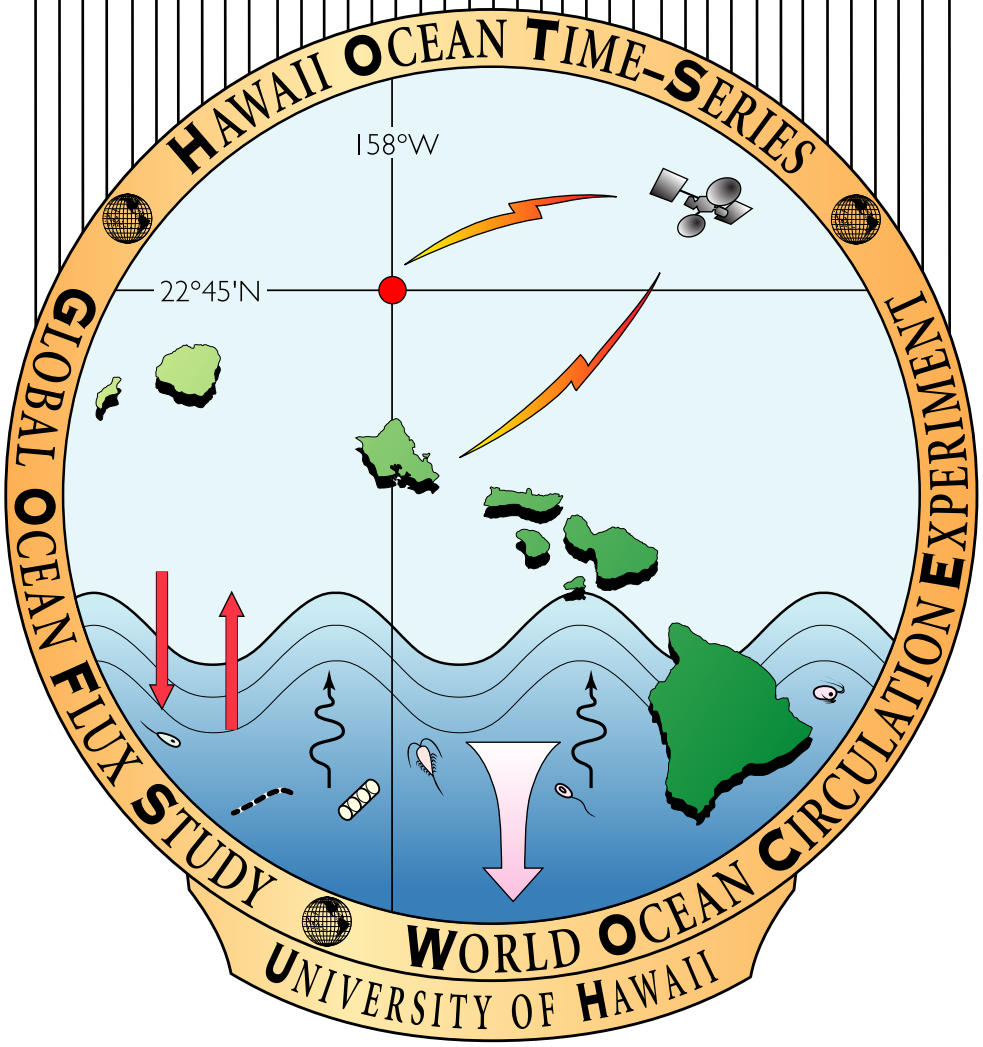
Hawaii Ocean Time-series Program

HOT 302



Hawaii Ocean Time-Series

HOT-**302**

KAHE Station Data Sheet

Station # 1 Date: 5/14/18 (HST)

Cast # 1 Time: 1340 (HST)

Operator(s): AN KB TC DS RT CF

Rosette Position	Desired Depth	Oxygen	Sample Temp.	DIC/ Alk	pH	Nuts	LLN/ LLP	Chl *a*	
1	**1000**	1	5.4						
2	**750**	2,3,4	6.6						
3	**500**	5	7.6						
4	**350**	6	10.8			4			
5	**250**	7	15.2			5			
6	**200**								
7	**175**							7	
8	**150**	8	20.1			8	8	8	
9	**125**							9	
10	**100**	9,10,11	22.3			10	10	10A-B	
11	**75**							11	
12	**45**	12	24.9	12	1	12	12	12	
13	**25**	13	25.2	13	2			13A-B	
14	**5**	14	25.5	14	3,4,5	14	14	14	
15	**5**	QC	25.5						
16									
17									
18									
19									
20									
21									
22									
23									
24									

Notes:

Hawaii Ocean Time-Series
HOT-**302**
KAHE Station Data Sheet

Station # 1
Cast # 1
Operator(s): AN KB TC

Date: 5/14/18 (HST)
Time: 1340 (HST)

Rosette Position	Desired Depth	Oxygen	Sample Temp.	DIC/ Alk	pH	Nuts	LLN/ LLP	Chl *a*	
1	**1000**	1	5.4						
2	**750**	2,3,4	6.6						
3	**500**	5	7.6						
4	**350**	6	10.90			4			
5	**250**	7	15.2			5			
6	**200**								
7	**175**							7	
8	**150**	8	20.1			8	8	8	
9	**125**							9	
10	**100**	9,10,11	22.3			10	10	10A-B	
11	**75**							11	
12	**45**	12	24.9	12	1	12	12	12	
13	**25**	13	25.2	13	2			13A-B	
14	**5**	14	25.5	14	3,4,5	14	14	14	
15	**5**	QC	25.5						
16									
17									
18									
19									
20									
21									
22									
23									
24									

Notes:

Hawaii Ocean Time-series

HOT-**302**

WOCE Deep Data Sheet

Station # 2 Date: 5/15/18 (HST)

Cast # 1 Time: 0630 (HST)

Operator(s): AN KKB TC ML

Rosette Position	Desired Depth	Oxygen	Sample Temp.	DIC/ Alk	pH	DOC	Nutrient	Refrig. Si	
1	**4800**	15	2.7				1	1	
2	**4600**	16	2.9				2	2	
3	**4500**	17,18,19	3.0	3A-B	1,2,3	3ABC	3A-B	3A-B	
4	**4400**	20	2.8				4	4	
5	**4200**	21	2.9				5	5	
6	**4000**	22	2.8				6	6	
7	**3800**	23,24,25	3.3			7ABC	7A-B	7A-B	
8	**3600**	26	3.0				8	8	
9	**3400**	27	3.0				9	9	
10	**3200**	28	3.0				10	10	
11	**3000**	29,30,31	3.4	11	4	11ABC	11A-B	11A-B	
12	**2800**	32	3.1				12	12	
13	**2600**	33	3.4				13	13	
14	**2400**	34	3.3				14	14	
15	**2200**	35	3.4				15	15	
16	**2000**	36	3.5	16	5	16ABC	16A-B	16A-B	
17	**1800**	37,38,39	4.2				17	17	
18	**1600**	150	4.1				18	18	
19	**1400**	41	4.3				19	19	
20	**1200**	42	4.7				20	20	
21	**1000**	43	5.2				21	21	
22	**750**	44	5.7				22	22	
23	**500**	45	7.9				23	23	
24	**5**	46	23.9				24		

Notes:

Hawaii Ocean Time-series
HOT-**302**
WOCE Deep Data Sheet

Station # 2 Date: 5/15/18 (HST)
Cast # 1 Time: 0630 (HST)
Operator(s): AN KKB TC

Rosette Position	Desired Depth	Oxygen	Sample Temp.	DIC/ Alk	pH	DOC	Nutrient	Refrig. Si	
1	**4800**	15	2.7				1	1	
2	**4600**	16	2.9				2	2	
3	**4500**	17,18,19	3.0	3A-B	1,2,3	3ABC	3A-B	3A-B	
4	**4400**	20	2.8				4	4	
5	**4200**	21	2.9				5	5	
6	**4000**	22	2.8				6	6	
7	**3800**	23,24,25	3.3			7ABC	7A-B	7A-B	
8	**3600**	26	3.0				8	8	
9	**3400**	27	3.0				9	9	
10	**3200**	28	3.0				10	10	
11	**3000**	29,30,31	3.4	11	4	11ABC	11A-B	11A-B	
12	**2800**	32	3.1				12	12	
13	**2600**	33	3.4				13	13	
14	**2400**	34	3.3				14	14	
15	**2200**	35	3.4				15	15	
16	**2000**	36	3.5	16	5	16ABC	16A-B	16A-B	
17	**1800**	37,38,39	4.2				17	17	
18	**1600**	150	4.1				18	18	
19	**1400**	41	4.3				19	19	
20	**1200**	42	4.7				20	20	
21	**1000**	43	5.2				21	21	
22	750	44	5.7				22	22	
23	500	45	7.9				23	23	
24	5	46	23.9				24		

Notes:

Hawaii Ocean Time-series

HOT-**302**

PO Shallow Data Sheet

Station # 2 Date: 5/15/18 (HST)

Cast # 2 Time: 1225 (HST)

Operator(s): AN TC KKB ML

Rosette Position	Desired Depth	Oxygen	Sample Temp.	DIC/ Alk	pH	DOC	Nutrient	Refrig. Si	Replicate Depths
1	**1020**	**47,48,49**	**5.9**	**1**	**1**	**1**	**1A-B**	**1A-B**	**1020**
2	**995**	50	5.6				2	2	
3	**949**	51	5.8				3	3	
4	**903**	52	5.9				4	4	
5	**857**	53	6.1				5	5	
6	**811**	54	5.9				6	6	
7	**746**	55,56,57	6.4	7	2	7	7	7	
8	**702**	**58**	**6.3**				**8**	**8**	**750**
9	**658**	59	6.5				9	9	
10	**601**	60	7.0	10	3	10	10	10	
11	**558**	**61**	**7.4**				**11**	**11**	**600**
12	**511**	62	8.0	12	4	12	12A-B	12A-B	
13	**475**	63	8.6				**13**	**13**	**525**
14	**443**	64,65,66	9.3				14	14	
15	**410**	**67**	**10.0**				**15**		**500**
16	**354**	68	11.2	16A-B	5,6	16	16		
17	**307**	**69**	**12.6**				**17**		**350**
18	**267**	70	14.0	18	7	18	18		
19	**227**	**71,72,73**	**15.7**				**19**		**225**
20	**170**	74	18.9				20A-B		
21	**125**	**75**	**21.2**				**21**		**150**
22	**90**	76	22.3				22		
23	**54**	77	22.8				23		
24	**8**	78	24.0				24		

Notes:

Hawaii Ocean Time-series
HOT-**302**
PO Shallow Data Sheet

Station # 2 Date: 5/15/18 (HST)
Cast # 2 Time: 1225 (HST)
Operator(s): AN TC KKB ML

Rosette Position	Desired Depth	Oxygen	Sample Temp.	DIC/ Alk	pH	DOC	Nutrient	Refrig. Si	Replicate Depths
1	**1020**	**47,48,49**	5.9	**1**	**1**	**1**	**1A-B**	**1A-B**	**1020**
2	**995**	50	5.6				2	2	
3	**949**	51	5.8				3	3	
4	**903**	52	5.9				4	4	
5	**857**	53	6.1				5	5	
6	**811**	54	5.9				6	6	
7	**746**	55,56,57	6.4	7	2	7	7	7	
8	**702**	**58**	6.3				**8**	**8**	**750**
9	**658**	59	6.5				9	9	
10	**601**	60	7.0	10	3	10	10	10	
11	**558**	**61**	7.4				**11**	**11**	**600**
12	**511**	62	8.0	12	4	12	12A-B	12A-B	
13	**475**	63	8.6				**13**	**13**	**525**
14	**443**	64,65,66	9.3				14	14	
15	**410**	**67**	10.0				**15**		**500**
16	**354**	68	11.2	16A-B	5,6	16	16		
17	**307**	**69**	12.6				**17**		**350**
18	**267**	70	14.0	18	7	18	18		
19	**227**	**71,72,73**	15.7				**19**		**225**
20	**170**	74	18.9				20A-B		
21	**125**	**75**	21.2				**21**		**150**
22	**90**	76	22.3				22		
23	**54**	77	22.8				23		
24	**8**	78	24.0				24		

Notes:

Hawaii Ocean Time-series

HOT- **302**

PC/PN Data Sheet

Station #	2		Date:	5/15/18	(HST)
Cast #	3		Time:	1430	(HST)
Operator(s):	DS CF TB RT	Pre-screen mesh size:		202 um	
Blank #'s	___**B1**___	___**B2**___	___**B3**___		

Rosette Position	Desired Depth	Carboy #	Total Volume	Sample #	DNA	SF-S O2	
1	**1000**						
2	**Sal min**						
3	**350**	1	10	3			
4	**350**	2	10	4			
5	**250**	3	10	5			
6	**200**	4	10	6			
7	**175**	5	10	7			
8	**150**	6	10	8			
9	**125**	7,8	4,4	9A-B			
10	**100**	9	4	10			
11	**75**	10	4	11			
12	**75**				X		
13	**45**	11	4	13			
14	**45**				X		
15	**25**	12,13	4,4	15A-B			
16	**25**				X		
17	**15**						
18	**5**	14	4	18			
19	**5**				X		
20							
21							
22							
23							
24							

Notes: Bottle number 1 lost about ~50 mL. Filters # 5,6 and 14 broken

Hawaii Ocean Time-series

HOT- **302**

PC/PN Data Sheet

Station #	2		Date:	5/15/18	(HST)
Cast #	3		Time:	1430	(HST)
Operator(s):	DS CF TB RT	Pre-screen mesh size:		202 um	
Blank #'s	**B1**	**B2**	**B3**		

Rosette Position	Desired Depth	Carboy #	Total Volume	Sample #	DNA	SF-S O2	
1	**1000**						
2	**Sal min**						
3	**350**	1	10	3			
4	**350**	2	10	4			
5	**250**	3	10	5			
6	**200**	4	10	6			
7	**175**	5	10	7			
8	**150**	6	10	8			
9	**125**	7,8	4,4	9A-B			
10	**100**	9	4	10			
11	**75**	10	4	11			
12	**75**				X		
13	**45**	11	4	13			
14	**45**				X		
15	**25**	12,13	4,4	15A-B			
16	**25**				X		
17	**15**					X	
18	**5**	14	4	17			
19	**5**				X		
20							
21							
22							
23							
24							

Notes: Bottle number 1 lost about ~50mL
Filter #14 broken #6, #5

Hawaii Ocean Time-series

HOT- **302**

Particulate Phosphorus Data Sheet

Station #	2	Date:	5/15/2018 (HST)
Cast #	4	Time:	18:05 (HST)
Operator(s):	DS CF RT TB MB	Pre-screen mesh size:	202 um
Blank #'s	**B1**	**B2**	**B3**

Rosette Position	Desired Depth	Carboy #	Total Volume	Sample #	SF-S	O2 SF-S	Temp	
1	**1000**							
2	**Sal min**							
3	**350**	1	10	3				
4	**350**	2	10	4				
5	**250**	3	10	5				
6	**200**	4	10	6				
7	**175**	5	10	7				
8	**150**	6	10	8				
9	**125**	7,8	4,4	9A-B				
10	**100**	9	4	10				
11	**75**	10	4	11				
12	**45**	11	4	12				
13	**25**	12,13	4,4	13A-B				
14	**25**				14 A,B			
15	**15**					X	23.8	
16	**5**	14	4	16				
17	**5**				17 A,B			
18								
19								
20								
21								
22								
23								
24								

Notes: O2 Bottle number: 109, 110, 111

Hawaii Ocean Time-series
HOT- **302**
Particulate Phosphorus Data Sheet

Station # 2 Date: 5/15/2018 (HST)
Cast # 4 Time: 18:05 (HST)
Operator(s): DS CF RT TB MB Pre-screen mesh size: 202 um
Blank #'s **B1** **B2** **B3**

Rosette Position	Desired Depth	Carboy #	Total Volume	Sample #	SF-S	O2 SF-S	Temp	
1	**1000**							
2	**Sal min**							
3	**350**	1	10	3				
4	**350**	2	10	4				
5	**250**	3	10	5				
6	**200**	4	10	6				
7	**175**	5	10	7				
8	**150**	6	10	8				
9	**125**	7,8	4,4	9A-B				
10	**100**	9	4	10				
11	**75**	10	4	11				
12	**45**	11	4	12				
13	**25**	12,13	4,4	13A-B				
14	**25**				X			
15	**15**					X	23.8	
16	**5**	14	4	16				
17	**5**				X			
18								
19								
20								
21								
22								
23								
24								

Notes: 109, 119, 117

Hawaii Ocean Time-series

HOT-**302**

BEACH Shallow Data Sheet (1/2)

Station #	2	Date:	5/15/2018 (HST)
Cast #	5	Time:	20:00 (HST)
Operator(s):	DS CF RT TB		

Rosette Position	Desired Depth	Oxygen	Sample Temp.	DIC/ ALK	Quay DIC	Keeling DIC	SF-S	pH	DOC
1	**1000**	79	6						
2	**O_2 min**	80	6.3						
3	**Sal min**	81	8.8						
4	**200**	82	17.1	4				1	4
5	**175**	83	18.8						5
6	**165**	84	19.1						
7	**150**	85	20.4	7				2	7
8	**130**								
9	**125**	86	21.3						9
10	**115**	87	21.7						
11	**110**								
12	**100**	88,89,90	22.3	12				3	12
13	**90**								
14	**85**	91	22.7						
15	**75**	92	23.0	15				4	15
16	**60**								16
17	**45**	93	23.8	17				5	17
18	**35**								18
19	**25**	94	24.0	19				6	19
20	**25**				20		20A-B		
21	**15**								21
22	**5**	95	24.3	22A-B				7,8	22
23	**5**				23	23A-B			
24	**5**						24A-B		

Notes: Keeling 21:22 HST

Hawaii Ocean Time-series

HOT-**302**

BEACH Shallow Data Sheet (2/2)

Station # 2 Date: 5/15/18 (HST)

Cast # 5 Time: 20:00 (HST)

Operator(s): DS CF RT TB

Rosette Position	Desired Depth	Nutrient	Refrig. Si	LLN	LLP			
1	**1000**							
2	**O_2 min**							
3	**Sal min**							
4	**200**	4	4					
5	**175**	5		5	5			
6	**165**			6				
7	**150**	7		7A-B	7			
8	**130**			8				
9	**125**	9A-B		9	9			
10	**115**			10	10			
11	**110**			11				
12	**100**	12		12A-B	12			
13	**90**			13				
14	**85**			14	14			
15	**75**	15		15	15			
16	**60**	16		16	16			
17	**45**	17A-B		17	17			
18	**35**	18		18				
19	**25**	19		19	19			
20	**25**							
21	**15**	21		21				
22	**5**	22		22A-B	22			
23	**5**							
24	**5**							

Notes:

Hawaii Ocean Time-series
HOT-**302**
BEACH Shallow Data Sheet (1/2)

Station # 2
Cast # 5
Operator(s): DS CF RT TB

Date: 5/15/2018 (HST)
Time: 20:00 (HST)

Rosette Position	Desired Depth	Oxygen	Sample Temp.	DIC/ ALK	Quay DIC	Keeling DIC	SF-S ✓	pH ✓	DOC
1	**1000**	79	6.0						
2	**O_2 min**	80	6.3						
3	**Sal min**	81	8.8						
4	**200**	82	17.1	4				1	4
5	**175**	83	18.8						5
6	**165**	84	19.1						
7	**150**	85	20.4	7				2	7
8	**130**								
9	**125**	86	21.3						9
10	**115**	87	21.7						
11	**110**								
12	**100**	88,89,90	22.3	12				3	12
13	**90**								
14	**85**	91	22.7						
15	**75**	92	23.0	15				4	15
16	**60**								16
17	**45**	93	23.8	17				5	17
18	**35**								18
19	**25**	94	24.0	19				6	19
20	**25**				20		20A-B		
21	**15**								21
22	**5**	95	21.3	22A-B				7,8	22
23	**5**				23	23A-B			
24	**5**						24A-B		

Notes: Keeling – 5/15/18 21:22 HST

Hawaii Ocean Time-series
HOT-**302**
BEACH Shallow Data Sheet (2/2)

Station # 2
Cast # 5
Operator(s): DS CF RT TB

Date: 5/15/18 (HST)
Time: 20:00 (HST)

Rosette Position	Desired Depth	Nutrient	Refrig. Si	LLN	LLP			
1	**1000**							
2	**O_2 min**							
3	**Sal min**							
4	**200**	4	4					
5	**175**	5		5	5			
6	**165**			6				
7	**150**	7		7A-B	7			
8	**130**			8				
9	**125**	9A-B		9	9			
10	**115**			10	10			
11	**110**			11				
12	**100**	12		12A-B	12			
13	**90**			13				
14	**85**			14	14			
15	**75**	15		15	15			
16	**60**	16		16	16			
17	**45**	17A-B		17	17			
18	**35**	18		18				
19	**25**	19		19	19			
20	**25**							
21	**15**	21		21				
22	**5**	22		22A-B	22			
23	**5**							
24	**5**							

Notes:

Hawaii Ocean Time-series

HOT-**302**

PUR Data Sheet

Station # 2 Date: 5/15/2018 (HST)

Cast # 6 Time: 23:11 (HST)

Operator(s): DS CF RT TB

Rosette Position	Desired Depth	Carboy #	Total Volume	PUR	SF-S	DNA		
1	**1000**							
2	**775**	5	10					
3	**250**							
4	**175**	1	10	4				
5	**175**					X		
6	**150**	2	10	6				
7	**150**					X		
8	**125**	7,8	4,4	8A-B				
9	**125**					X		
10	**100**	9	4	10				
11	**100**					X		
12	**75**	10	4	12				
13	**45**	11,12	4,4	13A-B				
14	**25**	3	10	14				
15	**25**				15A,B			
16	**5**	4	10	16				
17	**5**				17A,B			
18								
19								
20								
21								
22								
23								
24								

