



MIT Kavli Institute  
for Astrophysics  
and Space Research

# HETG - Status

*Chandra* Quarterly Review No. 26

23 October 2008



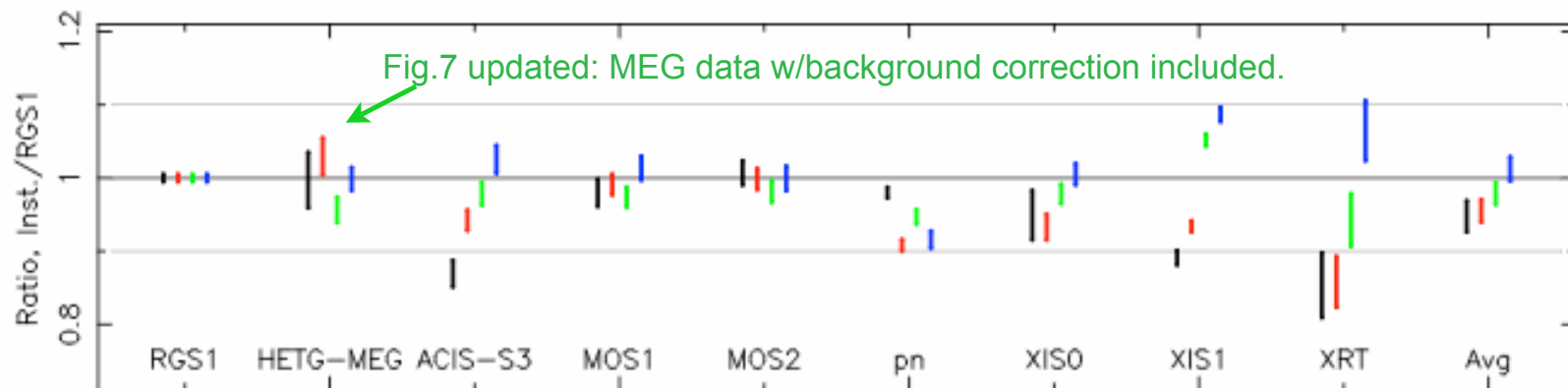
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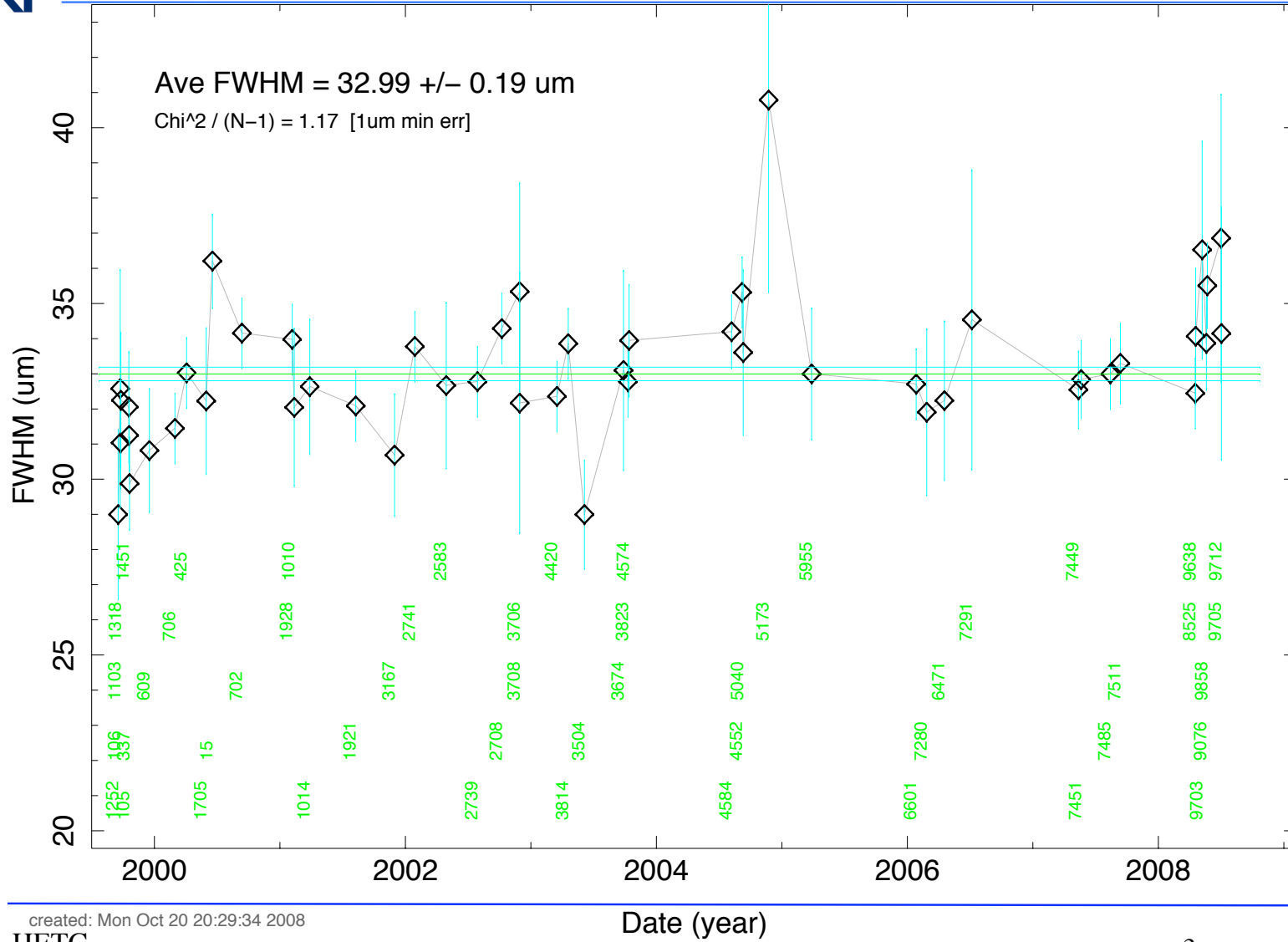
## Ongoing HETG Team Activities Summary

