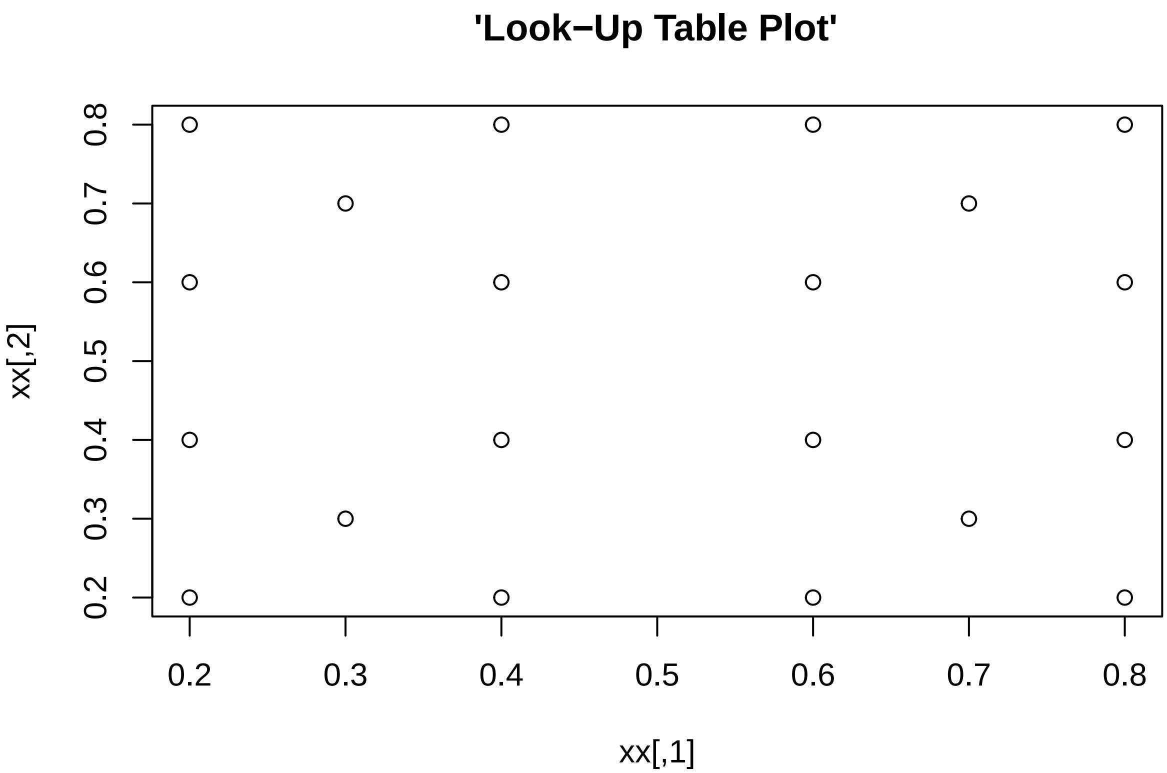
Tessellation README

2023-01-23

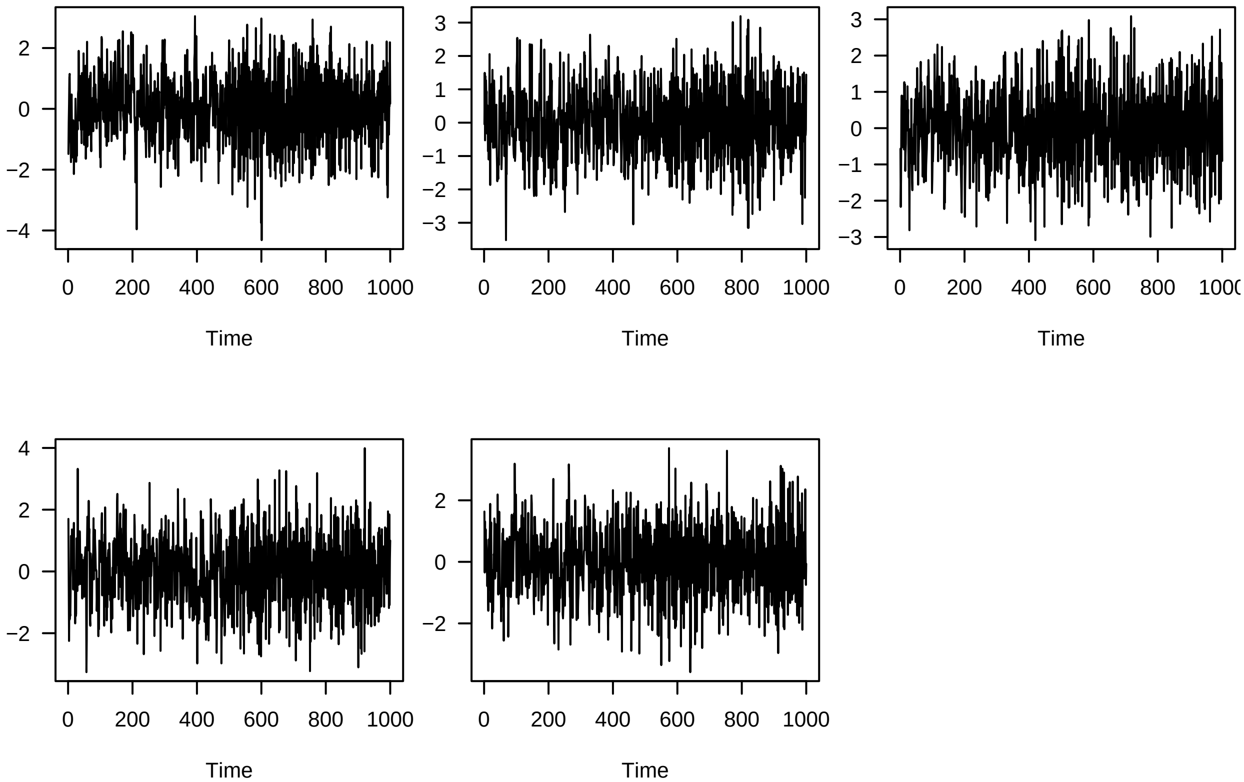
Abrupt-Abrupt Simulate Data

The simulated twenty abrupt-abrupt time series begins with creating a matrix (20×2). Each row in the matrix will be used to determine the ϕ values for the simulated time series. The plot below shows this matrix. This matrix is used as a "Lookup Table" for the parameters in generating these time series.

