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| **Parameter Name** | **ReminRecord** | Remineralization Data | **For each simulation, the following Parameters are required (pertaining to organic matter)** | **Units** |
| Max. Degrdn Rate, labile | DecayMax\_Lab | DecayMax | Maximum decomposition rate | g/g∙d |
| Max Degrdn Rate, Refrac | DecayMax\_Refr | ColonizeMax | Maximum colonization rate under ideal conditions | g/g∙d |
| Optimum Temperature | TOpt | TOpt | Optimum temperature for degredation to occur | °C |
| Maximum Temperature | TMax | TMax | Maximum temperature at which degradation will occur | °C |
| Min pH for Degradation | pHMin | pHMin | Minimum ph below which limitation on biodegradation rate occurs. | pH |
| Max pH for Degradation | pHMax | pHMax | Maximum ph above which limitation on biodegradation occurs. | pH |
| KNitri, Max Rate of Nitrif. | KNitri | KNitri | Maximum rate of nitrification | 1/day |
| KDenitri Bottom (max.) | KDenitri\_Bot | KDenitriBottom | Maximum rate of denitrification at the sed/water interface | 1/day |
| KDenitri Water (max.) | KDenitri\_Wat | KDenitriWater | Maximum rate of denitrification in the water column | 1/day |
| P to Organics, Labile | P2OrgLab | P2OrgLab | Ratio of phosphate to labile organic matter | fraction dry weight |
| N to Organics, Labile | N2OrgLab | N2OrgLab | Ratio of nitrate to labile organic matter | fraction dry weight |
| P to Organics, Refractory | P2OrgRefr | P2OrgRefr | Ratio of phosphate to refractory organic matter | fraction dry weight |
| N to Organics, Refractory | N2OrgRefr | N2OrgRefr | Ratio of nitrate to refractory organic matter | fraction dry weight |
| P to Organics, Diss. Labile | P2OrgDissLab | P2OrgDissLab | Ratio of phosphate to dissolved labile organic matter | fraction dry weight |
| N to Organics, Diss. Labile | N2OrgDissLab | N2OrgDissLab | Ratio of nitrate to dissolved labile organic matter | fraction dry weight |
| P to Organics, Diss. Refr. | P2OrgDissRefr | P2OrgDissRefr | Ratio of phosphate to dissolved refractory organic matter | fraction dry weight |
| N to Organics, Diss. Refr. | N2OrgDissRefr | N2OrgDissRefr | Ratio of nitrate to dissolved refractory organic matter | fraction dry weight |
| O2 : Biomass, Respiration | O2Biomass | O2Biomass | Ratio of oxygen to organic matter | unitless ratio |
| O2: N, Nitrification | O2N | O2N | Ratio of oxygen to nitrogen | unitless ratio |
| Detrital Sed Rate (KSed) | KSed | KSed | Intrinsic sedimentation rate | m/d |
| Temperature of Obs. KSed | KSedTemp | TemperatureReference | Reference temperature of water for calculating detrital sinking rate | deg. c |
| Salinity of Obs. KSed | KSedSalinity | SalinityReference | Reference salinity of water for calculating detrital sinking rate | ‰ |
| Wet to Dry Susp. Labile | Wet2DrySLab | Wet2DrySLab | Wet weight to dry weight ratio for suspended labile detritus | ratio |
| Wet to Dry Susp. Refr | Wet2DrySRefr | Wet2DrySRefr | Wet weight to dry weight ratio for suspended refractory detritus | ratio |
| Wet to Dry Sed. Labile | Wet2DryPLab | Wet2DryPLab | Wet weight to dry weight ratio for particulate labile detritus | ratio |
| Wet to Dry Sed. Refr. | Wet2DryPRefr | Wet2DryPRefr | Wet weight to dry weight ratio for particulate refractory detritus | ratio |
| KD, P to CaCO3 | KDPCalcite | KD\_P\_Calcite | Partition coefficient for phosphorus to calcite | L / kg |