N° d'ordre : 2229

THÈSE

Présentée

pour obtenir

LE TITRE DE DOCTEUR DE L'INSTITUT NATIONAL POLYTECHNIQUE DE TOULOUSE

Spécialité : Sciences Agronomiques

BIOGÉOCHIMIE ET HYDROCLIMATOLOGIE APPLIQUÉES À L'AMÉNAGEMENT DES BASSINS FLUVIAUX. MODÈLES DE MÉLANGE. DIAGNOSTIC ET PRÉVISION.

CAS DU NIGER, DE L'AMAZONE ET DE LA GARONNE.

DOCUMENT ANNEXE

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TABLE DES MATIÈRES

CHAPITRE 1- PROTOCOLE D'ÉTUDES A TROIS RÉSERVOIRS. RESULTATS.

CHAPITRE 2- NIGER AMONT. ÉROSION ET DYNAMIQUE DES SOLS.

CHAPITRE 3- AMAZONE. CYCLES BIOGÉOCHIMIQUES DANS LE SYSTEME SOL-PLANTE-RIVIÈRE.

Illustration graphique des résultats du tableau A9. Mise en regard des variations des paramètres (trait plein) avec les variations de débit (histogramme).

Reconstitution de la norme d'altération, établie excursion par excursion pour l'Amazone, ses 8 principaux affluents et la somme des affluents. Détermination de la norme moyenne.

Reconstitution des principales composantes du carbone inorganique dissous, établie excursion par excursion pour l'Amazone, ses 8 principaux affluents et la somme des affluents. Détermination du bilan de consommation moyen du CO_2.

Profils en long de l'ensemble des paramètres mesurés sur le bassin de l'Amazone.
A gauche : Comparaison entre le profil en long théorique (calculé à partir du mélange en proportions variables des eaux des tributaires) et le profil en long observé sur les stations du cours principal. (données moyennes, excursion 1 à 8)
A droite : Comparaison des variations de concentration des différents paramètres, excursion par excursion (2 à 8), entre l'exutoire d'Obidos (valeurs mesurées) et la somme des affluents (valeurs calculées).

Modèle de respiration des sols pour l'Amazone, ses 8 principaux affluents et la somme des affluents. Corrections du signal isotopique du DIC par déduction de la part contributive des roches carbonatées. Détermination du signal isotopique de la pluie : $\delta^{18}O$(pluie) par couplage des variations de $\delta^{13}C$ (DIC*) et de $\delta^{18}O$ selon l'équation : $\Delta\delta^{18}O = 0{,}5 \times \Delta\delta^{13}C$ (DIC*).

CHAPITRE 4- GARONNE. VEILLE ENVIRONNEMENTALE D'UN BASSIN FLUVIAL ANTHROPISÉ

Données chimiques moyennes mensuelles établies pour un réseau de 9 stations situées sur le bassin de la Garonne et supposées représentatives de l'hétérogénéité du bassin. Comparaison des variations saisonnière de composition chimique (trait plein) et des variations de débit (histogramme). Valeurs calculées à partir de la base de données de l'Agence de Bassin Adour-Garonne (1971-1999).

Décomposition des hydrogrammes en trois composantes pour l'ensemble des crues étudiées du Girou (1982-1985), de la Garonne amont (1999-2000) et de la Garonne aval (1989-1992).

CHAPITRE 5- DIAGNOSTIC ET PRÉVISION.

Séries historiques mensuelles de débit de l'Amazone (1911-1985), du Niger amont (1907-1979) et de la Garonne (1914-1979).

Illustration des variations du débit moyen annuel déterminées à partir du tableau A13.

Tableau A1 (1/5)

Amazone à Obidos. Superficie = 4 619 000 km²

	$m^3.s^{-1}$		Cations (µmol.l^{-1})						µeq.l^{-1}		Anions (µmol.l^{-1})					
N°	Qt	pH	H^+	NH_4^+	Na^+	K^+	Ca^{2+}	Mg^{2+}	S^+	S^-	HCO_3^-	Cl^-	NO_3^-	DOC^-	SO_4^{2-}	HPO_4^{2-}
1	220000	*6.67*	*0.2*	*0.7*	*88*	*25*	*156*	*42*	*510*	*510*	*389*	*46*	*9.1*	*21.4*	*22*	*0.69*
2	161300	6.61	0.2	*0.6*	90	21	128	34	436	436	*299*	*53*	9.0	*21.9*	26	0.54
3	122900	7.13	0.1	*0.7*	120	49	246	70	802	802	*577*	*84*	18.9	*16.6*	52	0.68
4	166800	7.00	0.1	0.5	93	28	229	60	700	700	*516*	*69*	11.0	*17.1*	42	1.06
5	177300	6.68	0.2	0.8	105	24	158	40	525	525	*391*	*59*	9.2	*24.3*	20	0.94
6	91700	7.14	0.1	0.9	183	20	178	47	654	654	*416*	*90*	17.5	*18.4*	55	0.91
7	177000	6.76	0.2	0.5	87	25	150	47	507	507	*363*	*65*	14.1	*23.5*	20	0.51
8	203000	6.62	0.2	0.9	109	23	140	39	491	491	*363*	*69*	7.9	*20.1*	15	0.59
Ave	165000	6.75	0.2	0.7	104	26	169	46	561	561	406	64	11.3	*20.7*	28	0.73

	$mm.a^{-1}$		Cations (µmol.l^{-1})						µeq.l^{-1}		Anions (µmol.l^{-1})					
N°	Qt	pH	H^+	NH_4^+	Na^+	K^+	Ca^{2+}	Mg^{2+}	S^+	S^-	HCO_3^-	Cl^-	NO_3^-	DOC^-	SO_4^{2-}	HPO_4^{2-}
1	1503	*6.67*	*0.22*	*0.65*	*88*	*24.8*	*156*	*42*	*510*	*513*	*382*	*55*	*9.1*	*21.4*	*22*	*0.69*
2	1102	*6.55*	*0.28*	*0.73*	*90*	*20.7*	*138*	*36*	*460*	*456*	*336*	*52*	*7.0*	*21.7*	*19*	*0.69*
3	840	*6.95*	*0.11*	*0.69*	*120*	*29.7*	*194*	*55*	*649*	*637*	*451*	*72*	*15.2*	*19.7*	*39*	*0.77*
4	1140	*6.78*	*0.17*	*0.61*	*93*	*28.4*	*178*	*50*	*579*	*584*	*433*	*61*	*12.0*	*20.8*	*28*	*0.71*
5	1211	*6.74*	*0.18*	*0.71*	*105*	*25.0*	*165*	*45*	*551*	*543*	*391*	*62*	*10.9*	*20.7*	*29*	*0.73*
6	627	*7.14*	*0.07*	*0.98*	*183*	*25.2*	*194*	*52*	*701*	*636*	*397*	*90*	*17.9*	*17.6*	*56*	*0.90*
7	1209	*6.90*	*0.13*	*0.50*	*87*	*34.0*	*204*	*60*	*651*	*730*	*548*	*82*	*14.9*	*20.5*	*32*	*0.70*
8	1387	*6.70*	*0.20*	*0.76*	*109*	*22.6*	*154*	*41*	*523*	*508*	*361*	*60*	*9.8*	*20.8*	*27*	*0.73*
Ave	1127	*6.75*	*0.18*	*0.69*	*104*	*26*	169	46	561	561	406	64	11.3	*20.7*	28	0.73

R^2	-	0.66	0.80	0.70	1.00	0.20	0.31	0.45	0.42	0.50	0.55	0.71	0.79	0.18	0.59	0.12

Somme des affluents. Superficie = 4 370 000 km²

	$m^3.s^{-1}$		Cations (µmol.l^{-1})						µeq.l^{-1}		Anions (µmol.l^{-1})					
N°	Qt	pH	H^+	NH_4^+	Na^+	K^+	Ca^{2+}	Mg^{2+}	S^+	S^-	HCO_3^-	Cl^-	NO_3^-	DOC^-	SO_4^{2-}	HPO_4^{2-}
1	226400	*6.81*	*0.15*	*0.4*	*78*	*26*	*192*	*41*	*571*	*571*	*446*	*46*	*6.2*	*31.3*	*20*	*0.58*
2	129200	6.68	*0.21*	*0.5*	93	21	128	34	*439*	*438*	*308*	53	8.2	*24.7*	22	0.42
3	118100	7.10	*0.08*	*0.5*	124	33	273	63	*828*	*828*	*618*	84	14.9	*19.2*	46	0.69
4	148300	6.93	*0.12*	1.3	113	27	248	55	*748*	*748*	*533*	69	10.0	*21.0*	57	0.48
5	146300	6.69	*0.20*	0.6	101	21	171	41	*548*	*548*	*412*	59	8.0	*23.0*	23	0.60
6	71400	7.08	*0.08*	0.7	137	19	182	46	*613*	*613*	*431*	90	11.3	*18.8*	30	0.75
7	161400	6.93	*0.12*	0.8	125	26	213	52	*682*	*682*	*482*	79	10.1	*25.6*	42	0.47
8	163000	6.76	*0.17*	0.9	111	22	160	41	*537*	*537*	*371*	69	7.5	*25.7*	31	0.54
Ave	145513	6.85	*0.14*	*0.71*	*106.6*	*24.7*	*195.4*	*46.1*	*615*	*615*	*448.5*	*65.6*	*9.1*	*24.6*	*33.1*	*0.55*

	$mm.a^{-1}$		Cations (µmol.l^{-1})						µeq.l^{-1}		Anions (µmol.l^{-1})					
N°	Qt	pH	H^+	NH_4^+	Na^+	K^+	Ca^{2+}	Mg^{2+}	S^+	S^-	HCO_3^-	Cl^-	NO_3^-	DOC^-	SO_4^{2-}	HPO_4^{2-}
1	1635	*6.83*	*0.15*	*0.67*	*78*	*24*	*181*	*41*	*549*	*547*	*431*	*47*	*6.7*	*26.5*	*18*	*0.51*
2	933	*6.73*	*0.18*	*0.70*	*93*	*20*	*139*	*35*	*465*	*465*	*329*	*56*	*8.2*	*25.5*	*23*	*0.53*
3	853	*7.08*	*0.08*	*0.64*	*124*	*30*	*302*	*65*	*890*	*887*	*663*	*80*	*12.6*	*20.6*	*54*	*0.62*
4	1071	*6.93*	*0.12*	*0.88*	*113*	*29*	*222*	*54*	*695*	*709*	*511*	*73*	*10.7*	*21.6*	*46*	*0.55*
5	1056	*6.74*	*0.18*	*0.78*	*101*	*22*	*161*	*42*	*533*	*533*	*376*	*60*	*8.6*	*24.4*	*31*	*0.57*
6	516	*6.96*	*0.11*	*0.67*	*137*	*21*	*191*	*45*	*633*	*629*	*444*	*88*	*10.8*	*20.8*	*32*	*0.64*
7	1166	*6.95*	*0.11*	*0.86*	*125*	*28*	*218*	*52*	*698*	*698*	*486*	*79*	*11.2*	*23.9*	*49*	*0.50*
8	1177	*6.78*	*0.16*	*0.68*	*111*	*22*	*164*	*40*	*545*	*545*	*390*	*69*	*8.3*	*25.8*	*26*	*0.55*
Ave	1051	6.85	*0.14*	0.71	106.6	24.7	195.4	46.1	615	615	448.5	65.6	9.1	*24.6*	33.1	0.55

Tableau A1 (2/5)

Rio Negro à Manacapuru. Superficie = 755 000 km²

	$M^3.s^{-1}$		Cations ($\mu mol.l^{-1}$)						$\mu eq.l^{-1}$		Anions ($\mu mol.l^{-1}$)					
N°	Qt	pH	H^+	NH_4^+	Na^+	K^+	Ca^{2+}	Mg^{2+}	S^+	S^-	HCO_3^-	Cl^-	NO_3^-	DOC^-	SO_4^{2-}	HPO_4^{2-}
1	59000	*4.88*	*13.18*	*0.30*	*22.0*	*15.0*	*12.0*	*4.0*	*82*	*82*	*4.3*	*7.3*	*3.0*	*52.6*	*7.3*	*0.35*
2	40300	4.94	11.48	*0.30*	22.0	12.0	9.0	6.0	76	76	*6.5*	8.6	2.1	*41.3*	8.6	0.04
3	5000	5.19	6.46	*1.20*	26.0	10.0	11.0	7.0	80	80	*7.3*	7.8	3.0	*45.5*	7.8	0.22
4	8300	5.42	3.80	1.10	33.0	10.0	6.0	6.0	72	72	*7.3*	11.0	6.8	*34.7*	6.0	0.06
5	32200	4.86	13.80	1.41	20.0	5.1	7.0	1.0	56	56	*3.2*	7.3	1.7	*38.0*	3.0	0.04
6	12400	4.84	14.45	1.28	52.0	6.4	7.0	4.0	96	96	*4.3*	34.0	3.4	*40.2*	7.0	0.14
7	28000	4.82	15.14	0.57	94.6	11.3	2.5	3.9	134	134	*4.0*	79.0	1.7	*45.5*	2.0	0.10
8	46300	4.91	12.30	1.16	54.4	12.5	9.5	6.2	112	112	*3.6*	40.0	3.0	*46.9*	9.0	0.14
Ave	28938	4.91	12.62	0.76	39.1	11.4	8.6	4.5	90	90	4.5	24.3	2.7	*45.1*	6.6	0.16

	$mm.a^{-1}$		Cations ($\mu mol.l^{-1}$)						$\mu eq.l^{-1}$		Anions ($\mu mol.l^{-1}$)					
N°	Qt	pH	H^+	NH_4^+	Na^+	K^+	Ca^{2+}	Mg^{2+}	S^+	S^-	HCO_3^-	Cl^-	NO_3^-	DOC^-	SO_4^{2-}	HPO_4^{2-}
1	2466	*5.02*	*9.49*	*0.78*	*22.0*	*11.1*	*10.1*	*4.4*	*73*	*75*	*4.4*	*9.6*	*2.7*	*44.7*	*6.5*	*0.17*
2	1684	*5.10*	*7.90*	*0.72*	*22.0*	*12.2*	*10.0*	*5.1*	*73*	*76*	*4.8*	*9.9*	*3.2*	*44.0*	*6.7*	*0.16*
3	209	*4.94*	*11.49*	*0.83*	*26.0*	*10.2*	*9.9*	*3.8*	*76*	*78*	*4.1*	*12.7*	*2.2*	*45.4*	*6.4*	*0.18*
4	347	*5.25*	*5.59*	*0.59*	*33.0*	*14.7*	*8.8*	*6.6*	*85*	*87*	*5.7*	*20.2*	*4.4*	*42.8*	*7.0*	*0.12*
5	1346	*4.86*	*13.66*	*0.90*	*20.0*	*8.9*	*10.5*	*3.1*	*71*	*71*	*3.6*	*7.1*	*1.6*	*46.0*	*6.3*	*0.20*
6	518	*4.84*	*14.50*	*0.83*	*52.0*	*10.0*	*7.6*	*3.5*	*100*	*100*	*4.0*	*34.9*	*1.9*	*46.5*	*6.4*	*0.17*
7	1170	*4.80*	*15.71*	*0.74*	*94.6*	*11.4*	*3.8*	*4.2*	*138*	*139*	*4.4*	*71.9*	*2.2*	*47.2*	*6.6*	*0.12*
8	1935	*5.04*	*9.21*	*0.69*	*54.4*	*12.7*	*7.2*	*5.2*	*102*	*105*	*5.0*	*37.9*	*3.2*	*44.9*	*6.7*	*0.13*
Ave	1210	*4.91*	*12.62*	*0.76*	*39.1*	*11.4*	*8.6*	*4.5*	*90*	*90*	*4.5*	*24.3*	*2.7*	*45.1*	*6.6*	*0.16*

R^2	-	0.51	-	0.05	1.00	0.32	0.55	0.33	-	-	0.16	0.74	0.31	0.06	0.01	0.06

Rio Iça à Sao Antonio do Iça. Superficie = 148 000 km²

	$m^3.s^{-1}$		Cations ($\mu mol.l^{-1}$)						$\mu eq.l^{-1}$		Anions ($\mu mol.l^{-1}$)					
N°	Qt	pH	H^+	NH_4^+	Na^+	K^+	Ca^{2+}	Mg^{2+}	S^+	S^-	HCO_3^-	Cl^-	NO_3^-	DOC^-	SO_4^{2-}	HPO_4^{2-}
1	6900	*6.87*	*0.13*	*0.60*	*25.0*	*14.0*	*42.0*	*13.0*	*150*	*150*	*95.4*	*8.0*	*5.8*	*31.5*	*4.0*	*0.52*
2	7300	6.23	0.59	*0.60*	43.0	14.0	28.0	12.0	138	138	*93.5*	7.0	6.5	*15.6*	7.0	0.84
3	7300	6.36	0.44	*2.50*	36.0	17.0	34.0	12.0	148	148	*92.3*	7.6	9.9	*19.2*	9.0	0.46
4	6400	6.31	0.49	0.65	45.0	9.0	34.0	15.0	153	153	*96.2*	16.0	10.1	*18.6*	6.0	0.16
5	9100	6.11	0.78	0.69	47.0	12.8	40.0	16.0	173	173	*112.4*	19.0	6.7	*22.0*	6.0	0.60
6	5800	6.50	0.32	0.37	37.0	7.4	32.0	13.0	135	135	*85.4*	10.0	9.4	*15.2*	7.0	0.58
7	7300	6.03	0.93	1.94	72.0	14.6	31.1	12.0	176	176	*85.9*	29.0	6.6	*19.5*	17.0	0.36
8	8400	6.28	0.52	0.71	43.0	11.8	35.2	17.0	160	160	*106.2*	18.0	7.4	*14.3*	7.0	0.24
Ave	7313	6.27	0.54	1.02	43.9	12.7	34.7	13.9	155	155	96.9	14.7	7.7	*19.5*	7.9	0.47

	$mm.a^{-1}$		Cations ($\mu mol.l^{-1}$)						$\mu eq.l^{-1}$		Anions ($\mu mol.l^{-1}$)					
N°	Qt	pH	H^+	NH_4^+	Na^+	K^+	Ca^{2+}	Mg^{2+}	S^+	S^-	HCO_3^-	Cl^-	NO_3^-	DOC^-	SO_4^{2-}	HPO_4^{2-}
1	1471	*6.48*	*0.33*	*0.40*	*25.0*	*14.4*	*38.9*	*14.3*	*146*	*146*	*108.9*	*1.9*	*5.5*	*27.7*	*0.5*	*0.58*
2	1557	*6.29*	*0.51*	*0.96*	*43.0*	*13.0*	*35.1*	*13.9*	*156*	*156*	*98.2*	*13.9*	*7.3*	*20.5*	*7.4*	*0.48*
3	1557	*6.29*	*0.52*	*1.01*	*36.0*	*11.2*	*34.4*	*13.8*	*145*	*145*	*94.6*	*10.9*	*9.6*	*16.8*	*6.2*	*0.48*
4	1365	*6.24*	*0.58*	*1.15*	*45.0*	*11.8*	*33.7*	*13.8*	*153*	*153*	*93.3*	*16.0*	*8.9*	*16.6*	*8.8*	*0.45*
5	1940	*6.26*	*0.55*	*1.07*	*47.0*	*12.9*	*34.5*	*13.9*	*158*	*158*	*96.4*	*16.5*	*7.5*	*19.4*	*8.8*	*0.46*
6	1237	*6.27*	*0.54*	*1.07*	*37.0*	*10.9*	*34.0*	*13.7*	*145*	*145*	*93.2*	*11.7*	*9.9*	*15.8*	*6.7*	*0.47*
7	1557	*6.10*	*0.80*	*1.52*	*72.0*	*13.9*	*31.9*	*13.8*	*180*	*180*	*90.9*	*31.1*	*6.4*	*17.2*	*16.7*	*0.38*
8	1791	*6.30*	*0.50*	*0.94*	*43.0*	*13.2*	*35.3*	*14.0*	*156*	*156*	*98.8*	*13.8*	*7.1*	*21.0*	*7.3*	*0.48*
Ave	1559	*6.27*	*0.54*	*1.02*	*43.9*	*12.7*	*34.7*	*13.9*	*155*	*155*	*96.9*	*14.7*	*7.7*	*19.5*	*7.9*	*0.47*

R^2	-	0.16	0.26	0.16	1.00	0.16	0.19	0.01	0.58	0.58	0.36	0.72	0.81	0.50	0.73	0.06

Tableau A1 (3/5)

Rio Jutai à Xibeco. Superficie = 74 000 km²

	$m^3.s^{-1}$		Cations ($\mu mol.l^{-1}$)						$\mu eq.l^{-1}$		Anions ($\mu mol.l^{-1}$)					
N°	Qt	pH	H^+	NH_4^+	Na^+	K^+	Ca^{2+}	Mg^{2+}	S^+	S^-	HCO_3^-	Cl^-	NO_3^-	DOC^-	SO_4^{2-}	HPO_4^{2-}
1	6000	*6.19*	*0.65*	*0.50*	*44.0*	*17.0*	*100.0*	*19.0*	*300*	*300*	*167.6*	*0.0*	*1.6*	*28.7*	*50.5*	*0.60*
2	2200	6.17	0.68	*1.00*	55.0	19.0	30.0	10.0	156	156	*87.7*	14.4	1.5	*22.3*	14.4	0.50
3	2600	5.48	3.31	*1.00*	41.0	19.0	36.0	7.0	150	150	*39.0*	26.6	0.8	*30.5*	26.6	0.10
4	3900	5.48	3.31	1.11	35.0	9.0	50.0	10.0	168	168	*57.7*	6.0	1.5	*32.3*	35.4	0.10
5	4200	5.58	2.63	0.64	64.0	15.0	67.0	16.0	248	248	*74.3*	25.0	0.9	*27.1*	60.1	0.40
6	1400	6.31	0.49	1.05	43.0	15.0	17.0	8.0	110	110	*59.3*	5.0	2.0	*26.6*	8.0	0.30
7	3800	5.19	6.46	0.89	43.0	16.0	45.0	7.0	170	170	*25.8*	23.0	1.4	*33.4*	43.0	0.30
8	3300	5.60	2.51	1.08	38.0	16.0	53.0	2.0	168	168	*35.3*	5.0	2.0	*18.9*	53.0	0.20
Ave	3425	5.58	2.63	0.85	45.5	15.5	58.6	11.1	204	204	77.9	12.4	1.4	*28.0*	41.7	0.34

	$mm.a^{-1}$		Cations ($\mu mol.l^{-1}$)						$\mu eq.l^{-1}$		Anions ($\mu mol.l^{-1}$)					
N°	Qt	pH	H^+	NH_4^+	Na^+	K^+	Ca^{2+}	Mg^{2+}	S^+	S^-	HCO_3^-	Cl^-	NO_3^-	DOC^-	SO_4^{2-}	HPO_4^{2-}
1	2559	*5.62*	*2.43*	*0.82*	*44.0*	*15.6*	*67.9*	*10.8*	*220*	*221*	*78.7*	*11.5*	*1.5*	*27.2*	*50.6*	*0.35*
2	938	*5.66*	*2.18*	*0.76*	*55.0*	*16.7*	*67.8*	*13.9*	*238*	*239*	*93.1*	*15.6*	*1.4*	*26.3*	*50.7*	*0.42*
3	1109	*5.54*	*2.85*	*0.95*	*41.0*	*14.6*	*39.0*	*9.6*	*157*	*157*	*66.1*	*11.4*	*1.4*	*30.2*	*23.8*	*0.26*
4	1663	*5.54*	*2.86*	*0.94*	*35.0*	*14.3*	*50.8*	*8.1*	*171*	*171*	*61.7*	*8.8*	*1.5*	*29.6*	*34.5*	*0.26*
5	1791	*5.68*	*2.09*	*0.74*	*64.0*	*17.4*	*57.6*	*16.4*	*232*	*233*	*101.9*	*19.4*	*1.2*	*26.5*	*41.4*	*0.45*
6	597	*5.52*	*3.00*	*0.99*	*43.0*	*14.5*	*23.8*	*10.0*	*129*	*130*	*64.2*	*12.7*	*1.4*	*31.5*	*9.8*	*0.23*
7	1621	*5.60*	*2.52*	*0.85*	*43.0*	*15.3*	*61.8*	*10.4*	*206*	*207*	*75.5*	*11.4*	*1.5*	*27.9*	*44.9*	*0.33*
8	1407	*5.60*	*2.53*	*0.84*	*38.0*	*15.0*	*71.3*	*9.1*	*217*	*218*	*71.8*	*9.2*	*1.5*	*27.4*	*53.5*	*0.33*
Ave	1461	*5.58*	*2.63*	*0.85*	*45.5*	*15.5*	*58.5*	*11.1*	*204*	*204*	*77.8*	*12.4*	*1.4*	*28.0*	*41.8*	*0.34*

R^2	-	0.02	0.03	0.17	1.00	0.12	0.42	0.26	0.42	0.42	0.10	0.11	0.05	0.15	0.66	0.18

Rio Japurá à Jutica. Superficie = 289 000 km²

	$m^3.s^{-1}$		Cations ($\mu mol.l^{-1}$)						$\mu eq.l^{-1}$		Anions ($\mu mol.l^{-1}$)					
N°	Qt	pH	H^+	NH_4^+	Na^+	K^+	Ca^{2+}	Mg^{2+}	S^+	S^-	HCO_3^-	Cl^-	NO_3^-	DOC^-	SO_4^{2-}	HPO_4^{2-}
1	20100	*6.48*	*0.33*	*0.62*	*49.5*	*13.2*	*43.7*	*12.4*	*176*	*176*	*121.2*	*18.7*	*9.2*	*14.9*	*5.6*	*0.30*
2	21400	6.26	0.55	*0.76*	44.4	11.6	39.3	12.1	160	160	*108.2*	16.8	8.4	*17.0*	4.6	0.30
3	14100	6.11	0.77	*0.95*	53.1	10.6	48.6	15.0	193	193	*134.0*	20.3	6.9	*21.2*	5.1	0.27
4	9000	6.78	0.17	0.97	69.0	15.0	102.0	23.0	335	335	*257.6*	26.0	8.6	*22.6*	10.0	0.12
5	19200	6.10	0.79	0.59	42.0	10.2	41.0	12.0	160	160	*110.2*	16.0	8.3	*18.2*	3.0	0.43
6	14700	6.47	0.34	0.46	53.0	13.3	33.0	11.0	155	155	*100.9*	20.0	9.1	*12.3*	6.0	0.38
7	12800	6.53	0.30	0.68	87.0	13.8	63.7	18.5	266	266	*190.3*	33.0	6.9	*19.4*	8.0	0.22
8	16700	5.94	1.15	1.17	44.4	9.7	27.4	12.0	135	135	*83.1*	17.0	6.2	*20.6*	4.0	0.21
Ave	16000	6.24	0.58	0.76	52.8	11.9	45.8	13.7	185	185	128.0	20.0	8.0	*18.0*	5.4	0.29

	$mm.a^{-1}$		Cations ($\mu mol.l^{-1}$)						$\mu eq.l^{-1}$		Anions ($\mu mol.l^{-1}$)					
N°	Qt	pH	H^+	NH_4^+	Na^+	K^+	Ca^{2+}	Mg^{2+}	S^+	S^-	HCO_3^-	Cl^-	NO_3^-	DOC^-	SO_4^{2-}	HPO_4^{2-}
1	2195	*6.48*	*0.33*	*0.62*	*49.5*	*13.2*	*43.7*	*12.4*	*176*	*176*	*121.2*	*18.7*	*9.2*	*14.9*	*5.6*	*0.30*
2	2337	*6.26*	*0.55*	*0.76*	*44.4*	*11.6*	*39.3*	*12.1*	*160*	*160*	*108.2*	*16.8*	*8.4*	*17.0*	*4.6*	*0.30*
3	1540	*6.11*	*0.77*	*0.95*	*53.1*	*10.6*	*48.6*	*15.0*	*193*	*193*	*134.0*	*20.3*	*6.9*	*21.2*	*5.1*	*0.27*
4	983	*6.47*	*0.34*	*0.75*	*69.0*	*13.0*	*60.7*	*16.9*	*238*	*239*	*171.0*	*26.2*	*7.6*	*19.5*	*7.1*	*0.28*
5	2097	*6.15*	*0.70*	*0.82*	*42.0*	*10.5*	*35.8*	*11.8*	*149*	*151*	*99.8*	*16.0*	*7.6*	*18.5*	*4.0*	*0.31*
6	1605	*6.50*	*0.32*	*0.60*	*53.0*	*13.3*	*45.5*	*12.7*	*183*	*184*	*127.8*	*20.0*	*9.1*	*15.2*	*5.8*	*0.31*
7	1398	*6.69*	*0.21*	*0.69*	*87.0*	*14.7*	*77.2*	*20.2*	*297*	*298*	*218.4*	*32.9*	*7.7*	*19.9*	*9.2*	*0.25*
8	1824	*6.08*	*0.82*	*0.90*	*44.4*	*10.0*	*38.2*	*12.7*	*158*	*159*	*106.4*	*16.9*	*7.0*	*20.2*	*4.0*	*0.30*
Ave	1747	*6.24*	*0.52*	*0.76*	*52.8*	*12.0*	*45.8*	*13.7*	*185*	*185*	*128.0*	*20.0*	*8.0*	*18.0*	*5.4*	*0.29*

R^2	-	0.63	0.51	0.28	1.00	0.76	0.35	0.50	0.54	0.54	0.48	1.00	0.59	0.47	0.62	0.04

Tableau A1 (4/5)

Rio Purus à Anori. Superficie = 372 000 km²

	$m^3.s^{-1}$		Cations ($\mu mol.l^{-1}$)						$\mu eq.l^{-1}$		Anions ($\mu mol.l^{-1}$)					
N°	Qt	pH	H^+	NH_4^+	Na^+	K^+	Ca^{2+}	Mg^{2+}	S^+	S^-	HCO_3^-	Cl^-	NO_3^-	DOC^-	SO_4^{2-}	HPO_4^{2-}
1	20000	*6.16*	*0.69*	*0.30*	*50.0*	*27.0*	*70.0*	*23.0*	*264*	*264*	*212.1*	*3.6*	*5.9*	*33.3*	*3.6*	*0.97*
2	10900	6.41	0.39	*0.80*	70.0	30.0	111.0	32.0	387	387	*336.3*	7.5	9.2	*18.5*	7.5	0.39
3	5000	6.93	0.12	*0.70*	78.0	37.0	104.0	33.0	390	390	*312.9*	12.7	18.1	*18.9*	12.7	0.87
4	14300	6.32	0.48	2.70	55.0	22.0	73.0	26.0	278	278	*229.1*	4.7	6.1	*28.0*	4.7	0.45
5	15000	6.20	0.63	0.55	58.0	21.7	77.0	26.0	287	287	*252.8*	2.4	3.6	*21.8*	2.4	0.73
6	2800	7.49	0.03	0.73	173.0	30.4	157.0	56.0	630	630	*565.0*	12.5	14.5	*11.9*	12.5	0.62
7	10700	6.10	0.79	0.35	92.0	24.0	67.2	23.0	298	298	*181.7*	26.4	10.9	*24.9*	26.4	0.46
8	16200	6.25	0.56	0.26	79.6	25.3	93.0	30.7	353	353	*274.3*	17.4	2.2	*22.9*	17.4	0.80
Ave	11863	6.26	0.56	0.79	69.2	25.8	84.2	27.8	320	320	258.3	9.7	6.8	*24.9*	9.7	0.68

	$mm.a^{-1}$		Cations ($\mu mol.l^{-1}$)						$\mu eq.l^{-1}$		Anions ($\mu mol.l^{-1}$)					
N°	Qt	pH	H^+	NH_4^+	Na^+	K^+	Ca^{2+}	Mg^{2+}	S^+	S^-	HCO_3^-	Cl^-	NO_3^-	DOC^-	SO_4^{2-}	HPO_4^{2-}
1	1697	*6.19*	*0.64*	*0.73*	*50.0*	*25.2*	*73.6*	*24.1*	*272*	*272*	*215.3*	*6.7*	*4.9*	*26.8*	*8.5*	*0.73*
2	925	*6.31*	*0.49*	*0.52*	*70.0*	*26.3*	*85.3*	*30.2*	*328*	*328*	*271.6*	*6.7*	*5.3*	*23.4*	*9.9*	*0.75*
3	424	*6.29*	*0.51*	*0.95*	*78.0*	*25.8*	*88.8*	*28.3*	*339*	*339*	*272.2*	*12.6*	*8.4*	*24.6*	*10.2*	*0.63*
4	1213	*6.15*	*0.70*	*1.23*	*55.0*	*24.4*	*75.2*	*20.9*	*274*	*274*	*205.8*	*13.0*	*8.1*	*28.7*	*8.5*	*0.60*
5	1272	*6.24*	*0.57*	*0.64*	*58.0*	*25.6*	*78.3*	*26.6*	*295*	*295*	*238.1*	*6.6*	*5.0*	*25.4*	*9.1*	*0.74*
6	238	*6.78*	*0.17*	*0.42*	*173.0*	*30.2*	*143.2*	*53.5*	*597*	*597*	*520.6*	*17.7*	*13.2*	*11.1*	*16.6*	*0.61*
7	908	*6.31*	*0.49*	*1.29*	*92.0*	*25.6*	*95.8*	*28.4*	*368*	*368*	*290.8*	*18.1*	*11.4*	*24.7*	*10.8*	*0.53*
8	1374	*6.36*	*0.44*	*0.48*	*79.6*	*26.7*	*90.8*	*32.7*	*354*	*354*	*296.2*	*7.4*	*5.9*	*22.1*	*10.6*	*0.74*
Ave	1006	*6.26*	*0.56*	*0.79*	*69.2*	*25.8*	*84.2*	*27.8*	*320*	*320*	*258.3*	*9.7*	*6.8*	*24.9*	*9.7*	*0.68*

