



S6 Fig. Diagnostic plots for the two-state hidden Markov model with the best fit on overall dynamic body acceleration. (a) Time series of pseudo-residuals from the model with zero-centered line (red). (b) Quantile-quantile (Q-Q) plot for pseudo-residuals against the standard normal distribution with 1:1 line (red). (c) Pseudo-residual sample autocorrelation function. (d) Distribution of pseudo-residuals with fitted normal curve (red).