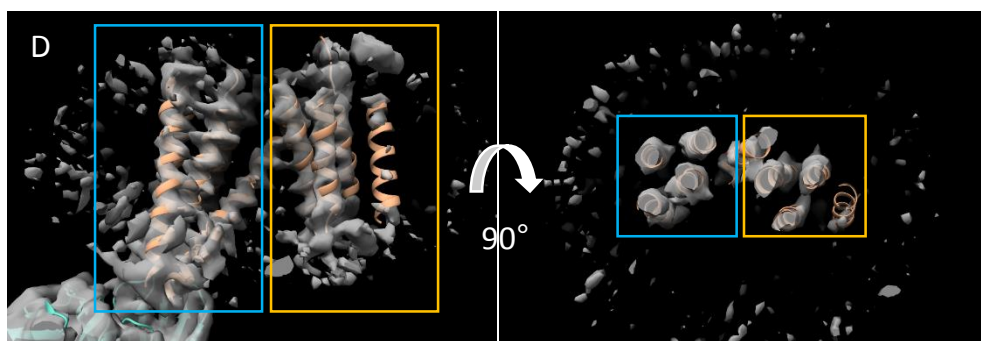
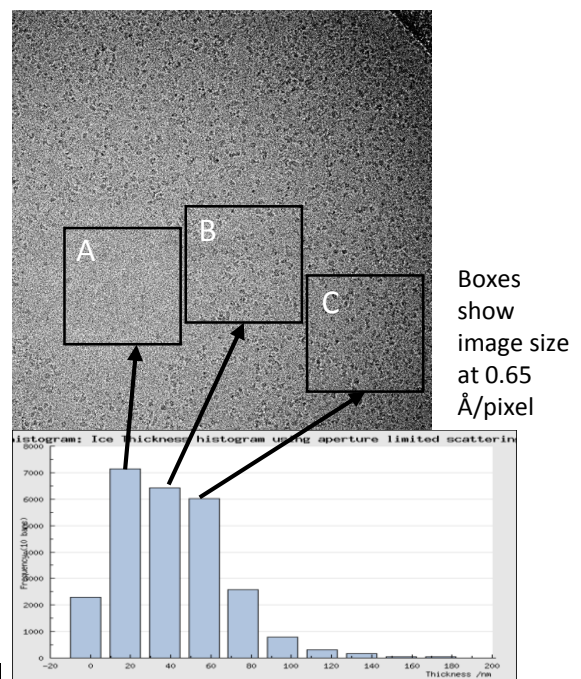
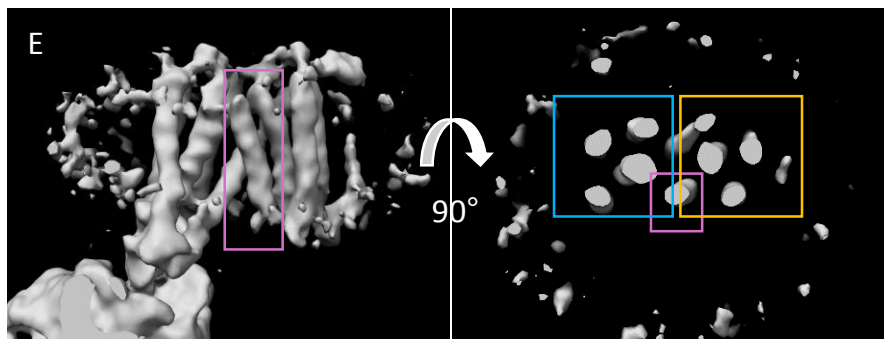


- NCCAT Jan 2, 2019
- Support: Ed Eng and William Rice
- Grid type: C-flat 1.2/1.3
- The goal was to target ideal ice to improve resolution
- Optimal ice thickness is 35 - 45 nm
 - A. 25 - 30 nm: particle exclusion is significant
 - B. <25 nm: particle exclusion is complete
 - C. >50 nm: resolution estimates decrease substantially
- The NCCAT dataset resulted in best maps to date
 - D/E. Initial TM and sequence assignments were possible in Fab-bound bundle (blue box)
 - D/E. Flexibility between TM bundles precluded assignment of Fab-distal helices. (orange box)



- UVA MEMC Titan Krios/Falcon3EC data collection with new construct
- New construct and crosslinking resulted in improved conformational homogeneity
 - E. With the new construct, a “missing” TM helix between the TM bundles appeared (pink box), and the two TM bundles are equally well resolved.
 - E. However, the overall resolution is lower than in the NCCAT map, possibly due to the use of a Falcon3EC rather than the GIF/K2



- Grids for a new NCCAT data collection with the stabilized construct are high-quality & have sufficient areas of optimal ice.
- 4 grids each of C-Flat 1.2/1.3 and 2/1 grids are ready for NCCAT data collection
- C-Flat 2/1 grids were used to improve the efficiency of image shift data collection

