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	47	10	6
(0.781,2.59]	Lower Pleistocene	1.6845000	68	24	11
(2.59,3.6]	Upper Pliocene	3.0940000	22	15	9
(3.6,5.33]	Lower Pliocene	4.4660000	29	17	8
(5.33,11.6]	Upper Miocene	8.4700000	41	21	9
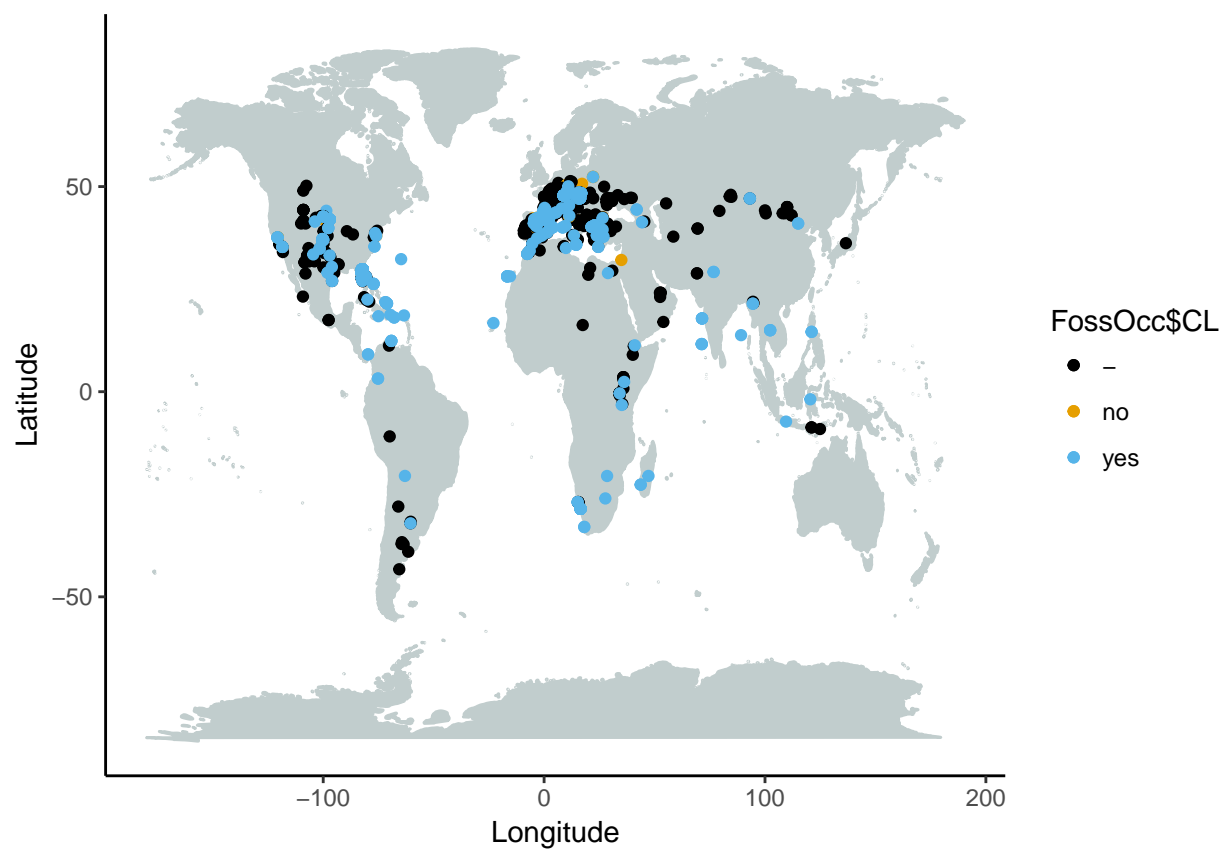
Figure 1: Map displaying all fossil occurrences of testudinids, with color indicating whether relevant literature was available (black if not) and if it was, whether body size data was available or not (yes and no, respectively).
