Supplementary Material


Figure S1: Combinations of n (time interval for which the average position is calculated) and $m$ (number of consecutive signals to calculate average position) with a match in path length measured using video recordings and calculated using positioning data for six exemplarily chosen sows. Note that all other combinations of $n$ and $m$ let to a mismatch. $m=200$ and $n=40$ were chosen as parametrisation..


Figure S2 (a): Relationship between the number of position samples per day and the path length $\left(S_{n, m}\right), R^{2}=0.5742$, (b) Relationship between the corrected path length ( $\mathrm{S}_{\text {corr) }}$ ) depending on the number of positions sampled per day


Figure S3: Comparison of activity index Path from one sow when using samples from the last 15,30 or 50 days for the linear regression

