

ST-ECF

STUC, 12 April 2007
Bob Fosbury

ST-ECF status

- ▶ The mandated staffing level (7 ESO + 7 ESA) was achieved early in 2006
- ▶ Decision taken in Oct 06 to terminate the ST-ECF when the current Hubble ESA/ NASA MoU expires at the end of 2010
- ▶ Two internal reviews (with ESO participation) held during last 4 months
 - ▶ Archive status (Freudling et al.)
 - ▶ Priorities for Hubble Legacy Archive data product generation (Kuntschner et al.)

▶ Concerns

- ▶ Deployment of ST-ECF staff after 2010
- ▶ Completion and maintenance of full HST data archive in Europe
- ▶ Continuation of European ground-space coordination via ESA-ESO contacts
- ▶ Loss of services during last years of Hubble operations (after SM4)

Curent Activities

- ▶ Instrument science
- ▶ Archive & HLA
- ▶ Public Outreach
- ▶ ESA-ESO coordination (ground-space in Europe)

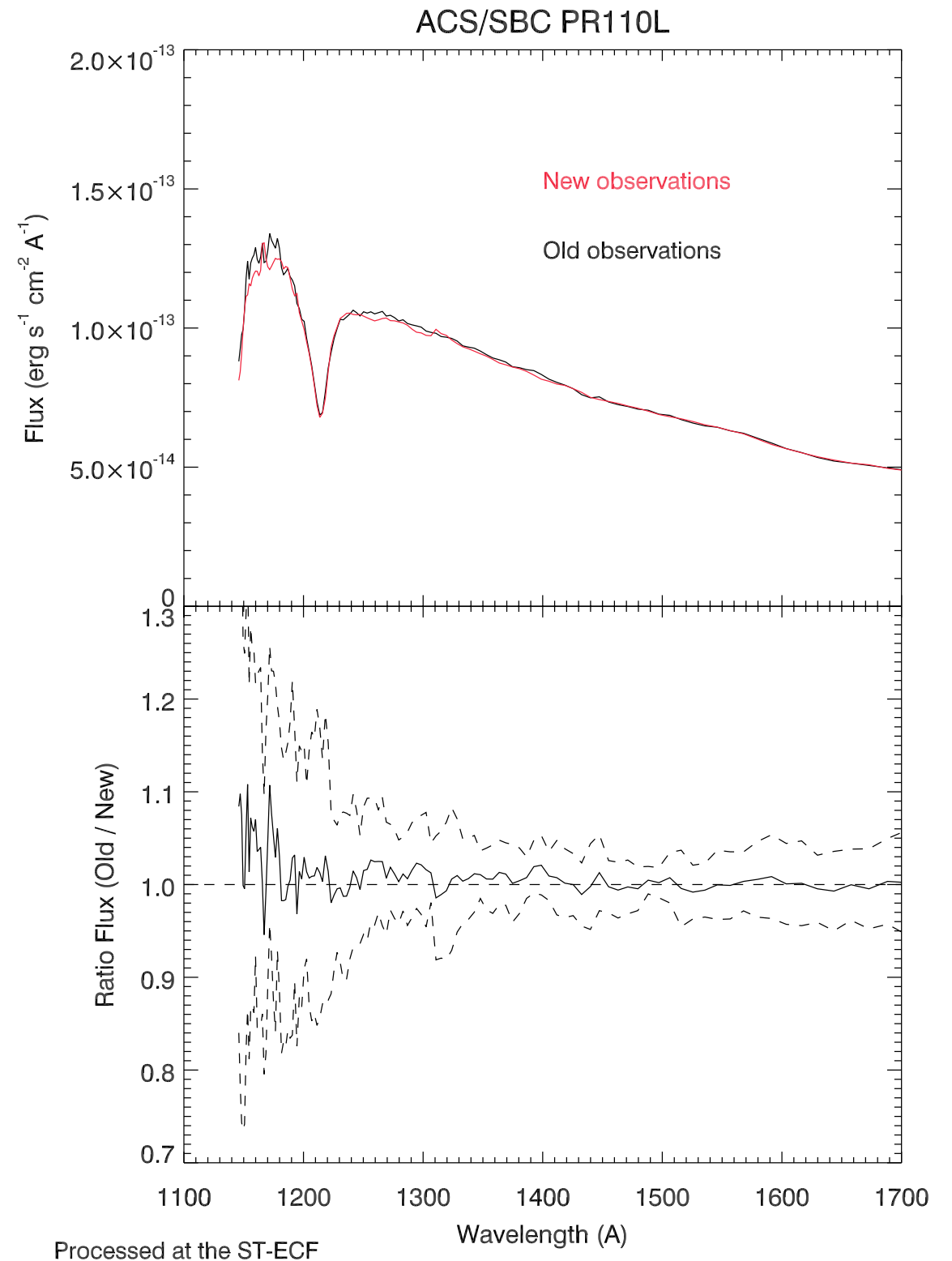
Instrument science

- ▶ Software to extract calibrated spectra from slitless grism/prism observations developed and deployed. Applicable to:



- ▶ NICMOS [*HLA pilot project underway*]
- ▶ ACS [*used for major science programmes: APPLES, GRAPES, PEARS, PANS*]
- ▶ WFC3 [*involvement in ground calibration*]
- ▶ [*Also suited to ground-based MOS and to JWST NIRSpec formats*]

- ▶ ECF SBC prism calibration programme to check the red leak provided a check of the contamination post the January Side 2 fuse blow
- ▶ Black are old data; Red is 'after' observation
- ▶ => No obvious loss in UV sensitivity



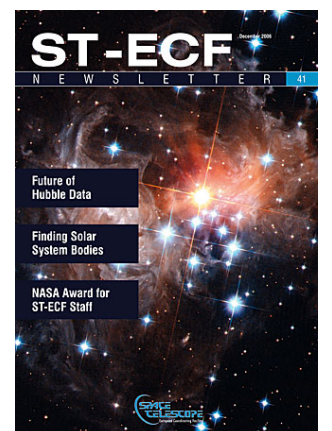
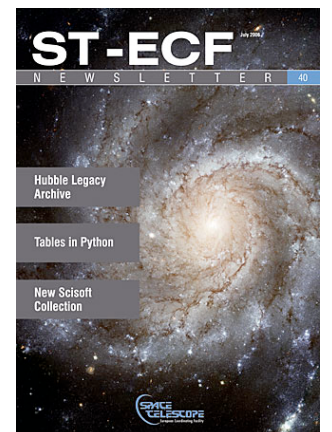
- ▶ The former *Instrument Advanced Calibration Group* was selected by NASA to receive the “Group Achievement Award” for its work on high fidelity calibration
- ▶ Instrument models based on the physics of the instrument, high accuracy laboratory assessment of wavelength standards, and sophisticated modelling of the detection process of individual photons. The award was given to P. Bristow, F. Kerber and M. Rosa and is shared with a three-member team from the US National Institute of Standards (NIST; Nave, Reader, Sansonna). The ceremony was at NASA HQ on July 21, 2006



Archive

- ▶ Migration of HST data to NGAS nearing completion
 - ▶ Total holdings are now 547,000 datasets. 41,426 datasets (2.9 TB) were distributed to 402 users during 2006 [*Archive statistics for 2006 — document available*]
 - ▶ STScI and ST-ECF and have performed the final reprocessing of the FOC and GHRS archives
- ▶ The STScI, the ST-ECF and the CADDC have initiated the **Hubble Legacy Archive**
 - ▶ This will consist of High Level Science Data Products, derived from selected datasets and made available through the archives in VO-compatible structures
 - ▶ A tri-partite agreement exists
 - ▶ The first products are being created

See *ST-ECF Newsletters*
Nos. 40 & 41



- ▶ HLA kick-off meeting held at ST-ECF in May 2006 - attended by STScI, CADDC, ESO (VOS-ADP) and ESAC
- ▶ Decided to make a tri-partite (ST-ECF, STScI, CADDC) agreement
- ▶ Regular meetings and telecons initiated
- ▶ Pilot project started (NICMOS grism)

HLA (2007)

- ▶ Complete NICMOS grism pilot project (June 2007)
- ▶ Finalise NICMOS grism HLA products and interfaces (late 2007)
- ▶ Bring FOS reprocessed datasets to final form (coaddition/enhanced metadata, spectral container) and publish (Summer 2007)
- ▶ Plan scope of ACS/WFC grism HLA project (to start in late 2007)
- ▶ Conclude WFPC2 associations project in conjunction with CADC (quality control)
- ▶ Sign Tripartite Agreement
- ▶ Collaborate closely with STScI and CADC

HLA (to 2010)

- ▶ Publish final, validated high-level data products for several Hubble instruments and make them available through VO and other interfaces in collaboration with the other HLA sites
- ▶ Minimum set of data will include:
 - ▶ NICMOS grism extracted spectra
 - ▶ ACS/WFC grism extracted spectra
 - ▶ FOS coadded extracted spectra
- ▶ Other products (eg, STIS UV echelle, enhanced WFPC2 associations, atlas-style products) will be considered as time and resources allow

Euro-Outreach

- ▶ 19 news & photo releases (up 25%)
- ▶ 185 million web-hits (up 60%)
- ▶ 2.8 million visitors (up 90%)
- ▶ 36TB of multimedia downloaded (up 65%)
- ▶ ESA/ESO/NASA Photoshop FITS Liberator V2.1 released
- ▶ Several exhibitions
- ▶ Astronomy Visualization Metadata standard (co-authored with IPAC) endorsed by IVOA
- ▶ 2 Newsletter issues + 4 books produced

ESA-ESO coordination

- ▶ 3rd ESA-ESO bilateral meeting took place in Garching in October 2006
- ▶ 2nd and 3rd Working Group reports completed and distributed
- ▶ 4th WG — on Galactic Structure — being formed [*Chair: Catherine Turon*]
- ▶ Input to ASTRONET

All 3 reports available (as books) on request or at: http://www.stecf.org/coordination/esa_eso/

