Supplementary Data Section

Complementary acoustic and optical methods for characterization of diffuse venting, gas seeps, and biota distributions at hydrothermal systems: A case study at Kick'em Jenny Volcano, Grenada, West Indies

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Includes: Supplementary Figures S1-S6

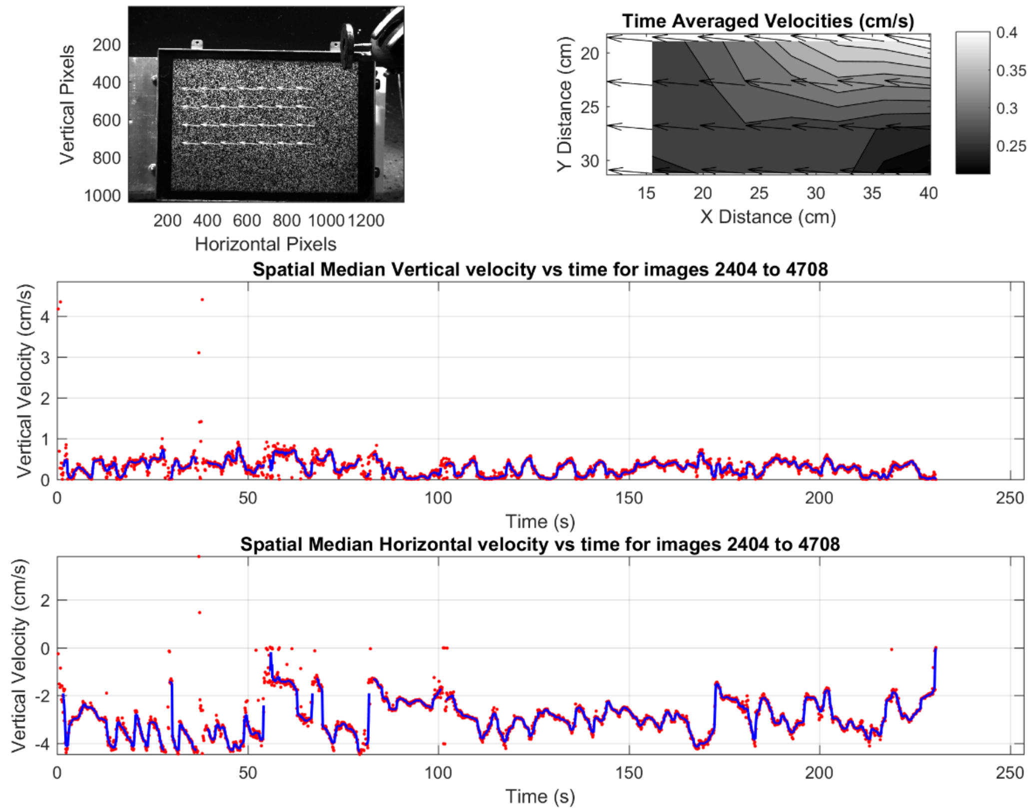

Figure S1. Diffuse Flow Velocimetry is used to determine the flow rates of diffuse effluent rising in front of (upper left) a speckled background board. (upper right) Time averaged velocities (arrows) show patterns of higher and lower vertical velocities (contours) across the background board. Spatial medians of (middle) vertical and (bottom) horizontal velocities are taken from each DFV calculation (red dots) indicate a relative constant upwelling rate (~1.5 cm/s) from this diffuse vent. A ten-point-wide running average is also shown (blue line). The data shown correspond to survey 1037 (Table 3).

