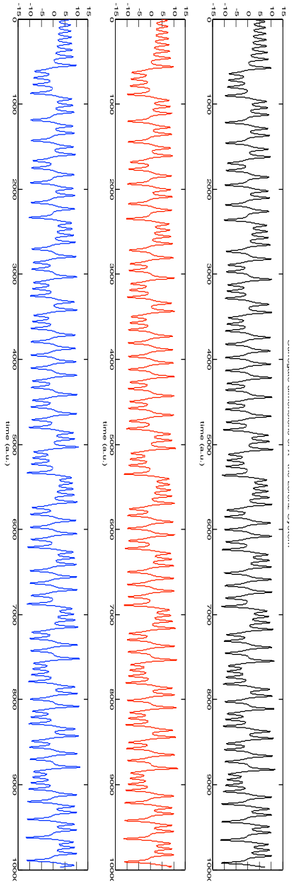
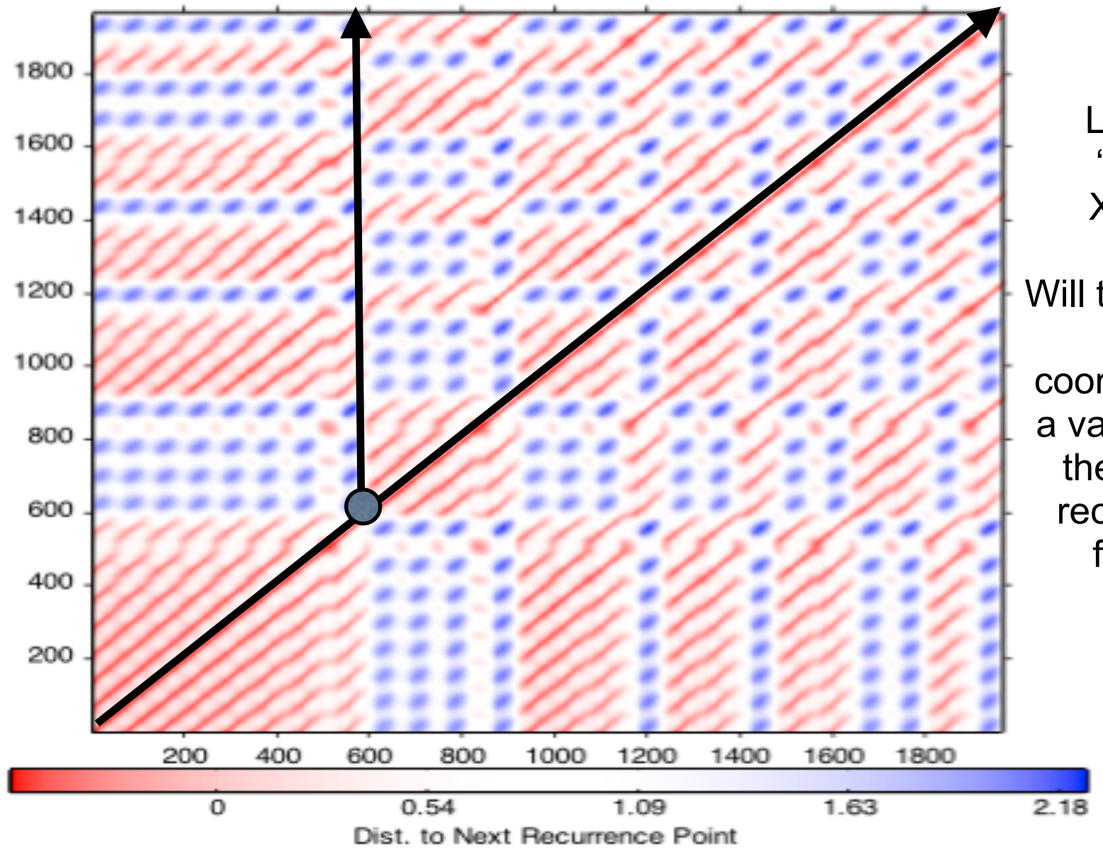




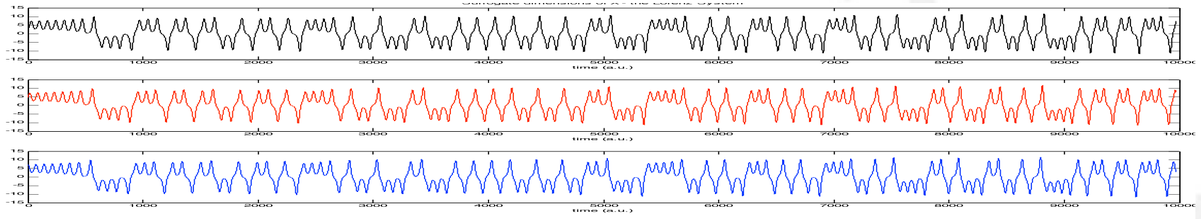
Looking "up" at X(600):

Will the current X,Y,Z coordinate (or a value within the radius) recur in the future?

