

Appendix 4A-3: STA-1W Dissolved Oxygen Data

Table 1. Statistical summary of diel parameters at the outflow stations (G251D and G310) and transect stations in the Refuge for each deployment period.

Period	Location	Station	Temperature (°C)						Specific Conductivity (µmhos/cm)						Water pH						Dissolved Oxygen (mg/L)							
			No. of Samples	Mean	Minimum	Median	Maximum	Standard Deviation	No. of Samples	Mean	Minimum	Median	Maximum	Standard Deviation	No. of Samples	Mean	Minimum	Median	Maximum	Standard Deviation	No. of Samples	Mean	Minimum	Median	Maximum	Standard Deviation		
07/08/2002 - 07/15/2002	Inflow	S5AU	337	27.5	26.3	27.1	30.0	1.0	337	1320.0	1,167	1,314	1,647	68.2	337	7.25	7.19	7.24	7.39	0.05	337	1.24	0.38	1.23	2.11	0.31		
		G251D	337	27.1	25.3	26.8	30.0	1.2	337	1038.1	851	1,022	1,198	83.8	337	7.65	7.39	7.64	7.95	0.15	337	1.84	0.33	1.67	4.28	1.00		
		G310	337	27.9	26.0	27.4	31.3	1.4	337	1173.0	1,096	1,184	1,248	45.4	337	7.52	7.40	7.52	7.67	0.07	337	3.80	1.65	3.87	5.72	0.98		
	Transect X	X1	175	26.1	25.4	26.1	26.8	0.4	175	819.8	774	789	974	56.6	175	7.13	7.08	7.12	7.21	0.03	175	1.41	0.48	1.40	3.10	0.58		
		X2	177	27.3	26.1	27.3	29.0	0.7	177	652.9	616	652	675	10.9	---	---	---	---	---	---	177	4.24	2.00	4.07	6.67	1.24		
		X3	178	27.7	26.4	27.6	29.1	0.7	---	---	---	---	---	---	---	178	7.30	7.08	7.29	7.54	0.12	178	5.08	2.35	4.84	8.49	1.61	
	Transect Y	X4	176	27.6	26.1	27.6	29.7	0.9	---	---	---	---	---	---	---	176	6.92	6.68	6.92	7.24	0.13	176	4.54	2.54	4.57	6.60	0.96	
		Y4	177	27.4	26.2	27.3	29.2	0.7	---	---	---	---	---	---	---	177	6.99	6.91	6.97	7.11	0.05	177	3.31	2.00	3.14	5.20	0.87	
		Transect Z	Z1	177	26.0	25.5	25.9	27.5	0.4	177	799.6	742	798	839	17.0	---	---	---	---	---	---	177	0.62	0.42	0.52	1.55	0.25	
			Z2	177	26.5	25.6	26.4	28.3	0.6	177	609.6	554	612	641	18.8	---	---	---	---	---	---	177	2.26	0.94	1.68	7.35	1.47	
	Z3		177	27.7	26.2	27.6	29.4	0.8	---	---	---	---	---	---	---	---	---	---	---	---	177	3.37	1.43	3.45	5.61	1.04		
	Z4		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
	09/30/2002 - 10/07/2002	Inflow	S5AU	337	28.9	28.3	28.9	29.7	0.3	337	550.1	367	556	824	103.4	337	7.33	7.13	7.30	7.56	0.14	337	3.69	2.99	3.73	4.28	0.32	
Outflow			G251D	337	28.2	26.8	28.2	29.8	0.6	337	751.0	720	742	883	26.0	321	7.52	7.37	7.52	7.69	0.06	321	2.58	0.94	2.59	4.35	0.80	
			G310	337	28.4	27.5	28.4	29.7	0.5	337	718.5	694	718	746	15.8	337	7.51	7.36	7.48	7.81	0.10	337	2.02	0.44	1.87	4.29	0.82	
01/22/2003 - 01/25/2003	Inflow	S5AU	145	14.9	14.0	14.9	15.6	0.4	145	547.4	526	548	553	4.5	145	7.88	7.75	7.88	8.05	0.05	145	8.34	8.09	8.30	8.79	0.16		
		Outflow	G251D	145	13.1	9.4	14.2	16.2	2.1	145	662.0	621	660	690	15.7	145	7.58	7.40	7.57	7.88	0.11	145	6.96	5.20	6.91	9.52	1.17	
			G310	145	14.6	11.6	15.0	15.9	1.2	145	622.8	601	623	648	13.0	145	7.75	7.71	7.75	7.81	0.03	145	6.73	6.22	6.70	7.70	0.39	
	Transect X	X1	183	14.4	13.0	14.4	15.7	0.6	183	891.6	858	889	938	24.2	---	---	---	---	---	---	183	2.43	1.14	2.42	4.76	0.64		
		X2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
		X3	183	15.9	14.0	15.9	17.6	0.9	---	---	---	---	---	---	---	---	---	---	---	---	183	5.22	2.20	5.35	7.22	1.13		
	Transect Y	X4	183	16.2	14.2	16.1	18.2	1.2	---	---	---	---	---	---	---	183	7.33	7.18	7.32	7.50	0.07	---	---	---	---	---		
		Y4	183	15.7	14.1	15.9	16.9	0.7	---	---	---	---	---	---	---	183	7.34	7.17	7.33	7.58	0.09	183	4.82	2.12	4.74	7.25	1.28	
		Transect Z	Z1	183	14.3	13.5	14.2	15.3	0.5	---	---	---	---	---	---	---	183	7.15	7.07	7.15	7.26	0.04	183	0.71	0.17	0.59	2.98	0.50
			Z2	148	15.1	13.6	15.2	16.5	0.8	---	---	---	---	---	---	---	---	---	---	---	---	146	1.88	0.02	1.85	4.19	1.14	
	Z3		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
	Z4		183	16.5	14.2	16.8	17.9	1.1	183	518.7	508	515	562	10.0	183	7.29	7.15	7.28	7.40	0.07	183	6.09	3.88	6.11	8.08	0.99		
	04/21/2003 - 04/24/2003	Inflow	S5AU	141	26.2	24.4	26.2	30.0	0.7	141	494.7	472	489	600	20.3	141	7.94	7.78	7.94	8.25	0.08	141	6.22	5.49	6.18	7.70	0.37	
Outflow			G251D	138	25.8	24.5	25.8	27.3	0.7	138	914.8	905	914	921	4.3	138	7.80	7.62	7.81	7.98	0.09	138	4.77	2.51	4.95	6.75	1.05	
			G310	137	25.4	24.1	25.4	27.8	0.7	137	892.4	867	895	923	12.3	137	7.68	7.45	7.70	7.94	0.12	137	4.42	1.75	4.45	7.32	1.39	
Transect X		X1	185	24.1	20.9	23.9	28.5	2.1	---	---	---	---	---	---	185	7.29	7.17	7.23	7.74	0.12	185	2.57	0.87	2.39	5.64	0.99		
		X2	185	25.1	21.1	24.3	30.9	2.9	---	---	---	---	---	---	185	7.20	7.12	7.17	7.39	0.07	185	2.86	0.33	1.68	7.76	2.53		
		X3	185	24.5	20.6	23.7	29.8	2.8	---	---	---	---	---	---	185	7.16	7.03	7.13	7.46	0.07	185	3.17	0.66	2.30	7.32	2.17		
Transect Y		X4	185	26.7	21.8	25.9	33.9	3.5	---	---	---	---	---	---	---	185	7.15	6.89	7.05	7.88	0.25	185	1.84	0.24	1.15	5.21	1.45	
		Y4	185	23.8	21.0	23.1	27.8	2.0	---	---	---	---	---	---	---	185	7.25	7.10	7.20	7.73	0.15	185	2.62	0.46	2.25	6.54	1.69	
		Transect Z	Z1	185	24.2	21.5	23.8	27.9	1.9	---	---	---	---	---	---	---	185	7.25	7.15	7.23	7.39	0.06	185	1.99	0.88	1.92	3.49	0.61
			Z2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Z3			185	25.8	20.6	25.3	32.7	3.5	184	768.9	755	770	786	7.6	185	7.34	7.03	7.31	7.81	0.22	185	3.05	0.78	2.91	8.98	1.72		
Z4			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		

