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
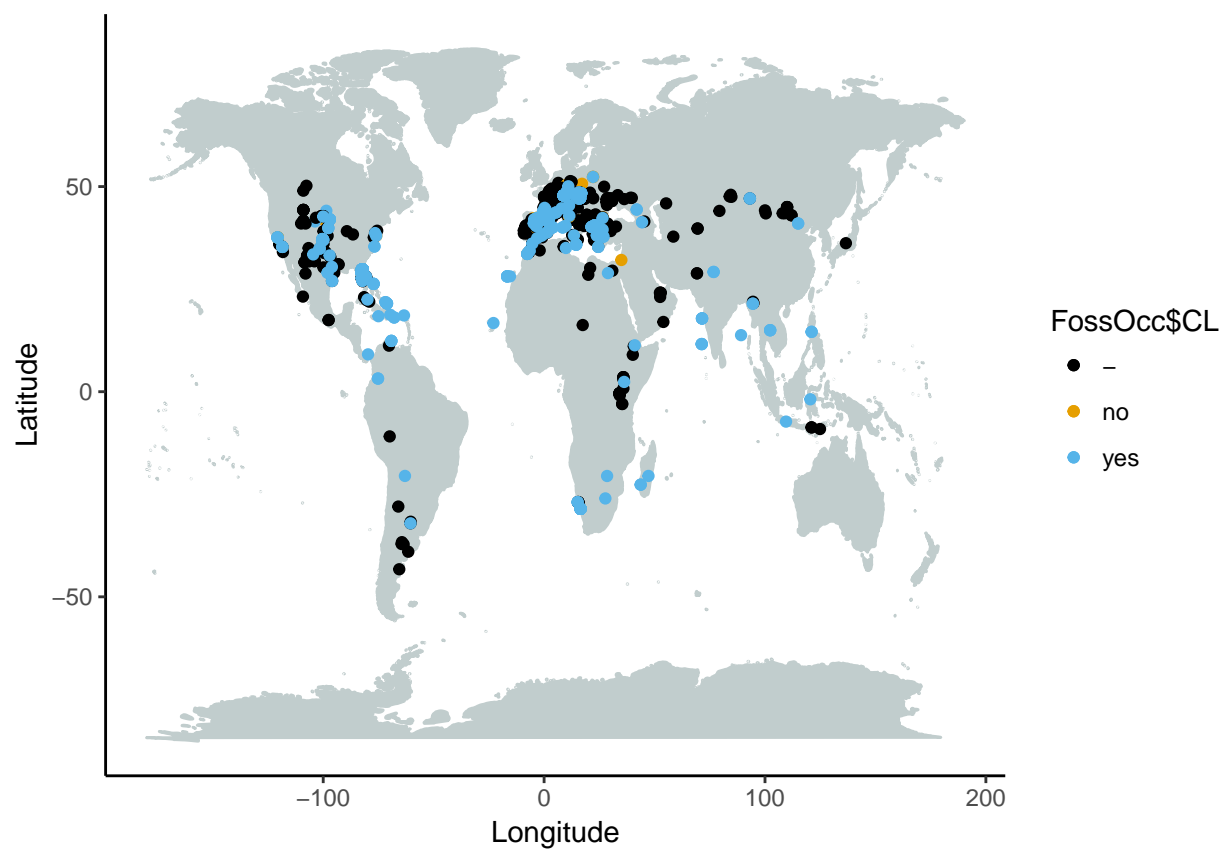
Figure 1: Map displaying all fossil occurrences of testudinids, with color indicating whether relevant literature was available (black if not) and if it was, whether body size data was