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

Table 1. Statistical summary of diel parameters at the outflow stations (G-251D and G-310) 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
05/07/2001 - 05/14/2001	Outflow	G251D	335	25.6	23.5	25.4	30.0	1.2	335	1,218.1	1,207	1,217	1,229	5.1	335	7.83	7.58	7.83	8.09	0.13	335	4.95	1.96	4.99	7.45	1.40
		G310	335	25.4	24.1	25.2	29.0	0.9	335	1,217.5	1,213	1,217	1,224	2.4	335	8.03	7.87	8.05	8.17	0.08	335	7.29	5.50	7.27	8.45	0.43
07/11/2001 - 07/17/2001	Outflow	G251D	287	28.1	27.4	28.1	29.6	0.5	287	981.8	741	978	1,056	34.1	287	7.35	7.18	7.36	7.49	0.08	287	2.06	0.25	2.06	3.58	0.64
		G310	289	28.4	27.3	28.3	30.0	0.6	289	990.3	935	988	1,074	39.6	289	7.48	7.22	7.47	7.75	0.10	289	3.31	0.84	3.26	6.04	1.04
	X	X1	197	28.9	26.0	28.7	32.3	1.7	197	709.4	668	713	743	18.5	0	----	----	----	----	----	0	----	----	----	----	----
		X2	197	28.4	24.9	27.5	35.0	2.7	197	508.8	396	507	541	18.5	197	7.34	7.18	7.30	7.71	0.14	0	----	----	----	----	----
		X3	197	28.5	25.4	27.8	34.6	2.4	197	544.1	501	554	581	22.1	197	7.42	7.09	7.33	8.13	0.26	197	3.62	0.65	3.35	8.20	2.15
	Z	Z1	197	27.2	25.6	27.2	29.0	0.8	197	677.9	662	678	699	7.6	197	7.26	7.16	7.26	7.37	0.04	197	0.35	0.12	0.17	1.83	0.34
		Z2	197	28.2	24.0	27.4	35.6	2.9	0	----	----	----	----	----	197	7.76	7.14	7.51	9.21	0.60	197	5.08	0.29	4.31	14.43	4.22
		Z3	197	28.4	25.3	27.8	34.6	2.6	0	----	----	----	----	----	197	7.34	7.13	7.31	7.68	0.13	0	----	----	----	----	----
		Z4	197	27.8	25.7	27.5	31.6	1.4	197	303.0	280	303	321	8.6	0	----	----	----	----	----	197	2.98	0.90	2.90	5.58	1.24
10/08/2001 - 10/12/2001	Outflow	G251D	181	26.0	24.6	26.0	27.8	0.7	181	1,187.7	1,180	1,188	1,196	3.4	181	7.67	7.47	7.63	7.87	0.14	181	2.60	0.74	2.70	4.41	1.04
		G310	181	26.6	25.7	26.5	28.0	0.7	181	1,181.8	1,074	1,181	1,190	8.4	181	7.69	7.48	7.67	7.87	0.09	181	4.36	2.86	4.35	5.35	0.47
	X	X1	181	25.8	24.7	25.8	27.5	0.7	181	1,124.2	1,117	1,122	1,140	5.2	181	7.32	7.24	7.31	7.46	0.05	181	1.35	0.11	1.13	3.93	0.98
		X2	181	26.1	24.4	26.2	29.1	1.1	181	1,020.1	1,010	1,021	1,030	4.5	0	----	----	----	----	----	0	----	----	----	----	----
		X3	181	26.1	24.4	26.0	29.2	1.2	181	745.7	656	772	815	55.9	181	7.42	7.32	7.40	7.58	0.06	181	3.77	1.83	3.85	5.72	1.04
		X4	181	26.2	24.2	26.1	29.9	1.4	0	----	----	----	----	----	181	7.22	6.93	7.21	7.41	0.08	181	3.03	1.77	3.00	4.09	0.43
	Y	Y4	183	26.1	24.2	26.0	28.9	1.2	0	----	----	----	----	----	183	7.23	7.01	7.21	7.67	0.13	183	3.53	2.01	3.47	6.04	0.94
	Z	Z1	181	25.5	24.5	25.5	27.0	0.6	181	1,084.4	1,033	1,088	1,108	17.0	181	7.26	7.08	7.27	7.36	0.06	181	0.19	0.01	0.04	1.44	0.36
		Z2	181	25.9	24.2	25.9	29.1	1.1	181	757.5	730	755	793	10.1	0	----	----	----	----	----	181	3.03	0.30	3.04	7.57	1.75
		Z3	182	26.1	24.3	26.1	29.3	1.2	182	571.1	557	572	579	3.1	182	7.51	7.31	7.52	7.66	0.08	182	5.12	3.66	5.06	6.29	0.58
		Z4	182	26.1	24.1	26.1	29.6	1.3	182	250.1	246	249	263	3.6	182	7.06	6.91	7.06	7.20	0.07	182	5.38	4.13	5.30	7.06	0.75
	Mesocosm	MESO01	181	26.4	23.6	26.2	32.7	2.0	0	----	----	----	----	----	0	----	----	----	----	----	181	5.96	4.82	5.87	7.42	0.70
12/12/2001 - 12/17/2001	Outflow	G251D	241	24.2	23.4	24.1	26.0	0.6	241	1,011.2	961	998	1,061	29.0	241	7.51	7.44	7.50	7.62	0.05	241	3.17	2.02	3.11	4.99	0.70
		G310	241	23.7	23.3	23.7	24.1	0.2	241	956.4	920	960	1,003	20.0	241	7.41	7.38	7.41	7.46	0.02	241	2.32	1.74	2.36	2.92	0.27
01/03/2002 - 01/09/2002	Outflow	G251D	289	15.3	13.5	15.2	18.0	1.0	289	780.5	755	774	811	17.3	289	7.70	7.49	7.72	7.84	0.10	289	5.59	3.49	5.93	6.79	0.88
		G310	289	15.1	13.8	14.9	17.9	1.1	289	818.4	756	824	886	36.9	289	7.64	7.48	7.64	7.80	0.07	289	5.02	3.08	5.26	6.31	0.74
01/23/2002 - 01/28/2002	X	X1	241	21.3	19.6	21.0	23.7	1.1	0	----	----	----	----	----	241	7.51	7.36	7.51	7.68	0.08	241	2.86	0.97	2.57	5.09	1.19
		X2	241	23.7	21.7	23.5	26.4	1.2	241	529.3	518	529	541	6.4	0	----	----	----	----	----	0	----	----	----	----	----
		X3	241	23.2	21.8	23.3	24.2	0.6	241	408.3	404	408	414	1.9	241	7.05	6.94	7.04	7.26	0.05	241	1.97	0.76	1.91	3.32	0.54
		X4	241	24.6	21.5	24.0	29.7	2.1	241	288.1	284	288	294	2.1	0	----	----	----	----	----	241	4.58	2.03	4.37	8.68	1.73
	Y	Y4	241	21.7	20.6	21.7	23.1	0.6	0	----	----	----	----	----	241	7.07	6.92	7.07	7.22	0.06	241	3.05	1.33	3.01	4.97	0.84
	Z	Z1	241	21.3	19.7	21.0	24.3	1.2	0	----	----	----	----	----	241	7.34	7.18	7.34	7.46	0.06	241	2.32	1.30	2.19	3.56	0.50
		Z2	241	22.2	20.4	22.2	23.7	0.9	241	852.0	840	849	876	9.2	241	7.08	7.00	7.08	7.21	0.05	241	3.41	1.08	3.68	5.62	1.29
		Z3	241	23.3	21.4	23.2	26.6	1.3	241	544.8	533	546	556	5.2	0	----	----	----	----	----	241	4.97	2.79	5.08	6.79	1.03
		Z4	241	22.9	21.4	22.9	24.6	0.7	0	----	----	----	----	----	241	6.80	6.71	6.78	6.94	0.05	241	3.05	1.59	3.04	4.46	0.69
	Mesocosm	MESO01	241	24.1	22.2	24.2	25.8	1.0	0	----	----	----	----	----	241	5.95	5.71	5.96	6.14	0.09	241	5.38	3.46	5.40	7.06	0.74
04/02/2002 - 04/09/2002	Outflow	G251D	331	25.8	23.6	25.8	28.2	1.0	331	723.6	663	710	805	37.8	329	7.75	7.51	7.71	8.15	0.16	330	3.42	2.02	3.33	5.27	0.77
		G310	329	25.9	24.1	25.8	28.4	0.9	329	823.3	729	805	1,047	66.1	329	7.72	7.50	7.72	7.90	0.08	329	3.61	2.42	3.48	5.42	0.68
04/22/2002 - 04/26/2002	X	X1	183	27.6	23.3	27.4	32.4	2.5	0	----	----	----	----	----	0	----	----	----	----	----	183	3.50	0.25	1.45	12.44	3.78
	Y	Y4	183	26.1	21.3	24.8	32.0	3.3	183	328.1	315	327	347	6.9	0	----	----	----	----	----	183	2.74	0.24	1.65	7.01	2.48
	Z	Z1	183	26.9	23.9	26.7	30.6	1.9	0	----	----	----	----	----	183	7.49	7.44	7.49	7.54	0.02	183	1.44	0.40	1.32	3.04	0.78
		Z3	183	27.6	21.6	26.8	34.9	3.9	0	----	----	----	----	----	183	7.06	6.82	7.01	7.47	0.19	183	3.59	0.34	3.13	8.30	2.85
	Mesocosm	MESO01	78	28.5	24.0	27.1	34.9	3.7	78	59.2	16	45	127	38.4	78	6.02	5.78	5.92	6.65	0.22	78	4.42	1.31	3.60	8.94	2.61