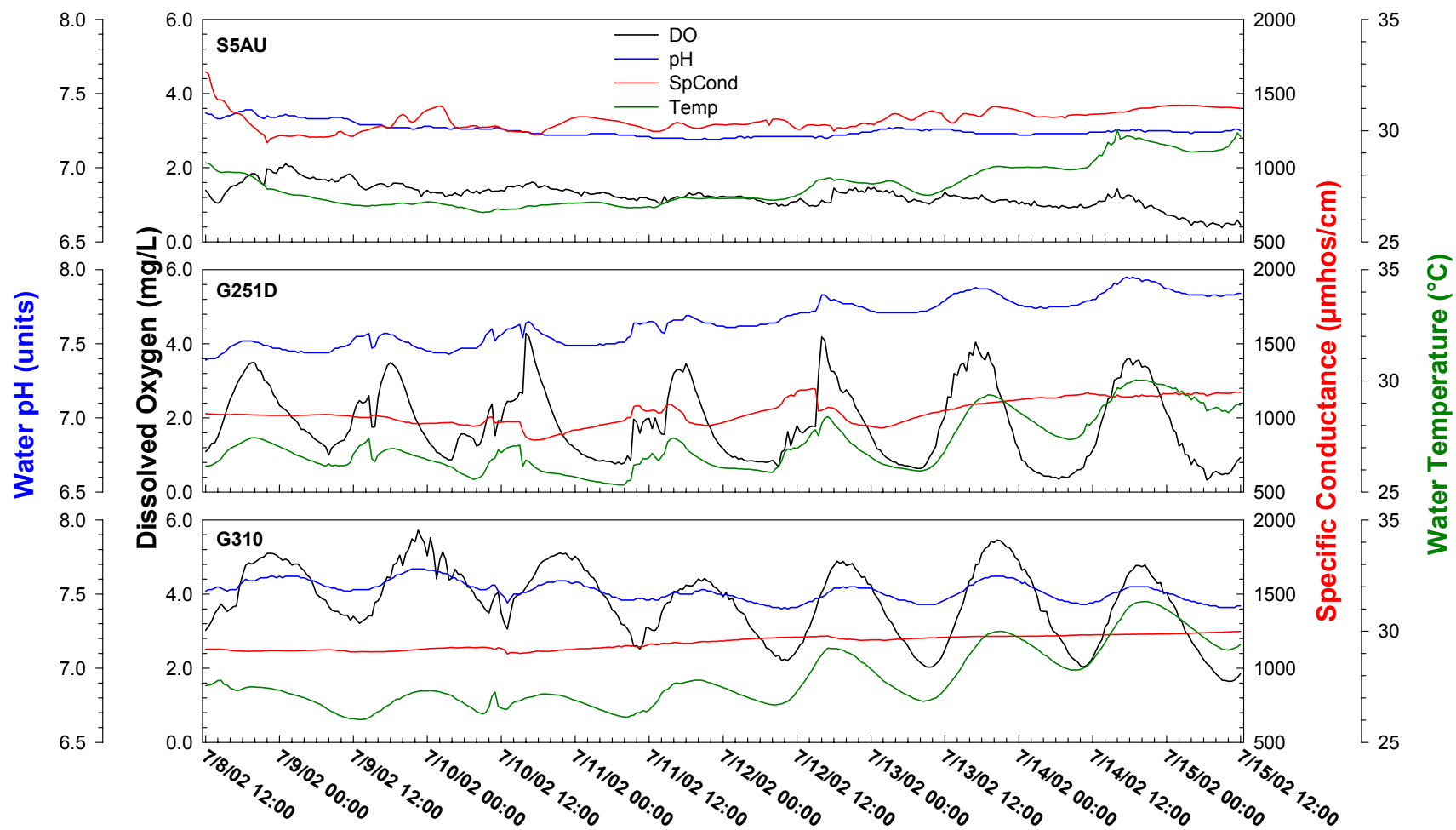


Figure 1. Diel measurements at S5AU, G251D, and G310 in STA-1W, July 8-15, 2002.

