Multimedia Appendix 2. Nonparametric analysis of circadian rest-activity rhythms.

Mathematical calculations of interdaily stability (IS), intradaily variability (IV) are as below:

$$IS = \frac{n \sum_{h=1}^{24}(\bar{x}_h - \bar{x})^2}{24 \sum_{i=1}^{n}(x_i - \bar{x})^2}$$

$$IV = \frac{n \sum_{i=2}^{n}(x_i - x_{i-1})^2}{(n-1) \sum_{i=1}^{n}(x_i - \bar{x})^2}$$

where n is the total number of activity count data points, $\bar{x}$ is the average of the 24-hour activity counts, $\bar{x}_h$ is the hourly average of activity counts, and x_i is the individual activity count data point.