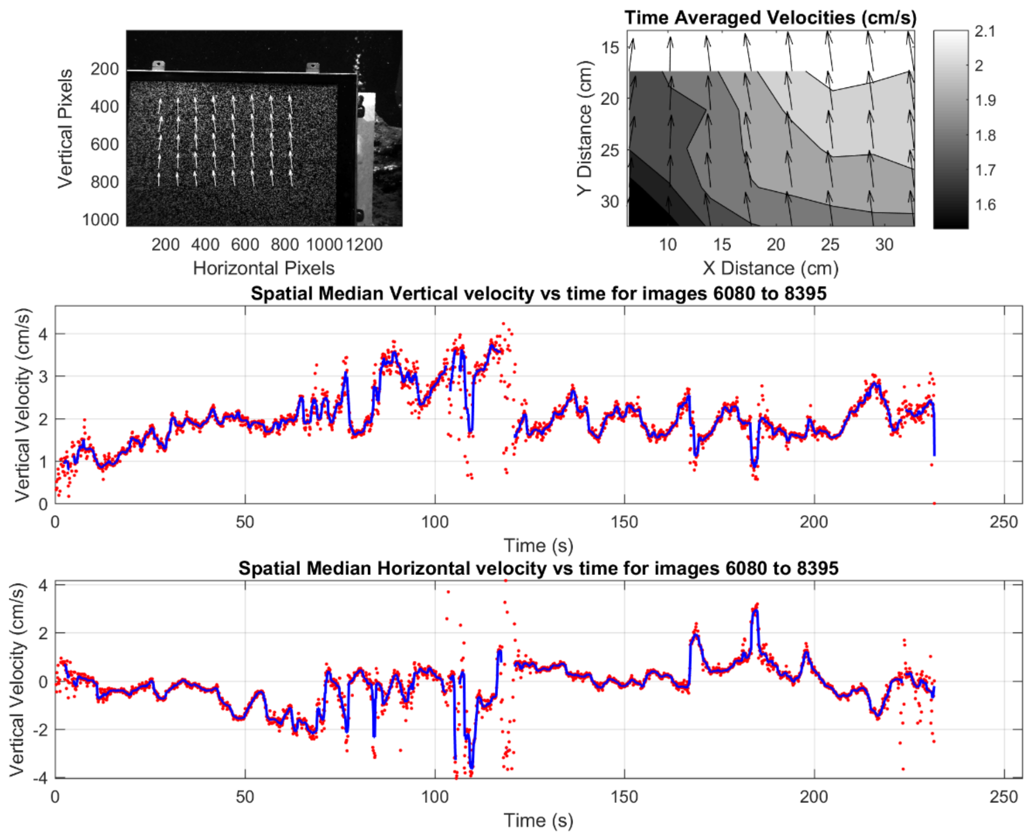

Figure S2. Diffuse Flow Velocimetry is used to determine the flow rates of diffuse effluent rising in front of (upper left) a speckled background board. (upper right) Time averaged velocities (arrows) show patterns of higher and lower vertical velocities (contours) across the background board. Spatial medians of (middle) vertical and (bottom) horizontal velocities are taken from each DFV calculation (red dots) indicate a relative constant upwelling rate (~1.5 cm/s) from this diffuse vent. A ten-point-wide running average is also shown (blue line). The data shown correspond to survey 1751 (Table 3).

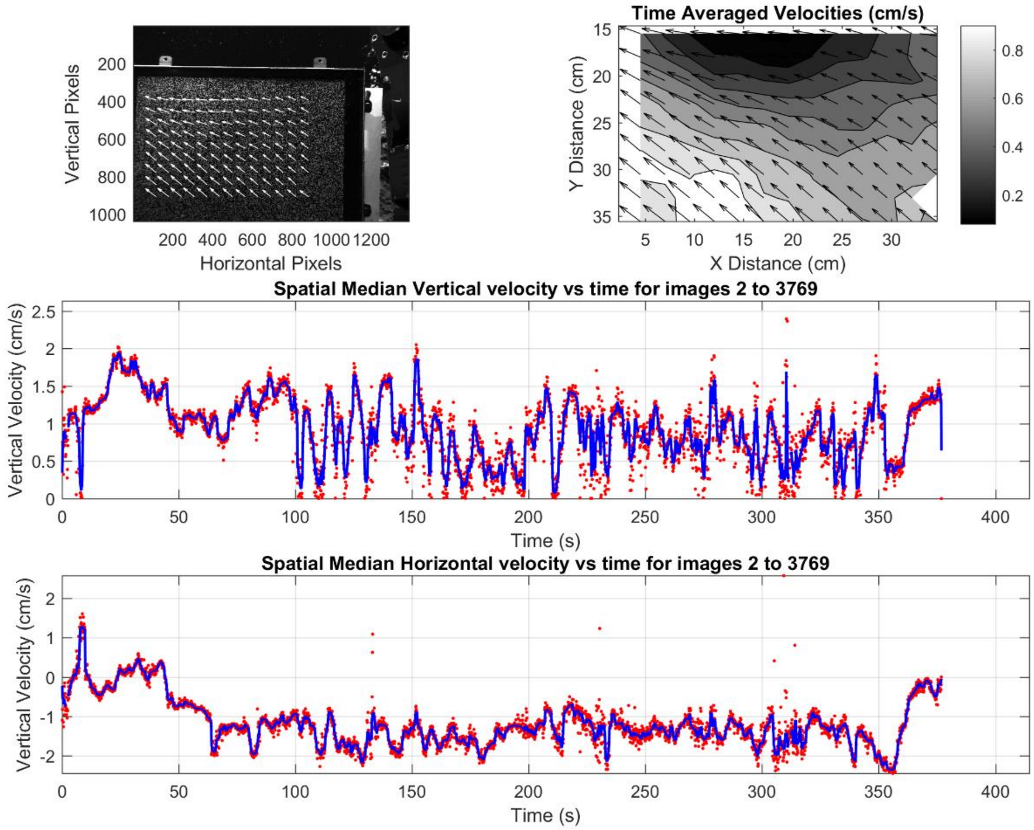

Figure S3. Diffuse Flow Velocimetry is used to determine the flow rates of diffuse effluent rising in front of (upper left) a speckled background board. (upper right) Time averaged velocities (arrows) show patterns of higher and lower vertical velocities (contours) across the background board. Spatial medians of (middle) vertical and (bottom) horizontal velocities are taken from each DFV calculation (red dots) indicate a relative constant upwelling rate (~1.5 cm/s) from this diffuse vent. A ten-point-wide running average is also shown (blue line). The data shown correspond to survey 1816 (Table 3).

