Magnetar Observations in the Swift-Fermi/GBM era

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NASA's Fermi Observatory was launched June 11, 2008; the Fermi Gamma Ray Burst Monitor (GBM) began normal operations on July 14, about a month after launch, when the trigger algorithms were enabled. Since then, and against all odds, GBM recorded over 600 bursts from 4 SGRs. Of these four sources, only one was an old magnetar: SGR J1806+20. SGR J0501+4516, was discovered with Swift and extensively monitored with GBM. A source originally classified as AXP 1E1547.0-5408 exhibited SGR-like bursting behavior and we reclassified it as SGR J1550-5418. Finally, GBM discovered SGR J0418+5729 on 2009 June. Finally, on March 2010, a third new magnetar was discovered with Swift, SGR J1833-0832. I report below on the current status of the field and on several results combining multi-satellite and ground-based data.

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