

Exposure Time Calculator

The [JWST Exposure Time Calculator \(ETC\)](#) is a pixel-based ETC paired with a modern graphical user interface. It supports all JWST observing modes: imaging, spectroscopy (slitted, slitless, and IFU), coronagraphy, and aperture masking interferometry.

Introduction

The [JWST Exposure Time Calculator \(ETC\)](#) has advanced features that go well beyond those in previous exposure time calculators; this includes algorithms that accurately model data acquisition and post-processing, as well as functionality for users to efficiently explore parameter space. The graphical user interface provides enhanced capabilities supporting multiple workflows. For example, users can create workbooks to manage related sets of calculations, can create complex astronomical scenes with multiple sources, and can compare the results of multiple calculations.

More about JWST ETC

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How to use JWST ETC

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[Video Tutorials](#)

How to use JWST ETC Python Code Interface

[JWST ETC Pandeia Engine Tutorial](#)

External JWST ETC links and documents

Go to the on-line [JWST Exposure Time Calculator Tool](#)

Pontoppidan, K. M., Pickering, T. E., Laidler, V. G. et al., 2016, Proc. SPIE 9910, Observatory Operations: Strategies, Processes, and Systems VI, 991016 ,

Pandeia: a multi-mission exposure time calculator for JWST and WFIRST

