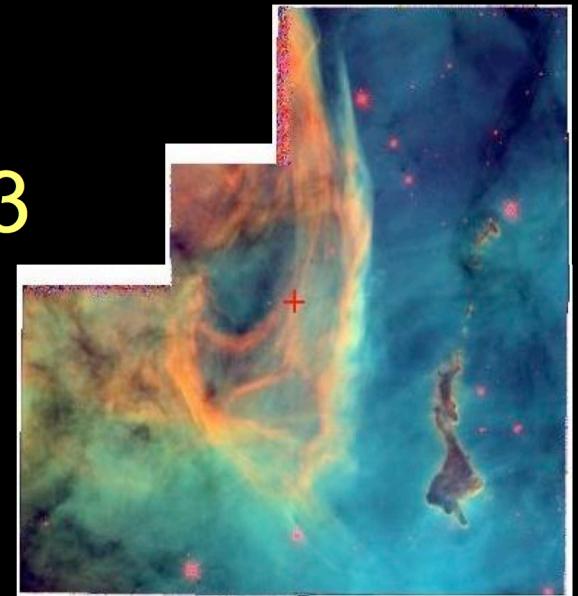


A screenshot of the Hubble Legacy Archive website. At the top, there is a search bar with the coordinates "RA = 84.676663 Dec = -69.100781 r = 0.200000 [38:42:399 -69:06:02.81]" and a "Search" button. Below the search bar are tabs for "Inventory", "Images", "Footprints", "NICMOS Grism (ST-ECF)", and "Help". The main area shows a table of search results with columns for "Display", "Download", "RA", "DEC", "Level", "Target", "Detector", "Aperture", "Spectral_Elt", "NExposures", "ExpTime", and "StartTime". The results list various observations of the star 30 Dor, including multiple visits with the ACS/WFC and NICMOS instruments at different filter wavelengths (F606W, F814W, F850LP) and dates between July 2004 and July 2005.

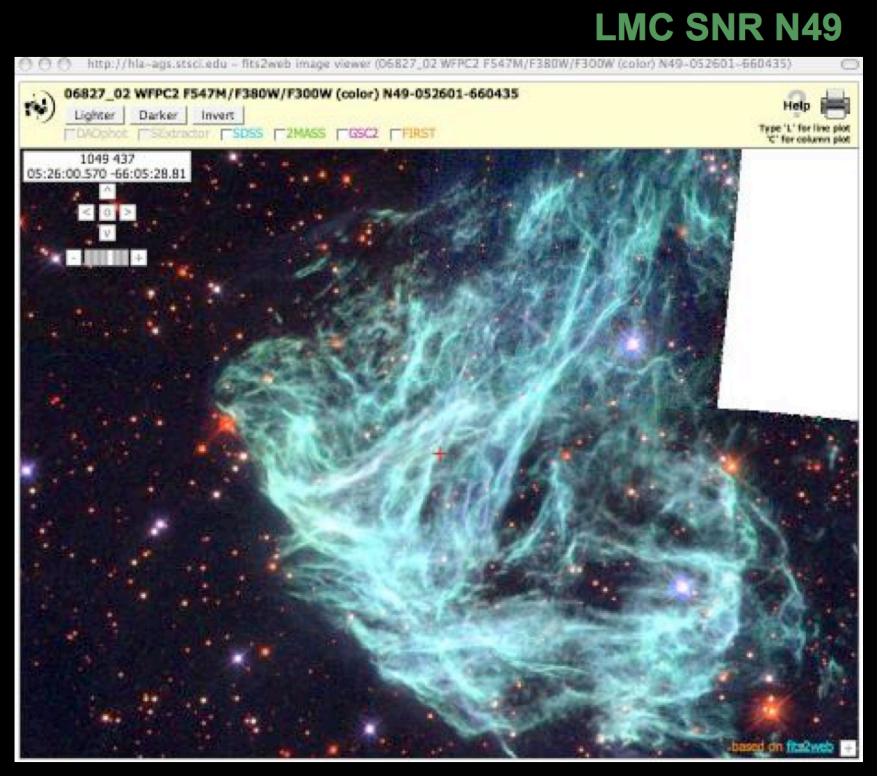
The Hubble Legacy Archive: DR2, DR3, and Beyond

