

ST-ECF

STUC, 18 October 2007

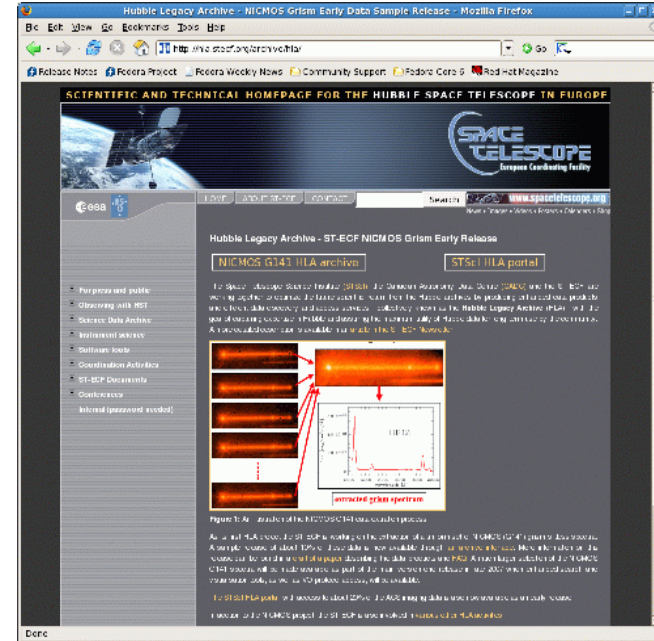
Martin Kümmel

ST-ECF status

- Stable staffing until 2010:
 - 14 ESA/ESO, ~6 intern/postdoc (mostly Outreach), 2 (IAU) for IYA09
- Project activities same as last STUC report
 - Instrument science
 - Archive/HLA
 - Space-ground coordination
 - Public communication

NICMOS G141 pilot project

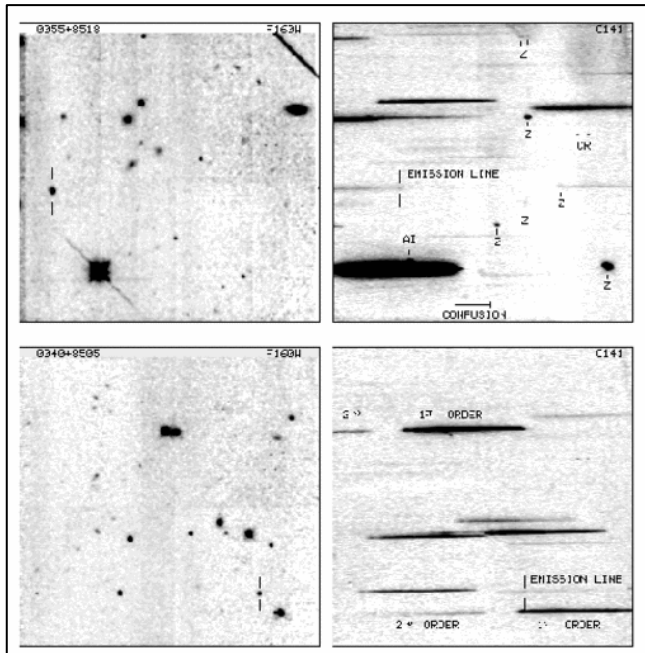
- Coordinated STScI / ST-ECF pre-release of small fraction of data to demonstrate data quality and interfaces.
- Release to public on July 31, 2007
- ST-ECF contribution about 10% of the G141 NICMOS spectra
- Total of 873 high S/N spectra



