

APPENDIX O—STATION MAL

Station Name: **MAL**
 (Near Mallard Island)
 Position: Lat. 38°02'33"
 Long. 121°54'59"
 Depth: 16.4 m (MLLW)

Manufacturer	Serial Number	Deployment Dates
CT _t : DWR	xx	N/A
ADCP: RDI	BB	7/6/95(187) - 11/16/95(320)

Serviced: 7/6/95(187), 11/16/95(320)

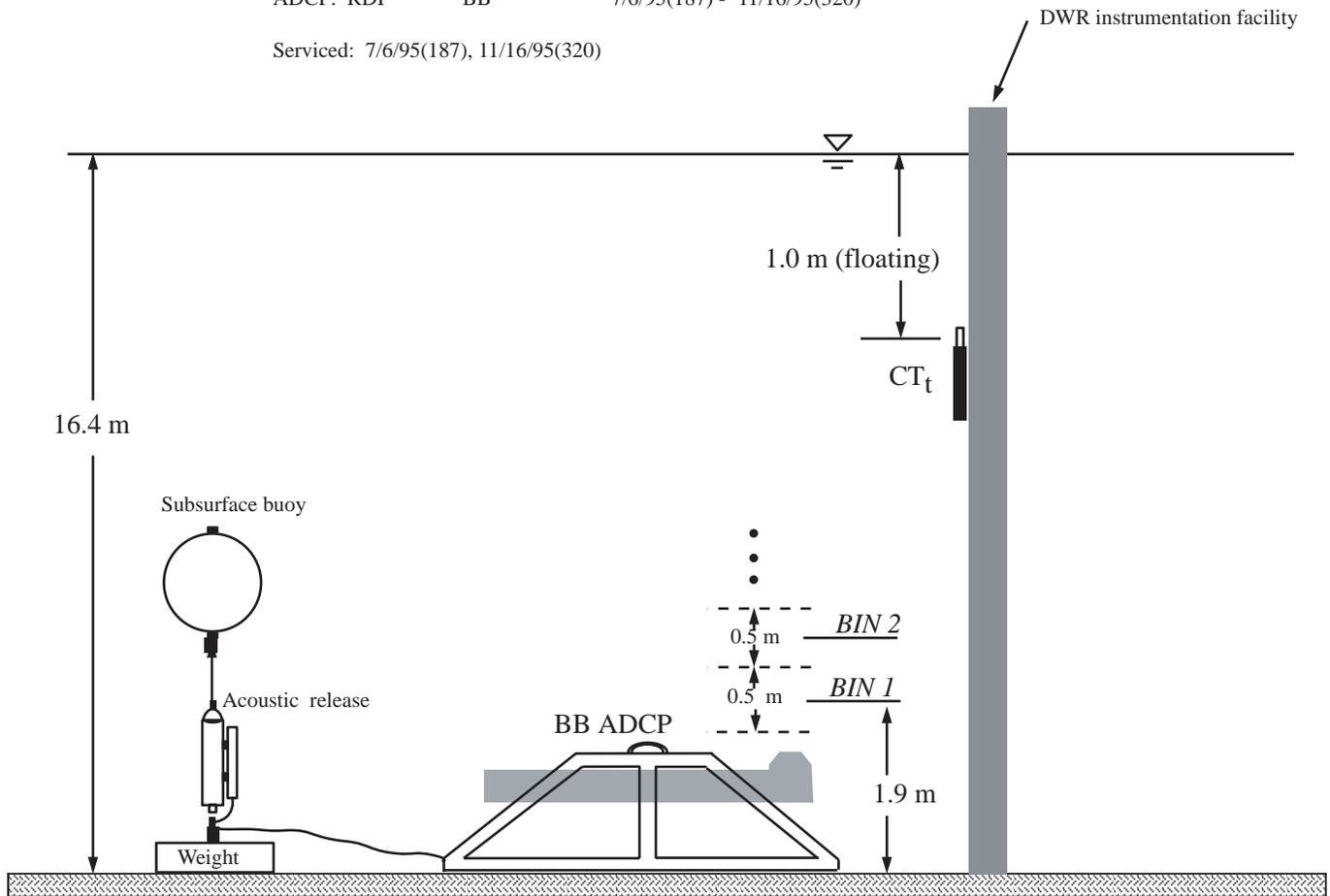


Figure 01. Configuration of instrument deployment, Station MAL, July 6 through November 16, 1995, Suisun Bay, California. m, meters; MLLW, mean lower low water; ADCP, acoustic Doppler current profiler; BB ADCP, broad-band acoustic Doppler current profiler; RD Ins, R.D. Instruments, Inc.; CT, conductivity-temperature; DWR, California Department of Water Resources; BIN, a discrete measurement location in the vertical.

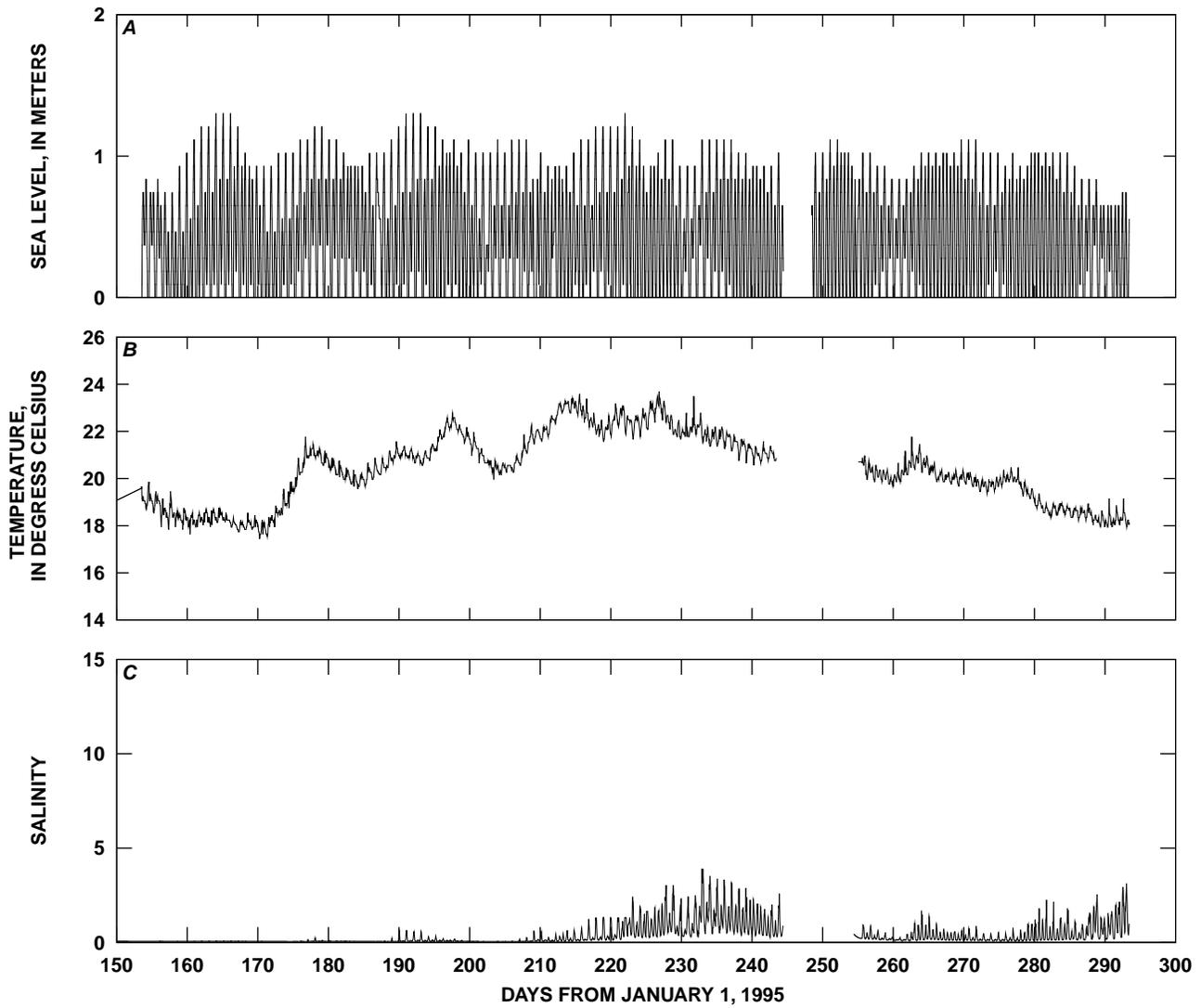


Figure 02. Time-series plots of *A*, sea level; *B*, temperature; and *C*, salinity, Station MAL, May 8 through October 15, 1995, Suisun Bay, California. Near-surface sensor. Sea level was measured using a float-driven incremental encoder. Salinities in this report are presented without units because salinity is a conductivity ratio; therefore, it has no physical units (Millero, 1993).

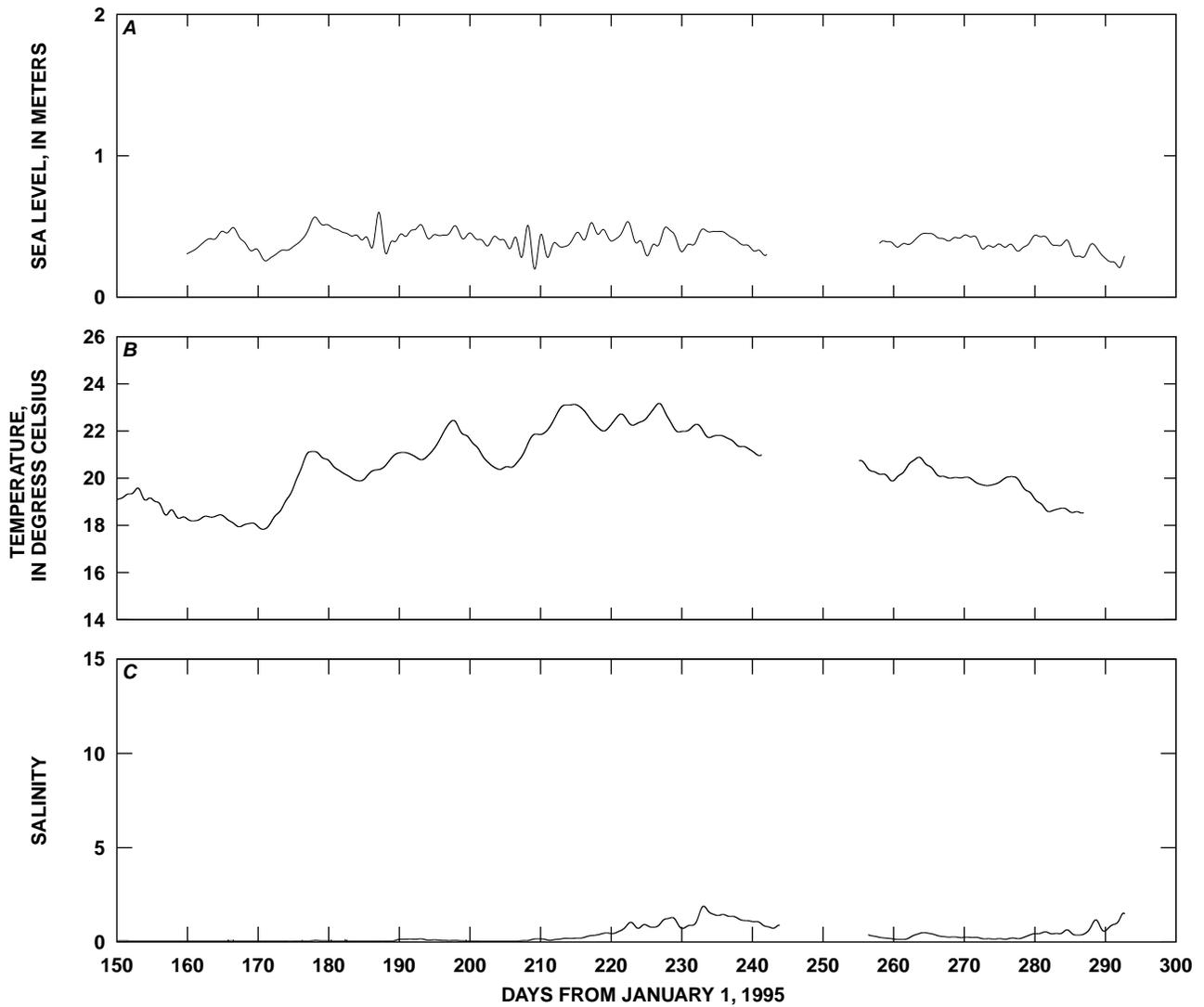


Figure 03. Time-series plots of low-pass-filtered *A*, sea level; *B*, temperature; and *C*, salinity, Station MAL, May 8 through October 15, 1995, Suisun Bay, California. Near-surface sensor. Sea level was measured using a float-driven incremental encoder. Salinities in this report are presented without units because salinity is a conductivity ratio; therefore, it has no physical units (Millero, 1993).

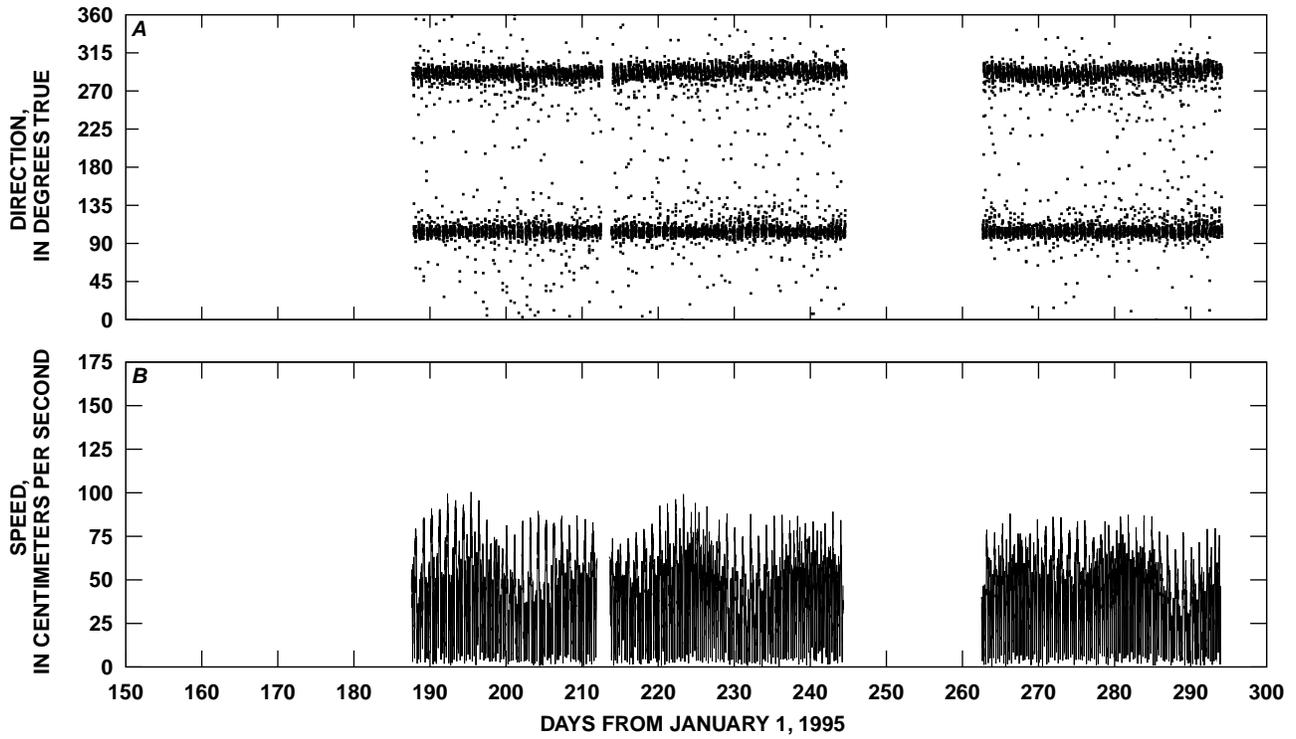


Figure 04. Time-series plots of tidal currents, Station MAL, July 6 through November 16, 1995, BIN 1 near-bottom BIN, Suisun Bay, California. BIN refers to a discrete measurement location in the vertical.

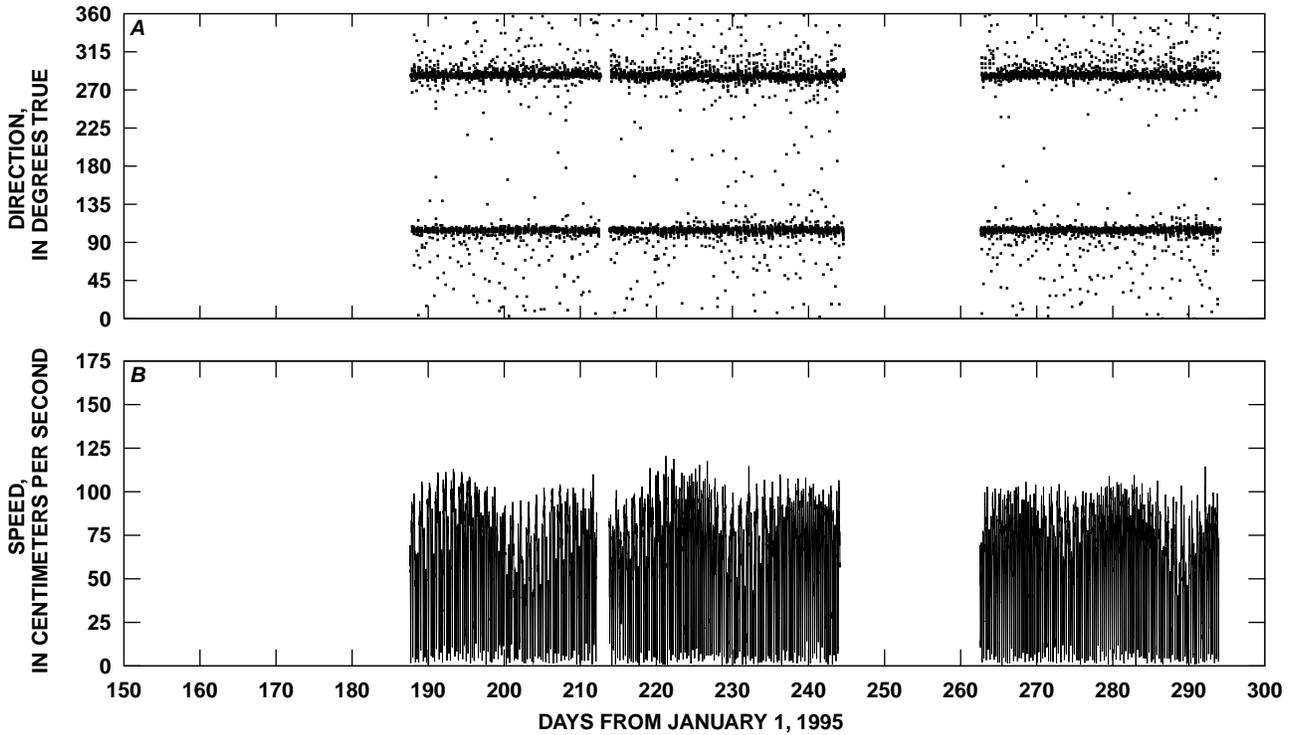


Figure 05. Time-series plots of tidal currents, Station MAL, July 6 through November 16, 1995, BIN 19 near-surface BIN, Suisun Bay, California. BIN refers to a discrete measurement location in the vertical.

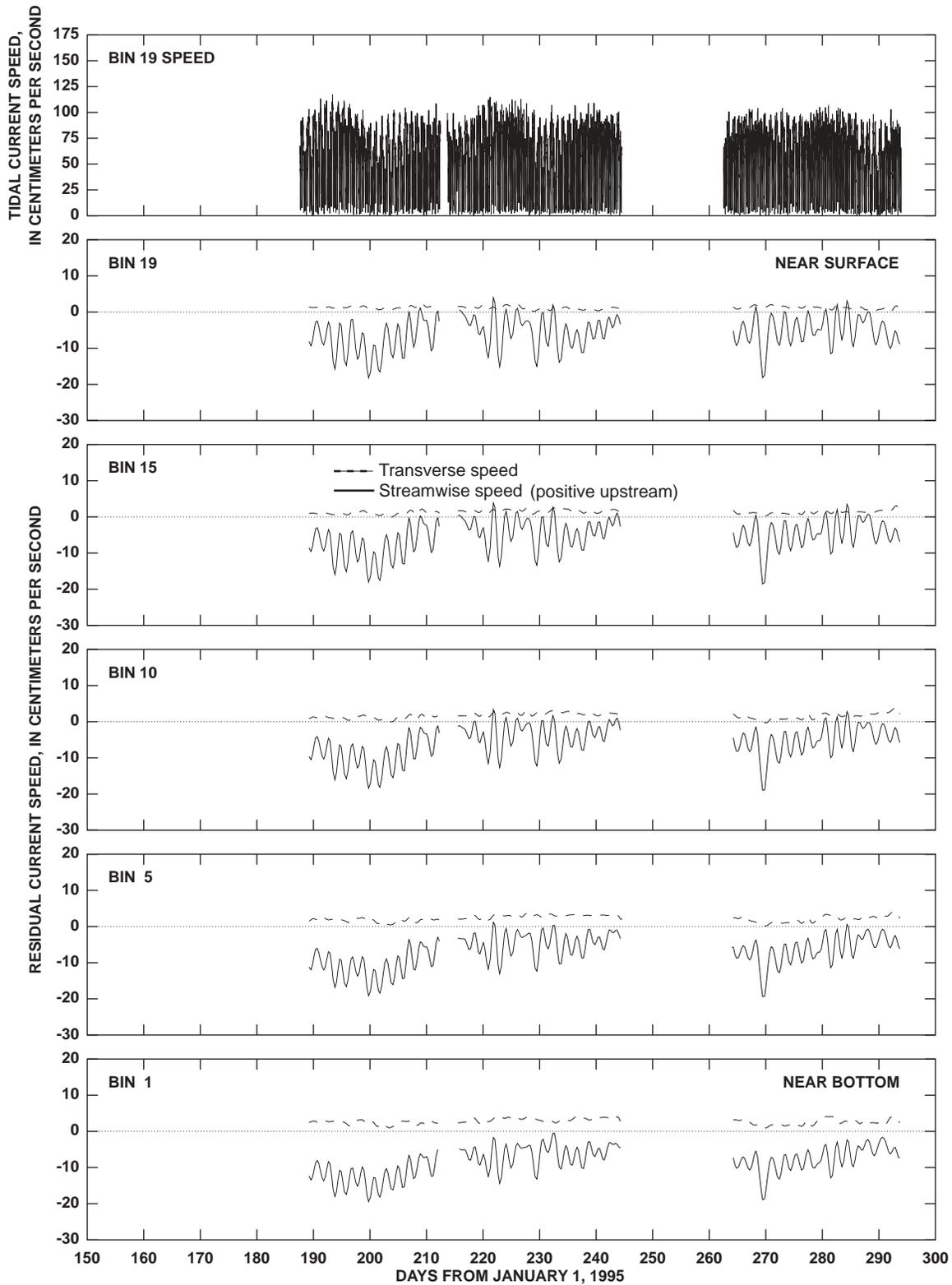


Figure 06. Longitudinal and transverse residual currents, Station MAL, July 6 through November 16, 1995, Suisun Bay, California. Tidal current speed at BIN 19 near-surface BIN is shown in the top panel for reference. BIN refers to a discrete measurement location in the vertical. Principal direction is 108.2 degrees true.

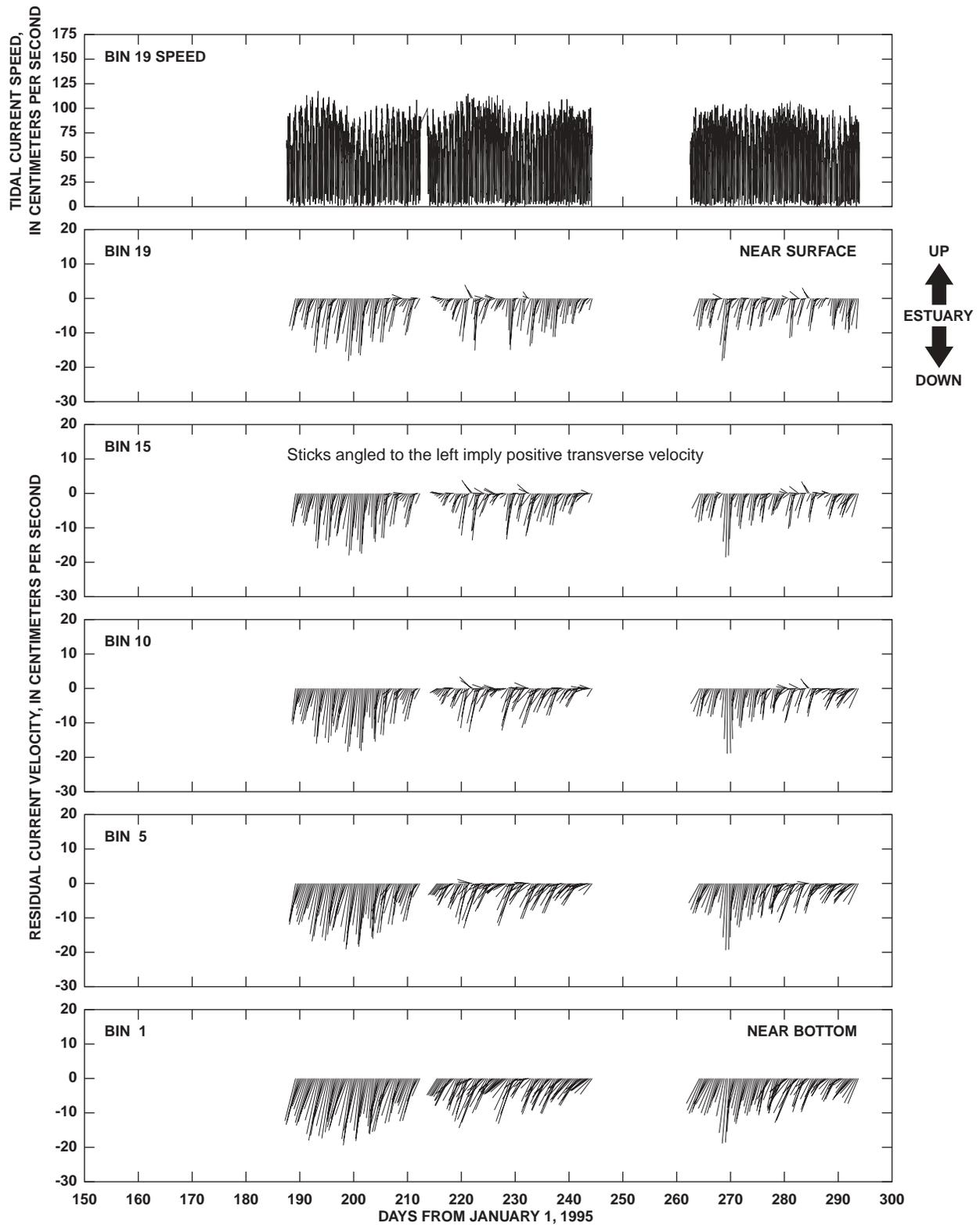


Figure 07. Residual currents, Station MAL, July 6 through November 16, 1995, Suisun Bay, California. Tidal current speed at BIN 19 near-surface BIN is shown in the top panel for reference. BIN refers to a discrete measurement location in the vertical. Principal direction is 108.2 degrees true.