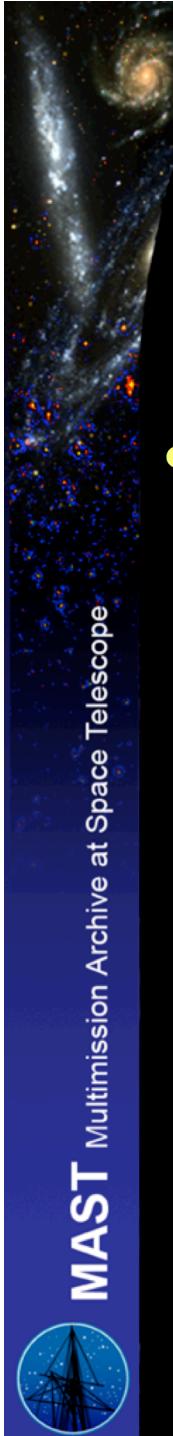
Rick White
STUC, 2008 Nov 13



Overview

- Data Release 2 (DR2)
- Data Release 3 (DR3) and beyond
- Demo





The Hubble Legacy Archive

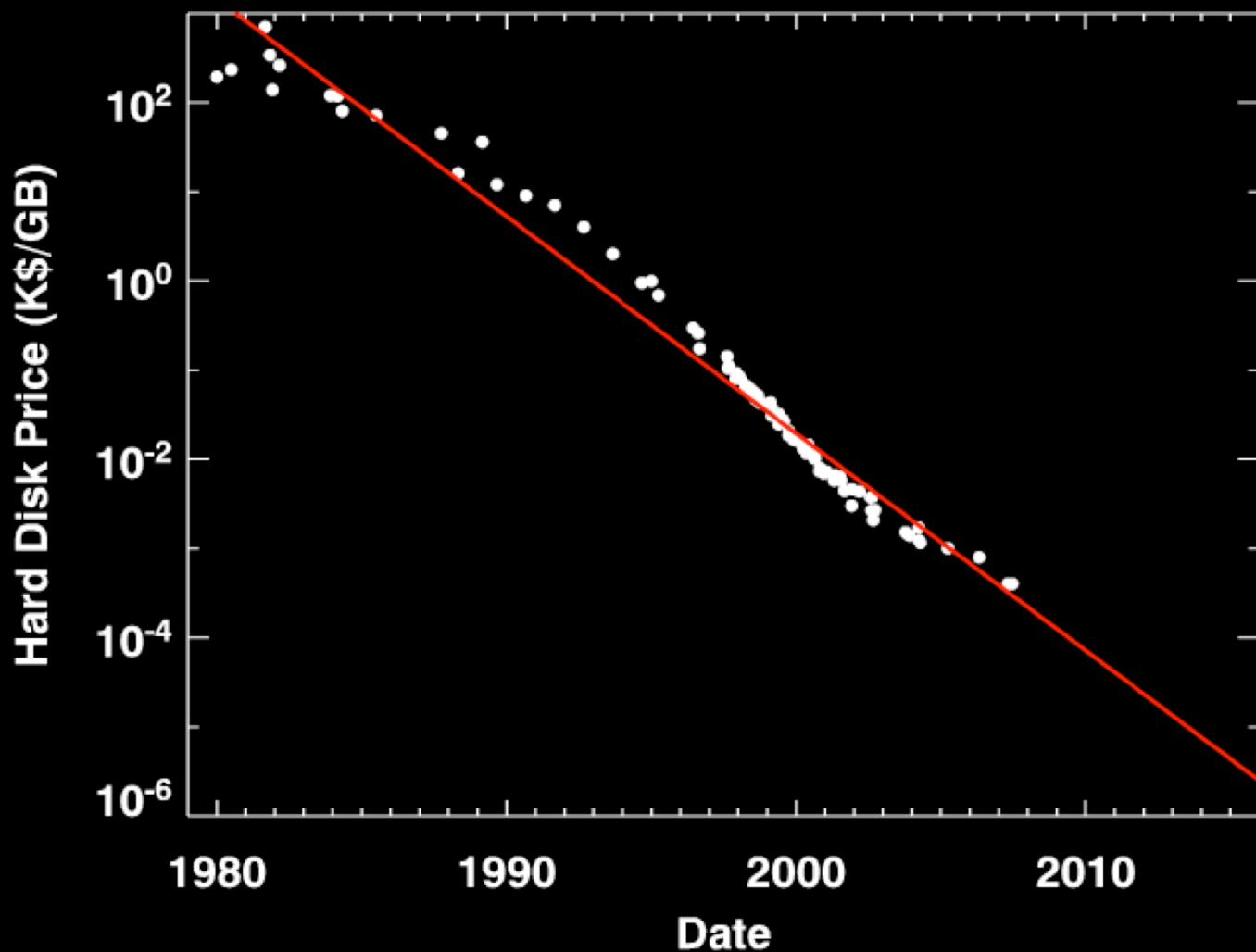
- The HLA aims to optimize the science return from HST by:
 - Creating online, enhanced data products for all Hubble data
 - Developing advanced user interfaces to enable new browsing capabilities