available or not (yes and no, respectively).
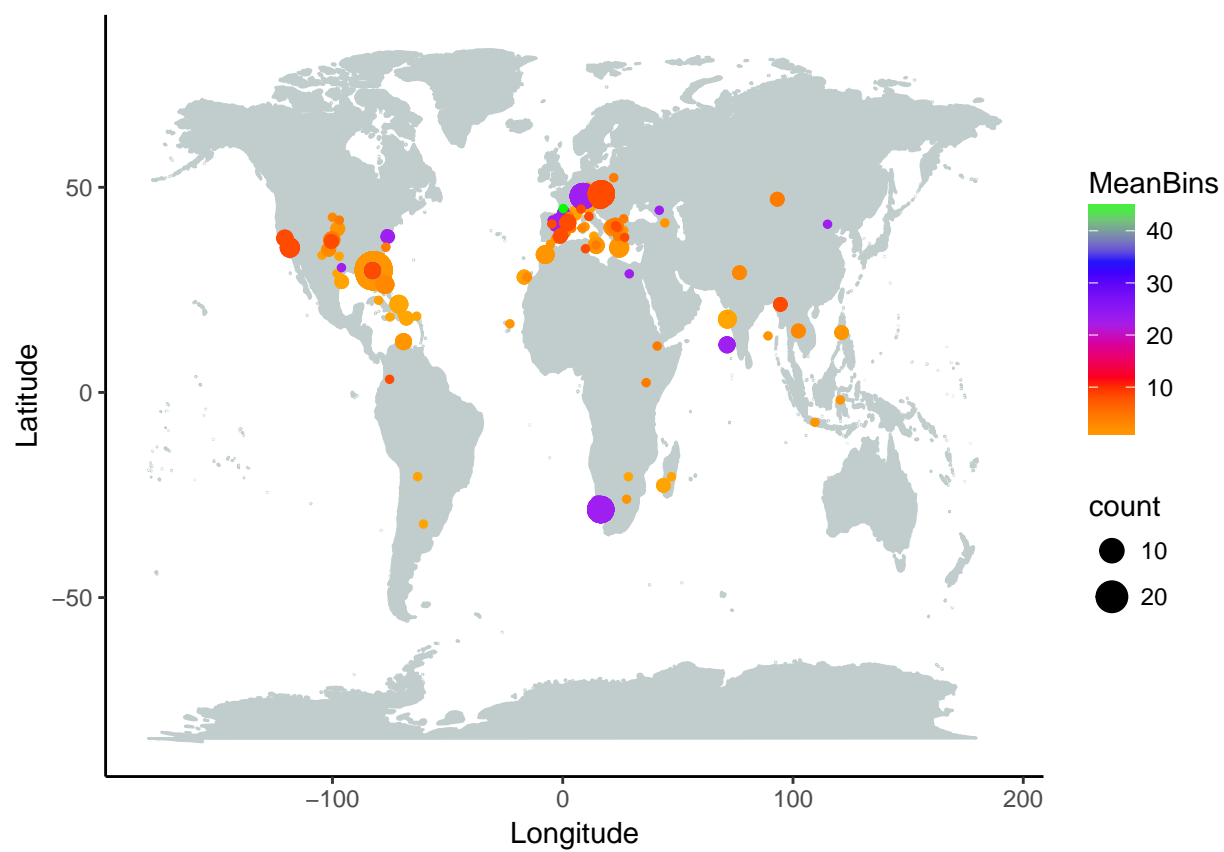
Figure 2: Map displaying all localities for which body size data for testudinids was available in the literature. Size of points denotes sample size, color denotes approximate age.
