Body size trends in fossil tortoises

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

```
## Warning in bind_rows_(x, .id): binding character and factor vector,
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## coercing into character vector
```

bin	n
(0,1e-06]	234
(1e-06,0.0117]	10
(0.0117,0.126]	12
(0.126,0.781]	4
(0.781,2.59]	24
(2.59,3.6]	13
(3.6,5.33]	15
(5.33,11.6]	16

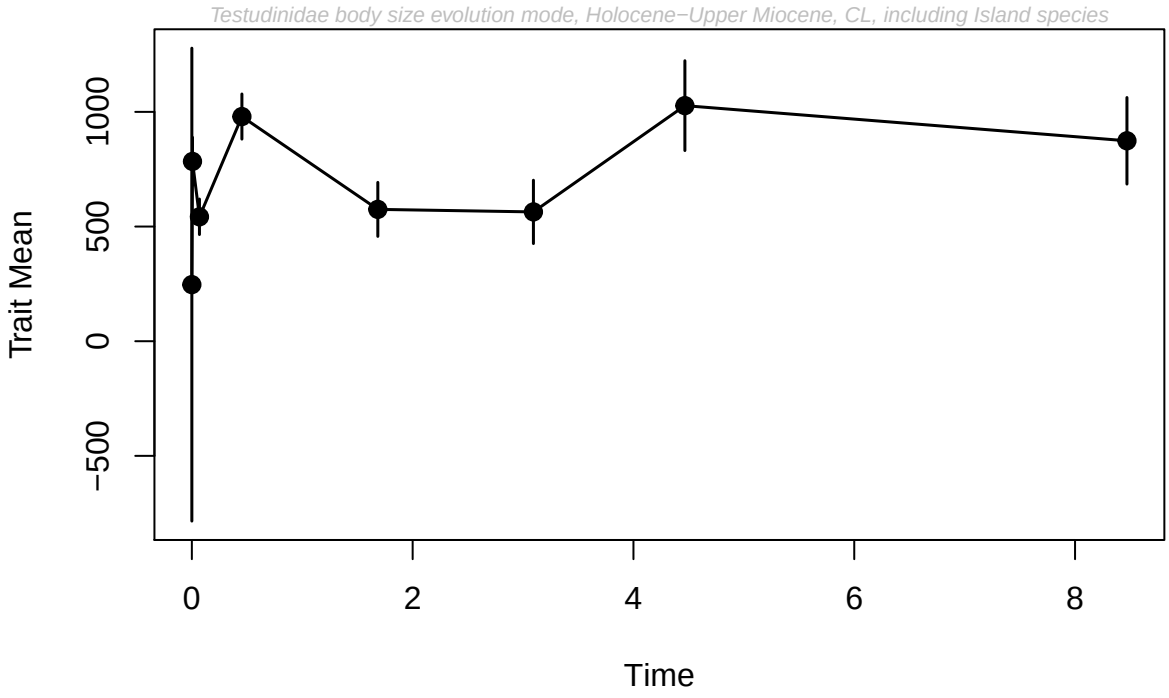
bin	EpochBins	MeanBins
(0,1e-06]	Modern	0.0000005
(1e-06,0.0117]	Holocene	0.0058500
(0.0117,0.126]	Upper Pleistocene	0.0688500
(0.126,0.781]	Middle Pleistocene	0.4535000
(0.781,2.59]	Lower Pleistocene	1.6845000
(2.59,3.6]	Upper Pliocene	3.0940000
(3.6,5.33]	Lower Pliocene	4.4660000
(5.33,11.6]	Upper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

including Island species (n=2051)

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

mm	nn	vv	tt
246.7213	1962	2.085874e+09	0.0000005
784.0000	9	9.923200e+04	0.0058500
542.4800	12	7.186028e+04	0.0688500
979.6667	3	2.904033e+04	0.4535000
574.8409	22	3.048720e+05	1.6845000
563.8583	12	2.288335e+05	3.0940000
1027.2667	15	5.753904e+05	4.4660000

mm	nn	vv	tt
873.9312	16	5.695508e+05	8.4700000



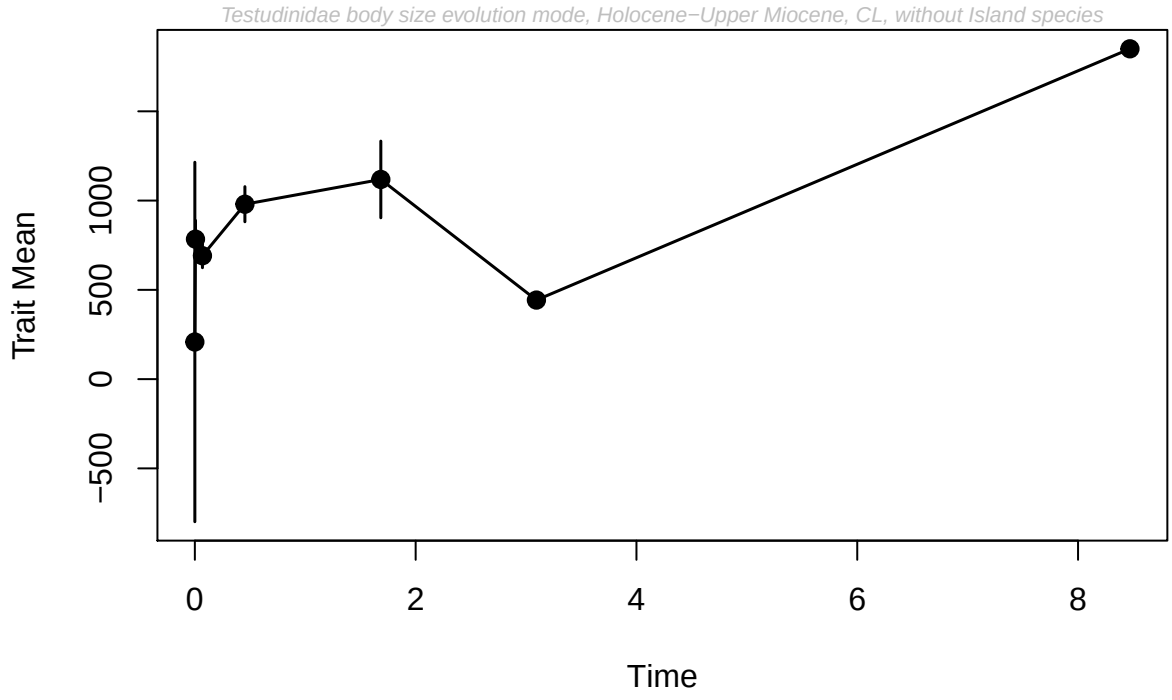

```
##
## Comparing 3 models [n = 7, method = AD]
##
##             logL K     AICc Akaike.wt
## GRW    -55.52189 2 118.0438         0
## URW    -57.85527 1 118.5105         0
## Stasis -46.77517 2 100.5503         1
```

	logL	K	AICc	Akaike.wt
GRW	-55.52189	2	118.0438	0
URW	-57.85527	1	118.5105	0
Stasis	-46.77517	2	100.5503	1

