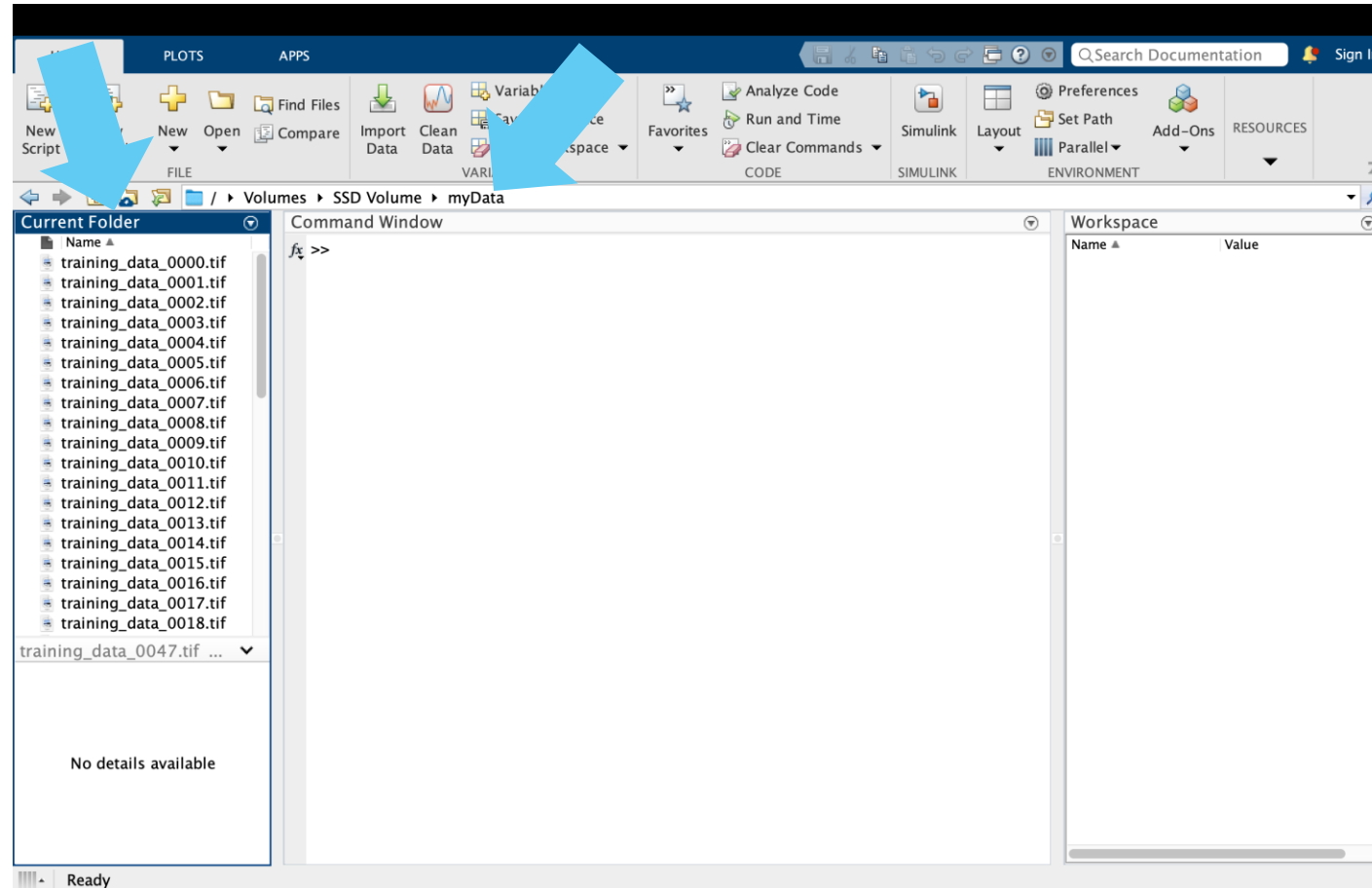


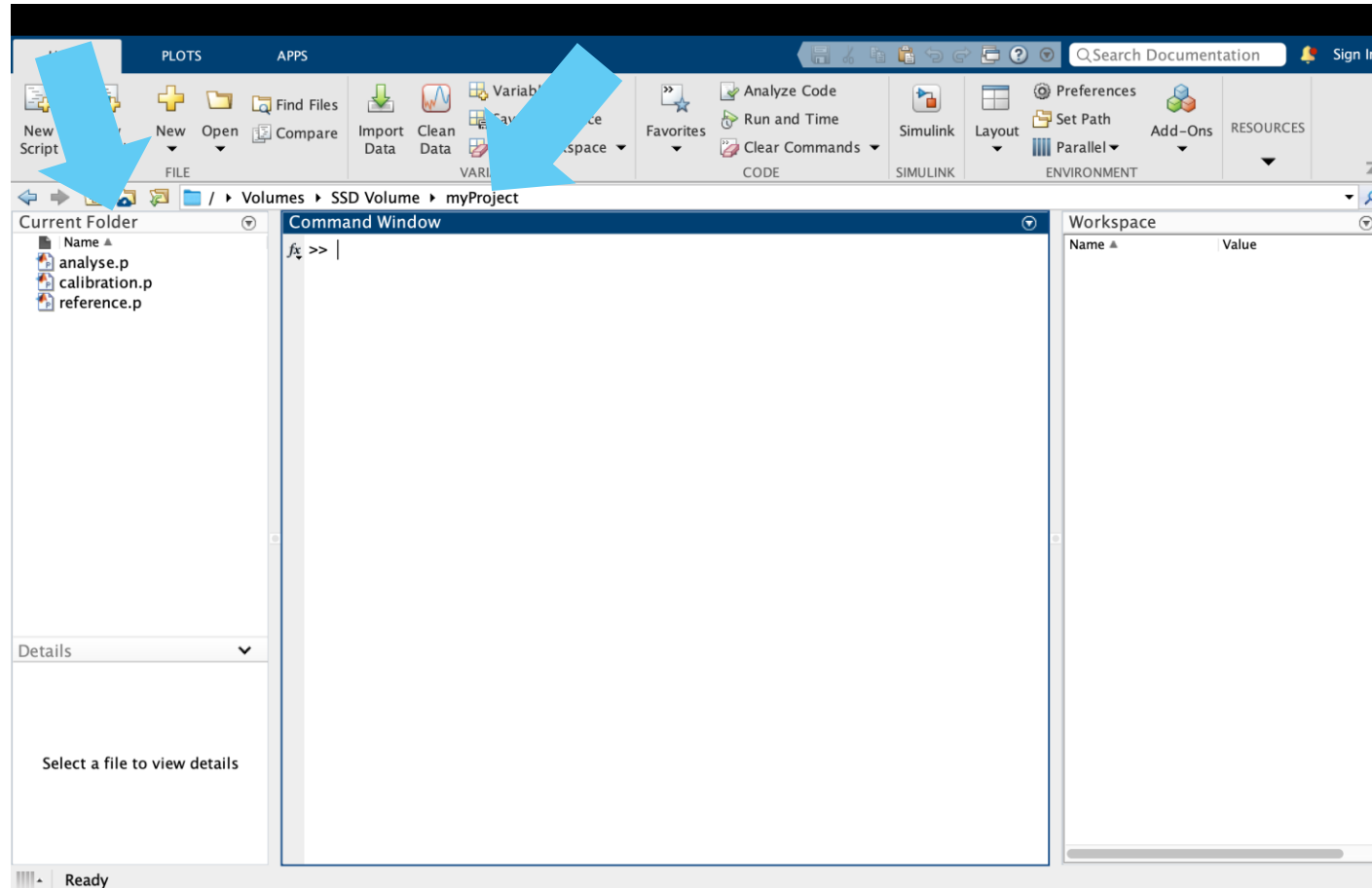
# exCaking

A guide for accurate elastic strain analysis  
using polycrystal diffraction data

