

How to **export** images of TIF and other format from **txm** file



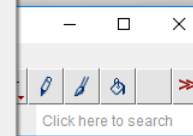
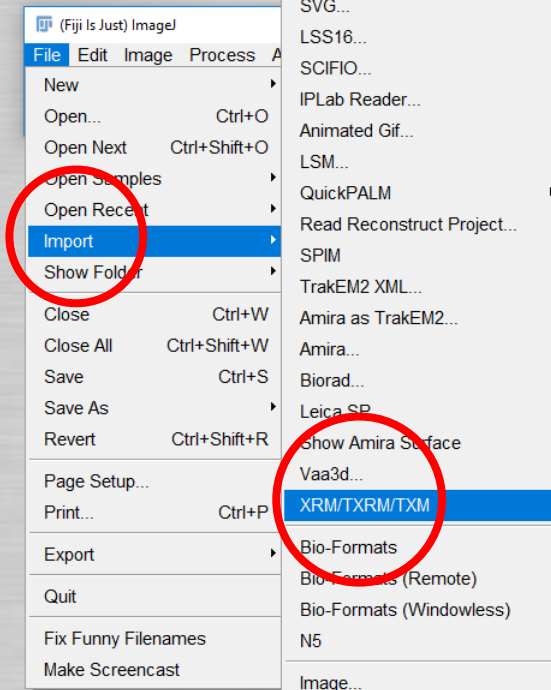
by **Dr. Yuntao Ji**, Utrecht University

