Supplementary Figure 2: Localization accuracy of single switches before and after drift correction
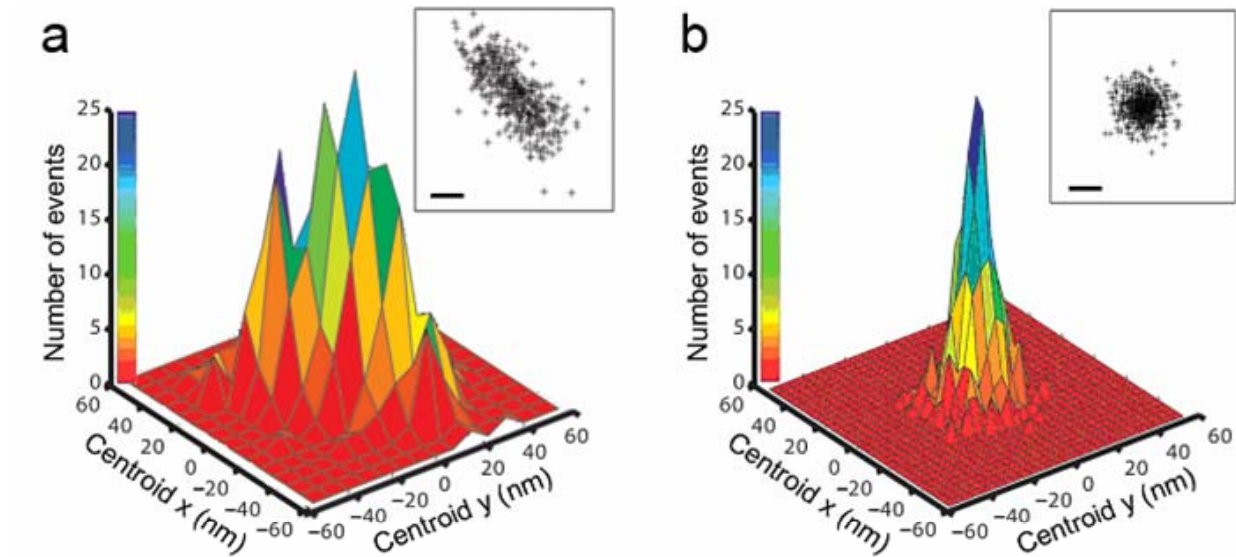

Plotted are the superimposed position distributions of 29 individual switches before (**a**) and after (**b**) correction for stage drift. Scale bar: 20 nm. To obtain these distributions, the image of each switch during a given imaging cycle was fit to a two-dimensional Gaussian function, yielding the centroid position of each switch during that cycle. Twenty imaging cycles were carried out, giving twenty measured positions per switch. The position data for each switch were realigned so that the average position of each switch was at the origin, and the measurements from different switches were then superimposed to give the overall position distribution shown in the insets. The main plots are histograms of these centroid positions. The uncorrected distribution is fairly broad and skewed asymmetrically. After correction for stage drift using fiducial markers (see **Supplementary Methods** online) the distribution become significantly narrower. The fit of the drift-corrected histogram to a Gaussian gives a full width at half-maximum of 18 ± 2 nm.