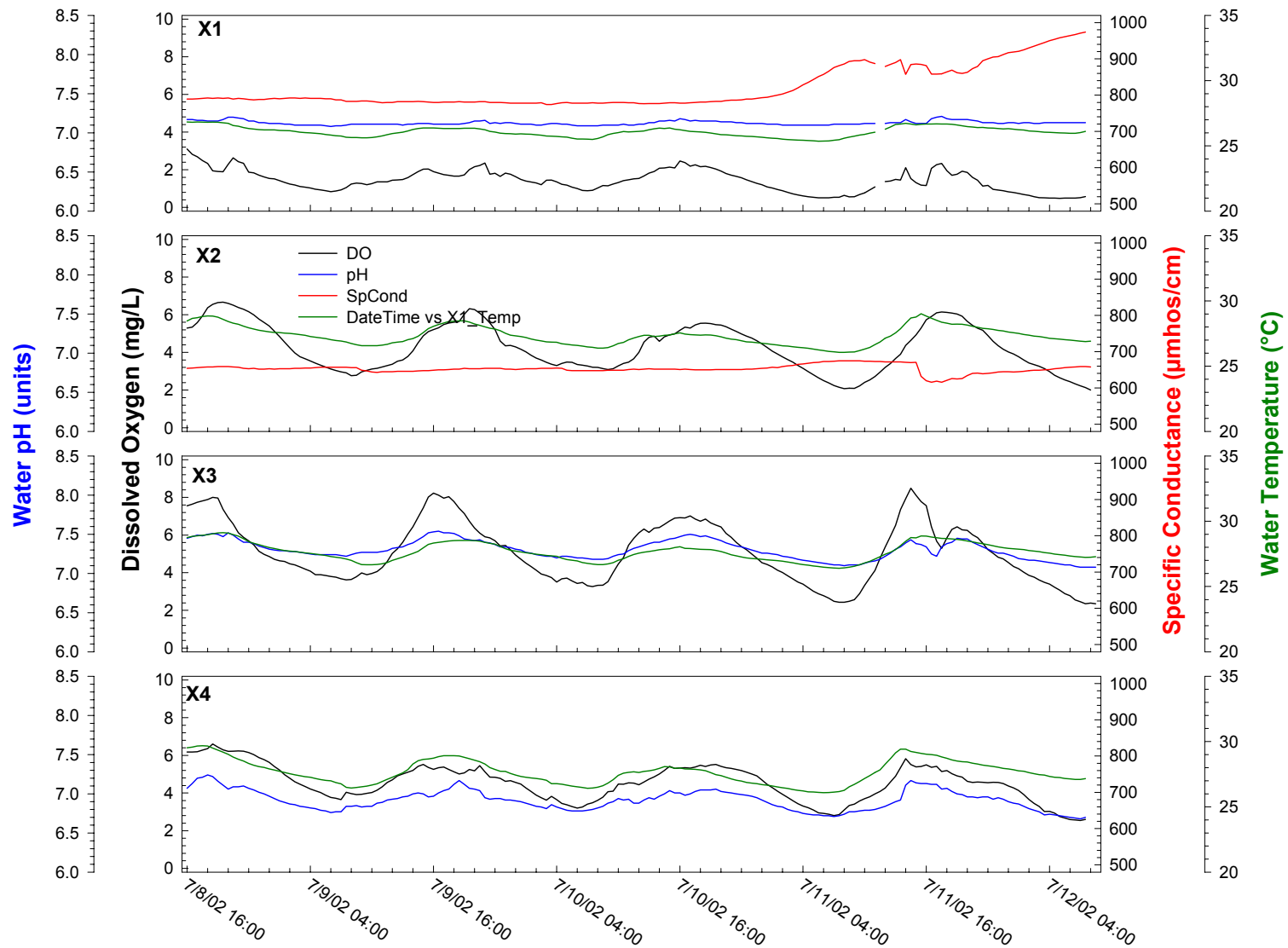


Figure 2. Diel measurements along Transect X, July 8-12, 2002.

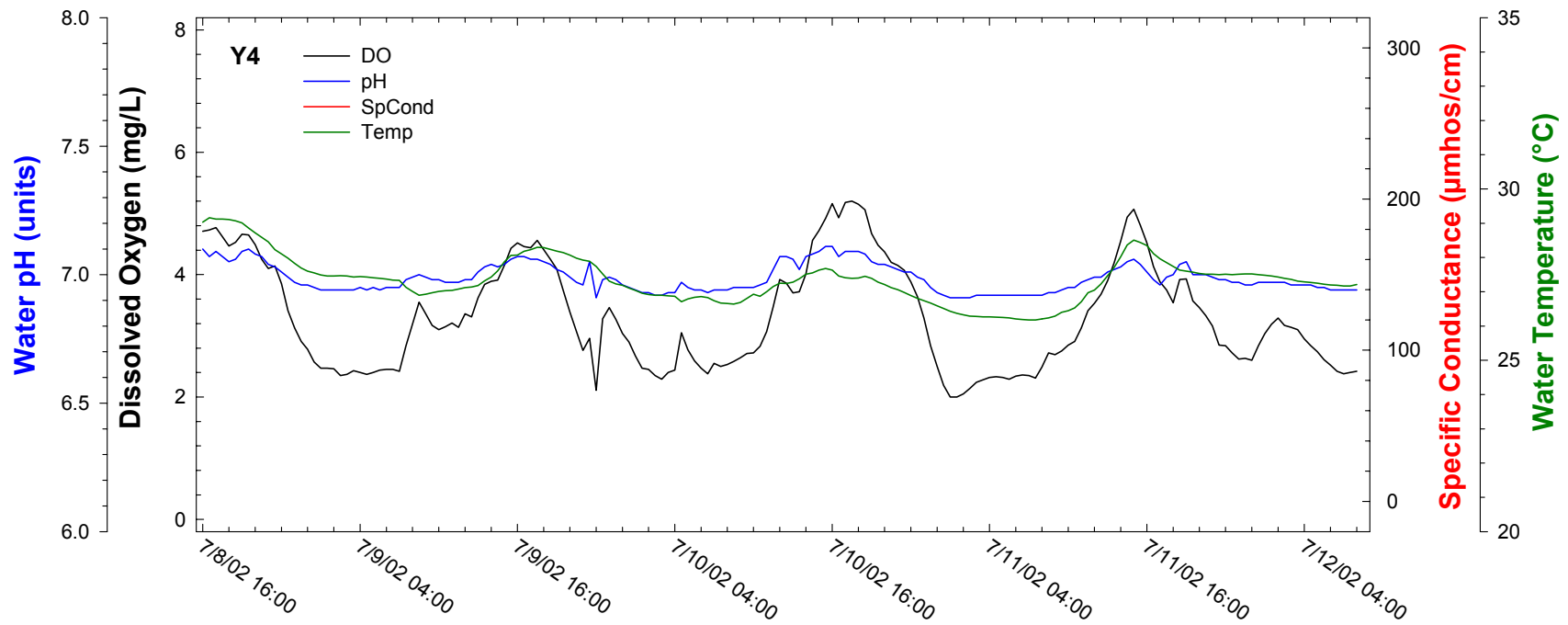


Figure 3. Diel measurements along Transect Y, July 8-12, 2002.

