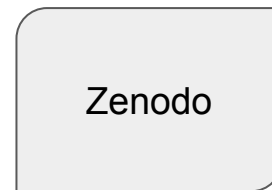
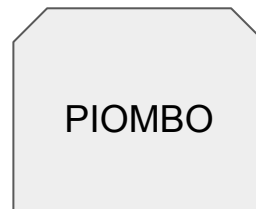
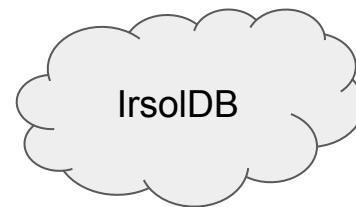
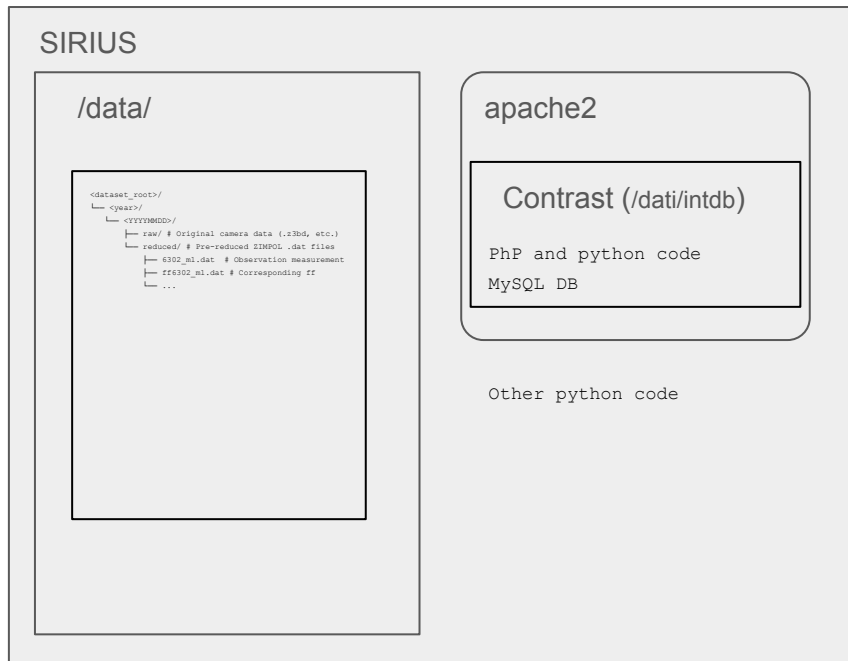


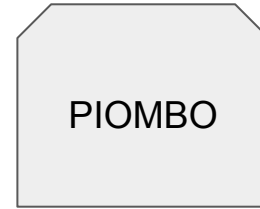
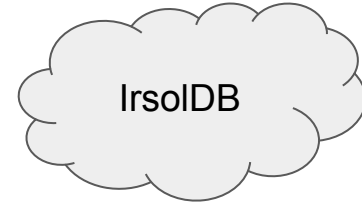
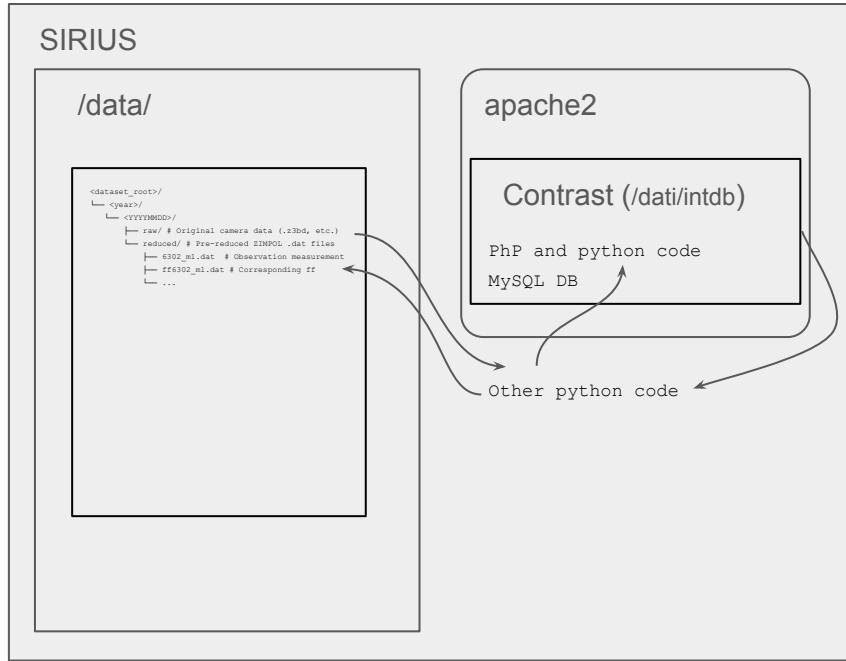
# Contrast - Data Pipeline

