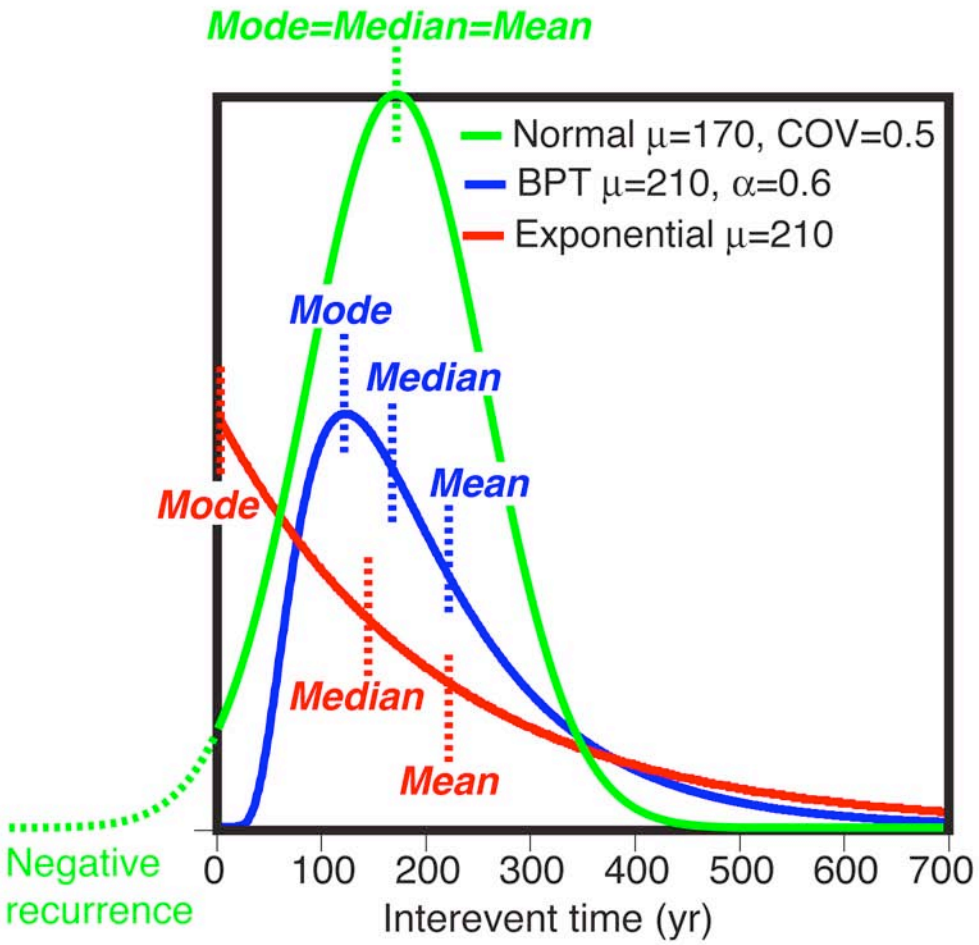
Earthquake recurrence distribution characteristics



