



kalao.cacao.telemetry.streams			
nuvu_stream	shwfs_slopes_flux	shwfs_slopes  shws_slopes.mean()	dm01disp

```
database.get_all_last_telemetry()
    nuvu_emgain
    strehl
    ...
```

Tip/tilt plot

kalao.interface.status.telemetry\_series -> dict

Modal gains

```
centring_needed, image = kalao.interface.star_centering.fli_view()
kalao.interface.star_centering.star_pixel(x, y)
```

```
database.get_all_last_monitoring()
    shutter
    flip_mirror
    calib_unit
    laser
    tungsten
    filter
    temp_bench_air
    temp_bench_board
    temp_water_in
    temp_water_out
    coretemp_isa-Package_id_0
    acpitz_acpi-temp1
    nuvu_temp_ccd
    fli_temp_ccd
```

kalao.interface.status.latest\_obs\_log\_entry() -> string

kalao.plc.laser.enable() / kalao.plc.laser.disable()  
kalao.plc.laser.set\_intensity(NUMBER)  
kalao.plc.laser.status()

kalao.plc.shutter.open() / kalao.plc.shutter.close()  
kalao.plc.shutter.position()

kalao.plc.flip\_mirror.up() / kalao.plc.flip\_mirror.down()  
kalao.plc.flip\_mirror.position()

kalao.plc.tungsten.on() / kalao.plc.tungsten.off()  
kalao.plc.tungsten.status()['sStatus']

kalao.plc.calib\_unit.laser() / kalao.plc.calib\_unit.tungsten()  
kalao.plc.calib\_unit.move(\$VALUE)  
kalao.plc.calib\_unit.status()['lrPosActual']  
kalao.plc.calib\_unit.status()['sStatus']

```
database.get_all_last_telemetry()
    nuvu_emgain
    strehl
    ...
```

```
database.get_all_last_monitoring()
    shutter
    flip_mirror
    calib_unit
    laser
    tungsten
    filter
    temp_bench_air
    temp_bench_board
    temp_water_in
    temp_water_out
    coretemp_isa-Package_id_0
    acpitz_acpi-temp1
    nuvu_temp_ccd
    fli_temp_ccd
```

Restart FLI camera service

Restart monitoring database updater service

Restart kalaortc