

Linking Literature to the Data

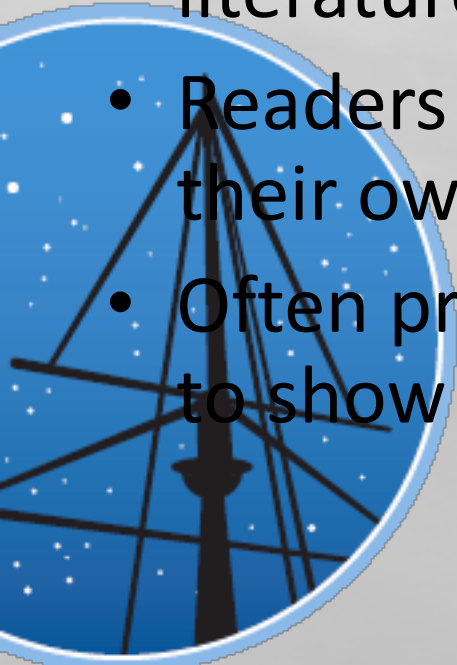
MAST: Karen Levay,
Joshua Peek, Sarah Weissman, Amanda Marrione, Tom Donaldson

STScI Library: Jill Lagerstrom

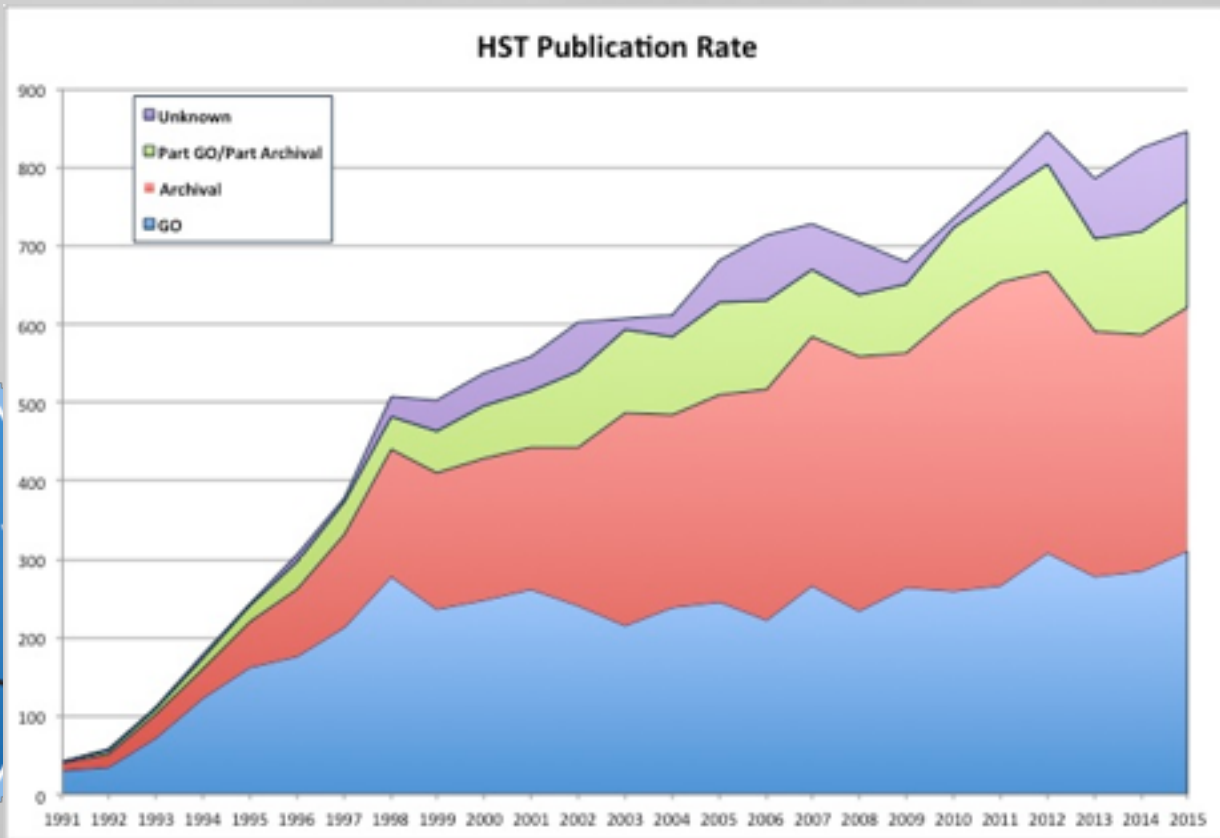
Acknowledgement: Julie Steffen, Gus Muench, Ethan Vishniac

