WASP-18: An exoplanet about ten times Jupiter’s mass located some 330 light years from Earth. (Credit: X-ray: NASA/CXC/SAO/I.Pillitteri et al; Optical: DSS; Illustration: NASA/CXC/M.Weiss

Caption: The artist’s illustration featured in the main part of this graphic depicts a star and its planet, WASP-18b, a giant exoplanet that orbits very close to it. A new study using Chandra data has shown that WASP-18b is making the star that it orbits act much older than it actually is. The lower inset box reveals that no X-rays were detected during a long Chandra observation. This is surprising given the age of the star, suggesting the planet is weakening the star’s magnetic field through tidal forces.

Scale: Inset image is about 5.3 arcmin across (about 0.5 light years)