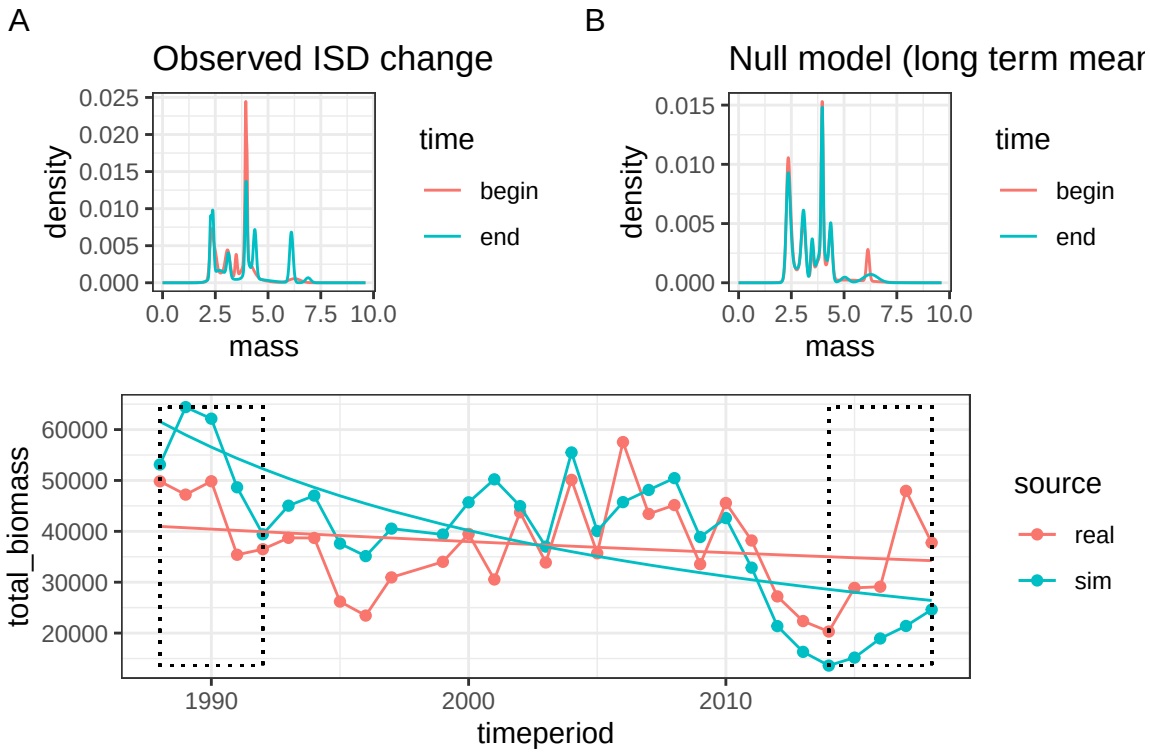
Abundance-driven vs. actual change



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

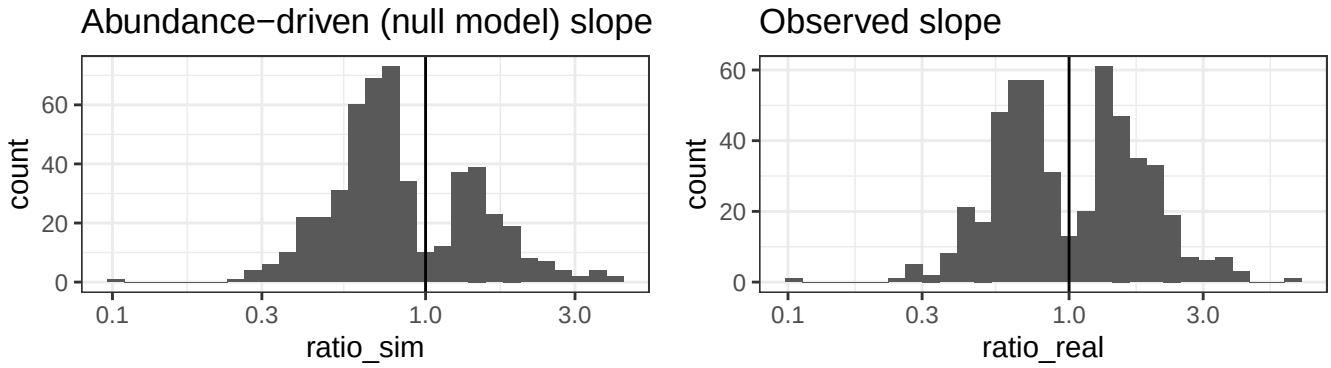
biomass_increasing	n	prop
FALSE	256	0.512
TRUE	244	0.488

