

**Table S6. Mean (SE) biogenic volatile organic compound (BVOC) emissions from a high arctic *Salix*-dominated heath in control and warming treatments (n=4) during a 24-hour period the 25-26 July.**

| Emission ( $\mu\text{g m}^{-2} \text{h}^{-1}$ ) | Control            |                    |                      |                    |                      |                      |                     |                    | Warming            |                    |                    |                      |                      |                      |                      |                    |
|---|--------------------|--------------------|----------------------|--------------------|----------------------|----------------------|---------------------|--------------------|--------------------|--------------------|--------------------|----------------------|----------------------|----------------------|----------------------|--------------------|
|   | 00:00              | 03:00              | 06:00                | 09:00              | 12:00                | 15:00                | 18:00               | 21:00              | 00:00              | 03:00              | 06:00              | 09:00                | 12:00                | 15:00                | 18:00                | 21:00              |
| Isoprene  | <0.01              | <0.01              | 5.14 (3.78)          | 3.46 (2.20)        | 97.37 (61.22)        | 175.7 (66.43)        | 37.17 (27.22)       | 1.63 (0.83)        | <0.01              | <0.01              | 1.97 (0.74)        | 12.60 (11.06)        | 104.1 (43.12)        | 290.4 (111.2)        | 223.1 (60.52)        | 7.43 (4.30)        |
| <b>Monoterpenes</b>                             |                    |                    |                      |                    |                      |                      |                     |                    |                    |                    |                    |                      |                      |                      |                      |                    |
| 1,8-cineole                                     | <0.01              | <0.01              | 0.02 (0.02)          | <0.01              | 0.03 (0.03)          | 0.04 (0.02)          | <0.01               | <0.01              | <0.01              | <0.01              | <0.01              | <0.01                | 0.09 (0.03)          | 0.08 (0.05)          | 0.03 (0.03)          | <0.01              |
| $\beta$ -Ocimene                                | <0.01              | <0.01              | <0.01                | <0.01              | <0.01                | <0.01                | <0.01               | <0.01              | <0.01              | <0.01              | <0.01              | <0.01                | 0.08 (0.08)          | 0.12 (0.12)          | 0.04 (0.04)          | <0.01              |
| Bornyl acetate                                  | <0.01              | <0.01              | <0.01                | <0.01              | <0.01                | <0.01                | <0.01               | 0.03 (0.03)        | <0.01              | <0.01              | <0.01              | <0.01                | <0.01                | <0.01                | <0.01                | <0.01              |
| <b>Total MTs</b>                                | <0.01              | <0.01              | 0.02 (0.02)          | <0.01              | 0.03 (0.03)          | 0.04 (0.02)          | <0.01               | 0.03 (0.03)        | <0.01              | <0.01              | <0.01              | <0.01                | 0.17 (0.09)          | 0.20 (0.10)          | 0.07 (0.04)          | <0.01              |
| <b>ORVOCs</b>                                   |                    |                    |                      |                    |                      |                      |                     |                    |                    |                    |                    |                      |                      |                      |                      |                    |
| 2-methylfuran                                   | <0.01              | <0.01              | <0.01                | <0.01              | <0.01                | <0.01                | <0.01               | <0.01              | <0.01              | <0.01              | <0.01              | <0.01                | <0.01                | <0.01                | 0.24 (0.24)          | <0.01              |
| Benzene   | <0.01              | <0.01              | <0.01                | 0.18 (0.18)        | <0.01                | <0.01                | 0.35 (0.35)         | <0.01              | <0.01              | <0.01              | <0.01              | <0.01                | 0.30 (0.30)          | <0.01                | <0.01                | <0.01              |
| Heptanal  | <0.01              | <0.01              | <0.01                | <0.01              | 0.15 (0.15)          | <0.01                | <0.01               | <0.01              | <0.01              | <0.01              | <0.01              | <0.01                | <0.01                | <0.01                | <0.01                | <0.01              |
