

Chandra Observations of the Crab: A Progress Report

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Abstract:

Recently there have been two important findings concerning the Crab both of which are highlighted in this workshop. One finding was the discovery, using the AGILE and Fermi satellites, of gamma-ray flares from the direction of the Crab Nebula (Tavani et al. 2011, Abdo et al. 2011). The other finding was the variability, up to 7%, with time scales of the order of a year of the integrated hard X-ray emission (Wilson-Hodge et al. 2011).

We have been using the Chandra X-Ray observatory to monitor the Crab on a monthly cadence since just after the 2010 September gamma-ray flare. We were also fortunate to trigger series of preplanned target of opportunity observations during the 2011 April flare. Our monitoring observations are on-going and will extend, at a minimum until the fall of 2012. We present an update and overview of these observations.