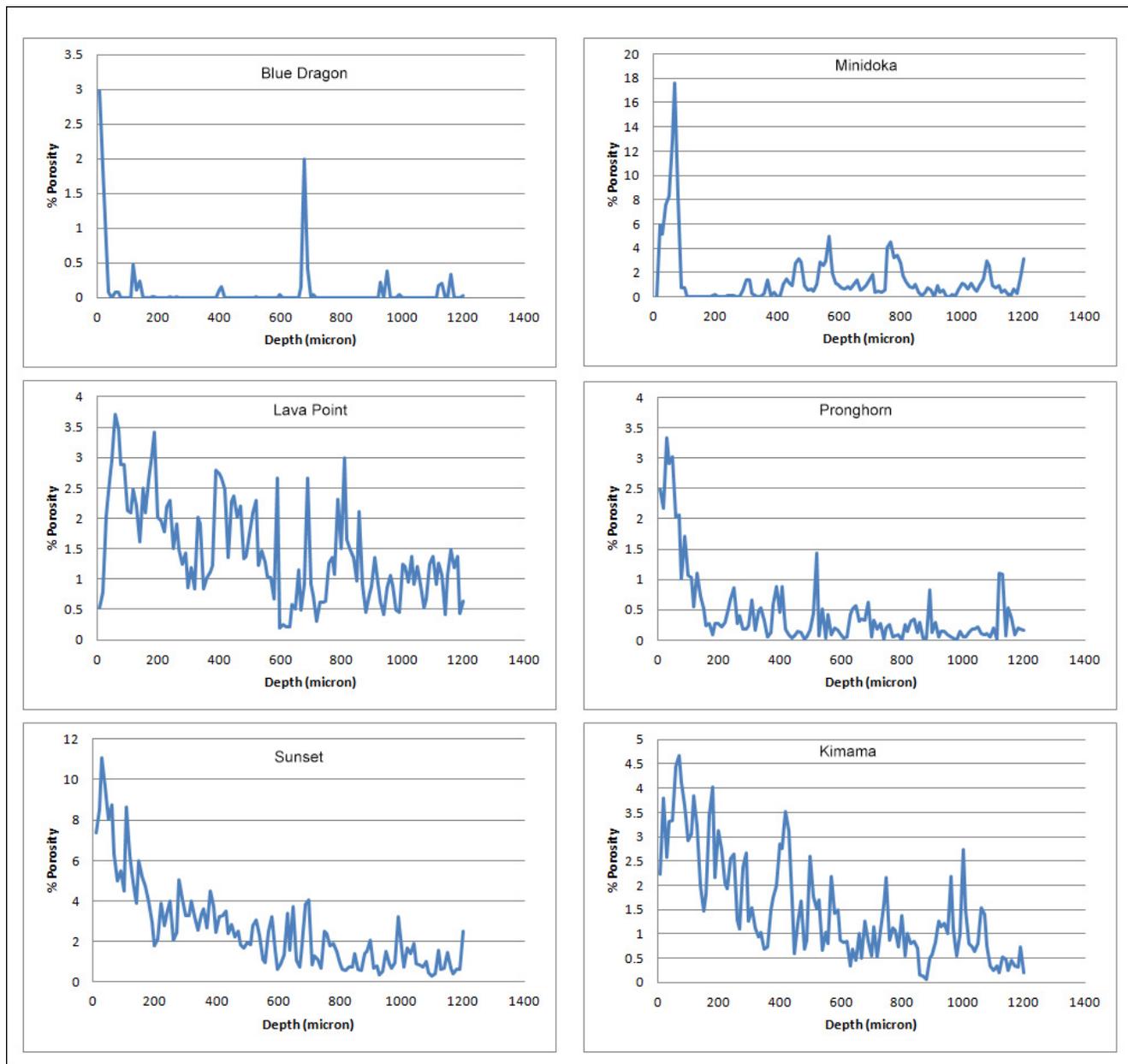
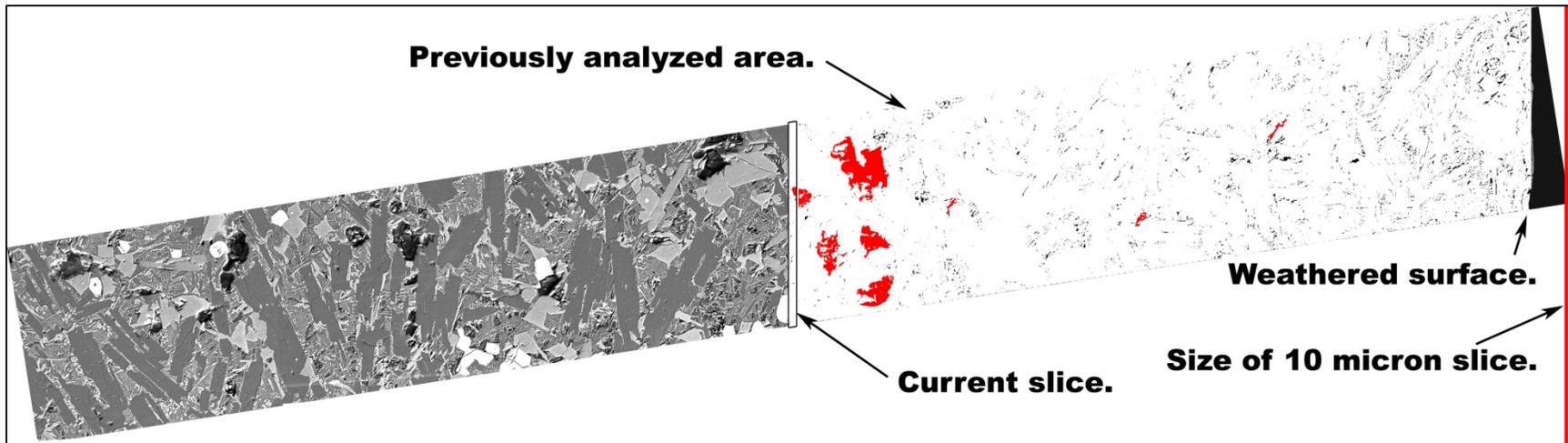