<https://www.uu.nl/staff/YJi>

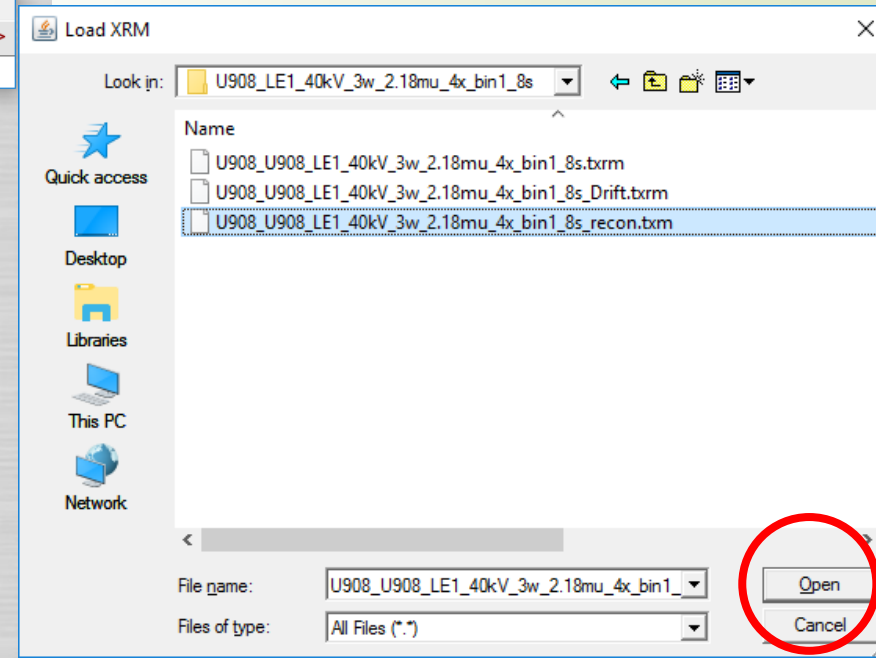
Step 1

Import txm file

- Click Import,
- Select XRM/TXRM/TXM;
- Locate target file
- Click Open



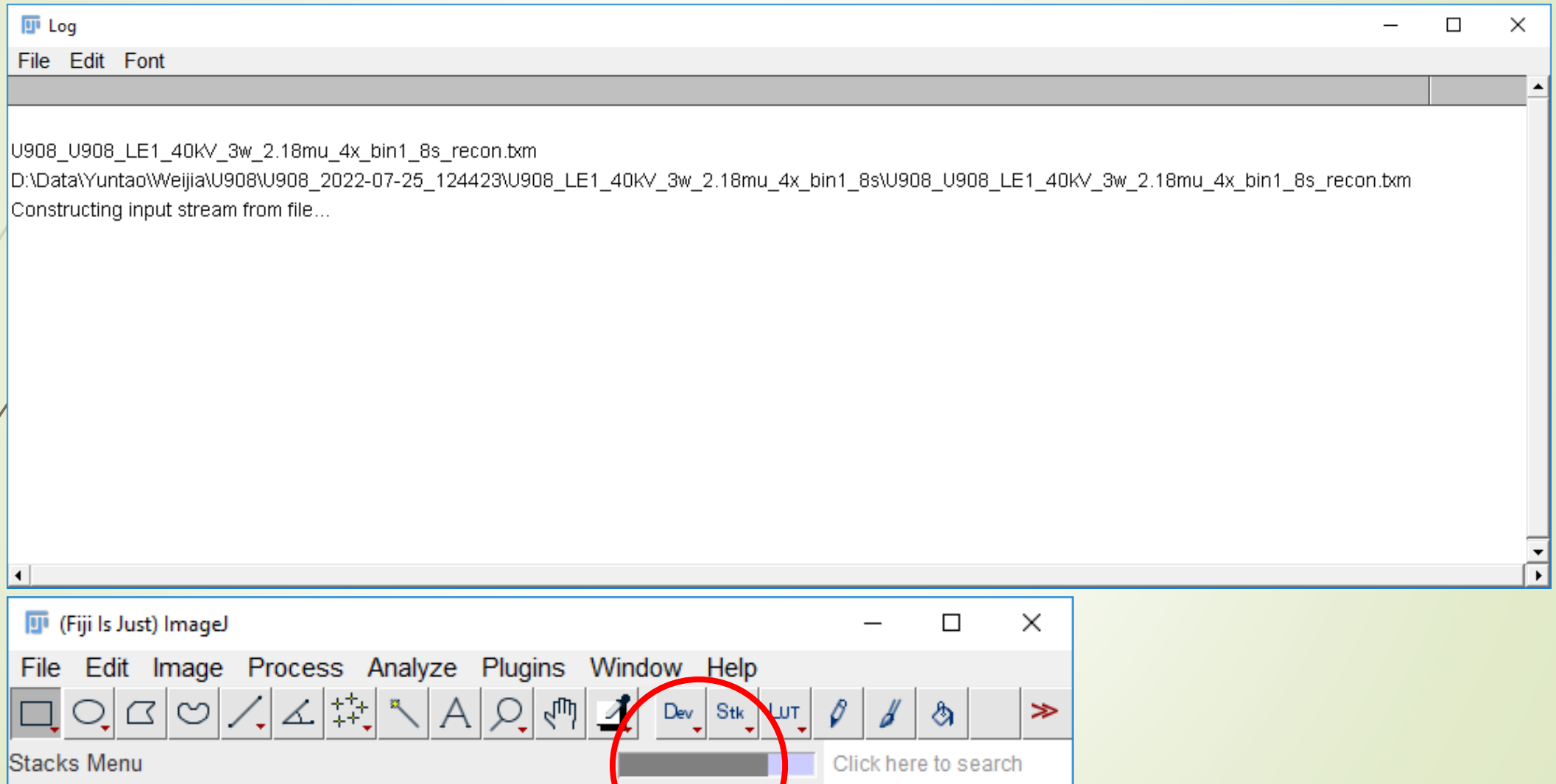
With Fuji or ImageJ



Step 2

Wait for the file to be loaded

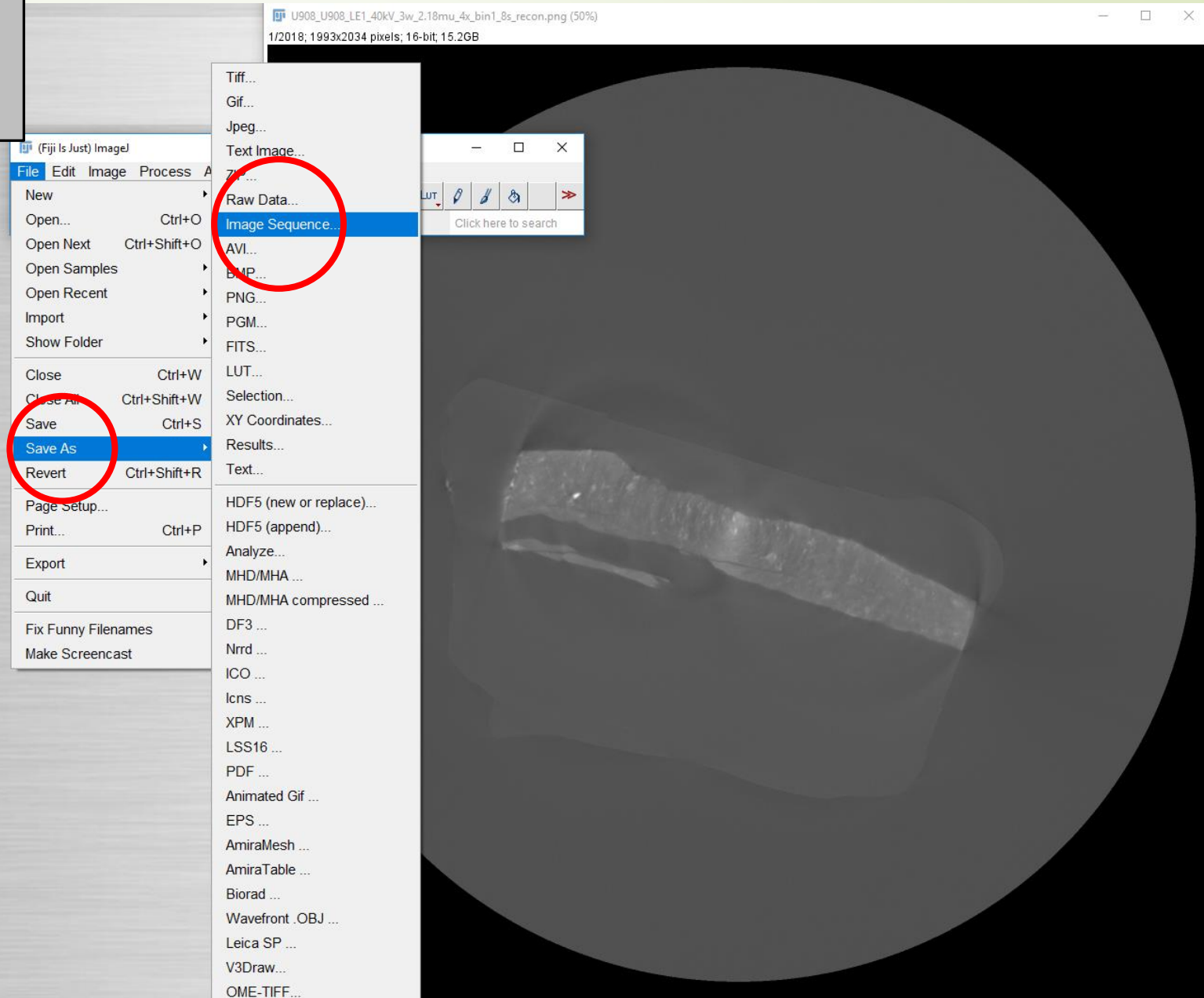
With Fiji or ImageJ



Step 3

When the txm file is opened, save it as "**Image Sequence**"

