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

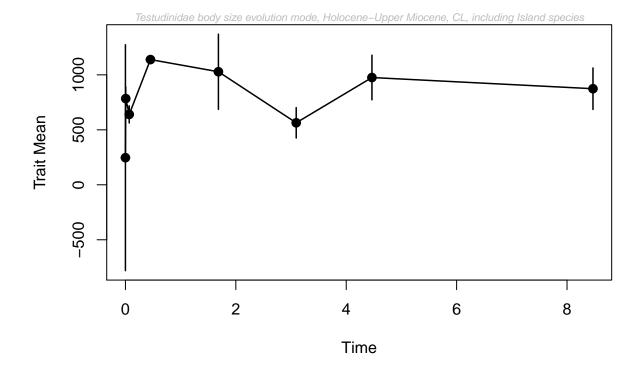
bin	n
(0.1e-06]	232
(1e-06,0.0117]	10
(0.0117, 0.126]	9
(0.126, 0.781]	2
(0.781, 2.59]	8
(2.59, 3.6]	13
(3.6, 5.33]	14
(5.33,11.6]	16

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=2027)

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

tt	vv	nn	mm
0.0000005	2.067437e + 09	1960	246.5267
0.0058500 0.0688500	9.923200e+04 5.494913e+04	9	784.0000 640.1956
0.4535000	0.000000e+00	1	1139.0000
1.6845000	7.006992e + 05	6	1028.1833
3.0940000 4.4660000	2.288335e+05 5.766009e+05	12 14	563.8583 975.6429
8.4700000	5.695508e+05	16	873.9312

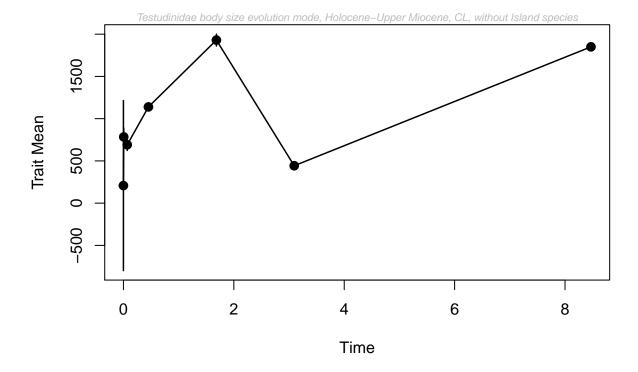


```
##
## Comparing 3 models [n = 7, method = AD]
##
## logL K AICc Akaike.wt
## GRW -56.18427 2 119.3685 0.000
## URW -53.87174 1 110.5435 0.019
## Stasis -47.81894 2 102.6379 0.981
```

	logL	K	AICc	Akaike.wt
GRW	-56.18427	2	119.3685	0.000
URW	-53.87174	1	110.5435	0.019
Stasis	-47.81894	2	102.6379	0.981

Excluding Island species (n= 1728)

1	mm	nn	vv	tt
208.0	755	1703	1.725832e + 09	0.0000005
784.0	000	9	$9.923200e{+04}$	0.0058500
691.1	250	8	3.611984e+04	0.0688500
1139.0	000	1	0.000000e+00	0.4535000
1930.0	000	2	9.800000e+03	1.6845000
442.7	500	4	4.049167e + 02	3.0940000
1850.0	000	1	0.000000e+00	8.4700000



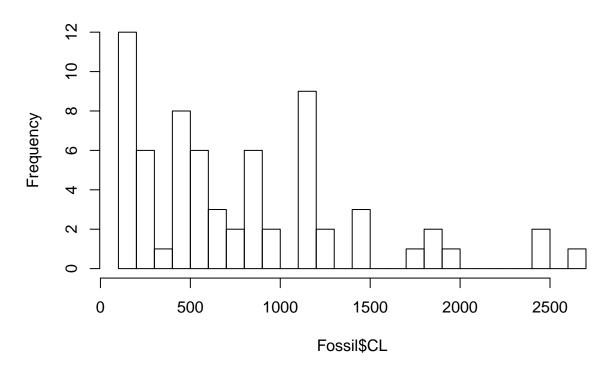
```
##
## Comparing 3 models [n = 6, method = AD]
##
## logL K AICc Akaike.wt
## GRW -53.20994 2 114.4199 0.027
## URW -57.87959 1 118.7592 0.003
## Stasis -49.61560 2 107.2312 0.970
```

	logL	K	AICc	Akaike.wt
GRW	-53.20994	2	114.4199	0.027
URW	-57.87959	1	118.7592	0.003
Stasis	-49.61560	2	107.2312	0.970

