## Tables

Table 1: Descriptions of the minimal variables included in each dataset (i.e. in each CSV file).

| Variable       | Description   |
|----------------|---|
| date           | Sampling date (UTC)   |
| latitude       | Latitude of the sampling location (degree decimals).  |
| longitude      | Longitude of the sampling location (degree decimals).   |
| sample_type    | Origin of the water ("water", "ice", "meltpond").   |
| sample_source  | Source of the water ("niskin", "underice" "0-1 cm", "0-3 cm", "3-10 cm", "rosette" ).                     |
| depth_m        | Depth at which measurement was made.  |
| snow_thickness | Qualitative value discribing the snow cover under which measurement was made ("thin_snow", "thick_snow"). |
| mission        | Misson identifier ("ice_camp_2015", "ice_camp_2016")  |
| pi             | Name(s) of the principal investigator(s) responsible of the measured variable.                            |

2

Table 2: Parameters measured during the Green Edge ice camp surveys.

| Year | Parameter                                       | Sampling method        | Principal investigators               | Processed              |
|------|---|------------------------|---------------------------------------|------------------------|
| 2015 | Absorption coefficient                          | In-water profiler      | Becu G. / Babin M.                    | Available              |
| 2015 | Absorption (particulate)                        | Camp ice sample        | Ehn J. / Cox C.                       | Available              |
| 2015 | Absorption (particulate)                        | Camp water sample      | Ehn J. / Cox C.                       | Available              |
| 2015 | Absorption (particulate)                        | Camp ice sample        | Matsuoka A. / Bricaud A. / Ferland J. | Available              |
| 2015 | Absorption (particulate)                        | Camp water sample      | Matsuoka A. / Bricaud A. / Ferland J. | Available              |
| 2015 | ADCP (Mooring)                                  | Mooring                | Marec C.                              | Available              |
| 2015 | Aerosol optical depth                           | Surface mode           | Belanger S. / Goyens C. / Leymarie E. | Available              |
| 2015 | Aerosol relative humidity                       | Surface mode           | Belanger S. / Goyens C. / Leymarie E. | Available              |
| 2015 | Air Relative Humidity                           | Meteorological Tower   | Massé G.                              | Available              |
| 2015 | Air Temperature                                 | Meteorological Tower   | Massé G.                              | Available              |
| 2015 | Alkalinity total (TA)                           | Camp water sample      | Else B. / Whitehead J.                | Available              |
| 2015 | Angstrom coefficient                            | Surface mode           | Belanger S. / Goyens C. / Leymarie E. | Available              |
| 2015 | Attenuation coefficient                         | In-water profiler      | Becu G. / Babin M.                    | Available              |
| 2015 | Backscattering Coefficient                      | In-water profiler      | Becu G. / Babin M.                    | Available              |
| 2015 | Bacterial sequencing                            | Air filtration         | Amiraux R.                            | Available              |
| 2015 | Bacterial sequencing                            | Camp water sample      | Amiraux R.                            | Available              |
| 2015 | Bacterial sequencing                            | Ice core               | Amiraux R.                            | Available              |
| 2015 | Bacterial sequencing                            | Sediment trap          | Amiraux R.                            | Available              |
| 2015 | Brine salinity and volume                       | Sea ice core           | Galindo V./ Rysgaard S.               | Available              |
| 2015 | CDOM  | In-water profiler      | Becu G. / Babin M.                    | Available              |
| 2015 | CDOM absorption                                 | Camp water sample      | Matsuoka A. / Ferland J. / Babin M.   | Available              |
| 2015 | Chla  | In-water profiler      | Becu G. / Babin M.                    | Available              |
| 2015 | Chla  | Sediment Trap          | Fortier L. / Lalande C.               | Available              |
| 2015 | Chlorophyll a and Phaeopigments (concentration) | Camp water sample      | Babin M. / Ferland J.                 | Available              |
| 2015 | Chlorophyll a and Phaeopigments (concentration) | Camp water sample      | Raimbault P.                          | Data not available yet |
| 2015 | Cryptophytes (abundance)                        | Camp water sample      | Vaulot D. / Marie D.                  | Available              |
| 2015 | CTD   | In-water profiler      | Becu G. / Babin M.                    | Available              |
| 2015 | CTD   | In-water profiler      | Guillot P. / Babin M. / Marec C.      | Available              |
| 2015 | Diffuse attenuation coefficient (Kd)            | Profile mode           | Becu G. / Babin M.                    | Available              |
| 2015 | Dissolved inorganic Carbon (DIC)                | Camp water sample      | Else B. / Whitehead J.                | Available              |
| 2015 | DMS   | Camp water sample      | Levasseur M.                          | Available              |
| 2015 | DMS   | Melt pond water sample | Levasseur M.                          | Available              |

