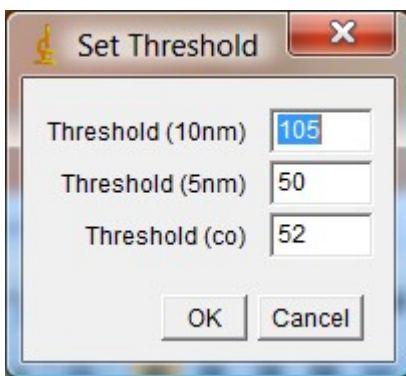


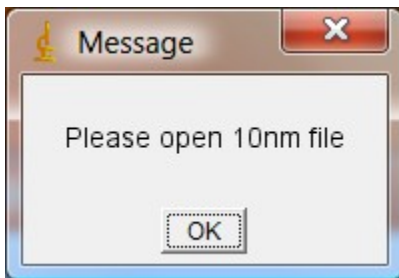
Install CoLocalization plugin by copying "CoLocalization_.java" to ImageJ's plugins directory and then click "Plugins/Compile and Run...", and select "CoLocalization_.java". Restart ImageJ and there will be an item "CoLocalization" in the plugins menu.

The following are instructions of using this "CoLocalization" Plugin

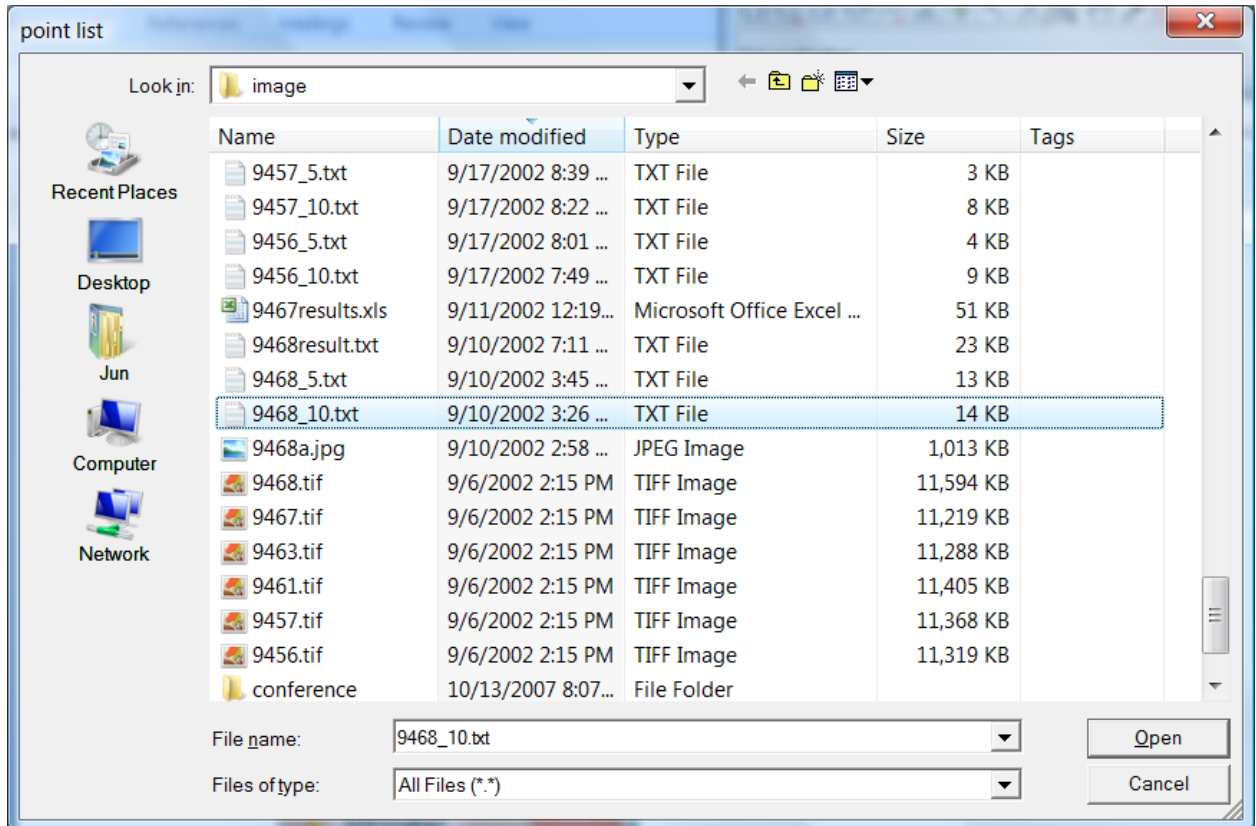
1. Open a TEM image in ImageJ. If this image is not 8bit, convert it to 8bit by clicking "Image/Type/8-bit".
2. Click "Plugins/CoLocalization", the following dialog will show up.