<http://projects.irsol.local/intdb/metadata.php>

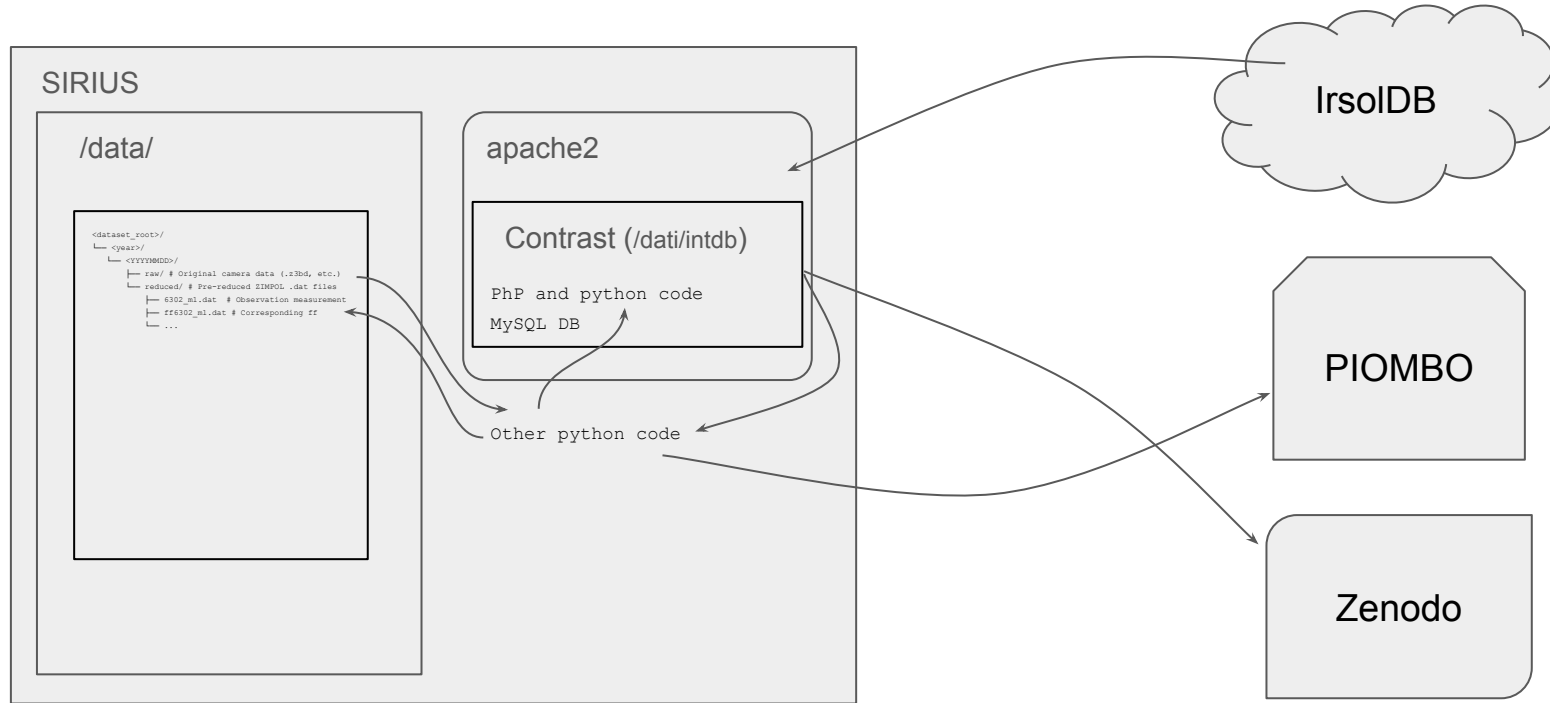
# The actors - Now



# The actors - Now



# The actors - Now



# The actors - Now

SIRIUS

/data/

```
<dataset_root>/
├── cyear/
│   └── <YYYYMMDD>/
│       ├── raw/ # Original camera
│       └── reduced/ # Pre-reduced
│           ├── 6302_m1.dat # Obs4
│           ├── z26302_m1.dat # con
│           └── ...
```