ω

Table 2: Parameters measured during the Green Edge ice camp surveys. *(continued)* 

| Year                                 | Parameter   | Sampling method   | Principal investigators  | Processed   |
|--------------------------------------|---|---|--|---|
| 2015<br>2015<br>2015                 | DMS DMSP DMSP   | Sea ice core Camp water sample Melt pond water sample   | Levasseur M. Levasseur M. Levasseur M.   | Available<br>Available<br>Available   |
| 2015<br>2015<br>2015<br>2015<br>2015 | DMSP DOM (sugars) DON (release) Downwelling irradiance Downwelling Irradiance above the surface (Ed(0+))  | Sea ice core<br>Rosette<br>Camp water sample<br>Surface mode<br>Surface mode                                | Levasseur M.<br>Sempéré R. / Panagiotopoulos C.<br>Raimbault P.<br>Belanger S. / Goyens C. / Leymarie E.<br>Babin M. / Galí M.                                 | Available<br>Available<br>Available<br>Available<br>Available                           |
| 2015<br>2015<br>2015<br>2015<br>2015 | Downwelling Irradiance above the surface (Ed(0+)) Downwelling Irradiance (Ed(z)) Ed(0+) spectra from SBDART radiative transfer simulations Faecal pellets flux Fluorescence Variable (Phyto)            | Profile mode Profile mode Surface mode Sediment Trap Camp water sample                                      | Becu G. / Babin M.<br>Becu G. / Babin M.<br>Babin M. / Galí M.<br>Fortier L. / Lalande C.<br>Galindo V. / Rysgaard S.  | Available<br>Available<br>Available<br>Available<br>Data not available yet              |
| 2015<br>2015<br>2015<br>2015<br>2015 | Fluorescence Variable (Phyto) Fluorescence Variable (Phyto) Hemispherical directional reflectance distribution function Hemispherical Directional Reflectance Factor Heterotrophic bacteria (abundance) | Sediment Trap Surface mode Surface mode Surface mode Camp water sample                                      | Galindo V. / Rysgaard S.<br>Galindo V. / Rysgaard S.<br>Belanger S. / Goyens C. / Leymarie E.<br>Belanger S. / Goyens C. / Leymarie E.<br>Vaulot D. / Marie D. | Available<br>Data not available yet<br>Available<br>Available<br>Available              |
| 2015<br>2015<br>2015<br>2015<br>2015 | Heterotrophic nanoflagellates Ice and Snow Temperature Ice thickness Irradiance (Downwelling, Upwelling) Isoprenoid lipids  | Camp water sample Meteorological Tower Camp ice sample Surface-, Under-water profile-mode Camp water sample | Joux F. Massé G. Galindo V. / Rysgaard S. Matthes L. / Ehn J. / Lambert-Girard S./ Mundy C.J. Massé G. / Guilmette C.  | Available<br>Available<br>Available<br>Available<br>Data not available yet              |
| 2015<br>2015<br>2015<br>2015<br>2015 | Isoprenoid lipids Net radiation NH4 NH4 (assimilation) NH4 (regeneration)   | Sea ice core Surface mode Camp water sample Camp water sample Camp water sample                             | Massé G. / Guilmette C.<br>Else B.<br>Raimbault P.<br>Raimbault P.<br>Raimbault P.   | Data not available yet<br>Available<br>Data not available yet<br>Available<br>Available |
| 2015<br>2015<br>2015<br>2015         | Nitrification<br>NO2<br>NO2<br>NO3  | Camp water sample<br>Camp water sample<br>Sea ice core<br>Camp water sample                                 | Raimbault P.<br>Raimbault P.<br>Raimbault P.<br>Raimbault P.   | Available<br>Available<br>Available<br>Available  |

