

JWST AWS Bulk Download Scripts

To facilitate high demand during the first few weeks, MAST copied all the pipeline-produced products to the Amazon cloud from both the "Webb First Images" (aka, "ERO") and the Commissioning programs.

On this page...

- [Bulk Downloads from AWS](#)
- [Table of Scripts - Webb First Images \("ERO" Programs\)](#)
- [For Further Reading...](#)

Bulk Downloads from AWS

Copies of the early JWST data products were hosted in Amazon Web Services (AWS) to support the high demand during the first few weeks of data release. For the ERO programs, these have been replaced with bulk download scripts that retrieve the data through MAST. The scripts only require that `curl` be installed on your machine. You do not require an account of any kind to retrieve the data, since they are all public. Alternatively, you can use [astroquery.mast](#) to [programmatically search and download products](#).



The scripts have since been modified to retrieve data through MAST, rather than AWS, and are made available here for convenience.



Each line in the script corresponds to a single data file. So if you want to make edits to the products you retrieve, you can simply delete or comment out (add '#' as the first character) lines for files you do not want to download.

Three scripts are available for each program ID: "Calibrated" contain Stage 2+3 products, "Uncalibrated" contain Stage 0+1 products, and "Guide Star" contain guide star files. See https://jwst-pipeline.readthedocs.io/en/latest/jwst/data_products/product_types.html for a description of the products contained within each Stage.



Data Quality Caveats

The products linked here were produced by the standard calibration pipeline. At this early stage of the mission, with the current operational pipeline and available reference files, calibrated products may show a variety of known issues. Please check the [JWST Calibration Pipeline Caveats](#) page in [JDox](#) for more information about limitations of the current data and suggested options.

Table of Scripts - Webb First Images ("ERO" Programs)

The links in each row will download a script for a particular category of products related to a given Program ID. Note that these scripts will download all pipeline products for the program ID, even if the press release images used a subset of the observations within a program.



The total volume of data downloaded can be as high as tens or hundreds of GB, be sure you have plenty of space on your drive before you execute the script.



NOTE: If you run the bash shell and are having trouble running these scripts as-is, you can replace the first line in the .sh file with:

```
#!/usr/bin/bash
```

NOTE: Windows users may want to consider installing a tool such as CygWin to execute the .sh scripts. More information on CygWin here: <https://www.cygwin.com>. Alternatively, you can convert the shell scripts into PowerShell (generally replace "curl" with "curl.exe", but consult online documentation for guidance on how to run curl in Windows PowerShell).

JWST Program ID	Description	Bulk Download Scripts
2731	NGC 3324 (Carina)	Calibrated Uncalibrated Guide Star
2732	Stephan's Quintet	Calibrated Uncalibrated Guide Star
2733	NGC 3132 (Southern Ring Nebula)	Calibrated Uncalibrated Guide Star

2734	WASP-96 b and HAT-P-18 b exoplanets	Calibrated Uncalibrated Guide Star
2736	SMACS 0723 galaxy lensing cluster ("JWST Deep Field")	Calibrated Uncalibrated Guide Star

For Further Reading...

- JDOx: [JWST User Documentation Home](#)
- MAST: [JWST Archive Manual](#)
- MAST: [Portal Guide](#)