Bayesian Model

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1 Bayesian Generalized Linear Model

1.1 Not Hierarchical

We fit a model to our data, where the occurence of the species $(y_{i,j})$ for site i in projected area j is modeled as,

$$y_{i,j} \sim \text{Bernoulli}(p_{i,j})$$
$$\text{logit}(p_{i,j}) = \alpha_0 + \beta_1 \times \text{dist.human}_{i,j}$$

1.1.1 Priors

$$\alpha_0 \sim \text{Logistic}(0,1)$$
$$\beta_1 \sim \text{Logistic}(0,1)$$