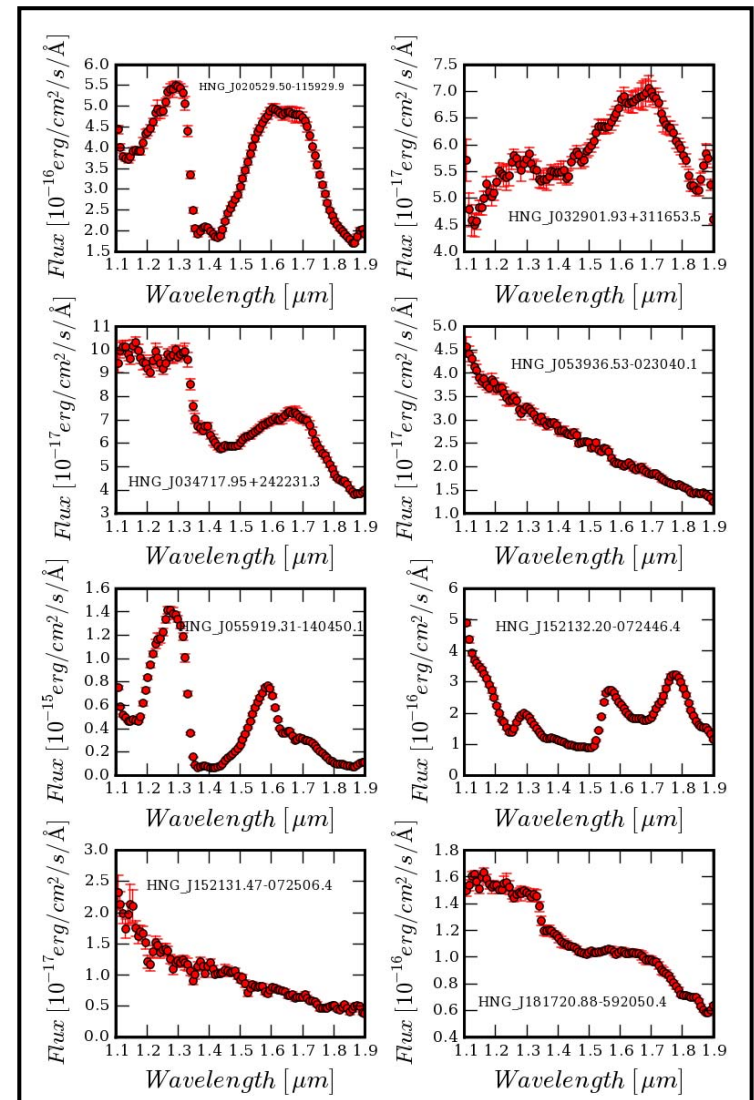
ST-ECF HLA portal

NICMOS HLA Data

Still lots of science!



Raw data



Spectra of bright sources

Plans for Next (First) Data Release

- Next release planned for Winter 2007/2008
