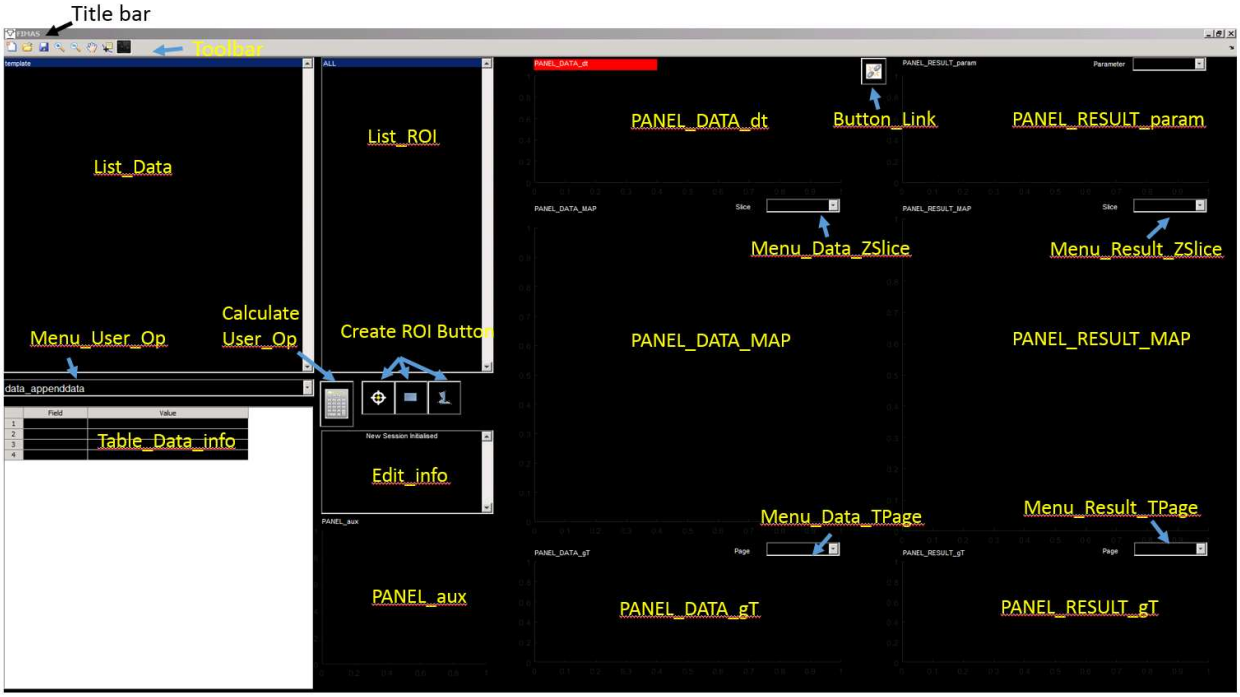
Handbook for FIMAS

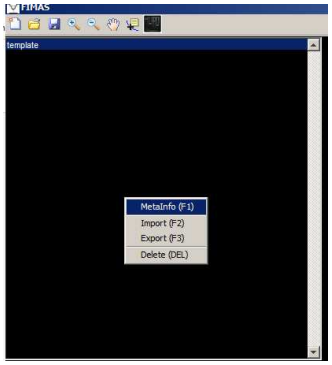
Starting software

After you have extracted the compressed FIMAS file you have downloaded, all programme files should remain in their file structures. Open ./bin/FIMAS.m in your Matlab windows and run the programme either by press Run button or in the command windows type in FIMAS and press RETURN. This should start the FIMAS main interface as illustrated below.