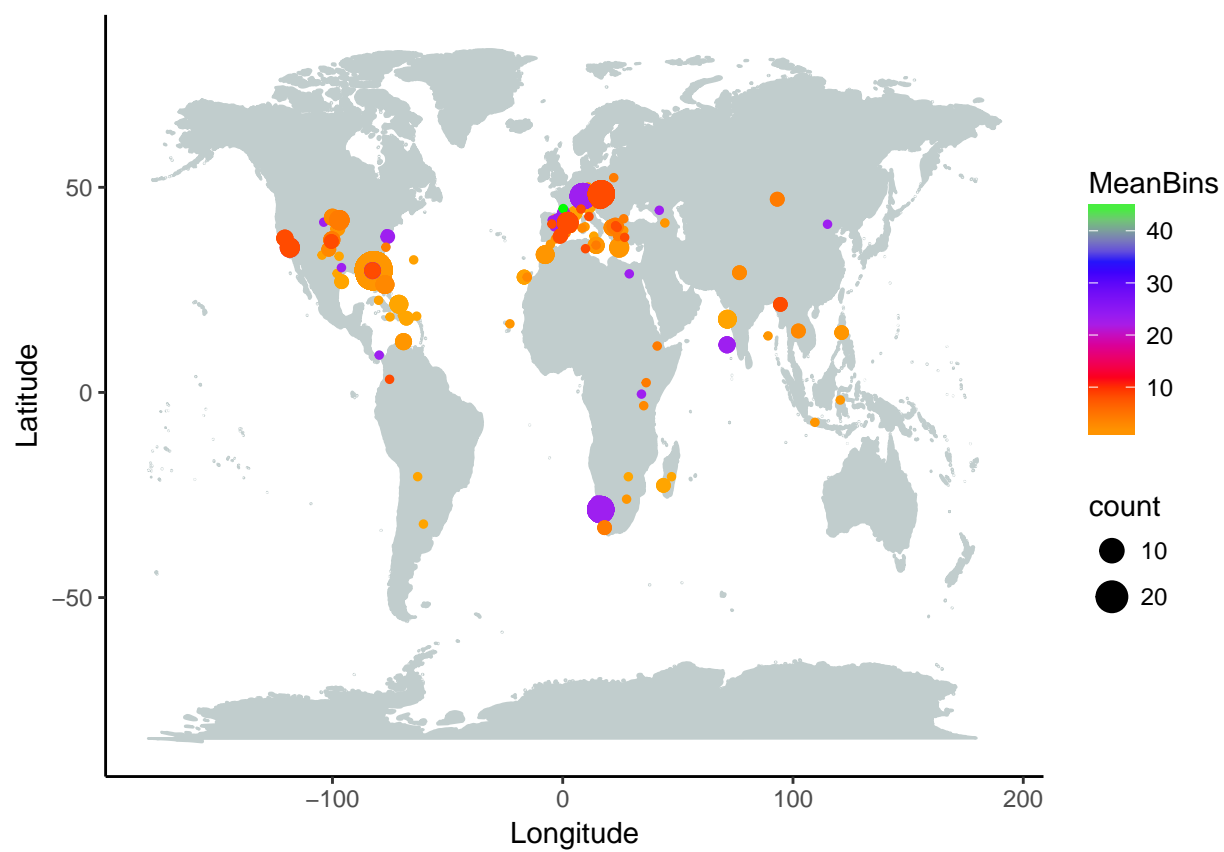
Figure 2: Map displaying all localities for which body size data for testudinids was available in the literature. Size of points denotes sample size, color denotes approximate age.
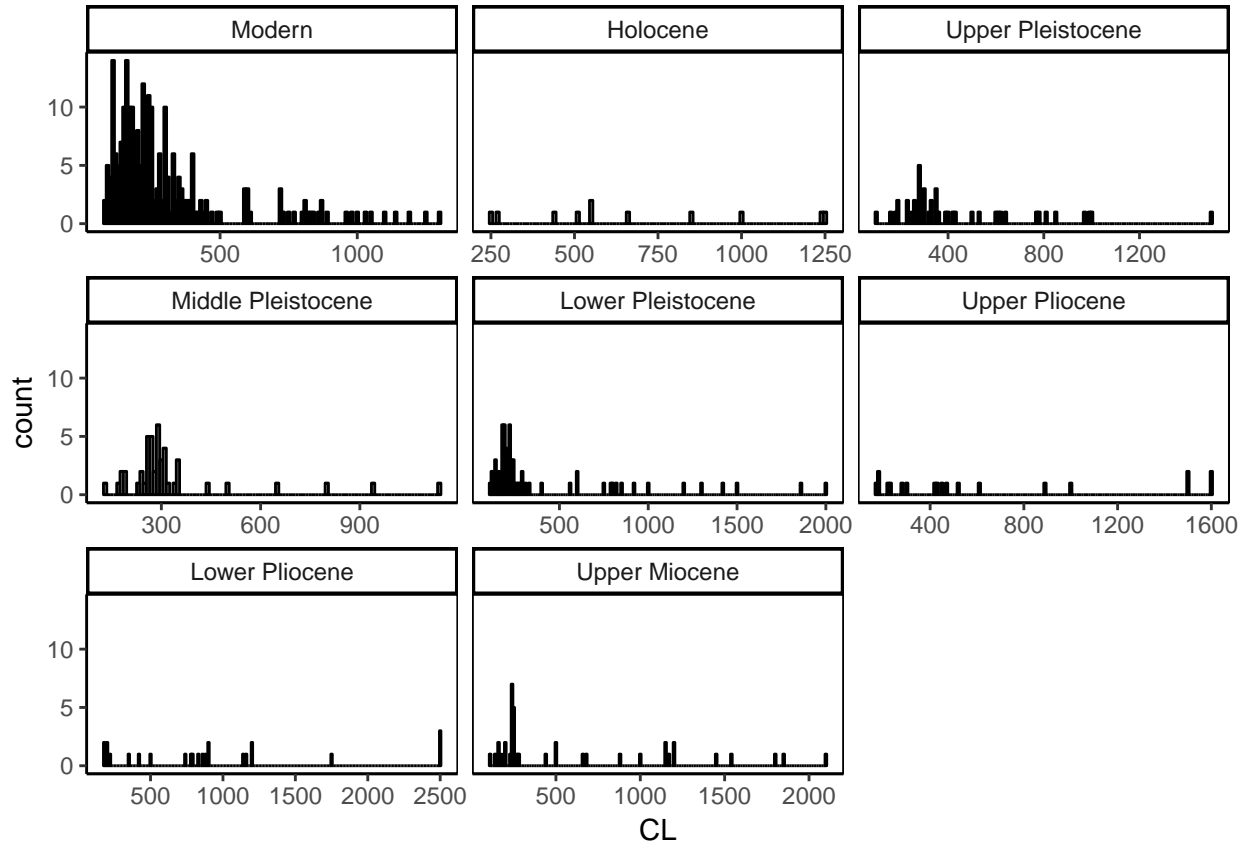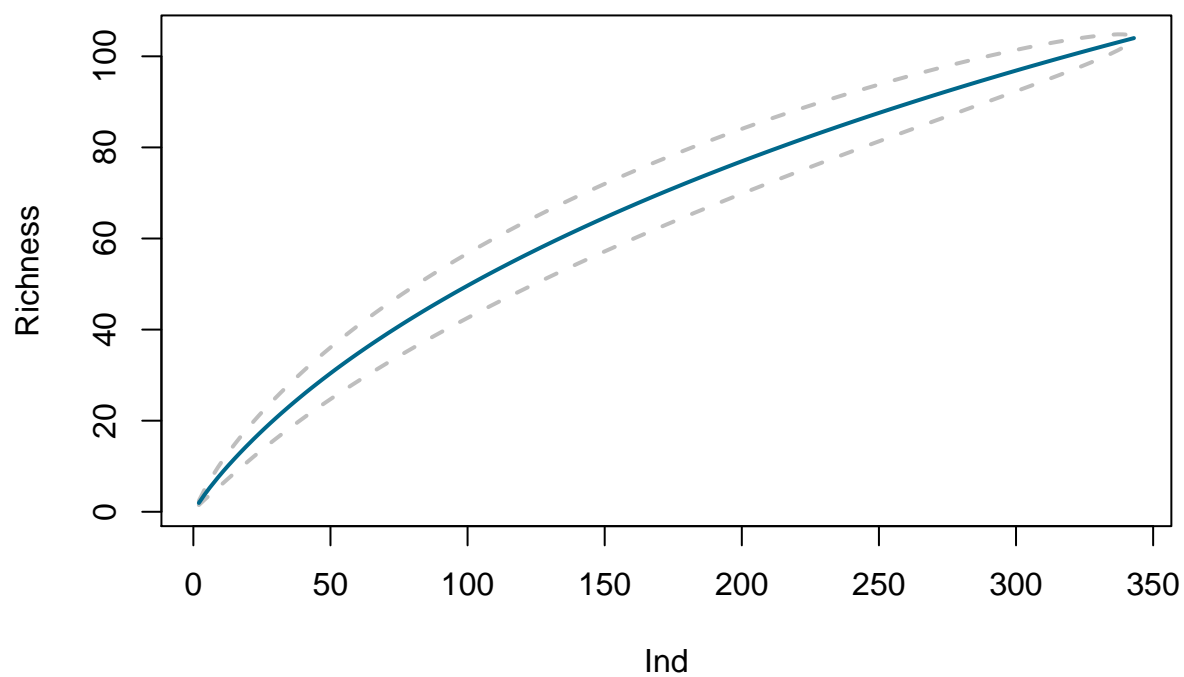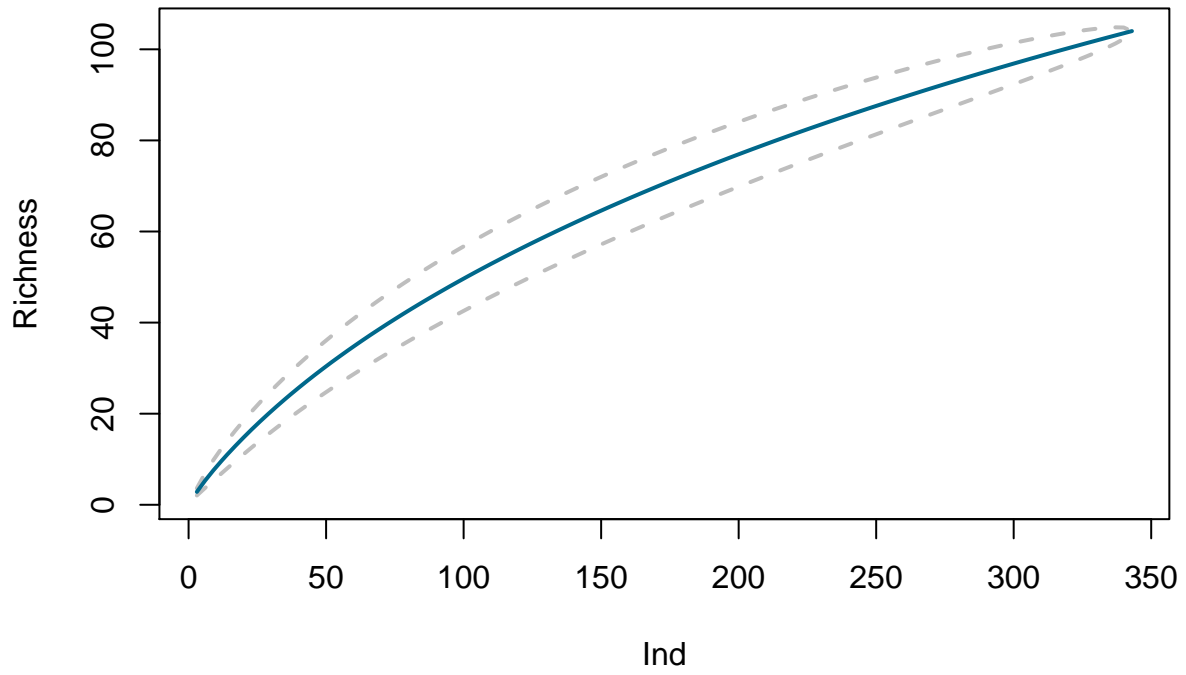
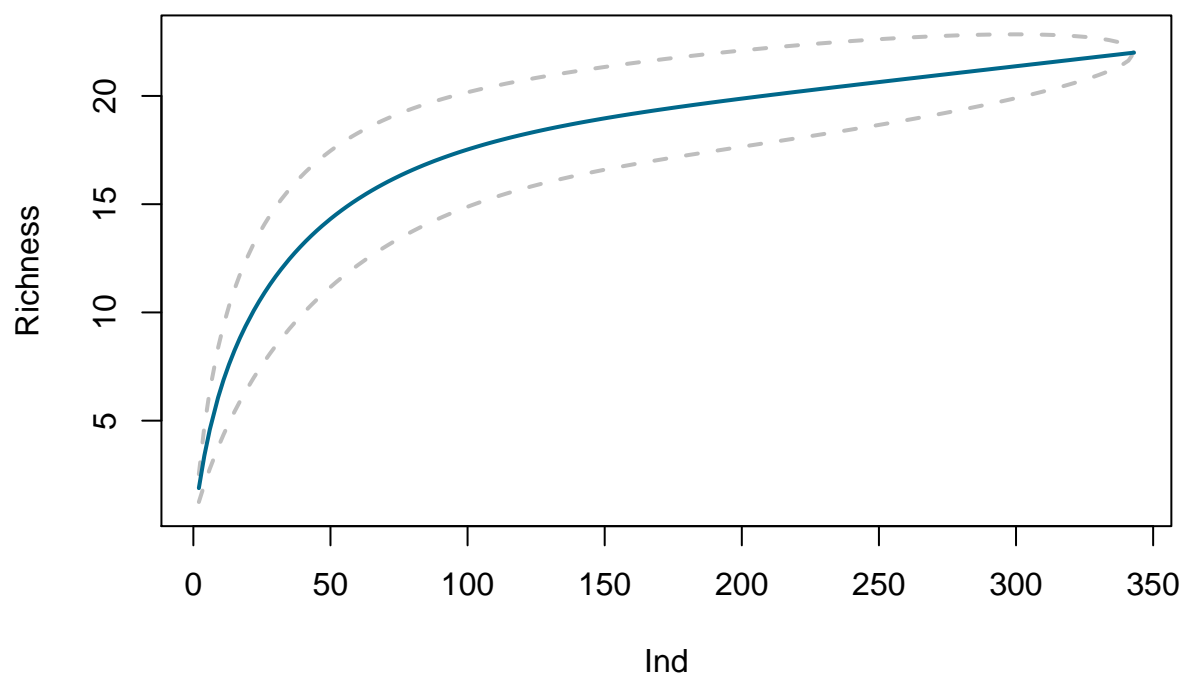Figure 3: Distribution of body site data per time bin
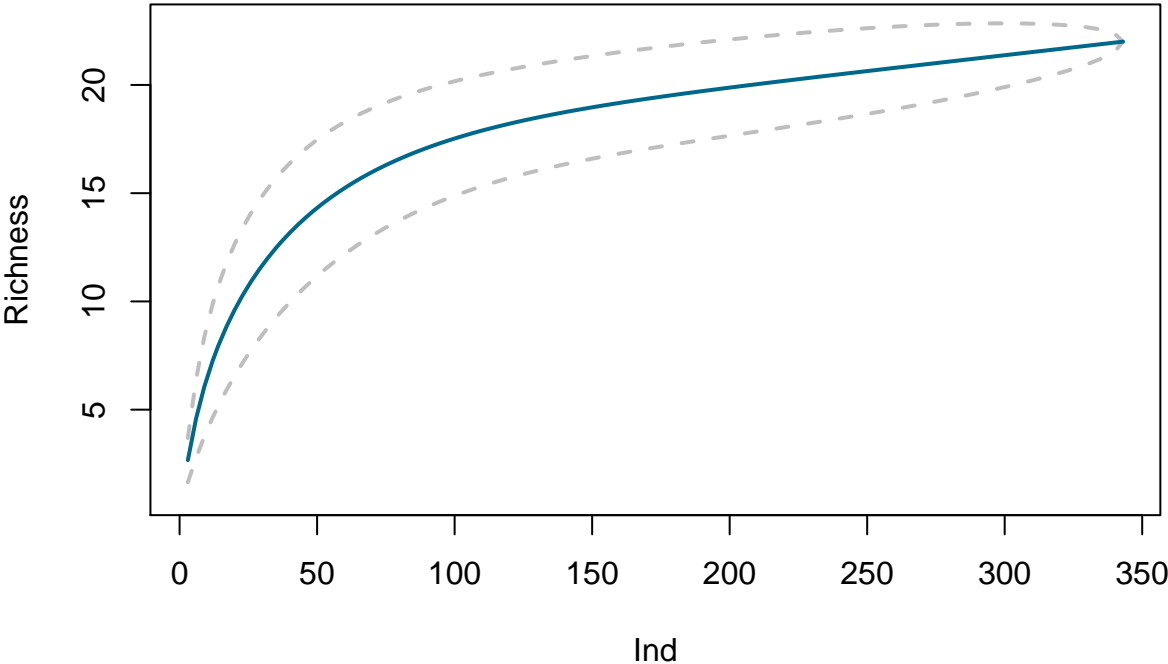
Fossil species, CL, per Locality

