Reconstruction algorithms for events in SNO+ generally use the photon time-of-arrival information to fit for position, and the total detected photon count to fit for energy. I will write a maximum likelihood fitter based on a simplified scintillation model and a simplified detector geometry which does a combined energy-position fit. I will compare the reconstructed vertices to those using separate fitters to see if any improvements are possible. If so, and time permitting, I will extend the geometry to be closer to the actual SNO+ geometry.