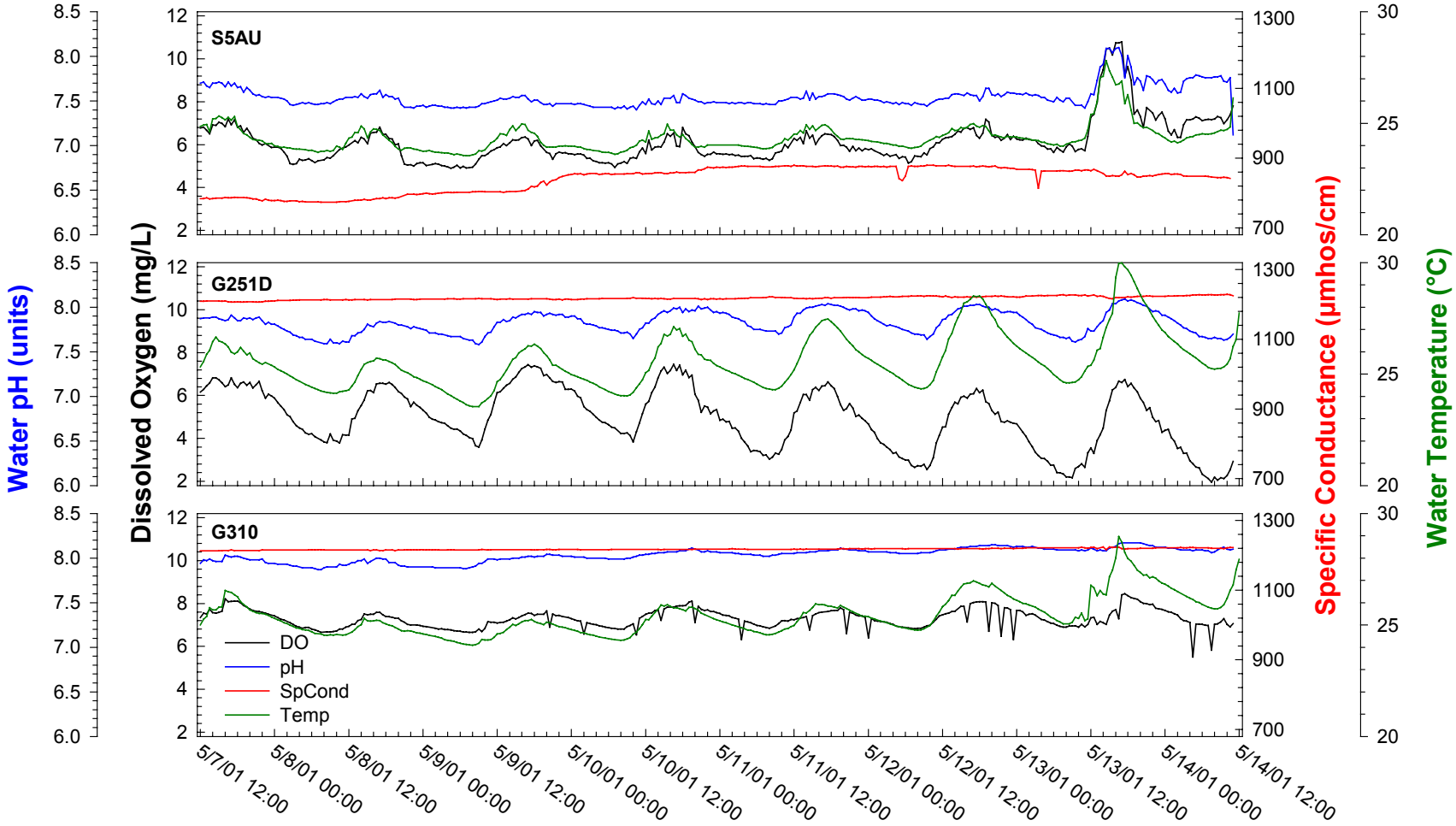

Figure 1. Diel measurements at S-5AU, G-251D and G-310 in STA1-W, May 7 through 14, 2001

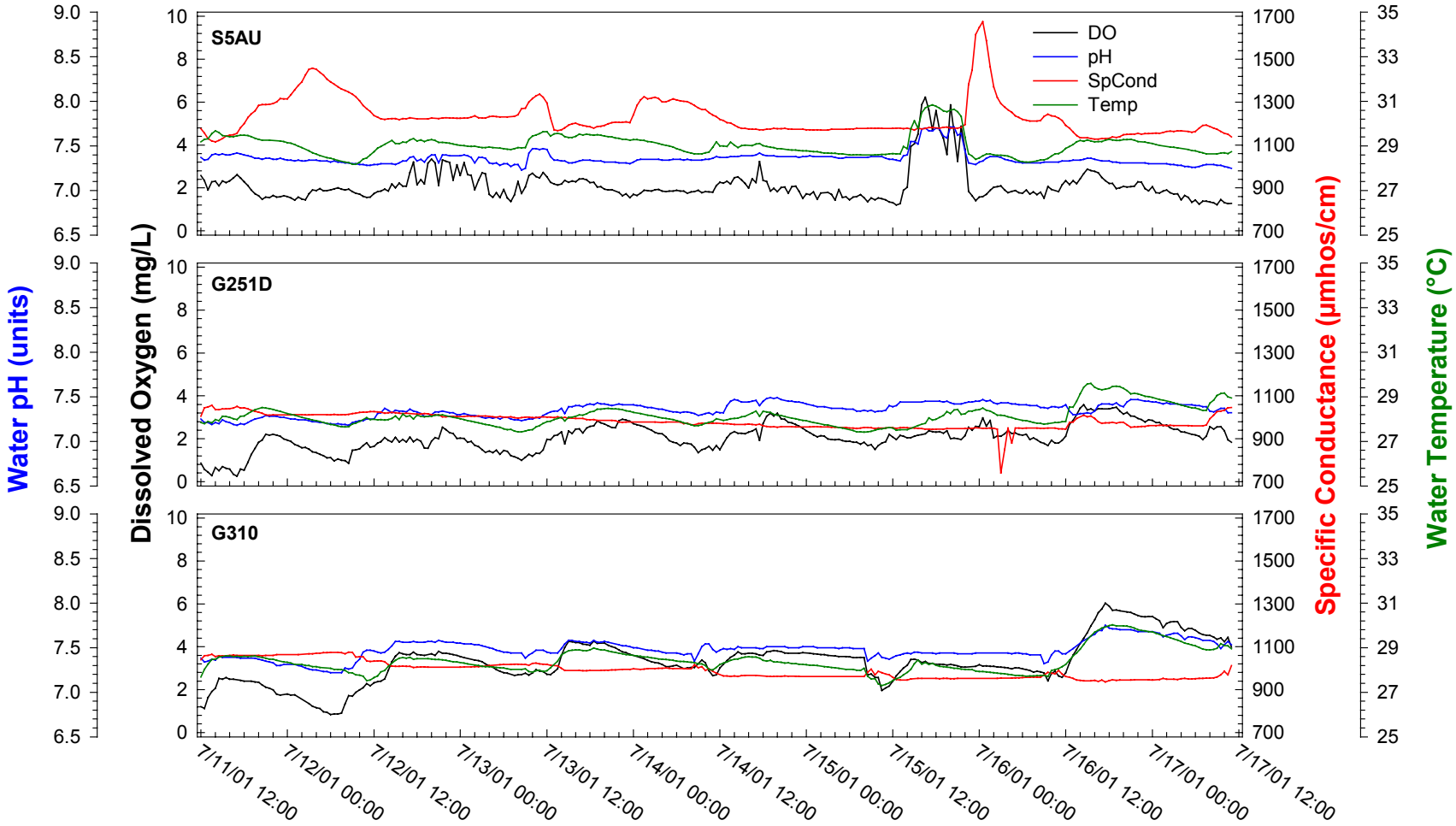

Figure 2. Diel measurements at S-5AU, G-251D and G-310 in STA-1W, July 11 through 17, 2001