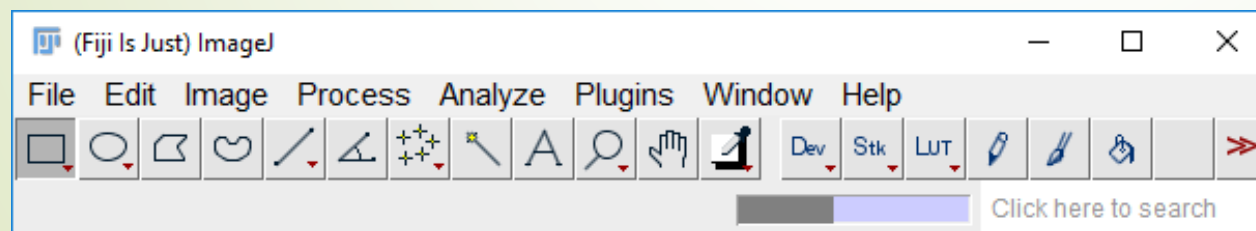
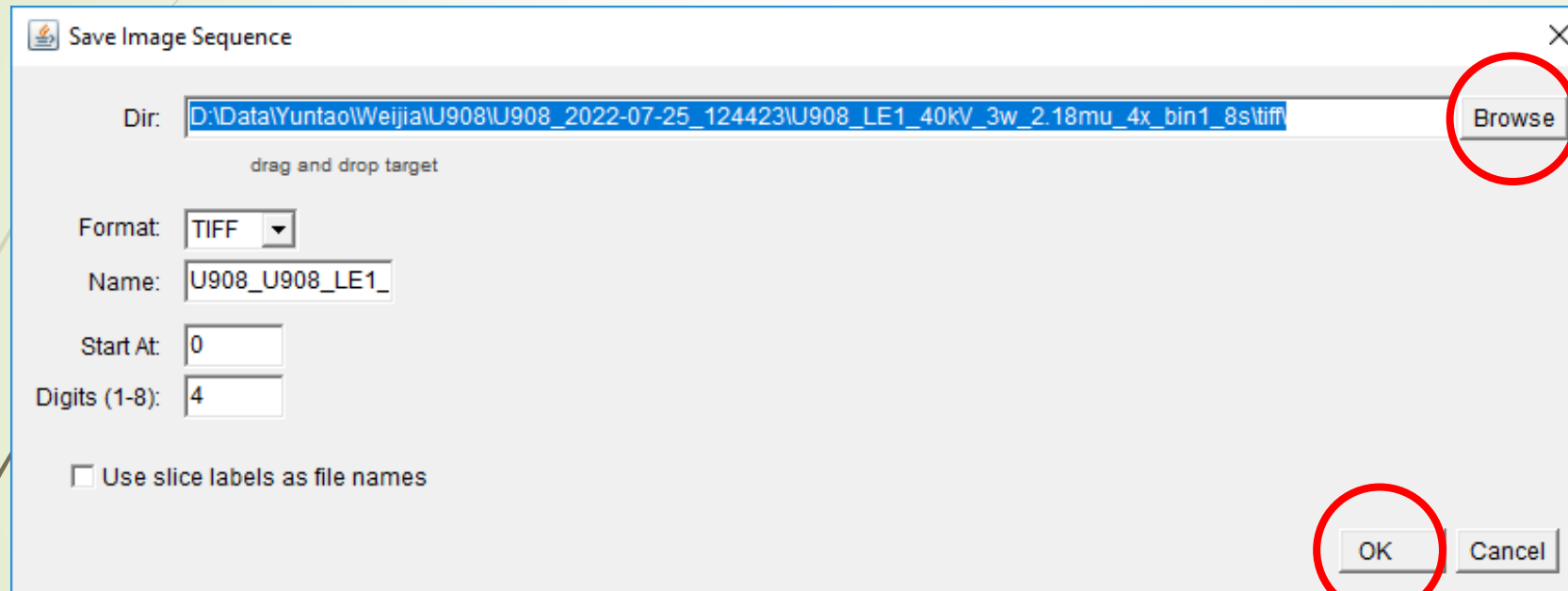
With Fuji or ImageJ



