temDM trackDrift

Installation: The plugins „temDM trackDrift.gtk" and „temDM ExtFrames.gt3" should be placed in some plugins folder of DigitalMicrograph.
The script „find plugins folders.s" included in the distribution package will help you to localize such folders. Open „find plugins folders.s" in DigitalMicrograpgh and run it by pressing „execute" or by pressing ENTER with holding the CNTR key. Read the list of available plugins folders. The first folder in the list is most appropriated for placing the temDM plugins.

Some folders can be hidden in Windows. If you do not see all folders, make them visible in Windows explorer:
Windows 7:   „Organize" tab – „Folders and search options" – „View" tab – click „show hidden files, folders and drivers" checkbox.
Window 10:   „View" tab – click „hidden items" checkbox.

Drop the plugins into the choosen Plugins folder.
Restart DigitalMicrograph.

To update the version, just overwrite the plugin of the previous version in the Plugins folder. This is needed to avoid confusion of DigitalMicrograph with loading ambiguous commands.

Alternatively, you can install the script manually in DigitalMicrograph.
Having "extended frames classes.s" frontmost click: "File" – "Install script"- "Library"-"OK"
Having "customer filter.s" frontmost click: "File" – "Install script"- "Library"-"OK"
Having "trackDrift.s" frontmost click: "File" – "Install script"- "Menu command"-"OK"
In this way, you can modify the text of the script.

TrackDrift tool measures the value and the direction of the current sample drift. It also stores the temporal graph of the drift in the separate display.

This plugin is primarily aimed for an in-line DigitalMicrograph directly connected with a TEM microscope. However, it is fully functional in an off-line DigitalMicrograph where the plugin „temDM VirtualTEM.gtk " is installed.

How it works ?

First assign the live continuously updated image:
- Having a live image frontmost press assign. The letter label of the image appears at the right from the knob.
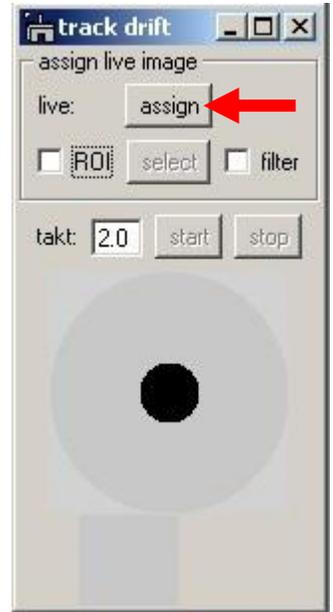
Define how frequently you are going to proceed the measurement:
- Input the number in the "takt" field. This is the periodicity in seconds.

- Press start. The big arrow will indicate the direction of the drift while the number below shows the drift value (in units the image is currently calibrated). You can always stop the measurement by clicking stop or simply by closing the tool.

You might wish to track drift not over the whole image but within the smaller area (Region Of Interest) with well defined features.

- Check ROI box. Draw a ROI area in the live image. Its width/height should fit 2^n numbers (hold ALT key to ensure that). Then press select.
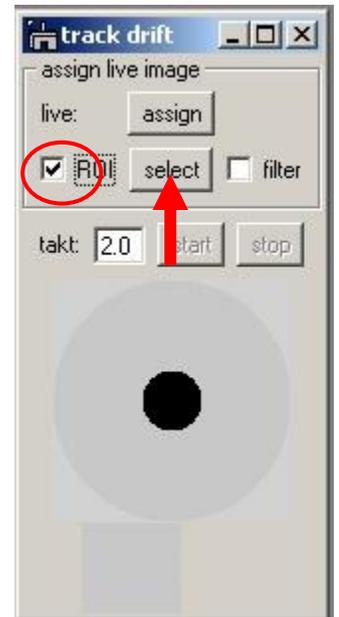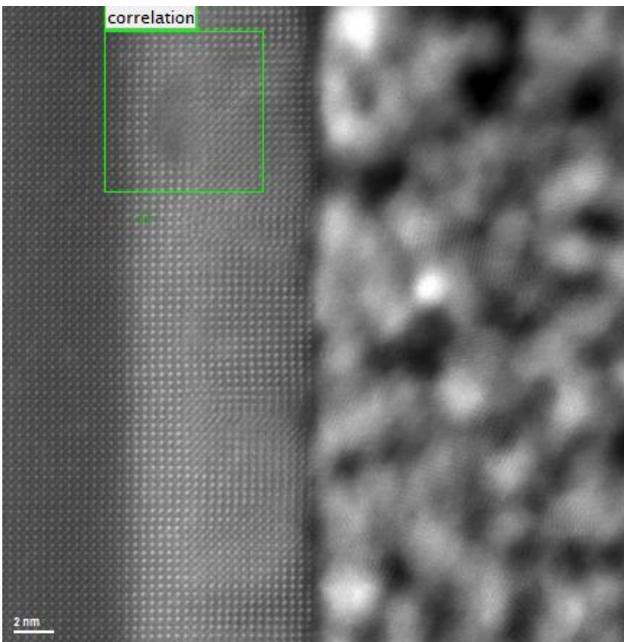
Sometimes your live image is too noisy for the reliable drift determination. You can improve that by smoothing the image in the course of cross correlation.

- check filter box. The default filter is Gaussian but you can define your own filter by changing text in "custom filter.s" library script.