

NGC 6995, a supernova remnant



Isaac Newton Telescope + Photographic Prime Focus Camera



A supernova remnant is the expanding shell of material created by the ejection of the outer layers of a star that explodes as a supernova. A shock wave precedes the ejected shell, colliding with and heating the interstellar gas. The ejected material breaks up into clumps, so the radiation emitted from the shell often does not make up a uniform ring. NGC 6995, part of the Cygnus Loop is the remnant of a type II supernova. For a few days the supernova emitted as much energy as a whole galaxy. When it was all over, a large fraction of the star was blown into space, as shown on this picture. Remnants are typically at most few light-years across.

Photograph by David Malin (AAO).