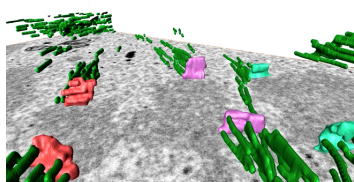
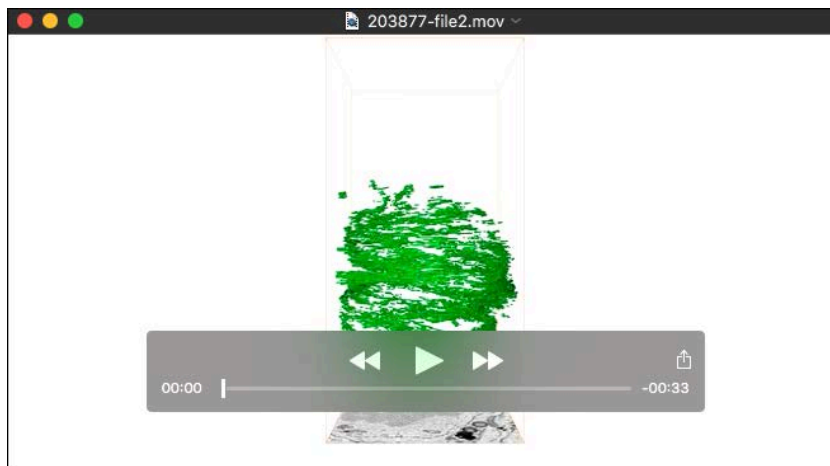
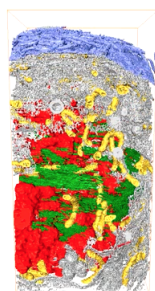
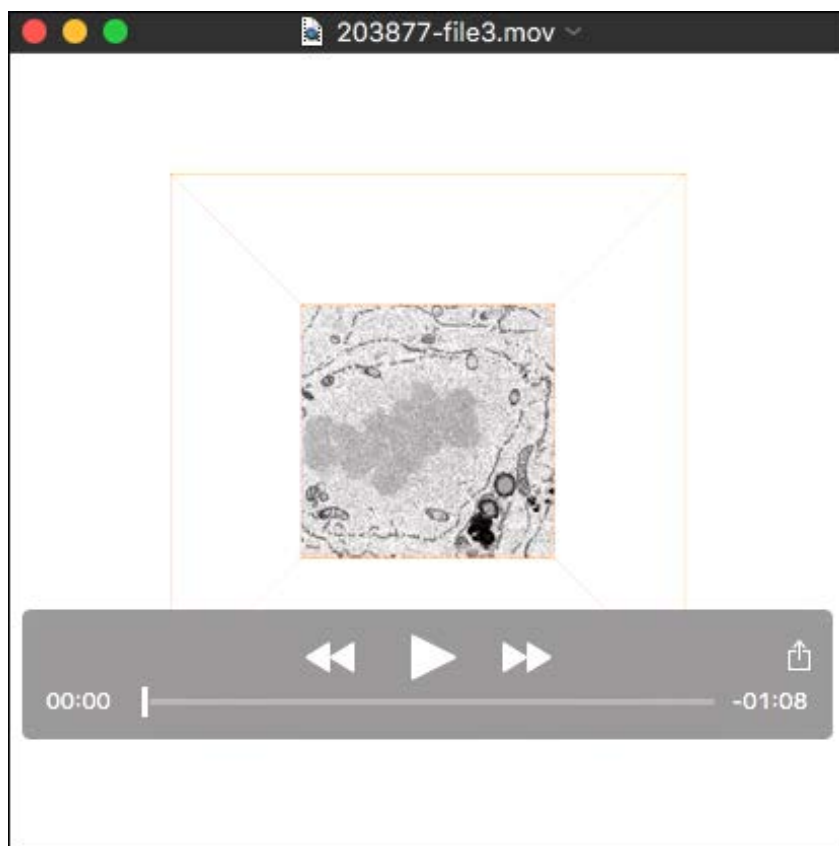