<http://hla.stsci.edu>



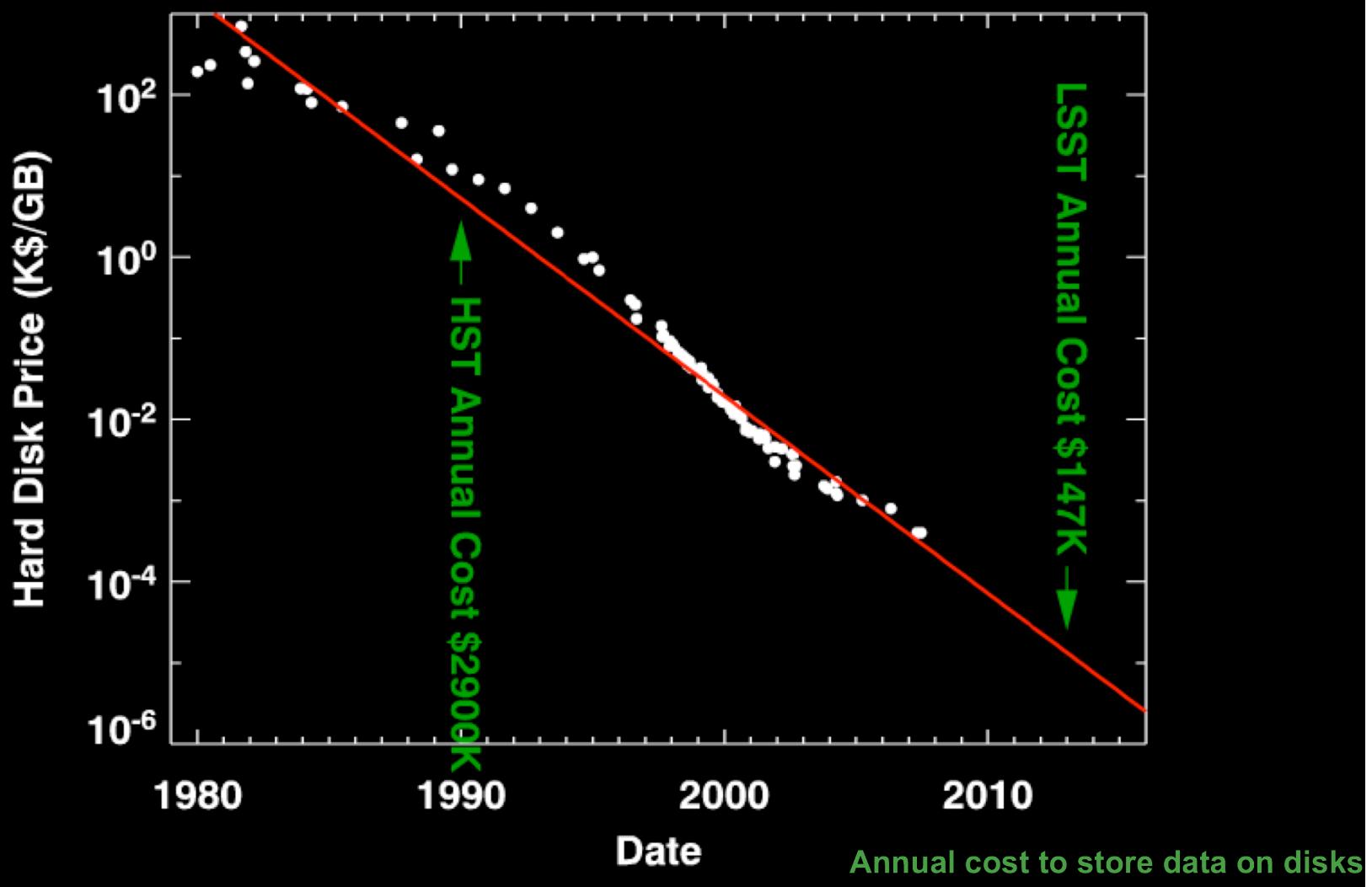


Why now? Disk cost per Gigabyte



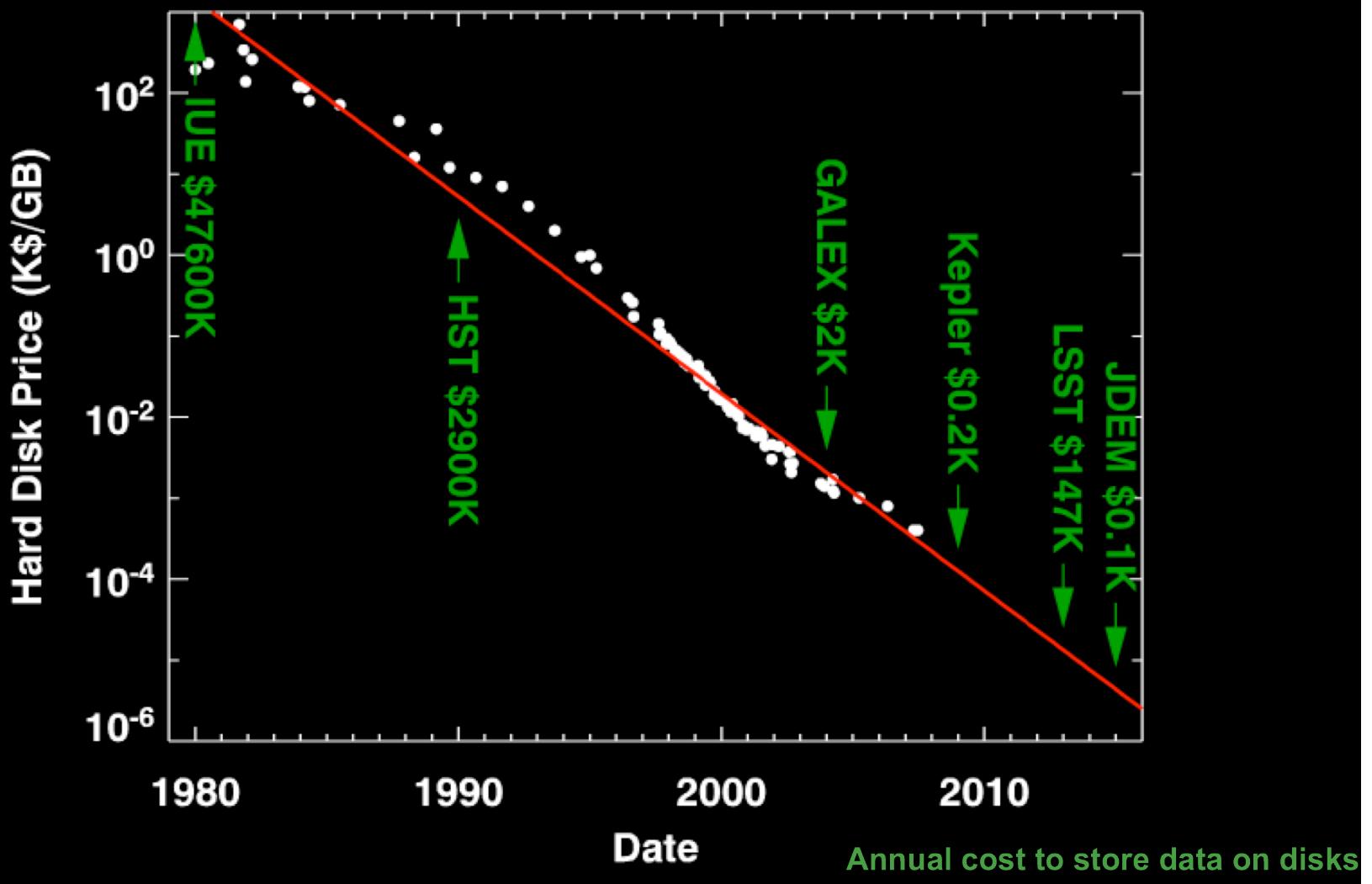


Why now? Disk cost per Gigabyte





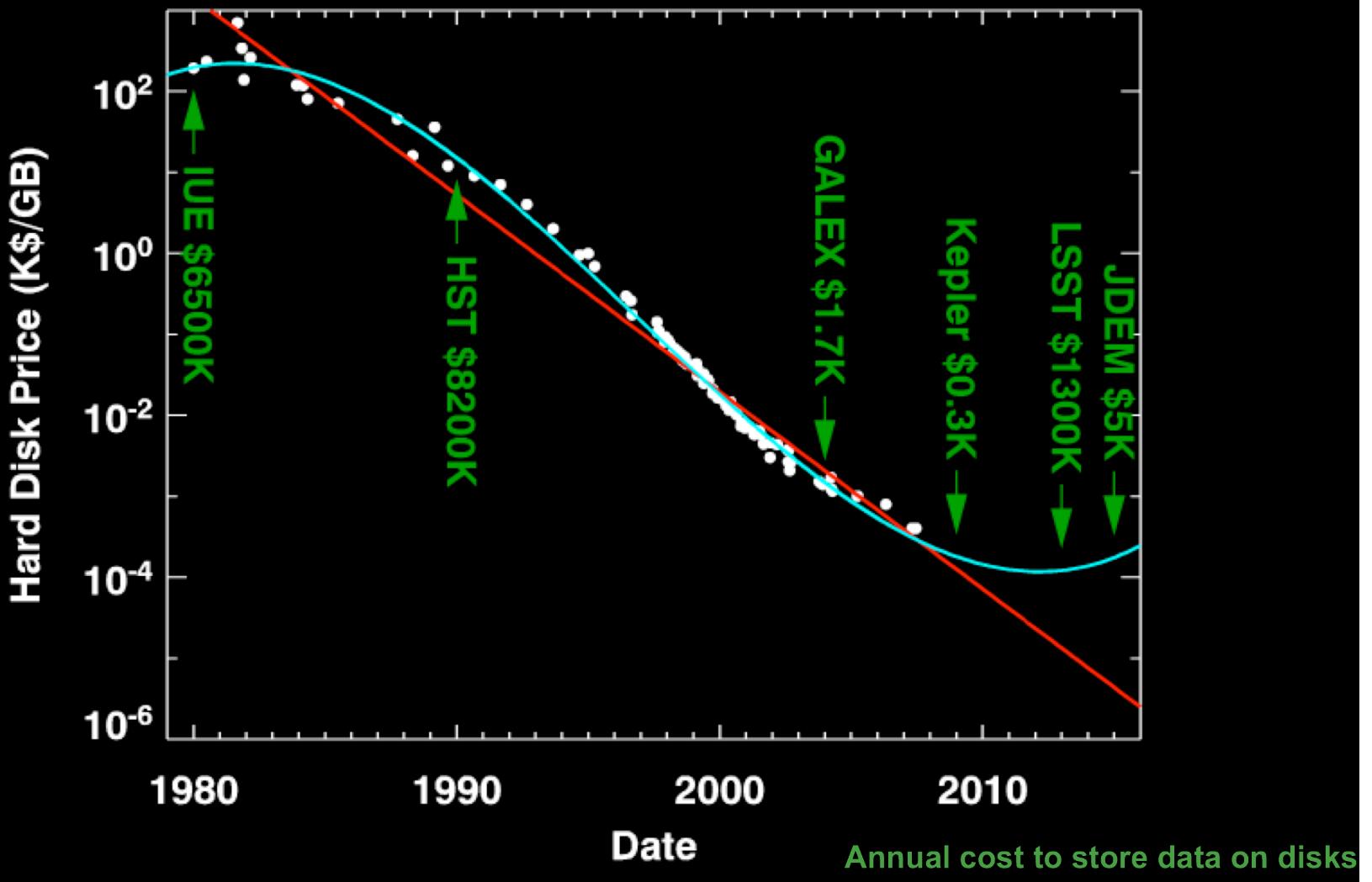
