Body size trends in fossil tortoises

paleoTS Plot with the following bins (for fossil taxa):

- after including extant species, another bin is added: Modern, t=0

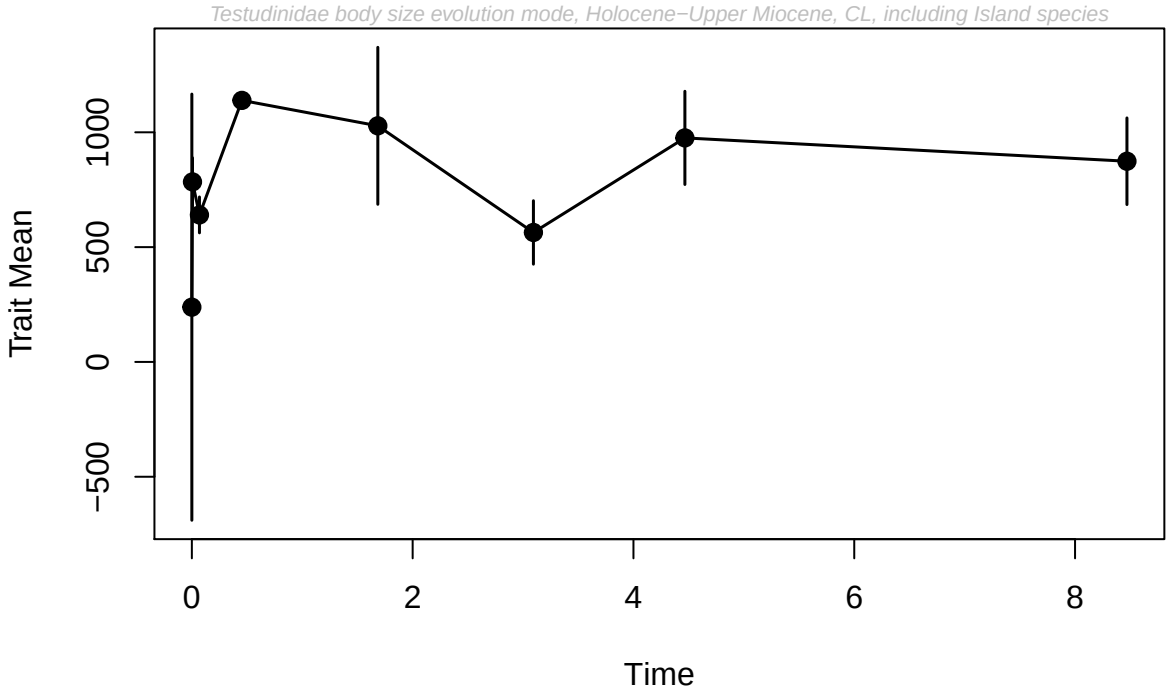
bin	n
(0,1e-06]	134
(1e-06,0.0117]	10
(0.0117,0.126]	9
(0.126,0.781]	2
(0.781,2.59]	8
(2.59,3.6]	13
(3.6,5.33]	14
(5.33,11.6]	16

bin	EpochBins	MeanBins
(0,1e-06]	Modern	0.0000005
(1e-06,0.0117]	Holocene	0.0058500
(0.0117,0.126]	Upper Pleistocene	0.0688500
(0.126,0.781]	Middle Pleistocene	0.4535000
(0.781,2.59]	Lower Pleistocene	1.6845000
(2.59,3.6]	Upper Pliocene	3.0940000
(3.6,5.33]	Lower Pliocene	4.4660000
(5.33,11.6]	Upper Miocene	8.4700000

including Island species (n=1929)

paleoTS object (mm= mean CL, nn = sample size, vv = variance (CL), tt = Age):

mm	nn	vv	tt
238.5245	1862	1.603157e+09	0.0000005
784.0000	9	9.923200e+04	0.0058500
640.1956	9	5.494913e+04	0.0688500
1139.0000	1	0.000000e+00	0.4535000
1028.1833	6	7.006992e+05	1.6845000
563.8583	12	2.288335e+05	3.0940000
975.6429	14	5.766009e+05	4.4660000
873.9312	16	5.695508e+05	8.4700000

