Mission Search Caveats

The MAST Mission Search interfaces currently lack certain intended, but as yet unimplemented features. Many of these features would affect all of these interfaces, but some affect only JWST. In most cases these features are offered in the MAST Portal. These issues will be addressed over time, and this page will be updated as the issues are resolved.

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Streaming data downloads through the browser are limited to 1.0 TB of uncompressed data (which works out to a zip file of about 100 GB). This limit is actually considerably higher than for the MAST Portal.

Known Flaws

The following are known flaws in the interfaces, which will be fixed as soon as possible.

Date	Status	Description
01 Feb 2024	Fix pending	**Problem:** for users of the **Safari web browser** when downloading bundles where any individual file is larger than 4 GB using the zip output format. This results in a **silent failure to include all intended files in the bundle**. The root problem is with Safari itself, and unless it is fixed in a future version of that browser, this may result in zip files that contain missing data products. **Work-around:** You can still use the Mission search form with Safari, but you must uncheck an option that is turned on by default for zip downloads to properly function. This setting results in incomplete zip files: Under **Safari -> Preferences -> General**, the _Open "safe" files after downloading_ box is checked. Options to avoid this issue: - under **Safari -> Preferences -> General**, uncheck that box. You will then need to decompress the zip file yourself after the download finishes - using the Search form with Safari, instead select the _curl_ download option, which will download a set of curl commands to download your files - use an alternate browser like Firefox or Chrome **Resolution:** A work-around in the Mission Search interfaces is being studied in the event that Apple does not soon address the problem in Safari.

Common Caveats

The following limitations apply to MAST Mission-specific search interfaces:

- There is no data previewer
- There is no tool for visualizing spatial footprints of the data on the sky, analogous to AstroView in the Portal
- Retrieving data in bulk with scripts is limited to Curl; support for Python is not yet available
- There is no support for download through astroquery.mast using the MastMissions module
- There is no support for altering the order or the width of columns in the Search Results table

JWST Caveats

The following limitations apply to the MAST JWST Search interface:

- Planned JWST observations are not searchable
- Only the highest-level Guide Star products are available; lower-level product types (`_uncal,` etc.) are not currently available for download
- No support for purely "Guide Star" searches (those without accompanying science observations)
- Certain non-FITS Level-3 products, notably the `_phot.ecsv` products, are grouped with L-2 products. They are also not indicated in the Search Results table in the Product Levels column. This is a side-effect of a problem in the back-end database. You may need to include a wider range of products in the download overlay to include them.
- The search does not find NIRISS Level-2c `_ami` products, which are related to Aperture Mask Interferometry

For Further Reading...

- [MAST Data Holdings](#)