R^2	-	0.16	-	0.18	1.00	0.12	0.55	0.86	0.77	0.77	0.68	0.37	0.33	*0.68*	0.10	0.16

Rio Madeira à Sao Jose do Amatari. Superficie = 1 380 000 km²

	$m^3.s^{-1}$		Cations ($\mu mol.l^{-1}$)						$\mu eq.l^{-1}$		Anions ($\mu mol.l^{-1}$)					
N°	Qt	pH	H^+	NH_4^+	Na^+	K^+	Ca^{2+}	Mg^{2+}	S^+	S^-	HCO_3^-	Cl^-	NO_3^-	DOC^-	SO_4^{2-}	HPO_4^{2-}
1	40000	*6.73*	*0.19*	*1.07*	*74.0*	*33.2*	*124.0*	*62.4*	*481*	*481*	*351.3*	*28.2*	*8.2*	*18.1*	*37.3*	*0.42*
2	13700	7.04	0.09	*0.40*	113.0	38.0	155.0	85.0	631	631	*447.2*	24.0	12.8	*17.0*	65.0	0.25
3	23100	6.95	0.11	*0.50*	127.0	48.0	163.0	85.0	672	672	*416.5*	75.0	17.5	*15.4*	73.0	0.58
4	48400	6.67	0.21	2.00	64.0	32.0	100.0	58.0	414	414	*327.3*	20.0	9.0	*16.9*	20.0	0.50
5	24700	6.73	0.19	0.51	104.0	38.9	136.0	72.0	560	560	*407.6*	33.0	9.2	*18.8*	45.0	0.54
6	6800	7.44	0.04	0.35	142.0	29.9	200.0	107.0	786	786	*526.0*	81.0	16.2	*8.9*	76.0	1.06
7	42100	7.30	0.05	1.15	87.0	39.3	137.5	72.5	547	547	*405.9*	30.0	11.5	*19.3*	40.0	0.43
8	19300	6.86	0.14	1.46	100.0	35.3	120.2	76.4	530	530	*376.8*	22.0	11.6	*14.3*	52.0	0.65
Ave	27263	6.84	0.14	1.14	90.2	36.7	130.8	70.9	532	532	383.5	33.1	10.9	*17.5*	42.9	0.50

	$mm.a^{-1}$		Cations ($\mu mol.l^{-1}$)						$\mu eq.l^{-1}$		Anions ($\mu mol.l^{-1}$)					
N°	Qt	pH	H^+	NH_4^+	Na^+	K^+	Ca^{2+}	Mg^{2+}	S^+	S^-	HCO_3^-	Cl^-	NO_3^-	DOC^-	SO_4^{2-}	HPO_4^{2-}
1	915	*6.73*	*0.19*	*1.07*	*74.0*	*33.2*	*124.0*	*62.4*	*481*	*481*	*351.3*	*28.2*	*8.2*	*18.1*	*37.3*	*0.42*
2	313	*6.94*	*0.11*	*0.88*	*113.0*	*34.9*	*147.8*	*84.2*	*613*	*613*	*435.5*	*39.2*	*12.2*	*15.0*	*55.0*	*0.63*
3	528	*7.21*	*0.06*	*1.06*	*127.0*	*42.9*	*158.5*	*90.8*	*670*	*670*	*457.9*	*49.9*	*16.5*	*15.1*	*64.5*	*0.68*
4	1107	*6.71*	*0.20*	*1.36*	*64.0*	*35.9*	*111.2*	*56.2*	*436*	*436*	*326.9*	*23.9*	*8.4*	*20.1*	*28.3*	*0.36*
5	565	*6.90*	*0.13*	*0.97*	*104.0*	*35.1*	*141.0*	*79.0*	*580*	*581*	*415.6*	*36.3*	*11.5*	*15.9*	*50.1*	*0.58*
6	156	*7.17*	*0.07*	*0.74*	*142.0*	*38.1*	*169.6*	*100.1*	*720*	*720*	*495.9*	*51.2*	*16.0*	*12.7*	*71.6*	*0.78*
7	963	*6.94*	*0.11*	*1.33*	*87.0*	*40.4*	*128.6*	*68.5*	*523*	*523*	*372.6*	*34.9*	*12.1*	*18.6*	*42.0*	*0.47*
8	441	*6.83*	*0.15*	*0.94*	*100.0*	*33.4*	*137.9*	*77.0*	*564*	*565*	*408.3*	*33.7*	*10.5*	*15.9*	*47.5*	*0.56*
Ave	623	*6.84*	*0.14*	*1.14*	*90.2*	*36.7*	*130.8*	*70.9*	*532*	*532*	*383.5*	*33.1*	*10.9*	*17.5*	*42.9*	*0.50*

R^2	-	0.43	0.55	0.13	1.00	0.38	0.38	0.91	0.66	0.66	0.84	0.15	0.83	*0.51*	0.54	0.35

Tableau A1 (5/5)

Rio Juruá à Tupe. Superficie = 217 000 km²

	$m^3.s^{-1}$		Cations ($\mu mol.l^{-1}$)						$\mu eq.l^{-1}$		Anions ($\mu mol.l^{-1}$)					
N°	Qt	pH	H^+	NH_4^+	Na^+	K^+	Ca^{2+}	Mg^{2+}	S^+	S^-	HCO_3^-	Cl^-	NO_3^-	DOC^-	SO_4^{2-}	HPO_4^{2-}
1	4700	*6.89*	*0.13*	*0.40*	*112.0*	*29.0*	*217.0*	*61.0*	*698*	*698*	*569.3*	*23.0*	*6.7*	*36.9*	*30.0*	*0.84*
2	1700	7.40	0.04	*0.50*	213.0	39.0	410.0	88.0	1249	1249	*1090.9*	43.0	17.6	*15.8*	40.0	0.64
3	3900	7.18	0.07	*0.30*	99.0	43.0	288.0	65.0	848	848	*704.6*	20.0	22.8	*24.9*	37.0	1.00
4	5600	6.83	0.15	1.68	83.0	32.0	230.0	55.0	687	687	*620.2*	17.0	4.1	*28.6*	8.0	0.47
5	3100	6.80	0.16	0.21	129.0	33.2	282.0	67.0	861	861	*721.5*	26.0	19.7	*17.6*	37.0	0.86
6	900	7.39	0.04	0.44	261.0	38.6	497.0	70.0	1434	1434	*1250.6*	53.0	11.4	*17.9*	50.0	0.57
7	5200	6.66	0.22	0.29	125.7	30.7	214.2	46.1	677	677	*581.8*	26.0	13.8	*34.7*	10.0	0.58
8	4800	6.80	0.16	0.42	137.0	32.2	231.4	59.3	751	751	*668.6*	28.0	8.2	*18.7*	13.0	0.90
Ave	3738	6.85	0.14	0.60	123.3	33.5	256.7	60.0	791	791	680.5	25.2	11.9	*26.7*	22.5	0.74

	$mm.a^{-1}$		Cations ($\mu mol.l^{-1}$)						$\mu eq.l^{-1}$		Anions ($\mu mol.l^{-1}$)					
N°	Qt	pH	H^+	NH_4^+	Na^+	K^+	Ca^{2+}	Mg^{2+}	S^+	S^-	HCO_3^-	Cl^-	NO_3^-	DOC^-	SO_4^{2-}	HPO_4^{2-}
1	684	*6.76*	*0.17*	*0.87*	*111.8*	*28.9*	*219.0*	*58.1*	*696*	*696*	*604.2*	*22.9*	*5.0*	*29.4*	*16.5*	*0.68*
2	247	*7.20*	*0.06*	*0.36*	*213.0*	*36.8*	*396.6*	*71.2*	*1186*	*1186*	*1034.0*	*43.3*	*13.7*	*19.2*	*37.3*	*0.66*
3	567	*6.91*	*0.12*	*0.30*	*99.0*	*39.0*	*248.9*	*57.7*	*752*	*752*	*632.8*	*20.2*	*21.6*	*26.1*	*24.7*	*0.86*
4	814	*6.69*	*0.20*	*0.85*	*83.0*	*29.5*	*182.0*	*54.7*	*587*	*587*	*503.3*	*17.1*	*7.1*	*31.1*	*13.4*	*0.73*
5	451	*6.91*	*0.12*	*0.56*	*129.0*	*34.1*	*267.5*	*60.7*	*820*	*820*	*706.2*	*26.3*	*12.7*	*26.0*	*23.8*	*0.74*
6	131	*7.36*	*0.04*	*0.27*	*261.0*	*38.0*	*468.8*	*77.1*	*1391*	*1391*	*1218.6*	*53.0*	*13.8*	*15.4*	*44.6*	*0.61*
7	756	*6.94*	*0.11*	*0.42*	*125.7*	*36.5*	*274.3*	*60.6*	*833*	*833*	*712.1*	*25.6*	*16.6*	*25.3*	*25.7*	*0.78*
8	698	*6.90*	*0.13*	*0.64*	*137.0*	*32.6*	*271.3*	*61.5*	*836*	*836*	*724.0*	*28.0*	*9.9*	*26.1*	*23.3*	*0.70*
Ave	544	*6.85*	*0.14*	*0.60*	*123.2*	*33.5*	*256.6*	*60.0*	*791*	*791*	*680.5*	*25.2*	*11.9*	*26.7*	*22.5*	*0.74*

R^2	-	0.53	0.59	0.22	0.86	0.55	0.77	0.33	0.79	0.79	0.78	0.86	0.60	*0.36*	0.42	0.17

Rio Solimões à Vargem Grande. Superficie = 1 135 000 km²

	$m^3.s^{-1}$		Cations ($\mu mol.l^{-1}$)						$\mu eq.l^{-1}$		Anions ($\mu mol.l^{-1}$)					
N°	Qt	pH	H^+	NH_4^+	Na^+	K^+	Ca^{2+}	Mg^{2+}	S^+	S^-	HCO_3^-	Cl^-	NO_3^-	DOC^-	SO_4^{2-}	HPO_4^{2-}
1	69700	*7.26*	*0.05*	*0.10*	*150.0*	*36.0*	*482.0*	*78.0*	*1306*	*1306*	*1097.2*	*117.0*	*7.4*	*25.0*	*29.0*	*0.83*
2	31700	7.38	0.04	*0.60*	225.0	28.0	349.0	65.0	1082	1082	*795.9*	175.0	14.0	*16.9*	39.0	0.94
3	57100	7.39	0.04	*0.10*	170.0	36.0	450.0	82.0	1270	1270	*986.9*	133.0	17.3	*17.1*	57.0	0.90
4	52400	7.41	0.04	0.45	212.0	31.0	538.0	83.0	1485	1485	*1018.2*	165.0	14.0	*19.0*	134.0	0.66
5	38800	7.18	0.07	0.04	227.0	29.9	465.0	82.0	1351	1351	*1059.1*	177.0	14.2	*16.4*	41.0	1.15
6	26600	7.45	0.04	0.67	241.0	26.3	374.0	77.0	1170	1170	*847.9*	188.0	15.5	*16.1*	50.0	1.23
7	51500	7.39	0.04	0.55	203.8	29.9	493.6	85.0	1391	1391	*1026.9*	159.0	14.9	*21.1*	84.0	0.79
8	48000	7.36	0.04	0.49	217.4	31.2	413.5	78.4	1233	1233	*909.7*	169.0	12.8	*15.6*	62.0	0.95
Ave	46975	7.34	0.05	0.34	198.4	31.9	457.2	79.6	1304	1304	988.8	154.6	13.4	*19.0*	63.2	0.90

	$mm.a^{-1}$		Cations ($\mu mol.l^{-1}$)						$\mu eq.l^{-1}$		Anions ($\mu mol.l^{-1}$)					
N°	Qt	pH	H^+	NH_4^+	Na^+	K^+	Ca^{2+}	Mg^{2+}	S^+	S^-	HCO_3^-	Cl^-	NO_3^-	DOC^-	SO_4^{2-}	HPO_4^{2-}
1	1938	*7.27*	*0.05*	*0.19*	*150.0*	*35.4*	*451.4*	*76.3*	*1241*	*1241*	*1048.5*	*117.0*	*9.0*	*21.2*	*21.8*	*0.85*
2	881	*7.33*	*0.05*	*0.37*	*225.0*	*29.4*	*397.1*	*74.3*	*1197*	*1198*	*901.1*	*175.2*	*12.9*	*17.7*	*44.3*	*1.06*
3	1588	*7.34*	*0.05*	*0.29*	*170.0*	*34.4*	*514.0*	*84.4*	*1402*	*1402*	*1076.3*	*132.7*	*13.5*	*20.4*	*78.5*	*0.74*
4	1457	*7.38*	*0.04*	*0.39*	*212.0*	*31.1*	*484.5*	*83.4*	*1379*	*1379*	*994.6*	*165.3*	*15.8*	*18.5*	*91.7*	*0.85*
5	1079	*7.36*	*0.04*	*0.40*	*227.0*	*29.5*	*427.0*	*77.8*	*1267*	*1267*	*924.6*	*176.8*	*14.5*	*17.6*	*65.6*	*0.99*
6	740	*7.35*	*0.04*	*0.42*	*241.0*	*28.2*	*396.3*	*75.1*	*1212*	*1212*	*879.1*	*187.6*	*14.3*	*16.9*	*56.2*	*1.08*
7	1432	*7.38*	*0.04*	*0.39*	*203.8*	*31.9*	*506.5*	*85.4*	*1420*	*1420*	*1024.7*	*159.0*	*16.1*	*18.9*	*99.9*	*0.80*
8	1335	*7.34*	*0.05*	*0.36*	*217.4*	*30.1*	*413.2*	*75.7*	*1226*	*1226*	*925.3*	*169.3*	*13.0*	*18.1*	*49.0*	*1.01*
Ave	1306	*7.34*	*0.05*	*0.34*	*198.4*	*31.9*	*457.2*	*79.6*	*1304*	*1304*	*989.0*	*154.6*	*13.4*	*19.0*	*63.2*	*0.90*

R^2	-	0.15	0.14	0.09	1.00	0.53	0.57	0.55	0.52	0.52	0.48	1.00	0.58	0.21	0.60	0.46

Tableau A2 (1/5)

Amazone à Obidos. Superficie = 4 619 000 km²

	$m^3.s^{-1}$	$mg.l^{-1}$	$\mu mol.l^{-1}$				$mg.l^{-1}$					
N°	Qt	DOC	DIC	CO_2	O_2	SiO_2	FSS	CSS	TSS	POCF	POCC	POC
1	220000	4.0	601	201	137	*128*	202	34.9	237	2.40	0.32	2.7
2	161300	4.1	495	180	151	*130*	145	43.0	188	2.35	0.27	2.6
3	122900	3.1	672	99	183	*135*	238	11.0	249	2.24	0.24	2.5
4	166800	3.2	676	128	128	*130*	254	31.0	285	2.57	0.42	3.0
5	177300	4.5	617	202	144	139	188	28.0	216	2.43	0.34	2.8
6	91700	3.4	499	72	194	137	88	4.6	93	1.17	0.05	1.2
7	177000	4.4	556	160	165	122	345	40.0	385	3.28	0.38	3.7
8	203000	3.8	609	218	127	120	148	47.0	195	1.66	0.35	2.0
Ave	165000	3.9	*604*	*177*	149	129	206	32.7	239	2.32	0.32	2.6

	$mm.a^{-1}$	$mg.l^{-1}$	$\mu mol.l^{-1}$				$mg.l^{-1}$					
N°	Qt	DOC	DIC	CO_2	O_2	SiO_2	FSS	CSS	TSS	POCF	POCC	POC
1	1503	*4.0*	*593*	*179*	*137*	*128*	*202*	*34.9*	*237*	*2.40*	*0.32*	*2.7*
2	1102	*4.1*	*578*	*219*	*128*	*128*	*145*	*37.9*	*183*	*2.08*	*0.30*	*2.4*
3	840	*3.7*	*627*	*151*	*167*	*130*	*238*	*28.6*	*267*	*2.40*	*0.32*	*2.7*
4	1140	*3.9*	*621*	*176*	*148*	*128*	*254*	*33.1*	*287*	*2.64*	*0.35*	*3.0*
5	1211	*3.9*	*601*	*186*	*147*	*129*	*188*	*33.3*	*221*	*2.22*	*0.31*	*2.5*
6	627	*3.3*	*600*	*135*	*192*	*138*	*88*	*22.3*	*110*	*1.24*	*0.18*	*1.4*
7	1209	*3.9*	*652*	*149*	*158*	*127*	*345*	*30.7*	*376*	*3.16*	*0.40*	*3.6*
8	1387	*3.9*	*588*	*197*	*143*	*130*	*148*	*34.2*	*182*	*1.98*	*0.28*	*2.3*
Ave	1127	*3.9*	*604*	*177*	*149*	*129*	*206*	*32.7*	*239*	*2.32*	*0.32*	*2.6*

R^2	-	0.19	0.12	0.27	0.64	0.25	1.00	0.10	0.91	0.78	0.31	0.75

Somme des affluents. Superficie = 4 370 000 km²

	$m^3.s^{-1}$	$mg.l^{-1}$	$\mu mol.l^{-1}$				$mg.l^{-1}$					
N°	Qt	DOC	DIC	CO_2	O_2	SiO_2	FSS	CSS	TSS	POCF	POCC	POC
1	226400	5.9	608	159	163	*111*	140	70.3	211	1.86	0.52	2.4
2	129200	4.6	458	149	164	*118*	80	17.9	98	1.12	0.33	1.5
3	118100	3.6	730	115	199	*128*	378	77.9	456	3.50	0.53	4.0
4	148300	3.9	678	145	132	*136*	374	81.8	456	3.66	0.78	4.4
5	146300	4.3	607	195	150	129	128	14.0	142	1.70	0.22	1.9
6	71400	3.5	516	84	200	138	120	20.6	141	1.63	0.30	1.9
7	161400	4.8	612	131	166	120	385	66.2	451	3.02	1.91	4.9
8	163000	4.8	521	150	148	123	97	22.0	119	1.24	0.21	1.5
Ave	145513	4.6	*595*	*146*	162	124	213	49.2	262	2.21	0.63	2.8

	$mm.a^{-1}$	$mg.l^{-1}$	$\mu mol.l^{-1}$				$mg.l^{-1}$					
N°	Qt	DOC	DIC	CO_2	O_2	SiO_2	FSS	CSS	TSS	POCF	POCC	POC
1	1635	*5.0*	*585*	*149*	*162*	*111*	*150*	*41.1*	*191*	*1.71*	*0.48*	*2.2*
2	933	*4.8*	*470*	*141*	*169*	*115*	*80*	*24.0*	*104*	*1.21*	*0.27*	*1.5*
3	853	*3.8*	*788*	*127*	*176*	*123*	*377*	*74.8*	*452*	*3.51*	*0.97*	*4.5*
4	1071	*4.0*	*655*	*139*	*149*	*137*	*374*	*67.7*	*442*	*3.24*	*1.07*	*4.3*
5	1056	*4.6*	*534*	*158*	*163*	*123*	*128*	*29.8*	*158*	*1.58*	*0.34*	*1.9*
6	516	*3.9*	*552*	*113*	*196*	*134*	*120*	*35.0*	*155*	*1.67*	*0.41*	*2.1*
7	1166	*4.5*	*613*	*128*	*166*	*126*	*385*	*67.0*	*452*	*3.28*	*1.14*	*4.4*
8	1177	*4.8*	*539*	*149*	*163*	*121*	*97*	*29.0*	*126*	*1.38*	*0.29*	*1.7*
Ave	1051	4.6	*595*	*146*	162	124	213	49.2	262	2.21	0.63	2.8

Rio Negro à Manacapuru. Superficie = 755 000 km²

	$m^3.s^{-1}$	$mg.l^{-1}$	$\mu mol.l^{-1}$				$mg.l^{-1}$					
N°	Qt	DOC	DIC	CO_2	O_2	SiO_2	FSS	CSS	TSS	POCF	POCC	POC
1	59000	9.8	135	131	166	*63*	7	0.0	7	0.78	0.00	0.78
2	40300	7.7	180	174	112	*68*	8	0.4	8	0.22	0.00	0.22
3	5000	8.5	118	110	193	*53*	6	0.1	6	0.04	0.00	0.04
4	8300	6.5	72	64	180	*59*	10	0.0	10	0.06	0.00	0.06
5	32200	7.1	106	103	131	65	5	0.0	5	0.30	0.00	0.30
6	12400	7.5	147	143	199	73	5	0.0	5	0.09	0.00	0.09
7	28000	8.5	144	140	166	58	5	0.0	5	0.65	0.00	0.65
8	46300	8.8	106	102	129	70	8	0.5	8	0.42	0.08	0.50
Ave	28938	8.4	132	128	147	65	7	0.2	7	0.45	0.02	0.47

	$mm.a^{-1}$	$mg.l^{-1}$	$\mu mol.l^{-1}$				$mg.l^{-1}$					
N°	Qt	DOC	DIC	CO_2	O_2	SiO_2	FSS	CSS	TSS	POCF	POCC	POC
1	2466	*8.4*	*130*	*125*	*144*	*62*	*7*	*0*	*7*	*0.37*	*0.01*	*0.38*
2	1684	*8.2*	*123*	*118*	*142*	*62*	*8*	*0*	*8*	*0.34*	*0.02*	*0.36*
3	209	*8.5*	*137*	*133*	*146*	*63*	*6*	*0*	*6*	*0.41*	*0.01*	*0.42*
4	347	*8.0*	*108*	*103*	*139*	*63*	*10*	*0*	*10*	*0.35*	*0.03*	*0.37*
5	1346	*8.6*	*144*	*141*	*148*	*63*	*5*	*0*	*5*	*0.40*	*0.00*	*0.41*
6	518	*8.7*	*145*	*141*	*153*	*68*	*5*	*0*	*5*	*0.55*	*0.01*	*0.56*
7	1170	*8.8*	*146*	*141*	*160*	*74*	*5*	*0*	*5*	*0.74*	*0.03*	*0.77*
8	1935	*8.4*	*127*	*122*	*148*	*67*	*8*	*0*	*8*	*0.50*	*0.02*	*0.52*
Ave	1210	*8.4*	*132*	*128*	*147*	*65*	*7*	*0.2*	*7*	*0.45*	*0.02*	*0.47*

R^2	-	0.06	0.16	0.17	0.04	0.40	1.00	0.15	1.01	0.24	0.08	0.24

Rio Iça à Sao Antonio do Iça. Superficie = 148 000 km²

	$m^3.s^{-1}$	$mg.l^{-1}$	$\mu mol.l^{-1}$				$mg.l^{-1}$					
N°	Qt	DOC	DIC	CO_2	O_2	SiO_2	FSS	CSS	TSS	POCF	POCC	POC
1	6900	5.9	125	30	186	*106*	42	4.0	46	1.00	0.06	1.06
2	7300	2.9	222	128	174	*103*	68	38.0	106	0.77	0.45	1.22
3	7300	3.6	186	94	208	*103*	94	3.0	97	1.49	0.10	1.59
4	6400	3.5	206	110	176	*108*	88	2.0	90	1.66	0.20	1.86
5	9100	4.1	315	203	174	116	71	16.0	87	1.67	0.30	1.97
6	5800	2.8	148	63	193	111	99	22.0	121	1.76	0.32	2.08
7	7300	3.6	272	187	186	103	63	5.0	68	1.40	0.17	1.57
8	8400	2.7	236	130	184	107	65	7.0	72	1.04	0.16	1.20
Ave	7313	3.6	*219*	*122*	185	107	73	12.1	85	1.34	0.22	1.56

	$mm.a^{-1}$	$mg.l^{-1}$	$\mu mol.l^{-1}$				$mg.l^{-1}$					
N°	Qt	DOC	DIC	CO_2	O_2	SiO_2	FSS	CSS	TSS	POCF	POCC	POC
1	1471	*5.2*	*169*	*60*	*181*	*107*	*42*	*11*	*53*	*0.83*	*0.14*	*0.97*
2	1557	*3.8*	*217*	*119*	*184*	*107*	*68*	*12*	*80*	*1.27*	*0.21*	*1.48*
3	1557	*3.1*	*195*	*101*	*191*	*109*	*94*	*14*	*108*	*1.58*	*0.25*	*1.83*
4	1365	*3.1*	*221*	*128*	*188*	*108*	*88*	*13*	*101*	*1.55*	*0.25*	*1.80*
5	1940	*3.6*	*228*	*131*	*184*	*107*	*71*	*12*	*83*	*1.33*	*0.22*	*1.55*
6	1237	*2.9*	*198*	*104*	*192*	*109*	*99*	*14*	*113*	*1.66*	*0.26*	*1.91*
7	1557	*3.2*	*298*	*207*	*177*	*106*	*63*	*10*	*73*	*1.35*	*0.25*	*1.60*
8	1791	*3.9*	*217*	*118*	*183*	*107*	*65*	*12*	*77*	*1.23*	*0.20*	*1.43*
Ave	1559	*3.6*	*219*	*122*	*185*	*107*	*73*	*12.1*	*85*	*1.34*	*0.22*	*1.56*

R^2	-	0.50	0.36	0.50	0.21	0.05	1.00	0.01	0.72	0.51	0.10	0.62

Rio Jutai à Xibeco. Superficie = 74 000 km²

	$m^3.s^{-1}$	$mg.l^{-1}$	$\mu mol.l^{-1}$				$mg.l^{-1}$					
N°	Qt	DOC	DIC	CO_2	O_2	SiO_2	FSS	CSS	TSS	POCF	POCC	POC
1	6000	5.4	420	252	59	*135*	11	1.7	13	0.85	0.03	0.9
2	2200	4.2	226	138	71	*107*	10	2.0	12	0.14	0.03	0.2
3	2600	5.7	340	301	126	*89*	25	0.5	26	0.70	0.03	0.7
4	3900	6.0	503	445	55	*133*	20	0.4	20	1.41	0.03	1.4
5	4200	5.1	529	455	71	150	14	0.3	14	0.77	0.03	0.8
6	1400	5.0	175	93	215	156	32	0.3	32	0.82	0.03	0.9
7	3800	6.3	414	388	59	98	14	0.4	14	0.90	0.03	0.9
8	3300	3.5	182	155	67	134	10	0.1	10	0.93	0.03	1.0
Ave	3425	5.2	*383*	*305*	77	126	15	0.8	16	0.86	0.03	0.9

	$mm.a^{-1}$	$mg.l^{-1}$	$\mu mol.l^{-1}$				$mg.l^{-1}$					
N°	Qt	DOC	DIC	CO_2	O_2	SiO_2	FSS	CSS	TSS	POCF	POCC	POC
1	2559	*5.1*	*389*	*310*	*55*	*122*	*11*	*0.5*	*12*	*0.84*	*0.03*	*0.87*
2	938	*4.9*	*424*	*331*	*51*	*128*	*10*	*0.5*	*10*	*0.78*	*0.03*	*0.81*
3	1109	*5.7*	*347*	*281*	*124*	*130*	*25*	*1.2*	*26*	*0.94*	*0.03*	*0.97*
4	1663	*5.5*	*341*	*280*	*99*	*123*	*20*	*1.0*	*21*	*0.95*	*0.03*	*0.98*
5	1791	*5.0*	*441*	*339*	*71*	*137*	*14*	*0.7*	*15*	*0.75*	*0.03*	*0.78*
6	597	*5.9*	*337*	*273*	*158*	*136*	*32*	*1.6*	*34*	*0.97*	*0.03*	*1.00*
7	1621	*5.2*	*379*	*303*	*70*	*124*	*14*	*0.7*	*15*	*0.87*	*0.03*	*0.90*
8	1407	*5.1*	*374*	*302*	*50*	*118*	*10*	*0.5*	*10*	*0.87*	*0.03*	*0.90*
Ave	1461	*5.2*	*383*	*305*	*77*	*126*	*15*	*0.8*	*16*	*0.86*	*0.03*	*0.89*

R^2	-	0.15	0.07	0.03	0.51	0.08	1.00	0.31	0.97	0.05	-	0.05

Rio Japurá à Jutica. Superficie = 289 000 km²

	$m^3.s^{-1}$	$mg.l^{-1}$	$\mu mol.l^{-1}$				$mg.l^{-1}$					
N°	Qt	DOC	DIC	CO_2	O_2	SiO_2	FSS	CSS	TSS	POCF	POCC	POC
1	20100	3.1	254	99	214	*104*	61	5.9	67	1.41	0.59	2.0
2	21400	3.3	265	153	192	*99*	51	4.7	55	1.38	0.37	1.8
3	14100	3.6	311	195	176	*95*	45	4.0	48	1.33	0.38	1.7
4	9000	4.2	357	100	176	*110*	51	0.3	51	1.10	1.00	2.1
5	19200	3.4	314	204	177	98	46	4.0	50	1.87	0.21	2.1
6	14700	2.3	180	80	223	104	63	11.0	74	1.30	0.30	1.6
7	12800	3.6	321	131	196	91	55	2.0	57	1.45	1.15	2.6
8	16700	3.9	305	222	170	87	40	3.0	43	0.96	0.15	1.1
Ave	16000	3.4	*307*	*175*	191	98	52	4.6	56	1.38	0.47	1.8

	$mm.a^{-1}$	$mg.l^{-1}$	$\mu mol.l^{-1}$				$mg.l^{-1}$					
N°	Qt	DOC	DIC	CO_2	O_2	SiO_2	FSS	CSS	TSS	POCF	POCC	POC
1	2195	*2.8*	*237*	*116*	*223*	*107*	*63*	*6.1*	*69*	*1.47*	*0.44*	*1.9*
2	2337	*3.2*	*267*	*159*	*199*	*101*	*54*	*4.9*	*58*	*1.41*	*0.37*	*1.8*
3	1540	*4.0*	*334*	*200*	*160*	*91*	*39*	*3.4*	*42*	*1.26*	*0.45*	*1.7*
4	983	*3.6*	*337*	*166*	*185*	*96*	*51*	*4.5*	*56*	*1.33*	*0.67*	*2.0*
5	2097	*3.5*	*334*	*235*	*180*	*95*	*46*	*3.8*	*50*	*1.38*	*0.33*	*1.7*
6	1605	*2.8*	*267*	*139*	*220*	*105*	*63*	*5.7*	*69*	*1.48*	*0.49*	*2.0*
7	1398	*3.7*	*336*	*117*	*190*	*97*	*55*	*5.0*	*60*	*1.30*	*0.90*	*2.2*
8	1824	*3.8*	*364*	*258*	*164*	*91*	*40*	*3.2*	*43*	*1.32*	*0.35*	*1.7*
Ave	1747	*3.4*	*304*	*175*	*191*	*98*	*52*	*4.6*	*56*	*1.38*	*0.47*	*1.8*

R^2	-	0.58	0.70	0.95	0.86	0.59	1.00	0.10	0.96	0.09	0.28	0.18

Rio Purus à Anori. Superficie = 372 000 km²

	$m^3.s^{-1}$	$mg.l^{-1}$	$\mu mol.l^{-1}$				$mg.l^{-1}$					
N°	Qt	DOC	DIC	CO_2	O_2	SiO_2	FSS	CSS	TSS	POCF	POCC	POC
1	20000	6.2	554	342	113	*140*	51	14.0	65	0.96	0.11	1.1
2	10900	3.5	641	305	36	*152*	22	2.0	24	0.22	0.15	0.4
3	5000	3.5	399	86	205	*140*	103	0.2	103	0.87	0.00	0.9
4	14300	5.2	484	255	72	*160*	143	2.6	146	1.77	0.24	2.0
5	15000	4.1	624	371	36	165	38	2.0	40	0.92	0.00	0.9
6	2800	2.2	608	43	217	200	46	0.1	46	1.13	0.00	1.1
7	10700	4.7	518	336	113	138	170	0.2	170	1.63	0.00	1.6
8	16200	4.3	633	359	86	146	18	0.0	18	0.67	0.00	0.7
Ave	11863	4.6	*592*	*334*	89	151	70	3.9	74	1.02	0.08	1.1

