

Why measurable ^{14}C in ancient samples
does not support a young earth

-- OR --

How we can verify that
“historical science” works:
Example using radiocarbon

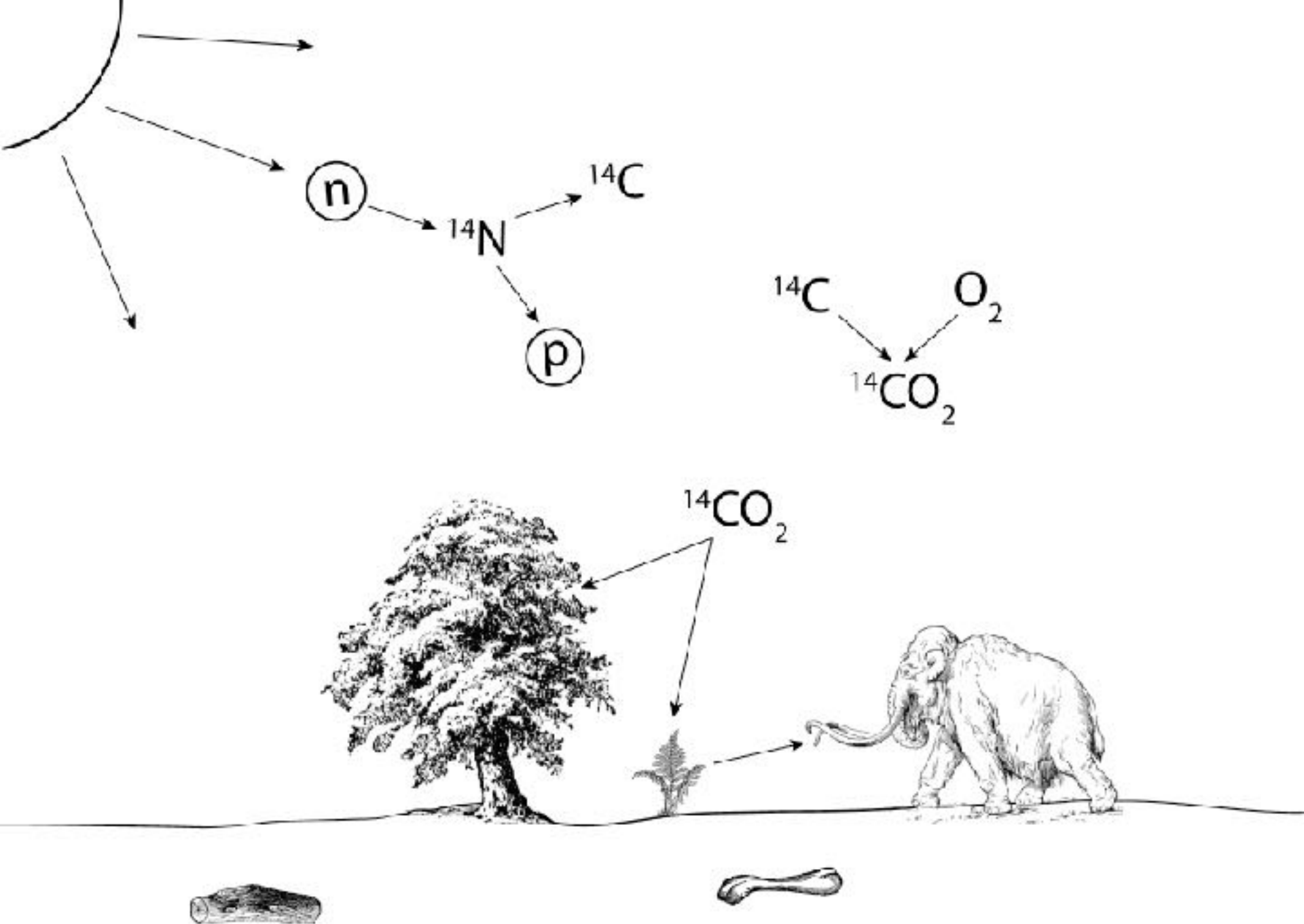
Gregg Davidson and Ken Wolgemuth

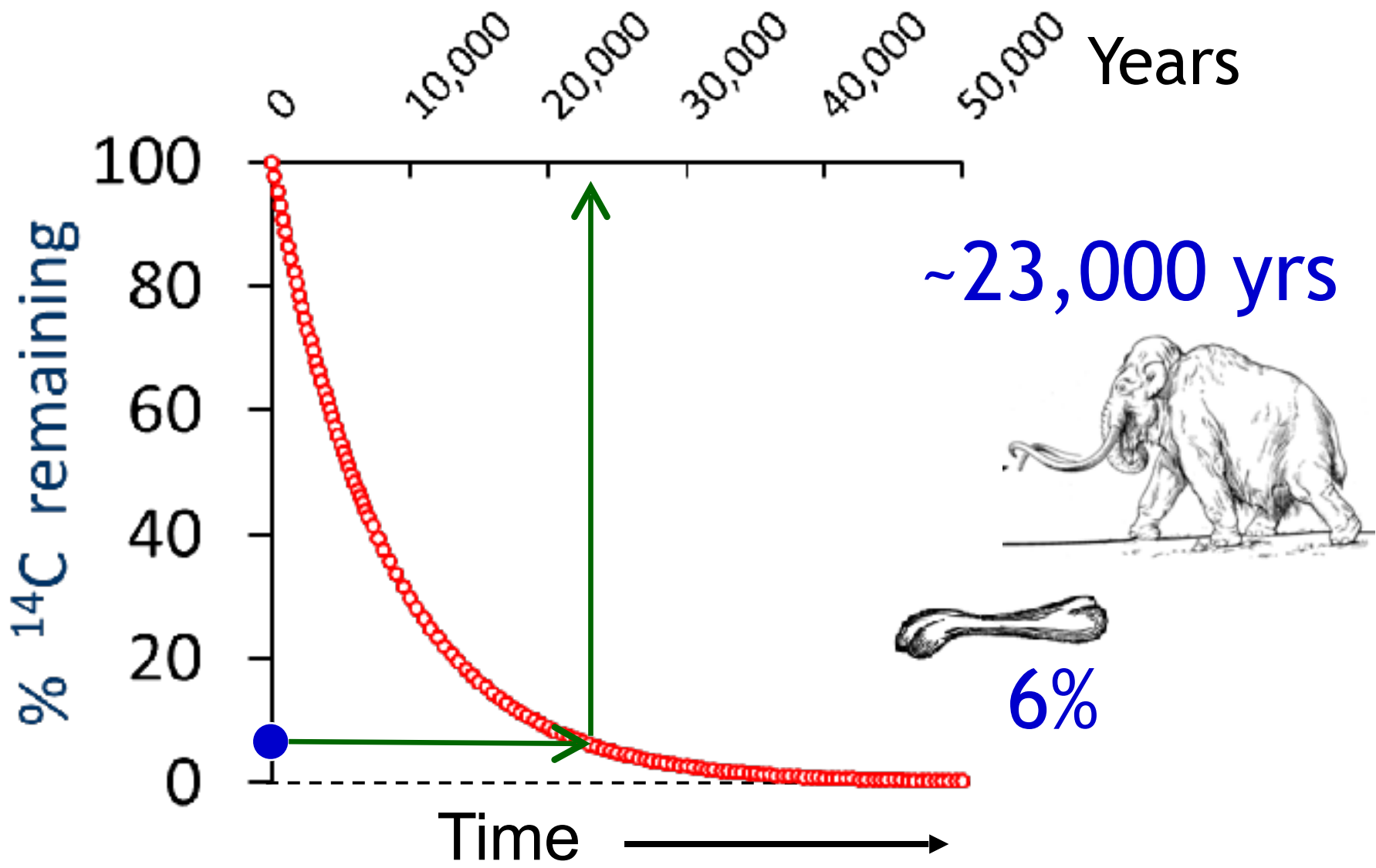
BIOLOGOS
Voices

SOLID ROCK
LECTURES
EARTH AS GOD'S CREATION



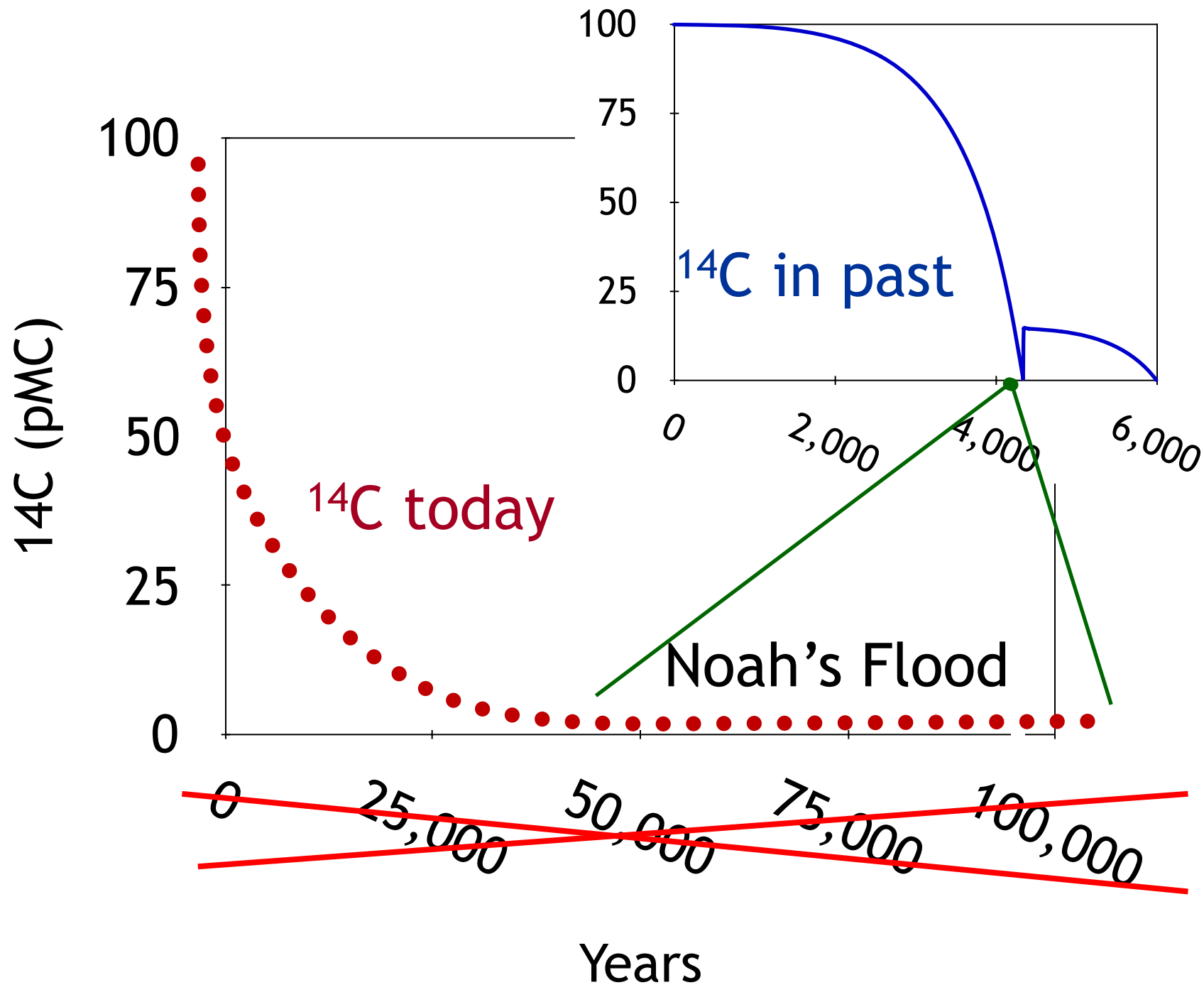
THE UNIVERSITY of
MISSISSIPPI





- young earth challenges -

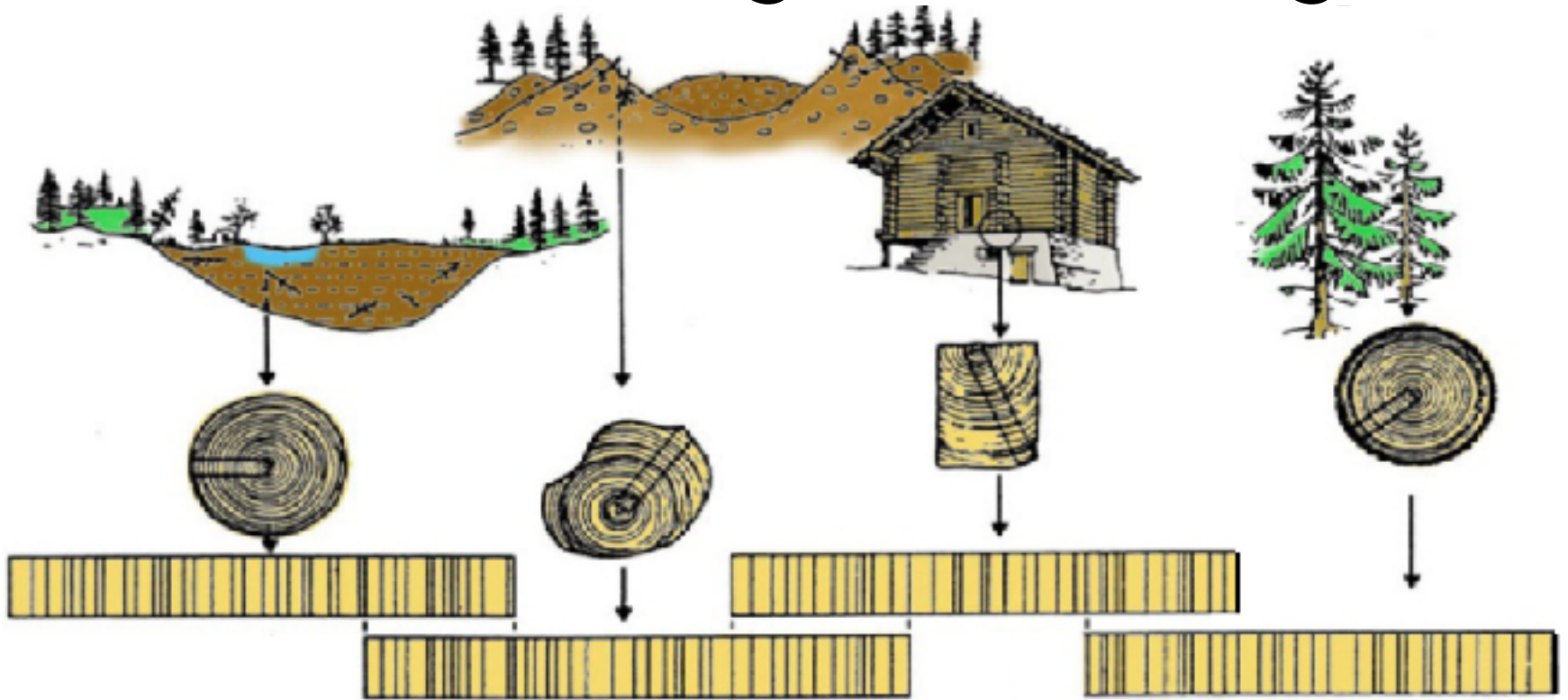
- conventional assumptions untestable
- decay rates faster in the past
- ^{14}C built up in the atmosphere only after the Flood
- measurable ^{14}C in samples “millions of years old” is evidence of a young earth



