Image processing with Fanosoft

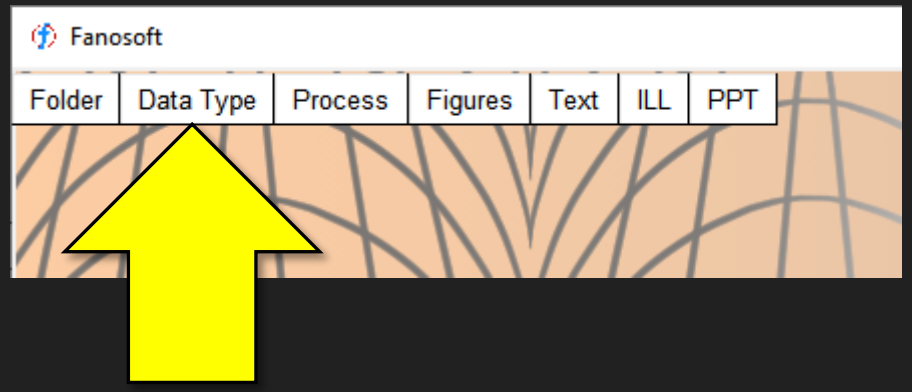
Content

Importing Images

Data Type Module

Importing Images

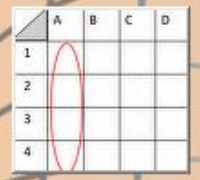
- Click on “Data Type” in the upper left corner of the main window

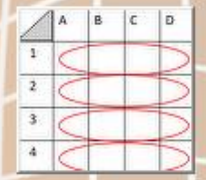


Fanosoft

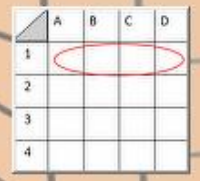
Folder | Data Type | Process | Figures | Text | ILL | PPT

DATA TYPE



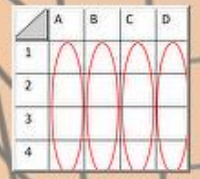


Import image stitch (row/columns)



Import individual images

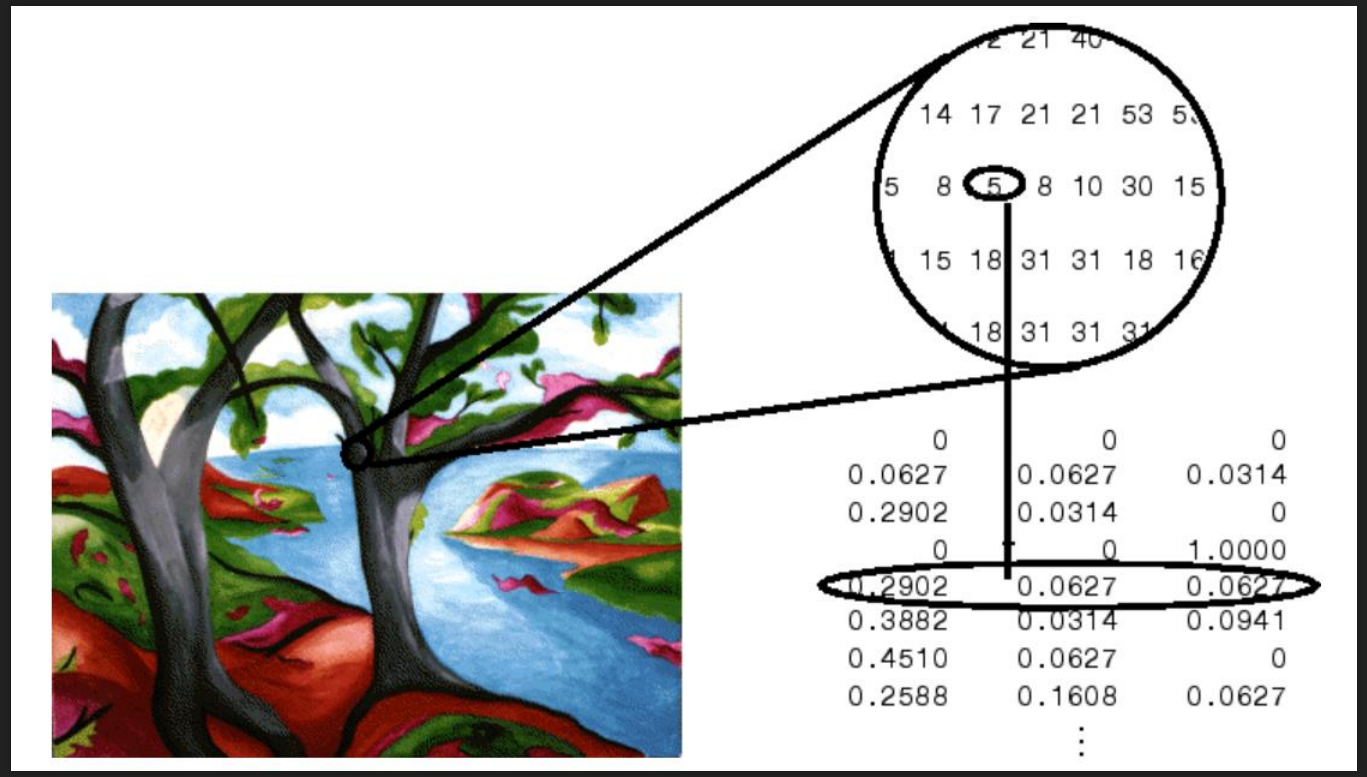
Import image stack



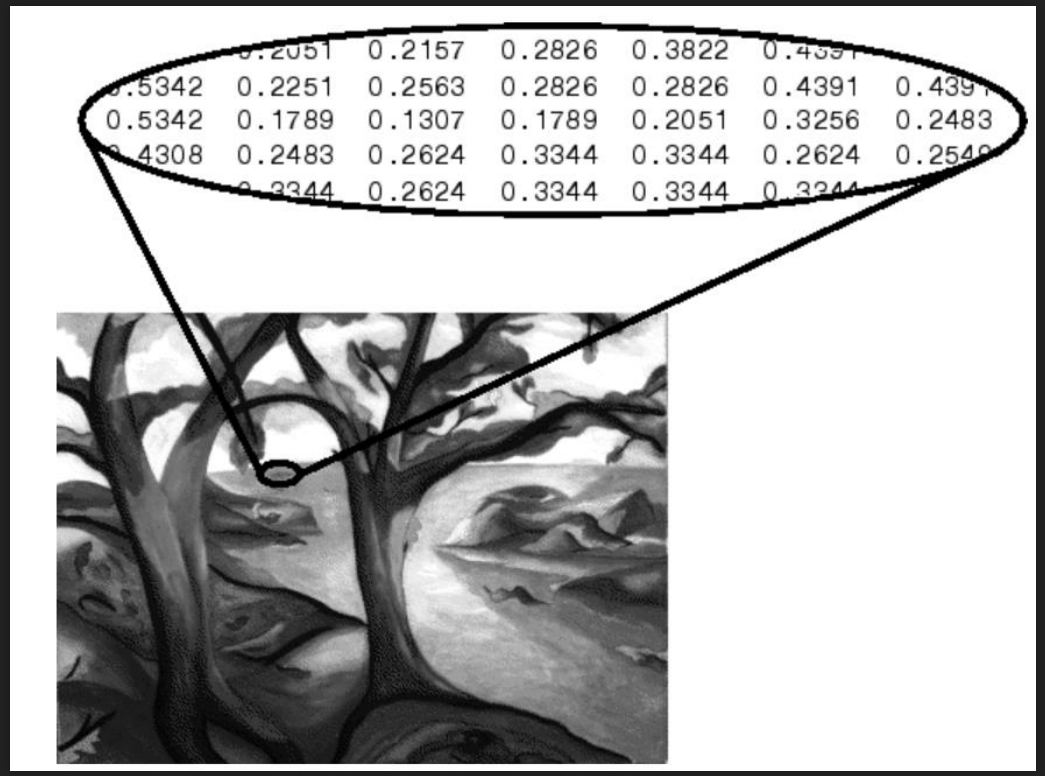
Supported Image Formats

- Supported Image formats(.bmp .gif .jpg .png .tif .mat)
- Supported Image types:
  - Grayscale (Intensity images): NxM array of class double, uint8 or uint16
  - Indexed images
  - RGB (Truecolor images): NxMx3 array of class double, uint8 or uint16

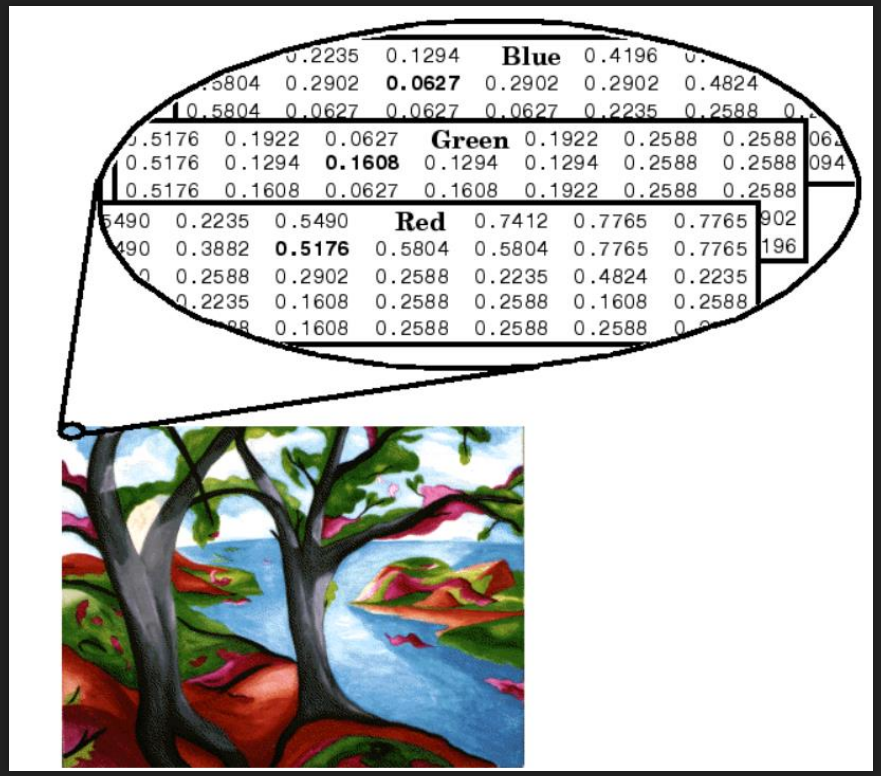
Indexed images



Greyscale (Intensity) Images



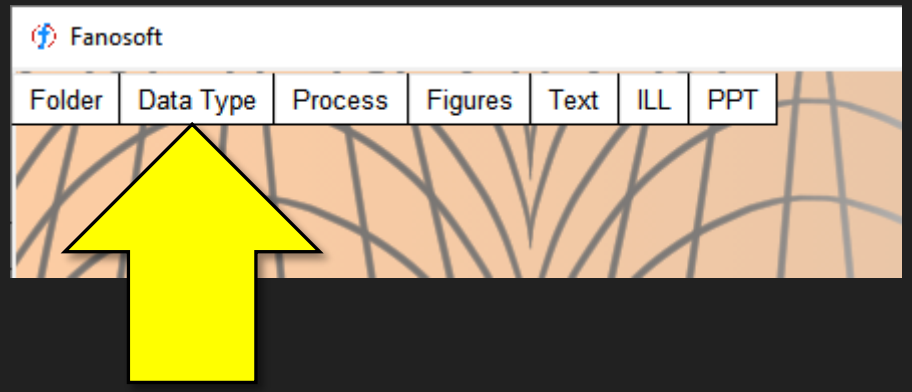
RGB Images

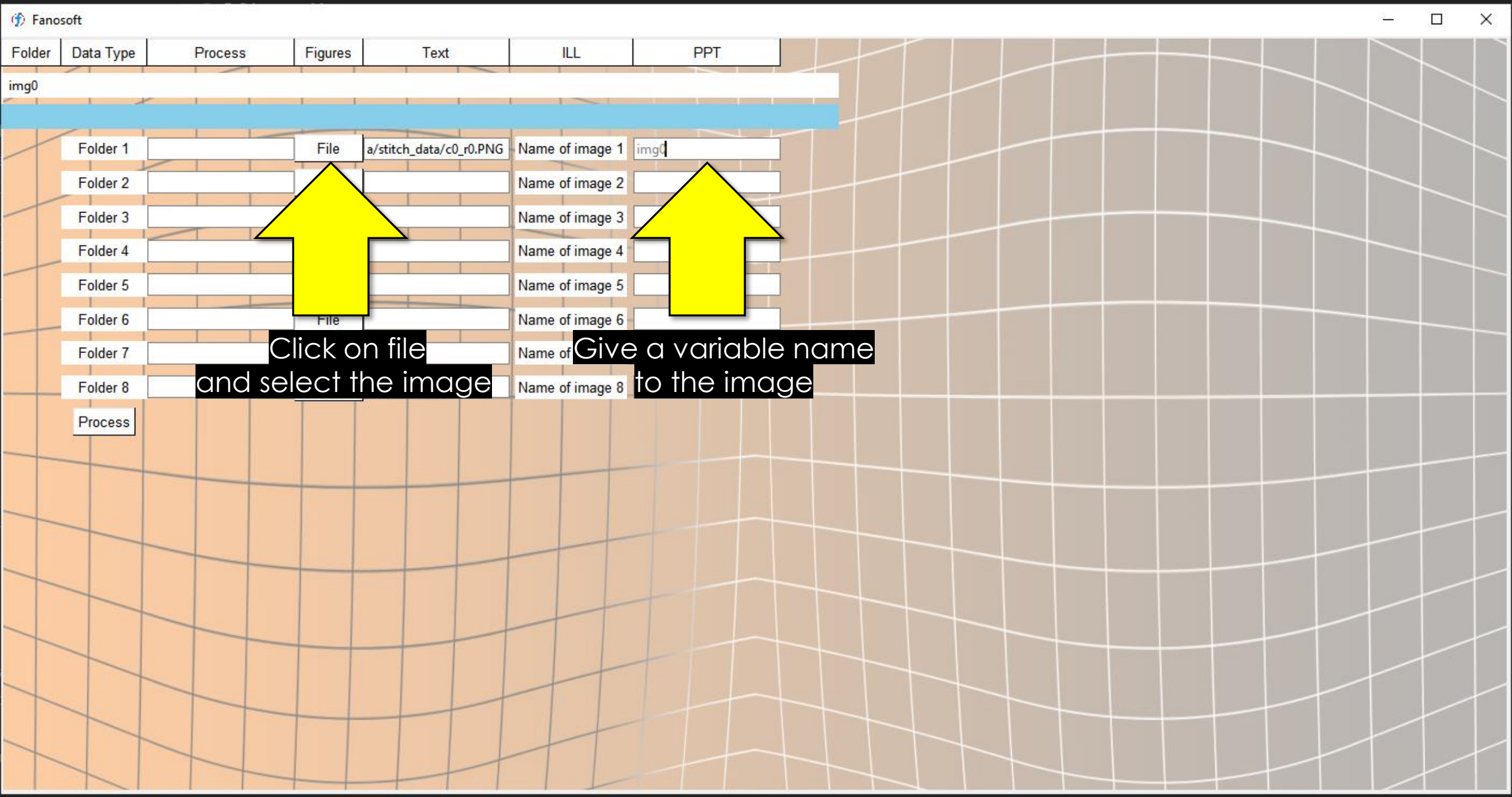

Blue
0.1294 0.4196
0.2902 0.0627 0.2902 0.4824
0.0627 0.0627 0.2235 0.2588
Green
0.5176 0.1922 0.0627 0.1922 0.2588 0.2588
0.5176 0.1294 0.1608 0.1294 0.1294 0.2588 0.2588
0.5176 0.1608 0.0627 0.1608 0.1922 0.2588 0.2588
Red
0.2235 0.5490 0.7412 0.7765 0.7765
0.3882 0.5176 0.5804 0.5804 0.7765 0.7765
0.2588 0.2902 0.2588 0.2235 0.4824 0.2235
0.2235 0.1608 0.2588 0.2588 0.1608 0.2588
0.1608 0.2588 0.2588 0.2588

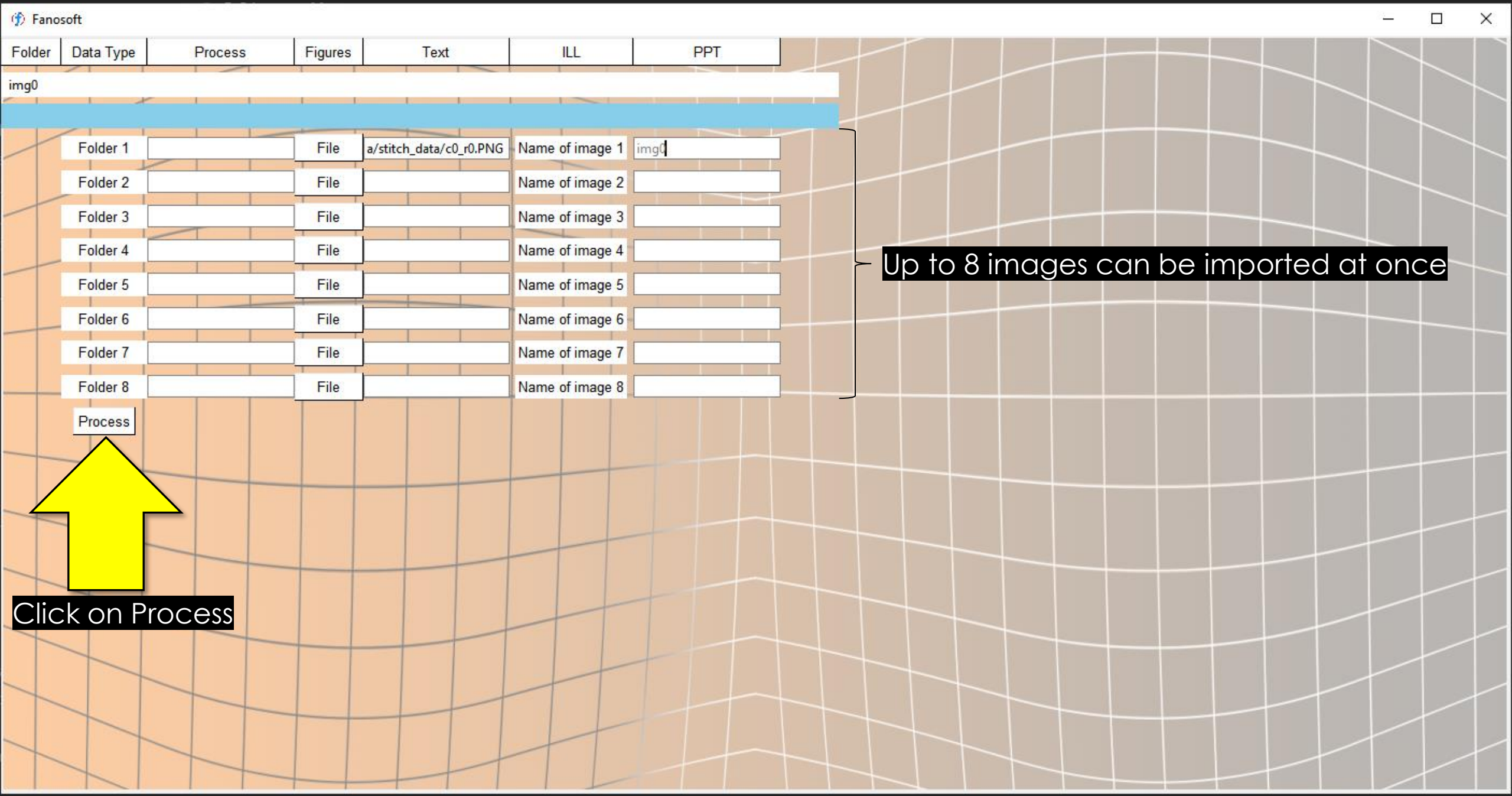
Importing a single image

Example importing a single image

- Click on “Data Type” in the upper left corner of the main window




Fanosoft
Folder
Data Type
Process
Figures
Text
ILL
PPT
img0
Folder 1
File
a/stitch_data/c0_r0.PNG
Name of image 1
img0
Folder 2
Name of image 2
Folder 3
Name of image 3
Folder 4
Name of image 4
Folder 5
Name of image 5
Folder 6
File
Name of image 6
Folder 7
Name of
Folder 8
Name of image 8
Process
Click on file and select the image
Give a variable name to the image


Fanosoft
Folder
Data Type
Process
Figures
Text
ILL
PPT
img0
Folder 1
File
a/stitch_data/c0_r0.PNG
Name of image 1
img0
Folder 2
File
Name of image 2
Folder 3
File
Name of image 3
Folder 4
File
Name of image 4
Folder 5
File
Name of image 5
Folder 6
File
Name of image 6
Folder 7
File
Name of image 7
Folder 8
File
Name of image 8
Process
Up to 8 images can be imported at once
Click on Process

Example: Importing a single image

- If the process is successful, a checkmark is displayed
- The imported variables are visible in the white banner and can be referenced:

Importing an image stack

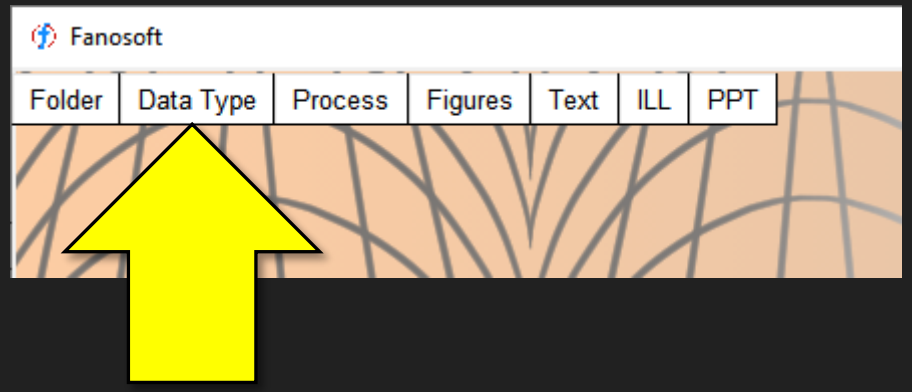
Image stacks

- Load an image stack under a single variable name
- An image stack consists of multiple files with the same filename indexed by a number
  - e.g. “image0.png” “image2.png” “image3.png” … “image24.png”
  - e.g. “c0_r1.png” “c0_r1.png” … “c0_r6.png”
- The user specifies the filename with a “%d” token, a start and a stop
  - e.g. “image%d.png” with %d from 0 to 24
  - e.g. “c0_r%d.png” with %d from 1 to 6
- The image stack is imported in a subfolder in the user directory
  - Import format can be selected: tif or png

Example: Importing an image stack

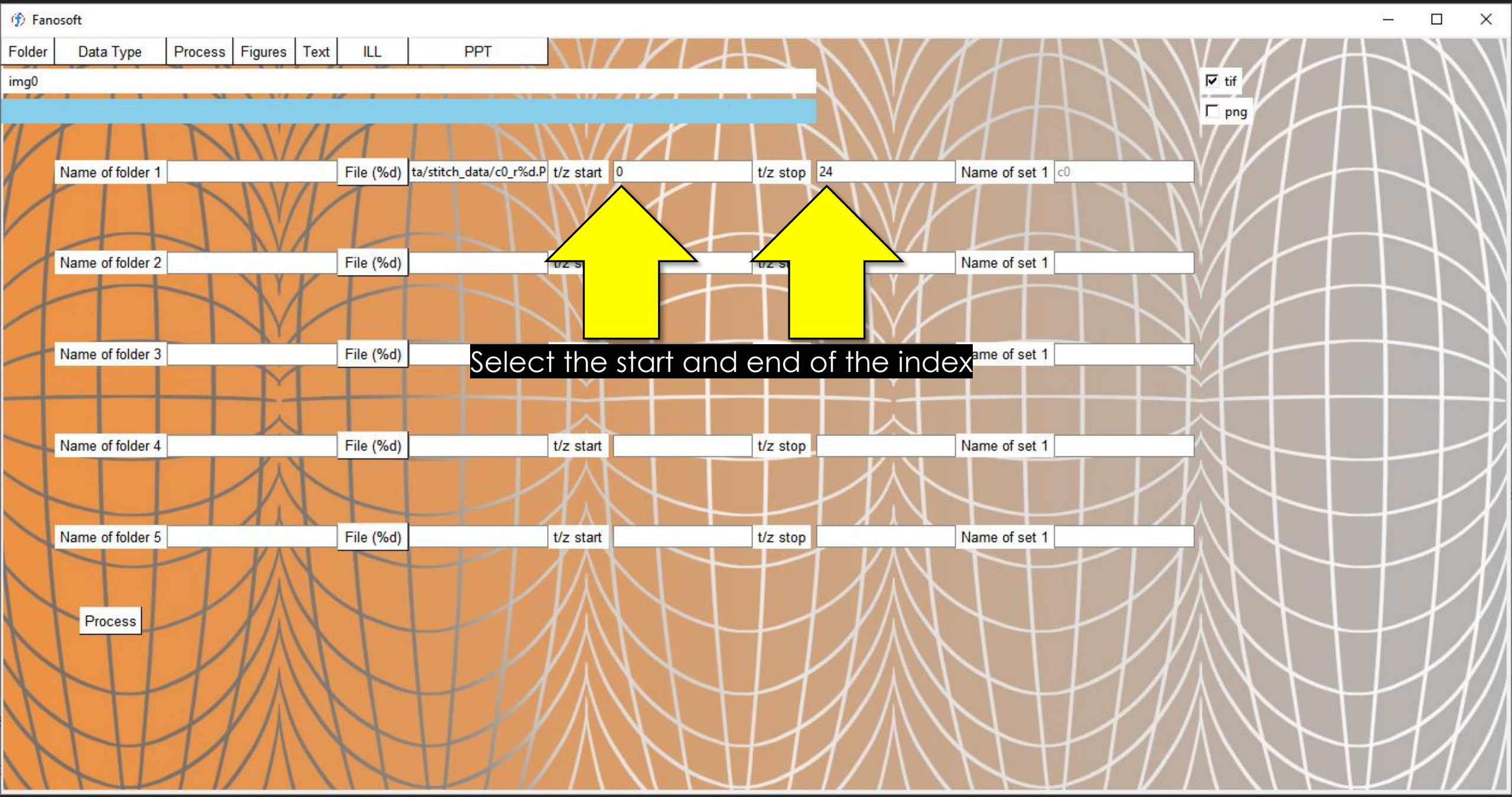
Example importing an image stack

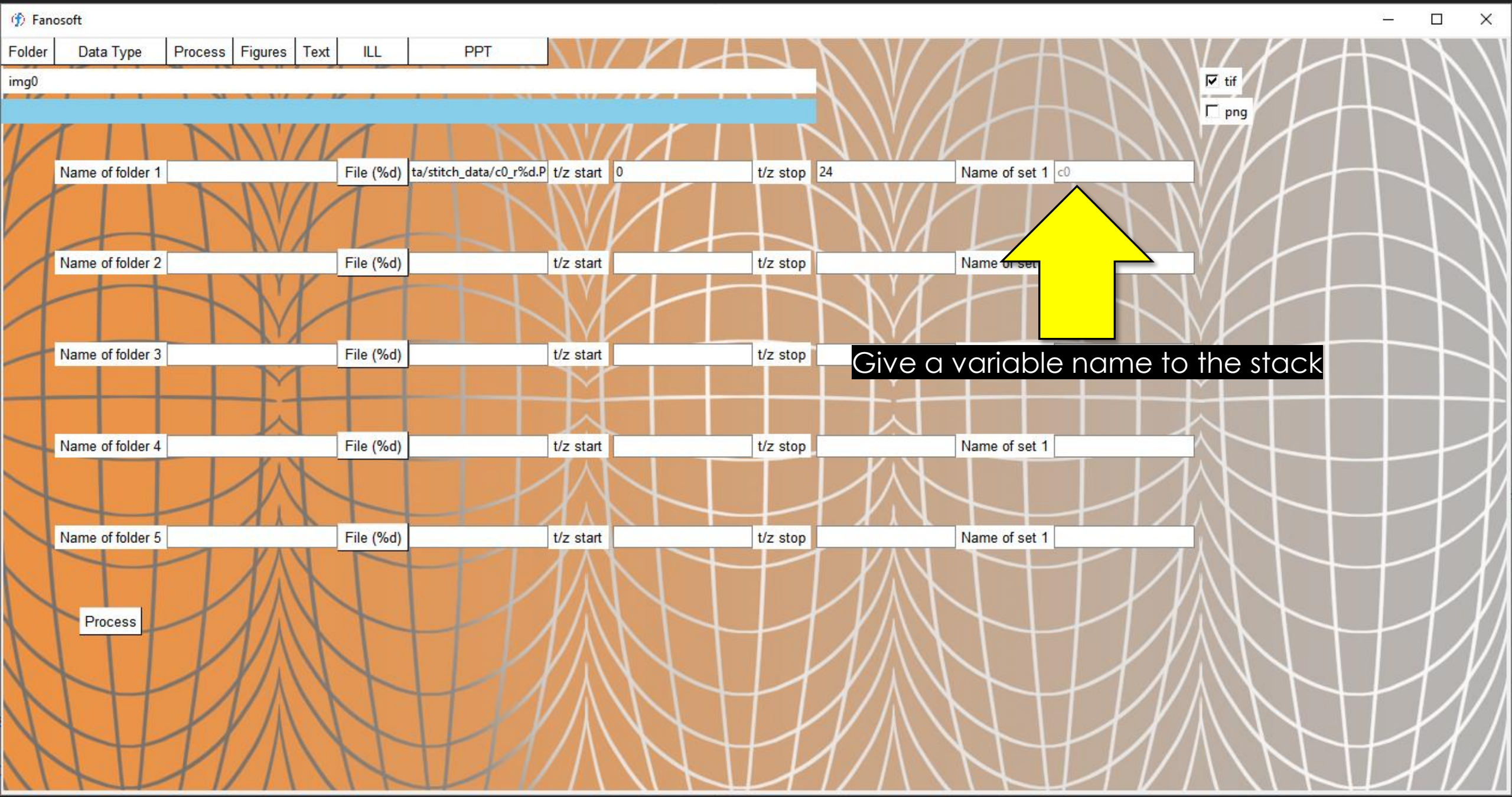
- Click on “Data Type” in the upper left corner of the main window

