jwstobsim

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Contents:

This tool creates simulated spectra based on PandExo.

CHAPTER 1

Guide

Soon to be added...

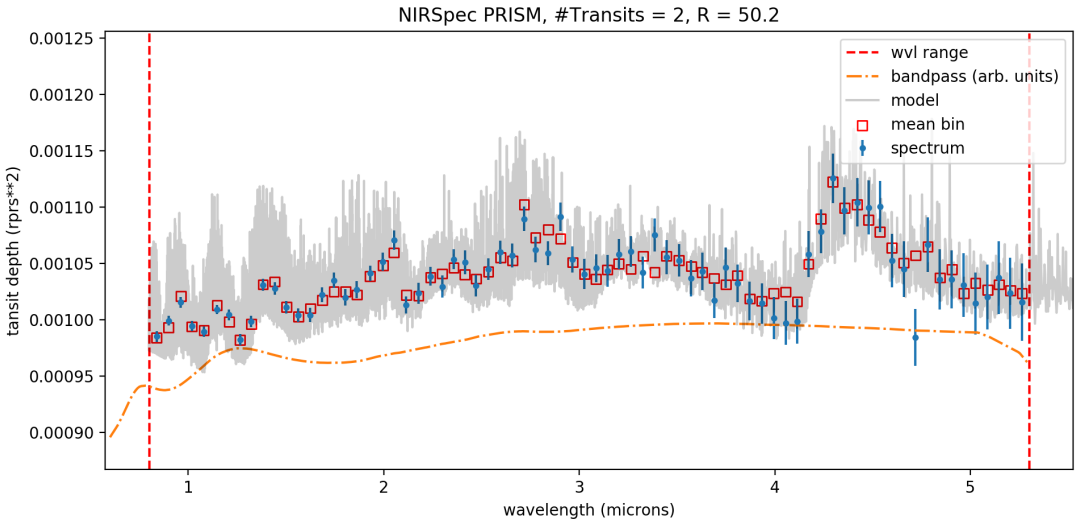
1.1 Installation

You will find a installation guide here.

1.2 Quickstart

Firstly, you have to update the params.yaml in the config directory with the observational parameters. If you have done that, you navigate to the script directory in a termainal and type python run.py. The simulated spectrum will be then saved in the runs_dir directory.

An example for a simulated spectrum:



This code is available in full at https://github.com/sebastian-zieba/JWST-observation-simulator.

1.3 Tutorial

You will find a tutorial here.

1.4 The Code

1.4.1 jwstobsim

class jwstobsim.utils.**AncillaryData**(*params*)

Note:

- Units for the orbital period and ephemeris can be anything as long as they are consistent (e.g. both in days).
- The orbital path is calculated based on *t0* for primary transits and *t_secondary* for secondary eclipses.

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jwstobsim.utils.**bins_new**(*x*, *y*, *y_err*, *n_bins*)

Calculate maximum error for transit light curve calculation.

Parameters **plot** (*bool*) – If True, plots the error in the light curve model as a function of separation of centers.

Returns Truncation error (parts per million)

Return type float

1.5 Acknowledgements

You will find the acknowledgements here.

CHAPTER 2

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