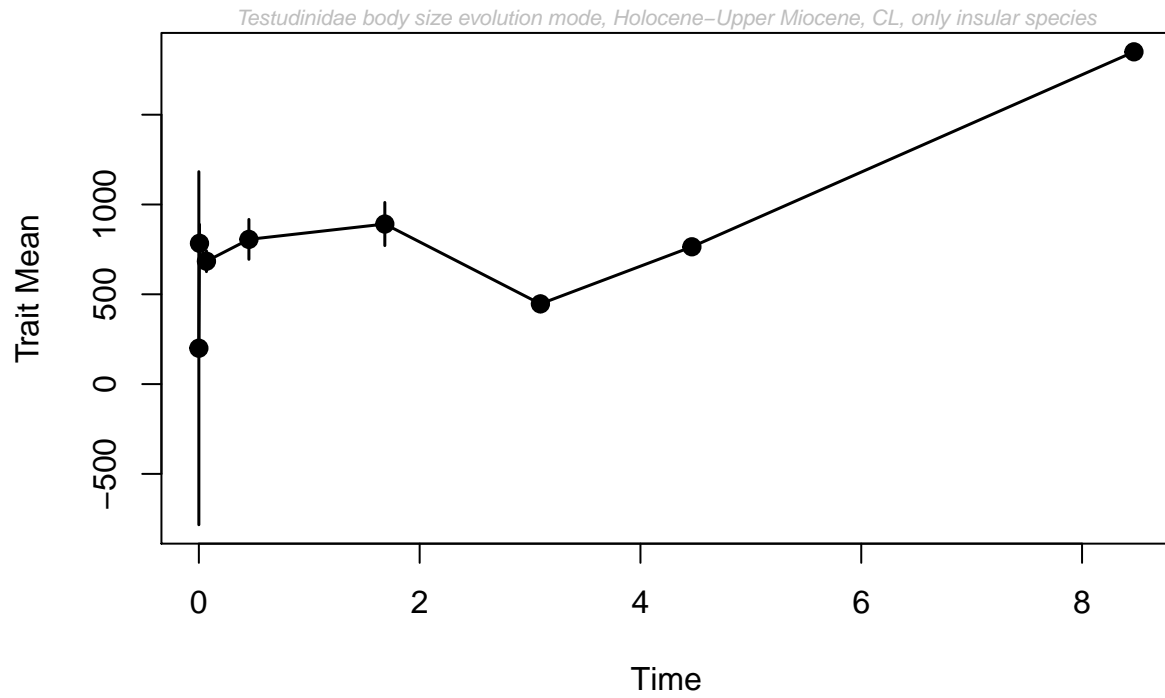


Figure 12: individuals, excluding continental species

Table 8: Model-fitting results for testudinidae, individuals, only insular species

	logL	K	AICc	Akaike.wt
GRW	-63.07747	2	133.1549	0.000
URW	-52.21971	1	107.2394	0.964
Stasis	-53.39557	2	113.7911	0.036

1.3.2 species (insular)