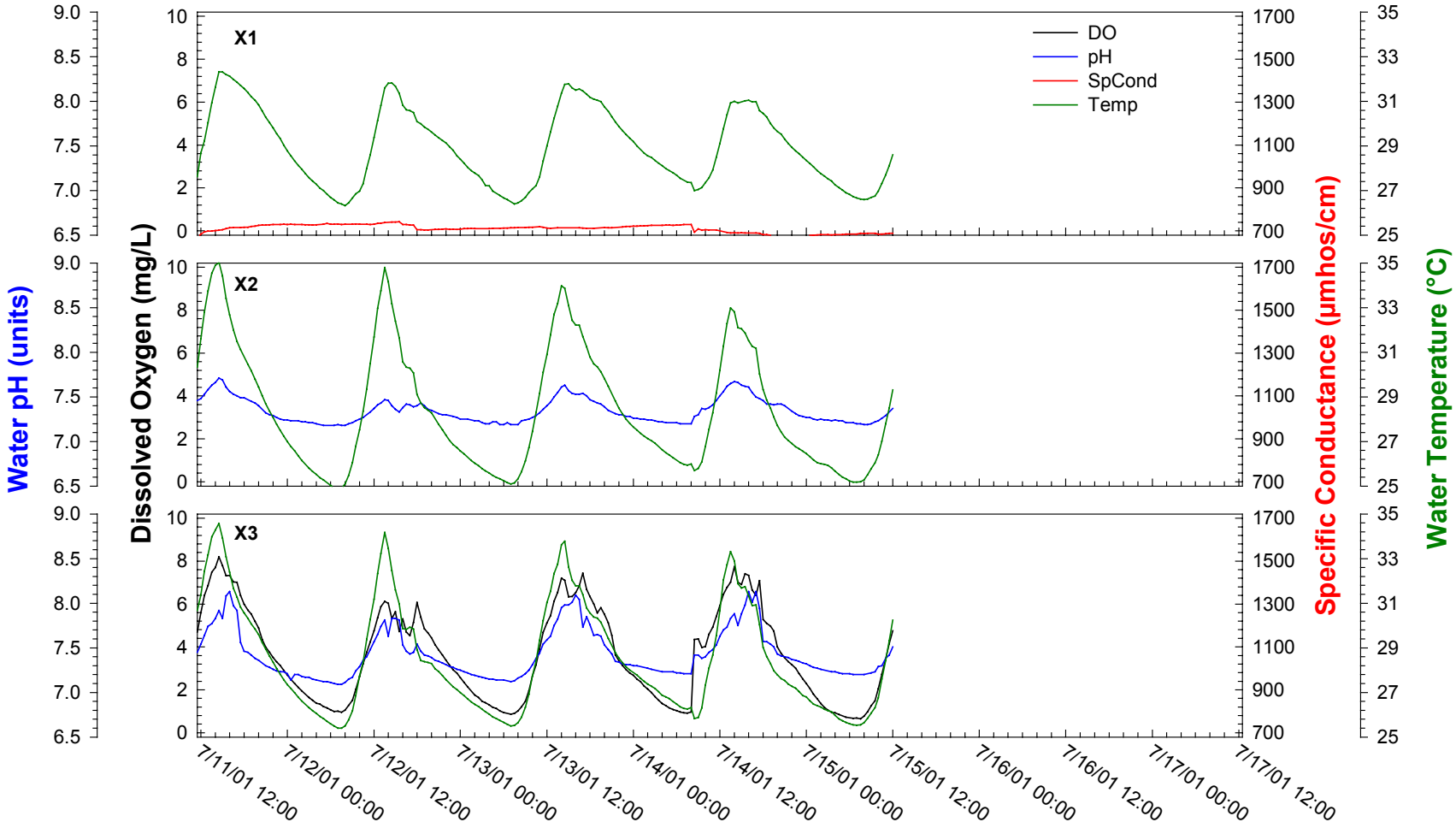

Figure 3. Diel measurements along transect X, July 11 through 17, 2001

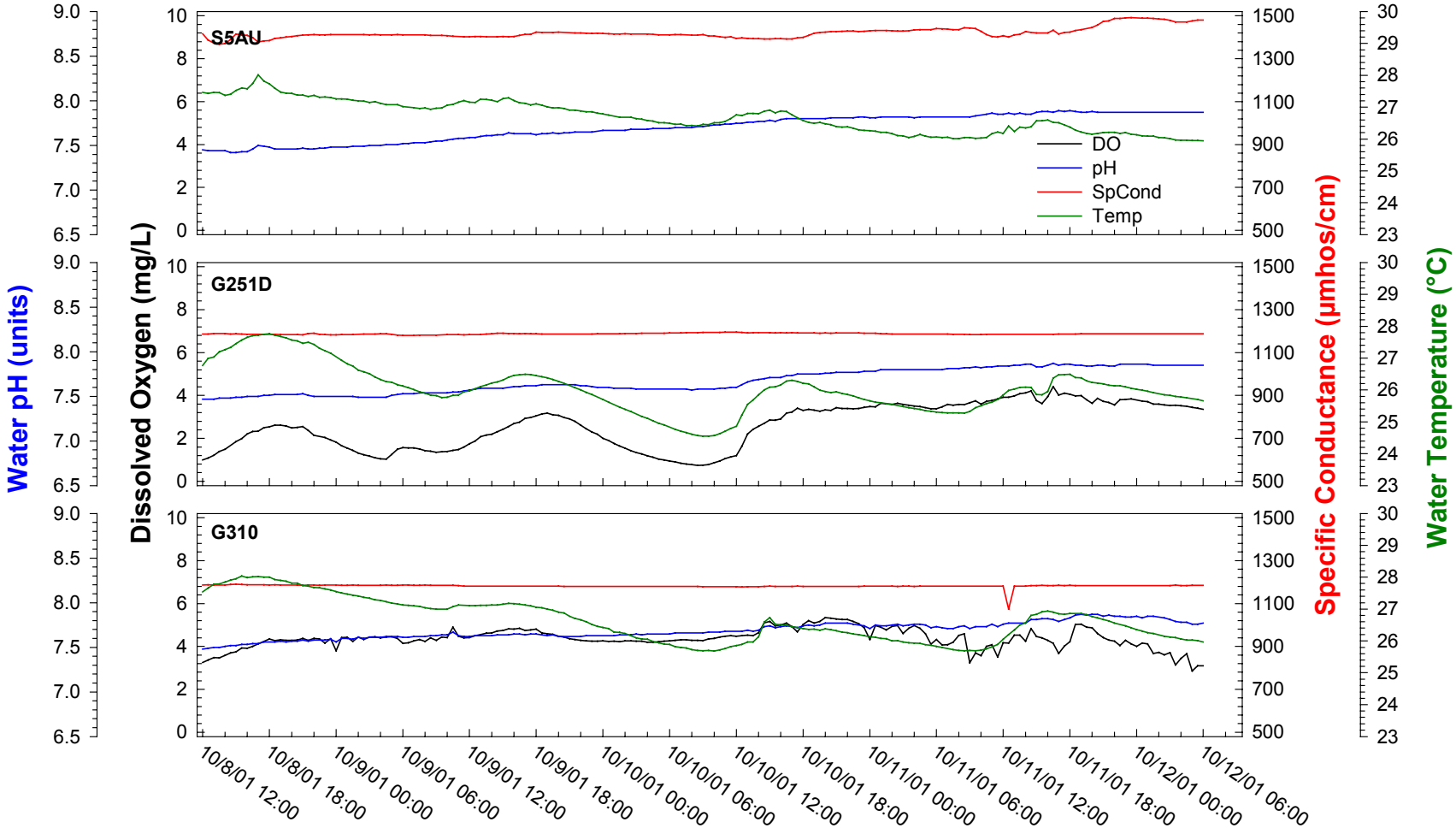

Figure 4. Diel measurements at S-5AU, G-251D and G-310 in STA-1W, October 8 through 12, 2001

