

Table 6. Rate of release of N₂O measurements made in August 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; C₂H₂, Acetylene]

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 GW4	1	8/13/08 18:07	8/13/08 19:27	8/13/08 23:30	Ambient	3	16.8	-92
NEC GW4	2	8/13/08 18:14	8/13/08 23:30	8/14/08 7:30	Ambient	3	16.8	-65
NEC GW4	3	8/13/08 18:15	8/14/08 7:30	8/14/08 11:45	Ambient	3	16.8	71.9
NEC GW4	1	8/13/08 17:25	8/13/08 19:30	8/13/08 23:33	5 mM NO ₃ + C ₂ H ₂	3	16.8	681
NEC GW4	2	8/13/08 17:40	8/13/08 23:33	8/14/08 7:33	5 mM NO ₃ + C ₂ H ₂	3	16.8	3930
NEC GW4	3	8/13/08 17:55	8/14/08 7:33	8/14/08 11:48	5 mM NO ₃ + C ₂ H ₂	3	16.8	4420
NEC GW2	1	8/13/08 19:12	8/13/08 19:40	8/13/08 23:36	Ambient + C ₂ H ₂	3	16.8	-130
NEC GW2	2	8/13/08 19:19	8/13/08 23:36	8/14/08 7:36	Ambient + C ₂ H ₂	3	16.8	-11
NEC GW2	3	8/13/08 19:20	8/14/08 7:36	8/14/08 11:51	Ambient	3	16.8	-11
NEC GW2	1	8/13/08 18:35	8/13/08 19:43	8/13/08 23:39	5 mM NO ₃ + C ₂ H ₂	3	16.8	450
NEC GW2	2	8/13/08 18:44	8/13/08 23:39	8/14/08 7:39	5 mM NO ₃ + C ₂ H ₂	3	16.8	2380
NEC GW2	3	8/13/08 18:54	8/14/08 7:39	8/14/08 11:54	5 mM NO ₃ + C ₂ H ₂	3	16.8	3600
NEC GW4	1	8/14/08 13:50	8/14/08 17:35	8/14/08 23:15	50 mM NO ₃ + C ₂ H ₂	3	16.8	42200
NEC GW4	2	8/14/08 13:50	8/14/08 23:15	8/15/08 10:40	50 mM NO ₃ + C ₂ H ₂	3	16.8	66400
NEC GW4	3	8/14/08 13:50	8/15/08 10:40	8/15/08 13:17	50 mM NO ₃ + C ₂ H ₂	3	16.8	84100

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

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

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