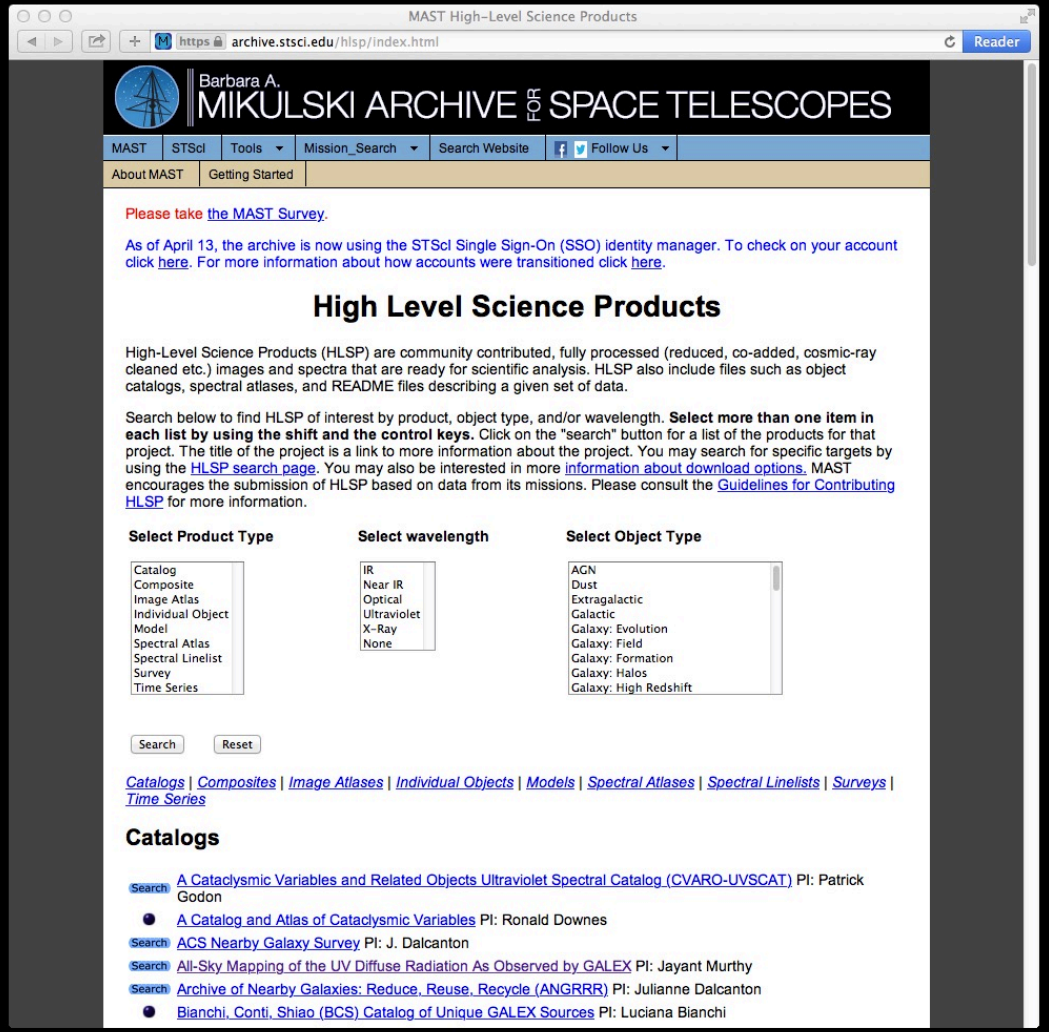
MAST HLSP

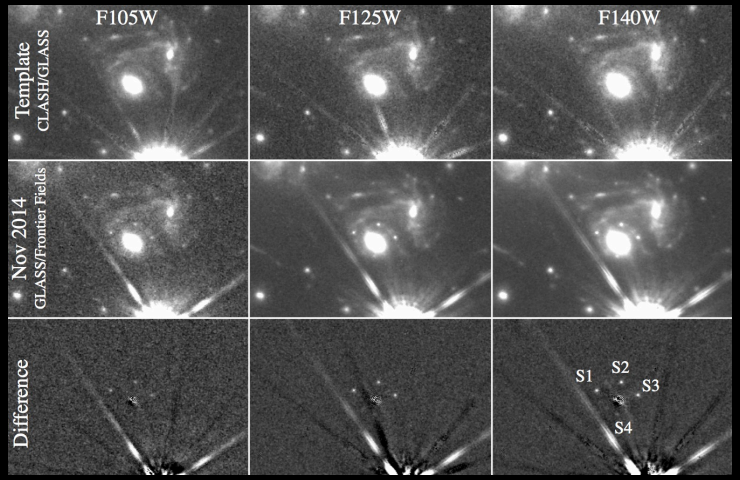
High Level Science Products are community-contributed data that relate to a MAST-supported mission. These can include images, spectra, catalogs, linelists, time series, models and simulations.

