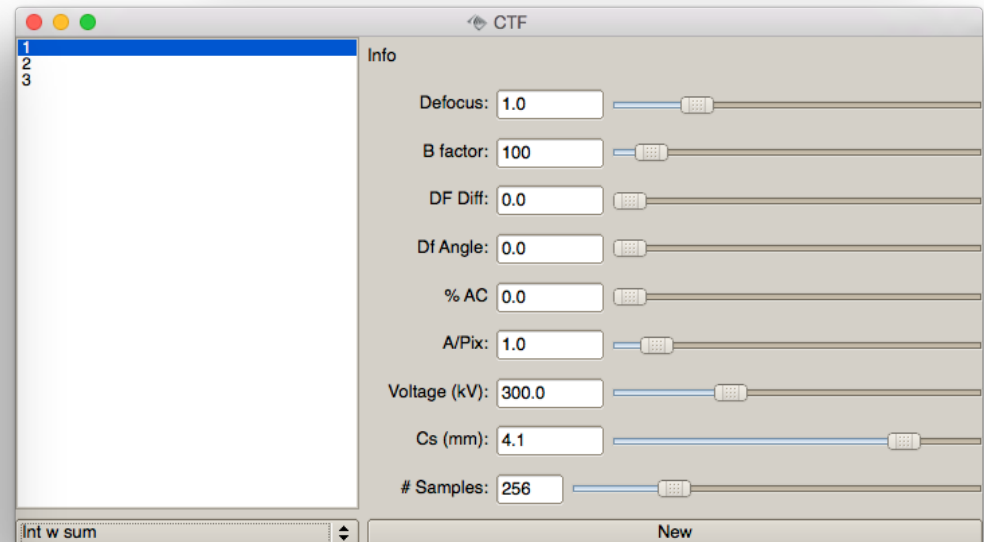
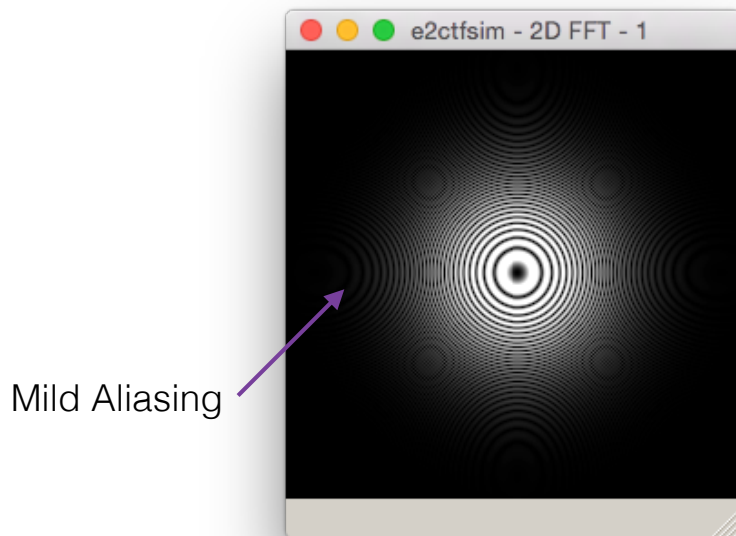
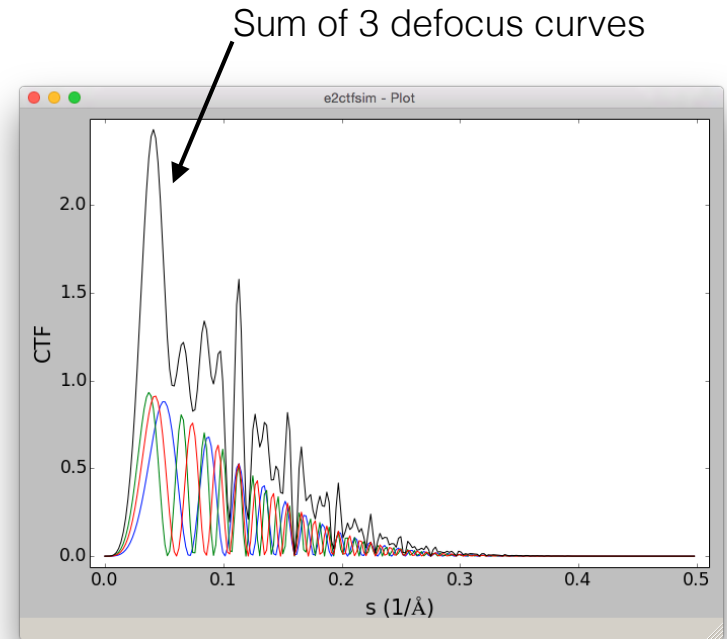


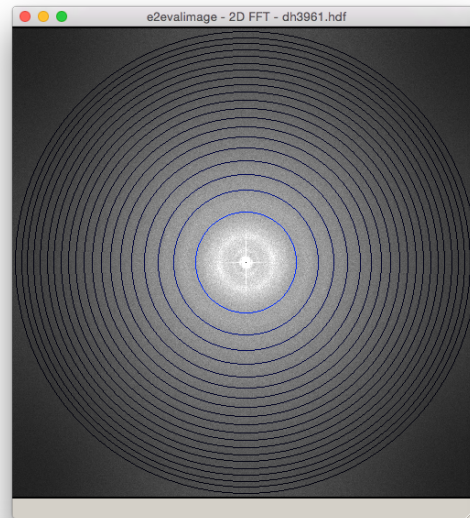
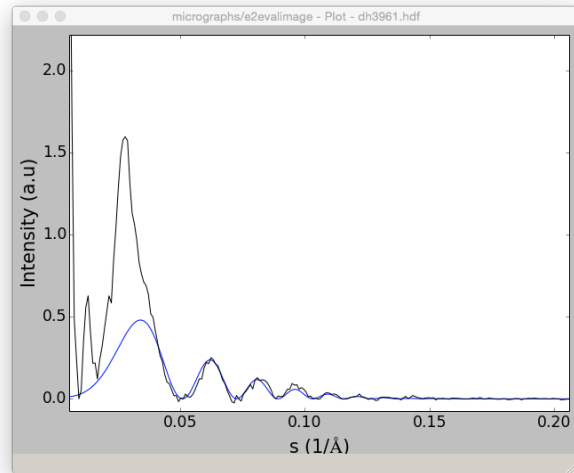
CTF Simulation

