

Table S9. Mean (SE) biogenic volatile organic compound (BVOC) emissions from a subarctic peatland (n=4) during a 24-hour period the 5-6 of August 2008.

Emission ($\mu\text{g m}^{-2} \text{h}^{-1}$)		August											
Time		01:00	03:00	05:00	07:00	09:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00
<i>Monoterpenoids</i>													
Isoprene	<0.01	45.67 (22.21)	33.50 (24.54)	20.15 (5.06)	21.05 (6.53)	22.97 (3.76)	323.0 (171.7)	167.2 (124.8)	182.2 (61.47)	218.3 (142.2)	20.13 (20.13)	81.0 (81.0)	
α -pinene	99.81 (33.85)	181.0 (18.93)	140.70 (14.62)	92.16 (13.55)	50.09 (7.56)	24.92 (4.93)	97.07 (35.90)	19.09 (2.02)	30.24 (4.04)	36.87 (9.65)	127.4 (14.54)	144.7 (20.36)	
Camphene	4.81 (1.69)	6.57 (2.42)	6.31 (0.16)	4.24 (0.27)	0.93 (0.47)	<0.01	2.04 (1.28)	<0.01	<0.01	<0.01	4.63 (1.61)	5.86 (1.04)	
Sabinene	3.34 (3.34)	5.02 (5.02)	5.54 (3.20)	3.28 (1.90)	0.56 (0.56)	<0.01	<0.01	<0.01	<0.01	<0.01	2.80 (2.80)	5.49 (3.39)	
β -myrcene	0.63 (0.63)	2.22 (1.28)	1.67 (0.97)	<0.01	<0.01	<0.01	0.24 (0.24)	<0.01	<0.01	<0.01	1.96 (1.34)	0.60 (0.60)	
Carene	25.55 (8.87)	44.48 (4.73)	36.48 (6.50)	23.23 (5.92)	10.90 (1.79)	1.27 (1.27)	14.88 (9.86)	1.88 (1.09)	2.97 (1.76)	4.58 (2.69)	27.40 (4.05)	36.97 (5.59)	
d-limonene	16.65 (7.64)	13.52 (4.55)	17.67 (2.34)	8.08 (2.75)	3.70 (1.48)	2.18 (1.28)	7.83 (1.71)	4.63 (2.72)	7.92 (7.01)	3.51 (2.35)	14.04 (2.12)	13.05 (4.87)	
Terpinolene	1.24 (1.24)	7.06 (5.41)	2.37 (1.48)	0.76 (0.76)	<0.01	<0.01	<0.01	<0.01	<0.01	1.97 (1.97)	1.96 (1.13)	5.03 (3.82)	
γ -terpinene	<0.01	52.44 (52.44)	80.03 (46.21)	<0.01	0.09 (0.09)	0.52 (0.52)	0.70 (0.70)	<0.01	79.52 (79.52)	49.75 (49.75)	65.93 (64.06)	<0.01	
Camphor	<0.01	<0.01	<0.01	<0.01	0.54 (0.54)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
1,8-cineole	<0.01	<0.01	<0.01	<0.01	0.39 (0.39)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	1.98 (1.98)	
Linalool	<0.01	0.04 (0.04)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
O-cymene	<0.01	<0.01	4.33 (4.33)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	1.07 (1.07)	
Total MTs	152.0 (50.99)	312.3 (72.44)	295.1 (30.18)	131.8 (19.84)	67.20 (10.52)	28.90 (6.51)	122.8 (48.17)	25.60 (3.64)	120.6 (79.17)	46.92 (12.58)	246.1 (78.01)	264.5 (63.23)	
<i>Sesquiterpenes</i>													
Longifolene	<0.01	<0.01	<0.01	<0.01	0.22 (0.22)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
α -patchoulene	<0.01	1.03 (1.03)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
