Export particles from cisTEM to Relion.

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qianpu
Export particles from cisTEM to Relion.

Hi,

I'm using cisTEM to pickup particles. The picked up particles were exported to relion for further data processing. However, it seems to me that only the particles within 3710x3710 region were exported. (K2 images). This caused a problem when I used images that have 4096x4096 size, e.g. from Falcon. Is there an alternative way to do it using cisTEM?

Best regards

Pu Qian
Hi,

Hi,

I think particles should be picked from the whole image. Are you saying that on a 4kx4k image, only particles within 3710x3710 are picked? Are you setting the min. edge distance?

Are you exporting to relion using export in the refinement package assets panel?

Thanks,

Tim
qianpu
Hi,

I worked with K2 images many times, receiving coordinates from cisTEM without problem. This problem happened only with 4kx4k images collected from Falcon 3.

Procedure I used:
1. import motion corrected images to cistem
2. ctf correction
3. particle picking
4. Assets--Refine pkgs--create.
5. export--relion
6. got two files, .mrcs and . star
7. extract x, y from .star
8. import x,y to relion.

Let me check original .star file to see whether it contains coordinates that larger than 3710, then email you again.

Best regards

Pu Qian
Hi Pu Qian,

Hi Pu Qian,

How did you do your step #7?

Thanks in advance!
qianpu
Hi Tim,

When I pick up particles, all particles within 4kx4k are picked up. However, when I exported them to relion, only the particle with 3710x3710 are exported. I attached a image to you in your email box for your reference. In that image, I used coordinates received from cisTEM to circle all picked up particles. You can see that there are no particles on the left and bottom are circled, meaning their coordinates are not included. It results in wasting of 15% particle in total.

Best regards
Hi,

Hi,

Did you pick, create a refinement package and export - or did you do some processing on them first?

How big is your box size?

Thanks,

Tim