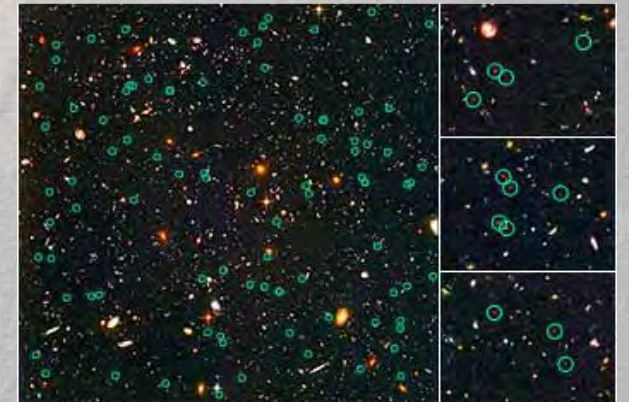
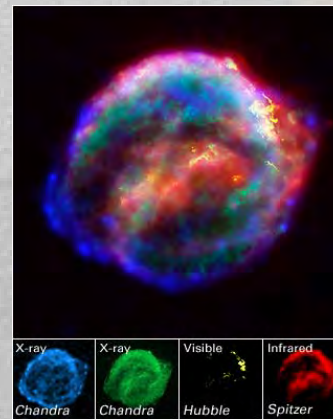
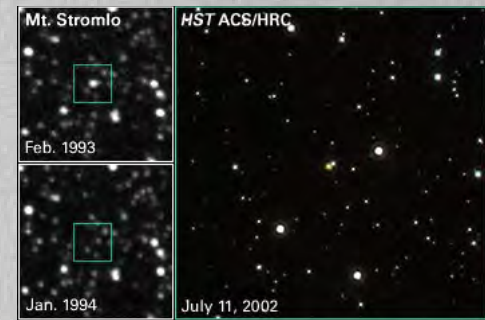
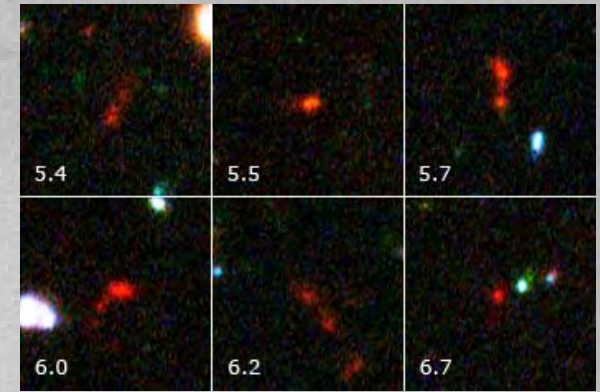


# ACS Press Releases

## ■ Science

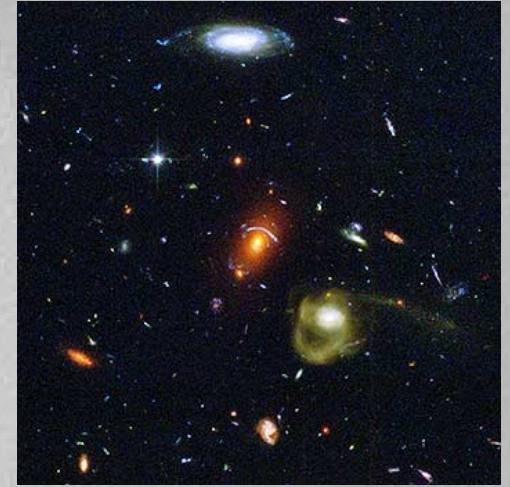
- ◆ Grism spectroscopy of UDF galaxies
- ◆ Mass of the MACHO-LMC-5 lens
- ◆ Earliest star-forming galaxies in UDF
- ◆ Kepler's SNR
- ◆ Surviving companion star in Tycho's SNR



# ACS Press Releases

## ■ Images

- ◆ Gravitational lens in ACS/WFC parallel image
- ◆ SN 2004dj in NGC 2403
- ◆ Cat's Eye Nebula



# ACS Status / Operation

- All modes continue to operate well
- Preparation for two-gyro operations
  - ◆ Anticipated science impact described in two-gyro handbook
  - ◆ ACS/ETC updated to deal with two-gyro PSF
  - ◆ Planning underway for test observations in Feb 2005
- Electronics
  - ◆ Preparations are underway to allow a fast electronic side switch for ACS if ever necessary

# ACS User Support

- Support provided for planning of 70 proposals:
  - ◆ 24 proposals switched from STIS
    - ◆ 11 use SBC
    - ◆ 15 use ACS prisms
    - ◆ 2 use ACS grism
    - ◆ 1 uses WFPC2
  - ◆ 39 newly accepted
  - ◆ 7 proposals accepted through Chandra TAC
- ACS SBC (FUV) and spectroscopic modes (grism/prisms) can take over some of the science from STIS
  - ◆ No snapshots possible with ACS/SBC

# ACS Documentation

- New (complete) ACS Data Handbook released
- New Instrument Handbook released for Cycle 14
- ACS+WFPC2 newsletter (STAN) released