Step 4

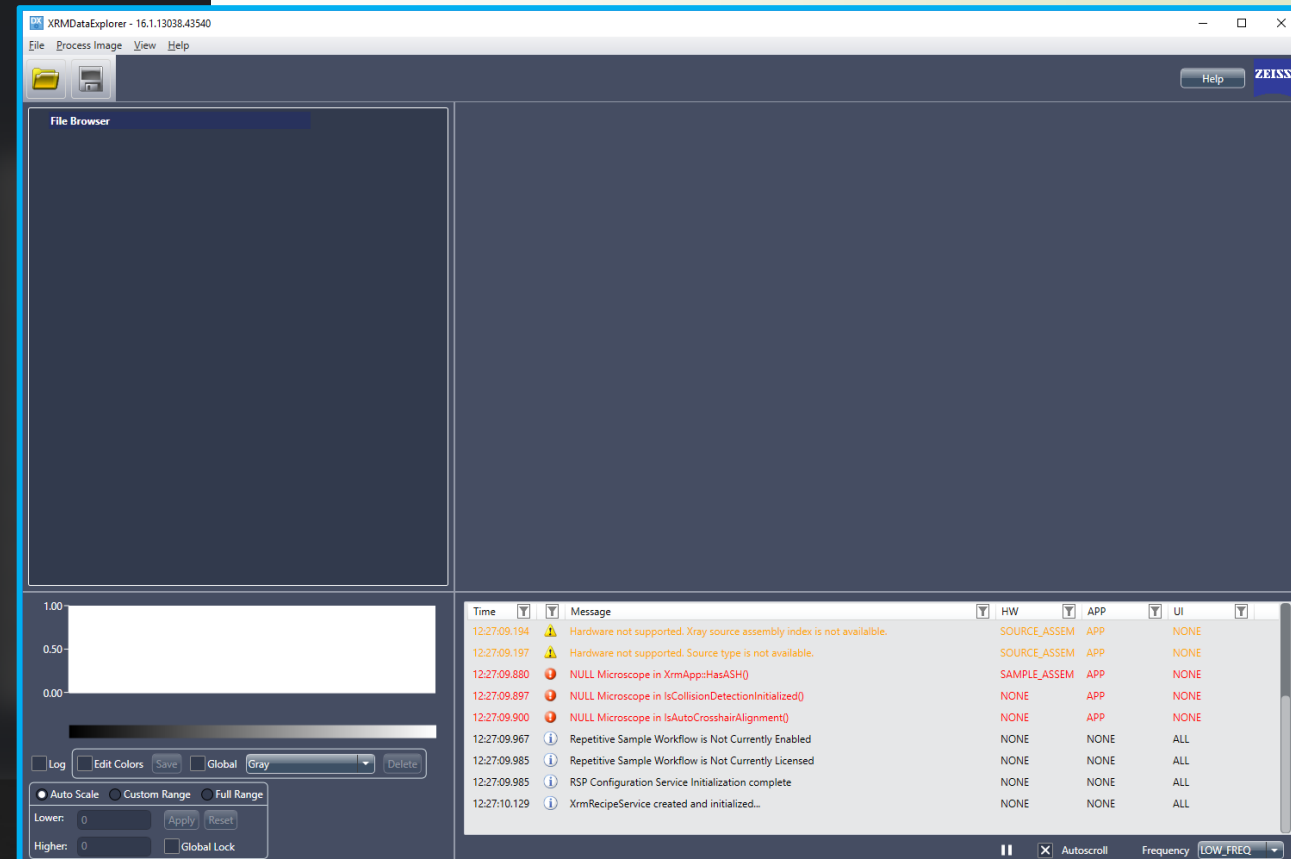
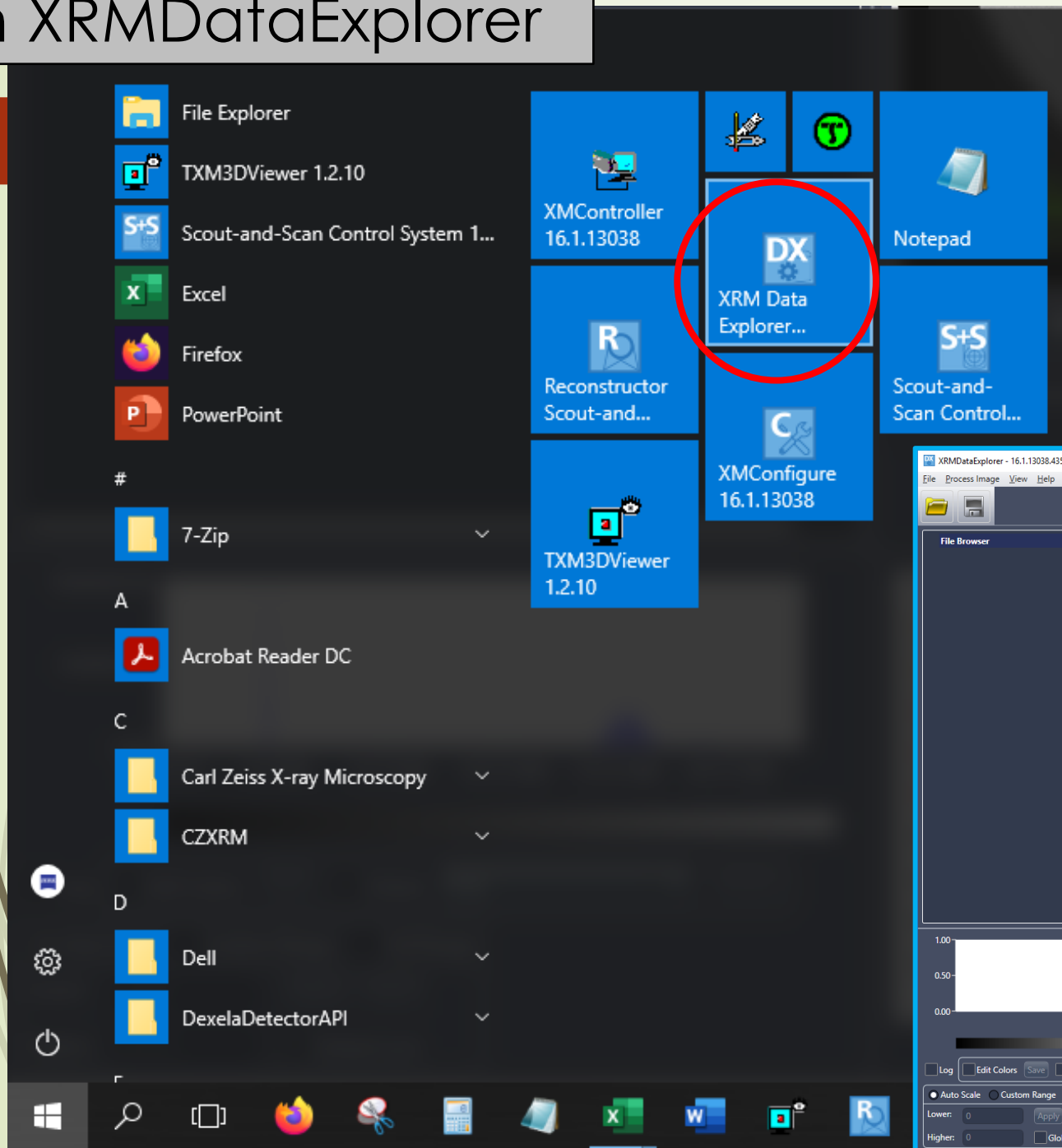
Select target folder,
click OK to export images

