

NAME

pyFAI-average – pyFAI-average

DESCRIPTION

usage: pyFAI-average [options] [options] **-o** output.edf file1.edf file2.edf ...

This tool can be used to average out a set of dark current images using mean or median filter (along the image stack). One can also reject outliers by specifying a cutoff (remove cosmic rays / zingers from dark)

positional arguments:

FILE Files to be processed

optional arguments:

-h, --help

show this help message and exit

-V, --version

show program's version number and exit

-o OUTPUT, --output OUTPUT

Output/ destination of average image

-m METHOD, --method METHOD

Method used for averaging, can be 'mean' (default) or 'median', 'min' or 'max'

-c CUTOFF, --cutoff CUTOFF

Take the mean of the average \pm cutoff * std_dev.

-F FORMAT, --format FORMAT

Output file/image format (by default EDF)

-d DARK, --dark DARK

Dark noise to be subtracted

-f FLAT, --flat FLAT

Flat field correction

-v, --verbose

switch to verbose/debug mode

-q QUANTILES, --quantiles QUANTILES

average out between two quantiles **-q** 0.20–0.90

It can also be used to merge many images from the same sample when using a small beam and reduce the spotty-ness of Debye–Sherrer rings. In this case the "max-filter" is usually recommended.