	$mm.a^{-1}$	$mg.l^{-1}$	$\mu mol.l^{-1}$				$mg.l^{-1}$					
N°	Qt	DOC	DIC	CO_2	O_2	SiO_2	FSS	CSS	TSS	POCF	POCC	POC
1	1697	*5.0*	*590*	*375*	*61*	*145*	*51*	*5.0*	*56*	*0.83*	*0.08*	*0.9*
2	925	*4.4*	*625*	*354*	*77*	*155*	*22*	*5.0*	*27*	*0.65*	*0.07*	*0.7*
3	424	*4.6*	*576*	*304*	*109*	*152*	*103*	*2.9*	*106*	*1.29*	*0.08*	*1.4*
4	1213	*5.4*	*531*	*325*	*93*	*140*	*143*	*2.6*	*146*	*1.56*	*0.09*	*1.6*
5	1272	*4.7*	*605*	*367*	*67*	*149*	*38*	*5.0*	*43*	*0.75*	*0.08*	*0.8*
6	238	*2.1*	*687*	*166*	*205*	*192*	*46*	*1.2*	*47*	*1.03*	*0.03*	*1.1*
7	908	*4.6*	*541*	*250*	*144*	*151*	*170*	*0.8*	*171*	*1.84*	*0.08*	*1.9*
8	1374	*4.1*	*635*	*339*	*87*	*159*	*18*	*4.8*	*23*	*0.64*	*0.07*	*0.7*
Ave	1006	*4.6*	*592*	*334*	*89*	*151*	*70*	*3.9*	*74*	*1.02*	*0.08*	*1.1*

R^2	-	0.68	0.35	0.30	0.48	0.59	1.00	0.15	0.97	0.80	0.03	0.75

Rio Madeira à Sao Jose do Amatari. Superficie = 1 380 000 km²

	$m^3.s^{-1}$	$mg.l^{-1}$	$\mu mol.l^{-1}$				$mg.l^{-1}$					
N°	Qt	DOC	DIC	CO_2	O_2	SiO_2	FSS	CSS	TSS	POCF	POCC	POC
1	40000	*3.4*	*501*	*149*	*152*	*143*	*274*	*39*	*313*	*2.2*	*0.8*	*3.0*
2	13700	3.2	542	95	205	*135*	79	1.0	80	1.04	0.00	1.0
3	23100	2.9	525	109	209	*145*	619	58.0	677	4.39	0.39	4.8
4	48400	3.2	490	163	121	*145*	594	144.0	738	4.97	1.06	6.0
5	24700	3.5	584	177	206	149	171	8.0	179	1.49	0.04	1.5
6	6800	1.7	570	44	214	135	90	1.0	91	0.81	0.00	0.8
7	42100	3.6	453	47	166	137	771	120.0	891	3.60	5.94	9.5
8	19300	2.7	498	121	180	142	64	0.2	64	0.61	0.00	0.6
Ave	27263	3.3	*513*	*130*	167	142	*429*	67.4	487	2.92	1.54	4.47

	$mm.a^{-1}$	$mg.l^{-1}$	$\mu mol.l^{-1}$				$mg.l^{-1}$					
N°	Qt	DOC	DIC	CO_2	O_2	SiO_2	FSS	CSS	TSS	POCF	POCC	POC
1	915	*3.4*	*501*	*149*	*152*	*143*	*274*	*39*	*313*	*2.15*	*0.84*	*3.00*
2	313	*2.8*	*566*	*131*	*198*	*141*	*79*	*6*	*85*	*0.98*	*0.07*	*1.05*
3	528	*2.8*	*551*	*93*	*206*	*140*	*619*	*103*	*722*	*3.81*	*2.42*	*6.23*
4	1107	*3.7*	*467*	*141*	*136*	*144*	*594*	*96*	*690*	*3.89*	*2.21*	*6.10*
5	565	*3.0*	*548*	*133*	*187*	*141*	*171*	*22*	*193*	*1.50*	*0.45*	*1.95*
6	156	*2.4*	*604*	*109*	*230*	*139*	*90*	*9*	*99*	*0.94*	*0.16*	*1.11*
7	963	*3.5*	*487*	*115*	*159*	*143*	*771*	*129*	*900*	*4.75*	*3.01*	*7.76*
8	441	*3.0*	*549*	*141*	*183*	*141*	*64*	*3*	*71*	*0.97*	*0.00*	*0.96*
Ave	623	*3.3*	*513*	*130*	*168*	*142*	*429*	*67.5*	*497*	*2.93*	*1.54*	*4.47*

R^2	-	0.51	0.57	0.15	0.87	0.13	1.00	0.78	0.99	0.82	0.36	0.76

Rio Juruá à Tupe. Superficie = 217 000 km²

	$m^3.s^{-1}$	$mg.l^{-1}$	$\mu mol.l^{-1}$				$mg.l^{-1}$					
N°	Qt	DOC	DIC	CO_2	O_2	SiO_2	FSS	CSS	TSS	POCF	POCC	POC
1	4700	6.9	740	171	132	*185*	46	14.0	60	0.83	0.16	1.0
2	1700	3.0	1192	101	177	*200*	117	2.0	119	1.33	0.10	1.4
3	3900	4.7	813	108	178	*195*	400	3.0	403	2.60	0.16	2.8
4	5600	5.4	834	214	82	*160*	122	51.0	173	1.26	0.30	1.6
5	3100	3.3	988	266	103	190	186	0.4	186	1.59	0.12	1.7
6	900	3.4	1369	119	179	204	66	0.7	67	1.23	0.08	1.3
7	5200	6.5	878	296	132	169	270	20.0	290	2.46	0.20	2.7
8	4800	3.5	915	247	113	184	121	8.0	129	1.11	0.14	1.3
Ave	3738	5.0	*902*	*222*	127	181	177	17.1	194	1.59	0.18	1.77

	$mm.a^{-1}$	$mg.l^{-1}$	$\mu mol.l^{-1}$				$mg.l^{-1}$					
N°	Qt	DOC	DIC	CO_2	O_2	SiO_2	FSS	CSS	TSS	POCF	POCC	POC
1	684	*5.5*	*849*	*245*	*97*	*174*	*49*	*27*	*75*	*0.85*	*0.21*	*1.06*
2	247	*3.6*	*1197*	*163*	*164*	*197*	*117*	*6*	*123*	*1.40*	*0.10*	*1.50*
3	567	*4.9*	*846*	*213*	*154*	*184*	*400*	*7*	*407*	*2.80*	*0.18*	*2.98*
4	814	*5.8*	*761*	*258*	*95*	*170*	*122*	*27*	*149*	*1.21*	*0.22*	*1.44*
5	451	*4.9*	*923*	*216*	*131*	*182*	*186*	*15*	*201*	*1.65*	*0.17*	*1.82*
6	131	*2.9*	*1352*	*134*	*180*	*205*	*66*	*1*	*67*	*1.20*	*0.06*	*1.26*
7	756	*4.7*	*921*	*209*	*145*	*185*	*270*	*11*	*281*	*2.11*	*0.17*	*2.28*
8	698	*4.9*	*942*	*218*	*124*	*181*	*121*	*18*	*139*	*1.30*	*0.17*	*1.47*
Ave	544	*5.0*	*902*	*222*	*127*	*181*	*177*	*17.1*	*194*	*1.59*	*0.18*	*1.77*

R^2	-	0.39	0.87	0.28	0.66	0.57	0.99	0.32	0.96	0.94	0.62	0.92

Rio Solimões à Vargem Grande. Superficie = 1 135 000 km²

	$m^3.s^{-1}$	$mg.l^{-1}$	$\mu mol.l^{-1}$				$mg.l^{-1}$					
N°	Qt	DOC	DIC	CO_2	O_2	SiO_2	FSS	CSS	TSS	POCF	POCC	POC
1	69700	4.7	1238	140	177	*120*	282	205.0	487	3.38	1.11	4.5
2	31700	3.2	873	77	239	*175*	217	59.0	276	2.58	0.92	3.5
3	57100	3.2	1081	94	205	*135*	470	136.0	606	4.65	0.82	5.5
4	52400	3.6	1110	92	148	*140*	436	92.0	528	4.64	0.94	5.6
5	38800	3.1	1222	163	168	168	299	41.0	340	3.34	0.61	4.0
6	26600	3.0	918	70	183	183	232	44.0	276	2.81	0.56	3.4
7	51500	3.9	1124	97	177	143	486	106.0	592	4.96	0.81	5.8
8	48000	2.9	1002	92	168	166	252	71.0	323	2.65	0.54	3.2
Ave	46975	3.6	*1094*	*105*	181	148	349	107.4	456	3.76	0.82	4.58

	$mm.a^{-1}$	$mg.l^{-1}$	$\mu mol.l^{-1}$				$mg.l^{-1}$					
N°	Qt	DOC	DIC	CO_2	O_2	SiO_2	FSS	CSS	TSS	POCF	POCC	POC
1	1938	*4.0*	*1168*	*119*	*192*	*125*	*282*	*114*	*396*	*3.24*	*0.91*	*4.14*
2	881	*3.3*	*1003*	*101*	*188*	*172*	*217*	*94*	*311*	*2.60*	*0.76*	*3.36*
3	1588	*3.8*	*1186*	*110*	*175*	*124*	*470*	*120*	*590*	*4.83*	*0.89*	*5.72*
4	1457	*3.4*	*1095*	*100*	*172*	*150*	*436*	*109*	*545*	*4.49*	*0.80*	*5.30*
5	1079	*3.3*	*1024*	*99*	*181*	*168*	*299*	*98*	*397*	*3.30*	*0.76*	*4.06*
6	740	*3.2*	*976*	*97*	*185*	*180*	*232*	*92*	*324*	*2.71*	*0.73*	*3.44*
7	1432	*3.5*	*1126*	*101*	*169*	*142*	*486*	*114*	*600*	*4.93*	*0.83*	*5.76*
8	1335	*3.4*	*1028*	*103*	*186*	*165*	*252*	*98*	*350*	*2.91*	*0.77*	*3.68*
Ave	1306	*3.6*	*1094*	*105*	*181*	*148*	*349*	*107.4*	*456*	*3.76*	*0.82*	*4.58*

R^2	-	0.21	0.36	0.05	0.09	0.92	1.00	0.04	0.74	0.98	0.10	0.89

Tableau A3 (1/5)

Amazone à Obidos. Superficie = 4 619 000 km²

N°	pH	log fO_2*	log $[NO_3^-]/[NH_4^+]$	log fO_2**	log fCO_2**	CSS/TSS
1	6.67	-0.99	1.14	-29.84	-2.23	0.15
2	6.61	-0.95	1.18	-29.77	-2.28	0.23
3	7.13	-0.86	1.43	-30.16	-2.54	0.04
4	7.00	-1.02	1.34	-30.08	-2.43	0.11
5	6.68	-0.97	1.07	-29.90	-2.23	0.13
6	7.14	-0.84	1.28	-30.25	-2.68	0.05
7	6.76	-0.91	1.44	-29.79	-2.33	0.10
8	6.62	-1.02	0.94	-29.90	-2.19	0.24
Ave	6.75	-0.95	1.22	-29.89	-2.28	0.14

N°	pH	log fO_2*	log $[NO_3^-]/[NH_4^+]$	log fO_2**	log fCO_2**	CSS/TSS
1	*6.67*	*-0.99*	*1.14*	*-29.77*	*-2.16*	*0.15*
2	*6.61*	*-1.02*	*0.97*	*-29.74*	*-2.12*	*0.21*
3	*7.13*	*-0.91*	*1.34*	*-29.98*	*-2.38*	*0.11*
4	*7.00*	*-0.96*	*1.28*	*-29.84*	*-2.25*	*0.12*
5	*6.68*	*-0.96*	*1.18*	*-29.86*	*-2.25*	*0.15*
6	*7.14*	*-0.84*	*1.25*	*-30.22*	*-2.58*	*0.20*
7	*6.76*	*-0.93*	*1.46*	*-29.87*	*-2.31*	*0.08*
8	*6.62*	*-0.97*	*1.10*	*-29.85*	*-2.22*	*0.19*
Ave	*6.75*	*-0.95*	*1.22*	-29.89	*-2.28*	*0.14*

R^2	1.00	-	0.73	0.69	0.70	-

Somme des affluents. Superficie = 4 370 000 km²

N°	pH	log fO_2*	log $[NO_3^-]/[NH_4^+]$	log fO_2**	log fCO_2**	CSS/TSS
1	6.81	-0.91	1.17	-29.81	-2.33	0.33
2	6.68	-0.91	1.19	-29.67	-2.36	0.18
3	7.10	-0.83	1.45	-29.95	-2.47	0.17
4	6.93	-1.01	0.88	-30.07	-2.37	0.18
5	6.69	-0.95	1.12	-29.71	-2.24	0.10
6	7.08	-0.83	1.22	-30.04	-2.61	0.15
7	6.93	-0.91	1.12	-29.95	-2.42	0.15
8	6.76	-0.96	0.94	-29.87	-2.36	0.18
Ave	6.85	-0.92	1.11	-29.88	-2.37	0.19

N°	pH	log fO_2*	log $[NO_3^-]/[NH_4^+]$	log fO_2**	log fCO_2**	CSS/TSS
1	*6.83*	*-0.92*	*1.00*	*-29.91*	*-2.36*	*0.22*
2	*6.73*	*-0.90*	*1.07*	*-29.78*	*-2.38*	*0.23*
3	*7.08*	*-0.88*	*1.30*	*-30.01*	*-2.43*	*0.17*
4	*6.93*	*-0.95*	*1.09*	*-29.97*	*-2.39*	*0.15*
5	*6.74*	*-0.92*	*1.04*	*-29.80*	*-2.33*	*0.19*
6	*6.96*	*-0.84*	*1.21*	*-29.94*	*-2.48*	*0.23*
7	*6.95*	*-0.91*	*1.11*	*-29.97*	*-2.43*	*0.15*
8	*6.78*	*-0.92*	*1.08*	*-29.82*	*-2.36*	*0.23*
Ave	*6.85*	*-0.92*	*1.11*	*-29.88*	*-2.37*	*0.19*

Tableau A3 (2/5)

Rio Negro à Manacapuru. Superficie = 755 000 km²

N°	pH	log fO_2*	log $[NO_3^-]/[NH_4^+]$	log fO_2**	log fCO_2**	CSS/TSS
1	4.88	-0.91	1.00	-28.13	-2.42	0.00
2	4.94	-1.08	0.85	-28.27	-2.29	0.05
3	5.19	-0.84	0.39	-28.74	-2.49	0.02
4	5.42	-0.87	0.79	-28.77	-2.72	0.00
5	4.86	-1.01	0.09	-28.57	-2.52	0.00
6	4.84	-0.83	0.43	-28.38	-2.38	0.00
7	4.82	-0.91	0.46	-28.34	-2.39	0.00
8	4.91	-1.02	0.42	-28.45	-2.52	0.06
Ave	4.91	-0.96	0.55	-28.39	-2.42	0.02

N°	pH	log fO_2*	log $[NO_3^-]/[NH_4^+]$	log fO_2**	log fCO_2**	CSS/TSS
1	*5.02*	*-0.97*	*0.53*	*-28.40*	*-2.42*	*0.02*
2	*5.10*	*-0.98*	*0.65*	*-28.42*	*-2.46*	*0.03*
3	*4.94*	*-0.96*	*0.42*	*-28.37*	*-2.38*	*0.02*
4	*5.25*	*-0.98*	*0.87*	*-28.46*	*-2.53*	*0.03*
5	*4.86*	*-0.96*	*0.24*	*-28.35*	*-2.35*	*0.01*
6	*4.84*	*-0.94*	*0.35*	*-28.32*	*-2.35*	*0.02*
7	*4.80*	*-0.92*	*0.48*	*-28.29*	*-2.35*	*0.03*
8	*5.04*	*-0.96*	*0.67*	*-28.38*	*-2.44*	*0.03*
Ave	*4.91*	*-0.96*	*0.55*	*-28.39*	*-2.42*	*0.02*

R^2	0.51	-	0.44	0.06	0.25	-

Rio Iça à San Antonio do Iça. Superficie = 148,000 km²

N°	pH	log fO_2*	log $[NO_3^-]/[NH_4^+]$	log fO_2**	log fCO_2**	CSS/TSS
1	6.87	-0.86	0.99	-30.13	-3.06	0.09
2	6.23	-0.89	1.03	-29.46	-2.43	0.36
3	6.36	-0.81	0.60	-29.81	-2.56	0.03
4	6.31	-0.88	1.19	-29.46	-2.49	0.02
5	6.11	-0.89	0.99	-29.37	-2.23	0.18
6	6.50	-0.84	1.40	-29.55	-2.73	0.18
7	6.03	-0.86	0.53	-29.52	-2.26	0.07
8	6.28	-0.86	1.02	-29.52	-2.42	0.10
Ave	6.27	-0.86	0.88	-29.58	-2.45	0.14

N°	pH	log fO_2*	log $[NO_3^-]/[NH_4^+]$	log fO_2**	log fCO_2**	CSS/TSS
1	*6.48*	-0.87	*1.14*	*-29.95*	*-2.81*	*0.21*
2	*6.29*	-0.86	*0.88*	*-29.61*	*-2.47*	*0.15*
3	*6.29*	-0.85	*0.98*	*-29.56*	*-2.51*	*0.13*
4	*6.24*	-0.85	*0.89*	*-29.49*	*-2.39*	*0.13*
5	*6.26*	-0.86	*0.85*	*-29.55*	*-2.40*	*0.14*
6	*6.27*	-0.84	*0.97*	*-29.52*	*-2.48*	*0.12*
7	*6.10*	-0.88	*0.62*	*-29.31*	*-2.04*	*0.14*
8	*6.30*	-0.86	*0.88*	*-29.63*	*-2.48*	*0.15*
Ave	*6.27*	-0.86	*0.88*	*-29.58*	*-2.45*	*0.14*

R^2	0.16	-	0.25	0.54	0.61	-

Tableau A3 (3/5)

Rio Jutai à Xibeco. Superficie = 74 000 km²

N°	pH	log fO_2*	log $[NO_3^-]/[NH_4^+]$	log fO_2**	log fCO_2	CSS/TSS
1	6.19	-1.36	0.51	-29.69	-2.13	0.13
2	6.17	-1.28	0.18	-29.83	-2.39	0.17
3	5.48	-1.03	-0.10	-29.28	-2.05	0.02
4	5.48	-1.39	0.13	-29.16	-1.88	0.02
5	5.58	-1.28	0.15	-29.26	-1.87	0.02
6	6.31	-0.79	0.28	-29.92	-2.70	0.01
7	5.19	-1.36	0.20	-28.84	-1.94	0.03
8	5.60	-1.30	0.27	-29.22	-2.22	0.01
Ave	5.58	-1.24	0.23	-29.22	-2.05	0.05

N°	pH	log fO_2*	log $[NO_3^-]/[NH_4^+]$	log fO_2**	log fCO_2	CSS/TSS
1	*5.62*	*-1.39*	*0.25*	*-29.30*	*-2.01*	*0.05*
2	*5.66*	*-1.42*	*0.26*	*-29.42*	*-2.00*	*0.05*
3	*5.54*	*-1.03*	*0.18*	*-29.47*	*-2.10*	*0.05*
4	*5.54*	*-1.13*	*0.21*	*-29.32*	*-2.07*	*0.05*
5	*5.68*	*-1.28*	*0.22*	*-29.60*	*-2.02*	*0.05*
6	*5.52*	*-0.93*	*0.14*	*-29.60*	*-2.15*	*0.05*
7	*5.60*	*-1.28*	*0.24*	*-29.33*	*-2.03*	*0.05*
8	*5.60*	*-1.43*	*0.26*	*-29.21*	*-2.01*	*0.05*
Ave	*5.58*	*-1.24*	*0.23*	*-29.22*	*-2.05*	*0.05*

R^2	0.02	-	0.06	0.14	0.04	-

Rio Japurá à Jutica. Superficie = 289 000 km²

N°	pH	log fO_2*	log $[NO_3^-]/[NH_4^+]$	log fO_2**	log fCO_2	CSS/TSS
1	*6.48*	*-0.80*	*1.17*	*-29.64*	*-2.51*	*0.09*
2	*6.26*	*-0.84*	*1.04*	*-29.49*	*-2.33*	*0.08*
3	*6.11*	*-0.88*	*0.86*	*-29.43*	*-2.07*	*0.08*
4	6.78	-0.88	0.95	-30.06	-2.54	0.01
5	6.10	-0.88	1.15	-29.28	-2.22	0.08
6	6.47	-0.78	1.30	-29.57	-2.63	0.15
7	6.53	-0.83	1.01	-29.78	-2.42	0.04
8	5.94	-0.90	0.72	-29.33	-2.19	0.07
Ave	6.24	-0.84	1.02	-29.48	-2.30	0.08

N°	pH	log fO_2*	log $[NO_3^-]/[NH_4^+]$	log fO_2**	log fCO_2	CSS/TSS
1	*6.48*	*-0.78*	*1.17*	*-29.46*	*-2.51*	*0.09*
2	*6.26*	*-0.83*	*1.04*	*-29.35*	*-2.33*	*0.09*
3	*6.11*	*-0.92*	*0.86*	*-29.39*	*-2.07*	*0.08*
4	*6.47*	*-0.86*	*1.01*	*-29.65*	*-2.30*	*0.08*
5	*6.15*	*-0.87*	*0.97*	*-29.28*	*-2.19*	*0.08*
6	*6.50*	*-0.78*	*1.18*	*-29.50*	*-2.51*	*0.08*
7	*6.69*	*-0.85*	*1.05*	*-29.89*	*-2.38*	*0.08*
8	*6.08*	*-0.91*	*0.89*	*-29.29*	*-2.08*	*0.07*
Ave	*6.24*	*-0.84*	*1.02*	*-29.48*	*-2.30*	*0.08*

R^2	0.63	-	0.40	0.66	0.79	-

Tableau A3 (4/5)

Rio Purus à Anori. Superficie = 372,000 km²

N°	pH	log fO_2*	log $[NO_3^-]/[NH_4^+]$	log fO_2**	log fCO_2	CSS/TSS
1	6.16	-1.07	1.29	-29.26	-2.00	0.22
2	6.41	-1.57	1.06	-29.63	-2.05	0.08
3	6.93	-0.82	1.41	-29.97	-2.60	0.00
4	6.32	-1.27	0.35	-29.89	-2.13	0.02
5	6.20	-1.57	0.82	-29.54	-1.96	0.05
6	7.49	-0.79	1.30	-30.59	-2.90	0.00
7	6.10	-1.07	1.49	-29.10	-2.01	0.00
8	6.25	-1.19	0.93	-29.54	-1.98	0.00
Ave	6.26	-1.18	0.93	-29.54	-2.01	0.05

N°	pH	log fO_2*	log $[NO_3^-]/[NH_4^+]$	log fO_2**	log fCO_2	CSS/TSS
1	*6.19*	*-1.34*	*0.82*	*-29.31*	*-1.79*	*0.09*
2	*6.31*	*-1.24*	*1.01*	*-29.50*	*-1.91*	*0.19*
3	*6.29*	*-1.09*	*0.94*	*-29.49*	*-2.00*	*0.03*
4	*6.15*	*-1.16*	*0.82*	*-29.26*	*-1.86*	*0.02*
5	*6.24*	*-1.30*	*0.89*	*-29.39*	*-1.84*	*0.12*
6	*6.78*	*-0.82*	*1.50*	*-30.30*	*-2.59*	*0.02*
7	*6.31*	*-0.97*	*0.95*	*-29.53*	*-2.11*	*0.00*
8	*6.36*	*-1.19*	*1.09*	*-29.58*	*-1.97*	*0.21*
Ave	*6.26*	*-1.18*	*0.93*	*-29.54*	*-2.01*	*0.05*

R^2	0.16	-	0.34	0.48	0.53	-

Rio Madeira à Sao Jose do Amatari. Superficie = 1 380 000 km²

N°	pH	log fO_2*	log $[NO_3^-]/[NH_4^+]$	log fO_2**	log fCO_2	CSS/TSS
1	6.73	-0.95	0.88	-30.04	-2.35	0.12
2	7.04	-0.82	1.51	-30.04	-2.56	0.01
3	6.95	-0.81	1.54	-29.93	-2.50	0.09
4	6.67	-1.04	0.65	-30.09	-2.32	0.20
5	6.73	-0.81	1.25	-29.85	-2.29	0.04
6	7.44	-0.80	1.67	-30.36	-2.88	0.01
7	7.30	-0.91	1.00	-30.55	-2.86	0.13
8	6.86	-0.87	0.90	-30.16	-2.45	0.00
Ave	6.84	-0.90	0.98	-30.10	-2.43	0.14

N°	pH	log fO_2*	log $[NO_3^-]/[NH_4^+]$	log fO_2**	log fCO_2	CSS/TSS
1	*6.73*	*-0.95*	*0.88*	*-30.07*	*-2.26*	*0.12*
2	*6.94*	*-0.83*	*1.14*	*-30.05*	*-2.42*	*0.07*
3	*7.21*	*-0.81*	*1.19*	*-30.19*	*-2.65*	*0.14*
4	*6.71*	*-0.99*	*0.79*	*-30.15*	*-2.30*	*0.14*
5	*6.90*	*-0.86*	*1.08*	*-30.07*	*-2.39*	*0.11*
6	*7.17*	*-0.76*	*1.34*	*-30.07*	*-2.58*	*0.09*
7	*6.94*	*-0.93*	*0.96*	*-30.20*	*-2.48*	*0.14*
8	*6.83*	*-0.86*	*1.05*	*-30.01*	*-2.34*	*0.04*
Ave	*6.84*	*-0.90*	*0.98*	*-30.10*	*-2.43*	*0.14*

R^2	0.43	-	0.23	0.09	0.34	-

Tableau A3 (5/5)

Rio Juruá à Tupe. Superficie = 217 000 km²

N°	pH	log fO_2*	log $[NO_3^-]/[NH_4^+]$	log fO_2**	log fCO_2	CSS/TSS
1	6.89	-1.01	1.23	-30.03	-2.30	0.23
2	7.40	-0.88	1.55	-30.38	-2.53	0.02
3	7.18	-0.88	1.88	-29.99	-2.50	0.01
4	6.83	-1.21	0.39	-30.39	-2.20	0.29
5	6.80	-1.11	1.97	-29.56	-2.11	0.00
6	7.39	-0.87	1.41	-30.43	-2.46	0.01
7	6.66	-1.01	1.68	-29.57	-2.06	0.07
8	6.80	-1.07	1.29	-29.90	-2.14	0.06
Ave	6.85	-1.02	1.30	-29.95	-2.19	0.09

N°	pH	log fO_2*	log $[NO_3^-]/[NH_4^+]$	log fO_2**	log fCO_2	CSS/TSS
1	*6.76*	*-1.14*	*0.76*	*-30.06*	*-2.09*	*0.35*
2	*7.20*	*-0.91*	*1.58*	*-30.17*	*-2.30*	*0.05*
3	*6.91*	*-0.94*	*1.86*	*-29.69*	*-2.21*	*0.02*
4	*6.69*	*-1.15*	*0.92*	*-29.93*	*-2.07*	*0.18*
5	*6.91*	*-1.01*	*1.35*	*-29.95*	*-2.18*	*0.08*
6	*7.36*	*-0.87*	*1.71*	*-30.31*	*-2.37*	*0.01*
7	*6.94*	*-0.97*	*1.59*	*-29.86*	*-2.21*	*0.04*
8	*6.90*	*-1.03*	*1.19*	*-30.03*	*-2.16*	*0.13*
Ave	*6.85*	*-1.02*	*1.30*	*-29.95*	*-2.19*	*0.09*

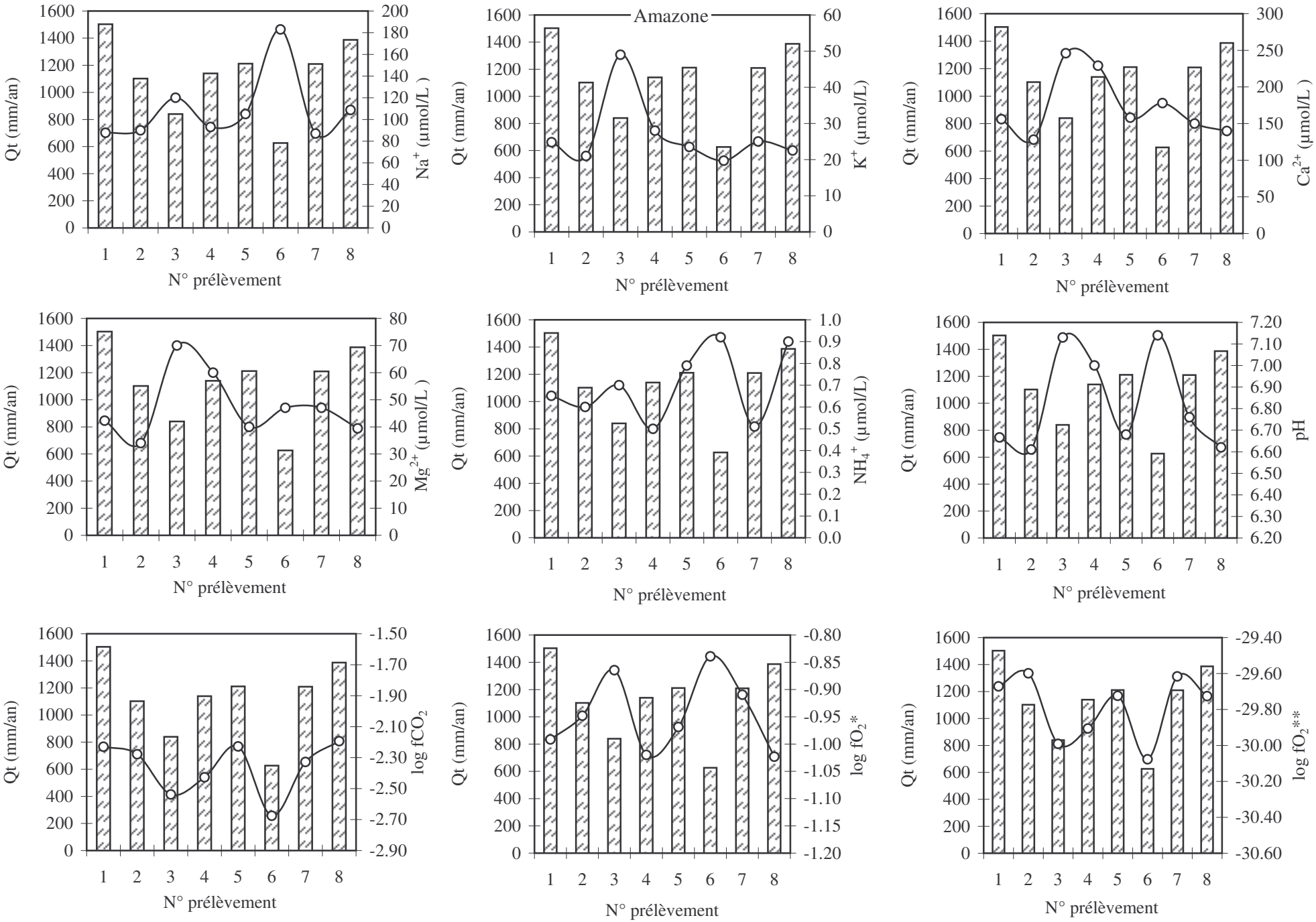
R^2	0.58	-	0.62	0.30	0.29	-

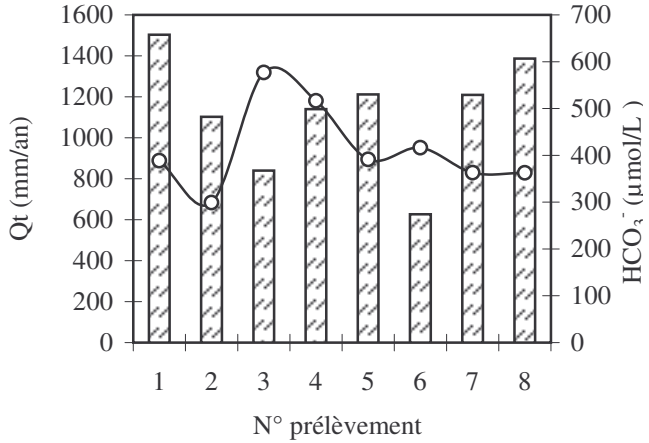
Rio Solimões à Vargem Grande. Superficie = 1 135 000 km²

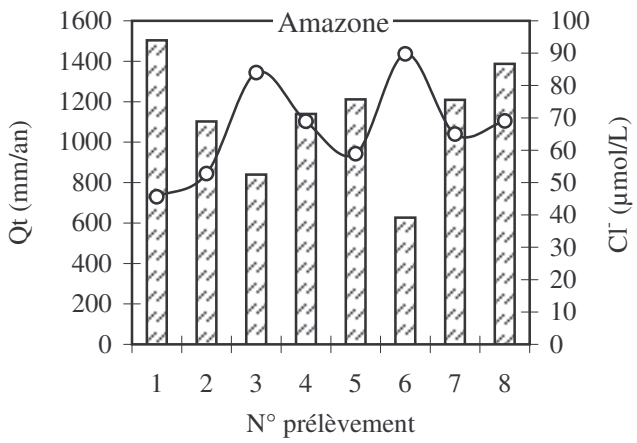
N°	pH	log fO_2*	log $[NO_3^-]/[NH_4^+]$	log fO_2**	log fCO_2	CSS/TSS
1	7.26	-0.88	1.87	-30.08	-2.39	0.42
2	7.38	-0.75	1.37	-30.45	-2.65	0.21
3	7.39	-0.82	2.24	-30.02	-2.56	0.22
4	7.41	-0.96	1.49	-30.41	-2.57	0.17
5	7.18	-0.90	2.55	-29.65	-2.32	0.12
6	7.45	-0.86	1.36	-30.52	-2.69	0.16
7	7.39	-0.88	1.43	-30.42	-2.54	0.18
8	7.36	-0.90	1.42	-30.40	-2.57	0.22
Ave	7.34	-0.87	1.60	-30.29	-2.51	0.24