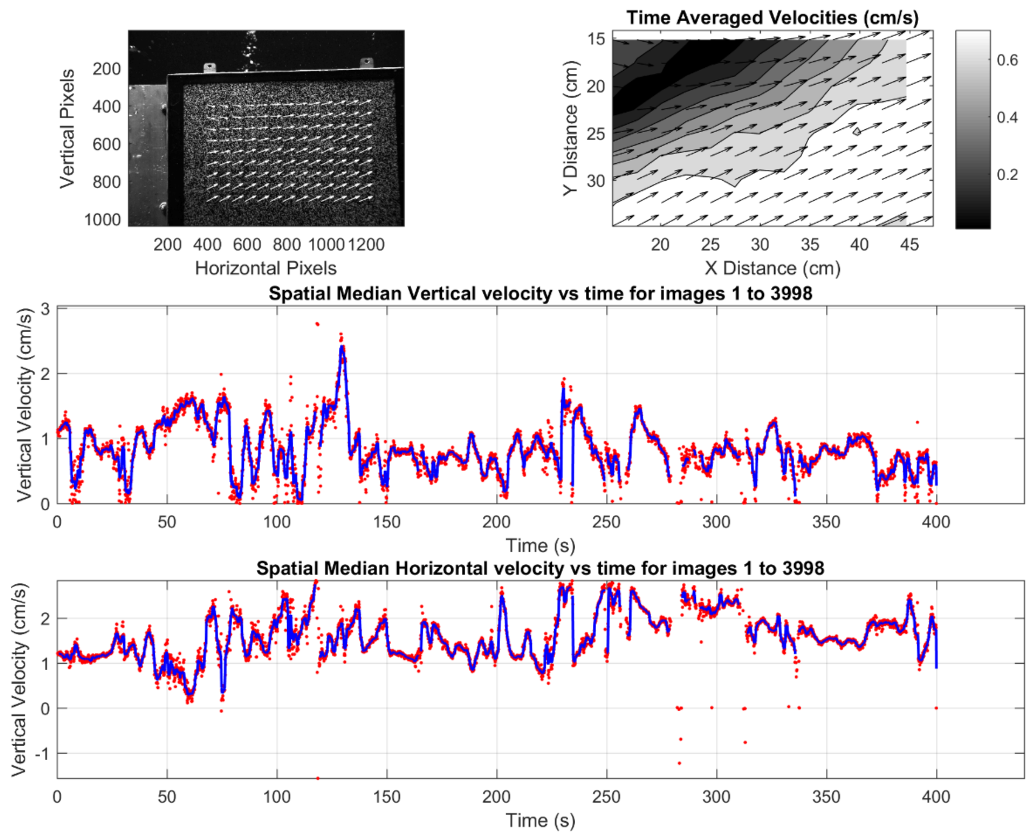

Figure S4. Diffuse Flow Velocimetry is used to determine the flow rates of diffuse effluent rising in front of (upper left) a speckled background board. (upper right) Time averaged velocities (arrows) show patterns of higher and lower vertical velocities (contours) across the background board. Spatial medians of (middle) vertical and (bottom) horizontal velocities are taken from each DFV calculation (red dots) indicate a relative constant upwelling rate (~1.5 cm/s) from this diffuse vent. A ten-point-wide running average is also shown (blue line). The data shown correspond to survey 1829 (Table 3).

