



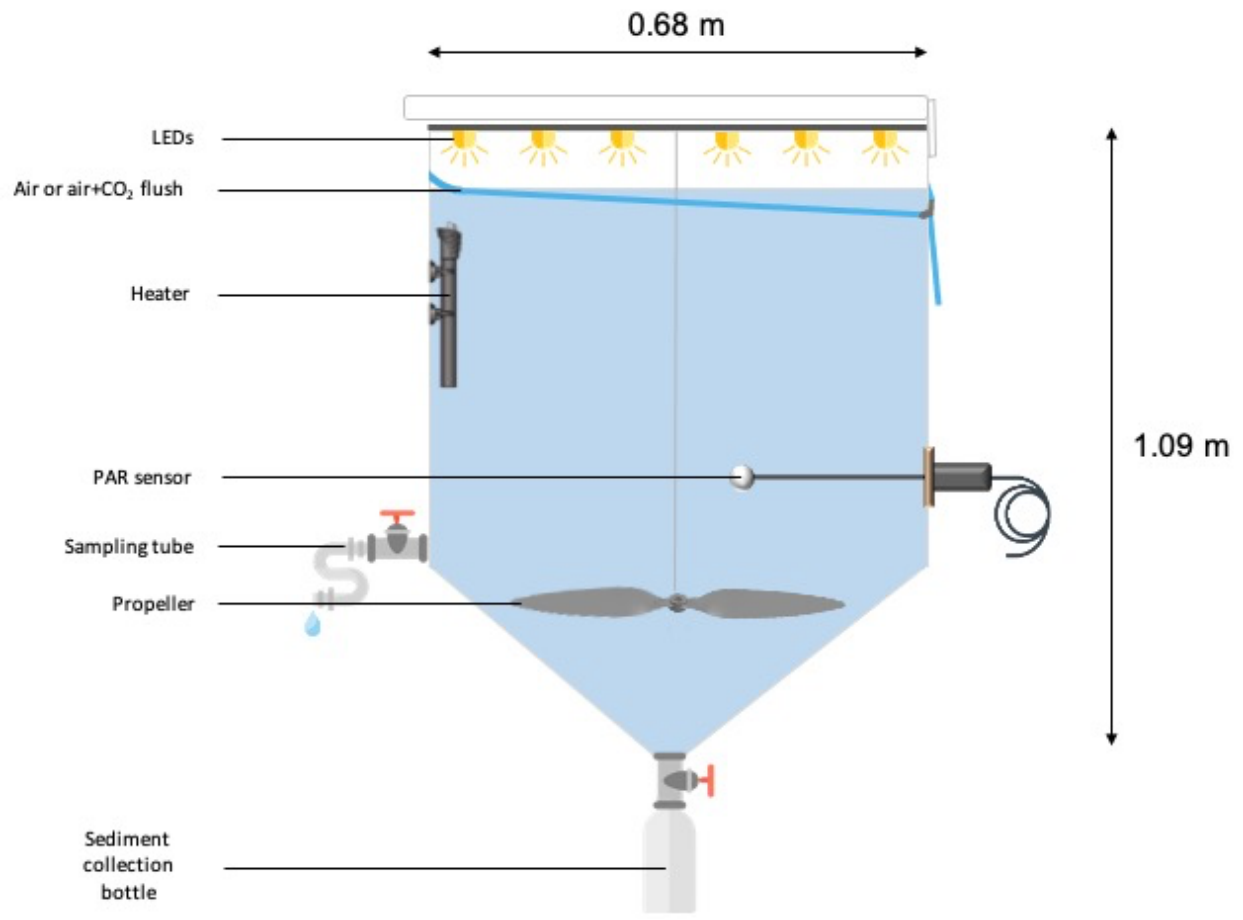
Supplement of

Impact of dust addition on the metabolism of Mediterranean plankton communities and carbon export under present and future conditions of pH and temperature

Frédéric Gazeau et al.

