It is important to assess the significance of the model parameters to check the model assumptions that rainfall and forest age are driving changes in the FDC. The model (2) was split into simplified forms, where only the rainfall or time terms were included by setting $b=0$, as shown in Eq. (5), or $Y=0$ as shown in Eq. (6). The component models (5) and (6) were then tested against the complete model, (2).

$$Q_\% = a + \frac{Y}{1 + \exp\left(\frac{T - T_{half}}{S}\right)} \tag{5}$$