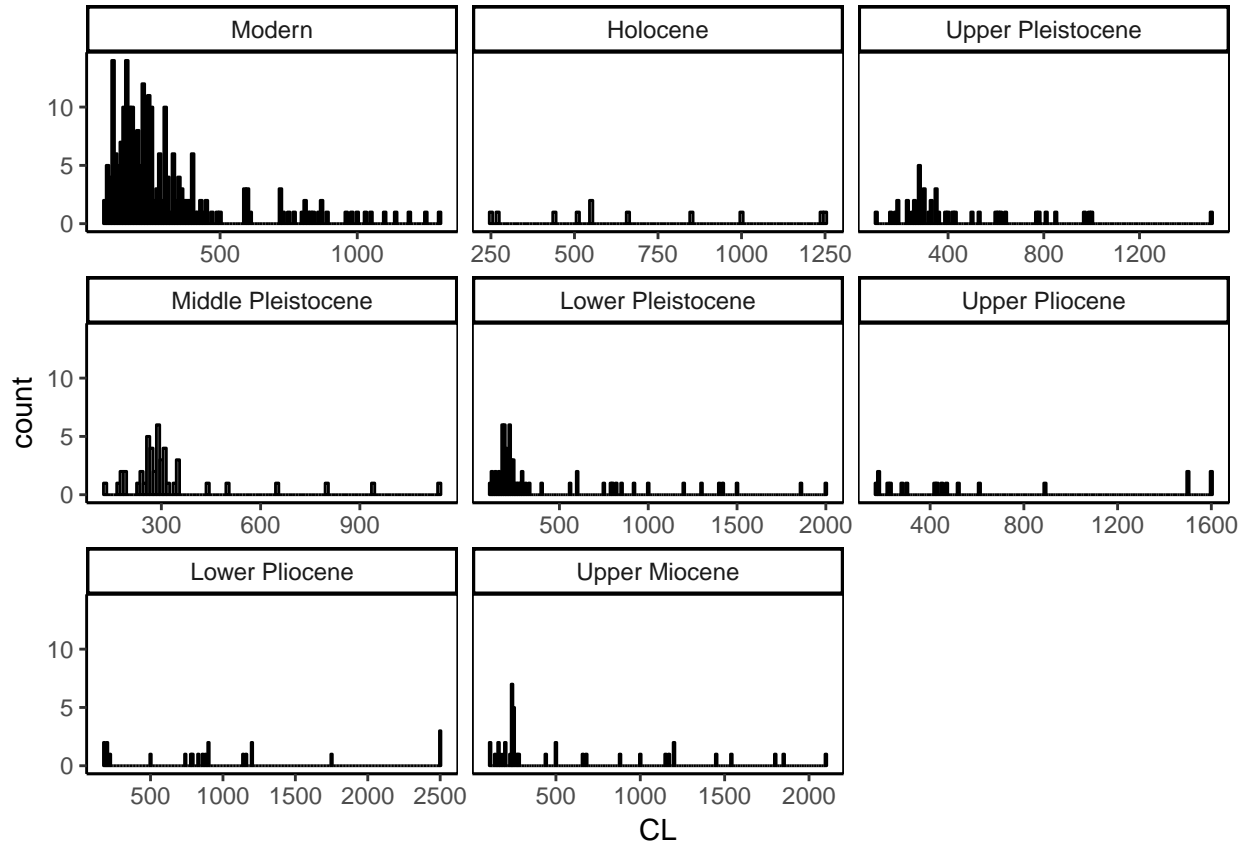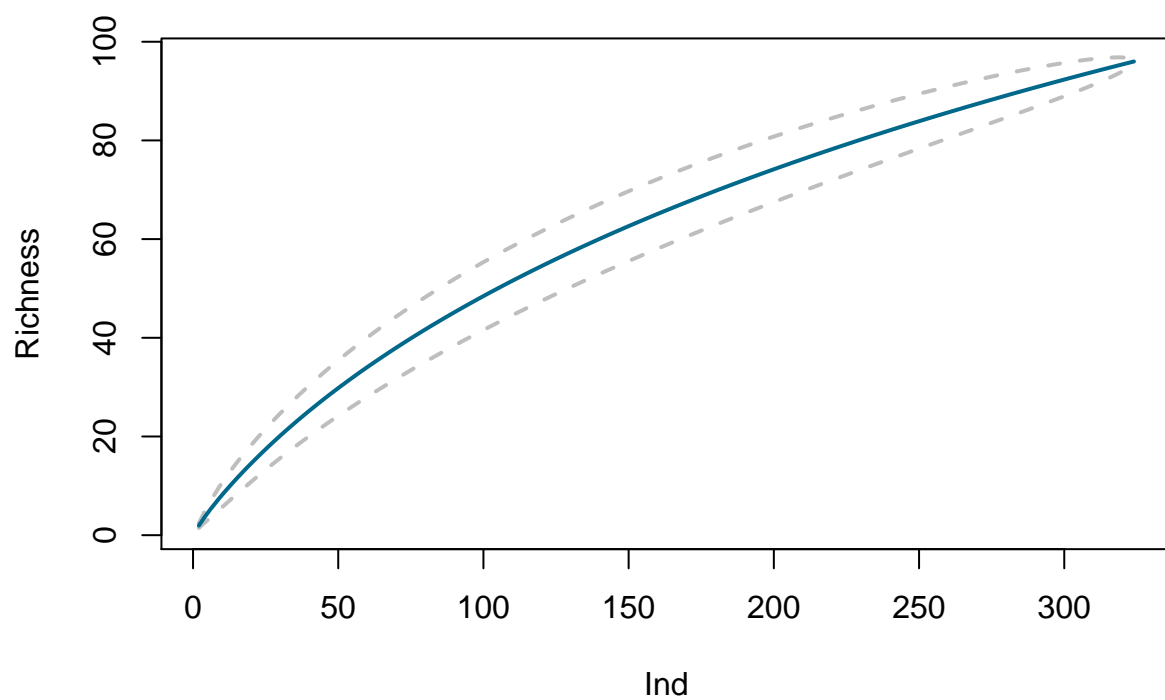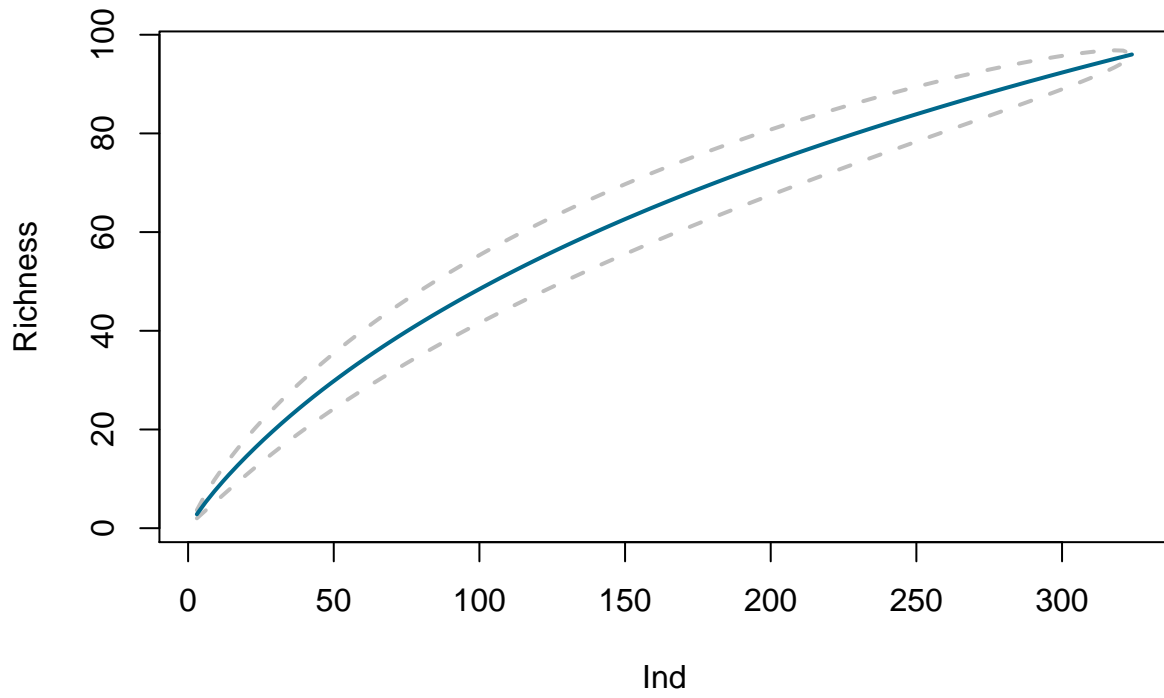
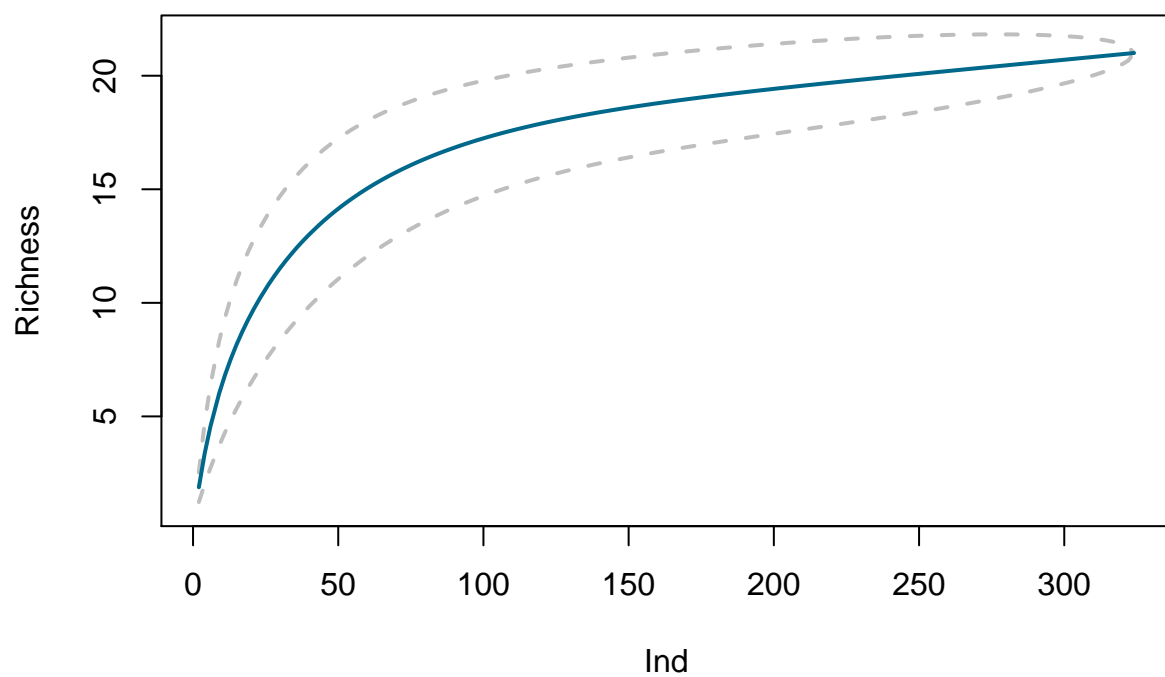Figure 3: Distribution of body site data per time bin
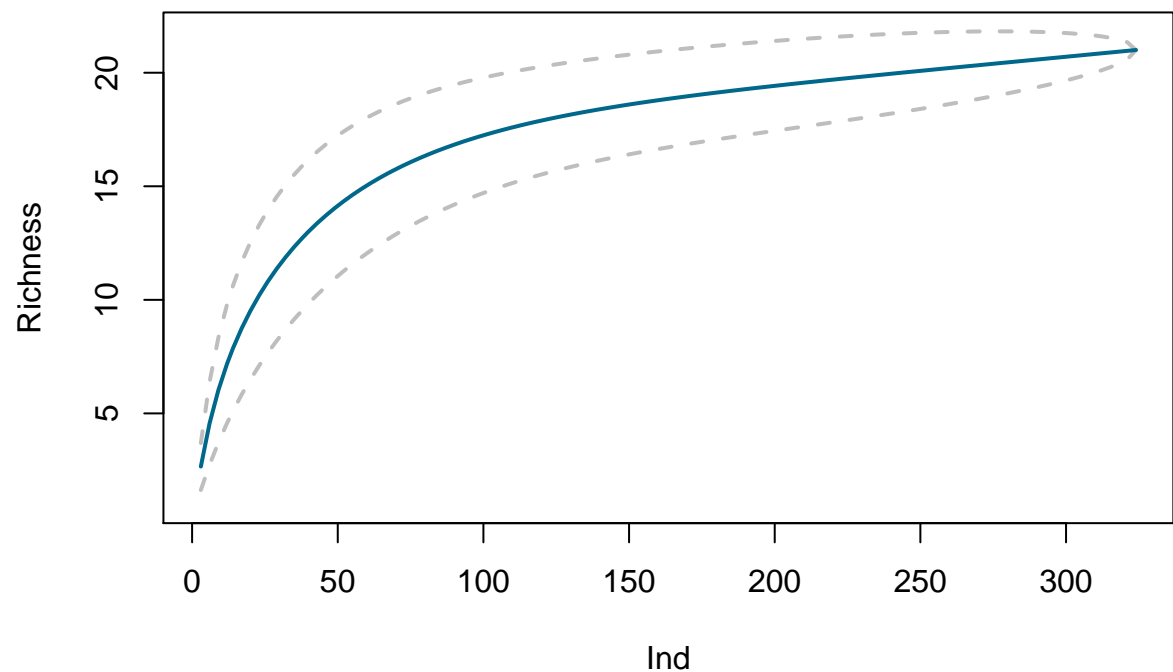
Fossil species, CL, per Locality