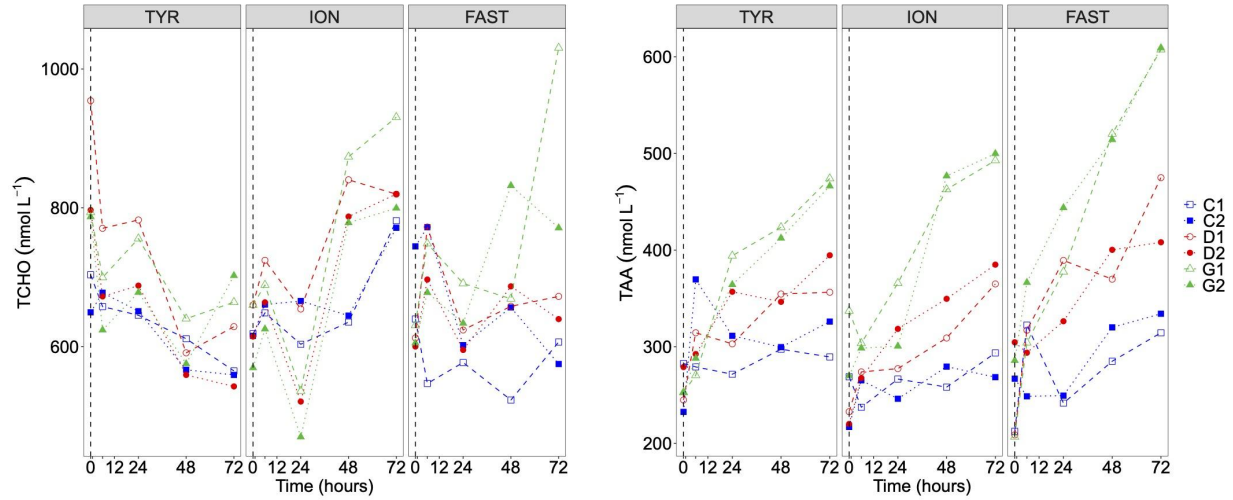
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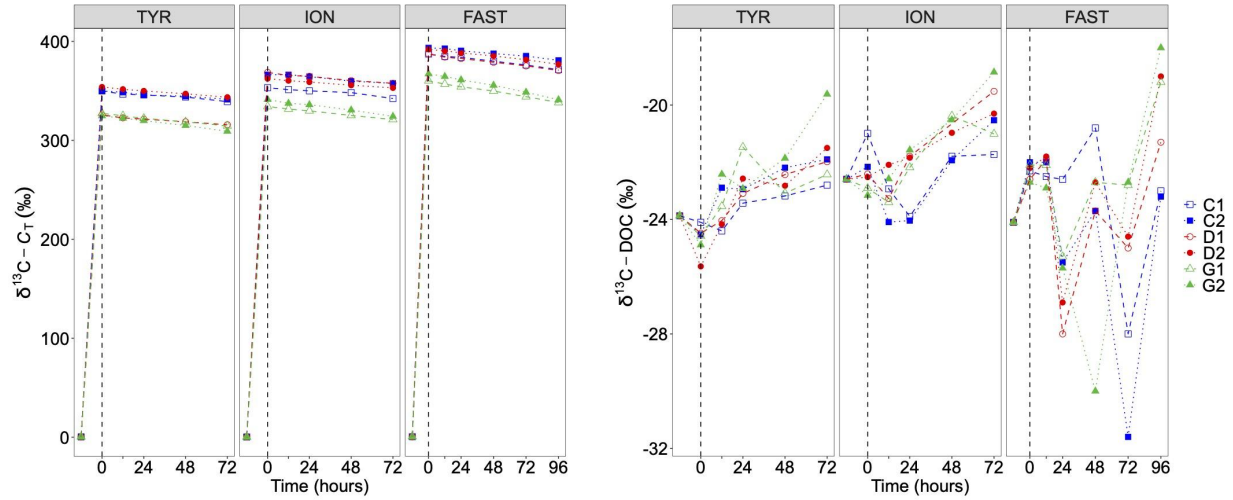
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1423 Fig. S1. Diagram of an experimental tank.



