Tree priors

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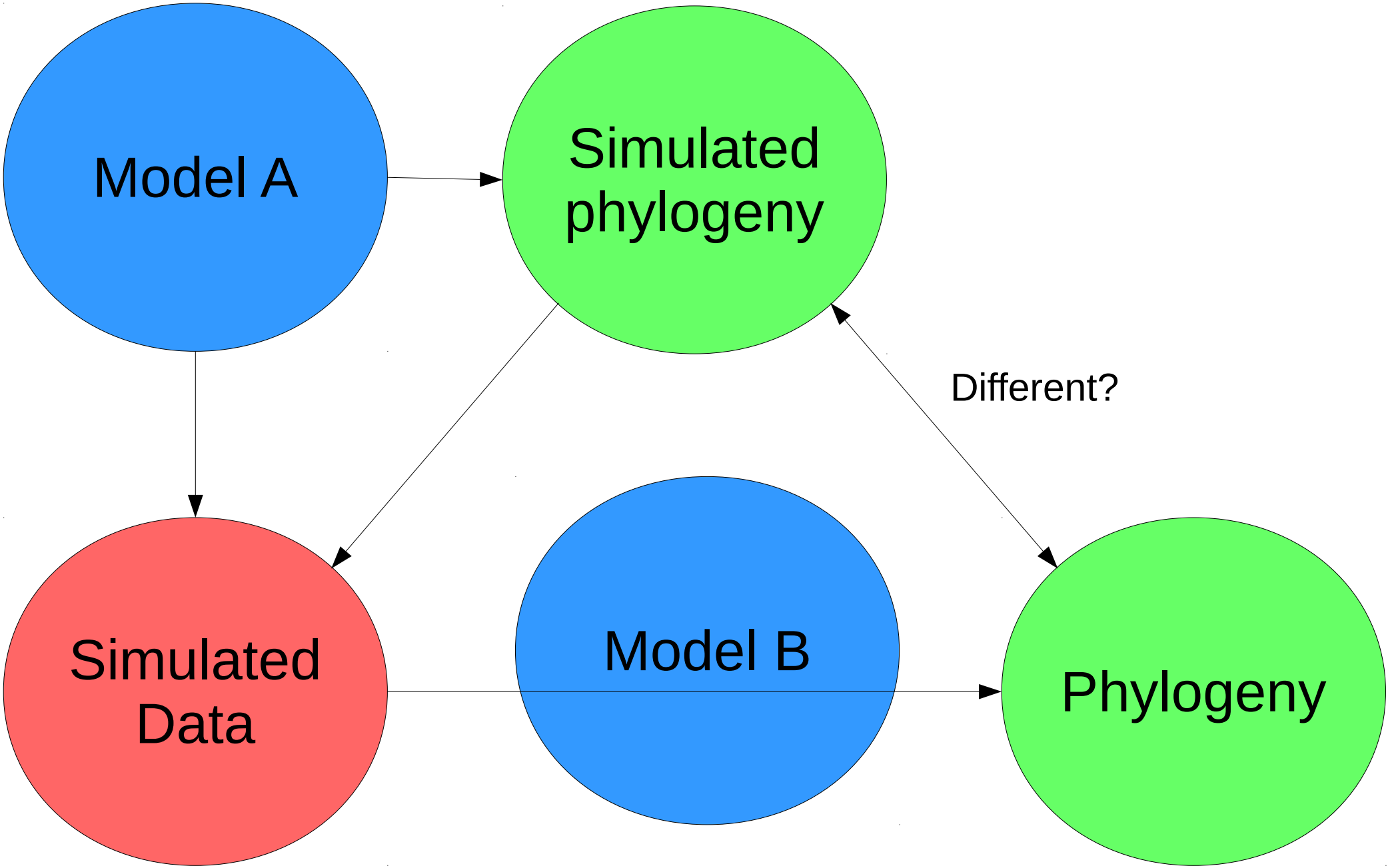
Does model matter?