Excluding Island species (n= 1735)

mm	nn	vv	tt
208.0755	1703	1.725832e+09	0.0000005
784.0000	9	9.923200e+04	0.0058500
691.1250	8	3.611984e+04	0.0688500

mm	nn	vv	tt
979.6667	3	2.904033e+04	0.4535000
1118.2857	7	3.228806e+05	1.6845000
442.7500	4	4.049167e+02	3.0940000
1850.0000	1	0.000000e+00	8.4700000

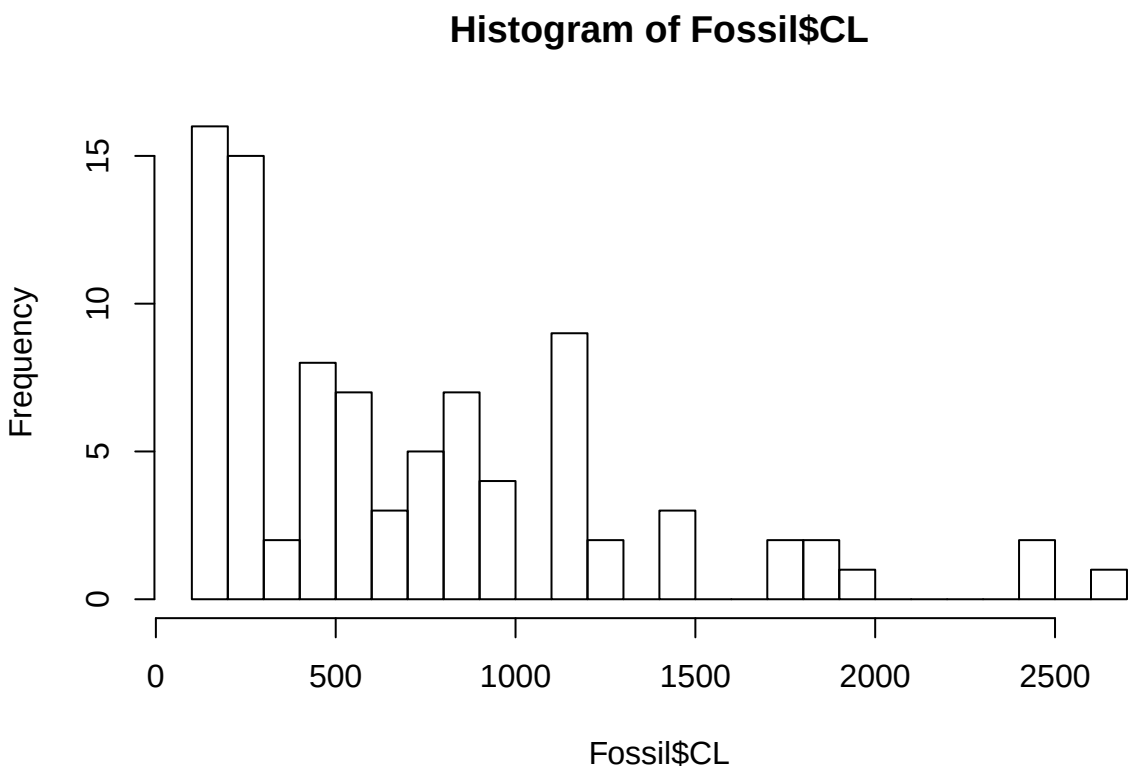


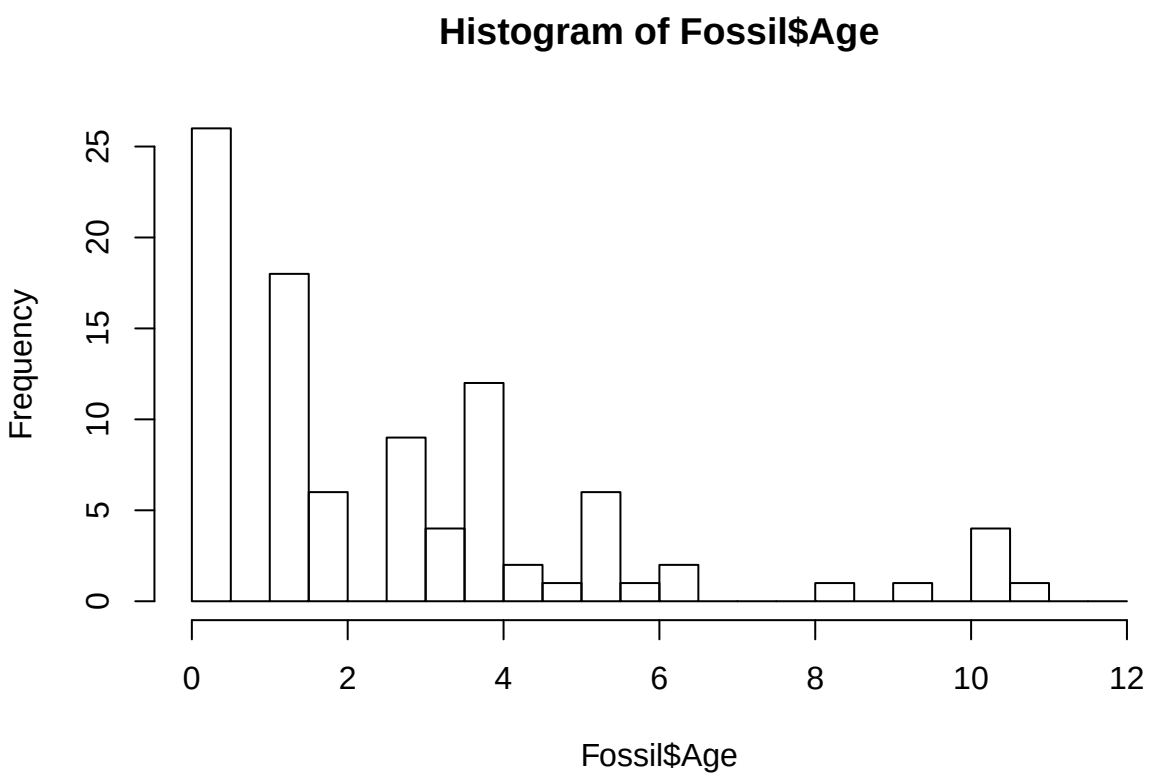

```
##
## Comparing 3 models [n = 6, method = AD]
##
##             logL K     AICc Akaike.wt
## GRW    -49.07288 2 106.1458     0.063
## URW    -52.20350 1 107.4070     0.034
## Stasis -46.41756 2 100.8351     0.903
```