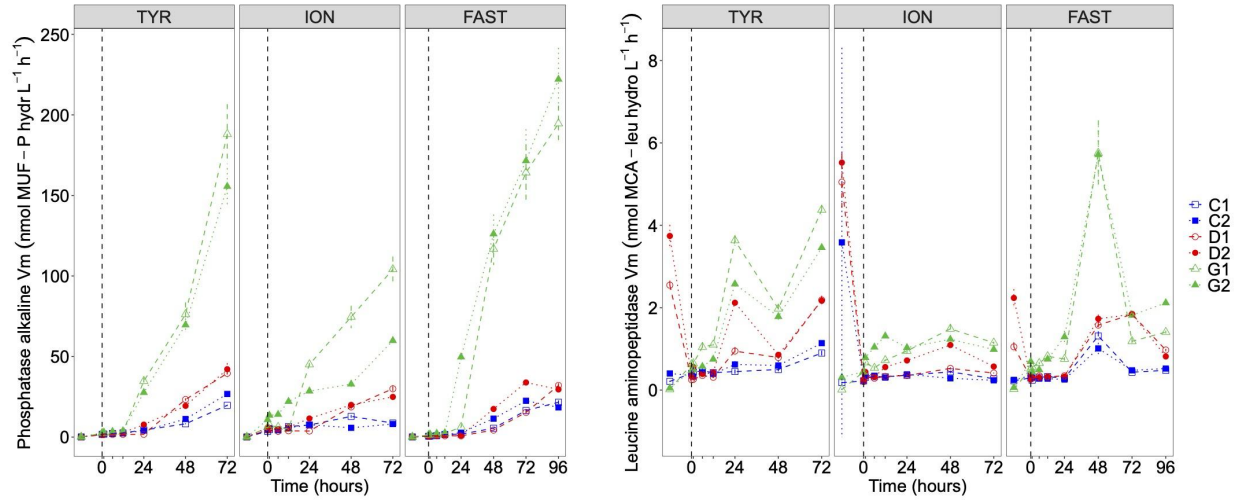
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1425 Fig. S2. Total hydrolysable carbohydrate (TCHO) and amino acids (TAA) concentrations in the
 1426 six tanks (controls: C1, C2; dust addition under present conditions of temperature and pH: D1,
 1427 D2; dust addition under future conditions of temperature and pH: G1 and G2) during the three
 1428 experiments (TYR, ION and FAST). The dashed vertical line indicates the time of seeding (after
 1429 t_0).



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1431 Fig. S3. Isotopic signature of dissolved inorganic carbon ($\delta^{13}\text{C}-C_T$) and incorporation of ^{13}C into
 1432 dissolved organic carbon ($\delta^{13}\text{C}-\text{DOC}$) in the six tanks (controls: C1, C2; dust addition under
 1433 present conditions of temperature and pH: D1, D2; dust addition under future conditions of
 1434 temperature and pH: G1 and G2) during the three experiments (TYR, ION and FAST). The
 1435 dashed vertical line indicates the time of seeding (after t_0).



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Fig. S4. Maximum hydrolysis velocity (V_m) of the phosphatase alkaline and leucine

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aminopeptidase (over 1-2 h incubations) on samples taken in the six tanks (controls: C1, C2; dust