IRSOL

MeasurementsData managementUser management

Carlo Del Don

## Measurements metadata

202120222023202420252026

From

mm / dd / yyyy

To

mm / dd / yyyy

Telescope

None Selected

Wavelength

None Selected

Observer

None Selected

Project

None Selected

Target

None Selected

Only publishedOnly with DOIOnly SVO

Generate FITS

Download FITS (zip)

Create/Edit DOI

Upload to SVO

Sync FITS/public data status

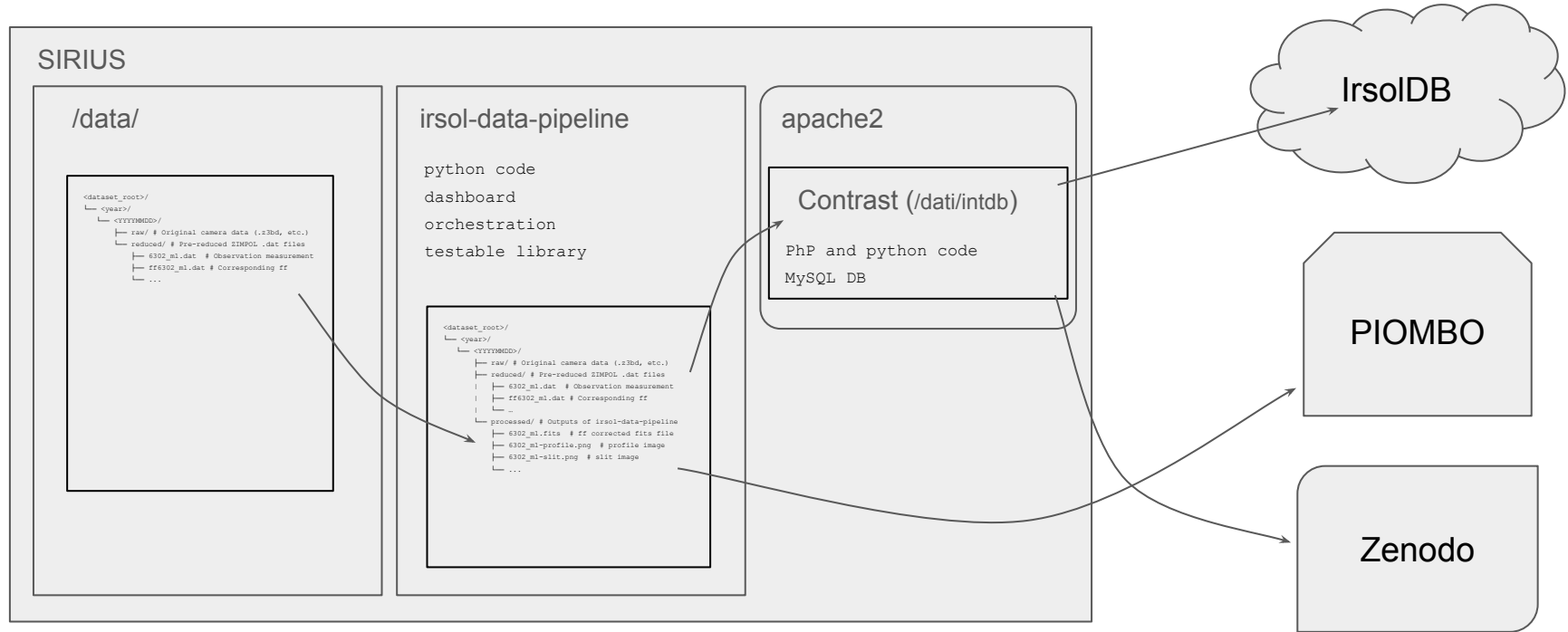
Remove SVO data

<input type="checkbox"/>	260107	10
<input type="checkbox"/>	260126	10
<input type="checkbox"/>	260205	18
<input type="checkbox"/>	260312	12
<input type="checkbox"/>	260317	11