With Fuji or ImageJ



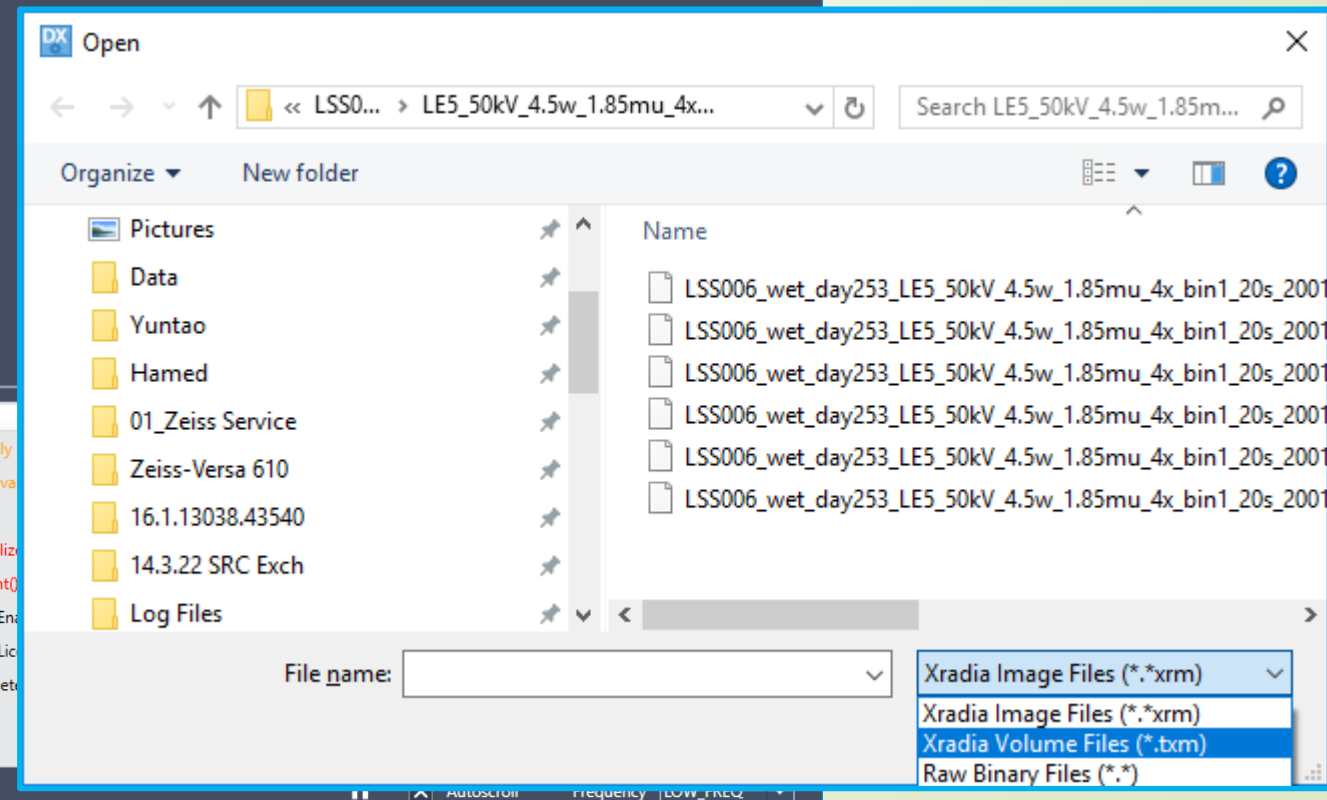
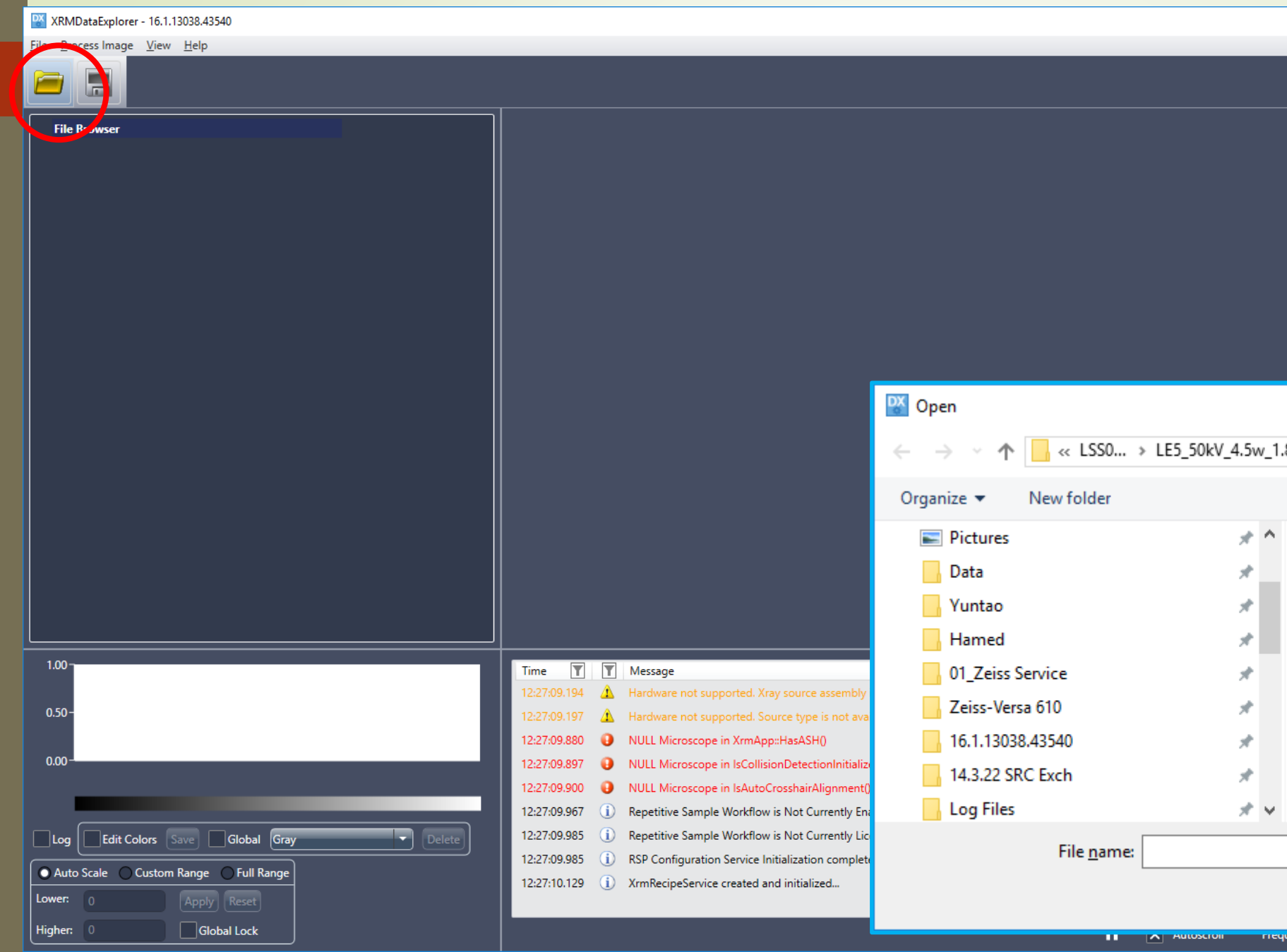
With XRMDataExplorer