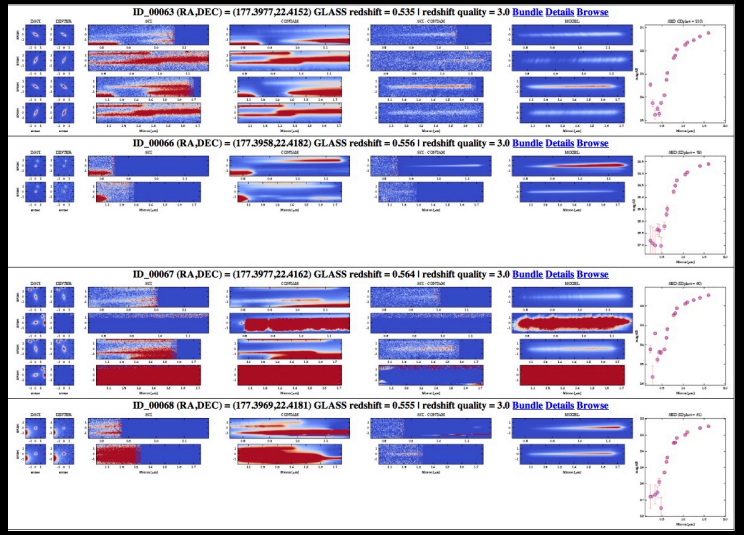
archive.stsci.edu/prepds/<*HLSP*>

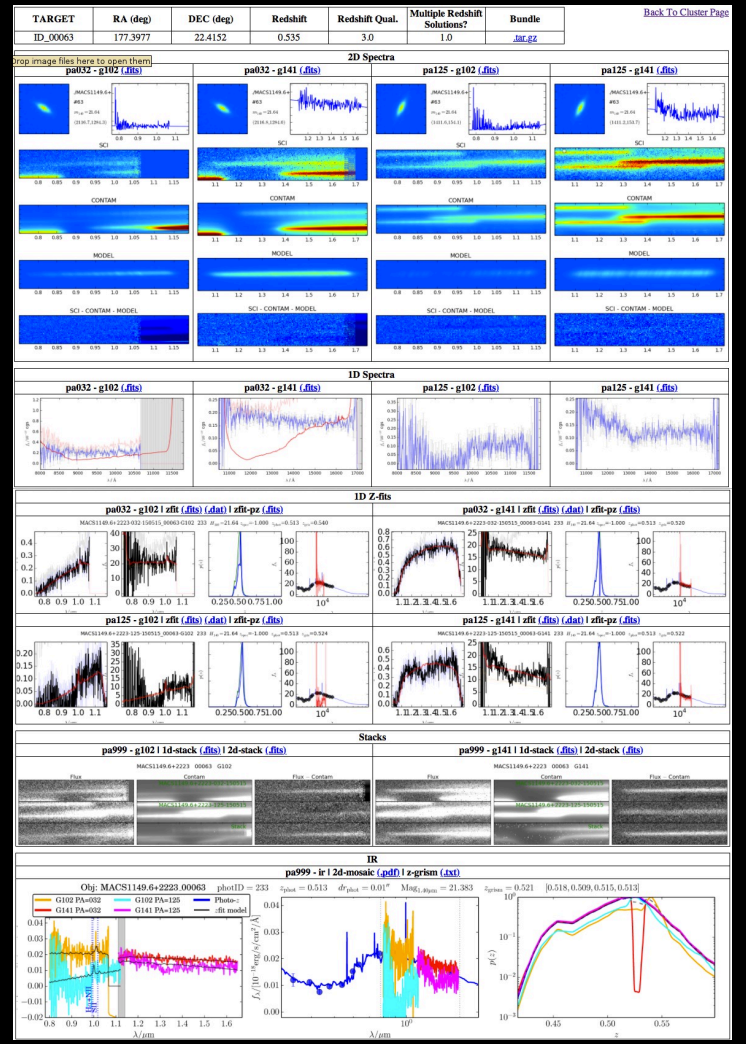


GLASS

Cycle 21 HST program to survey 10 galaxy clusters using grism spectroscopy. A total of 140 primary orbits and 140 parallel orbits.

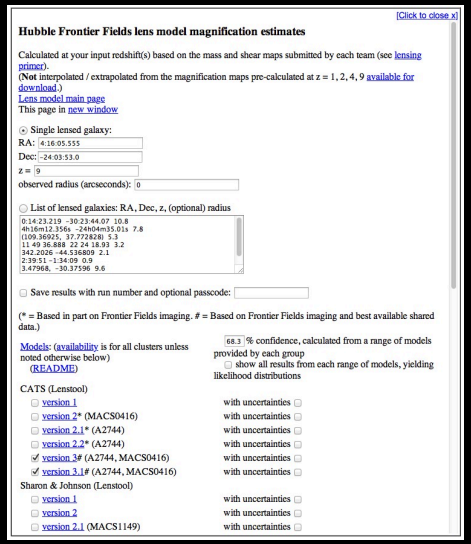






Frontier Lens Models

Lensing models from 7 teams for the six Frontier Fields. Includes shear, mass surface density, lensing deflection and image magnification.



[Click to close x]

Hubble Frontier Fields lens model magnification estimates

Calculated at your input redshift(s) based on the mass and shear maps submitted by each team (see lensing primer).
(Not interpolated / extrapolated from the magnification maps pre-calculated at z = 1, 2, 4, 9 available for download.)
Lens model main page
This page in new window

Single lensed galaxy:
RA: 4:16:05.555
Dec: -24:03:53.0
z = 9
observed radius (arcseconds): 0

List of lensed galaxies: RA, Dec, z, (optional) radius
0:14:23.219 -30:23:44.07 10.8
4h16m12.356s -24d04m35.01s 7.8
(109.36925, 37.772828) 5.3
11.49 36.888 22.24 18.93 3.2
342.2026 -44.536809 2.1
2:39:51 -1:34:09 0.9
3.47968, -30.37596 9.6

Save results with run number and optional passcode:

(* = Based in part on Frontier Fields imaging. # = Based on Frontier Fields imaging and best available shared data.)

