

Table 5. Rate of release of N₂O measurements made in July 2008.

[NEC, Northeast Creek Watershed; GW#, measurement site; mM, millimolar; Temp., temperature; °C, temperature; degrees Celsius; NO₃, nitrate; nmoles, nanomoles; m, meters; hr, hours; sq, square; T₀, date and time chamber sealed; T₁, beginning of period of associated flux calculation; T₂ ending of period of flux calculation; N₂O, nitrous oxide]

Location	Sequence No. ¹	Chamber Sealed (T ₀)	Start Time (T ₁)	End Time (T ₂)	Treatment	Number of replicate measurements ²	Soil Temp. (°C)	Net N ₂ O release ³ (nmoles/sq m/hr)
NEC GW1	1	7/15/08 19:41	7/15/08 19:55	7/15/08 23:25	Ambient	7	22	-269
NEC GW1	2	7/15/08 19:41	7/15/08 23:28	7/16/08 10:48	Ambient	4	22	477
NEC GW3	1	7/15/08 19:48	7/15/08 20:06	7/15/08 23:32	Ambient	6	22	-1,370
NEC GW3	2	7/15/08 19:48	7/15/08 23:32	7/16/08 10:52	Ambient	6	22	970
NEC GW1	1	7/16/08 11:15	7/16/08 15:13	7/16/08 19:51	5 mM NO ₃	3	21	85,500
NEC GW1	2	7/16/08 11:15	7/16/08 19:51	7/16/08 23:06	5 mM NO ₃	3	21	78,100
NEC GW1	3	7/16/08 11:15	7/16/08 23:06	7/17/08 10:48	5 mM NO ₃	3	21	43,000
NEC GW3	1	7/16/08 17:00	7/16/08 17:07	7/16/08 19:58	5 mM NO ₃	3	21	37,100
NEC GW3	2	7/16/08 17:00	7/16/08 19:58	7/16/08 23:11	5 mM NO ₃	3	21	76,600
NEC GW3	3	7/16/08 17:00	7/16/08 23:11	7/17/08 10:53	5 mM NO ₃	3	21	58,700
NEC GW4	1	7/16/08 13:10	7/16/08 13:43	7/16/08 17:16	Ambient	6	21	1,100
NEC GW4	2	7/16/08 13:10	7/16/08 17:16	7/16/08 20:06	Ambient	6	21	1,370
NEC GW4	3	7/16/08 13:10	7/16/08 20:06	7/16/08 23:17	Ambient	6	21	906
NEC GW4	4	7/16/08 13:10	7/16/08 23:17	7/17/08 12:39	Ambient	3	21	2,040
NEC GW4	1	7/16/08 13:38	7/17/08 13:58	7/17/08 18:35	5 mM NO ₃	3	22	118,000
NEC GW4	2	7/16/08 13:38	7/17/08 18:35	7/17/08 20:10	5 mM NO ₃	3	22	211,000
NEC GW4	3	7/16/08 13:38	7/17/08 20:10	7/18/08 0:43	5 mM NO ₃	3	21	215,000
NEC GW4	4	7/16/08 13:38	7/18/08 0:43	7/18/08 11:00	5 mM NO ₃	3	21	225,000
NEC GW2	1	7/17/08 12:19	7/17/08 13:01	7/17/08 17:25	Ambient	6	21	6,460
NEC GW2	2	7/17/08 12:19	7/17/08 17:25	7/17/08 20:02	Ambient	3	21	-238
NEC GW2	3	7/17/08 12:19	7/17/08 20:02	7/18/08 0:52	Ambient	3	21	-800

NEC GW2	4	7/17/08 12:19	7/18/08 0:52	7/18/08 10:48	Ambient	3	21	-500
NEC GW2	1	7/17/08 18:21	7/17/08 18:45	7/17/08 20:06	5 mM NO ₃	3	21	24,200
NEC GW2	2	7/17/08 18:21	7/17/08 20:06	7/18/08 0:55	5 mM NO ₃	3	21	67,500
NEC GW2	3	7/17/08 18:21	7/18/08 0:55	7/18/08 10:53	5 mM NO ₃	3	21	141,000
NEC GW5	1	7/17/08 17:30	7/17/08 18:00	7/17/08 23:32	Ambient	5	22	4,210
NEC GW5	2	7/17/08 17:30	7/17/08 23:32	7/18/08 14:31	Ambient	3	22	-56
NEC GW5	1	7/17/08 17:34	7/17/08 18:03	7/17/08 23:35	5 mM NO ₃	1	22	30100
NEC GW5	2	7/17/08 17:34	7/17/08 23:36	7/18/08 14:34	5 mM NO ₃	2	22	39000
NEC GW6	1	7/18/08 12:11	7/18/08 12:17	7/18/08 16:00	Ambient	4	21	2,750
NEC GW6	2	7/18/08 12:11	7/18/08 16:00	7/19/08 10:39	Ambient	4	21	-238
NEC GW6	1	7/18/08 11:07	7/18/08 12:11	7/18/08 16:05	5 mM NO ₃	2	21	29,300
NEC GW6	2	7/18/08 11:07	7/18/08 16:05	7/19/08 10:43	5 mM NO ₃	2	21	57,700

¹ Sequence numbers refer to the chronologically ordered N₂O release rate measurements at a given site for the same treatment following sealing of the chamber.

² Replicate measurements refers to the number of individual chambers receiving the same treatment. Values shown are for the average of measurements receiving the same treatment.

³ A negative number indicates a decrease in N₂O in the headspace during the measurements interval suggesting N₂O was consumed.