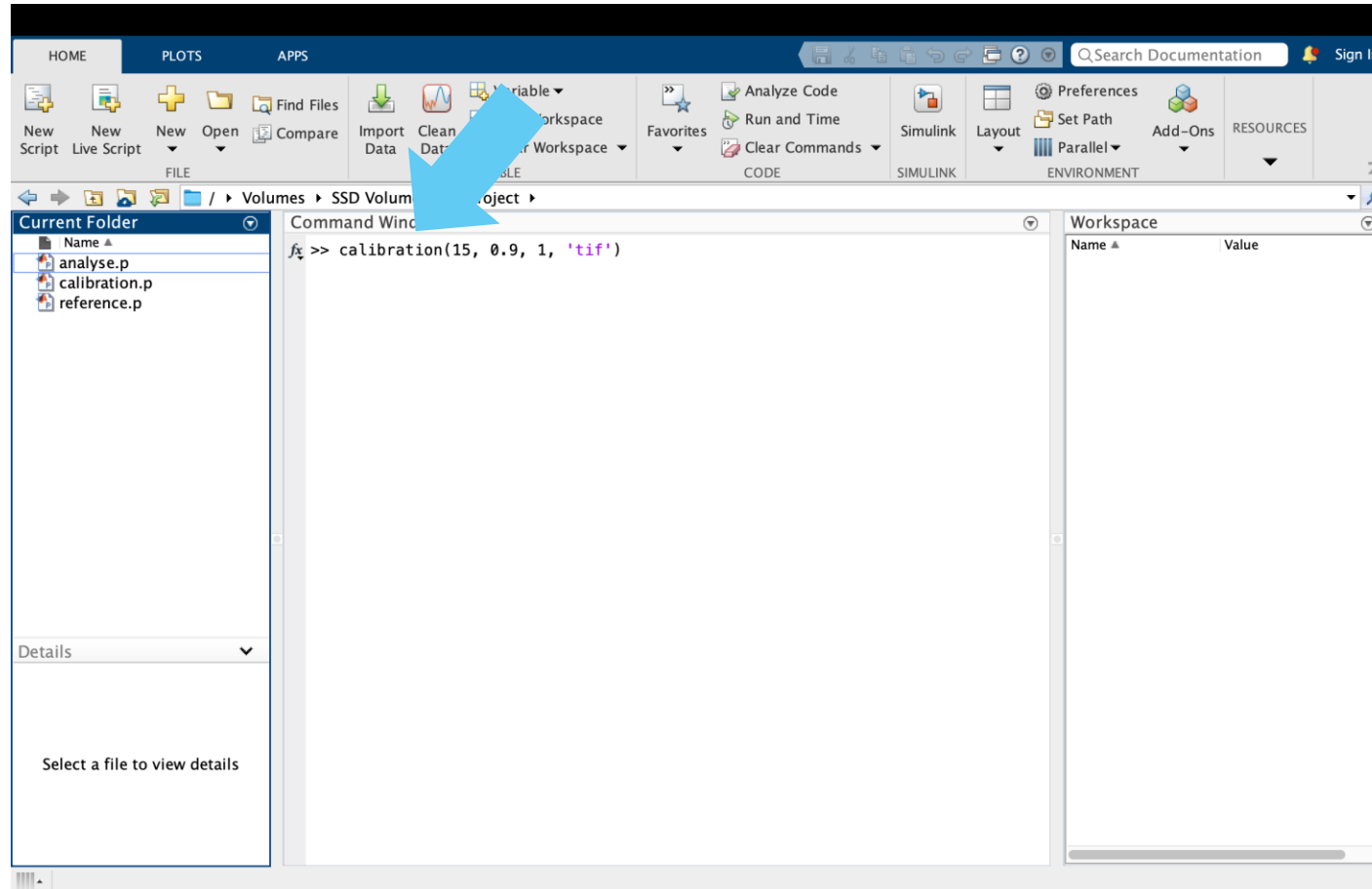
# Place polycrystal diffraction data in a folder



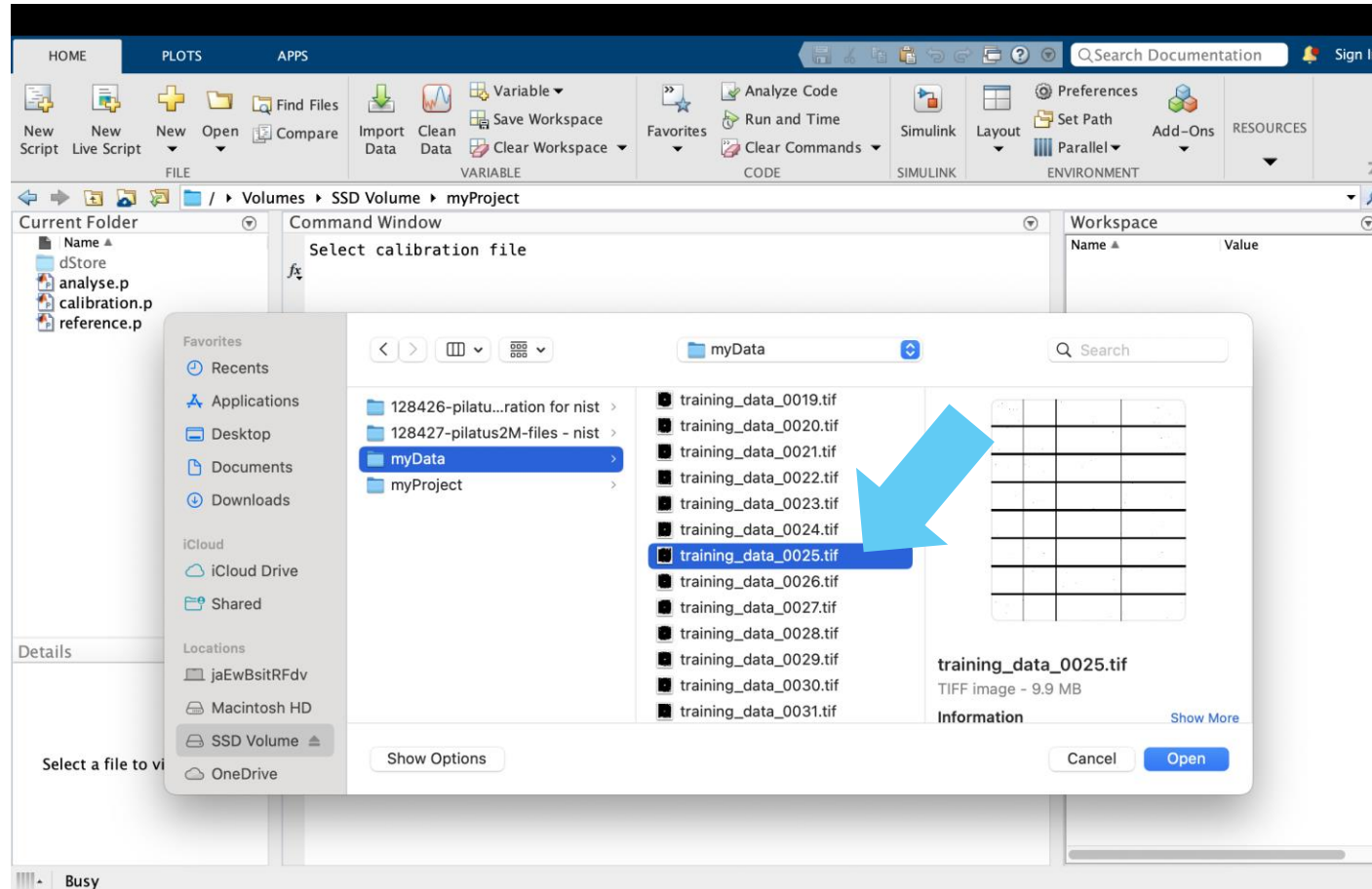
# Copy exCaking functions to project folder



