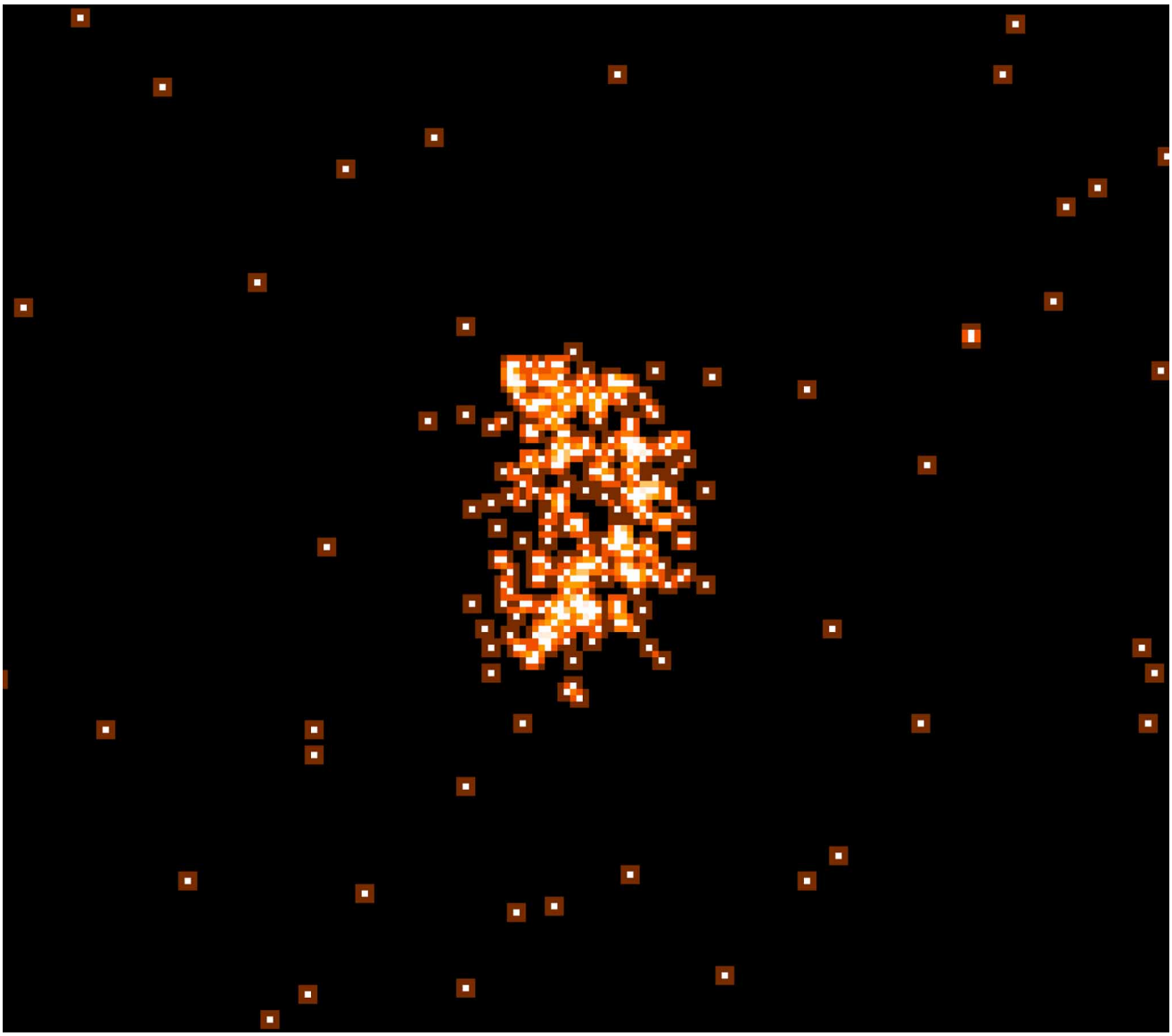

Chandra X-Ray Observatory Center

Harvard-Smithsonian Center for Astrophysics
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Venus: The second planet closest to the sun in our solar system.
Credit: NASA/MPE/K.Dennerl et al.

Chandra's unique capabilities provided astronomers with their first look at Venus in X-ray light. The image shows a half crescent due to the relative orientation of the sun, Earth and Venus. The X-rays from Venus are produced by fluorescent radiation from oxygen and other atoms in the atmosphere between 120 and 140 kilometers above the surface of the planet. In contrast, the light we see from Venus in the night sky is caused by the reflection of sunlight from clouds 50 to 70 kilometers above the surface. X-ray images of Venus will enable scientists to explore regions of the Venusian atmosphere that are difficult to investigate otherwise.

Scale: Crescent of Venus is 23 arcsec from top to bottom.
Chandra X-ray Observatory ACIS Image