3 Supplementary Movies and 3 Supplementary Figures



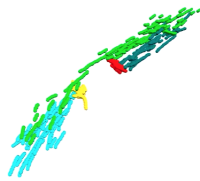
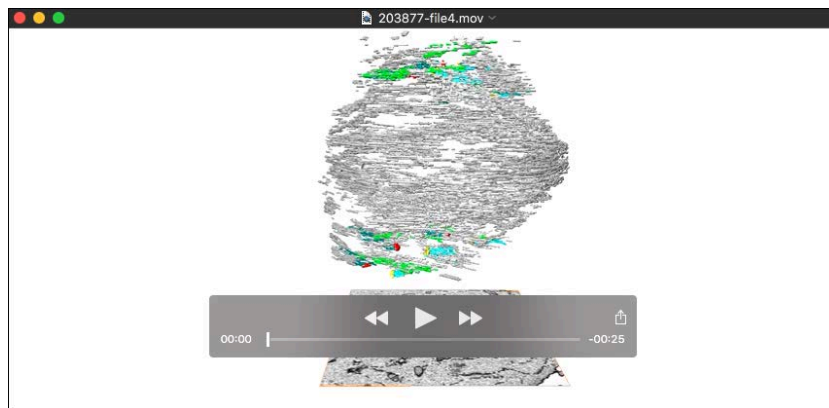
Supplementary Movie 1 Movie to show 3D rendering of a SBF-SEM dataset from a HeLa cell at metaphase.

MTs (green) are shown together with chromosomes (red) and kinetochores, where visible are shown as colored patches. Same colors indicate the sister pairs.



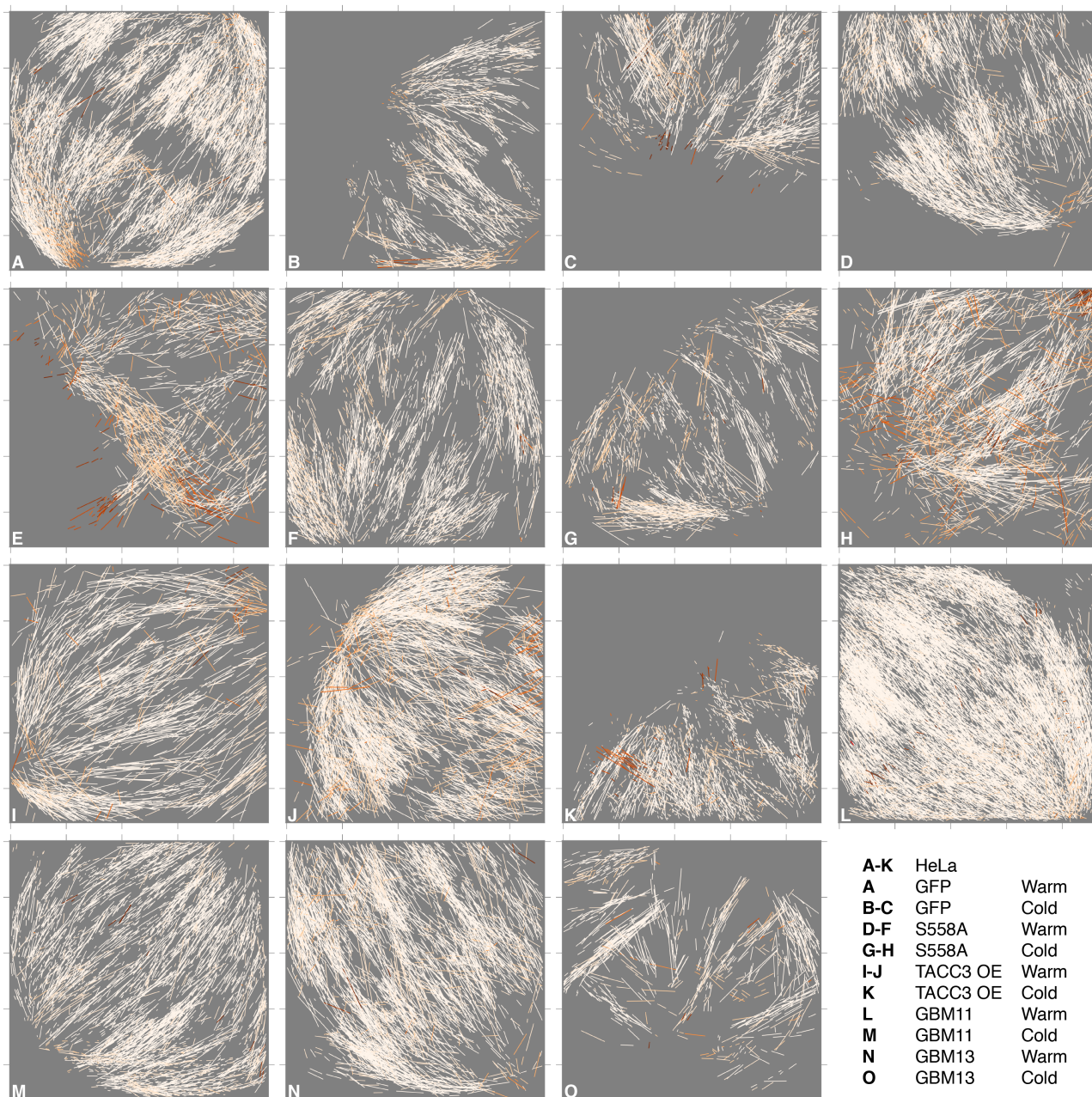
Supplementary Movie 2 Spindle exclusion zone.