Tree priors

	Name	When use it?
Y	Yule	No extinction, complete sampling, commonly used
CY	Corrected Yule	
CRBD	Constant-rate Birth-Death	Yule with extinction and incomplete samping
CCP	Coalescent Constant Population	Small sample of large population, population at equilibrium
CEP	Coalescent Exponential Population	Small sample of large population, population just founded
CBS	Coalescent Bayesian Skyline	
CEBS	Coalescent Extended Bayesian Skyline	

Yule model

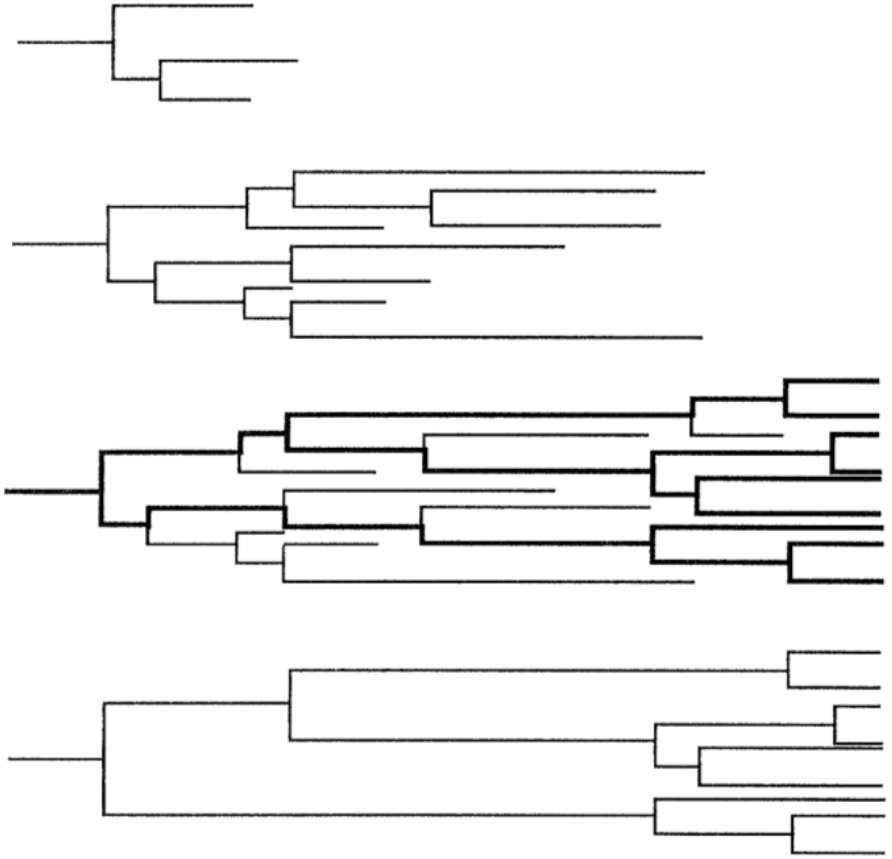
- No extinction
- Complete sampling

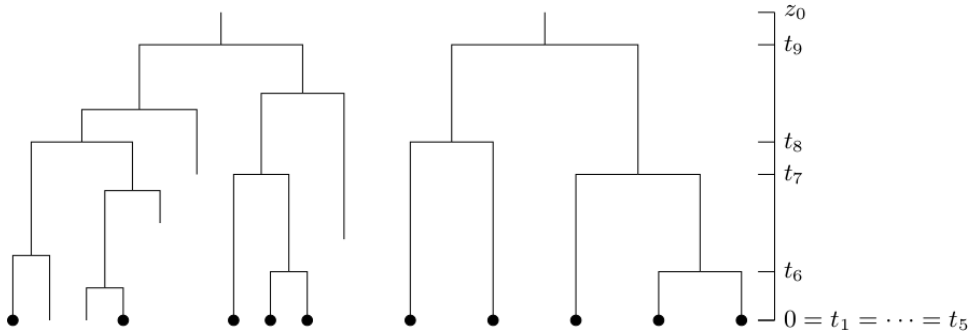
G Yule, 1924

Calibrated Yule model

Constant rate birth-death model

- Birth and death rate constant