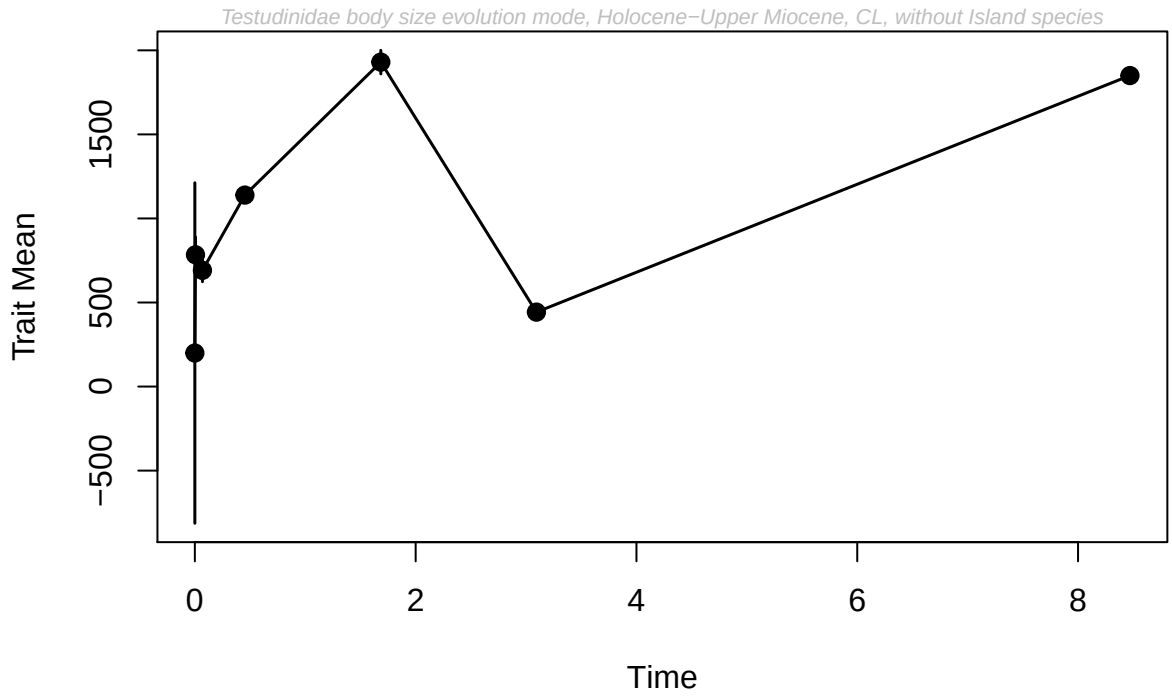



```
##
## Comparing 3 models [n = 7, method = AD]
##
##             logL K     AICc Akaike.wt
## GRW    -55.55226 2 118.1045     0.001
## URW    -53.88058 1 110.5612     0.032
## Stasis -48.38531 2 103.7706     0.967
```

	logL	K	AICc	Akaike.wt
GRW	-55.55226	2	118.1045	0.001
URW	-53.88058	1	110.5612	0.032
Stasis	-48.38531	2	103.7706	0.967

Excluding Island species (n= 1685)

mm	nn	vv	tt
199.5519	1660	1.702244e+09	0.0000005
784.0000	9	9.923200e+04	0.0058500
691.1250	8	3.611984e+04	0.0688500
1139.0000	1	0.000000e+00	0.4535000
1930.0000	2	9.800000e+03	1.6845000
442.7500	4	4.049167e+02	3.0940000
1850.0000	1	0.000000e+00	8.4700000