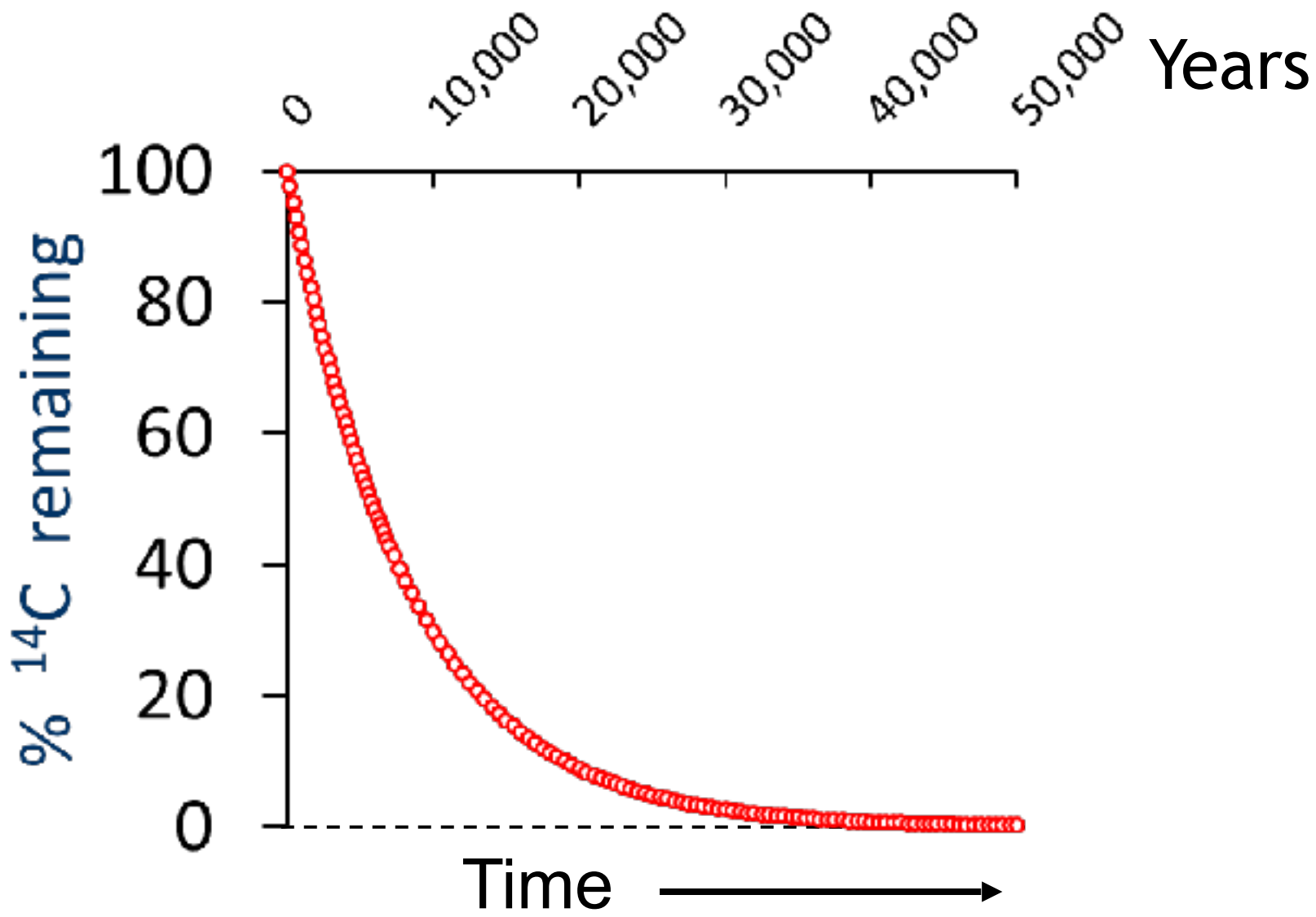
Combine three independent methods

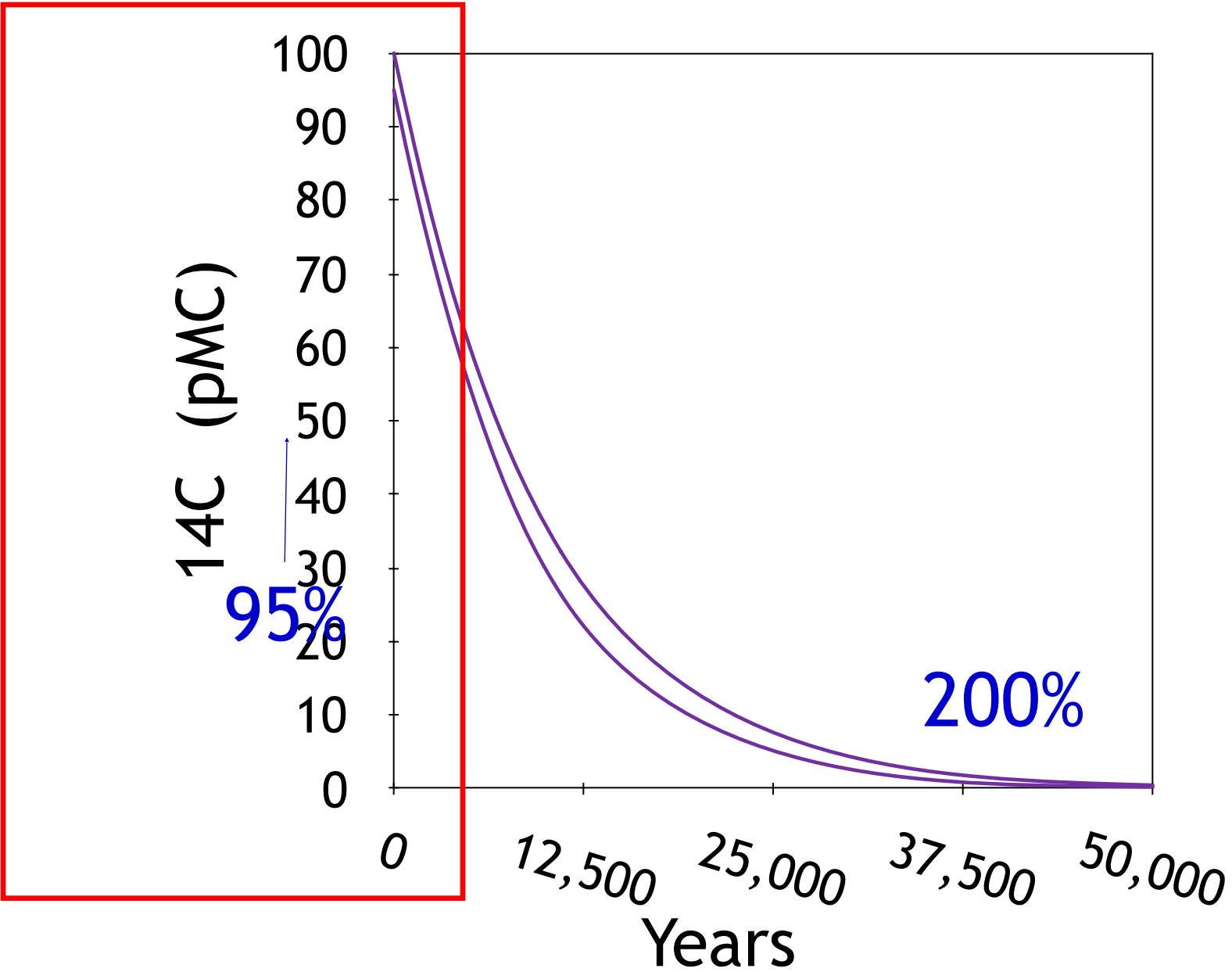
- ^{14}C content
- tree rings
- varves

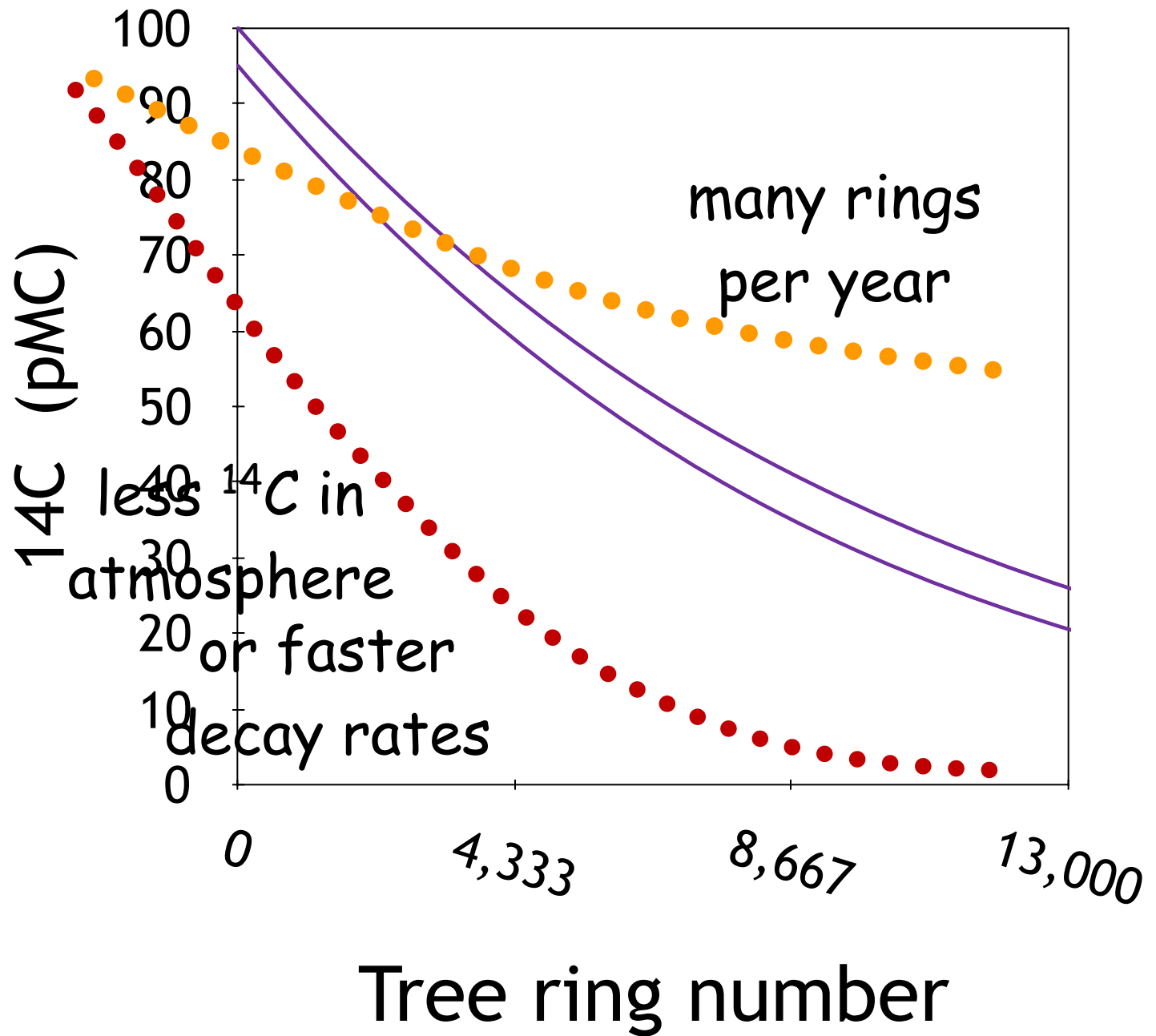
Cross-Dating of Tree Rings

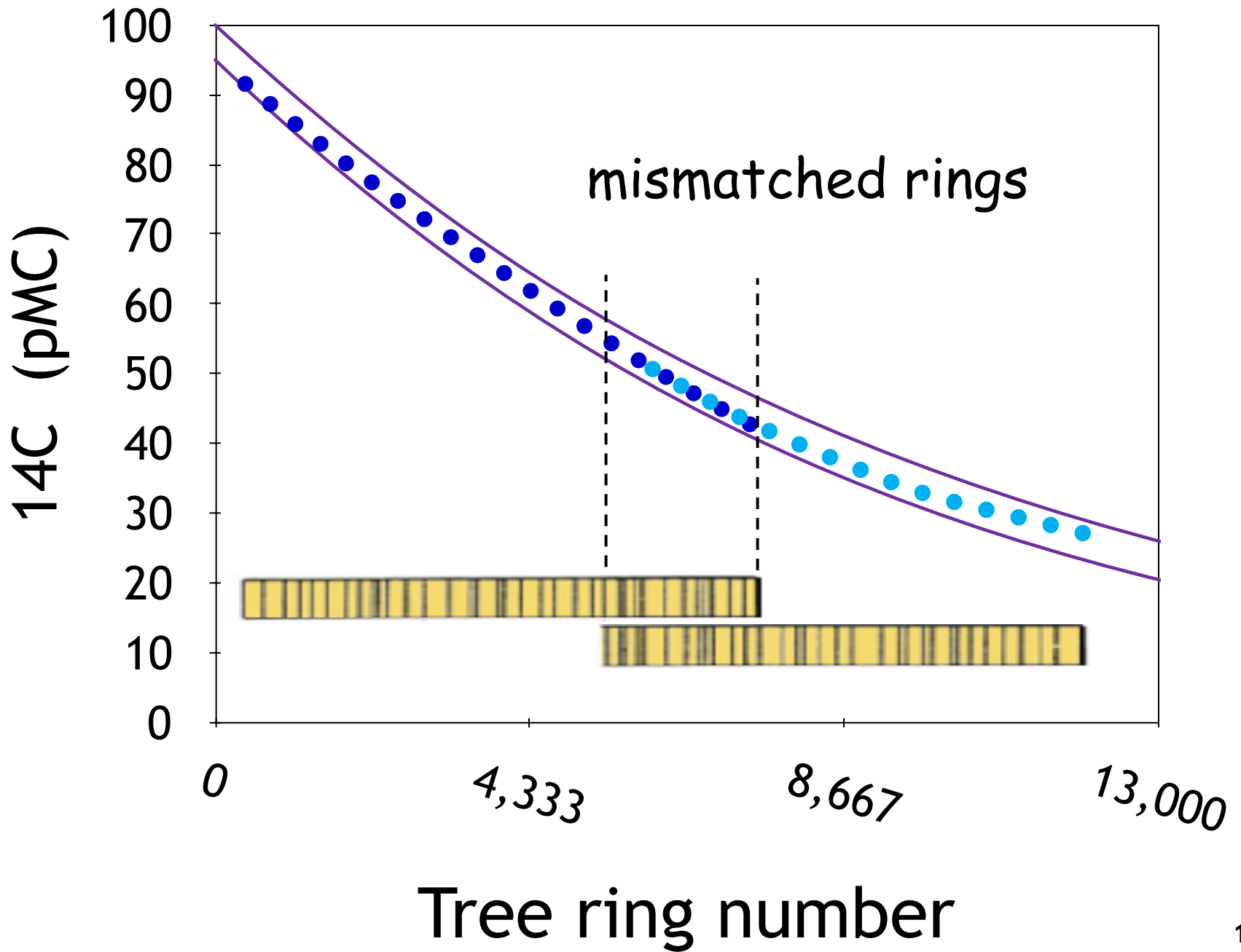


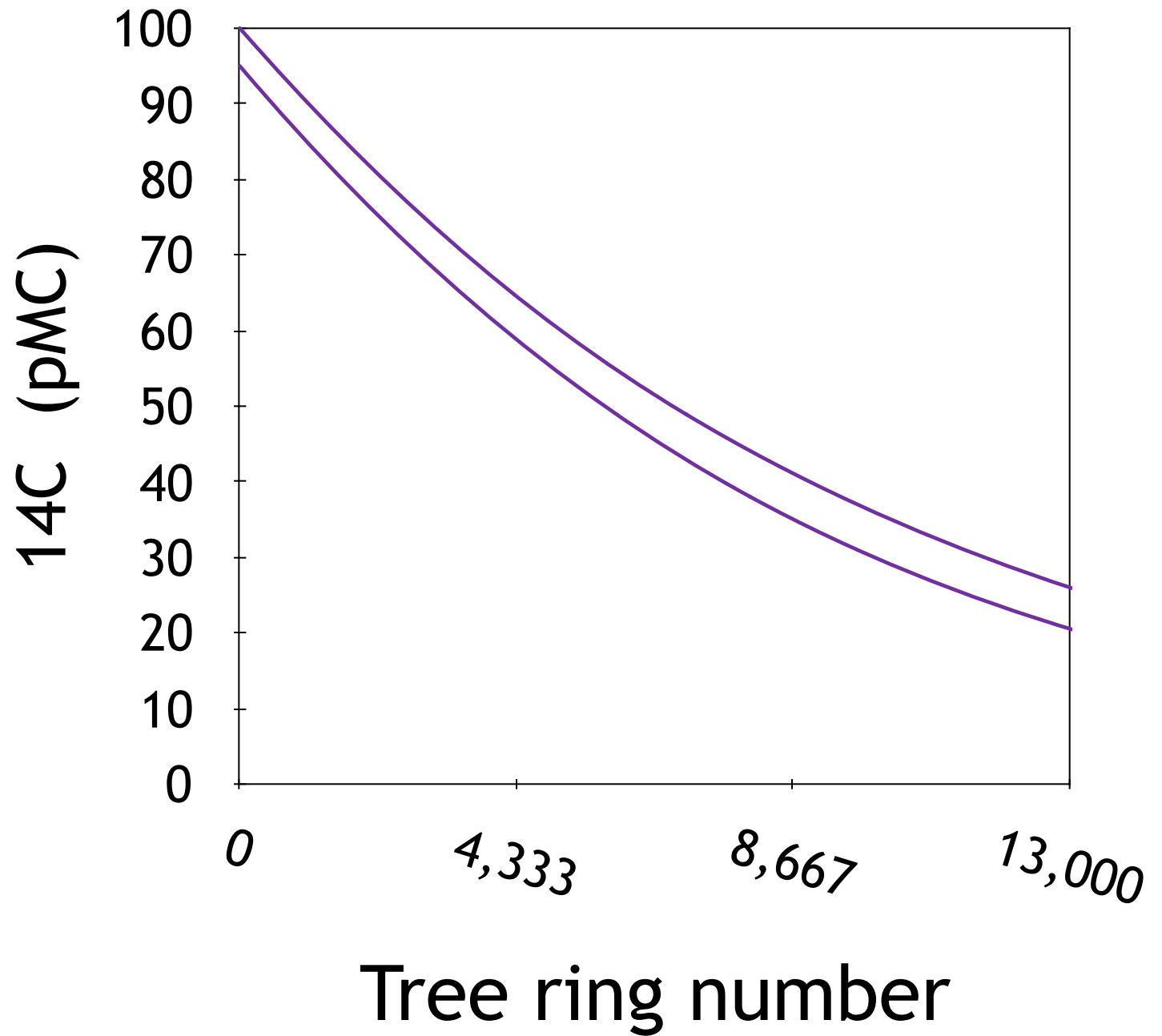
- *young earth challenges* -
 - trees can grow multiple rings per year