Fossil species, CL, per Reference

Fossil genera, CL, per Locality
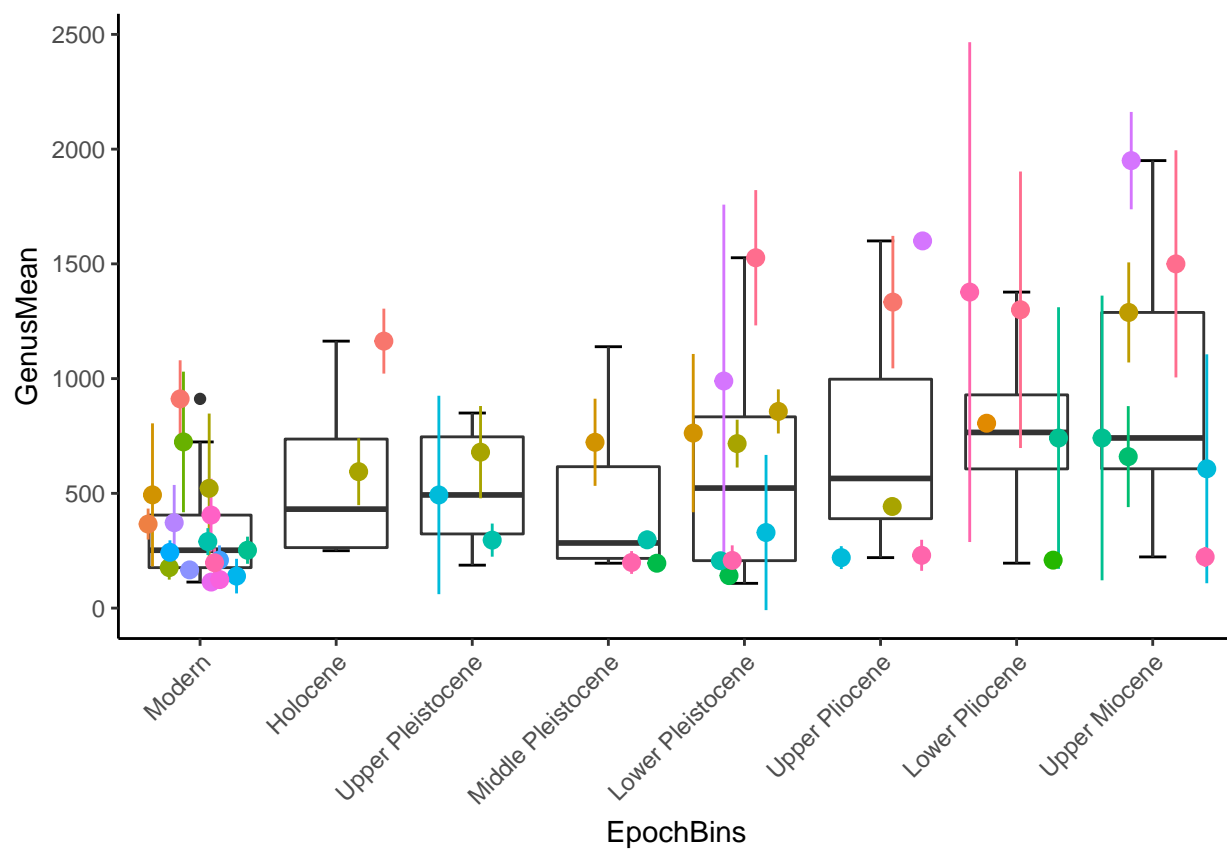
Fossil genera, CL, per Reference