A movie of 3D rendering of an SBF-SEM dataset from a HeLa cell at metaphase. MTs (green) are shown together with chromosomes (red) and membranes are colored as described in Figure 7. The exclusion zone is modeled as a translucent blue bubble.



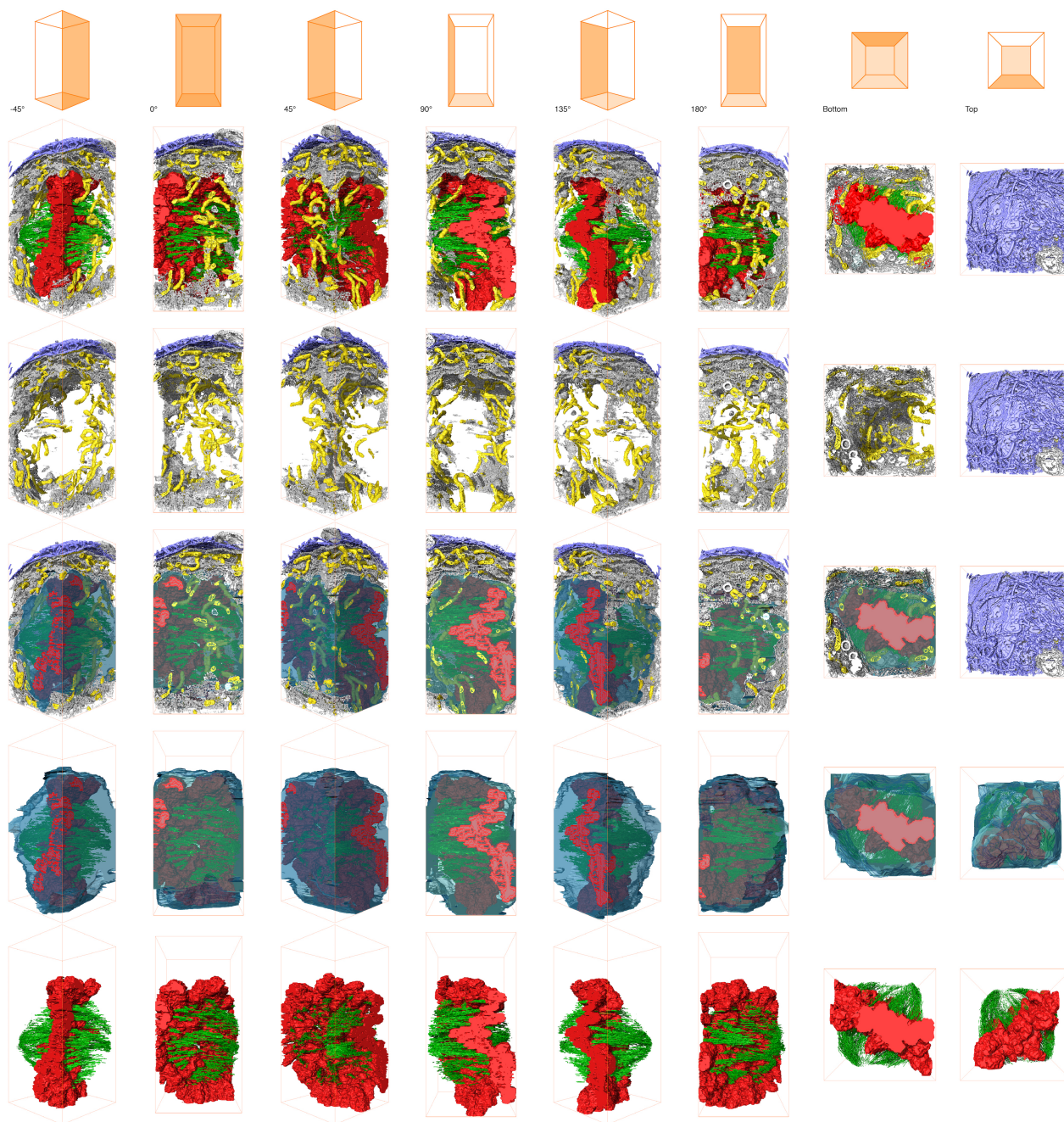
Supplementary Movie 3 Bridging fibers.