	logL	K	AICc	Akaike.wt
GRW	-49.07288	2	106.1458	0.063
URW	-52.20350	1	107.4070	0.034
Stasis	-46.41756	2	100.8351	0.903

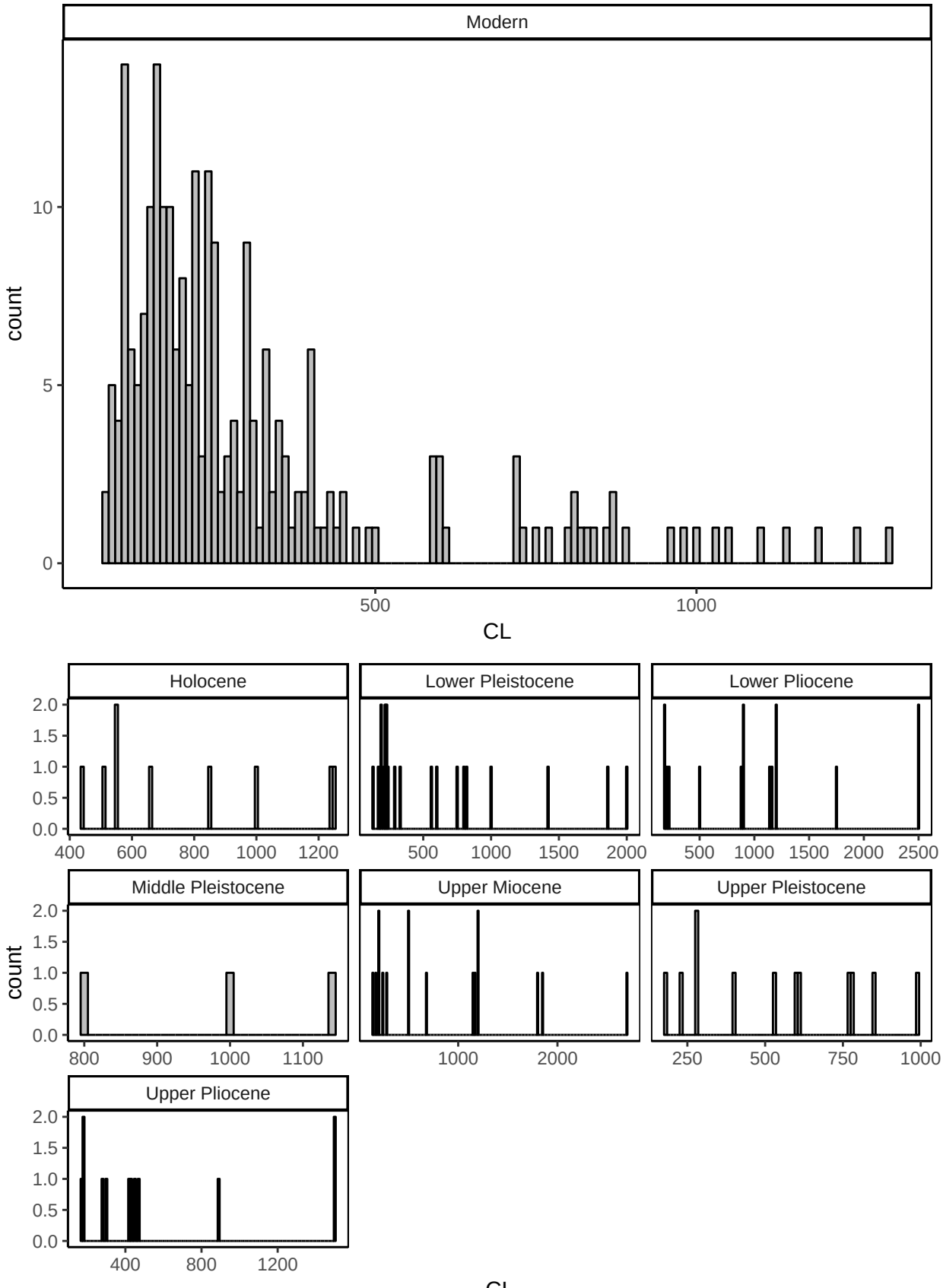
Histograms

Frequency of body size data and distribution over time

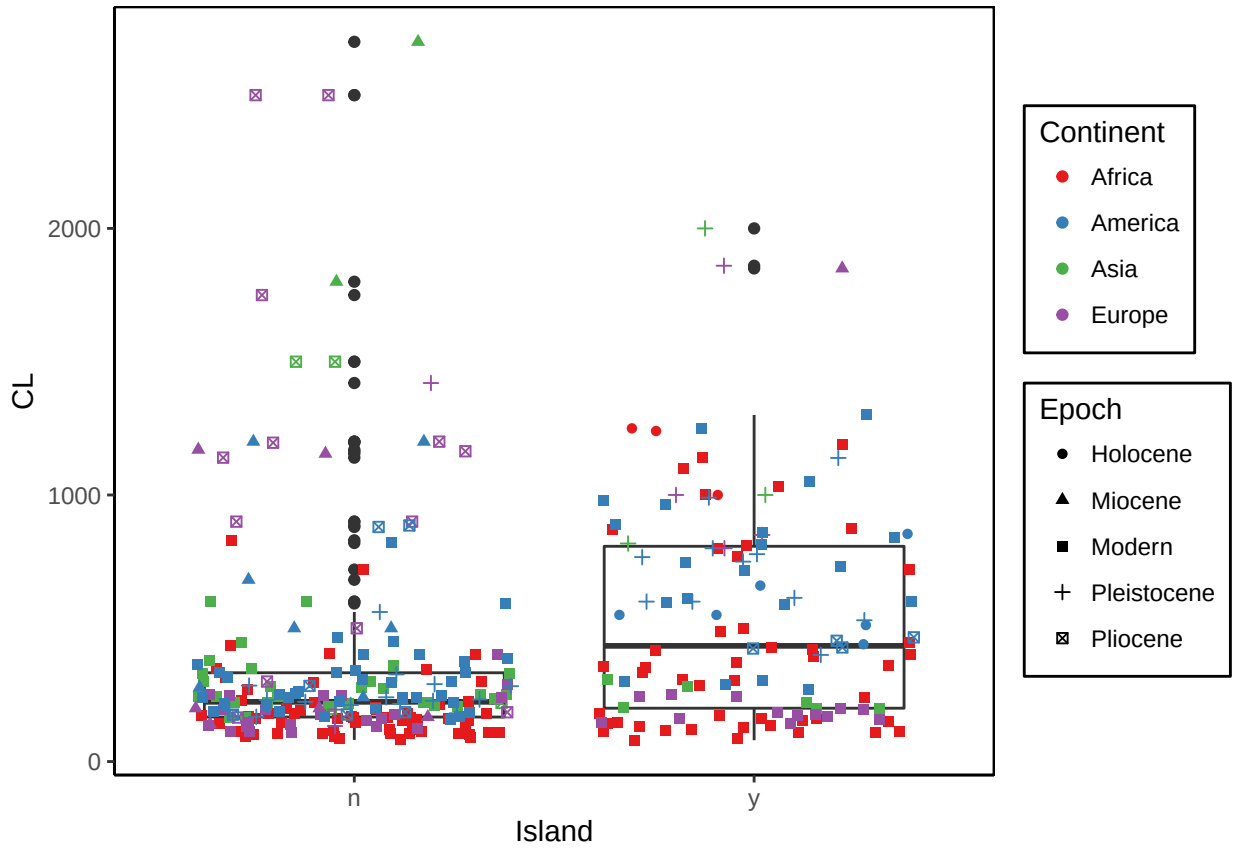

Histogram of Fossil$CL