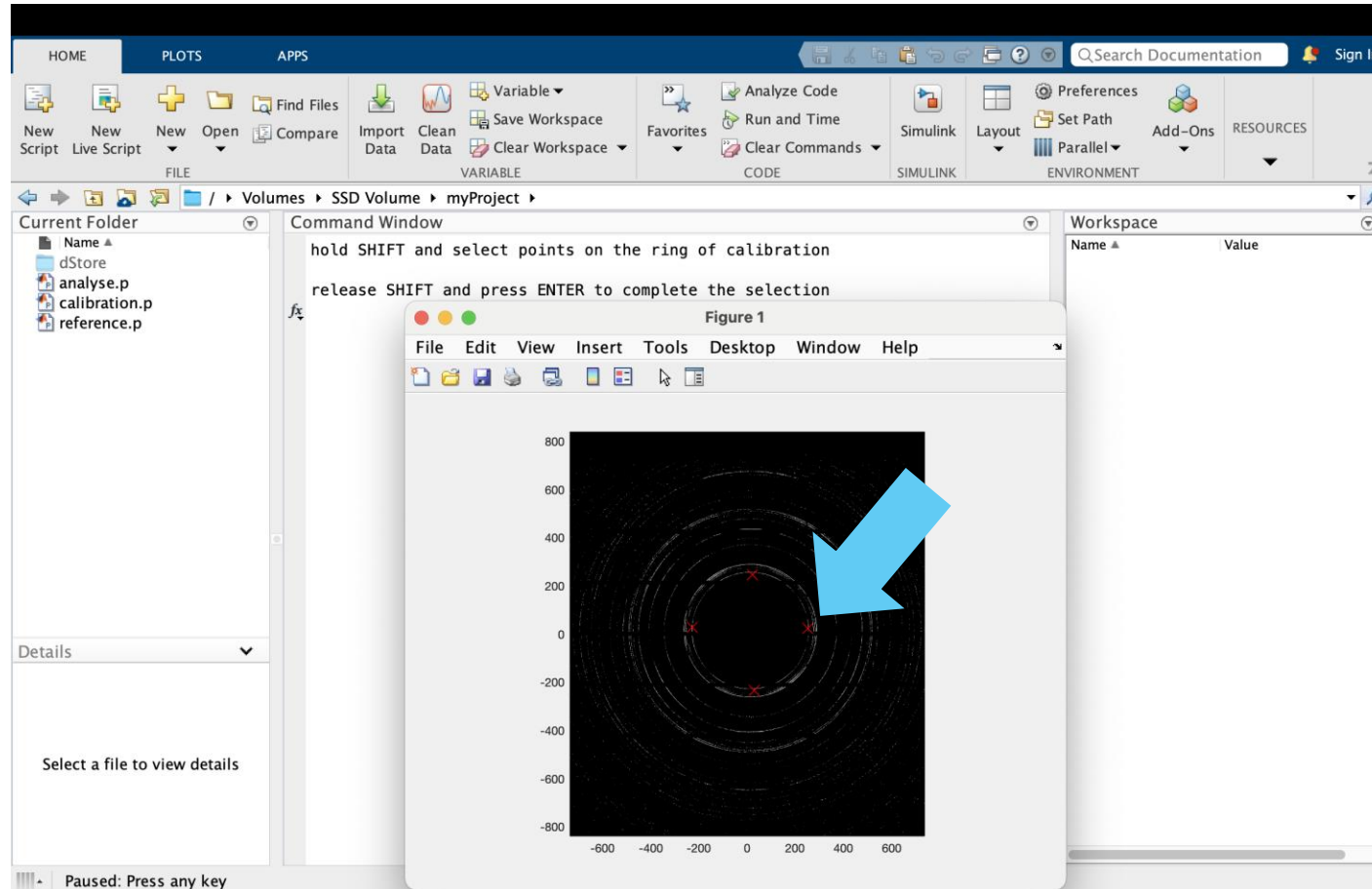
# Initiate **calibration** command



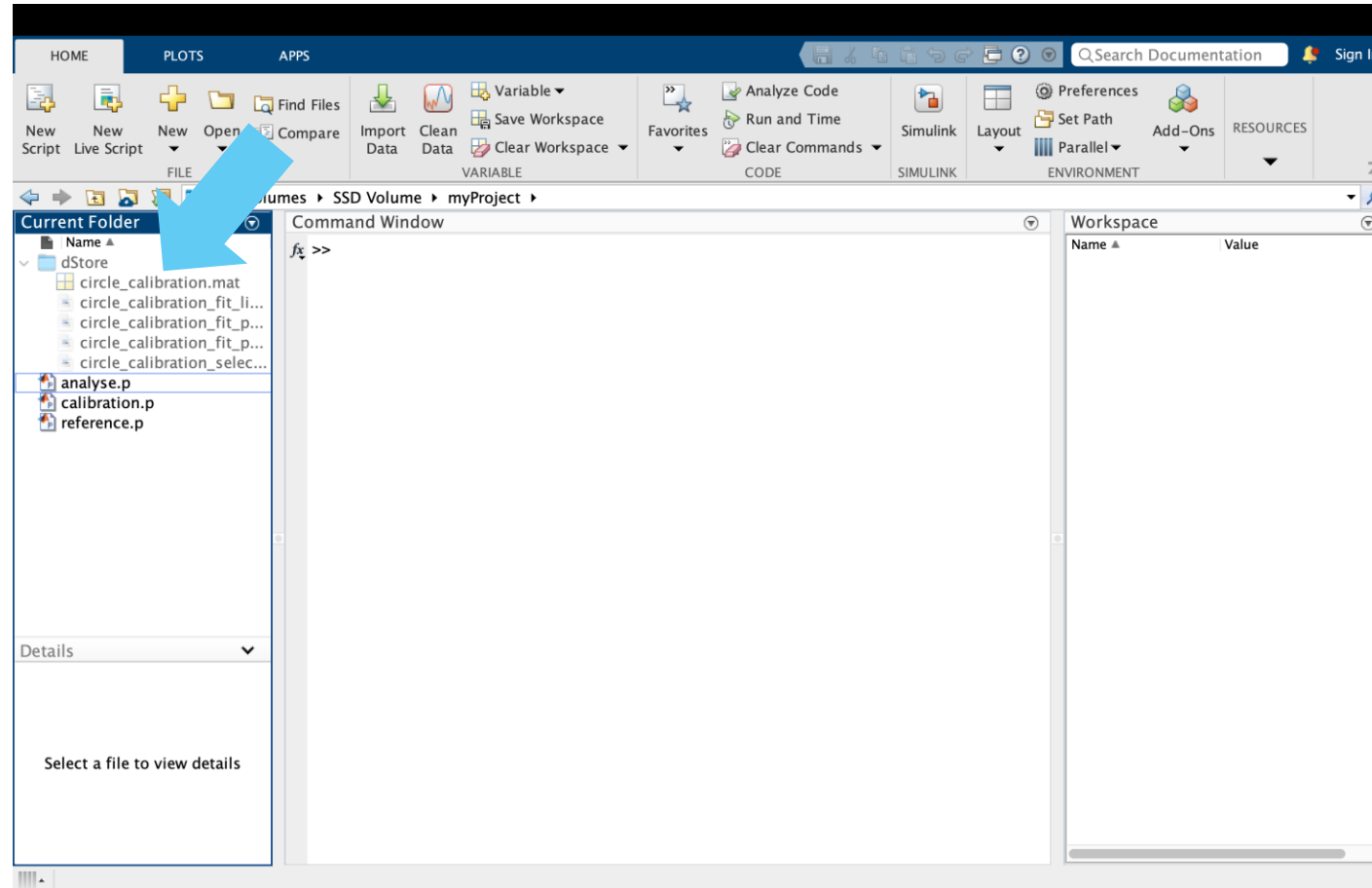
# Select calibration file



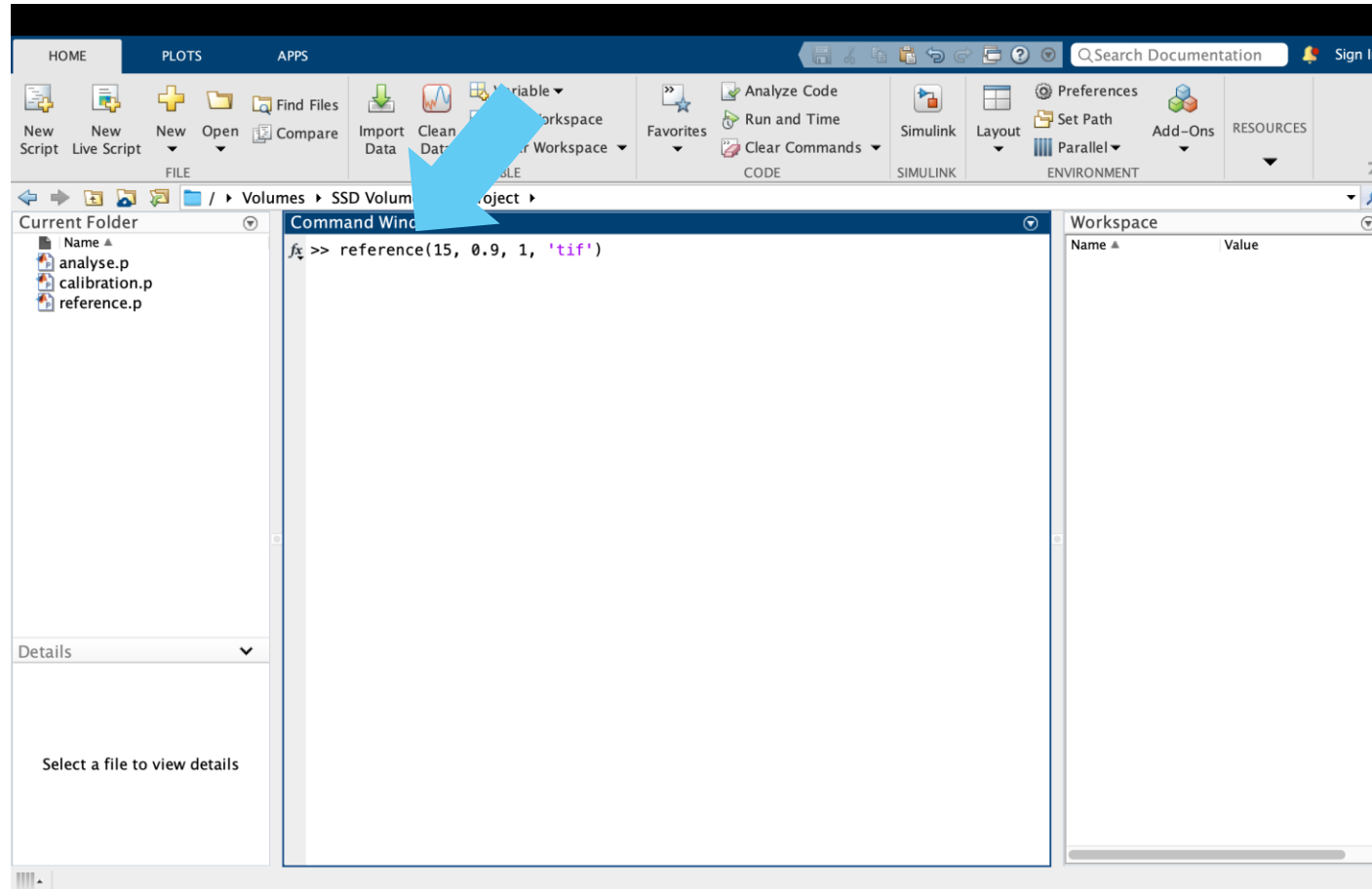
# Select fitting points on one of the rings



