

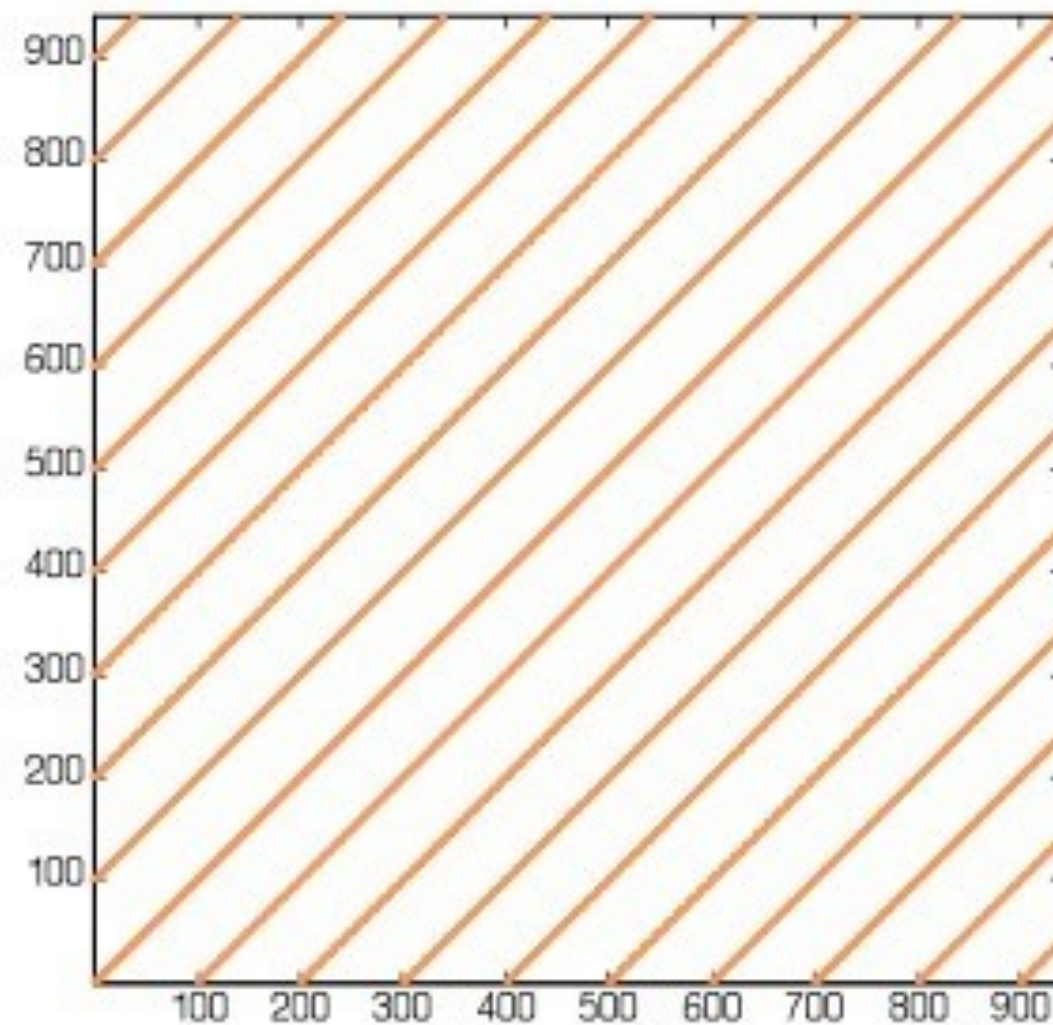
MAXLINE

How long the system can maintain a recurring pattern ~ “Stability”