Notes: Carboy # 7 filter broken

Carboy #3&4 took to long

Carboy #3 -730 mL Carboy #4 -910 mL

Hawaii Ocean Time-series
HOT-**302**
PUR Data Sheet

Station # 2 Date: 5/15/2018 (HST)
Cast # 6 Time: 2311 (HST)
Operator(s): DS CF RT TB

Rosette Position	Desired Depth	Carboy #	Total Volume	PUR	SF-S	DNA		
1	**1000**							
2	**775**	5	10					
3	**250**							
4	**175**	1	10	4				
5	**175**					X		
6	**150**	2	10	6				
7	**150**					X		
8	**125**	7,8	4,4	8A-B				
9	**125**					X		
10	**100**	9	4	10				
11	**100**					X		
12	**75**	10	4	12				
13	**45**	11,12	4,4	13A-B				
14	**25**	3	10	14				
15	**25**				15A,B			
16	**5**	4	10	16				
17	**5**				17A,B			
18								
19								
20								
21								
22								
23								
24								

Notes: Carboy #17 filter broken

Carboy #3 - 730mL
Carboy #4 - 910mL

Hawaii Ocean Time-series

HOT-**302**

HPLC & Chl *a*. Bottle Data Sheet

Station #	2	Date:	5/16/18 (HST)
Cast #	7	Time:	0325 (HST)
Operator(s):	AN KKB TC ML MB		

Rosette Position	Desired Depth	Carboy #	Total Volume	HPLC	Chl *a*. FCM (x2)	MB	SFS	ML
1	**1000**							
2	**Sal min**							
3	**250**							X
4	**175**	1	10	4	4			
5	**150**							X
6	**150**	2	10	6	6			
7	**135**	7	4	7	7A-B			
8	**DCM**							X
9	**DCM**					X		
10	**125**	8,9	4,4	10A-B	10			
11	**115**	10	4	11	11			
12	**100**	11	4	12	12			
13	**85**	12	4	13	13			
14	**75**	13	4	14	14			
15	**60**	14	4	15	15A-B			
16	**50**							X
17	**45**	15,16	4,4	17A-B	17			
18	**25**					X		
19	**25**	3	10	19	19			
20	**25**						X	
21	**15**					X		
22	**15**							X
23	**5**	4	10	23	23			
24	**5**						X	

Notes

Hawaii Ocean Time-series
HOT-**302**
HPLC & Chl *a*. Bottle Data Sheet

Station # 2
Cast # 7
Operator(s): AN KKB TC ML MB

Date: 5/16/18 (HST)
Time: 0325 (HST)

Rosette Position	Desired Depth	Carboy #	Total Volume	HPLC	Chl *a*. FCM (x2)	MB	SFS	ML
1	**1000**							
2	**Sal min**							
3	**250**							X
4	**175**	1	10	4	4			
5	**150**							X
6	**150**	2	10	6	6			
7	**135**	7	4	7	7A-B			
8	**DCM**							X
9	**DCM**					X		
10	**125**	8,9	4,4	10A-B	10			
11	**115**	10	4	11	11			
12	**100**	11	4	12	12			
13	**85**	12	4	13	13			
14	**75**	13	4	14	14			
15	**60**	14	4	15	15A-B			
16	**50**							X
17	**45**	15,16	4,4	17A-B	17			
18	**25**					X		
19	**25**	3	10	19	19			
20	**25**						X	
21	**15**					X		
22	**15**							X
23	**5**	4	10	23	23			
24	**5**						X	

Notes

Hawaii Ocean Time-series

HOT- **302**

Particulate Silica Data Sheet

Station #	2		Date:	5/17/18	(HST)
Cast #	8		Time:	0330	(HST)
Operator(s):	AN TC KKB	Pre-screen mesh size:		none	
Blank #	**B1, B2, B3**				

Rosette Position	Desired Depth	Carboy #	Total Volume	Sample #	SCOPE	Salts	PO	ML
1	**1000**							X
2	**1000**							X
3	**1000**							X
4	**1000**							X
5	**1000**					X		X
6	**1000**						X	
7	**1000**						X	
8	**1000**						X	
9	**1000**						X	
10	**1000**						X	
11	**1000**						X	
12	**Sal min**					X		
13	**275**				X			
14	**250**				X			
15	**225**				X			
16	**200**				X			
17	**175**	7	4	17				
18	**150**	8	4	18				
19	**125**	9,10	4,4	19A-B				
20	**100**	11	4	20				
21	**75**	12	4	21				
22	**45**	13	4	22				
23	**25**	14,15	4,4	23A-B				
24	**5**	16	4	24		X		

Notes:

Hawaii Ocean Time-series
HOT- **302**
Particulate Silica Data Sheet

Station # 2
Cast # 8
Operator(s): AN KKB TC
Blank # **B1, B2, B3**

Date: 5/17/18 (HST)
Time: 0330 (HST)
Pre-screen mesh size: none

Rosette Position	Desired Depth	Carboy #	Total Volume	Sample #	SCOPE	Salts	PO	ML
1	**1000**							X
2	**1000**							X
3	**1000**							X
4	**1000**							X
5	**1000**					X		X
6	**1000**						X	
7	**1000**						X	
8	**1000**						X	
9	**1000**						X	
10	**1000**						X	
11	**1000**						X	
12	**Sal min**					X		
13	**275**				X			
14	**250**				X			
15	**225**				X			
16	**200**				X			
17	**175**	7	4	17				
18	**150**	8	4	18				
19	**125**	9,10	4,4	19A-B				
20	**100**	11	4	20				
21	**75**	12	4	21				
22	**45**	13	4	22				
23	**25**	14,15	4,4	23A-B				
24	**5**	16	4	24		X		

Notes:

Hawaii Ocean Time-series

HOT- **302**

ATP Data Sheet

Station # 2 Date: 5/17/18 (HST)

Cast # 9 Time: 0545 (HST)

Operator(s): AN KKB TC Pre-screen mesh size: 202um

Blank #'s 28, 29, 30

Rosette Position	Desired Depth	ATP Tube #'s	Volume Filtered	Carboy #	SW/SFS	DNA	TC
1	**1020**						X
2	**1000**						X
3	**1000**						X
4	**1000**					X	
5	**770**					X	
6	**500**					X	
7	**Sal min**						
8	**400**					X	
9	**350**	1 – 3	3x2	1			
10	**300**					X	
11	**250**	4 – 6	3x2	2			
12	**150**	7 – 9	3x1	7			
13	**125**	10 – 12	3x1	8			
14	**100**	13 – 15	3x1	9			
15	**75**	16 – 18	3x1	10			
16	**45**	19 – 21	3x1	11			
17	**25**	22 – 24	3x1	12			
18	**25**				X		
19	**5**	25 - 27	3x1	13			
20	**5**				SW		
21	**5**				SW		
22	**5**				SW		
23	**5**				X		
24							

Notes:

ATP Tube 23 had 900 ml

Hawaii Ocean Time-series
HOT- **302**
ATP Data Sheet

Station # 2 Date: 5/17/18 (HST)
Cast # 9 Time: 0545 ~~0600~~ (HST)
Operator(s): AN KKB TC Pre-screen mesh size: 202um
Blank #'s 28, 29, 30

Rosette Position	Desired Depth	ATP Tube #'s	Volume Filtered	Carboy #	SW/SFS	DNA	TC
1	**1020**						X
2	**1000**						X
3	**1000**						X
4	**1000**					X	
5	**770**					X	
6	**500**					X	
7	**Sal min**						
8	**400**					X	
9	**350**	1 – 3	3x2	1			
10	**300**					X	
11	**250**	4 – 6	3x2	2			
12	**150**	7 – 9	3x1	7			
13	**125**	10 – 12	3x1	8			
14	**100**	13 – 15	3x1	9			
15	**75**	16 – 18	3x1	10			
16	**45**	19 – 21	3x1	11			
17	**25**	22 * 24	3x1	12			
18	**25**				X		
19	**5**	25 - 27	3x1	13			
20	**5**				SW		
21	**5**				SW		
22	**5**				SW		
23	**5**				X		
24							

Notes: * ATP tube 23 had 900 mL

Hawaii Ocean Time-series

HOT- **302**

OPEN Data Sheet

Station #	2	Date:	5/17/18 (HST)
Cast #	10	Time:	0745 (HST)
Operator(s):	AN CF KKB DS TC		

Rosette Position	Desired Depth	Salts	SW	SF-S	MC		
1	**1000**	X					
2	**800**		X				
3	**Sal Min**	X					
4	**400**		X	X			
5	**300**		X	X			
6	**200**		X	X			
7	**175**				X		
8	**175**		X				
9	**150**				X		
10	**150**		X	X			
11	**125**				X		
12	**125**		X	X			
13	**100**		X	X			
14	**100**				X		
15	**75**		X	X			
16	**75**				X		
17	**45**		X	X			
18	**45**				X		
19	**MLD+5**			X			
20	**MLD-5**			X			
21	**25**		X	X			
22	**25**				X		
23	**5**		X	X			
24	**5**	X			X		

Notes:

Hawaii Ocean Time-series
HOT- **302**
OPEN Data Sheet

Station # 2
Cast # 10
Operator(s): AN CF KKB DS TC

Date: 5/17/18 (HST)
Time: 745 (HST)

Rosette Position	Desired Depth	Salts	SW	SF-S	MC		
1	**1000**	X					
2	**800**		X				
3	**Sal Min**	X					
4	**400**		X	X			
5	**300**		X	X			
6	**200**		X	X			
7	**175**				X		
8	**175**		X				
9	**150**				X		
10	**150**		X	X			
11	**125**				X		
12	**125**		X	X			
13	**100**		X	X			
14	**100**				X		
15	**75**		X	X			
16	**75**				X		
17	**45**		X	X			
18	**45**				X		
19	**MLD+5**			X			
20	**MLD-5**			X			
21	**25**		X	X			
22	**25**				X		
23	**5**		X	X			
24	**5**	X			X		

Notes:

Hawaii Ocean Time-series

HOT- **302**

STATION 52 Data Sheet

Station # 52 Date: 5/17/18 (HST)

Cast # 1 Time: 1630 (HST)

Operator(s): DS AN KKB

Rosette Position	Desired Depth	DIC	pH	BG				
1	**15**			X				
2	**15**			X				
3	**15**			X				
4	**5**	4A,B	1,2,3					
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								

Notes:

Hawaii Ocean Time-series
HOT- **302**
STATION 52 Data Sheet

Station # 52
Cast # 1
Operator(s): DS AN KKB

Date: 5/17/18 (HST)
Time: 16:35 (HST)

Rosette Position	Desired Depth	DIC	pH	BG				
1	**15**			X				
2	**15**			X				
3	**15**			X				
4	**5**	4A,B	1,2,3					
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								

Notes:

Data Sheet for Sediment Trap Volumes

Cruise #: 302
Analyst: AN KKB

Directions: 1) Mark the traps with 2 lines
a) Line #1 is at the interface

Trap Name	Depth (m)	Height (cm) at Line #2 (Top Line)
A	150	40.5
B	150	38.0
C	150	38.5
D	150	39.5
E	150	37.0
F	150	37.3
G	150	35.5
H	150	42.5
I	150	34.4
J	150	39.5
K	150	38.5
L	150	38.1

Data Sheet for Sediment Trap Volumes

Cruise #: 302 - McCarthy
Analyst: AN KKB

Directions: 1) Mark the traps with 2 lines
a) Line #1 is at the interface
b) Line #2 is 2" (5 cm) above the interface
2) Siphon off the top of the trap to Line #2 - 2" above the interface
3) Measure the distance from the bottom of the trap to Line #2 2" above the interface and record the result in this table.

Trap Name	Depth (m)	Height (cm) at Line #2 (Top Line)	
A	150	37.3	
B	150	37.5	
C	150	35.5	
D	150	38.7	
E	150	40.5	
F	150	38.1	
G	150	38.1	
H	150	38.1	
I	150	40.1	
J	150	34.6	
K	150	36.7	
L	150	35.0	

Data Sheet for Sediment Trap Volumes

Cruise #: 302
Analyst: AN, KKB

Directions: 1) Mark the traps with 2 lines
a) Line #1 is at the interface

Trap Name	Depth (m)	Height (cm) at Line #2 (Top Line)
A	150	40.5
B	150	38.0
C	150	38.5
D	150	39.5
E	150	37.0
F	150	37.3
G	150	35.5
H	150	42.5
I	150	34.4
J	150	39.5
K	150	38.5
L	150	38.1

Data Sheet for Sediment Trap Volumes

Cruise #: 302 - McCarthy
Analyst: AN, KKB

Directions: 1) Mark the traps with 2 lines
a) Line #1 is at the interface
b) Line #2 is 2" (5 cm) above the interface
2) Siphon off the top of the trap to Line #2 - 2" above the interface
3) Measure the distance from the bottom of the trap to Line #2 2" above the interface and record the result in this table.

Trap Name	Depth (m)	Height (cm) at Line #2 (Top Line)	
A	150	37.3	
B	150	37.5	
C	150	35.5	
D	150	38.7	
E	150	40.5	
F	150	38.1	
G	150	38.1	
H	150	38.1	
I	150	40.1	
J	150	34.6	
K	150	36.7	
L	150	35.0	

Hawaii Ocean Time-series
HOT-302 Sediment Trap Data Sheet

Type of traps: PIT
Operator(s): AN TC KKB BW
Position in: 22 43.044' 158 00.9164

Date: 5/15/18
Wind: 10-15 kts
Sea State: 3-5'

Time in: 150 m HOT- 0547
(HST) McCarthy- 0547

Time released: 0558
Time started: 0524

Operator(s): AN TC KKB BW
Position out: 22 42.1208 158 00.4793
Overall sea state:

Date: 5/16/18
Wind: 10 kts
2-3'
Sea state:

Time Out: 150 m 0618
(HST)

Notes: Recovery started at 0600

Hawaii Ocean Time-series
HOT-302 Sediment Trap Data Sheet

Type of traps: PIT
Operator(s): AN TC BW KB
Position in: 22° 43.044' 158° 00.9164

Date: 5/15/18
Wind: 10-15 kts
Sea State: 3-4'
Start at 5:24

Time in: HOT 150 m 5:47
(HST) McCarthy 150m 5:47

Time released: 05:58

Operator(s): AN TC BW KKB
Position out: 22°42.1208' 158°00.4793
Overall sea state:

Date: 5/16/18
Wind: 10-15 kts
Sea state: 4-5'

Time Out: 150 m out at 0618
(HST)

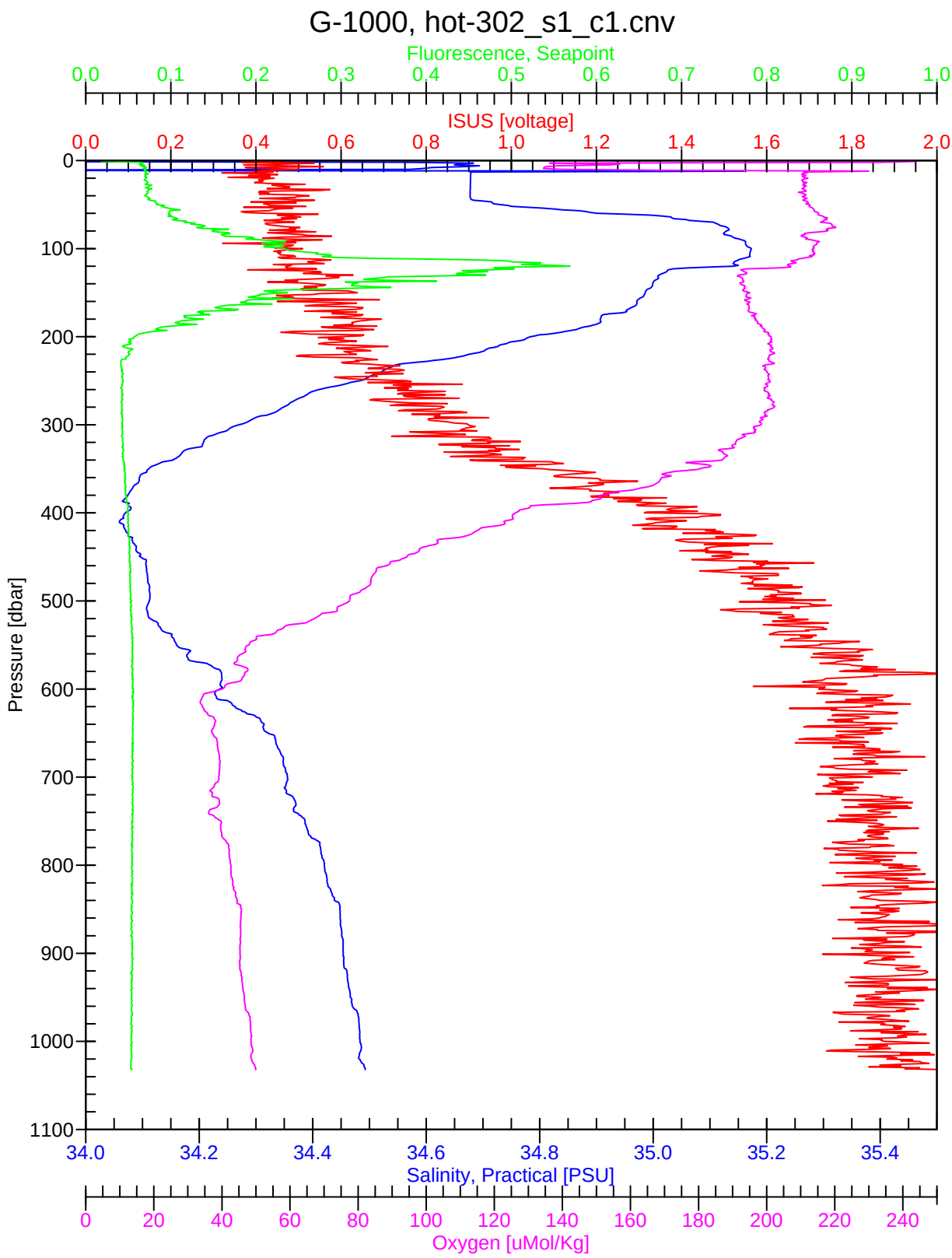
Notes:

Had to recover early Start at 0600

Hawaii Ocean Time-series
HOT 302
Chlorophyll Grab Sample Sheet

Date	Time (HST)	Location	GS #
5/15	0026	TRANSIT	1
5/15	0618	Hahn	2
5/15	1218	ALOHA	3
5/15	2012	"	4
5/16	0658	ALOHA	5
5/16	20:35	Transit	6