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)
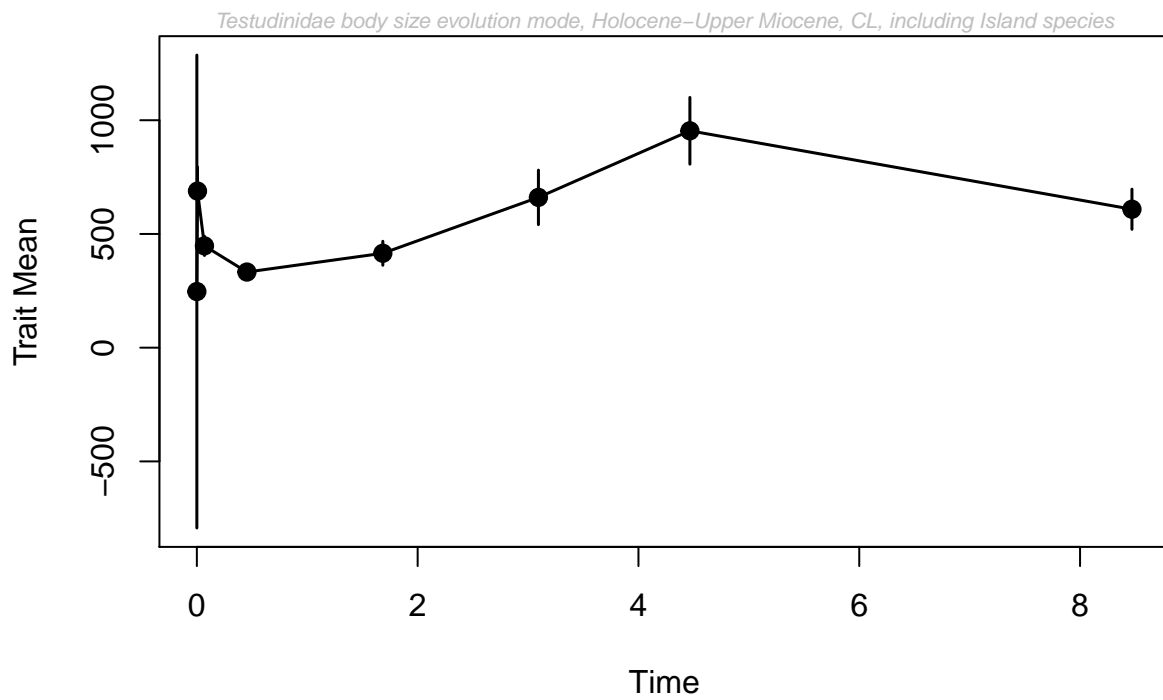
1.1.1 individuals (all)

Figure 6: individuals, including island species

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

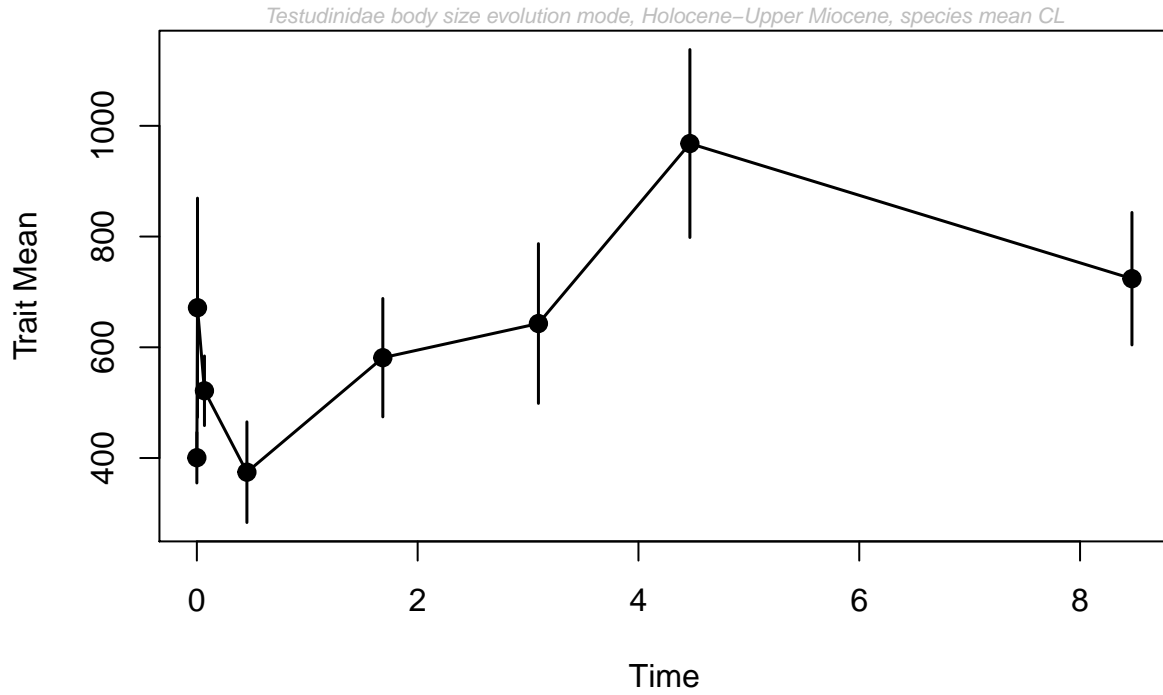|	logL	K	AICc	Akaike.wt
GRW	-50.71912	2	108.4382	0.014
URW	-50.08092	1	102.9618	0.220
Stasis	-46.73470	2	100.4694	0.766

11

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

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

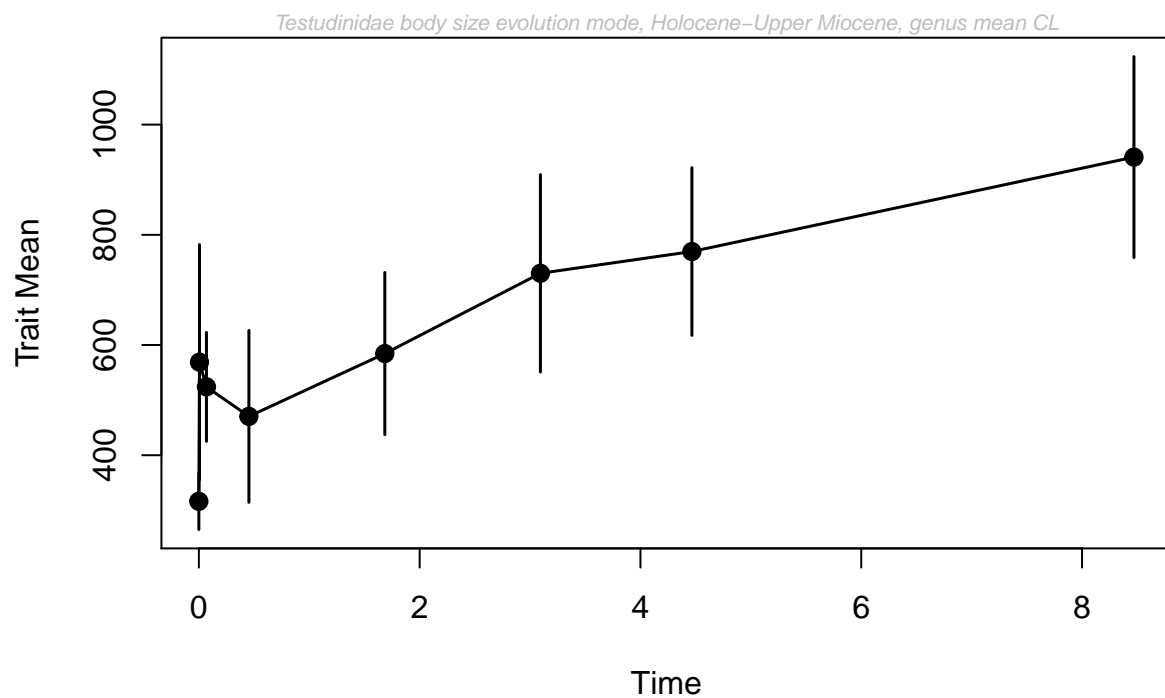|	logL	K	AICc	Akaike.wt
GRW	-47.39886	2	101.79772	0.072
URW	-47.46314	1	97.72628	0.554
Stasis	-45.75934	2	98.51868	0.373

