

## Supplementary Information 1

**Table S1.** Comparison of rates of morphological evolution using principal component axes for dataset excluding *Anolis onca*. Subset rates inferred to be greater than rates in at least one other geographic subset by AIC<sub>c</sub> tests are shaded; those inferred to be significantly greater by likelihood-ratio tests appear in bold. Substantial rate differences are described in the far right column. A dagger (†) indicates moderate AIC<sub>c</sub> support for multiple rates among group pairs and two daggers (††) indicate strong AIC<sub>c</sub> support for multiple rates. An asterisk (\*) indicates that likelihood-ratio tests support multiple rates with  $p < 0.05$  and two asterisks (\*\*) indicate support of multiple rates with  $p < 0.001$ .

Character	% Var. Explained	M1 Rate	C Rate	M2 Rate	Single Rate	Comparisons
<b>PC I</b>	39.9	0.030	0.088	0.085	0.084	
<b>PC II</b>	24.3	0.047	0.047	0.093	0.061	M2>C†
<b>PC III</b>	9.5	0.024	0.027	0.028	0.027	
<b>PC IV</b>	5.6	0.005	0.014	0.010	0.012	
<b>PC V</b>	5.5	0.018	0.016	0.015	0.016	
<b>PC VI</b>	3.7	0.001	0.012	0.010	0.011	C>M1†; M2>M1†

**Appendix 1a.** Species Included in the Study (Phylogenetic Set). Note that *Chamaeleolis* and *Phenacosaurus* phylogenetically arise within *Anolis* (Jackman et al. 1999; Nicholson et al. 2005). Asterisks indicate those species in the “randomly chosen” subset of Caribbean species.

Caribbean Species

*Anolis acutus*\*  
*A. aliniger*  
*A. allisoni*  
*A. alumina*\*  
*A. angusticeps*  
*A. argillaceus*\*  
*A. armouri*  
*A. bahorucoensis*  
*A. baleatus*\*  
*A. baracoae*\*  
*A. bartschi*\*  
*A. caudalis*  
*A. chlorocyanus*\*  
*A. christophei*  
*A. coelestinus*  
*A. confusus*  
*A. cooki*  
*A. cristatellus*  
*A. cuvieri*  
*A. darlingtoni*\*  
*A. distichus*  
*A. equestris*  
*A. etheridgei*  
*A. eugenegrahami*\*  
*A. evermanni*  
*A. fowleri*\*  
*A. garmani*  
*A. insolitus*  
*A. isolepis*  
*A. jubar*  
*A. krugi*  
*A. lineatopus*\*  
*A. longitibialis*  
*A. loysiana*  
*A. lucius*\*

*A. marcanoi*  
*A. marron\**  
*A. maynardi*  
*A. monticola\**  
*A. occultus*  
*A. opalinus*  
*A. ophiolepis*  
*A. paternus*  
*A. placidus*  
*A. porcatus*  
*A. ricordi*  
*A. sagrei*  
*A. semilineatus*  
*A. shrevei*  
*A. singularis*  
*A. strahmi*  
*A. stratulus*  
*A. valencienni*  
*A. vanidicus*  
*A. vermiculatus*  
*Chamaeleolis chamaeleonides\**  
*C. porcus*

Mainland Species

Clade M1

*A. frenatus*  
*A. microtus*  
*A. punctatus*  
*A. transversalis*  
*Phenacosaurus heterodermus*

Clade M2

*A. altae*  
*A. aquaticus*  
*A. auratus*  
*A. biporcatus*  
*A. bitectus*  
*A. capito*  
*A. crassulus*  
*A. fuscoauratus*  
*A. humilis*  
*A. intermedius*  
*A. isthmicus*  
*A. lemurinus*  
*A. limifrons*  
*A. lionotus*  
*A. meridionalis*

*A. nebuloides*  
*A. nitens*  
*A. onca*  
*A. ortonii*  
*A. oxylophus*  
*A. pachypus*  
*A. poecilopus*  
*A. polylepis*  
*A. purpurgularis*  
*A. quercorum*  
*A. sericeus*  
*A. trachyderma*  
*A. tropidogaster*  
*A. tropidonotus*  
*A. uniformis*

**Appendix 1b.** Species Included in the Study (Non-Phylogenetic Set). Asterisks denote species residing within mainland clades that have colonized islands. Double asterisks denote Lesser Antillean anoles, an island clade that arose within M1.

Caribbean Species

*Anolis koopmani*

Mainland Species

Clade M1

*A. aeneus*\*\*  
*A. aequatorialis*  
*A. agassizi*\*  
*A. blaquillanus*\*\*  
*A. caquetae*  
*A. chloris*  
*A. eulaemus*  
*A. fasciatus*  
*A. festae*  
*A. fraseri*  
*A. gemmosus*  
*A. huilae*  
*A. jacare*  
*A. latifrons*  
*A. maculigula*  
*A. malkini*

*A. menta*  
*A. peraccae*  
*A. philopunctatus*  
*A. princeps*  
*A. proboscis*  
*A. richardi\*\**  
*A. squamulatus*  
*A. vanzolinii*  
*A. vaupesianus*  
*A. ventrimaculatus*

Clade M2

*A. anisolepis*  
*A. antonii*  
*A. barkeri*  
*A. bombiceps*  
*A. bourgeaei*  
*A. cobanensis*  
*A. concolor\**  
*A. cuprinus*  
*A. dunnii*  
*A. godmani*  
*A. gracilipes*  
*A. kemptoni*  
*A. liogaster*  
*A. lynchi*  
*A. macrolepis*  
*A. mariarum*  
*A. megapholidotus*  
*A. microlepidotus*  
*A. nebulosus*  
*A. notopholis*  
*A. parvauritus*  
*A. pentaprion*  
*A. pinchoti\**  
*A. rivalis*  
*A. subocularis*  
*A. taylori*  
*A. tolimensis*  
*A. townsendi\**  
*A. tropidolepis*  
*A. villai*  
*A. vittigerus*  
*A. vociferans*

Jackman, T. R., Larson, A., de Queiroz, K. & Losos, J. B. 1999. Phylogenetic relationships and tempo of early diversification in *Anolis* lizards. *Syst. Biol.* **48**, 254-285.