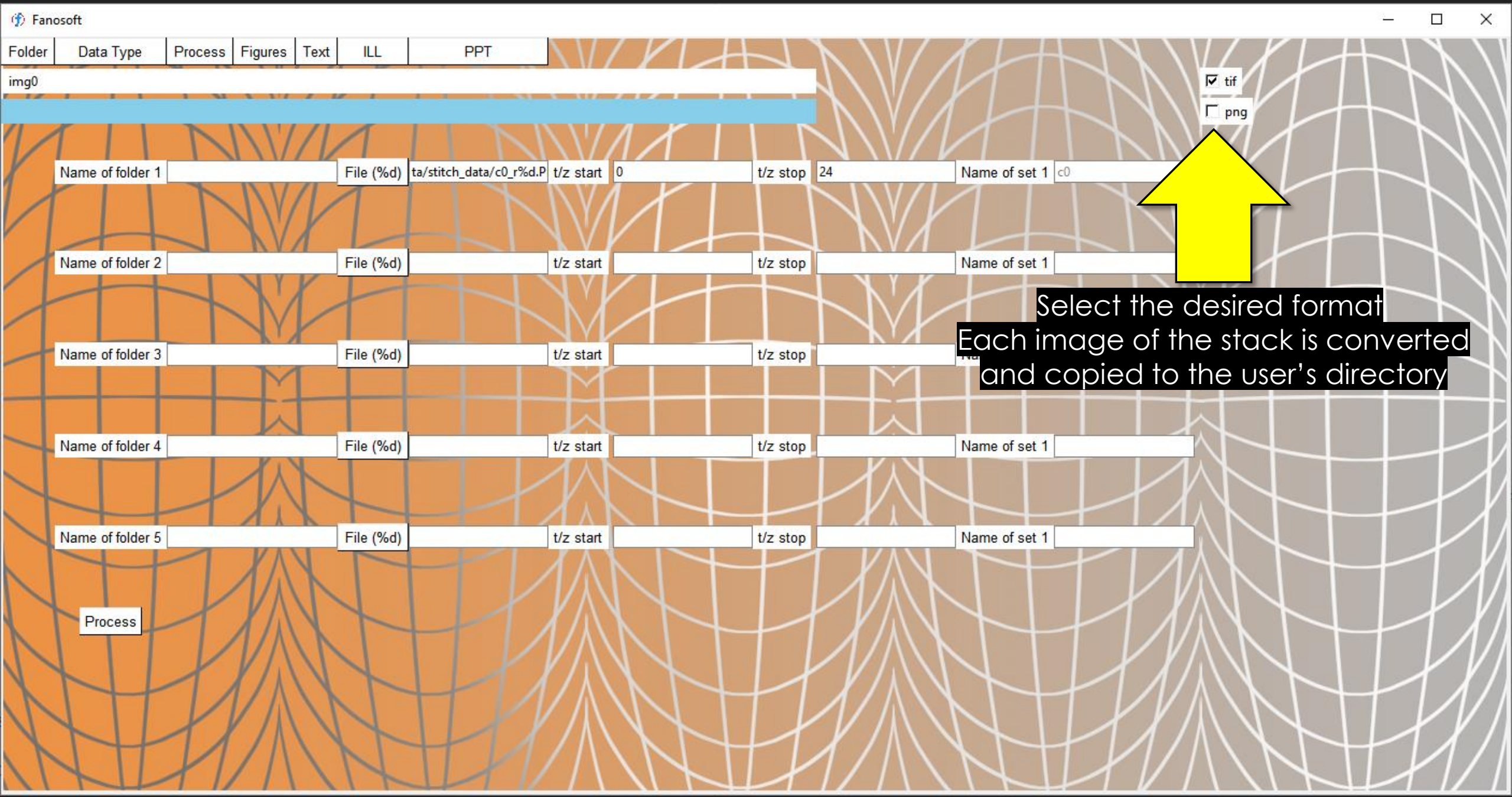


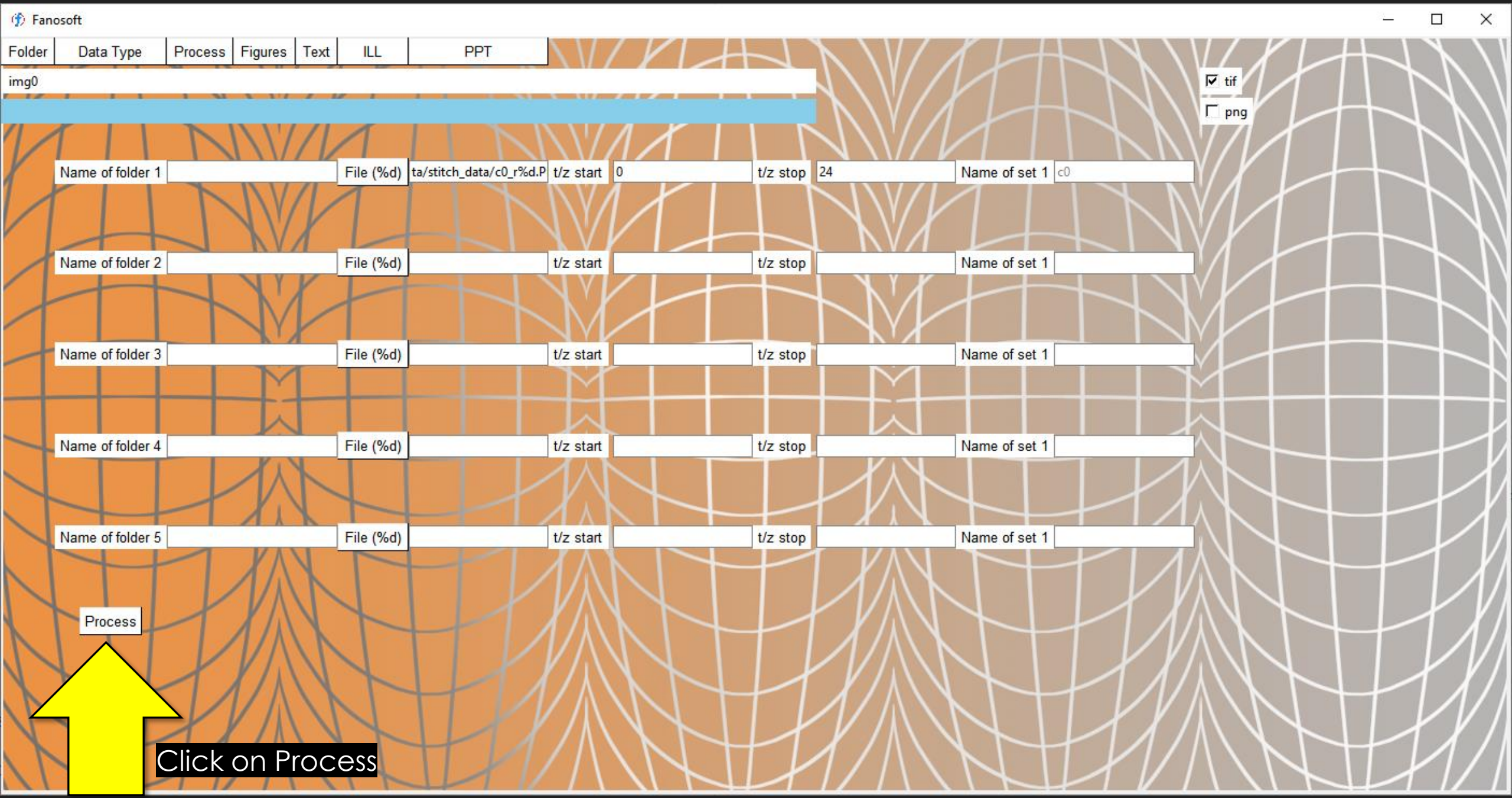

Fanosoft
Folder
Data Type
Process
Figures
Text
ILL
PPT
img0
tif
png
Name of folder 1
File (%d)
/video_data/c0_r1.PNG
t/z start
1
t/z stop
6
Name of set 1
c0
Name of folder 2
t/z start
t/z stop
Name of set 1
Name of folder 3
t/z start
t/z stop
Name of set 1
Click on file
and select the first image of the stack
Name of folder 4
File (%d)
t/z start
t/z stop
Name of set 1
Name of folder 5
File (%d)
t/z start
t/z stop
Name of set 1
Process


Fanosoft
Folder
Data Type
Process
Figures
Text
ILL
PPT
img0
tif
png
Name of folder 1
File (%d)
/video_data/c0_r1.PNG
t/z start
1
t/z stop
6
Name of set 1
c0
Name of folder 2
File (%d)
t/z stop
Name of set 1
Name of folder 3
t/z stop
Name of set 1
Replace the index by %d
e.g. c0_r1.PNG → c0_r%d.PNG
Name of folder 4
File (%d)
t/z start
t/z stop
Name of set 1
Name of folder 5
File (%d)
t/z start
t/z stop
Name of set 1
Process


Fanosoft
Folder
Data Type
Process
Figures
Text
ILL
PPT
img0
tif
png
Name of folder 1
File (%d)
ta/stitch_data/c0_r%d.P
t/z start
0
t/z stop
24
Name of set 1
c0
Name of folder 2
File (%d)
Name of set 1
Name of folder 3
File (%d)
Select the start and end of the index
Name of folder 4
File (%d)
t/z start
t/z stop
Name of set 1
Name of folder 5
File (%d)
t/z start
t/z stop
Name of set 1
Process

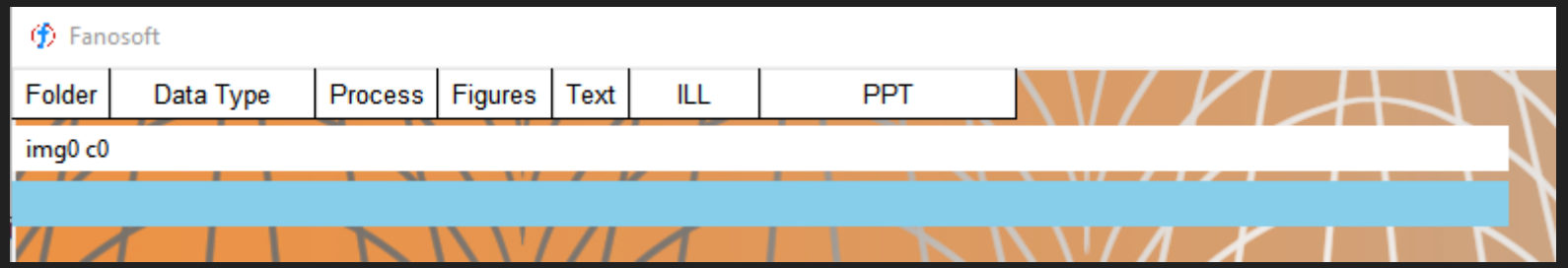

Fanosoft
Folder
Data Type
Process
Figures
Text
ILL
PPT
img0
tif
png
Name of folder 1
File (%d)
ta/stitch_data/c0_r%d.P
t/z start
0
t/z stop
24
Name of set 1
c0
Name of folder 2
File (%d)
t/z start
t/z stop
Name of folder 3
File (%d)
t/z start
t/z stop
Give a variable name to the stack
Name of folder 4
File (%d)
t/z start
t/z stop
Name of set 1
Name of folder 5
File (%d)
t/z start
t/z stop
Name of set 1
Process


Fanosoft
Folder
Data Type
Process
Figures
Text
ILL
PPT
img0
tif
png
Name of folder 1
File (%d)
ta/stitch_data/c0_r%d.P
t/z start
0
t/z stop
24
Name of set 1
c0
Name of folder 2
File (%d)
t/z start
t/z stop
Name of set 1
Name of folder 3
File (%d)
t/z start
t/z stop
Name of folder 4
File (%d)
t/z start
t/z stop
Name of set 1
Name of folder 5
File (%d)
t/z start
t/z stop
Name of set 1
Process
Select the desired format
Each image of the stack is converted
and copied to the user's directory


Fanosoft
Folder
Data Type
Process
Figures
Text
ILL
PPT
img0
tif
png
Name of folder 1
File (%d)
ta/stitch_data/c0_r%d.P
t/z start
0
t/z stop
24
Name of set 1
c0
Name of folder 2
File (%d)
t/z start
t/z stop
Name of set 1
Name of folder 3
File (%d)
t/z start
t/z stop
Name of set 1
Name of folder 4
File (%d)
t/z start
t/z stop
Name of set 1
Name of folder 5
File (%d)
t/z start
t/z stop
Name of set 1
Process
Click on Process

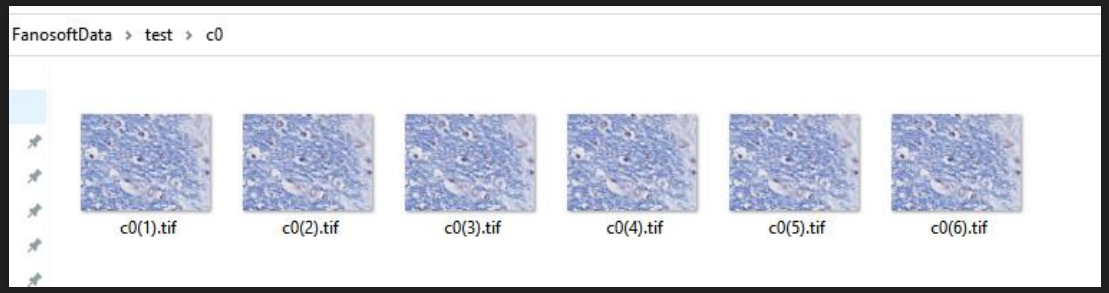
Example: Importing an image stack

- If the process is successful, a checkmark is displayed
- The imported variables are visible in the white banner and can be referenced:



Example: Importing an image stack

- Fanosoft copied the images in the user's directory (e.g. FanosoftData\Test) in a sub-folder with the name of the variable (e.g. c0)



Importing an image stitch

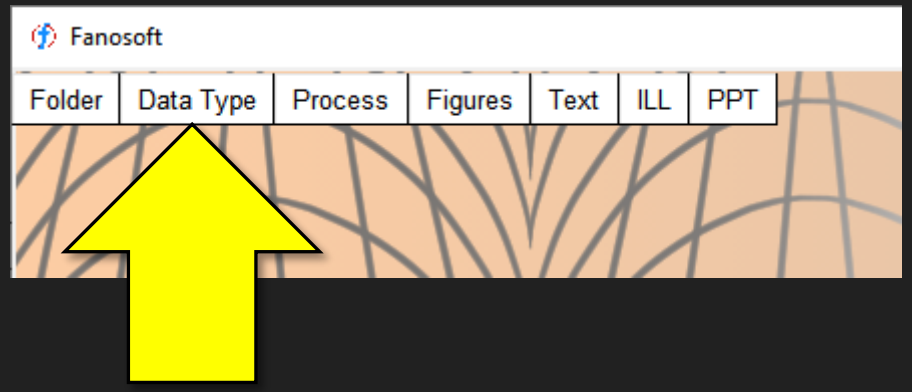
Image stitch

- Load an image stitch under a single variable name
- An image stitch consists of multiple files indexed by rows and columns e.g.
  - First column: “c0_r0.png” “c0_r1.png” … “c0_r24.png”
  - 2nd column: “c1_r0.png” “c1_r1.png” … “c1_r24.png”
  - …
  - Last column: “c4_r0.png” “c4_r1.png” … “c4_r24.png”
- Specifies the filename with a “%r” and a “%c” token for the row and column respectively
  - e.g. “c%c_r%r.png” with %c from 0 to 4 and %r from 0 to 24
- Fanosoft import images 2D arrays row-by-row.

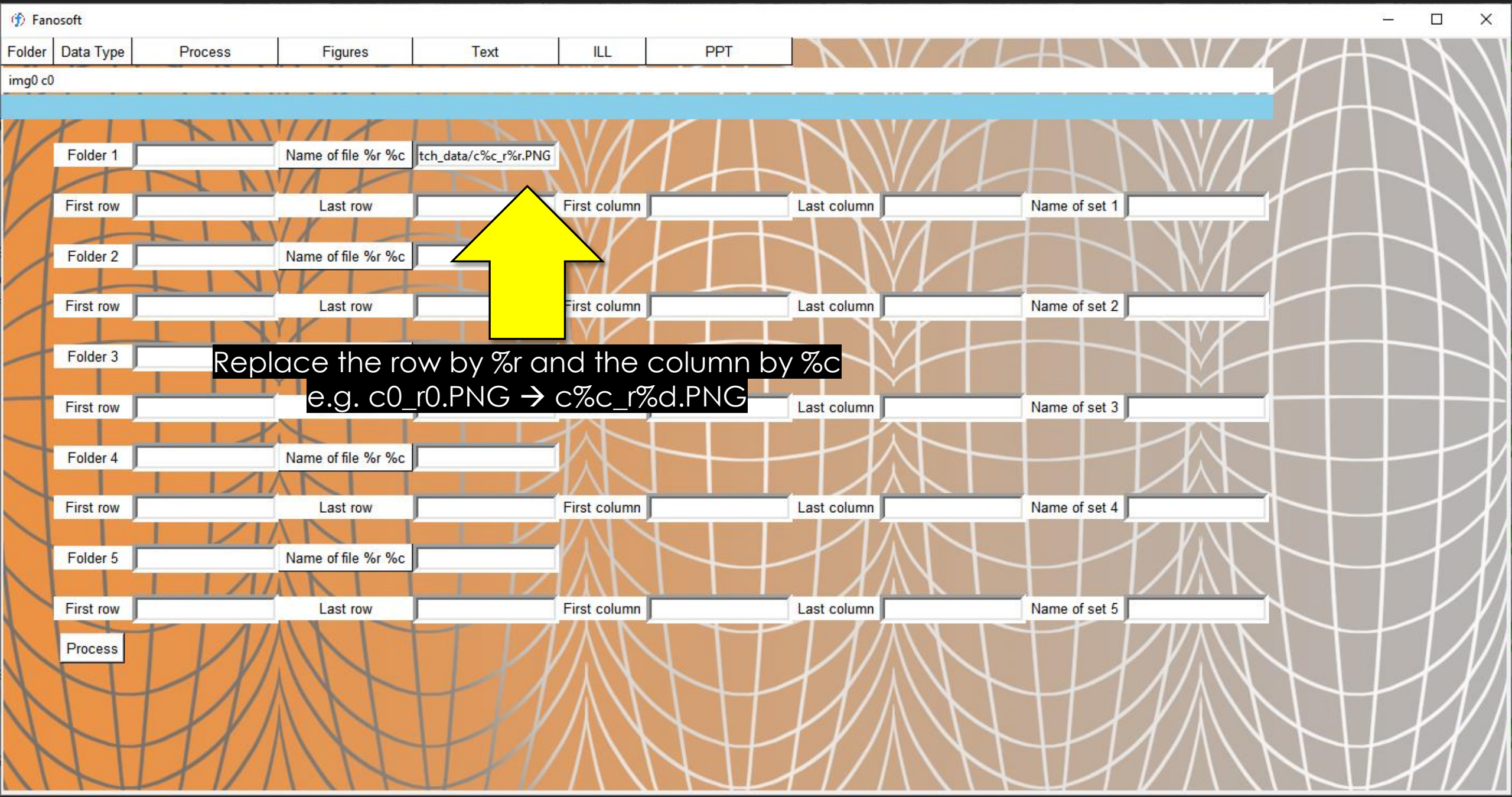
Example: Importing an image stich

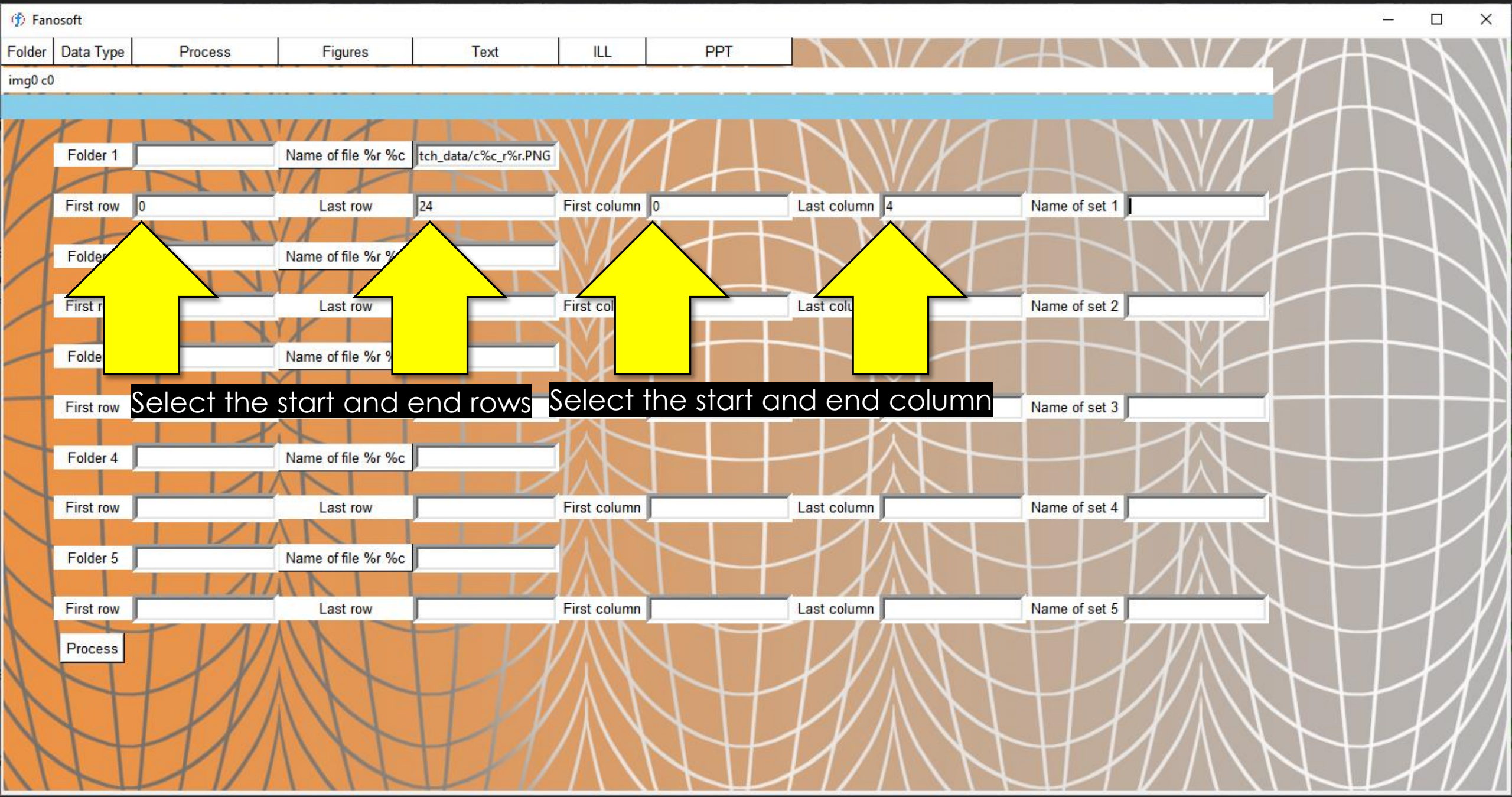
Example importing an image stitch

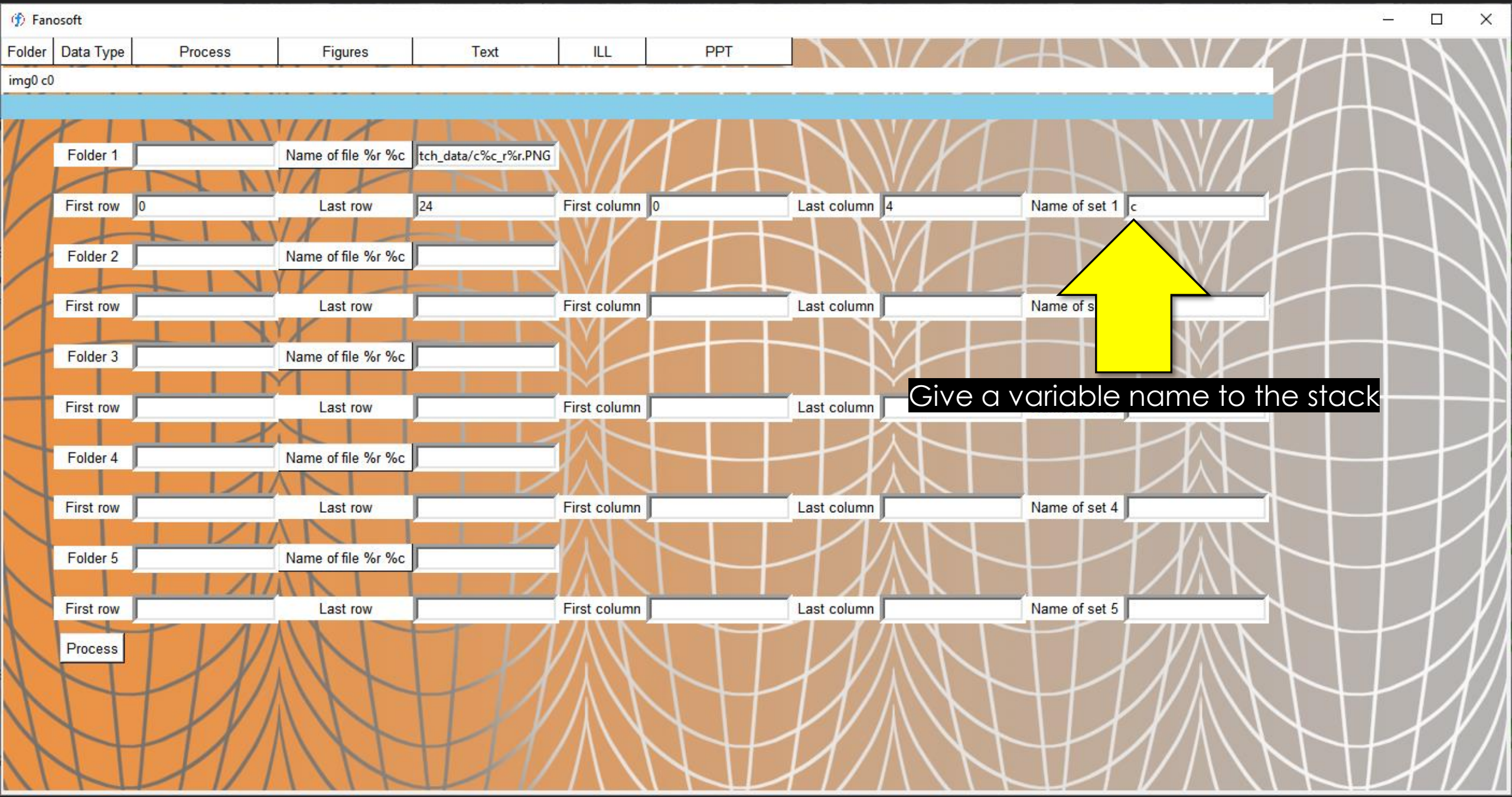
- Click on “Data Type” in the upper left corner of the main window

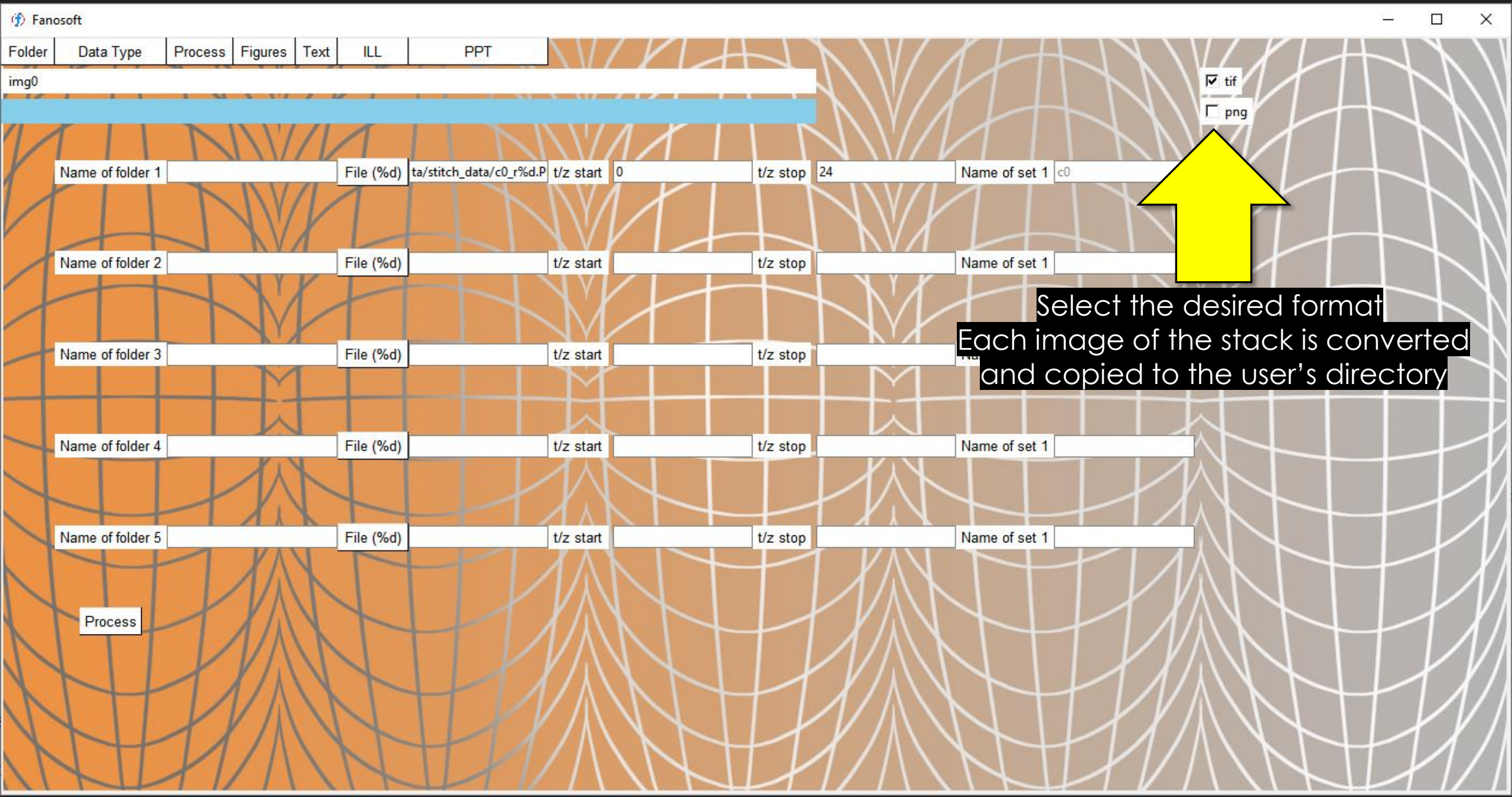


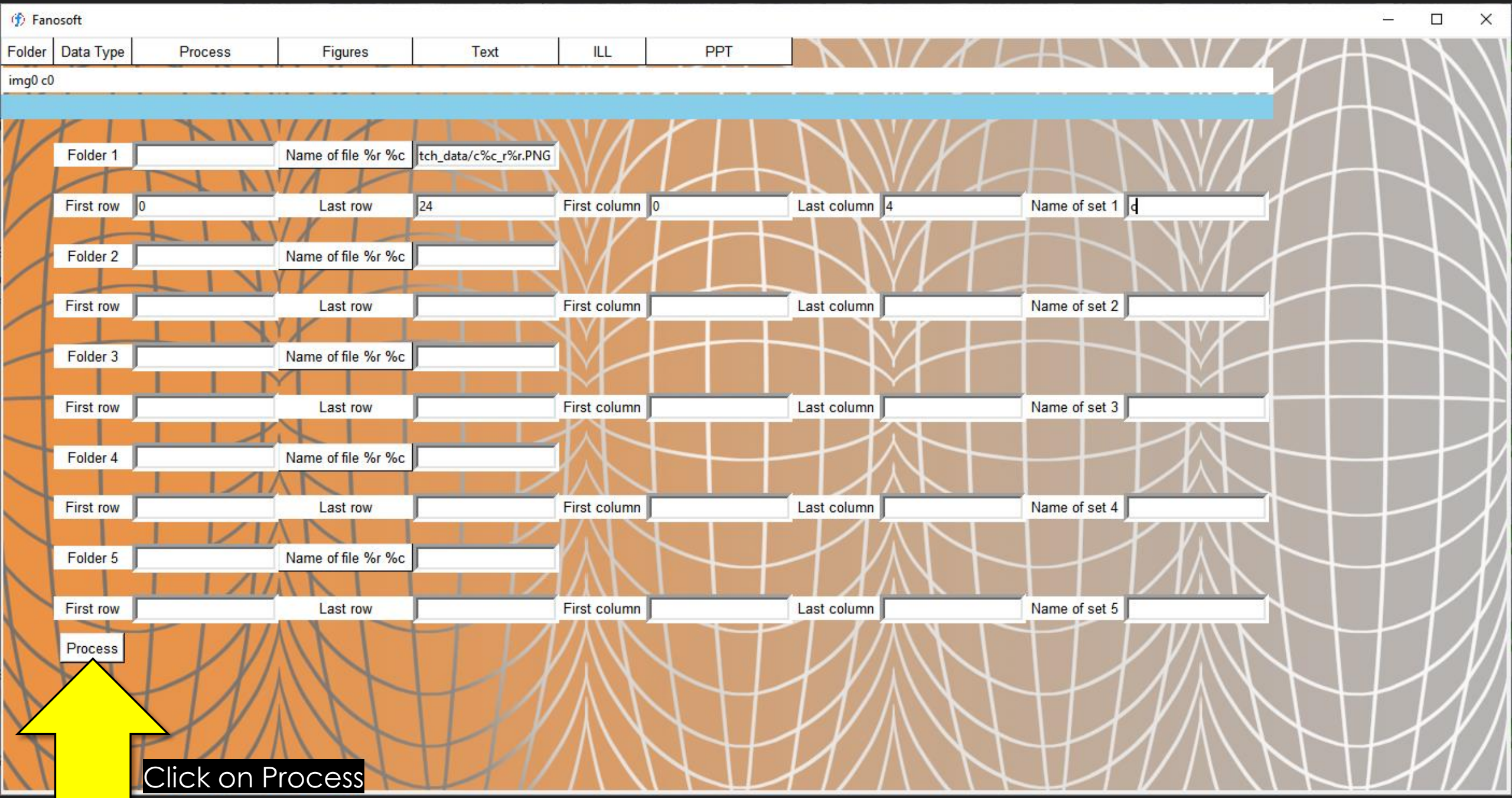

Fanosoft
Folder
Data Type
Process
Figures
Text
ILL
PPT
img0 c0
Folder 1
Name of file %r %c
/stitch_data/c0_r0.PNG
First row
First column
Last column
Name of set 1
Folder 2
First row
First column
Last column
Name of set 2
Folder 3
Click on "Name of file"
and select the first image of the stitch
First row
Last row
First column
Last column
Name of set 3
Folder 4
Name of file %r %c
First row
Last row
First column
Last column
Name of set 4
Folder 5
Name of file %r %c
First row
Last row
First column
Last column
Name of set 5
Process