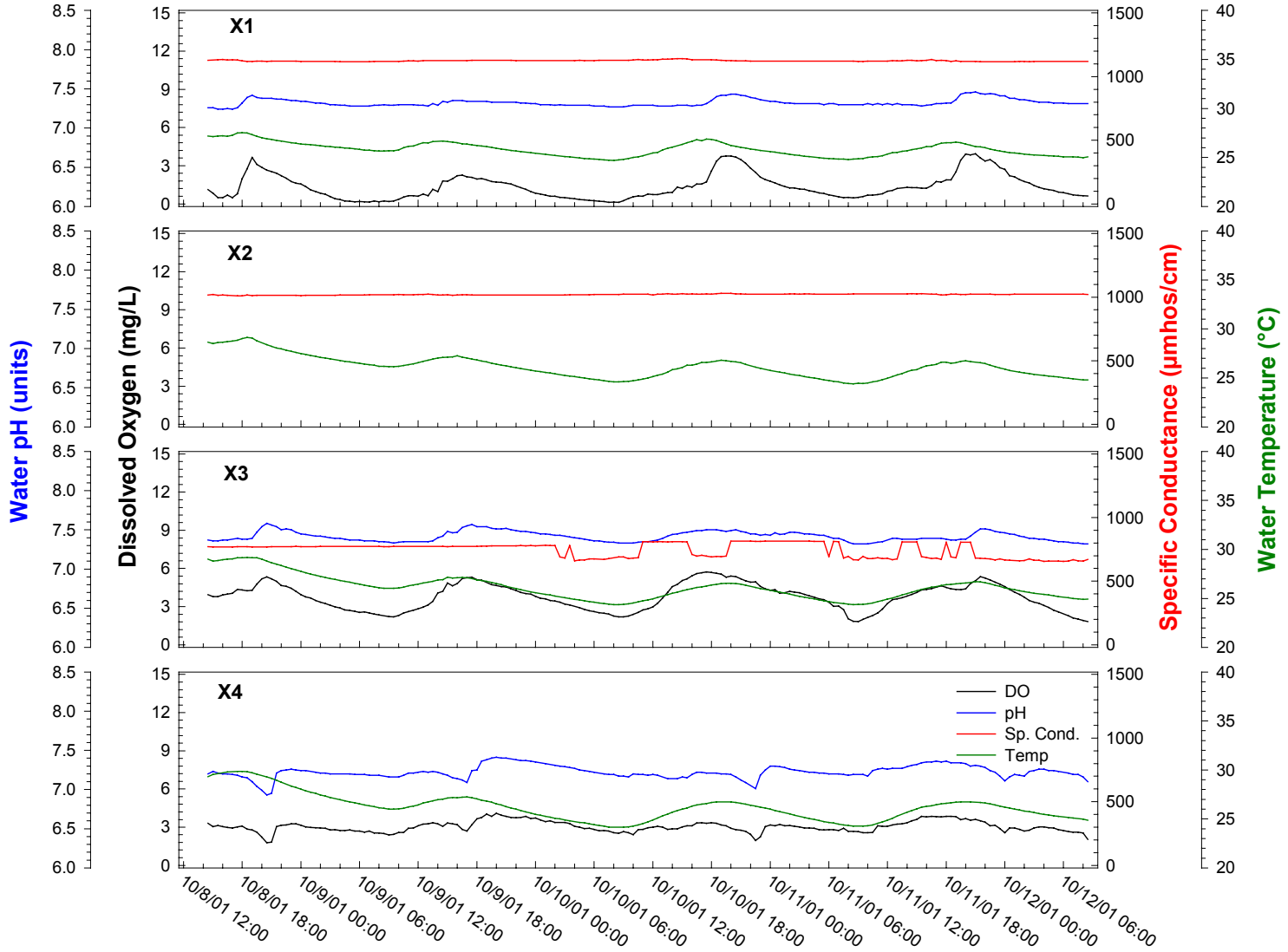

Figure 5. Diel measurements along transect X, October 8 through 12, 2001

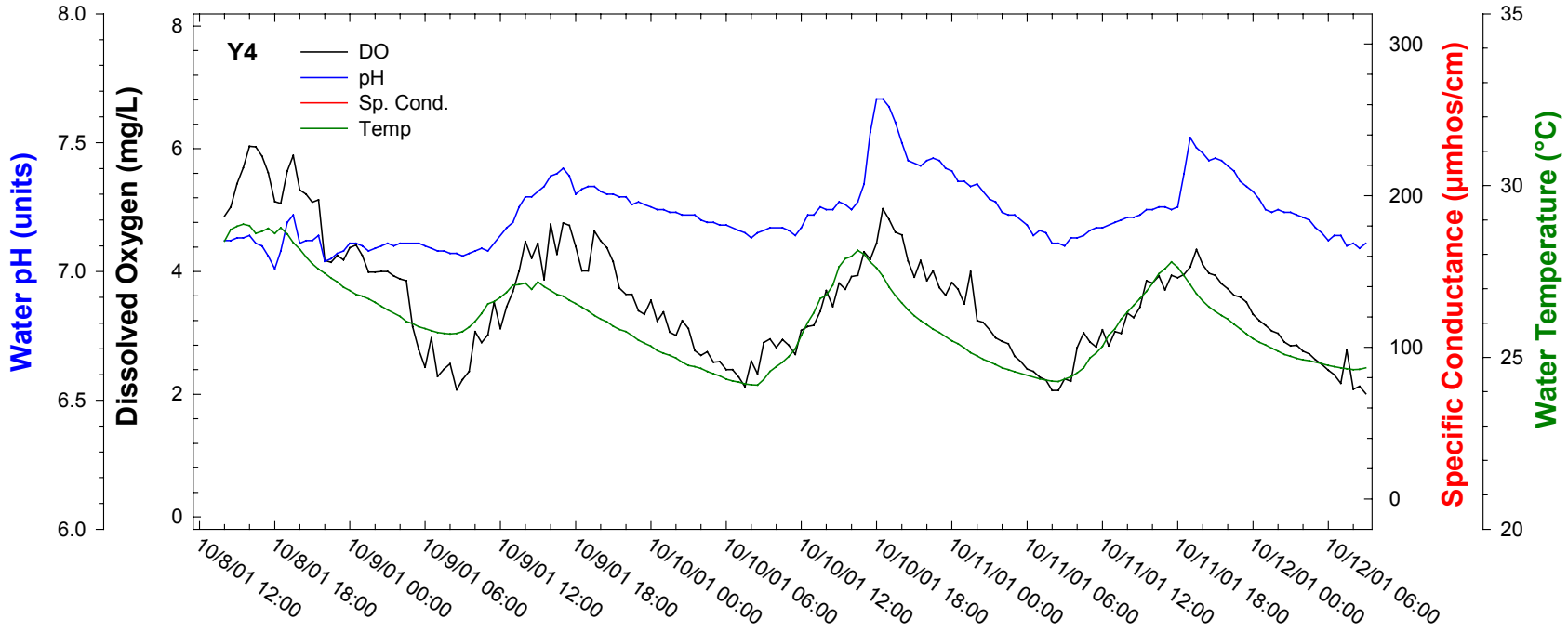

Figure 6. Diel measurements at marsh site Y4, October 8 through 12, 2001

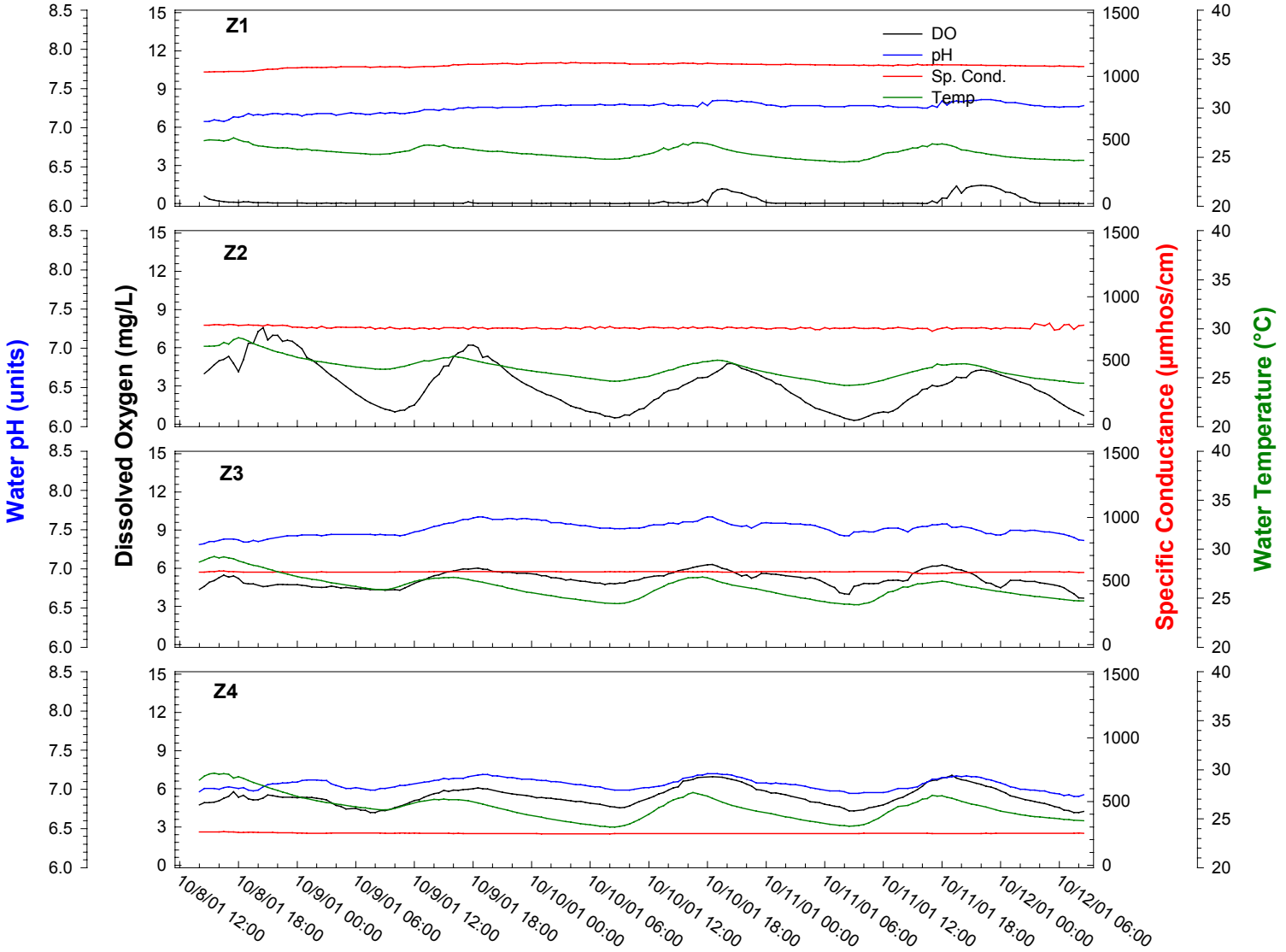

Figure 7. Diel measurements along transect Z, October 8 through 12, 2001

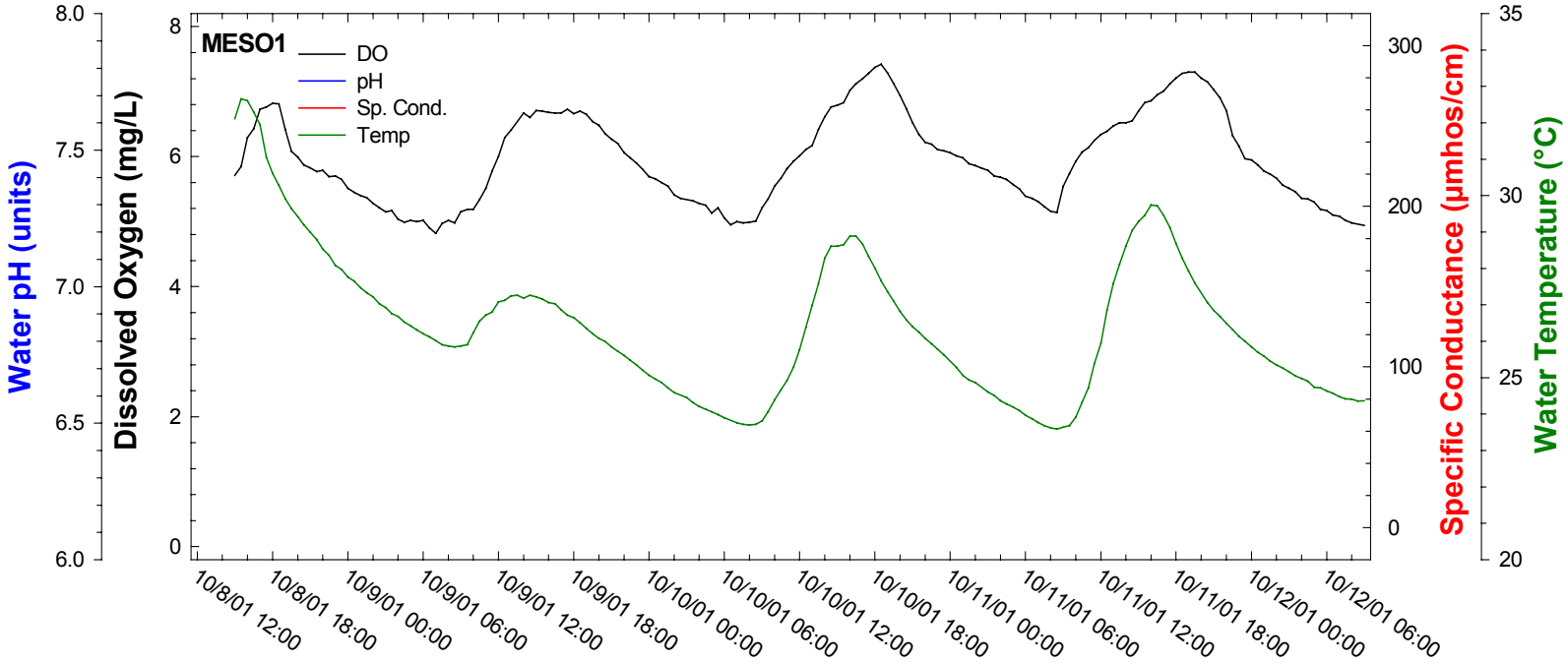