Why now? Disk cost per Gigabyte





Why now?

Disk cost per Gigabyte





HLA design philosophy

- Simple, dynamic interface
 - “Google-like”
- Use web browser as interface
 - Not downloaded applications
- Build around existing software
-  inside

Instrument	#Footprints
ACS	53
WFPC2	472
STIS	444
NICMOS	399
NICMOS GRISM	0
FOS	199
GHRS	77

DSS Image: On Off

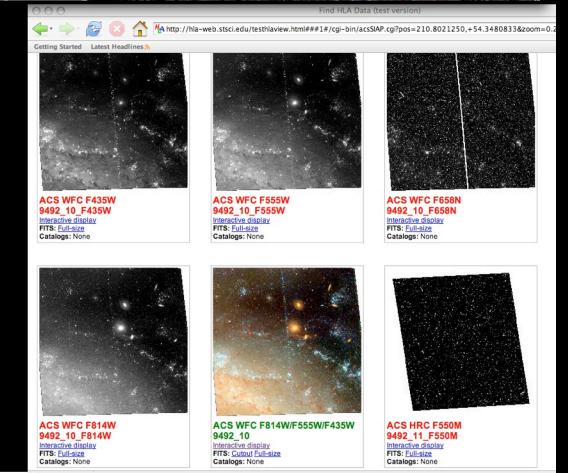
Data Product: Exposure(Level 1) Combined(Level 2) Best Available