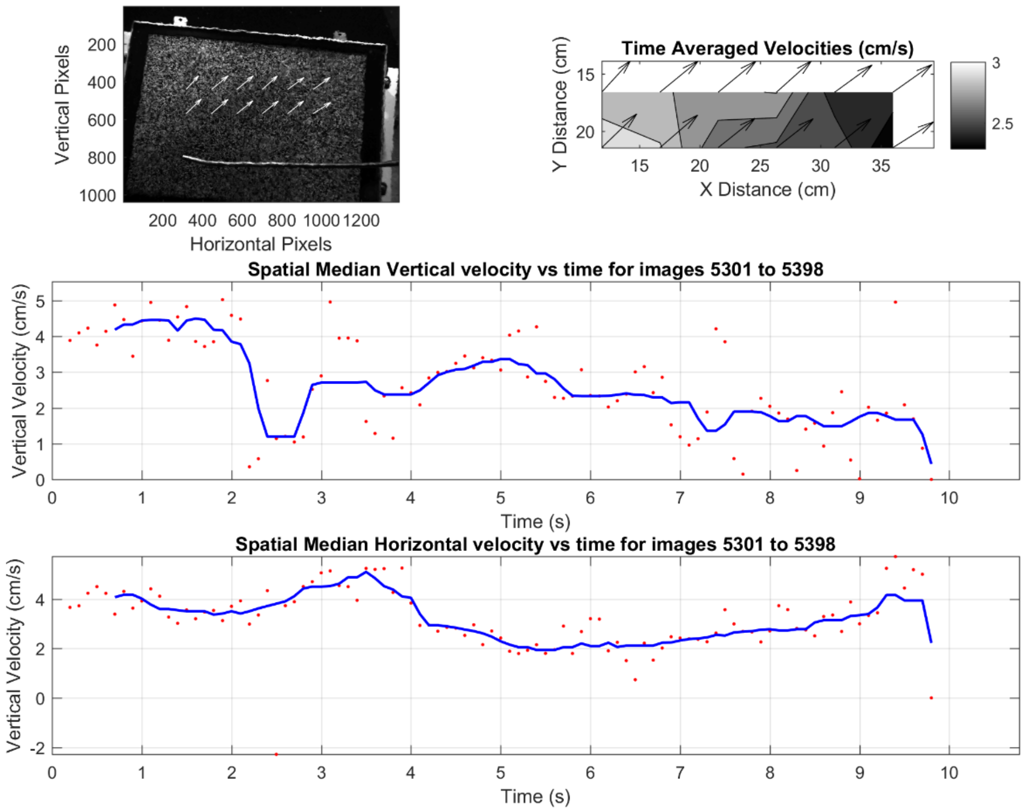

Figure S5. Diffuse Flow Velocimetry is used to determine the flow rates of diffuse effluent rising in front of (upper left) a speckled background board. (upper right) Time averaged velocities (arrows) show patterns of higher and lower vertical velocities (contours) across the background board. Spatial medians of (middle) vertical and (bottom) horizontal velocities are taken from each DFV calculation (red dots) indicate a relative constant upwelling rate (~1.5 cm/s) from this diffuse vent. A ten-point-wide running average is also shown (blue line). The data shown correspond to survey 1928 (Table 3).

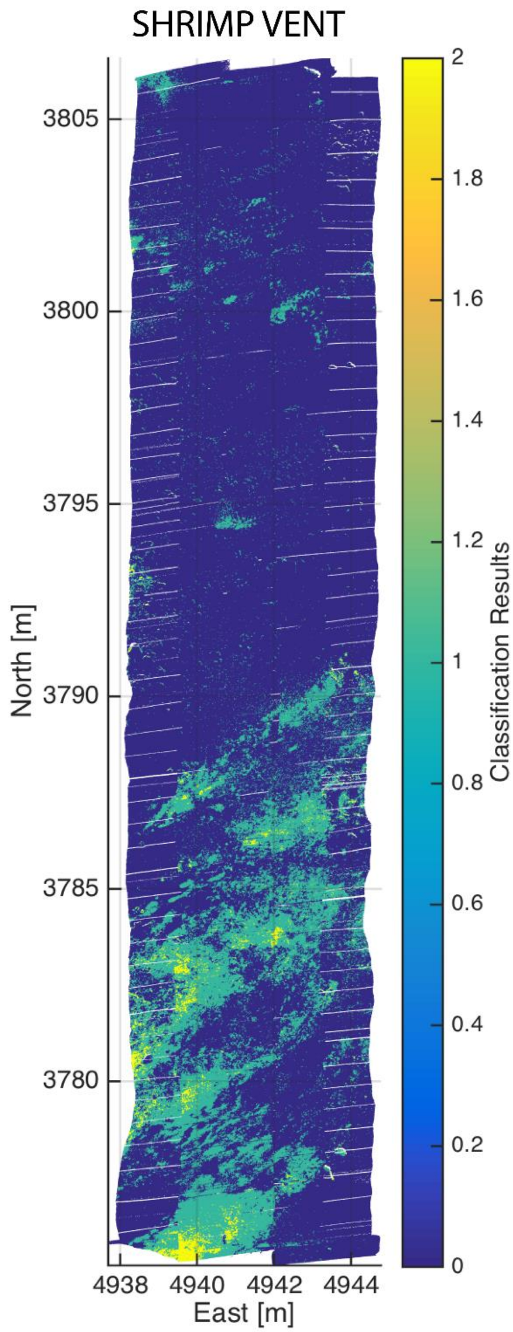

Figure S6. Classification of the entire extended Shrimp Vent data set with classifications results denoting seafloor (value = 0), microbial mats (value = 1), and active diffuse venting (value = 2).