Models: (availability is for all clusters unless noted otherwise below)
(README)

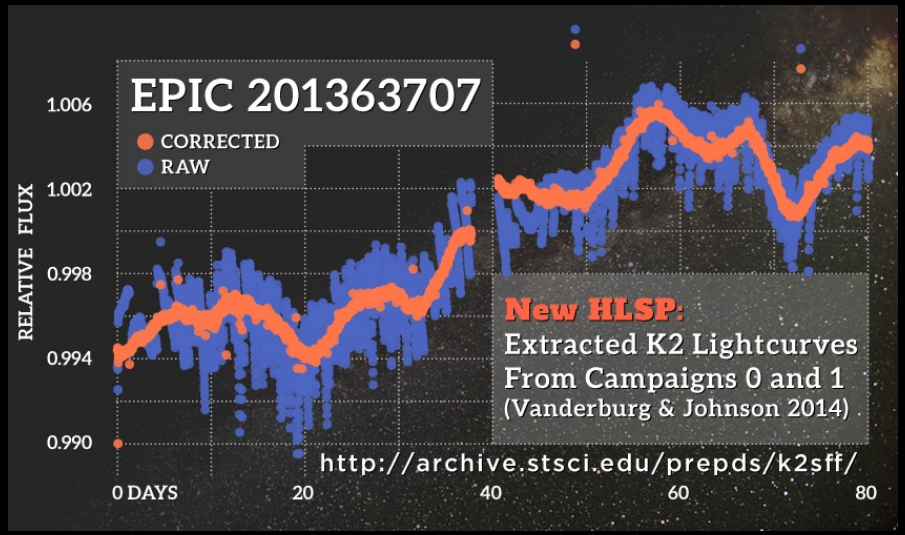
68.3 % confidence, calculated from a range of models provided by each group
show all results from each range of models, yielding likelihood distributions

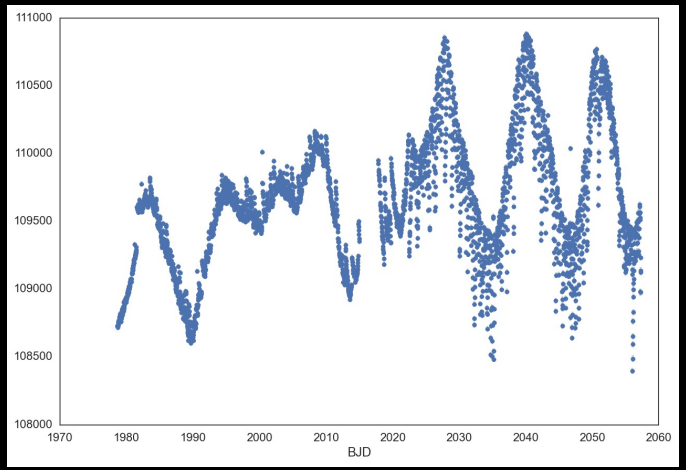
CATS (Lenstool)
version 1 with uncertainties
version 2* (MACS0416) with uncertainties
version 2.1* (A2744) with uncertainties
version 2.2* (A2744) with uncertainties
version 3# (A2744, MACS0416) with uncertainties
version 3.1# (A2744, MACS0416) with uncertainties

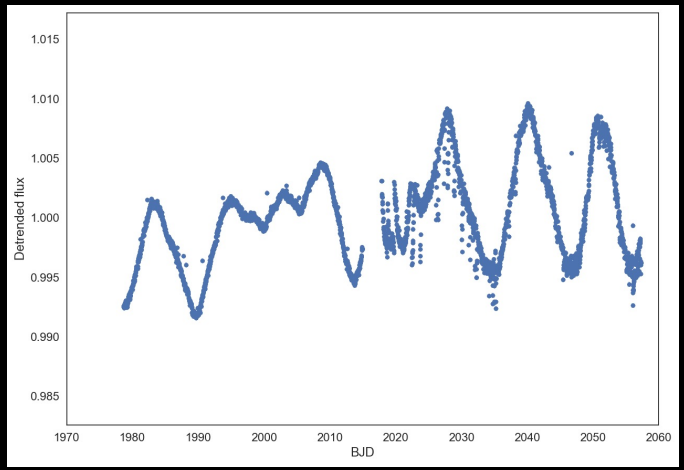
Sharon & Johnson (Lenstool)
version 1 with uncertainties
version 2 with uncertainties
version 2.1 (MACS1149) with uncertainties

K2SFF & K2VARCAT

Extracted and calibrated light curves for K2 targets from Vanderburg et al. (K2SFF) and Armstrong et al. (K2VARCAT). K2VARCAT also includes variability classification.

