Published on *cisTEM* (https://cistem.org)

Exporting 2D classes from cisTEM to relion

Mon, 02/17/2020 - 14:34 #1

Panchali
Goswami

Exporting 2D classes from cisTEM to relion

I have a data set collected using K3 detector which I could'nt particle pick or 2D classify on Relion. Fortunately, cisTEM does a good job and I could pick particles successfully. Also, I found that a small subset of particles yielded much better 2D classes on cisTEM than Relion. However, I would like to use Relion for 3D classification. Will the following work?

1. Save the good 2D classes on cisTEM

2. Create refinement package

3. Export particle.star (of the saved good 2D classes)

4. Import the cisTEM initial model mrc file and use it as reference.

5. 3D classify in the usual relion style.

Cheers,

Panchali

timgrant

Hi Panchali,

Hi Panchali,

Yes, I think what you say should work.

BTW - you can also do 3D classification within cisTEM.

Cheers,

Tim

Tue, 02/18/2020 - 16:23 (Reply to #2)

Panchali
Goswami

Hi Tim,

Hi Tim,

Thanks for your reply. I am new to cisTEM and have so far proceeded with only 2D classify and Initial model. Does the option generate 3D allow speration into different classes?

Also, for Map sharpening (post processing) how do I get the detector MTF file?

Cheers,

Panchali

Wed, 02/19/2020 - 11:28 (Reply to #3)

timgrant

Hi Panchali,

Hi Panchali,

For the cisTEM route, you would first run one or two auto-refines (first one starting at 20A, second one starting at higher res if the data supports it) starting from your intial model.

When that is done, you create a new refinement package starting from your refined refinement package, but this time select n classes. You can then run more autorefines on this refinement package.

You do not need an MTF file for cisTEM.

Tim

timgrant

Also, the inital model from

Also, the inital model from cisTEM is likely not on the correct greyscale for Relion, so that needs to be taken into consideration.

Tim

Log in or register to post comments

Source URL:https://cistem.org/exporting-2d-classes-cistem-relion?page=0