MARCH 2019

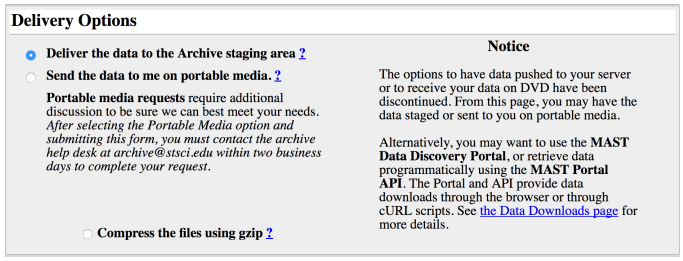
# MAST NEWSLETTER

THE LATEST UPDATES FROM THE BARBARA A. MIKULSKI ARCHIVE FOR SPACE TELESCOPES AT STSCI

## AN UPDATE TO PORTABLE DATA DISTRIBUTION METHODS

### DVDS WILL SOON BE PHASED OUT AS THE PRIMARY OPTION FOR PHYSICAL DELIVERY OF MAST DATA REQUESTS.

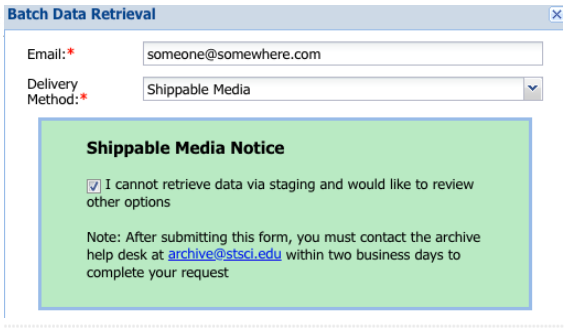
MARCH 13, 2019




*MAST Classic data delivery options*

To accommodate users with slower network speeds or limited access, MAST has supported data distribution via mailed DVD for a number of years. As those speeds have become faster and CD and DVD drives continue to be phased out of computers, we recognize the need to update our practices to be able to best serve MAST users. Starting soon, DVDs will be replaced by USB drives as the primary MAST data physical media option.

When the new system is launched, users will see a “ data batch retrieval. As with the current hard media option that offers a DVD, the new system offering a USB will involve a delay due to processing and shipping and will require users to contact the Archive Help Desk to discuss options available that will work for them. We highly recommend that those who are able to retrieve data via staging continue to use this method, as it will greatly expedite the retrieval of data. Users that are unable to use staging and require hard media are welcome to take advantage of this new option, and will see instructions on MAST after selecting the portable media option on how to proceed with their request. Any questions or concerns can be sent to the Archive Help Desk.




*MAST Portal shippable media dialogue*

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## TESS MISSION DATA RELEASES

**AVAILABLE DATA FROM THE TRANSITING EXOPLANET SURVEY SATELLITE NOW INCLUDES OBSERVATIONS FROM SECTORS 6 AND 7.**

**MARCH 13, 2019**

MAST continues to provide access to new data from theTransiting Exoplanet Survey Satellite (TESS) mission as they are released. All of the data products for both Sector 6 and Sector 7 are now available; Sector 6 data went live on February 27, 2019 and Sector 7 data went live today. To find out which TESS data products are available via different services at MAST, see the Current TESS Holdings page. For immediate notification for when new sectors are available for download, follow MAST on Twitter (@MAST_News) or Facebook (@MASTArchive).

The TESS Archive Manual provides a directory to the many methods to access TESS data

through MAST, as well as a number of Jupyter notebook tutorials on working with the various types of data products available. Additional information on the different file types and naming conventions can be found at the MAST Data Product Summary page. Data release notes are also available for all mission data releases with more information about characteristics identified in these data. Additional questions on accessing TESS public data through MAST may be directed to the Archive Help Desk.