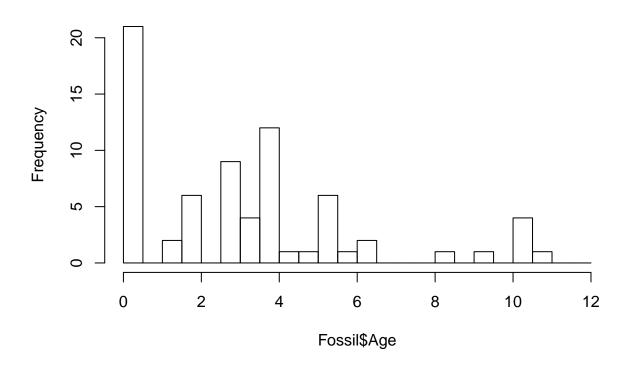
Histograms

Frequency of body size data and distribution over time

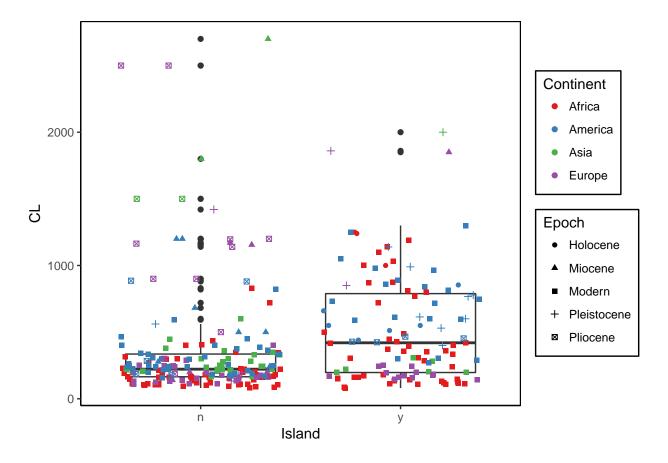
Histogram of Fossil\$CL

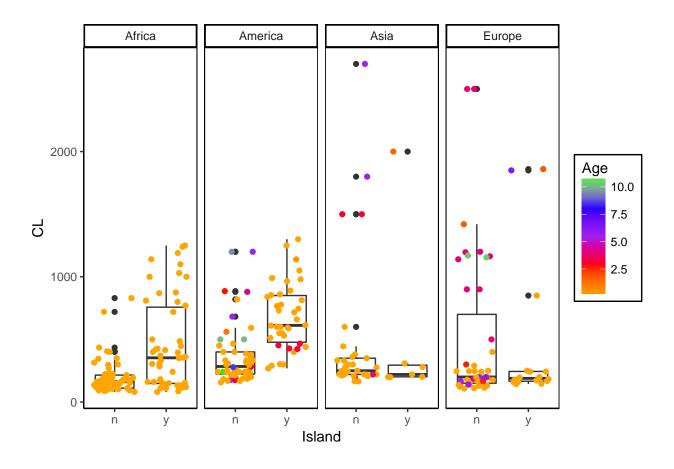


Histogram of Fossil\$Age

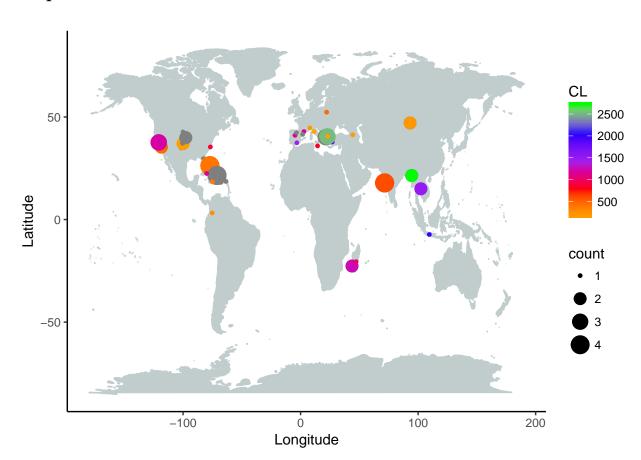


Boxplots (continental (n) vs. Island (y) species)





Map



Species Accumulation Curve

