

# Tumor Modelling: Hints

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Through this exercise, one is expected to get comfortable with various tumor labels and tumor modelling. Its mandatory to try out the following *cases*. Additional analysis on top of it will be appropriately rewarded.

1. Find the *infiltration length* of this tumor, by optimizing the Dice score. Show a graph.
2. The *Distance* map is not very realistic. Look at the images in *case1* and determine the outlines of the white and gray matter. There is a midline, there are ventricles - and they all should be considered to be *outside Voxels*. So manually draw a more realistic map for *outside Voxels* and iterate the search for the best infiltration length
3. Redo both steps above for a different axial slice. Can be in *case1* or *case2*.
4. Compare this example with the *AnisotropicFastMarching/simple\_example2D.m* and *AnisotropicFastMarching/simple\_example3D.m*. Would you be able to redo step (1) in 3D?