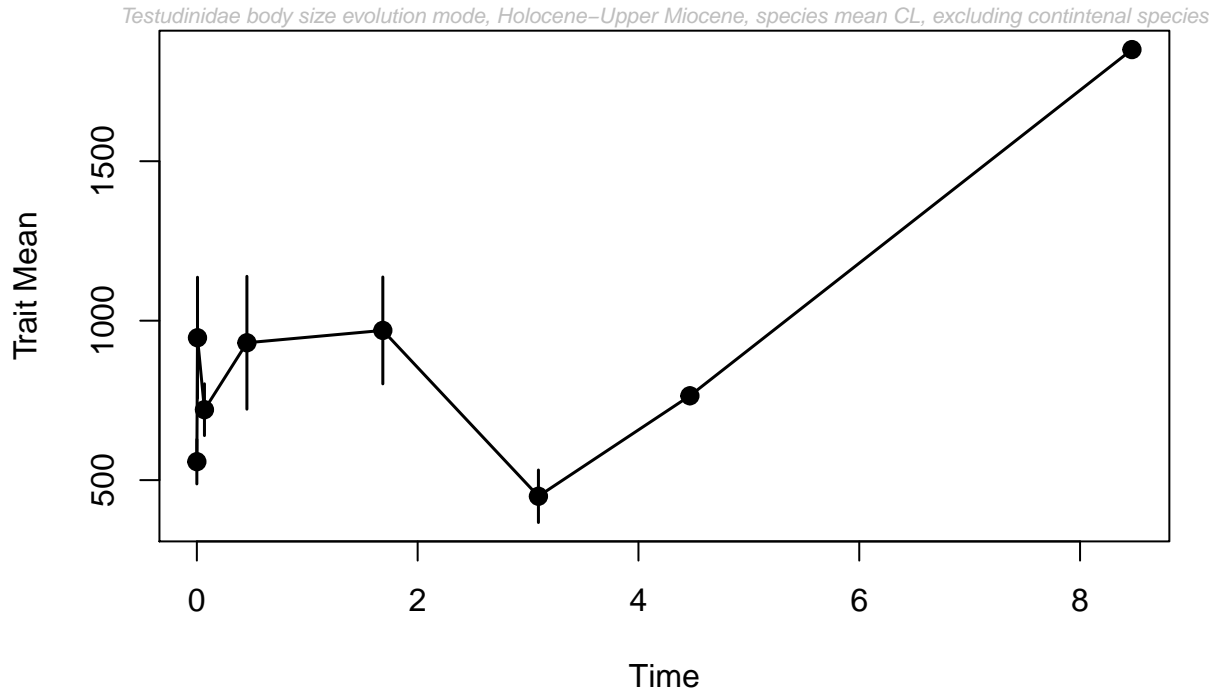


Figure 13: paleoTS plot with species mean, only insular species

Table 9: Model-fitting results for testudinidae, species, only insular species

	logL	K	AICc	Akaike.wt
GRW	-48.11009	2	103.2202	0.155
URW	-48.73586	1	100.2717	0.678
Stasis	-48.03479	2	103.0696	0.167

1.3.3 genera (insular)