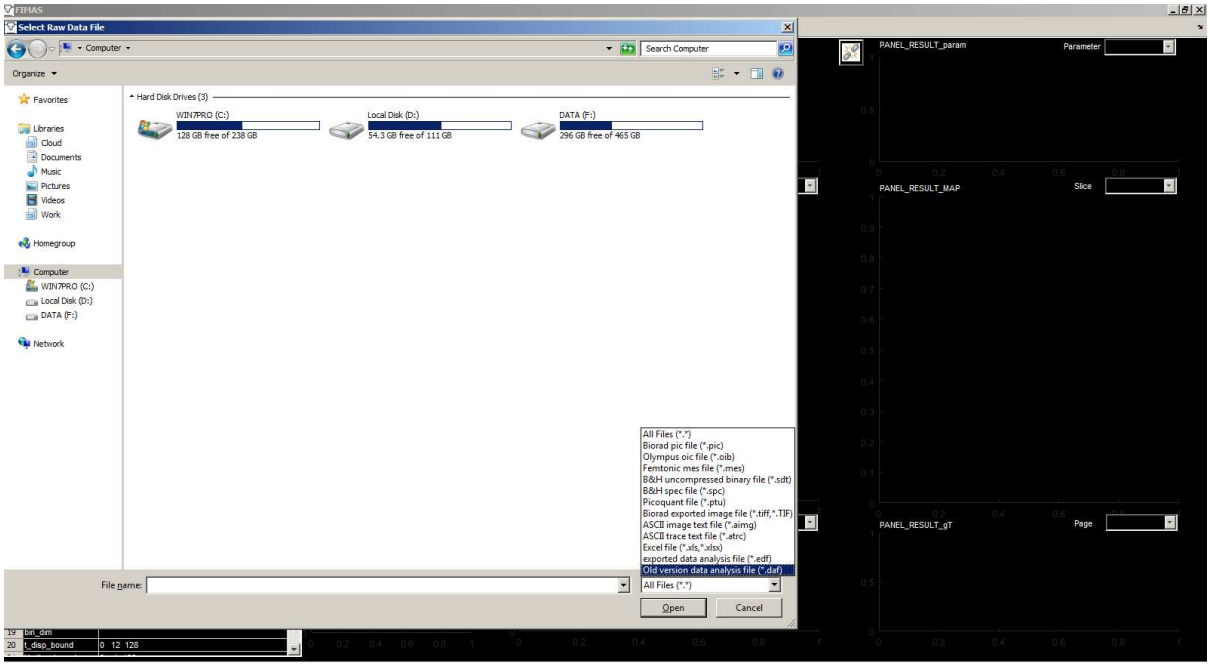


Import data files

Right click on the List_Data panel to bring out the context menu (Fig. x) and click on Import. A file import dialogue box should appear which lists the supported imaging file data formats. Alternatively, you can use the hotkey F2 instead to bring up the import dialogue box as illustrated below.



You can select multiple files from the same folder to import them. The import process can take some time depending on the file size and file type. Often certain file formats will require further user input to determine the correct information are used to construct the image data, e.g. single photon counting file formats. Detailed import for each data type will be explained in the subsections below.



Once the import process has completed successfully, a notification text will be displayed in the Edit_info panel, and the name list of the data imported will be displayed in the List_Data panel. Otherwise error information should be displayed in the Edit_info panel.

Export data item

You can export selected data items from the List_Data panel by right click on the panel and click Export on the context menu (Fig. X) or alternatively use the hotkey F3. Exported data will be saved in the edf (exported data file) format, which is simply the Matlab file (ver 7.3) with built in fimas data class. You can import the edf into any other sessions by itself using the import function or if you have the fimas data class definition you can load the edf file into any Matlab workspace.

Successful export is notified in the Edit_info panel once it is completed, otherwise error information will be displayed in the Edit_info panel.

Open saved FIMAS data file

Simply click on the open file icon  on the tool bar to open saved fimas data file (.fim) using a system file selection dialogue. Only a single saved fimas data file can be opened at a time. Therefore it is better to export your desired raw data as edf files and import them into different sessions as your analysis process requires. Saved the analysis session as a fim file to preserve your analysed results.

If process is successful, notification will be given in the Edit_info panel once it is completed and data name list will appear in the List_Data panel. Otherwise error information will be displayed in the Edit_info panel.

Save FIMAS data file

Click on the save file icon  on the tool bar to save your current analysis session in fim format using a system file selection dialogue. They can then be opened later for further analysis if desired.

Successful saving is notified in the Edit_info panel once it is completed, otherwise error information will be displayed in the Edit_info panel.