 - coincidental matches in cross-dating possible

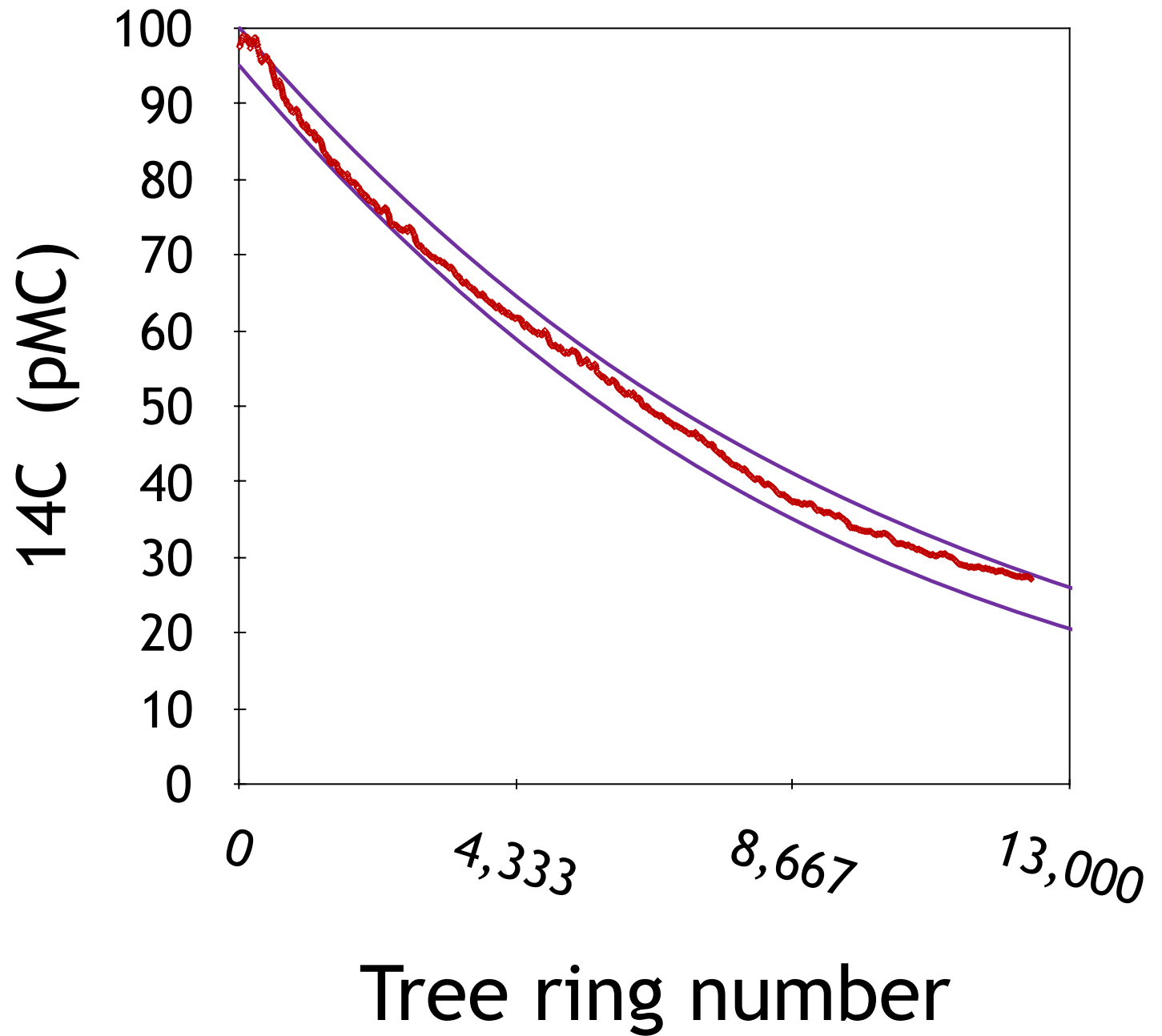












Option 1

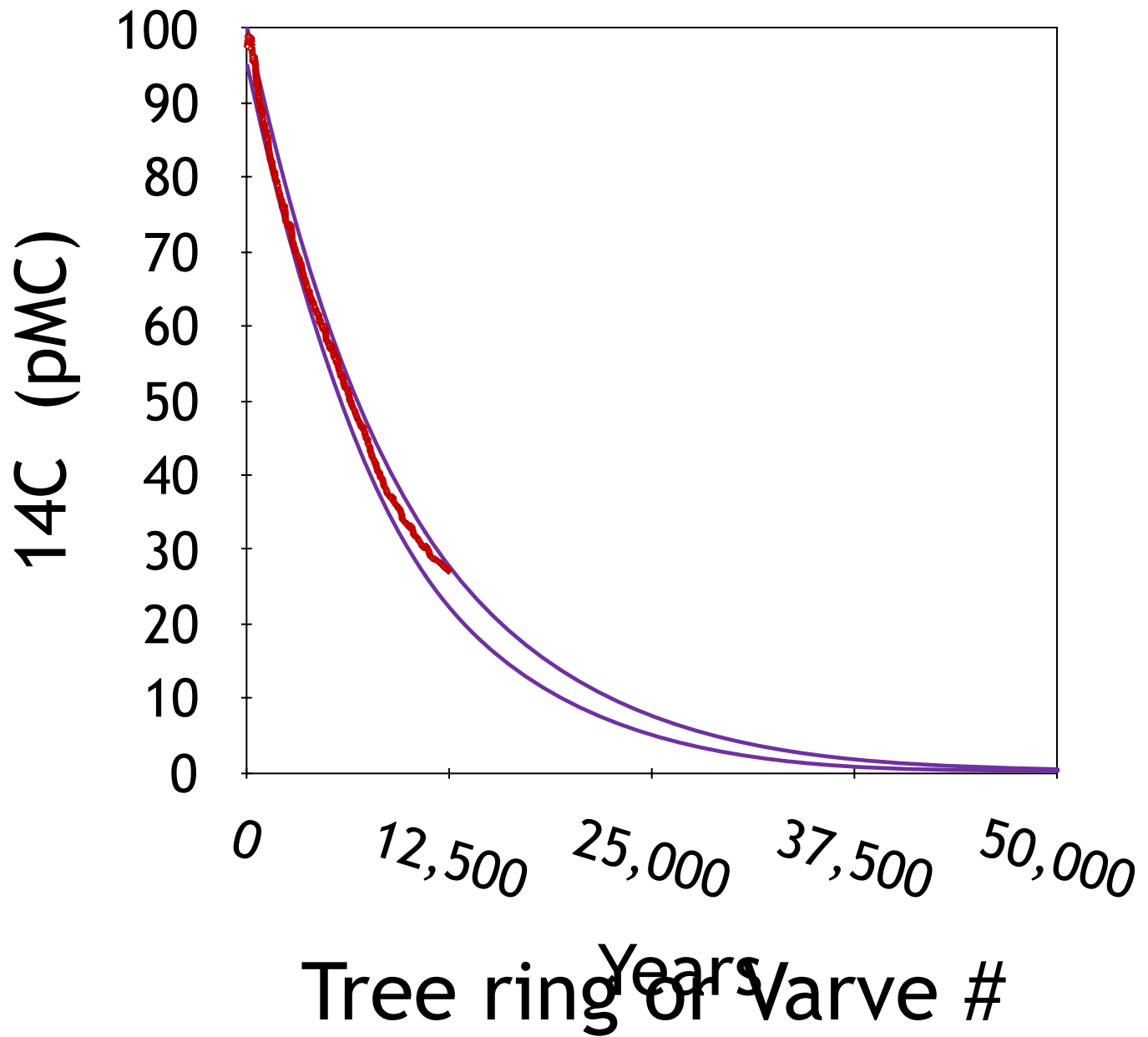
God gave us awesome tools to verify that
12,000 tree-rings = 12,000 years

Option 2

God precisely altered three independent natural phenomena

- tree rings per year
- atmospheric production of ^{14}C
- decay rate

to *falsely* match conventional expectations.



