Figure S1. Methane-carbon assimilation in relation to oxygen concentration. Methane-carbon assimilation was determined from incubations amended with ^{14}C-CH$_4$ at saturated ($\sim$220 μmol l^{-1}, shaded bars) or low oxygen concentrations (<0.5 μmol l^{-1}, black bars) of water recovered in Nov. 2013 at 20 mbsl (a, c) and in Feb. 2014 at 5 and 20 mbsl (b, d). Incubations were performed in triplicates and standard deviations are indicated. (a, b) First-order rate constant k. (c, d) Fraction of oxidized methane incorporated into biomass. Asterisks indicate a p-value <0.05 of a two-tailed, two-sample t-test assuming equal variance between the samples at low and high oxygen concentrations.
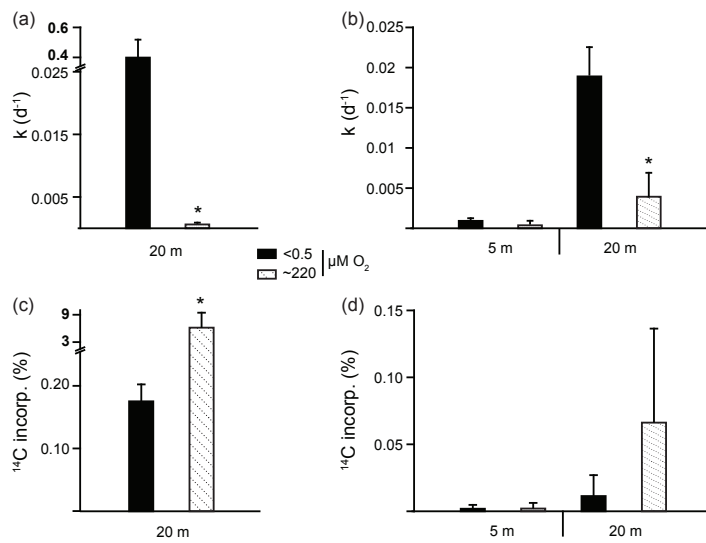
Figure S2. MOx first order rate constants (*k*) at different temperatures. First order rate constants of MOx were determined with ³H-CH₄ amendments in triplicated incubations of water from 5 mbsl (a-d) and 20 mbsl (e, f), recovered in Nov. 2013 (a), Feb. 2014 (b), June 2014 (c, e), and Sept. 2014 (d, f).