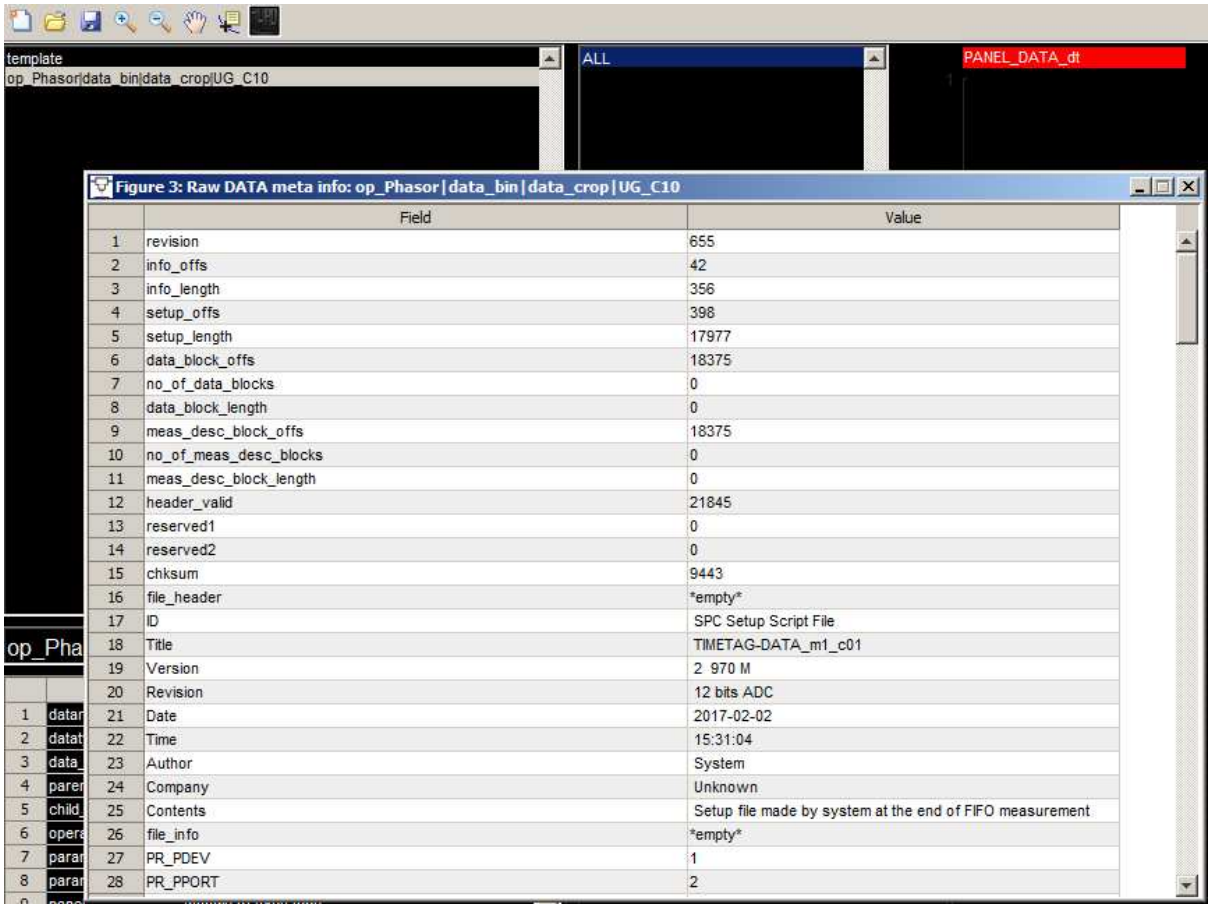
Start new session

Click on the new session icon on the tool bar will wipe current data contents and enable you to start a analysis session. Alternatively you can close the FIMAS interface by click the close window icon or use the system shortcut key (Alt+F4 in windows). A confirmation dialogue will appear as below. Click on Yes button to exit FIMAS followed by step 1, starting software to start a new session with cleared workspace.

If you are unsure, please click the No button and you will be able to continue as it is.

Display data item metadata information

Right click on the Data_List panel to bring up the context menu (Fig. X) and click on MetaInfo. Alternatively use the shortcut key F1. This will bring out Figure 2 panel titled “Figure $X: Raw DATA meta info: $dataitem_name” as shown by an example (Fig. X).



	Field	Value
1	revision	655
2	info_offs	42
3	info_length	356
4	setup_offs	398
5	setup_length	17977
6	data_block_offs	18375
7	no_of_data_blocks	0
8	data_block_length	0
9	meas_desc_block_offs	18375
10	no_of_meas_desc_blocks	0
11	meas_desc_block_length	0
12	header_valid	21845
13	reserved1	0
14	reserved2	0
15	chksum	9443
16	file_header	*empty*
17	ID	SPC Setup Script File
18	Title	TIMETAG-DATA_m1_c01
19	Version	2 970 M
20	Revision	12 bits ADC
21	Date	2017-02-02
22	Time	15:31:04
23	Author	System
24	Company	Unknown
25	Contents	Setup file made by system at the end of FIFO measurement
26	file_info	*empty*
27	PR_PDEV	1
28	PR_PPORT	2

If multiple data items were selected, multiple windows with respective metainfo will be displayed.

You can select certain field and its value then copy them into clipboard to be used elsewhere.

You can also search for field names or field values containing certain text. Simply click on any field name and press CTRL+F. A text input dialogue will appear to ask for search string. The search string is case insensitive. If fields name or value containing the text are found, they will be displayed in a new window. You will need to close the window before proceeding to other operations.

Delete data item

Display data item

Edit data item data information

Create ROI

ROI related functions

User Operation

Graph control

GUI Graph Control