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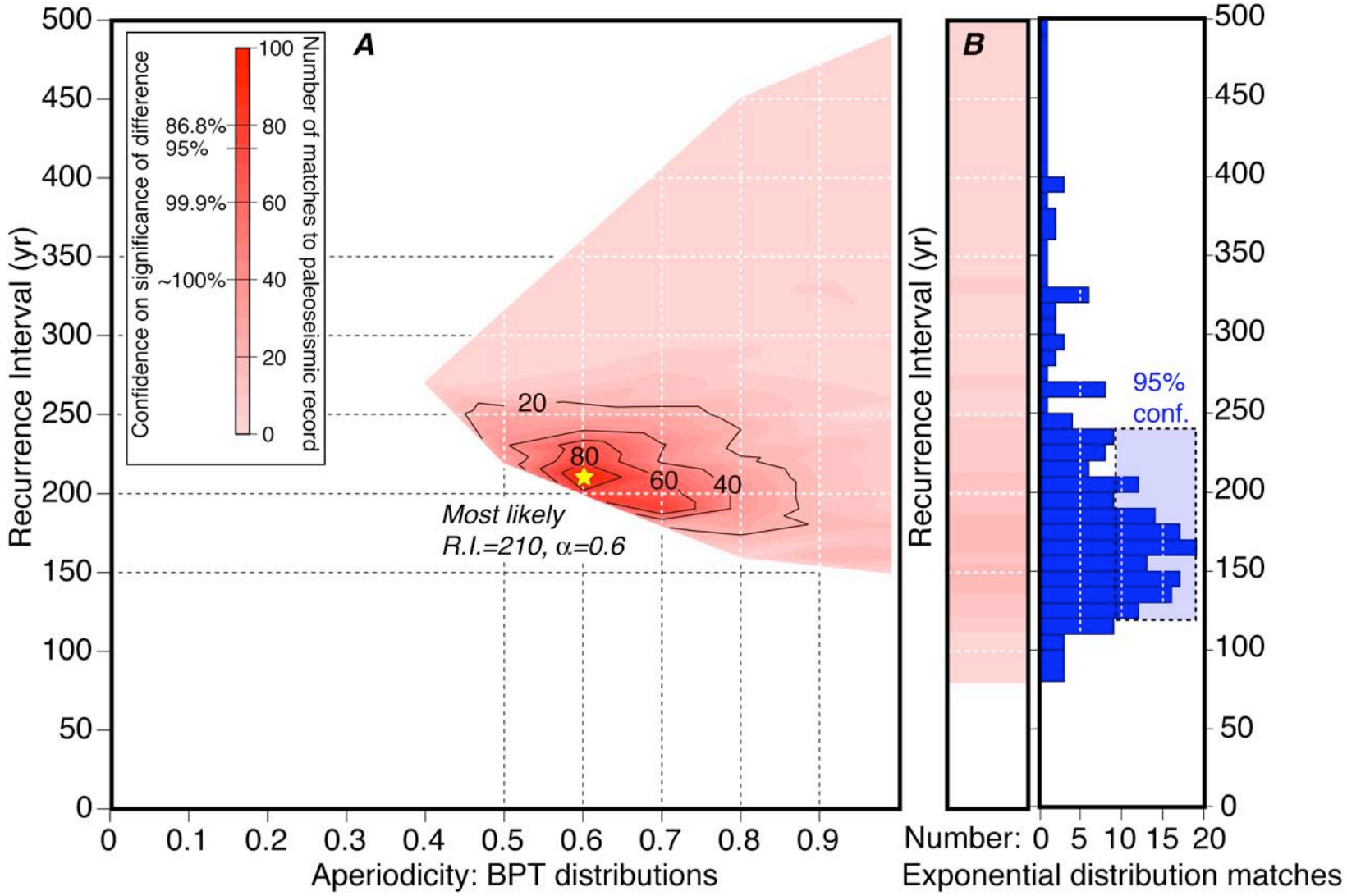
Earthquake recurrence on the south Hayward fault is most consistent with a time dependent, renewal process



