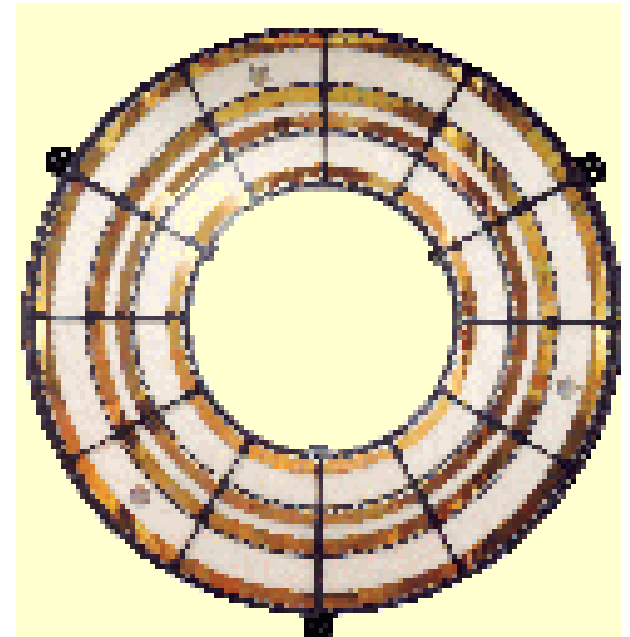




MIT Kavli Institute
for Astrophysics
and Space Research

HETG - Status

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Ongoing HETG Team Activities Summary

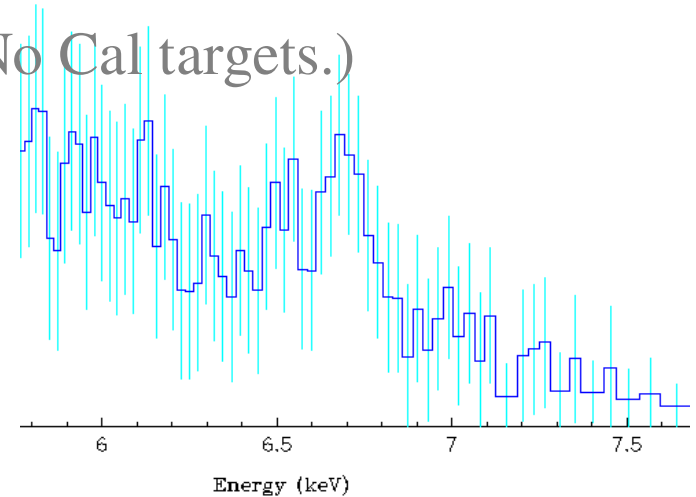
HETG Performance (September 2012 -- March 2013)

* 26 HETG obs.s on 12 Science targets. (No Cal targets.)

• Our GTO HD 79826, **details are shown**

• VLP on Sgr A* completed
(2.95 Ms, 38 obsids, Feb -- Oct '12)

* HETG performance is nominal.



* LETG usage: 8 obsids on 3 Sci.(incl. Crab) & 2 Cal targets

Support to CXC

* HETG Chandra Newsletter article.

* TGCat, <http://tgcate.mit.edu/> : ingestion and V&V; see SDS.



Ongoing HETG Team Activities, cont.

GTO Science Program

@ Cycle 14:

- ✓ Star: HD 79826 [65 ks]
 - 0.5 day eclipsing “RS CVn” system
- M31: XRB, SNR, AGN
[taken 2/9-ths of 685 ks]

@ Cycle 15, Targets submitted:

- XRB: GX 3+1 (90ks), LMC X-2 (100ks)
- Star: HD 206267 (150ks)
- AGN: Mkn 766 (345ks)
- + Competing a TOO (0.1x150ks)

@ Postdoc status:

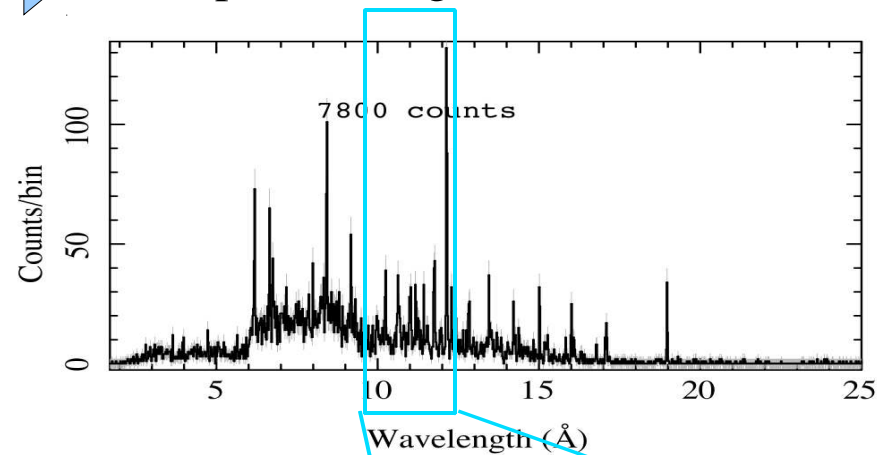
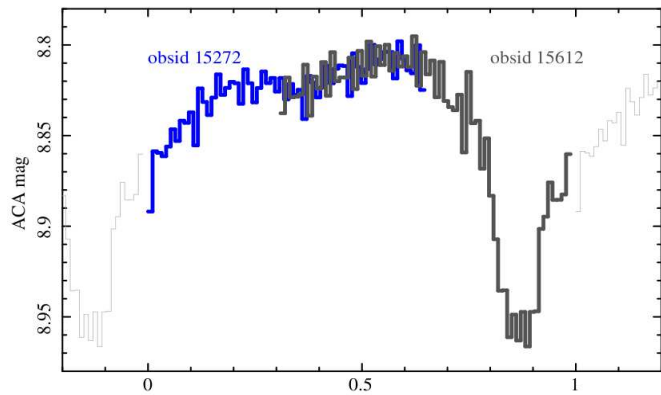
- One HETG postdoc, currently.
- Reviewing applications for open position