Figure 8. Diel measurements at marsh site MESO1, October 8 through 12, 2001

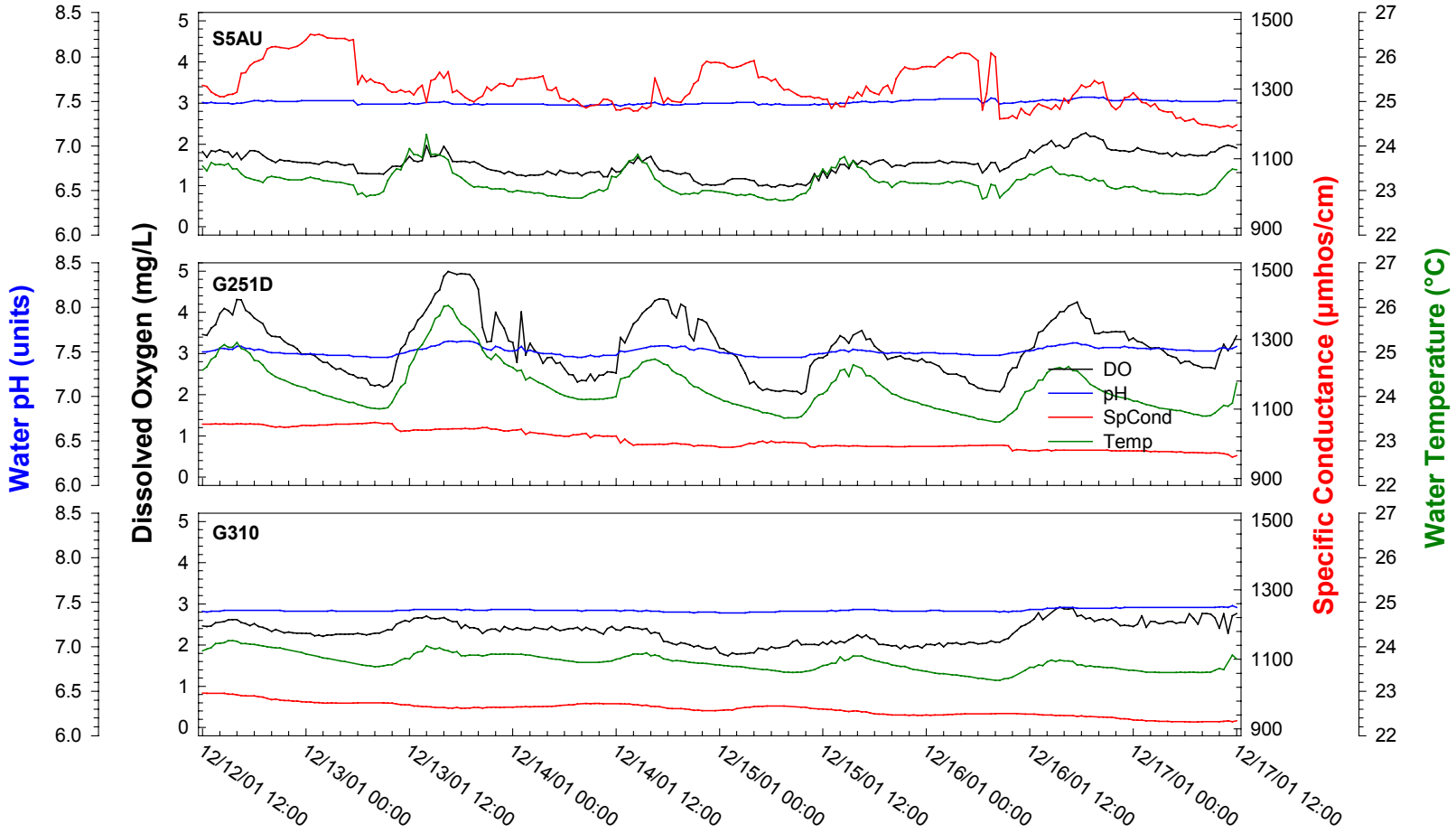

Figure 9. Diel measurements at S-5AU, G-251D and G-310 in STA-1W, December 12 through 17, 2001

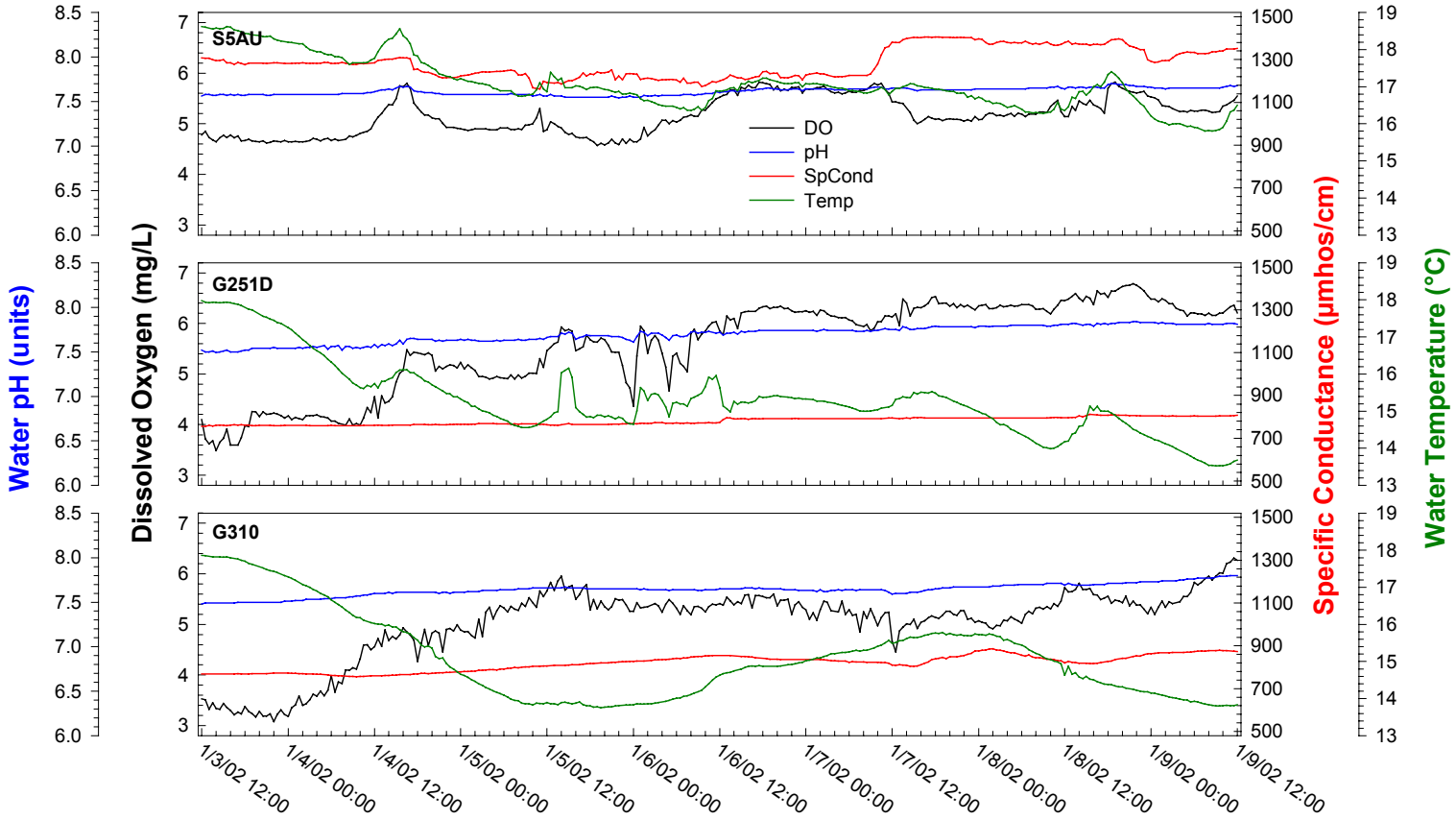

Figure 10. Diel measurements at S-5AU, G-251D and G-310 in STA-1W, January 3 through 9, 2002

