



**MAST**  
Users  
Group  
Meeting

Nov 18  
2013

# MAST High-Level Science Products (HLSP)

<http://archive.stsci.edu/hlsp>

- Community-contributed, fully processed
- Include a wide variety of different types:
  - Image atlases
  - Spectral atlases
  - Surveys
  - Individual objects
  - Catalogs
  - Composite spectra
  - Time series datasets
  - Theoretical models

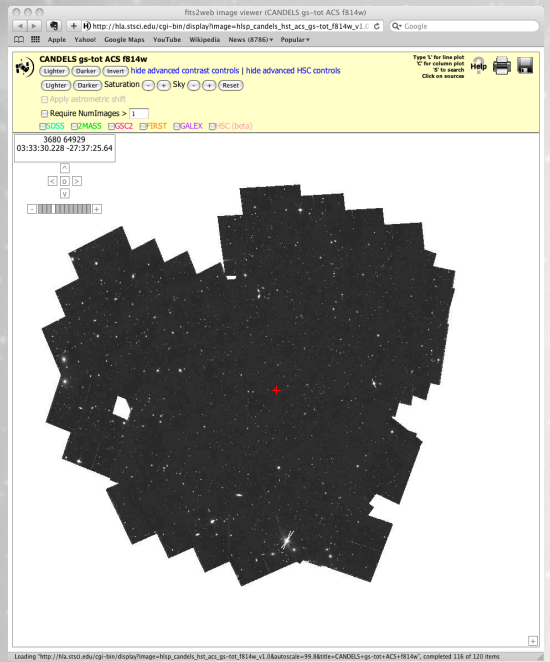


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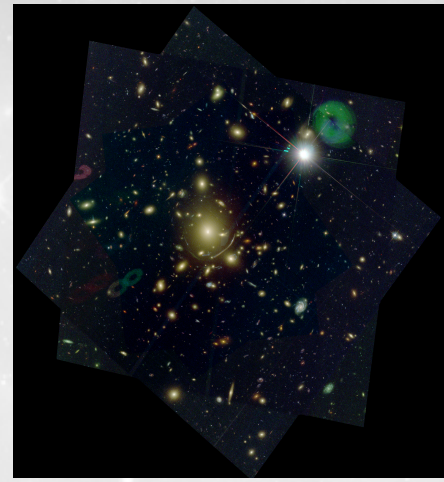
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# Imaging HLSPs

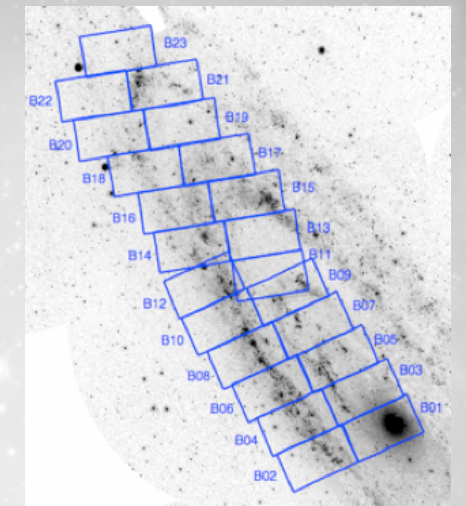
MCT programs: CANDELS (PI: Faber, Ferguson)



CLASH (PI: Postman)



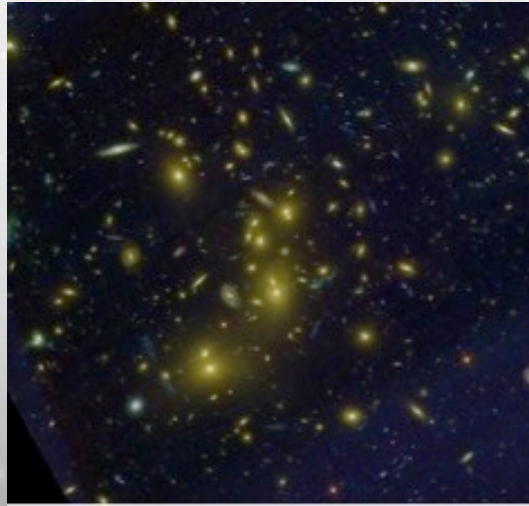
PHAT (PI: Dalcanton)