- Incomplete sampling





S Nee, RM May and PH Harvey, 1994

AJ Drummond and RR Bouckaert, 2014

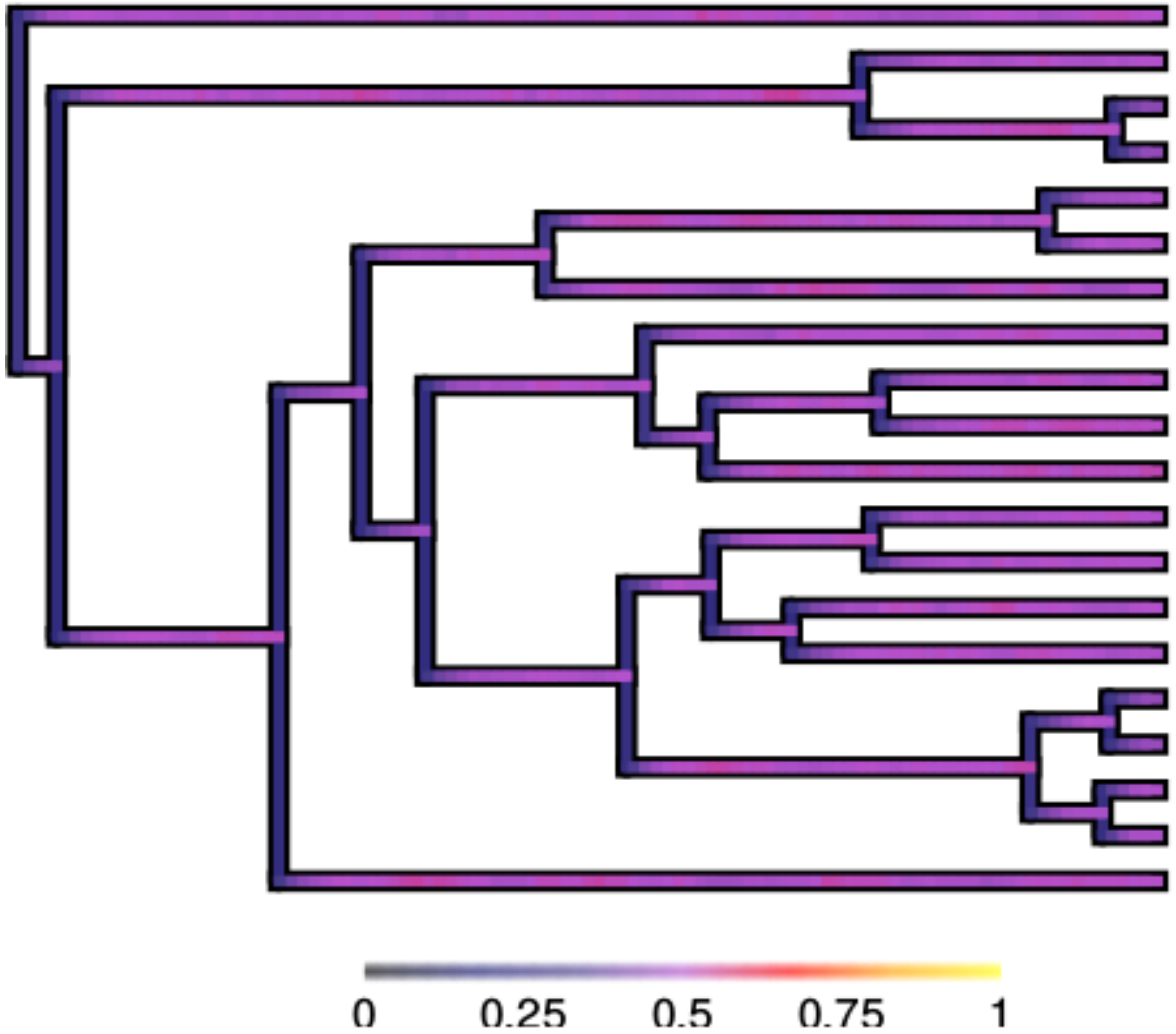
Coalescent constant population model

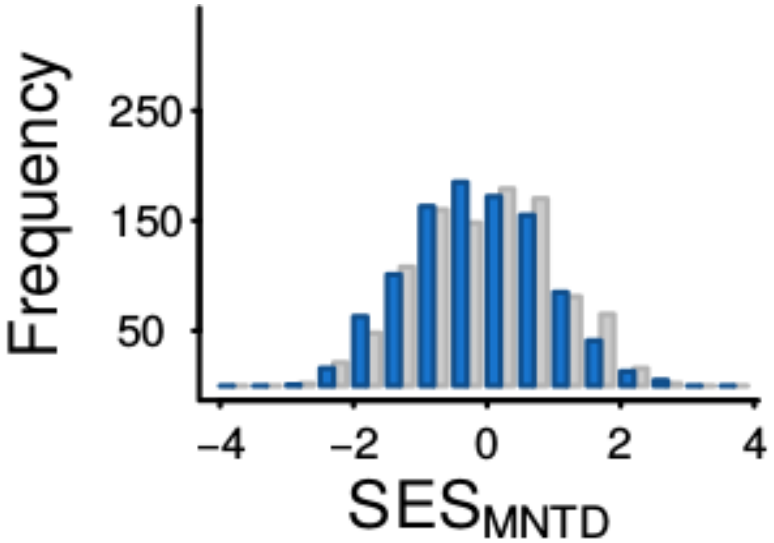
Coalescent exponential population model

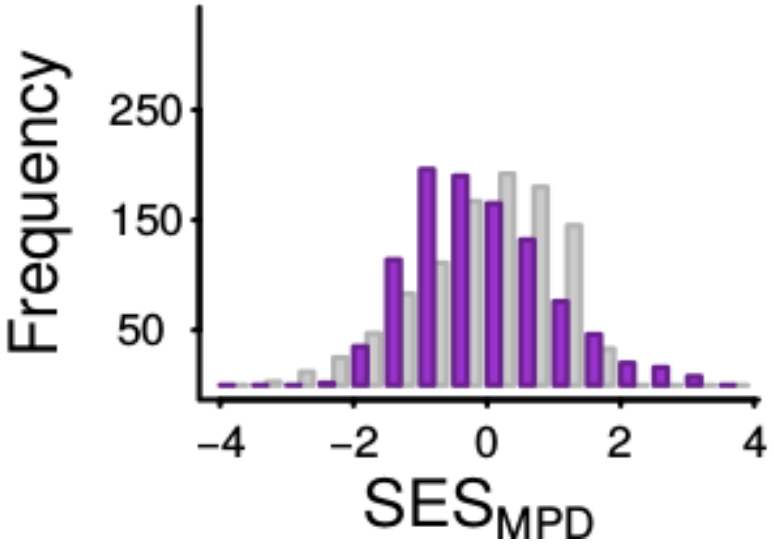
Does model matter?

