Cygnus OB2

The Milky Way and other galaxies in the Universe harbor many young clusters and associations that each contain hundreds to thousands of hot, massive, young stars known as O and B stars. The star cluster Cygnus OB2 contains about 2,000 of these stars at a relatively nearby distance to Earth of about 5,000 light years. Chandra observations have helped to find the young stars in the dusty environment of the cluster, and provided evidence for a range of ages for the stars (two million to five million years). In this image, X-rays from Chandra (blue) have been combined with Spitzer data (red) and optical emission (orange).