Fossil species, CL, per Reference

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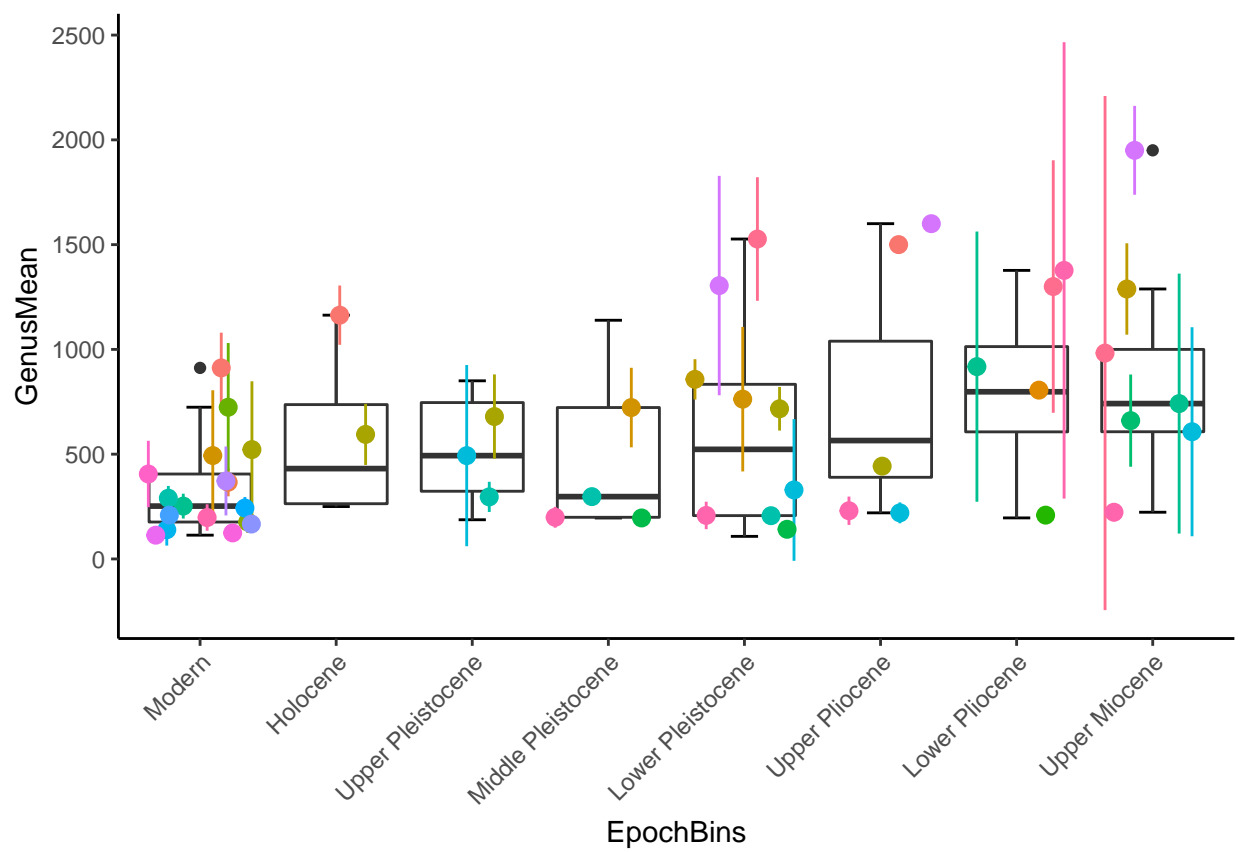
Fossil genera, CL, per Reference

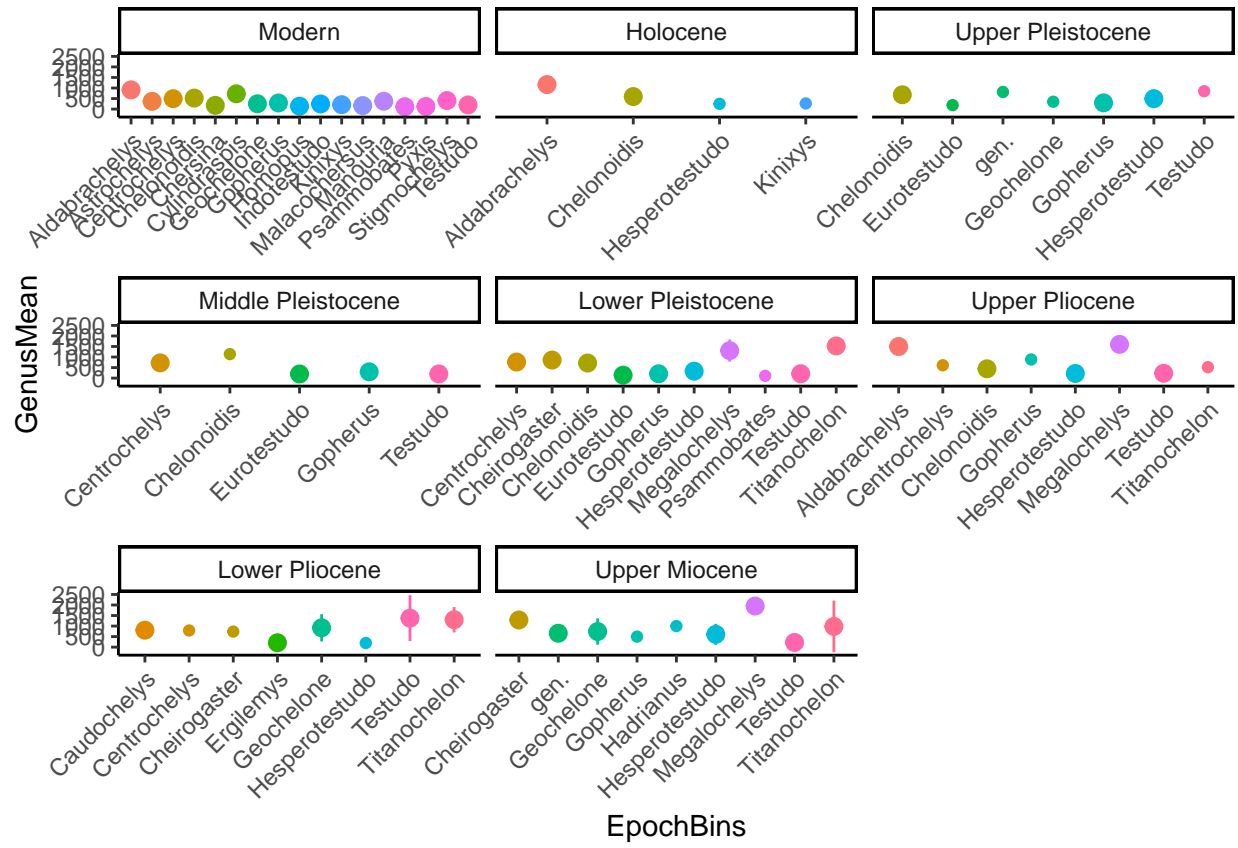Figure 4: Boxplots of each genus per time bin, for colors see Fig. 4.

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

1 including Island species (n=2215)

Testudinidae body size evolution mode, Holocene–Upper Miocene, CL, including Island species
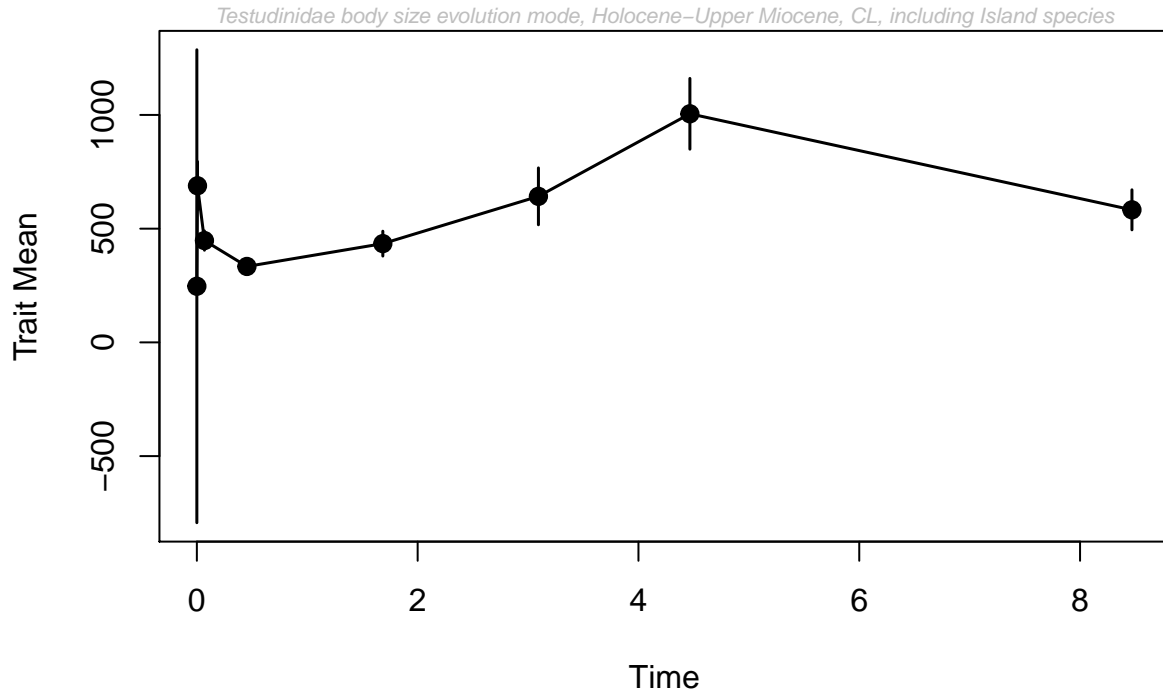
Figure 6: individuals, including island species