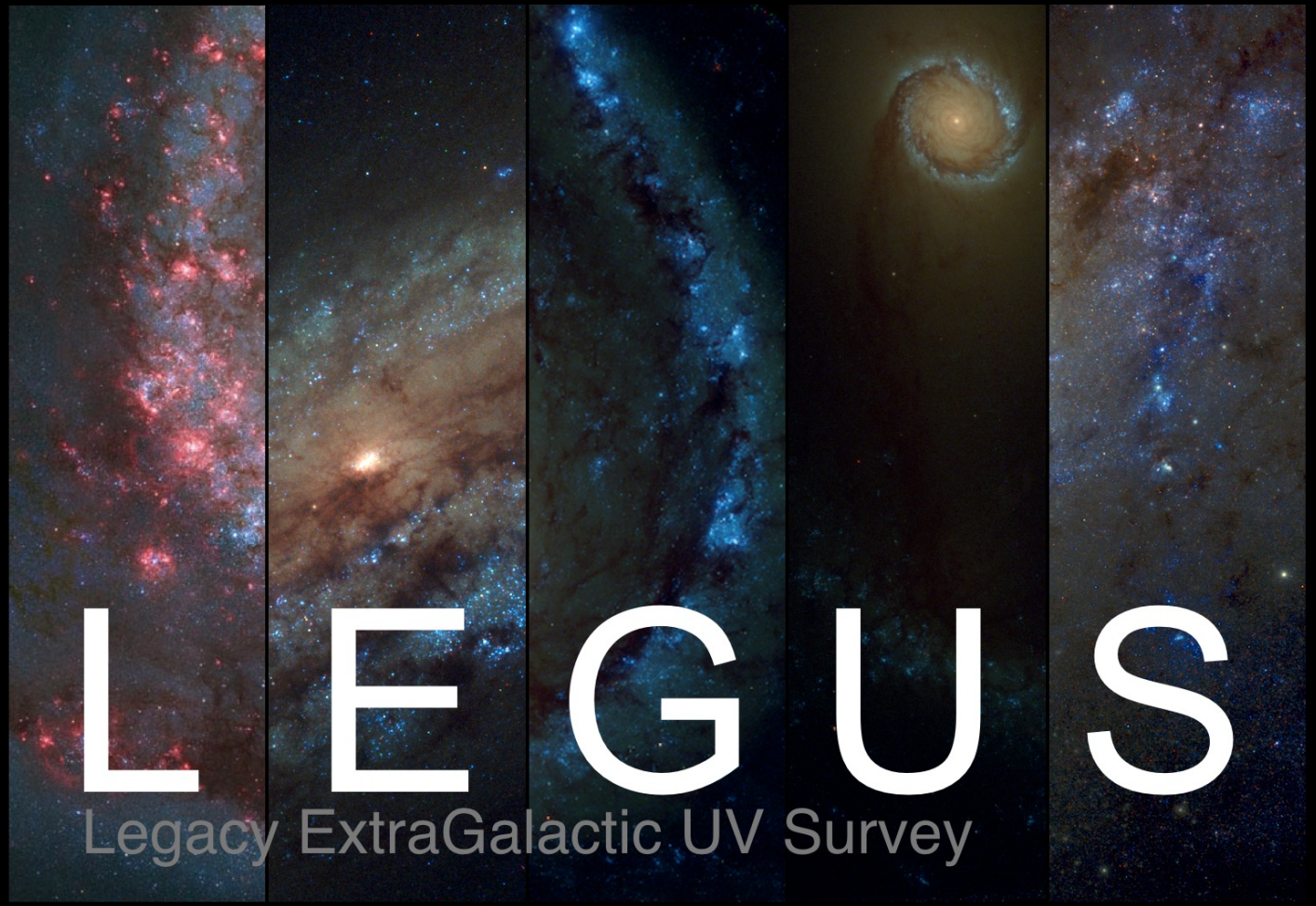






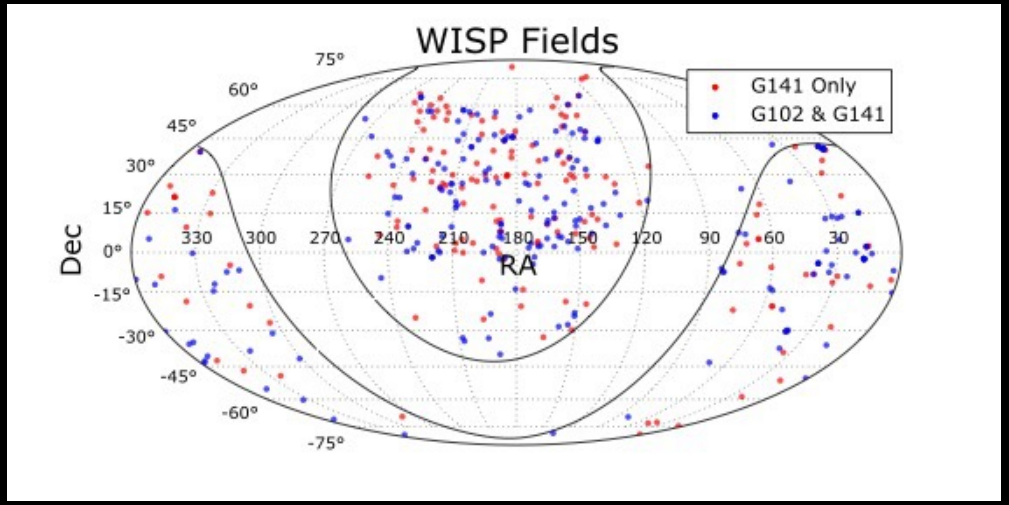
LEGUS

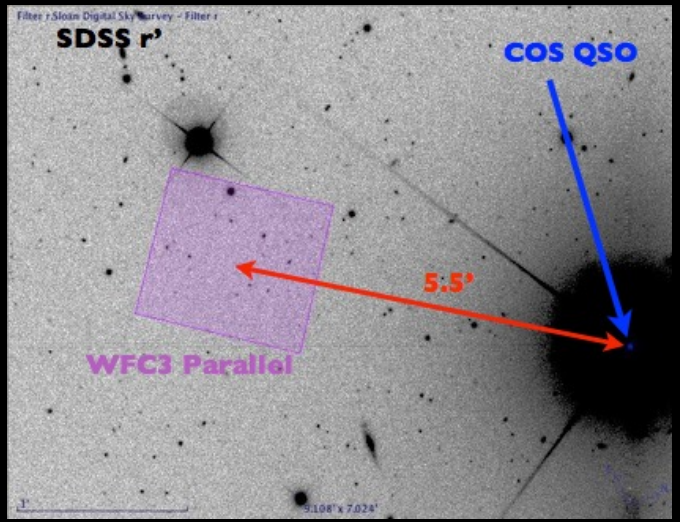
HST Treasury Program to image 50 nearby galaxies in multiple colors with ACS and WFC3. The galaxies are resolved into stars, clusters, and associations.

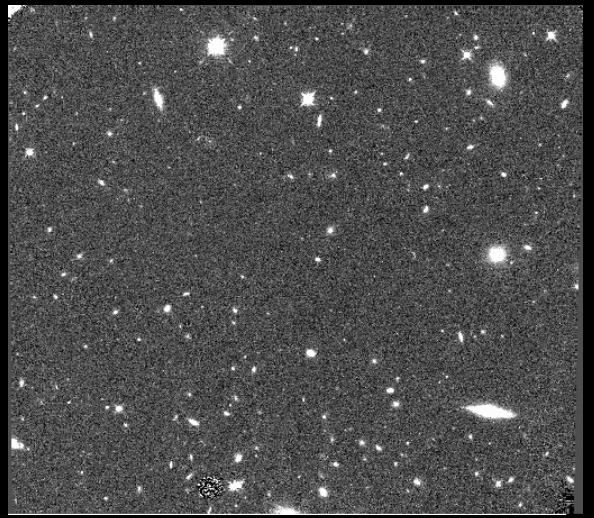


WISP

A large HST pure-parallel program using WFC3 grisms to obtain images, spectra, and catalogs of star forming galaxies at redshifts $0.5 < z < 2.5$. A total of 385 fields will be observed.