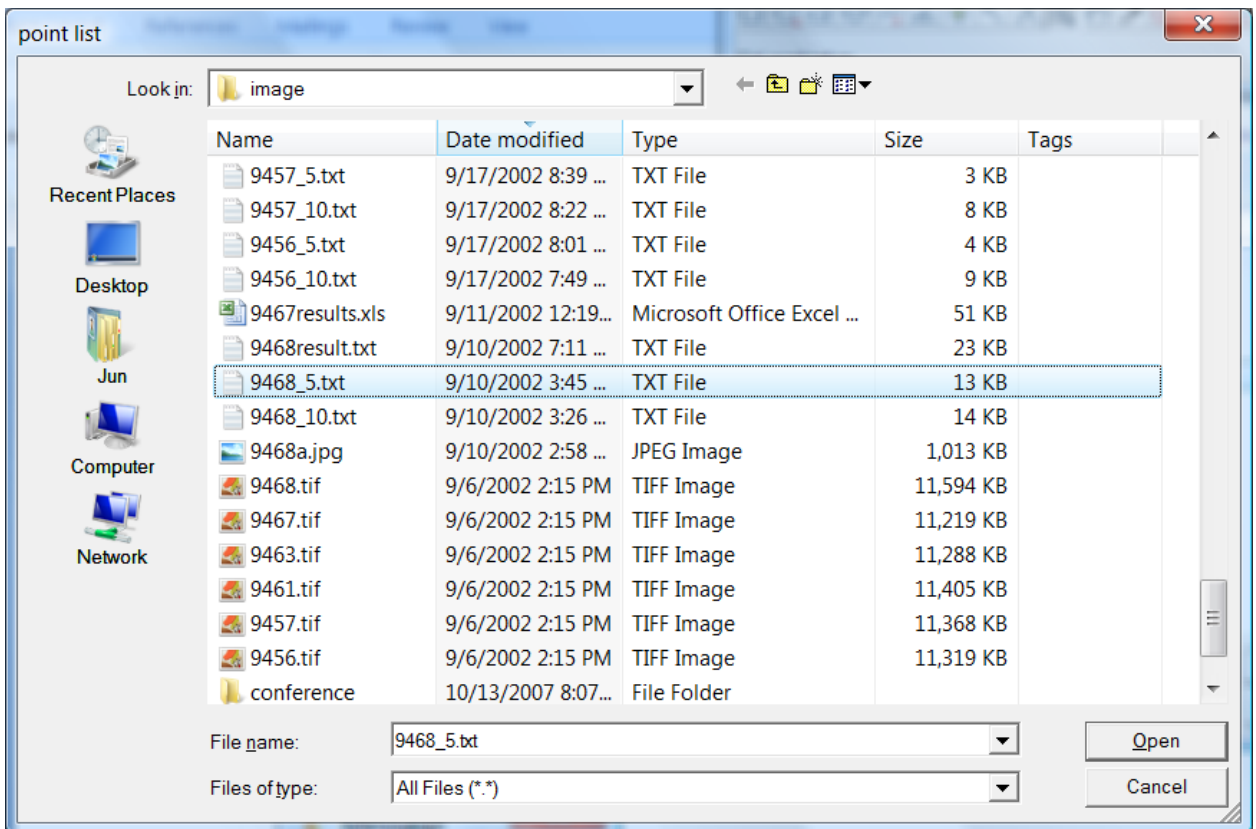
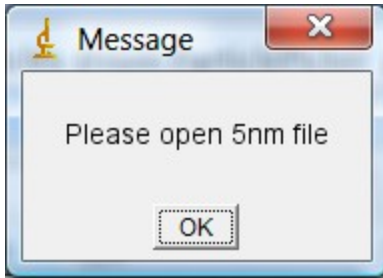
3. After setting thresholds (in pixels) for clustering and co-clustering, click "OK".