Submit

To Zoom, go to Advanced Search and enter a smaller value for Radius (smallest value 0.01 degrees)

Click here for NVO STC Web Services

Reset Selection Save Table



Hubble Legacy Archive

Examples: M101, 14 03 12.6 +54 20 56.7 r=0.2d, more...
Requires Firefox or compatible browser

Search | Reset | advanced search

Inventory Images Footprints NICMOS Grism (ST-ECF) Help

EMAIL US SUGGESTIONS FAQ ABOUT THE HLA

STScI / ST-ECF / CADC



HLA milestones

- Data releases: EDR (Jul 2007), DR1 (Feb 2008), DR2 (Sep 2008)
 - Future releases at ~6 month intervals
- Current contents:
 - Drizzled images for ~95% of ACS & WFPC2
 - Extracted NICMOS grism spectra
 - Source lists for ACS images
 - Access to other HST data (STIS, NICMOS, FOS, GHRS)

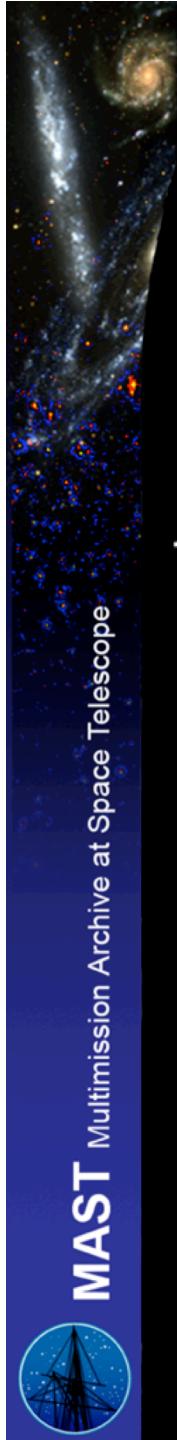




What's New in DR2

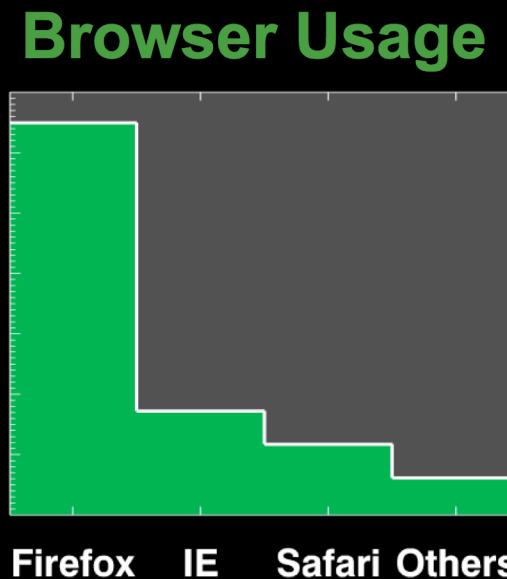
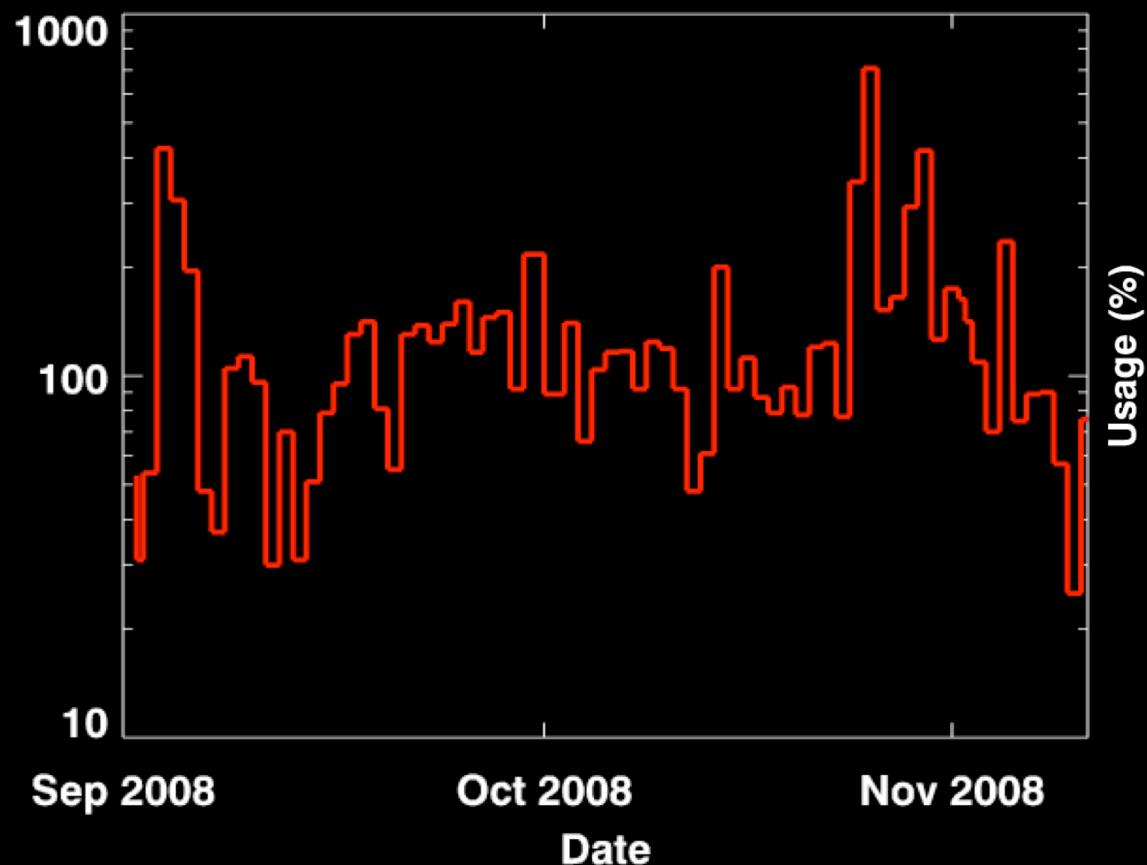
- New Science Products
 - Images for ~90% of WFPC2 data (increased the number of enhanced HLA images by a factor of 3)
 - Next generation ACS source lists for ~100% of “useable” images (up from 50% in DR1)
 - Reprocessed ACS images from Early Data Release (~30% of images)
- New User Interface Tools
 - Shopping cart for downloads
 - Enhanced plotting tool
 - External catalog overlays (GSC2, 2MASS, SDSS, FIRST)
 - Much faster footprints
 - User-defined search lists
 - Runs in Internet Explorer
- Infrastructure: new hardware for dev and ops