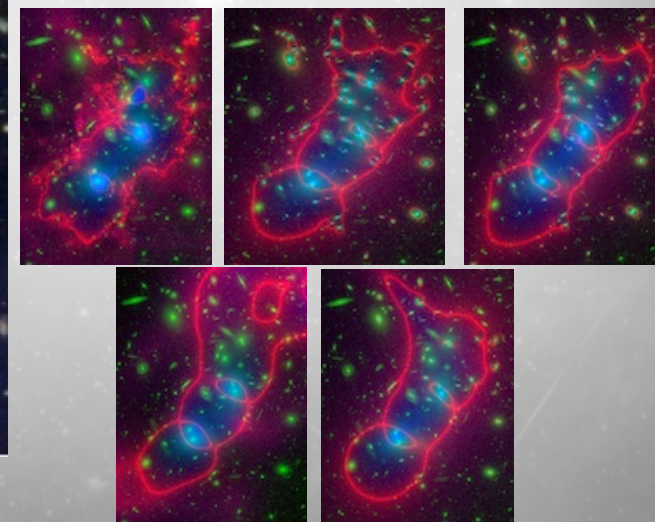
Carina Nebula (PI: Mutchler)



Frontier Fields  
(PI: Lotz/  
Mountain)



Cluster lensing models  
contributed by community  
(Bradac, Ebeling, Mertin,  
Zitrin, Sharon, Williams)





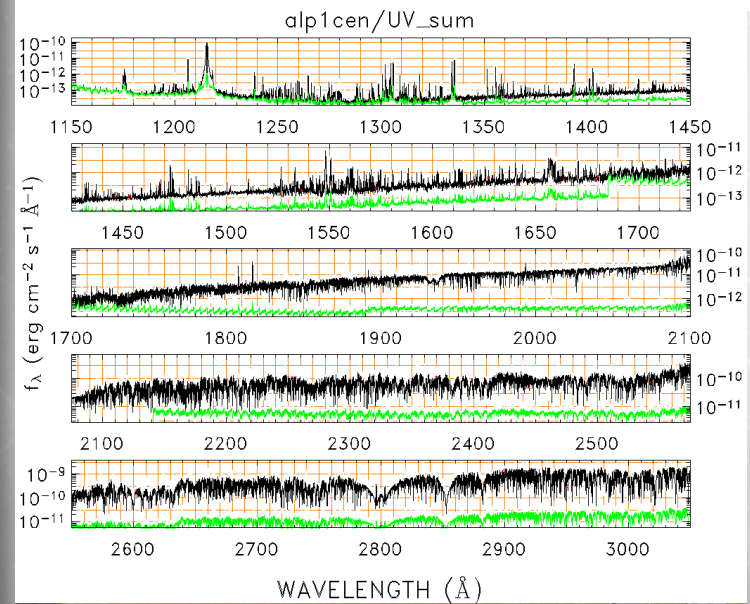
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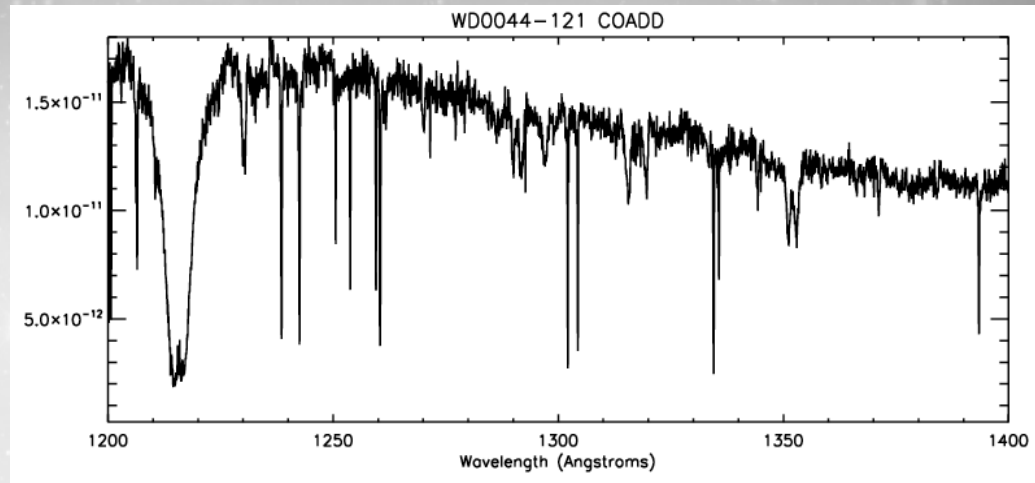
# Spectroscopic HLSP