The Goal

- To accurately identify data used in the literature.
- Readers may want to use the same data for their own project.
- Often projects and archives use this information to show how their data have been used.

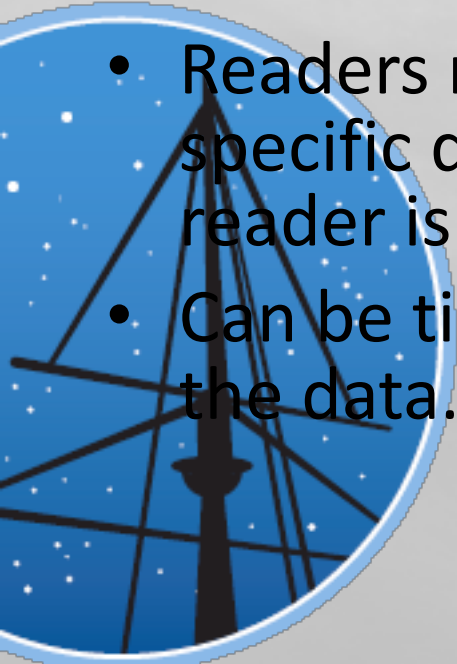


STScI Bibliometrics

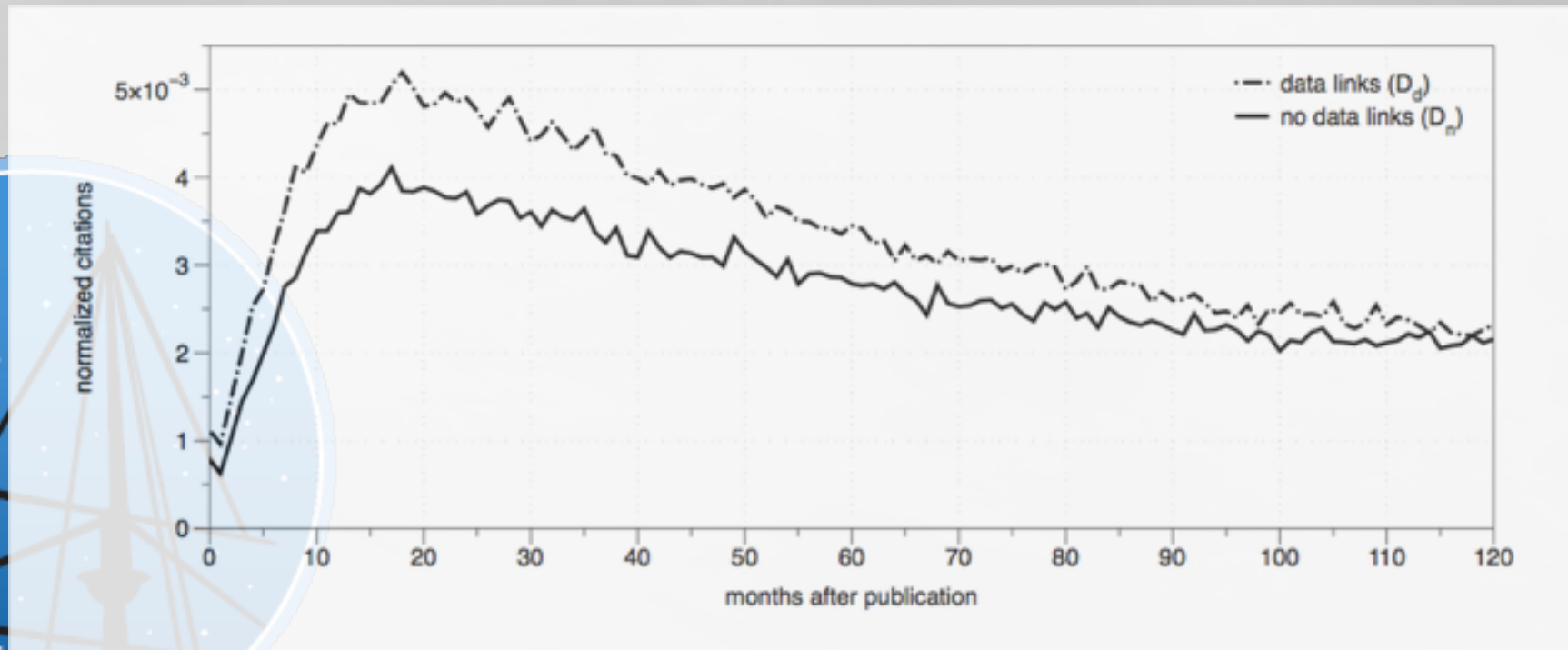


The Challenge

