Bernoulli Process

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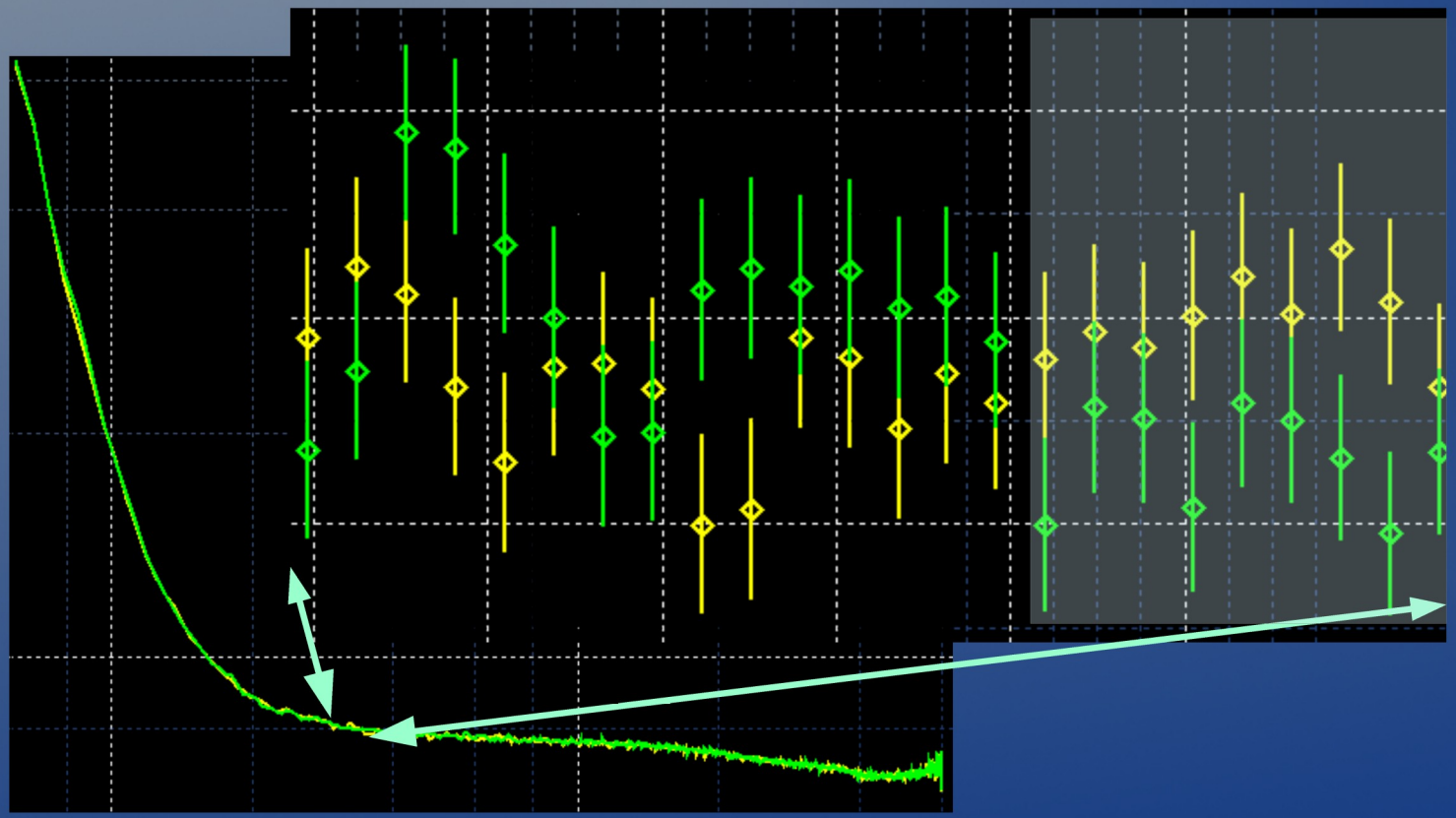


N = 24

1,1,
0,0,0,0,
1,1,
0,0,0,0,0,0,0,
1,1,1,1,1,1,1,1,1

C = 9

P-value = 0.01658

Test hypothesis “the [two] curves are similar”

