Interpreting the Correlation Results

- Measurements:
 - 1. The correlation distance function is measured every 24 seconds of biological time.
 - Local correlation is the average over the first third.

 Global correlation is the average of the entire distance.

 The mean of all samples at each point of measurement is then curve-fit.

Methods of Analysis

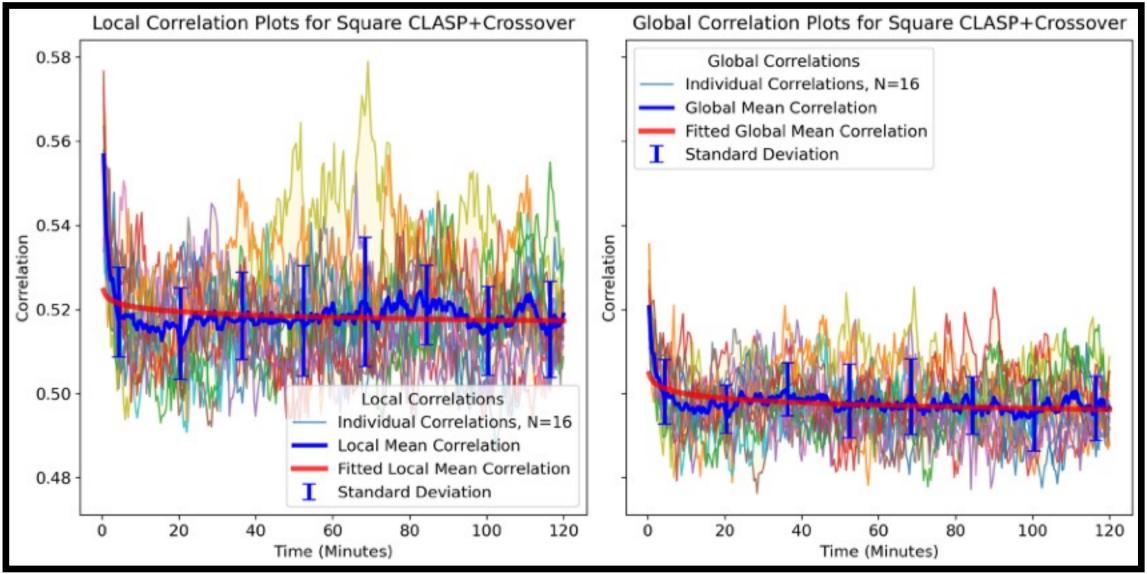
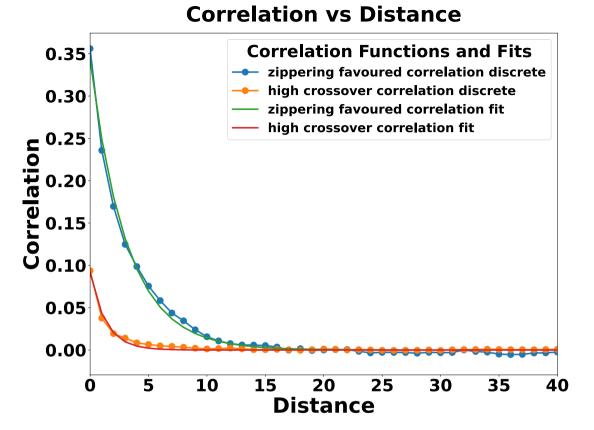


Figure 42: Plots of local correlations (left) and global correlations (right).



Call back of Figure 36: correlation vs distance function results for the previous CMA grammar. Note the scale difference from subtracting 0.5!

Methods of Analysis

Interpreting the Correlation Results

- Measurements:
 - 1. The correlation distance function is measured every 24 seconds of biological time.
 - Local correlation is the average over the first third.
 - Global correlation is the average of the entire distance.
 - The mean of all samples at each point of measurement is then curve-fit.

