

## Differences in microbial methane turnover and carbonate isotopy between two neighboring mounds along the Pacific Costa Rican continental margin

Supplementary data

Figure captions

Figure 1S. Measured porewater data obtained from SO206-39 (Multi Corer) at Mound 11 during cruise SO206 and modeled vertical profile. Top left - sulfate ( $\text{SO}_4^{2-}$ ), top right - methane ( $\text{CH}_4$ ), middle left - chloride ( $\text{Cl}^-$ ), middle right - bicarbonate ( $\text{HCO}_3^-$ ), bottom left - sulfide ( $\text{HS}^-$ ), bottom right - calcium ( $\text{Ca}^{2+}$ ).

Figure 2S. Measured porewater data obtained from SO206-50 (Gravity corer) at Mound 11 during cruise SO206 and modeled vertical profile. Top left - sulfate ( $\text{SO}_4^{2-}$ ), top right - methane ( $\text{CH}_4$ ), middle left - chloride ( $\text{Cl}^-$ ), middle right - bicarbonate ( $\text{HCO}_3^-$ ), bottom left - sulfide ( $\text{HS}^-$ ), bottom right - calcium ( $\text{Ca}^{2+}$ ).

Figure 3S. Measured porewater data obtained from SO206-44 (Multi Corer) at Mound 12 during cruise SO206 and modeled vertical profile. Top left - sulfate ( $\text{SO}_4^{2-}$ ), top right - methane ( $\text{CH}_4$ ), middle left - chloride ( $\text{Cl}^-$ ), middle right - bicarbonate ( $\text{HCO}_3^-$ ), bottom left - sulfide ( $\text{HS}^-$ ), bottom right - calcium ( $\text{Ca}^{2+}$ ).

Figure 4S. Measured porewater data obtained from SO206-46 (Multi Corer) at Mound 12 during cruise SO206 and modeled vertical profile. Top left - sulfate ( $\text{SO}_4^{2-}$ ), top right - methane ( $\text{CH}_4$ ), middle left - chloride ( $\text{Cl}^-$ ), middle right - bicarbonate ( $\text{HCO}_3^-$ ), bottom left - sulfide ( $\text{HS}^-$ ), bottom right - calcium ( $\text{Ca}^{2+}$ ).