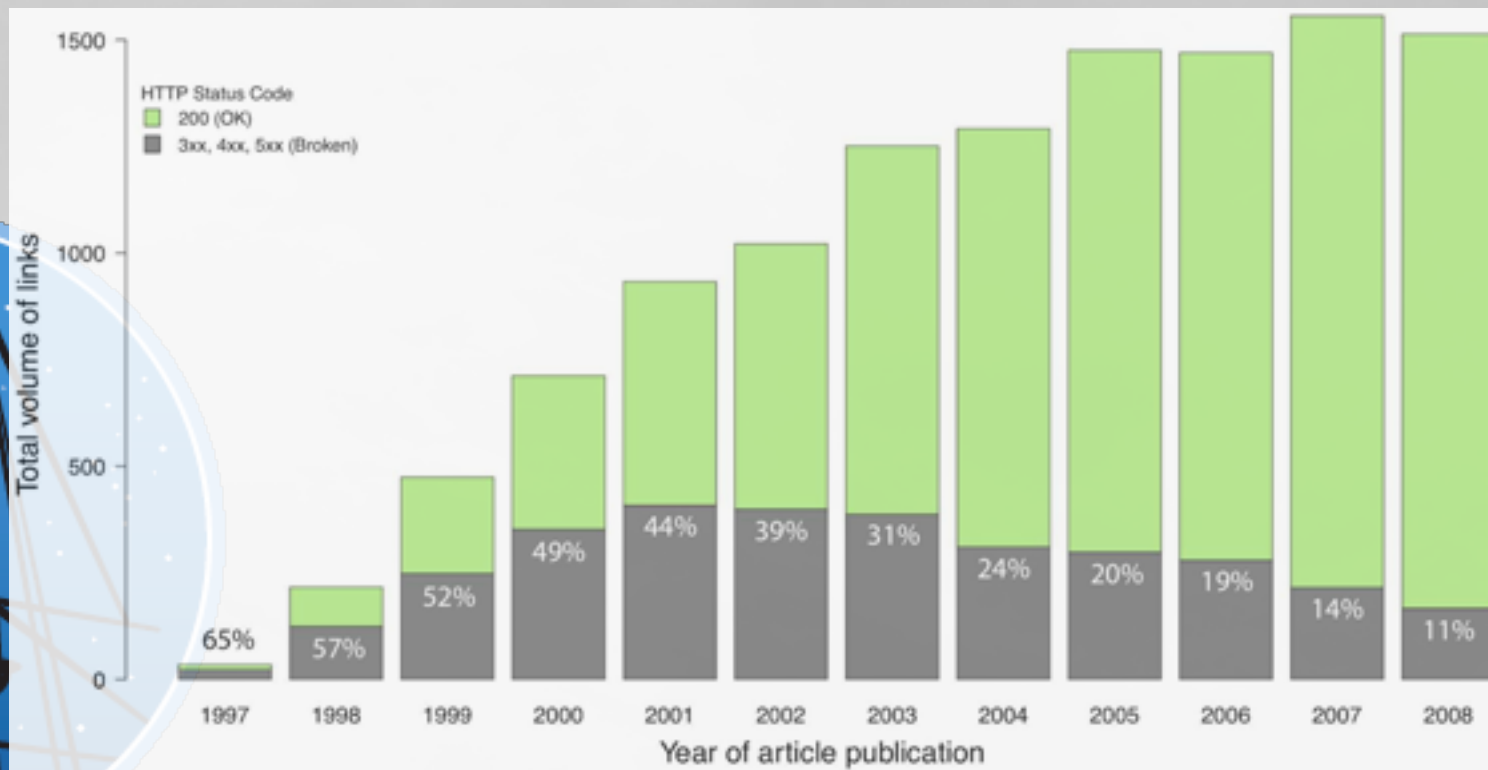
- Authors often have space challenges to describe the data used in their analysis.
- Readers may be challenged to actually identify the specific data used in the paper, especially if the reader is unfamiliar with the relevant instrument.
- Can be time consuming for STScI staff to identify the data.