Frequency
0
5
10
15
0
500
1000
1500
2000
2500
Fossil$CL

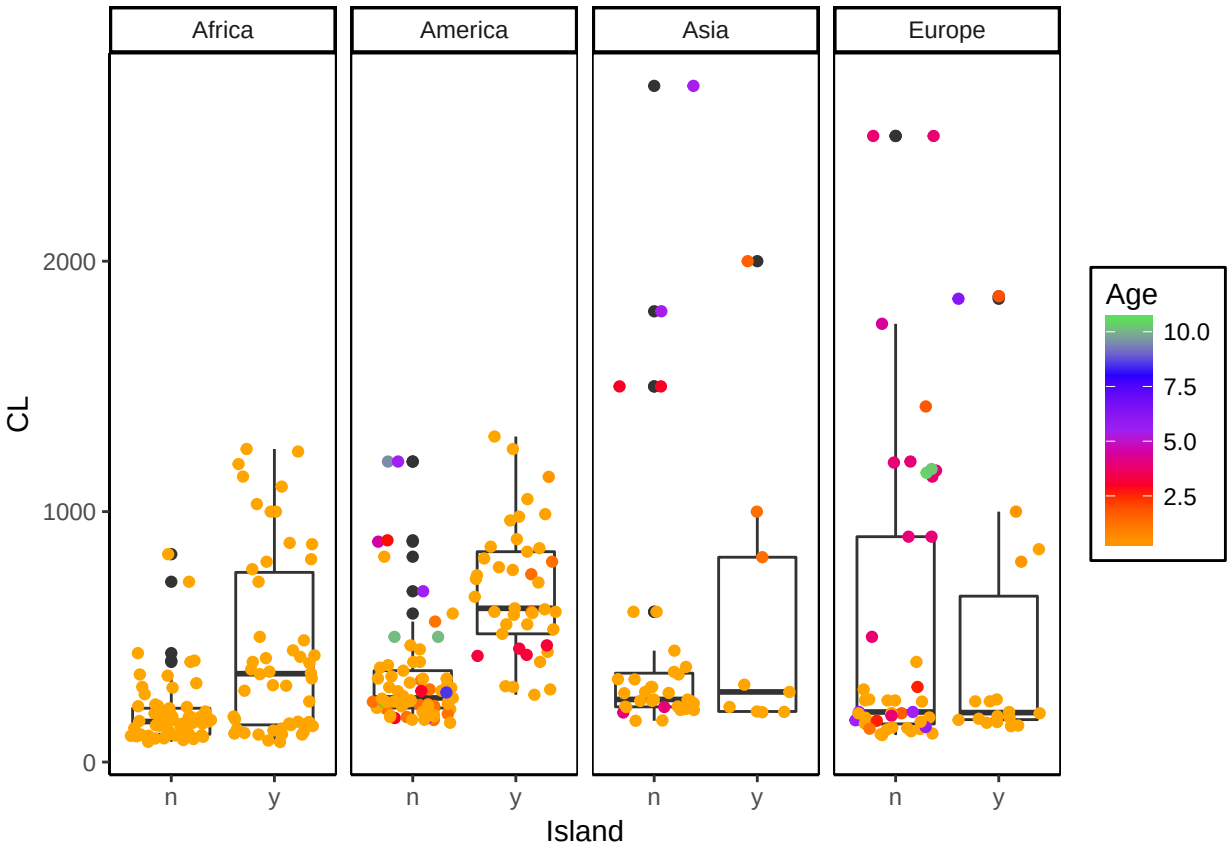

Histogram of Fossil$Age
Frequency
0
5
10
15
20
25
0
2
4
6
8
10
12
Fossil$Age

CL histogram per bin

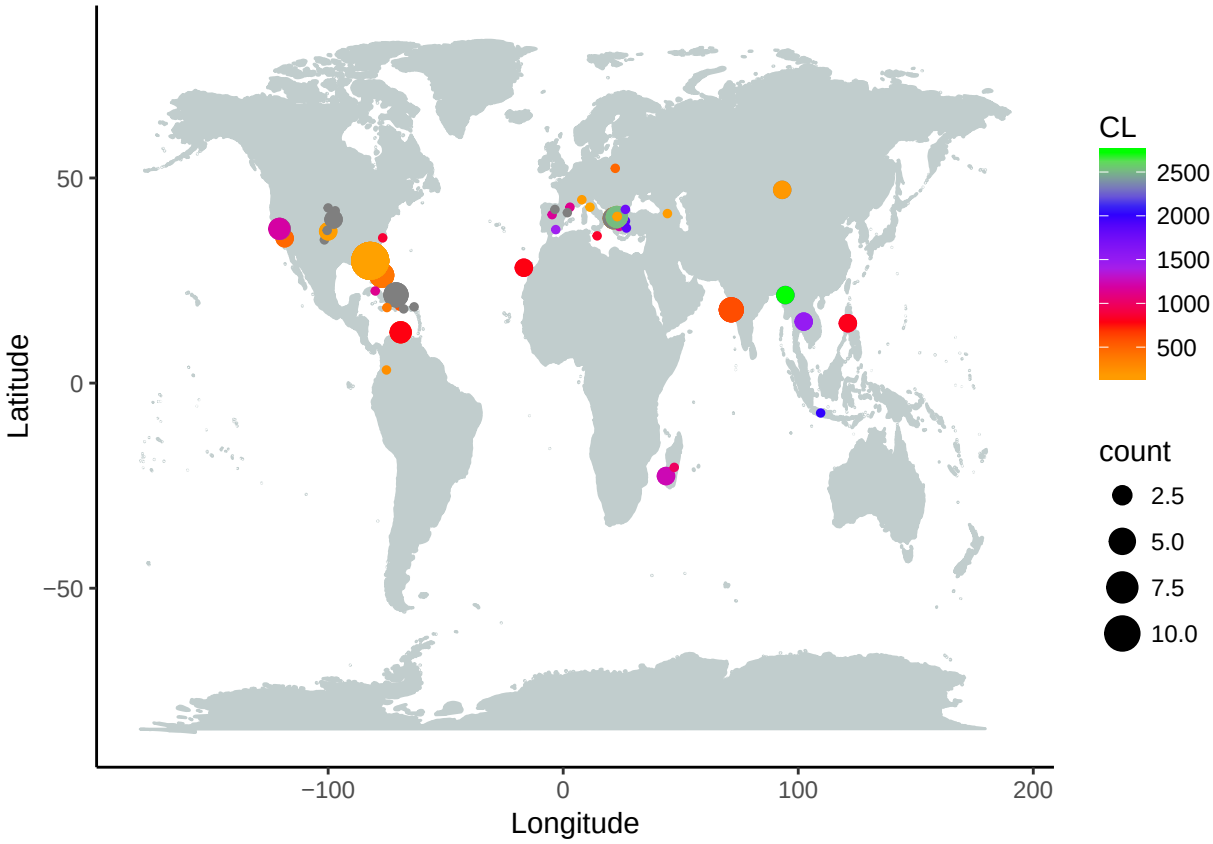


Boxplots (continental (n) vs. Island (y) species)