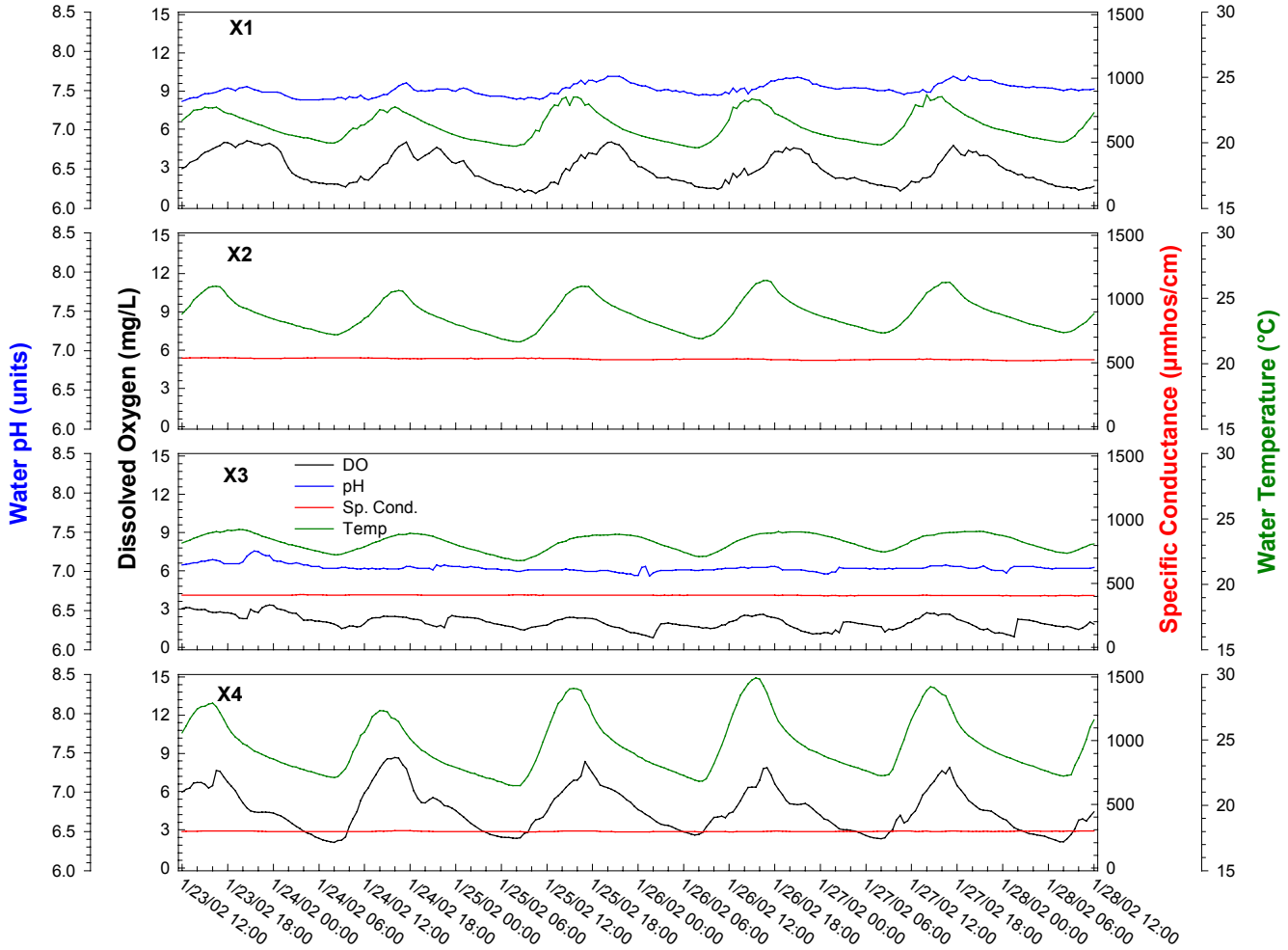

Figure 11. Diel measurements along transect X, January 23 through 28, 2002

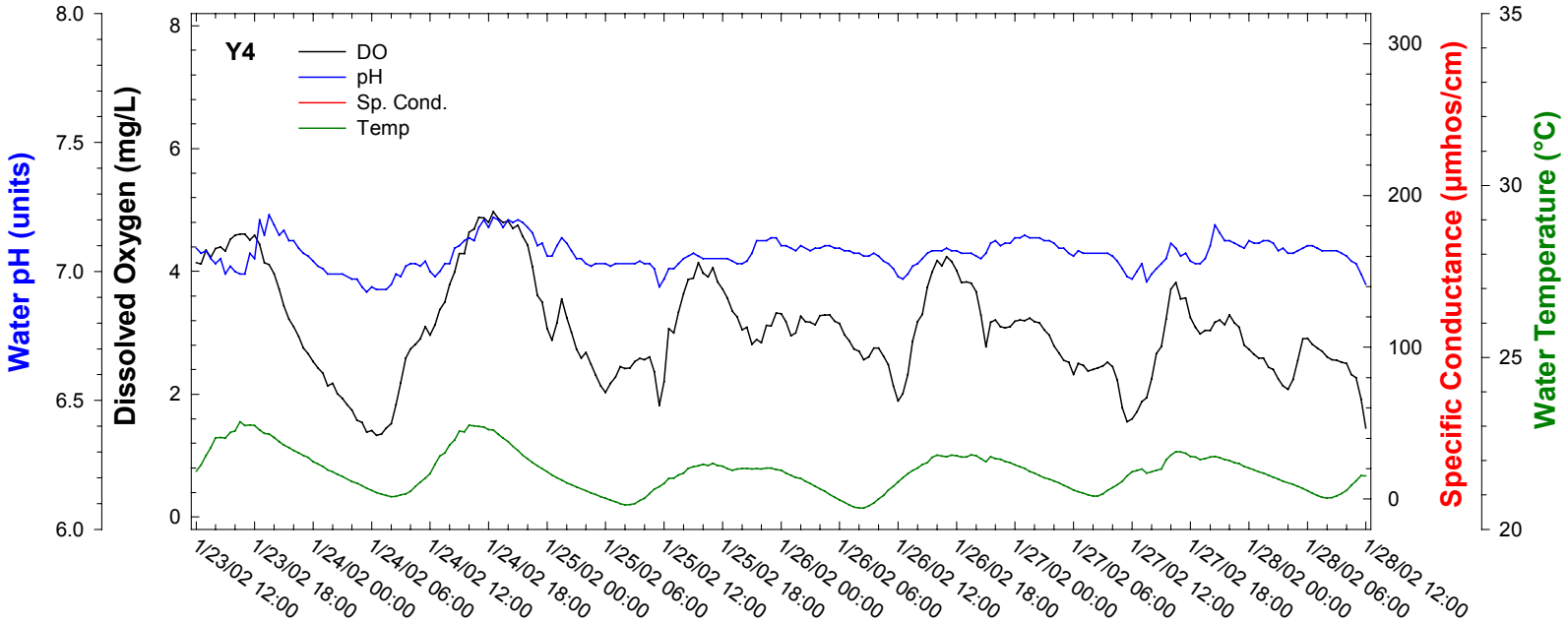

Figure 12. Diel measurements at marsh site Y4, January 23 through 28, 2002

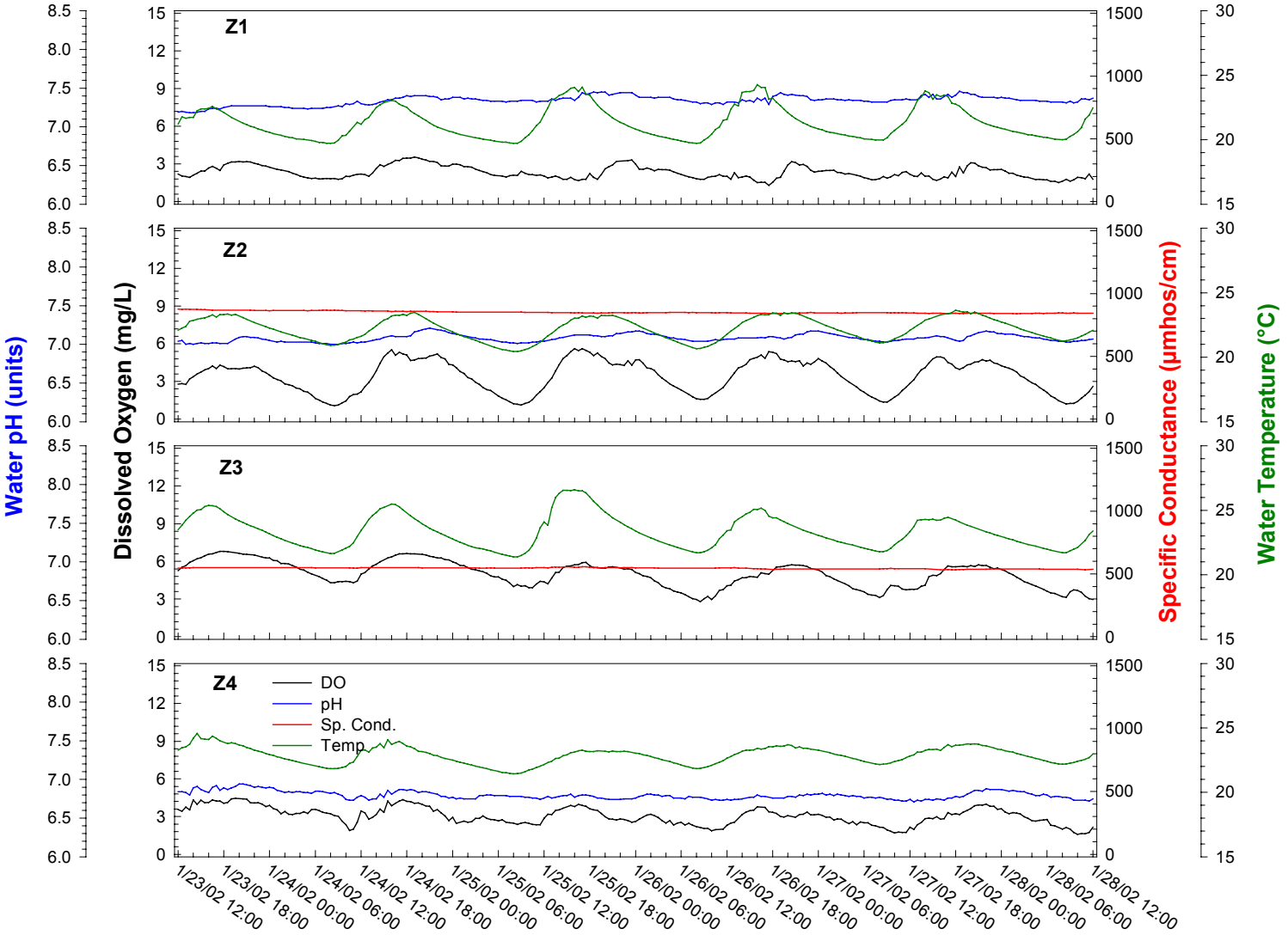