Fanosoft
Folder
Data Type
Process
Figures
Text
ILL
PPT
img0 c0
Folder 1
Name of file %r %c
tch_data/c%c_r%r.PNG
First row
Last row
First column
Last column
Name of set 1
Folder 2
Name of file %r %c
First row
Last row
First column
Last column
Name of set 2
Folder 3
Replace the row by %r and the column by %c
e.g. c0_r0.PNG → c%c_r%d.PNG
First row
Last column
Name of set 3
Folder 4
Name of file %r %c
First row
Last row
First column
Last column
Name of set 4
Folder 5
Name of file %r %c
First row
Last row
First column
Last column
Name of set 5
Process


Fanosoft
Folder
Data Type
Process
Figures
Text
ILL
PPT
img0 c0
Folder 1
Name of file %r %c
tch_data/c%c_r%r.PNG
First row
0
Last row
24
First column
0
Last column
4
Name of set 1
Name of set 2
Name of set 3
Folder 4
Name of set 4
Folder 5
Name of set 5
Process
Select the start and end rows
Select the start and end column

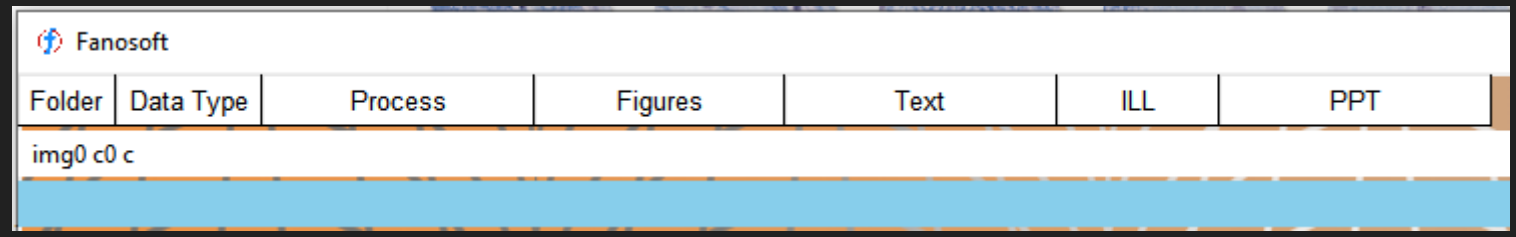

Fanosoft
Folder
Data Type
Process
Figures
Text
ILL
PPT
img0 c0
Folder 1
Name of file %r %c
tch_data/c%c_r%r.PNG
First row
0
Last row
24
First column
0
Last column
4
Name of set 1
c
Folder 2
Name of file %r %c
First row
Last row
First column
Last column
Name of s
Folder 3
Name of file %r %c
First row
Last row
First column
Last column
Folder 4
Name of file %r %c
First row
Last row
First column
Last column
Name of set 4
Folder 5
Name of file %r %c
First row
Last row
First column
Last column
Name of set 5
Process
Give a variable name to the stack


Fanosoft
Folder
Data Type
Process
Figures
Text
ILL
PPT
img0
tif
png
Name of folder 1
File (%d)
ta/stitch_data/c0_r%d.P
t/z start
0
t/z stop
24
Name of set 1
c0
Name of folder 2
File (%d)
t/z start
t/z stop
Name of set 1
Name of folder 3
File (%d)
t/z start
t/z stop
Name of folder 4
File (%d)
t/z start
t/z stop
Name of set 1
Name of folder 5
File (%d)
t/z start
t/z stop
Name of set 1
Process
Select the desired format
Each image of the stack is converted
and copied to the user's directory


Fanosoft
Folder
Data Type
Process
Figures
Text
ILL
PPT
img0 c0
Folder 1
Name of file %r %c
tch_data/c%c_r%r.PNG
First row
0
Last row
24
First column
0
Last column
4
Name of set 1
Folder 2
Name of file %r %c
First row
Last row
First column
Last column
Name of set 2
Folder 3
Name of file %r %c
First row
Last row
First column
Last column
Name of set 3
Folder 4
Name of file %r %c
First row
Last row
First column
Last column
Name of set 4
Folder 5
Name of file %r %c
First row
Last row
First column
Last column
Name of set 5
Process
Click on Process

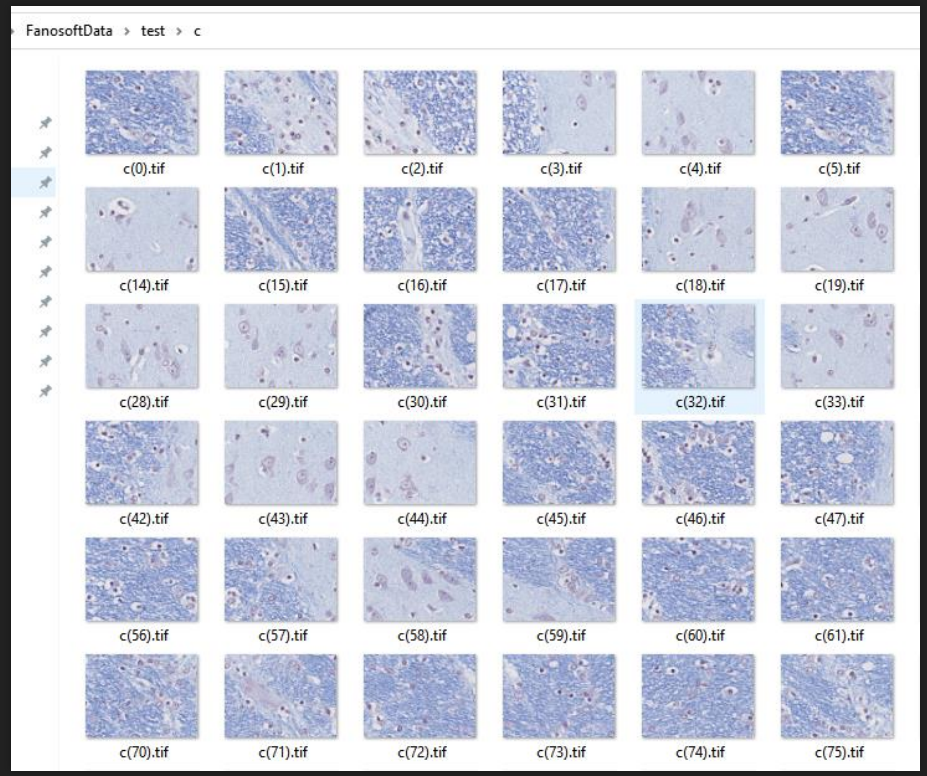
Example: Importing an image stitch

- If the process is successful, a checkmark is displayed
- The imported variables are visible in the white banner and can be referenced:



Example: Importing an image stitch

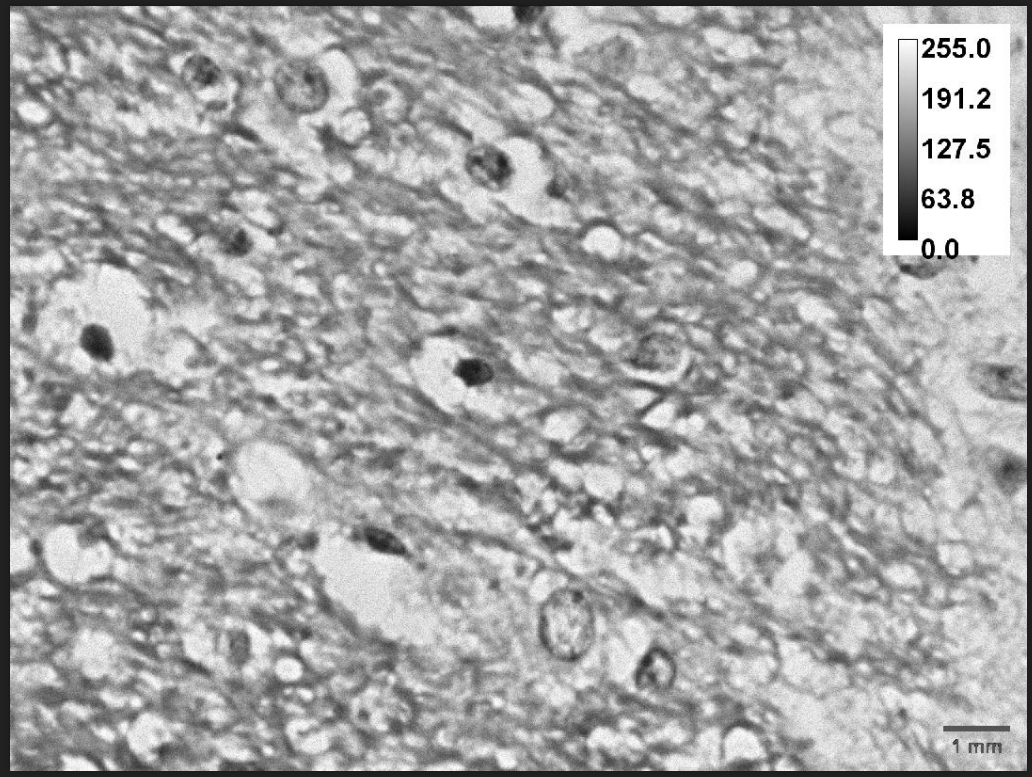
- Fanosoft copied the images in the user's directory (e.g. FanosoftData\Test) in a sub-folder with the name of the variable (e.g. c)

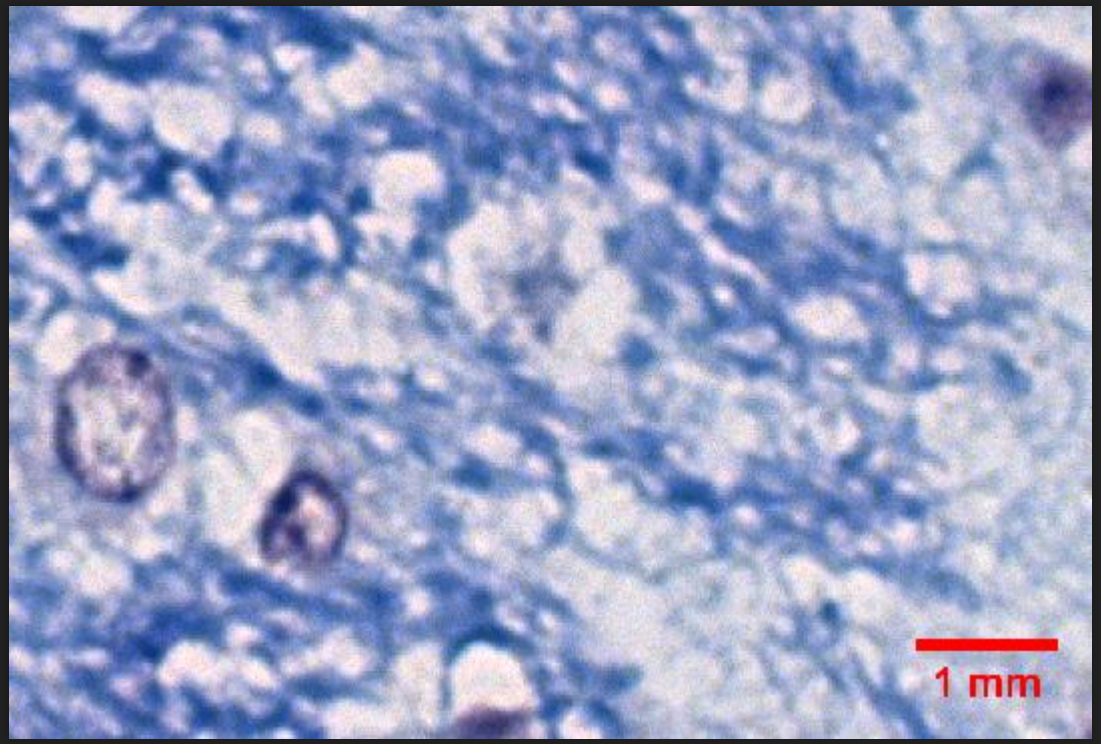


Scale & Calibration Bars

Scale & Calibration Bars Examples

Calibration bar





Scale bar

Scale & Calibration Bars

- Add scale bars or calibration bars to an image
- Work on a single image or an image stack
- The image or stack must be imported first (see “Importing images” section)
- The output image can be in color (RGB) or monochrome (32bits)

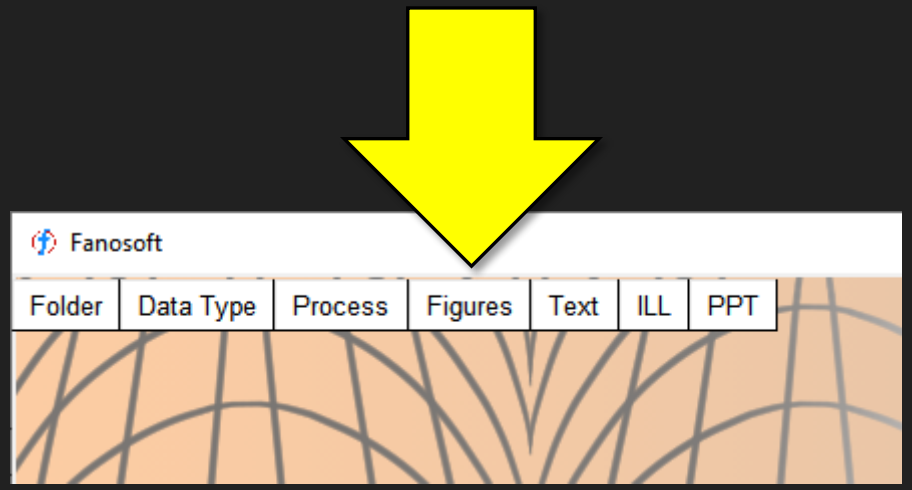
Scale & Calibration Bars

- For scale bars (e.g. 100 pixels = 1mm), the user specifies:
  - The distance in pixels (“Pixels per unit”) e.g. 100
  - The unit of length (“Unit”) e.g. mm
  - And the known distance in unit of length (“Length”) e.g. 1
  - The color: Black, White, Red or Yellow

- Calibration bars display a legend with the pixel intensity
  - works with single channel/monochrome images => 32 bit must be selected

Scale & Calibration Bars

- Click on Figures

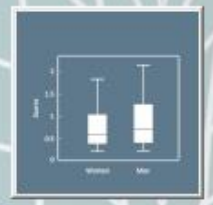
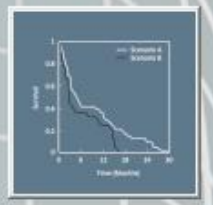


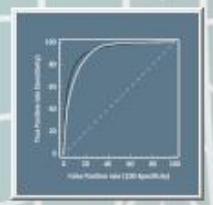
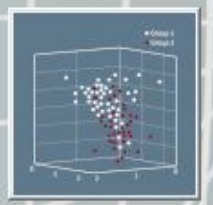
Fanosoft

Folder | Data Type | Process | Figures | Text | ILL | PPT

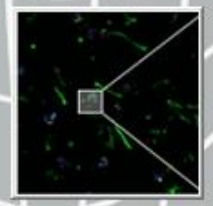
Figures

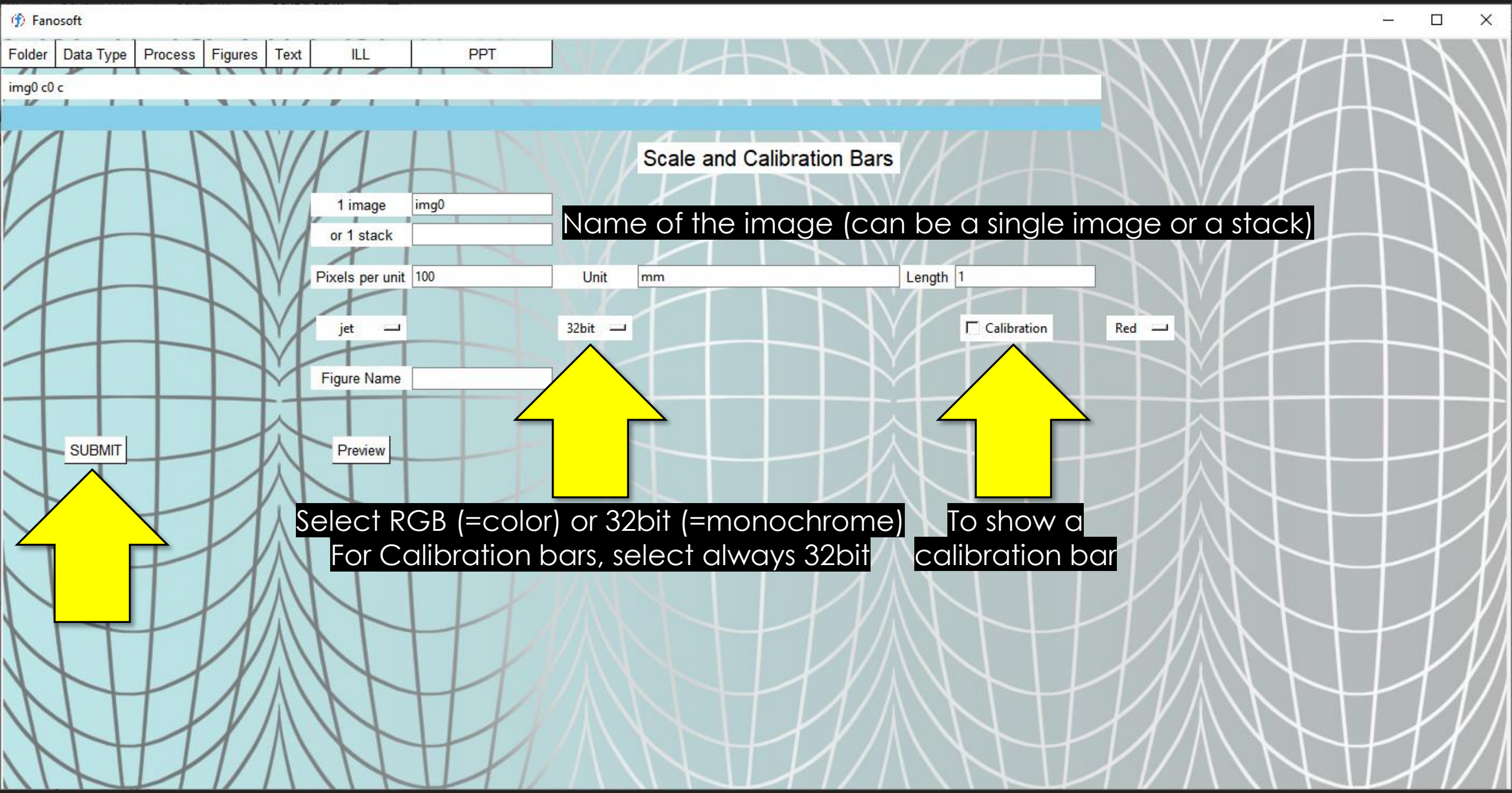





Fanosoft
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Process
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PPT
img0 c0 c
Scale and Calibration Bars
1 image
img0
or 1 stack
Name of the image (can be a single image or a stack)
Pixels per unit
100
Unit
mm
Length
1
jet
32bit
Calibration
Red
Figure Name
SUBMIT
Preview
Select RGB (=color) or 32bit (=monochrome)
For Calibration bars, select always 32bit
To show a
calibration bar

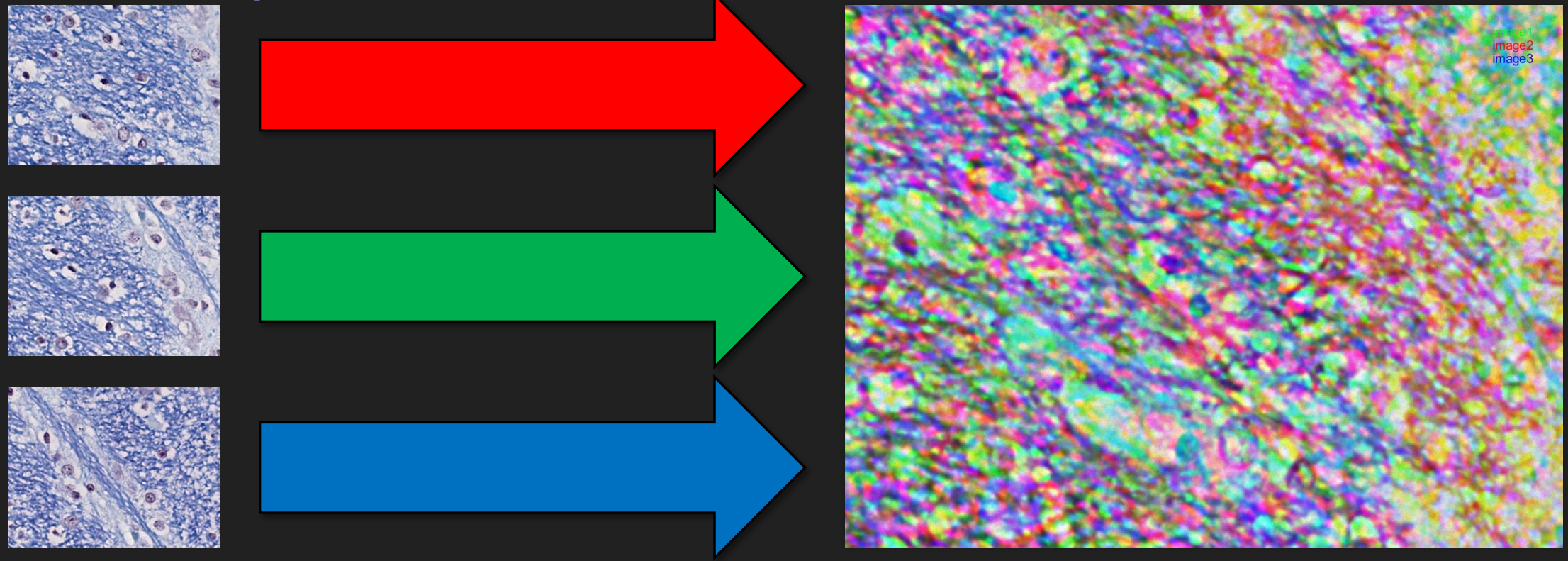
Scale & Calibration Bars

- Preview only displays the figure on the screen.
- Submit generates a .jpeg image and a PowerPoint slide in the user's directory
  - The filename is given by the field "Figure Name"

Merge Channels

Merge 2 or 3 images

Merge Channels Example

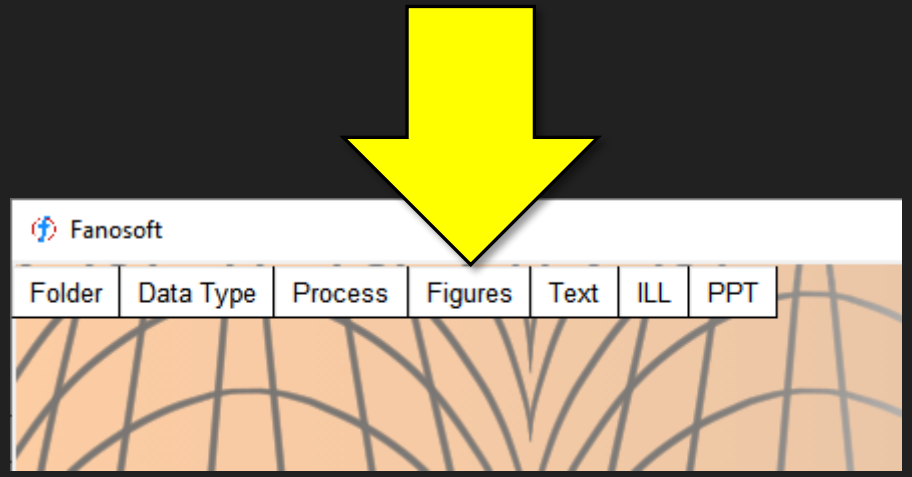


Merge Channels

- Merge 2 or 3 images into one
  - Each input image is first converted to the desired color
  - Available colors: Green, Red, Blue or Yellow
  - Then the images are merged into one
- Input images must be imported first (refer to “Importing a single image” section)

Merge Channels

- Click on Figures

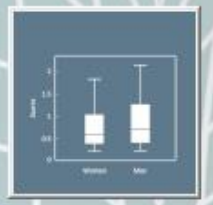
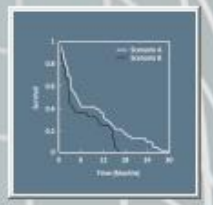


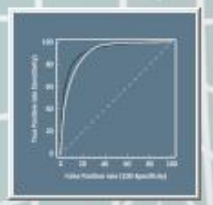
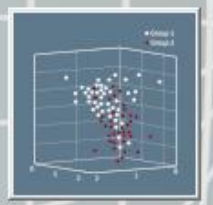
Fanosoft

