Example for MS Fig. 3a:

1. From the full FOV of the series, crop an area of 1024-by-1024 pixels, and bin each frame by a factor of two, thus dimensions in the config file should be [512,512]. This is a recommendation for a quick reconstruction, but larger areas or no binning, using a powerful computing machine, will work as well.
2. The reconstruction limit chosen is 1.6 Å (Limit=6).
3. All frames are used for the reconstruction, therefore: Range=[[0,29]].
4. The focal range is: Foci=[-270.0 ,-90.0]
5. All other relevant parameters are in the attached config-example.fsr file.
6. In order to choose an area for the alignments:
   a. Temporally save "exampleframe_000.raw" in another folder.
   b. Bin over the whole series, and save it as "exampleframe_000.raw".
   c. Then, use the following command line:
      $> python PyFSRec.py –config-example.fsr --showarea
   d. Correct the config file offset accordingly, and iterate with the same command line.
   e. When finished, move the original "exampleframe_000.raw" file back to the input folder.
   f. In this example case: Offset=[0,0] and AREA=[128,128]
7. Resave the original "exampleframe_000.raw" in the examples file folder.
8. To reconstruct the wavefunction, use the following command line:
   $> python PyFSRec.py –config-example.fsr
9. It will save in the given config file output folder some Excel files, and two ".wav" files which are the wavefunction and the filtered wavefunction.
10. To autofocus, run the following command line:
    $> python PyFSRec.py –config-example.fsr --autofocus
11. To finish, present the phase of "Rec-bin2-av10_filt.wav"