## Spectral Atlases

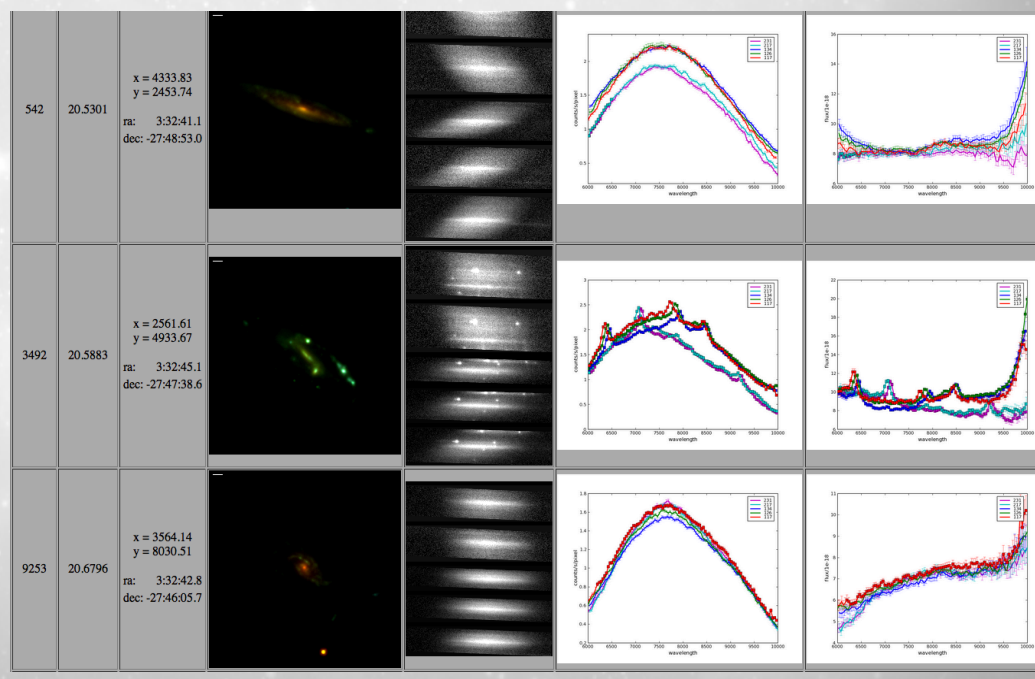
- Search [10 Lac \(O9V\) Spectral Atlas \(HST/GHRS\)](#) PI: Brandt, J.C.
- Search [A FUV Atlas of Low-Resolution HST Spectra of T Tauri Stars](#) PI: Gregory Herczeg
- Search [AGN and Quasar Spectral Atlas \(HST/FOS\)](#) PI: Ian Evans
- [alpha Ori Spectral Atlas \(HST/GHRS\)](#) PI: GHRS Team
- [chi Lupi \(B9.5 pHgMn\) Spectral Atlas \(HST/GHRS\)](#) PI: GHRS GTO team
- Search [CoolCAT - A cool-star UV spectral catalog](#) PI: Thomas Ayres
- [Copernicus Atlases of 6 Selected Stars](#) PI: Copernicus Project
- Search [Detailed Far-UV Atlas of O Main Sequence Stars](#) PI: Myron Smith
- Search [Detailed Far-UV Spectral Atlas of B Main Sequence Stars](#) PI: Myron Smith
- Search [EUV Spectral Atlas of Stars \(EUVE\)](#) PI: N. Craig
- Search [FUSE Atlas of Starburst Galaxies](#) PI: Anne Pellerin
- Search [FUSE Magellanic Clouds Legacy Project](#) PI: William Blair
- Search [FUSE Spectral Atlas of Wolf-Rayet Stars](#) PI: Allan J. Willis
- Search [OB Stars \(Galactic\): FUSE Spectral Atlas](#) PI: Anne Pellerin
- Search [OB Stars \(Magellanic\): FUSE Spectral Atlas](#) PI: Nolan Walborn
- Search [Pre-Main Sequence Stars: IUE Spectral Atlas](#) PI: Jeff Valenti
- [Procyon \(FV-IV\) Spectral Atlas - Chromospheric Lines \(HST/GHRS\)](#) PI: Brian Wood
- [Standard Stars: IUE](#) PI: Chi-Chao Wu
- Search [StarCat: HST STIS Echelle Spectral Catalog of Stars](#) PI: Thomas Ayres
- Search [STIS Next Generation Spectral Library \(AR10659\)](#) PI: Sally Heap
- Search [White Dwarf Spectral Atlas: High dispersion IUE](#) PI: Jay Holberg



CoolCAT / StarCAT UV Atlases,  
several hundred stars (Ayers)



## Co-added IUE White Dwarf Spectra (Holberg)



GRAPES grism spectroscopic survey, 1400  
spectra from UDF (Malhotra)



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# HLSP Open Questions

- Do the community think of MAST as their go-to source for HLSP, or do they just google search and visit individual people's / team's pages? How can we change this mentality?
- Are the community motivated to share their final data with us, especially when not required by funding conditions? We have had some steady interest, but how can we motivate more groups? What roadblocks are there to encourage more group's to share their published results at MAST?
- What is the utility of such data? Is this something the community actually wants or needs? *If they don't know about data / papers on their objects of interest, they can't possibly make use of it.* Is enhancing the discoverability of such HLSPs an important goal (the most important goal)?
- What key ideas do we need to be pursuing in order to make HLSP data more accessible to the community?