| Benzaldehyde                                    | <0.01              | <0.01              | <0.01                | <0.01              | 0.22 (0.22)          | 0.18 (0.18)          | 0.43 (0.43)         | <0.01              | <0.01              | <0.01              | <0.01              | <0.01                | 0.54 (0.54)          | 0.31 (0.31)          | <0.01                | 0.19 (0.19)        |
| Octanal   | <0.01              | <0.01              | <0.01                | <0.01              | <0.01                | <0.01                | <0.01               | <0.01              | <0.01              | <0.01              | <0.01              | <0.01                | <0.01                | <0.01                | 0.27 (0.27)          | <0.01              |
| 2-hydroxy-benzaldehyde                          | <0.01              | <0.01              | <0.01                | <0.01              | <0.01                | <0.01                | <0.01               | <0.01              | <0.01              | <0.01              | <0.01              | <0.01                | 0.16 (0.16)          | 0.07 (0.07)          | <0.01                | <0.01              |
| Nonanal   | <0.01              | <0.01              | <0.01                | <0.01              | <0.01                | 0.75 (0.75)          | <0.01               | <0.01              | <0.01              | <0.01              | <0.01              | <0.01                | <0.01                | <0.01                | <0.01                | <0.01              |
| Decanal   | <0.01              | <0.01              | <0.01                | <0.01              | <0.01                | 0.15 (0.10)          | <0.01               | <0.01              | <0.01              | <0.01              | <0.01              | <0.01                | <0.01                | 0.09 (0.09)          | <0.01                | <0.01              |
| 3-methoxy-17-methyl-morphinan-14-ol             | <0.01              | <0.01              | <0.01                | <0.01              | 0.05 (0.04)          | <0.01                | <0.01               | <0.01              | <0.01              | <0.01              | <0.01              | <0.01                | <0.01                | <0.01                | <0.01                | <0.01              |
| <b>Total ORVOC</b>                              | <0.01              | <0.01              | <0.01                | 0.18 (0.18)        | 0.42 (0.35)          | 1.08 (0.79)          | 0.78 (0.78)         | <0.01              | <0.01              | <0.01              | <0.01              | <0.01                | 1.01 (1.01)          | 0.46 (0.36)          | 0.51 (0.30)          | 0.19 (0.19)        |
| <b>Other VOCs</b>                               |                    |                    |                      |                    |                      |                      |                     |                    |                    |                    |                    |                      |                      |                      |                      |                    |
| 2-methyl-butane                                 | <0.01              | <0.01              | 7.34 (7.24)          | <0.01              | <0.01                | <0.01                | <0.01               | <0.01              | <0.01              | 3.76 (3.76)        | <0.01              | <0.01                | <0.01                | <0.01                | <0.01                | <0.01              |
| Methacrylic acid methyl ester                   | <0.01              | <0.01              | <0.01                | 0.53 (0.53)        | 2.30 (1.36)          | 4.87 (2.75)          | 1.38 (0.82)         | 0.28 (0.28)        | <0.01              | <0.01              | <0.01              | <0.01                | 5.19 (5.19)          | 8.14 (4.74)          | 5.28 (1.03)          | 0.70 (0.70)        |
| Toluene   | 0.32 (0.02)        | 0.38 (0.03)        | 0.53 (0.05)          | 0.41 (0.03)        | 0.46 (0.03)          | 0.60 (0.06)          | 0.34 (0.12)         | 0.27 (0.09)        | 0.32 (0.02)        | 0.35 (0.03)        | 0.43 (0.05)        | 0.38 (0.02)          | 0.59 (0.09)          | 0.54 (0.07)          | 0.45 (0.05)          | 0.37 (0.03)        |
| Methoxy-phenyl-oxime                            | <0.01              | <0.01              | <0.01                | <0.01              | 0.05 (0.05)          | 0.27 (0.27)          | 0.68 (0.68)         | <0.01              | <0.01              | <0.01              | <0.01              | <0.01                | 0.40 (0.40)          | <0.01                | <0.01                | <0.01              |
| <b>Total other VOCs</b>                         | 0.32 (0.02)        | 0.38 (0.03)        | 7.87 (7.36)          | 0.94 (0.55)        | 2.80 (1.42)          | 5.74 (3.03)          | 2.39 (0.83)         | 0.55 (0.33)        | 0.32 (0.02)        | 4.10 (3.77)        | 0.43 (0.05)        | 0.38 (0.02)          | 6.60 (6.09)          | 8.68 (4.71)          | 5.74 (1.08)          | 1.07 (0.67)        |
| <b>Total BVOCs</b>                              | <b>0.32 (0.02)</b> | <b>0.38 (0.03)</b> | <b>13.03 (11.10)</b> | <b>4.59 (2.71)</b> | <b>100.6 (60.39)</b> | <b>182.6 (64.28)</b> | <b>40.4 (27.43)</b> | <b>2.21 (0.73)</b> | <b>0.32 (0.02)</b> | <b>4.10 (3.77)</b> | <b>2.40 (0.71)</b> | <b>12.98 (11.06)</b> | <b>111.9 (37.54)</b> | <b>299.7 (111.5)</b> | <b>229.4 (61.57)</b> | <b>8.69 (4.01)</b> |