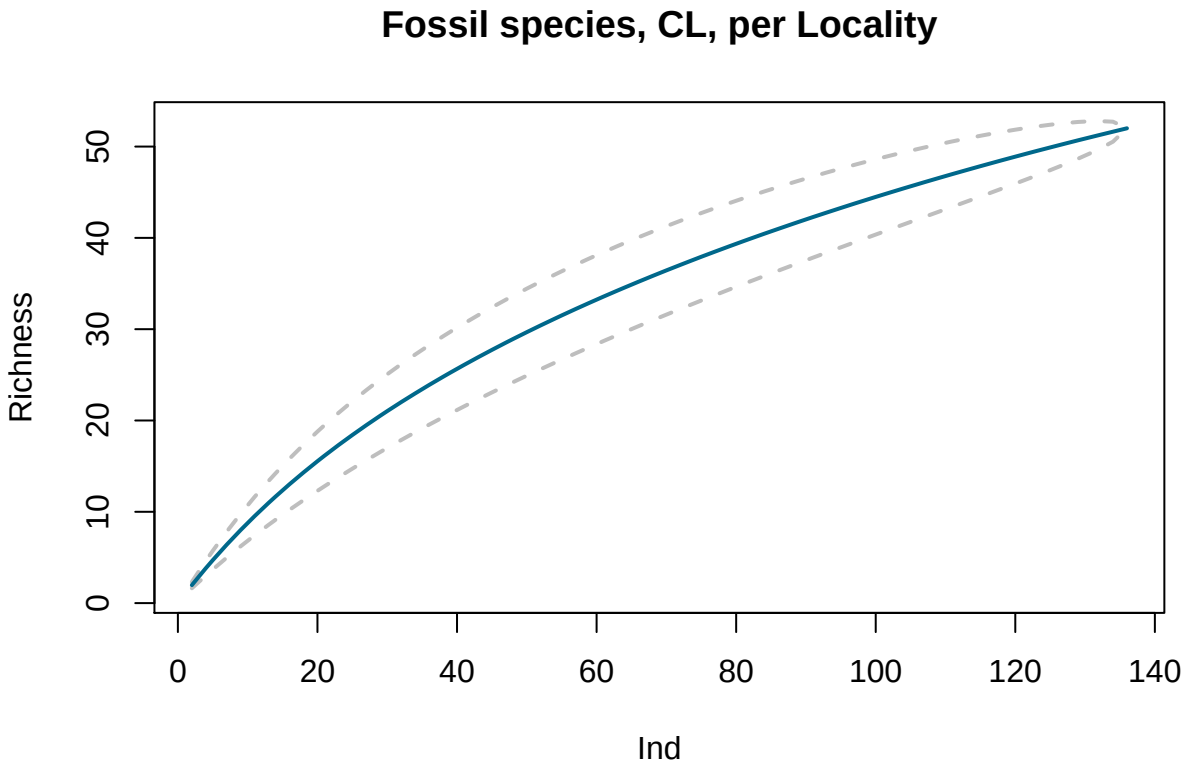

Africa
America
Asia
Europe
CL
2000
1000
0
n
y
Island
Age
10.0
7.5
5.0
2.5

Map

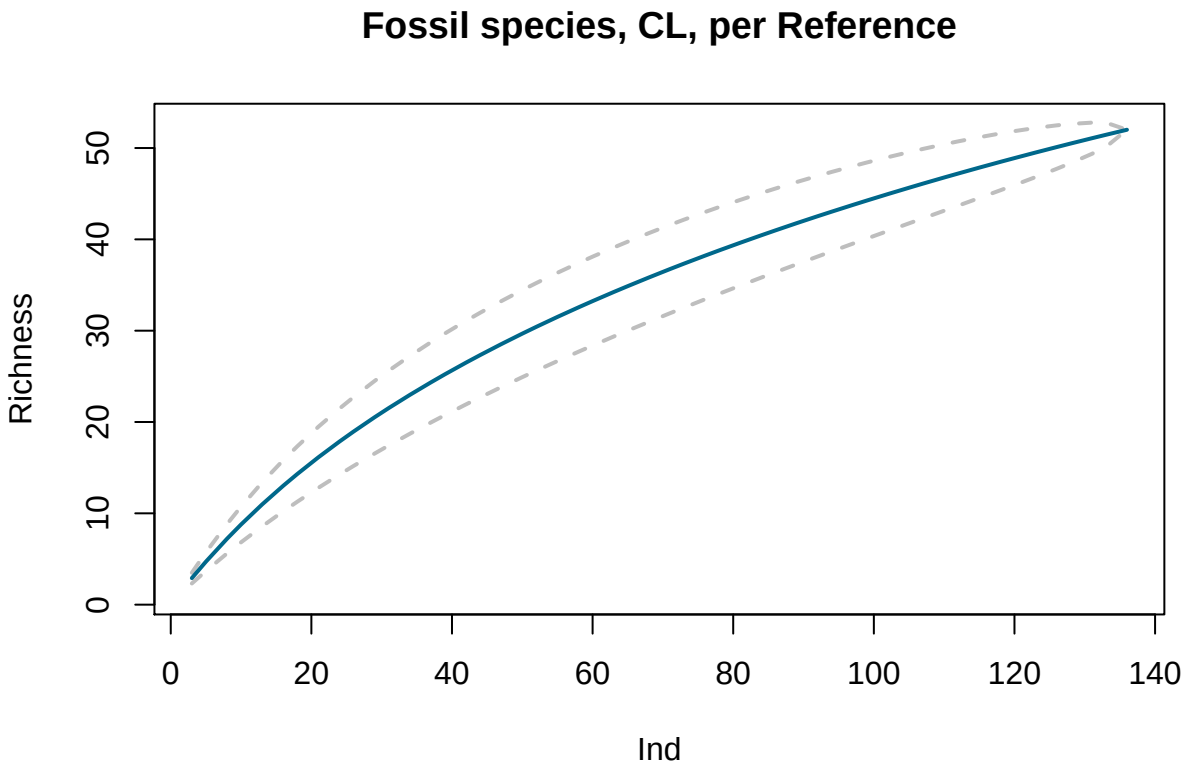

Latitude
50
0