- HETG Performance (May'08 -- mid-October'08)
  - 16 HETG obsids on 7 Science + 1 Cal targets
    - \* Two of our GTO targets: X1822-371 binary, AGN Ark 564.
    - \* Plus other goodies ('87A, Eta Car.)
  - FWHM of streak is steady (next page); HETG performance is nominal.
  - LETG usage: 19 obsids on 5 Science + 2 Cal targets; performance nominal.
- HETG Calibration
  - E0102 cross-calibration: Plucinsky et al. 2008 (SPIE v7011; arXiv/0807.2176).





FWHM of HETG Streak Core vs Time (TGCat processed)  
Note: The FWHM here is for un-randomized sky event data.



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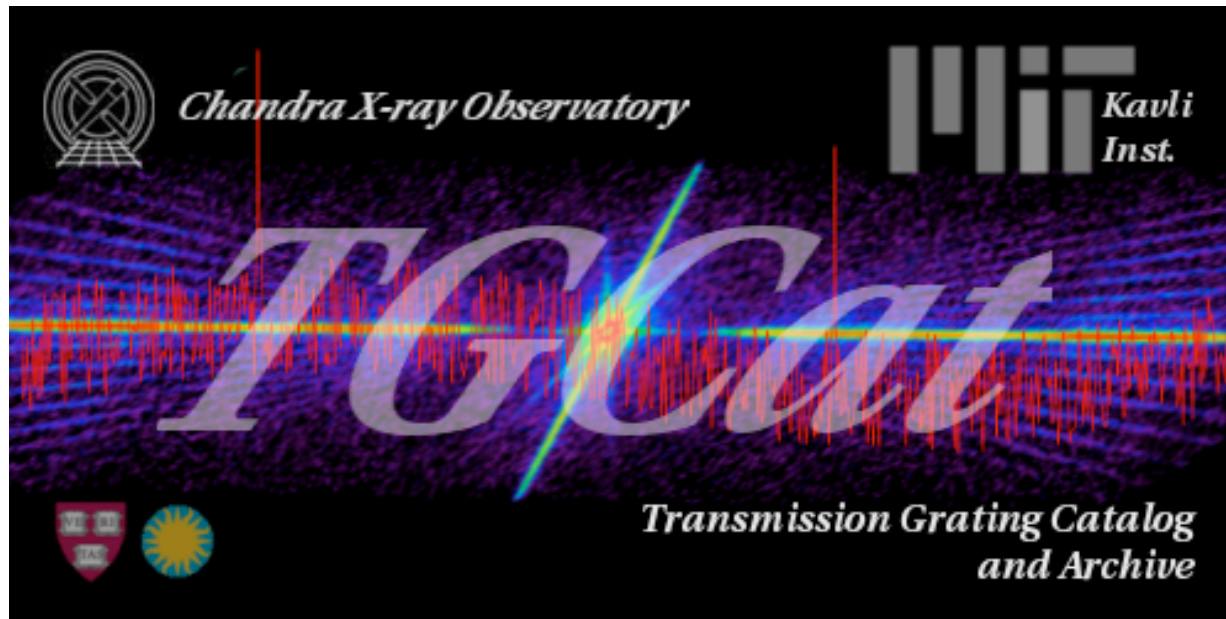
HETG



## Ongoing HETG Team Activities, cont.

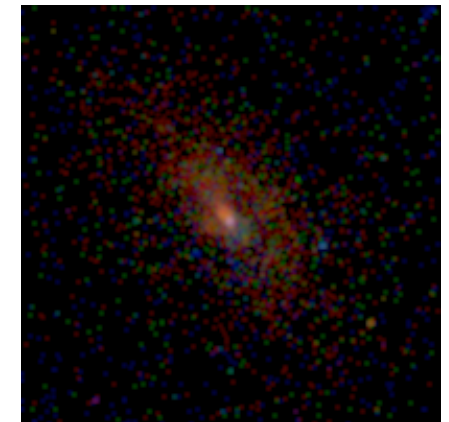
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- Science Support to CXC, etc.
    - Supporting Legacy Catalogue, "TGCat", w/Joy Nichols et al.
    - Provide useful, dependable (customized) high-level spectral products
    - Beta release made available for Chandra Users' Committee meeting
- ★ <http://spacebase-alpha.mit.edu/tgcat/>



- GTO Science Program
  - Cycle 9:
    - Still to come: NGC 1068: 400 ks in Nov./Dec.'08
  - Cycle 10:
    - AGN, Ark 564 (250 ks) -- Observed already !
    - XRB/IGM, 4U 0614+091 (200 ks)
    - Flare star, EV Lac (100 ks)
    - XRBs: GX 5-1, 4U 1556-60 (32, 40 ks)
    - Cas A "HETG-II": 8-years-later (70ks)
  - Postdoc status:
    - One PD finishing 8/09; within current contract.
    - Two PDs starting soon, Nov.1 '08 and Jan.1 '09
      - \* Will increase group focus on AGN

HST view of NGC 1068



Chandra HETG 46 ks,  
400 ks more coming...

# MKI Science: Cas A in 3-D !



- Sneak-peek before Jan.'09 AAS, Long Beach
- HETG Postdocs: Tracey DeLaney; building on Lazendic et al. '06
- Chandra **HETG** (Si), **ACIS 1Ms** (Fe-K) Spitzer (SiII-gray, **Ar-II-red**) and **optical data**: viewed in a 3D pdf !