Figure 13. Diel measurements along transect Z, January 23 through 28, 2002

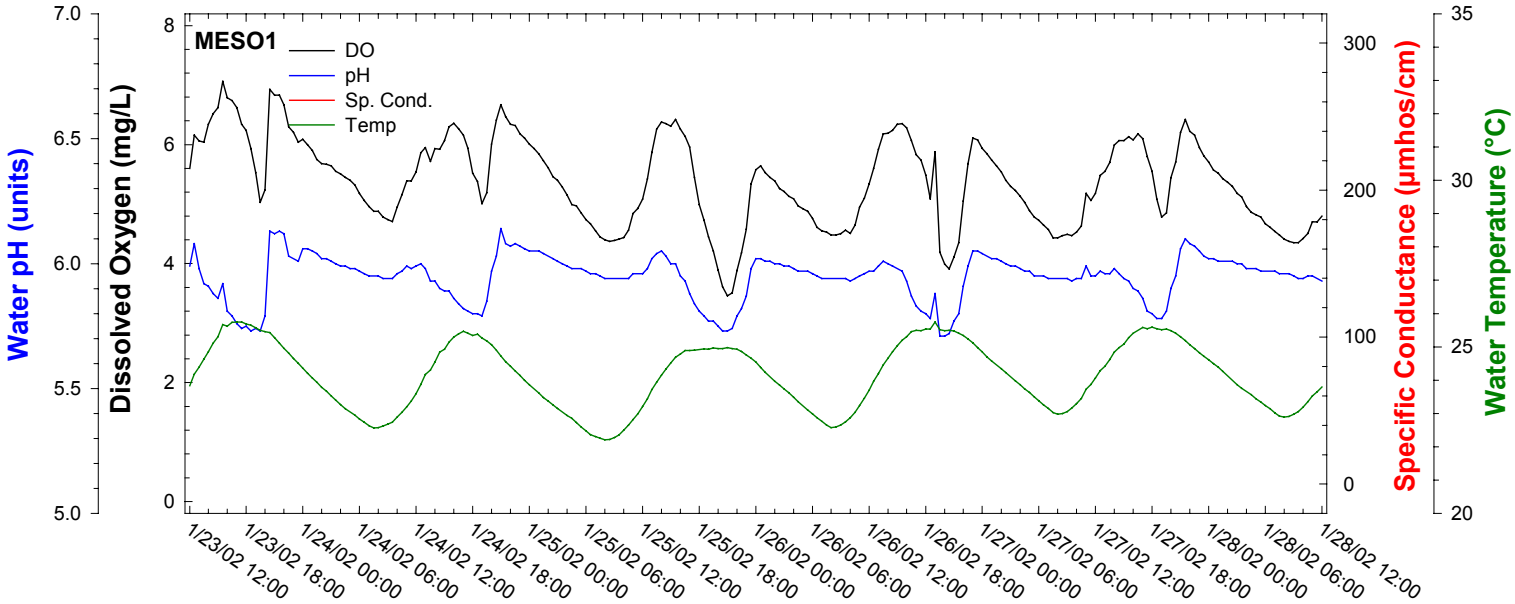

Figure 14. Diel measurements at marsh site MESO1, January 23 through 28, 2002

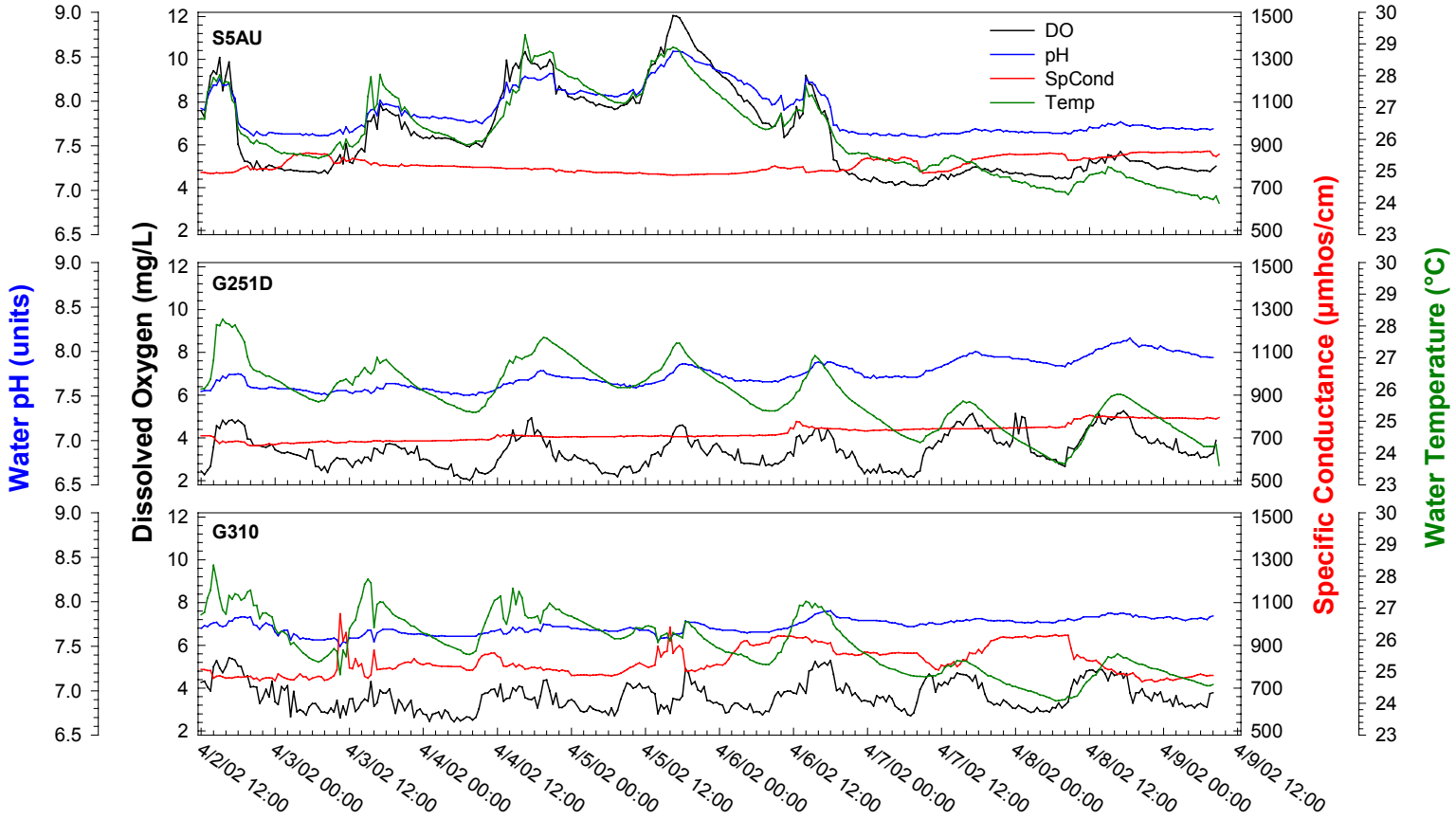

Figure 15. Diel measurements at S-5AU, G-251D and G-310 in STA-1W, April 2 through 9, 2002

