**hyperdaq.writing**

writing.py

Data writing for GaborDAQ programs

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***class*hyperdaq.writing.data\_scan\_writer(*images*, *images\_ext*, *buffer=True*)**

Bases: **object**

Handles data writing of scans based on data images

**Parameters**

* **images** ([*data\_image\_2*](file:///C:\Users\evers\OneDrive\Desktop\html-hyperDAQ\html-hyperDAQ\hyperdaq.processing.html#hyperdaq.processing.data_image_2)) – The data image objects (or derived classes) corresponding to the scan data to be written out
* **images\_ext** (*list*) – The file extensions for the image objects in images

**buffer\_cube()**

Buffer images into data cube

**close\_files()**

Closes all files

**init\_data\_cube(*n*)**

Starts buffering a data cube

**init\_log\_file(*f*, *run=''*, *aux=''*)**

Initializes the log file, writing the run number to log. Takes a file object as a parameter.

**init\_output\_files(*openfiles=True*, *aux=''*)**

Initialize output files for writing. Returns a list of files, with extensions given by self.file\_types,

**log\_param(*k*, *v*)**

Records the value of a parameter as “key:value”

**log\_str(*txt*)**

Records a message to the log file, buffers the change message if not recording

**Parameters**

**txt** (*str*) – the text to be written to the log file

**set\_gui\_ref(*ref*)**

Sets a reference of the GUI

**toggle\_record()**

Turns recording on and off

**write\_current\_images()**

Records the current images and scan data

**write\_images(*aux=''*)**

Records the images

**write\_images\_aux\_data(*aux\_data*, *aux\_type*)**

Saves images using write\_images and saves aux\_data to a file with the same run number and a file type given by aux\_type

**write\_params\_file()**

Saves all current parameters to the parameters file.