# Calibration files are stored in **dStore** folder

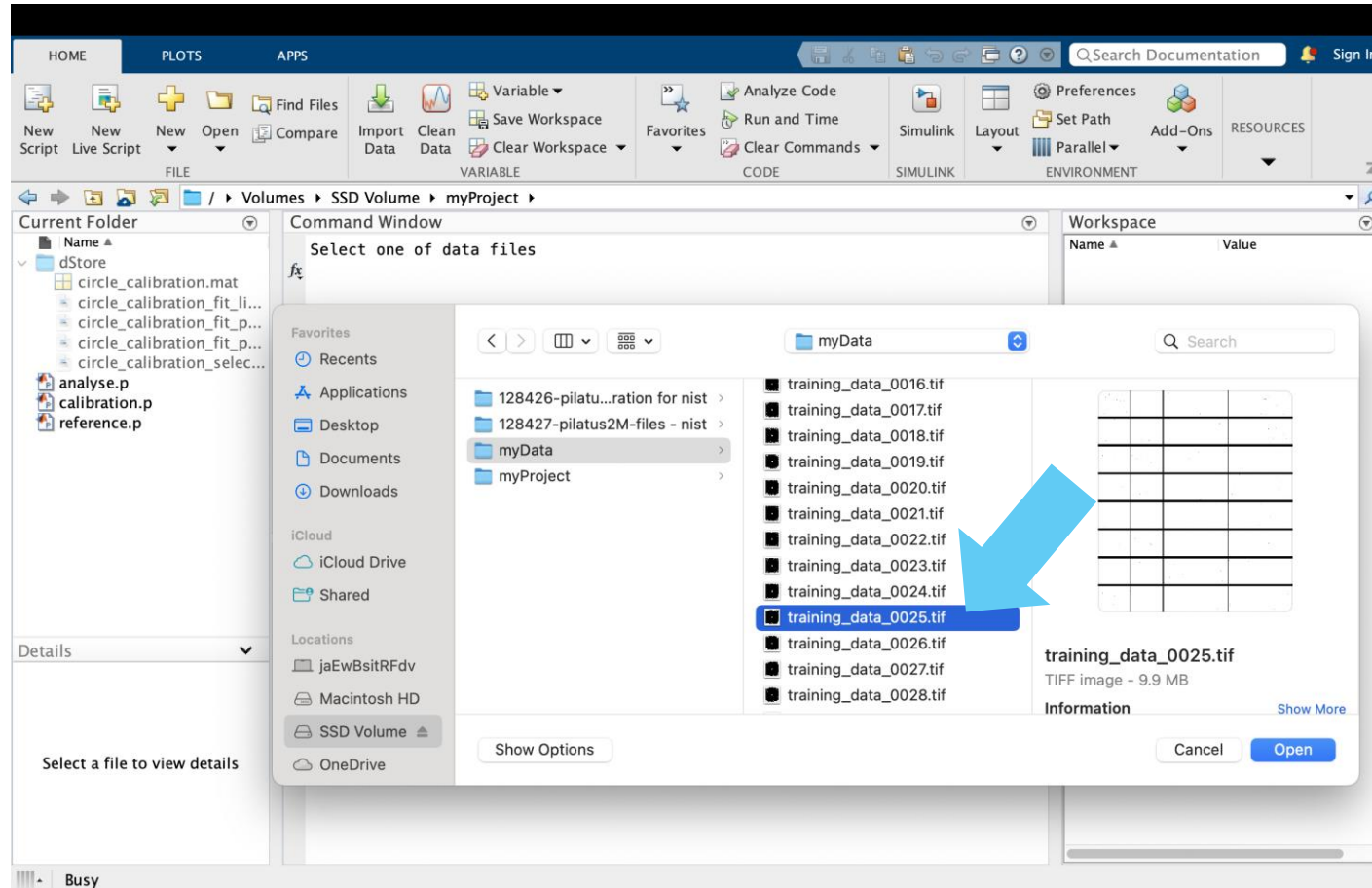


# Initiate **reference** command

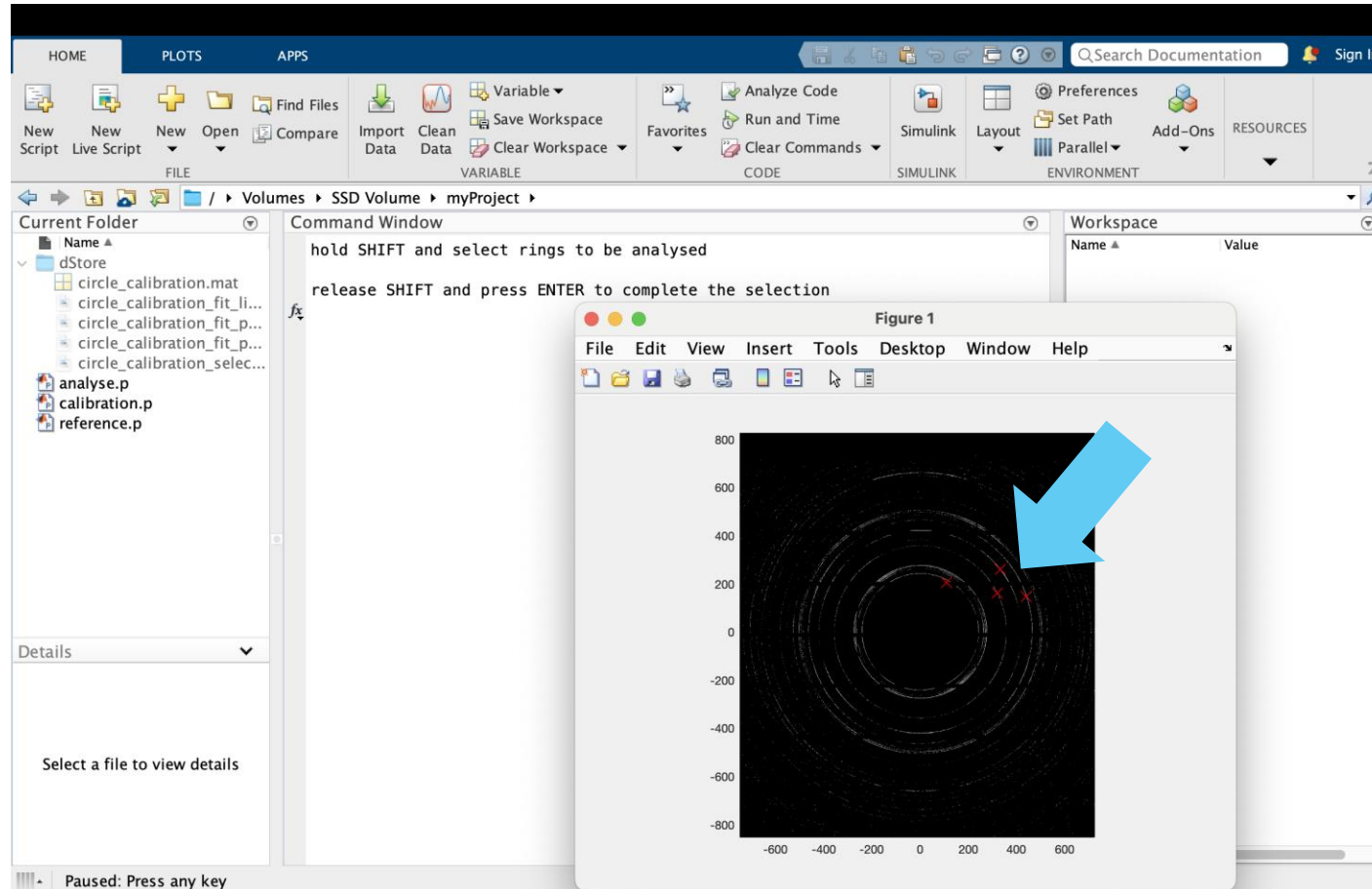




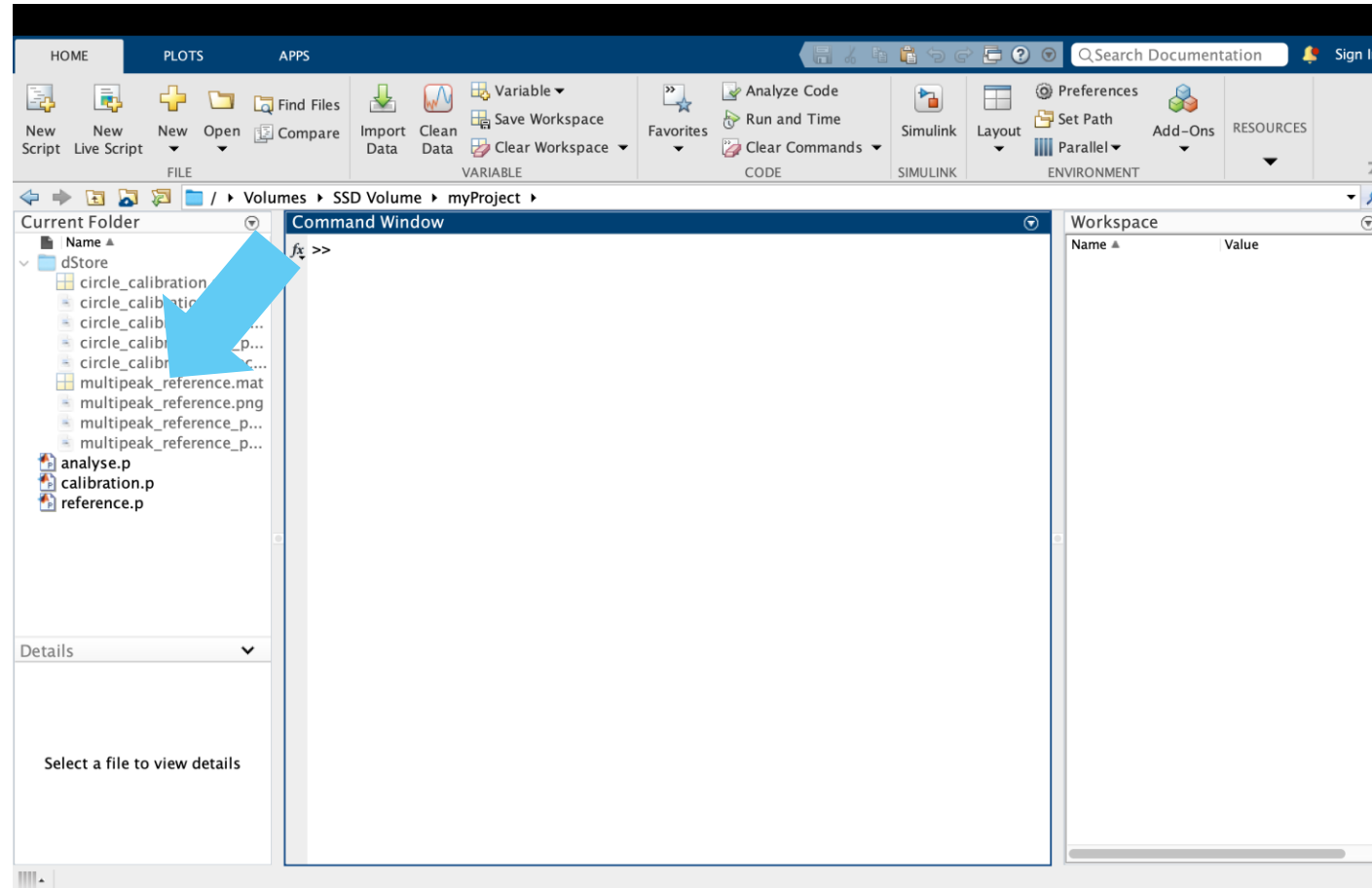