# ACS Pipeline/Analysis Software

- MultiDrizzle implemented in ACS pipeline
  - ◆ Works on associated data (exposures in a visit created with a recommended pattern or CR-SPLIT)
  - ◆ Produces cosmic-ray cleaned, combined, geometrically corrected output image
- New STSDAS standalone release planned for Nov 2004 (will work also for e.g. WFPC2)
- Further improvements planned for 2005
  - ◆ e.g., ability to automatically register images

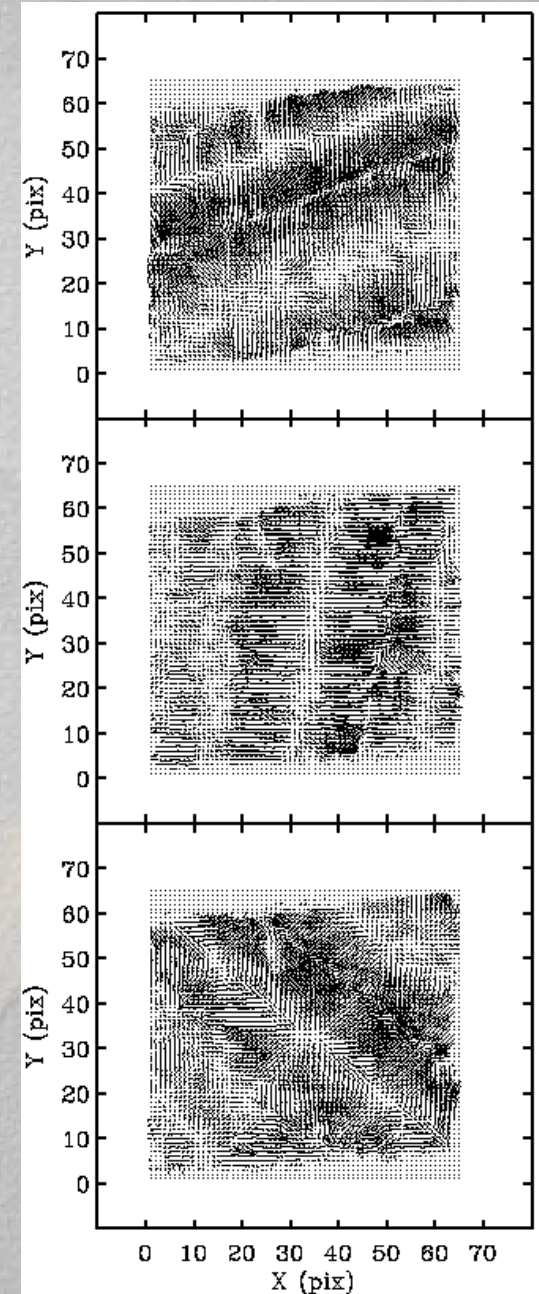
# ACS Calibration

## ■ Polarimetric Modes Characterized

- ◆ I. Introduction and status (ISR 04-09; Biretta et al.)
- ◆ II. The POLV filter angles (ISR 04-10; Biretta et al.)
- ◆ III. Astrometry of polarized stars (ISR 04-11; Kozhurina-Platais et al.)

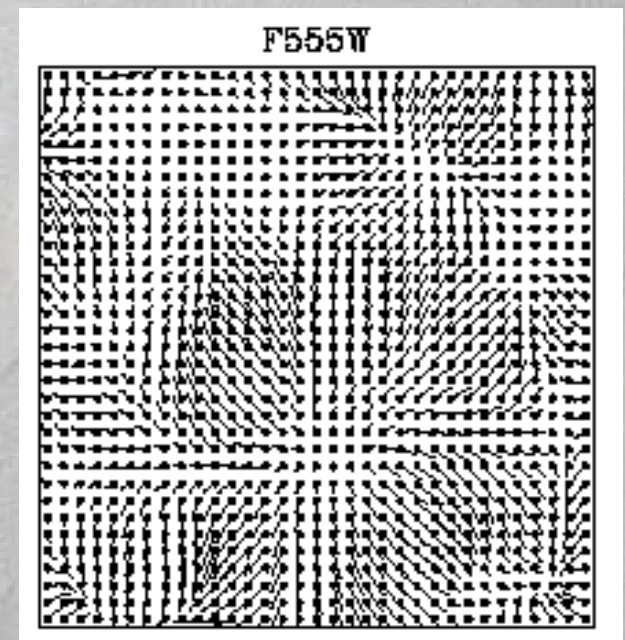
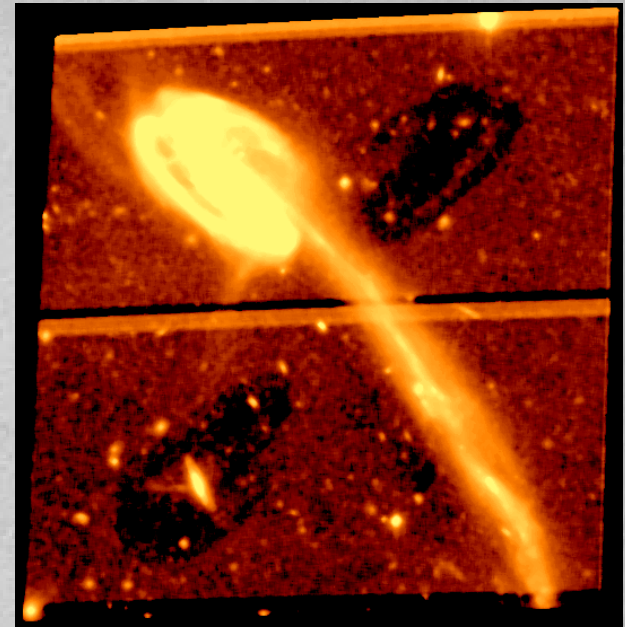
## ■ SBC dark rate measured