Papers with data links are more highly cited



Links in papers decay over time



MAST and AAS Journals Have Developed a New Workflow

- 
- STScI/MAST can now issue Digital Object Identifiers (DOI) or perma-links to define a unique set of data.
 - EJ Press will look at each manuscript at submission.
 - Author is asked if MAST data is used and if so prompted to submit DOI that can be linked to identify the data used.

EJ Press submission

MAST (Data hosted at Space Telescope Science Institute)

Does your manuscript directly refer to data in MAST (i.e. data from Hubble, Kepler, GALEX, IUE, [etc.](#))?

Yes No

What are DOIs for? Data DOIs (permanent links) allow readers to access the data you used directly from the text of your article.

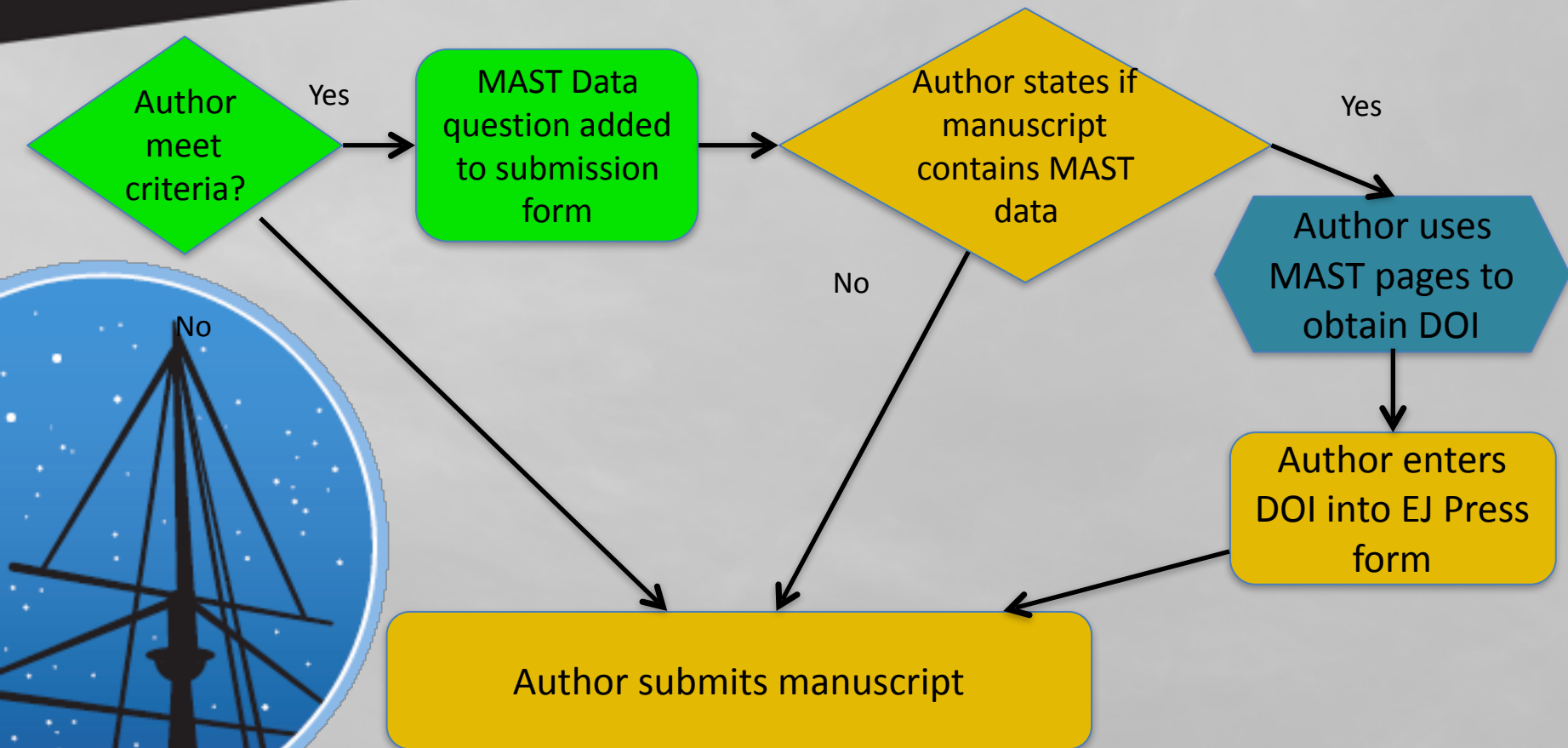
How do I get one? MAST provides DOIs for its data in two ways:

Find **existing DOIs for catalogs** (Kepler/KIC, GALEX/MCAT, etc.) and **High-Level Science Products** (CANDELS, K2SFF, etc.).

or
