

Dating the Viking settlement in Newfoundland

by

Tony Heyes

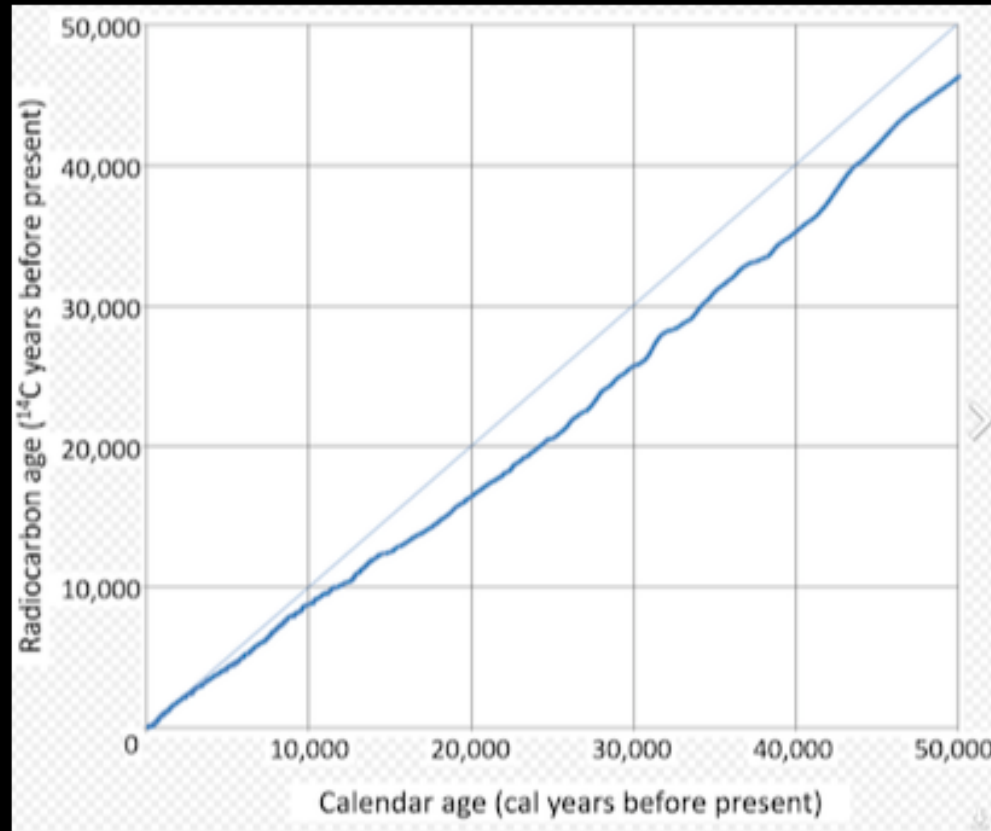
Radio Carbon Dating

Based on the ratio of
radio active Carbon 14
to stable Carbon 12 in
dead organic matter

Radio Carbon Dating

- Has established that the settlement was present in the 11th Century
- Radio Carbon dating relies a constant cosmic ray bombardment
- This maintains the constant ratio of Carbon 14 to Carbon 12 in the atmosphere

Suess Calibration Curve



Radio Carbon Dating

- Detailed examination of this curve shows the 11 year sun spot cycle during which the cosmic ray bombardment increases
- And therefore, so does the production of Carbon 14
- But also.....

Fusa Miyake



Fusa Miyake

- Uses tree rings to study solar activity
- Discovered Miyake Spikes
- Brief 'wiggles' in the graph corresponding to periods of intense solar activity

Miyake Spikes

- 5480 BC
- 660 BC
- 775 AD
- 994 AD

The Vikings

- The Viking settlement at L'Anse aux Meadows in Northern Newfoundland
- Wood cut down 27 years after a Miyake spike
- Thus dating the Viking settlement at

Vikings in the USA

Not 1492

but

1021 AD

And to end

A tree ring joke



I KNEW SHE WAS LYING ABOUT HER AGE.

The End