Given a sequence of N trials with a “clump” of C

$$P(N,C) = 2^{-C} + \sum_{i=1}^{C} 2^{-i} P(N-i, C)$$

$$P(N,C) = 0 \text{ for } N < C$$

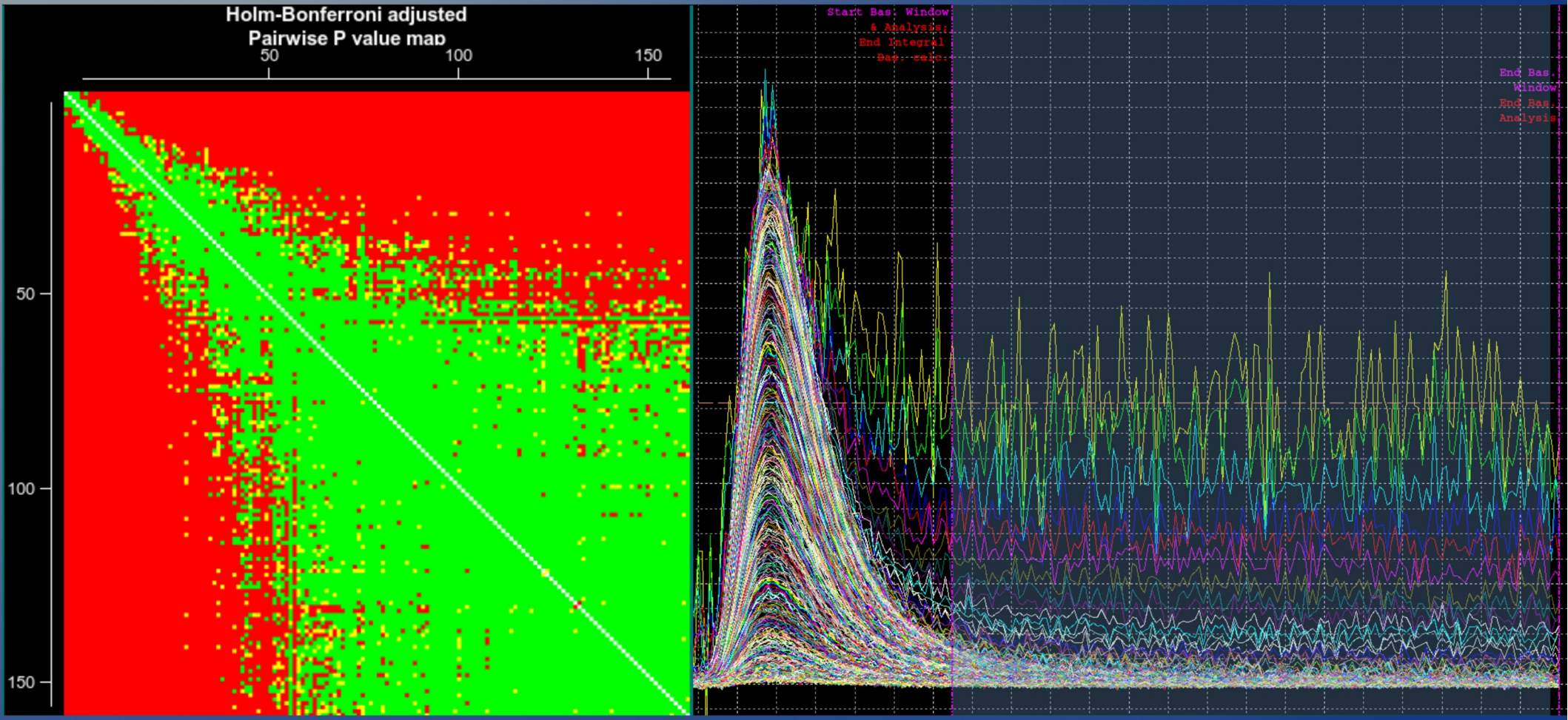
$P \geq 0.05$: hypothesis could not be rejected

