



Fig. S4. Aurora B kinase activity is required for organization of the aster-aster interaction zone (AAIZ) in *Xenopus* zygotes. Fertilized *Xenopus* eggs were injected with the Aurora kinase B specific inhibitor ZM447439 (10mM in buffer) or buffer alone after first mitosis and before first cytokinesis (75-80 minutes post fertilization), then fixed, stained for microtubules (green) and AurkB (red), and imaged by confocal microscopy. Similar images were obtained in three biological repeats. **(A, A')** Zygote injected with ZM447439 at 78 min and fixed at 130 min. Two focal planes are shown. Note disruption of antiparallel microtubule organization and CPC recruitment between the growing asters. Aster growth was not affected. **(B, B')** Zygote injected with control buffer at 73 min and fixed at 110 min. Antiparallel microtubule organization and CPC recruitment were not affected. Note buffer injection could move or distort the asters, however organization of the AAIZ with AurkB in zone was maintained.