Folder | Data Type | Process | Figures | Text | ILL | PPT

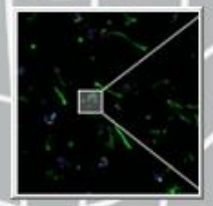
Figures





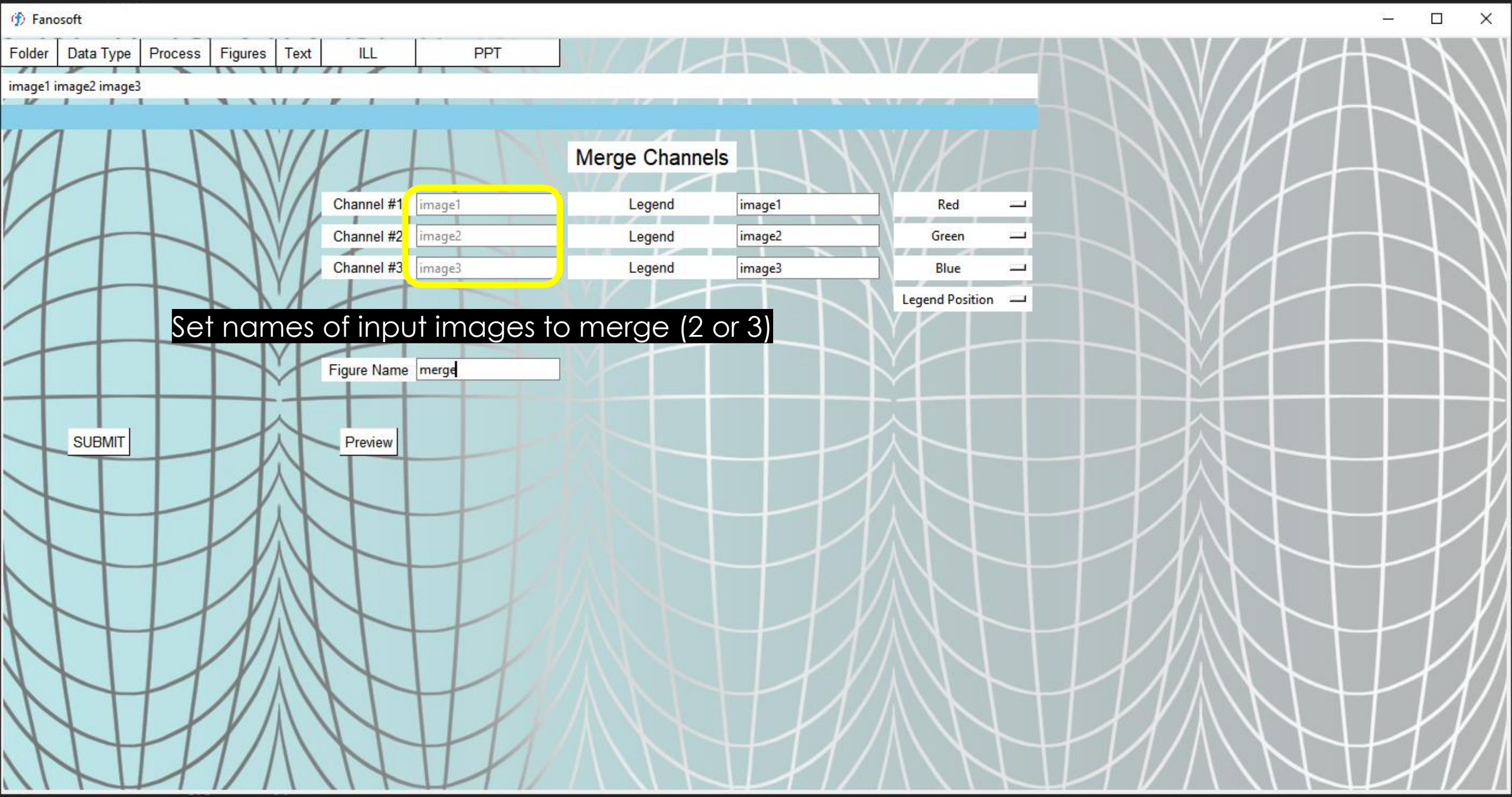

Fanosoft
Folder
Data Type
Process
Figures
Text
ILL
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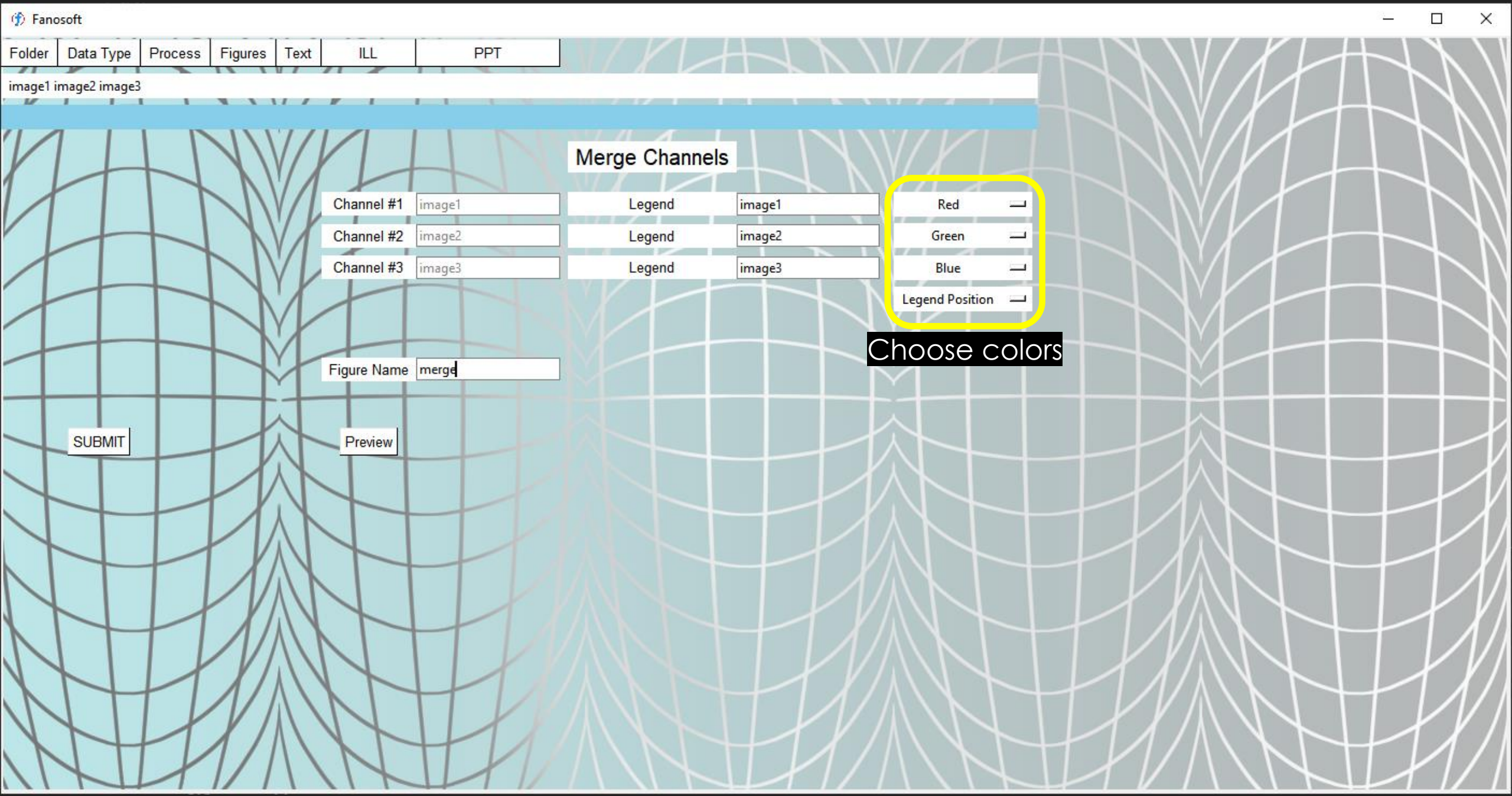
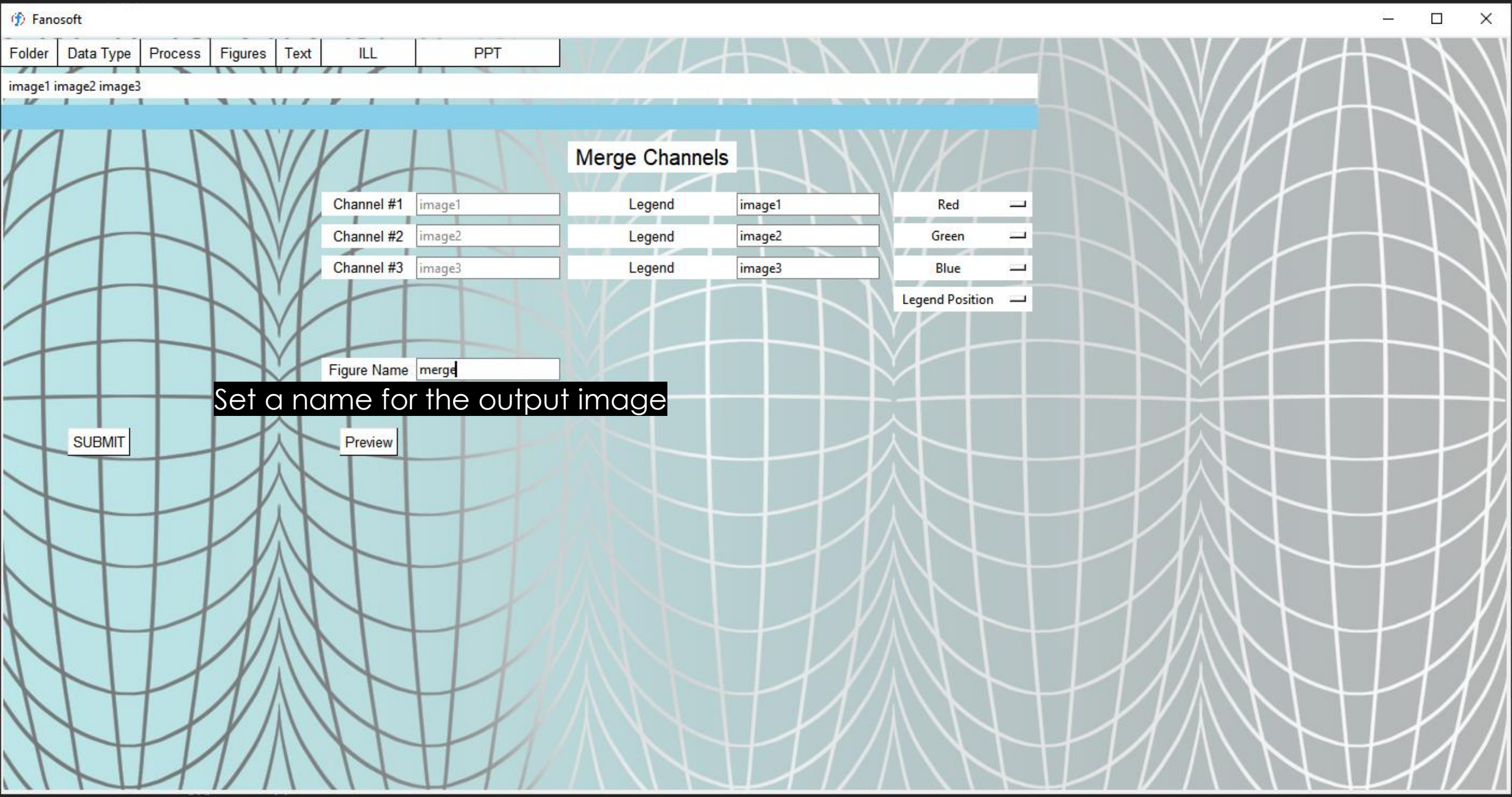
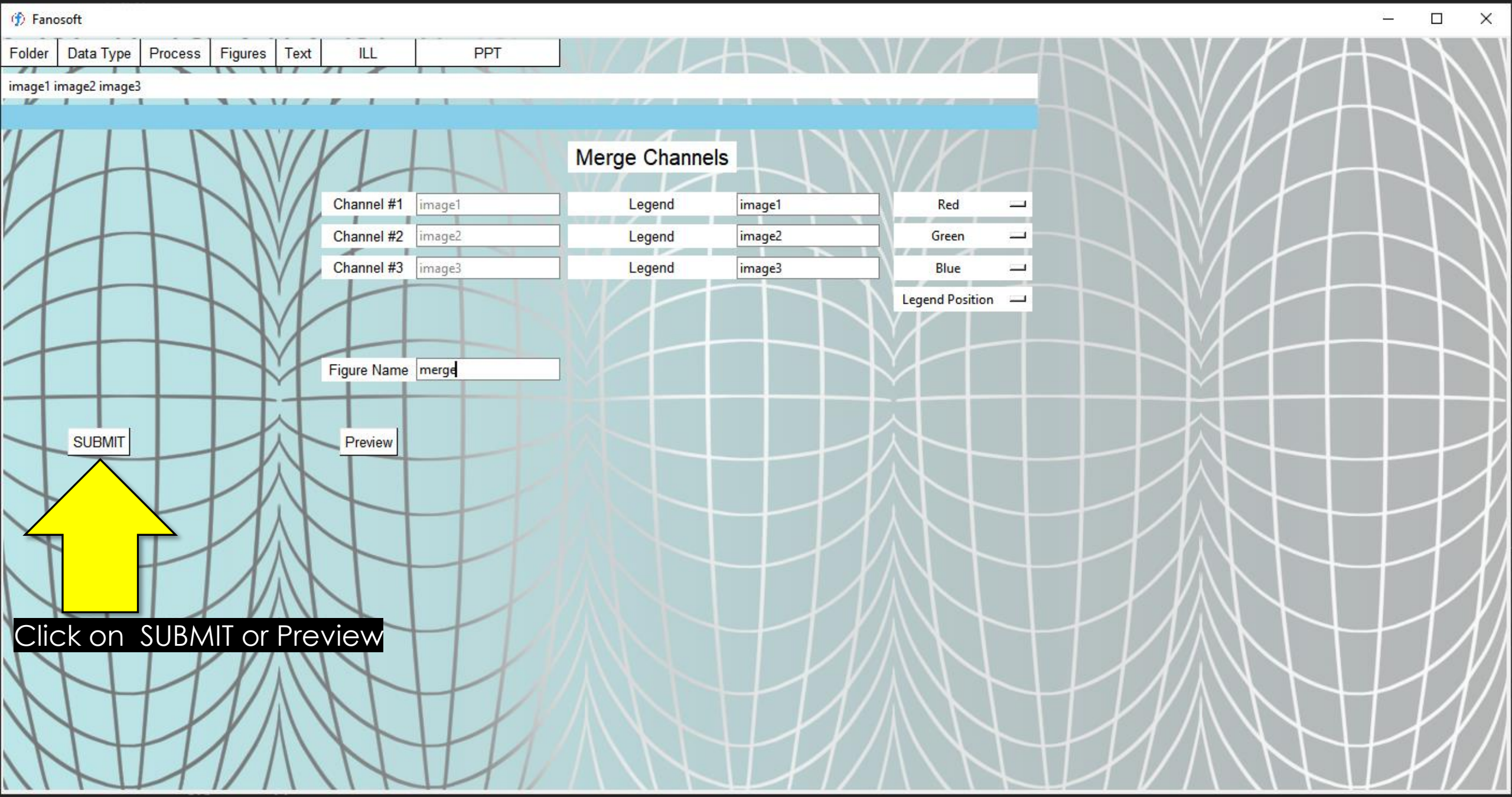
image1 image2 image3
Merge Channels
Channel #1
image1
Legend
image1
Red
Channel #2
image2
Legend
image2
Green
Channel #3
image3
Legend
image3
Blue
Legend Position
Set names of input images to merge (2 or 3)
Figure Name
merge
SUBMIT
Preview


Fanosoft
Folder
Data Type
Process
Figures
Text
ILL
PPT
image1 image2 image3
Merge Channels
Channel #1
image1
Legend
image1
Red
Channel #2
image2
Legend
image2
Green
Channel #3
image3
Legend
image3
Blue
Legend Position
Choose colors
Figure Name
merge
SUBMIT
Preview


Fanosoft
Folder
Data Type
Process
Figures
Text
ILL
PPT
image1 image2 image3
Merge Channels
Channel #1
image1
Legend
image1
Red
Channel #2
image2
Legend
image2
Green
Channel #3
image3
Legend
image3
Blue
Legend Position
Figure Name
merge
Set a name for the output image
SUBMIT
Preview


Fanosoft
Folder
Data Type
Process
Figures
Text
ILL
PPT
image1 image2 image3
Merge Channels
Channel #1
image1
Legend
image1
Red
Channel #2
image2
Legend
image2
Green
Channel #3
image3
Legend
image3
Blue
Legend Position
Figure Name
merge
SUBMIT
Preview
Click on SUBMIT or Preview

Merge Channels

- Preview only displays the figure on the screen.
- Submit generates a .jpeg image and a PowerPoint slide in the user's directory
  - The filename is given by the field "Figure Name"

Image Stitching

Image Stitching

- Combine multiple images with overlapping fields of view
- Produce a high resolution photo mosaic
- Input is an image stack (1D image array)
- Image stack must be imported first (see “Importing images” section)
  - Note that Fanosoft imports 2D arrays row-by-row

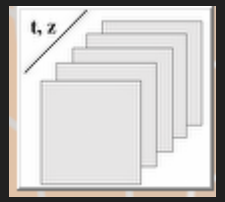
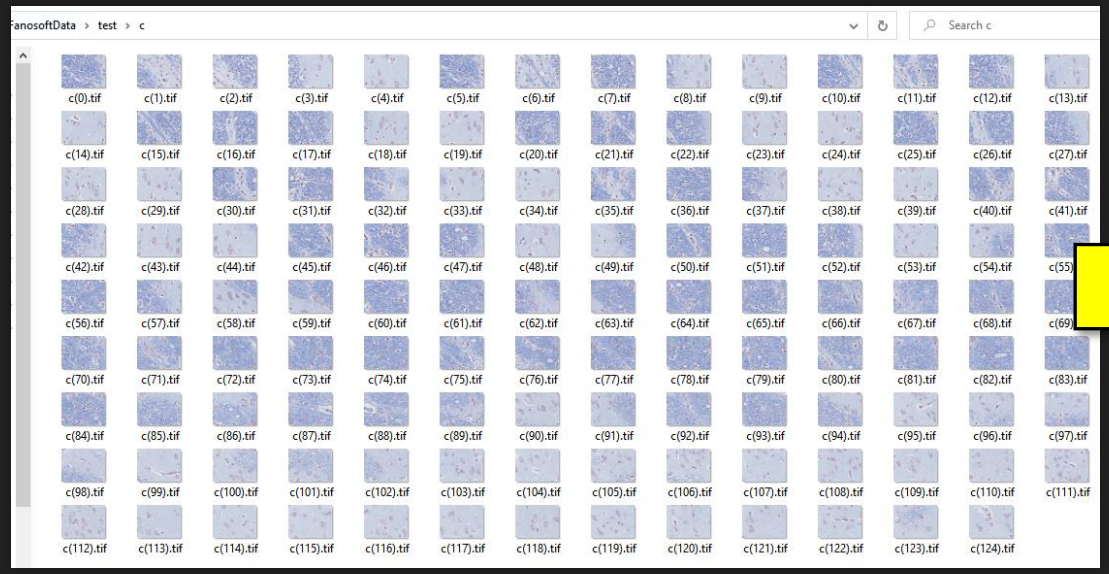


Image Stitching Example



Stitching

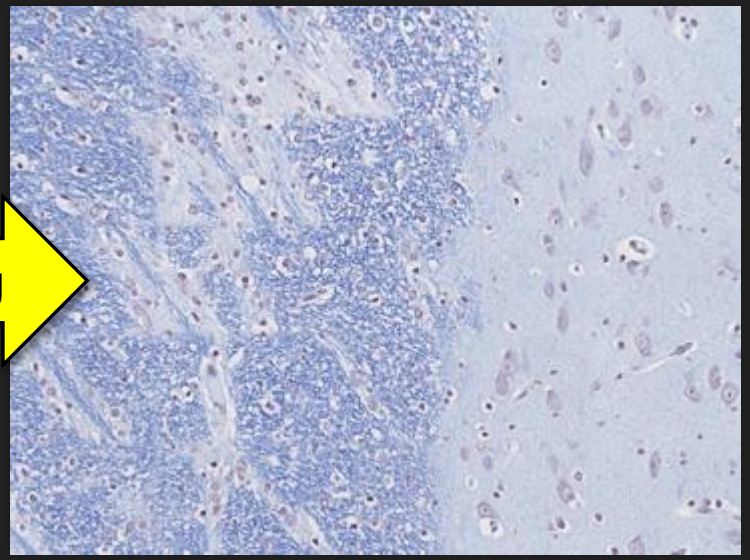
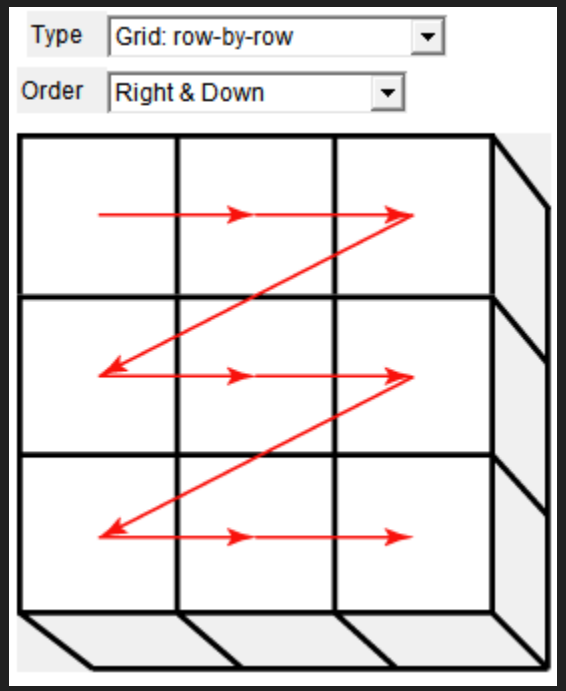


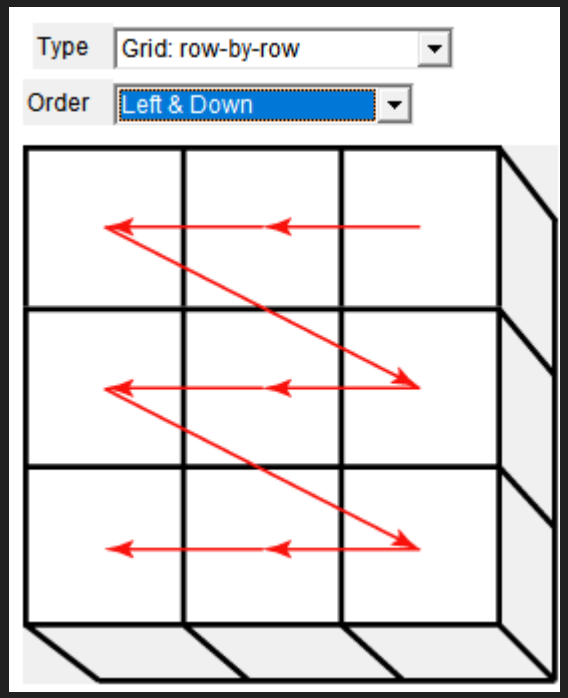
Image Stitching Options

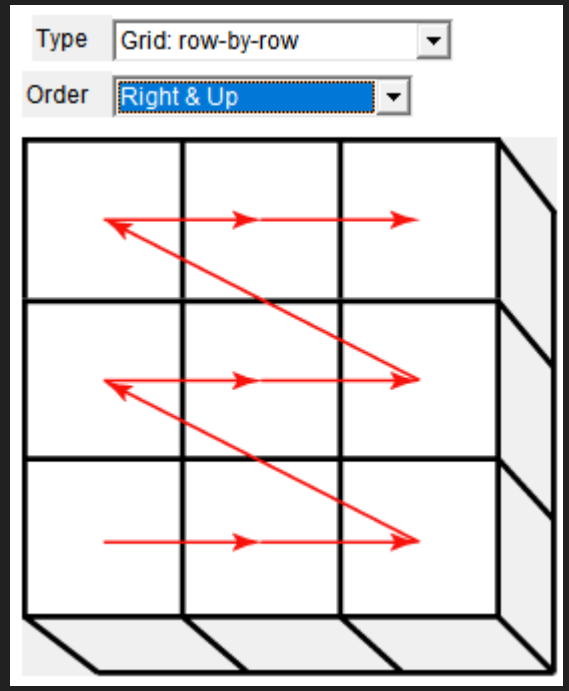
- Number of images in the horizontal (X) and vertical (Y) directions
  - Must match the number of images in the stack: X = 25 Y = 5 => Image stack with 125 images
- Image overlap percentage = shared image area between 2 adjacent images, e.g. 10%
- Scale of the stitch: x0.5 x0.3 x0.2 x0.1 x0.05 x0.01
- Order of the images in the stack
  - Row-by-row or column-by-column
  - Right&Down, Left&Down, Right&Up or Left&Up (see next slides)

Image Overlap (e.g 80%)

Image Stitching Options – row-by-row







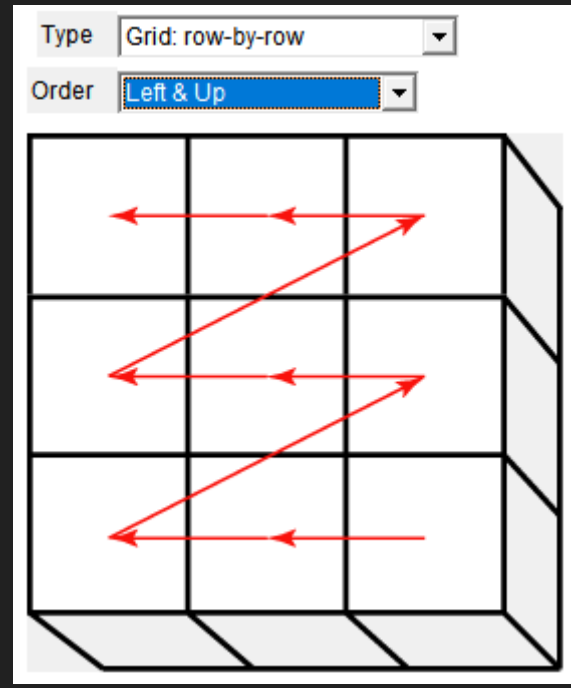
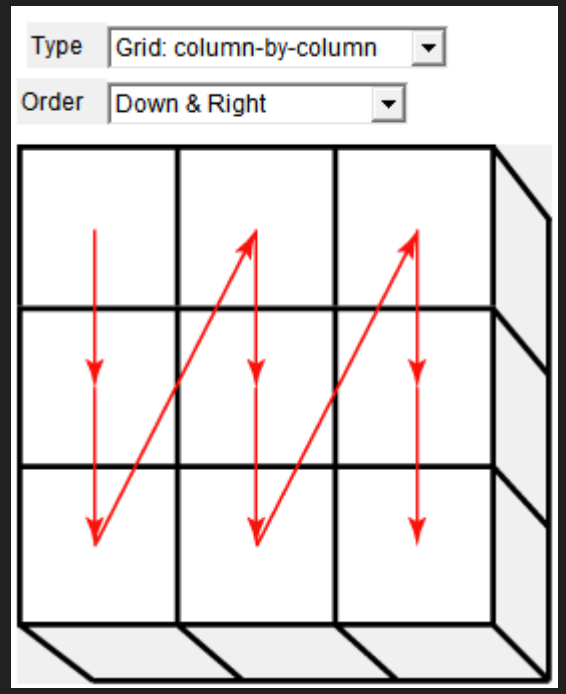
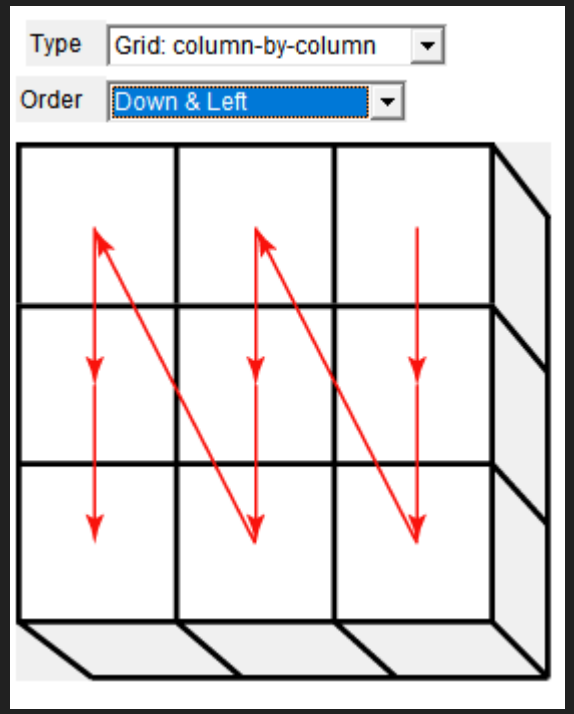
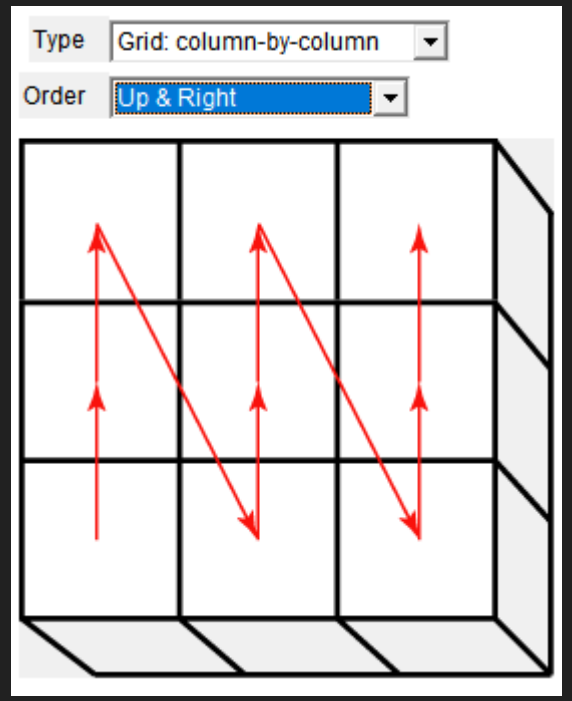


Image Stitching Options – column-by-col.







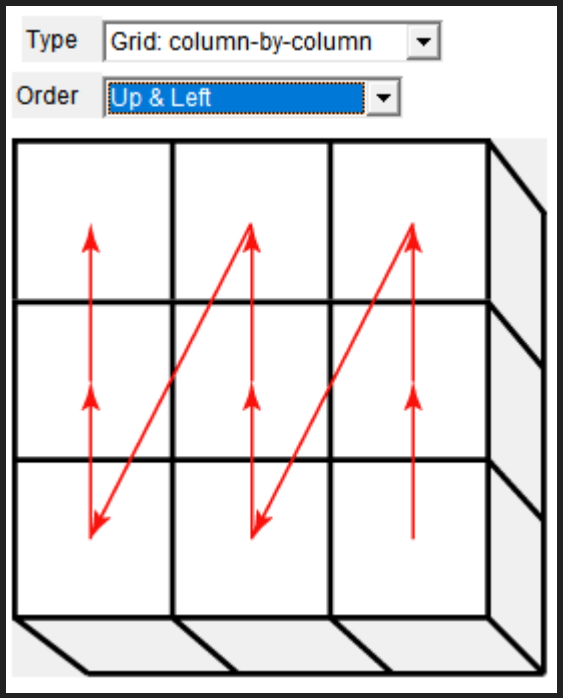
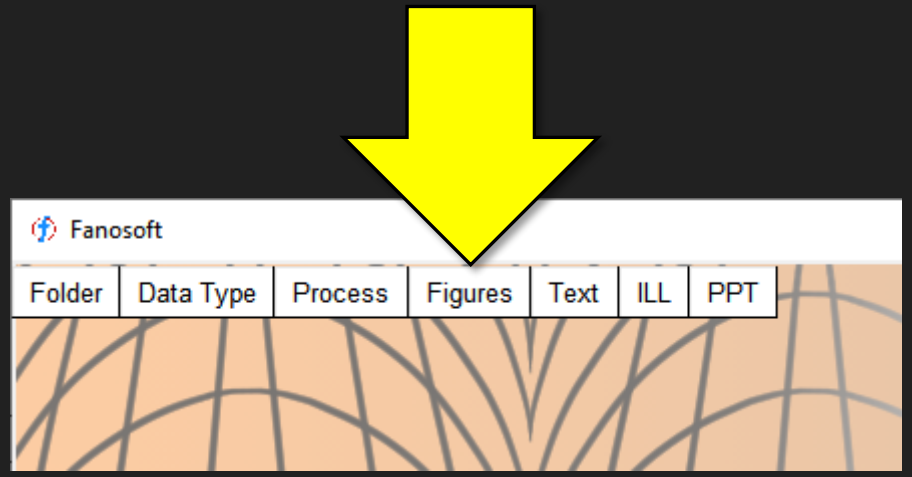


Image Stitching in Fanosoft

- Click on Figures

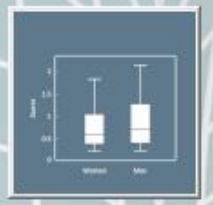
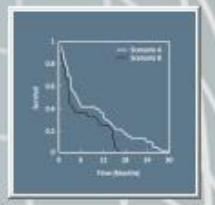


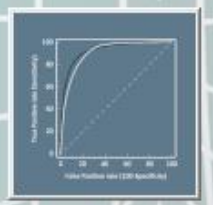
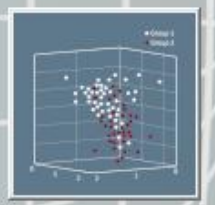
Fanosoft

Folder | Data Type | Process | Figures | Text | ILL | PPT

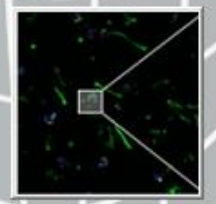
Figures

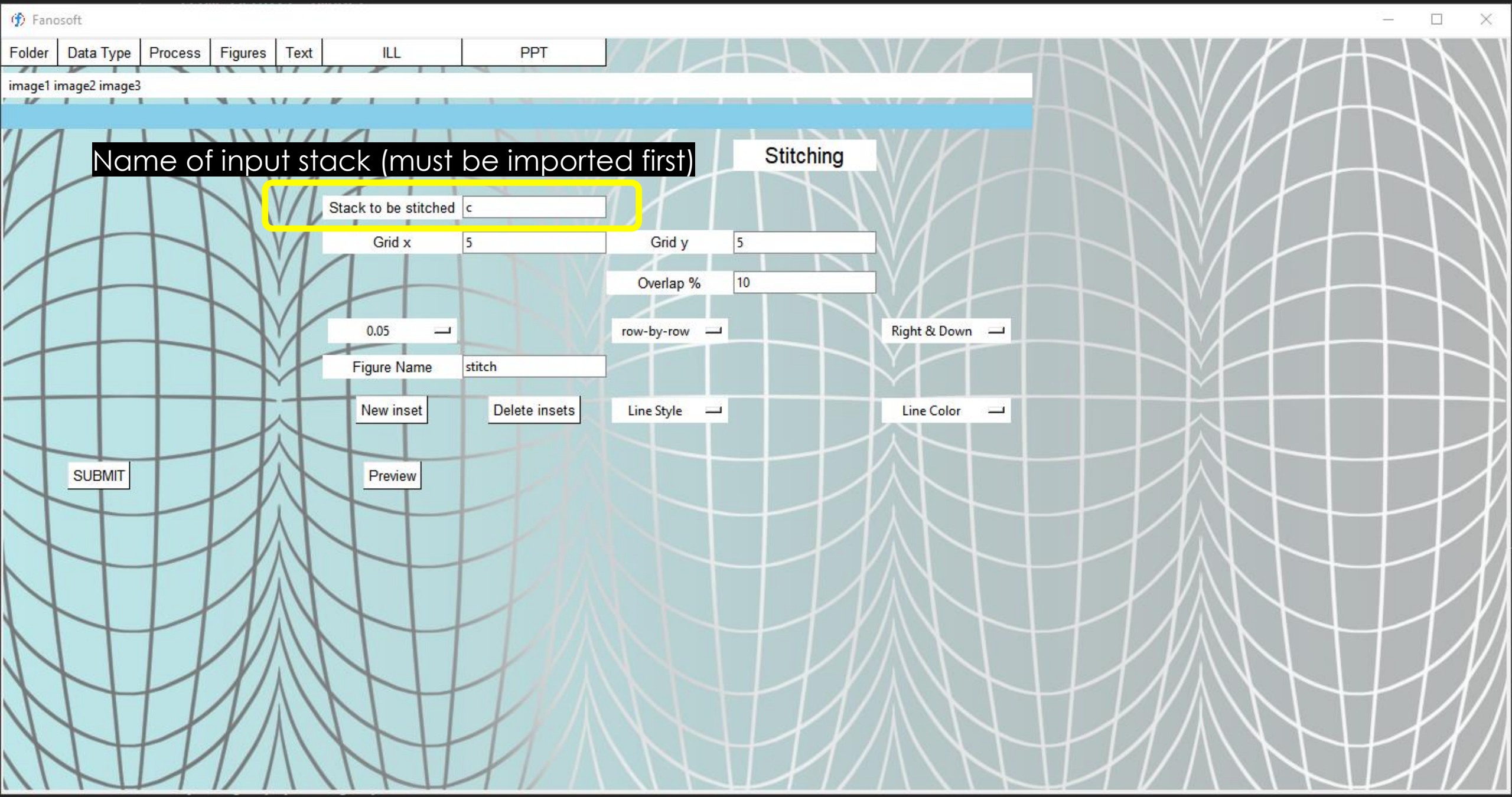





Fanosoft
Folder
Data Type
Process
Figures
Text
ILL
PPT
image1 image2 image3
Name of input stack (must be imported first)
Stitching
Stack to be stitched
c
Grid x
5
Grid y
5
Overlap %
10
0.05
row-by-row
Right & Down
Figure Name
stitch
New inset
Delete insets
Line Style
Line Color
SUBMIT
Preview