4

Table 2: Parameters measured during the Green Edge ice camp surveys. *(continued)* 

| Year | Parameter                                      | Sampling method                  | Principal investigators                         | Processed              |
|------|--|----------------------------------|---|------------------------|
| 2015 | NO3  | Sea ice core                     | Raimbault P.                                    | Available              |
| 2015 | NO3 (assimilation)                             | Camp water sample                | Raimbault P.                                    | Available              |
| 2015 | PAR  | Surface mode                     | Babin M. / Galí M.                              | Available              |
| 2015 | PAR from SBDART radiative transfer simulations | Surface mode                     | Babin M. / Galí M.                              | Available              |
| 2015 | PAR (Photosynthetically Available Radiation)   | Profile mode                     | Becu G. / Babin M.                              | Available              |
| 2015 | Particle Size Distribution                     | In-water profiler                | Becu G. / Babin M.                              | Available              |
| 2015 | Particles size                                 | Underwater Vision Profiler (UVP) | Marec C. / Picheral M.                          | Available              |
| 2015 | Particulate Carbon (PC)                        | Camp water sample                | Babin M. / Ferland J.                           | Available              |
| 2015 | Particulate mass                               | Sediment Trap                    | Fortier L. / Lalande C.                         | Available              |
| 2015 | Particulate Nitrogen (PN)                      | Camp water sample                | Babin M. / Ferland J.                           | Available              |
| 2015 | Particulate Organic Phosphorus (POP)           | Camp water sample                | Raimbault P.                                    | Data not available yet |
| 2015 | PDMPO uptake                                   | Camp water sample                | Leynaert A.                                     | Data not available yet |
| 2015 | PDMPO uptake per species                       | Camp water sample                | Leynaert A.                                     | Data not available yet |
| 2015 | Photosynthetic nanoeukaryotes (abundance)      | Camp water sample                | Vaulot D. / Marie D.                            | Available              |
| 2015 | Photosynthetic parameters                      | Camp water sample                | Ferland J. / Babin M.                           | Available              |
| 2015 | Photosynthetic picoeukaryotes (abundance)      | Camp water sample                | Vaulot D. / Marie D.                            | Available              |
| 2015 | Phytoplankton                                  | Camp water sample                | Ferland J. / Grondin P.L. / Babin M. / Marec C. | Available              |
| 2015 | Phytoplankton (taxonomy)                       | Sediment Trap                    | Fortier L. / Lalande C.                         | Available              |
| 2015 | Pigments                                       | Sea ice core                     | Galindo V. / Rysgaard S.                        | Available              |
| 2015 | Pigments                                       | Camp water sample                | Ras J. / Claustre H.                            | Available              |
| 2015 | PN   | Sediment Trap                    | Fortier L. / Lalande C.                         | Data not available yet |
| 2015 | PO4  | Camp water sample                | Raimbault P.                                    | Available              |
| 2015 | PO4  | Sea ice core                     | Raimbault P.                                    | Available              |
| 2015 | POC  | Sediment Trap                    | Fortier L. / Lalande C.                         | Available              |
| 2015 | POC  | Camp water sample                | Raimbault P.                                    | Available              |
| 2015 | PON  | Camp water sample                | Raimbault P.                                    | Available              |
| 2015 | Production (Primary Production)                | Camp water sample                | Raimbault P.                                    | Available              |
| 2015 | Rrs (0+)                                       | Profile mode                     | Becu G. / Babin M.                              | Available              |
| 2015 | Salinity                                       | Sea ice core                     | Galindo V. / Rysgaard S.                        | Available              |
| 2015 | Salinity-induced bacterial biomarker           | Ice core                         | Amiraux R./ Rontani J-F.                        | Available              |
| 2015 | Salinity-induced bacterial biomarker           | Sediment trap                    | Amiraux R./ Rontani J-F.                        | Available              |