# Select reference file



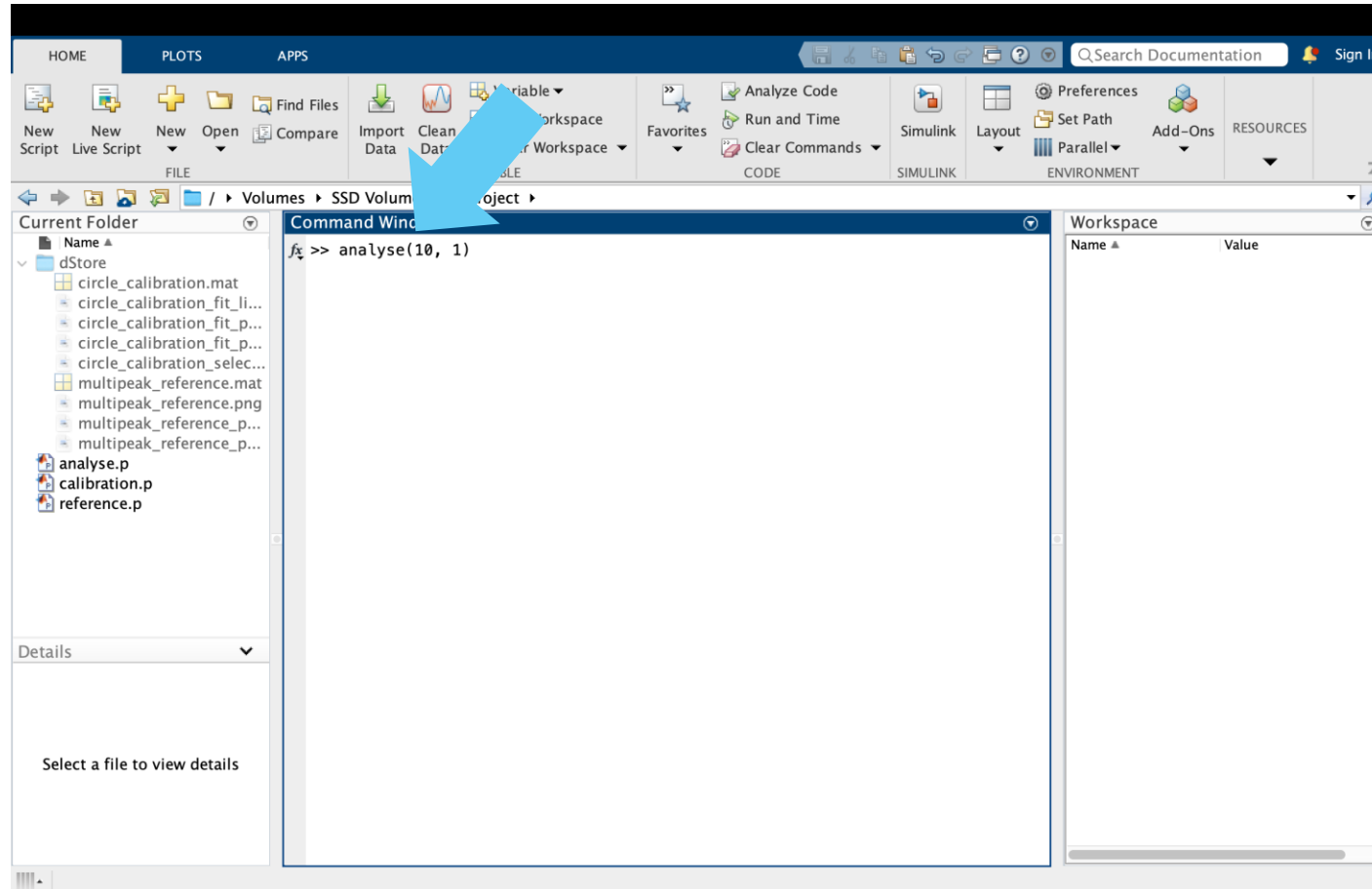
# Select rings to be analysed



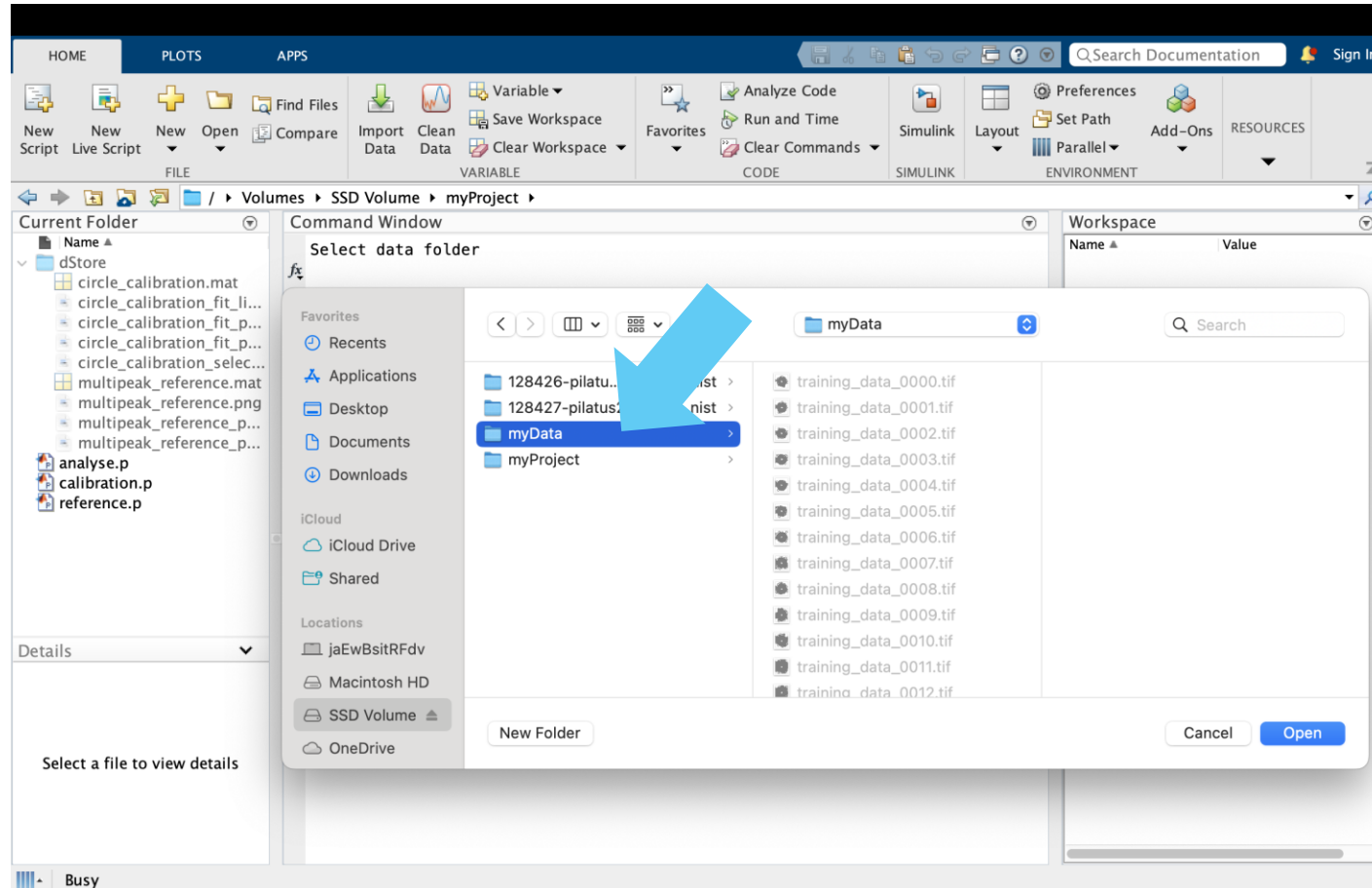
# Reference files are stored in **dStore** folder