Combine three independent methods

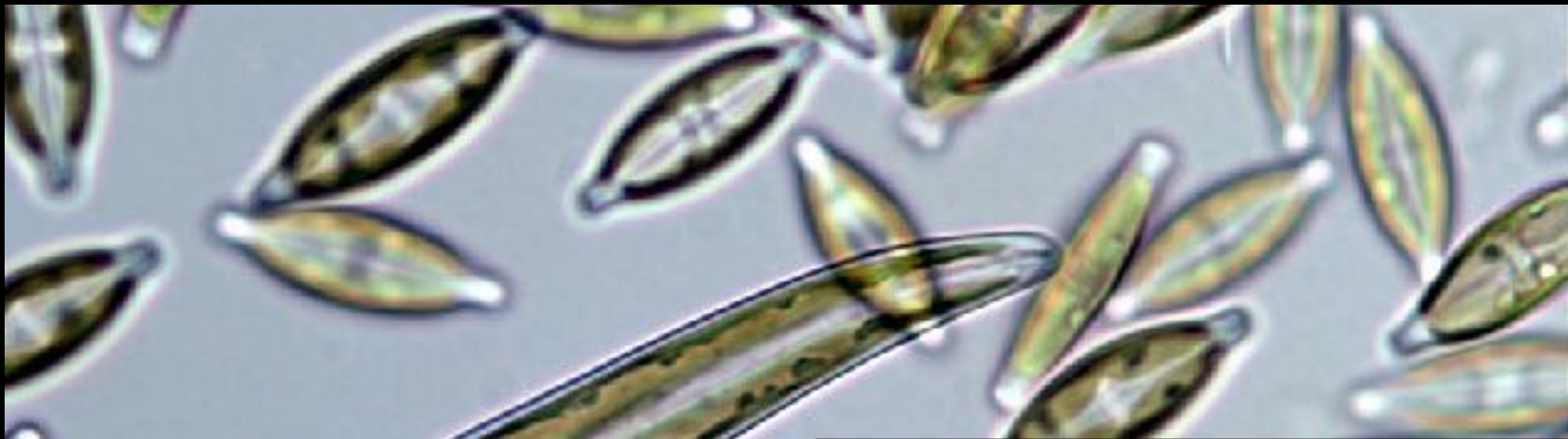
- ^{14}C content
- tree rings
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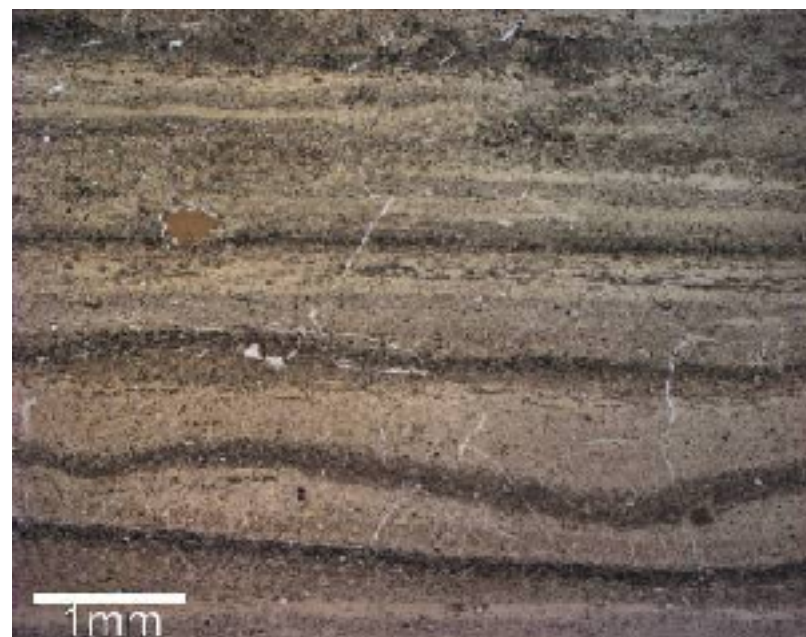
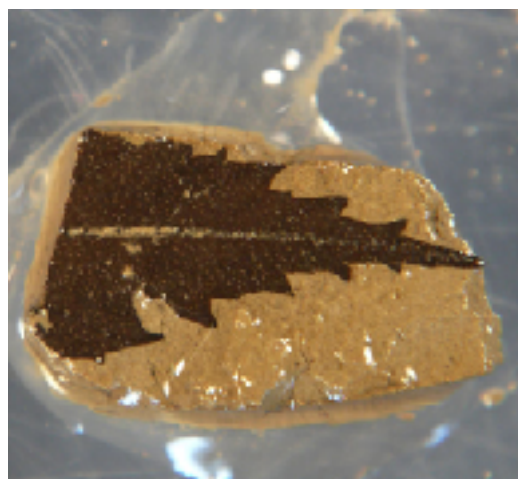
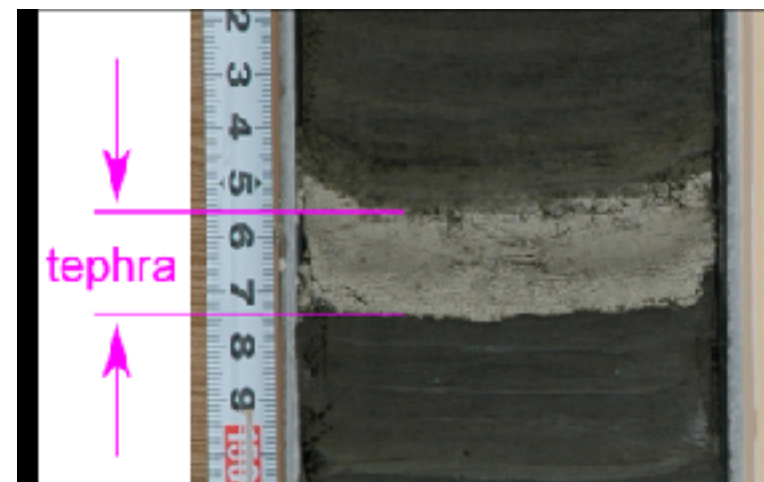
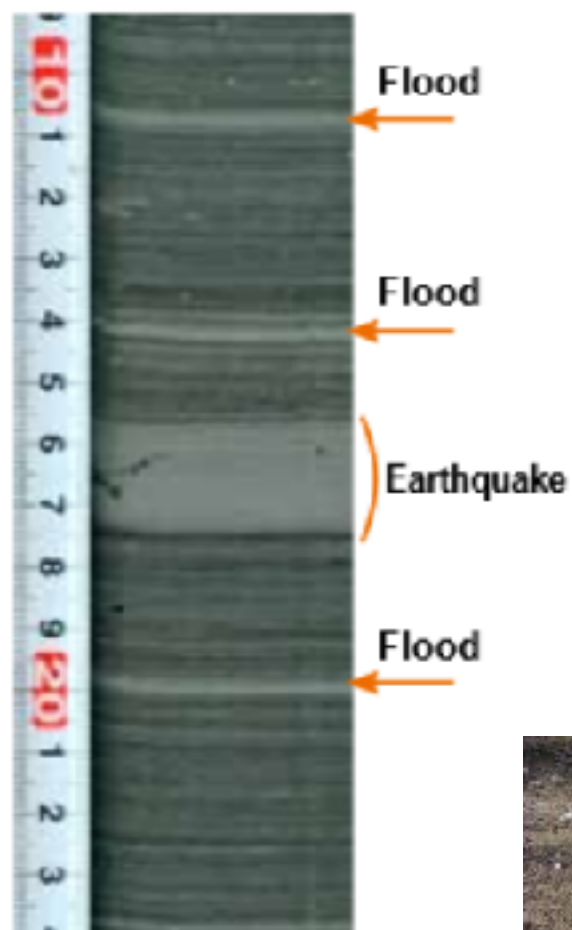
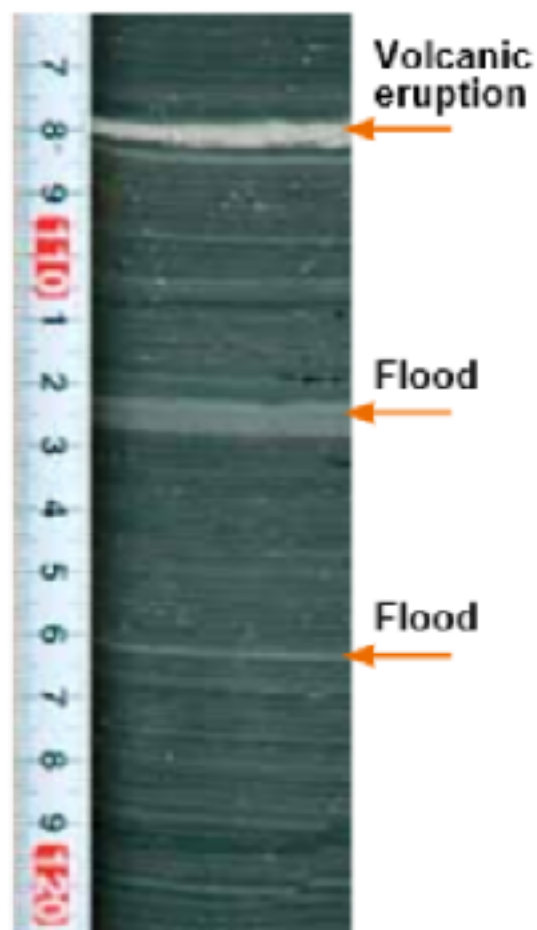


Suigetsu
Varves
2006

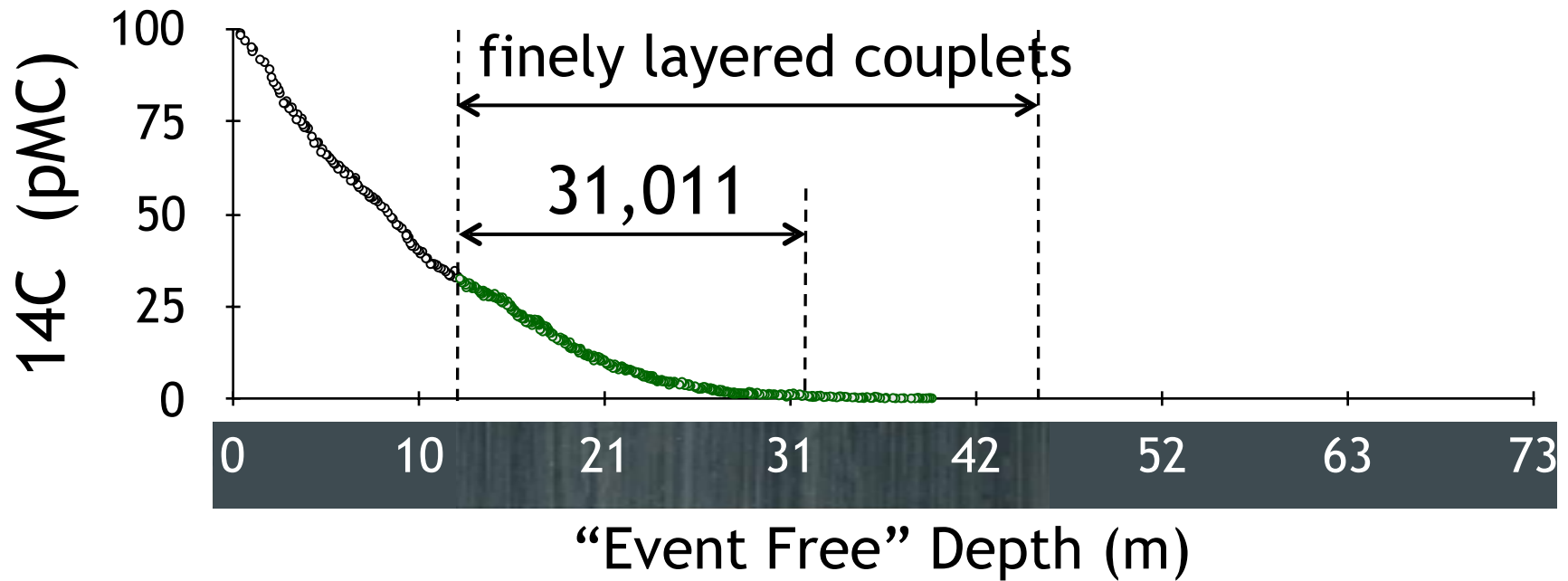
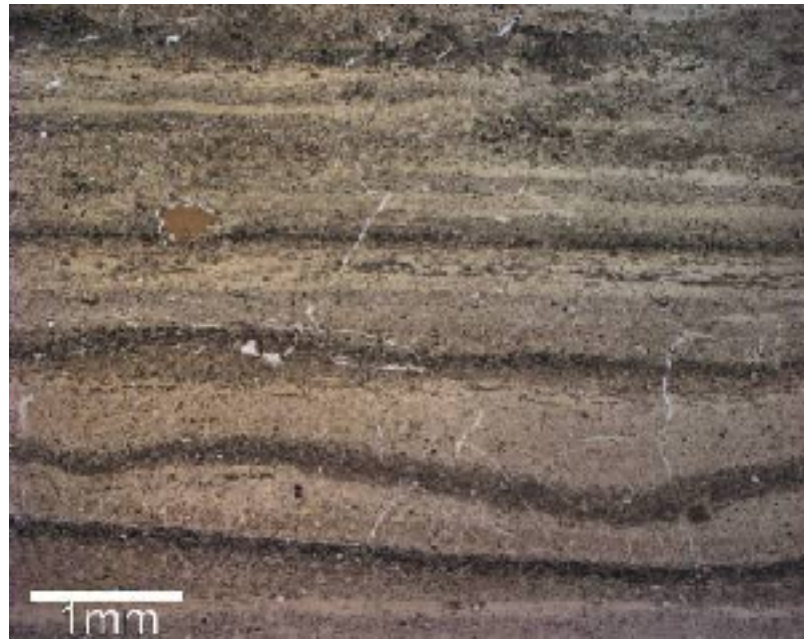


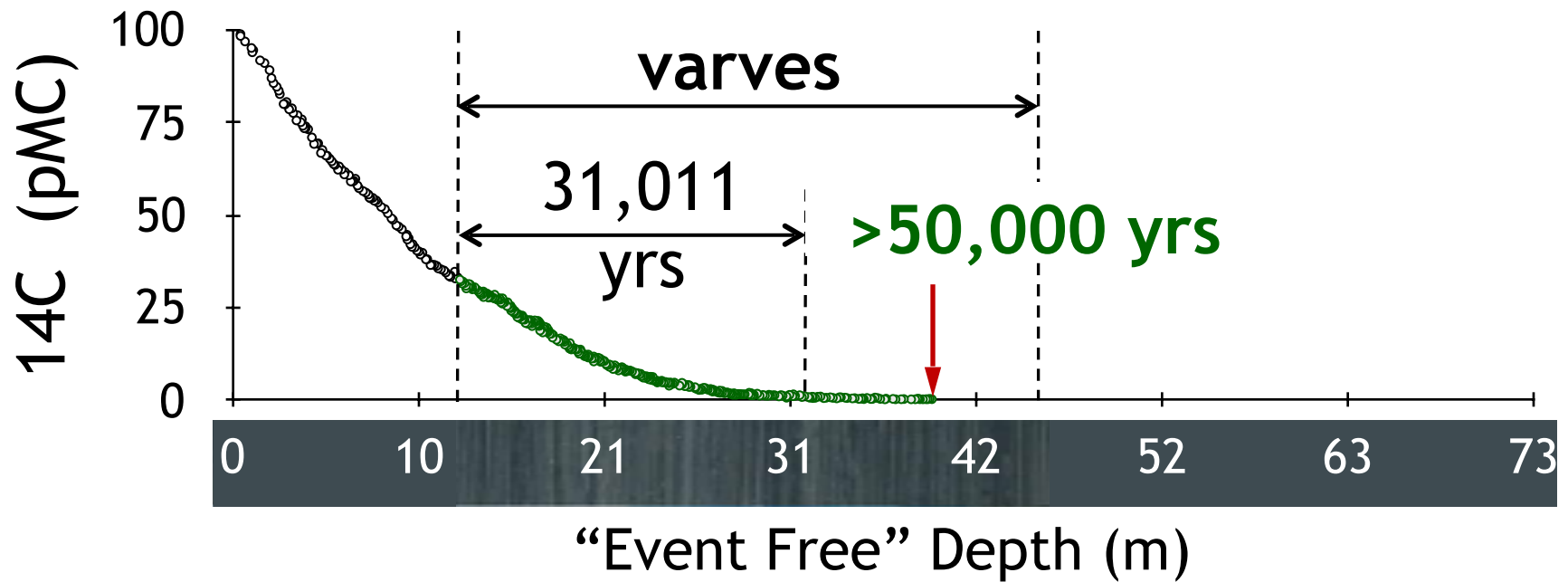
Varves





808 ^{14}C measurements



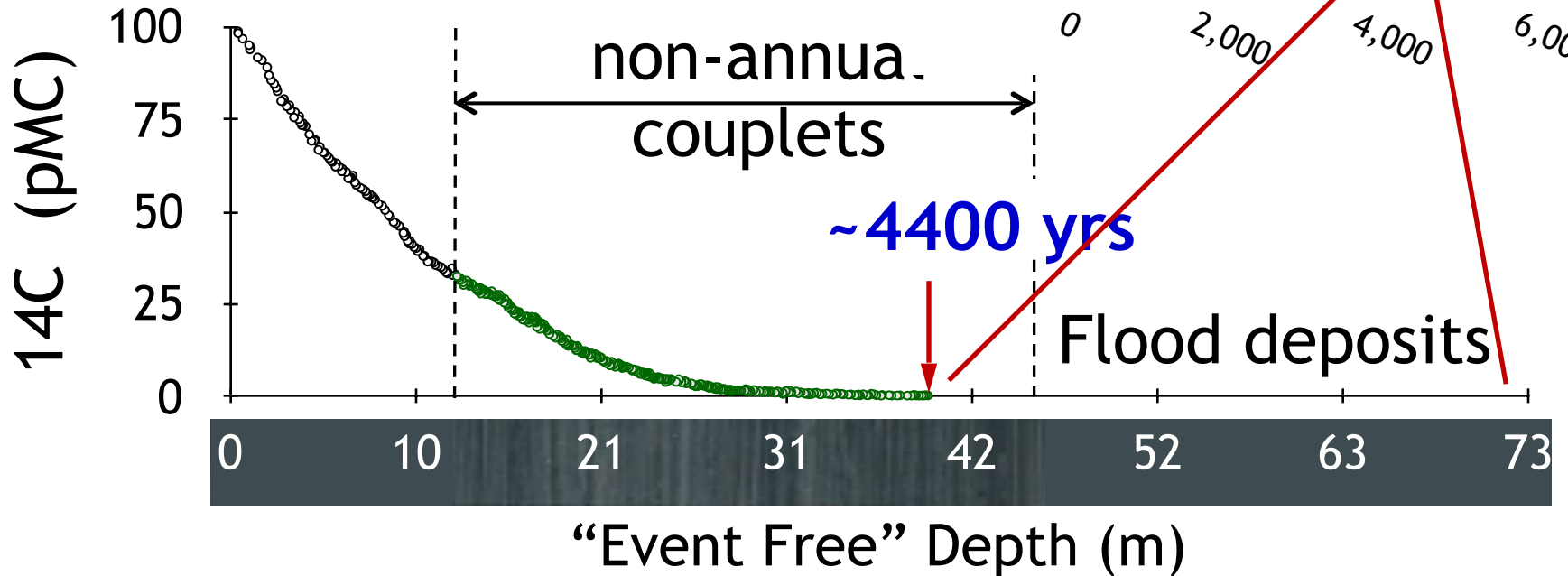
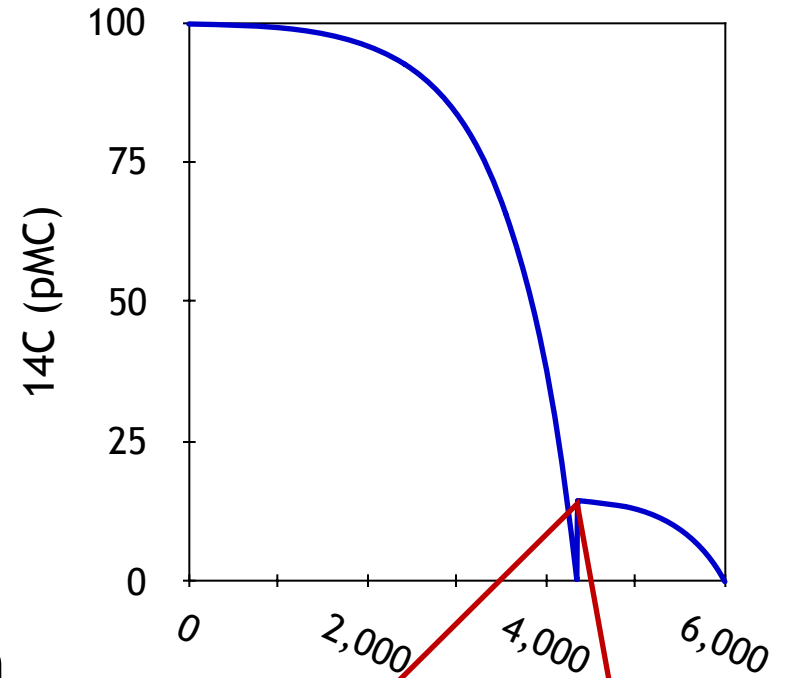