5

Table 2: Parameters measured during the Green Edge ice camp surveys. *(continued)* 

| Year | Parameter  | Sampling method                     | Principal investigators               | Processed |
|------|--|-------------------------------------|---------------------------------------|-----------|
| 2015 | Sea ice concentration                              | Surface mode                        | Massicotte P.                         | Available |
| 2015 | Silica Biogenic (BSi)                              | Camp water sample                   | Leynaert A.                           | Available |
| 2015 | Silica Biogenic (BSi) dissolution rate             | Camp water sample                   | Leynaert A.                           | Available |
| 2015 | Silicate Si(OH)4 - absorption kinetics             | Camp water sample                   | Leynaert A.                           | Available |
| 2015 | Silica (uptake rate)                               | Camp water sample                   | Leynaert A.                           | Available |
| 2015 | Si(OH)4  | Camp water sample                   | Leynaert A.                           | Available |
| 2015 | Si(OH)4  | Camp water sample                   | Raimbault P.                          | Available |
| 2015 | Si(OH)4  | Sea ice core                        | Raimbault P.                          | Available |
| 2015 | Snow depth   | Camp snow sample                    | Galindo V./ Rysgaard S.               | Available |
| 2015 | Snow depth   | Meteorological Tower                | Massé G.                              | Available |
| 2015 | SPM (Suspended Particulate Material)               | Camp water sample                   | Babin M. / Ferland J.                 | Available |
| 2015 | Sugars   | Sediment Trap                       | Sempéré R. / Panagiotopoulos C.       | Available |
| 2015 | Surface Albedo                                     | Surface mode                        | Verin G.                              | Available |
| 2015 | Swimmers   | Sediment Trap                       | Fortier L. / Lalande C.               | Available |
| 2015 | Synechococcus (abundance)                          | Camp water sample                   | Vaulot D. / Marie D.                  | Available |
| 2015 | Temperature  | Sea ice core                        | Galindo V. / Rysgaard S.              | Available |
| 2015 | Total Organic Carbon (TOC)                         | Rosette                             | Sempéré R. / Panagiotopoulos C.       | Available |
| 2015 | Total Organic Carbon (TOC)                         | Camp water sample                   | Raimbault P.                          | Available |
| 2015 | Total Organic Nitrogen (TON)                       | Camp water sample                   | Raimbault P.                          | Available |
| 2015 | Total Organic Phosphorus (TOP)                     | Camp water sample                   | Raimbault P.                          | Available |
| 2015 | Transmittance through ice                          | Surface mode                        | Verin G.                              | Available |
| 2015 | Under-ice export fluxes of biogenic matter (fresh) | Sediment Trap                       | Fortier L. / Lalande C.               | Available |
| 2015 | Under-ice photos and video                         | GoPro Hero 4 on radiometer profiler | Rehm E.                               | Available |
| 2015 | Upwelling Irradiance (Eu(z))                       | Profile mode                        | Becu G. / Babin M.                    | Available |
| 2015 | Upwelling radiance                                 | Surface mode                        | Belanger S. / Goyens C. / Leymarie E. | Available |
| 2015 | Upwelling radiance (Lu)                            | Profile mode                        | Becu G. / Babin M.                    | Available |
| 2015 | Vertical profile of snow density                   | Surface mode                        | Verin G.                              | Available |
| 2015 | Vertical profile of Specific Surface Area          | Surface mode                        | Verin G.                              | Available |
| 2015 | Virus (abundance)                                  | Camp water sample                   | Joux F.                               | Available |
| 2015 | Wind Direction                                     | Meteorological Tower                | Massé G.                              | Available |
| 2015 | Wind Speed   | Meteorological Tower                | Massé G.                              | Available |

6

Table 2: Parameters measured during the Green Edge ice camp surveys. *(continued)* 