Restricted to models with an *interaction*:

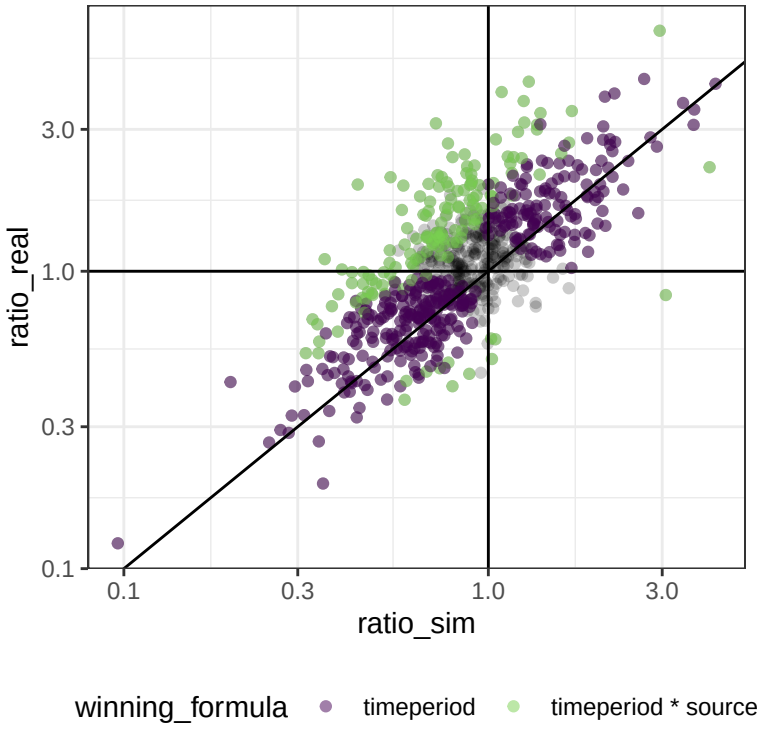
abundance_increasing	n	prop
FALSE	120	0.8053691
TRUE	29	0.1946309

biomass_increasing	n	prop
FALSE	41	0.2751678
TRUE	108	0.7248322

Direction and magnitude of slopes



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	timeperiod * 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

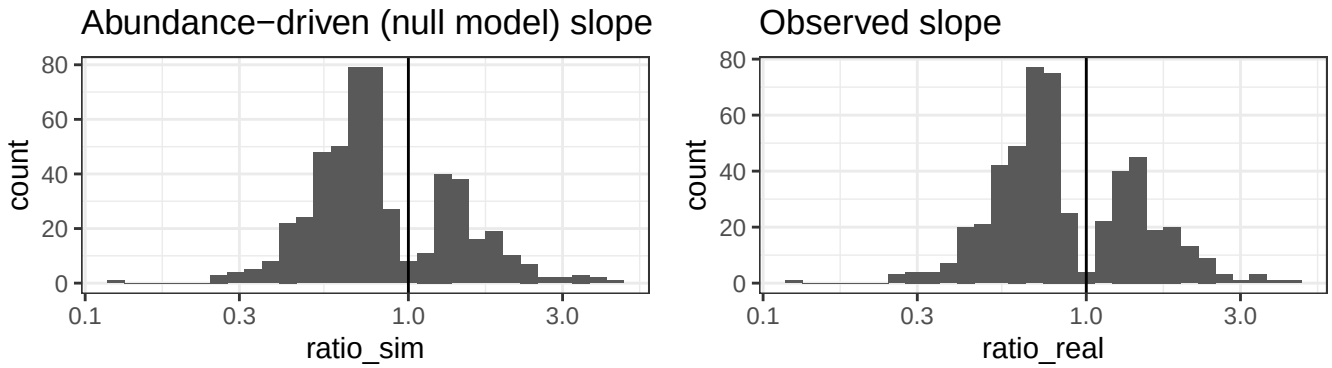
energy_increasing	n	prop
FALSE	329	0.6463654
TRUE	180	0.3536346

Restricted to models with an *interaction*:

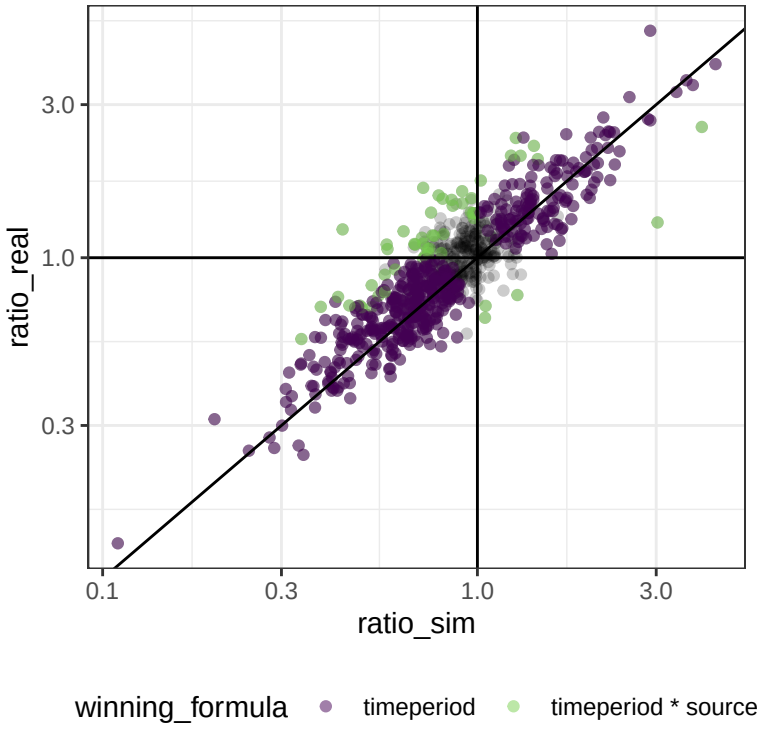
abundance_increasing	n	prop
FALSE	42	0.7924528
TRUE	11	0.2075472

energy_increasing	n	prop
FALSE	16	0.3018868
TRUE	37	0.6981132

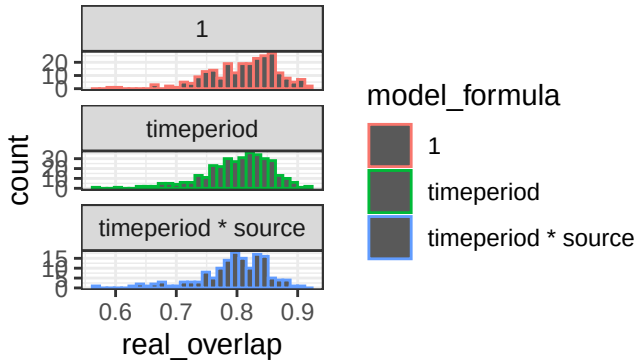
Direction and magnitude of slopes



Direction of decoupling



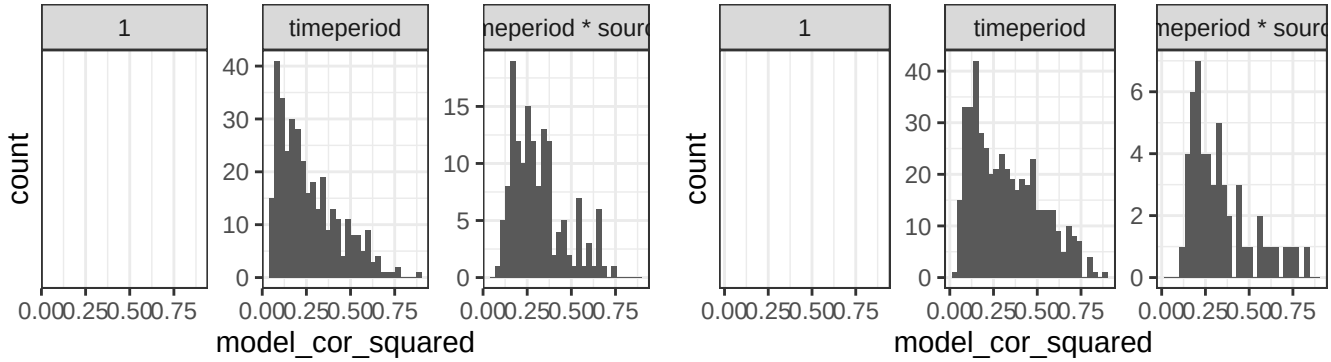
ISD overlap



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