



$$\begin{aligned}
 y_i &\sim \text{Weibull}(\sigma, \alpha) \\
 \eta_{j[i]} &\sim \text{Normal}(0, \tau) \\
 \tau &\sim \text{half-Cauchy}(2.5) \\
 h_i &\sim \text{MultiNormal}(0, \Sigma) \\
 \Sigma &= \mathbf{v} \times \mathbf{V}_{phy} \\
 \mathbf{v} &\sim \text{half-Cauchy}(2.5) \\
 \beta &\sim \text{Normal}(0, 10) \\
 \alpha &\sim \text{half-Cauchy}(2.5)
 \end{aligned}$$