

## Carbon-14 dating is generally reliable

BYU Geology Professor and Associate Dean of the College of Physical and Mathematical Sciences, Bart Kowallis, was recently asked about the reliability of carbon 14 dating. Here is my transcript of [the exchange](#):

**Question:** I have read a BYU Professor has proved the carbon dating process is inaccurate and false. Is this true?

**Answer:** No, that's not true. Carbon dating has its errors and its complications but we have ways of checking carbon 14 ages against other ages. For example, we have tree ring ages now that go back about 10,000 years which we can check carbon 14 over that period of time. We have ice cores which go back hundreds of thousands of years now and we can check the carbon 14 against some of that. So, "no", we haven't thrown carbon 14 away. It's a great method for dating young things geologically (by young that's in the last 60,000 years or so), but we don't use it for dating the age of the earth.

C-14 dating is corroborated by multiple orthogonal (i.e., independent) measurements of time. For example:

C-14 dates show that Stonehenge was gradually built over the period from 1900 BC to 1500 BC, long before the Druids, who claimed Stonehenge as their creation, came to England. Astronomer Gerald S. Hawkins calculated with a computer what the heavens were like back in the second millennium BC, accounting for the precession of the equinoxes, and found that Stonehenge had many significant alignments with various extreme positions of the sun and moon (for example, the hellstone marked the point where the sun rose on the first day of summer). Stonehenge fits the heavens as they were almost four thousand years ago, not as they are today, thereby cross-verifying the C-14 dates. ([source](#))