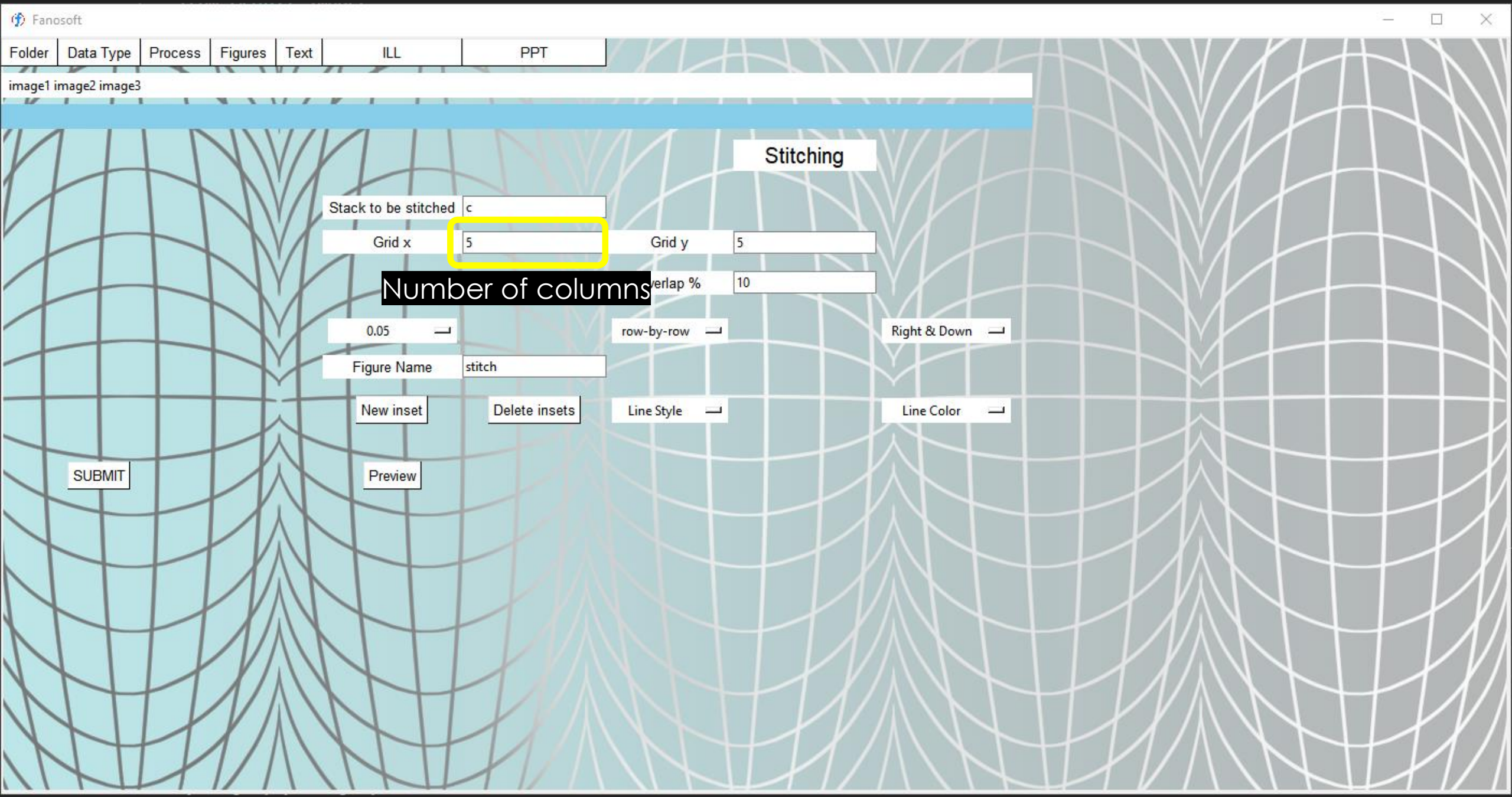

Fanosoft
Folder
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image1 image2 image3
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Stack to be stitched
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Figure Name
stitch
New inset
Delete insets
Line Style
Line Color
SUBMIT
Preview

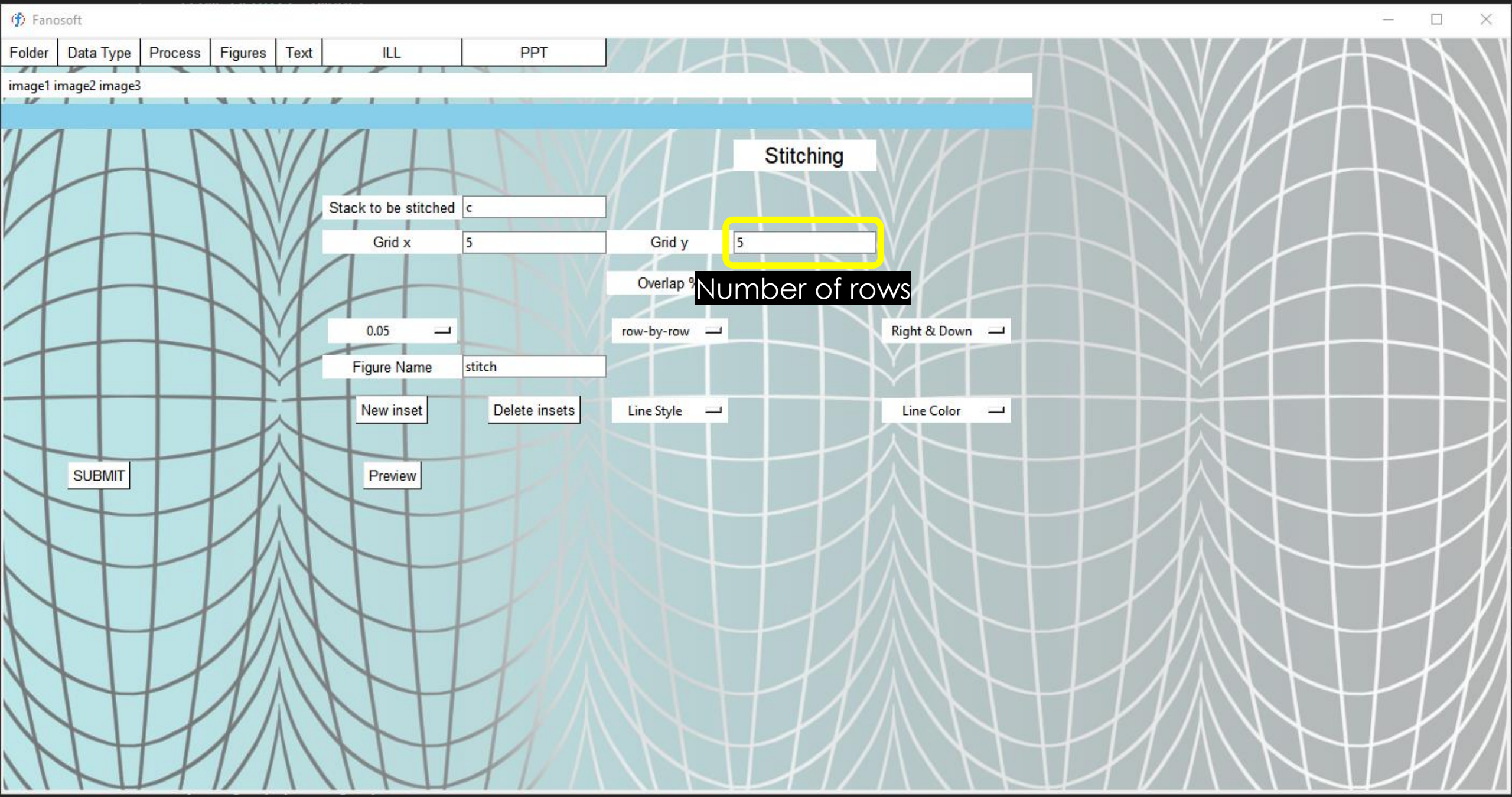
Fanosoft
Folder
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image1 image2 image3
Stitching
Stack to be stitched
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Grid x
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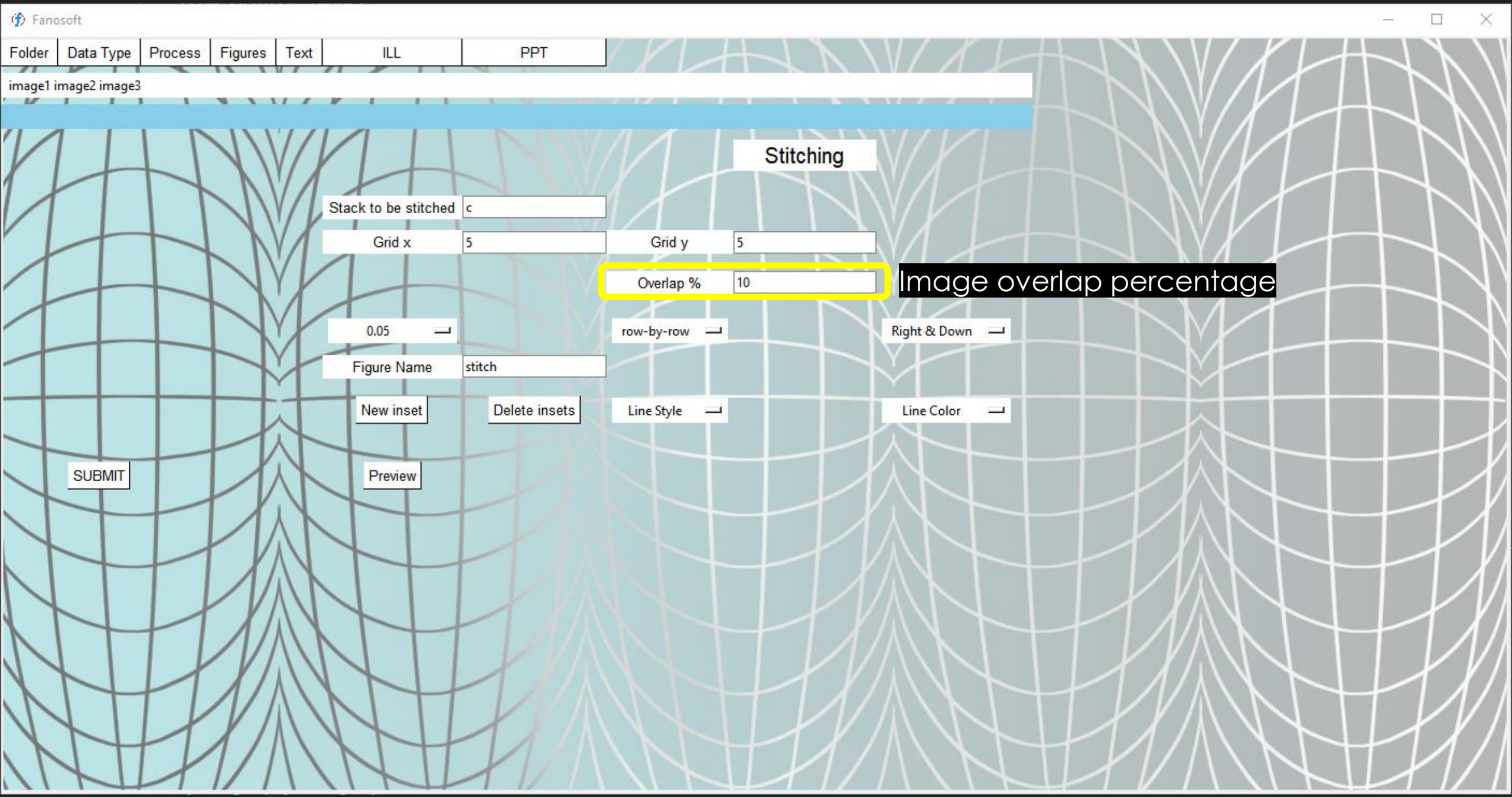
row-by-row
Right & Down
Figure Name
stitch
New inset
Delete insets
Line Style
Line Color
SUBMIT
Preview


Fanosoft
Folder
Data Type
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Figures
Text
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image1 image2 image3
Stitching
Stack to be stitched
c
Grid x
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Overlap %
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Image overlap percentage
0.05
row-by-row
Right & Down
Figure Name
stitch
New inset
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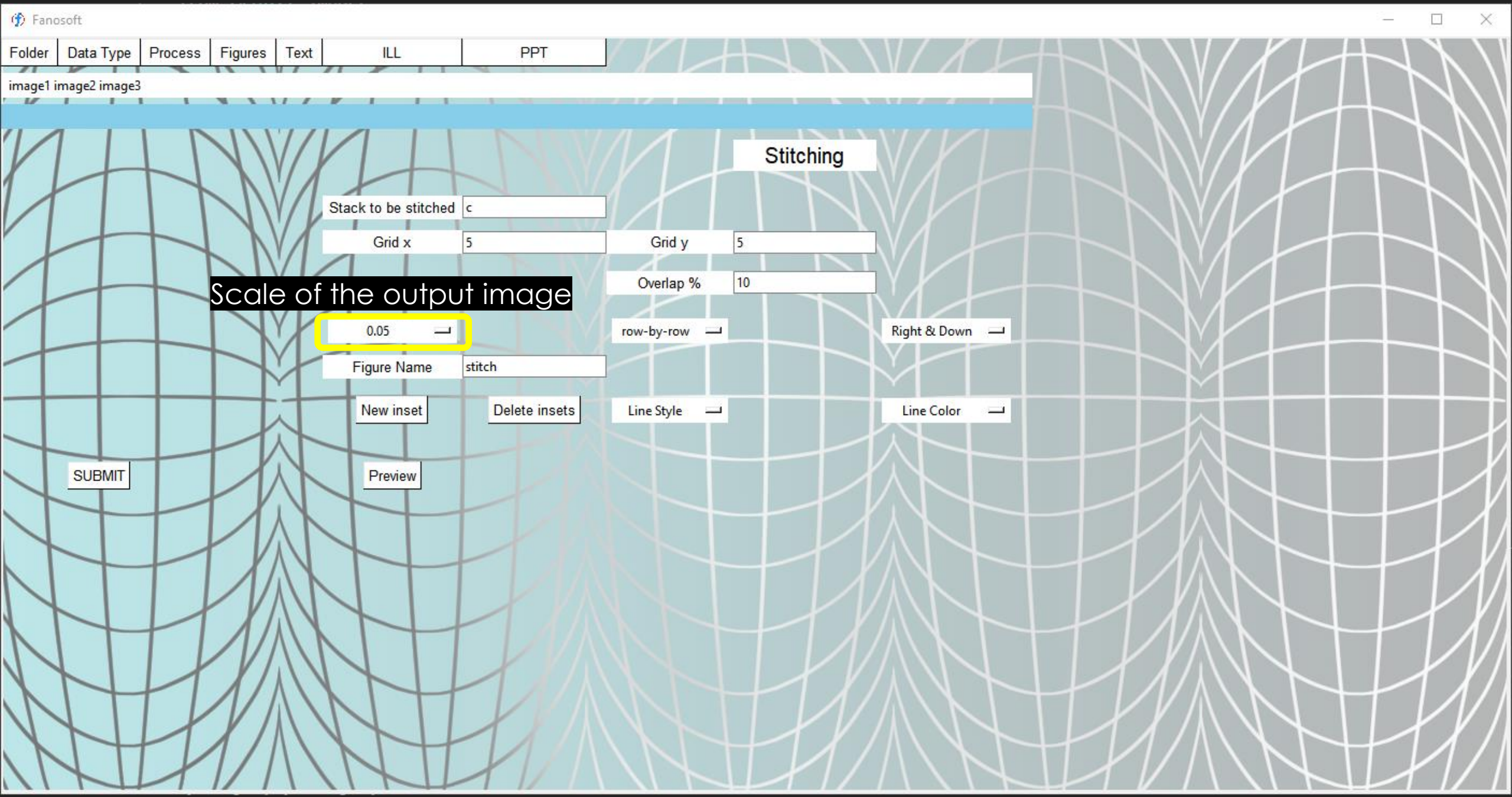
Line Color
SUBMIT
Preview


Fanosoft
Folder
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Process
Figures
Text
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image1 image2 image3
Stitching
Stack to be stitched
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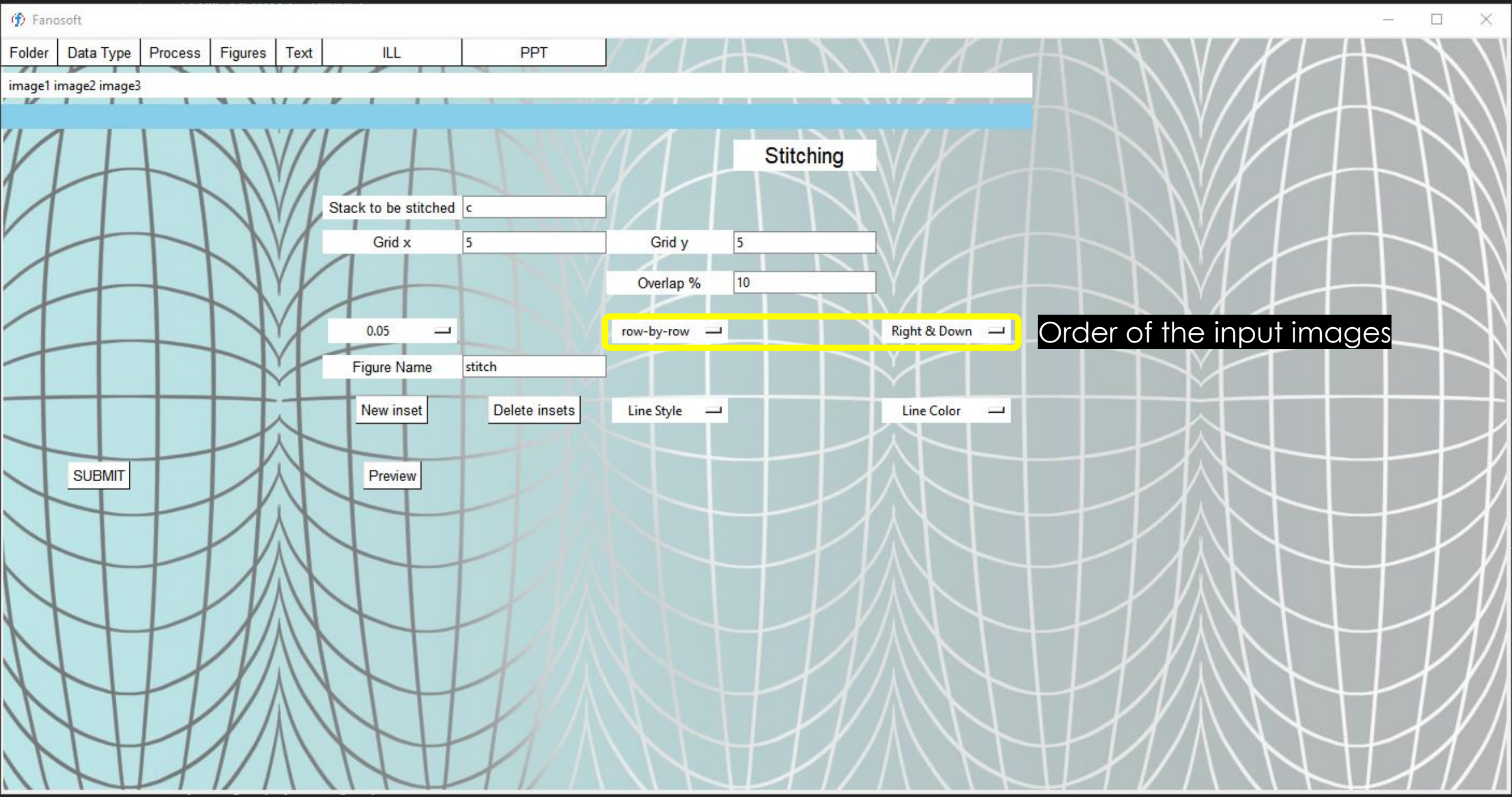
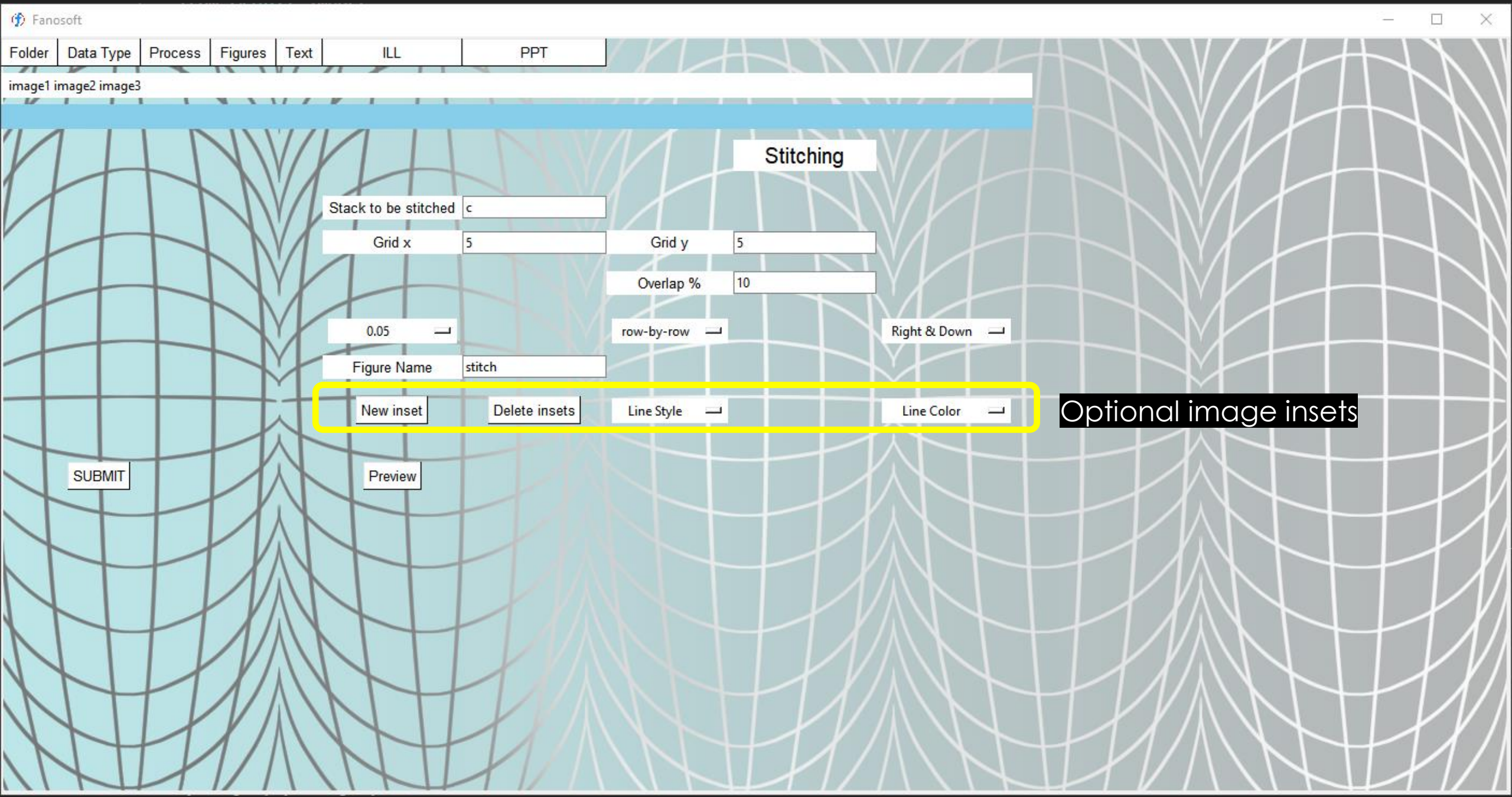
Grid y
5
Overlap %
10
Scale of the output image
0.05
row-by-row
Right & Down
Figure Name
stitch
New inset
Delete insets
Line Style
Line Color
SUBMIT
Preview


Fanosoft
Folder
Data Type
Process
Figures
Text
ILL
PPT
image1 image2 image3
Stitching
Stack to be stitched
c
Grid x
5
Grid y
5
Overlap %
10
0.05
row-by-row
Right & Down
Order of the input images
Figure Name
stitch
New inset
Delete insets
Line Style
Line Color
SUBMIT
Preview


Fanosoft
Folder
Data Type
Process
Figures
Text
ILL
PPT
image1 image2 image3
Stitching
Stack to be stitched
c
Grid x
5
Grid y
5
Overlap %
10
0.05
row-by-row
Right & Down
Figure Name
stitch
New inset
Delete insets
Line Style
Line Color
SUBMIT
Preview
Optional image insets

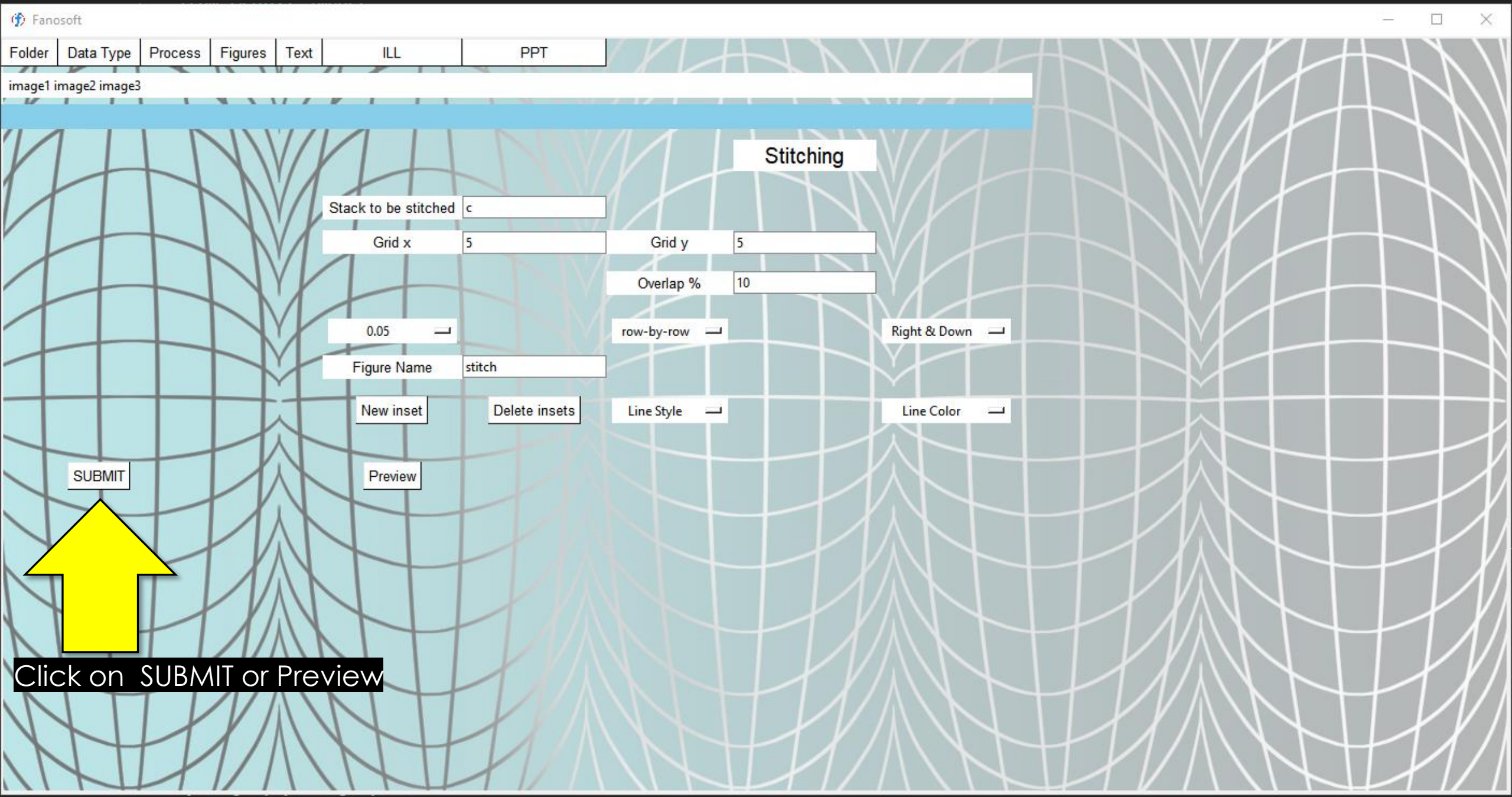
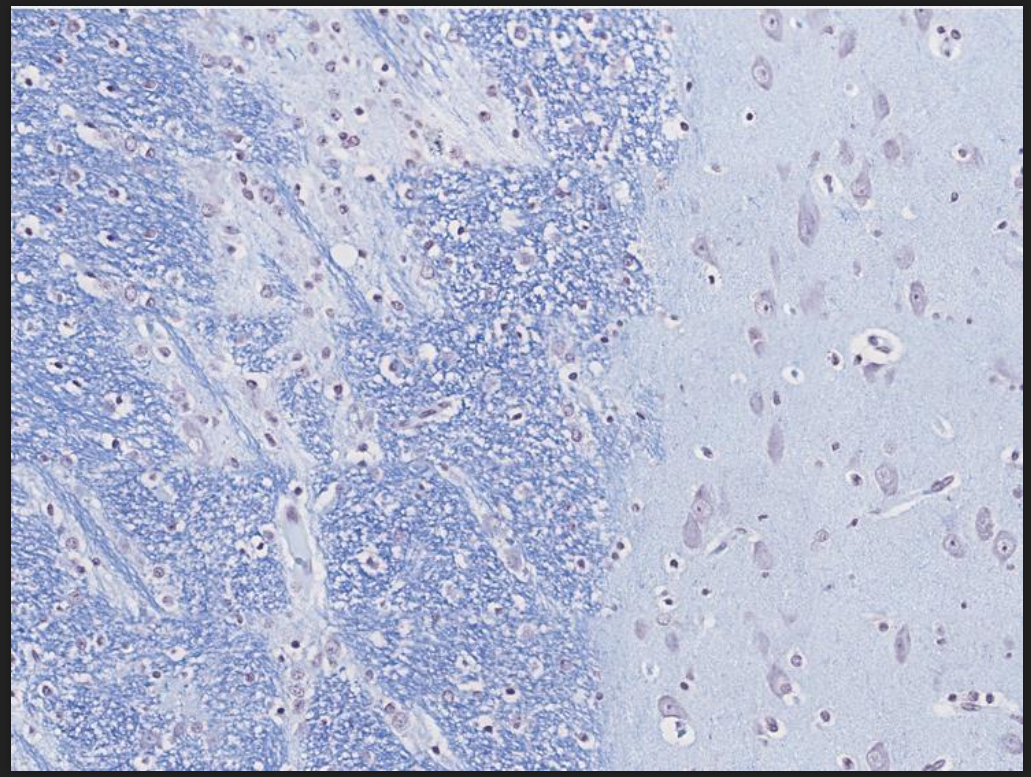
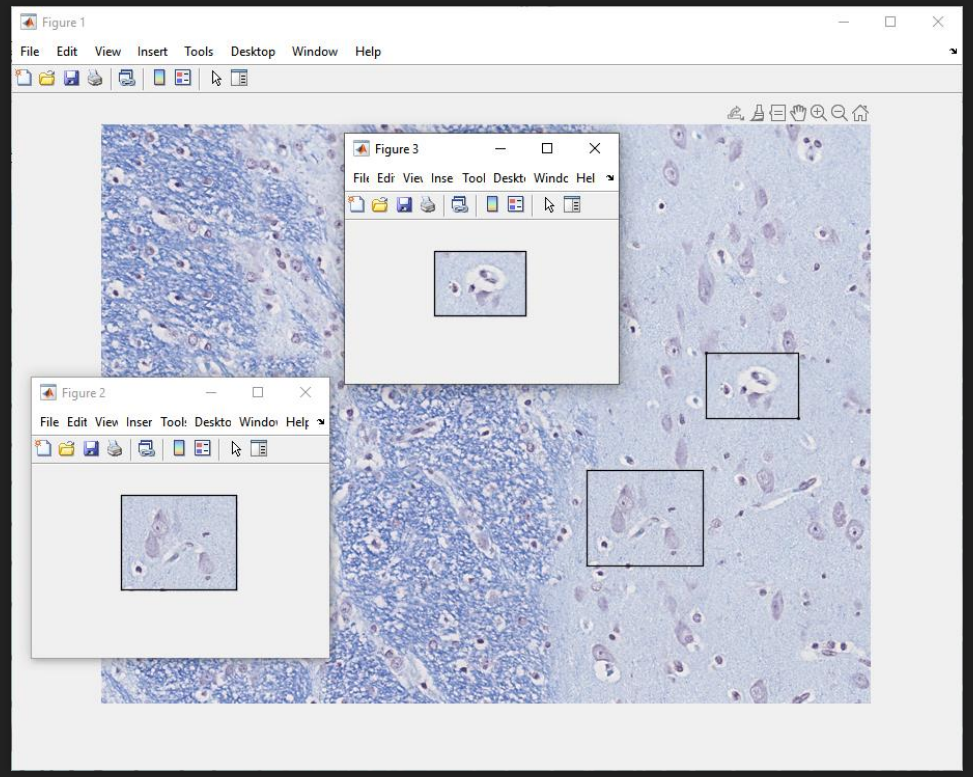

Fanosoft
Folder
Data Type
Process
Figures
Text
ILL
PPT
image1 image2 image3
Stitching
Stack to be stitched
c
Grid x
5
Grid y
5
Overlap %
10
0.05
row-by-row
Right & Down
Figure Name
stitch
New inset
Delete insets
Line Style
Line Color
SUBMIT
Preview
Click on SUBMIT or Preview