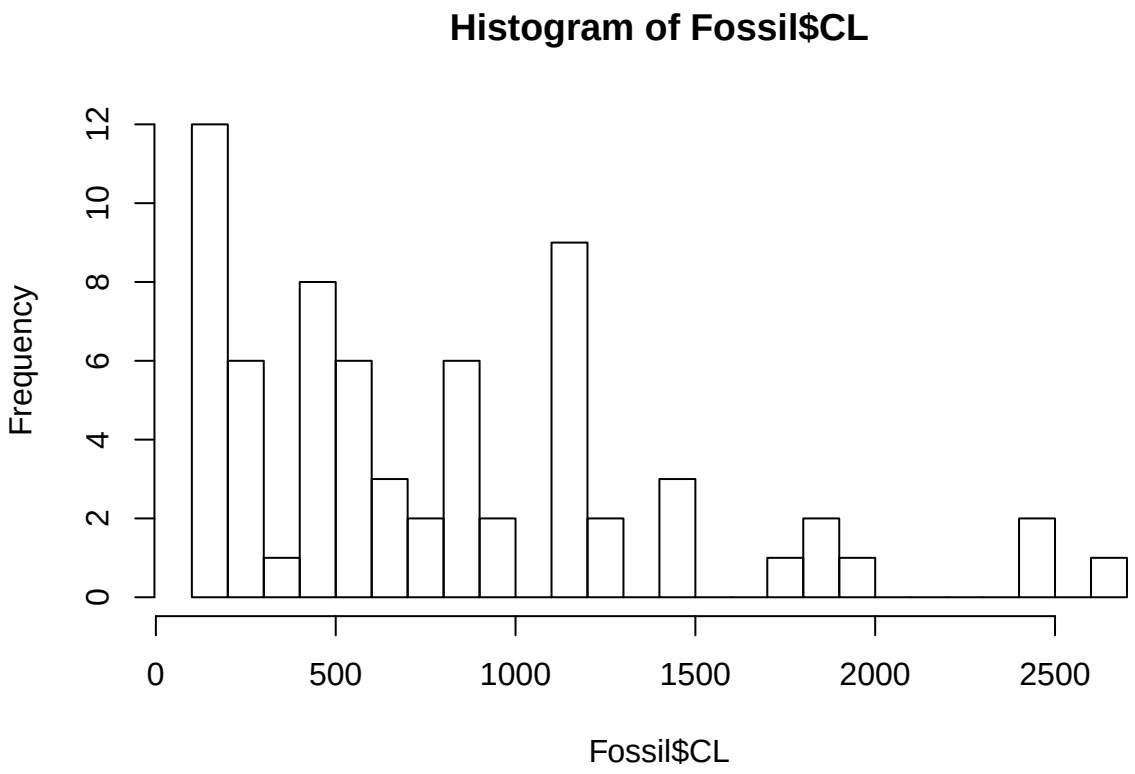


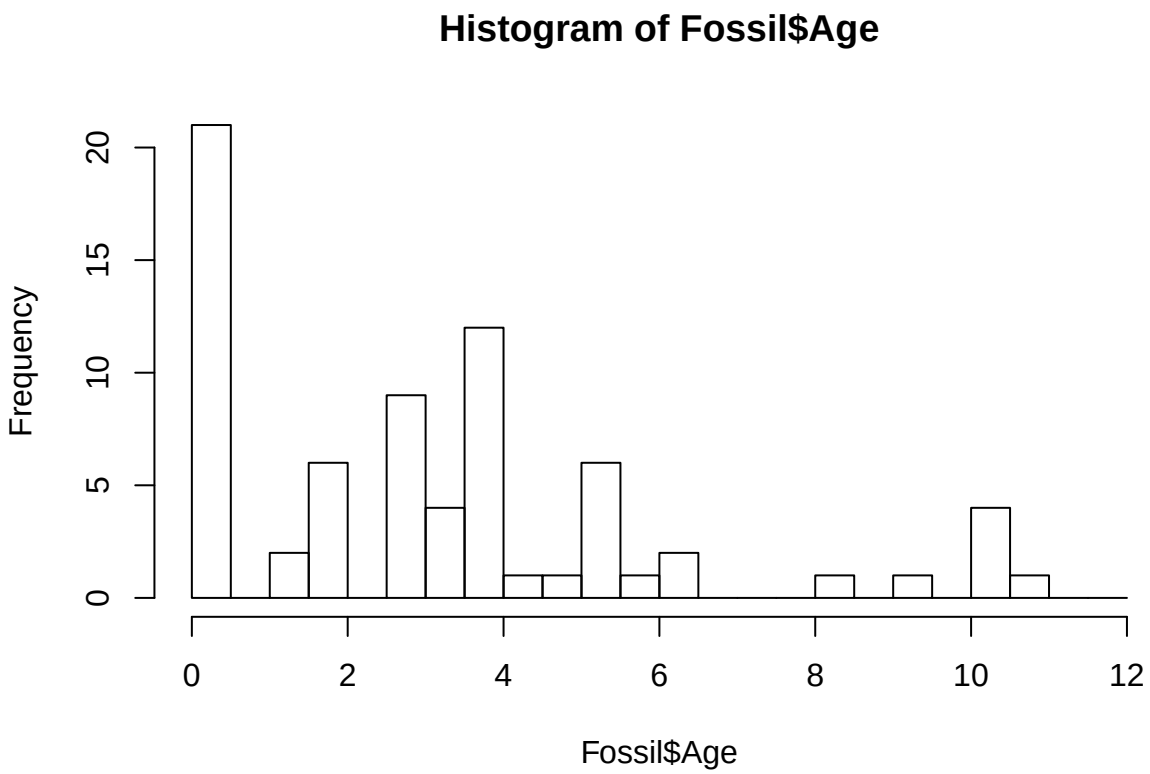

```
##
## Comparing 3 models [n = 6, method = AD]
##
##             logL K     AICc Akaike.wt
## GRW    -61.78664 2 131.5733         0
## URW    -65.93381 1 134.8676         0
## Stasis -49.60402 2 107.2080         1
```

