		1	2	3	4	5	6	7	8	9	10	11	12
Location	Analyte	14/07/00	28/07/00	17/08/00	04/09/00	20/09/00	06/10/00	24/10/00	10/11/00	27/11/00	18/12/00	10/01/01	16/01/01
top	TSS	8	10	0	0	2	11	<2	16	9	3	23	6
middle	TSS	27	0	2	5	8	2	2	32	42	80	140	7
bottom	TSS	67	1200	3	600	200	110	25	100	81	68	61	10
top	BOD	0	3	4	4	6	6	7	40	20	15	25	<2
middle	BOD	0	2	5	5	6	7	12	35	20	85	130	3
bottom	BOD	21	63	6	330	340	310	14	45	30	75	200	8
top	DO	nd	10.1	8.5	4.7	4.0	3.9	2.6	1.3	1.9	3.1	0.6	5.3
middle	DO	nd	9.9	8.2	4.8	2.3	2.6	2.0	1.0	0.6	0.8	0.7	2.5
bottom	DO	nd	7.3	8.4	2.7	2.6	1.9	1.3	1.0	0.9	1	0.8	2.9
top	COD	40	9	17	15	10	49	15	44	30	34	56	<2
middle	COD	50	7	12	12	11	49	15	53	54	170	160	14
bottom	COD	40	160	15	890	860	360	35	76	95	120	220	20
top	pH	nd	nd	7.5	7.2	7.3	7.1	7.1	7.1	6.5	6.5	6.6	7.2
middle	pH	nd	nd	7.2	7.1	7.2	6.9	7.1	6.9	6.7	6.6	6.1	7.2
bottom	pH	nd	nd	7.2	6.4	5.8	5.9	7.0	6.9	6.6	6.4	6	6.8
top	TP	0.14	0.26	0.30	0.21	0.19	1.40	0.53	2.3	0.78	0.4	0.43	0.22
middle	TP	0.15	0.23	0.26	0.17	0.17	1.50	0.46	3.0	1.1	0.87	1.4	0.33
bottom	TP	0.37	1.90	0.29	2.80	1.70	6.40	0.61	2.9	1.3	0.79	1.8	0.15
top	PO4	0.06	0.00	0.14	0.00	0.00	0.89	0.30	1.9	0.29	0.17	0.18	0.19
middle	PO4	0.01	0.00	0.14	0.00	0.00	1.00	0.27	2.5	0.36	0.17	0.89	0.14
bottom	PO4	0.04	0.00	0.14	0.30	0.32	4.50	0.26	2.4	0.38	0.15	1.5	<0.1
top	TN	1.4	1.7	2.7	1.6	1.3	4.9	3.2	7.9	3.20	0.80	2.80	5.70
middle	TN	1.0	1.0	1.9	1.7	1.7	7.0	2.1	4.8	3.10	2.80	8.20	6.50
bottom	TN	1.2	1.5	2.4	6.3	8.6	20.0	3.1	6.6	3.30	3.70	9.70	4.30
top	NH3-N	0.10	0.00	0.89	0.21	0.30	<0.1	0.60	2.8	1	<0.1	1.2	0.7
middle	NH3-N	0.00	0.00	0.91	0.23	0.40	<0.1	0.50	2.1	0.7	0.3	1.8	1.6
bottom	NH3-N	0.00	0.00	1.00	1.80	2.80	11.00	0.60	2.0	0.6	0.57	1.6	2.8
top	NOx-N	0.00	1.20	0.88	0.56	0.72	3.00	1.90	2.7	0.2	<0.1	<0.1	1.8
middle	NOx-N	0.00	0.96	0.84	0.52	0.66	4.60	1.30	0.12	<0.1	<0.1	<0.1	2.1
bottom	NOx-N	0.01	0.00	0.85	0.00	0.00	0.24	1.10	<0.1	<0.1	<0.1	<0.1	0.94
top	TKN	0.7	0.5	1.8	1.0	0.6	1.9	1.3	5.2	3	0.8	2.8	3.9
middle	TKN	1.0	0.0	1.1	1.2	0.9	2.4	0.8	4.7	3.1	2.8	8.2	4.4
bottom	TKN	1.2	1.5	1.5	6.3	8.6	20.0	2.0	6.6	3.3	3.7	9.7	3.4
top	FC	nd	5000	32000	3800	1900	4200	8600	>100000	>100000	100000	63000	2400
middle	FC	nd	1600	25000	3700	200	27000	9500	>100000	>100000	50000	42000	1500
bottom	FC	nd	66000	35000	4000	1510	92000	8900	>100000	>100000	80000	24000	3600
top	FS	nd	<10	15000	9000	3800	1150	28000	25000	24000	60000	<10	1300
middle	FS	nd	50	10000	16000	440	12000	26000	26000	22000	24000	3000	600
bottom	FS	nd	60000	25000	>100000	3500	26000	25600	24000	20000	18000	3000	800

Quality Assurance		1	2	3	4	5	6	7	8	9	10	11	12
lab blank	Date	14/07/00	28/07/00	17/08/00	04/09/00	20/09/00	06/10/00	24/10/00	10/11/00	27/11/00	18/12/00	10/01/01	16/01/01
	BOD				<2			<2	<2	<2		<2	
	DO				8.9			9	8.7	9		8.8	
	pH				6.9			6.8	7	6.8		6.7	
	COD				<2			<2	<2	<2		<2	
	TP				<0.1			<0.1	<0.1	<0.1		<0.1	
	PO4				<0.1			<0.1	<0.1	<0.1		<0.1	
	TN				<0.4			<0.4	<0.4	<0.4		<0.4	
	TKN				<0.4			<0.4	<0.4	<0.4		<0.4	
	NOx-N				<0.1			<0.1	<0.1	<0.1		<0.1	
	NH3-N				<0.1			<0.1	<0.1	<0.1		<0.1	
	TSS				<2			<2	<2	<2		<2	

		1	2	3	4	5	6	7	8	9	10	11	12
bottom duplicate	Date	14/07/00	28/07/00	17/08/00	04/09/00	20/09/00	06/10/00	24/10/00	10/11/00	27/11/00	18/12/00	10/01/01	16/01/01
	BOD				590	350	190						
	DO				2.5	2.6	2.6						
	pH				6.3	6.0	6.0						
	COD				1400	610	270						
	TP				2.0	1.4	4.9						
	PO4				1.10	0.17	3.30						
	TN				11.0	8.5	16.0						
	TKN				11.0	8.5	16.0						
	NOx-N				<0.1	<0.1	<0.1						
	NH3-N				4.9	0.8	8.6						
	TSS				420	240	100						

		1	2	3	4	5	6	7	8	9	10	11	12
field blank	Date	14/07/00	28/07/00	17/08/00	04/09/00	20/09/00	06/10/00	24/10/00	10/11/00	27/11/00	18/12/00	10/01/01	16/01/01
	BOD							<2					
	DO							9					
	pH							6.8					
	COD							<2					
	TP							<0.1					
	PO4							<0.1					
	TN							<0.4					
	TKN							<0.4					
	NOx-N							<0.1					
	NH3-N							<0.1					
	TSS							<2					