X

$X_{t+\tau}$

$X_{t+2\tau}$

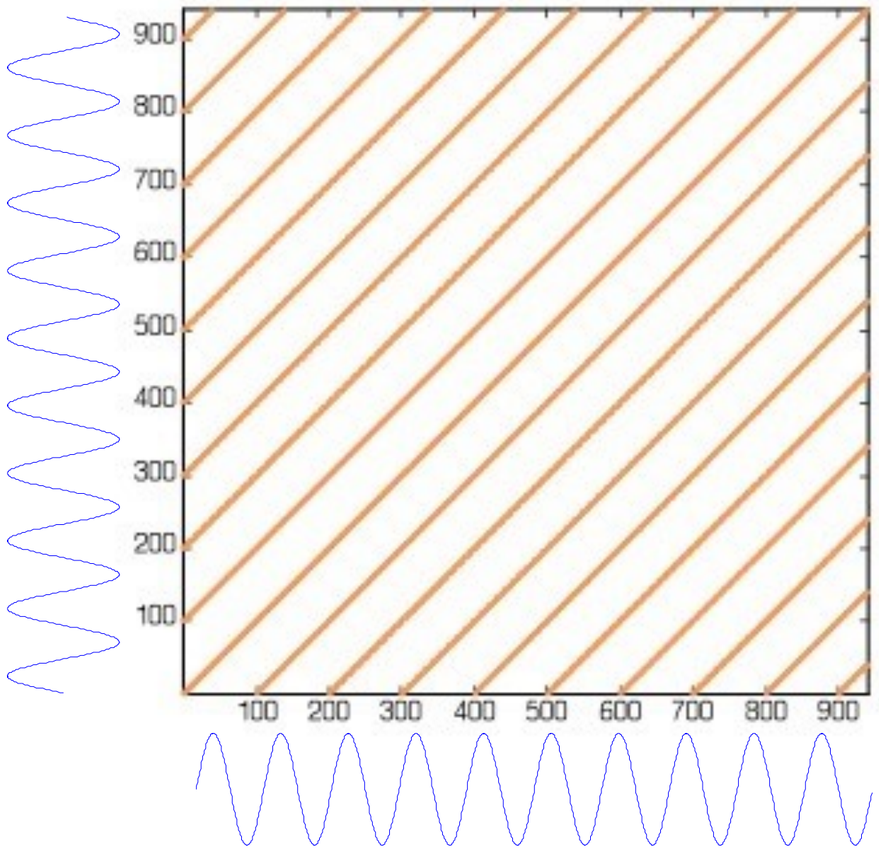


Quantifying Recurrence

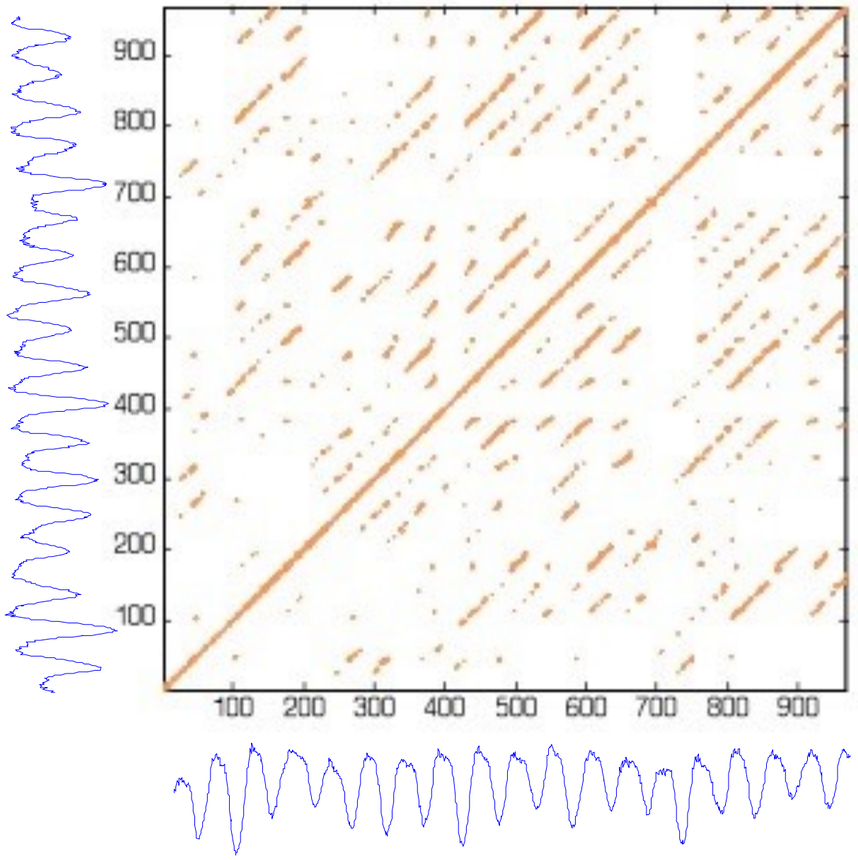
Shockley 2007

$$\%REC = \frac{\text{Number of recurrent points}}{\text{Total number of locations}} \times 100$$

Sine
%REC = 2.9



Limb oscillation to a metronome
%REC = .72



- Note that %REC is the number of points in phase space that recur, relative to all possible points that could recur. It is influenced by the radius you choose!
When comparing groups or subjects: keep %REC constant.