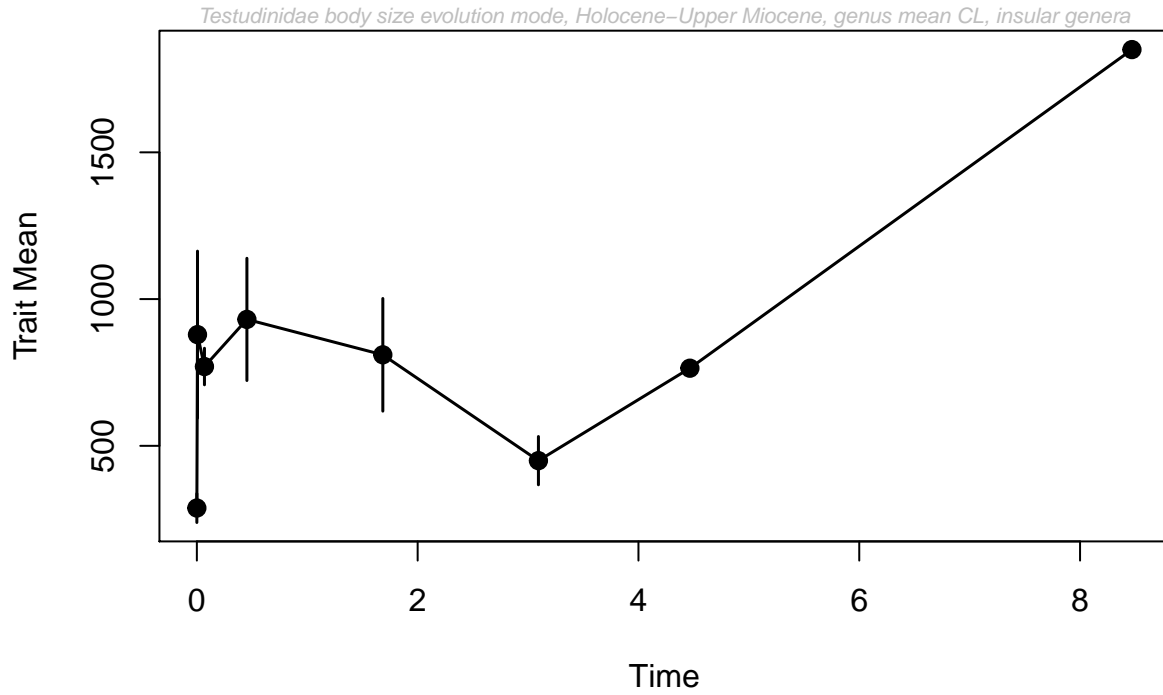


Figure 14: paleoTS plot with genus mean, only insular species

Table 10: Model-fitting results for testudinidae, genera, only insular species

	logL	K	AICc	Akaike.wt
GRW	-51.46539	2	109.9308	0.247
URW	-52.59318	1	107.9864	0.652
Stasis	-52.35547	2	111.7109	0.101