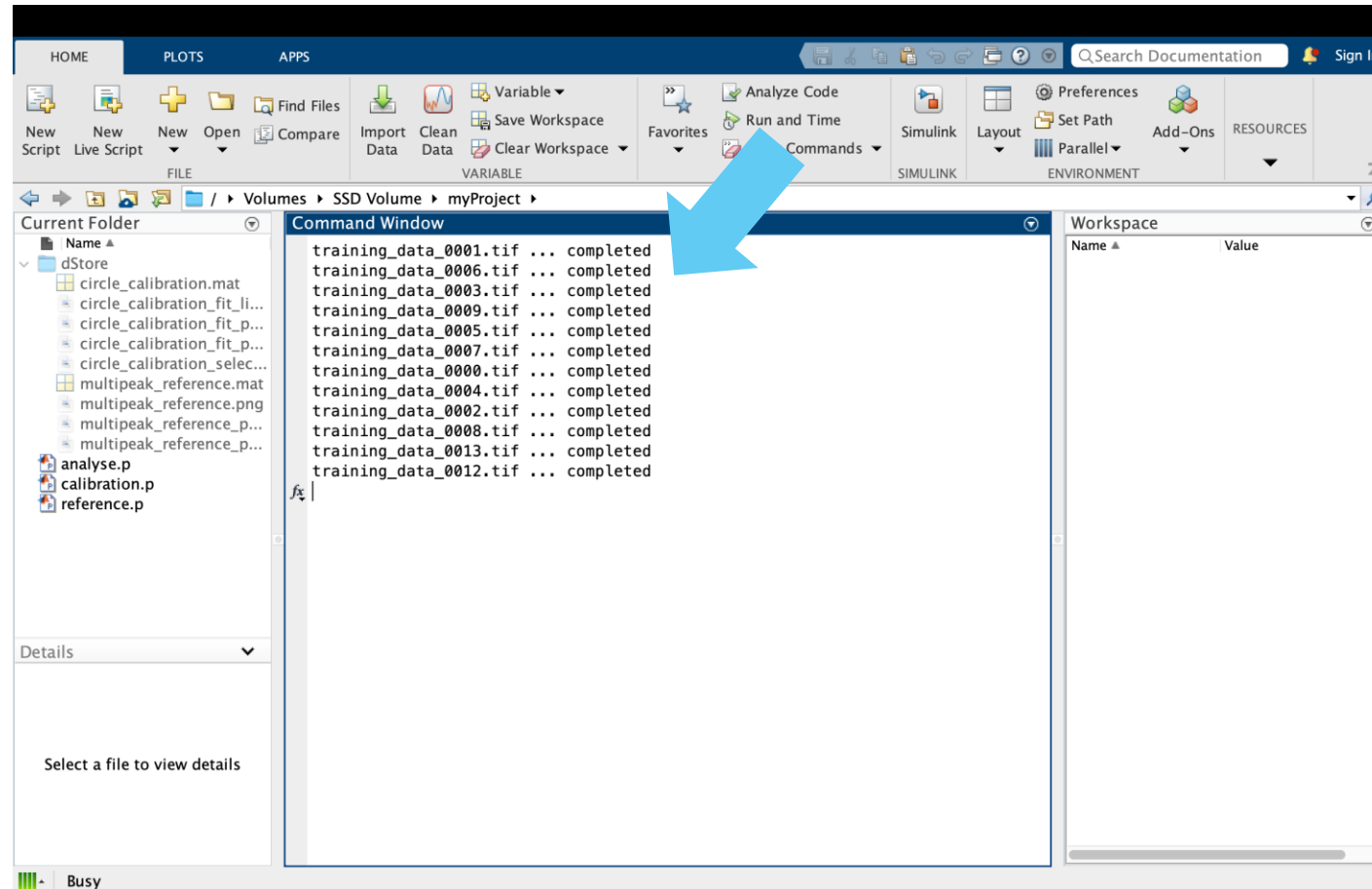
# Initiate the analysis



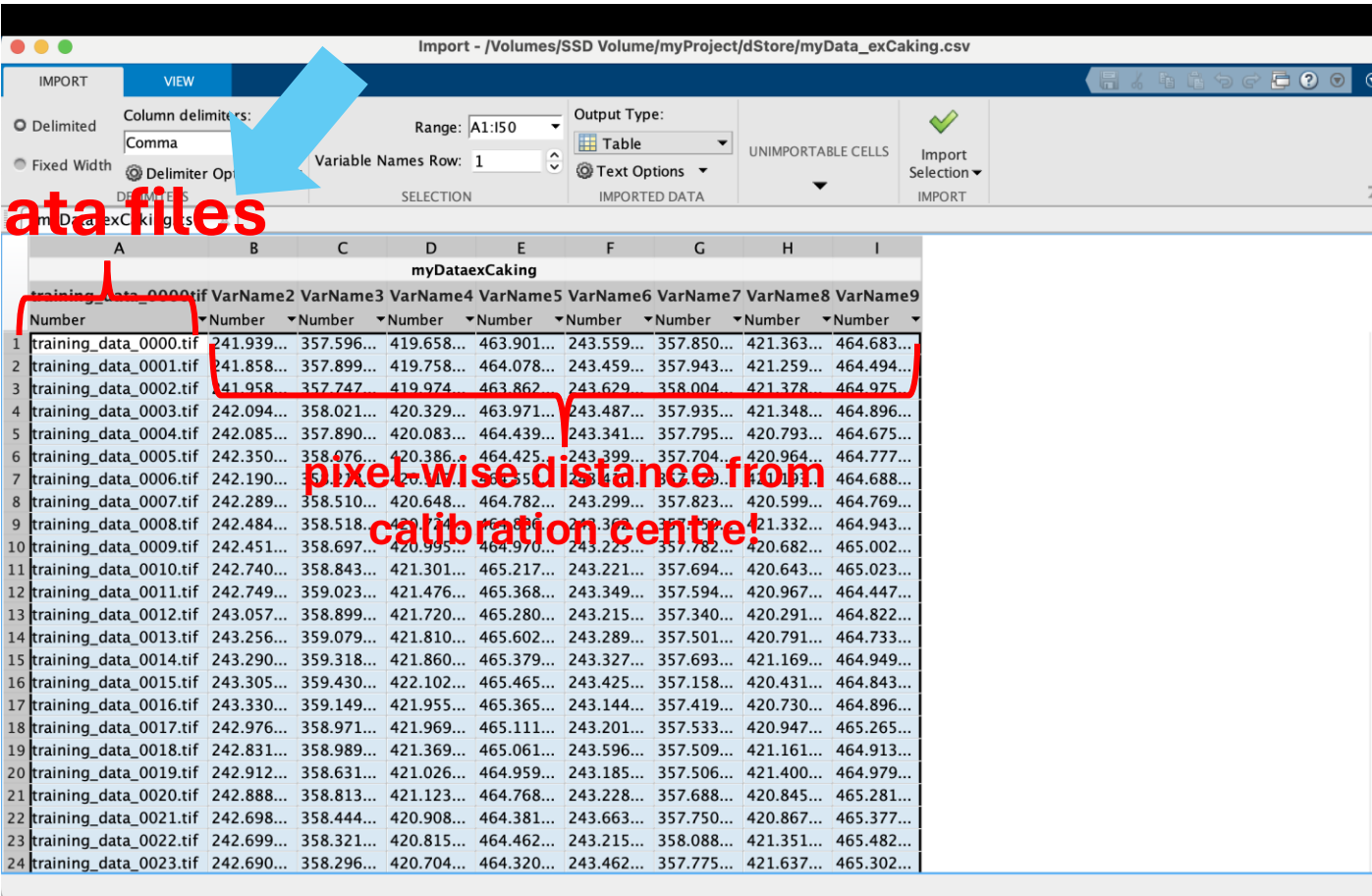
# Select data folder



# Follow the progress from Command Window



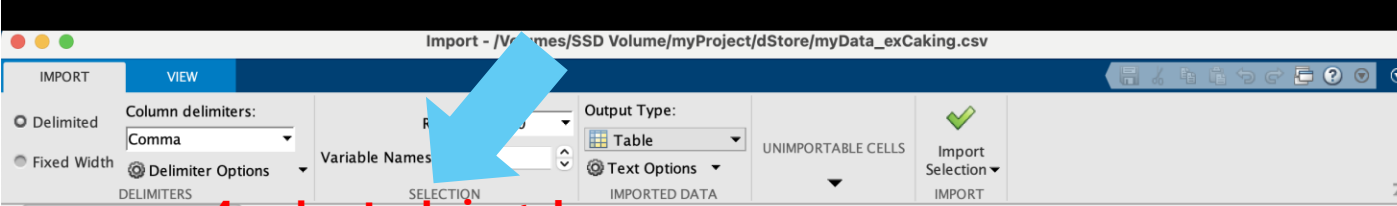
# Results are stored in **CSV** format



The screenshot shows a software window titled "Import - /Volumes/SSD Volume/myProject/dStore/myData\_exCaking.csv". The window has tabs for "IMPORT" and "VIEW". The "VIEW" tab is active, showing a table of data. A blue arrow points to the "Column delimiters:" dropdown menu, which is set to "Comma". A red bracket highlights the first column, labeled "Number", which contains file names. A red arrow points to the first row of data, which is highlighted in red. The table has 9 columns, labeled "VarName2" through "VarName9". The data is organized into rows, with the first row being the header and the subsequent rows containing numerical values. The text "data files" is written in red next to the first column, and "pixel-wise distance from calibration centre!" is written in red next to the first row of data.

	VarName2	VarName3	VarName4	VarName5	VarName6	VarName7	VarName8	VarName9
1	training_data_0000.tif	241.939...	357.596...	419.658...	463.901...	243.559...	357.850...	421.363...
2	training_data_0001.tif	241.858...	357.899...	419.758...	464.078...	243.459...	357.943...	421.259...
3	training_data_0002.tif	241.958...	357.747...	419.974...	463.862...	243.629...	358.004...	421.378...
4	training_data_0003.tif	242.094...	358.021...	420.329...	463.971...	243.487...	357.935...	421.348...
5	training_data_0004.tif	242.085...	357.890...	420.083...	464.439...	243.341...	357.795...	420.793...
6	training_data_0005.tif	242.350...	358.076...	420.386...	464.425...	243.399...	357.704...	420.964...
