All of these plots are at z=1. Emanueles curves are orange. The blue curve is my brute force derivative, dashed red is my chain rule. The brute force and chain rule derivatives agree. The dashed green curves are equal to my blue curves multiplied by b^2. The green curves seem to be in agreement with Emanuele, with the excpetion of the derivative wrt to h. The black dashed curve in the dPdh plot is calculated using the chain rule with dDdh = -0.61.