Table 01. Harmonic analysis results from sea-level measurements, Station MAL, May 8 through October 15, 1995, Suisun Bay, California. Mid-depth sensor. Sea level was measured using a float-driven incremental encoder

Station: MAL

Time series mean: 0.37186

Standard deviation: 0.18156

Hamonic constants: No tidal inference

Tidal symbol	Cycles (per day)	Mean amplitude (meters)	Local epoch (degrees)	Modified epoch (degrees)
Q1	0.89324	0.02051	172.78412	187.51122
O1	0.92954	0.12437	134.75949	145.13159
M1	0.96645	0.01980	248.83517	254.77802
P1	0.99726	0.06427	153.55414	155.79907
K1	1.00274	0.23603	143.24219	144.83003
Mu2	1.86455	0.01863	237.34636	257.43347
N2	1.89598	0.08148	48.57562	64.89056
Nu2	1.90084	0.05927	336.09052	351.82263
M2	1.93227	0.39682	33.16516	45.12512
L2	1.96857	0.01454	264.03879	271.64374
S2	2.00000	0.08484	84.96308	88.79585
K2	2.00548	0.04060	175.49985	178.67554
M4	3.86455	0.01013	338.52756	2.44742
Mk3	2.93501	0.02328	100.86043	114.40822

Table 02. Harmonic analysis results for velocity, Station MAL, July 6 through November 16, 1995, BIN 1 near-bottom BIN, Suisun Bay, California

[BIN refers to a discrete measurement location in the vertical. cm/s, centimeters per second; deg.T, degrees true; deg, degrees; E, equilibrium argument]

BIN number: 1
 Station: MAL
 Start time of the series (local time): Year, 1995; Month, 7; Day, 6; Hour, 13:30
 Time meridian: 120 W
 Station position: 38 513N 122 0 9W
 Record length: 204 M2 cycles: 12114 data points

Tidal Symbol	Major axis (CM/S)	Minor axis (CM/S)	Direction (deg. T)	Phase (deg)	E (deg)	Rotation
O1	10.79	0.03	111.9	121.2	149.8	Counterclockwise
K1	17.09	0.35	110.0	136.1	42.1	Counterclockwise
N2	9.11	0.61	106.9	37.0	245.6	Counterclockwise
M2	54.97	1.02	108.7	69.9	194.9	Counterclockwise
S2	11.13	0.29	109.2	80.5	45.3	Counterclockwise
M4	1.79	0.44	32.9	104.2	29.7	Counterclockwise

Rootmeansquare speed (cm/s): 44.96
 Standard deviation, U series (cm/s): 9.94
 Standard deviation, V series (cm/s): 4.69
 Tidal form number: 0.42
 Spring tidal current maximum (cm/s): 93.99
 Neap tidal current maximum (cm/s): 37.55
 Pricipal current direction (deg. T): 109.37

Table 03. Harmonic analysis results for velocity, Station MAL, July 6 through November 16, 1995, BIN 19 near-surface BIN, Suisun Bay, California

[BIN refers to a discrete measurement location in the vertical. cm/s, centimeters per second; deg.T, degrees true; deg, degrees; E, equilibrium argument]

BIN number: 19
 Station: MAL
 Start time of the series (local time): Year, 1995; Month, 7; Day, 6; Hour, 13:30
 Time meridian: 120 W
 Station position: 38 513N 122 0 9W
 Record length: 204 M2 cycles: 12114 data points

Tidal Symbol	Major axis (CM/S)	Minor axis (CM/S)	Direction (deg. T)	Phase (deg)	E (deg)	Rotation
O1	14.02	0.06	106.7	121.6	149.8	Counterclockwise
K1	24.03	0.05	105.3	134.7	42.1	Counterclockwise
N2	12.74	0.09	105.4	30.8	245.6	Clockwise
M2	82.03	0.80	105.5	68.7	194.9	Counterclockwise
S2	15.69	0.08	105.3	77.0	45.3	Counterclockwise
M4	4.54	0.28	105.9	147.3	29.7	Counterclockwise

Rootmeansquare speed (cm/s): 65.11
 Standard deviation, U series (cm/s): 14.85
 Standard deviation, V series (cm/s): 4.58
 Tidal form number: 0.39
 Spring tidal current maximum (cm/s): 135.78
 Neap tidal current maximum (cm/s): 56.33
 Pricipal current direction (deg. T): 105.59

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APPENDIX P—STATION MART

Station Name: **MART**
(Near Martinez)

Position: Lat. 38°01'40"

Long. 122°08'22"

Depth: 8.0 m (MLLW)

	<i>Manufacturer</i>	<i>Serial Number</i>	<i>Deployment Dates</i>
CT _t :	DWR	XX	5/1/95(121) - 11/1/95(305)
CT _b :	DWR	XX	5/1/95(121) - 11/1/95(305)

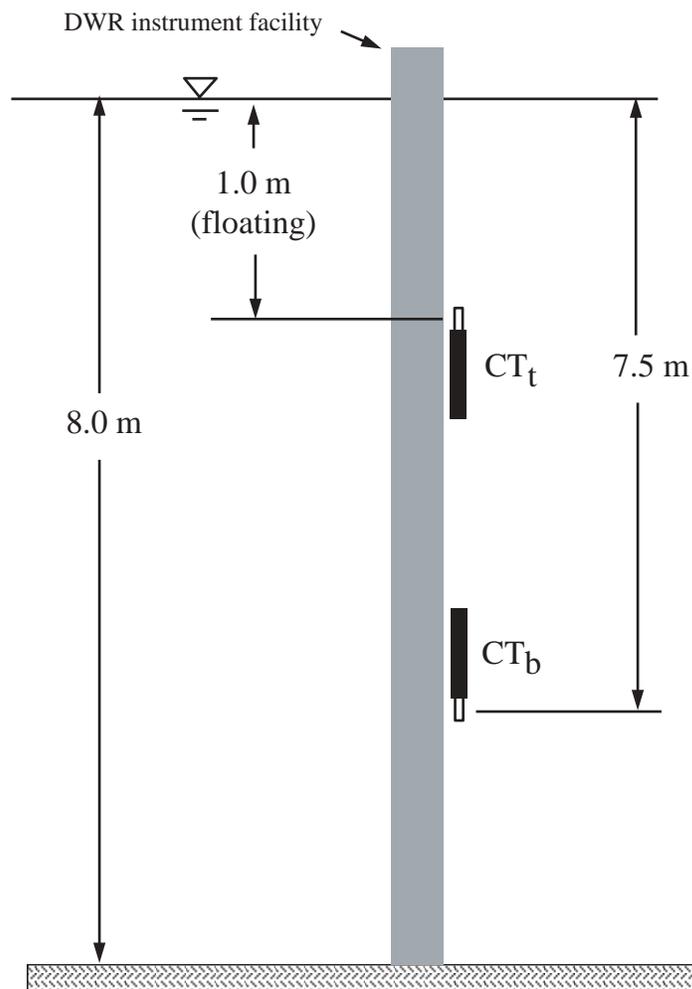


Figure P1. Configuration of instrument deployment, Station MART, May 1 through November 1, 1995, Suisun Bay, California. m, meters; MLLW, mean lower low water; CT, conductivity-temperature; DWR, California Department of Water Resources.

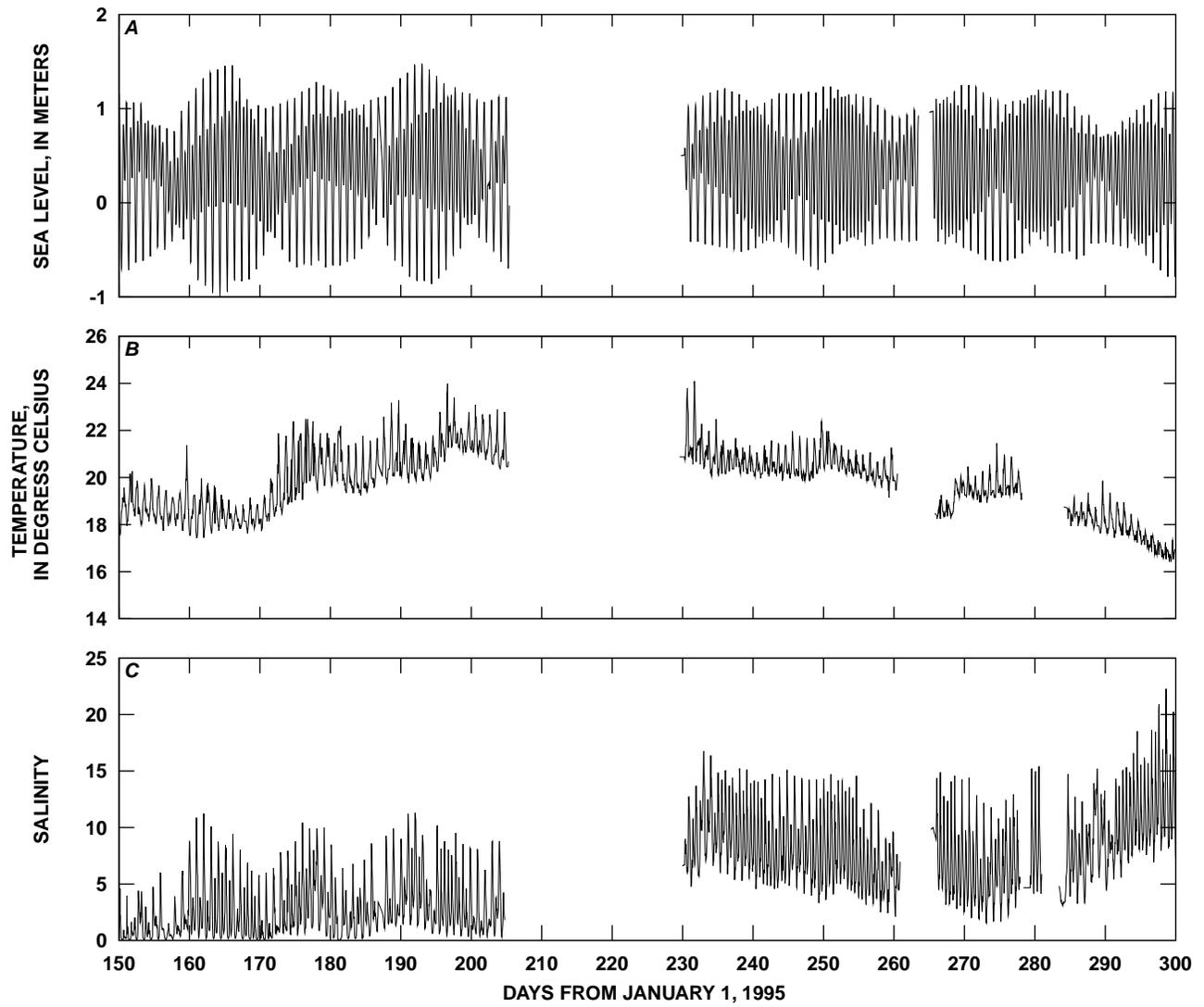


Figure P2. Time-series plots of *A*, sea level; *B*, temperature; and *C*, salinity, Station MART, May 1 through November 1, 1995, Suisun Bay, California. Near-surface sensor. Sea level was measured using a float-driven incremental encoder. Salinities in this report are presented without units because salinity is a conductivity ratio; therefore, it has no physical units (Millero, 1993).

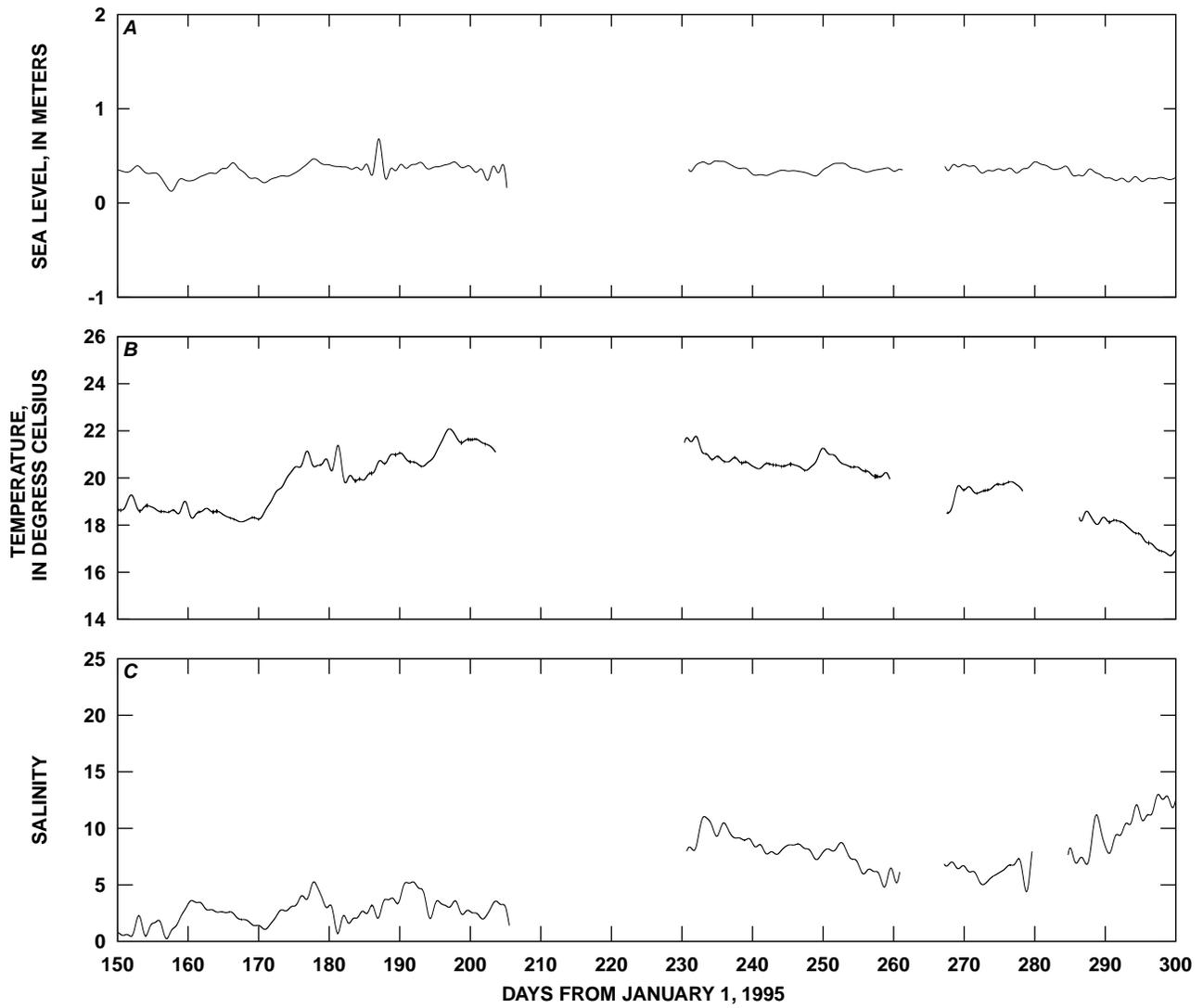


Figure P3. Time-series plots of low-pass-filtered *A*, sea level; *B*, temperature; and *C*, salinity, Station MART, May 1 through November 1, 1995, Suisun Bay, California. Near-surface sensor. Sea level was measured using a float-driven incremental encoder. Salinities in this report are presented without units because salinity is a conductivity ratio; therefore, it has no physical units (Millero, 1993).

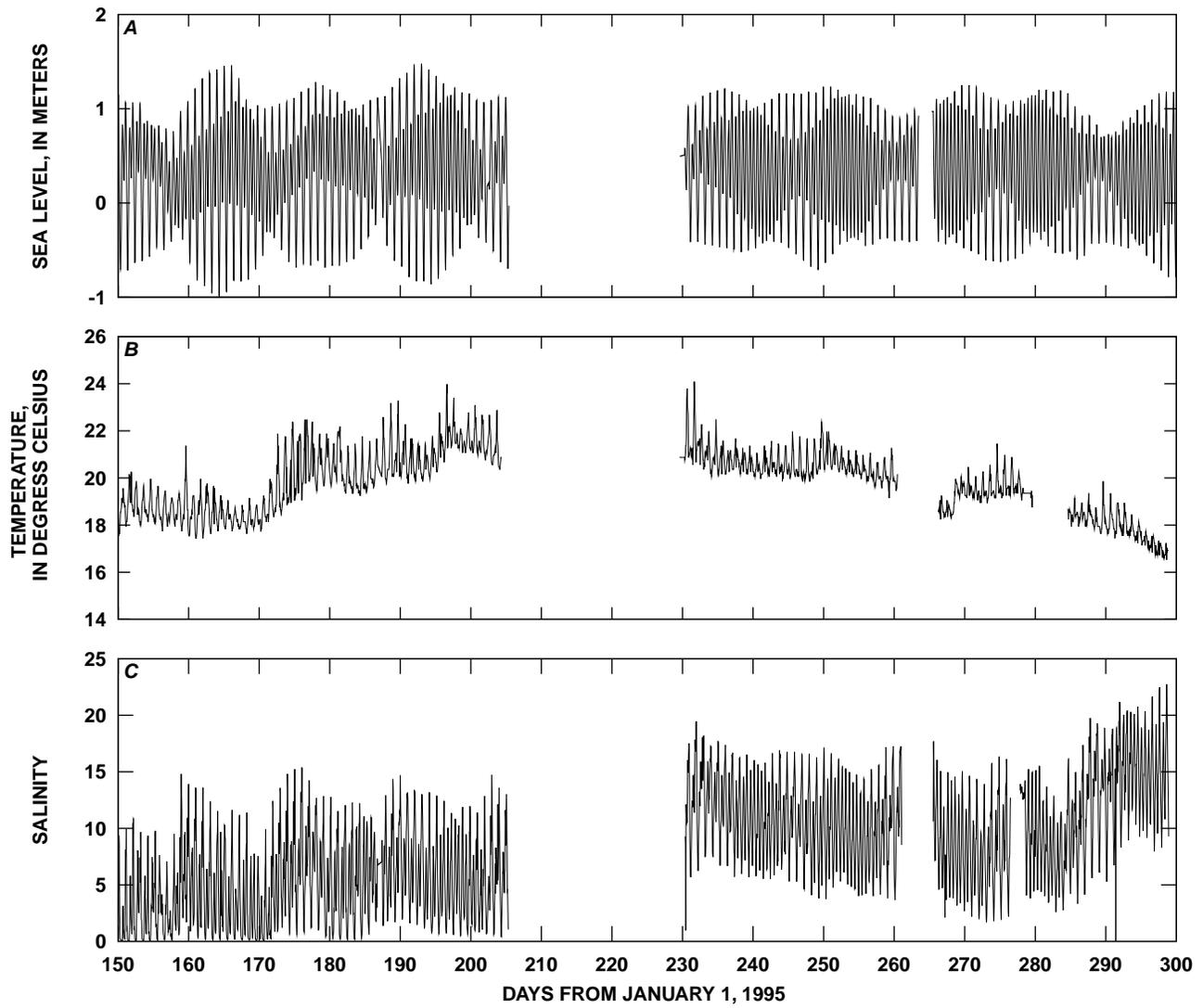


Figure P4. Time-series plots of *A*, sea level; *B*, temperature; and *C*, salinity, Station MART, May 1 through November 1, 1995, Suisun Bay, California. Near-bottom sensor. Sea level was measured using a float-driven incremental encoder. Salinities in this report are presented without units because salinity is a conductivity ratio; therefore, it has no physical units (Millero, 1993).

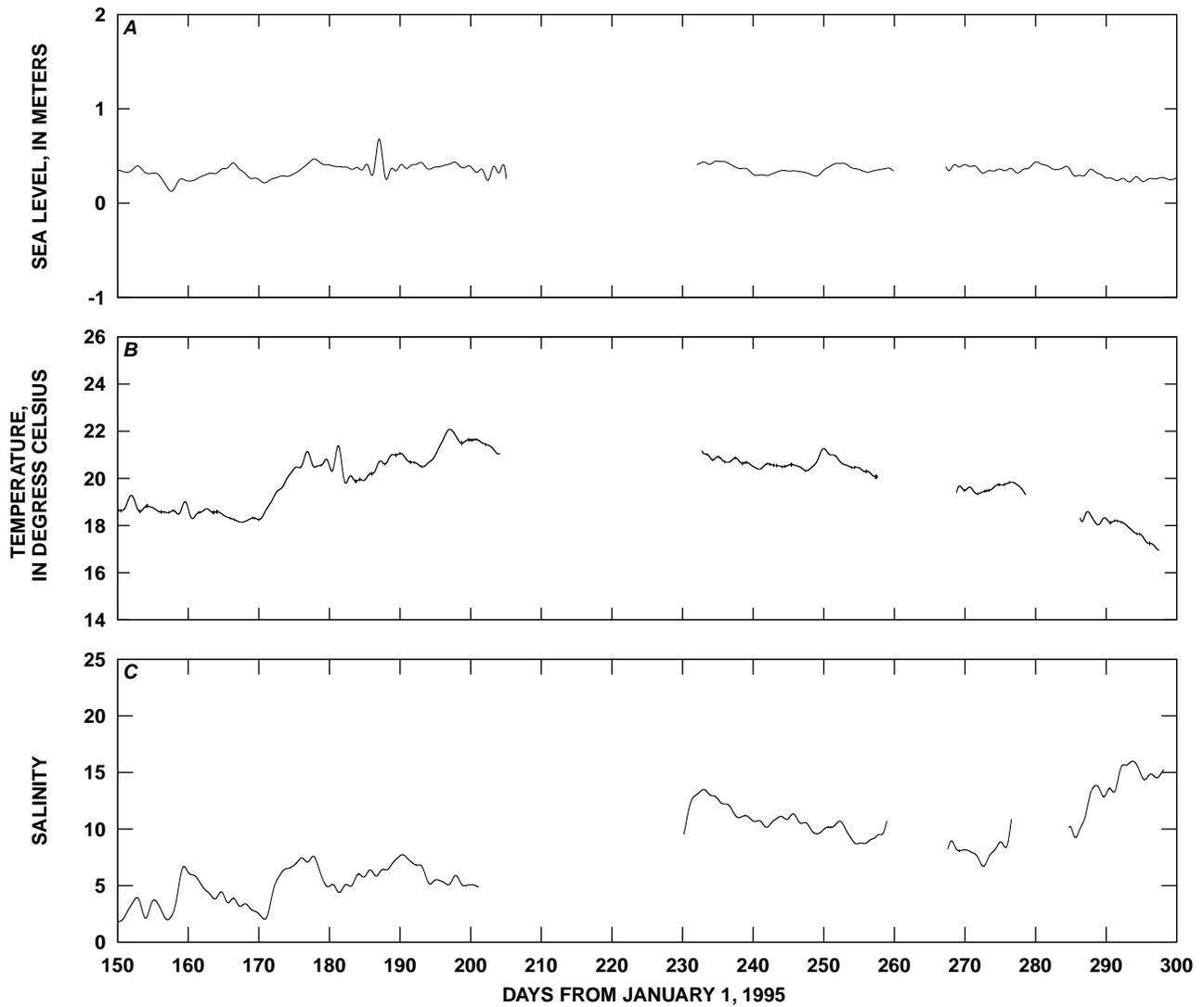


Figure P5. Time-series plots of low-pass-filtered *A*, sea level; *B*, temperature; and *C*, salinity, Station MART, May 1 through November 1, 1995, Suisun Bay, California. Near-bottom sensor. Sea level was measured using a float-driven incremental encoder. Salinities in this report are presented without units because salinity is a conductivity ratio; therefore, it has no physical units (Millero, 1993).

Table P1. Harmonic analysis results from sea-level measurements, Station MART, May 1 through November 1, 1995, Suisun Bay, California. Mid-depth sensor. Sea level was measured using a float-driven incremental encoder

Station: MART

Time series mean: 0.33821

Standard deviation: 0.20934

Hamonic constants: No tidal inference

Tidal symbol	Cycles (per day)	Mean amplitude (meters)	Local epoch (degrees)	Modified epoch (degrees)
Q1	0.89324	0.01919	132.05746	147.00761
O1	0.92954	0.16801	122.05304	132.64819
M1	0.96645	0.01337	309.16840	315.33429
P1	0.99726	0.09518	163.17758	165.64557
K1	1.00274	0.28628	118.33064	120.14153
Mu2	1.86455	0.01961	196.68944	217.22266
N2	1.89598	0.10070	10.52802	27.28906
Nu2	1.90084	0.04163	264.66309	280.84131
M2	1.93227	0.47715	7.79602	20.20209
L2	1.96857	0.01726	175.51865	183.56970
S2	2.00000	0.11683	37.42345	41.70232
K2	2.00548	0.03008	253.06320	256.68500
M4	3.86455	0.00521	248.44412	273.25620
Mk3	2.93501	0.01188	49.95349	64.17044

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APPENDIX Q—STATION MID

Station Name: **MID** (Near Middle Ground)

Position: Lat. 38°03'42"

Long. 122°00'03"

Depth: 8.5 m (MLLW)

Manufacturer	Serial Number	Deployment Dates
CTDt: Ocean Sensors	OS200 283	6/1/95(152) - 7/13/95(194)
CTDb: Ocean Sensors	OS200 255	6/1/95(152) - 7/13/95(194)
Ocean Sensors	OS200 255	7/13/95(194) - 9/30/95(273)
Ocean Sensors	OS200 282	8/10/95(222) - 10/23/95(296)
ADCP: RDI	BB 1269	6/1/95(152) - 8/10/95(222)
ADCP: RDI	NB 296	8/10/95(222) - 10/23/95(296)

Serviced: 6/1/95(152), 7/7/95(188), 7/13/95(194), 7/21/95(202), 8/10/95(222), 9/30/95(273), 10/23/95(296)

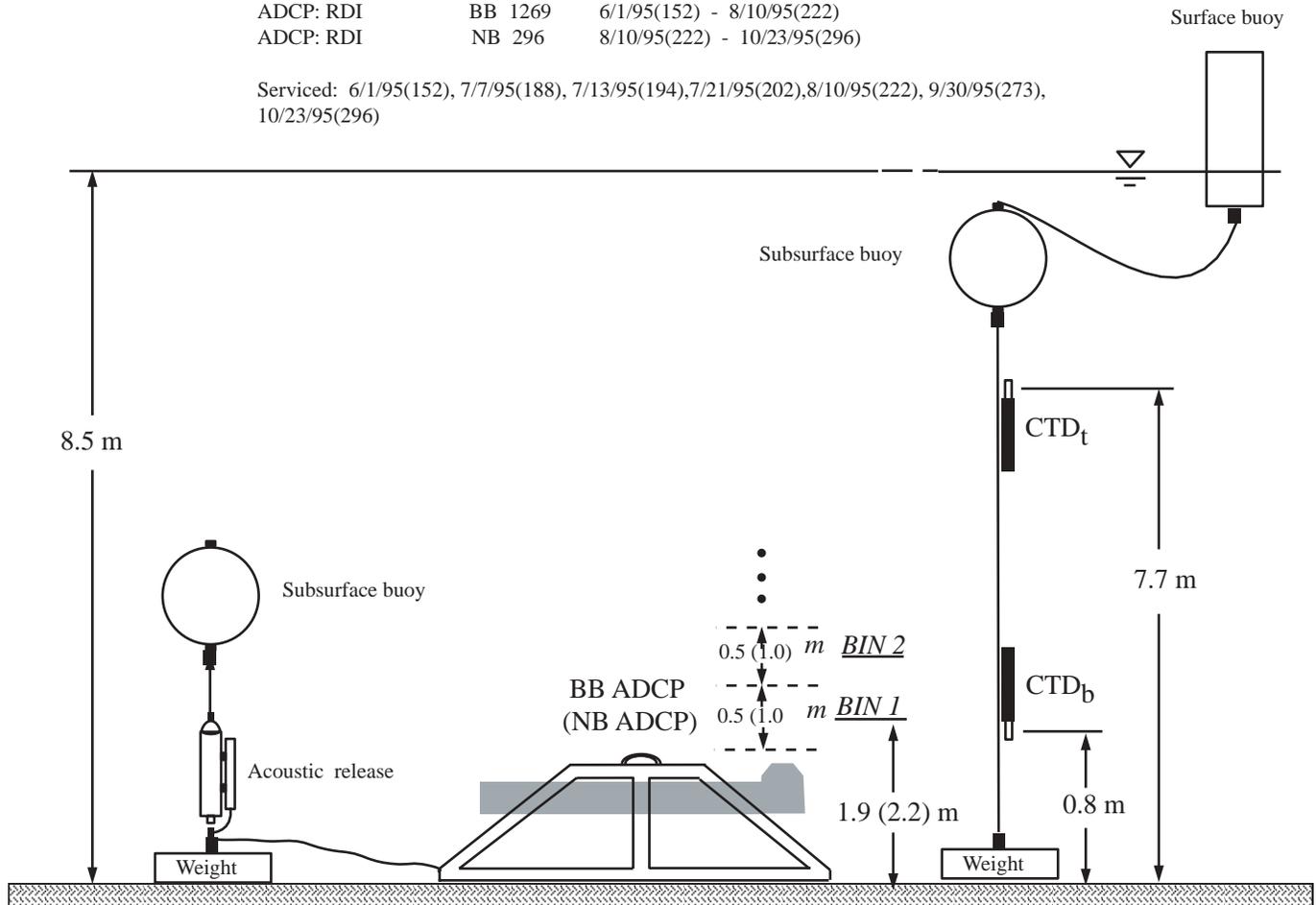


Figure Q1. Configuration of instrument deployment, Station MID, June 1 through October 23, 1995, Suisun Bay, California. m, meters; MLLW, mean lower low water; ADCP, acoustic Doppler current profiler; RDI, R.D. Instruments, Inc.; NB ADCP, narrow-band acoustic Doppler current profiler; BB ADCP, broad-band acoustic Doppler current profiler; CTD, conductivity-temperature-depth; BIN, a discrete measurement location in the vertical.

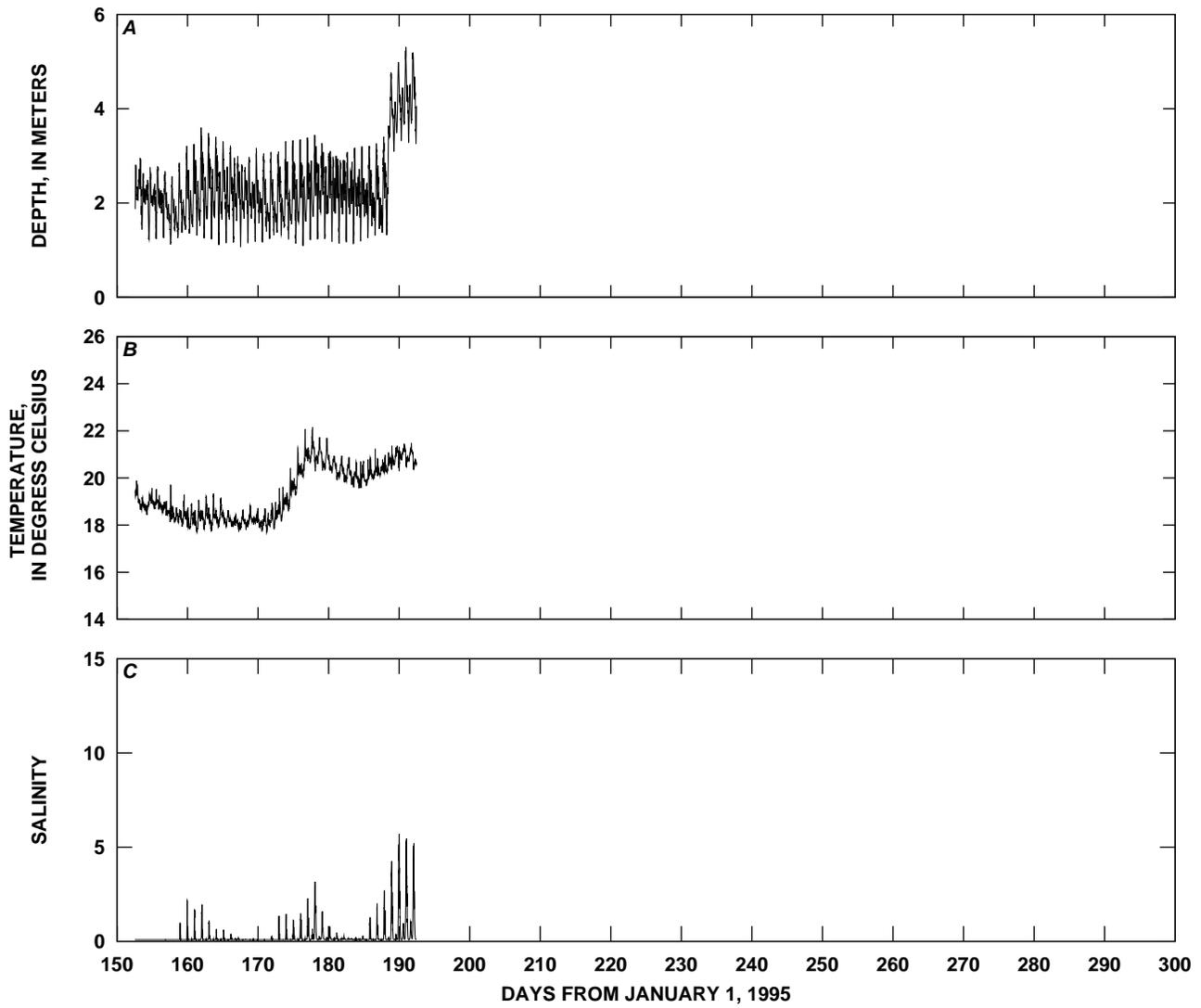


Figure Q2. Time-series plots of *A*, depth; *B*, temperature; and *C*, salinity, Station MID, June 1 through July 13, 1995, Suisun Bay, California. Near-surface sensor. Salinities in this report are presented without units because salinity is a conductivity ratio; therefore, it has no physical units (Millero, 1993).

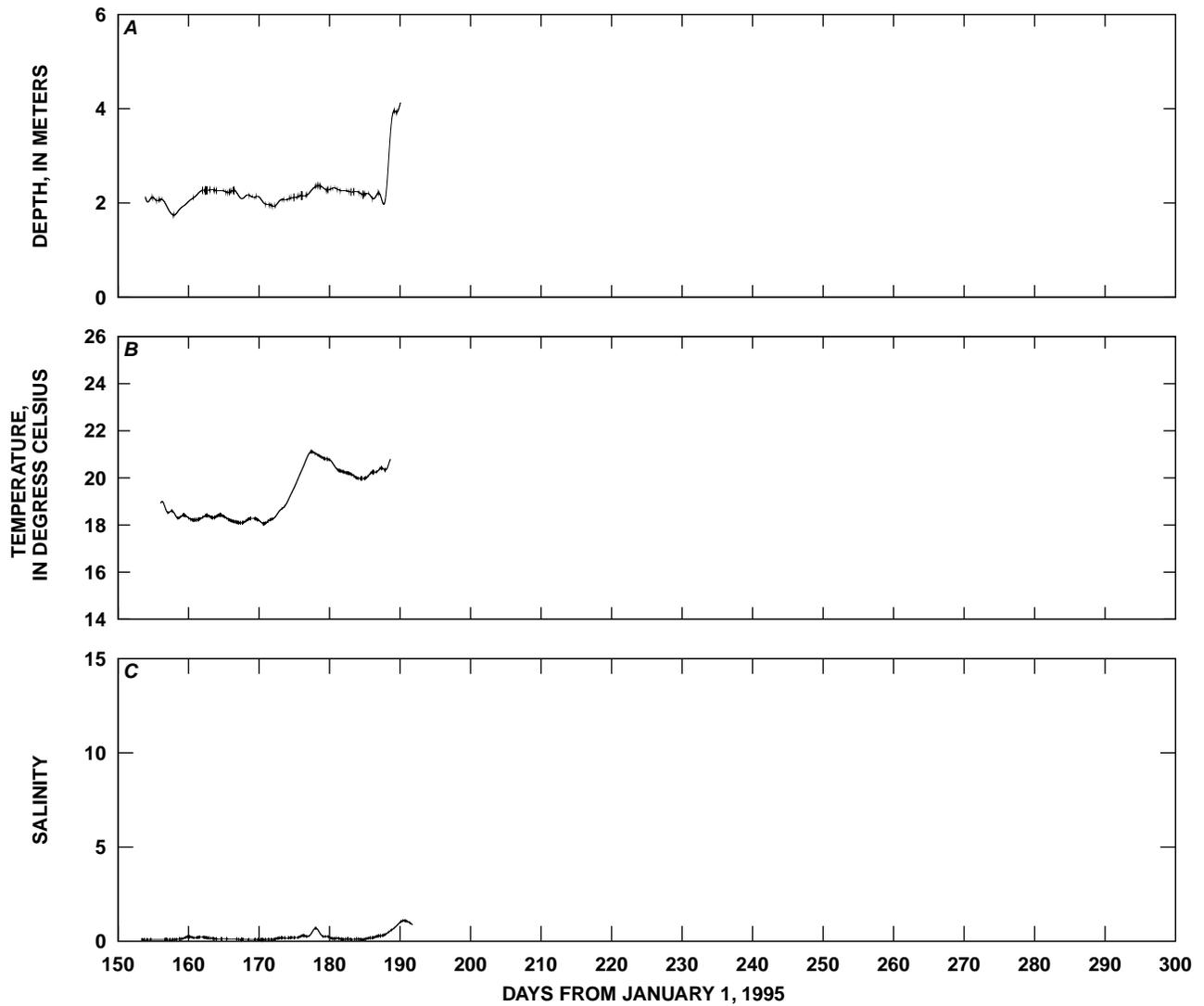


Figure Q3. Time-series plots of low-pass-filtered *A*, depth; *B*, temperature; and *C*, salinity, Station MID, June 1 through July 13, 1995, Suisun Bay, California. Near-surface sensor. Salinities in this report are presented without units because salinity is a conductivity ratio; therefore, it has no physical units (Millero, 1993).

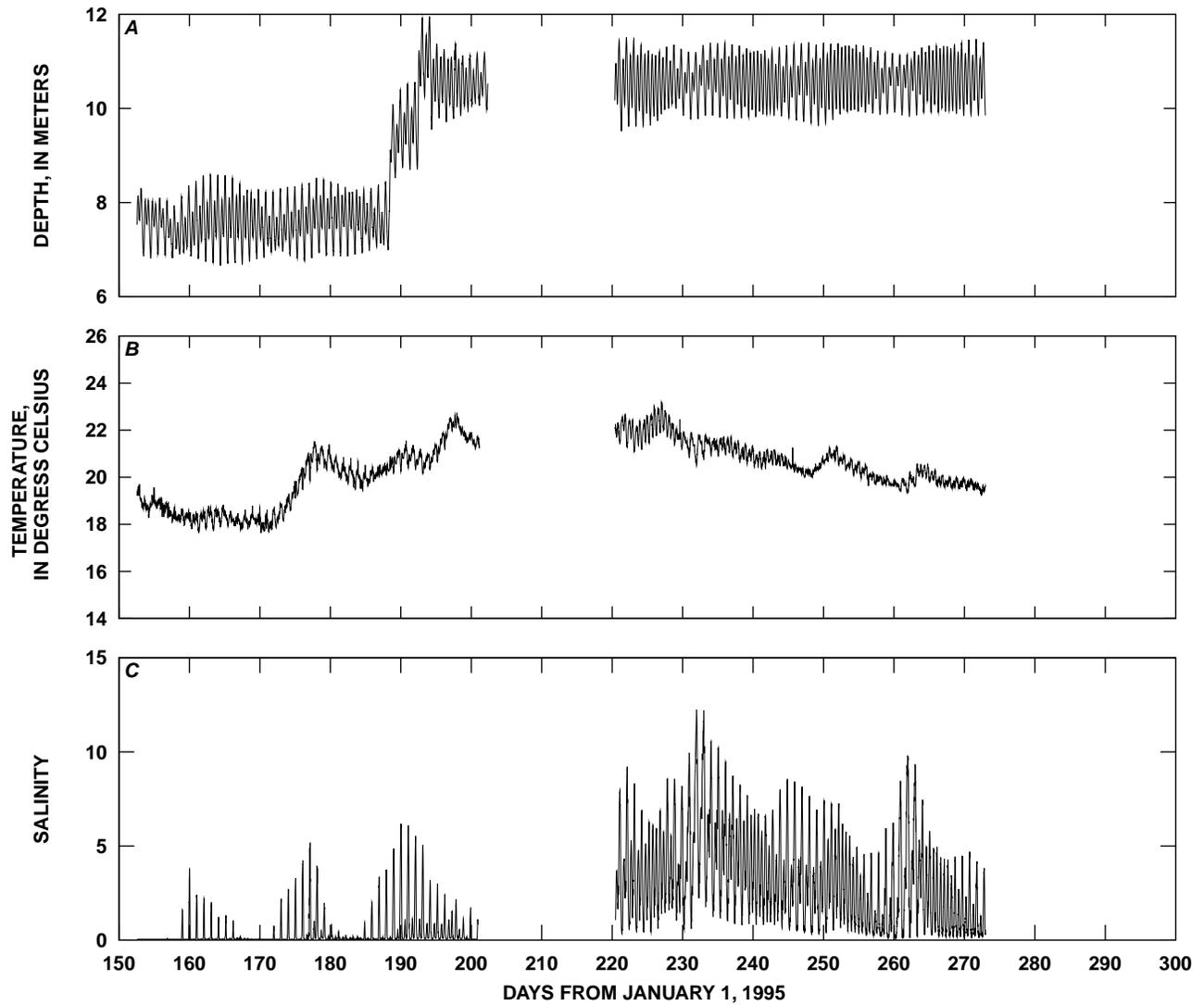


Figure Q4. Time-series plots of *A*, depth; *B*, temperature; and *C*, salinity, Station MID, June 1 through October 23, 1995, Suisun Bay, California. Near-bottom sensor. Salinities in this report are presented without units because salinity is a conductivity ratio; therefore, it has no physical units (Millero, 1993).

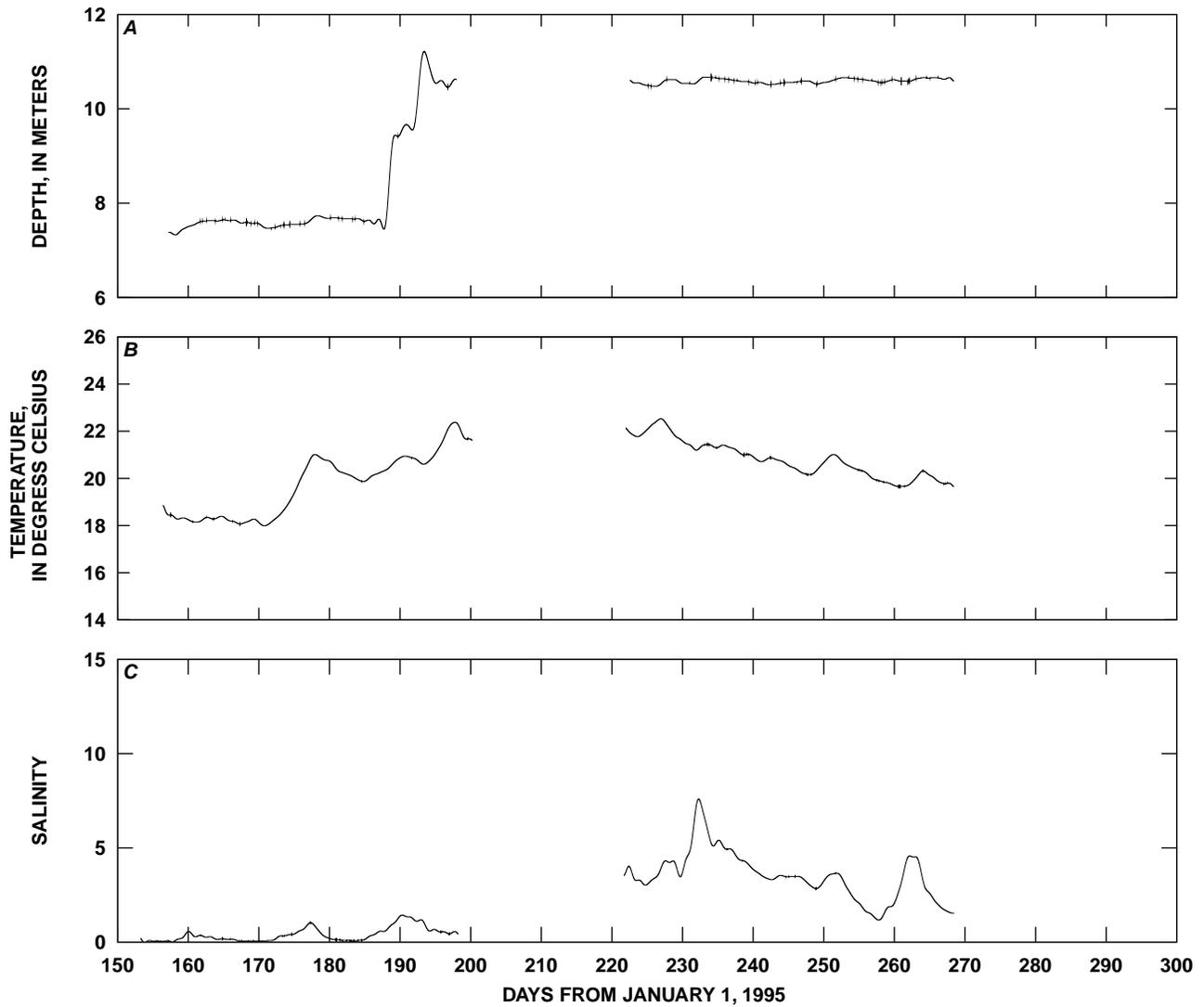


Figure Q5. Time-series plots of low-pass-filtered *A*, depth; *B*, temperature; and *C*, salinity, Station MID, June 1 through October 23, 1995, Suisun Bay, California. Near-bottom sensor. Salinities in this report are presented without units because salinity is a conductivity ratio; therefore, it has no physical units (Millero, 1993).

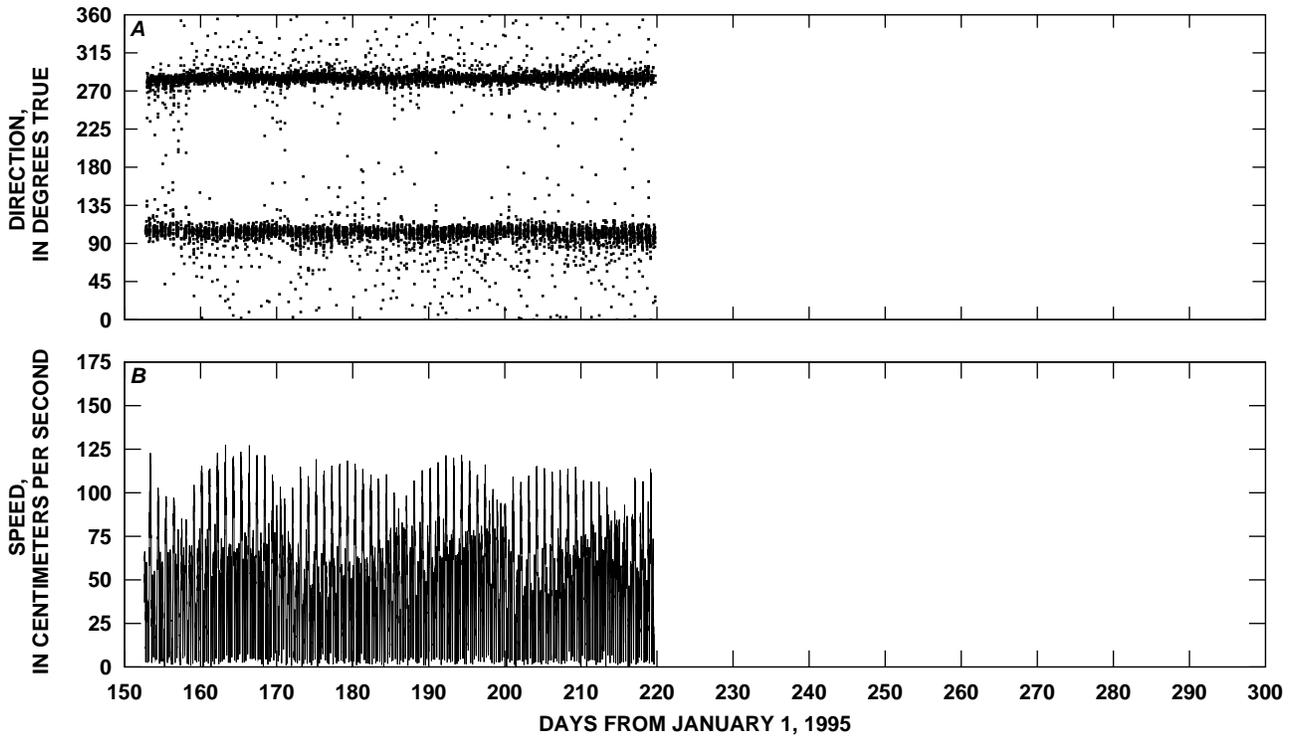


Figure Q6. Time-series plots of tidal currents, Station MID, June 1 through August 10, 1995, BIN 1 near-bottom BIN, Suisun Bay, California. BIN refers to a discrete measurement location in the vertical.

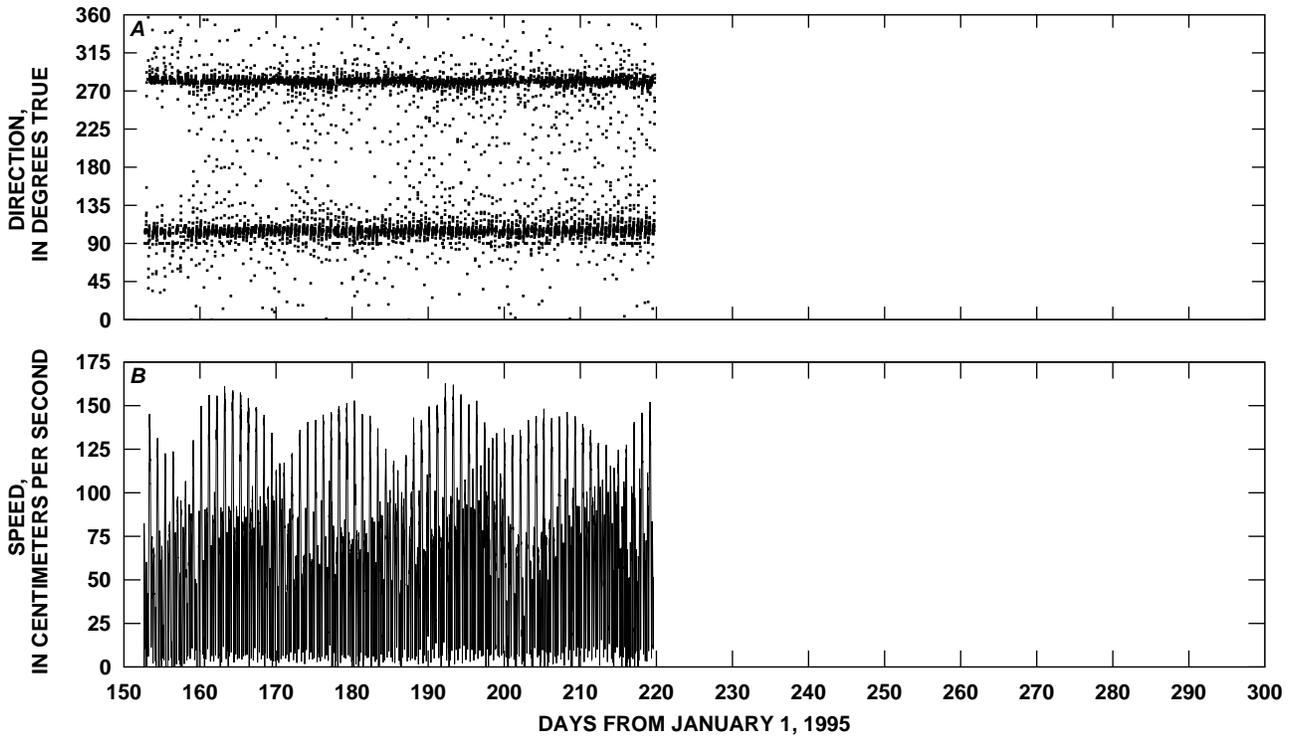


Figure Q7. Time-series plots of tidal currents, Station MID, June 1 through August 10, 1995, BIN 19 near-surface BIN, Suisun Bay, California. BIN refers to a discrete measurement location in the vertical.

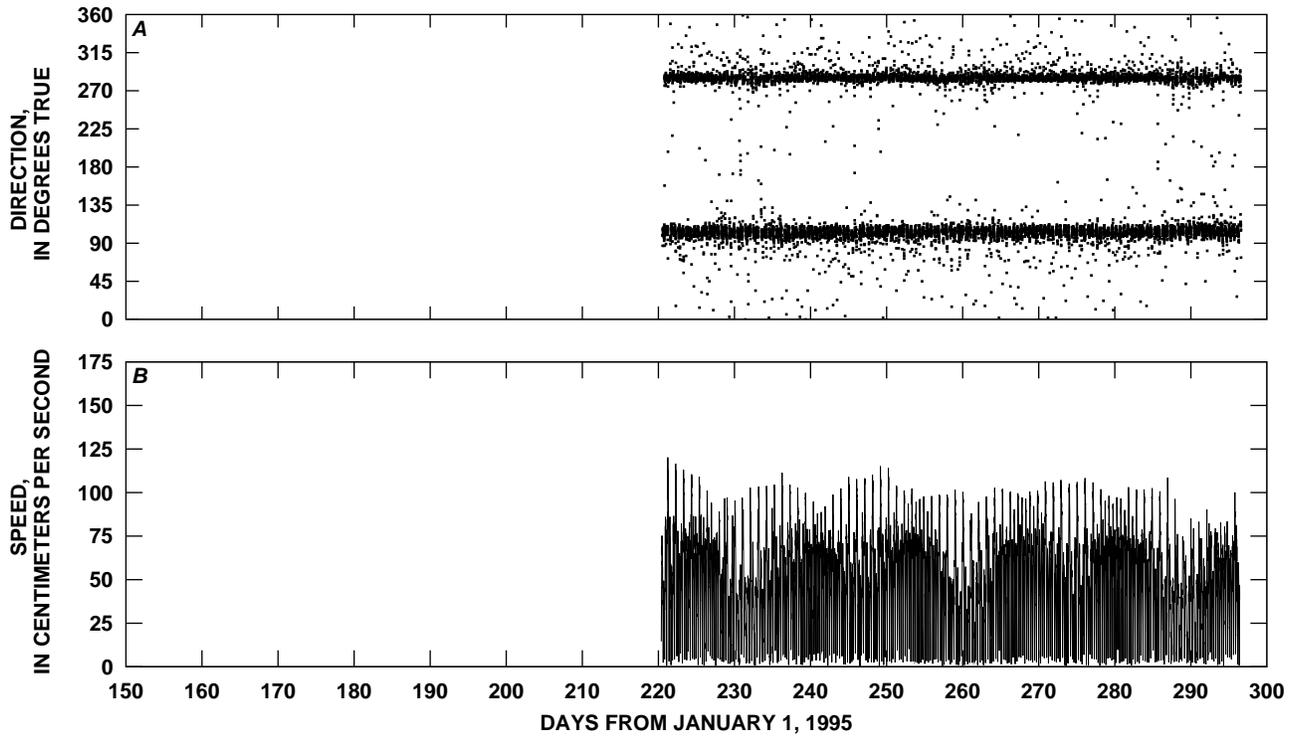


Figure 08. Time-series plots of tidal currents, Station MID, August 10 through October 23, 1995, BIN 1 near-bottom BIN, Suisun Bay, California. BIN refers to a discrete measurement location in the vertical.

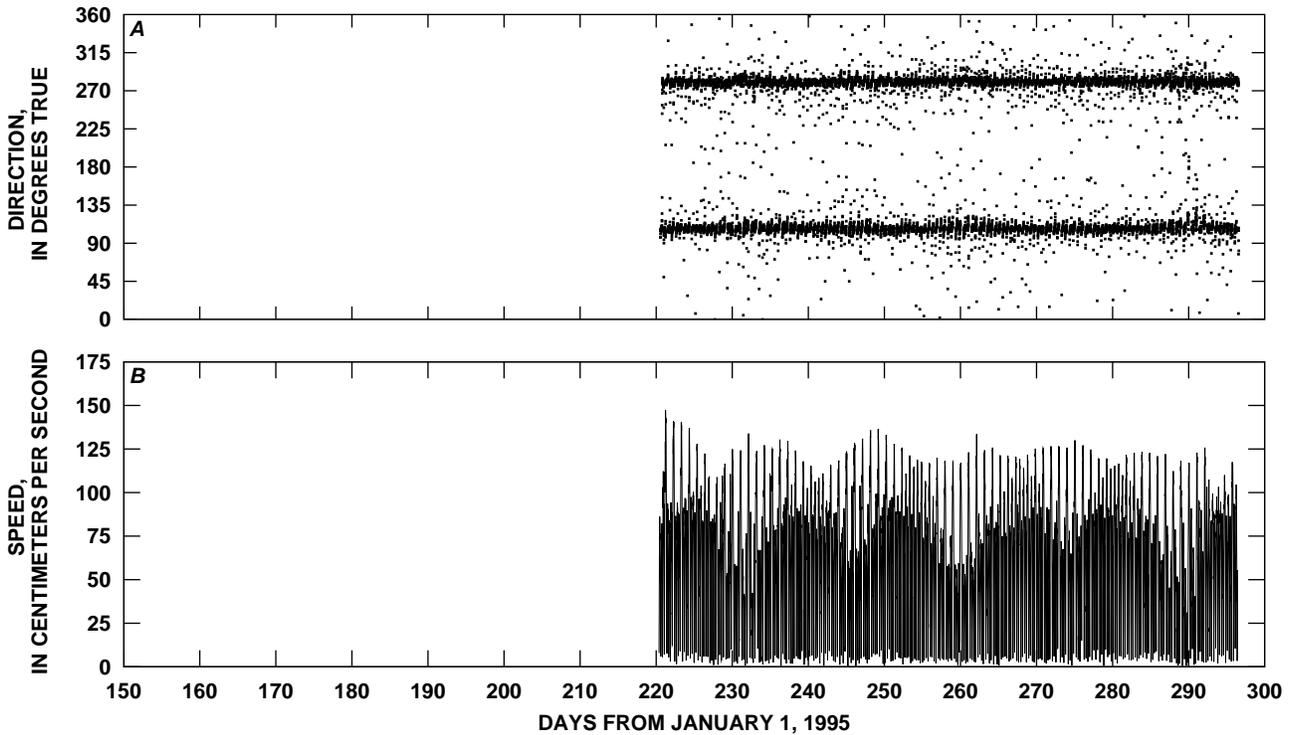


Figure 09. Time-series plots of tidal currents, Station MID, August 10 through October 23, 1995, BIN 7 near-surface BIN, Suisun Bay, California. BIN refers to a discrete measurement location in the vertical.

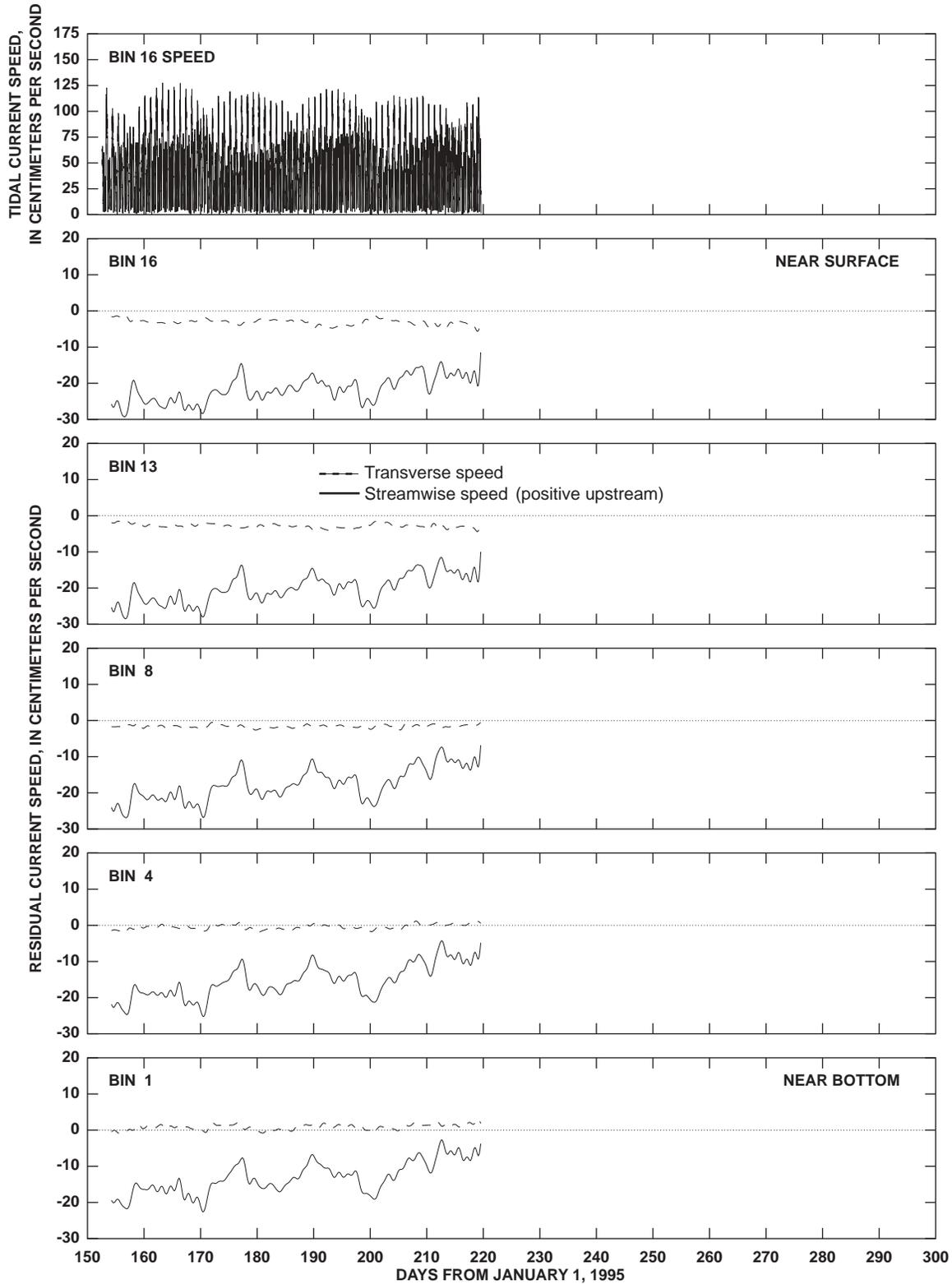


Figure Q10. Longitudinal and transverse residual currents, Station MID, June 1 through August 10, 1995, Suisun Bay, California. Tidal current speed at BIN 19 near-surface BIN is shown in the top panel for reference. BIN refers to a discrete measurement location in the vertical. Principal direction is 103.7 degrees true.

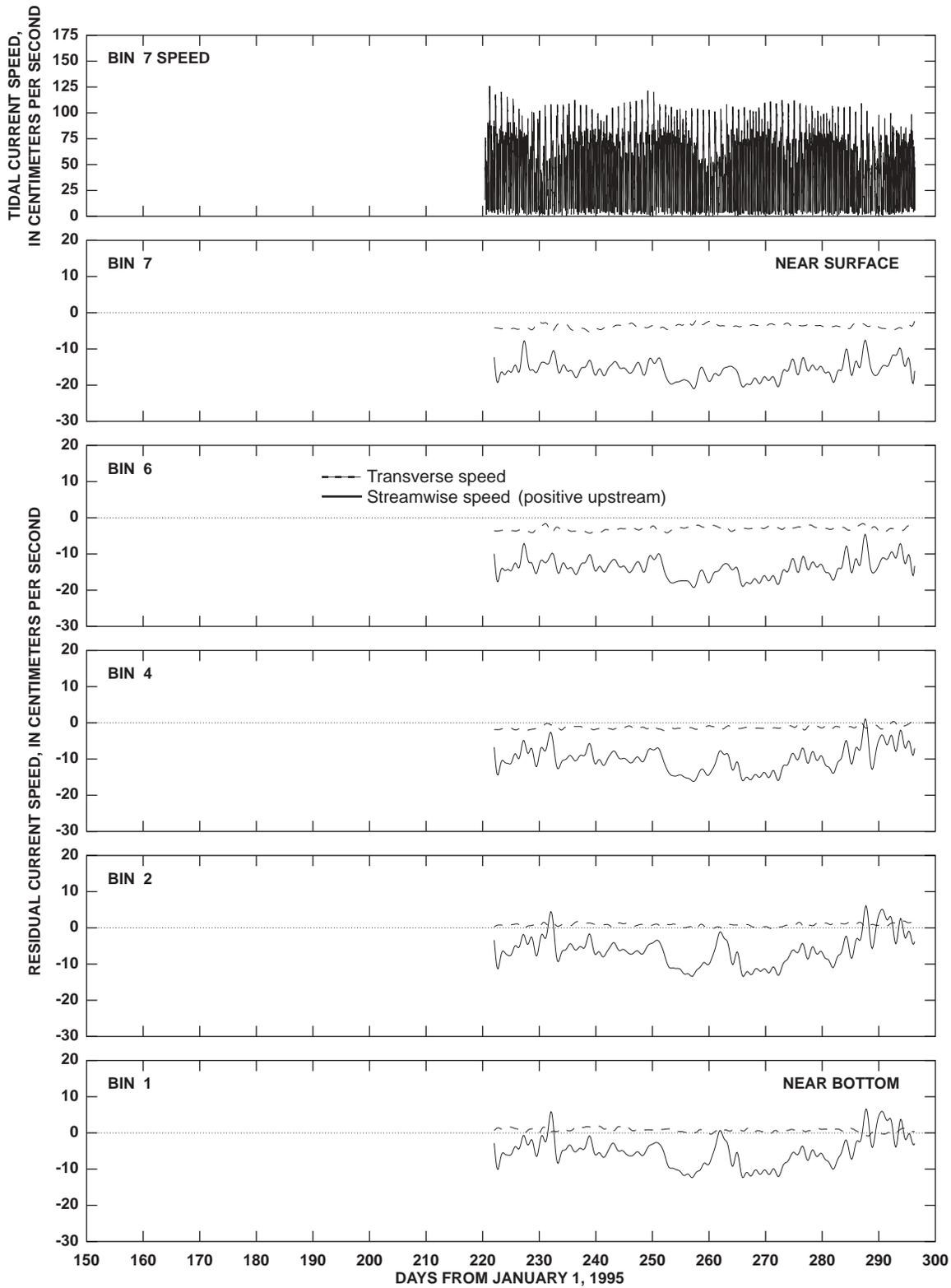


Figure Q11. Longitudinal and transverse residual currents, Station MID, August 10 through October 23, 1995, Suisun Bay, California. Tidal current speed at BIN 7 near-surface BIN is shown in the top panel for reference. BIN refers to a discrete measurement location in the vertical. Principal direction is 103.0 degrees true.

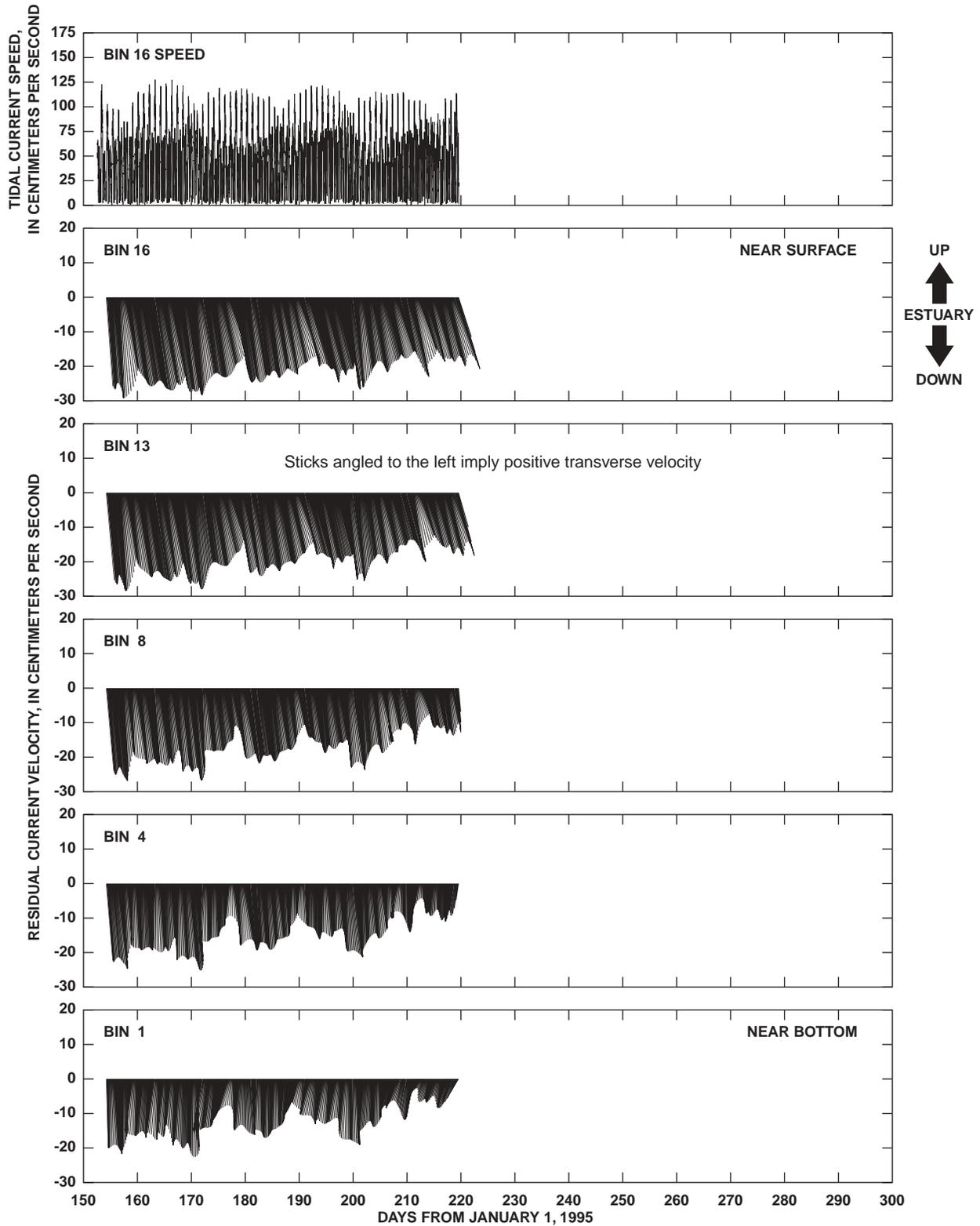


Figure Q12. Residual currents, Station MID, June 1 through August 10, 1995, Suisun Bay, California. Tidal current speed at BIN 19 near-surface BIN is shown in the top panel for reference. BIN refers to a discrete measurement location in the vertical. Principal direction is 103.7 degrees true.

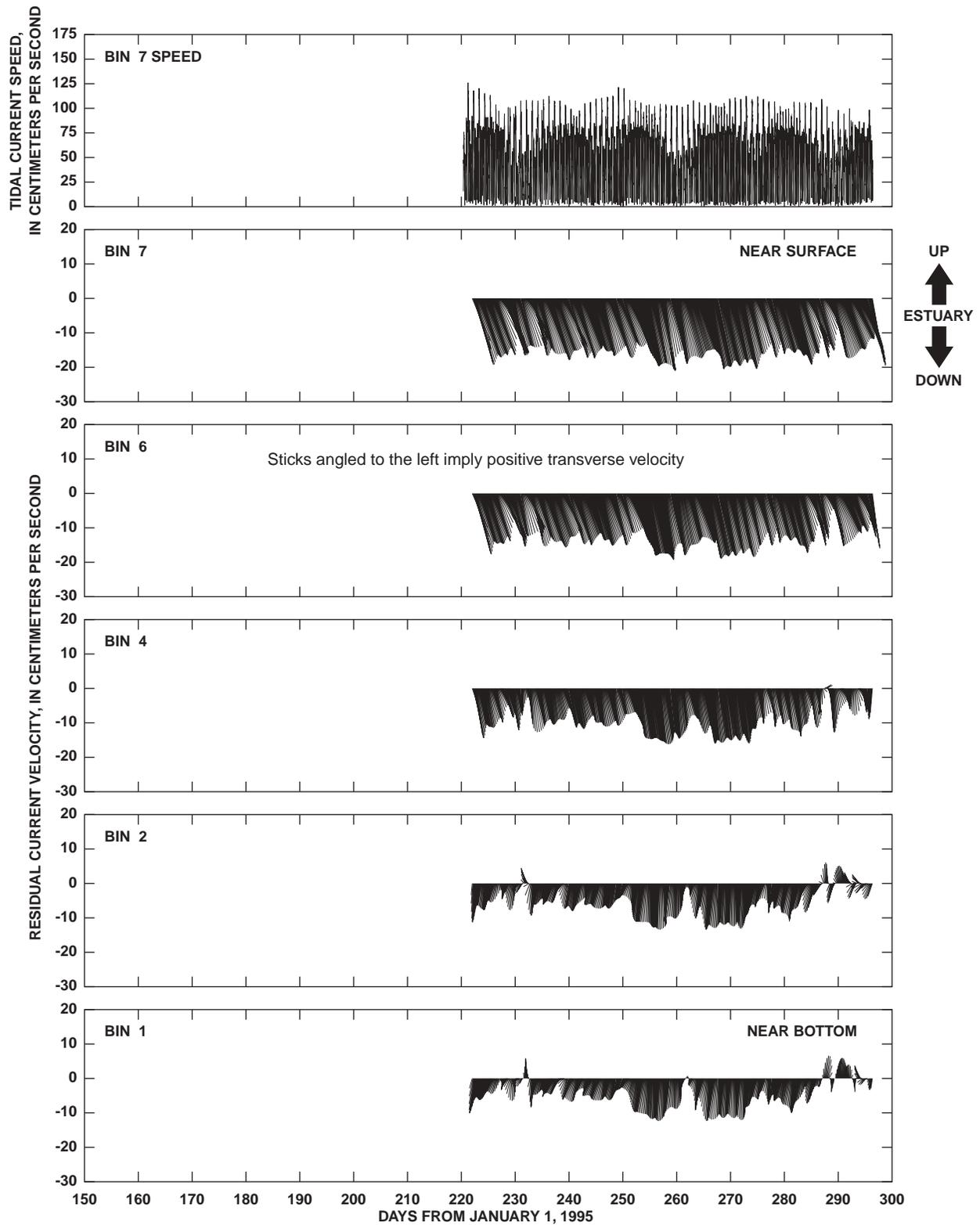


Figure Q13. Residual currents, Station MID, August 10 through October 23, 1995, Suisun Bay, California. Tidal current speed at BIN 7 near-surface BIN is shown in the top panel for reference. BIN refers to a discrete measurement location in the vertical. Principal direction is 103.0 degrees true.

Table Q1. Harmonic analysis results from depth measurements, Station MID, June 1 through October 23, 1995, Suisun Bay, California. Near-bottom sensor

Station: MID

Time series mean: 9.50308

Standard deviation: 1.42616

Harmonic constants: No tidal inference

Tidal symbol	Cycles (per day)	Mean amplitude (meters)	Local epoch (degrees)	Modified epoch (degrees)
Q1	0.89324	0.00000	109.47173	124.28326
O1	0.92954	0.17190	122.21976	132.67630
M1	0.96645	0.00000	151.18140	157.20868
P1	0.99726	0.00000	35.85728	38.18665
K1	1.00274	0.28564	122.14192	123.81421
Mu2	1.86455	0.00000	166.14659	186.40259
N2	1.89598	0.09168	349.18518	5.66901
Nu2	1.90084	0.00000	350.10632	6.00732
M2	1.93227	0.51075	346.39545	358.52429
L2	1.96857	0.00000	92.53214	100.30597
S2	2.00000	0.09987	12.93382	16.93547
K2	2.00548	0.00000	310.38217	313.72675
M4	3.86455	0.02481	258.33276	282.59039
Mk3	2.93501	0.04632	32.82950	46.63062

Table Q2. Harmonic analysis results for velocity, Station MID, June 1 through August 10, 1995, BIN 1 near-bottom BIN, Suisun Bay, California

[BIN refers to a discrete measurement location in the vertical. cm/s, centimeters per second; deg.T, degrees true; deg, degrees; E, equilibrium argument]

BIN number: 1
 Station: MIDGR
 Start time of the series (local time): Year, 1995; Month, 6; Day, 1; Hour, 14:19
 Time meridian: 120 W
 Station position: 38 347N 122 0 4W
 Record length: 128 M2 cycles: 9539 data points

Tidal Symbol	Major axis (CM/S)	Minor axis (CM/S)	Direction (deg. T)	Phase (deg)	E (deg)	Rotation
O1	9.61	0.28	106.1	111.5	329.1	Counterclockwise
K1	29.81	0.15	104.0	115.7	19.9	Counterclockwise
N2	13.38	0.31	104.1	6.3	139.5	Counterclockwise
M2	64.12	0.15	104.1	36.9	351.9	Counterclockwise
S2	9.99	0.11	103.0	57.9	69.9	Clockwise
M4	1.59	0.36	97.9	343.3	343.9	Clockwise

Rootmeansquare speed (cm/s): 54.39
 Standard deviation, U series (cm/s): 11.62
 Standard deviation, V series (cm/s): 4.27
 Tidal form number: 0.53
 Spring tidal current maximum (cm/s): 113.53
 Neap tidal current maximum (cm/s): 33.93
 Pricipal current direction (deg. T): 104.13

Table Q3. Harmonic analysis results for velocity, Station MID, June 1 through August 10, 1995, BIN 19 near-surface BIN, Suisun Bay, California

[BIN refers to a discrete measurement location in the vertical; cm/s, centimeters per second; deg.T, degrees true; deg, degrees; E, equilibrium argument]

BIN number: 19
 Station: MIDGR
 Start time of the series (local time): Year, 1995; Month, 6; Day, 1; Hour, 15:19
 Time meridian: 120 W
 Station position: 38 347N 122 0 4W
 Record length: 128 M2 cycles: 9008 data points

Tidal Symbol	Major axis (CM/S)	Minor axis (CM/S)	Direction (deg. T)	Phase (deg)	E (deg)	Rotation
O1	15.76	0.42	99.7	109.1	343.0	Clockwise
K1	40.93	0.65	102.9	109.7	35.0	Clockwise
N2	18.87	0.54	102.5	3.9	168.0	Clockwise
M2	88.23	2.92	102.3	33.2	20.9	Clockwise
S2	13.12	0.67	103.1	50.8	99.9	Clockwise
M4	3.00	0.68	112.9	52.4	41.9	Clockwise

Rootmeansquare speed (cm/s): 76.12
 Standard deviation, U series (cm/s): 14.31
 Standard deviation, V series (cm/s): 4.94
 Tidal form number: 0.56
 Spring tidal current maximum (cm/s): 158.05
 Neap tidal current maximum (cm/s): 49.93
 Pricipal current direction (deg. T): 102.29

Table Q4. Harmonic analysis results for velocity, Station MID, August 10 through October 23 , 1995, BIN 1 near-bottom BIN, Suisun Bay, California

[BIN refers to a discrete measurement location in the vertical; cm/s, centimeters per second; deg.T, degrees true; deg, degrees; E, equilibrium argument]

BIN number: 1
 Station: midgr
 Start time of the series (local time): Year, 1995; Month, 8; Day, 8; Hour, 9: 0
 Time meridian: 120 W
 Station position: 38 342N 122 0 6W
 Record length: 146 M2 cycles: 10881 data points

Tidal Symbol	Major axis (CM/S)	Minor axis (CM/S)	Direction (deg. T)	Phase (deg)	E (deg)	Rotation
O1	16.03	0.00	103.8	101.4	329.8	Counterclockwise
K1	20.68	0.13	103.9	118.3	6.9	Clockwise
N2	10.02	0.15	105.7	12.0	321.5	Clockwise
M2	68.28	0.33	104.3	33.5	339.5	Counterclockwise
S2	14.69	0.05	105.1	38.3	270.0	Clockwise
M4	2.58	0.52	102.9	331.1	319.0	Clockwise

Rootmeansquare speed (cm/s): 54.84
 Standard deviation, U series (cm/s): 11.60
 Standard deviation, V series (cm/s): 4.00
 Tidal form number: 0.44
 Spring tidal current maximum (cm/s): 119.67
 Neap tidal current maximum (cm/s): 48.94
 Pricipal current direction (deg. T): 104.26

Table Q5. Harmonic analysis results for velocity, Station MID, August 10 through October 23 , 1995, BIN 7 near-surface BIN, Suisun Bay, California

[BIN refers to a discrete measurement location in the vertical; cm/s, centimeters per second; deg.T, degrees true; deg, degrees; E, equilibrium argument]

BIN number: 7
 Station: midgr
 Start time of the series (local time): Year, 1995; Month, 8; Day, 8; Hour, 9: 0
 Time meridian: 120 W
 Station position: 38 342N 122 0 6W
 Record length: 146 M2 cycles: 10881 data points

Tidal Symbol	Major axis (CM/S)	Minor axis (CM/S)	Direction (deg. T)	Phase (deg)	E (deg)	Rotation
O1	17.63	0.69	102.7	100.5	329.8	Clockwise
K1	23.83	0.52	102.6	114.2	6.9	Clockwise
N2	11.24	0.34	102.1	359.8	321.5	Clockwise
M2	86.95	1.75	102.9	32.1	339.5	Clockwise
S2	17.72	0.35	101.9	29.6	270.0	Clockwise
M4	3.69	1.30	129.2	34.1	319.0	Clockwise

Rootmeansquare speed (cm/s): 70.11
 Standard deviation, U series (cm/s): 12.88
 Standard deviation, V series (cm/s): 4.57
 Tidal form number: 0.40
 Spring tidal current maximum (cm/s): 146.13
 Neap tidal current maximum (cm/s): 63.03
 Pricipal current direction (deg. T): 102.73

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APPENDIX R—STATION MOTH

Station Name: **MOTH**
(Mothball fleet)

Position: Lat. 38°05'29"

Long. 122°04'30"

Depth: 8.9 m (MLLW)

Manufacturer	Serial Number	Deployment Dates
CTD: Ocean Sensors	OS200 305	9/18/95(261) - 10/23/95(296)
V: InterOcean	S408782106	9/18/95(261) - 10/23/95(296)
OBS: D & A	OBS3 683	9/18/95(261) - 10/23/95(296)

Serviced: 9/18/95(261), 10/23/95(296)

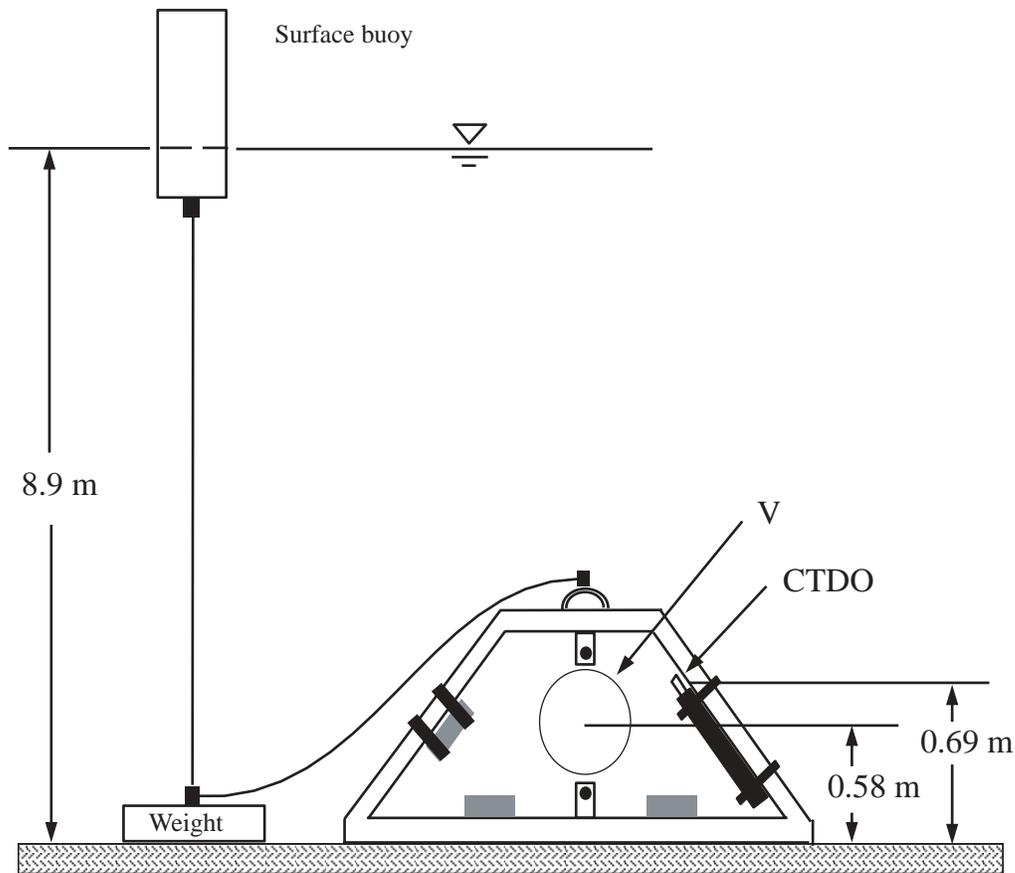


Figure R1. Configuration of instrument deployment, Station MOTH, September 18 through October 23, 1995, Suisun Bay, California. m, meters; MLLW, mean lower low water; OBS, optical backscatterance sensor; CTD, conductivity-temperature-depth; CTDO, conductivity-temperature-depth-optical (backscatterance sensor); V, velocity.

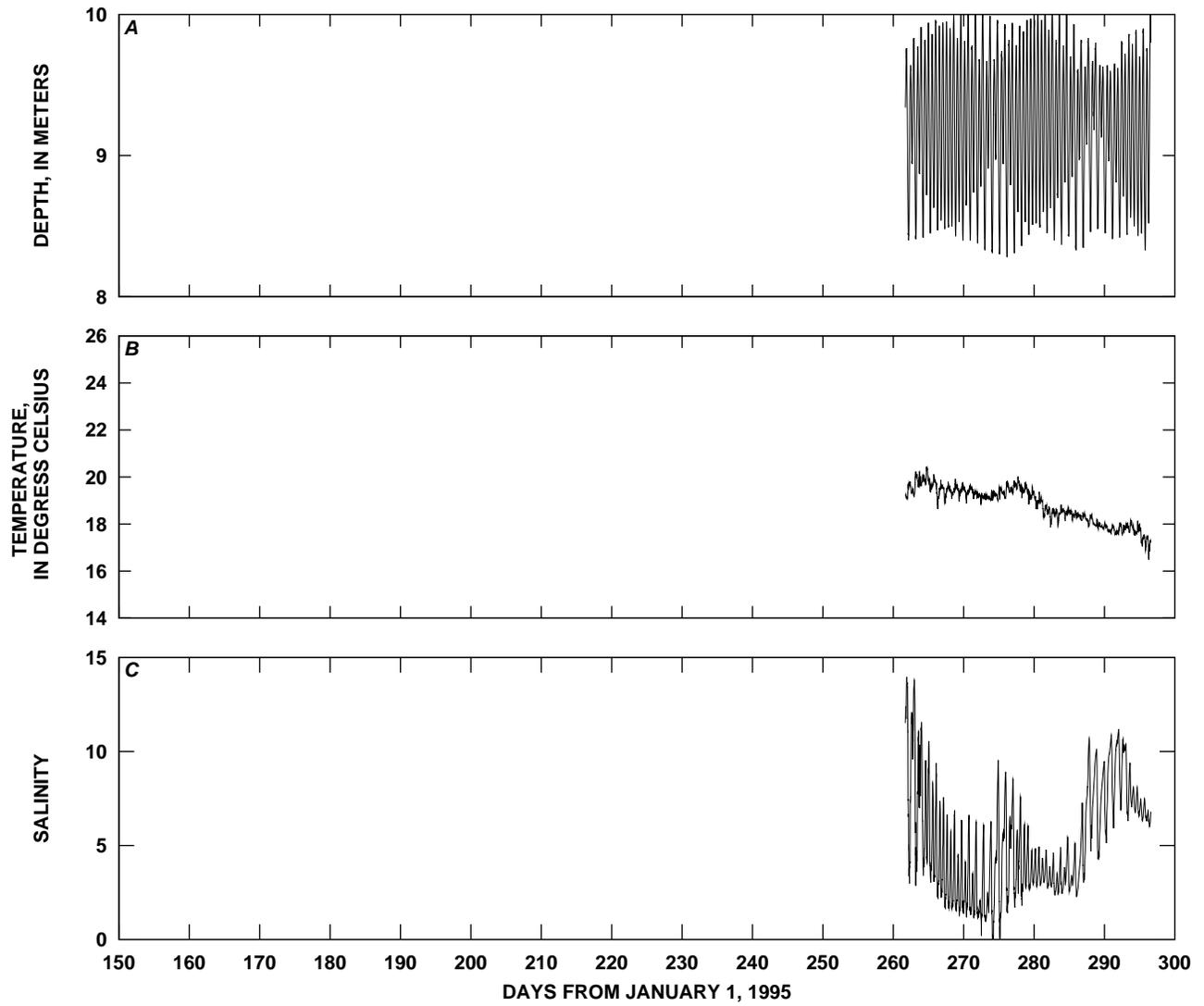


Figure R2. Time-series plots of *A*, depth; *B*, temperature; and *C*, salinity, Station MOTH, September 18 through October 23, 1995, Suisun Bay, California. Salinities in this report are presented without units because salinity is a conductivity ratio; therefore, it has no physical units (Millero, 1993).

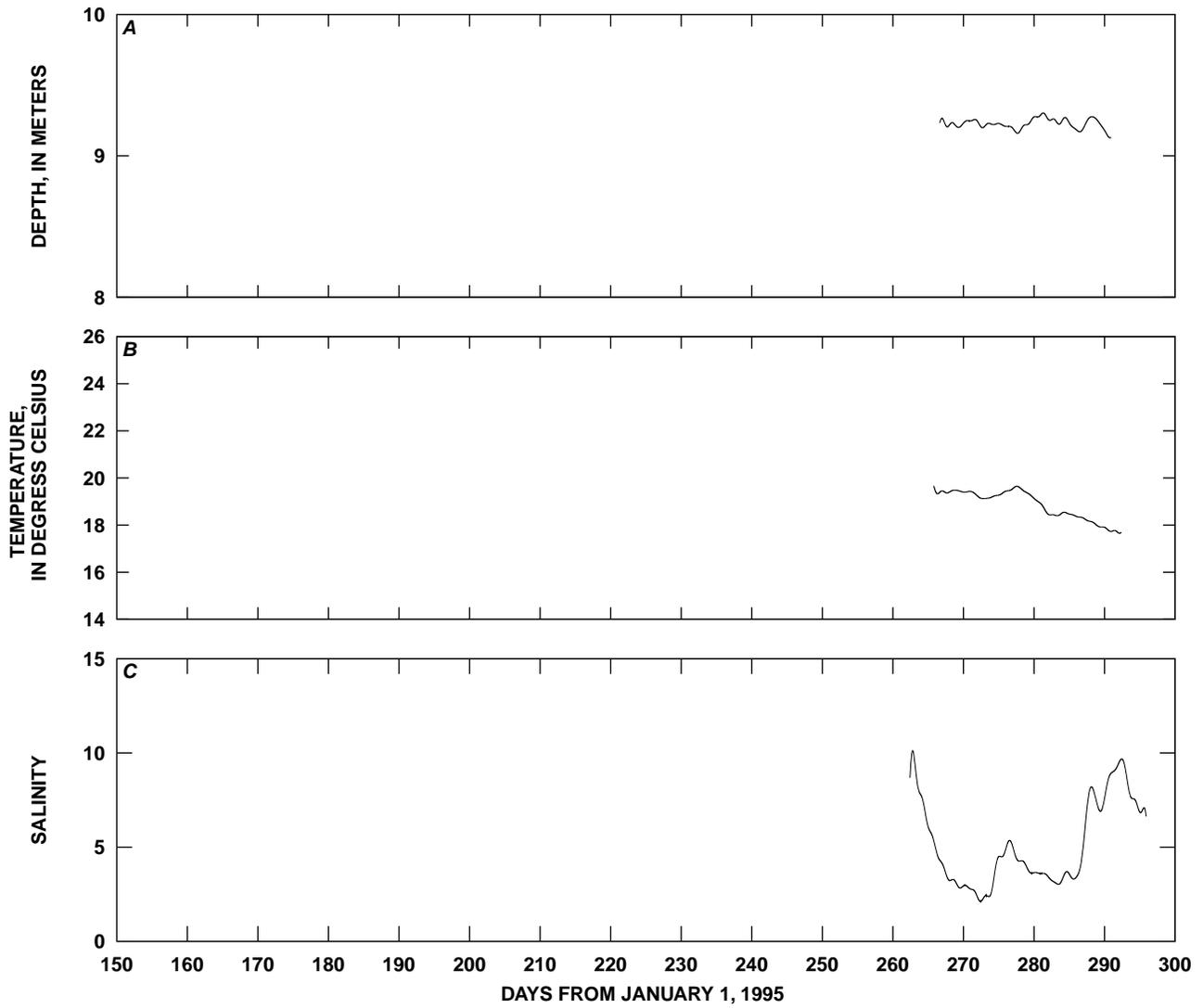


Figure R3. Time-series plots of low-pass-filtered *A*, depth; *B*, temperature; and *C*, salinity, Station MOTH, September 18 through October 23, 1995, Suisun Bay, California. Salinities in this report are presented without units because salinity is a conductivity ratio; therefore, it has no physical units (Millero, 1993).

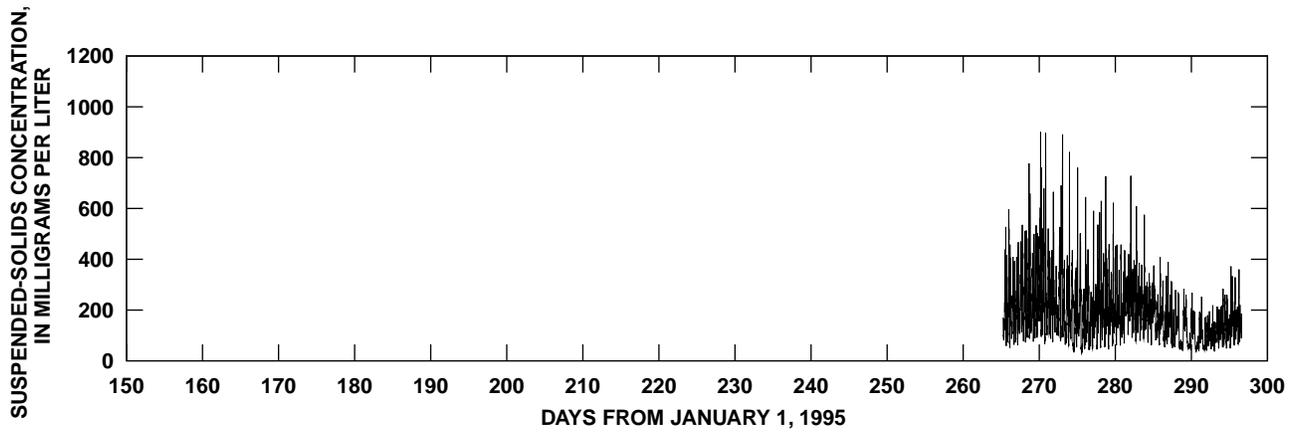


Figure R4. Time-series plot of suspended-solids concentration at Station MOTH, September 18 through October 23, 1995, Suisun Bay, California.

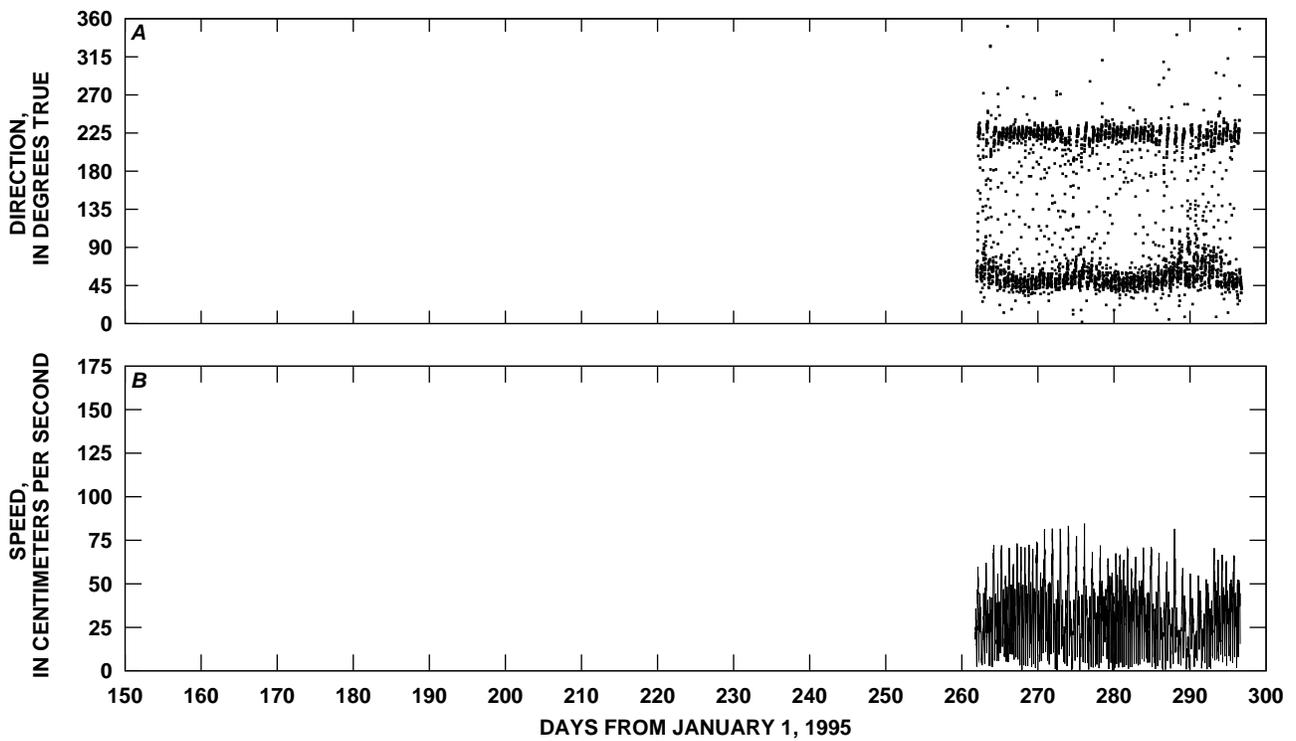


Figure R5. Time-series plots of tidal currents, Station MOTH, September 18 through October 23, 1995, Suisun Bay, California.

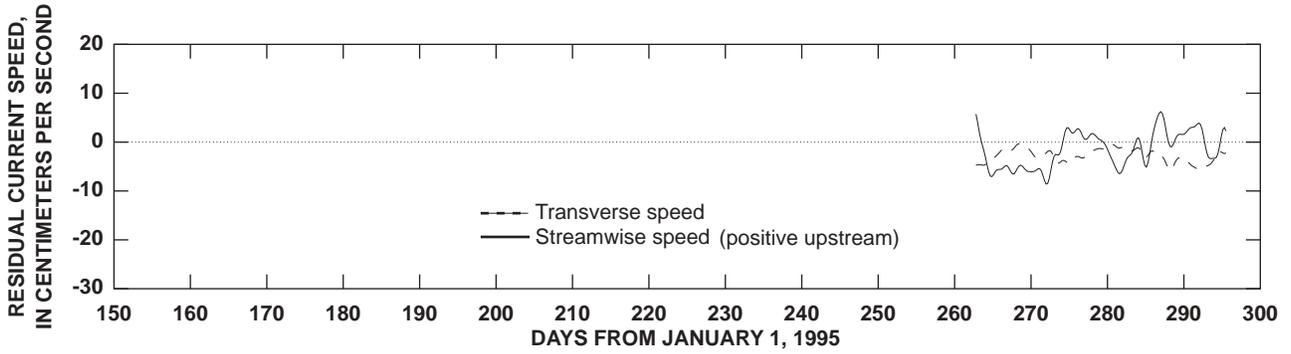


Figure R6. Longitudinal and transverse residual currents, Station MOTH, September 18 through October 23, 1995, Suisun Bay, California. Principal direction is 47.6 degrees true.

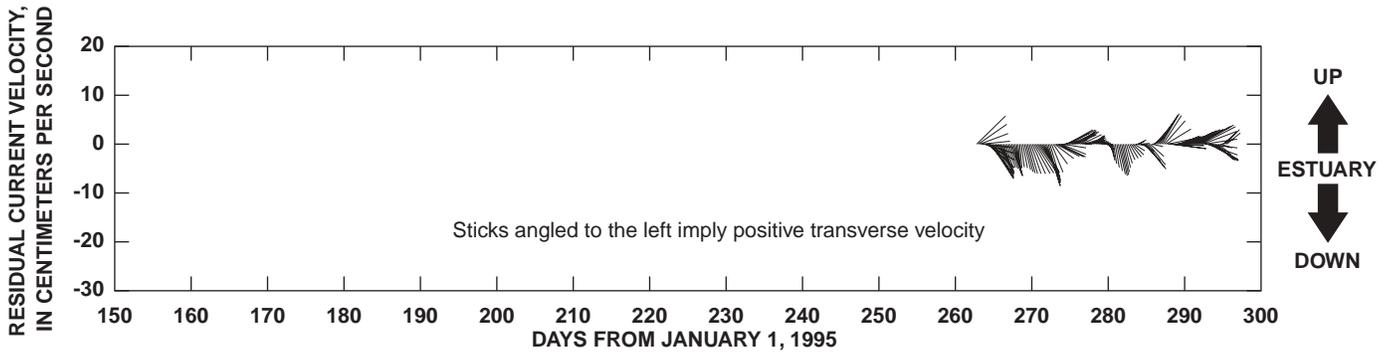


Figure R7. Residual currents, Station MOTH, September 18 through October 23, 1995, Suisun Bay, California. Principal direction is 47.6 degrees true.

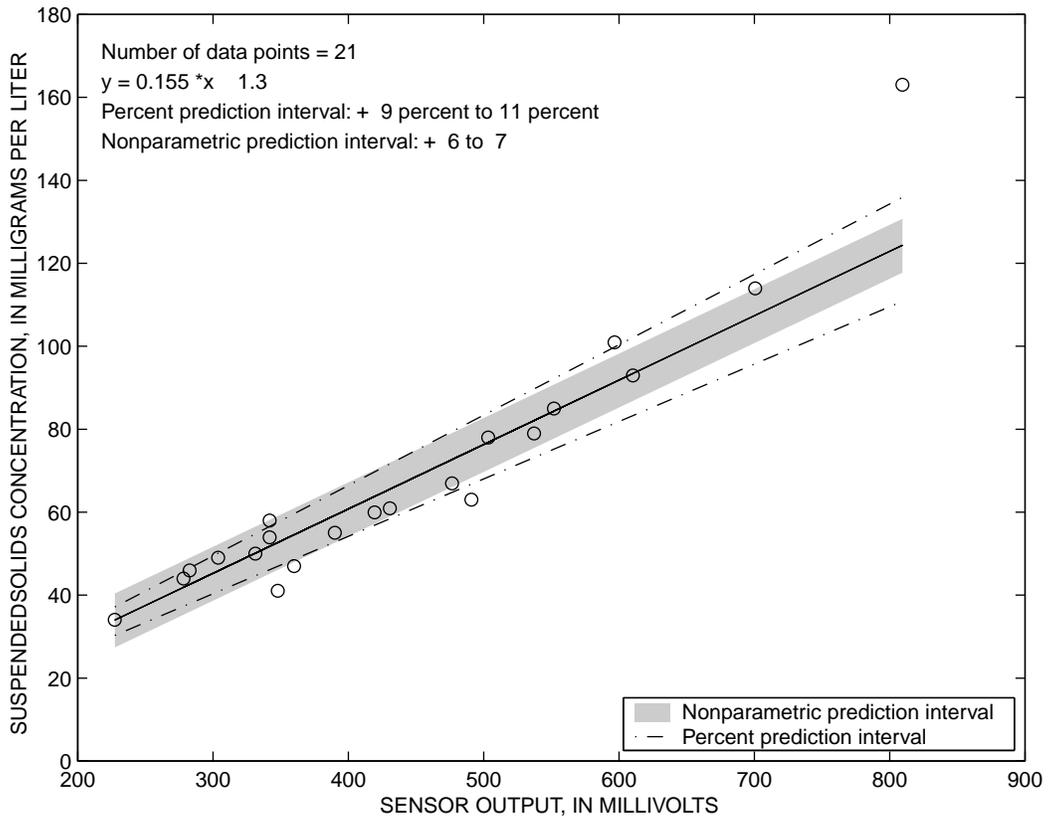


Figure R8. Calibration curve for near-bottom optical backscatterance sensor, Station MOTH, September 18 through October 23, 1995, Suisun Bay, California.

Table R1. Harmonic analysis results from depth measurements, Station MOTH, September 18 through October 23, 1995, Suisun Bay, California

Station: MOTH
Time series mean: 9.21348
Standard deviation: 0.07276
Harmonic constants: After tidal inference

Tidal symbol	Cycles (per day)	Mean amplitude (meters)	Local epoch (degrees)	Modified epoch (degrees)
Q1	0.89324	0.04357	123.89001	138.77570
O1	0.92954	0.22458	122.23470	132.76541
M1	0.96645	0.01595	120.56604	126.66749
P1	0.99726	0.11929	119.14767	121.55121
K1	1.00274	0.36038	118.89738	120.64383
Mu2	1.86455	0.01452	328.88654	349.29083
N2	1.89598	0.19190	7.35730	23.98944
Nu2	1.90084	0.03723	7.74664	23.79596
M2	1.93227	0.60506	10.26285	22.54004
L2	1.96857	0.01694	13.16840	21.09058
S2	2.00000	0.17402	51.63921	55.78918
K2	2.00548	0.04733	54.99069	58.48359
M4	3.86455	0.00581	238.81351	263.36780
Mk3	2.93501	0.01194	48.97073	62.99432

Table R2. Harmonic analysis results for velocity, Station MOTH, September 18 through October 23, 1995, Suisun Bay, California

[cm/s, centimeters per second; deg.T, degrees true; deg, degrees; E, equilibrium argument]

Station: MOTH
Start time of the series (local): Year, 95; Month,10; Day, 24; Hour, 0: 5
Record length: 34 M2 Cycle: 3346 data points

Tidal Symbol	Major axis (cm/s)	Minor axis (cm/s)	Direction (deg. T)	Phase (deg)	E (deg)	Rotation
O1	13.40	1.16	49.7	1.8	52.6	Clockwise
K1	15.78	0.92	47.1	212.6	293.1	Clockwise
N2	7.19	0.16	43.7	332.3	78.4	Clockwise
M2	41.35	0.97	47.7	43.3	345.7	Clockwise
S2	11.44	0.10	45.8	200.6	2.7	Clockwise
M4	6.41	0.80	54.7	314.6	331.5	Clockwise

Rootmeansquare speed, (cm/s): 35.51
Standard deviation, U series (cm/s): 6.91
Standard deviation, V series (cm/s): 6.73
Tidal form number: 0.55
Spring tidal current maximum (cm/s): 81.96
Neap tidal current maximum (cm/s): 27.53
Principal current direction (deg. T): 47.64

APPENDIX S—STATION RYER

Station Name: **RYER**
(West end of channel between
Roe and Ryer Islands)

Position: Lat. 38°04'45"

Long. 122°02'11"

Depth: 6.2 m (MLLW)

<i>Manufacturer</i>	<i>Serial Number</i>	<i>Deployment Dates</i>
CT: Seabird	Seacat 415	7/7/95(188) - 8/18/95(230)

Serviced: 7/7/95(188), 8/18/95(230)

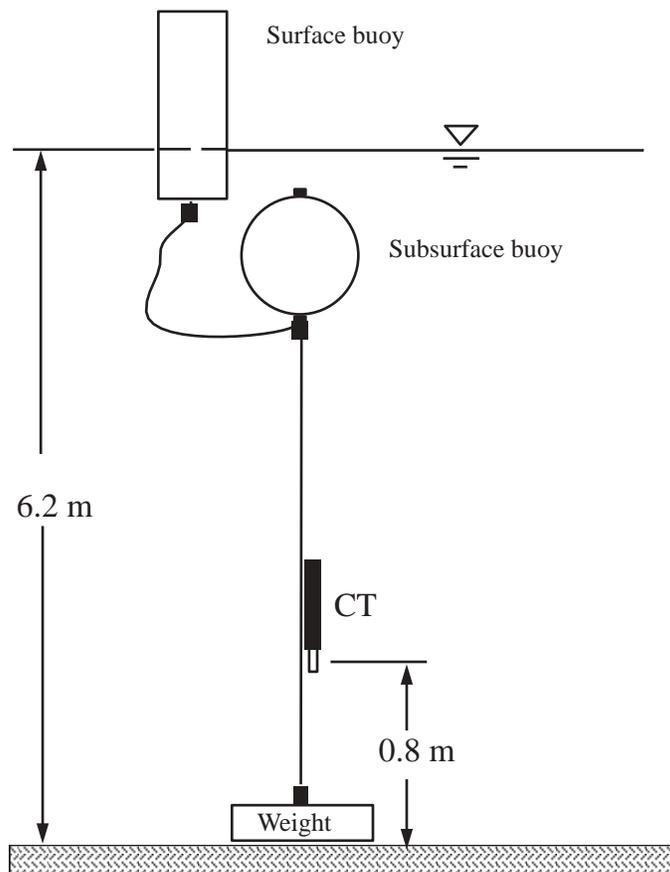


Figure S1. Configuration of instrument deployment, Station RYER, July 7 through August 18, 1995, Suisun Bay, California. m, meters; MLLW, mean lower low water; CT, conductivity-temperature.

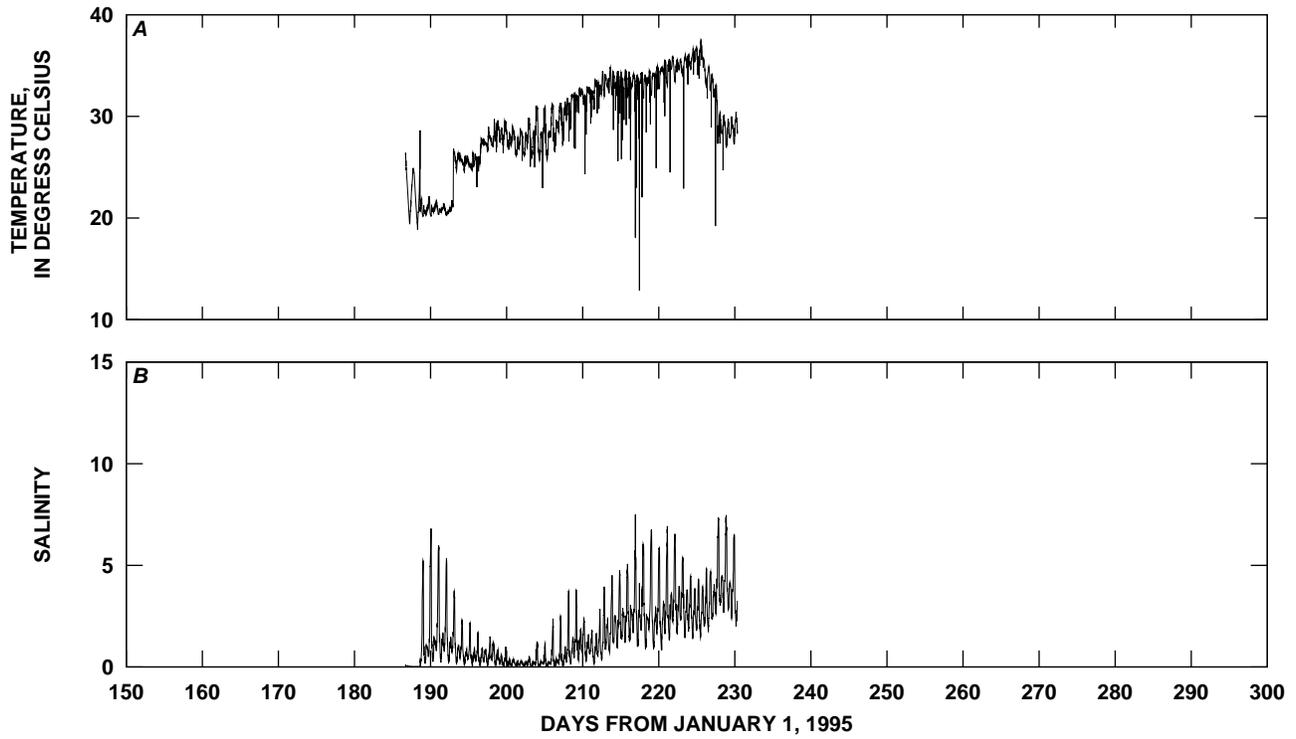


Figure S2. Time-series plots of *A*, temperature; and *B*, salinity, Station RYER, July 7 through August 18, 1995, Suisun Bay, California. Salinities in this report are presented without units because salinity is a conductivity ratio; therefore, it has no physical units (Millero, 1993). The temperature record for this site (*A*) is well out of the normal range for this location; a bad sensor is suspected.

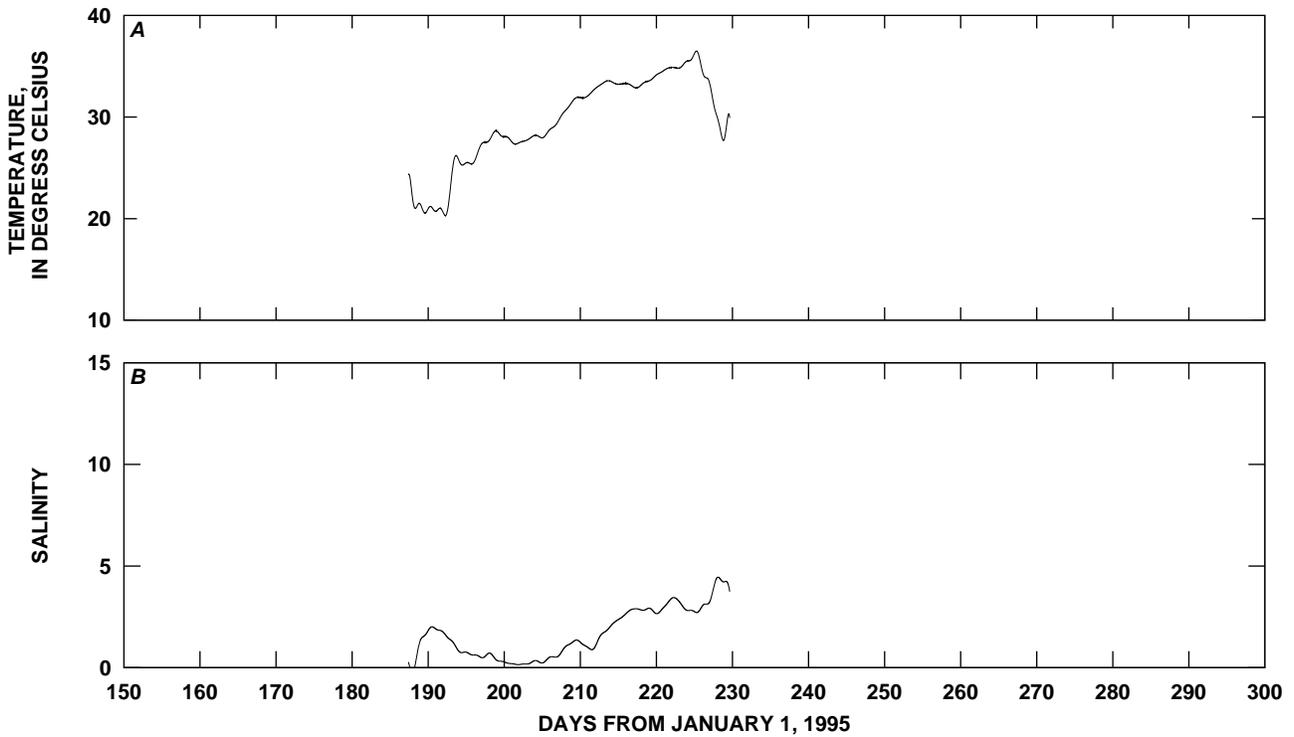


Figure S3. Time-series plots of low-pass-filtered *A*, temperature; and *B*, salinity, Station RYER, July 7 through August 18, 1995, Suisun Bay, California. Salinities in this report are presented without units because salinity is a conductivity ratio; therefore, it has no physical units (Millero, 1993). The temperature record for this site (*A*) is well out of the normal range for this location; a bad sensor is suspected.

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APPENDIX T—STATION RYERE

Station Name: **RYERE**
 (Near Bulls Head channel)
 Position: Lat. 38°04'28"
 Long. 122°01'16"
 Depth: 5.3 m (MLLW)

Manufacturer	Serial Number	Deployment Dates
CTDb: Ocean Sensors	OS200 303	6/27/95(178) - 7/7/95(188)
Ocean Sensors	OS200 302	7/7/95(188) - 8/18/95(230)
ADCP: RDI	BB 1270	6/1/95(152) - 8/18/95(230)

Serviced: 6/1/95(152), 6/27/95(178), 7/7/95(188), 8/8/95(220), 8/18/95(230)

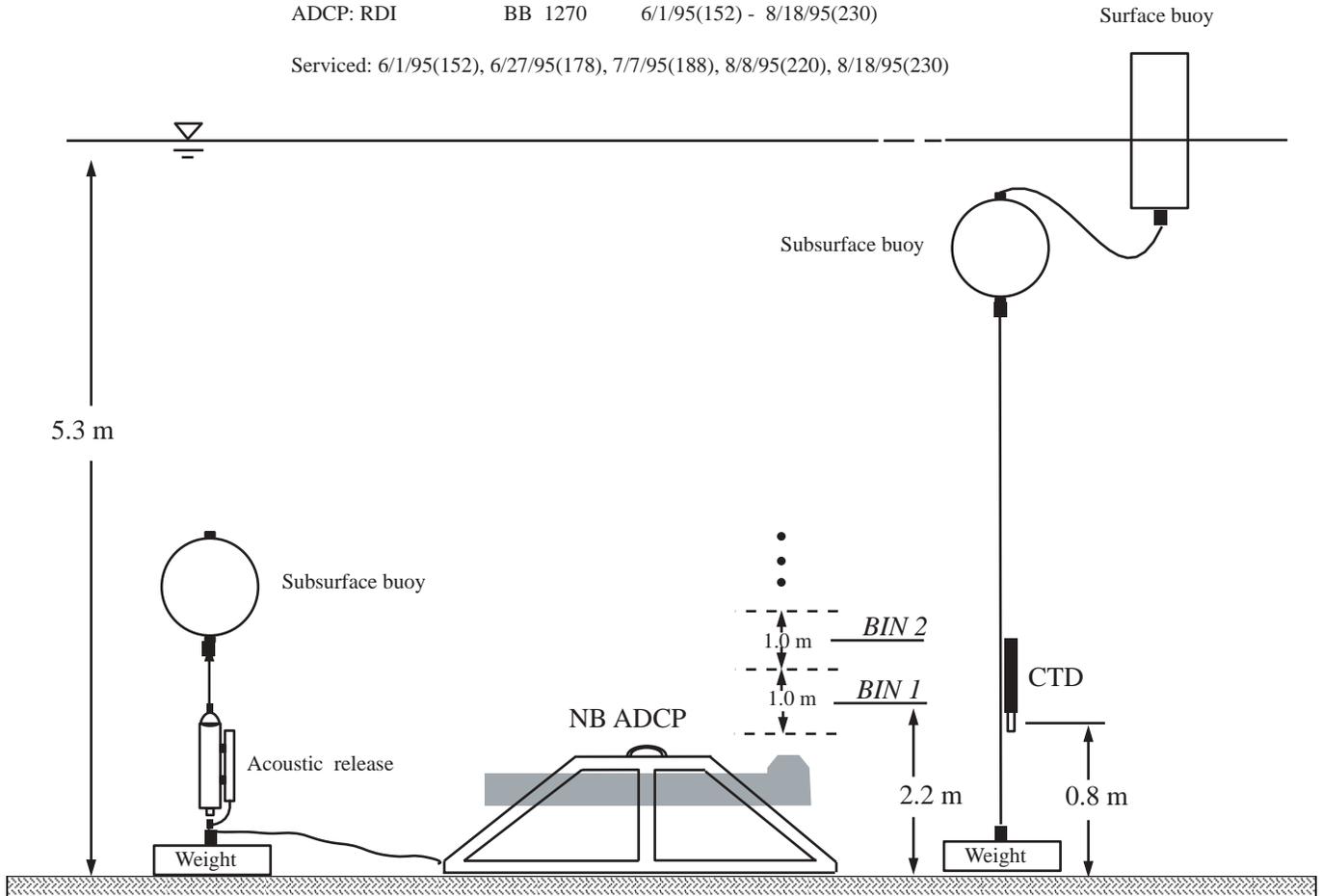


Figure T1. Configuration of instrument deployment, Station RYERE, June 1 through August 18, 1995, Suisun Bay, California. m, meters; MLLW, mean lower low water; ADCP, acoustic Doppler profiler; NB ADCP, narrow-band acoustic Doppler profiler; CTD, conductivity-temperature-depth; BIN, a discrete measurement location in the vertical.

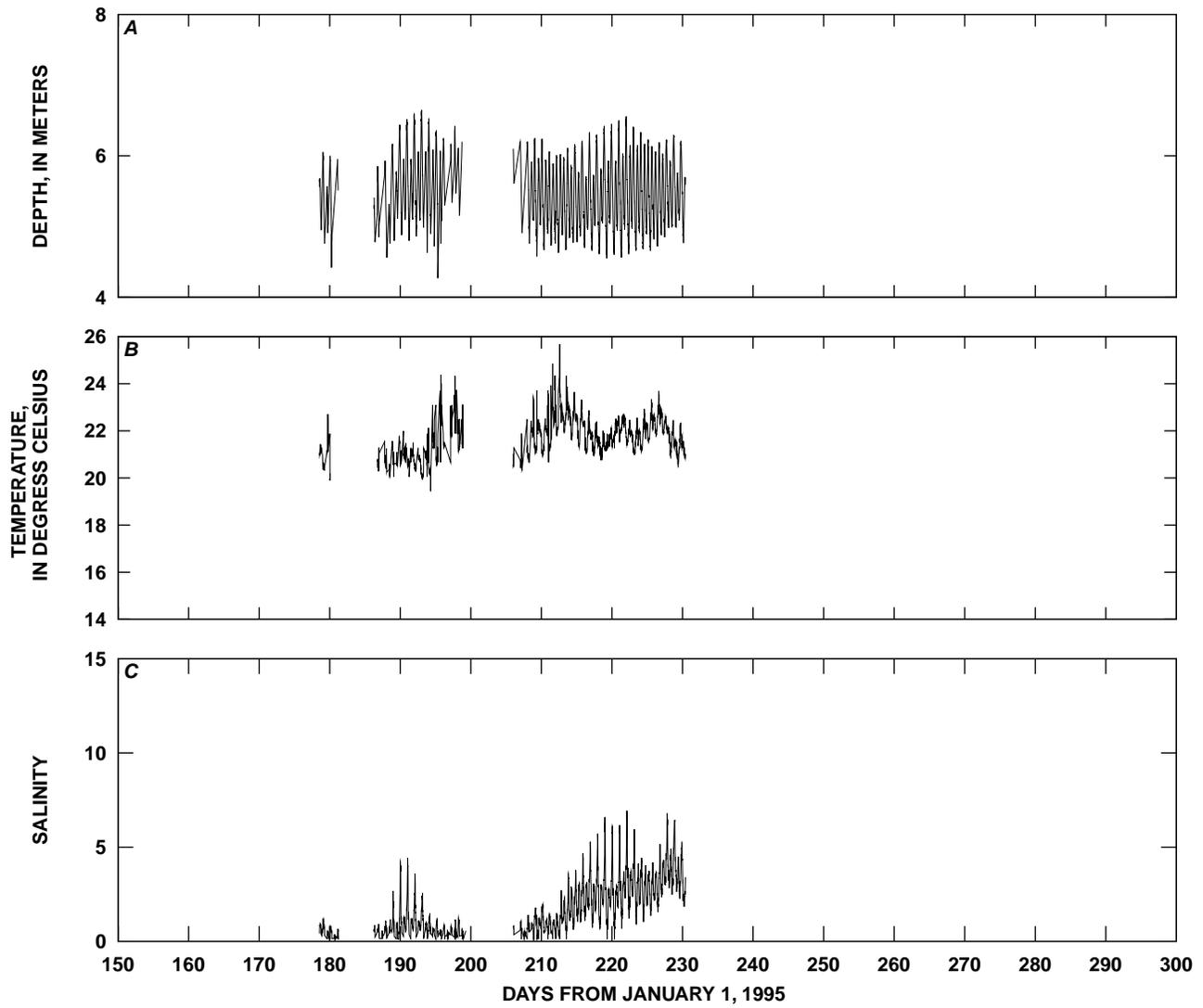


Figure T2. Time-series plots of *A*, depth; *B*, temperature; and *C*, salinity, Station RYERE, June 27 through August 18, 1995, Suisun Bay, California. Salinities in this report are presented without units because salinity is a conductivity ratio; therefore, it has no physical units (Millero, 1993).

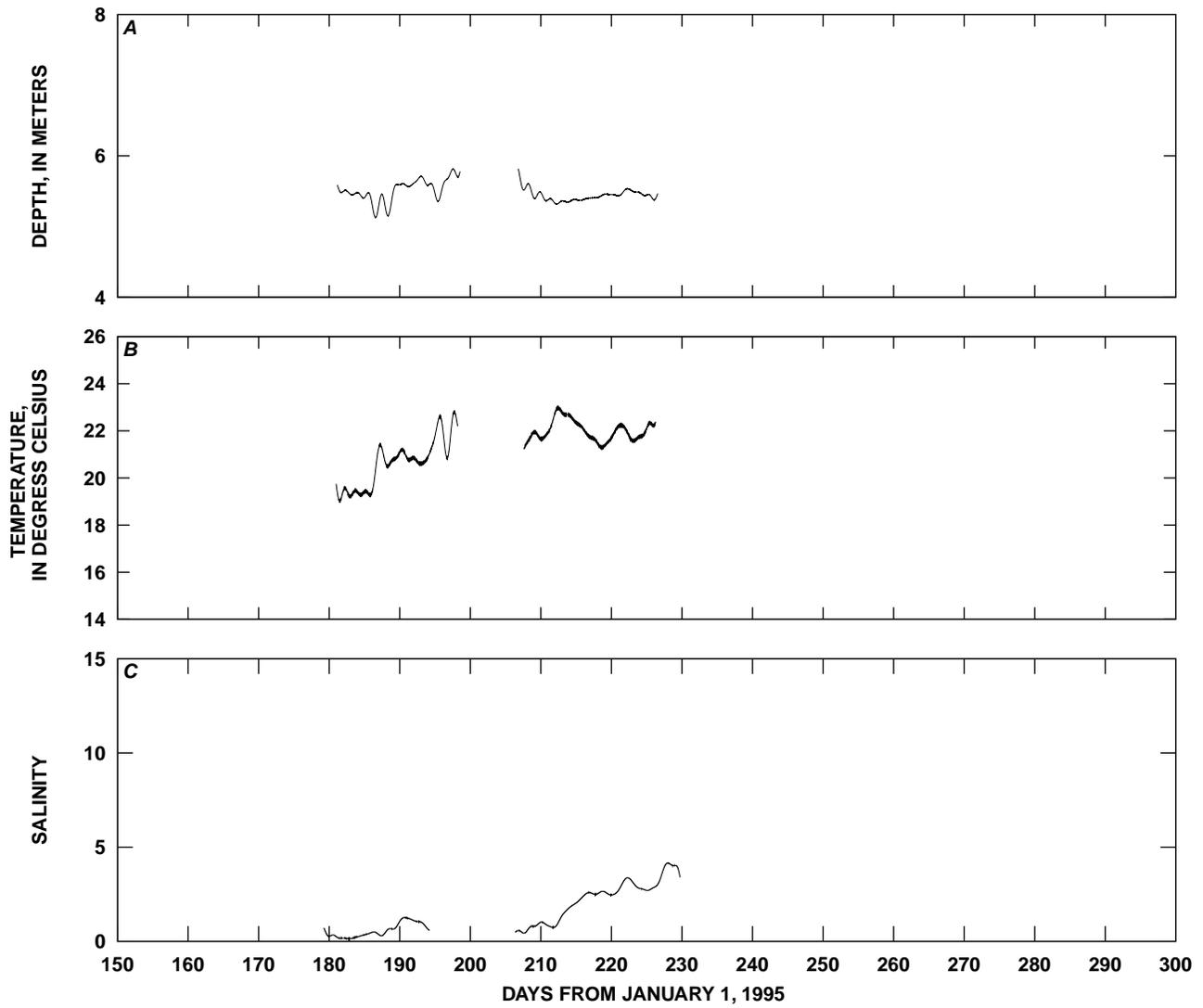


Figure T3. Time-series plots of low-pass-filtered *A*, depth; *B*, temperature; and *C*, salinity, Station RYERE, June 27 through August 18, 1995, Suisun Bay, California. Salinities in this report are presented without units because salinity is a conductivity ratio; therefore, it has no physical units (Millero, 1993).

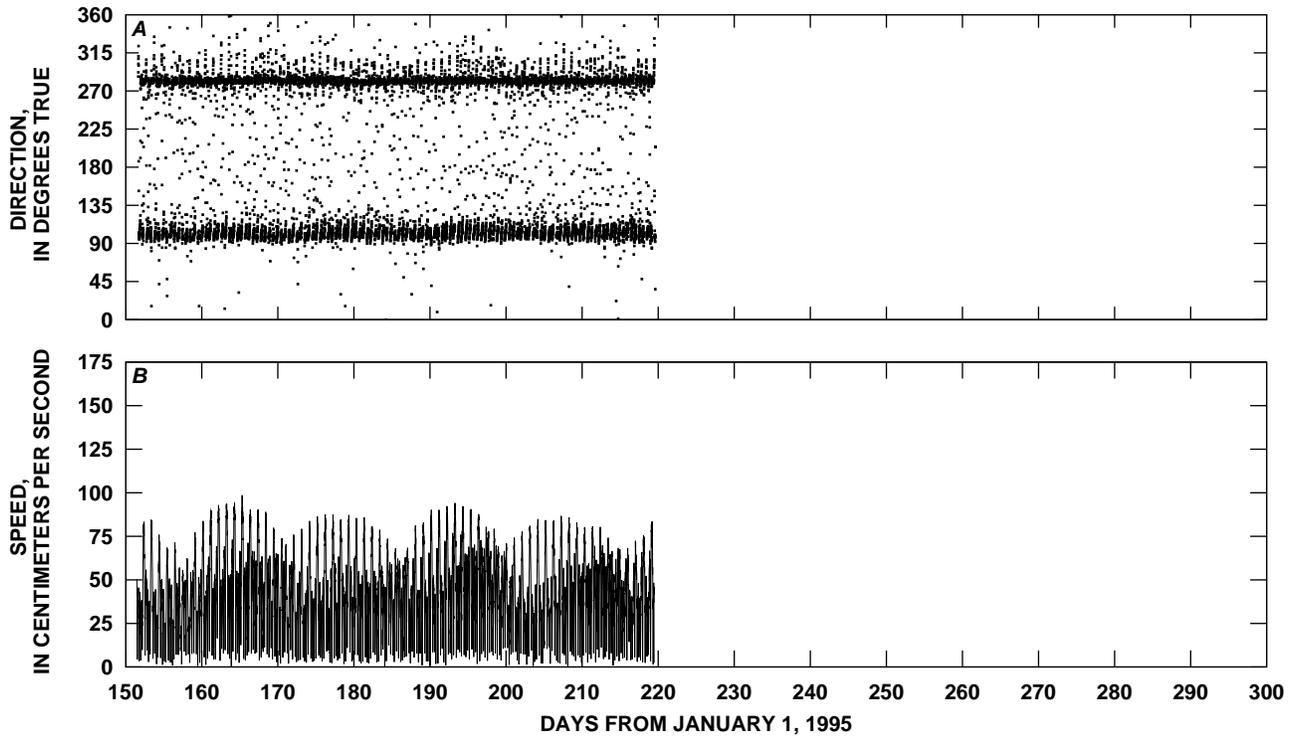


Figure T4. Time-series plots of tidal currents, Station RYERE, June 1 through August 18, 1995, BIN 1 near-bottom BIN, Suisun Bay, California. BIN refers to a discrete measurement location in the vertical.