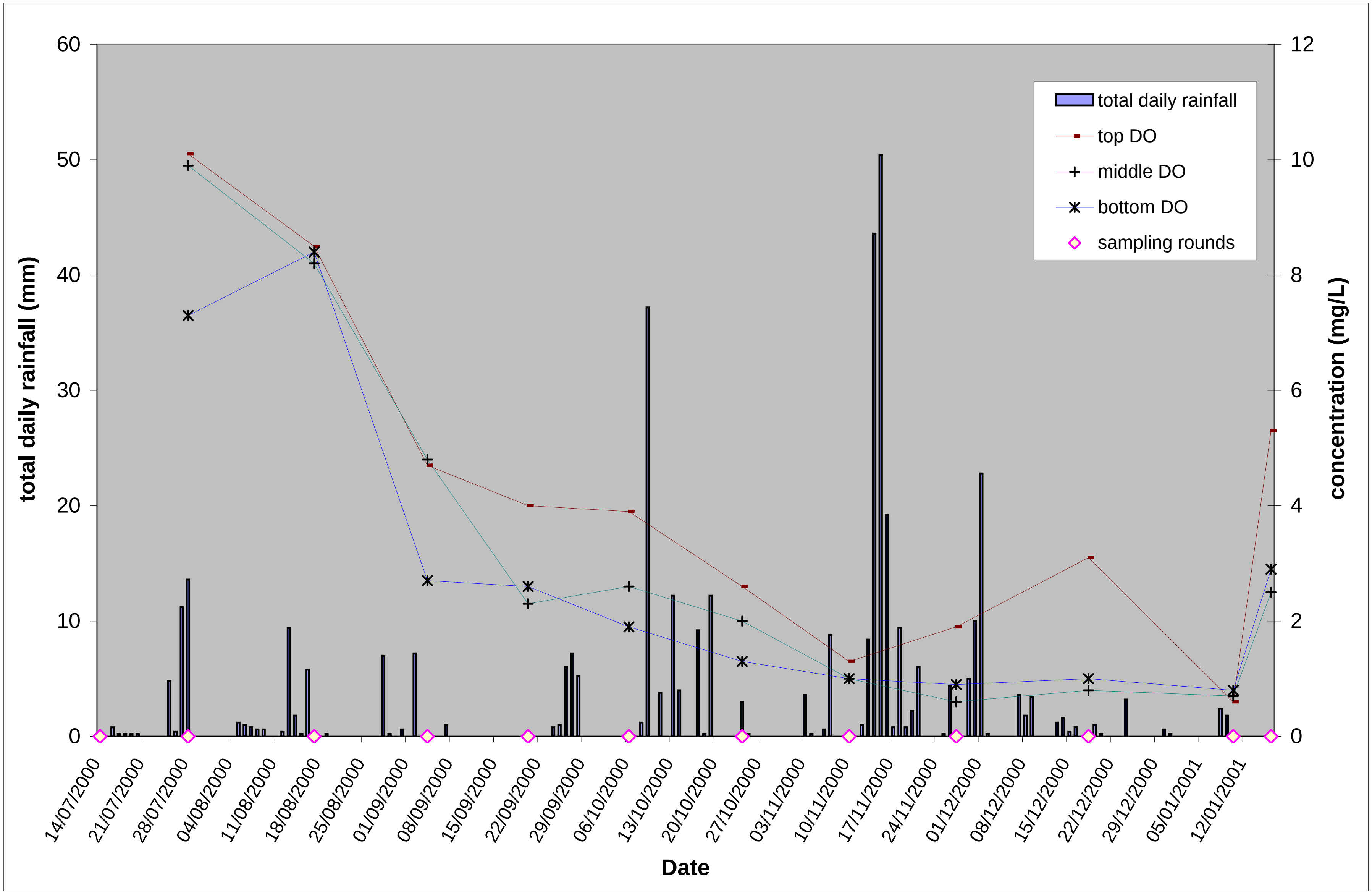


Figure 5-1 Time series graph DO and rainfall

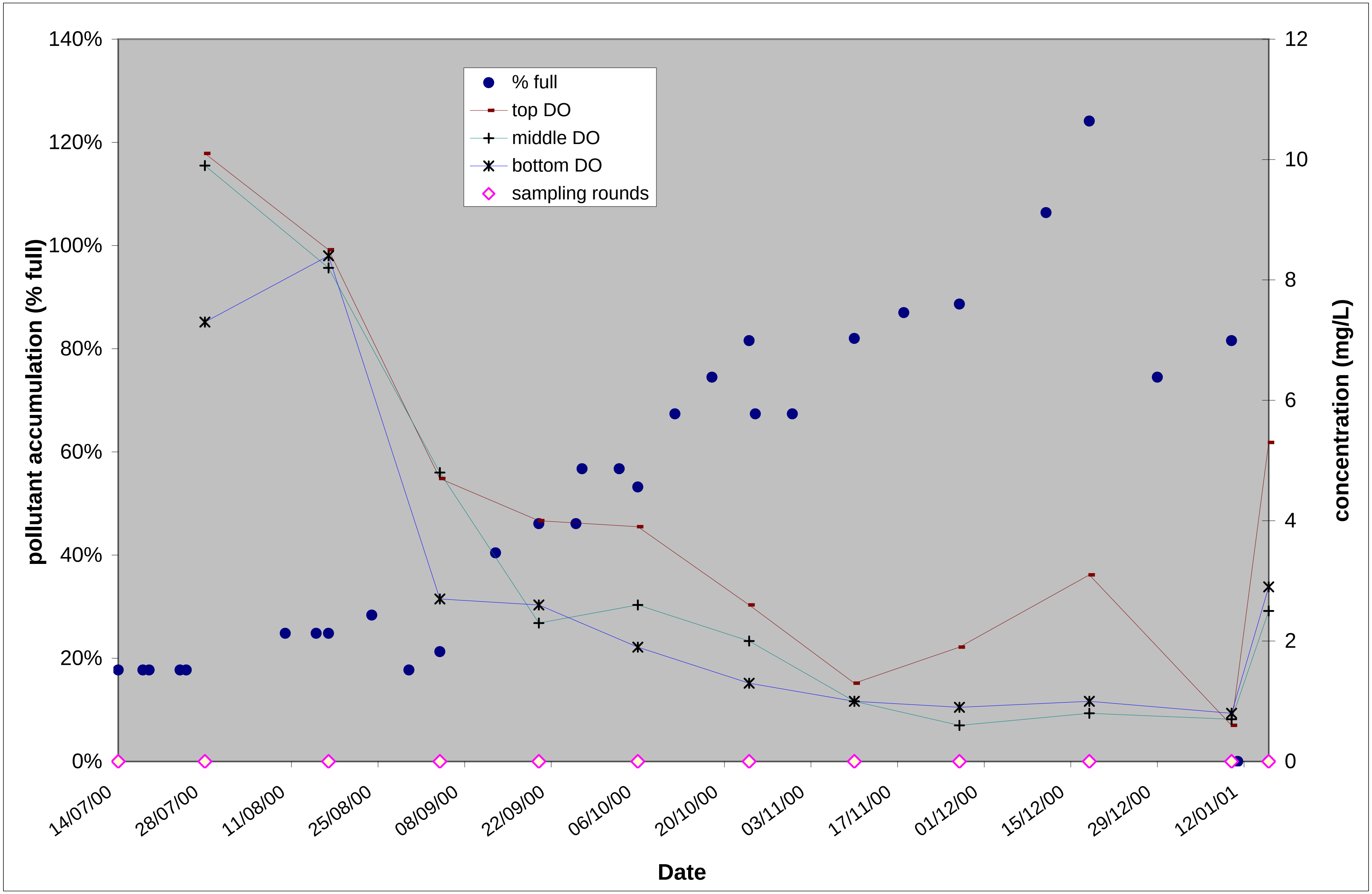


Figure 5-2 Time series graph of DO and pollutant accumulation

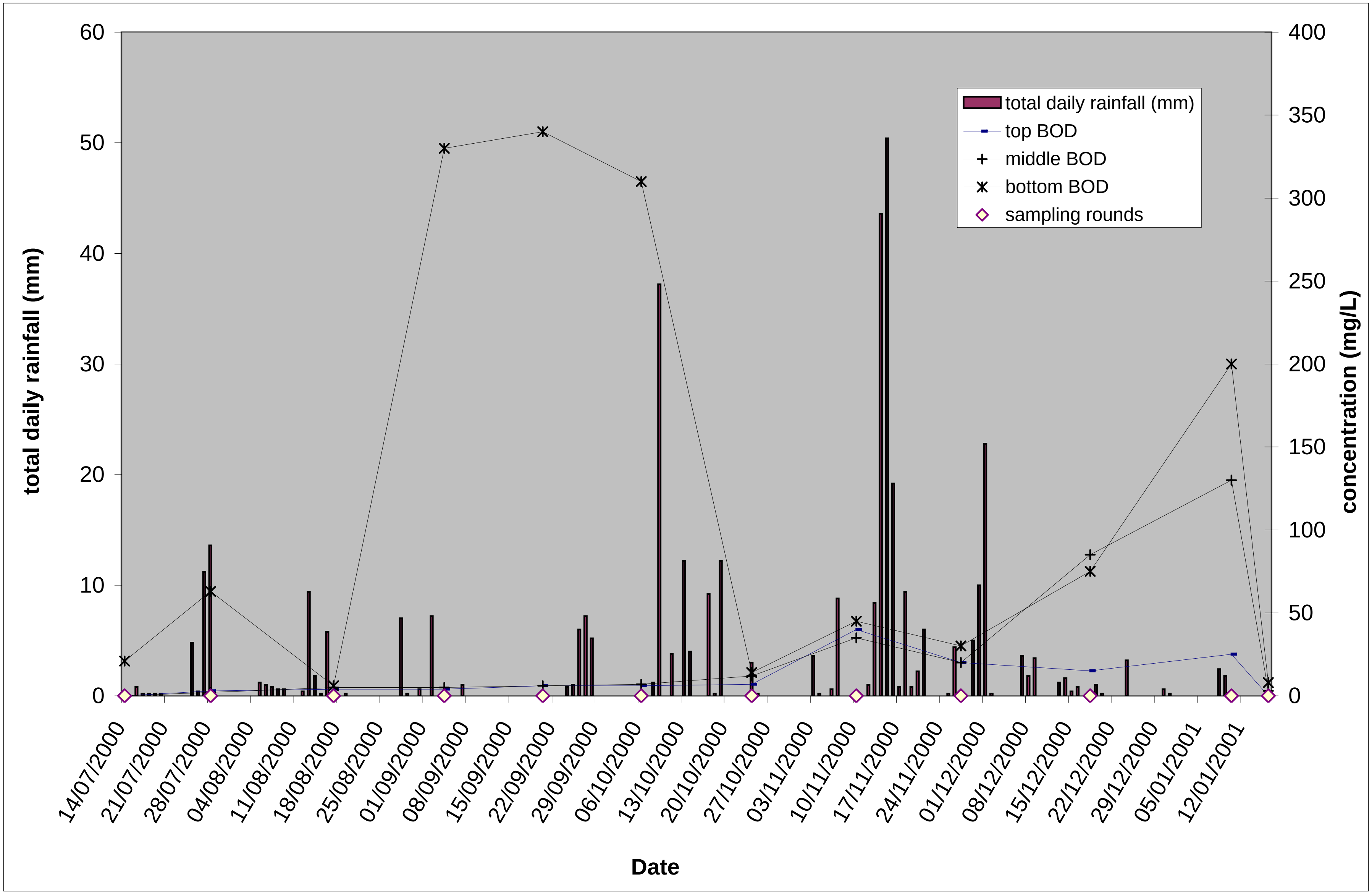


Figure 5-3 Time series graph of BOD and rainfall

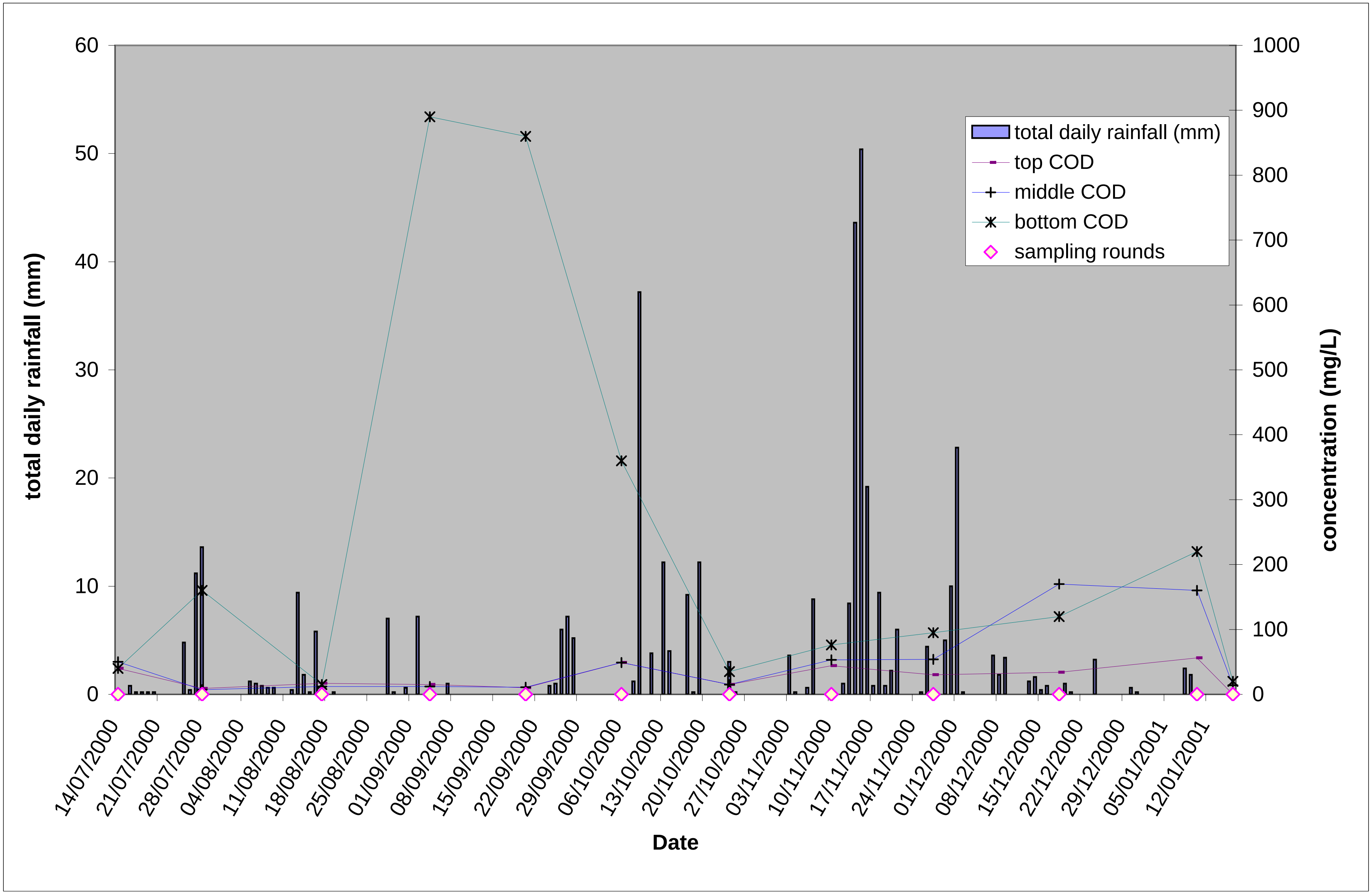


Figure 5-4 Time series graph of COD and rainfall

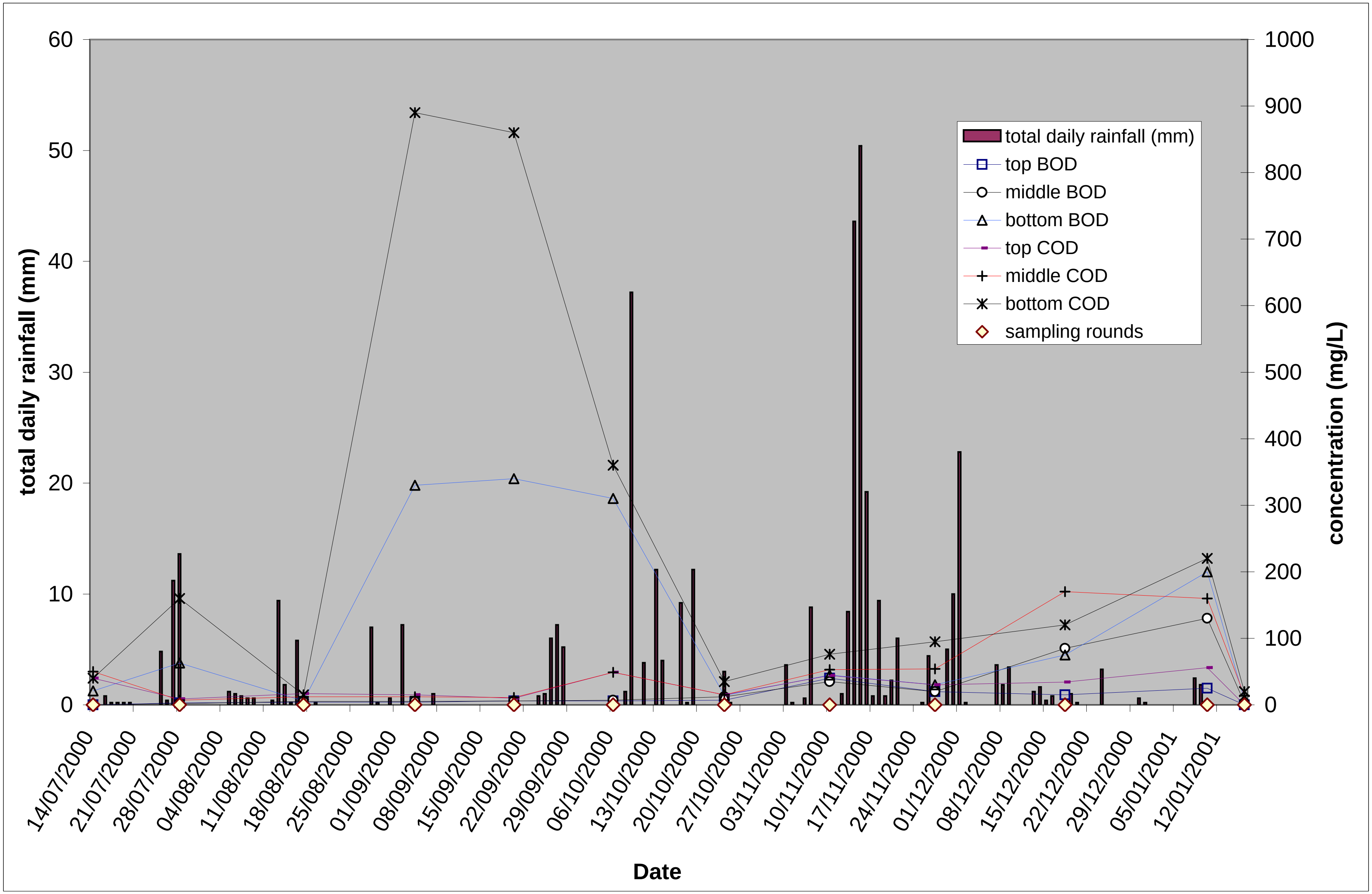


Figure 5-5 Time series graph of BOD, COD, and rainfall

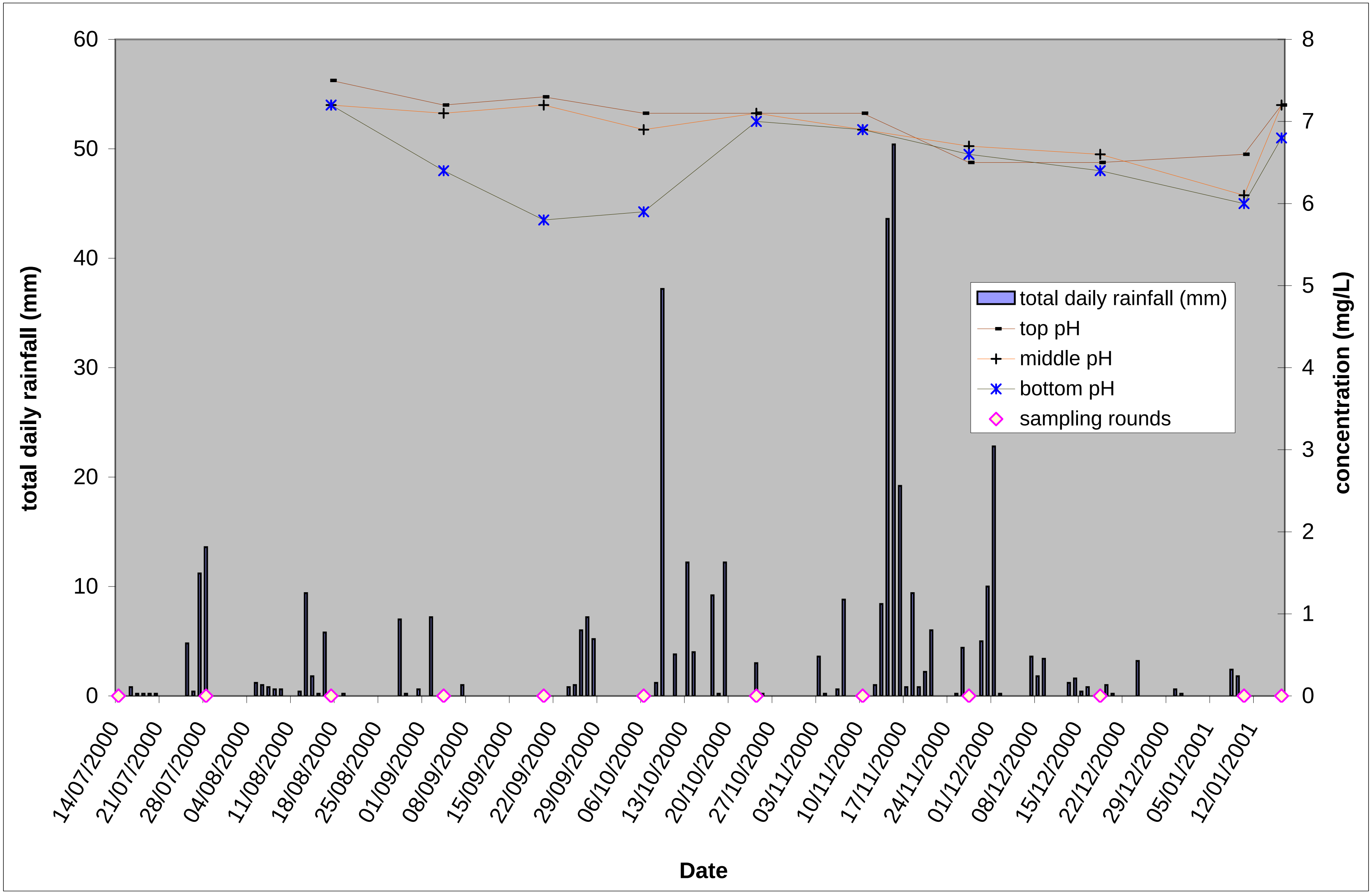


Figure 5-6 Time series graph of pH

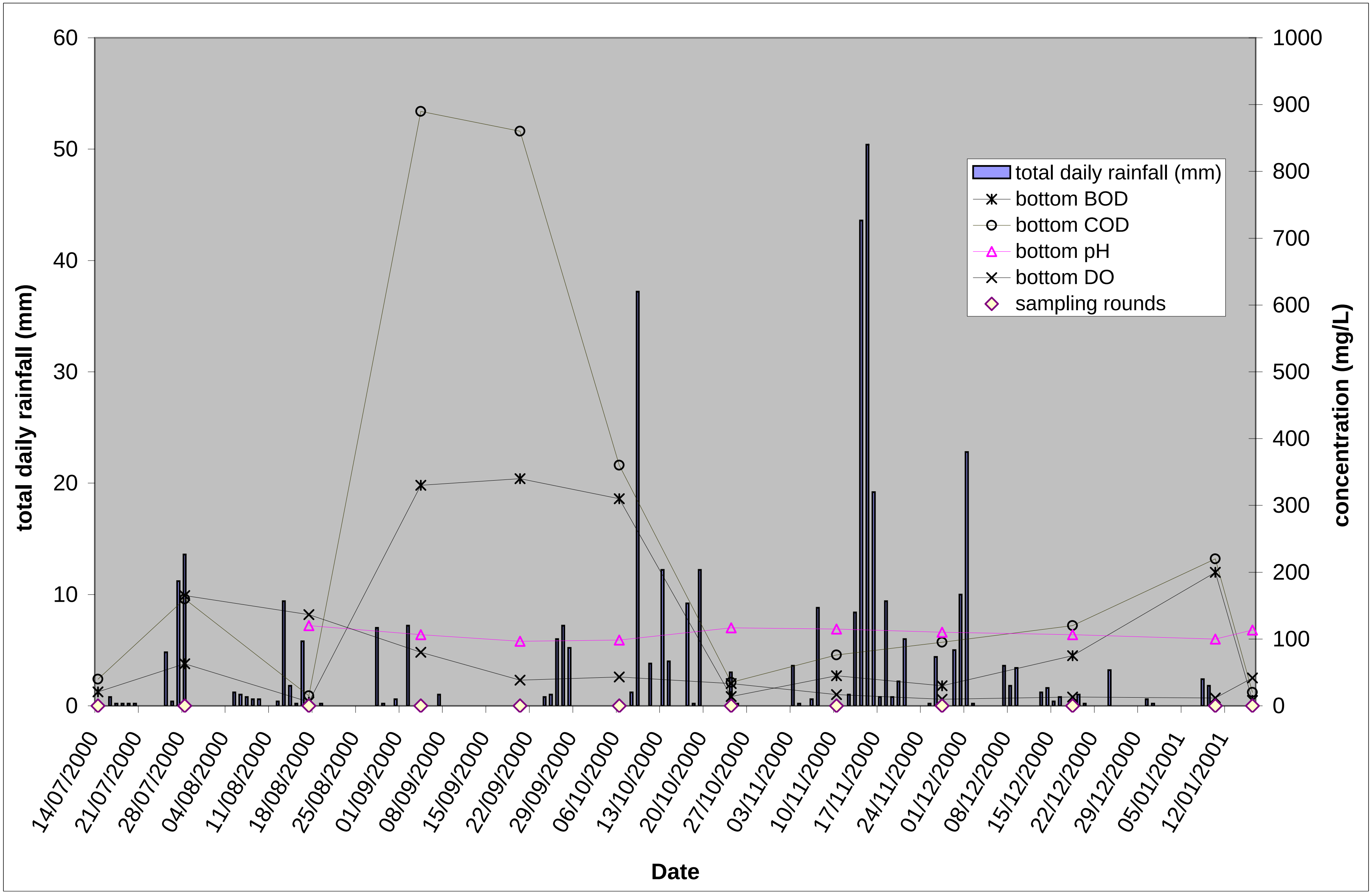


Figure 5-7 Time series graph of DO, BOD, COD, pH, and rainfall (bottom locations only)