- Includes about 90% of all G141 Spectra
- New VO-compliant spectrum server, uses **SSAP**
- Support for ESO's VIRGO archive browser
- Data quality full documented in refereed paper

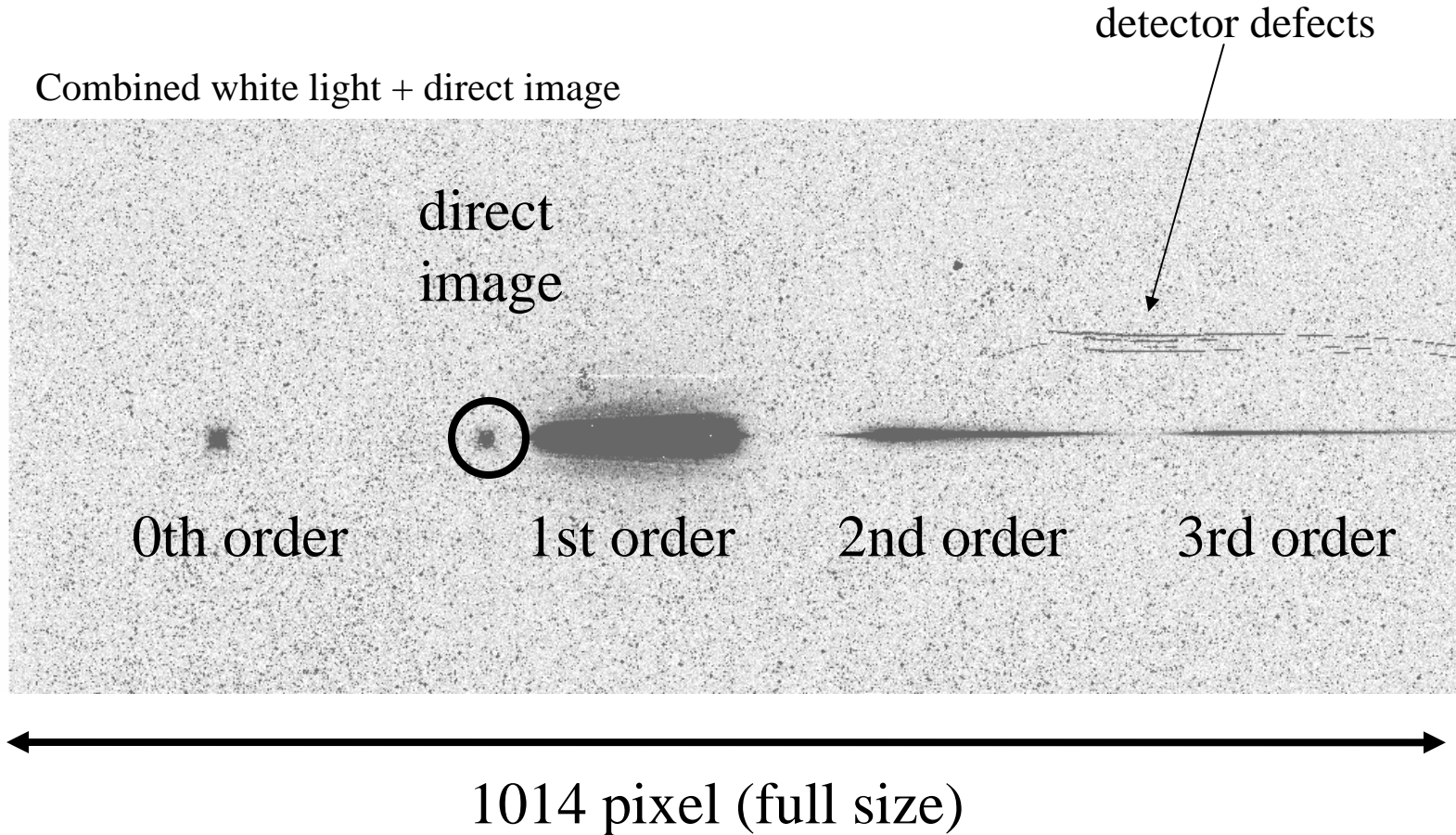
Work on ACS will start in winter !

