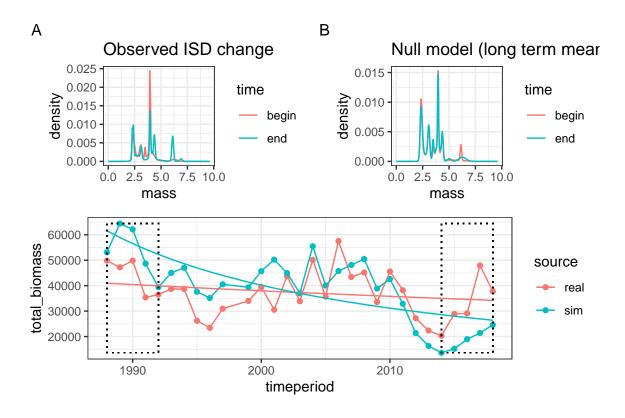
Abundance-driven vs. actual change



Biomass

Model outcomes

Overall proportion of routes with winning models:

model_family	model_formula	n	prop
Gamma	1	239	0.3234100
Gamma	timeperiod	351	0.4749662
Gamma	timeperiod * source	149	0.2016238

Of models with slope term, the proportion for which abundance and biomass are increasing:

abundance_increasing	n	prop
FALSE	335	0.67
TRUE	165	0.33

biomass_increasing	n	prop
FALSE	256	0.512
TRUE	244	0.488

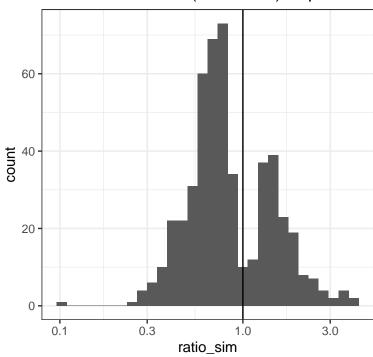
Restricted to models with an *interaction*:

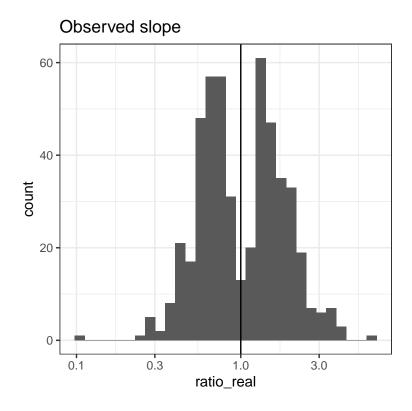
abundance_increasing	n	prop
FALSE	120	0.8053691
TRUE	29	0.1946309

biomass_increasing	n	prop
FALSE	41	0.2751678
TRUE	108	0.7248322

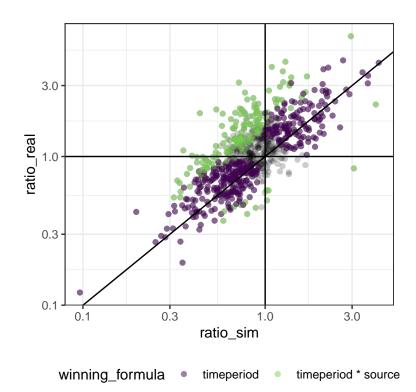
Direction and magnitude of slopes

Abundance-driven (null model) slope





Direction of decoupling



Energy use

Model outcomes

Overall proportion of routes with winning models:

model_family	model_formula	n	prop
Gamma	1	230	0.3112314
Gamma	timeperiod	456	0.6170501
Gamma	time period * source	53	0.0717185

Of models with slope term, the proportion for which abundance and biomass are increasing:

abundance_increasing	n	prop
FALSE	355	0.697446
TRUE	154	0.302554

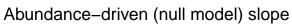
energy_increasing	n	prop
FALSE	329	0.0100001
TRUE	180	0.3536346