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

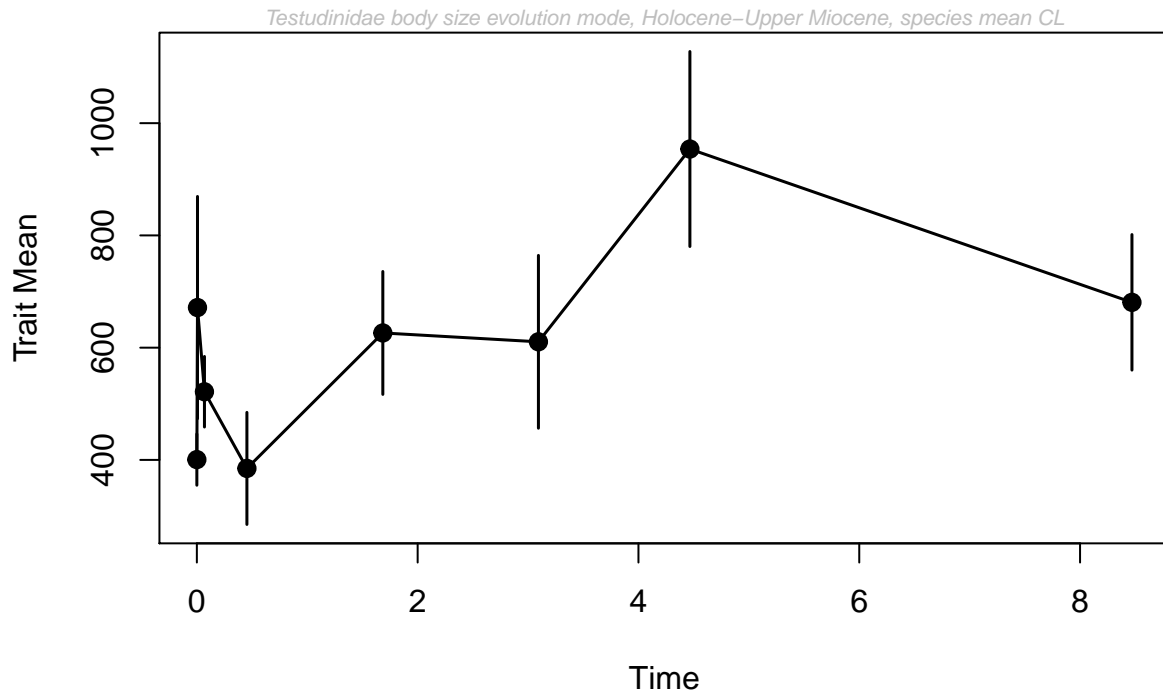# 2 paleoTS plot with species mean, including island species

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

Table 3: Model-fitting results for testudinidae, individuals, 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

3   paleoTS plot with genus mean

Testudinidae body size evolution mode, Holocene–Upper Miocene, genus mean CL
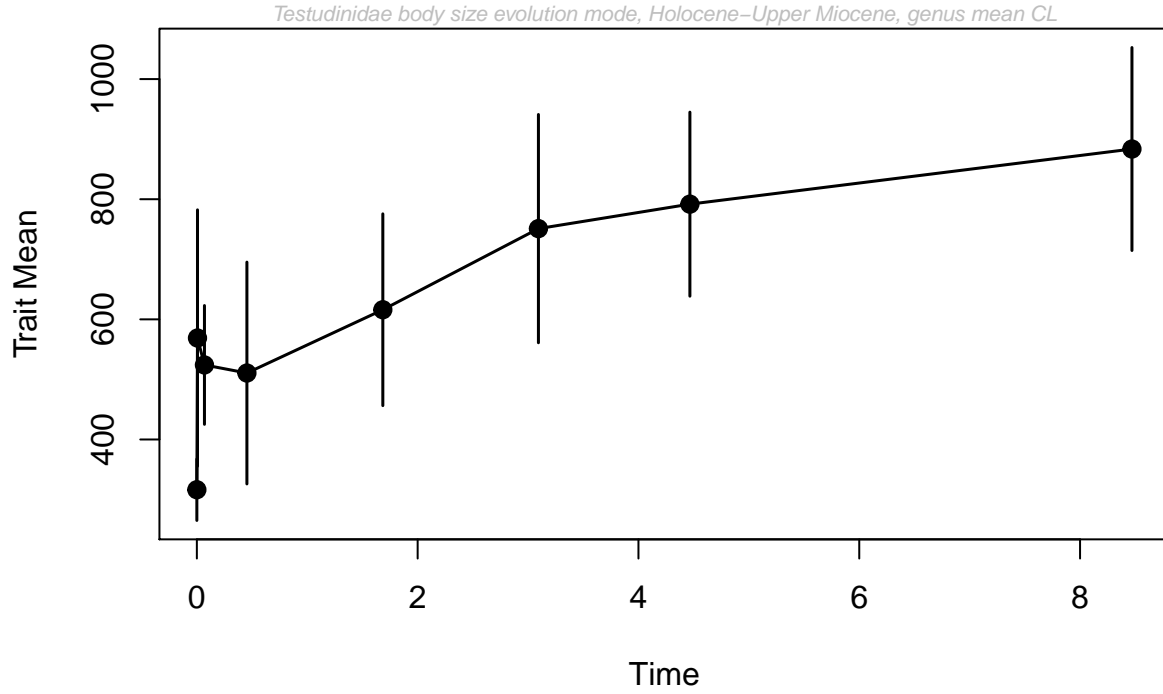
Figure 8: paleoTS plot with genus mean, including island species

