



$$y_i \sim \text{Poisson}(\lambda)$$

$$\phi \sim \text{half-Cauchy}(2.5)$$

$$h_i \sim \text{MultiNormal}(0, \Sigma_p)$$

$$\Sigma_p = \sigma_p^2 \mathbf{V}_{phy}$$

$$\sigma_p \sim \text{half-Cauchy}(2.5)$$

$$\beta \sim \text{Normal}(0, 10)$$