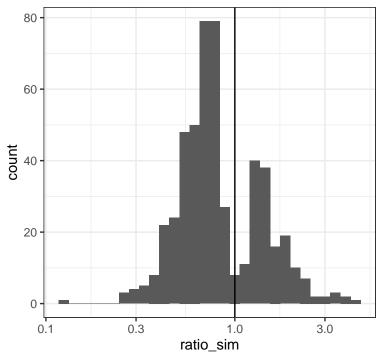
Restricted to models with an interaction:

abundance_increasing	n	prop
FALSE	42	0.7924528
TRUE	11	0.2075472

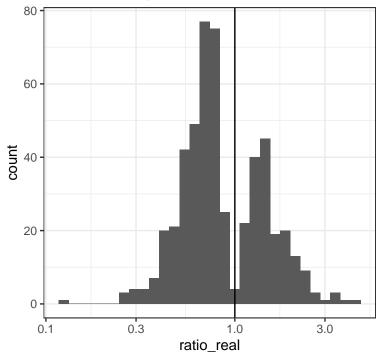
energy_increasing	n	prop
FALSE	16	0.3018868
TRUE	37	0.6981132

Direction and magnitude of slopes

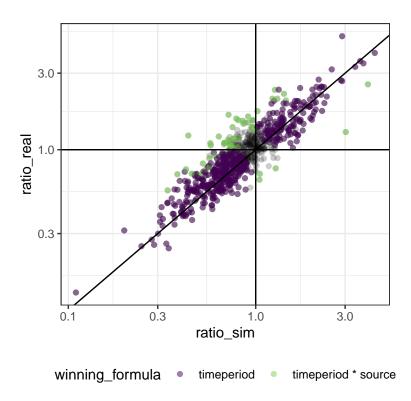




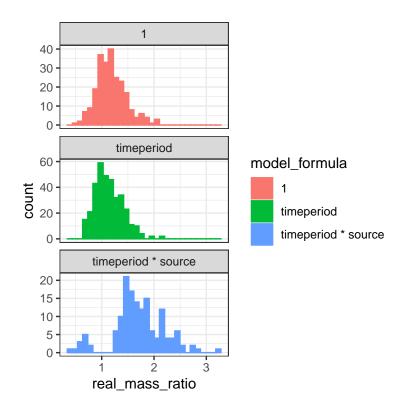
Observed slope



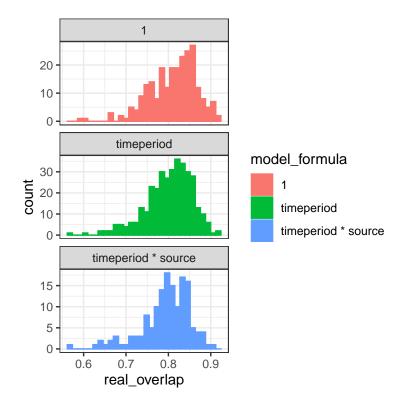
Direction of decoupling



Change in mean body size



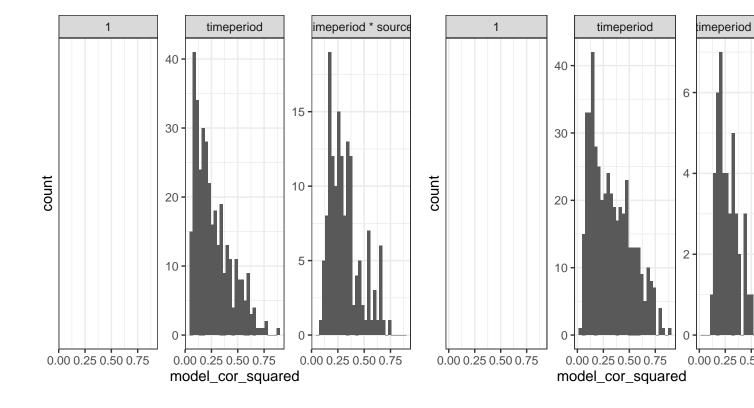
ISD overlap



R2 of binomial GLM overlap ~ model_formula (which does not beat a overlap ~ 1 via AIC, FYI)

[1] 0.01288145

Goodness of fit of models



References