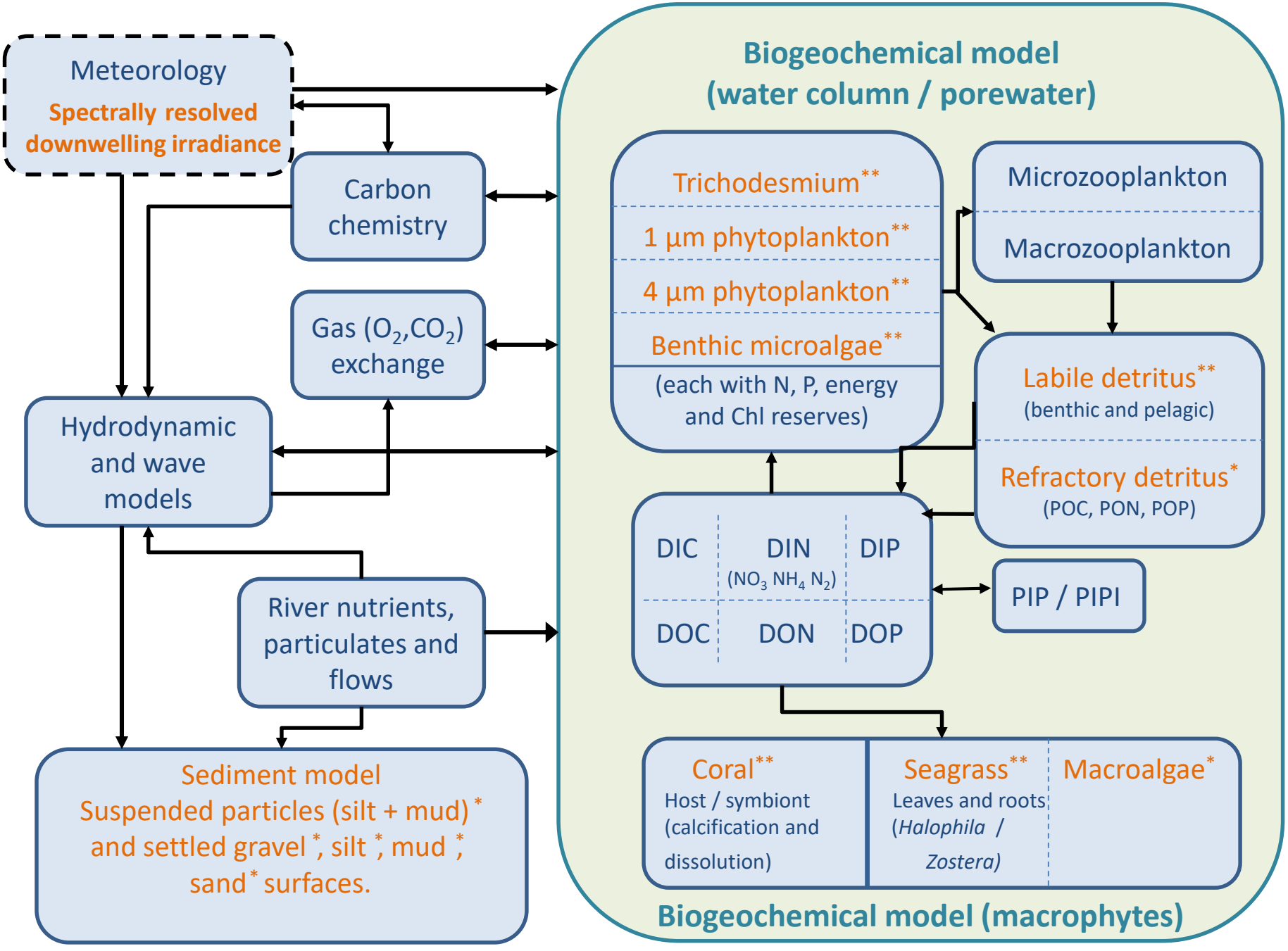
Meteorology
Spectrally resolved downwelling irradiance
Carbon chemistry
Gas (O_2,CO_2) exchange
Hydrodynamic and wave models
River nutrients, particulates and flows
Sediment model
Suspended particles (silt + mud) * and settled gravel *, silt *, mud *, sand * surfaces.
Biogeochemical model (water column / porewater)
Trichodesmium**
1 µm phytoplankton**
4 µm phytoplankton**
Benthic microalgae**
(each with N, P, energy and Chl reserves)
Microzooplankton
Macrozooplankton
Labile detritus**
(benthic and pelagic)
Refractory detritus*
(POC, PON, POP)
DIC
DIN
(NO_3 NH_4 N_2)
DIP
DOC
DON
DOP
PIP / PIPI
Coral**
Host / symbiont (calcification and dissolution)
Seagrass**
Leaves and roots (*Halophila* / *Zostera*)
Macroalgae*
Biogeochemical model (macrophytes)