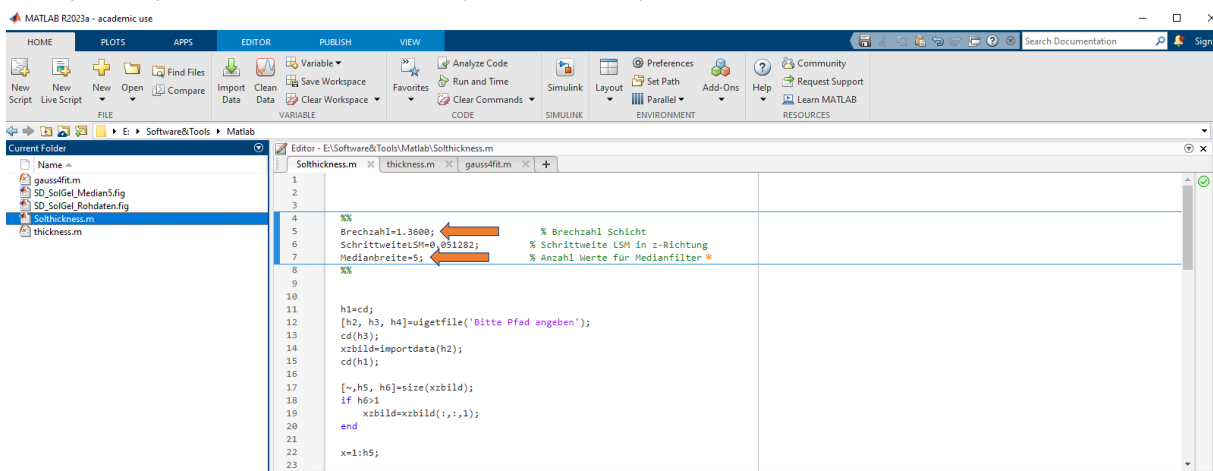


1. Image export from LEXT



Possible format: *.tif / *.bmp

2. Specify refractive index (Brechzahl) and run calculation



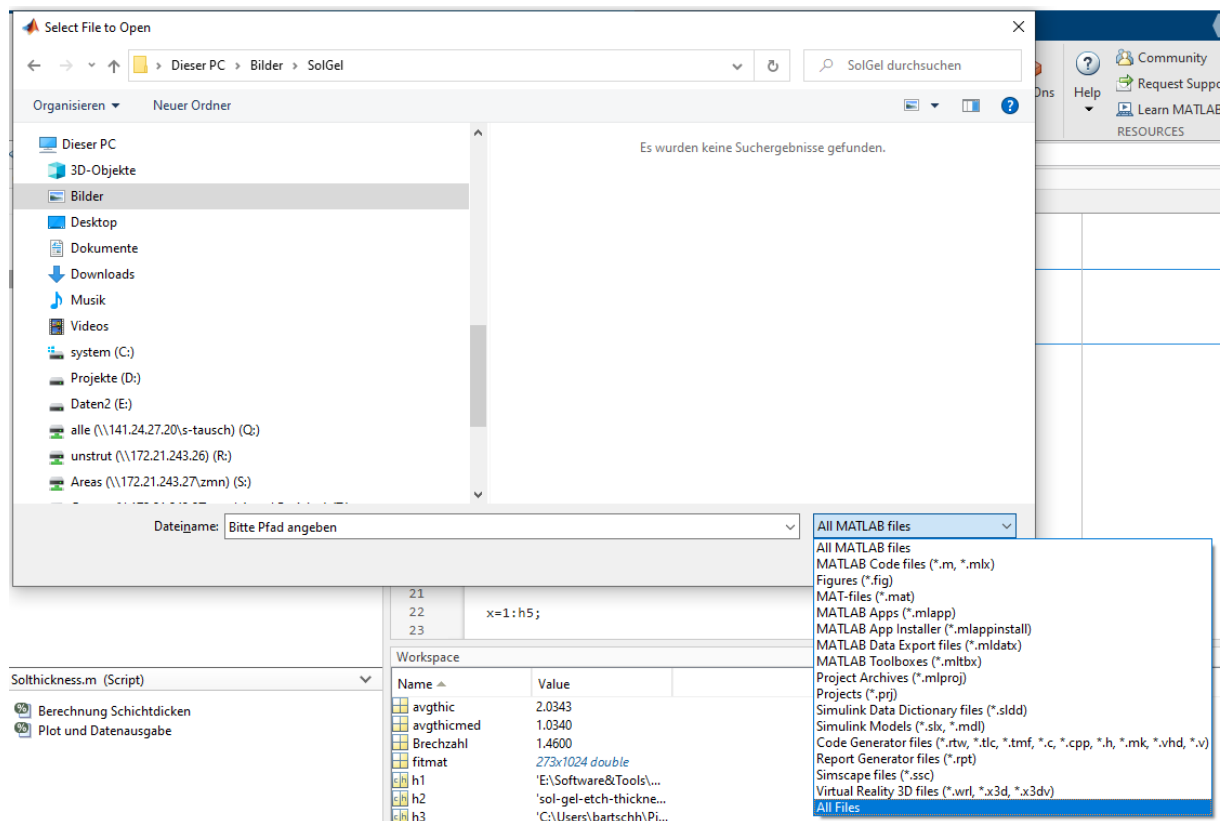
*see 5. Setting of median value (%Anzahl Werte für Medianfilter)