	logL	K	AICc	Akaike.wt
GRW	-61.78664	2	131.5733	0
URW	-65.93381	1	134.8676	0
Stasis	-49.60402	2	107.2080	1

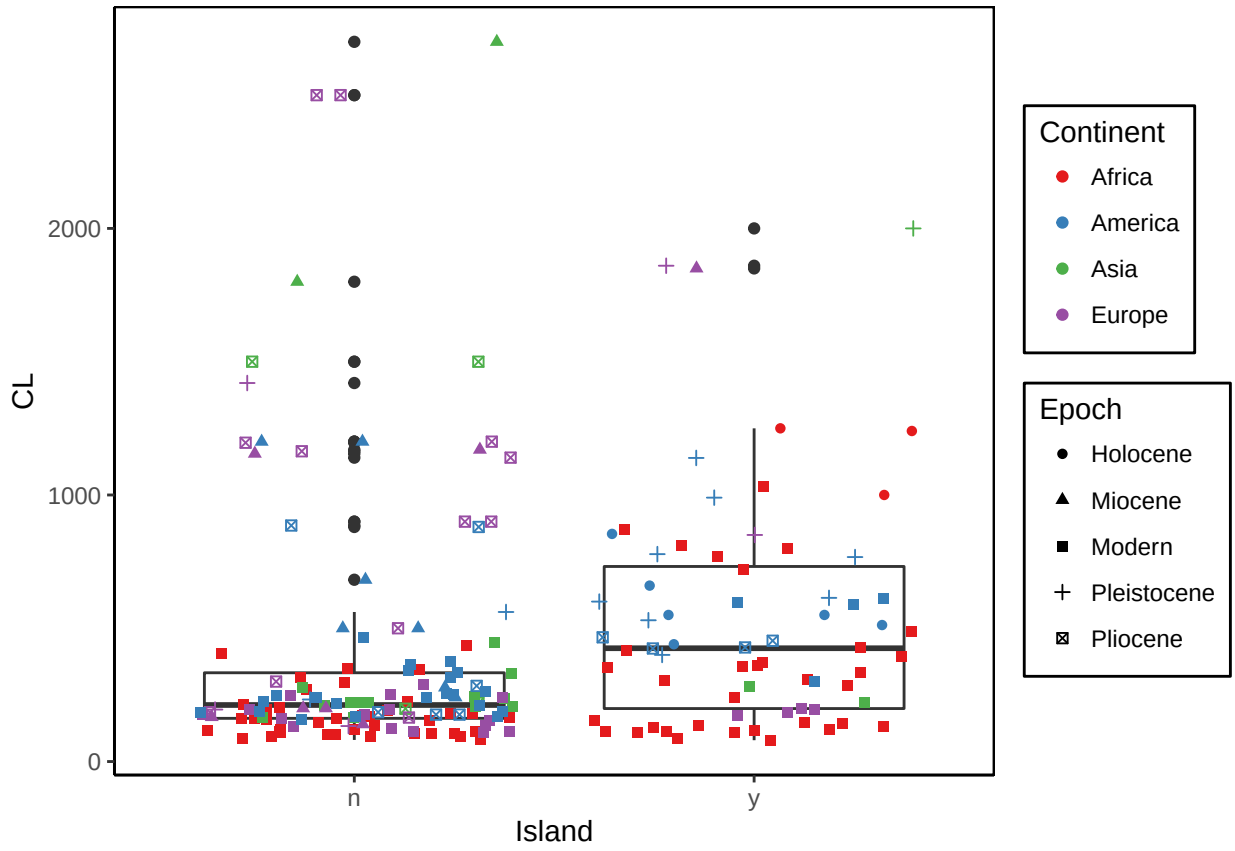