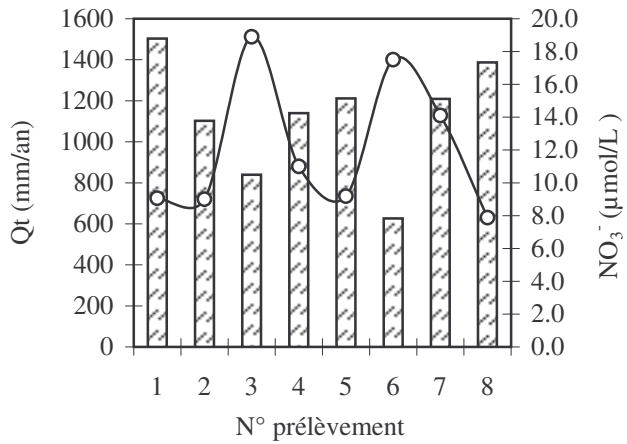
N°	pH	log fO_2*	log $[NO_3^-]/[NH_4^+]$	log fO_2**	log fCO_2	CSS/TSS
1	*7.27*	*-0.84*	*1.67*	*-30.10*	*-2.41*	*0.29*
2	*7.33*	*-0.85*	*1.54*	*-30.34*	*-2.53*	*0.30*
3	*7.34*	*-0.89*	*1.67*	*-30.19*	*-2.46*	*0.20*
4	*7.38*	*-0.89*	*1.60*	*-30.32*	*-2.53*	*0.20*
5	*7.36*	*-0.87*	*1.56*	*-30.36*	*-2.54*	*0.25*
6	*7.35*	*-0.86*	*1.53*	*-30.40*	*-2.56*	*0.28*
7	*7.38*	*-0.90*	*1.62*	*-30.30*	*-2.52*	*0.19*
8	*7.34*	*-0.86*	*1.55*	*-30.32*	*-2.52*	*0.28*
Ave	*7.34*	*-0.87*	*1.60*	*-30.29*	*-2.51*	*0.24*

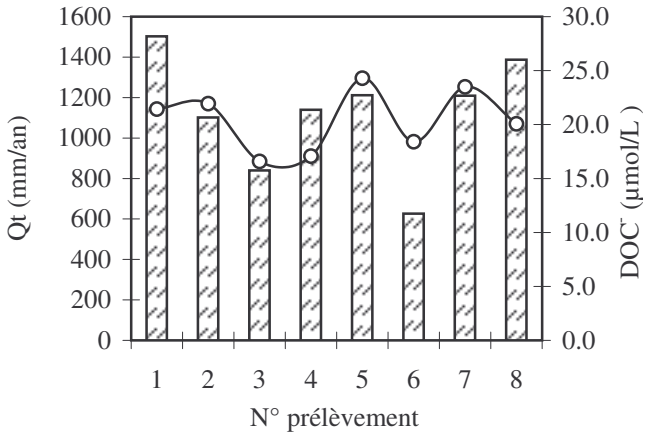
R^2	0.15	-	0.01	0.11	0.17	-

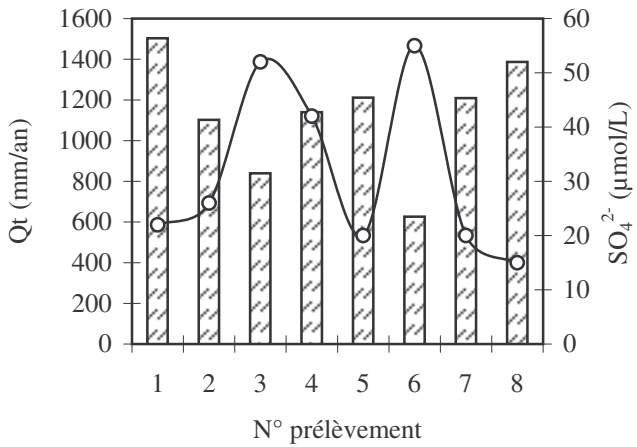

Amazone
Qt (mm/an)
Na+ (µmol/L)
K+ (µmol/L)
Ca2+ (µmol/L)
Mg2+ (µmol/L)
NH4+ (µmol/L)
pH
log fCO2
log fO2*
log fO2**
N° prélèvement

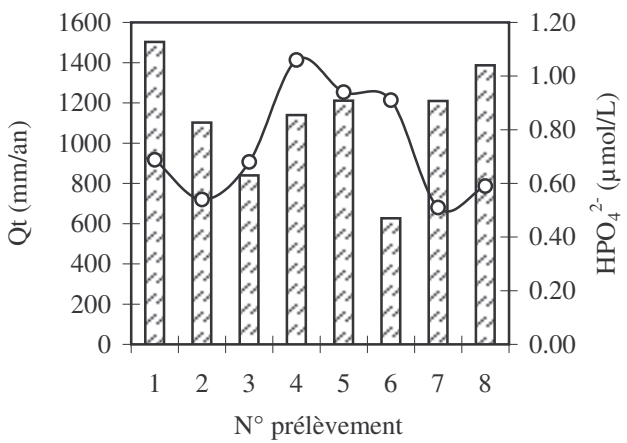

Qt (mm/an)
HCO3- (µmol/L)
N° prélèvement

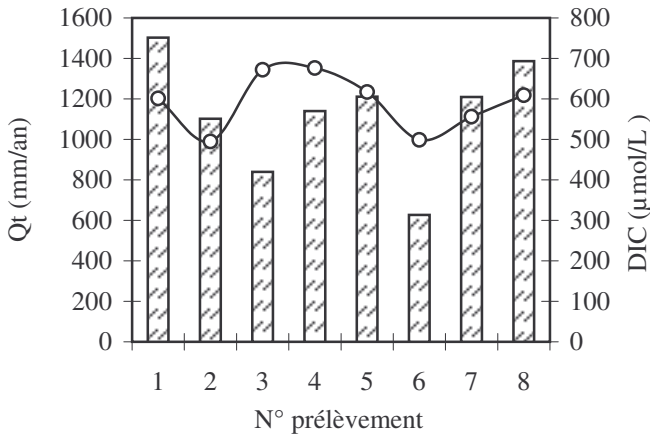

Amazone
Qt (mm/an)
Cl- (µmol/L)
N° prélèvement

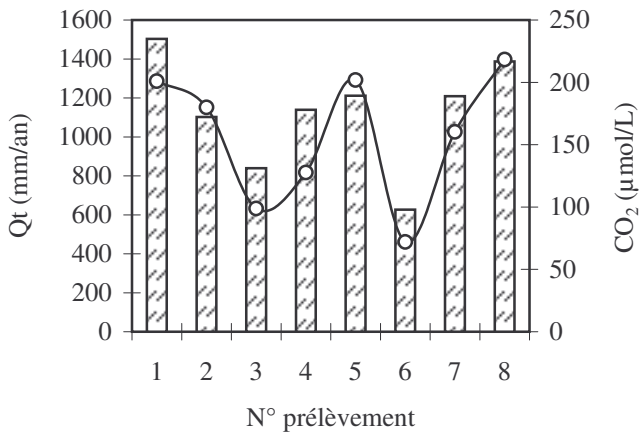

Qt (mm/an)
NO3- (µmol/L)
N° prélèvement

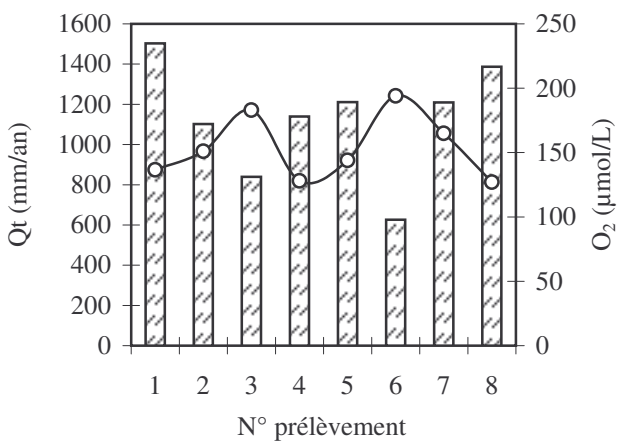

Qt (mm/an)
DOC (µmol/L)
N° prélèvement

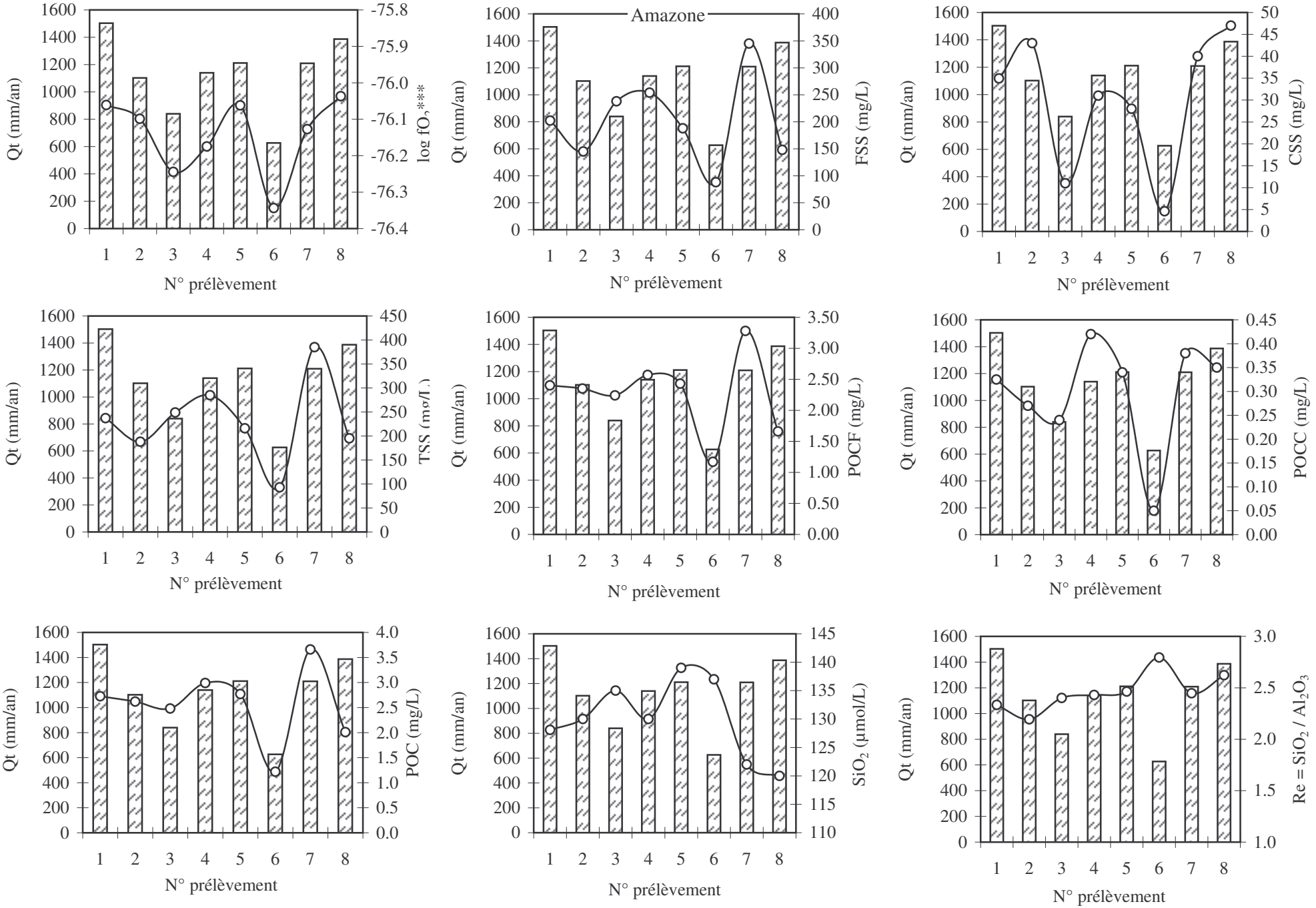

Qt (mm/an)
SO4 2- (µmol/L)
N° prélèvement

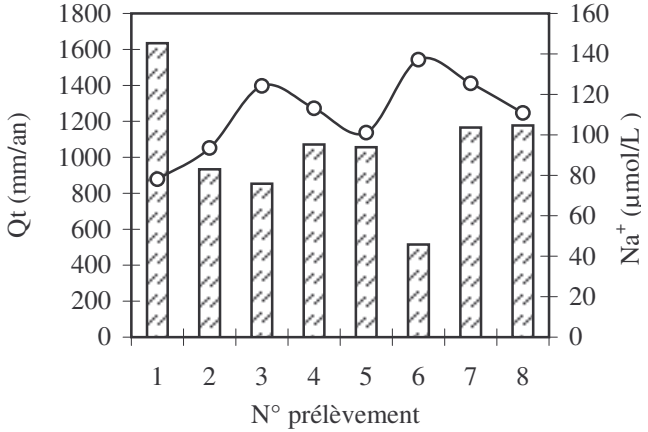

Qt (mm/an)
HPO4 2- (µmol/L)
N° prélèvement

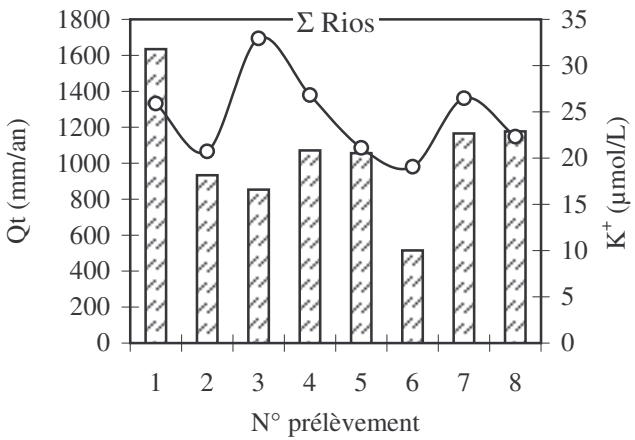

Qt (mm/an)
DIC (µmol/L)
N° prélèvement

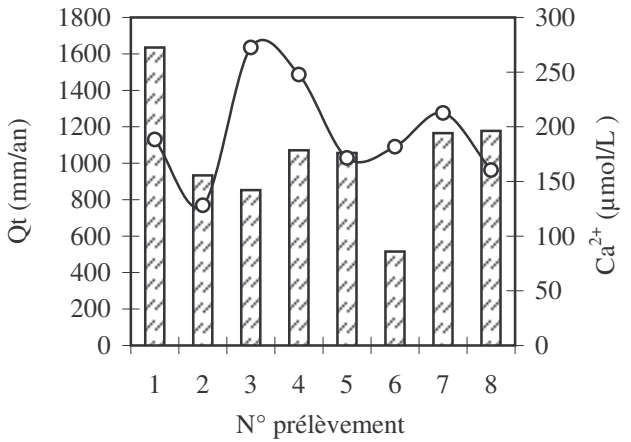

Qt (mm/an)
CO2 (µmol/L)
N° prélèvement

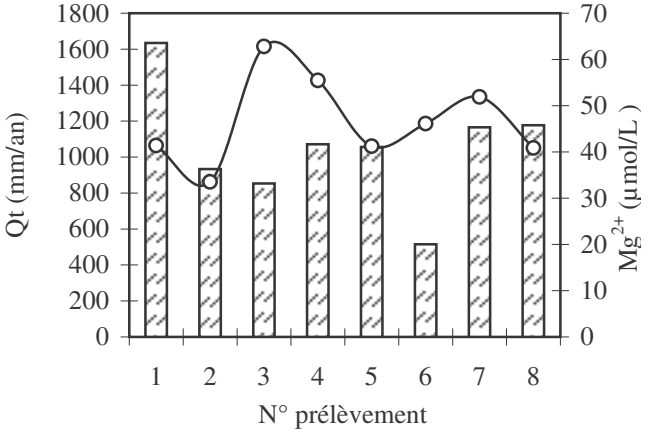

Qt (mm/an)
O2 (µmol/L)
N° prélèvement

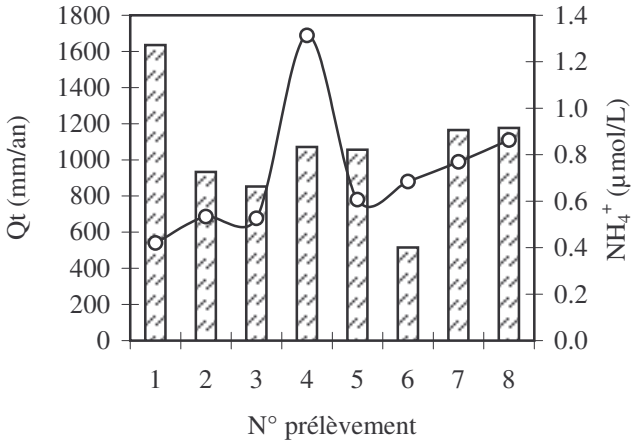

Amazone
Qt (mm/an)
log fO2,***
FSS (mg/L)
CSS (mg/L)
TSS (mg/L)
POCF (mg/L)
POCC (mg/L)
POC (mg/L)
SiO2 (µmol/L)
Re = SiO2 / Al2O3
N° prélèvement

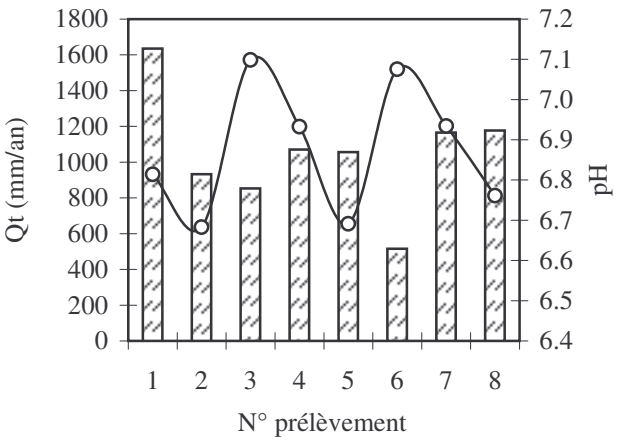

Qt (mm/an)
Na+ (µmol/L)
N° prélèvement

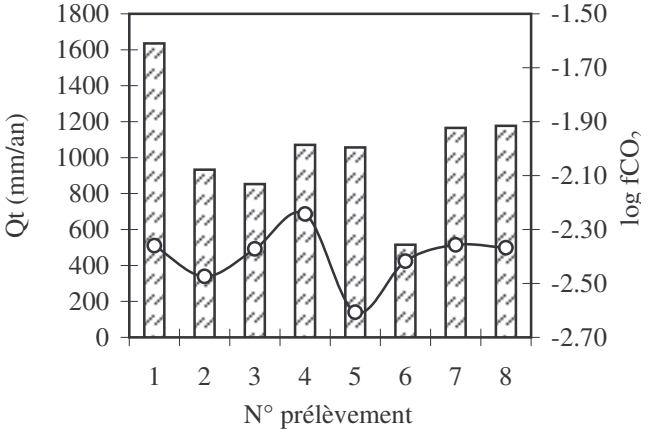

Σ Rios
Qt (mm/an)
K+ (µmol/L)
N° prélèvement

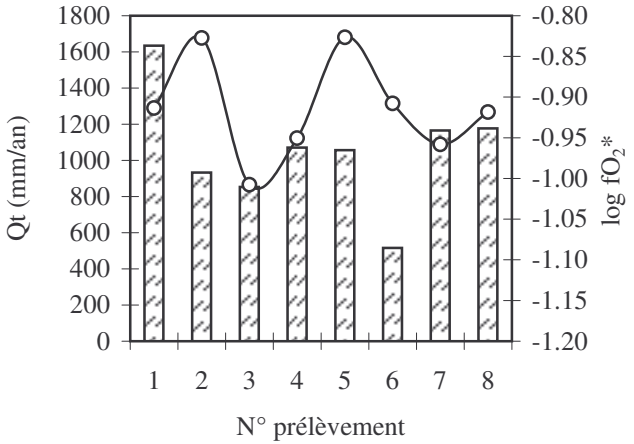

Qt (mm/an)
Ca2+ (µmol/L)
N° prélèvement

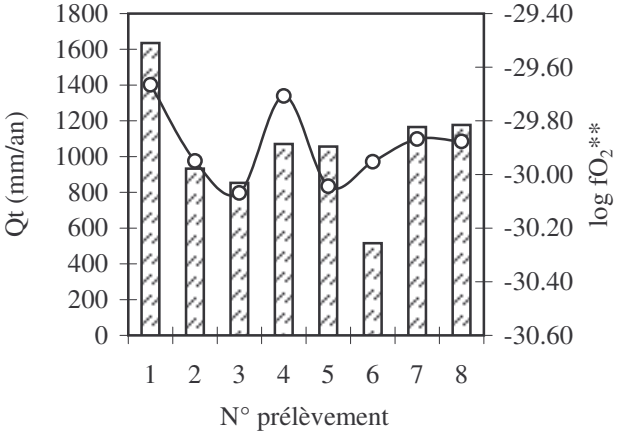

Qt (mm/an)
Mg2+ (µmol/L)
N° prélèvement

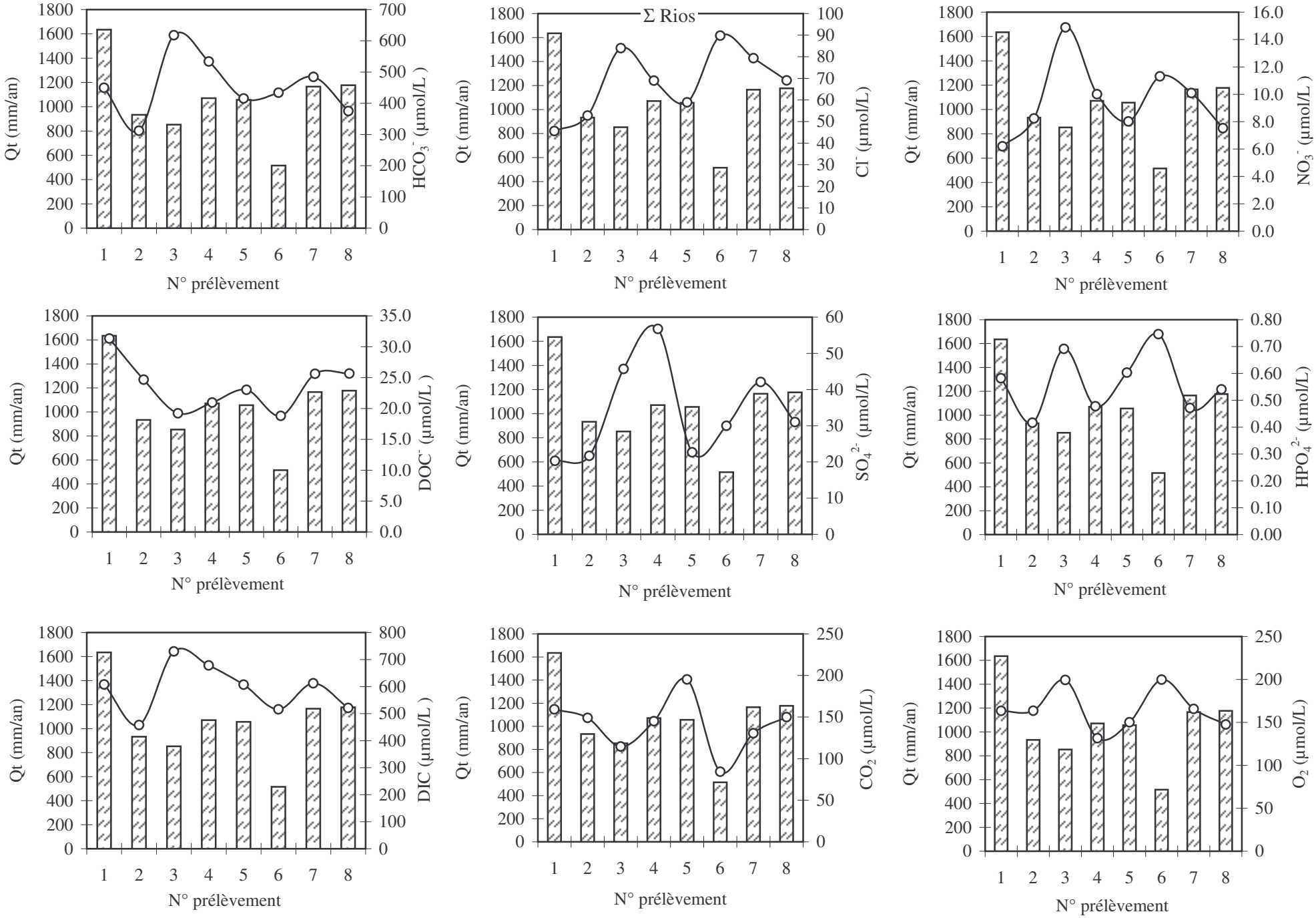

Qt (mm/an)
NH4+ (µmol/L)
N° prélèvement

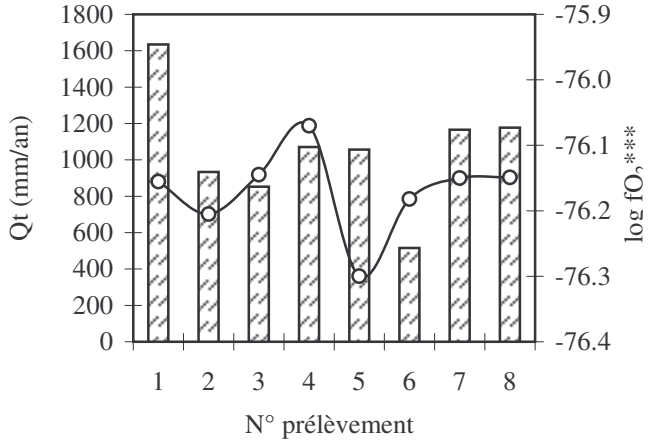

Qt (mm/an)
pH
N° prélèvement

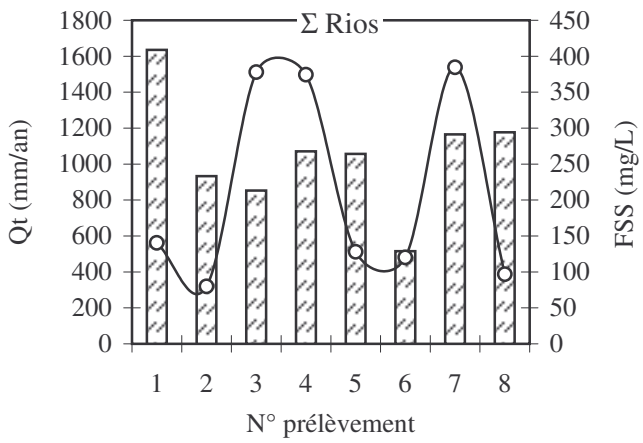

Qt (mm/an)
log fCO2
N° prélèvement

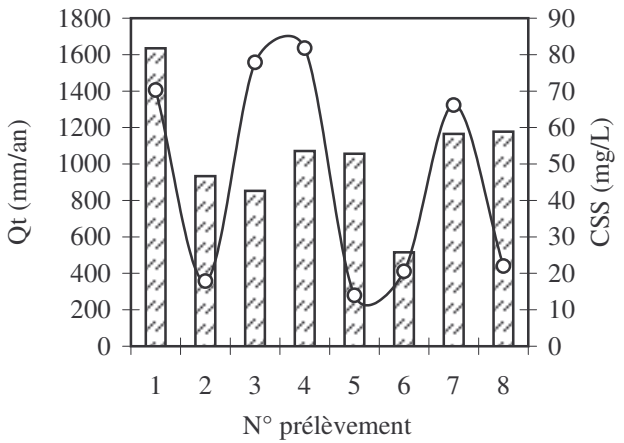

Qt (mm/an)
log fO2*
N° prélèvement

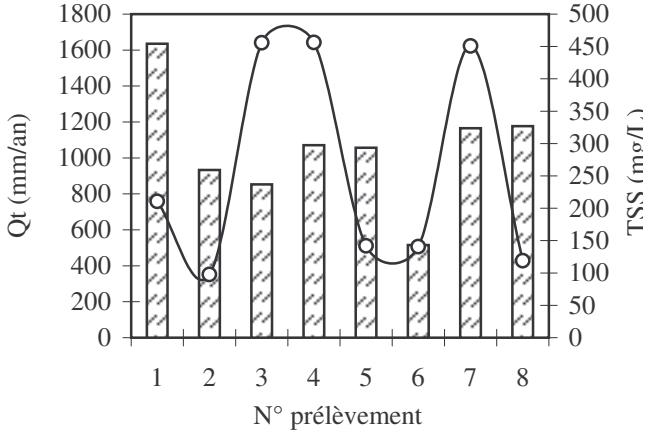

Qt (mm/an)
log fO2**
N° prélèvement

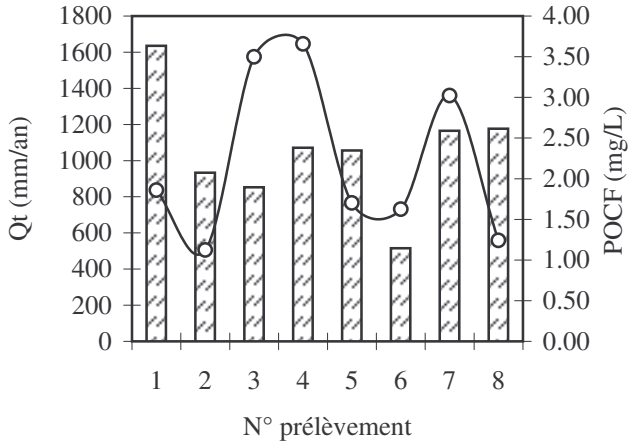

Σ Rios
Qt (mm/an)
HCO3- (µmol/L)
Cl- (µmol/L)
NO3- (µmol/L)
DOC- (µmol/L)
SO4 2- (µmol/L)
HPO4 2- (µmol/L)
DIC (µmol/L)
CO2 (µmol/L)
O2 (µmol/L)
N° prélèvement