0.990
0.975
1.01
0.94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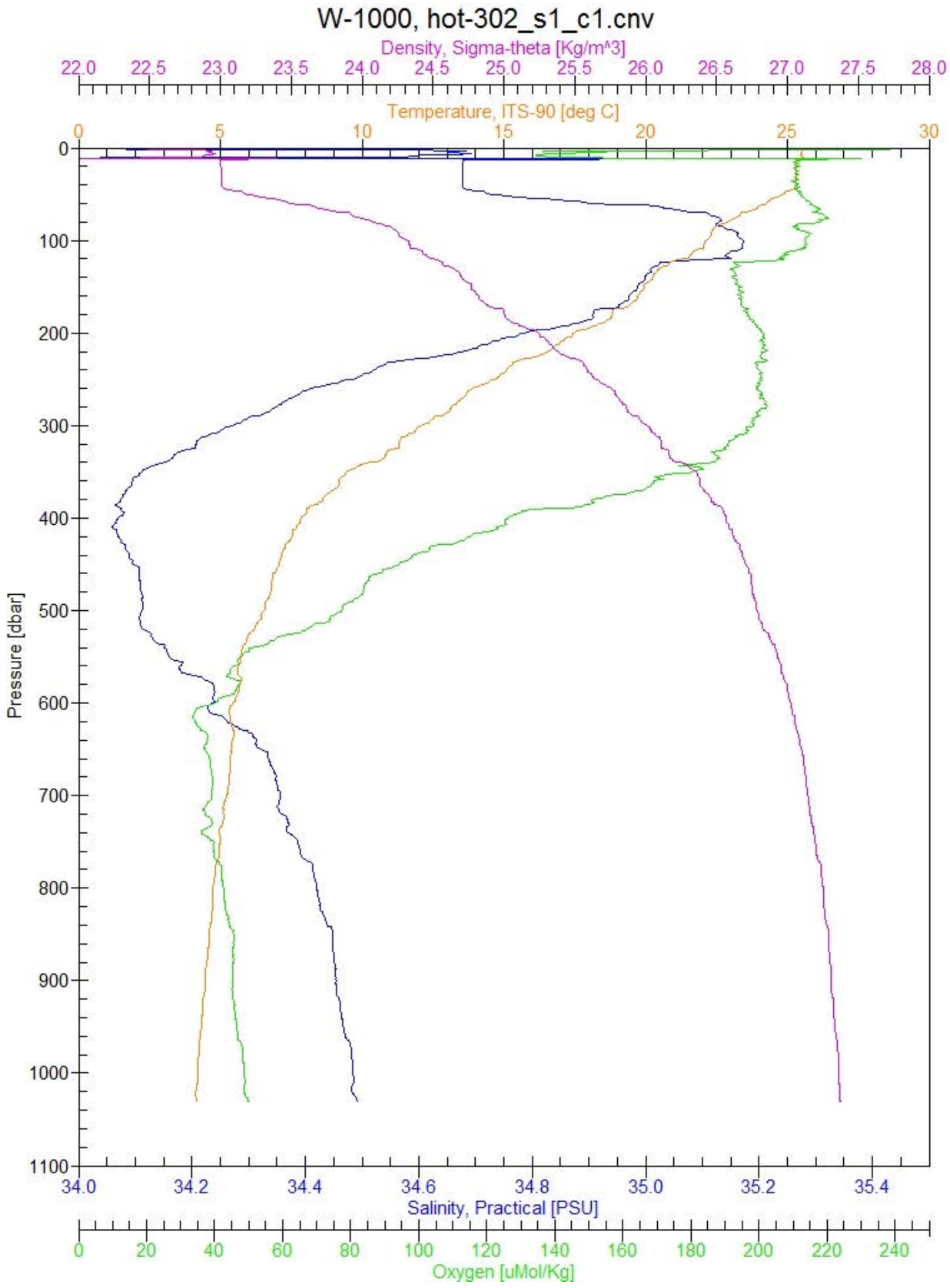
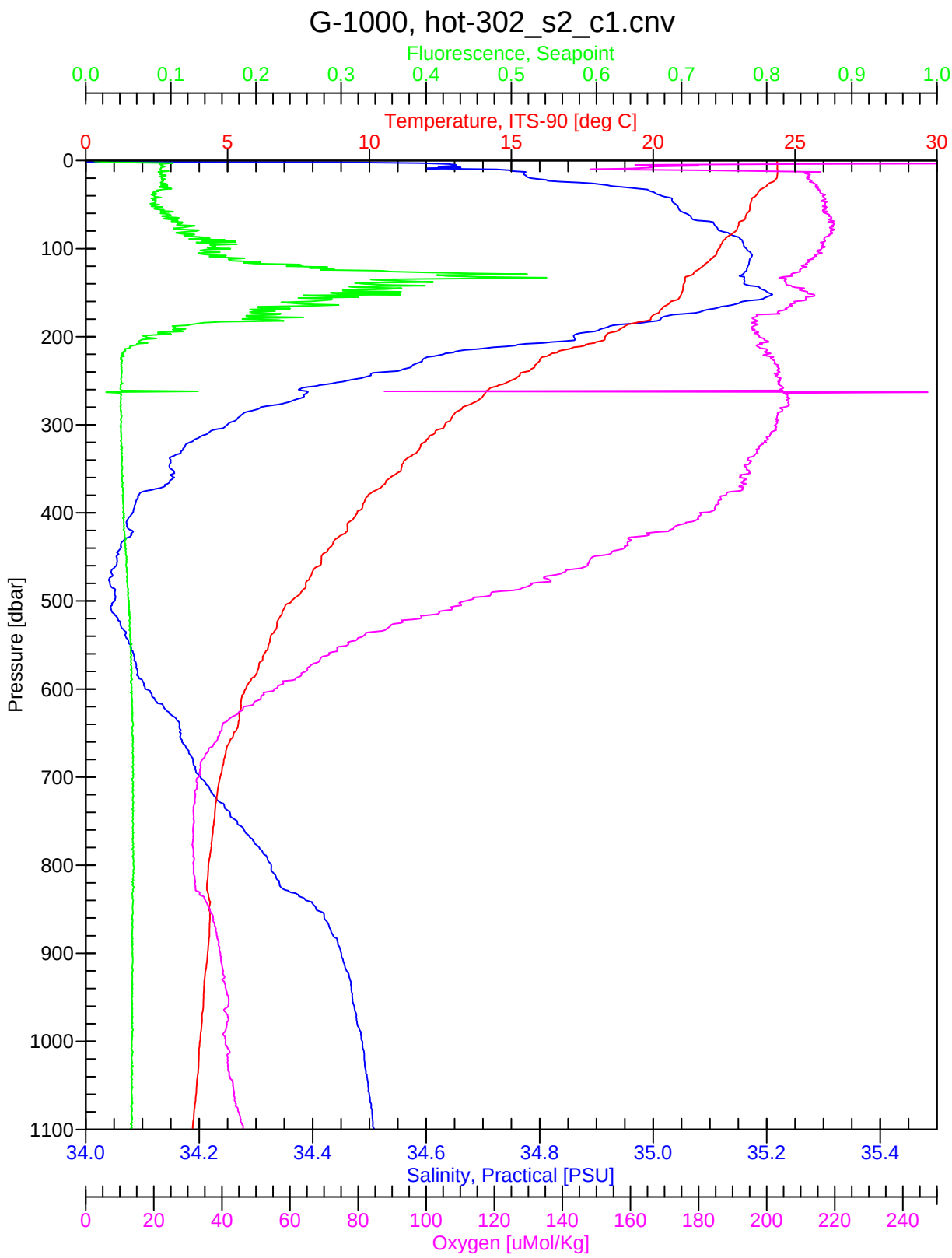
Fluorescence, Seapoint
0.0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
ISUS [voltage]
0.0 0.2 0.4 0.6 0.8 1.0 1.2 1.4 1.6 1.8 2.0
Pressure [dbar]
0 100 200 300 400 500 600 700 800 900 1000 1100
34.0 34.2 34.4 34.6 34.8 35.0 35.2 35.4
Salinity, Practical [PSU]
0 20 40 60 80 100 120 140 160 180 200 220 240
Oxygen [uMol/Kg]


W-1000, hot-302_s1_c1.cnv
Density, Sigma-theta [Kg/m^3]
22.0 22.5 23.0 23.5 24.0 24.5 25.0 25.5 26.0 26.5 27.0 27.5 28.0
Temperature, ITS-90 [deg C]
0 5 10 15 20 25 30
Pressure [dbar]
0 100 200 300 400 500 600 700 800 900 1000 1100
34.0 34.2 34.4 34.6 34.8 35.0 35.2 35.4
Salinity, Practical [PSU]
0 20 40 60 80 100 120 140 160 180 200 220 240
Oxygen [uMol/Kg]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Fluorescence, Seapoint
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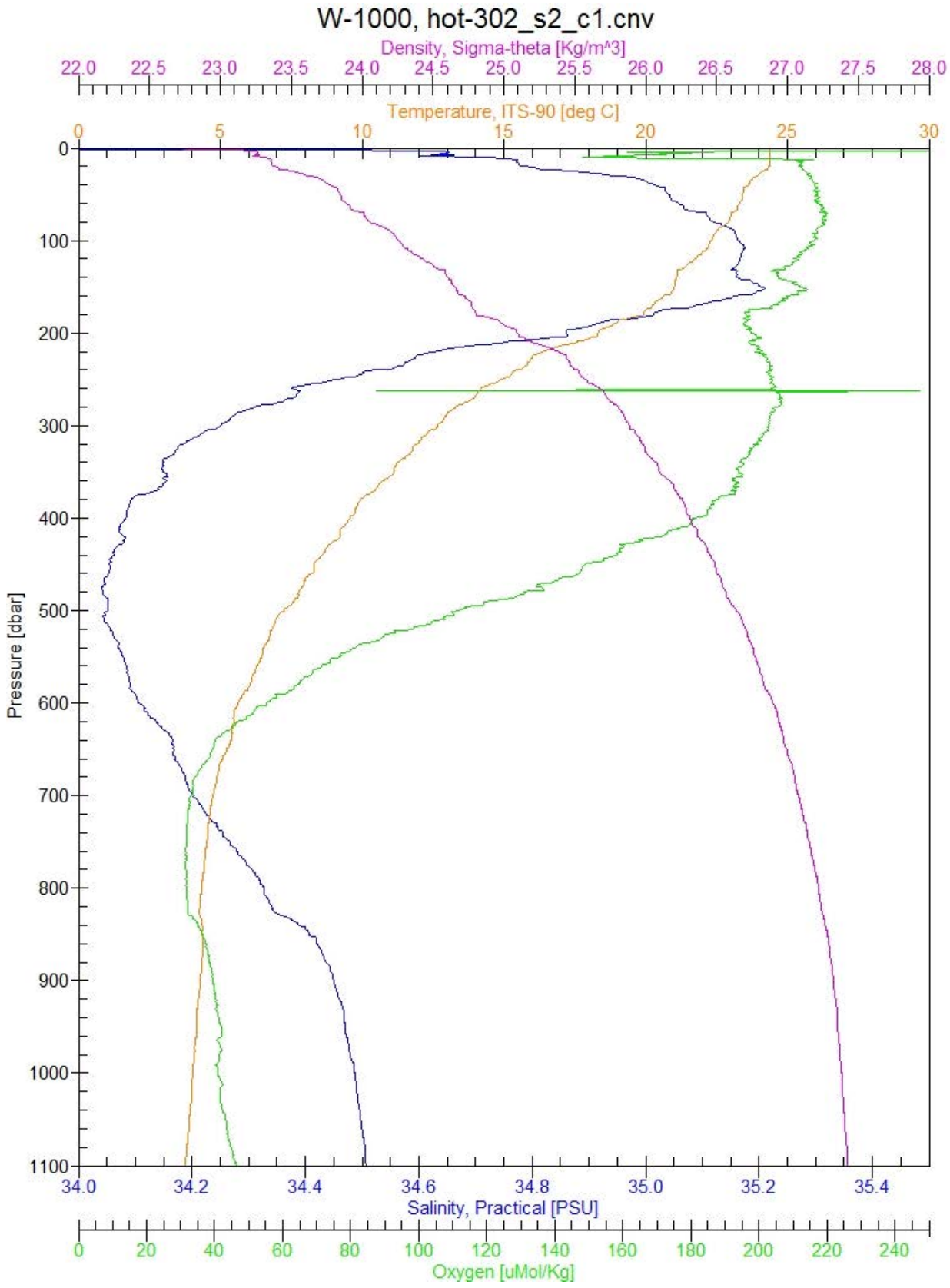
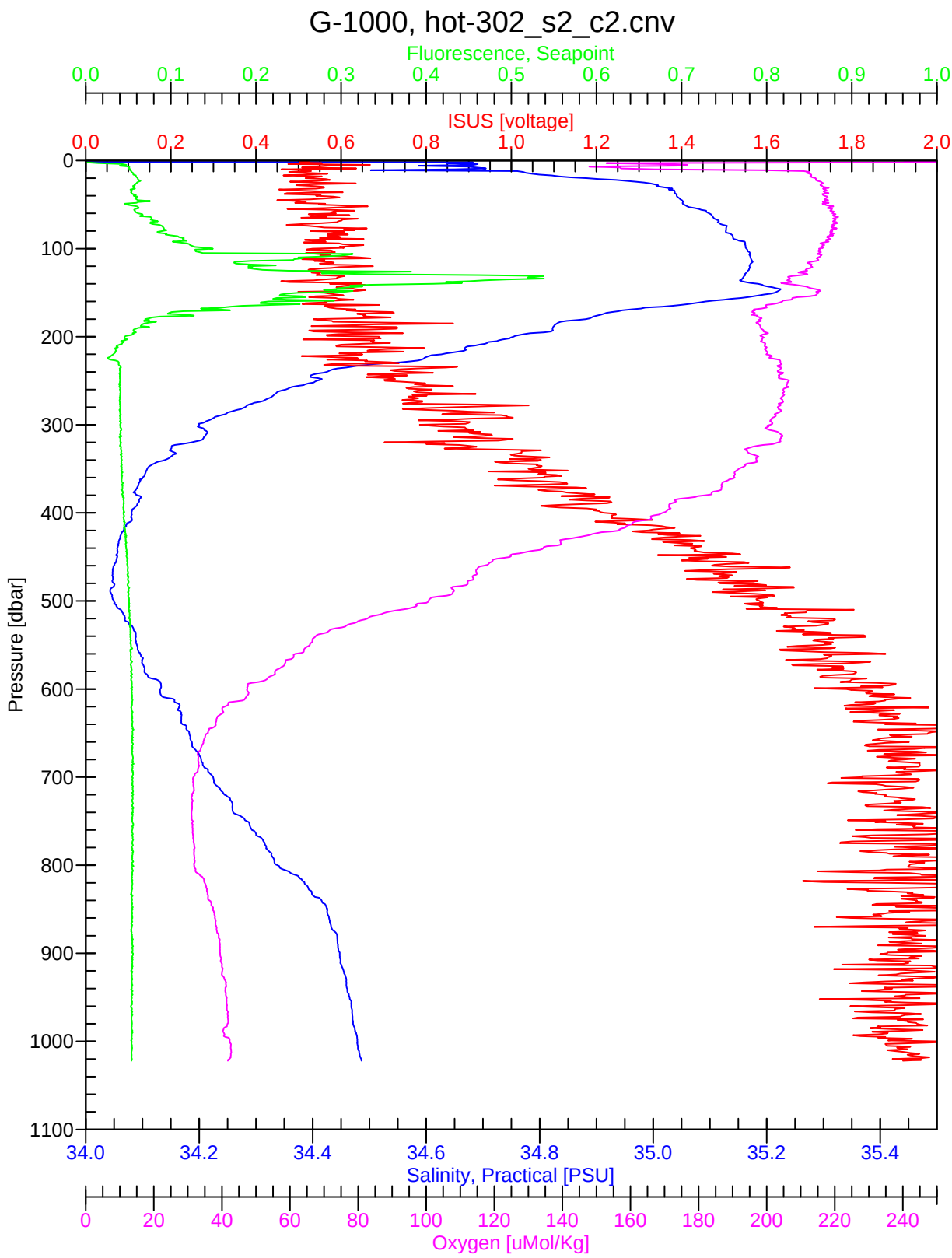
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
Temperature, ITS-90 [deg C]
0
5
10
15
20
25
30
Pressure [dbar]
0
100
200
300
400
500
600
700
800
900
1000
1100
34.0
34.2
34.4
34.6
34.8
35.0
35.2
35.4
Salinity, Practical [PSU]
0
20
40
60
80
100
120
140
160
180
200
220
240
Oxygen [uMol/Kg]