Random-draw

DAMOCLES







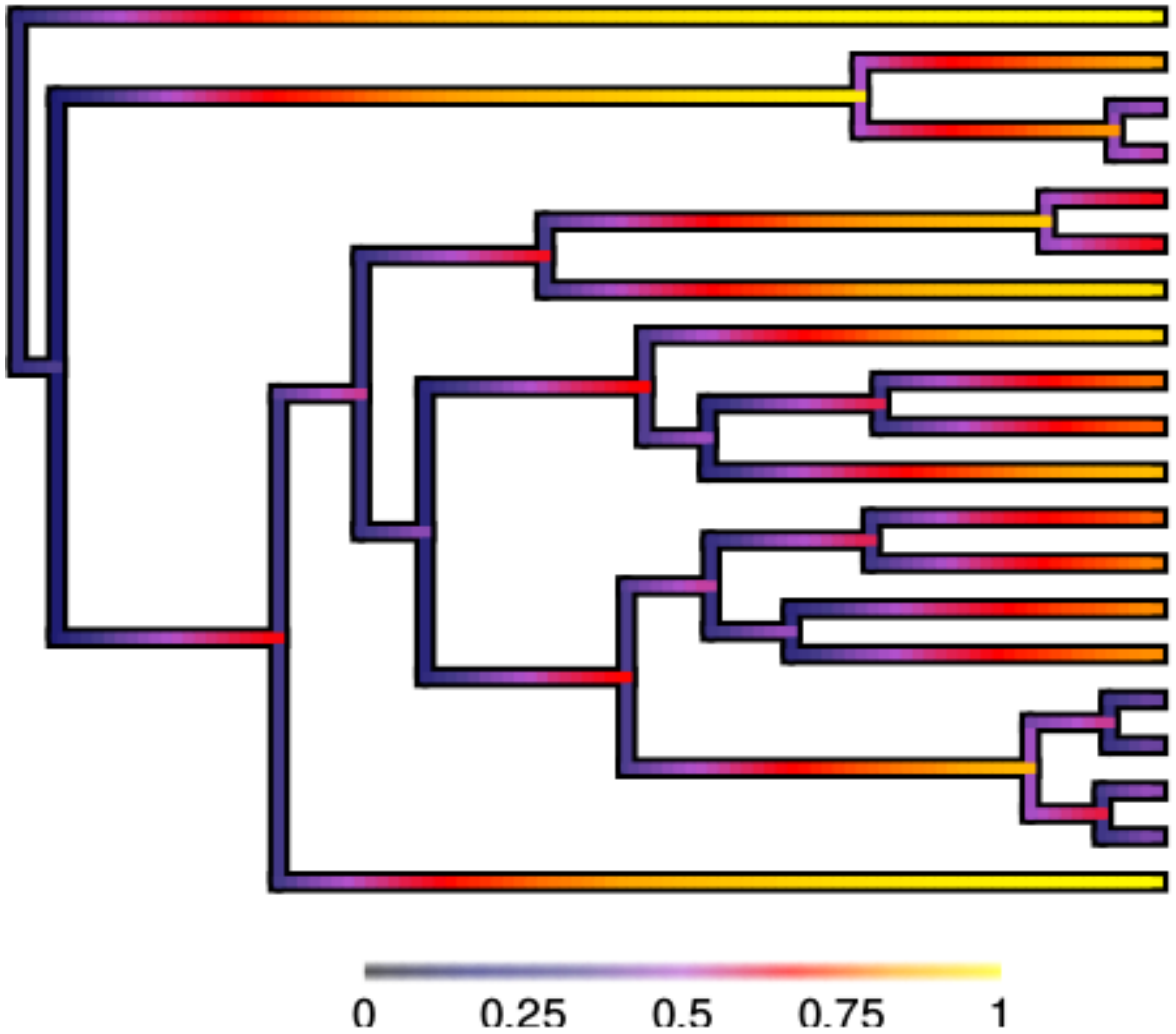
High extinction rate

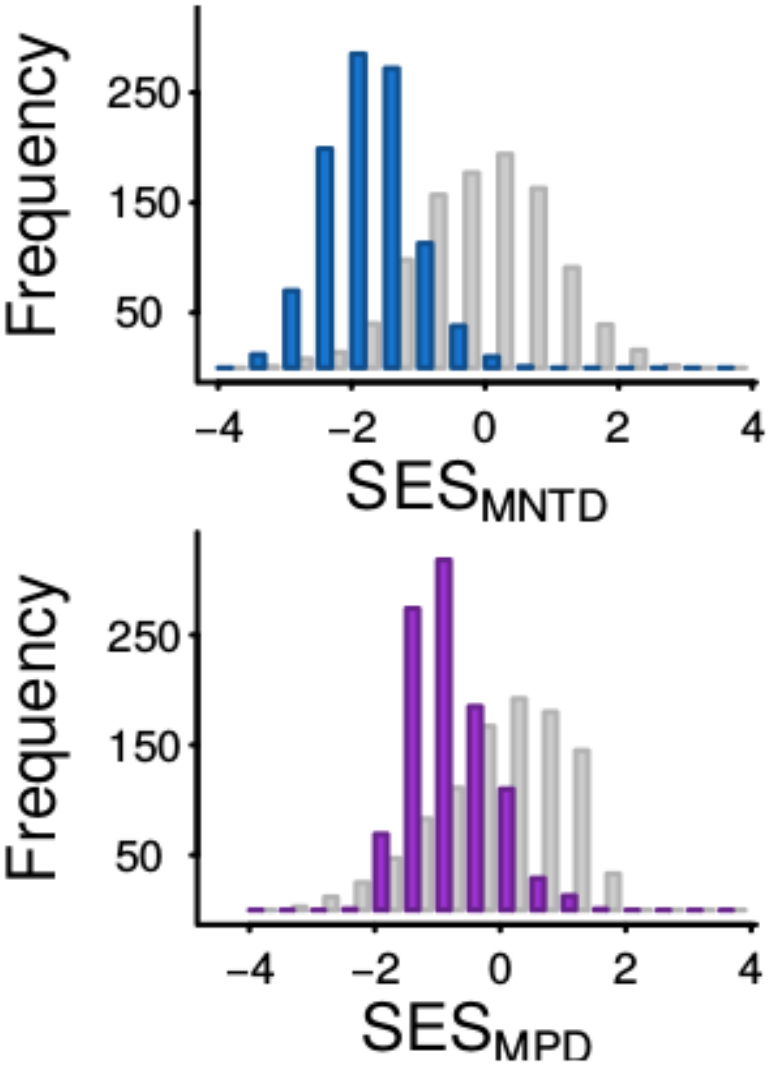
A Pigot & RS Etienne, 2015

Does model matter?