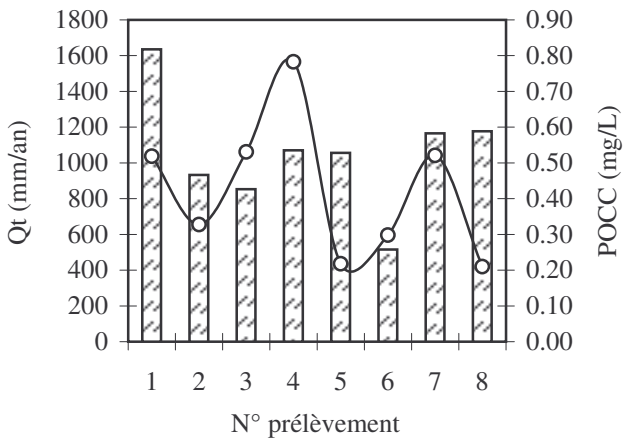

Qt (mm/an)
log fO2,***
N° prélèvement

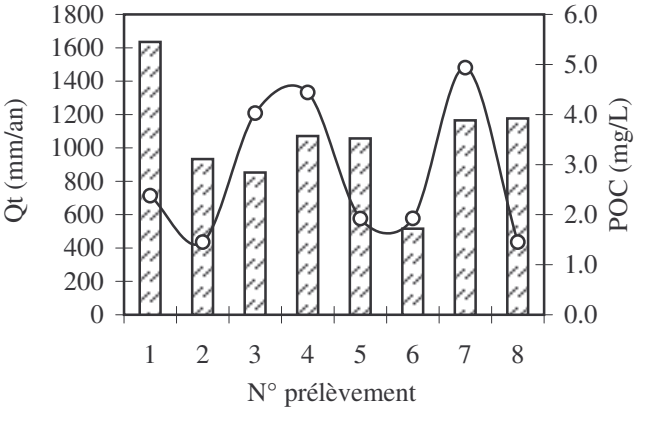

Σ Rios
Qt (mm/an)
FSS (mg/L)
N° prélèvement

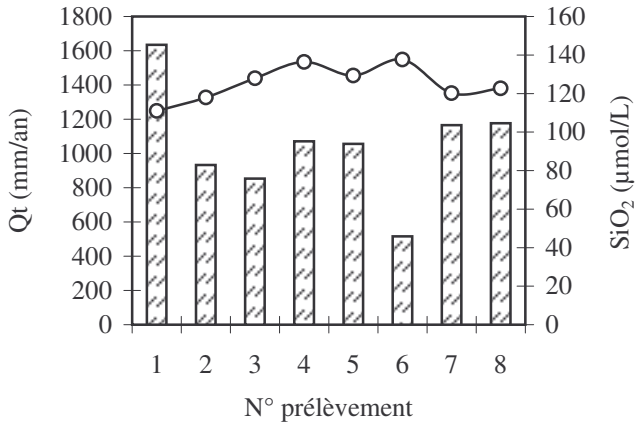

Qt (mm/an)
CSS (mg/L)
N° prélèvement

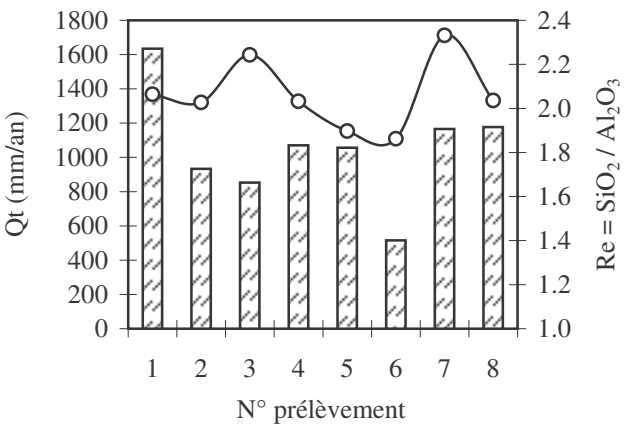

Qt (mm/an)
TSS (mg/L)
N° prélèvement

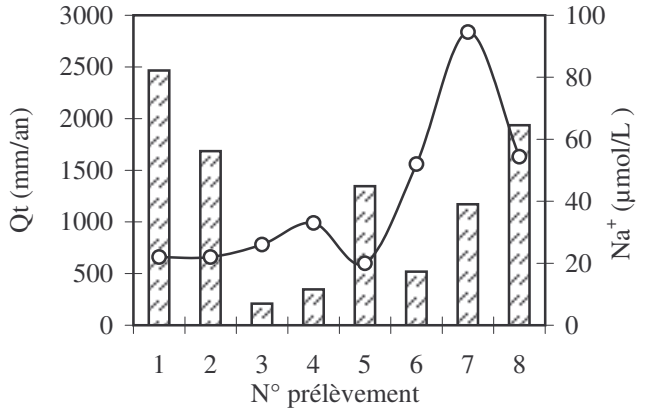

Qt (mm/an)
POCF (mg/L)
N° prélèvement

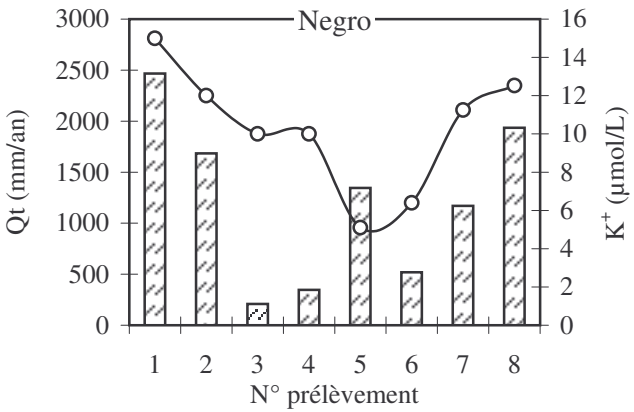

Qt (mm/an)
POCC (mg/L)
N° prélèvement

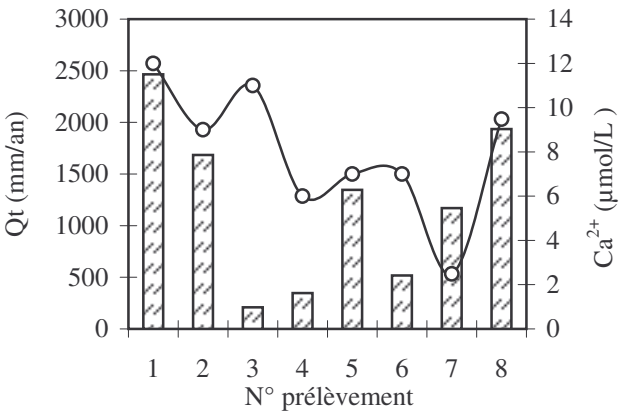

Qt (mm/an)
POC (mg/L)
N° prélèvement

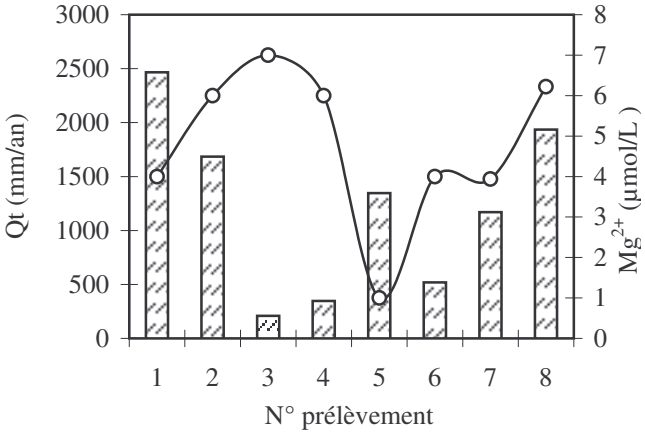

Qt (mm/an)
SiO2 (µmol/L)
N° prélèvement

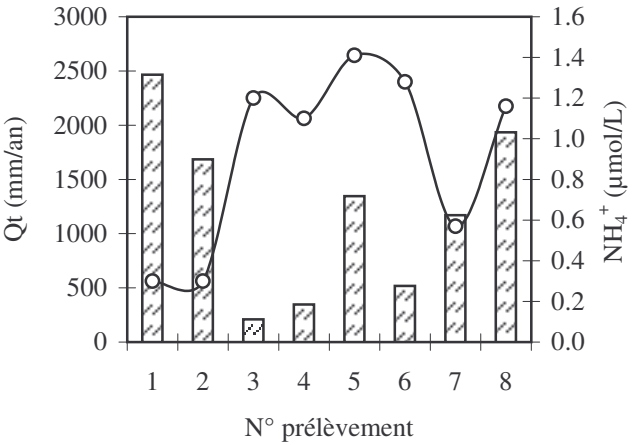

Qt (mm/an)
Re = SiO2 / Al2O3
N° prélèvement

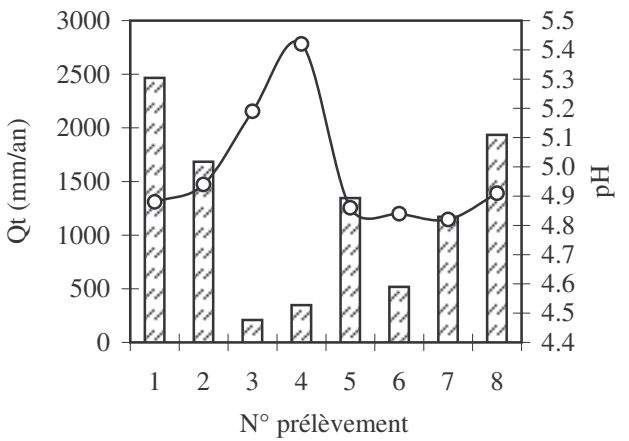

Qt (mm/an)
Na+ (µmol/L)
N° prélèvement

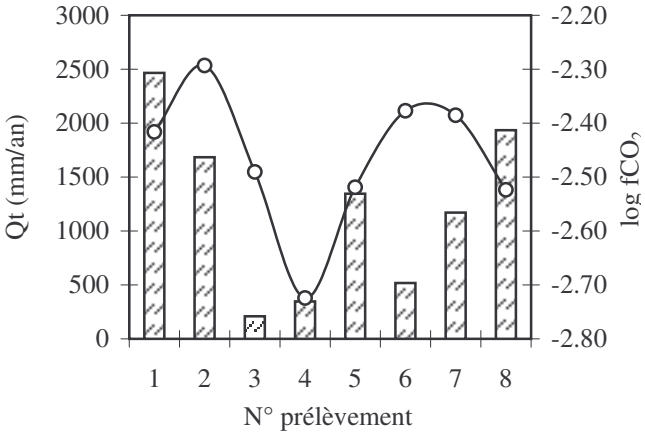

Negro
Qt (mm/an)
K+ (µmol/L)
N° prélèvement

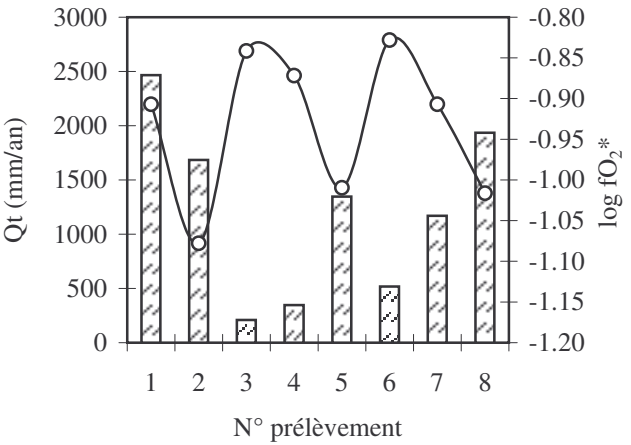

Qt (mm/an)
Ca2+ (µmol/L)
N° prélèvement

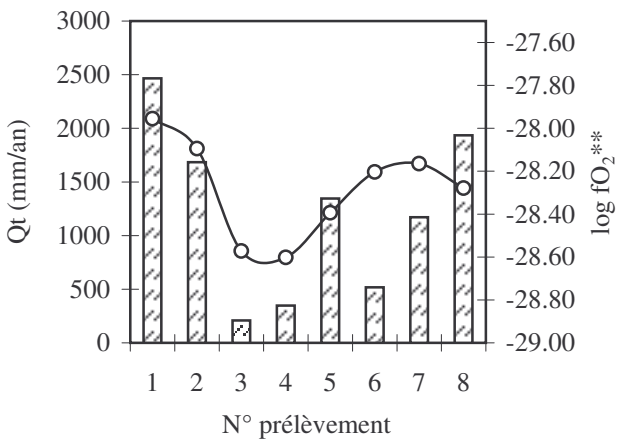

Qt (mm/an)
Mg2+ (µmol/L)
N° prélèvement

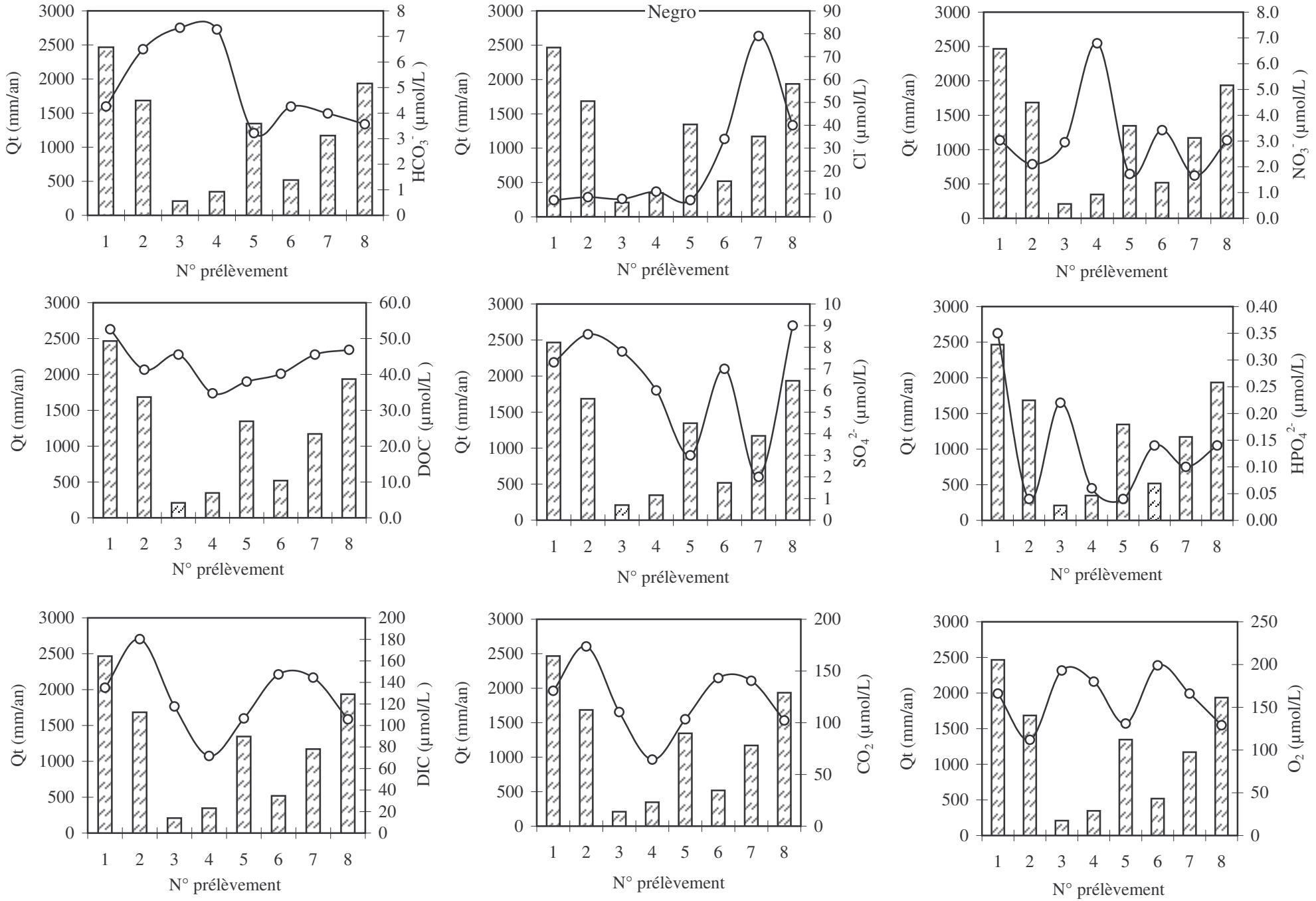

Qt (mm/an)
NH4+ (µmol/L)
N° prélèvement

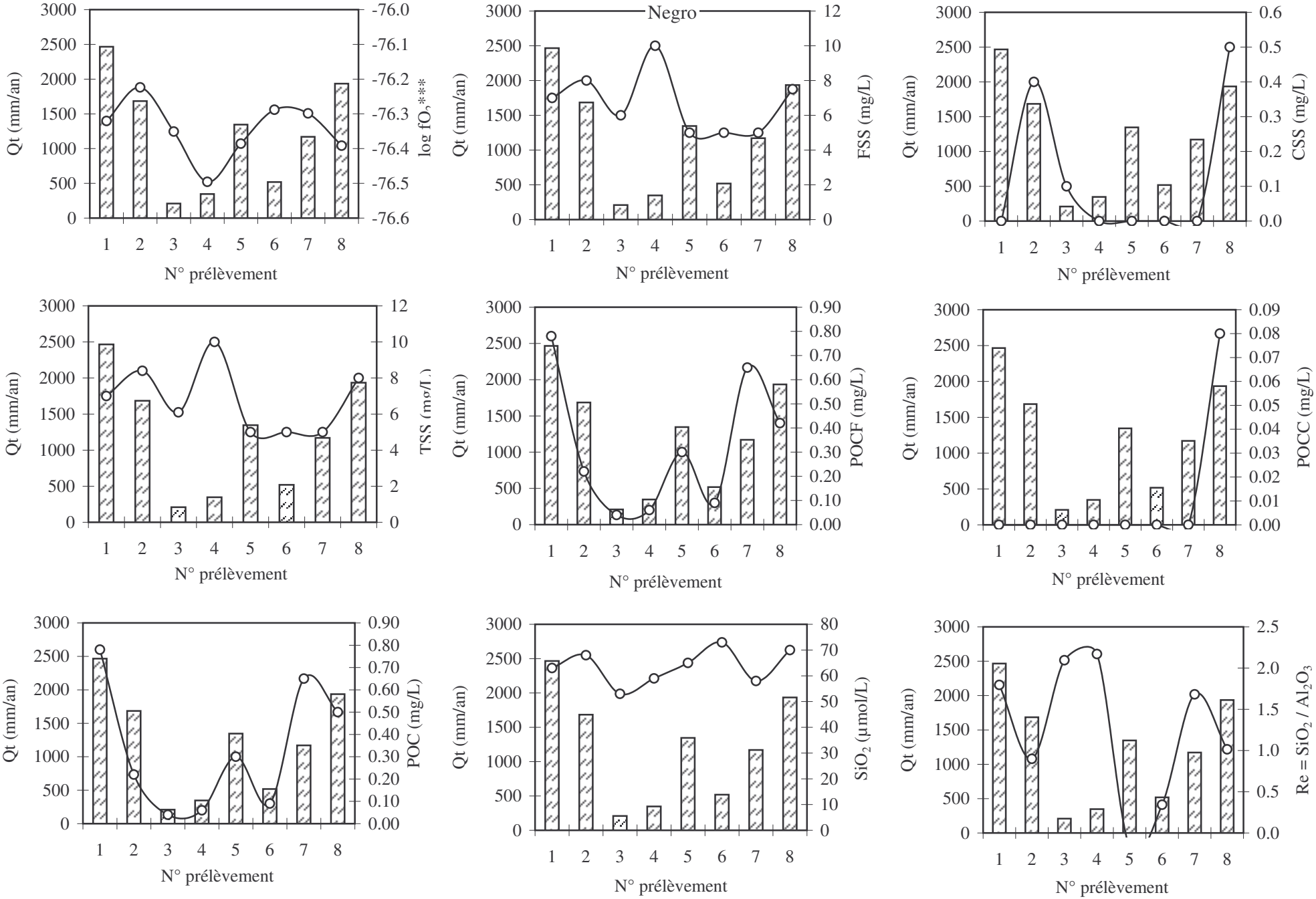

Qt (mm/an)
pH
N° prélèvement

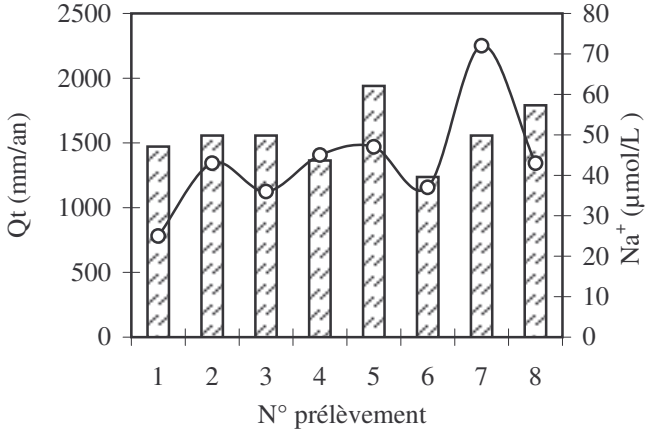

Qt (mm/an)
log fCO2
N° prélèvement

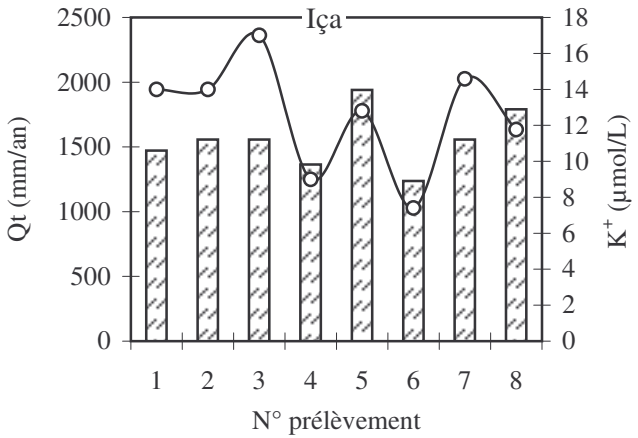

Qt (mm/an)
log fO2*
N° prélèvement

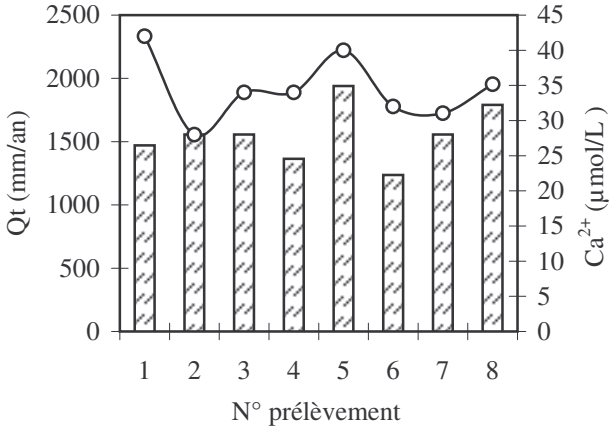

Qt (mm/an)
log fO2**
N° prélèvement

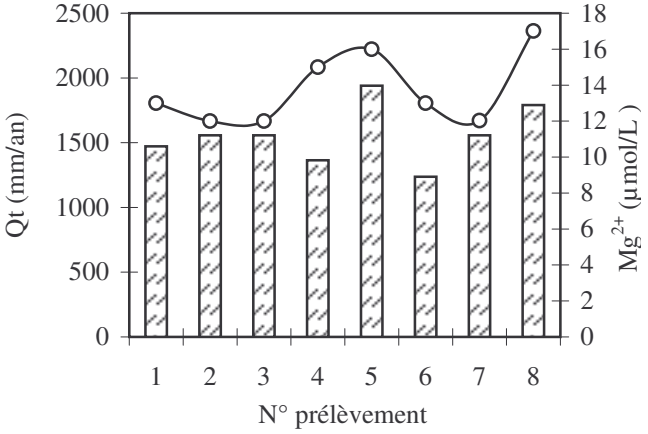

Negro
Qt (mm/an)
N° prélèvement
HCO3- (µmol/L)
Cl- (µmol/L)
NO3- (µmol/L)
DOC- (µmol/L)
SO4 2- (µmol/L)
HPO4 2- (µmol/L)
DIC (µmol/L)
CO2 (µmol/L)
O2 (µmol/L)

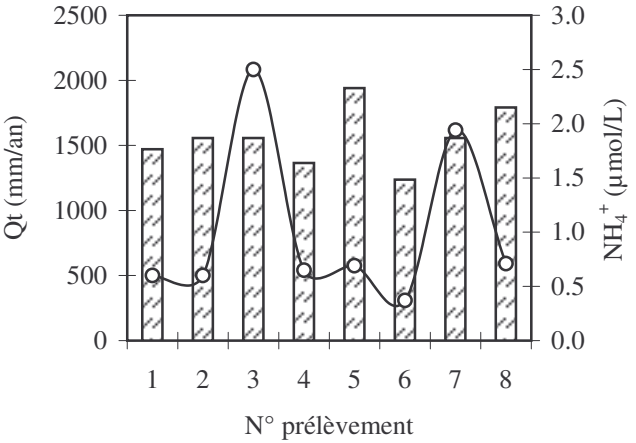

Negro
Qt (mm/an)
log fO2,***
FSS (mg/L)
CSS (mg/L)
TSS (mg/L)
POCF (mg/L)
POCC (mg/L)
POC (mg/L)
SiO2 (µmol/L)
Re = SiO2 / Al2O3
N° prélèvement

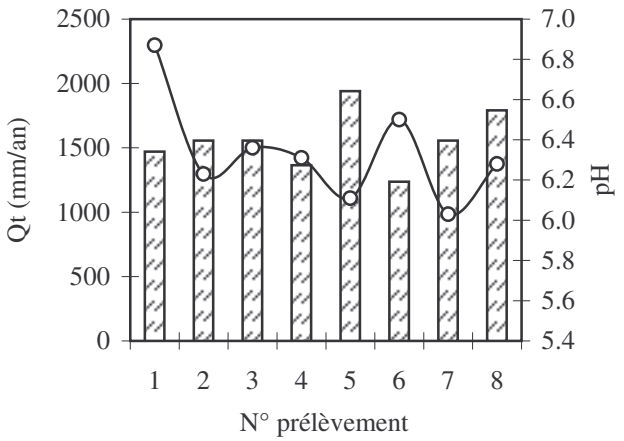

Qt (mm/an)
Na+ (µmol/L)
N° prélèvement

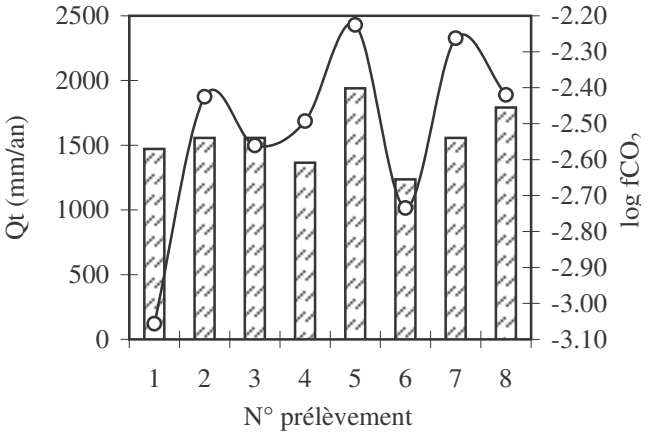

Iça
Qt (mm/an)
K+ (µmol/L)
N° prélèvement

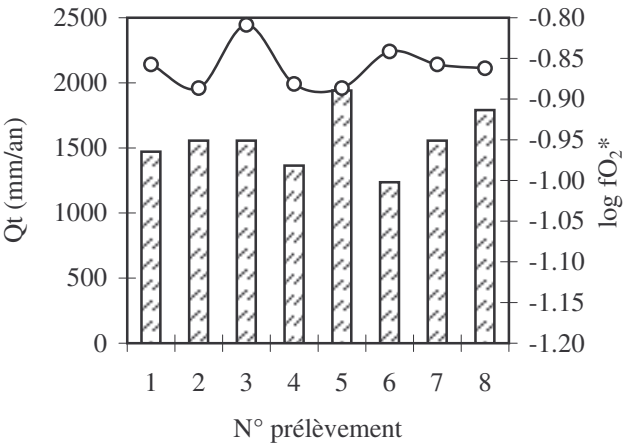

Qt (mm/an)
Ca2+ (µmol/L)
N° prélèvement

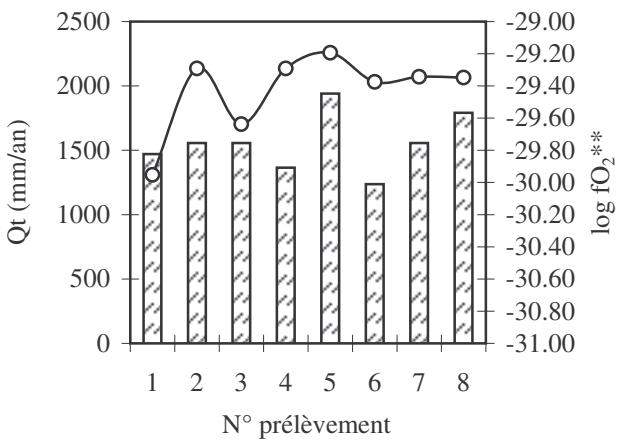

Qt (mm/an)
Mg2+ (µmol/L)
N° prélèvement

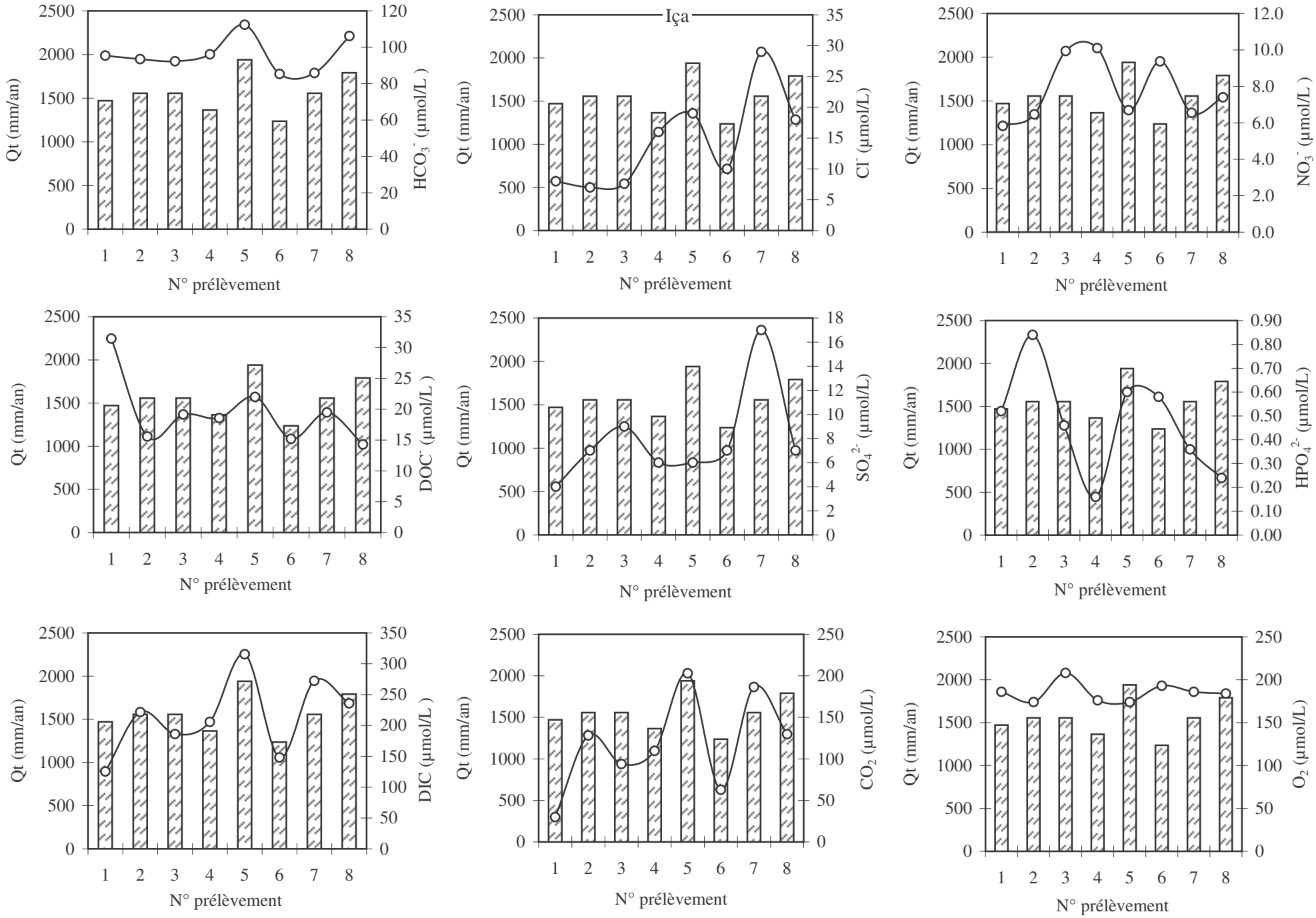

Qt (mm/an)
NH4+ (µmol/L)
N° prélèvement

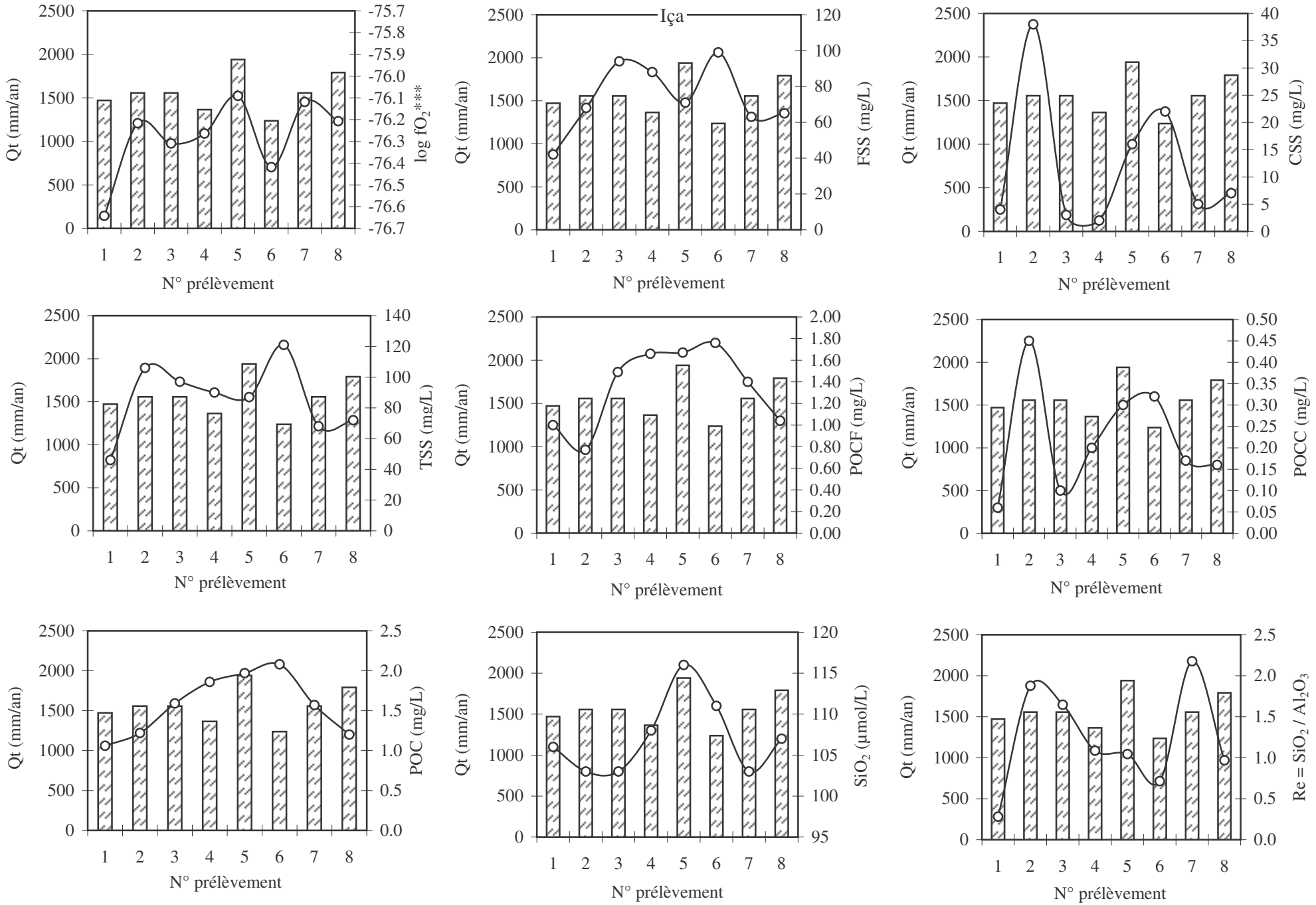

Qt (mm/an)
pH
N° prélèvement

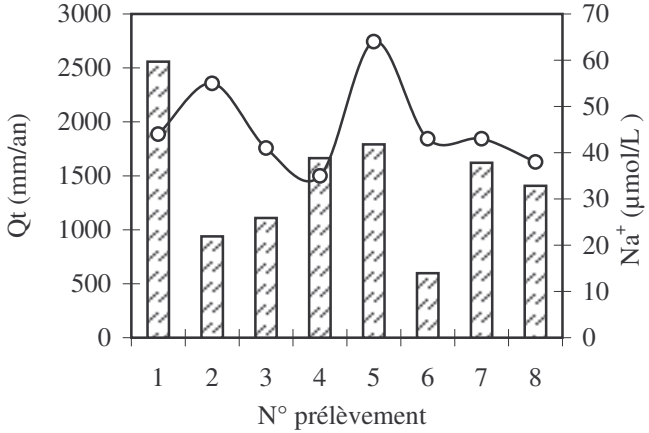

Qt (mm/an)
log fCO2
N° prélèvement

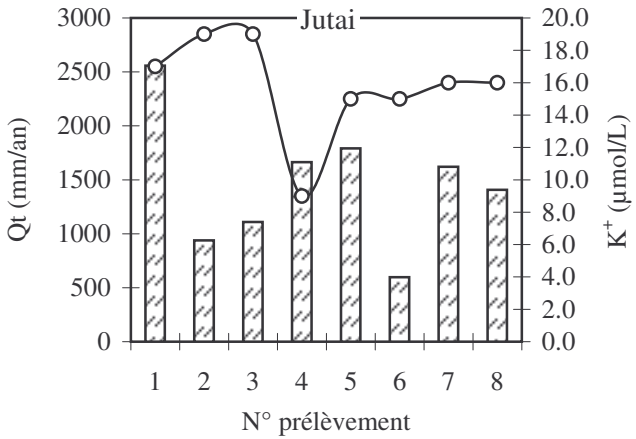

Qt (mm/an)
log fO2*
N° prélèvement

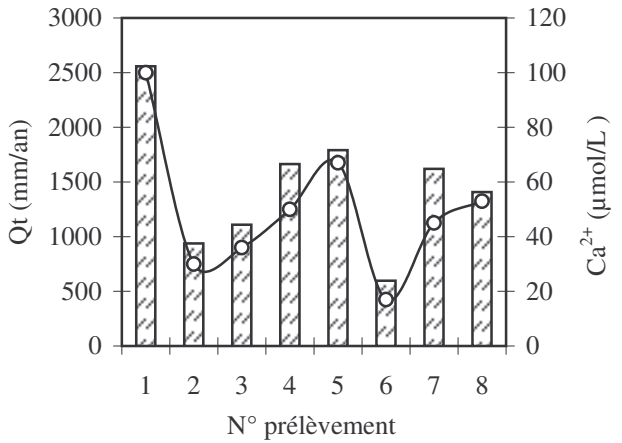

Qt (mm/an)
log fO2**
N° prélèvement

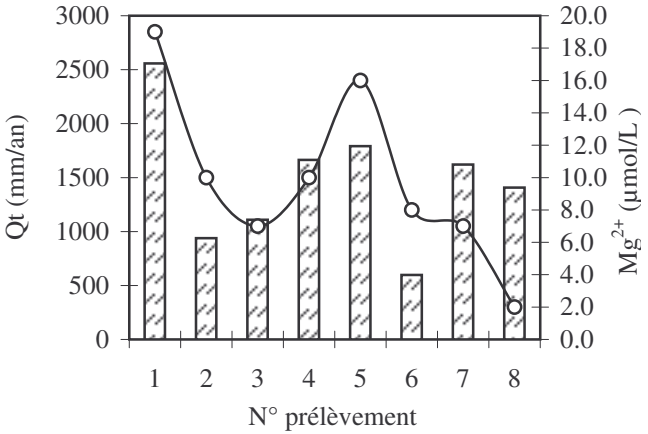

Iça
Qt (mm/an)
HCO3- (µmol/L)
Cl- (µmol/L)
NO3- (µmol/L)
DOC- (µmol/L)
SO4 2- (µmol/L)
HPO4 2- (µmol/L)
DIC (µmol/L)
CO2 (µmol/L)
O2 (µmol/L)
N° prélèvement

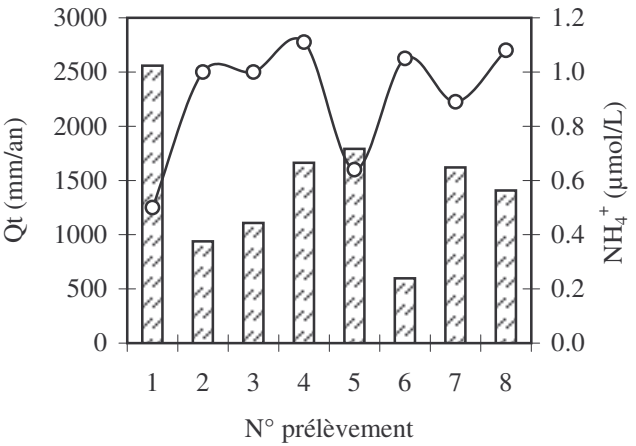

Iça
Qt (mm/an)
log fO2***
FSS (mg/L)
CSS (mg/L)
TSS (mg/L)
POCF (mg/L)
POCC (mg/L)
POC (mg/L)
SiO2 (µmol/L)
Re = SiO2 / Al2O3
N° prélèvement

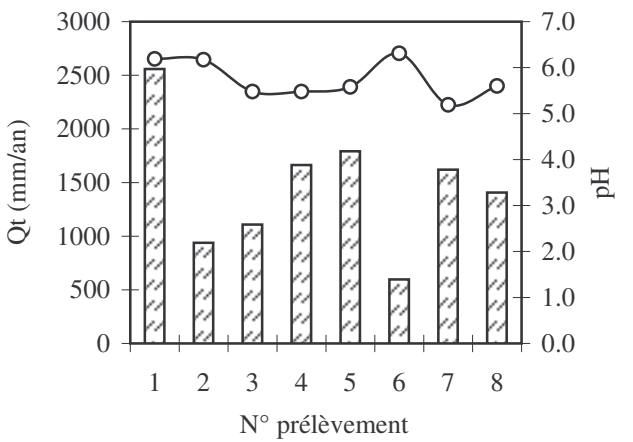

Qt (mm/an)
Na+ (µmol/L)
N° prélèvement

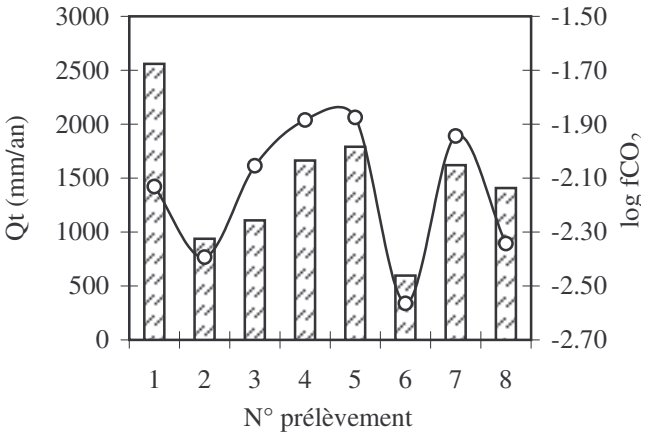

Jutai
Qt (mm/an)
K+ (µmol/L)
N° prélèvement

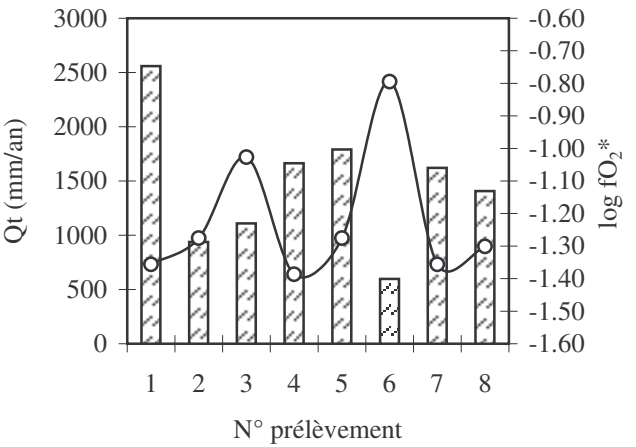

Qt (mm/an)
Ca2+ (µmol/L)
N° prélèvement

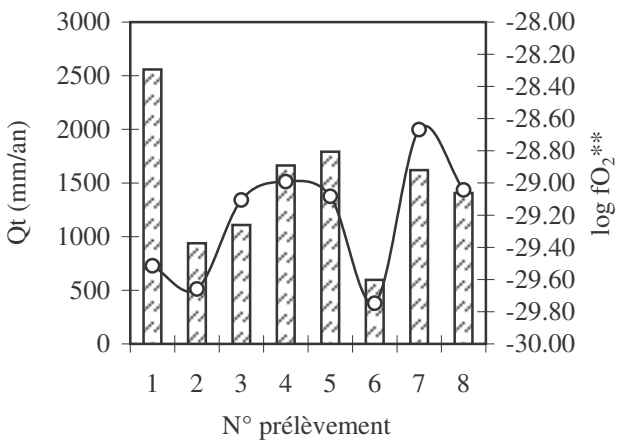

Qt (mm/an)
Mg2+ (µmol/L)
N° prélèvement

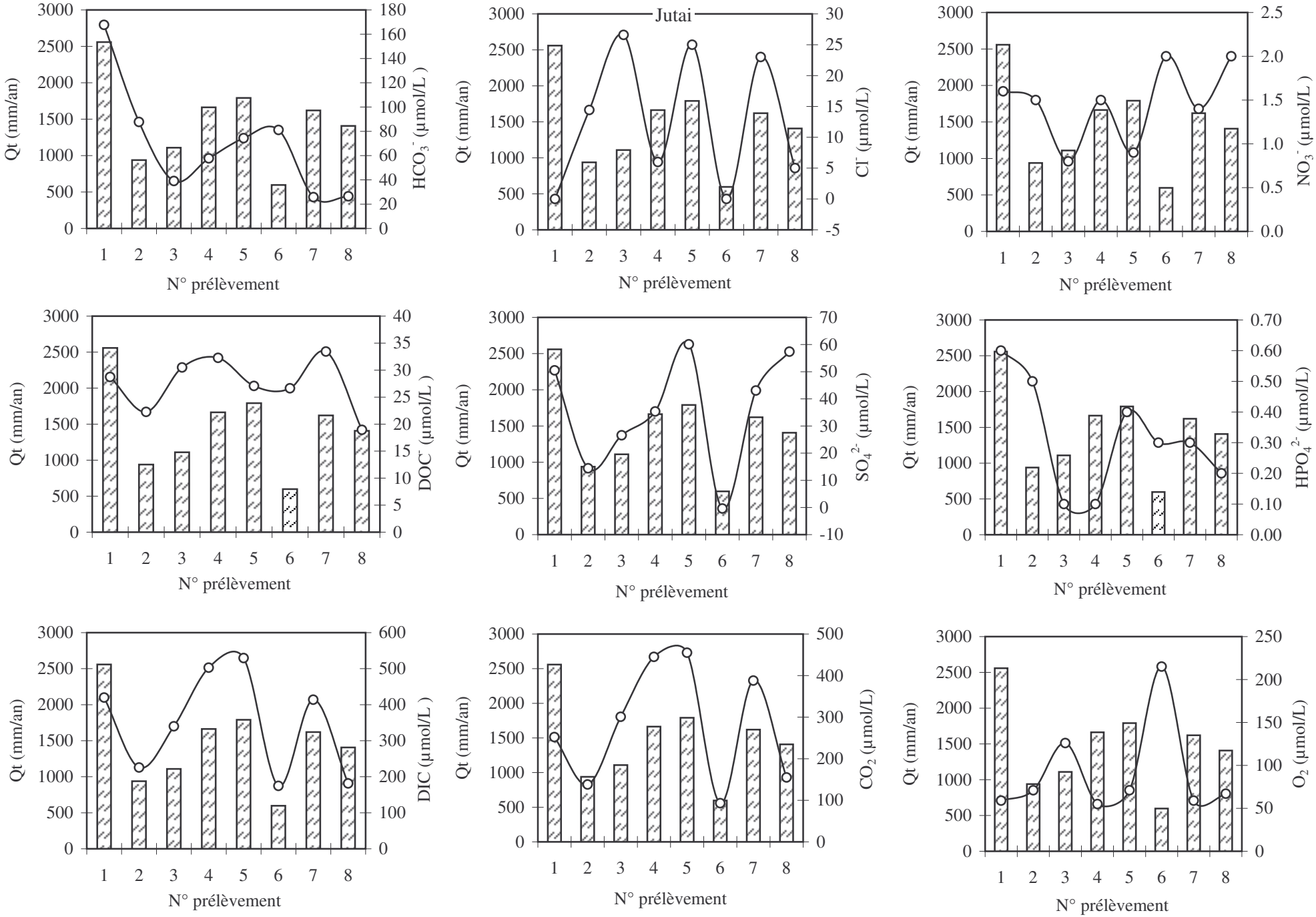

Qt (mm/an)
NH4+ (µmol/L)
N° prélèvement

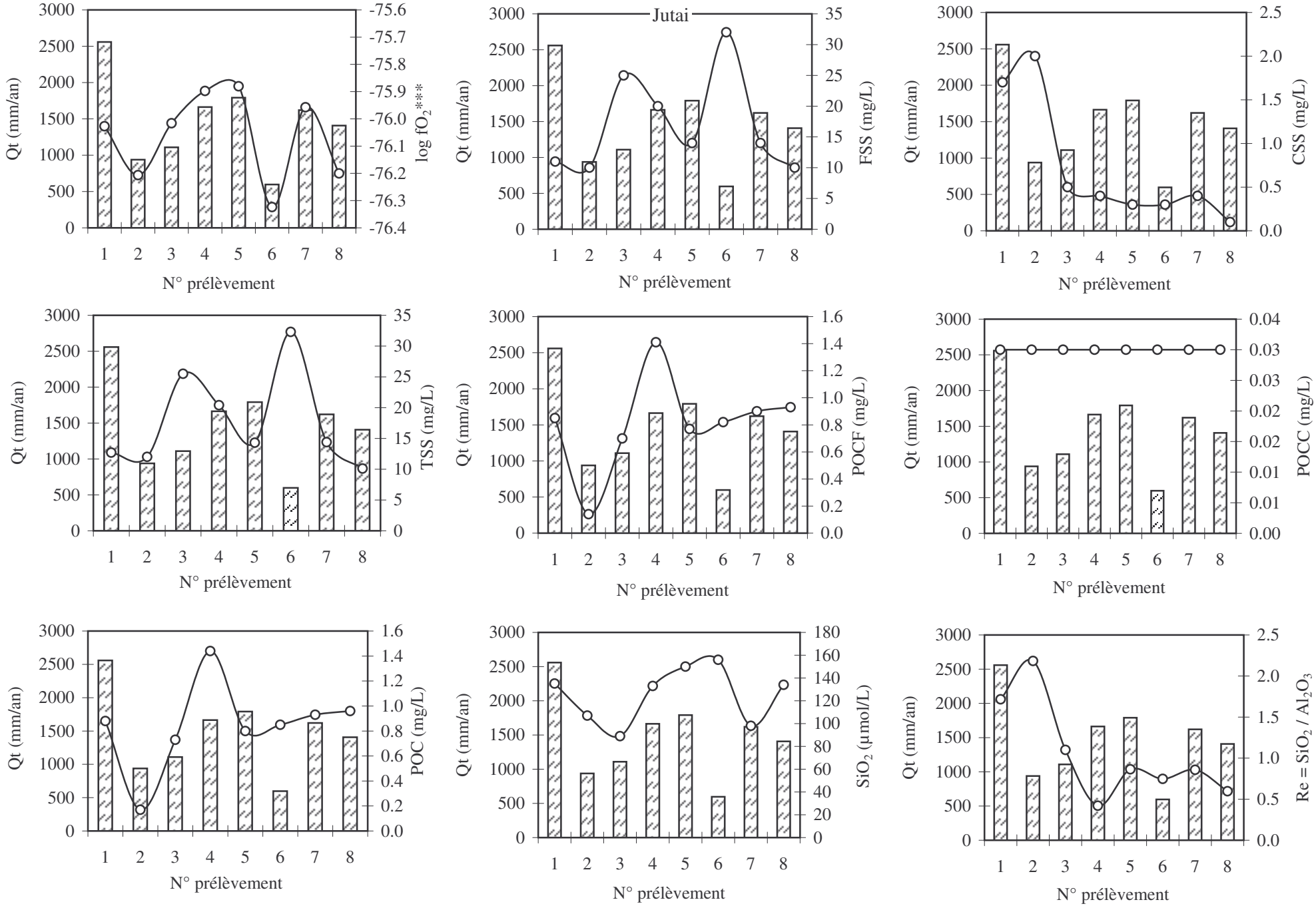

Qt (mm/an)
pH
N° prélèvement

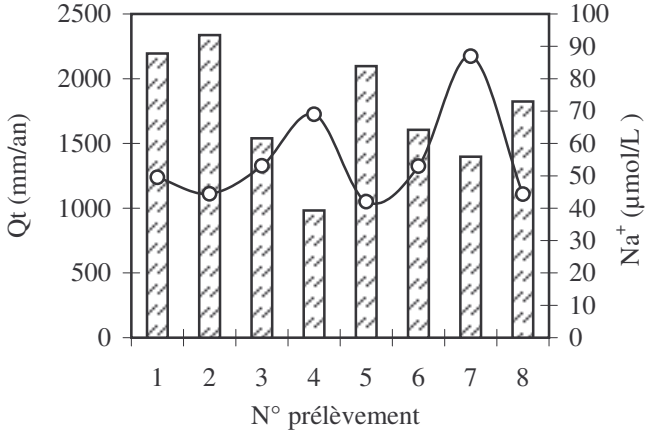

Qt (mm/an)
log fCO2
N° prélèvement

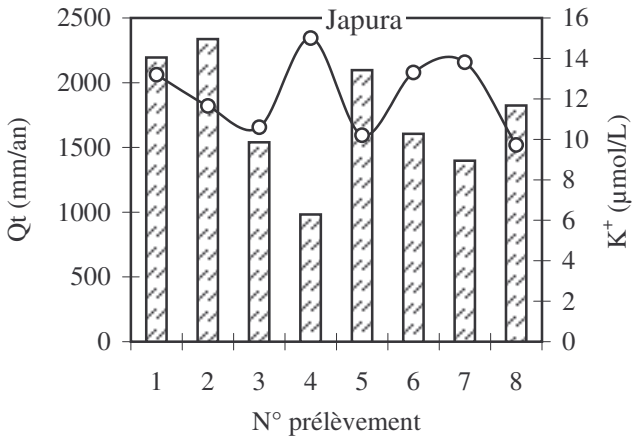

Qt (mm/an)
log fO2*
N° prélèvement

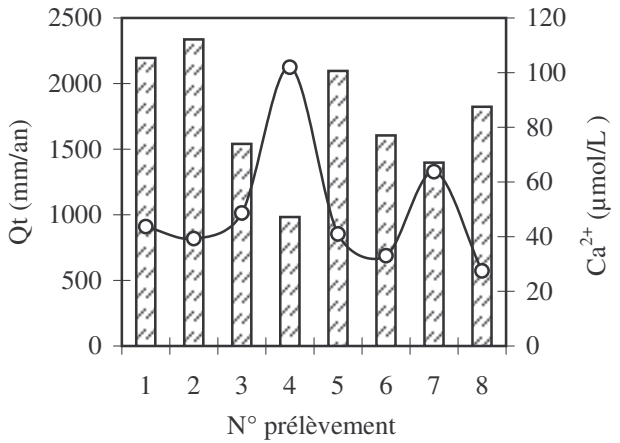

Qt (mm/an)
log fO2**
N° prélèvement

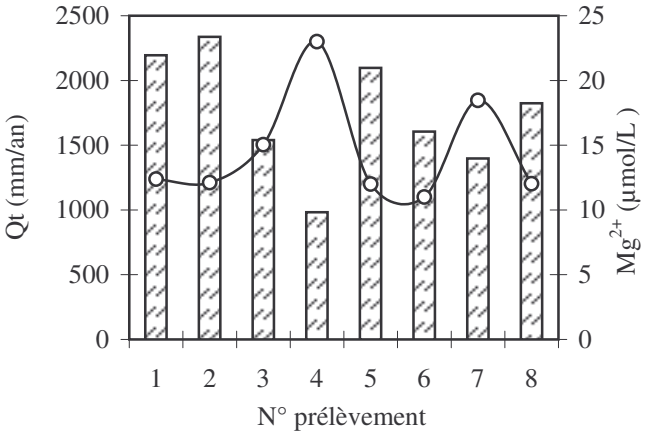

Jutai
Qt (mm/an)
N° prélèvement
HCO3- (µmol/L)
Cl- (µmol/L)
NO3- (µmol/L)
DOC (µmol/L)
SO4 2- (µmol/L)
HPO4 2- (µmol/L)
DIC (µmol/L)
CO2 (µmol/L)
O2 (µmol/L)

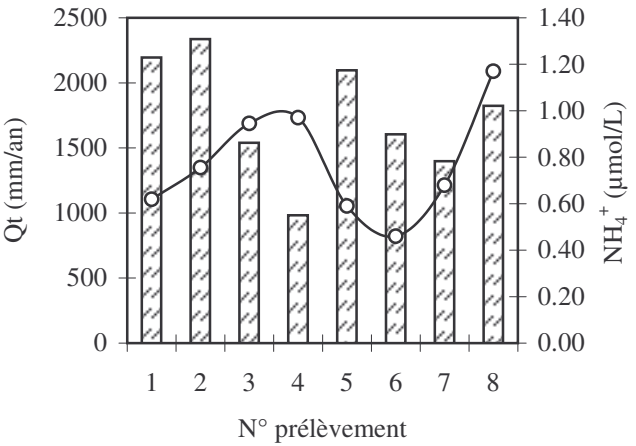

Jutai
Qt (mm/an)
log fO2***
FSS (mg/L)
CSS (mg/L)
TSS (mg/L)
POCF (mg/L)
POCC (mg/L)
POC (mg/L)
SiO2 (µmol/L)
Re = SiO2 / Al2O3
N° prélèvement

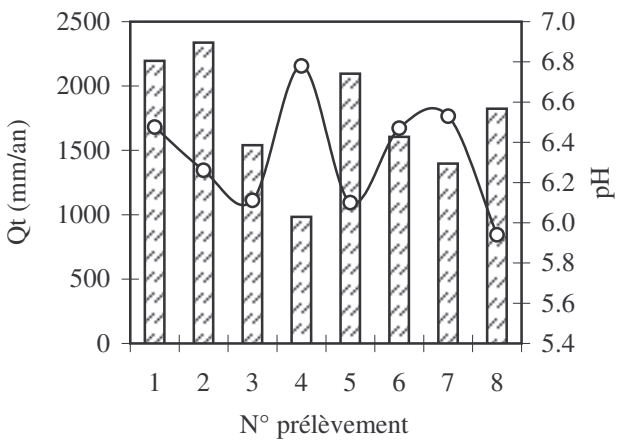

Qt (mm/an)
Na+ (µmol/L)
N° prélèvement

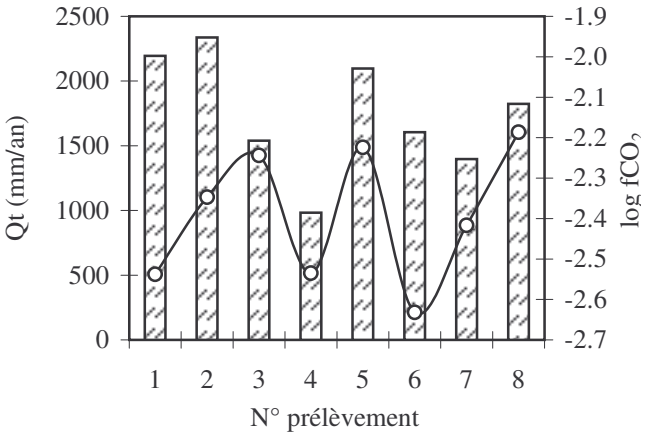

Japura
Qt (mm/an)
K+ (µmol/L)
N° prélèvement

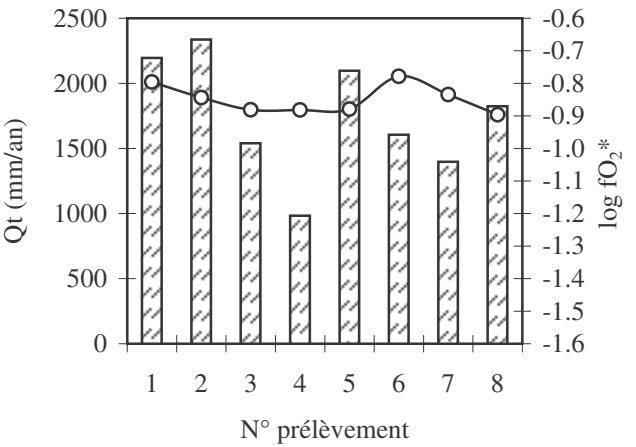

Qt (mm/an)
Ca2+ (µmol/L)
N° prélèvement

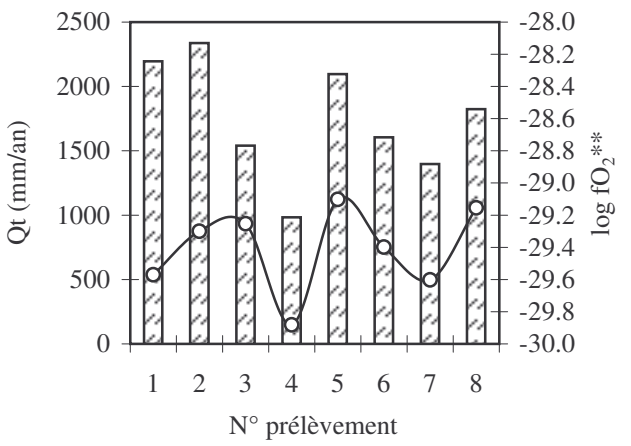

Qt (mm/an)
Mg2+ (µmol/L)
N° prélèvement

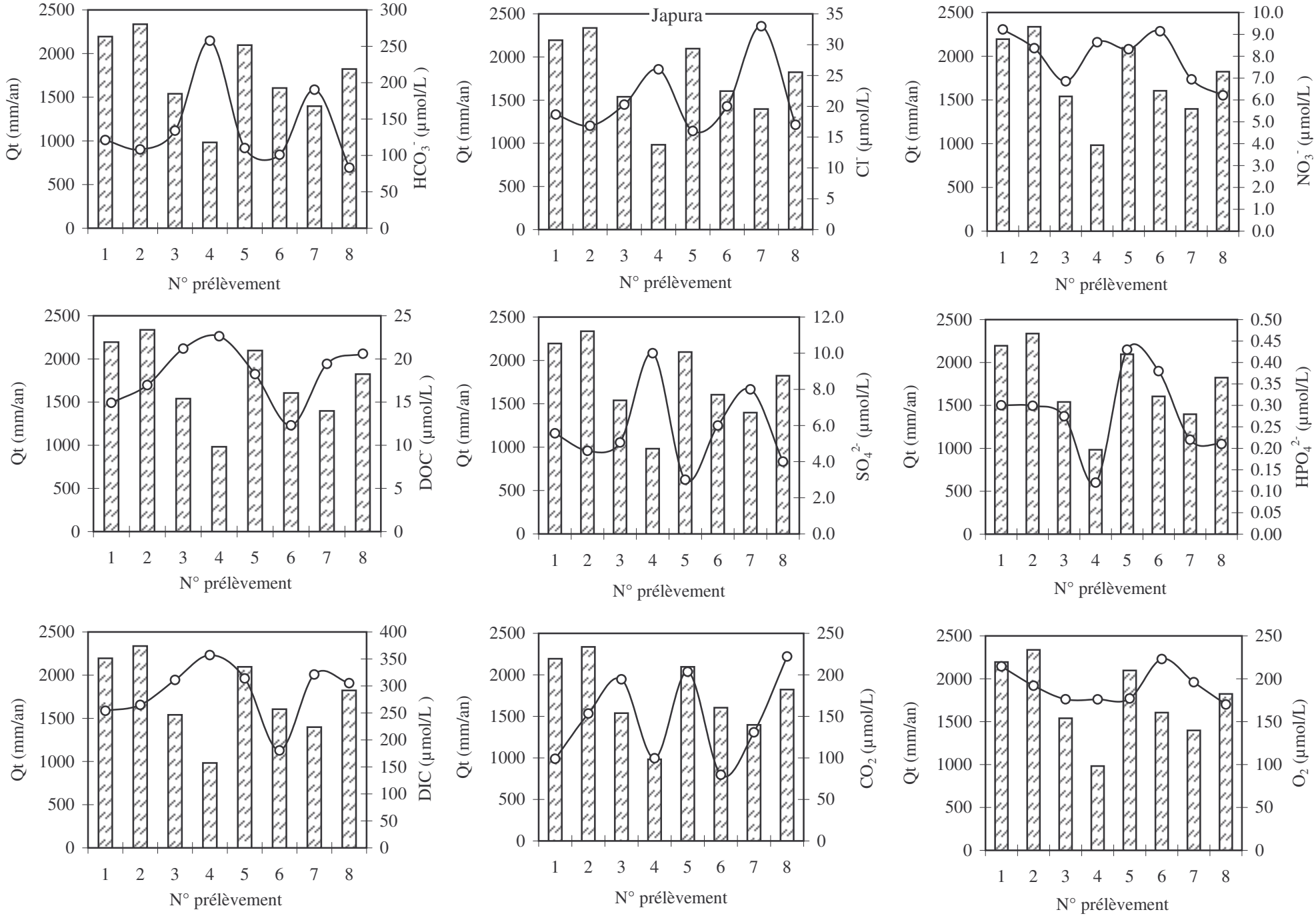

Qt (mm/an)
NH4+ (µmol/L)
N° prélèvement

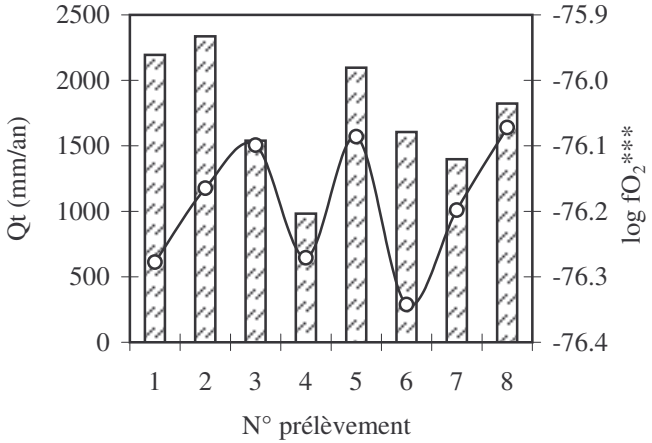

Qt (mm/an)
pH
N° prélèvement

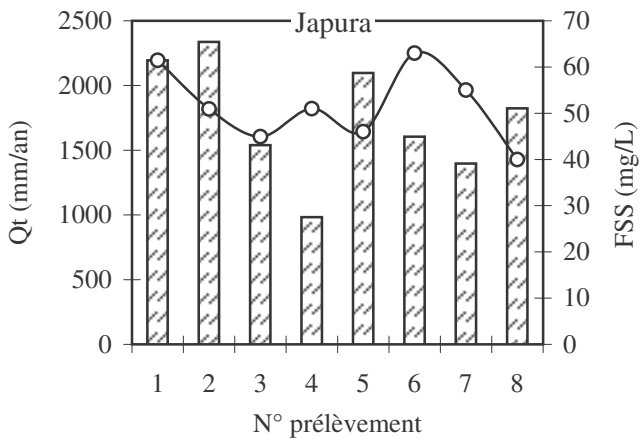

Qt (mm/an)
log fCO2
N° prélèvement

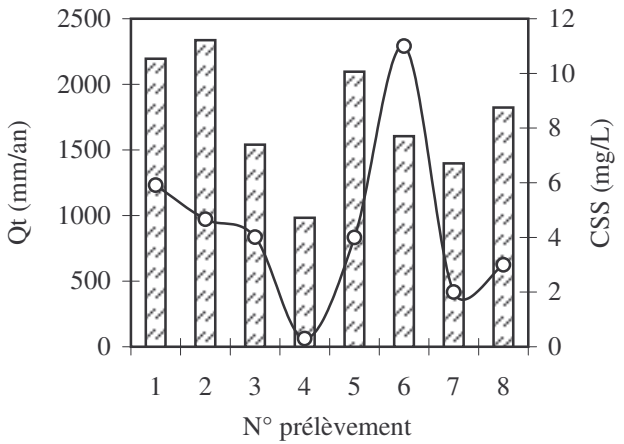

Qt (mm/an)
log fO2*
N° prélèvement

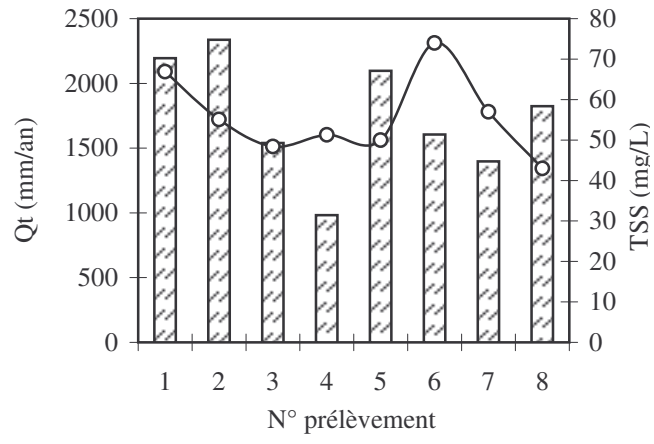

Qt (mm/an)
log fO2**
N° prélèvement

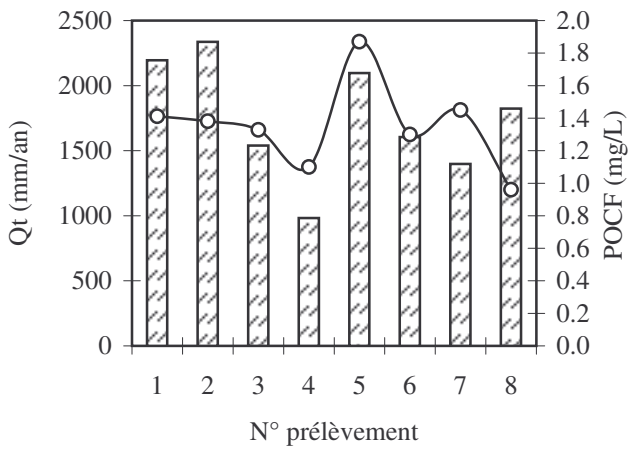

Japura
Qt (mm/an)
N° prélèvement
HCO3- (µmol/L)
Cl- (µmol/L)
NO3- (µmol/L)
DOC (µmol/L)
SO4 2- (µmol/L)
HPO4 2- (µmol/L)
DIC (µmol/L)
CO2 (µmol/L)
O2 (µmol/L)

