Create DOIs for Data You Publish

A DOI, or digital object identifier, is a persistent link to a digital resource somewhere on the web. They are used as a permanent link to journal articles, books, videos, and other digital content. In the context of MAST, DOIs can refer to collections of data, such as the set of Observations in MAST that were analyzed in a published paper. Such DOIs enable transparency and reproducibility in the scientific process, and provide one basis for measuring the scientific impact of missions hosted by MAST.

Creating a DOI for specific Observations you publish is straightforward. See the MAST DOI home page to learn more about DOIs, how to leverage pre-existing MAST DOIs, and to cite DOIs in manuscripts. If you need to create a new DOI for Observations hosted by MAST, see the Portal Guide on Special Searches Create a DOI, and then proceed to the MAST DOI Portal.

If you publish a paper as an outcome of a JWST-funded program, you are obligated to include a DOI to the specific JWST data used in your paper.

Contributing Data to MAST

Investigator teams have, from time to time, contributed collections of High-Level Science Products (HLSPs) to MAST for distribution to the community. These collections each cover a common science theme, have very high potential for enabling new science, and are described in a refereed journal paper. Collectively HLSPs include a wide variety of product types: images, spectra, source catalogs, light curves, SEDs, and more.

HLSP collections are among the most highly used and cited data products in MAST. See the HLSP home page to browse the collections. If you are interested in contributing a collection, consult the HLSP Contributor Guide for instructions for preparing your collection, and for contacting MAST.

Science-Enabling Products from ERS

A special Director's Discretionary program for JWST Cycle-1 solicited community proposals for Early Release Science (ERS). In addition to proposing a variety of excellent science programs with JWST, these programs were selected to, in aggregate, exercise a large fraction of the science instrument observing configurations, and to produce for the community science enabling products that would enable proposers for Cycles 2 and beyond to craft better observing programs.

All data from the selected programs, as produced by the JWST calibration pipeline, become available through MAST immediately upon ingest into the archive. Many of the ERS programs will, in addition, produce High-Level Science Product collections for distribution through MAST. These specialty products are not produced by standard processing by the Mission, and will facilitate rapid re-use by the community for new science.

Acknowledging JWST

Investigators who publish scientific results from JWST data are requested to acknowledge the JWST Mission as the source of the data. For investigations that were funded via an STScI grant, you are obligated to acknowledge in your paper the mission and the source of funding, and to create and cite a DOI to the data that were analyzed (see above). You should also insert the appropriate facilities keywords in your paper. See also the article on Data Attributions for how to do this.

JWST Bibliography

Search the literature for important papers relating to JWST with the Space Telescope Bibliography Search. You may also sign up for a bi-weekly email update of recent Flagship mission papers.

For Further Reading...

- MAST Data Use Policy
- MAST Mission Acknowledgements (including JWST)