| Year                                 | Parameter   | Sampling method  | Principal investigators  | Processed   |
|--------------------------------------|---|--|--|---|
| 2015                                 | Zooplancton (Abundances) Zooplancton (Abundances) Zooplancton (Taxonomy) Zooplancton (Taxonomy)                         | Plankton net   | Fortier L. / Aubry C   | Available   |
| 2015                                 |   | Plankton net (LOKI)  | Fortier L. / Aubry C   | Available   |
| 2015                                 |   | Plankton Net   | Fortier L. / Aubry C   | Available   |
| 2015                                 |   | Plankton net (LOKI)  | Fortier L. / Aubry C   | Available   |
| 2015                                 | Zooplankton vertical distribution 234Th (dissolved) 234Th (particulate) Absorption coefficient Absorption (particulate) | Underwater Vision Profiler (UVP)   | Marec C. / Sophie R. / Picheral M.   | Available   |
| 2016                                 |   | Rosette  | Schmidt S.   | Data not available yet  |
| 2016                                 |   | Rosette  | Schmidt S.   | Data not available yet  |
| 2016                                 |   | In-water IOP profiler  | Becu G. / Babin M.   | Available   |
| 2016                                 |   | Camp ice sample  | Matsuoka A. / Bricaud A. / Ferland J.  | Available   |
| 2016                                 | Absorption (particulate) ADCP (Mooring) Air Relative Humidity Air Temperature Attenuation coefficient                   | Camp water sample  | Matsuoka A. / Bricaud A. / Ferland J.  | Available   |
| 2016                                 |   | Mooring  | Oziel L. / Houssais MN. / Babin M./ Lagunas J.   | Available   |
| 2016                                 |   | Meteorological Tower   | Massé G.   | Available   |
| 2016                                 |   | Meteorological Tower   | Massé G.   | Available   |
| 2016                                 |   | In-water IOP profiler  | Becu G. / Babin M.   | Available   |
| 2016                                 | Backscattering Coefficient Bacterial cultures Bacterial cultures Bacterial production Bacterial production              | In-water IOP profiler  | Becu G. / Babin M.   | Available   |
| 2016                                 |   | Camp water sample  | Joux F.  | Available   |
| 2016                                 |   | Sea ice core   | Joux F.  | Available   |
| 2016                                 |   | Sea ice core   | Joux F. / Galindo V.   | Available   |
| 2016                                 |   | Camp water sample  | Joux F. / Galindo V.   | Available   |
| 2016<br>2016<br>2016<br>2016<br>2016 | Brine salinity and volume CDOM CDOM absorption CDOM (Fluorescence) Chla   | Sea ice core In-water IOP profiler Camp water sample Camp water sample In-water IOP profiler | Galindo V./ Rysgaard S.<br>Becu G. / Babin M.<br>Matsuoka A. / Ferland J. / Babin M.<br>Matsuoka A. / Ferland J.<br>Becu G. / Babin M. | Available<br>Available<br>Available<br>Available<br>Available |
| 2016<br>2016<br>2016<br>2016<br>2016 | Chla Chlorophyll a and Phaeopigments (concentration) Cryptophytes (abundance) CTD CTD                                   | Sediment Trap Camp water sample Camp water sample In-water IOP profiler In-water profiler    | Fortier L. / Lalande C.<br>Babin M. / Ferland J.<br>Vaulot D.<br>Becu G. / Babin M.<br>Guillot P. / Lagunas J.                         | Available<br>Available<br>Available<br>Available<br>Available |
| 2016                                 | Cultures of sorted populations  | Camp water sample  | Vaulot D.  | Available   |
| 2016                                 | Diatoms (bacilliarophyta) abundance   | Camp water sample  | Leblanc K. / Queguiner B. / Lafond.A   | Available   |
| 2016                                 | Diatoms (bacilliarophyta) taxonomy  | Camp water sample  | Leblanc K. / Queguiner B. / Lafond.A   | Available   |

7

Table 2: Parameters measured during the Green Edge ice camp surveys. *(continued)* 