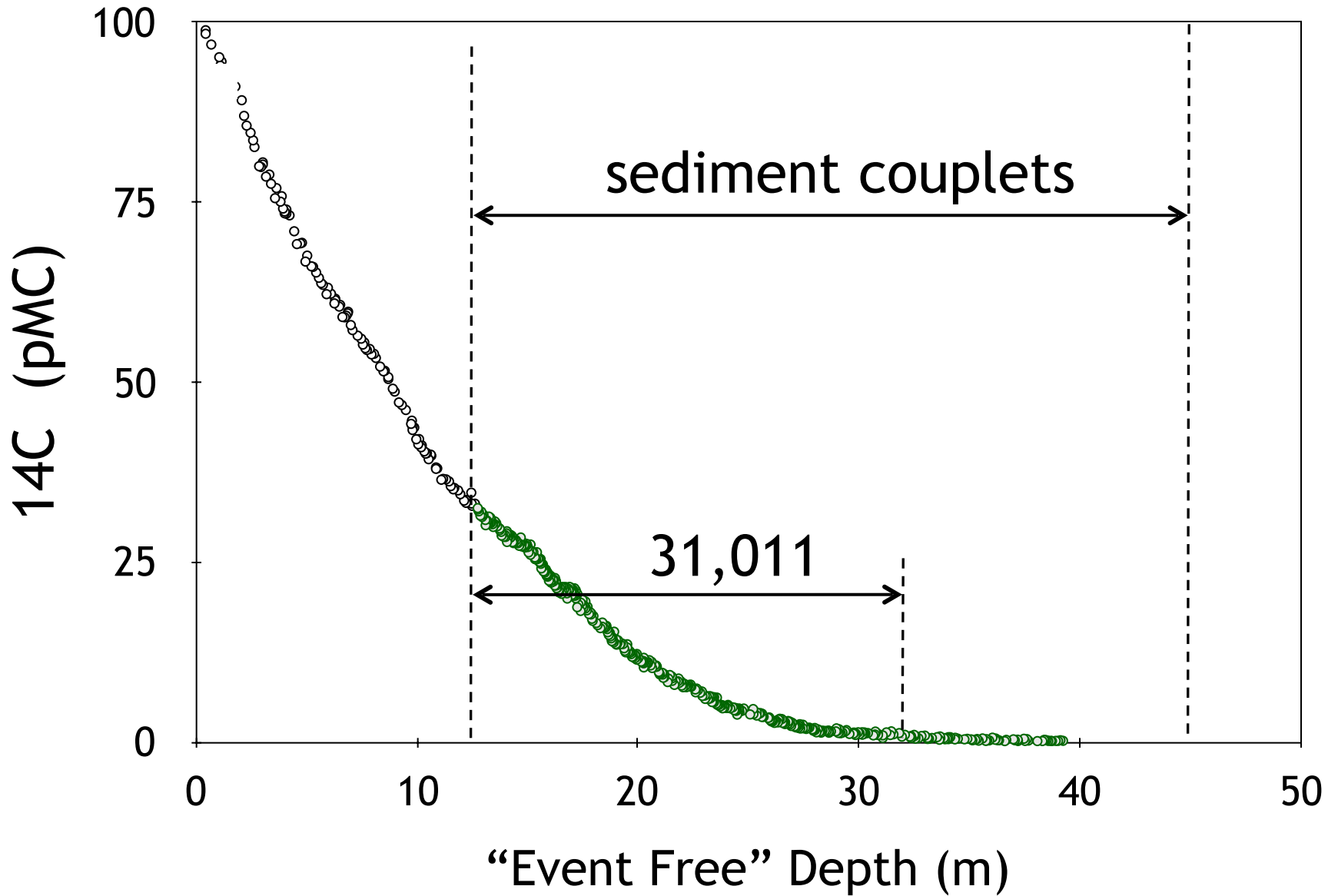
plain light

multiple layers per year

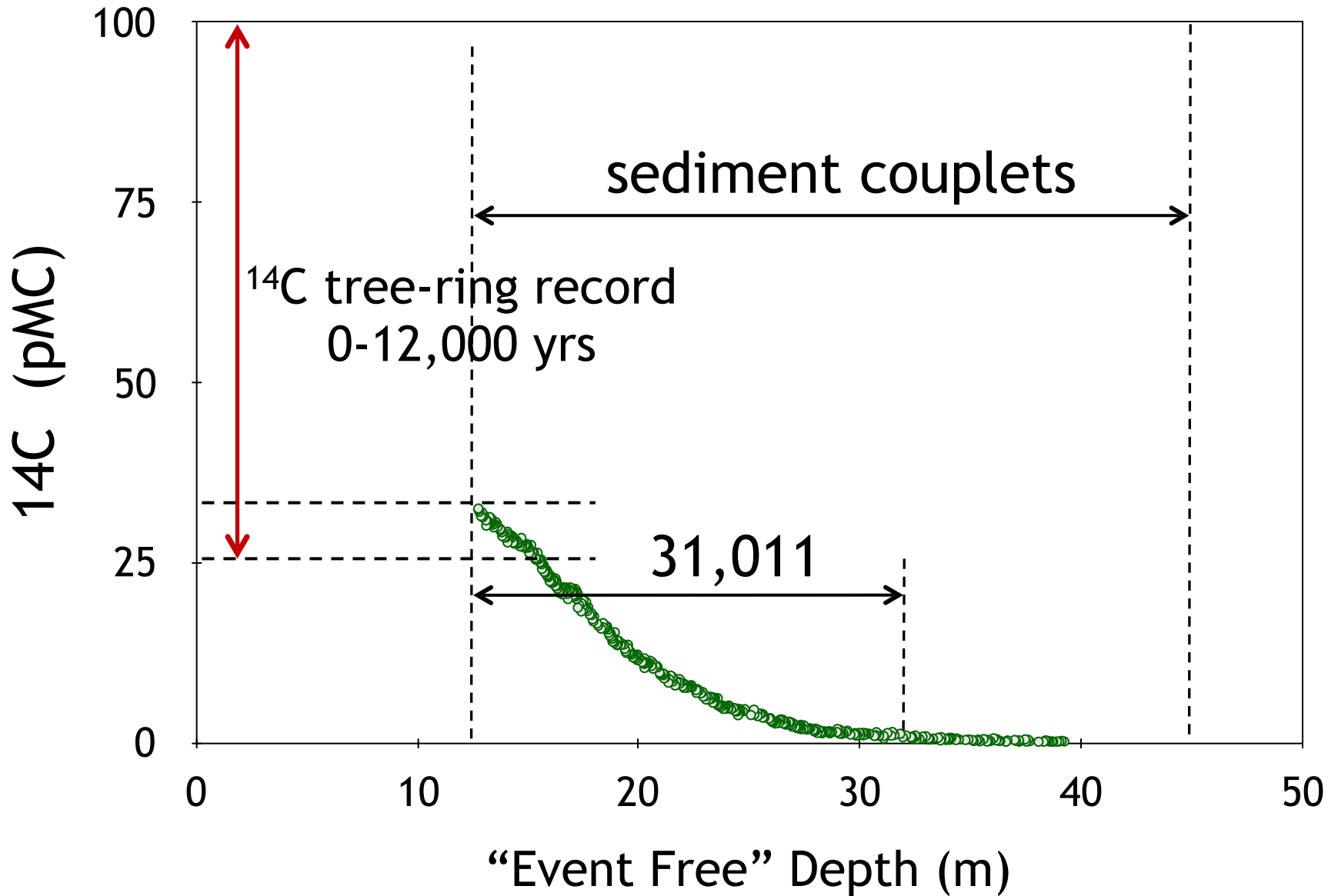
young earth view

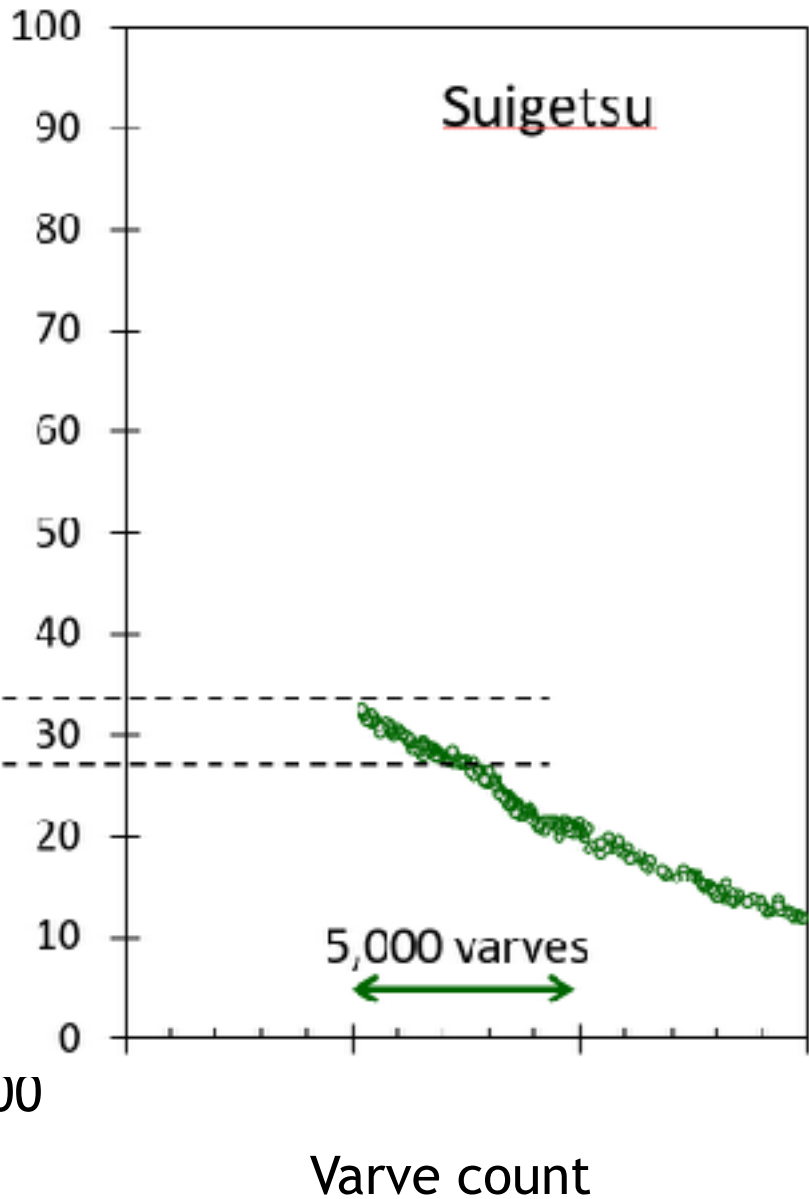
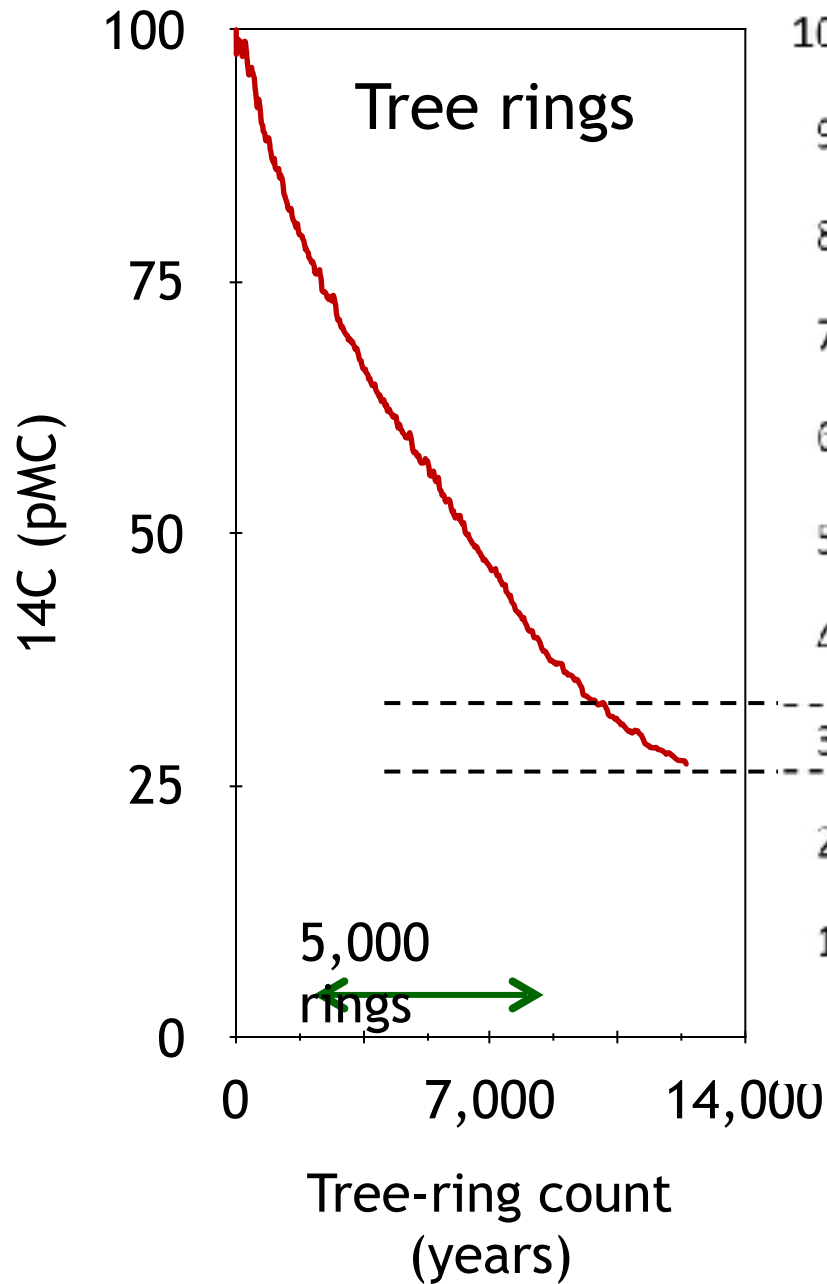