Step 1
Open
“XRMDataExplorer”

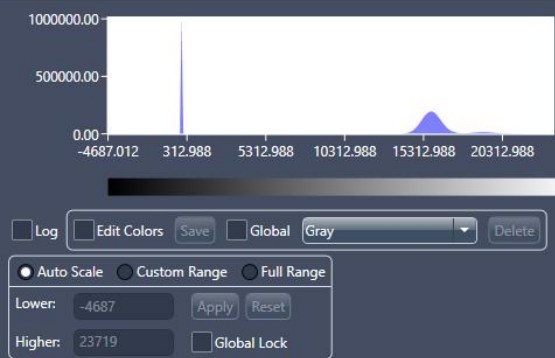
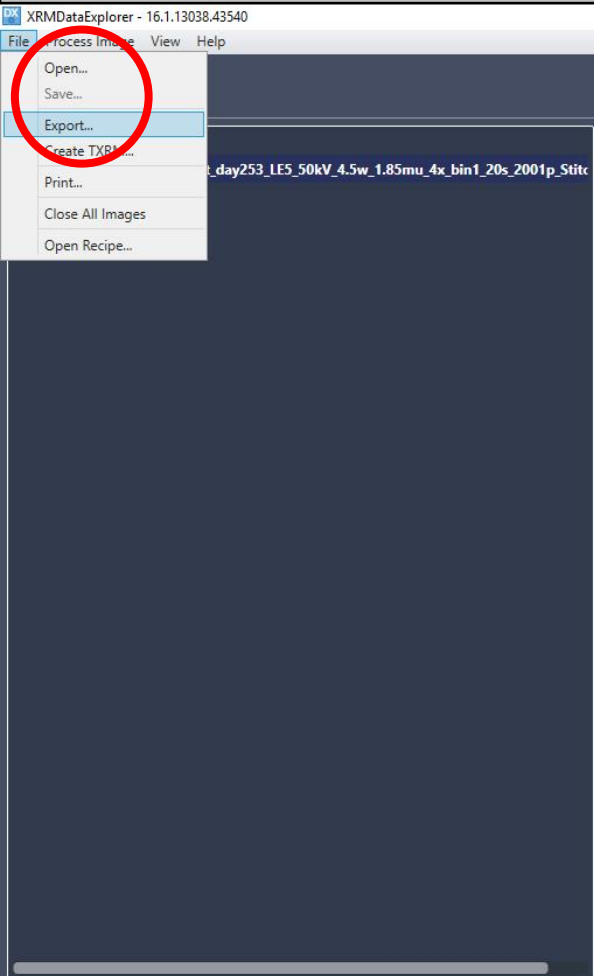


