Astronomers have identified 28 heavily obscured AGN in the Chandra Deep Field-South that were previously classified as low luminosity AGN.

This result combined Chandra data with data from several other telescopes including NASA’s Hubble and Spitzer Space Telescopes.

The discovery captures an important phase of growth for supermassive black holes, and helps explain a component of the X-ray background previously unaccounted for.

**Distance estimate:** About 5.4 to 11 billion light years

**Scale:** Image is about 16 arcmin across (about 26 million light years assuming distance is 11 billion light years).

**Credit:** NASA/CXC/Penn State/B. Luo et al; Illustration: NASA/CXC/M. Weiss

**Instrument:** ACIS


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**Caption:** A total of 28 heavily obscured AGN are labelled with green circles in this X-ray image of the Chandra Deep Field-South (right), where red, green, and blue represent the low, medium, and high-energy X-rays that Chandra detects. The artist's illustration (left) depicts how these AGN are wrapped in cocoons of material, making it difficult to accurately identify them. A piece of the cocoon is cut out to show a black hole in the middle of a disk of material falling inwards.