Supplementary Material

# Supplementary Figures and Tables

## Supplementary Figures

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 **Supplementary Figure 1.** Time series of meteorological data (daily average air temperature, wind speed, wind direction, and daily total precipitation) for the January-February 2019. The grey bars indicate three sampling dates (14 and 31 January, and 8 February). Yellow dots and bars correspond to days when sampling was performed.

## Supplementary Tables

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Date** | **Station** | **First** | **%** | **Second** | **%** | **Third** | **%** |
| 14 January, 2019 | MC3 | *Thalassiosira* spp. (>40um) | 70.4 | *Thalassiosira* spp. (20um<A<40um) | 12.0 | unidentified spp. (nanosize) | 5.4 |
| MC7 | *Thalassiosira* spp. (>40um) | 79.2 | *Thalassiosira* spp. (20um<A<40um) | 12.5 | unidentified spp. (nanosize) | 2.8 |
| MC13 | unidentified spp. (nanosize) | 44.0 | *Thalassiosira* spp. (20um<A<40um) | 30.3 | *Thalassiosira* spp. (>40um) | 9.8 |
| MC16 | *Thalassiosira* spp. (>40um) | 50.7 | unidentified spp. (nanosize) | 21.6 | *Thalassiosira* spp. (20um<A<40um) | 12.8 |
| 31 January, 2019 | MC3 | unidentified spp. (nanosize) | 41.0 | *Cryptomonas* sp. | 28.1 | *Minidiscus* spp. | 8.8 |
| MC7 | unidentified spp. (nanosize) | 48.0 | *Minidiscus* spp. | 19.3 | *Cryptomonas* sp. | 11.0 |
| MC13 | unidentified spp. (nanosize) | 75.7 | *Minidiscus* spp. | 14.3 | *Thalassiosira* spp.(<10um) | 3.8 |
| MC16 | unidentified spp. (nanosize) | 47.9 | *Minidiscus* spp. | 26.7 | *Thalassiosira* spp. (20um<A<40um) | 12.7 |
| 8 February, 2019 | MC3 | unidentified spp. (nanosize) | 44.7 | *Thalassiosira* spp. (20um<A<40um) | 13.5 | *Minidiscus* spp. | 12.8 |
| MC7 | unidentified spp. (nanosize) | 34.8 | *Minidiscus* spp. | 18.3 | *Cryptomonas* sp. | 12.1 |
| MC13 | unidentified spp. (nanosize) | 41.2 | *Minidiscus* spp. | 33.0 | *Thalassiosira* spp.(<10um) | 8.8 |
| MC16 | unidentified spp. (nanosize) | 81.1 | *Thalassiosira* spp.(<10um) | 8.3 | *Pseudo-nizschia lineola* | 6.5 |

**Supplementary Table 1.** Spatiotemporal contribution (in percentage) of the main species (first, second, and third) to the total phytoplankton carbon biomass.