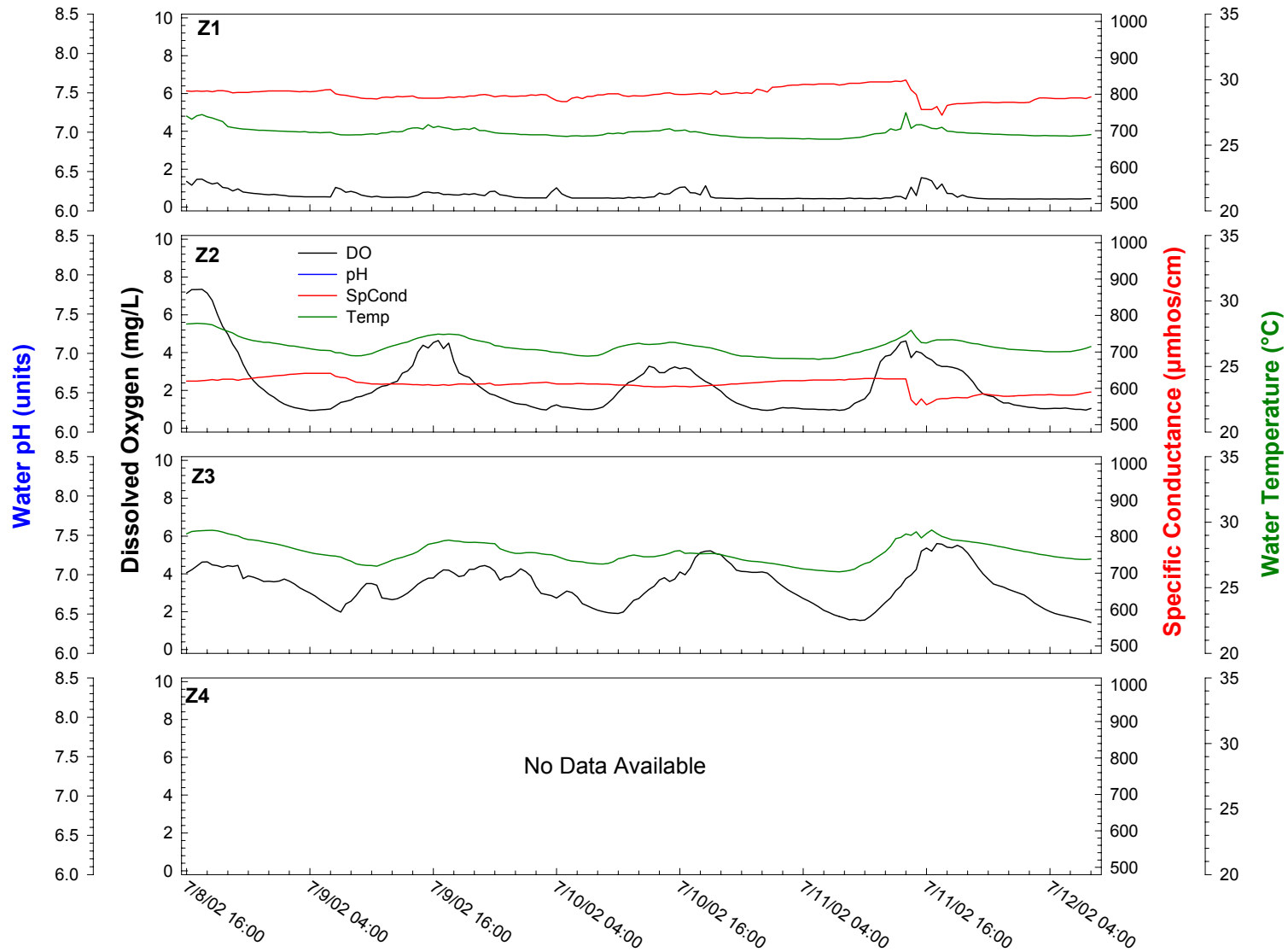


Figure 4. Diel measurements along Transect Z, July 8-12, 2002.

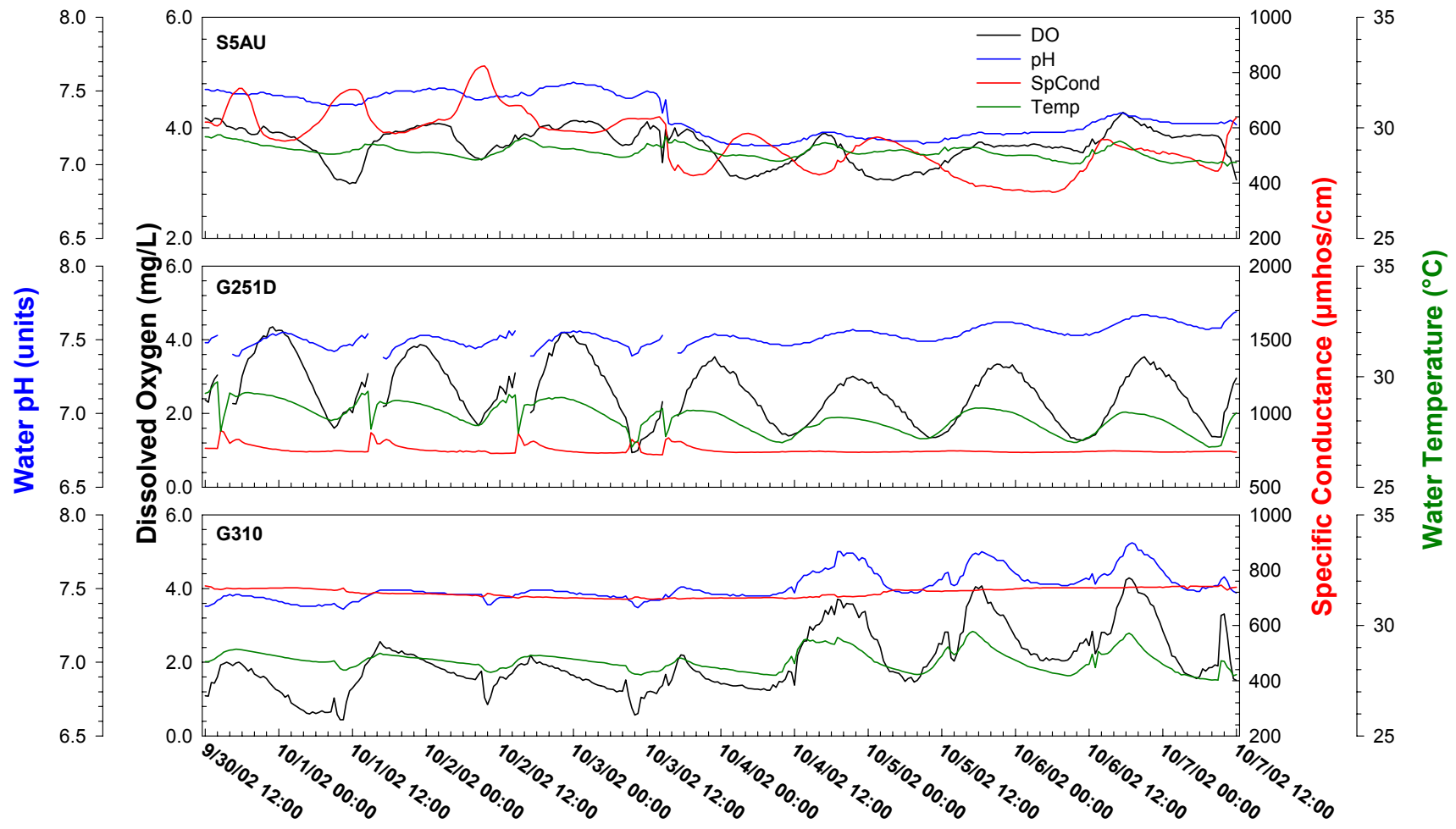


Figure 5. Diel measurements at S5AU, G251D, and G310 in STA-1W, September 30–October 7, 2002.