Histograms

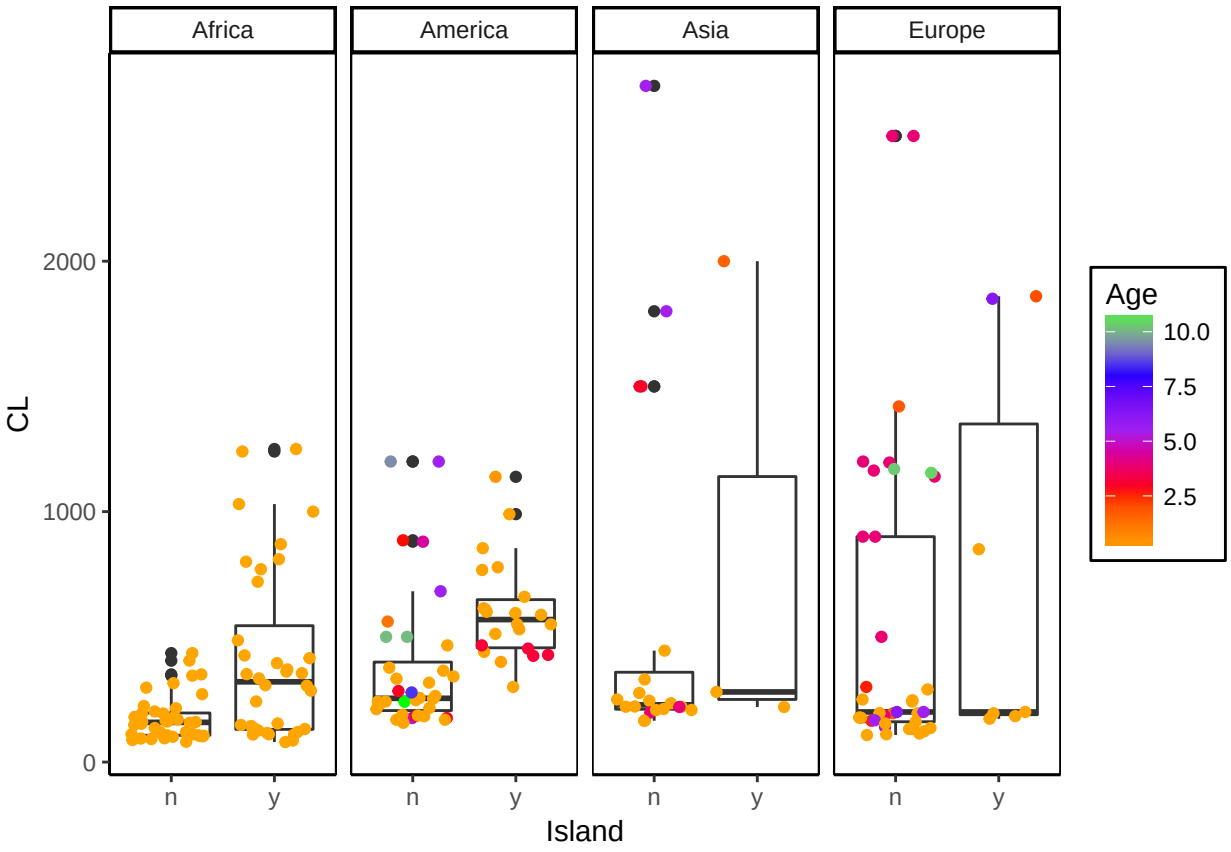
Frequency of body size data and distribution over time