If the refractive index is unknown, measure a line on high and low level of a step and compare the difference depending on the refractive index with the step height.

Point	Step height [μm]	Used refractive index (Brechzahl)	Median low thickness <i>avgmed</i> [μm]	Median high thickness <i>avgmed</i> [μm]	<i>avgmed_{high}</i> - <i>avgmed_{low}</i> [μm]
1					

>> if the difference is equal to the step height, the refractive index is correct.

3. Select image file



... wait... ... wait..... wait..... wait..... wait...

Coffee break...



... the result appears!

4. Results:

Name	Value
avgthic	1.8949
avgthicmed	0.9632
Brechzahl	1.3600
fitmat	273x1024 double
h1	'E:\Software&Tools\...
h2	'sol-gel-etch-thickne...
h3	'C:\Users\bartshh\...
h4	17
h5	1024
h6	3

avgthic: mean of the thickness values based on Gaussian fit (Fig. 1)

avgthicmed: thickness value based on median fit (Fig. 1), see 5. Setting of median value (%Anzahl Werte für Medianfilter)

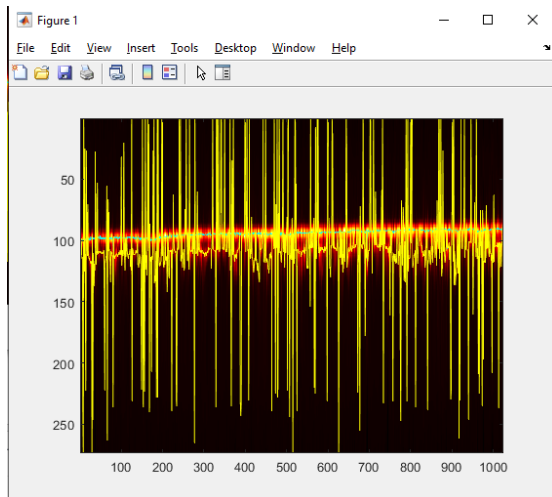


Figure 1: Graphic output Gaussian fit

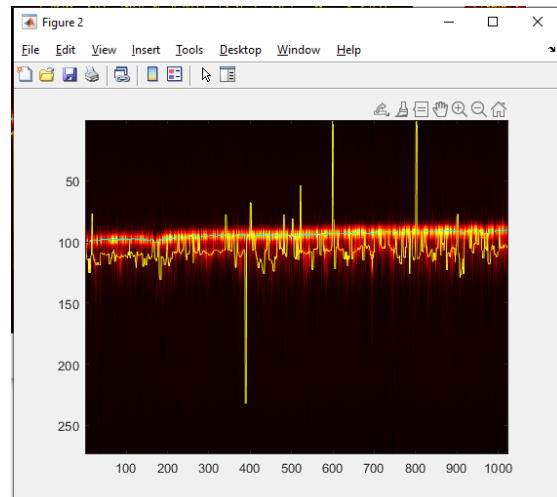


Figure 2: Graphic output median fit

```

Command Window

Standardabweichung median
    0.9769

done
>> Solthickness
fit in progress...
Elapsed time is 197.971847 seconds.
Mittlere Dicke
    1.8949

Standardabweichung
    3.0247

Mittlere Dicke median
    0.9247

Standardabweichung median
    0.6918

done
>> Solthickness
fit in progress...
Elapsed time is 198.789288 seconds.
Mittlere Dicke
    1.8949

Standardabweichung
    3.0247

Mittlere Dicke median
    0.9393

Standardabweichung median
    0.4586