$0.05 > P \geq 0.01$: hypothesis might be rejected

$0.01 > P$: hypothesis is rejected

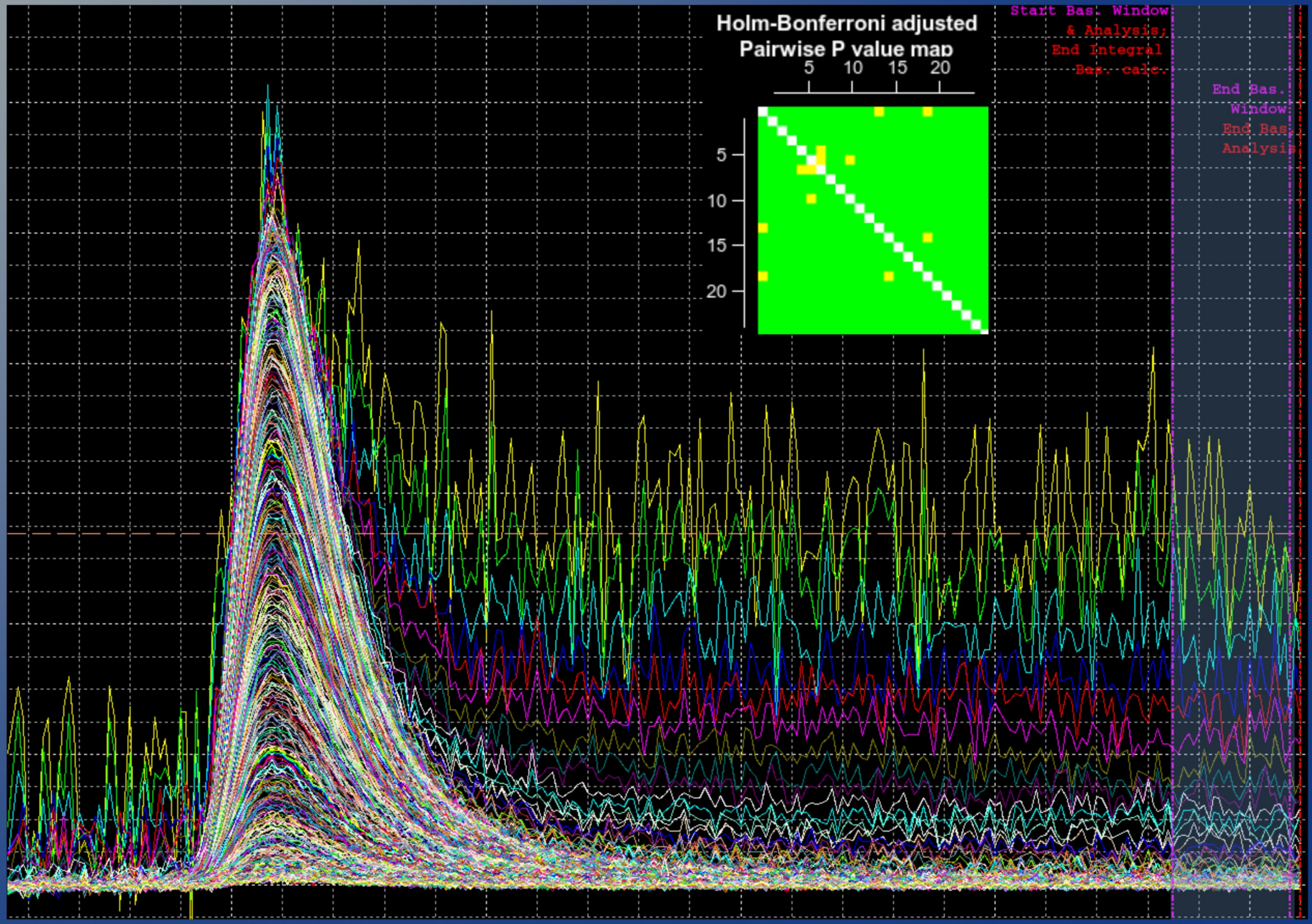
Recurrence Formula: *Bloom, D. M. Math. Mag. 69, 366-372, 1996.*

Pairwise P value map



Brookes, E. et. al. [2016]
J. Appl. Cryst. 49.

Lysozyme I(t)



Intensity (linear)

time or frame (linear)