

Statistical Rethinking 2nd edition Homework 9 in INLA

Contents

1.	1
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library(tidyverse)
library(rethinking)
library(dagitty)
library(INLA)
library(knitr)
library(stringr)
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1.

Consider the relationship between brain volume (brain) and bodymass (body) in the data (Primates301). These values are presented as single values for each species. However, there is always a range of sizes in a species, and some of these measurements are taken from very small samples. So these values are measured with some unknown error. We don't have the raw measurements to work with—that would be best. But we can imagine what might happen if we had them. Suppose error is proportional to the measurement. This makes sense, because larger animals have larger variation. As a consequence, the uncertainty is not uniform across the values and this could mean trouble. Let's make up some standard errors for these measurements, to see what might happen. Load the data and scale the the measurements so the maximum is 1 in both cases: