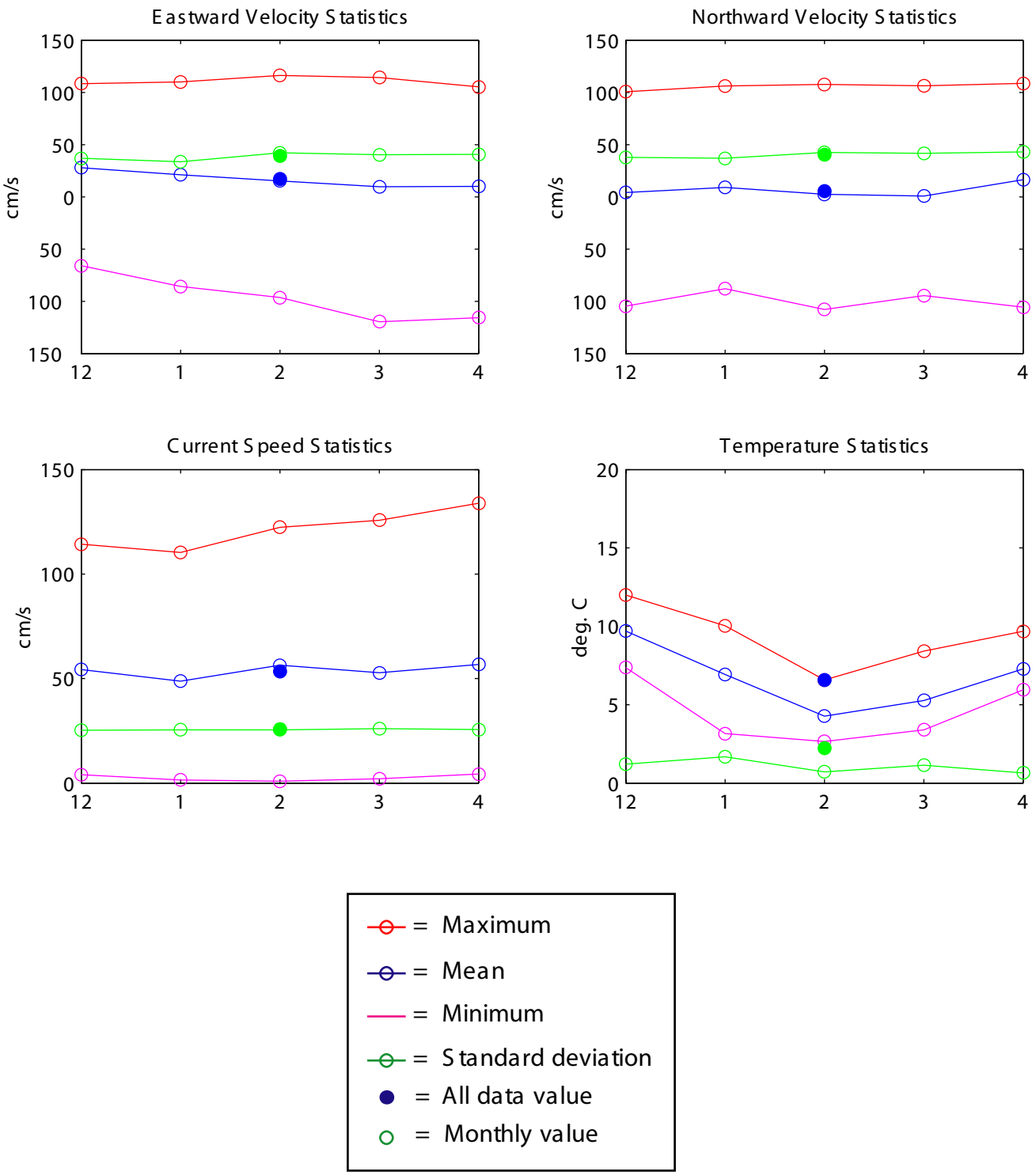
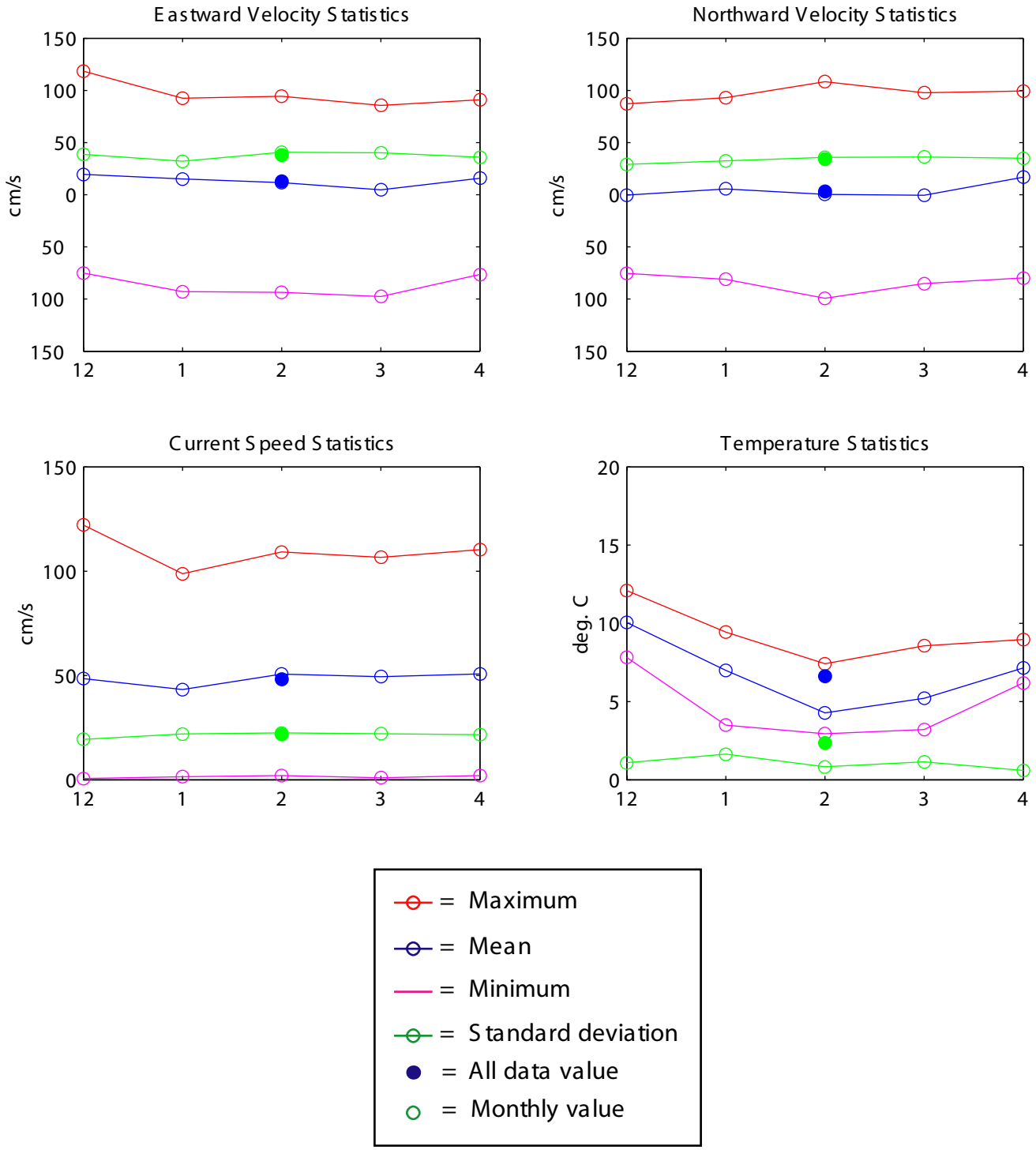
Station A: Monthly Current and Temperature Statistics

1 Meter Below the Surface
Hourly-Averaged Data



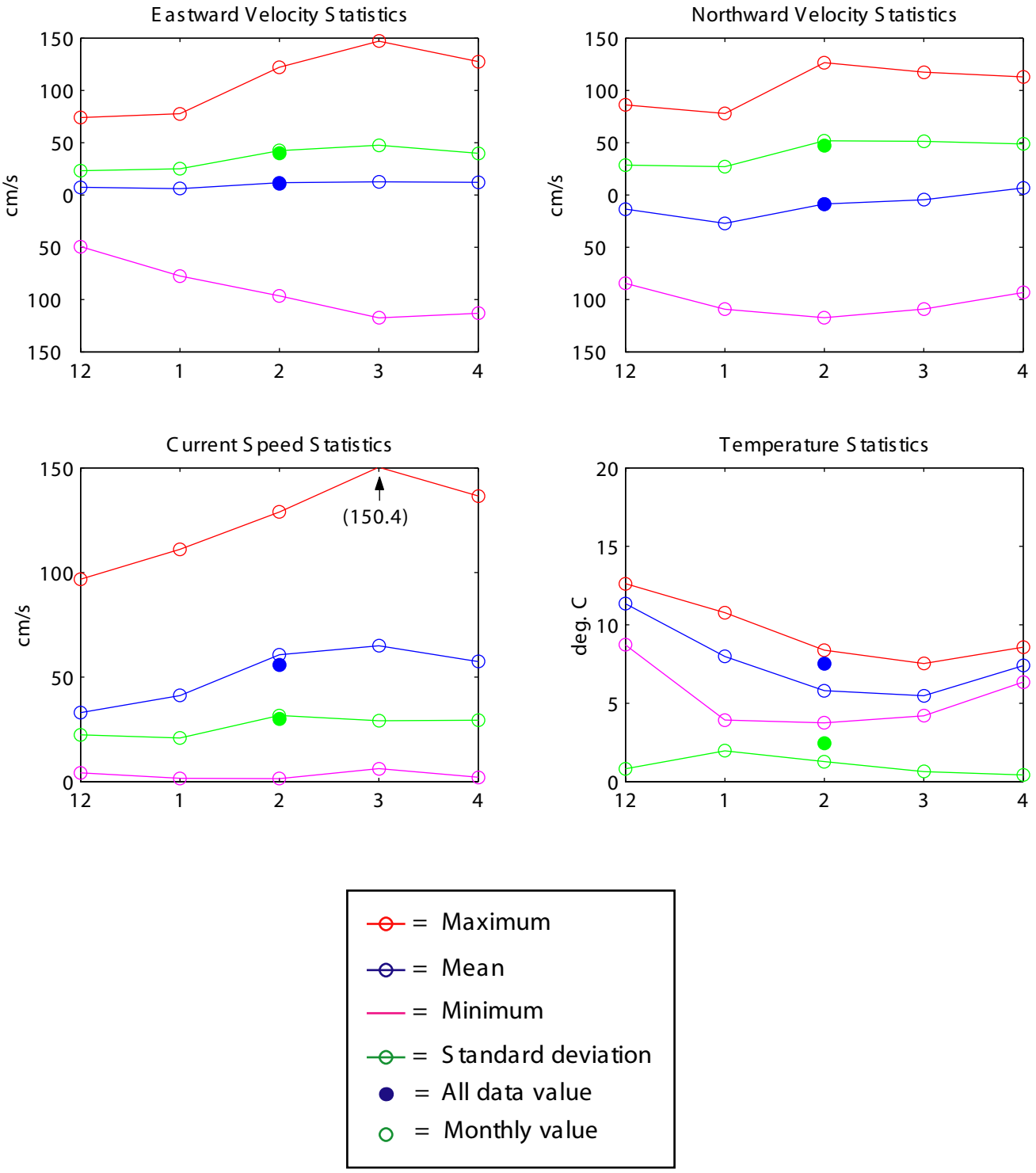
Station B: Monthly Current and Temperature Statistics

1 Meter Below the Surface
Hourly-Averaged Data



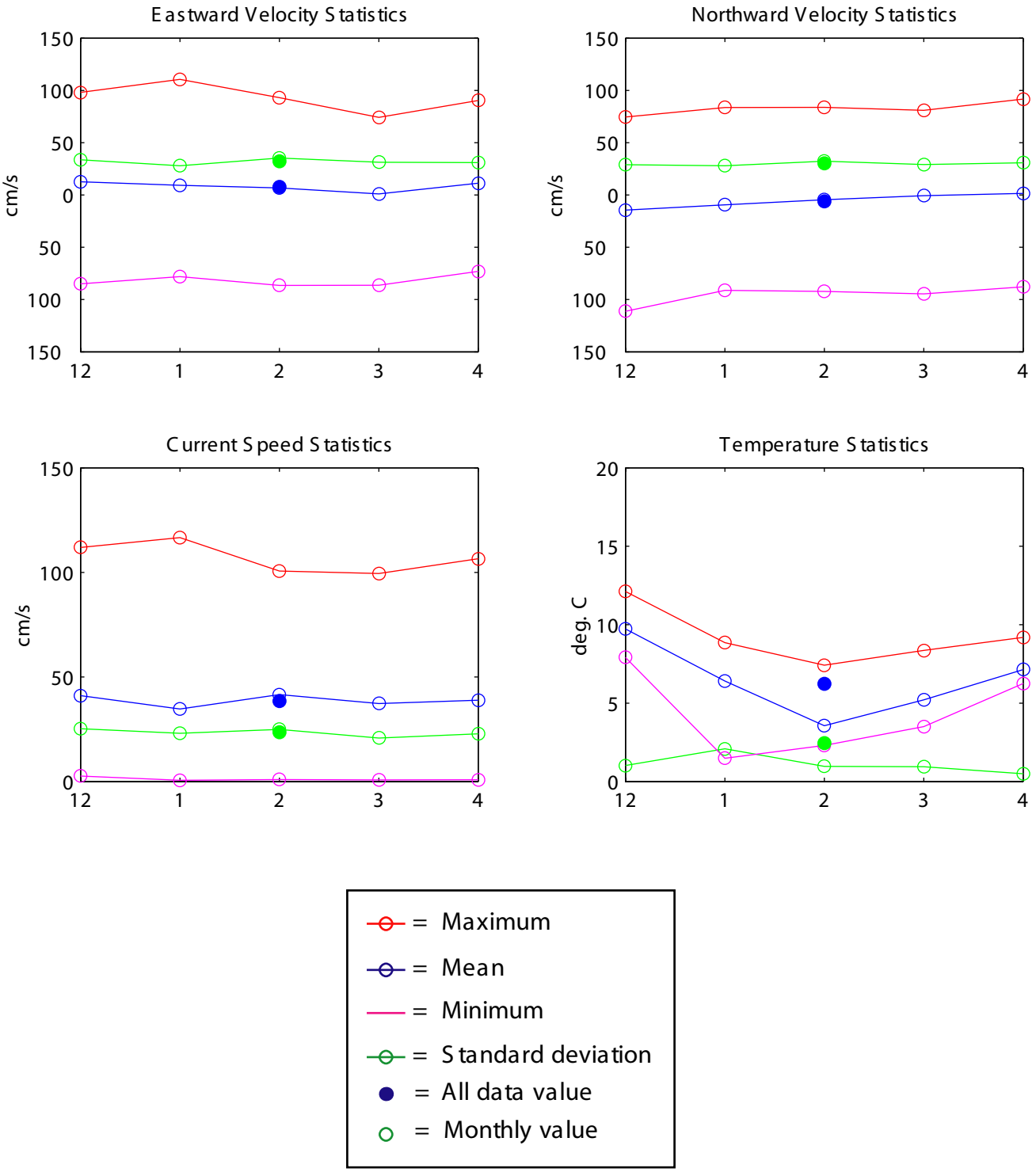
Station C: Monthly Current and Temperature Statistics

1 Meter Below the Surface
Hourly-Averaged Data



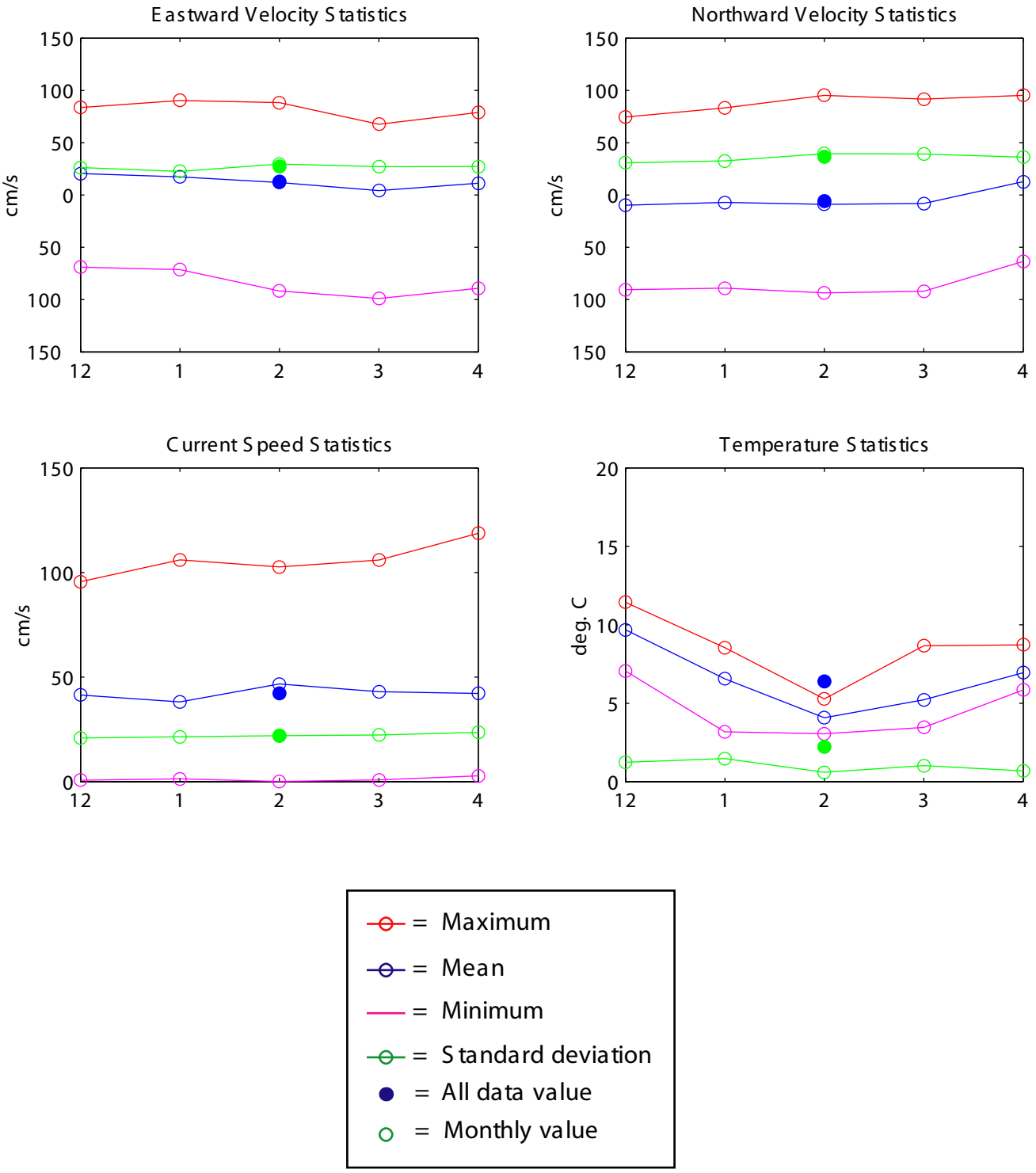
Station D: Monthly Current and Temperature Statistics

1 Meter Below the Surface
Hourly-Averaged Data



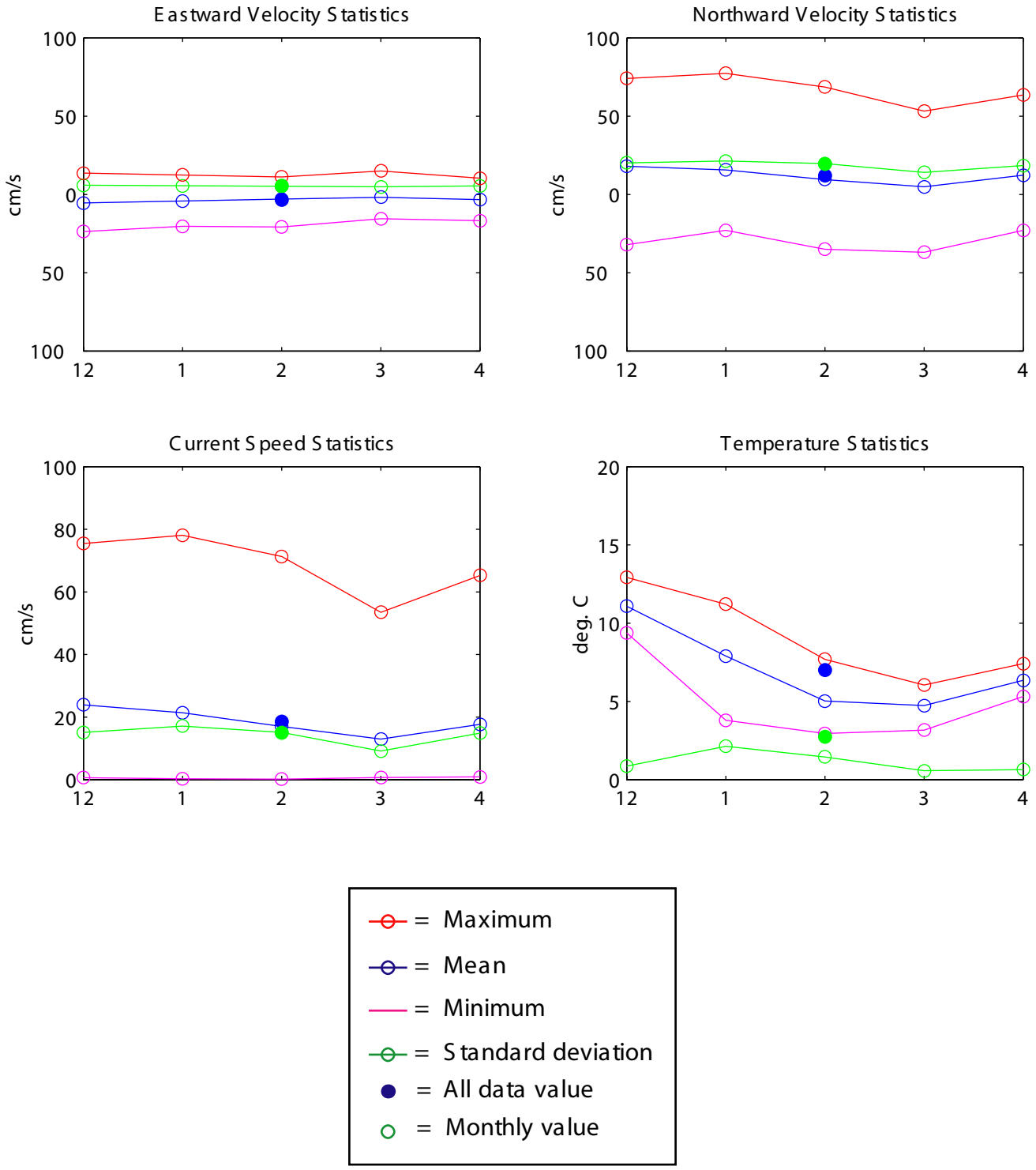
Station E: Monthly Current and Temperature Statistics

1 Meter Below the Surface
Hourly-Averaged Data



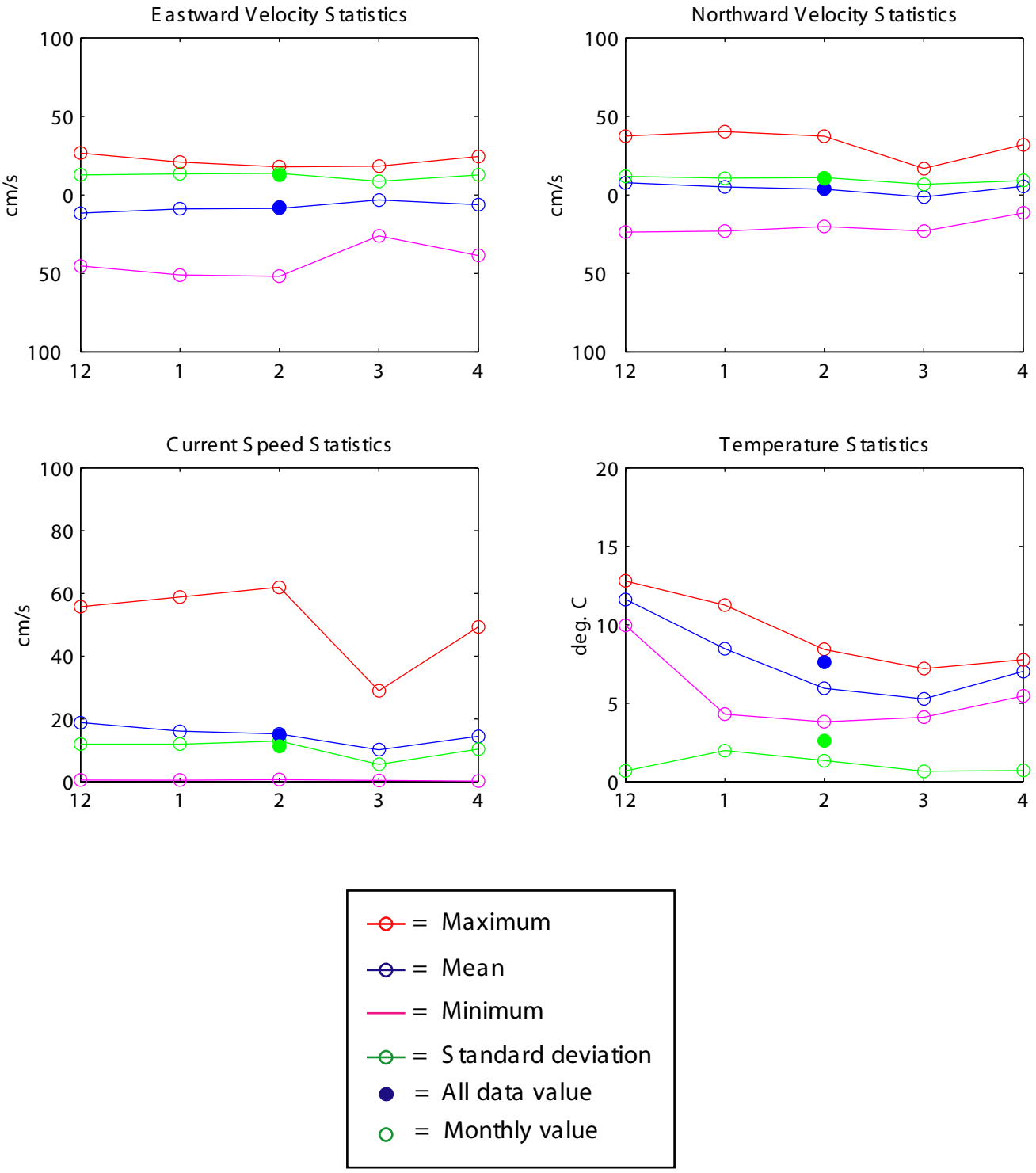
Station B: Monthly Current and Temperature Statistics

30 Meters Below the Surface
Hourly-Averaged Data



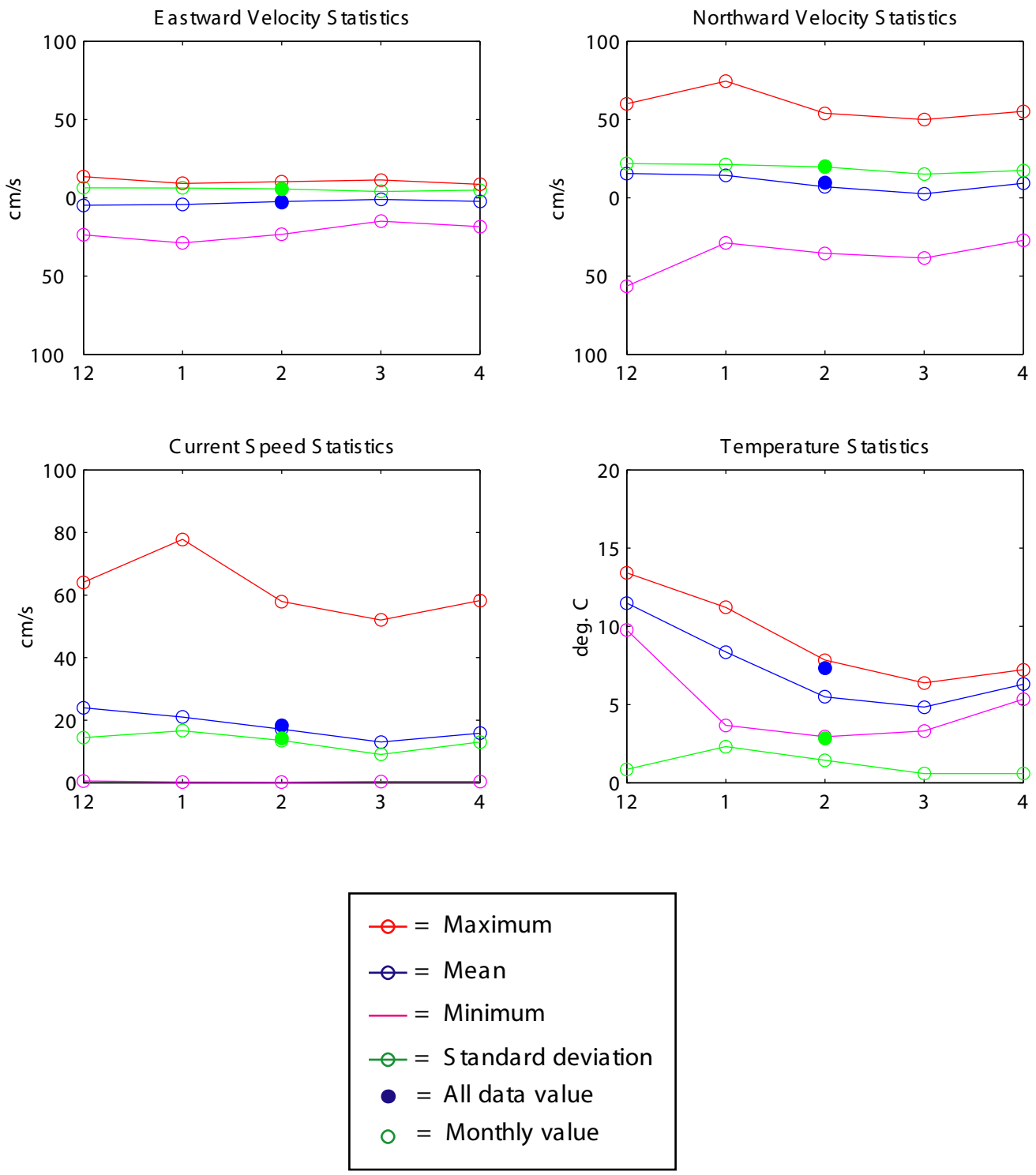
Station C: Monthly Current and Temperature Statistics

30 Meters Below the Surface
Hourly-Averaged Data



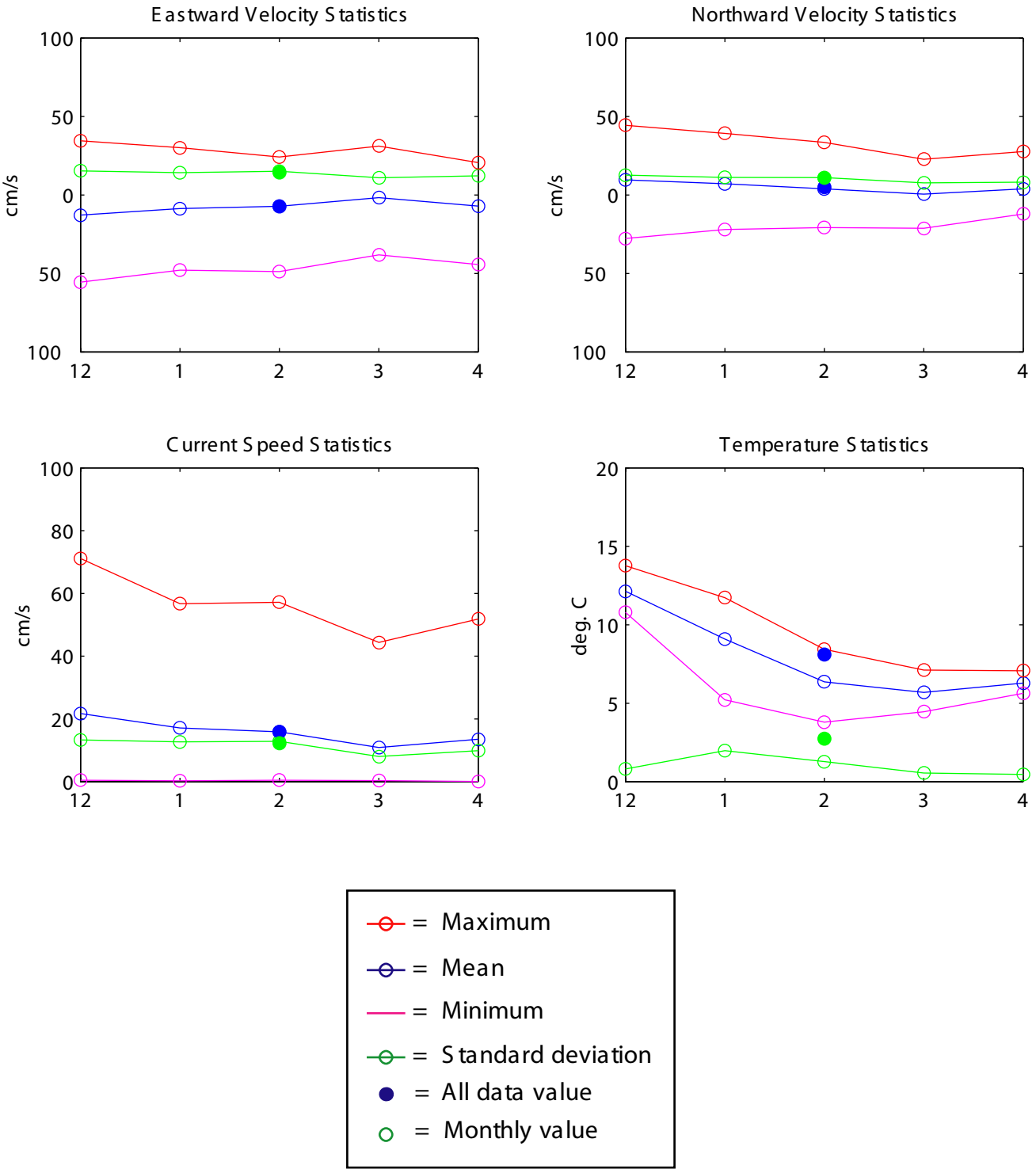
Station B: Monthly Current and Temperature Statistics

45.5 Meters Below the Surface
Hourly-Averaged Data



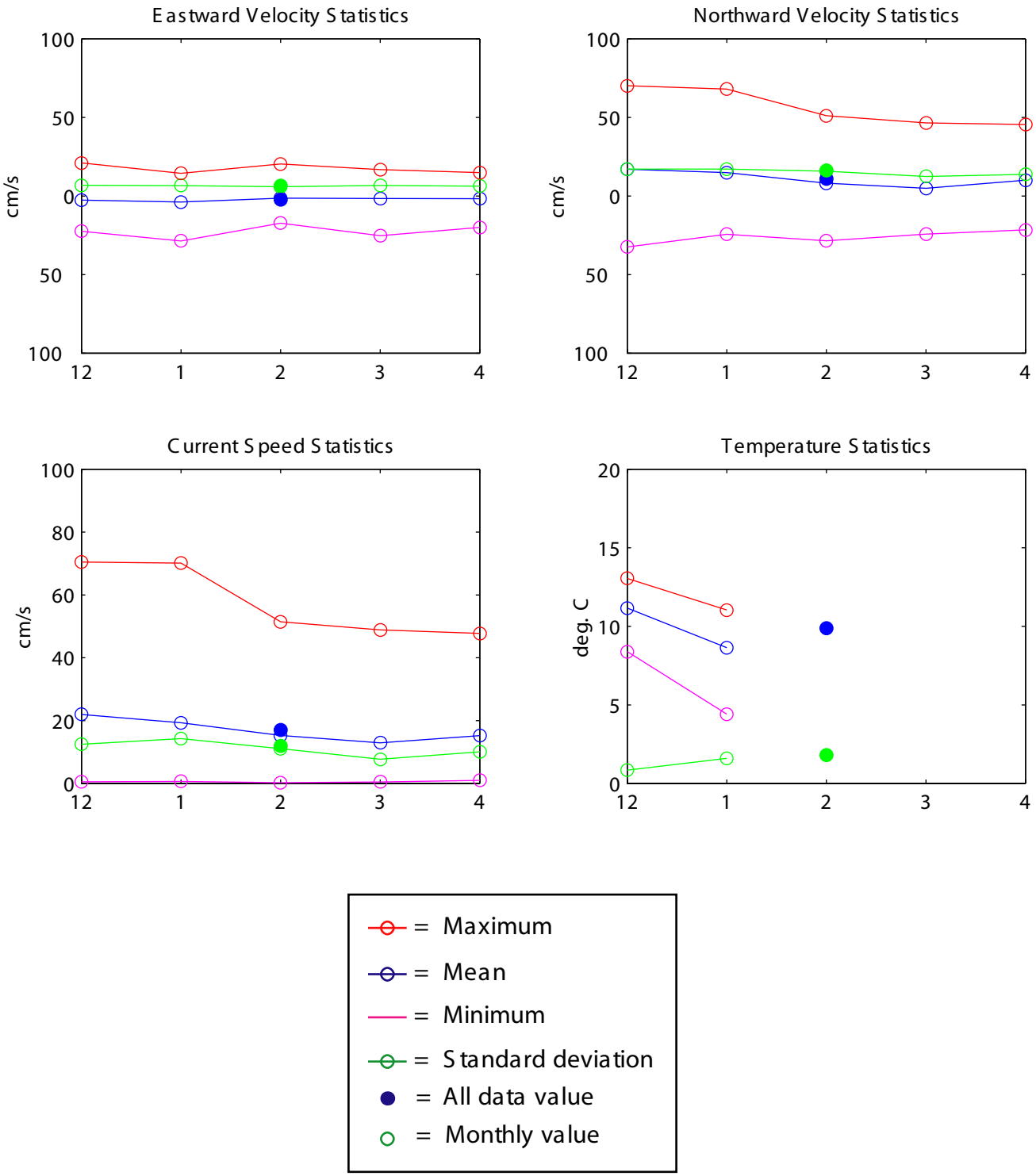
Station C: Monthly Current and Temperature Statistics

60 Meters Below the Surface
Hourly-Averaged Data



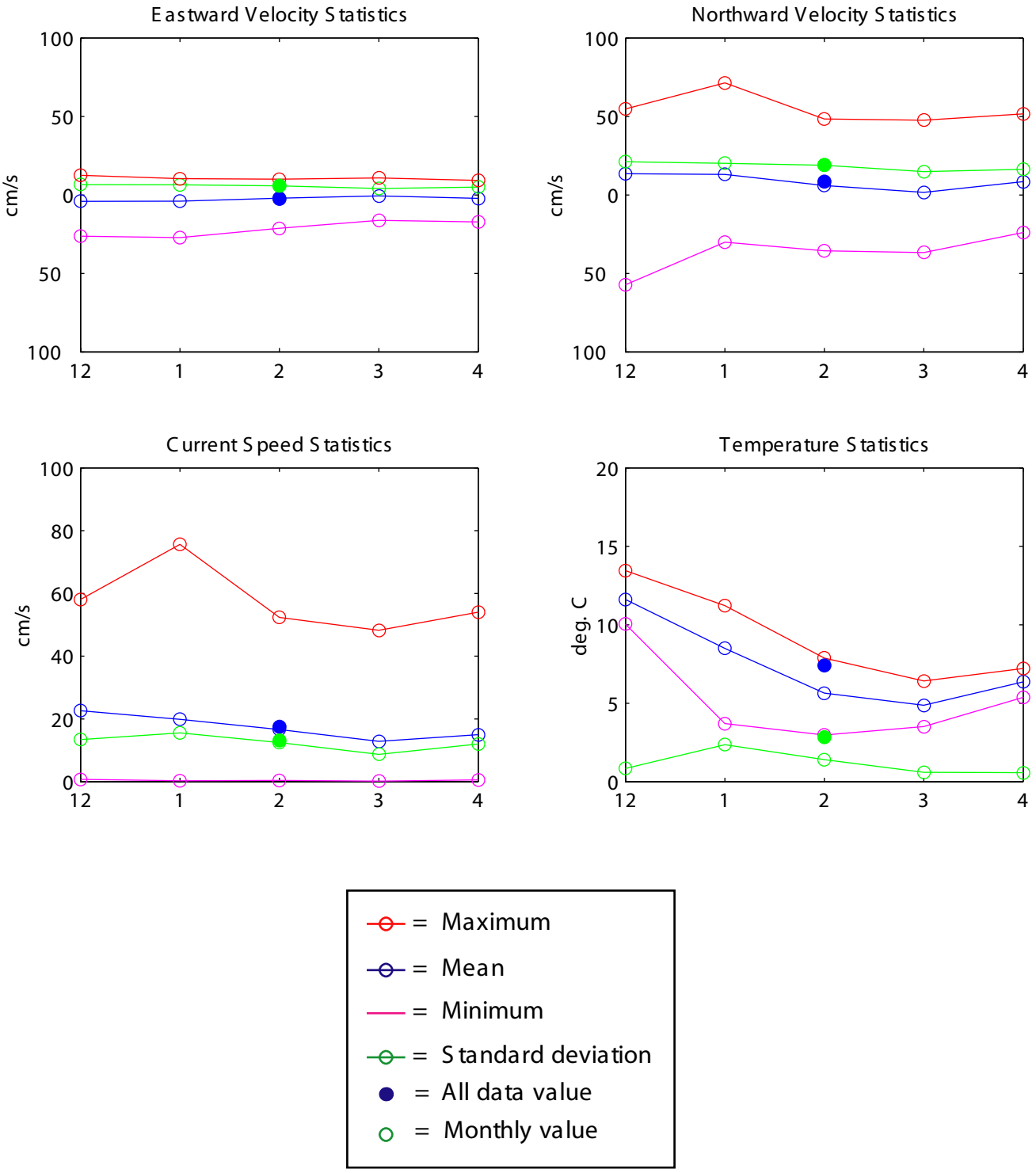
Station A: Monthly Current and Temperature Statistics

1 Meter Above the Bottom
Hourly-Averaged Data



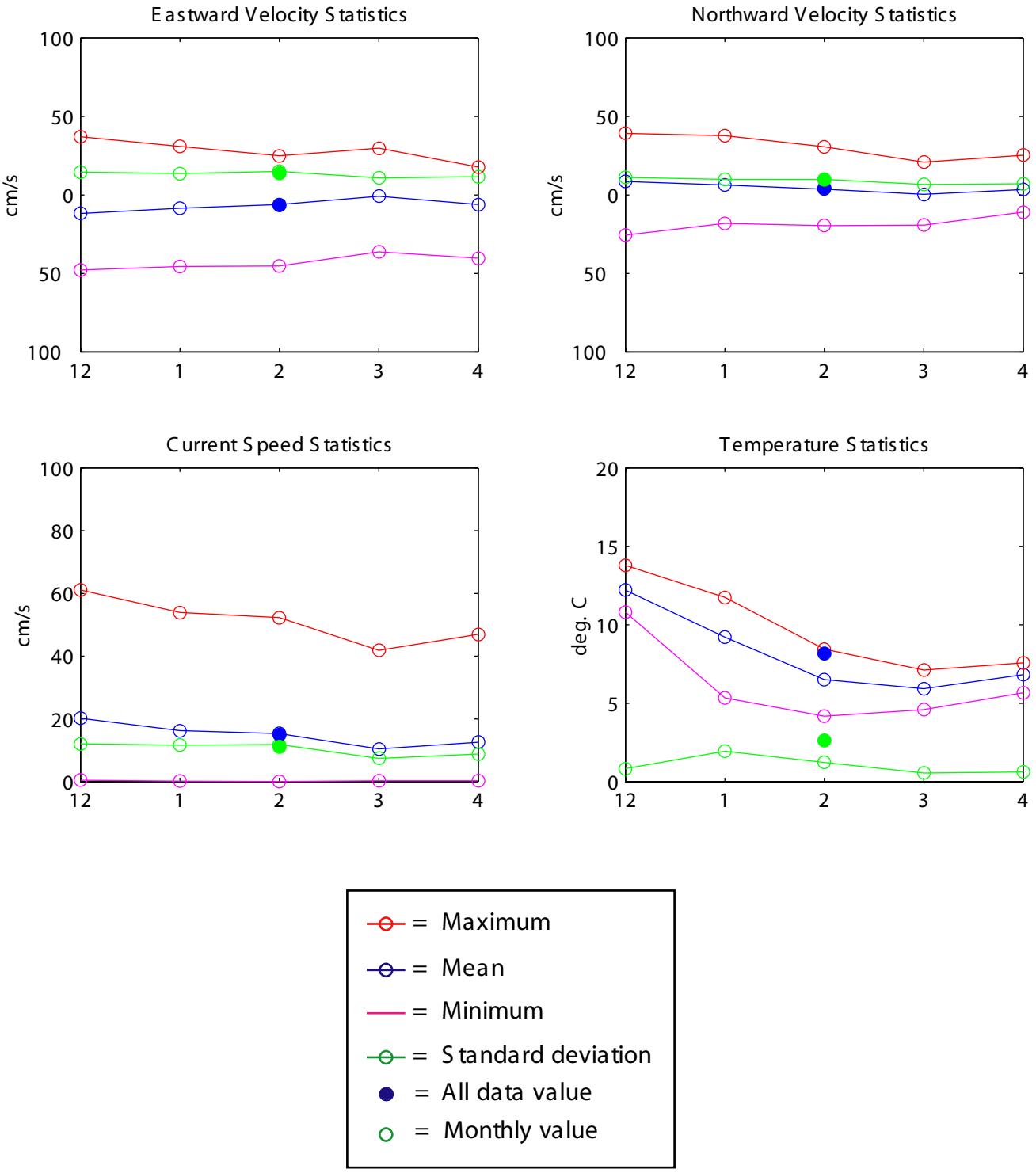
Station B: Monthly Current and Temperature Statistics

1 Meter Above the Bottom
Hourly-Averaged Data



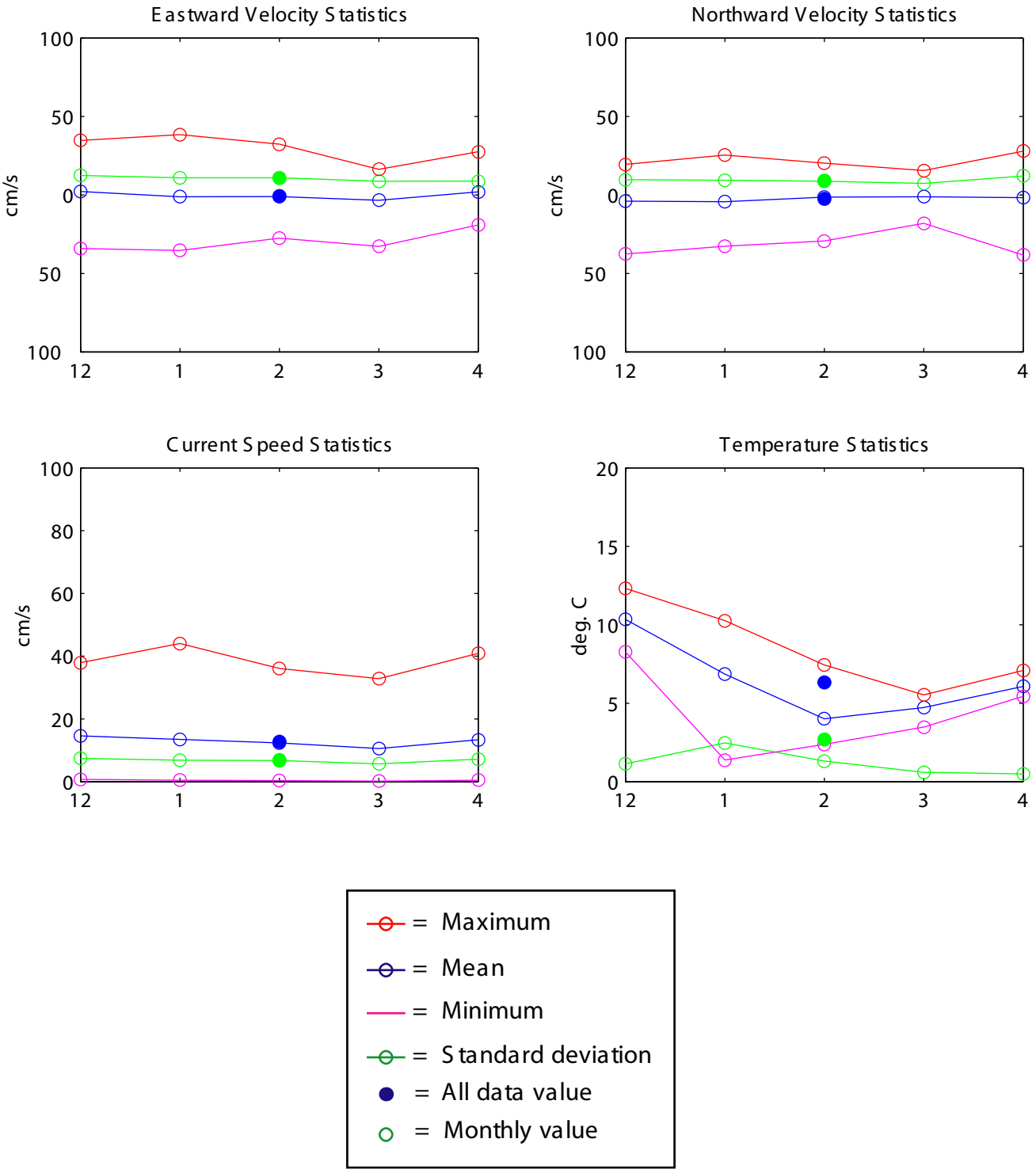
Station C: Monthly Current and Temperature Statistics

1 Meter Above the Bottom
Hourly-Averaged Data



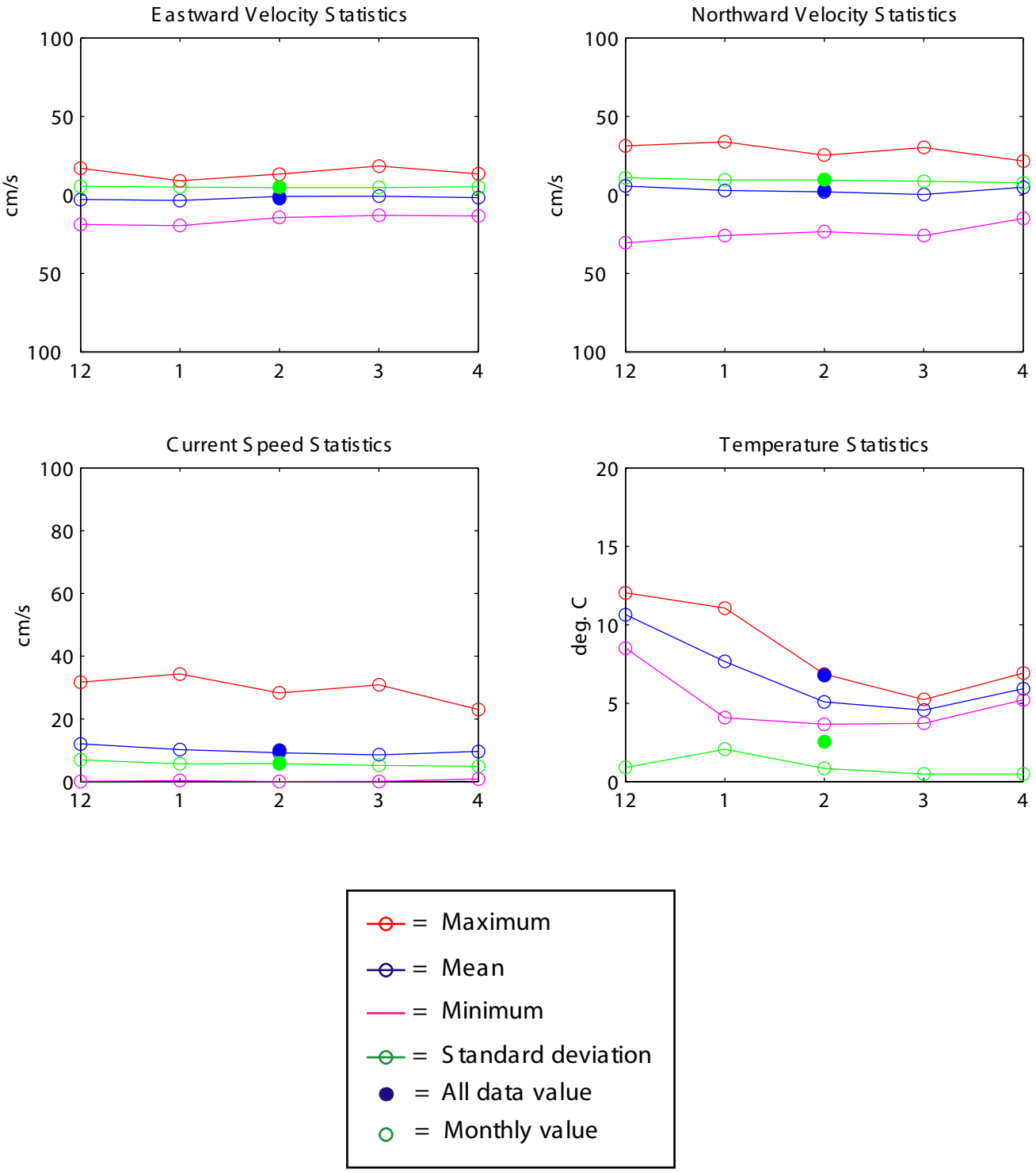
Station D: Monthly Current and Temperature Statistics

1 Meter Above the Bottom
Hourly-Averaged Data



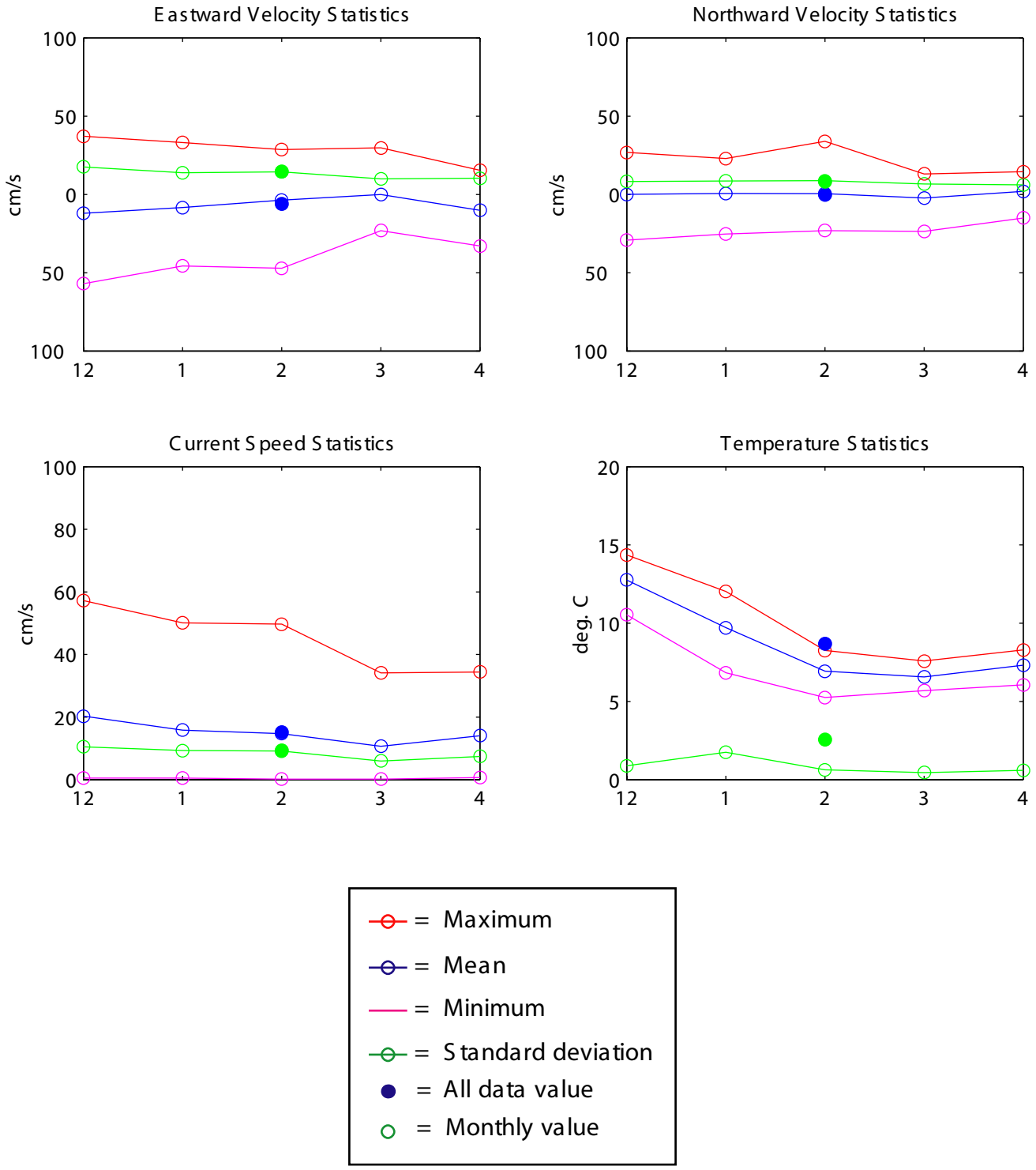
Station E: Monthly Current and Temperature Statistics

1 Meter Above the Bottom
Hourly-Averaged Data



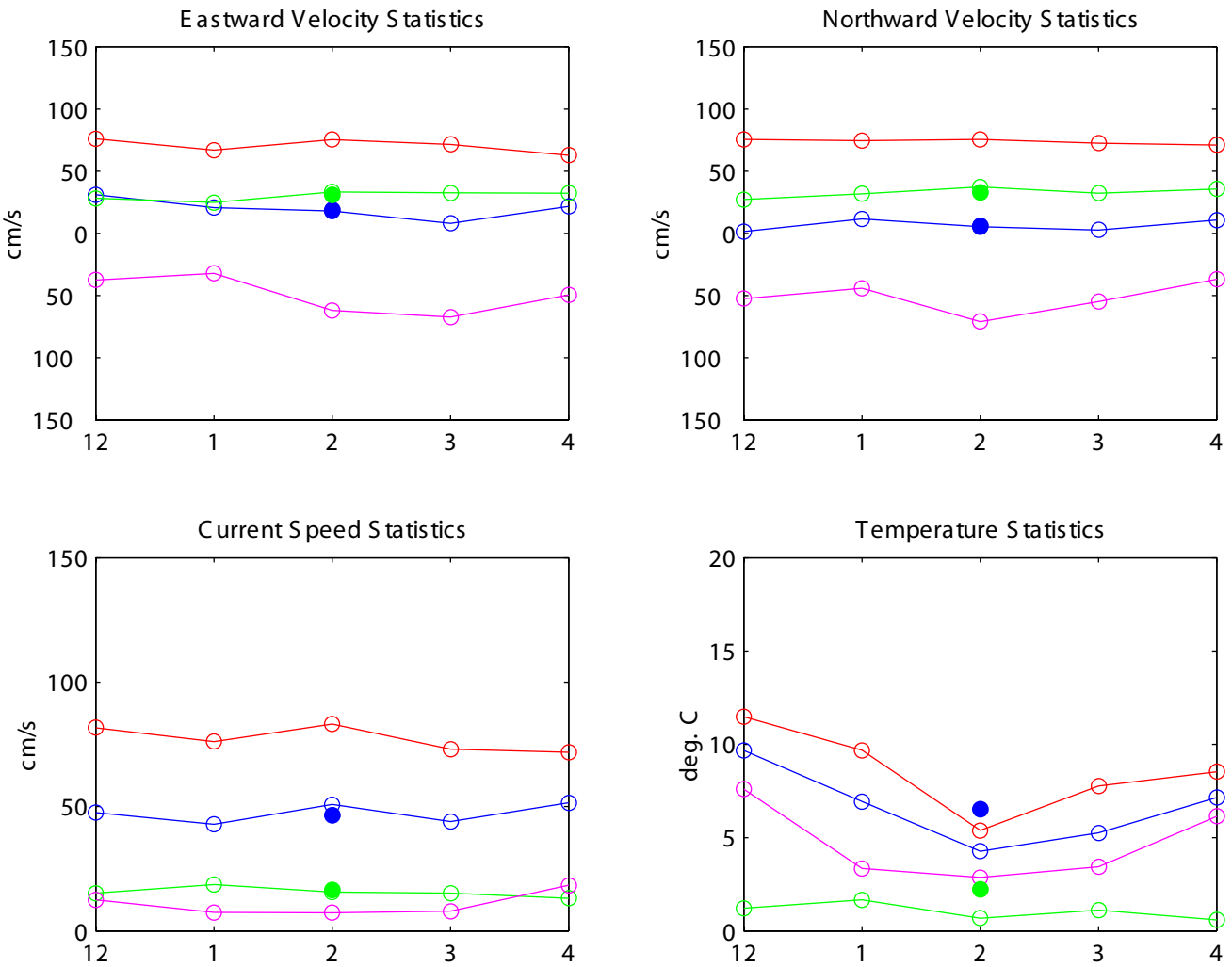
Station F: Monthly Current and Temperature Statistics

1 Meter Above the Bottom
Hourly-Averaged Data



Station A: Monthly Current and Temperature Statistics

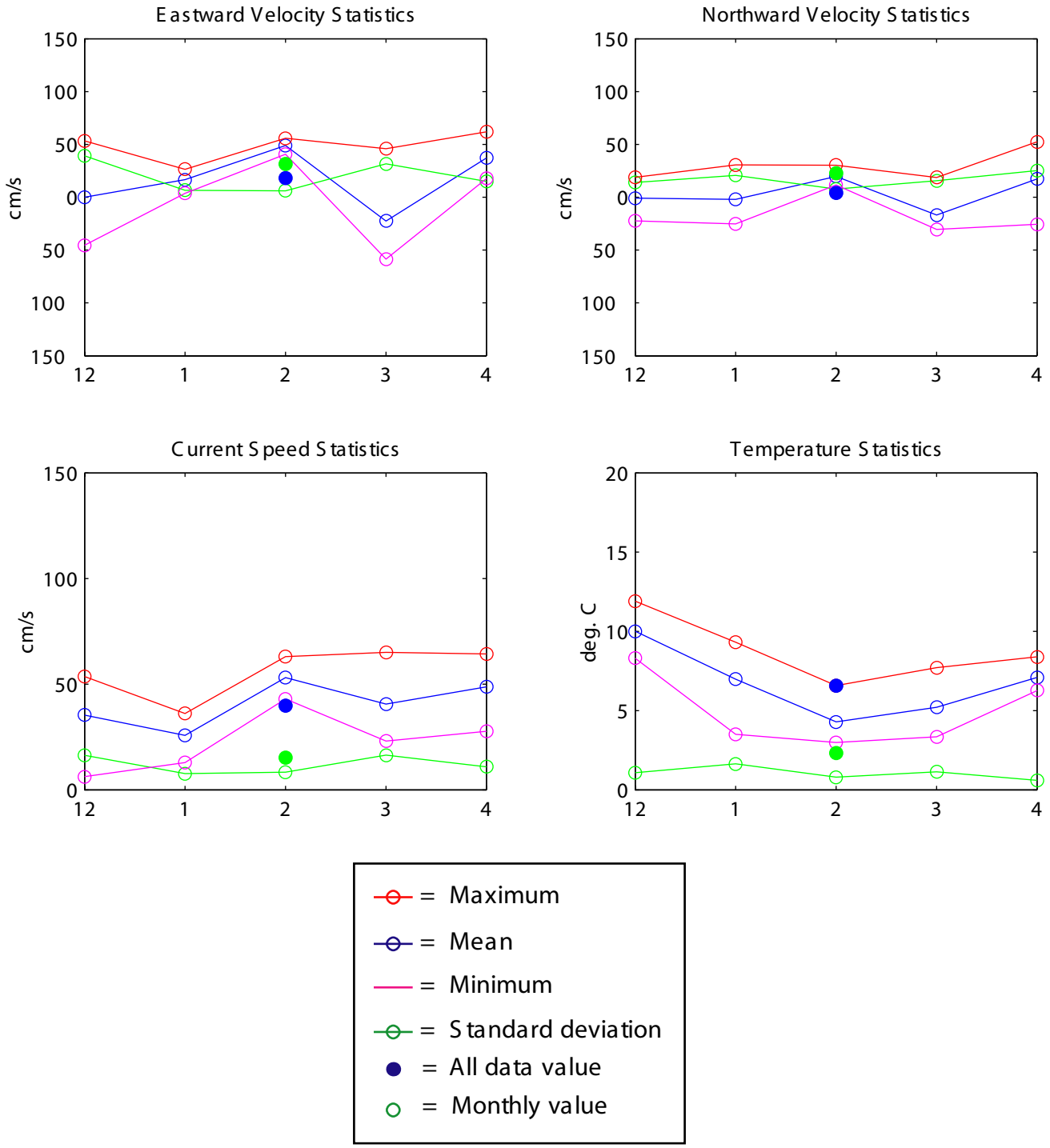
1 Meter Below the Surface
Low-Passed Data



= Maximum
= Mean
= Minimum
= Standard deviation
= All data value
= Monthly value

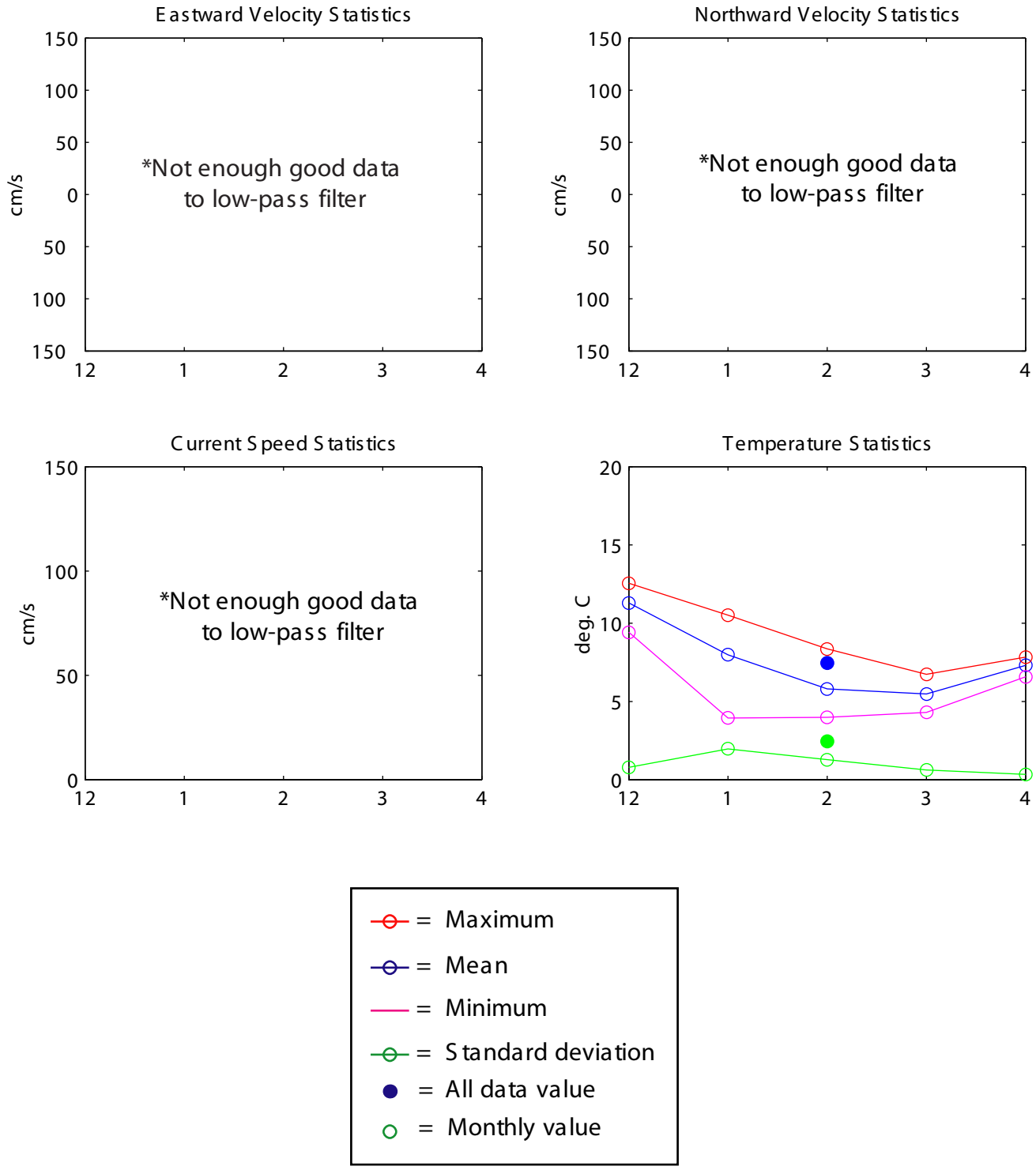
Station B: Monthly Current and Temperature Statistics

1 Meter Below the Surface
Low-Passed Data



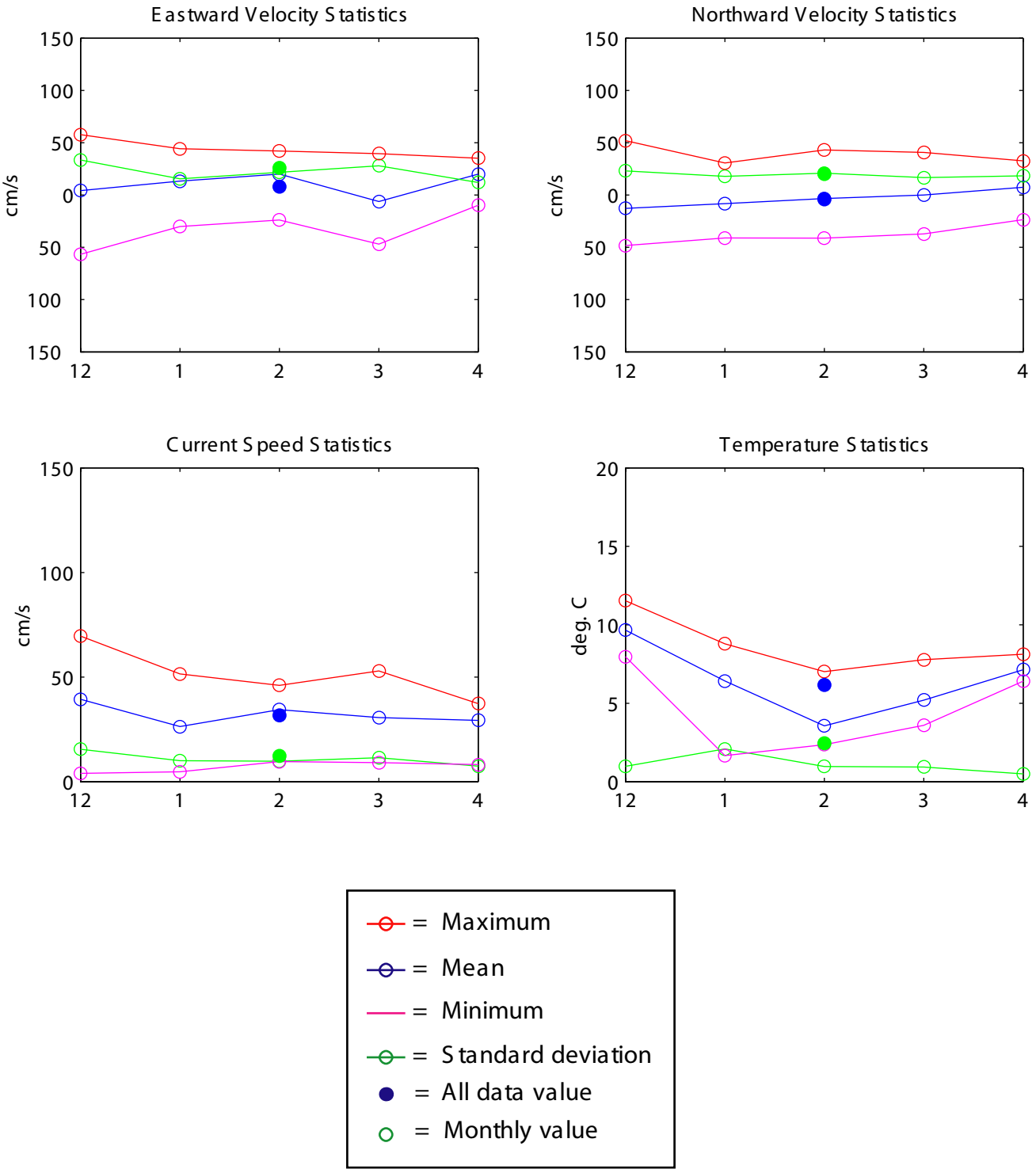
Station C: Monthly Current and Temperature Statistics

1 Meter Below the Surface
Low-Passed Data



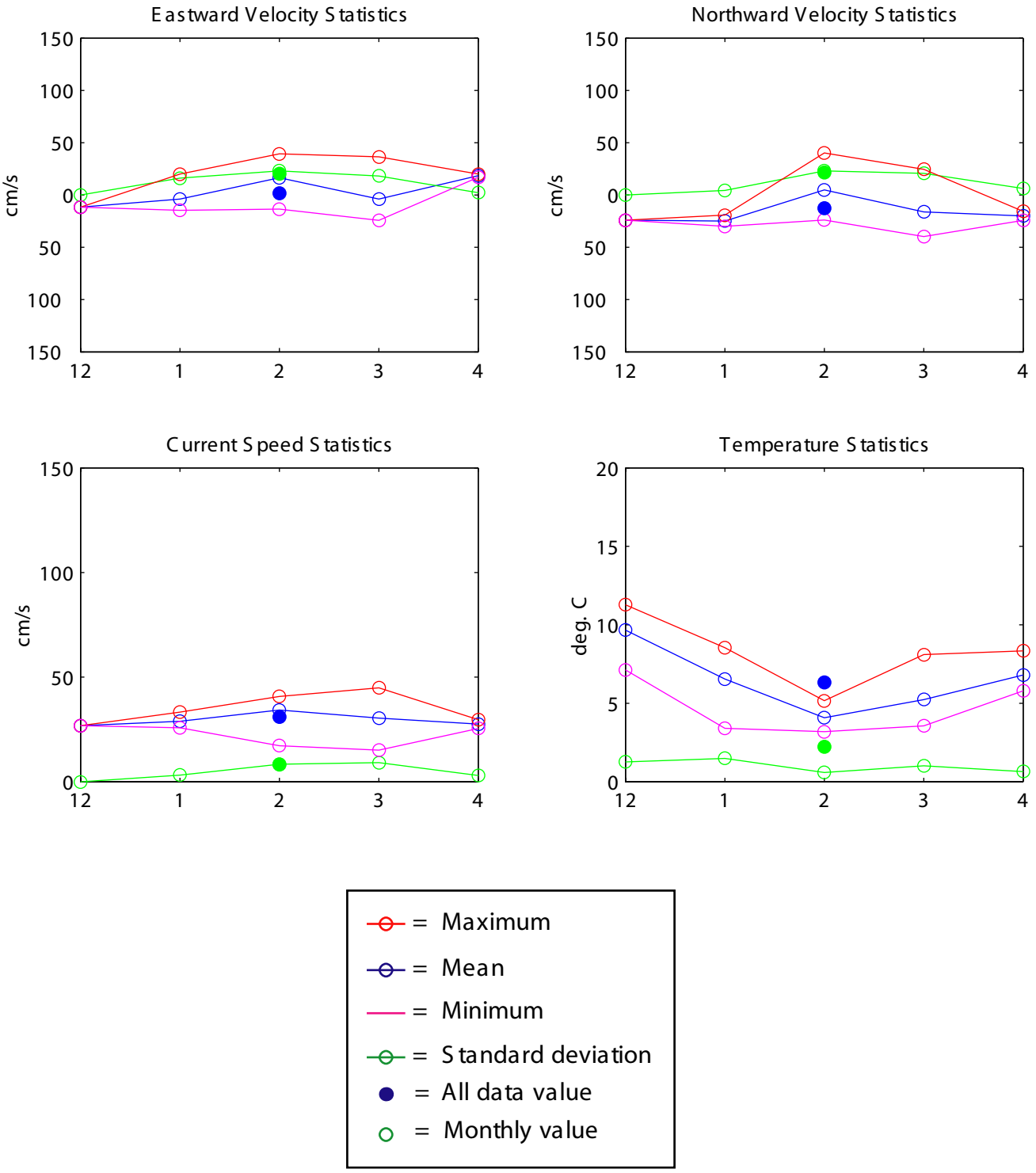
Station D: Monthly Current and Temperature Statistics

1 Meter Below the Surface
Low-Passed Data



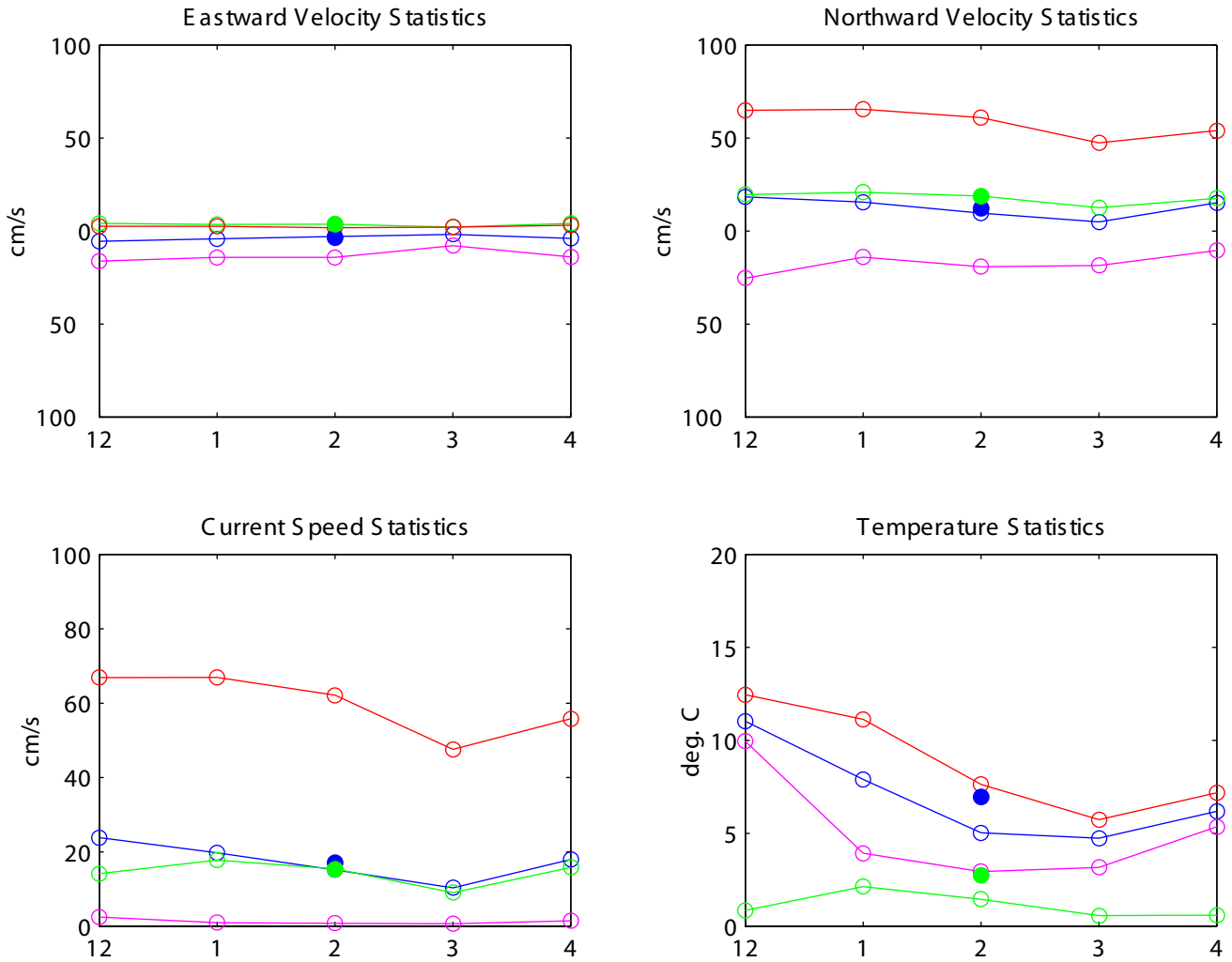
Station E: Monthly Current and Temperature Statistics

1 Meter Below the Surface
Low-Passed Data



Station B: Monthly Current and Temperature Statistics

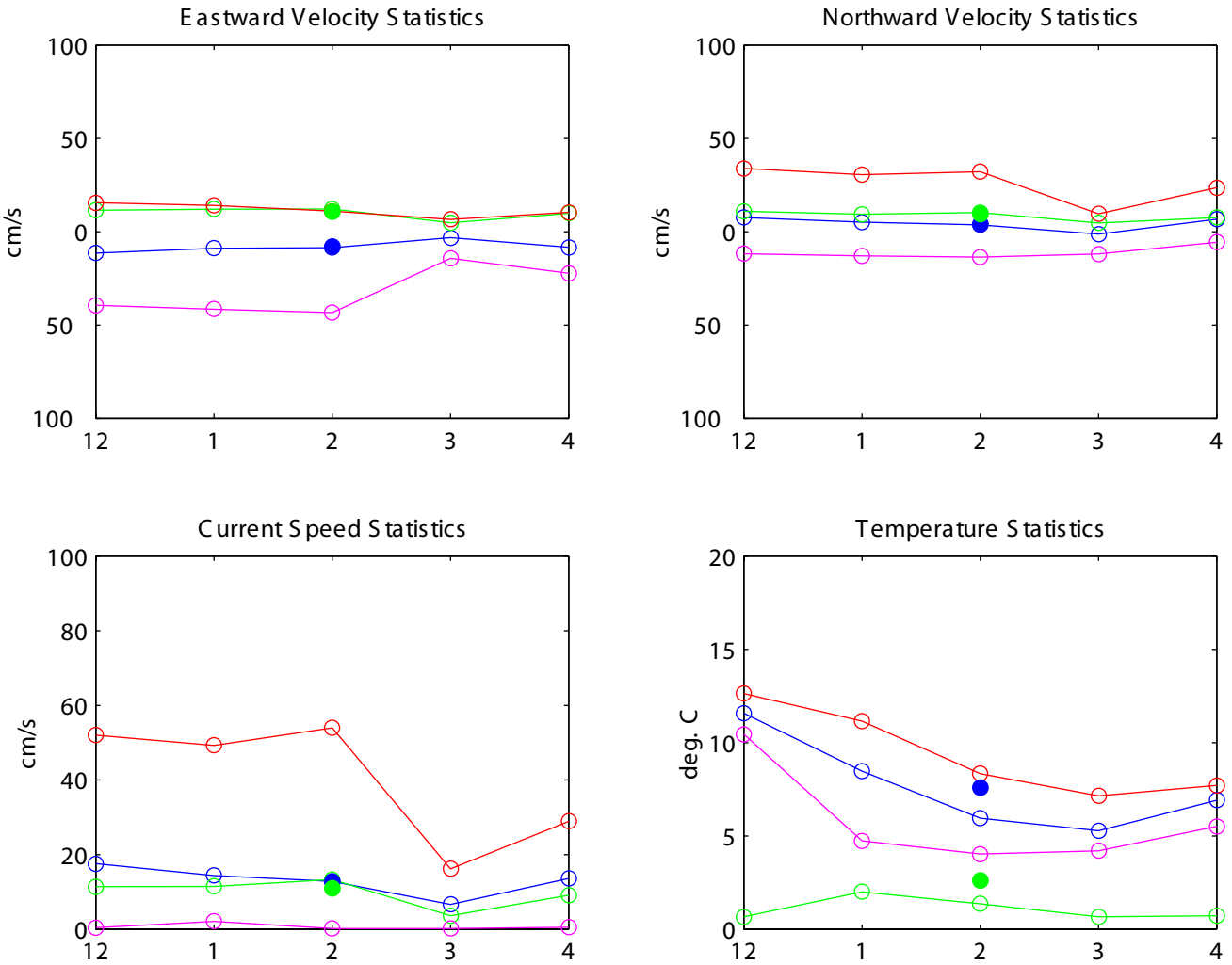
30 Meters Below the Surface
Low-Passed Data



= Maximum
= Mean
= Minimum
= Standard deviation
= All data value
= Monthly value

Station C: Monthly Current and Temperature Statistics

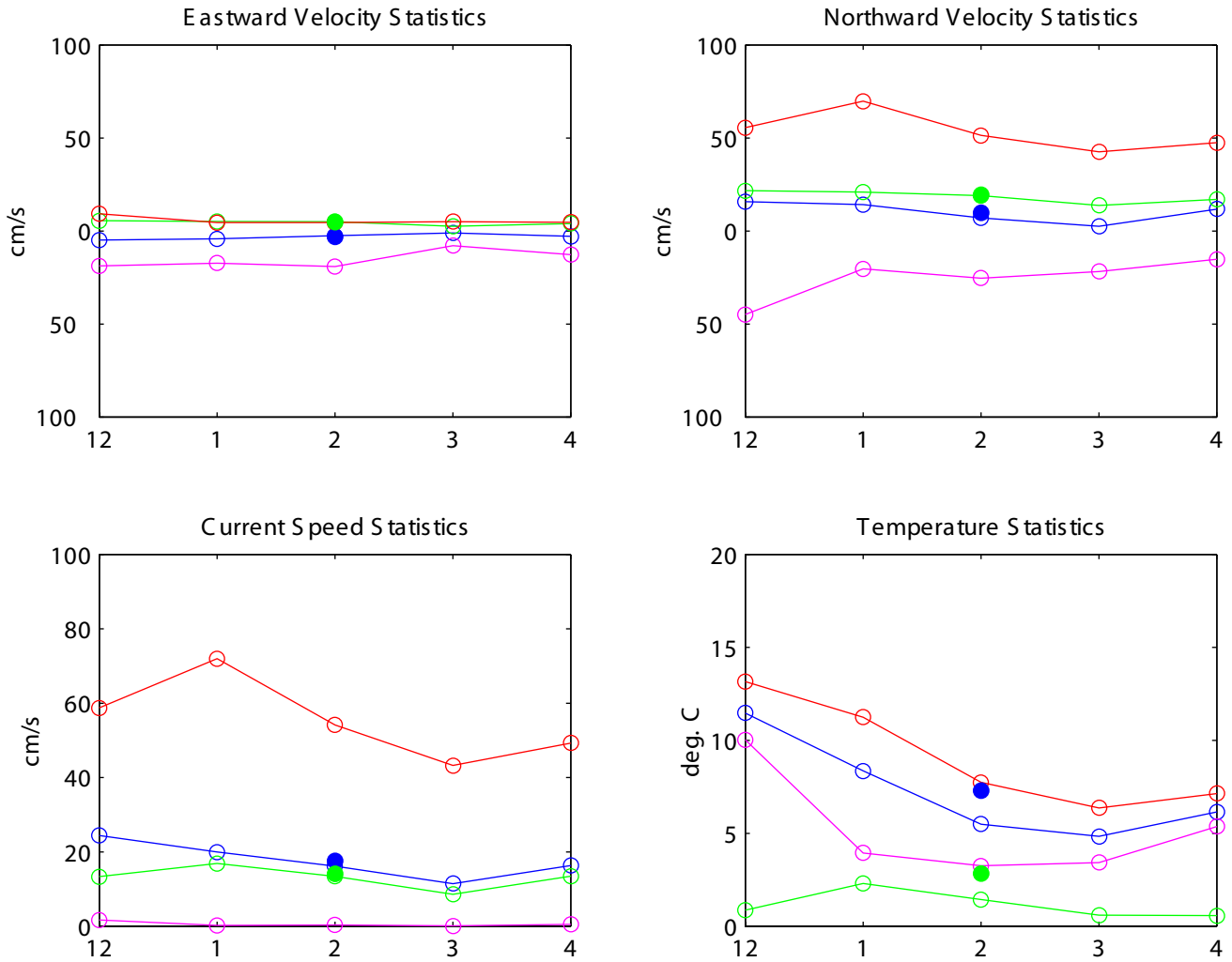
30 Meters Below the Surface
Low-Passed Data



= Maximum
= Mean
= Minimum
= Standard deviation
= All data value
= Monthly value

Station B: Monthly Current and Temperature Statistics

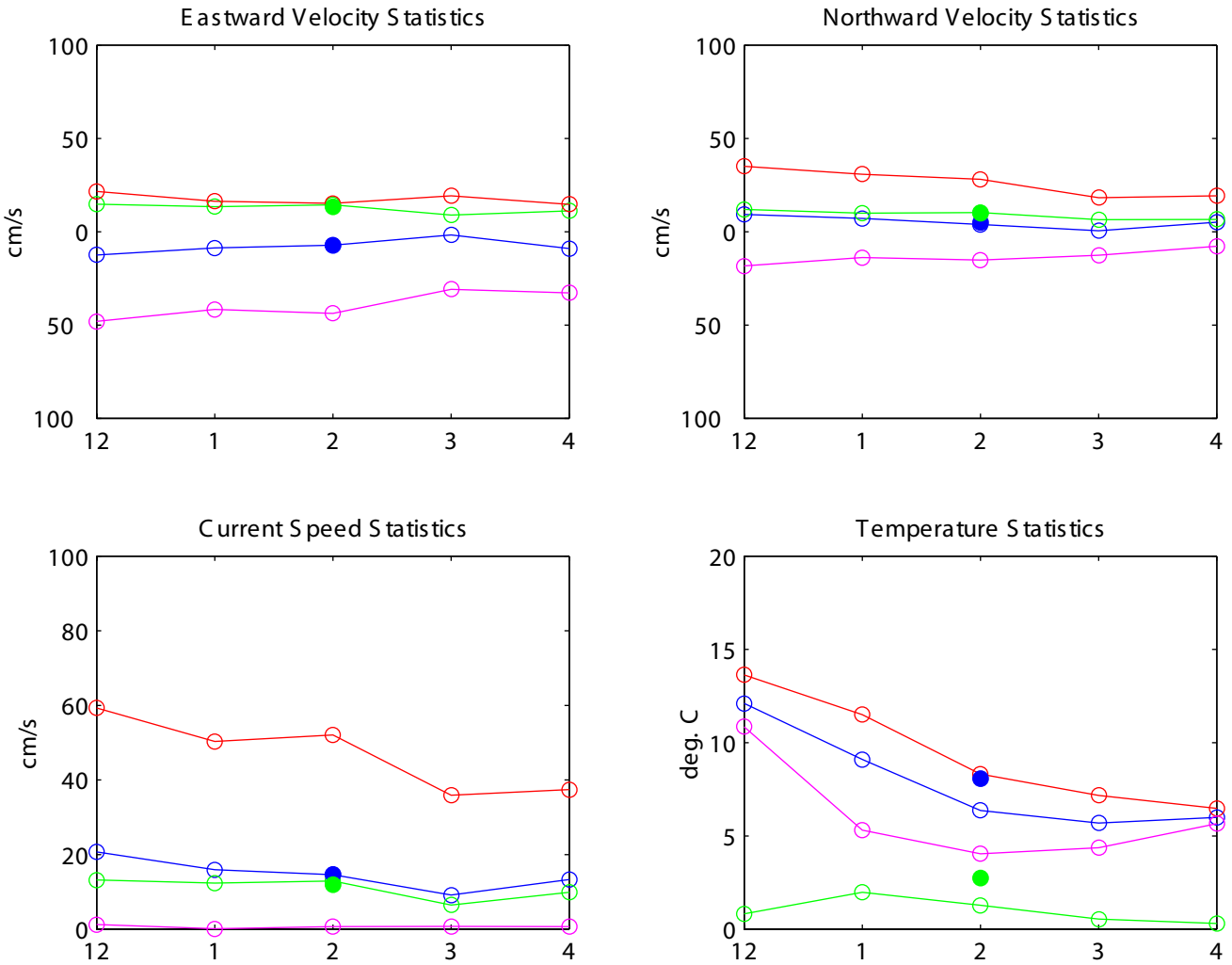
45.5 Meters Below the Surface
Low-Passed Data



= Maximum
= Mean
= Minimum
= Standard deviation
= All data value
= Monthly value

Station C: Monthly Current and Temperature Statistics

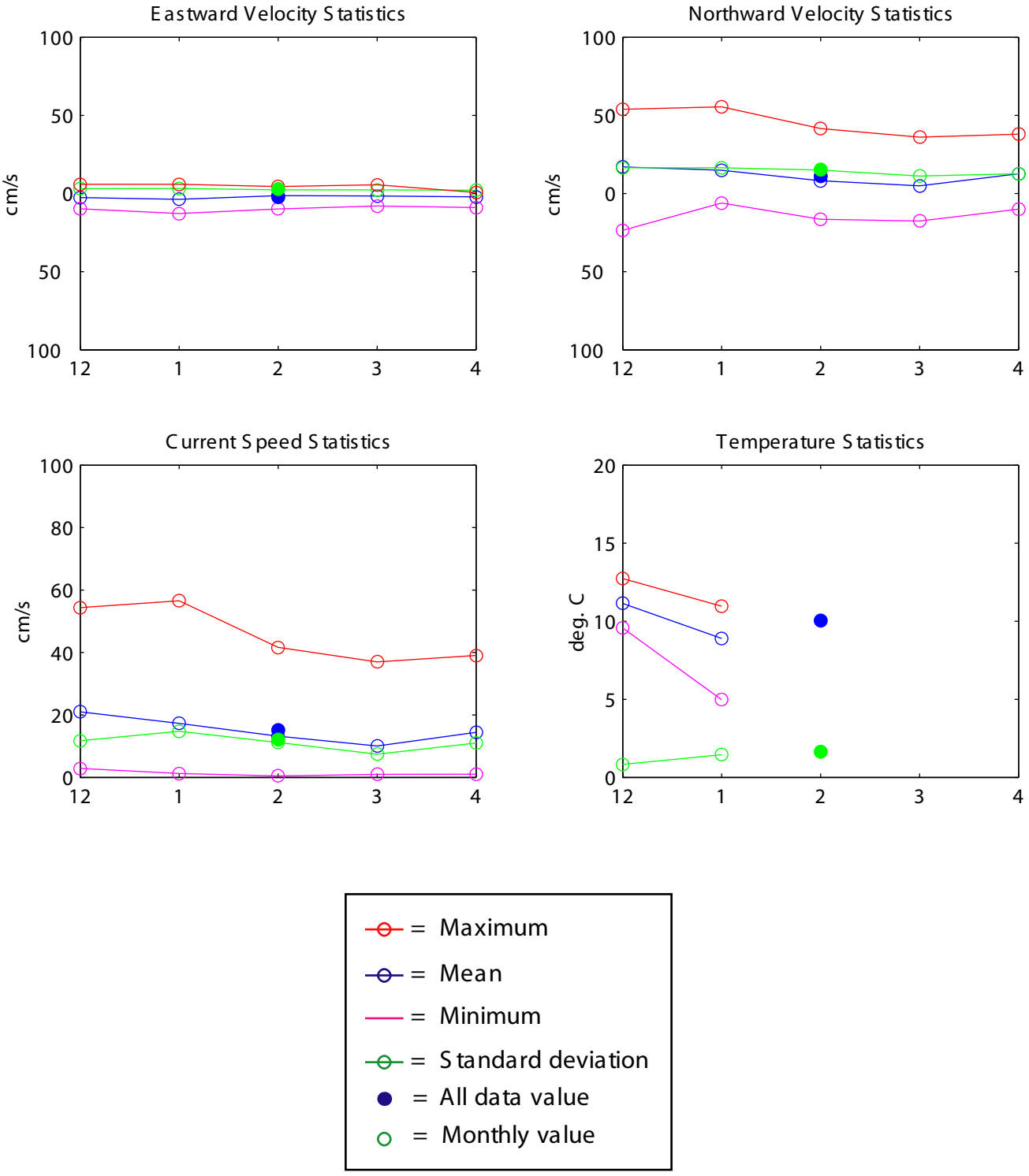
60 Meters Below the Surface
Low-Passed Data



= Maximum
= Mean
= Minimum
= Standard deviation
= All data value
= Monthly value

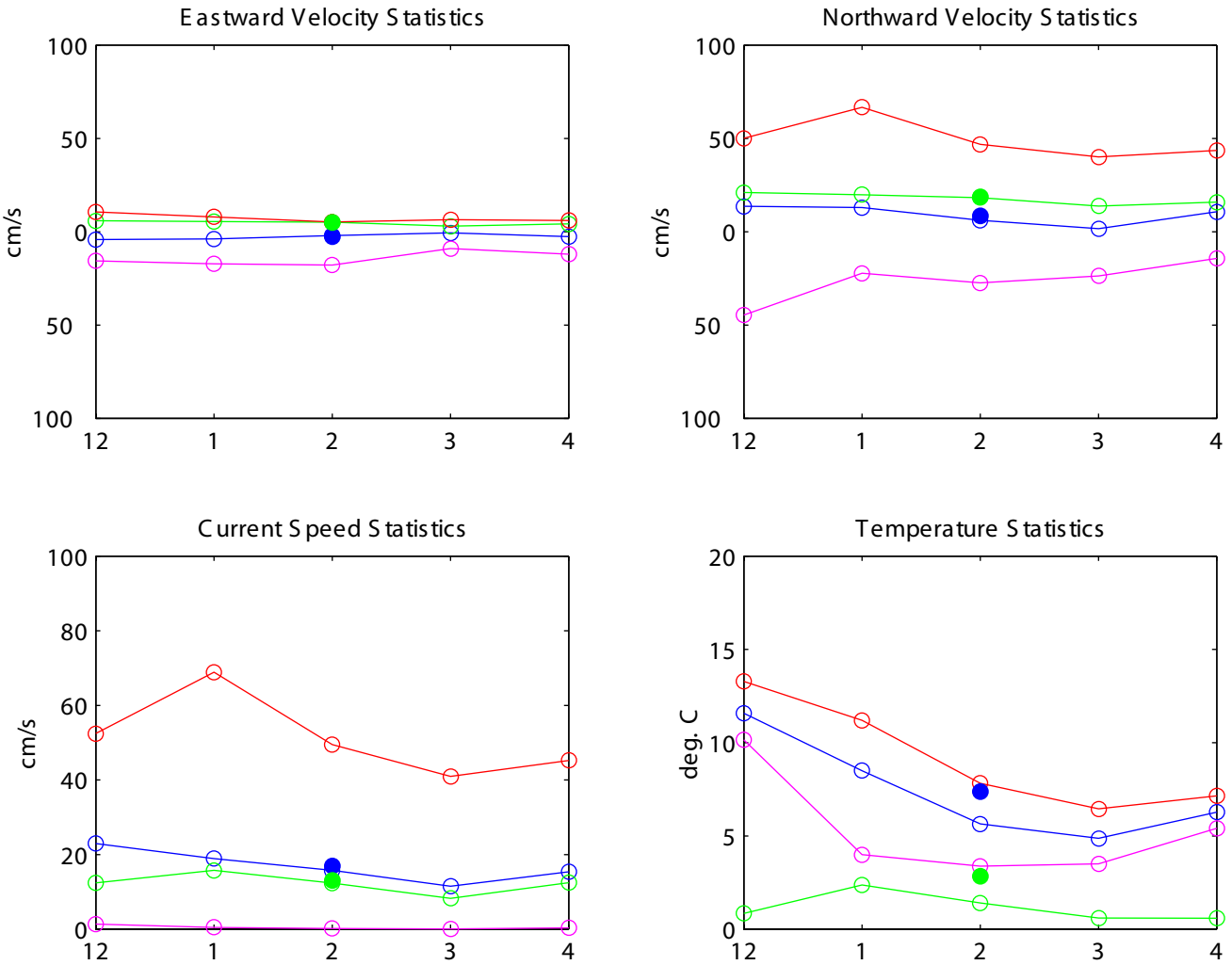
Station A: Monthly Current and Temperature Statistics

1 Meter Above the Bottom
Low-Passed Data



Station B: Monthly Current and Temperature Statistics

1 Meter Above the Bottom
Low-Passed Data



= Maximum

= Mean

= Minimum

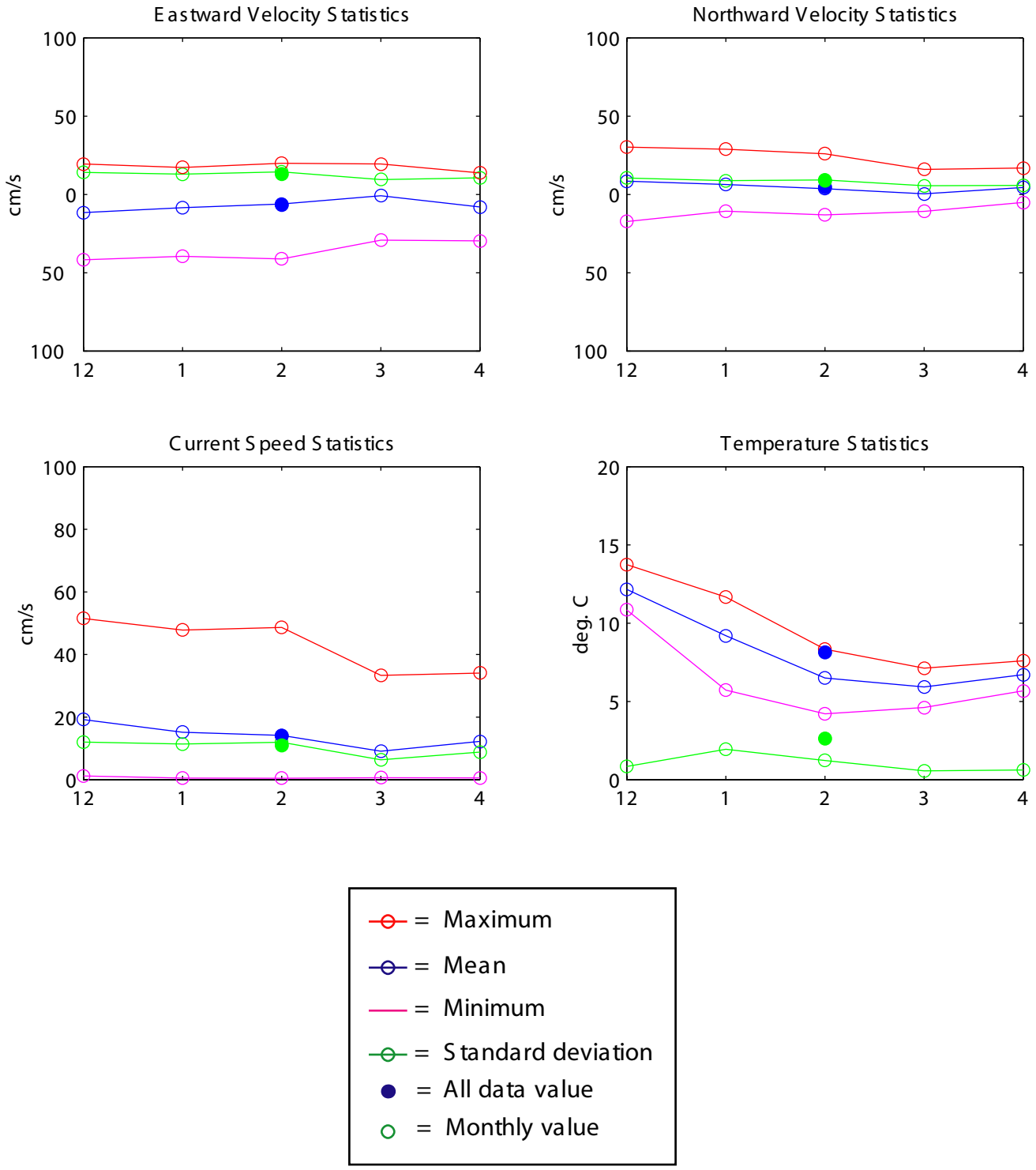
= Standard deviation

= All data value

= Monthly value

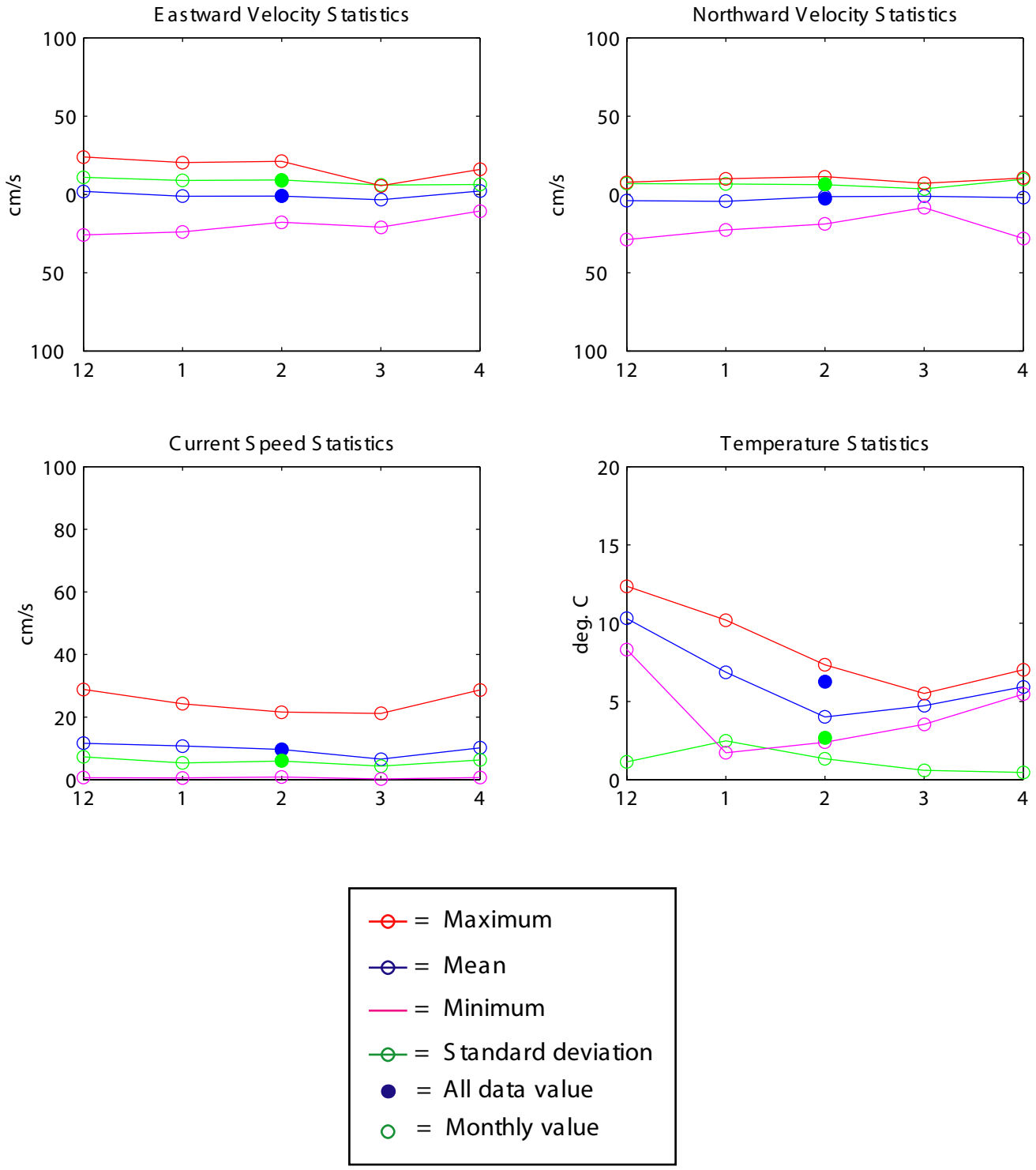
Station C: Monthly Current and Temperature Statistics

1 Meter Above the Bottom
Low-Passed Data



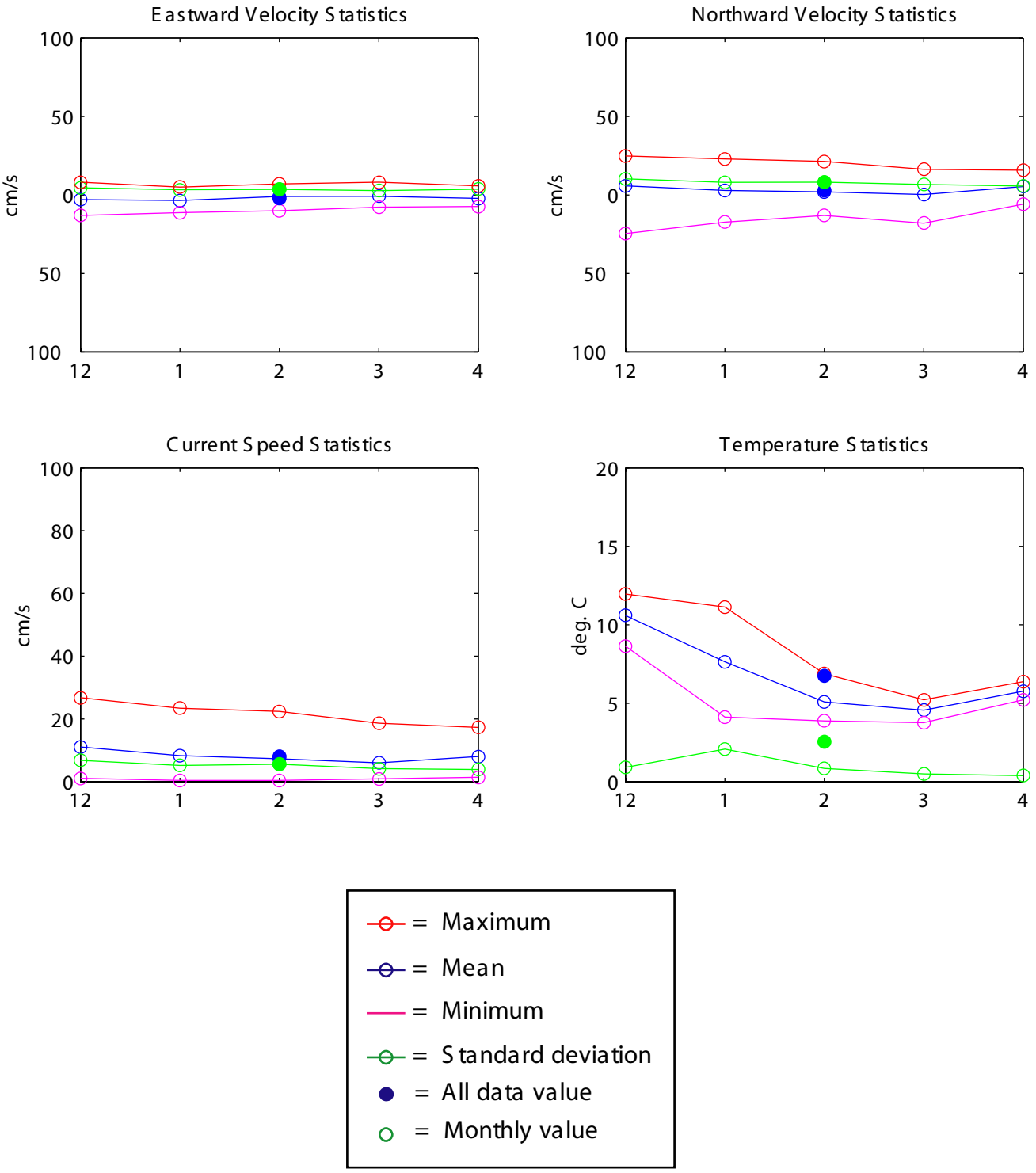
Station D: Monthly Current and Temperature Statistics

1 Meter Above the Bottom
Low-Passed Data



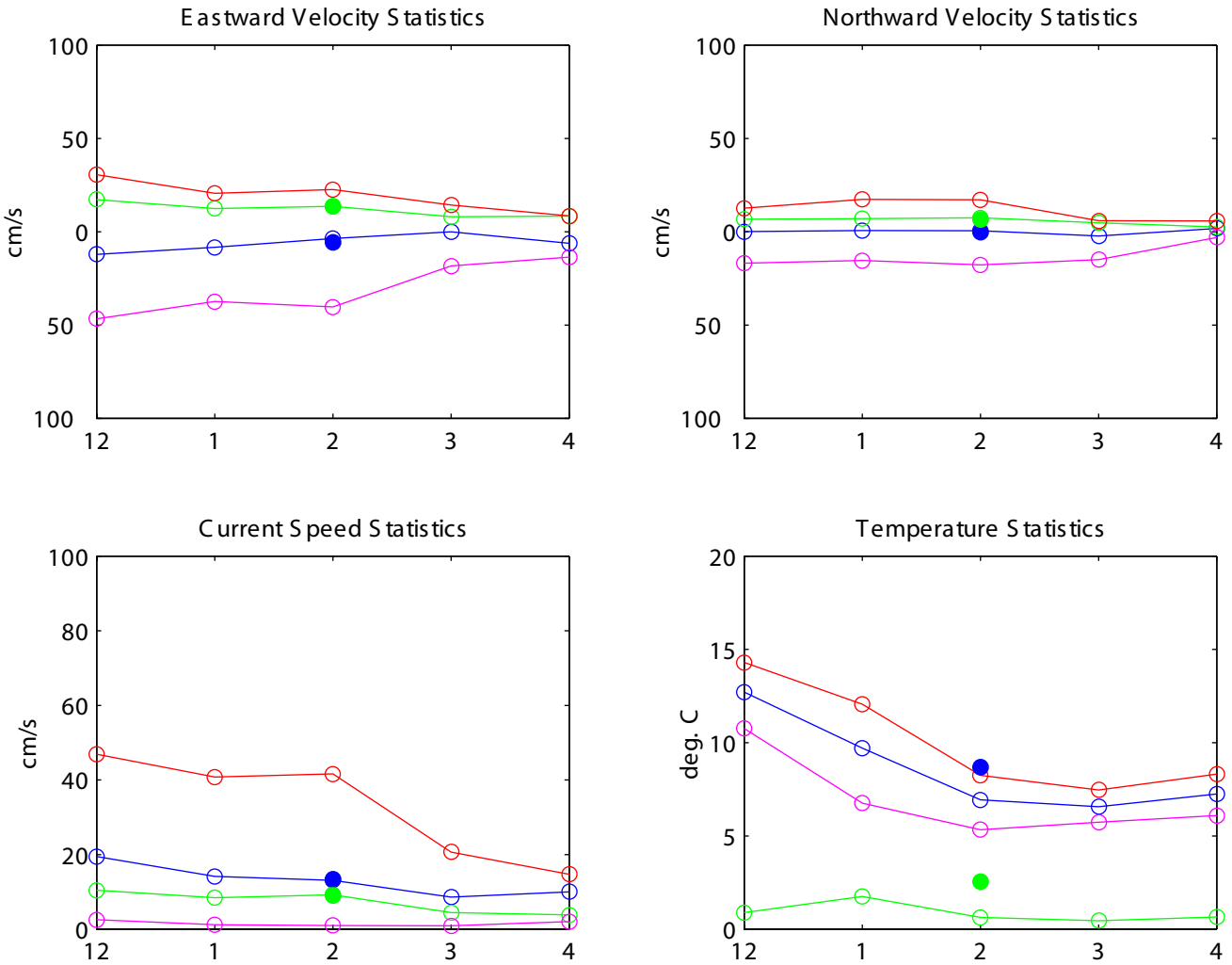
Station E: Monthly Current and Temperature Statistics

1 Meter Above the Bottom
Low-Passed Data



Station F: Monthly Current and Temperature Statistics

1 Meter Above the Bottom
Low-Passed Data



= Maximum

= Mean

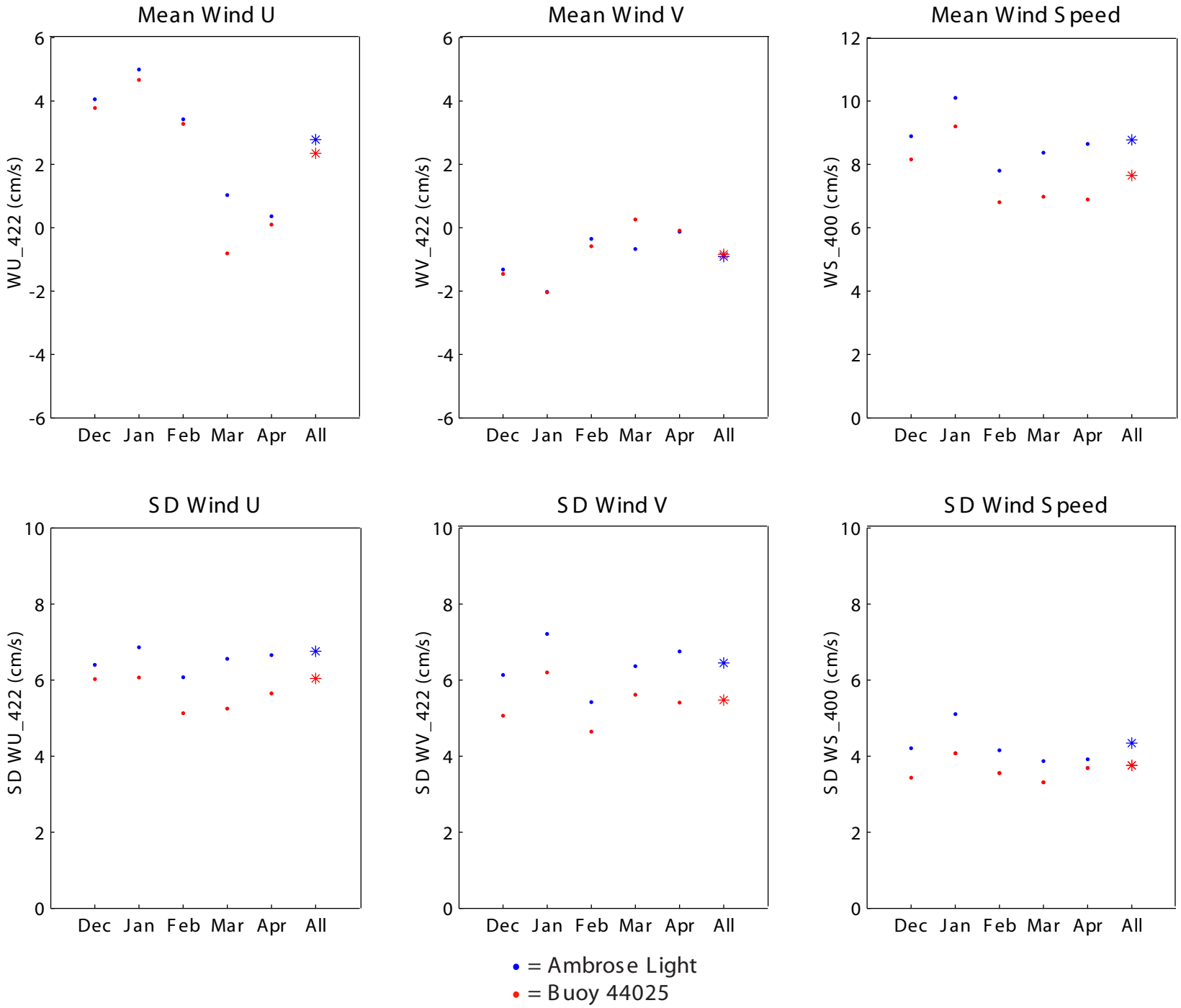
= Minimum

= Standard deviation

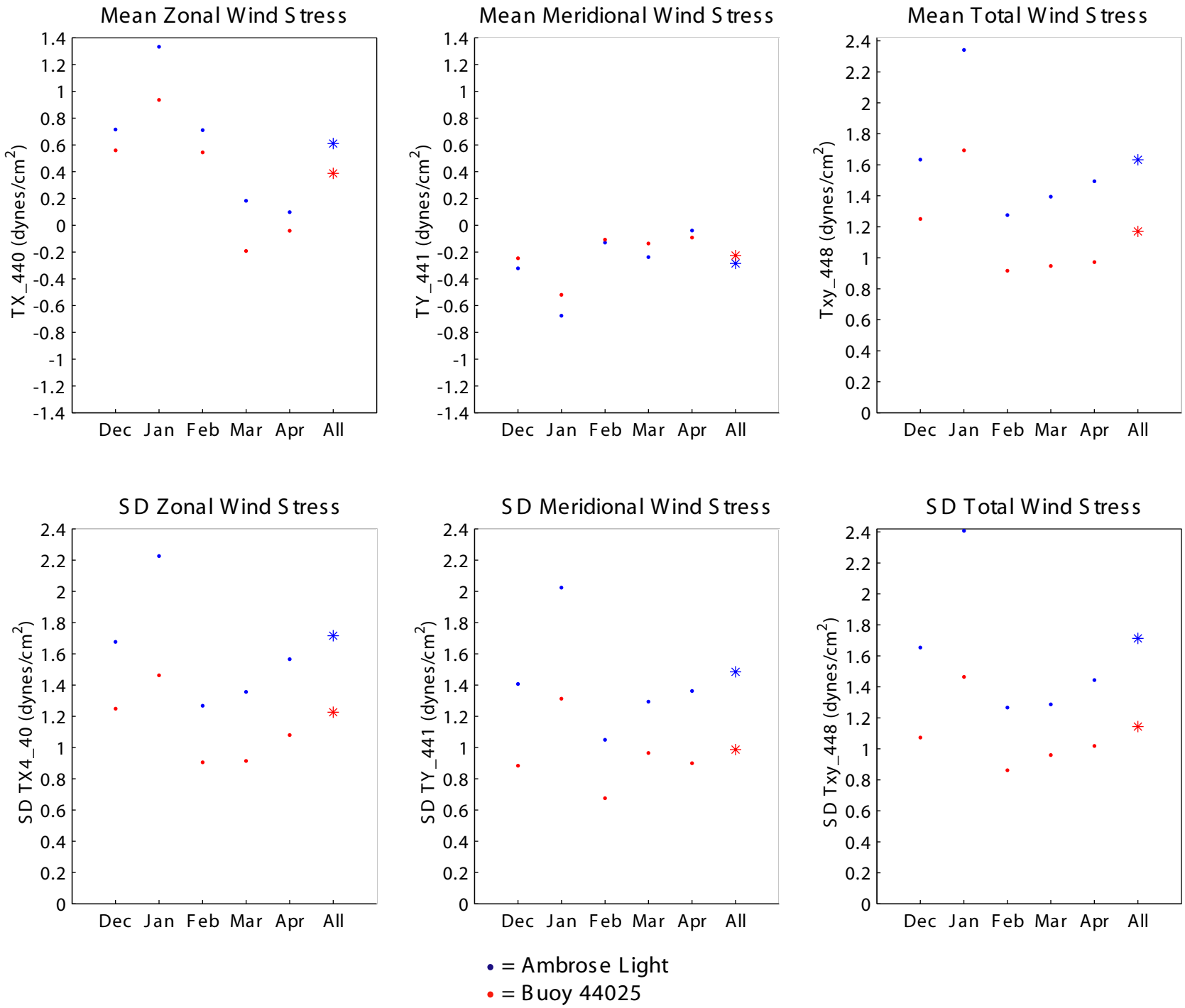
= All data value

= Monthly value

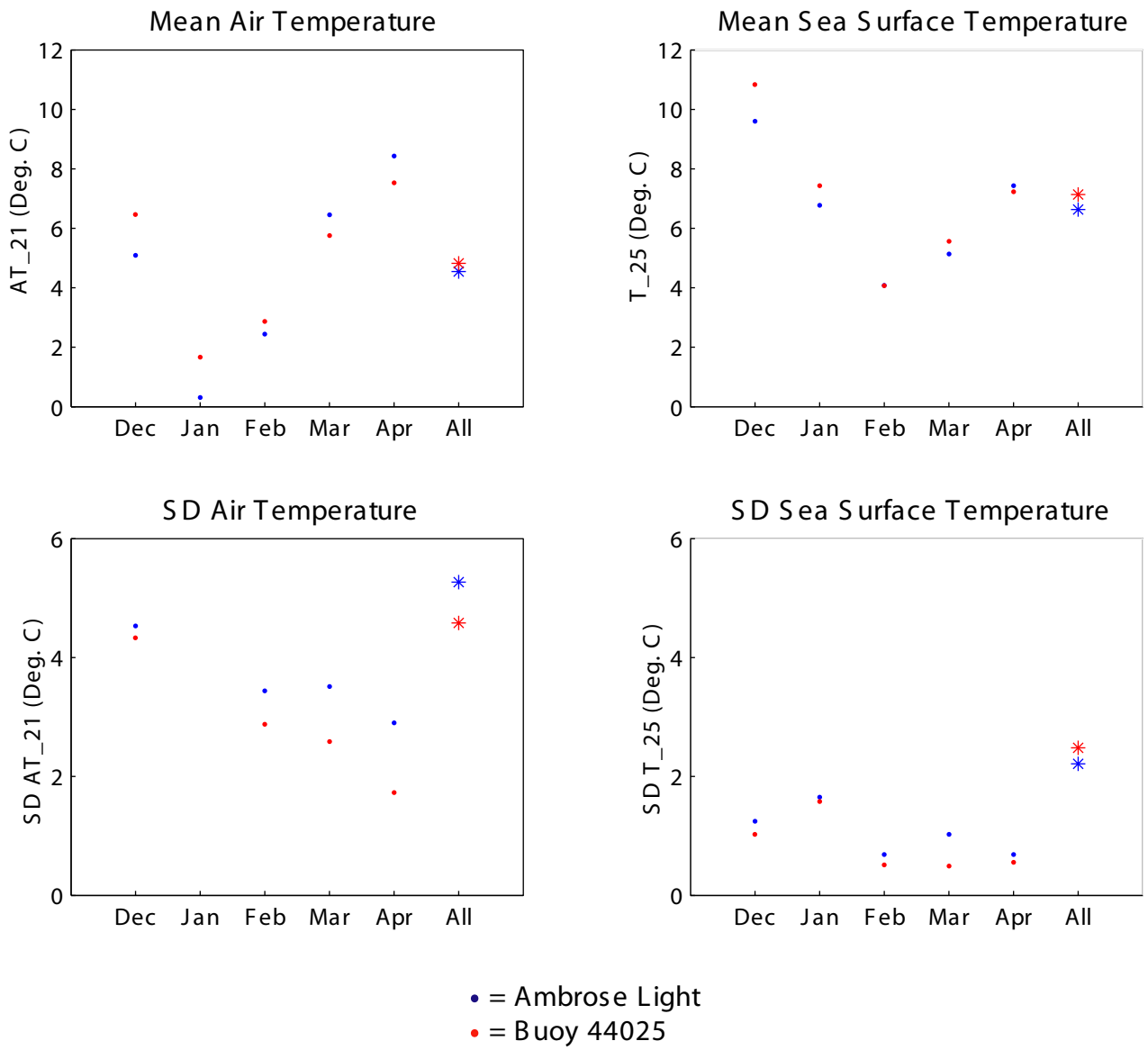
Wind Statistics: Ambrose Light Buoy and Buoy 44025



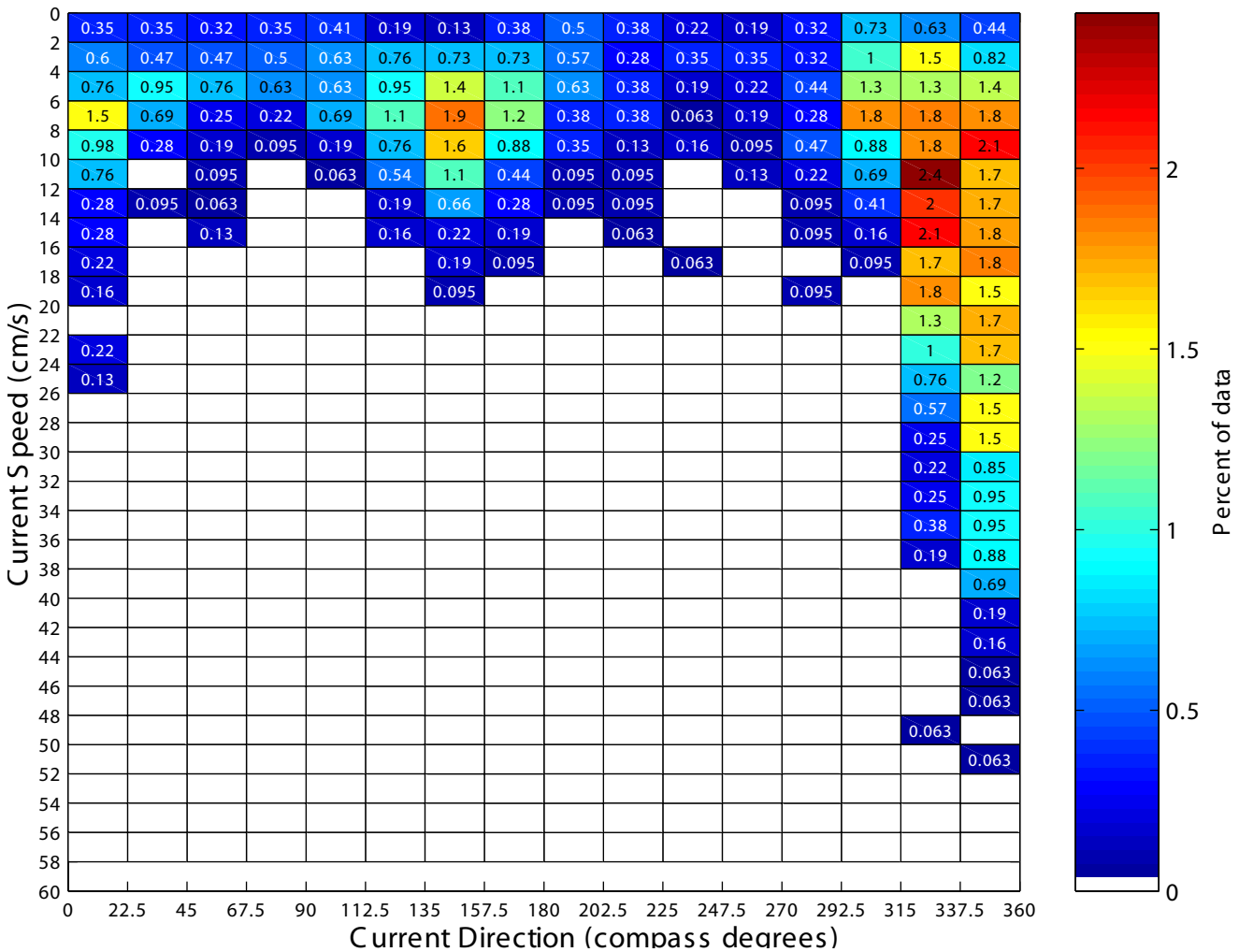
Wind Stress Statistics: Ambrose Light Buoy and Buoy 44025



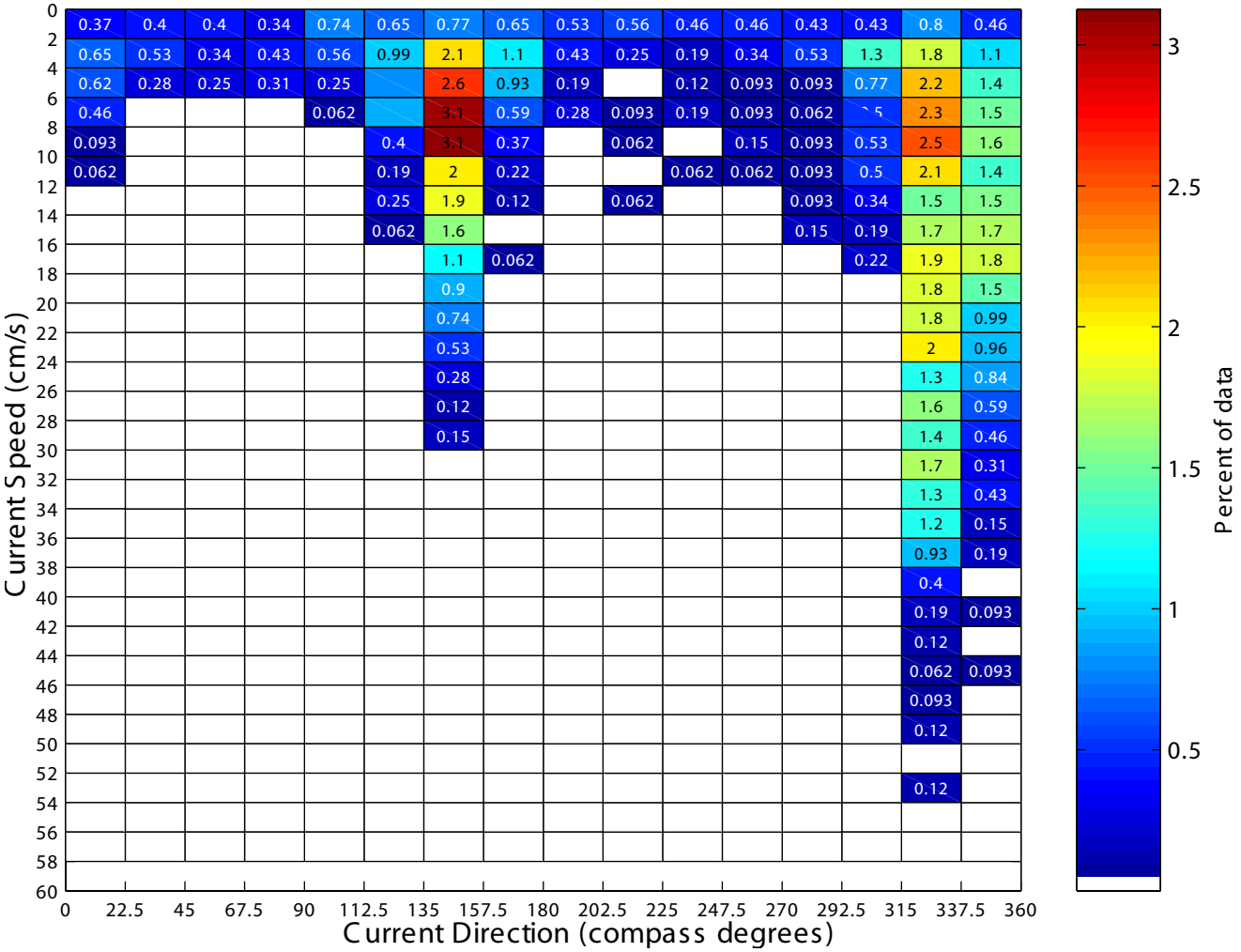
Temperature Statistics: Ambrose Light Buoy and Buoy 44025



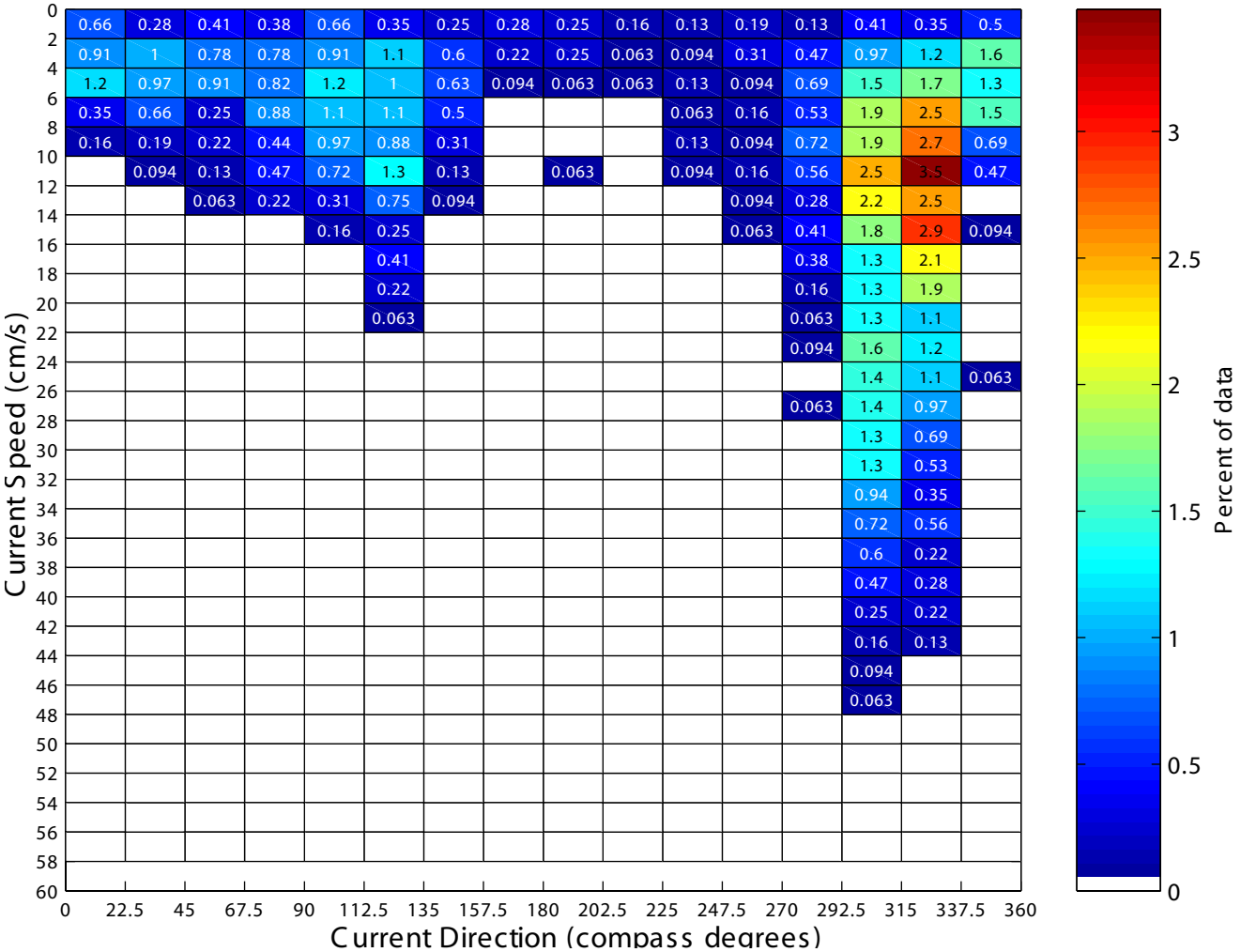
Station A: Sorted Current Speed and Direction for Hourly Averaged Data From BASS Sensor at Bottom (Depth = 37 m)



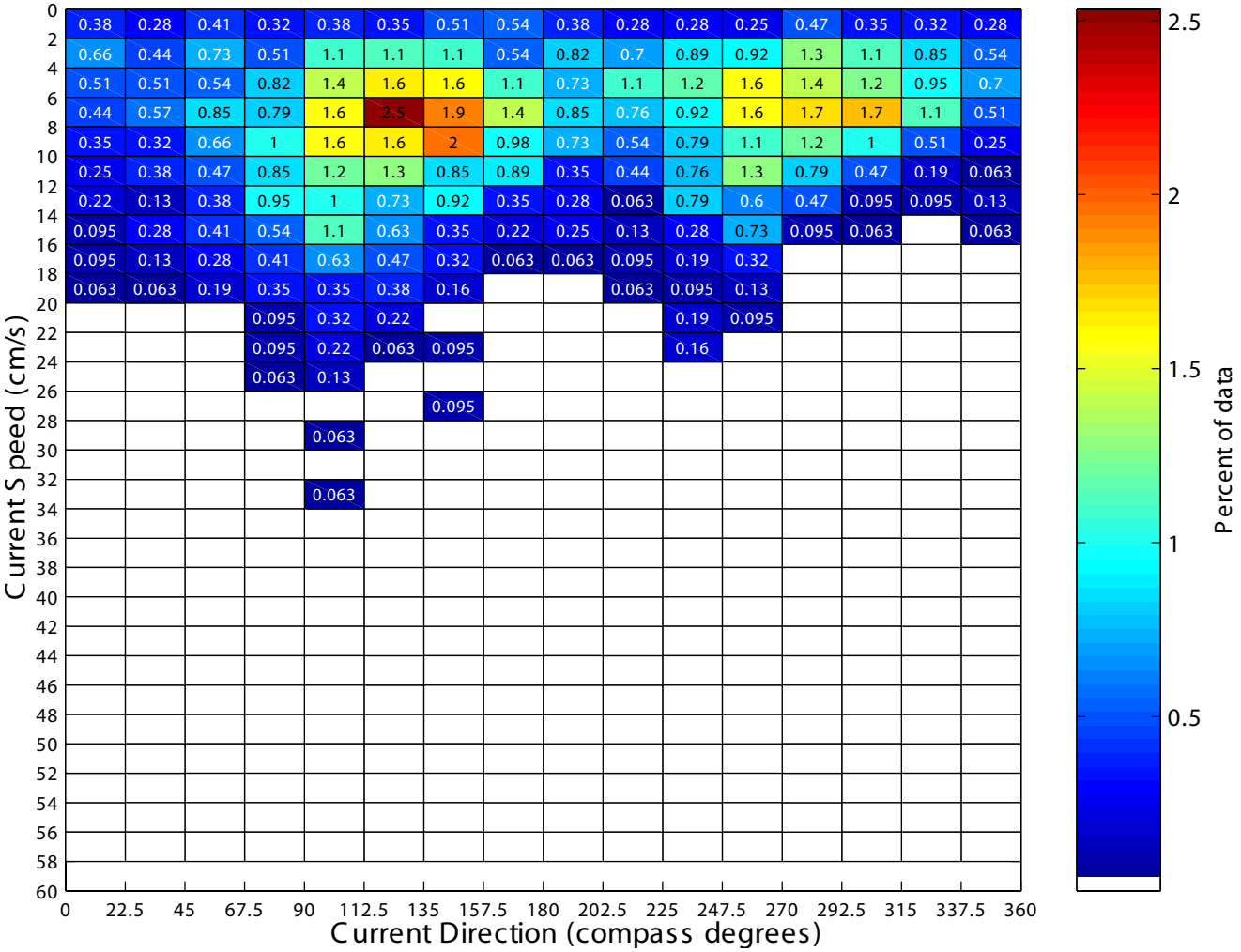
Station B: Sorted Current Speed and Direction for Hourly Averaged Data From BASS Sensor at Bottom (Depth = 55 m)



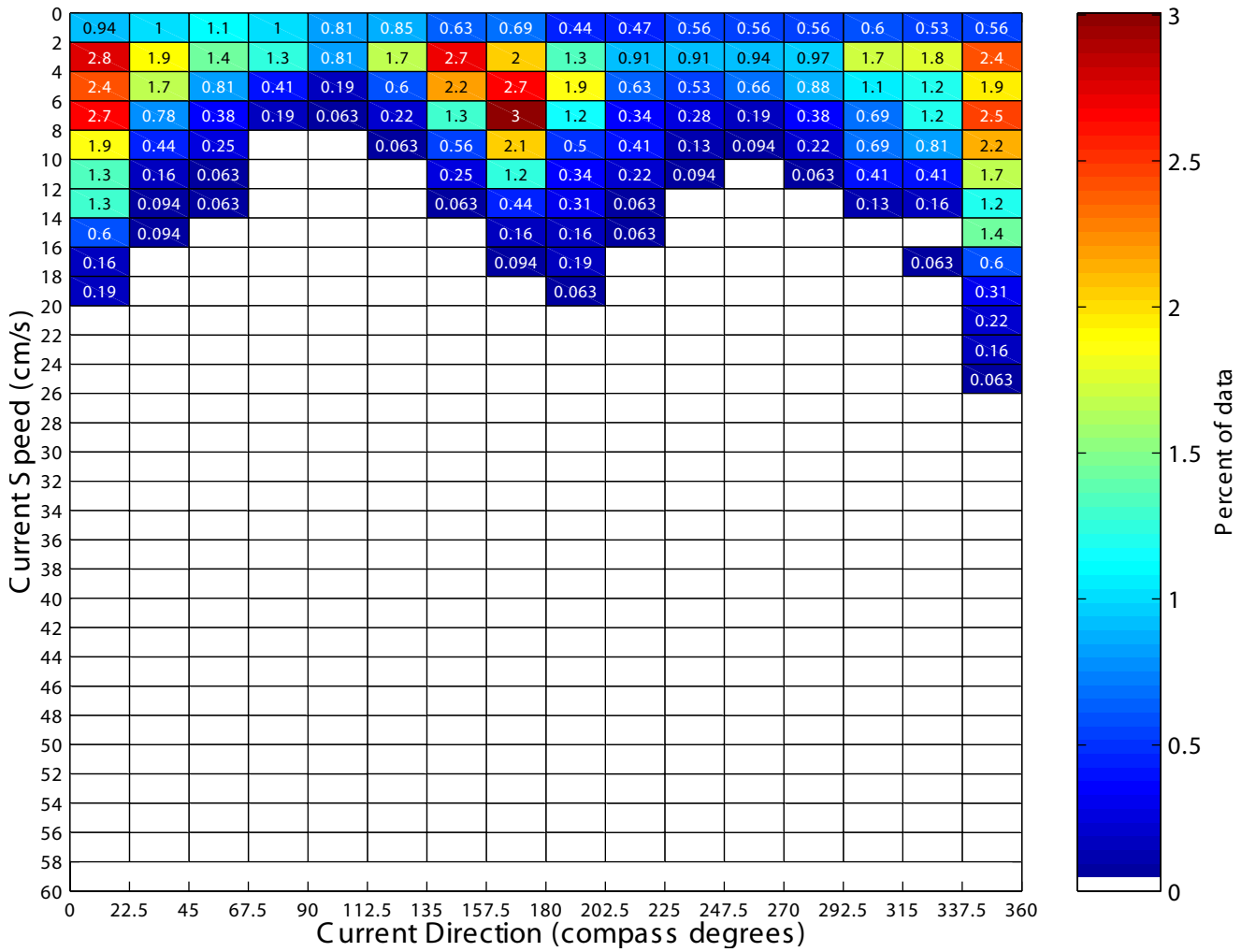
Station C: Sorted Current Speed and Direction for Hourly Averaged Data From MAVS Sensor at Bottom (Depth = 69 m)



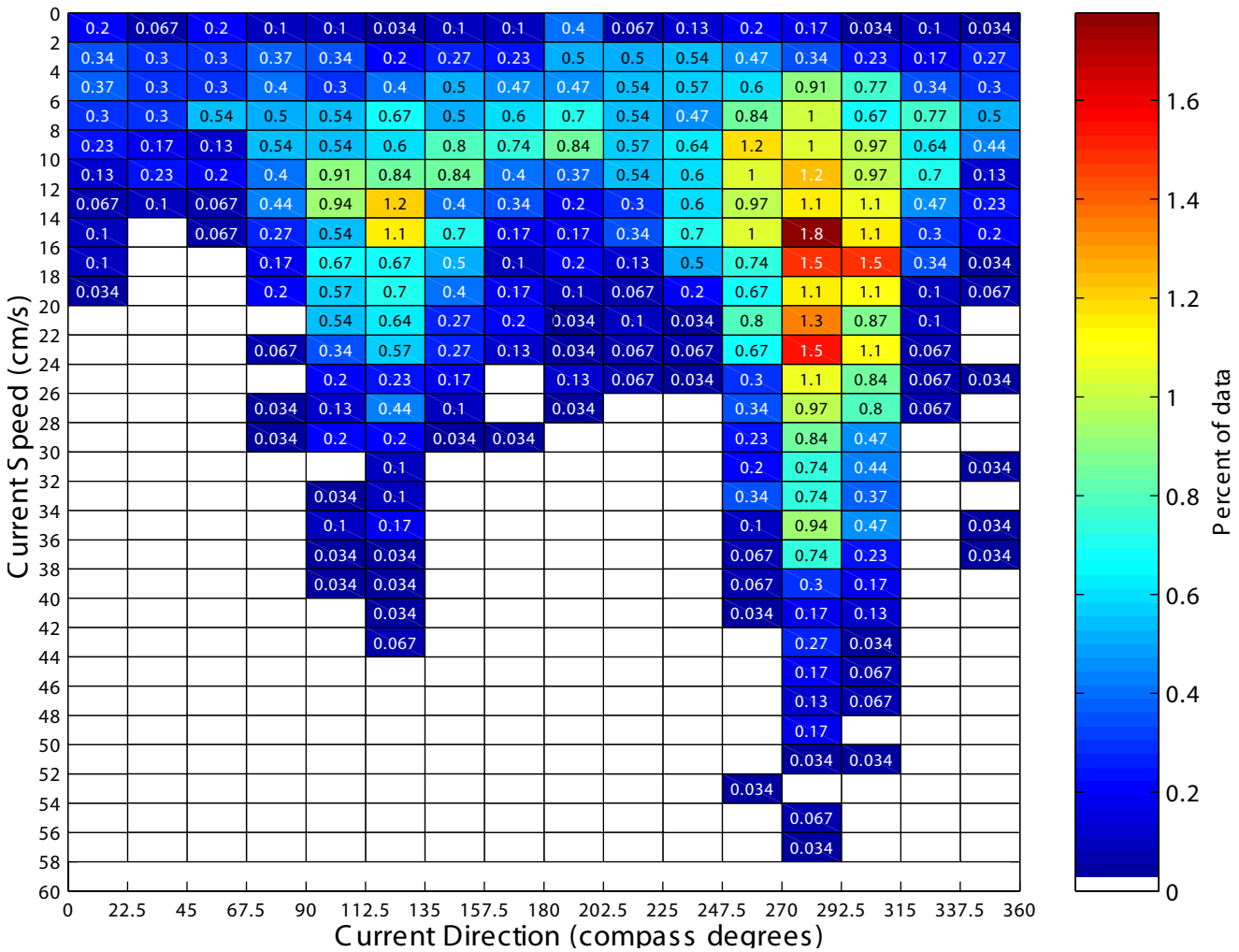
Station D: Sorted Current Speed and Direction for Hourly Averaged Data From BASS Sensor at Bottom (Depth = 25 m)



Station E: Sorted Current Speed and Direction for Hourly Averaged Data From MAVS Sensor at Bottom (Depth = 24 m)

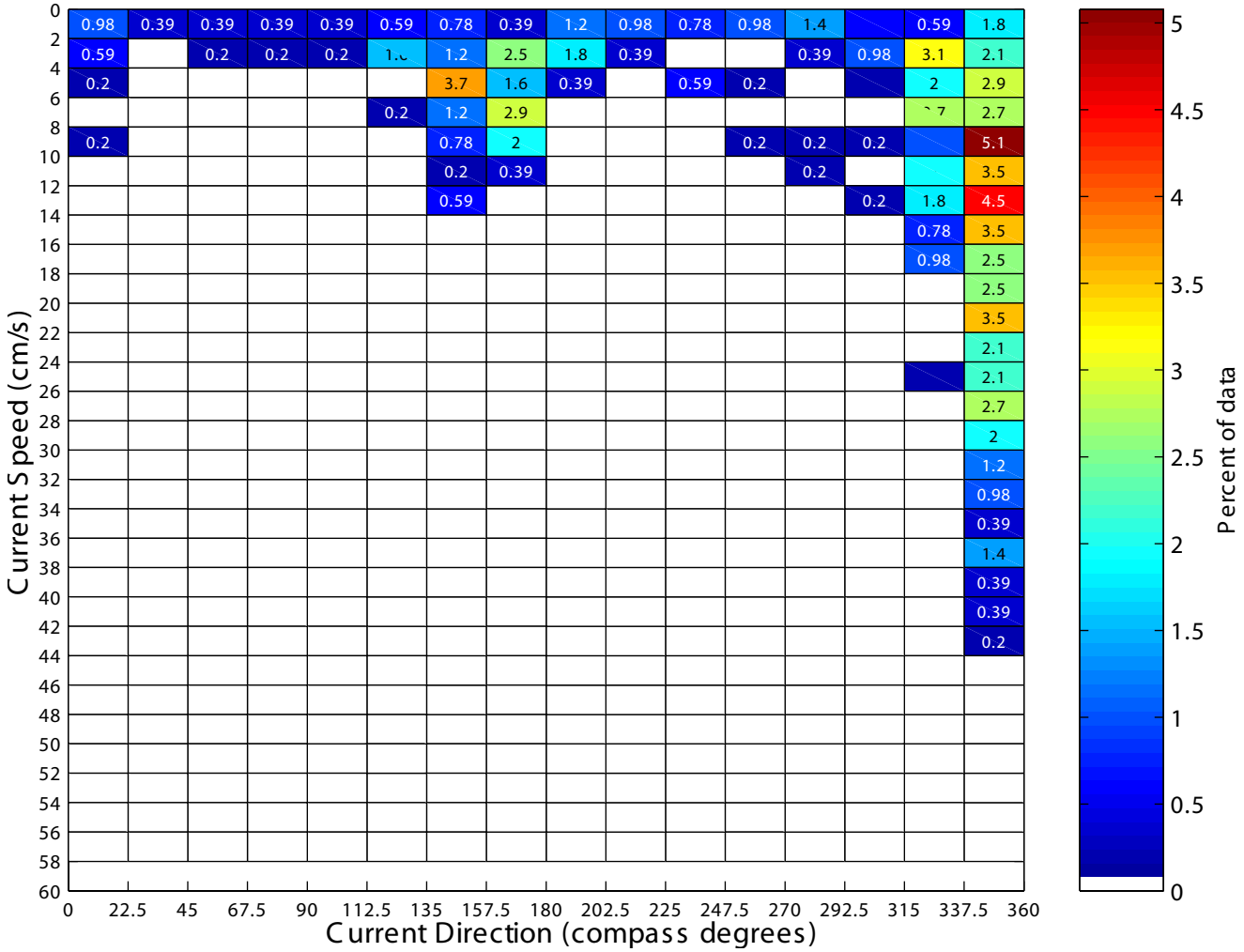


Station F: Sorted Current Speed and Direction for Hourly Averaged Data From ADCP* Sensor at Bottom (Depth = 70 m)

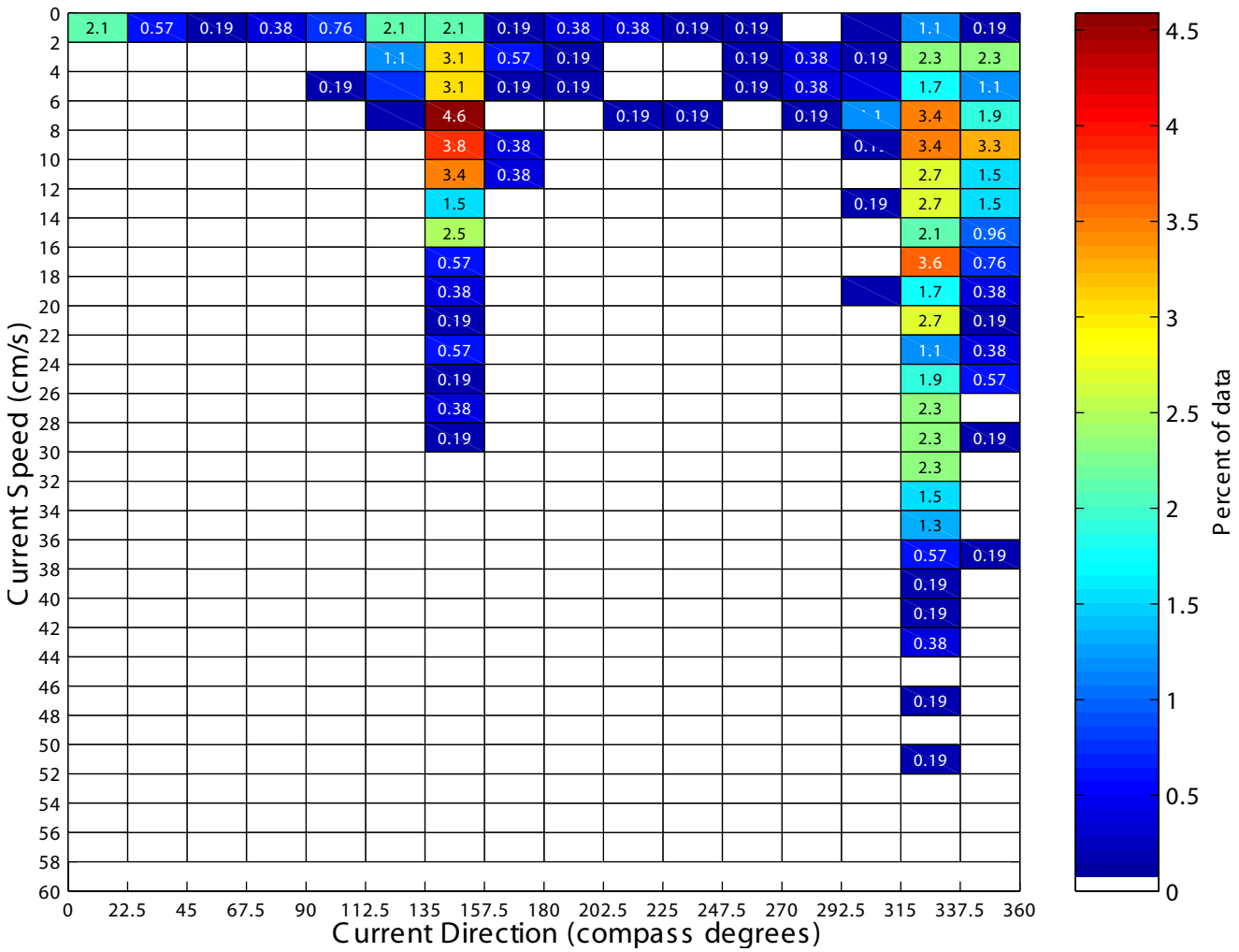


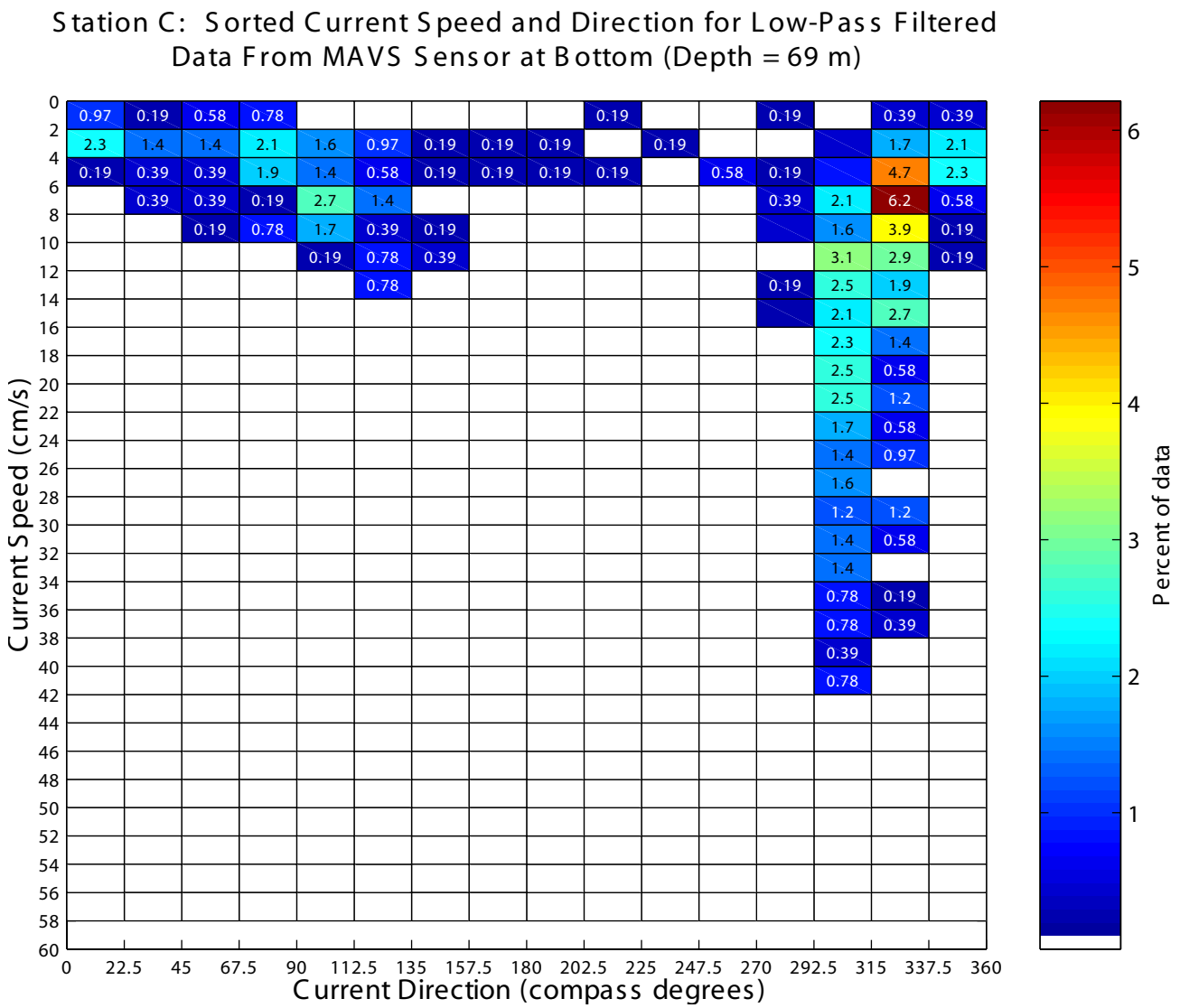
*ADCP data used since no additional bottom current instrumentation was in place at Station F

Station A: Sorted Current Speed and Direction for Low-Pass Filtered Data From BASS Sensor at Bottom (Depth = 37 m)

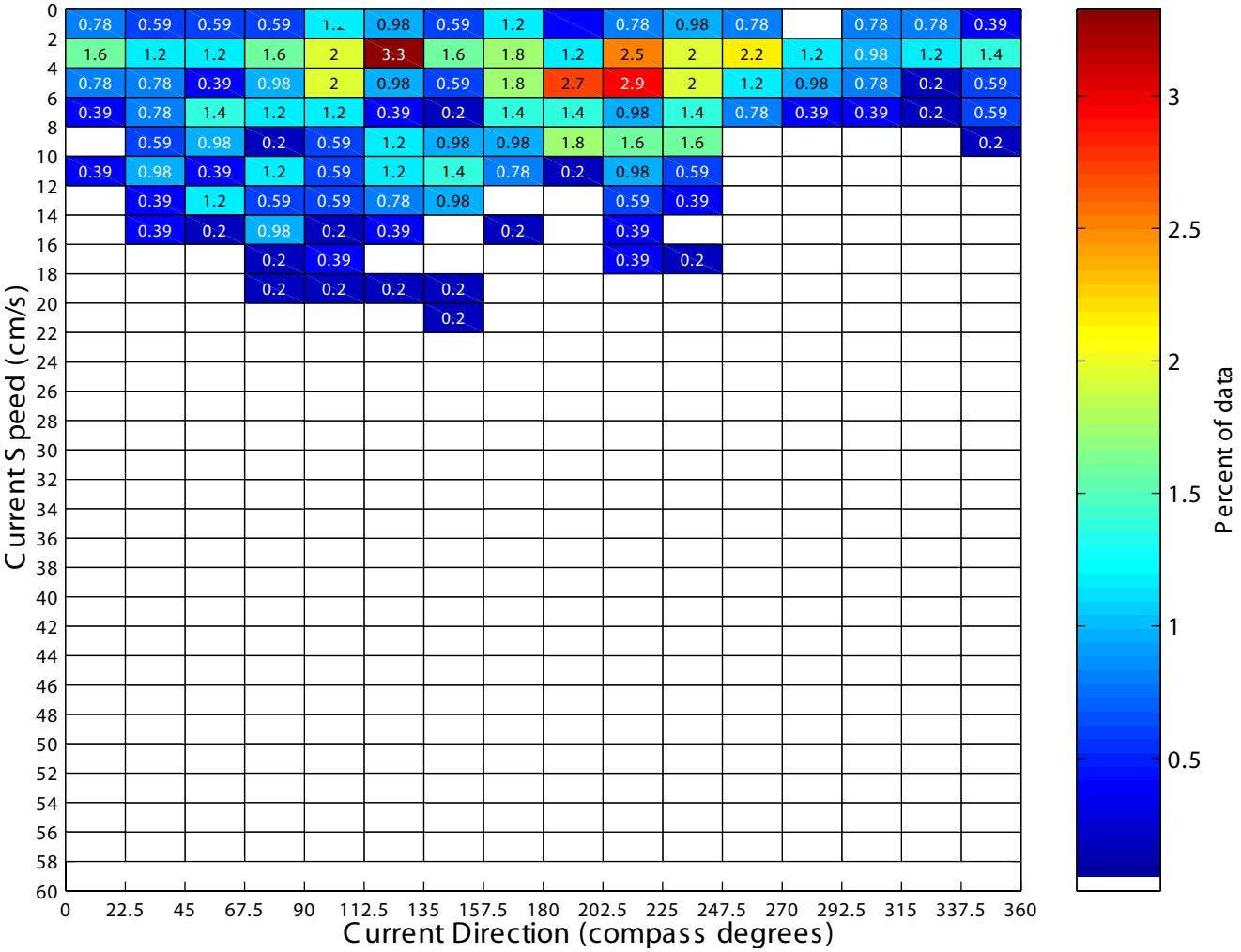


Station B: Sorted Current Speed and Direction for Low-Pass Filtered Data From BASS Sensor at Bottom (Depth = 55 m)

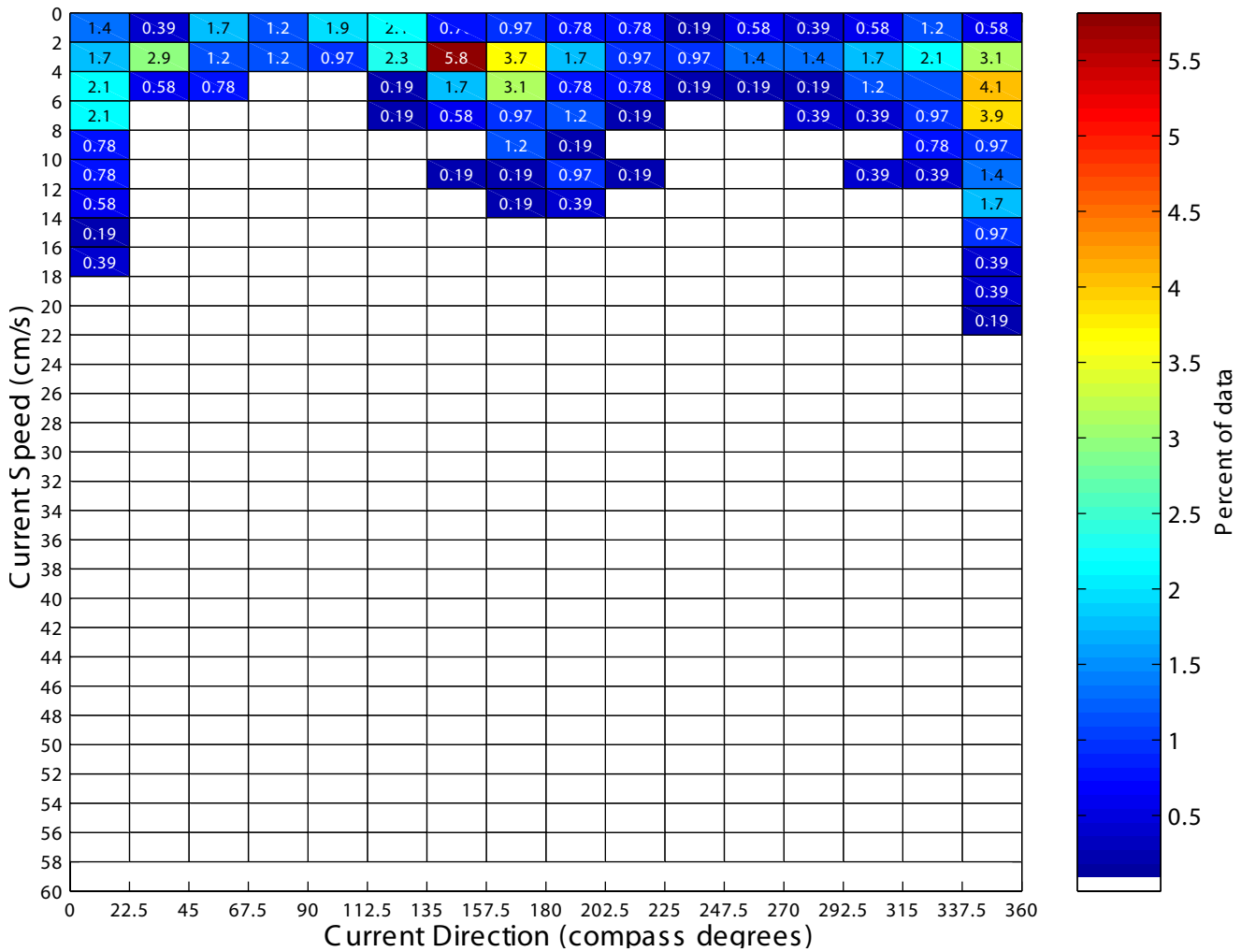



Station C: Sorted Current Speed and Direction for Low-Pass Filtered Data From MAVS Sensor at Bottom (Depth = 69 m)
Current Speed (cm/s)
Current Direction (compass degrees)
Percent of data
0 22.5 45 67.5 90 112.5 135 157.5 180 202.5 225 247.5 270 292.5 315 337.5 360
0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 52 54 56 58 60
0.97 0.19 0.58 0.78 0.19 0.19 0.39 0.39
2.3 1.4 1.4 2.1 1.6 0.97 0.19 0.19 0.19 0.19 1.7 2.1
0.19 0.39 0.39 1.9 1.4 0.58 0.19 0.19 0.19 0.19 0.58 0.19 4.7 2.3
0.39 0.39 0.19 2.7 1.4 0.39 2.1 6.2 0.58
0.19 0.78 1.7 0.39 0.19 1.6 3.9 0.19
0.19 0.78 0.39 3.1 2.9 0.19
0.78 0.19 2.5 1.9
2.1 2.7
2.3 1.4
2.5 0.58
2.5 1.2
1.7 0.58
1.4 0.97
1.6
1.2 1.2
1.4 0.58
1.4
0.78 0.19
0.78 0.39
0.39
0.78
1 2 3 4 5 6

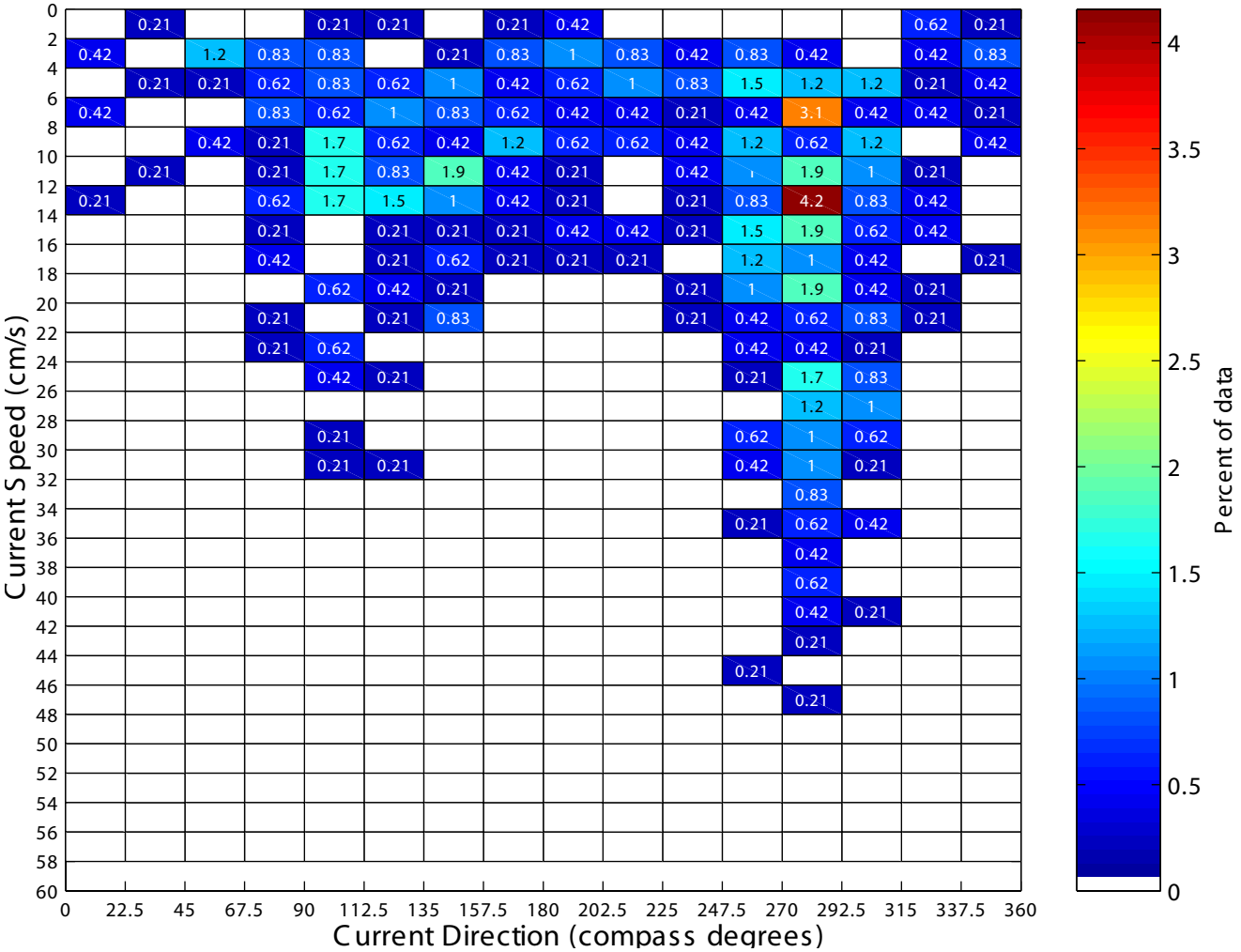
Station D: Sorted Current Speed and Direction for Low-Pass Filtered Data From BASS Sensor at Bottom (Depth = 25 m)



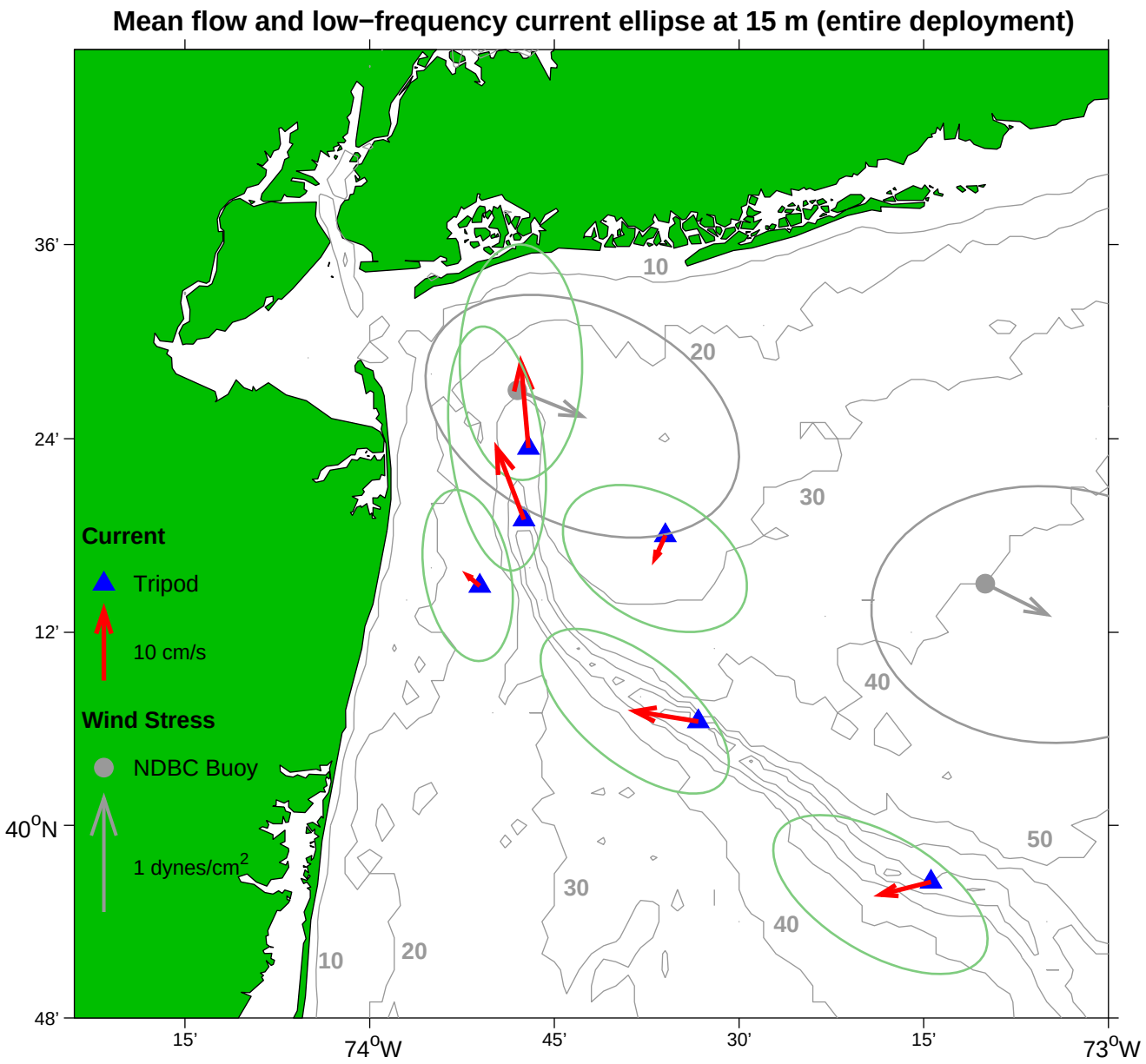
Station E: Sorted Current Speed and Direction for Low-Pass Filtered Data From MAVS Sensor at Bottom (Depth = 24 m)

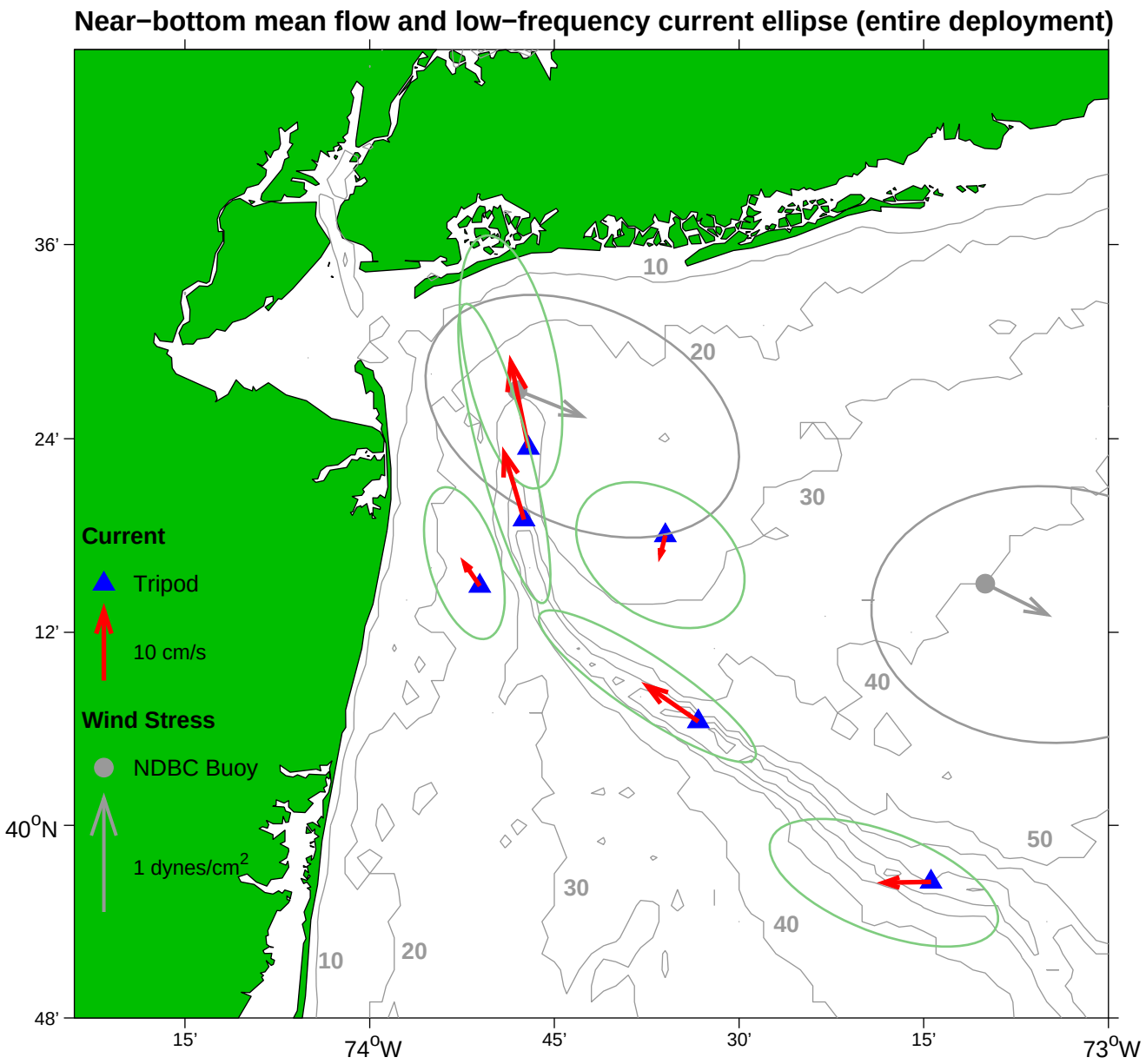


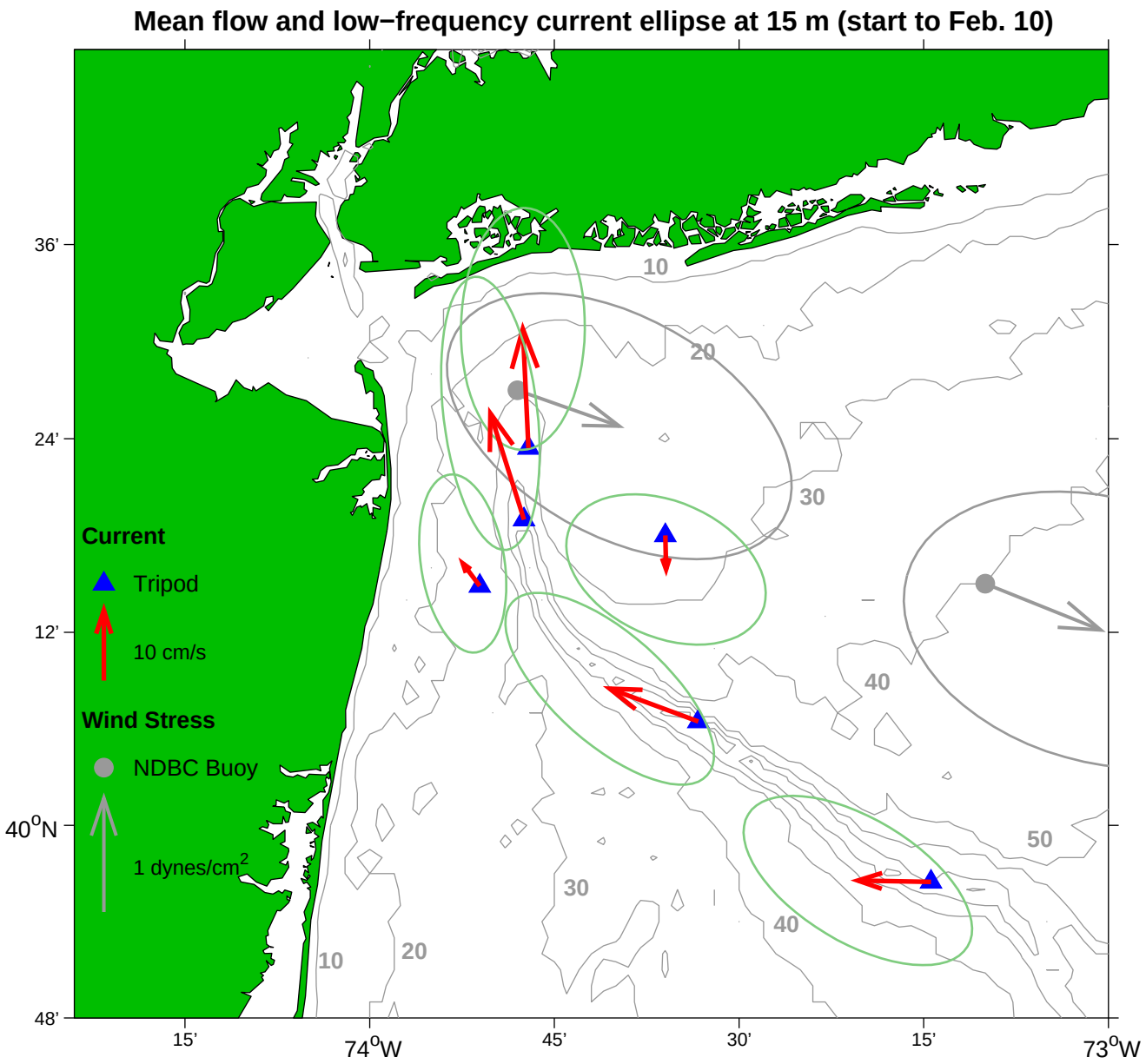
Station F: Sorted Current Speed and Direction for Low-Pass Filtered Data From ADCP* Sensor at Bottom (Depth = 70 m)

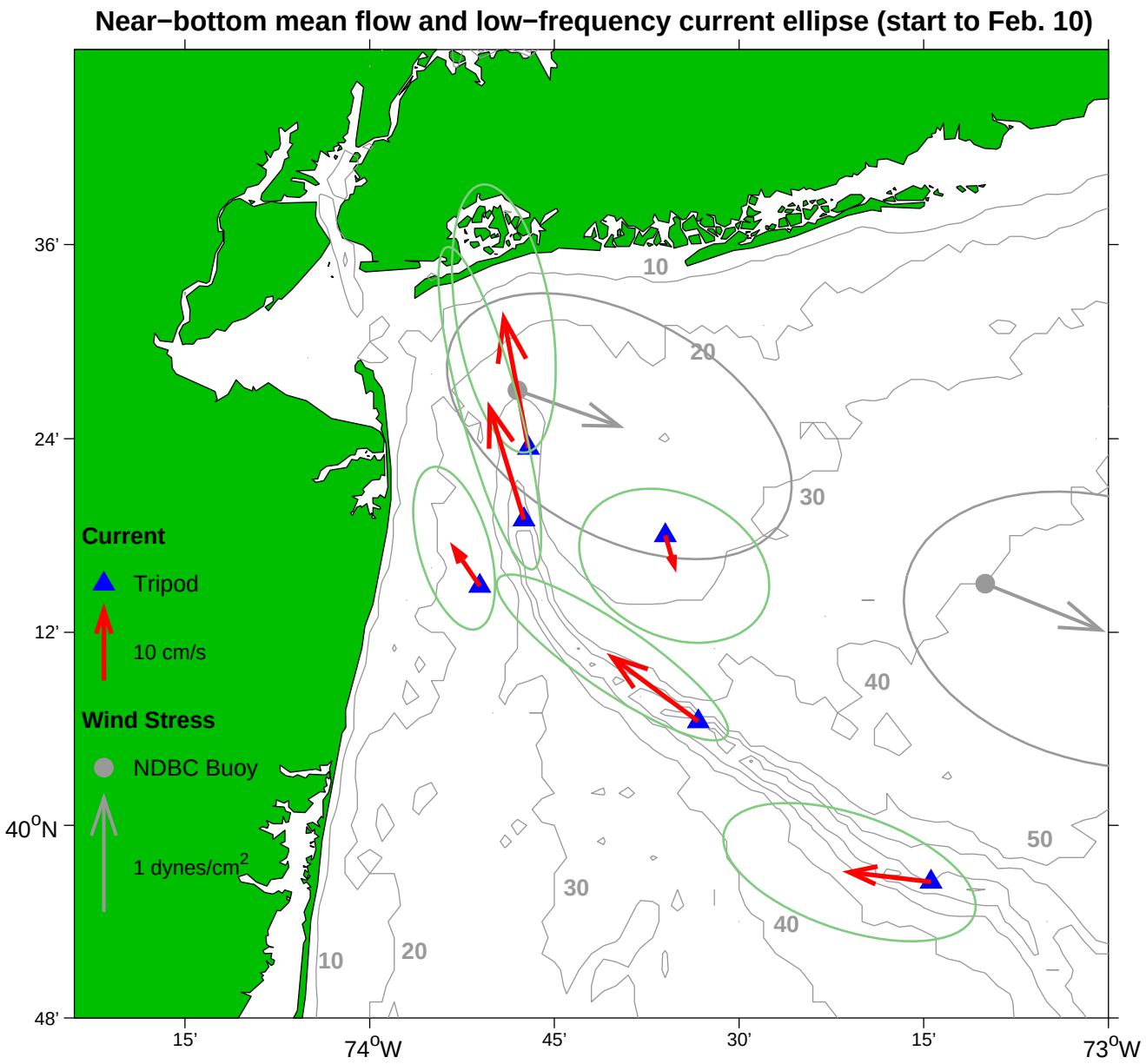


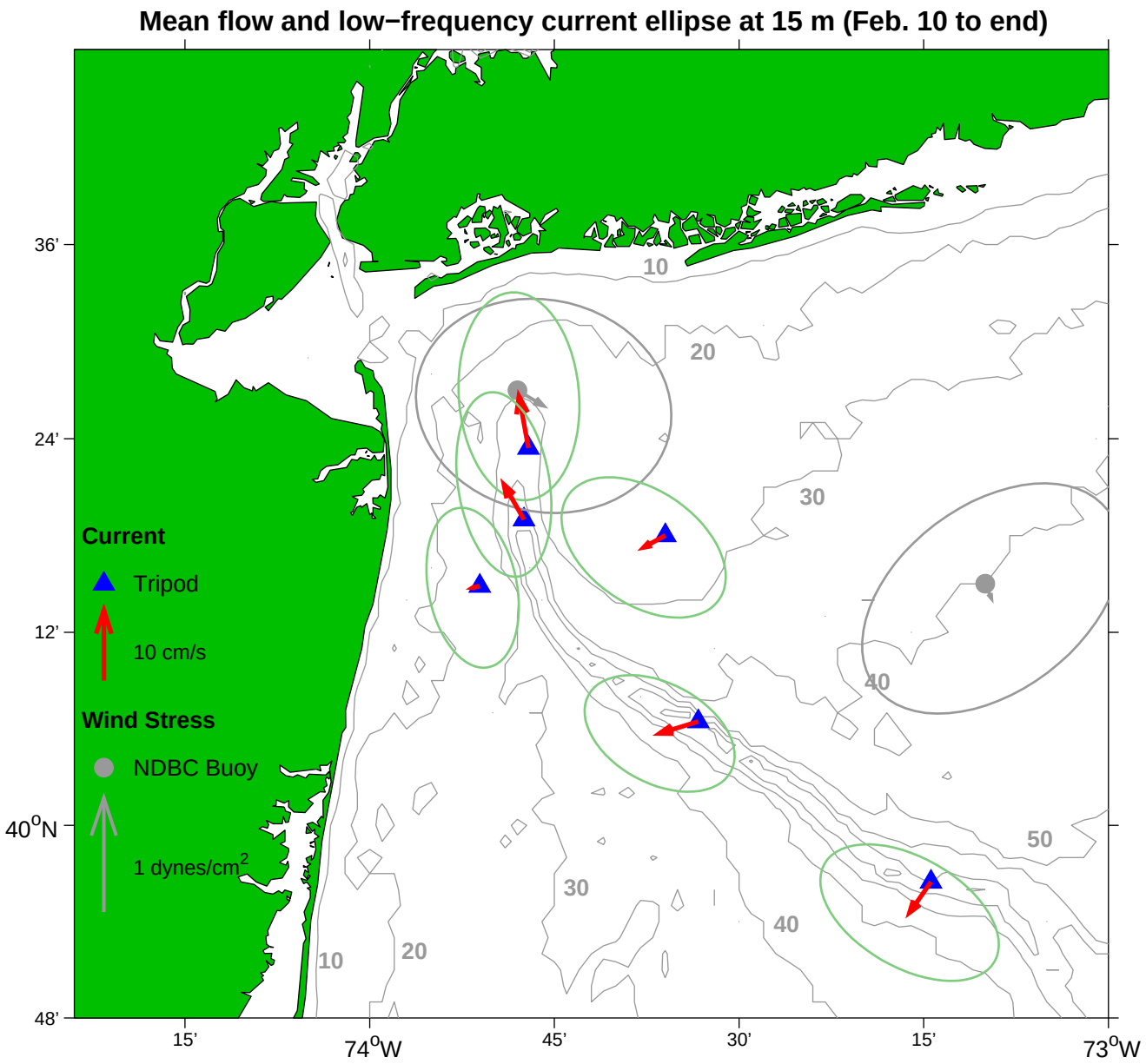
*ADCP data used since no additional bottom current instrumentation was in place at Station F

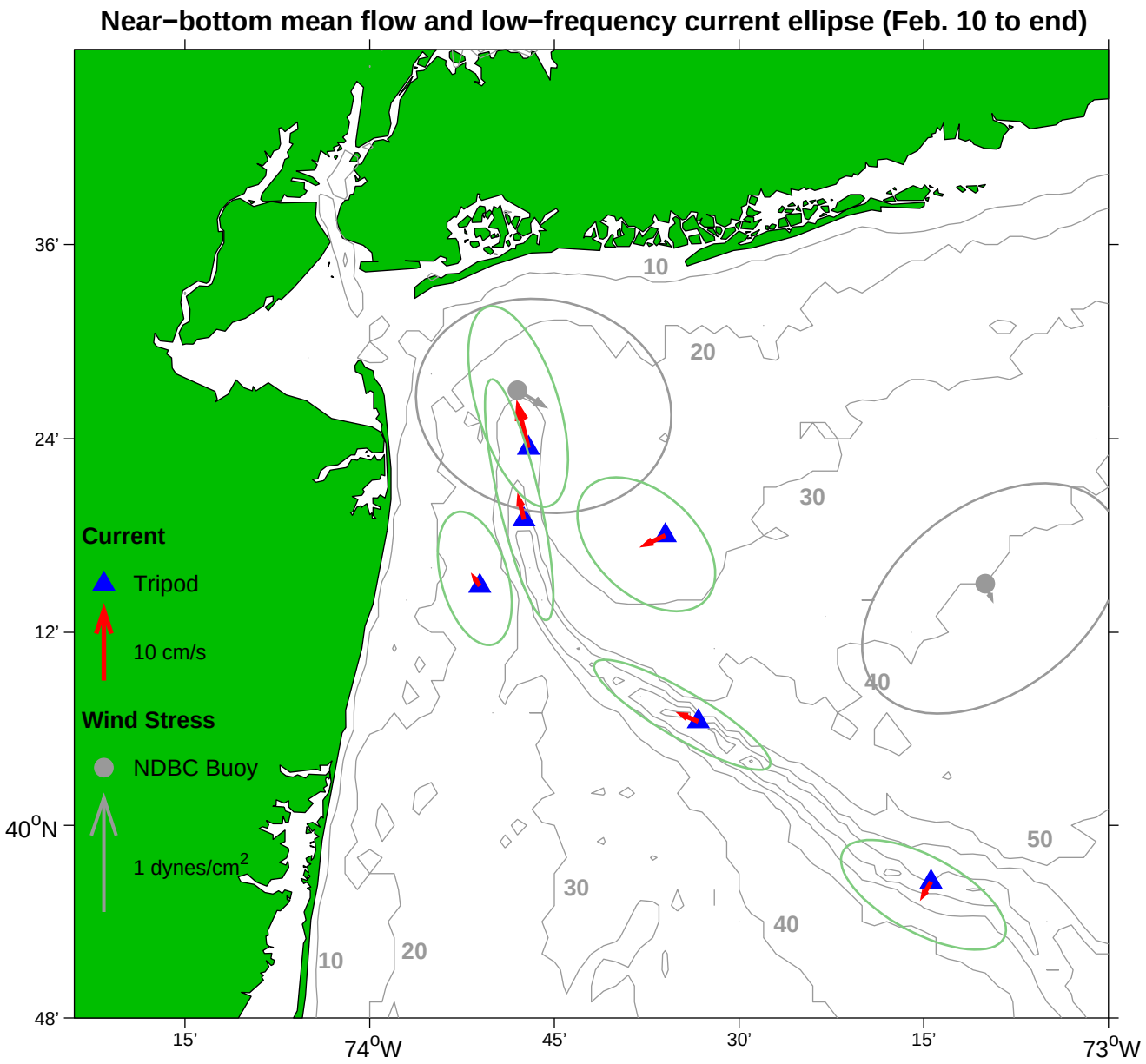

Mean flow and low−frequency current ellipse at 15 m (entire deployment)
Current
Tripod
10 cm/s
Wind Stress
NDBC Buoy
1 dynes/cm2
36'
24'
12'
40°N
48'
15'
74°W
45'
30'
15'
73°W
10
20
30
40
50

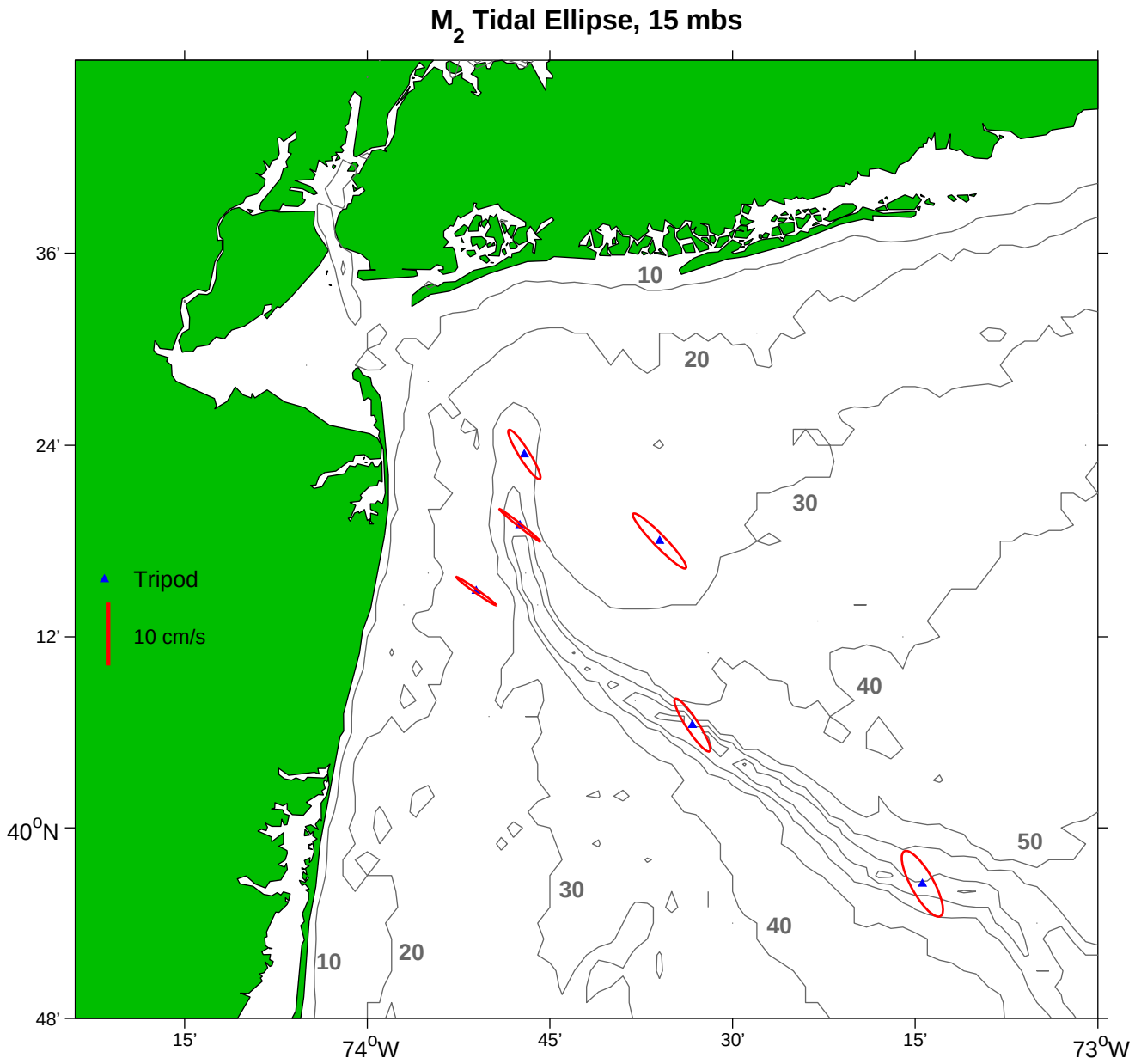

Near−bottom mean flow and low−frequency current ellipse (entire deployment)
Current
Tripod
10 cm/s
Wind Stress
NDBC Buoy
1 dynes/cm2
36'
24'
12'
40°N
48'
15'
74°W
45'
30'
15'
73°W
10
20
30
40
50
10
20
30
40

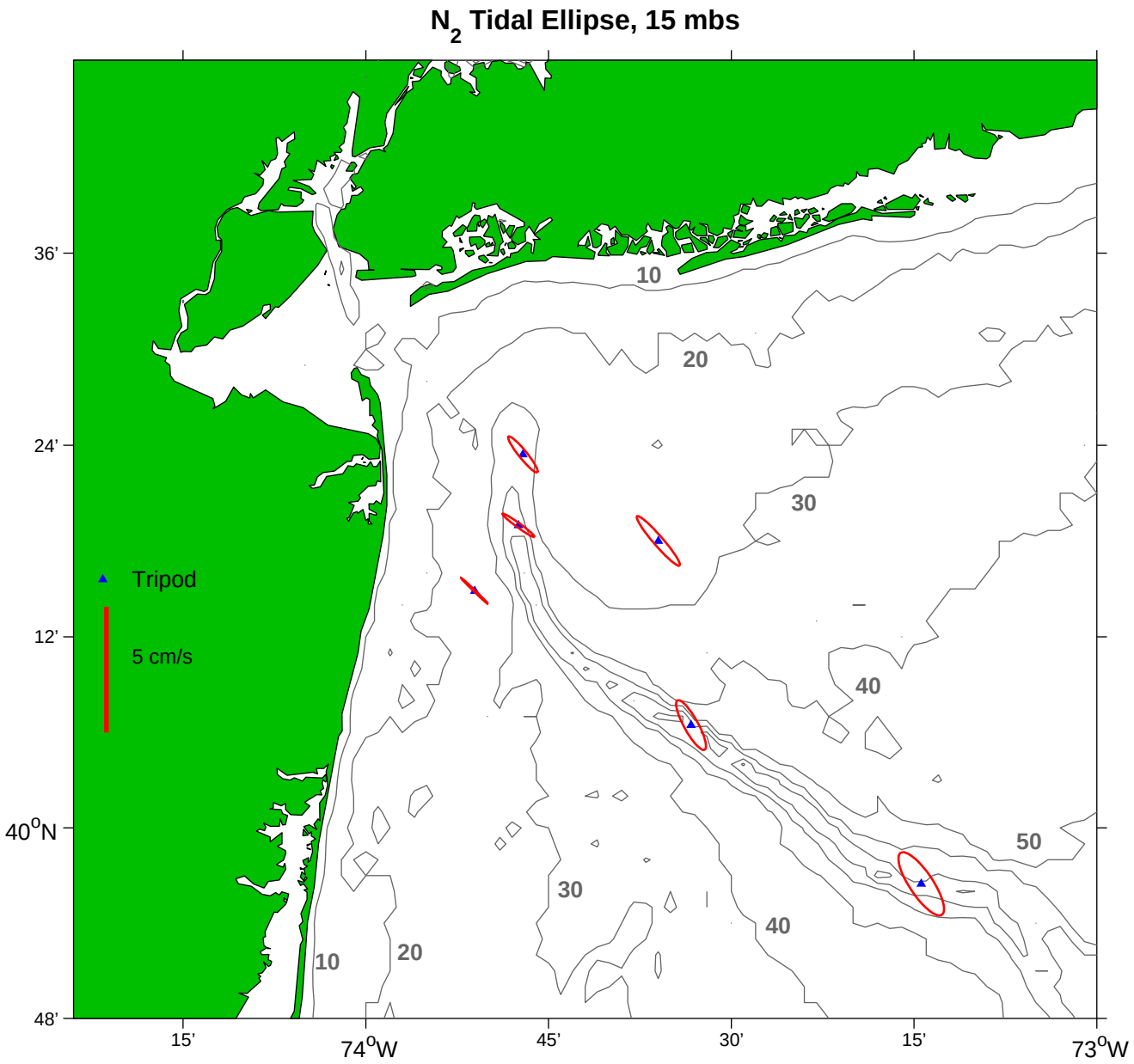

Mean flow and low−frequency current ellipse at 15 m (start to Feb. 10)
Current
Tripod
10 cm/s
Wind Stress
NDBC Buoy
1 dynes/cm2
36'
24'
12'
40°N
48'
15'
74°W
45'
30'
15'
73°W
10
20
30
40
50
30
40
10
20

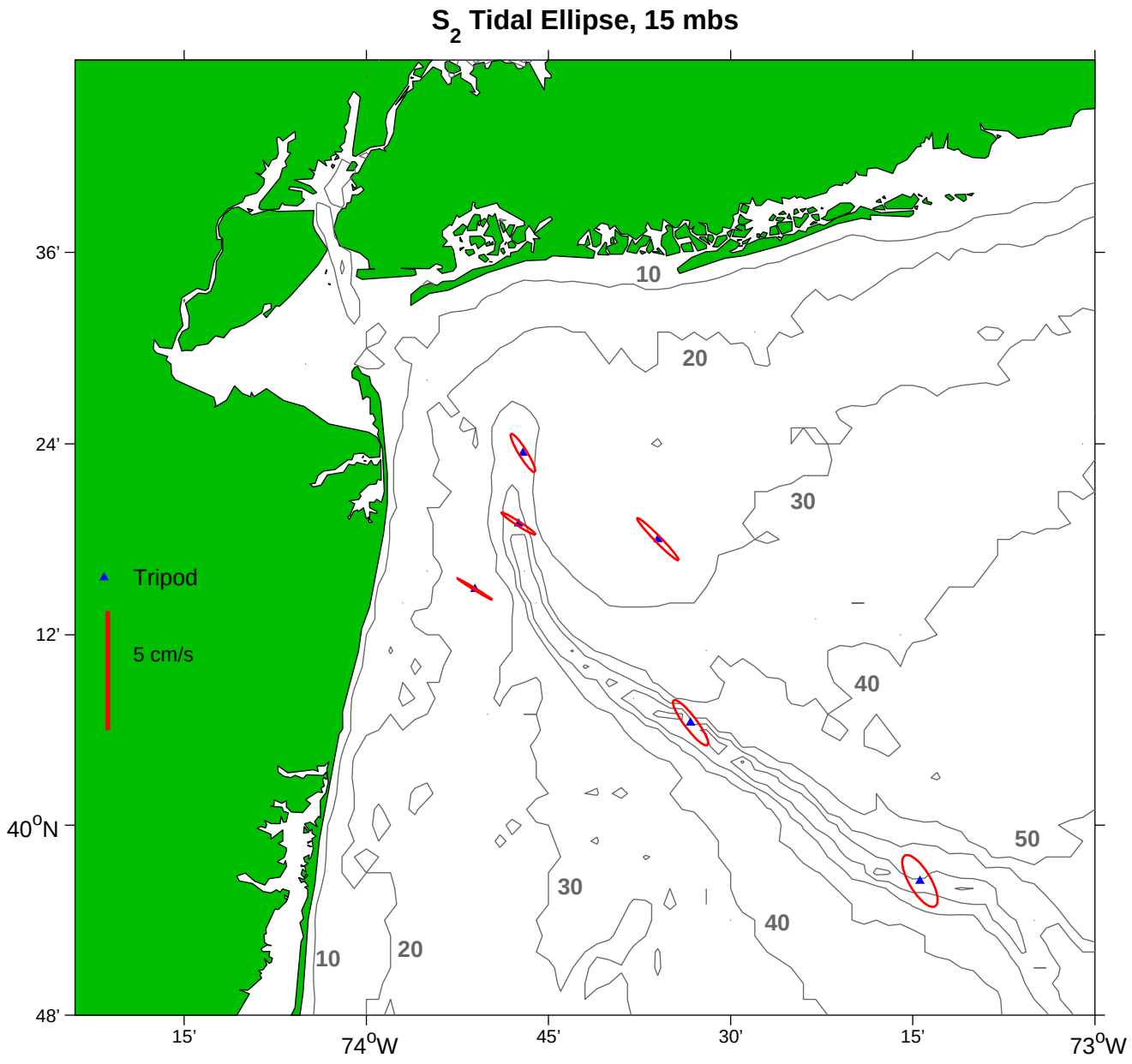

Near−bottom mean flow and low−frequency current ellipse (start to Feb. 10)
Current
Tripod
10 cm/s
Wind Stress
NDBC Buoy
1 dynes/cm2
36'
24'
12'
40°N
48'
15'
74°W
45'
30'
15'
73°W
10
20
30
40
50
30
40
10
20

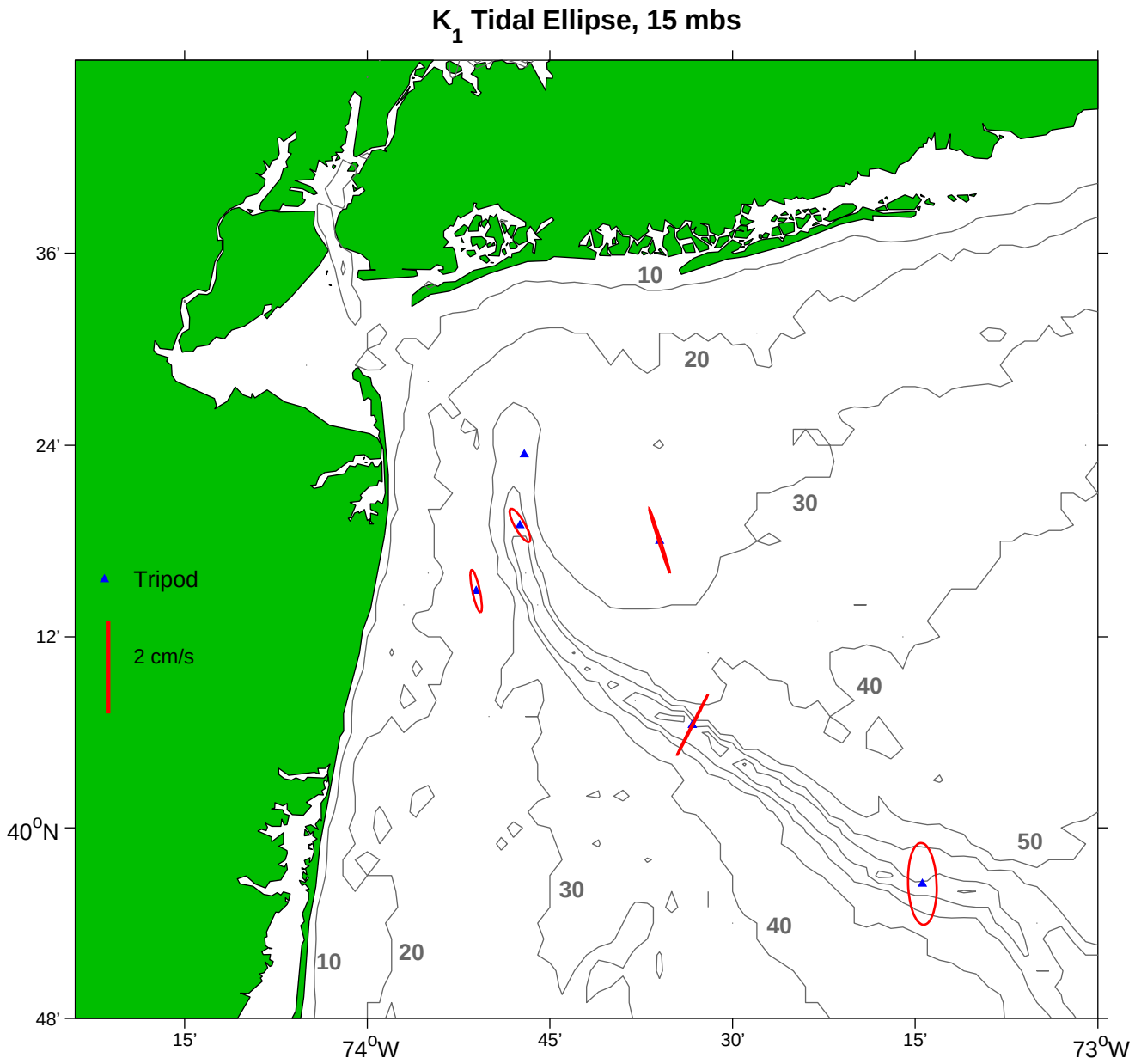

Mean flow and low−frequency current ellipse at 15 m (Feb. 10 to end)
Current
Tripod
10 cm/s
Wind Stress
NDBC Buoy
1 dynes/cm2
36'
24'
12'
40°N
48'
15'
74°W
45'
30'
15'
73°W
10
20
30
40
50

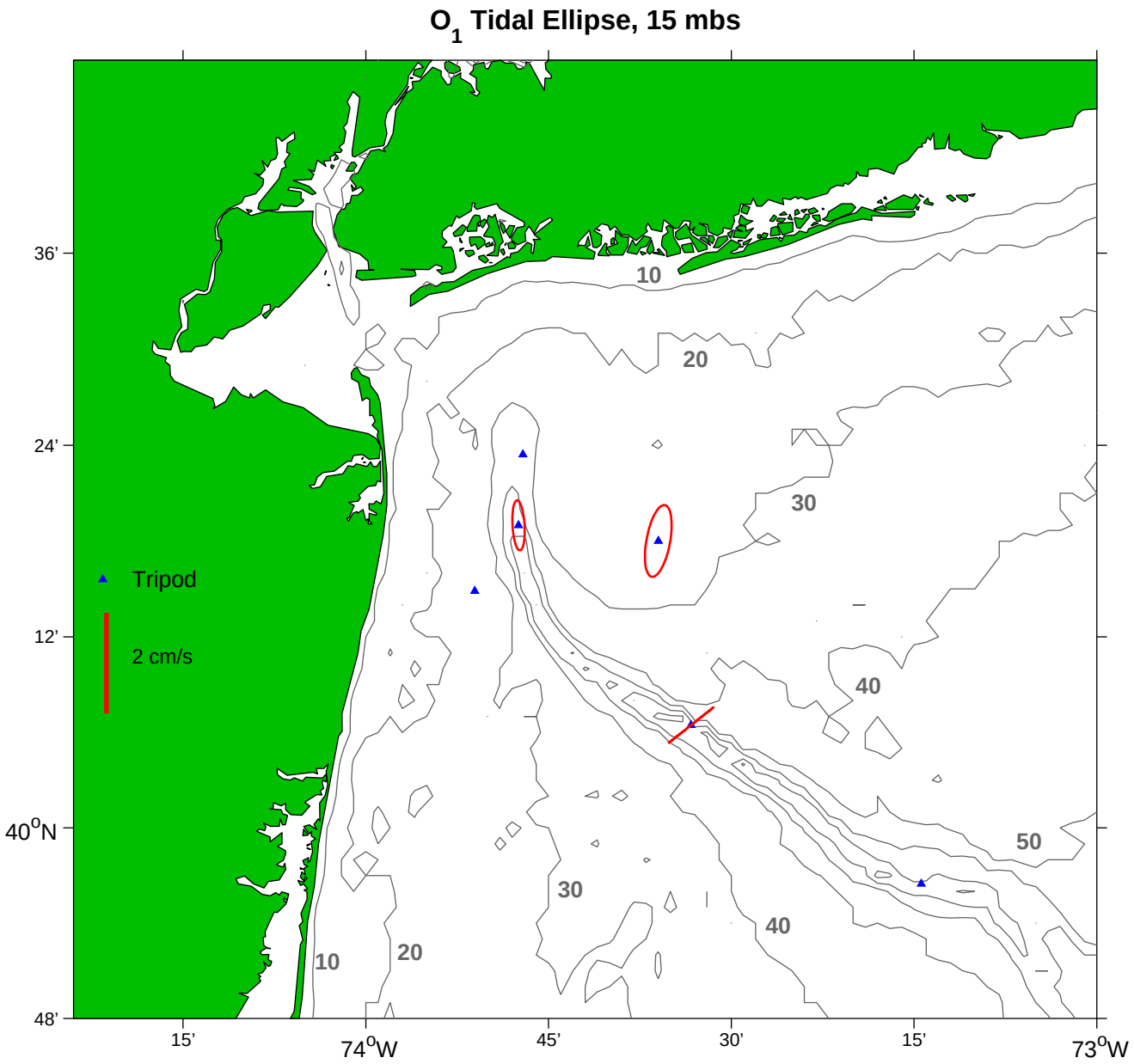

Near−bottom mean flow and low−frequency current ellipse (Feb. 10 to end)
Current
Tripod
10 cm/s
Wind Stress
NDBC Buoy
1 dynes/cm2
36'
24'
12'
40°N
48'
15'
74°W
45'
30'
15'
73°W
10
20
30
40
50


M2 Tidal Ellipse, 15 mbs
36'
24'
12'
40°N
48'
15'
74°W
45'
30'
15'
73°W
10
20
30
40
50
Tripod
10 cm/s

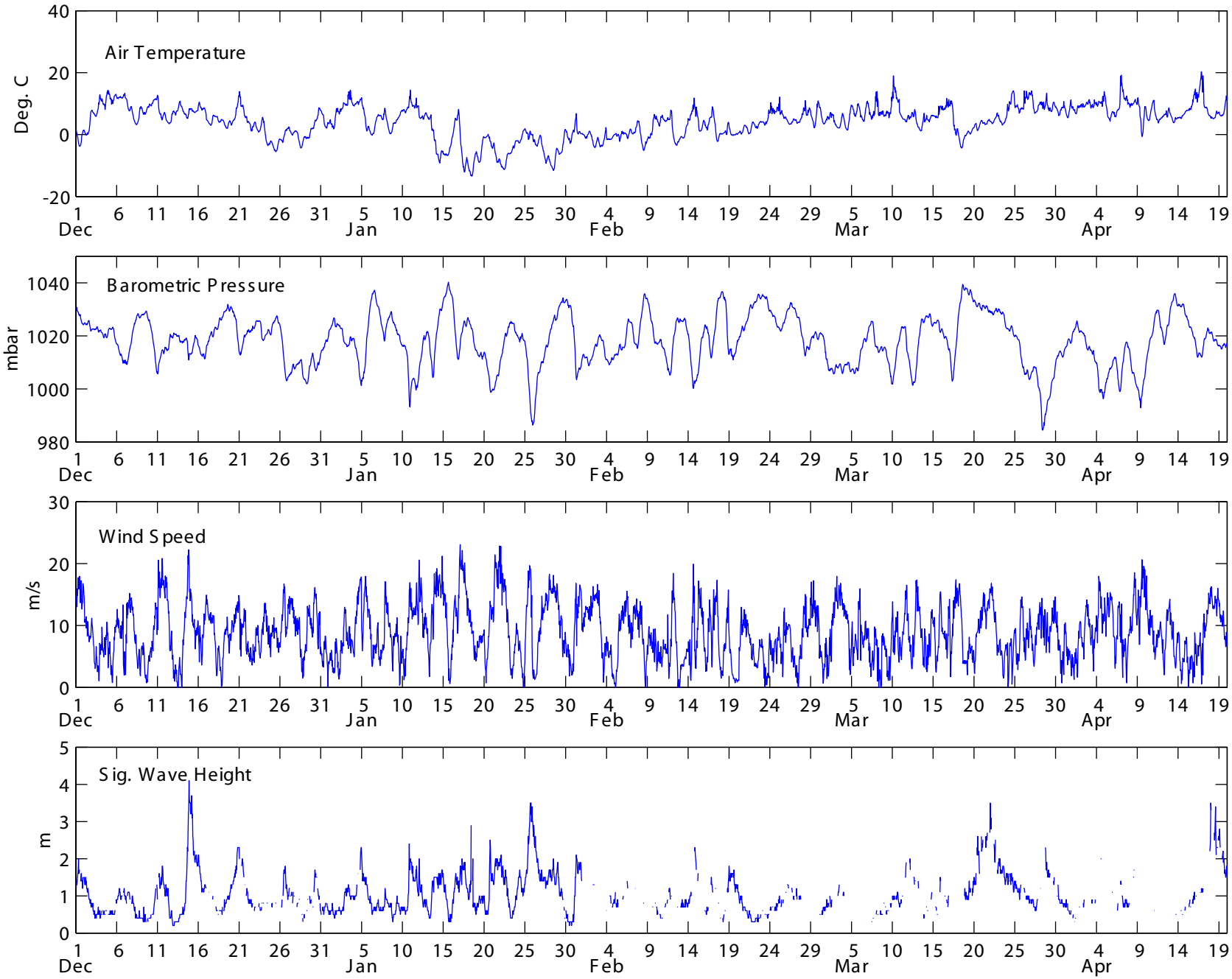

N2 Tidal Ellipse, 15 mbs
36'
24'
12'
40°N
48'
15'
74°W
45'
30'
15'
73°W
10
20
30
40
50
Tripod
5 cm/s

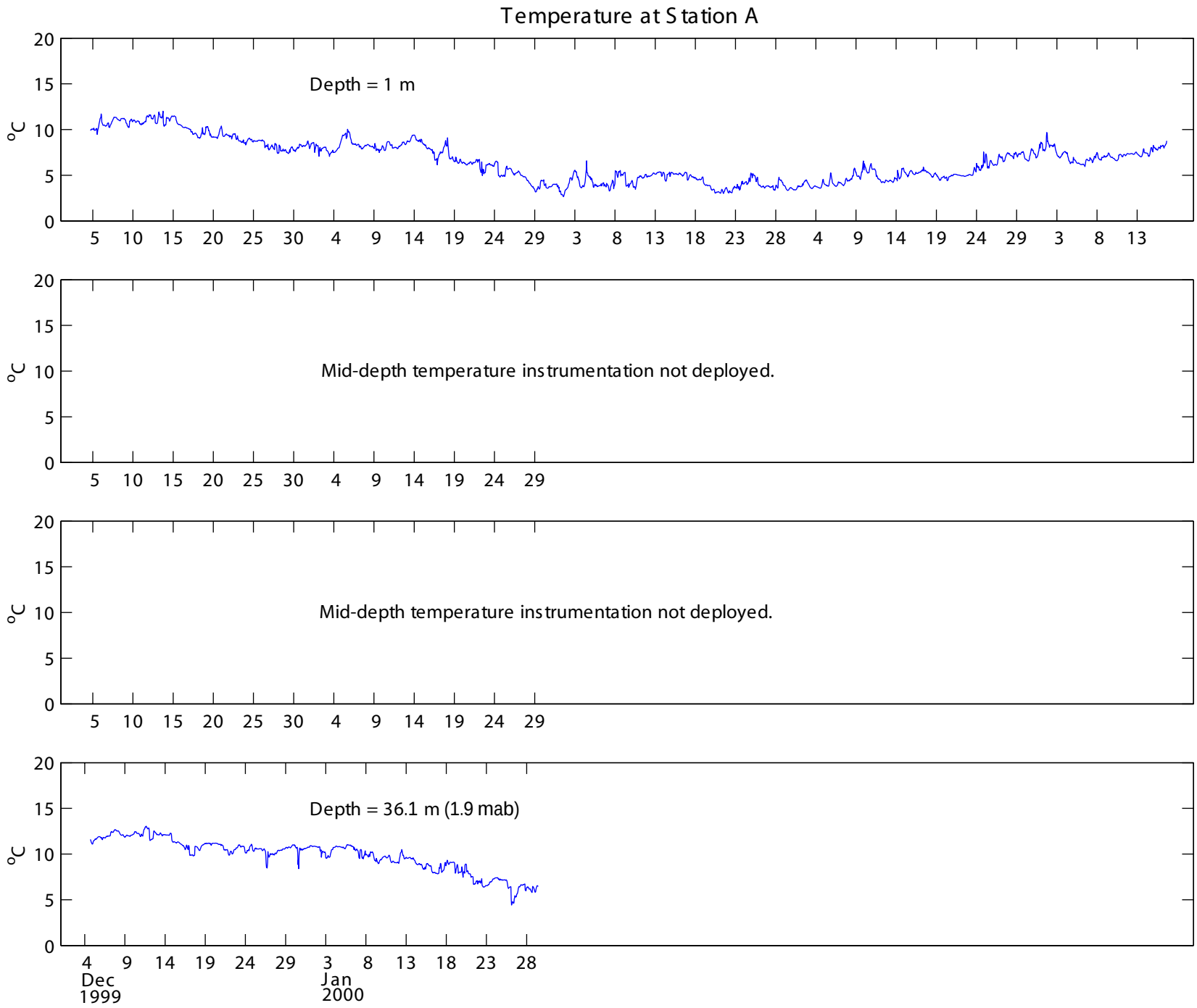

S2 Tidal Ellipse, 15 mbs
Tripod
5 cm/s
10
20
30
40
50
36'
24'
12'
40°N
48'
15'
74°W
45'
30'
15'
73°W

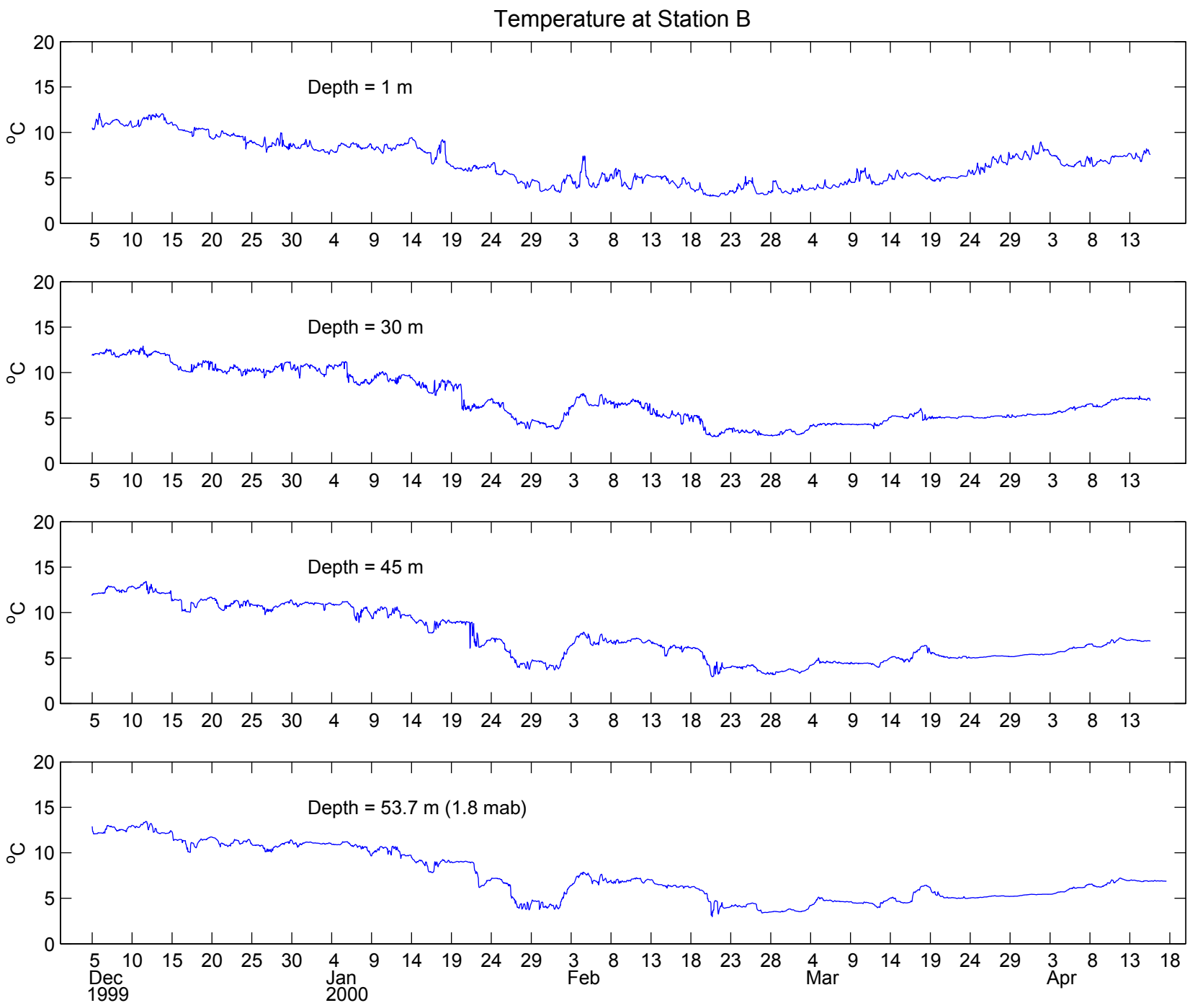

K1 Tidal Ellipse, 15 mbs
Tripod
2 cm/s
10
20
30
40
50
36'
24'
12'
40°N
48'
15'
74°W
45'
30'
15'
73°W

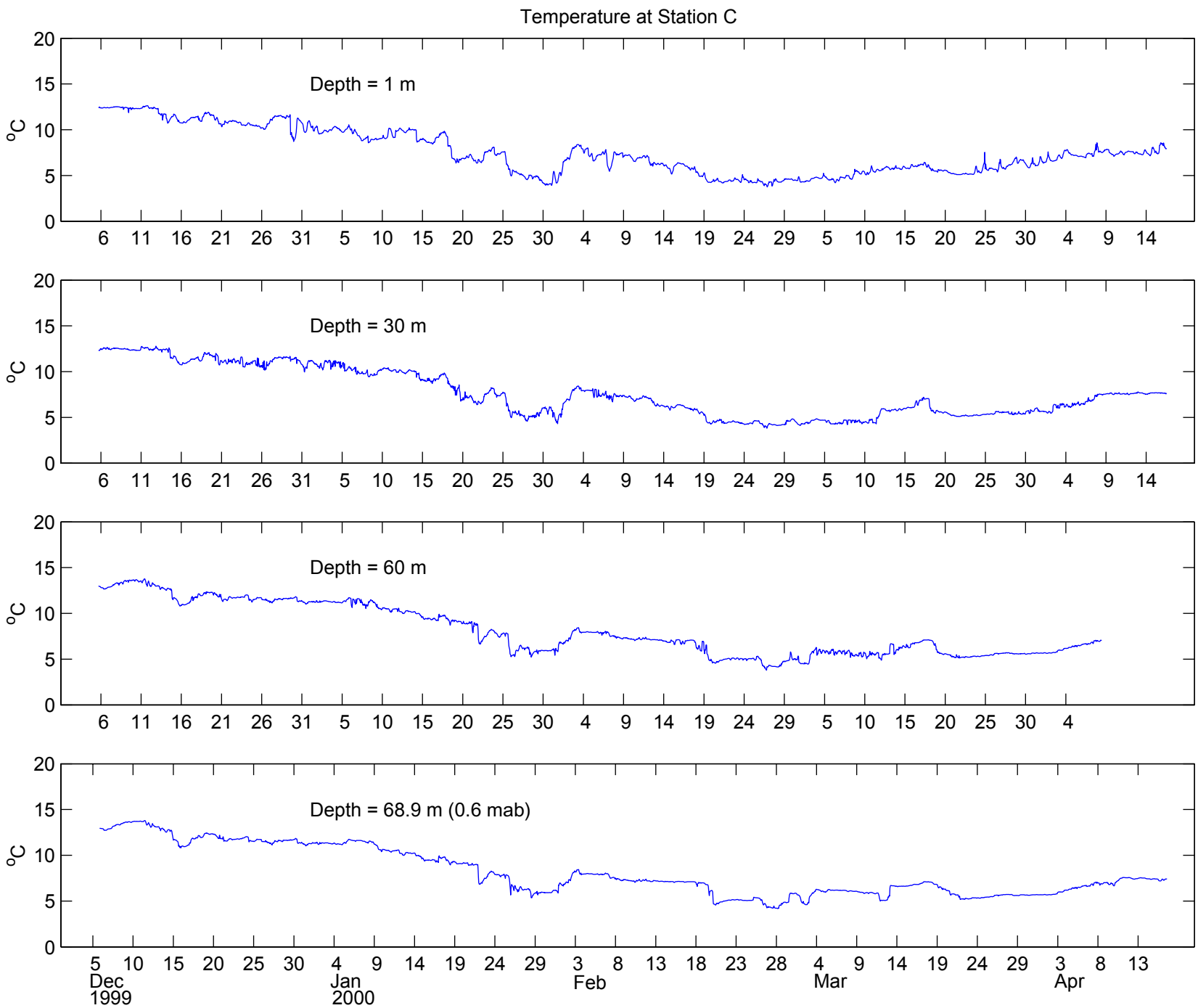

O1 Tidal Ellipse, 15 mbs
36'
24'
12'
40°N
48'
15'
74°W
45'
30'
15'
73°W
10
20
30
40
50
Tripod
2 cm/s

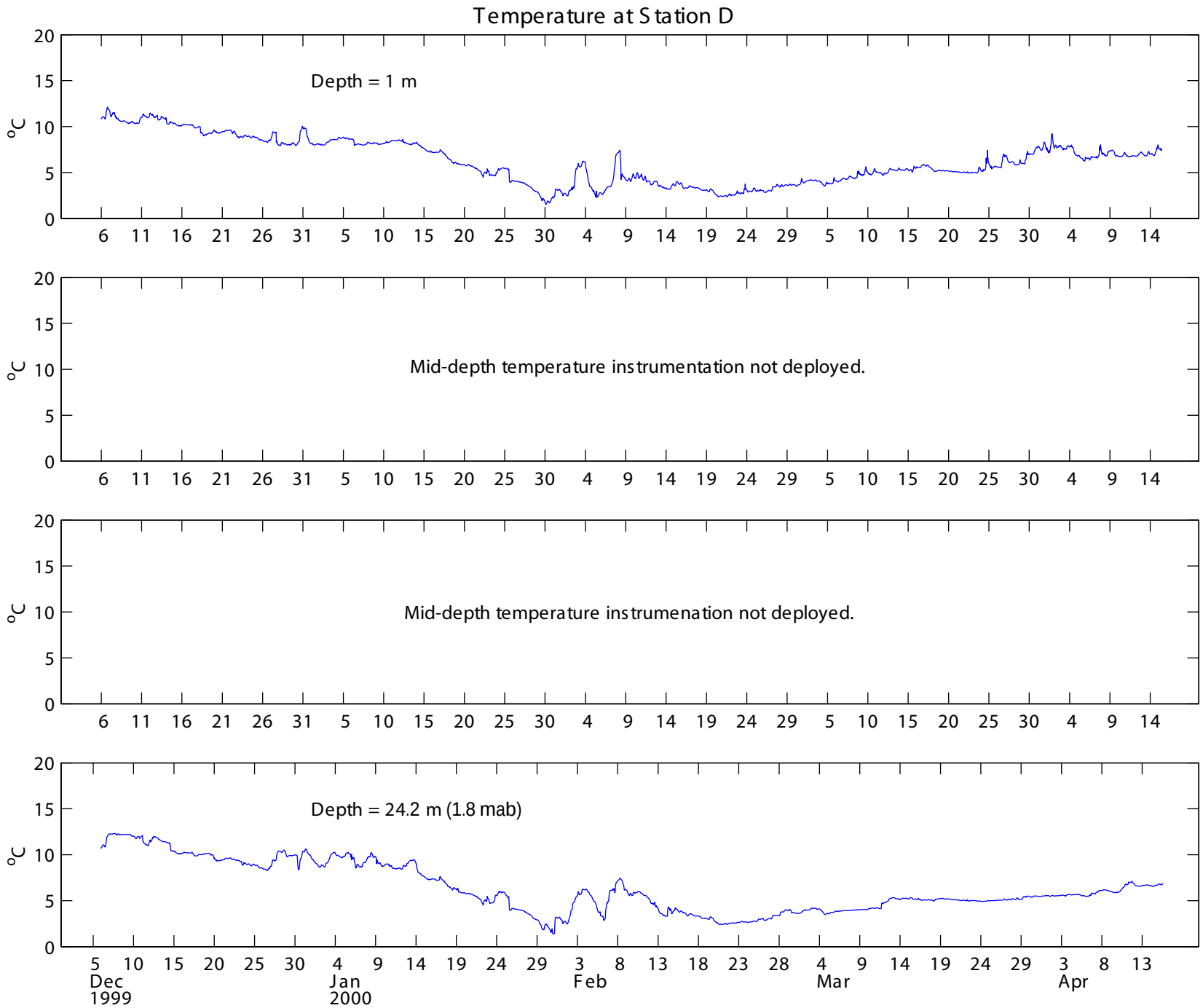
Weather Data from Ambrose Light Station

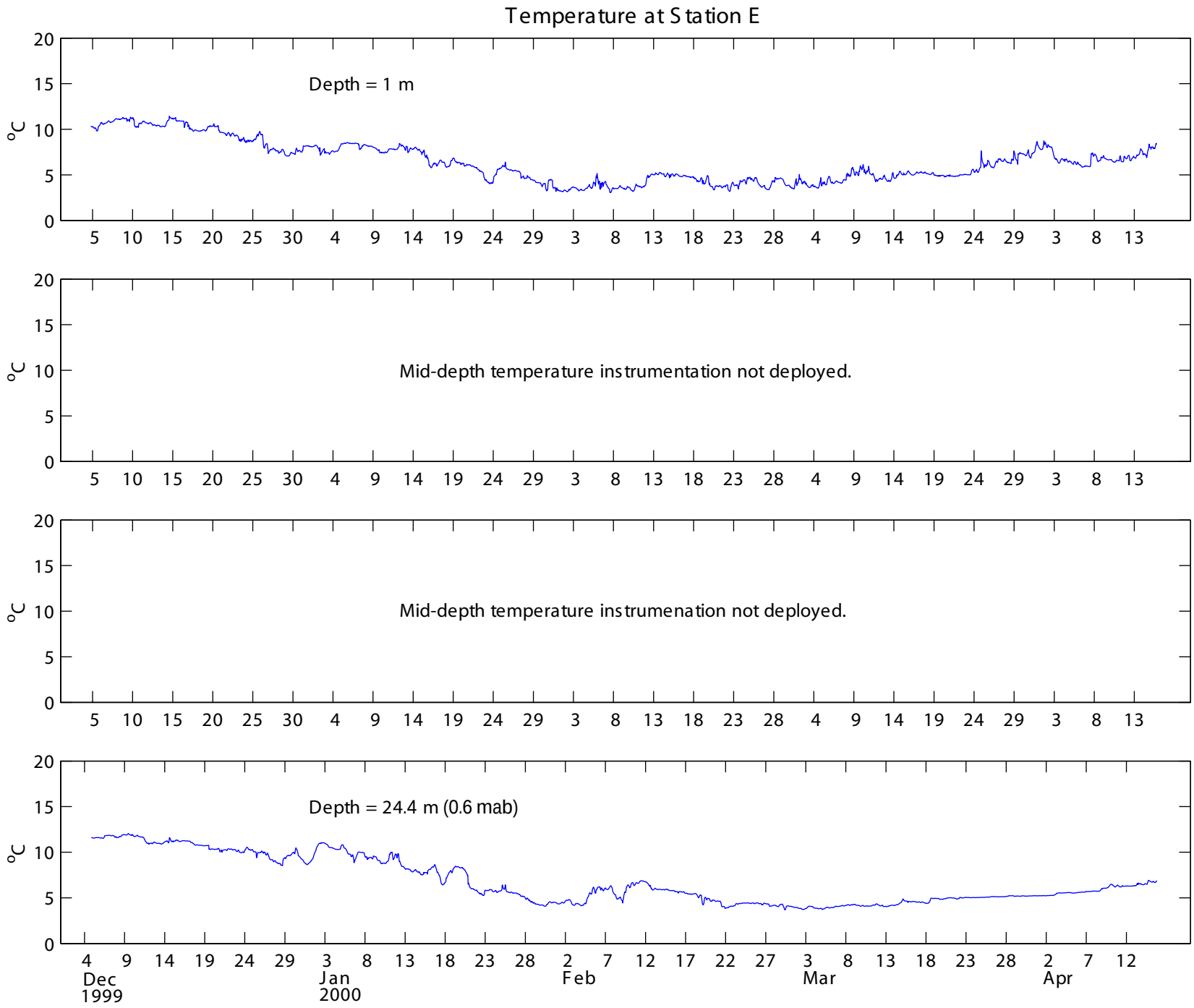


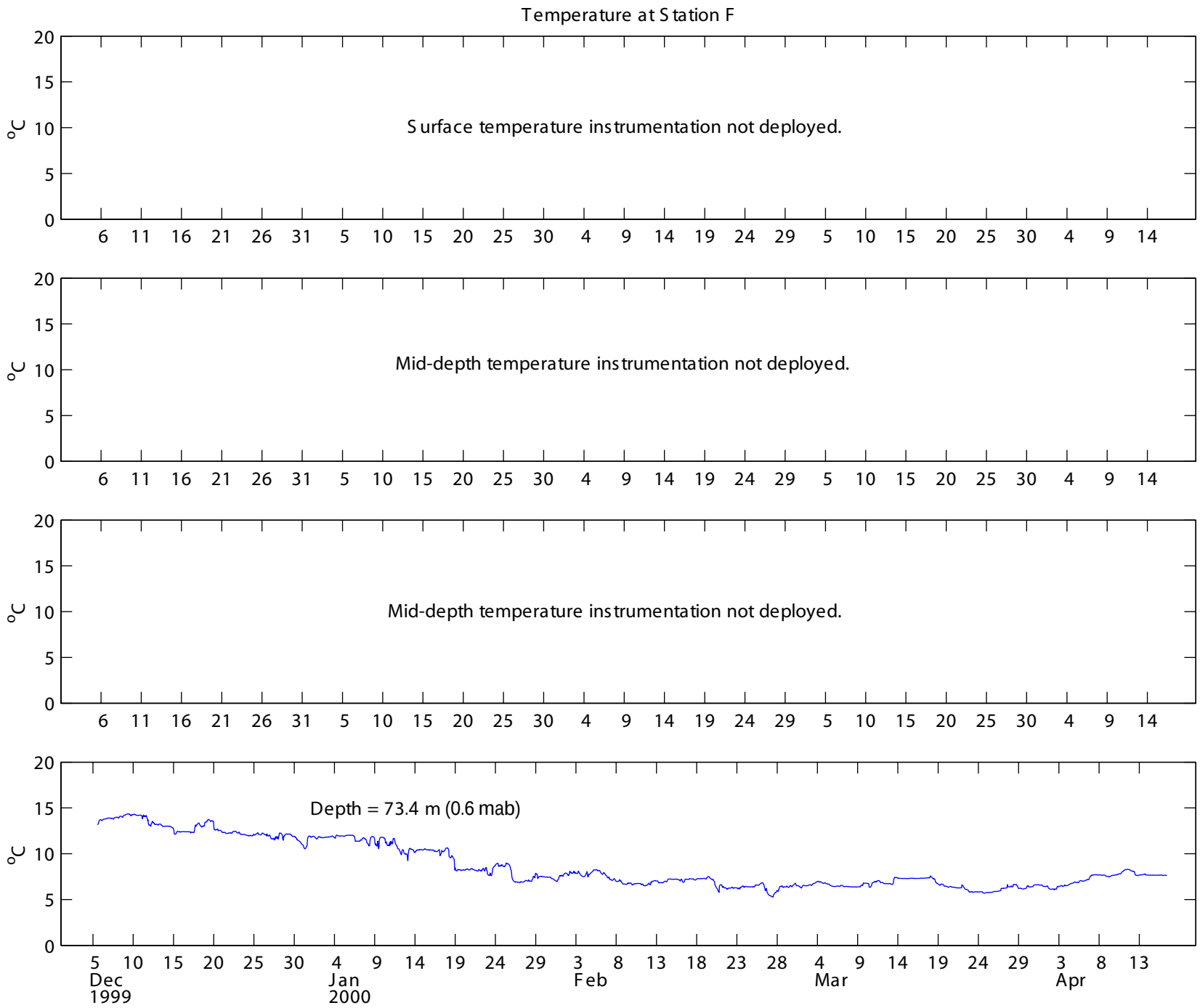

Temperature at Station A
Depth = 1 m
Mid-depth temperature instrumentation not deployed.
Mid-depth temperature instrumentation not deployed.
Depth = 36.1 m (1.9 mab)
°C
0
5
10
15
20
5 10 15 20 25 30 4 9 14 19 24 29 3 8 13 18 23 28 4 9 14 19 24 29 3 8 13
4 9 14 19 24 29 3 8 13 18 23 28
Dec
1999
Jan
2000

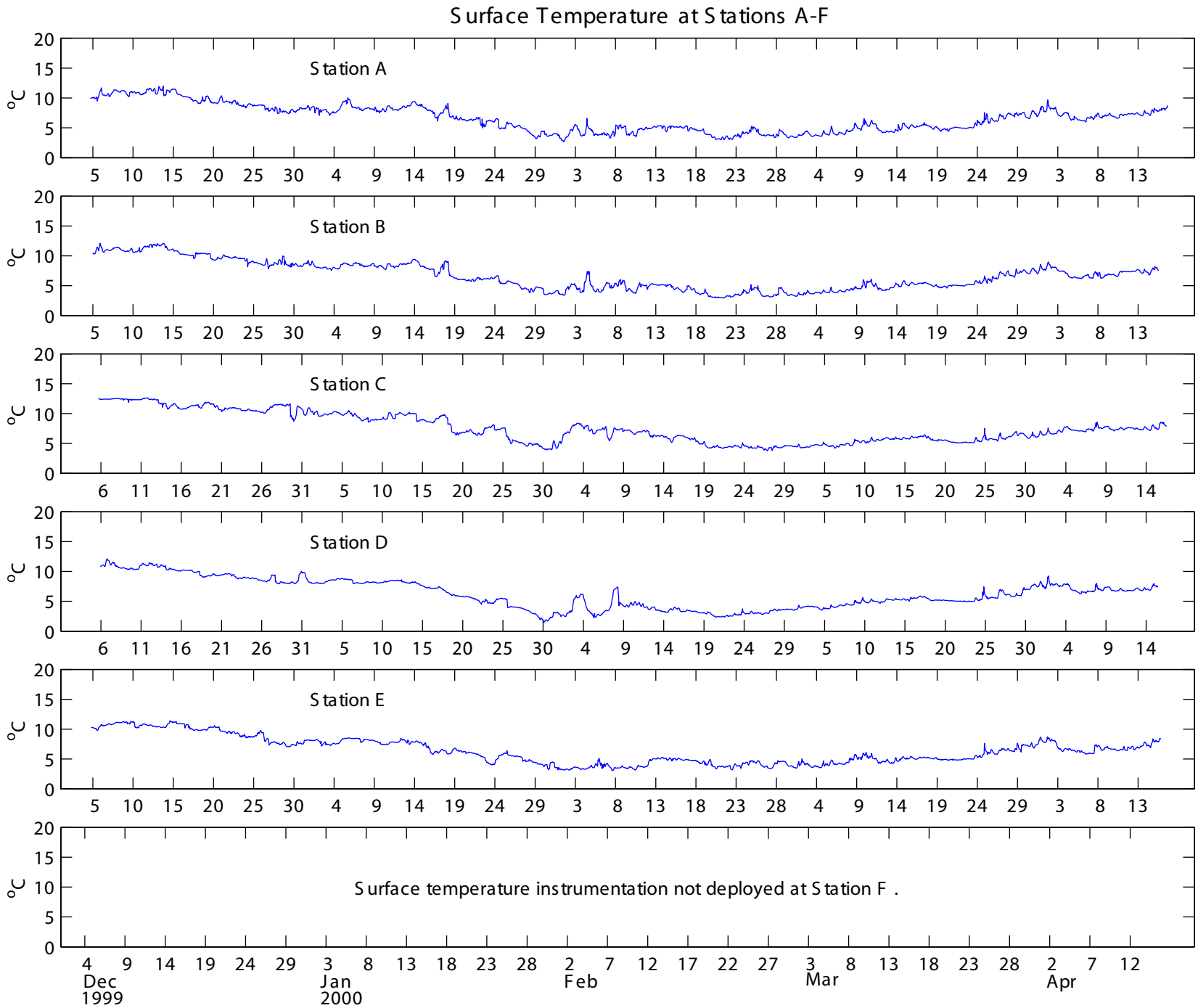

Temperature at Station B
Depth = 1 m
Depth = 30 m
Depth = 45 m
Depth = 53.7 m (1.8 mab)
°C
0
5
10
15
20
5 10 15 20 25 30 4 9 14 19 24 29 3 8 13 18 23 28 4 9 14 19 24 29 3 8 13 18
Dec
1999
Jan
2000
Feb
Mar
Apr

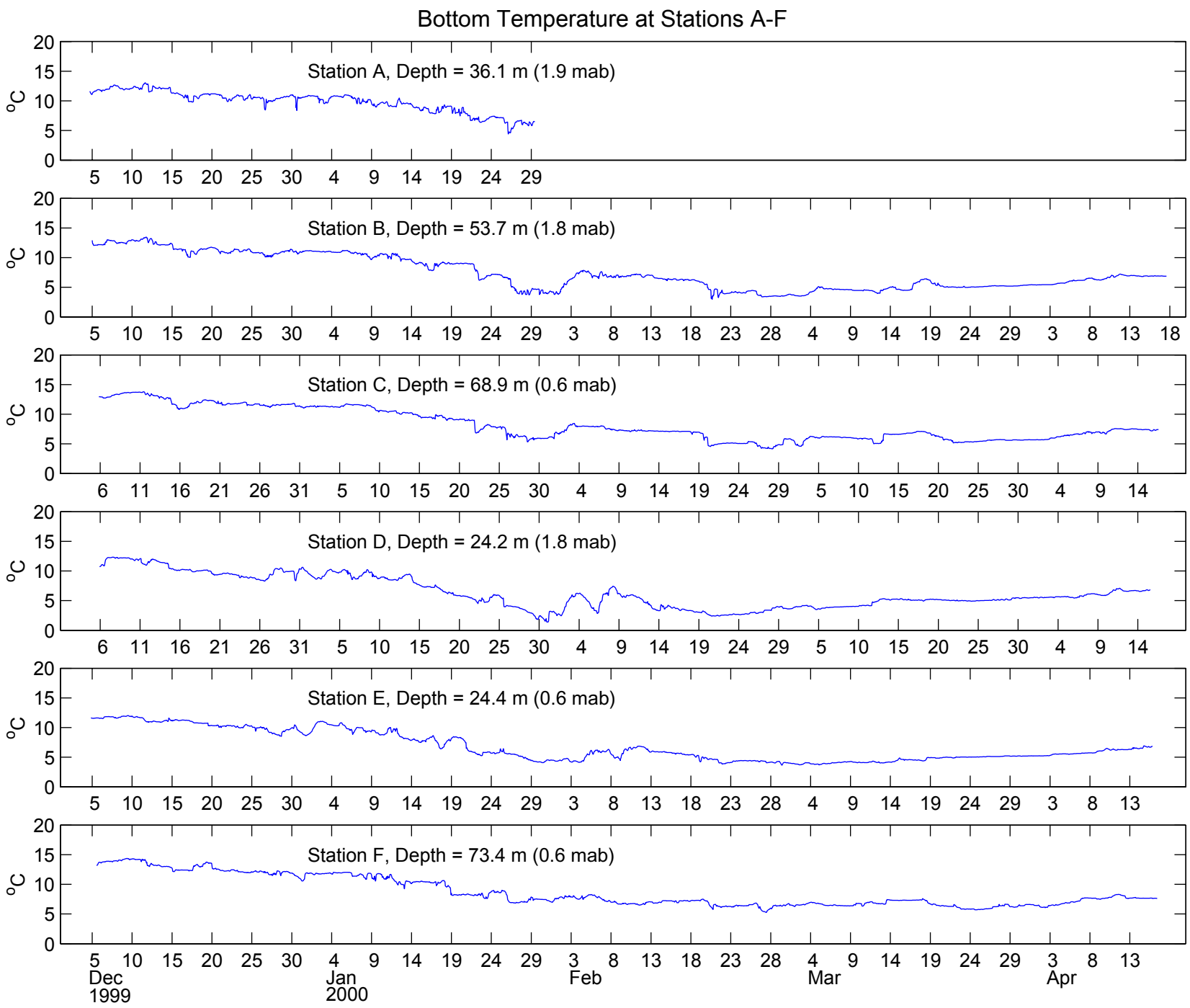

Temperature at Station C
Depth = 1 m
Depth = 30 m
Depth = 60 m
Depth = 68.9 m (0.6 mab)
°C
20
15
10
5
0
6 11 16 21 26 31 5 10 15 20 25 30 4 9 14 19 24 29 5 10 15 20 25 30 4 9 14
5 10 15 20 25 30 4 9 14 19 24 29 3 8 13 18 23 28 4 9 14 19 24 29 3 8 13
Dec
1999
Jan
2000
Feb
Mar
Apr

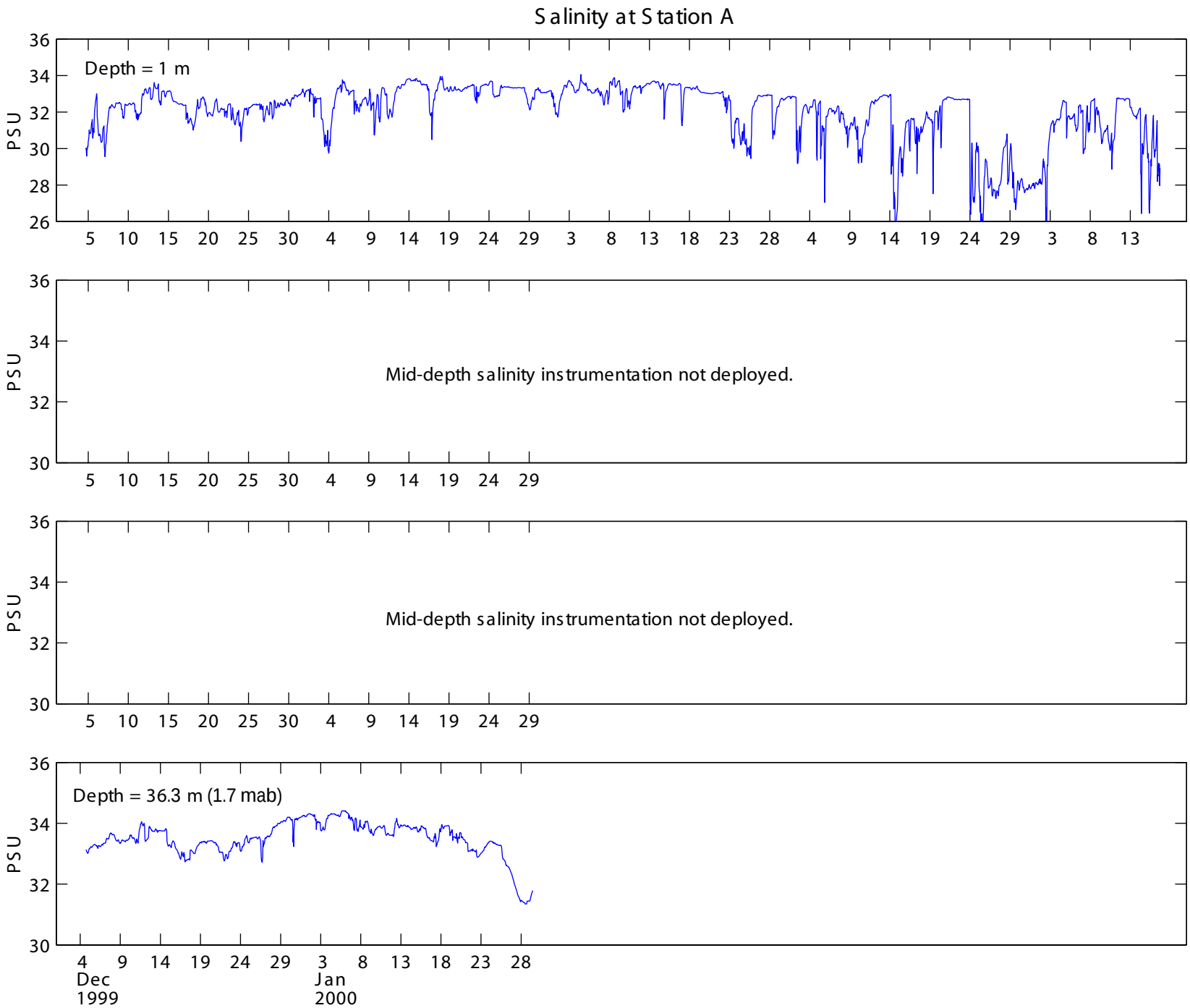

Temperature at Station D
Depth = 1 m
Mid-depth temperature instrumentation not deployed.
Mid-depth temperature instrumenation not deployed.
Depth = 24.2 m (1.8 mab)
°C
Dec 1999
Jan 2000
Feb
Mar
Apr

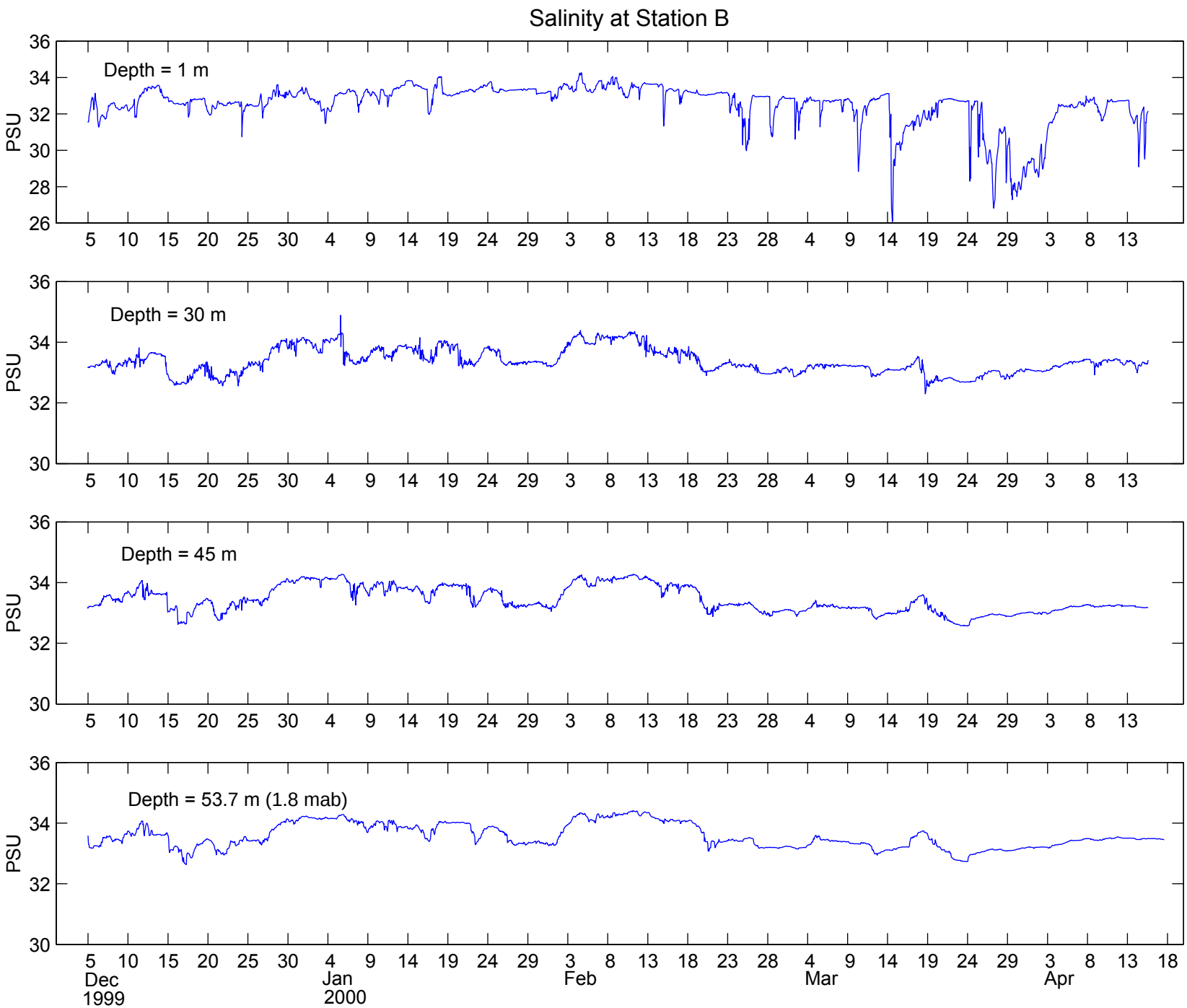

Temperature at Station E
Depth = 1 m
Mid-depth temperature instrumentation not deployed.
Mid-depth temperature instrumenation not deployed.
Depth = 24.4 m (0.6 mab)
°C
Dec 1999
Jan 2000
Feb
Mar
Apr

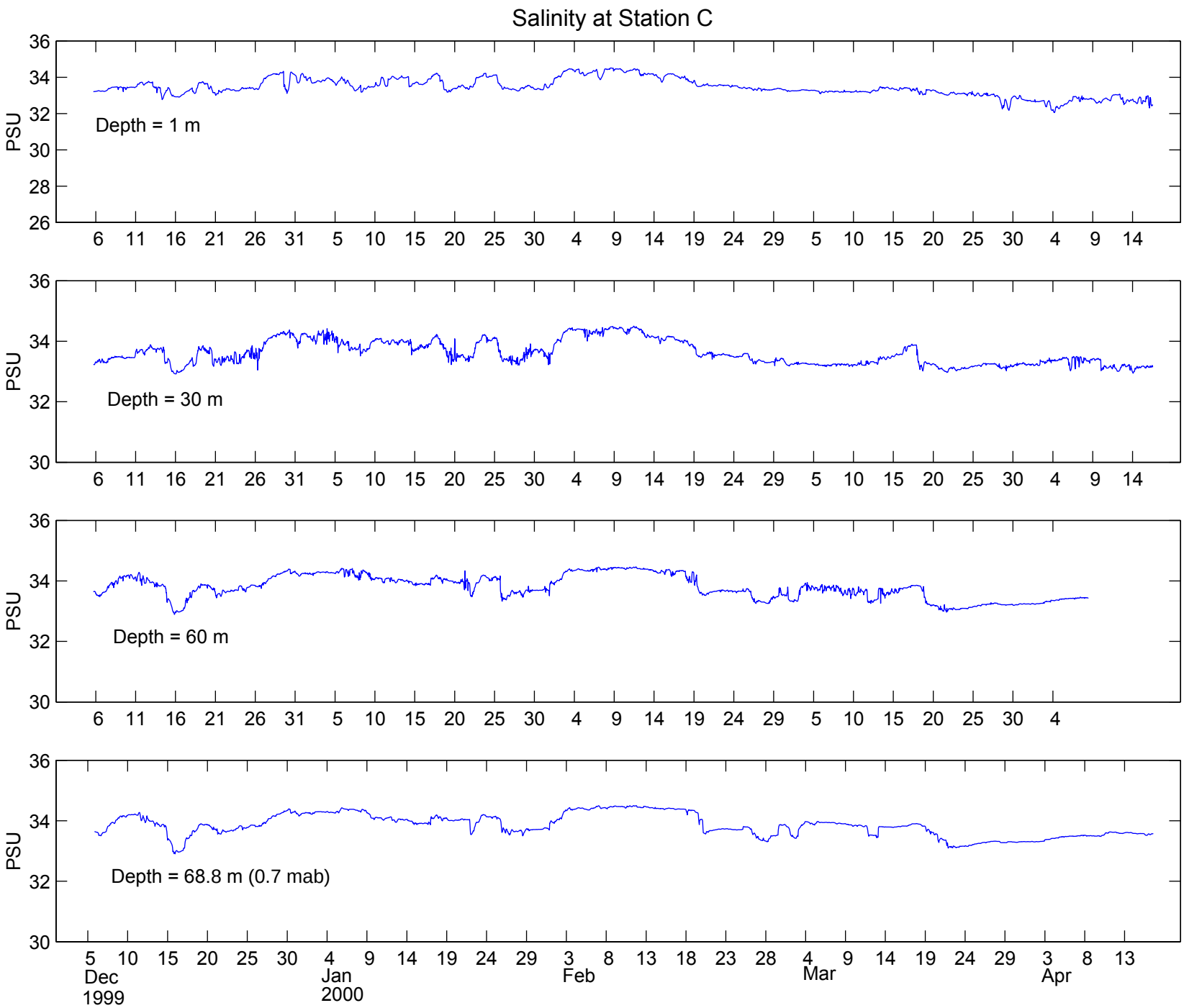

Temperature at Station F
°C
Surface temperature instrumentation not deployed.
Mid-depth temperature instrumentation not deployed.
Mid-depth temperature instrumentation not deployed.
Depth = 73.4 m (0.6 mab)
Dec 1999
Jan 2000
Feb
Mar
Apr

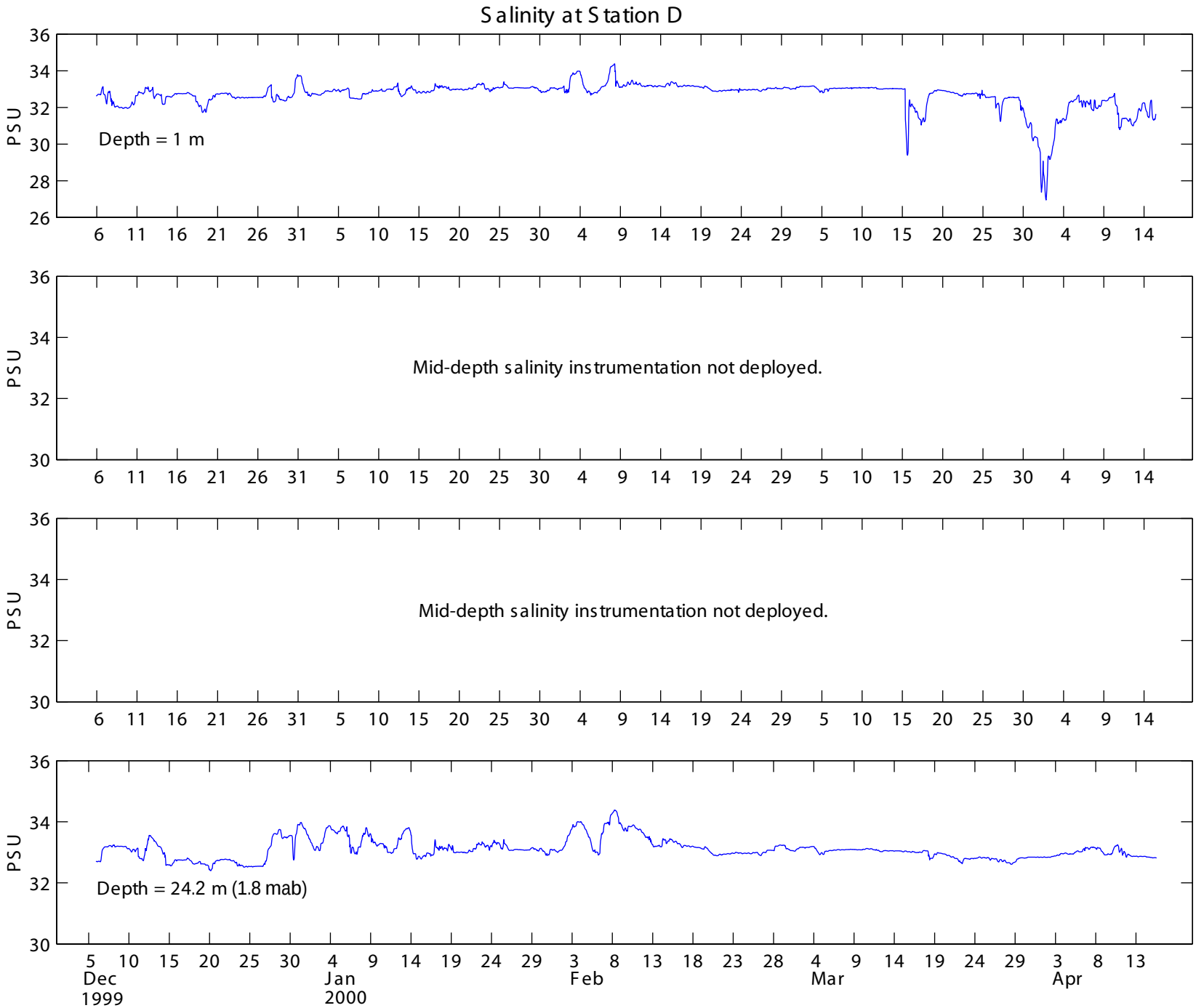

Surface Temperature at Stations A-F
Station A
Station B
Station C
Station D
Station E
Surface temperature instrumentation not deployed at Station F .
°C
Dec 1999
Jan 2000
Feb
Mar
Apr

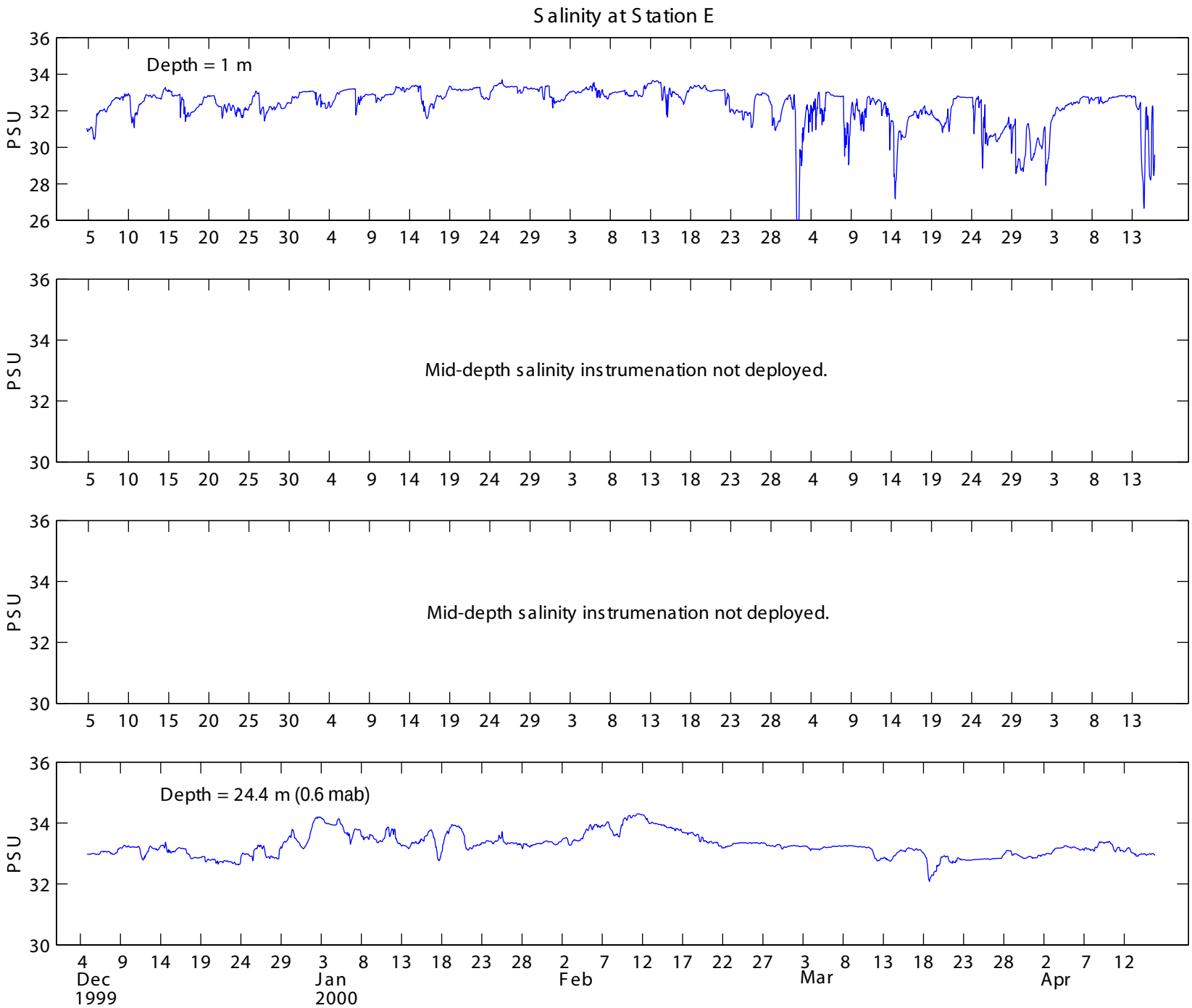

Bottom Temperature at Stations A-F
Station A, Depth = 36.1 m (1.9 mab)
Station B, Depth = 53.7 m (1.8 mab)
Station C, Depth = 68.9 m (0.6 mab)
Station D, Depth = 24.2 m (1.8 mab)
Station E, Depth = 24.4 m (0.6 mab)
Station F, Depth = 73.4 m (0.6 mab)
°C
Dec 1999
Jan 2000
Feb
Mar
Apr

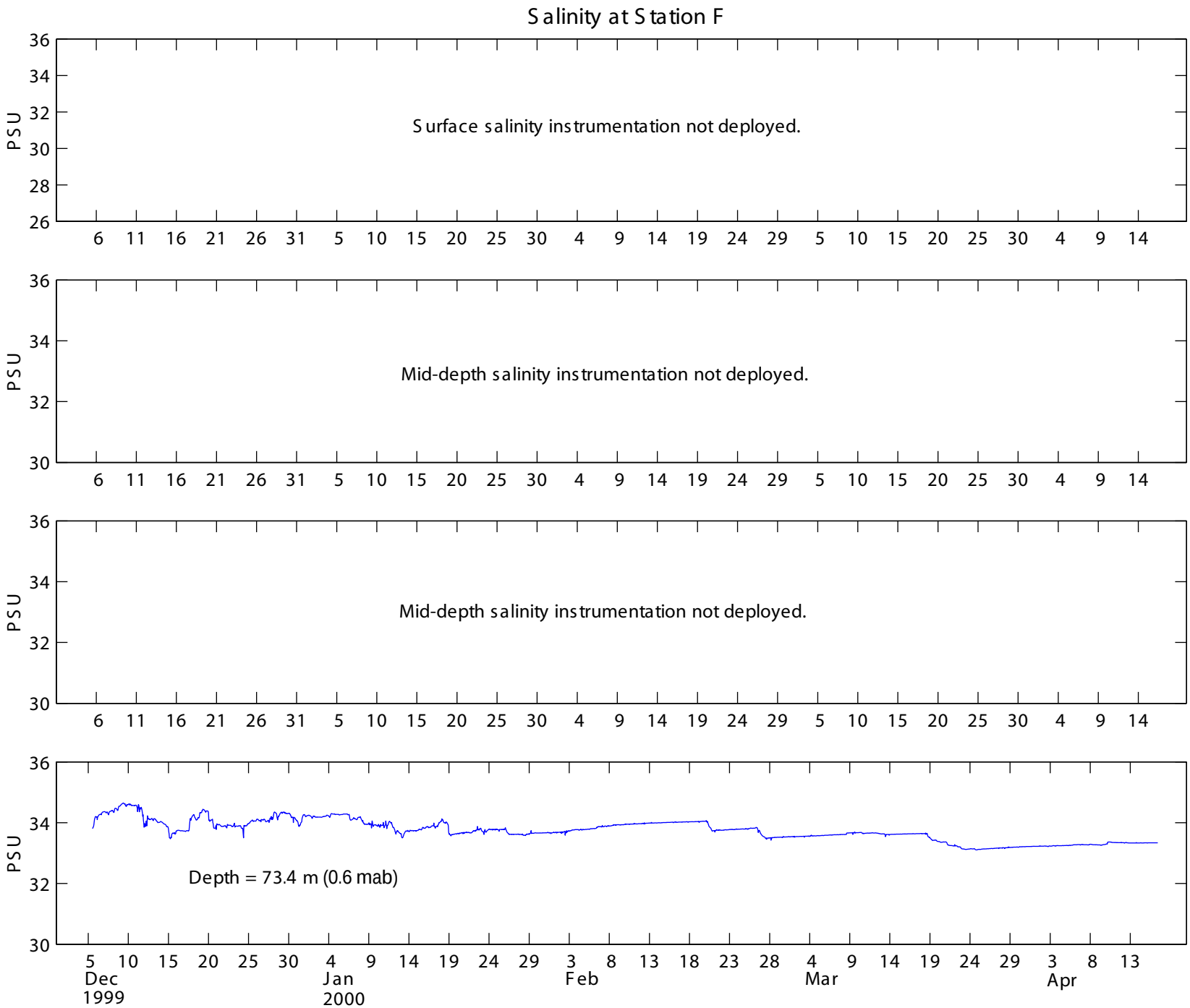

Salinity at Station A
Depth = 1 m
PSU
36
34
32
30
28
26
5 10 15 20 25 30 4 9 14 19 24 29 3 8 13 18 23 28 4 9 14 19 24 29 3 8 13
Mid-depth salinity instrumentation not deployed.
5 10 15 20 25 30 4 9 14 19 24 29
Mid-depth salinity instrumentation not deployed.
5 10 15 20 25 30 4 9 14 19 24 29
Depth = 36.3 m (1.7 mab)
4 9 14 19 24 29 3 8 13 18 23 28
Dec
1999
Jan
2000

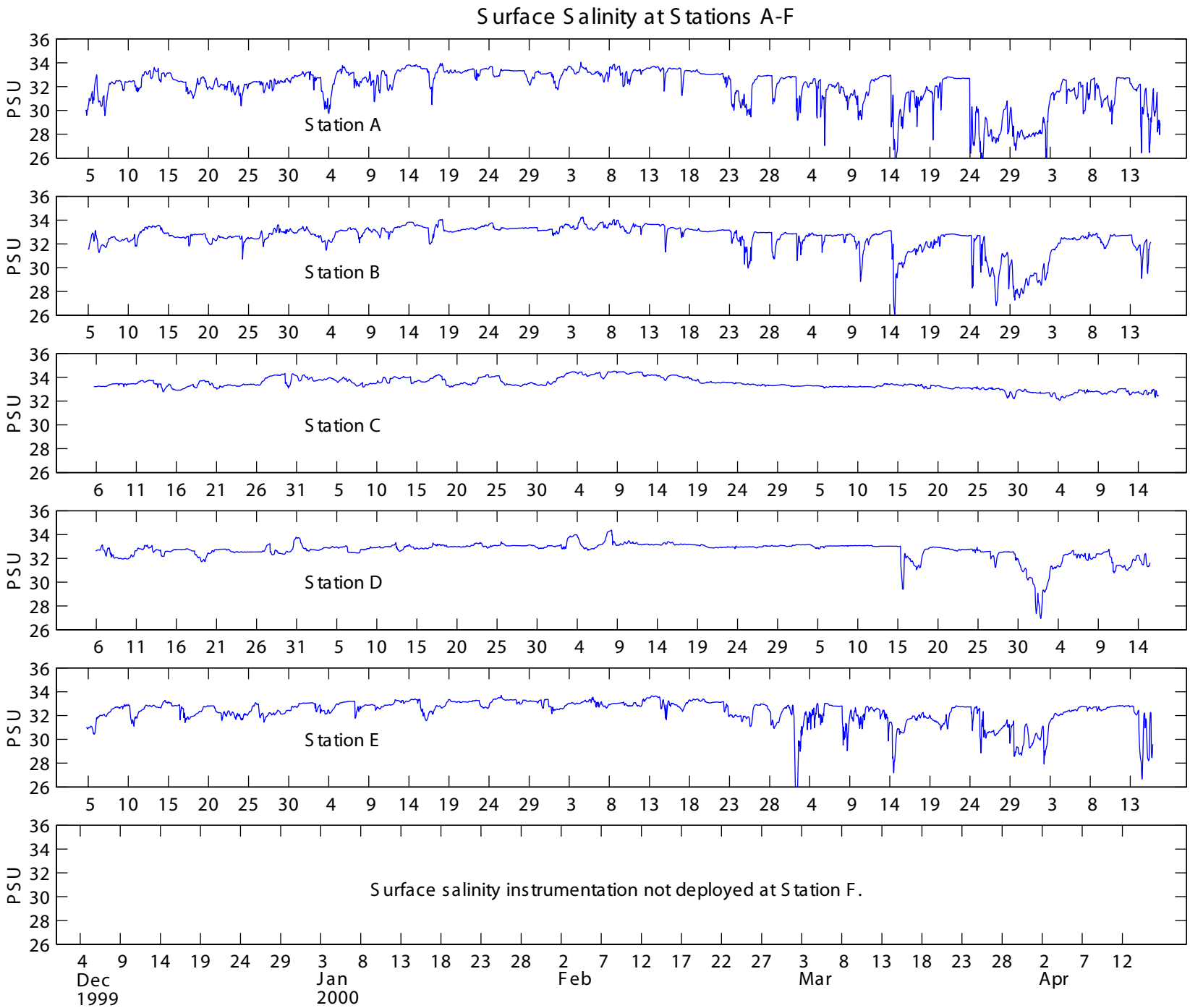

Salinity at Station B
Depth = 1 m
Depth = 30 m
Depth = 45 m
Depth = 53.7 m (1.8 mab)
PSU
36
34
32
30
28
26
5 10 15 20 25 30 4 9 14 19 24 29 3 8 13 18 23 28 4 9 14 19 24 29 3 8 13
5 10 15 20 25 30 4 9 14 19 24 29 3 8 13 18 23 28 4 9 14 19 24 29 3 8 13 18
Dec 1999
Jan 2000
Feb
Mar
Apr

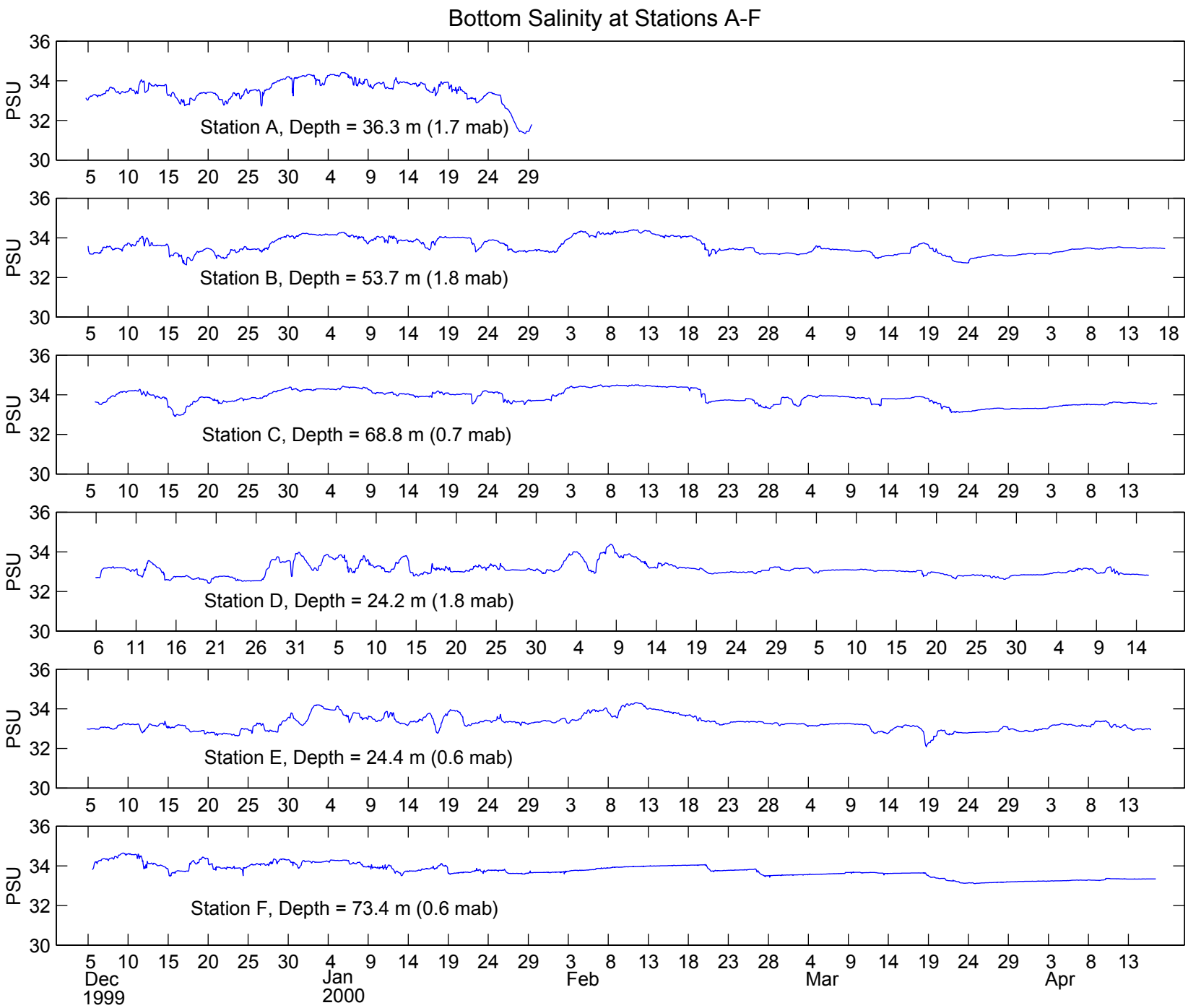

Salinity at Station C
PSU
Depth = 1 m
Depth = 30 m
Depth = 60 m
Depth = 68.8 m (0.7 mab)
36
34
32
30
28
26
6 11 16 21 26 31 5 10 15 20 25 30 4 9 14 19 24 29 5 10 15 20 25 30 4 9 14
5 10 15 20 25 30 4 9 14 19 24 29 3 8 13 18 23 28 4 9 14 19 24 29 3 8 13
Dec
1999
Jan
2000
Feb
Mar
Apr

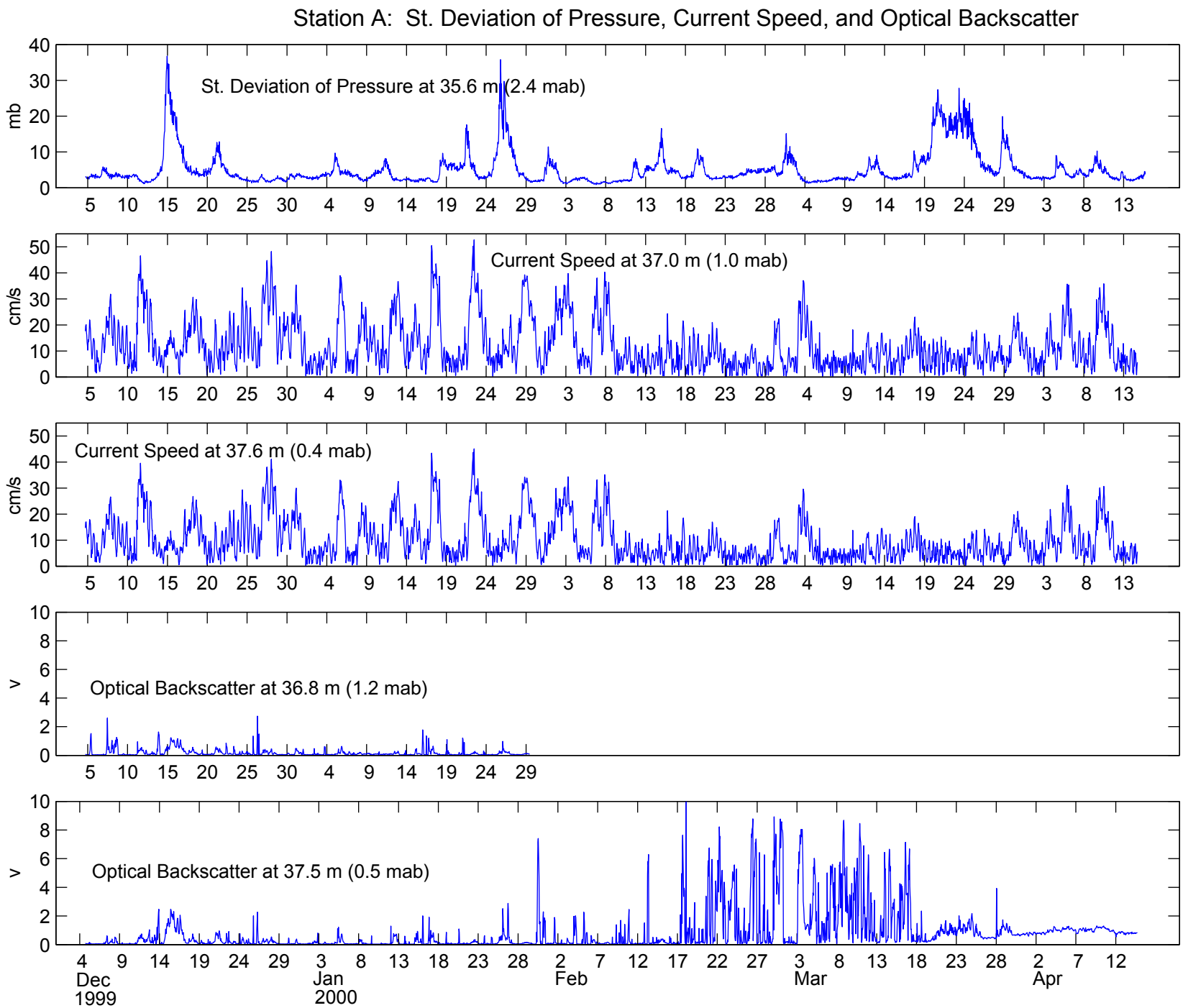

Salinity at Station D
PSU
Depth = 1 m
Mid-depth salinity instrumentation not deployed.
Mid-depth salinity instrumentation not deployed.
Depth = 24.2 m (1.8 mab)
Dec 1999
Jan 2000
Feb
Mar
Apr

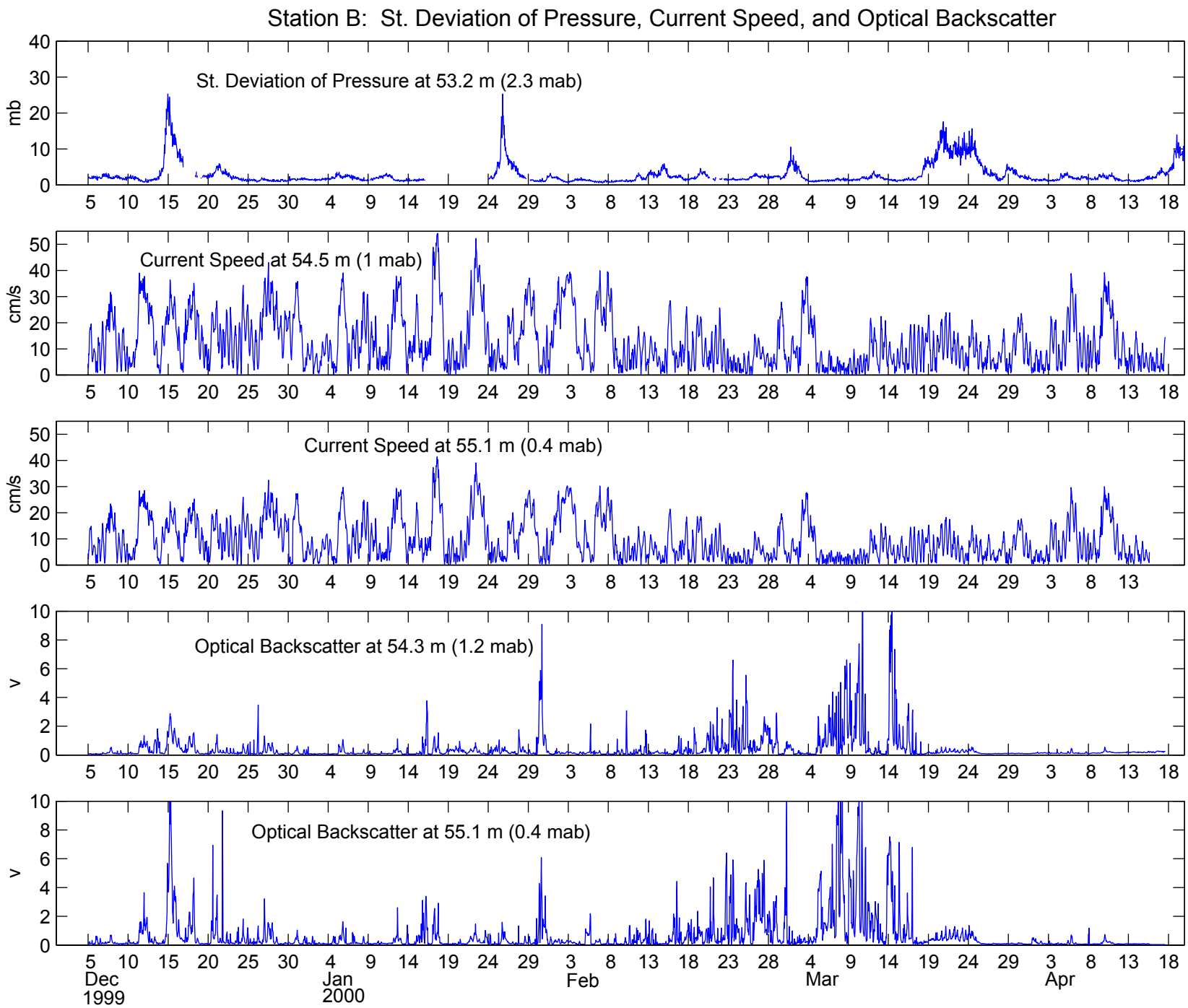

Salinity at Station E
Depth = 1 m
PSU
Mid-depth salinity instrumenation not deployed.
Mid-depth salinity instrumenation not deployed.
Depth = 24.4 m (0.6 mab)
Dec 1999
Jan 2000
Feb
Mar
Apr

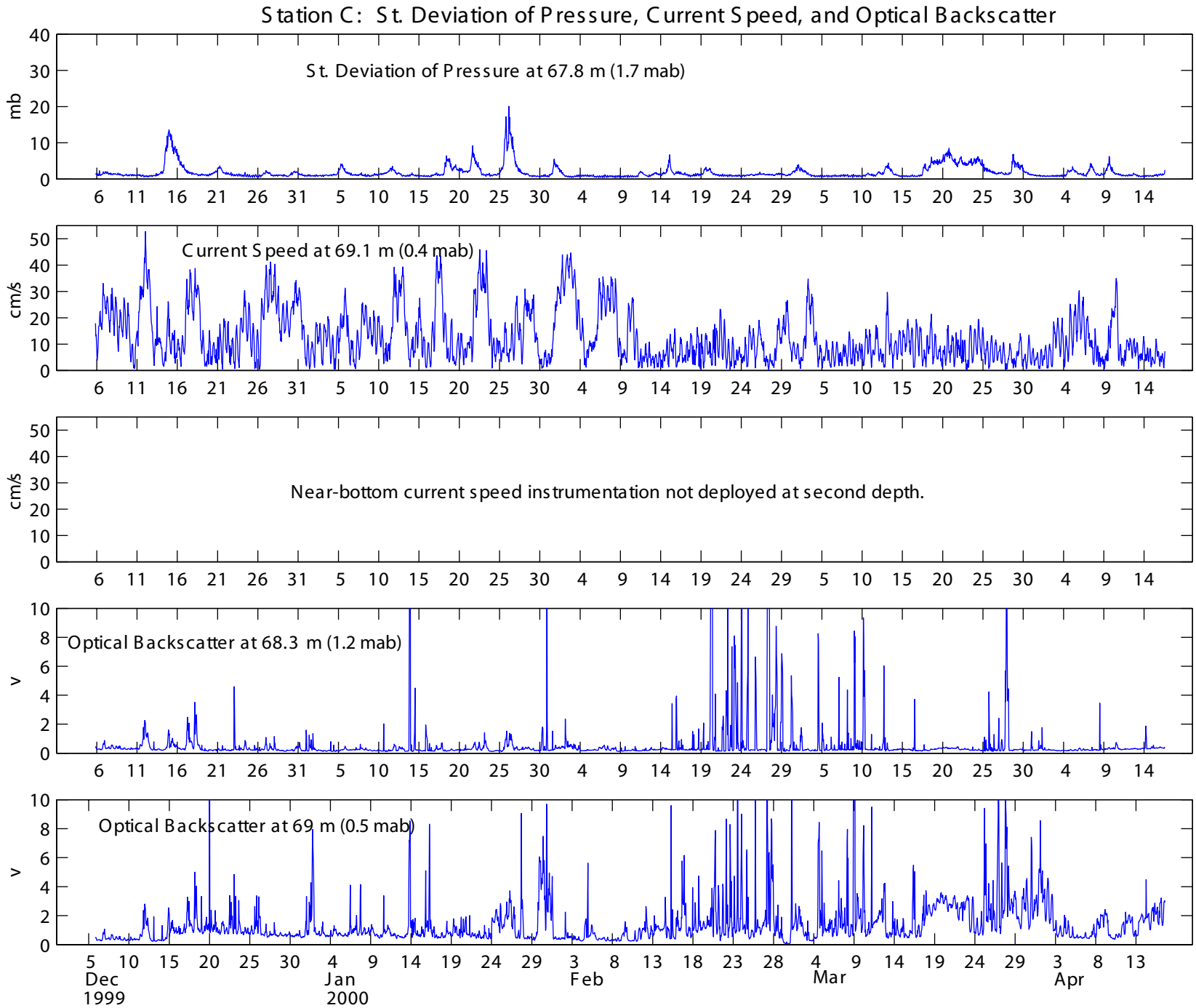

Salinity at Station F
PSU
Surface salinity instrumentation not deployed.
Mid-depth salinity instrumentation not deployed.
Mid-depth salinity instrumentation not deployed.
Depth = 73.4 m (0.6 mab)
Dec 1999
Jan 2000
Feb
Mar
Apr

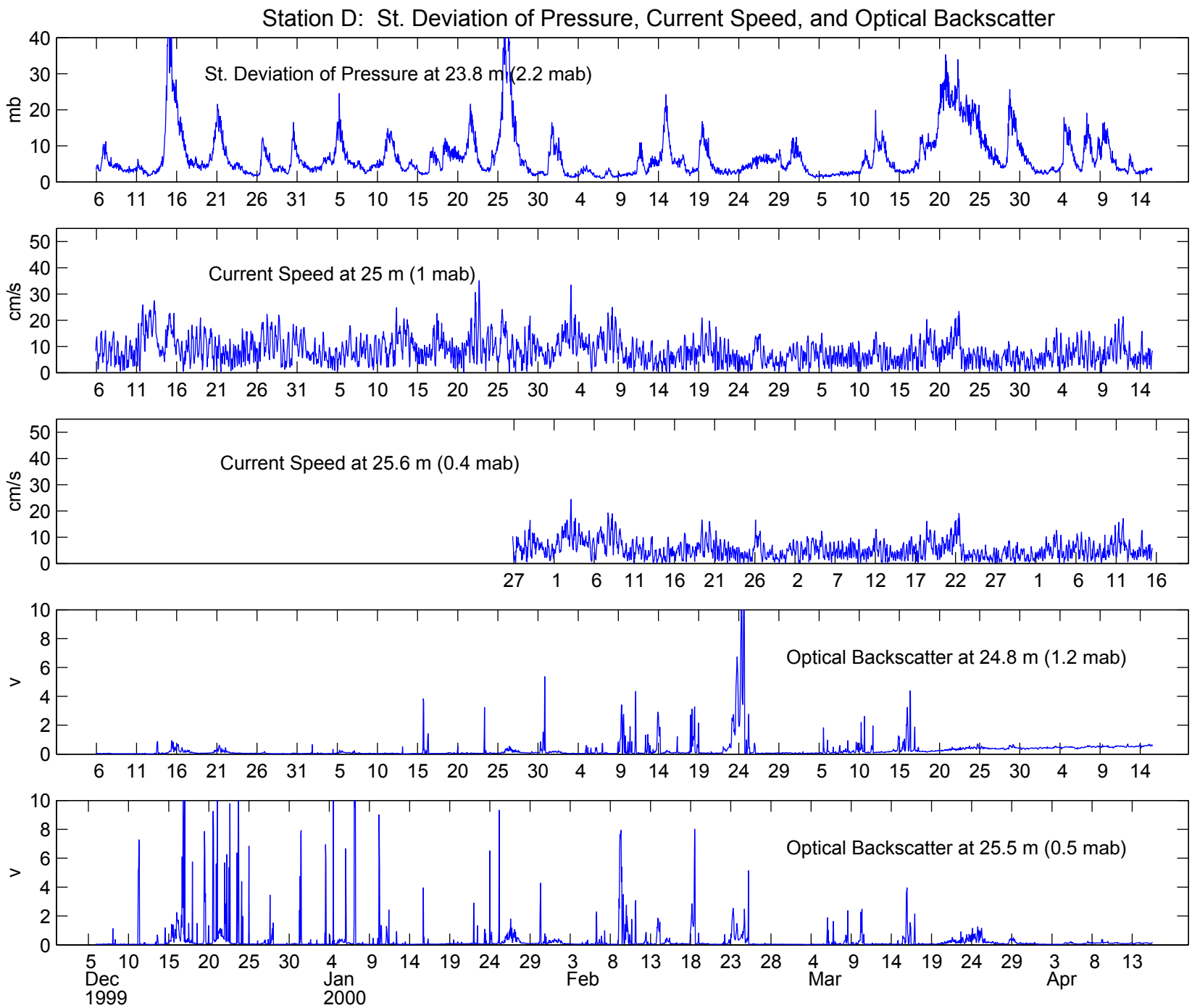

Surface Salinity at Stations A-F
PSU
Station A
Station B
Station C
Station D
Station E
Surface salinity instrumentation not deployed at Station F.
Dec
1999
Jan
2000
Feb
Mar
Apr

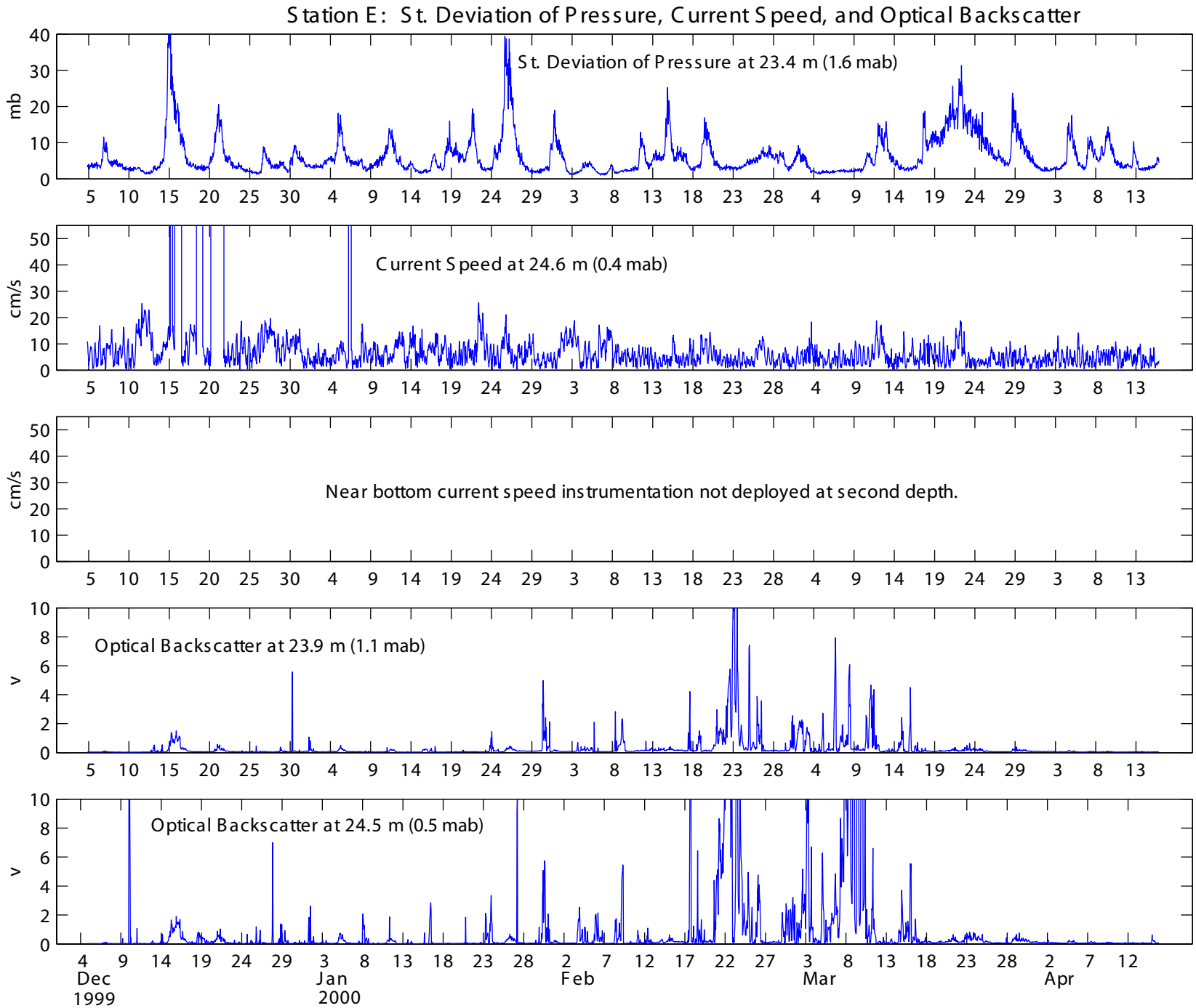

Bottom Salinity at Stations A-F
PSU
Station A, Depth = 36.3 m (1.7 mab)
Station B, Depth = 53.7 m (1.8 mab)
Station C, Depth = 68.8 m (0.7 mab)
Station D, Depth = 24.2 m (1.8 mab)
Station E, Depth = 24.4 m (0.6 mab)
Station F, Depth = 73.4 m (0.6 mab)
Dec 1999
Jan 2000
Feb
Mar
Apr

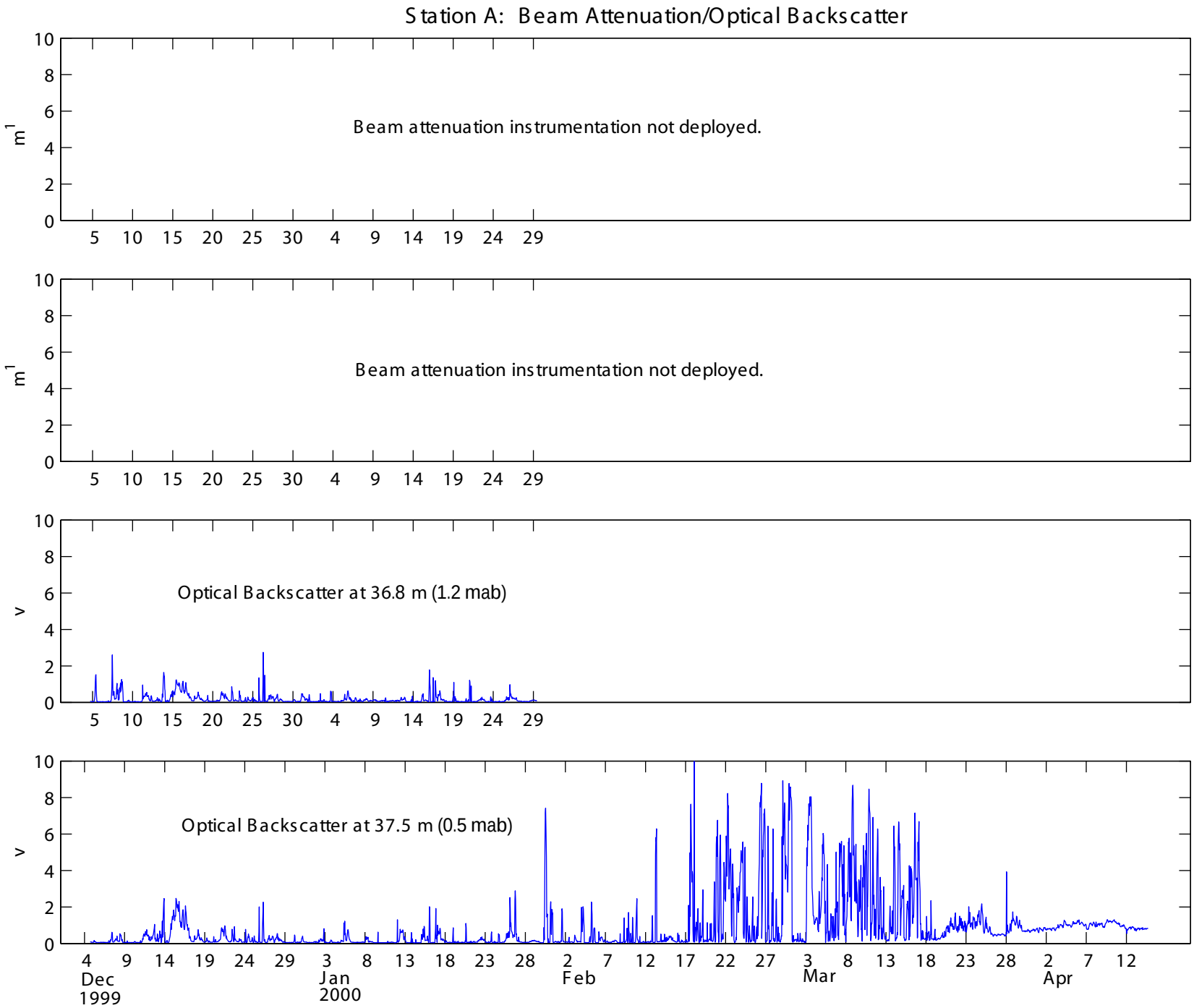

Station A: St. Deviation of Pressure, Current Speed, and Optical Backscatter
St. Deviation of Pressure at 35.6 m (2.4 mab)
mb
Current Speed at 37.0 m (1.0 mab)
cm/s
Current Speed at 37.6 m (0.4 mab)
cm/s
Optical Backscatter at 36.8 m (1.2 mab)
v
Optical Backscatter at 37.5 m (0.5 mab)
v
Dec 1999
Jan 2000
Feb
Mar
Apr

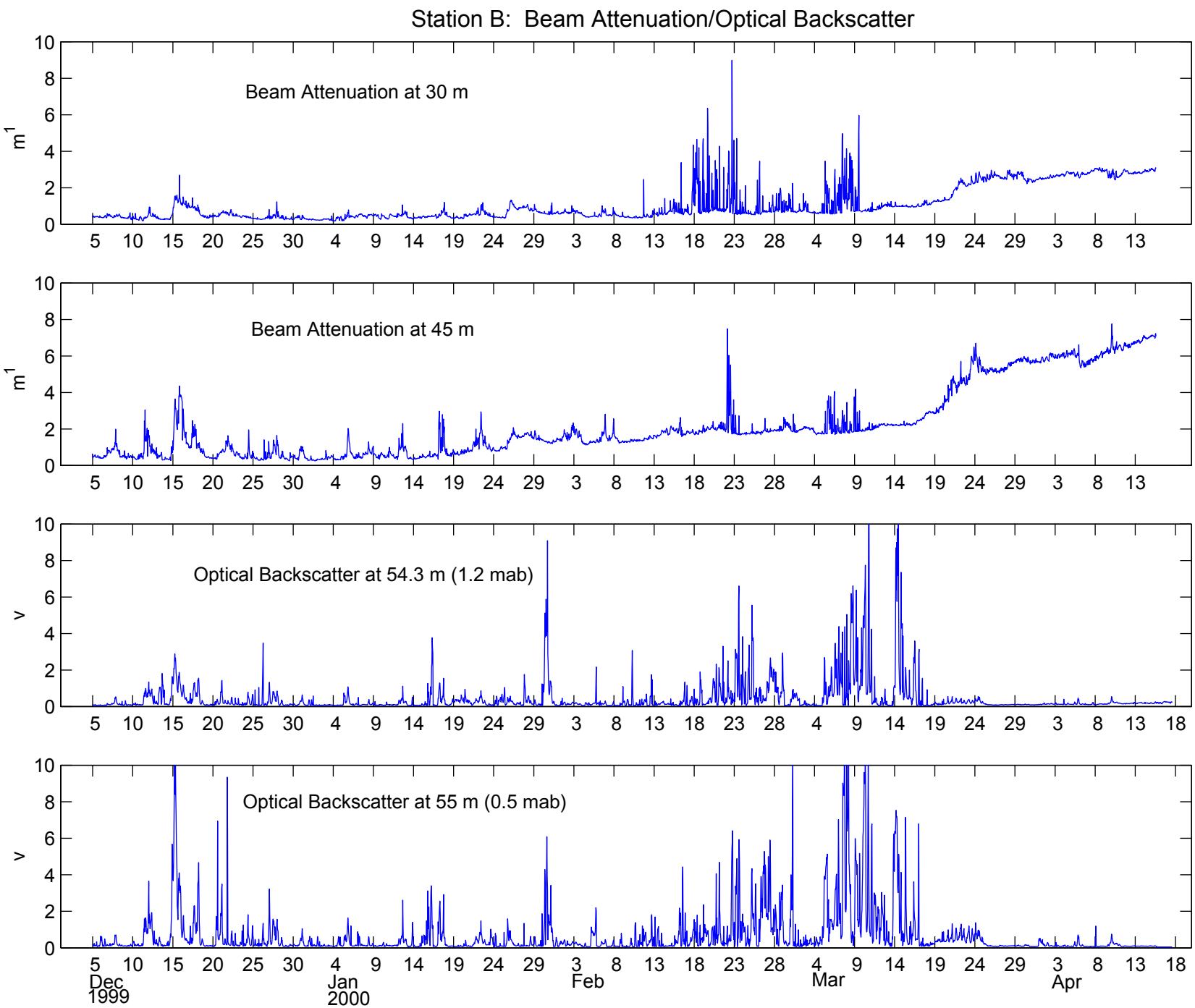

Station B: St. Deviation of Pressure, Current Speed, and Optical Backscatter
St. Deviation of Pressure at 53.2 m (2.3 mab)
mb
Current Speed at 54.5 m (1 mab)
cm/s
Current Speed at 55.1 m (0.4 mab)
cm/s
Optical Backscatter at 54.3 m (1.2 mab)
v
Optical Backscatter at 55.1 m (0.4 mab)
v
Dec 1999
Jan 2000
Feb
Mar
Apr

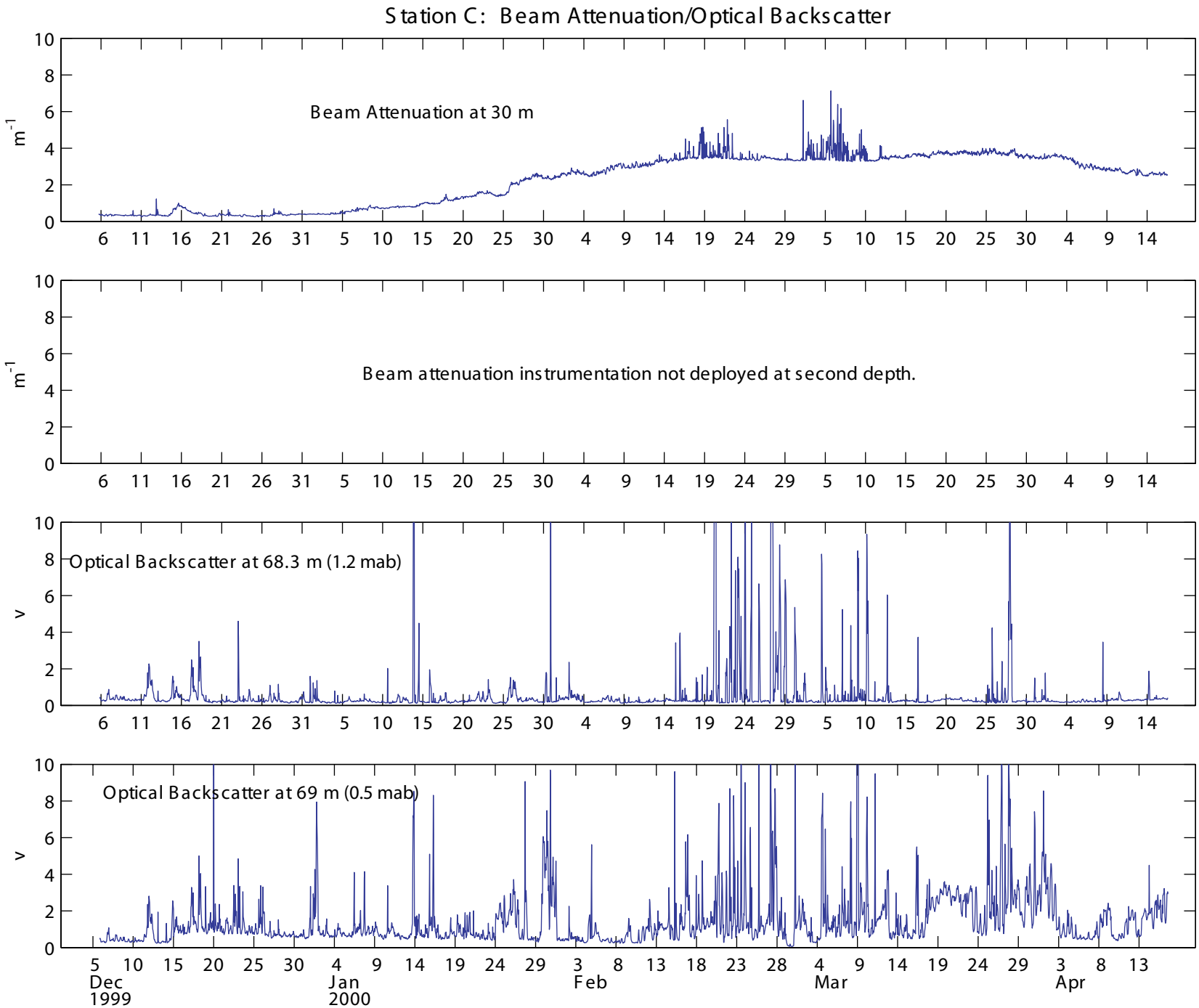

Station C: St. Deviation of Pressure, Current Speed, and Optical Backscatter
St. Deviation of Pressure at 67.8 m (1.7 mab)
mb
Current Speed at 69.1 m (0.4 mab)
cm/s
Near-bottom current speed instrumentation not deployed at second depth.
cm/s
Optical Backscatter at 68.3 m (1.2 mab)
v
Optical Backscatter at 69 m (0.5 mab)
v
Dec 1999
Jan 2000
Feb
Mar
Apr

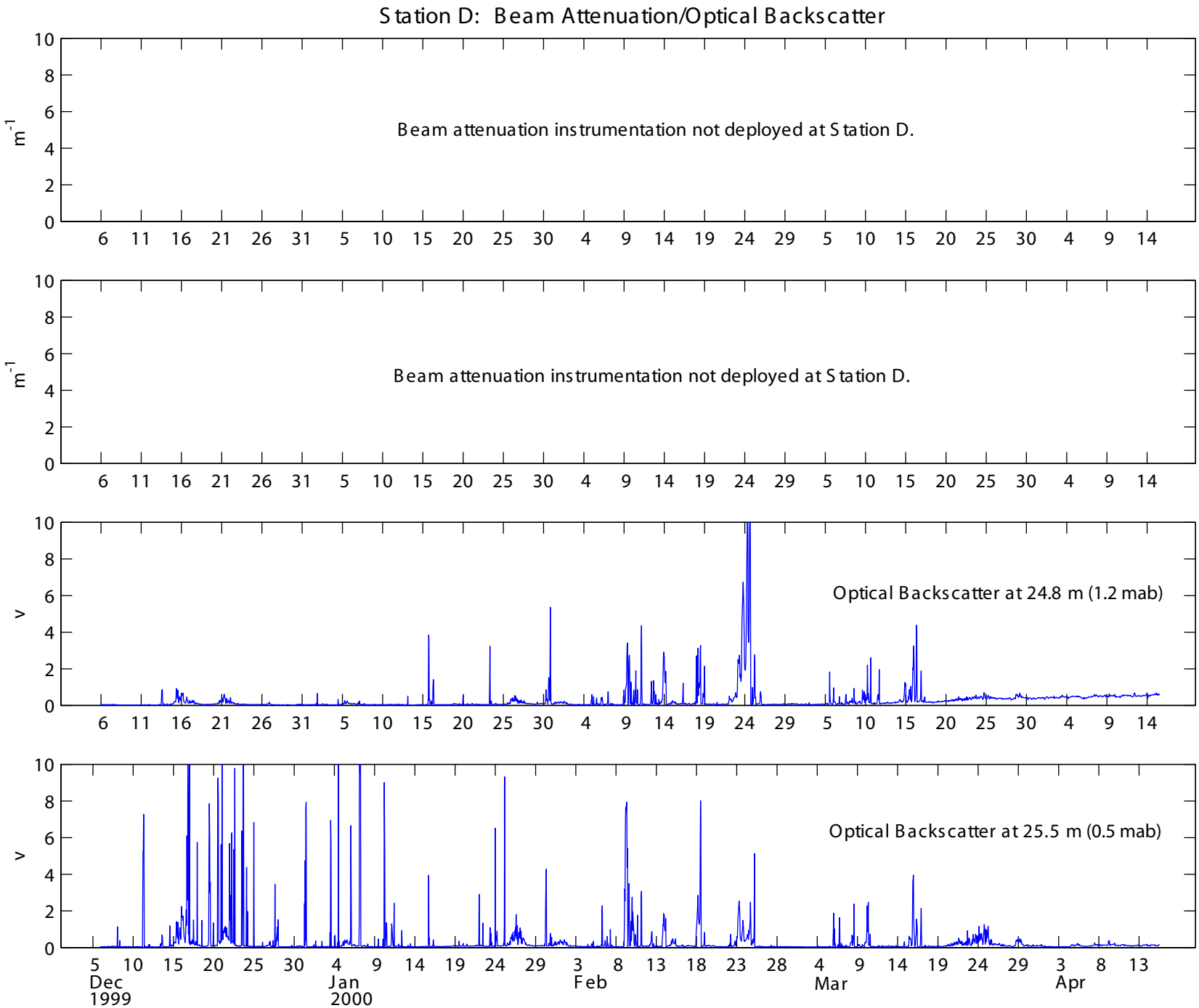

Station D: St. Deviation of Pressure, Current Speed, and Optical Backscatter
St. Deviation of Pressure at 23.8 m (2.2 mab)
mb
Current Speed at 25 m (1 mab)
cm/s
Current Speed at 25.6 m (0.4 mab)
cm/s
Optical Backscatter at 24.8 m (1.2 mab)
v
Optical Backscatter at 25.5 m (0.5 mab)
v
Dec 1999
Jan 2000
Feb
Mar
Apr

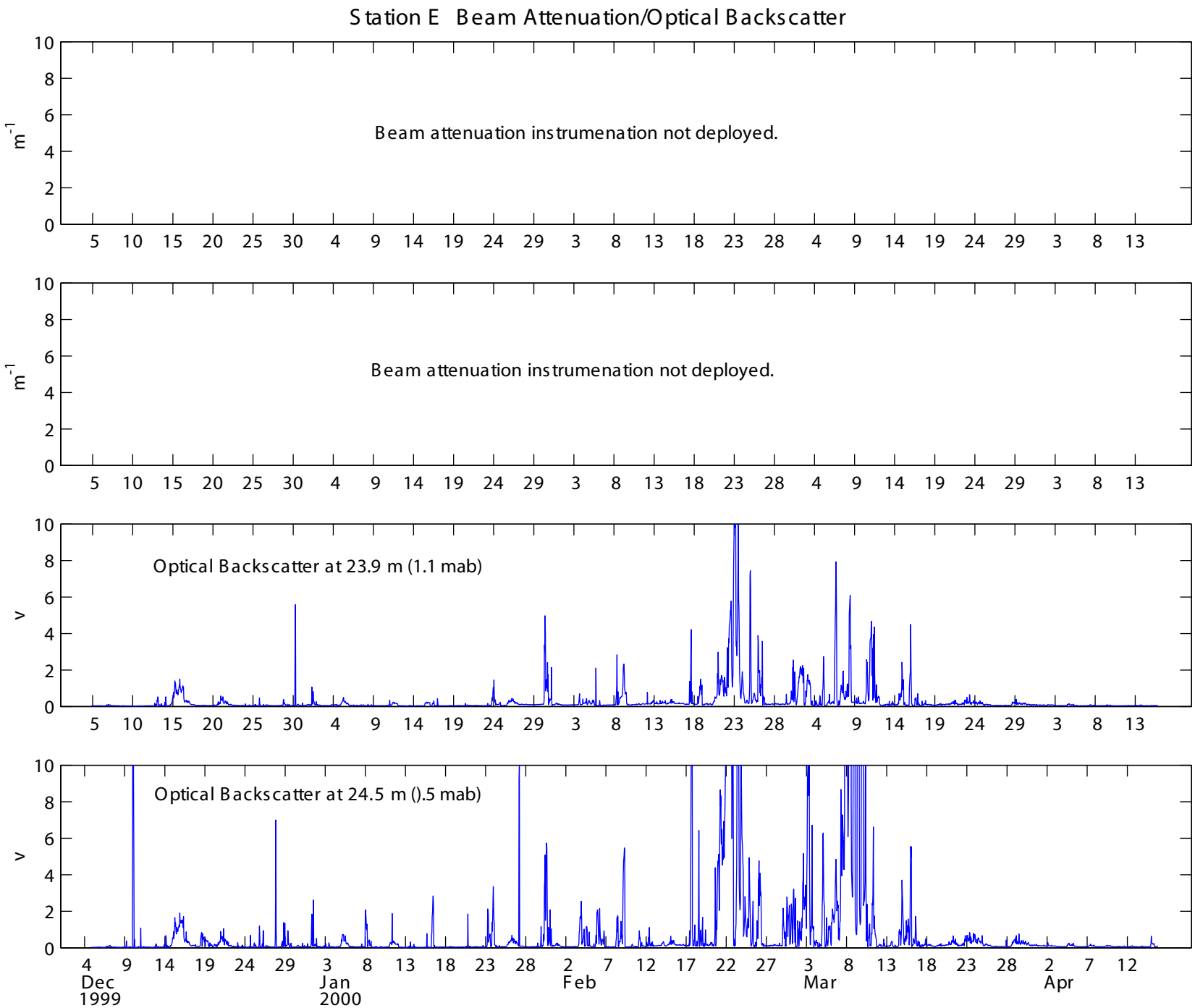

Station E: St. Deviation of Pressure, Current Speed, and Optical Backscatter
St. Deviation of Pressure at 23.4 m (1.6 mab)
mb
Current Speed at 24.6 m (0.4 mab)
cm/s
Near bottom current speed instrumentation not deployed at second depth.
cm/s
Optical Backscatter at 23.9 m (1.1 mab)
v
Optical Backscatter at 24.5 m (0.5 mab)
v
Dec 1999
Jan 2000
Feb
Mar
Apr


Station A: Beam Attenuation/Optical Backscatter
m-1
Beam attenuation instrumentation not deployed.
m-1
Beam attenuation instrumentation not deployed.
v
Optical Backscatter at 36.8 m (1.2 mab)
v
Optical Backscatter at 37.5 m (0.5 mab)
4 Dec 1999
Jan 2000
Feb
Mar
Apr

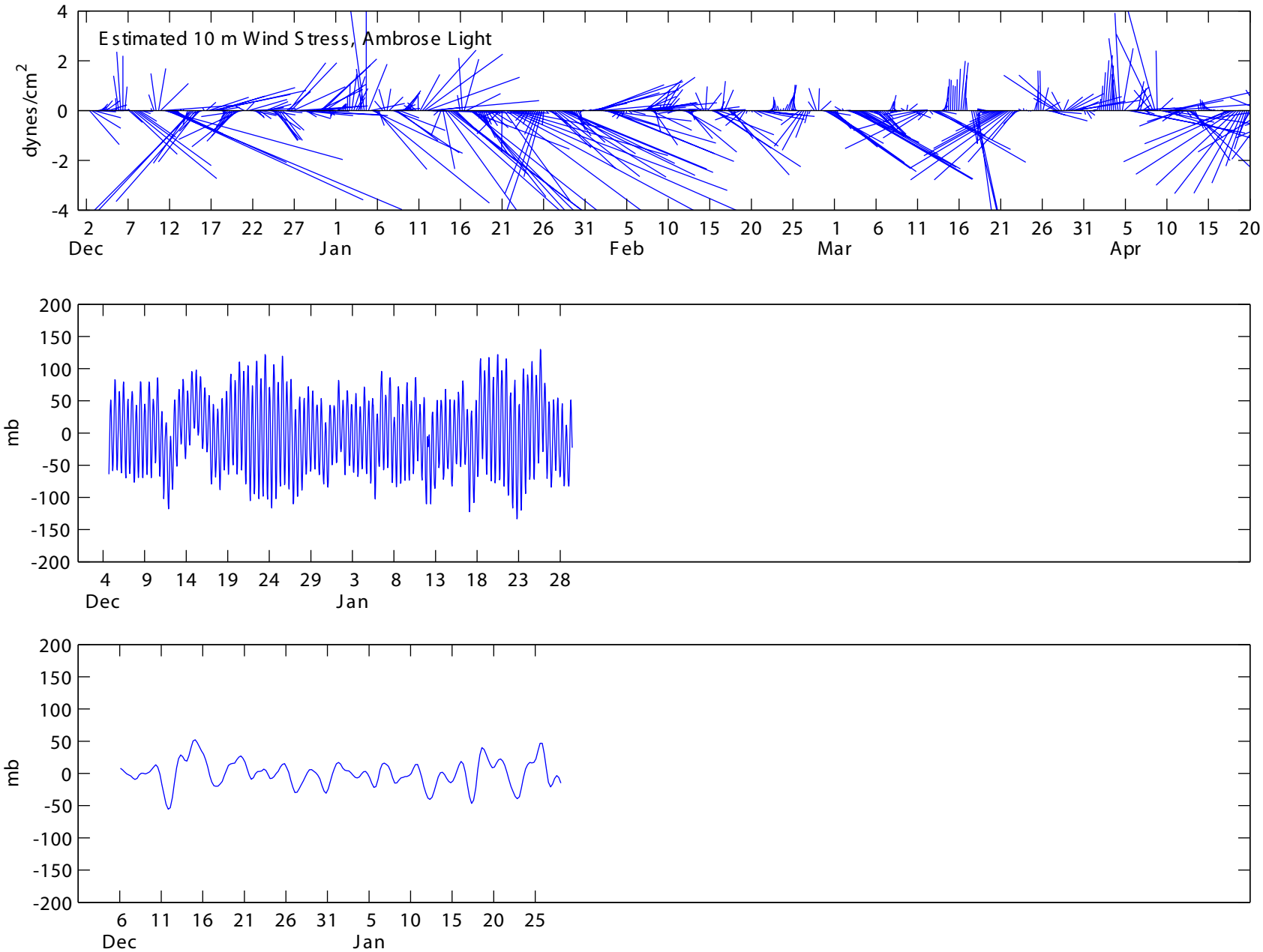

Station B: Beam Attenuation/Optical Backscatter
Beam Attenuation at 30 m
m-1
Beam Attenuation at 45 m
m-1
Optical Backscatter at 54.3 m (1.2 mab)
v
Optical Backscatter at 55 m (0.5 mab)
v
Dec 1999
Jan 2000
Feb
Mar
Apr


Station C: Beam Attenuation/Optical Backscatter
Beam Attenuation at 30 m
m-1
Beam attenuation instrumentation not deployed at second depth.
m-1
Optical Backscatter at 68.3 m (1.2 mab)
v
Optical Backscatter at 69 m (0.5 mab)
v
Dec 1999
Jan 2000
Feb
Mar
Apr

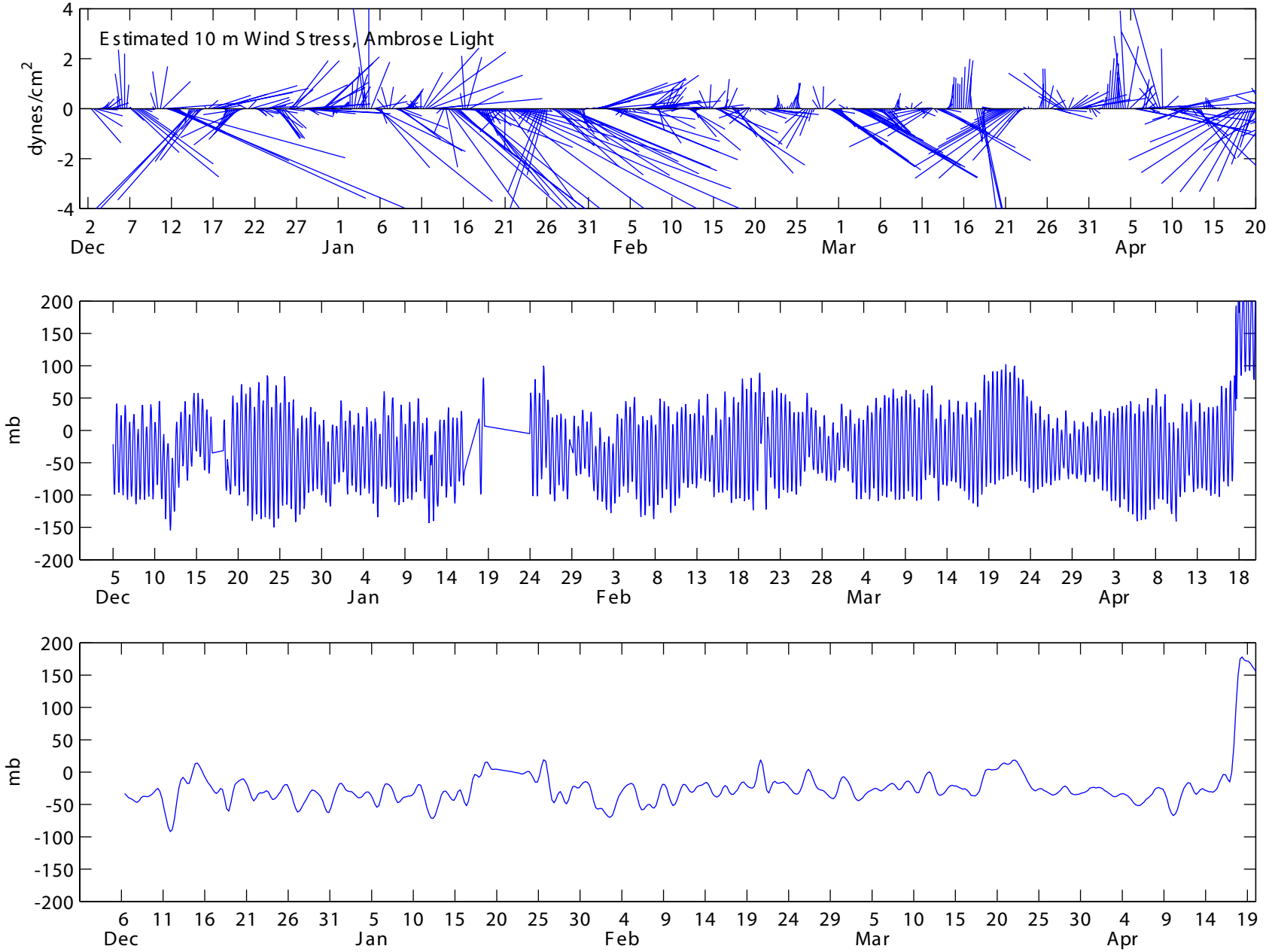

Station D: Beam Attenuation/Optical Backscatter
m-1
Beam attenuation instrumentation not deployed at Station D.
m-1
Beam attenuation instrumentation not deployed at Station D.
v
Optical Backscatter at 24.8 m (1.2 mab)
v
Optical Backscatter at 25.5 m (0.5 mab)
Dec 1999
Jan 2000
Feb
Mar
Apr


Station E Beam Attenuation/Optical Backscatter
m-1
Beam attenuation instrumenation not deployed.
m-1
Beam attenuation instrumenation not deployed.
v
Optical Backscatter at 23.9 m (1.1 mab)
v
Optical Backscatter at 24.5 m ().5 mab)
Dec 1999
Jan 2000
Feb
Mar
Apr

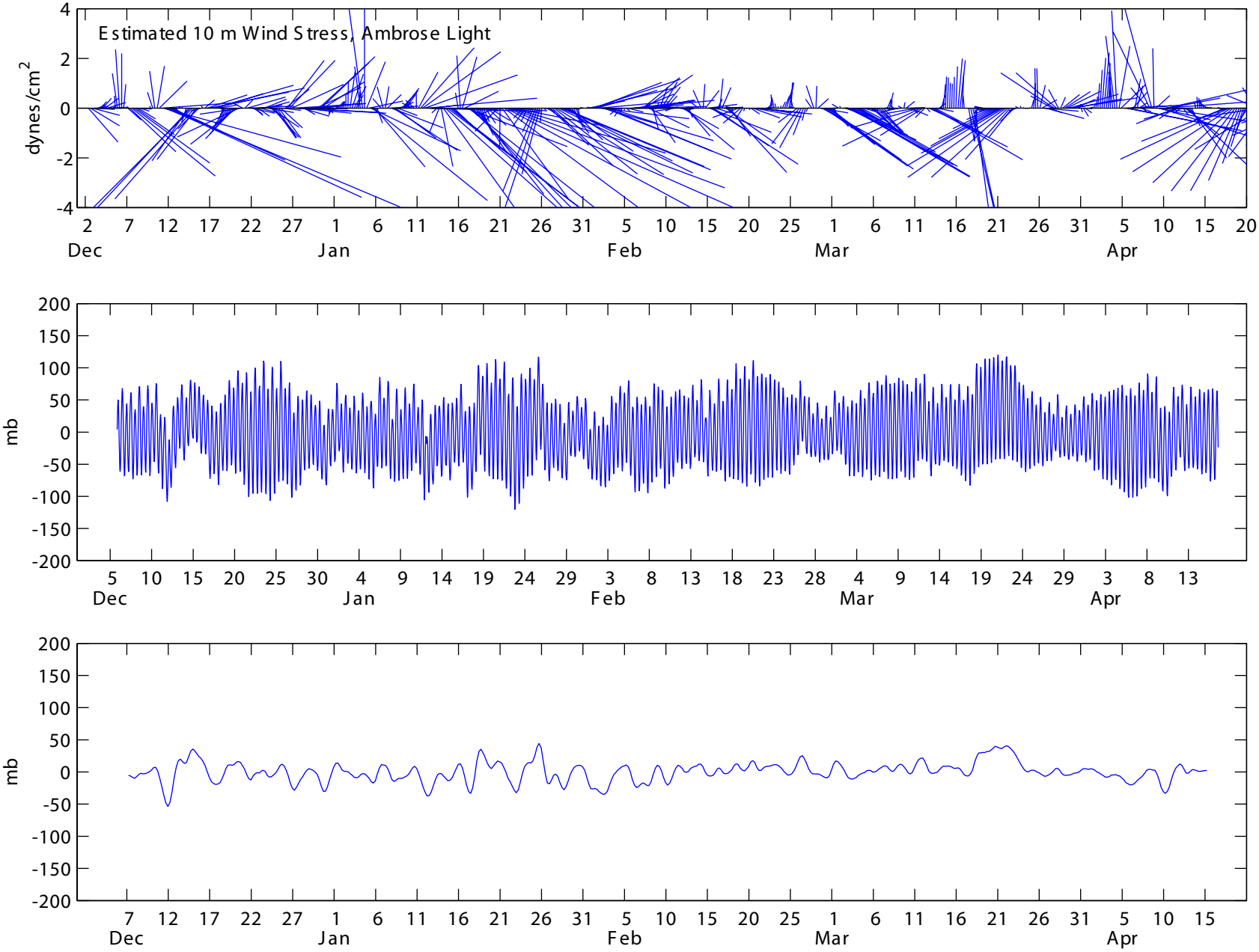
Low-Passed Wind Stress and Bottom Pressure at Station A



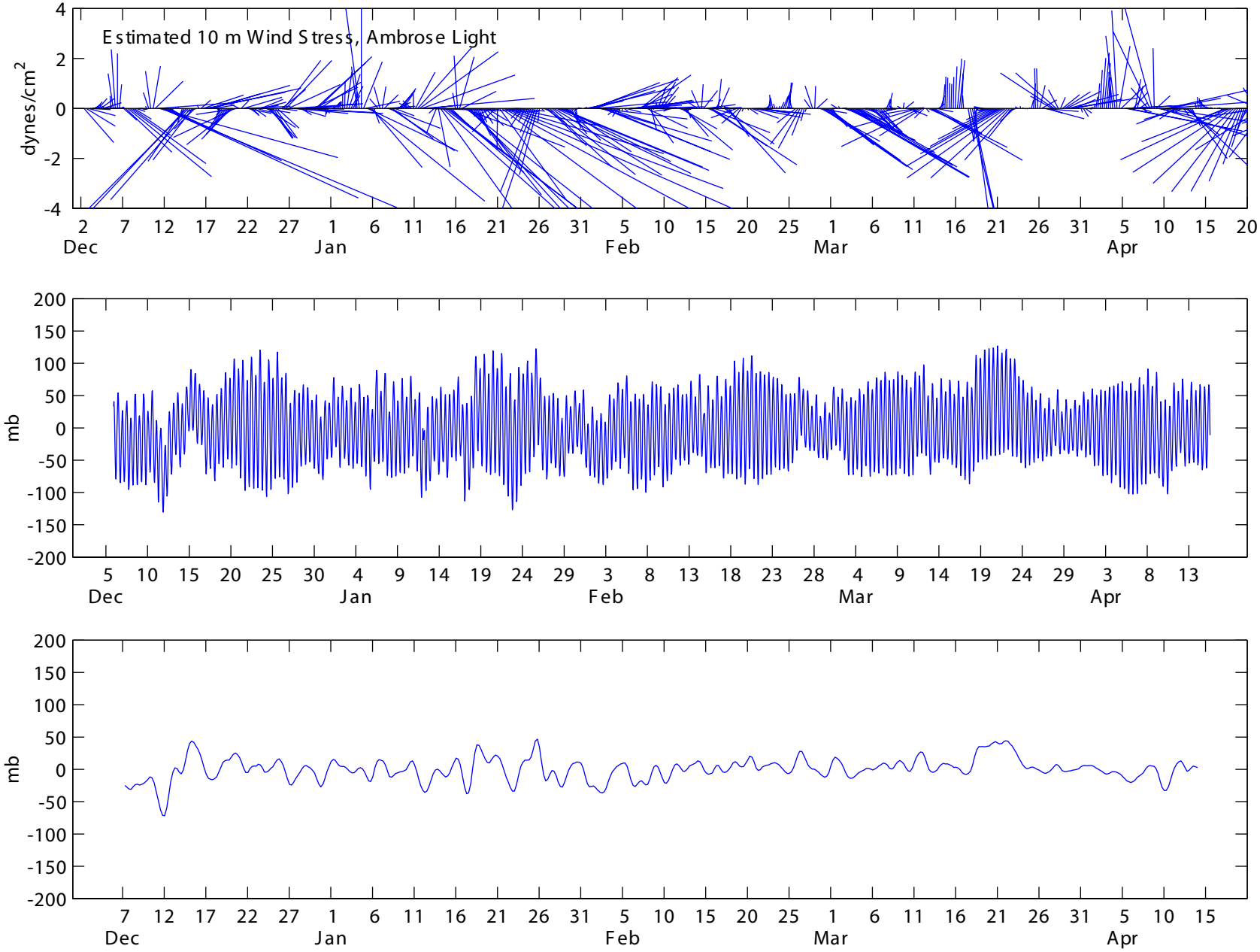
Low-Passed Wind Stress and Bottom Pressure at Station B



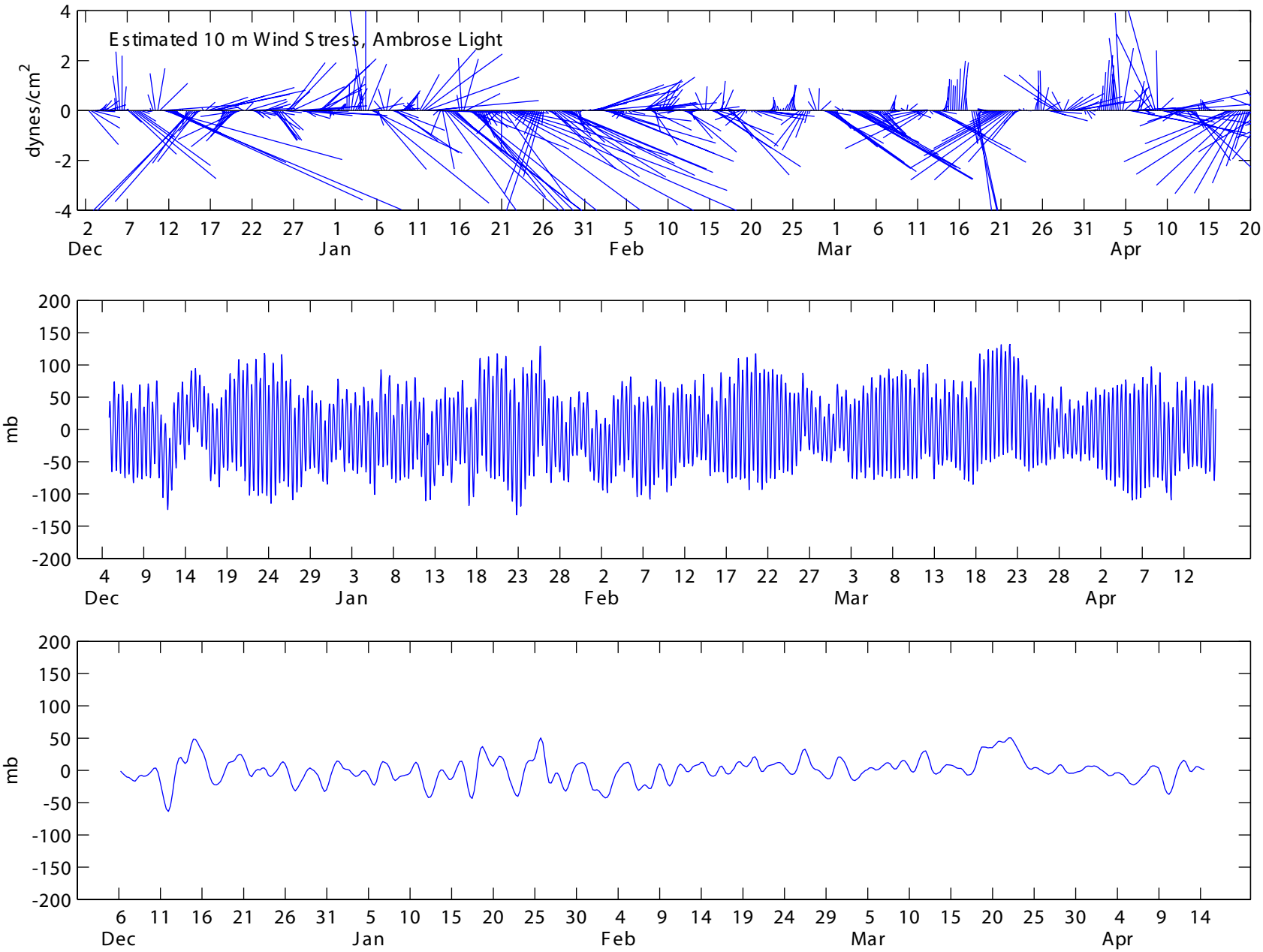
Low-Passed Wind Stress and Bottom Pressure at Station C



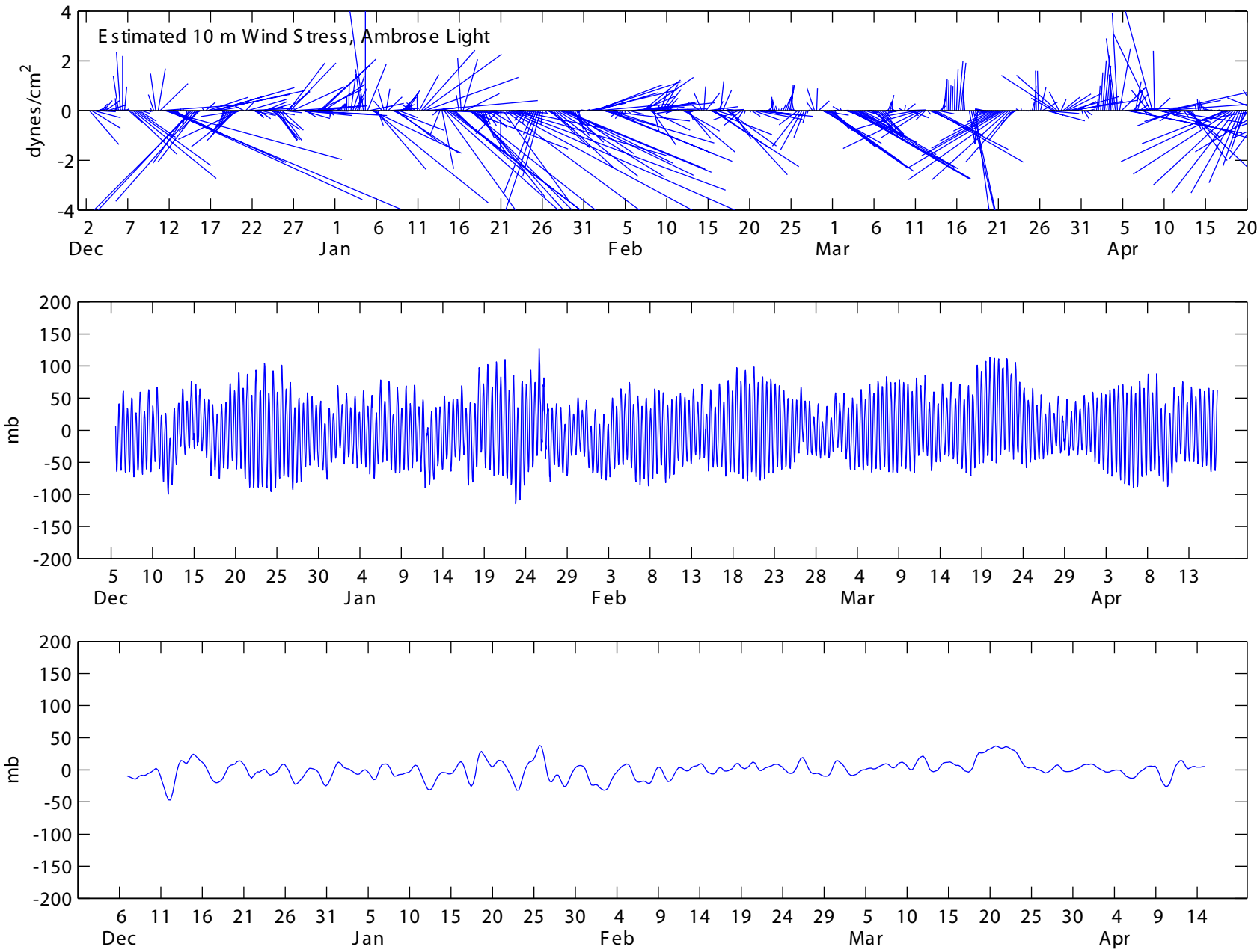
Low-Passed Wind Stress and Bottom Pressure at Station D



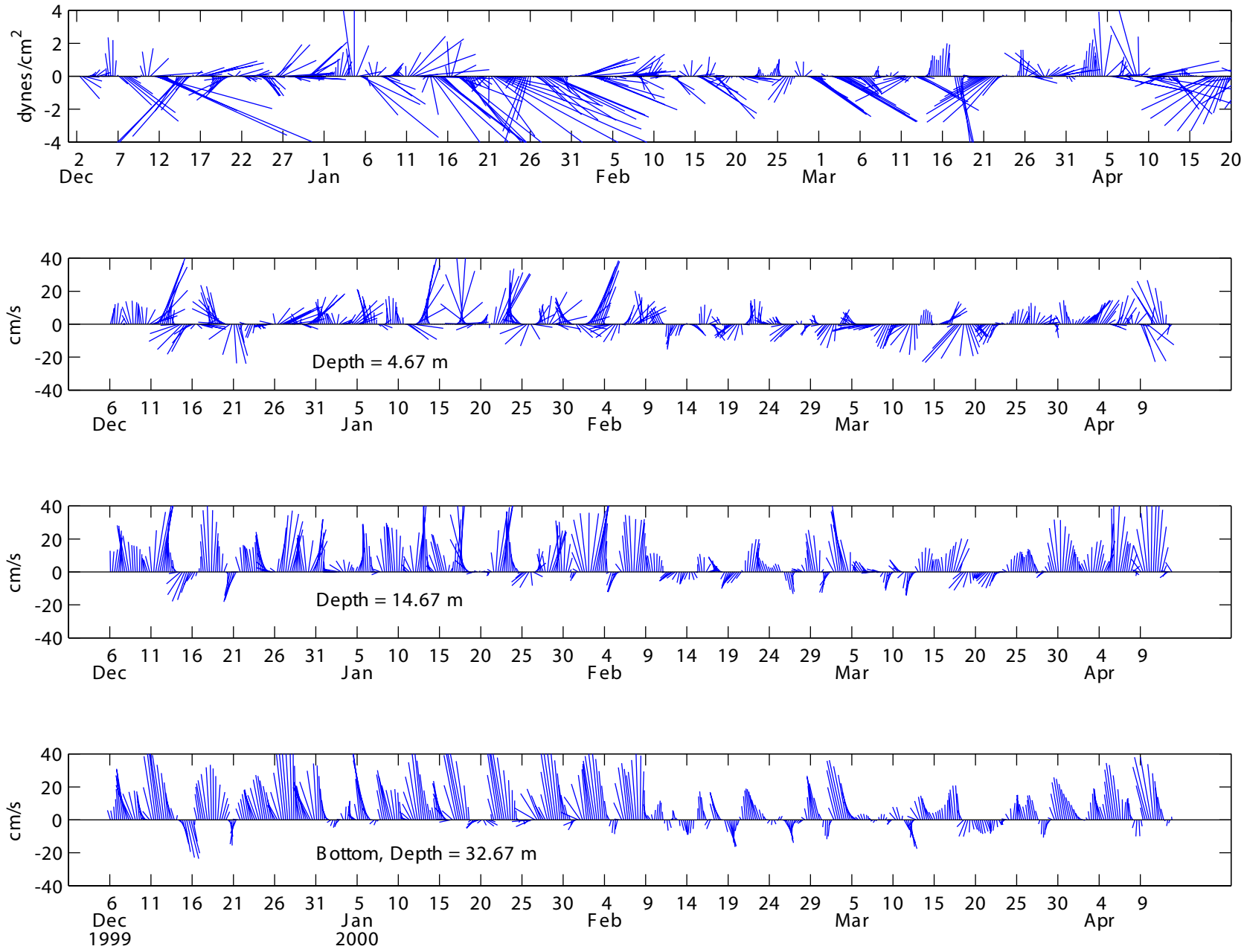
Low-Passed Wind Stress and Bottom Pressure at Station E

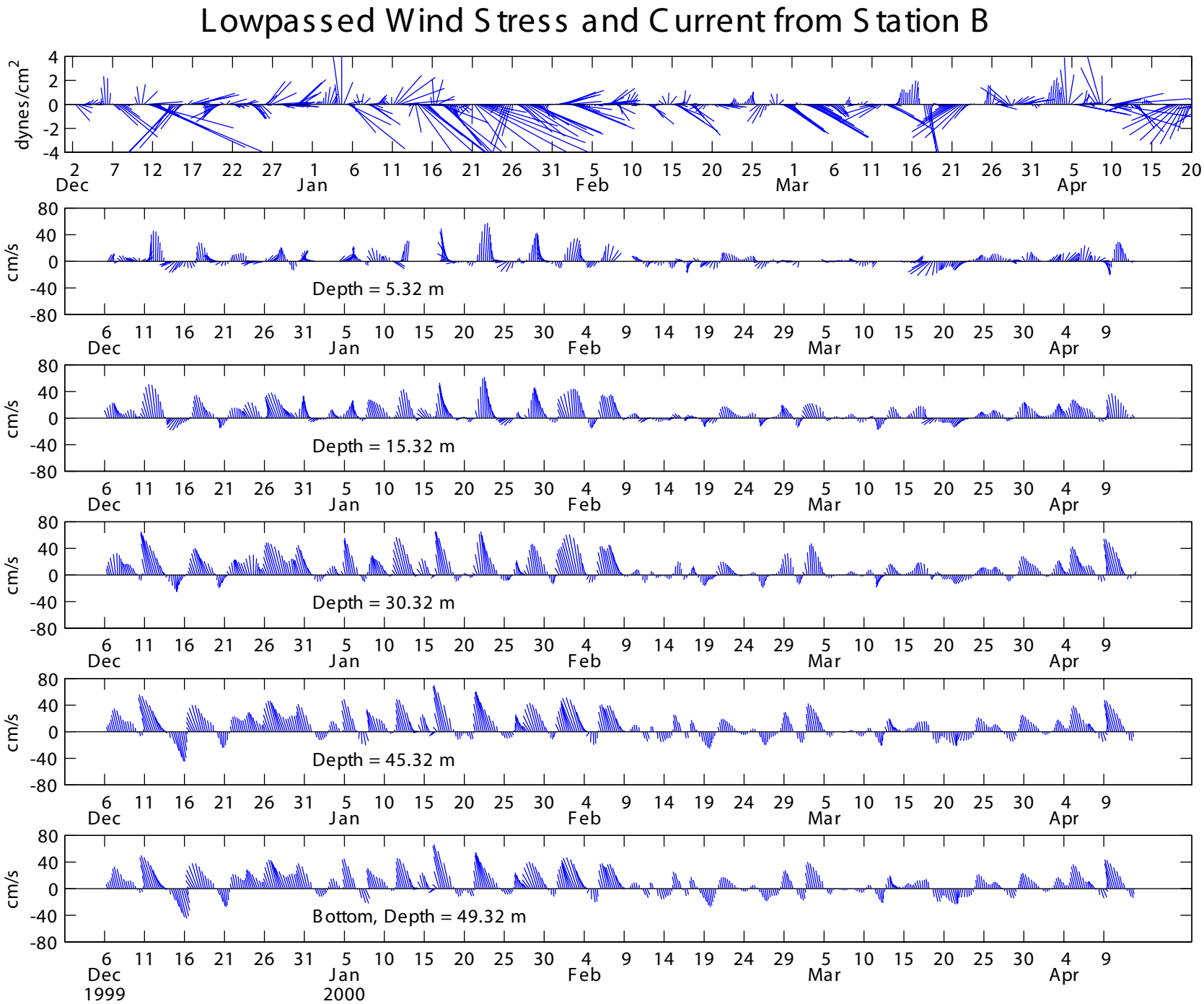


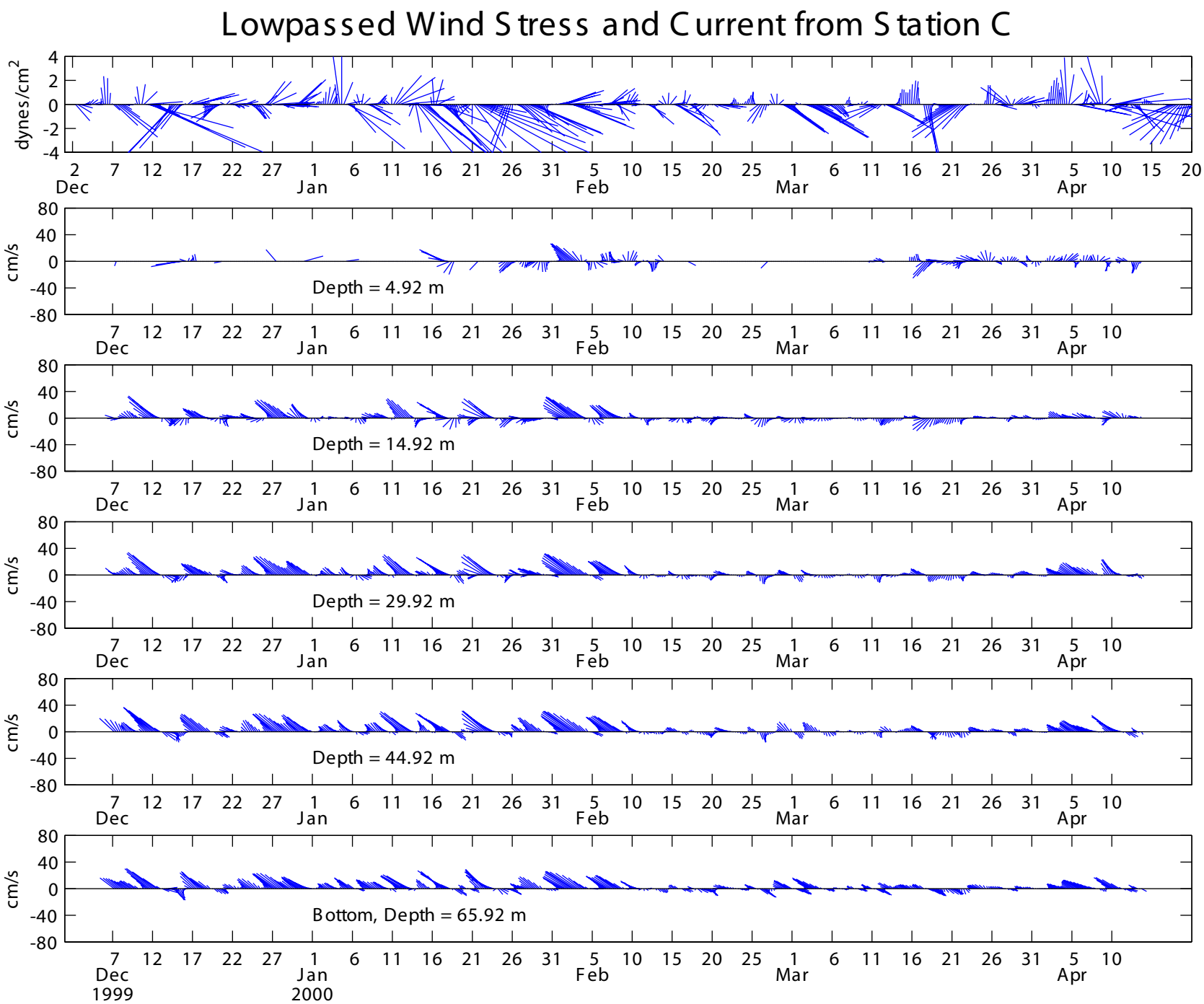
Low-Passed Wind Stress and Bottom Pressure at Station F



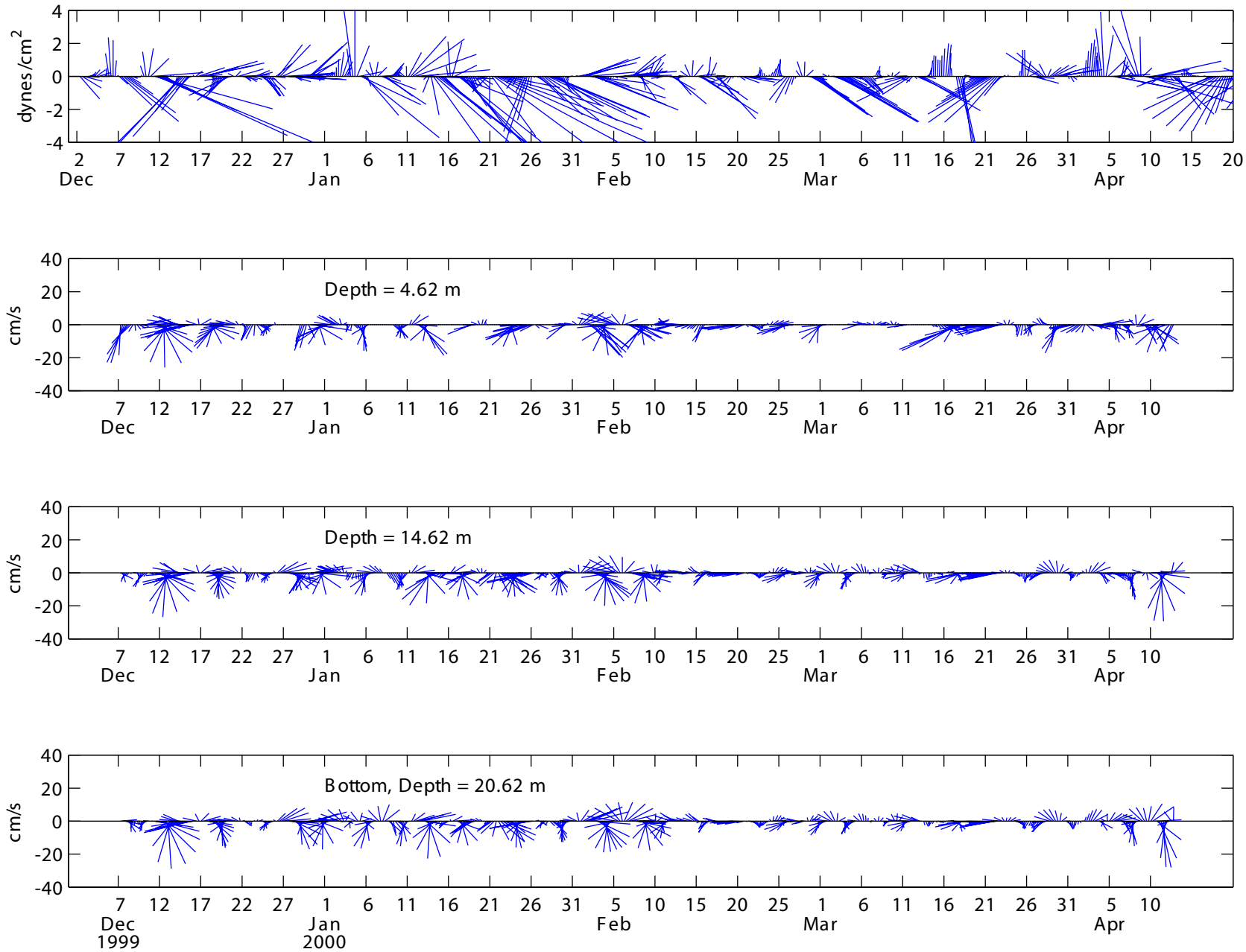
Lowpassed Wind Stress and Current from Station A

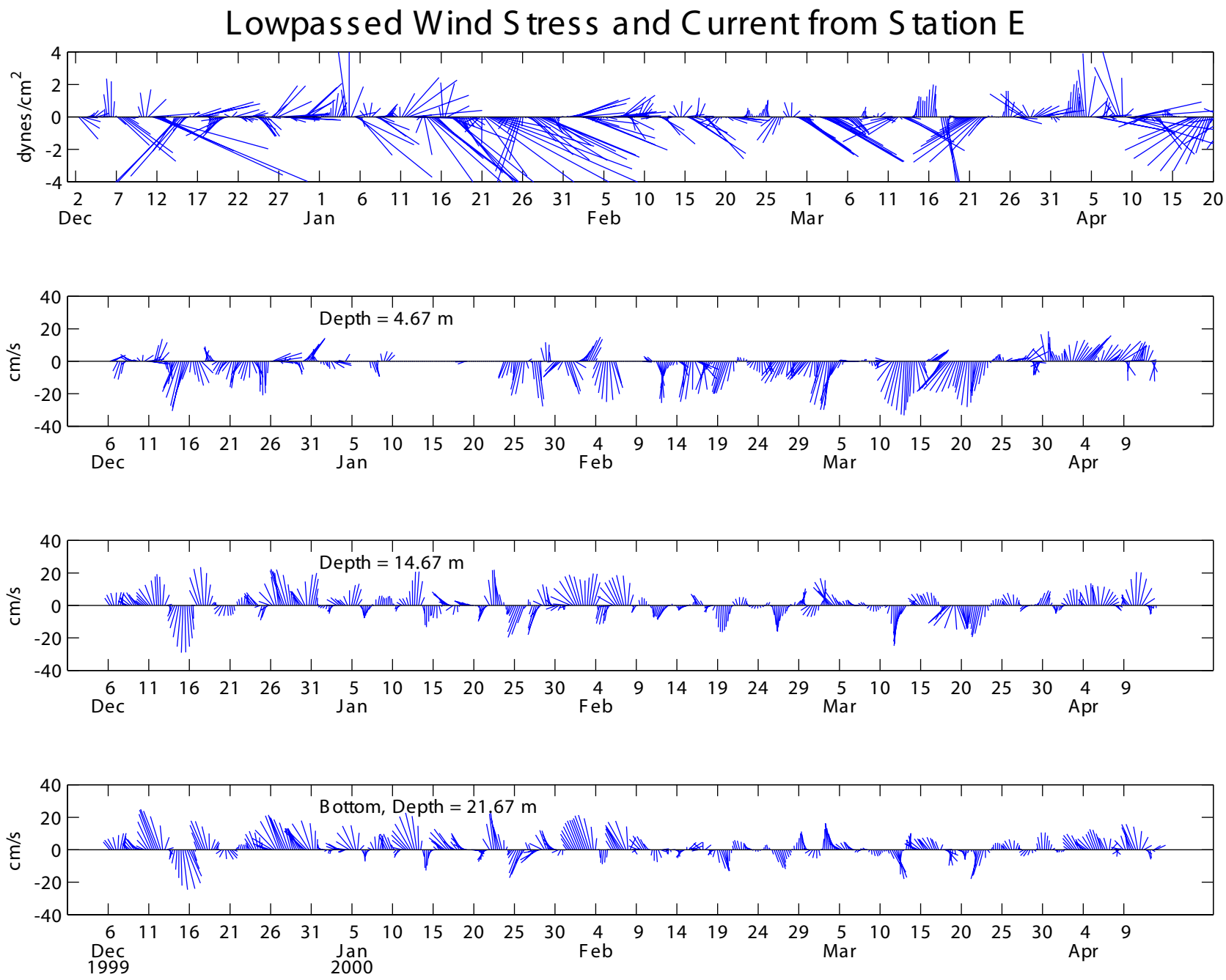


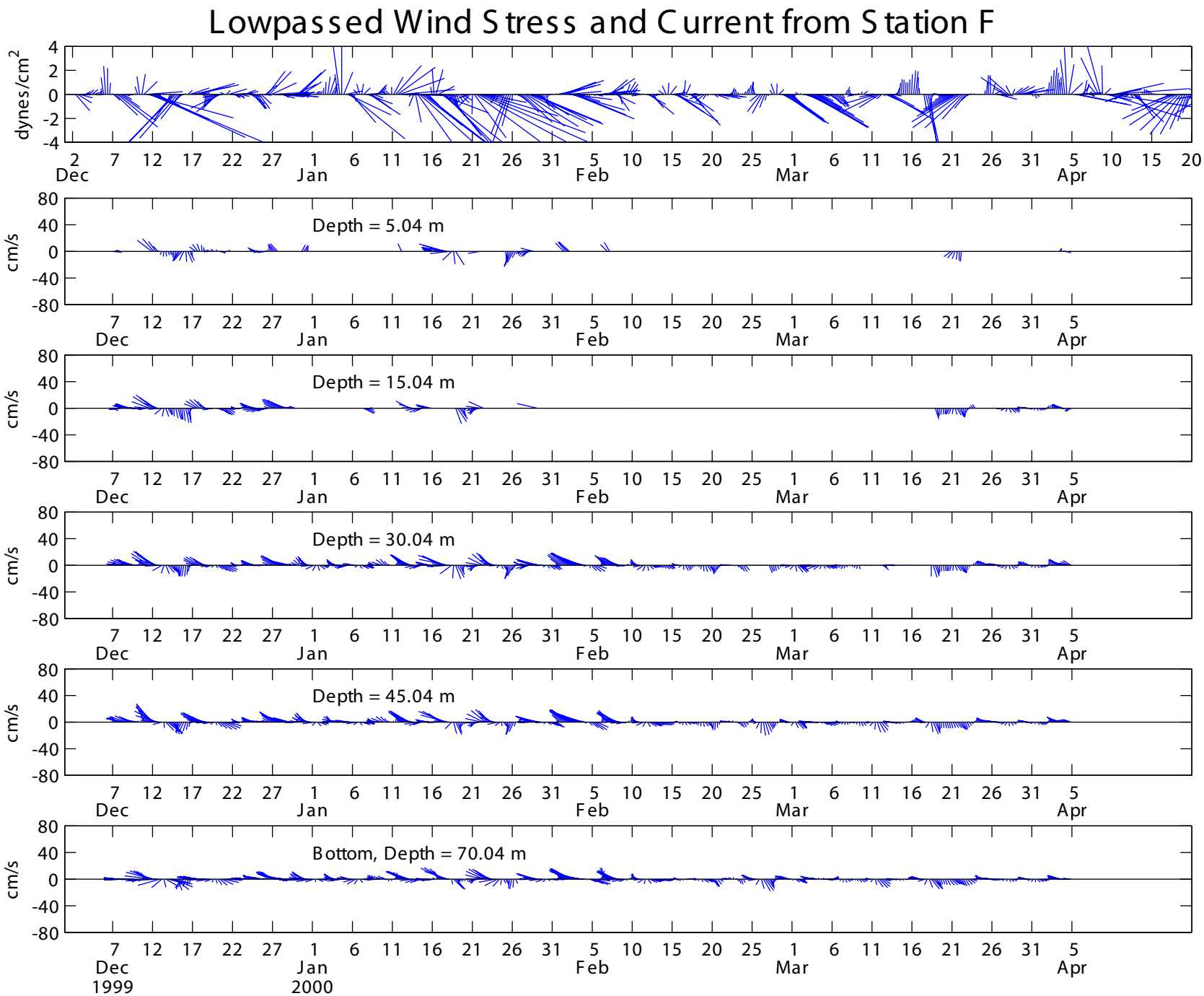

Lowpassed Wind Stress and Current from Station B
dynes/cm2
cm/s
Depth = 5.32 m
Depth = 15.32 m
Depth = 30.32 m
Depth = 45.32 m
Bottom, Depth = 49.32 m
Dec
Jan
Feb
Mar
Apr
1999
2000

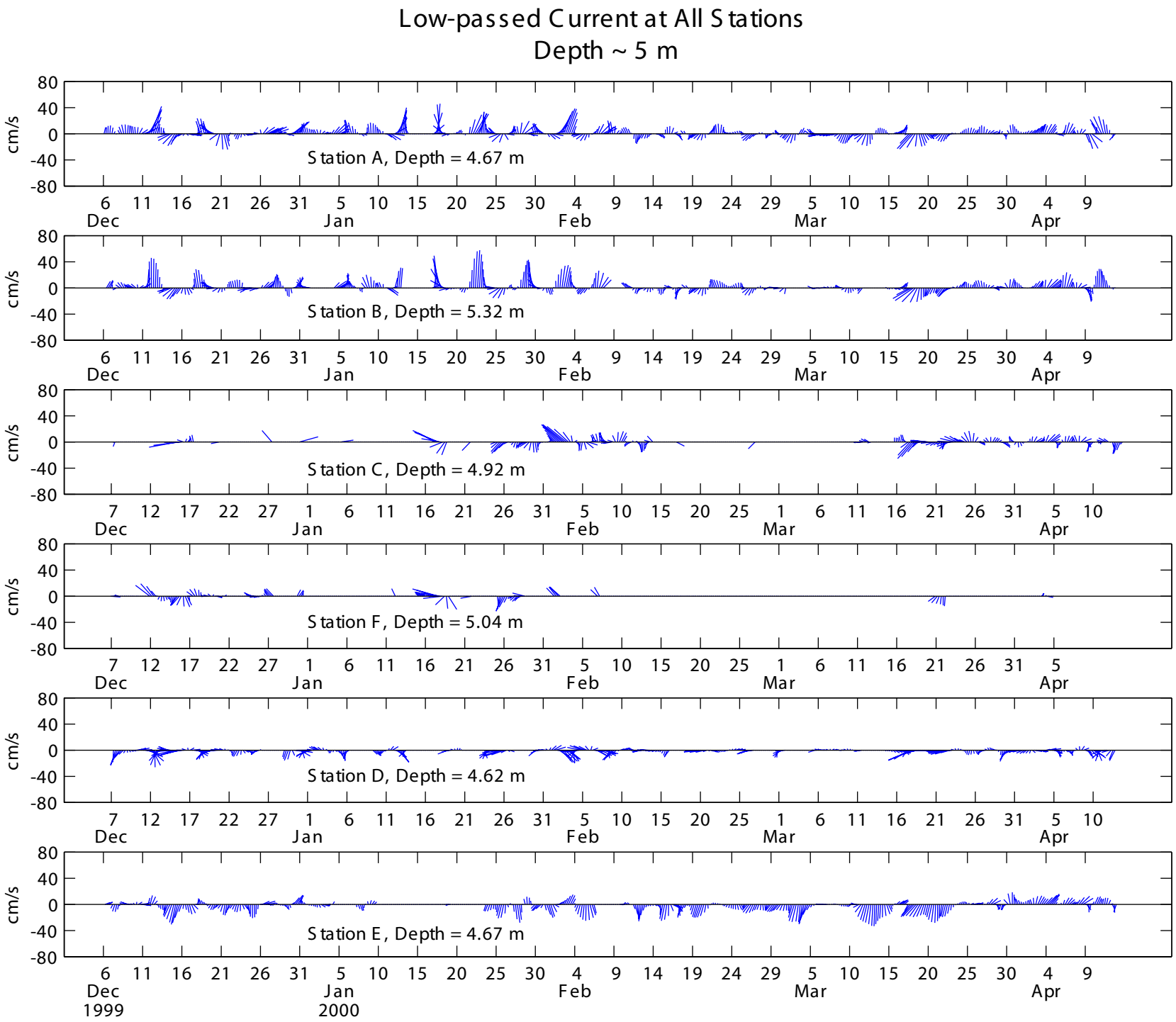

Lowpassed Wind Stress and Current from Station C
dynes/cm2
cm/s
Depth = 4.92 m
Depth = 14.92 m
Depth = 29.92 m
Depth = 44.92 m
Bottom, Depth = 65.92 m
Dec
Jan
Feb
Mar
Apr
1999
2000

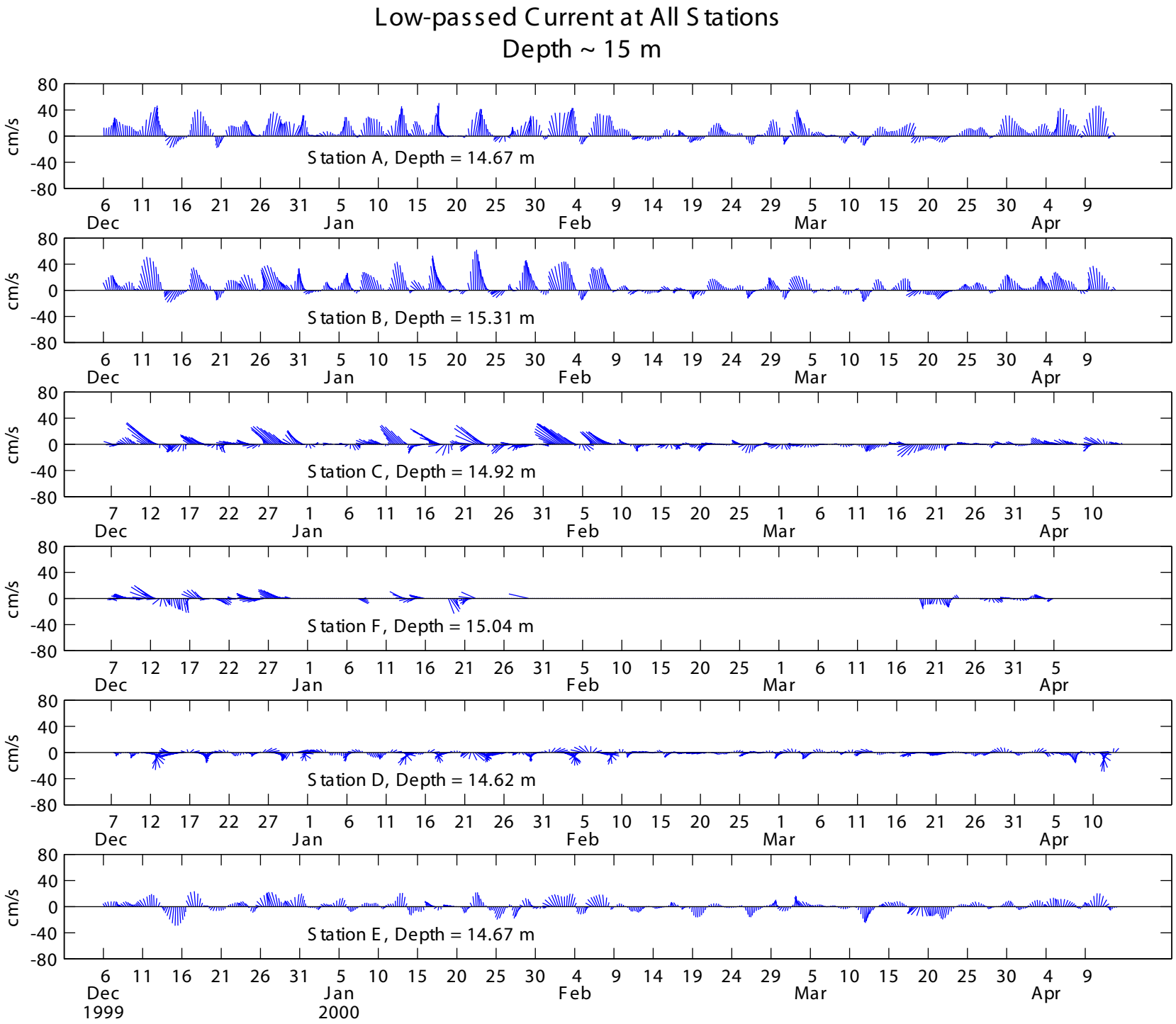
Lowpassed Wind Stress and Current from Station D

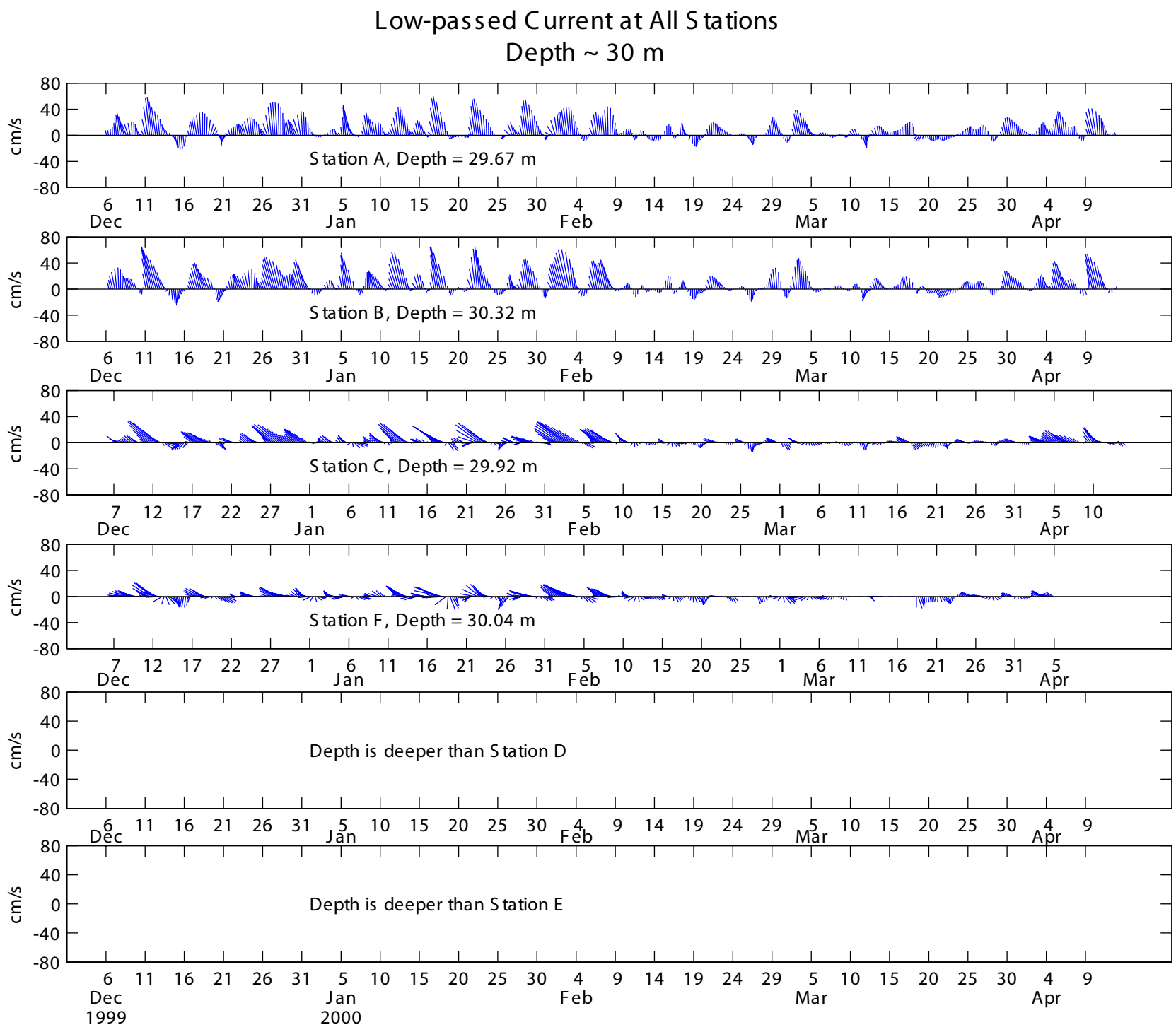


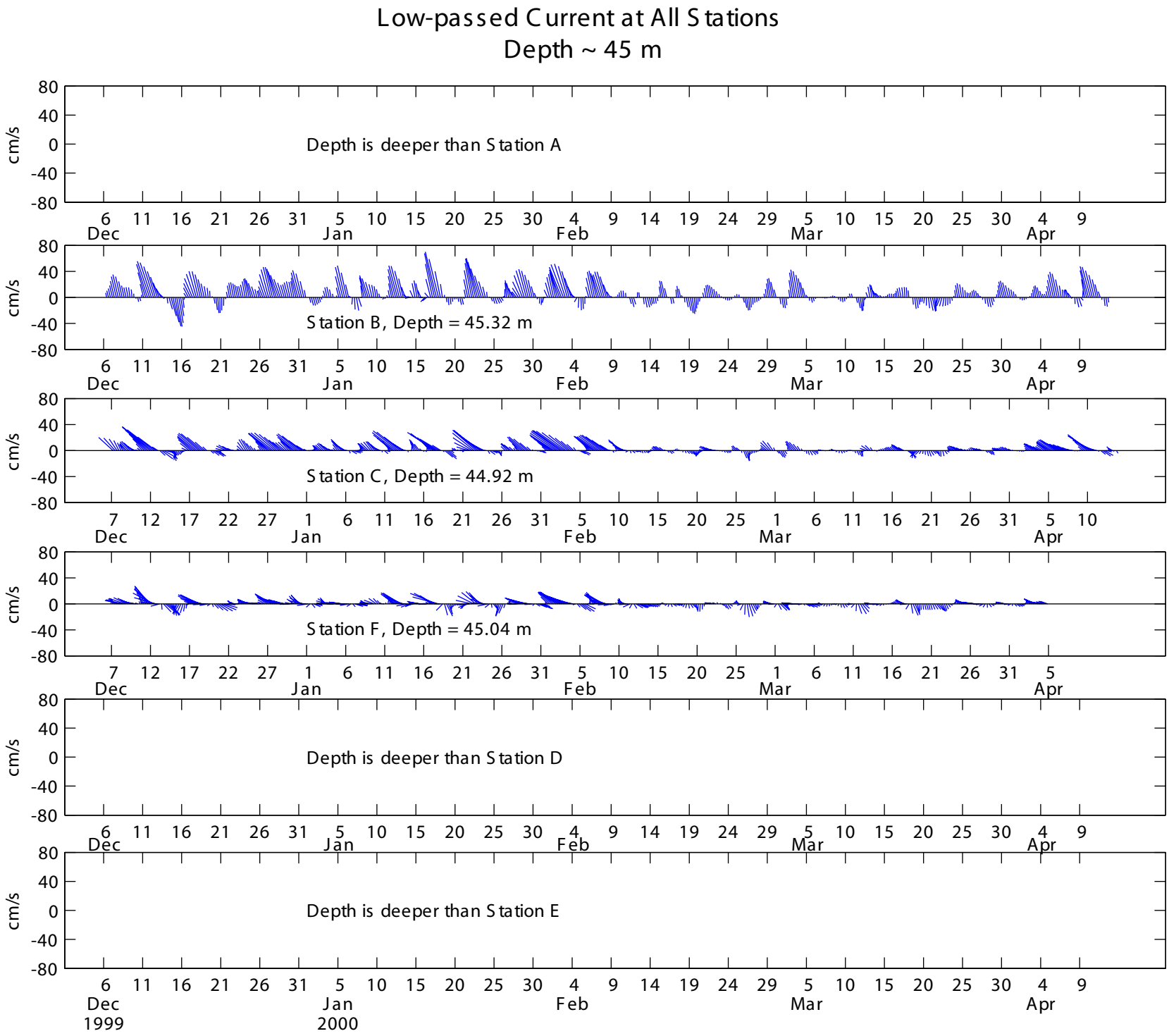

Lowpassed Wind Stress and Current from Station E
dynes/cm2
Depth = 4.67 m
Depth = 14.67 m
Bottom, Depth = 21.67 m
cm/s
Dec
Jan
Feb
Mar
Apr
1999
2000

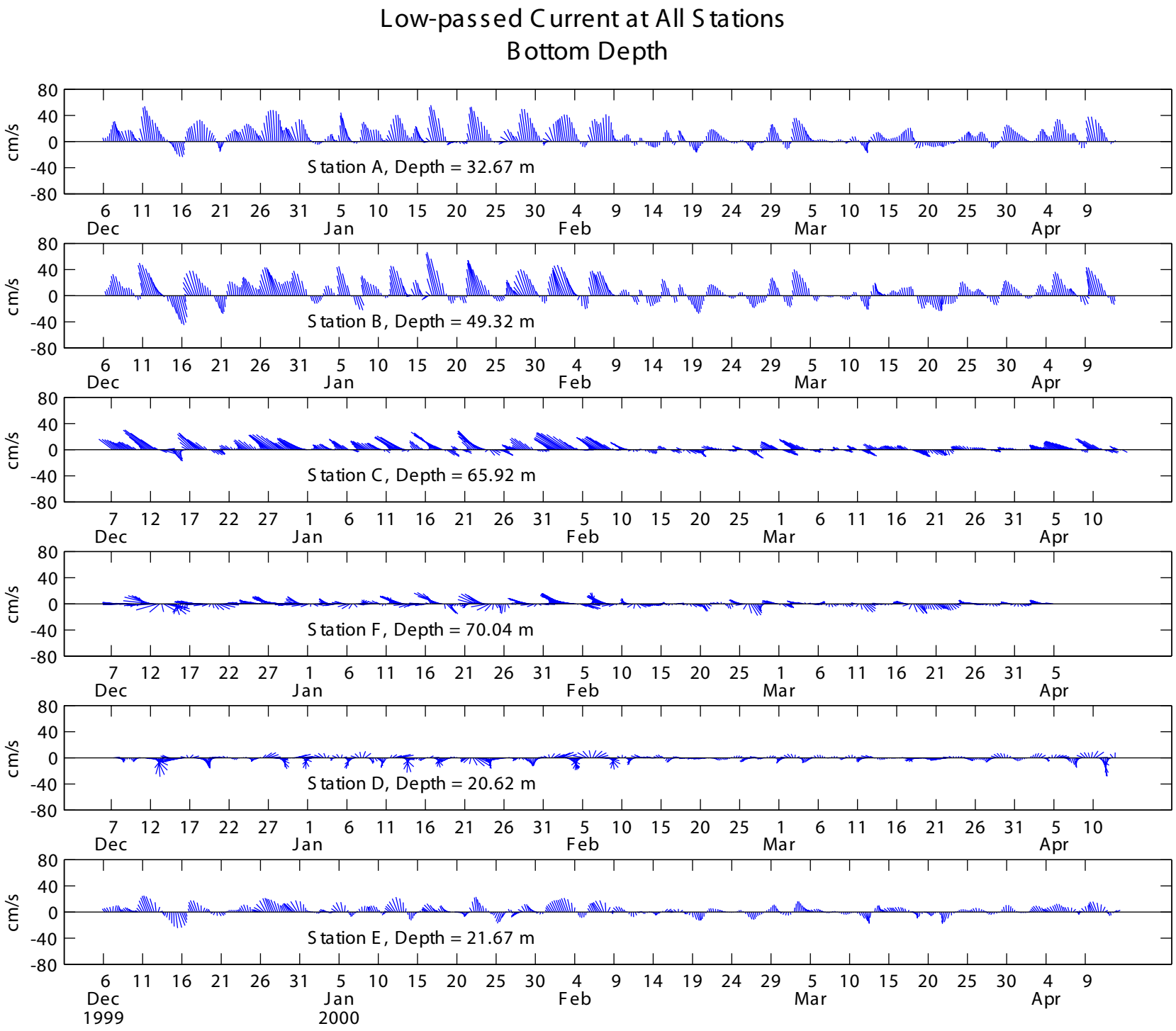

Lowpassed Wind Stress and Current from Station F
dynes/cm2
Depth = 5.04 m
Depth = 15.04 m
Depth = 30.04 m
Depth = 45.04 m
Bottom, Depth = 70.04 m
cm/s
Dec
Jan
Feb
Mar
Apr
1999
2000


Low-passed Current at All Stations
Depth ~ 5 m
cm/s
80
40
0
-40
-80
Station A, Depth = 4.67 m
Station B, Depth = 5.32 m
Station C, Depth = 4.92 m
Station F, Depth = 5.04 m
Station D, Depth = 4.62 m
Station E, Depth = 4.67 m
6 11 16 21 26 31 5 10 15 20 25 30 4 9 14 19 24 29 5 10 15 20 25 30 4 9
7 12 17 22 27 1 6 11 16 21 26 31 5 10 15 20 25 1 6 11 16 21 26 31 5 10
Dec
Jan
Feb
Mar
Apr
1999
2000

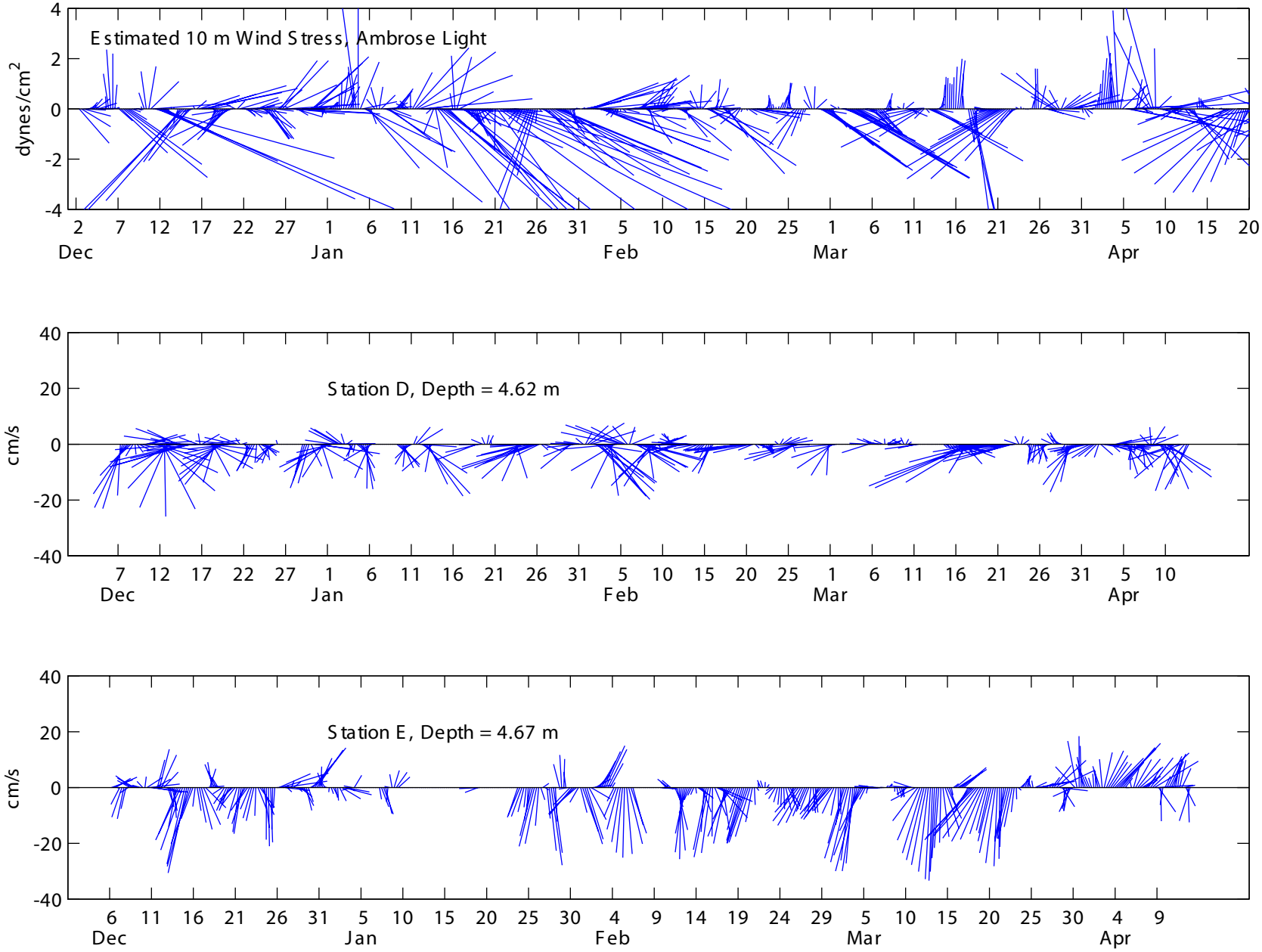

Low-passed Current at All Stations
Depth ~ 15 m
cm/s
80
40
0
-40
-80
Station A, Depth = 14.67 m
Station B, Depth = 15.31 m
Station C, Depth = 14.92 m
Station F, Depth = 15.04 m
Station D, Depth = 14.62 m
Station E, Depth = 14.67 m
6 11 16 21 26 31 5 10 15 20 25 30 4 9 14 19 24 29 5 10 15 20 25 30 4 9
Dec Jan Feb Mar Apr
7 12 17 22 27 1 6 11 16 21 26 31 5 10 15 20 25 1 6 11 16 21 26 31 5 10
Dec Jan Feb Mar Apr
7 12 17 22 27 1 6 11 16 21 26 31 5 10 15 20 25 1 6 11 16 21 26 31 5
Dec Jan Feb Mar Apr
Dec 1999
Jan 2000


Low-passed Current at All Stations
Depth ~ 30 m
cm/s
Station A, Depth = 29.67 m
Station B, Depth = 30.32 m
Station C, Depth = 29.92 m
Station F, Depth = 30.04 m
Depth is deeper than Station D
Depth is deeper than Station E
Dec
Jan
Feb
Mar
Apr
1999
2000

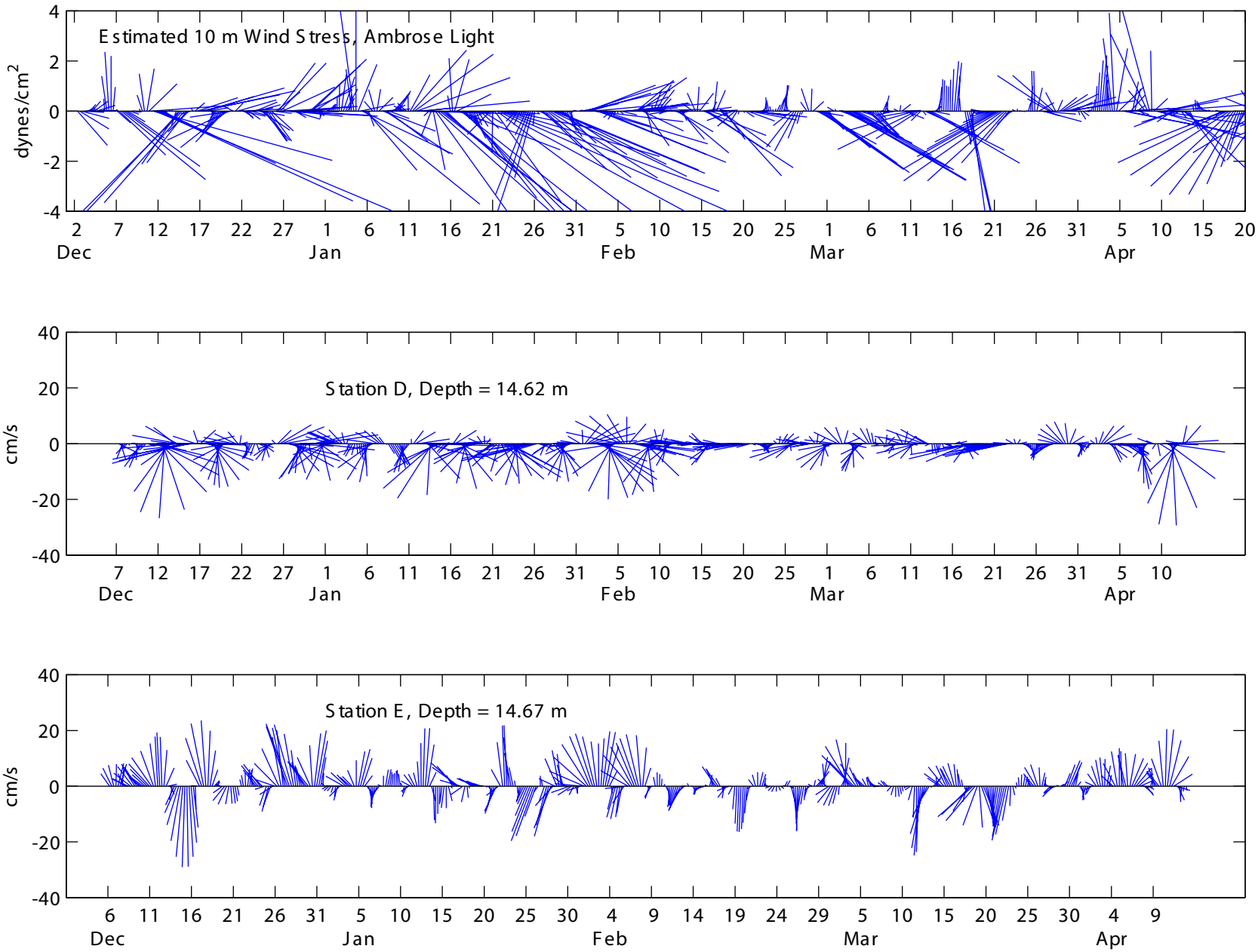

Low-passed Current at All Stations
Depth ~ 45 m
cm/s
Depth is deeper than Station A
Station B, Depth = 45.32 m
Station C, Depth = 44.92 m
Station F, Depth = 45.04 m
Depth is deeper than Station D
Depth is deeper than Station E
Dec
Jan
Feb
Mar
Apr
1999
2000


Low-passed Current at All Stations
Bottom Depth
cm/s
Station A, Depth = 32.67 m
Station B, Depth = 49.32 m
Station C, Depth = 65.92 m
Station F, Depth = 70.04 m
Station D, Depth = 20.62 m
Station E, Depth = 21.67 m
80
40
0
-40
-80
Dec
Jan
Feb
Mar
Apr
1999
2000

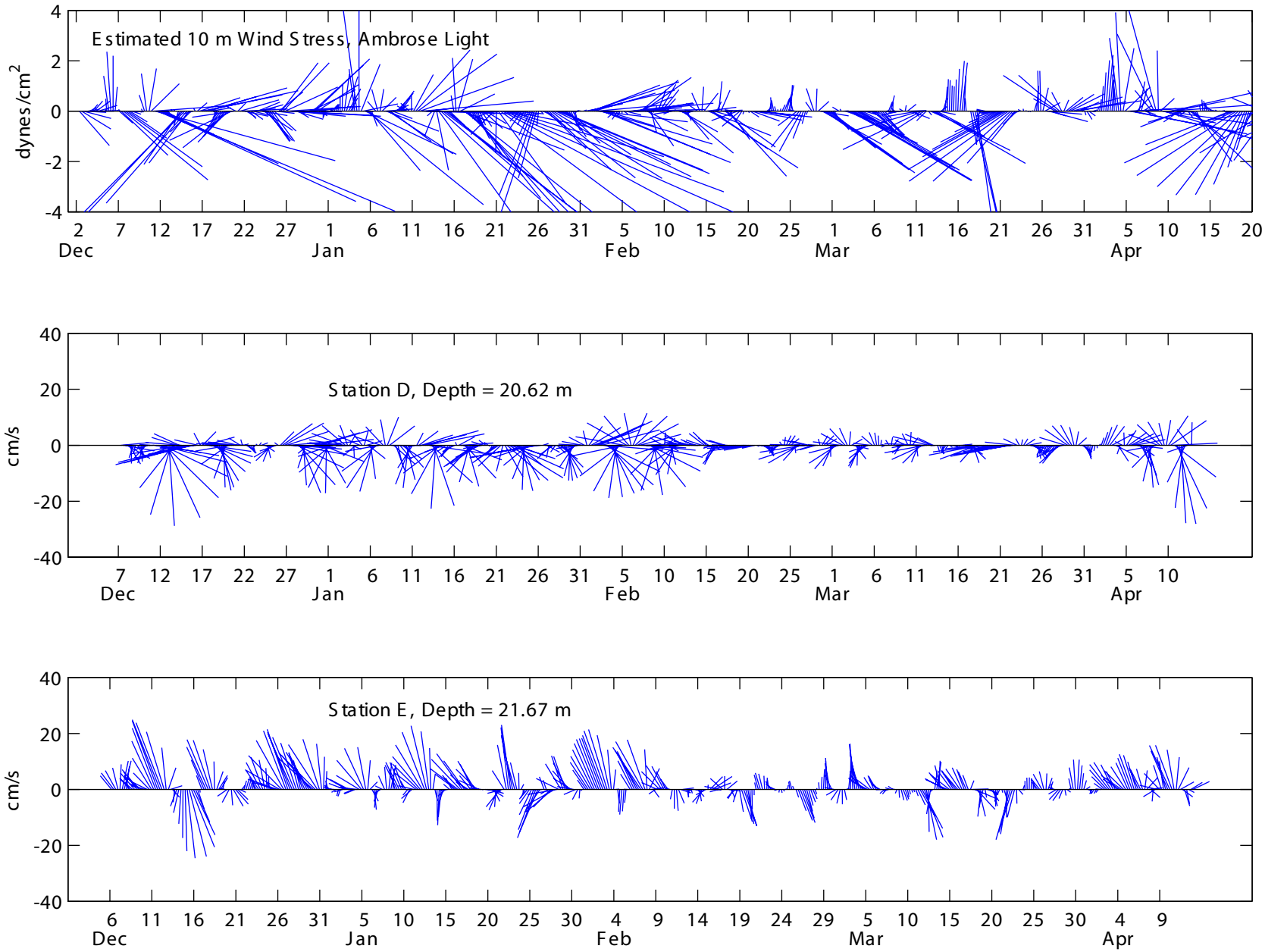
Low-Passed Wind Stress and Current at Shelf Stations, Depth ~ 5 m



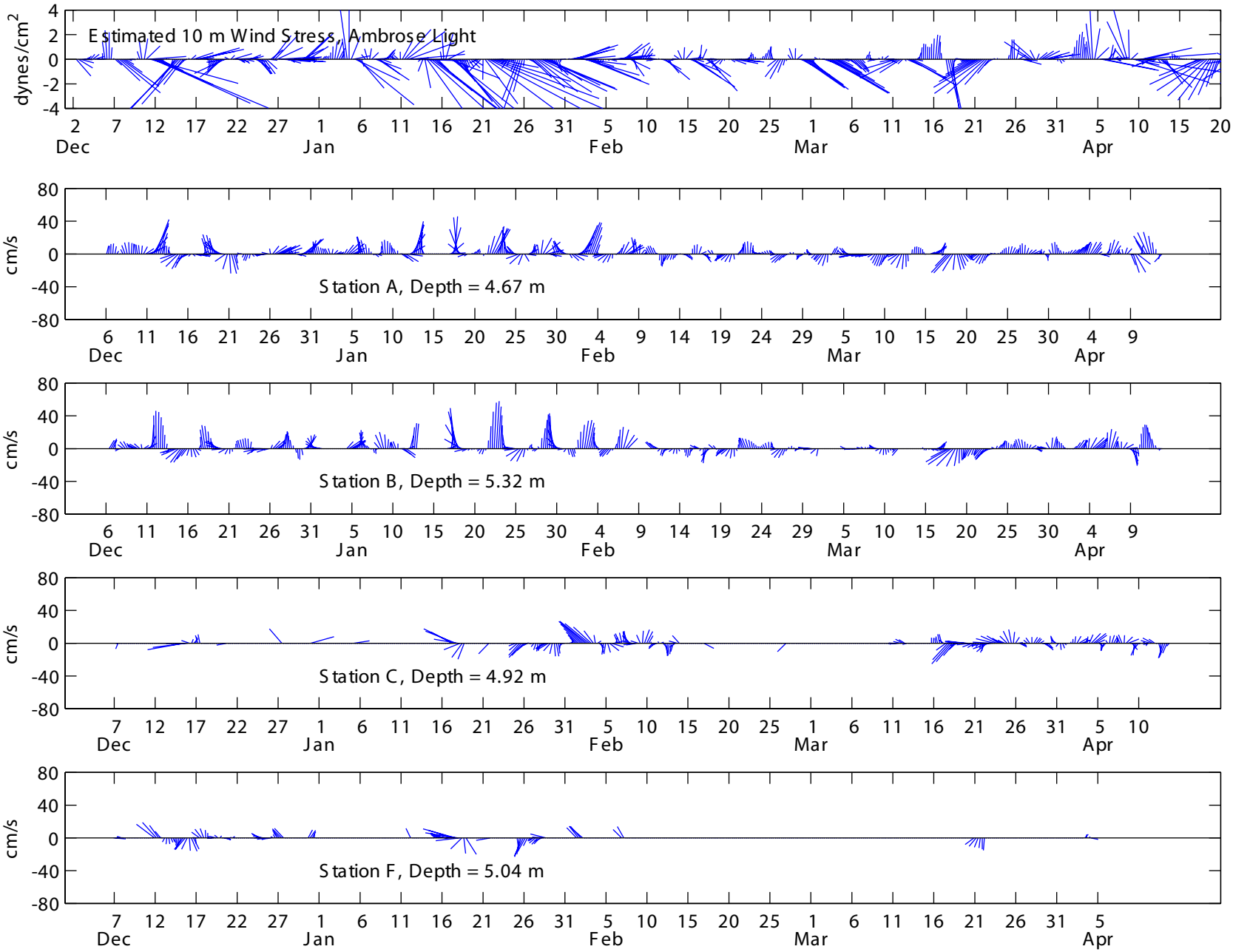
Low-Passed Wind Stress and Current at Shelf Stations, Depth ~ 15 m



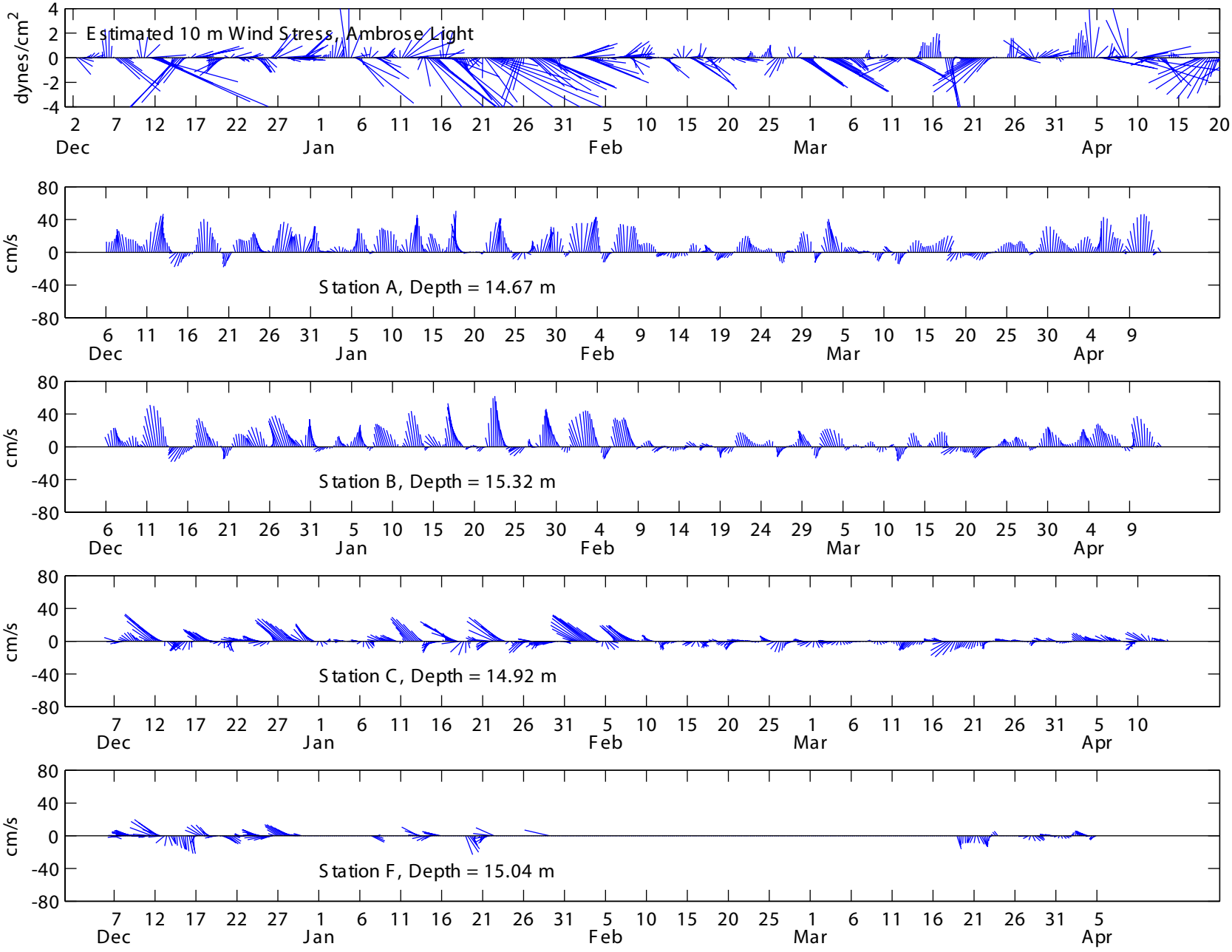
Low-Passed Wind Stress and Current at Shelf Stations, Bottom Depth



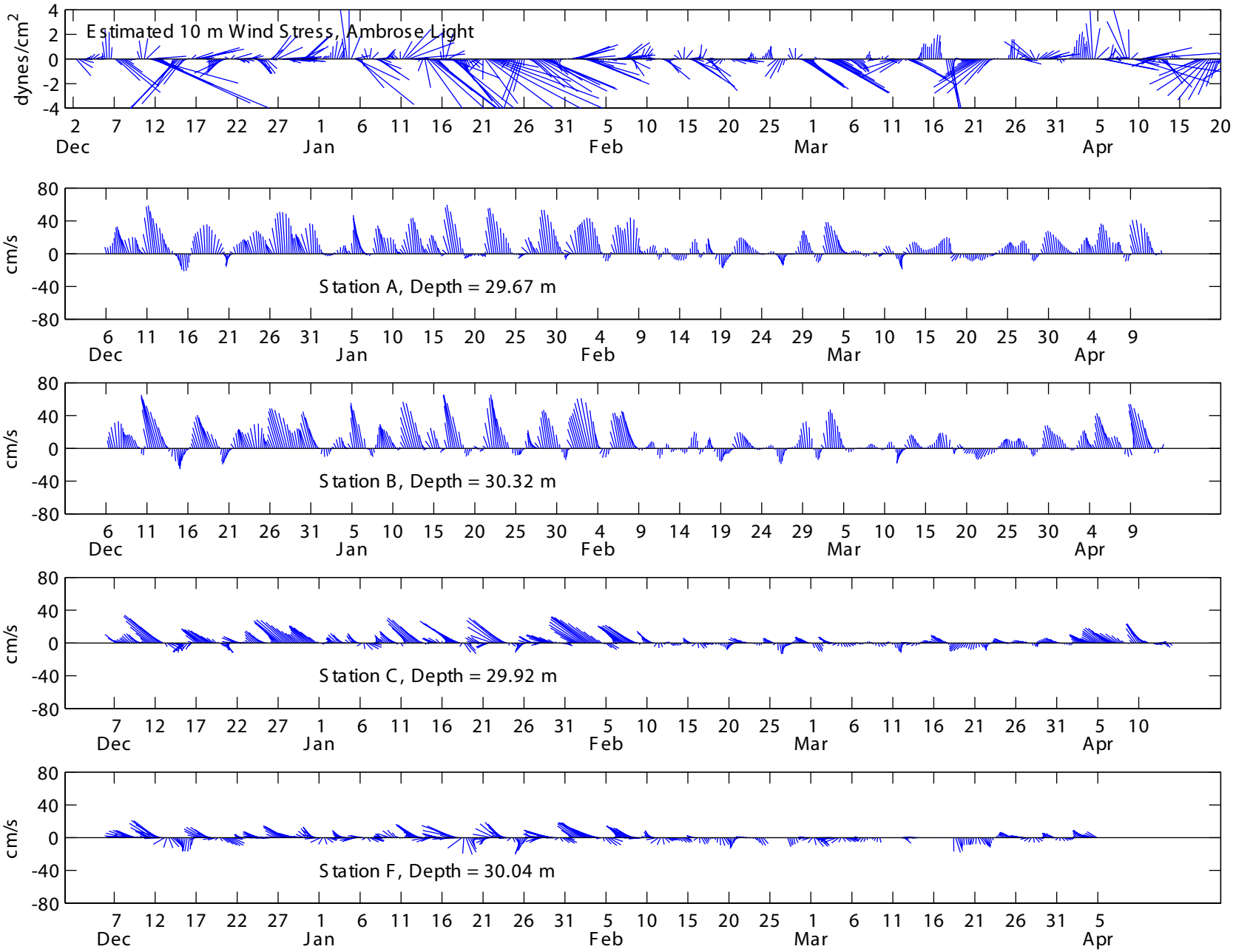
Low-Passed Wind Stress and Current at Valley Stations, Depth ~ 5 m



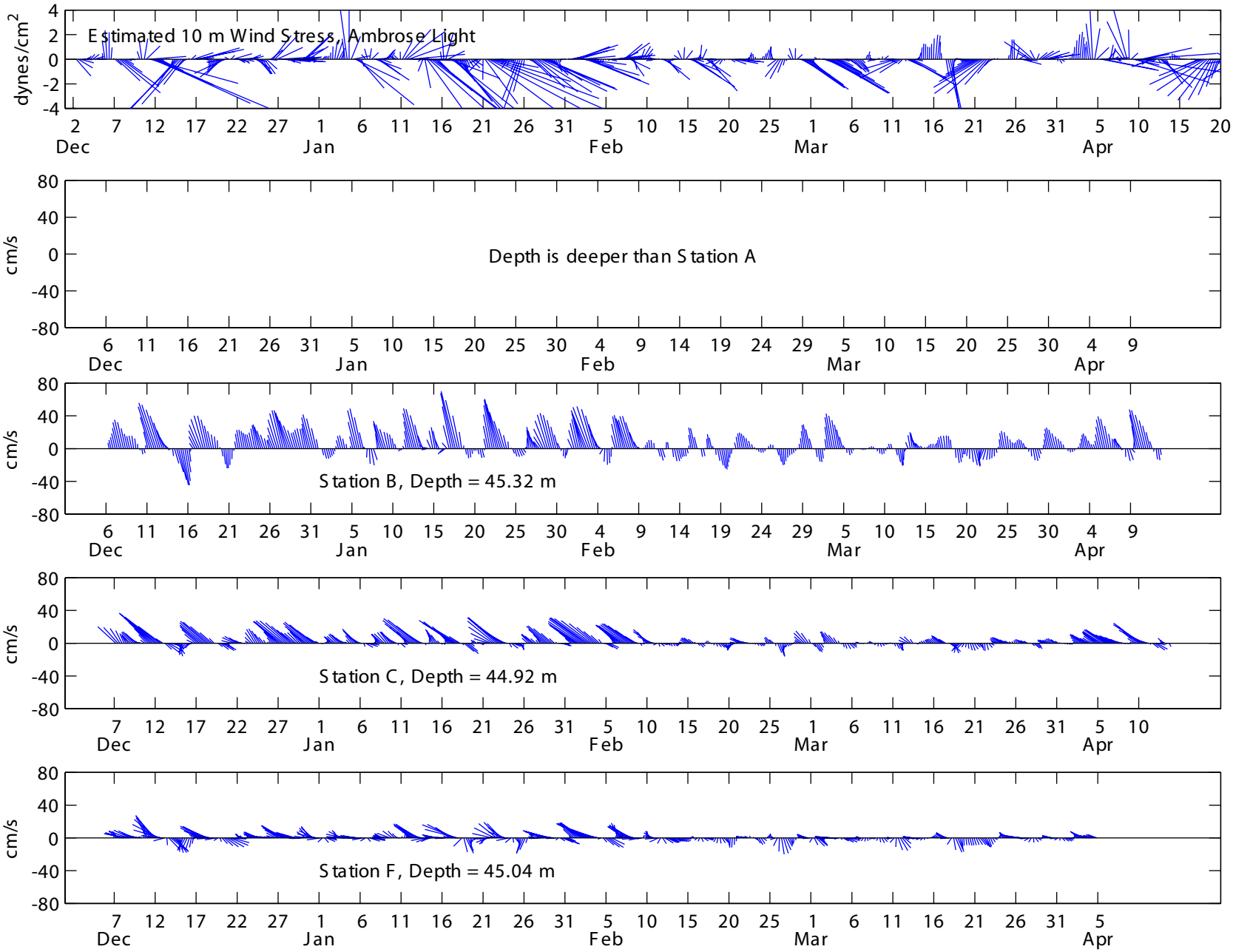
Low-Passed Wind Stress and Current at Valley Stations, Depth ~ 15 m



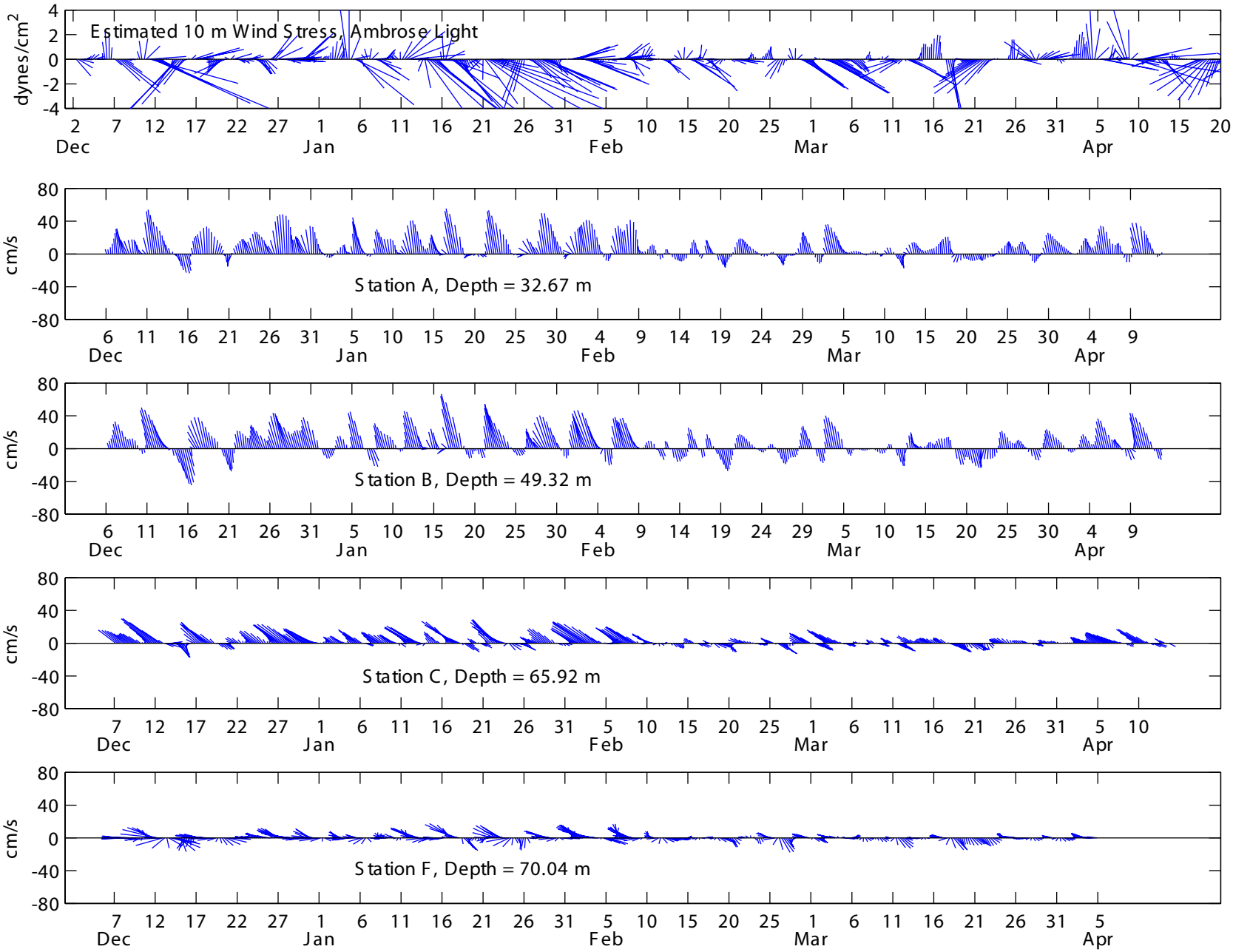
Low-Passed Wind Stress and Current at Valley Stations, Depth ~ 30 m



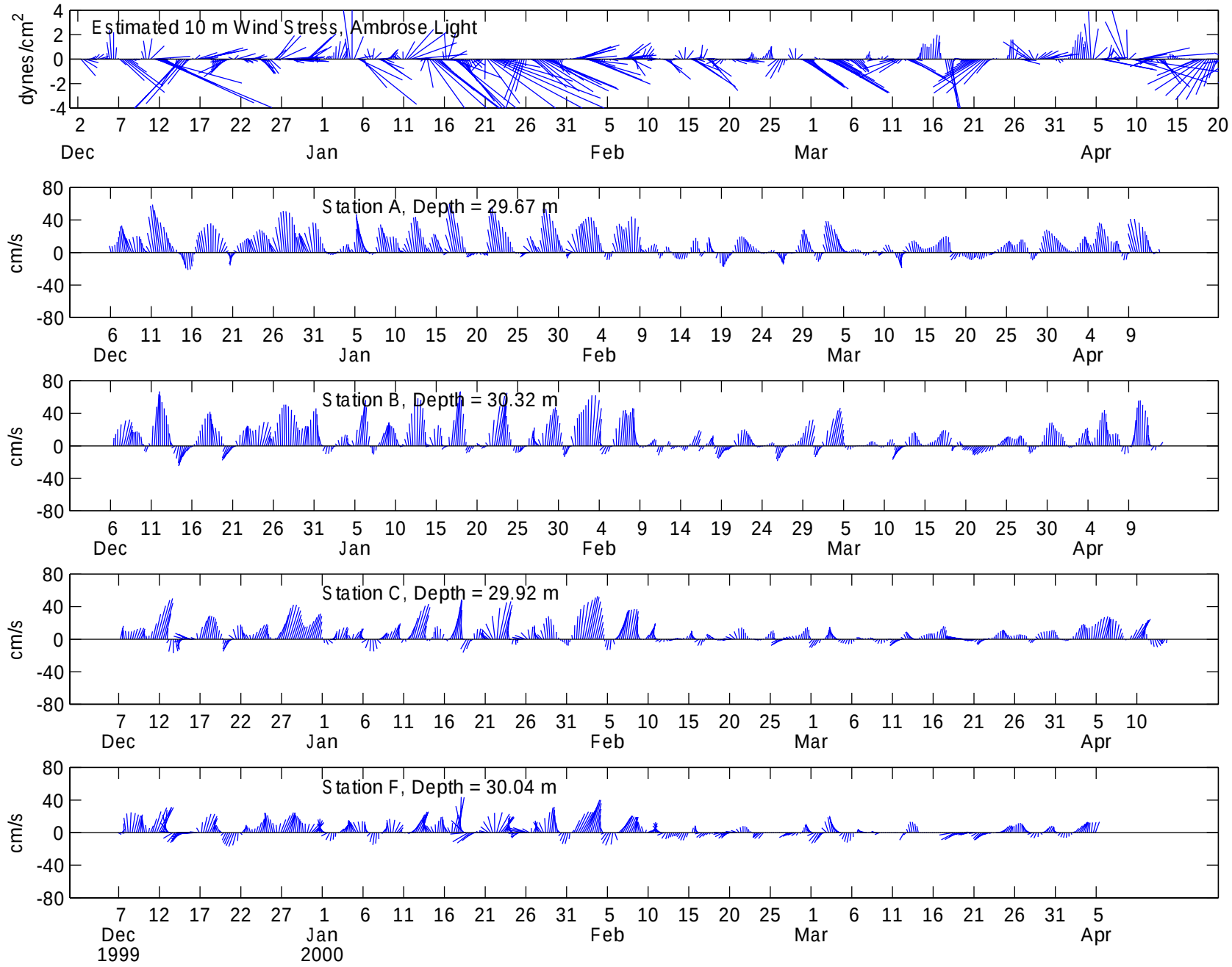
Low-Passed Wind Stress and Current at Valley Stations, Depth ~ 45 m



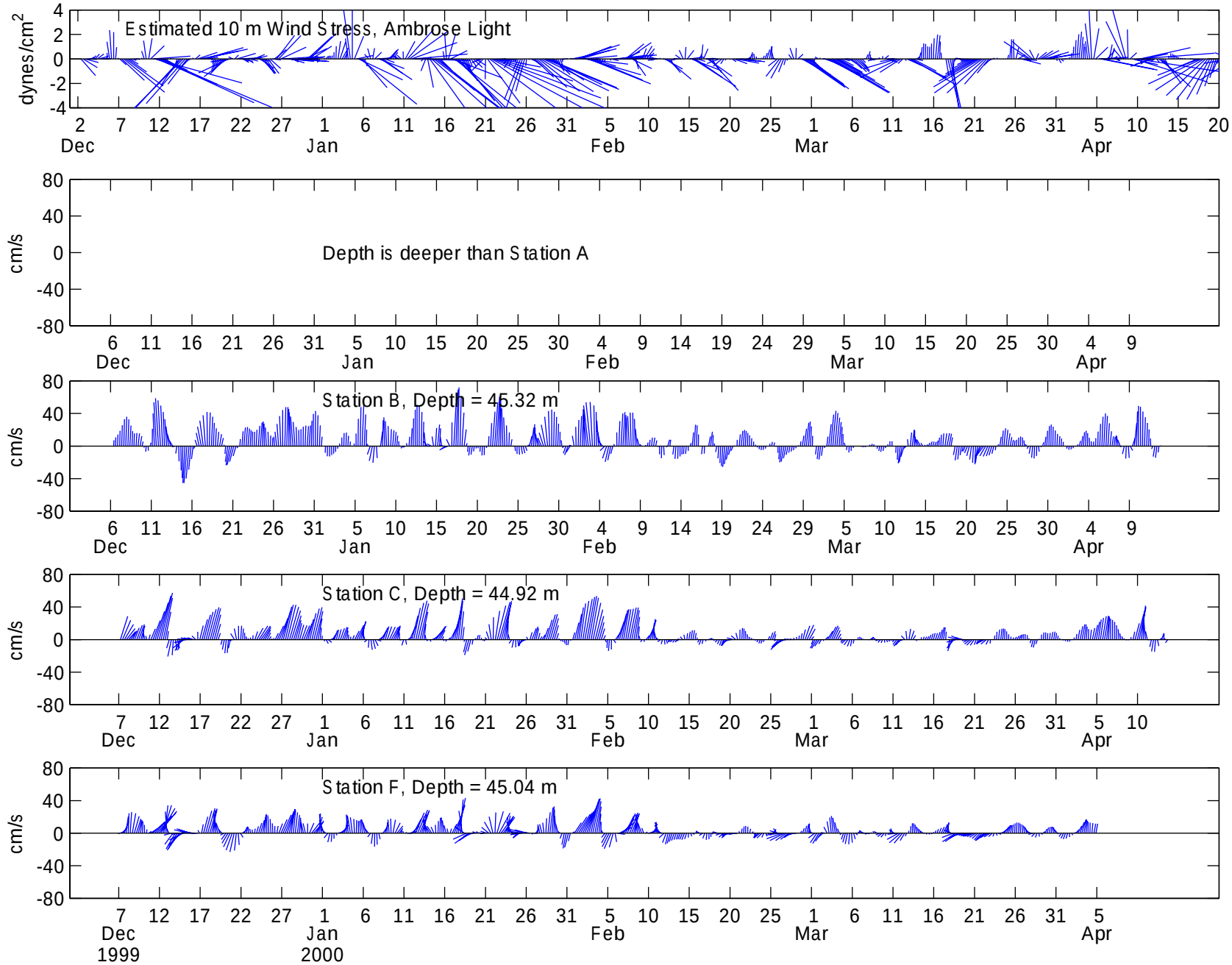
Low-Passed Wind Stress and Current at Valley Stations, Bottom Depth



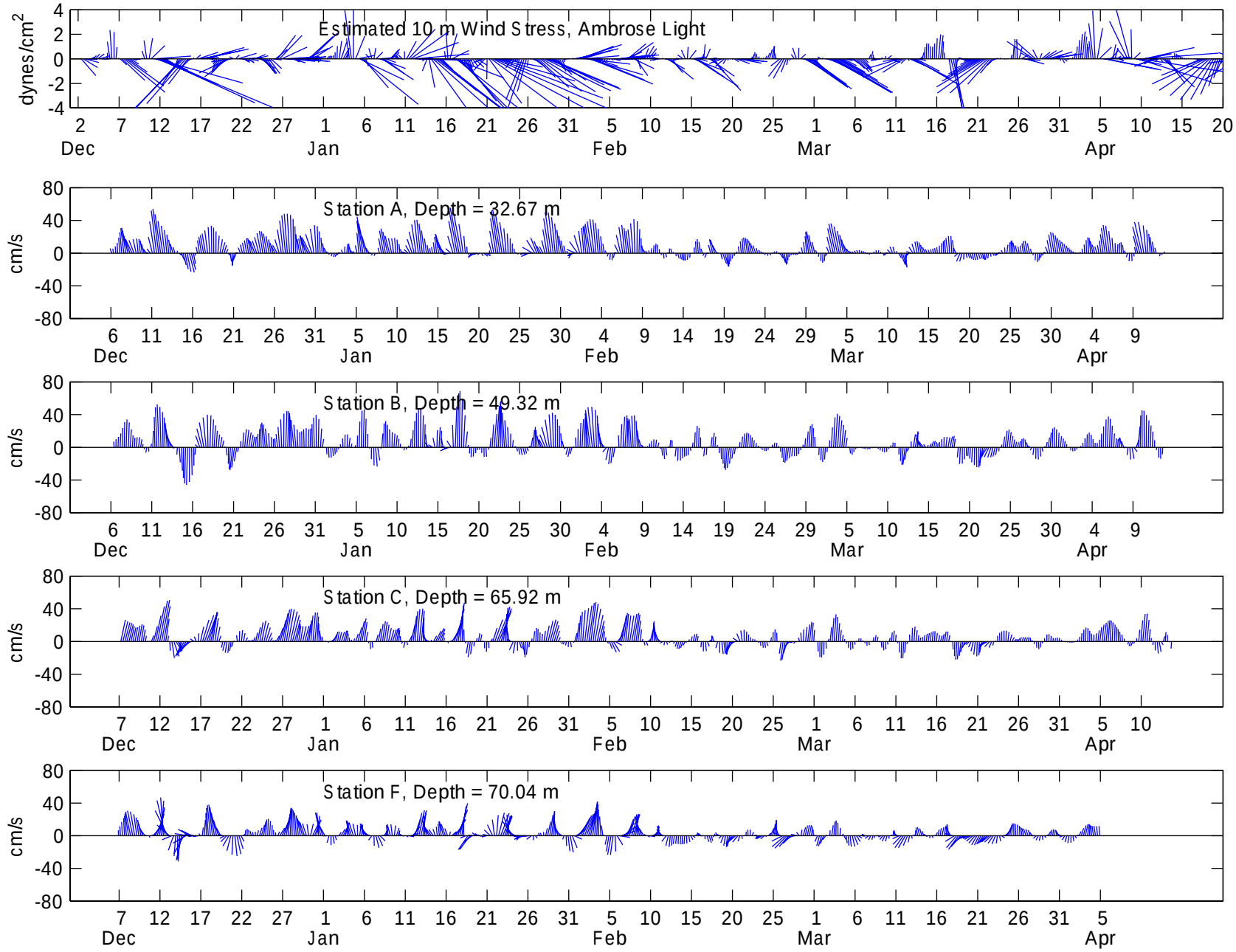
Low-Passed Wind Stress and Rotated Current at Valley Stations, Depth ~ 30 m



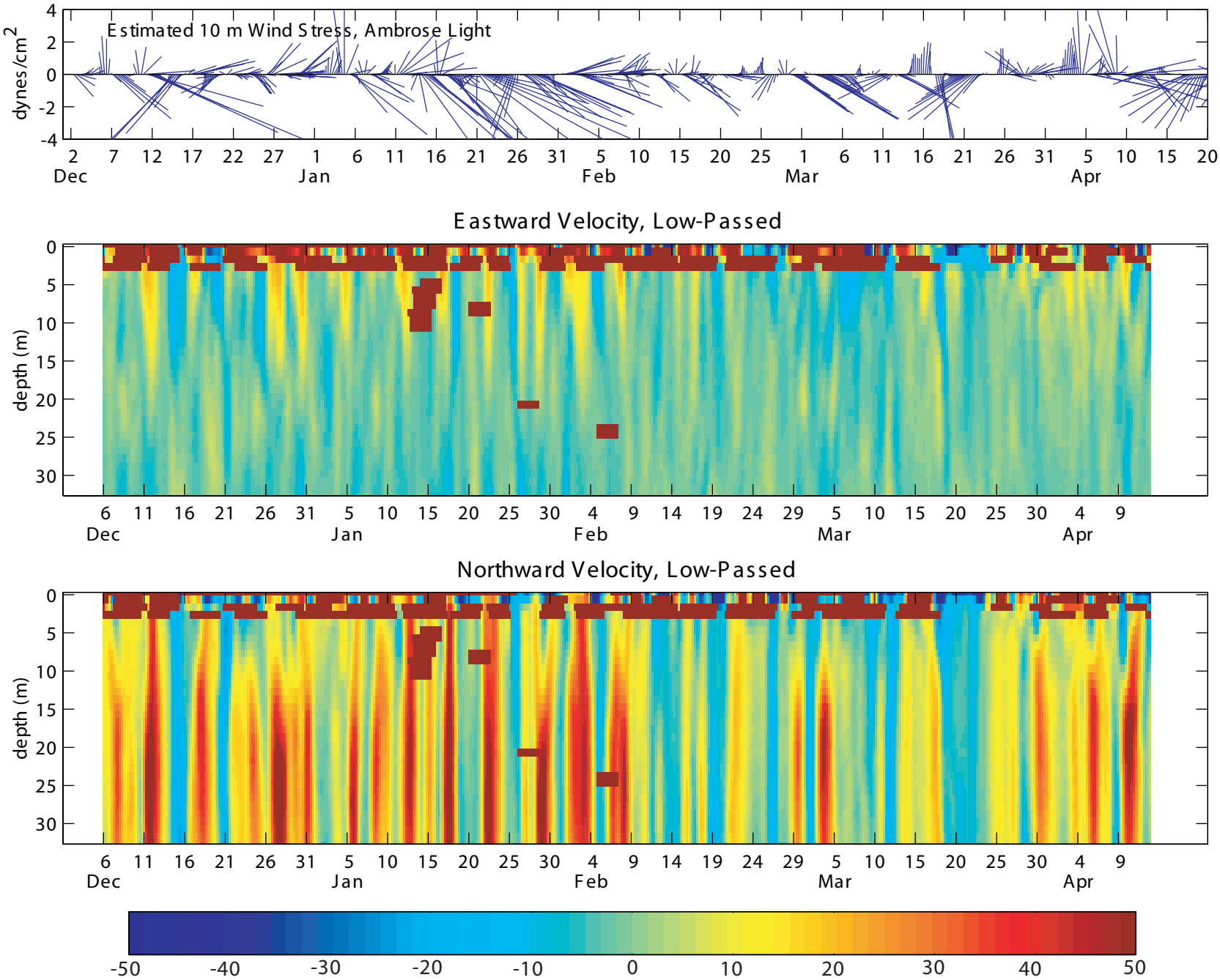
Low-Passed Wind Stress and Rotated Current at Valley Stations, Depth ~ 45 m



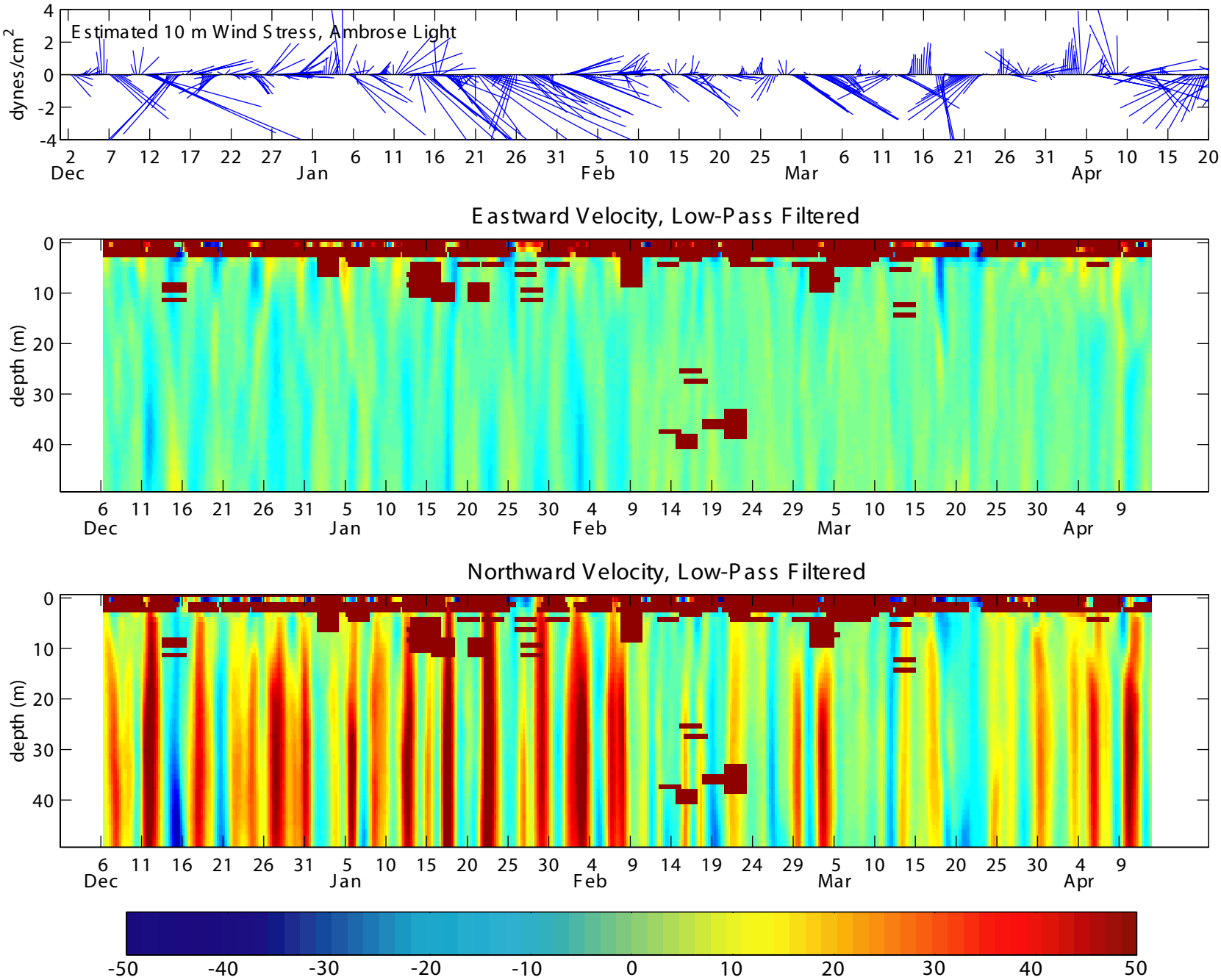
Lowpassed Wind Stress and Rotated Current at Valley Stations, Bottom Depth



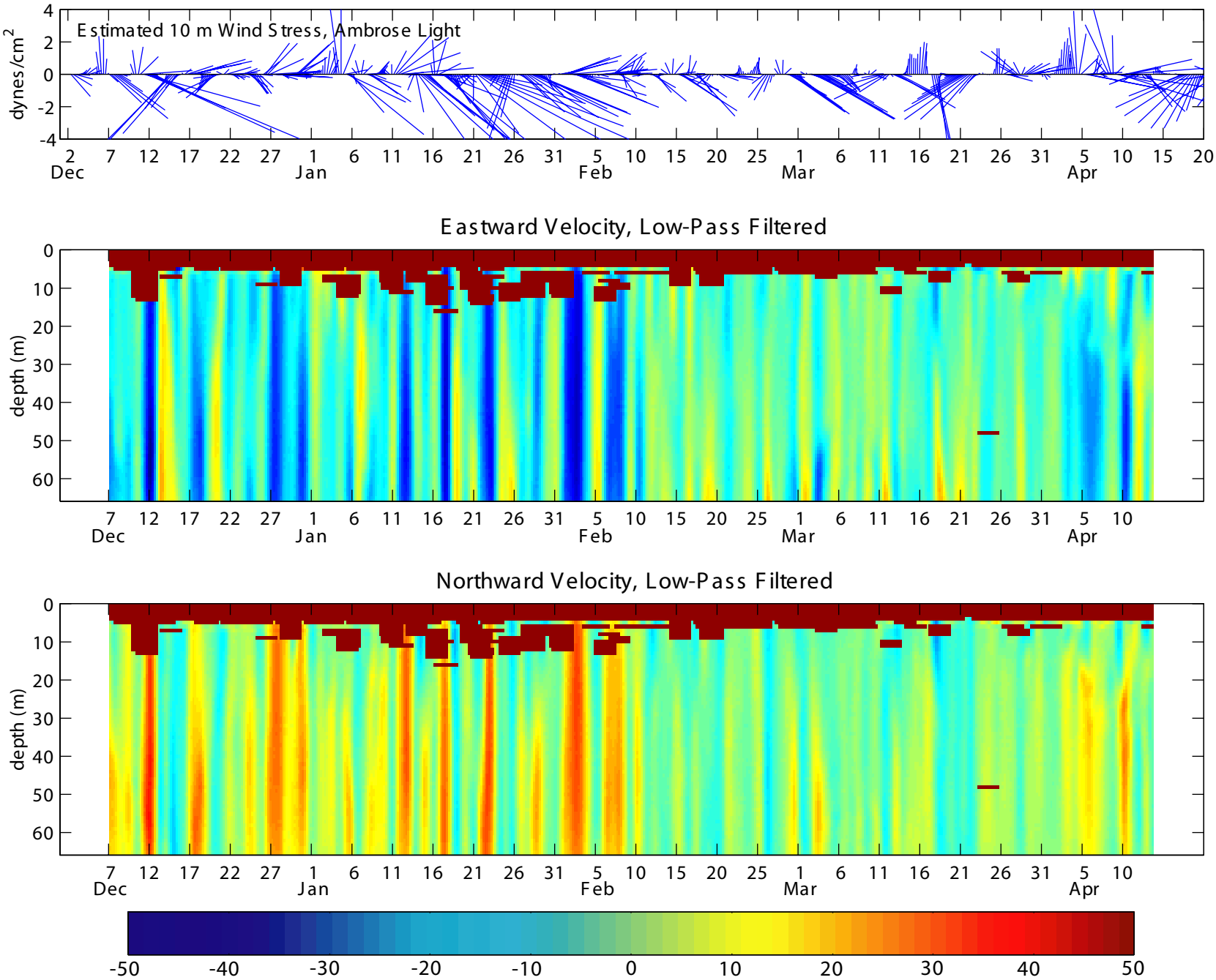
Low-passed Wind Stress and Current
Station A



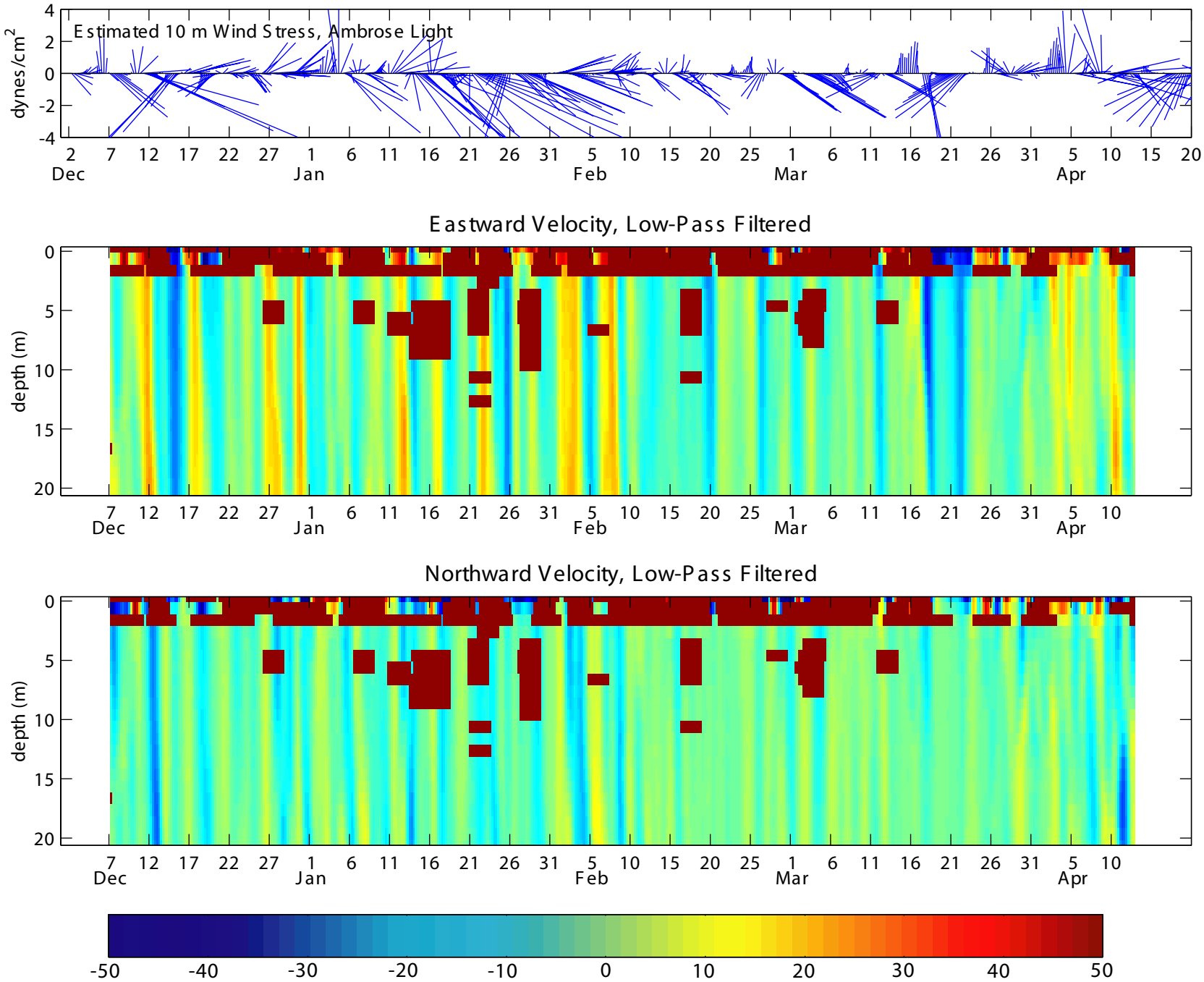
Low-passed Wind Stress and Current
Station B



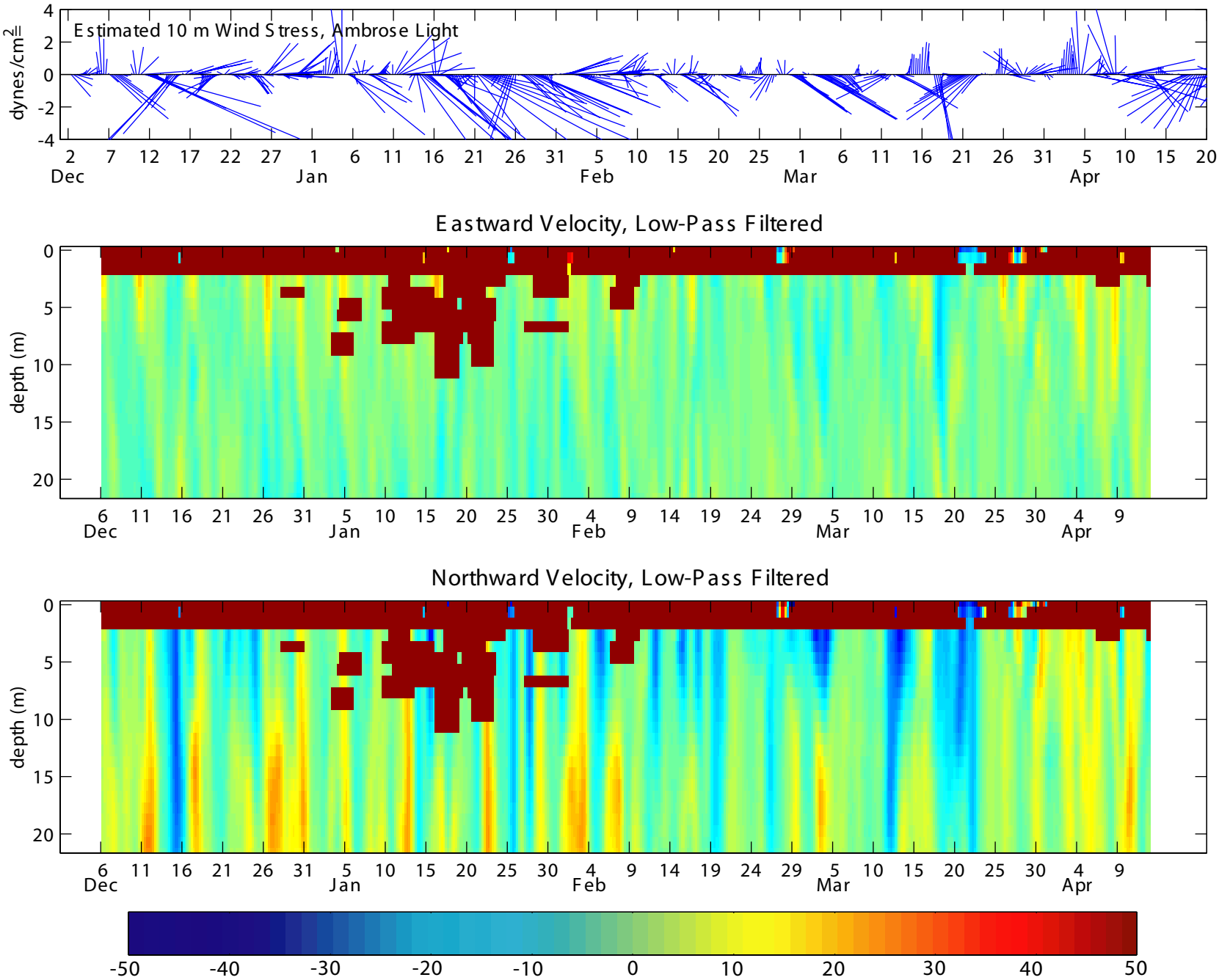
Low-passed Wind Stress and Current
Station C



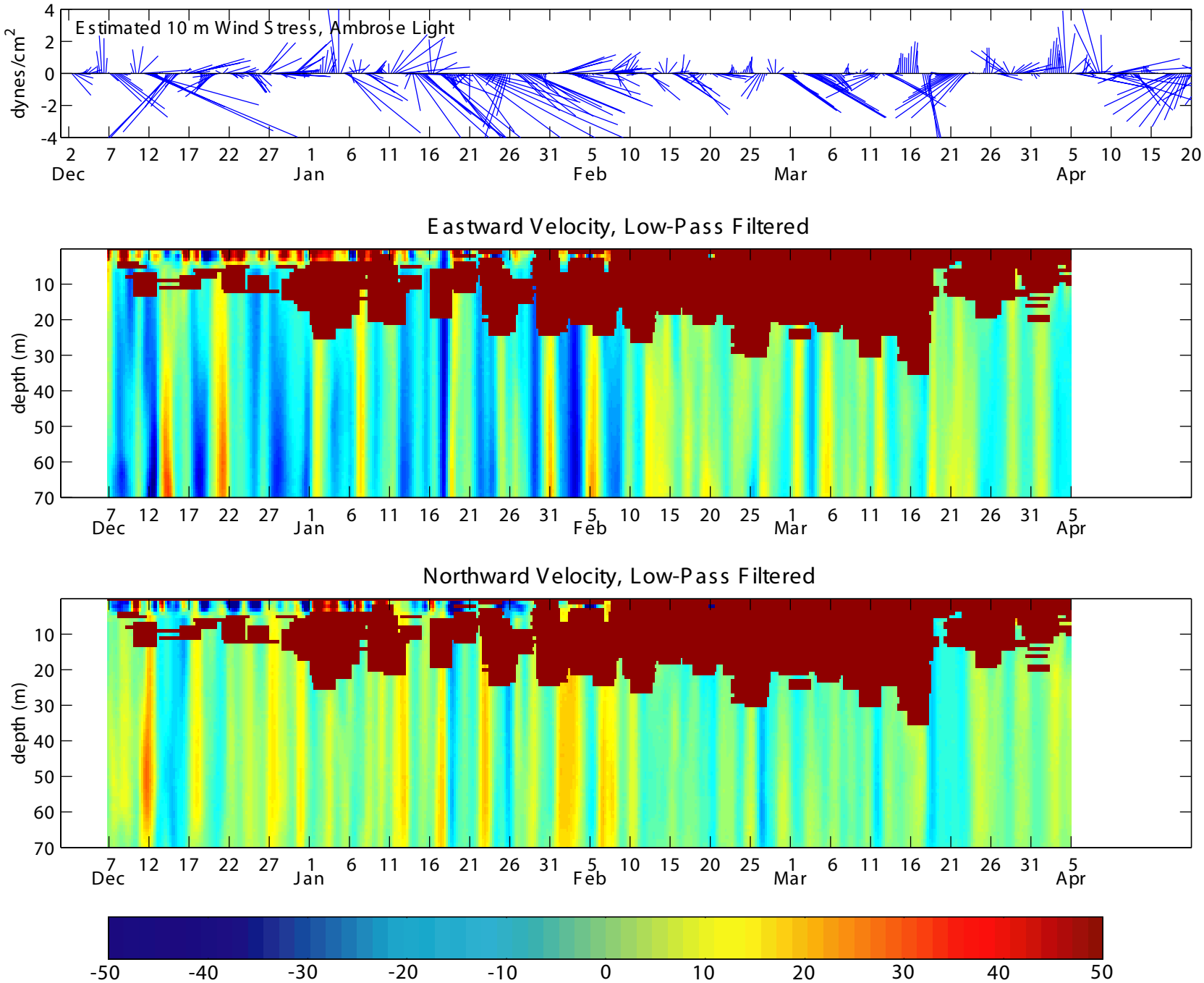
Low-passed Wind Stress and Current
Station D

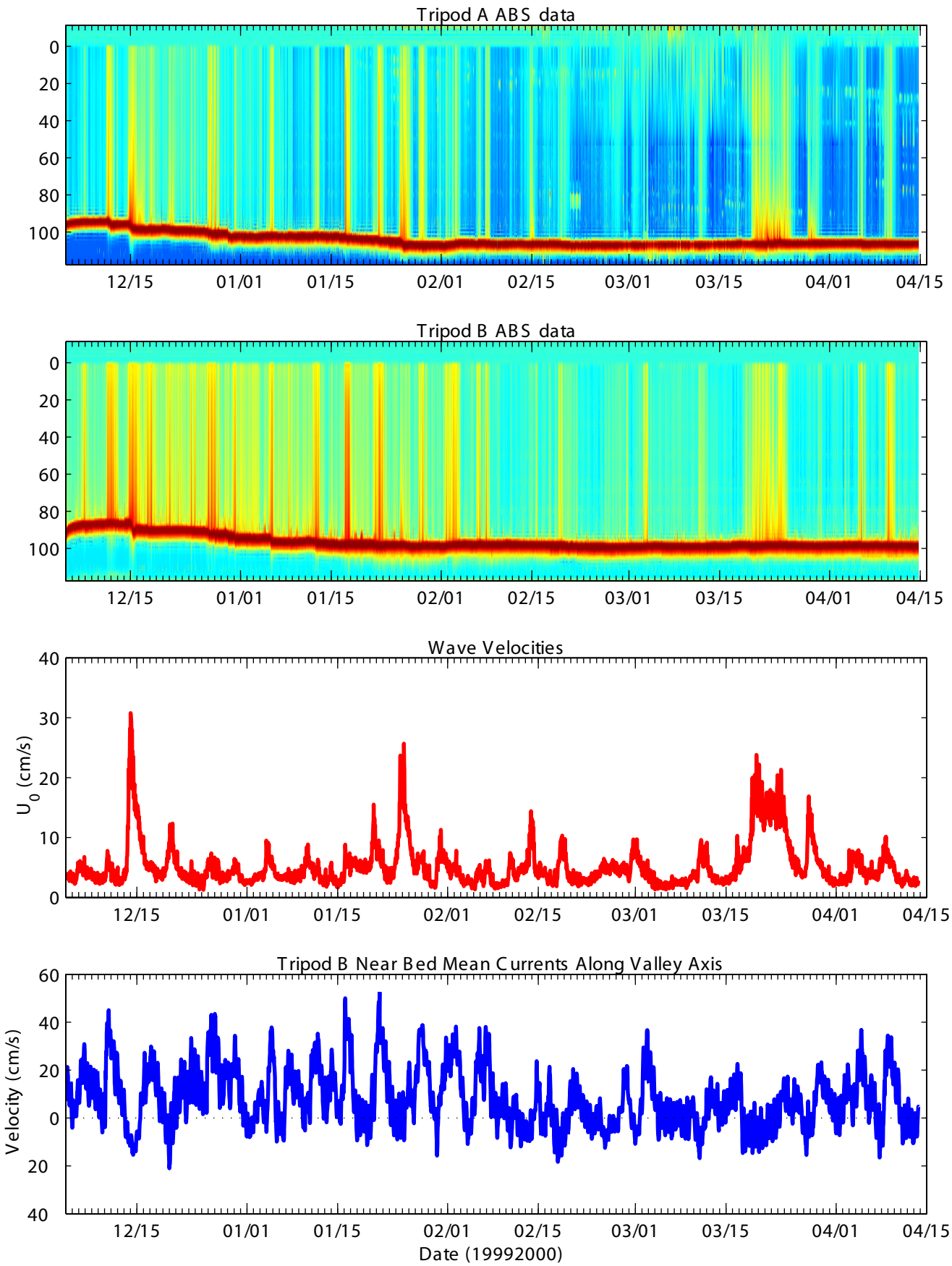


Low-passed Wind Stress and Current
Station E

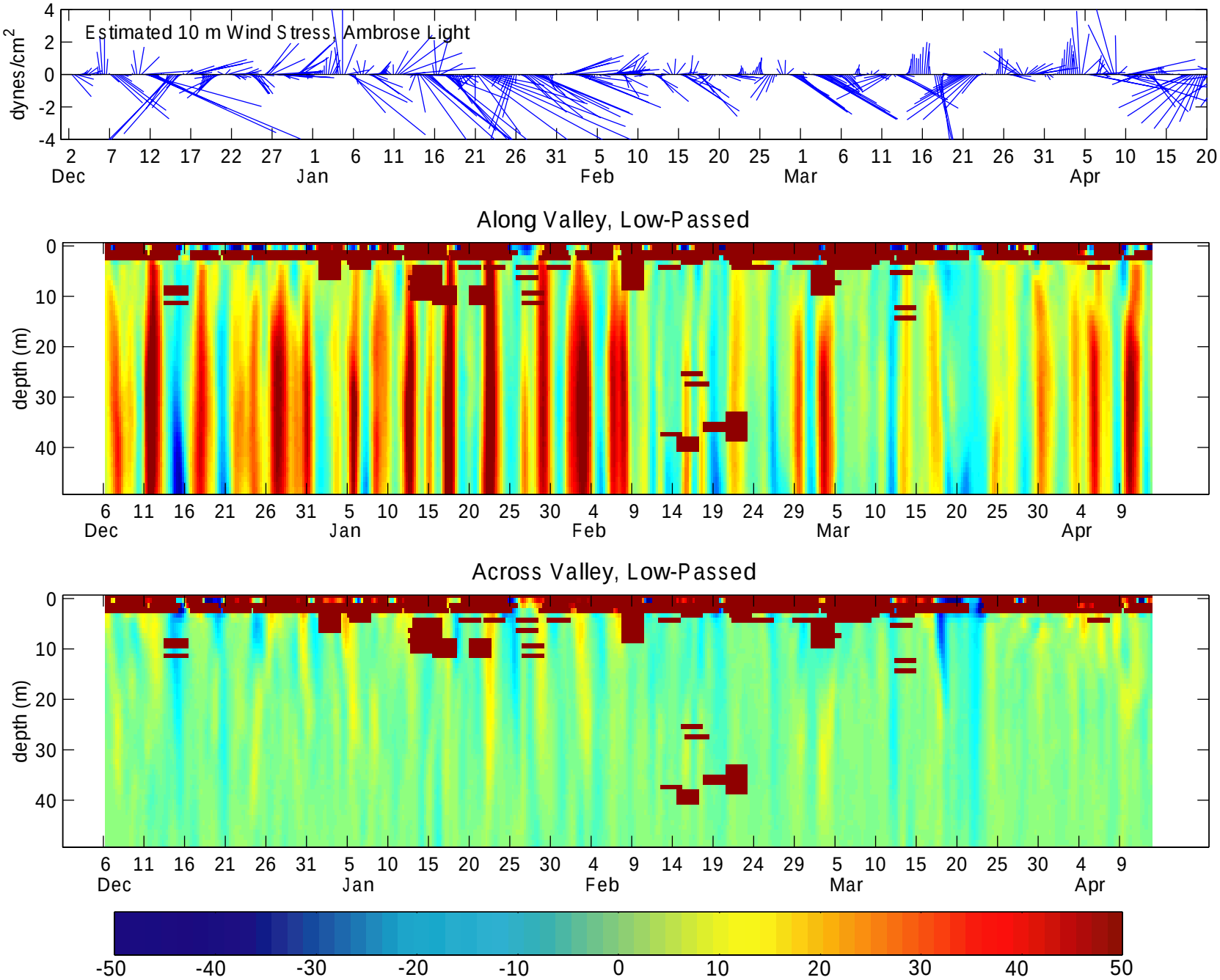


Low-passed Wind Stress and Current
Station F

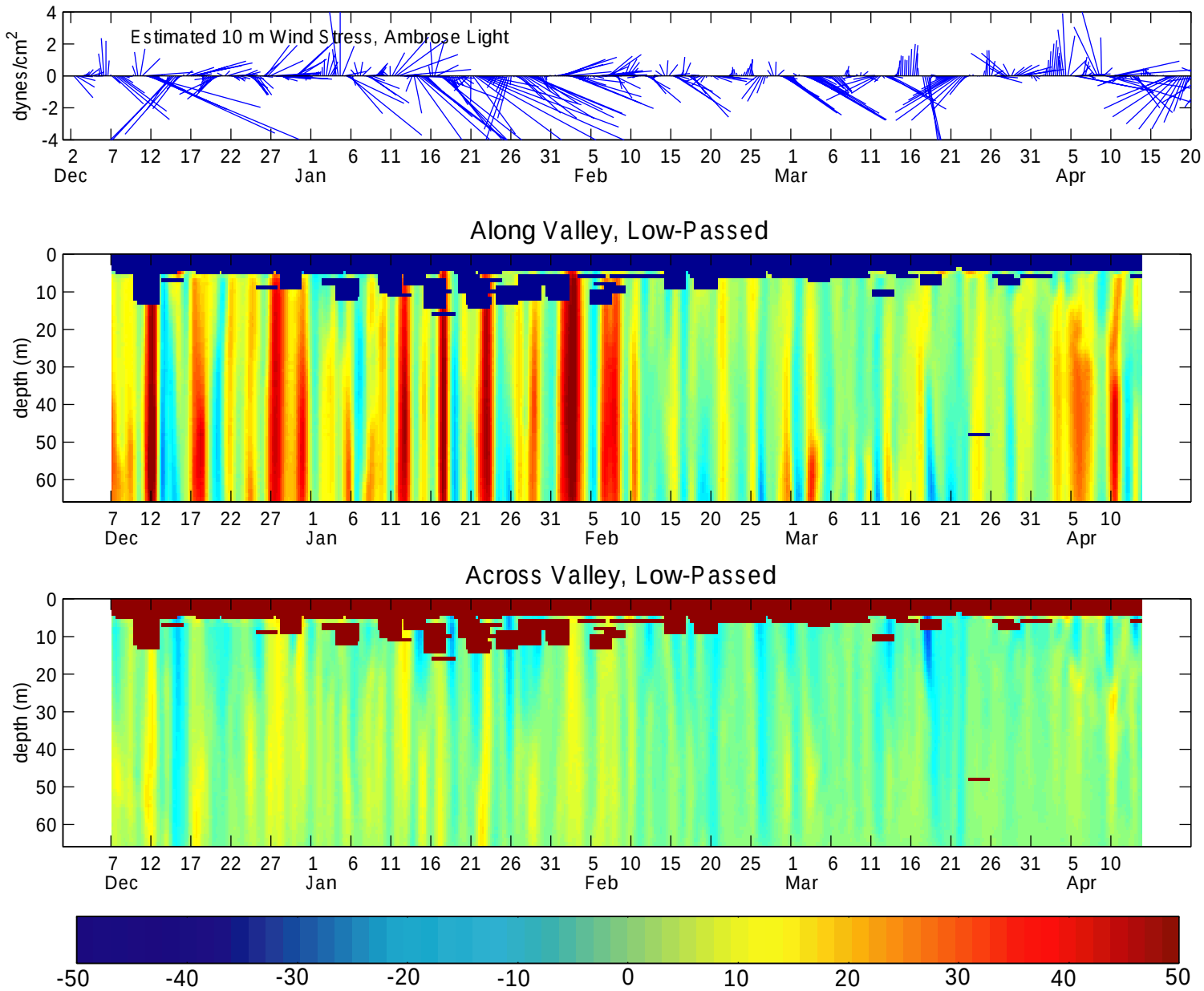



Tripod A ABS data
0
20
40
60
80
100
12/15
01/01
01/15
02/01
02/15
03/01
03/15
04/01
04/15
Tripod B ABS data
0
20
40
60
80
100
12/15
01/01
01/15
02/01
02/15
03/01
03/15
04/01
04/15
Wave Velocities
U0 (cm/s)
40
30
20
10
0
12/15
01/01
01/15
02/01
02/15
03/01
03/15
04/01
04/15
Tripod B Near Bed Mean Currents Along Valley Axis
Velocity (cm/s)
60
40
20
0
20
40
12/15
01/01
01/15
02/01
02/15
03/01
03/15
04/01
04/15
Date (19992000)

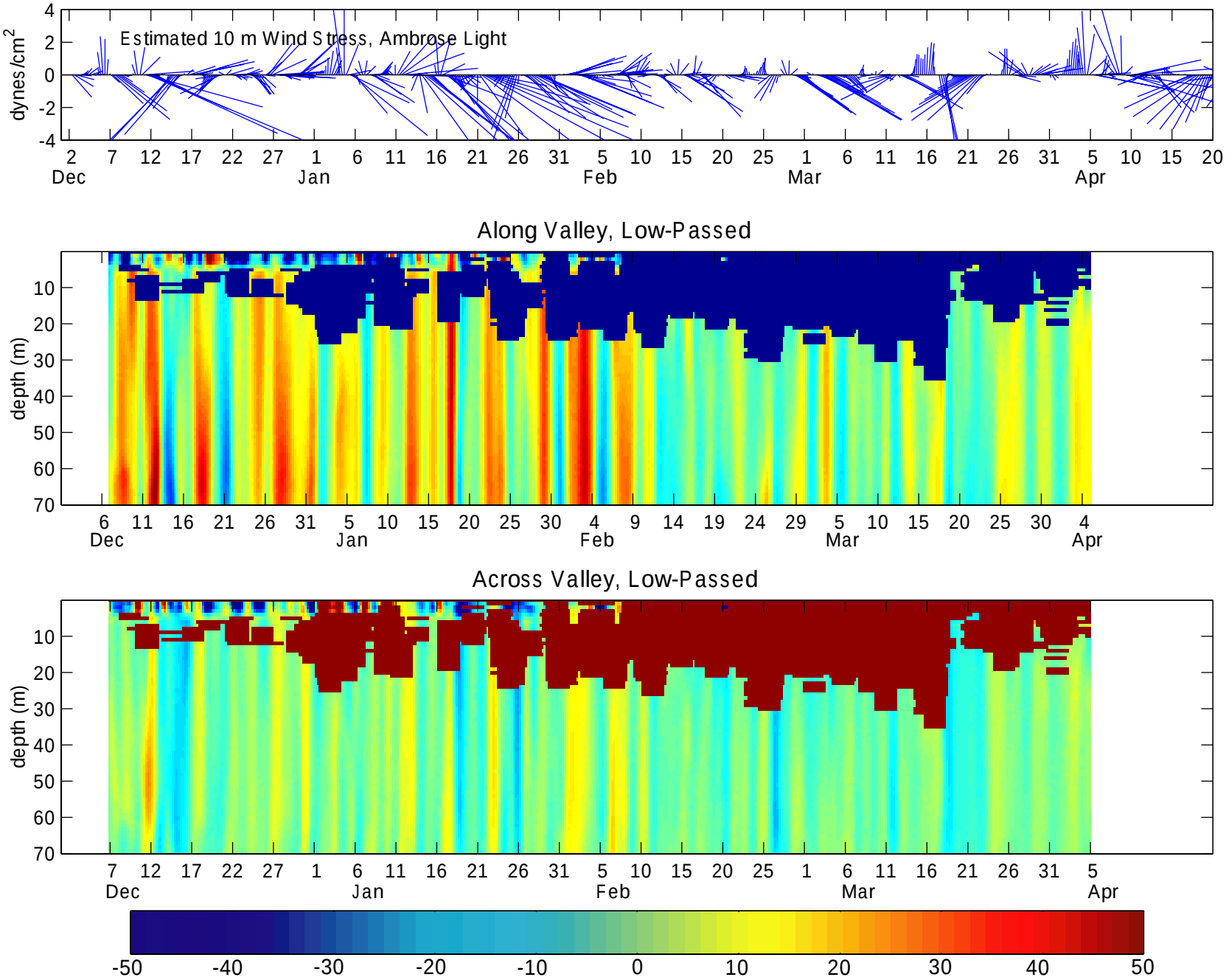
Low-Passed Wind Stress and Rotated Current
Station B



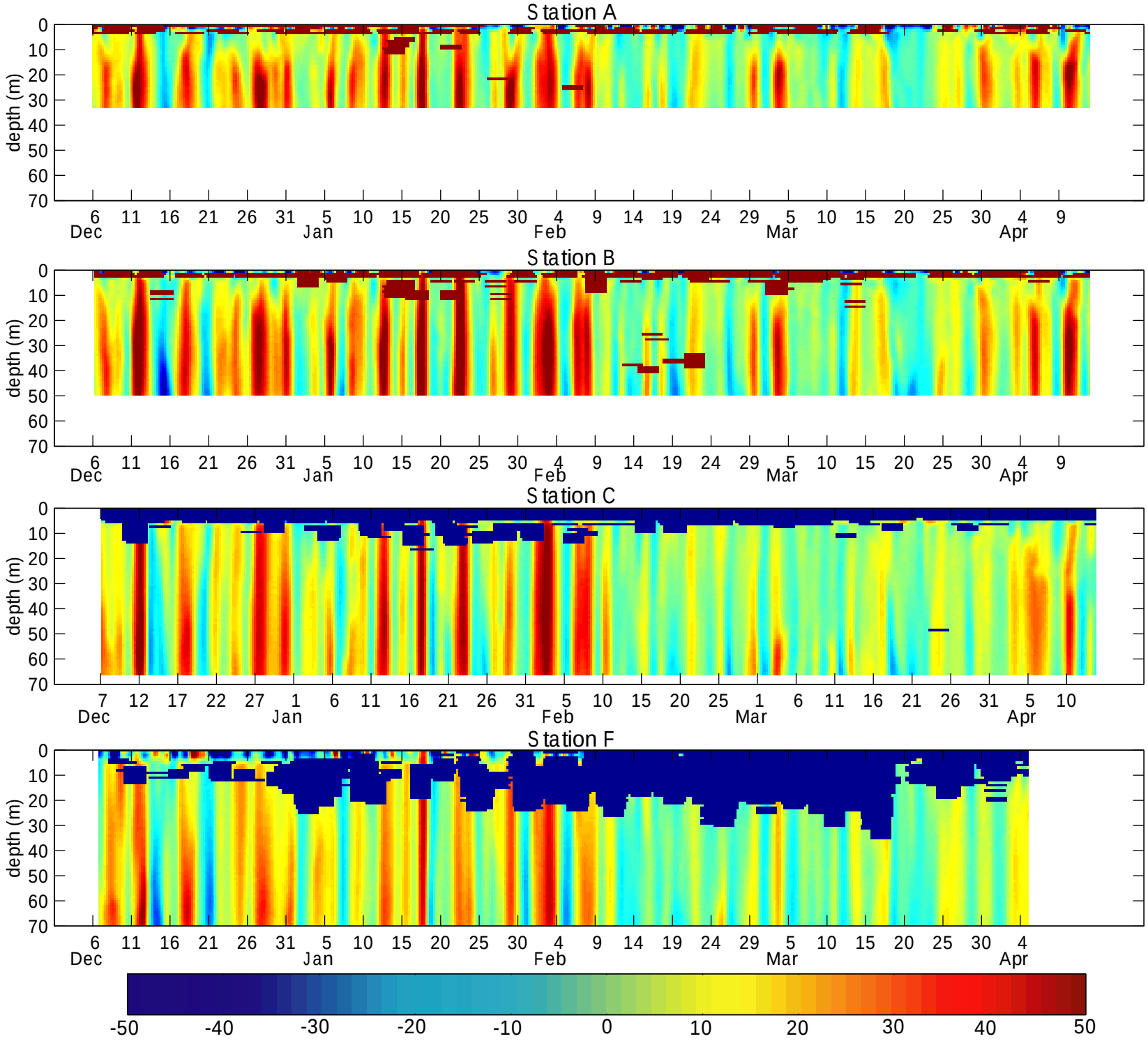
Low-Passed Wind Stress and Rotated Current
Station C



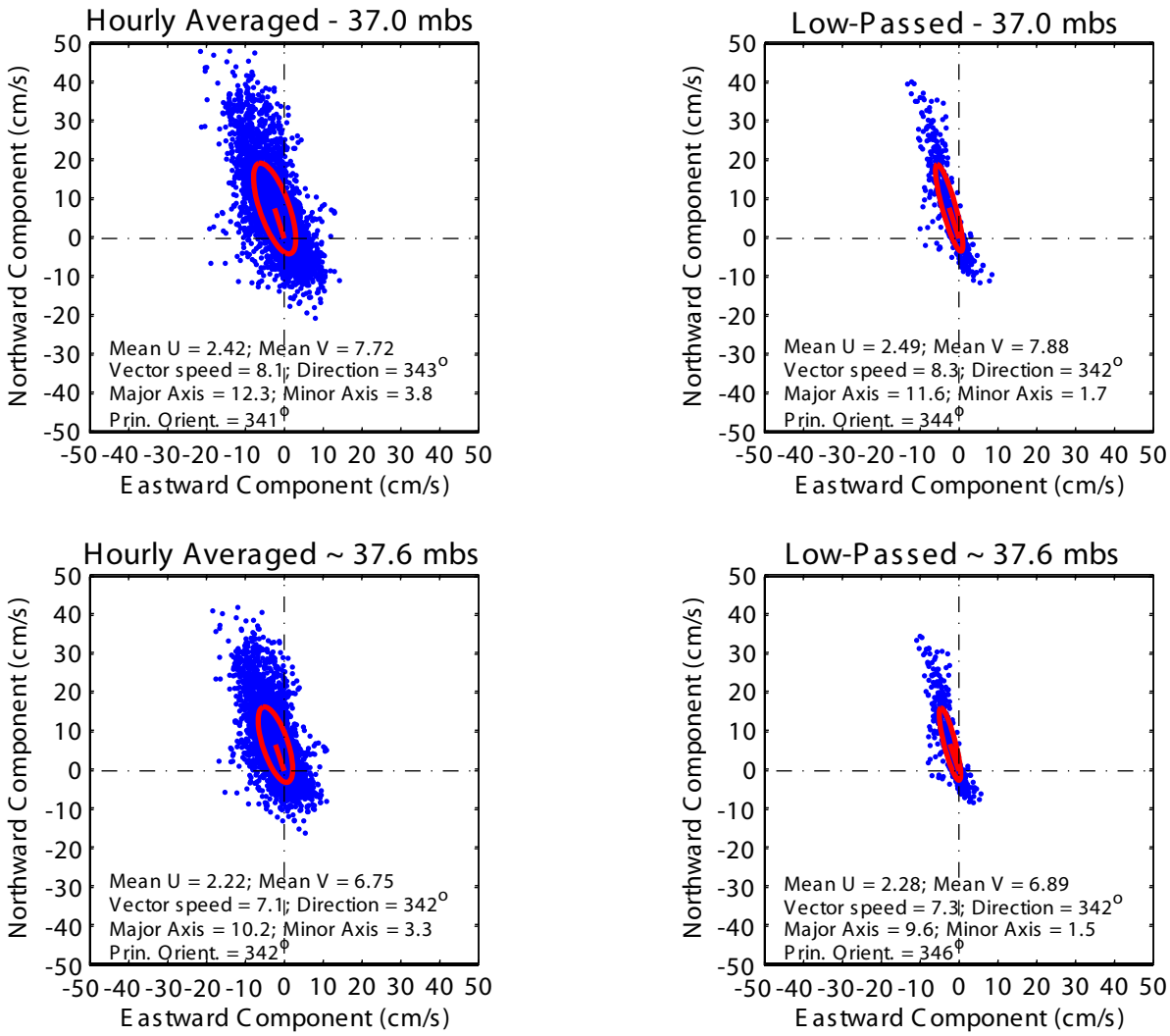
Low-Passed Wind Stress and Rotated Current
Station F



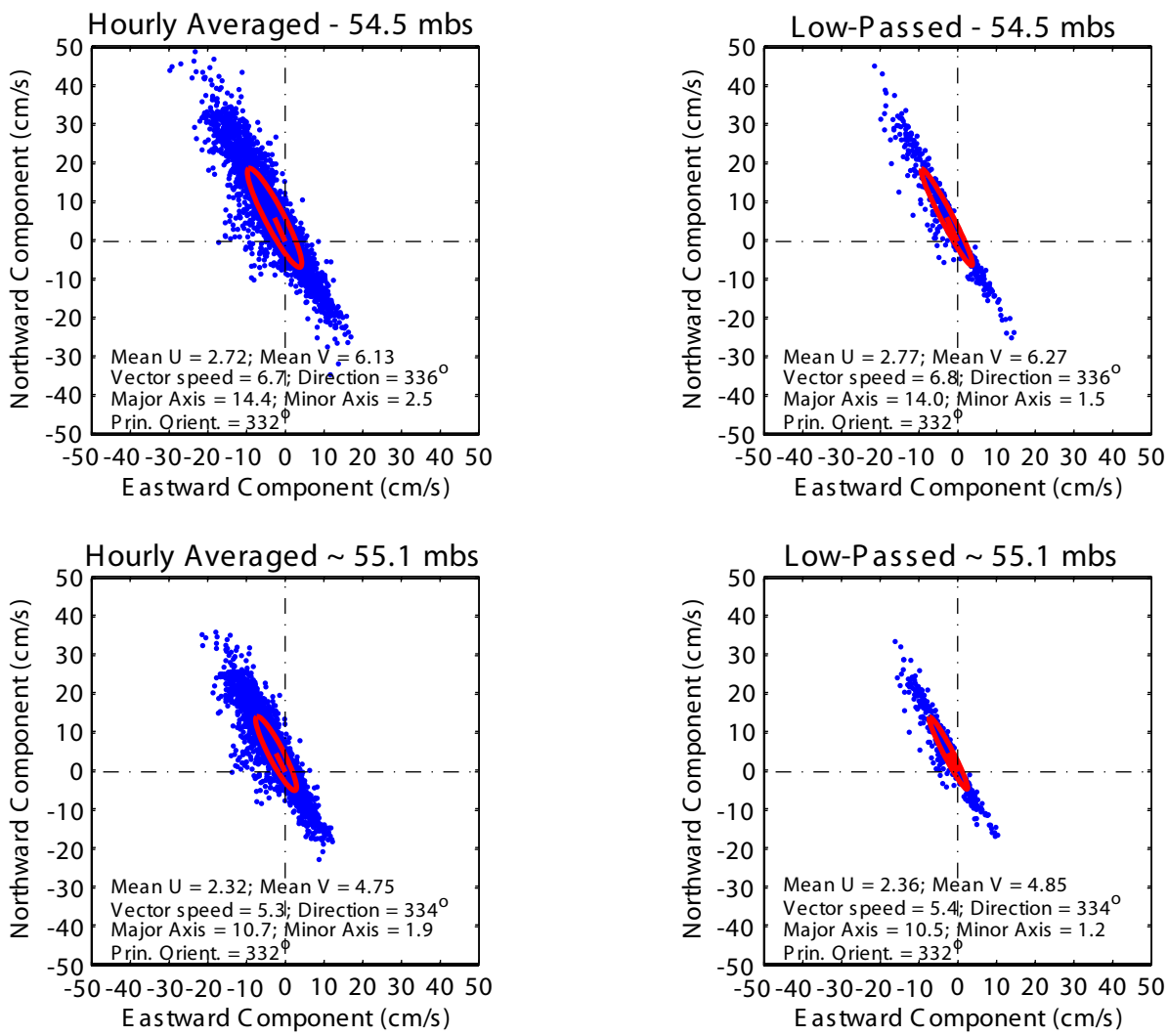
Along Valley Component of Valley Stations at All Depths



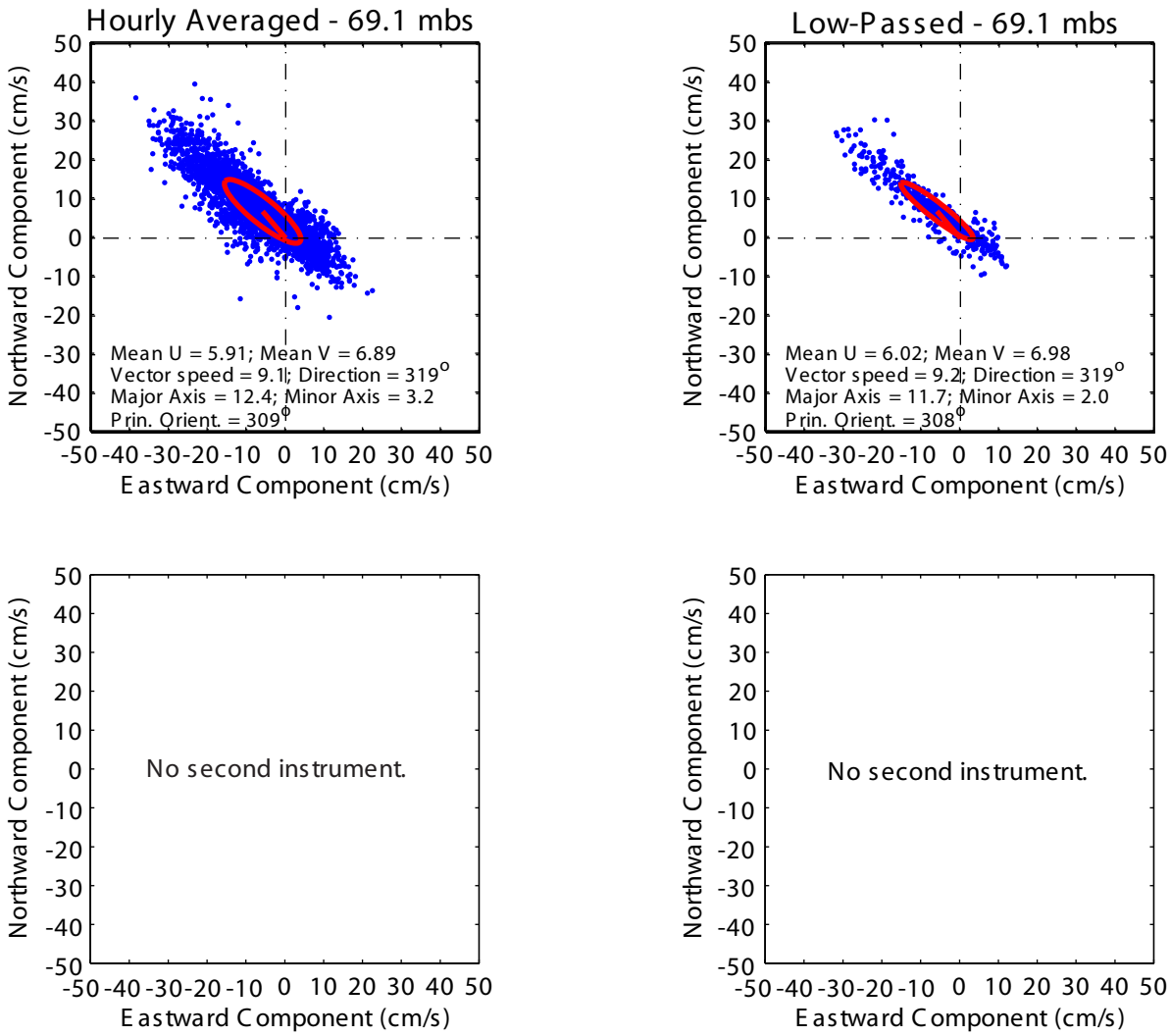
Station A: Current and Variability
BASS Data



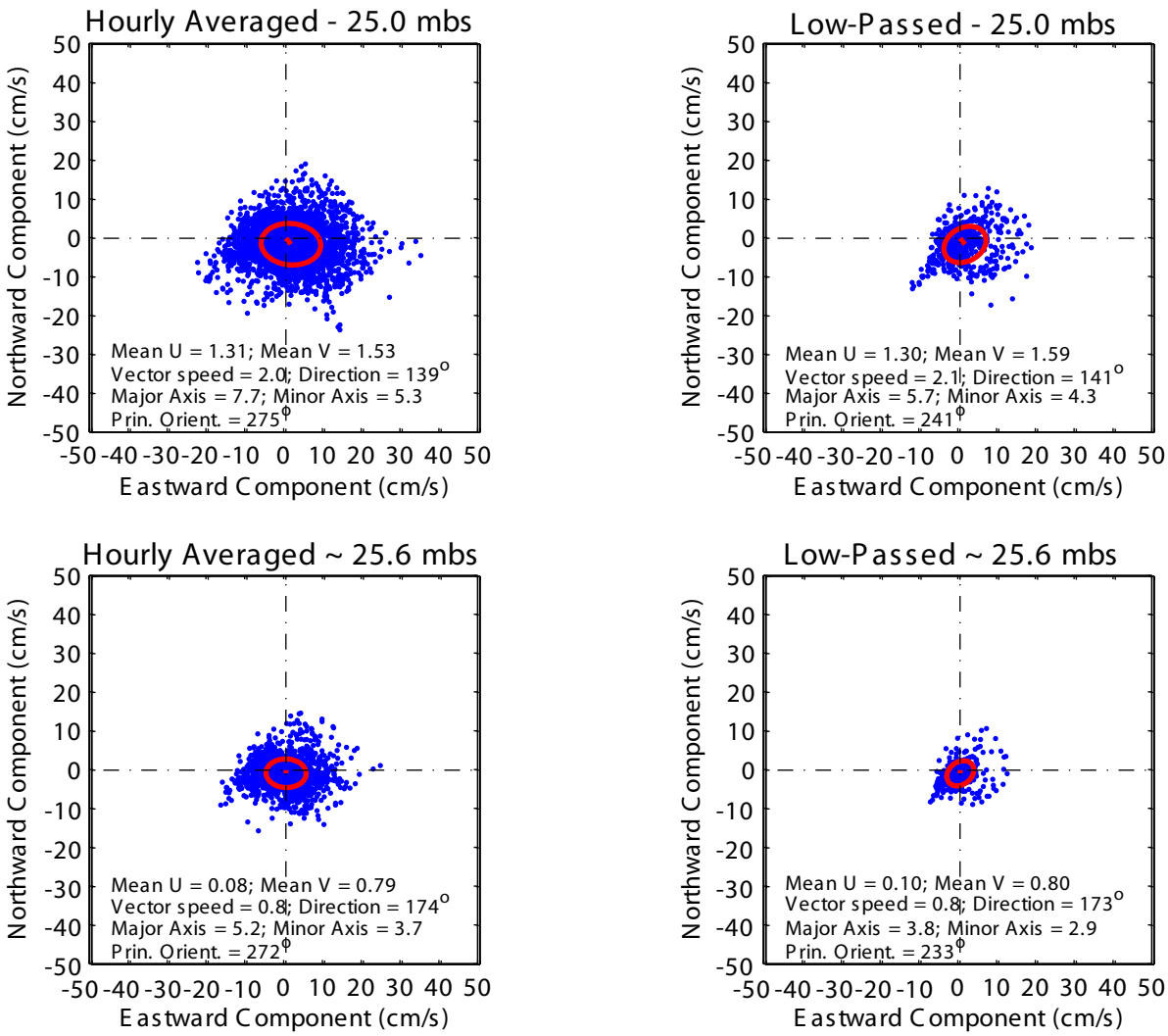
Station B: Current and Variability
BASS Data



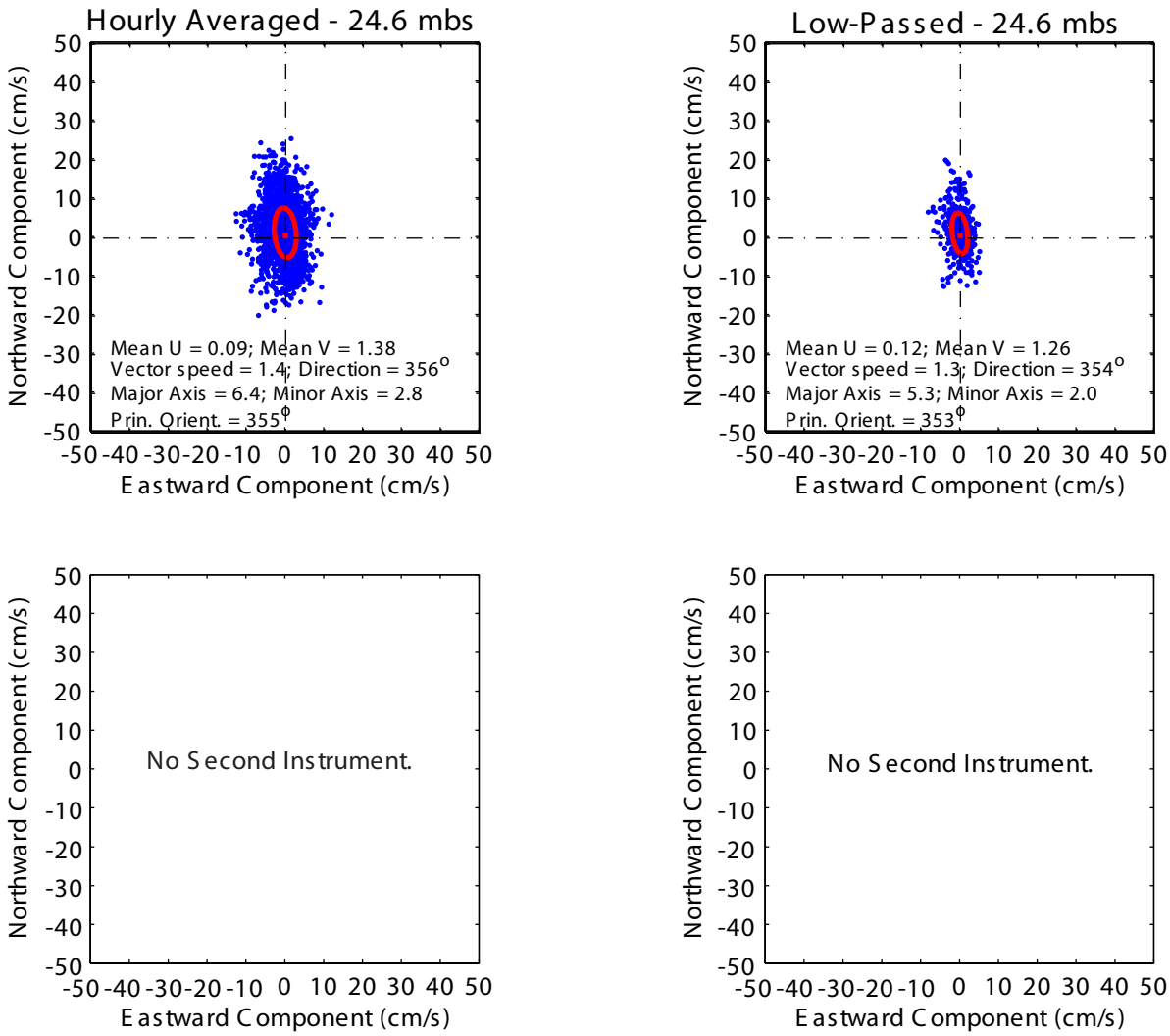
Station C: Current and Variability
MAVS Data



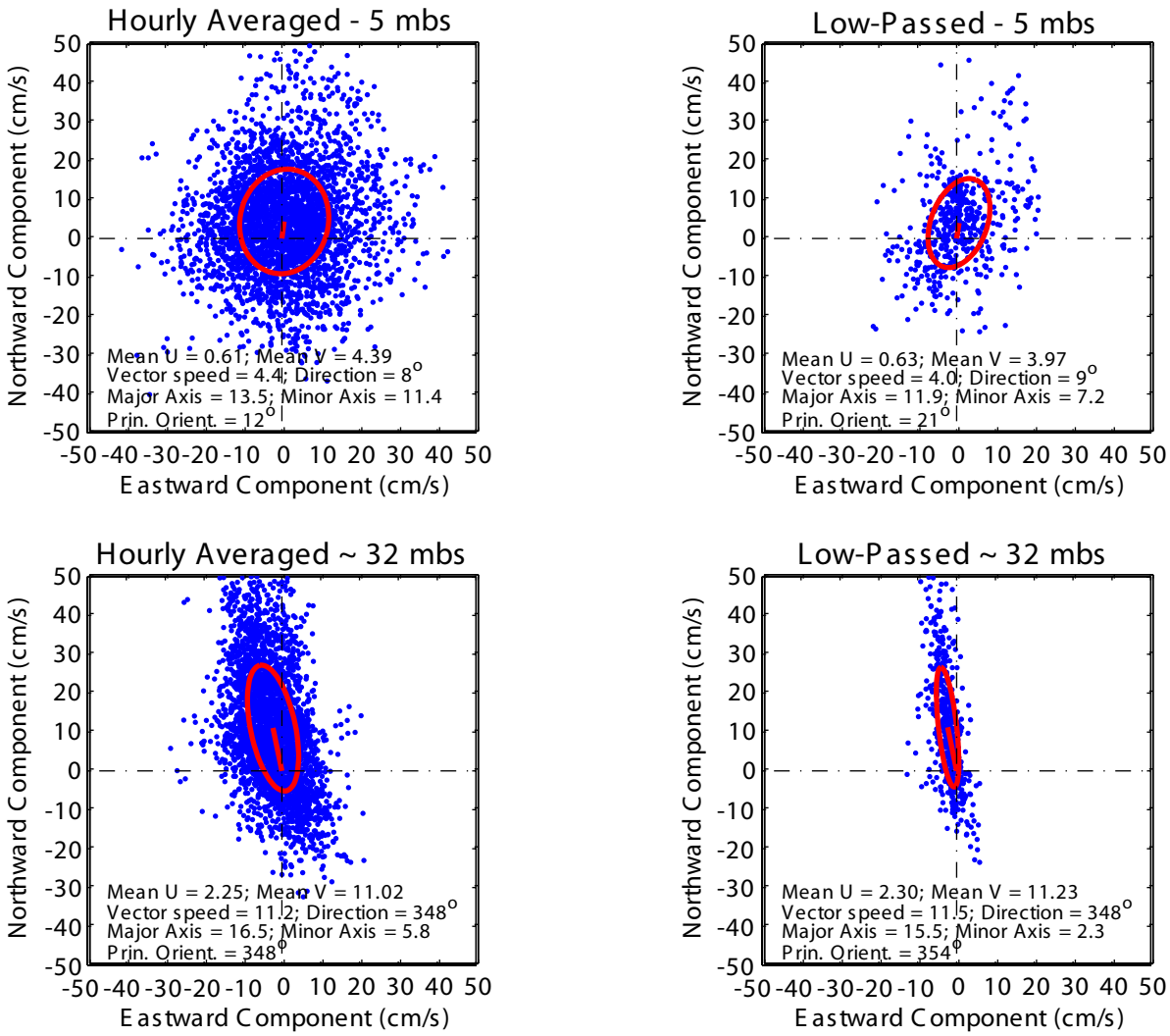
Station D: Current and Variability
BASS Data



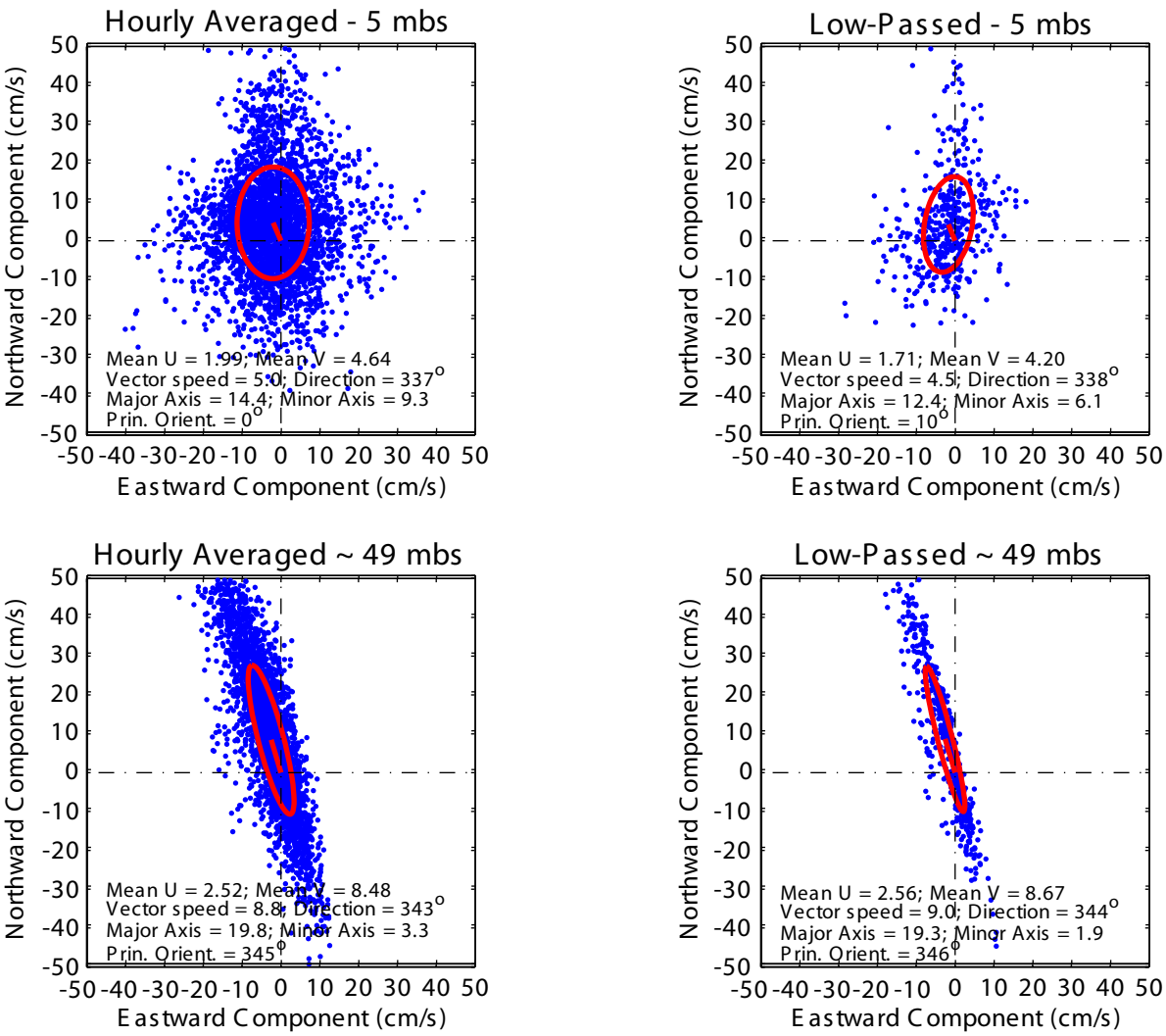
Station E: Current and Variability
MAVS Data



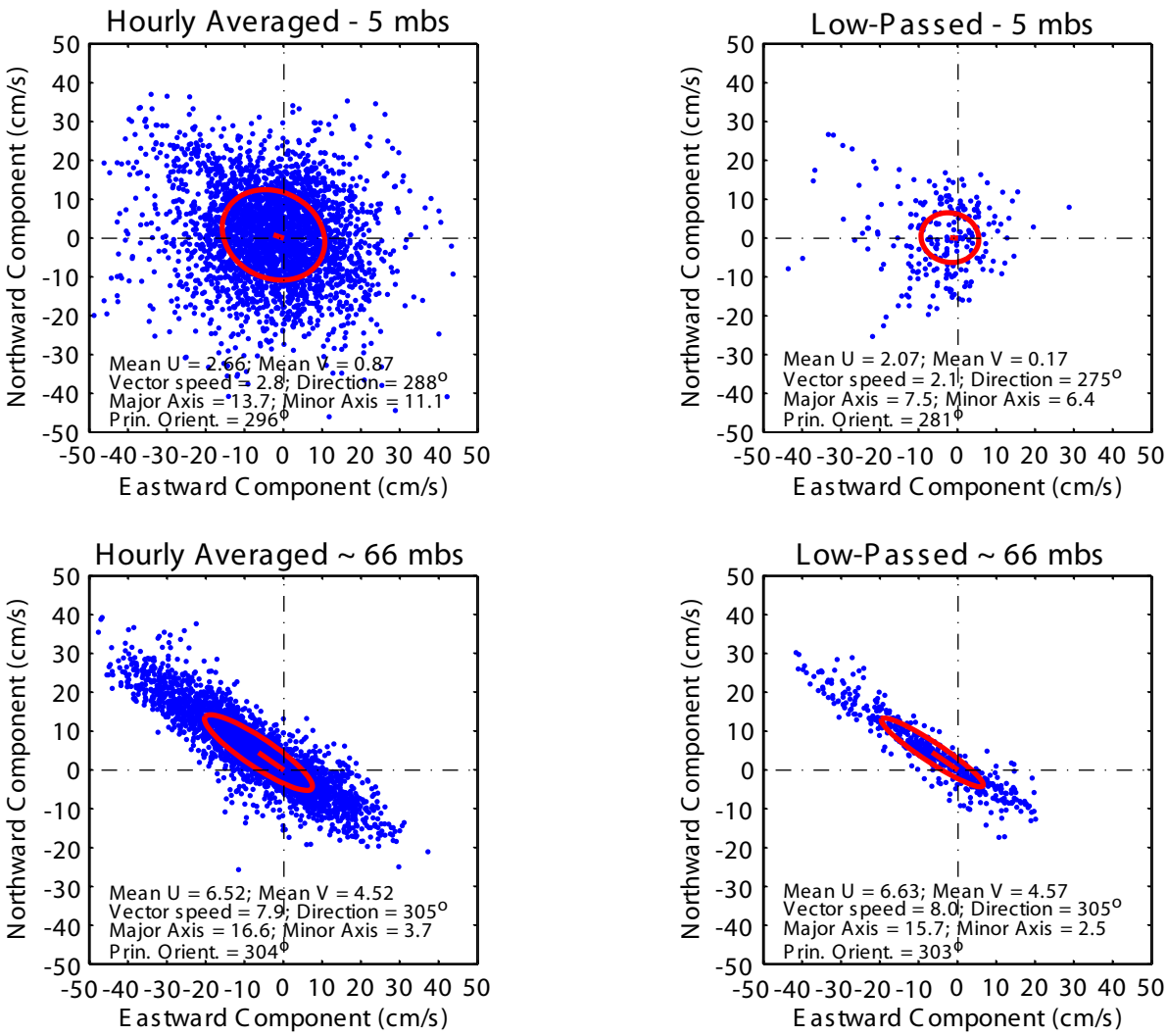
Station A: Current and Variability
ADCP Data



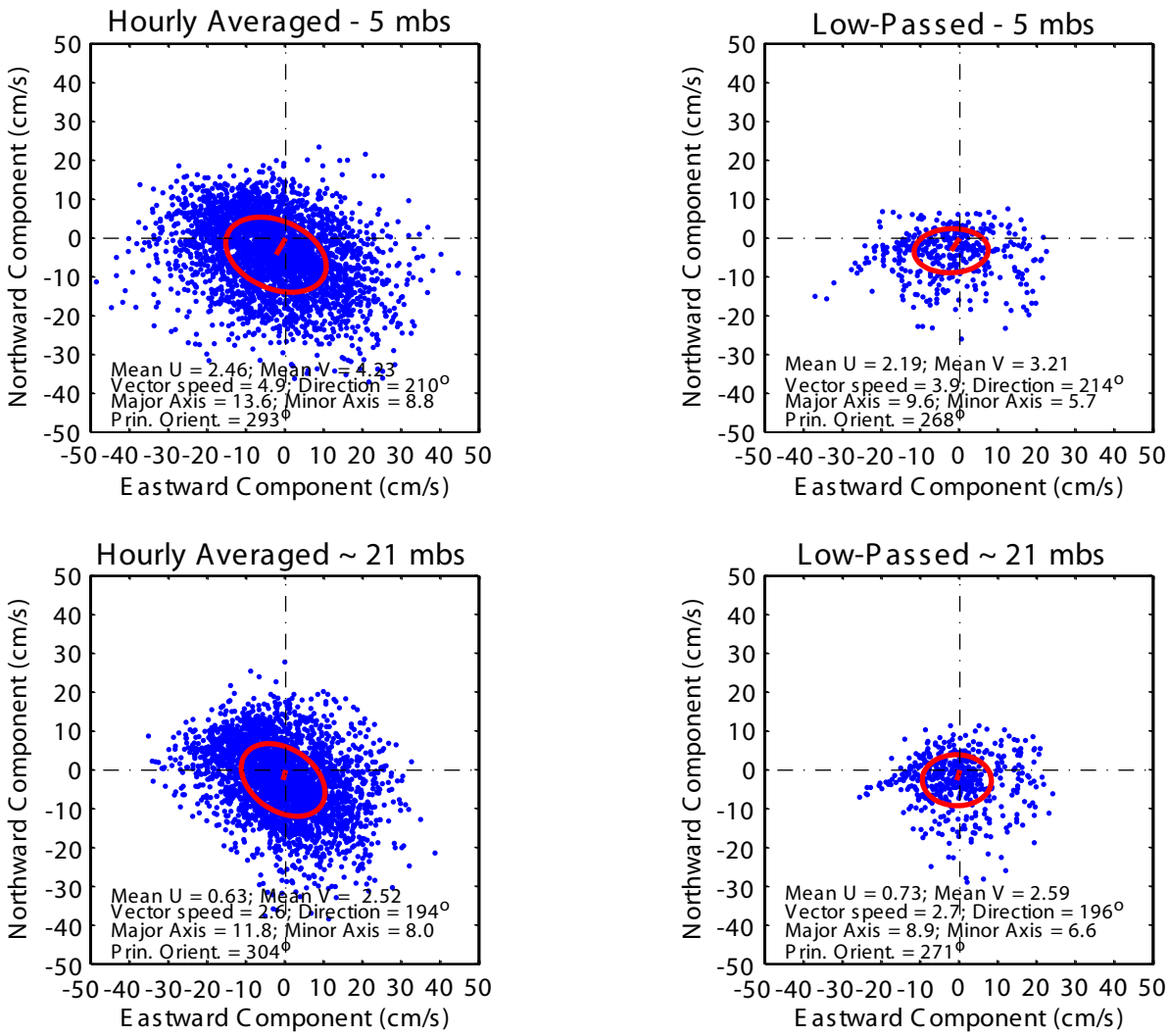
Station B: Current and Variability
ADCP Data



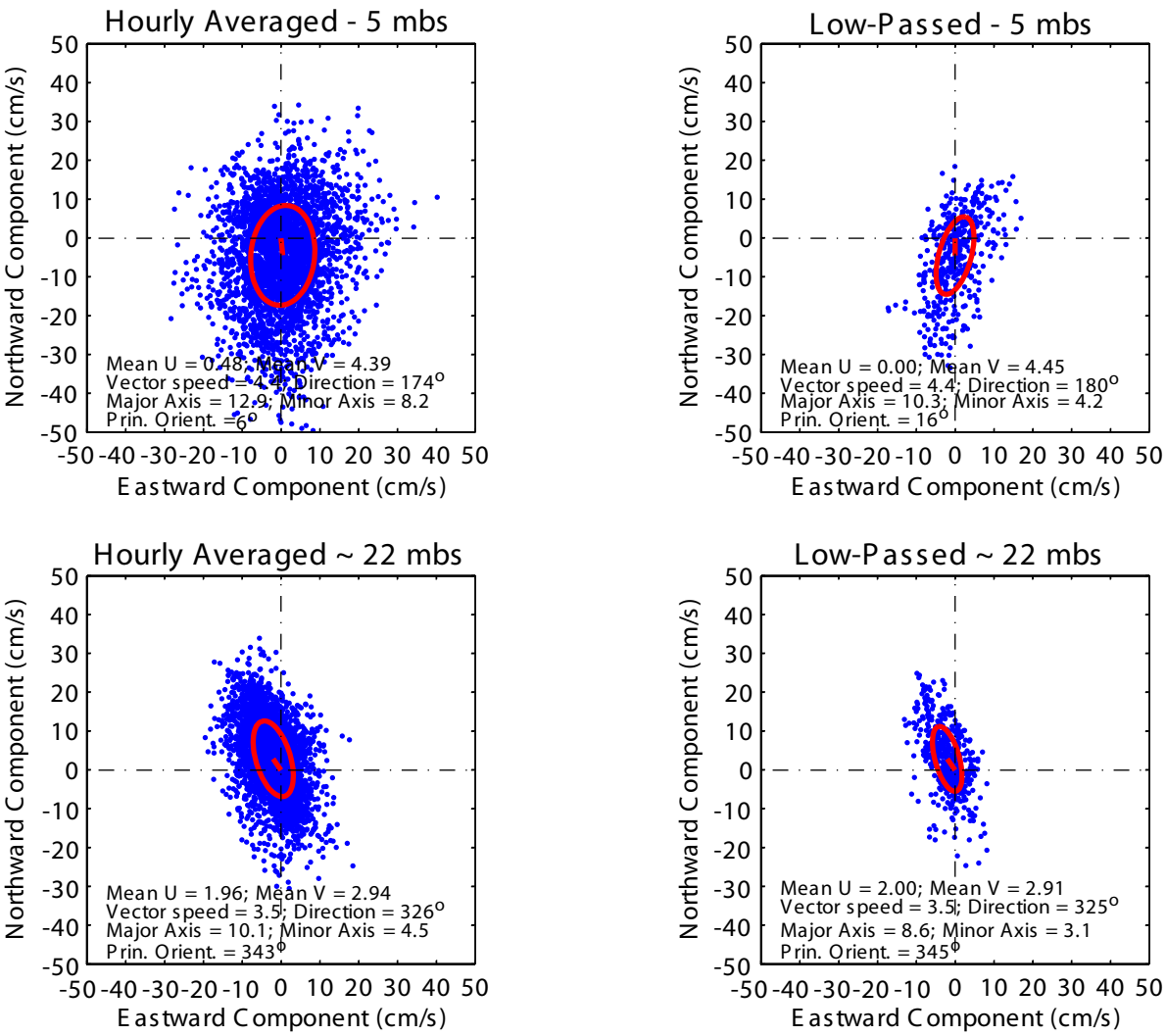
Station C: Current and Variability
ADCP Data



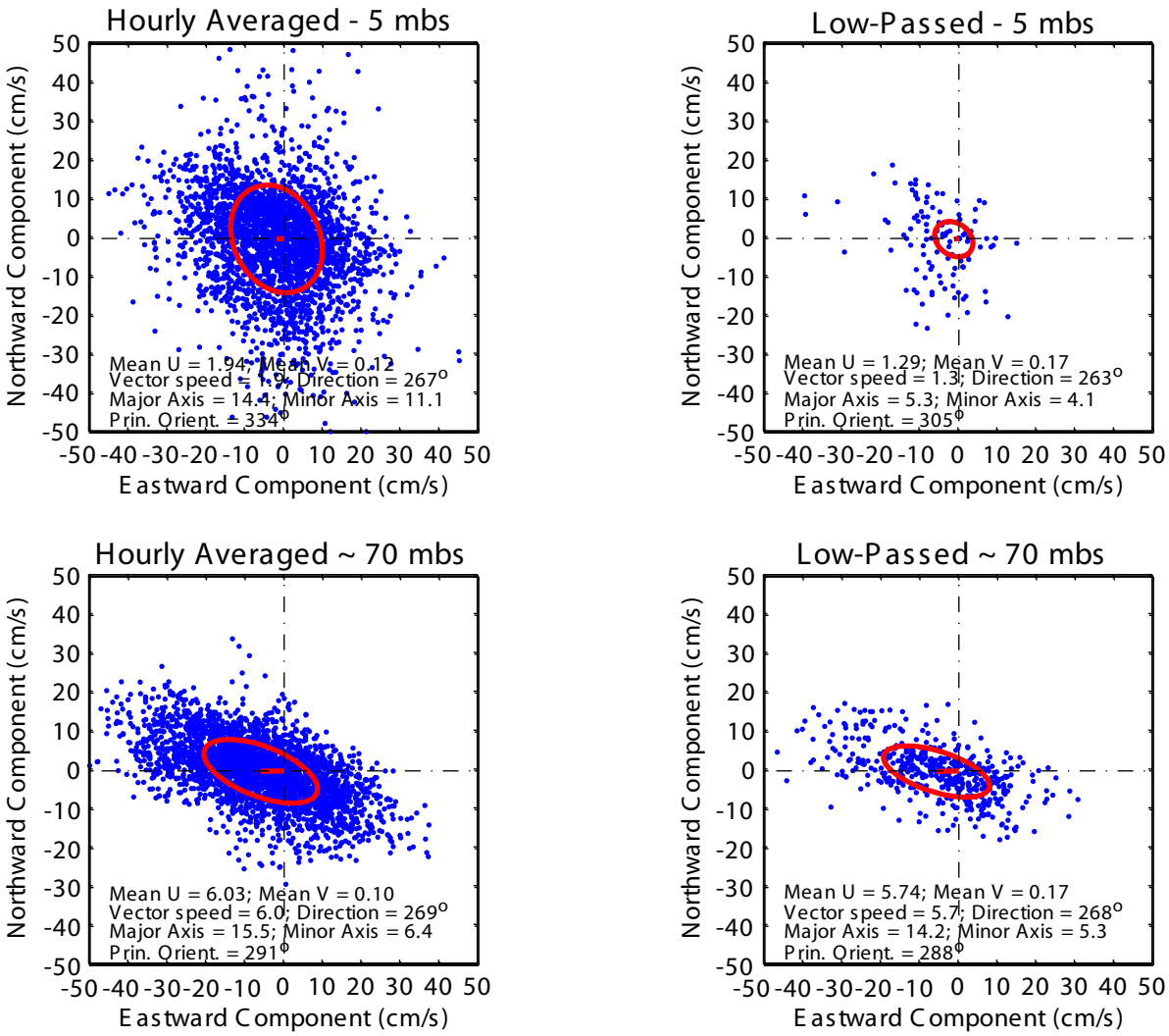
Station D: Current and Variability
ADCP Data



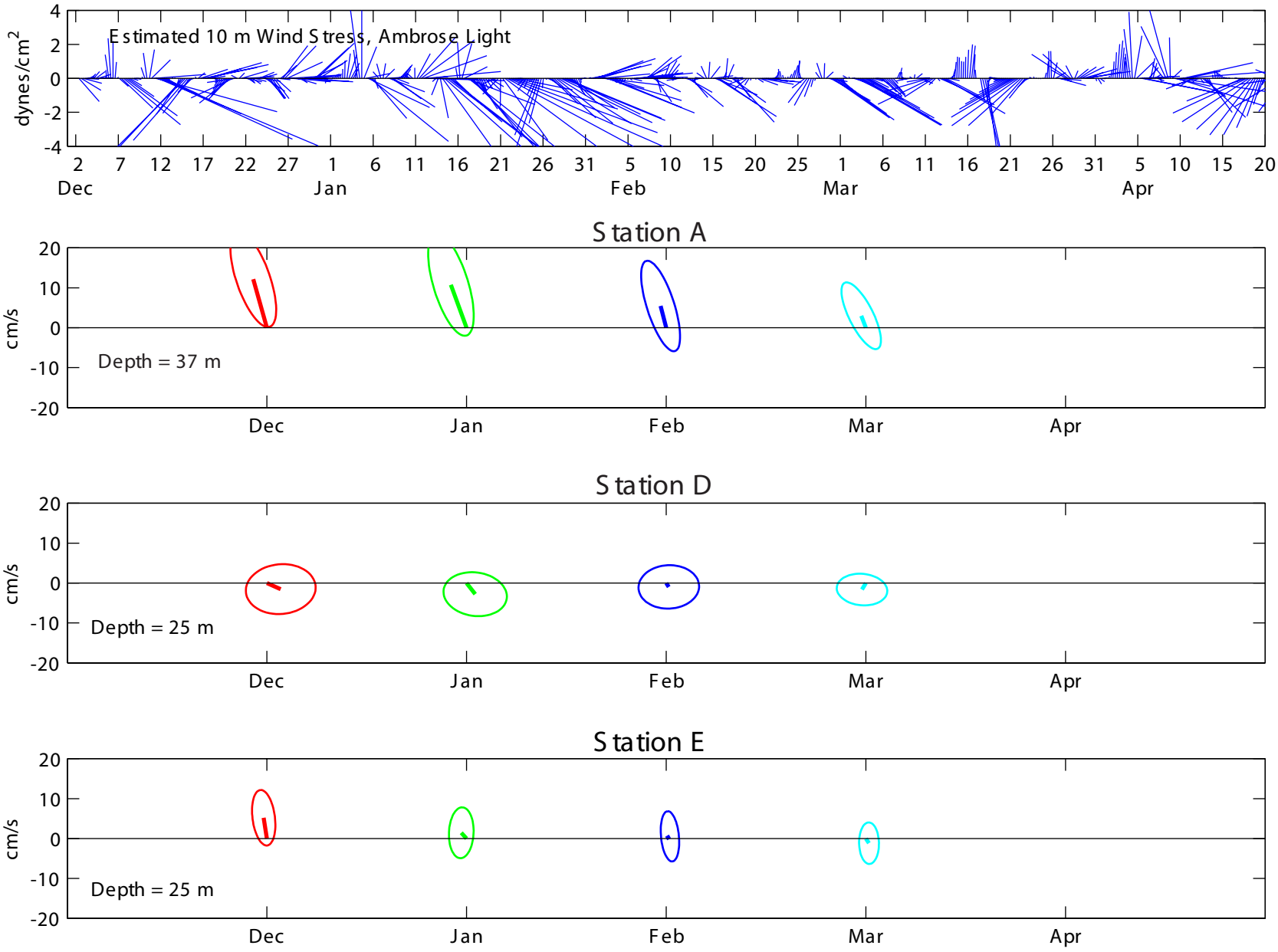
Station E: Current and Variability
ADCP Data



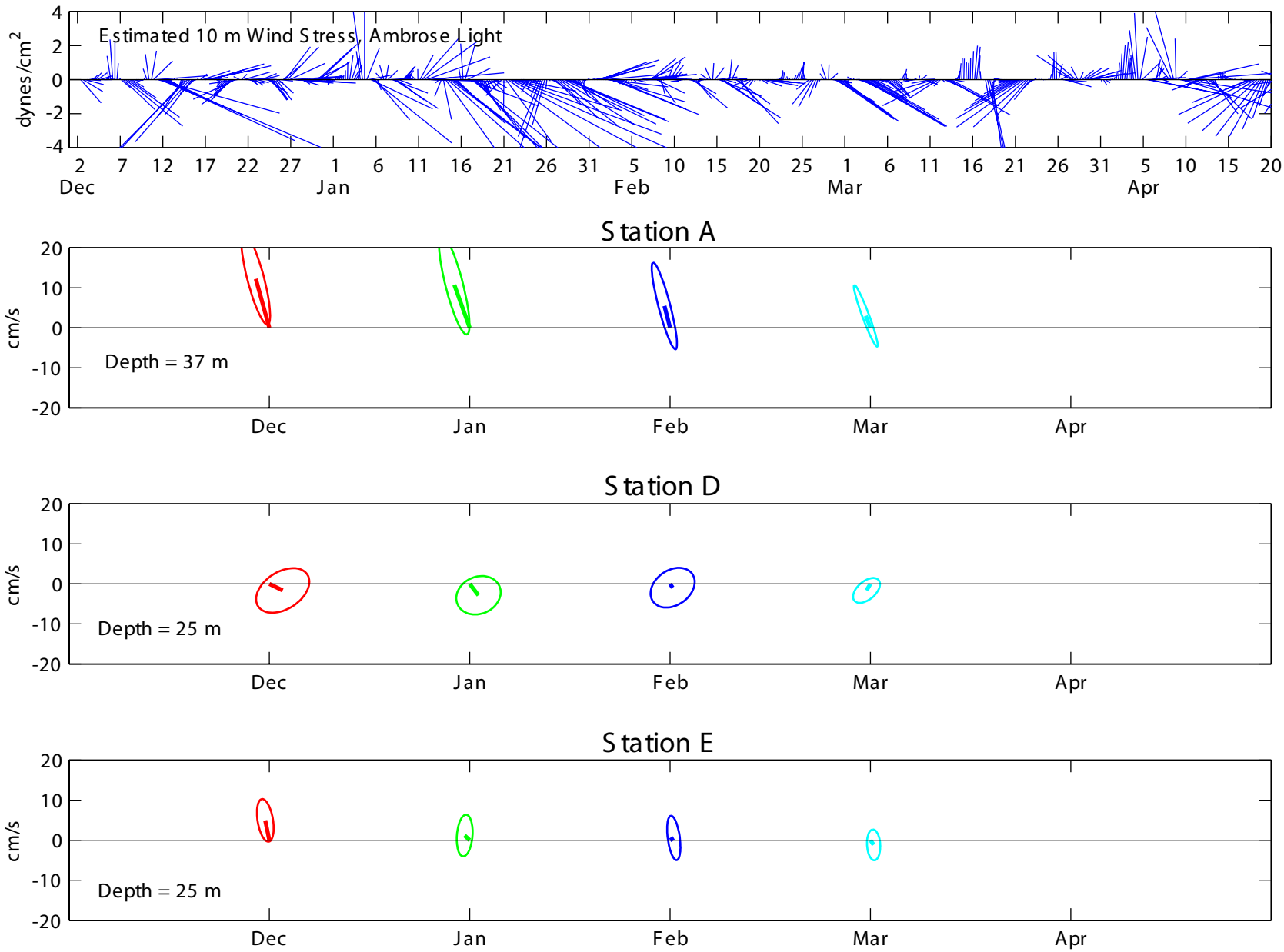
Station F: Current and Variability
ADCP Data



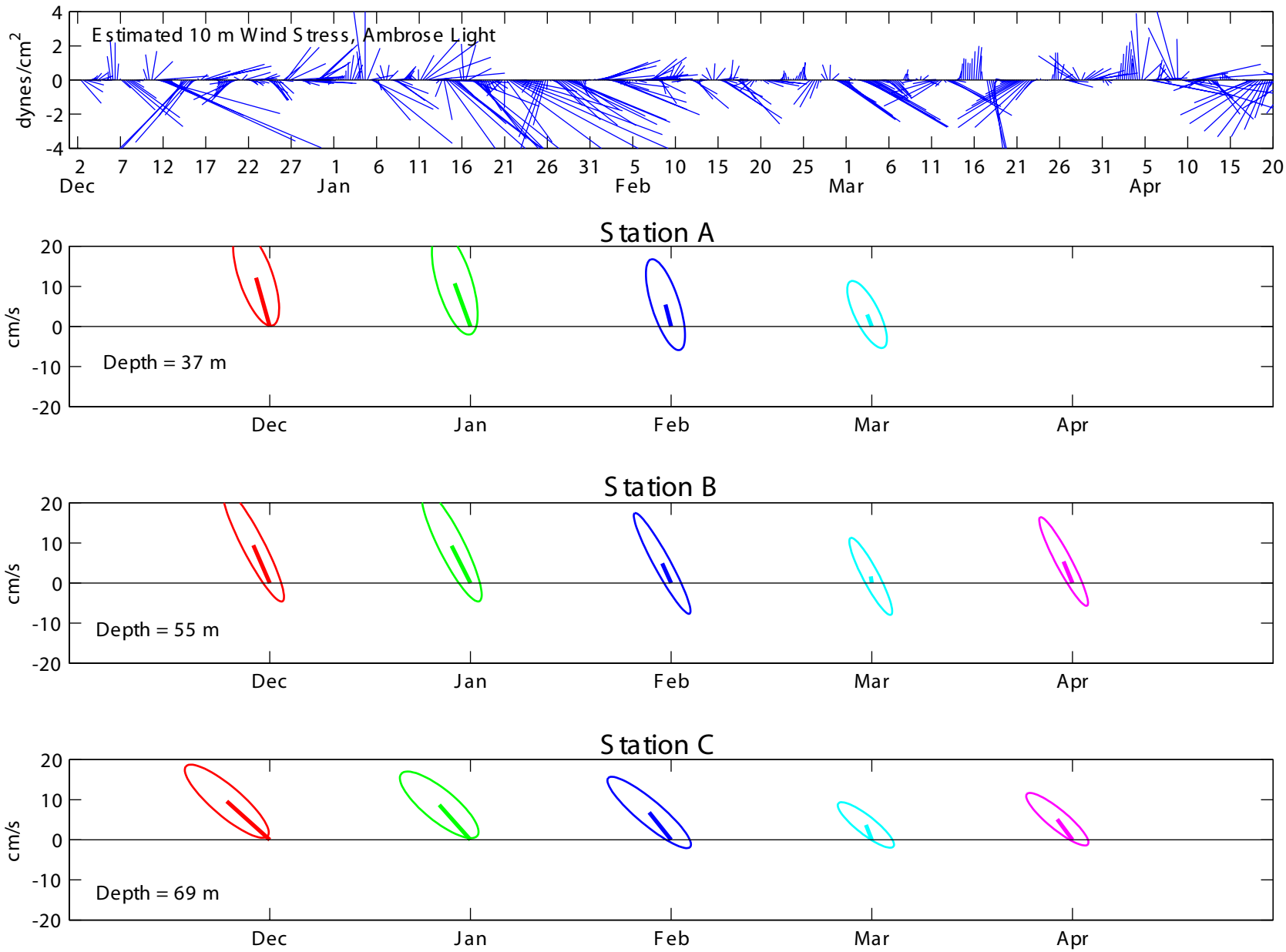
Low-Passed Wind Stress and Hourly-Averaged Current Mean Flow from Station A and Shelf Stations: BASS Data



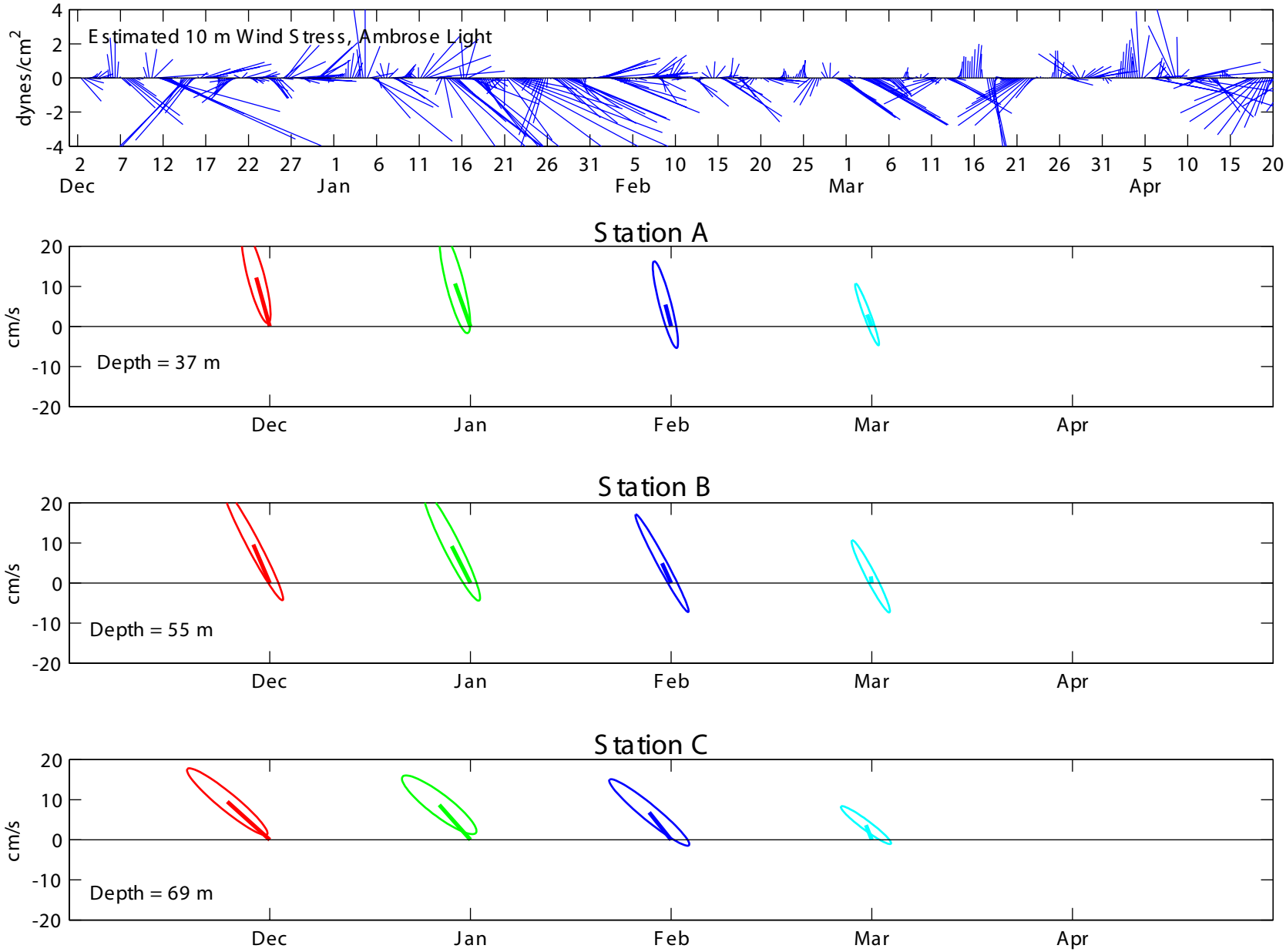
Low-Passed Wind Stress and Low-Passed Current Mean Flow from Station A and Shelf Stations: BASS Data



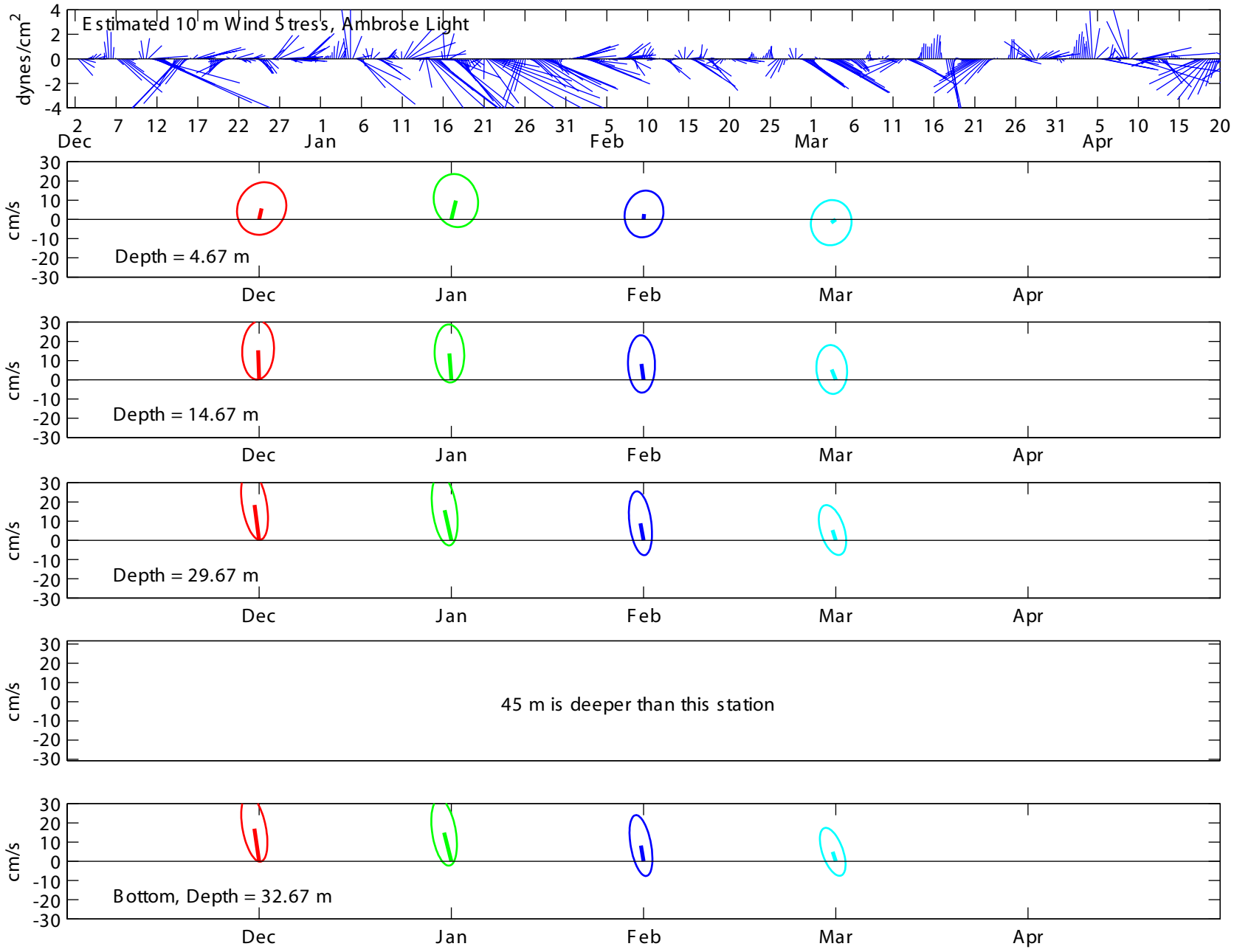
Low-Passed Wind Stress and Hourly-Averaged Current Mean Flow from Valley Stations: BASS Data



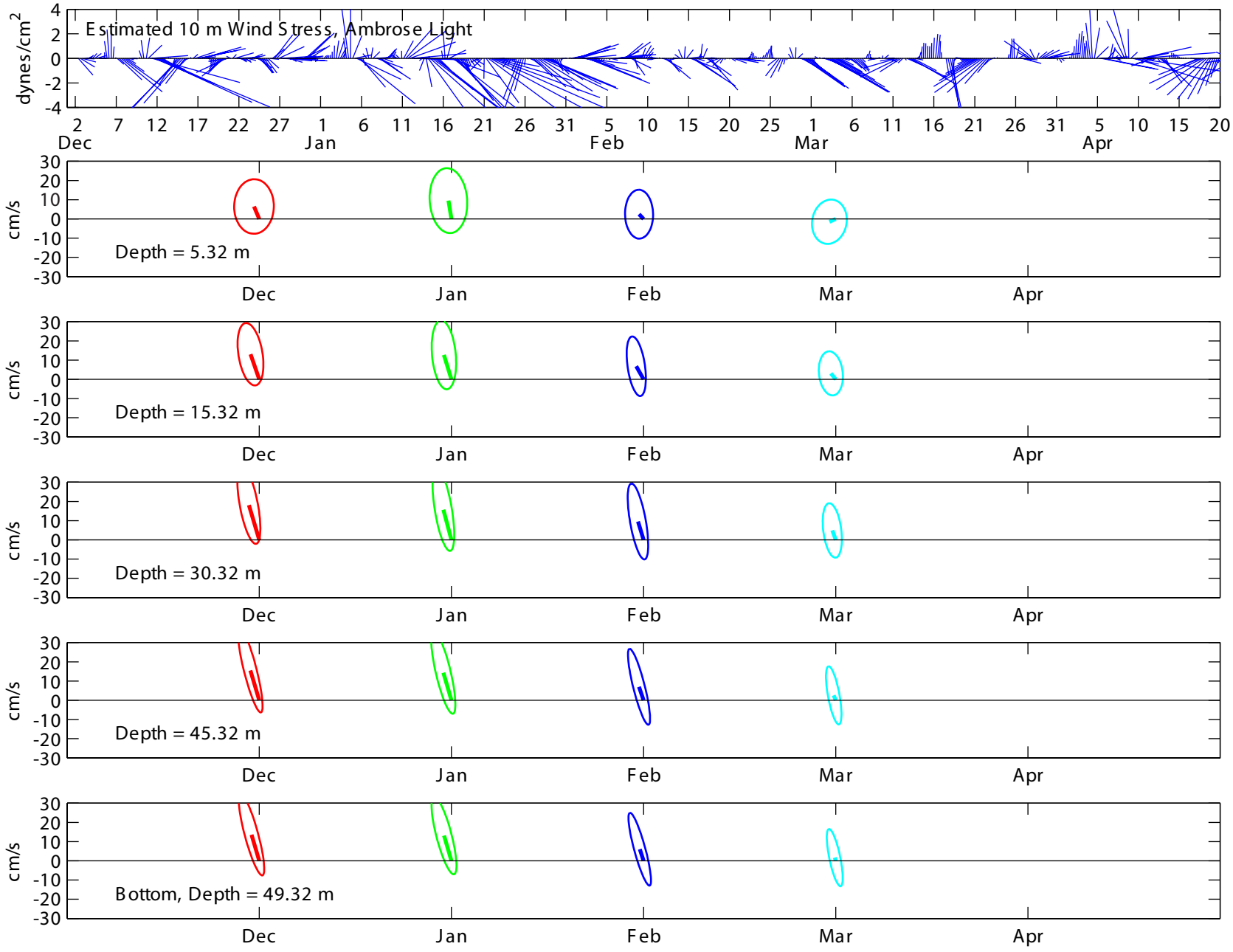
Low-Passed Wind Stress and Low-Passed Current Mean Flow from Valley Stations: BASS Data



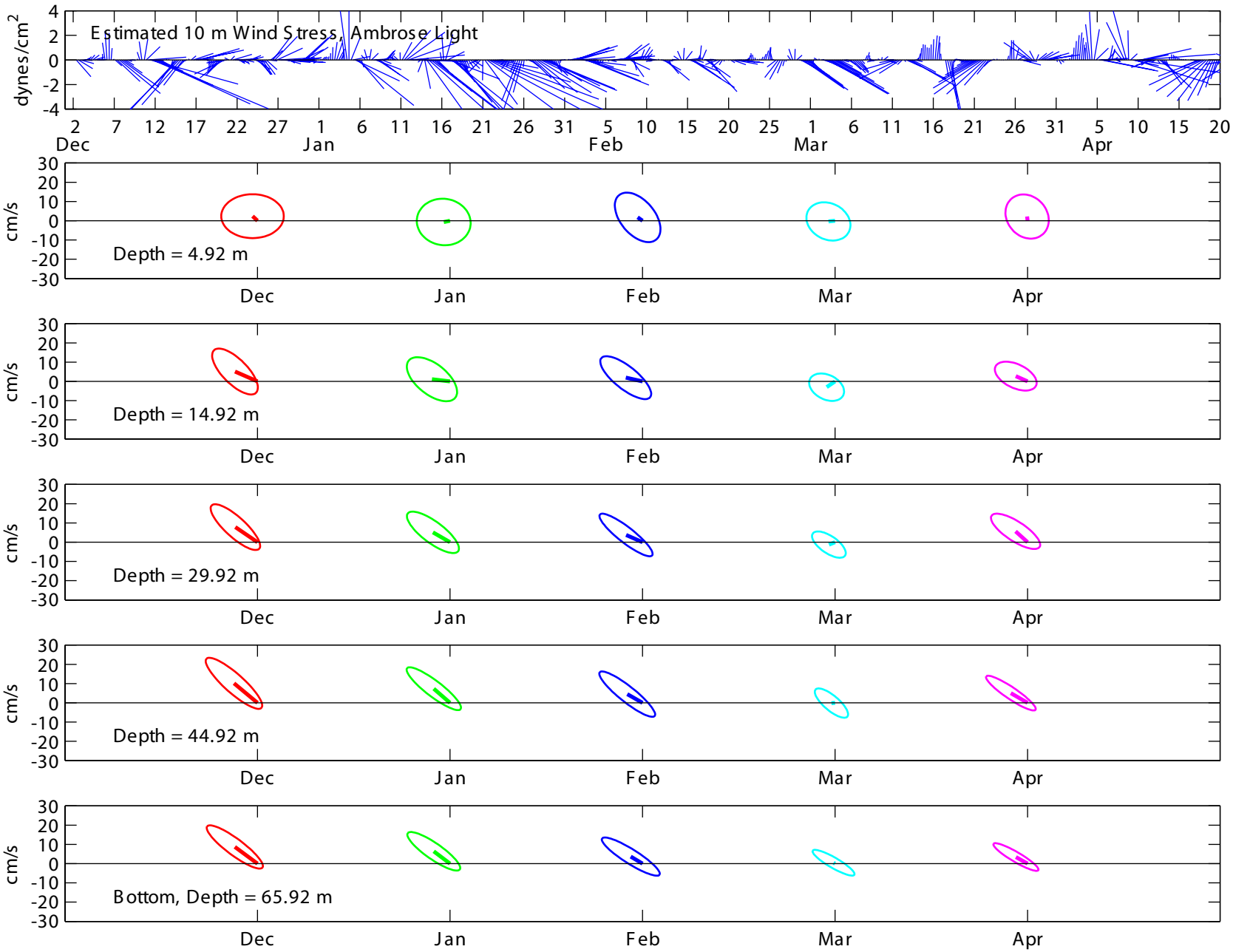
Low-Passed Wind Stress and Hourly Averaged Current Mean Flow from Station A



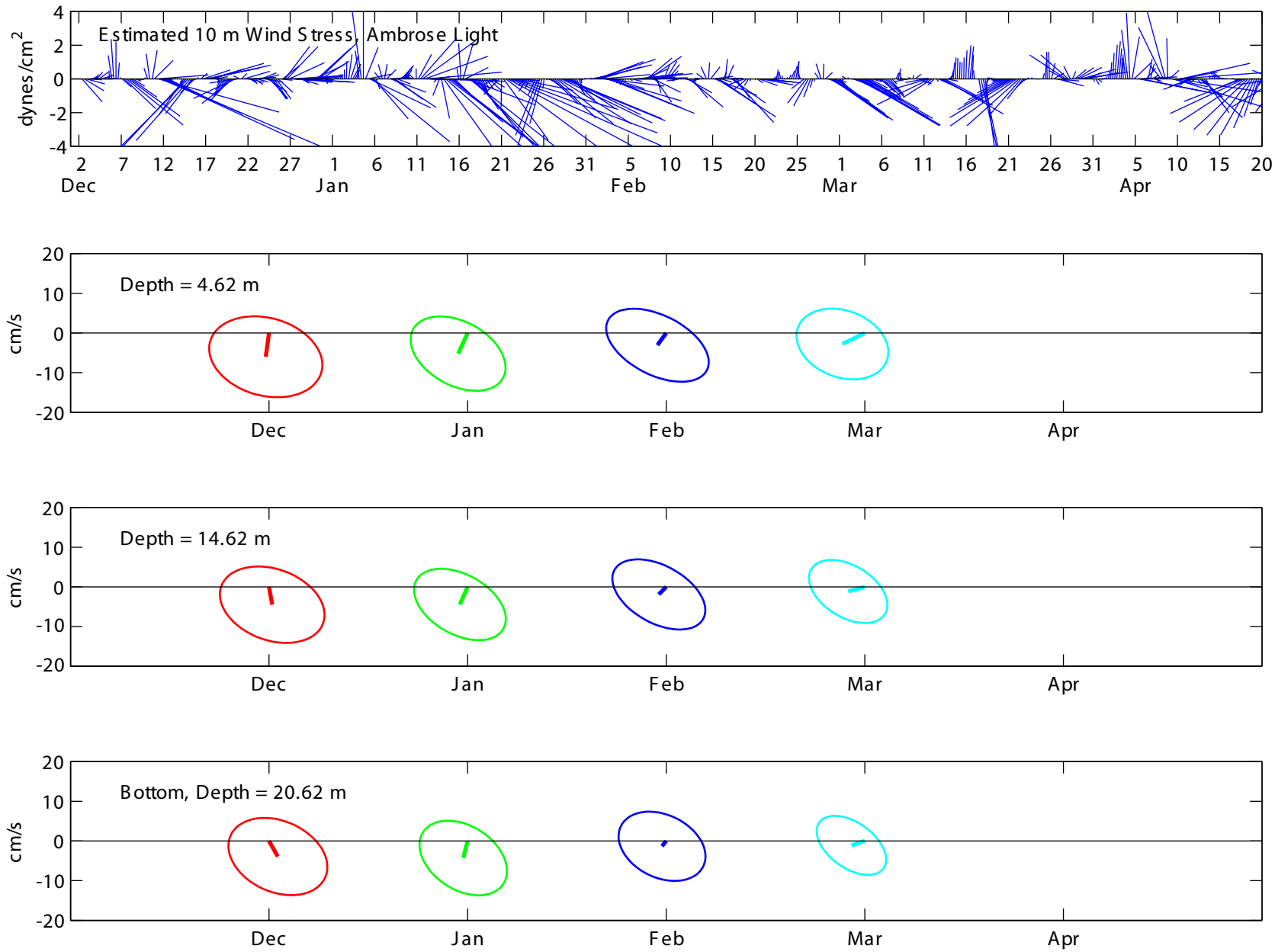
Low-Passed Wind Stress and Hourly Averaged Current Mean Flow from Station B



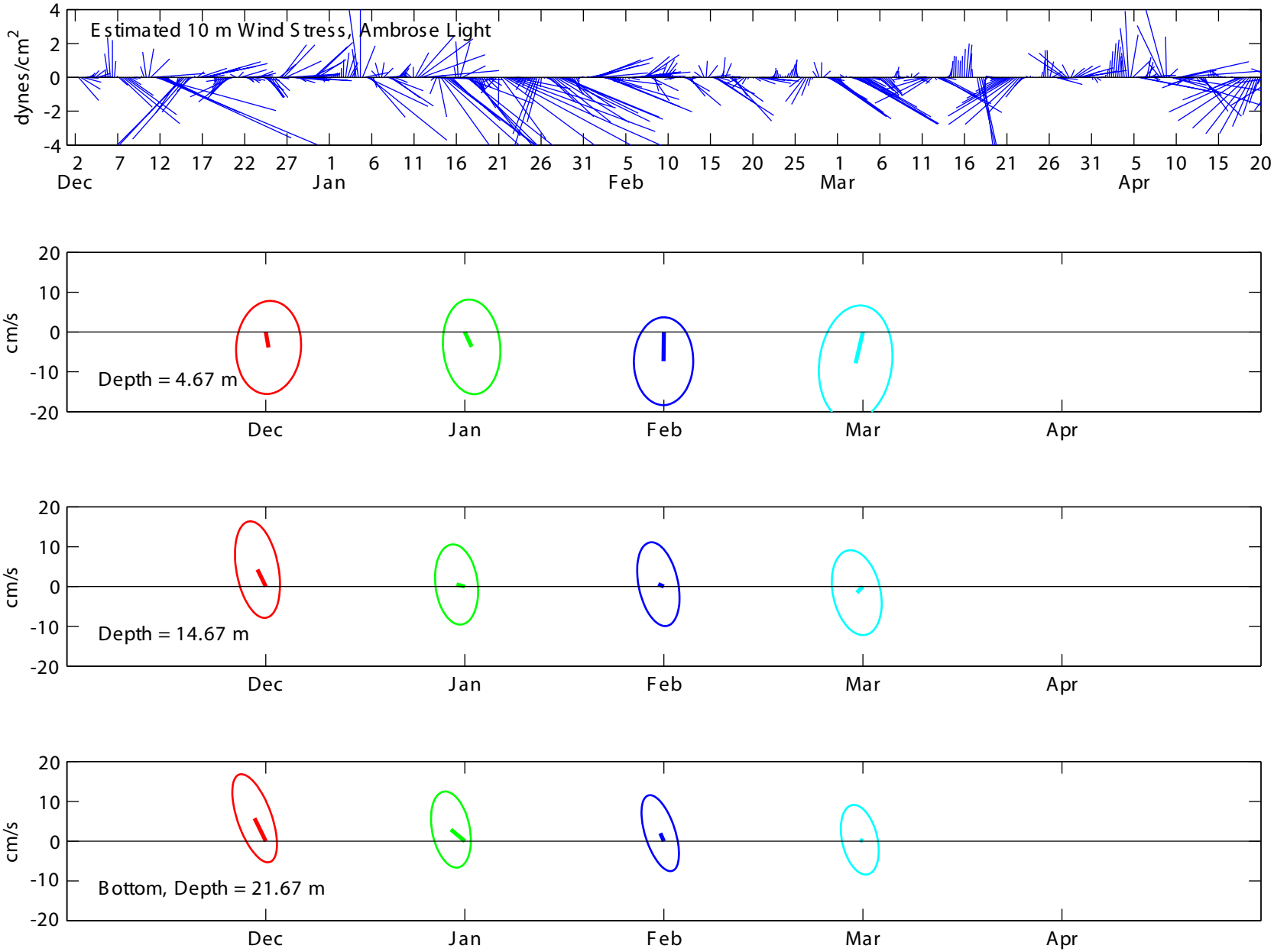
Low-Passed Wind Stress and Hourly Averaged Current Mean Flow from Station C



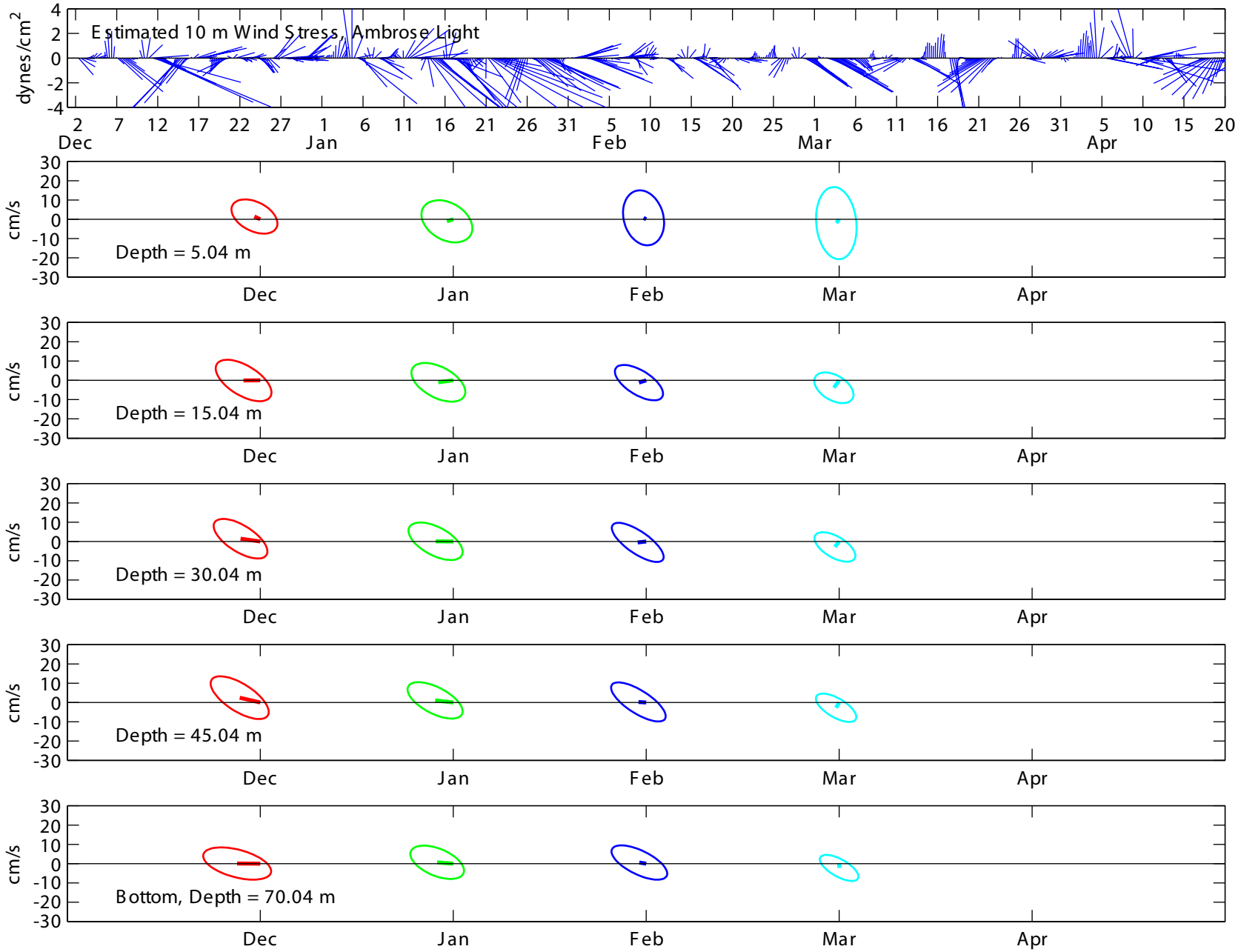
Low-Passed Wind Stress and Hourly Averaged Current Mean Flow from Station D



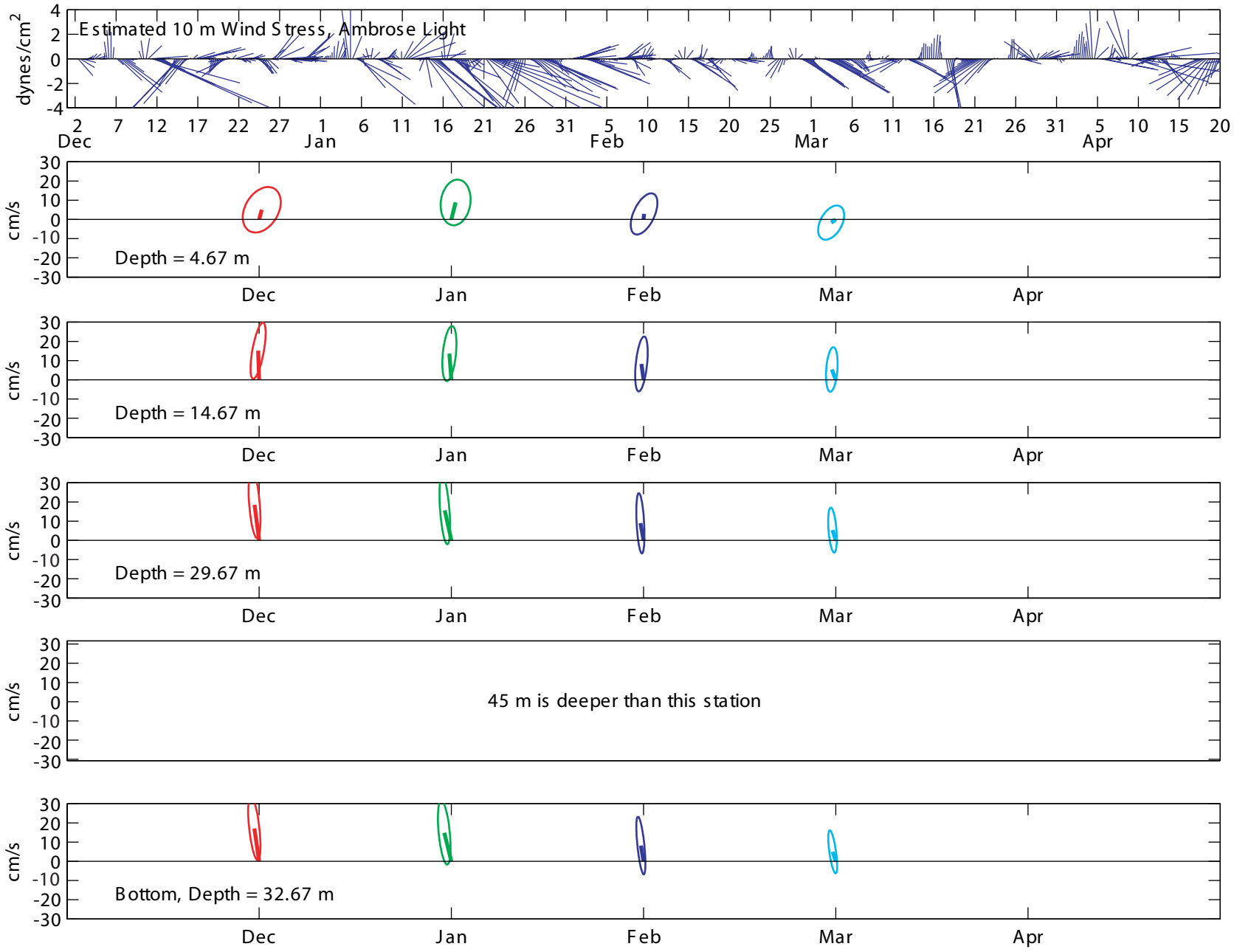
Low-Passed Wind Stress and Hourly Averaged Current Mean Flow from Station E



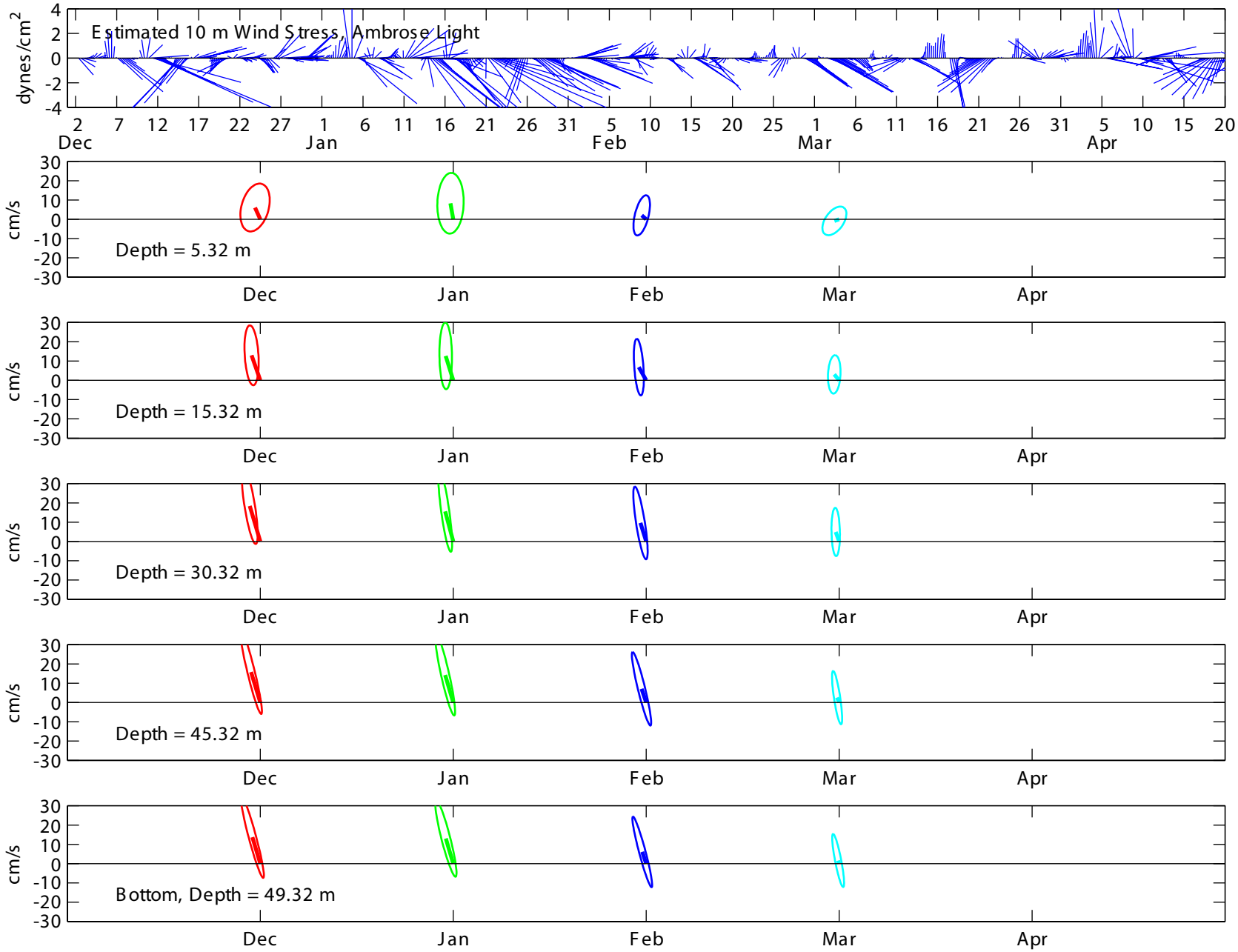
Low-Passed Wind Stress and Hourly Averaged Current Mean Flow from Station F



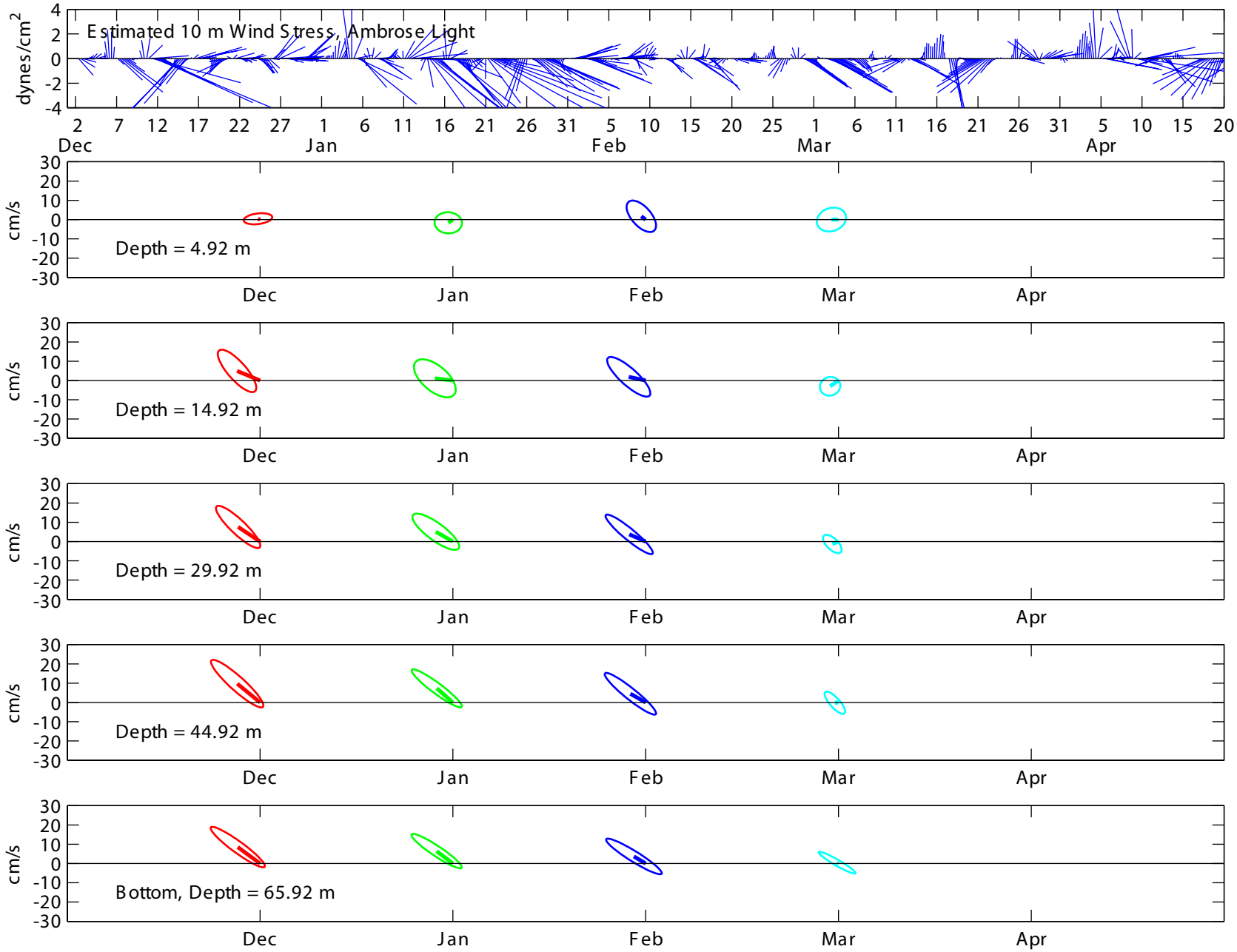
Low-Passed Wind Stress Low-Passed Current Mean Flow from Station A



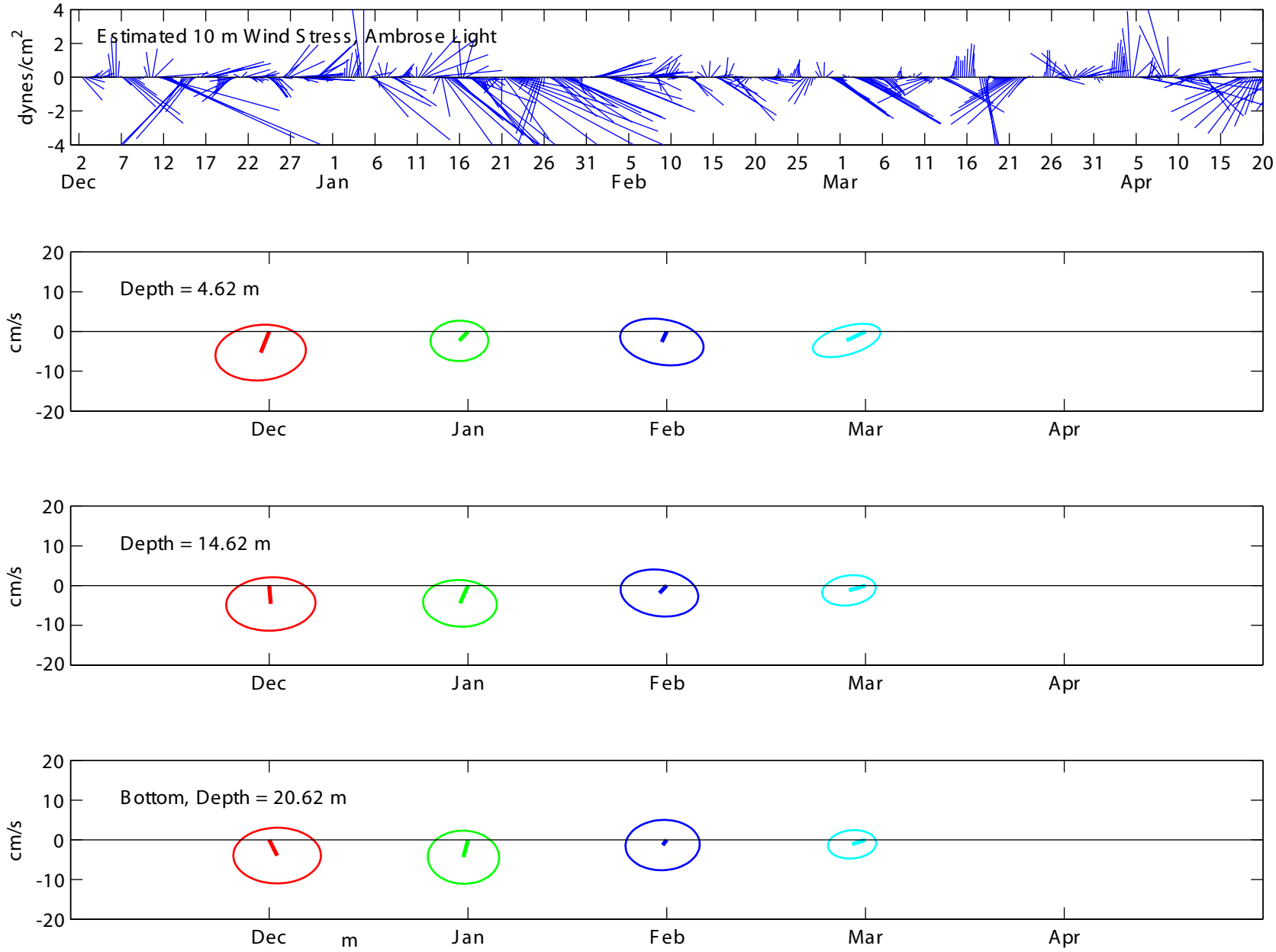
Low-Passed Wind Stress and Low-Passed Current Mean Flow from Station B



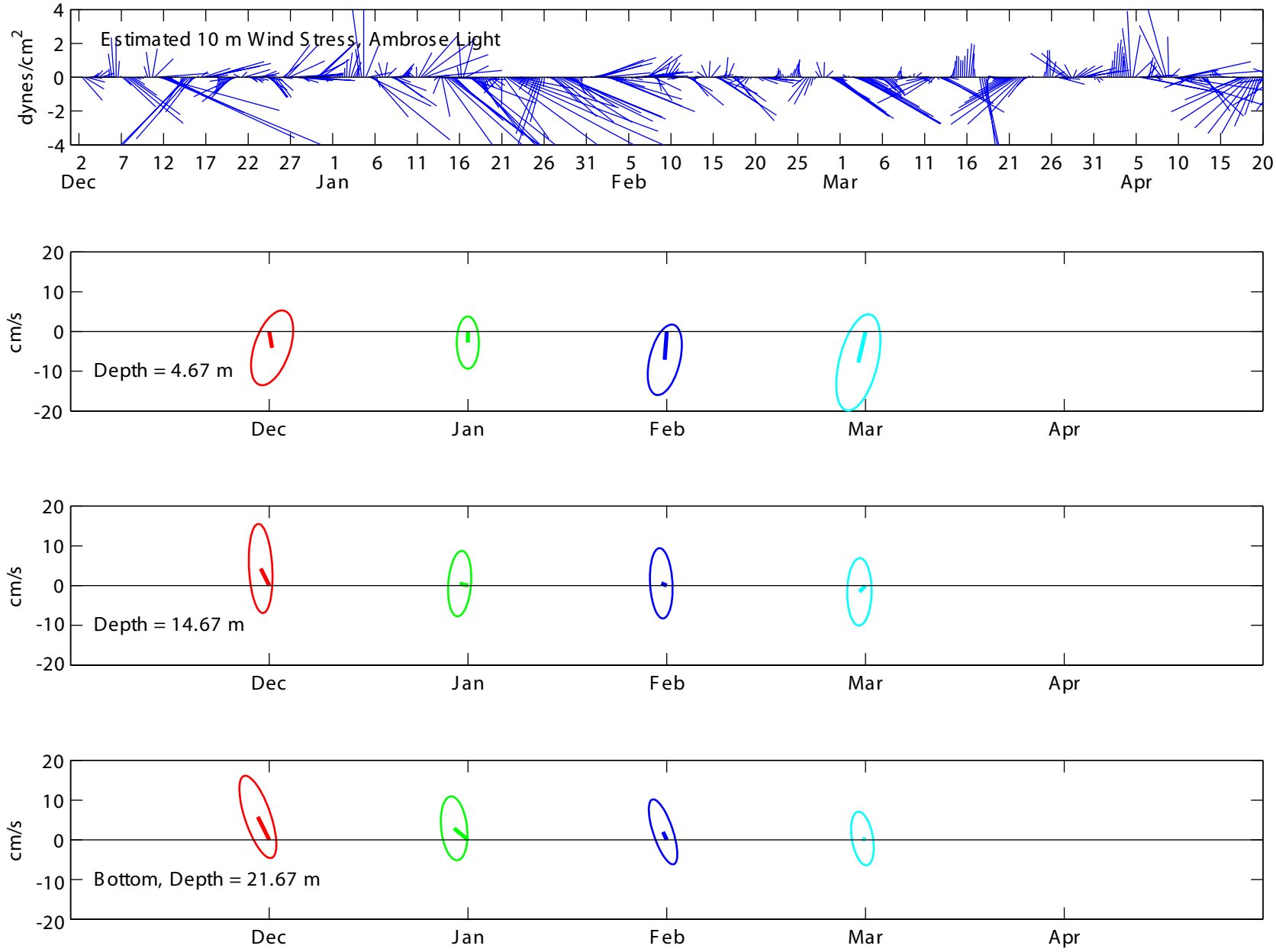
Low-Passed Wind Stress and Low-Passed Current Mean Flow from Station C



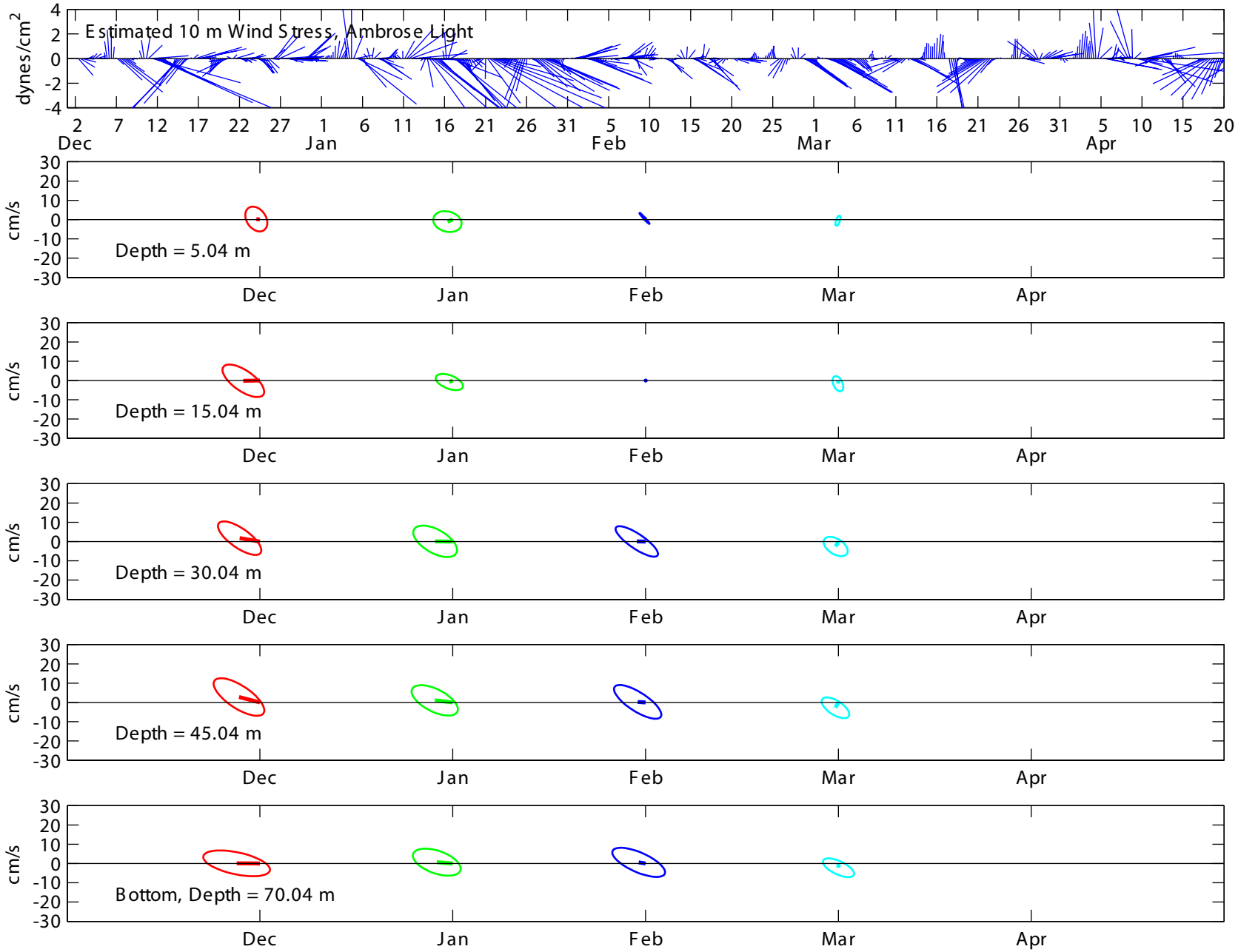
Low-Passed Wind Stress and Low-Passed Current Mean Flow from Station D



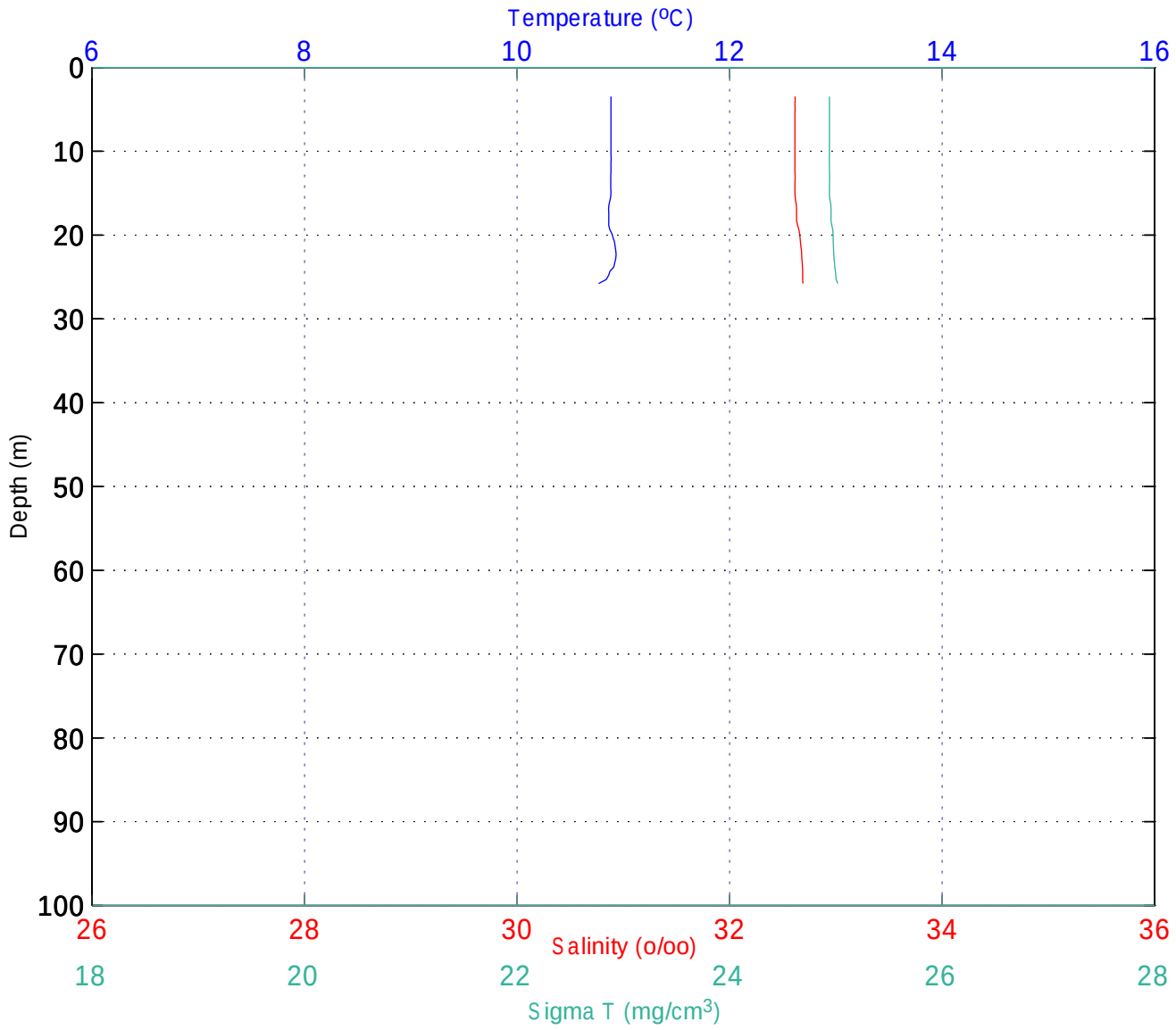
Low-Passed Wind Stress and Low-Passed Current Mean Flow from Station E



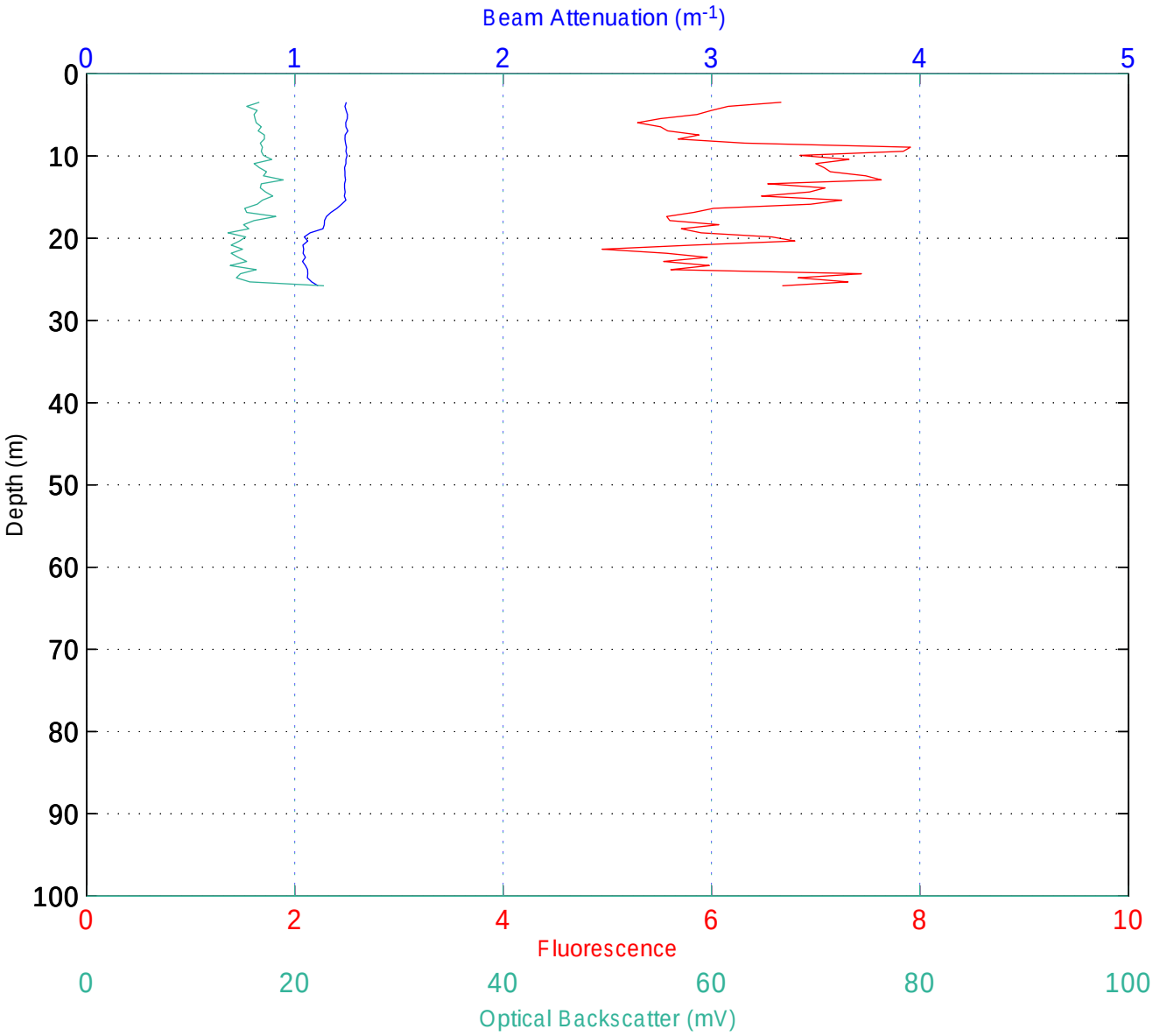
Low-Passed Wind Stress and Low-Passed Current Mean Flow from Station F



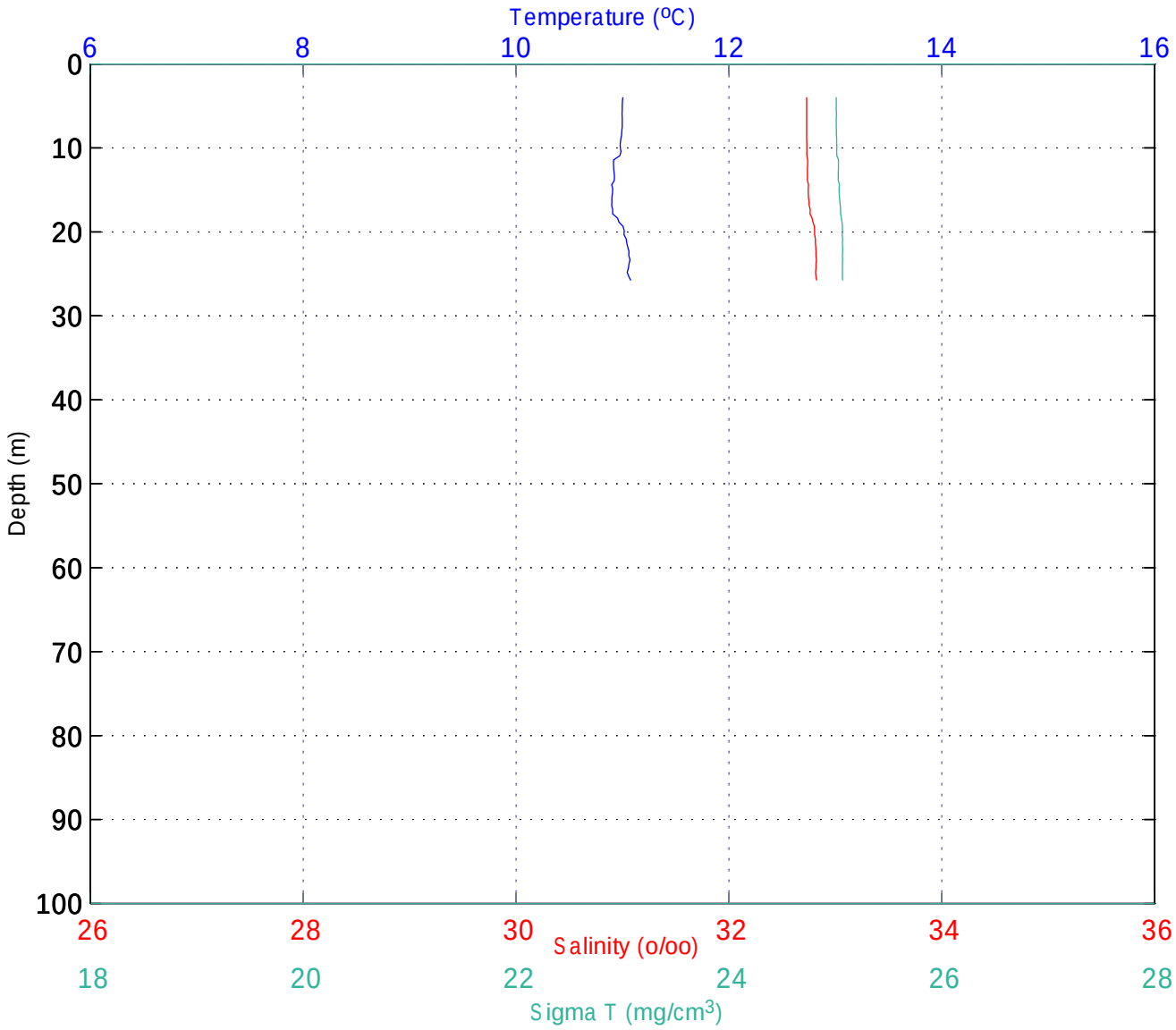
Oceanus Cast 1: Temperature, Salinity, and Sigma T



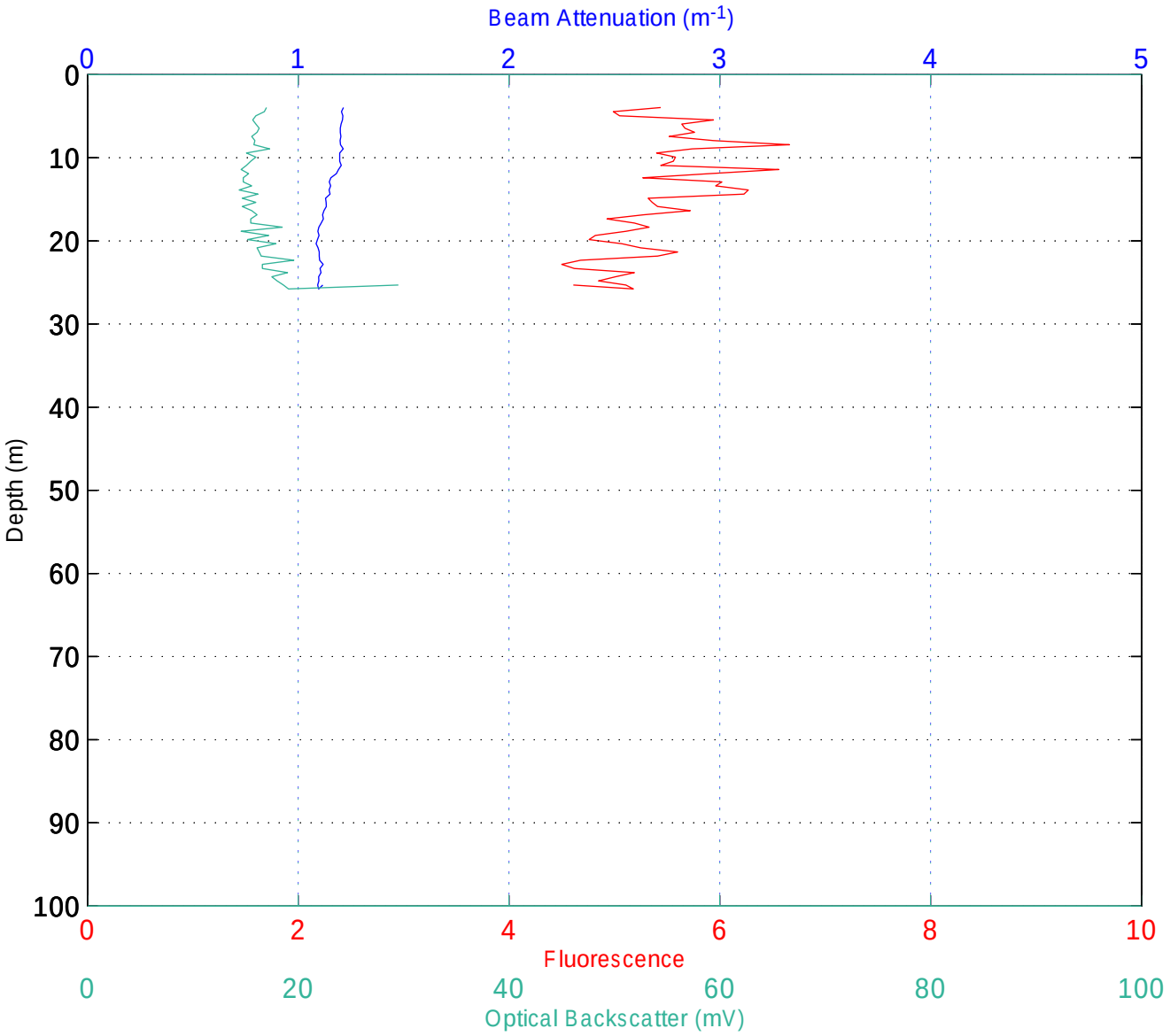
Oceanus Cast 1: Beam Attenuation, Fluorescence, and Optical Backscatter



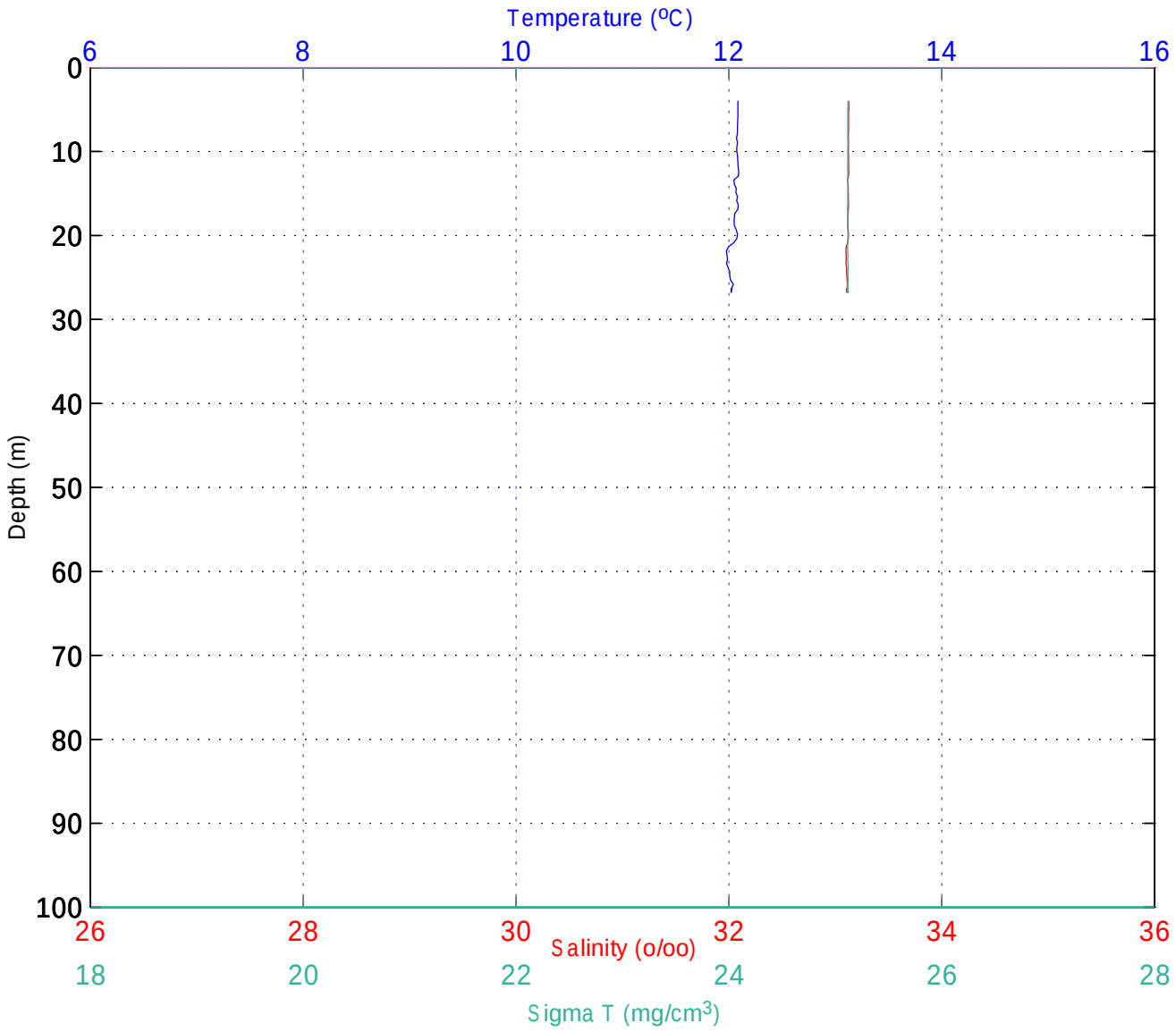
Oceanus Cast 2: Temperature, Salinity, and Sigma T



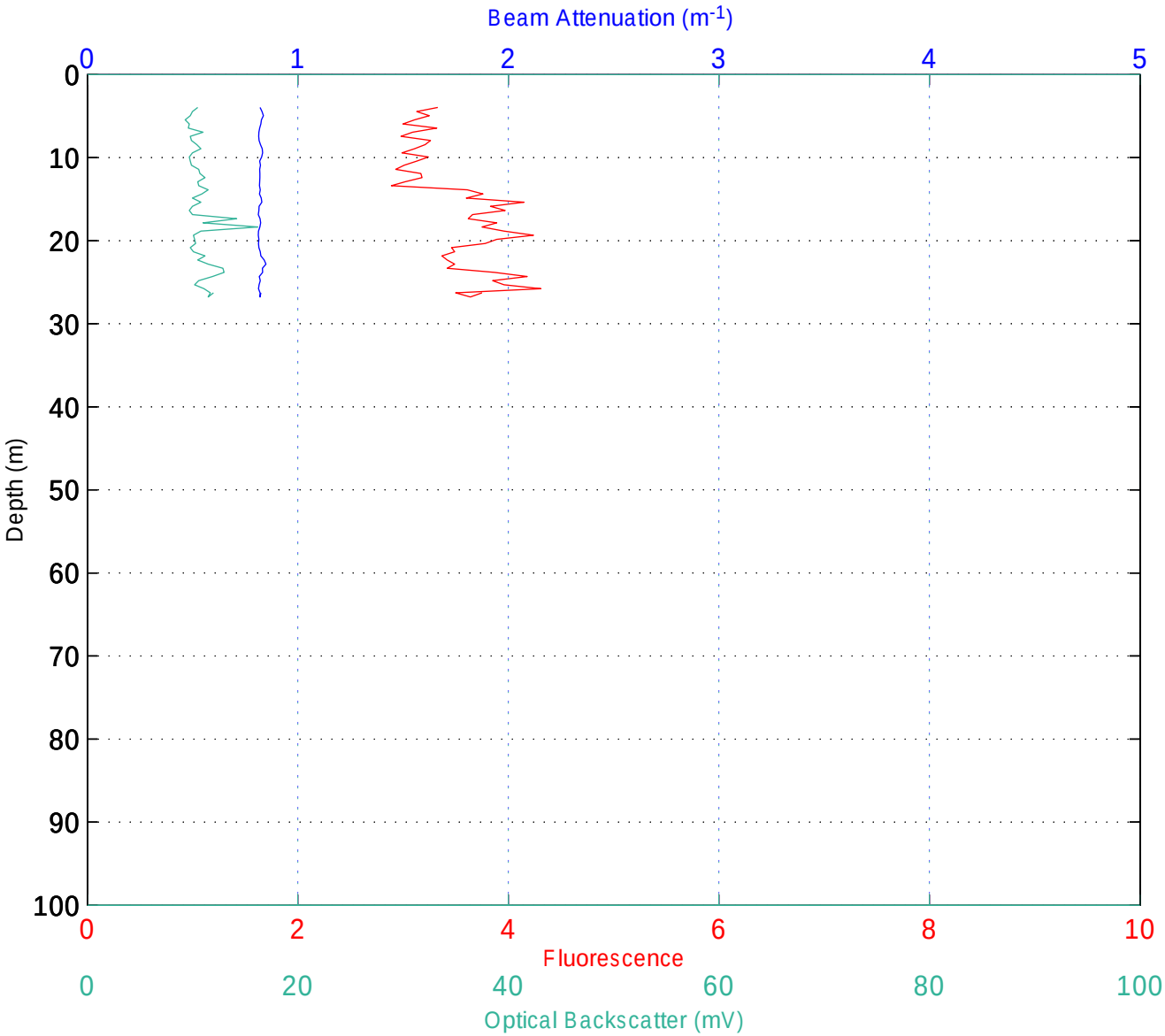
Oceanus Cast 2: Beam Attenuation, Fluorescence, and Optical Backscatter



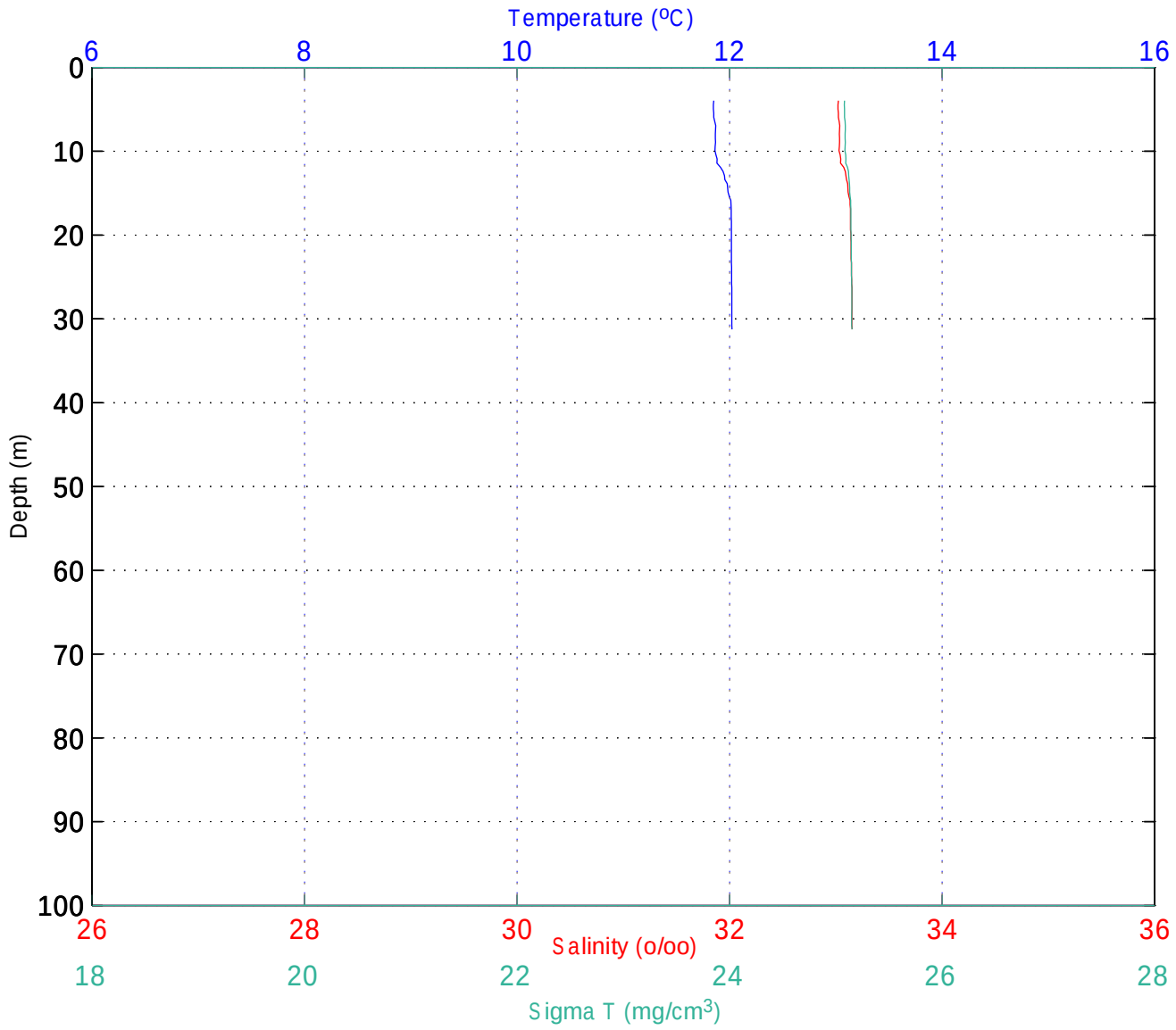
Oceanus Cast 3: Temperature, Salinity, and Sigma T



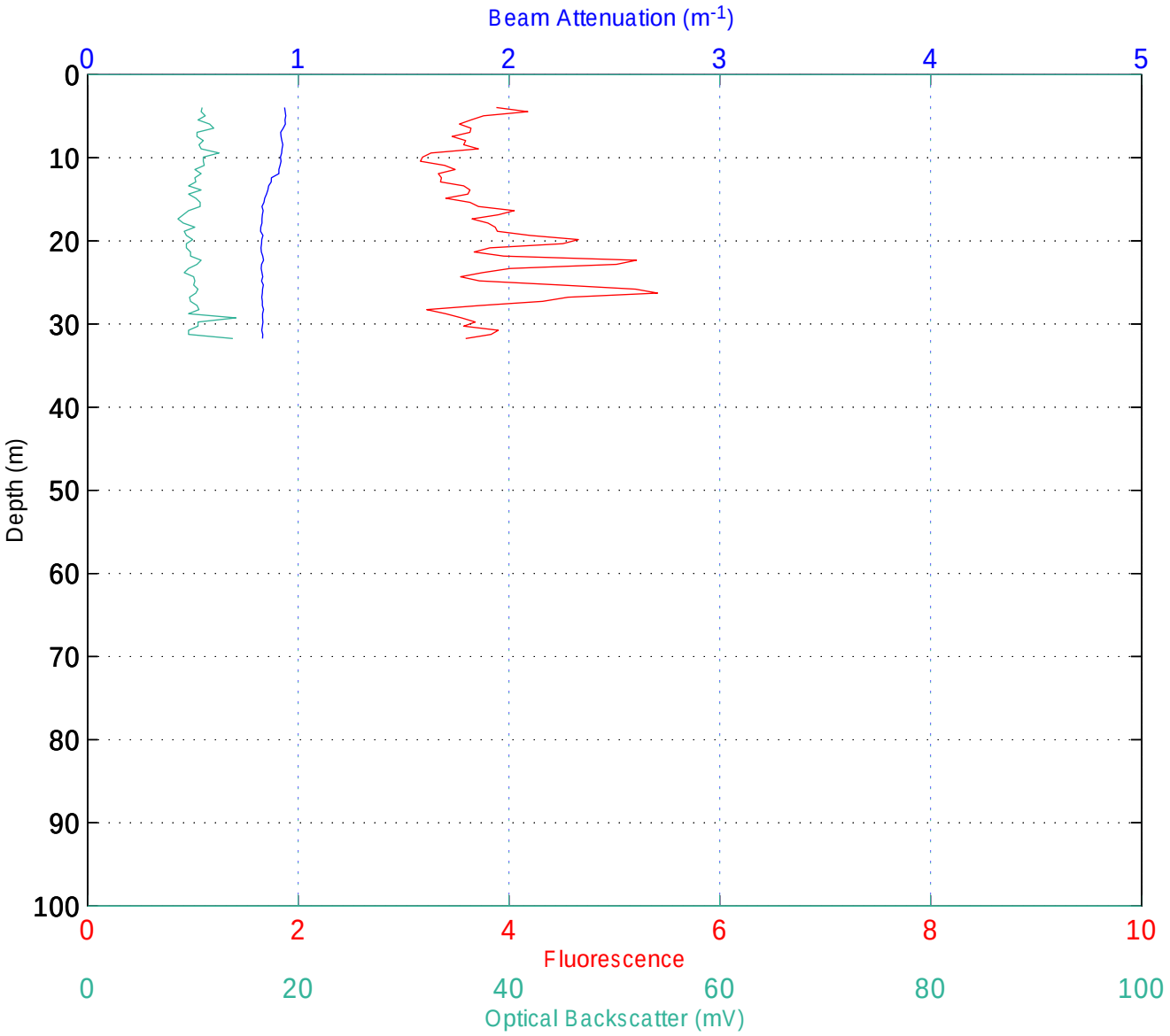
Oceanus Cast 3: Beam Attenuation, Fluorescence, and Optical Backscatter



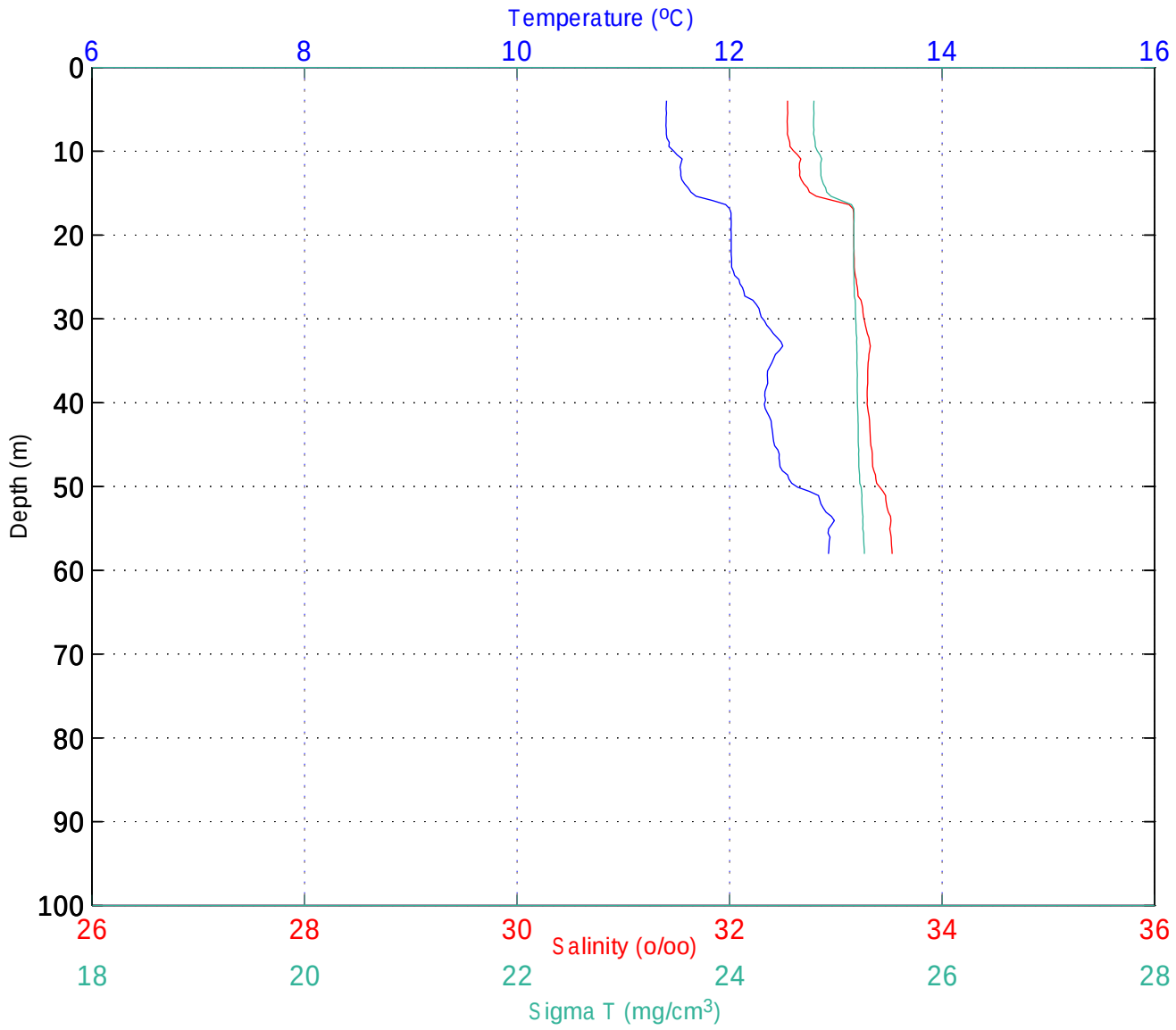
Oceanus Cast 4: Temperature, Salinity, and Sigma T



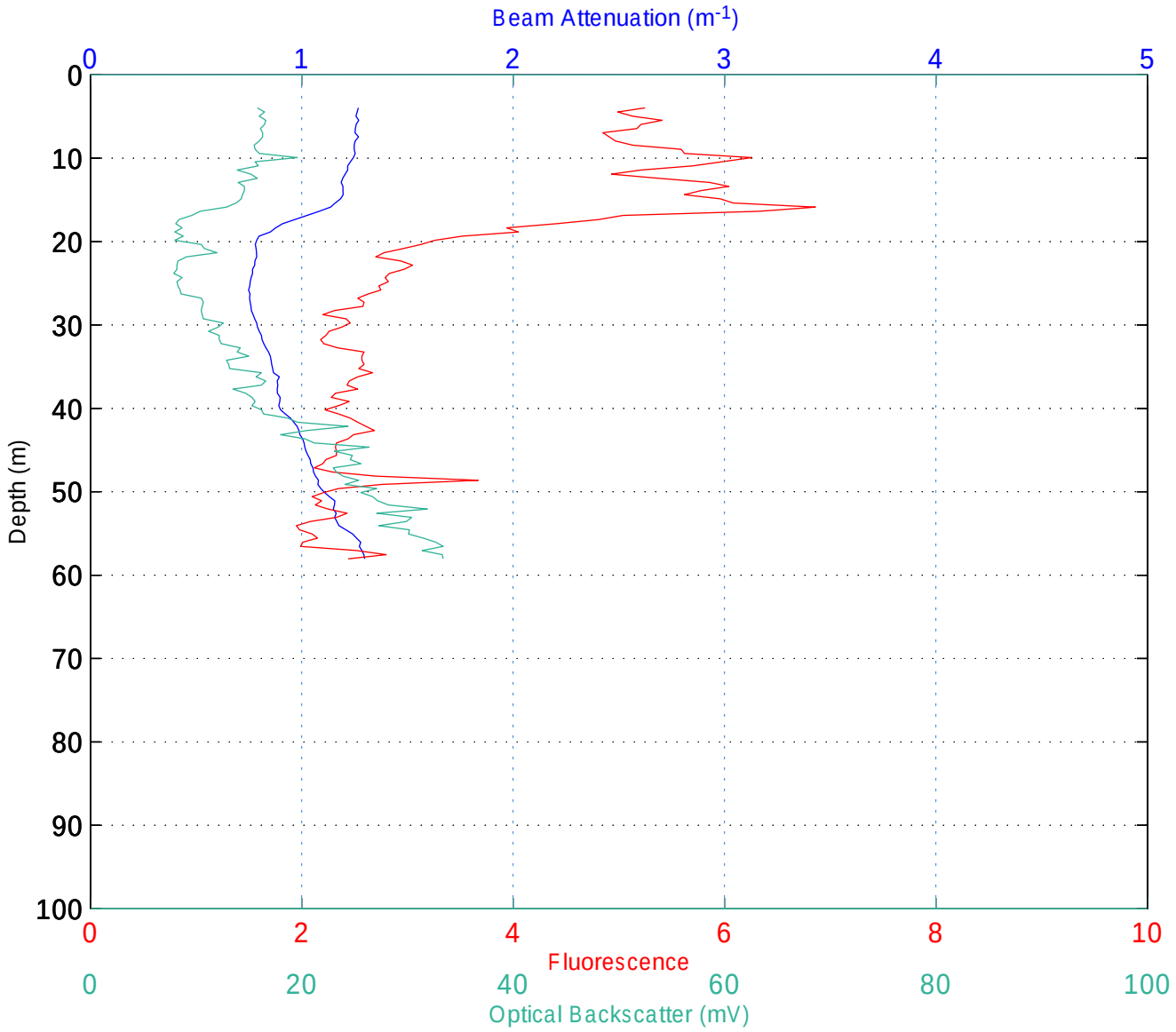
Oceanus Cast 4: Beam Attenuation, Fluorescence, and Optical Backscatter



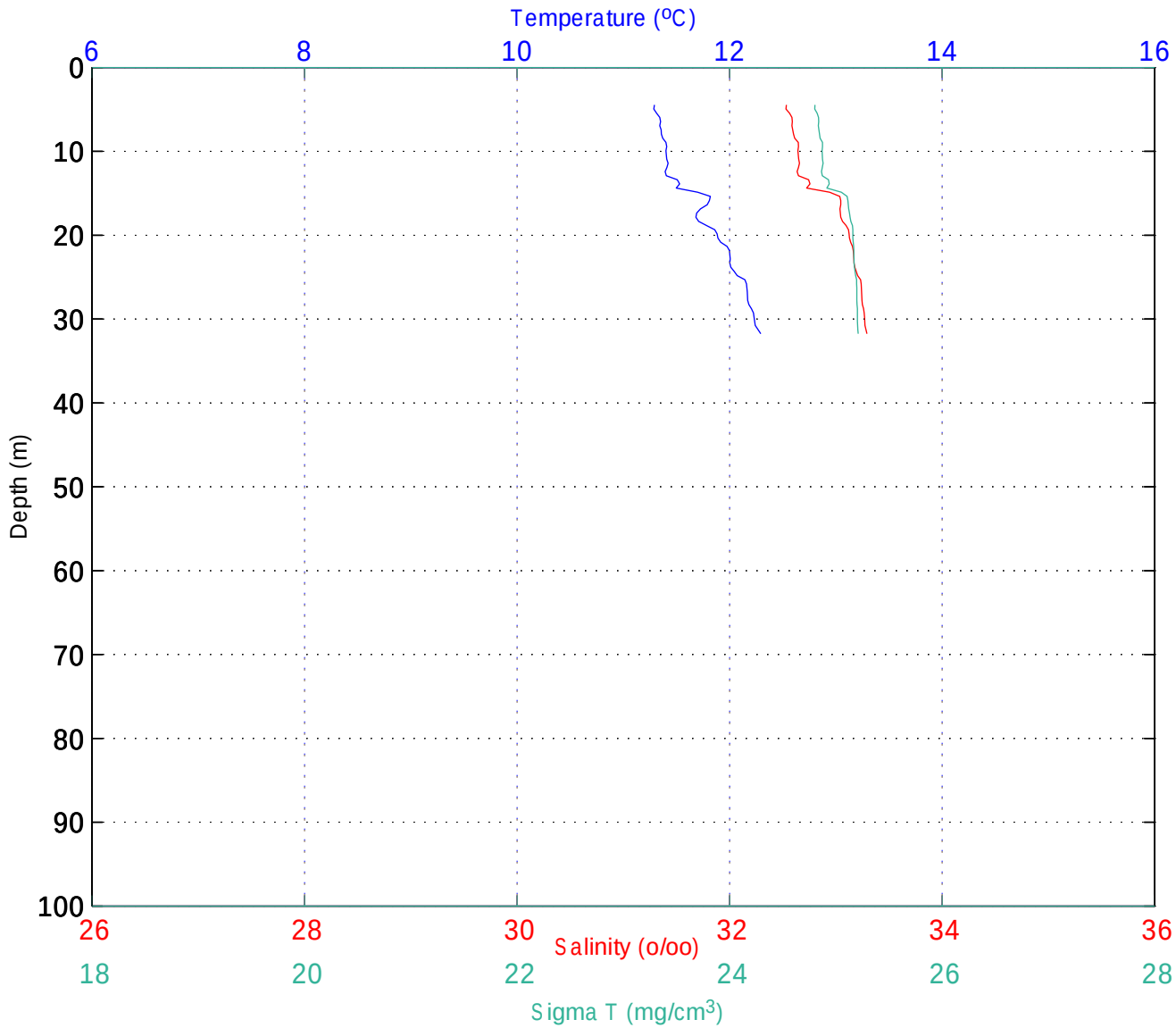
Oceanus Cast 5: Temperature, Salinity, and Sigma T



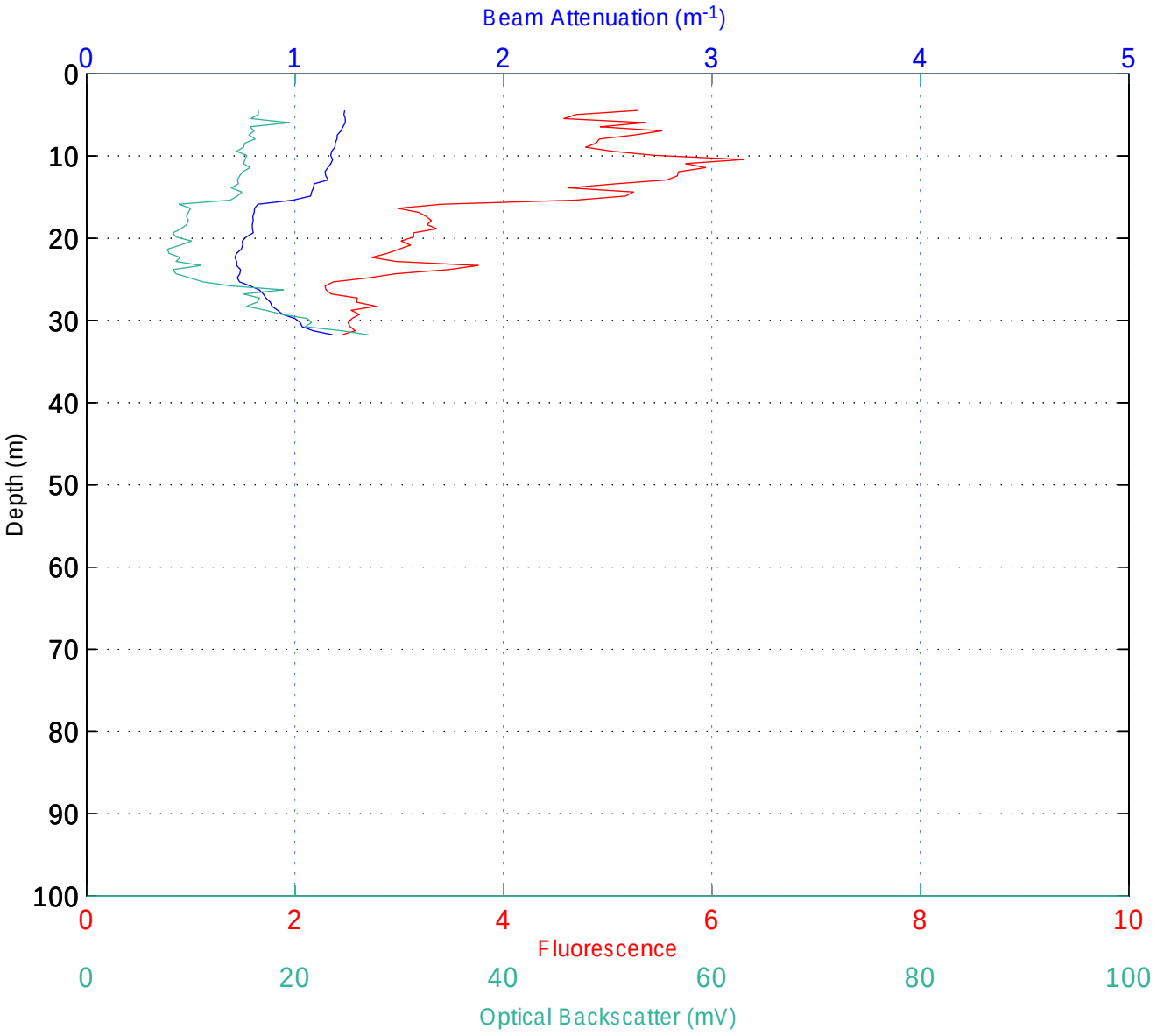
Oceanus Cast 5: Beam Attenuation, Fluorescence, and Optical Backscatter



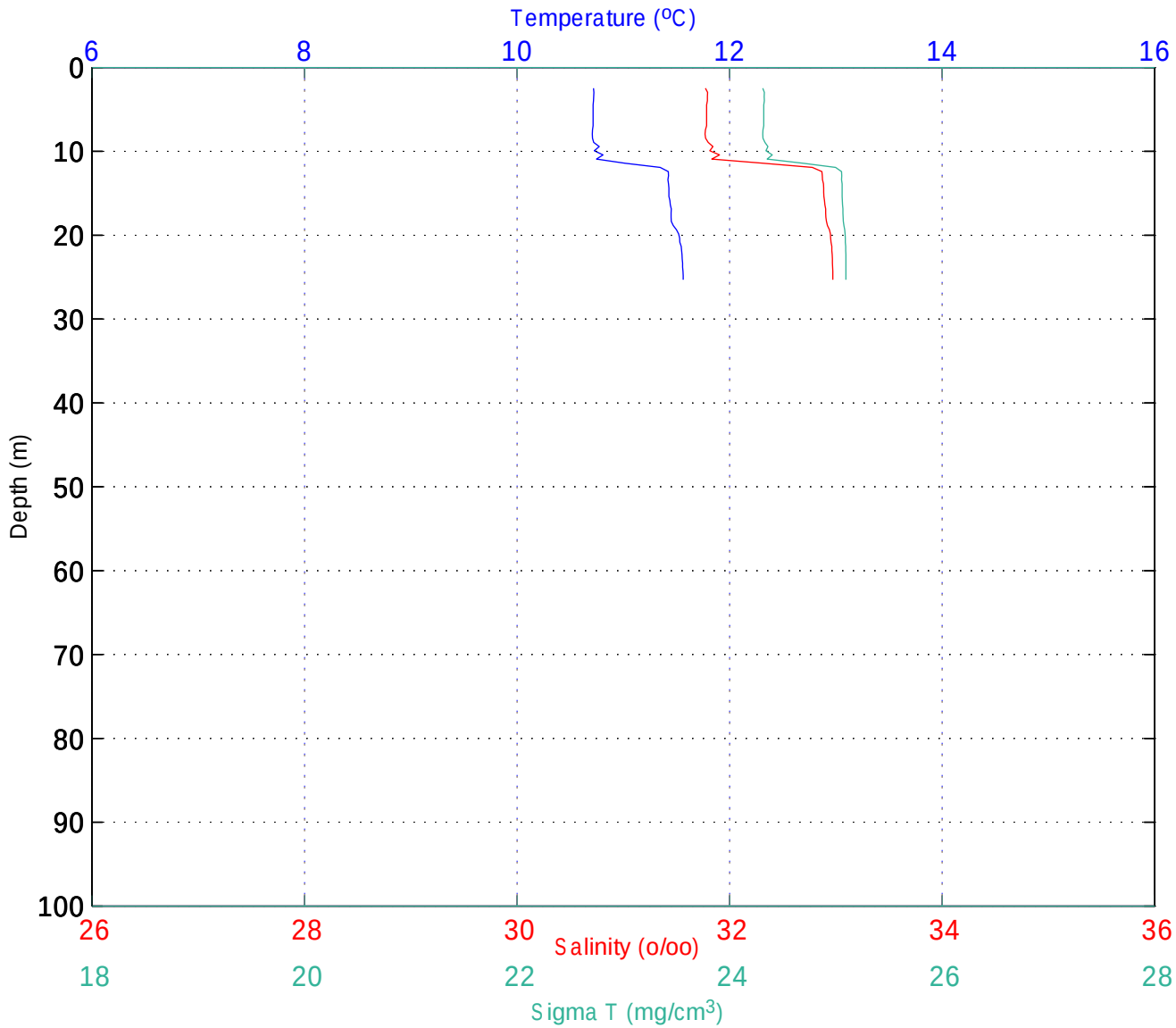
Oceanus Cast 6: Temperature, Salinity, and Sigma T



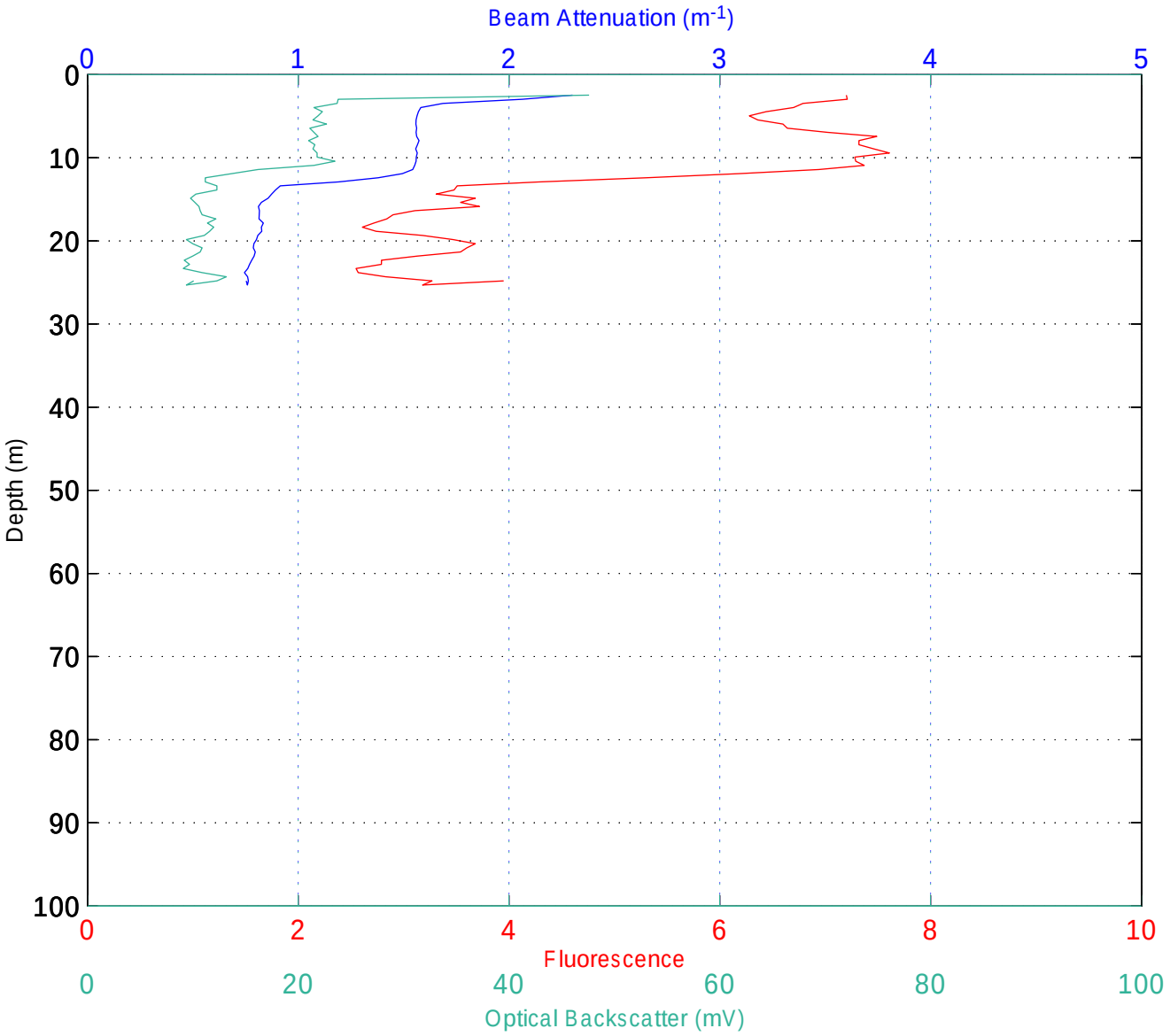
Oceanus Cast 6: Beam Attenuation, Fluorescence, and Optical Backscatter



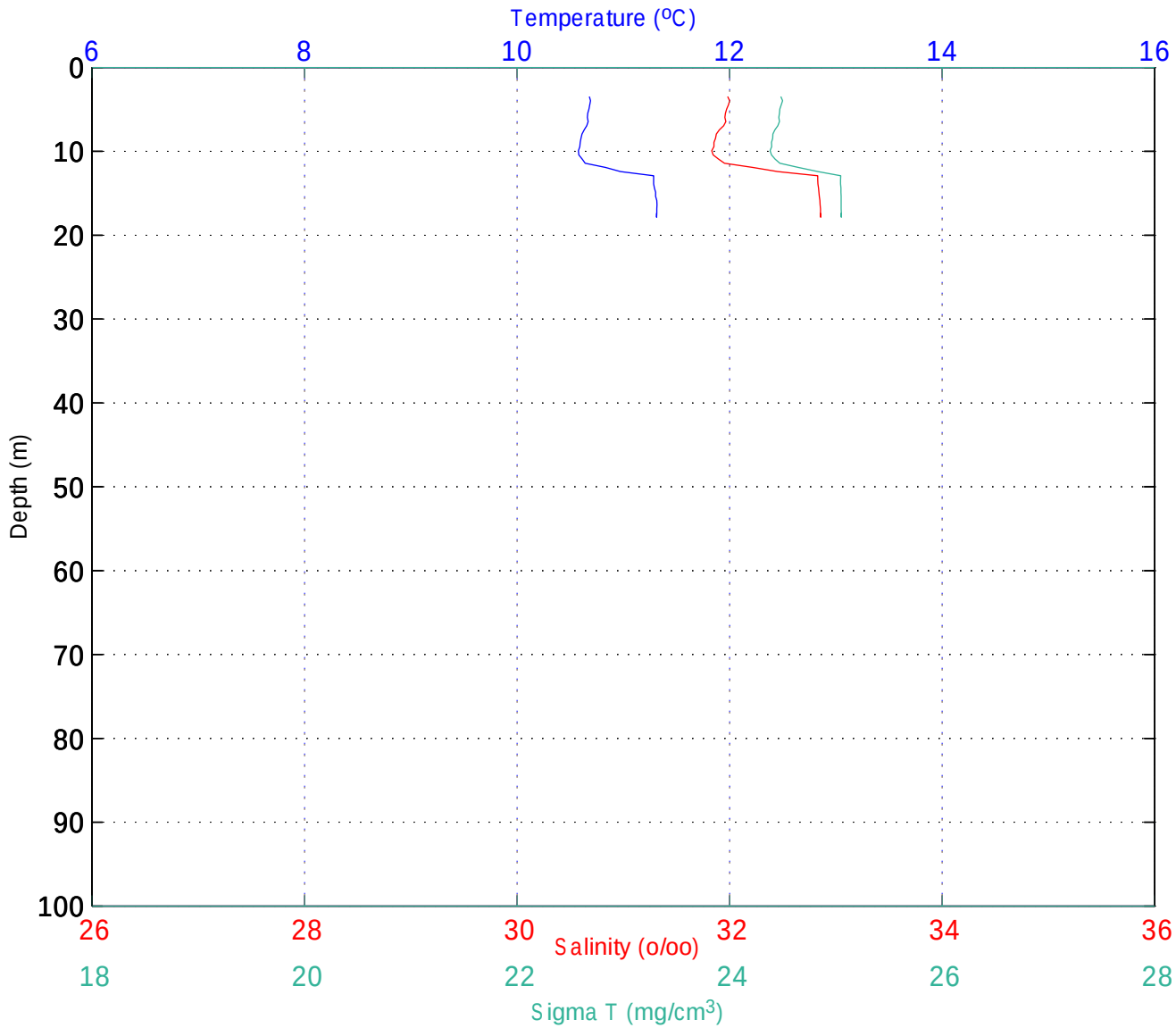
Oceanus Cast 7: Temperature, Salinity, and Sigma T



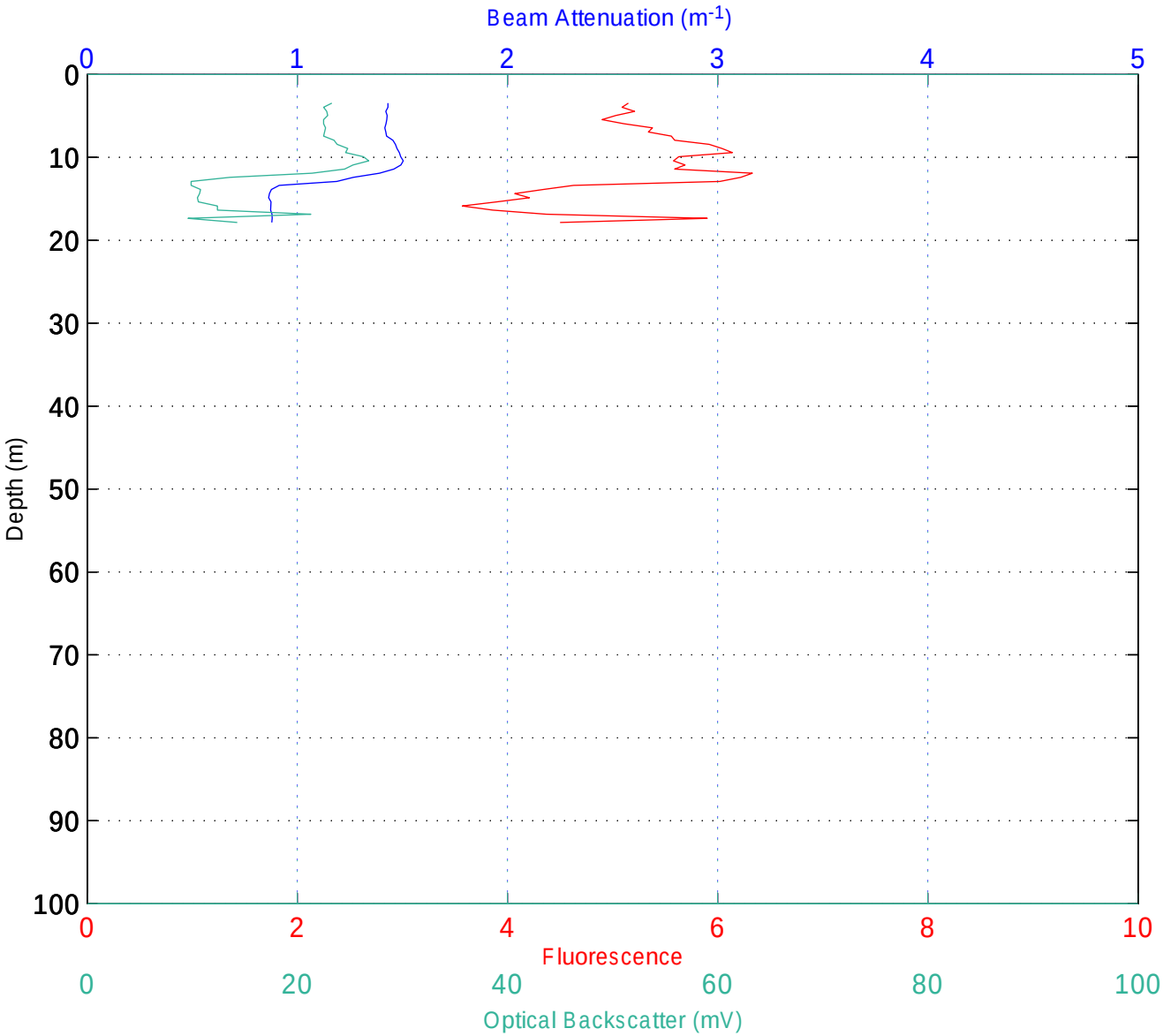
Oceanus Cast 7: Beam Attenuation, Fluorescence, and Optical Backscatter



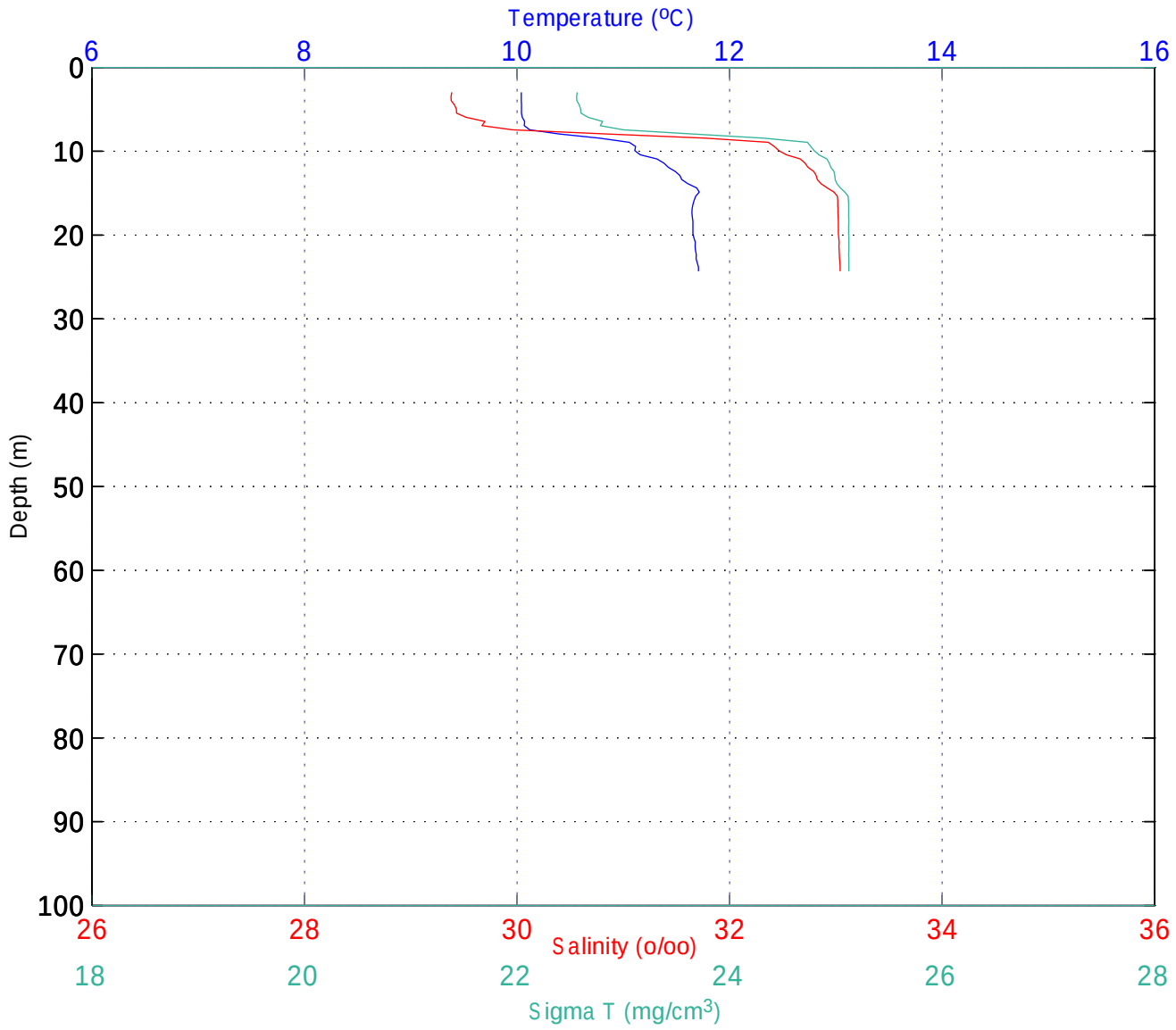
Oceanus Cast 8: Temperature, Salinity, and Sigma T



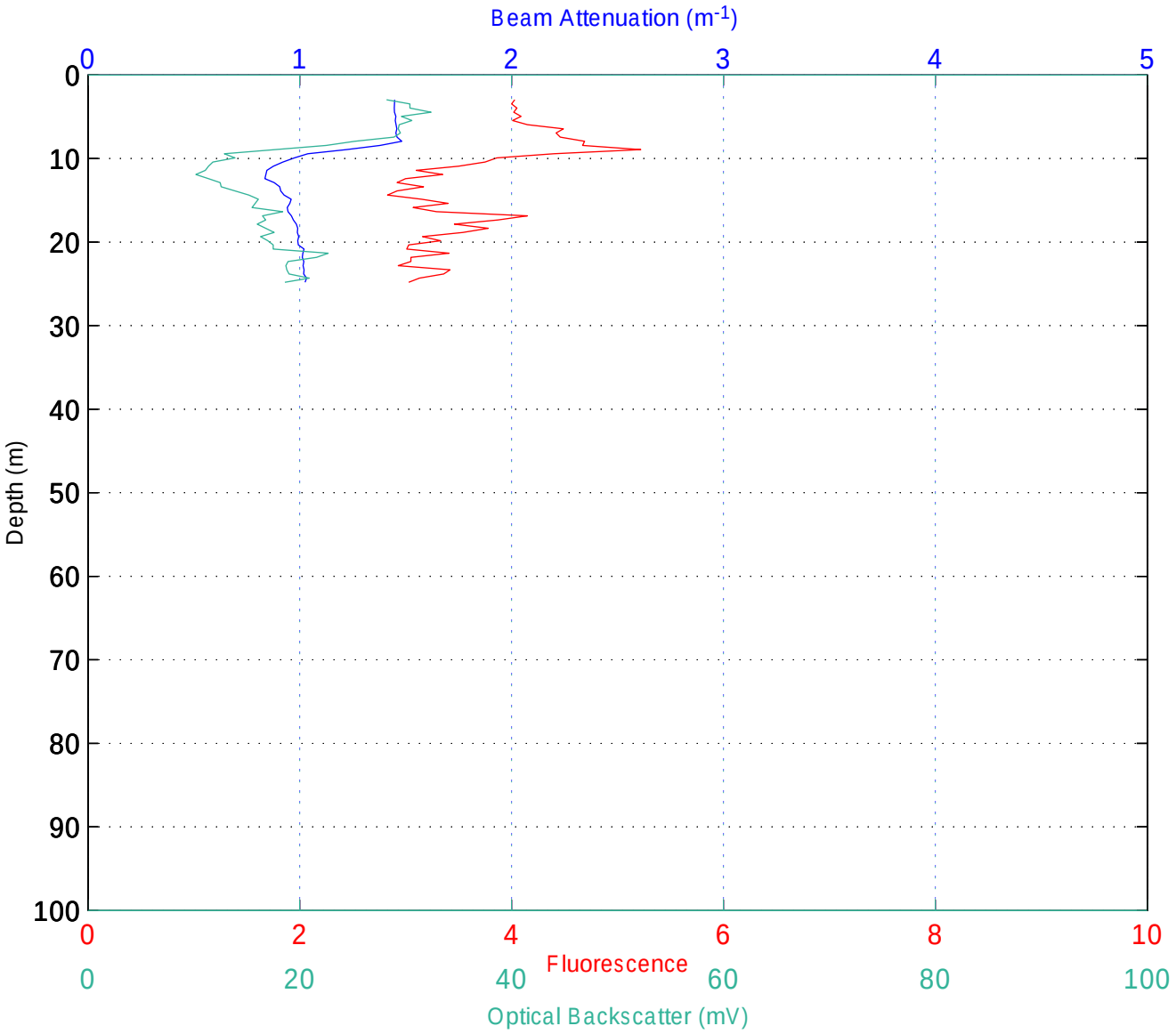
Oceanus Cast 8: Beam Attenuation, Fluorescence, and Optical Backscatter



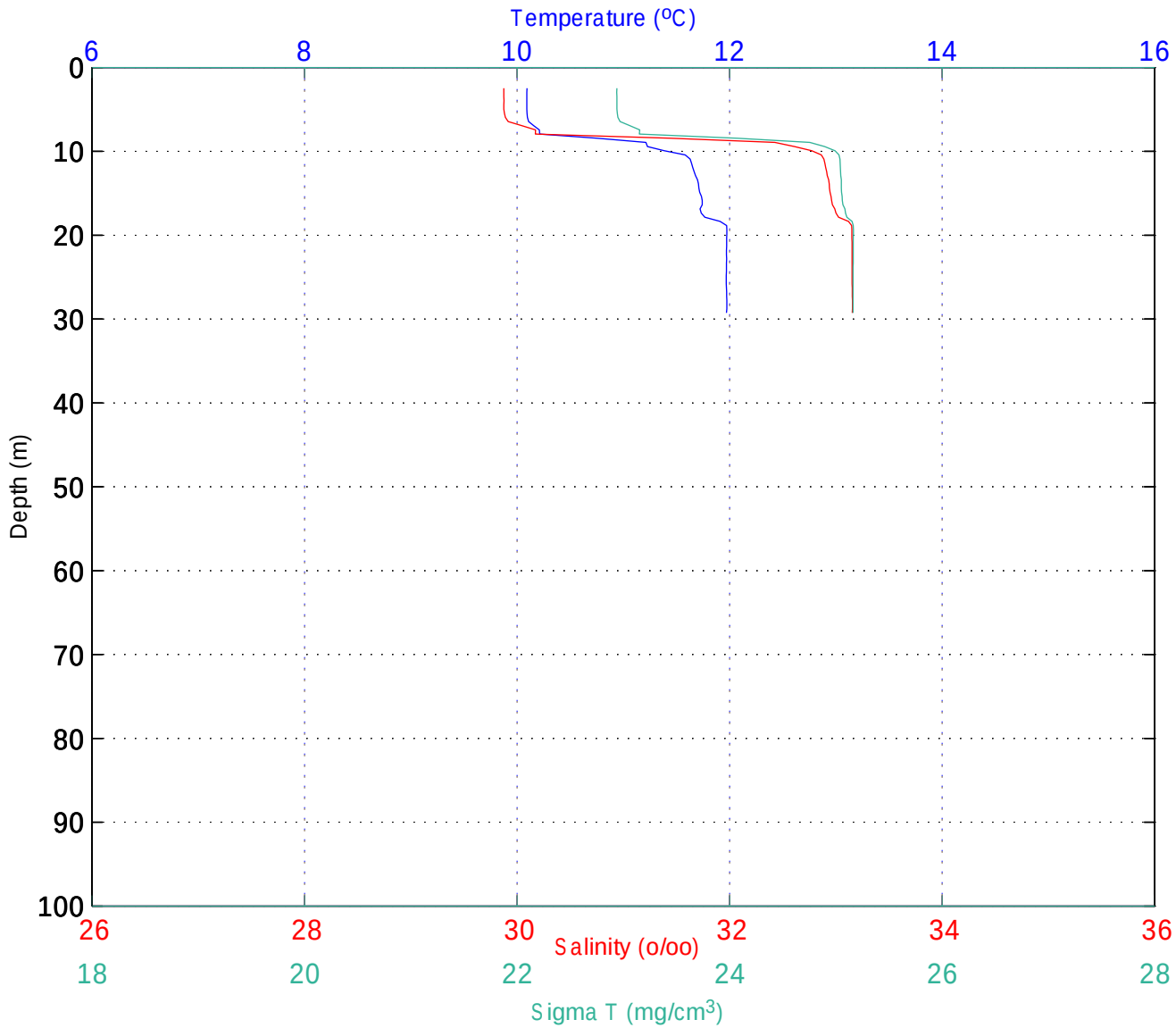
Oceanus Cast 9: Temperature, Salinity, and Sigma T



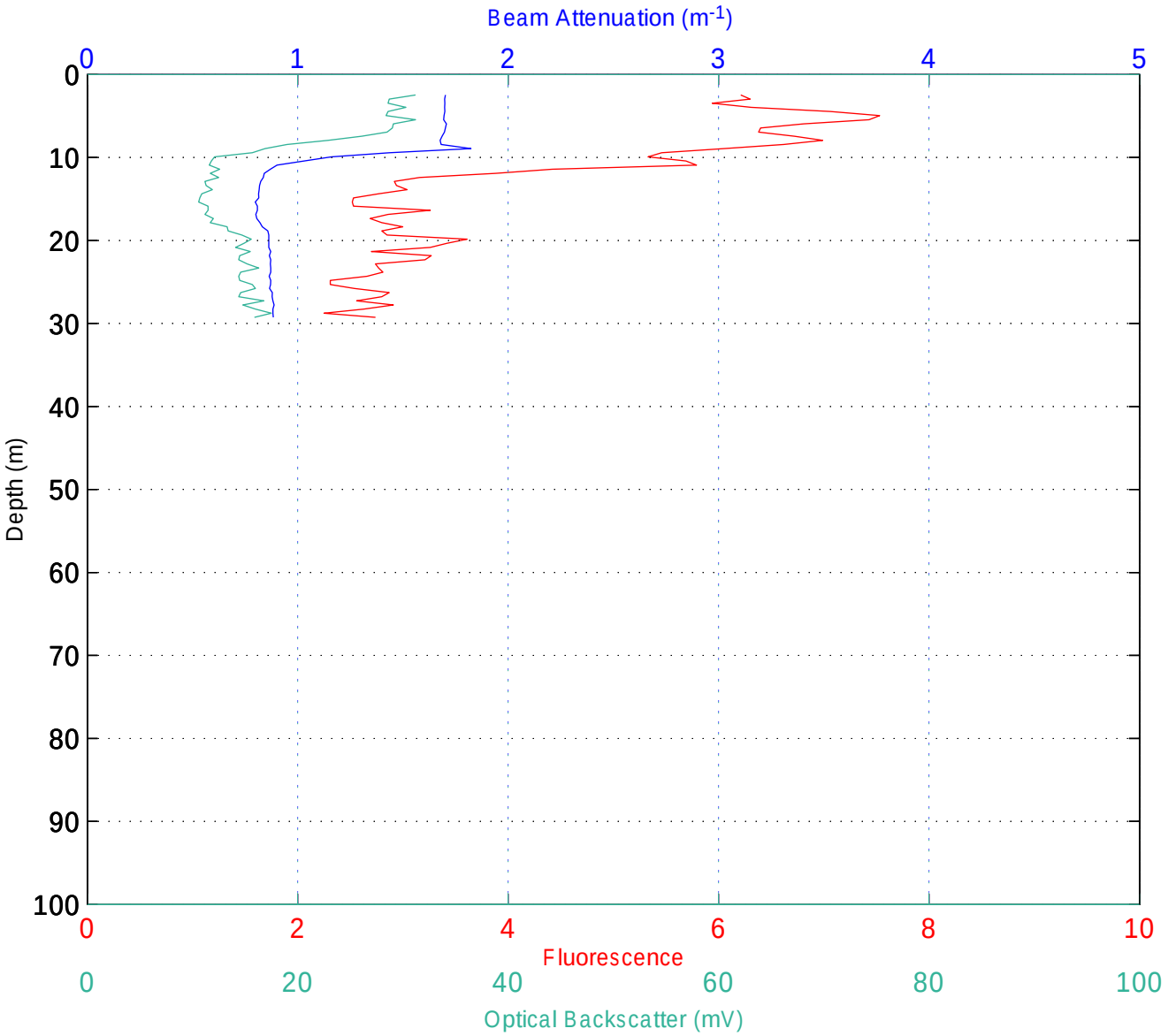
Oceanus Cast 9: Beam Attenuation, Fluorescence, and Optical Backscatter



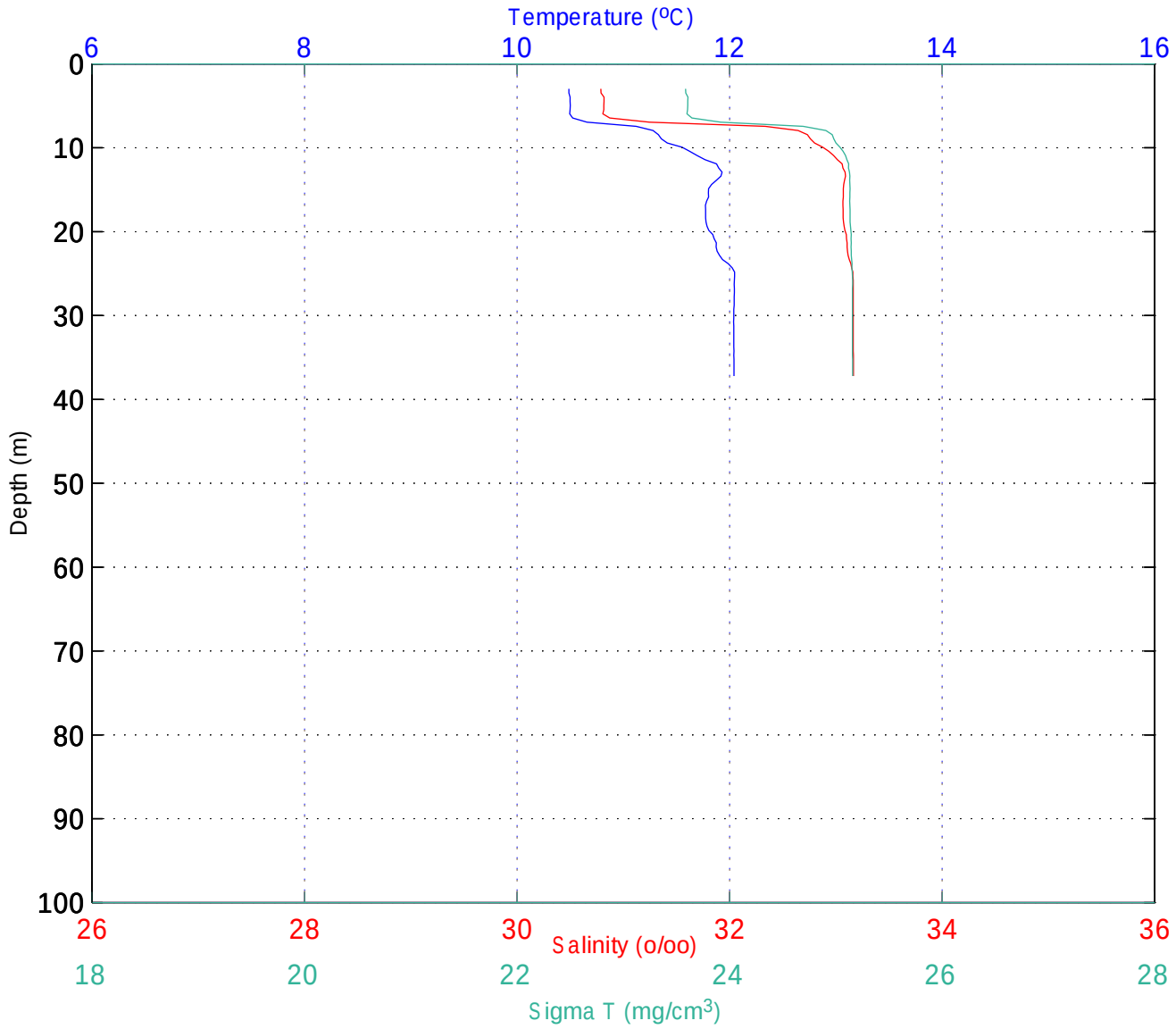
Oceanus Cast 10: Temperature, Salinity, and Sigma T



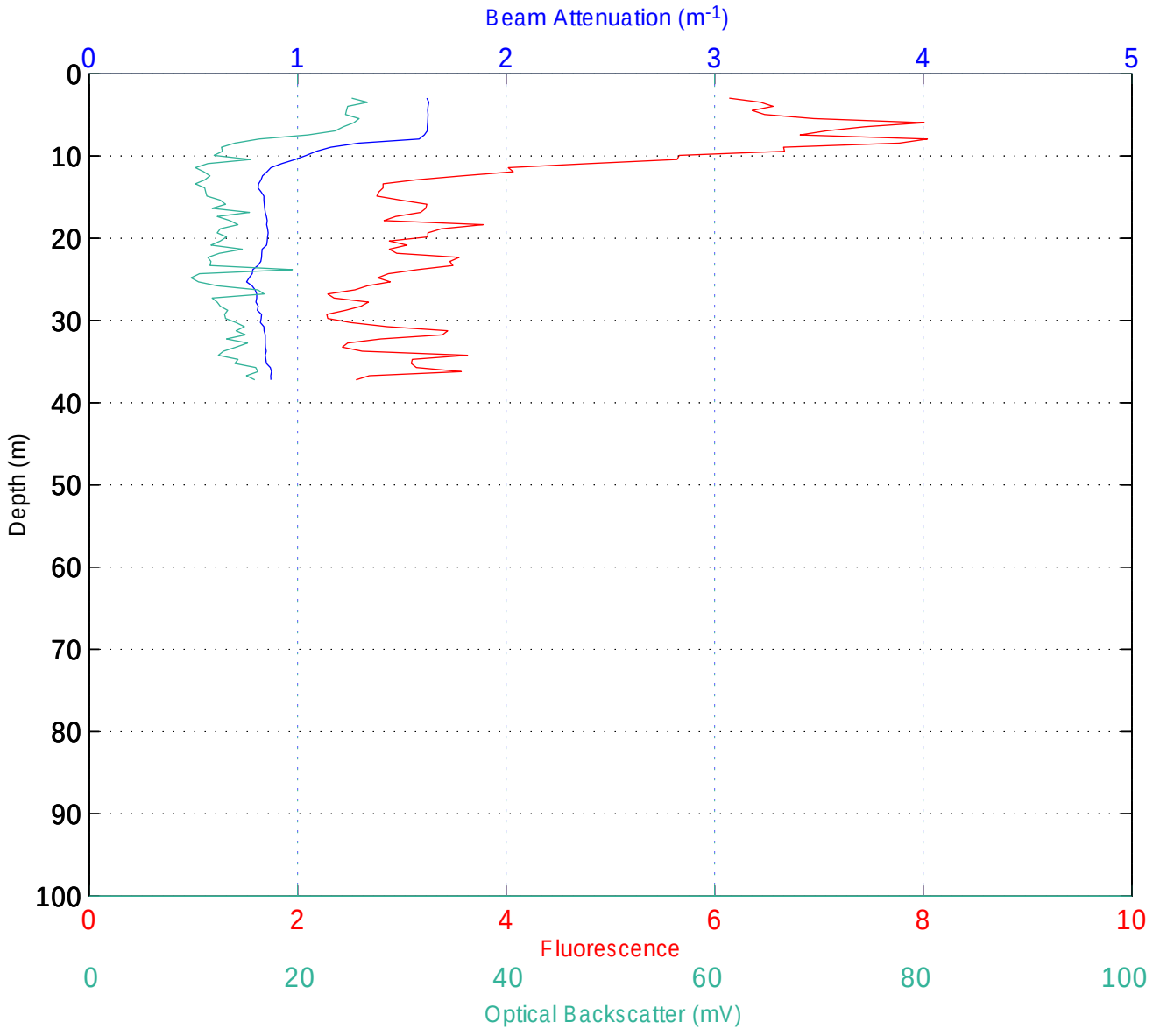
Oceanus Cast 10: Beam Attenuation, Fluorescence, and Optical Backscatter



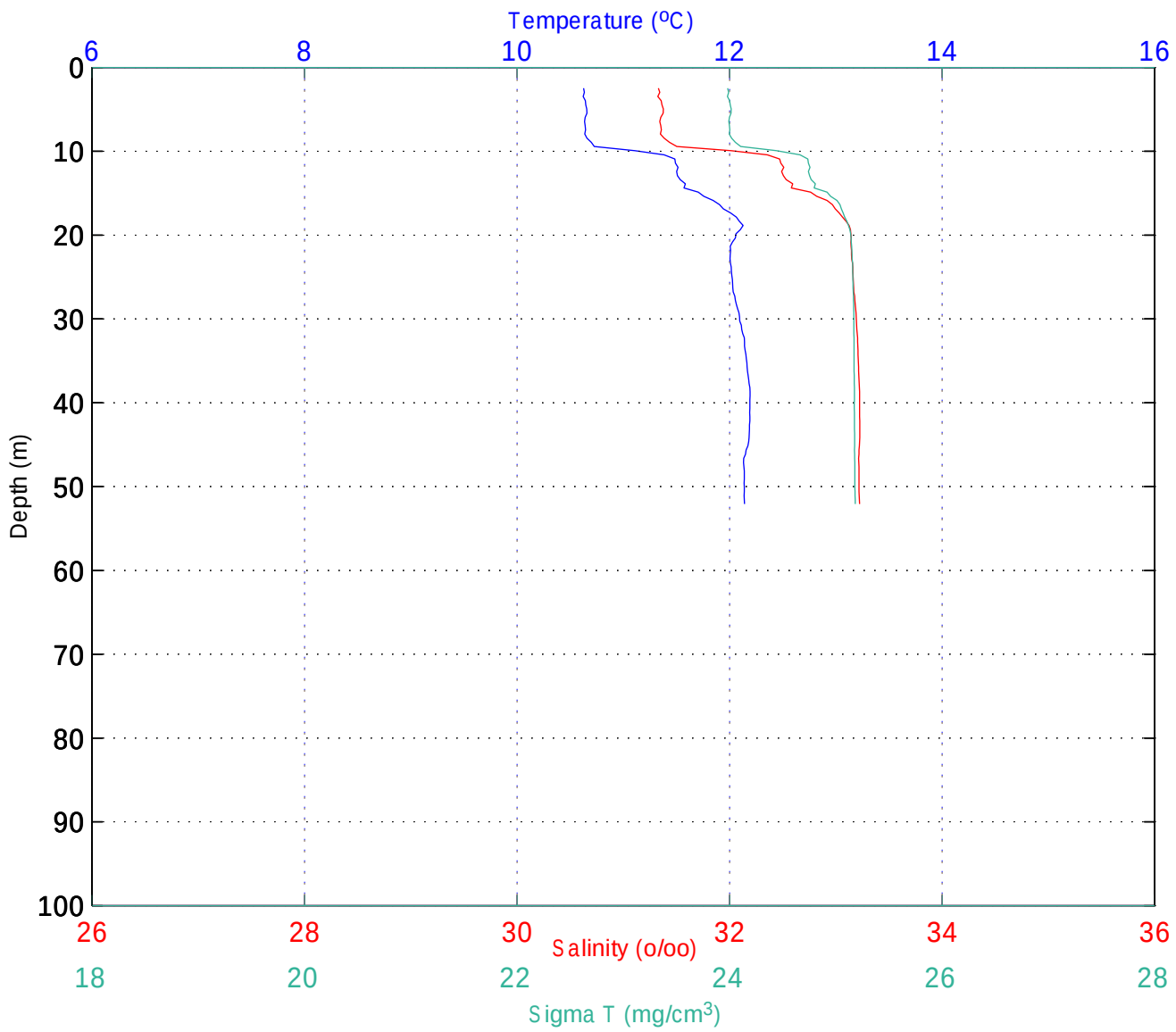
Oceanus Cast 11: Temperature, Salinity, and Sigma T



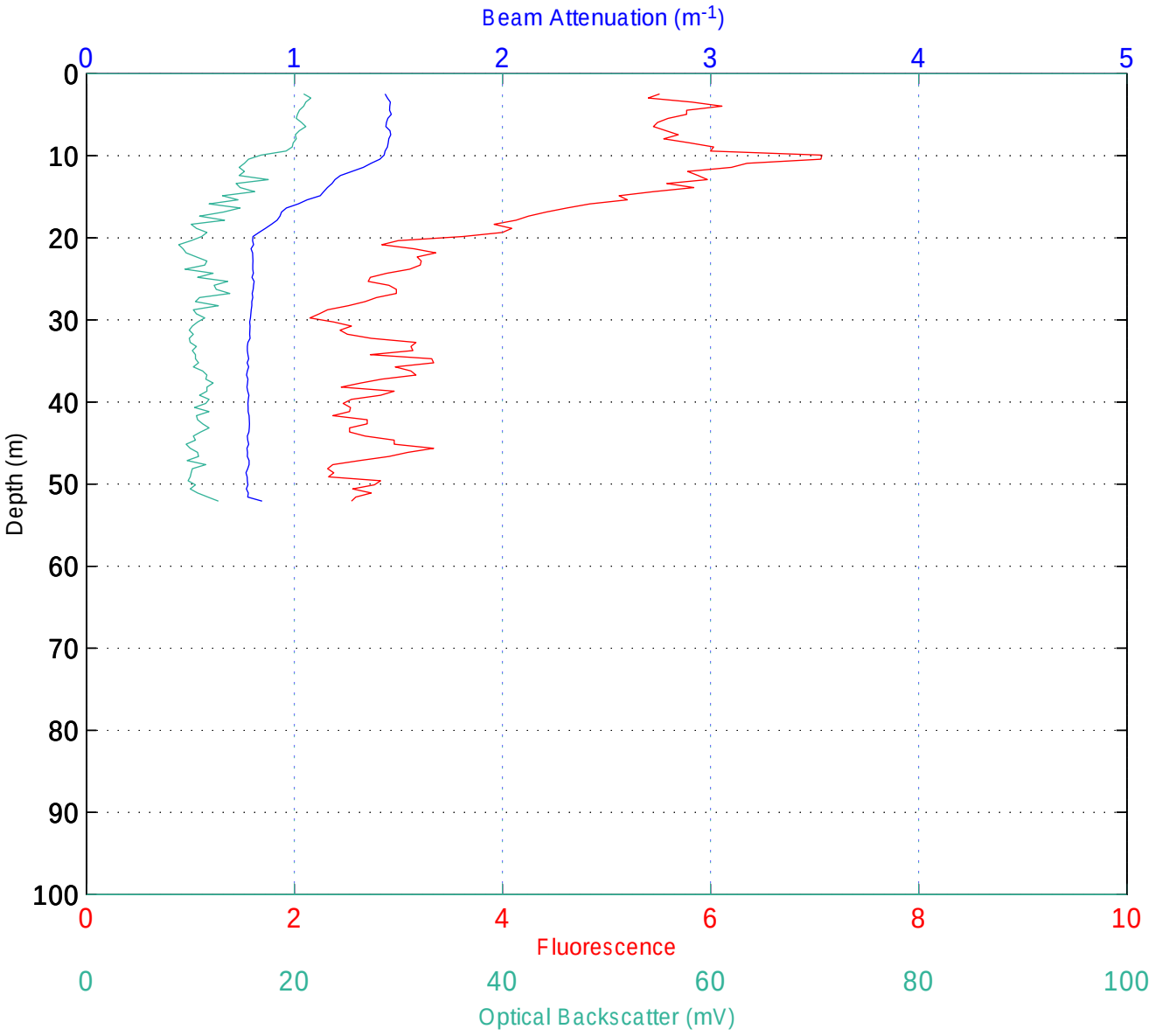
Oceanus Cast 11: Beam Attenuation, Fluorescence, and Optical Backscatter



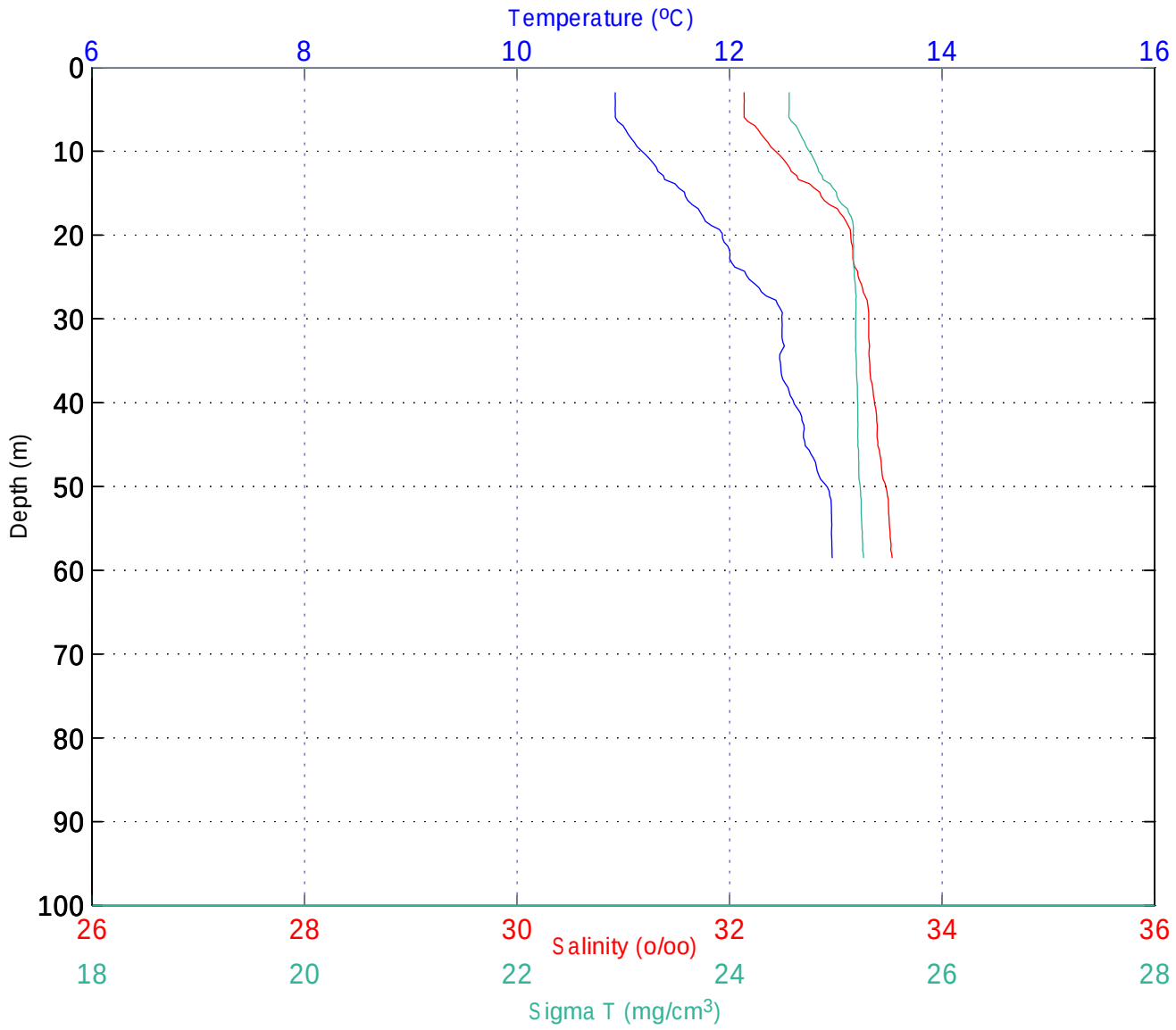
Oceanus Cast 12: Temperature, Salinity, and Sigma T



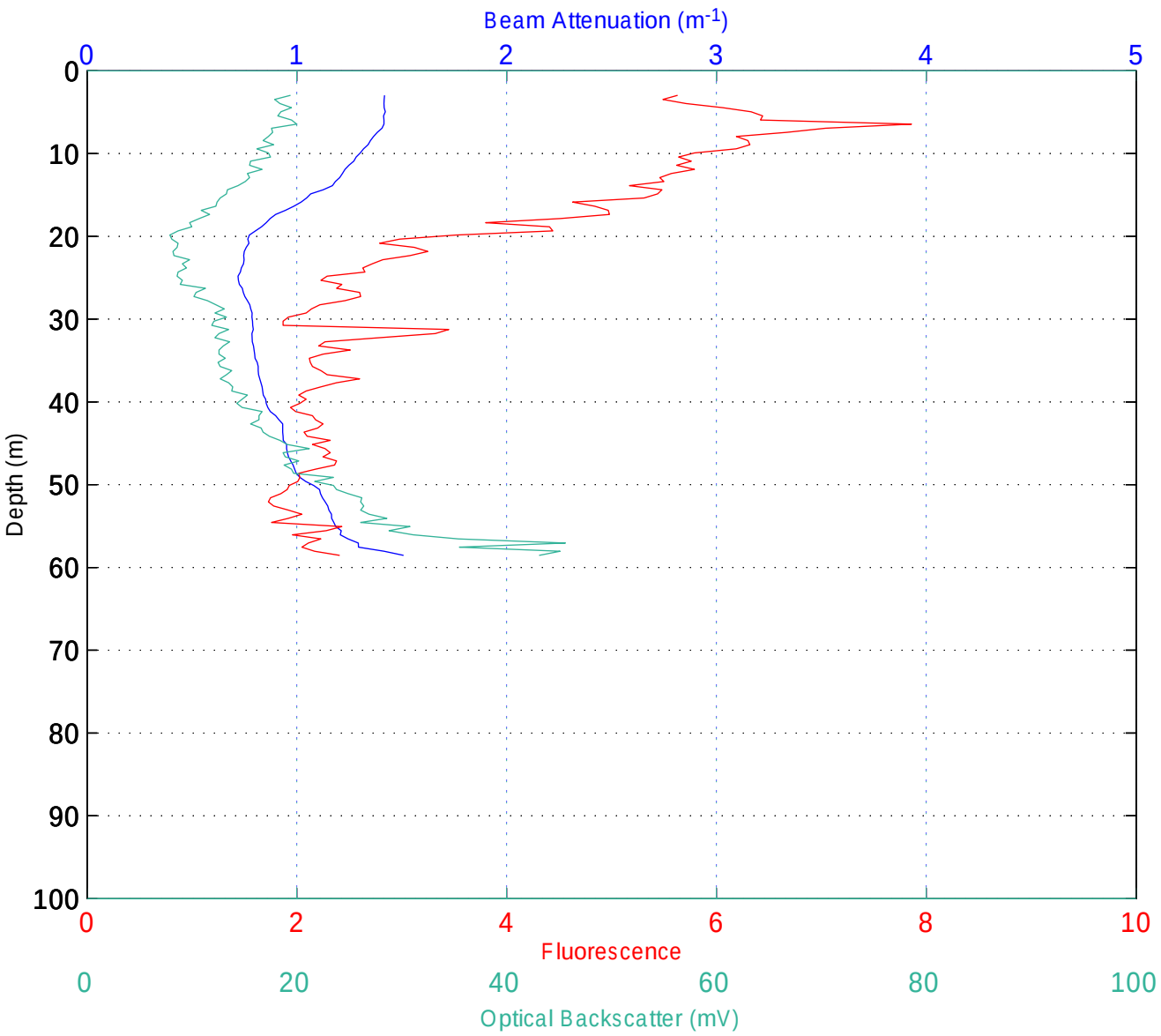
Oceanus Cast 12: Beam Attenuation, Fluorescence, and Optical Backscatter



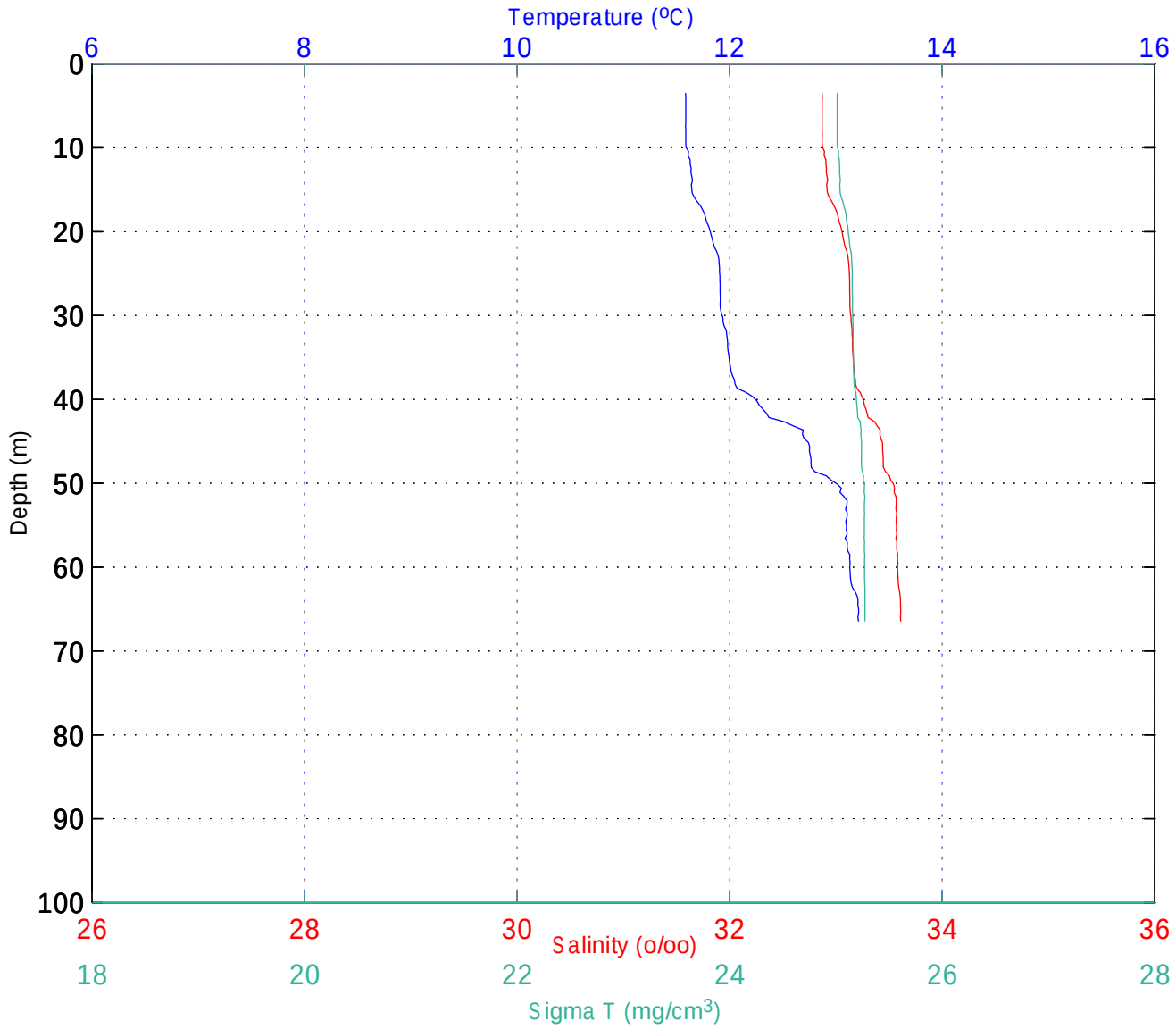
Oceanus Cast 13: Temperature, Salinity, and Sigma T



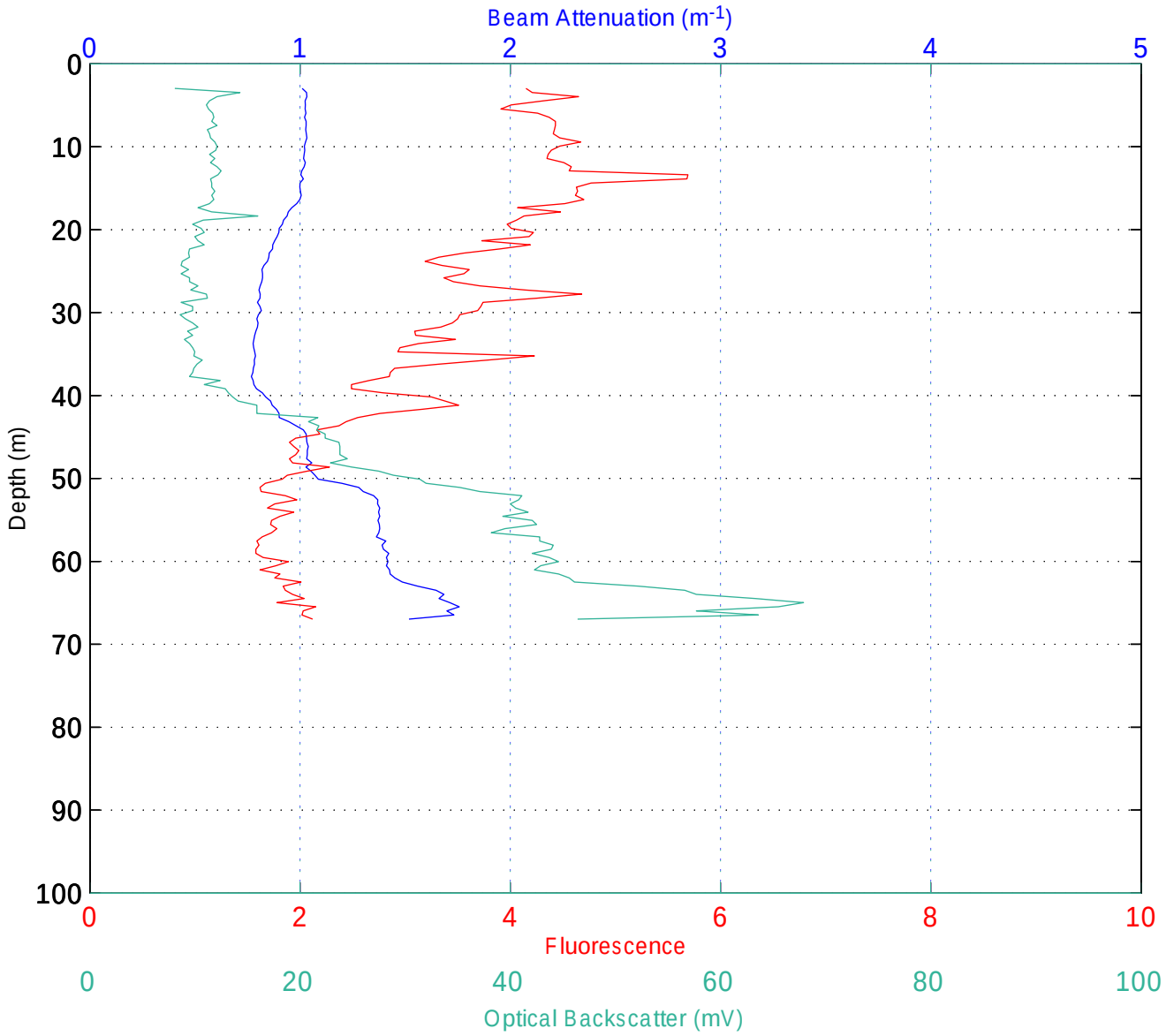
Oceanus Cast 13: Beam Attenuation, Fluorescence, and Optical Backscatter



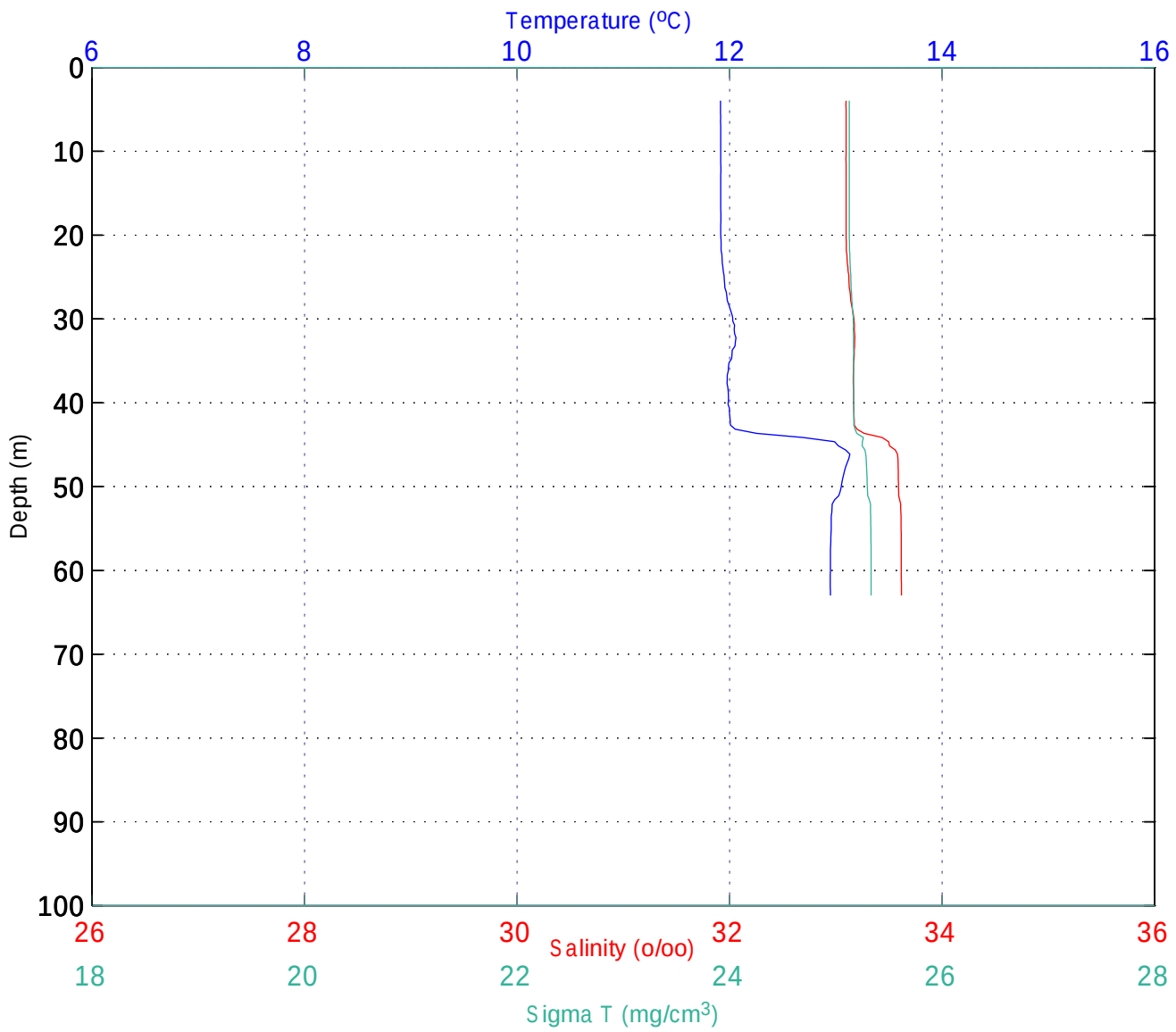
Oceanus Cast 14: Temperature, Salinity, and Sigma T



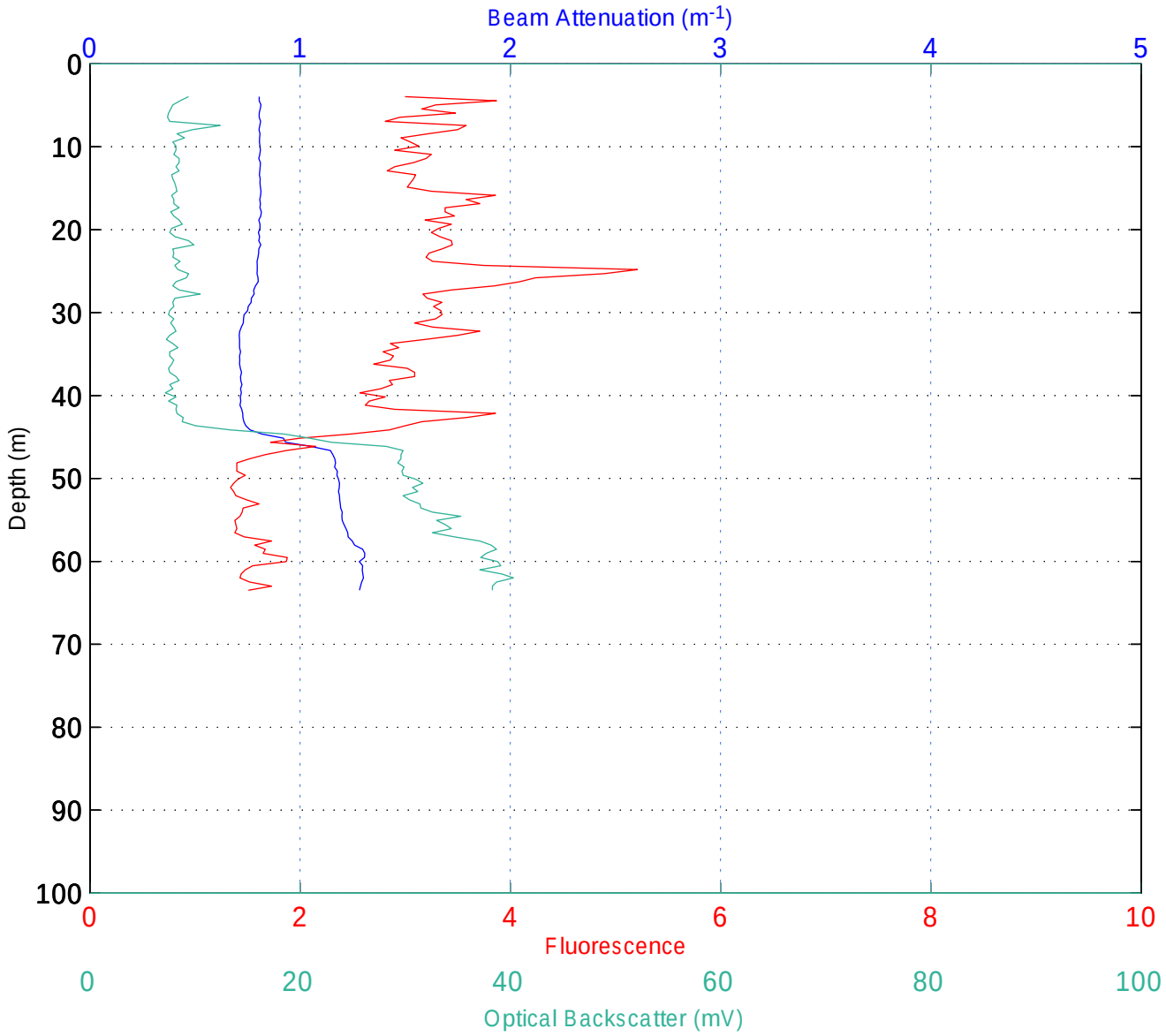
Oceanus Cast 14: Beam Attenuation, Fluorescence, and Optical Backscatter



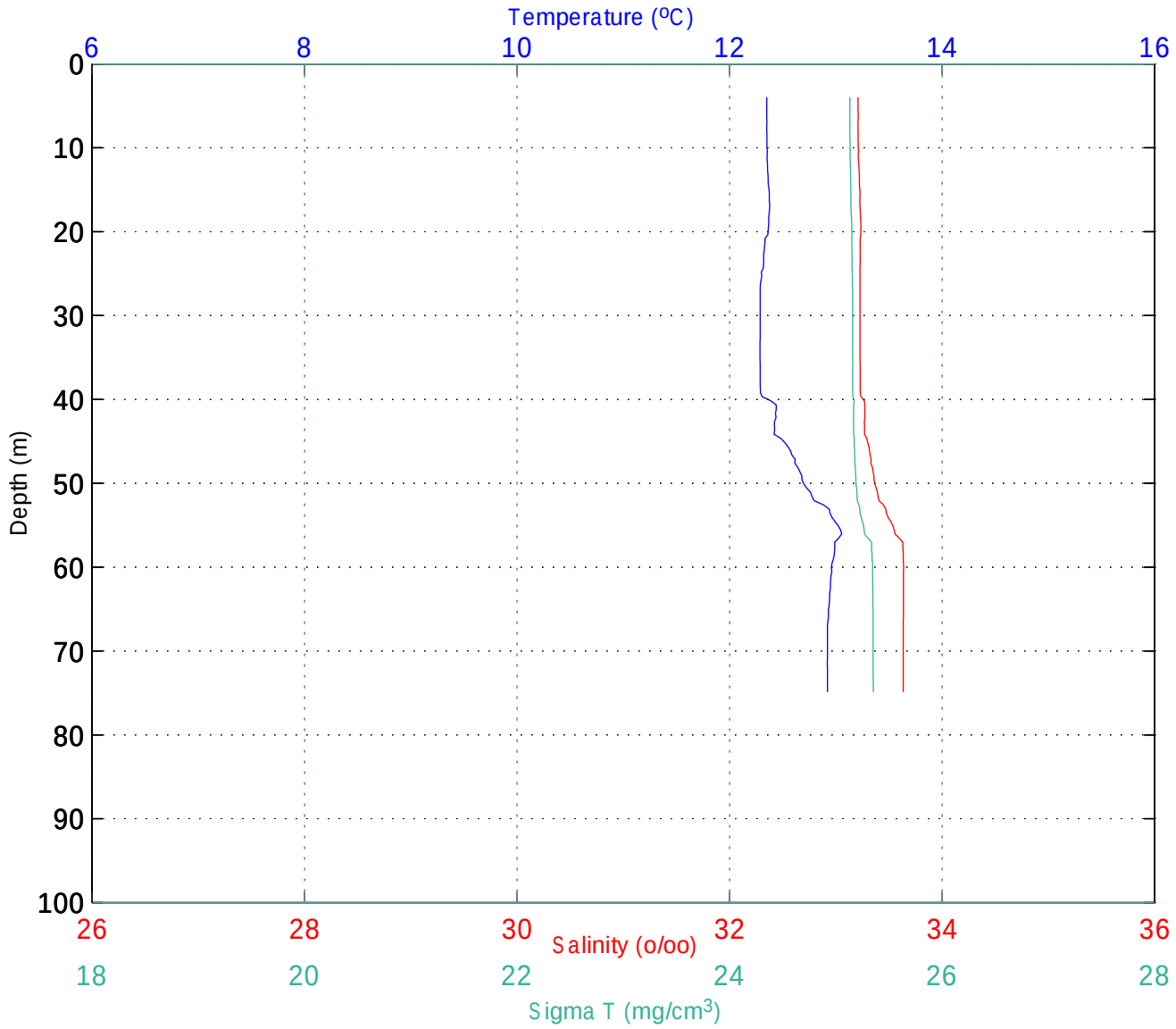
Oceanus Cast 15: Temperature, Salinity, and Sigma T



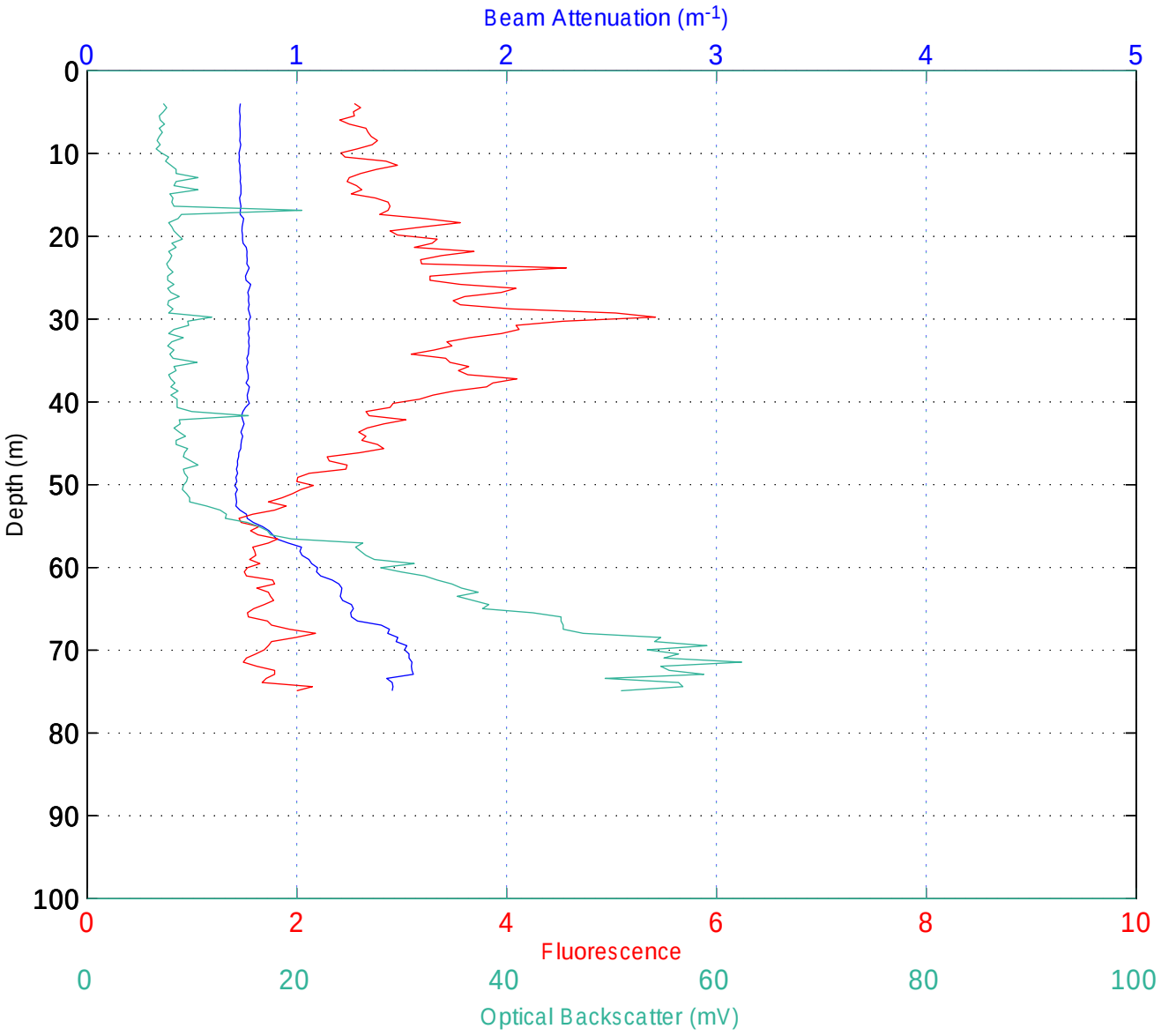
Oceanus Cast 15: Beam Attenuation, Fluorescence, and Optical Backscatter



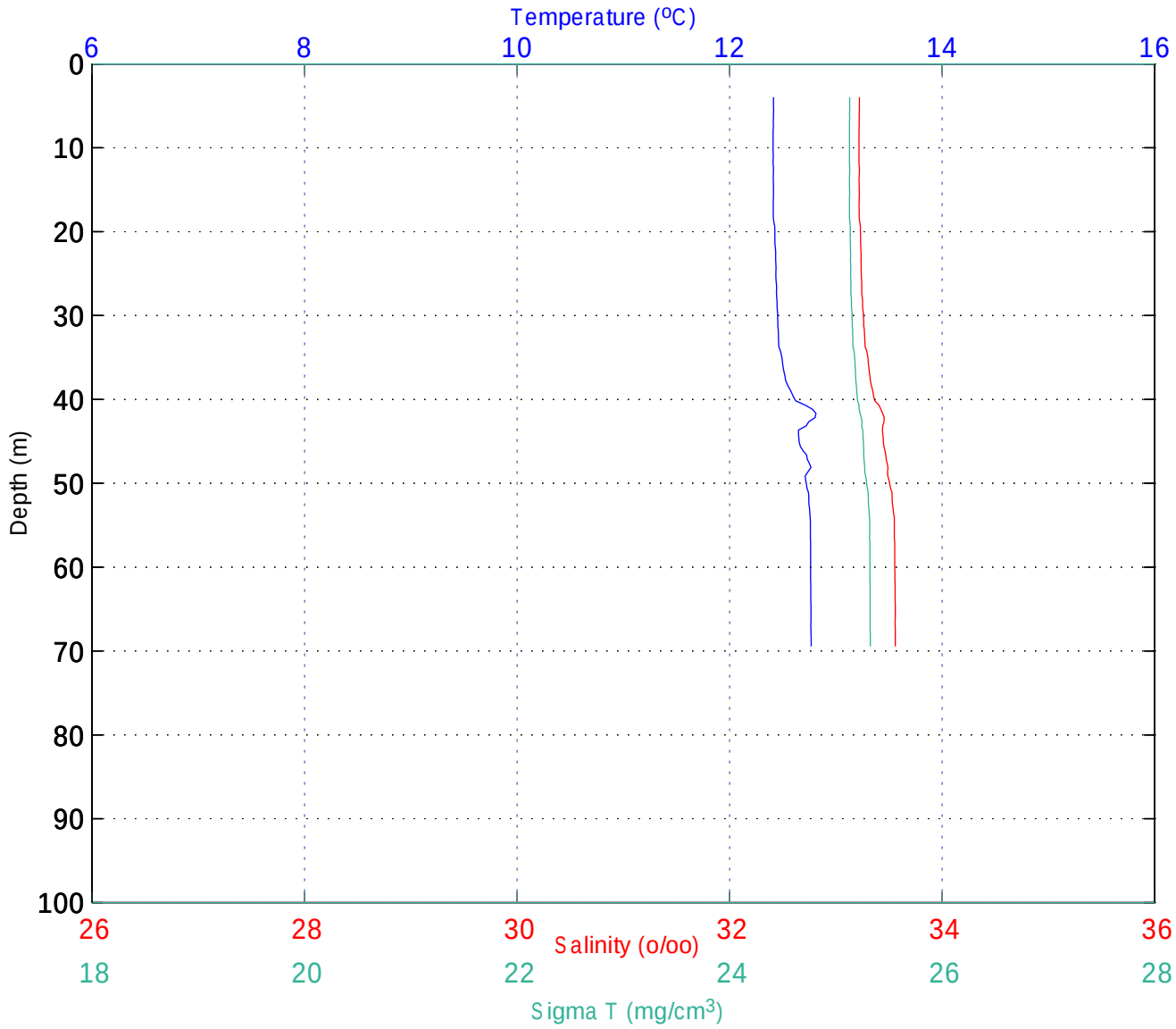
Oceanus Cast 16: Temperature, Salinity, and Sigma T



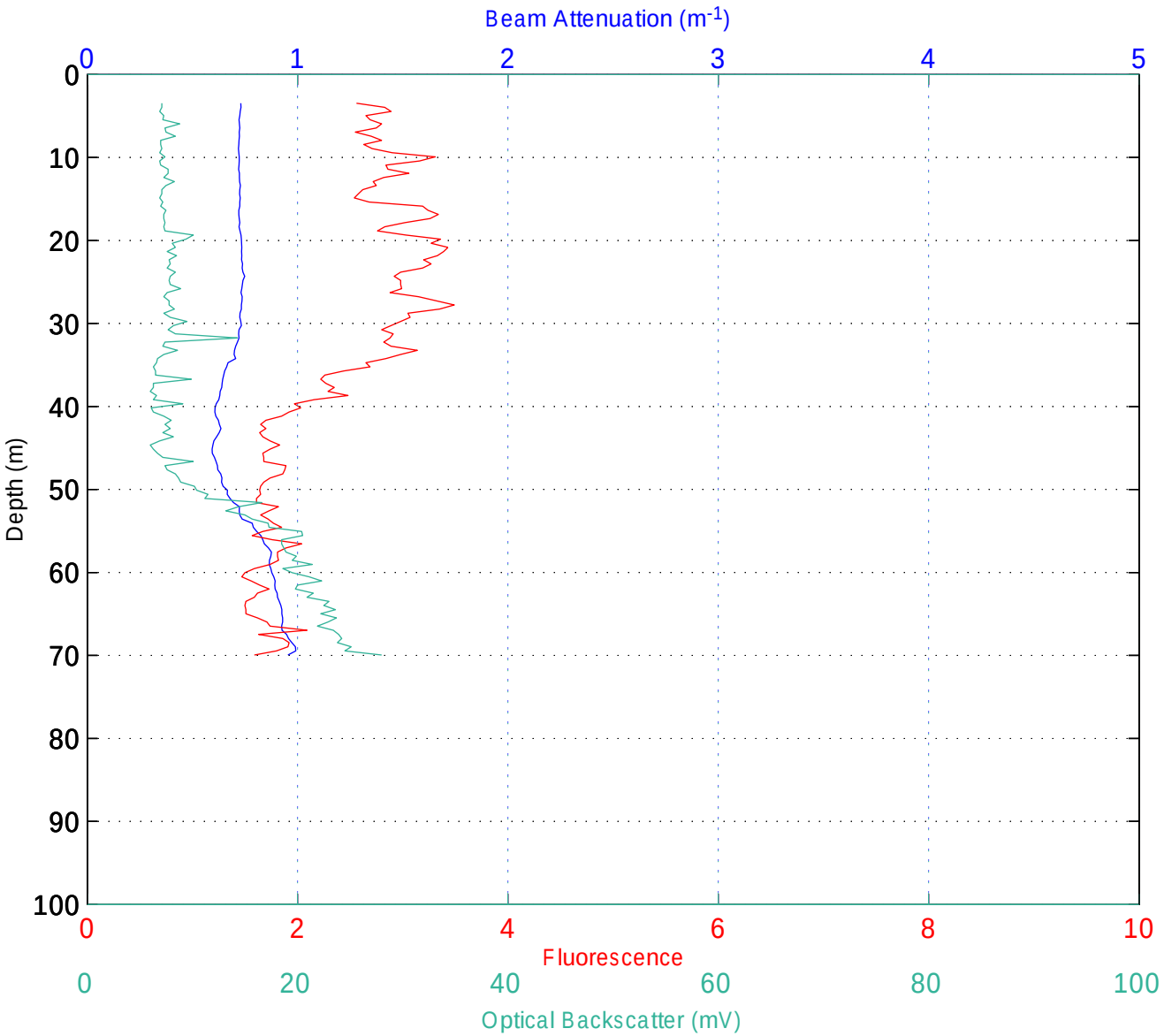
Oceanus Cast 16: Beam Attenuation, Fluorescence, and Optical Backscatter



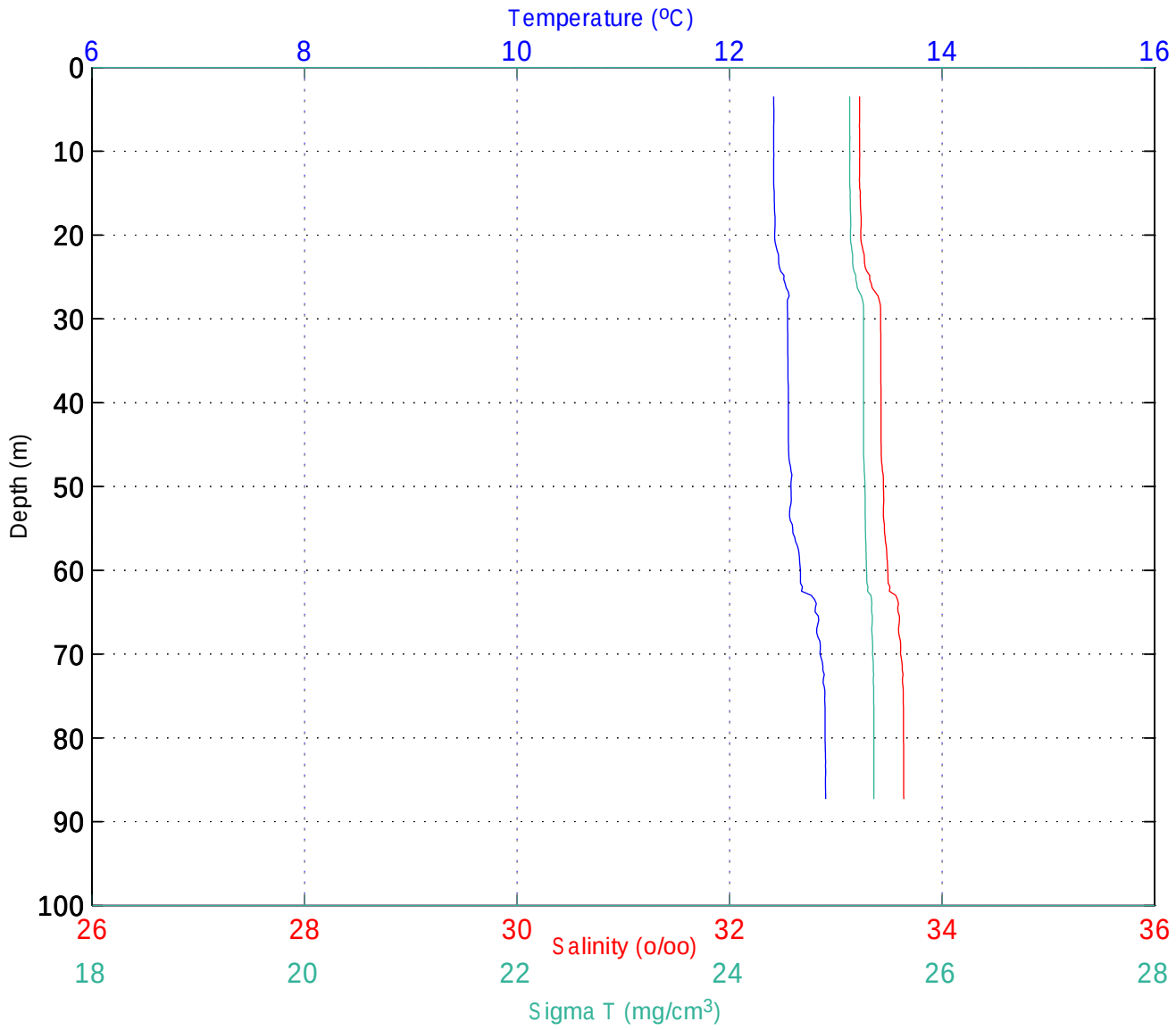
Oceanus Cast 17: Temperature, Salinity, and Sigma T



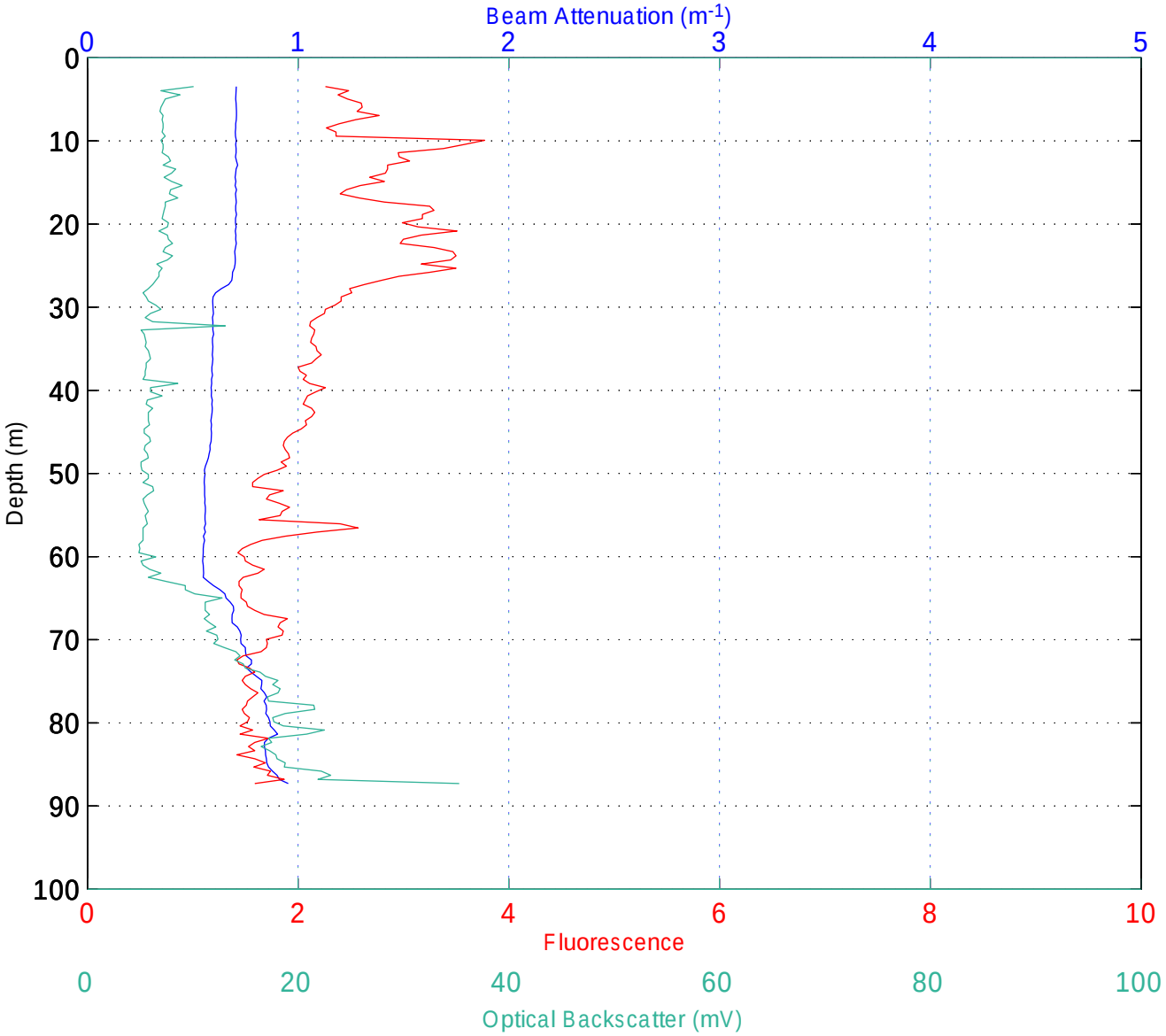
Oceanus Cast 17: Beam Attenuation, Fluorescence, and Optical Backscatter



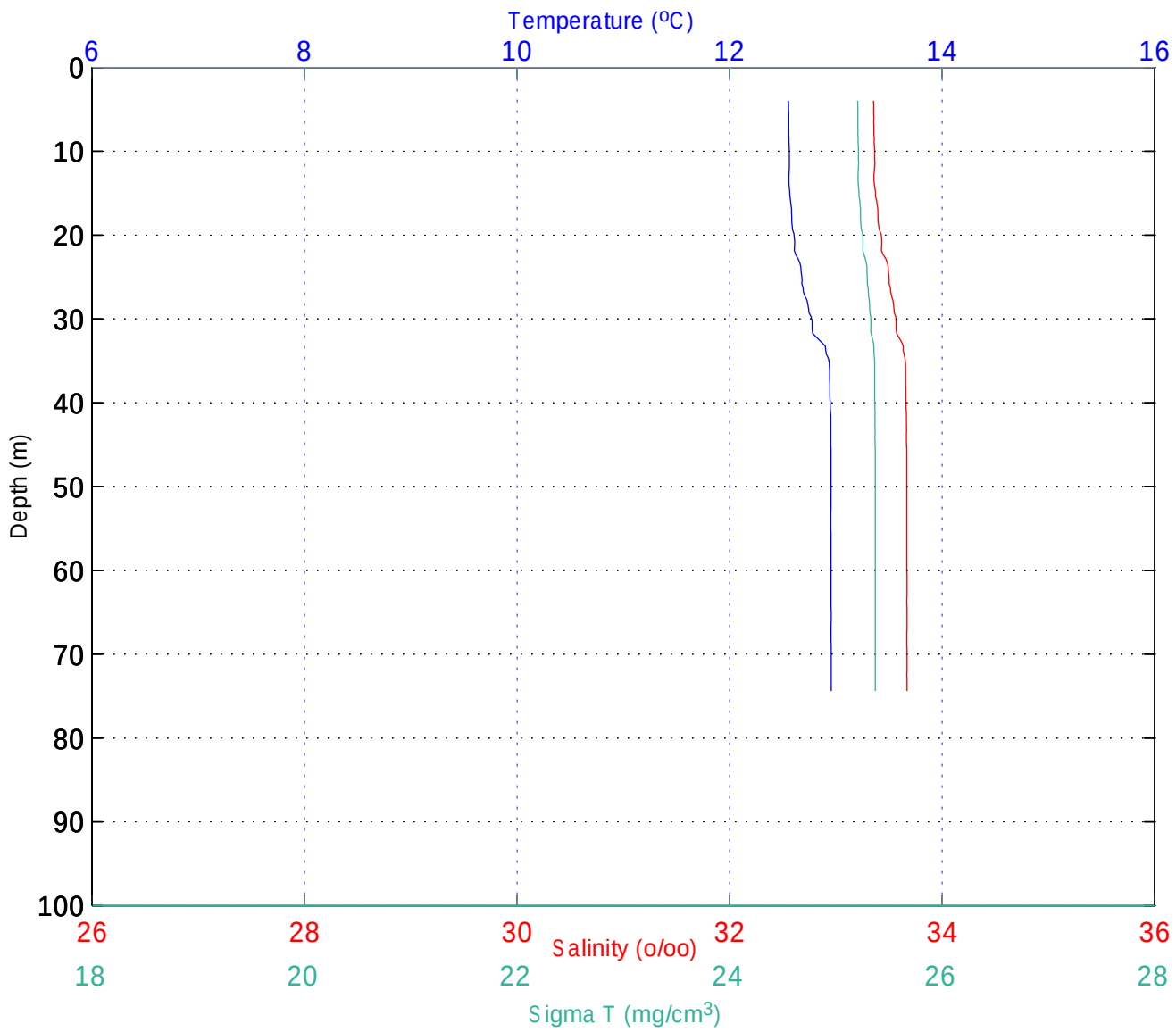
Oceanus Cast 18: Temperature, Salinity, and Sigma T



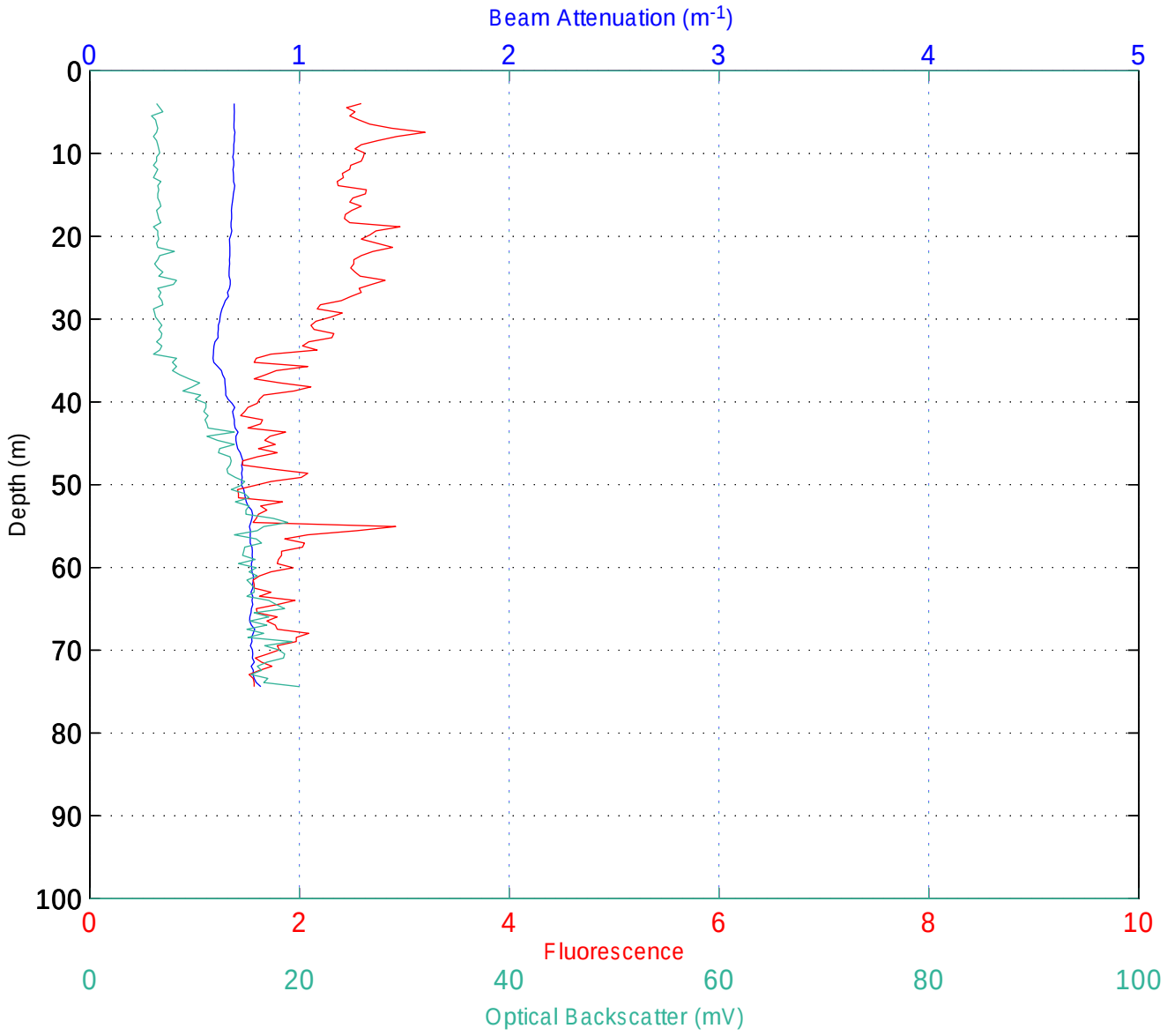
Oceanus Cast 18: Beam Attenuation, Fluorescence, and Optical Backscatter



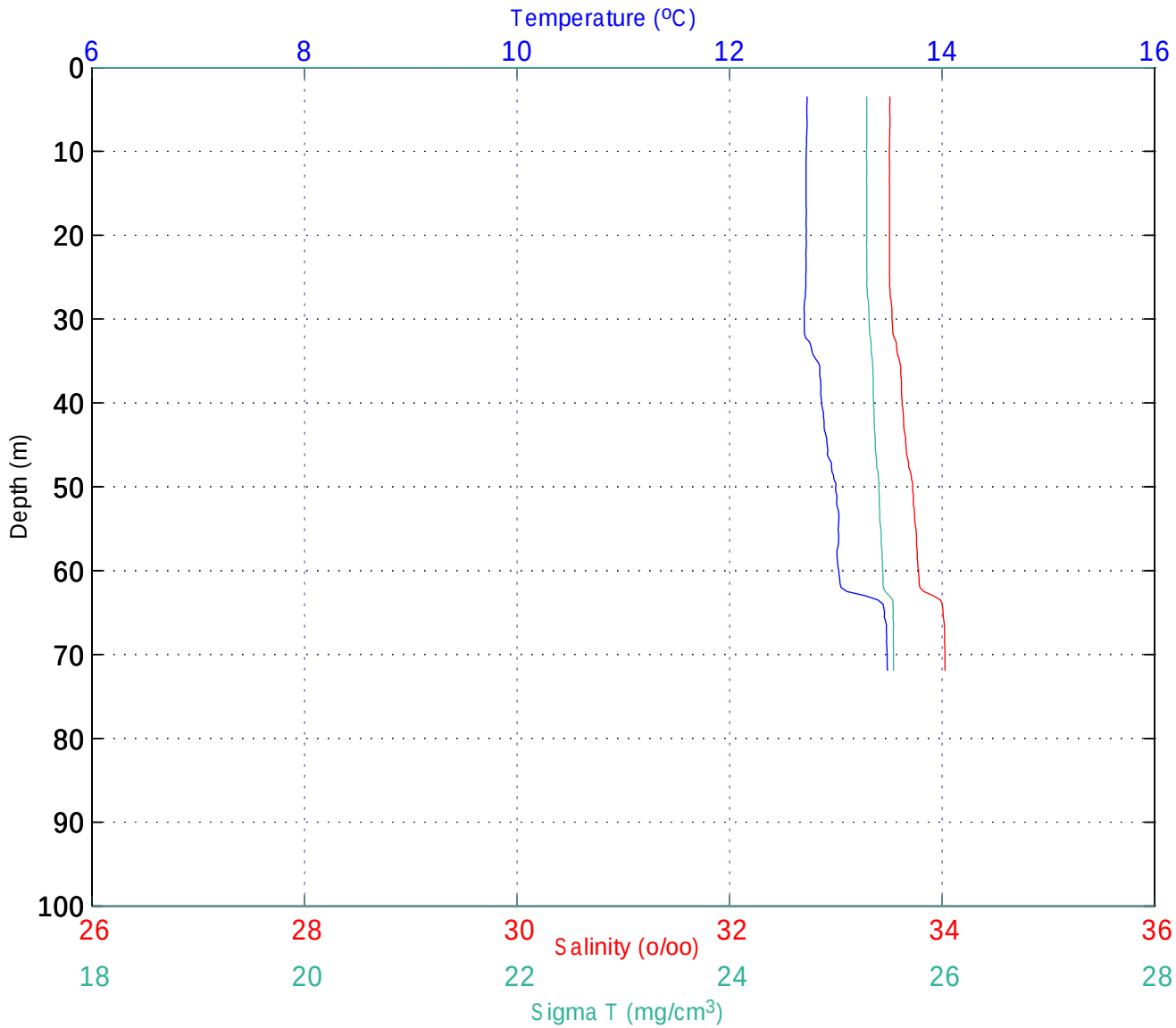
Oceanus Cast 19: Temperature, Salinity, and Sigma T



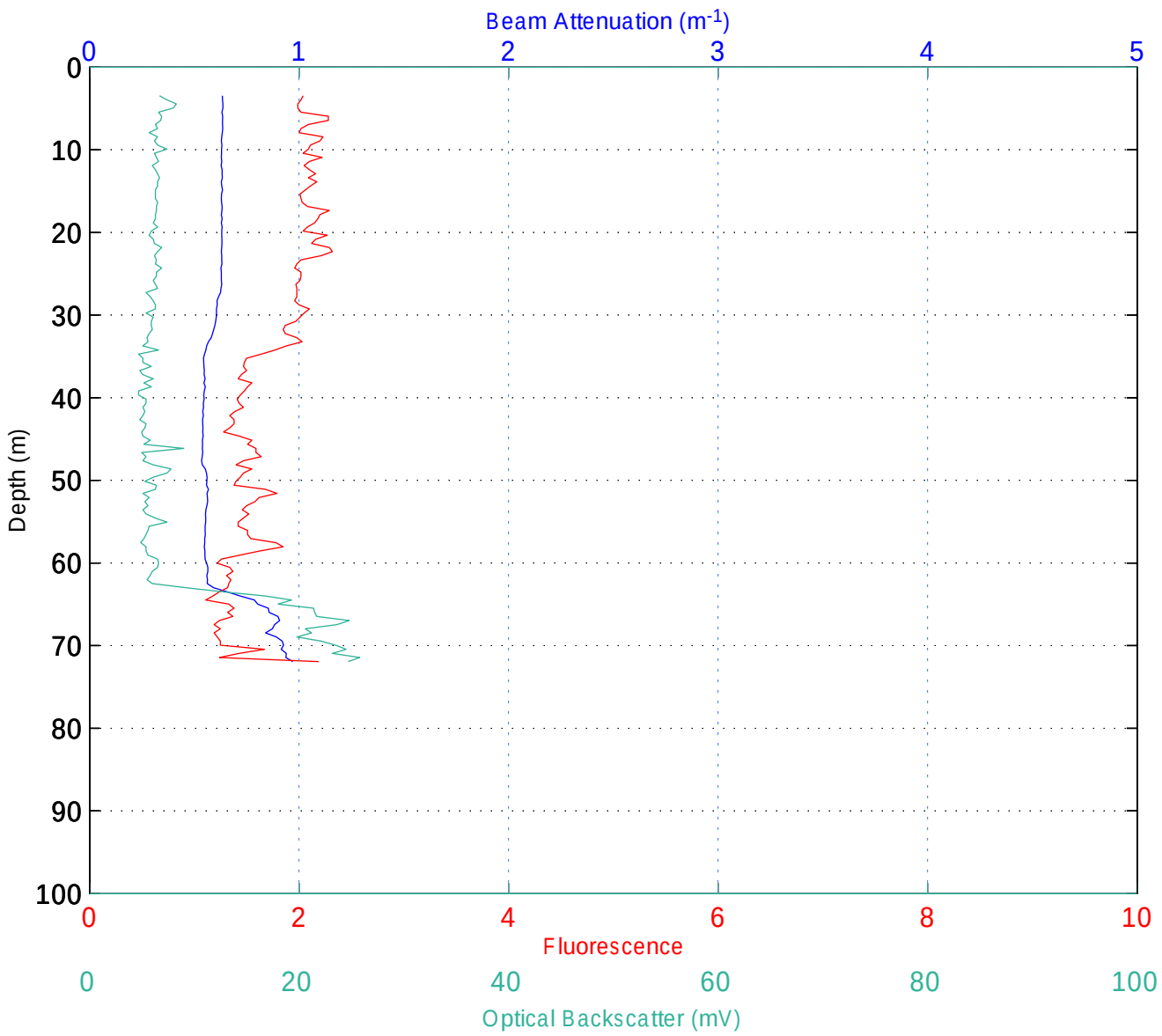
Oceanus Cast 19: Beam Attenuation, Fluorescence, and Optical Backscatter



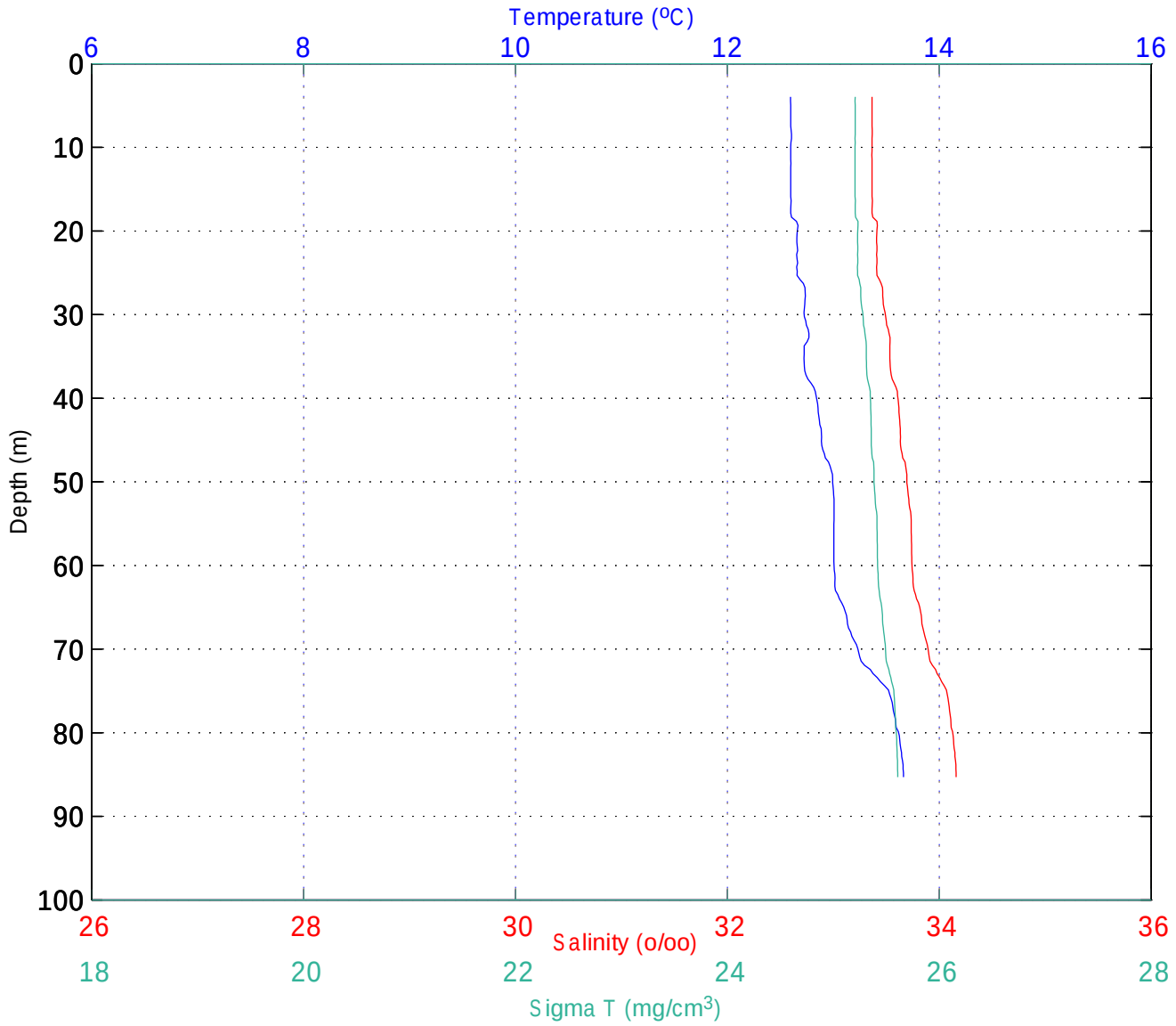
Oceanus Cast 20: Temperature, Salinity, and Sigma T



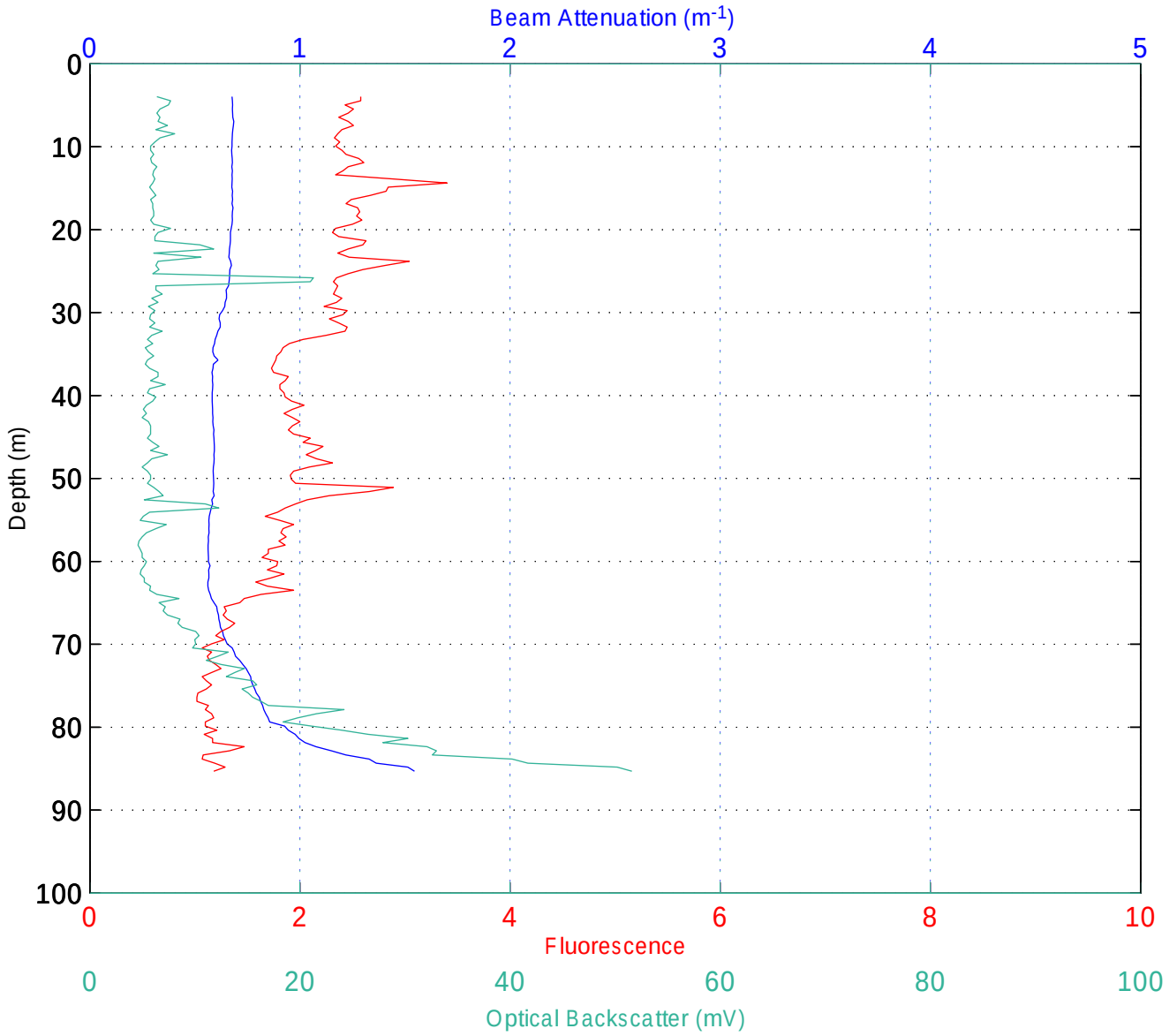
Oceanus Cast 20: Beam Attenuation, Fluorescence, and Optical Backscatter



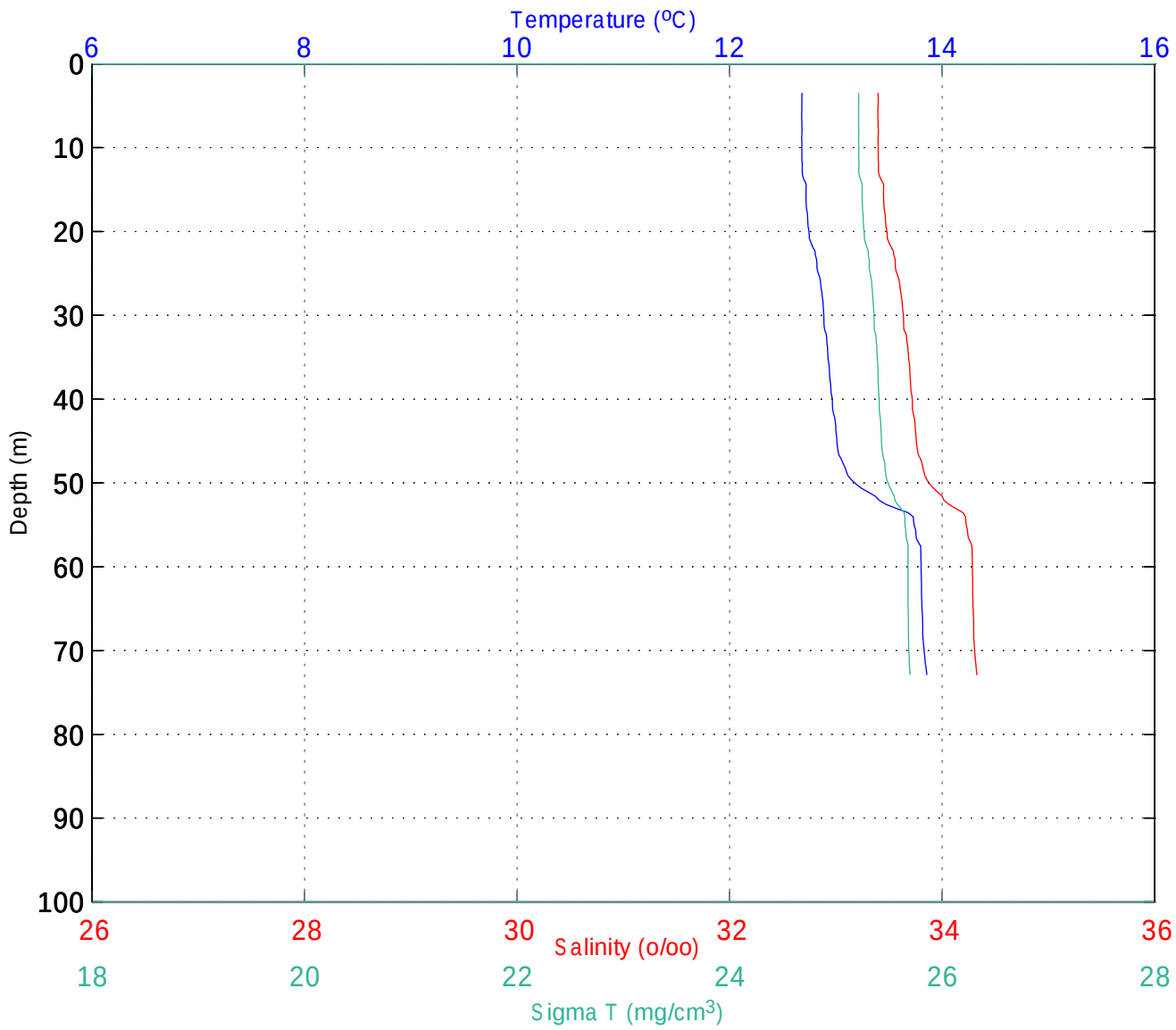
Oceanus Cast 21: Temperature, Salinity, and Sigma T



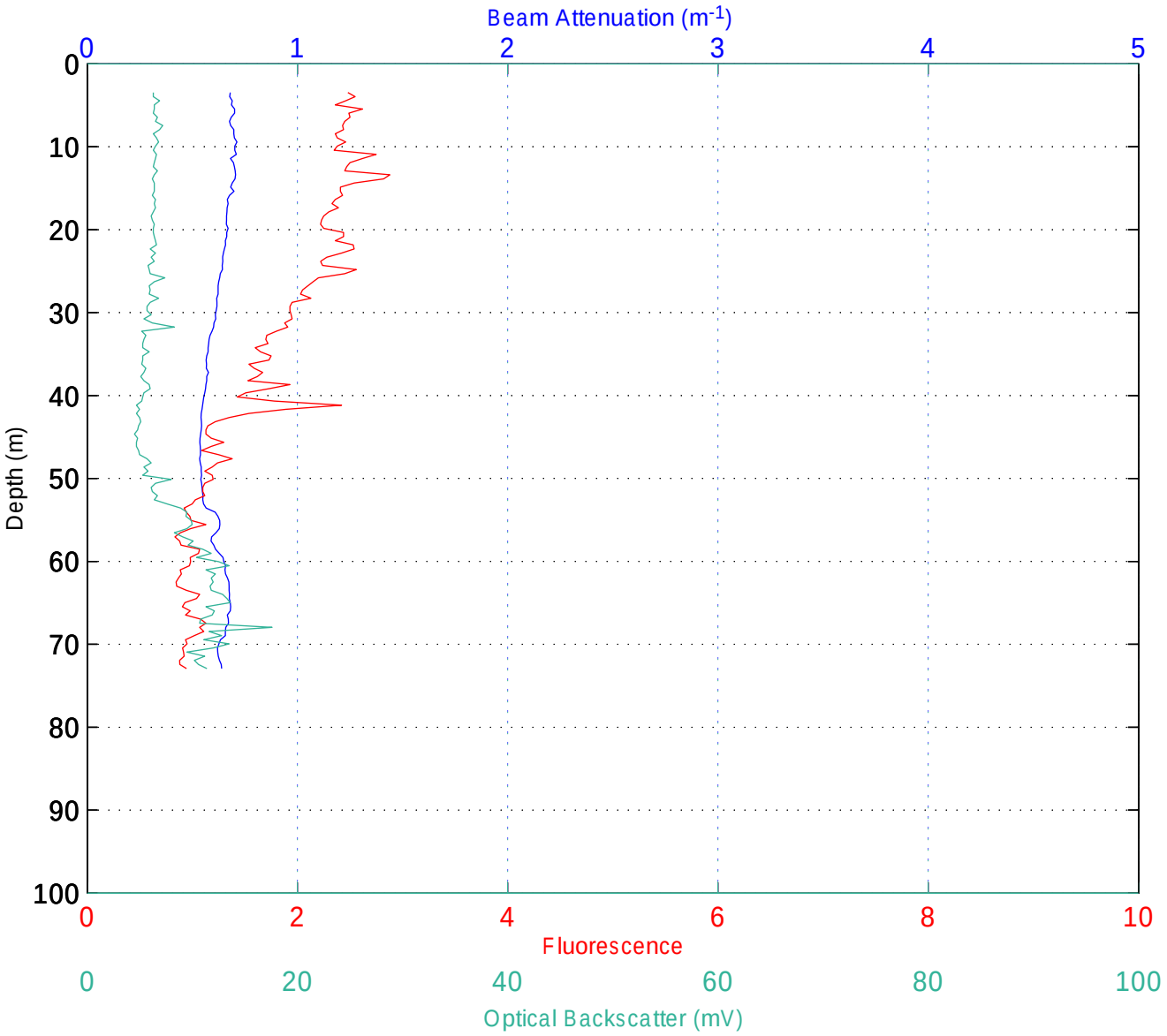
Oceanus Cast 21: Beam Attenuation, Fluorescence, and Optical Backscatter



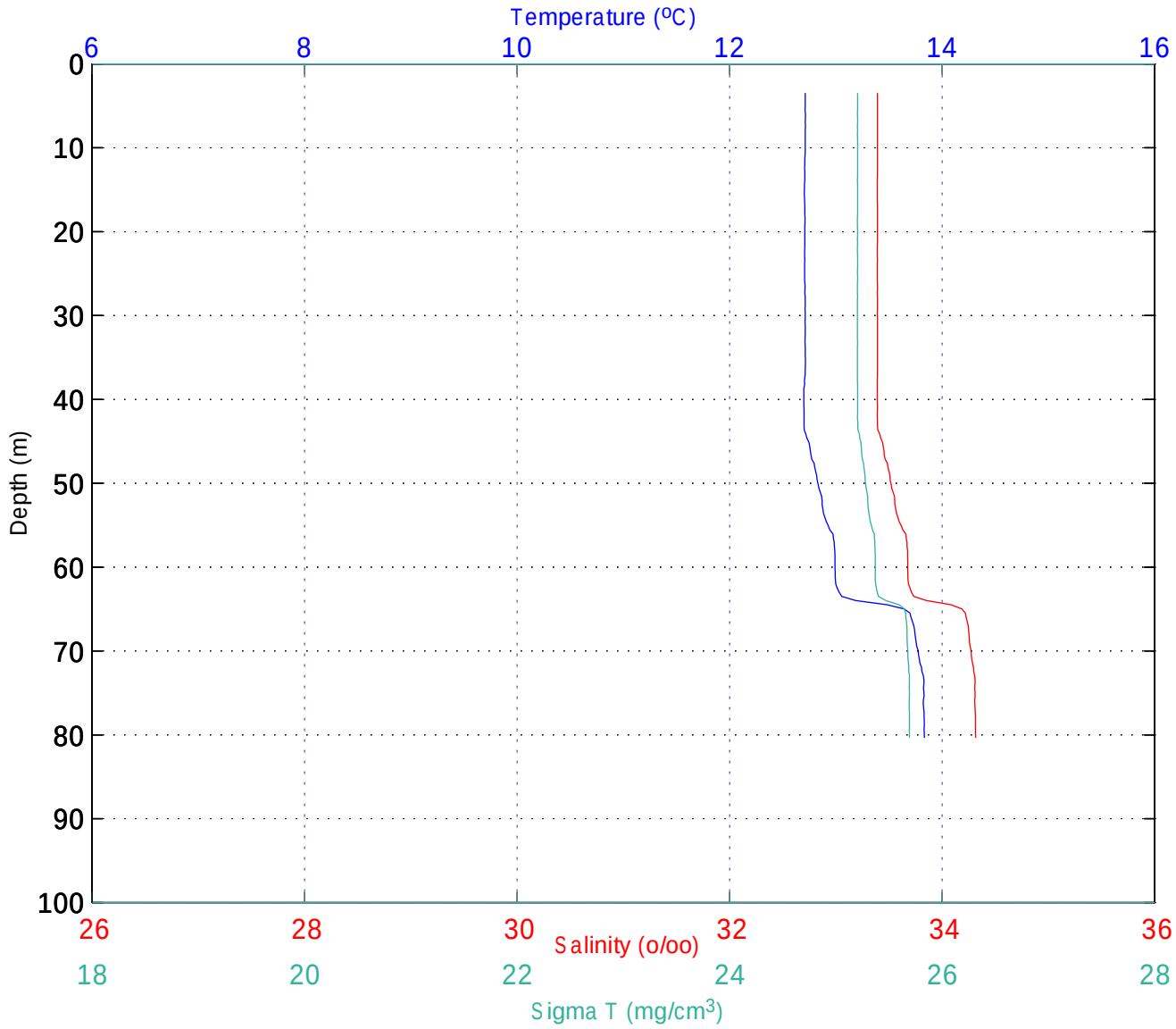
Oceanus Cast 22: Temperature, Salinity, and Sigma T



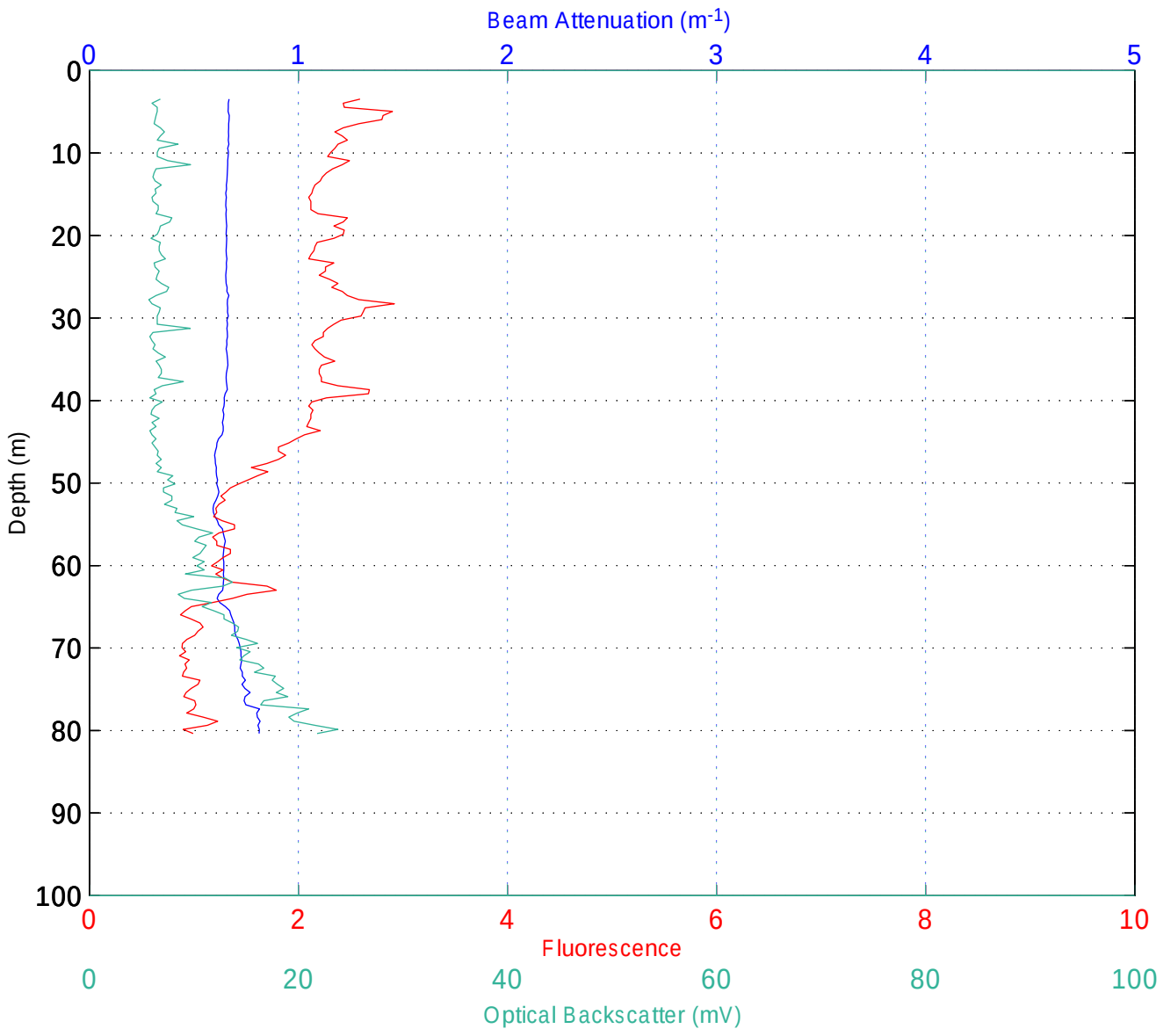
Oceanus Cast 22: Beam Attenuation, Fluorescence, and Optical Backscatter



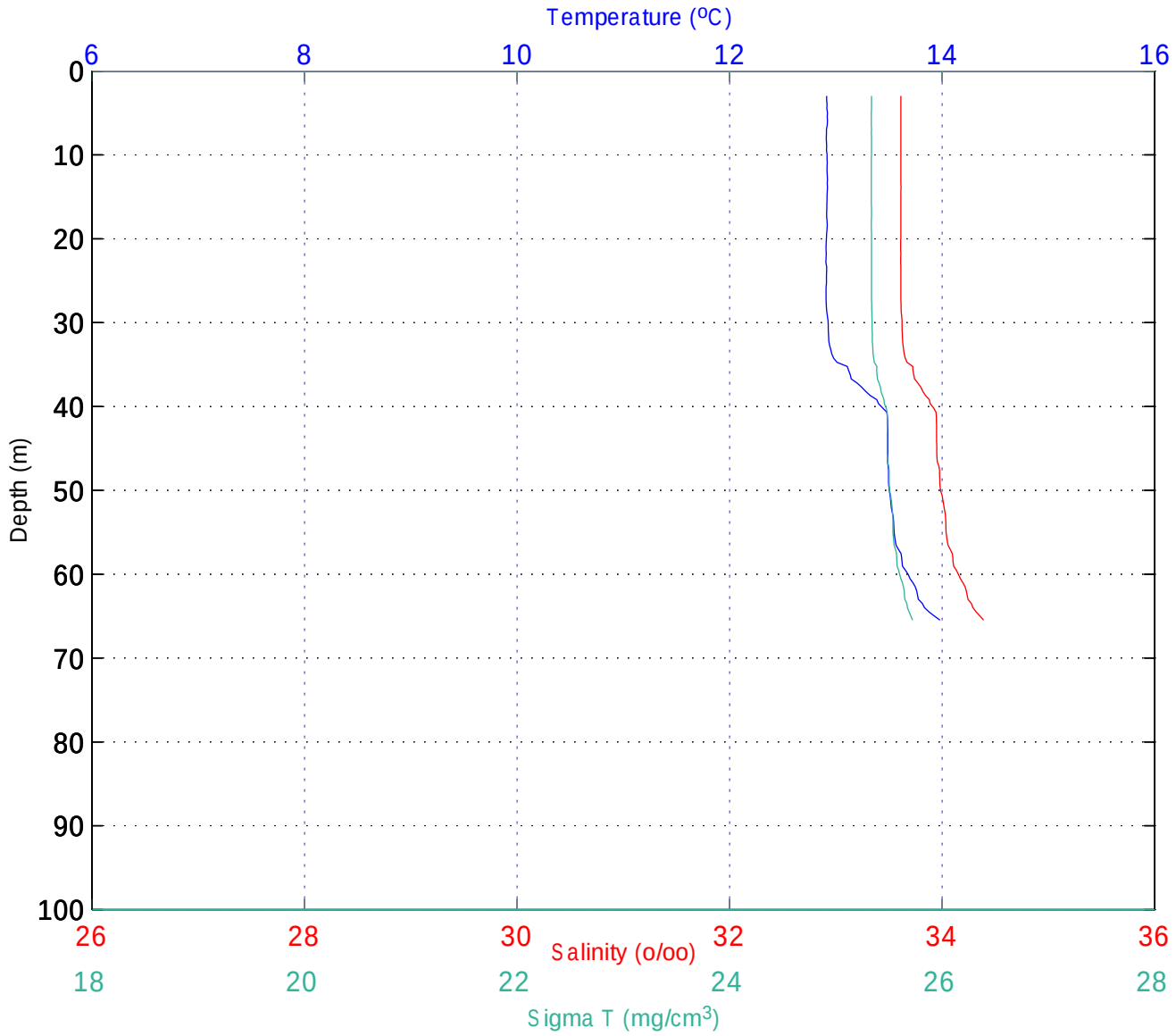
Oceanus Cast 23: Temperature, Salinity, and Sigma T



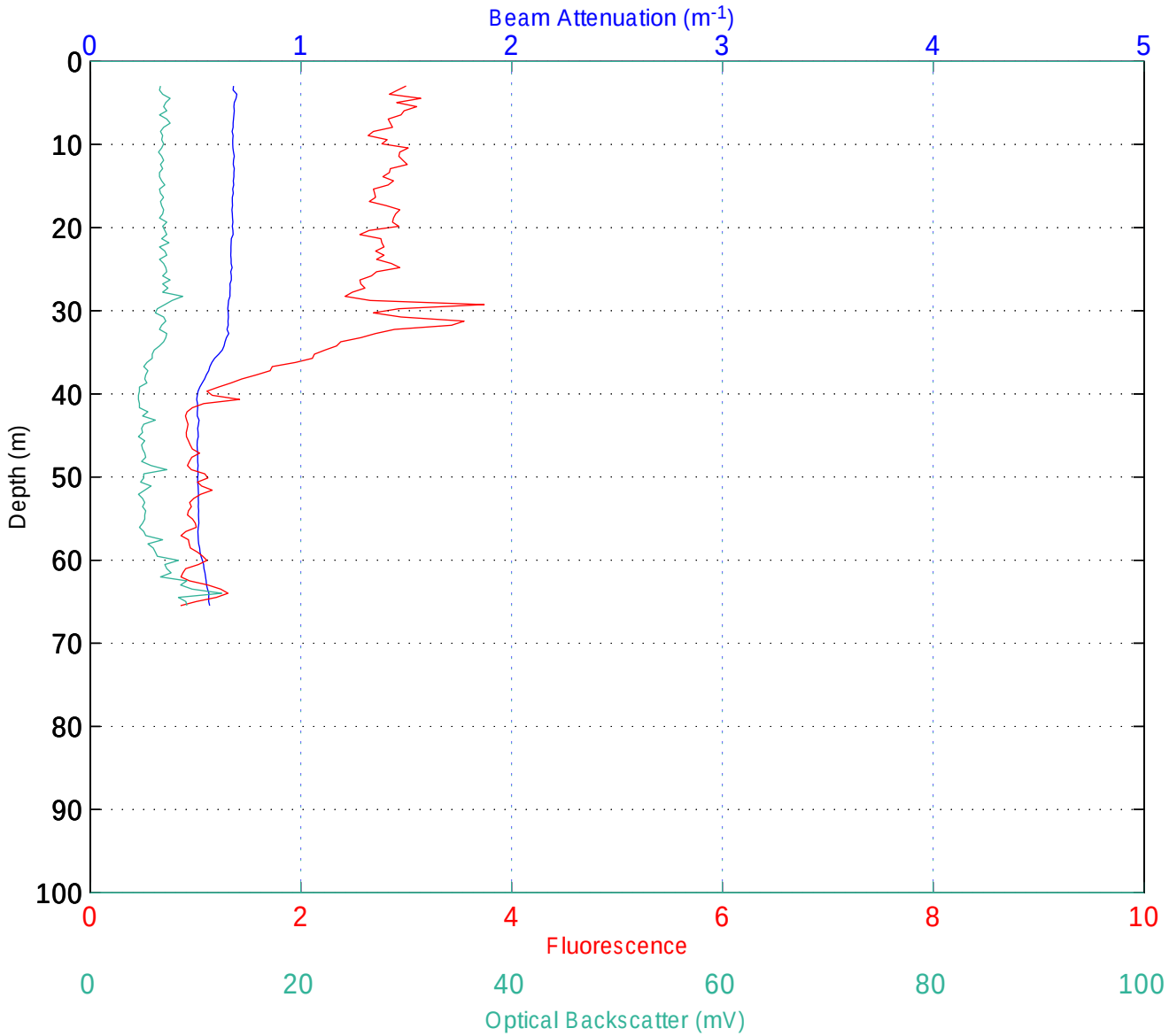
Oceanus Cast 23: Beam Attenuation, Fluorescence, and Optical Backscatter



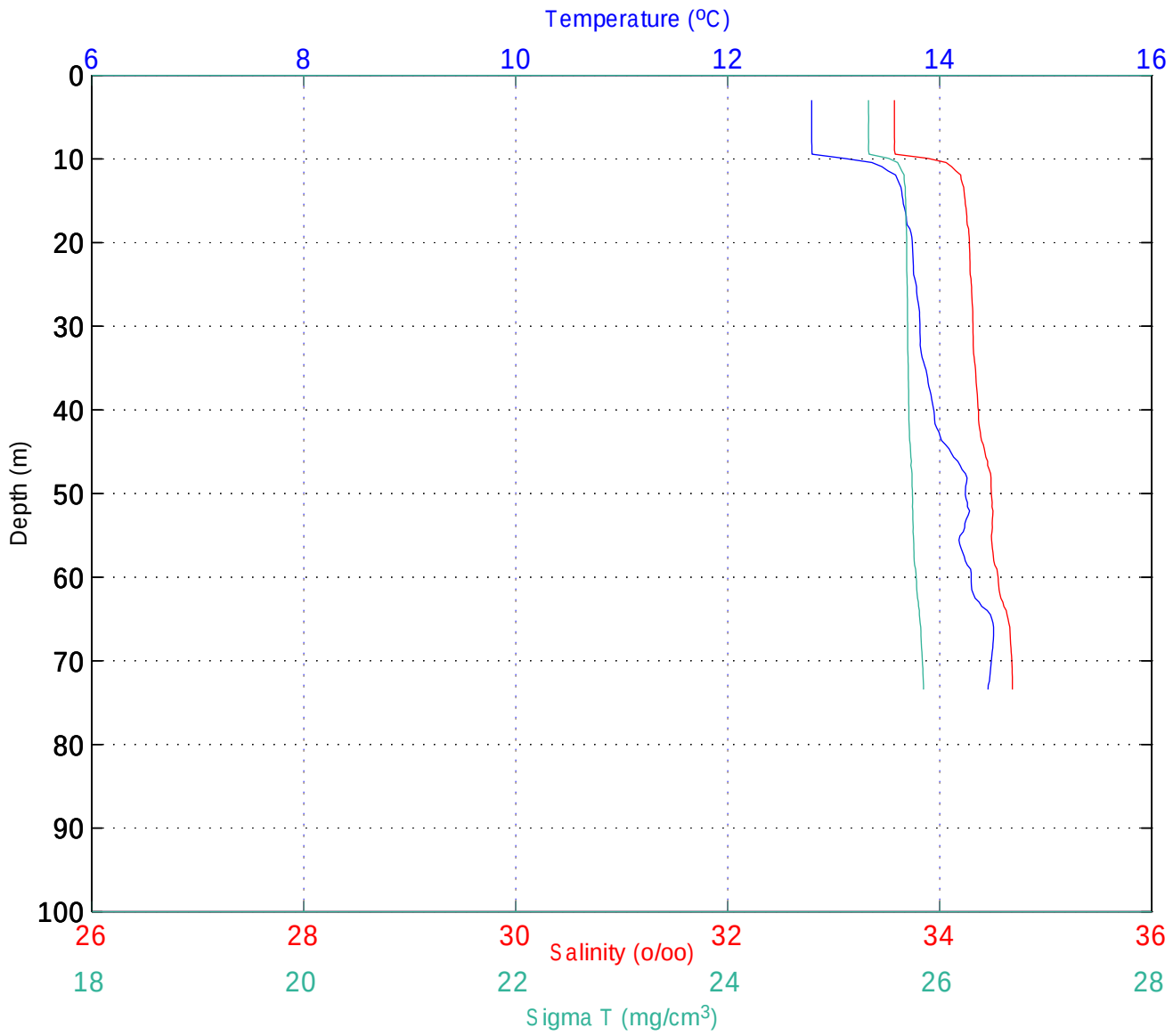
Oceanus Cast 24: Temperature, Salinity, and Sigma T



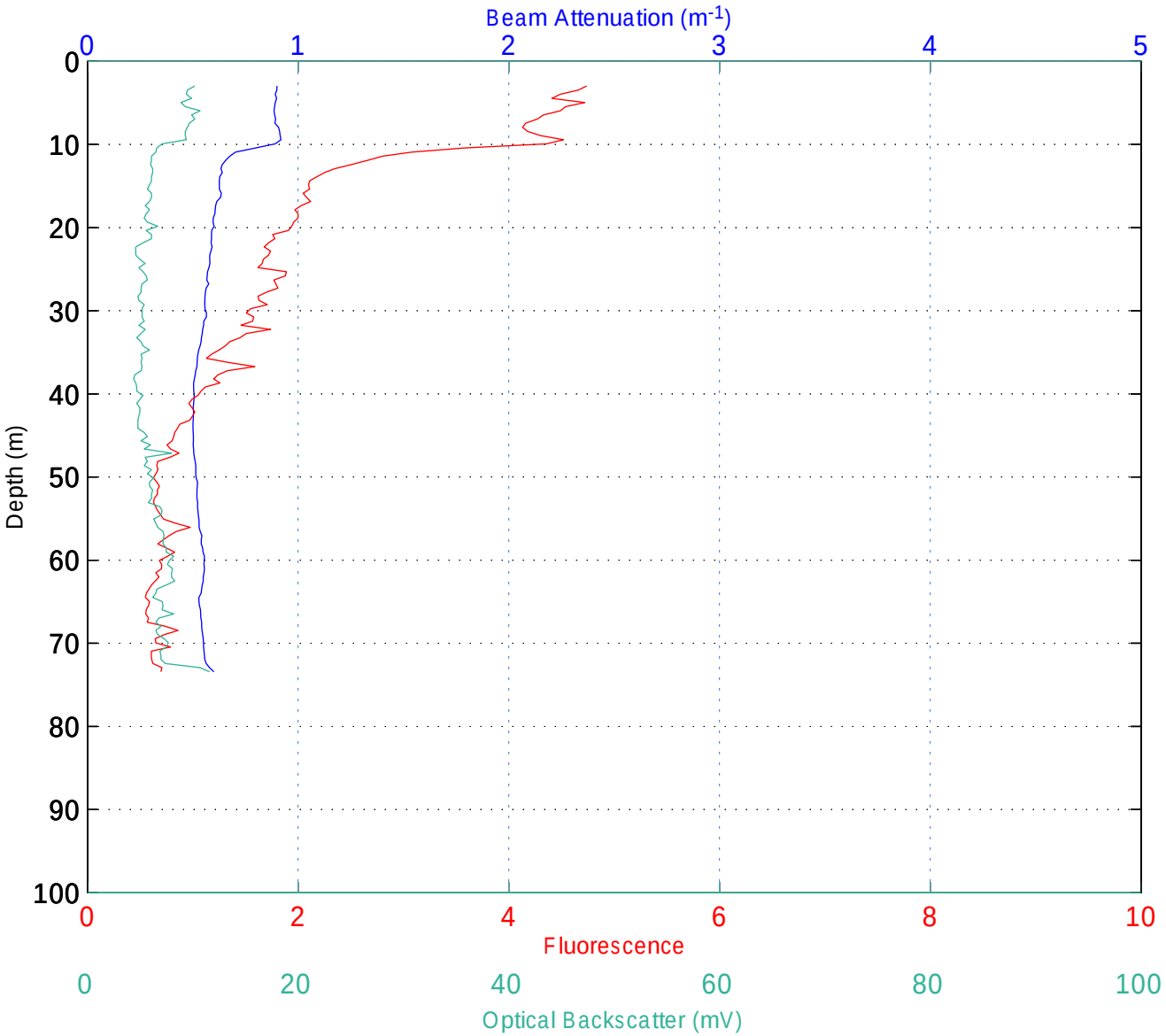
Oceanus Cast 24: Beam Attenuation, Fluorescence, and Optical Backscatter



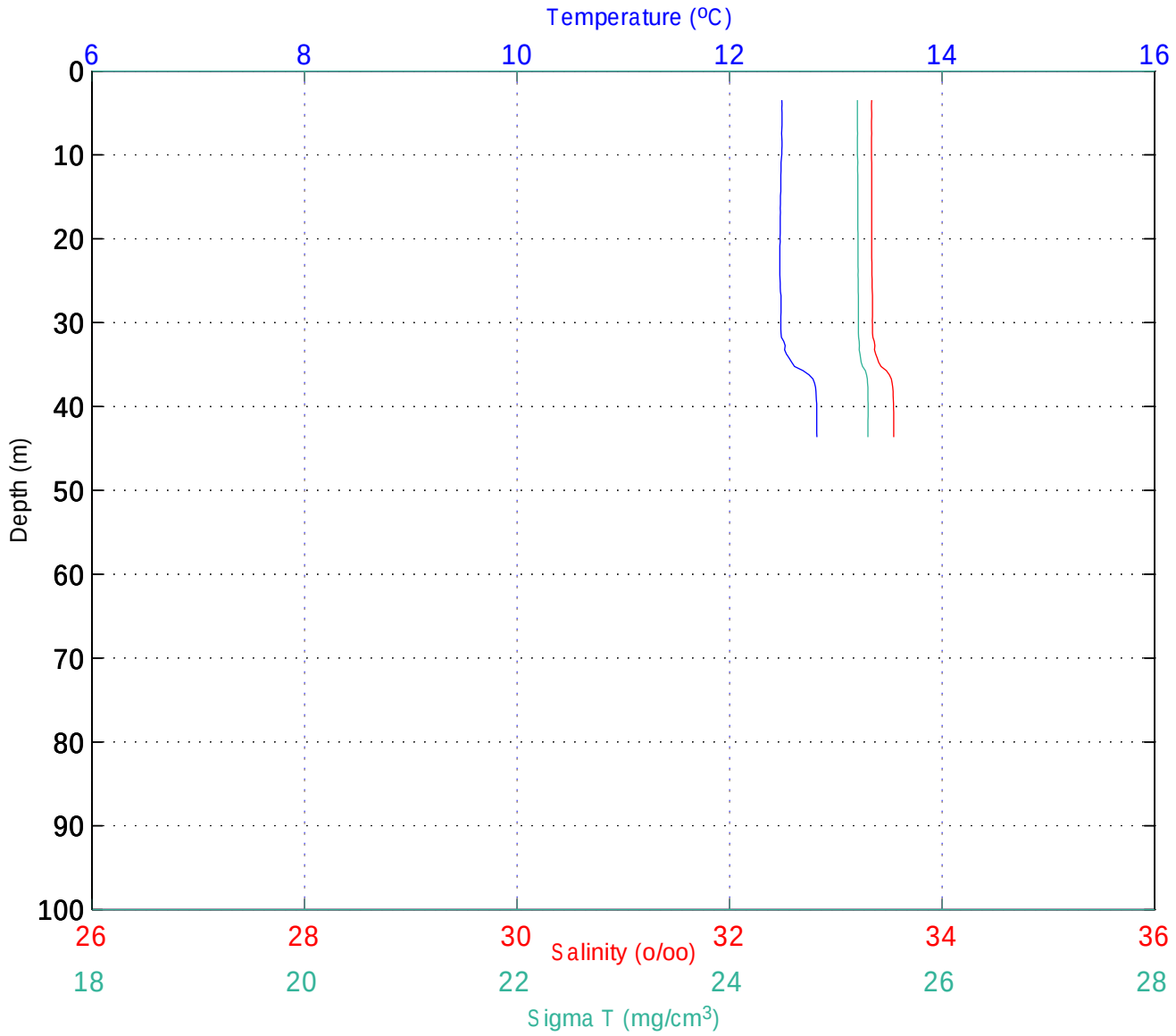
Oceanus Cast 25: Temperature, Salinity, and Sigma T



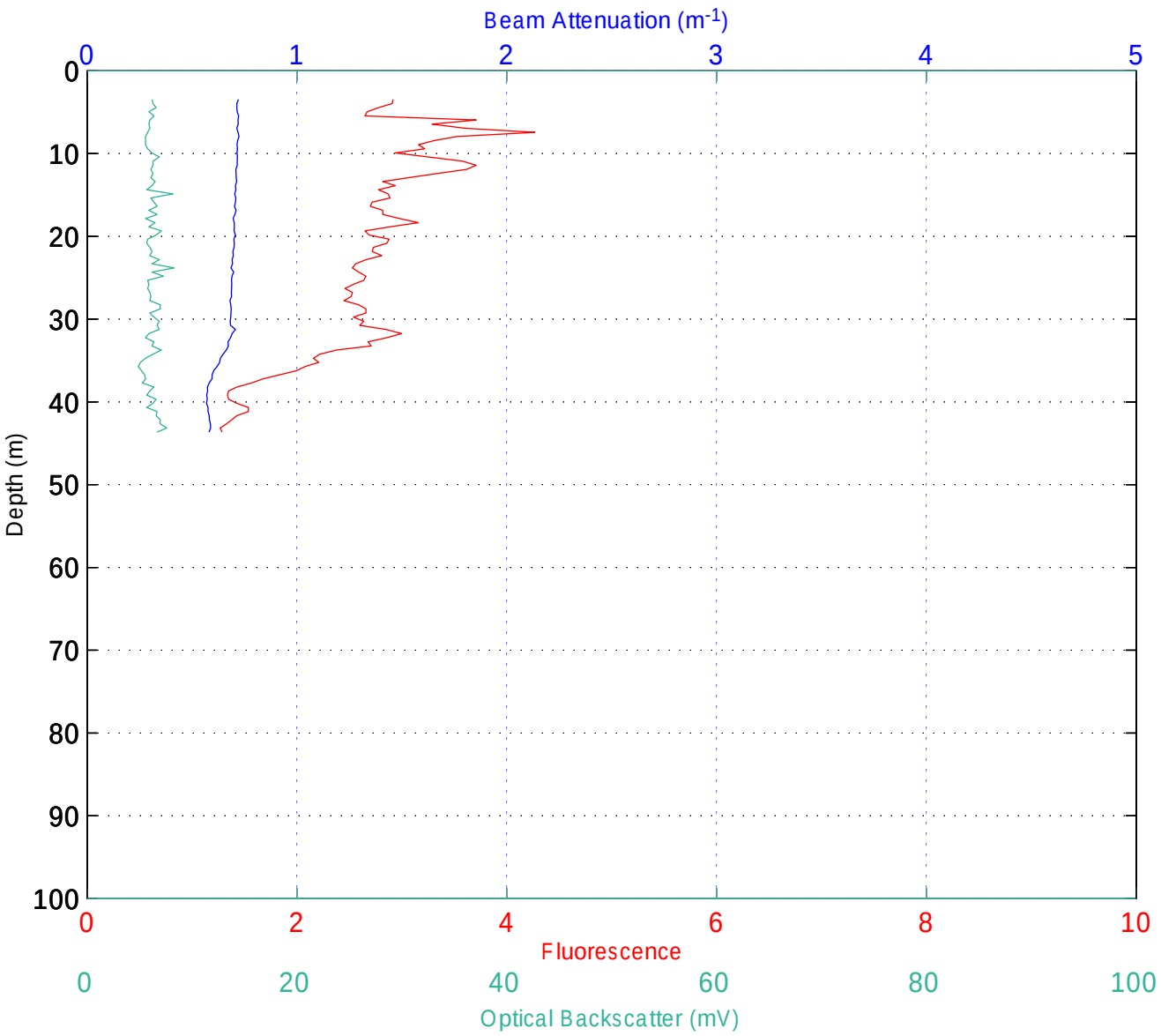
Oceanus Cast 25: Beam Attenuation, Fluorescence, and Optical Backscatter



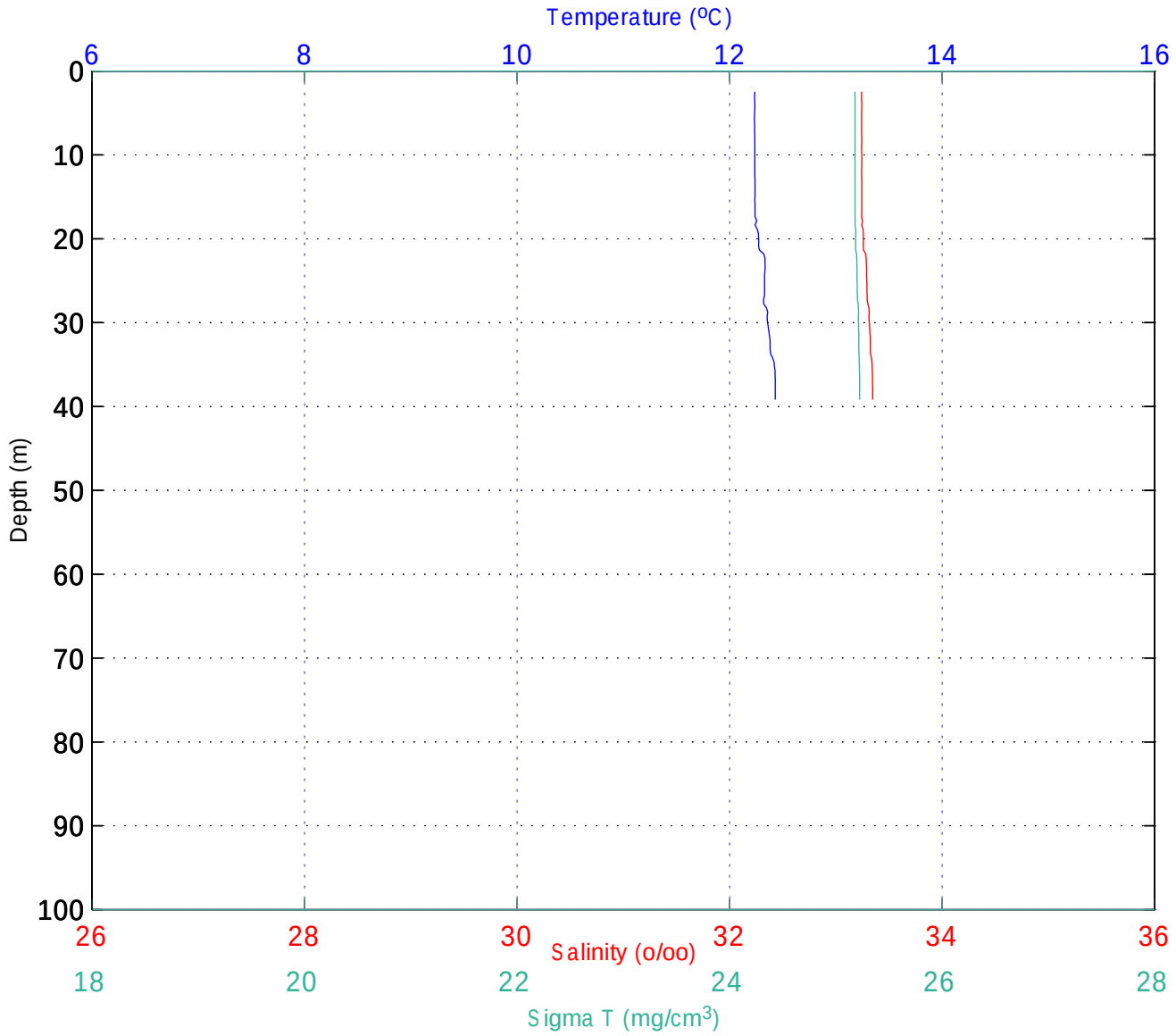
Oceanus Cast 26: Temperature, Salinity, and Sigma T



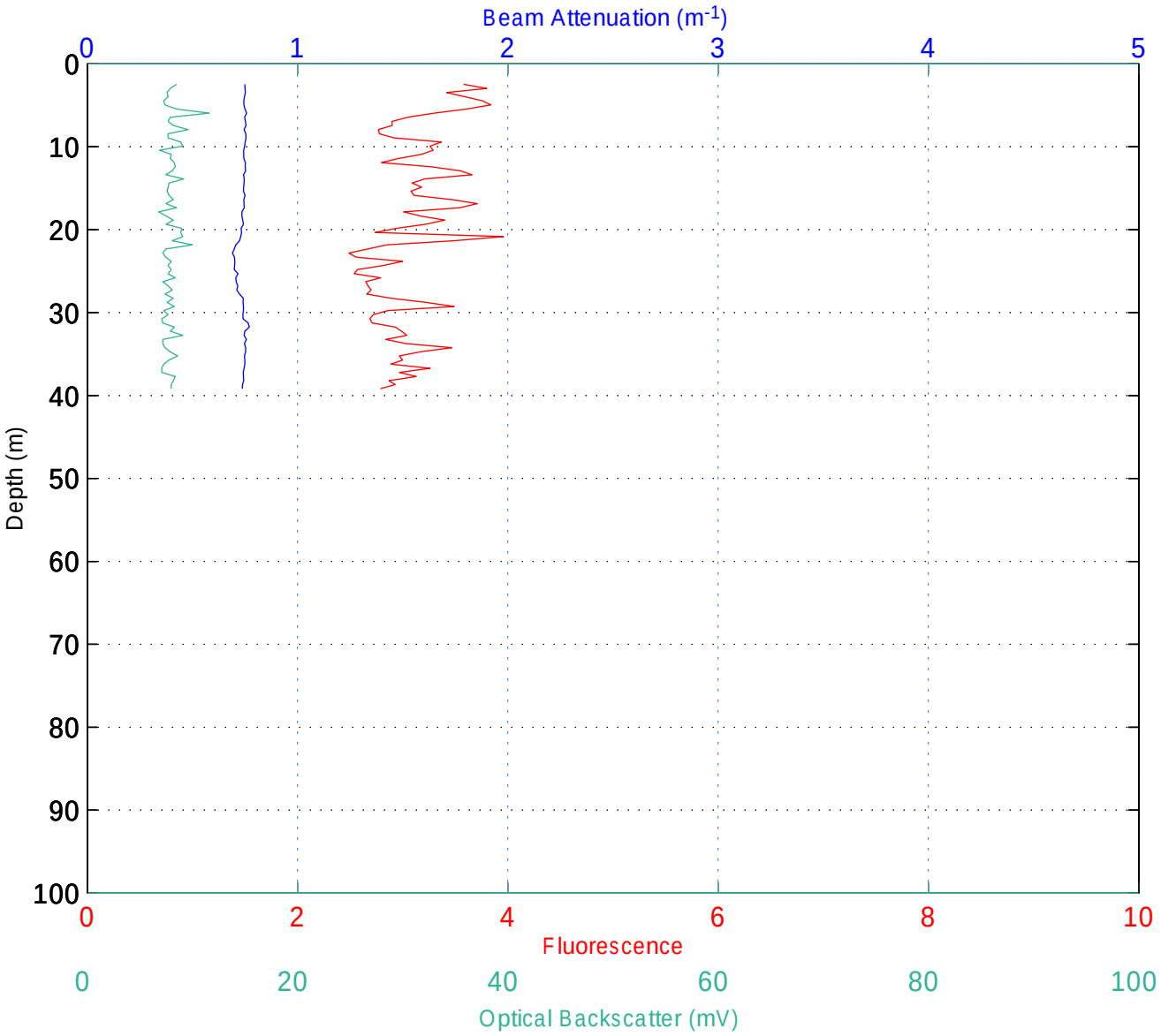
Oceanus Cast 26: Beam Attenuation, Fluorescence, and Optical Backscatter



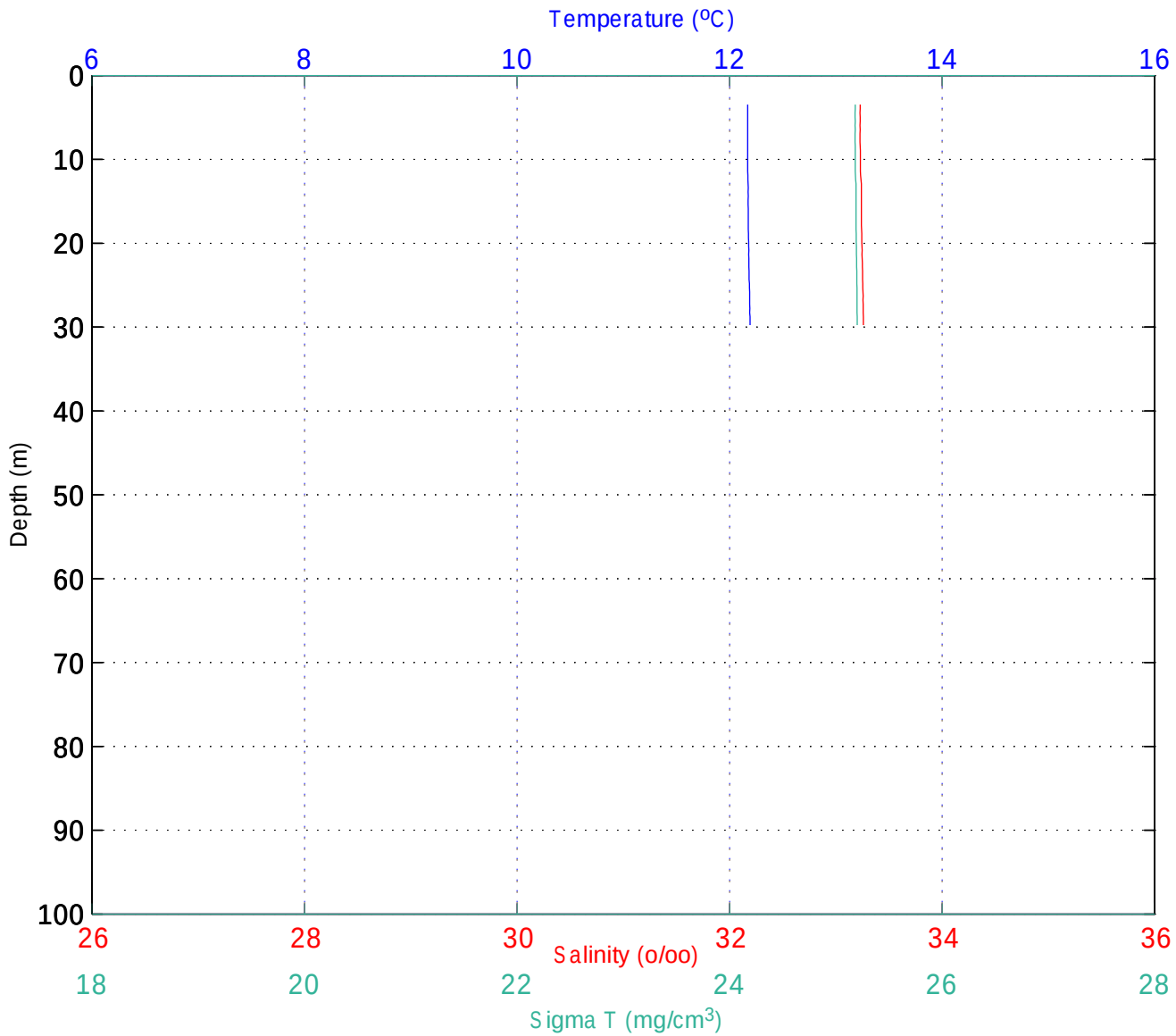
Oceanus Cast 27: Temperature, Salinity, and Sigma T



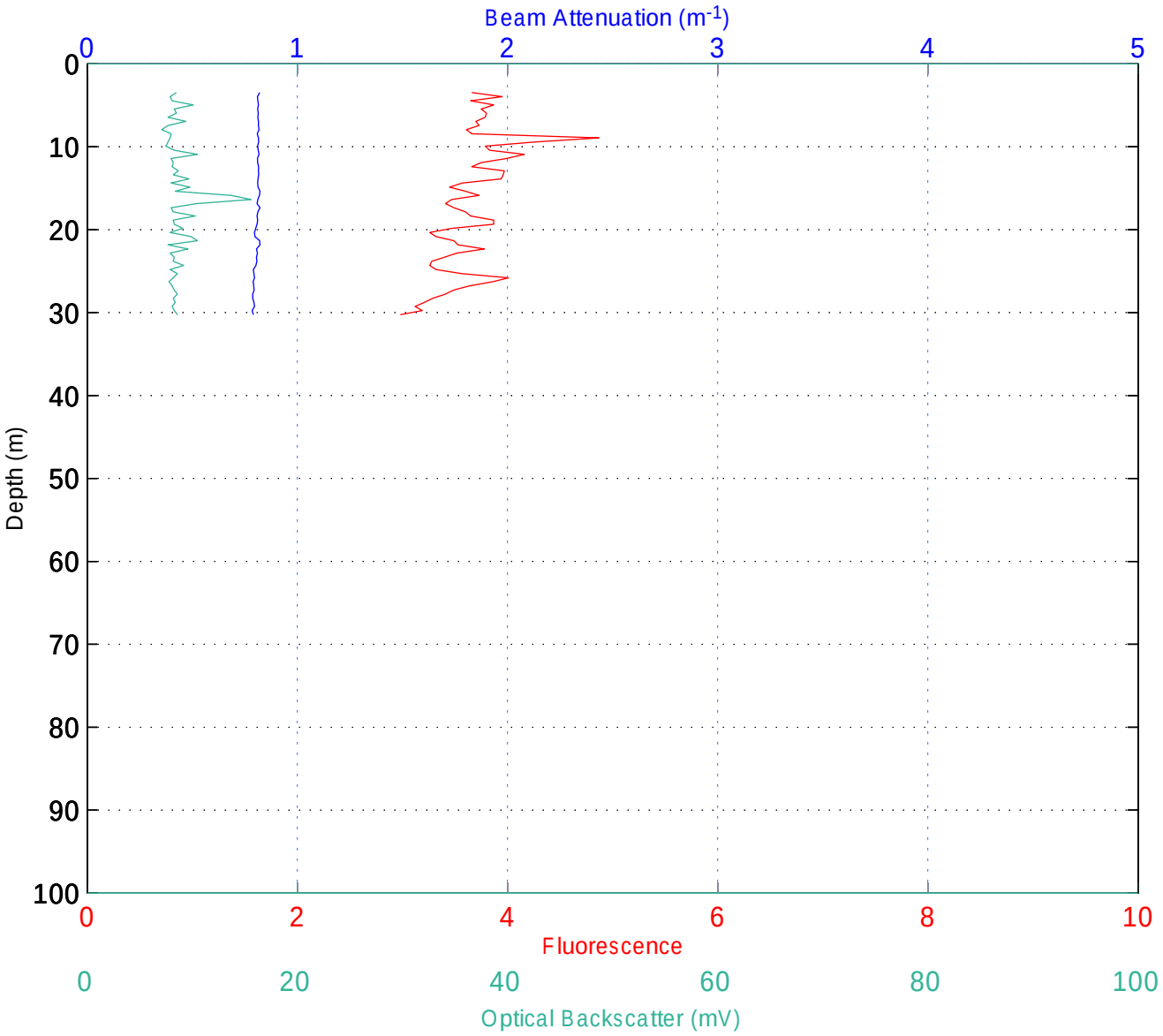
Oceanus Cast 27: Beam Attenuation, Fluorescence, and Optical Backscatter



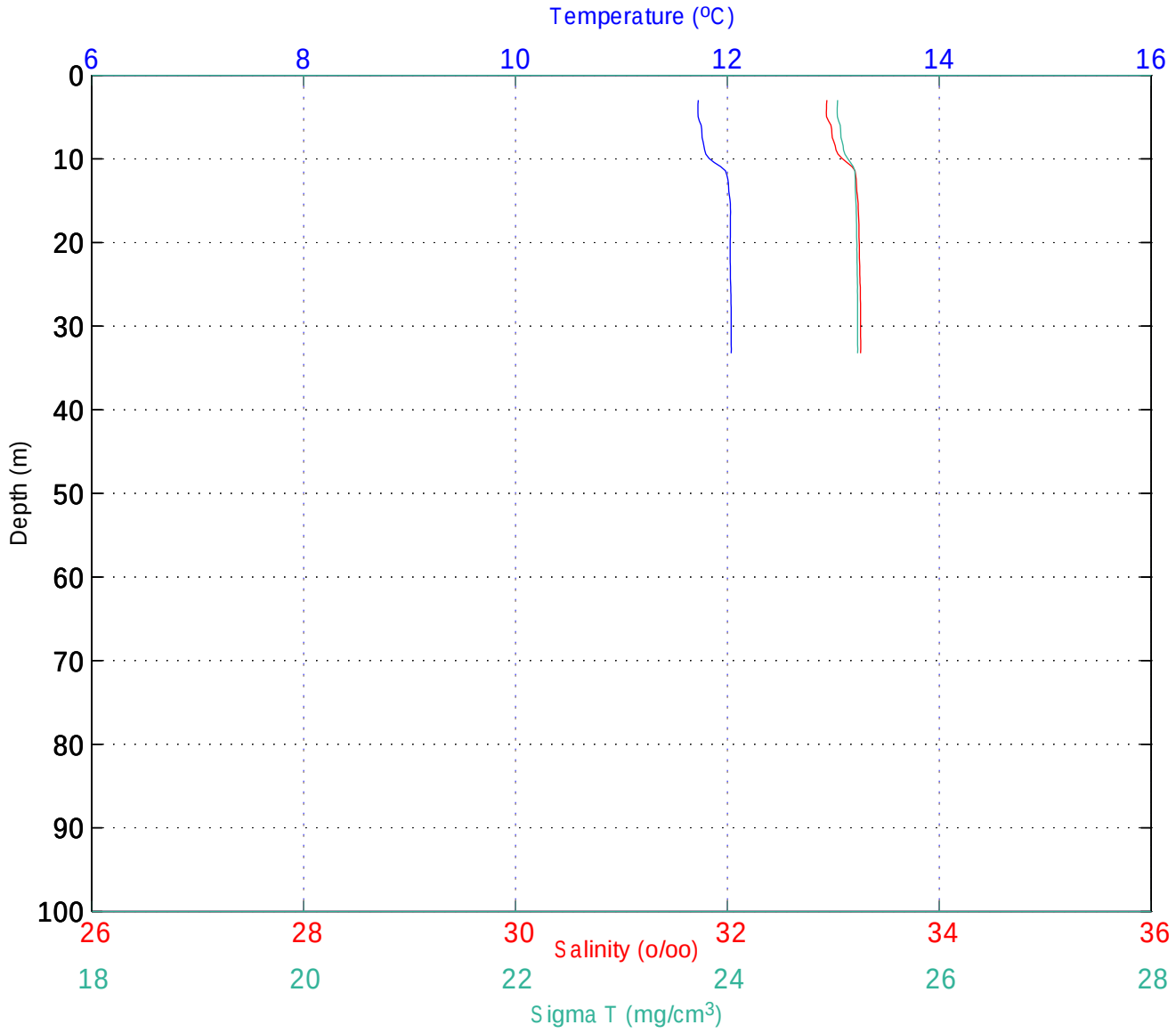
Oceanus Cast 28: Temperature, Salinity, and Sigma T



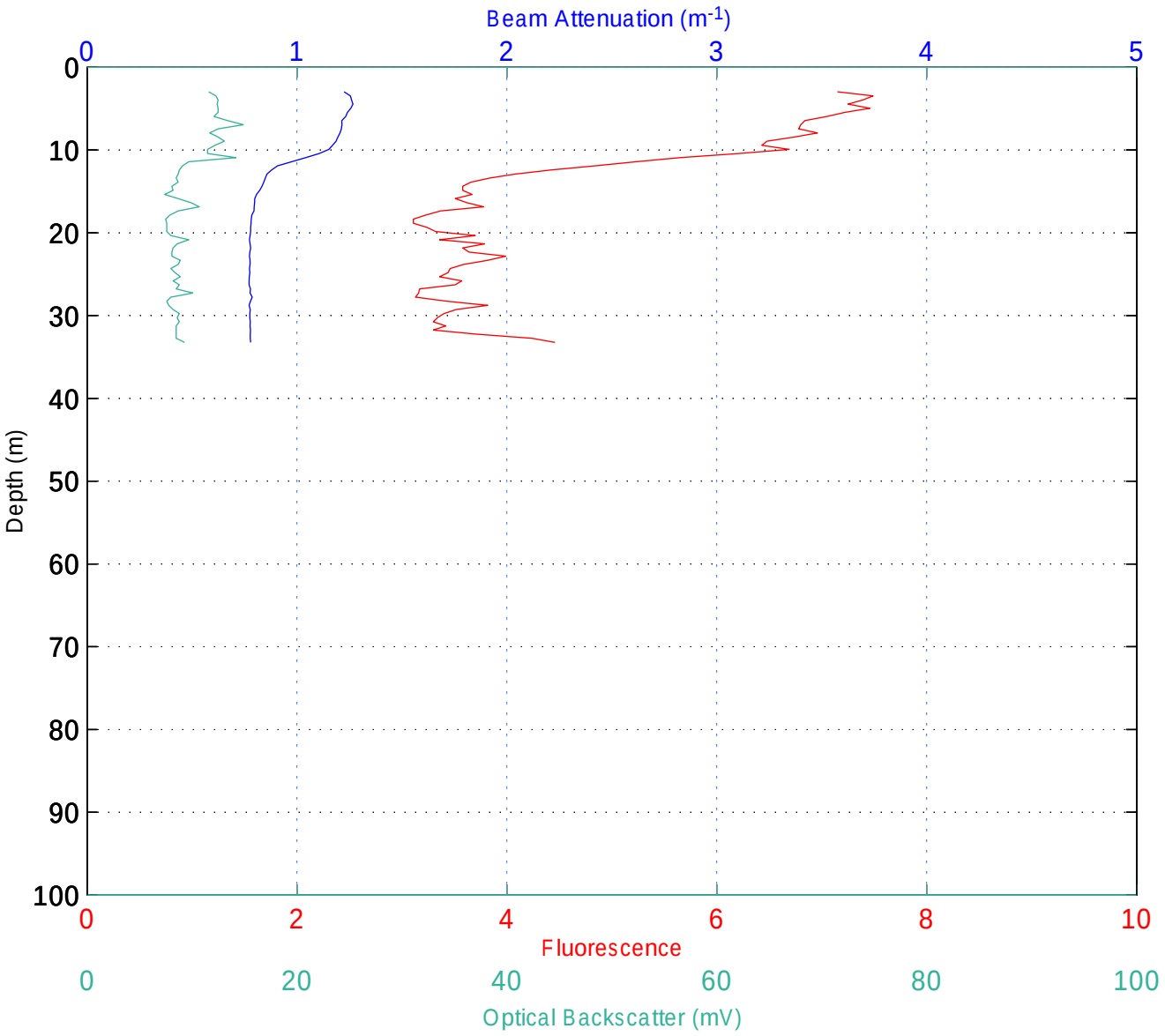
Oceanus Cast 28: Beam Attenuation, Fluorescence, and Optical Backscatter



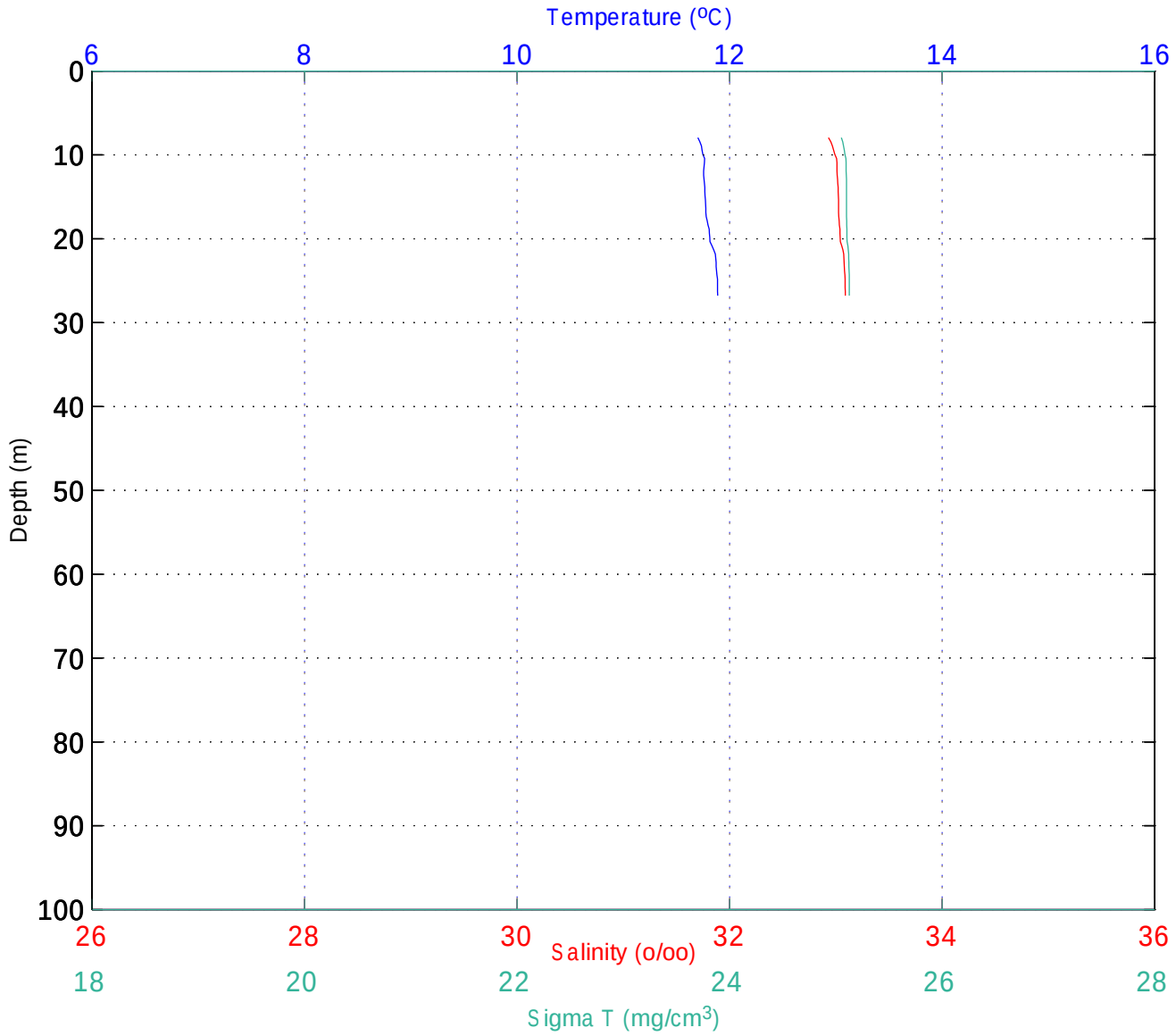
Oceanus Cast 29: Temperature, Salinity, and Sigma T



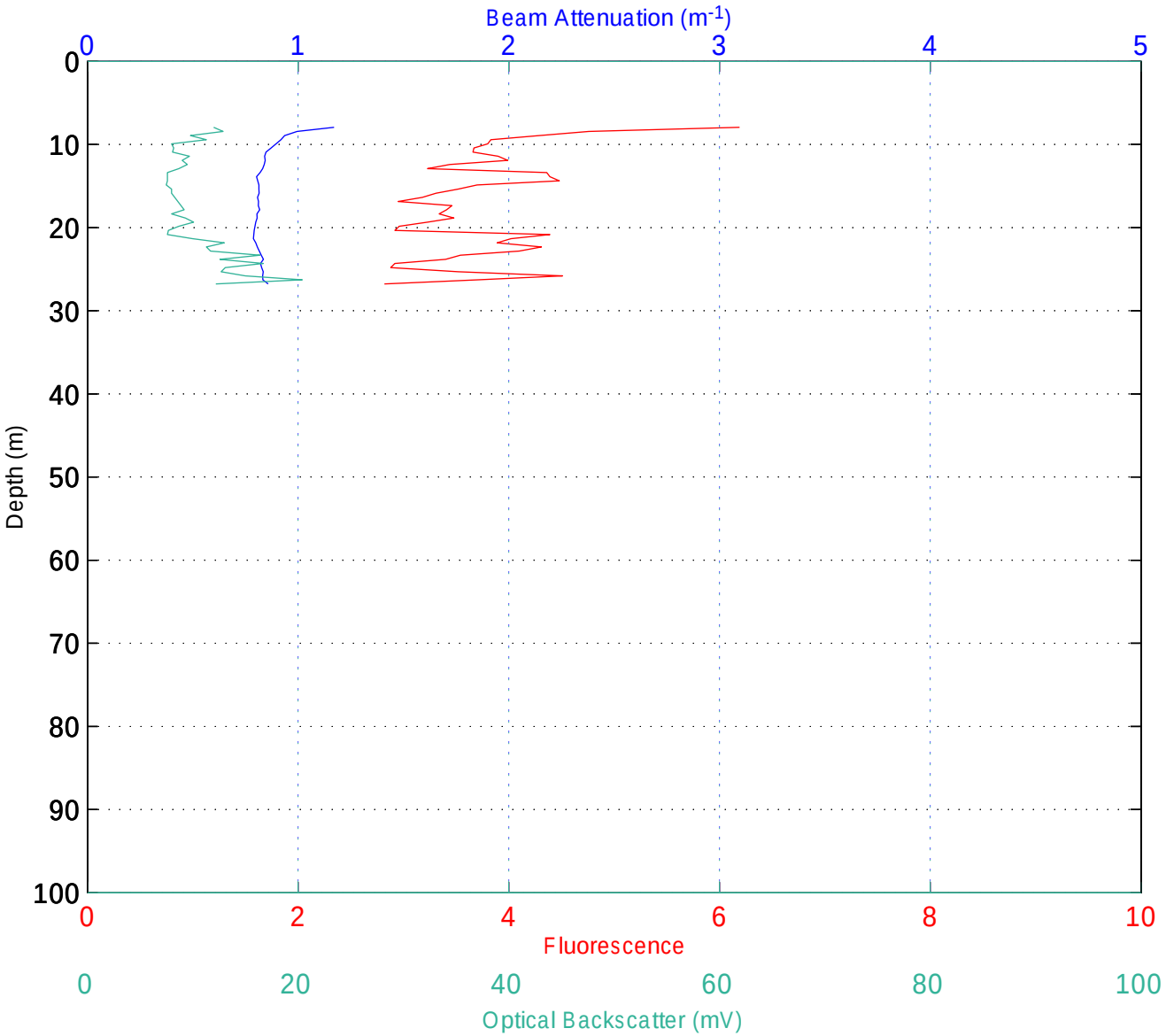
Oceanus Cast 29: Beam Attenuation, Fluorescence, and Optical Backscatter



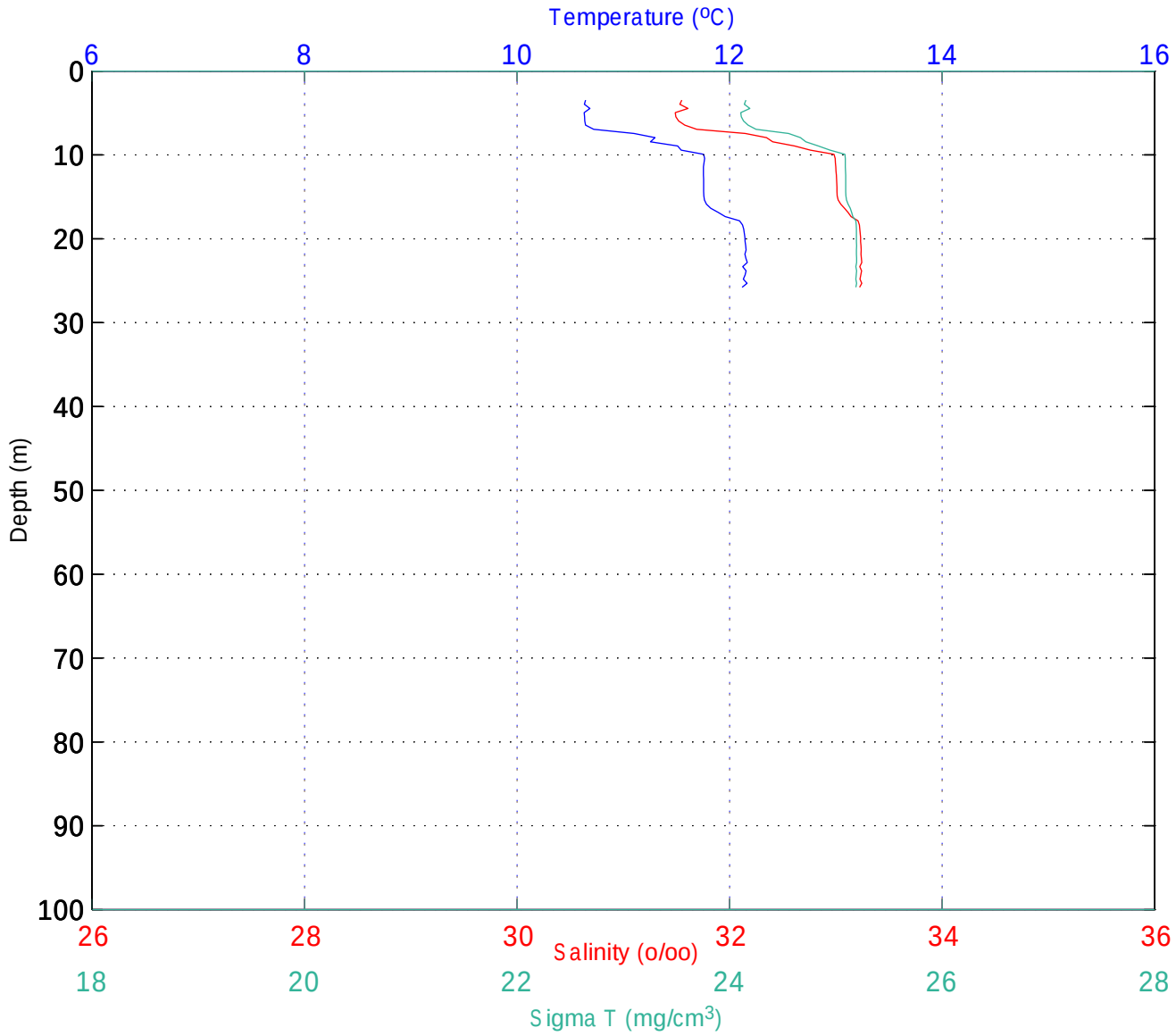
Oceanus Cast 30: Temperature, Salinity, and Sigma T



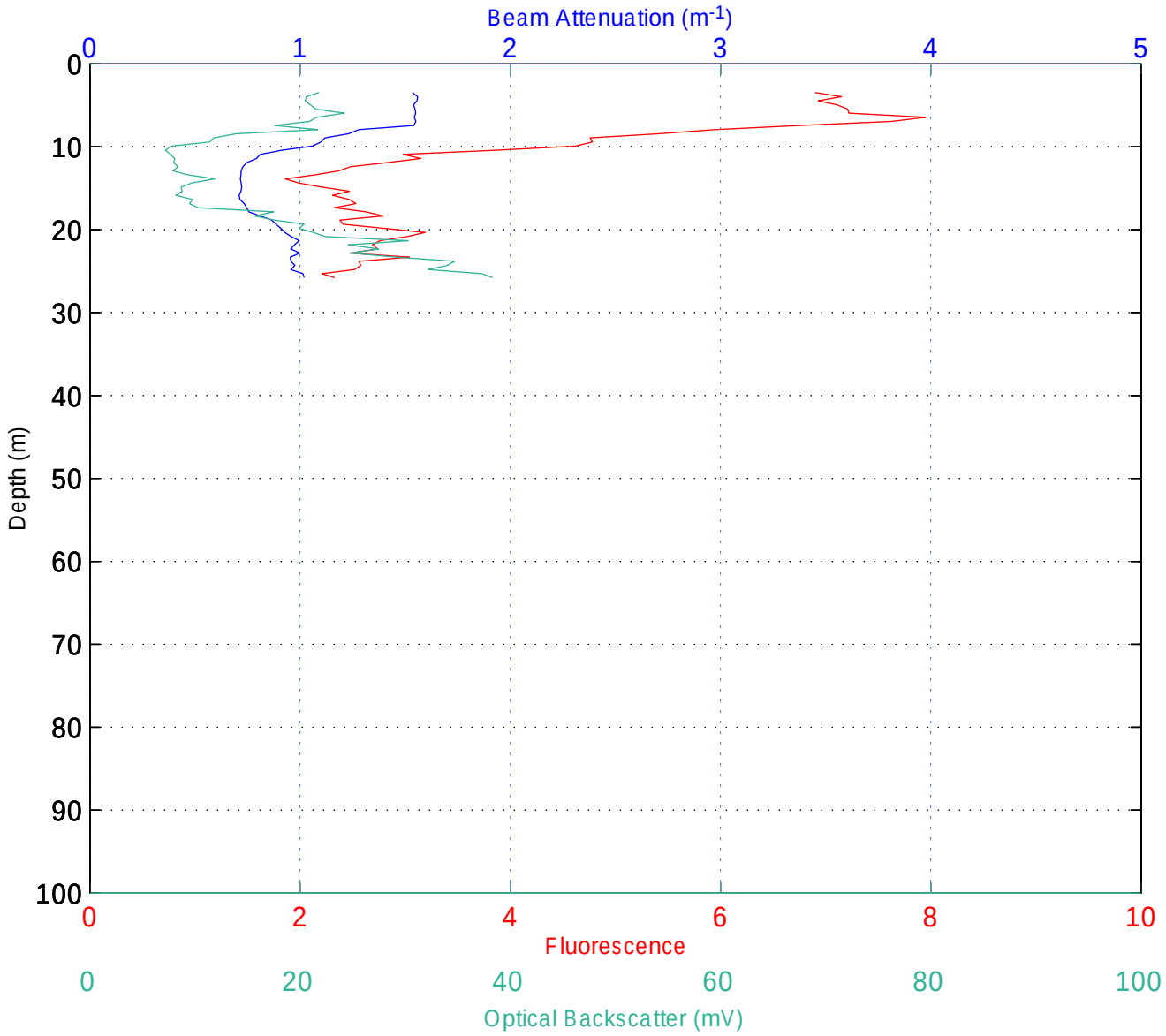
Oceanus Cast 30: Beam Attenuation, Fluorescence, and Optical Backscatter



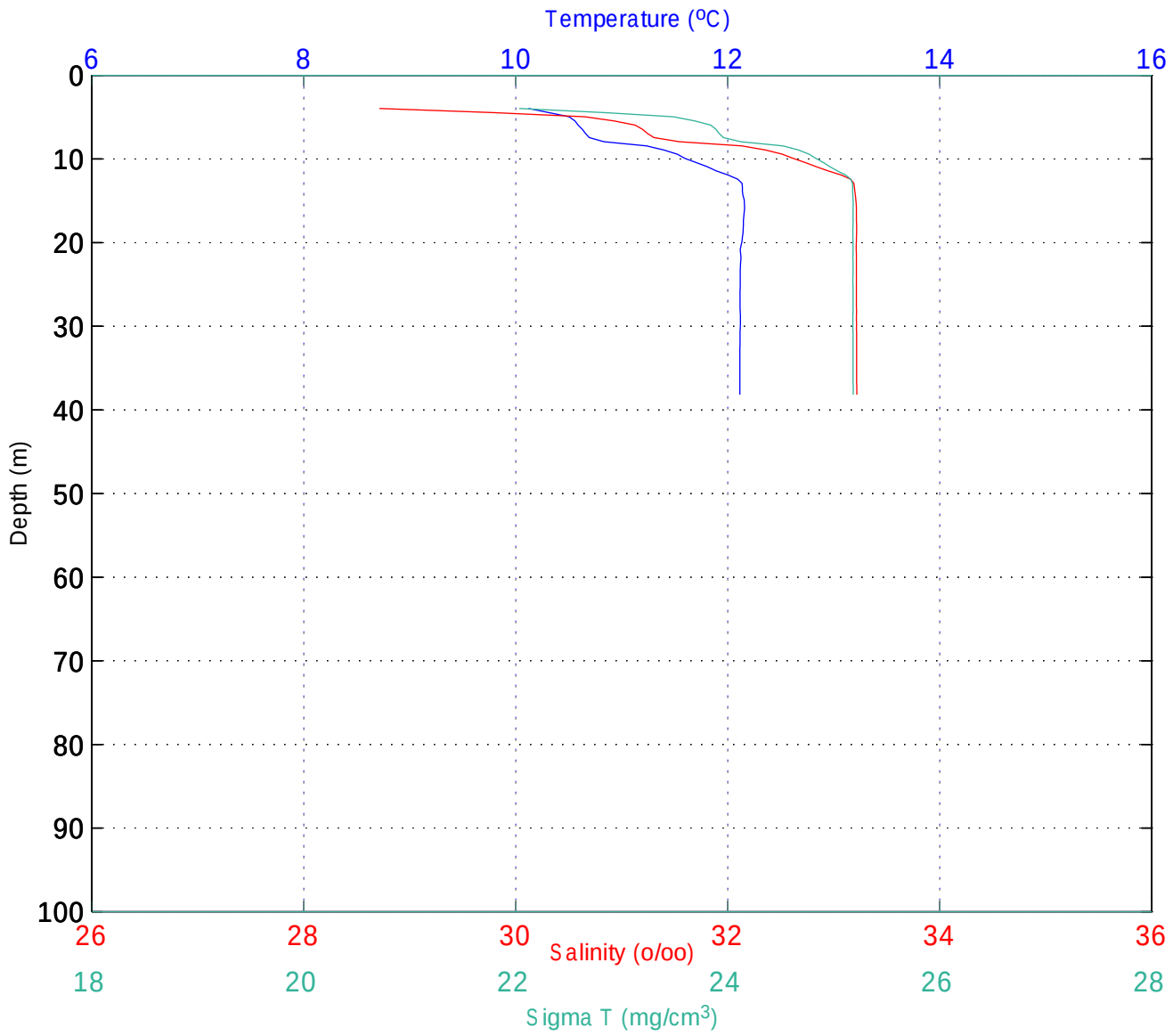
Oceanus Cast 31: Temperature, Salinity, and Sigma T



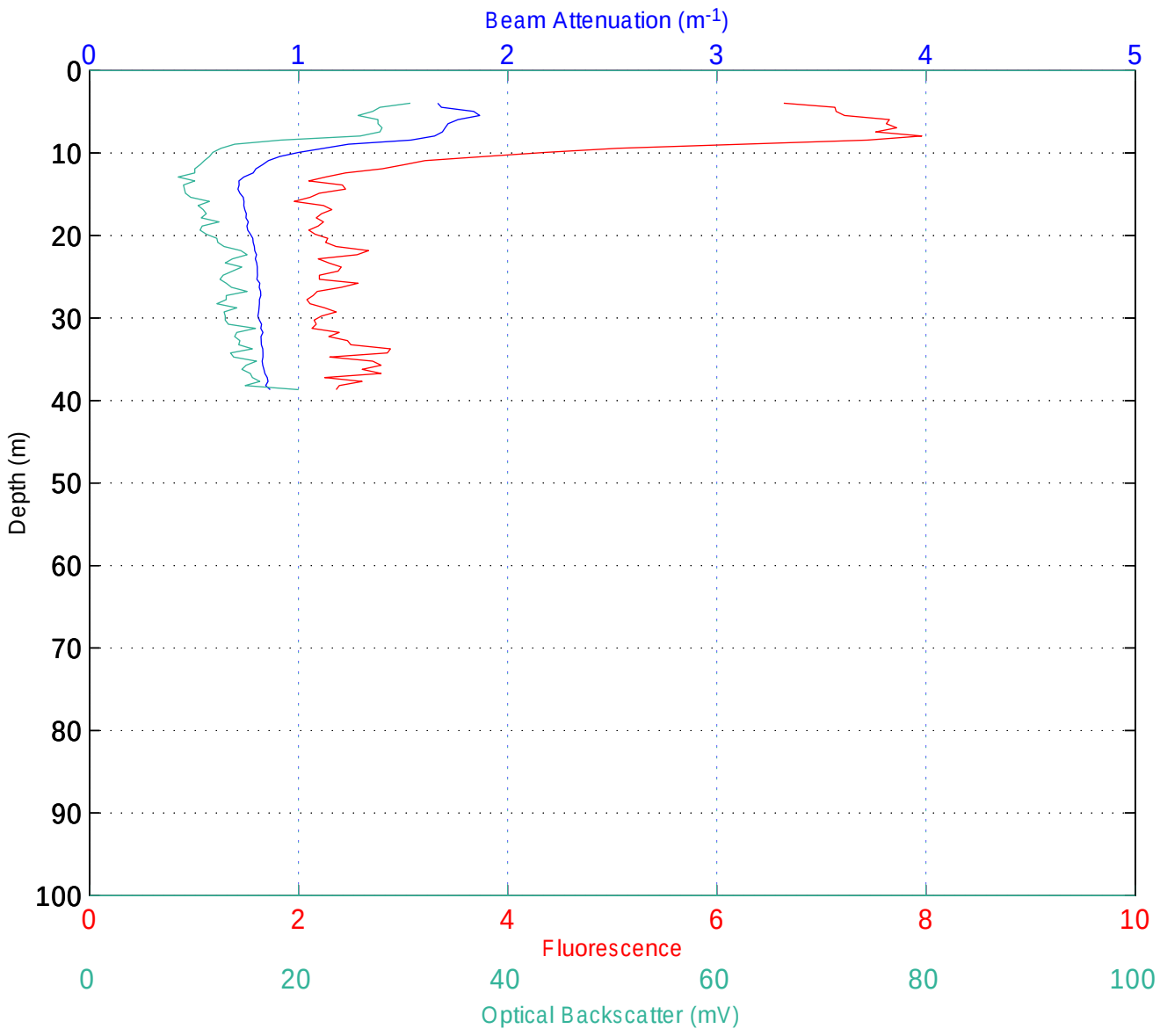
Oceanus Cast 31: Beam Attenuation, Fluorescence, and Optical Backscatter



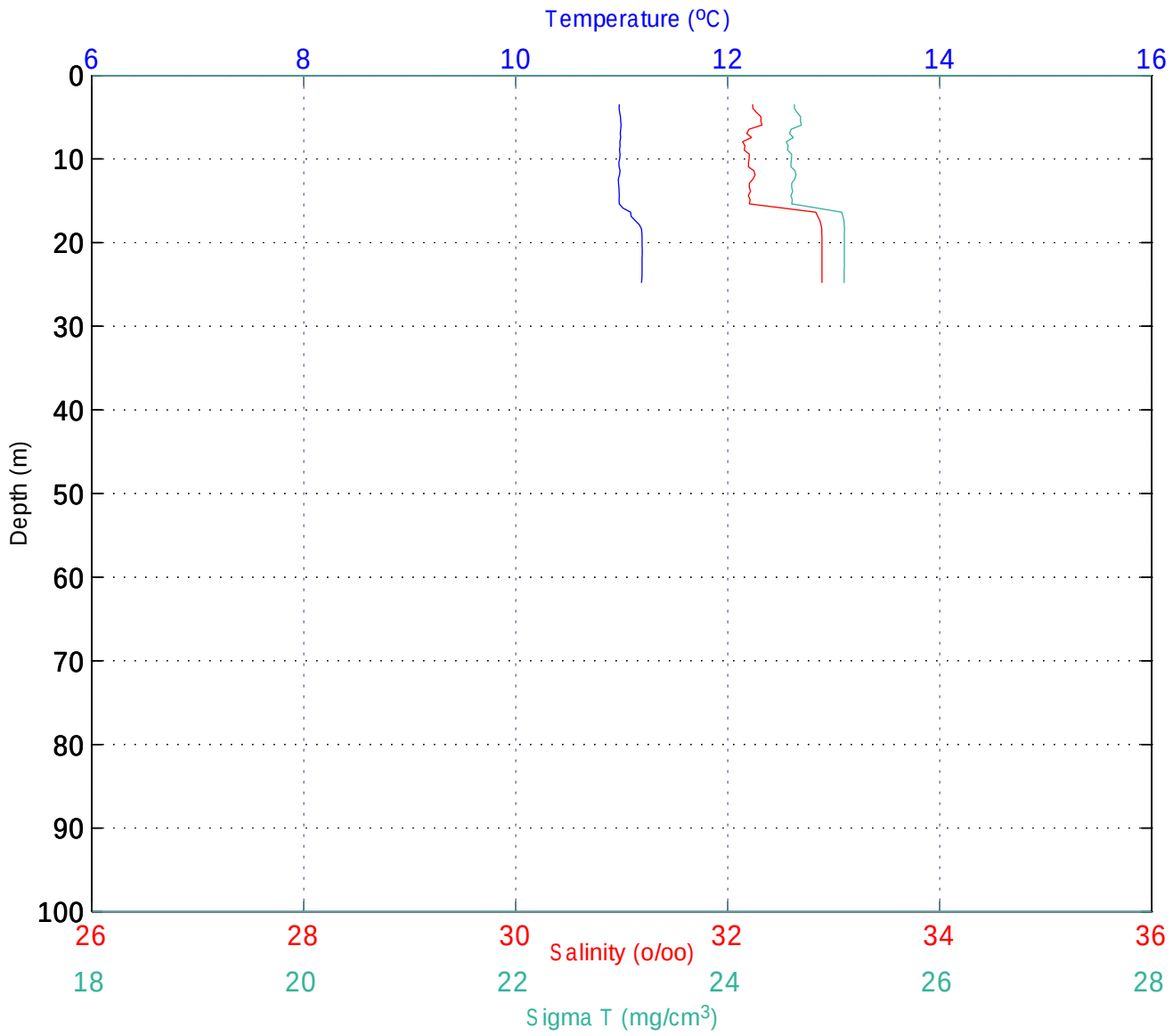
Oceanus Cast 32: Temperature, Salinity, and Sigma T



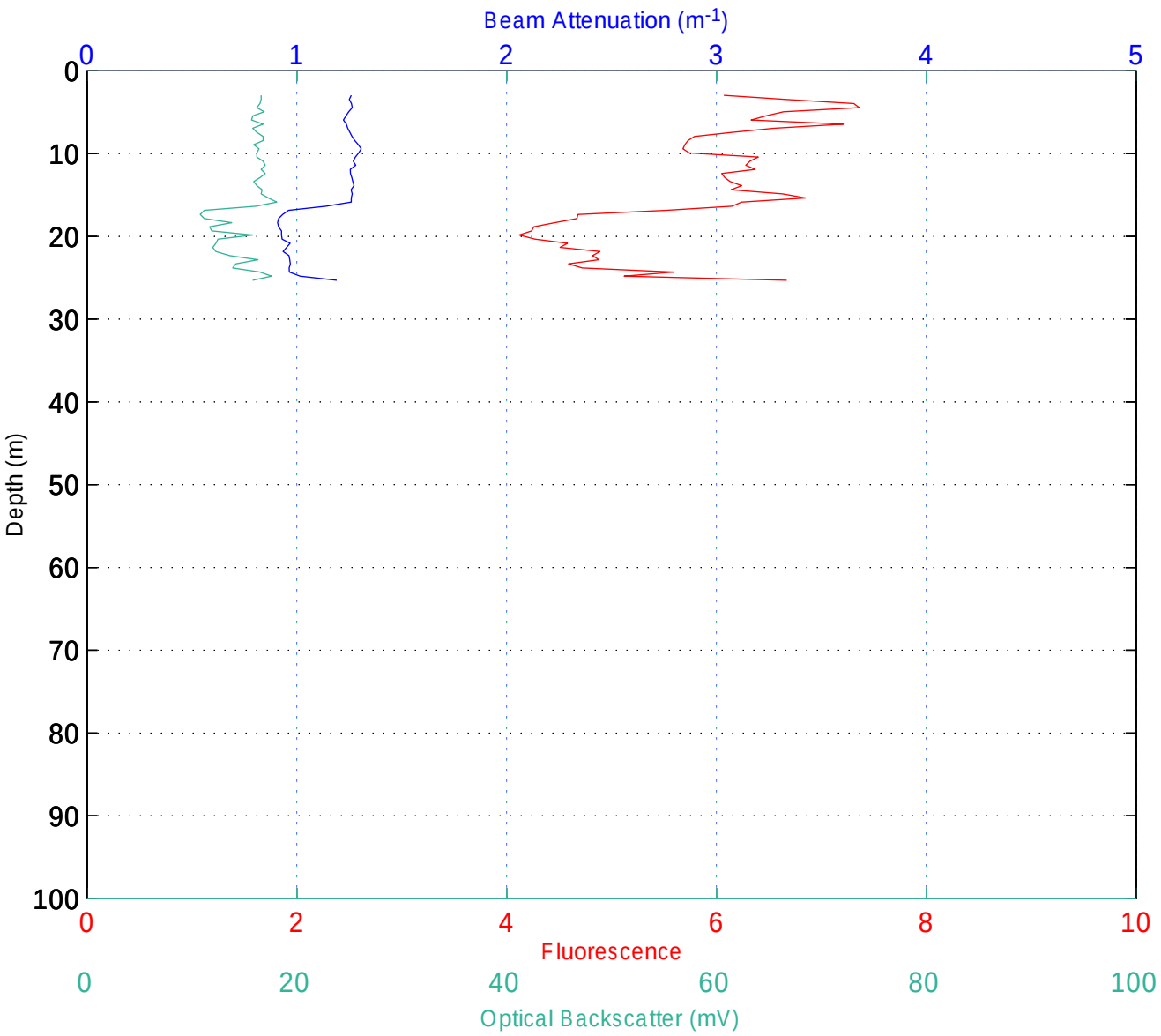
Oceanus Cast 32: Beam Attenuation, Fluorescence, and Optical Backscatter



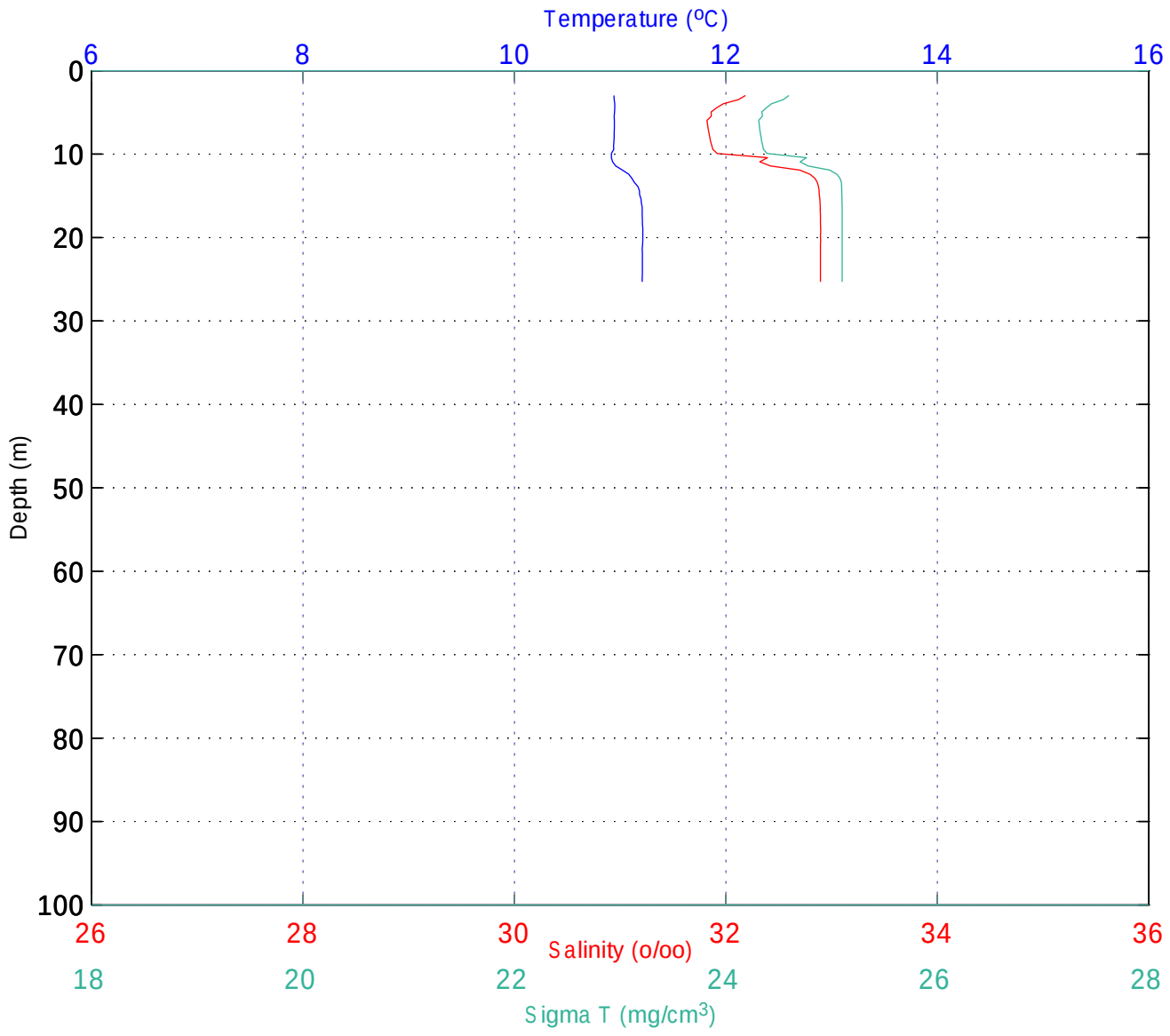
Oceanus Cast 33: Temperature, Salinity, and Sigma T



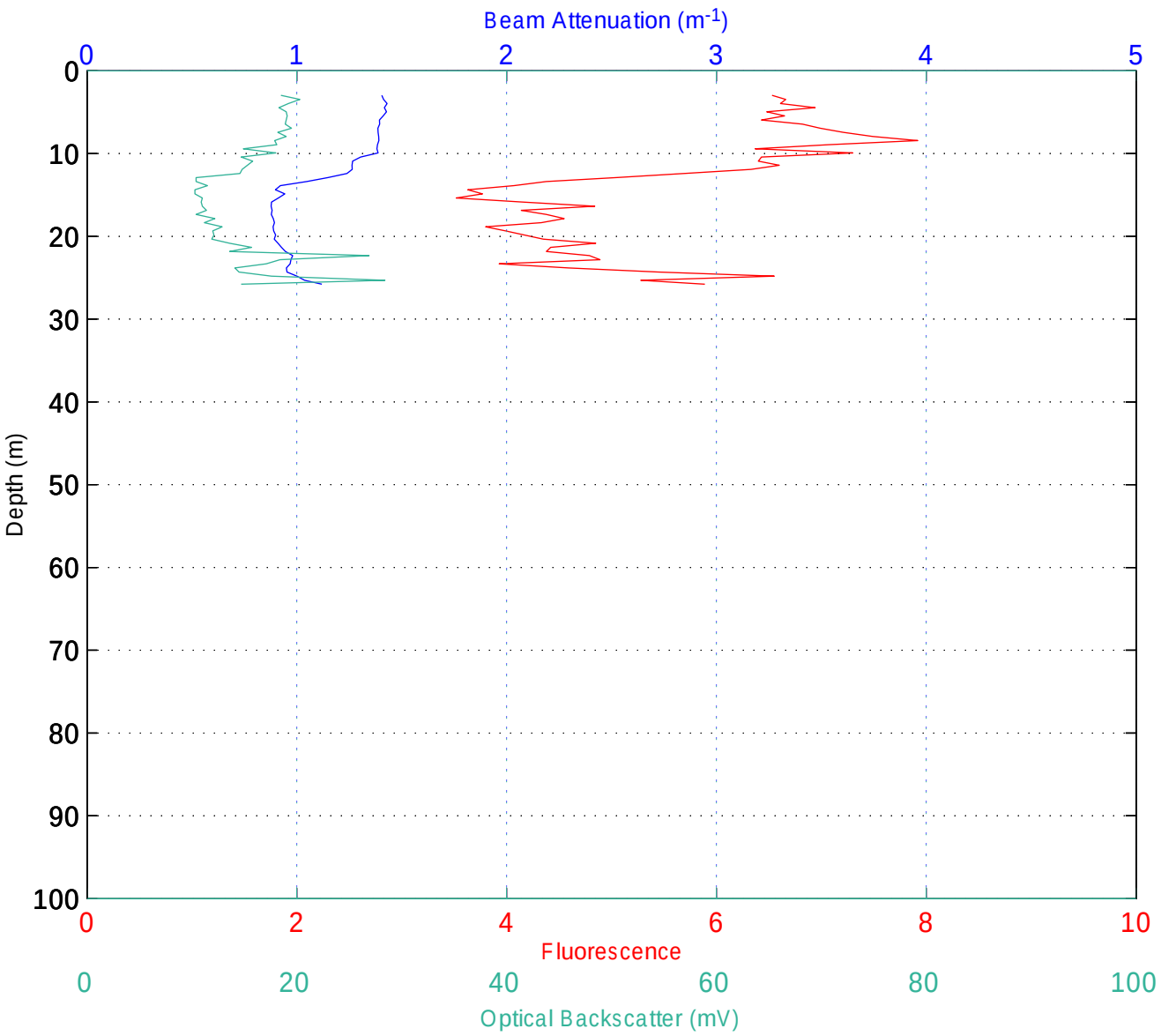
Oceanus Cast 33: Beam Attenuation, Fluorescence, and Optical Backscatter



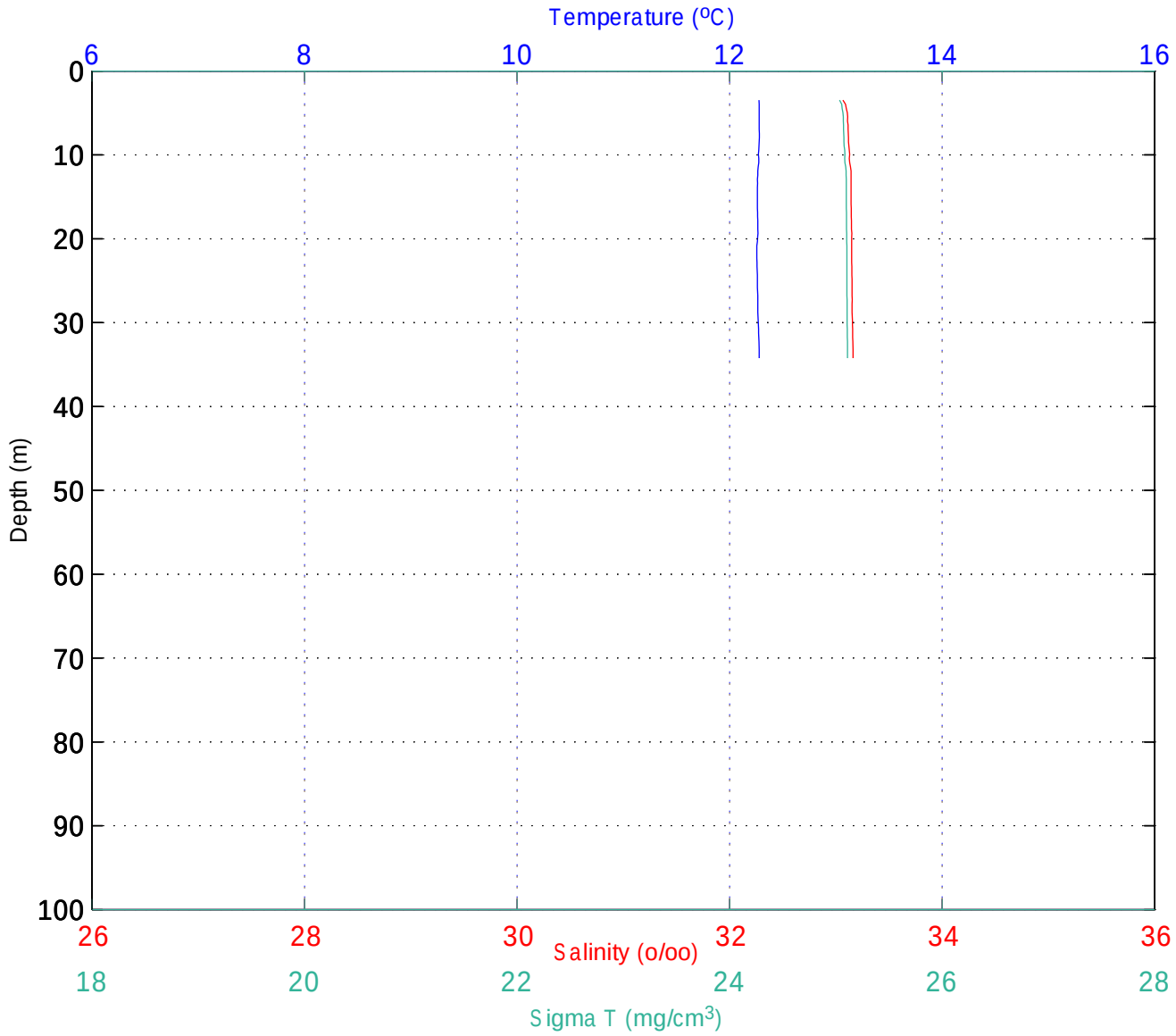
Oceanus Cast 34: Temperature, Salinity, and Sigma T



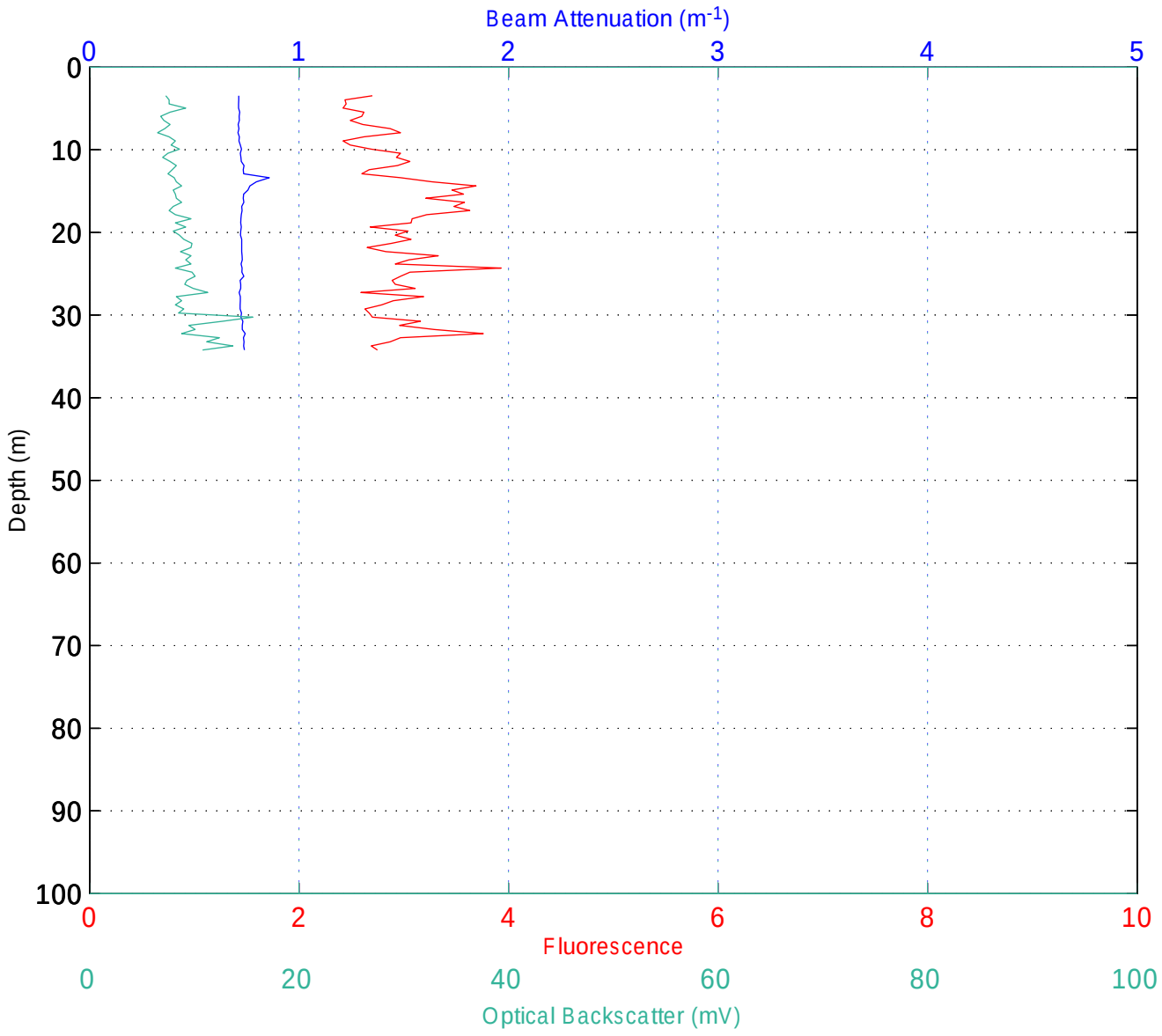
Oceanus Cast 34: Beam Attenuation, Fluorescence, and Optical Backscatter



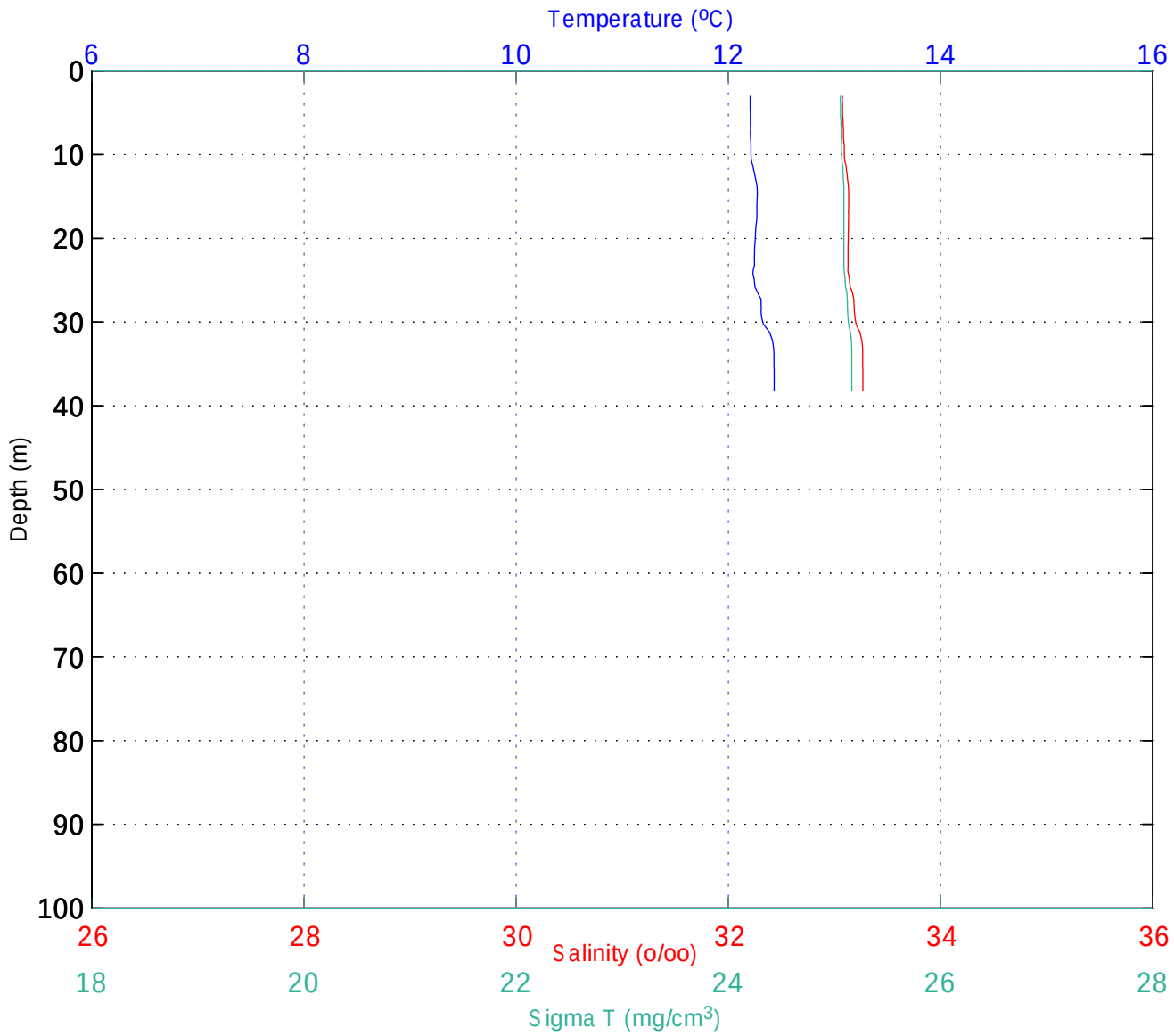
Oceanus Cast 35: Temperature, Salinity, and Sigma T



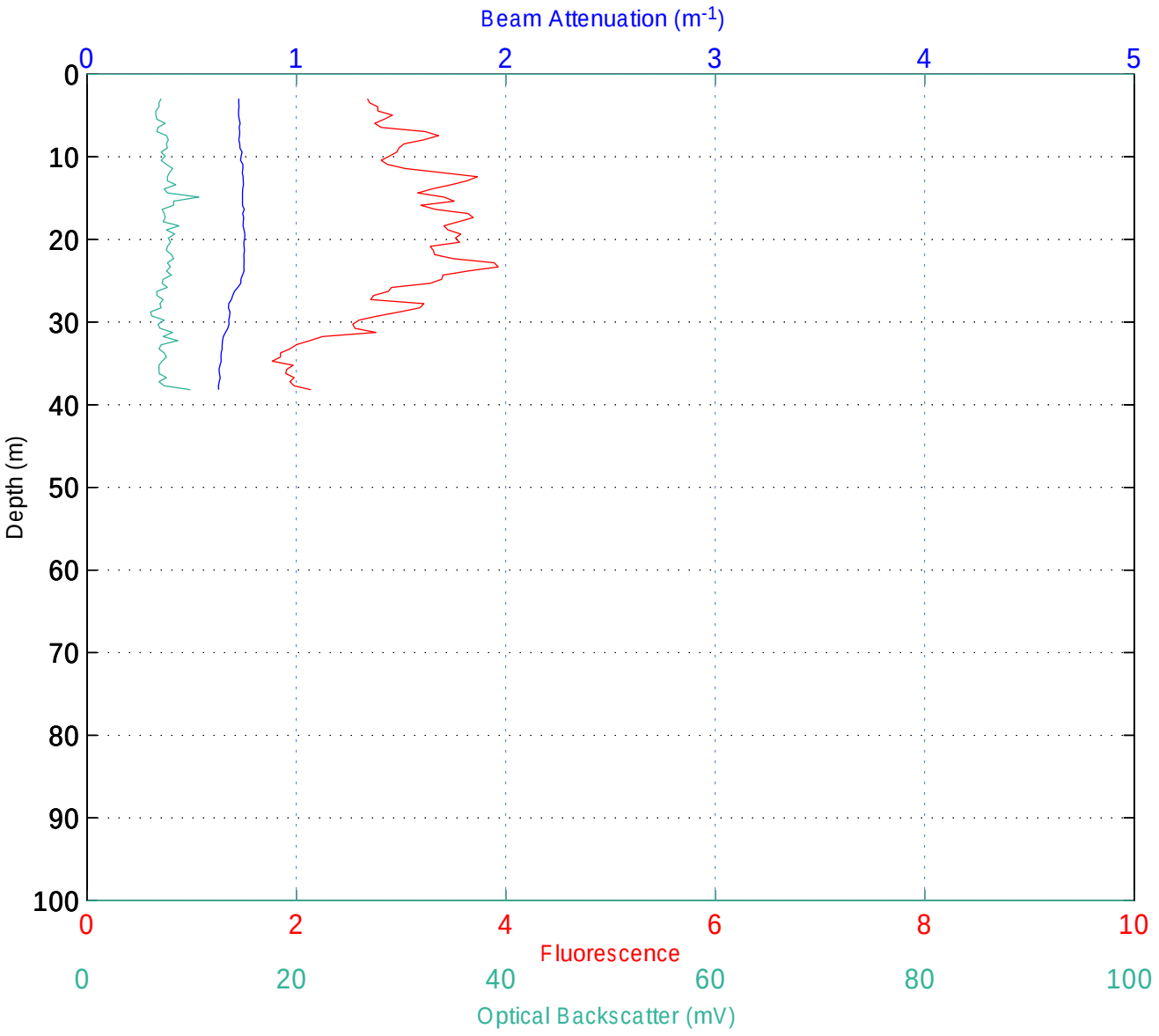
Oceanus Cast 35: Beam Attenuation, Fluorescence, and Optical Backscatter



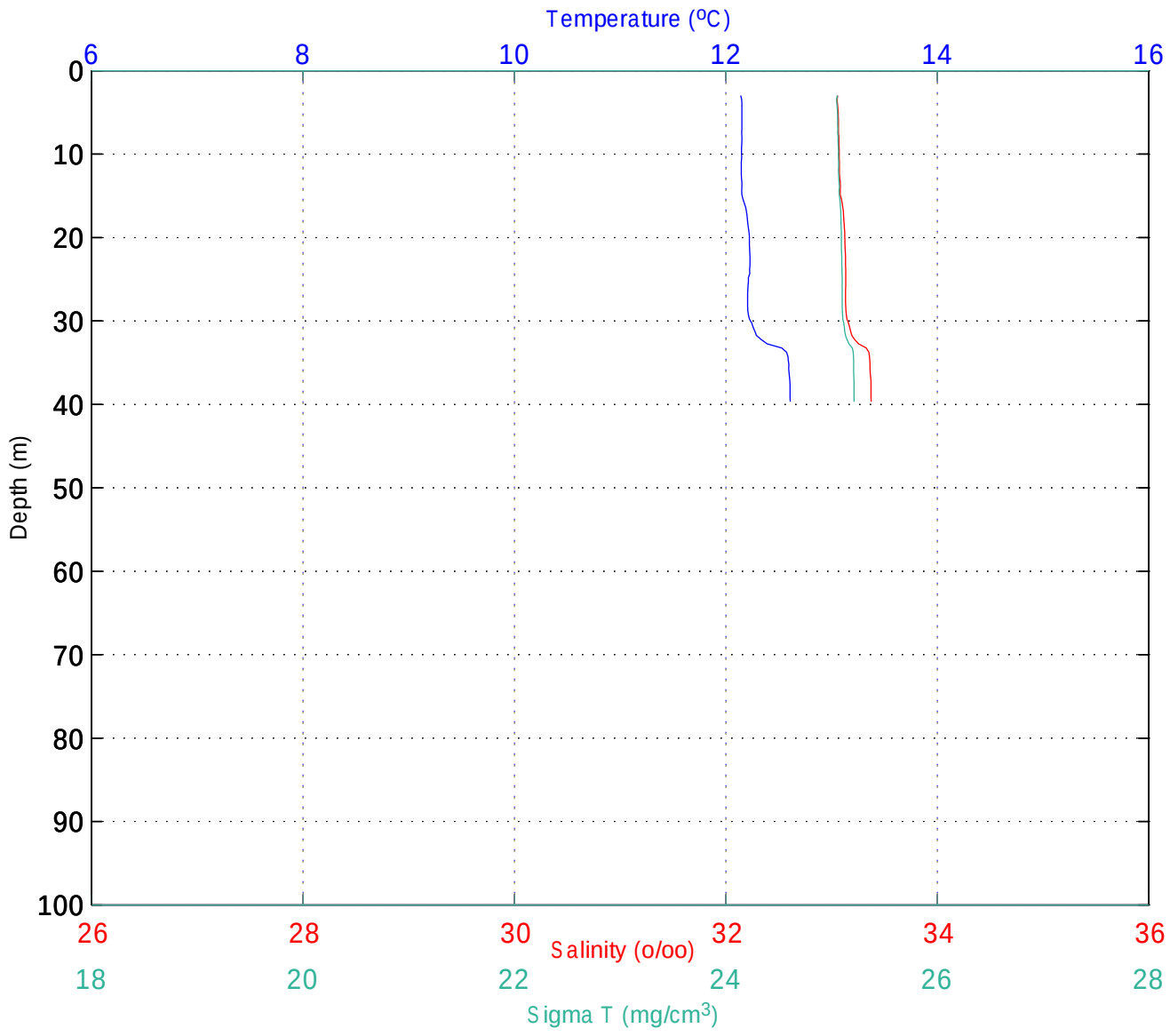
Oceanus Cast 36: Temperature, Salinity, and Sigma T



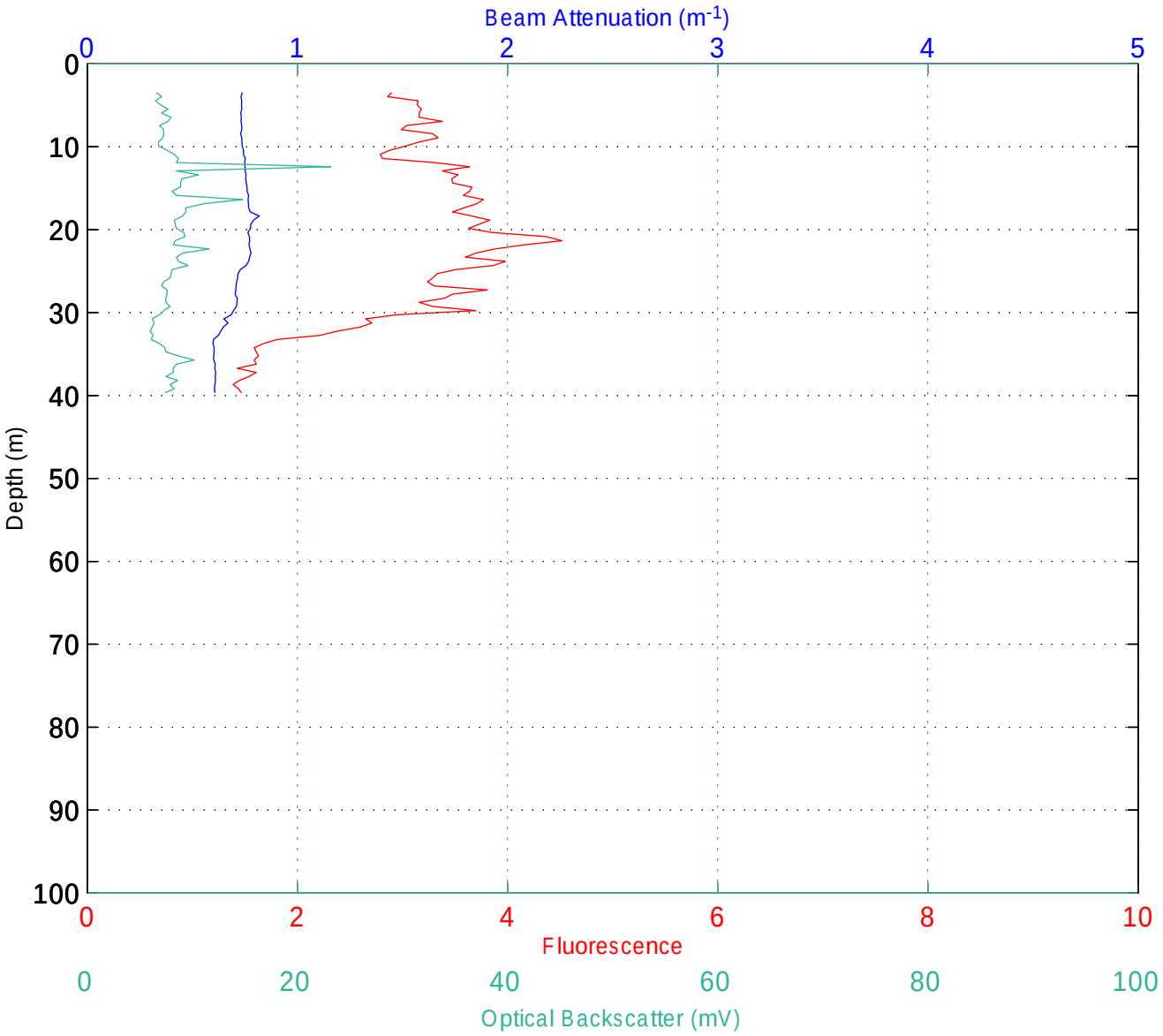
Oceanus Cast 36: Beam Attenuation, Fluorescence, and Optical Backscatter



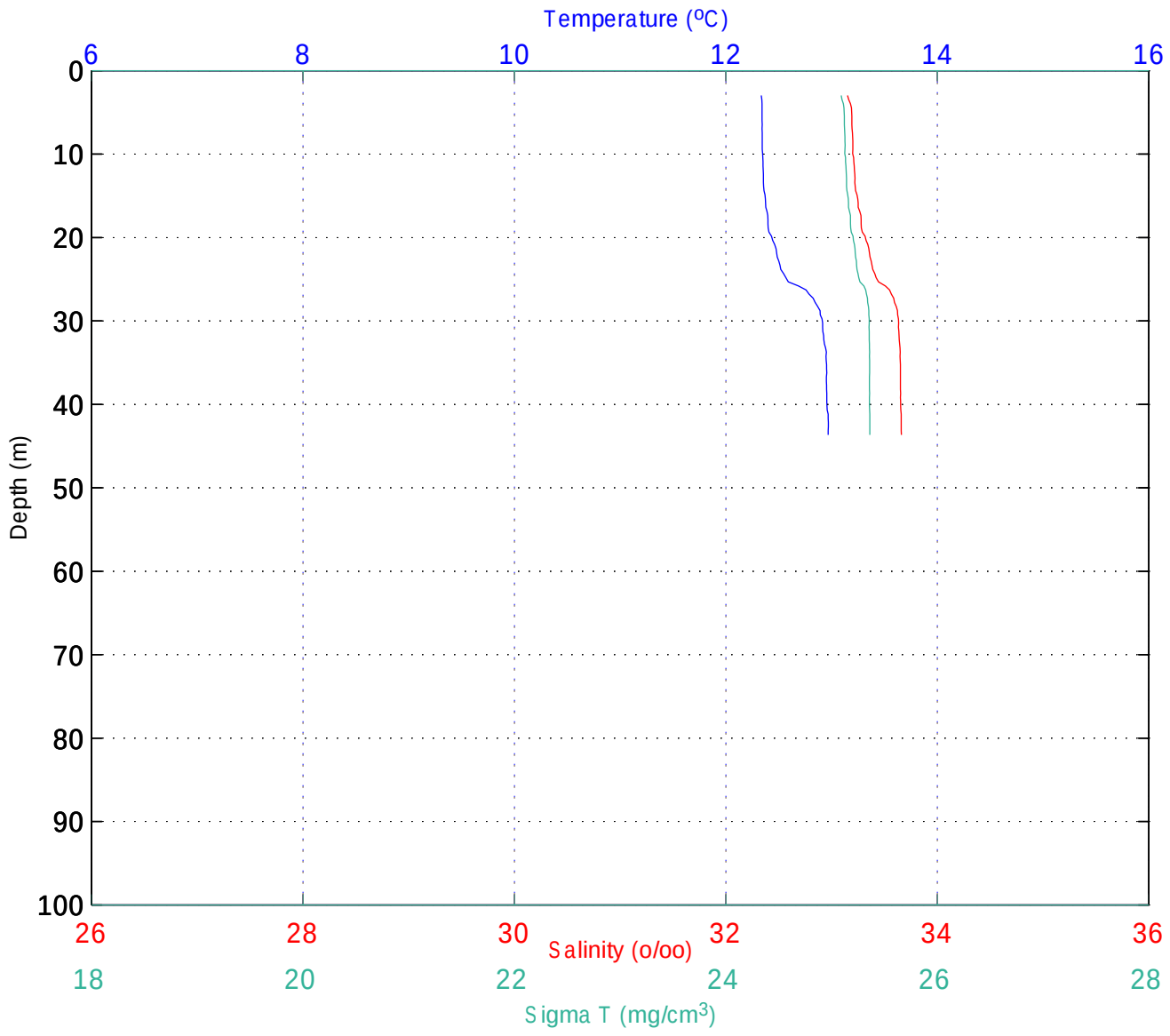
Oceanus Cast 37: Temperature, Salinity, and Sigma T



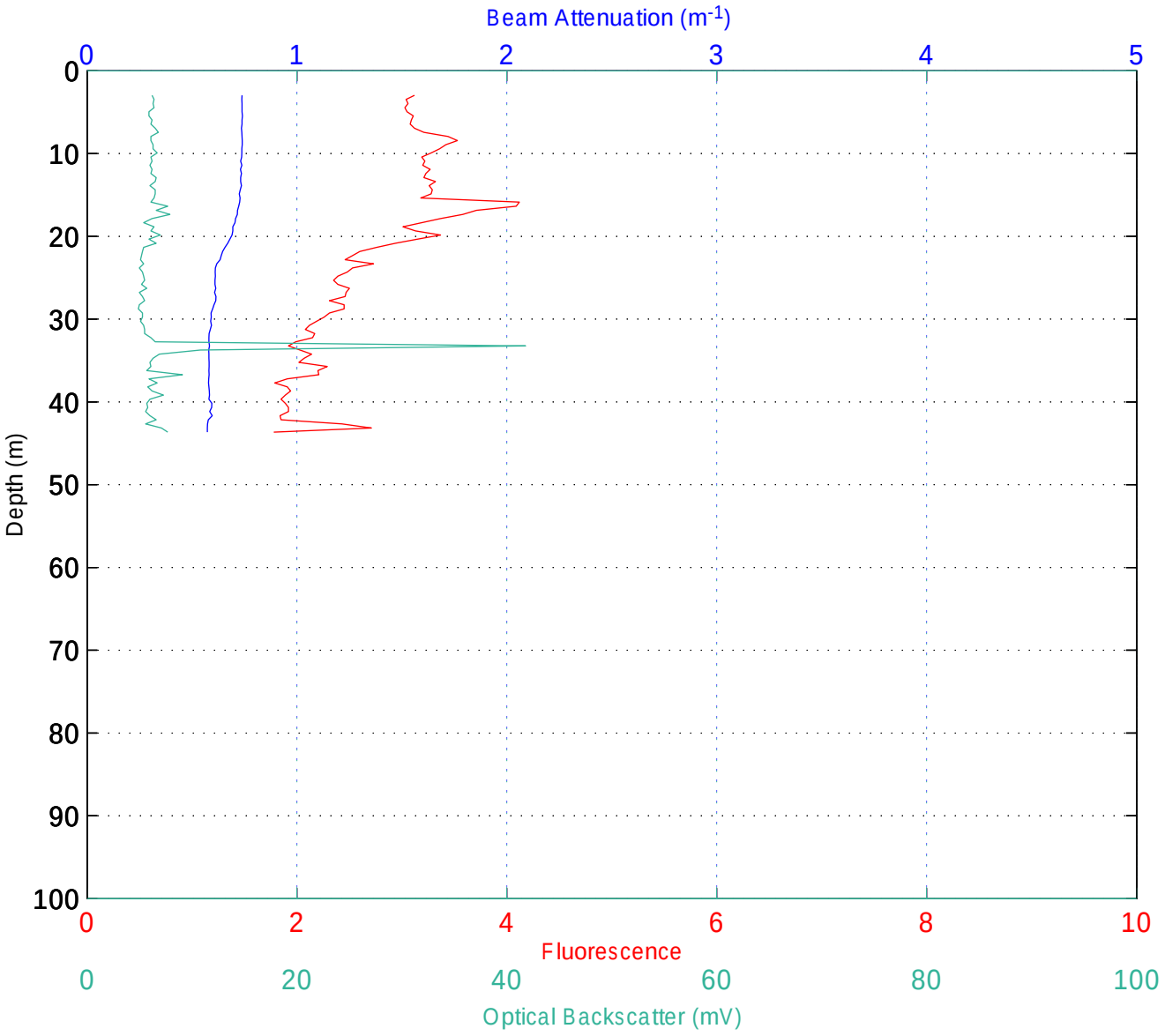
Oceanus Cast 37: Beam Attenuation, Fluorescence, and Optical Backscatter



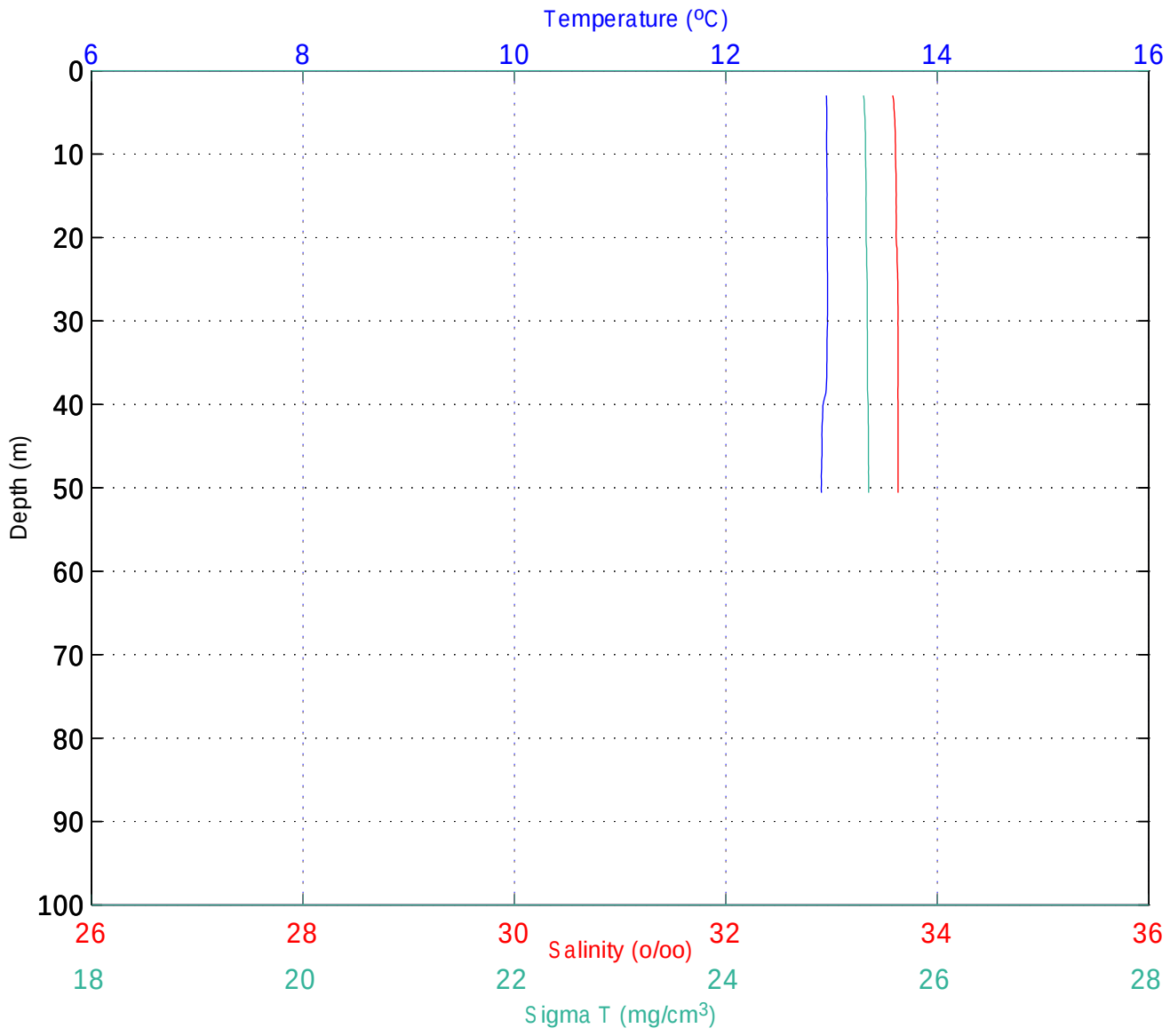
Oceanus Cast 38: Temperature, Salinity, and Sigma T



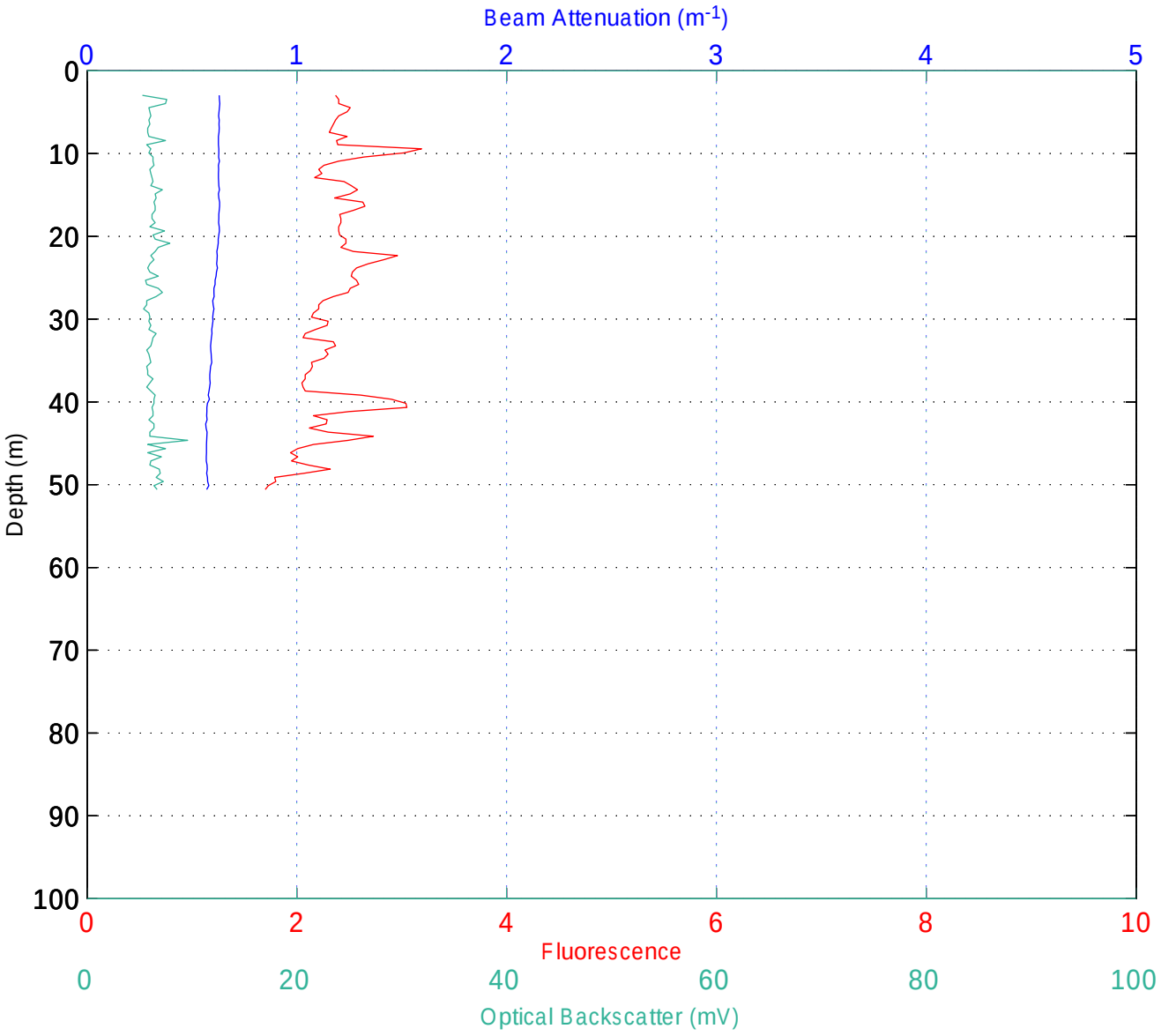
Oceanus Cast 38: Beam Attenuation, Fluorescence, and Optical Backscatter

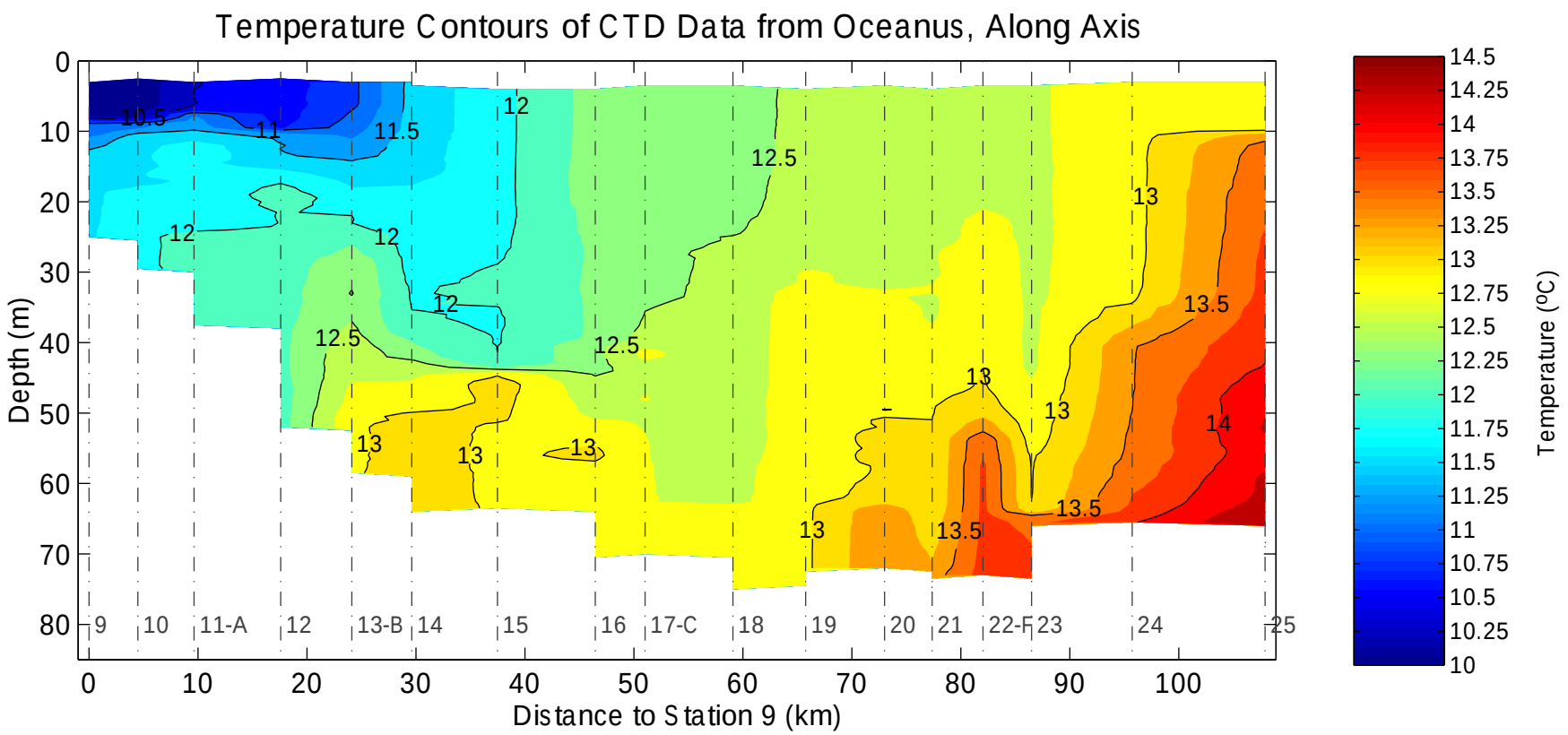


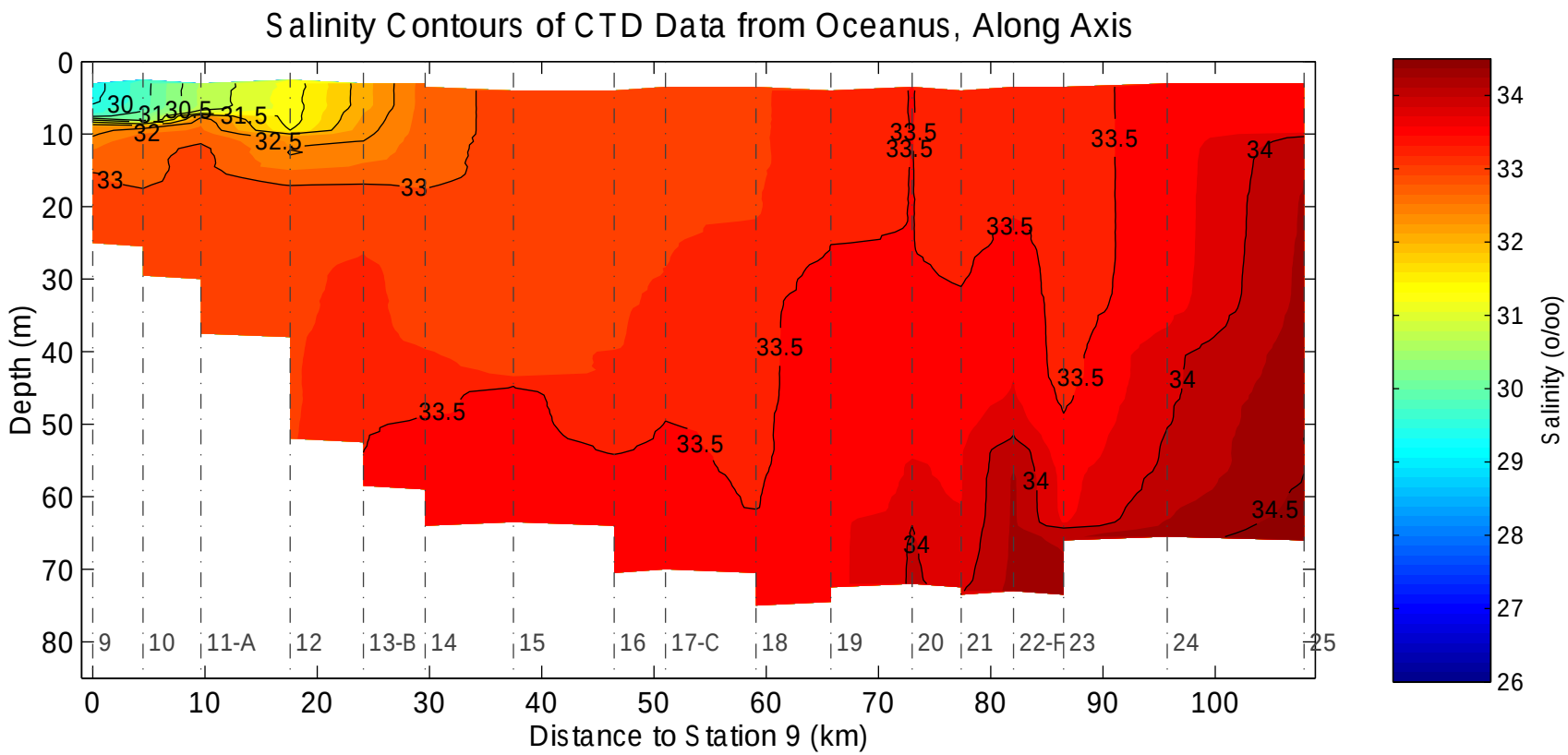
Oceanus Cast 39: Temperature, Salinity, and Sigma T

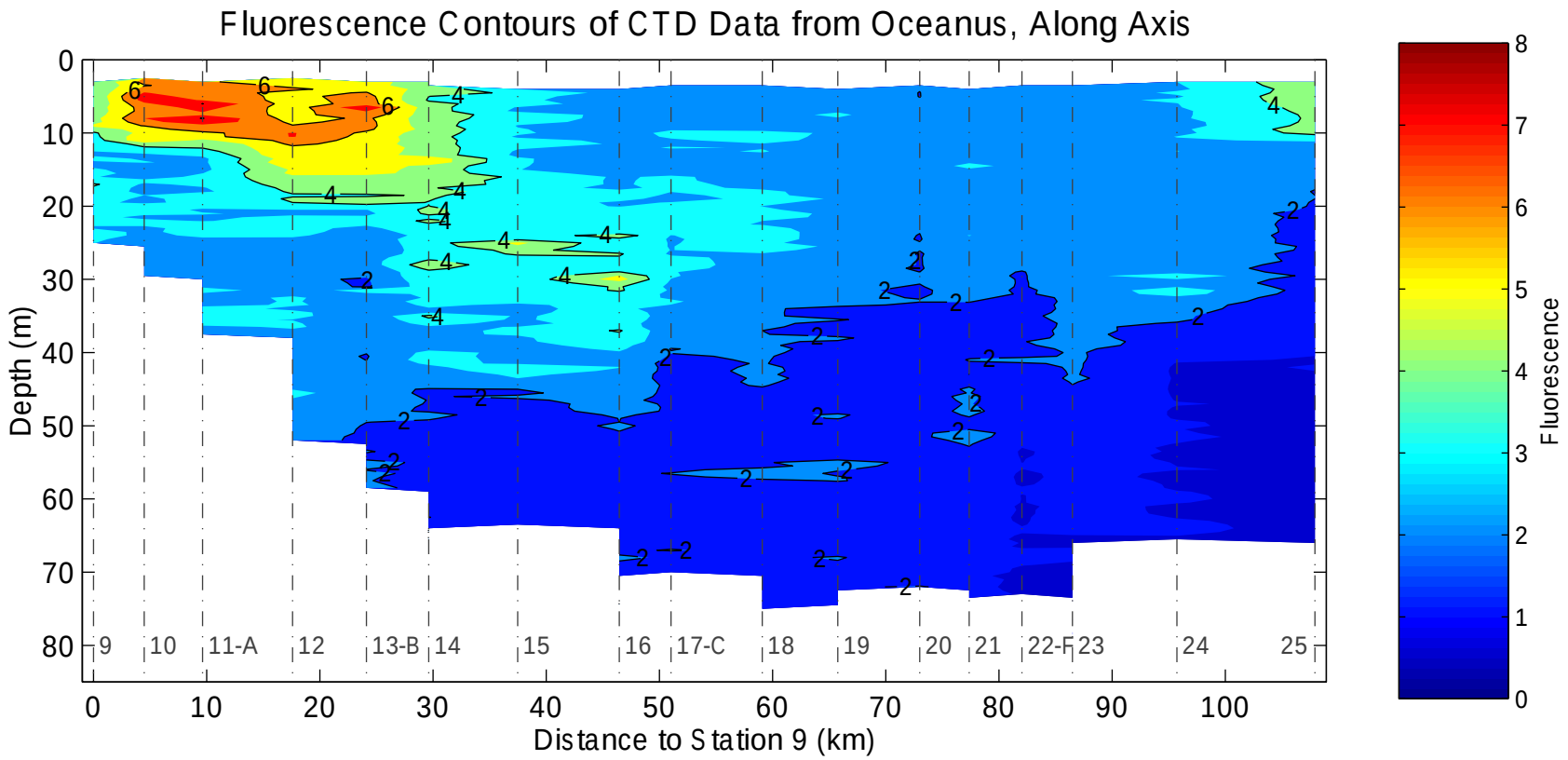


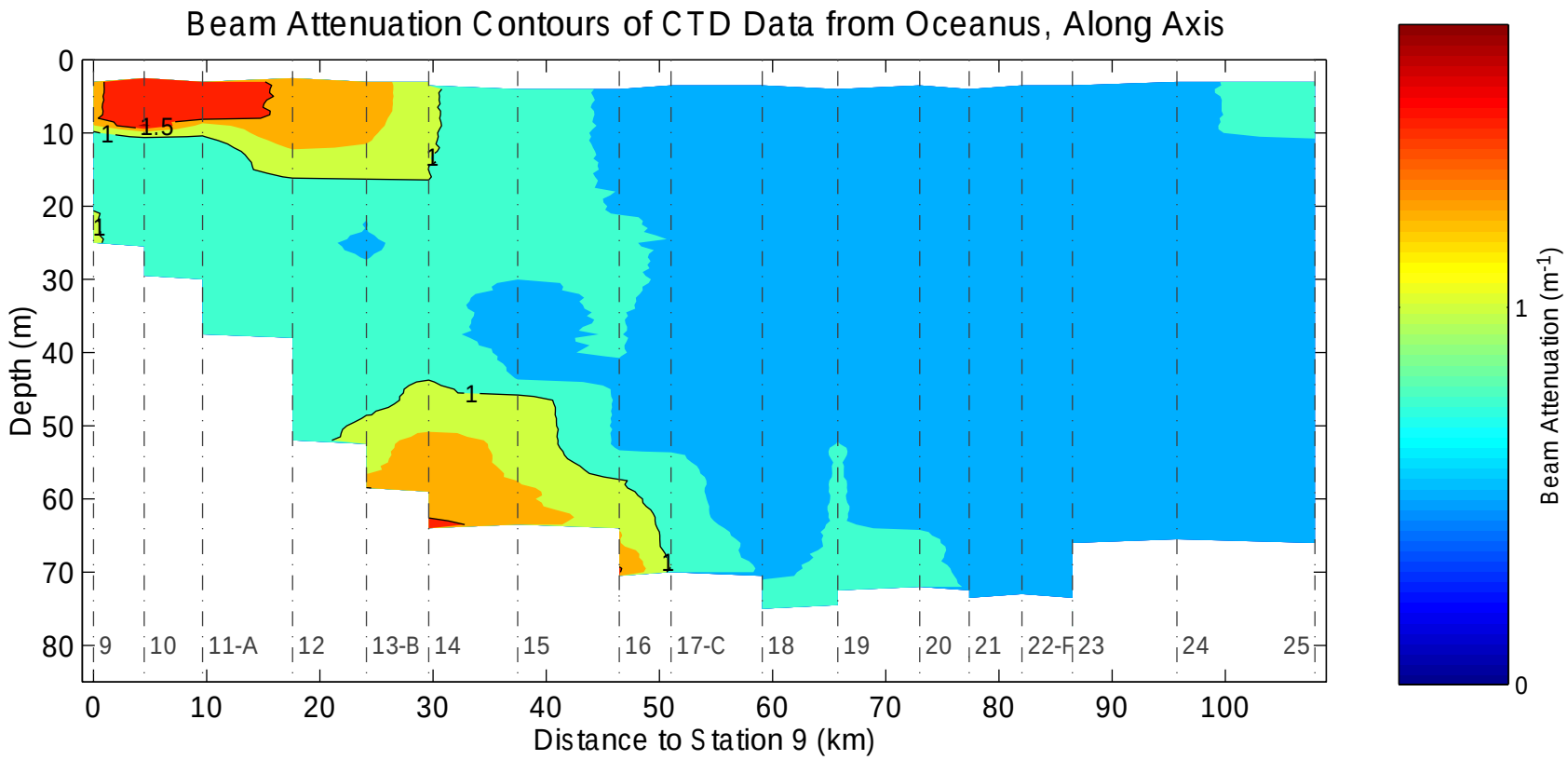
Oceanus Cast 39: Beam Attenuation, Fluorescence, and Optical Backscatter



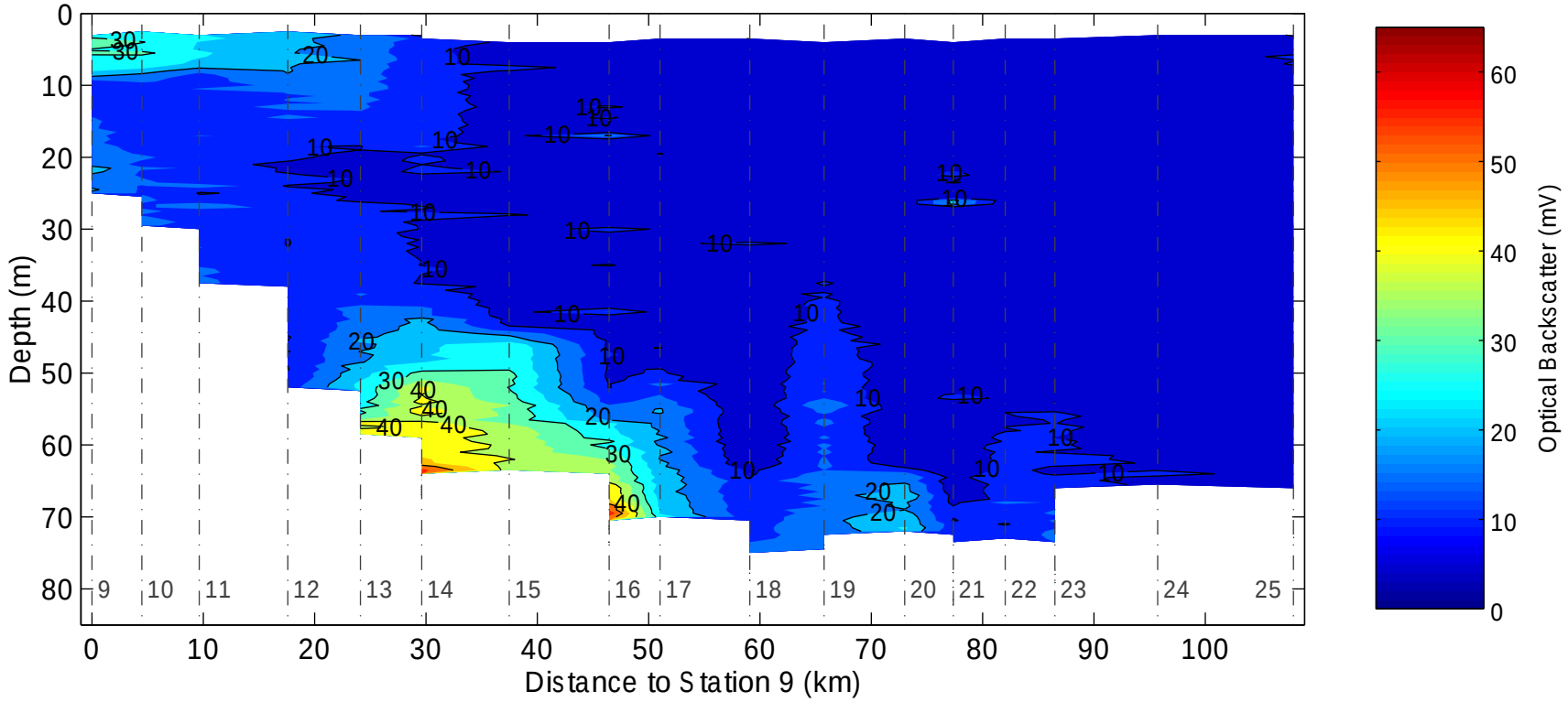

Temperature Contours of CTD Data from Oceanus, Along Axis
Depth (m)
Distance to Station 9 (km)
Temperature (ºC)
9
10
11-A
12
13-B
14
15
16
17-C
18
19
20
21
22-F
23
24
25
10.5
11
11.5
12
12.5
13
13.5
14

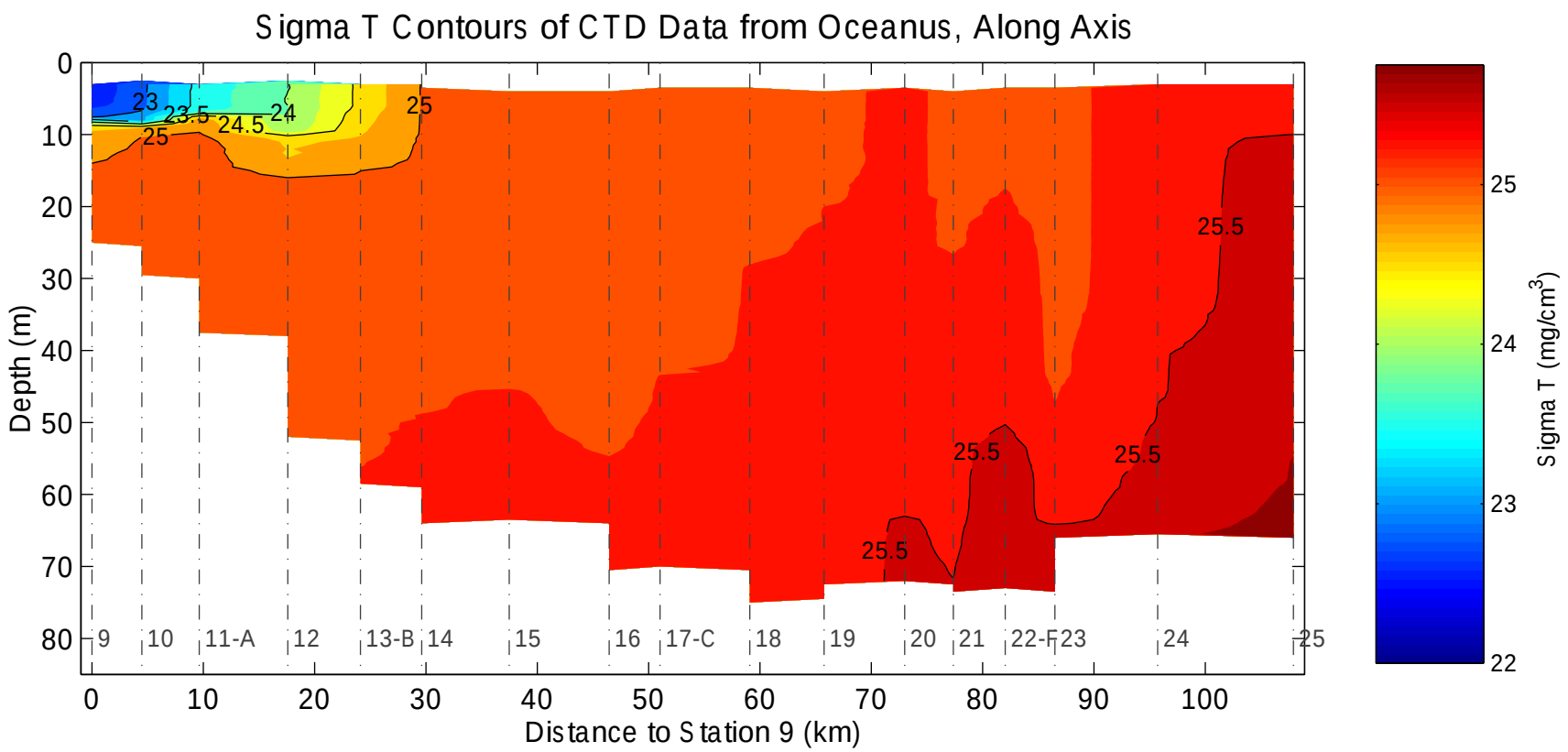

Salinity Contours of CTD Data from Oceanus, Along Axis
Depth (m)
Distance to Station 9 (km)
Salinity (o/oo)
9
10
11-A
12
13-B
14
15
16
17-C
18
19
20
21
22-F
23
24
25
30
31
30.5
31.5
32
32.5
33
33.5
34
34.5

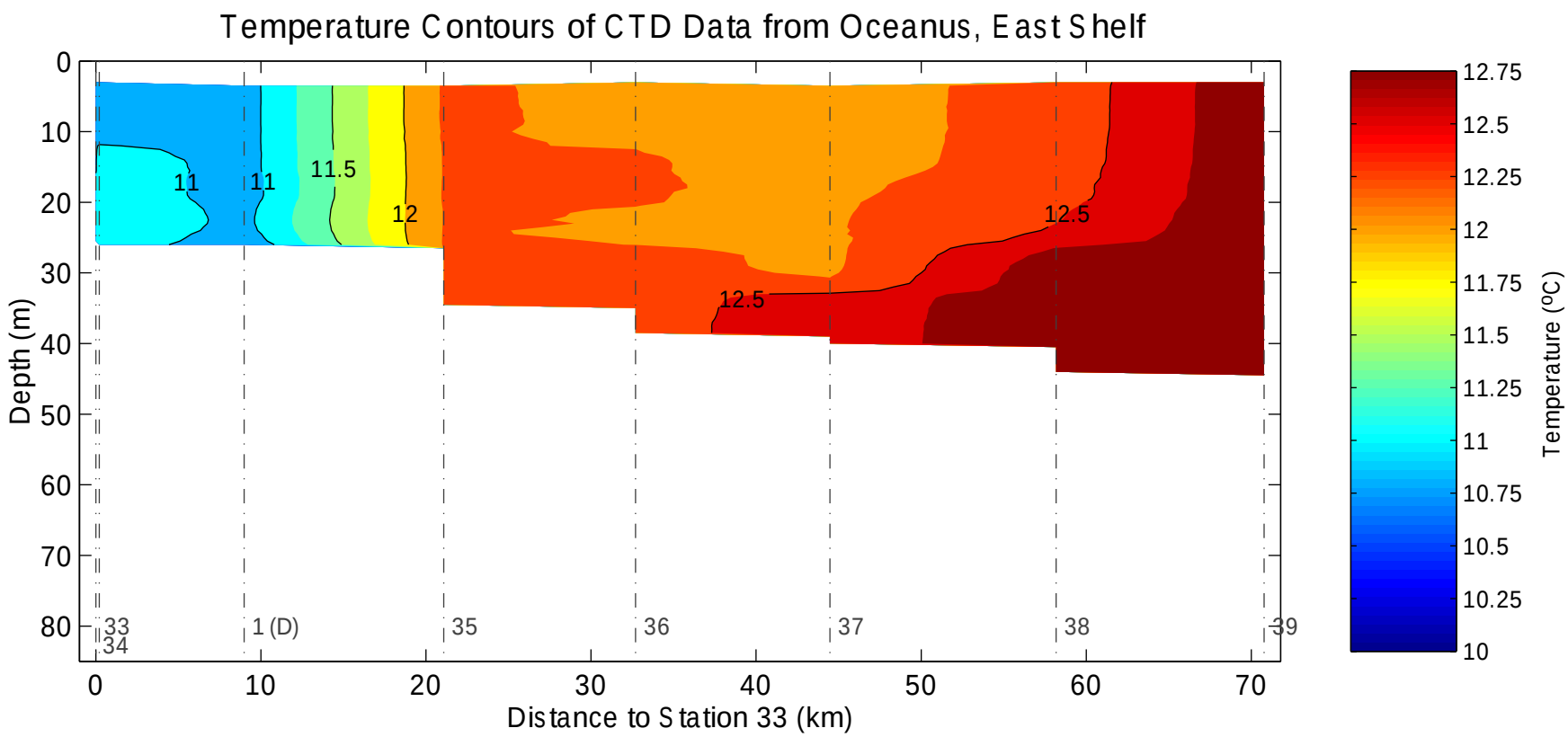

Fluorescence Contours of CTD Data from Oceanus, Along Axis
Depth (m)
Distance to Station 9 (km)
Fluorescence
9
10
11-A
12
13-B
14
15
16
17-C
18
19
20
21
22-F
23
24
25

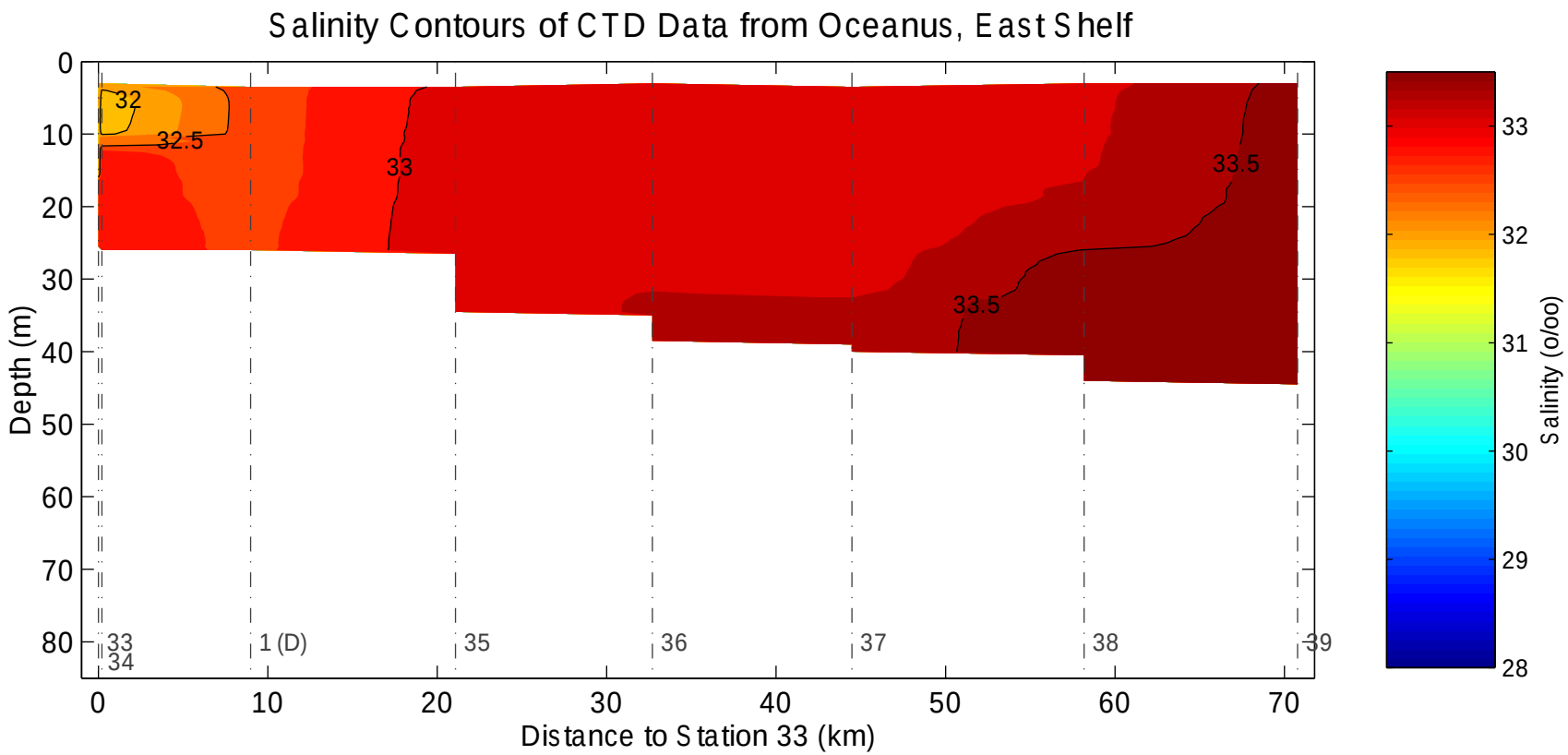

Beam Attenuation Contours of CTD Data from Oceanus, Along Axis
Depth (m)
Distance to Station 9 (km)
Beam Attenuation (m-1)
0
10
20
30
40
50
60
70
80
90
100
1
1.5
9
10
11-A
12
13-B
14
15
16
17-C
18
19
20
21
22-F
23
24
25

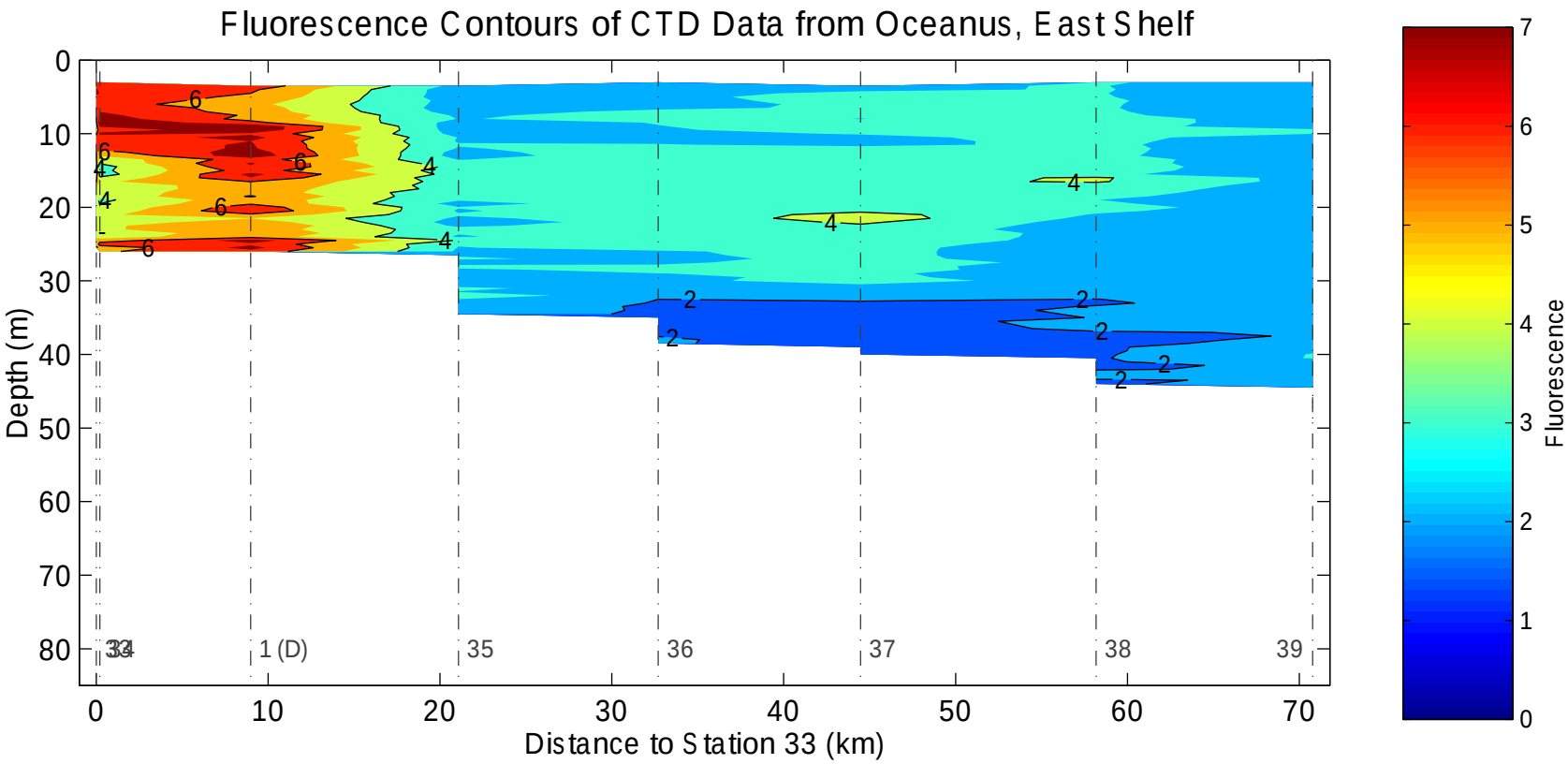
Optical Backscatter Contours of CTD Data from Oceanus, Along Axis

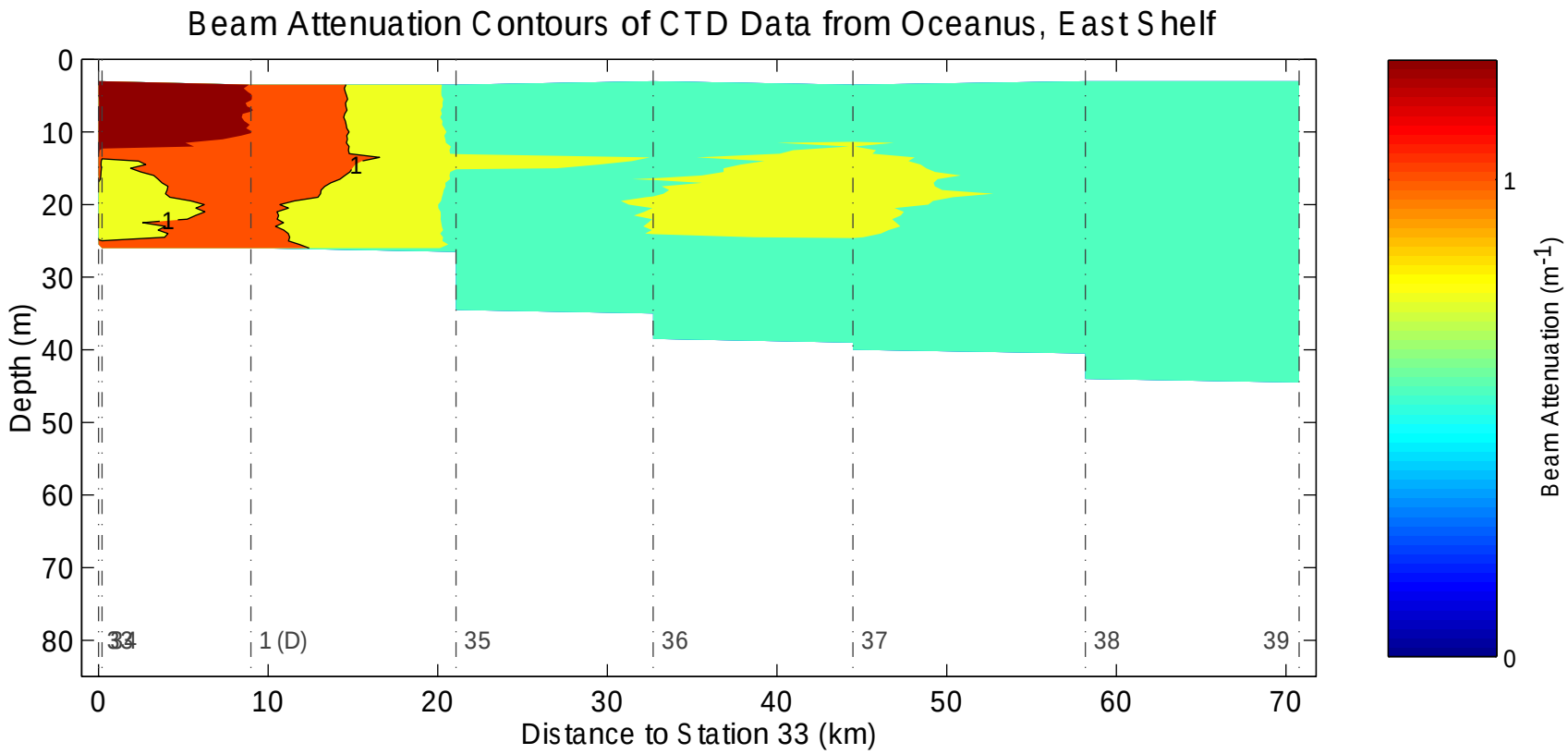



Sigma T Contours of CTD Data from Oceanus, Along Axis
Depth (m)
Distance to Station 9 (km)
Sigma T (mg/cm3)
23
23.5
24.5
24
25
25.5
9
10
11-A
12
13-B
14
15
16
17-C
18
19
20
21
22-F
23
24
25

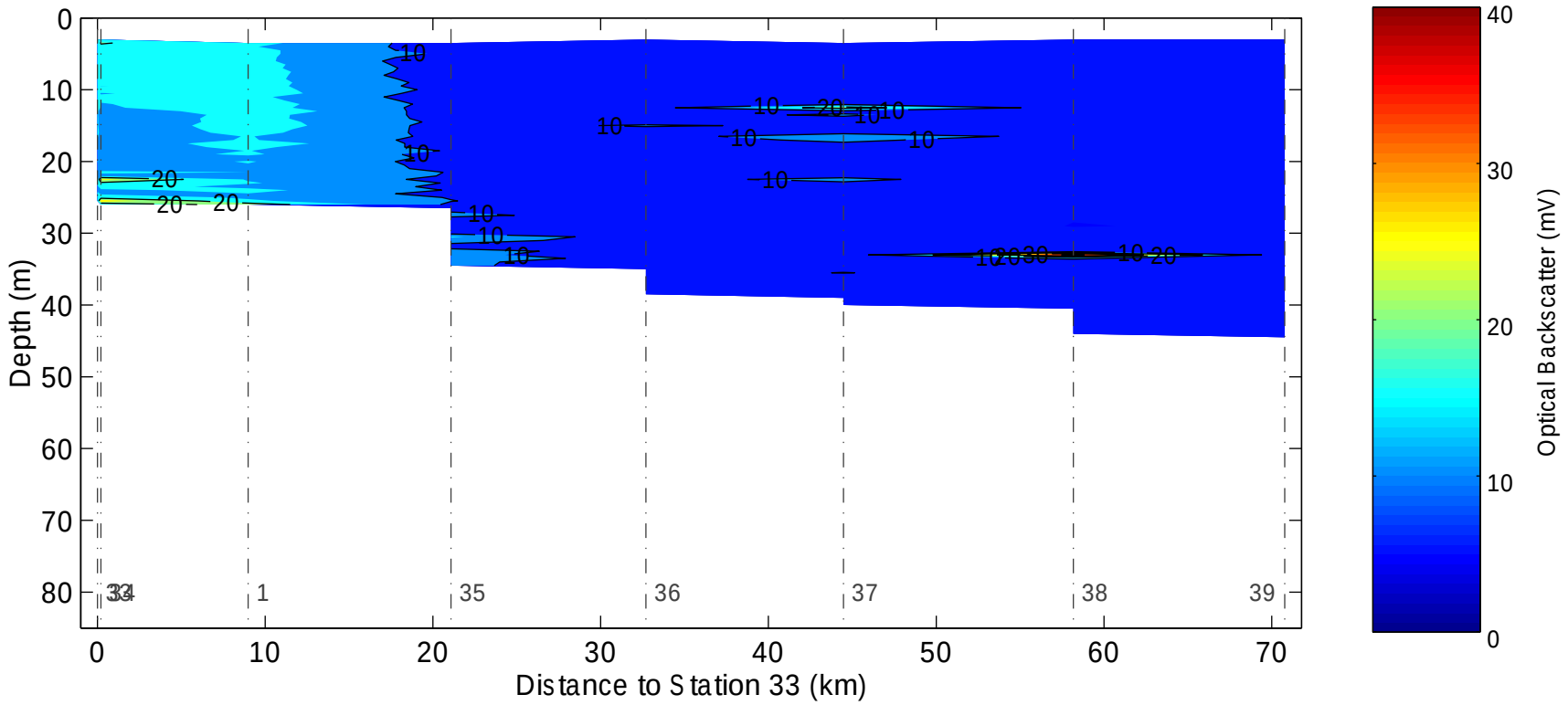

Temperature Contours of CTD Data from Oceanus, East Shelf
Depth (m)
Distance to Station 33 (km)
Temperature (°C)
11
11
11.5
12
12.5
12.5
33
34
1 (D)
35
36
37
38
39
0
10
20
30
40
50
60
70
80
12.75
12.5
12.25
12
11.75
11.5
11.25
11
10.75
10.5
10.25
10

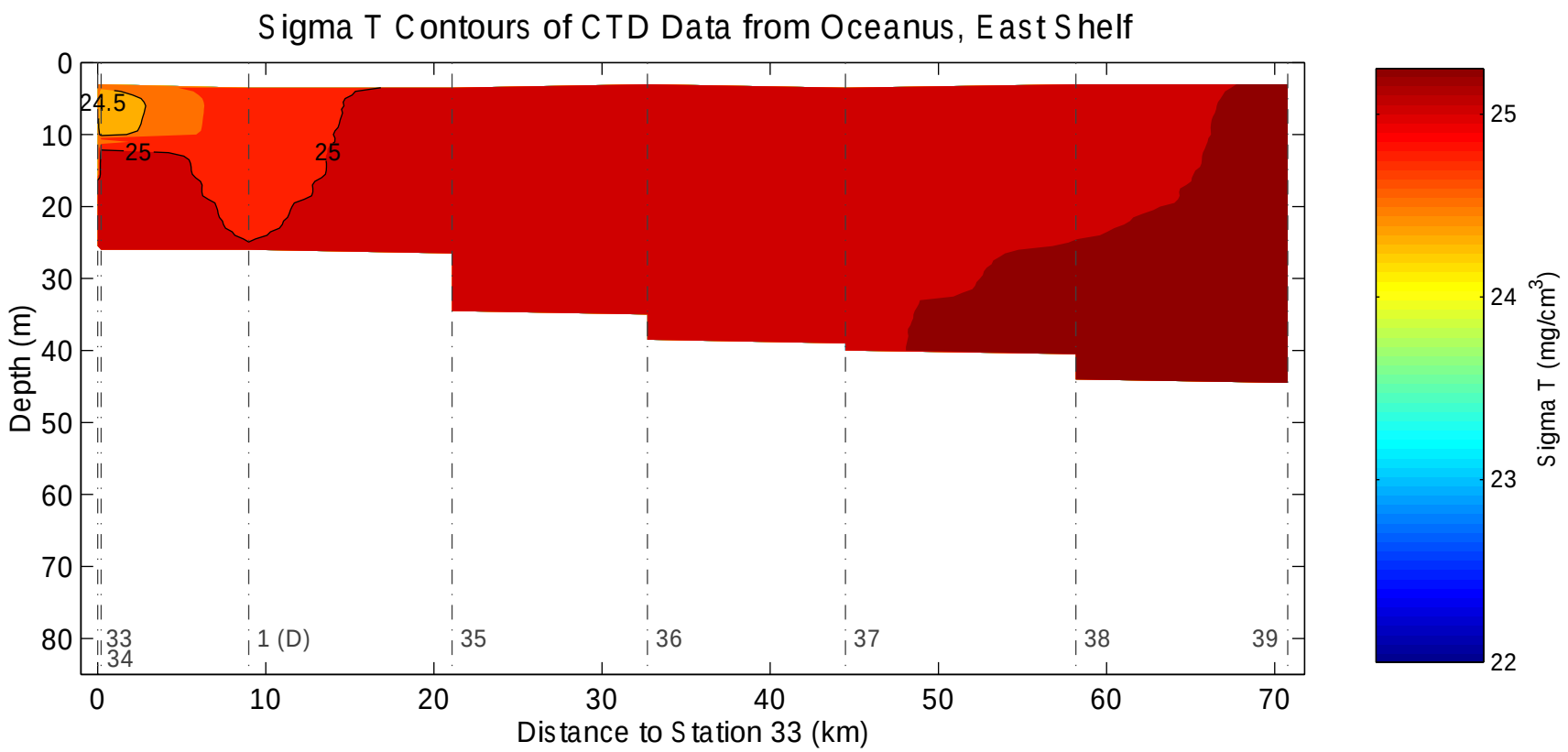

Salinity Contours of CTD Data from Oceanus, East Shelf
Depth (m)
Distance to Station 33 (km)
Salinity (o/oo)
32
32.5
33
33.5
33.5
33
34
1 (D)
35
36
37
38
39
0
10
20
30
40
50
60
70
80
0
10
20
30
40
50
60
70
28
29
30
31
32
33

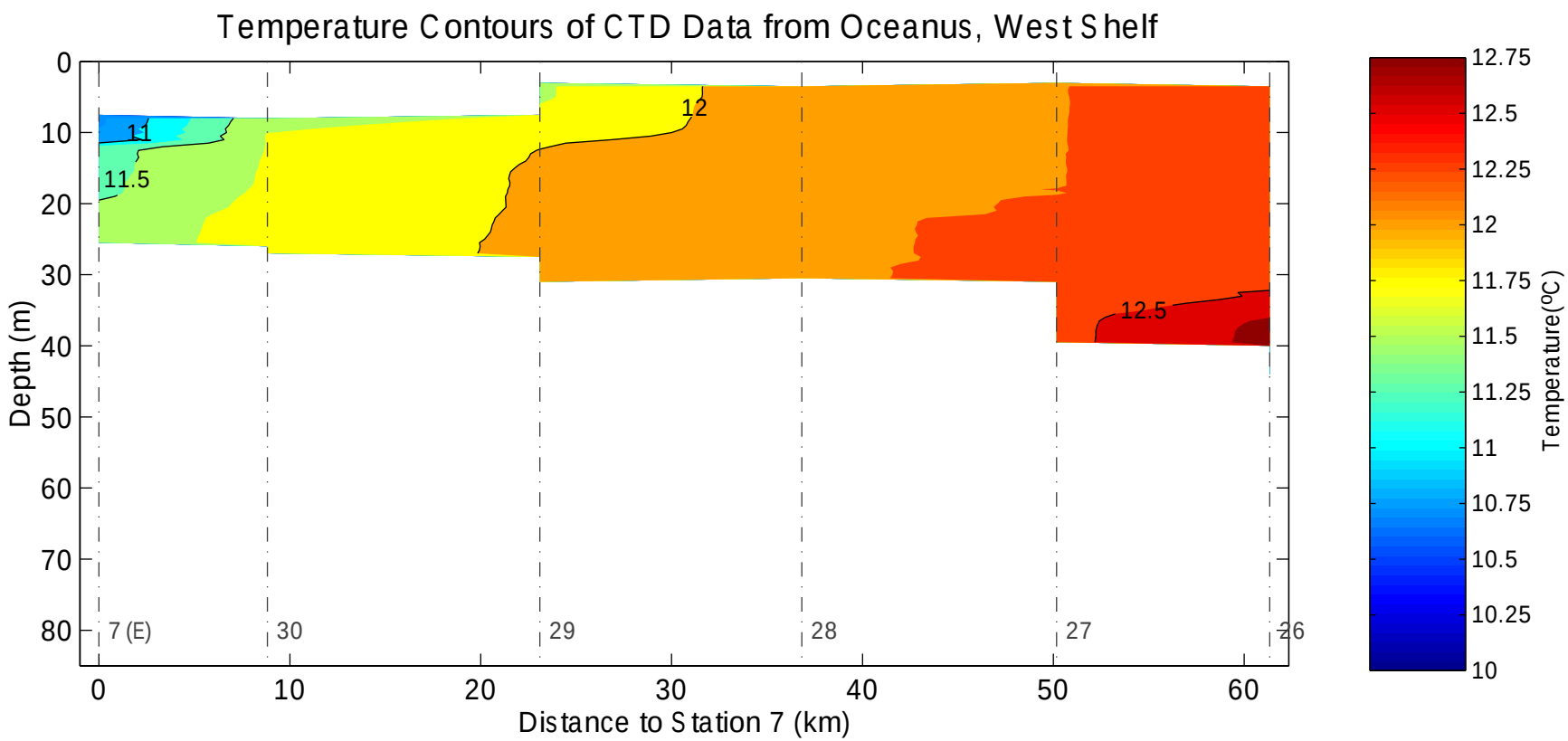

Fluorescence Contours of CTD Data from Oceanus, East Shelf
Depth (m)
Distance to Station 33 (km)
Fluorescence
1 (D)
35
36
37
38
39

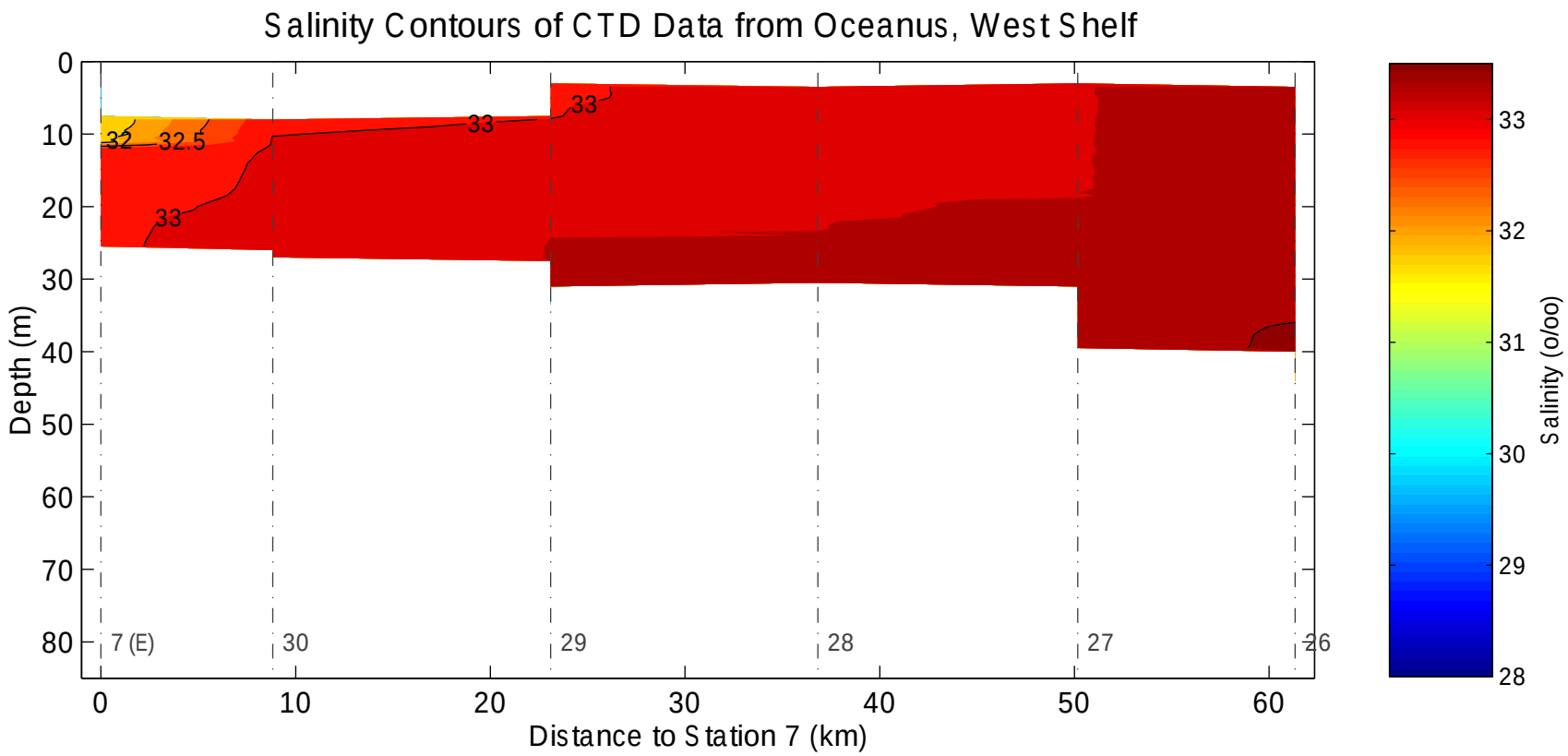

Beam Attenuation Contours of CTD Data from Oceanus, East Shelf
Depth (m)
Distance to Station 33 (km)
Beam Attenuation (m-1)
0
10
20
30
40
50
60
70
80
33
34
1 (D)
35
36
37
38
39
1
1
1
0

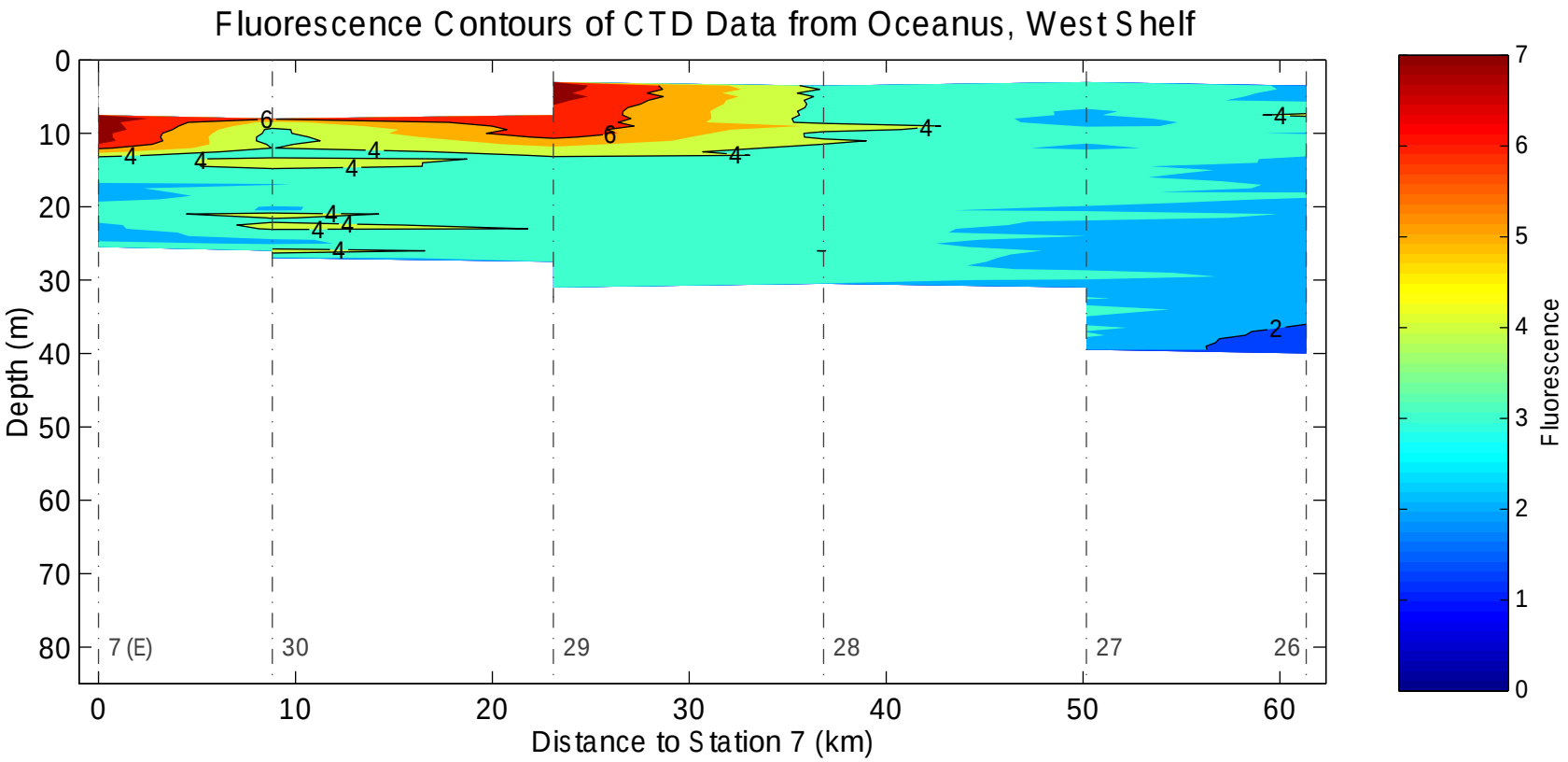
Optical Backscatter Contours of CTD Data from Oceanus, East Shelf

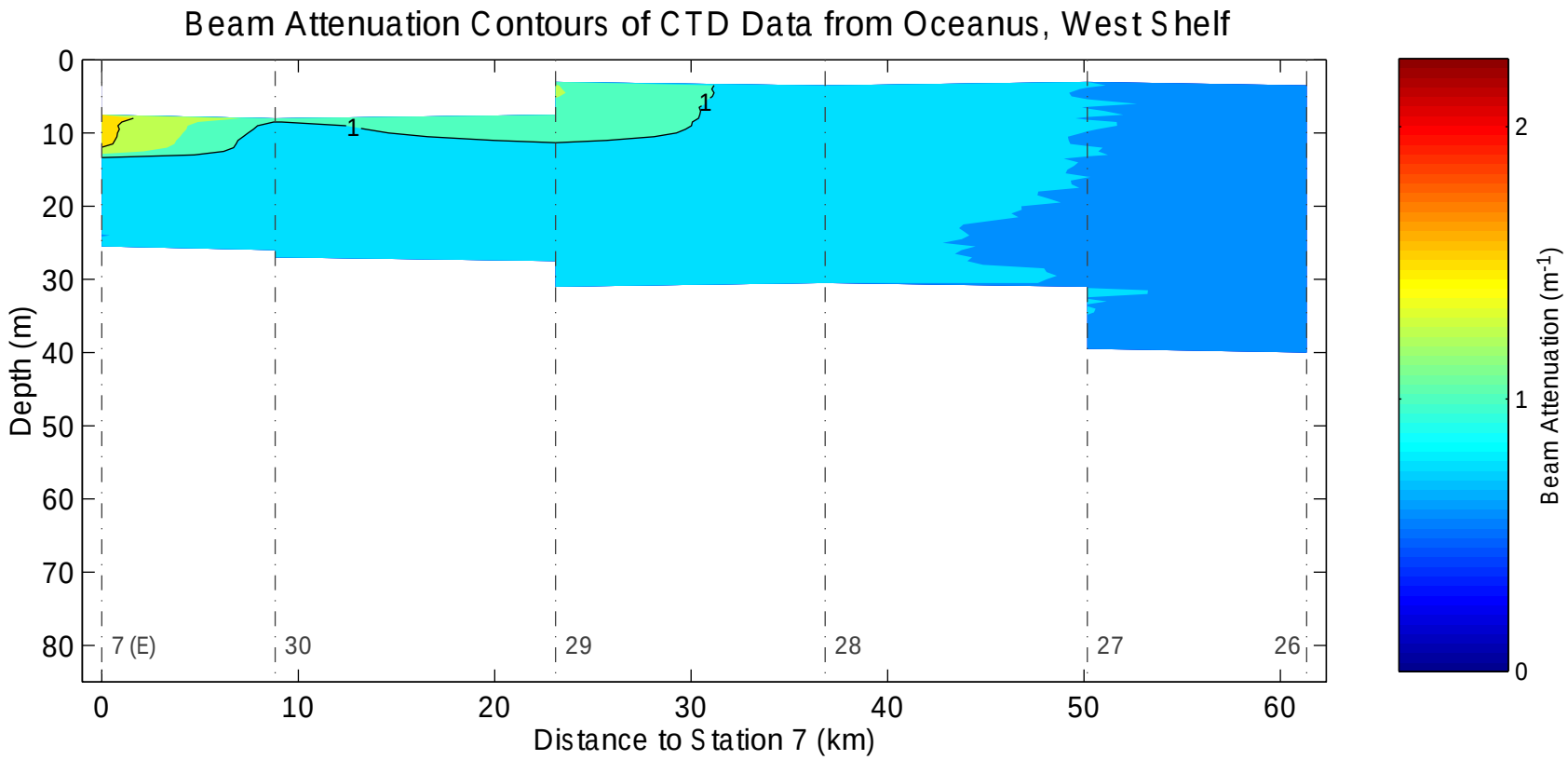



Sigma T Contours of CTD Data from Oceanus, East Shelf
Depth (m)
Distance to Station 33 (km)
Sigma T (mg/cm3)
24.5
25
25
33
34
1 (D)
35
36
37
38
39
0
10
20
30
40
50
60
70
80
22
23
24
25

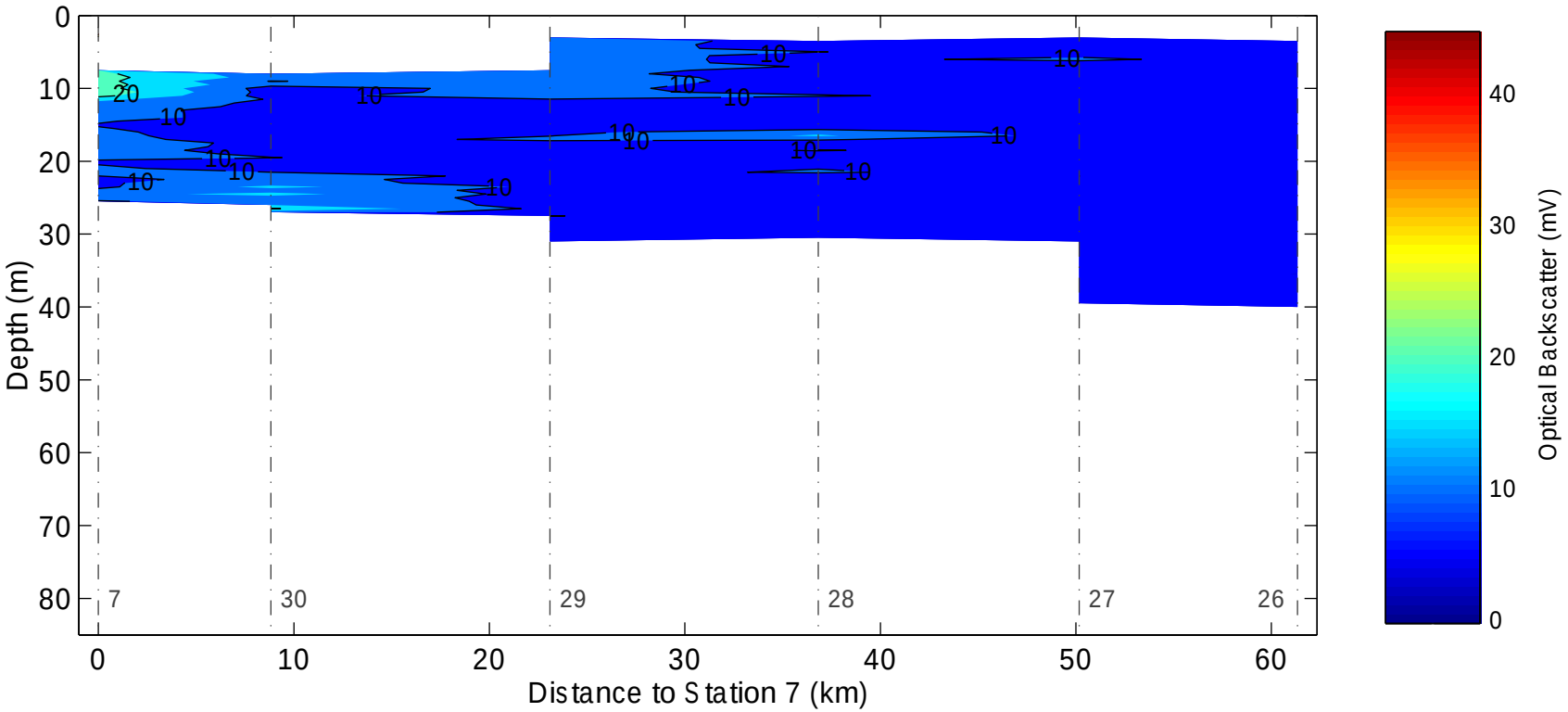

Temperature Contours of CTD Data from Oceanus, West Shelf
Depth (m)
Distance to Station 7 (km)
Temperature(ºC)
11
11.5
12
12.5
7 (E)
30
29
28
27
26
0
10
20
30
40
50
60
70
80
12.75
12.5
12.25
12
11.75
11.5
11.25
11
10.75
10.5
10.25
10

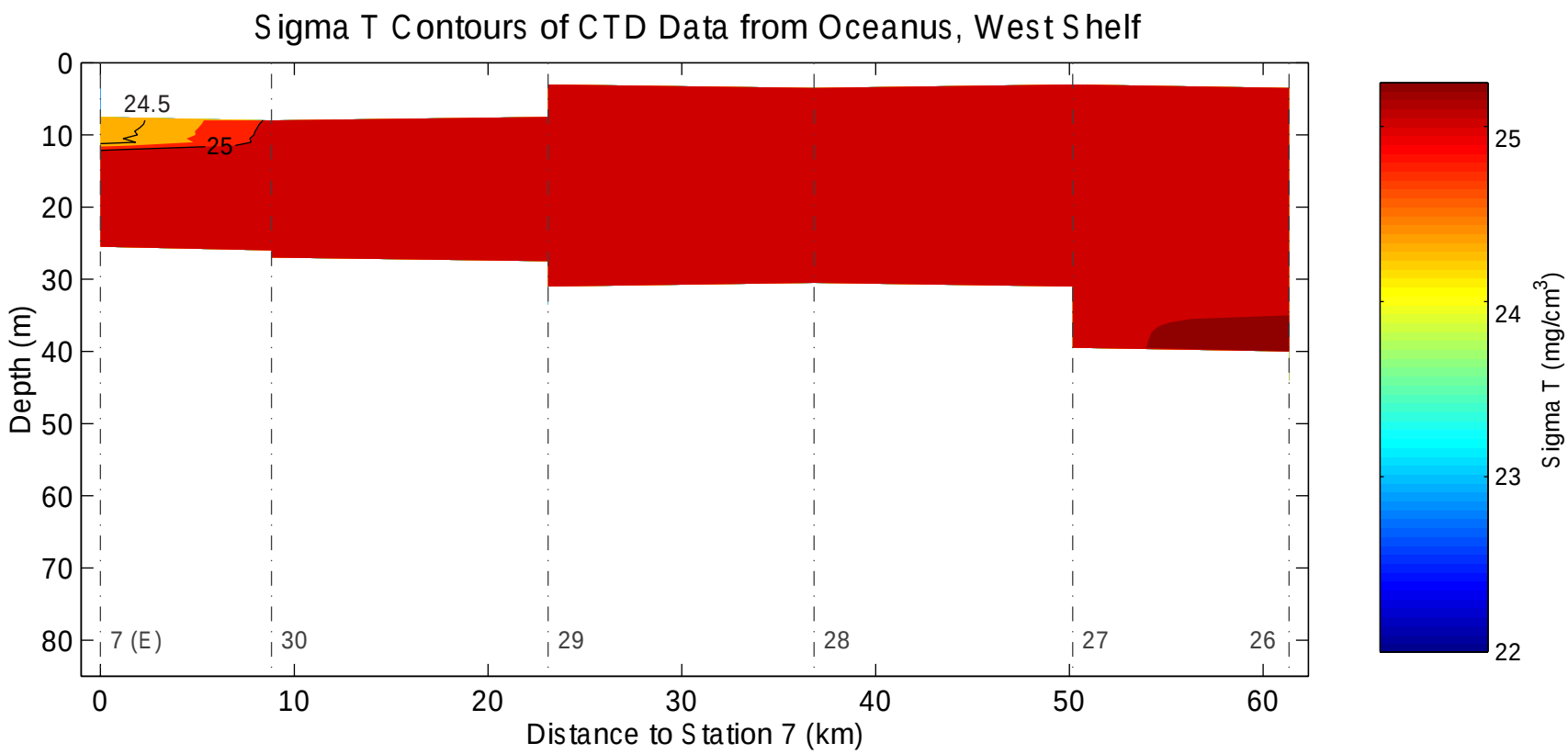

Salinity Contours of CTD Data from Oceanus, West Shelf
Depth (m)
Distance to Station 7 (km)
Salinity (o/oo)
0
10
20
30
40
50
60
70
80
0
10
20
30
40
50
60
32
32.5
33
33
33
7 (E)
30
29
28
27
26
33
32
31
30
29
28

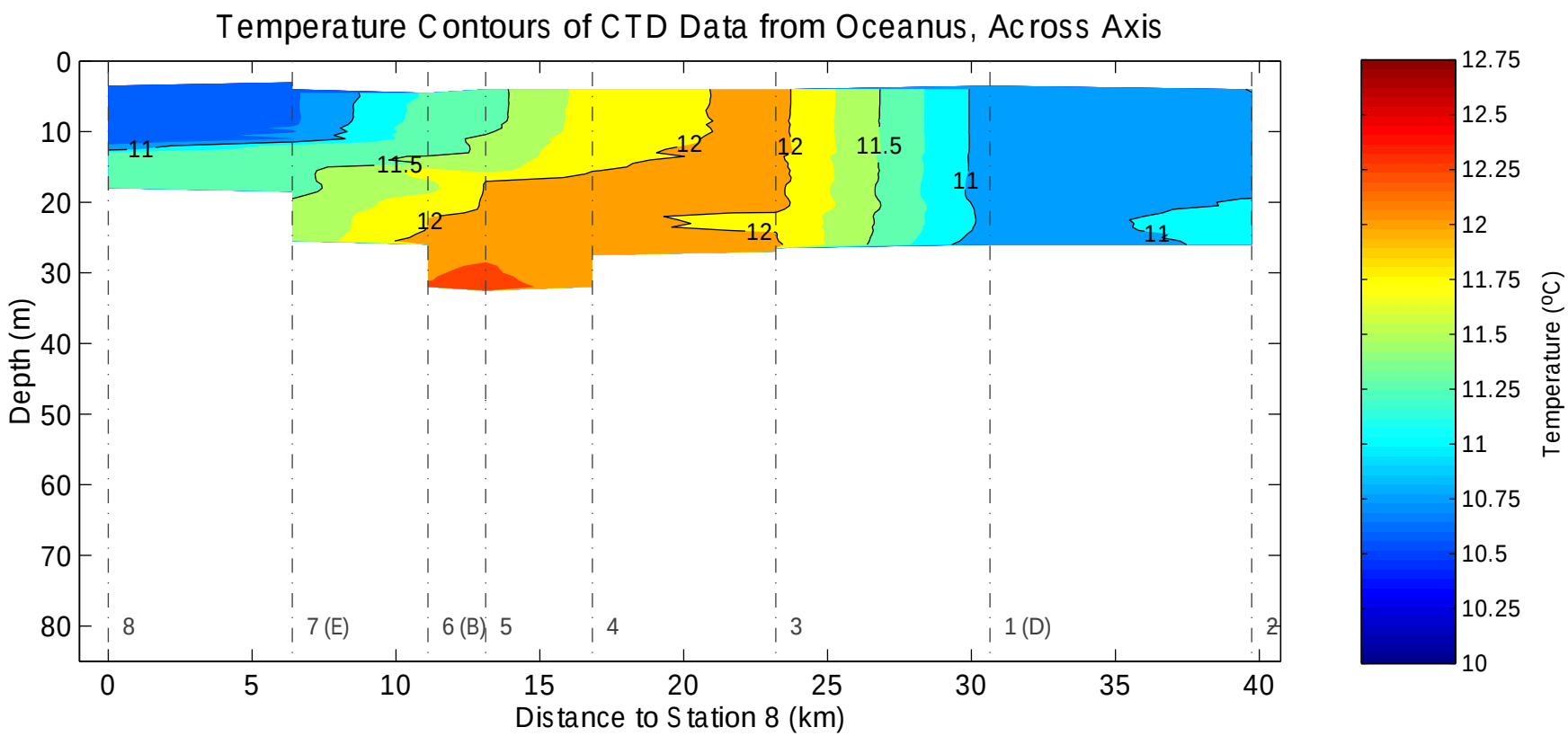

Fluorescence Contours of CTD Data from Oceanus, West Shelf
Depth (m)
Distance to Station 7 (km)
Fluorescence
7 (E)
30
29
28
27
26
0
10
20
30
40
50
60
70
80
0
10
20
30
40
50
60
0
1
2
3
4
5
6
7
2
4
6

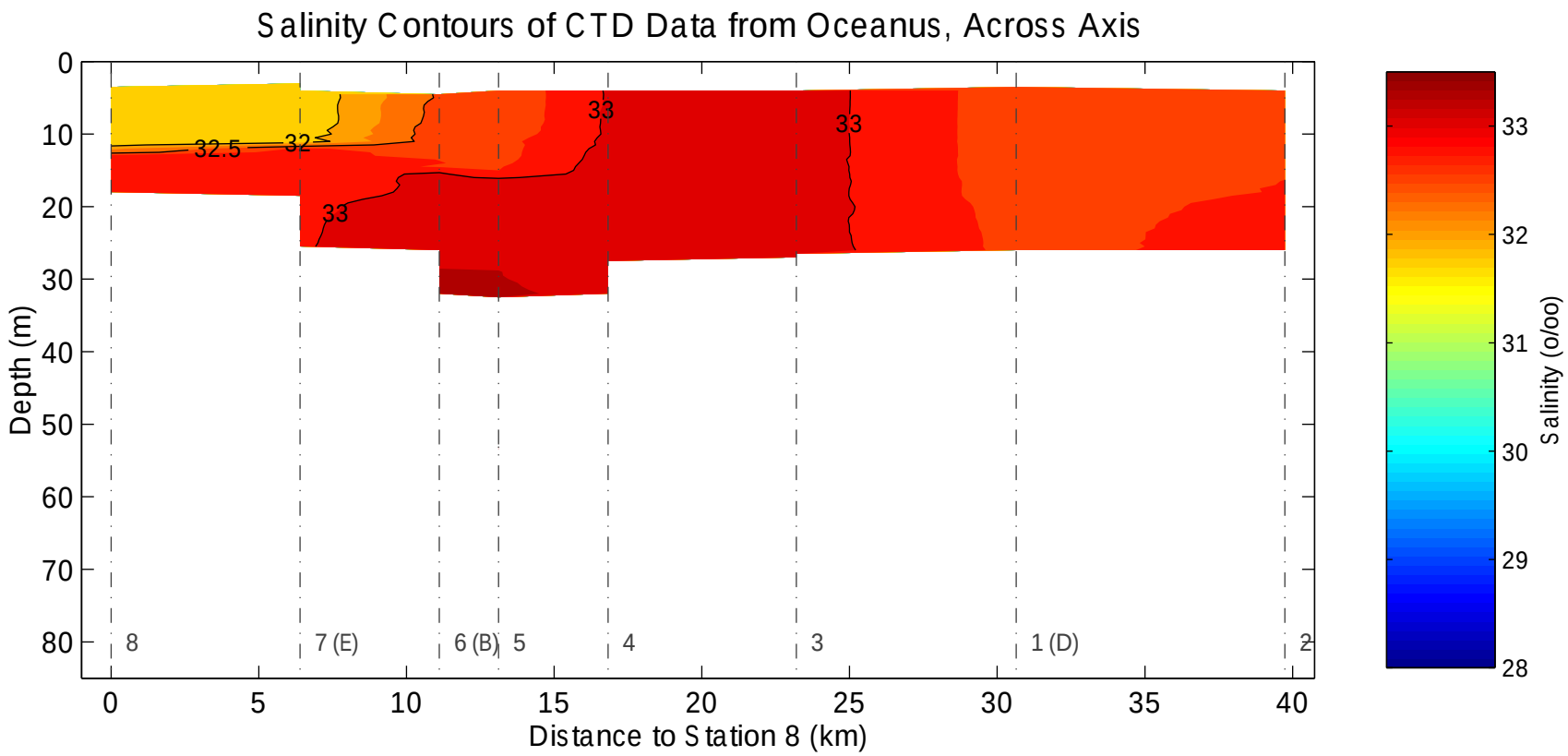

Beam Attenuation Contours of CTD Data from Oceanus, West Shelf
Depth (m)
0
10
20
30
40
50
60
70
80
7 (E)
30
29
28
27
26
1
1
0
10
20
30
40
50
60
Distance to Station 7 (km)
Beam Attenuation (m-1)
0
1
2

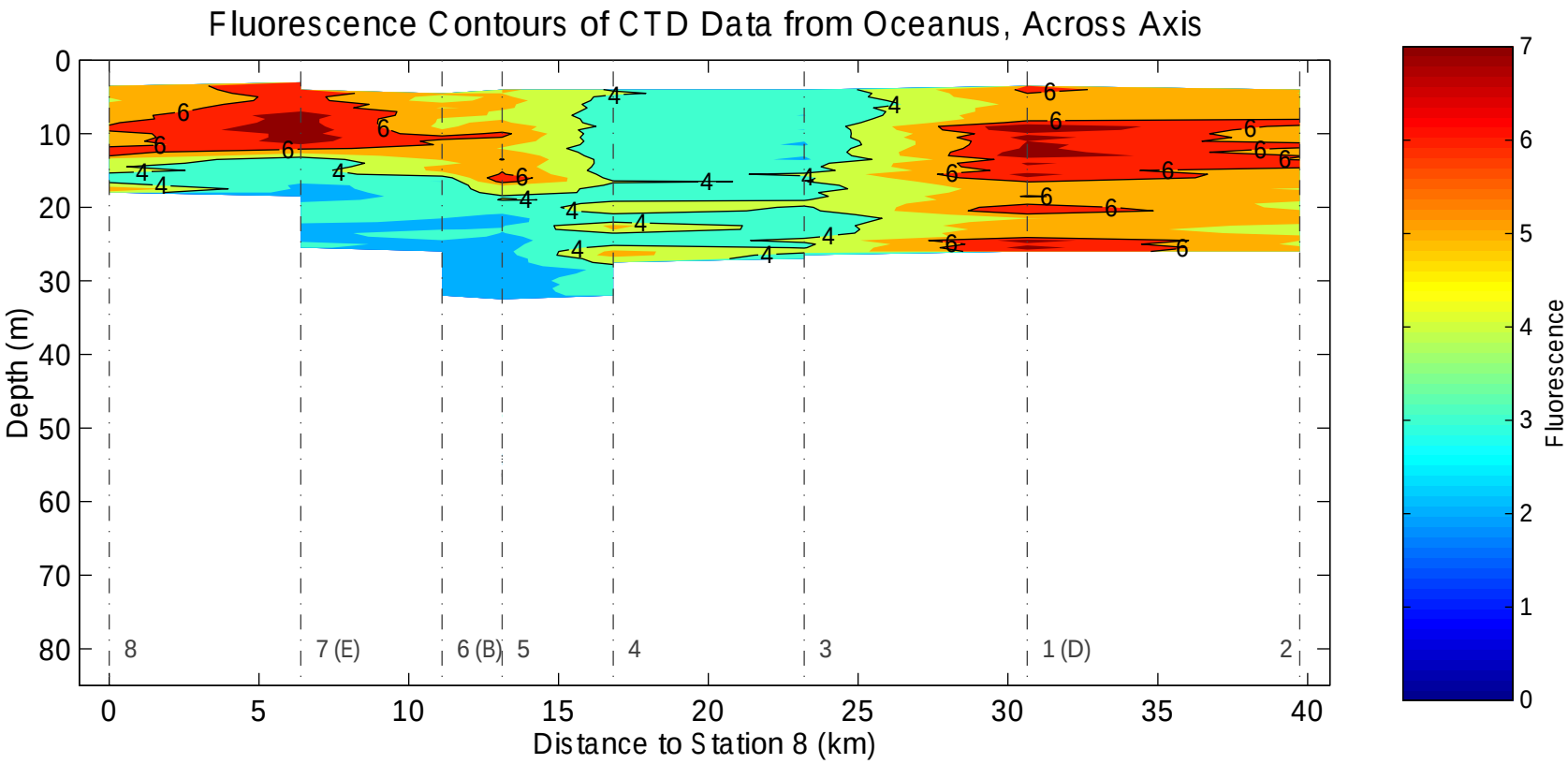
Optical Backscatter Contours of CTD Data from Oceanus, West Shelf

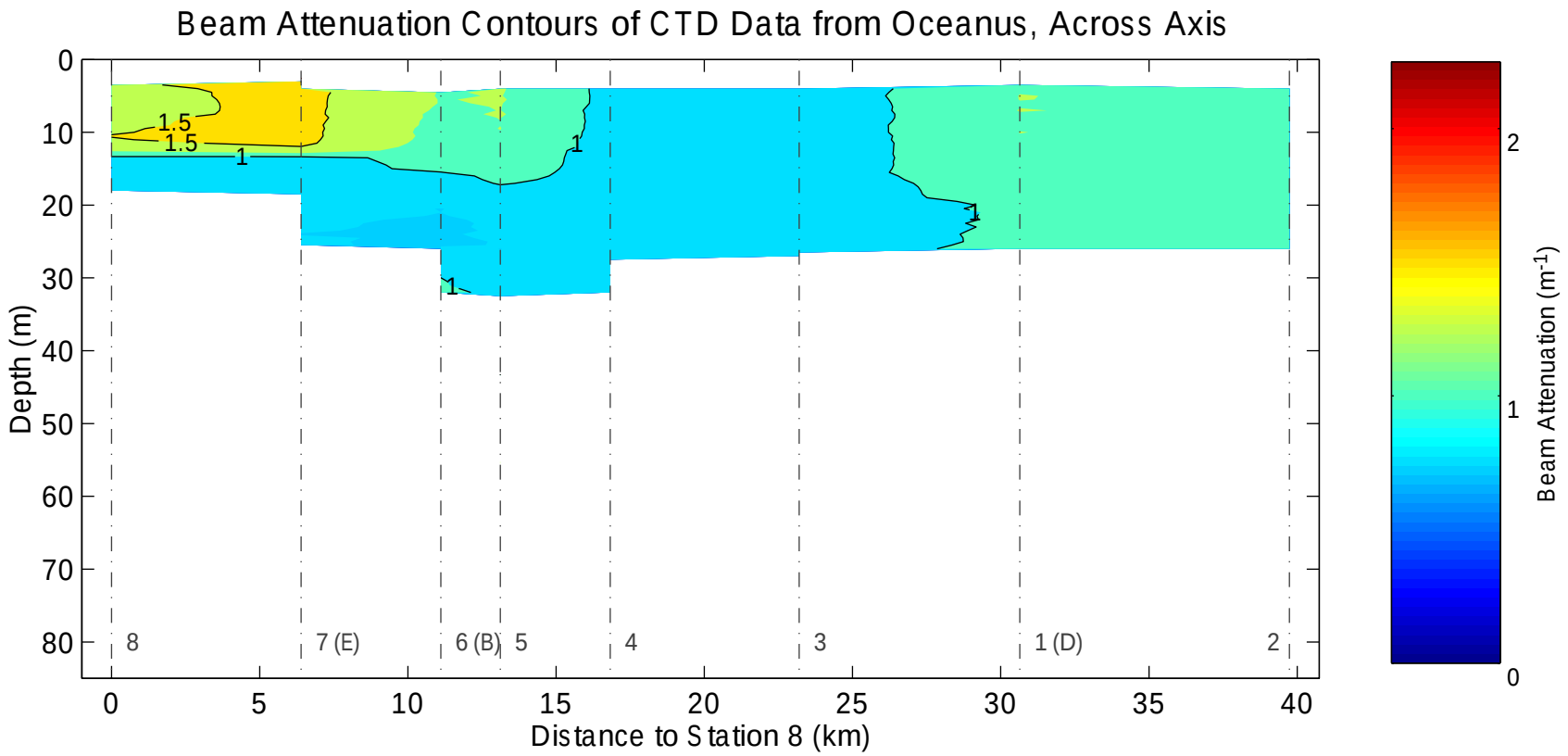



Sigma T Contours of CTD Data from Oceanus, West Shelf
24.5
25
Depth (m)
0
10
20
30
40
50
60
70
80
7 (E)
30
29
28
27
26
0
10
20
30
40
50
60
Distance to Station 7 (km)
25
24
23
22
Sigma T (mg/cm3)

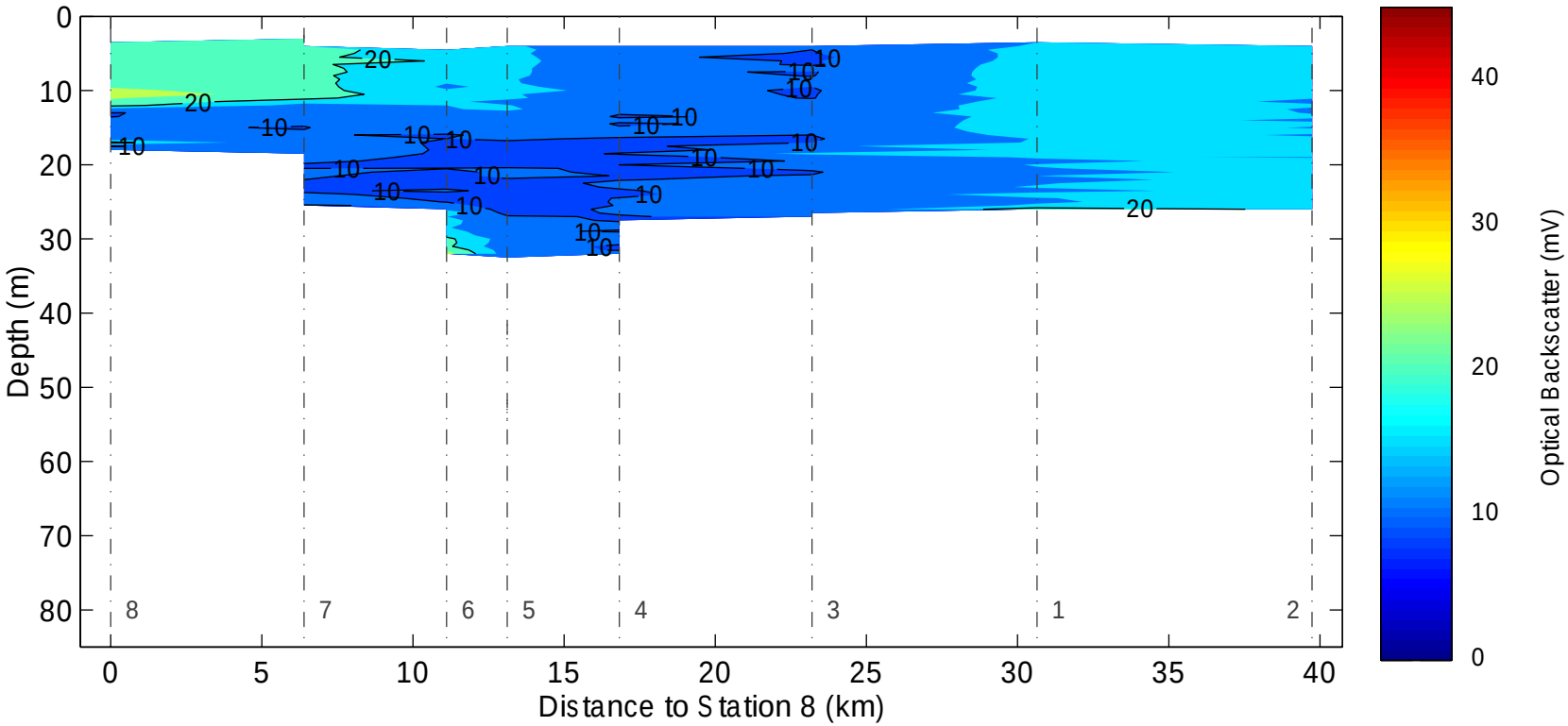

Temperature Contours of CTD Data from Oceanus, Across Axis
Depth (m)
Distance to Station 8 (km)
Temperature (°C)
8
7 (E)
6 (B)
5
4
3
1 (D)
2
11
11.5
12
12
12
11.5
11
11
0
10
20
30
40
50
60
70
80
0
5
10
15
20
25
30
35
40
12.75
12.5
12.25
12
11.75
11.5
11.25
11
10.75
10.5
10.25
10

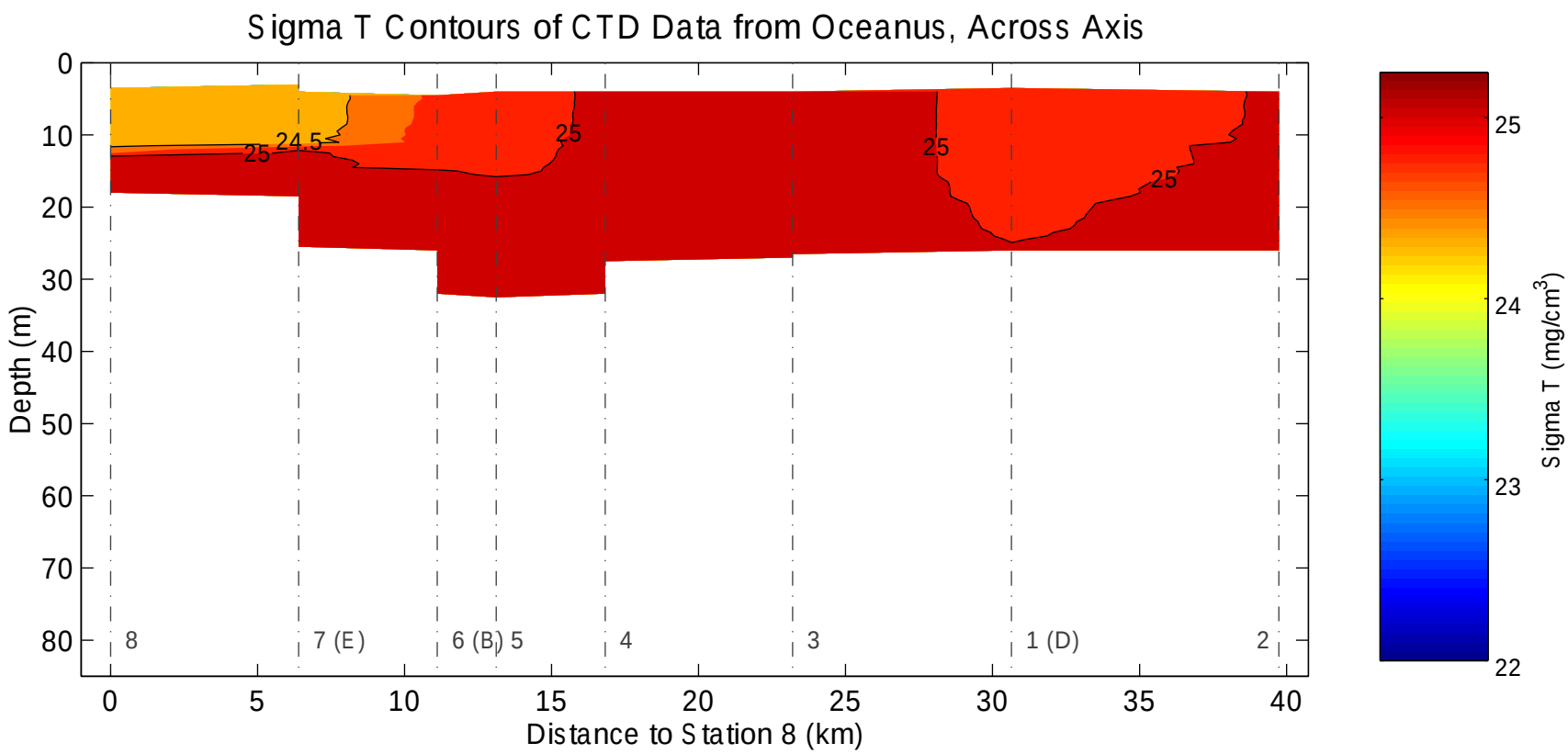

Salinity Contours of CTD Data from Oceanus, Across Axis
Depth (m)
Distance to Station 8 (km)
Salinity (o/oo)
32.5
32
33
33
33
8
7 (E)
6 (B)
5
4
3
1 (D)
2

