

$$\text{WASO} = \sum_{\substack{\text{Sleep} \\ \text{Onset} \\ \text{Time}}}^{\substack{\text{Sleep} \\ \text{Awakening} \\ \text{Time}}} \begin{cases} \| \text{WakefulPeriod} \|, \\ 0 \\ \| \text{WakefulPeriod} \| > 5, \\ \text{otherwise} \end{cases}$$

$$\begin{aligned}
 \text{Sleep Efficiency} &= \frac{\text{Total Sleep Time}}{\text{Total Minutes in Bed}} \\
 &= \frac{\| \text{Sleep Period} \| - \text{WASO}}{\| \text{Sleep Period} \| + \text{Latency}}
 \end{aligned}$$