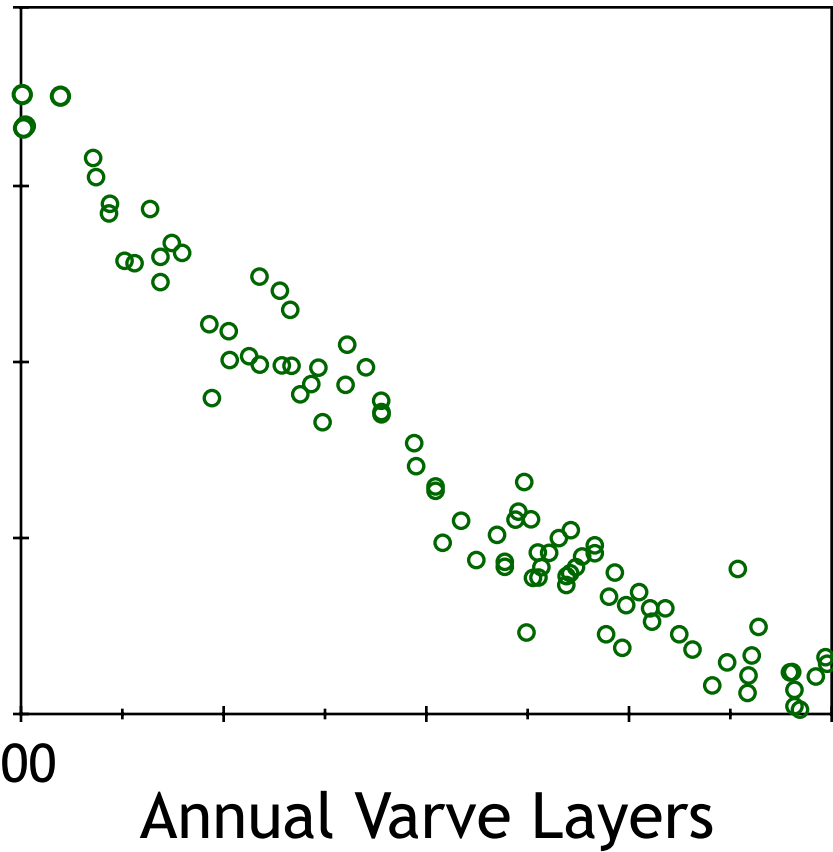
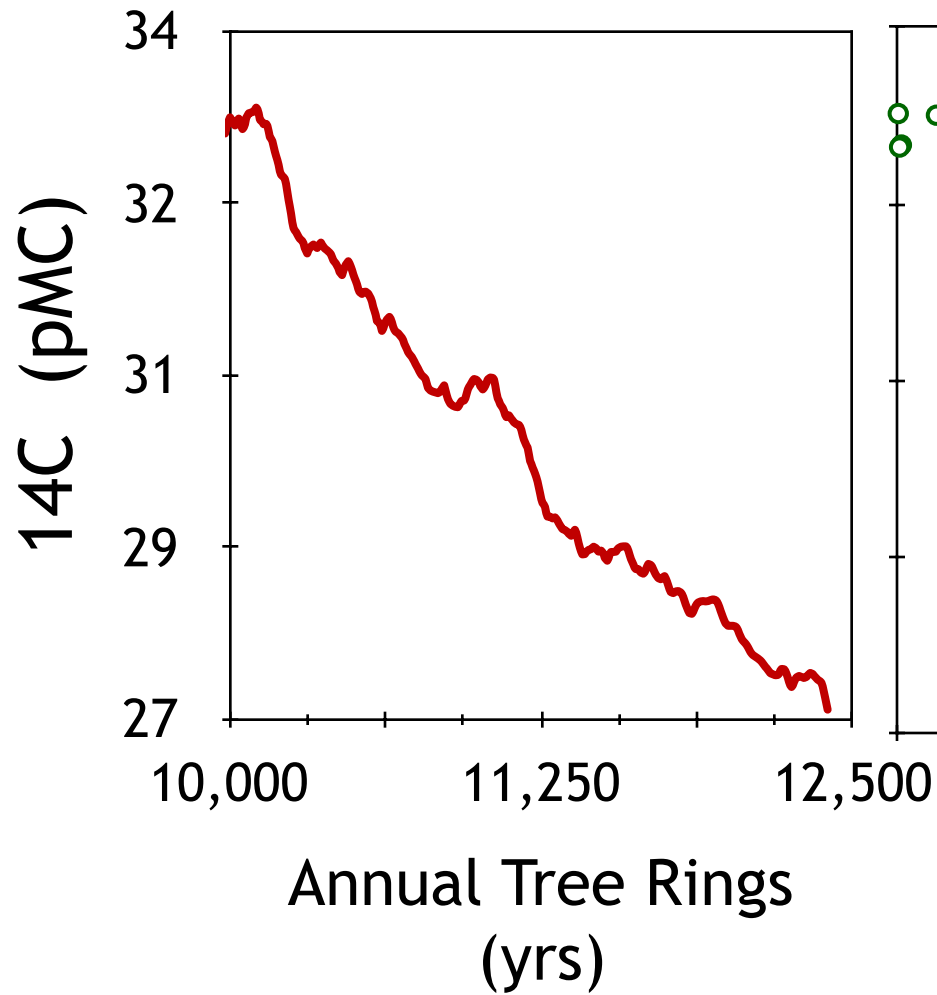
808 ^{14}C measurements