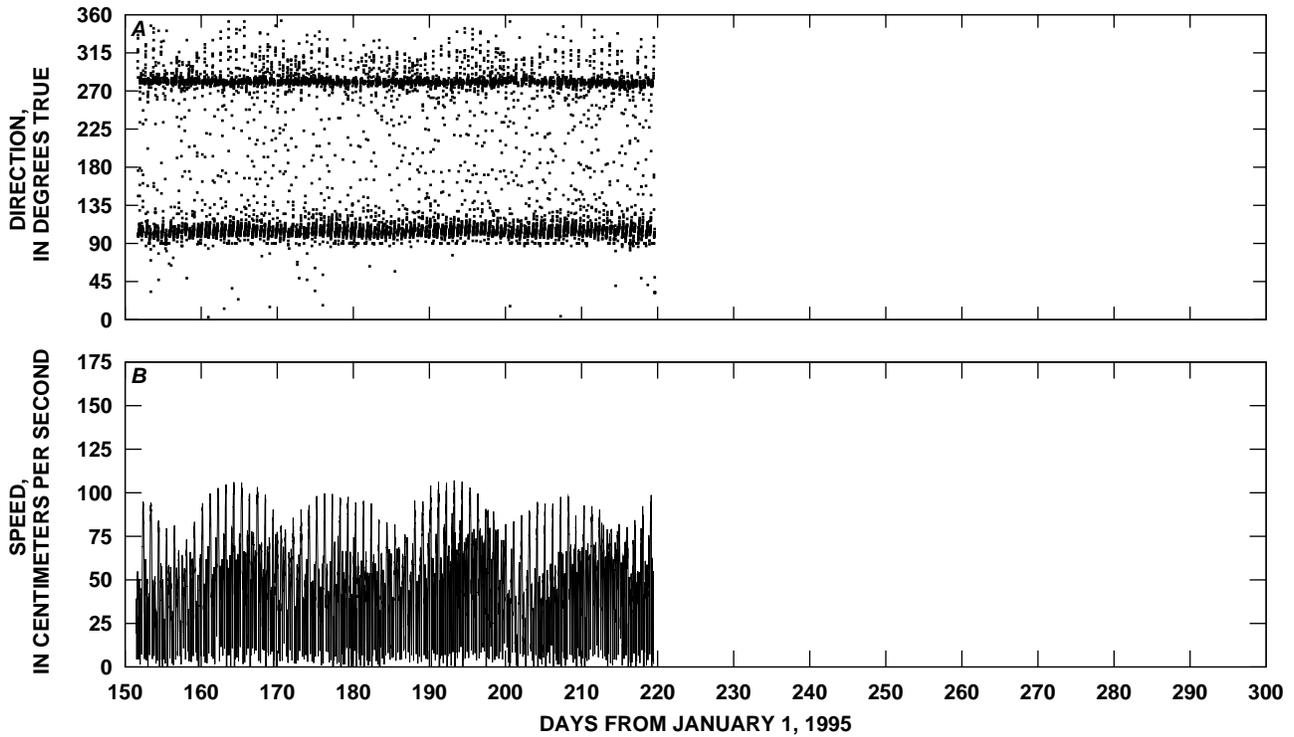


Figure T5. Time-series plots of tidal currents, Station RYERE, June 1 through August 18, 1995, BIN 4 near-surface BIN, Suisun Bay, California. BIN refers to a discrete measurement location in the vertical.

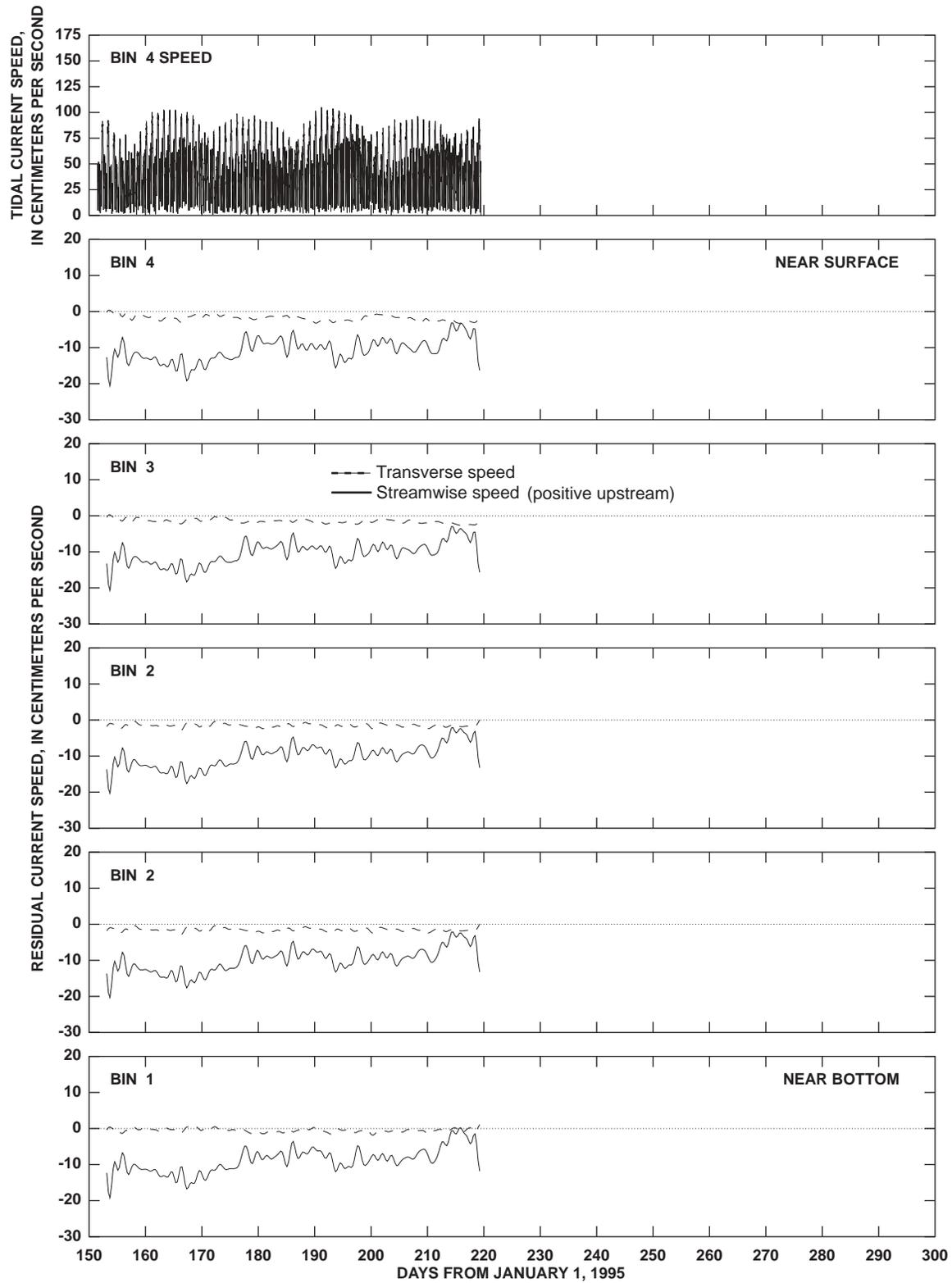


Figure T6. Longitudinal and transverse residual currents, Station RYERE, June 1 through August 18, 1995, Suisun Bay, California. Tidal current speed at BIN 4 near-surface BIN is shown in the top panel for reference. BIN refers to a discrete measurement location in the vertical. Principal direction is 102.4 degrees true.

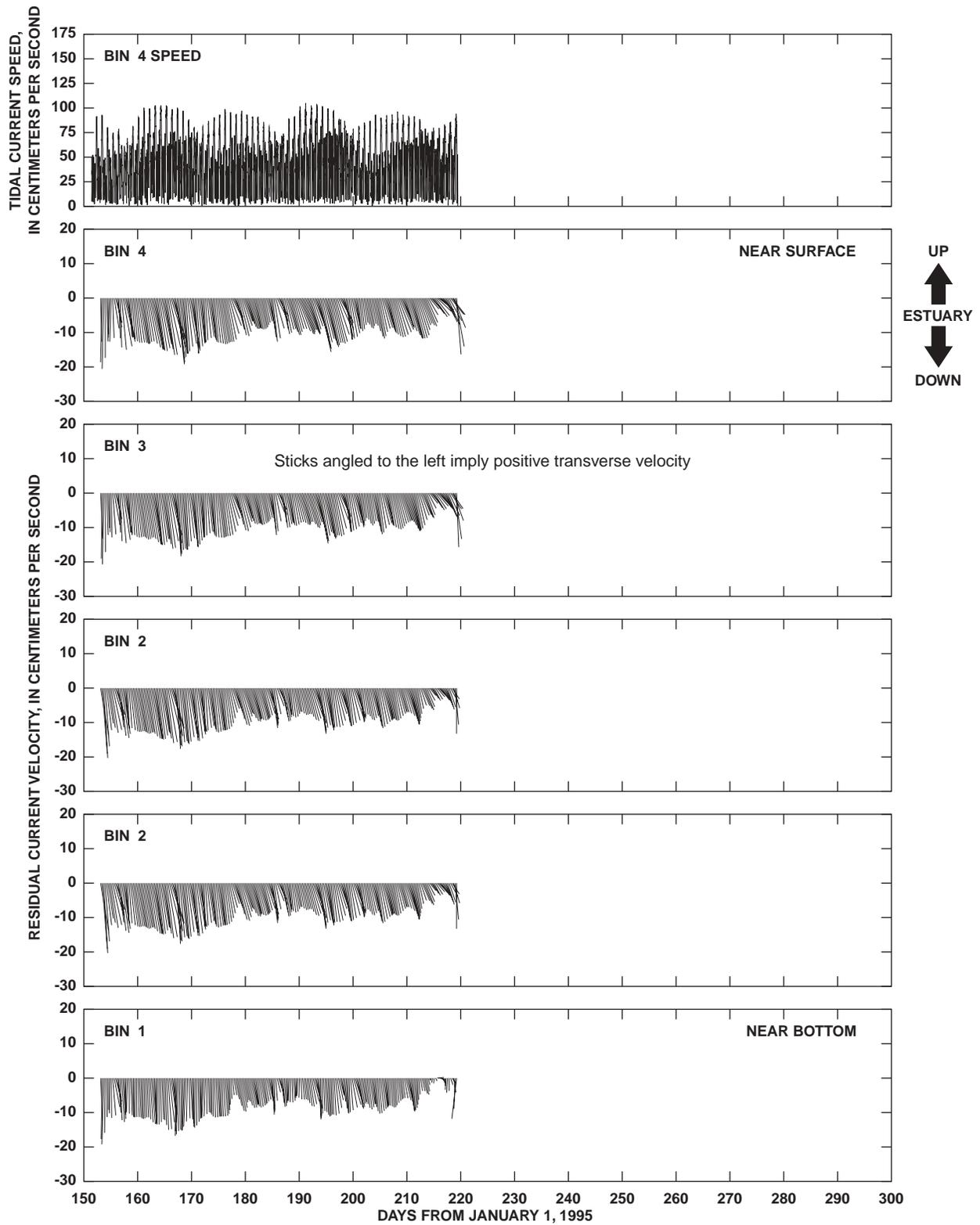


Figure T7. Residual currents, Station RYERE, June 1 through August 18, 1995, Suisun Bay, California. Tidal current speed at BIN 4 near-surface BIN is shown in the top panel for reference. BIN refers to a discrete measurement location in the vertical. Principal direction is 102.4 degrees true.

Table T1. Harmonic analysis results from depth measurements, Station RYERE, June 27 through August 18, 1995, Suisun Bay, California

Station: RYERE

Time series mean: 5.43115

Standard deviation: 0.13792

Harmonic constants: After tidal inference

Tidal symbol	Cycles (per day)	Mean amplitude (meters)	Local epoch (degrees)	Modified epoch (degrees)
Q1	0.89324	0.03578	243.79070	258.62250
O1	0.92954	0.18443	309.09967	319.57648
M1	0.96645	0.01309	14.93530	20.98285
P1	0.99726	0.07517	70.89563	73.24527
K1	1.00274	0.22709	80.77097	82.46353
Mu2	1.86455	0.01128	231.97620	252.27277
N2	1.89598	0.10124	30.17429	46.69867
Nu2	1.90084	0.01964	41.25351	57.19507
M2	1.93227	0.46985	112.85507	125.02448
L2	1.96857	0.01316	195.53586	203.35025
S2	2.00000	0.08763	353.73401	357.77625
K2	2.00548	0.02384	344.08521	347.47034
M4	3.86455	0.05619	161.91113	186.24988
Mk3	2.93501	0.06834	131.34726	145.20920

Table T2. Harmonic analysis results for velocity, Station RYERE, June 1 through August 18, 1995, BIN 1 near-bottom BIN, Suisun Bay, California

[BIN refers to a discrete measurement location in the vertical. cm/s, centimeters per second; deg.T, degrees true; deg, degrees; E, equilibrium argument]

BIN number: 1
 Station: roery
 Start time of the series (local time): Year, 1995; Month, 5; Day, 31; Hour, 11:19
 Time meridian: 120 W
 Station position: 38 511N 1215932W
 Record length: 130 M2 cycles: 9688 data points

Tidal Symbol	Major axis (CM/S)	Minor axis (CM/S)	Direction (deg. T)	Phase (deg)	E (deg)	Rotation
O1	10.93	0.28	102.5	105.5	312.7	Clockwise
K1	24.50	0.78	103.2	111.3	333.9	Clockwise
N2	11.99	0.36	103.5	1.4	91.6	Clockwise
M2	56.02	1.92	102.0	29.3	289.3	Clockwise
S2	8.98	0.71	102.5	51.7	339.9	Clockwise
M4	2.37	0.81	112.3	58.4	218.7	Clockwise

Rootmeansquare speed (cm/s): 47.05
 Standard deviation, U series (cm/s): 10.50
 Standard deviation, V series (cm/s): 5.03
 Tidal form number: 0.55
 Spring tidal current maximum (cm/s): 100.43
 Neap tidal current maximum (cm/s): 33.47
 Pricipal current direction (deg. T): 102.41

Table T3. Harmonic analysis results for velocity, Station RYERE, June 1 through August 18, 1995, BIN 4 near-surface BIN, Suisun Bay, California

[BIN refers to a discrete measurement location in the vertical. cm/s, centimeters per second; deg.T, degrees true; deg, degrees; E, equilibrium argument]

BIN number: 4
 Station: roery
 Start time of the series (local time): Year, 1995; Month, 5; Day, 31; Hour, 11:19
 Time meridian: 120 W
 Station position: 38 511N 1215932W
 Record length: 130 M2 cycles: 9140 data points

Tidal Symbol	Major axis (CM/S)	Minor axis (CM/S)	Direction (deg. T)	Phase (deg)	E (deg)	Rotation
O1	12.62	0.47	101.8	103.3	312.7	Clockwise
K1	28.02	1.41	103.5	107.3	333.9	Clockwise
N2	14.00	0.46	104.2	1.4	91.6	Clockwise
M2	64.58	3.19	102.7	27.4	289.3	Clockwise
S2	9.98	0.69	104.8	49.7	339.9	Clockwise
M4	2.93	0.88	126.4	56.7	218.7	Clockwise

Rootmeansquare speed (cm/s): 53.10
 Standard deviation, U series (cm/s): 11.91
 Standard deviation, V series (cm/s): 5.65
 Tidal form number: 0.54
 Spring tidal current maximum (cm/s): 115.20
 Neap tidal current maximum (cm/s): 39.19
 Pricipal current direction (deg. T): 102.94

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APPENDIX U—STATION SPOON

Station Name: **SPOON**
(Spoonbill Slough)

Position: Lat. 38°04'15"

Long. 121°54'42"

Depth: 2.4 m (MLLW)

Manufacturer	Serial Number	Deployment Dates
CTD: Ocean Sensors	OS200 304	9/18/95(261) - 10/24/95(297)
V: InterOcean	S405451272	9/18/95(261) - 10/24/95(297)
OBS: D & A	OBS3 613	9/18/95(261) - 10/24/95(297)

Serviced: 9/18/95(261), 10/24/95(297)

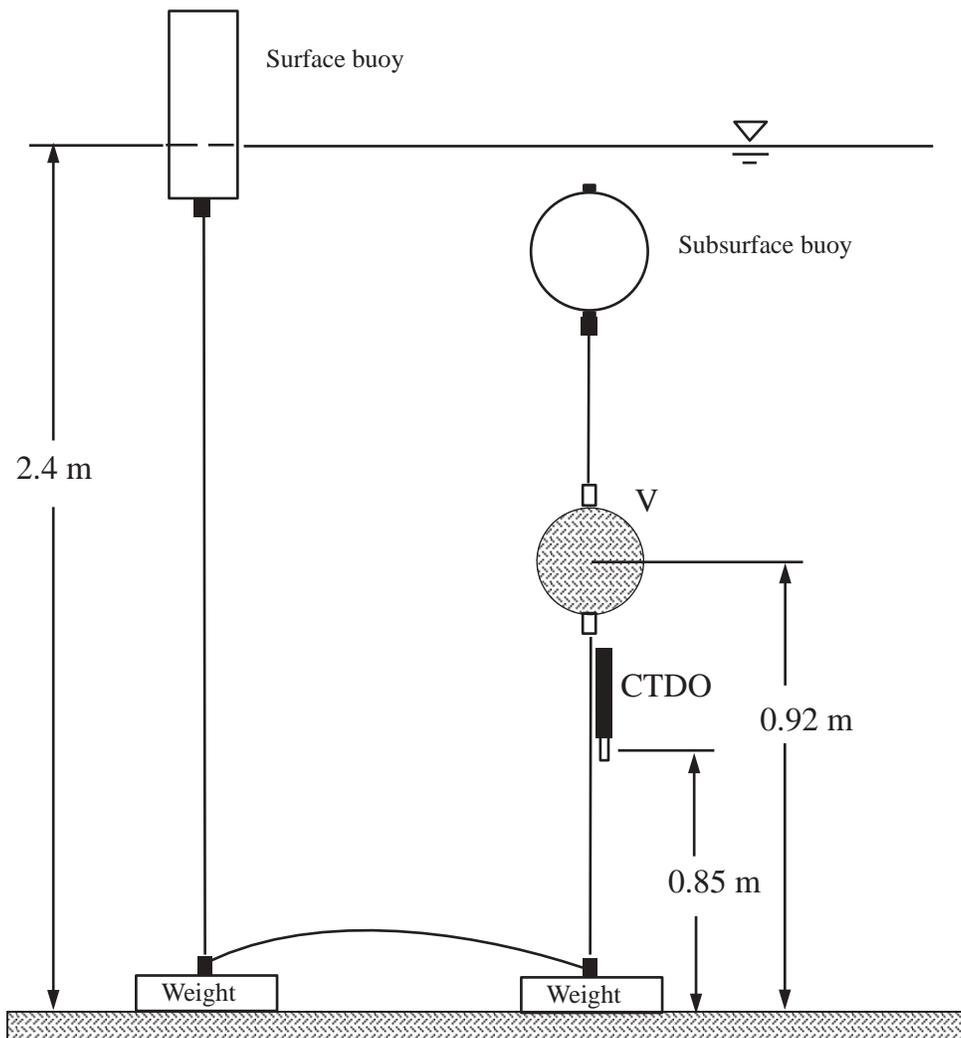


Figure U1. Configuration of instrument deployment, Station SPOON, September 18 through October 24, 1995, Suisun Bay, California. m, meters; MLLW, mean lower low water; OBS, optical backscatterance sensor; CTD, conductivity-temperature-depth; CTDO, conductivity-temperature-depth-optical (backscatterance sensor), V, velocity.

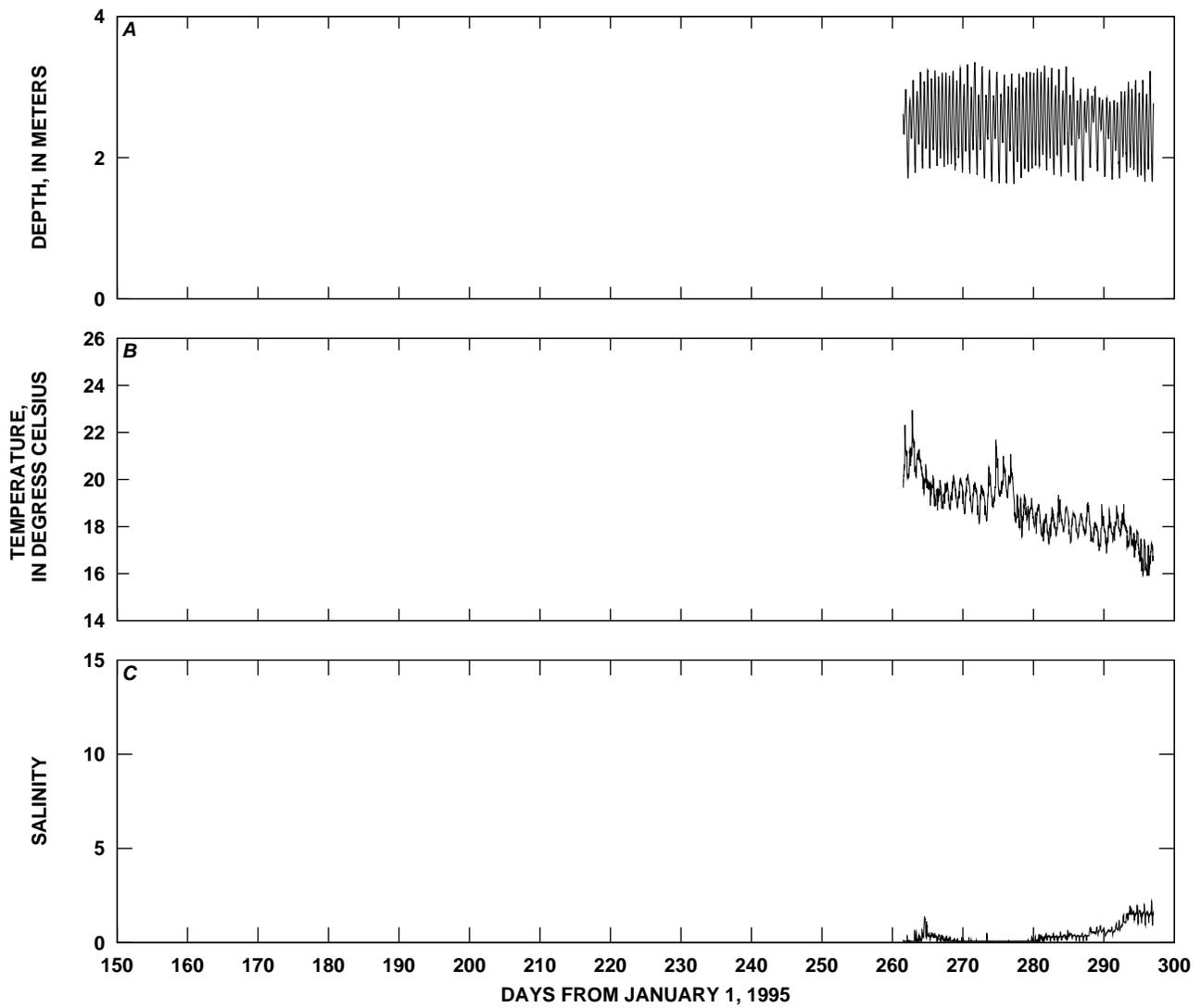


Figure U2. Time-series plots of *A*, depth; *B*, temperature; and *C*, salinity, Station SPOON, September 18 through October 24, 1995, Suisun Bay, California. Salinities in this report are presented without units because salinity is a conductivity ratio; therefore, it has no physical units (Millero, 1993).

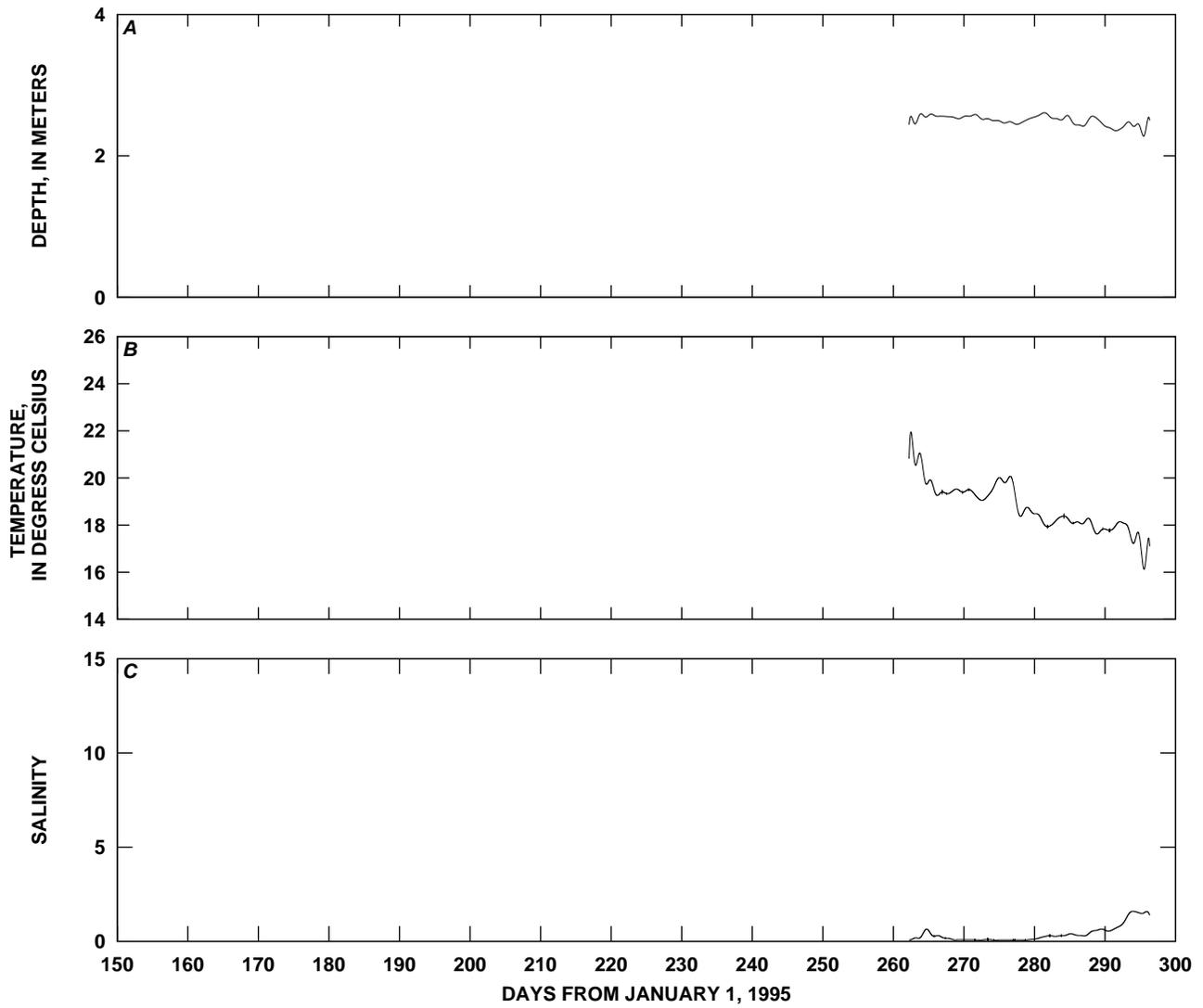


Figure U3. Time-series plots of low-pass-filtered *A*, depth; *B*, temperature; and *C*, salinity, Station SPOON, September 18 through October 24, 1995, Suisun Bay, California. Salinities in this report are presented without units because salinity is a conductivity ratio; therefore, it has no physical units (Millero, 1993).

