# MIRI Example Programs

We provide Example Programs to walk users through all elements of a JWST observing program, from posing a question, to identifying an instrument-specific mode optimized to answer this question posed. These examples use Exposure Time Calculator (ETC) simulations to estimate reasonable exposure times, and illustrate how to specify the observations in the Astronomers Proposal Tool (APT).

As part of the single stream process, JWST proposals will require a detailed technical justification and Astronomers Proposal Tool (APT) executable. Proposals may require significantly more preparation compared to HST. While APT provides some templates for some of the most common observing modes (see Figure 1), some observing scenarios are more complicated. The science use cases listed below provide a guide for crafting the technical aspects to your proposal, including how to use the Exposure Time Calculator (ETC) and APT.

Figure 1. Accessing ETC workbooks for example science programs.
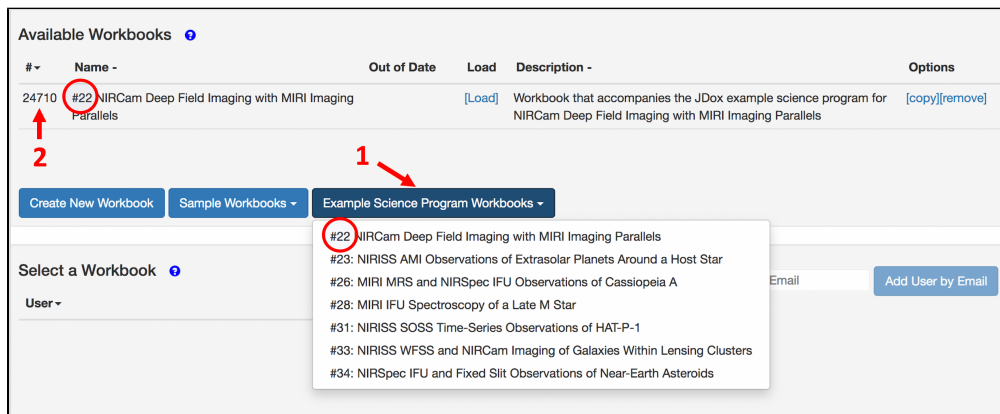
In the ETC GUI, select "Example Science Program Workbooks" tab (arrow 1) and then select an example workbook of interest (in this example, #22). That workbook then becomes available for your use, but is assigned a unique new ID number (arrow 2). Once you load this notebook, you can read it to follow along with the example program description, or edit it further as you like.

Here is a list of all MIRI related example programs:

MIRI

MIRI Coronagraphy of GJ 758 b

NIRSpec and MIRI IFU Observations of Cas A - OLD

MIRI Imaging, MIRI MRS, and NIRSpec IFU Observations of SN1987A

MIRI and NIRCam Coronagraphy of the Beta Pictoris Debris Disk