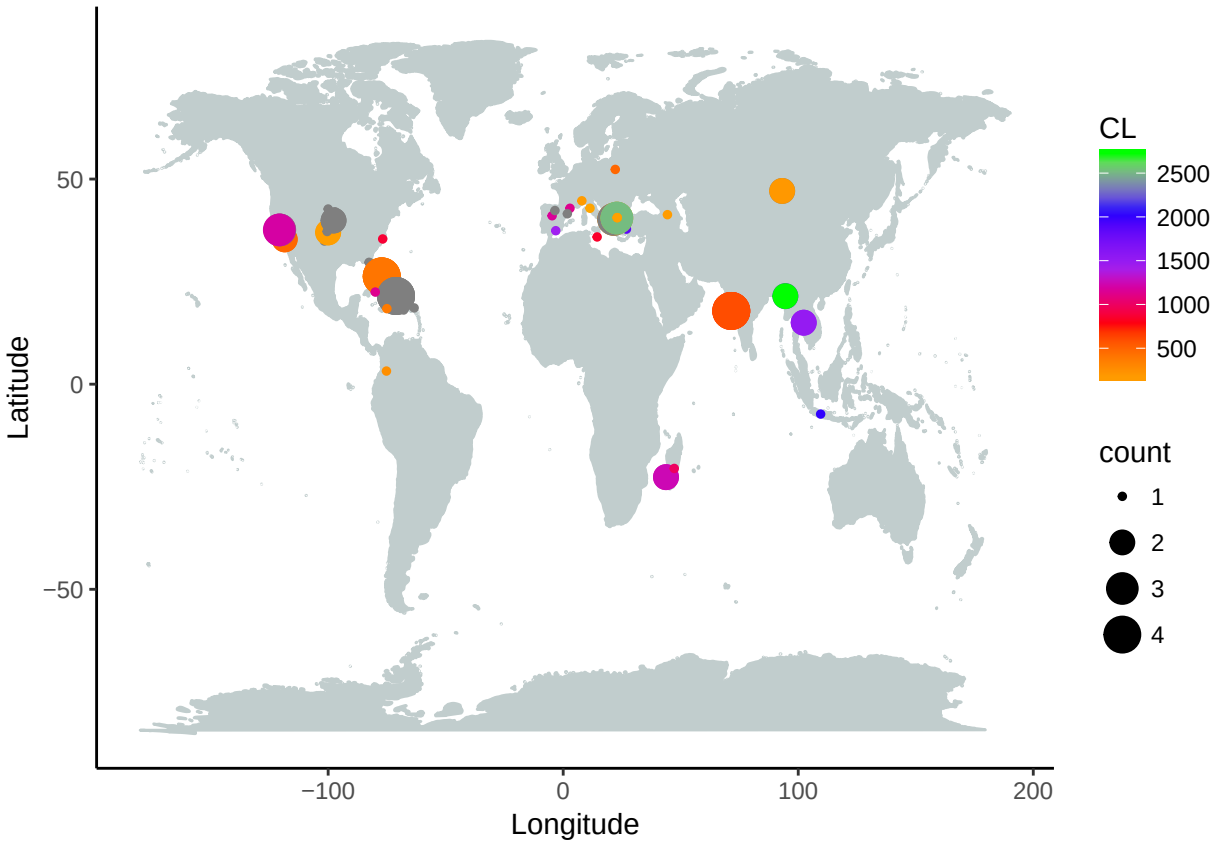

Histogram of Fossil$CL
Frequency
0
2
4
6
8
10
12
0
500
1000
1500
2000
2500
Fossil$CL


Histogram of Fossil$Age
Frequency
0
5
10
15
20
0
2
4
6
8
10
12
Fossil$Age

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




Africa
America
Asia
Europe
CL
2000
1000
0
n
y
Island
Age
10.0
7.5
5.0
2.5


Latitude
50
0
−50
−100
0
100
200
Longitude
CL
2500
2000
1500
1000
500
count
1
2
3
4