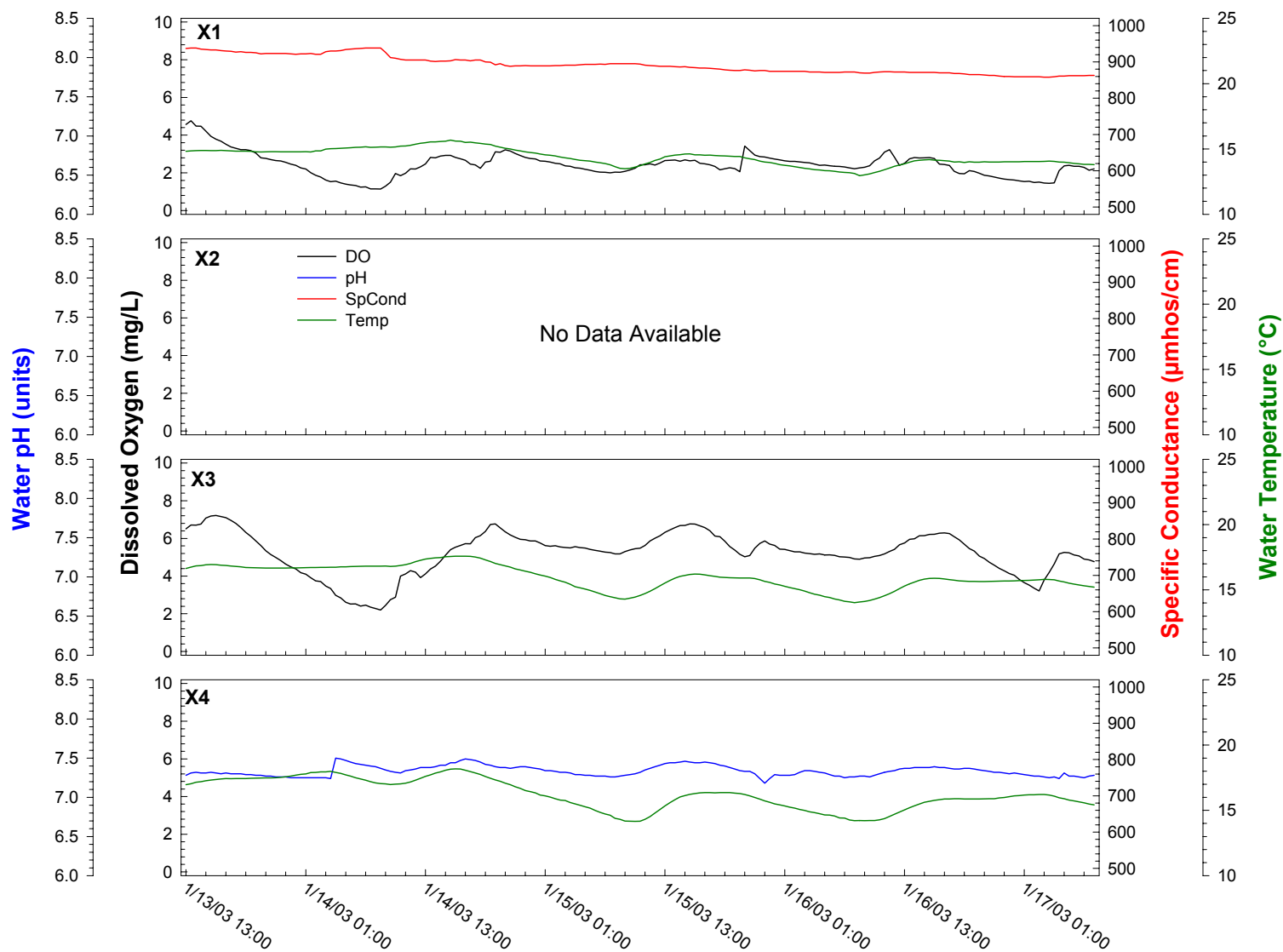


Figure 6. Diel measurements along Transect X, January 13-17, 2003.

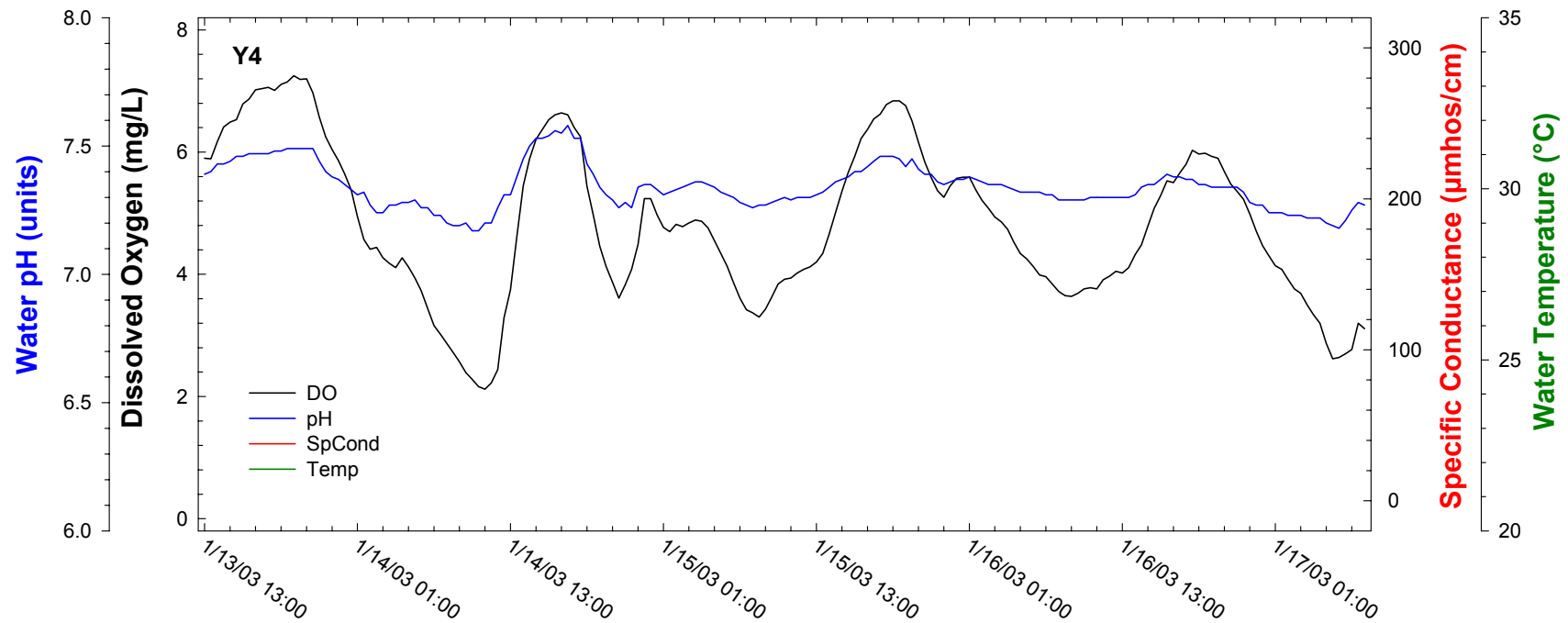


Figure 7. Diel measurements along Transect Y, January 13-17, 2003.