7	training_data_0006.tif	242.190...	358.127...	420.111...	464.555...	243.460...	357.679...	421.093...
8	training_data_0007.tif	242.289...	358.510...	420.648...	464.782...	243.299...	357.823...	420.599...
9	training_data_0008.tif	242.484...	358.518...	420.111...	464.896...	243.360...	357.559...	421.332...
10	training_data_0009.tif	242.451...	358.697...	420.995...	464.970...	243.225...	357.782...	420.682...
11	training_data_0010.tif	242.740...	358.843...	421.301...	465.217...	243.221...	357.694...	420.643...
12	training_data_0011.tif	242.749...	359.023...	421.476...	465.368...	243.349...	357.594...	420.967...
13	training_data_0012.tif	243.057...	358.899...	421.720...	465.280...	243.215...	357.340...	420.291...
14	training_data_0013.tif	243.256...	359.079...	421.810...	465.602...	243.289...	357.501...	420.791...
15	training_data_0014.tif	243.290...	359.318...	421.860...	465.379...	243.327...	357.693...	421.169...
16	training_data_0015.tif	243.305...	359.430...	422.102...	465.465...	243.425...	357.158...	420.431...
17	training_data_0016.tif	243.330...	359.149...	421.955...	465.365...	243.144...	357.419...	420.730...
18	training_data_0017.tif	242.976...	358.971...	421.969...	465.111...	243.201...	357.533...	420.947...
19	training_data_0018.tif	242.831...	358.989...	421.369...	465.061...	243.596...	357.509...	421.161...
20	training_data_0019.tif	242.912...	358.631...	421.026...	464.959...	243.185...	357.506...	421.400...
21	training_data_0020.tif	242.888...	358.813...	421.123...	464.768...	243.228...	357.688...	420.845...
22	training_data_0021.tif	242.698...	358.444...	420.908...	464.381...	243.663...	357.750...	420.867...
23	training_data_0022.tif	242.699...	358.321...	420.815...	464.462...	243.215...	358.088...	421.351...
24	training_data_0023.tif	242.690...	358.296...	420.704...	464.320...	243.462...	357.775...	421.637...

