Object of the Week February 22, 2015 - IC2574 Coddington's Nebula

IC2574 - Coddington's Nebula / Ursa Major (UMa)

Galaxy / Member of the M81 Group

RA: 10h 28m 23,48s Dec: +68° 24' 43,7"

10,2 mag / Size: 13,2' x 5,4' (arcmin)

The dwarf galaxy IC2574 is located in the constellation Big Dipper and not far away from the magnificent pair M81 & M82.

Since IC2574 has a relatively low surface brightness, you've to accurately look when you're searching for it! I always start from M81 going first to NGC3077 located less than one degree east-south-east of it. 1,6 degrees east of NGC3077 you'll spot a 6th-magnitude star (accompanied by two 8th-mag stars).

Coddington's nebula is located just 45' east-south-east of this 6th-magnitude star and fits easily in the field of a low power eyepiece, just carefully peer for it.

The galaxy was discovered by Edwin Coddington in April 1898. Astronomers classify IC2574 as a dwarf irregular galaxy due to its relatively small size and lack of organization or structure. But note that you can find IC2574 classified as a "dwarf spiral galaxy" or "barred late-type galaxy" too. In other words, the classification is not really uniform.

However, the IC2574 is about 13 million light-years (LJ) away from us and a little less than 50000LJ in diameter. It shows clear evidence of intense star forming activity and this is what makes the dwarf galaxy interesting for a wide field of apertures.

This picture from the Italian photographer Leonardo Orazi



Image Credit and Copyright: Leonardo Orazi

Using my 12" dobson, IC2574 is an easy object using averted vision. It's even possible to identify the giant star forming area at the north end of the galaxy as outlined in the following sketch.



Object: IC2574 - Coddington's Nebula

Type: Dwarf Galaxy (Uma) Observing Place: Sudelfeld, Germany Date, Time: March 13 2013, 11:50 pm SQML = 21,5 mag/arcsec*2, seeing II-III, dry, 32 degF, relHum 50% Dobson Hofheim Instruments 300mm / F5 Power: 75x (Nagler 20mm)

The following DSF thread from April 2013 collects a number of observations.

IC 2574 aka Coddington's Nebula

As already outlined, the galaxy is an interesting object for a really wide range of apertures. It even starts already with only a few inches on the one end - Sue French reports seeing it in a 105mm Apo Traveler - and there is as usual no limit at the other ...

Just to mention some of the highlights to be spotted:

- different star forming areas spread over the whole galaxy
- the separation from HII emission areas in the clusters
- the faint "tail" at the SW side

It's the right time now to look for this object.

"Give it a go and let us know"