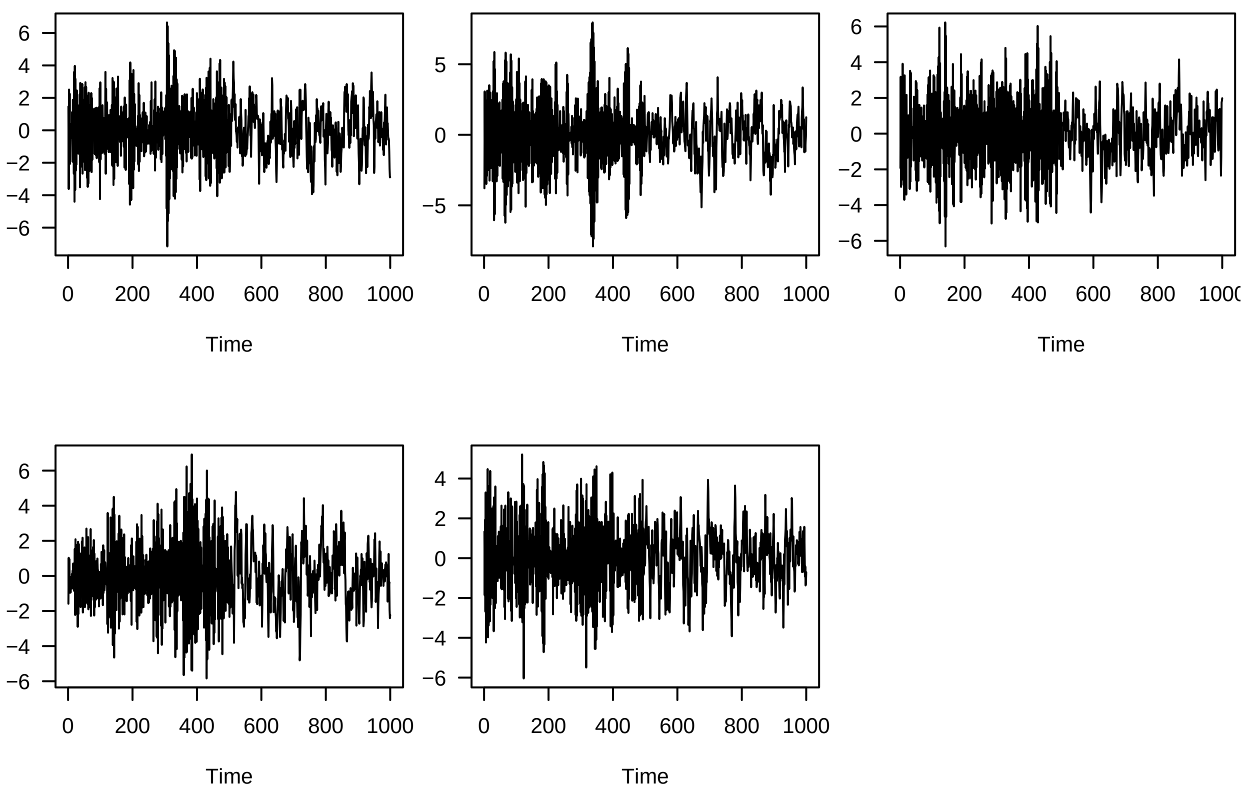


The following explains how the data for the abrupt-abrupt simulated data is generated. The first set of time series below were created by using an AR(1) model with $\phi = 0.3$ for the first 500 time points and then