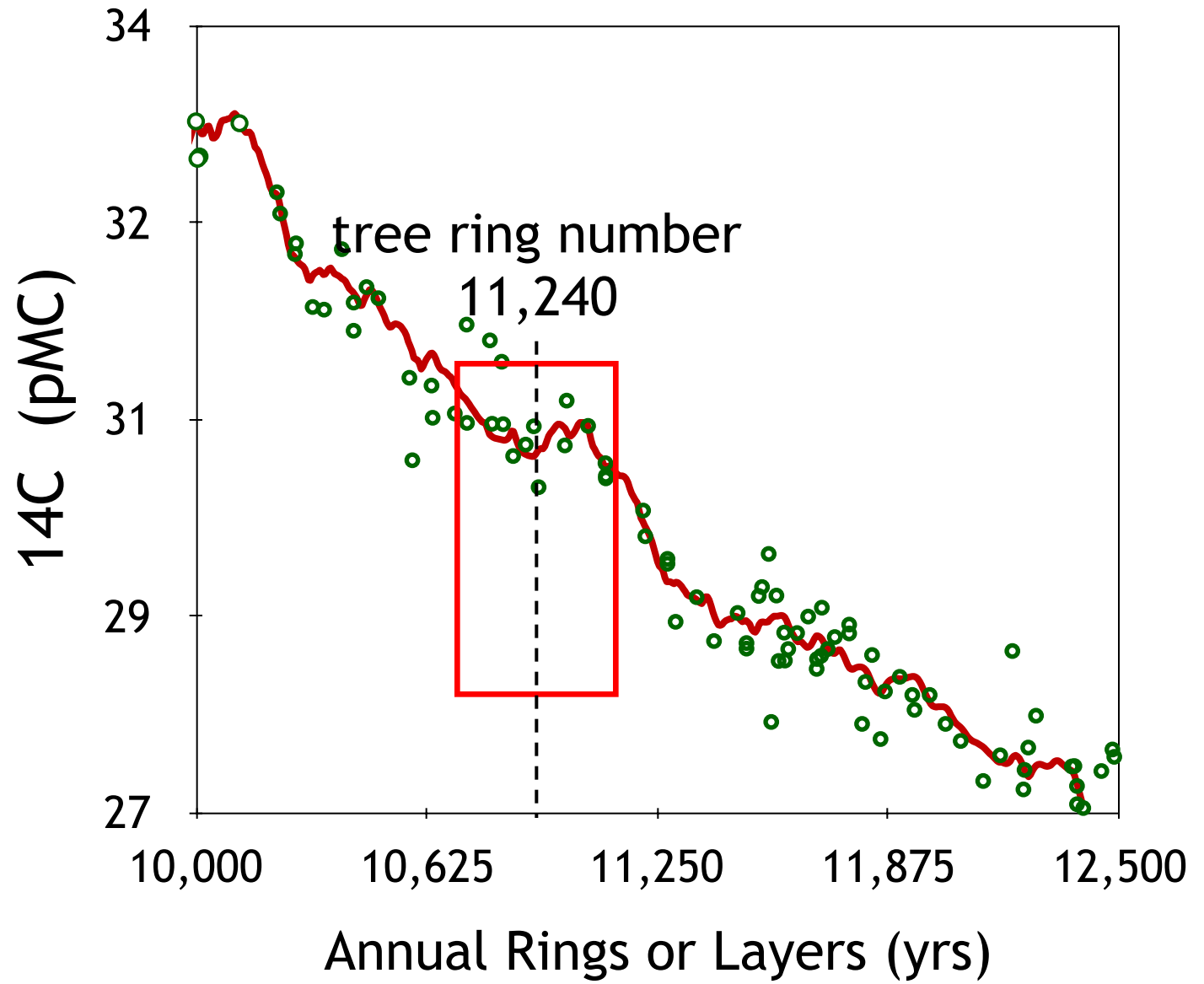


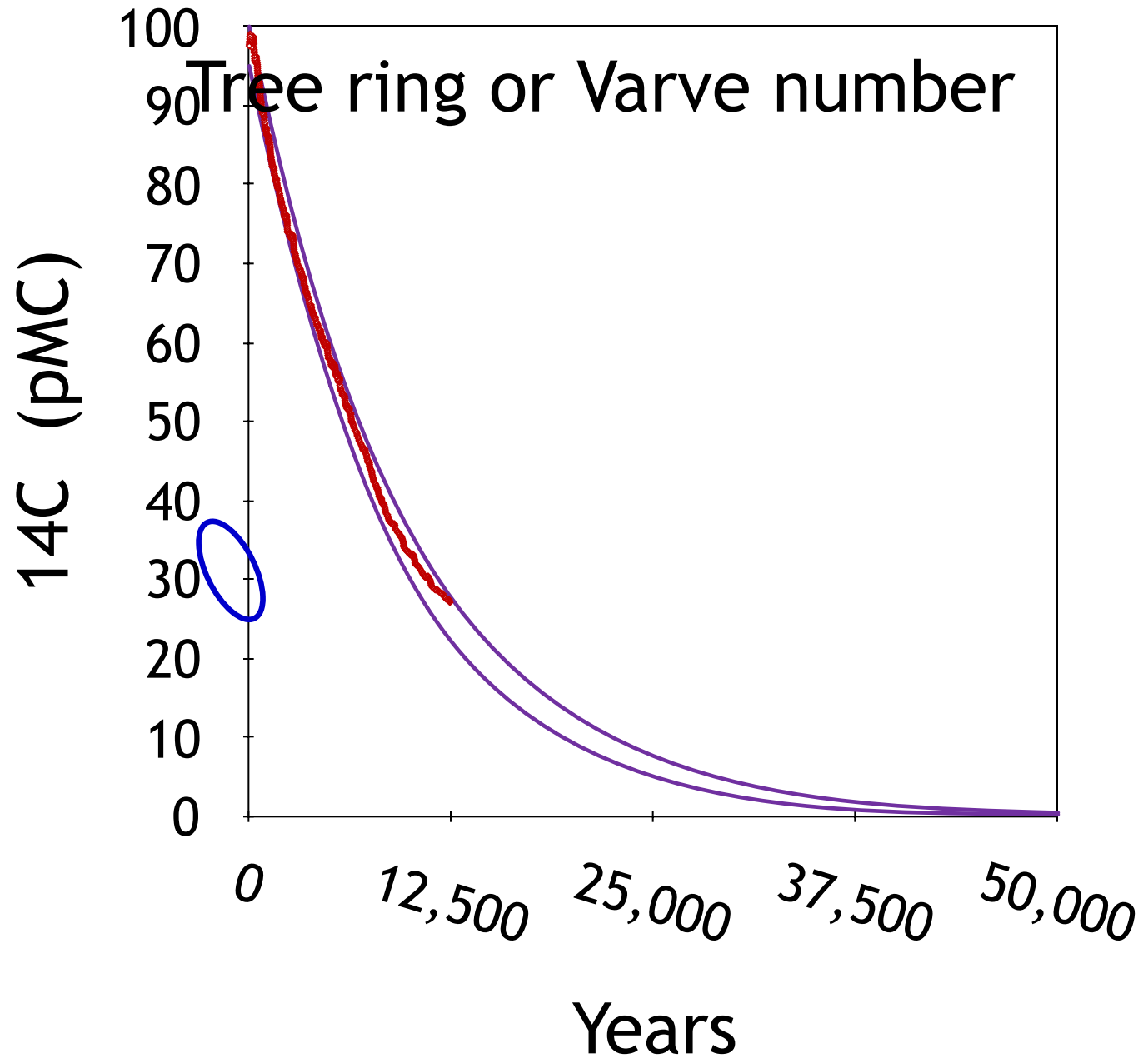
808 ^{14}C measurements

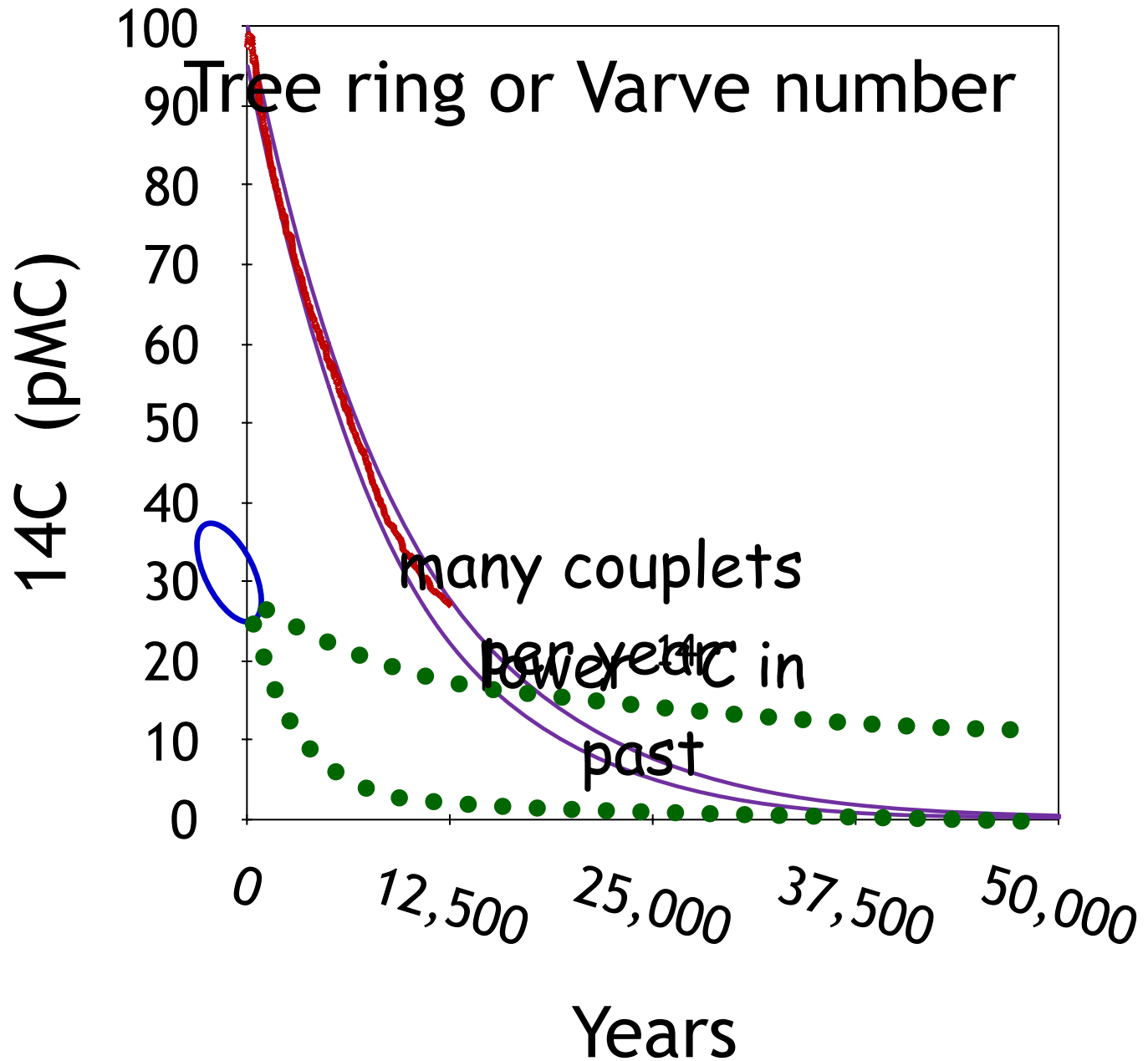


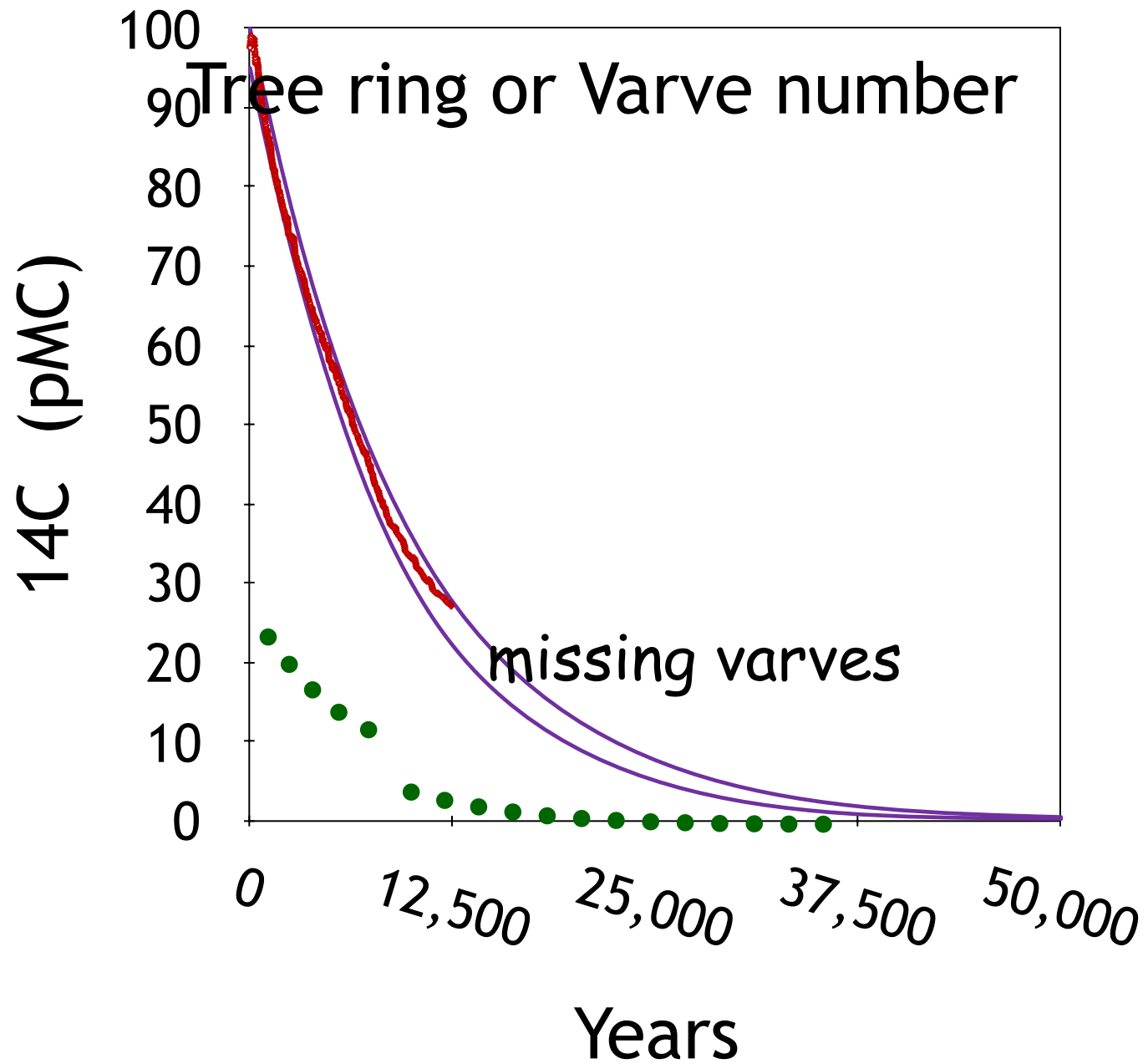


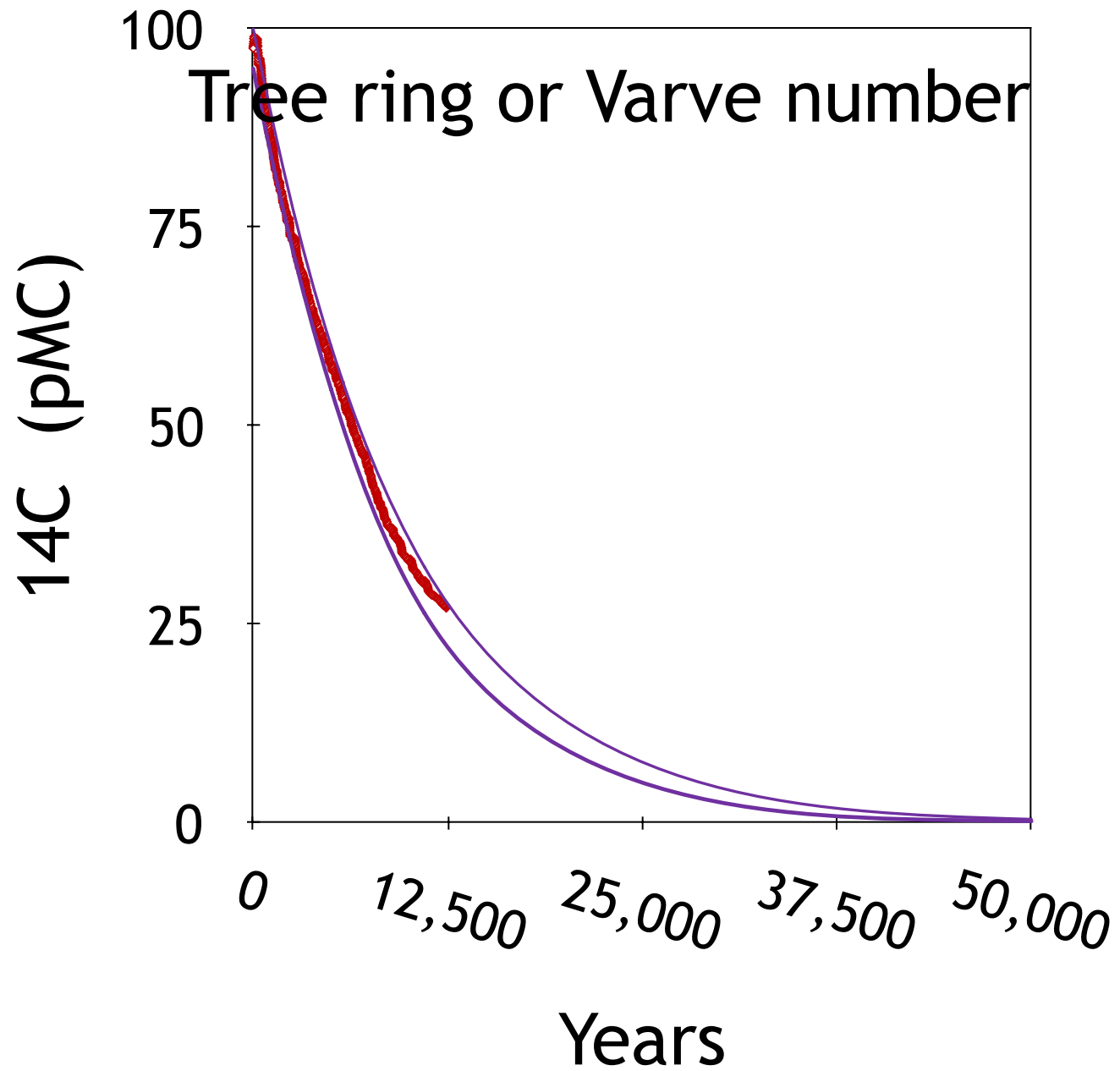


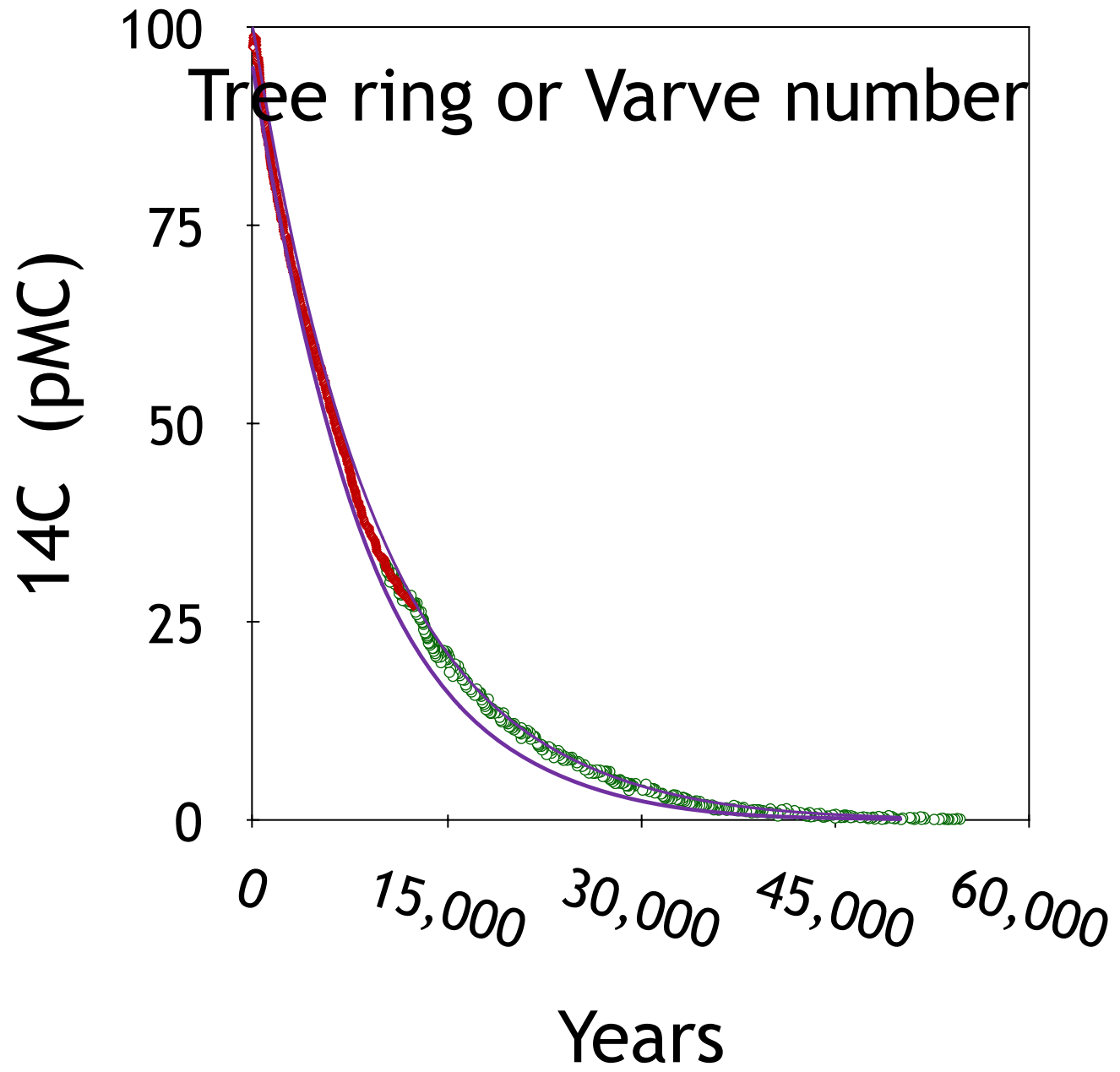












Option 1

God gave us awesome tools to verify that

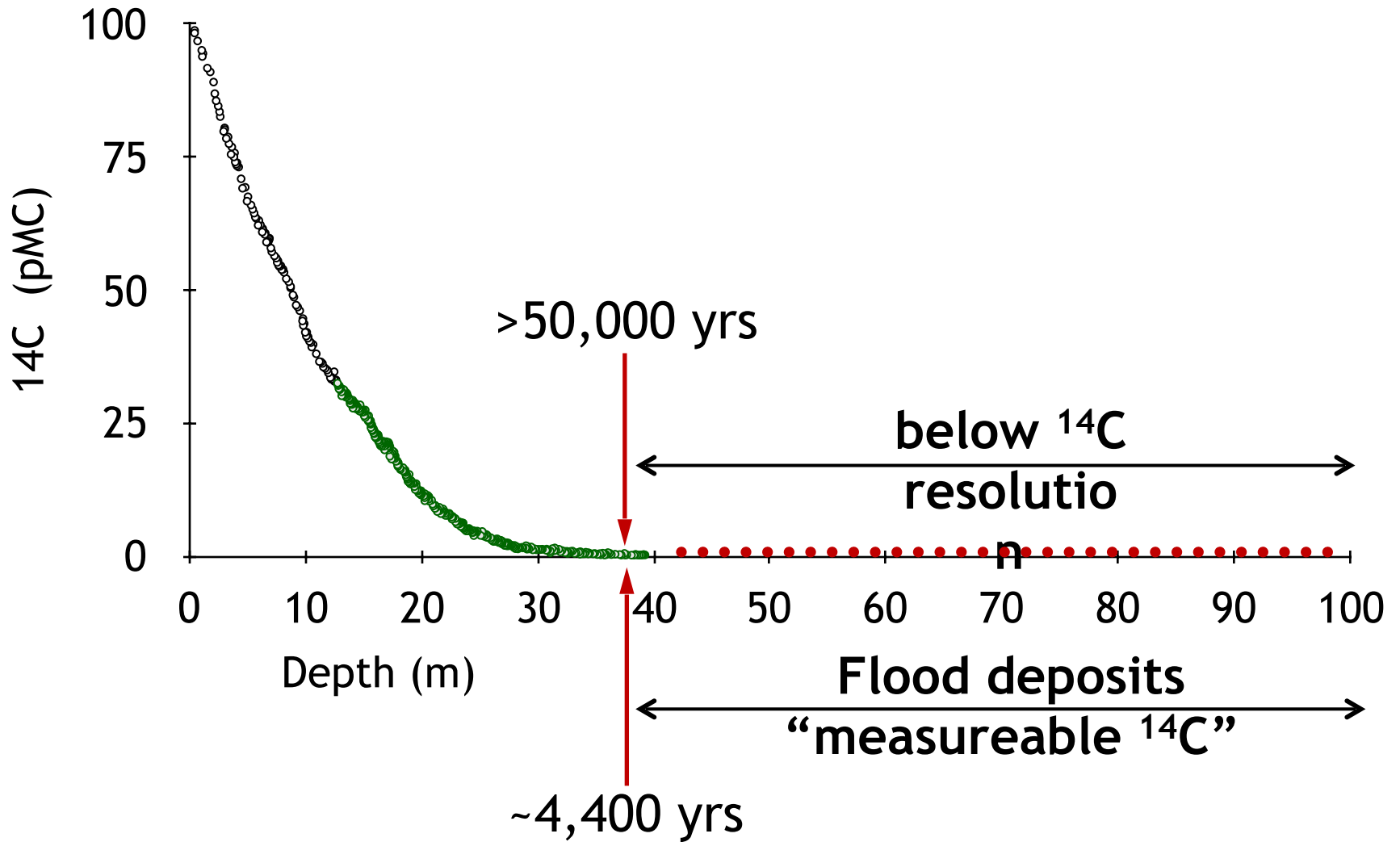
- Suigetsu couplets are annual (varves)
- radiocarbon record goes back ~50,000 years