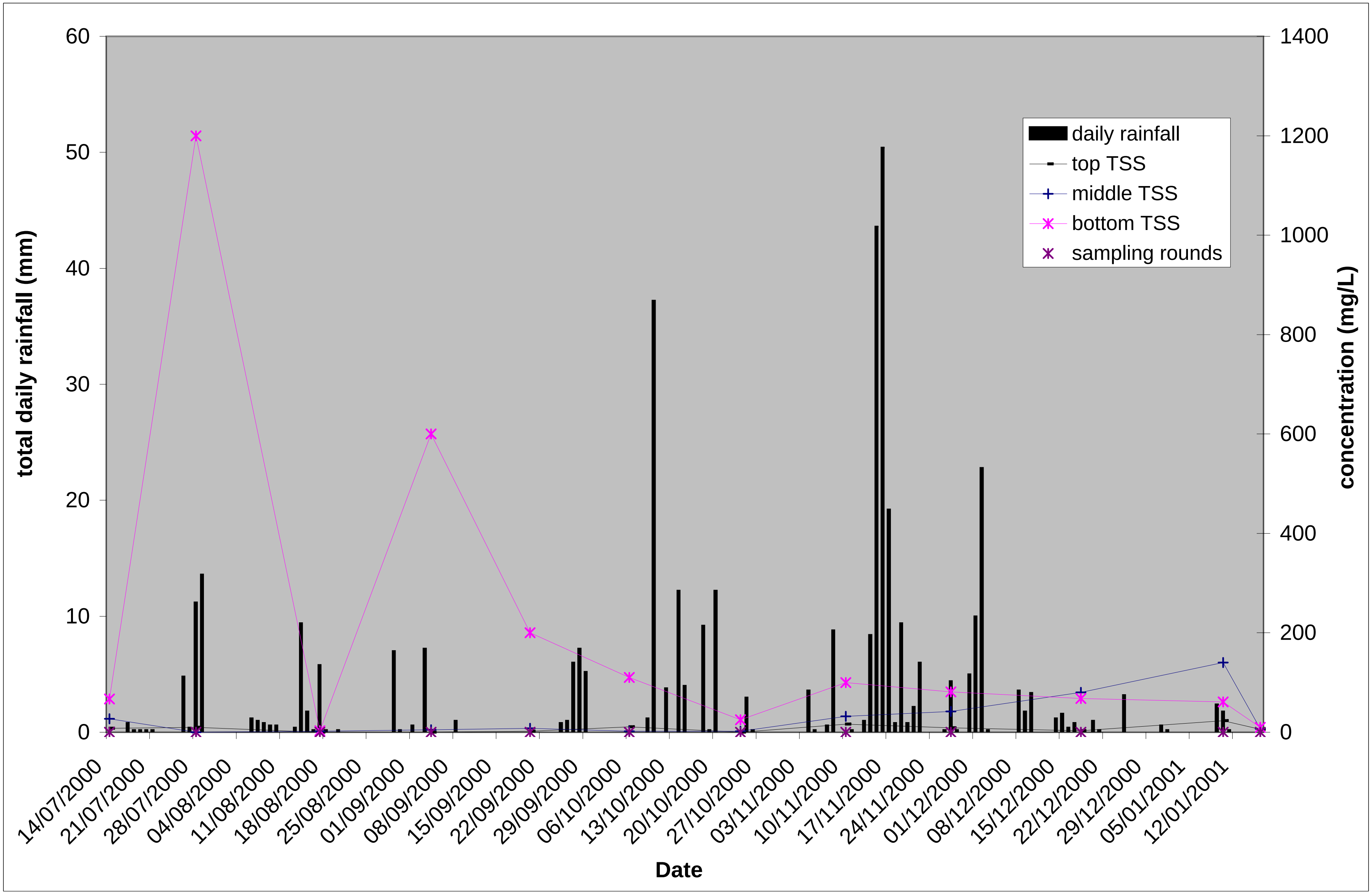


Figure 5-8 Time series graph of TSS and rainfall

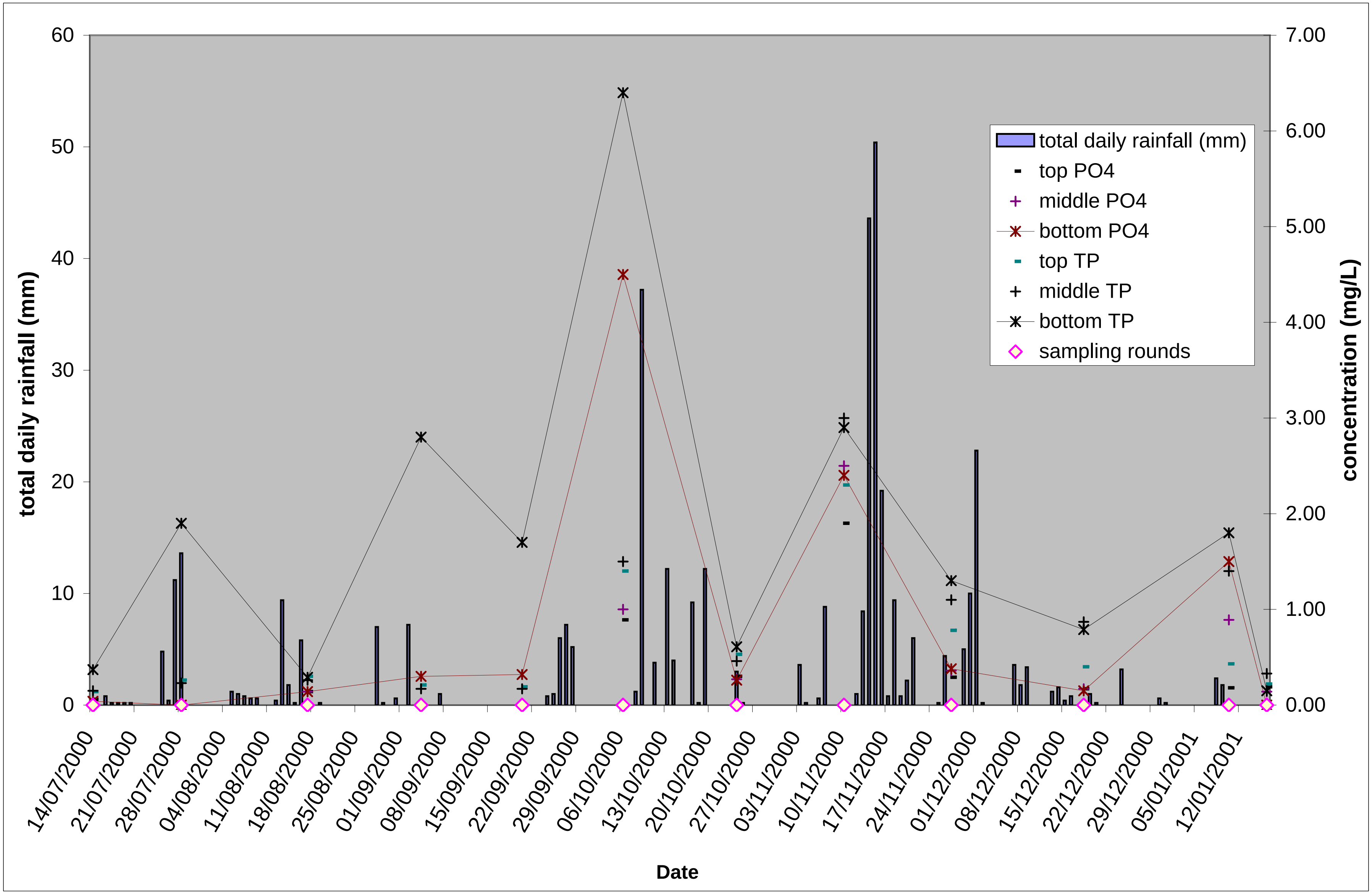


Figure 5-9 Time series graph of phosphorus (TP and PO4) and rainfall

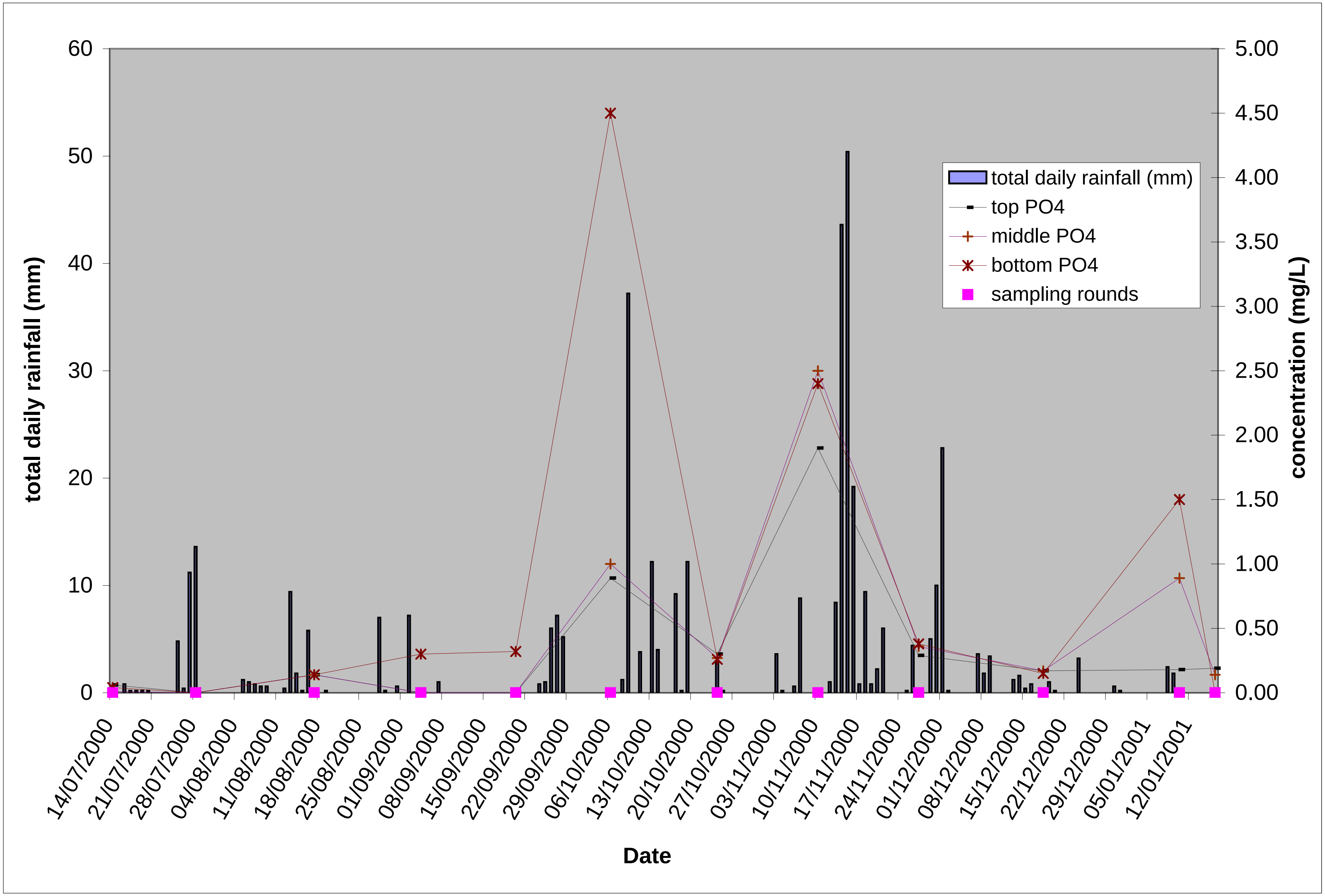


Figure 5-10 Time series graph of phosphorus (PO4 only) and rainfall

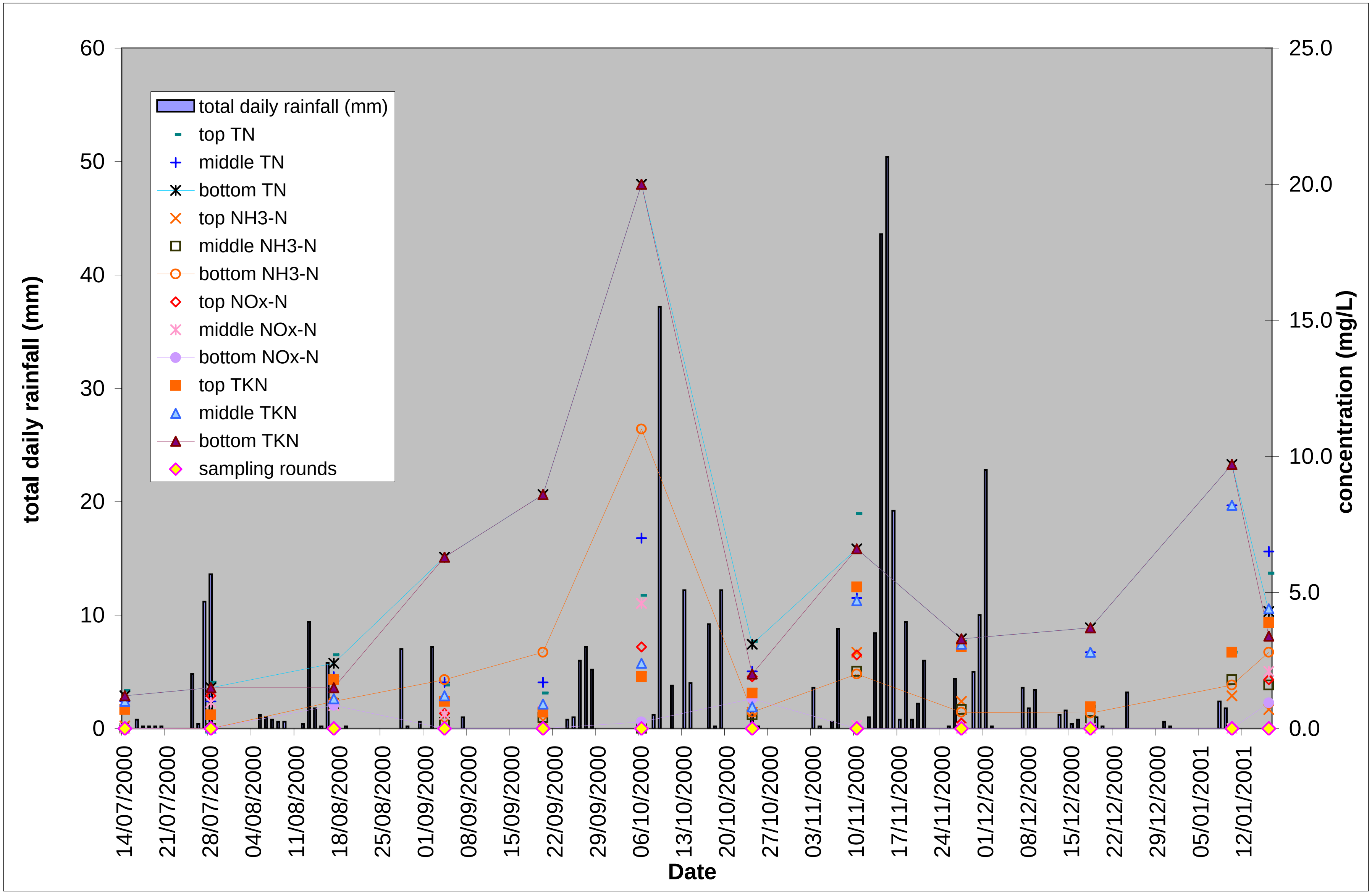


Figure 5-11 Time series graph of nitrogen (TN, TKN, NH3, NOx) and rainfall

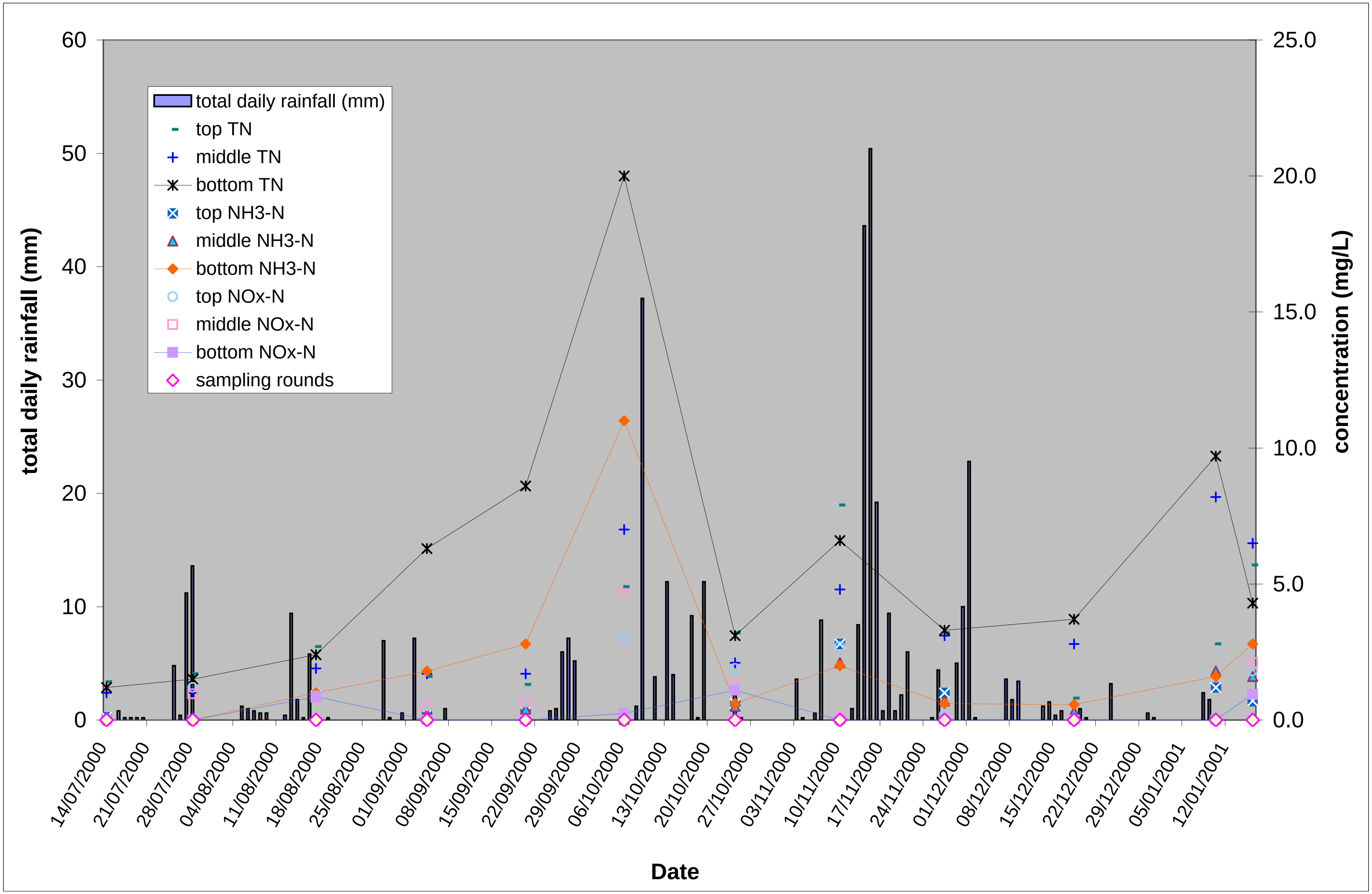


Figure 5-12 Time series graph of nitrogen (TN, NH3, NOx) and rainfall

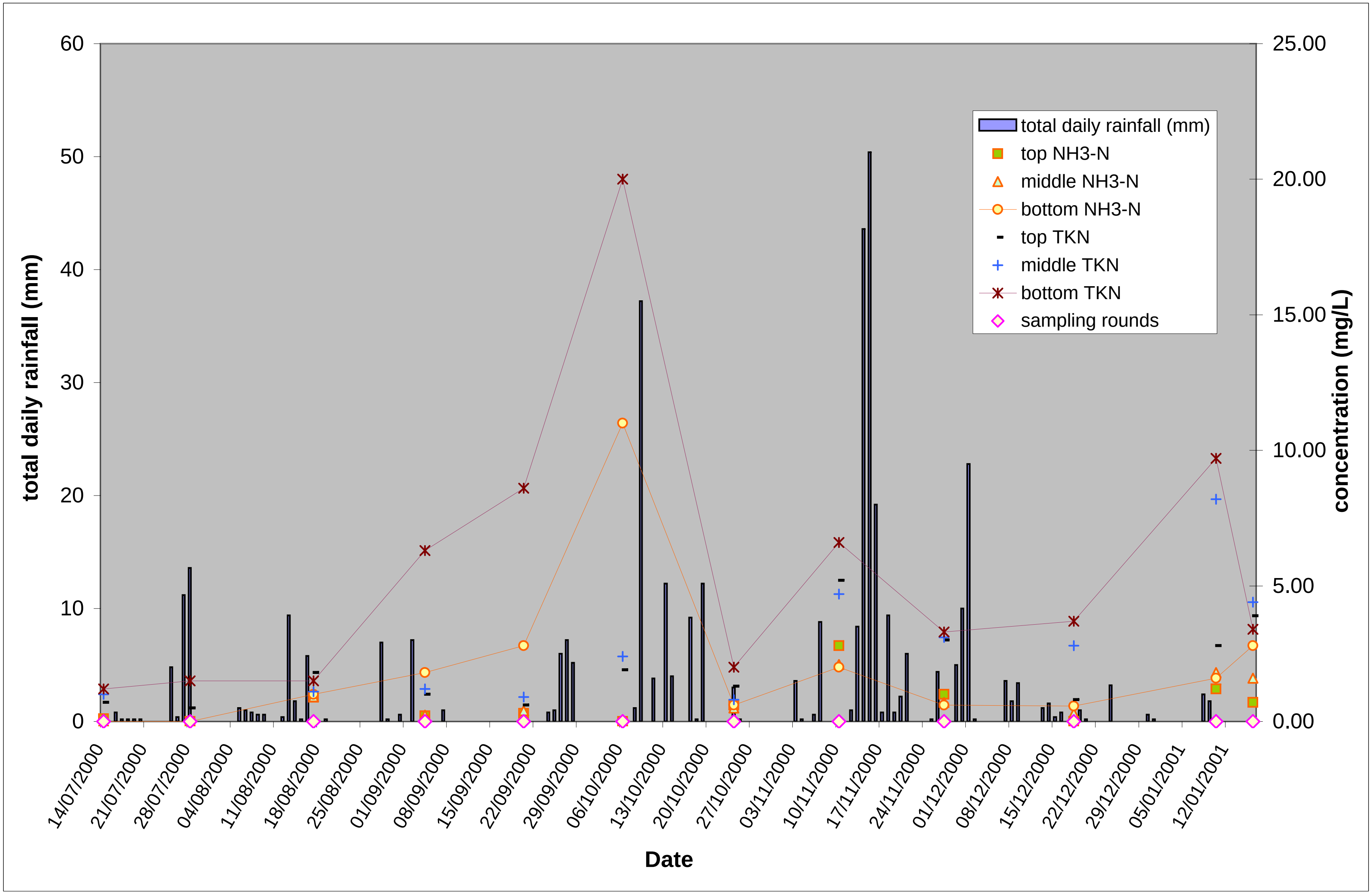


Figure 5-13 Time series graph of nitrogen (TKN and NH3) and rainfall

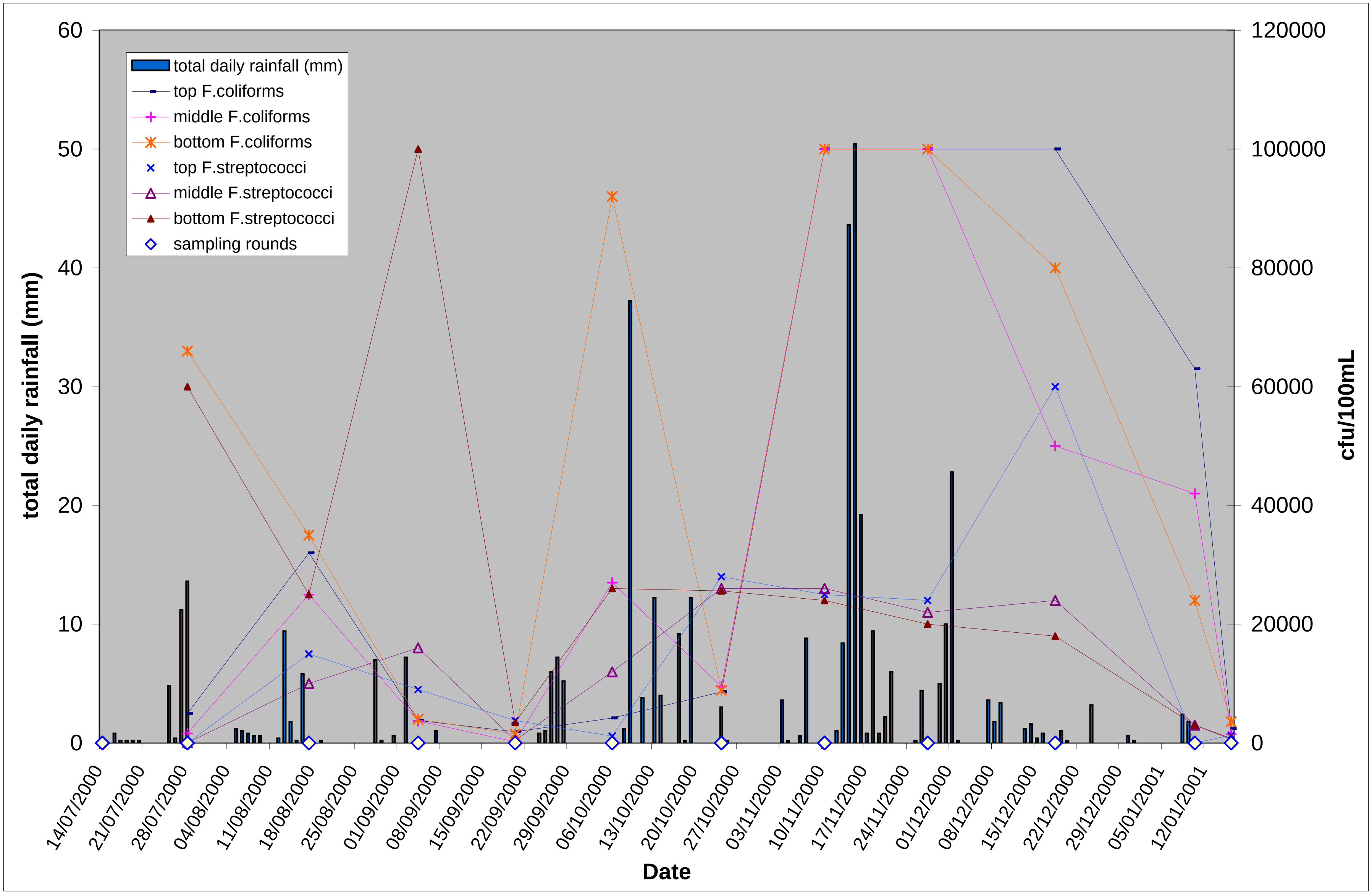
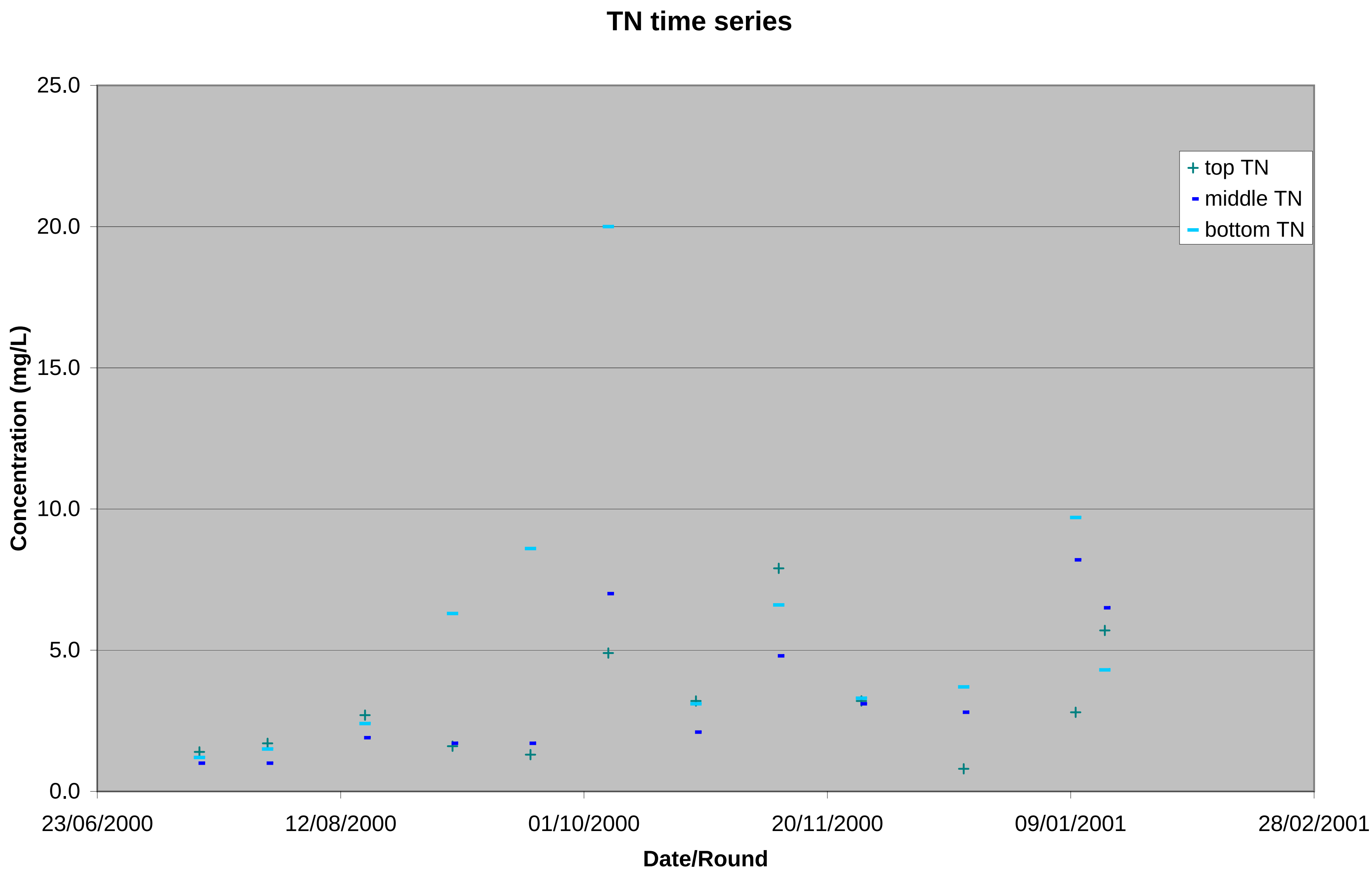


Figure 5-14 Time series graph of FC, FS, and rainfall



TN time series
25.0
20.0
15.0
10.0
5.0
0.0
Concentration (mg/L)
23/06/2000
12/08/2000
01/10/2000
20/11/2000
09/01/2001
28/02/2001
Date/Round
top TN
middle TN
bottom TN

Figure 5-9

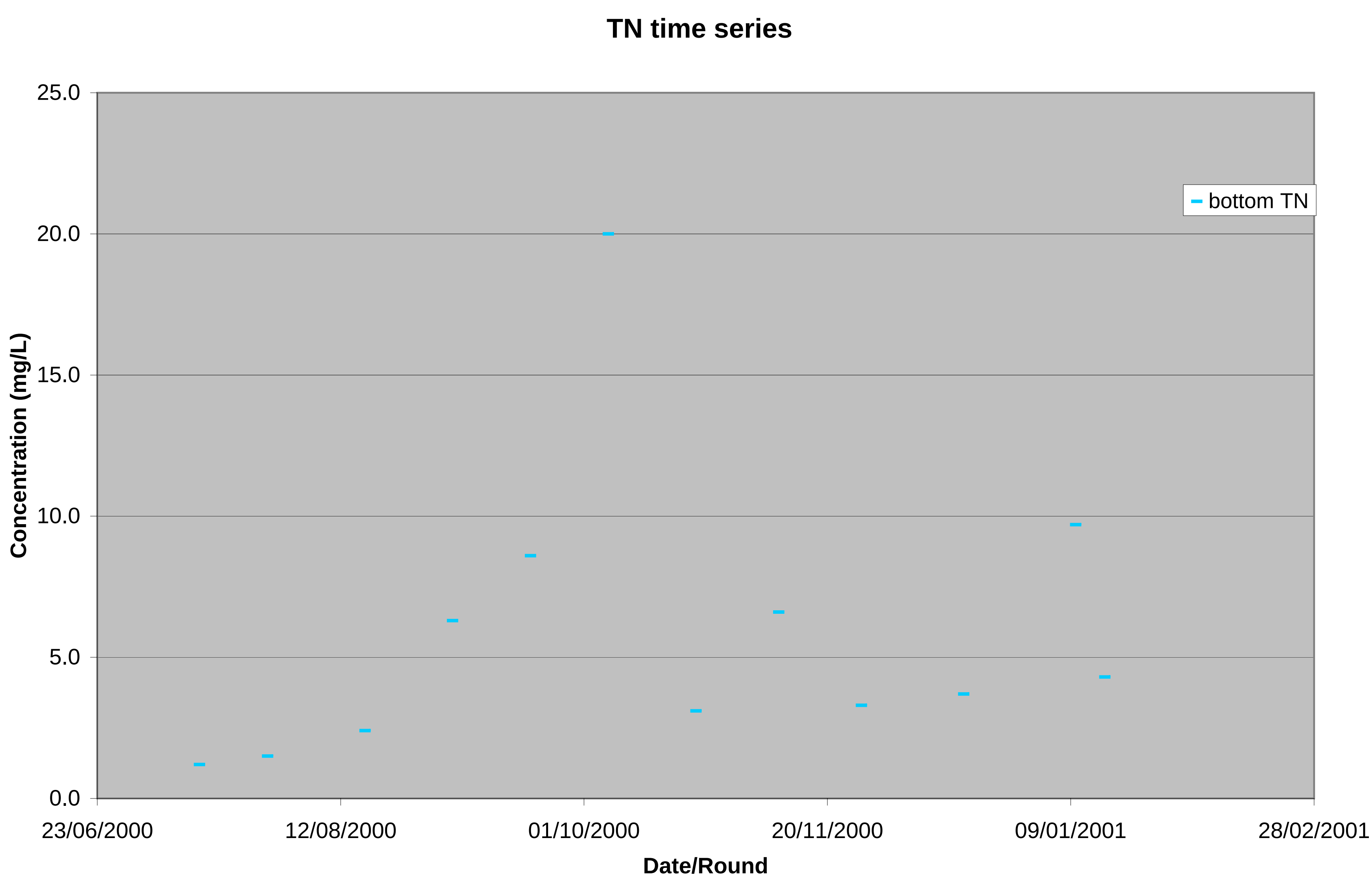
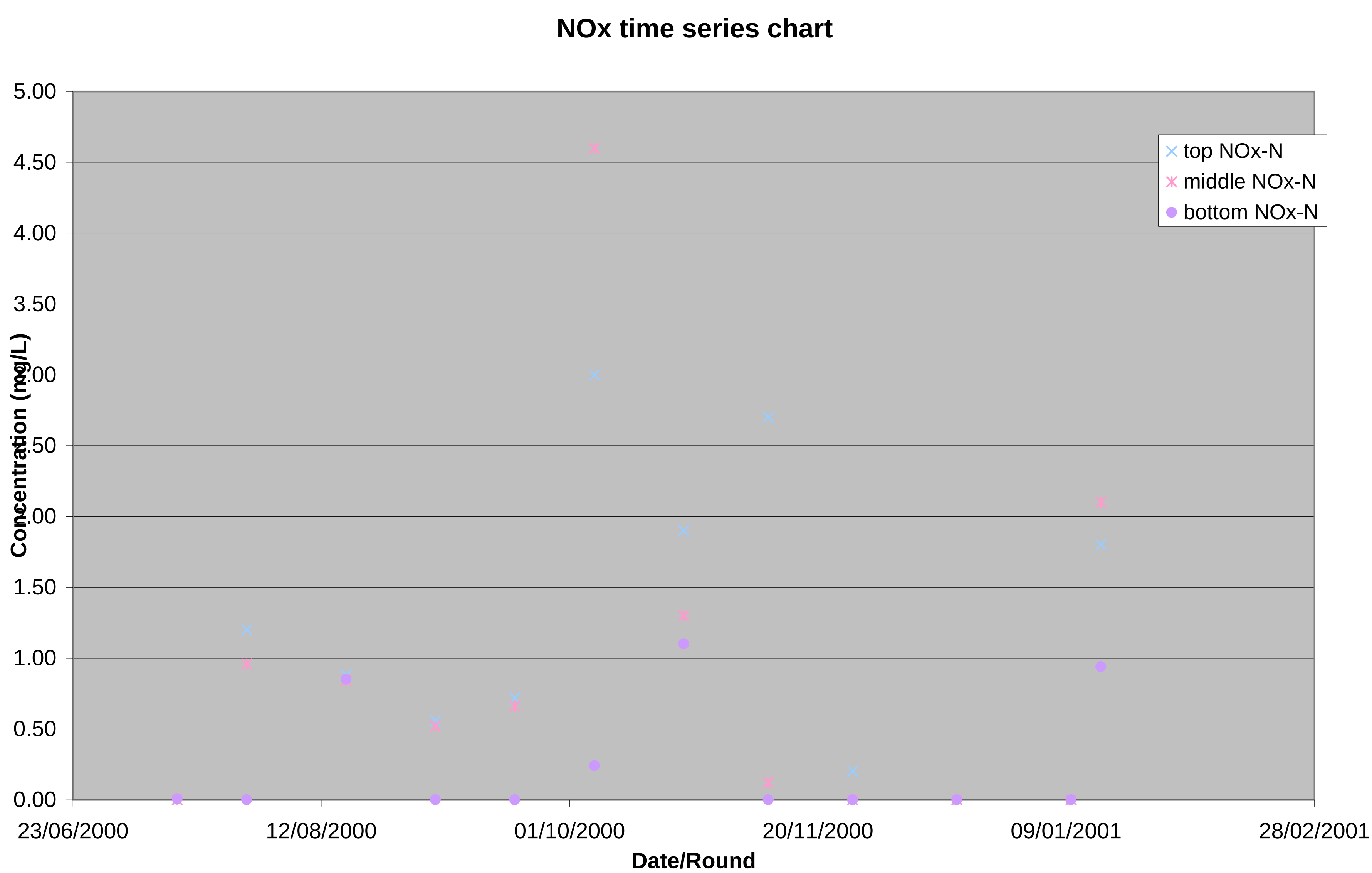