Increasing HLA usage since DR2

Log searches per day since DR2



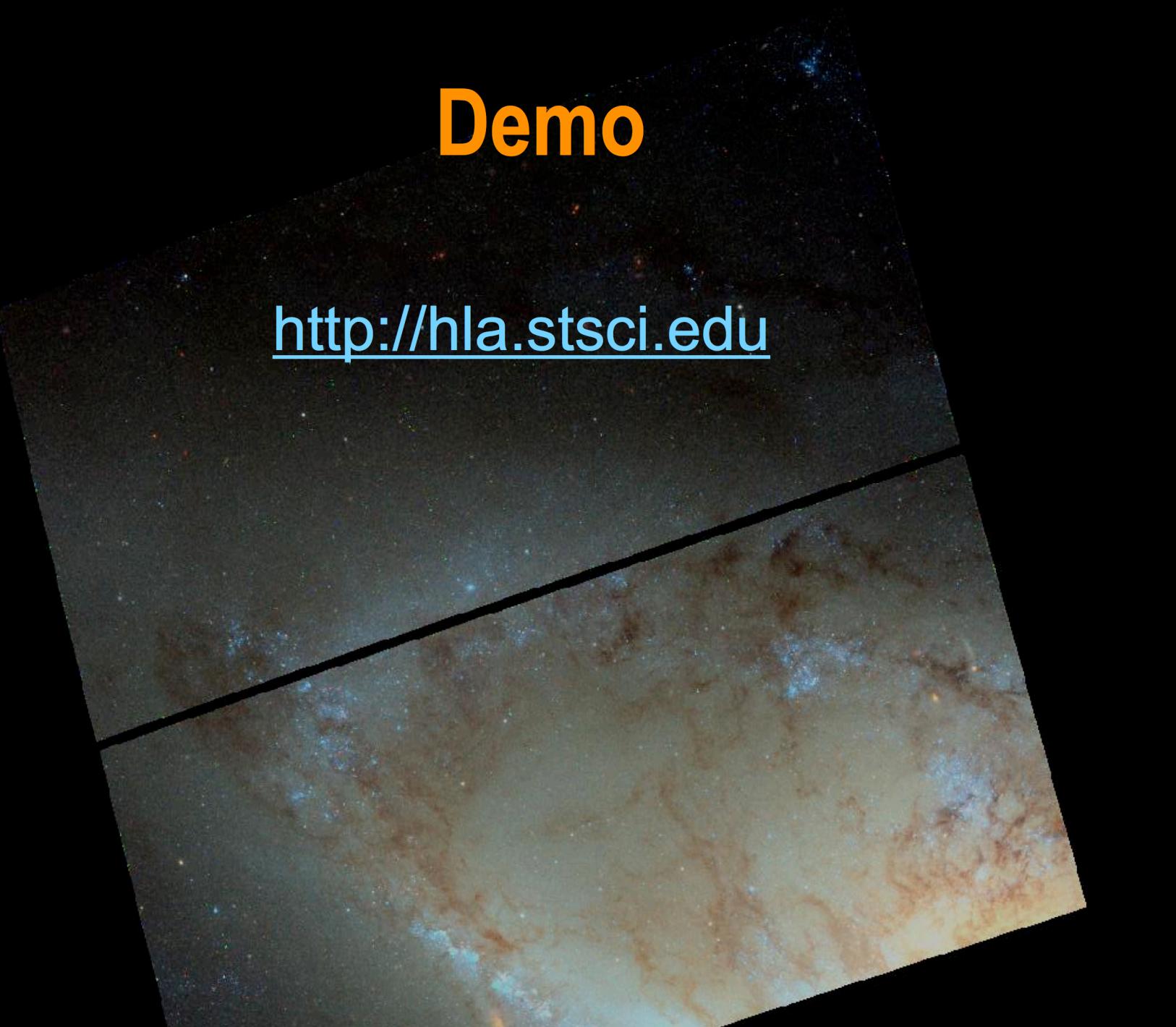
Preview of DR3 (early spring, 2009)

1. Prototype NICMOS images
2. Prototype ACS slitless spectra (ST-ECF)
3. Prototype ACS mosaics (possibly some WFPC2 also)
4. Source lists for WFPC2 images
5. High-level science products (e.g., UDF, GOODS, COSMOS, ...)
6. Various reprocessing projects (e.g., fix WF4 anomaly, improve WFPC2 chip-to-chip astrometry, 30 mas pixel ACS images, ...)
7. GHRS and FOS available in advanced plotting tool
8. Various user interface enhancements (e.g., improve filtering & selection of footprints, interactive display additions, efficiency improvements)
9. Registered VO services
10. Infrastructure: improved automation for data processing



Organizational changes

- HLA was included in MAST Senior Review proposal (June 2008)
 - MAST tied for 2nd (after ADS) among NASA archives
 - HLA funded for next 4 years (from NASA HQ through archive center funding line, not through HSTP contract)
 - MAST/HLA merger: incorporate MAST data in HLA, use HLA interfaces in MAST
- Warren Miller (HLA project engineer) left STScl, replaced by Mark Kyprianou
- Brad Whitmore (HLA project scientist) going on sabbatical, replacement TBD

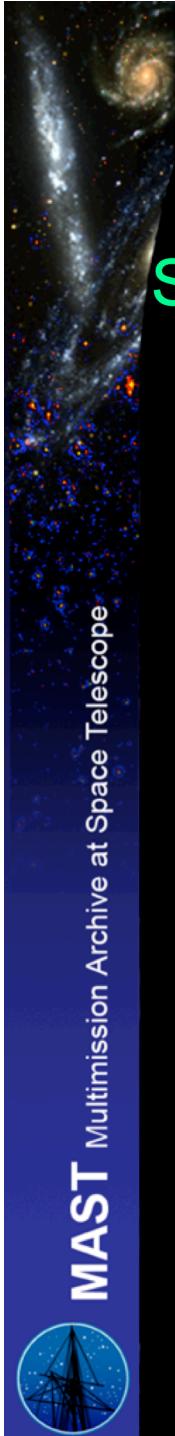


Demo

<http://hla.stsci.edu>

MAST Multimission Archive at Space Telescope





HLA Contributors (partial list)

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GSFC (XSLT filtering)

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