| Year | Parameter   | Sampling method                      | Principal investigators                             | Processed              |
|------|---|--------------------------------------|---|------------------------|
| 2016 | Diffuse attenuation coefficient (Kd)                        | Optical radiometers profiling system | Becu G. / Babin M.                                  | Available              |
| 2016 | DOC (HTCO)  | Rosette                              | Matsuoka A. / Benner R. / Ferland J.                | Available              |
| 2016 | DOM (Amino acids)   | Rosette                              | Matsuoka A. / Benner R. / Ferland J.                | Available              |
| 2016 | DOM (sugars)  | Rosette                              | Panagiotopoulos C./ R Sempéré                       | Available              |
| 2016 | DON (release)   | Camp water sample                    | Raimbault P.  | Available              |
| 2016 | Downwelling irradiance                                      | Surface mode                         | Belanger S. / Goyens C. / Lambert Girard S.         | Available              |
| 2016 | Downwelling irradiance                                      | Surface mode                         | Lambert-Girard S. / Leymarie E.                     | Available              |
| 2016 | Downwelling Irradiance above the surface (Ed(0+))           | Surface mode                         | Babin M. / Galí M.                                  | Available              |
| 2016 | Downwelling Irradiance above the surface (Ed(0+))           | Optical radiometers profiling system | Becu G. / Babin M.                                  | Available              |
| 2016 | Downwelling Irradiance (Ed(z))                              | Optical radiometers profiling system | Becu G. / Babin M.                                  | Available              |
| 2016 | Ed(0+) spectra from SBDART radiative transfer simulations   | Surface mode                         | Babin M. / Galí M.                                  | Available              |
| 2016 | Faecal pellets flux   | Sediment Trap                        | Fortier L. / Lalande C.                             | Available              |
| 2016 | Hemispherical directional reflectance distribution function | Surface mode                         | Belanger S. / Goyens C. / Lambert-Girard S.         | Data not available yet |
| 2016 | Heterotrophic bacteria (abundance)                          | Camp water sample                    | Vaulot D.   | Available              |
| 2016 | Hydro SCAMP (Temp, Salin, Chlorophyll, turb)                | In-water profiler                    | Vladoiu A. / Dumont D. / Sévigny C.                 | Available              |
| 2016 | Ice and Snow Temperature                                    | Meteorological Tower                 | Massé G.  | Data not available yet |
| 2016 | Ice thickness   | Camp ice sample                      | Galindo V./ Rysgaard S.                             | Available              |
| 2016 | Irradiance (Downwelling)                                    | Surface-, Ice Bottom-mode            | Matthes L. / Ehn J. / Lambert-Girard S./ Mundy C.J. | Available              |
| 2016 | Irradiance (Downwelling)                                    | Under-ice irradiance transects, ROV  | Matthes L. /Lambert-Girard S./ Ehn J./Mundy C.J     | Available              |
| 2016 | Irradiance (Downwelling, Upwelling)                         | Surface-, Under-water profile-mode   | Matthes L. / Ehn J. / Lambert-Girard S./ Mundy C.J. | Available              |
| 2016 | Isoprenoid lipids   | Camp water sample                    | Massé G. / Guilmette C.                             | Data not available yet |
| 2016 | Isoprenoid lipids   | Sea ice core                         | Massé G. / Guilmette C.                             | Data not available yet |
| 2016 | Lipid biomarkers  | Collected organisms                  | Dufour F. / Massé G. / Ayotte P. / Lemire M.        | Data not available yet |
| 2016 | Lipid tracers of bacteria stress                            | Camp water sample                    | Rontani JF. / Amiraux R.                            | Data not available yet |
| 2016 | Lipid tracers of bacteria stress                            | Sea ice core                         | Rontani JF. / Amiraux R.                            | Data not available yet |
| 2016 | Lipid tracers of bacteria stress                            | Sediment Trap                        | Rontani JF. / Amiraux R.                            | Data not available yet |
| 2016 | NH4   | Camp water sample                    | Raimbault P.  | Data not available yet |
| 2016 | NH4 (assimilation)  | Camp water sample                    | Raimbault P.  | Available              |
| 2016 | NH4 (regeneration)  | Camp water sample                    | Raimbault P.  | Available              |
| 2016 | Nitrification   | Camp water sample                    | Raimbault P.  | Available              |
| 2016 | NO2   | Camp water sample                    | Raimbault P.  | Available              |
| 2016 | NO2   | Sea ice core                         | Raimbault P.  | Available              |

 $\infty$ 

Table 2: Parameters measured during the Green Edge ice camp surveys. *(continued)* 