2 Boxplots (continental (n) vs. Island (y) species)

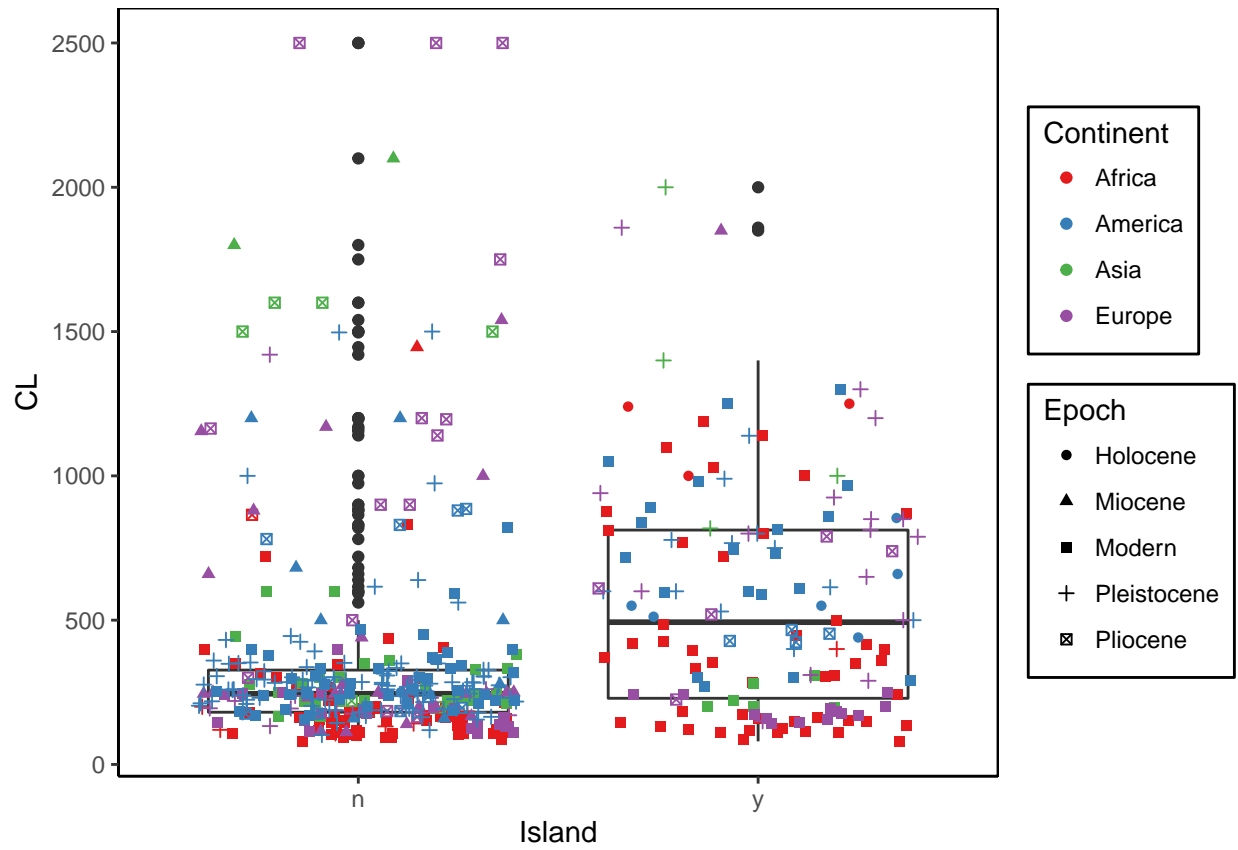


Figure 15: Boxplot continental vs. insular, individuals

