**Figure 4**

**(A-C)** Cartoons representing the model

**(D)** 50 seconds of kymographs generated from Model 1

**(E)** Shrinkage speed in time for the different models, for the parameter sets that fit the simulations

**(F-G)** The “experiment” dot is placed at the measured value of each magnitude along the x and y axes. The lines represent all the solutions of Model 1,2,3 from omega=0 to omega =1. The square is the best value of omega. This value of omega is the one used to plot the dynamics of shrinkage speed in (E).

**Figure S5**

Simulated kymographs from each model, and density of Ase1 along the microtubule.