| Year   | Parameter   | Sampling method  | Principal investigators   | Processed  |
|--|---|--|---|--|
| 2016<br>2016<br>2016<br>2016                 | NO3<br>NO3<br>NO3 (assimilation)<br>Nutrients bioassay  | Camp water sample<br>Sea ice core<br>Camp water sample<br>Experiment                                   | Raimbault P.<br>Raimbault P.<br>Raimbault P.<br>Delaforge A./ Mundy CJ  | Available<br>Available<br>Available<br>Data not available yet  |
| 2016   | Nutrients bioassay  | Experiment   | Galindo V./ Rysgaard S.   | Data not available yet   |
| 2016<br>2016<br>2016<br>2016<br>2016         | PAR PAR from SBDART radiative transfer simulations PAR (Photosynthetically Available Radiation) Particle Size Distribution Particle Size Distribution   | Surface mode Surface mode Optical radiometers profiling system In-water IOP profiler In-water profiler | Babin M. / Galí M.<br>Babin M. / Galí M.<br>Becu G. / Babin M.<br>Becu G. / Babin M.<br>L. Stemmann / Lagunas J.  | Available<br>Available<br>Available<br>Data not available yet<br>Data not available yet              |
| 2016<br>2016<br>2016<br>2016<br>2016         | Particles size Particulate Carbon (PC) Particulate mass Particulate Nitrogen (PN) Particulate Organic Phosphorus (POP)  | Underwater Vision Profiler (UVP) Camp water sample Sediment Trap Camp water sample Camp water sample   | Lagunas J. / Picheral M.<br>Babin M. / Ferland J.<br>Fortier L. / Lalande C.<br>Babin M. / Ferland J.<br>Raimbault P.   | Available<br>Available<br>Available<br>Available<br>Data not available yet                           |
| 2016<br>2016<br>2016<br>2016<br>2016         | PDMPO uptake PDMPO uptake per species Photosynthetic eukaryotes (morphology) Photosynthetic nanoeukaryotes (abundance) Photosynthetic parameters  | Camp water sample              | Leblanc K. / Queguiner B.<br>Leblanc K. / Queguiner B.<br>Vaulot D.<br>Vaulot D.<br>Ferland J. / Babin M.   | Data not available yet<br>Data not available yet<br>Available<br>Available<br>Available              |
| 2016<br>2016<br>2016<br>2016<br>2016         | Photosynthetic parameters (variable fluorescence) Photosynthetic parameters (variable fluorescence) Photosynthetic parameters (variable fluorescence) Photosynthetic picoeukaryotes (abundance) Phytoplankton | Camp water sample<br>Sediment Trap<br>Sea ice core<br>Camp water sample<br>Camp water sample           | Lavaud J. / Galindo V. / Rysgaard S.<br>Lavaud J. / Galindo V. / Rysgaard S.<br>Lavaud J. / Galindo V. / Rysgaard S.<br>Vaulot D.<br>Ferland J. / Grondin P.L. / Babin M. | Data not available yet<br>Data not available yet<br>Data not available yet<br>Available<br>Available |
| 2016<br>2016<br>2016<br>2016<br>2016<br>2016 | Phytoplankton (taxonomy) Pigments PN PO4 PO4 POC  | Sediment Trap Camp water sample Sediment Trap Camp water sample Sea ice core Sediment Trap             | Fortier L. / Lalande C. Ras J. / Claustre H./Galindo V./ Rysgaard S. Fortier L. / Lalande C. Raimbault P. Raimbault P. Fortier L. / Lalande C.                            | Available<br>Available<br>Available<br>Available<br>Available  |

Ø

Table 2: Parameters measured during the Green Edge ice camp surveys. *(continued)* 