- When collecting data it's important to spread your defocus values out over a sufficient range, and sufficiently uniformly to get pretty uniform information at all resolutions. ie- you don't want the zeroes to overlap too much. While the general guideline of going as close to focus as you can see particles clearly, then extending from this defocus to ~ 1 micron further from focus works well in most cases, it can be useful to simulate expected results.
- e2ctfsim.py allows you to simulate CTF curves for multiple defocuses at once. This can be useful to:
 - Look at the sum of these curves to see what sort of Fourier filling you can expect during reconstruction.
 - Simulate a specific box size and look for aliasing artifacts at high resolution. This can help you assess the maximum safe defocus for a given box-size.
 - Examine tolerance for various amounts of astigmatism without correction.



Micrograph Evaluation

- e2evalimage.py provides a tool for interactive assessment of micrographs, and offers a variety of different Fourier assessments and CTF fitting.



e2evalimage - Control Panel

dh3961.hdf
dh3962.hdf
dh3965.hdf
dh3986.hdf
dh3997.hdf
dh4017.hdf
dh4035.hdf
dh4045.hdf
dh4051.hdf
dh4184.hdf
dh4187.hdf
dh4188.hdf
dh4190.hdf
dh4192.hdf
dh4193.hdf
dh4196.hdf
dh4261.hdf
dh4265.hdf
dh4282.hdf
dh4709.hdf

Region: Tiled Boxes

2D FFT: Power Spectrum

Annotate: Ctf Zeroes

Plot: Bgsub and Fit

A/pix: 2.1

Voltage (kV): 300

Cs (mm): 4.1

Box Size: 512

Defocus: 1.9

B factor: 524.486

DF Diff: 0.0

Df Angle: 0.0

% AC: 10.0

45 mode ang: 0.0

Quality (0-9): 5

Refit

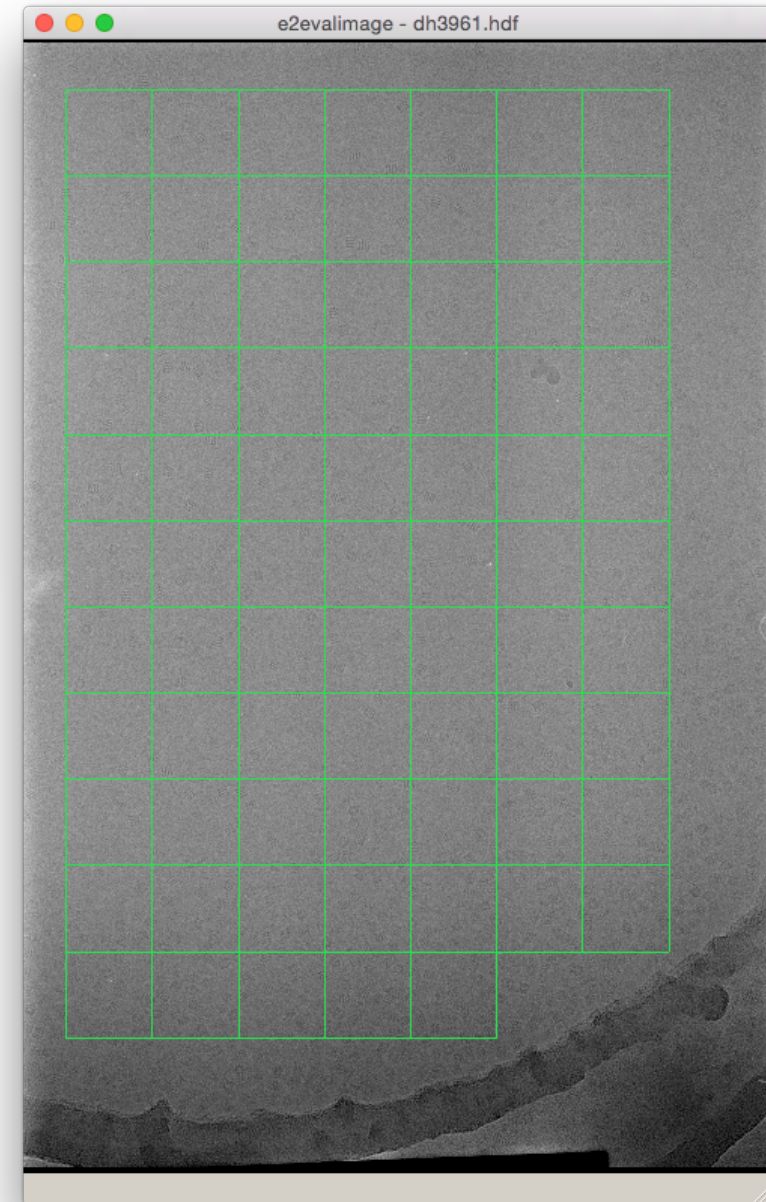
CTF BG Adj

Project

Import

Invert

X-ray Pixels



blake.bcm.edu/emanwiki/EMAN2/Programs/e2evalimage