Random-draw

DAMOCLES



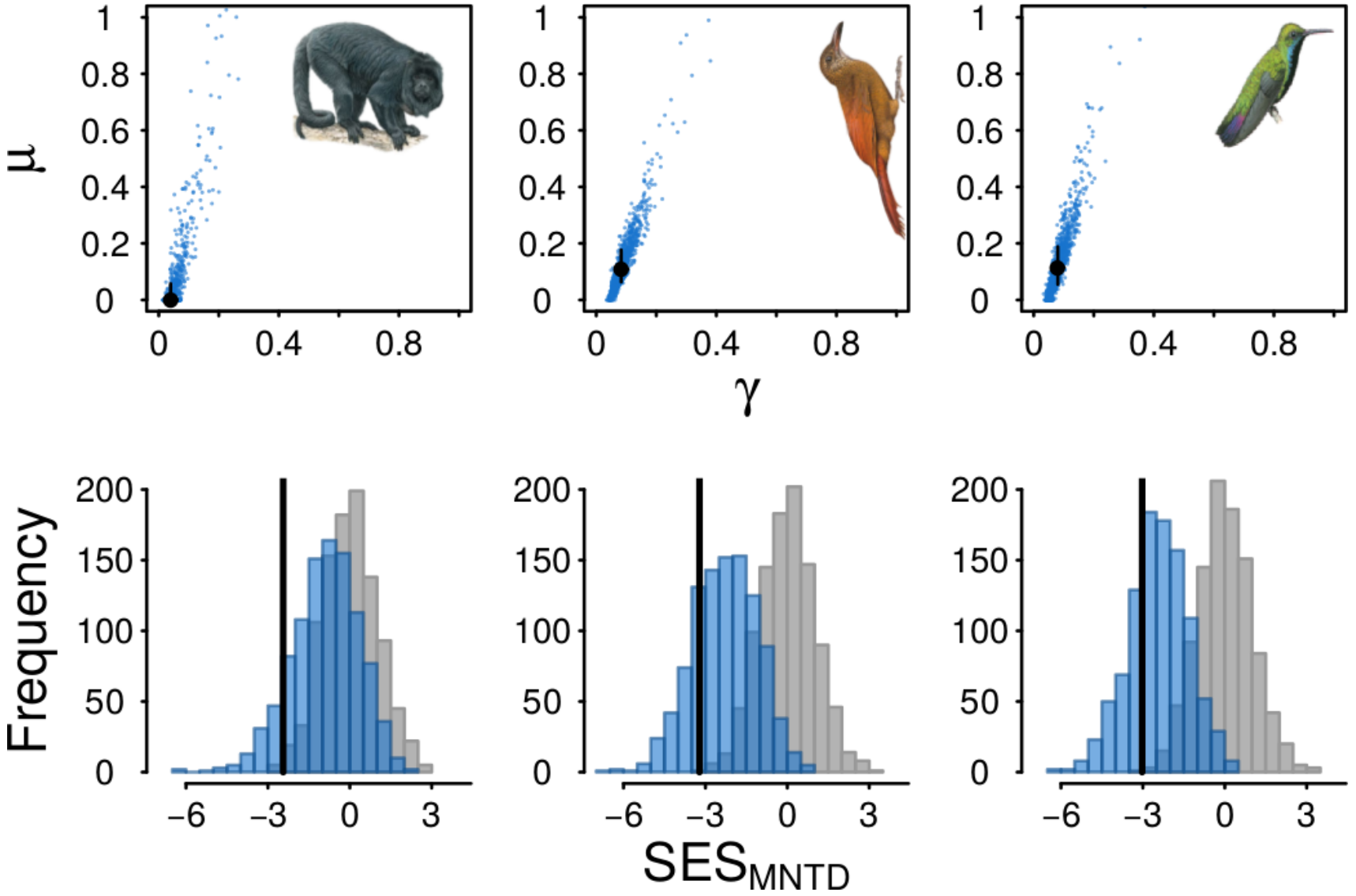


Low extinction rate

A Pigot & RS Etienne, 2015

Does model matter?

Random-draw
DAMOCLES
Observed



A Pigot & RS Etienne, 2015