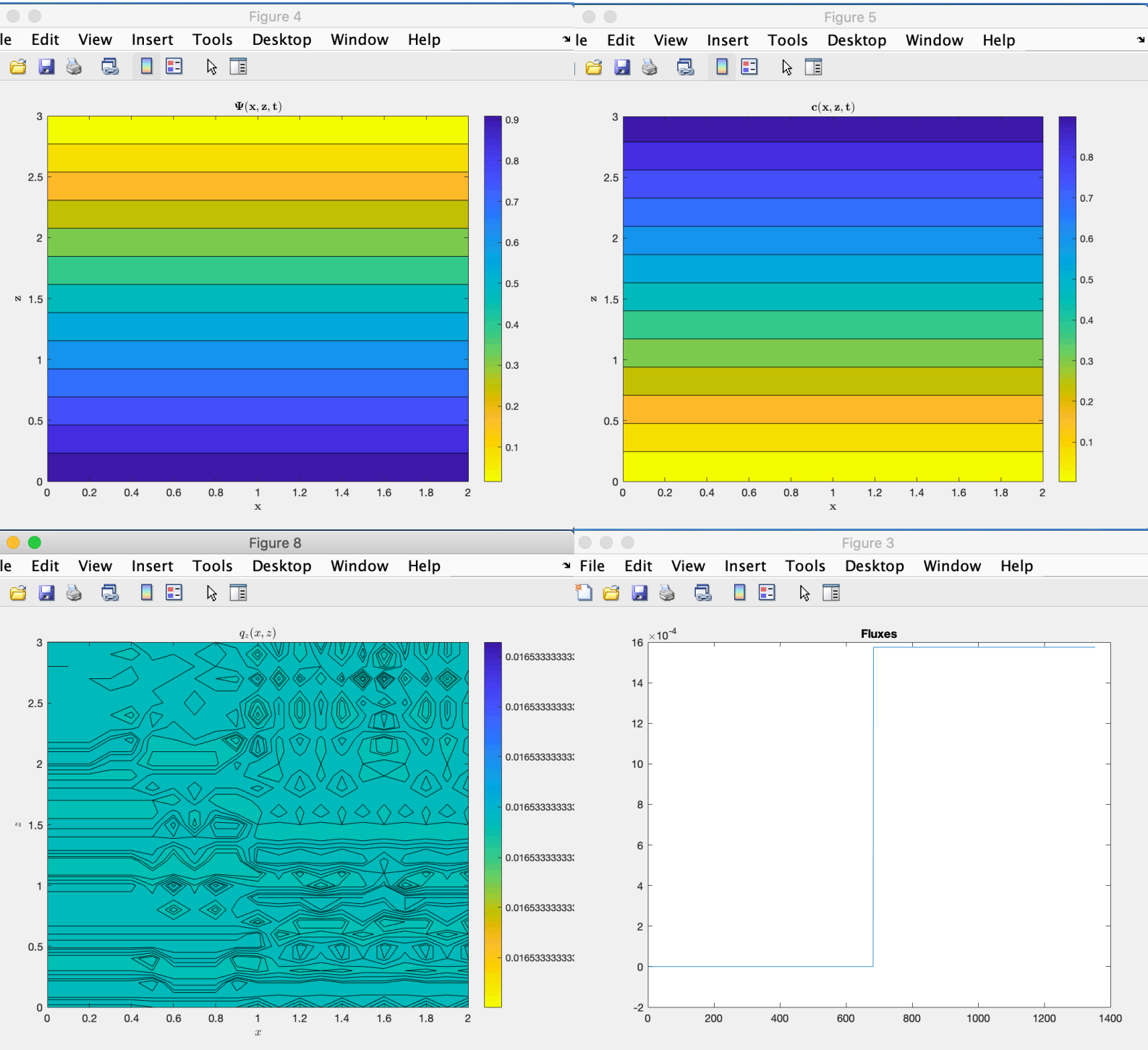


Updates

No gravity

I am reporting here the plots of pressure, concentration, vertical velocity and water fluxes. The results seem to be better. If I can use U_{mean} computed by myself the results for the norm are optima.



