

1. Software pre-installation requirement

- Linux system
- UCSF Chimera or other software to display 3D map
- Python

2. Input data requirement

- 3D density map/volume
- Tilt angle range and steps
- Molecular mass
- Image apix (Å/pixel)
- Mask (that can be generated from the low-pass the 3D map by following instruction)

3. Run the MW job

```
# "usage: ./runMissingWedge.py [input_3Dmap_mrc_no_ext] [3Dmask_mrc_no_ext]
[negative_angle] [positive_angle] [iteration_number] [lowpass_var]
#
# where:
#
# [input_3Dmap_mrc]: the input MRC 3D density map file to do Missing Wedge correction.
# [3Dmask_mrc]: the input MRC 3D mask density map, cutoff mask is better.
# [negative_angle]: the bottom negative angle for 2D stack.
# [positive_angle]: the top positive angle for 2D stack.
# [iteration_number]: the number of iterations.
# [lowpass_var]: {0/num}, if [lowpass_var]=0, do not add lp; if [lowpass_var]={num}, add cut
off lp as {num} pixels.
```

For example: runMissingWedge_v1p3final.py vol_BP_01 3DMask006-adv -70 70 500 4

Shall you have any question, please contact us

Gang (Gary) Ren, PhD
Lawrence Berkeley National Laboratory
Molecular Foundry, Room: 2220
1 Cyclotron Road, MS 67R2206
Berkeley CA 94720-8197
Phone: (510) 495-2375; Fax: (510) 486-7268
Email: gren@lbl.gov;
<https://rengroup.lbl.gov/>