|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **SI Table 2. POC flux at 450 m of the three diatom species that contributed most to the flux** | | | | | | |  |
|  |  |  |  |  |  |  |  |
|  | ***Flux*** |  |  |  |  | ***Standing stock\*\*\**** | |
|  | *F (full)* | *E (empty)* | *B (broken)* | *FEB\* flux* | *F:EB\*\** | *FEB\* stock* | *FEB flux : FEB stock* |
| ***PELAGRA trap*** | *mg C m-2 d-1* | *mg C m-2 d-1* | *mg C m-2 d-1* | *mg C m-2 d-1* | *mg:mg* | *mg C m-2 d-1* | *%* |
|  |  |  |  |  |  |  |  |
|  | ***Fragilariopsis kerguelensis*** | | |  |  |  |  |
| *# 3 (prob. IN), d10-d15* | *0.0007* | *0.0101* | 0.0099 | 0.021 | 0.04 | 19 | 0.1 |
| *# 6, d21-d26* | *0* | *0.1040* | 0.0425 | 0.147 | 0.00 | 19 | 0.8 |
| *# 7 , d23-d28* | *0.0008* | *0.0160* | 0.0050 | 0.022 | 0.04 | 19 | 0.1 |
| *# 10, d28-d33* | *0.0032* | *0.1262* | 0.1023 | 0.232 | 0.01 | 19 | 1.2 |
| *# 11, d33-d37* | *0* | *0.3336* | 0.1749 | 0.509 | 0.00 | 19 | 2.7 |
|  |  |  |  |  |  |  |  |
|  | ***Thalassionema nitzschioides*** | | |  |  |  |  |
| *# 3 (prob. IN), d10-d15* | 0.0015 | 0.0027 | 0.002 | 0.006 | 0.32 | 57 | 0.01 |
| *# 6, d21-d26* | 0.0014 | 0.0066 | 0.0048 | 0.013 | 0.12 | 57 | 0.02 |
| *# 7 , d23-d28* | 0.0014 | 0.0054 | 0.0027 | 0.010 | 0.17 | 57 | 0.02 |
| *# 10, d28-d33* | 0.0025 | 0.0085 | 0.0152 | 0.026 | 0.11 | 57 | 0.05 |
| *# 11, d33-d37* | 0.0038 | 0.0363 | 0.0263 | 0.066 | 0.06 | 57 | 0.12 |
|  |  |  |  |  |  |  |  |
|  | ***Ephemera cf. planamembranacea*** | | |  |  |  |  |
| *# 3 (prob. IN), d10-d15* | 0.0068 | 0.0015 | 0.0015 | 0.010 | 2.27 | 46 | 0.02 |
| *# 6, d21-d26* | 0.0041 | 0.0027 | 0.0041 | 0.011 | 0.60 | 46 | 0.02 |
| *# 7 , d23-d28* | 0.0013 | 0.0038 | 0.0054 | 0.011 | 0.14 | 46 | 0.02 |
| *# 10, d28-d33* | 0.0070 | 0.0422 | 0.0258 | 0.075 | 0.10 | 46 | 0.16 |
| *# 11, d33-d37* | 0.0083 | 0.025 | 0.0167 | 0.050 | 0.20 | 46 | 0.11 |
|  |  |  |  |  |  |  |  |
| \* Carbon equvivalent (sum of F, E and B) | | |  |  |  |  |  |
| \*\* ration of F:EB |  |  |  |  |  |  |  |
| \*\*\* average over all surface IN stations (integrated over the upper 80 m) | | | | |  |  |  |