−50
−100
0
100
200
Longitude
CL
2500
2000
1500
1000
500
count
2.5
5.0
7.5
10.0

Species Accumulation Curve

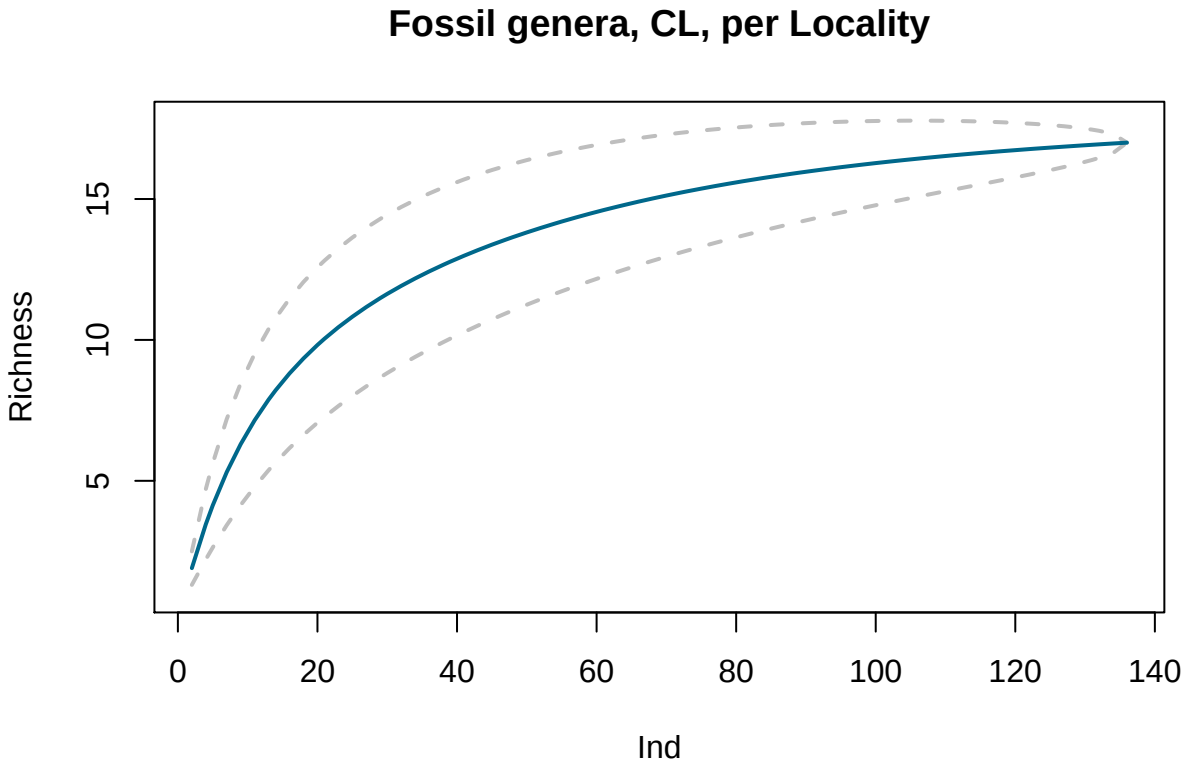
Fossil species (per Locality)