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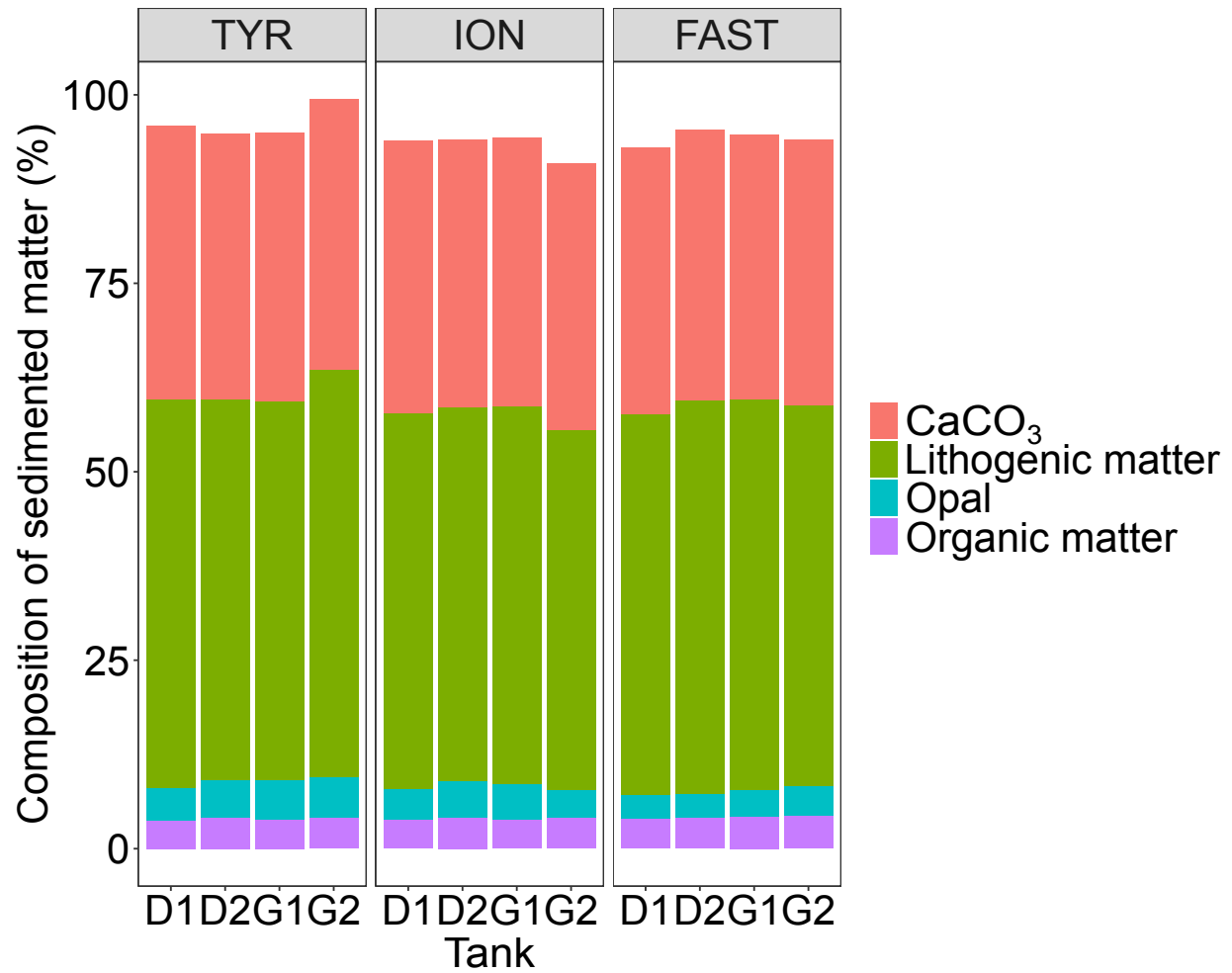
addition under present conditions of temperature and pH: D1, D2; dust addition under future

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conditions of temperature and pH: G1 and G2) during the three experiments (TYR, ION and

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FAST).



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1443 Fig. S5. Proportion (%) of the different fractions analyzed in the recovered sedimented matter at
 1444 the end of the three experiments (TYR, ION and FAST) in dust enriched minicosms (D1, D2, G1
 1445 and G2).