



Figure S1. Schematic of experimental core incubation system used for flux and N transformation rate measurements. During the experiment cores were kept in the dark at 15°C. Feed seawater was amended with isotopically labeled $^{15}\text{NO}_3^-$. Concentrations of NO_3^- , NO_2^- and NH_4^+ and isotopic composition of NO_3^- , NH_4^+ and N_2 were measured at the inflow and outflow of each core in order to calculate aerial fluxes and transformation rates (see text for specific details).