Step 2 Open txm file

- Click File / Open,
- Select *.txm;
- Locate target file
- Click Open



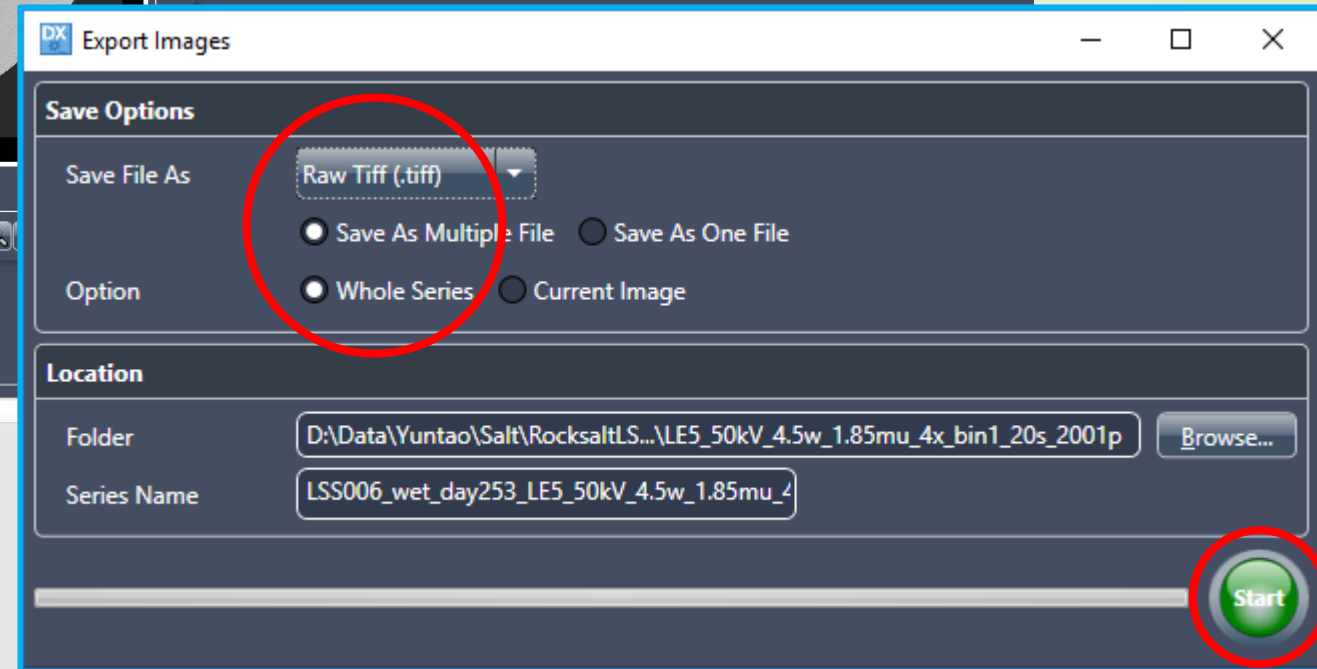
With XRMDDataExplorer



Time	Message
12:27:09.194	Hardware not supported. Xray source assembly index is not available.
12:27:09.197	Hardware not supported. Source type is not available.
12:27:09.880	NULL Microscope in XrmApp::HasASH()
12:27:09.897	NULL Microscope in IsCollisionDetectionInitialized()
12:27:09.900	NULL Microscope in IsAutoCrosshairAlignment()
12:27:09.967	Repetitive Sample Workflow is Not Currently Enabled
12:27:09.985	Repetitive Sample Workflow is Not Currently Licensed
12:27:09.985	RSP Configuration Service Initialization complete
12:27:10.129	XrmRecipeService created and initialized...

