



S1 Fig. Simulation of confocal microscope images from model predicted species distribution. (A) Model predicted distribution of oxygen in cross section 1 presented in grayscale image. (B) Resolution of the image predicted by the model was reduced by a margin of 5 times. (C) Subsequently we applied a point spread function over the image, followed by application of poisson noise, to derive the simulated confocal microscope image at low resolution.