```

Figure 3: Output in Command window

5. Setting of median value (%Anzahl Werte für Medianfilter)

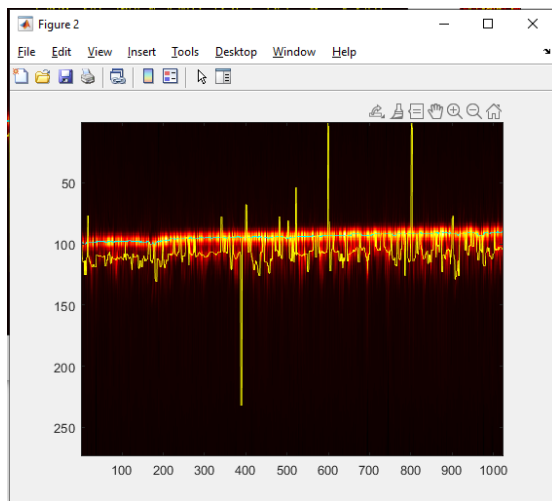


Figure 4: Medianbreite = 5

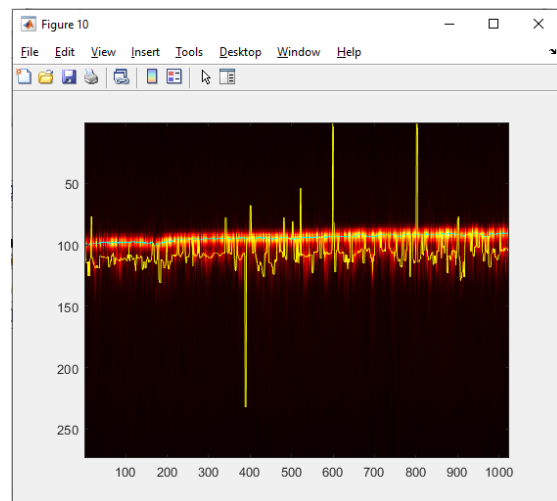


Figure 5: Medianbreite = 30

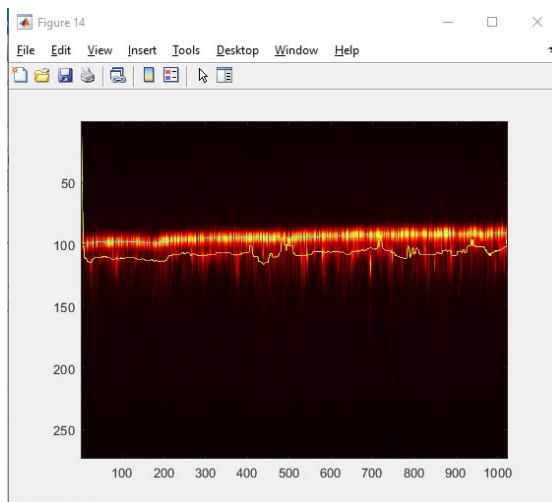


Figure 6: Medianbreite = 40

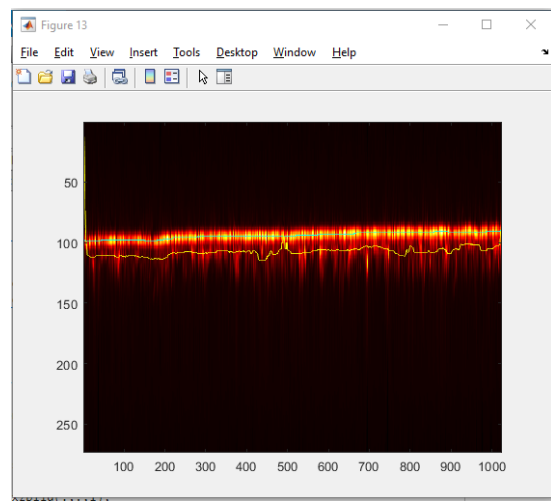


Figure 7: Medianbreite = 50

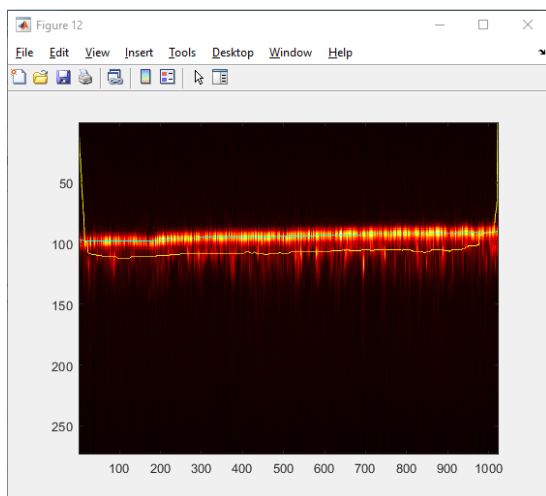


Figure 8: Medianbreite = 200