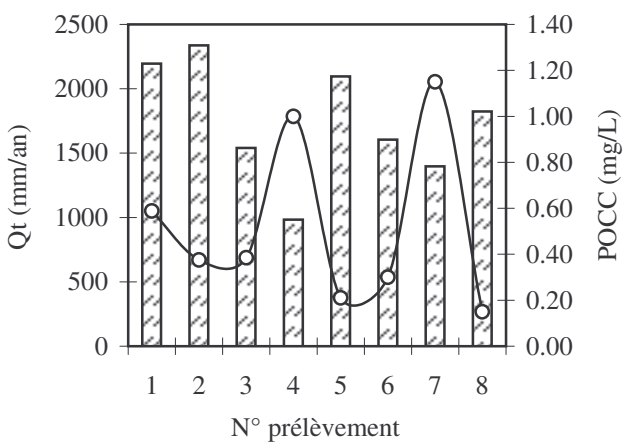

Qt (mm/an)
log fO2***
N° prélèvement

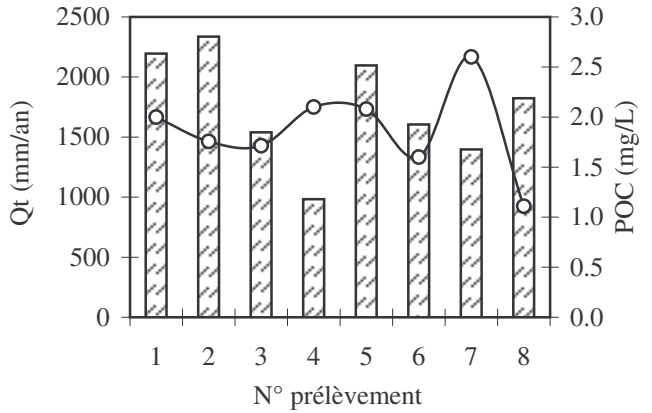

Japura
Qt (mm/an)
FSS (mg/L)
N° prélèvement

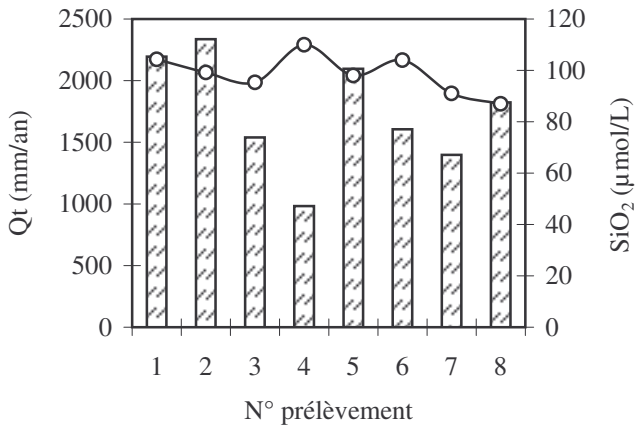

Qt (mm/an)
CSS (mg/L)
N° prélèvement

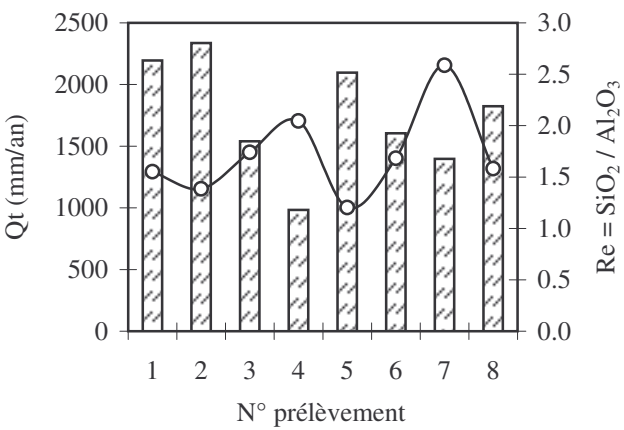

Qt (mm/an)
TSS (mg/L)
N° prélèvement

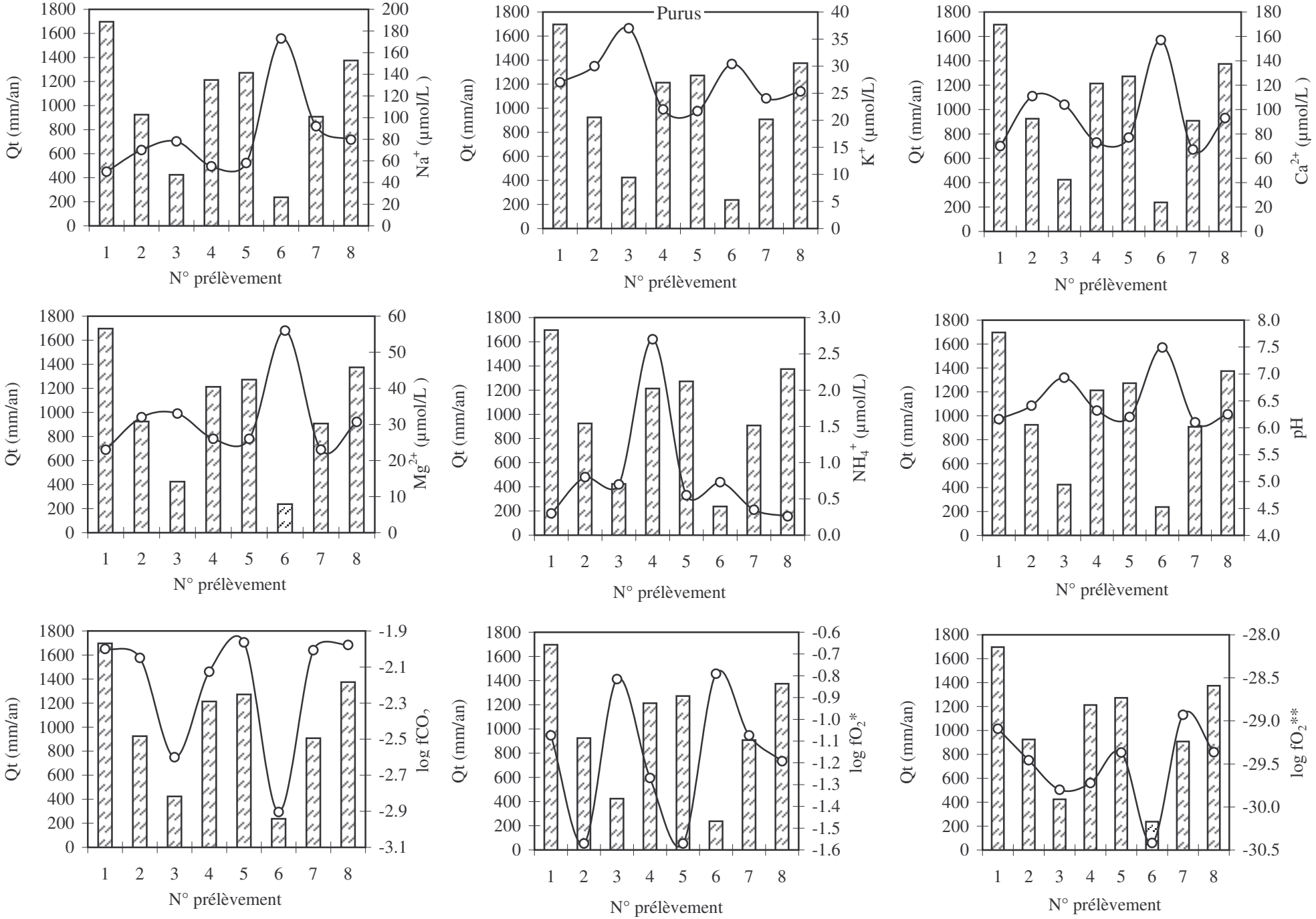

Qt (mm/an)
POCF (mg/L)
N° prélèvement

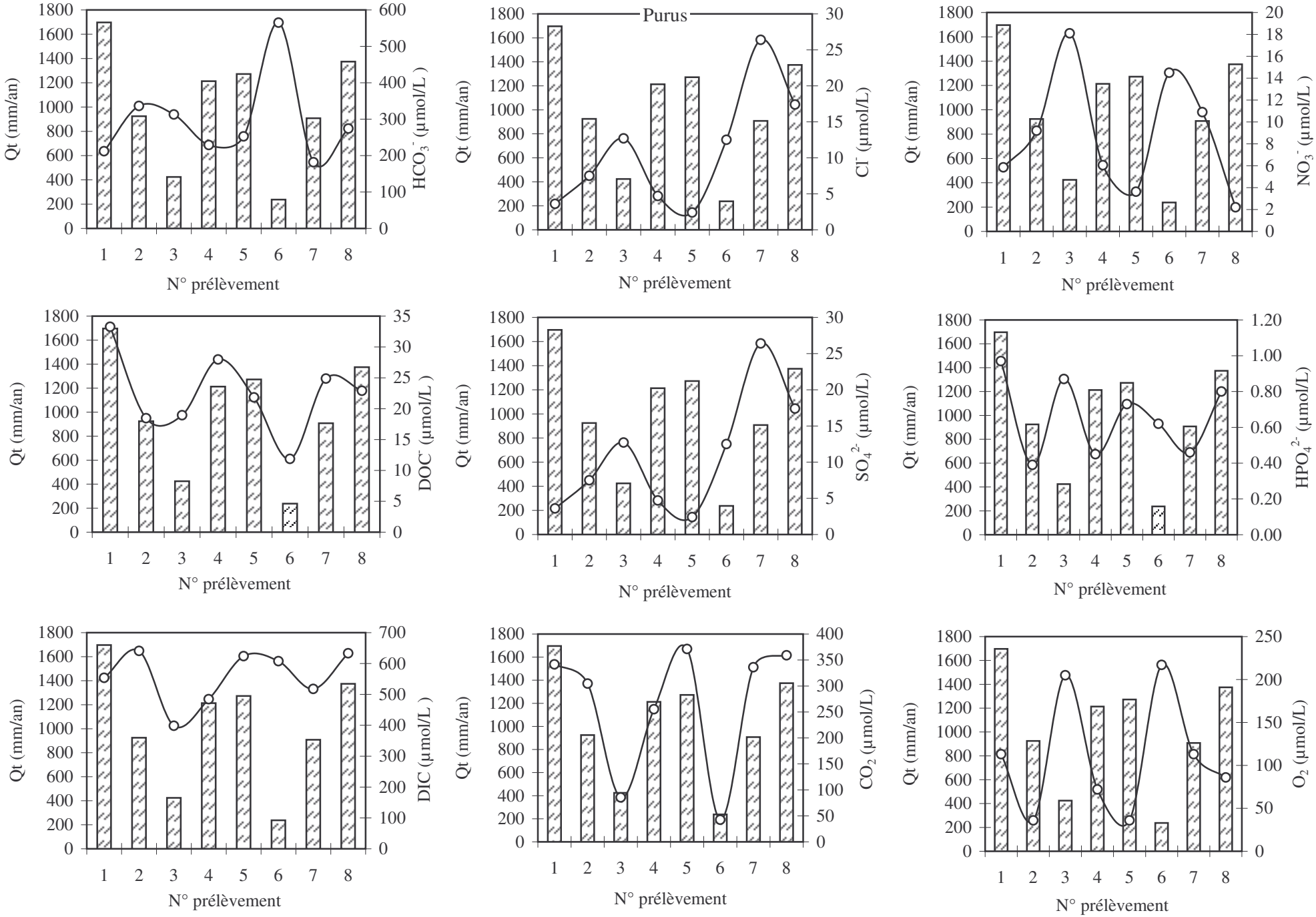

Qt (mm/an)
POCC (mg/L)
N° prélèvement

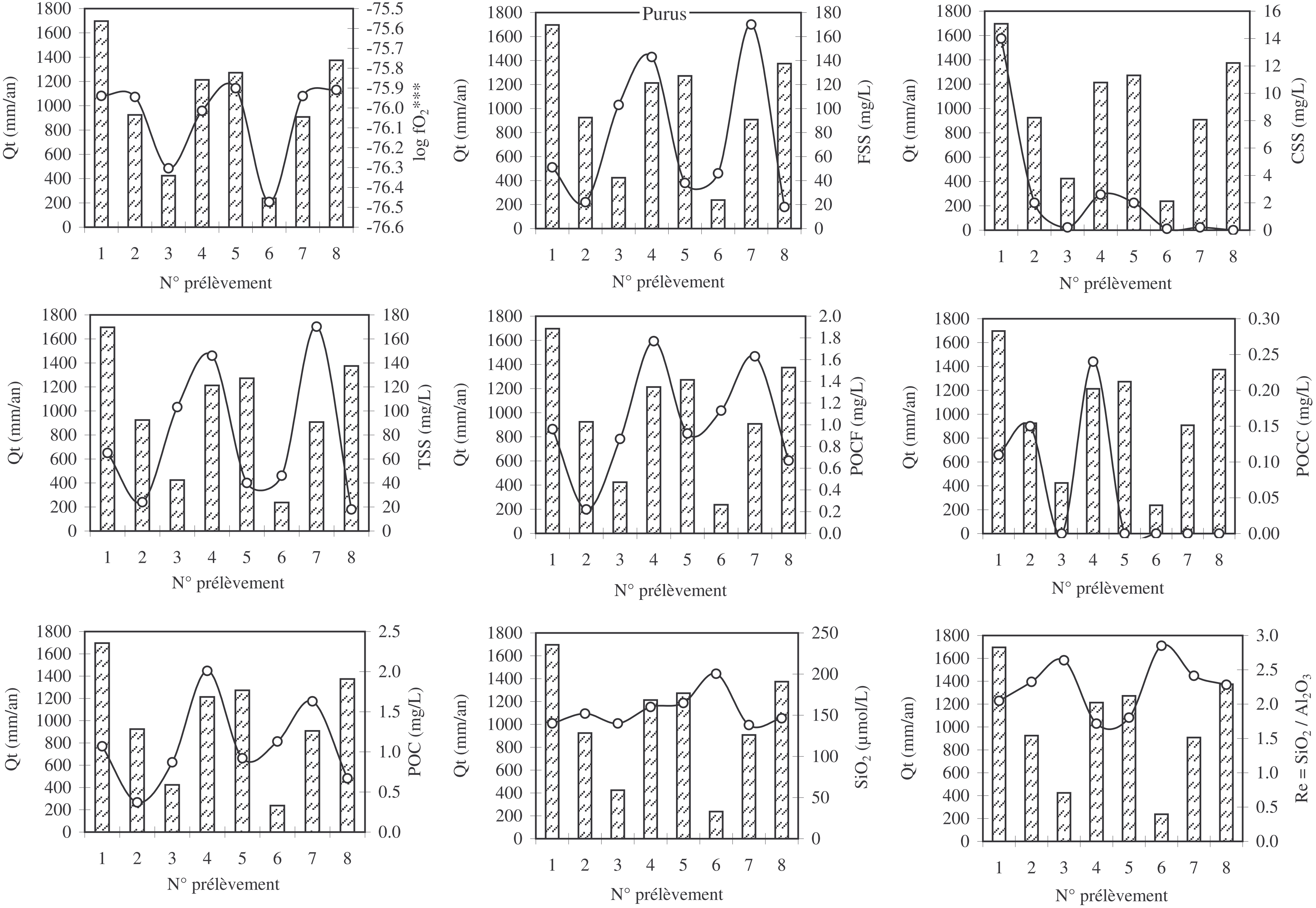

Qt (mm/an)
POC (mg/L)
N° prélèvement

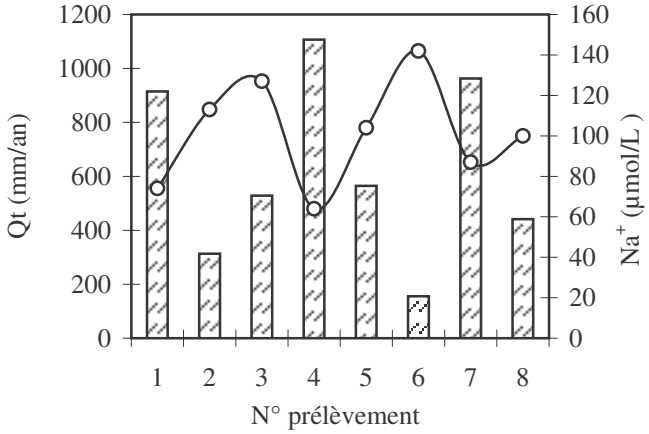

Qt (mm/an)
SiO2 (µmol/L)
N° prélèvement

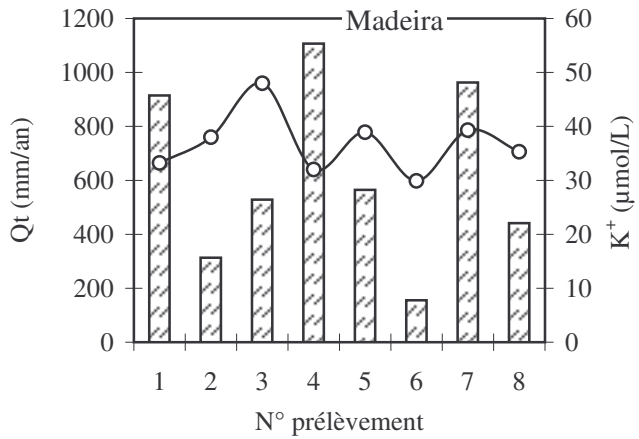

Qt (mm/an)
Re = SiO2 / Al2O3
N° prélèvement

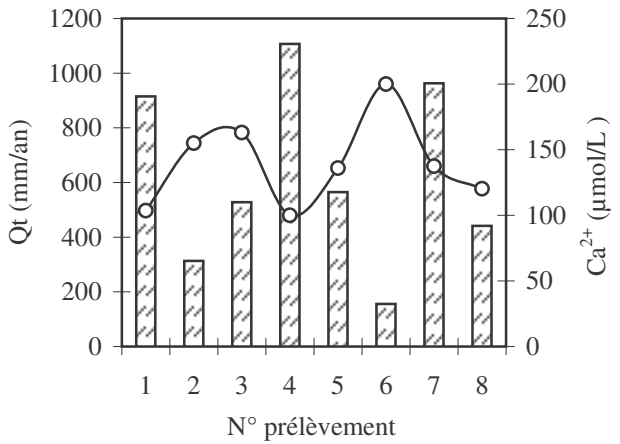

Purus
Qt (mm/an)
Na+ (µmol/L)
K+ (µmol/L)
Ca2+ (µmol/L)
Mg2+ (µmol/L)
NH4+ (µmol/L)
pH
log fCO2
log fO2*
log fO2**
N° prélèvement

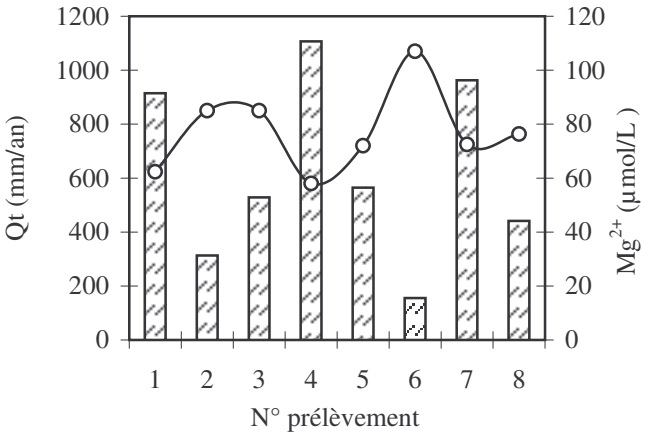

Purus
Qt (mm/an)
N° prélèvement
HCO_3^- (µmol/L)
Cl^- (µmol/L)
NO_3^- (µmol/L)
DOC (µmol/L)
SO_4^{2-} (µmol/L)
HPO_4^{2-} (µmol/L)
DIC (µmol/L)
CO_2 (µmol/L)
O_2 (µmol/L)

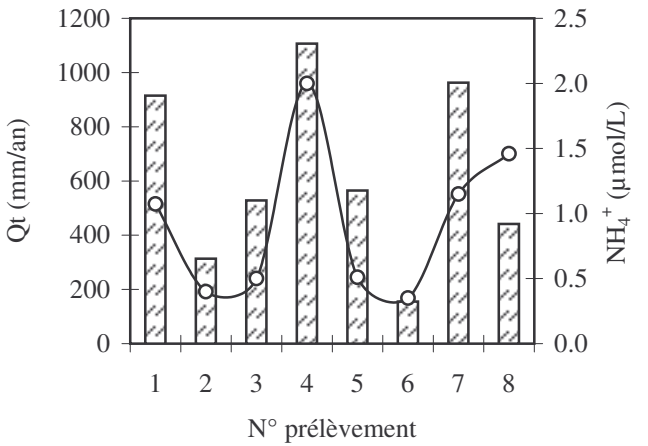

Purus
Qt (mm/an)
log fO_2***
FSS (mg/L)
CSS (mg/L)
TSS (mg/L)
POCF (mg/L)
POCC (mg/L)
POC (mg/L)
SiO_2 (µmol/L)
Re = SiO_2 / Al_2O_3
N° prélèvement

