

WeibullT model equation is:

$$\log_{10}(N_t) = \log_{10}(A * B + C)$$

where:

$$\begin{aligned} C &= 10^{\log_{10}(N_r)} \\ A &= 10^{\log_{10}(N_0)} - C \\ B &= 10^{-(t/\delta)^p} \end{aligned}$$

t is time and \log_{10} is base 10 logarithm. The parameters to estimate are δ , p , $\log_{10}(N_0)$, $\log_{10}(N_r)$. The noisy output is defined as:

$$\log_{10}(N_t) = \mathcal{N}(\log_{10}(N_t), \%noise)$$

i.e random number from the normal distribution with mean parameter $\log_{10}(N_t)$ and standard deviation parameter $\%noise$.

Example of WeibullT curve

Time unit is mn. Maximal time is 50mn. $\delta = 10.03$, $p = 1.8$, $\log_{10}(N_0) = 9.63$, $\log_{10}(N_r) = -4.08$

