A First Look at `The Tarantula -- Revealed by X-rays' (T-ReX)

A Cycle 15 XVP on 30 Doradus (1 Ms observed + 1 Ms scheduled)

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30 Doradus is the most important star-forming complex in the Local Group, offering a microscope on starburst astrophysics. At its heart is R136, the most massive resolved stellar cluster, containing the most massive stars known. Across 30 Dor's 250-pc extent, stellar winds and supernovae have carved its ISM into an amazing display of arcs, pillars, and bubbles.

Chandra is observing 30 Dor this year for the 2-Ms AO15 XVP 'T-ReX'. This deep observation will finally exploit Chandra's fine spatial resolution to study ISM interfaces on 1–10 pc scales, the full complement of massive stars, and the brightest pre-main sequence stars that trace 25 Myrs of star formation in this incomparable nearby starburst. Here we give preliminary results from the first 1 Ms of Chandra T-ReX observations.

Variable Emission from Known Massive Stars

VLT-FLAMES Tarantula Survey counterparts are noted (Evans11)

Hot X-ray plasma fills 100-pc-scale superbubbles outlined by heated dust and ionized gas.

T-ReX observations will be complete in early 2015!