Supplementary materials for

goCTF: Geometrically optimized CTF determination for single-particle cryo-EM

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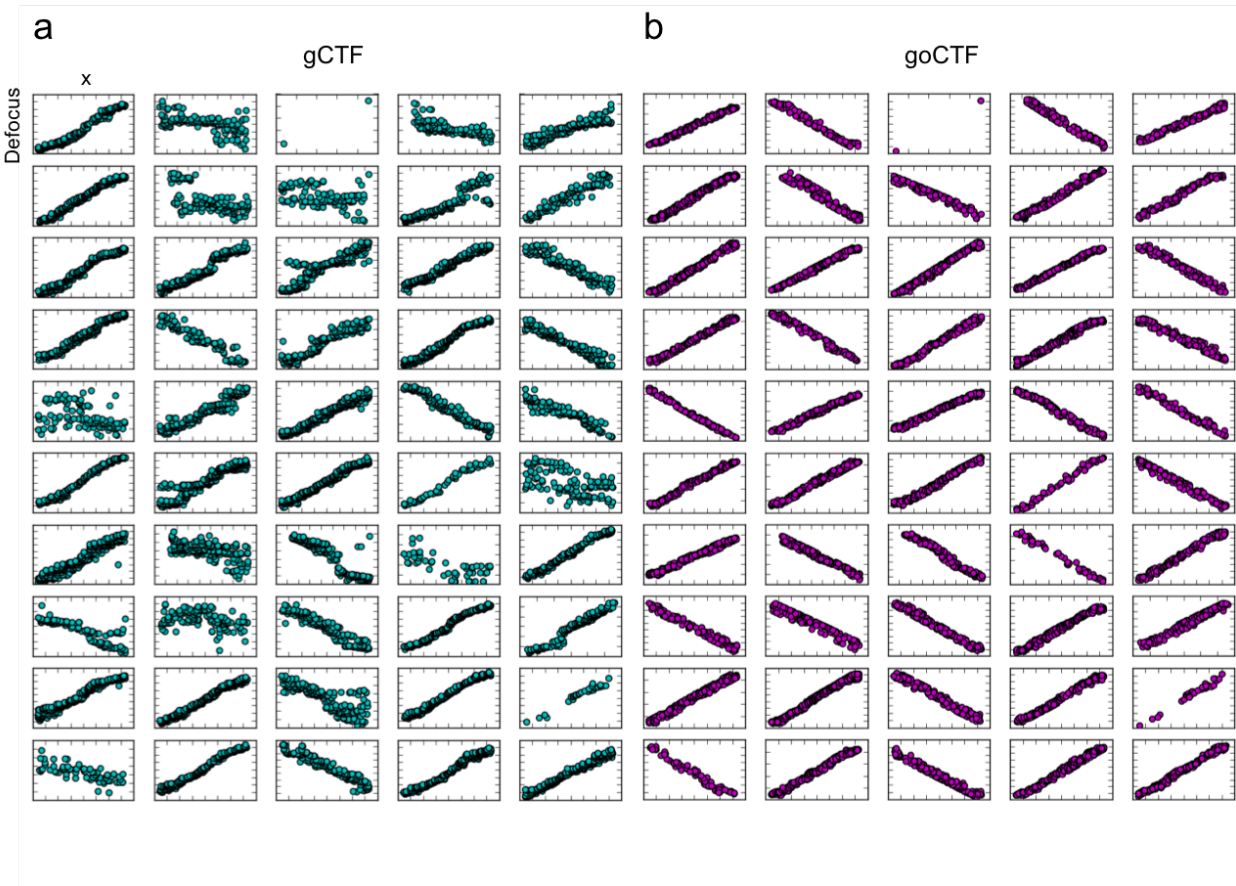
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Fig. S1. Local focus refinement performance comparison between gCTF and goCTF using the benchmark dataset (EMPIAR-10097). (a) One snapshot of randomly selected 50 micrographs with local defocus determined by gCTF. (b) Same experiment as (a) except with local defocus determined by goCTF.
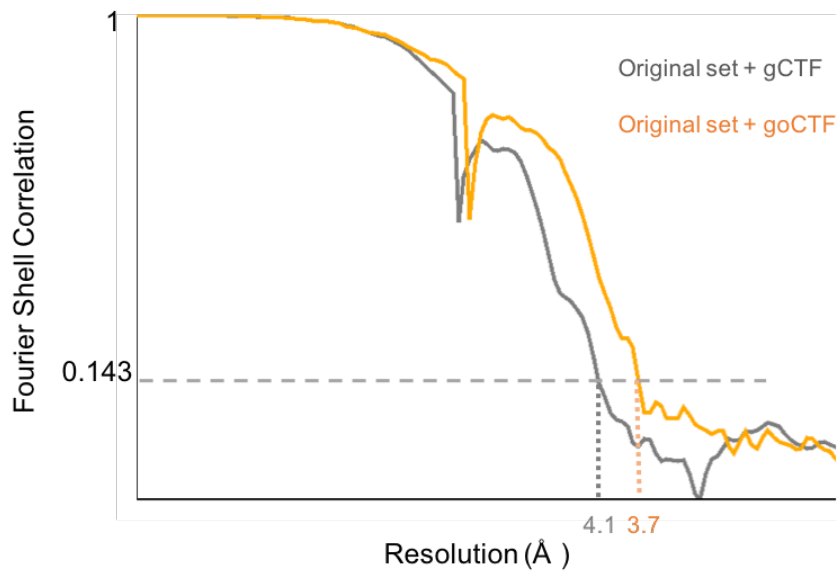
Fig. S2. Fourier shell correlation of reconstructions obtained from the benchmark dataset