Image Stitching Example

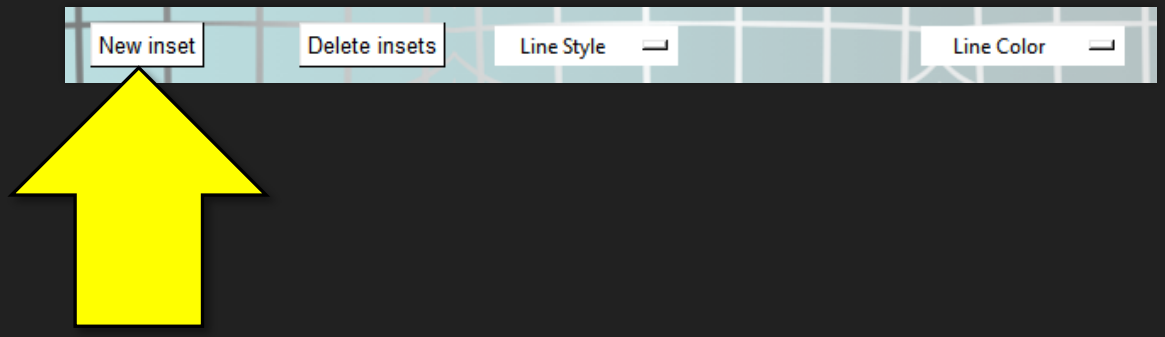


Adding Image Insets



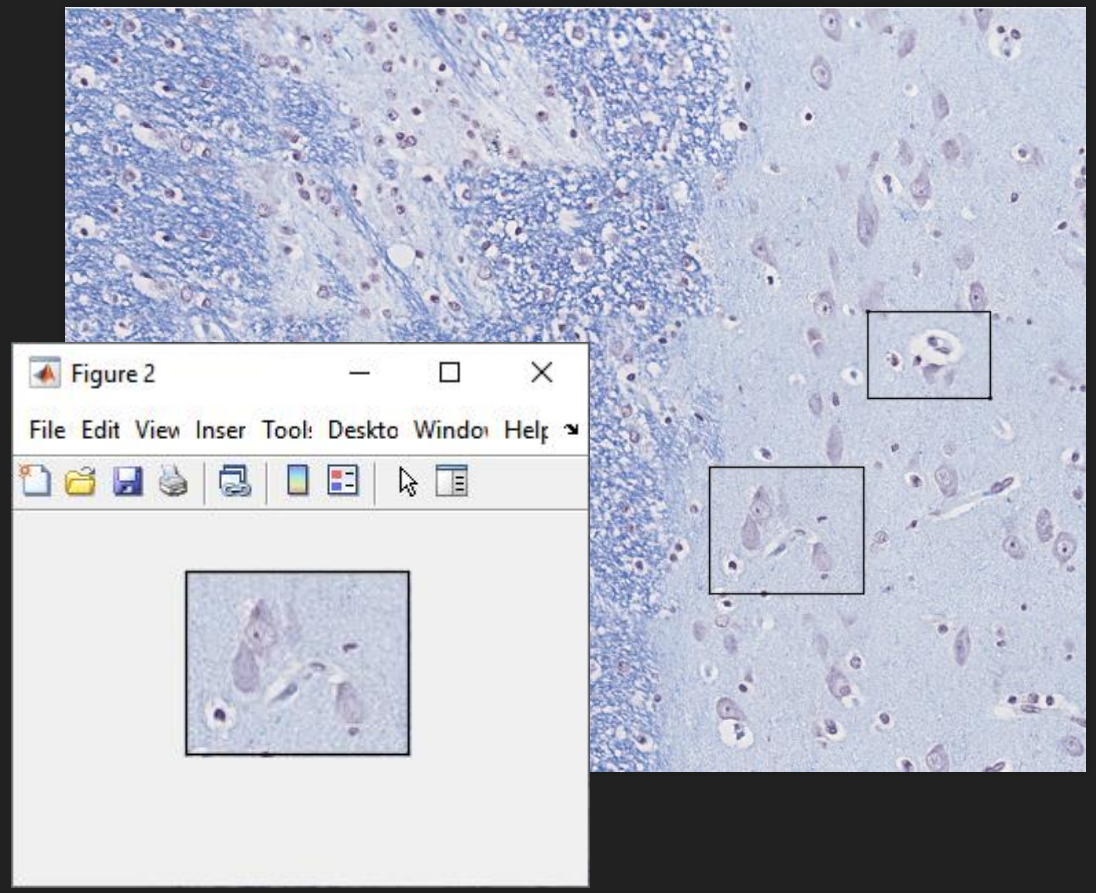
Adding Image Insets

- To add optional image insets
  - Generate a preview of the stitch
  - Select the desired line style & color
  - Click on New inset



Adding Image Insets

- Click in the preview once to select the first corner of the inset
- Click one more time in the stitch preview to select the 2nd corner
- The inset appears in a separate window
- You can create other insets by clicking on "New inset" again
- You can delete all insets by clicking on "Delete insets"
- Click on SUBMIT to export the stitch + all insets as images + PPT slides

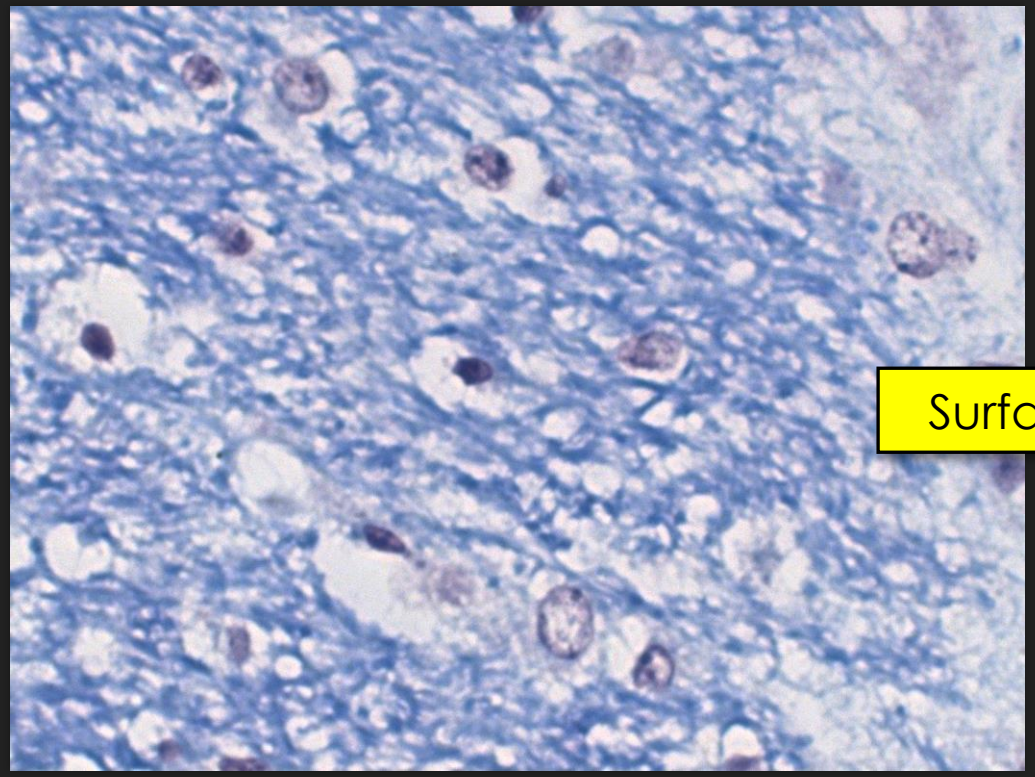


3D Rendering

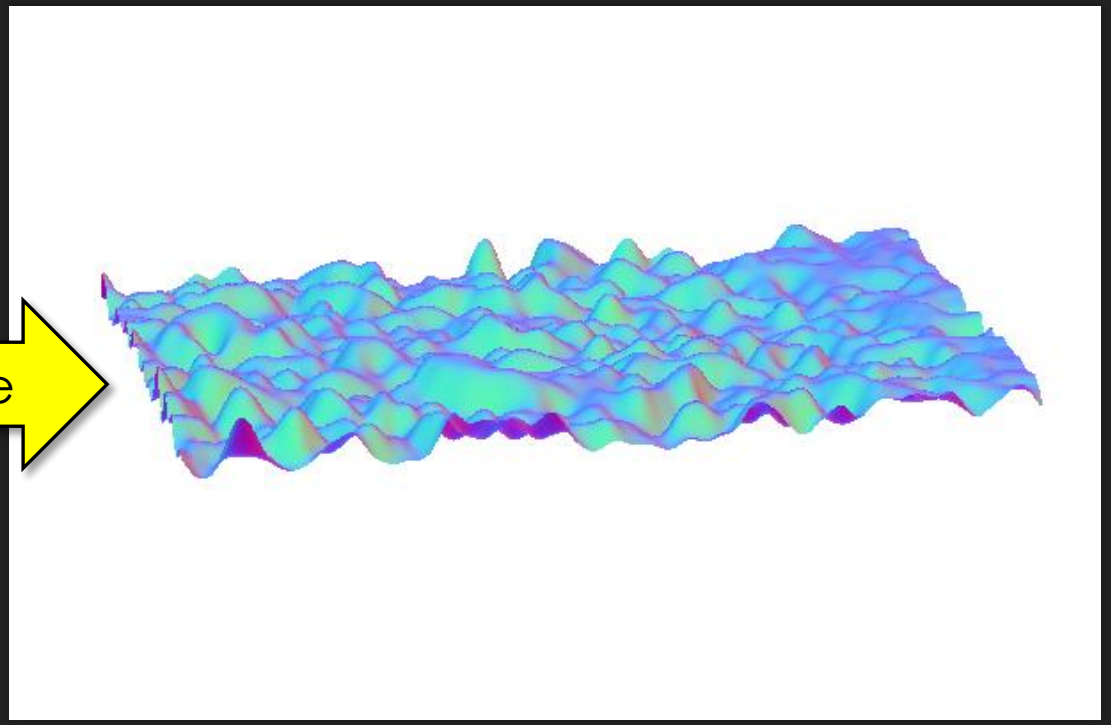
3D Rendering

- Render an image or an image stack in 3D
- 2 type of 3D rendering available:
  - Surface plot
  - Volume
- Image or image stack must be imported first (see “Importing Images” section)

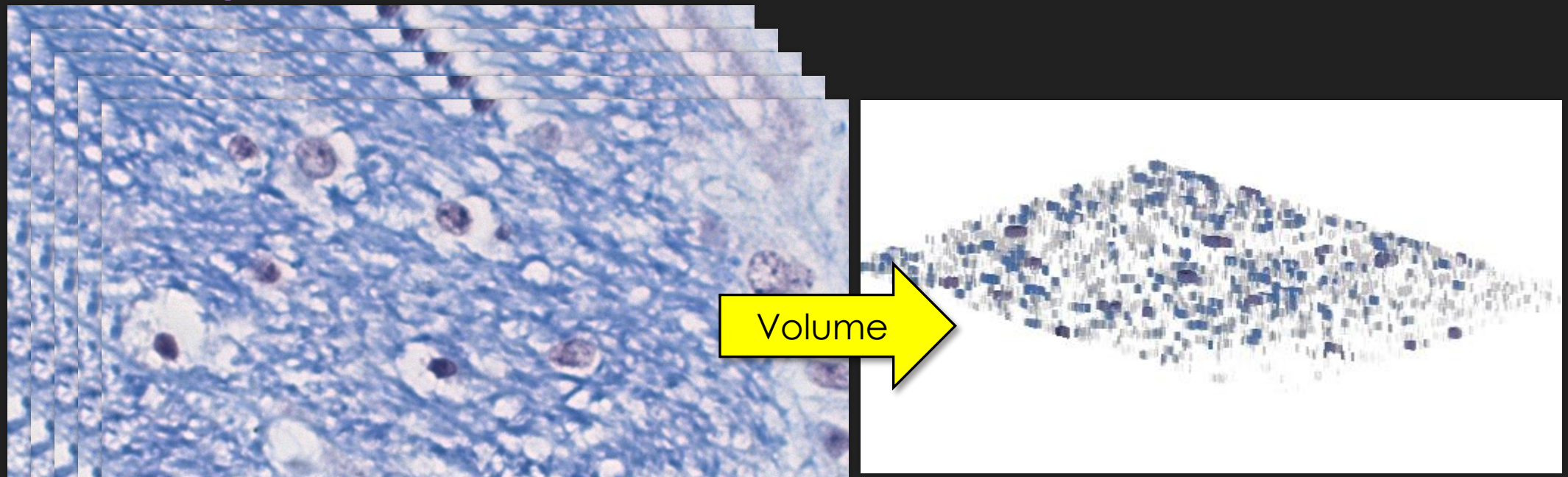
3D Rendering Example (Image→Surface)



Surface

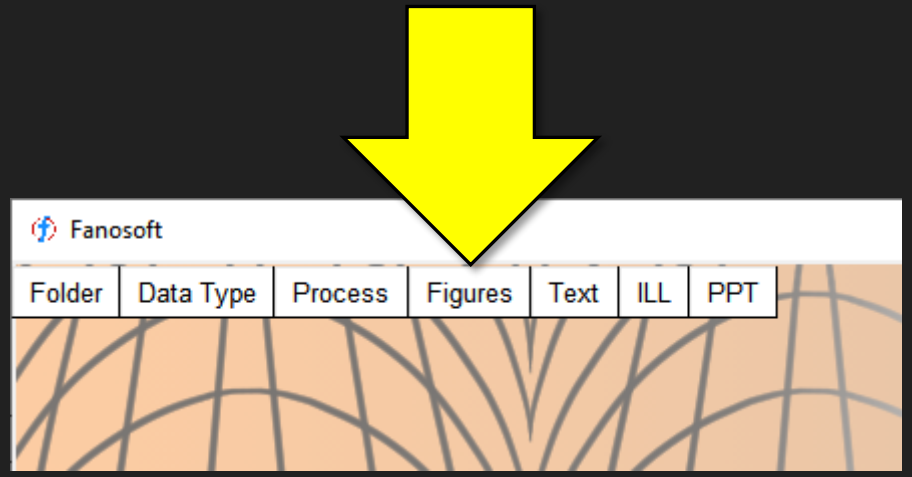


3D Rendering Example (Stack→Volume)



3D Rendering in Fanosoft

- Click on Figures

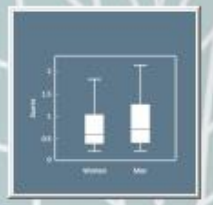
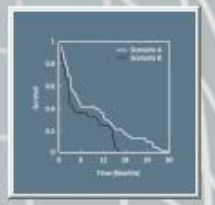


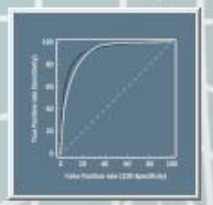
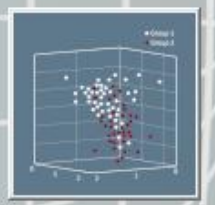
Fanosoft

Folder | Data Type | Process | Figures | Text | ILL | PPT

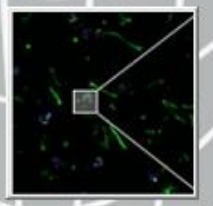
Figures

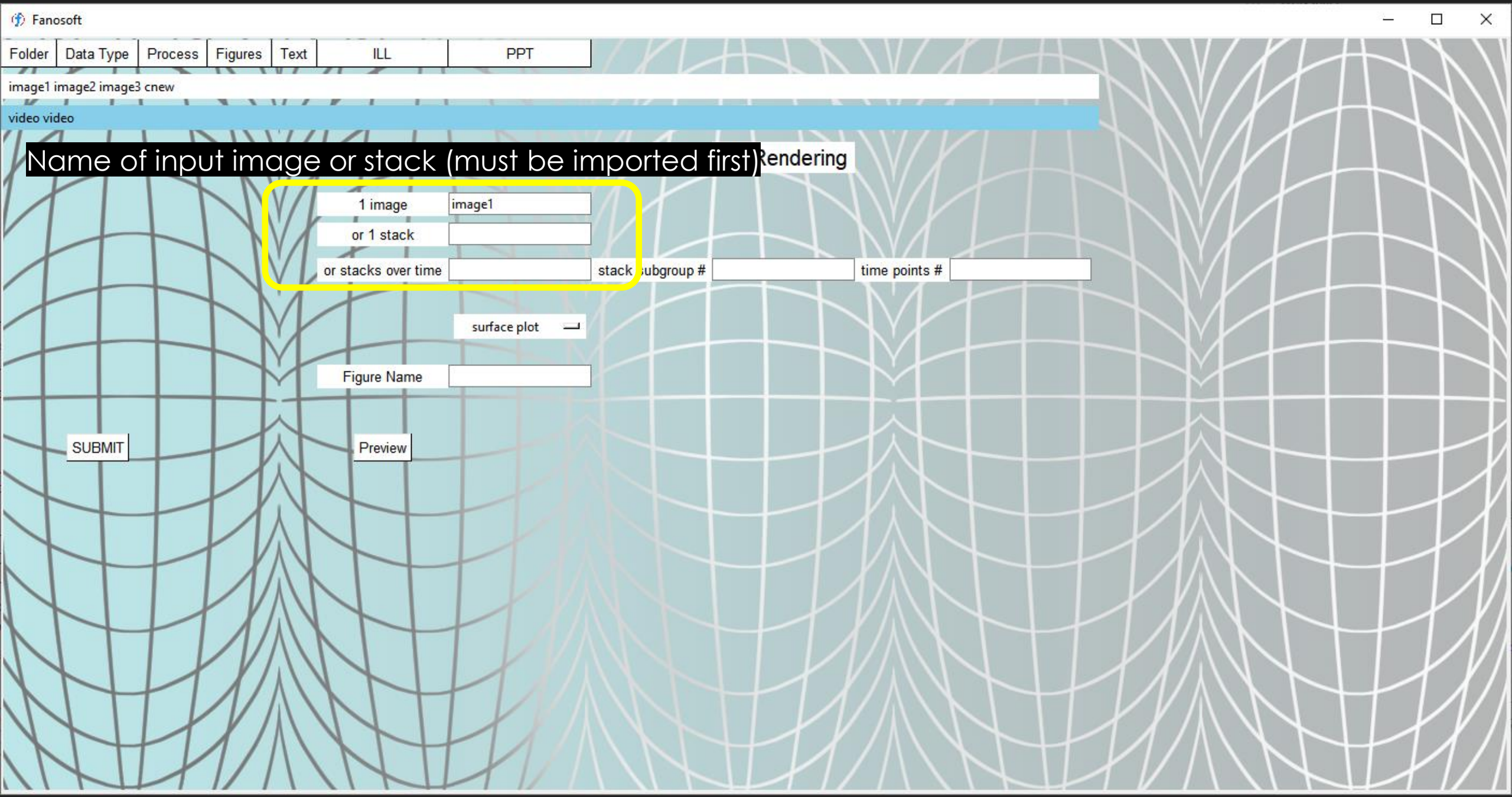


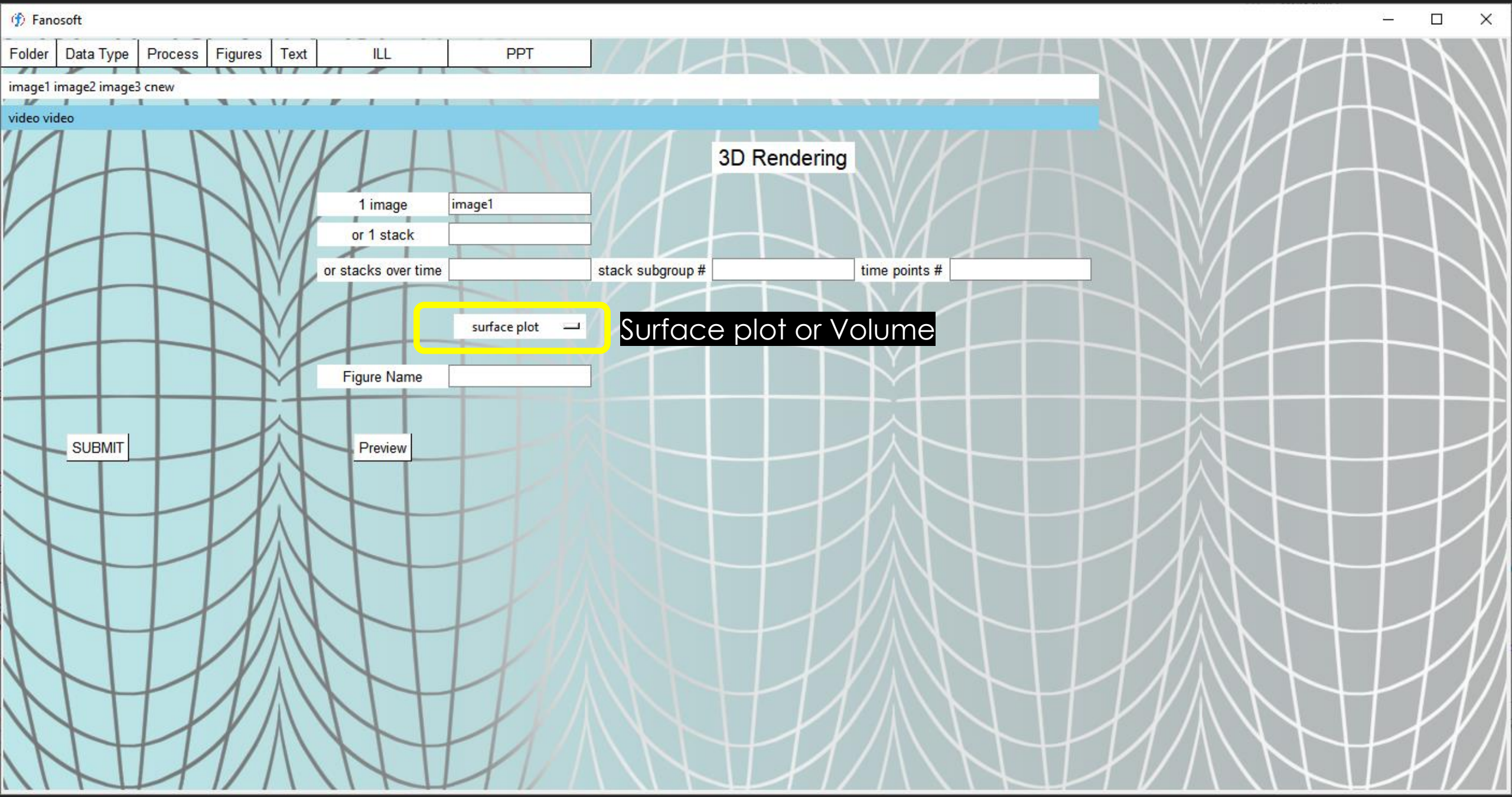






Fanosoft
Folder
Data Type
Process
Figures
Text
ILL
PPT
image1 image2 image3 cnew
video video
Name of input image or stack (must be imported first)
Rendering
1 image
image1
or 1 stack
or stacks over time
stack
ubgroup #
time points #
surface plot
Figure Name
SUBMIT
Preview


Fanosoft
Folder
Data Type
Process
Figures
Text
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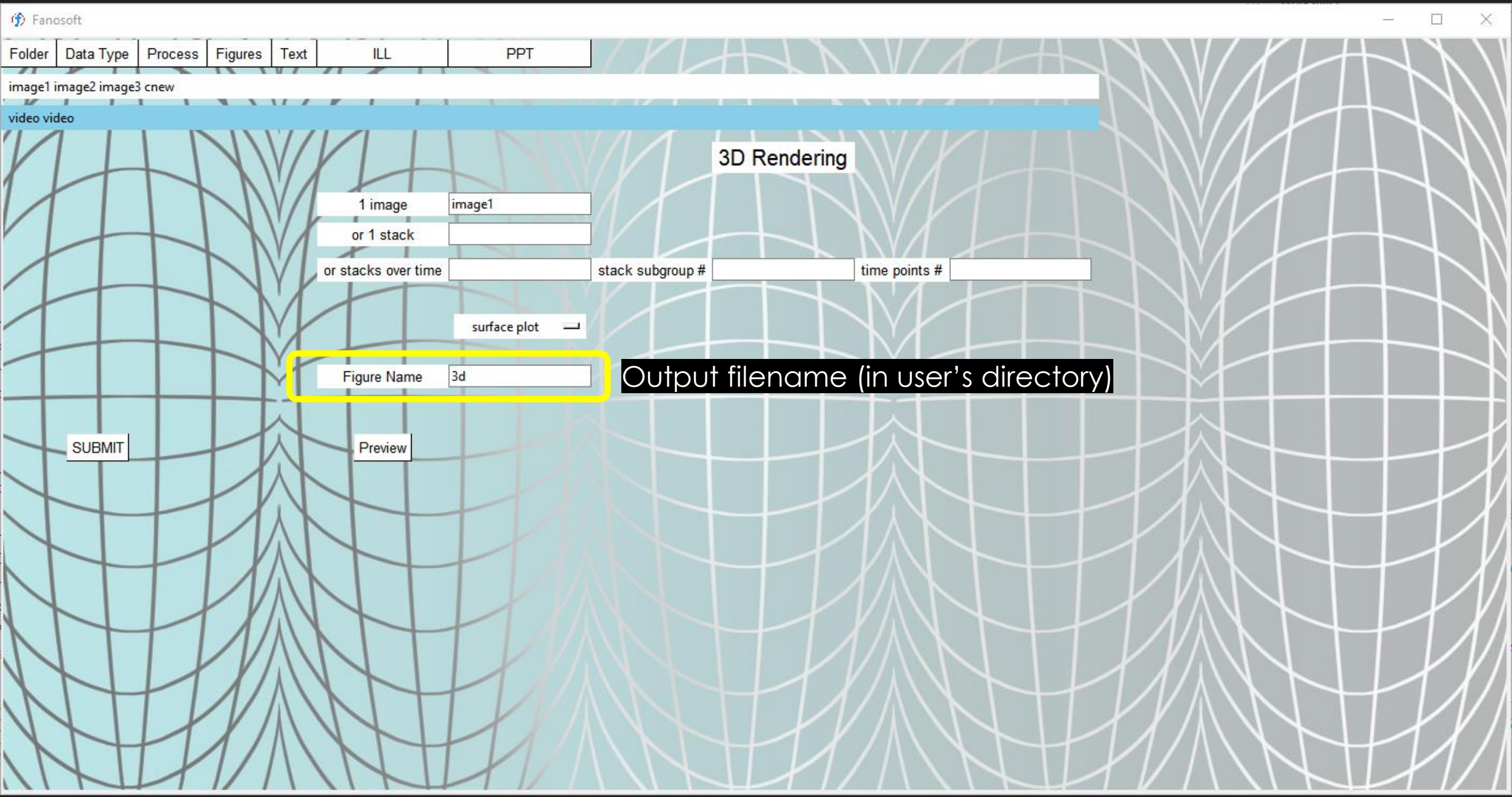
PPT
image1 image2 image3 cnew
video video
3D Rendering
1 image
image1
or 1 stack
or stacks over time
stack subgroup #
time points #
surface plot
Surface plot or Volume
Figure Name
SUBMIT
Preview


Fanosoft
Folder
Data Type
Process
Figures
Text
ILL
PPT
image1 image2 image3 cnew
video video
3D Rendering
1 image
image1
or 1 stack
or stacks over time
stack subgroup #
time points #
surface plot
Figure Name
3d
Output filename (in user's directory)
SUBMIT
Preview

Fanosoft

Folder | Data Type | Process | Figures | Text | ILL | PPT

image1 image2 image3 cnew

video video

3D Rendering

1 image: image1

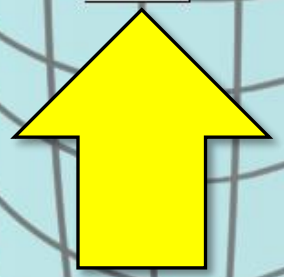
or 1 stack:

or stacks over time: | stack subgroup # | time points #

surface plot

Figure Name: 3d

SUBMIT | Preview



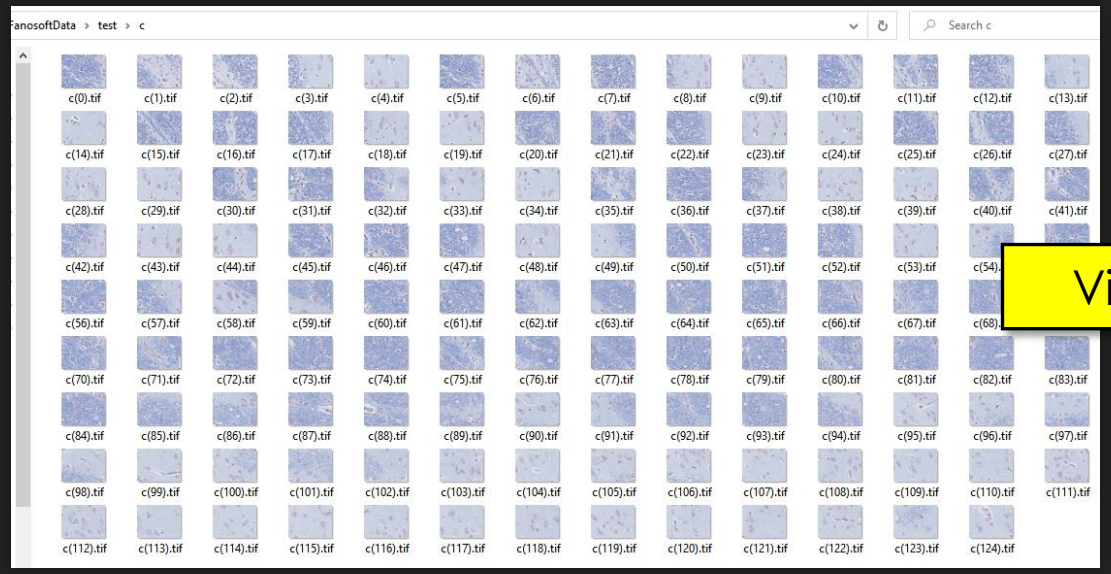
Click on SUBMIT or Preview

Video

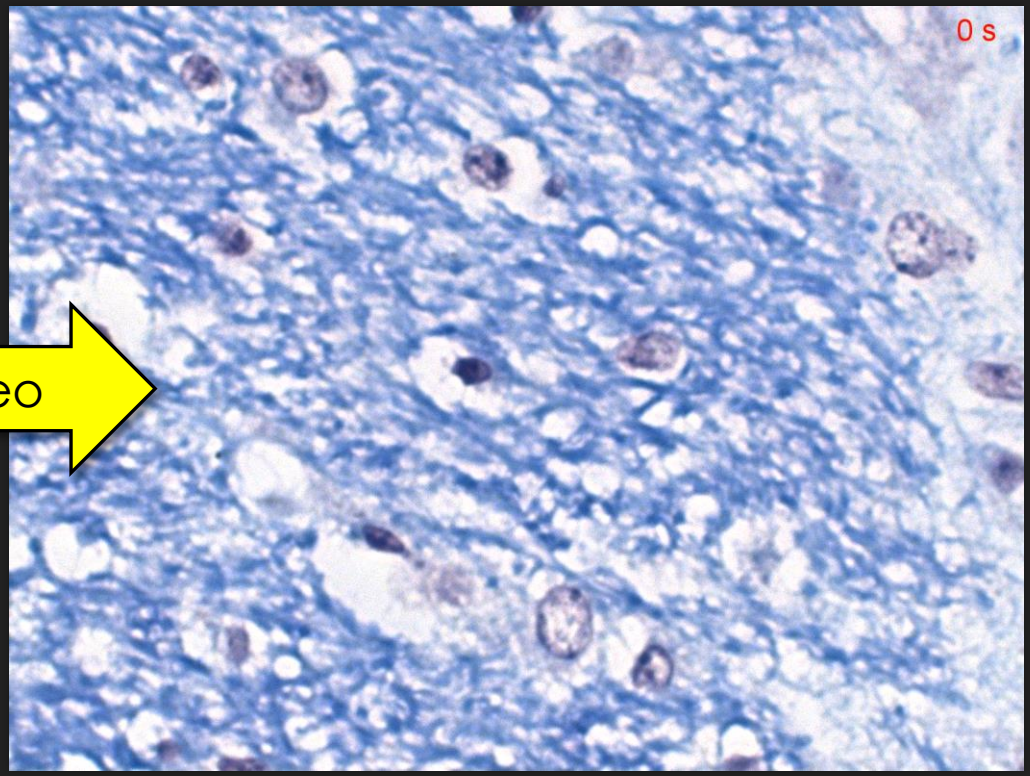
Page Video

- Convert an image stack to a video (.avi file)
- Optionally display a timestamp in each frame
  - Timestamp increment is configurable e.g. 1
  - Available units: s, min, hr, microns, nanometers
  - Position and color of the timestamp are configurable