Figure 1S

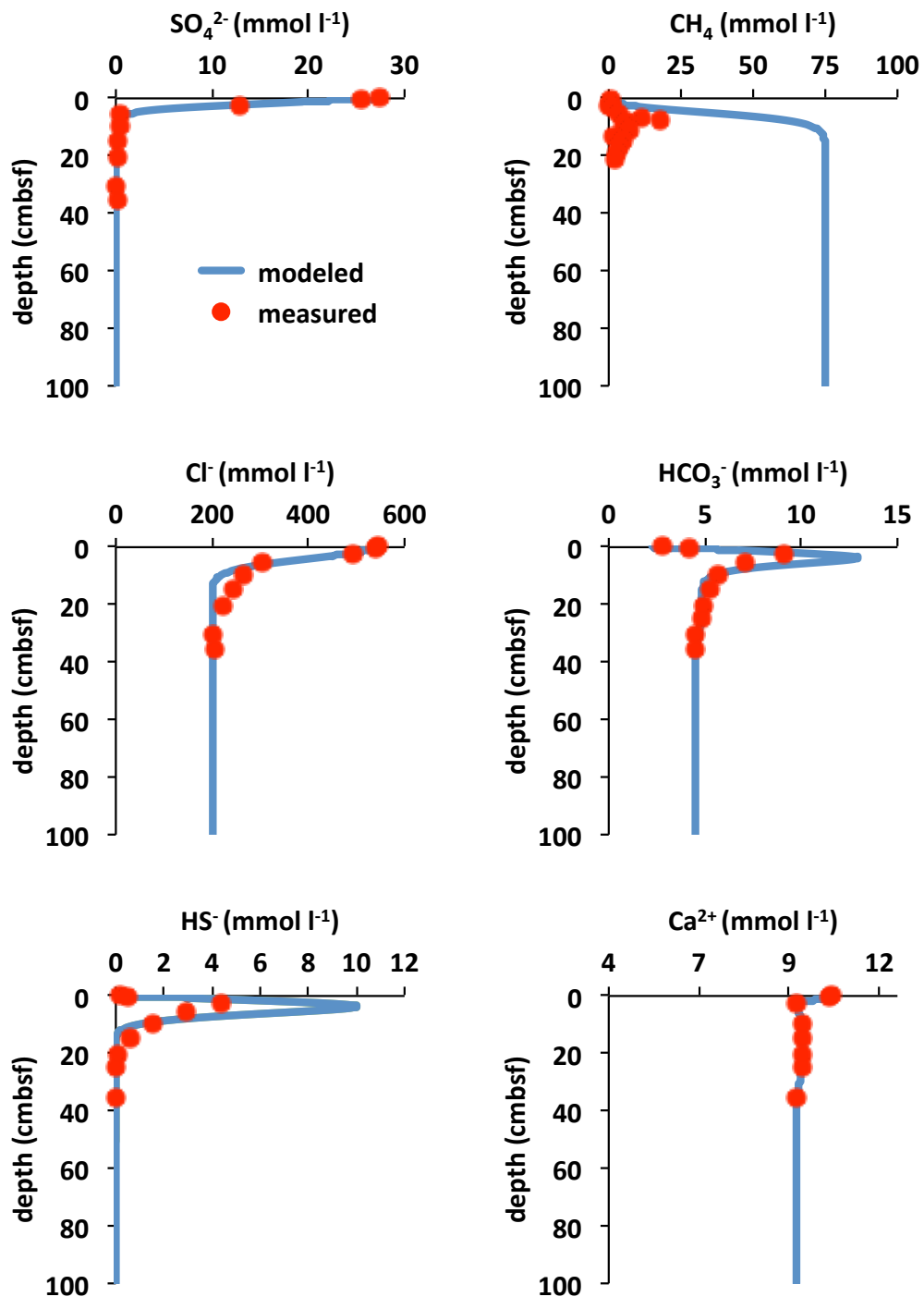


Figure 2S

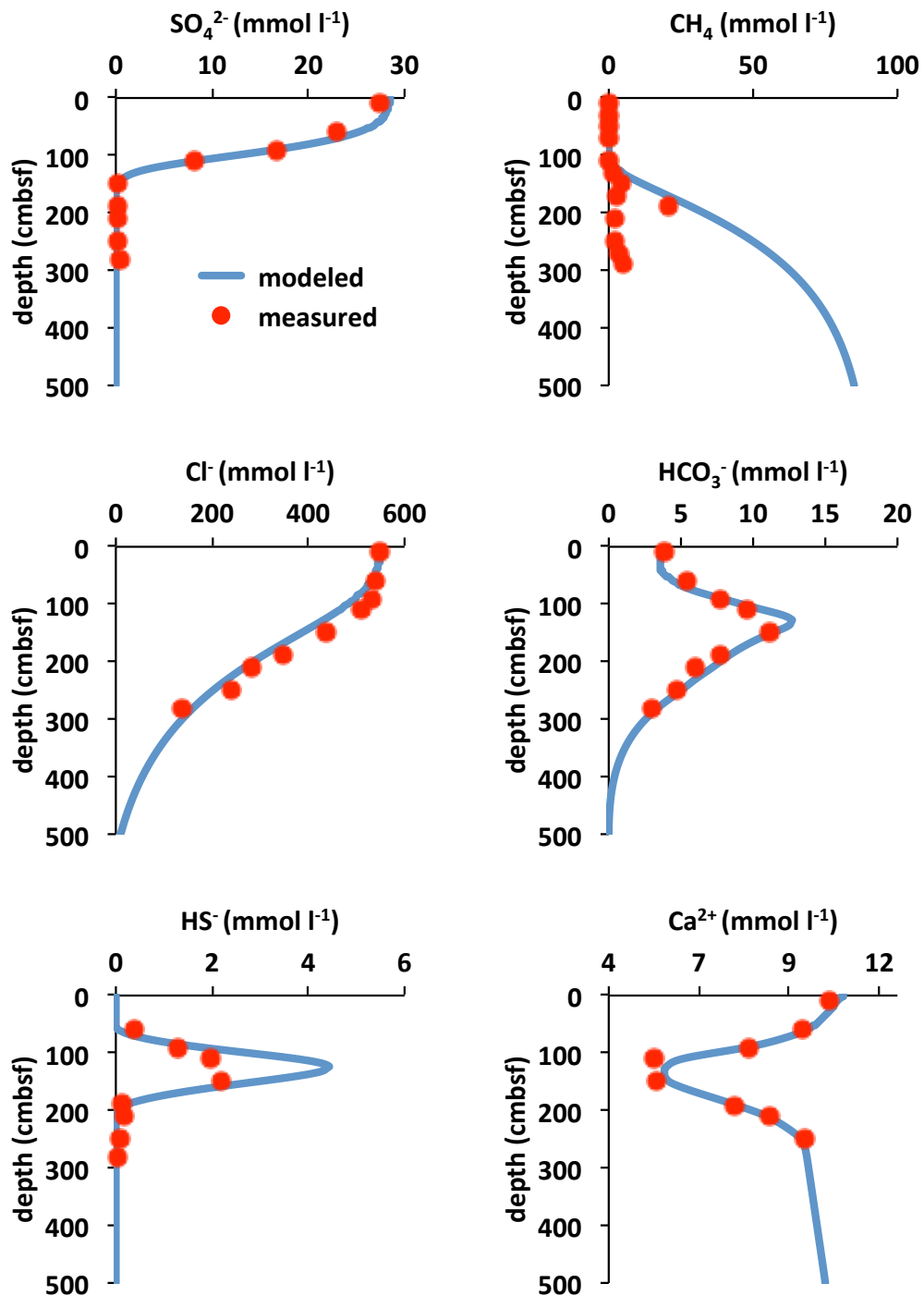