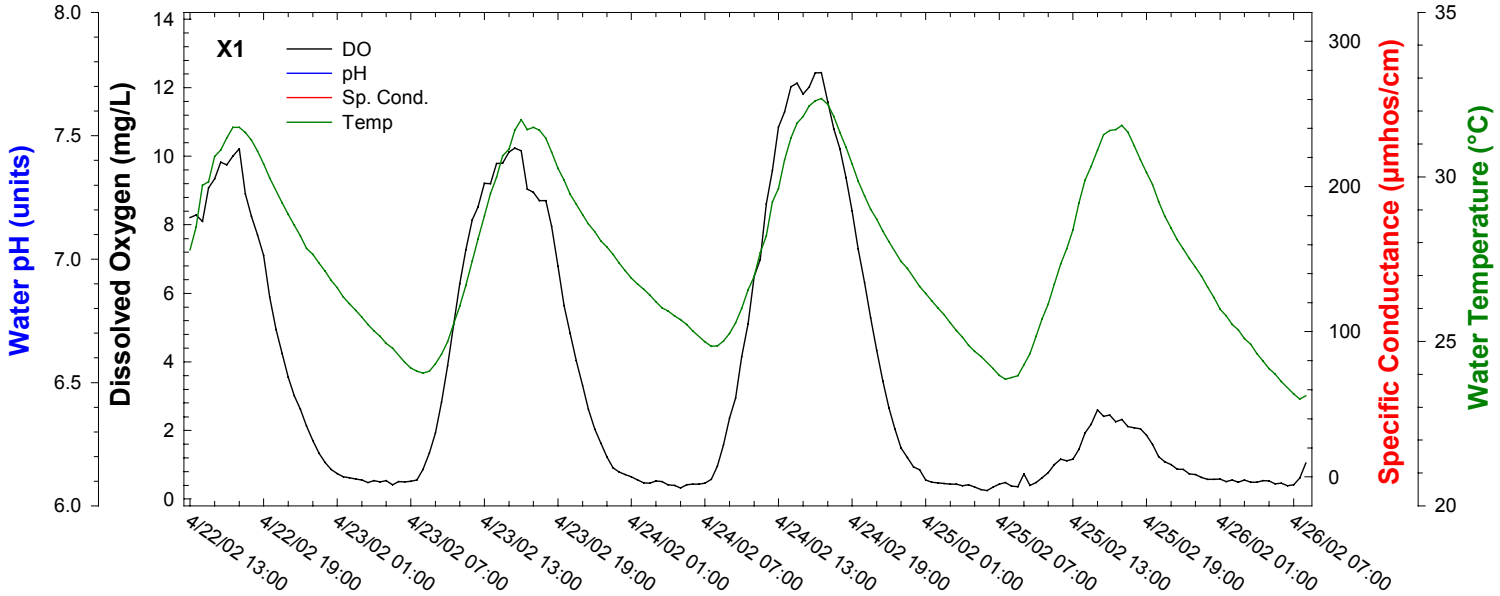

Figure 16. Diel measurements at marsh site X1, April 22 through 26, 2002

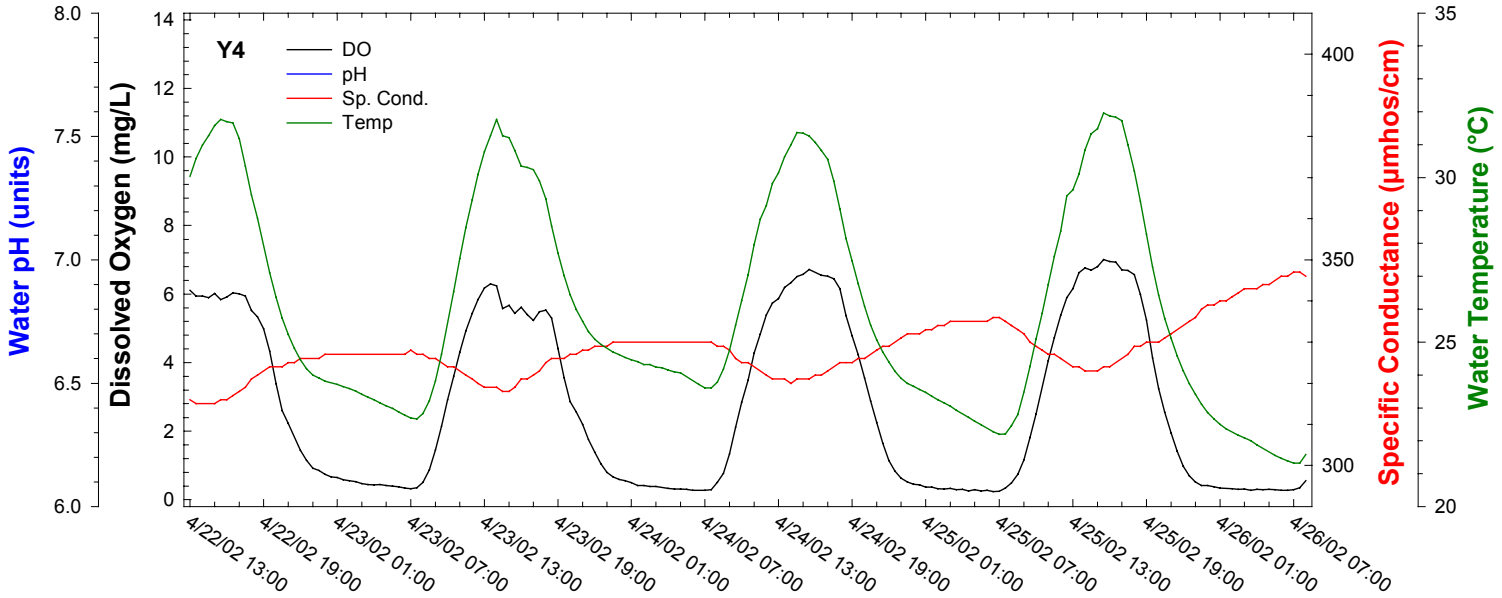

Figure 17. Diel measurements at marsh site Y4, April 22 through 26, 2002

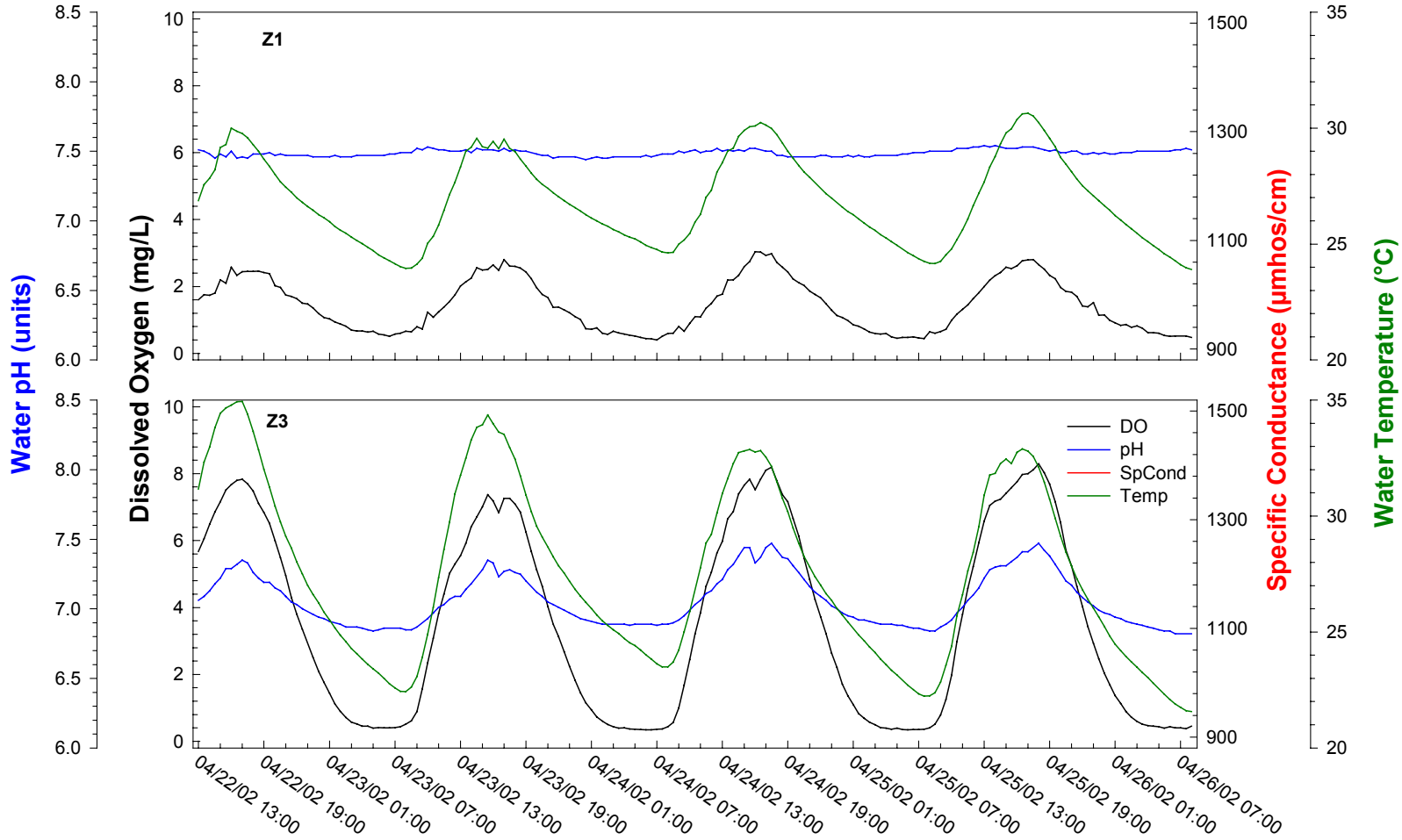

Figure 18. Diel measurements at transect Z, April 22 through 26, 2002

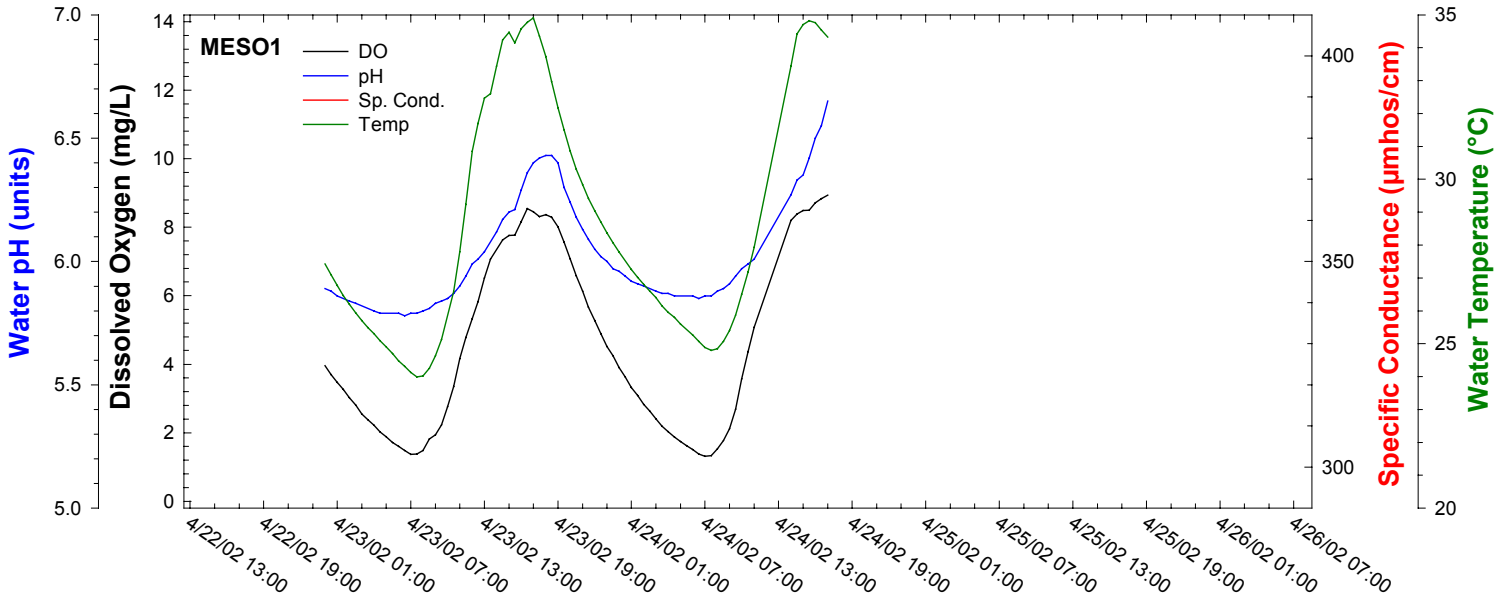

Figure 19. Diel measurements at marsh site MESO1, April 22 through 26, 2002