# Columns of xx-component



Import - /Volumes/SSD Volume/myProject/dStore/myData\_exCaking.csv

IMPORT VIEW

Delimited Column delimiters: Comma Output Type: Table

Fixed Width Delimiter Options Variable Names

DELIMITERS SELECTION IMPORTED DATA

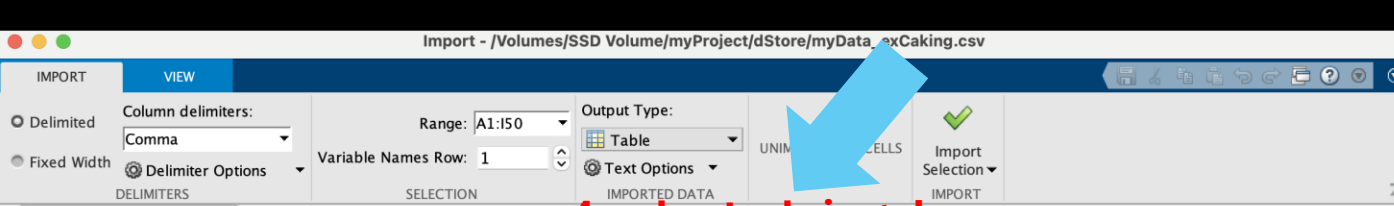
myData\_exCaking.csv

4 selected rings!

	A	B	C	D	E	F	G	H	I
	myDataexCaking								
	training_data_0000.tif	VarName2	VarName3	VarName4	VarName5	VarName6	VarName7	VarName8	VarName9
	Number	Number	Number	Number	Number	Number	Number	Number	Number
1	training_data_0000.tif	241.939...	357.596...	419.658...	463.901...	243.559...	357.850...	421.363...	464.683...
2	training_data_0001.tif	241.858...	357.899...	419.758...	464.078...	243.459...	357.943...	421.259...	464.494...
3	training_data_0002.tif	241.958...	357.747...	419.974...	463.862...	243.629...	358.004...	421.378...	464.975...
4	training_data_0003.tif	242.094...	358.021...	420.329...	463.971...	243.487...	357.935...	421.348...	464.896...
5	training_data_0004.tif	242.085...	357.890...	420.083...	464.439...	243.341...	357.795...	420.793...	464.675...
6	training_data_0005.tif	242.350...	358.076...	420.386...	464.425...	243.399...	357.704...	420.964...	464.777...
7	training_data_0006.tif	242.190...	358.212...	420.517...	464.552...	243.410...	357.729...	421.193...	464.688...
8	training_data_0007.tif	242.289...	358.510...	420.648...	464.782...	243.299...	357.823...	420.599...	464.769...
9	training_data_0008.tif	242.484...	358.518...	420.724...	464.886...	243.362...	357.750...	421.332...	464.943...
10	training_data_0009.tif	242.451...	358.697...	420.995...	464.970...	243.225...	357.782...	420.682...	465.002...
11	training_data_0010.tif	242.740...	358.843...	421.301...	465.217...	243.221...	357.694...	420.643...	465.023...
12	training_data_0011.tif	242.749...	359.023...	421.476...	465.368...	243.349...	357.594...	420.967...	464.447...
13	training_data_0012.tif	243.057...	358.899...	421.720...	465.280...	243.215...	357.340...	420.291...	464.822...
14	training_data_0013.tif	243.256...	359.079...	421.810...	465.602...	243.289...	357.501...	420.791...	464.733...
15	training_data_0014.tif	243.290...	359.318...	421.860...	465.379...	243.327...	357.693...	421.169...	464.949...
16	training_data_0015.tif	243.305...	359.430...	422.102...	465.465...	243.425...	357.158...	420.431...	464.843...
17	training_data_0016.tif	243.330...	359.149...	421.955...	465.365...	243.144...	357.419...	420.730...	464.896...
18	training_data_0017.tif	242.976...	358.971...	421.969...	465.111...	243.201...	357.533...	420.947...	465.265...
19	training_data_0018.tif	242.831...	358.989...	421.369...	465.061...	243.596...	357.509...	421.161...	464.913...
20	training_data_0019.tif	242.912...	358.631...	421.026...	464.959...	243.185...	357.506...	421.400...	464.979...
21	training_data_0020.tif	242.888...	358.813...	421.123...	464.768...	243.228...	357.688...	420.845...	465.281...
22	training_data_0021.tif	242.698...	358.444...	420.908...	464.381...	243.663...	357.750...	420.867...	465.377...
23	training_data_0022.tif	242.699...	358.321...	420.815...	464.462...	243.215...	358.088...	421.351...	465.482...
24	training_data_0023.tif	242.690...	358.296...	420.704...	464.320...	243.462...	357.775...	421.637...	465.302...



# Columns of yy-component



Import - /Volumes/SSD Volume/myProject/dStore/myData\_exCaking.csv

IMPORT VIEW

Delimited Column delimiters: Comma Range: A1:I50 Output Type: Table

Fixed Width Delimiter Options Variable Names Row: 1 Text Options

DELIMITERS SELECTION IMPORTED DATA

myData\_exCaking.csv

4 selected rings!

	A	B	C	D	E	F	G	H	I
	myDataexCaking								
	training_data_0000.tif	VarName2	VarName3	VarName4	VarName5	VarName6	VarName7	VarName8	VarName9
	Number	Number	Number	Number	Number	Number	Number	Number	Number
1	training_data_0000.tif	241.939...	357.596...	419.658...	463.901...	243.559...	357.850...	421.363...	464.683...
2	training_data_0001.tif	241.858...	357.899...	419.758...	464.078...	243.459...	357.943...	421.259...	464.494...
3	training_data_0002.tif	241.958...	357.747...	419.974...	463.862...	243.629...	358.004...	421.378...	464.975...
4	training_data_0003.tif	242.094...	358.021...	420.329...	463.971...	243.487...	357.935...	421.348...	464.896...
5	training_data_0004.tif	242.085...	357.890...	420.083...	464.439...	243.341...	357.795...	420.793...	464.675...
6	training_data_0005.tif	242.350...	358.076...	420.386...	464.425...	243.399...	357.704...	420.964...	464.777...
7	training_data_0006.tif	242.190...	358.212...	420.517...	464.552...	243.410...	357.729...	421.193...	464.688...
8	training_data_0007.tif	242.289...	358.510...	420.648...	464.782...	243.299...	357.823...	420.599...	464.769...
9	training_data_0008.tif	242.484...	358.518...	420.724...	464.886...	243.362...	357.750...	421.332...	464.943...
10	training_data_0009.tif	242.451...	358.697...	420.995...	464.970...	243.225...	357.782...	420.682...	465.002...
11	training_data_0010.tif	242.740...	358.843...	421.301...	465.217...	243.221...	357.694...	420.643...	465.023...
12	training_data_0011.tif	242.749...	359.023...	421.476...	465.368...	243.349...	357.594...	420.967...	464.447...
13	training_data_0012.tif	243.057...	358.899...	421.720...	465.280...	243.215...	357.340...	420.291...	464.822...
14	training_data_0013.tif	243.256...	359.079...	421.810...	465.602...	243.289...	357.501...	420.791...	464.733...
15	training_data_0014.tif	243.290...	359.318...	421.860...	465.379...	243.327...	357.693...	421.169...	464.949...
16	training_data_0015.tif	243.305...	359.430...	422.102...	465.465...	243.425...	357.158...	420.431...	464.843...
17	training_data_0016.tif	243.330...	359.149...	421.955...	465.365...	243.144...	357.419...	420.730...	464.896...
18	training_data_0017.tif	242.976...	358.971...	421.969...	465.111...	243.201...	357.533...	420.947...	465.265...
19	training_data_0018.tif	242.831...	358.989...	421.369...	465.061...	243.596...	357.509...	421.161...	464.913...
20	training_data_0019.tif	242.912...	358.631...	421.026...	464.959...	243.185...	357.506...	421.400...	464.979...
21	training_data_0020.tif	242.888...	358.813...	421.123...	464.768...	243.228...	357.688...	420.845...	465.281...
22	training_data_0021.tif	242.698...	358.444...	420.908...	464.381...	243.663...	357.750...	420.867...	465.377...
23	training_data_0022.tif	242.699...	358.321...	420.815...	464.462...	243.215...	358.088...	421.351...	465.482...
24	training_data_0023.tif	242.690...	358.296...	420.704...	464.320...	243.462...	357.775...	421.637...	465.302...