Generate your own DOI using an **interface for making custom collections** of observations.

Please use this [link](#) to the MAST DOI site to find or generate the DOI relevant to your article's MAST datasets.

DOI*	
<input type="text"/>	<input type="button" value="Clear"/>
<input type="text"/>	<input type="button" value="Clear"/>
<input type="button" value="Add Datasets"/>	



MAST DOI Options

- Some pre-defined DOIs for well defined datasets (e.g. Quarters of Kepler data, GALEX catalog, Community contributed High Level Science Products)
- New interface developed for users to select observations and create a new DOI





This version of the Portal is for the creation of DOIs. To download data, use the [Discovery Portal](#).

Search by... and enter one or more program ID:
 Program ID: 12556

Upload Target List **My DOI Basket: 3 observations** [User Manual/Help](#) | [Leave Feedback](#) | [About This Site](#)

Help Page Program ID: 12556

72 Total Rows

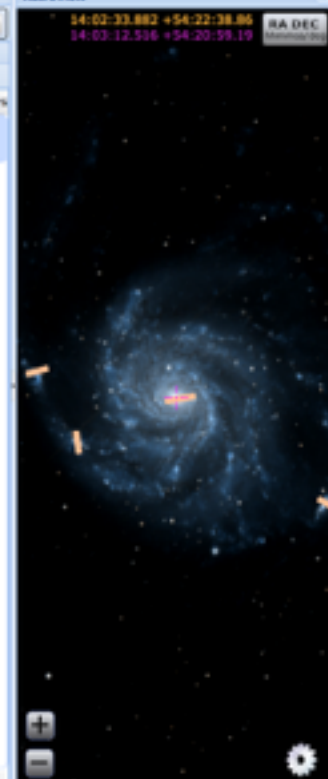
Filters
 Clear Filters Edit Filters... Help...

