Supernova Remnants

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Answers In Creation Website www.answersincreation.org/malone supernova.htm

In one article on Kent Hovind's website, Creation Science Evangelism, Bruce Malone argues that a lack of supernova remnants proves that the earth is young. 1

What is a supernova remnant? It is a plasma made up of the materials left behind by the gigantic explosion of a star in a supernova. There are two possible scenarios for this to occur. First, a massive star may cease to generate fusion energy in its core, and collapse inward under the force of its own gravity. Second, a white dwarf star may accumulate material from a companion star until it reaches a critical mass and undergoes a thermonuclear explosion² (if it's your star, its just not your day!).

The model for supernova explosions shows that it goes through several stages as the matter and energy disperse. The first stage is detectable from the bright flash of light (easy enough). Second, as the blast waves progress, they emit radio waves, for perhaps thousands of years. Finally, the material is so spread out that only heat energy is detectable (Stage 3).

Malone's argument goes like this...if these explosions have happened over millions of years (some estimate one every 25 years), then we should be able to detect millions of these remnants in our galaxy. Most of these would be detectable as in the final stage, where only the heat energy of the explosion is apparent. Malone claims that if it remains detectable for 55,000 years, then doing the math, we should have 2,200 supernova remnants. He breaks it down further, saying that if we could only detect half, then we should have found 1,100. He then lays the bomb...we have only detected 200, which is far fewer than expected, and therefore is indicative of a young earth.

Unfortunately, we don't have the source documents he uses, as he doesn't list them. Most young earth supernova remnant arguments are

based upon the work of Keith Davies. However, he used many false assumptions in his work and makes mathematical errors. In summary, many SNR remnants have been found, including many Stage 3, which gives evidence for an old earth.

Rather than repeat the scientific data here, I'll provide links to them. For the short article summary, see http://www.talkorigins.org/indexcc/CE/CE401.html. For the longer, scientific rebuttal to this claim, see Supernovae, Supernovae

There are other, more simple reasons that the earth is old based on supernovas. Supernovas are evidence that stars have reached the end of their lifetime, which in many cases is billions of years (never "thousands"). Second, star generation from supernova remnant material indicates that we have some second–generation stars, requiring millions of years. Third, light only travels so fast. We have witnessed a supernova that happened 50,000 light years away, meaning the minimum age of our universe is 50,000 years. In fact, the youngest SNR is more than 7,000 light years away.

As is typical with young earth literature, Malone relies on old scientific data, and research which is faulty. To confirm this statement, read the linked articles above.

Malone, Bruce, *Where Have All the Remnants Gone?*, CSE website (www.drdino.com/articles.php?spec=38) (copy link into your browser's address bar to view). Link last checked 26 Jan 06)

² http://en.wikipedia.org/wiki/Supernova_remnant

³ www.creationdiscovery.org/cdp/articles/snrart.html (copy link into your browser's address bar to view)