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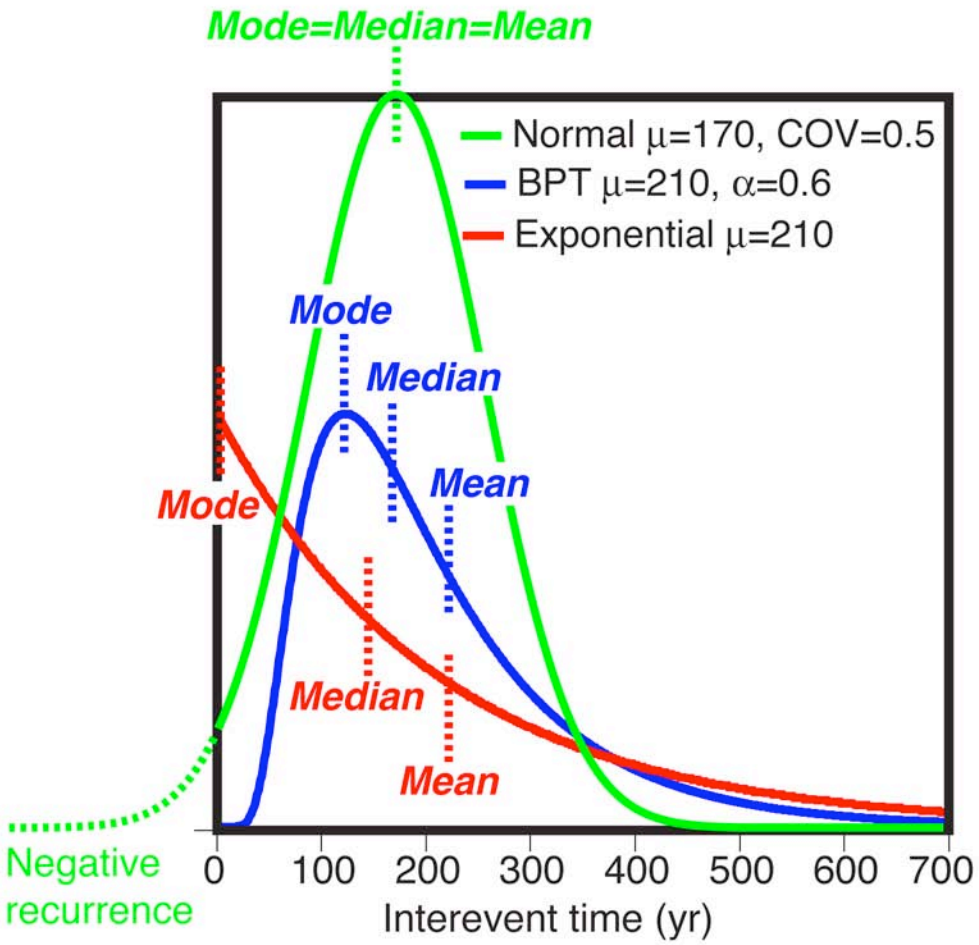
Earthquake recurrence distribution characteristics



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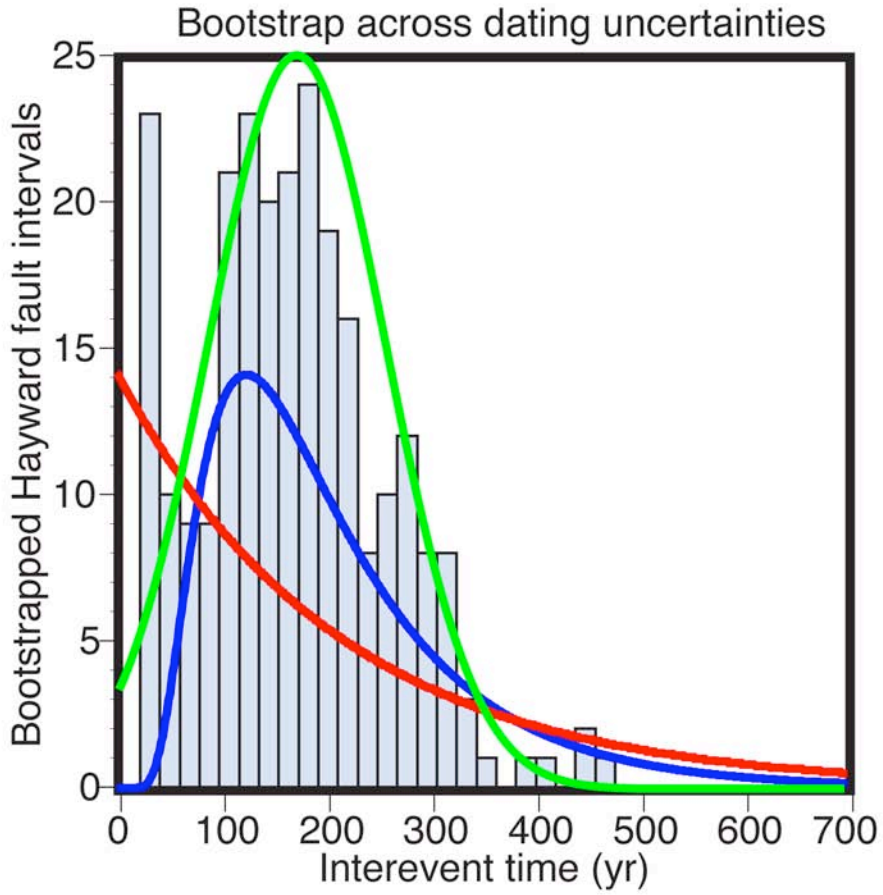
Earthquake recurrence distribution characteristics