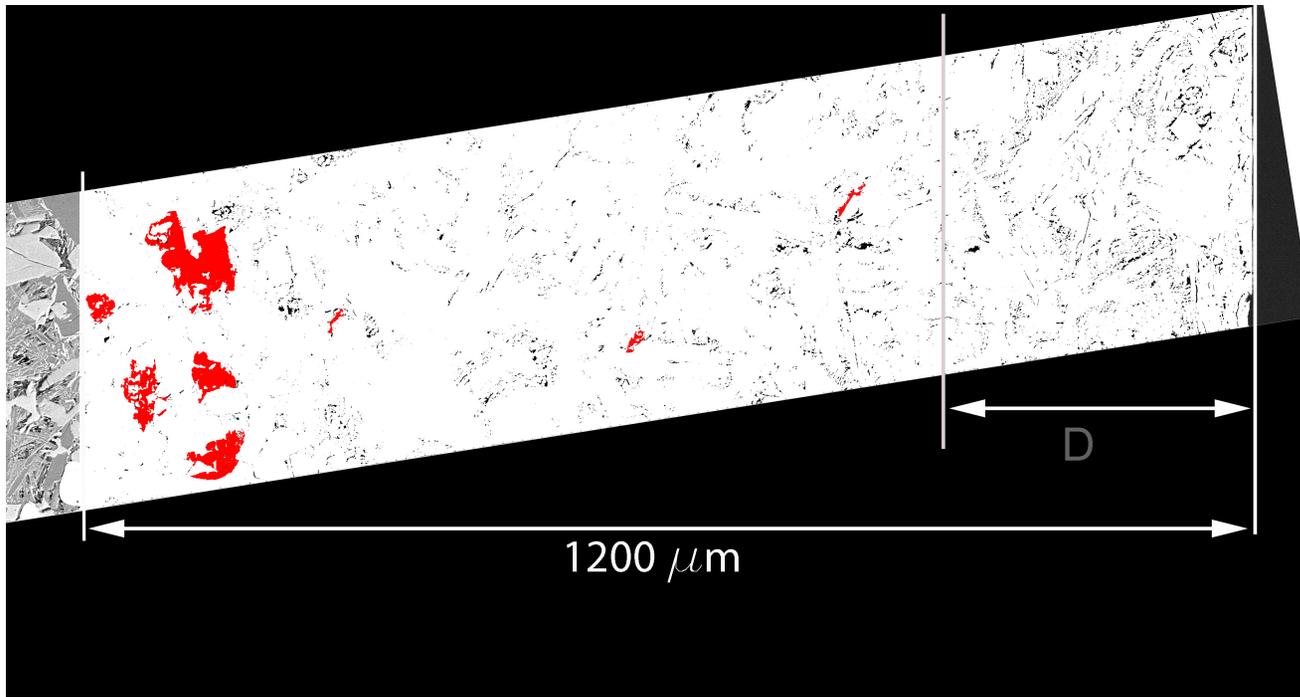
## Supplemental Figures



**Figure S1:** Profile plots of porosity versus depth for COTM samples. The plots were constructed from data obtained by the methods in Figure S2 and were then used as one of the methods applied to determine depth of developed porosity from glass dissolution in COTM samples.



**Figure S2:** Example of porosity determination. Black color on right side of image = porosity. White color = rock. Red color = macroporosity removed from consideration. 10 micron slices are taken one at a time and analyzed for porosity by % area. Compiled data appear in Table S8.



**Figure S3:** An example of how depth of developed porosity is judged visually in a BSE mosaic. Porosities were previously determined for the 1200  $\mu\text{m}$  contrast enhanced area. The user then visually judges the depth of developed porosity and the distance ("D") from the surface is determined, in this case 360  $\mu\text{m}$ .