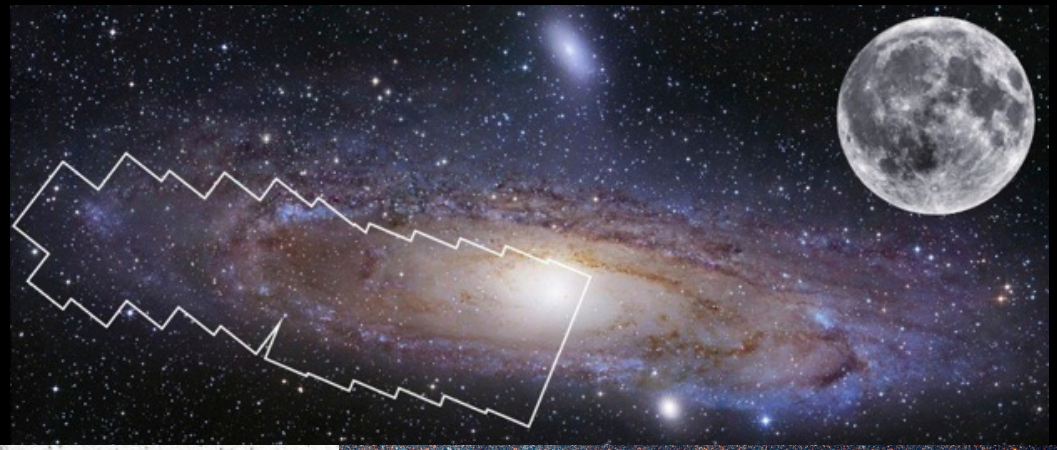


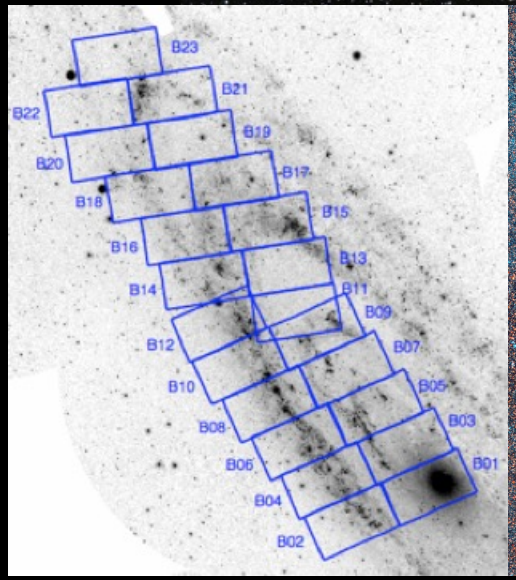


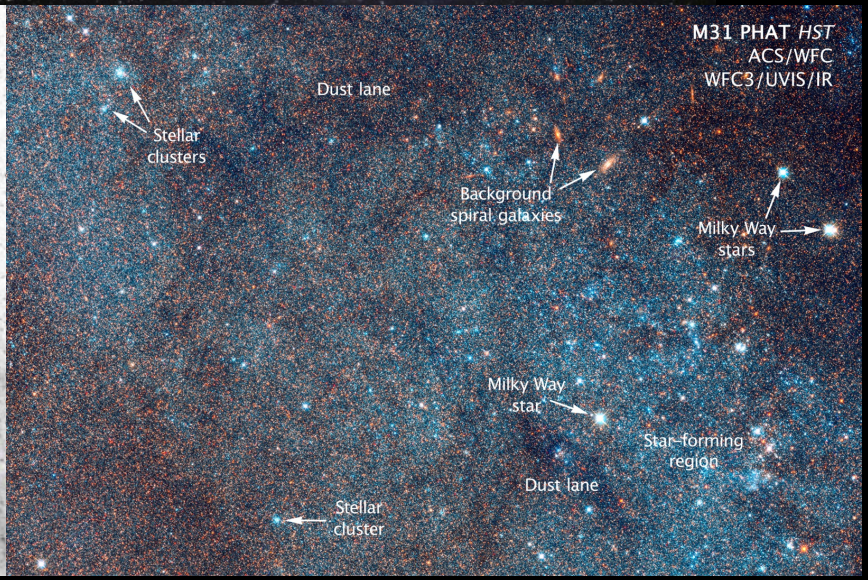


PHAT

A multi-cycle HST program to map 1/3 of Andromeda in 6 filters from the UV to NIR. The disk is resolved into > 100 million stars. The observations are grouped into 23 “bricks”.

