

Pore-backs segmentation in PerGeos

SEM Porosity segmentation (Pore-backs)

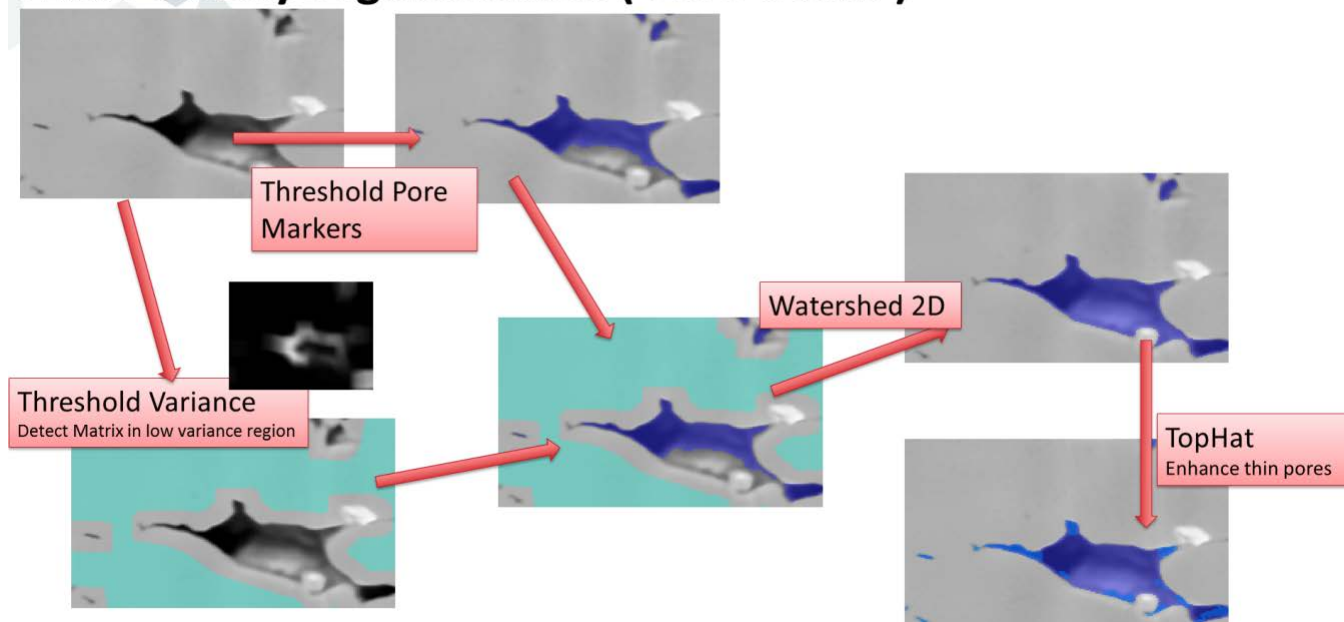


Figure 1 PerGeos Pore back recipe

1. Introduction

This tutorial will help you use the PerGeos recipe *SEM Porosity Segmentation (Pore-backs)* in order to accurately segment the pores of the FIB/SEM sample.

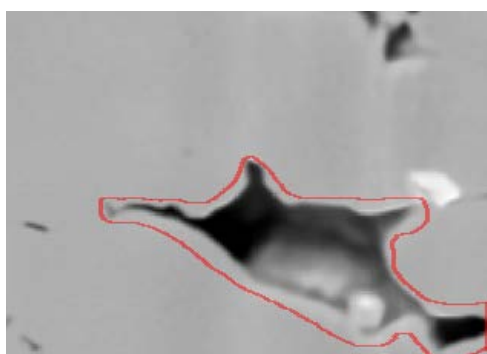
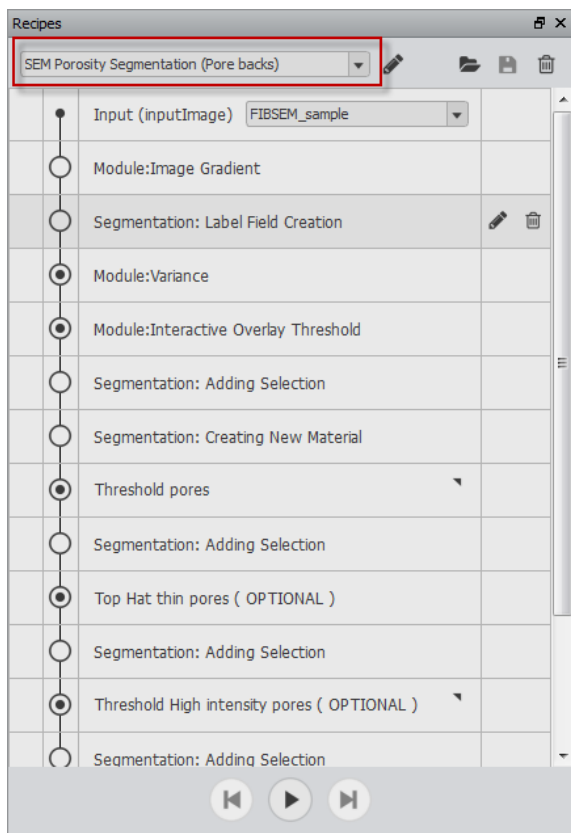