TN time series
25.0
20.0
15.0
10.0
5.0
0.0
Concentration (mg/L)
bottom TN
23/06/2000
12/08/2000
01/10/2000
20/11/2000
09/01/2001
28/02/2001
Date/Round

Figure 5-9



NOx time series chart
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
Concentration (mg/L)
top NOx-N
middle NOx-N
bottom NOx-N
23/06/2000
12/08/2000
01/10/2000
20/11/2000
09/01/2001
28/02/2001
Date/Round

Figure 5-10

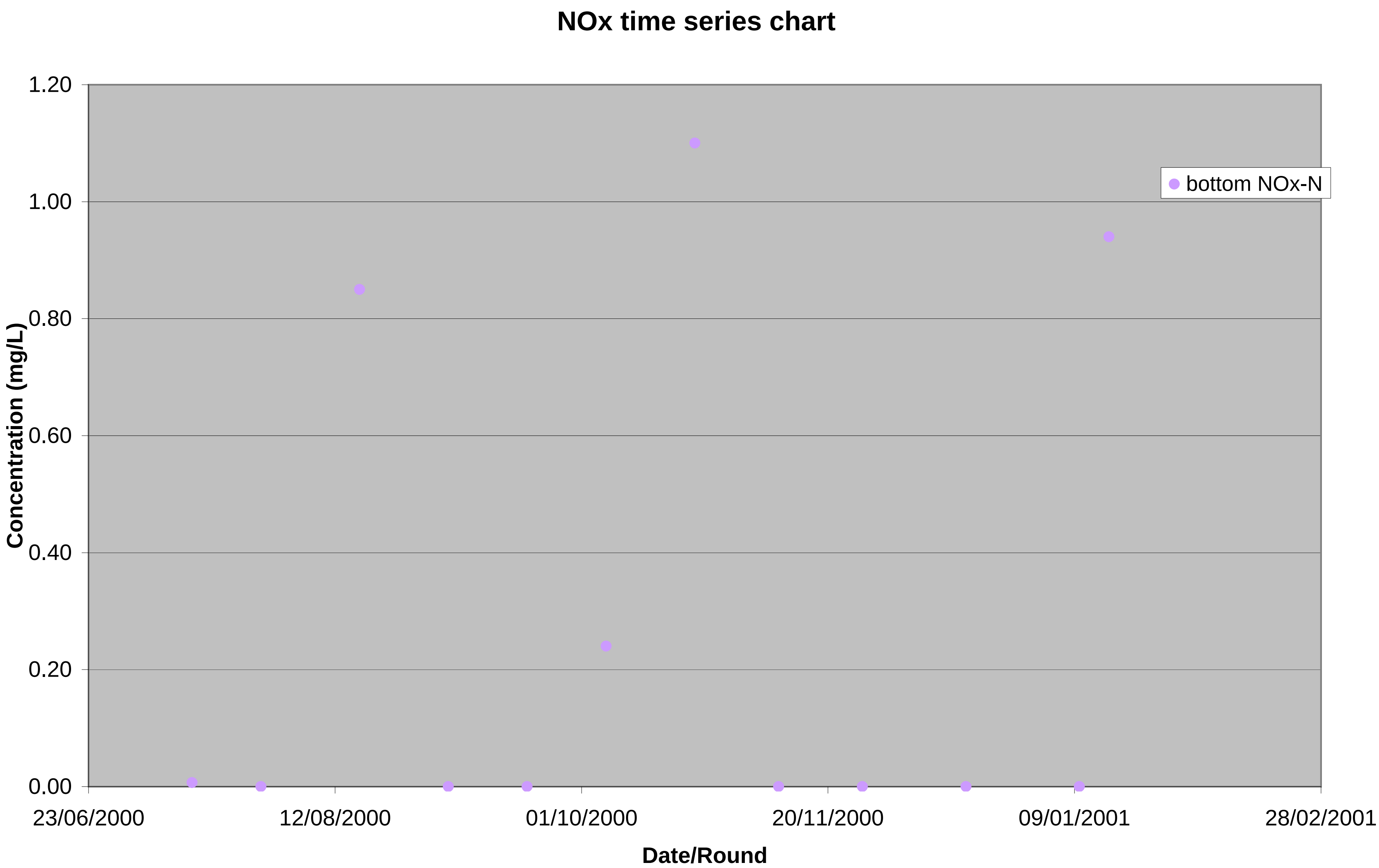

NOx time series chart
1.20
1.00
0.80
0.60
0.40
0.20
0.00
Concentration (mg/L)
bottom NOx-N
23/06/2000
12/08/2000
01/10/2000
20/11/2000
09/01/2001
28/02/2001
Date/Round

Figure 5-10

NH3 time series chart

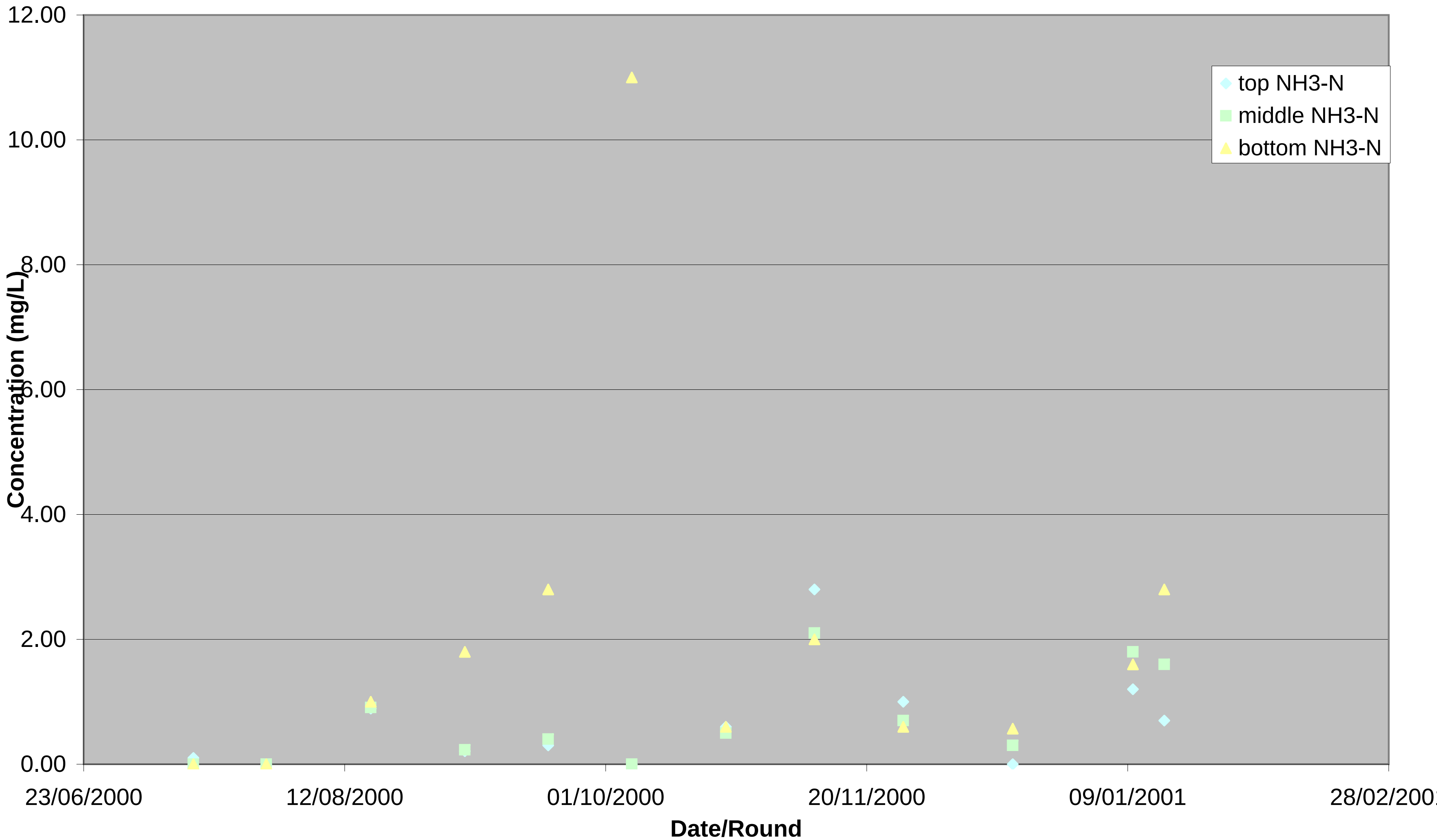


Figure 5-11

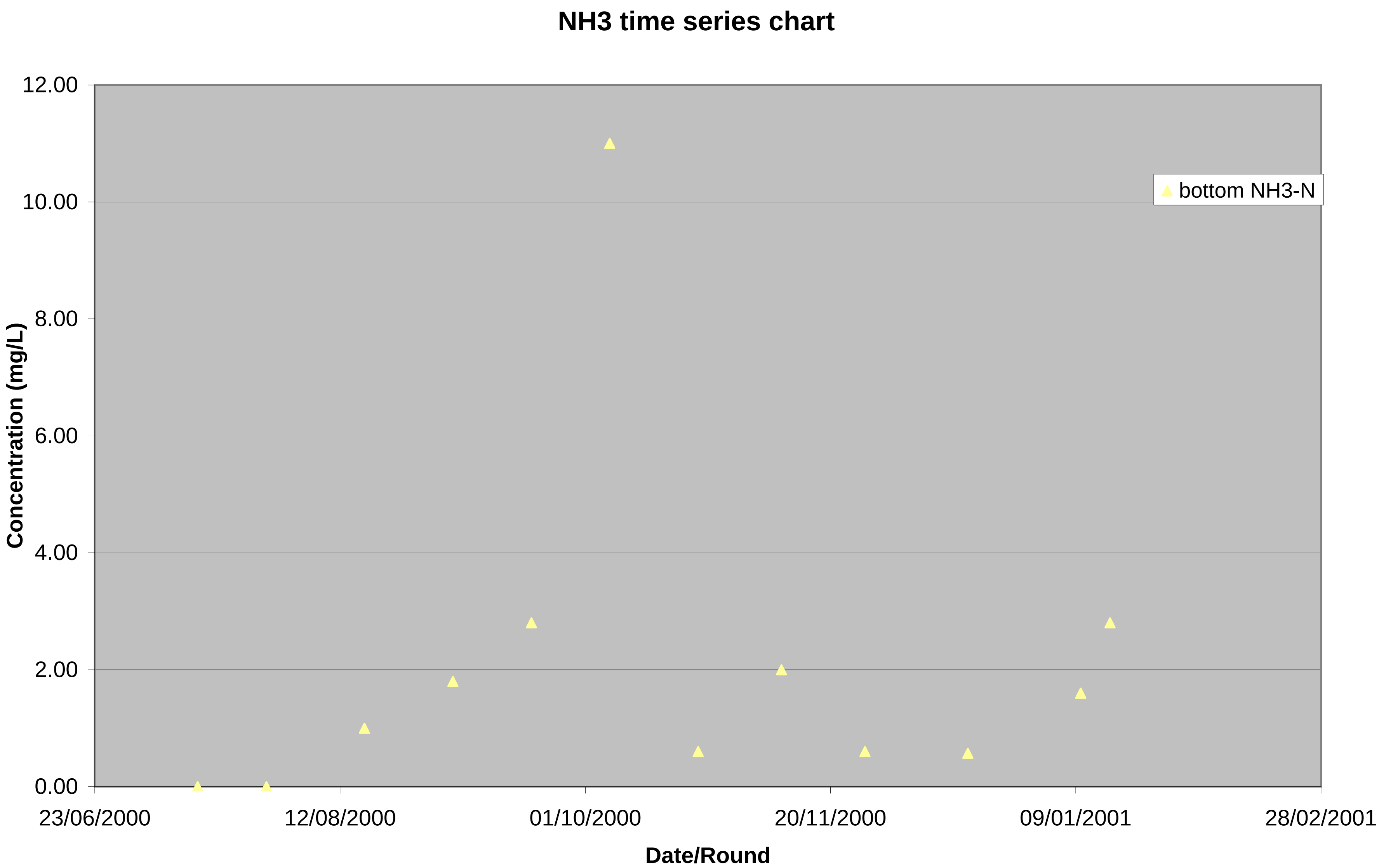

NH3 time series chart
12.00
10.00
8.00
6.00
4.00
2.00
0.00
Concentration (mg/L)
bottom NH3-N
23/06/2000
12/08/2000
01/10/2000
20/11/2000
09/01/2001
28/02/2001
Date/Round

Figure 5-11

TKN time series chart

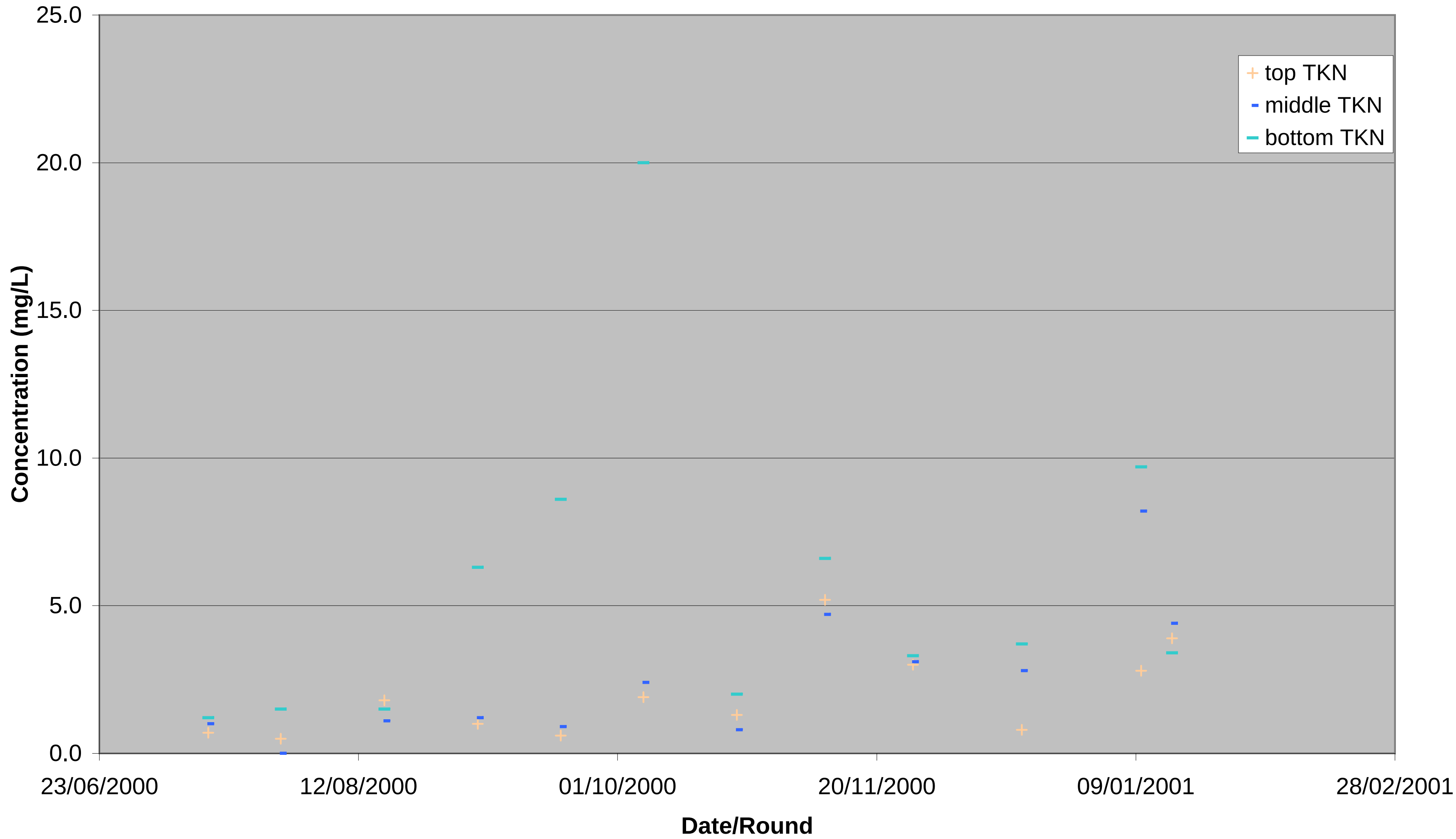
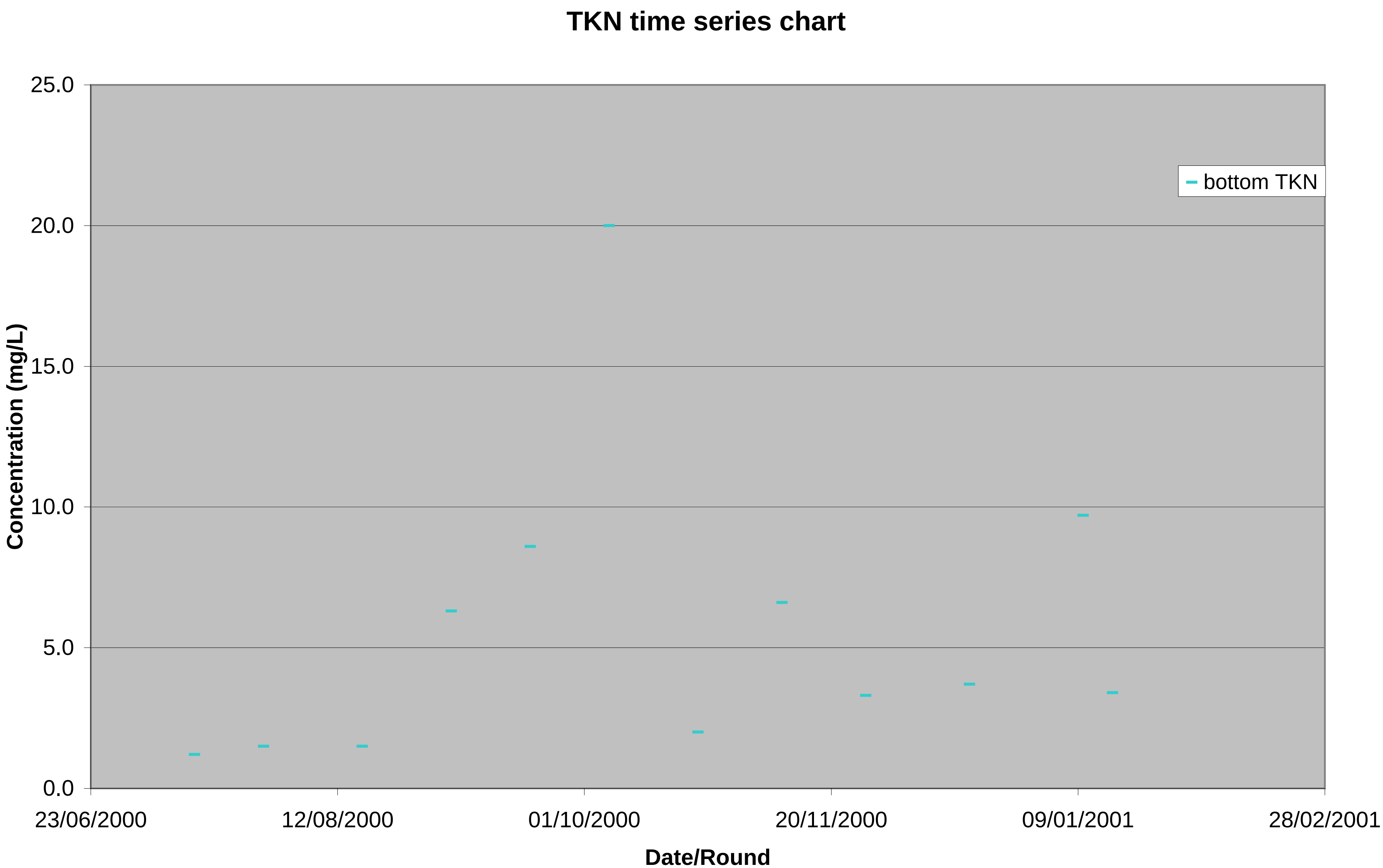


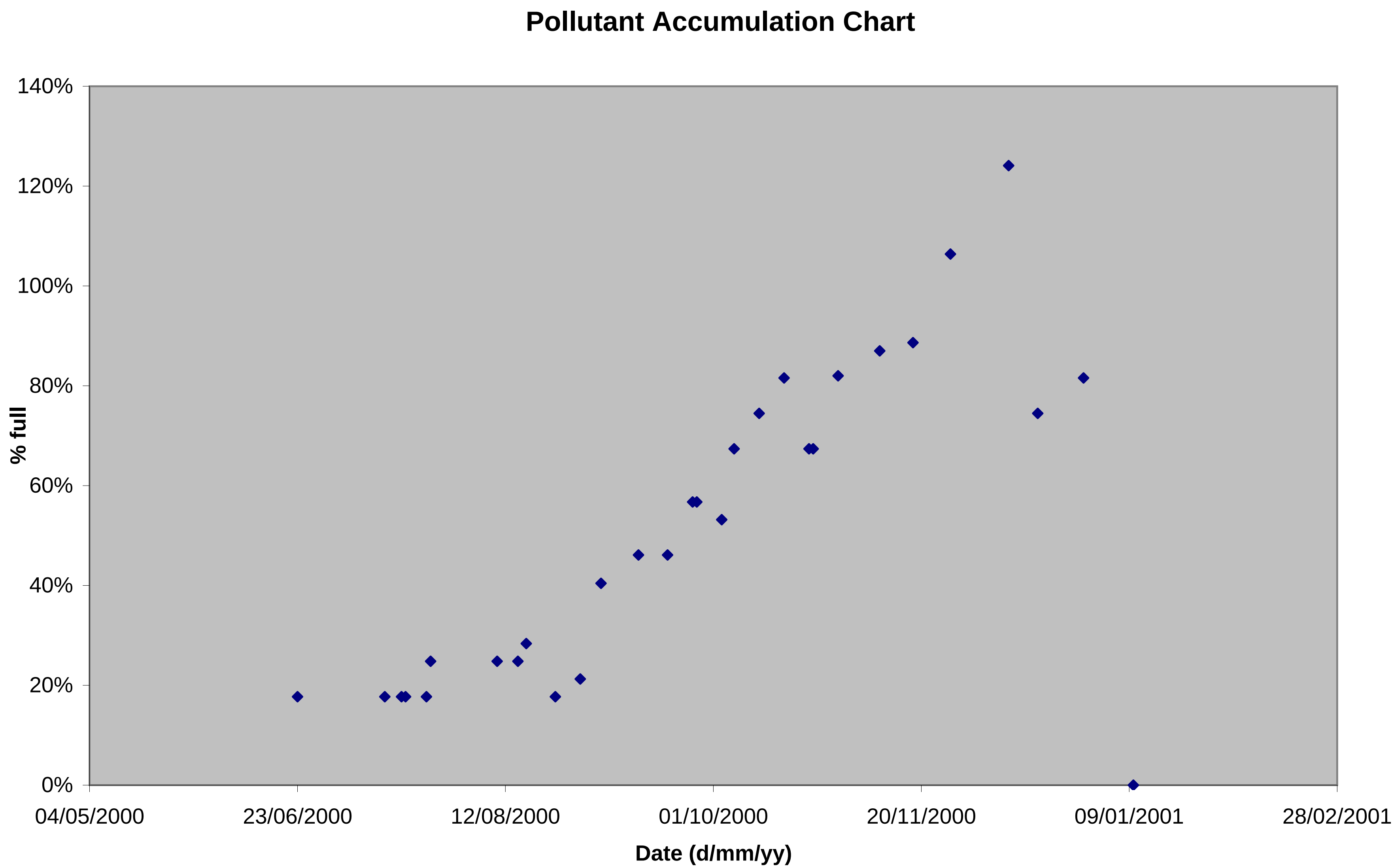
Figure 5-12



TKN time series chart
Concentration (mg/L)
25.0
20.0
15.0
10.0
5.0
0.0
bottom TKN
23/06/2000
12/08/2000
01/10/2000
20/11/2000
09/01/2001
28/02/2001
Date/Round

Figure 5-12

		1	2	3	4	5	6	7	8
Physico-chemical	ampling rounds	0	0	0	0	0	0	0	0
	Date	14/07/2000	28/07/2000	17/08/2000	04/09/2000	20/09/2000	06/10/2000	24/10/2000	10/11/2000
top	TSS	8	10	0	0	2	11	<2	16
middle	TSS	27	0	2	5	8	2	2	32
bottom	TSS	67	1200	3	600	200	110	25	100
top	BOD	0	3	4	4	6	6	7	40
middle	BOD	0	2	5	5	6	7	12	35
bottom	BOD	21	63	6	330	340	310	14	45
top	DO		10.1	8.5	4.7	4.0	3.9	2.6	1.3
middle	DO		9.9	8.2	4.8	2.3	2.6	2	1.0
bottom	DO		7.3	8.4	2.7	2.6	1.9	1.3	1.0
top	COD	40	9	17	15	10	49	15	44
middle	COD	50	7	12	12	11	49	15	53
bottom	COD	40	160	15	890	860	360	35	76
top	pH			7.5	7.2	7.3	7.1	7.1	7.1
middle	pH			7.2	7.1	7.2	6.9	7.1	6.9
bottom	pH			7.2	6.4	5.8	5.9	7.0	6.9
Nutrients	Round	1	2	3	4	5	6	7	8
	Date	14/07/2000	28/07/2000	17/08/2000	04/09/2000	20/09/2000	06/10/2000	24/10/2000	10/11/2000
top	TP	0.14	0.26	0.30	0.21	0.19	1.40	0.53	2.3
middle	TP	0.15	0.23	0.26	0.17	0.17	1.50	0.46	3.0
bottom	TP	0.37	1.90	0.29	2.80	1.70	6.40	0.61	2.9
top	PO4	0.06	0.00	0.14	0.00	0.00	0.89	0.30	1.9
middle	PO4	0.01	0.00	0.14	0.00	0.00	1.00	0.27	2.5
bottom	PO4	0.04	0.00	0.14	0.30	0.32	4.50	0.26	2.4
top	TN	1.4	1.7	2.7	1.6	1.3	4.9	3.2	7.9
middle	TN	1.0	1.0	1.9	1.7	1.7	7.0	2.1	4.8
bottom	TN	1.2	1.5	2.4	6.3	8.6	20.0	3.1	6.6
top	NH3-N	0.10	0.00	0.89	0.21	0.30	<0.1	0.60	2.8
middle	NH3-N	0.00	0.00	0.91	0.23	0.40	<0.1	0.50	2.1
bottom	NH3-N	0.00	0.00	1.00	1.80	2.80	11.00	0.60	2.0
top	NOx-N	0.00	1.20	0.88	0.56	0.72	3.00	1.90	2.7
middle	NOx-N	0.00	0.96	0.84	0.52	0.66	4.60	1.30	0.12
bottom	NOx-N	0.01	0.00	0.85	0.00	0.00	0.24	1.10	<0.1
top	TKN	0.7	0.5	1.8	1.0	0.6	1.9	1.3	5.2
middle	TKN	1.0	0.0	1.1	1.2	0.9	2.4	0.8	4.7
bottom	TKN	1.2	1.5	1.5	6.3	8.6	20.0	2.0	6.6
Bacteriological	Round	1	2	3	4	5	6	7	8
	Date	14/07/2000	28/07/2000	17/08/2000	04/09/2000	20/09/2000	06/10/2000	24/10/2000	10/11/2000
top	F.coliforms		5000	32000	3800	1900	4200	8600	100000
middle	F.coliforms		1600	25000	3700	200	27000	9500	100000
bottom	F.coliforms		66000	35000	4000	1510	92000	8900	100000
top	F.streptococci		<10	15000	9000	3800	1150	28000	25000
middle	F.streptococci		50	10000	16000	440	12000	26000	26000
bottom	F.streptococci		60000	25000	100000	3500	26000	25600	24000
Quality Assurance	Type	field blank	lab blank	lab blank	lab blank	bottom duplicate	bottom duplicate	bottom duplicate	
	Date	24/10/2000	04/09/2000	24/10/2000	10/11/2000	04/09/2000	20/09/2000	06/10/2000	
	BOD	<2	<2	<2	<2	590	350	190	
	DO	9	8.9	9	8.7	2.5	2.6	2.6	
	pH	6.8	6.9	6.8	7	6.3	6.0	6.0	
	COD	<2	<2	<2	<2	1400	610	270	
	TP	<0.1	<0.1	<0.1	<0.1	2.0	1.4	4.9	
	PO4	<0.1	<0.1	<0.1	<0.1	1.10	0.17	3.30	
	TN	<0.4	<0.4	<0.4	<0.4	11.0	8.5	16.0	
	TKN	<0.4	<0.4	<0.4	<0.4	11.0	8.5	16.0	
	NOx-N	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
	NH3-N	<0.1	<0.1	<0.1	<0.1	4.9	0.8	8.6	
	TSS	<2	<2	<2	<2	420	240	100	


Pollutant Accumulation Chart
140%
120%
100%
80%
60%
40%
20%
0%
% full
04/05/2000
23/06/2000
12/08/2000
01/10/2000
20/11/2000
09/01/2001
28/02/2001
Date (d/mm/yy)

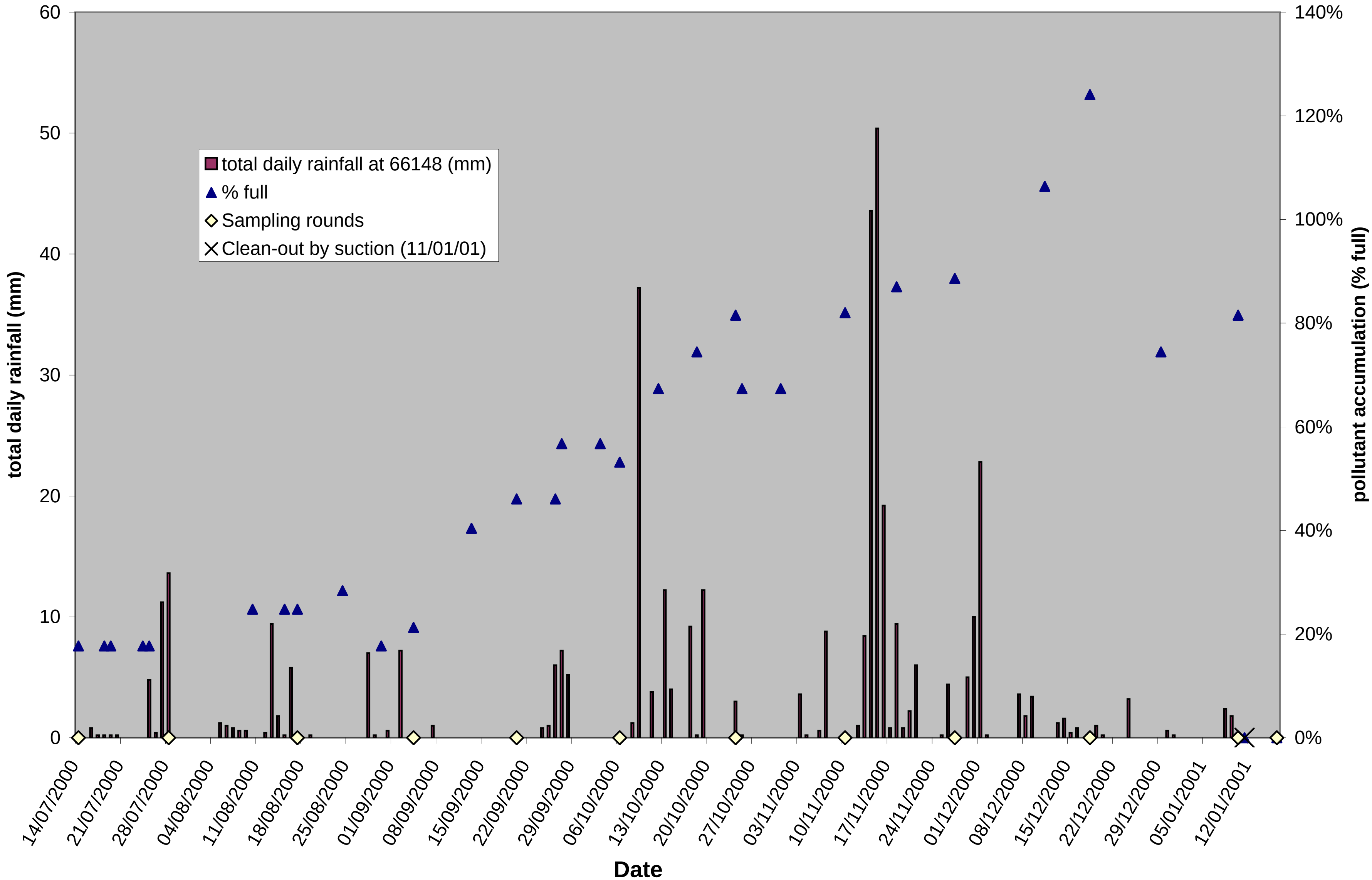


Figure 5-15 Time series graph of pollutant accumulation and daily rainfall

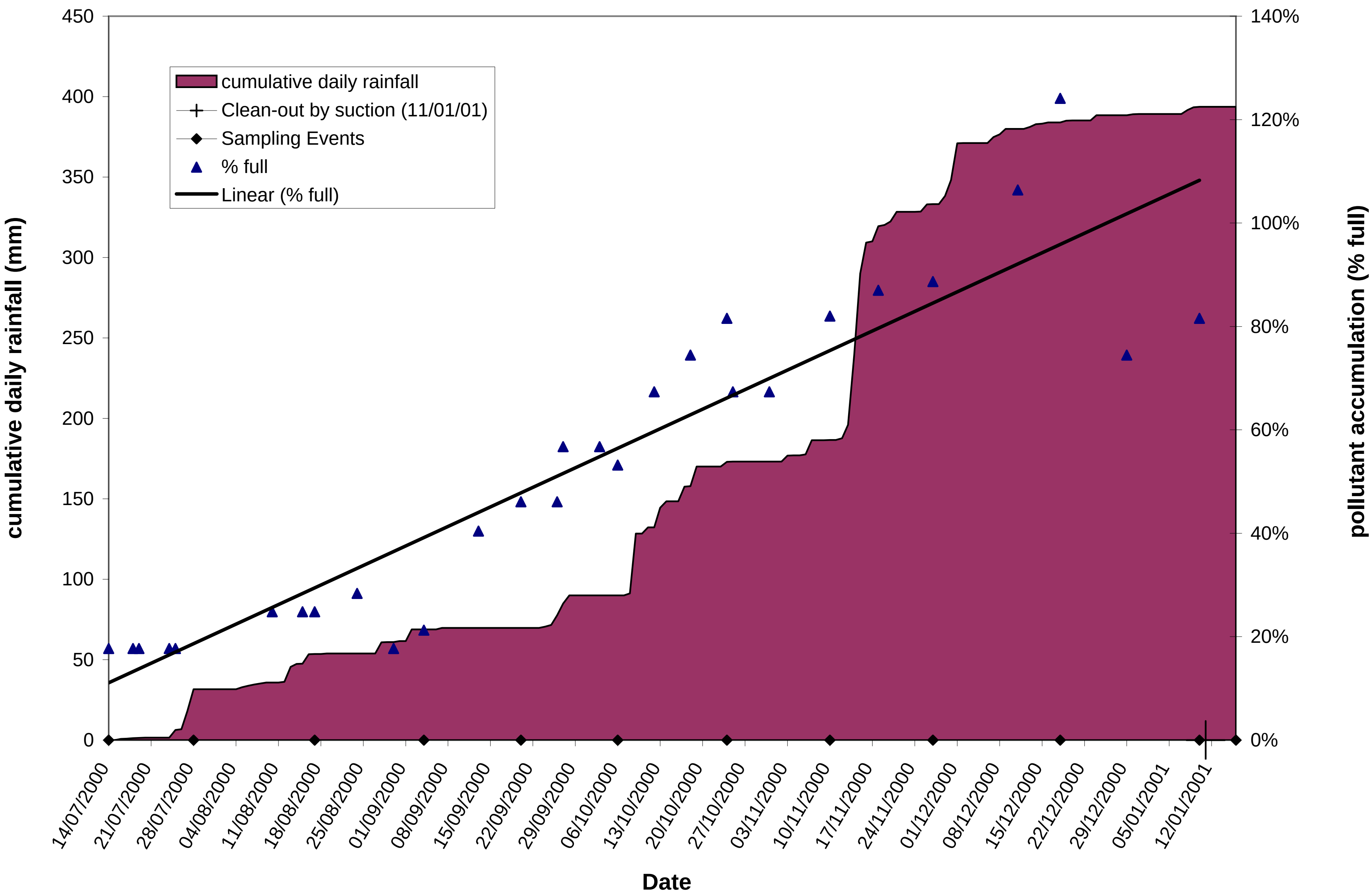


Figure 5-16 Time series graph of pollutant accumulation and cumulative rainfall

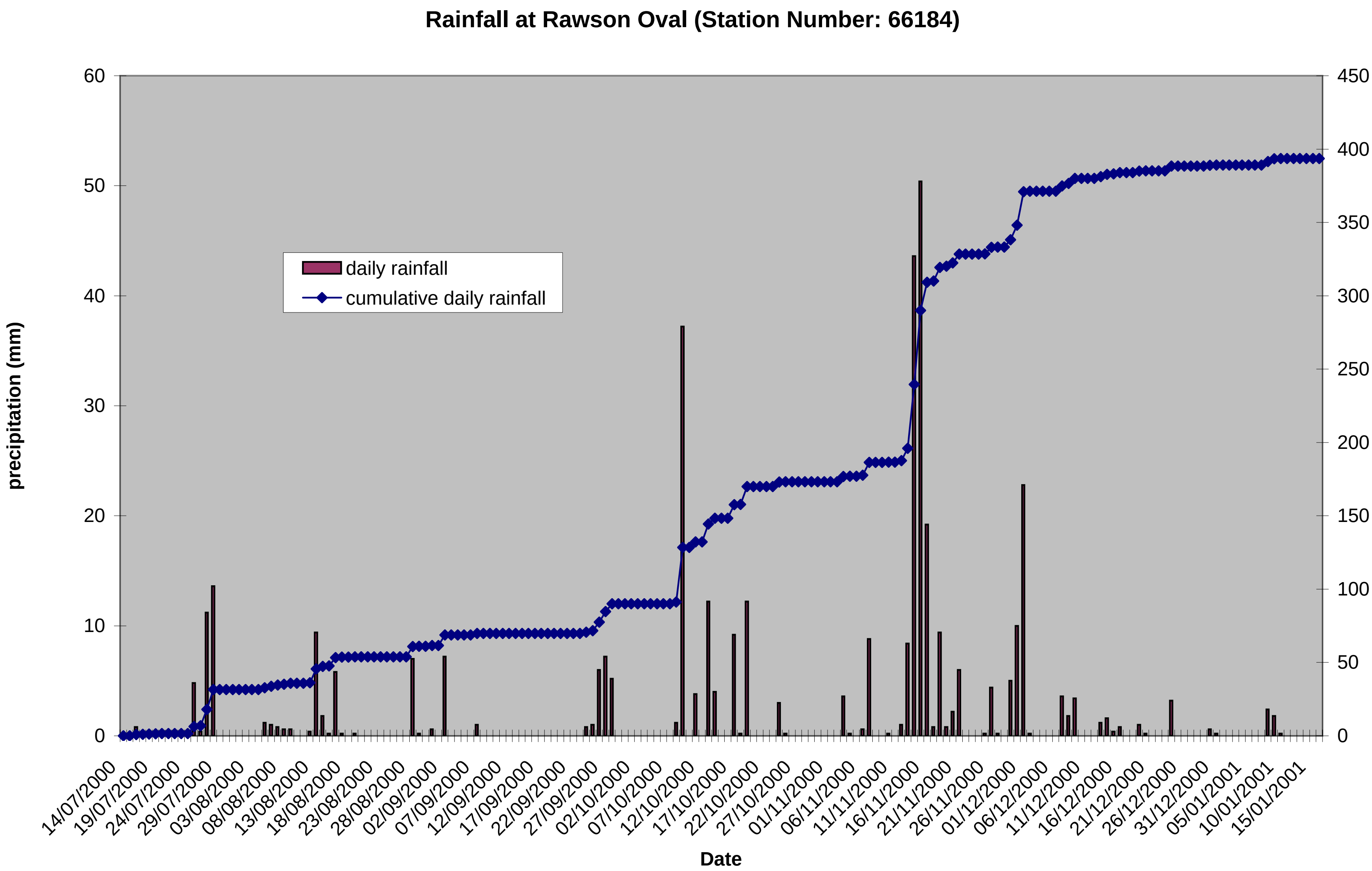


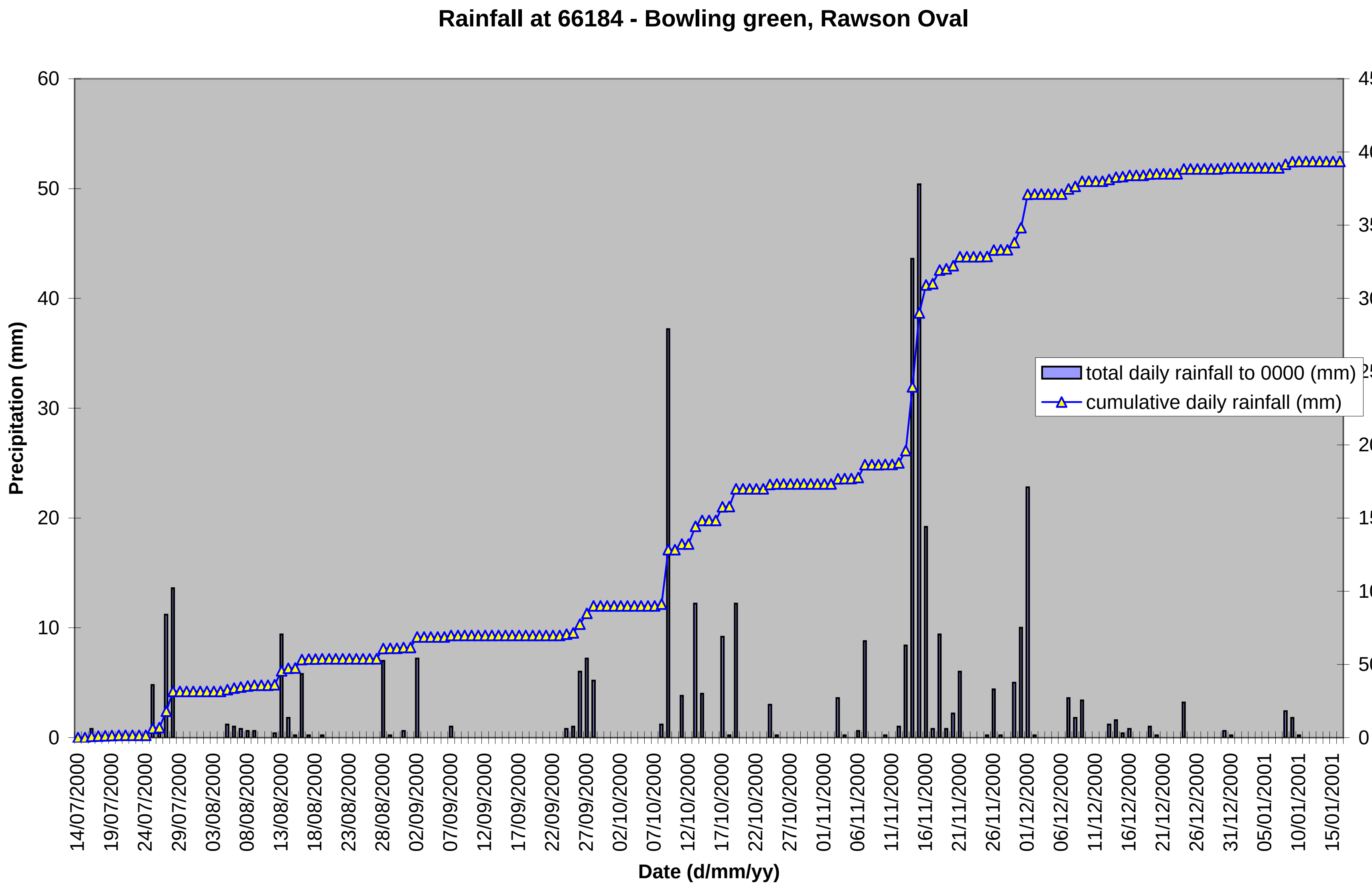
Figure 5-17 Total daily rainfall and cumulative daily rainfall