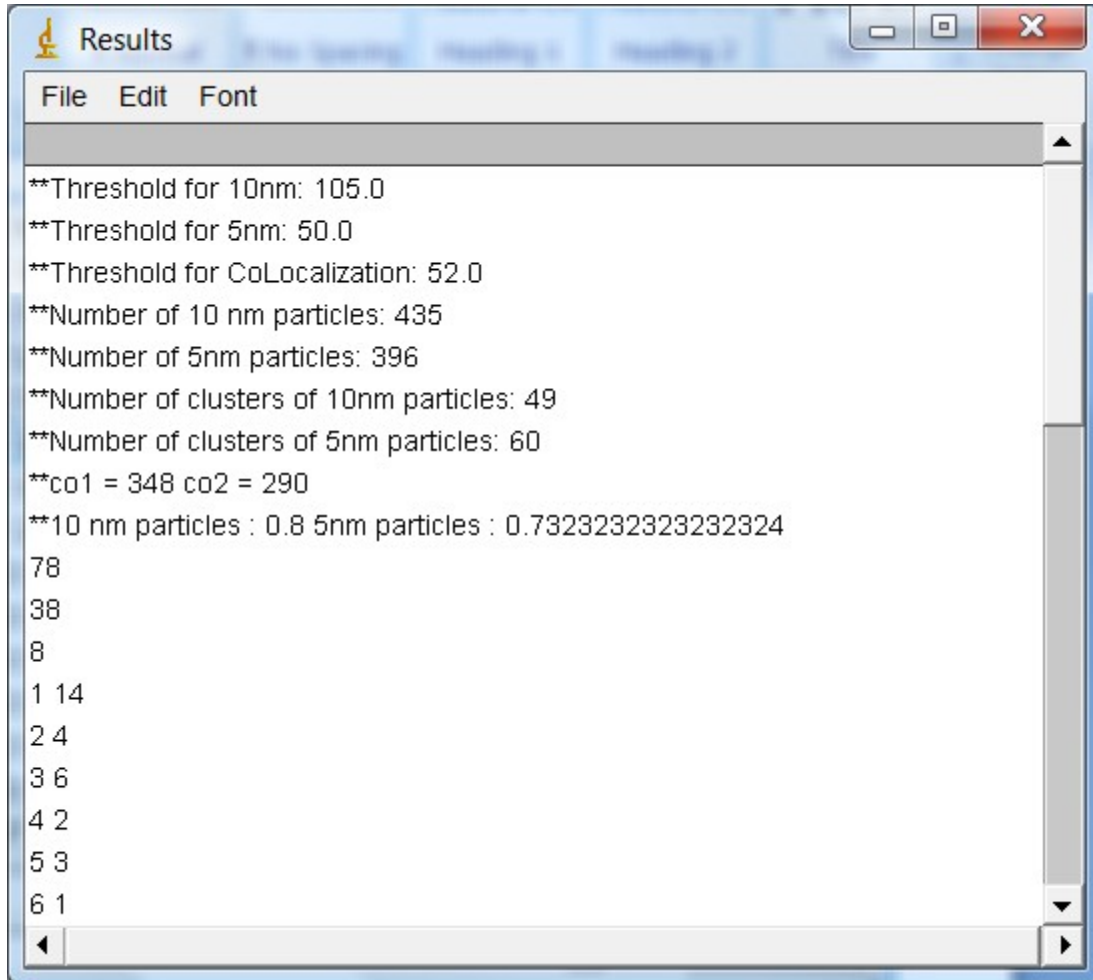
4. Open a file containing coordinates of 10 nm particles (From ParticlePicker plugin).