W-1000, hot-302_s2_c1.cnv
Density, Sigma-theta [Kg/m^3]
22.0 22.5 23.0 23.5 24.0 24.5 25.0 25.5 26.0 26.5 27.0 27.5 28.0
Temperature, ITS-90 [deg C]
0 5 10 15 20 25 30
Pressure [dbar]
0 100 200 300 400 500 600 700 800 900 1000 1100
34.0 34.2 34.4 34.6 34.8 35.0 35.2 35.4
Salinity, Practical [PSU]
0 20 40 60 80 100 120 140 160 180 200 220 240
Oxygen [uMol/Kg]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Fluorescence, Seapoint
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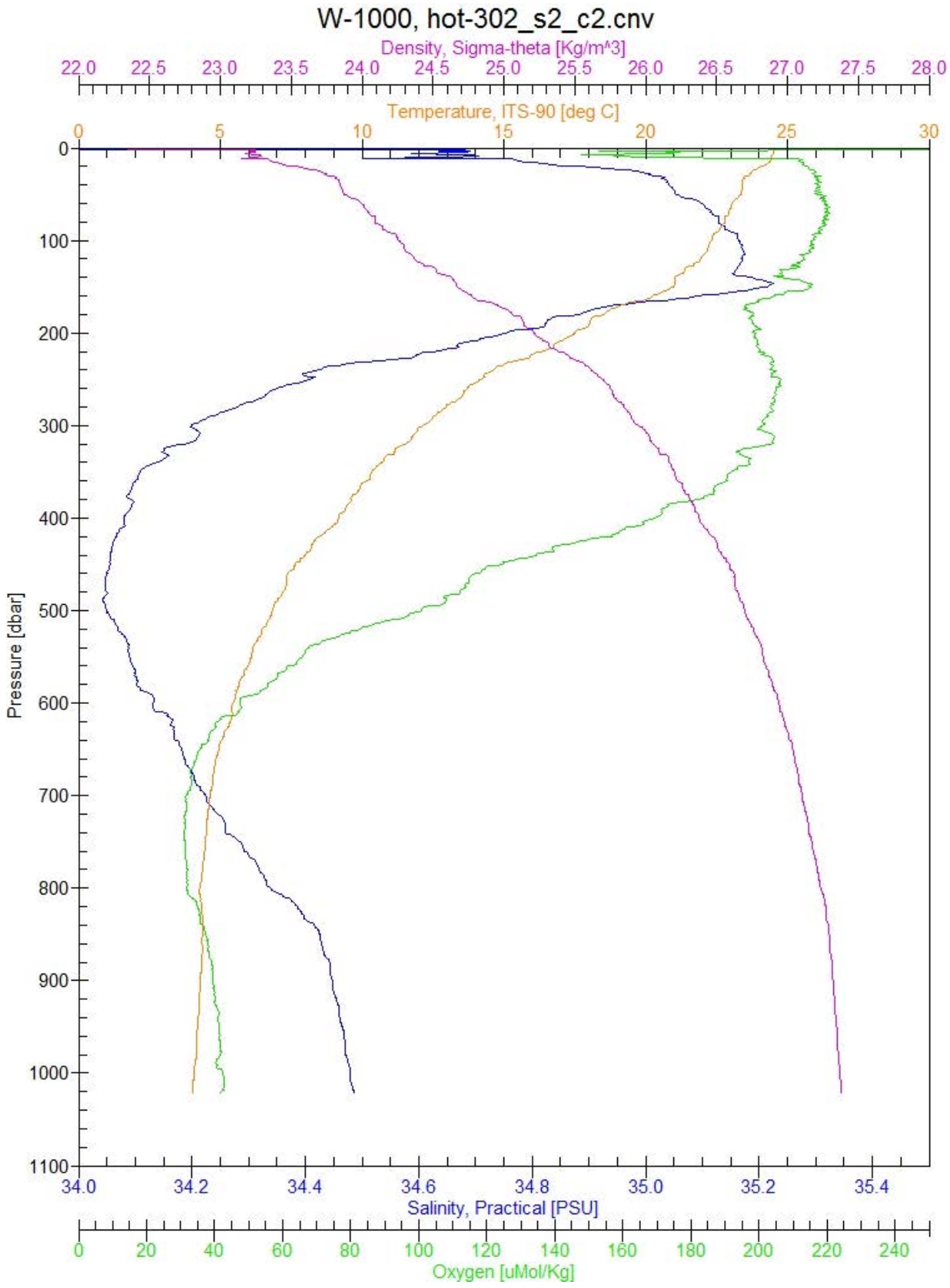
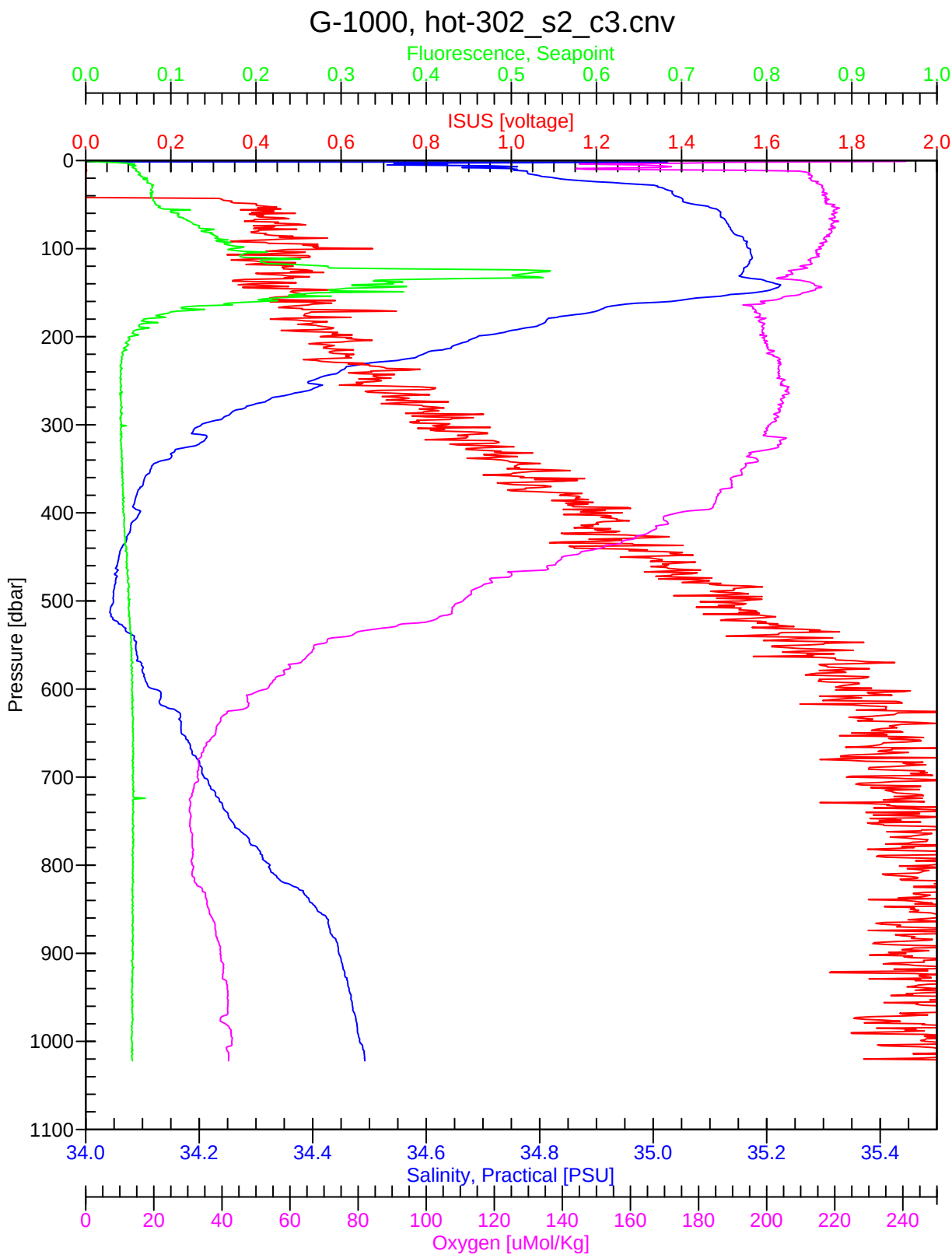
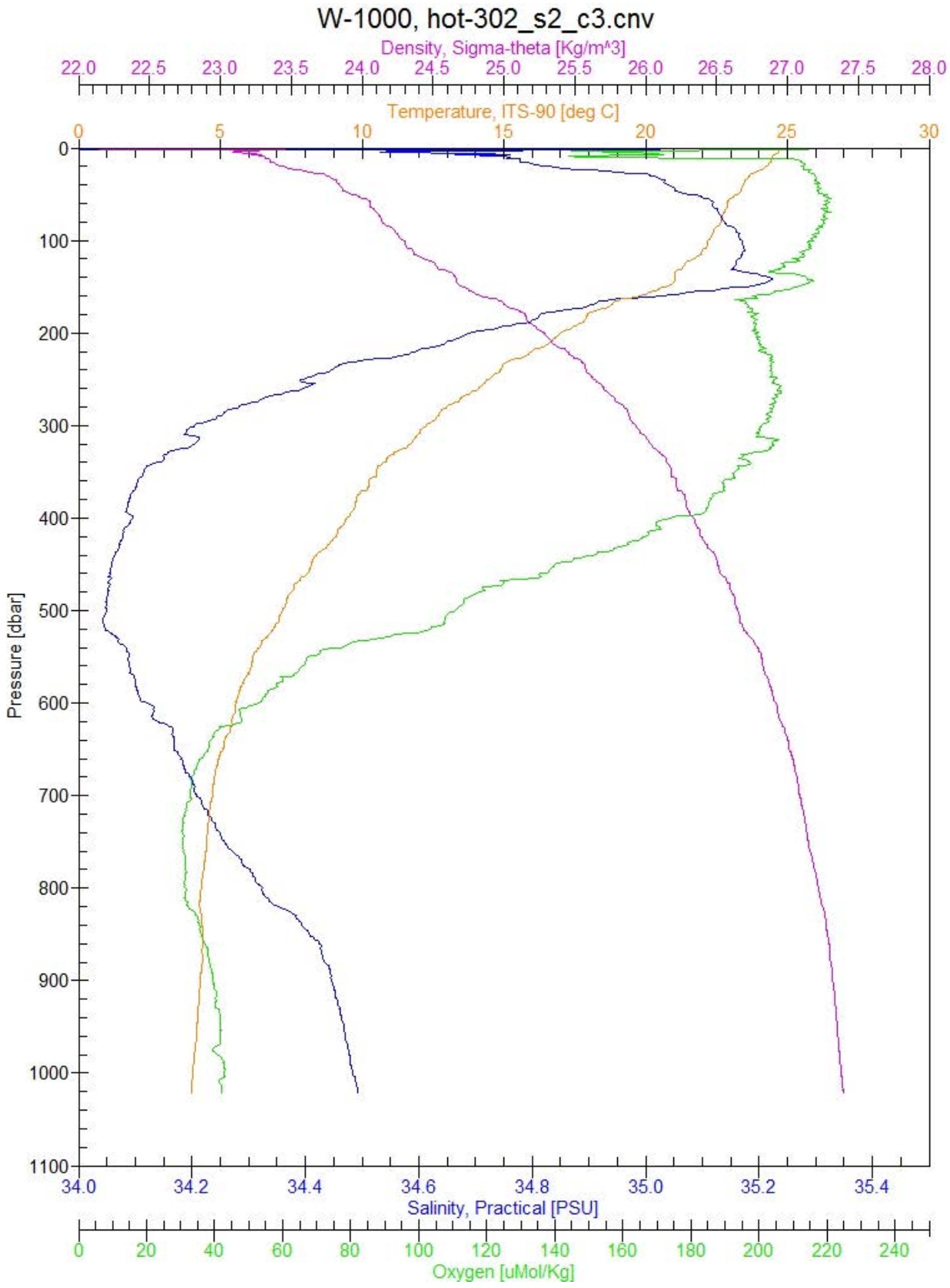
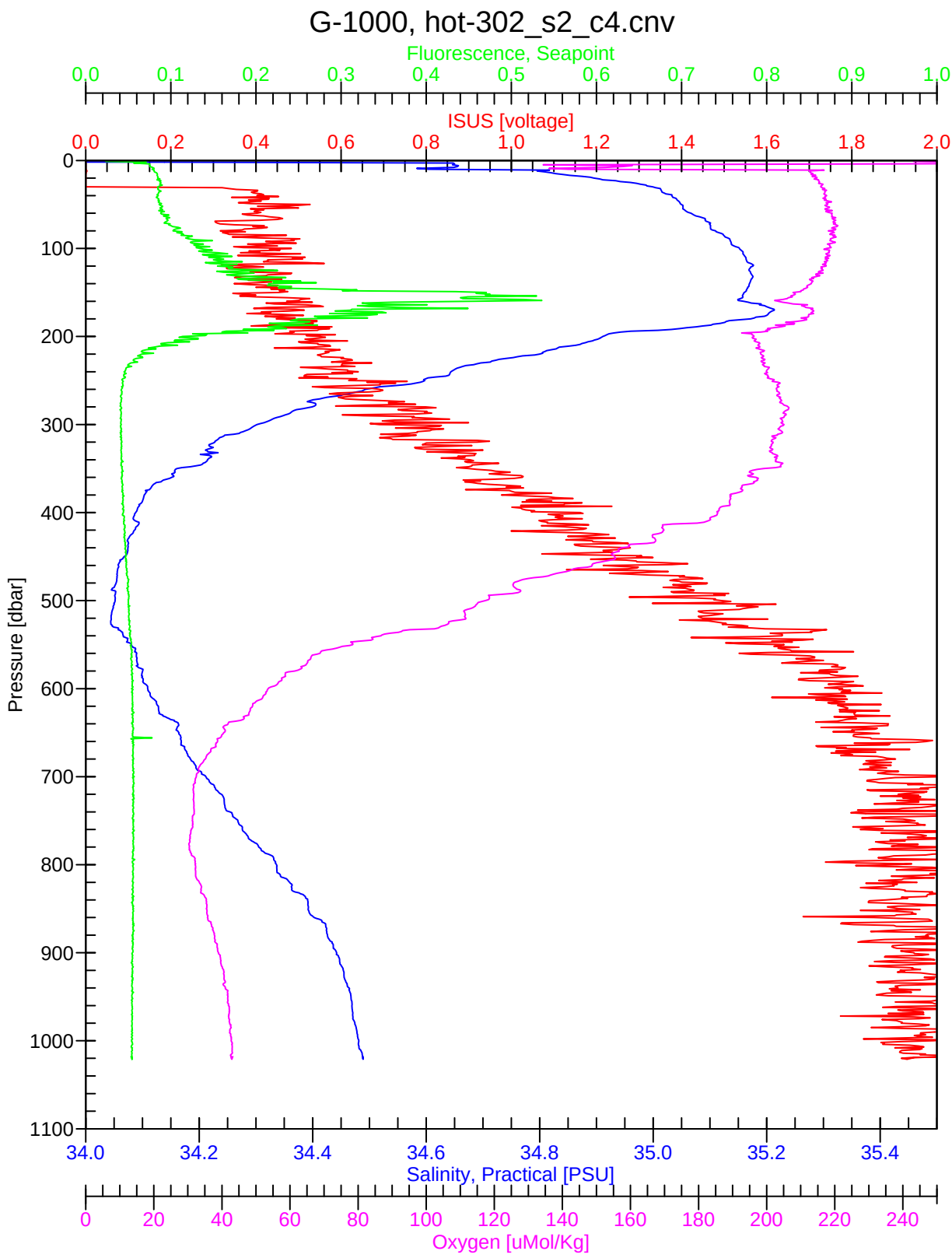
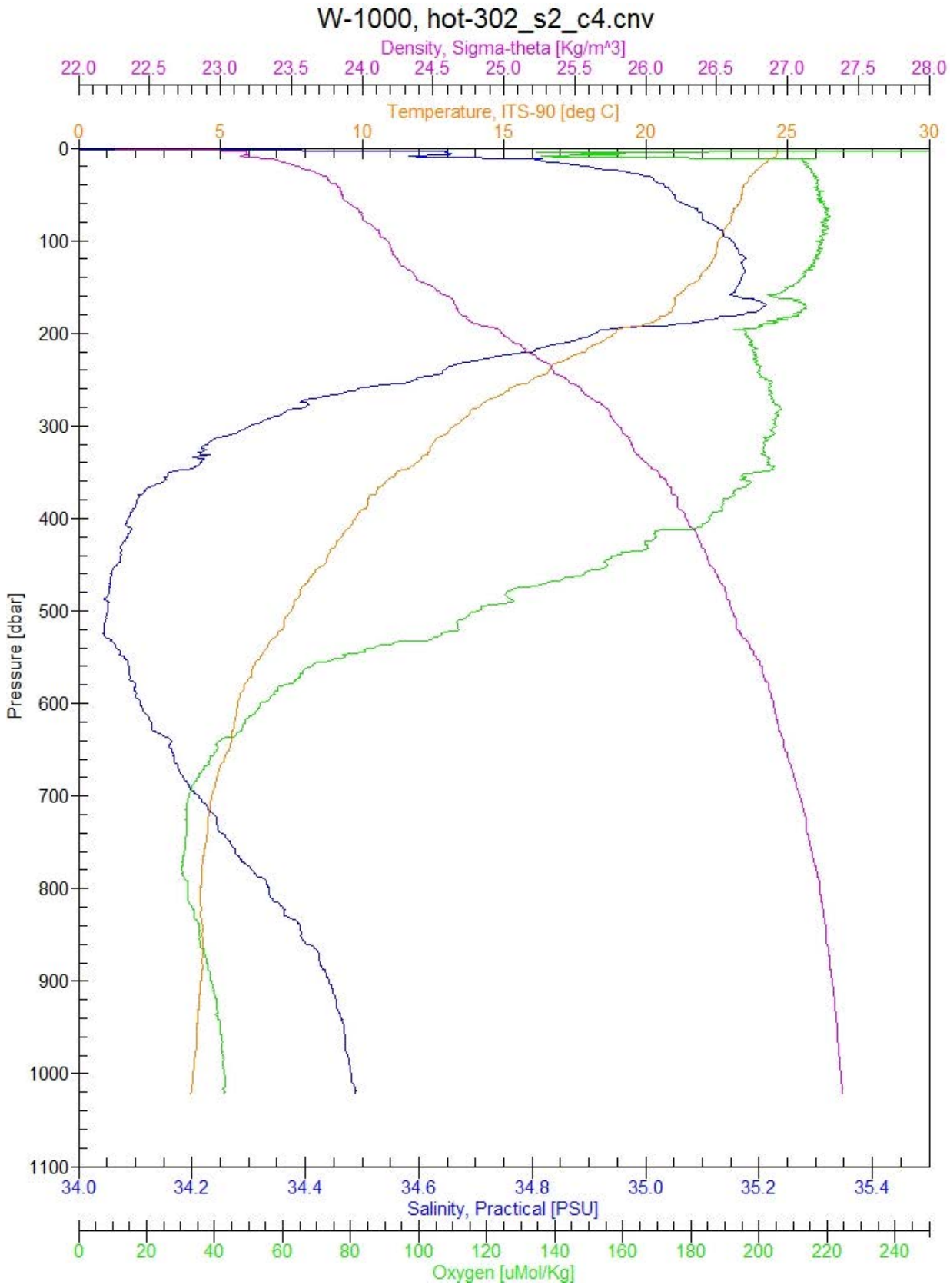
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
ISUS [voltage]
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1.8
2.0
Pressure [dbar]
0
100
200
300
400
500
600
700
800
900
1000
1100
34.0
34.2
34.4
34.6
34.8
35.0
35.2
35.4
Salinity, Practical [PSU]
0
20
40
60
80
100
120
140
160
180
200
220
240
Oxygen [uMol/Kg]

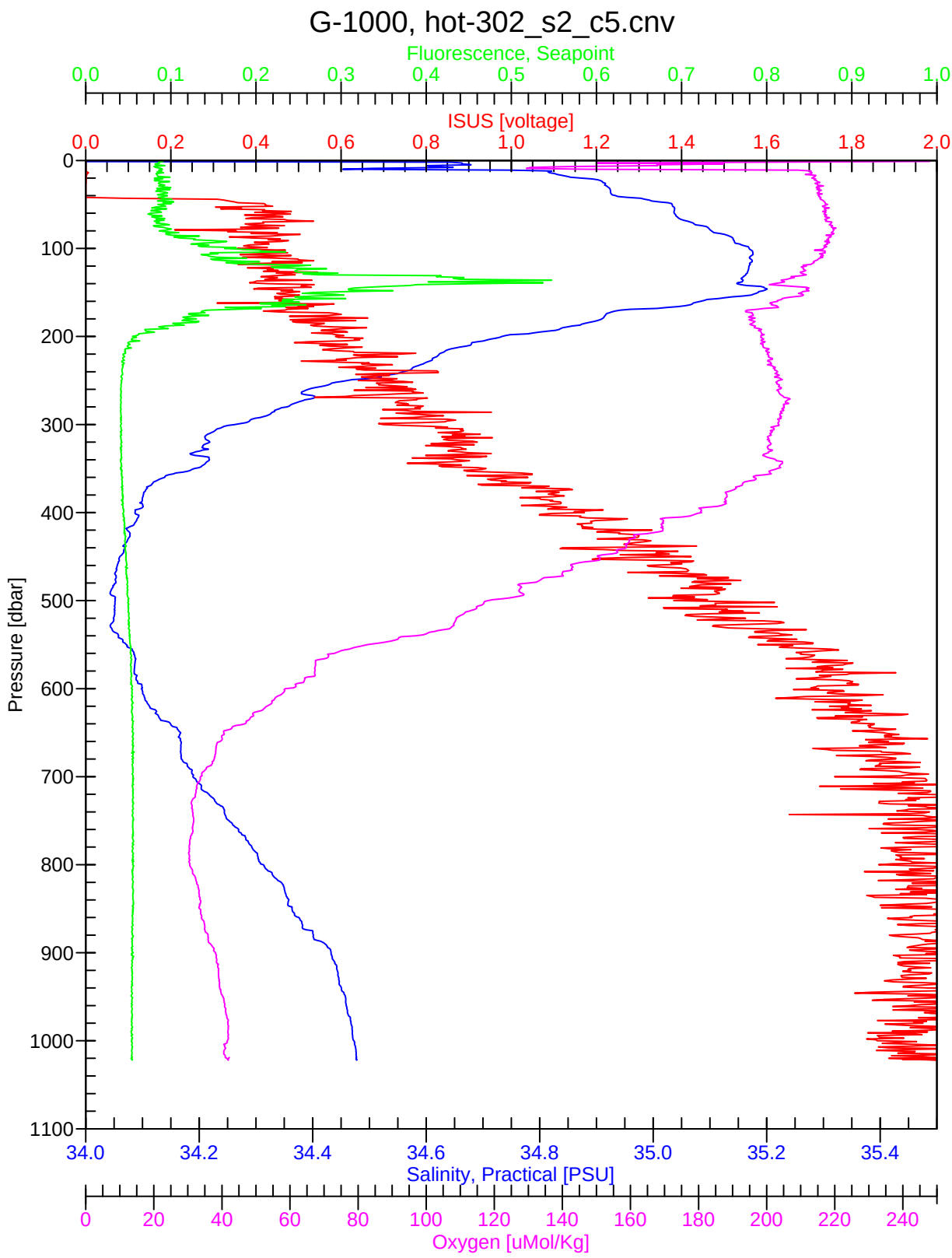

W-1000, hot-302_s2_c2.cnv
Density, Sigma-theta [Kg/m^3]
22.0 22.5 23.0 23.5 24.0 24.5 25.0 25.5 26.0 26.5 27.0 27.5 28.0
Temperature, ITS-90 [deg C]
0 5 10 15 20 25 30
Pressure [dbar]
0 100 200 300 400 500 600 700 800 900 1000 1100
Salinity, Practical [PSU]
34.0 34.2 34.4 34.6 34.8 35.0 35.2 35.4
Oxygen [uMol/Kg]
0 20 40 60 80 100 120 140 160 180 200 220 240

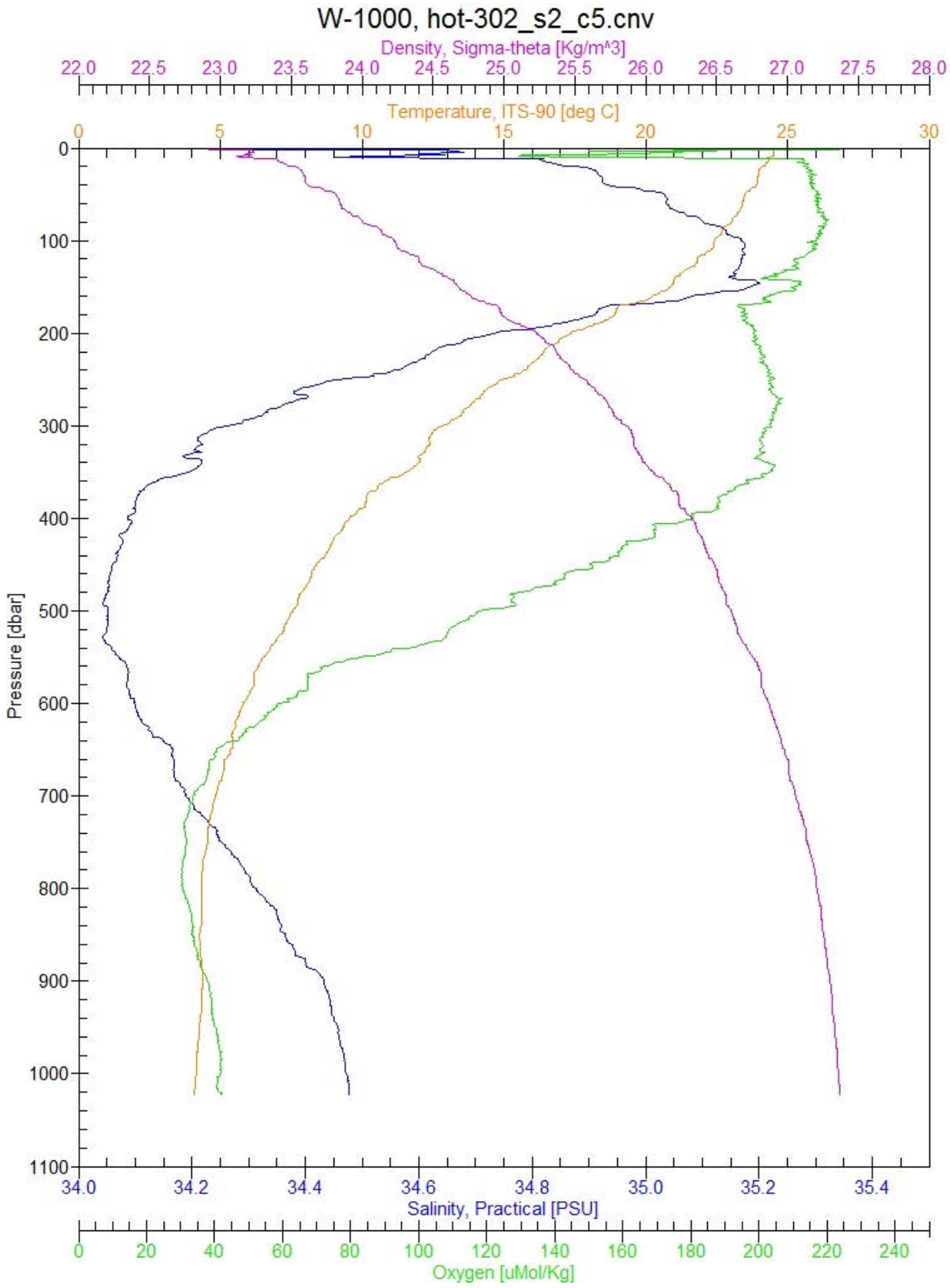

G-1000, hot-302_s2_c3.cnv
Fluorescence, Seapoint
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
ISUS [voltage]
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1.8
2.0
Pressure [dbar]
0
100
200
300
400
500
600
700
800
900
1000
1100
34.0
34.2
34.4
34.6
34.8
35.0
35.2
35.4
Salinity, Practical [PSU]
0
20
40
60
80
100
120
140
160
180
200
220
240
Oxygen [uMol/Kg]

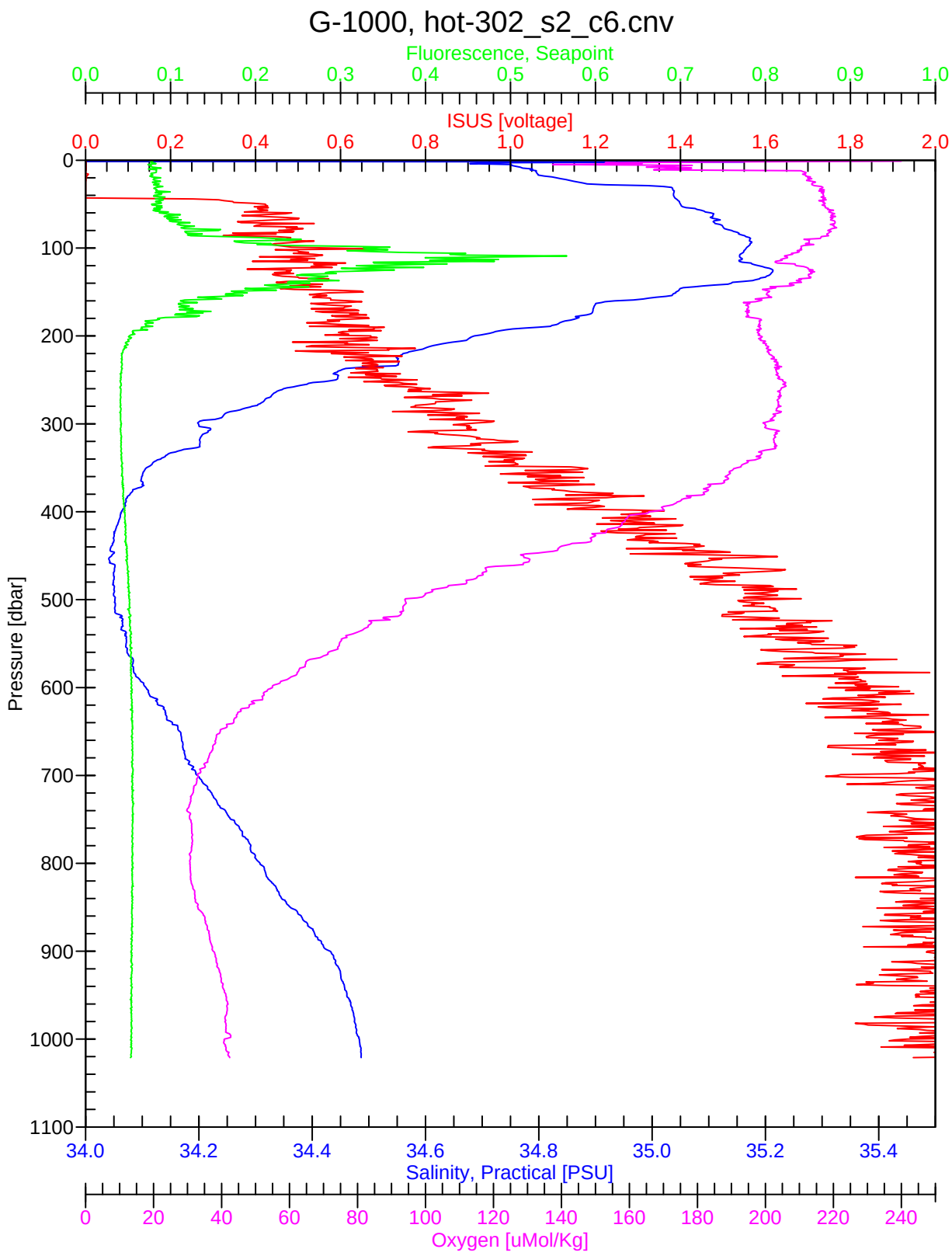

W-1000, hot-302_s2_c3.cnv
Density, Sigma-theta [Kg/m^3]
22.0 22.5 23.0 23.5 24.0 24.5 25.0 25.5 26.0 26.5 27.0 27.5 28.0
Temperature, ITS-90 [deg C]
0 5 10 15 20 25 30
Pressure [dbar]
0 100 200 300 400 500 600 700 800 900 1000 1100
Salinity, Practical [PSU]
34.0 34.2 34.4 34.6 34.8 35.0 35.2 35.4
Oxygen [uMol/Kg]
0 20 40 60 80 100 120 140 160 180 200 220 240