| Year                                 | Parameter   | Sampling method   | Principal investigators   | Processed  |
|--------------------------------------|---|---|---|--|
| 2016<br>2016<br>2016<br>2016         | POC PON Production (Primary Production) Prokaryotic diversity   | Camp water sample<br>Camp water sample<br>Camp water sample<br>Camp water sample                  | Raimbault P.<br>Raimbault P.<br>Raimbault P.<br>Joux F.   | Available<br>Available<br>Available<br>Data not available yet              |
| 2016<br>2016<br>2016<br>2016<br>2016 | Prokaryotic diversity Rrs (0+) Salinity Scattering Coefficient Sea ice concentration  | Sea ice core Optical radiometers profiling system Sea ice core In-water IOP profiler Surface mode | Joux F. Becu G. / Babin M. Galindo V. / Rysgaard S. Becu G. / Babin M. Massicotte P.  | Data not available yet<br>Available<br>Available<br>Available<br>Available |
| 2016<br>2016<br>2016<br>2016<br>2016 | Selenium Silica Biogenic (BSi) Silica Biogenic (BSi) dissolution rate Silica Lithogenic (LSi) Silicate Si(OH)4 - absorption kinetics                        | Collected organisms Camp water sample Camp water sample Camp water sample Camp water sample       | Dufour F., Massé G., Ayotte P., Lemire M.<br>Leynaert A./Moriceau B./ Leblanc K./Queguiner B.<br>Moriceau B.<br>Leynaert A./Moriceau B./ Leblanc K./Queguiner B.<br>Leynaert A. | Available<br>Available<br>Available<br>Data not available yet<br>Available |
| 2016<br>2016<br>2016<br>2016<br>2016 | Silica (uptake rate) Si(OH)4 Si(OH)4 Si(OH)4 Snow depth   | Camp water sample Camp water sample Camp water sample Sea ice core Camp snow sample               | Leynaert A. Leynaert A. / Moriceau B. Raimbault P. Raimbault P. Galindo V./ Rysgaard S.   | Available<br>Available<br>Available<br>Available<br>Available              |
| 2016<br>2016<br>2016<br>2016<br>2016 | Spectral downwelling radiance angular distribution Spectral transmittance through ice SPM (Suspended Particulate Material) Surface spectral albedo Swimmers | Under-water sensor Surface mode Camp water sample Surface mode Sediment Trap                      | Lambert-Girard S. / Leymarie E.<br>Verin G./Picard. G.<br>Babin M. / Ferland J.<br>Verin G./Picard. G.<br>Fortier L. / Lalande C.   | Available<br>Available<br>Available<br>Available<br>Available              |
| 2016<br>2016<br>2016<br>2016<br>2016 | Synechococcus (abundance) Temperature Total Organic Carbon (TOC) Total Organic Carbon (TOC)/Dissolved organic carbon (DOC) Total Organic Nitrogen (TON)     | Camp water sample<br>Sea ice core<br>Camp water sample<br>Rosette<br>Camp water sample            | Vaulot D.<br>Galindo V. / Rysgaard S.<br>Raimbault P.<br>Panagiotopoulos C./ Sempéré R.<br>Raimbault P.   | Available<br>Available<br>Available<br>Available<br>Available              |
| 2016<br>2016<br>2016                 | Total Organic Phosphorus (TOP)<br>Under-ice export fluxes of biogenic matter (fresh)<br>Upwelling Irradiance (Eu(z))  | Camp water sample<br>Sediment Trap<br>Optical radiometers profiling system                        | Raimbault P.<br>Fortier L. / Lalande C.<br>Becu G. / Babin M.   | Available<br>Available<br>Available  |

Table 2: Parameters measured during the Green Edge ice camp surveys. *(continued)* 

| Year | Parameter                                 | Sampling method                      | Principal investigators                     | Processed              |
|------|---|--------------------------------------|---|------------------------|
| 2016 | Upwelling radiance                        | Surface mode                         | Belanger S. / Goyens C. / Lambert-Girard S. | Data not available yet |
| 2016 | Upwelling radiance (Lu)                   | Optical radiometers profiling system | Becu G. / Babin M.                          | Available              |
| 2016 | Vertical profile of snow density          | Surface mode                         | Verin G./Picard. G.                         | Available              |
| 2016 | Vertical profile of Specific Surface Area | Surface mode                         | Verin G./Picard. G.                         | Available              |
| 2016 | Virus (abundance)                         | Camp water sample                    | Joux F.                                     | Available              |
| 2016 | Wind Direction                            | Meteorological Tower                 | Massé G.                                    | Available              |
| 2016 | Wind Speed                                | Meteorological Tower                 | Massé G.                                    | Available              |
| 2016 | Zooplancton (Abundances)                  | Plankton net                         | Fortier L. / Aubry C                        | Available              |
| 2016 | Zooplancton fecal pellet production rate  | Plankton net                         | Fortier L. / Sampei M                       | Available              |
| 2016 | Zooplancton grazing rate                  | Plankton net                         | Fortier L. / Sampei M                       | Available              |
| 2016 | Zooplancton (Taxonomy)                    | Plankton Net                         | Fortier L. / Aubry C                        | Available              |
| 2016 | Zooplankton vertical distribution         | Underwater Vision Profiler (UVP)     | Lagunas J. / Picheral M.                    | Available              |