combined with an AR(1) model with $\phi = -0.5$ for the last 500 time points.

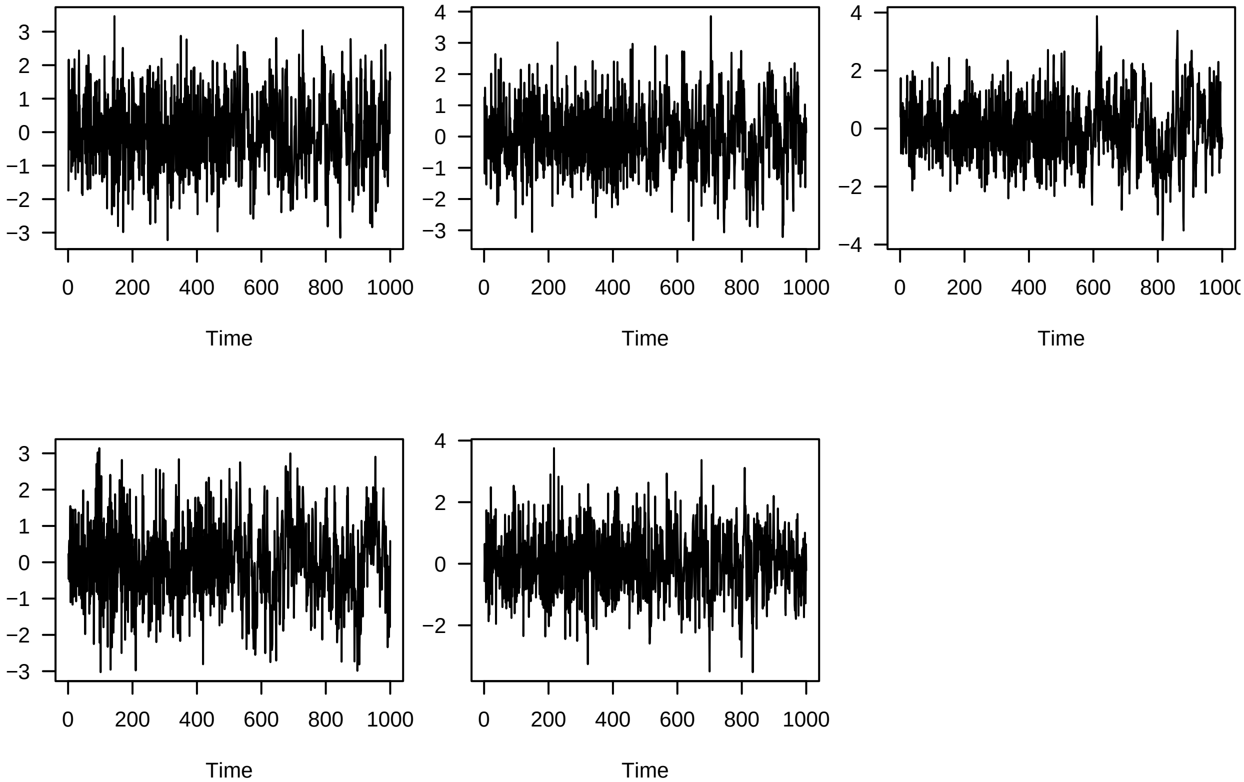
AR(1), phi = 0.3 and phi = −0.5



AR(1), phi = −0.9 and phi = 0.7



AR(1), phi = −0.3 and phi = 0.5



AR(1), phi = 0.9 and phi = −0.7