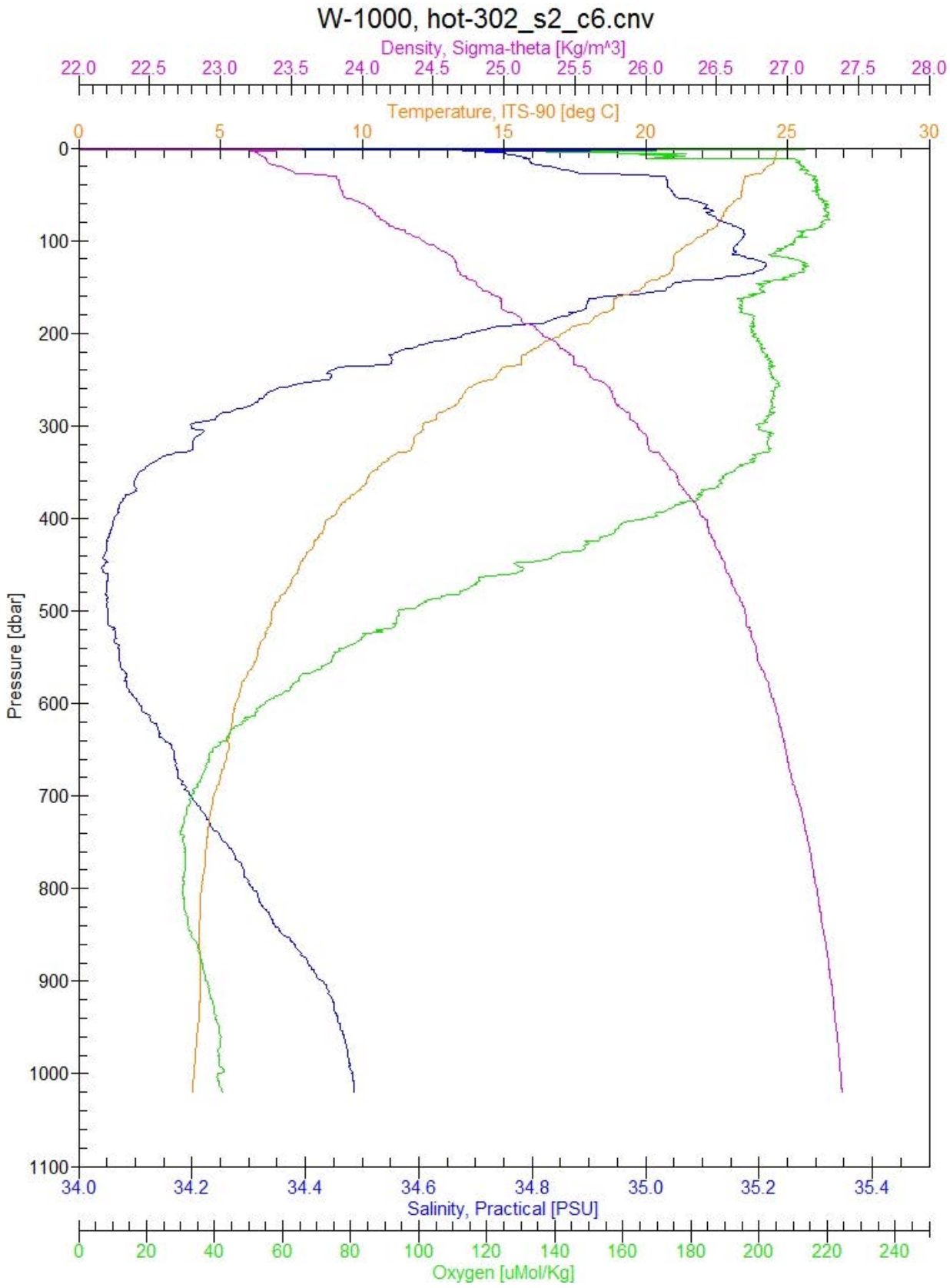

G-1000, hot-302_s2_c4.cnv
Fluorescence, Seapoint
0.0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
ISUS [voltage]
0.0 0.2 0.4 0.6 0.8 1.0 1.2 1.4 1.6 1.8 2.0
Pressure [dbar]
0 100 200 300 400 500 600 700 800 900 1000 1100
34.0 34.2 34.4 34.6 34.8 35.0 35.2 35.4
Salinity, Practical [PSU]
0 20 40 60 80 100 120 140 160 180 200 220 240
Oxygen [uMol/Kg]

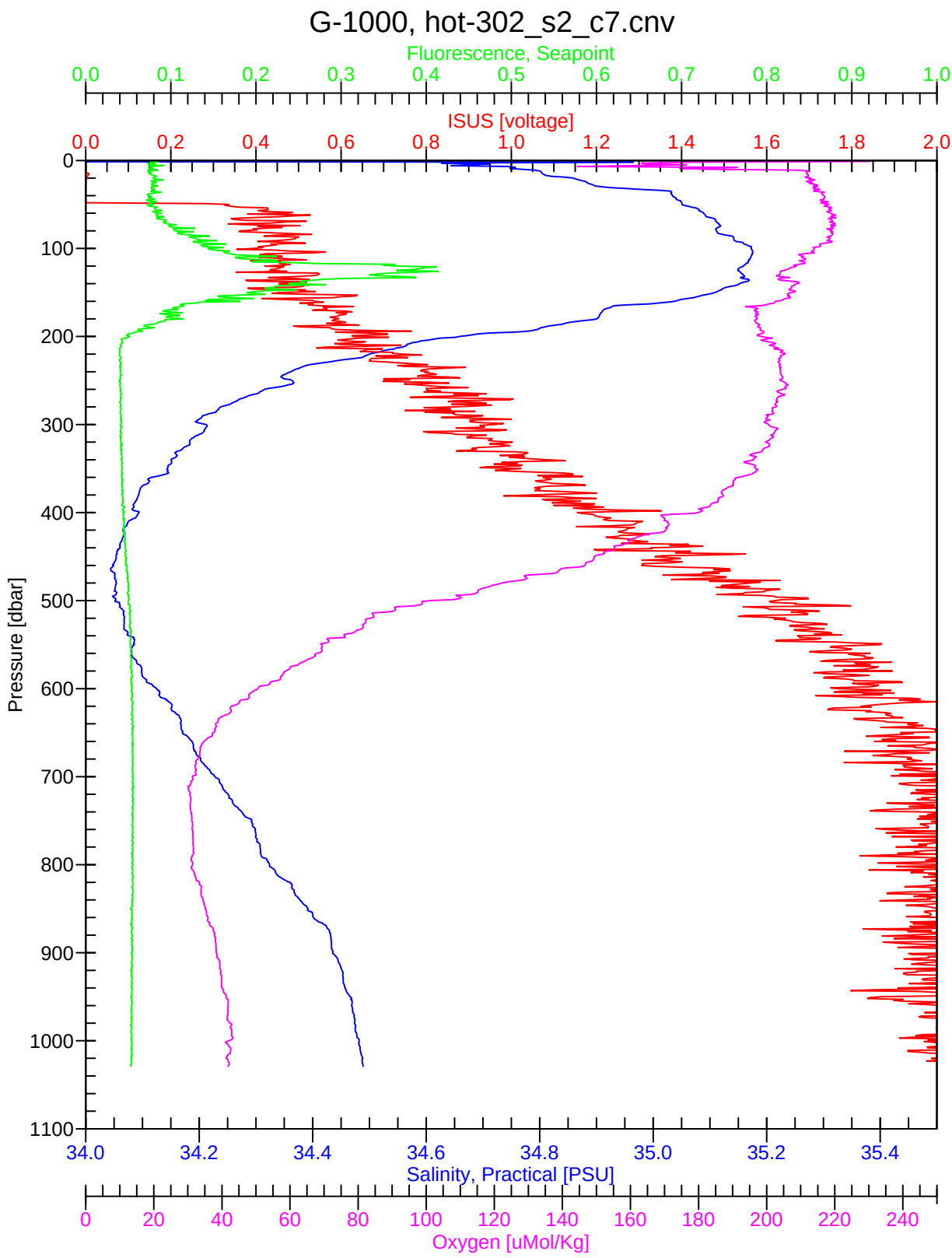

W-1000, hot-302_s2_c4.cnv
Density, Sigma-theta [Kg/m^3]
22.0 22.5 23.0 23.5 24.0 24.5 25.0 25.5 26.0 26.5 27.0 27.5 28.0
Temperature, ITS-90 [deg C]
0 5 10 15 20 25 30
Pressure [dbar]
0 100 200 300 400 500 600 700 800 900 1000 1100
34.0 34.2 34.4 34.6 34.8 35.0 35.2 35.4
Salinity, Practical [PSU]
0 20 40 60 80 100 120 140 160 180 200 220 240
Oxygen [uMol/Kg]

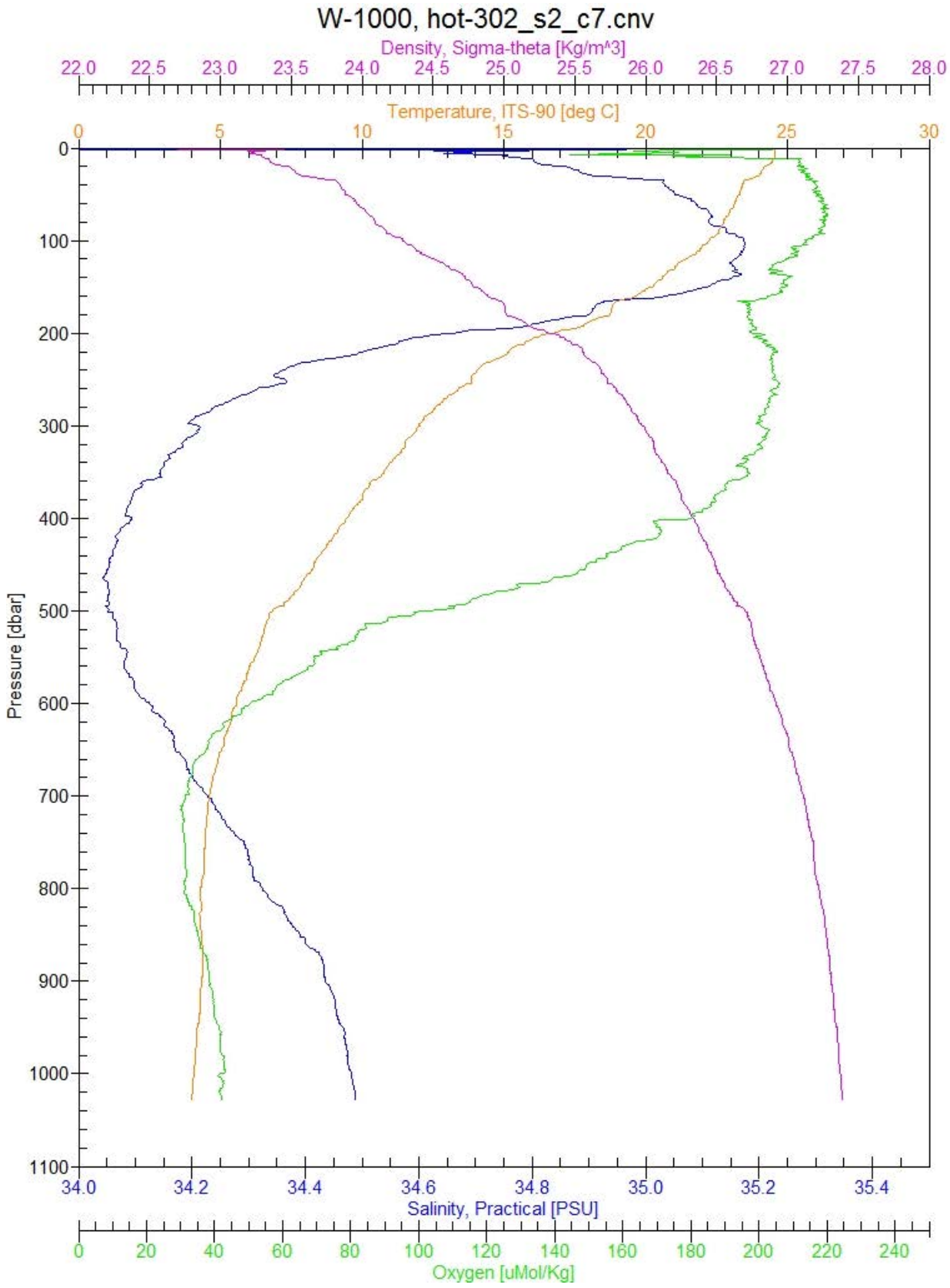

G-1000, hot-302_s2_c5.cnv
Fluorescence, Seapoint
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
ISUS [voltage]
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1.8
2.0
Pressure [dbar]
0
100
200
300
400
500
600
700
800
900
1000
1100
34.0
34.2
34.4
34.6
34.8
35.0
35.2
35.4
Salinity, Practical [PSU]
0
20
40
60
80
100
120
140
160
180
200
220
240
Oxygen [uMol/Kg]

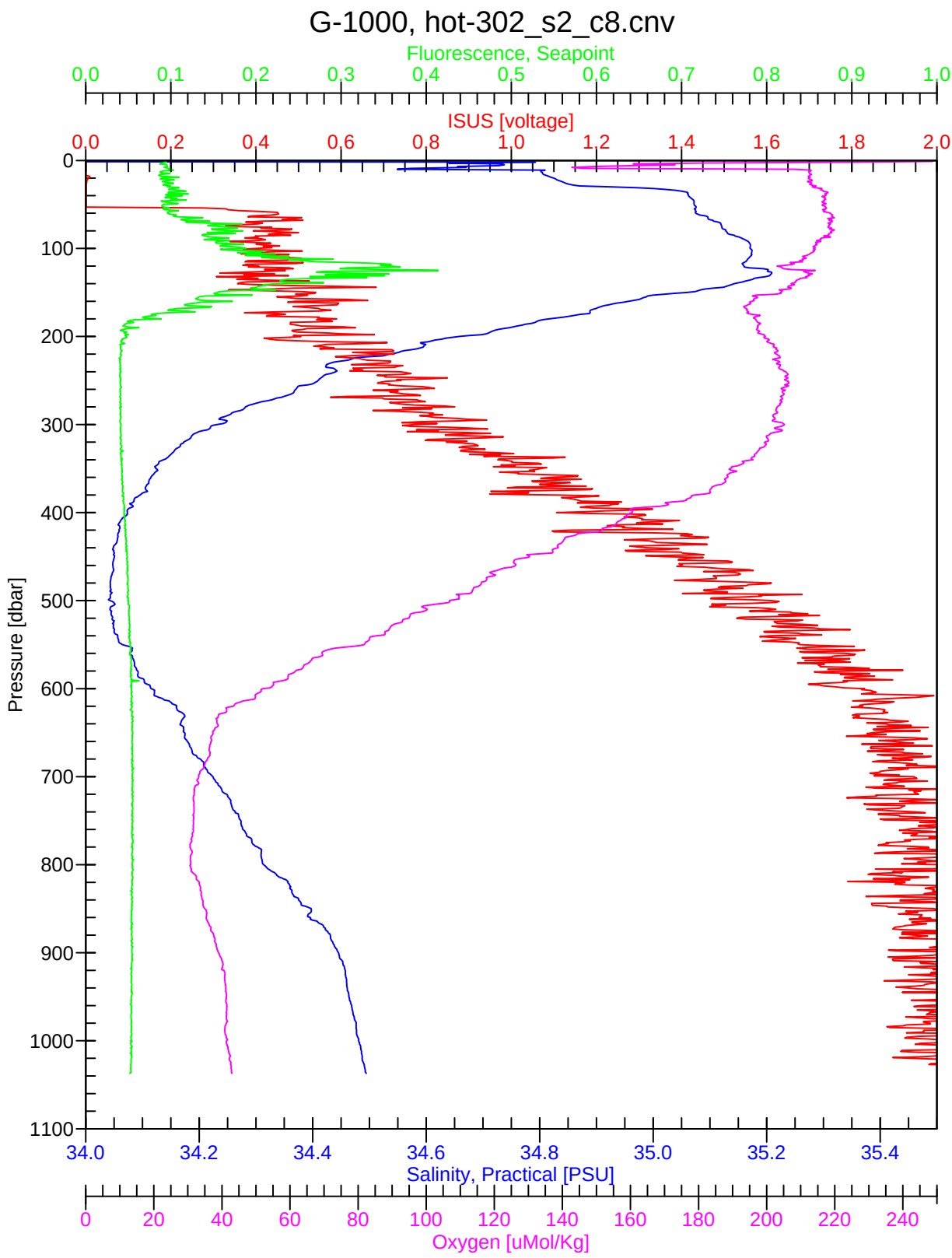

W-1000, hot-302_s2_c5.cnv
Density, Sigma-theta [Kg/m^3]
22.0 22.5 23.0 23.5 24.0 24.5 25.0 25.5 26.0 26.5 27.0 27.5 28.0
Temperature, ITS-90 [deg C]
0 5 10 15 20 25 30
Pressure [dbar]
0 100 200 300 400 500 600 700 800 900 1000 1100
34.0 34.2 34.4 34.6 34.8 35.0 35.2 35.4
Salinity, Practical [PSU]
0 20 40 60 80 100 120 140 160 180 200 220 240
Oxygen [uMol/Kg]

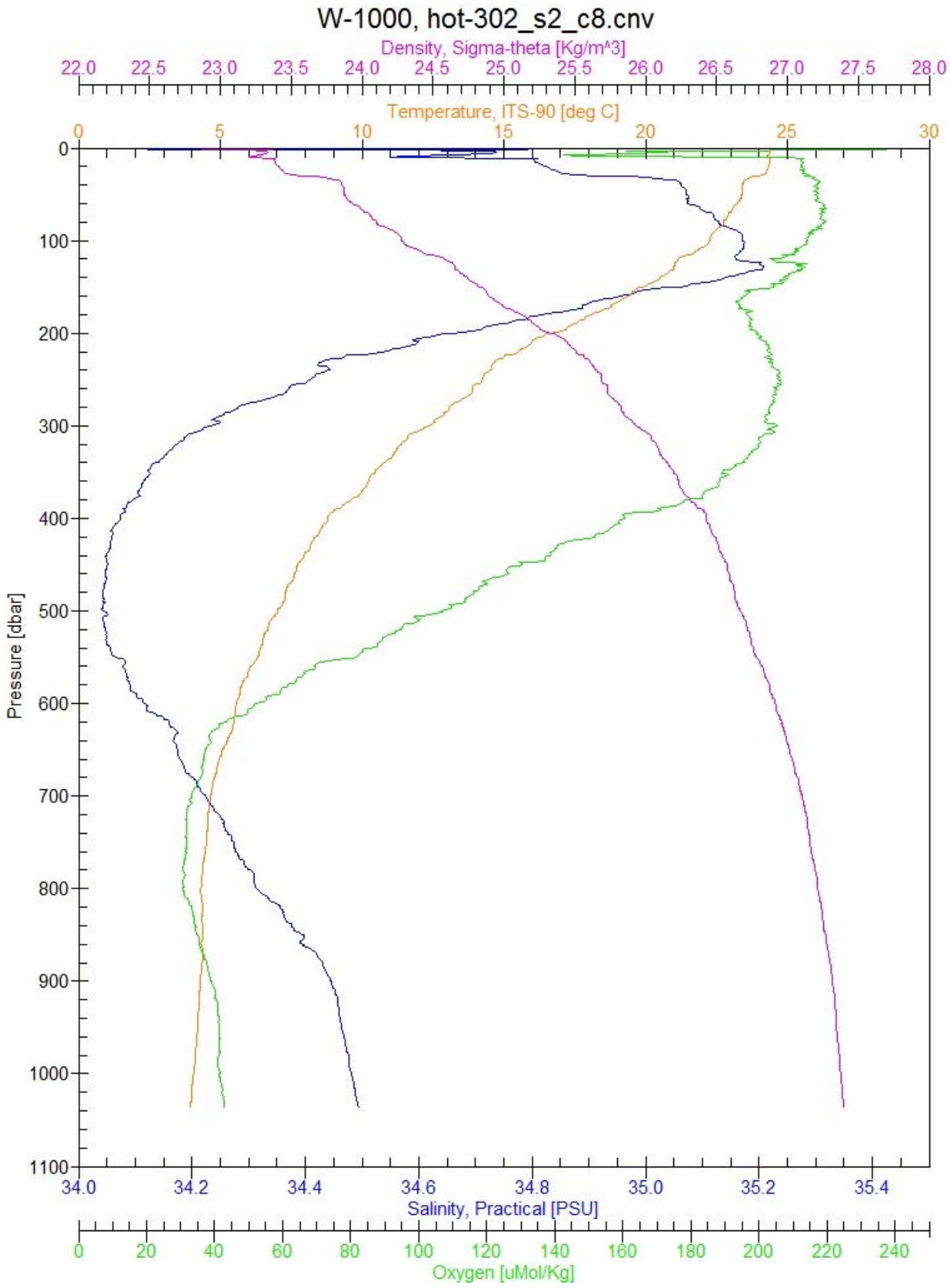

G-1000, hot-302_s2_c6.cnv
Fluorescence, Seapoint
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
ISUS [voltage]
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1.8
2.0
Pressure [dbar]
0
100
200
300
400
500
600
700
800
900
1000
1100
34.0
34.2
34.4
34.6
34.8
35.0
35.2
35.4
Salinity, Practical [PSU]
0
20
40
60
80
100
120
140
160
180
200
220
240
Oxygen [uMol/Kg]

