

Why use probabilistic models?

What questions do we want to answer?

- Statistical models should answer questions
 - What is the relation between two variables?
 - What is the difference between two groups?
 - What are the sources of variation in the data?
 - What is the expected result of an intervention?

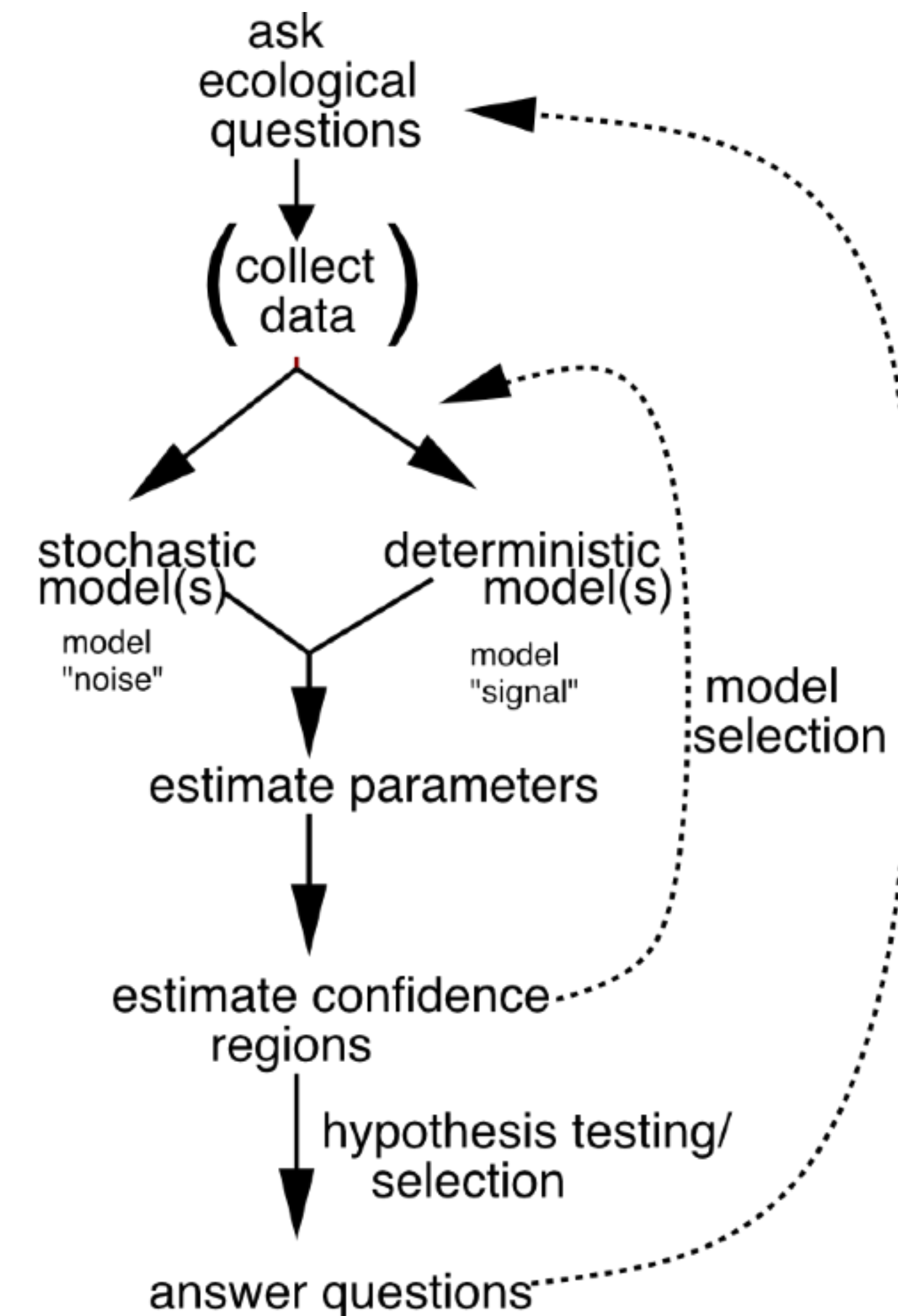


Figure 1.5 Flow of the modeling process.

The basic model

Our hammer

- Our model must:
 - Define a relation between observations and parameters
 - Create a probabilistic description of the system we are studying
 - The description should capture the aspects of the data we are interested in!