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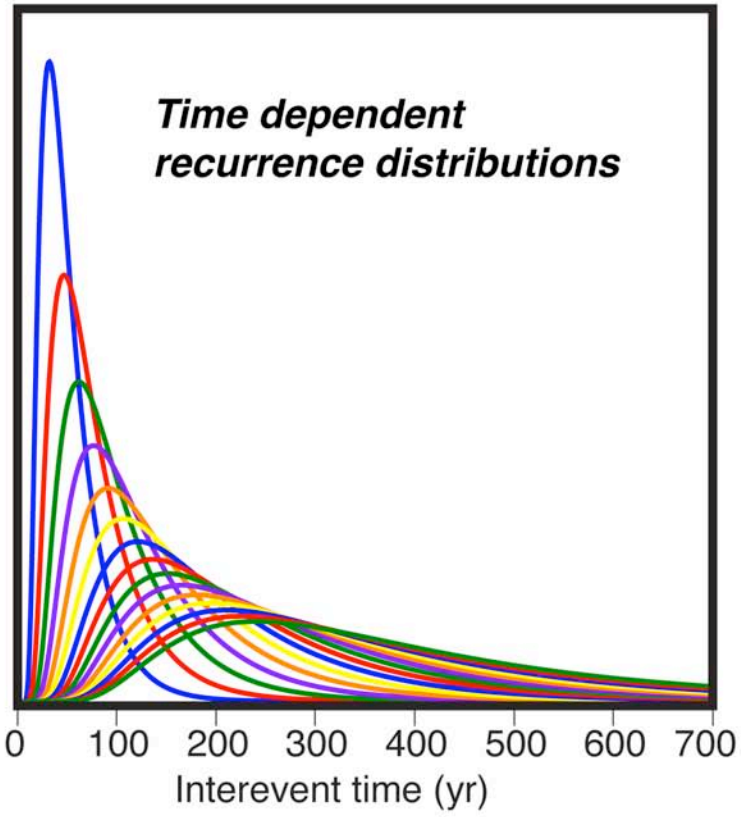
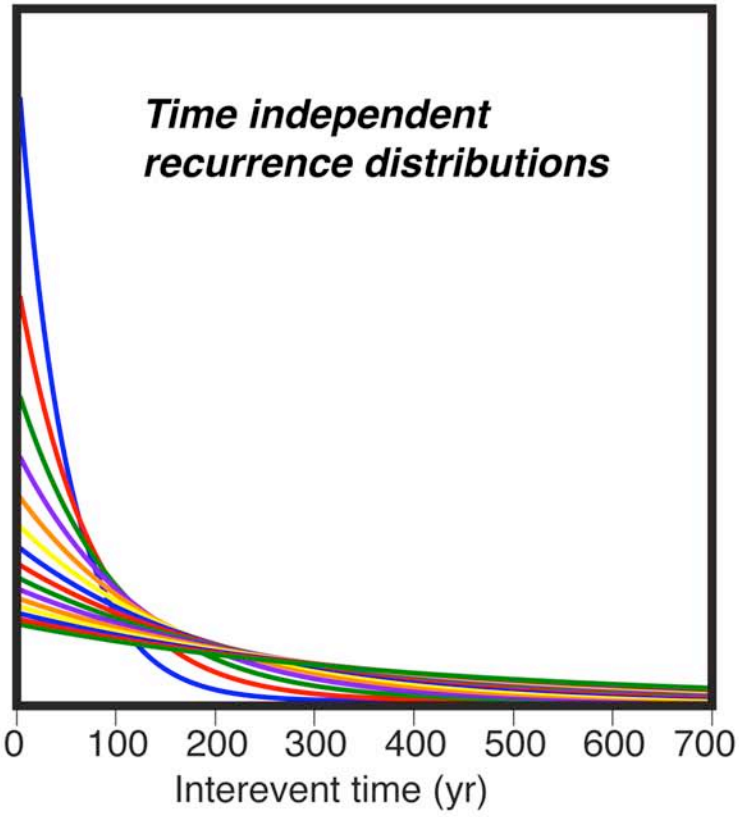
Monte Carlo method samples all parts of all recurrence distributions