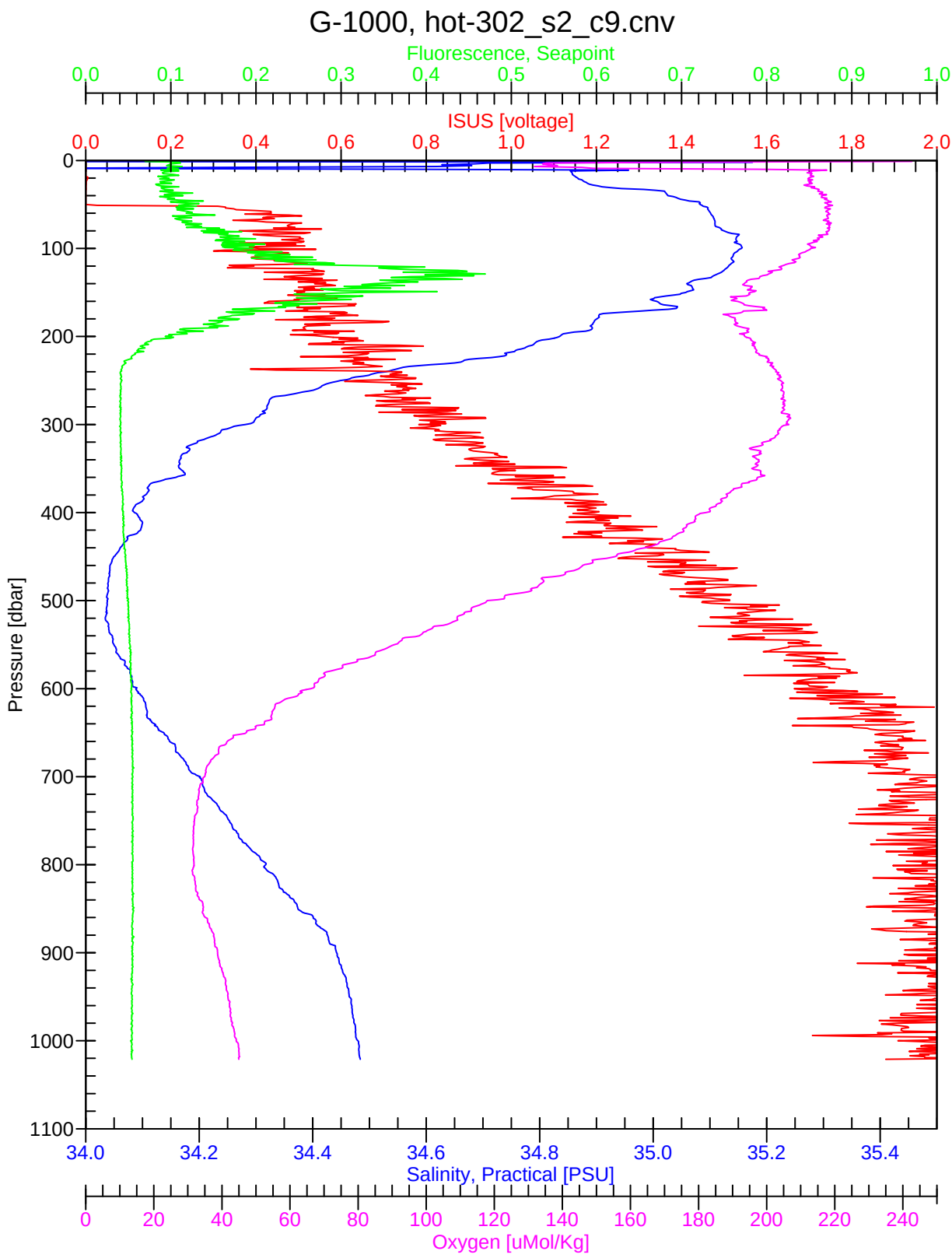

W-1000, hot-302_s2_c6.cnv
Density, Sigma-theta [Kg/m^3]
22.0 22.5 23.0 23.5 24.0 24.5 25.0 25.5 26.0 26.5 27.0 27.5 28.0
Temperature, ITS-90 [deg C]
0 5 10 15 20 25 30
Pressure [dbar]
0 100 200 300 400 500 600 700 800 900 1000 1100
34.0 34.2 34.4 34.6 34.8 35.0 35.2 35.4
Salinity, Practical [PSU]
0 20 40 60 80 100 120 140 160 180 200 220 240
Oxygen [uMol/Kg]

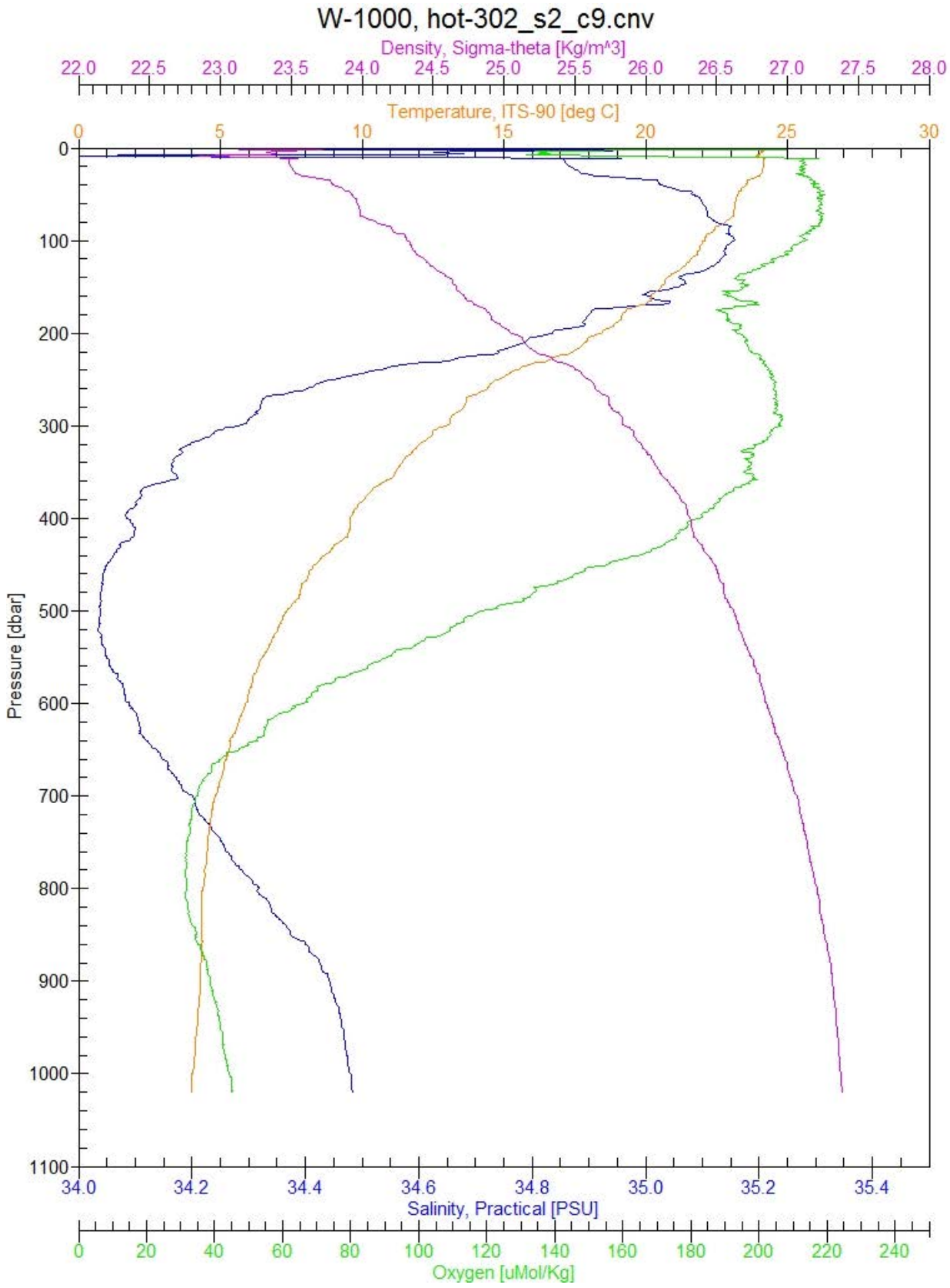

G-1000, hot-302_s2_c7.cnv
Fluorescence, Seapoint
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
ISUS [voltage]
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1.8
2.0
Pressure [dbar]
0
100
200
300
400
500
600
700
800
900
1000
1100
34.0
34.2
34.4
34.6
34.8
35.0
35.2
35.4
Salinity, Practical [PSU]
0
20
40
60
80
100
120
140
160
180
200
220
240
Oxygen [uMol/Kg]

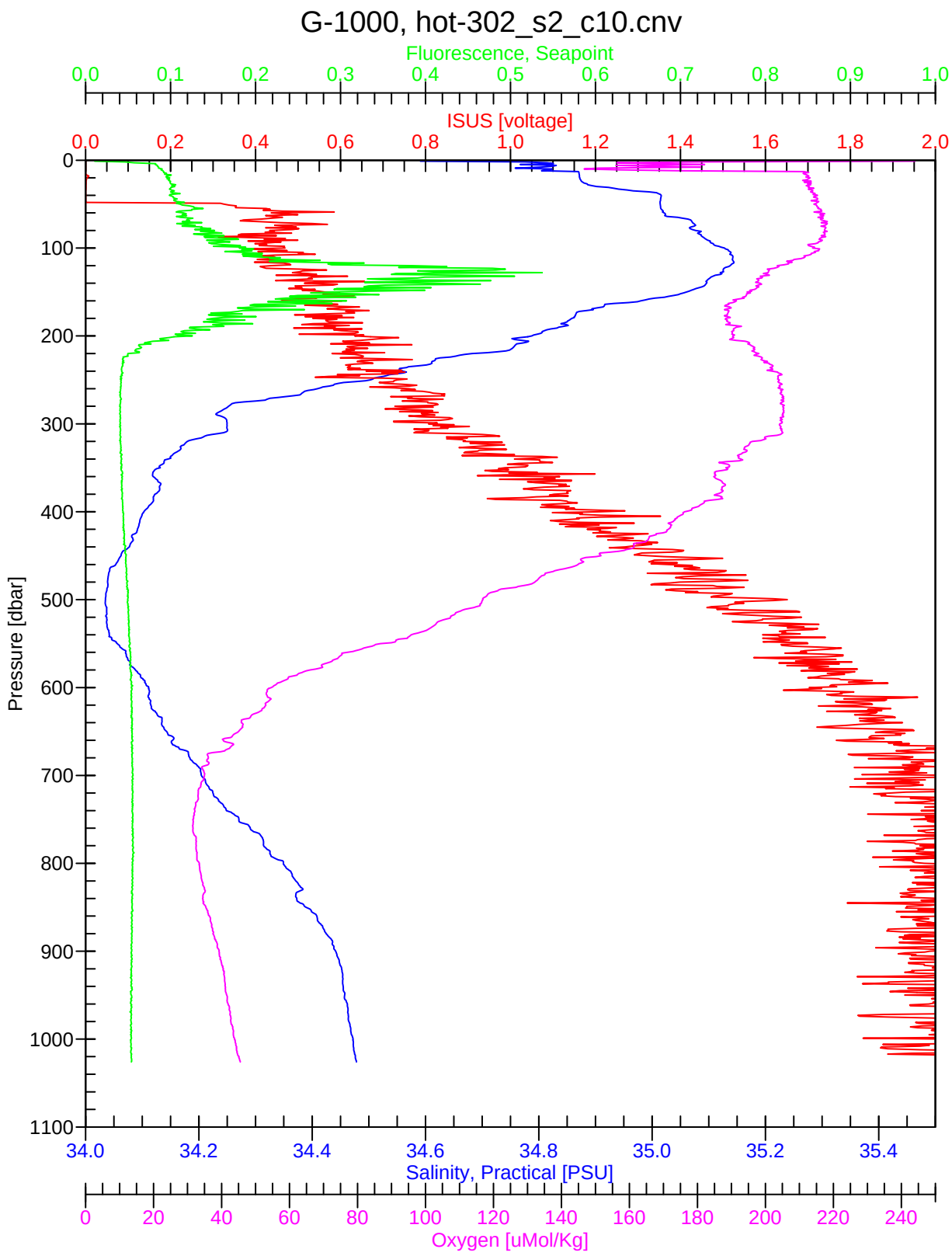

W-1000, hot-302_s2_c7.cnv
Density, Sigma-theta [Kg/m^3]
22.0 22.5 23.0 23.5 24.0 24.5 25.0 25.5 26.0 26.5 27.0 27.5 28.0
Temperature, ITS-90 [deg C]
0 5 10 15 20 25 30
Pressure [dbar]
0 100 200 300 400 500 600 700 800 900 1000 1100
34.0 34.2 34.4 34.6 34.8 35.0 35.2 35.4
Salinity, Practical [PSU]
0 20 40 60 80 100 120 140 160 180 200 220 240
Oxygen [uMol/Kg]

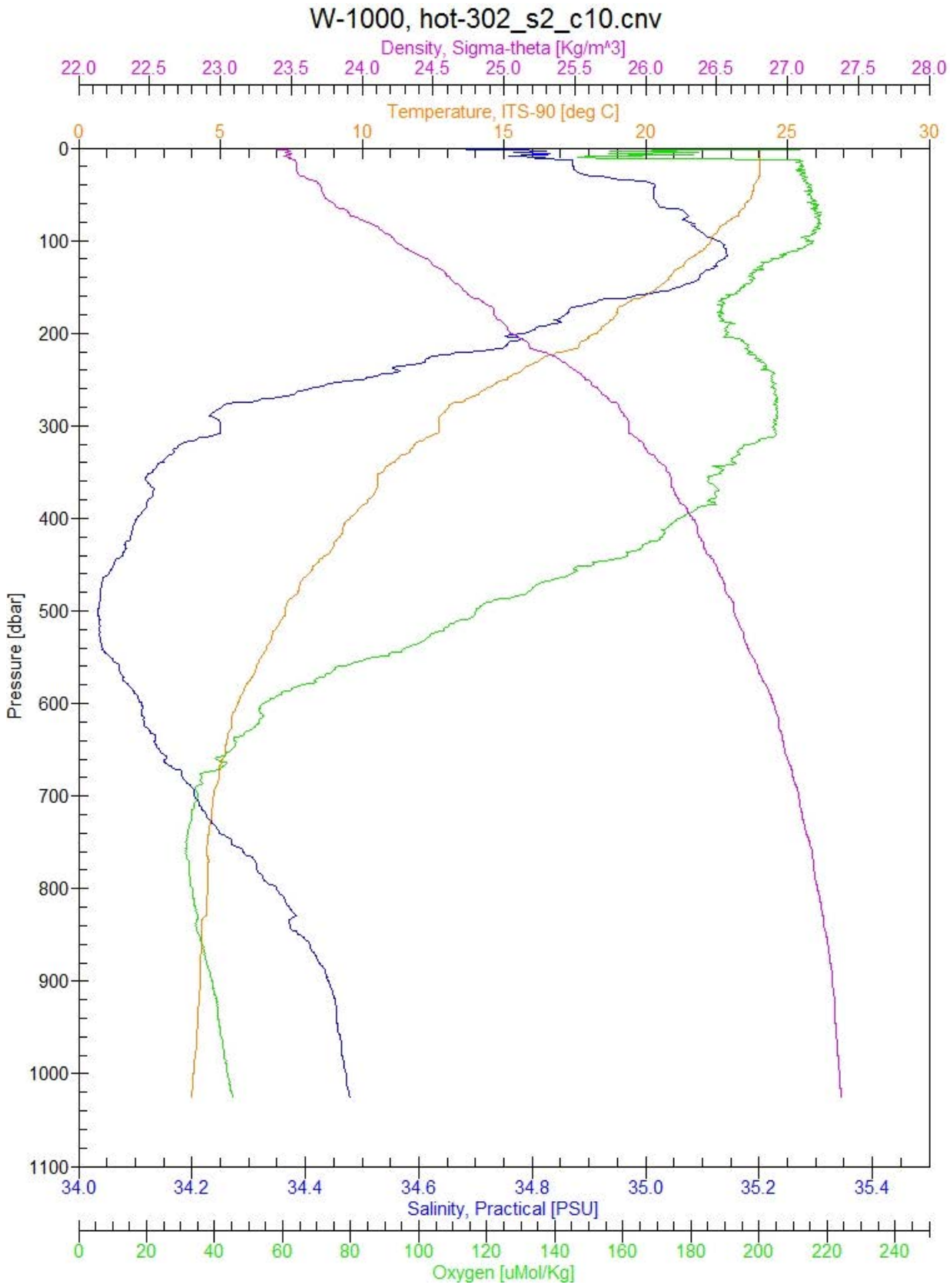

G-1000, hot-302_s2_c8.cnv
Fluorescence, Seapoint
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
ISUS [voltage]
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1.8
2.0
Pressure [dbar]
0
100
200
300
400
500
600
700
800
900
1000
1100
34.0
34.2
34.4
34.6
34.8
35.0
35.2
35.4
Salinity, Practical [PSU]
0
20
40
60
80
100
120
140
160
180
200
220
240
Oxygen [uMol/Kg]

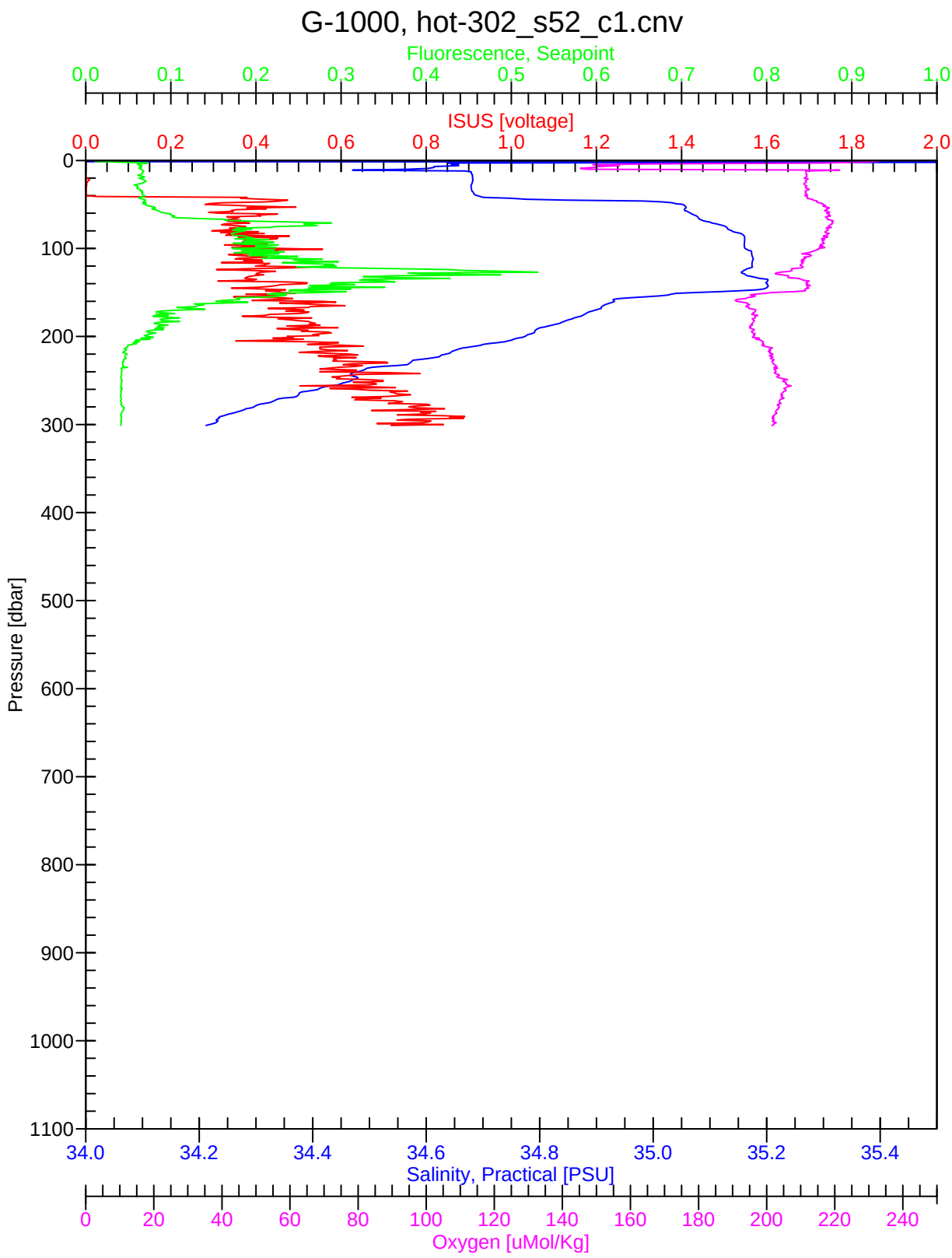

W-1000, hot-302_s2_c8.cnv
Density, Sigma-theta [Kg/m^3]
22.0 22.5 23.0 23.5 24.0 24.5 25.0 25.5 26.0 26.5 27.0 27.5 28.0
Temperature, ITS-90 [deg C]
0 5 10 15 20 25 30
Pressure [dbar]
0 100 200 300 400 500 600 700 800 900 1000 1100
34.0 34.2 34.4 34.6 34.8 35.0 35.2 35.4
Salinity, Practical [PSU]
0 20 40 60 80 100 120 140 160 180 200 220 240
Oxygen [uMol/Kg]