Caryophyllene	1.66 (1.07)	1.07 (1.07)	0.38 (0.38)	0.34 (0.34)	2.81 (1.32)	3.49 (2.26)	2.87 (2.87)	<0.01	0.61 (0.61)	6.32 (3.02)	2.34 (1.02)	2.57 (1.96)	
Total SQTs	1.66 (1.07)	2.10 (1.21)	0.38 (0.38)	0.34 (0.34)	3.03 (1.47)	3.49 (2.26)	2.87 (2.87)	<0.01	0.61 (0.61)	6.32 (3.02)	2.34 (1.02)	2.57 (1.96)	
<i>ORVOCs</i>													
trans-cyclohexane 1-methyl-4-(1-methylethyl)	<0.01	<0.01	<0.01	<0.01	1.34 (1.34)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
2-methylfuran	<0.01	<0.01	<0.01	<0.01	1.06 (1.06)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
1,2-Pentadiene	7.49 (4.34)	20.86 (10.34)	<0.01	<0.01	<0.01	15.76 (9.33)	<0.01	54.10 (46.81)	<0.01	19.49 (19.49)	18.63 (11.58)	9.14 (5.72)	
Hexane	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	5.61 (5.61)	<0.01	<0.01	<0.01	<0.01	<0.01	
1-heptene	<0.01	<0.01	7.25 (7.25)	<0.01	12.15 (6.54)	<0.01	5.71 (5.71)	51.60 (17.72)	<0.01	19.46 (14.66)	2.91 (2.91)	<0.01	
3-heptene	49.35 (21.43)	<0.01	14.15 (8.19)	<0.01	7.79 (5.55)	<0.01	7.38 (7.38)	14.69 (9.82)	<0.01	45.76 (28.11)	28.65 (17.16)	8.84 (8.84)	
(e)-2-heptene	52.55 (20.22)	13.79 (8.83)	18.33 (6.22)	0.00	23.58 (14.50)	15.51 (9.58)	6.76 (6.76)	40.25 (15.40)	6.77 (4.56)	45.19 (31.44)	62.13 (20.85)	34.97 (6.33)	
Benzaldehyde	0.17 (0.17)	2.62 (2.09)	<0.01	<0.01	0.66 (0.66)	<0.01	<0.01	2.86 (2.86)	<0.01	1.63 (1.63)	3.72 (3.72)	0.49 (0.49)	
(z)-acetate- 3-hexen-1-ol	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	8.74 (8.74)	<0.01	
1-octene	<0.01	<0.01	<0.01	<0.01	2.97 (2.97)	3.38 (3.38)	<0.01	2.31 (2.31)	<0.01	<0.01	1.81 (1.81)	<0.01	
Total ORVOCs	109.6 (45.51)	37.27 (12.45)	39.73 (18.69)	<0.01	49.54 (19.11)	34.65 (12.43)	25.47 (10.74)	165.8 (84.80)	6.77 (4.56)	131.5 (56.43)	126.6 (30.90)	53.44 (11.73)	
<i>Other VOCs</i>													
Toluene	37.34 (13.07)	12.66 (12.66)	33.31 (11.50)	15.26 (10.09)	7.45 (5.47)	18.60 (10.75)	27.15 (9.58)	<0.01	<0.01	9.25 (9.25)	56.28 (5.95)	30.16 (10.28)	
Methoxy-phenyl-oxime	3.57 (3.57)	61.43 (61.43)	120.35 (71.03)	290.1 (253.0)	319.7 (185.2)	228.1 (228.1)	29.27 (21.34)	31.48 (31.48)	81.68 (81.68)	16.60 (8.86)	404.3 (371.9)	51.50 (34.44)	
Total Other VOCs	40.91 (14.84)	74.09 (58.44)	153.66 (77.83)	305.4 (248.0)	327.1 (184.9)	246.7 (222.0)	56.42 (28.54)	31.48 (31.48)	81.68 (81.68)	25.84 (14.77)	460.6 (377.2)	81.66 (41.57)	
Total BVOCs	304.2 (105.3)	471.5 (43.3)	522.4 (48.4)	457.6 (245.2)	467.9 (179.3)	336.7 (234.2)	530.5 (124.74)	390.1 (106.9)	391.9 (109.9)	428.9 (158.1)	855.8 (320.6)	483.2 (123.0)	