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	-45.10347	2	97.20694	0.141
URW	-45.58241	1	93.96482	0.712
Stasis	-45.05814	2	97.11627	0.147

1.2 continental (excluding insular species)
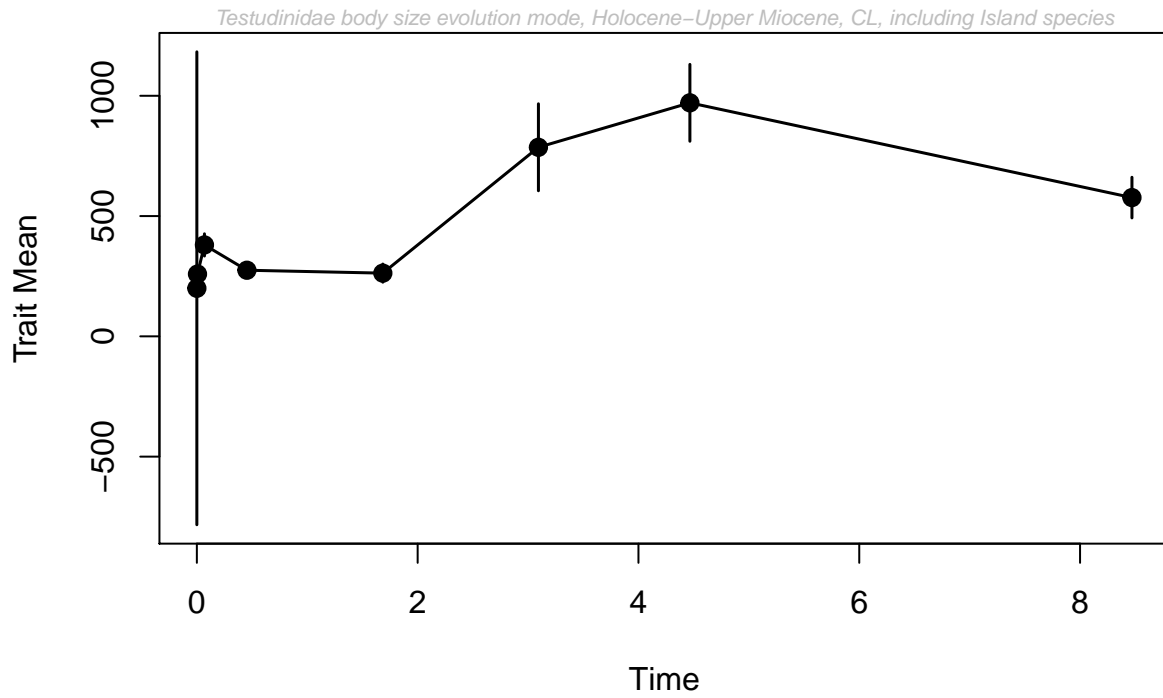
1.2.1 individuals (continental)

Figure 9: individuals, excluding island species

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

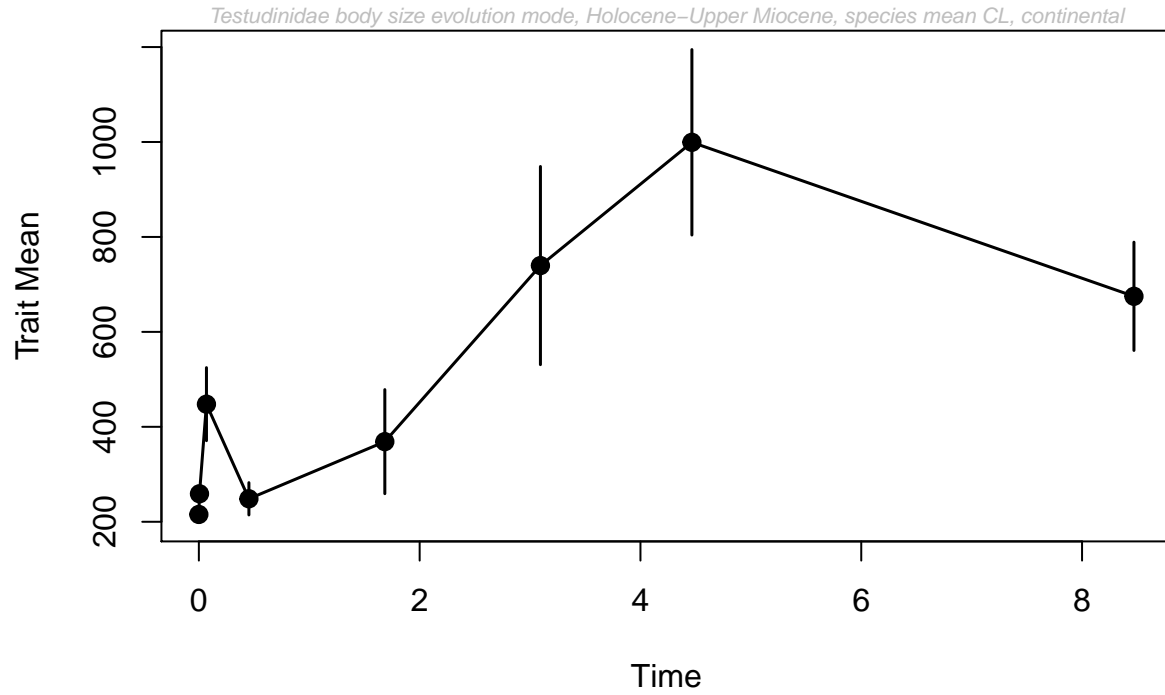|	logL	K	AICc	Akaike.wt
GRW	-50.79368	2	108.5874	0.209
URW	-53.12024	1	109.0405	0.167
Stasis	-49.70065	2	106.4013	0.624

