



SGR 0501+4516: Potential A5 target

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Why is it special?

Bursts comparable to brightest bursts from other SGRs → close

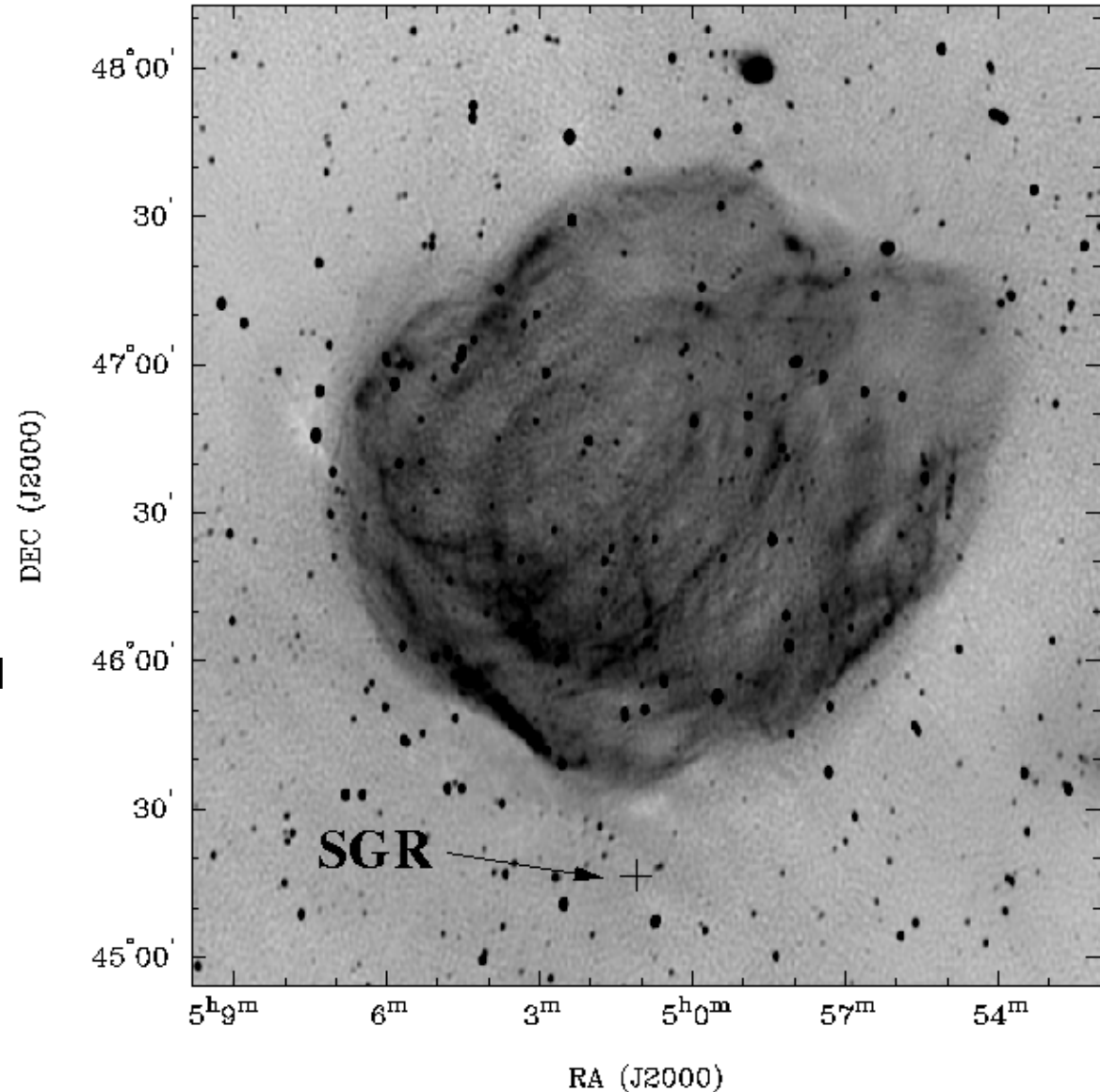
Galactic anti-center → < 5 kpc (GCN 8138)

Supernova remnant (GCN 8149)

Associated SNR is **1.5 kpc** distant

~7x closer, H2 only →

More than **10x gain** in energy over S5y1



http://www.physics.usyd.edu.au/~bmg/fig_sgr_snr.gif

Discovered on 22 August 2008 by Swift (GCN 8113)

Spin period: 5.7620697 ± 0.0000015 s (GCN 8146, Swift XRT)

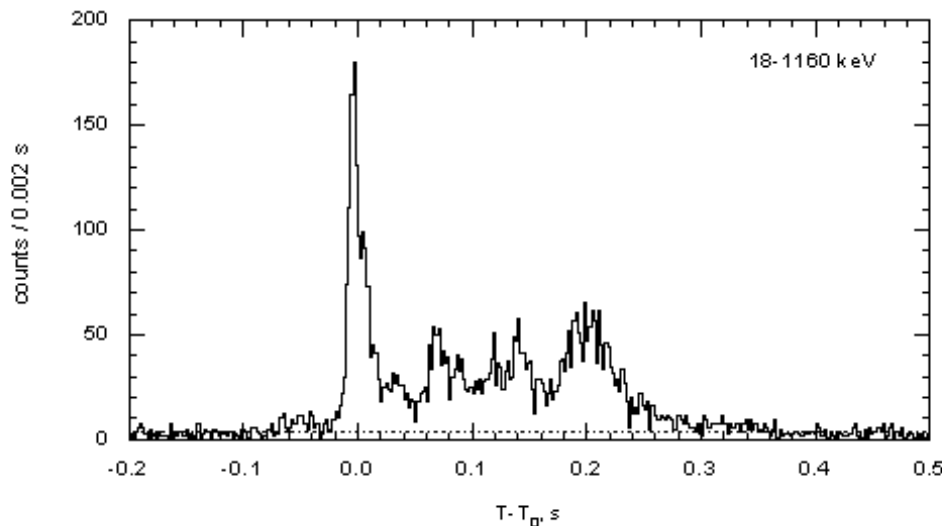
$\dot{P} = 1.5(5) \times 10^{-11}$ s/s $\rightarrow B = 3 \times 10^{14}$ G (RXTE, GCN 8166)

60 triggers in GCN reports

ToO observations (INTEGRAL, RXTE, GLAST, Suzaku) – dozens more?

KONUS-WIND SGR burst 080823
 $T_0 = 41252.652$ s UT (11:27:32.652)

S2



Brightest GCN-listed burst

20 of the GCN-listed triggers lie in A5 science segments
Full IPN list has been requested

This analysis could use as-is Flare code

To do:

- Get finalized A5 calibration and $h(t)$

- Open box