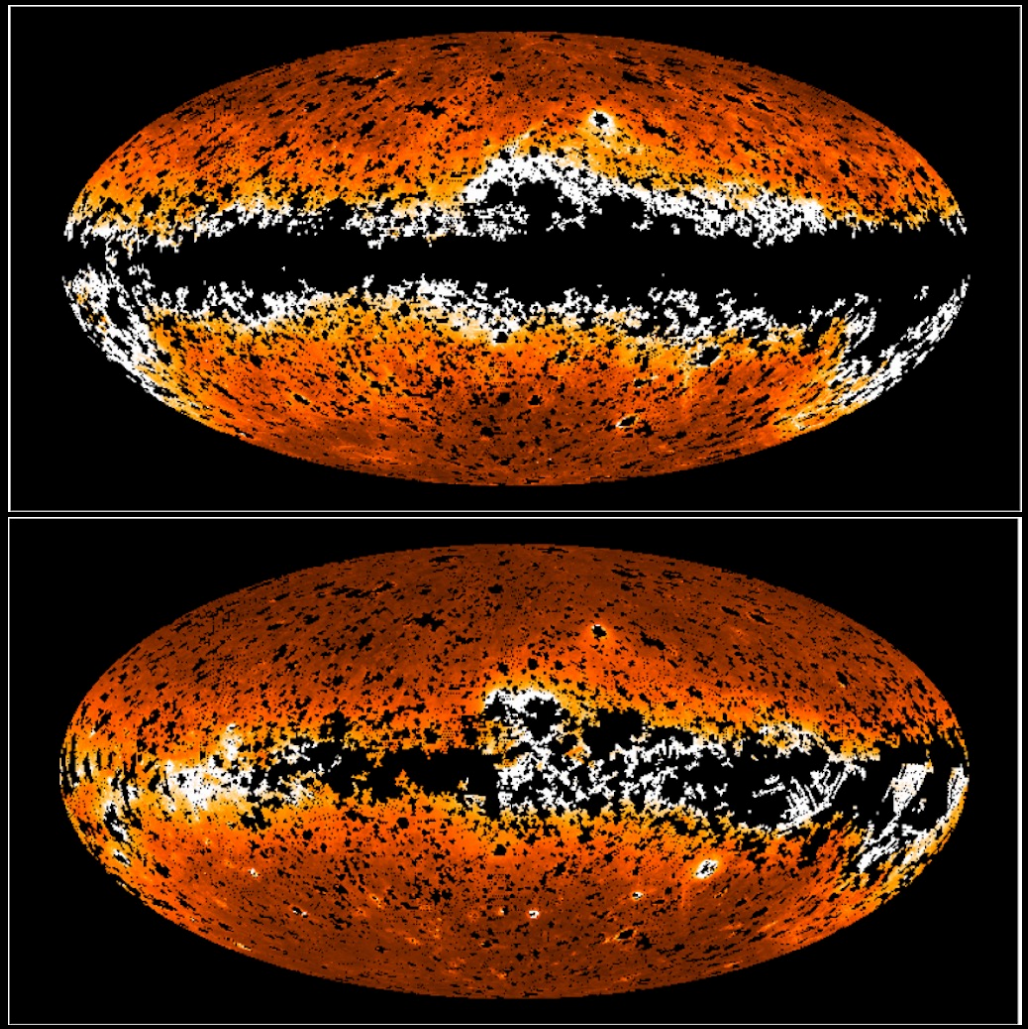






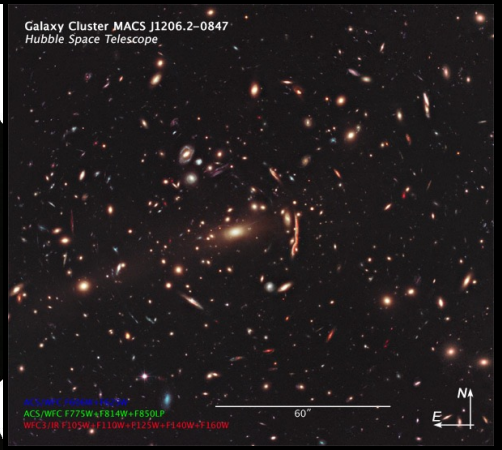
UV-BKGD

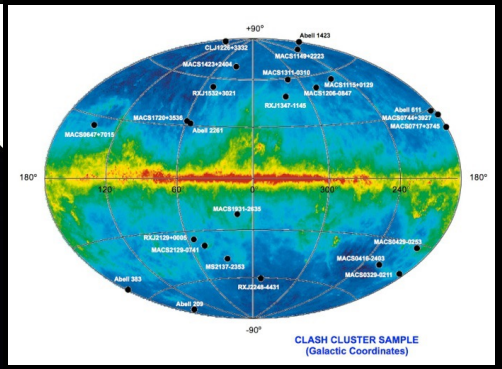
An all-sky mapping of diffuse UV background, in FUV and NUV, using GALEX data. Includes estimates of geocoronal and zodiacal foreground per pixel. Maps are 2x2 arcminute grids.