Video Example

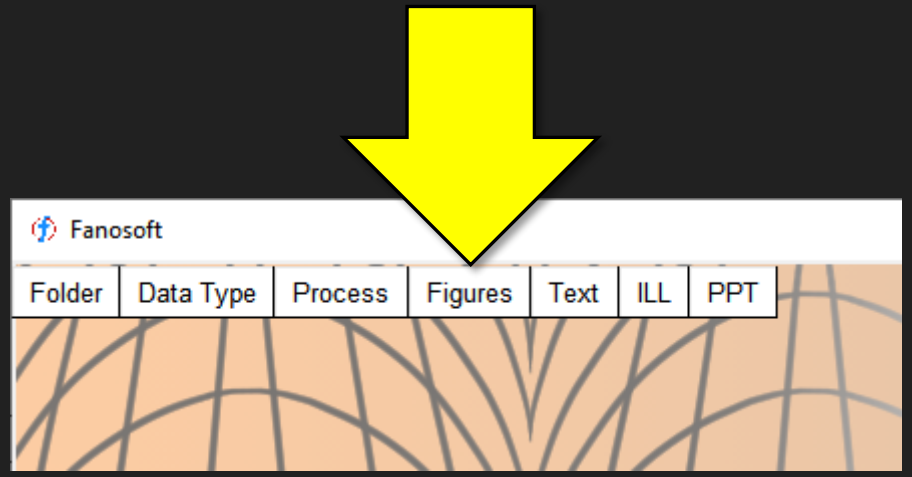


Video



Video in Fanosoft

- Click on Figures

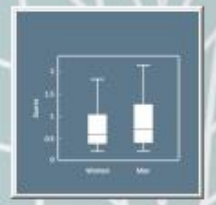
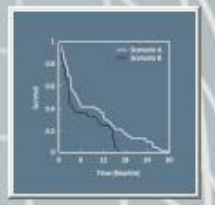


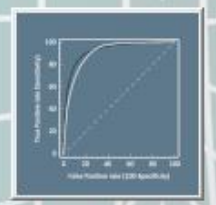
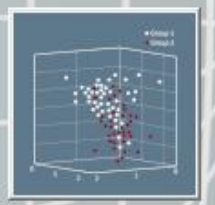
Fanosoft

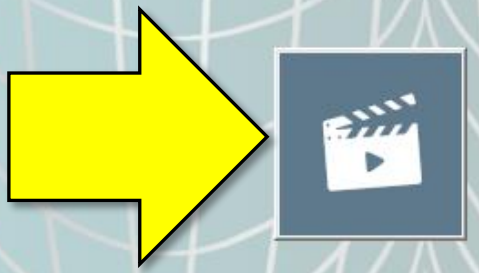
Folder | Data Type | Process | Figures | Text | ILL | PPT

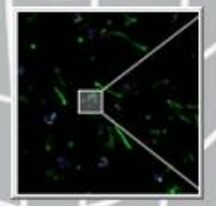
Figures

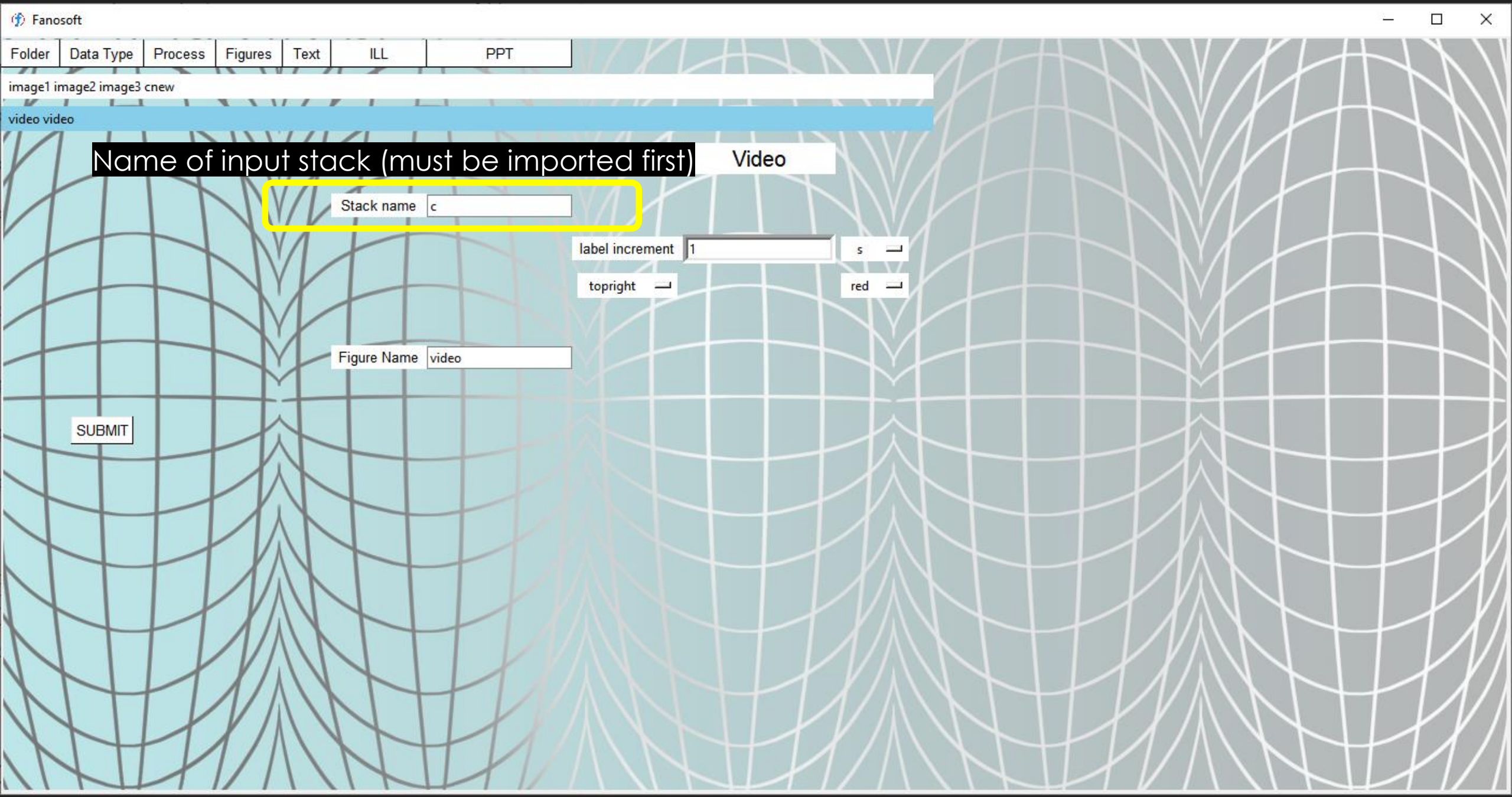



Fanosoft
Folder
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Process
Figures
Text
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image1 image2 image3 cnew
video video
Name of input stack (must be imported first)
Video
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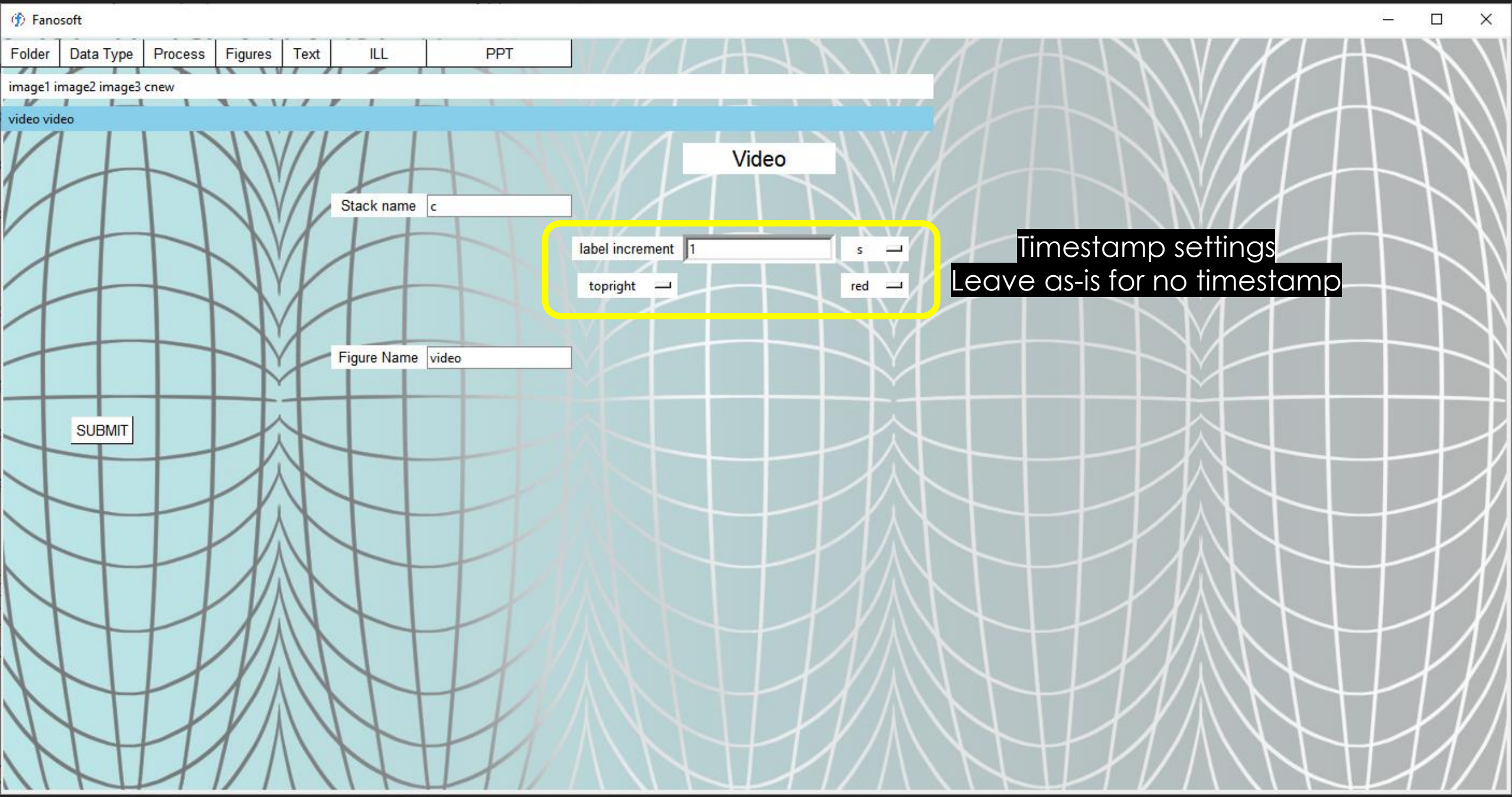
Figure Name
video
SUBMIT


Fanosoft
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Data Type
Process
Figures
Text
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PPT
image1 image2 image3 cnew
video video
Video
Stack name
c
label increment
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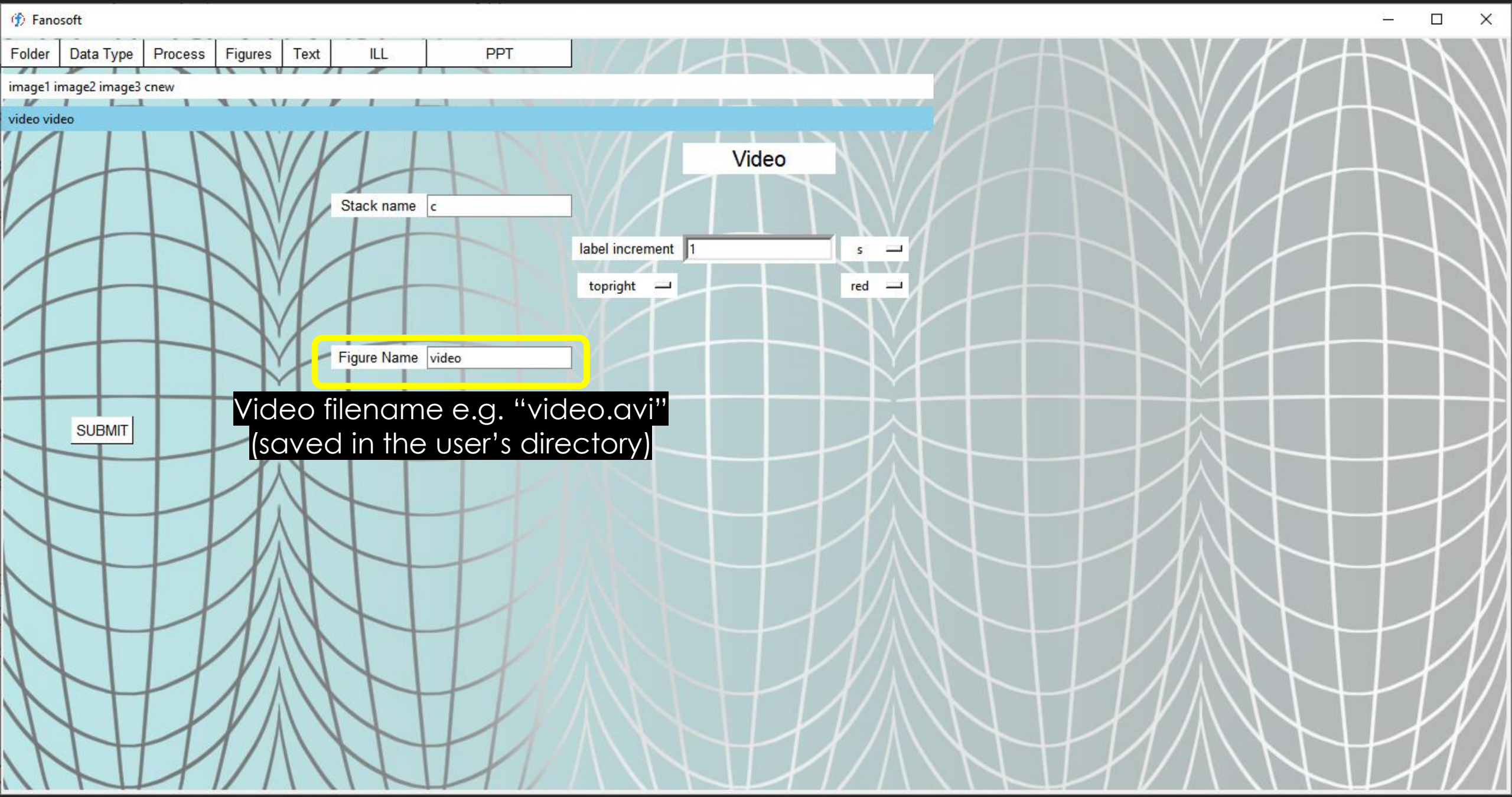
Figure Name
video
SUBMIT
Timestamp settings
Leave as-is for no timestamp


Fanosoft
Folder
Data Type
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Text
ILL
PPT
image1 image2 image3 cnew
video video
Video
Stack name
c
label increment
1
s
topright
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Figure Name
video
SUBMIT
Video filename e.g. “video.avi”
(saved in the user’s directory)

Fanosoft

Folder | Data Type | Process | Figures | Text | ILL | PPT

image1 image2 image3 cnew

video video

Video

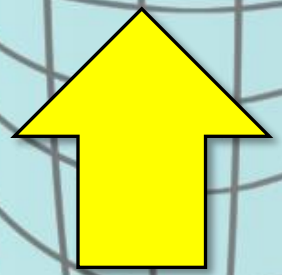
Stack name c

label increment 1 s

topright red

Figure Name video

SUBMIT



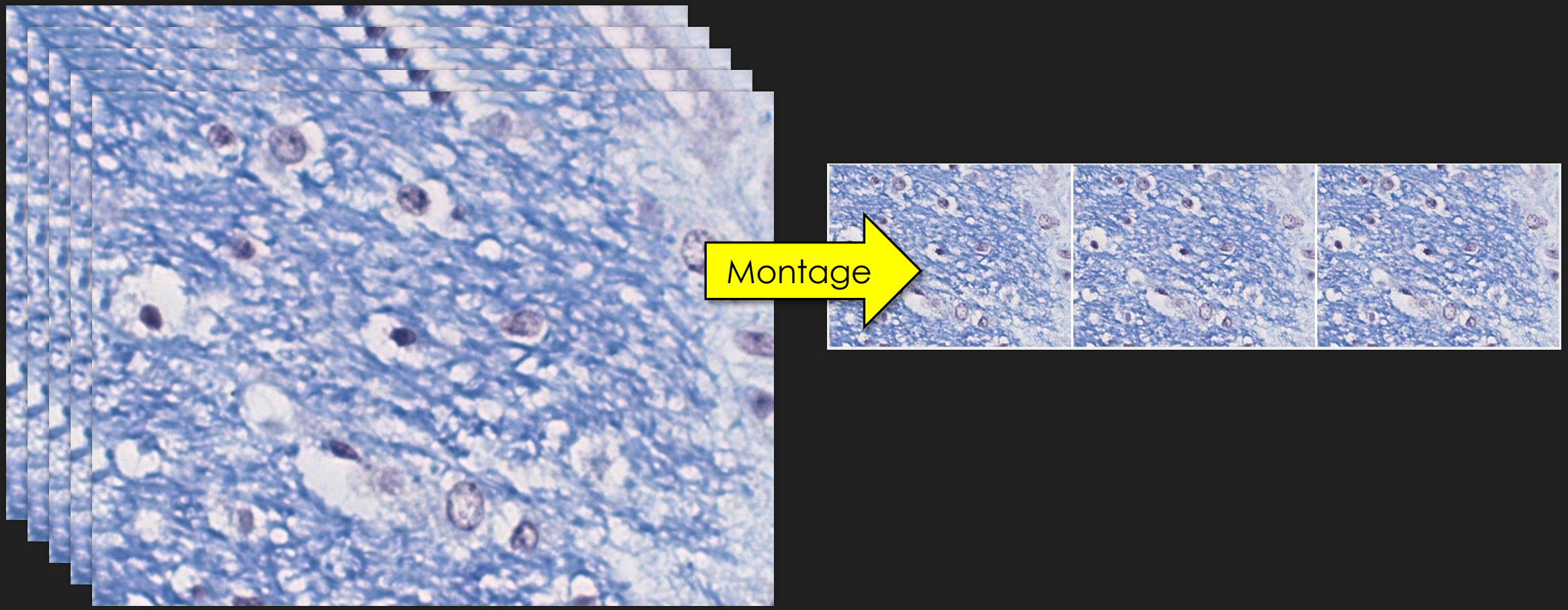
Click on SUBMIT
(No preview available)

Montage

Montage

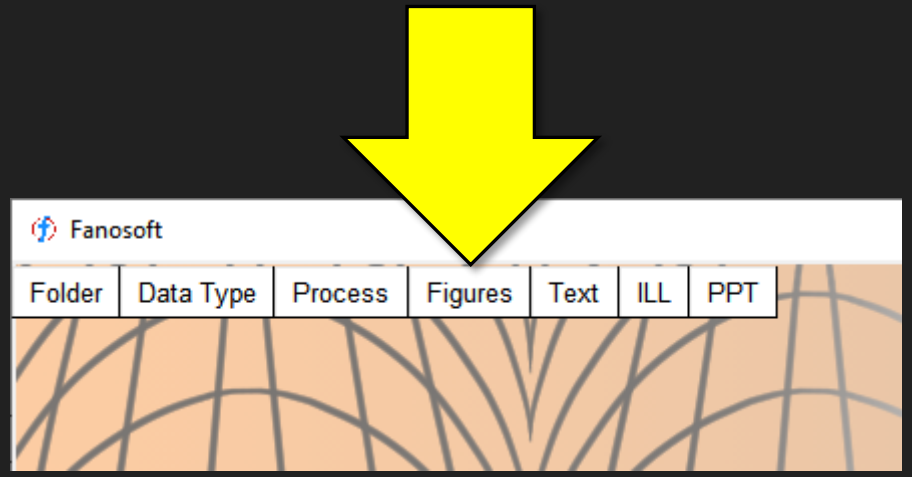
- Create a montage from an image stack
  - A montage is the result of making a composite image by assembling multiples images
- Images are assembled as a matrix array
  - Available formats (rowsxcols): 1x3 1x5 3x3 3x4 4x4 4x5 5x5

Montage Example (1x3)



Montage in Fanosoft

- Click on Figures

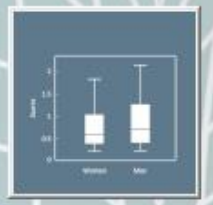
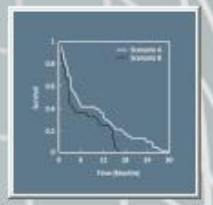


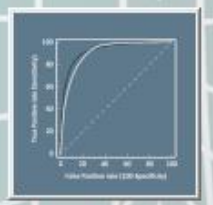
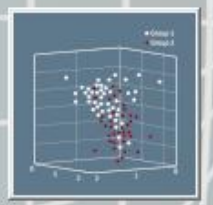
Fanosoft

Folder | Data Type | Process | Figures | Text | ILL | PPT

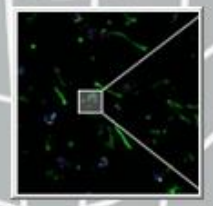
Figures

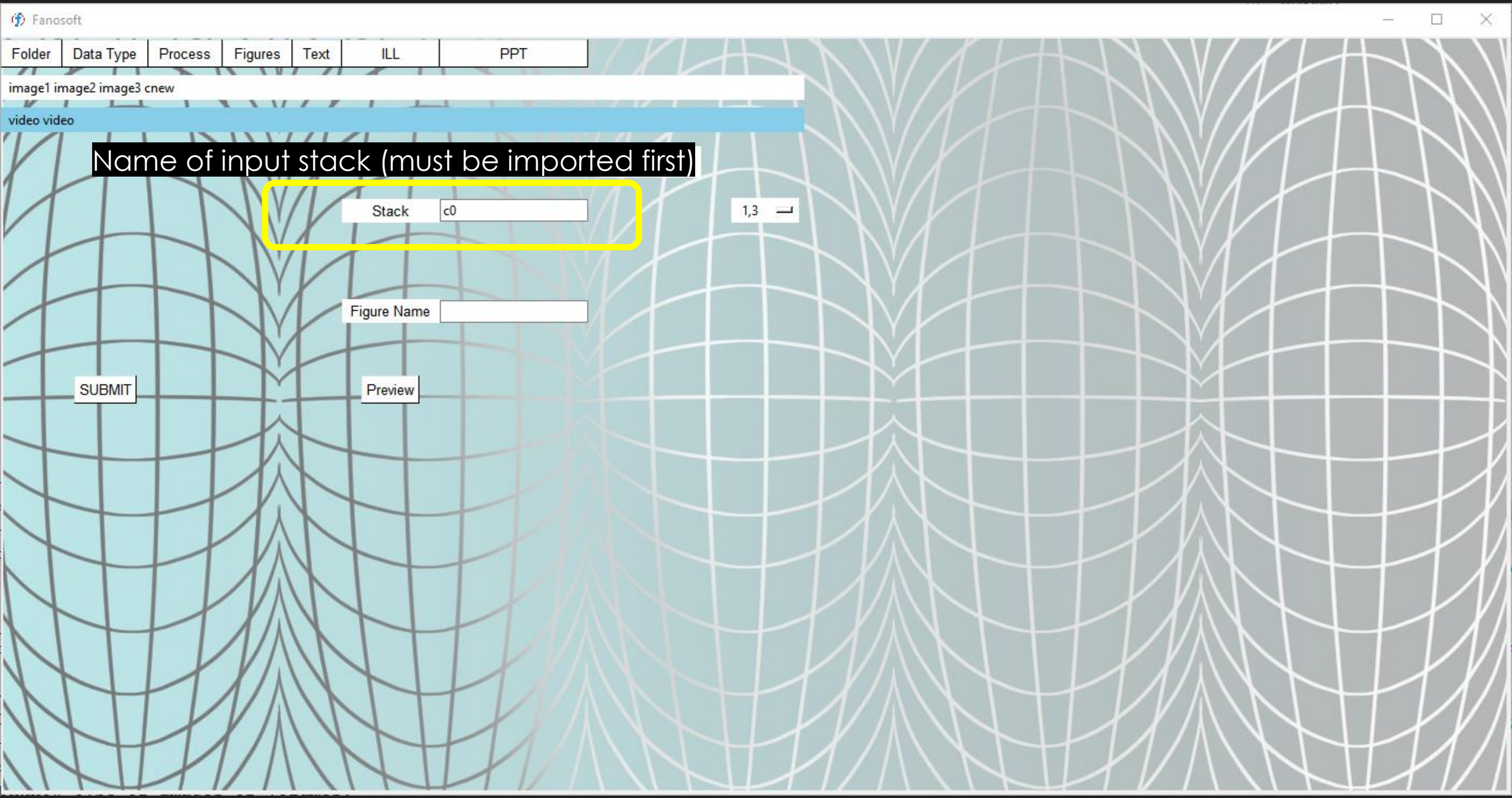





Fanosoft
Folder
Data Type
Process
Figures
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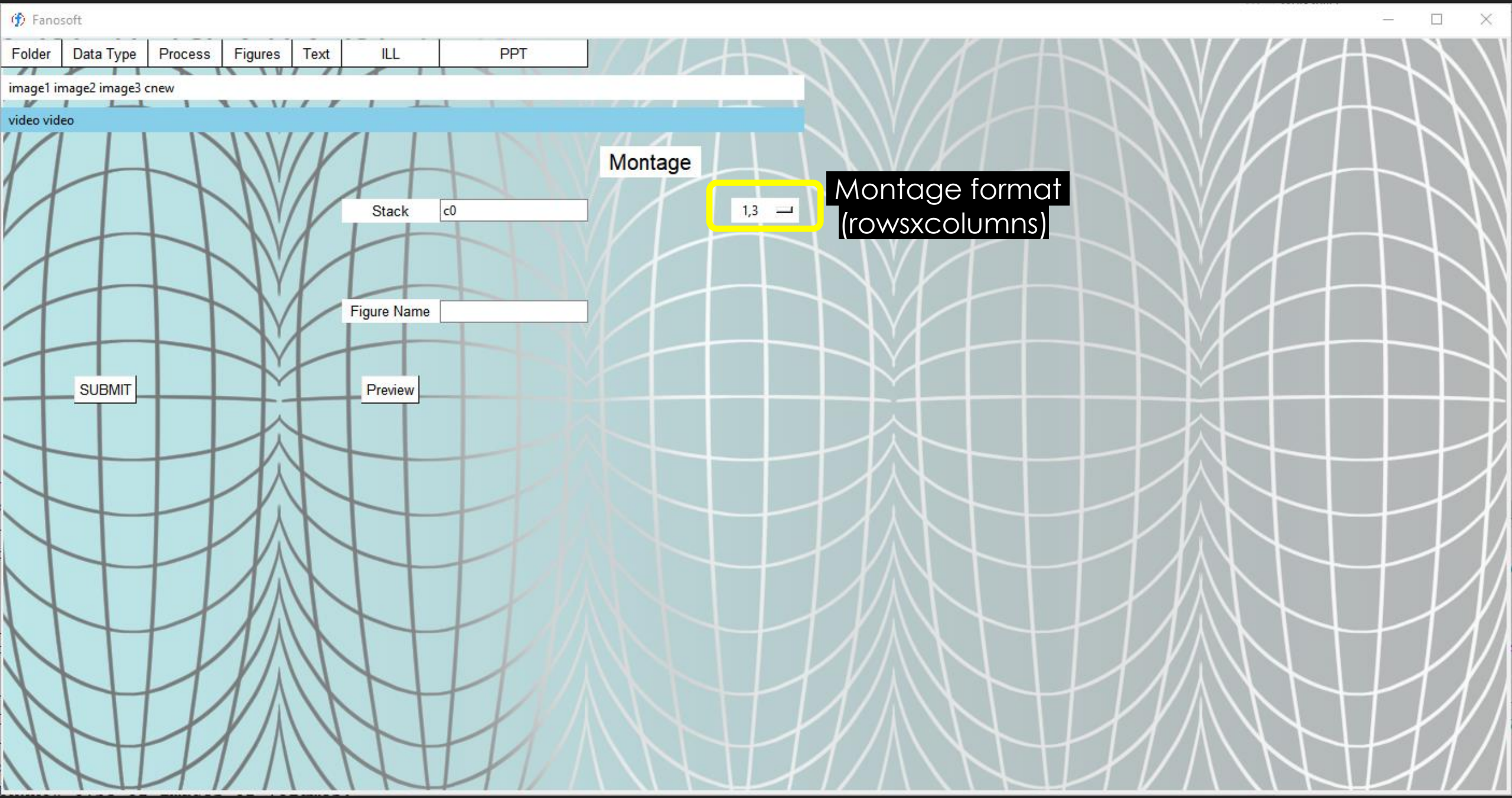
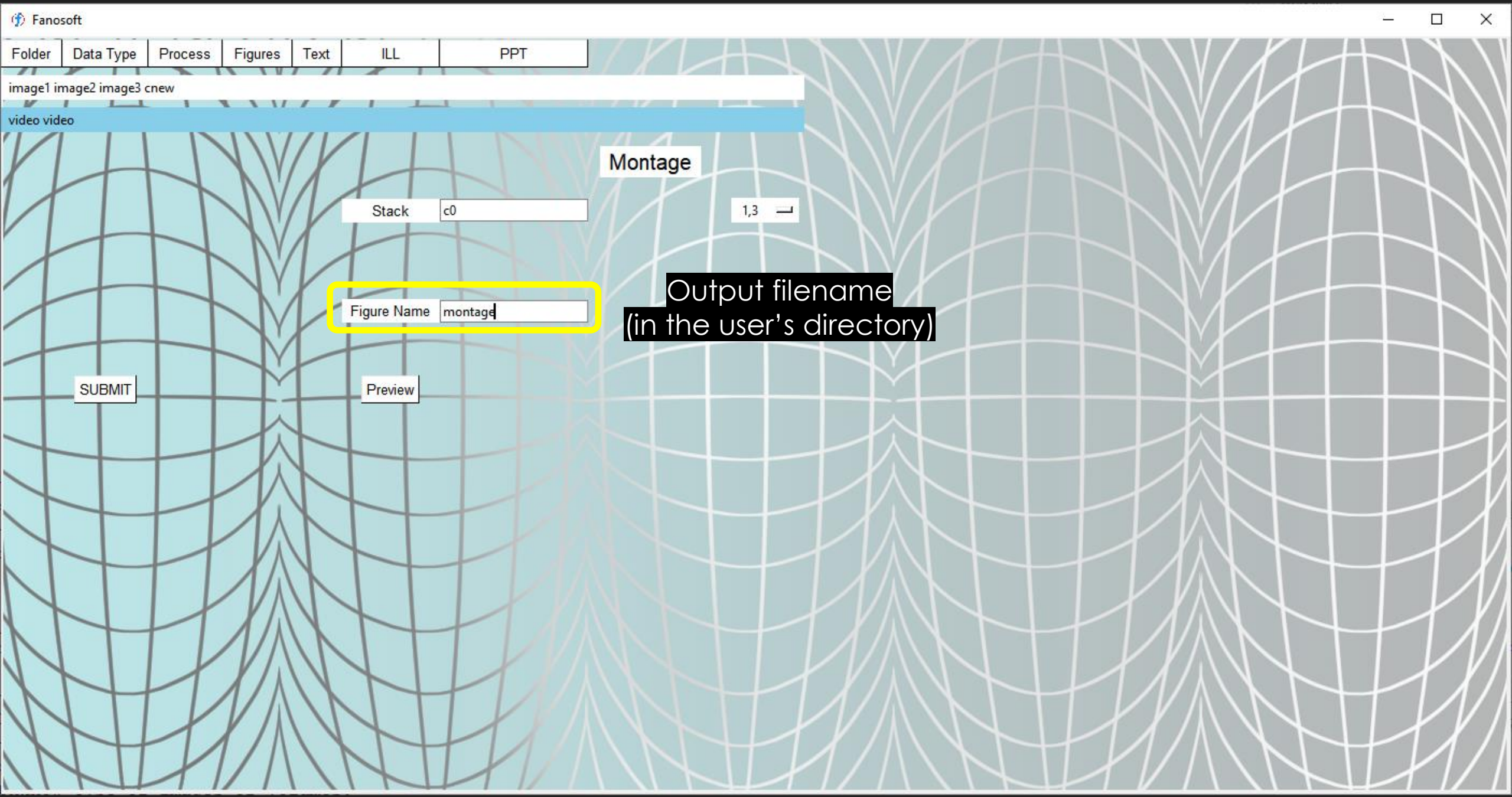
PPT
image1 image2 image3 cnew
video video
Name of input stack (must be imported first)
Stack
c0
1,3
Figure Name
SUBMIT
Preview


