

The Observer's Challenge Objects

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April: NGC 3079 – Galaxy – Ursa Major; mag_v = 10.9; Size = 7.9'×1.4'
RA: 10h 02m; Dec: +55° 41'

NGC3079 is a +11th Mag barred-spiral galaxy located in the spring constellation of Ursa Major - 'The Great Bear'. It is about 67 million light years distant. Using his '20-foot' telescope (with a 18.5" speculum metal mirror), William Herschel discovered this galaxy (*entry #47 in Class-V, very large nebulae*) on the night of April 1st, 1790, at his house in Slough, and listed it in his third catalog published in 1802.

In both Hubble and Chandra X-ray photos, the center of the galaxy is currently undergoing a starburst formation driven by a supermassive blackhole that has created a large ~4000 Ly in diameter 'bubble' of material on either side of the galaxy's core containing multiple plumes of gas and dust filaments shaped by high-speed stellar winds from the newborn stars.

NGC3079 is a fairly bright spiral, displaying dark lanes and knots, with diffuse arms on either end of the elongated galaxy. Located nearby in the same field-of-view is the small +16th Mag spiral PGC28990.

Video-Capture/EAA:

12/02/2021: from Big Woodchuck Observatory backyard in Pittsburgh, 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.