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

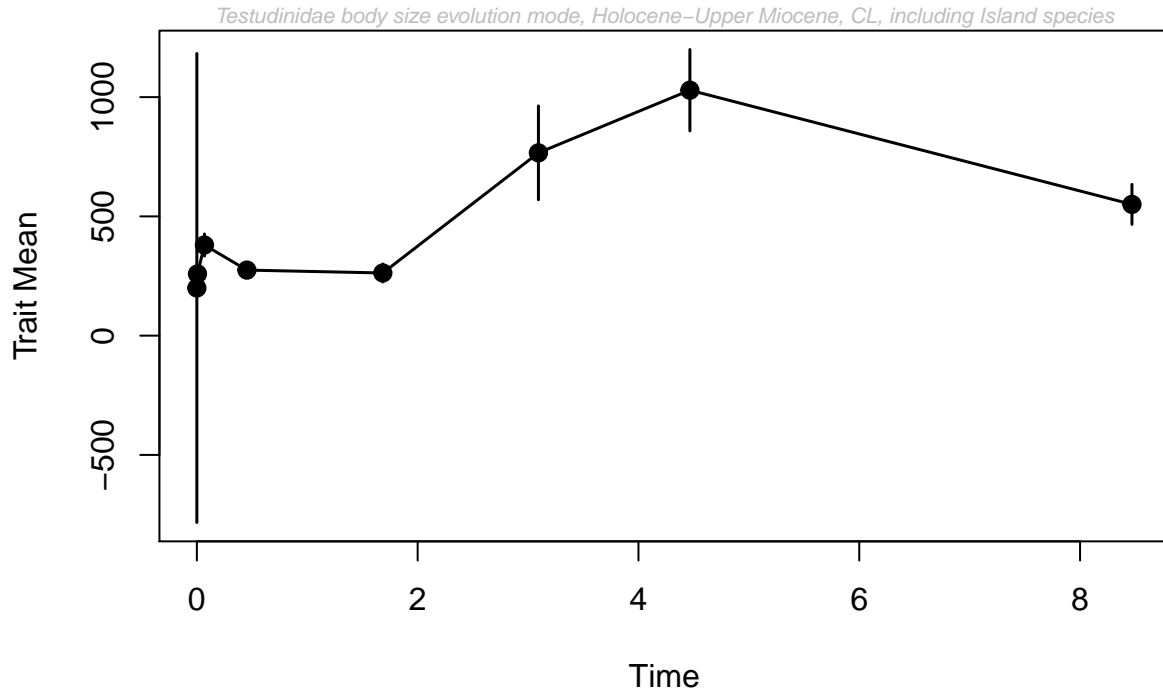|	logL	K	AICc	Akaike.wt
GRW	-45.37058	2	97.74116	0.107
URW	-45.58571	1	93.97143	0.702
Stasis	-44.78886	2	96.57771	0.191

4 excluding island species

Figure 9: individuals, excluding island species

Table 5: Model-fitting results for testudinidae, individuals, including 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

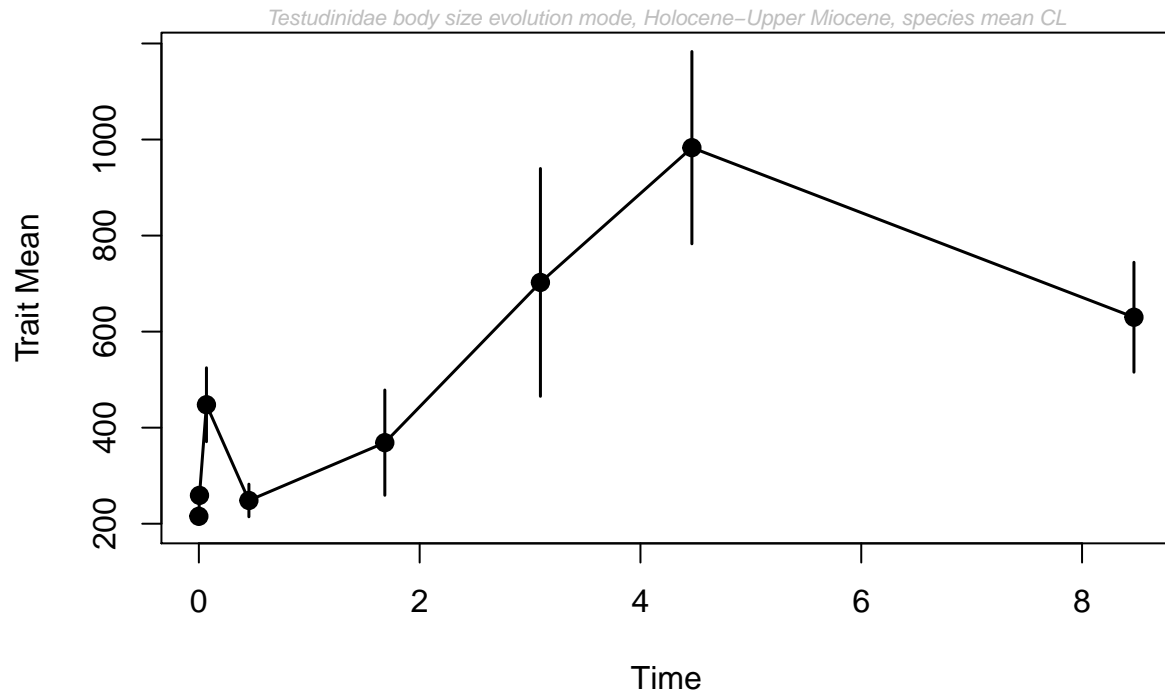# 5 paleoTS plot with species mean, excluding island species

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

Table 6: Model-fitting results for testudinidae, individuals, including 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

6 paleoTS plot with genus mean

Testudinidae body size evolution mode, Holocene–Upper Miocene, genus mean CL
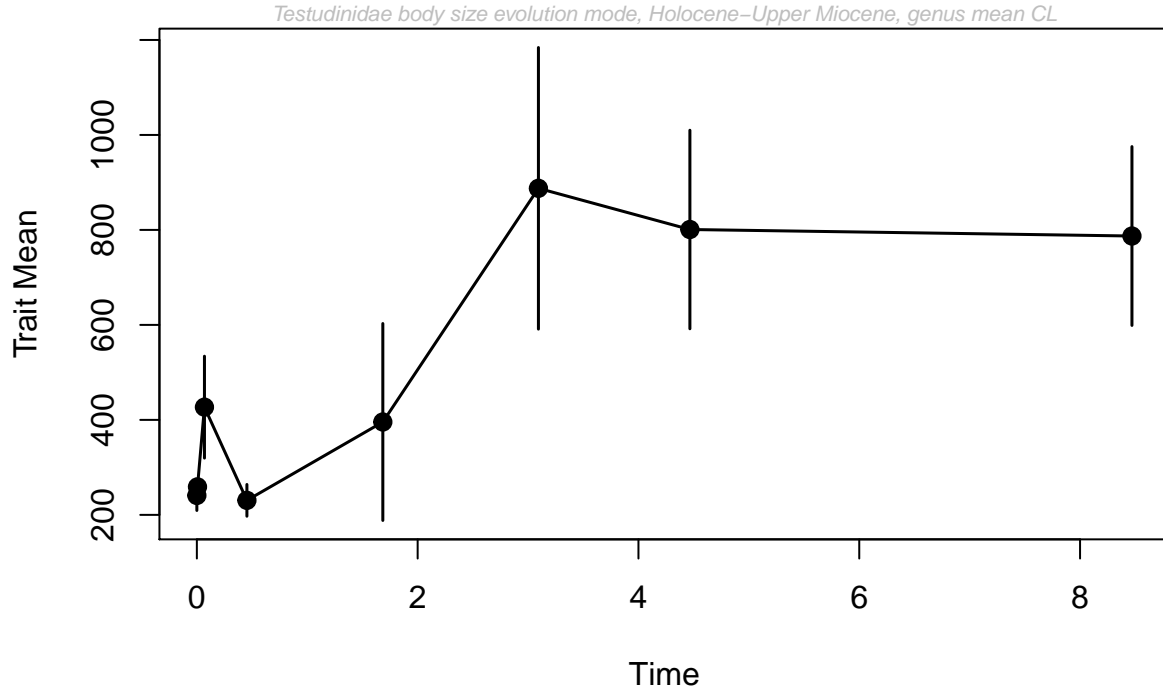
Figure 11: paleoTS plot with genus mean, excluding island species

