These Chandra images show the central region of the Orion Nebula, one of the closest star-forming regions to Earth. Assembled into a time-lapse movie, these observations show that, over the course of mere hours, many of the 700 objects in the field appear to “shimmer” or vary, in X-ray intensity. This flaring behavior appears to be a common characteristic of young stars. Since the sun formed in a similar region long ago, this discovery may help us better understand how our solar system formed.

Scale: Images are 30 arcmin top to bottom.

Orion Nebula: Cluster of young stars in the Orion Nebula.
Credit: NASA/CfA/S.Murray et al.

Chandra X-ray Observatory HRC Images