



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

[Home](#) > Symmetry expansion

Symmetry expansion

Thu, 04/23/2020 - 16:45

#1

ivo lu

Symmetry expansion

Hi all,

I was reading the paper [10.1073/pnas.1903562116](https://doi.org/10.1073/pnas.1903562116) and it mentioned using cisTEM to do symmetry expansion and asymmetrical unit focus refinement. It also mentioned a program within cisTEM called *symmetry_expand_stack_and_par*. I am wondering if this program is available?

Best,

WL

File:



[symmetry_expand_stack_and_par.gz](#)

timgrant

Hi,

Hi,

I have added the current version of the binary to your post. Please bear in mind that it has not been part of an official release yet, and so may be unstable / buggy. If you do try, please report any results / ask questions here.

Thanks,

Tim

Mon, 05/04/2020 - 17:44 (Reply to #2)

ivo lu

Hi

Thank you so much!

Could you explain a little bit of how to use this binary? I unzip it and copy into the folder of cisTEM programs. Is it correct or what should I do with it?

Best,

WL

ivo lu

Never mind, I am running the

Never mind, I am running the program now.

I have two questions for the program:

1. What does least square scaling do?

2. If let's say I only want the top right area of the map, do I use 'Center and Crop specific area'?

Thank you!

ivo lu

Sorry about the separated

Sorry about the separated posting.

I have one more question:

When recentering the output stack, what is origin point of the 3D volume? Is it the left back bottom corner so that X Y Z would all be positive number?

timgrant

Hi.

Hi.

1. Least squares scaling tries to scale the projections and the data, and can work better if the scaling seems to be off. If your density seems to be beign subtracted ok, you probably don't need this.

2. Yes you use center and crop specific area, and yes the X Y Z would all be positive. If you have imod, the co-ordinates it displays should be correct.

Tim

[Log in](#) or [register](#) to post comments

Source URL:<https://cistem.org/symmetry-expansion>