

Questions for Group 1 Organic carbon production

1. How do anthropogenic and natural factors influence OM production in different ecosystems? How do their interactions impact ecosystems?
2. Which is the robustness of satellite data in terms of productions in all systems (mainly inland water systems)? Which are the limitations?
3. How climate change effects (acidification, CO₂ levels, temperature, nutrients availability) will influence the carbon production in the different systems?
4. How change in currents will affect primary productivity in freshwater/marine ecosystems (e.g Gulf stream, upwelling intensity) ?
5. Generally about the role of nutrients:
 - How can topographical landscapes influence nutrient allocation and distribution and thus affect freshwater and marine systems?
 - How an increase or decrease in DOM terrestrial production could change the nutrient ratios in downstream ecosystems (like other lakes or even to the marine ecosystem)? And how can changes in ratios promote changes in primary production?
6. How estuaries and wetlands (as interconnecting ecosystems) behave in front of the mixing of inland water and marine water masses when they react differently to organic matter and nutrient input?
7. Is OM production in different systems controlled by the same environmental factors? Are factors important for some systems equally important in others?
8. How and how fast differences and changes in metabolic pathways (microbial community potential/functions) affect OM production?