

# Fine-Scale Assessment of Greenhouse Gases Fluxes from a Boreal Peatland Pond

Jing Xue <sup>1,2</sup>, Xinan Chen <sup>1,2</sup>, Xianwei Wang <sup>3</sup> and Xiaoxin Sun <sup>1,2,\*</sup>

<sup>1</sup> Key Laboratory of Sustainable Forest Ecosystem Management-Ministry of Education, School of Forestry, Northeast Forestry University, Harbin 150040, China; xuejing@nefu.edu.cn (J.X.); 18568870801@163.com (X.C.)

<sup>2</sup> Heilongjiang Sanjiang Plain Wetland Ecosystem Research Station, Fuyuan 156500, China

<sup>3</sup> Key Laboratory of Wetland Ecology and Environment, Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences, Changchun 130102, China; wangxianwei@iga.ac.cn

\* Correspondence: sunxiaoxin@nefu.edu.cn

**Table S1.** Hydrochemical parameter data in the water column in pelagic zone of the pond.

Sampling Date	Pelagic Zone									
	Water temperature (°C)	DO (mg l <sup>-1</sup> )	DOC (mg l <sup>-1</sup> )	TN (mg l <sup>-1</sup> )	TP (mg l <sup>-1</sup> )	EC (ms cm <sup>-1</sup> )	pH	CH <sub>4</sub> concentration (μM)	CO <sub>2</sub> concentration (μM)	N <sub>2</sub> O concentration (μM)
Jun 12th, 2021	10.75	8.31	29.91	3.07	0.133	0.056	6.81	0.089	222.041	0.028
Jun 20th, 2021	19.81	5.42	33.48	3.00	0.036	0.069	7.16	0.098	136.784	0.015
Jun 28th, 2021	19.73	6.09	30.13	2.78	0.090	0.070	7.09	0.090	112.763	0.009
Jul 06th, 2021	24.95	5.89	47.69	2.42	0.113	0.108	7.00	0.045	158.808	0.009
Jul 14th, 2021	14.60	7.42	47.95	2.38	0.079	0.104	7.33	0.050	255.755	0.011
Jul 22th, 2021	16.88	6.00	48.75	3.60	0.091	0.095	6.74	0.342	240.531	0.012
Jul 30th, 2021	17.20	3.77	32.01	3.07	0.018	0.094	6.63	0.170	198.643	0.008
Aug 06th, 2021	17.41	5.77	33.42	1.76	0.047	0.107	7.03	0.088	326.153	0.011
Aug 15th, 2021	16.7	4.93	43.05	1.16	0.032	0.133	7.10	0.191	393.814	0.012
Aug 22th, 2021	10.95	6.77	45.24	1.15	0.044	0.108	7.03	0.135	260.861	0.008
Aug 29th, 2021	13.09	4.52	61.86	1.52	0.056	0.110	7.14	0.074	242.162	0.016
Sep 05th, 2021	7.14	7.01	37.33	2.69	0.016	0.054	7.44	0.625	236.609	0.014
Sep 12th, 2021	7.90	7.05	41.82	1.43	0.018	0.092	6.27	0.052	187.017	0.012
Sep 19th, 2021	11.65	7.06	37.46	1.15	0.013	0.101	6.78	0.491	210.607	0.017
Sep 26th, 2021	4.28	10.01	28.10	1.67	0.020	0.087	6.03	1.322	116.209	0.011
<b>Mean</b>	<b>14.20</b>	<b>6.40</b>	<b>39.88</b>	<b>2.19</b>	<b>0.054</b>	<b>0.093</b>	<b>6.90</b>	<b>0.257</b>	<b>219.917</b>	<b>0.013</b>

Note: Values are mean values, n=3.