## The Observer's Challenge Objects

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June: NGC 5474 – Galaxy – Ursa Major; mag<sub>v</sub> = 10.8; Size = 4.7' RA: 14h 05m; Dec: +53° 40'

## NGC5474

The dwarf galaxy NGC5474 is located in the circumpolar constellation of Ursa Major - 'The Great Bear', (also commonly called the 'Big Dipper'). It was discovered by William Herschel on the night of May 1<sup>st</sup>, 1788 using his "20-Foot" reflector (18.7" speculum metal mirror) at Slough. Herschel described the galaxy as "considerably bright,, and large,,".

The 11<sup>th</sup> magnitude galaxy is about 21 million light years distant, and spans a size of 4.8 x 4.3 arc seconds. While not listed in Arp's Peculiar Galaxy catalog, this galaxy does exhibit a distorted appearance, due to its interaction with the much larger, nearby galaxy M101.

## Video-Capture/EAA:

Using EAA techniques, NGC5474 displays nicely in medium-size optics. It is a fairly bright face-on spiral, with an elongated core, and several spiral arms arranged in parabolic arcs on the south side of the nucleus, with each arm containing knots of HII star-forming regions.



05/30/2022: from Cherry Springs State Park, PA, using an 8" SCT optical tube @ f6.3 on a GEM mount, with a CMOS color camera and broadband filter @ 180-second guided exposure, live-stacked for 30 minutes.