$U_o = \text{original } u_{\text{mean}} = 0.0165$

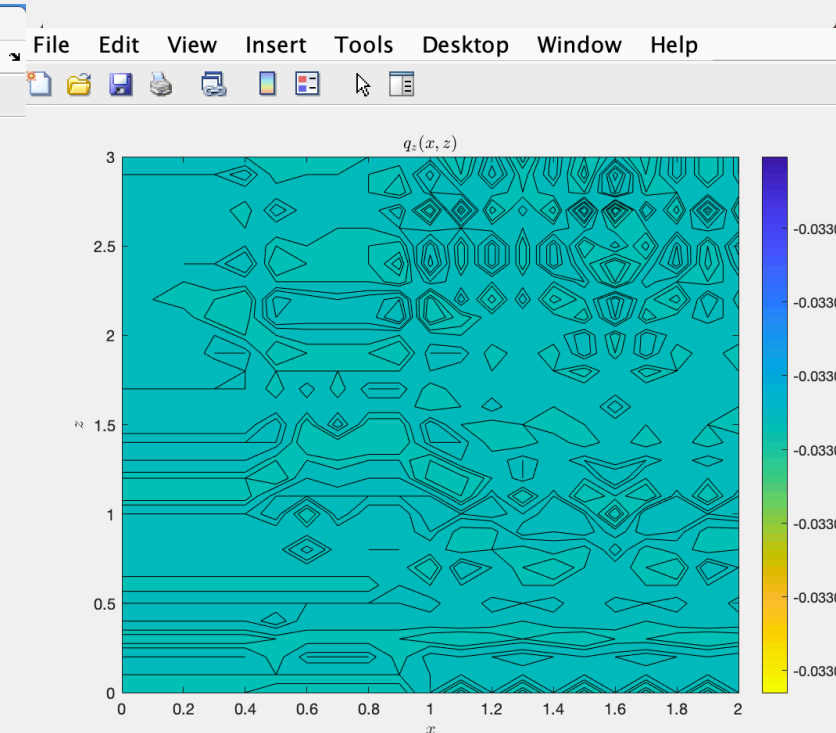
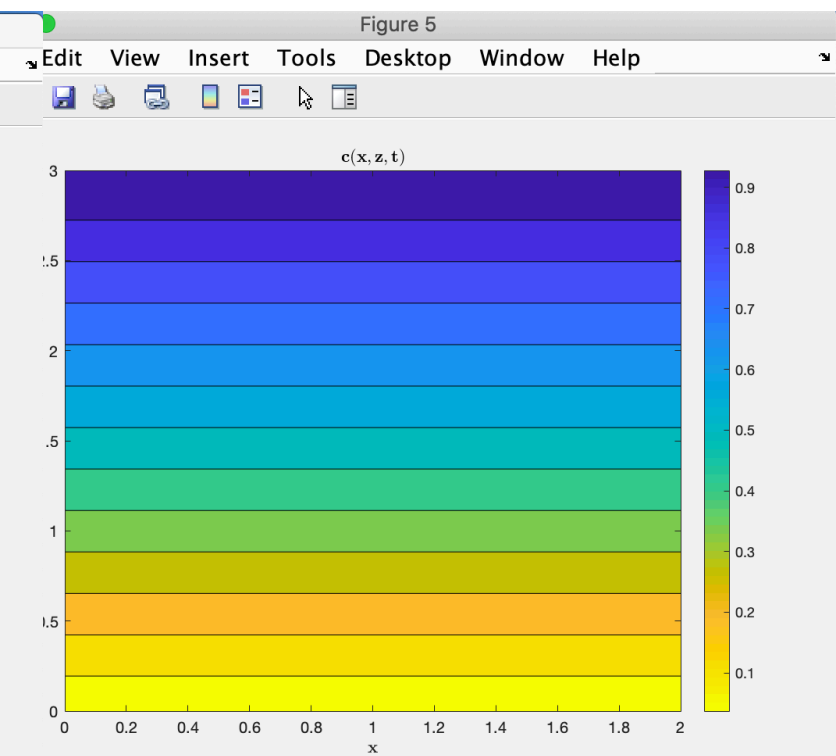
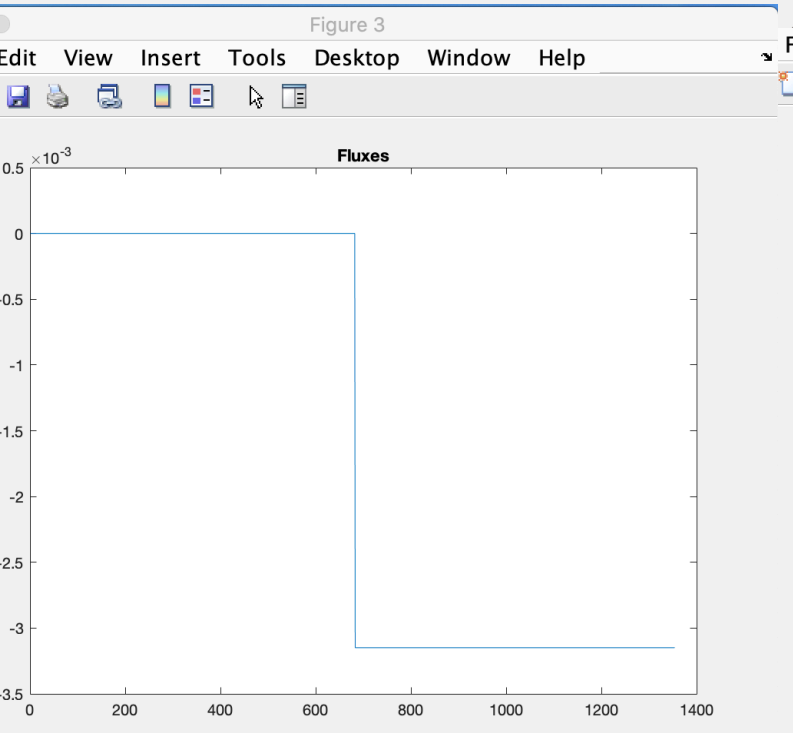
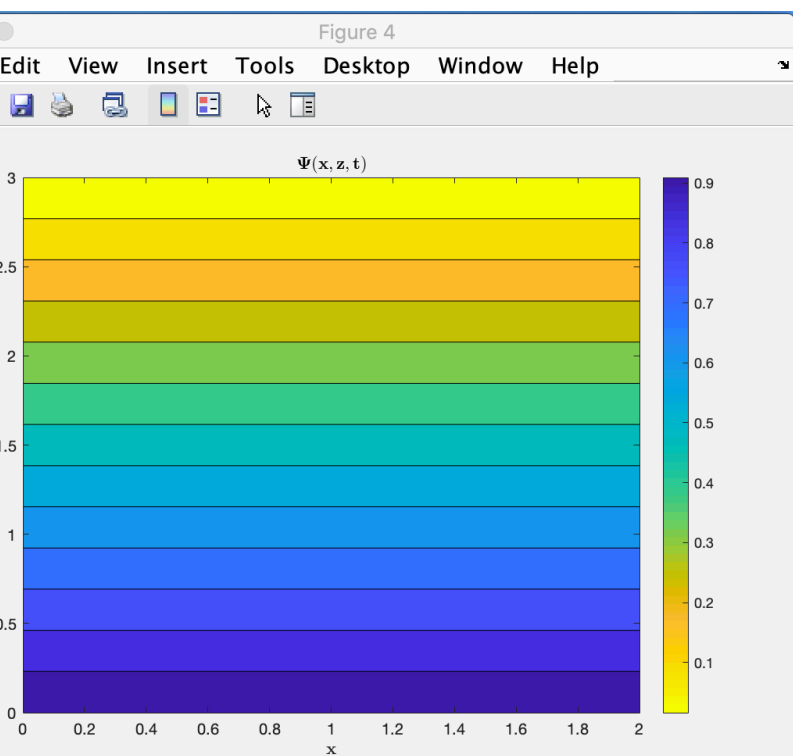
$U_{\text{new}} = \text{numerically computed } u_{\text{mean}} = 0.0165$

The difference between the two is noticeable only by using the long format.

$\text{norm}(v_y - U_o, \text{Inf}) = 7 \text{ e-}4$

$\text{norm}(v_y - U_{\text{new}}, \text{Inf}) = 4.7531\text{e-}16$

With gravity



$U_o = \text{original } u_{\text{mean}} = -0.0331$

$U_{\text{new}} = \text{numerically computed } u_{\text{mean}} = -0.0331$

The difference between the two is noticeable only by using the long format.

$\text{norm}(vy - U_o, \text{Inf}) = 8.5049\text{e-}04$

$\text{norm}(vy - U_{\text{new}}, \text{Inf}) = 7.0083\text{e-}16$