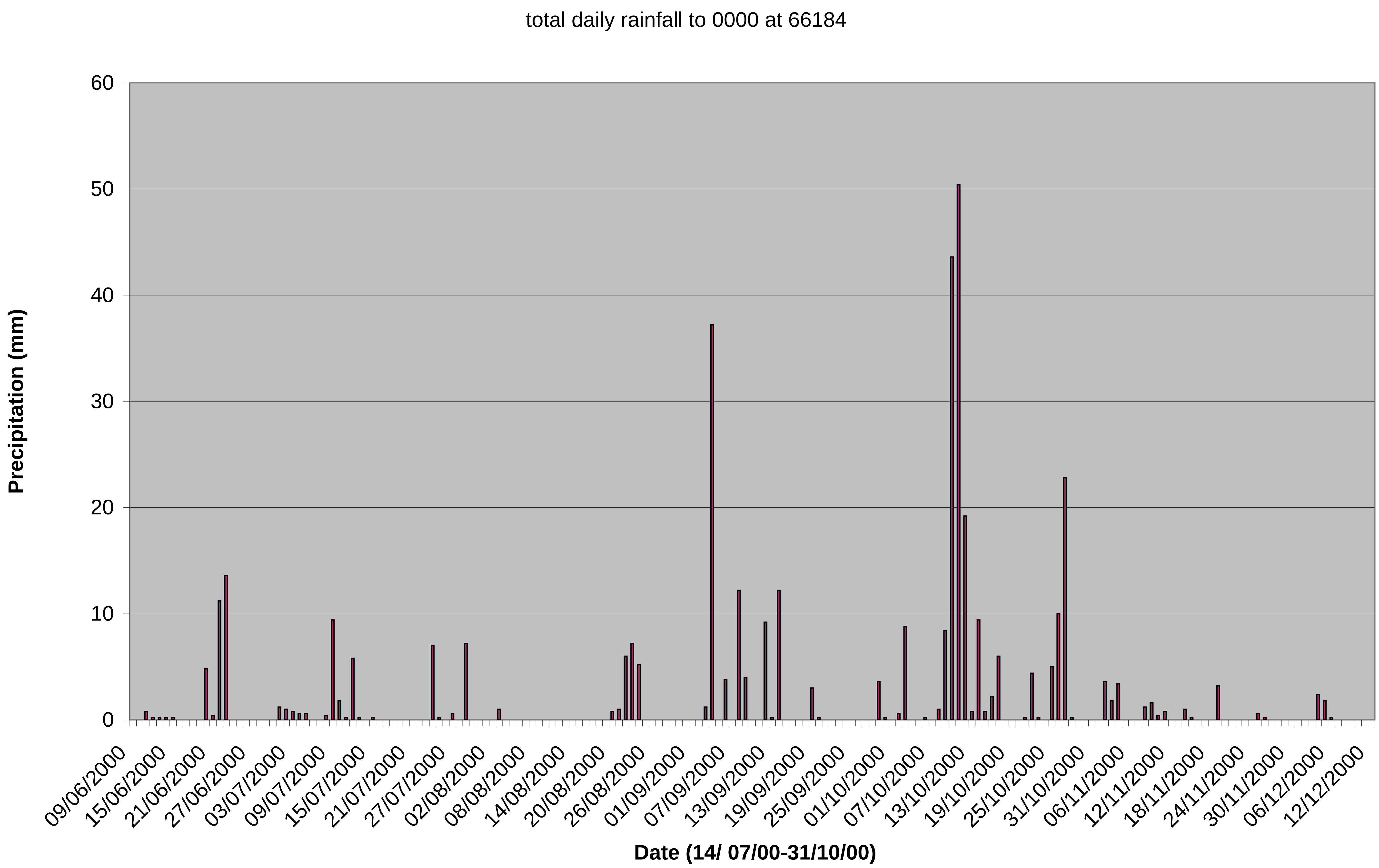
APPENDIX C - RAINFALL DATA

Date	% full	Date	daily rainfall	cumulative daily rainfall
23/06/2000	0%	23/06/2000	0	0
14/07/2000	18%	14/07/2000	0.00	0.00
18/07/2000	18%	15/07/2000	0.00	0.00
19/07/2000	18%	16/07/2000	1.00	1.00
24/07/2000	18%	17/07/2000	0.20	1.20
25/07/2000	18%	18/07/2000	0.20	1.40
10/08/2000	25%	19/07/2000	0.00	1.40
15/08/2000	25%	20/07/2000	0.20	1.60
17/08/2000	25%	21/07/2000	0.00	1.60
24/08/2000	28%	22/07/2000	0.00	1.60
30/08/2000	18%	23/07/2000	0.00	1.60
04/09/2000	21%	24/07/2000	0.00	1.60
13/09/2000	40%	25/07/2000	5.20	6.80
20/09/2000	46%	26/07/2000	0.00	6.80
26/09/2000	46%	27/07/2000	24.80	31.60
27/09/2000	57%	28/07/2000	0.00	31.60
03/10/2000	57%	29/07/2000	0.00	31.60
06/10/2000	53%	30/07/2000	0.00	31.60
12/10/2000	67%	31/07/2000	0.00	31.60
18/10/2000	74%	01/08/2000	0.00	31.60
24/10/2000	82%	02/08/2000	0.00	31.60
25/10/2000	67%	03/08/2000	0.00	31.60
31/10/2000	67%	04/08/2000	0.00	31.60
10/11/2000	82%	05/08/2000	1.20	32.80
18/11/2000	87%	06/08/2000	1.40	34.20
27/11/2000	89%	07/08/2000	0.40	34.60
11/12/2000	106%	08/08/2000	1.20	35.80
18/12/2000	124%	09/08/2000	0.00	35.80
29/12/2000	74%	10/08/2000	0.00	35.80
10/01/2001	82%	11/08/2000	0.00	35.80
11/01/2001	0%	12/08/2000	6.00	41.80
16/01/2001	0%	13/08/2000	5.40	47.20
		14/08/2000	0.20	47.40
		15/08/2000	0.20	47.60
		16/08/2000	5.80	53.40
		17/08/2000	0.20	53.60
		18/08/2000	0.20	53.80
		19/08/2000	0.00	53.80
		20/08/2000	0.00	53.80
		21/08/2000	0.00	53.80
		22/08/2000	0.00	53.80
		23/08/2000	0.00	53.80
		24/08/2000	0.00	53.80
		25/08/2000	0.00	53.80
		26/08/2000	0.00	53.80
		27/08/2000	0.00	53.80
		28/08/2000	7.00	60.80
		29/08/2000	0.20	61.00
		30/08/2000	0.60	61.60
		31/08/2000	0.00	61.60
		01/09/2000	7.20	68.80
		02/09/2000	0.00	68.80
		03/09/2000	0.00	68.80
		04/09/2000	0.00	68.80
		05/09/2000	0.00	68.80
		06/09/2000	0.00	68.80
		07/09/2000	1.00	69.80
		08/09/2000	0.00	69.80
		09/09/2000	0.00	69.80
		10/09/2000	0.00	69.80
		11/09/2000	0.00	69.80
		12/09/2000	0.00	69.80
		13/09/2000	0.00	69.80

APPENDIX C - RAINFALL DATA

		14/09/2000	0.00	69.80
		15/09/2000	0.00	69.80
		16/09/2000	0.00	69.80
		17/09/2000	0.00	69.80
		18/09/2000	0.00	69.80
		19/09/2000	0.00	69.80
		20/09/2000	0.00	69.80
		21/09/2000	0.00	69.80
		22/09/2000	0.00	69.80
		23/09/2000	0.00	69.80
		24/09/2000	1.80	71.60
		25/09/2000	0.00	71.60
		26/09/2000	13.20	84.80
		27/09/2000	5.00	89.80
		28/09/2000	0.20	90.00
		29/09/2000	0.00	90.00
		30/09/2000	0.00	90.00
		01/10/2000	0.00	90.00
		02/10/2000	0.00	90.00
		03/10/2000	0.00	90.00
		04/10/2000	0.00	90.00
		05/10/2000	0.00	90.00
		06/10/2000	0.00	90.00
		07/10/2000	0.00	90.00
		08/10/2000	19.40	109.40
		09/10/2000	19.00	128.40
		10/10/2000	3.60	132.00
		11/10/2000	0.20	132.20
		12/10/2000	0.00	132.20
		13/10/2000	16.00	148.20
		14/10/2000	0.20	148.40
		15/10/2000	0.00	148.40
		16/10/2000	8.60	157.00
		17/10/2000	0.60	157.60
		18/10/2000	12.20	169.80
		19/10/2000	0.20	170.00
		20/10/2000	0.00	170.00
		21/10/2000	0.00	170.00
		22/10/2000	0.00	170.00
		23/10/2000	0.00	170.00
		24/10/2000	3.20	173.20
		25/10/2000	0.00	173.20
		26/10/2000	0.00	173.20
		27/10/2000	0.00	173.20
		28/10/2000	0.00	173.20
		29/10/2000	0.00	173.20
		30/10/2000	0.00	173.20
		31/10/2000	0.00	173.20
		01/11/2000	0.00	0.00
		02/11/2000	0.00	0.00
		03/11/2000	0.00	0.00
		04/11/2000	0.00	0.00
		05/11/2000	0.00	0.00
		06/11/2000	0.00	0.00
		07/11/2000	0.00	0.00
		08/11/2000	0.00	0.00
		09/11/2000	0.00	0.00
		10/11/2000	0.00	0.00


Rainfall at 66184 - Bowling green, Rawson Oval
Precipitation (mm)
Date (d/mm/yy)
total daily rainfall to 0000 (mm)
cumulative daily rainfall (mm)
0
10
20
30
40
50
60
0
50
100
150
200
250
300
350
400
450
14/07/2000
19/07/2000
24/07/2000
29/07/2000
03/08/2000
08/08/2000
13/08/2000
18/08/2000
23/08/2000
28/08/2000
02/09/2000
07/09/2000
12/09/2000
17/09/2000
22/09/2000
27/09/2000
02/10/2000
07/10/2000
12/10/2000
17/10/2000
22/10/2000
27/10/2000
01/11/2000
06/11/2000
11/11/2000
16/11/2000
21/11/2000
26/11/2000
01/12/2000
06/12/2000
11/12/2000
16/12/2000
21/12/2000
26/12/2000
31/12/2000
05/01/2001
10/01/2001
15/01/2001


total daily rainfall to 0000 at 66184
Precipitation (mm)
0
10
20
30
40
50
60
09/06/2000
15/06/2000
21/06/2000
27/06/2000
03/07/2000
09/07/2000
15/07/2000
21/07/2000
27/07/2000
02/08/2000
08/08/2000
14/08/2000
20/08/2000
26/08/2000
01/09/2000
07/09/2000
13/09/2000
19/09/2000
25/09/2000
01/10/2000
07/10/2000
13/10/2000
19/10/2000
25/10/2000
31/10/2000
06/11/2000
12/11/2000
18/11/2000
24/11/2000
30/11/2000
06/12/2000
12/12/2000
Date (14/ 07/00-31/10/00)

Date	total daily rainfall to 0900 (mm)	cumulative daily rainfall (mm)		Date	no. of tips (actual day)	total daily rainfall to 0000 (mm)	cumulative daily rainfall (mm)	cumulative monthly rainfall	
14/07/2000	0.00	0.00		09/06/2000	0	0	0		
15/07/2000	0.00	0.00		10/06/2000	0	0	0		
16/07/2000	1.00	1.00		11/06/2000	26	5.2	5.2		
17/07/2000	0.20	1.20		12/06/2000	44	8.8	14		
18/07/2000	0.20	1.40		13/06/2000	0	0	14		
19/07/2000	0.00	1.40		14/06/2000	1	0.2	14.2		
20/07/2000	0.20	1.60		15/06/2000	0	0	14.2		
21/07/2000	0.00	1.60		16/06/2000	0	0	14.2		
22/07/2000	0.00	1.60		17/06/2000	0	0	14.2		
23/07/2000	0.00	1.60		18/06/2000	3	0.6	14.8		
24/07/2000	0.00	1.60		19/06/2000	6	1.2	16		
25/07/2000	5.20	6.80		20/06/2000	7	1.4	17.4		
26/07/2000	0.00	6.80		21/06/2000	1	0.2	17.6		
27/07/2000	24.80	31.60		22/06/2000	3	0.6	18.2		
28/07/2000	0.00	31.60		23/06/2000	0	0	18.2		
29/07/2000	0.00	31.60		24/06/2000	0	0	18.2		
30/07/2000	0.00	31.60		25/06/2000	0	0	18.2		
31/07/2000	0.00	31.60		26/06/2000	1	0.2	18.4		
01/08/2000	0.00	31.60		27/06/2000	9	1.8	20.2		
02/08/2000	0.00	31.60		28/06/2000	7	1.4	21.6		
03/08/2000	0.00	31.60		29/06/2000	20	4	25.6		
04/08/2000	0.00	31.60		30/06/2000	84	16.8	42.4	42.4	
05/08/2000	1.20	32.80		01/07/2000	0	0	42.4		
06/08/2000	1.40	34.20		02/07/2000	7	1.4	43.8		
07/08/2000	0.40	34.60		03/07/2000	34	6.8	50.6		
08/08/2000	1.20	35.80		04/07/2000	10	2	52.6		
09/08/2000	0.00	35.80		05/07/2000	1	0.2	52.8		
10/08/2000	0.00	35.80		06/07/2000	3	0.6	53.4		
11/08/2000	0.00	35.80		07/07/2000	3	0.6	54		
12/08/2000	6.00	41.80		08/07/2000	4	0.8	54.8		
13/08/2000	5.40	47.20		09/07/2000	0	0	54.8		
14/08/2000	0.20	47.40		10/07/2000	0	0	54.8		
15/08/2000	0.20	47.60		11/07/2000	0	0	54.8		
16/08/2000	5.80	53.40		12/07/2000	0	0	54.8		
17/08/2000	0.20	53.60		13/07/2000	0	0	54.8		
18/08/2000	0.20	53.80		14/07/2000	0	0	0		device pumped out to install screens
19/08/2000	0.00	53.80		15/07/2000	0	0	0		
20/08/2000	0.00	53.80		16/07/2000	4	0.8	0.8		
21/08/2000	0.00	53.80		17/07/2000	1	0.2	1		
22/08/2000	0.00	53.80		18/07/2000	1	0.2	1.2		
23/08/2000	0.00	53.80		19/07/2000	1	0.2	1.4		
24/08/2000	0.00	53.80		20/07/2000	1	0.2	1.6		
25/08/2000	0.00	53.80		21/07/2000	0	0	1.6		
26/08/2000	0.00	53.80		22/07/2000	0	0	1.6		
27/08/2000	0.00	53.80		23/07/2000	0	0	1.6		
28/08/2000	7.00	60.80		24/07/2000	0	0	1.6		
29/08/2000	0.20	61.00		25/07/2000	24	4.8	6.4		
30/08/2000	0.60	61.60		26/07/2000	2	0.4	6.8		
31/08/2000	0.00	61.60		27/07/2000	56	11.2	18		
01/09/2000	7.20	68.80		28/07/2000	68	13.6	31.6		
02/09/2000	0.00	68.80		29/07/2000	0	0	31.6		
03/09/2000	0.00	68.80		30/07/2000	0	0	31.6		
04/09/2000	0.00	68.80		31/07/2000	0	0	31.6	31.6	
05/09/2000	0.00	68.80		01/08/2000	0	0	31.6		
06/09/2000	0.00	68.80		02/08/2000	0	0	31.6		
07/09/2000	1.00	69.80		03/08/2000	0	0	31.6		
08/09/2000	0.00	69.80		04/08/2000	0	0	31.6		
09/09/2000	0.00	69.80		05/08/2000	6	1.2	32.8		
10/09/2000	0.00	69.80		06/08/2000	5	1	33.8		
11/09/2000	0.00	69.80		07/08/2000	4	0.8	34.6		
12/09/2000	0.00	69.80		08/08/2000	3	0.6	35.2		
13/09/2000	0.00	69.80		09/08/2000	3	0.6	35.8		
14/09/2000	0.00	69.80		10/08/2000	0	0	35.8		
15/09/2000	0.00	69.80		11/08/2000	0	0	35.8		
16/09/2000	0.00	69.80		12/08/2000	2	0.4	36.2		
17/09/2000	0.00	69.80		13/08/2000	47	9.4	45.6		
18/09/2000	0.00	69.80		14/08/2000	9	1.8	47.4		
19/09/2000	0.00	69.80		15/08/2000	1	0.2	47.6		
20/09/2000	0.00	69.80		16/08/2000	29	5.8	53.4		
21/09/2000	0.00	69.80		17/08/2000	1	0.2	53.6		
22/09/2000	0.00	69.80		18/08/2000	0	0	53.6		
23/09/2000	0.00	69.80		19/08/2000	1	0.2	53.8		
24/09/2000	1.80	71.60		20/08/2000	0	0	53.8		
25/09/2000	0.00	71.60		21/08/2000	0	0	53.8		
26/09/2000	13.20	84.80		22/08/2000	0	0	53.8		
27/09/2000	5.00	89.80		23/08/2000	0	0	53.8		
28/09/2000	0.20	90.00		24/08/2000	0	0	53.8		
29/09/2000	0.00	90.00		25/08/2000	0	0	53.8		
30/09/2000	0.00	90.00		26/08/2000	0	0	53.8		
01/10/2000	0.00	90.00		27/08/2000	0	0	53.8		
02/10/2000	0.00	90.00		28/08/2000	35	7	60.8		
03/10/2000	0.00	90.00		29/08/2000	1	0.2	61		
04/10/2000	0.00	90.00		30/08/2000	0	0	61		
05/10/2000	0.00	90.00		31/08/2000	3	0.6	61.6	61.6	
06/10/2000	0.00	90.00		01/09/2000	0	0	61.6		
07/10/2000	0.00	90.00		02/09/2000	36	7.2	68.8		

08/10/2000	19.40	109.40	03/09/2000	0	0	68.8					
09/10/2000	19.00	128.40	04/09/2000	0	0	68.8					
10/10/2000	3.60	132.00	05/09/2000	0	0	68.8					
11/10/2000	0.20	132.20	06/09/2000	0	0	68.8					
12/10/2000	0.00	132.20	07/09/2000	5	1	69.8					
13/10/2000	16.00	148.20	08/09/2000	0	0	69.8					
14/10/2000	0.20	148.40	09/09/2000	0	0	69.8					
15/10/2000	0.00	148.40	10/09/2000	0	0	69.8					
16/10/2000	8.60	157.00	11/09/2000	0	0	69.8					
17/10/2000	0.60	157.60	12/09/2000	0	0	69.8					
18/10/2000	12.20	169.80	13/09/2000	0	0	69.8					
19/10/2000	0.20	170.00	14/09/2000	0	0	69.8					
20/10/2000	0.00	170.00	15/09/2000	0	0	69.8					
21/10/2000	0.00	170.00	16/09/2000	0	0	69.8					
22/10/2000	0.00	170.00	17/09/2000	0	0	69.8					
23/10/2000	0.00	170.00	18/09/2000	0	0	69.8					
24/10/2000	3.20	173.20	19/09/2000	0	0	69.8					
25/10/2000	0.00	173.20	20/09/2000	0	0	69.8					
26/10/2000	0.00	173.20	21/09/2000	0	0	69.8					
27/10/2000	0.00	173.20	22/09/2000	0	0	69.8					
28/10/2000	0.00	173.20	23/09/2000	0	0	69.8					
29/10/2000	0.00	173.20	24/09/2000	4	0.8	70.6					
30/10/2000	0.00	173.20	25/09/2000	5	1	71.6					
31/10/2000	0.00	173.20	26/09/2000	30	6	77.6					
			27/09/2000	36	7.2	84.8					
			28/09/2000	26	5.2	90					
			29/09/2000	0	0	90					
			30/09/2000	0	0	90	90				
			01/10/2000	0	0	90					
			02/10/2000	0	0	90					
			03/10/2000	0	0	90					
			04/10/2000	0	0	90					
			05/10/2000	0	0	90					
			06/10/2000	0	0	90					
			07/10/2000	0	0	90					
			08/10/2000	6	1.2	91.2					
			09/10/2000	186	37.2	128.4					
			10/10/2000	0	0	128.4					
			11/10/2000	19	3.8	132.2					
			12/10/2000	0	0	132.2					
			13/10/2000	61	12.2	144.4					
			14/10/2000	20	4	148.4					
			15/10/2000	0	0	148.4					
			16/10/2000	0	0	148.4					
			17/10/2000	46	9.2	157.6					
			18/10/2000	1	0.2	157.8					
			19/10/2000	61	12.2	170					
			20/10/2000	0	0	170					
			21/10/2000	0	0	170					
			22/10/2000	0	0	170					
			23/10/2000	0	0	170					
			24/10/2000	15	3	173					
			25/10/2000	1	0.2	173.2					
			26/10/2000	0	0	173.2					
			27/10/2000	0	0	173.2					
			28/10/2000	0	0	173.2					
			29/10/2000	0	0	173.2					
			30/10/2000	0	0	173.2					
			31/10/2000	0	0	173.2	173.2				
			01/11/2000	0	0	173.2					
			02/11/2000	0	0	173.2					
			03/11/2000	18	3.6	176.8					
			04/11/2000	1	0.2	177					
			05/11/2000	0	0	177					
			06/11/2000	3	0.6	177.6					
			07/11/2000	44	8.8	186.4					
			08/11/2000	0	0	186.4					
			09/11/2000	0	0	186.4					
			10/11/2000	1	0.2	186.6					
			11/11/2000	0	0	186.6					
			12/11/2000	5	1	187.6					
			13/11/2000	42	8.4	196					
			14/11/2000	218	43.6	239.6					
			15/11/2000	252	50.4	290					
			16/11/2000	96	19.2	309.2					
			17/11/2000	4	0.8	310					
			18/11/2000	47	9.4	319.4					
			19/11/2000	4	0.8	320.2					
			20/11/2000	11	2.2	322.4					
			21/11/2000	30	6	328.4					
			22/11/2000	0	0	328.4					
			23/11/2000	0	0	328.4					
			24/11/2000	0	0	328.4					
			25/11/2000	1	0.2	328.6					
			26/11/2000	22	4.4	333					
			27/11/2000	1	0.2	333.2					
			28/11/2000	0	0	333.2					
			29/11/2000	25	5	338.2					
			30/11/2000	50	10	348.2	348.2				
			01/12/2000	114	22.8	371					