We don't care so much about mean, mode etc because distribution characteristics are predefined





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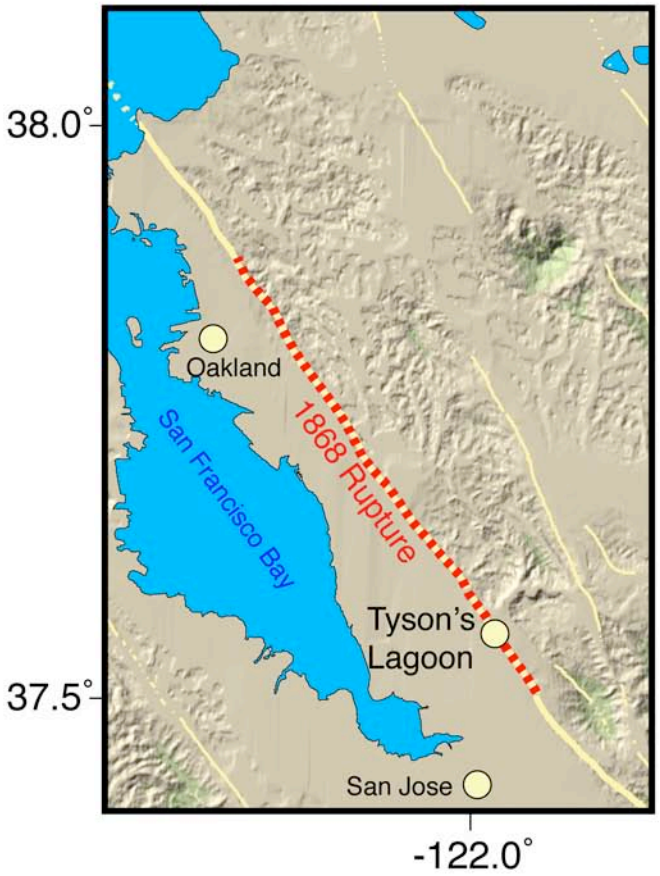
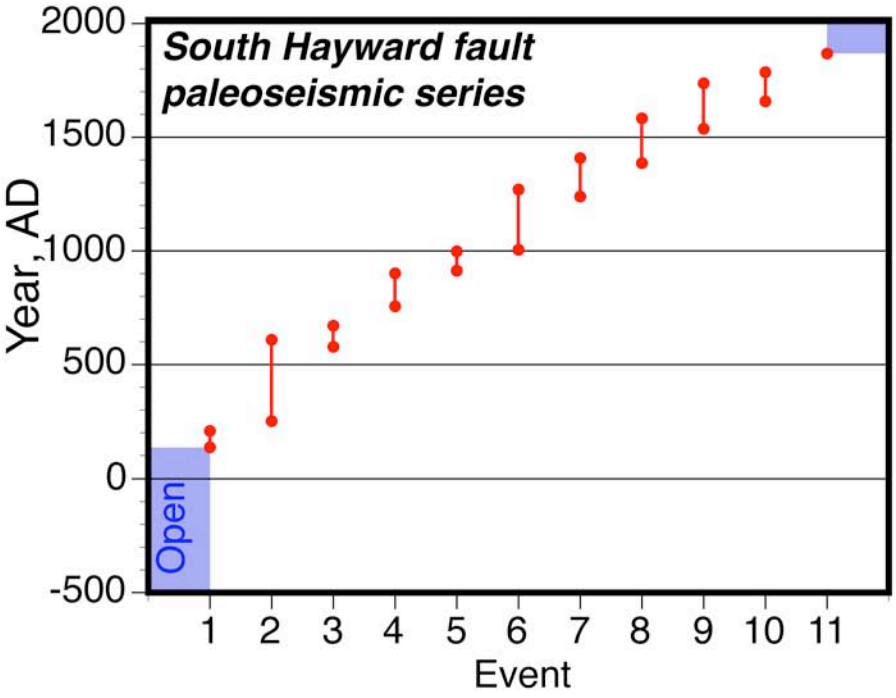
Earthquake recurrence on the south Hayward fault is most consistent with a time dependent, renewal process