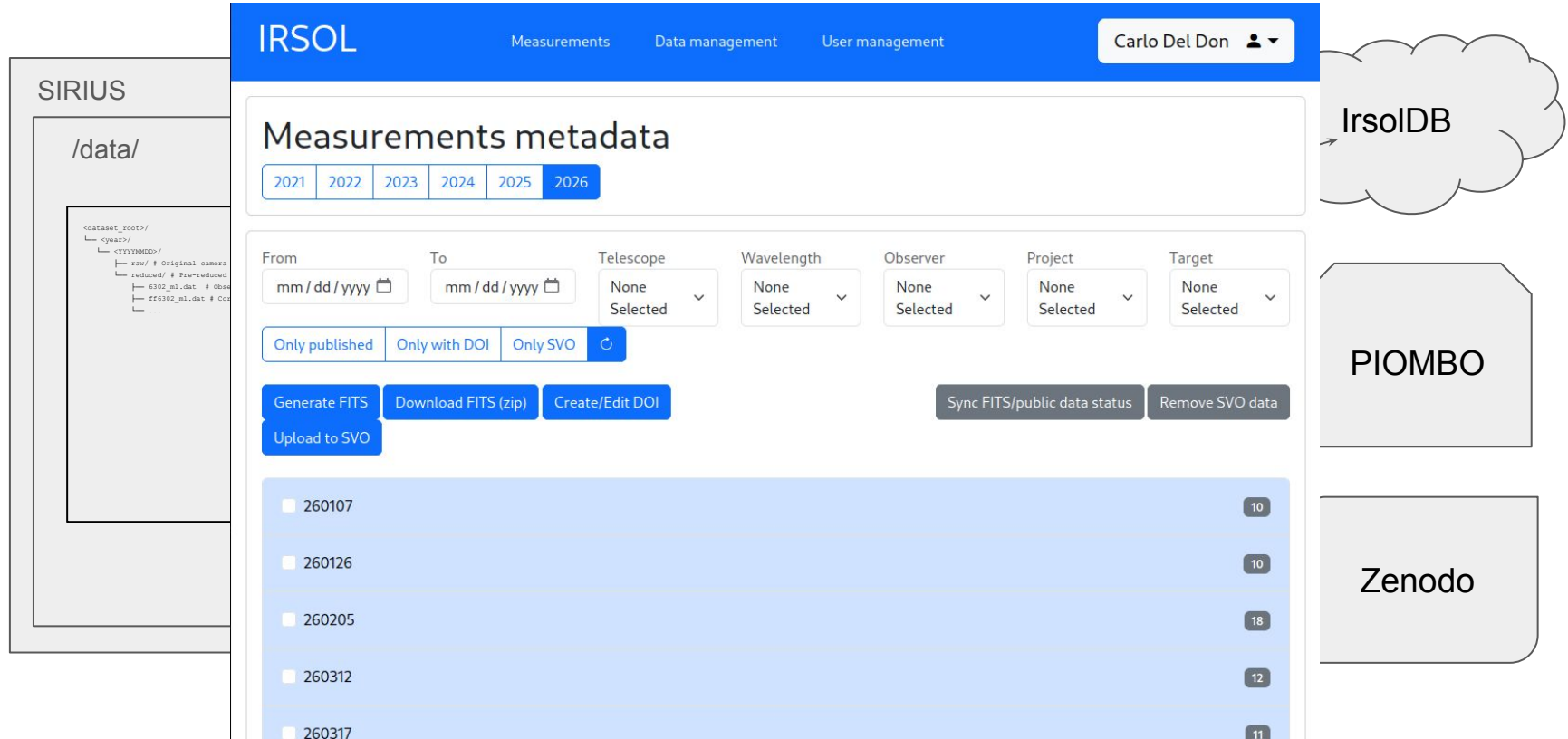
# Issues

- Code is not shared or re-usable
- Hard to add new steps in processing pipeline or artifacts (e.g. flat-field-correction)
- Not clear separation of concern between processing data and publishing data
- No observability (what happens if something fails to process?)

# The actors - To be



# The actors - To be





# irsol-data-pipeline

- Github [repository](#)
- Auto-published as a pip [package](#) whenever a tag is created
- Usable as a [library](#):  
`uv run entrypoints/plot_fits_profile.py input_fits.fits -o profile.png`
- Usable via its CLI interface:  
`idp plot profile input_fits.fits --output-path profile.png`
- Running prefect orchestration on sirius  
`(ssh -L 4200:localhost:4200 <username>@sirius)`
  - Automatic flat-field correction execution of measurements
  - Automatic slit-image generation for all measurements
  - Integration with PIOMBO asset storage