Table 7: Model-fitting results for testudinidae, individuals, including island 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

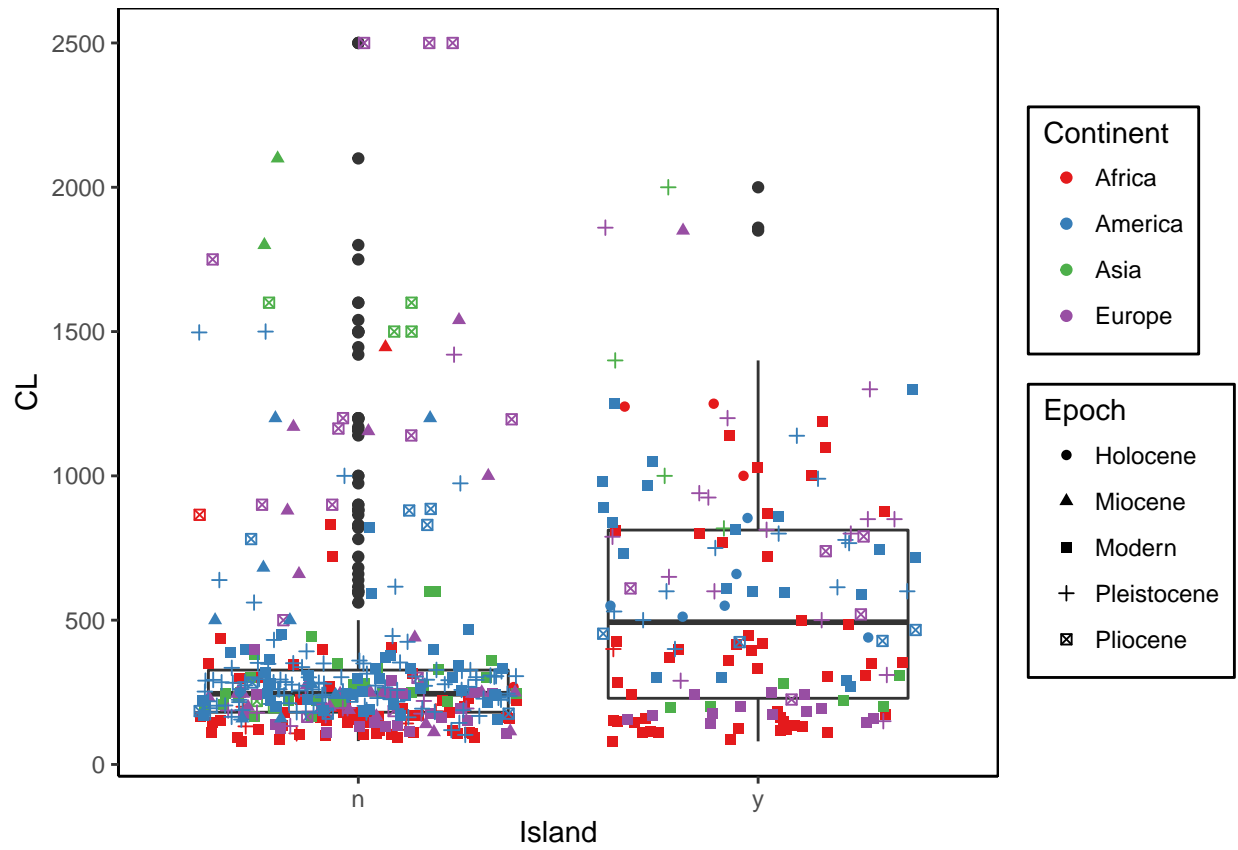# 7 Boxplots (continental (n) vs. Island (y) species)

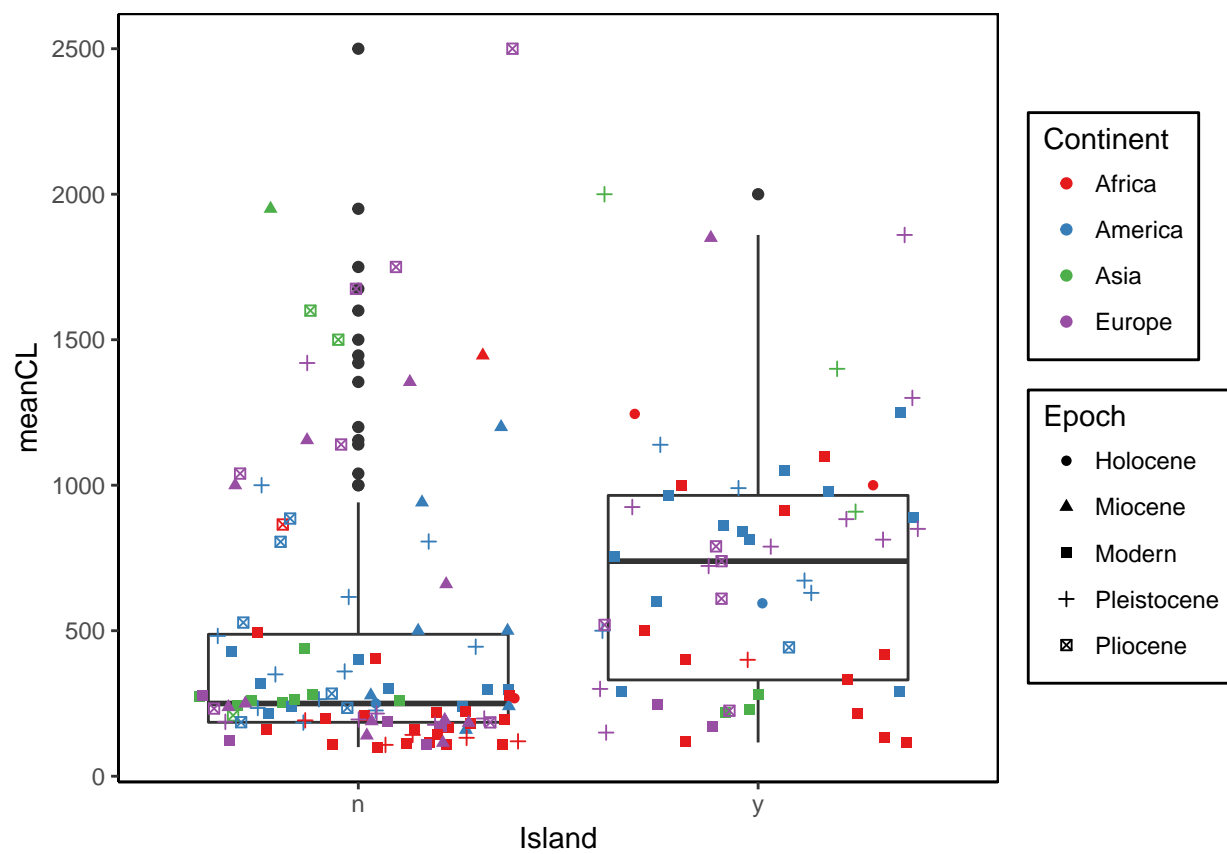Figure 12: Boxplot continental vs. insular, individuals