Fanosoft
Folder
Data Type
Process
Figures
Text
ILL
PPT
image1 image2 image3 cnew
video video
Montage
Stack
c0
1,3
Montage format (rowsxcolumns)
Figure Name
SUBMIT
Preview


Fanosoft
Folder
Data Type
Process
Figures
Text
ILL
PPT
image1 image2 image3 cnew
video video
Montage
Stack
c0
1,3
Figure Name
montage
Output filename
(in the user's directory)
SUBMIT
Preview

Fanosoft

Folder | Data Type | Process | Figures | Text | ILL | PPT

image1 image2 image3 cnew

video video

Montage

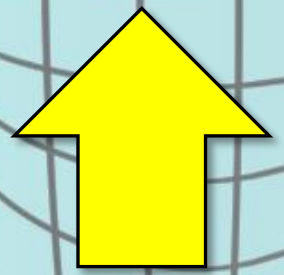
Stack c0

1,3

Figure Name montage

SUBMIT

Preview



Click on SUBMIT or Preview

Montage output

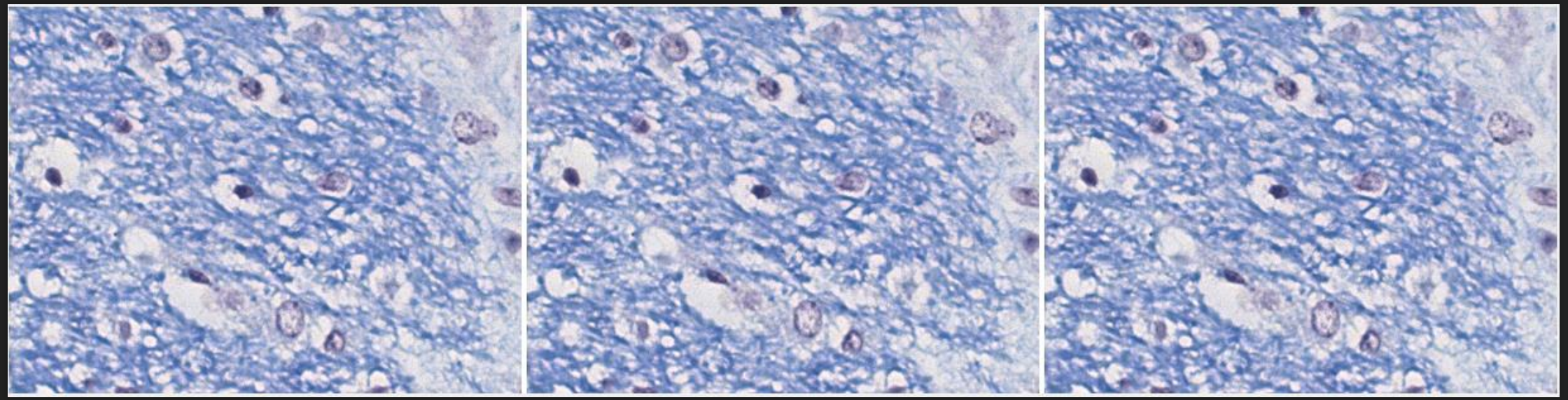


Image Inset

Add an inset to an image

Image Inset Example

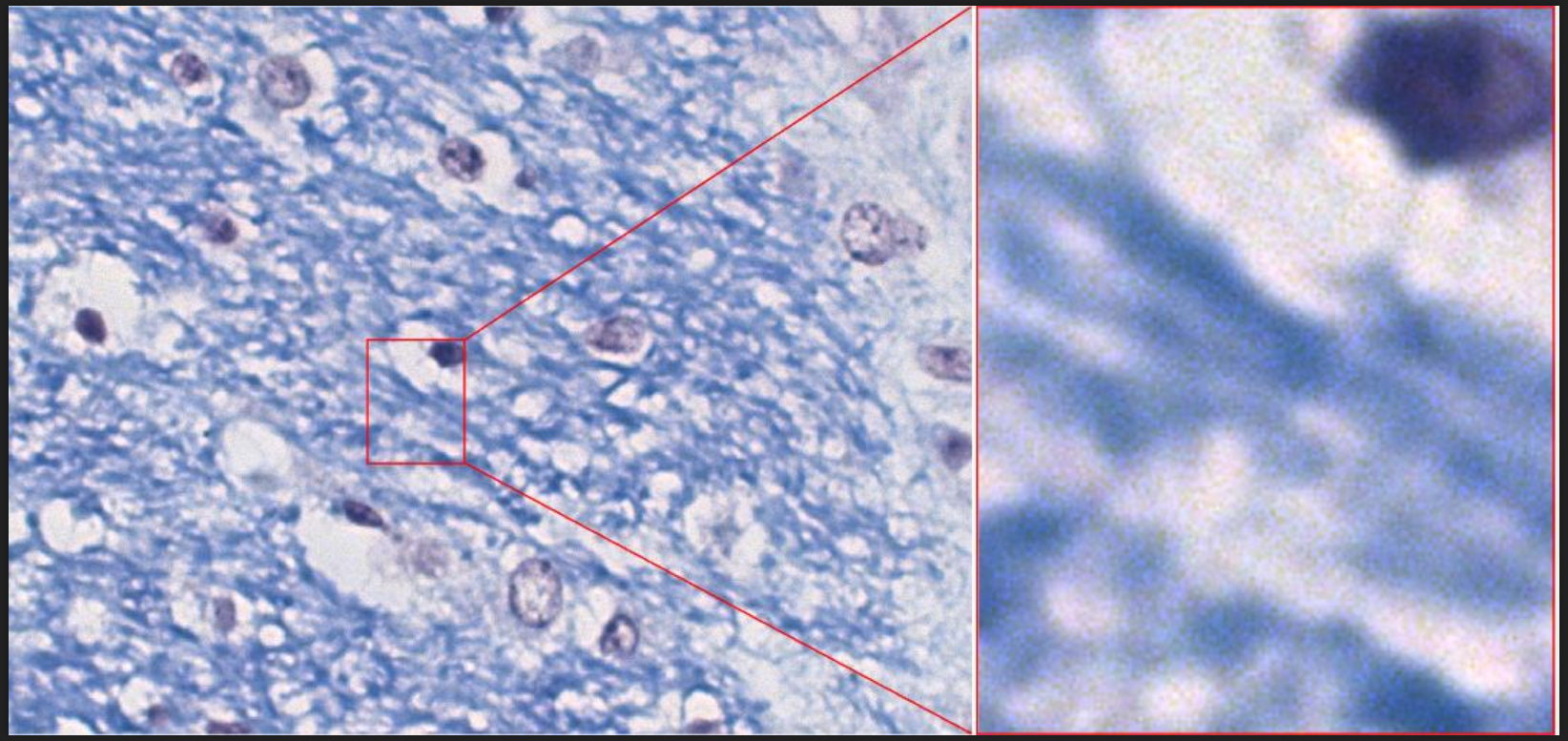
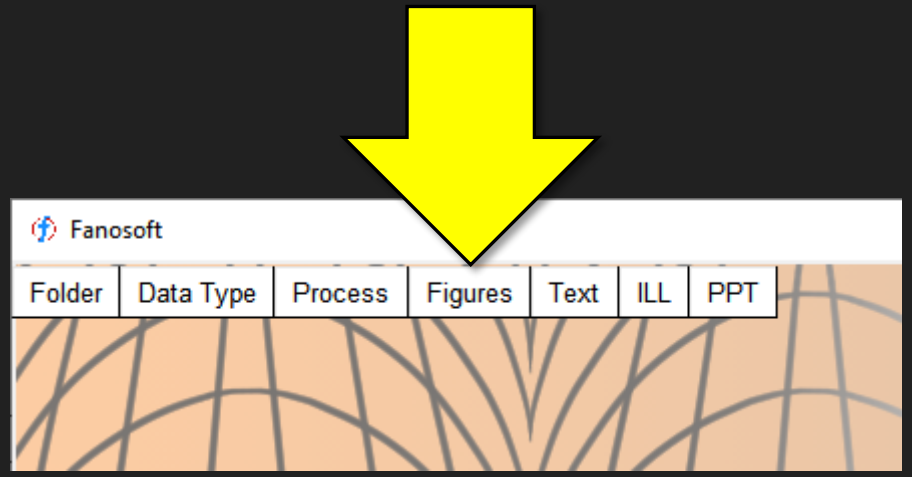


Image Inset in Fanosoft

- Click on Figures

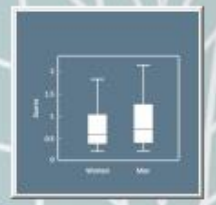
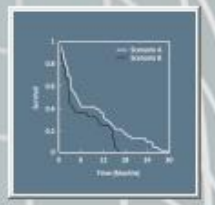


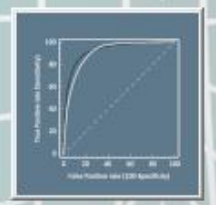
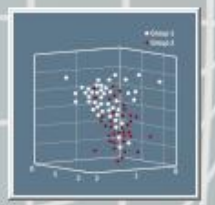
Fanosoft

Folder | Data Type | Process | Figures | Text | ILL | PPT

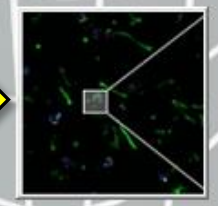
Figures

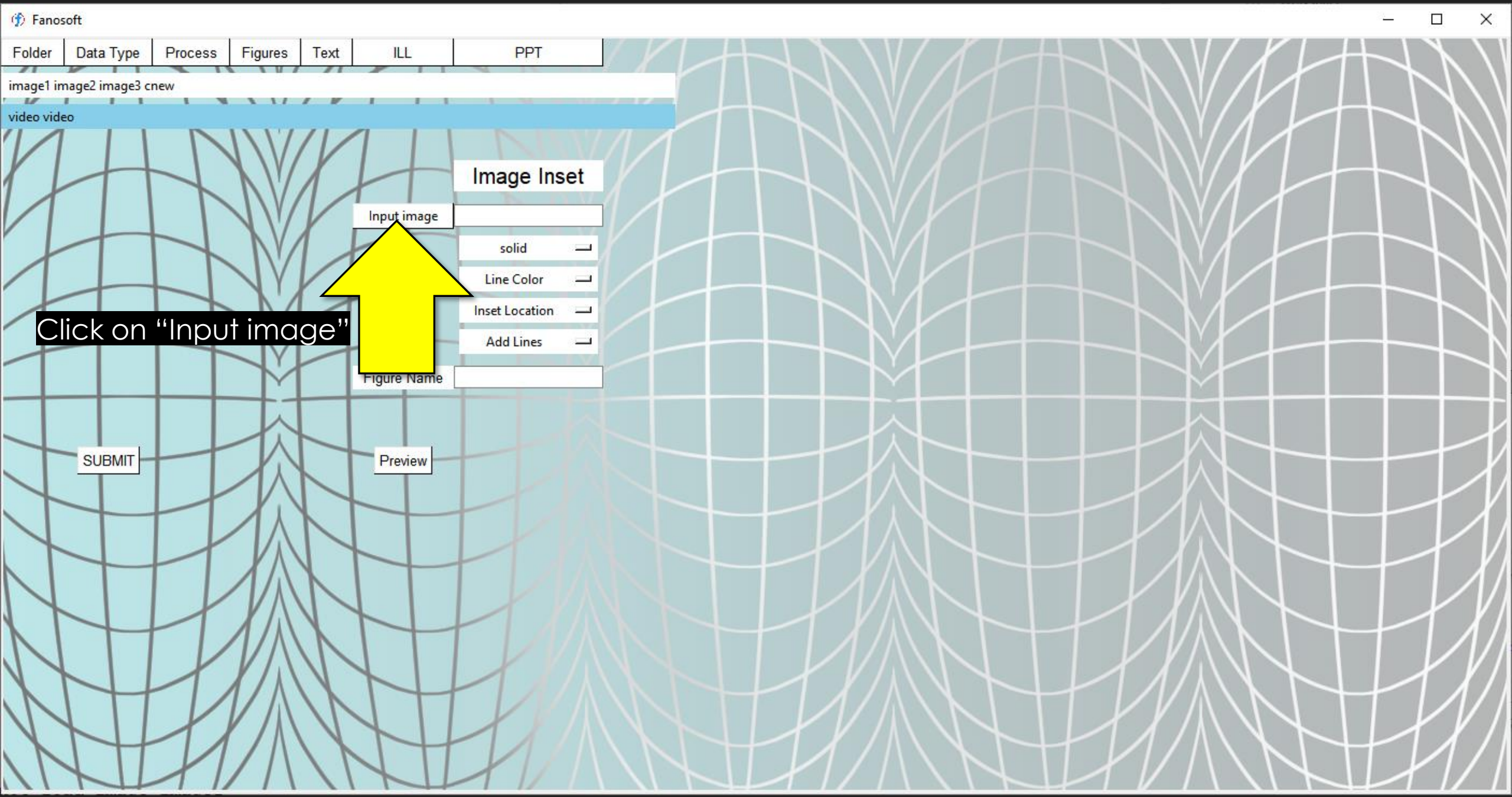


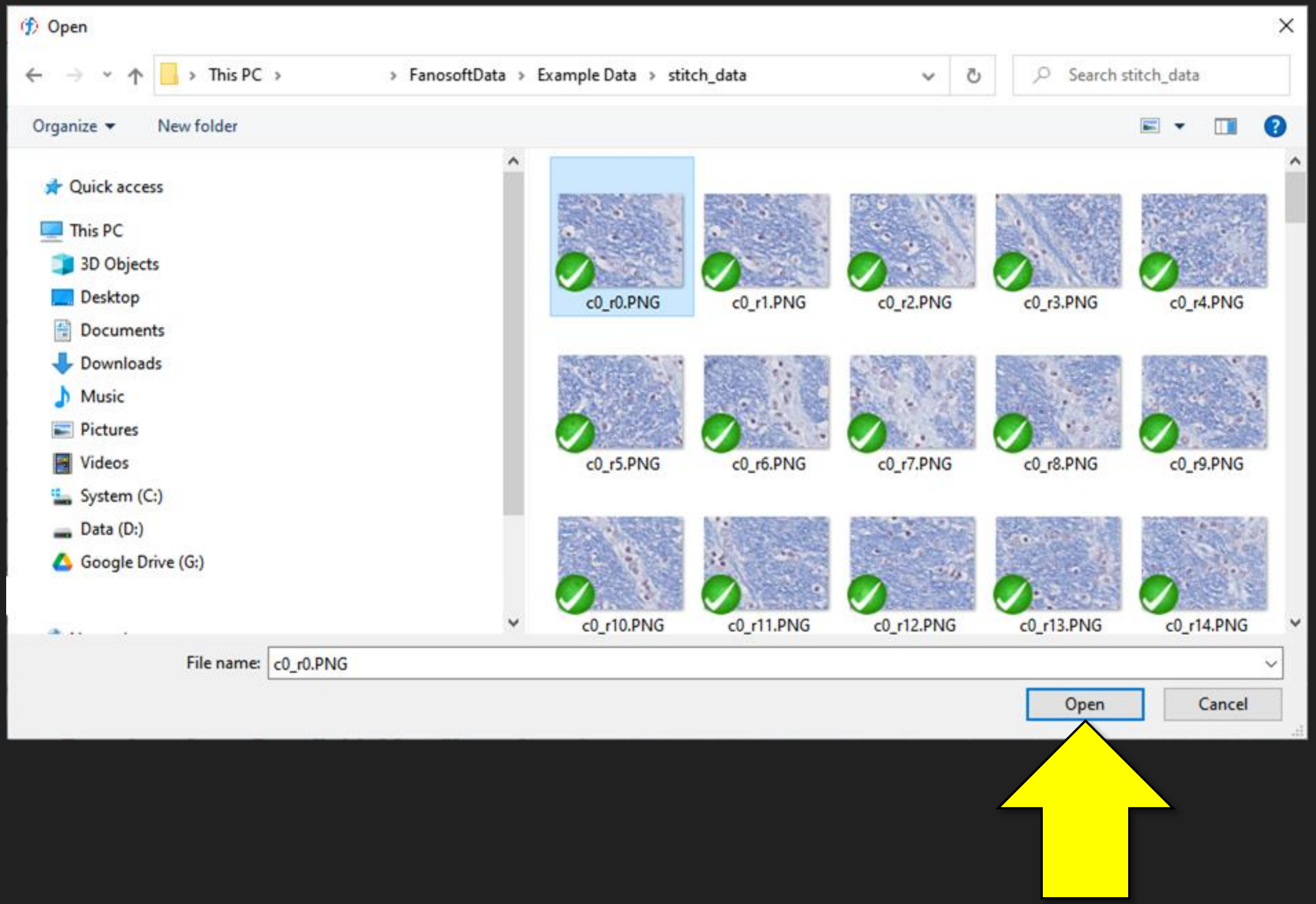



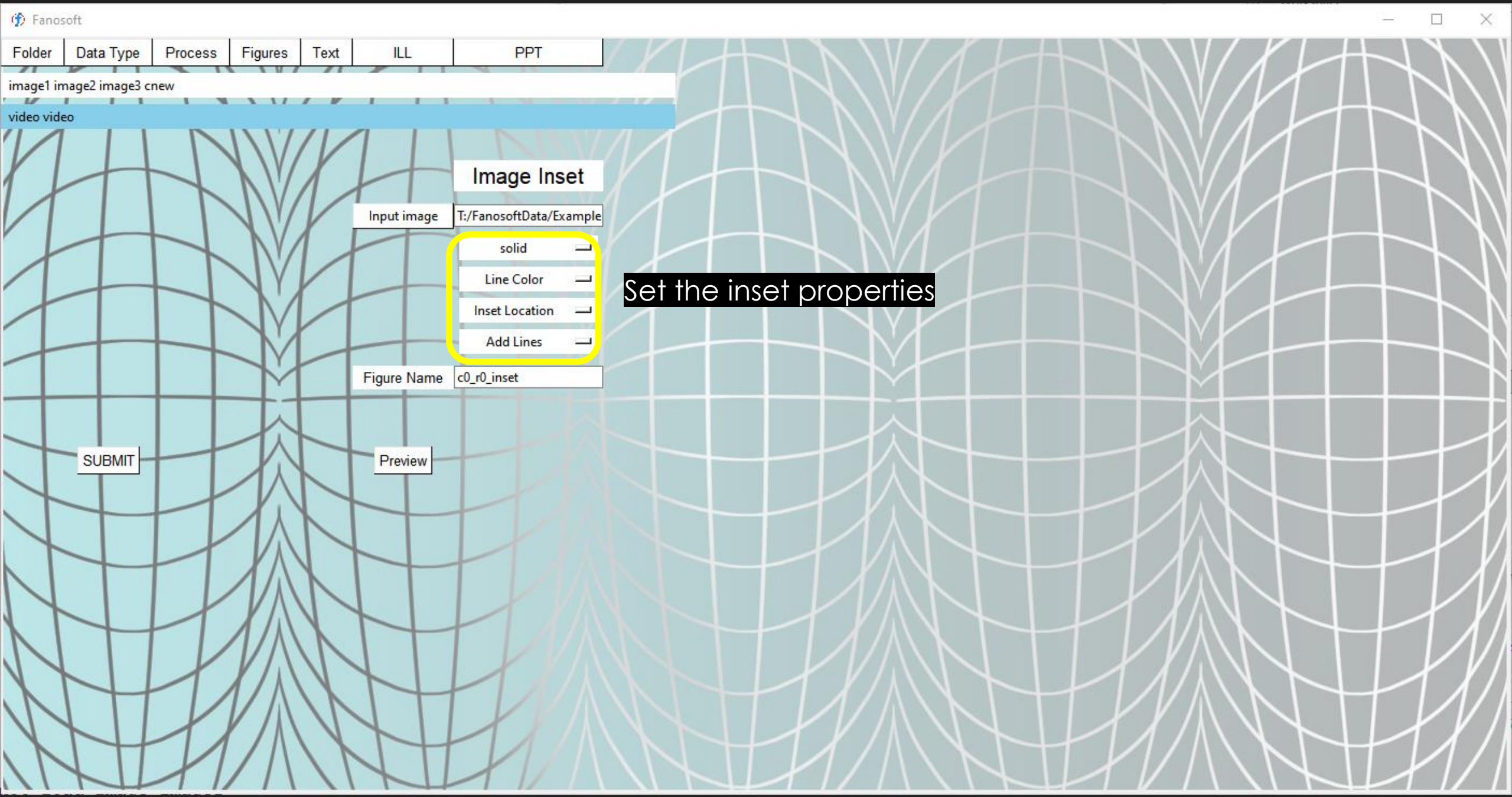



Fanosoft
Folder
Data Type
Process
Figures
Text
ILL
PPT
image1 image2 image3 cnew
video video
Image Inset
Input image
solid
Line Color
Inset Location
Add Lines
Figure Name
Click on “Input image”
SUBMIT
Preview



Select an image and click “Open”


Fanosoft
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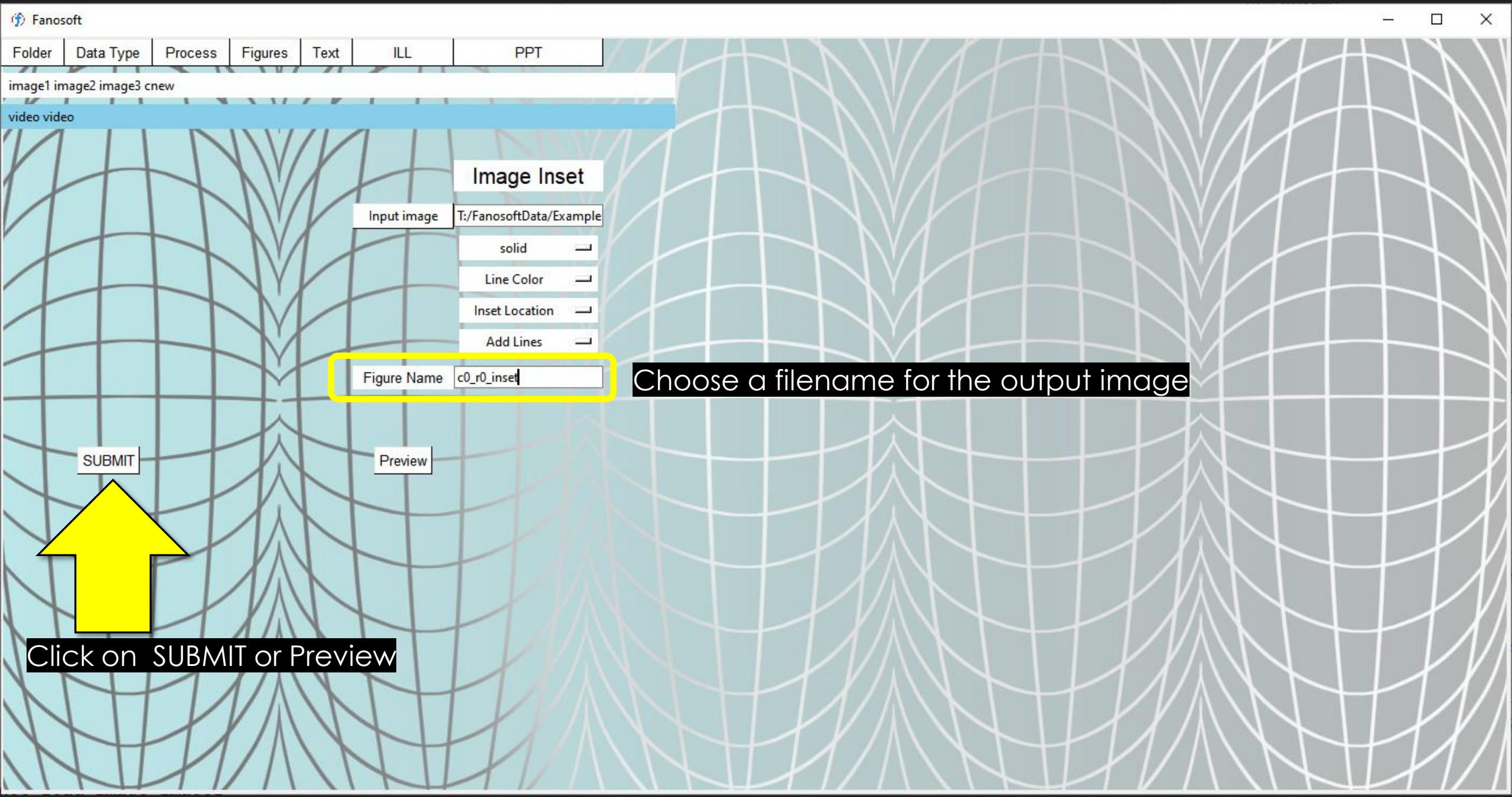
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Line Color
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Add Lines
Figure Name
c0_r0_inset
Choose a filename for the output image
SUBMIT
Preview
Click on SUBMIT or Preview

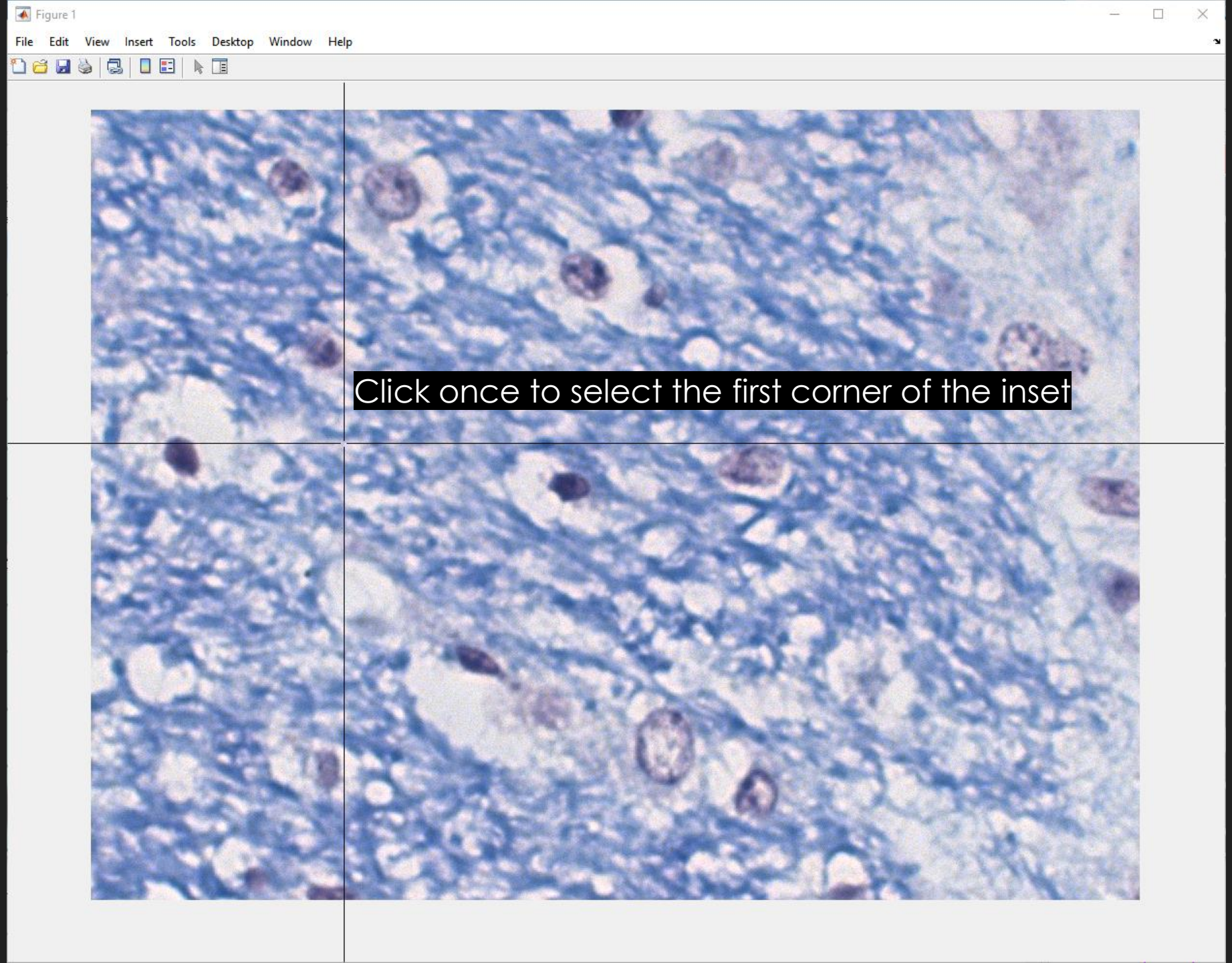
Figure 1
File Edit View Insert Tools Desktop Window Help
Click once to select the first corner of the inset

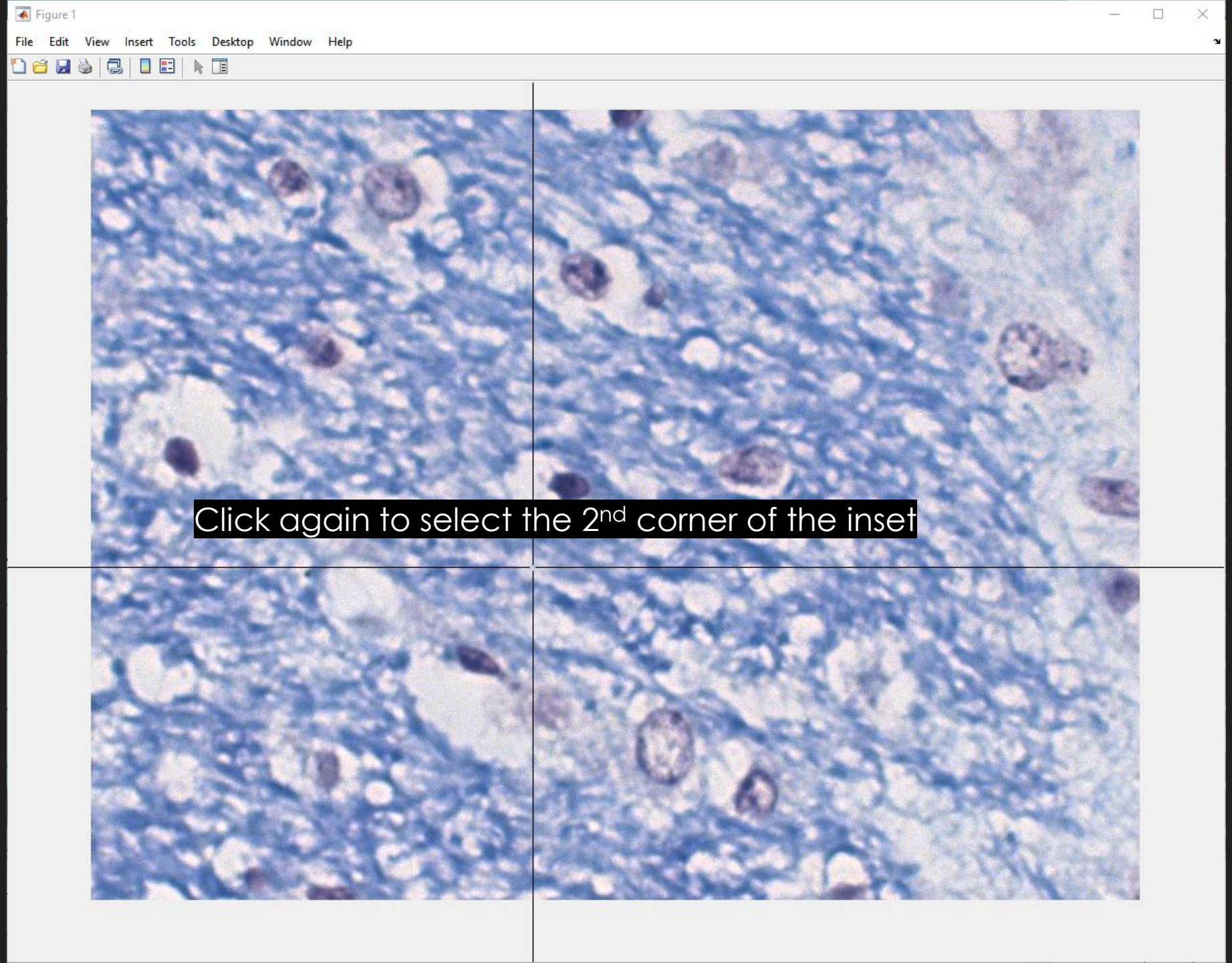
Figure 1
File Edit View Insert Tools Desktop Window Help
Click again to select the 2nd corner of the inset

Image Inset Output Example