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

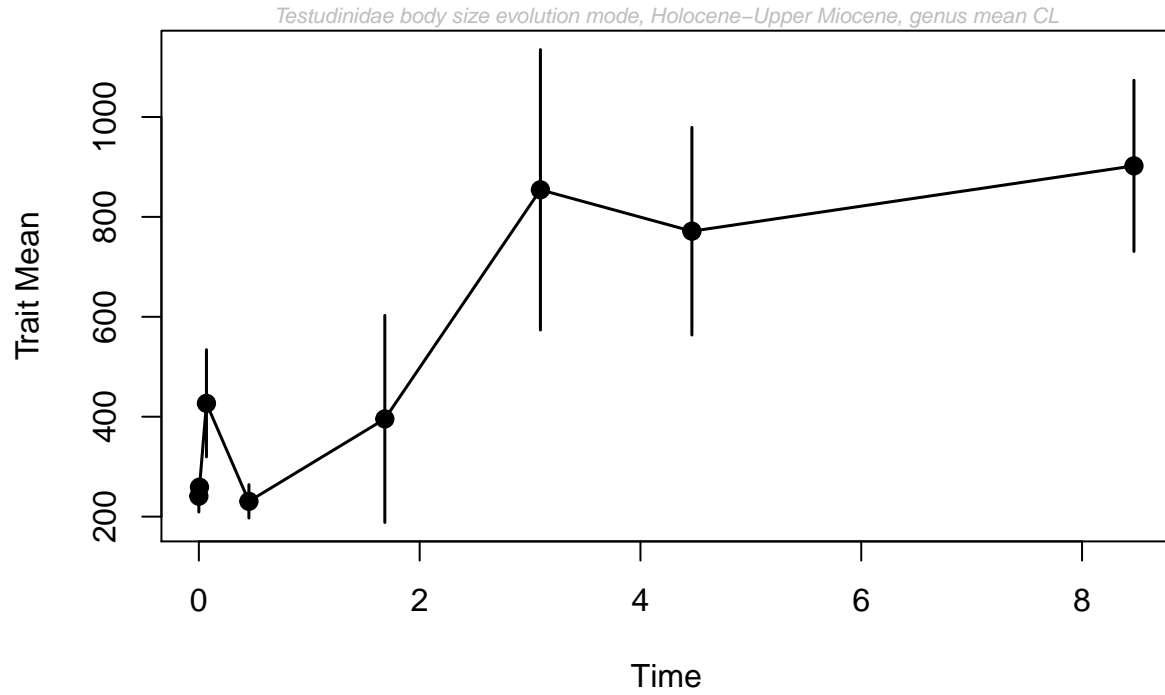|	logL	K	AICc	Akaike.wt
GRW	-48.07907	2	103.1581	0.171
URW	-48.75614	1	100.3123	0.711
Stasis	-48.45781	2	103.9156	0.117

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	-45.98051	2	98.96102	0.131
URW	-46.19143	1	95.18286	0.863
Stasis	-49.01587	2	105.03175	0.006

1.3 insular (excluding continental)
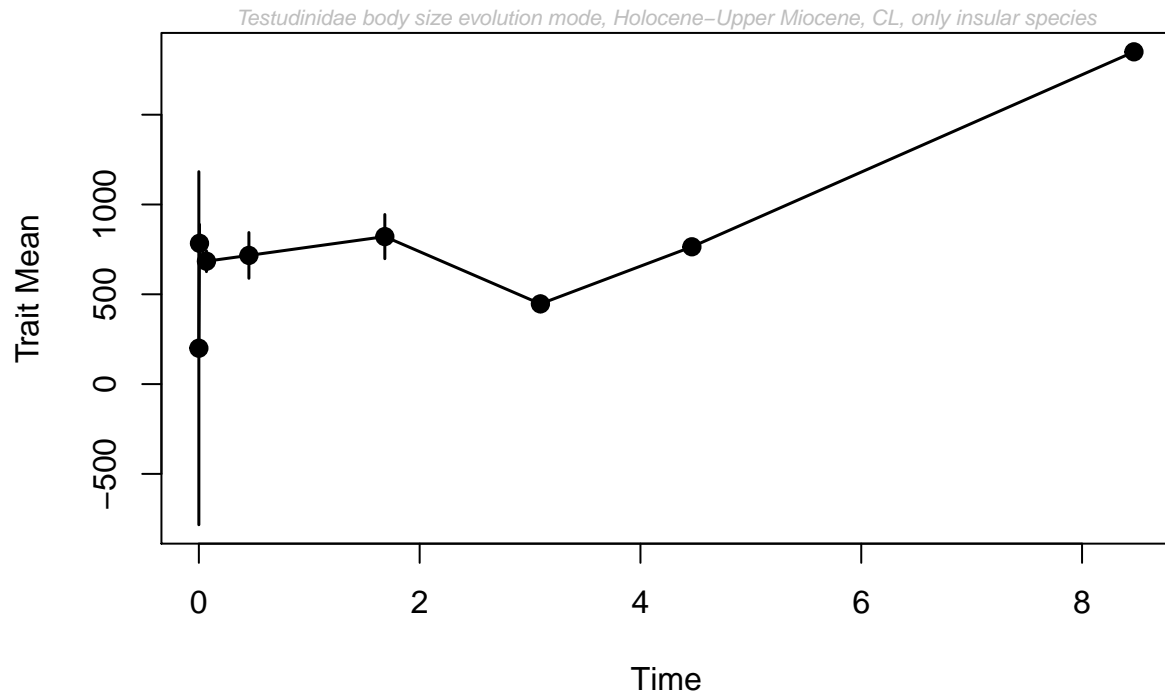
1.3.1 individuals (insular)

Figure 12: individuals, excluding continental species

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

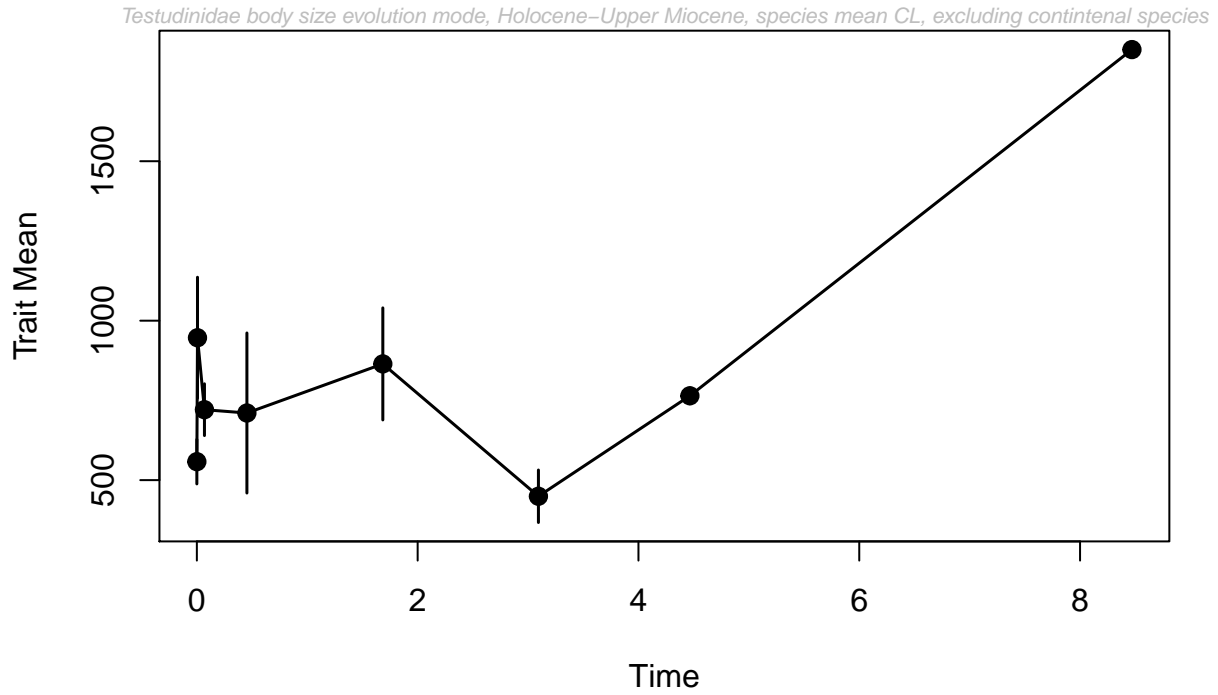|	logL	K	AICc	Akaike.wt
GRW	-59.02021	2	125.0404	0.00
URW	-51.37484	1	105.5497	0.99
Stasis	-53.85005	2	114.7001	0.01

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	-48.07907	2	103.1581	0.171
URW	-48.75614	1	100.3123	0.711
Stasis	-48.45781	2	103.9156	0.117