- Keyword/Text Filter**
Filter All Columns
- Instrument**
 Name Quantity
 STIS/MLV MAMA (26 of 26)
 STIS/FUV MAMA (26 of 26)
- Filters**
 Name Quantity
 G230L (26 of 26)
 G140L (26 of 26)
- Target Name**
 Name Quantity
 NUCLEUS+HODGE602 (24 of 24)
 NGC3471 (12 of 12)
 NGC3462 (12 of 12)
 NGC3447 (12 of 12)
 NGC3461 (12 of 12)
- Target Classification**
 Name Quantity
 ISM (72 of 72)
 HII REGION (72 of 72)
- RA (deg)**
 14-02-27.925 14-04-29.491

List of Observations
 Edit Columns... Table Display: All

	Actions	Preview	Cutout	Mission	Instrument	Project	Filters
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<input type="checkbox"/>				HST	STIS/FUV-MA...	HST	GL
<input checked="" type="checkbox"/>				HST	STIS/FUV-MA...	HST	GL
<input checked="" type="checkbox"/>				HST	STIS/FUV-MA...	HST	GL
<input checked="" type="checkbox"/>				HST	STIS/FUV-MA...	HST	GL

AstroView
 14-02-33.882 +54-22-38.86 RA DEC
 14-03-12.556 +54-20-59.19



DOI Basket

This version of the Portal is for the creation of DOIs. To download data, use the [Discovery Portal](#).

DOI Basket

3 Total Rows 3 Observations Selected

Edit Column... Table Display: All

(x)	Mission	Instrument	Observation ID	Filters	Waveband	Proposal ID	Principal Investigator
<input checked="" type="checkbox"/>	1	HST	08QU60030	G140L	UV	12556	Gordon
<input checked="" type="checkbox"/>	2	HST	08QU60040	G140L	UV	12556	Gordon
<input checked="" type="checkbox"/>	3	HST	08QU60050	G140L	UV	12556	Gordon

Enter DOI metadata...

DOI Creator(s): Karen Levy

Dataset Title: e.g. Data from paper "Your Paper Title"

About this data: [optional] Enter a description here. This could be a paper abstract, description of dataset or description of search methods and/or parameters.

Remove observations from DOI basket after DOI is created?

Create DOI



Information about DOI 10.17909/T9RP4V

DOI Creator(s): Elena Sabbi

Date: 2016-01-22

Title: Hubble Tarantula Treasury Project

Display Data: View data for [doi:10.17909/T9RP4V](https://archive.stsci.edu/doi/10.17909/T9RP4V)

About this data: HTTP is a panchromatic imaging survey of stellar populations in the Tarantula Nebula in the Large Magellanic Cloud that reaches into the sub-solar mass regime ($<0.5 M_{\odot}$). HTTP utilizes the capability of the Hubble Space Telescope to operate the Advanced Camera for Surveys and the Wide Field Camera 3 in parallel to study this remarkable region in the near-ultraviolet, optical, and near-infrared spectral regions, including narrow-band H α images.

Last Updated: 2016-04-04 14:04:30

This DOI is provided by the MAST archive at Space Telescope Science Institute

- [DOI FAQs](#)
- [DOI Main page](#)

<https://archive.stsci.edu/doi/resolve/resolve.html?doi=10.17909/T9RP4V>

Test Phase 2016

- First authors from STScI using MAST data through 2016.
- EJ Press will implement process for all papers that appear to use MAST data.
- Plan educational campaign for our users.



Future

- Possible methodologies and feasibility of defining catalog samples from large database (anyone else interested in this topic?)
- Hope to expand our publisher partners.
- Expand use of DOIs for other purposes (e.g. sharing a large data sample among collaborators).
- Improving and expanding “preset” HLSPs.
- Updating existing data links to use DOIs.
- Establish/improve integration with ADS.
- Create DOIs from saved MAST Discovery Portal searches.

