

SimCADO

The instrument data simulator for MICADO built on top of the ScopeSim simulation environment

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1 Introduction

- asd

2 Online Documentation

- Where to find what
- Installing ScopeSim
- Downloading a package

3 ScopeSim Package for MICADO

3.1 Main Packages

- Pipeline
- Science
- ETC

3.2 Support Packages

- Armazones
- ELT
- MAORY

4 Basic functionality

- Quick look example for cluster in LMC with Ks and SCAO

5 Making an on-sky Source

- ScopeSim Templates
- What is inside a Source object
- **How to make source objects to observe**
 - Star cluster
 - Custom point source
 - Elliptical galaxy
 - Custom extended source
 - Combining sources

6 Simulating an Observation Run

6.1 General Workflow

- **Observing the Source**
 - Workflow

6.2 Controlling the simulation

- **Official MICADO modes**
 - SCAO, MCAO
 - 4mas, 1.5mas, Spec
- **Other major configuration parameters**
 - filter
 - dit / ndit
 - slit size
 - zenith distance
 - psf model

7 Science package use case examples

- IMG 4mas, MCAO, Ks
- IMG 1.5mas, SCAO, Pa-Beta
- IMG Astrometric, sub-pixel, 1.5mas, SCAO, J
- SPEC 50x15000, HK, slit aligned with parallactic angle, no ADC
- SPEC 20x3000, J, slit at 45 deg to zenith
- **HCI (not yet implemented)**
 - possible hack