


Model Creation

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Status of the model creation

Motivation:

many of our methods depend on an exact knowledge of the machine configuration

recreating the exact machine configuration by hand is error prone and tedious

Two use cases

- during measurement, *online model*
- when reanalysing old data (maybe far in the future)

Current status:

- OK using pre-2021 optics *but limited functionality*
- OK using the new `acc-models` repository
- NOT YET using tags *but code is ready*
- X Knob extraction *prototype ready, see below*

Knob Extraction

Tasks:

extract knob settings, selected by category (disp, xing, ...) and timestamp

Examples:

call knob extractor with ISO time string

```
python knob_extractor.py xing sep chroma --extract '2022-04-26T15:00:00'
```

call knob extractor with 'now'

```
python knob_extractor.py xing sep chroma --extract now
```

Knob Extraction

Tasks:

extract knob settings, selected by category (disp, xing, ...) and timestamp

Examples:

output

```
! File created by knob extractor
! knobs extracted for time 2022-04-26 15:00:00
! xing
on_x1_v := 0.0;
on_x5_h := 0.0;

! sep
on_sep1_h := 0.0;
on_sep5_v := 0.0;

! chroma
dQpx.b1_op := -16.82;
dQpy.b1_op := -1.5;
dQpx.b2_op := -15.52;
dQpy.b2_op := -2.869999999999999;
```