Earthquake sequence on the south Hayward fault from Lienkaemper and Williams [2007]

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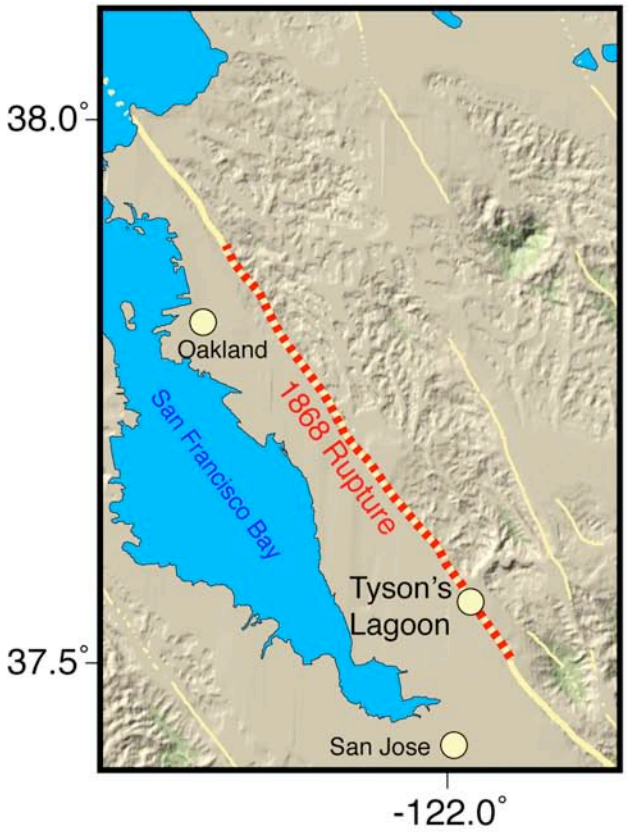
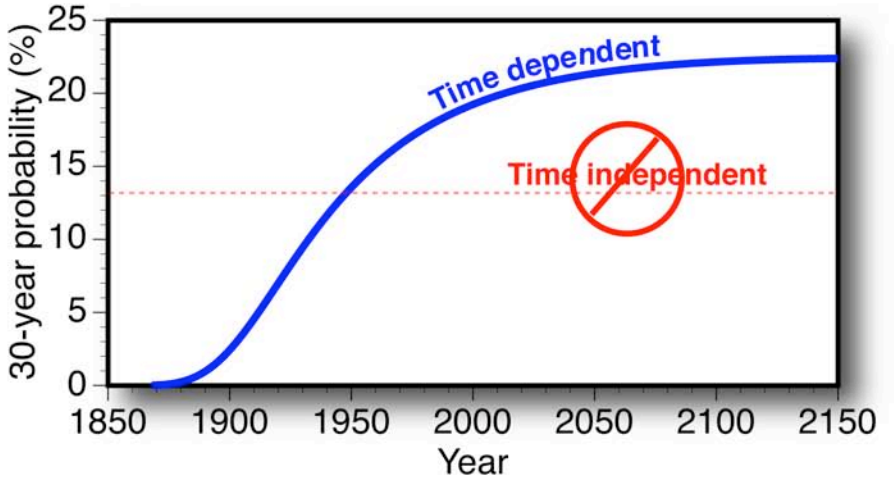


South Hayward fault has:

Mean recurrence interval μ~210 years

Coefficient of variation α~0.6

Large earthquake probability ~20%



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