2D Classification in RELION 2.1

If you do not have extracted particles, copy them from the precalculated results to the working directory:

cp – **r** PrecalculatedResults/Extract/job011 Extract/job011

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Then select your particles.star file in the gui:

I/O CTF Optimisation Sampling He	lix Compute Running
Perform image alignment?	Yes \$
In-plane angular sampling:	67
Offset search range (pix):	5 7
Offset search step (pix):	1 7

Helix tab:

I/O CTF Optimisation Sampling Helix Compute Running										
Classify 2D helical segments? No Tube diameter (A): 200 Do bimodal angular searches? Yes Angular search range - psi (deg): 6										
Compute tab:										
I/O CTF Optimisation Sampling Helix Compute Running										
Use parallel disc I/O? Yes Vumber of pooled particles: Pre-read all particles into RAM? Yes Copy particles to scratch directory: Combine iterations through disc? No										
Use GPU acceleration? No 🗘 🕅 Which GPUs to use: 0:1:2:3										
Running tab:										
I/O CTF Optimisation Sampling Helix Compute Running										
Number of MPI procs: 1 7 Number of threads: 1 7 Submit to queue? No ¢?										
Queue name: openmpi ? Queue submit command: qsub ? Standard submission script: ON/relion/bin/relion_qsub.csh ? Browse Minimum dedicated cores per node: 24										
Additional arguments: ?										

If your run takes too long you can copy the precalculated run to the running directory and use these results: cp –r PrecalculatedResults/Class2D/job014 Class2D/job014

Selection of the best 2D classes

Now you can use the 2D classes to select the best for the initial structure generation:

Therefore choose the **Class2D/job014/run_it025_model.star** file in the **Subset selection** panel:

Class options tab:

I/O Class options Running	
Re-center the class averages?	Yes
Regroup the particles?	No \$?
Approximate nr of groups:	1 ?
press run:	

•	Relion display GUI						
run_it025_model.sta	r						
Scale:	Black value: 0						
Sigma contrast:	0 White value: 0						
Display:	rInReferenceImage \$						
✓Sort images on: rInClassDistribution							
✓ Reverse sort?	Apply orientations? Read whole stacks?						
Nr. columns: 5 Max nr selected par	Ori scale: 1 Max. nr. images: 1000 ts per class: -1						
	Display!						

You can select the better classes by clicking on them and save your selection by clicking the right mouse click button and choose save selection:

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