1.3.3 genera (insular)
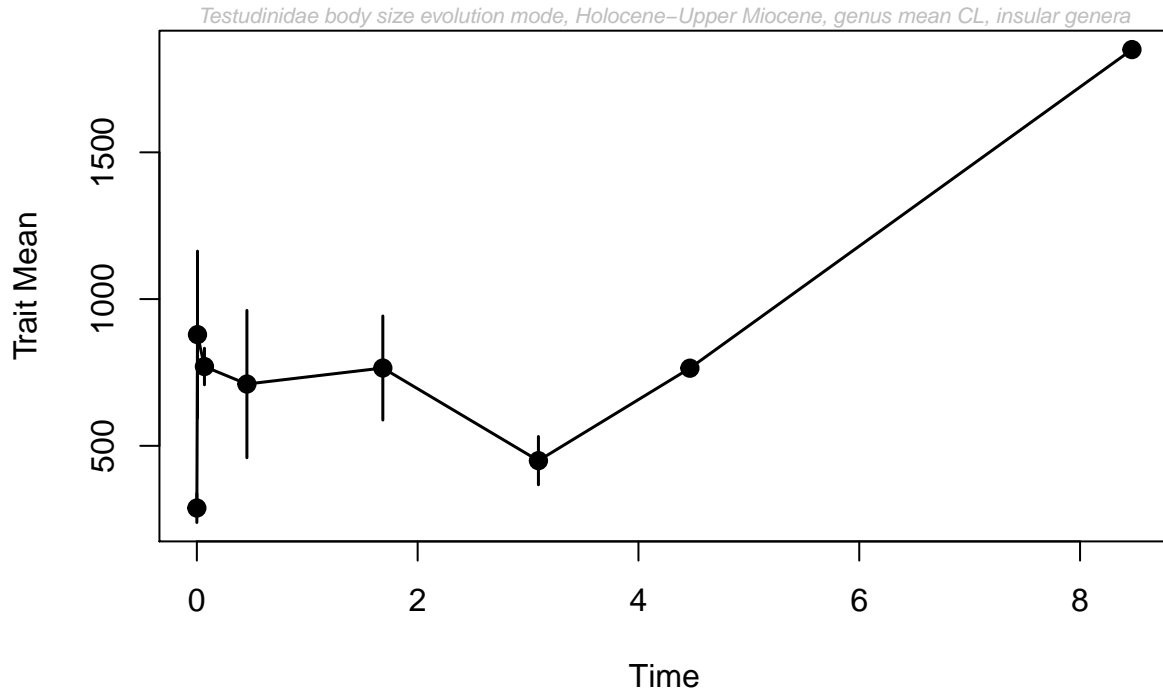

Figure 14: paleoTS plot with genus mean, only insular species

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

	logL	K	AICc	Akaike.wt
GRW	-51.15193	2	109.3039	0.309
URW	-52.57226	1	107.9445	0.610
Stasis	-52.49514	2	111.9903	0.081

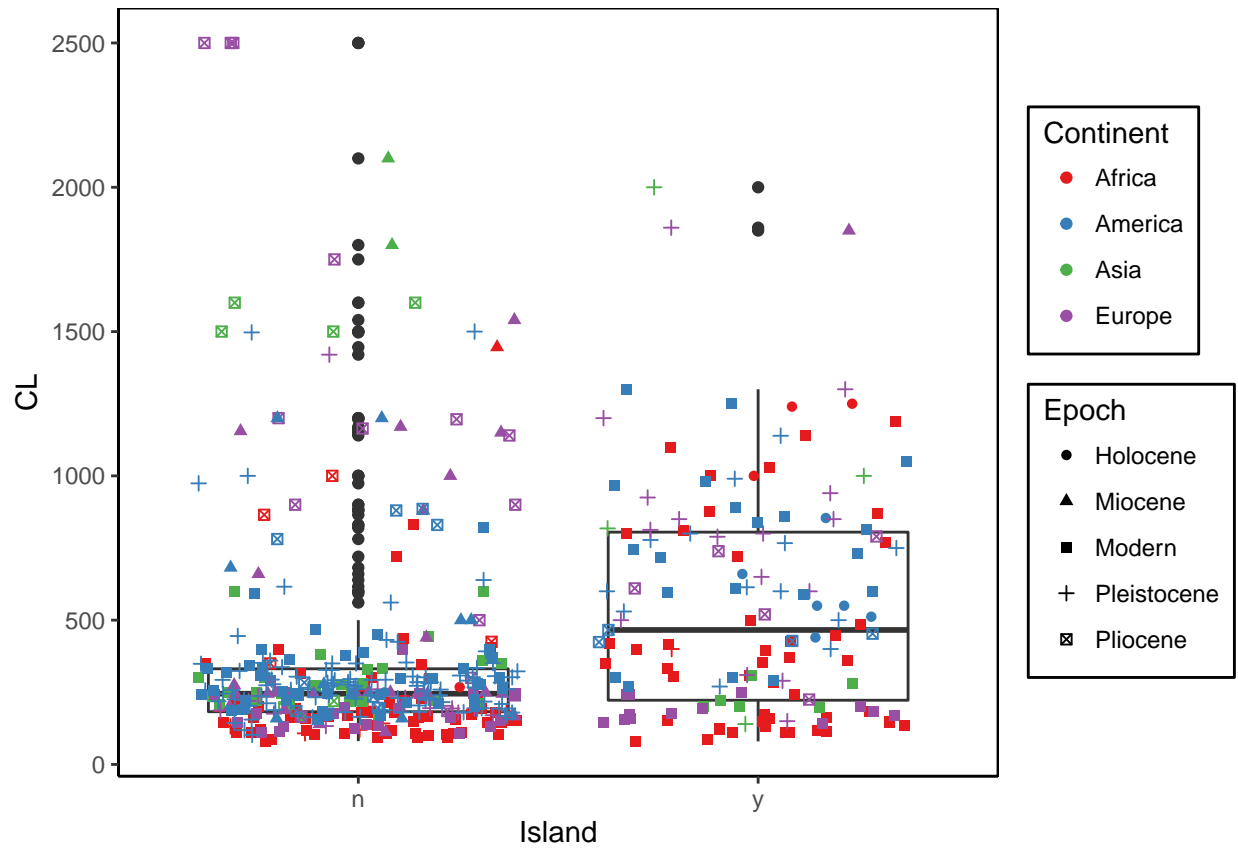# 2 Boxplots (continental (n) vs. Island (y) species)

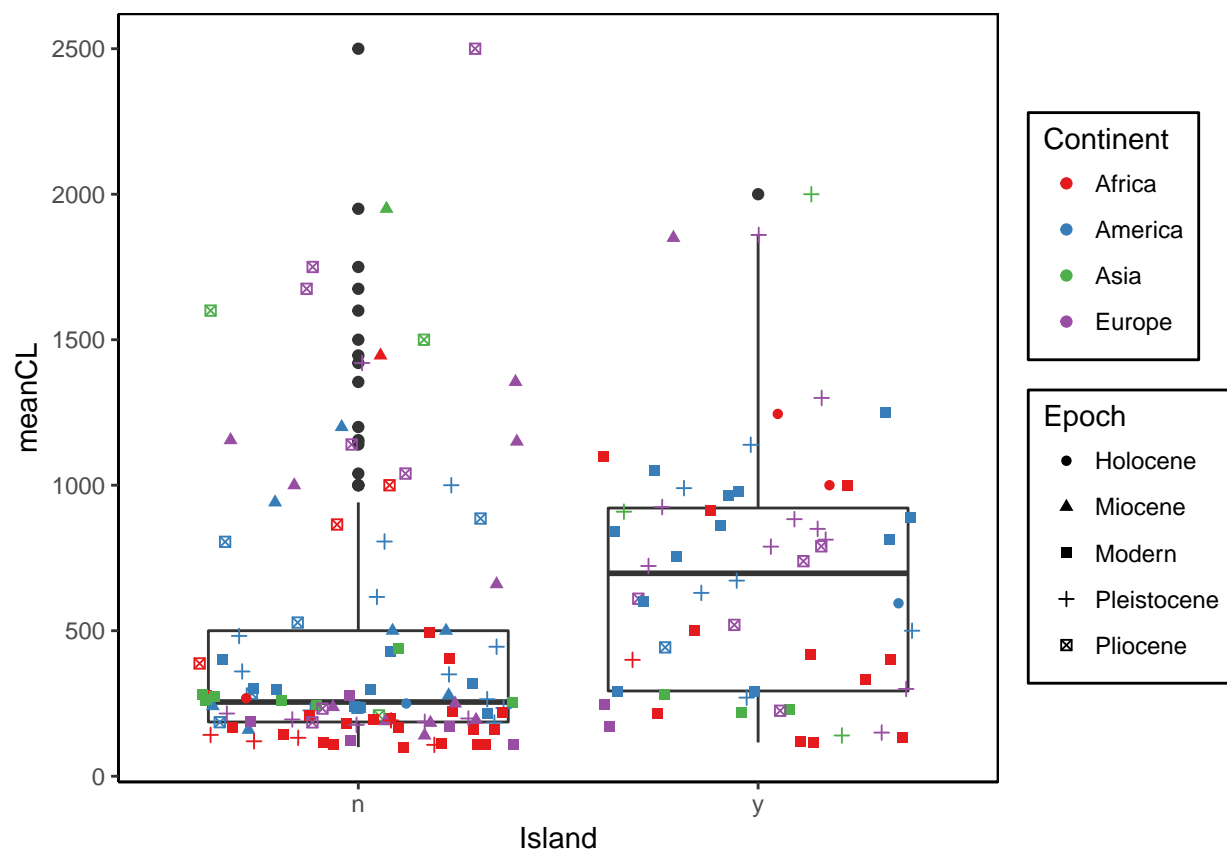Figure 15: Boxplot continental vs. insular, individuals

