Variables	Description (unit)
DO	Dissolved oxygen ($mg\,O_2\,L^{-1}$)
DO_{sat}	Saturated DO concentrations ($mg\,O_2\,L^{-1}$)
DO_{sed}	DO concentrations in the sediment ($mg\,O_2\,L^{-1}$)
DO_{BC}	DO species which is contributed by lateral boundary condition ($mg\,O_2\,L^{-1}$)
DO_{REA}	DO species which is contributed by re-aeration ($mg\,O_2\,L^{-1}$)
DO_{WCP}	DO species which is contributed by water column production ($mg\,O_2\,L^{-1}$)
DO_{SOD}	DO species which is contributed by sediment oxygen demand ($mg\,O_2\,L^{-1}$)
O_2^*	Dissolved oxygen equivalent ($mg\,O_2\,L^{-1}$)
P_c	Phytoplankton biomass ($mg\,C\,L^{-1}$)
RDOC	Refractory dissolved organic carbon ($mg\,C\,L^{-1}$)
LDOC	Labile dissolved organic carbon ($mg\,C\,L^{-1}$)
ReDOC	Reactive dissolved organic carbon ($mg\,C\,L^{-1}$)
ExDOC	Algal exudate dissolved organic carbon ($mg\,C\,L^{-1}$)
G_i	Concentrations of particulate organic carbon, particulate organic nitrogen, or particulate organic phosphorus in ith G class ($mg\,L^{-1}$)
C_{d0}	Dissolved concentrations in the overlying water ($mg\,L^{-1}$)
C_{T1}	Total concentrations in aerobic layer ($mg\,L^{-1}$)
C_{T2}	Total concentrations in anaerobic layer ($mg\,L^{-1}$)
C_{water}	Concentrations of nutrients and DO in the water ($mg\,L^{-1}$)
C_{sed}	Concentrations of nutrients and DO in the sediment ($mg\,L^{-1}$)