

Description of Additional Supplementary Files

Supplementary Movie 1: Raw tilt-series of the tracking area obtained using BISECT. Sequence of 41 unaligned raw tilted projections collected over a $\pm 60^\circ$ tilt range acquired using BIS. We can achieve tracking with precision greater than 5 nm over the course of the tilt-series by using cross-correlation maximal distance thresholds of 50 nm at the low-magnification level, and 2 nm at the high-magnification level. Field of view is ~ 500 nm.

Supplementary Movie 2: Raw tilt-series of a ROI obtained using BISECT. Representative area situated $5.4\ \mu\text{m}$ away in x along the tilt axis and $4.8\ \mu\text{m}$ perpendicular to the tilt axis from the tracking area.