5. And then open a file containing coordinates of 5 nm particles.

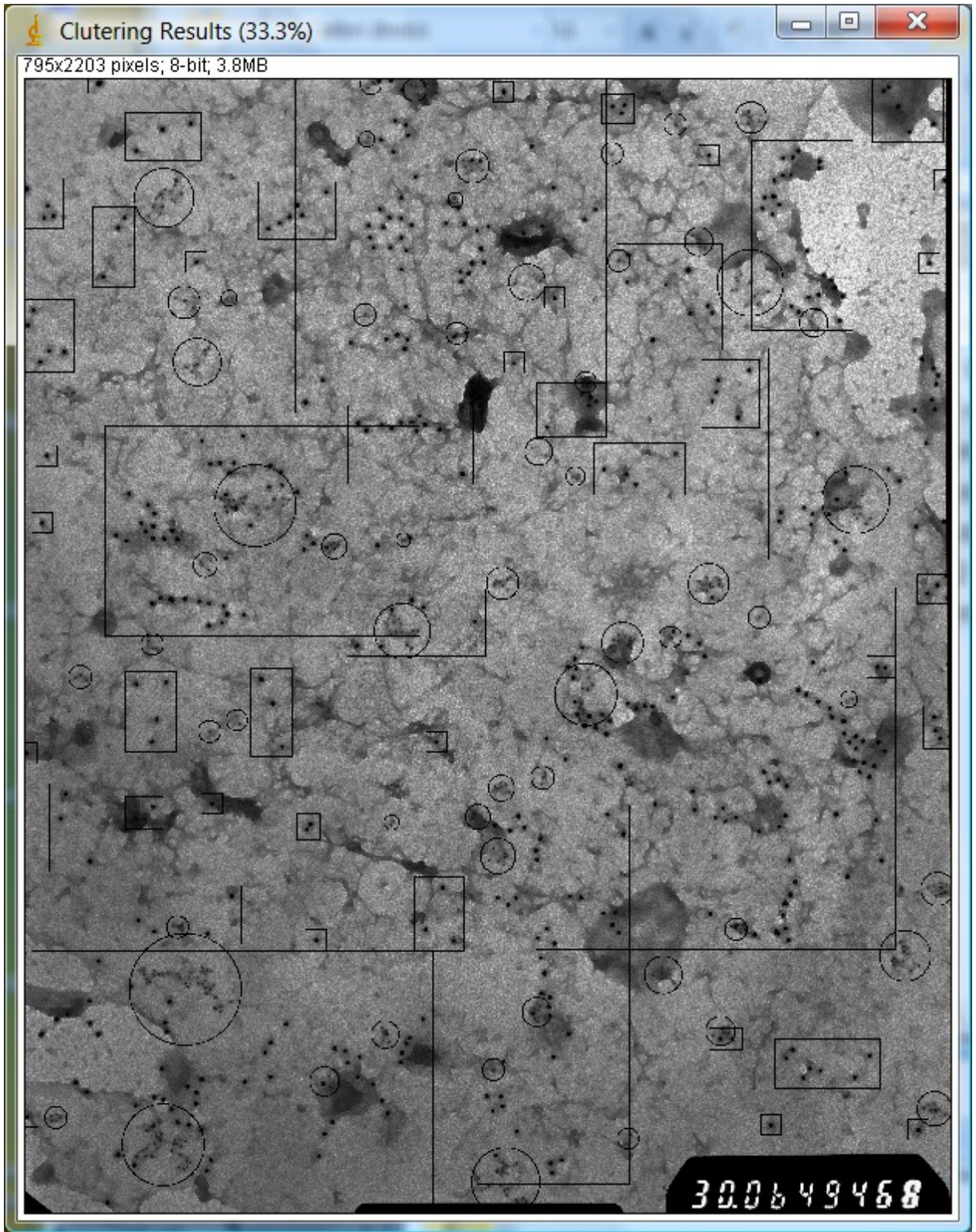


6. Two windows of results will show up.

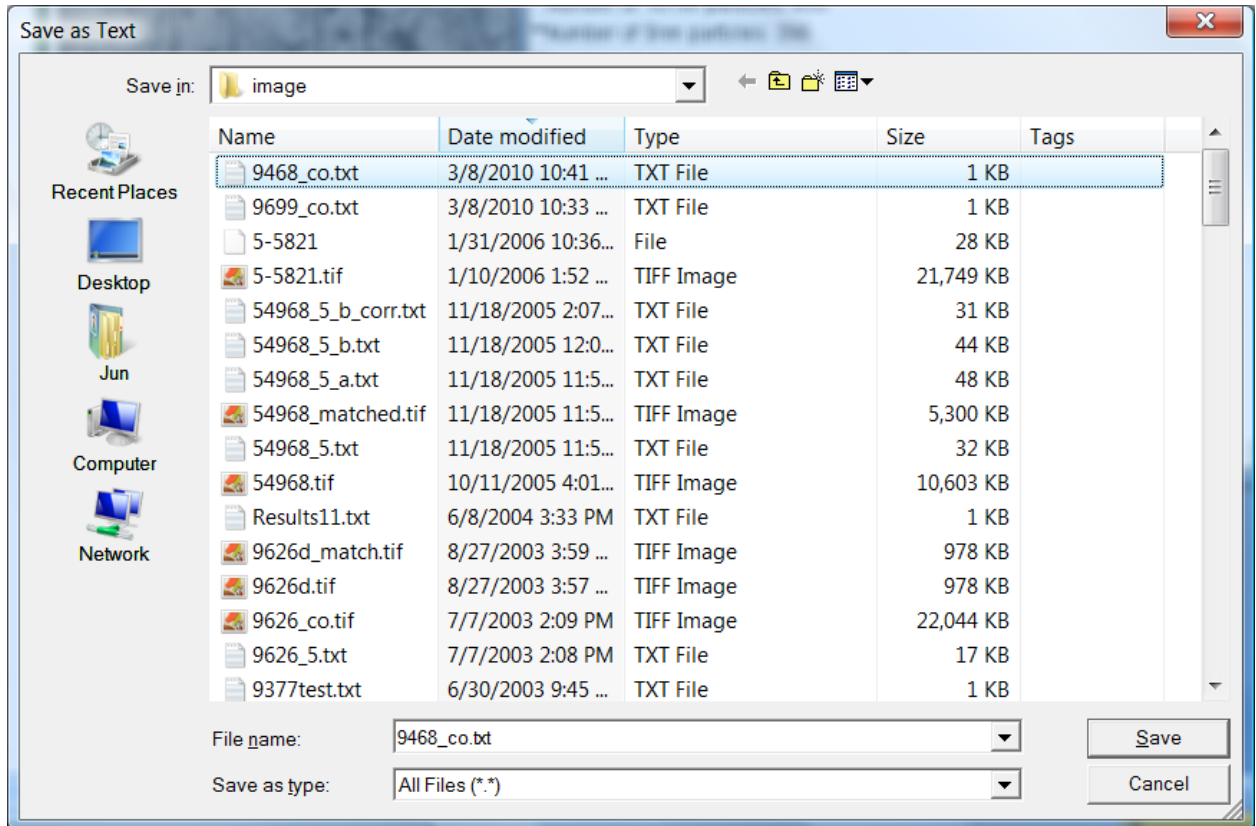


The screenshot shows a window titled "Results" with a menu bar containing "File", "Edit", and "Font". The main text area contains the following output:

