



DANG adjustment during initial model generation

Sat, 2017-07-08 10:32 — mtherkel

Hello,

I'm using Frealign to generate an initial model of a virus. I saw in an earlier post that it was suggested to set DANG to 0 for MODE 3 initial model generation. When I did this for cycle 1 (with 40A res limit), Frealign set DANG to 8 degrees, which would've taken 40+ hrs, and seemed like overkill for generating a featureless sphere. I set it back to the default 200, but am wondering as I lower the resolution threshold in subsequent cycles if I should also adjust the angular step size.

What do you suggest for DANG at various resolution limits?

Thanks!

Matt



IF YOU HAVE HIGH SYMMETRY IT

niko - 8 Jul 2017 - 16:43

If you have high symmetry it will probably work with all angles, so 200 deg is fine. The angle should be chosen to provide sufficient sampling at the periphery of particle. If there is no symmetry, $\text{angle_in_rad} = \text{resolution} / \text{particle_diameter}$ is usually sufficient.

Source URL: <http://grigoriefflab.janelia.org/node/5697>