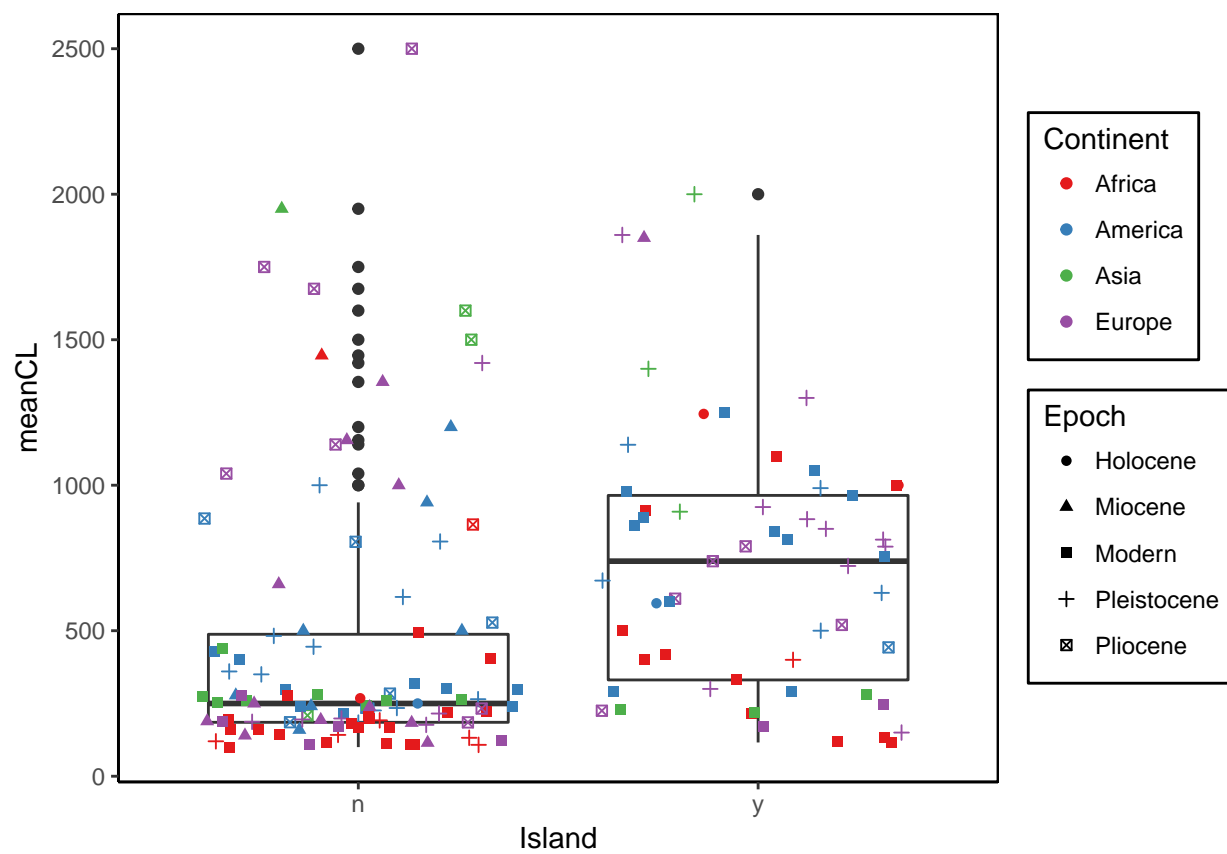


Figure 16: Boxplots continental vs. insular, genera summarised

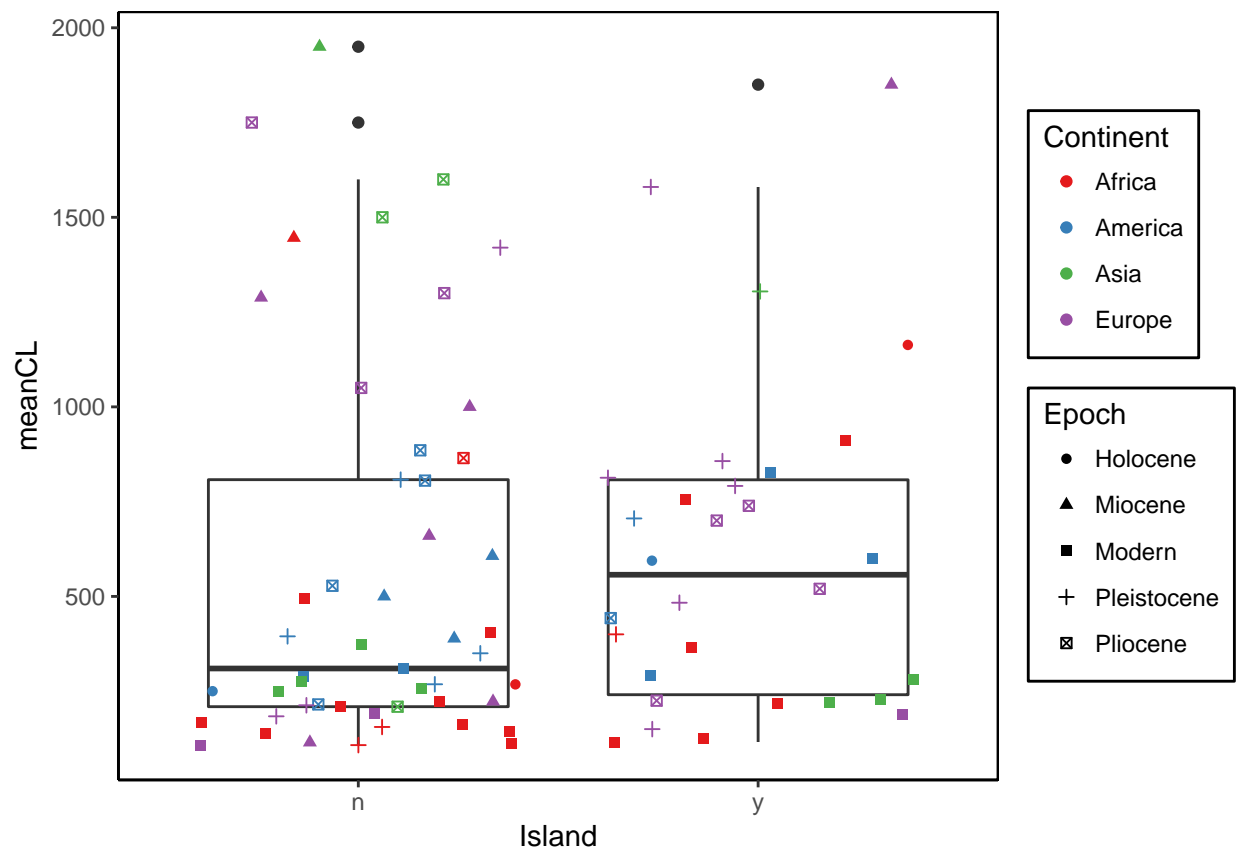


Figure 17: Boxplot continental vs. insular, species summarised