*Funding for the TESS mission is provided by NASA's Science Mission directorate. TESS team partners include the Massachusetts Institute of Technology, the Kavli Institute for Astrophysics and Space Research, NASA's Goddard Space Flight Center, MIT's Lincoln Laboratory, Orbital ATK, NASA's Ames Research Center, the Harvard-Smithsonian Center for Astrophysics, and the Space Telescope Science Institute.*

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## NEW AND UPDATED HLSPS FOR MARCH

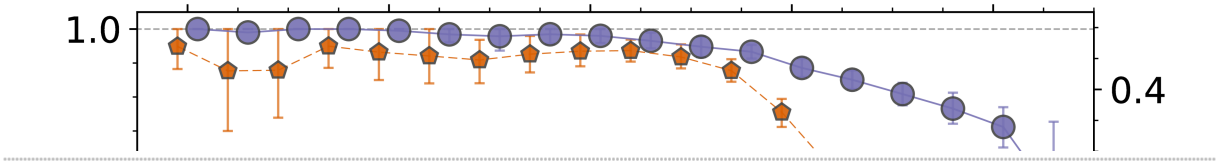
**THE LATEST HLSP UPDATES INCLUDE A NEW CATALOG OF OBJECT CLASSIFICATION FOR PAN-STARRS SOURCES, A SET OF SIMULATED GALACTIC EVOLUTION IMAGES FROM VARIOUS SPACE TELESCOPES, AND UPDATED MODELS FOR GALAXY CLUSTERS.**

**MARCH 13, 2019**

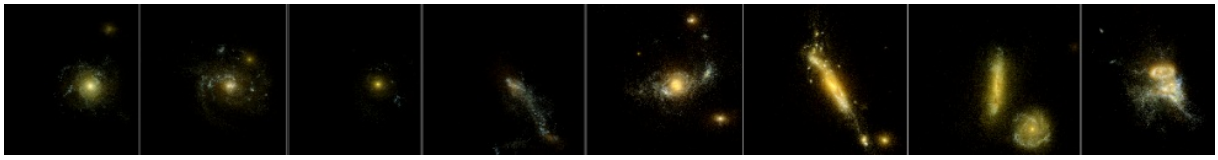
**NEW:**

- The Probabilistic Classifications of Unresolved Point Sources in Pan-STARRS1 (**PS1-PSC**, Tachibana & Miller 2018) catalog presents a machine learning model based on

morphological properties of sources in the Pan-STARRS Data Release 1. The result is a superior classification of 1.5 billion sources as either resolved galaxies or unresolved point-sources. The catalog is available via direct download and MAST CasJobs.




- The Mock Images from Vela Cosmological Simulations (**VELA**, Simons et al. 2019) project presents synthetic ultra-high-resolution space telescope images spanning the cosmic time evolution of nearly 3 dozen galaxies. Based on dust radiative transfer modeling, this dataset contains over 800,000 mock images for 34 broadband HST, JWST, and proposed WFIRST filters.



**UPDATED:**

- New lens models were added for eight **RELICS** lensing galaxy clusters, and improved 'version 2' models for two other clusters. See the project page to access the models and consult the updated lens model README file for more information.

If you are thinking about contributing a High-Level Science Product of your own, please fill out the HLSP Interest Form to get started. HLSPs archived on MAST enjoy permanent hosting space, additional visibility, and, often, increased citation rates. Any further questions on the process can be sent to the Archive Help Desk.

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**AN UPDATE TO PORTABLE DATA DISTRIBUTION METHODS**

**HANNAH DREW-MOYER**

## TESS MISSION DATA RELEASES

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## NEW AND UPDATED HLSPS FOR MARCH

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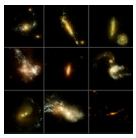

## ABOUT

This newsletter is a MAST publication produced by Greg Snyder, Peter Forshay, and Jonathan Hargis, on behalf of the entire MAST staff, who welcome your comments and suggestions.

The Mikulski Archive for Space Telescopes (MAST) is a NASA funded project to support and provide to the astronomical community a variety of astronomical data archives, with the primary focus on scientifically related data sets in the optical, ultraviolet, and near-infrared parts of the spectrum. MAST is located at the Space Telescope Science Institute (STScI).

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