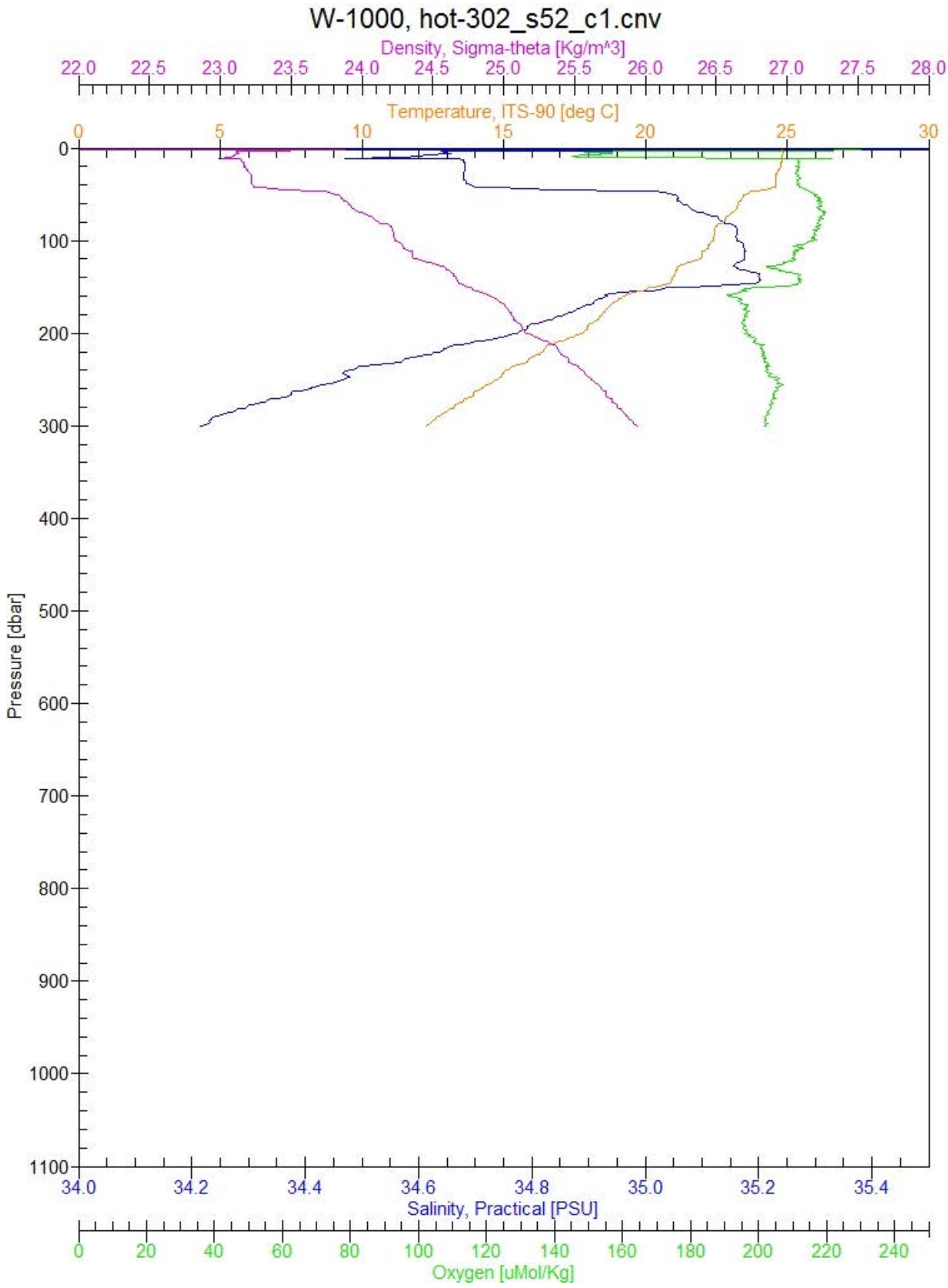

G-1000, hot-302_s2_c9.cnv
Fluorescence, Seapoint
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
ISUS [voltage]
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1.8
2.0
Pressure [dbar]
0
100
200
300
400
500
600
700
800
900
1000
1100
34.0
34.2
34.4
34.6
34.8
35.0
35.2
35.4
Salinity, Practical [PSU]
0
20
40
60
80
100
120
140
160
180
200
220
240
Oxygen [uMol/Kg]


W-1000, hot-302_s2_c9.cnv
Density, Sigma-theta [Kg/m^3]
22.0 22.5 23.0 23.5 24.0 24.5 25.0 25.5 26.0 26.5 27.0 27.5 28.0
Temperature, ITS-90 [deg C]
0 5 10 15 20 25 30
Pressure [dbar]
0 100 200 300 400 500 600 700 800 900 1000 1100
Salinity, Practical [PSU]
34.0 34.2 34.4 34.6 34.8 35.0 35.2 35.4
Oxygen [uMol/Kg]
0 20 40 60 80 100 120 140 160 180 200 220 240


G-1000, hot-302_s2_c10.cnv
Fluorescence, Seapoint
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
ISUS [voltage]
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1.8
2.0
Pressure [dbar]
0
100
200
300
400
500
600
700
800
900
1000
1100
34.0
34.2
34.4
34.6
34.8
35.0
35.2
35.4
Salinity, Practical [PSU]
0
20
40
60
80
100
120
140
160
180
200
220
240
Oxygen [uMol/Kg]


W-1000, hot-302_s2_c10.cnv
Density, Sigma-theta [Kg/m^3]
22.0 22.5 23.0 23.5 24.0 24.5 25.0 25.5 26.0 26.5 27.0 27.5 28.0
Temperature, ITS-90 [deg C]
0 5 10 15 20 25 30
Pressure [dbar]
0 100 200 300 400 500 600 700 800 900 1000 1100
34.0 34.2 34.4 34.6 34.8 35.0 35.2 35.4
Salinity, Practical [PSU]
0 20 40 60 80 100 120 140 160 180 200 220 240
Oxygen [uMol/Kg]


G-1000, hot-302_s52_c1.cnv
Fluorescence, Seapoint
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
ISUS [voltage]
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1.8
2.0
Pressure [dbar]
0
100
200
300
400
500
600
700
800
900
1000
1100
34.0
34.2
34.4
34.6
34.8
35.0
35.2
35.4
Salinity, Practical [PSU]
0
20
40
60
80
100
120
140
160
180
200
220
240
Oxygen [uMol/Kg]


W-1000, hot-302_s52_c1.cnv
Density, Sigma-theta [Kg/m^3]
22.0 22.5 23.0 23.5 24.0 24.5 25.0 25.5 26.0 26.5 27.0 27.5 28.0
Temperature, ITS-90 [deg C]
0 5 10 15 20 25 30
Pressure [dbar]
0 100 200 300 400 500 600 700 800 900 1000 1100
34.0 34.2 34.4 34.6 34.8 35.0 35.2 35.4
Salinity, Practical [PSU]
0 20 40 60 80 100 120 140 160 180 200 220 240
Oxygen [uMol/Kg]

HOT-302

Hawaii Ocean Time-Series CONSOLE LOG

Cast type	Bottle type	SST	Operator
G1000GPS	12L	25.61	KR

- [x] Pinger
- [x] Altimeter Xmiss: −0.27, 0.13
- [x] Transmissometer
- [ ] BEACH Sea Tech Fluorometer
- [ ] OTG Seapoint Fluorometer
- [x] ISUS
- [x] PO Fluorometer
- [ ]

MLD: 45 dbar
Smin: 415 dbar
DCM: 120

Station: 1	Cast: 1
Latitude start: 21° 20.628 end: 21° 21.787	Longitude start: 158 16.436 end: 158° 16.623
Depth of water: 1436 meters	Date (GMT): 5/14/18
Pressure on Deck	Time:
Begin: −0.36 End: −0.20	Start Log: 23:48 In Water: 23:51
Max cast pressure: 1018 dbar	Out of Water: 5/15/18 01:00

Trip/ Niskin	Time stopped	Confirm tripped	Pressure	Target Depth	Comments
1	00:17:30	00:17:50	1017	1020	
2		32:20	752	750	
3		38:50	502	500	
4		43:00	352	350	
5		46:00	250	250	
6		48:10	201	200	
7		49:39	176	175	
8		51:10	151	150	
9		52:40	125	125	
10		54:10	100	100	
11		55:30	75	75	
12		57:10	45	45	
13		58:15	25	25	
14		59:30	✓	[5	]
15		59:35	5	[5	]
16					
17					
18					
19					
20					
21					
22					
23					
24					

Hawaii Ocean Time Series			Station #: 1	Cast #: 1	Box #: 2
Salinity Sample Log Sheet			Cruise #: HOT-302	Sampler: KR/S	
Niskin #	Depth	Serial #	Comments		
1	1020	25			
2	750	26			
3	500	27			
4	350	28			
5	250	29			
6	200	30			
7	175	31			
8	150	32			
9	125	33			
10	100	34			
11	75	35			
12	45	36			
13	25	37			
14	5	38			
15	5	39			
16					
17					
18					
19					
20					
21					
22					
23					
24					

TEST FIRE

65000

HOT-302

Hawaii Ocean Time-Series CONSOLE LOG

Cast type	Bottle type	SST	Operator
GlobalGPS	12L	24.29	KM/JS

- [x] Pinger
- [x] Altimeter
- [x] Transmissometer
- [ ] BEACH Sea Tech Fluorometer
- [ ] OTG Seapoint Fluorometer
- [ ] ISUS
- [x] PO Fluorometer
- [ ]

MLD: 25 dbar
S-min: 500 dbar
DCM: 140 dbar

Station: 2	Cast: 1
Latitude start: 22° 45.17 end: 22° 46.665	Longitude start: 158 0.011' end: 157° 59.711
Depth of water: 4722 meters	Date (GMT): 31/5/18
Pressure on Deck	Time:
Begin: -0.38	Start Log: 16:30
End: -0.54	In Water: 16:38
Max cast pressure: 4796 dbar	Out of Water: 20:23

Trip/ Niskin	Time stopped	Confirm tripped	Pressure	Target Depth	Comments
1		18:23:17	4796	4800	1.5 m off bottom
2		28:25	4601	4600	
3		01:50	4500	4500	
4		35:20	4398	4400	
5		40:50	4200	4200	
6		45:40	3999	4000	
7		50:30	3801	3800	
8		55:00	3601	3600	
9		59:40	3401	3400	
10		19:04:10	3199	3200	
11		09:00	3000	3000	
12		14:00	2800	2800	
13		18:45	2598	2600	
14		23:40	2401	2400	
15		28:35	2199	2200	
16		33:20	2000	2000	
17		38:10	1802	1800	
18		43:05	1601	1600	
19		47:45	1401	1400	
20		53:25	1200	1200	
21		58:50	1000	1000	
22		20:05:20	749	750	
23		11:25	501	500	
24		22:10	6	5	

Hawaii Ocean Time Series			Station #: 2	Cast #: 1	Box #: 3-3
Salinity Sample Log Sheet			Cruise #: HOT-302		Sampler: KR/JS
Niskin #	Depth	Serial #	Comments		
1	4800	49			
2	4600	50			
3	4500	51			
4	4400	52			
5	4200	53			
6	4000	54			
7	3800	55			
8	3600	56			
9	3400	57			
10	3200	58			
11	3000	59			
12	2800	60			
13	2600	61			
14	2400	62			
15	2200	63			
16	2000	64			
17	1800	65			
18	1600	66			
19	1400	67			
20	1200	68			
21	1000	69			
22	750	70			
23	500	71			
24	5	72			

Hawaii Ocean Time Series			Station #: 2	Cast #: 1	Box #: 4
Salinity Sample Log Sheet			Cruise #: HOT- 302	Sampler: KR/JS	
Niskin #	Depth	Serial #	Comments		
1	4800	93			
2	4600	94			
3	4500	95			
4	4400	96			
5	4200	97			
6	4000	98			
7	3800	99			
8	3000	80			
9	3400	81			
10	3200	82			
11	3000	83			
12	2800	84			
13	2600	85			
14	2400	86			
15	2200	87			
16	2000	88			
17	1800	89			
18	1600	90			
19	1400	91			
20	1200	92			
21	1000	93			
22	750	94			
23	500	95			
24	5	96			

Hawaii Ocean Time Series			Station #: 2	Cast #: 1	Box #: 5
Salinity Sample Log Sheet			Cruise #: HOT- 302	Sampler: KR/TS	
Niskin #	Depth	Serial #	Comments		
1	4800	97			
2	4600	98			
3	4500	99			
4	4400	100			
5	4200	101			
6	4000	102			
7	3800	103			
8	3600	104			
9	3400	105			
10	3200	106			
11	3000	107			
12	2800	108			
13	2600	109			
14	2400	110			
15	2200	111			
16	2000	112			
17	1800	113			
18	1600	114			
19	1400	115			
20	1200	116			
21	1000	117			
22	750	118			
23	500	119			
24	5	120			

HOT-362

Hawaii Ocean Time-Series CONSOLE LOG

Cast type	Bottle type	SST	Operator
G1000GPS	12L	24.50	KR

- [x] Pinger
- [ ] Altimeter
- [x] Transmissometer
- [ ] BEACH Sea Tech Fluorometer
- [ ] OTG Seapoint Fluorometer
- [x] HSUS
- [ ] PO Fluorometer
- [ ]

MLD: 15 dbar
S-min: 481
DCM: 130

Station: 2	Cast: 2
Latitude start: 22° 45.085' end: 22° 45.031'	Longitude start: 158° 0.148' end: 157 59.863'
Depth of water: unknown meters	Date (GMT): 5/15/18
Pressure on Deck	Time:
Begin: -0.39 End: -0.30	Start Log: 22:20 In Water: 22:27
Max cast pressure: 1021 dbar	Out of Water: 23:32

Trip/ Niskin	Time stopped	Confirm tripped	Pressure	Target Depth	Comments
1		22:51:00	1020	1020	
2		52:45	995	995	
3		54:40	949	949	
4		57:10	902	903	
5		59:00	856	857	
6		23:00:40	810	811	
7		02:50	747	746	
8		05:20	703	702	
9		07:00	657	658	
10		08:50	601	601	
11		10:15	558	558	
12		11:05	510	511	
13		13:30	475	475	
14		14:45	442	443	
15		16:00	411	410	
16		17:50	353	354	
17		19:30	306	307	
18		21:00	266	267	
19		22:30	227	227	
20		24:20	170	170	
21		26:00	124	125	
22		27:35	90	90	
23		29:10	53	54	
24		31:15	7	8	

Hawaii Ocean Time-Series

HOT - 302

Station:	2	Cast:	2
Latitude:	22° 45.085'	Longitude:	158° 0.148'
Date:	5/15/18	Time (GMT):	22:20
Operator:	LCR		

$\delta\theta$	$\sigma\theta$	Depth
700	20.76	
650	21.28	
600	21.80	
550	22.33	
500	22.85	
450	23.37	87
400	23.90	54
350	24.42	124.9
300	24.95	170.3
250	25.47	227
200	26.00	307
180	26.21	354
160	26.42	410
140	26.63	475
130	26.73	511
120	26.84	558
110	26.94	601
100	27.05	658
90	27.16	746
80	27.26	811
70	27.37	995

S_{max}	145
S_{min}	475
S_{max}	
S_{min}	

O_{max}	750
O_{min}	65
O_{max}	
O_{min}	
O_{max}	

F_{max}	135
F_{min}	725
F_{max}	110
F_{min}	
F_{max}	

Bottle	Depth
1	1020
2	995
3	949
4	903
5	857
6	811
7	746
8	702
9	658
10	601
11	558
12	511
13	475
14	443
15	410
16	354
17	307
18	267
19	227
20	170
21	125
22	90
23	54
24	8

Hawaii Ocean Time Series			Station #: 2	Cast #: 2	Box #: 6
Salinity Sample Log Sheet			Cruise #: HOT-302	Sampler: KR/JS/SC	
Niskin #	Depth	Serial #	Comments		
1	1028	121			
2	995	122			
3	949	123			
4	903	124			
5	857	125			
6	811	126			
7	746	127			
8	702	128			
9	658	129			
10	601	130			
11	558	131			
12	511	132			
13	475	133			
14	443	134			
15	410	135			
16	354	136			
17	307	137			
18	267	138			
19	227	139			
20	170	140			
21	125	141			
22	90	142			
23	54	143			
24	8	144			

HOT-302

Hawaii Ocean Time-Series CONSOLE LOG

Cast type	Bottle type	SST	Operator
GLOBOCAPS	12L	24.6	KK/SN

- [x] Pinger
- [x] Altimeter
- [ ] Transmissometer
- [ ] BEACH Sea Tech Fluorometer
- [ ] OTG Seapoint Fluorometer
- [x] ISUS
- [x] PO Fluorometer
- [ ]

PC/PN

MLD : 15
SMin : 500
DCM : 120

Station: 2	Cast: 3
Latitude start: 22° 44.867' end: 22° 44.9217	Longitude start: 158° 0.161' end: 158° 00.458'
Depth of water: N/A meters	Date (GMT): 5/16/18
Pressure on Deck	Time:
Begin: -0.41	Start Log: 00:23
End: -0.30	In Water: 00:36
Max cast pressure: 1020 dbar	Out of Water: 01:32

Trip/ Niskin	Time stopped	Confirm tripped	Pressure	Target Depth	Comments
1		00:58:30	1021	1020	
2		01:08:20	500	500	5-min
3		12:40	350	350	
4		:45	349	350	
5		15:50	250	250	
6		17:30	200	200	
7		19:10	174	175	
8		20:35	148	150	
9		22:05	125	125	
10		23:40	99	100	
11		24:50	74	75	
12		:55	75	75	
13		26:30	44	45	
14		:35	45	45	
15		28:10	25	25	
16		:15	25	25	
17		29:45	15	15	
18		31:00	4	5	
19		31:05	4	5	
20					
21					
22					
23					
24					

Hawaii Ocean Time Series			Station #: 2	Cast #: 3	Box #: 7
Salinity Sample Log Sheet			Cruise #: HOT- 302	Sampler: KT, SN, FSM	
Niskin #	Depth	Serial #	Comments		
1	1020	145			
2	500	146	S-min		
3	350	147			
4	350	148			
5	250	149			
6	200	150			
7	175	151			
8	150	152			
9	125	153			
10	100	154			
11	75	155			
12	—				
13	45	156			
14	—				
15	25	157			
16	—				
17	15	158			
18	—				
19	5	159			
20					
21					
22					
23					
24					

HOT-302

Hawaii Ocean Time-Series CONSOLE LOG

Cast type	Bottle type	SST	Operator
G1000 GPS	12 L	24.62	SN

- ☑ Pinger
- ☑ Altimeter
- ☑ Transmissometer
- ☐ BEACH Sea Tech Fluorometer
- ☐ OTG Seapoint Fluorometer
- ☑ ISUS
- ☑ PO Fluorometer
- ☐

S-min : ≈500 m
DCM : ≈160m
MLD : ≈10 m

Station: 2	Cast: 4
Latitude start: 22° 44.9728 end: 22° 45.2883	Longitude start: 158° 00.8126 end: 158° 00.8077
Depth of water: NA meters	Date (GMT): 5 / 16 / 18
Pressure on Deck	Time:
Begin: -0.40	Start Log: 02:49
End: -0.33	In Water: 03:01
Max cast pressure: 1020 dbar	Out of Water: 04:01

Trip/ Niskin	Time stopped	Confirm tripped	Pressure	Target Depth	Comments
1	03:27:00	3:29:00	1020	1020	
2		39:40	498	500	S-min
3		43:50	351	350	
4		44:00	350	350	
5		46:55	249	250	
6		48:40	200	200	
7		50:00	175	175	
8		51:00	149	150	
9		52:10	124	125	
10		53:20	99	100	
11		55:00	75	75	
12		56:40	43	45	
13		57:40	24	25	
14		:45	24	25	
15		58:50	14	15	
16		59:45	5	5	
17		:50	5	5	
18					
19					
20					
21					
22					
23					
24					

Hawaii Ocean Time Series			Station #: 2	Cast #: 4	Box #: 7
Salinity Sample Log Sheet			Cruise #: HOT- 302	Sampler: KT, SN, TSM	
Niskin #	Depth	Serial #	Comments		
1	1000	160			
2	500	161	5-mil		
3	350	162			
4	350	163			
5	250	164			
6	200	165			
7	175	166			
8	150	167			
9	125	168			
10	100	169			
11	75	170			
12	45	171			
13	25	172			
14	—	—			
15	—	—			
16	5	173			
17	—				
18					
19					
20					
21					
22					
23					
24					

