



Sweeping Supernovas Clean Up The Cosmos



Supernovas are the spectacular ends to the lives of many massive stars. They are explosions that produce enormous amounts of energy and can shine as bright as an entire galaxy made up of billions of stars!

These events are very important because the remains of the shattered star are hurled into space. This material goes on to form new stars, planets and moons – in fact, both you and I are made of supernova material!

As these clouds of leftover star material (called “supernova remnants”) expand, they sweep up all the material they encounter and carry it along with them.

This space photograph shows a 2200-year-old supernova remnant that is sweeping up a remarkable amount of material – enough to make 45 Suns! The picture shows the supernova remnant in blue while the cosmic dust is shown in pink.

The impressive amount of material swept up by this remnant may be the first clue that something special happened to this star before it exploded.

Another clue is the temperature of the remnant, which is unusually hot and still shining high-energy light, called X-rays. With 2200 years having past since supernova explosion, the gas and dust it swept up should have cooled much more.

Unfortunately, you'll have to watch this space to find out the cause for these oddities, as scientists are still trying to figure it out themselves!

COOL FACT

The last supernova observed in the Milky Way was Kepler's Star back in 1604 (known as SN 1604).



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