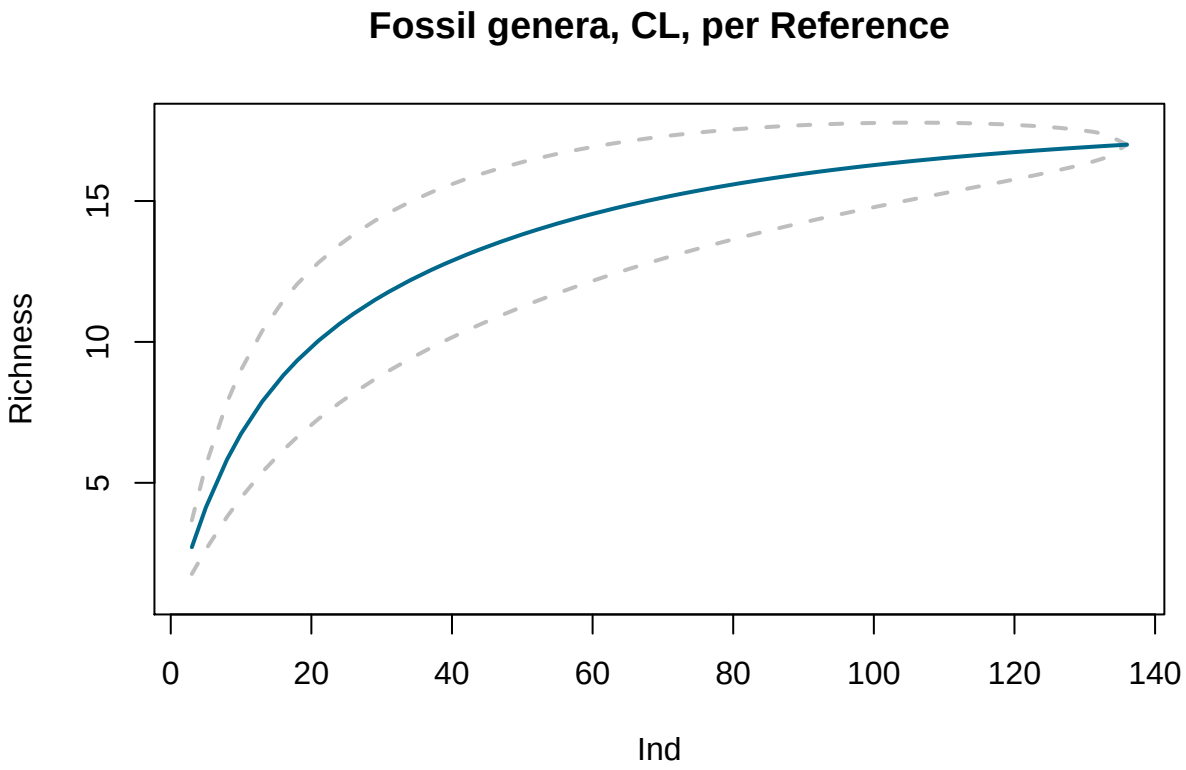
Fossil species (per Reference)



Fossil genera (per Locality)



Fossil genera (per Reference)