Figure 3S

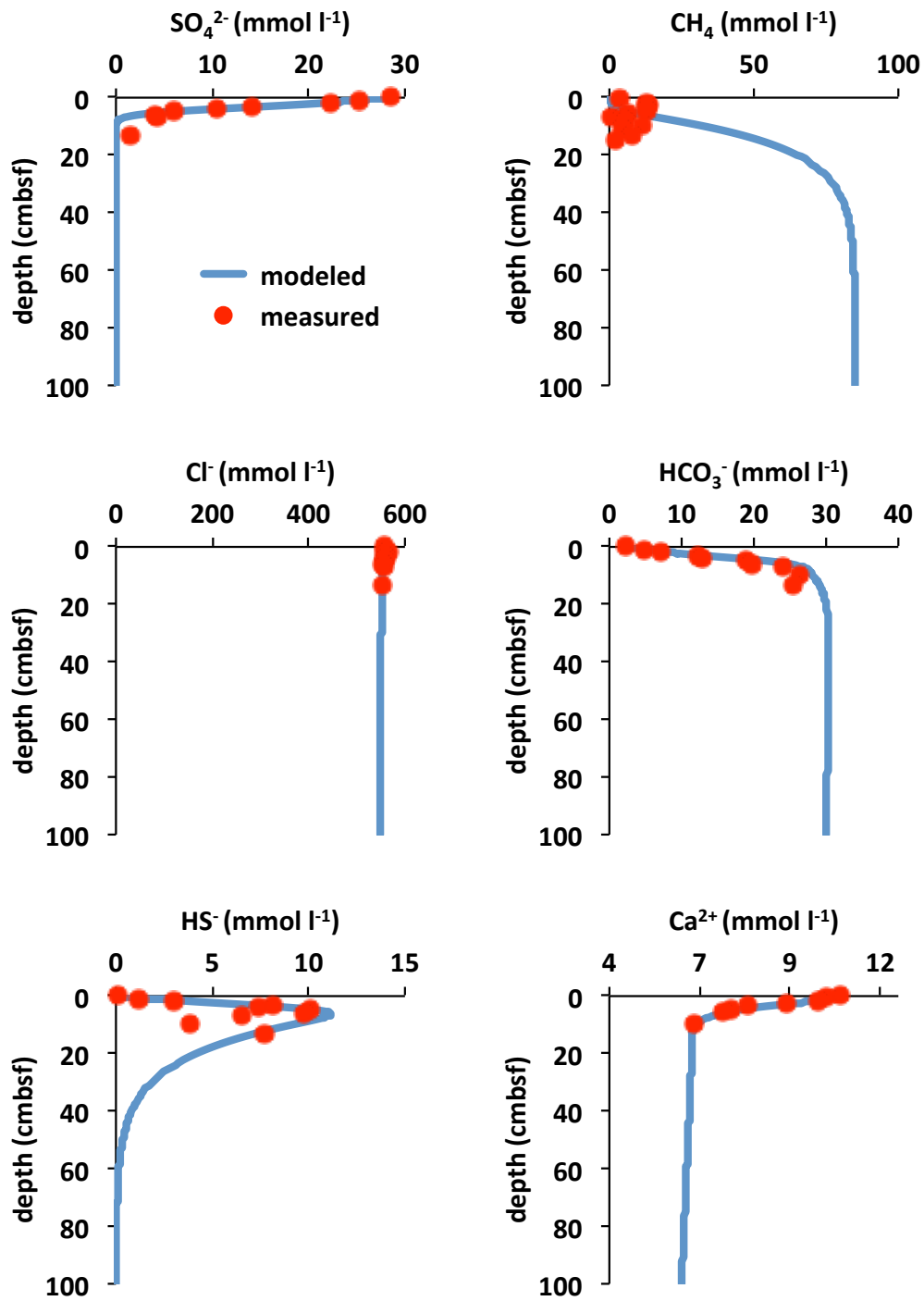


Figure 4S