HETG GTO publications list (by H.L. Marshall)

Obs ID	Instrument	Grating	Target Name	Reference/Status
5	ACIS-S	HETG	TW HYA	Kastner et al. (2002)
102	ACIS-S	HETG	VELA X-1	Schulz et al. (2002)
103	ACIS-S	HETG	GX 301-2	Torrejon et al. (2010)
104	ACIS-S	HETG	4U 1626-67	Schulz et al. (2001)
106	ACIS-S	HETG	SS 433	Marshall et al. (2002)
107	ACIS-S	HETG	CYG X-1	Miller et al. (2002, 2005)
120	ACIS-S	HETG	E0102-72.3	Flanagan et al. (2004)
130	HRC-S	LETG	PSR B065614	Marshall et al. (2002)
241	ACIS-S	HETG	NGC 4486	Marshall et al. (2001)
332	ACIS-S	HETG	NGC 1068	Ogle et al. (2003)
333	ACIS-S	HETG	NGC 1275	Shu et al. (2011)
334	ACIS-S	HETG	Q08367104	Fang et al. (2001)
335	ACIS-S	HETG	NGC 4151	Ogle et al. (2000)
336	ACIS-S	HETG	PKS 2149-306	Fang et al. (2001)
337	ACIS-S	HETG	PKS 2155-304	Fang et al. (2002)
433	ACIS-S	HETG	MCG-6-30-15	Lee et al. (2001, 2002)
510	ACIS-S	HETG	PKS 0745-191	Fang et al. (2005)
601	ACIS-S	HETG	TY PYX	Testa et al. (2004, 2007)
1017	ACIS-S	HETG	EXO 0748-676	Jimenez-Garate et al. (2003)
1018	ACIS-S	HETG	4U 014261	Juett et al. (2002)
1019	ACIS-S	HETG	SS 433	Lopez et al. (2006)
1451	ACIS-S	HETG	II PEG	Huenemoerder et al. (2001)
1500	ACIS-S	HETG	H 1821643	Fang et al. (2002)
1500	ACIS-S	HETG	1H 0414009	Fang et al. (2005)
2970	ACIS-S	HETG	1ES 1028511	Fang et al. (2005)
2971	ACIS-S	HETG	3C 279	Fang et al. (2005)
2977	ACIS-S	HETG	MRC 2251-178	Gibson et al. (2005)
3147	ACIS-S	HETG	NGC 7469	Scott et al. (2005)
3148	ACIS-S	HETG	IRAS 18325-5926	Mocz et al. (2011)
3567	ACIS-S	HETG	Mkn 290	Zhang et al. (2011)
3568	ACIS-S	HETG	H 1426428	Fang et al. (2005)
4759	ACIS-S	HETG	MCG-6-30-15	Miller et al. (2008)
5512	ACIS-S	HETG	SS 433	Marshall et al. submitted
5599	ACIS-S	HETG	PG 0844349	Shu et al. (2010, 2012)
5600	ACIS-S	HETG	M81*	Markoff et al. (2008)
6567	ACIS-S	HETG	4U 1728-34	Galloway et al. (2010)
9148	ACIS-S	HETG	NGC 1068	Kallmann et al. in prep.
9898	ACIS-S	HETG	Ark 564	Longinotti et al. in prep.
11848	ACIS-S	HETG	ESO 323-G077	Evans et al. in prep.
11858	ACIS-S	HETG	NGC 2992	Murphy et al. in prep.
12165	ACIS-S	HETG	Mkn 841	Longinotti et al. in prep.
13293	ACIS-S	NONE	Puppis A	Recently observed
13305	ACIS-S	HETG	3C445	Longinotti et al. in prep.
15272	ACIS-S	HETG	SMC X-1	Observations in progress
15272	ACIS-S	HETG	HD 79826	Recently observed
15273	ACIS-S	HETG	M 31 (3 positions)	Observations in progress

Science: A pathfinding look at HD 79826

Chandra's Aspect Camera ^{Optical} lightcurve: GTO pathfinding observations, 65 ks:



@Late-type eclipsing stellar binary:

- Discovered short period and “heavily spotted” behavior in ACA lightcurves (J. Nichols et al. project)
- Followed-up with GTO observation
- Strong flare in second obsid
- Justify a longer GO observation