MAXLINE = The longest sequence of recurring points

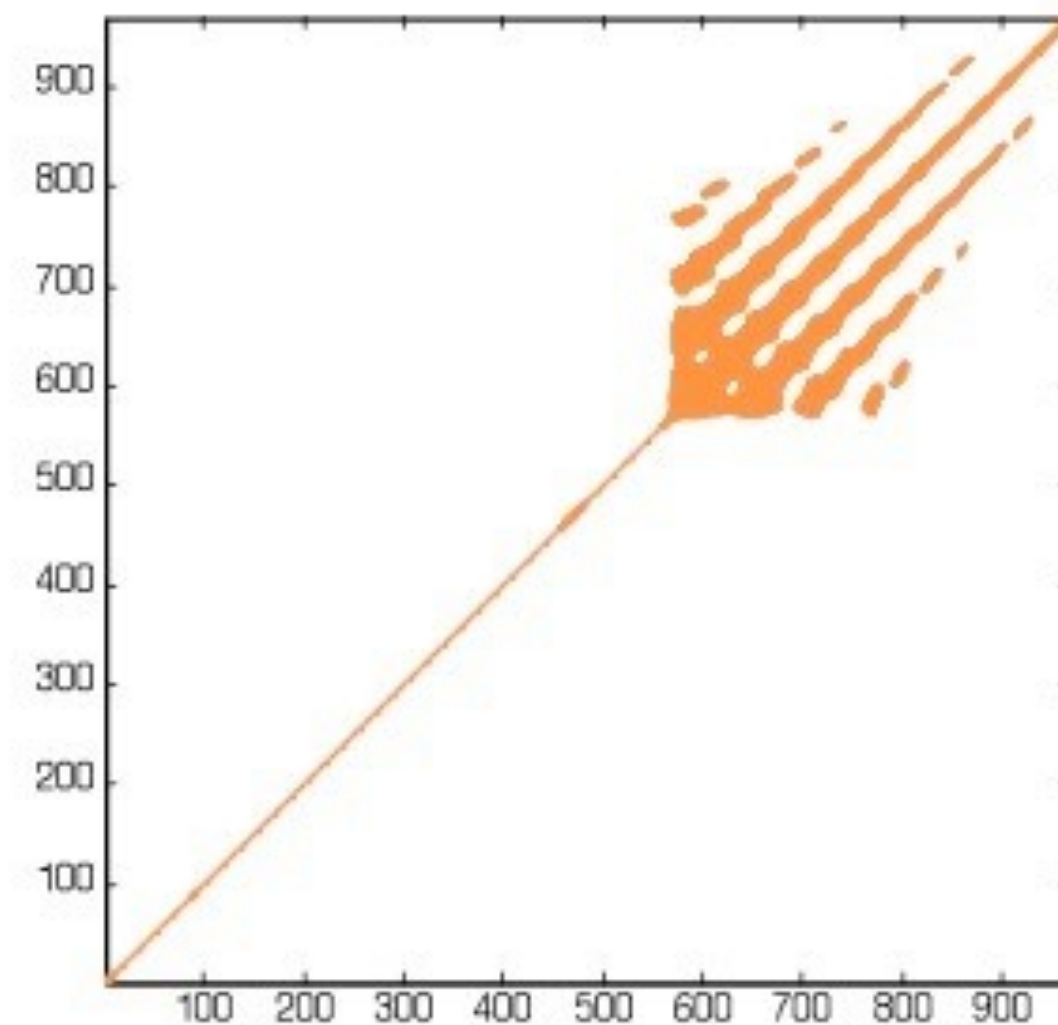
Sine

%REC = 2.9
MAXLINE = 938



Lorenz

%REC = 2.9
MAXLINE = 410



$1/\text{maxline} = \text{Divergence}$ (Thought to be an estimate of largest Lyapunov exponent)

RQA measures

- %REC or RR (recurrence rate)
- %DET (is the data from a deterministic process or random?)
- MAXLINE (maximal diagonal line length)
- DIV (divergence, $1/\text{maxline}$, suggested estimate of largest Lyapunov exponent)
- Average LINE (average diagonal line length)
- ENTROPY (complexity of deterministic structure)
- TREND (is the data stationary?)
- %LAM (laminarity, points on vertical lines, connected to Laminar phases)
- TT (Trapping Time, average length of vertical lines: How long the system stays in a specific state)
- Create your own...