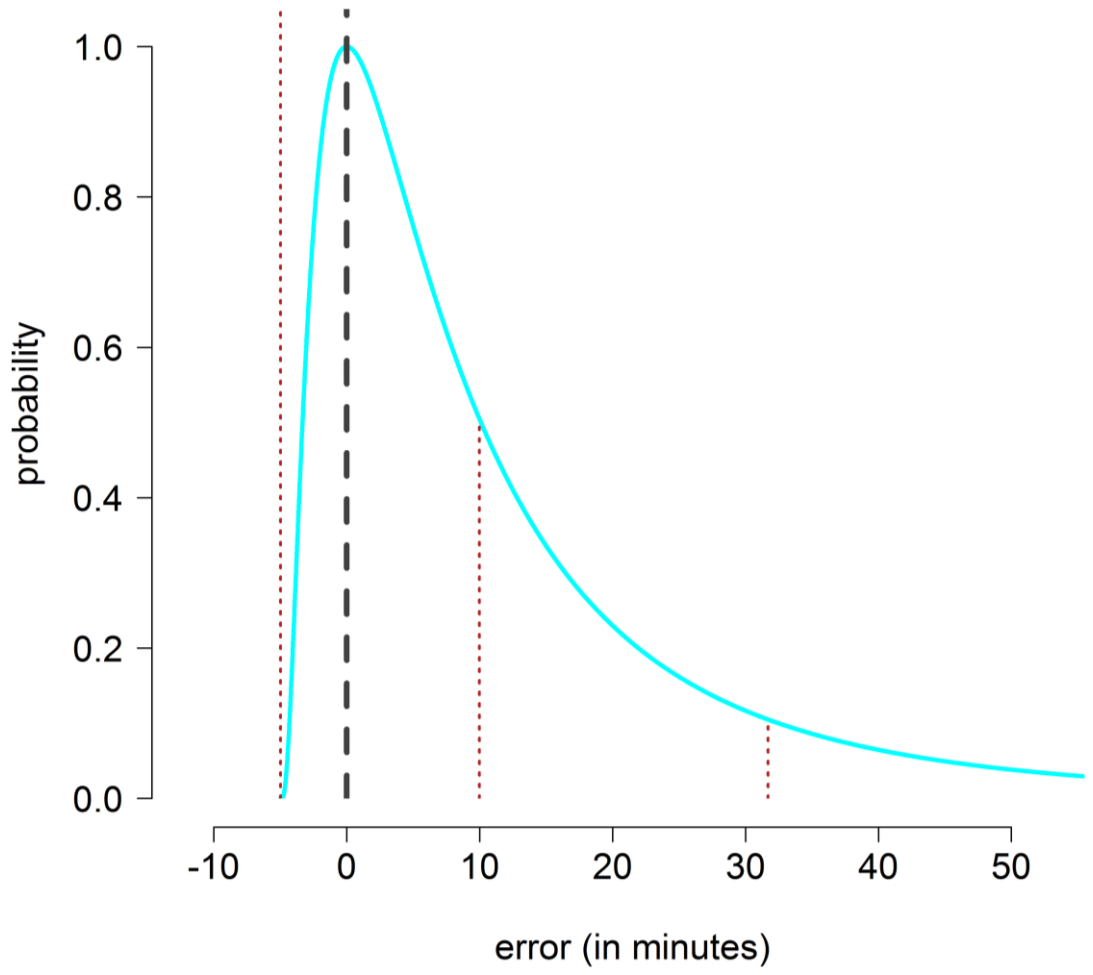

Figure A1. A twilight event uncertainty structure, assuming a log normal distribution, as determined by the function `twilight_error_estimation` (`probGLS` package). This distribution depicts the uncertainty structure around a sunrise and would be mirrored along the stripped line for a sunset. For this study the values of the "shape" (*log(μ)*), "scale" (*log(σ^2)*) and "delay" parameters have been set to 2.49, 0.94 and 0, respectively. The uncertainty represents a maximum error before sunrise/ after sunset of 5 minutes, 50% probability error after sunrise/ before sunset of 10 minutes and 10% error after sunrise/ before sunset of 31.7 minutes. The parameters are chosen as they resemble the twilight error structure of open habitat species described in [1].

1. Lisovski S, Hewson CM, Klaassen RHG, Korner-Nievergelt F, Kristensen MW, Hahn S: **Geolocation by light: accuracy and precision affected by environmental factors.** *Methods in Ecology and Evolution* 2012, **3:**603-612.