(EMPIAR-10097). Original set contains 130,000 particles with a local defocus determined by

gCTF shown in grey indicates 4.1 Å resolution. The same set with local focus determined by

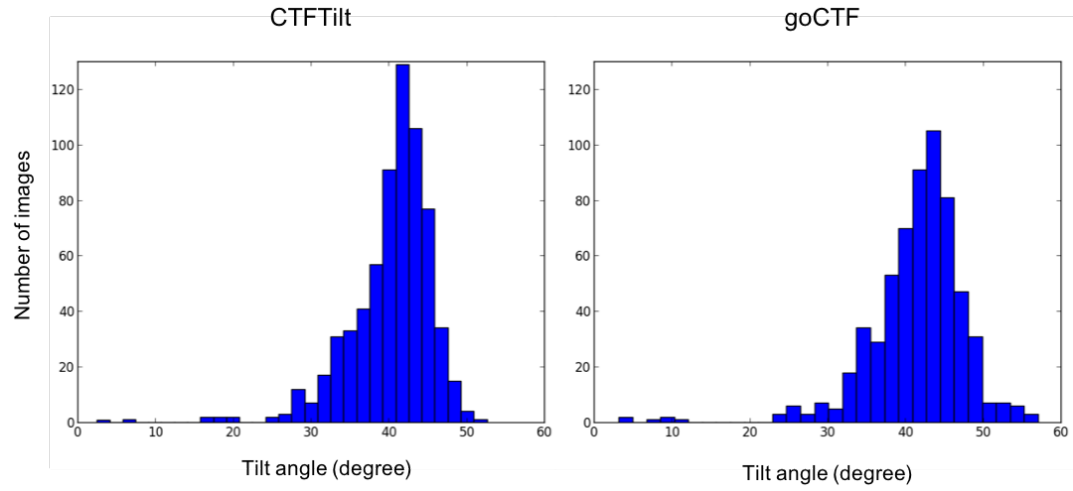goCTF shown in yellow indicates 3.7 Å resolution.

Fig. S3. Histogram of determined tilt angle from CTFTilt (left) and goCTF (right) using benchmark

dataset (EMPIAR-10097).