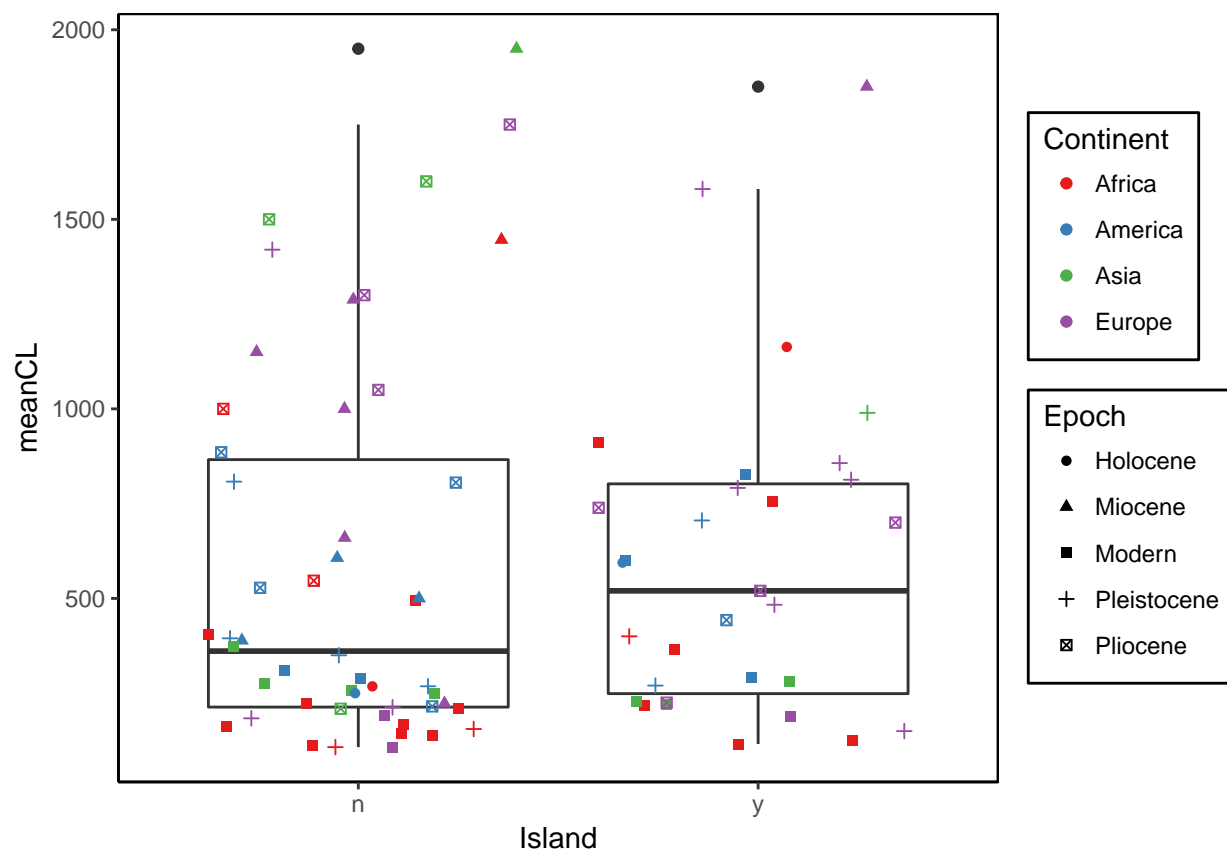Figure 16: Boxplots continental vs. insular, genera summarised

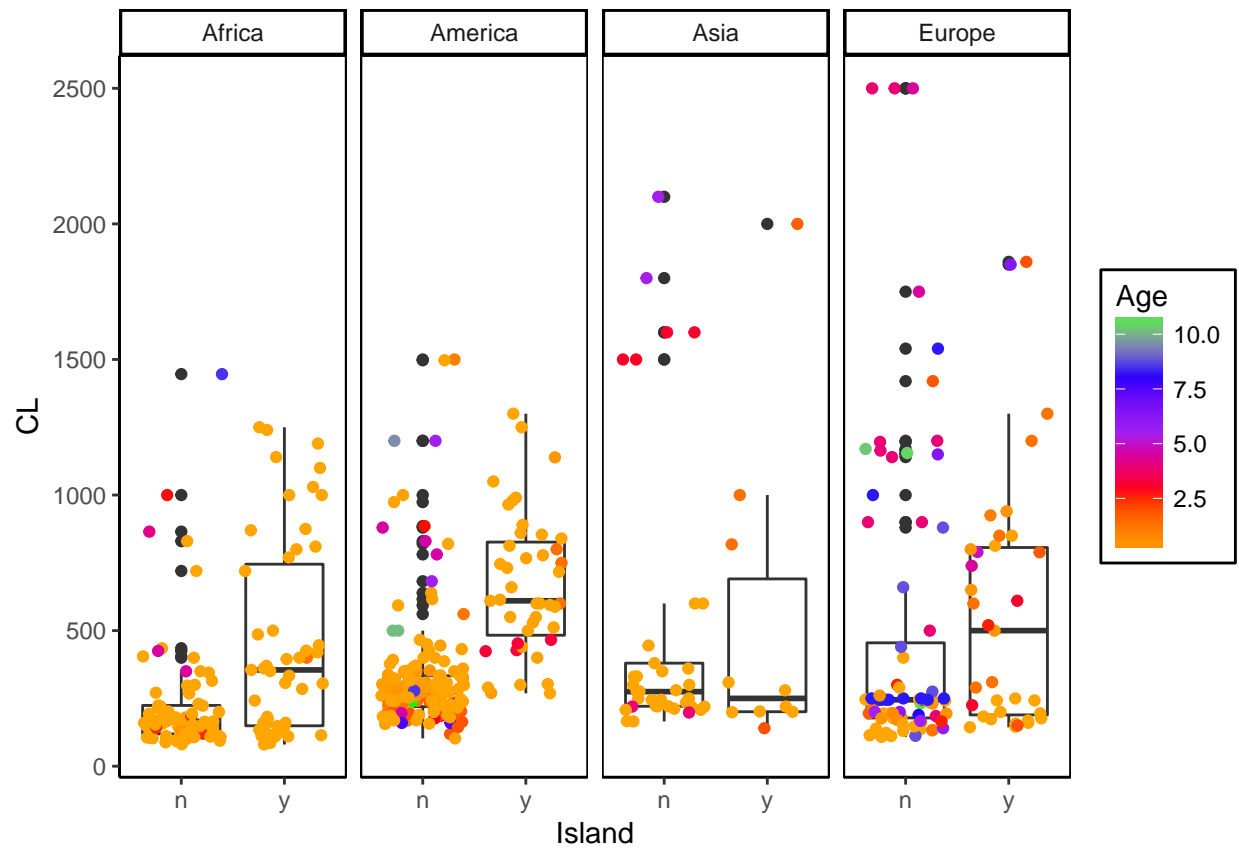Figure 17: Boxplot continental vs. insular, species summarised

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