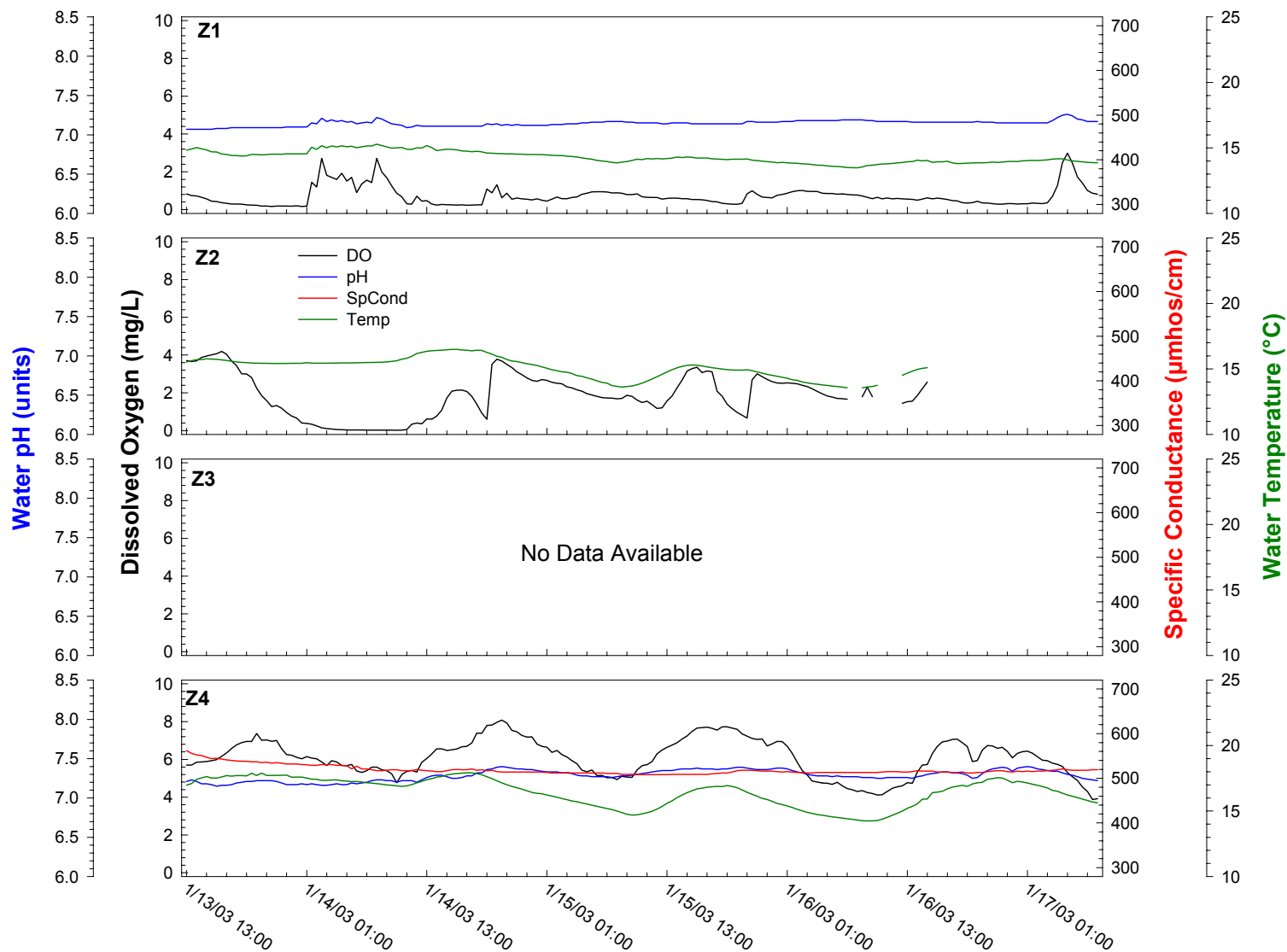


Figure 8. Diel measurements along Transect Z, January 13-17, 2003.

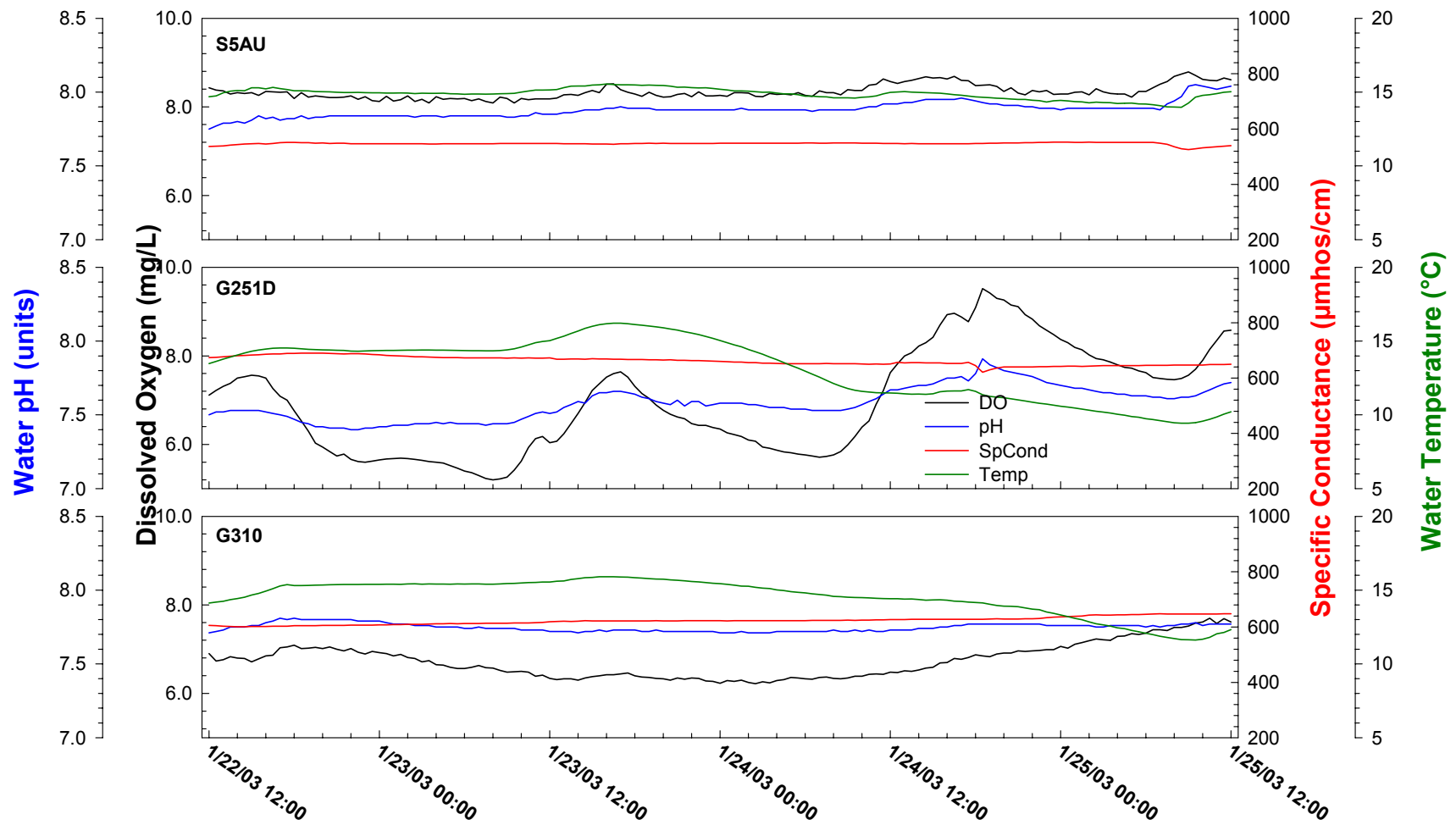


Figure 9. Diel measurements at S5AU, G251D, and G310 in STA-1W, January 22-25, 2003.