WFC3

- ST-ECF responsible for support of the slitless modes of WFC (as for ACS)
- Calibration, software development and user support
- WFC3 slitless modes:
 - UVIS/G280: 2000-5300Å 70 @ 3000Å
 - IR/G102: 7800-10700Å 210 @ 10000Å
 - IR/G141: 10500-17000Å 130 @ 14000Å
- Calibration of slitless modes in Ambient, TV1 and 2 campaigns

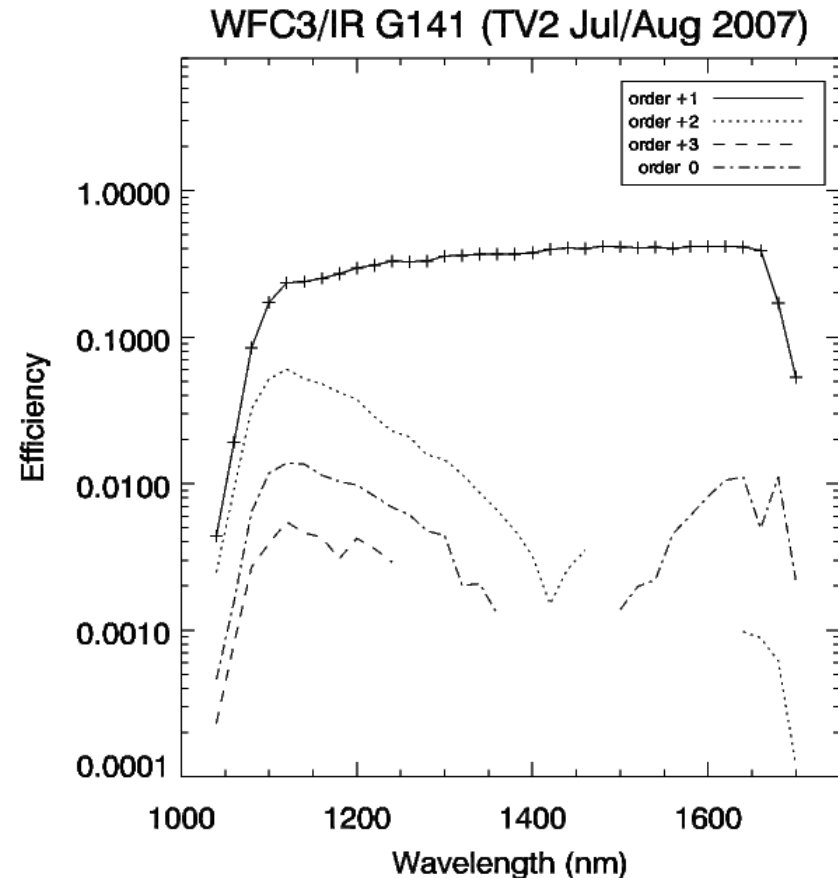
WFC3-IR G141

Combined white light + direct image



Thermal Vacuum 2 results

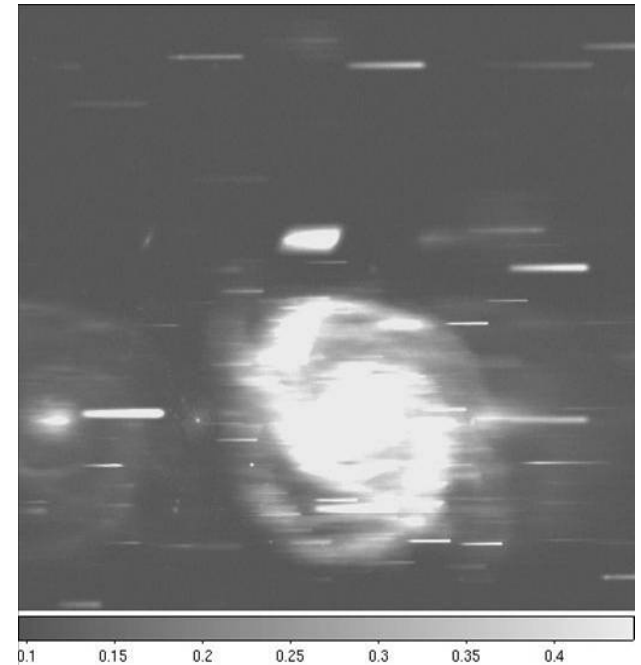
- Characterization of the UVIS and NIR instrument modes
- Throughput (→ETC)
- Aperture correction (→ETC)
- “First” configuration files (trace and dispersion)
- “First” calibration files
- Wavelength dependent flatfields



Throughput of IR/G141

Simulating slitless WFC3 images: aXeSIM

- Aid HST users during Phase I and II
 - Optimal pointing and roll angle
 - Spectral features to be detected
- Getting familiar with slitless spectroscopy
- Complementary to the ETC
- Available as a webservice



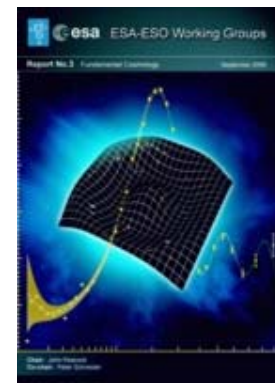
G141 Simulation: Spiral galaxy, HII regions and stars



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 — report due end '07
[Chair: Catherine Turon]
- Input to ASTRONET (European 'decadal survey')

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



Public Outreach

- The core product: ~20 news and photo releases per year
- ~15 TB multimedia files distributed per month
- ~800,000 visitors per month
- Home to the International Year of Astronomy 2009 Secretariat
- ESA/ESO/NASA FITS Liberator 3.0 production has started (parallelization, GUI improvements, ...)



Public Outreach: Hubblecast

- The Hubblecast concept has been consolidated as a regularly supplemental product and ~12-14 episodes/year are produced (9 so far)
- Production time is ~5-7 work days. Now in Full HD (1920x1080pix)
- Hubblecast regularly appear in the iTunes podcast Top100 all over the world
- 800,000 individual episodes distributed



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Information on the WEB

- **NICMOS HLA:** www.hla.stecf.org
- **HLA archive:**
http://archive.eso.org/wdb/wdb/hla/product_science/form
- **aXe slitless extraction software:**
www.stecf.org/instruments/ACSgrism/axe
- **ESA-ESO coordination reports:**
http://www.stecf.org/coordination/esa_eso
- **Hubblecast:**
www.spacetelescope.org/videos/hubblecast.html
- **International year of astronomy:**
www.astronomy2009.org
- **ST-ECF Newsletter:**
www.stecf.org/documents/newsletter/