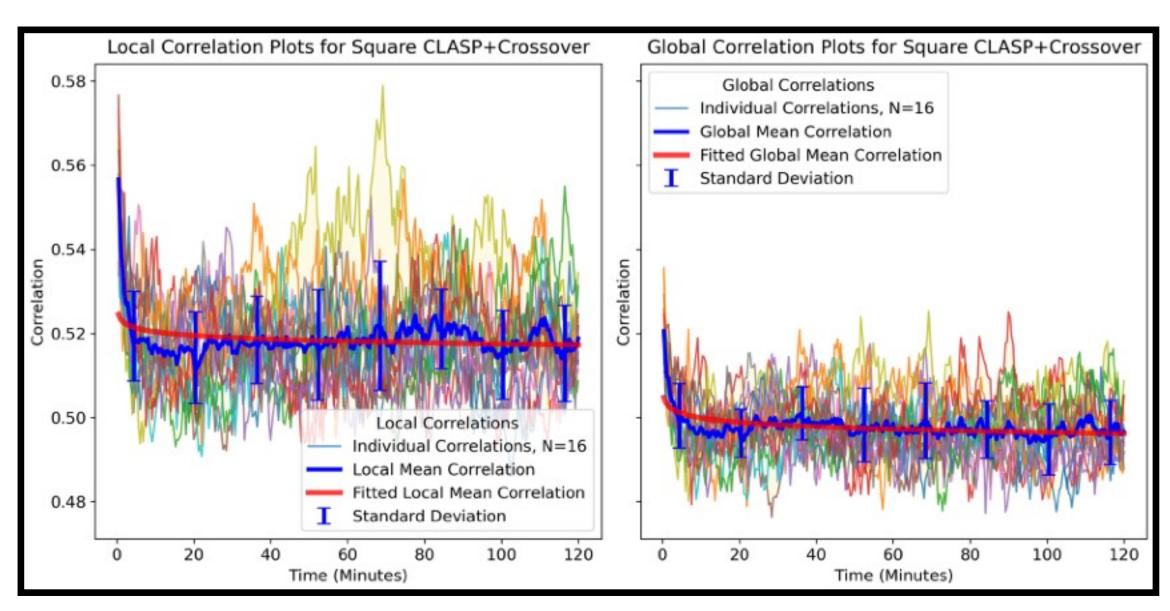


Figure 42: Plots of local correlations (left) and global correlations (right).

Methods of Analysis

Interpreting the Orientation Results

- Measurements:
 - 1. Orientation angles are also collected and a mean histogram is computed.
 - For qualitative analysis a kernel density function is estimated¹.

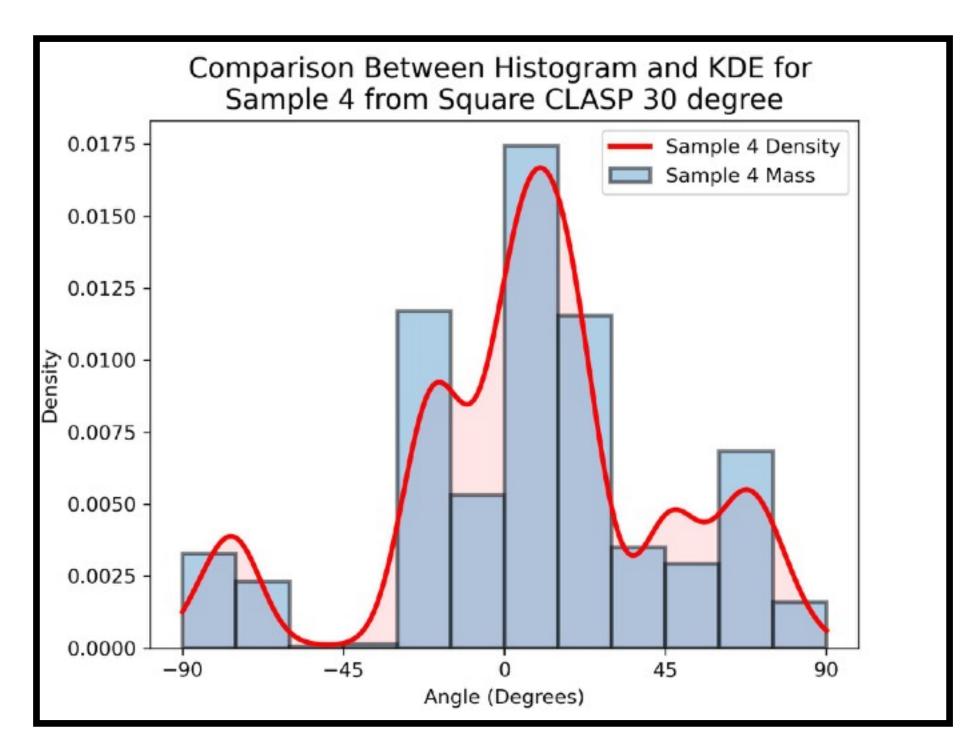


Figure 43: Closer look at one example for the KDE with a Gaussian kernel and the Scott bandwidth of the orientation PDF.