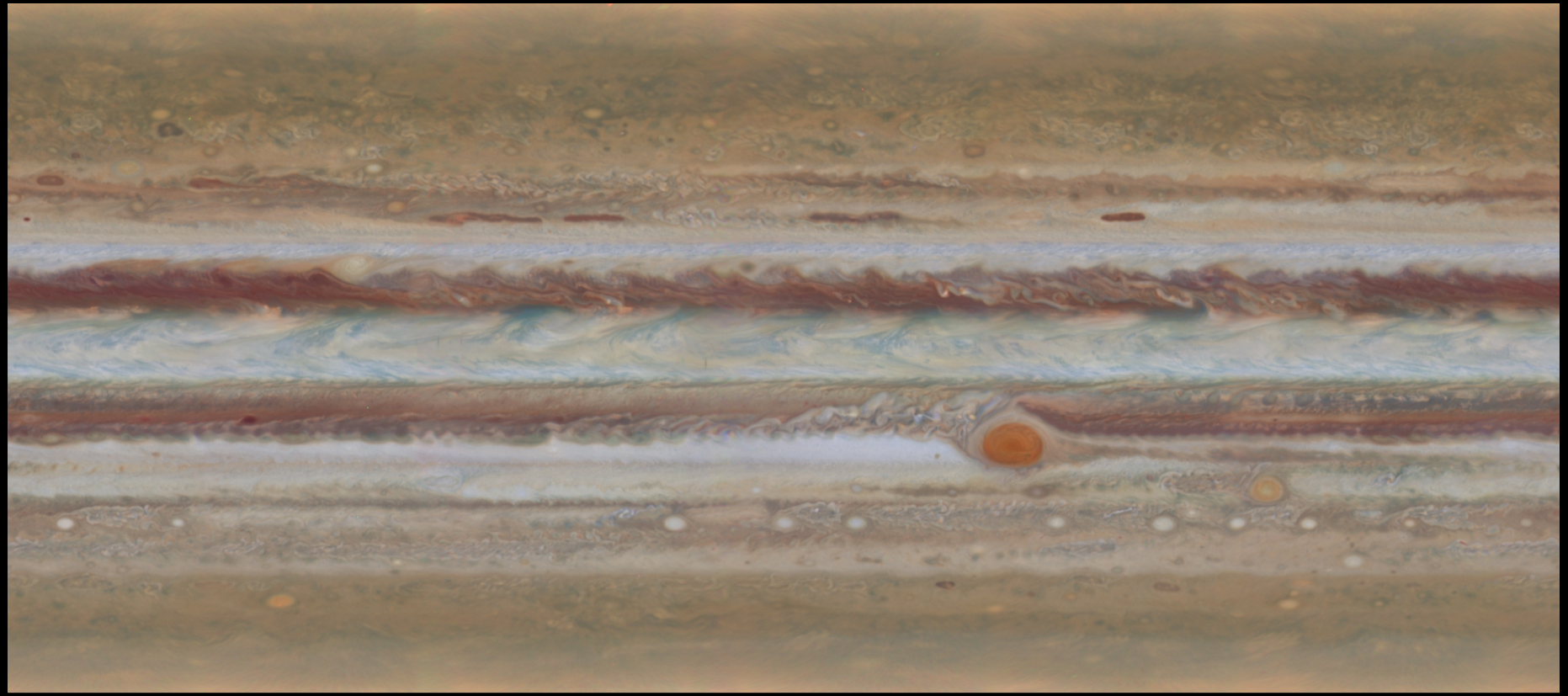
CLASH

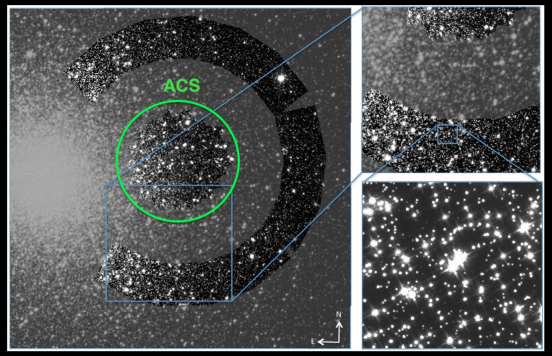
An HST survey of 25 massive galaxy clusters using WFC3 and ACS. Includes mosaics, source catalogs, and lensing models, along with Subaru mosaics and source catalogs from ground-based imaging.