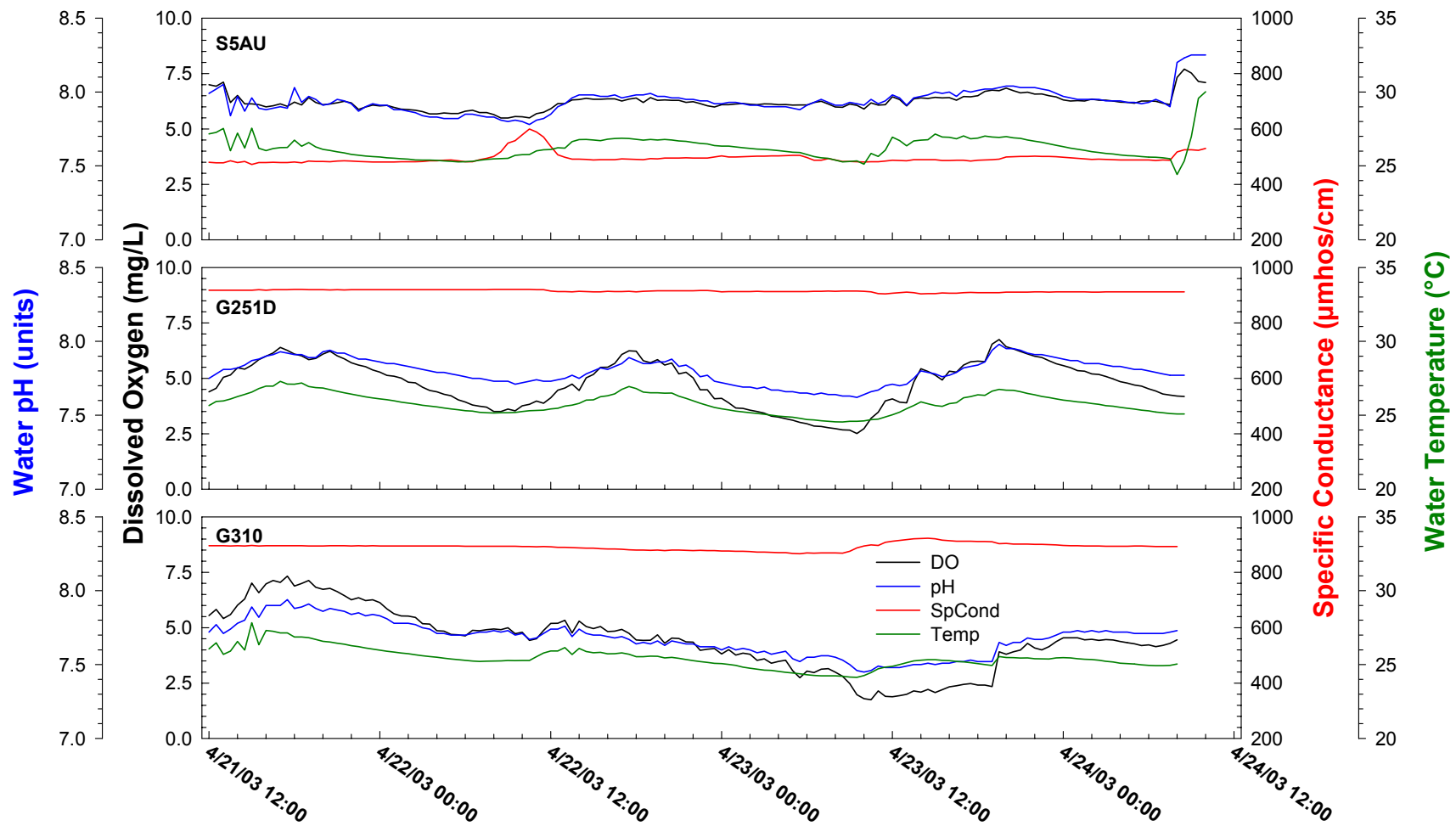


Figure 10. Diel measurements at S5AU, G251D, and G310 in STA-1W, April 21-24, 2003.

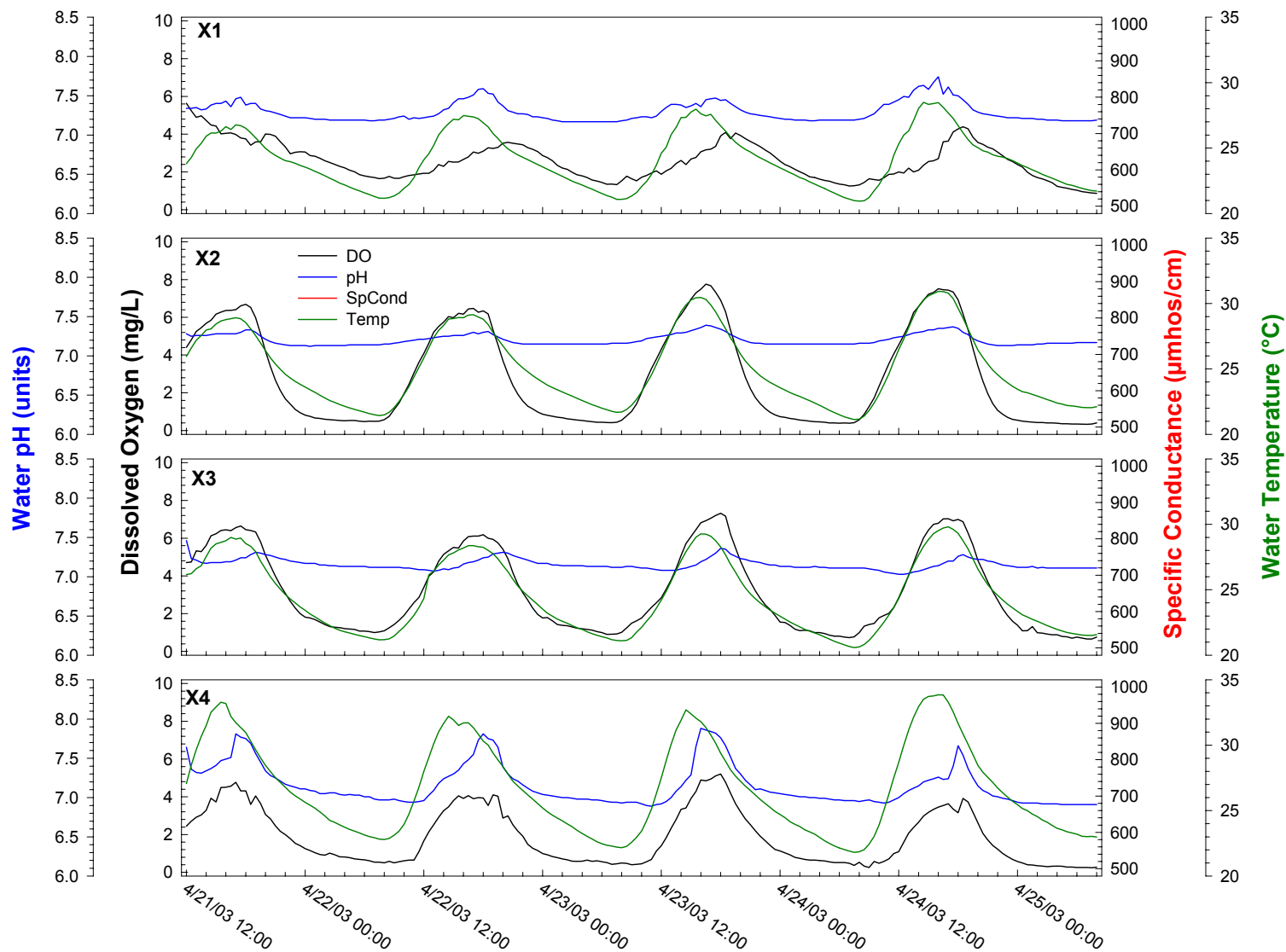


Figure 11. Diel measurements along Transect X, April 21-25, 2003.