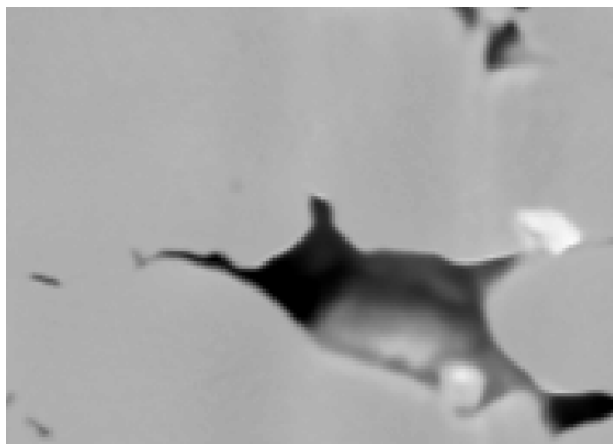
Figure 2 Highlighted pore back in a FIB/SEM slice

2. Methodology

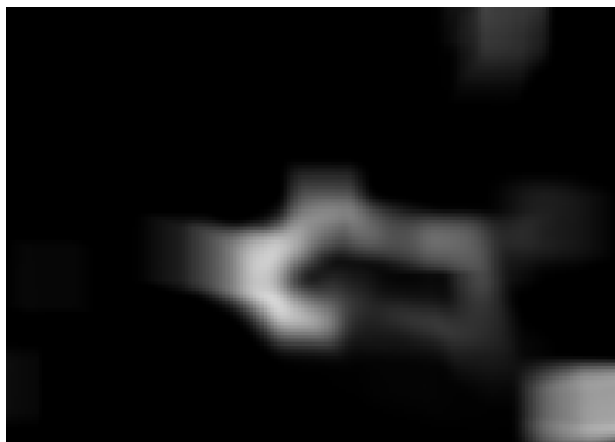
1. Select the SEM *Porosity Segmentation (Pore-backs)* recipe



2. Ensure the input data is set to FIBSEM_sample



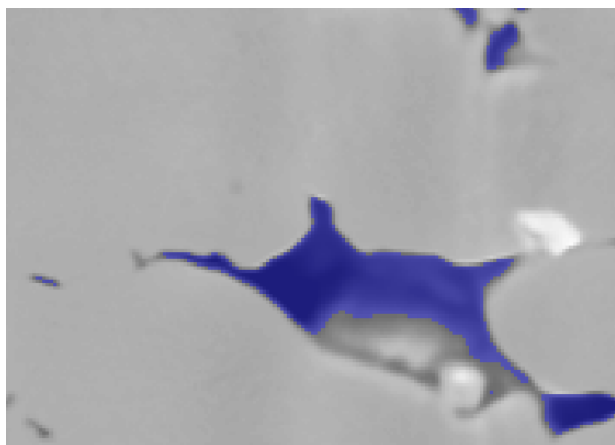
3. Hit the play button so that the variance filter is computed. The breakpoint in the recipe will let you indicate a kernel size of 20. **Note: hit the Enter key after having changed the value**



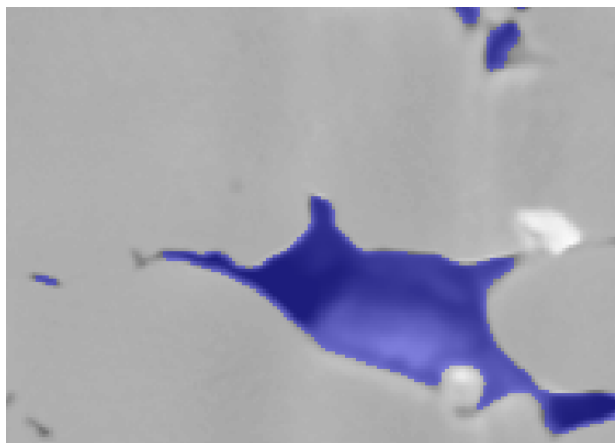
4. Select the matrix with a low intensity thresholding on the variance image



5. Select the pores with a low intensity thresholding on the greyscale image



6. Skip the TopHat step
7. Skip the High intensity pores thresholding step
8. Apply the gradient-based Watershed in 2D



9. Enhance the pores with a black TopHat