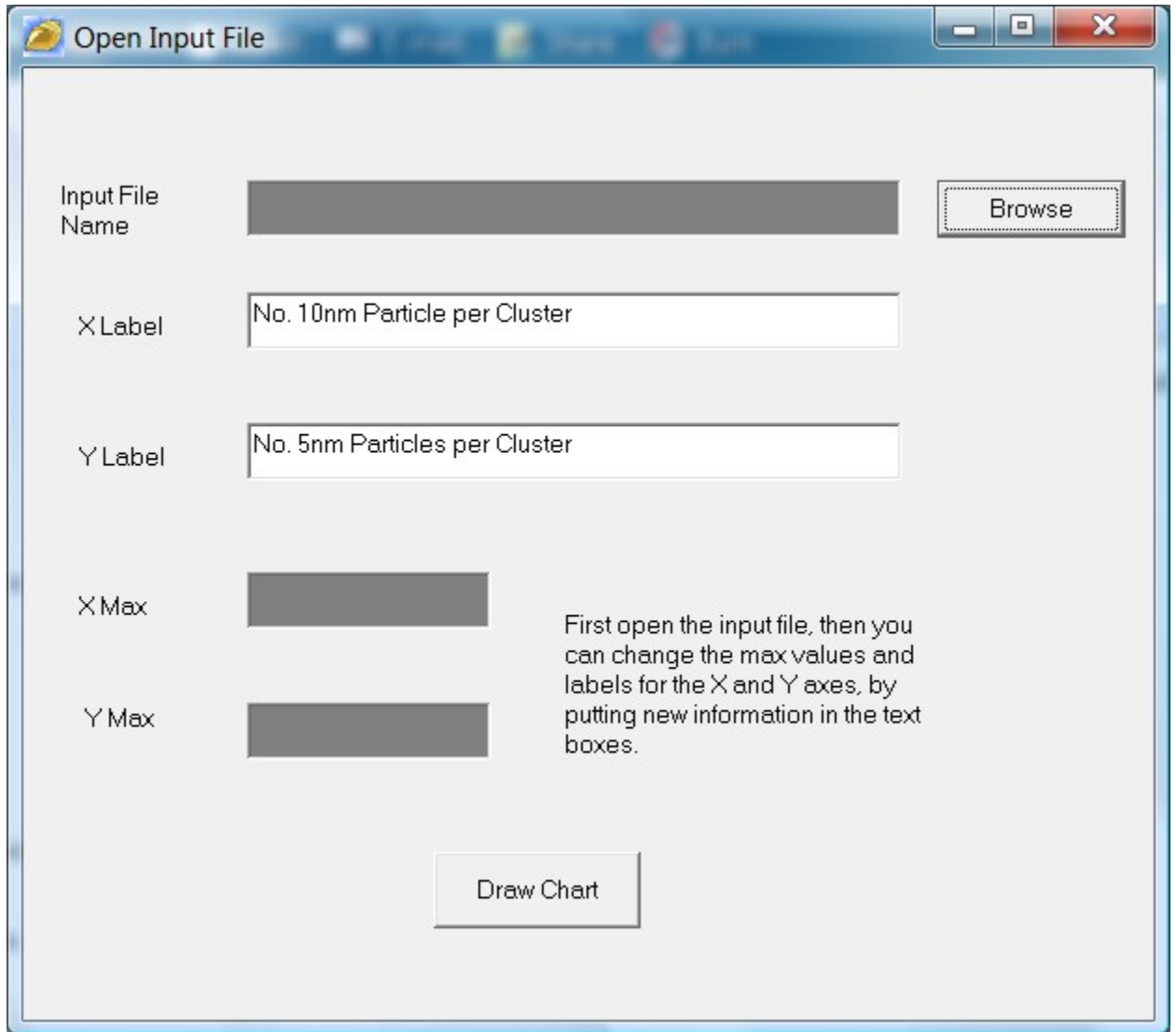
```
**Threshold for 10nm: 105.0
**Threshold for 5nm: 50.0
**Threshold for CoLocalization: 52.0
**Number of 10 nm particles: 435
**Number of 5nm particles: 396
**Number of clusters of 10nm particles: 49
**Number of clusters of 5nm particles: 60
**co1 = 348 co2 = 290
**10 nm particles : 0.8 5nm particles : 0.73232323232324
78
38
8
1 14
2 4
3 6
4 2
5 3
6 1
```



