# 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

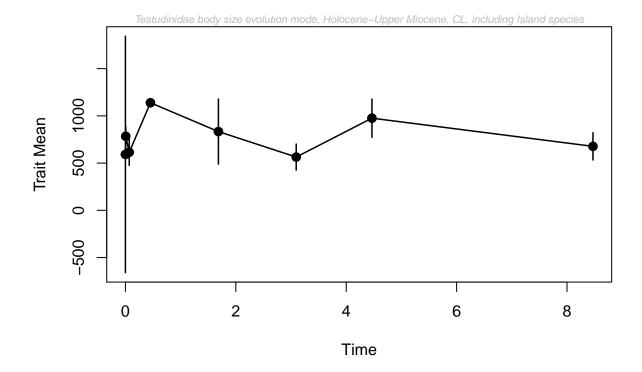
bin	n
$\overline{(0,0.0117]}$	10
(0.0117, 0.126]	5
(0.126, 0.781]	2
(0.781, 2.59]	7
(2.59, 3.6]	13
(3.6, 5.33]	14
(5.33,11.6]	14

bin	EpochBins	MeanBins
(0,0.0117]	Holocene	0.00585
(0.0117, 0.126]	Upper Pleistocene	0.06885
(0.126, 0.781]	Middle Pleistocene	0.45350
(0.781, 2.59]	Lower Pleistocene	1.68450
(2.59, 3.6]	Upper Pliocene	3.09400
(3.6, 5.33]	Lower Pliocene	4.46600
(5.33,11.6]	Upper Miocene	8.47000

#### including Island species (n=256)

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

mm	nn	vv	tt
592.0561	196	307090499.2	0.00000
784.0000	9	99232.0	0.00585
614.5520	5	97101.6	0.06885
1139.0000	1	0.0	0.45350
833.8200	5	592545.7	1.68450
563.8583	12	228833.5	3.09400
975.6429	14	576600.9	4.46600
677.3500	14	293085.6	8.47000

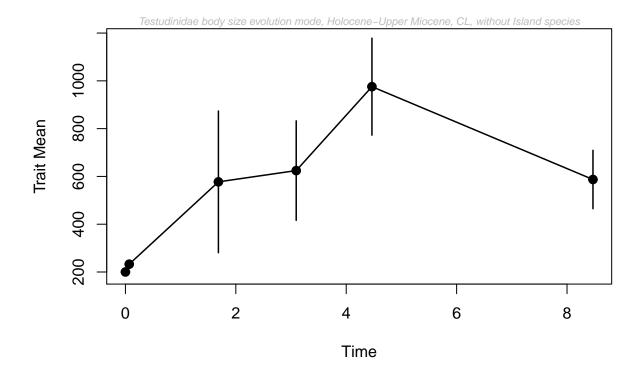


```
##
## Comparing 3 models [n = 7, method = AD]
##
## logL K AICc Akaike.wt
## GRW -56.74055 2 120.4811 0.000
## URW -56.79183 1 116.3837 0.002
## Stasis -48.47836 2 103.9567 0.998
```

	logL	K	AICc	Akaike.wt
GRW	-56.74055	2	120.4811	0.000
URW	-56.79183	1	116.3837	0.002
Stasis	-48.47836	2	103.9567	0.998

### Excluding Island species (n= 113)

mm	nn	vv	tt
200.0685	73	8888.231	0.00000
232.7600	1	0.000	0.06885
577.2750	4	351291.969	1.68450
624.4125	8	346850.133	3.09400
975.6429	14	576600.863	4.46600
587.1462	13	194102.244	8.47000



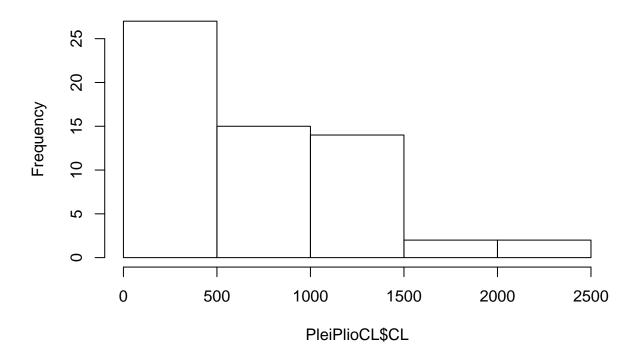
```
##
## Comparing 3 models [n = 5, method = AD]
##
## logL K AICc Akaike.wt
## GRW -33.74382 2 77.48763 0.040
## URW -33.91926 1 71.17185 0.947
## Stasis -34.93663 2 79.87326 0.012
```

	logL	K	AICc	Akaike.wt
GRW	-33.74382	2	77.48763	0.040
URW	-33.91926	1	71.17185	0.947
Stasis	-34.93663	2	79.87326	0.012

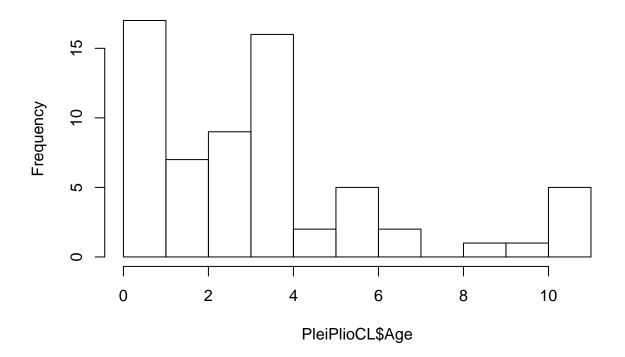
#### Histograms

Frequency of body size data and distribution over time

# Histogram of PleiPlioCL\$CL



# Histogram of PleiPlioCL\$Age



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

