

LogLinearT model equation is:

$$\log_{10}(N_t) = \log_{10}(A \times B + 10^{\log_{10}(N_r)})$$

where:

$$A = 10^{\log_{10}(N_0)} - 10^{\log_{10}(N_r)}$$

$$B = \exp(-k_{max} \times t)$$

t is time, \log_{10} is base 10 logarithm. The parameters to estimate are k_{max} , $\log_{10}(N_0)$ and $\log_{10}(N_r)$.

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 LogLinearT curve

Time unit is mn. Maximal time is 60mn. $k_{max} = 0.5$, $\log_{10}(N_0) = 8$, $\log_{10}(N_r) = 0$