A movie of 3D rendering of an SBF-SEM dataset from a HeLa cell at metaphase to accompany Figure 8.

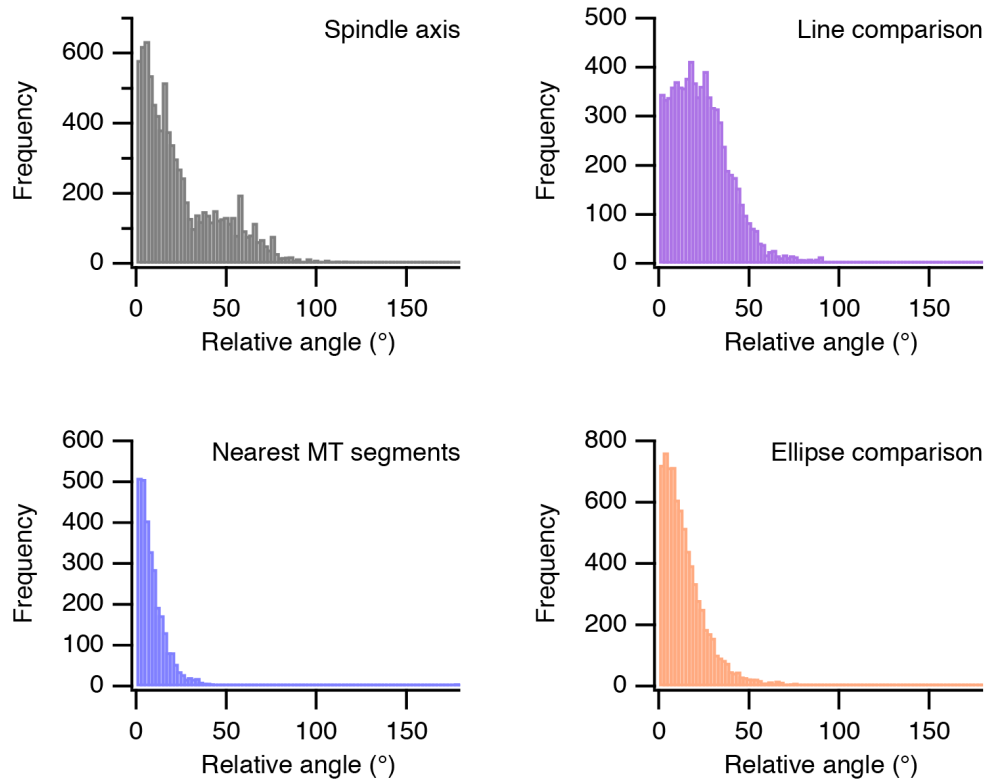


Supplementary Figure 1. MT datasets described in this paper.

Z-projections of all MTs segmented in each dataset colored according to angle deviations from the ellipse model, as in Figure 5.



Supplementary Figure 2. The mitotic spindle exists in a spindle “exclusion zone”. Various views of a 3D rendering of an SBF-SEM dataset from a HeLa cell at metaphase to accompany Figure 7.



Supplementary Figure 3. Comparison of ellipse model with other spindle models.

The same MT segmentation dataset is shown compared to four different models.

- (A) spindle axis, comparison to the a straight line from spindle pole to the opposite pole.
- (B) nearest MT segments, comparison to MT segments that lie within x nm.
- (C) line comparison, using a straight line model, i.e. diamond shaped spindle with no curvature.
- (D) ellipse comparison, using the ellipse model as described (selected method).