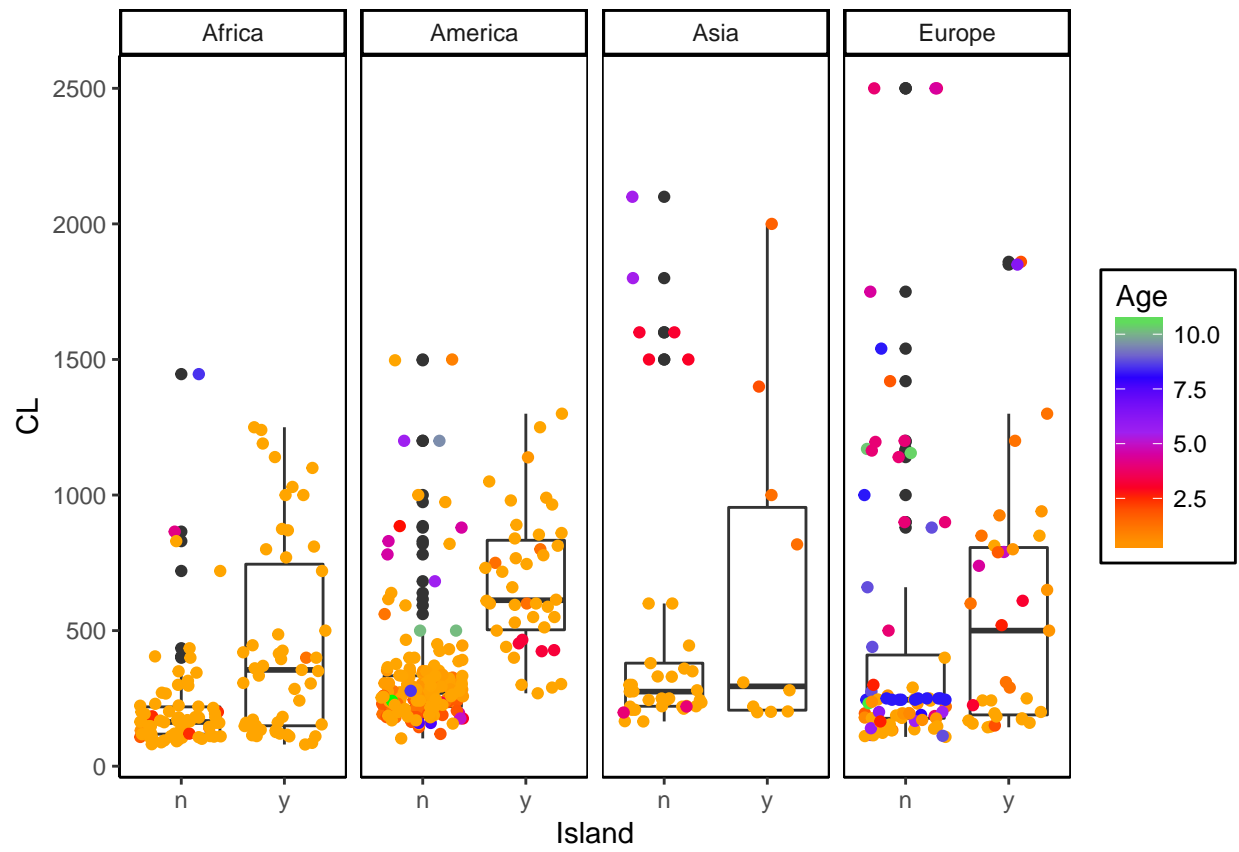


Figure 18: Boxplots of body size (individuals) on different continents, insular vs. continent with age indicated