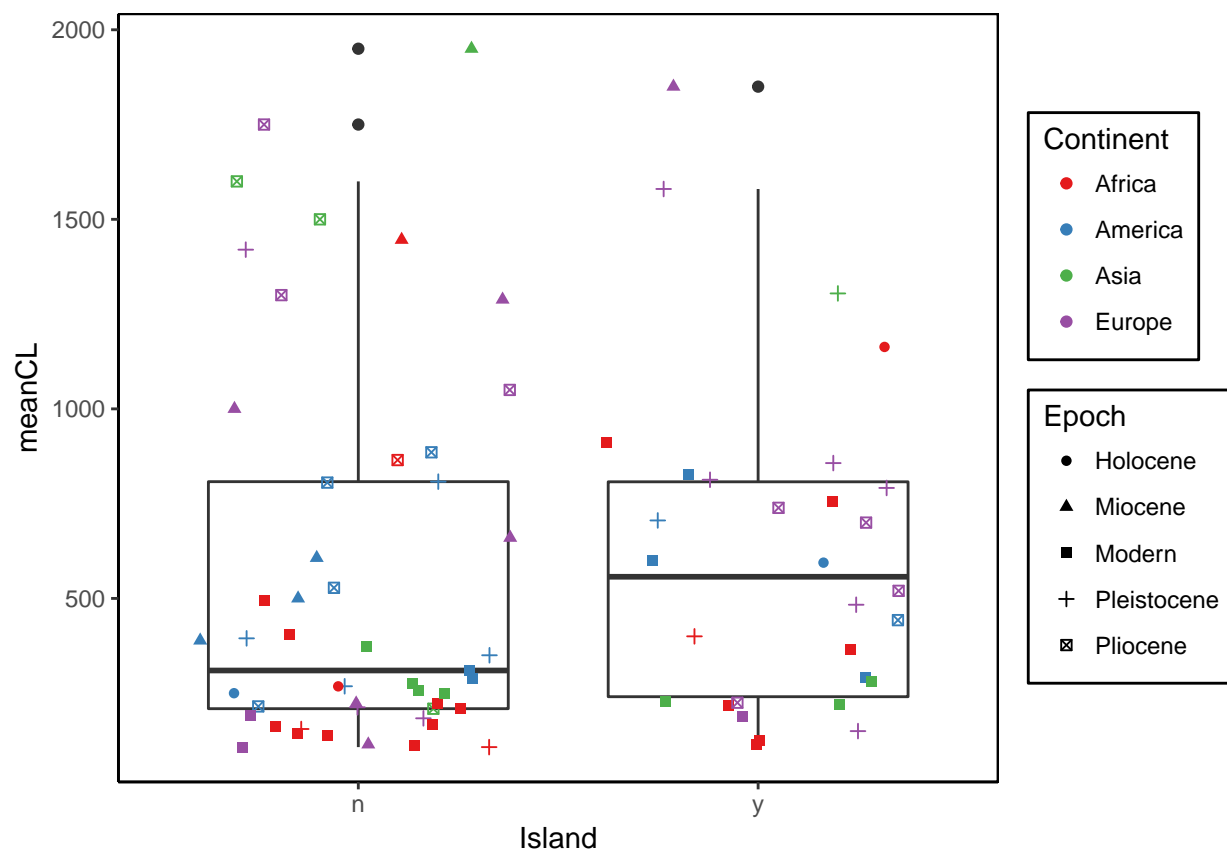Figure 13: Boxplots continental vs. insular, genera summarised

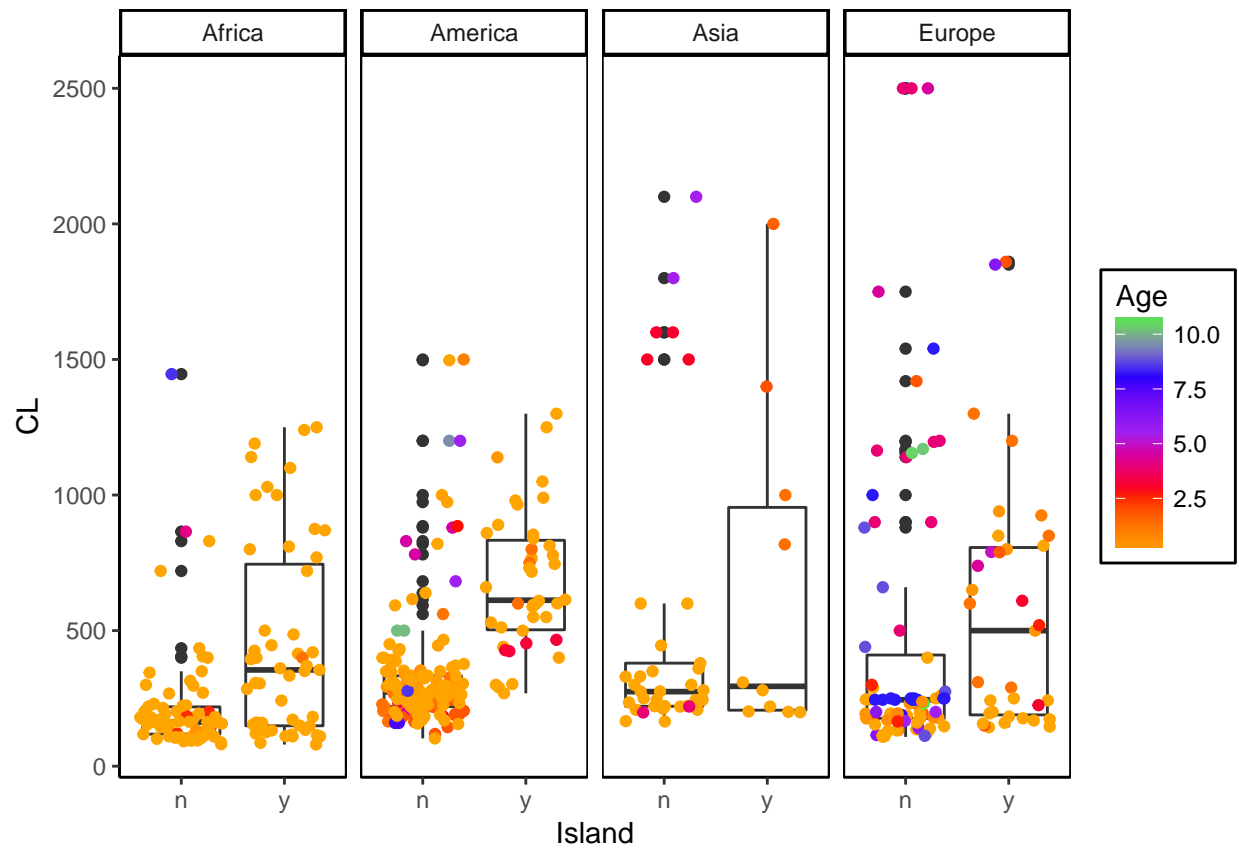Figure 14: Boxplot continental vs. insular, species summarised

Figure 15: Boxplots of body size (individuals) on different continents, insular vs. continent with age indicated