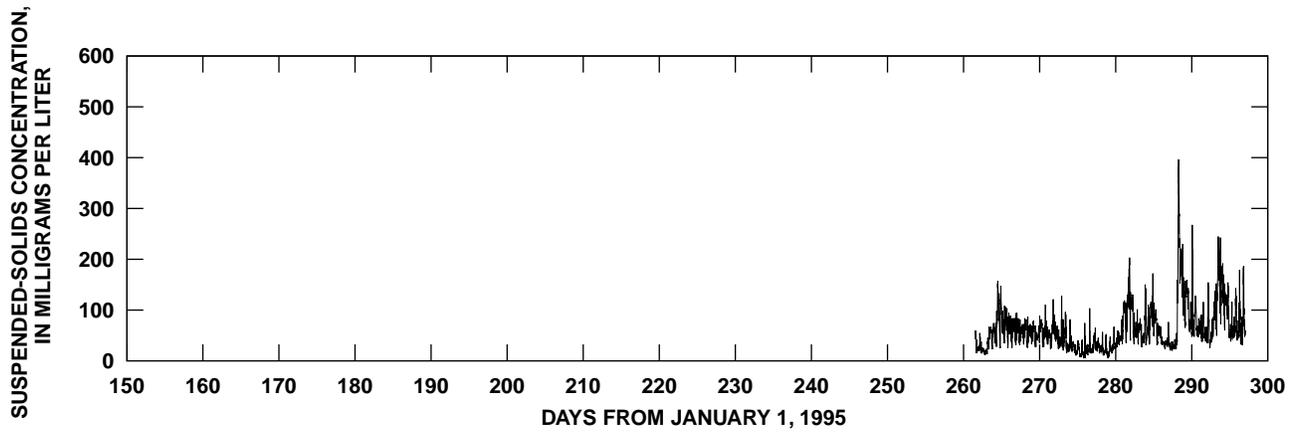


Figure U4. Time-series plot of suspended-solids concentration at Station SPOON, September 18 through October 24, 1995, Suisun Bay, California.

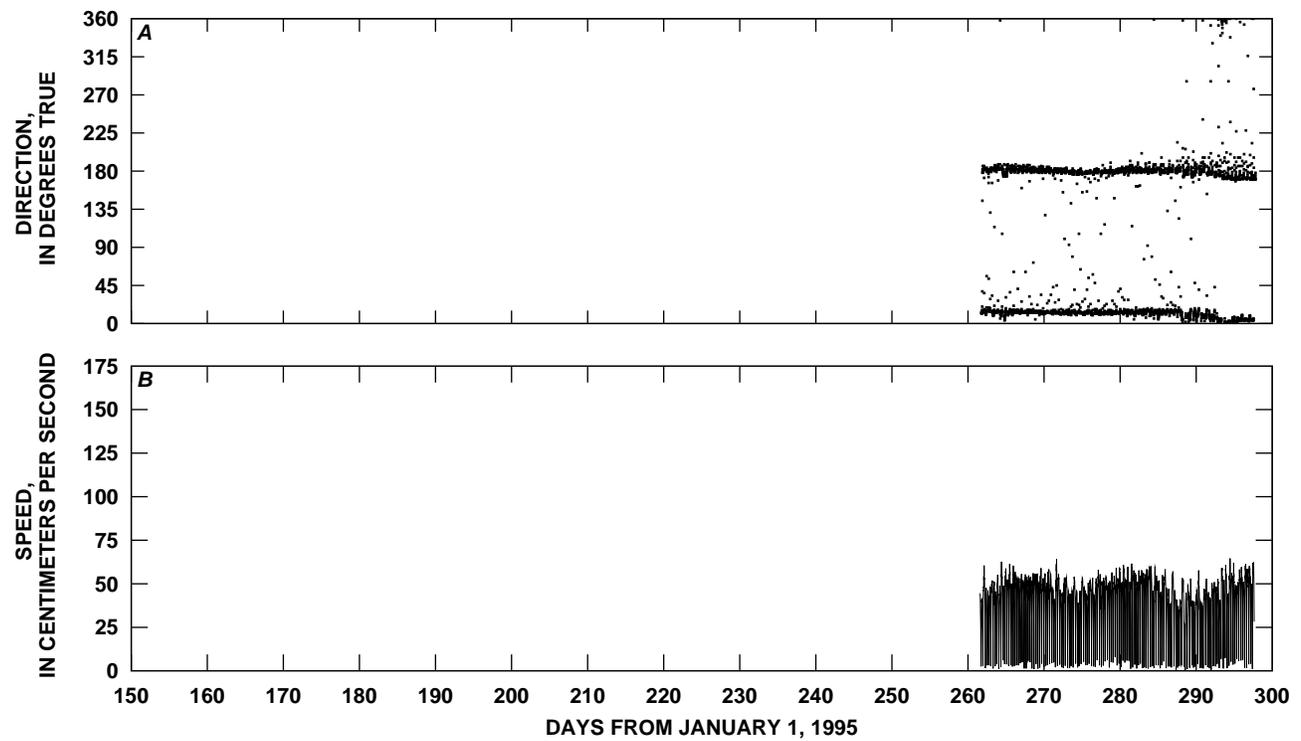


Figure U5. Time series plots of tidal currents, Station SPOON, September 18 through October 24, 1995, Suisun Bay, California.

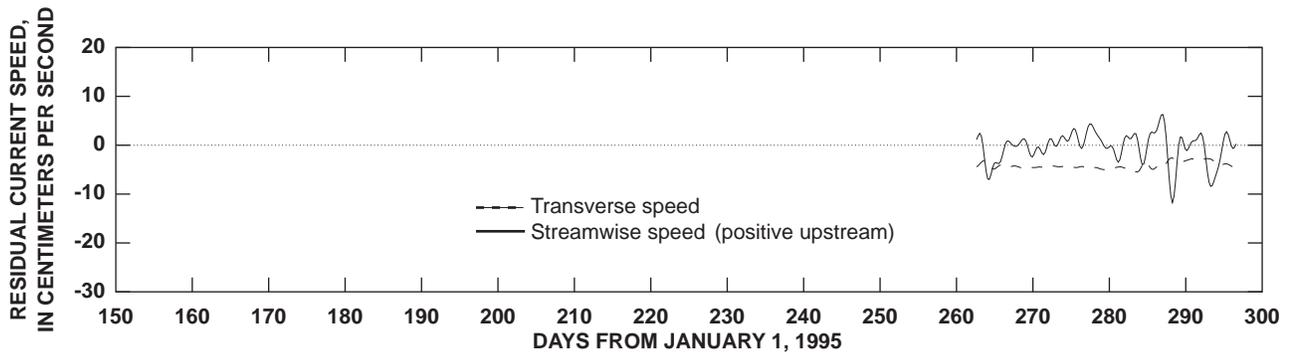


Figure U6. Longitudinal and transverse residual currents, Station SPOON, September 18 through October 24, 1995, Suisun Bay, California. Principal direction is 5.3 degrees true.

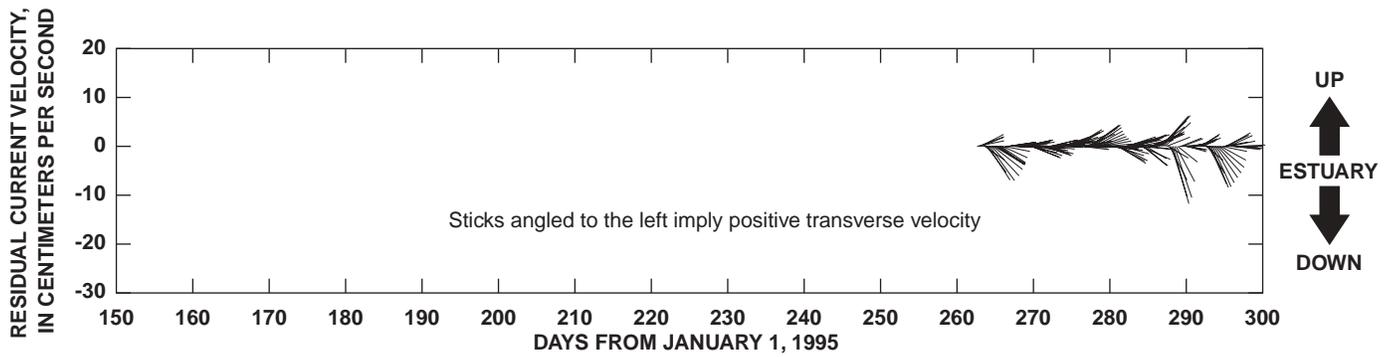


Figure U7. Residual currents, Station SPOON, September 18 through October 24, 1995, Suisun Bay, California. Principal direction is 5.3 degrees true.

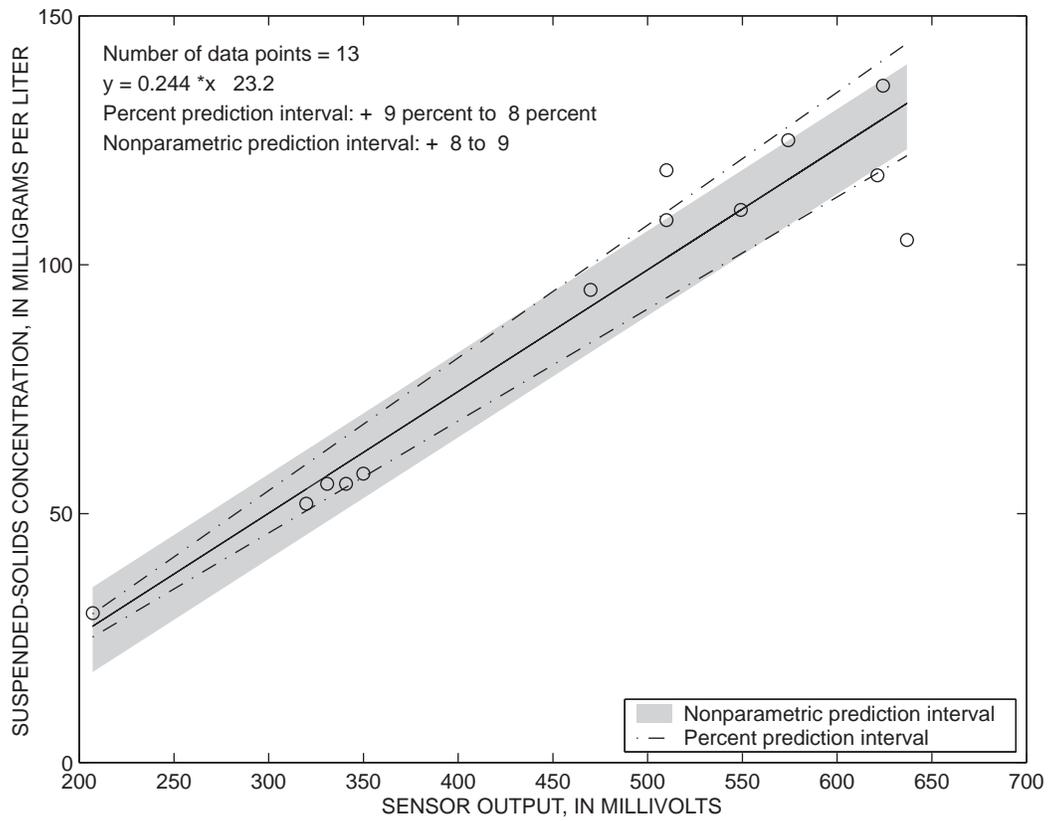


Figure U8. Calibration curve for near-bottom optical backscatterance sensor, Station SPOON, September 18 through October 24, 1995, Suisun Bay, California.

Table U1. Harmonic analysis results from depth measurements, Station SPOON, September 18 through October 24, 1995, Suisun Bay, California

Station: SPOON
Time series mean: 2.49932
Standard deviation: 0.08763
Harmonic constants: After tidal inference

Tidal symbol	Cycles (per day)	Mean amplitude (meters)	Local epoch (degrees)	Modified epoch (degrees)
Q1	0.89324	0.03976	140.57109	155.29346
O1	0.92954	0.20495	138.21729	148.58466
M1	0.96645	0.01455	135.84450	141.78262
P1	0.99726	0.10492	133.82762	136.06783
K1	1.00274	0.31697	133.47171	135.05484
Mu2	1.86455	0.01261	353.04999	13.12766
N2	1.89598	0.17180	28.15253	44.45801
Nu2	1.90084	0.03333	28.88666	44.60931
M2	1.93227	0.52531	33.63116	45.58167
L2	1.96857	0.01471	39.10980	46.70532
S2	2.00000	0.13802	74.21234	78.03566
K2	2.00548	0.03754	77.49942	80.66566
M4	3.86455	0.02501	335.70963	359.61060
Mk3	2.93501	0.01805	75.28635	88.81995

Table U2. Harmonic analysis results for velocity measurements, Station SPOON, September 18 through October 24, 1995, Suisun Bay, California

[cm/s, centimeters per second; deg.T, degrees true; deg, degrees; E, equilibrium argument]

Station: SPOON
Start time of the series (local): Year, 95; Month,10; Day, 24; Hour, 0: 8
Record length: 35 M2 Cycle: 3461 dat points

Tidal Symbol	Major axis (cm/s)	Minor axis (cm/s)	Direction (deg. T)	Phase (deg)	E (deg)	Rotation <input type="checkbox"/>
O1	9.19	0.41	8.3	240.9	53.3	<input type="checkbox"/> Clockwise <input type="checkbox"/>
K1	11.34	0.23	5.0	80.4	293.9	<input type="checkbox"/> Clockwise <input type="checkbox"/>
N2	5.16	0.73	8.9	257.7	79.8	<input type="checkbox"/> Counterclockwise <input type="checkbox"/>
M2	51.37	0.15	5.0	344.1	347.2	<input type="checkbox"/> Clockwise <input type="checkbox"/>
S2	11.41	0.95	4.6	139.9	4.2	<input type="checkbox"/> Clockwise <input type="checkbox"/>
M4	1.77	0.41	135.3	310.0	334.4	<input type="checkbox"/> Counterclockwise <input type="checkbox"/>

Rootmeansquare speed, (cm/s): 41.25
Standard deviation, U series (cm/s): 3.03
Standard deviation, V series (cm/s): 10.92
Tidal form number: 0.33
Spring tidal current maximum (cm/s): 83.32
Neap tidal current maximum (cm/s): 37.81
Principal current direction (deg. T): 5.31

APPENDIX V—STATION WICK

Station Name: **WICK**
(Wickland Oil Pier)
Position: Lat. 38°03'30"
Long. 122°14'24"
Depth: 15.3 m (MLLW)

<i>Manufacturer</i>	<i>Serial Number</i>	<i>Deployment Dates</i>
CTt: YSI	Model 33 NA	4/30/95(120) - 10/31/95(304)
CTb: YSI	Model 33 NA	4/30/95(120) - 10/31/95(304)

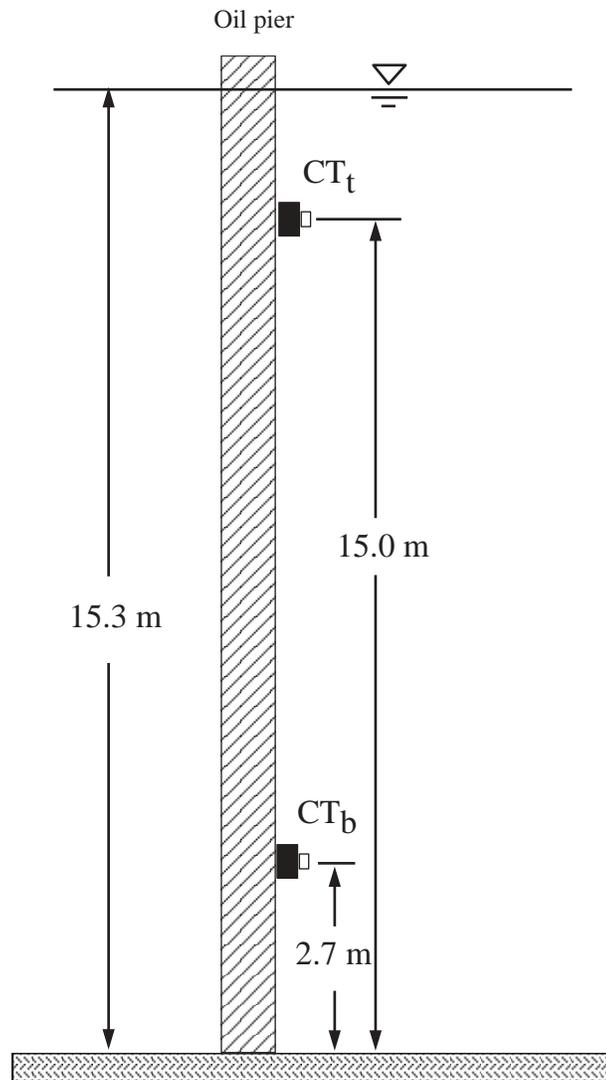


Figure V1. Configuration of instrument deployment, Station WICK, April 30 through October 31, 1995, Suisun Bay, California. m, meters; MLLW, mean lower low water; CT, conductivity-temperature.

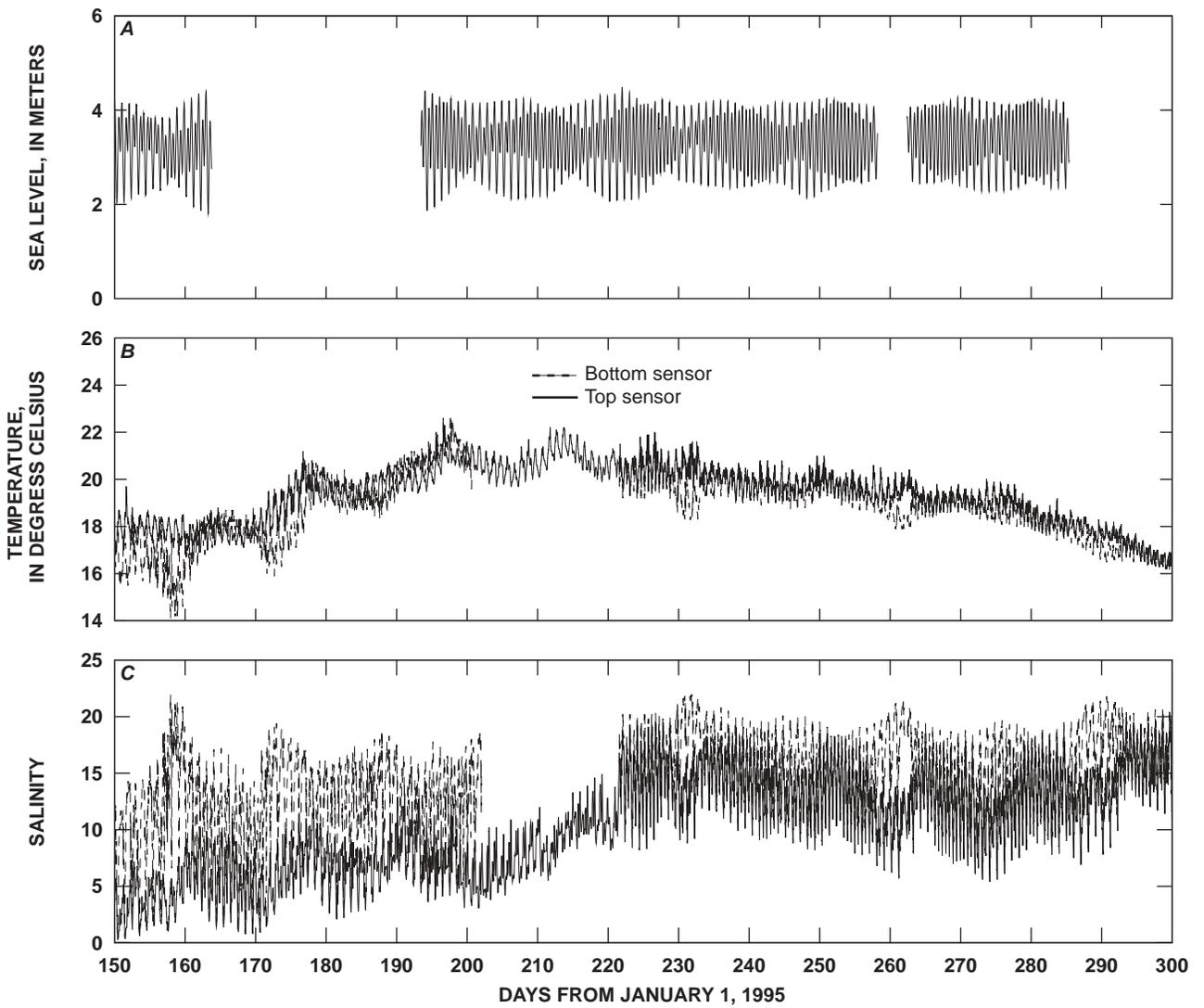


Figure V2. Time-series plots of *A*, sea level; *B*, temperature; and *C*, salinity, Station WICK, April 30 through October 31, 1995, Suisun Bay, California. Salinities in this report are presented without units because salinity is a conductivity ratio; therefore, it has no physical units (Millero, 1993).

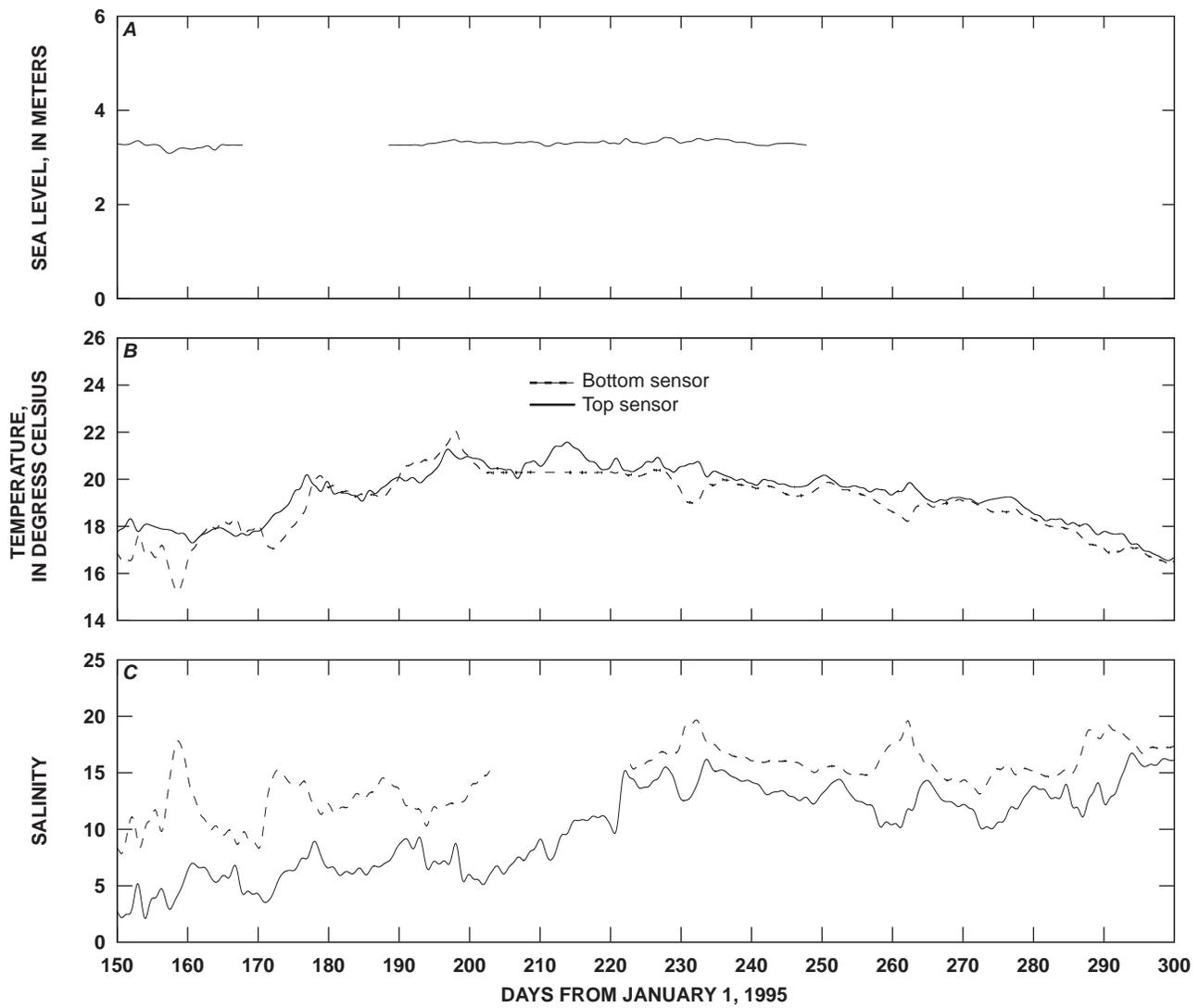


Figure V3. Time-series plots of low-pass-filtered *A*, sea level; *B*, temperature; and *C*, salinity, Station WICK, April 30 through October 31, 1995, Suisun Bay, California. Salinities in this report are presented without units because salinity is a conductivity ratio; therefore, it has no physical units (Millero, 1993).

Table V1. Harmonic analysis results from sea-level measurements, Station WICK, April 30 through October 31, 1995, Suisun Bay, California

Station: WICK

Time series mean: 3.30924

Standard deviation: 0.07277

Harmonic constants: No tidal inference

Tidal symbol	Cycles (per day)	Mean amplitude (meters)	Local epoch (degrees)	Modified epoch (degrees)
Q1	0.89324	0.03179	133.46725	148.51794
O1	0.92954	0.22389	109.03653	119.73224
M1	0.96645	0.00828	262.98404	269.25049
P1	0.99726	0.12366	127.85188	130.42041
K1	1.00274	0.36371	110.35765	112.26910
Mu2	1.86455	0.01137	173.87511	194.60944
N2	1.89598	0.13505	356.55664	13.51880
Nu2	1.90084	0.02876	268.32159	284.70093
M2	1.93227	0.64766	352.35675	4.96393
L2	1.96857	0.03247	167.85997	176.11214
S2	2.00000	0.14450	17.39562	21.87560
K2	2.00548	0.04491	171.94656	175.76947
M4	3.86455	0.01875	151.20685	176.42114
Mk3	2.93501	0.00640	108.94424	123.46286