

Seasonal cycles of biogeochemical fluxes in the Scotia Sea, Southern Ocean: A stable isotope approach

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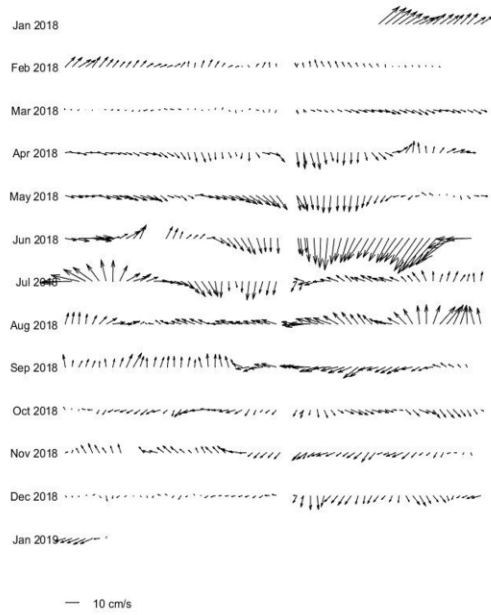
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Supplementary material

Table S1: Sediment trap bottle opening timings. Dates and duration open correspond to both deep (2000 m) and shallow (400 m) traps.

Bottle number	Bottle open date	Days open
1	25/01/2018	7
2	01/02/2018	14
3	15/02/2018	14
4	01/03/2018	31
5	01/04/2018	30
6	01/05/2018	31
7	01/06/2018	30
8	01/07/2018	31
9	01/08/2018	31
10	01/09/2018	30
11	01/10/2018	31
12	01/11/2018	30
13	01/12/2018	14
14	15/12/2018	17

A) Shallow ~350 m



B) Deep ~2050 m

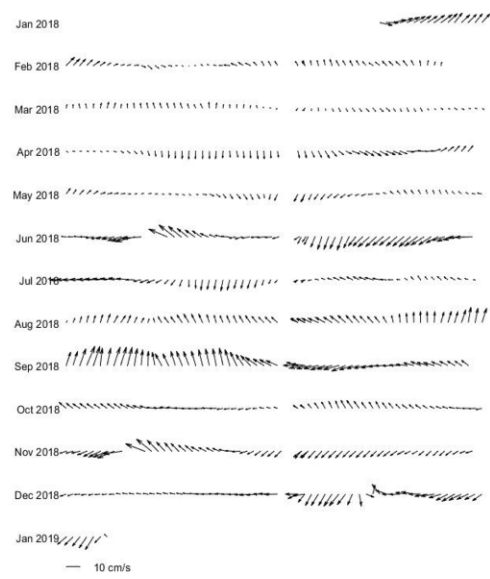


Figure S1: Current vector stick plots of filtered (de-tided with 33-hour half amplitude period) current data. Smoothed data are shown every 12 hours. Arrow length scales to current speed, indicated by the scale bar, in cm/s.

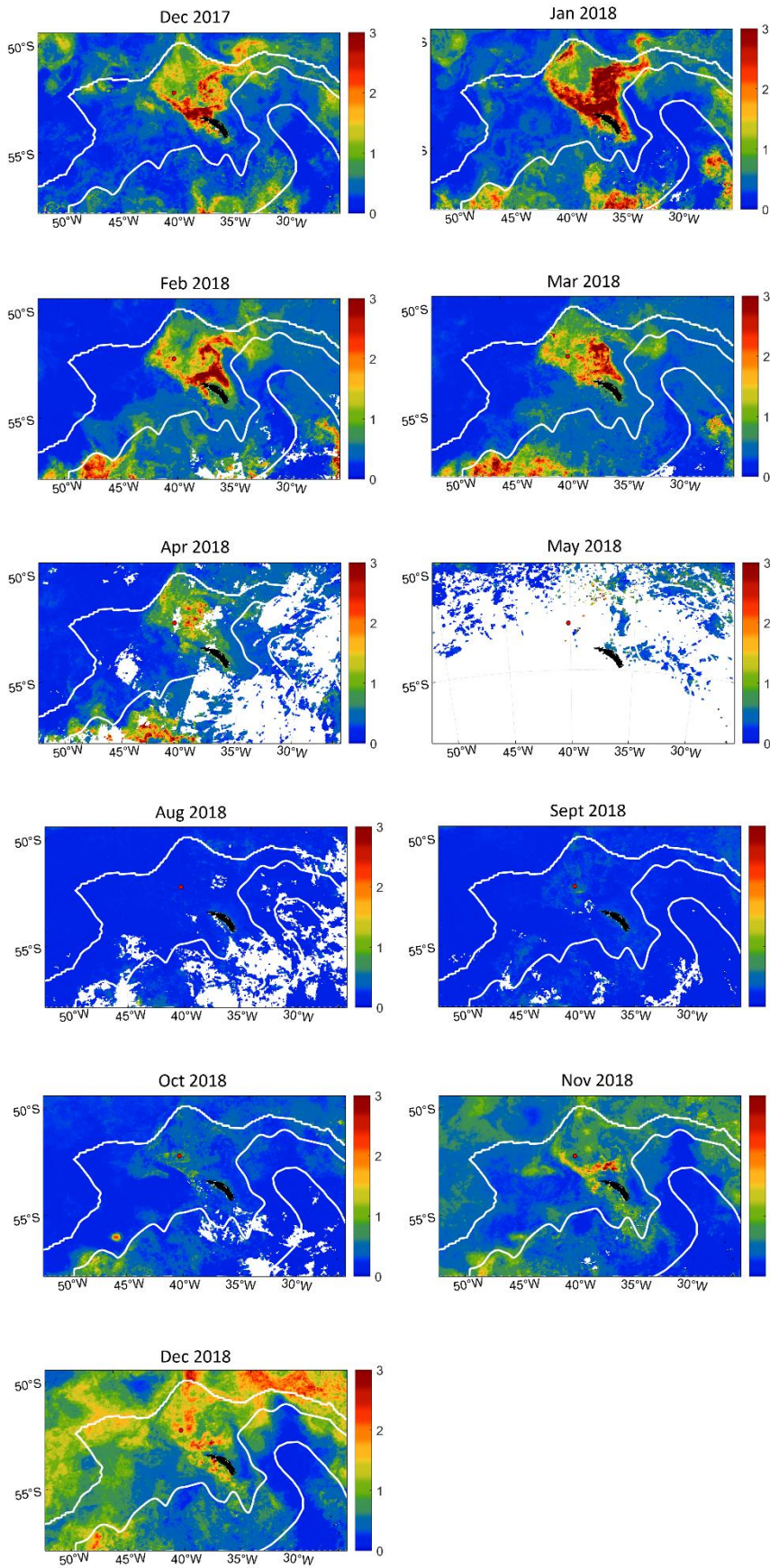


Figure S2: Seasonal progression of satellite derived surface chlorophyll concentration (mg m^{-3}). Data are monthly for Dec 2017- May 2018, and Aug 2018-Dec 2018, averaged from 8 day satellite chlorophyll data from the Ocean Colour CCI (version 5.0) (Sathyendranath et al., 2021, 2019). White lines indicate frontal positions of the Antarctic Polar Front (APF) (Moore et al., 1999), Subantarctic Circumpolar Current Front (SACCF) (Thorpe et al., 2002) and the Southern Boundary of the Antarctic Circumpolar Current (SB-ACC) (Orsi et al., 1995). P3 station is indicated by the red marker.