HOT- 302

Hawaii Ocean Time-Series CONSOLE LOG

Cast type	Bottle type	SST	Operator
G1000 GPS	12L	24.40	SN

- ☑ Pinger
- ☑ Altimeter
- ☑ Transmissometer
- ☐ BEACH Sea Tech Fluorometer
- ☐ OTG Seapoint Fluorometer
- ☑ ISUS
- ☑ PO Fluorometer
- ☐

MLD: 10m
S-min: 500m
PCM: ≈135m

Station: 2	Cast: 5
Latitude start: 22° 45.0416 end: 22° 45.4226	Longitude start: 158° 00.6920 end: 158° 01.3349
Depth of water: 4731 meters	Date (GMT): 5 16 18
Pressure on Deck	Time:
Begin: -0.35 End: -0.36	Start Log: 05:47 In Water: 05:59
Max cast pressure: 1020 dbar	Out of Water: 07:05

Trip/ Niskin	Time stopped	Confirm tripped	Pressure	Target Depth	Comments
1		06:27:20	1020	1020	
2		:33:45	790	790	O_2 min
3		:39:45	499	500	S-min
4		46:10	201	200	
5		47:55	174	175	
6		49:05	165	165	
7		50:00	148	150	
8		51:30	130	130	
9		52:20	125	125	
10		53:30	116	115	
11		54:30	110	110	
12		55:30	99	100	
13		56:30	89	90	
14		57:30	85	85	
15		58:30	74	75	
16		59:40	61	60	
17		07:00:45	46	45	
18		01:45	36	35	
19		02:40	26	25	
20		:45	25	25	
21		03:40	21	15	
22		04:30	4	5	
23		:35	4	5	
24		:40	4	5	

Hawaii Ocean Time Series			Station #: 2	Cast #: 5	Box #: 8 9
Salinity Sample Log Sheet			Cruise #: HOT-302	Sampler: SM, FSM, ICT	
Niskin #	Depth	Serial #	Comments		
1	1020	174			
2		175	O_2 min		
3		176	S min		
4	200	177			
5	175	178			
6	165	179			
7	150	180			
8	130	181			
9	125	182			
10	115	183			
11	110	184			
12	100	185			
13	90	186			
14	85	187			
15	75	188			
16	60	189			
17	45	190			
18	35	191			
19	25	192			
20	25	193			
21	15	194			
22	5	195			
23	5	196			
24	—				

HOT-302

Hawaii Ocean Time-Series CONSOLE LOG

Cast type	Bottle type	SST	Operator
G1000 GPS	12L	24.61	[illegible]

- ☑ Pinger
- ☑ Altimeter
- ☑ Transmissometer
- ☐ BEACH Sea Tech Fluorometer
- ☐ OTG Seapoint Fluorometer
- ☑ USBL
- ☑ PO Fluorometer
- ☐

MLD: 11 M
PCM: 110 M
S-min: 465 m

Station: 2	Cast: 6
Latitude start: 22° 44.7733 end: 22° 44.9484	Longitude start: 157° 59.1682 end: 157° 59.5154
Depth of water: 4720 meters	Date (GMT): 05 16 18
Pressure on Deck	Time:
Begin: -0.35 End: -0.19	Start Log: 09:04 In Water: 9:11
Max cast pressure: 1020 dbar	Out of Water: 10:18

Trip/ Niskin	Time stopped	Confirm tripped	Pressure	Target Depth	Comments
1		09:42:45	1019	1020	
2	09:48:00	09:48:30	~~775~~	~~775~~	
3	10:01:10	10:01:40	251	250	
4	10:03:50	10:04:20	174	175	
~~5~~		10:04:40	174	175	
6	10:06:00	10:06:30	149	150	
~~7~~		10:06:35	149	150	
8		10:08:30	124	125	
~~9~~		10:08:35	124	125	
10	10:09:45	10:10:15	100	100	
~~11~~		10:10:20	100	100	
12		10:12:00	75	~~75~~	
13		13:50	45	45	
14		15:20	25	25	
~~15~~		15:25	25	25	
16		17:05	5	5	
~~17~~		110	5	5	
18					
19					
20					
21					
22					
23					
24					

Hawaii Ocean Time Series			Station #: 2	Cast #: 6	Box #: 9
Salinity Sample Log Sheet			Cruise #: HOT- 302	Sampler: KT, FSM, SN	
Niskin #	Depth	Serial #	Comments		
1	1020	197			
2	775	198			
3	250	199			
4	175	200			
5	—				
6	150	201			
7	—				
8	125	202			
9	—				
10	100	203			
11	—				
12	75	204			
13	45	205			
14	25	206			
15	—				
16	5	207			
17	—				
18					
19					
20					
21					
22					
23					
24					

HOT-302

Hawaii Ocean Time-Series CONSOLE LOG

Cast type	Bottle type	SST	Operator
GC/CTD	12L	24.48	KR

- [x] Pinger
- [x] Altimeter
- [x] Transmissometer
- [ ] BEACH Sea Tech Fluorometer
- [ ] OTG Seapoint Fluorometer
- [x] ISUS
- [x] RO Fluorometer
- [ ]

HPLC

14:24

MLD	20 m
S-min	460 m
DCM	130 m

Station: 2	Cast: 7
Latitude start: 22° 45.842 end: 22° 46.377	Longitude start: 158° 0.816 end: 158° 1.506
Depth of water: N/A meters	Date (GMT): 5/16/18
Pressure on Deck	Time:
Begin: -0.32 End: -0.33	Start Log: 13:08 In Water: 13:14
Max cast pressure: 1021 dbar	Out of Water: 14:22

Trip/ Niskin	Time stopped	Confirm tripped	Pressure	Target Depth	Comments
1		13:40:05	1020	1020	
2		56:00	460	460	S-min
3		14:01:25	251	250	
4		03:40	176	175	
5		05:40	149	150	
6		:50	150	150	
7		07:00	135	135	
8		08:00	130	130	DCM
9		:10	129	130	DCM
10		09:00	124	125	
11		10:25	114	115	
12		11:40	100	100	
13		13:20	85	85	
14		14:25	74	75	
15		15:30	60	60	
16		16:45	50	50	
17		17:30	45	45	
18		18:50	25	25	
19		19:00	25	25	
20		19:10	25	25	
21		20:20	15	15	
22		20:30	15	15	
23		21:40	4	5	
24		21:50	5	5	

Hawaii Ocean Time Series			Station #: 2	Cast #: 7	Box #: 9, 10
Salinity Sample Log Sheet			Cruise #: HOT-302	Sampler: JR, JS, SL	
Niskin #	Depth	Serial #	Comments		
1	1020	208			
2	460	209			
3	250	210			
4	175	211			
5	150	212	No Water - Empty Niskin		
6	150	213			
7	135	214			
8	120	215			
9	130	216			
10	125	217			
11	115	218			
12	100	219			
13	85	220			
14	75	221			
15	60	222			
16	50	223			
17	45	224	NO WATER - EMPTY Niskin		
18	25	225			
19	25	226			
20	25	227			
21	15	228			
22	15	229			
23	5	230			
24	5	231			

HOT-303

Hawaii Ocean Time-Series CONSOLE LOG

Cast type	Bottle type	SST	Operator
GTDDGPS	12L	24.35	KR

- [x] Pinger
- [x] Altimeter
- [x] Transmissometer
- [ ] BEACH Sea Tech Fluorometer
- [ ] OTG Seapoint Fluorometer
- [x] ISUS
- [x] PO Fluorometer
- [ ]

MLD	30
SMin	500
DCM:	120

Station: 2	Cast: 8
Latitude start: 22° 42.273' end: 22° 42.322'	Longitude start: 157° 56.596 end: 157° 57.072
Depth of water: N/A meters	Date (GMT): 5/17/18
Pressure on Deck	Time:
Begin: −0.38 End: −0.20	Start Log: 13:23 In Water: 13:31
Max cast pressure: 1034 dbar	Out of Water: 14:28

Trip/ Niskin	Time stopped	Confirm tripped	Pressure	Target Depth	Comments
1		13:55:50	1026	1020	
2		56:00	1027	1020	
3		:10	1027	1020	
4		:20	1028	1020	
5		:30	1028	1020	
6		:40	1029	1020	
7		:50	1030	1020	
8		57:00	1031	1020	
9		:10	1032	1020	
10		:20	1033	1020	
11		:30	1034	1020	
12		14:08:00	499	500	5-min
13		13:00	276	275	
14		14:30	249	250	
15		15:55	225	225	
16		17:10	199	200	
17		18:20	174	175	
18		19:30	149	150	
19		20:45	125	125	
20		21:55	100	100	
21		23:10	74	75	
22		24:45	45	45	
23		25:50	24	25	
24		27:15	4	5	

Hawaii Ocean Time Series			Station #: 2	Cast #: 8	Box #: 10, 11
Salinity Sample Log Sheet			Cruise #: HOT-302		Sampler: KR, JS, SC
Niskin #	Depth	Serial #	Comments		
1	1020	232			
2	1020	233			
3	1020	234	NO		
4	1020	235		SAMPLE	
5	1020	236			
6	1020	237			
7	1020	238			
8	1020	239			
9	1020	240			
10	1020	241			
11	1020	242			
12	500	243	S-min		
13	275	244			
14	250	245	NO WATER — EMPTY NISKIN		
15	225	246			
16	200	247			
17	175	248			
18	150	249			
19	125	250			
20	100	251			
21	75	252			
22	45	253			
23	25	254			
24	5	255			

HOT-302

Hawaii Ocean Time-Series CONSOLE LOG

Cast type	Bottle type	SST	Operator
G/Ω/GPS	12L	24.15	ICL

- [x] Pinger
- [x] Altimeter
- [x] Transmissometer
- [ ] BEACH Sea Tech Fluorometer
- [ ] OTG Seapoint Fluorometer
- [x] ISUS
- [x] PO Fluorometer
- [ ]

ATP

MLD 35
DCM 130
S-min 520

Station: 2	Cast: 9
Latitude start: 22° 45.524' end: 22° 46.490'	Longitude start: 157° 56.732 end: 157° 56.908'
Depth of water: N/A meters	Date (GMT): 5/17/18
Pressure on Deck	Time:
Begin: −0.32 End: −0.22	Start Log: 15:39 In Water: 15:48
Max cast pressure: 1018 dbar	Out of Water: 16:45

Trip/ Niskin	Time stopped	Confirm tripped	Pressure	Target Depth	Comments
1		16:13:30	1018	1020	
2		13:40	1017	1020	
3		13:50	1016	1020	
4		14:00	1016	1020	
5		19:10	772	770	
6		25:10	501	500	
7		:20	501	500	S-min
8		28:00	401	400	
9		29:40	350	350	
10		31:20	300	300	
11		33:05	249	250	
12		36:15	151	150	
13		37:40	125	125	
14		38:50	98	100	
15		39:50	75	75	
16		41:00	45	45	
17		42:10	25	25	
18		:20	25	25	
19		44:00	4	5	
20		:10	5	5	
21		:20	5	5	
22		:30	5	5	
23		:40	4	5	
24					

Hawaii Ocean Time Series			Station #: 2	Cast #: 9	Box #: 11, 12
Salinity Sample Log Sheet			Cruise #: HOT- 302	Sampler: KR, JS, SC	
Niskin #	Depth	Serial #	Comments		
1	1020	256			
2	1020	257			
3	1020	258			
4	1020	259	EMPTY		
5	770	—			
6	500	—			
7	500	260	5 min		
8	400	—			
9	350	261			
10	300	—			
11	250	262			
12	150	263			
13	125	264			
14	100	265			
15	75	266			
16	45	267			
17	25	268			
18	25	—			
19	5	269			
20	5	—			
21	5	—			
22	5	—			
23	5	—			
24					

HOT- 302

Hawaii Ocean Time-Series CONSOLE LOG

Cast type	Bottle type	SST	Operator
G [illegible]	12L	24.11	KR

- ☒ Pinger
- ☒ Altimeter
- ☒ Transmissometer
- ☐ BEACH Sea Tech Fluorometer
- ☐ OTG Seapoint Fluorometer
- ☒ ISUS
- ☒ PO Fluorometer
- ☐

OPEN

MLD 40
DCM 130
S-min 300

Station: 2	Cast: 10
Latitude start: 22° 47.830' end: 22° 48.883'	Longitude start: 157° 56.827' end: 157° 56.403'
Depth of water: N/A meters	Date (GMT): 5/17/13
Pressure on Deck	Time:
Begin: −0.37 End: −0.27	Start Log: 17:26 In Water: 17:33
Max cast pressure: 1024 dbar	Out of Water: 18:38

Trip/ Niskin	Time stopped	Confirm tripped	Pressure	Target Depth	Comments
1		18:00:25	1024	1020	
2		06:45	795	800	
3		13:30	501	500	S-min
4		16:25	402	400	
5		19:30	301	300	
6		22:15	201	200	
7		23:40	177	175	
8		:50	178	175	
9		25:40	149	150	
10		:50	150	150	
11		27:00	125	125	
12		:10	125	125	
13		29:00	100	100	
14		:10	100	100	
15		31:00	75	75	75
16		:10	74	75	75
17		32:45	44	45	45
18		:55	44	45	45
19		34:00	34	35	MLD+5 MLD-5
20		35:10	25	25	MLD-5
21		:20	25	25	
22		:30	25	25	
23		36:50	4	5	
24		37:00	4	5	

21			
22			
23			
24	5	272	

Hawaii Ocean Time Series			Station #: 2	Cast #: 10	Box #: 12
Salinity Sample Log Sheet			Cruise #: HOT- 302	Sampler: KK, SS, JJ	
Niskin #	Depth	Serial #	Comments		
1	1000	270			
2					
3	500	271	5-min		
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24	5	272			

HOT- 302

Hawaii Ocean Time-Series CONSOLE LOG

Cast type	Bottle type	SST	Operator
G1000GPS	12 L	25.0	SN/KT

- ☑ Pinger
- ☑ Altimeter
- ☑ Transmissometer
- ☐ BEACH Sea Tech Fluorometer
- ☐ OTG Seapoint Fluorometer
- ☑ ISUS
- ☑ PO Fluorometer
- ☐

DCM: 175 (secondary 75 m on upcast)

MLD: ~15 m.

Station: 52	Cast: 1
Latitude start: 22° 40.9416 end: 22° 41.5550	Longitude start: 157° 58.1644 end: 157° 58.1555
Depth of water: NA meters	Date (GMT): 05 / 18 / 18
Pressure on Deck	Time:
Begin: -0.38 End: -0.26	Start Log: 02:30 In Water: 02:35
Max cast pressure: 300 dbar	Out of Water: 02:57

Trip/ Niskin	Time stopped	Confirm tripped	Pressure	Target Depth	Comments
1		02:55:15	15		
2		:20	15		
3		:25	15		
4		57:02	5		
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					

Hawaii Ocean Time Series			Station #: 52	Cast #: 2	Box #:
Salinity Sample Log Sheet			Cruise #: HOT- 302	Sampler:	
Niskin #	Depth	Serial #	Comments		
1					
2					
3					
4					
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NO SALTS

HOT-302 KOK-1803

CTD configuration

CTD: 850

Deck Unit: 112060 (secondary)

Pressure: 1430

Carousel: 518

T_1: 1416 T_2: 4448

C_1: 4687 C_2: 2954

O_1: 1601 O_2: 43918

$Pump_1$: 968 $Pump_2$: 494

Flurometer: SCF 3831

Altimeter: 7769

Bucket Thermometer: 3622

Transmissometer: 1192-UK

Cruise Participants

Alex Nelson

Dan Sadler (Chief Scientist)

Carolina Funkey

Blake Watkins

Kendra Brooks

Fernando Santiago-Mandujano

Kellen Rosburg

Ryan Tabata

Svetlana Natarov

Ksenia Trifonova (HOT P.O. Research Assistant)

Jefrey Snyder

Macarena Burgos

Tim Burrell

Tara Clemente

Morgan Linney (UH. Graduate student

Solomon Chen (UH, Undgrad. Volunteer)

Rob Palomares (OTG)

Julianna Diehl (OTG)

Elizabeth Ricci (OTG)

Elizabeth Steffen (PMEL)

Scientist

Loading May 11, 2018
RED CONDUCTOR 2085Ω

WIRE LENGTH 7086

Weight Cast
Dry: 395 lbs

Wet: 433 lbs

1135 lbs

-Primary O_2 Sensor cable changed prior to cruise

HOT-302 14 May 2018

18:20 Depart Pier 35

19:10 Fire & Abandon Ship drills

19:30 Saftey & Science meeting.

21:00 Flow through system reported to have low/weak flow.

21:41 Arrive Station Kahe.

21:52 Begin Weight cast. Decend to 500m.

22:18 End Weight cast.

22:30 DEPLOY HYPER PRO
21°21.46 158° 10.66

23:10 END HYPER PRO

23:15 DEED ARGO FLOAT PRACTICE DEPLOYMENT

23:20 FINISH

23:48 Begin Station 1 Cast 1, G1000GPS.
Wait at bottom to adjust level wind, for 3 mins.

15 May 2018

AT 1000 DBARS

00:23 Stop upcast, payout 10 m. Payout 10 m more.
1036 DBARS

00:26 Resume Cast as usual.

Printer A needs new ink replacement.

HOT-302 15 May 2018

01:00 END station 1 cast 1.
15 MARKS OK.

01:05 TRANSIT TO ALOHA.

12:40 Begin PMEL ARGO float deployment @ 22° 29.955'N, 158° 4.103'W (~10nm South of ALOHA border).

12:44 Float in water @ 12:44:53 UTC @ 22° 30.0507'N, 158° 04.910'W.

12:47 Resume transit to ALOHA.

14:30 START WIRE WALKER DEPLOYMENT

22°39.96 158° 00.94

14:48 End wire walker deployment.

15:21 Begin Sediment Trap Deployment @ 22° 42.217'N 158° 1.722'W

15:58 End S.T. deployment.

16:30 Begin Station 2 Cast 1 - G5000GPS.

Modulo error at 267 dbar. Pumps remained on, Spike in both O_2 sensors.

18:23 7.5m off bottom @ 22° 46.037', 157° 57.436'W.

20:25 End Station 2 Cast 1 - 24 Marks OK

HOT-302 15 May 2018

20:35 START NET TOW
22° 46.78 157° 49.58

21:05 START TOW 2

21:35 END NET TOW
TRANSIT TO CENTER

22:23 Begin Station 2 Cast 2 – G1000 GPS.

23:35 End Station 2 Cast 2 – 24 marks OK.

16 May 2018

00:23 Begin Station 2 Cast 3. G1000GPS.

12 KHz not working, bottom depth not available.
OT6 will try to use the seaseam.

01:32 End Station 2 Cast 3 – 19 marks OK.

02:49 ~~Start~~ Sta 2 cast 4 G1000 GPS

Fluorescence spike at 650 dbar downcast

04:01 End Station 2 Cast 4.
17 marks OK
12KHz signal OK, Bottom depth available

05:59 Start Station 2 Cast 5 G1000 GPS.

07:05 End Station 2 Cast 5.
24 marks OK.

HOT-302 16 May 2018

0800	Start net tow
0830	End net tow
0835	Start net tow
09:05	End net tow
09:11	Begin Station 2 cast 6 G1000 GPS
10:18	End Station 2 cast 6. 17 marks OK.
11:06	Start optics, lat: 22° 45.2935 lon: 157° 59.8148
1200	OTG tech hurt his hand during optics operations, stop ops. temporarily, while assessing the situation w/ captain.
12:05	Raining on station.
12:40	End optics: 22° 45.7959 158° 00.5350
13:08	Begin Station 2 Cast 7 - G1000 GPS Noisy & miss trace upcast
14:24	End Station 2 Cast 7 - 24 marks OK.
14:30	Transit to pick up Sed. Traps & WW.
15:52	Begin Sed. Trap recovery @ 22° 42.021'N, 158° 1.474'W
16:31	End Sed. Trap recovery.

HOT-302 16 May 2018

16:42 Transit to WW.

	ARRIVE AT START	IN W RECOVERY
18:00	22° 39.61	157° 59.48

18:29 End WW recovery.

18:30 Transit to Haleiwa FOR MEDICAL EVACUATION

19:42 Deploy PMEL Deep ARGO float 22° 30.750'N, 158° 1.402'W.

19:45 Resume transit.

17 May 2018

0315 Arrived at Haleiwa OT6 tech and Elizabeth Steffer taken to shore in small boat.

0405 Transit to ALOHA Sta.

17 May 2018

13:13 Arrive @ Stn ALOHA

13:23 Begin Station 2 Cast 8 – G1000GPS.

Small X-miss spike @ ~560 dbar
Fln spike @ ~590 dbar, may be related.

14:30 End Station 2 Cast 8. 24 Marks OK!

HOT-302 17 May 2018

15:39 Begin Station 2 Cast 9 – G1000GPS.

16:50 End Station 2 cast-9. >3 marks OK.

17:26 Begin Station 2 Cast 10 – G1000GPS

Large xmiss spike @ 1020 dbar.

18:41 End Station 2 cast-10 >4 marks OK

18:46 Transit to Deep Traps Site.

21:15 START SEDIMENT TRAP DEPLOYMENT
22° 49.714 157° 56.091
Securing ADCP

23:00 RELEASE ANCHOR
22° 51.285 157° 53.491

23:30 Begin anchor triangulation.

18 May 2018

00:50 End triangulation & transit to WHOTS 14 mooring.

02:25 Arrived at Sta 52

B. Glazer's sensors attached to one of the rosette's poles.

02:35 Begin Station 52 Cast 1 - G1000GPS (300m, no yo-yo)

thermosalinograph 18 May 2018
Ship time : 20:08:30
Clock time : 20:08:43

Clock drift +13 sec

HOT-302 18 May 2018

02:54 Secondary Fluorescence max @ 75 dbar
02:58 End station 52 cast 1. Four mark OK.
Transmisometer Calibration

dark: 0.15751
clear: 4.54212

03:10 Transit To Honolulu.

0410 Turned on ADCP.

2115 Arrives at Pier 35