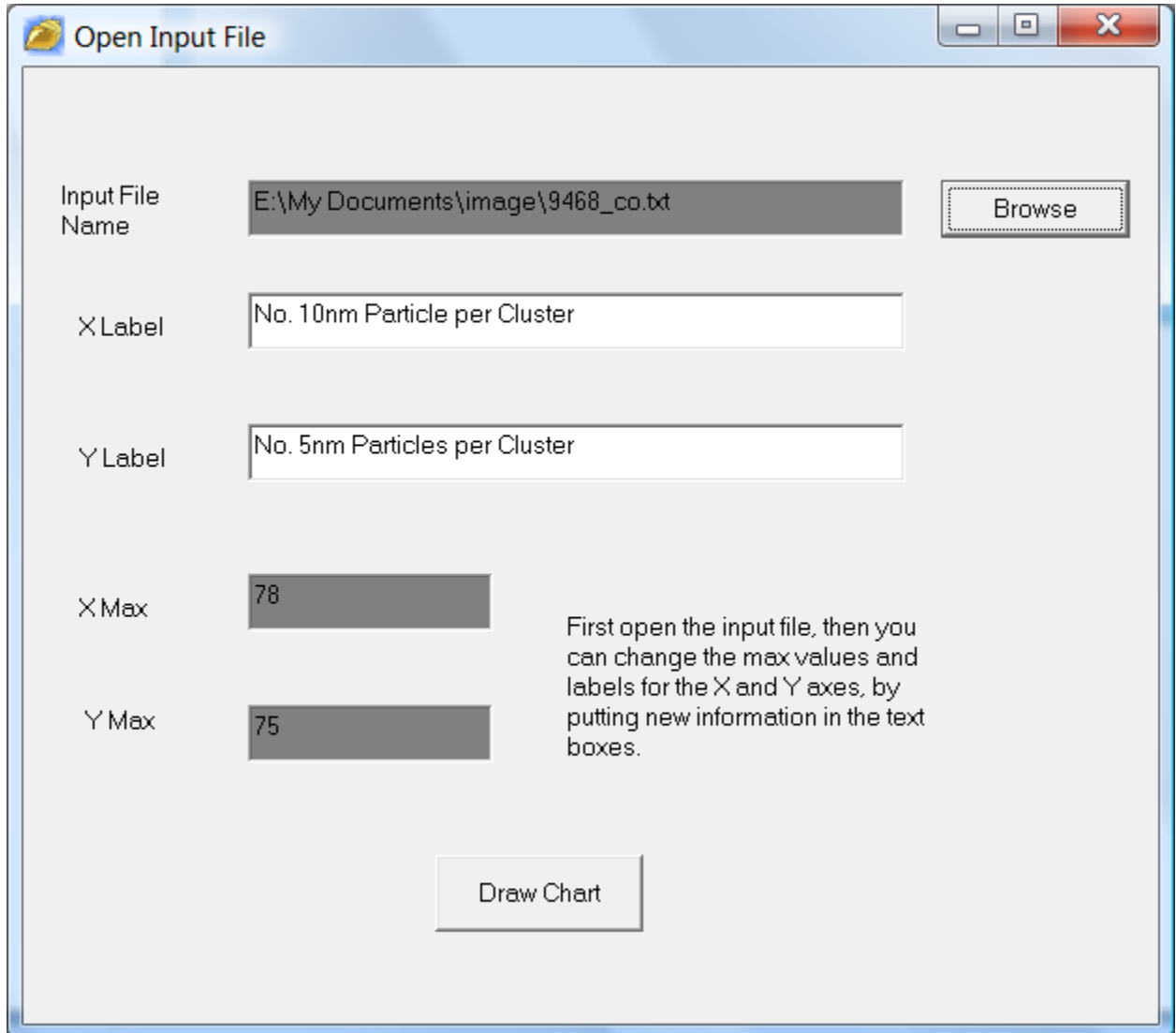
7. Save the result in the first window by clicking “File/Save as...” of that window.



- Open the resulting file (9468_co.txt) in Colocalchart.exe to draw a diagram of co-clustering.



9. Click "Browse" to select the input file.



Open Input File

Input File Name: E:\My Documents\image\9468_co.txt

X Label: No. 10nm Particle per Cluster

Y Label: No. 5nm Particles per Cluster

X Max: 78

Y Max: 75

First open the input file, then you can change the max values and labels for the X and Y axes, by putting new information in the text boxes.

11. Click "Save" to save this diagram as a bitmap.