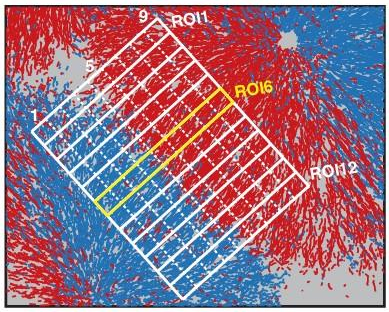
(analysis continued from MT plus tip tracking, fig. S2)

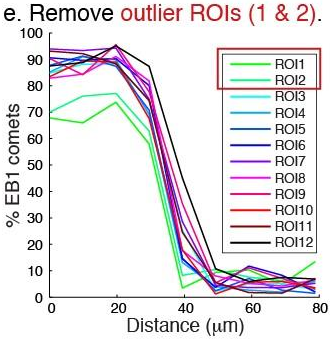
4) Interpenetration analysis for a single aster-aster interaction zone (AAIZ)

a. Divide comets (summed over 2 min) into two populations based on direction.
b. Divide space into binned rectangular ROIs perpendicular to interaction zone.
c. Determine population fractions. (Example data for ROI6)



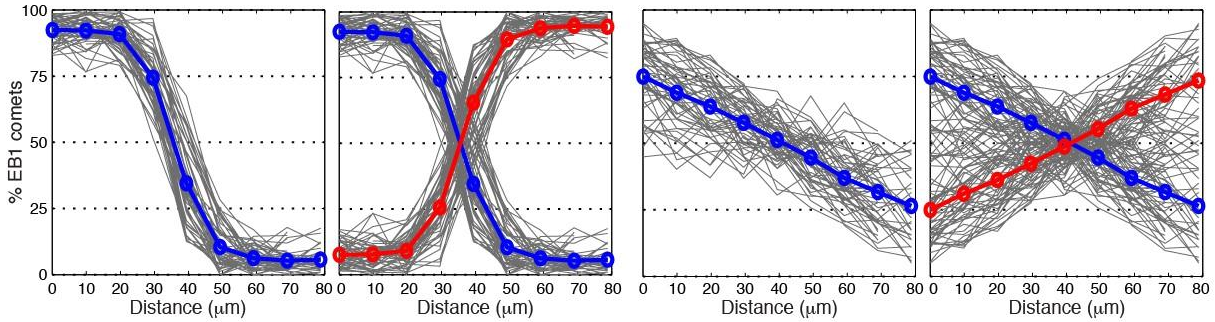
Bin No.	Number of EB1 comets			
	Total	Blue	Red	% Blue
1	265	240	25	90.6
2	279	250	29	89.6
3	308	278	30	90.3
4	351	281	70	80.1
5	282	41	241	14.5
6	268	10	258	3.7
7	255	30	225	11.8
8	265	22	243	8.3
9	301	6	295	2.0

d. Plot population fractions over distance for all ROIs.
e. Remove outlier ROIs (1 & 2).



5) Interpenetration analysis for multiple AAIZs

Control (n = 52 ROIs from 6 zones) **AurkB inhibition** (n = 55 ROIs from 5 zones)



Gray lines -- population fraction data associated with each ROI.
Blue line -- mean fraction of "blue" comets.
Red line -- mean fraction of "red" comets, corresponding to (1 - Blue Fraction).

Same data are displayed in Figure 1F with standard deviation represented by shaded area.

Fig. S3. Aster-aster interpenetration analysis based on tracked microtubule plus ends. See Supplementary Methods section "Aster-Aster Interpenetration Analysis" for description.