

We started observing the light echo with the Hubble Space Telescope at the end of April 2002 and started we've also observed again in May and September, and we've seen enormous changes in the appearance of the light echo at these three times and the reason is that the light from the outburst is spreading out into the nebula and illuminating different pieces of the nebula as time goes by, and in particular we have seen a hole in the middle of the nebula around the star, and that indicates that there probably is a cavity in the dust surrounding the star. Now eventually light from the outburst will go back into the dust, hit that dust, reflect off it, and come back toward us so we expect that hole will fill in and become bright. In fact, before we made the observation in September I had actually predicted that the hole would be full and would be bright in September. Well this must set one of the records for a prediction being proved wrong in science because the hole was still there in September. So the cavity around the star apparently is larger than we had thought, perhaps it's not quite centered on the star, and extends further behind the star than it does to the front. So now I predict when we look at it in November that the hole will be filled in and look bright, and we'll see what happens.