Step 3 Open txxm file

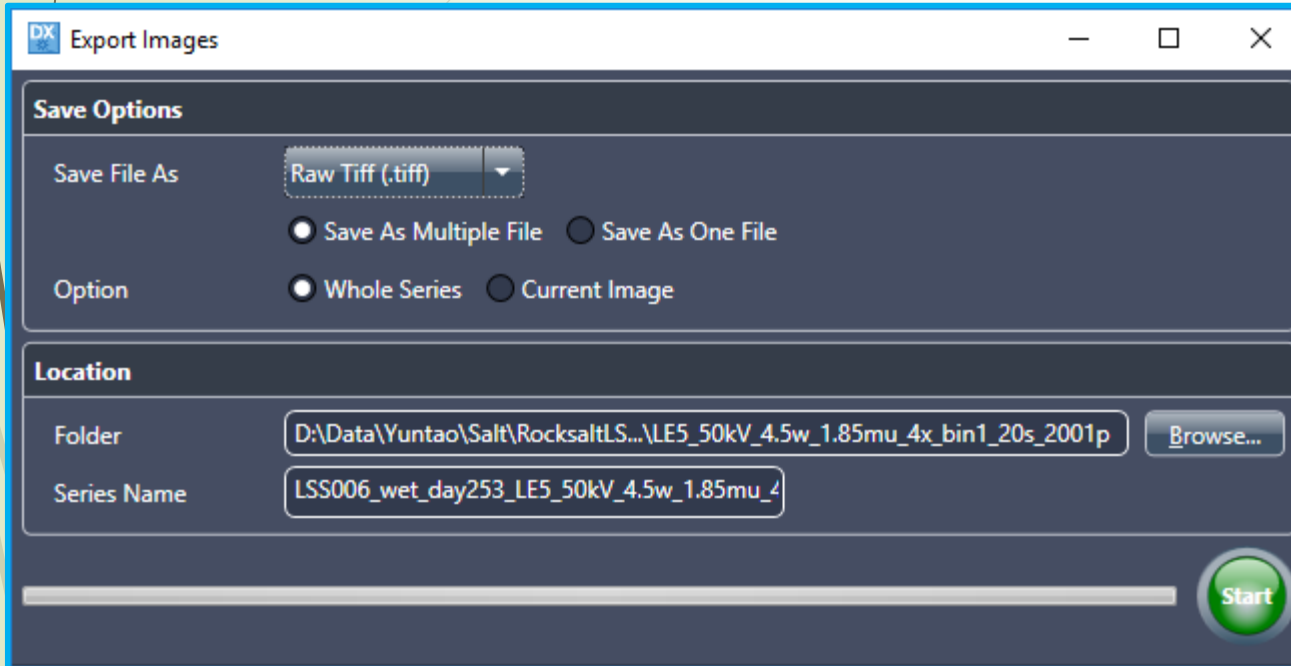
- Click File / Export;
- Select “raw tiff (.tiff)”;
- Set other parameters
- Click **Start**



Step 3

More information on the options

- Export format



Export format

- 8 bit tiff (.tif)
- Bitmap (.bmp)
- JPEG (.jpg)
- **16 bit raw tiff (.tiff)**
- binary (.bin)
- single image (.xrm)
- DICOM
- Hierarchical Data Format (*.hdf)
- Carl Zeiss Image data file (*.dzi)

Notes:

- 1) 16-bit raw tiffs keep all the information but have bigger size;
- 2) 16-bit raw tiffs can be viewed with specialized softwares, such as MATLAB and ImageJ.

Step 3

More information on the options

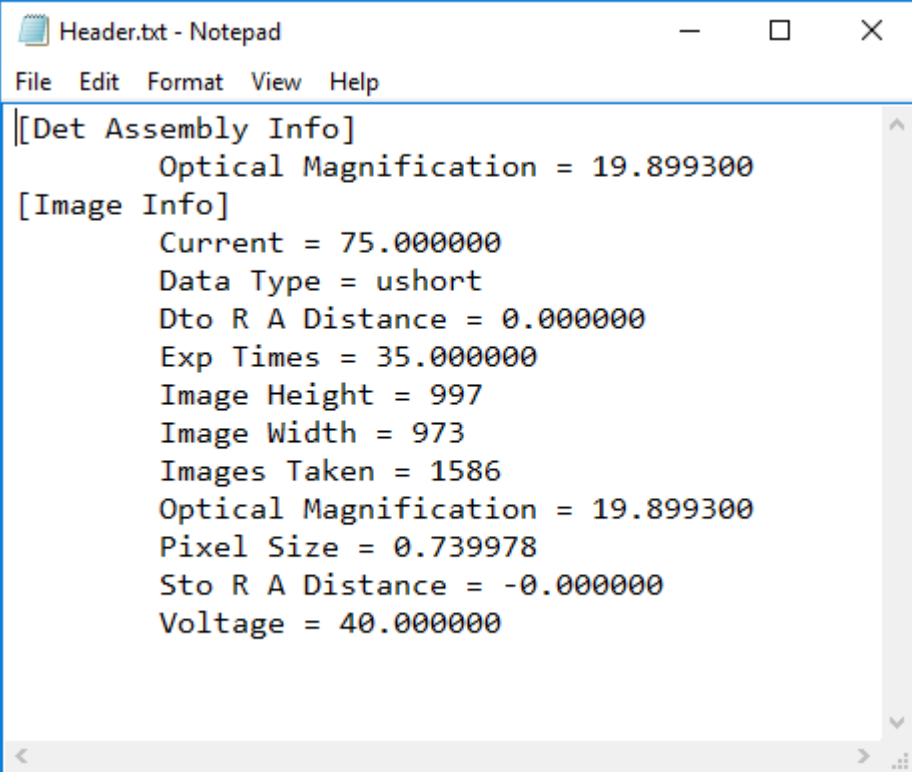
- File header

Notes on file header

1, Binary images are accompanied by header files (*Header.txt) – simple text files that indicate the parameters required to read these images.

2, Header.txt will be saved in the same folder as the exported images.

3, An example of a binary header files is provided as figure.



```
Header.txt - Notepad
File Edit Format View Help
[[Det Assembly Info]
    Optical Magnification = 19.899300
[Image Info]
    Current = 75.000000
    Data Type = ushort
    Dto R A Distance = 0.000000
    Exp Times = 35.000000
    Image Height = 997
    Image Width = 973
    Images Taken = 1586
    Optical Magnification = 19.899300
    Pixel Size = 0.739978
    Sto R A Distance = -0.000000
    Voltage = 40.000000
```