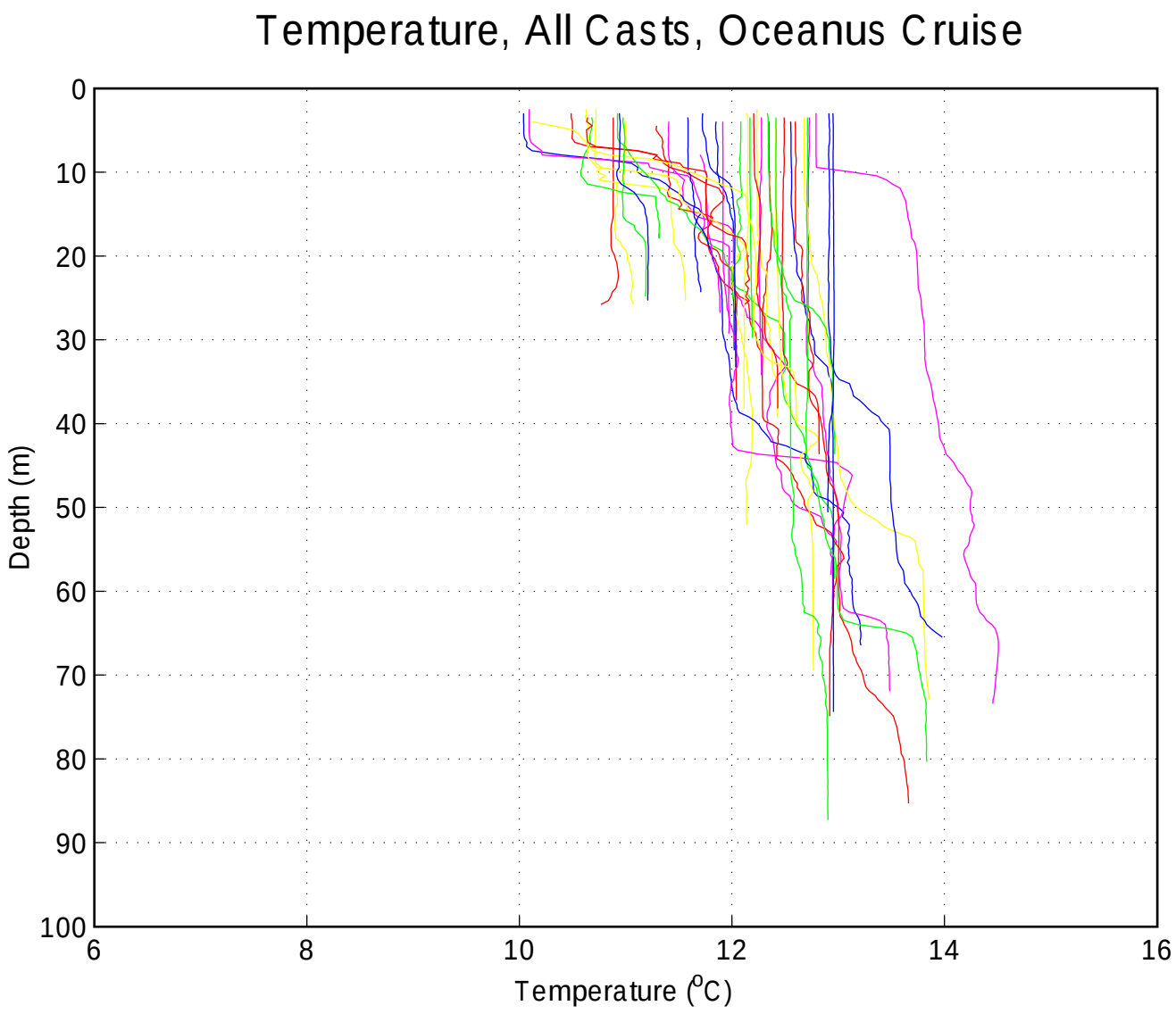

Fluorescence Contours of CTD Data from Oceanus, Across Axis
Depth (m)
Distance to Station 8 (km)
Fluorescence
8
7 (E)
6 (B)
5
4
3
1 (D)
2

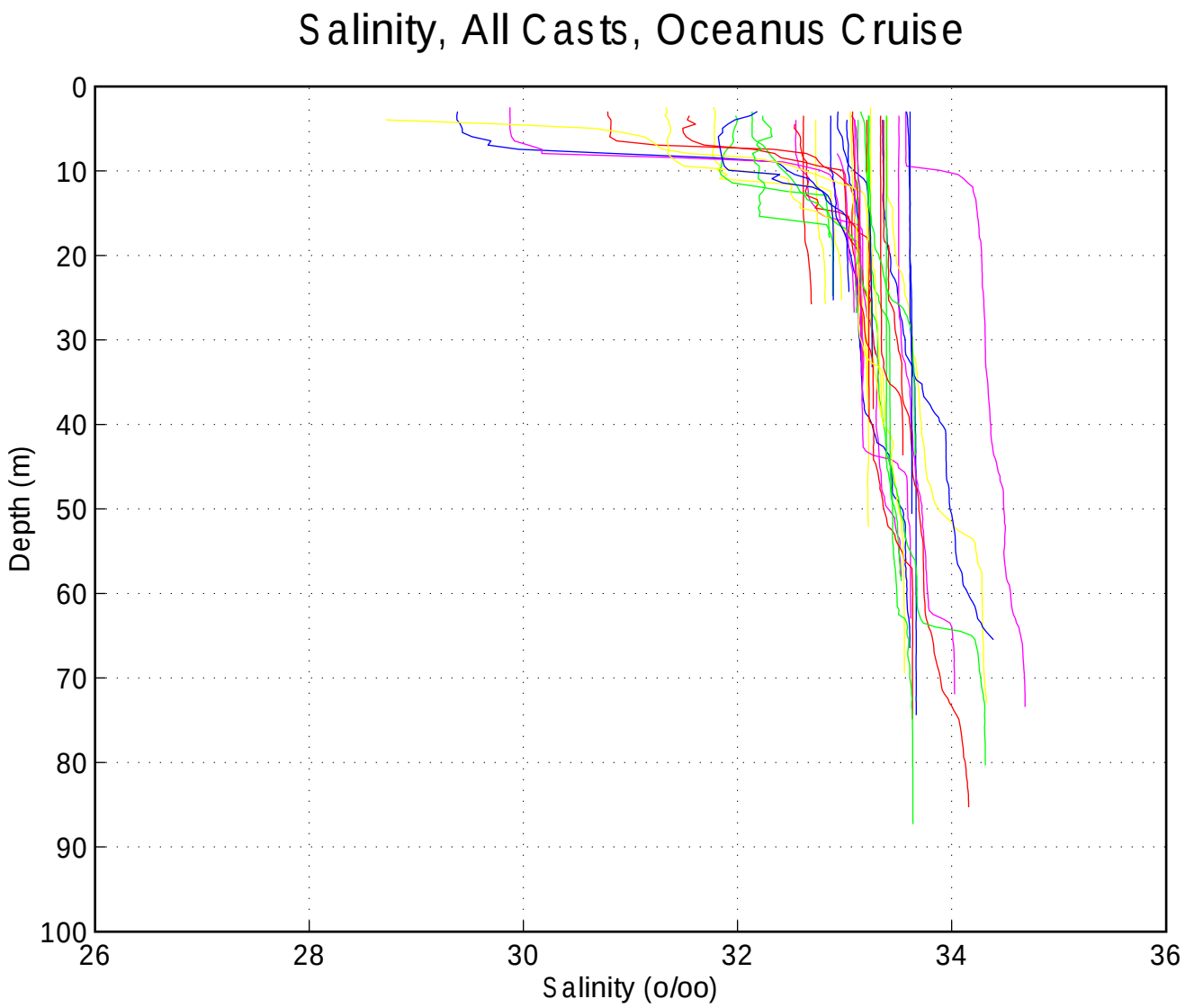

Beam Attenuation Contours of CTD Data from Oceanus, Across Axis
Depth (m)
Distance to Station 8 (km)
Beam Attenuation (m-1)
1.5
1.5
1
1
1
1
8
7 (E)
6 (B)
5
4
3
1 (D)
2

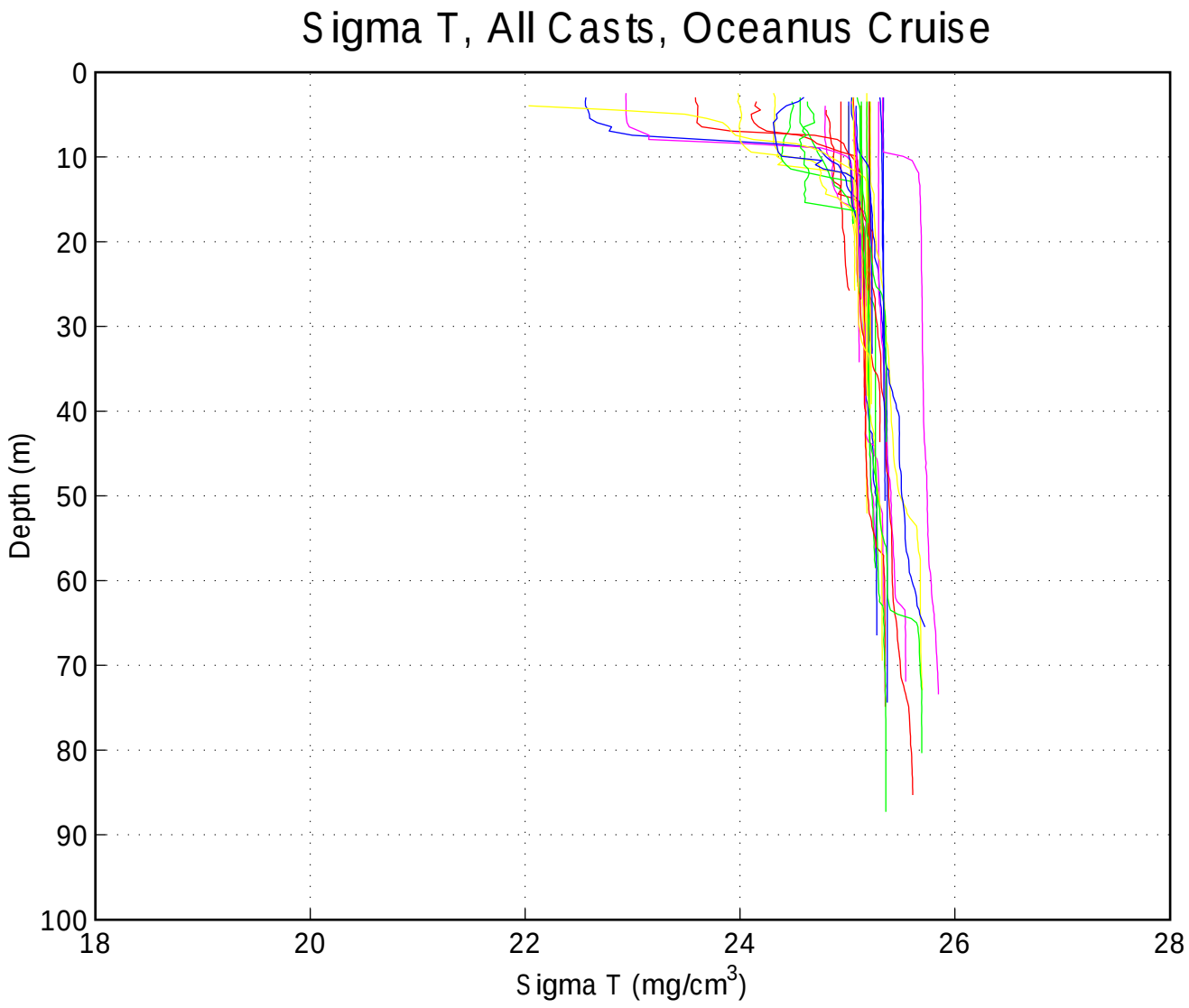
Optical Backscatter Contours of CTD Data from Oceanus, Across Axis

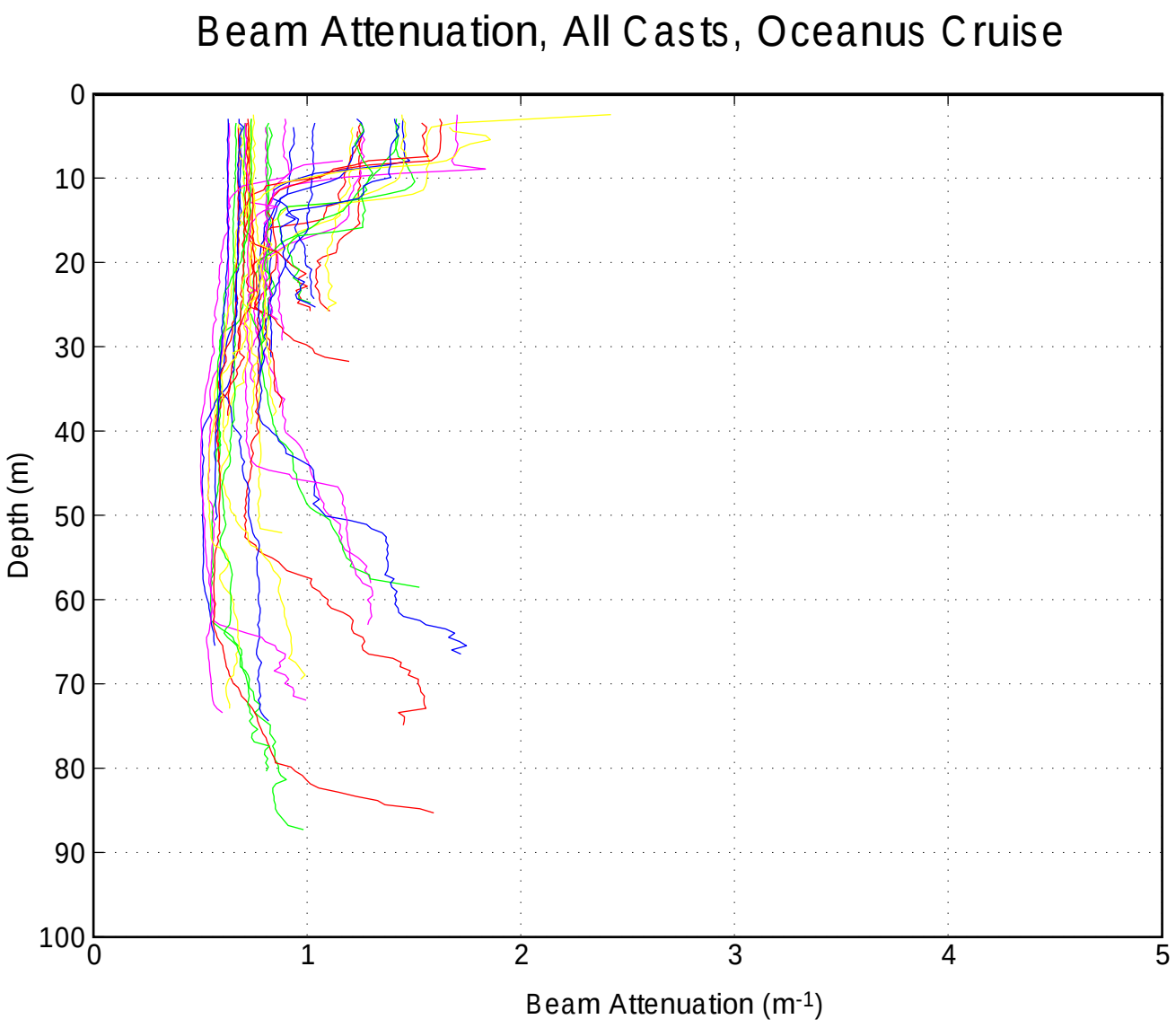


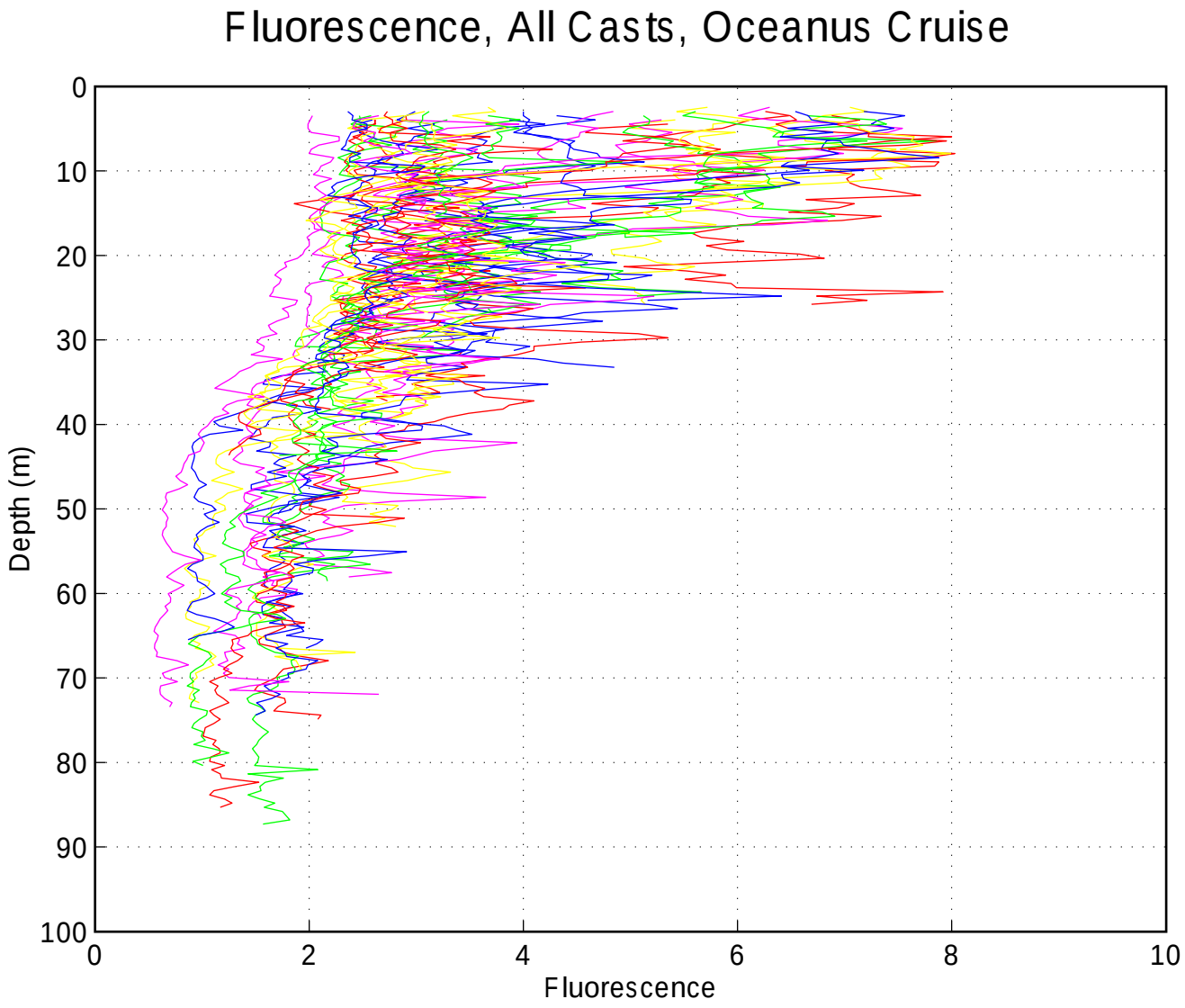

Sigma T Contours of CTD Data from Oceanus, Across Axis
Depth (m)
Distance to Station 8 (km)
Sigma T (mg/cm3)
24.5
25
8
7 (E)
6 (B)
5
4
3
1 (D)
2

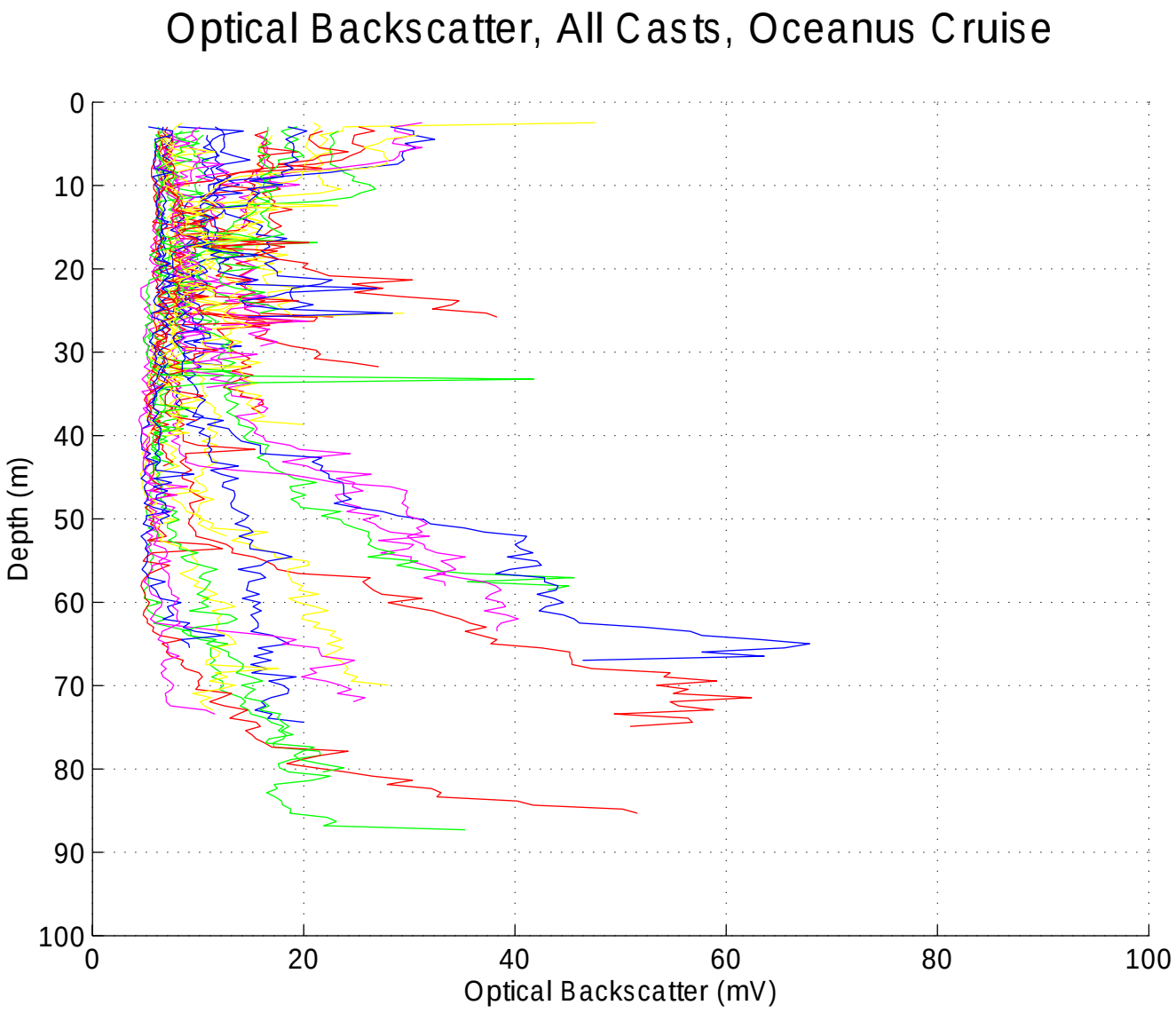

Temperature, All Casts, Oceanus Cruise
Depth (m)
0
10
20
30
40
50
60
70
80
90
100
6
8
10
12
14
16
Temperature (°C)


Salinity, All Casts, Oceanus Cruise
Depth (m)
0
10
20
30
40
50
60
70
80
90
100
26
28
30
32
34
36
Salinity (o/oo)

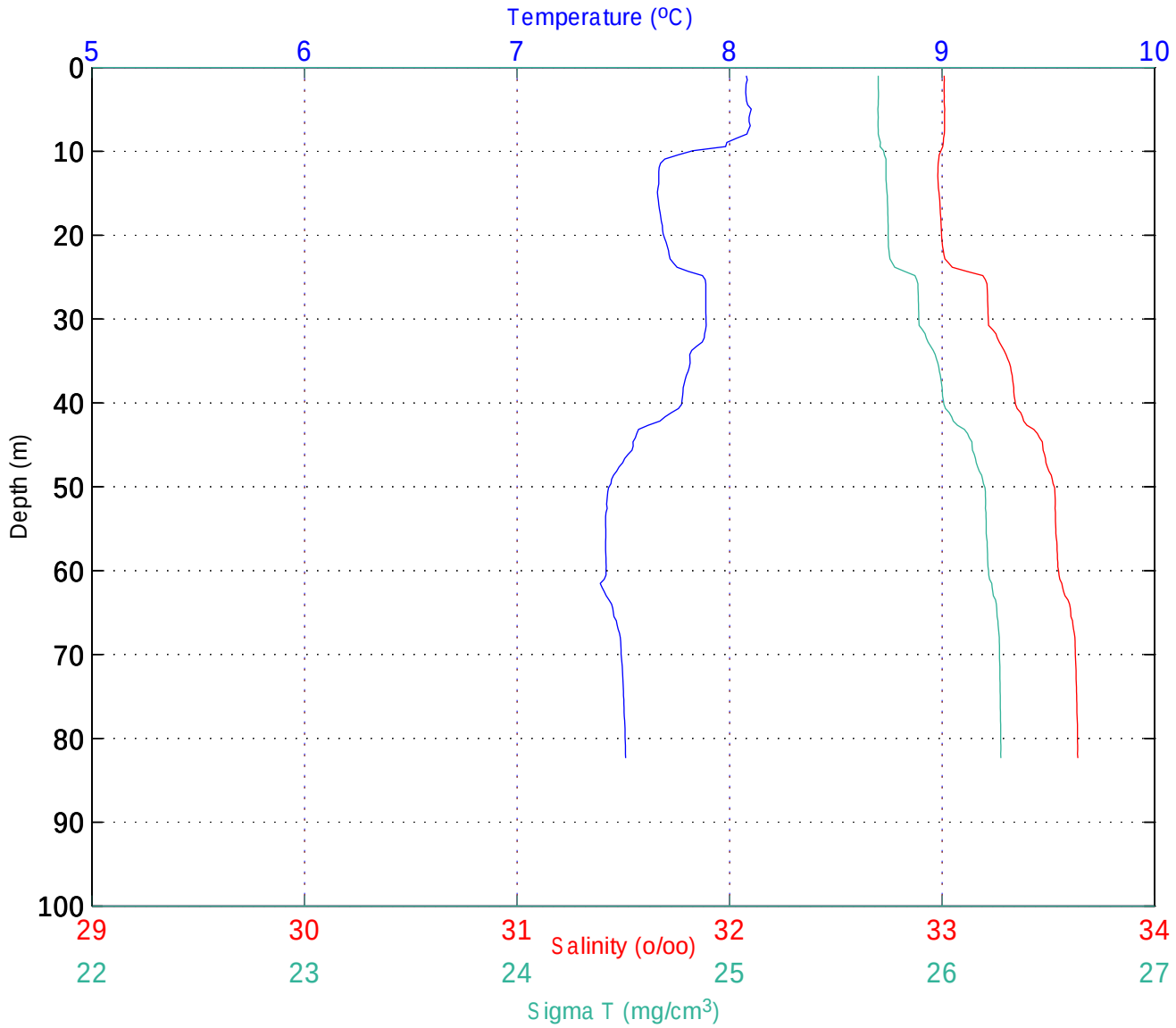

Sigma T, All Casts, Oceanus Cruise
Depth (m)
0
10
20
30
40
50
60
70
80
90
100
18
20
22
24
26
28
Sigma T (mg/cm3)


Beam Attenuation, All Casts, Oceanus Cruise
Depth (m)
0
10
20
30
40
50
60
70
80
90
100
0
1
2
3
4
5
Beam Attenuation (m-1)

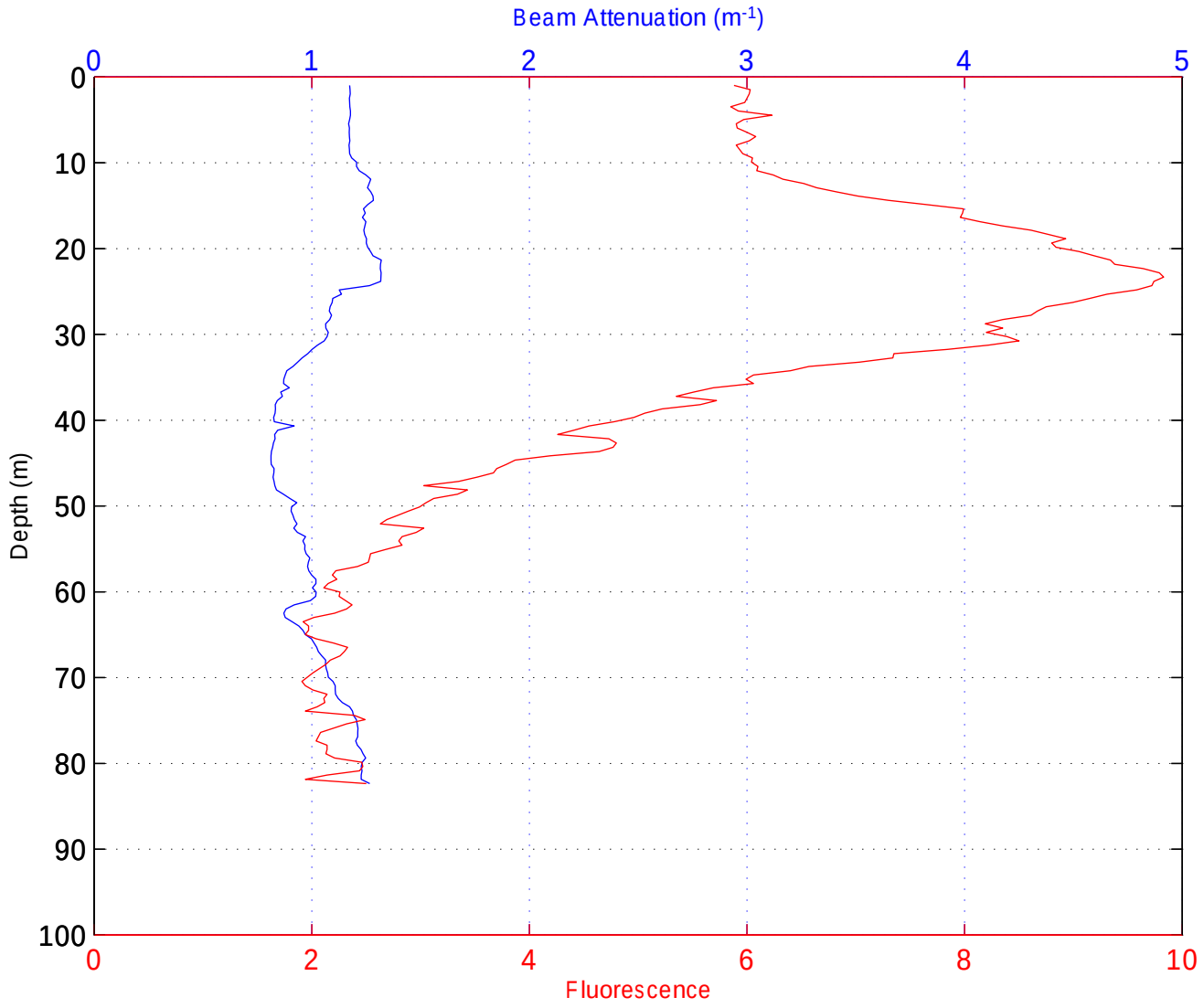

Fluorescence, All Casts, Oceanus Cruise
Depth (m)
0
10
20
30
40
50
60
70
80
90
100
0
2
4
6
8
10
Fluorescence


Optical Backscatter, All Casts, Oceanus Cruise
Depth (m)
0
10
20
30
40
50
60
70
80
90
100
0
20
40
60
80
100
Optical Backscatter (mV)

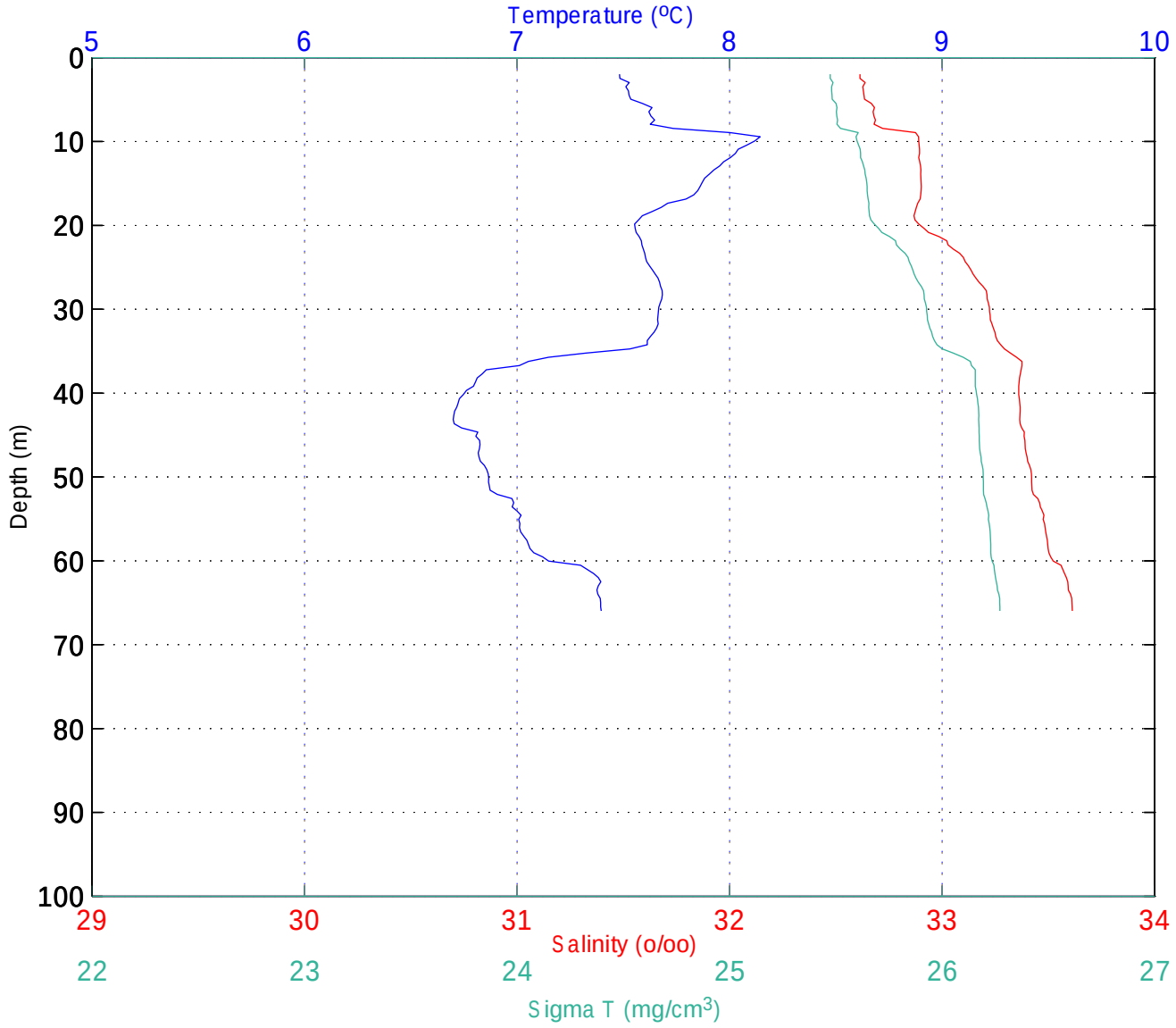
Endeavor Cast 1: Temperature, Salinity, and Sigma T



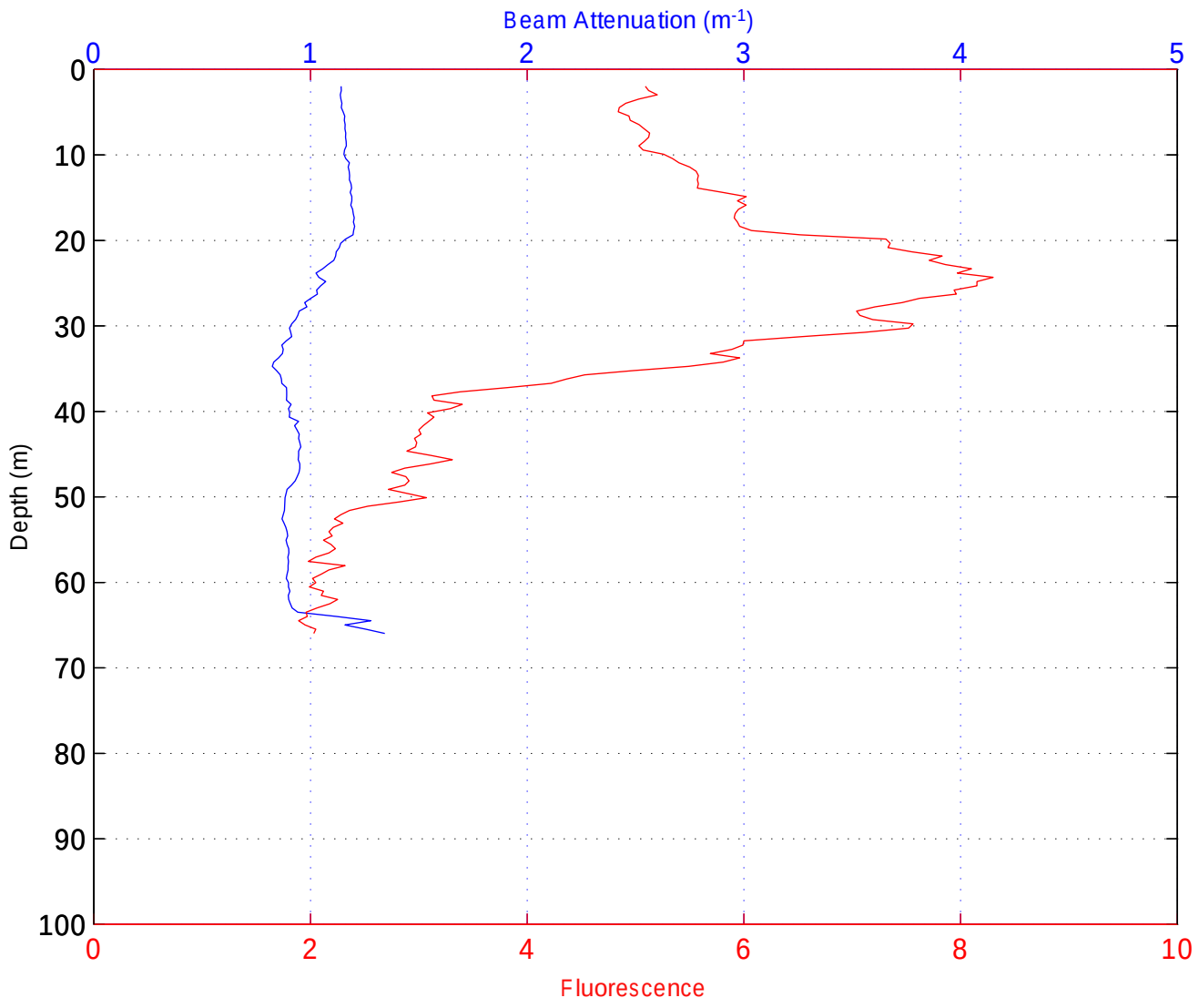
Endeavor Cast 1: Beam Attenuation and Fluorescence



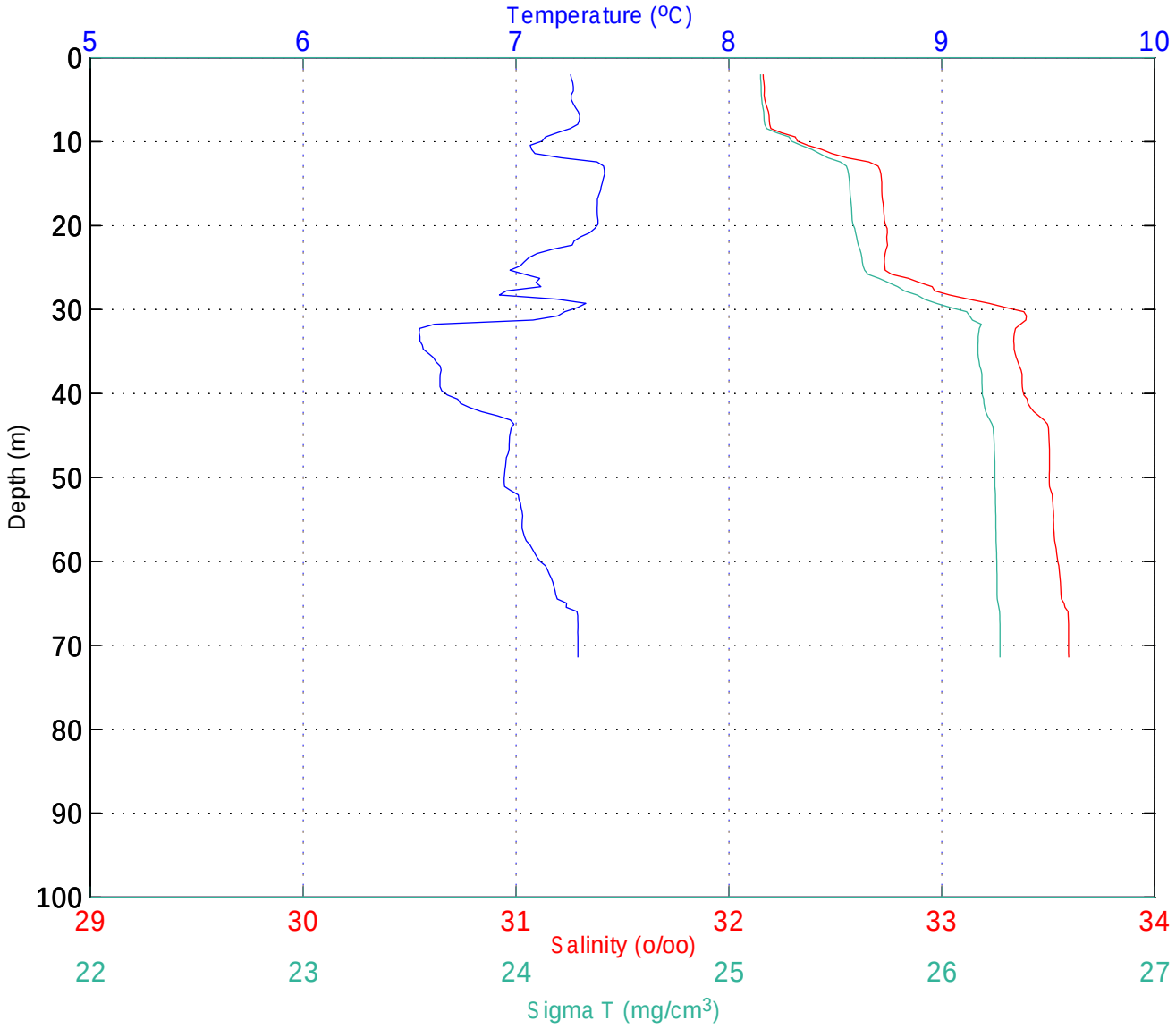
Endeavor Cast 2: Temperature, Salinity, and Sigma T



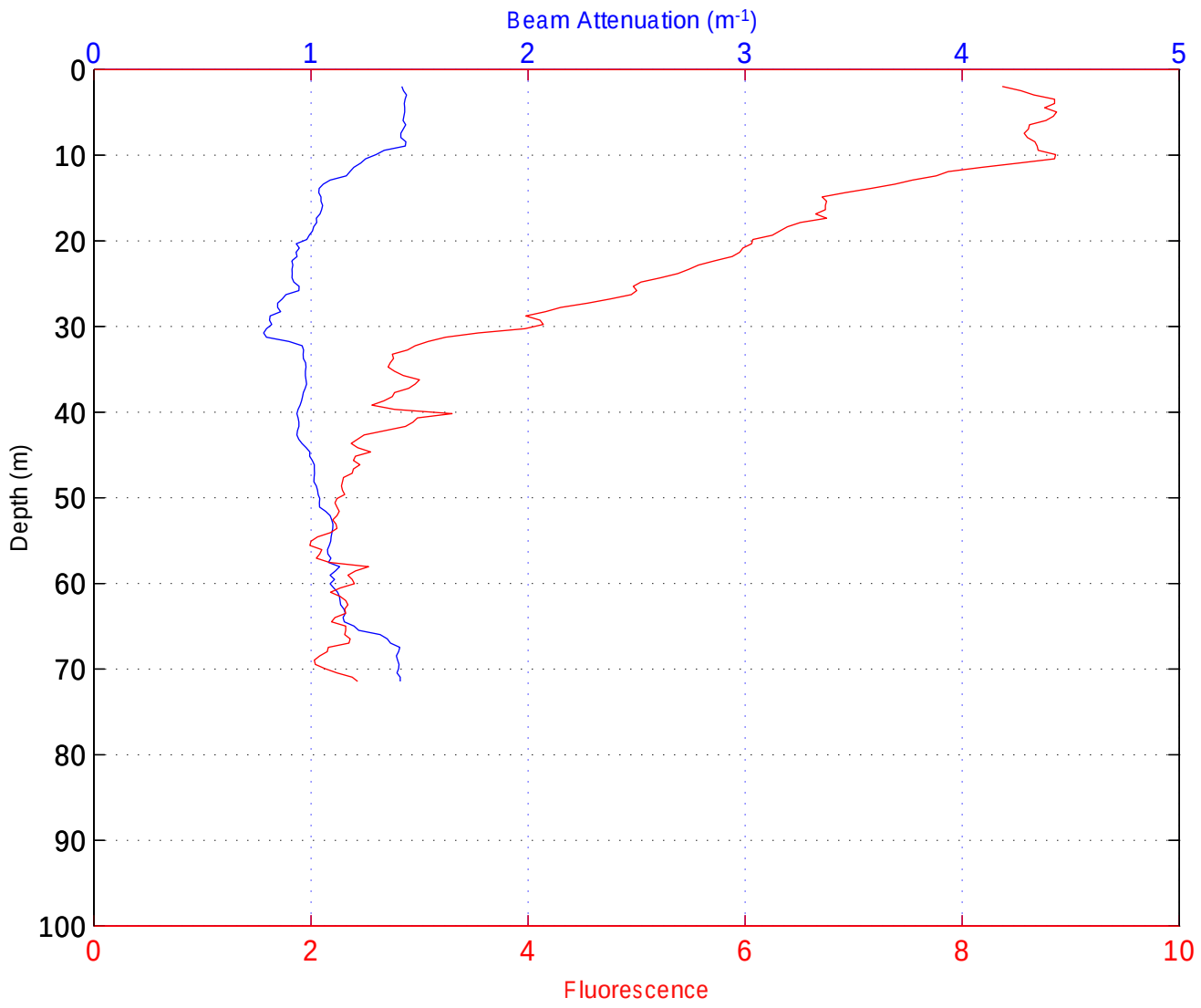
Endeavor Cast 2: Beam Attenuation and Fluorescence



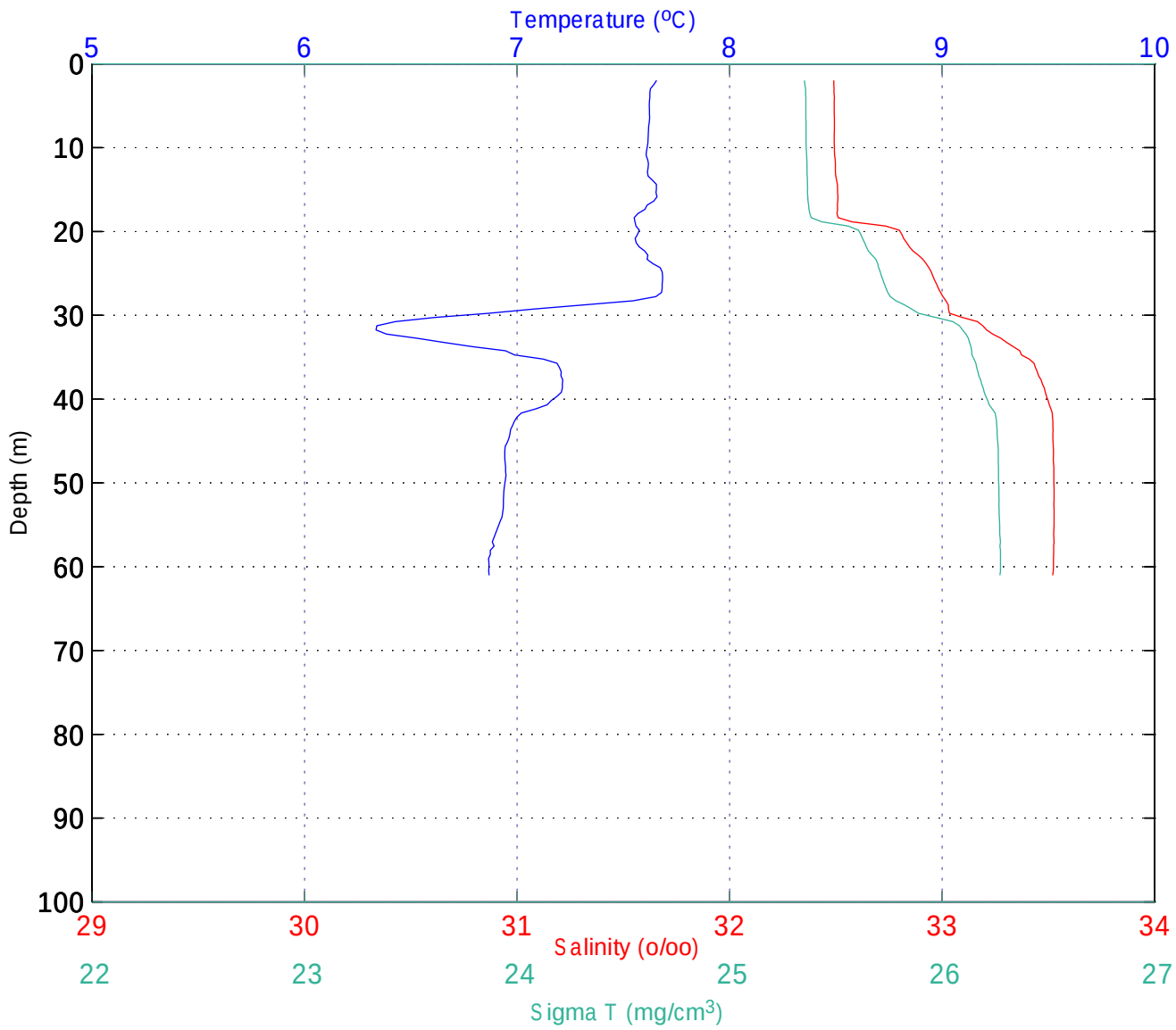
Endeavor Cast 3: Temperature, Salinity, and Sigma T



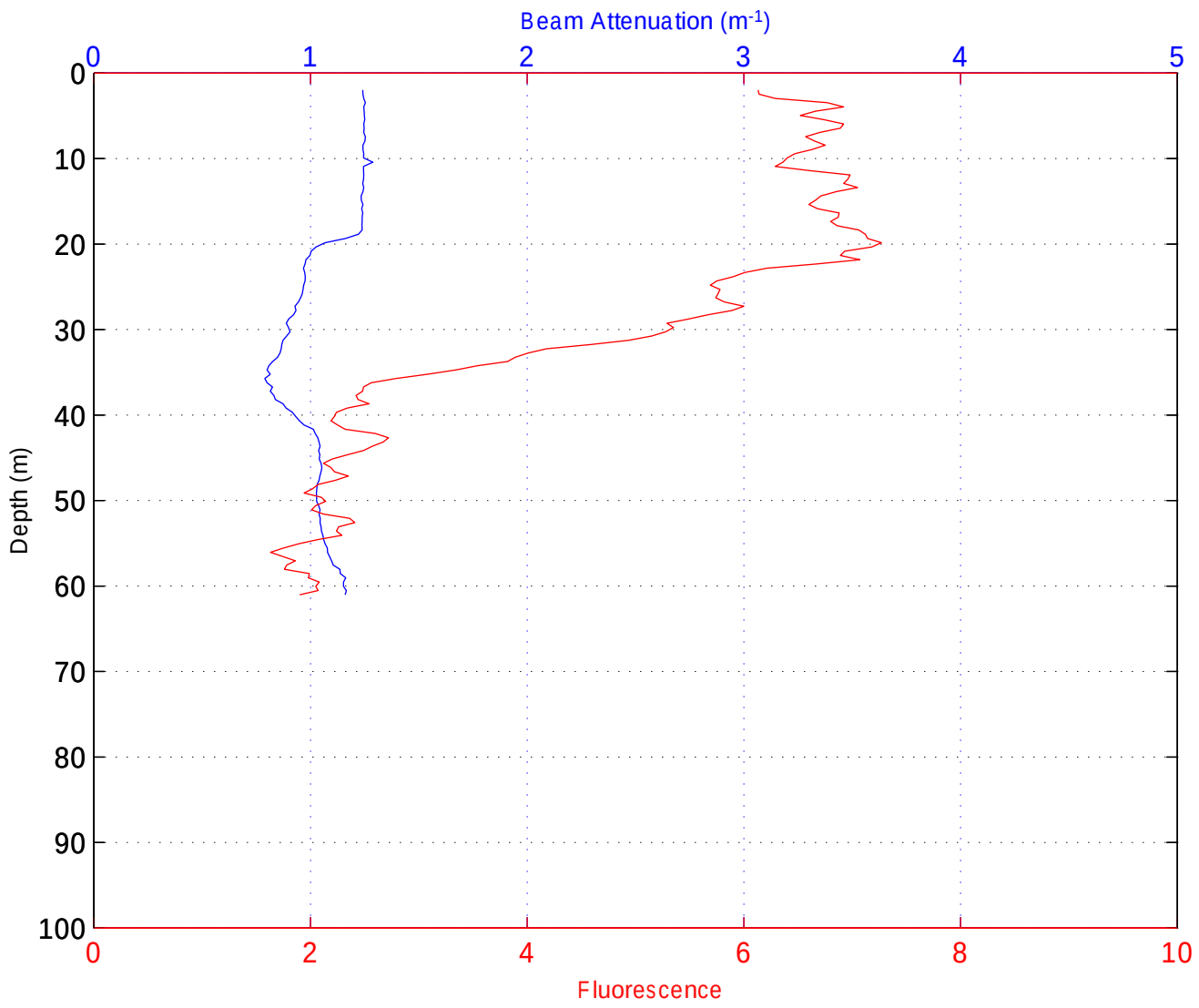
Endeavor Cast 3: Beam Attenuation and Fluorescence



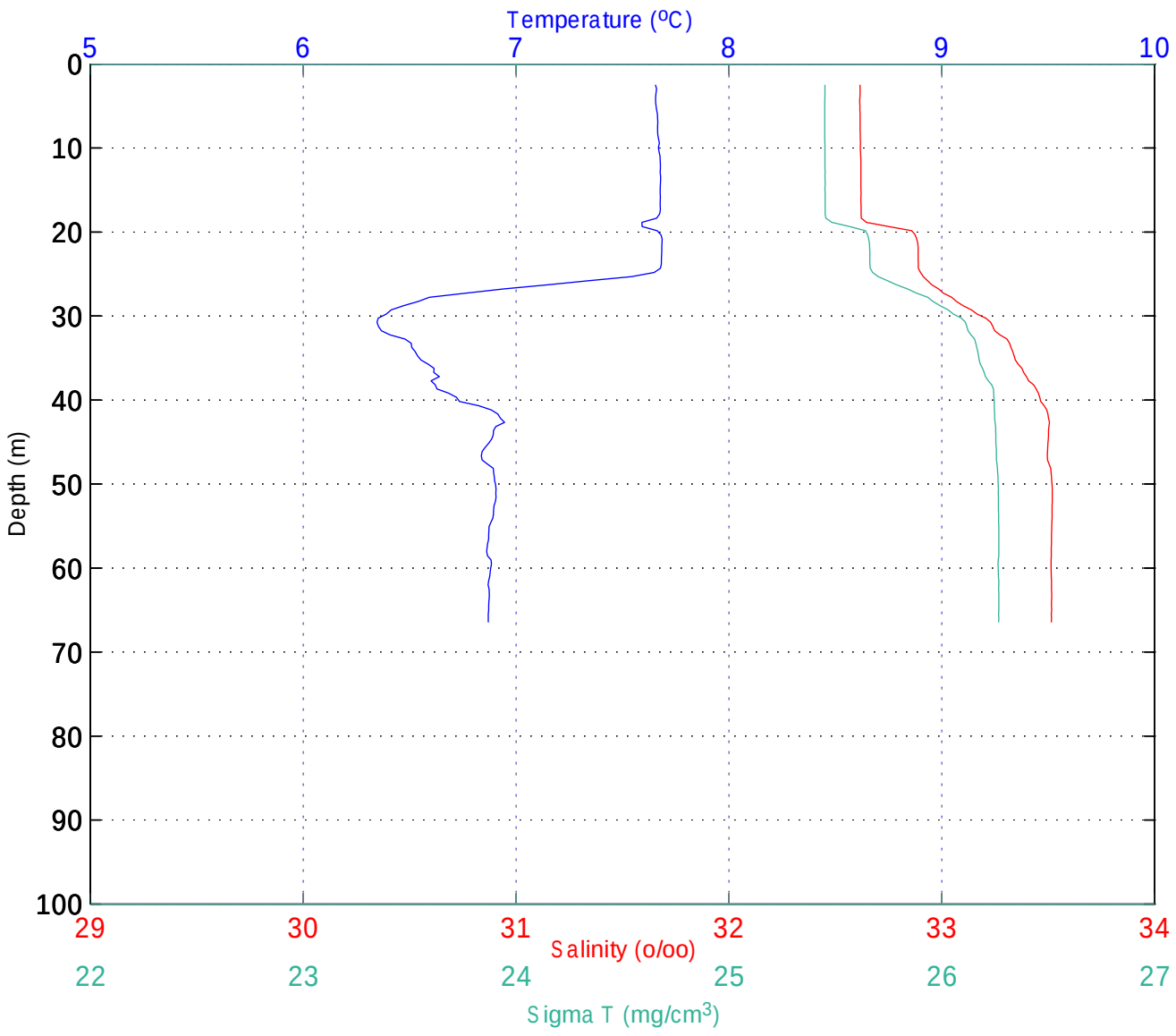
Endeavor Cast 4: Temperature, Salinity, and Sigma T



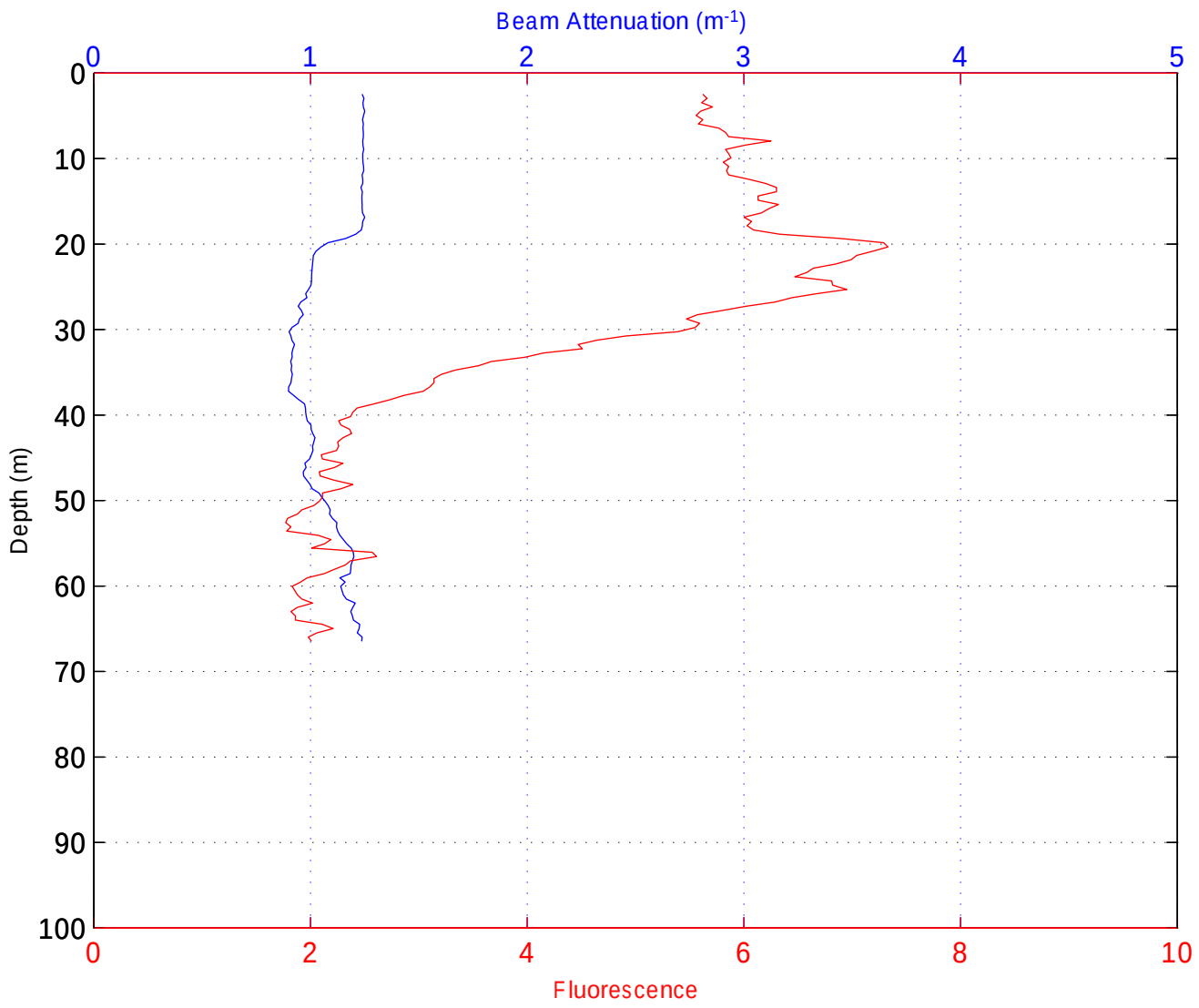
Endeavor Cast 4: Beam Attenuation and Fluorescence



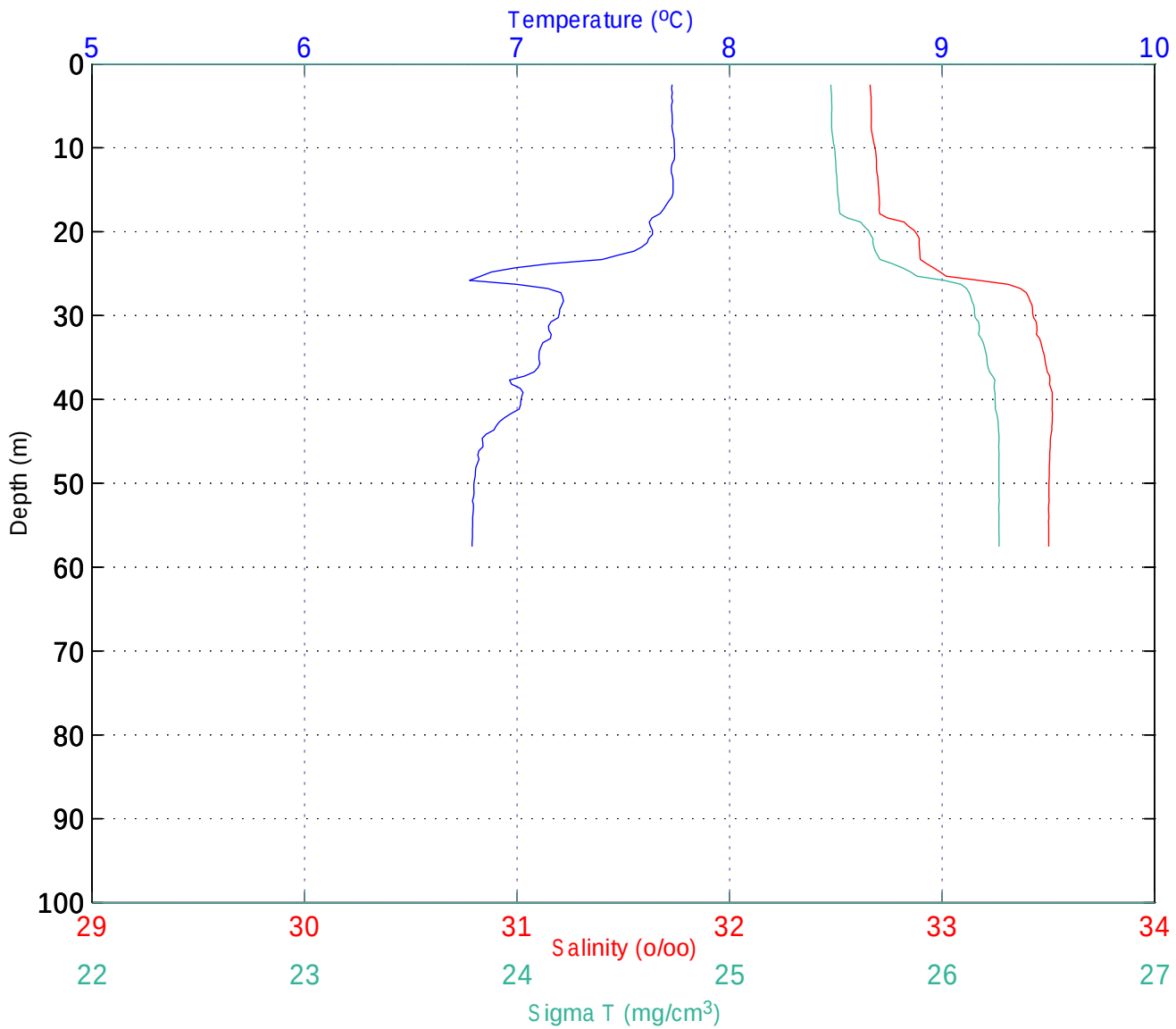
Endeavor Cast 5: Temperature, Salinity, and Sigma T



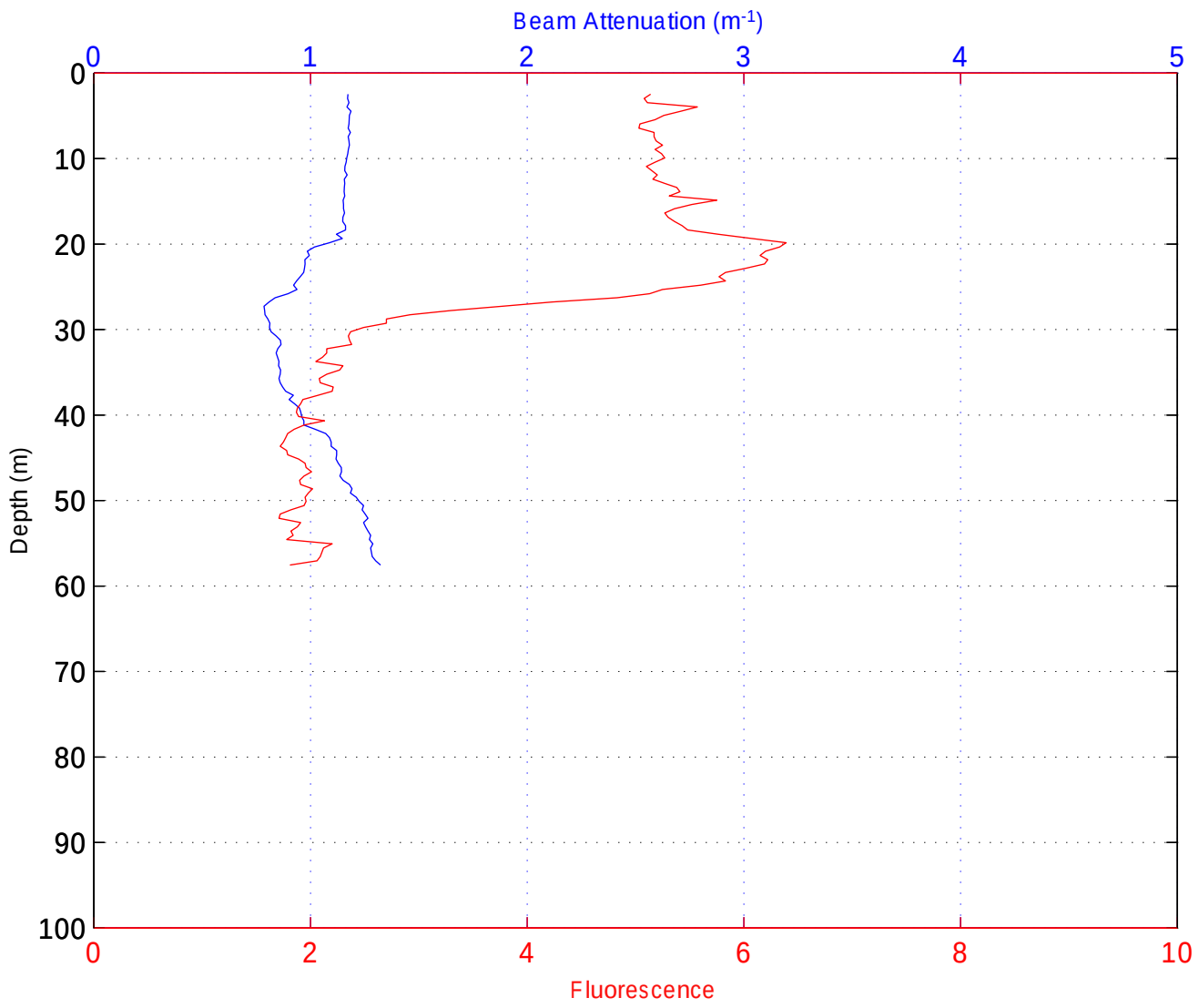
Endeavor Cast 5: Beam Attenuation and Fluorescence



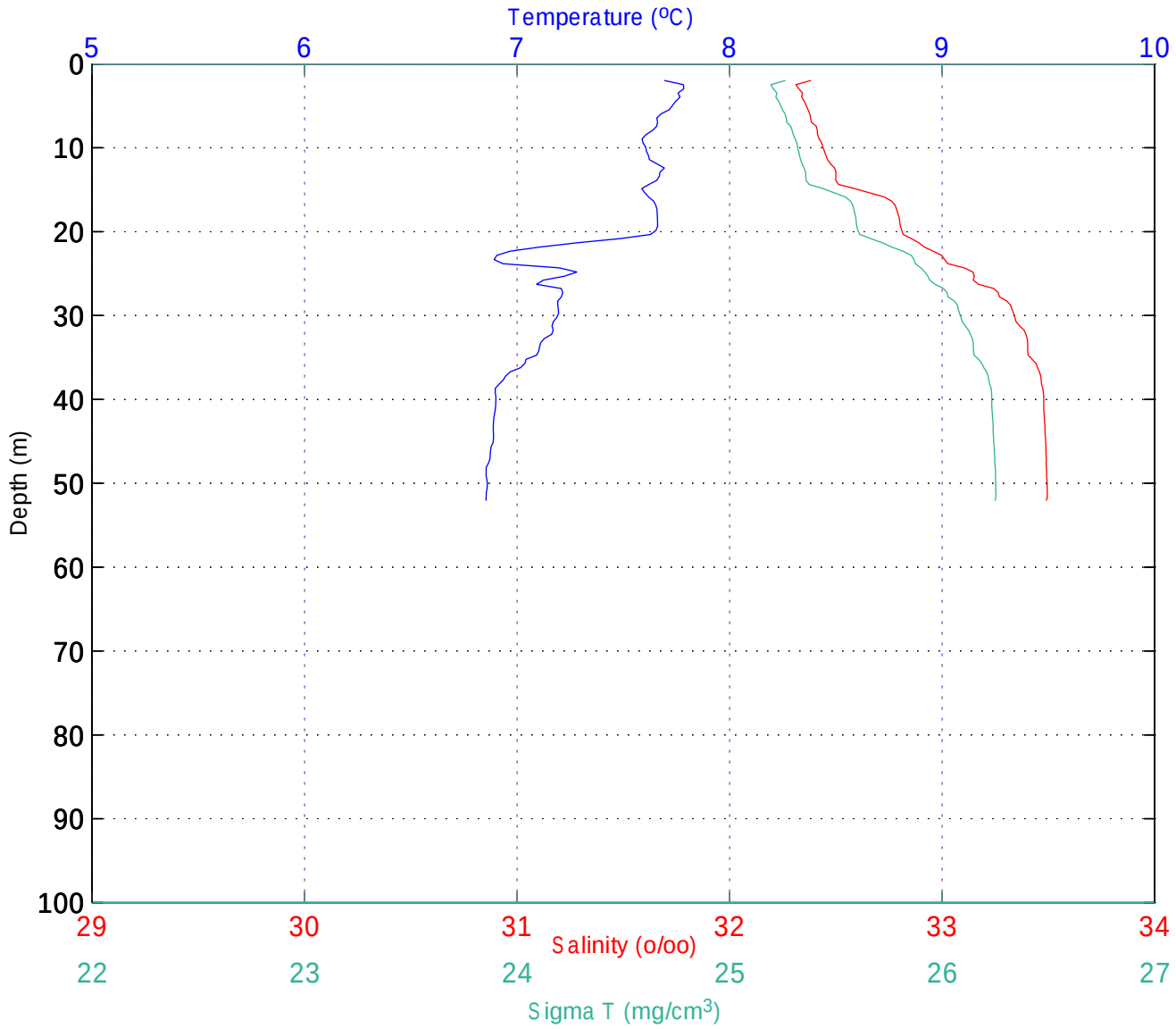
Endeavor Cast 6: Temperature, Salinity, and Sigma T



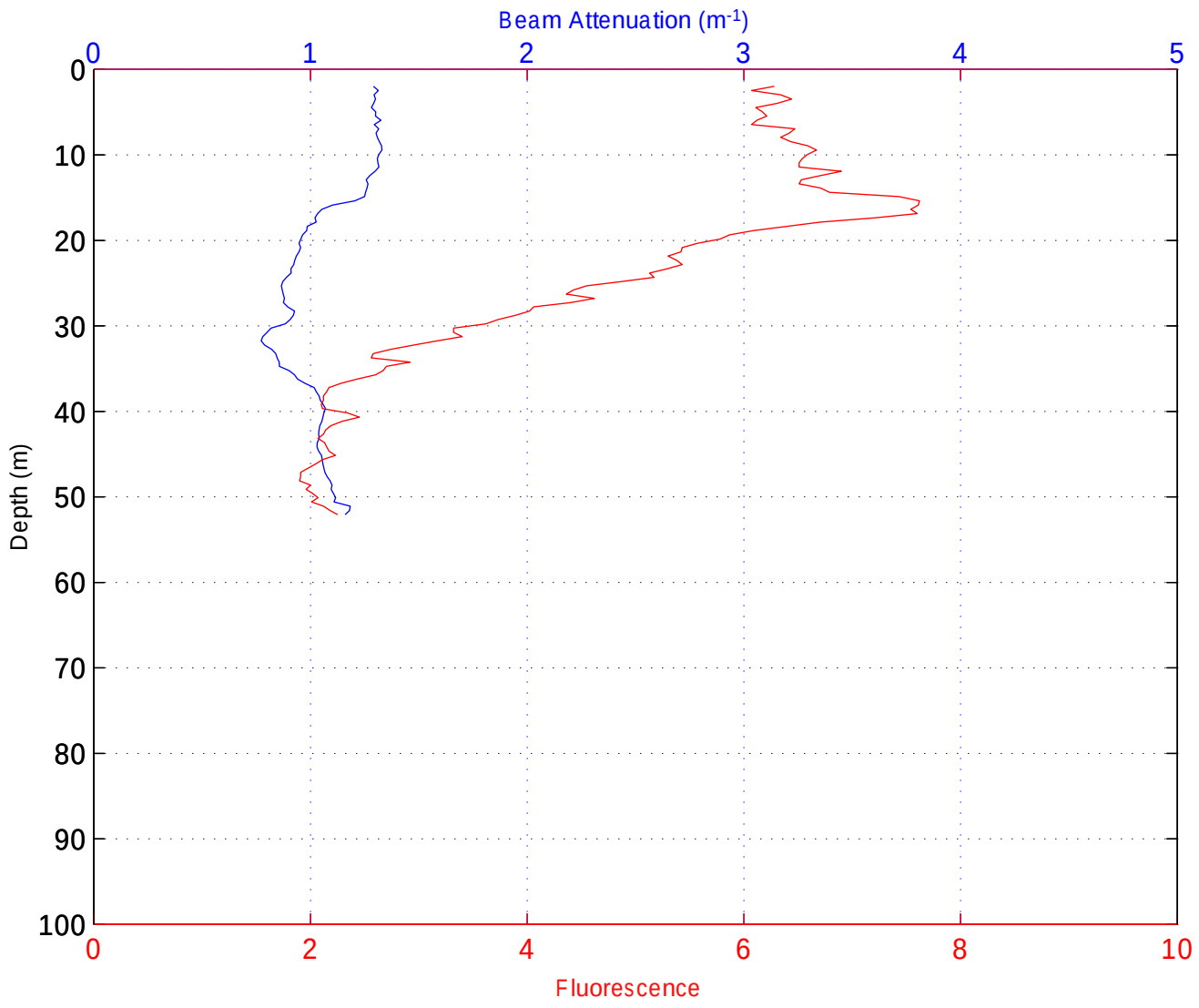
Endeavor Cast 6: Beam Attenuation and Fluorescence



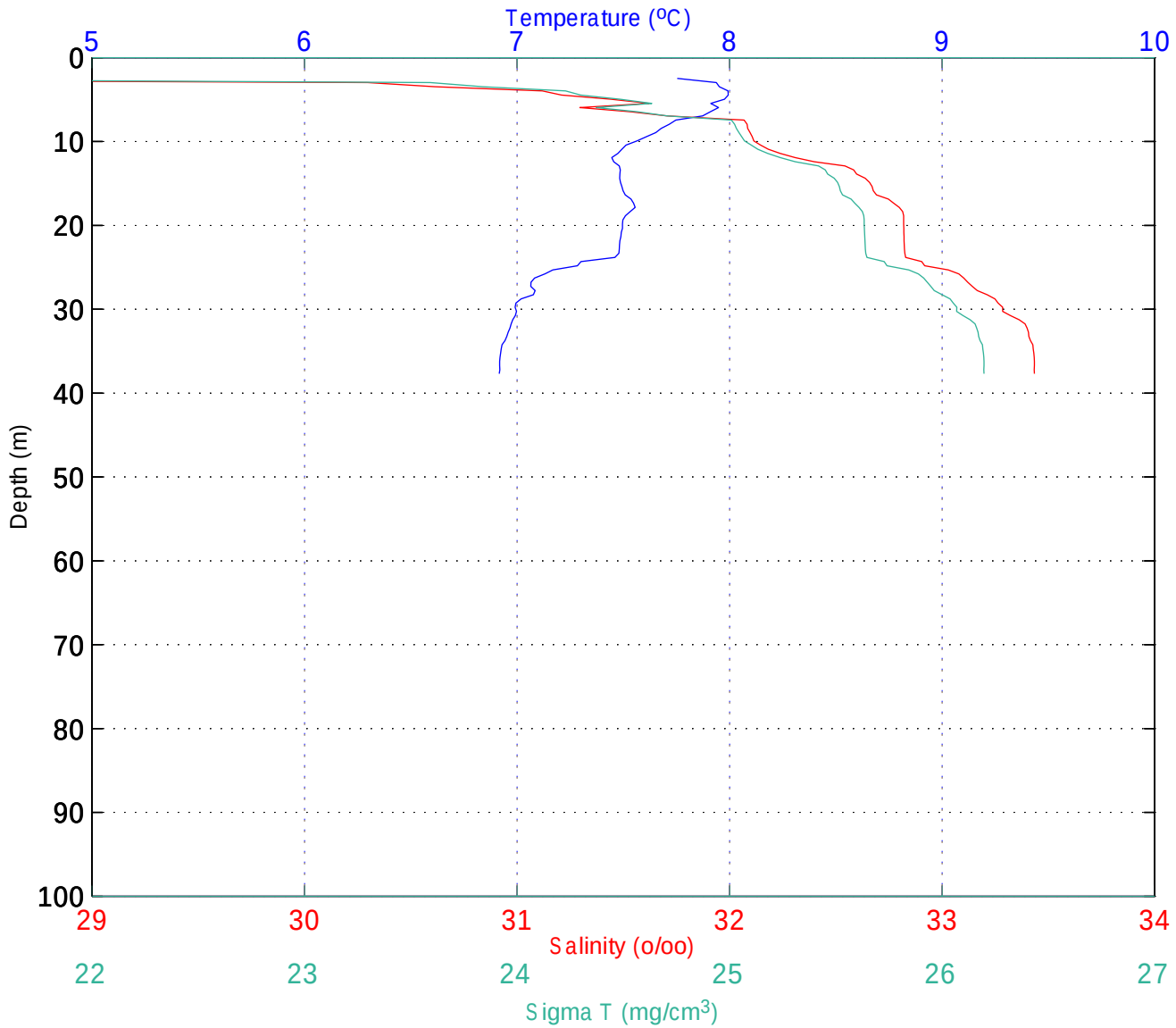
Endeavor Cast 7: Temperature, Salinity, and Sigma T



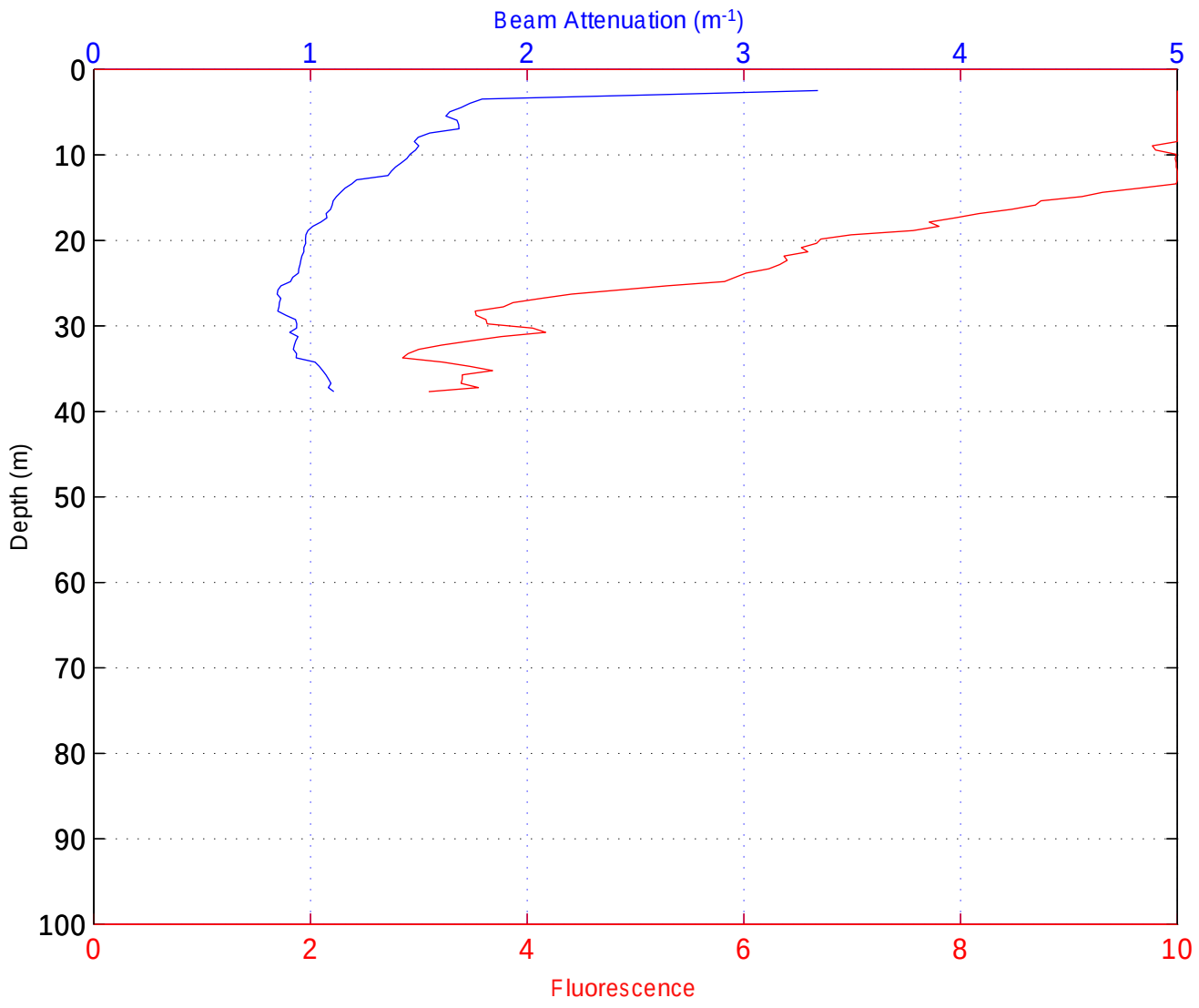
Endeavor Cast 7: Beam Attenuation and Fluorescence



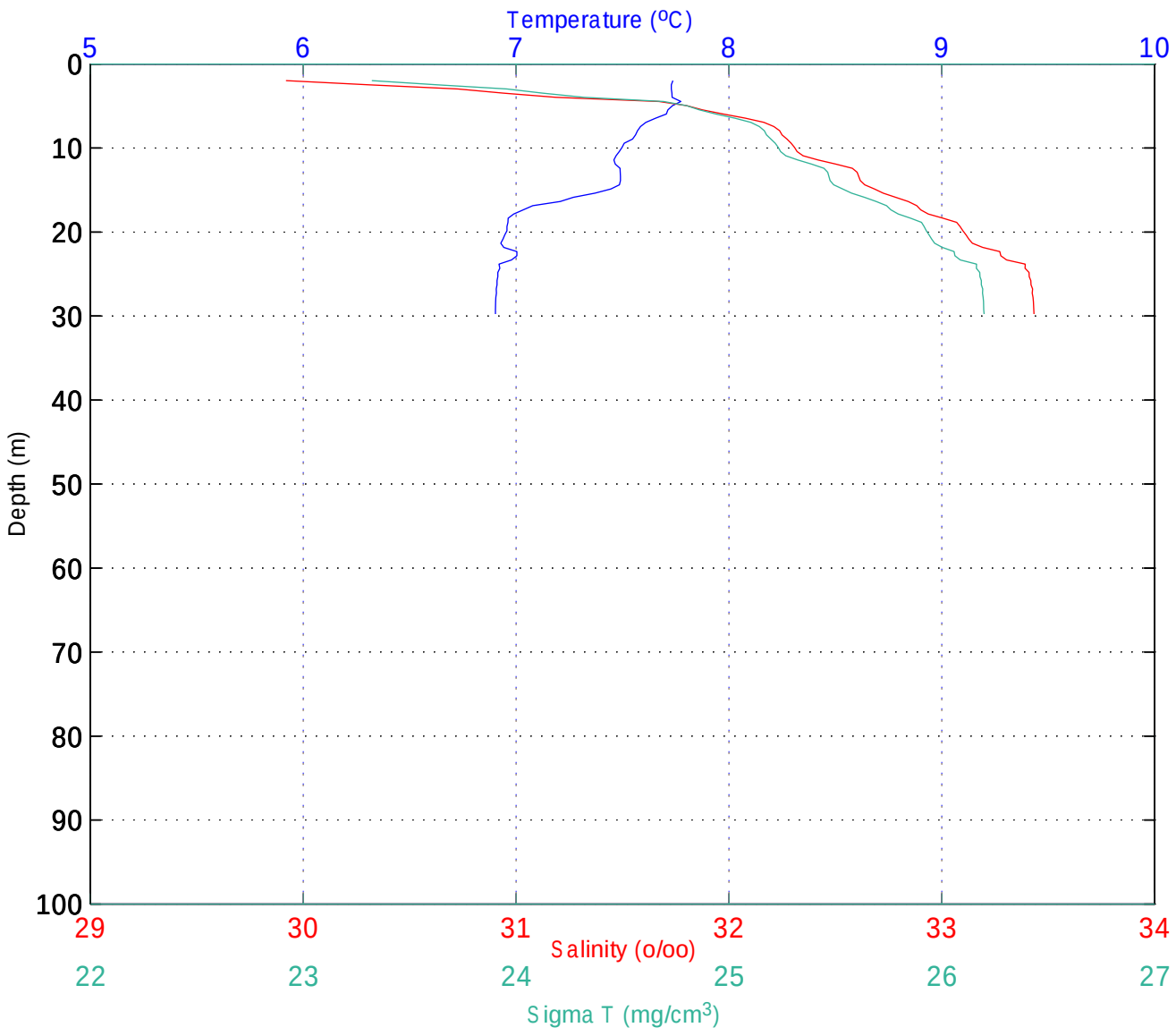
Endeavor Cast 8: Temperature, Salinity, and Sigma T



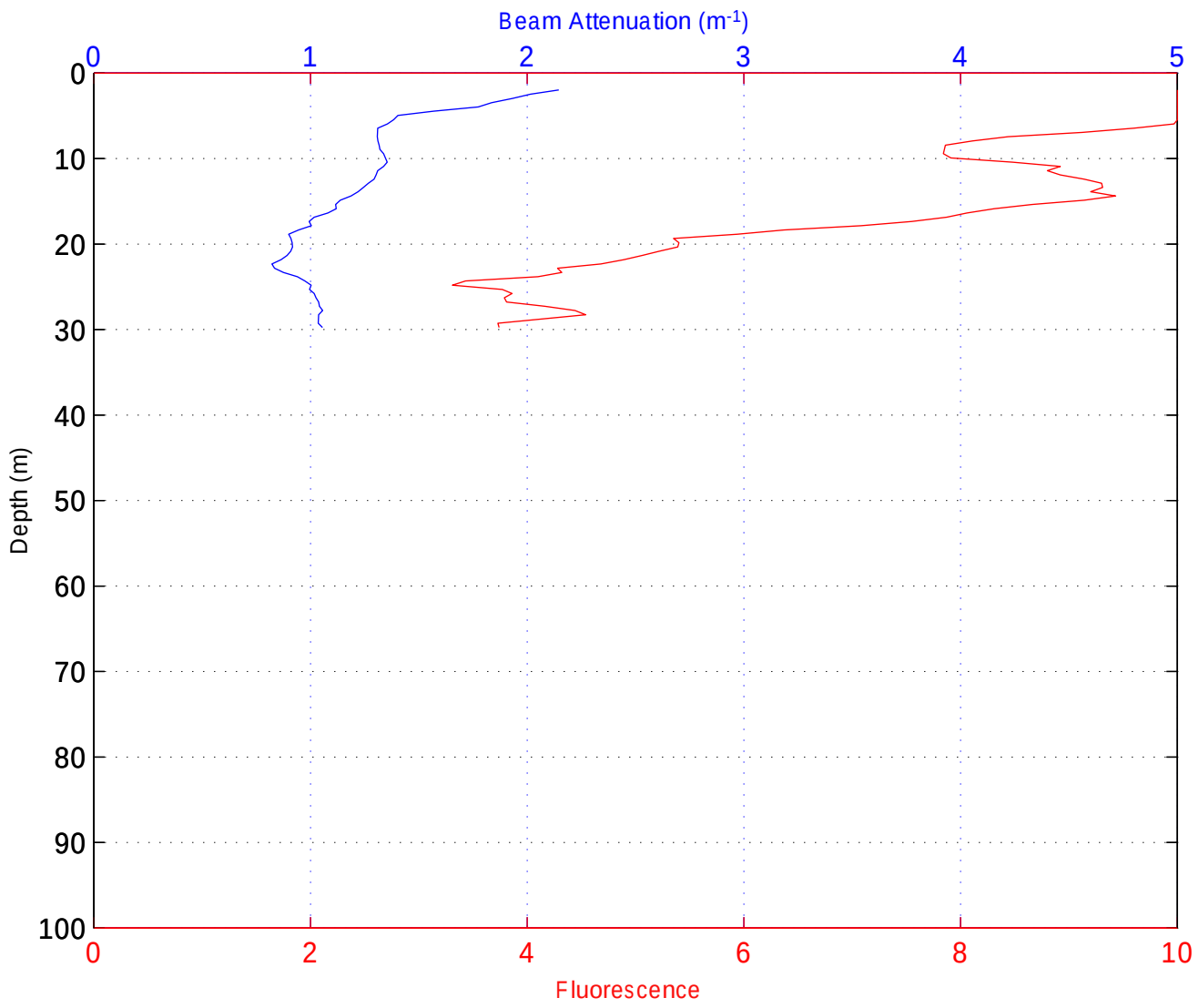
Endeavor Cast 8: Beam Attenuation and Fluorescence



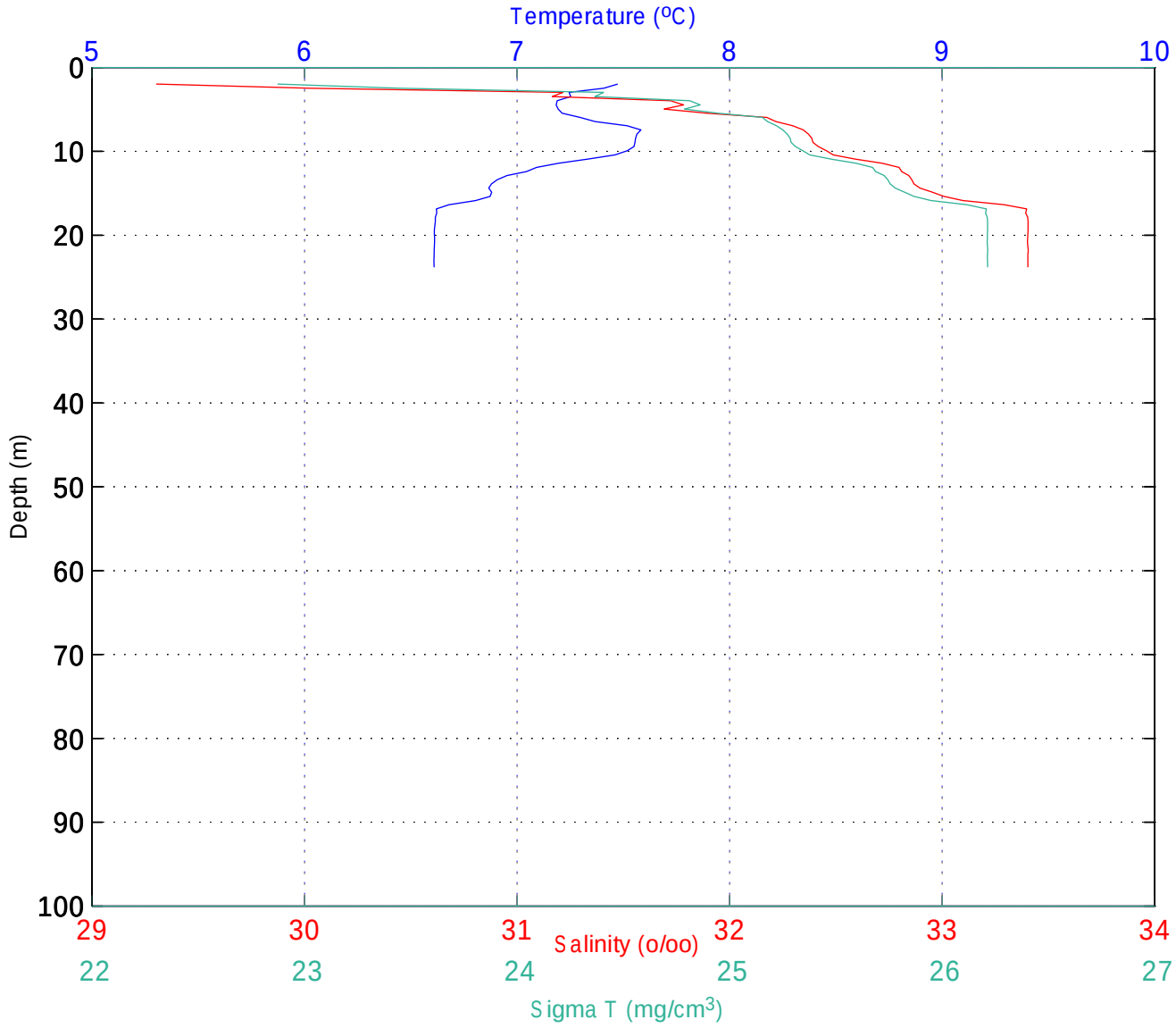
Endeavor Cast 9: Temperature, Salinity, and Sigma T



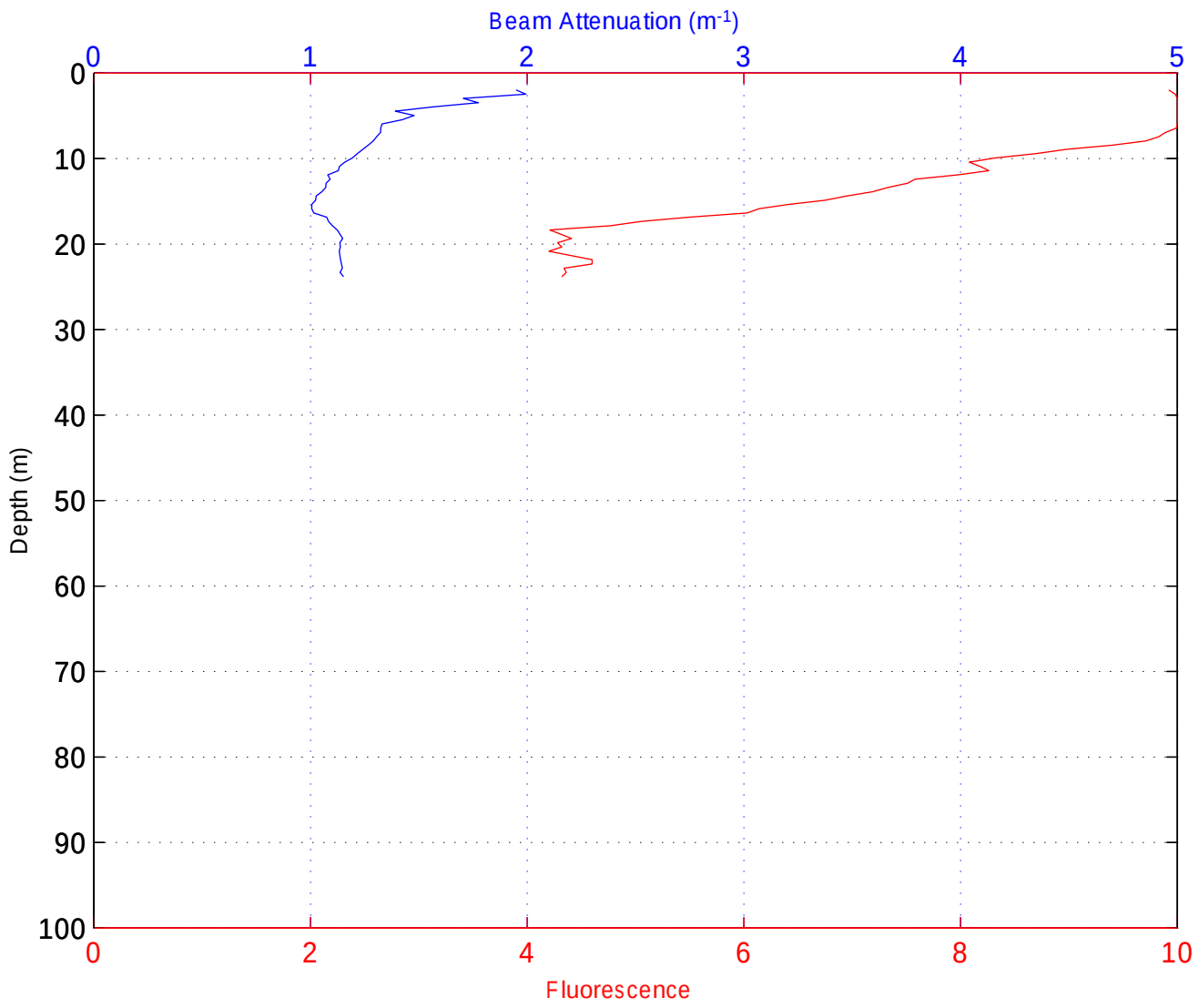
Endeavor Cast 9: Beam Attenuation and Fluorescence

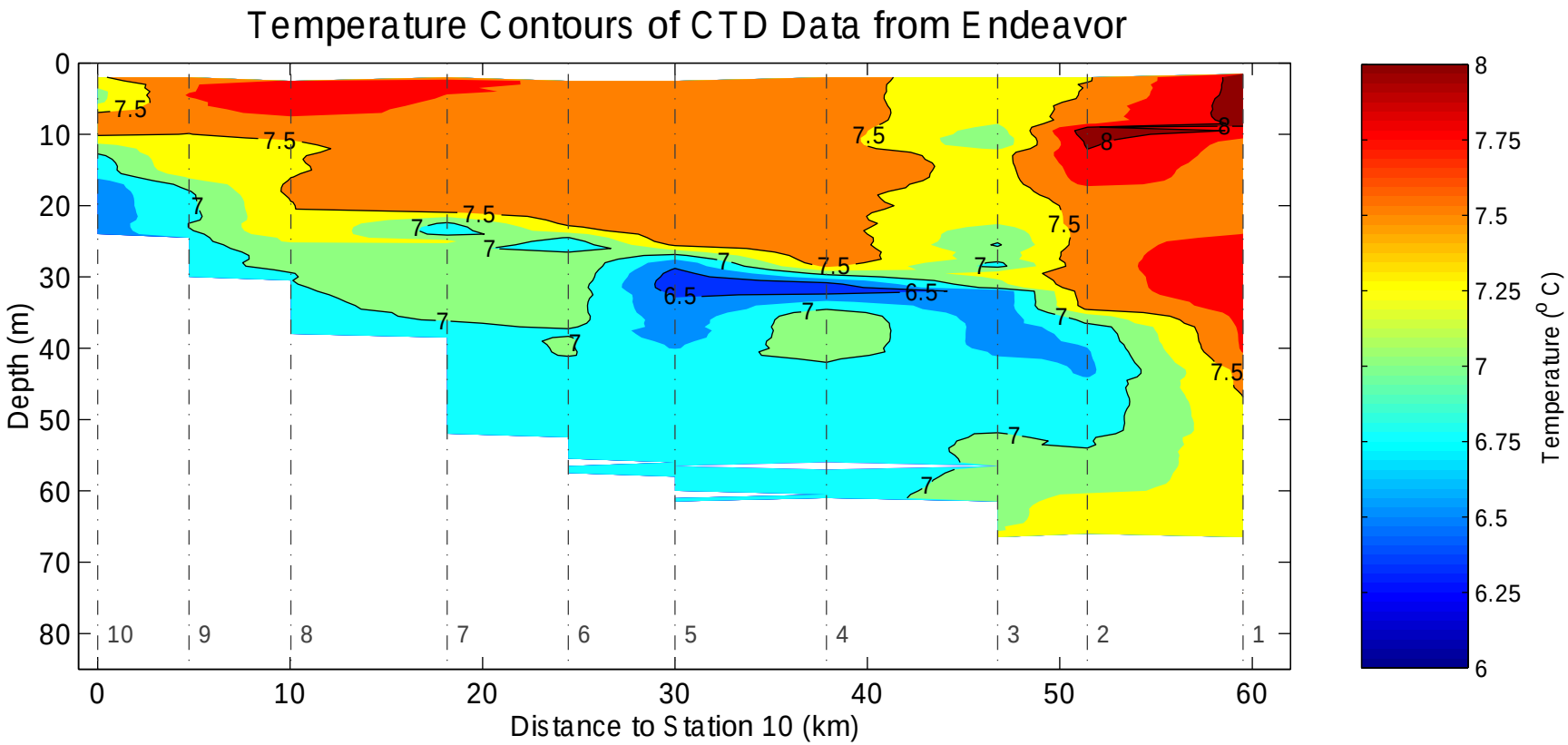


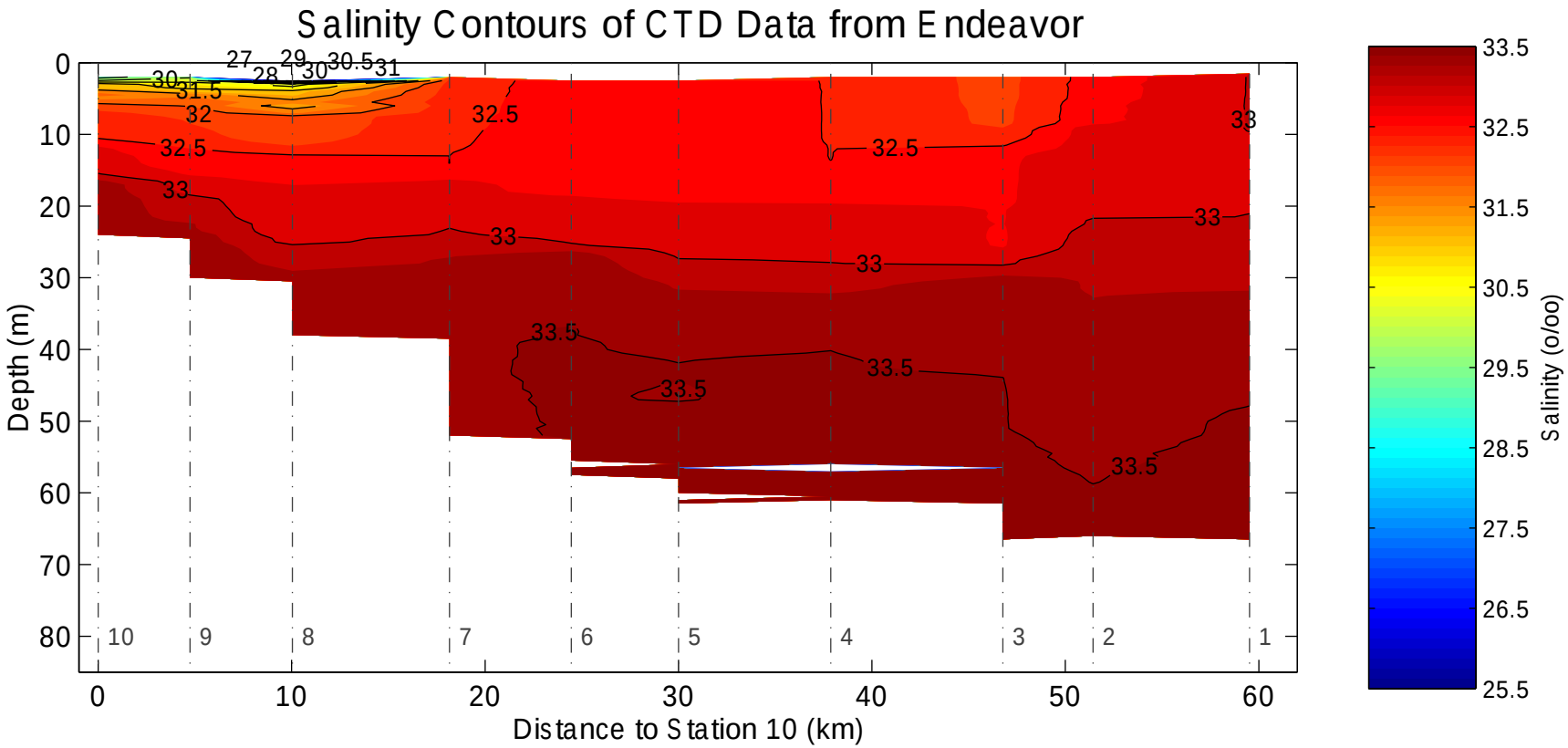
Endeavor Cast 10: Temperature, Salinity, and Sigma T

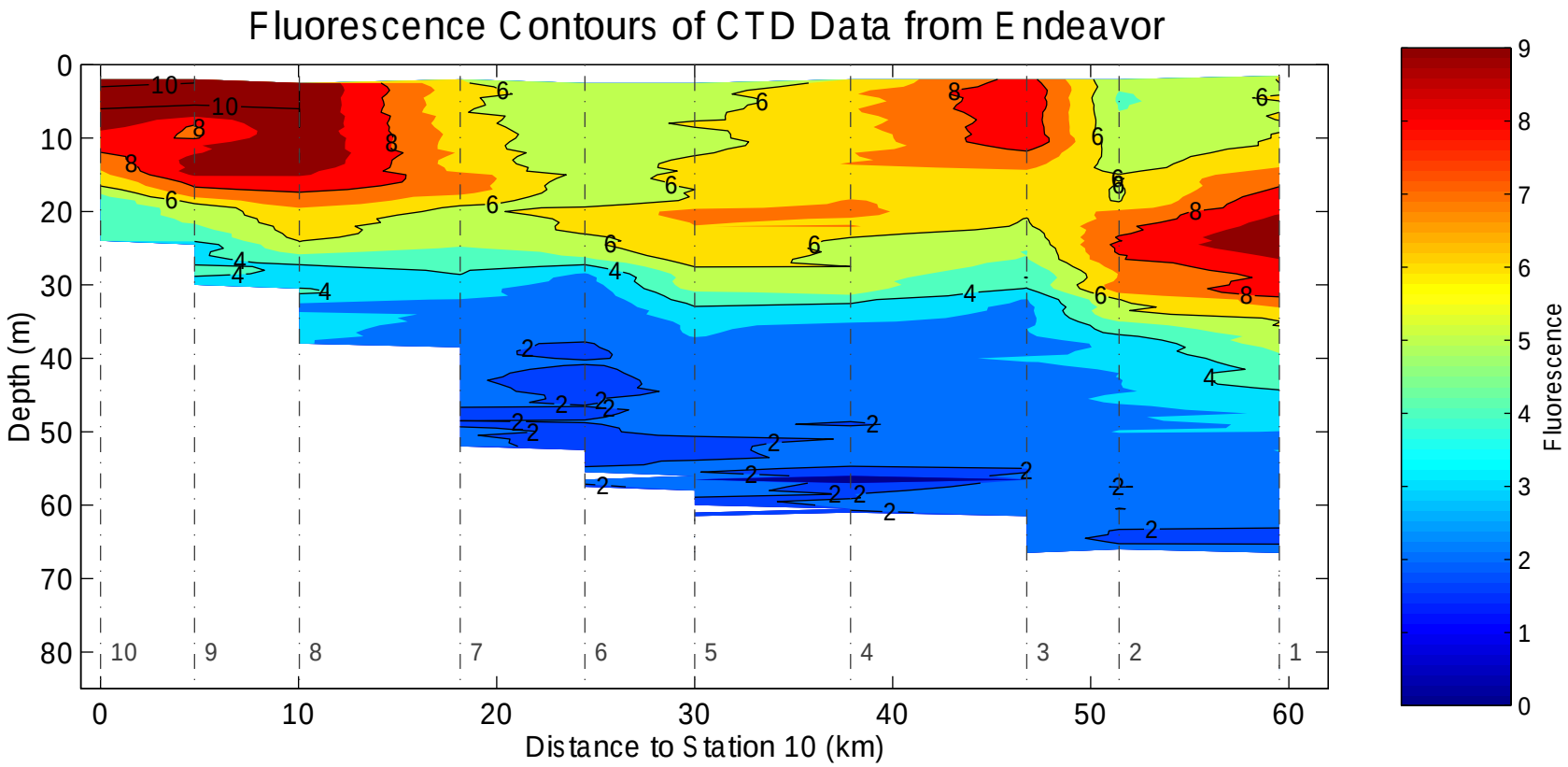


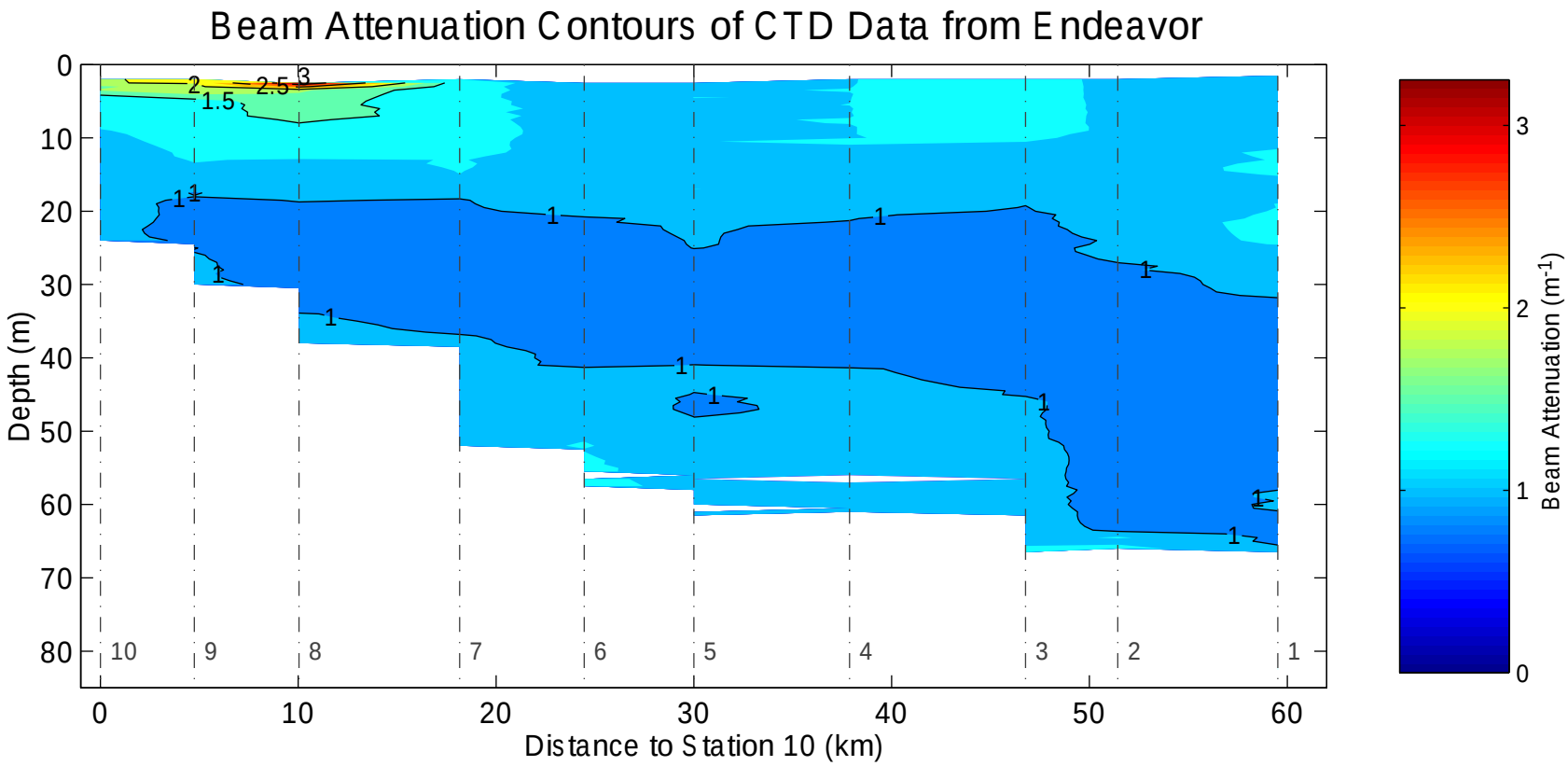
Endeavor Cast 10: Beam Attenuation and Fluorescence

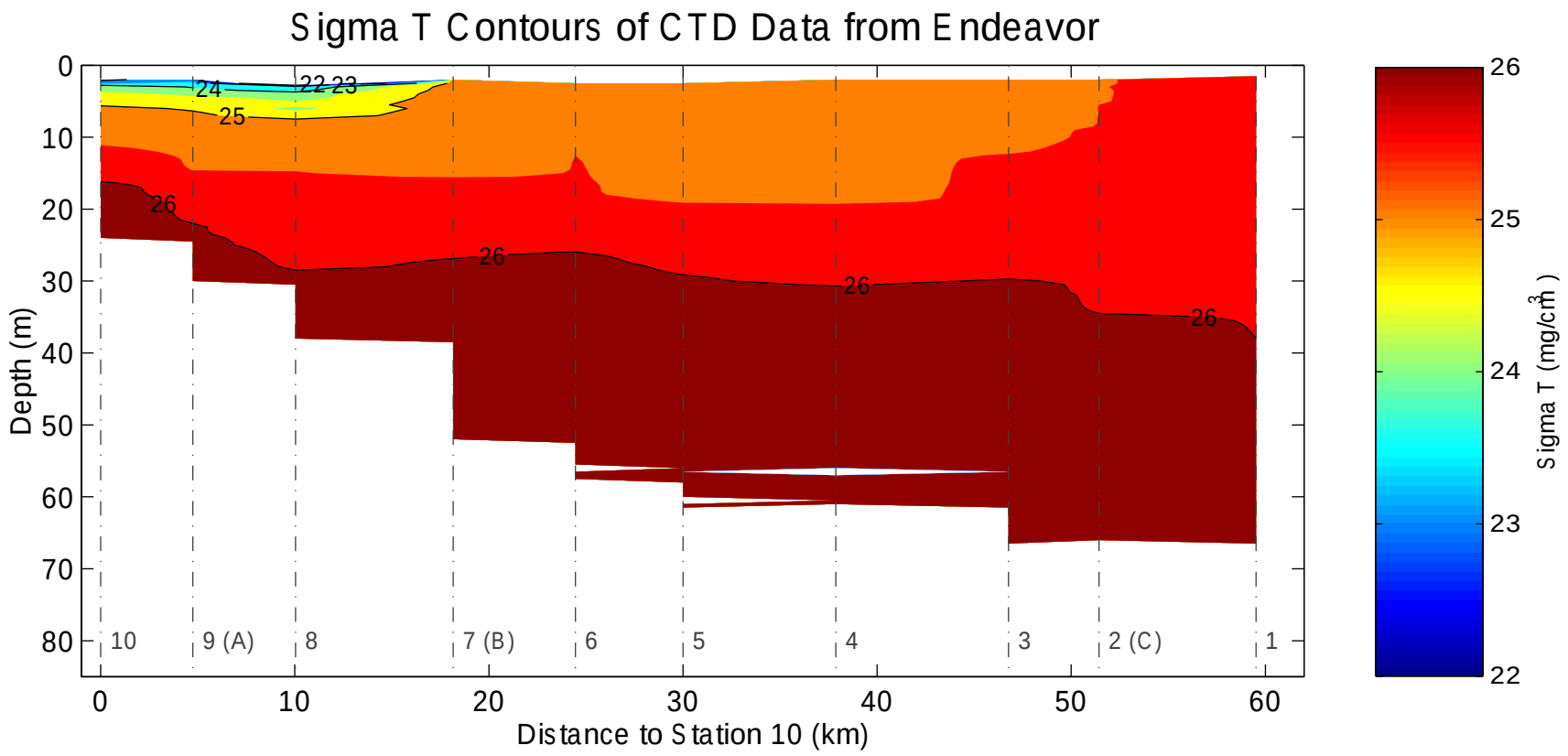


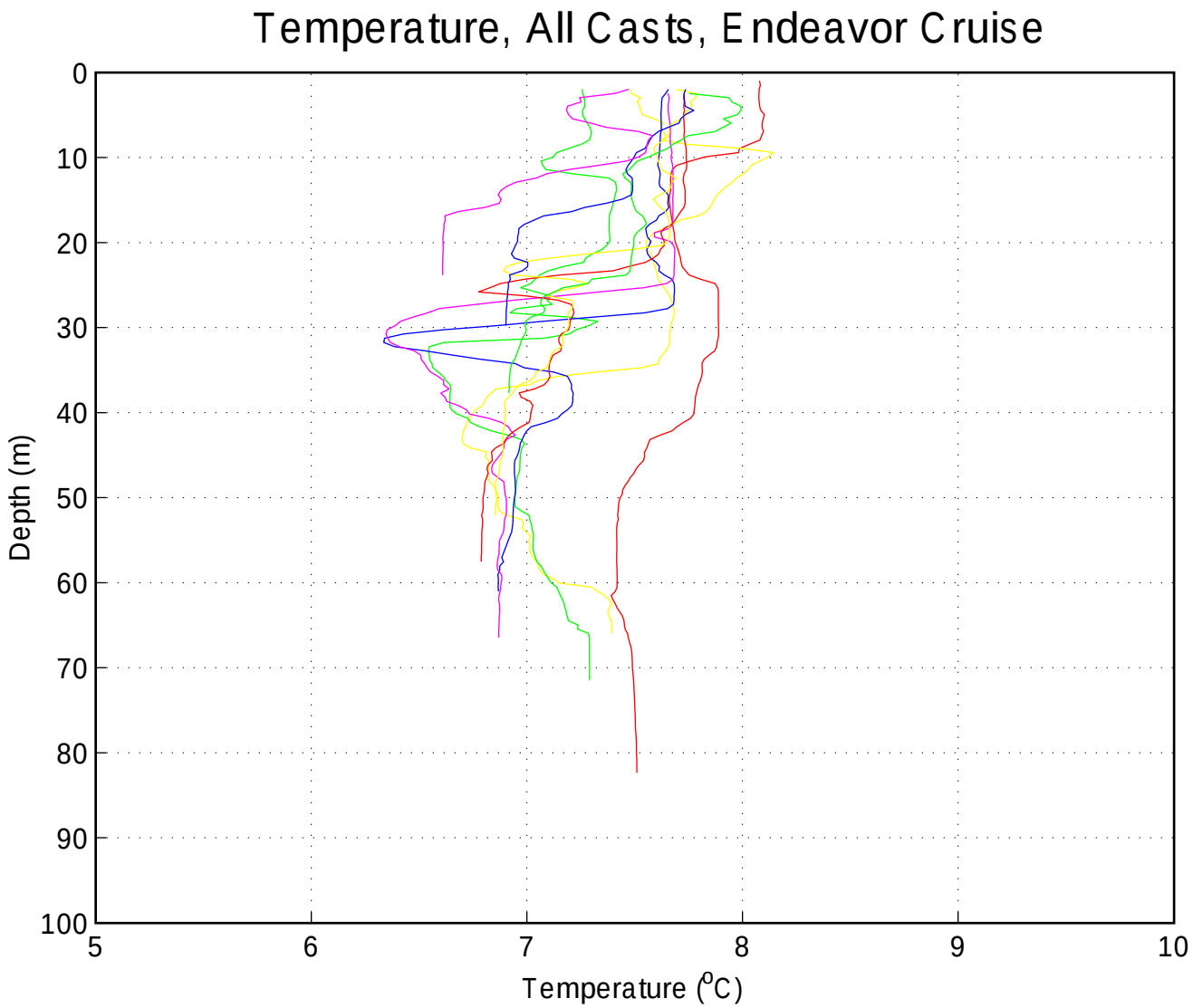

Temperature Contours of CTD Data from Endeavor
Depth (m)
Distance to Station 10 (km)
Temperature (°C)
0
10
20
30
40
50
60
70
80
0
10
20
30
40
50
60
10
9
8
7
6
5
4
3
2
1
8
7.75
7.5
7.25
7
6.75
6.5
6.25
6
7.5
7
6.5
8

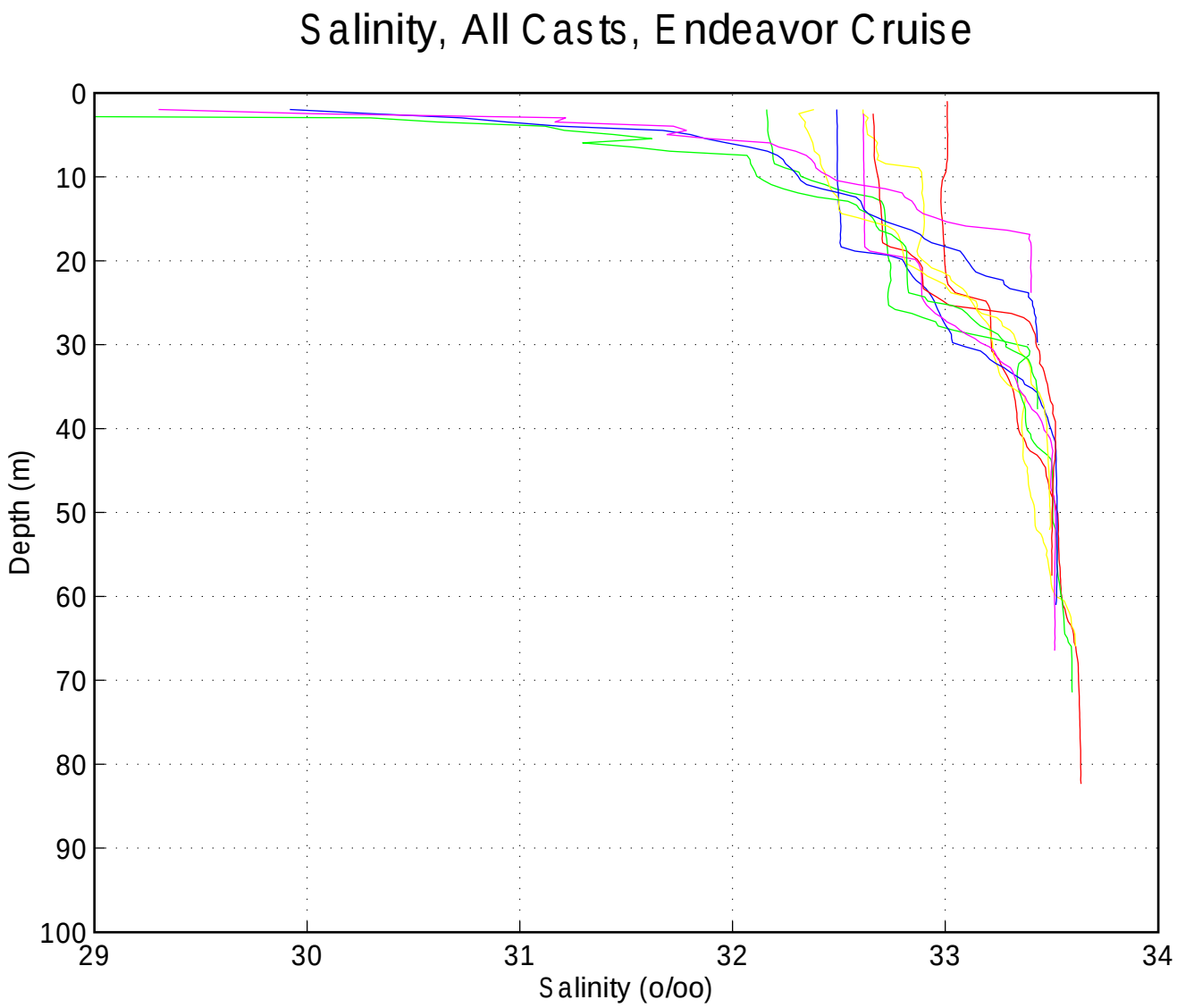

Salinity Contours of CTD Data from Endeavor
Depth (m)
Distance to Station 10 (km)
Salinity (o/oo)
0
10
20
30
40
50
60
70
80
0
10
20
30
40
50
60
25.5
26.5
27.5
28.5
29.5
30.5
31.5
32.5
33.5
27
28
29
30
30.5
31
31.5
32
32.5
33
33.5
10
9
8
7
6
5
4
3
2
1

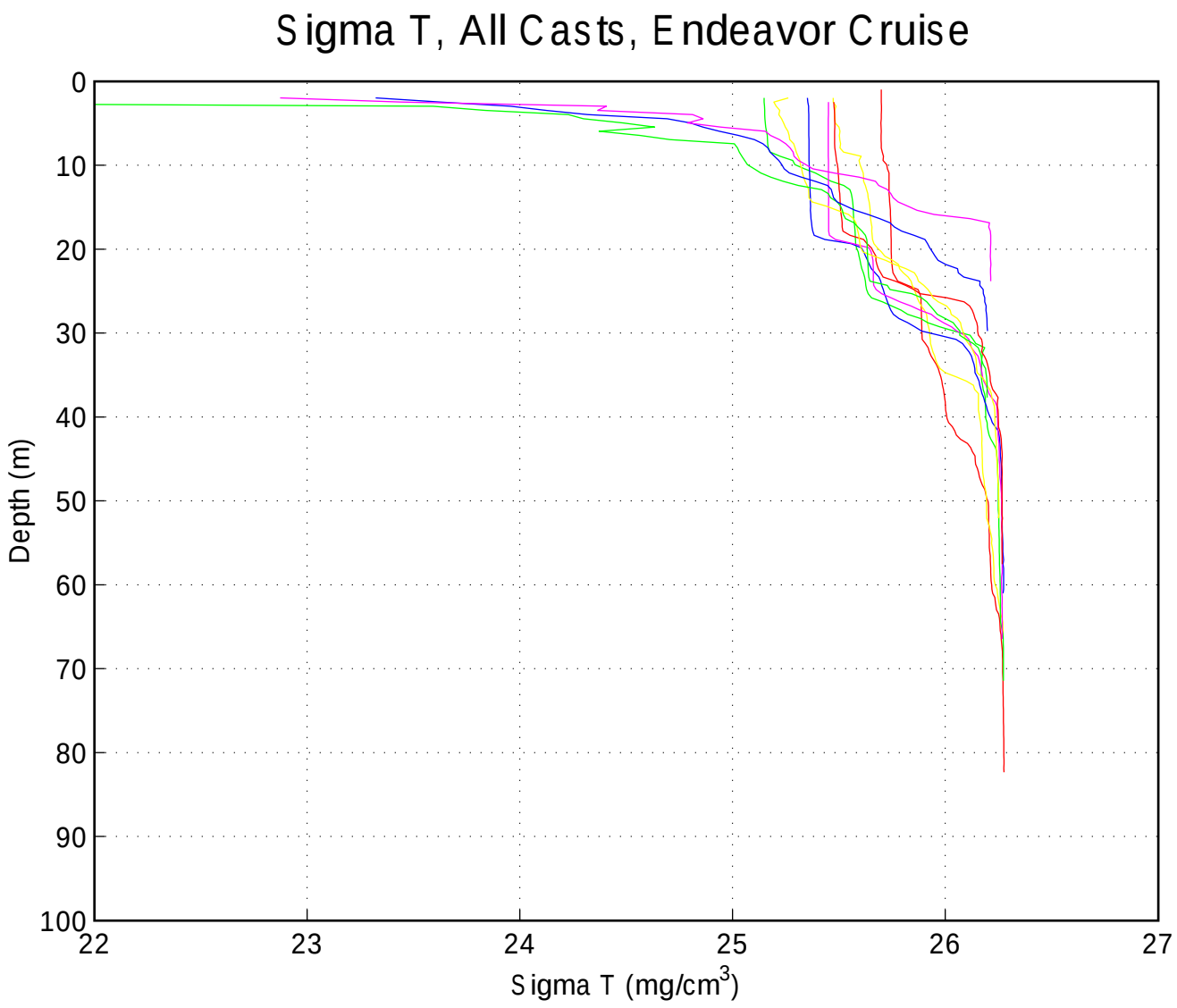

Fluorescence Contours of CTD Data from Endeavor
Depth (m)
Distance to Station 10 (km)
Fluorescence
10
9
8
7
6
5
4
3
2
1

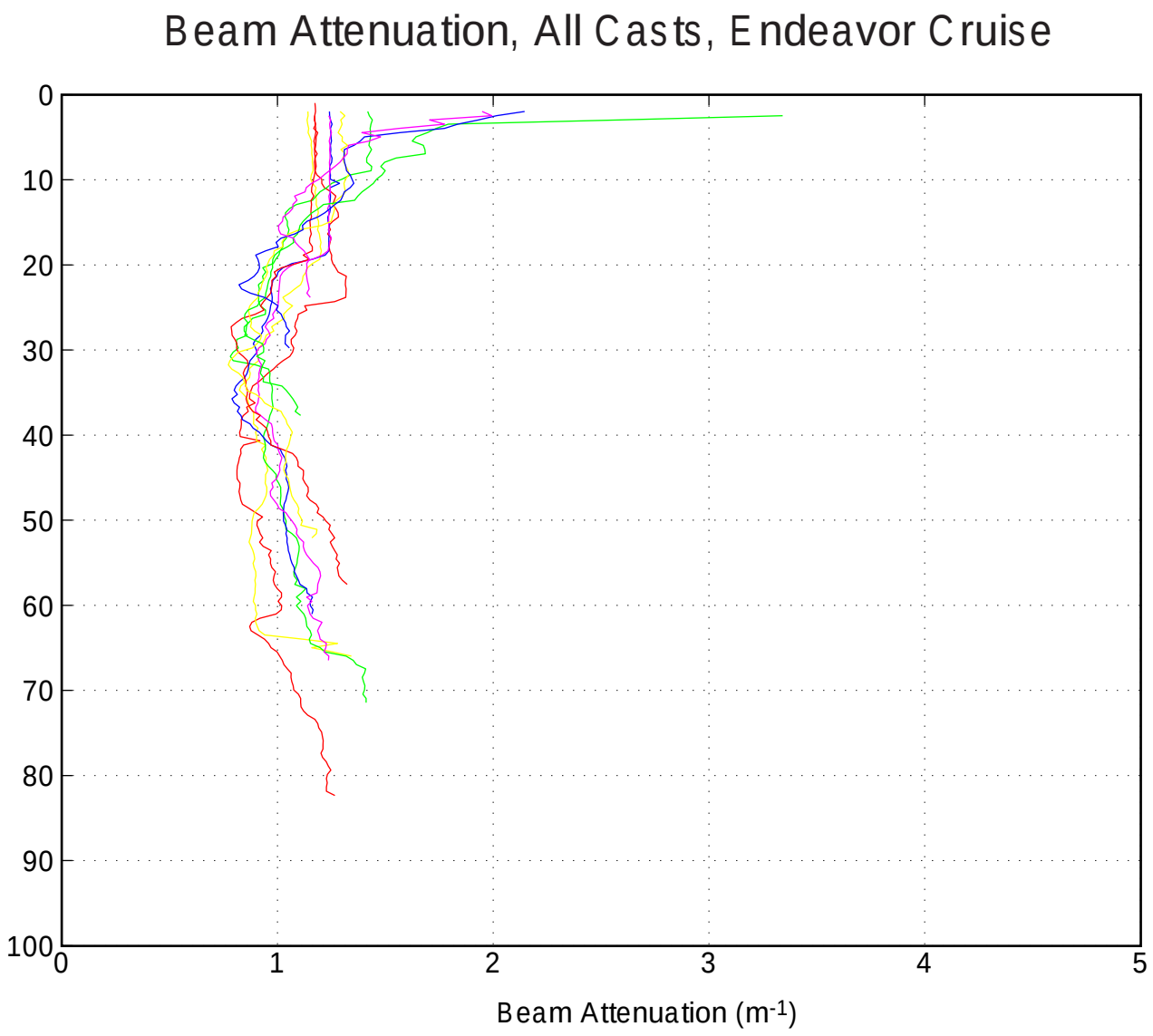

Beam Attenuation Contours of CTD Data from Endeavor
Depth (m)
Distance to Station 10 (km)
Beam Attenuation (m-1)
0
10
20
30
40
50
60
70
80
0
10
20
30
40
50
60
0
1
2
3
1.5
2.5
10
9
8
7
6
5
4
3
2
1

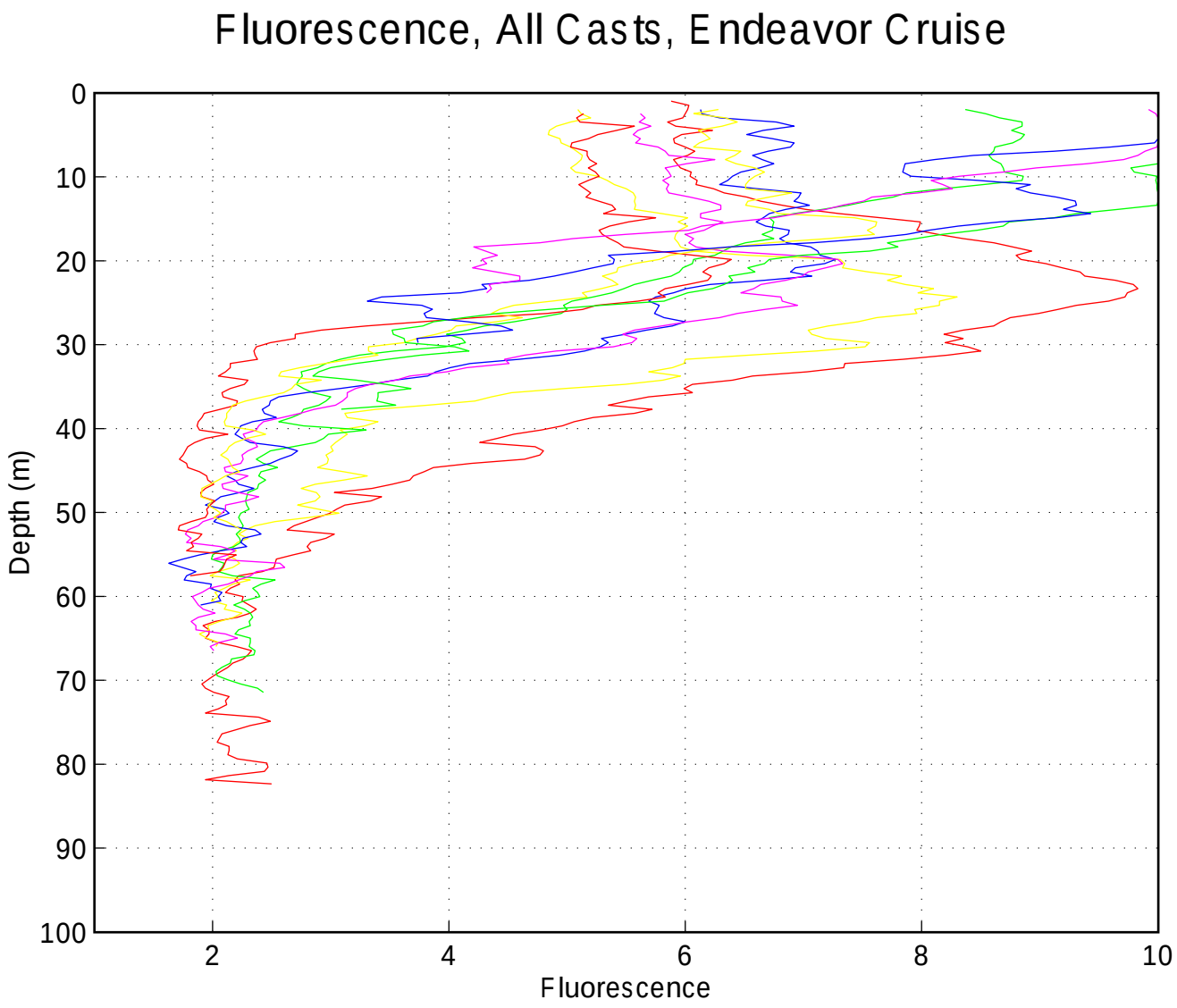

Sigma T Contours of CTD Data from Endeavor
Depth (m)
Distance to Station 10 (km)
Sigma T (mg/cm3)
0
10
20
30
40
50
60
70
80
0
10
20
30
40
50
60
22
23
24
25
26
10
9 (A)
8
7 (B)
6
5
4
3
2 (C)
1


Temperature, All Casts, Endeavor Cruise
Depth (m)
0
10
20
30
40
50
60
70
80
90
100
5
6
7
8
9
10
Temperature (°C)


Salinity, All Casts, Endeavor Cruise
Depth (m)
0
10
20
30
40
50
60
70
80
90
100
29
30
31
32
33
34
Salinity (o/oo)


Sigma T, All Casts, Endeavor Cruise
Depth (m)
0
10
20
30
40
50
60
70
80
90
100
22
23
24
25
26
27
Sigma T (mg/cm3)


Beam Attenuation, All Casts, Endeavor Cruise
0
10
20
30
40
50
60
70
80
90
100
0
1
2
3
4
5
Beam Attenuation (m-1)


Fluorescence, All Casts, Endeavor Cruise
Depth (m)
0
10
20
30
40
50
60
70
80
90
100
2
4
6
8
10
Fluorescence