Fossil and extant species (per Reference)

```
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## coercing into character vector
```
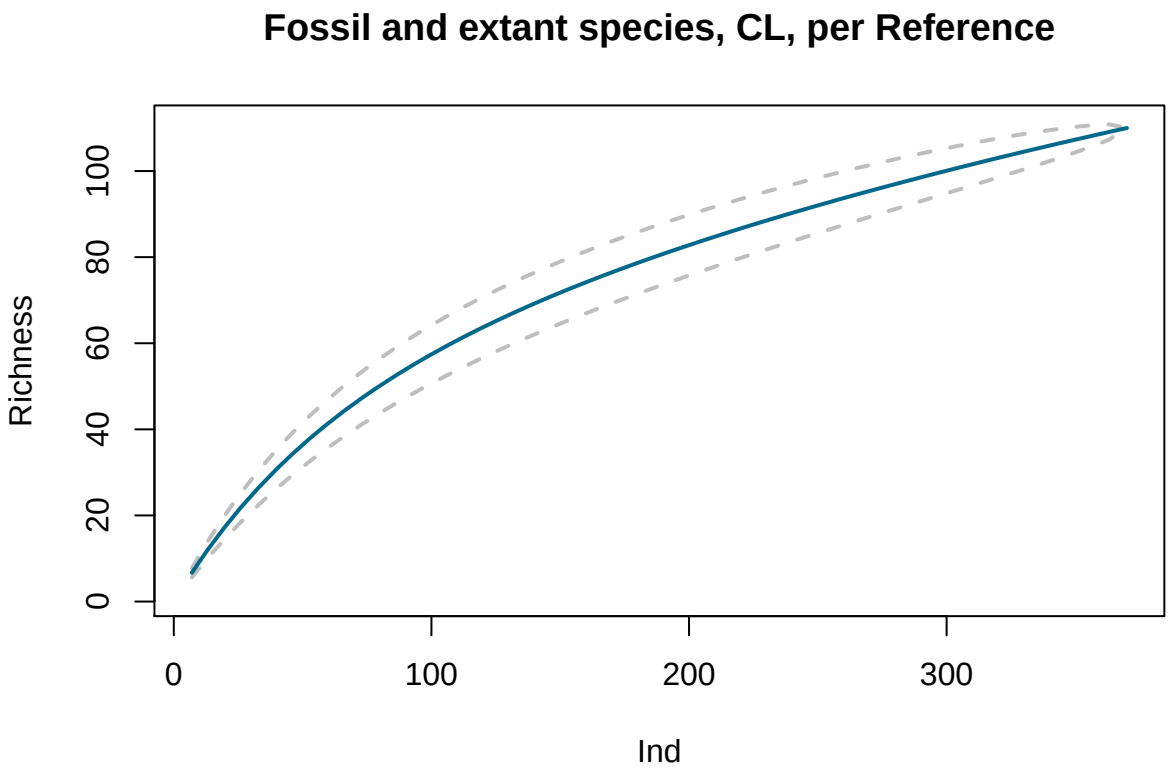
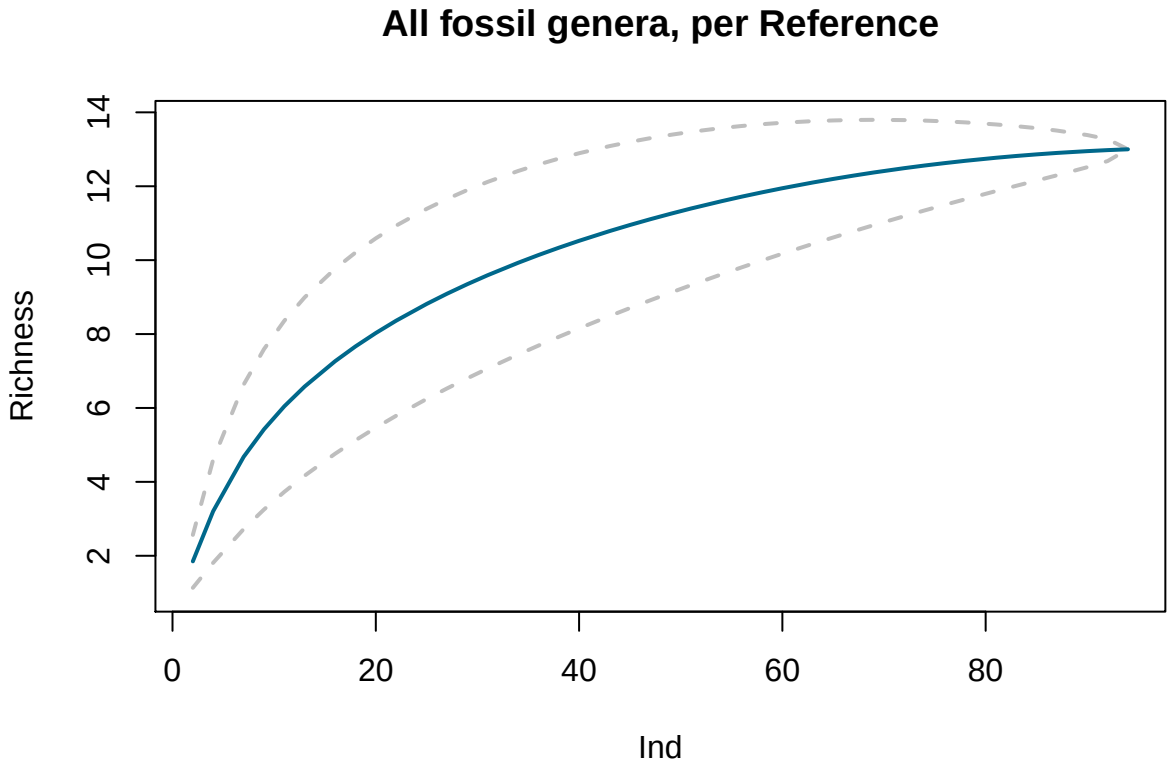
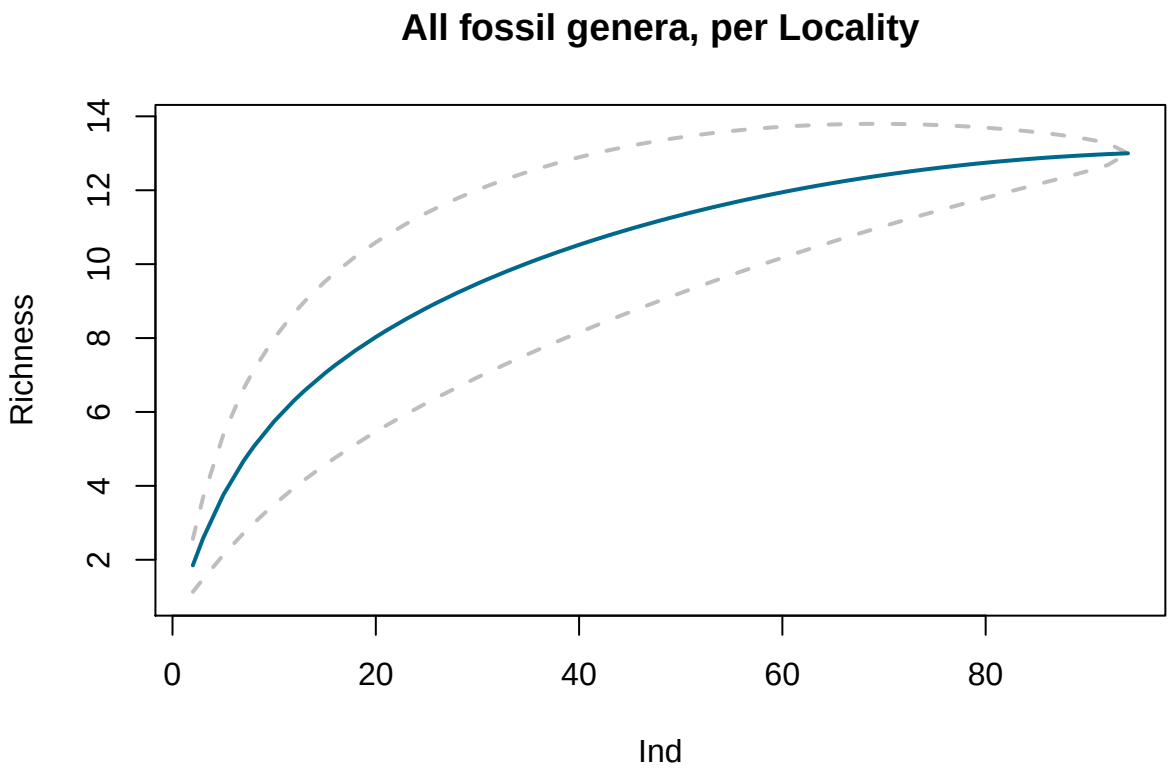


Fossil and extant species, CL, per Reference
Richness
0
20
40
60
80
100
0
100
200
300
Ind

Occurences from FosFarBase per Reference (all known occurences, disregarding availability of CL-data)



Occurences from FosFarBase per Locality (all known occurences, disregarding availability of CL-data)