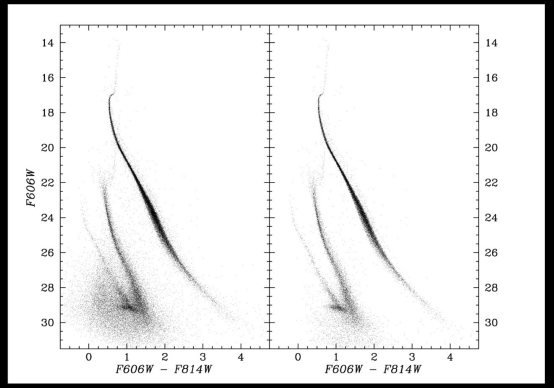




OPAL (Outer Planets Atmospheres Legacy)



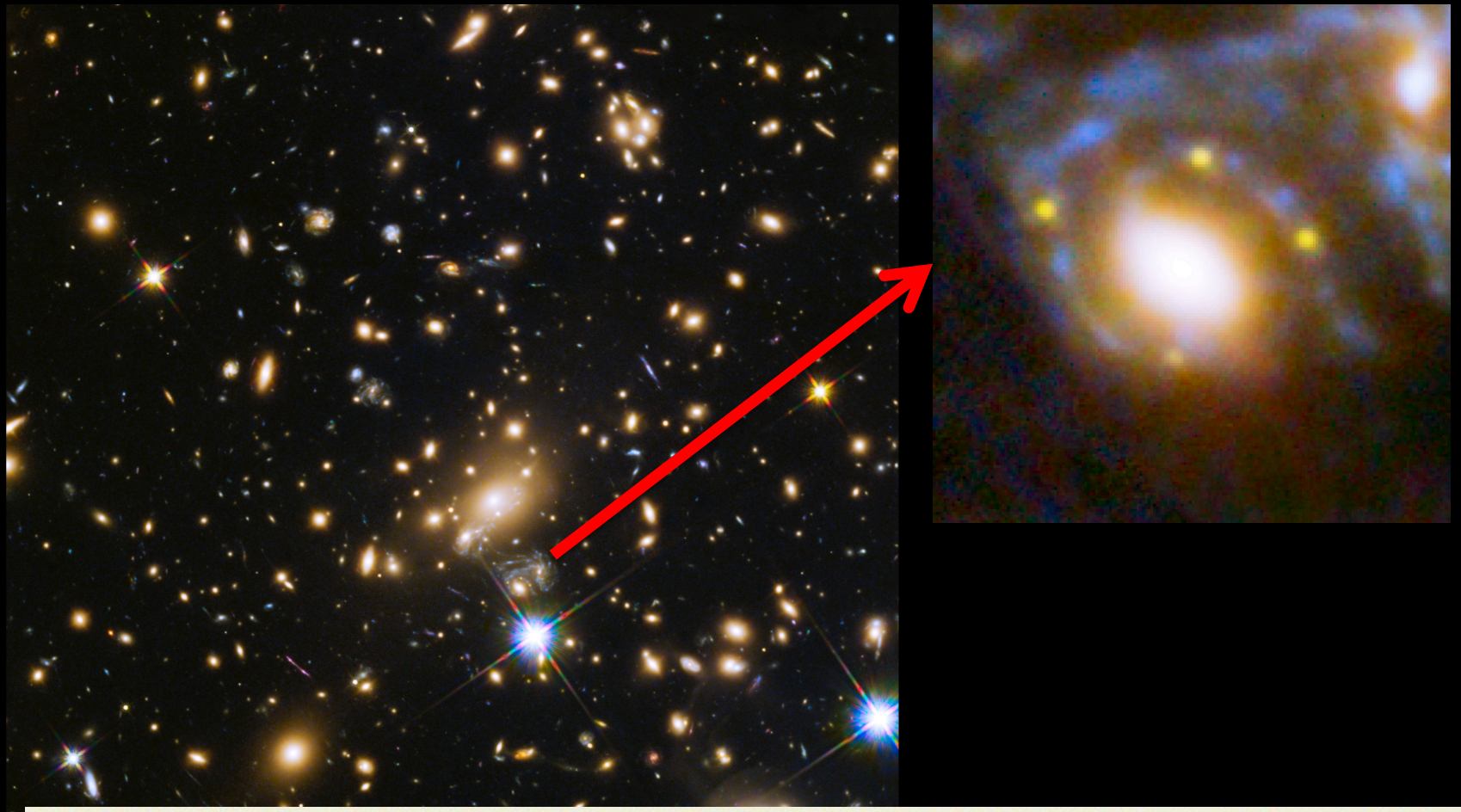




Deep 47 Tuc

Hubble
Heritage

M83
Mosaics



Credit: NASA, ESA, and S. Rodney (JHU) and the FrontierSN team; T. Treu (UCLA), P. Kelly (UC Berkeley), and the GLASS team; J. Lotz (STScI) and the Frontier Fields team; M. Postman (STScI) and the CLASH team; and Z. Levay