				02/12/2000	1	0.2	371.2					
				03/12/2000	0	0	371.2					
				04/12/2000	0	0	371.2					
				05/12/2000	0	0	371.2					
				06/12/2000	0	0	371.2					
				07/12/2000	18	3.6	374.8					
				08/12/2000	9	1.8	376.6					
				09/12/2000	17	3.4	380					
				10/12/2000	0	0	380					
				11/12/2000	0	0	380					
				12/12/2000	0	0	380					
				13/12/2000	6	1.2	381.2					
				14/12/2000	8	1.6	382.8					
				15/12/2000	2	0.4	383.2					
				16/12/2000	4	0.8	384					
				17/12/2000	0	0	384					
				18/12/2000	0	0	384					
				19/12/2000	5	1	385					
				20/12/2000	1	0.2	385.2					
				21/12/2000	0	0	385.2					
				22/12/2000	0	0	385.2					
				23/12/2000	0	0	385.2					
				24/12/2000	16	3.2	388.4					
				25/12/2000	0	0	388.4					
				26/12/2000	0	0	388.4					
				27/12/2000	0	0	388.4					
				28/12/2000	0	0	388.4					
				29/12/2000	0	0	388.4					
				30/12/2000	3	0.6	389					
				31/12/2000	1	0.2	389.2	389.2				
				01/01/2001	0	0	389.2					
				02/01/2001	0	0	389.2					
				03/01/2001	0	0	389.2					
				04/01/2001	0	0	389.2					
				05/01/2001	0	0	389.2					
				06/01/2001	0	0	389.2					
				07/01/2001	0	0	389.2					
				08/01/2001	12	2.4	391.6					
				09/01/2001	9	1.8	393.4					
				10/01/2001	1	0.2	393.6					
				11/01/2001	0	0	393.6					
				12/01/2001	0	0	393.6					
				13/01/2001	0	0	393.6					
				14/01/2001	0	0	393.6					
				15/01/2001	0	0	393.6					
				16/01/2001	0	0	393.6	448.4				

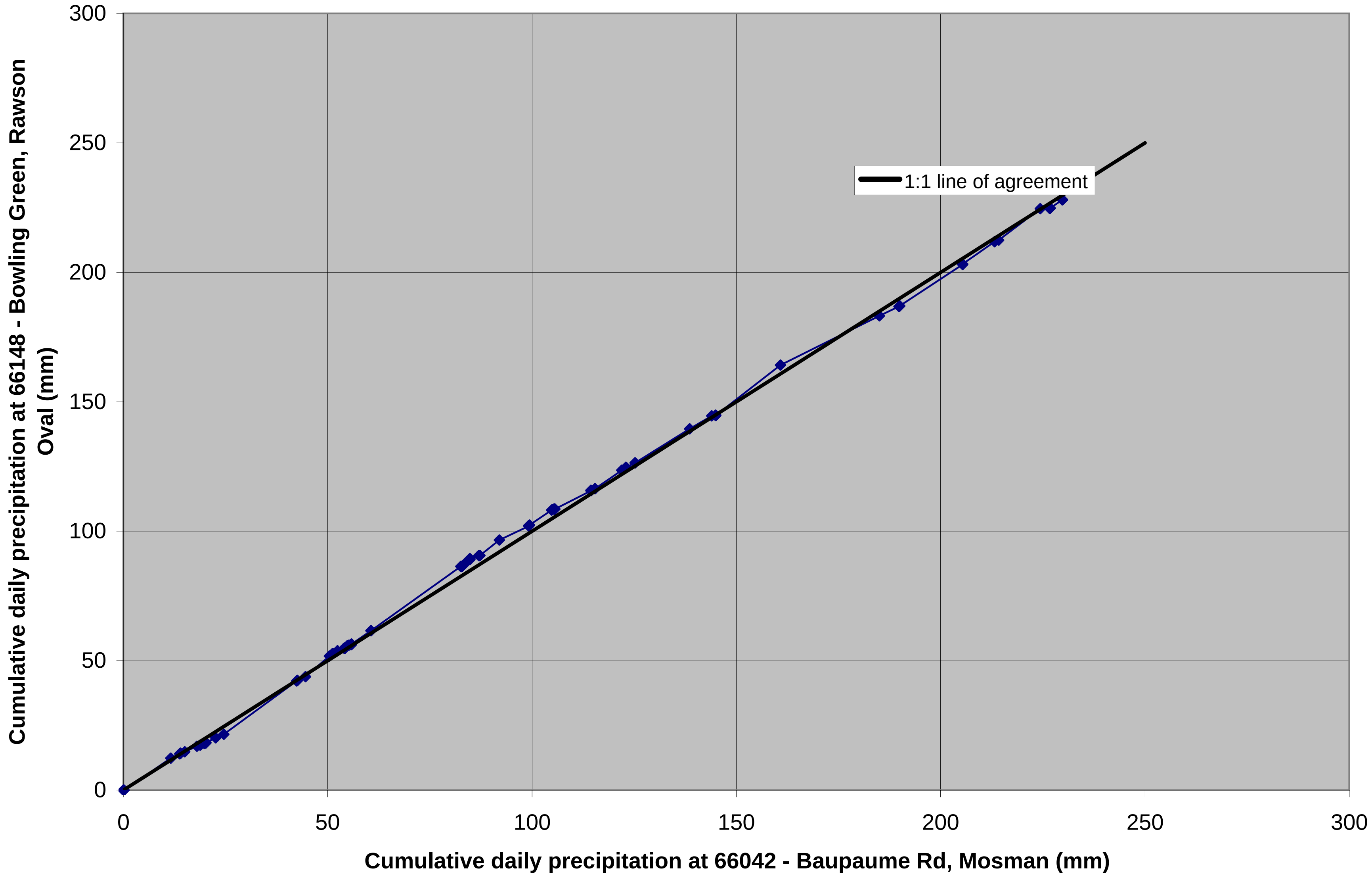
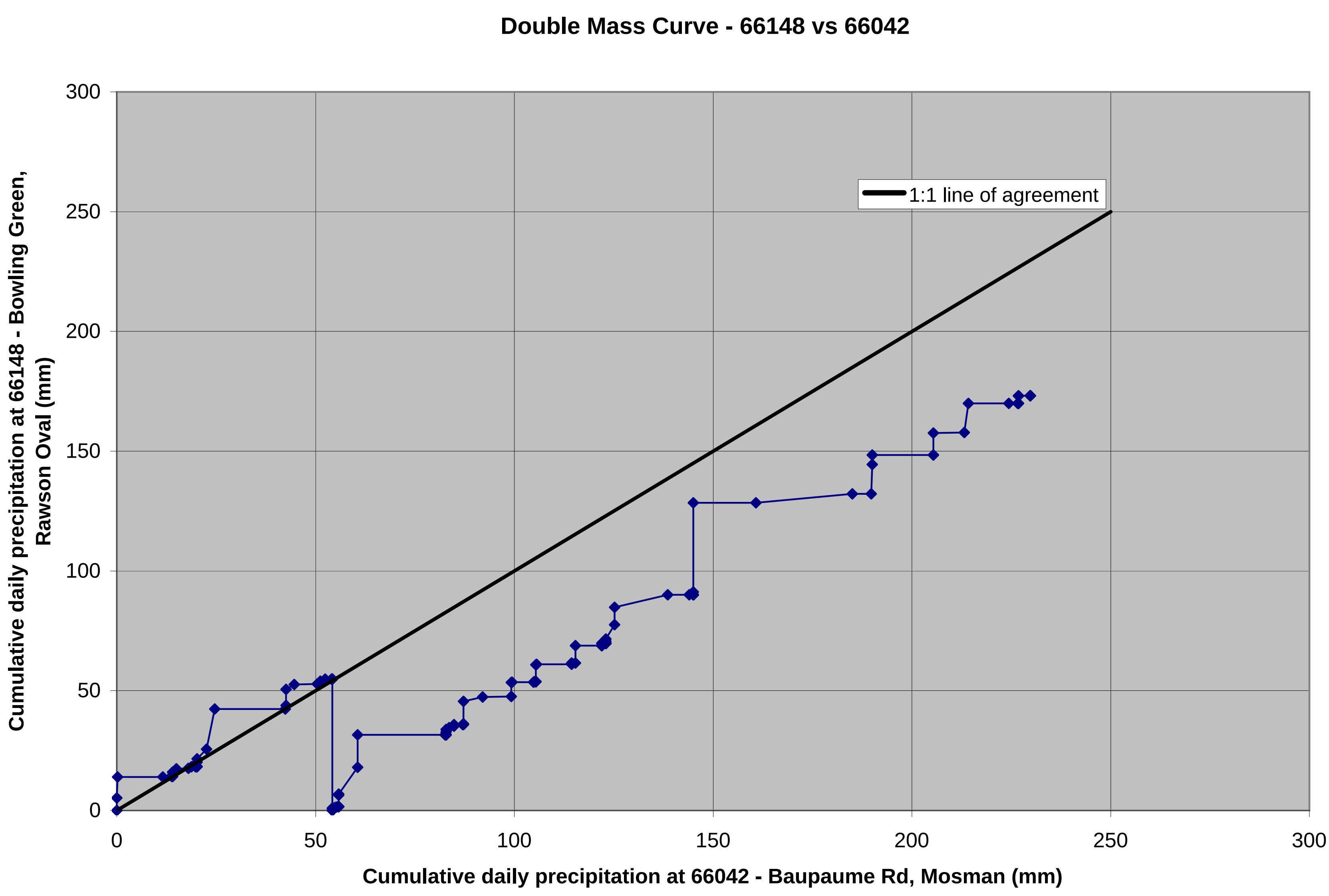


Figure 5-18 Double Mass Curve



Double Mass Curve - 66148 vs 66042
1:1 line of agreement
Cumulative daily precipitation at 66148 - Bowling Green, Rawson Oval (mm)
Cumulative daily precipitation at 66042 - Baupaume Rd, Mosman (mm)
0
50
100
150
200
250
300

66184	66042		66184	66042
cumulative daily total to 0900	cumulative daily total to 0900		cumulative daily rainfall (mm)	
0	0	0	0	
0	0		0	
0	0		5.2	
12	12		14	
14	14		14	
14	14		14.2	
14	14		14.2	
14	14		14.2	
14	14		14.2	
14	14		14.8	
15	15		16	
17	18		17.4	
17	19		17.6	
18	20		18.2	
18	20		18.2	
18	20		18.2	
18	20		18.2	
18	20		18.4	
18	20		20.2	
20	23		21.6	
22	25		25.6	
42	42		42.4	
42	43		42.4	
42	43		43.8	
44	45		50.6	
52	50		52.6	
53	51		52.8	
53	51		53.4	
54	52		54	
55	54		54.8	
55	54		54.8	
55	54		54.8	
55	54		54.8	
55	54		54.8	
55	54		54.8	
55	54		0	
55	54		0	
55	54		0.8	
56	55		1	
56	55		1.2	
56	56		1.4	
56	56		1.6	

56	56	1.6
56	56	1.6
56	56	1.6
56	56	1.6
56	56	6.4
62	61	6.8
62	61	18
86	83	31.6
86	83	31.6
86	83	31.6
86	83	31.6
86	83	31.6
86	83	31.6
86	83	31.6
86	83	31.6
86	83	32.8
88	84	33.8
89	85	34.6
89	85	35.2
91	87	35.8
91	87	35.8
91	87	35.8
91	87	36.2
97	92	45.6
102	99	47.4
102	99	47.6
102	99	53.4
108	105	53.6
108	105	53.6
109	105	53.8
109	105	53.8
109	105	53.8
109	105	53.8
109	105	53.8
109	105	53.8
109	105	53.8
109	105	53.8
109	105	53.8
109	106	60.8
116	114	61
116	114	61
116	115	61.6
116	115	61.6
124	122	68.8
124	122	68.8
124	122	68.8
124	122	68.8

124	122	68.8
124	122	69.8
125	123	69.8
125	123	69.8
125	123	69.8
125	123	69.8
125	123	69.8
125	123	69.8
125	123	69.8
125	123	69.8
125	123	69.8
125	123	69.8
125	123	69.8
125	123	69.8
125	123	69.8
125	123	69.8
125	123	69.8
125	123	69.8
125	123	70.6
126	125	71.6
126	125	77.6
140	139	84.8
145	144	90
145	145	90
145	145	90
145	145	90
145	145	90
145	145	90
145	145	90
145	145	90
145	145	90
145	145	90
145	145	91.2
164	161	128.4
183	185	128.4
187	190	132.2
187	190	132.2
187	190	144.4
203	205	148.4
203	205	148.4
203	205	148.4
212	213	157.6
212	214	157.8
225	224	170
225	227	170
225	227	170
225	227	170

225	227		170
225	227		173
228	230		173.2
228	230		173.2
228	230		173.2
228	230		173.2
228	230		173.2
228	230		173.2
228	230		173.2
		250	173.2
			173.2
			176.8
			177
			177
			177.6
			186.4
			186.4
			186.4
			186.6
			186.6
			187.6
			196
			239.6
			290
			309.2
			310
			319.4
			320.2
			322.4
			328.4
			328.4
			328.4
			328.4
			328.6
			333
			333.2
			333.2
			338.2
			348.2
			371
			371.2
			371.2
			371.2
			371.2
			371.2
			374.8
			376.6

380
380
380
380
381.2
382.8
383.2
384
384
384
385
385.2
385.2
385.2
385.2
388.4
388.4
388.4
388.4
388.4
388.4
389
389.2
389.2
389.2
389.2
389.2
389.2
389.2
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391.6
393.4
393.6
393.6
393.6
393.6
393.6
393.6
393.6

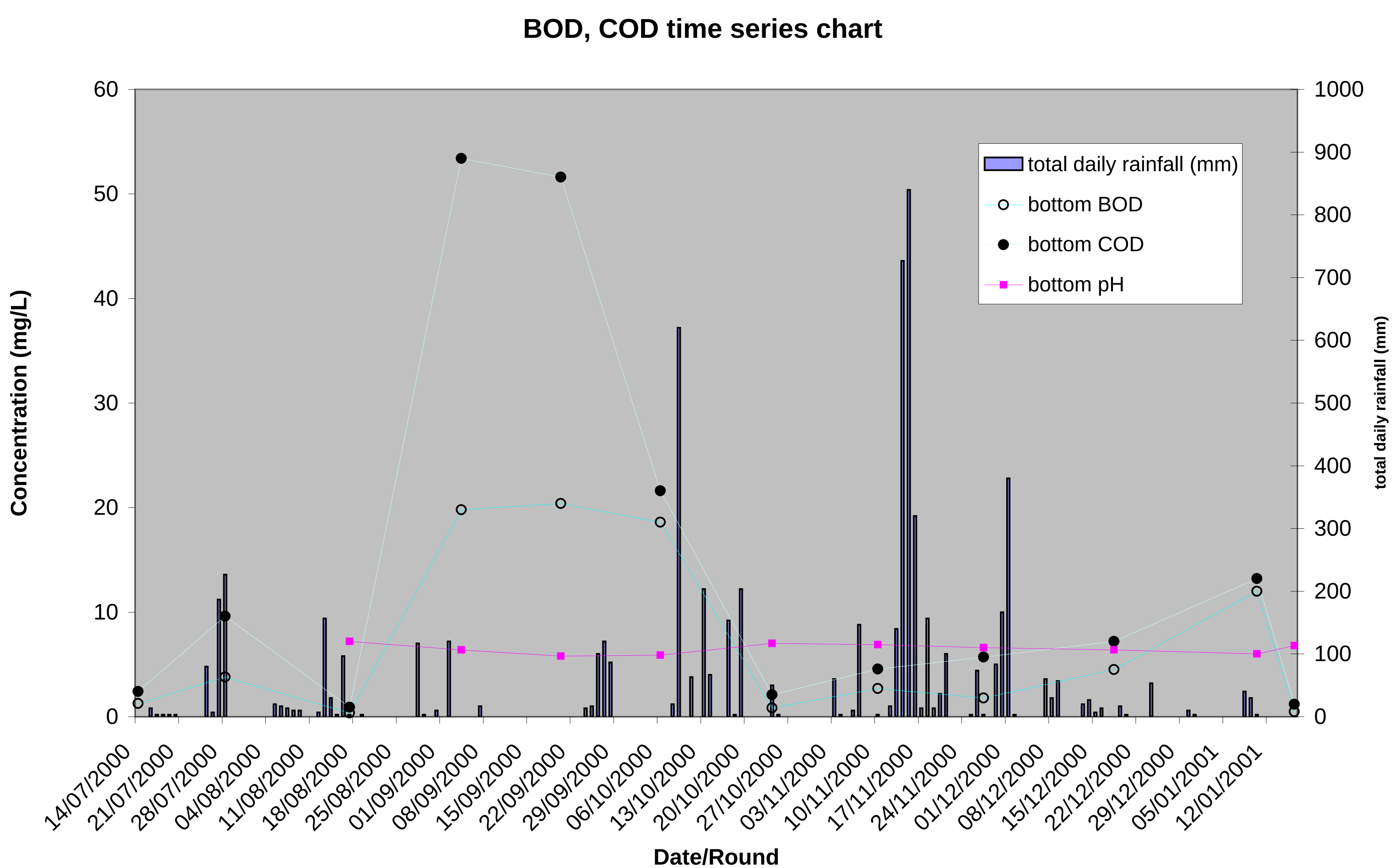
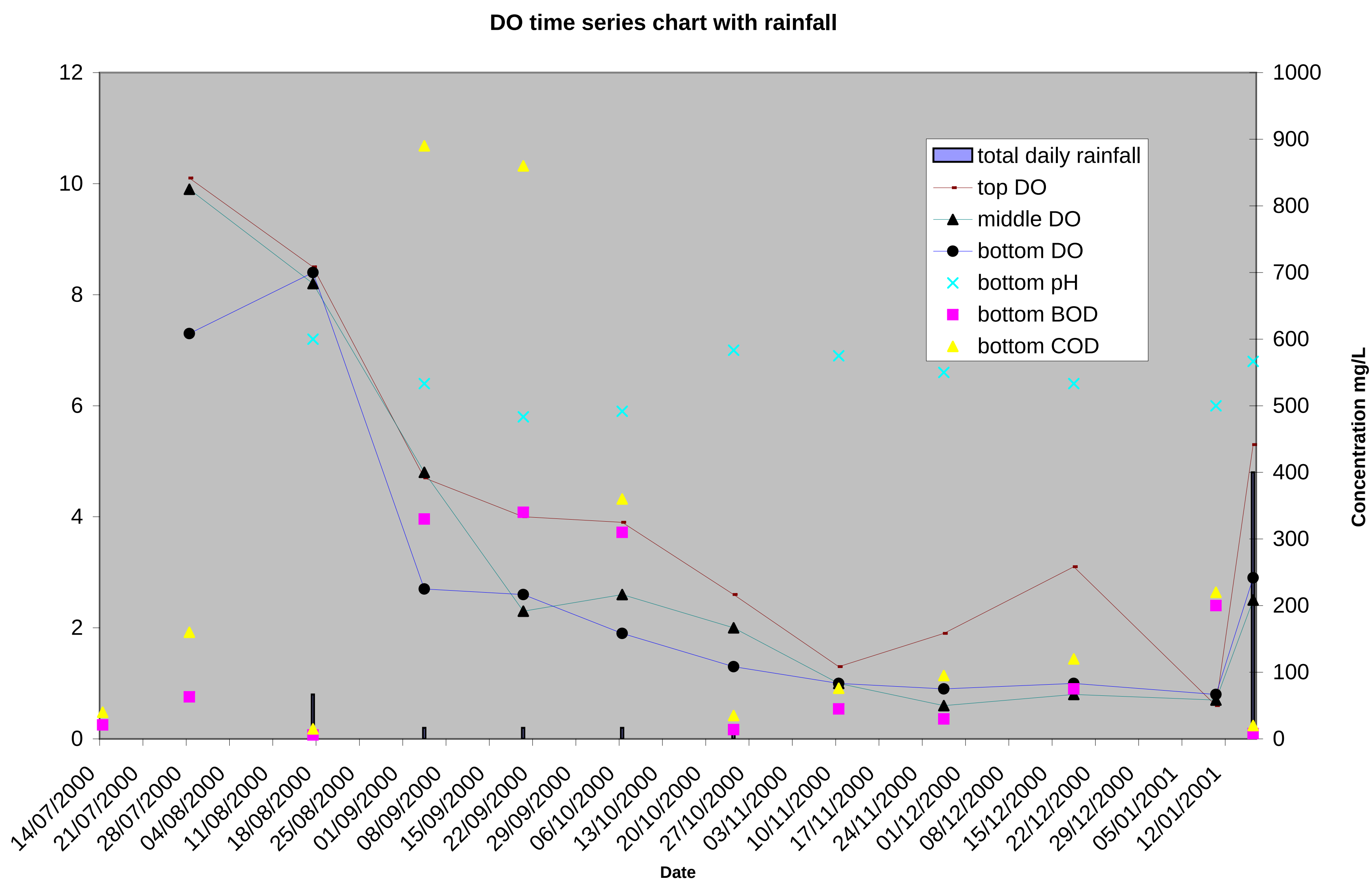

BOD, COD time series chart
Concentration (mg/L)
total daily rainfall (mm)
Date/Round
total daily rainfall (mm)
bottom BOD
bottom COD
bottom pH
0
10
20
30
40
50
60
0
100
200
300
400
500
600
700
800
900
1000
14/07/2000
21/07/2000
28/07/2000
04/08/2000
11/08/2000
18/08/2000
25/08/2000
01/09/2000
08/09/2000
15/09/2000
22/09/2000
29/09/2000
06/10/2000
13/10/2000
20/10/2000
27/10/2000
03/11/2000
10/11/2000
17/11/2000
24/11/2000
01/12/2000
08/12/2000
15/12/2000
22/12/2000
29/12/2000
05/01/2001
12/01/2001

Figure 4-4



DO time series chart with rainfall
total daily rainfall
top DO
middle DO
bottom DO
bottom pH
bottom BOD
bottom COD
Concentration mg/L
Date
0
2
4
6
8
10
12
0
100
200
300
400
500
600
700
800
900
1000
14/07/2000
21/07/2000
28/07/2000
04/08/2000
11/08/2000
18/08/2000
25/08/2000
01/09/2000
08/09/2000
15/09/2000
22/09/2000
29/09/2000
06/10/2000
13/10/2000
20/10/2000
27/10/2000
03/11/2000
10/11/2000
17/11/2000
24/11/2000
01/12/2000
08/12/2000
15/12/2000
22/12/2000
29/12/2000
05/01/2001
12/01/2001

