

# Section 0.1.4 DRIFT Correction

In TEM an image is acquired with an exposure time of  $< 1$  sec. During this time the sample could have drifted from original position giving rise to an image which appears to be out of focus.

In STEM an image is acquired as the beam is scanned over an area of the sample with a short dwell time (microsec- millisec) at every spot to minimize drift. This image is not optimized for contrast and brightness.

If a series of images is acquired from the same area they can be summed up to increase intensity and contrast. Prior to combining the images it is necessary to correct for sample drift from one image to the next.



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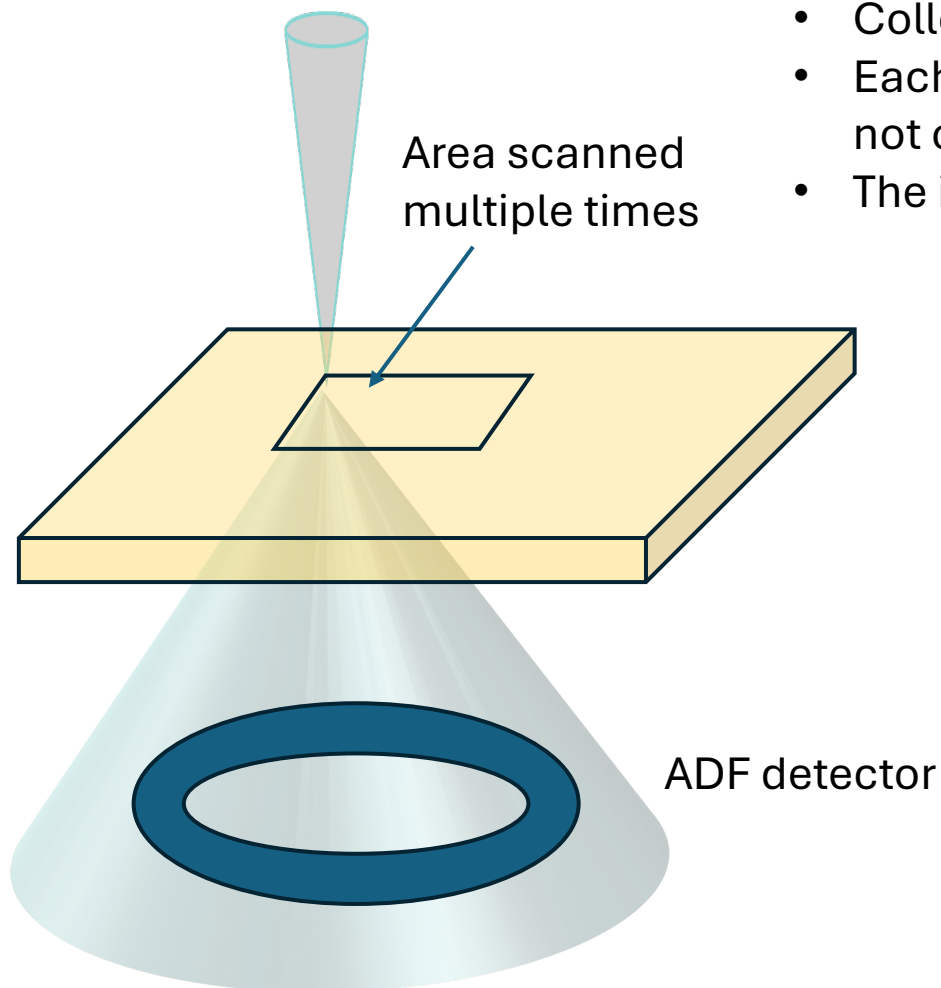


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# Drift Correction



- Collection of several images from the same area of the sample.
- Each image is obtained with short dwell time to minimize drift; not optimized for brightness and contrast
- The images are then corrected for drift and summed up