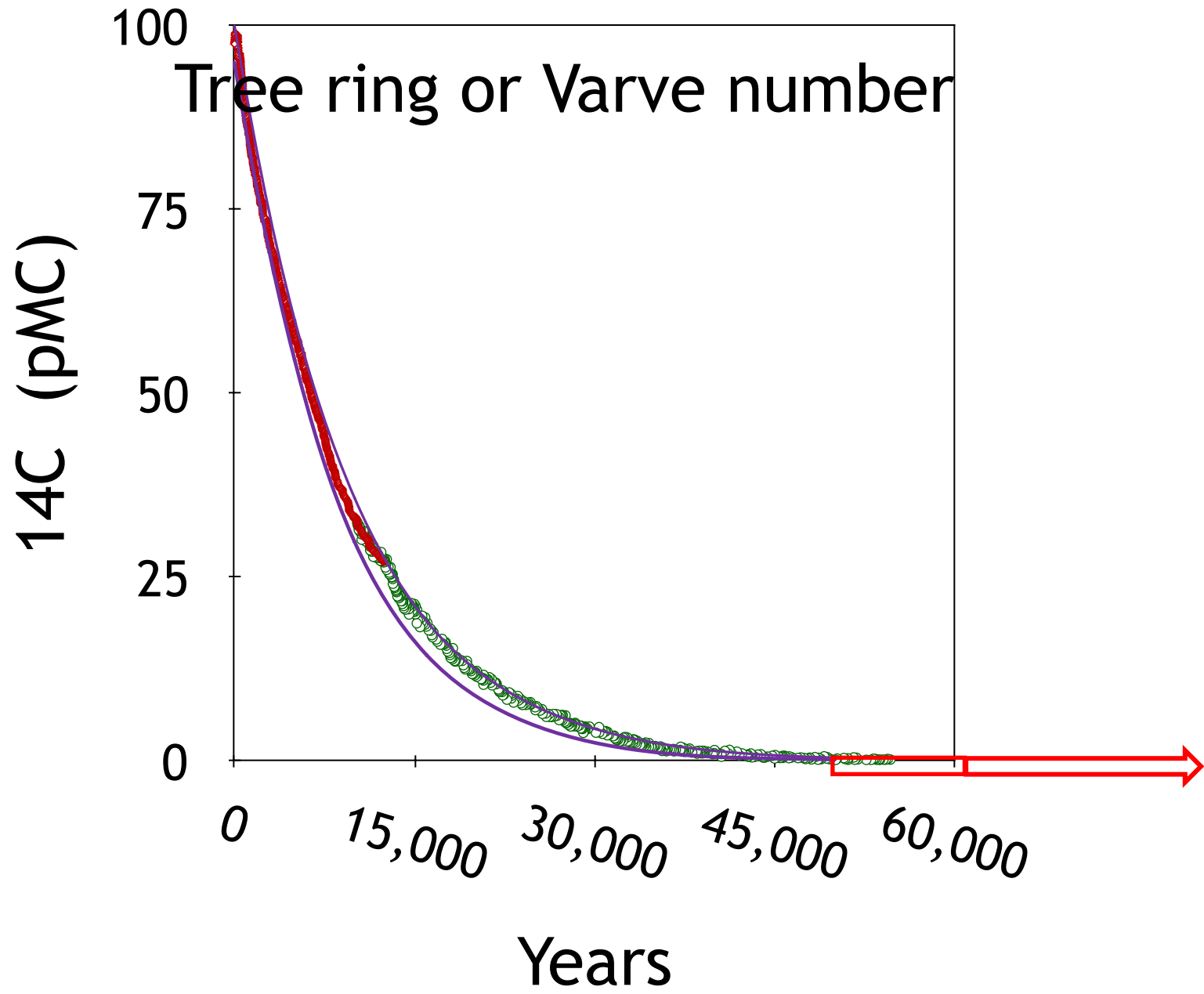
Option 2

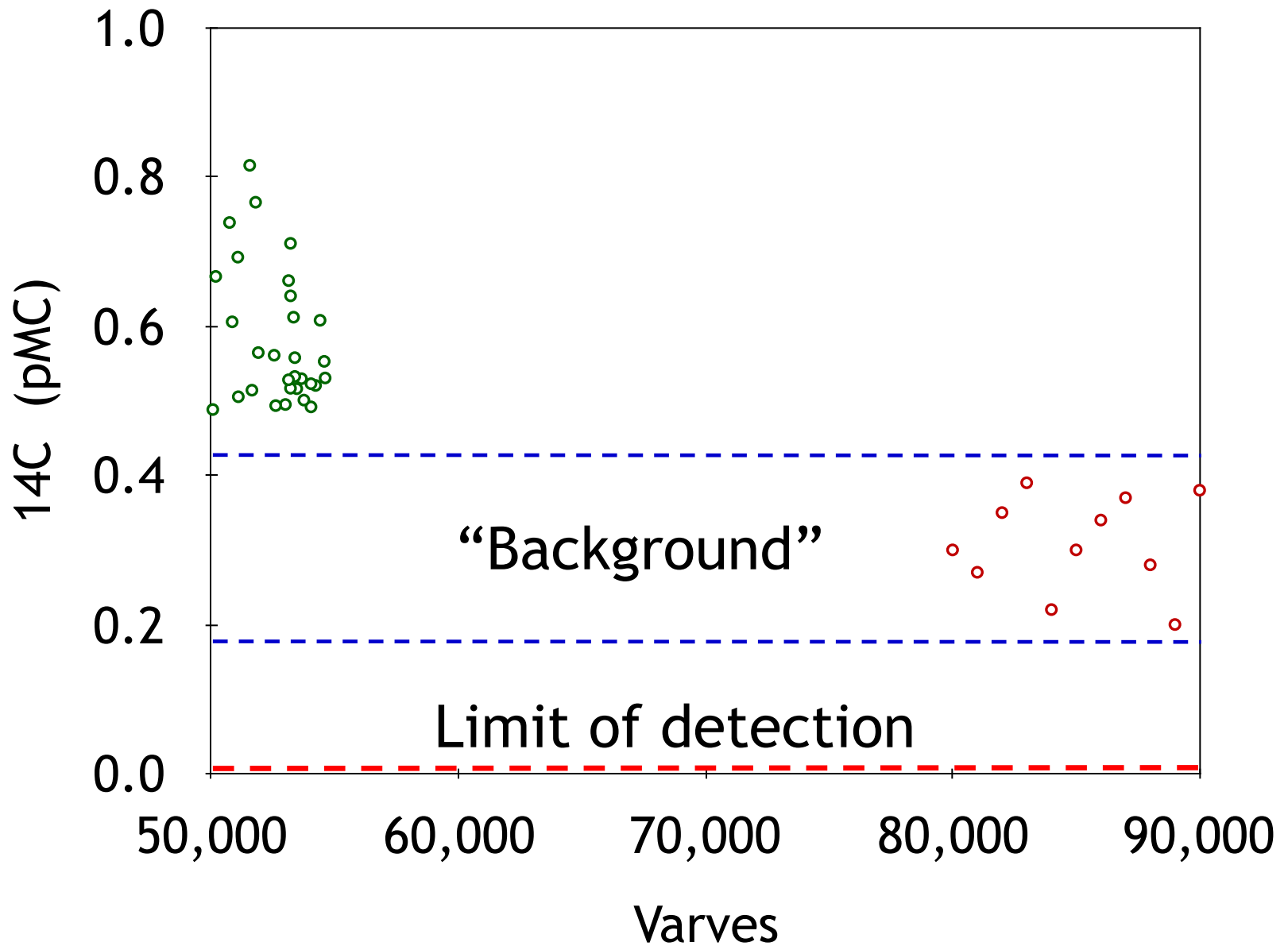
God precisely altered four independent natural phenomena

- tree rings per year
- sediment couplets per year
- atmospheric production of ^{14}C
- decay rate

to *falsely* match conventional expectations.









bone



coal



wood



sources of modern
 ^{14}C

(contamination)

- groundwater
- bacteria
- insects



bone

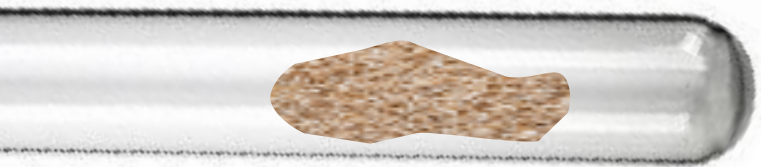


coal

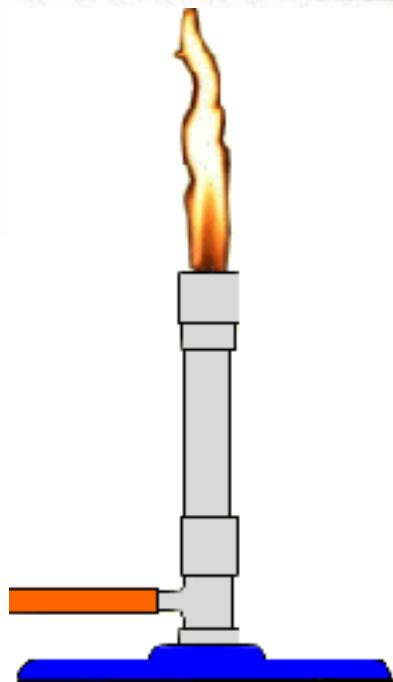


wood

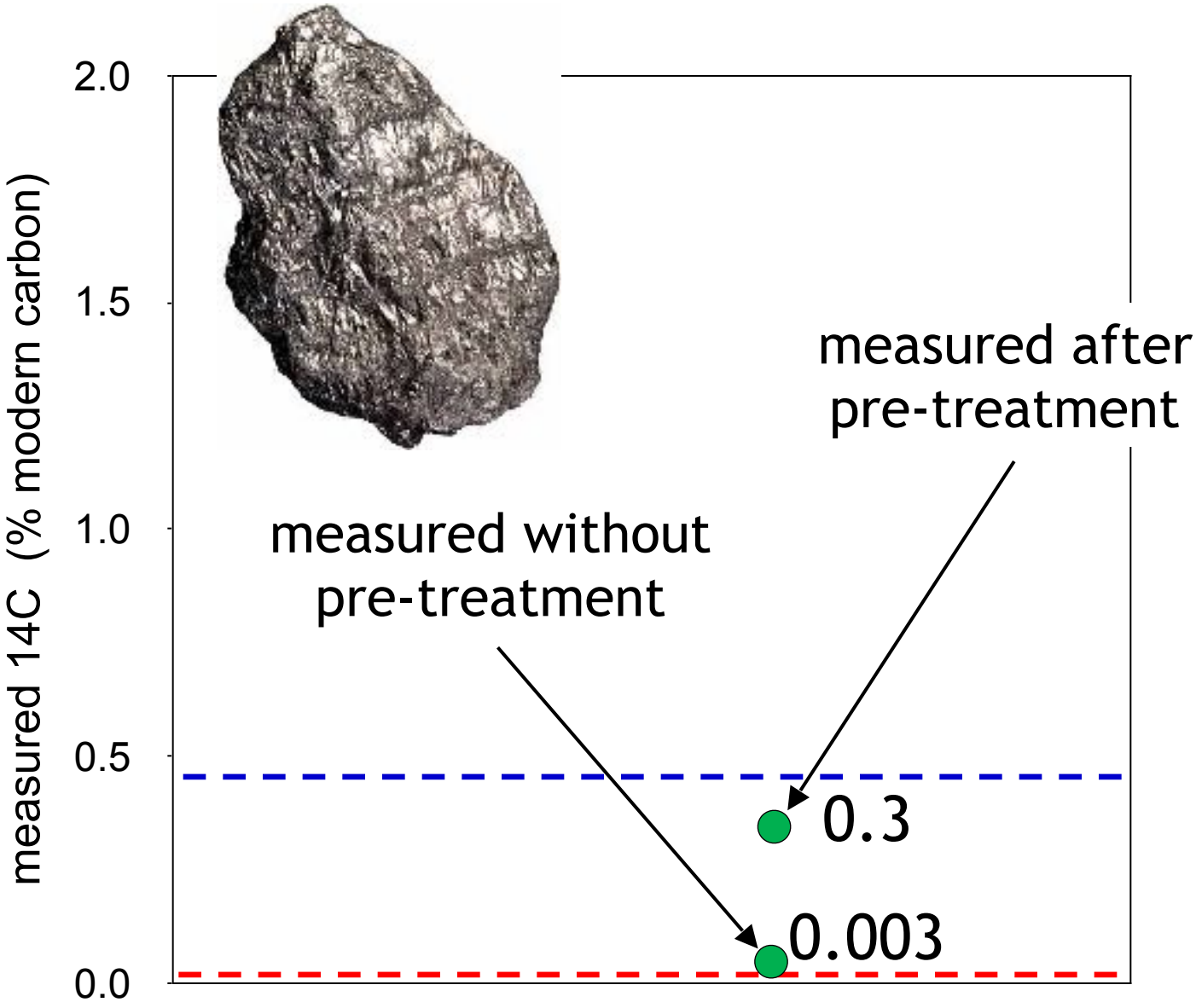




graphite



ancient graphite



Option 1

God gave us awesome tools to verify that ancient samples do not have intrinsic radiocarbon.

Option 2

God precisely picked

- atmospheric radiocarbon concentration at the time of the Flood
- timing of discovery of radiocarbon dating to ensure that it would look *falsely* just like laboratory background.

Questions