Figure 4-3

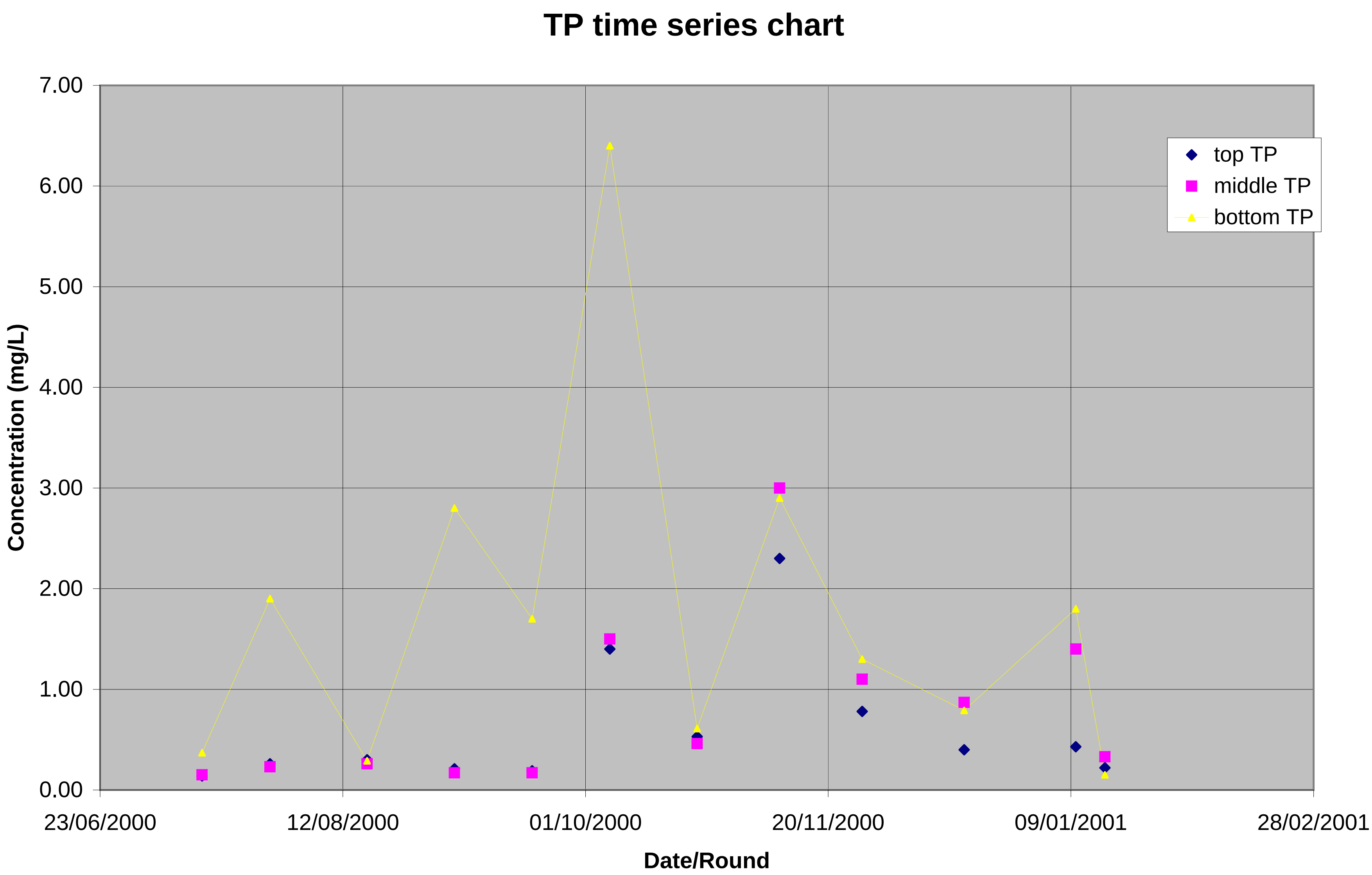

TP time series chart
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
Concentration (mg/L)
23/06/2000
12/08/2000
01/10/2000
20/11/2000
09/01/2001
28/02/2001
Date/Round
top TP
middle TP
bottom TP

Figure 4-7

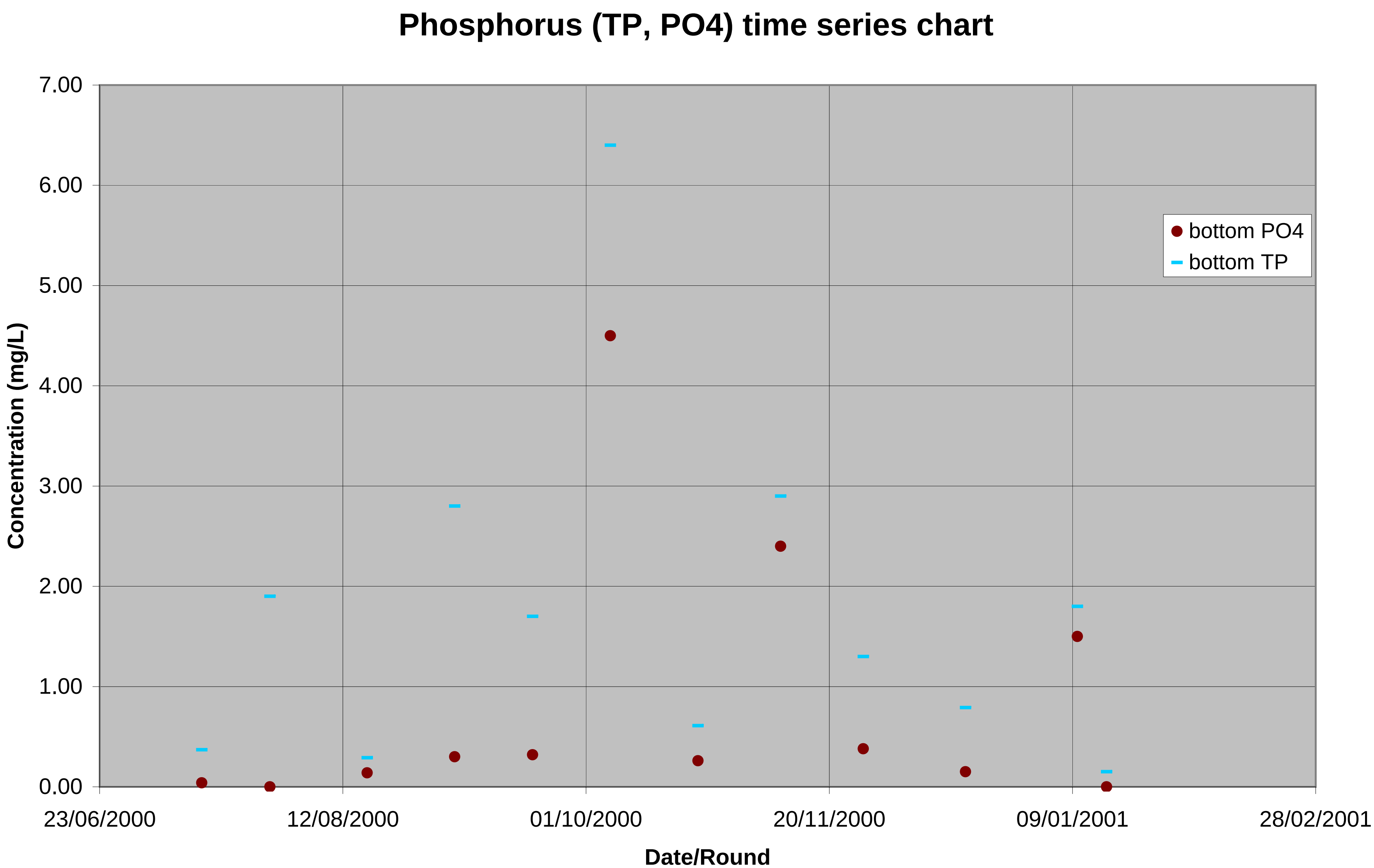

Phosphorus (TP, PO4) time series chart
Concentration (mg/L)
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
23/06/2000
12/08/2000
01/10/2000
20/11/2000
09/01/2001
28/02/2001
Date/Round
bottom PO4
bottom TP

Figure 4-5

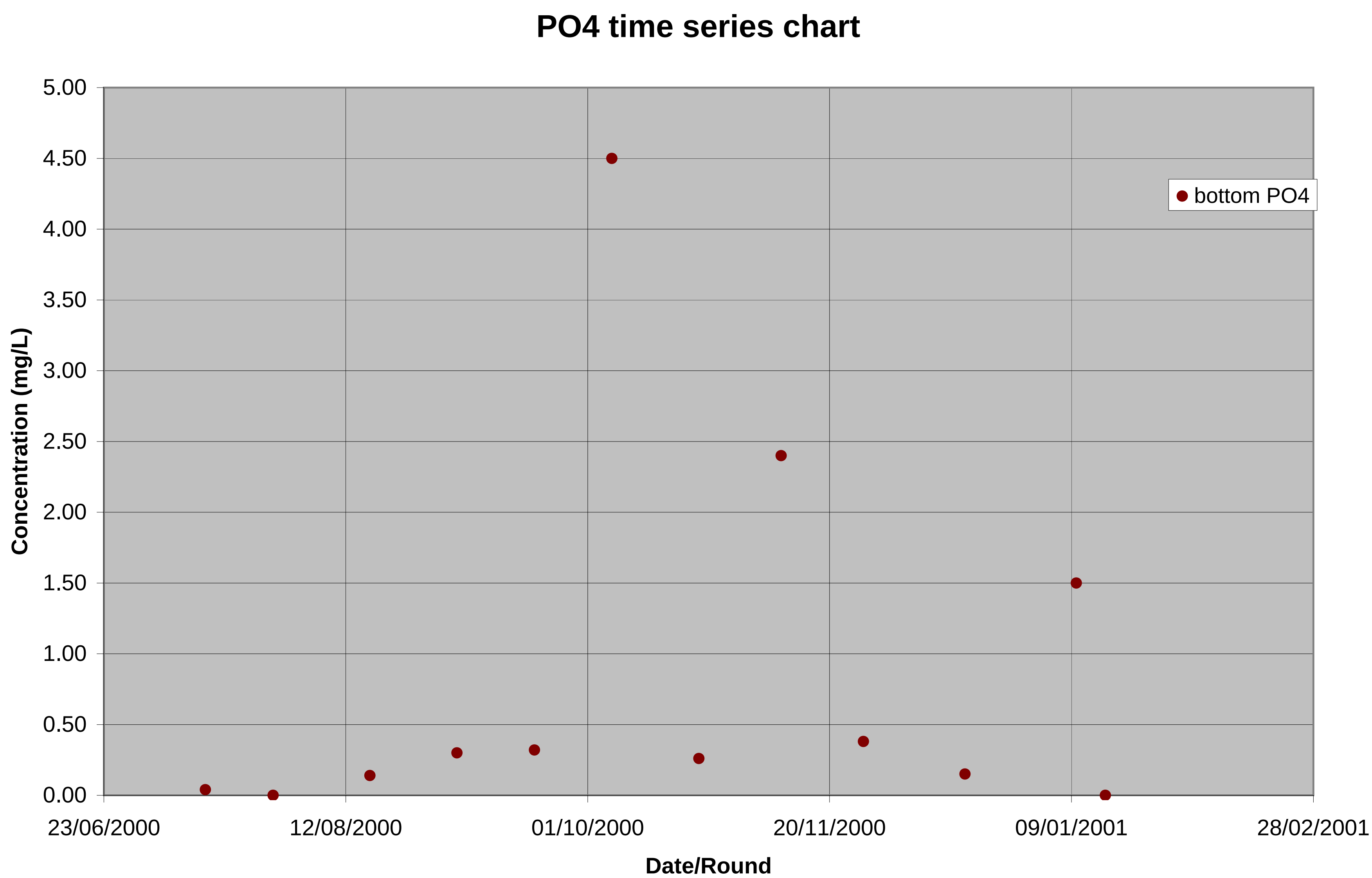

PO4 time series chart
Concentration (mg/L)
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
23/06/2000
12/08/2000
01/10/2000
20/11/2000
09/01/2001
28/02/2001
Date/Round
bottom PO4

Figure 4-6

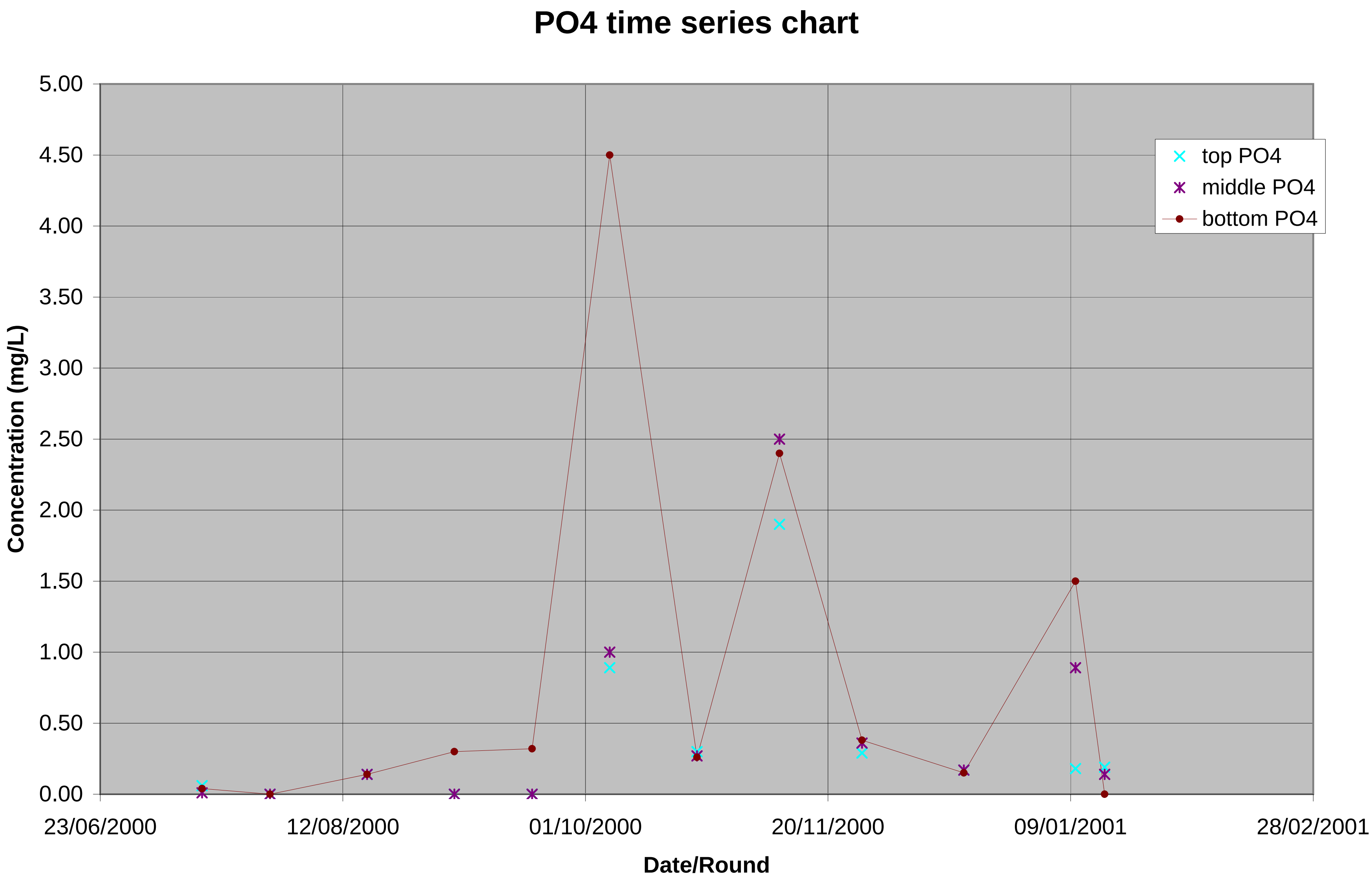
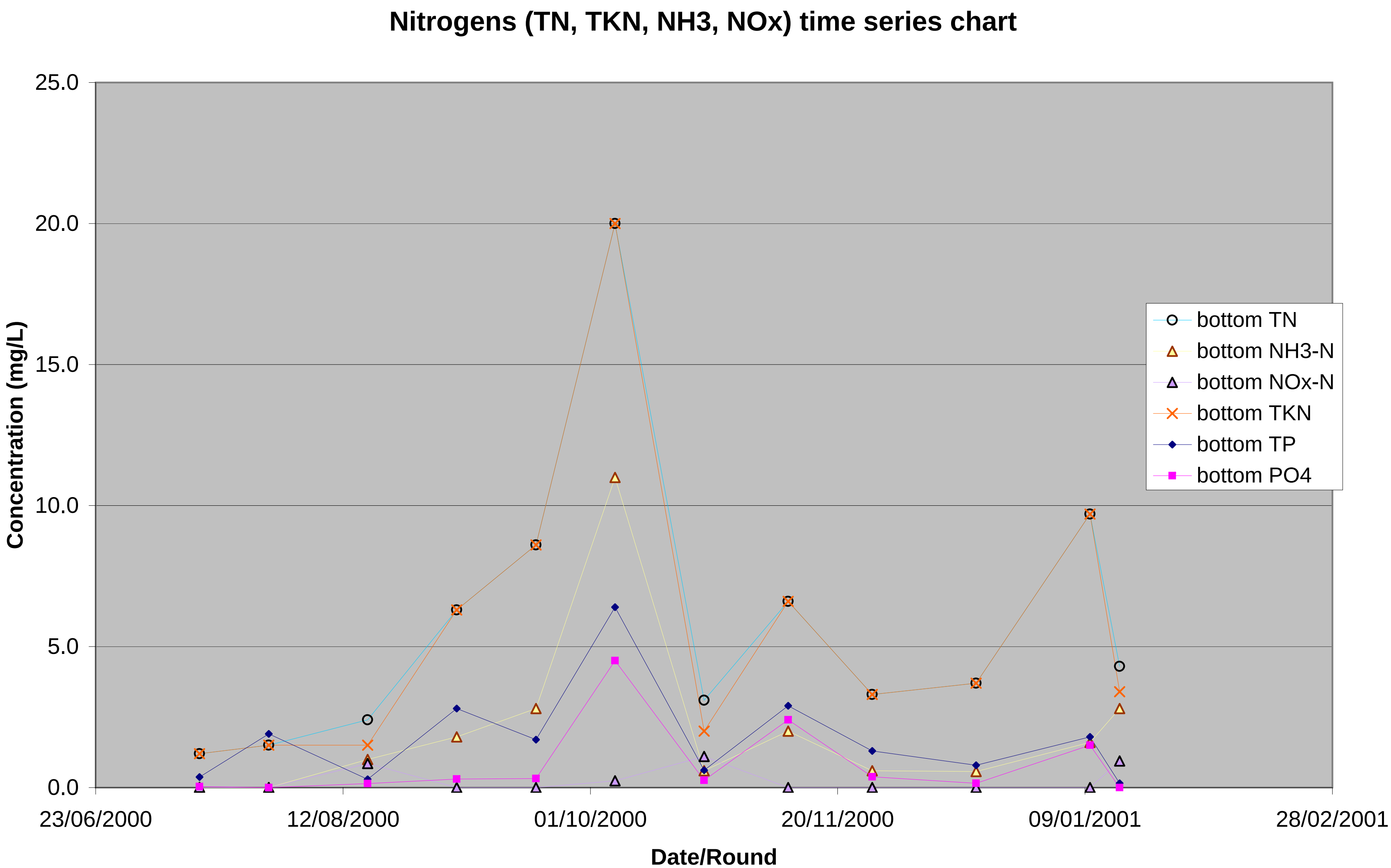

PO4 time series chart
Concentration (mg/L)
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
23/06/2000
12/08/2000
01/10/2000
20/11/2000
09/01/2001
28/02/2001
Date/Round
top PO4
middle PO4
bottom PO4

Figure 4-6



Nitrogens (TN, TKN, NH3, NOx) time series chart
25.0
20.0
15.0
10.0
5.0
0.0
Concentration (mg/L)
23/06/2000
12/08/2000
01/10/2000
20/11/2000
09/01/2001
28/02/2001
Date/Round
bottom TN
bottom NH3-N
bottom NOx-N
bottom TKN
bottom TP
bottom PO4

Figure 4-8

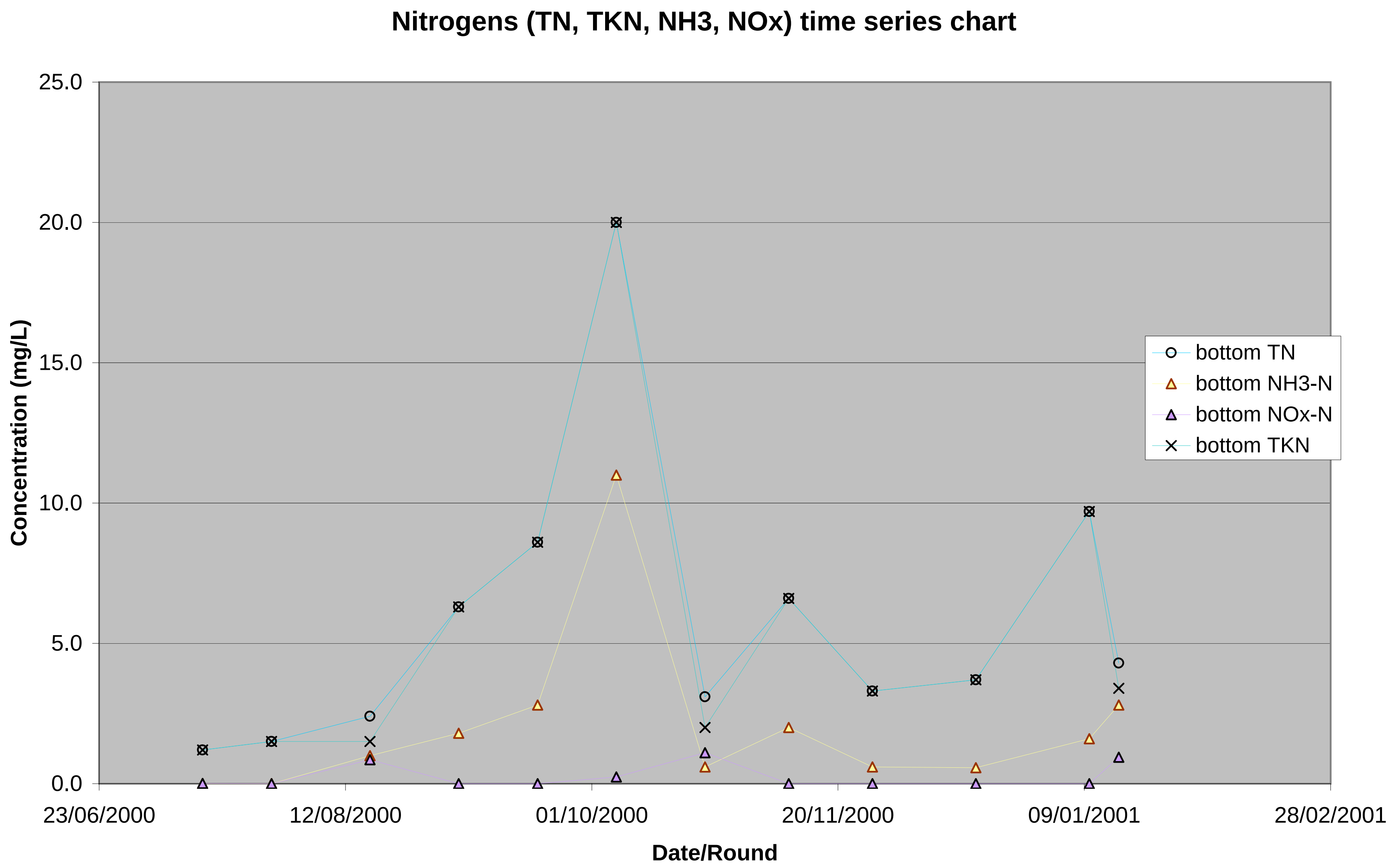

Nitrogens (TN, TKN, NH3, NOx) time series chart
25.0
20.0
15.0
10.0
5.0
0.0
Concentration (mg/L)
23/06/2000
12/08/2000
01/10/2000
20/11/2000
09/01/2001
28/02/2001
Date/Round
bottom TN
bottom NH3-N
bottom NOx-N
bottom TKN

Figure 4-8