

A "12 Inch Footprint" - Minkowski 1-92

Minkowski 1-92, also known as Minkowski's Footprint, is a proto-planetary nebula in the constellation Cygnus. The bipolar nebula has a special shape in the form of two lobes that are formed by material emitted from the central star. It is bright but very small, means that high magnification needs to be used. It doesn't respond to filters since not an emission but a reflection nebula. Because a star spends only a few thousand years in this phase, these type of objects are rather rare.



Hubble Picture

I've observed M 1-92 using a 12 inch dobson.

My experiences with this object go from

- did not even find it,
- seen something causing me to have severe doubts about the quality of my mirror up to
- having really great fun

The key for a successful observation is the seeing and a properly collimated scope.

This August I was able to "separate" the two lobes with my 12" dobson having good seeing conditions. The observation was confirmed by a second observer.

The sketch together with more data related to the observation.



Observing Location: Sudelfeld, Bavarian Alps, Germany

Date: 08/02/2013, 1am

Conditions: SQML = 21,5 mag/arcsec², rel. humidity = 50%, 18 GradC, seeing good

Scope: Dobson Hofheim Instruments 300mm / F5

Power: 500x (Nagler Zoom 3mm)

My questions are:

- What are your experiences with this object?
- What is the smallest aperture to separate the two lobes?
- What aperture is needed to see the central star?

I would appreciate to read about your experiences with minko 1-92, whatever aperture used.