- ◆ ISR 04-14 (Cox)



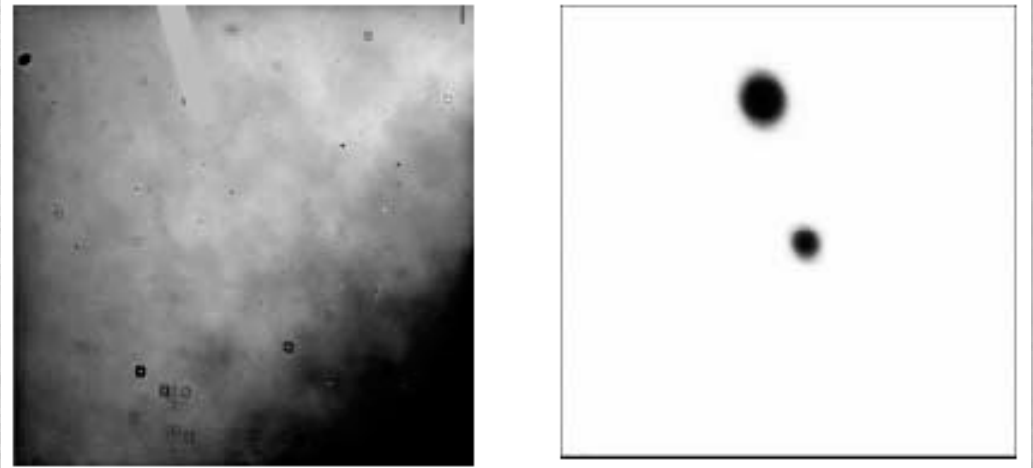
# ACS Calibration

- Amplifier Cross-Talk Characterized
  - ◆ I. Description of the effect (ISR 04-12; Giavalisco)
  - ◆ II. Using GAIN=2 to minimize the effect (ISR 04-13; Giavalisco)
- Geometric Distortion on HRC calibrated to 0.01 pixel
  - ◆ ISR 04-15 (Anderson & King)





# ACS Calibration



- Coronagraphic Flatfield Methodology improved
  - ◆ ISR 04-16 (Krist et al)
- Calibration plan for Cycle 13 prepared and being executed
  - ◆ Additional calibrations for spectroscopic modes and SBC are being planned, now that STIS has failed.

# ACS Reference Files

- Dark/Bias creation infrastructure revised
- Delivered to the pipeline since 06/2004:
  - ◆ 246 dark images
  - ◆ 58 bias images
  - ◆ 3 MultiDrizzle parameter tables
  - ◆ 6 Tables with improved geometric distortion polynomials
  - ◆ 22 higher-order geometric distortion correction images
  - ◆ Coronagraphic spot flats and spot position tables

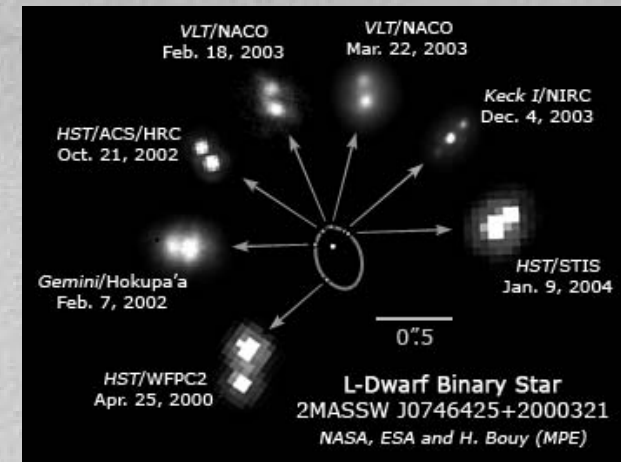
# WFPC2 Press Releases

## ■ Science

- ◆ Mass of L-dwarf binary star

## ■ Images

- ◆ Heart of the Trifid Nebula
- ◆ Spiral galaxy NGC 3949
- ◆ HII Regions N11 & N44 in the LMC



# WFPC2 Support & Calibration

- WFPC2 continues to be supported primarily through routine calibrations (dark, bias, UV contamination, ...) and user support
- New Instrument Handbook released for Cycle 14
- Accuracy of Photometric Zeropoints was studied
  - ◆ **ISR 04-01: Heyer et al.**
- Calibration plan for Cycle 13 prepared and being executed
- Time-varying geometric distortion solutions were delivered as reference files for use with MultiDrizzle