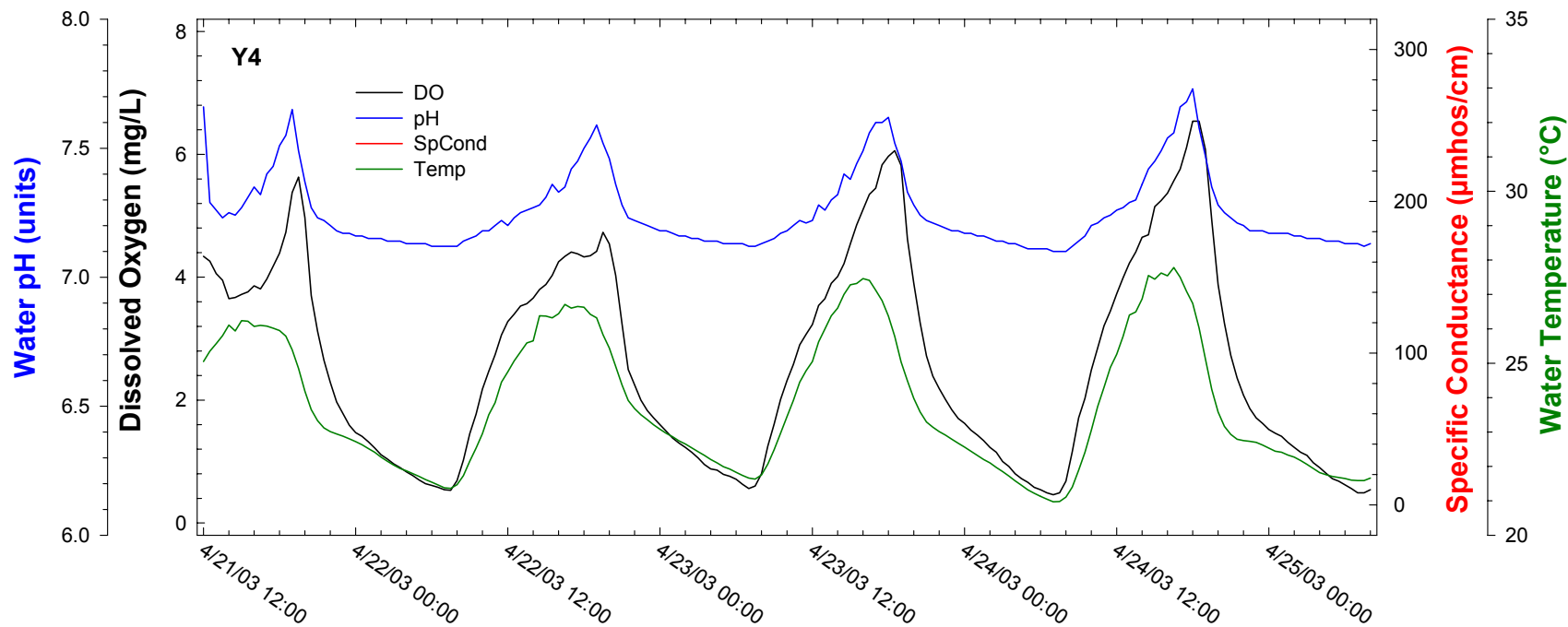


Figure 12. Diel measurements along Transect Y, April 21-25, 2003.

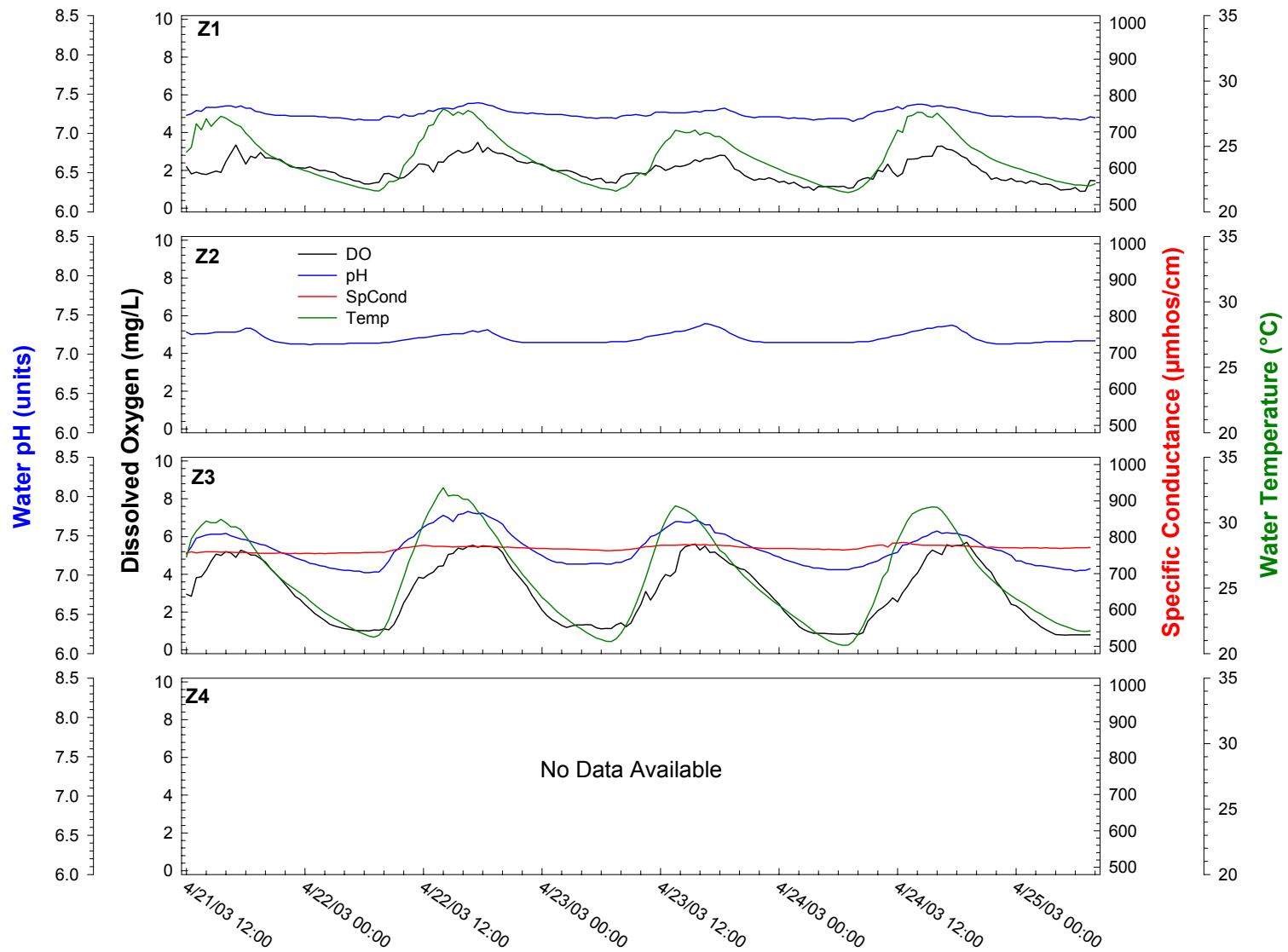


Figure 13. Diel measurements along Transect Z, April 21-25, 2003.