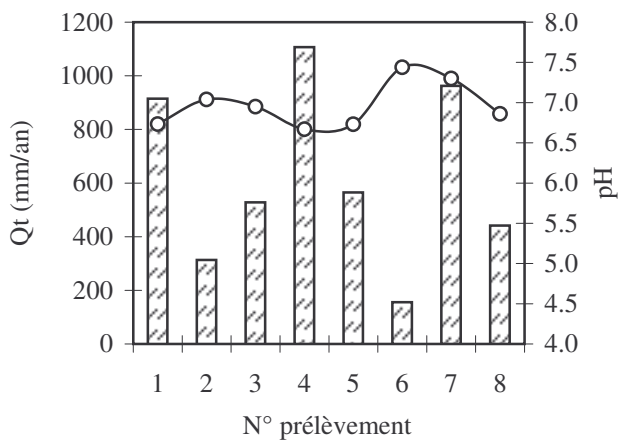

Qt (mm/an)
Na+ (µmol/L)
N° prélèvement

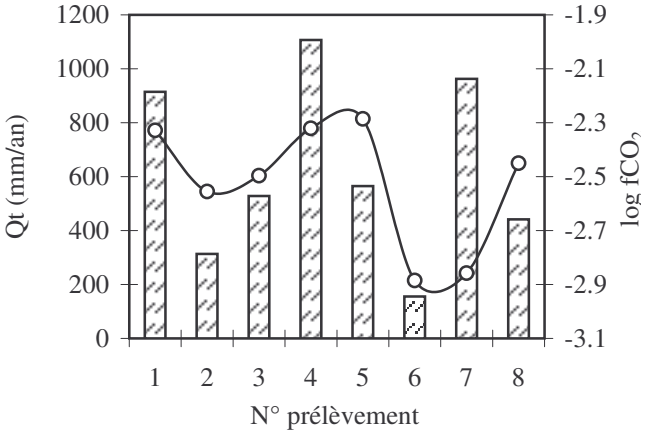

Madeira
Qt (mm/an)
K+ (µmol/L)
N° prélèvement

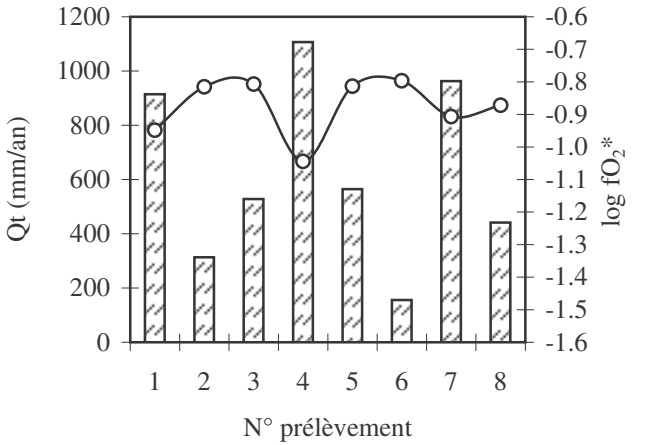

Qt (mm/an)
Ca2+ (µmol/L)
N° prélèvement

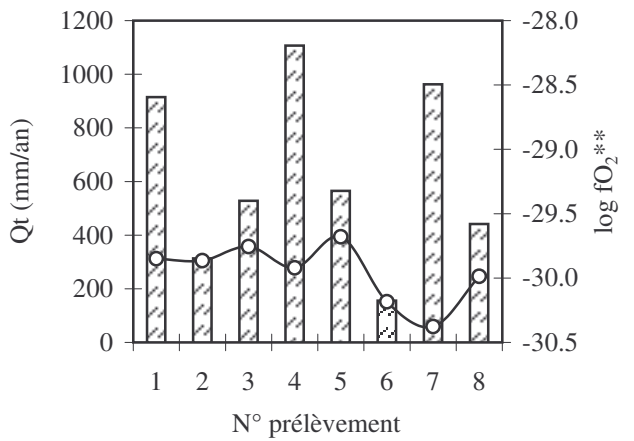

Qt (mm/an)
Mg2+ (µmol/L)
N° prélèvement

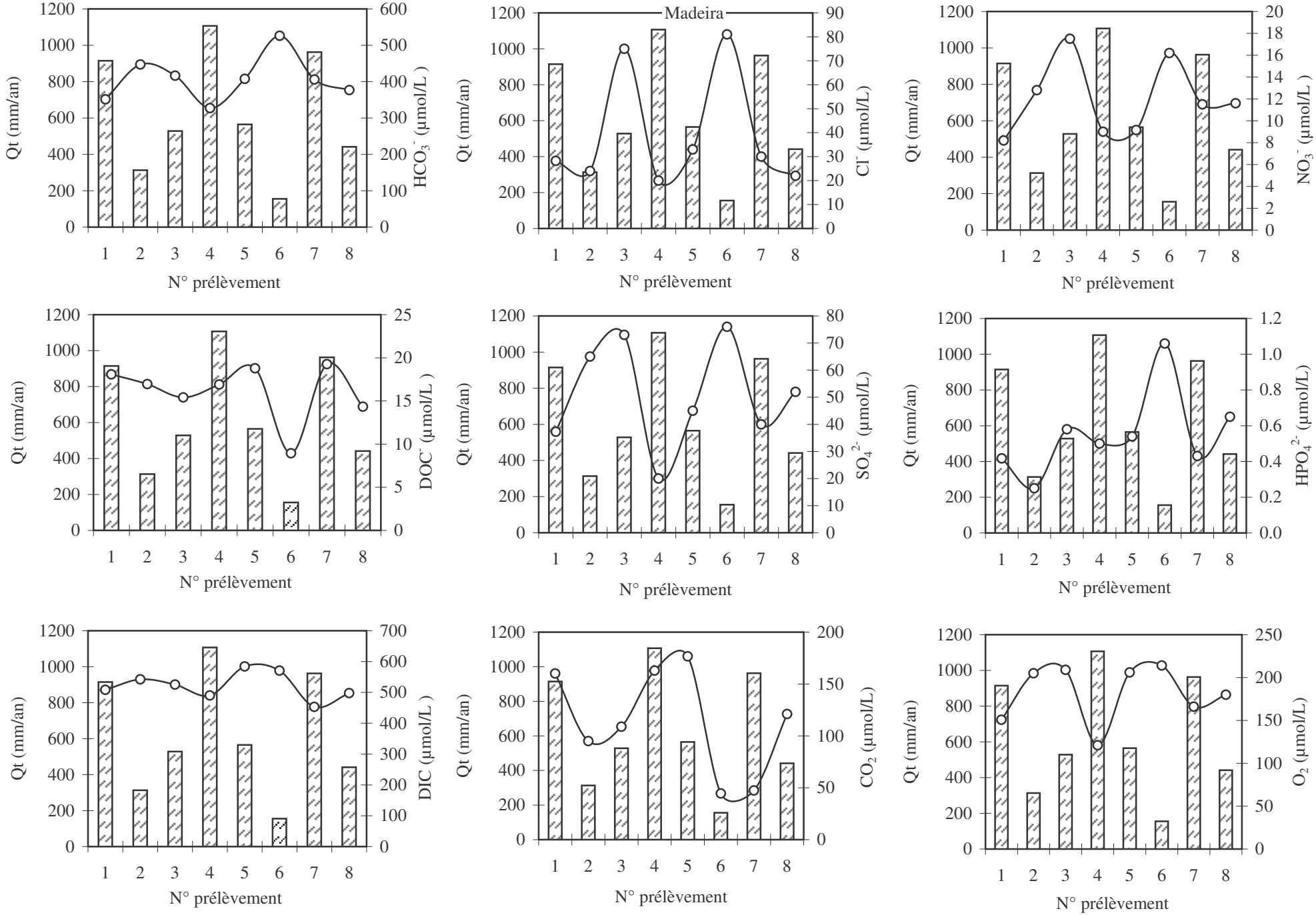

Qt (mm/an)
NH4+ (µmol/L)
N° prélèvement

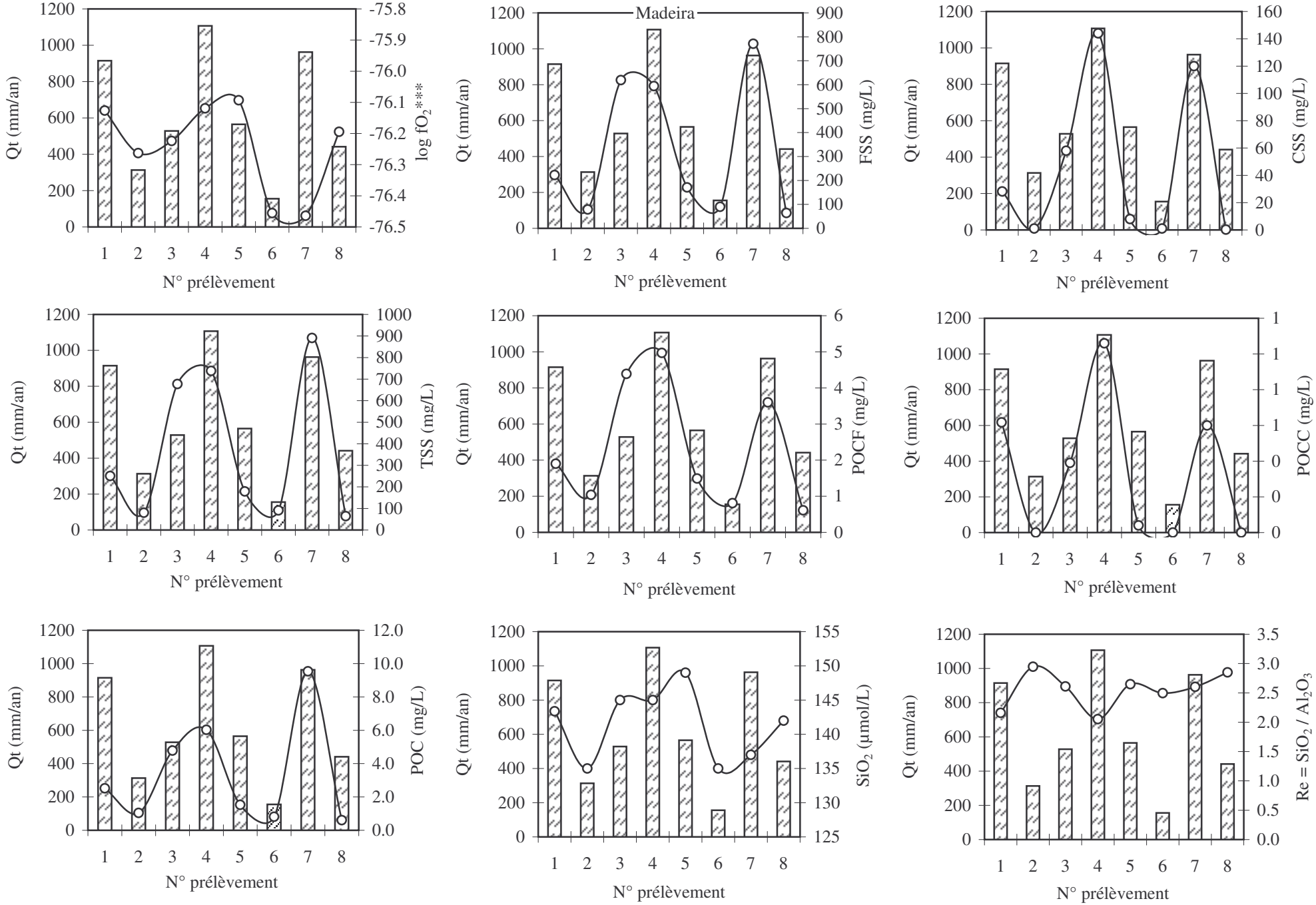

Qt (mm/an)
pH
N° prélèvement

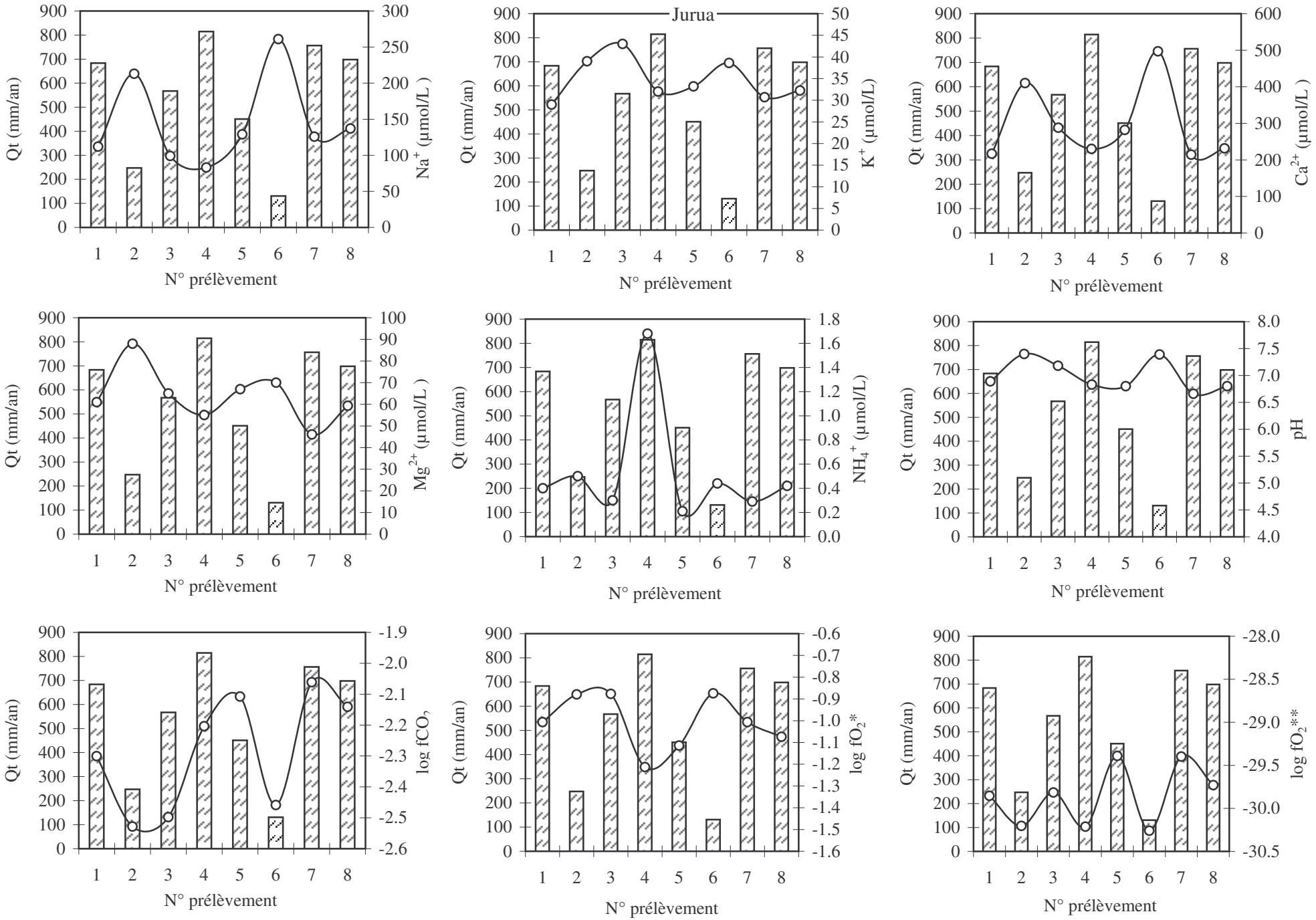

Qt (mm/an)
log fCO2
N° prélèvement

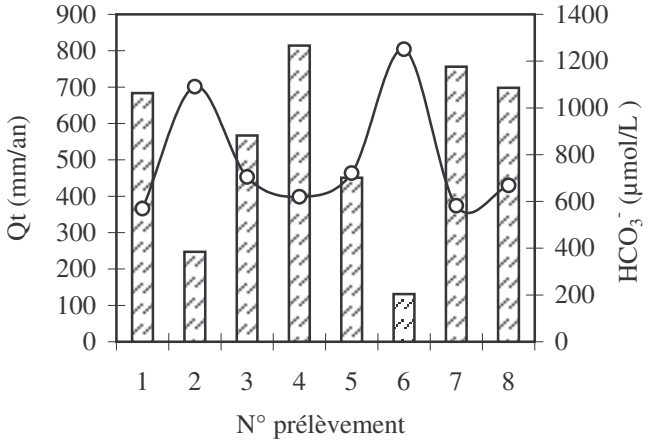

Qt (mm/an)
log fO2*
N° prélèvement

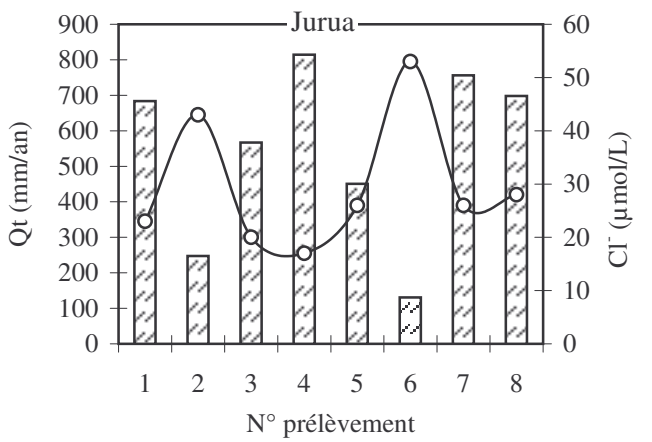

Qt (mm/an)
log fO2**
N° prélèvement

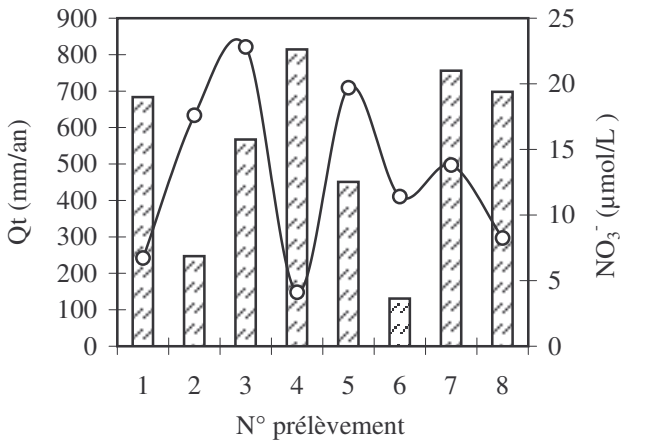

Madeira
Qt (mm/an)
HCO_3^- (µmol/L)
Cl^- (µmol/L)
NO_3^- (µmol/L)
DOC^- (µmol/L)
SO_4^{2-} (µmol/L)
HPO_4^{2-} (µmol/L)
DIC (µmol/L)
CO_2 (µmol/L)
O_2 (µmol/L)
N° prélèvement

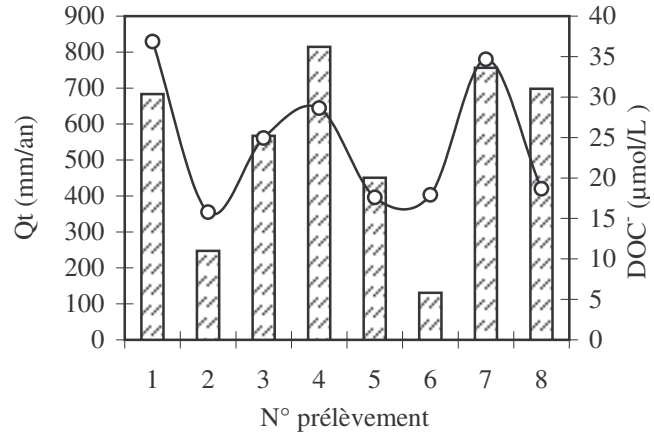

Madeira
Qt (mm/an)
log fO2***
FSS (mg/L)
CSS (mg/L)
TSS (mg/L)
POCF (mg/L)
POCC (mg/L)
POC (mg/L)
SiO2 (µmol/L)
Re = SiO2 / Al2O3
N° prélèvement

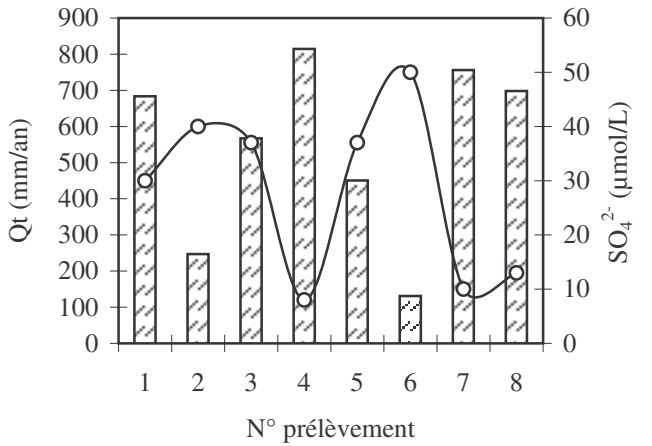

Jurua
Qt (mm/an)
Na+ (µmol/L)
K+ (µmol/L)
Ca2+ (µmol/L)
Mg2+ (µmol/L)
NH4+ (µmol/L)
pH
log fCO2
log fO2*
log fO2**
N° prélèvement

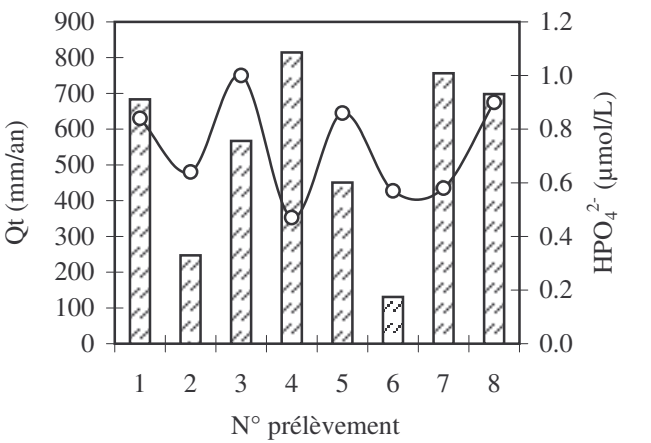

Qt (mm/an)
HCO3- (µmol/L)
N° prélèvement

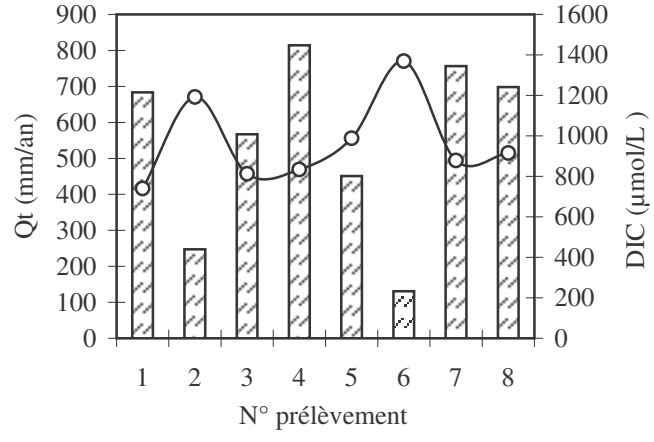

Jurua
Qt (mm/an)
Cl- (µmol/L)
N° prélèvement

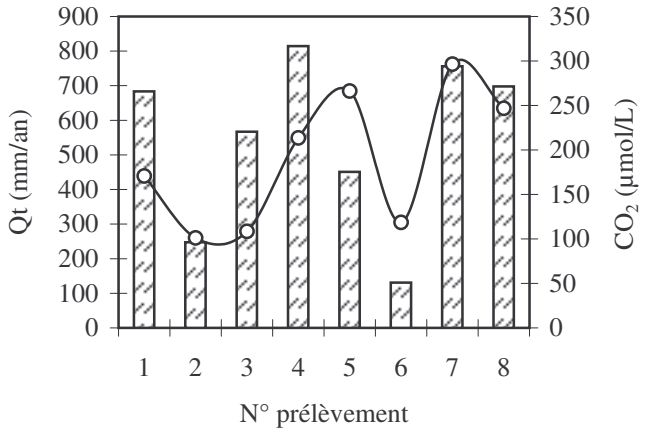

Qt (mm/an)
NO3- (µmol/L)
N° prélèvement

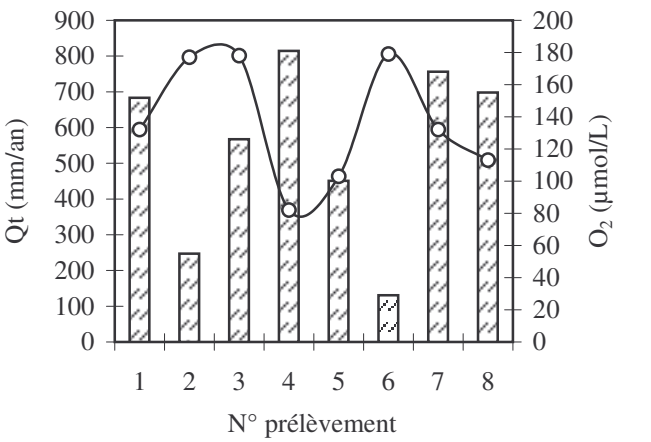

Qt (mm/an)
DOC- (µmol/L)
N° prélèvement

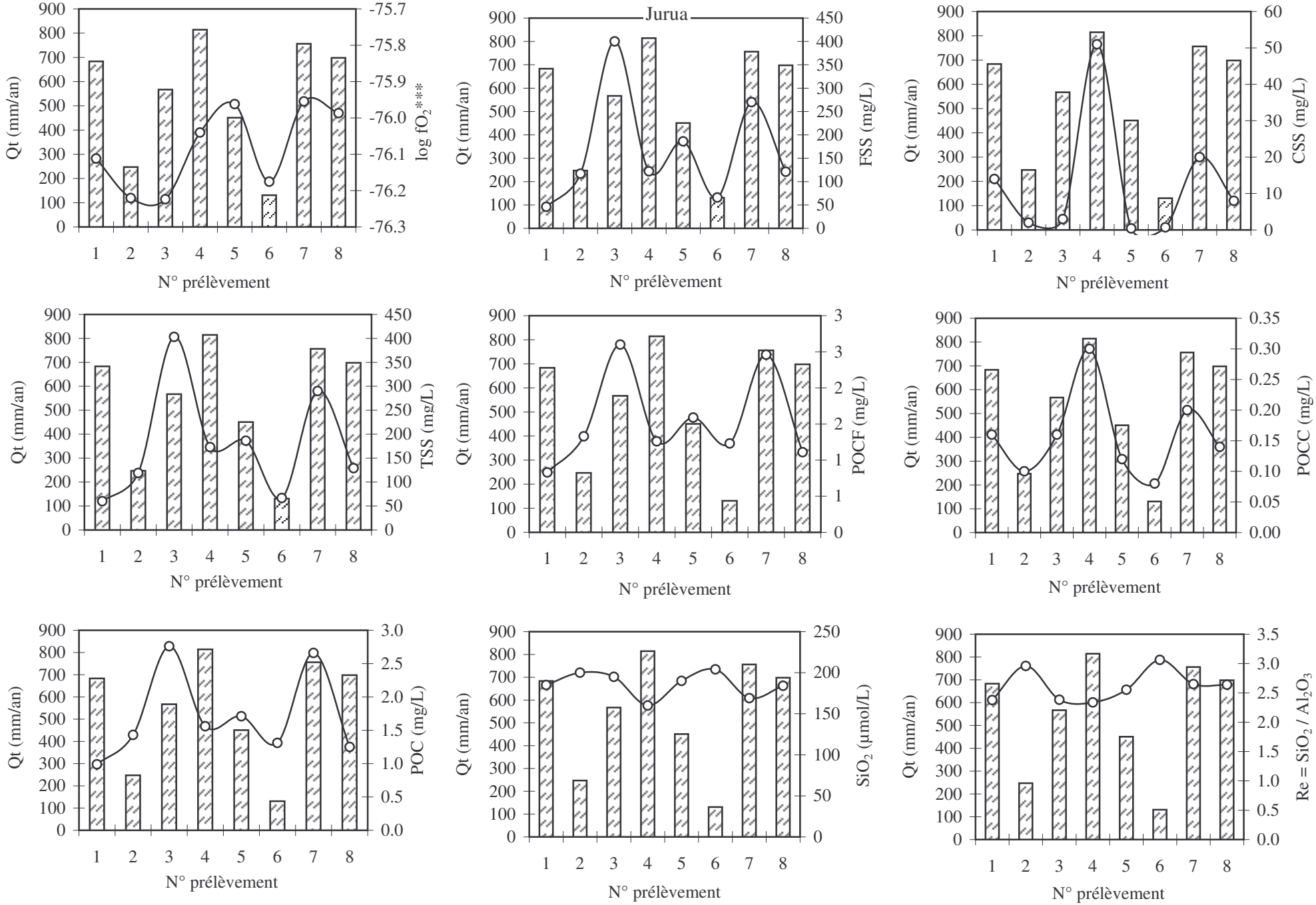

Qt (mm/an)
SO4 2- (µmol/L)
N° prélèvement

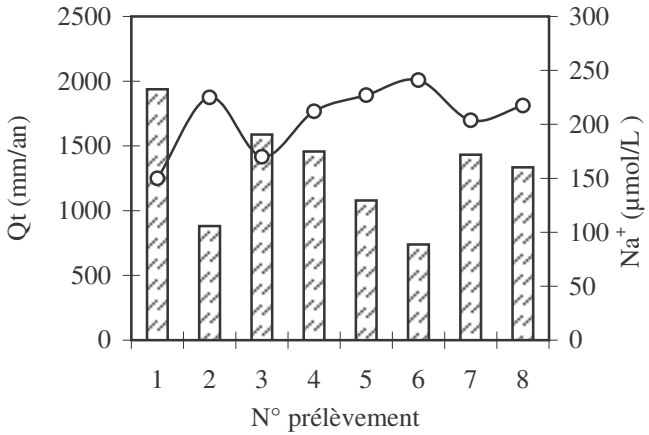

Qt (mm/an)
HPO4 2- (µmol/L)
N° prélèvement

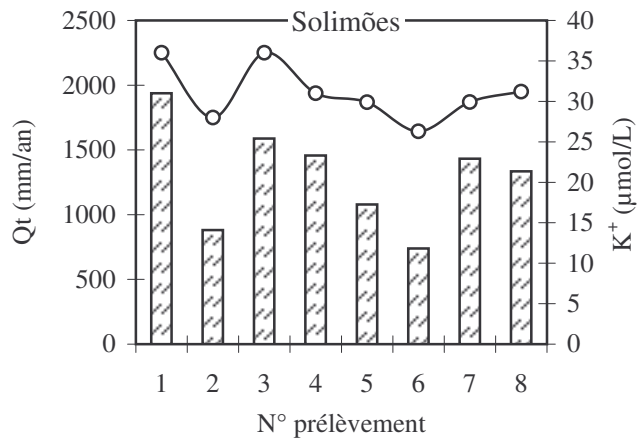

Qt (mm/an)
DIC (µmol/L)
N° prélèvement

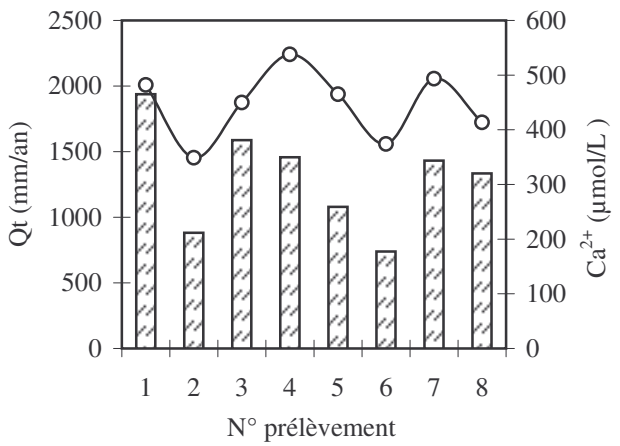

Qt (mm/an)
CO2 (µmol/L)
N° prélèvement

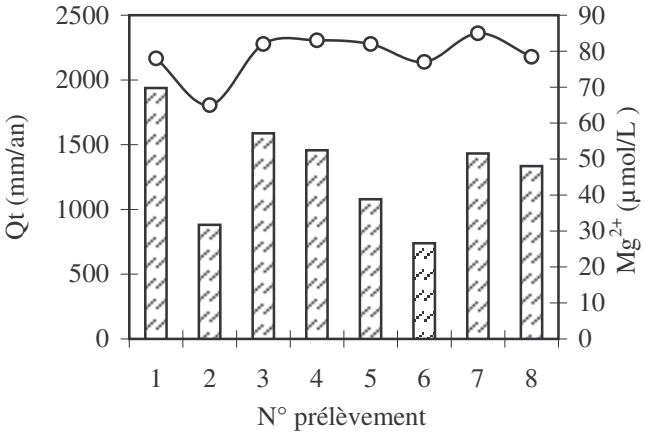

Qt (mm/an)
O2 (µmol/L)
N° prélèvement

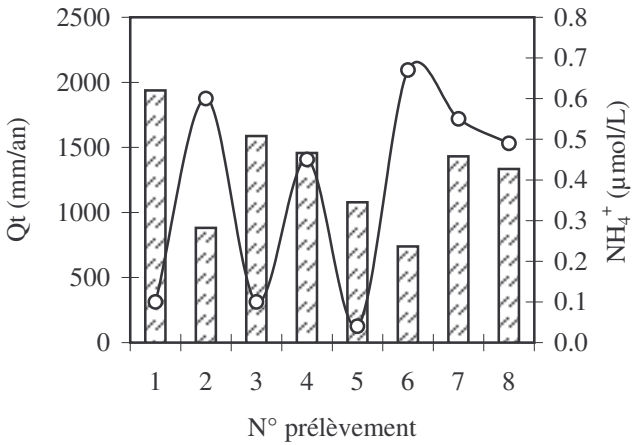

Jurua
Qt (mm/an)
log fO2***
FSS (mg/L)
CSS (mg/L)
TSS (mg/L)
POCF (mg/L)
POCC (mg/L)
POC (mg/L)
SiO2 (µmol/L)
Re = SiO2 / Al2O3
N° prélèvement

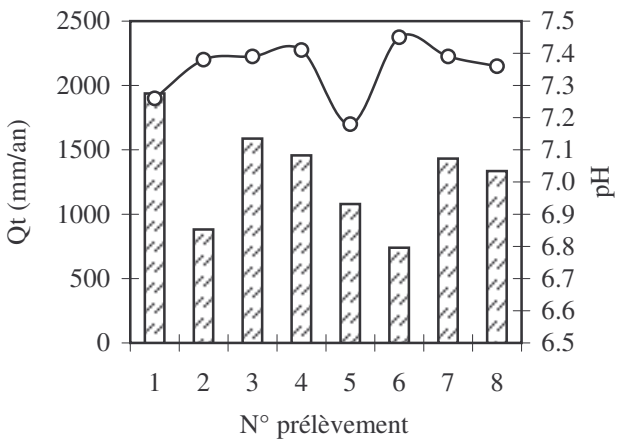

Qt (mm/an)
Na+ (µmol/L)
N° prélèvement

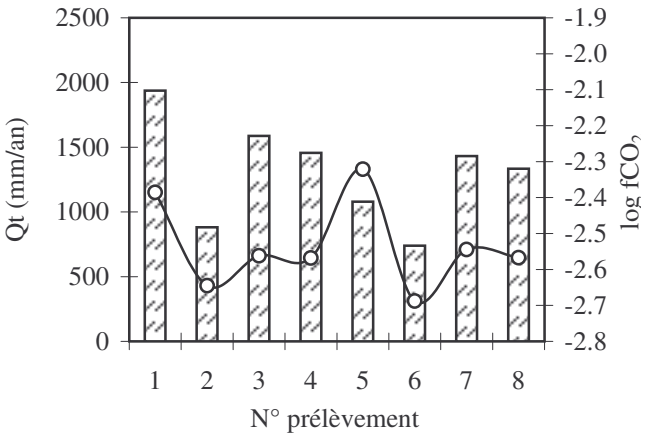

Solimões
Qt (mm/an)
K+ (µmol/L)
N° prélèvement

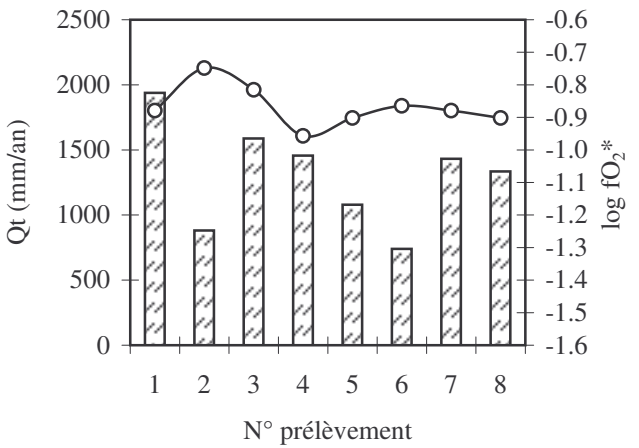

Qt (mm/an)
Ca2+ (µmol/L)
N° prélèvement

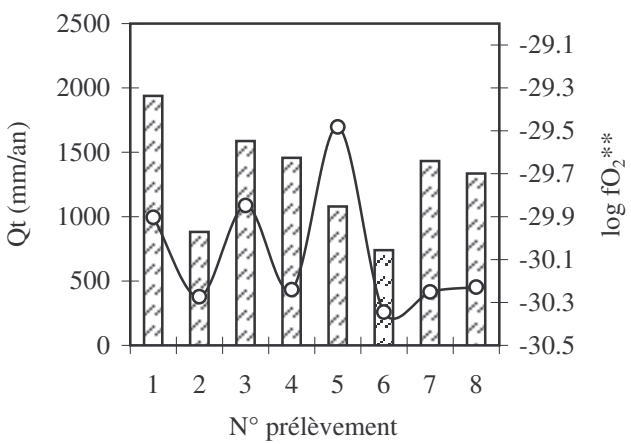

Qt (mm/an)
Mg2+ (µmol/L)
N° prélèvement

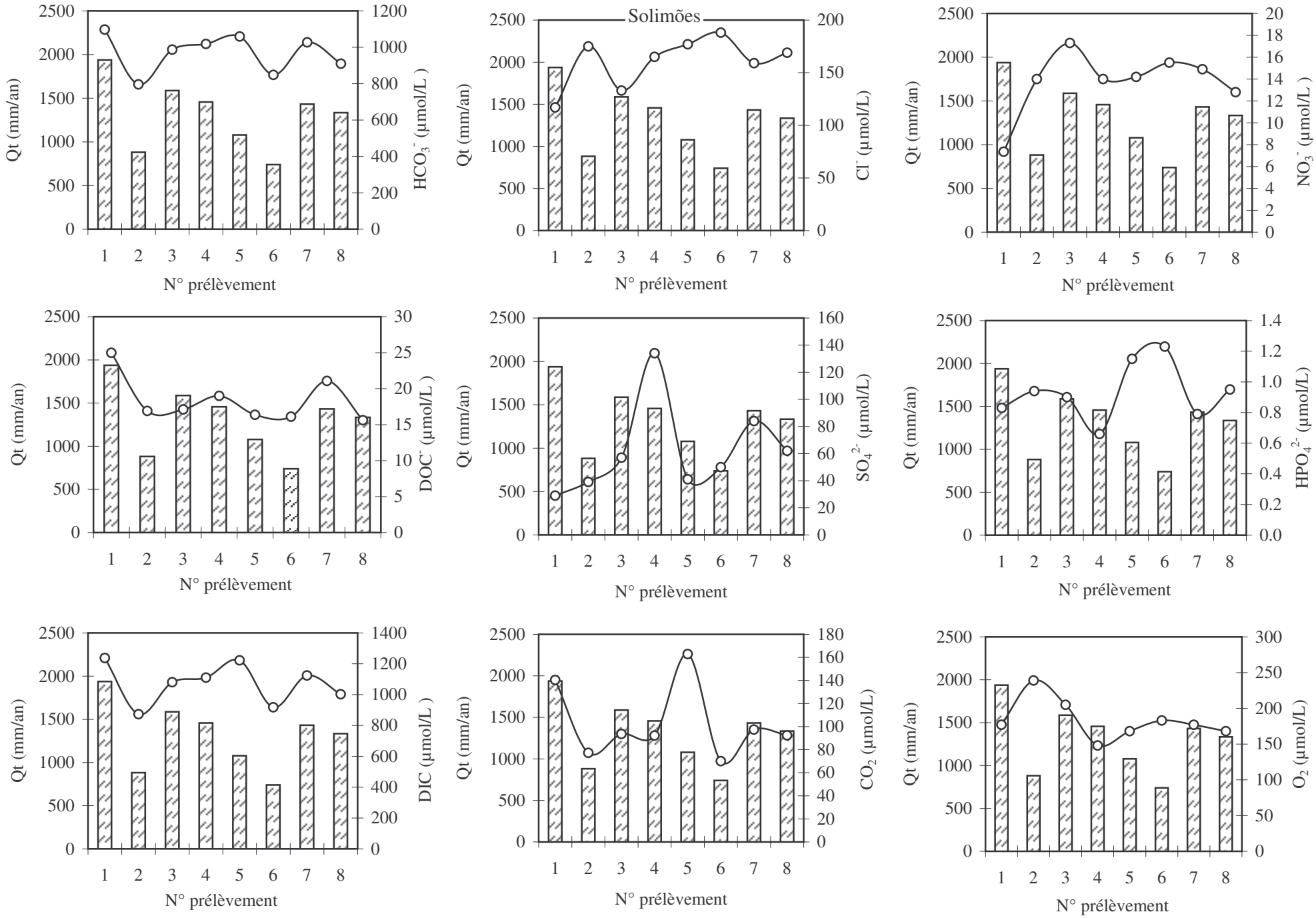

Qt (mm/an)
NH4+ (µmol/L)
N° prélèvement


Qt (mm/an)
pH
N° prélèvement


Qt (mm/an)
log fCO2
N° prélèvement


Qt (mm/an)
log fO2*
N° prélèvement


Qt (mm/an)
log fO2**
N° prélèvement


Solimões
Qt (mm/an)
HCO3- (µmol/L)
Cl- (µmol/L)
NO3- (µmol/L)
DOC- (µmol/L)
SO4 2- (µmol/L)
HPO4 2- (µmol/L)
DIC (µmol/L)
CO2 (µmol/L)
O2 (µmol/L)
N° prélèvement

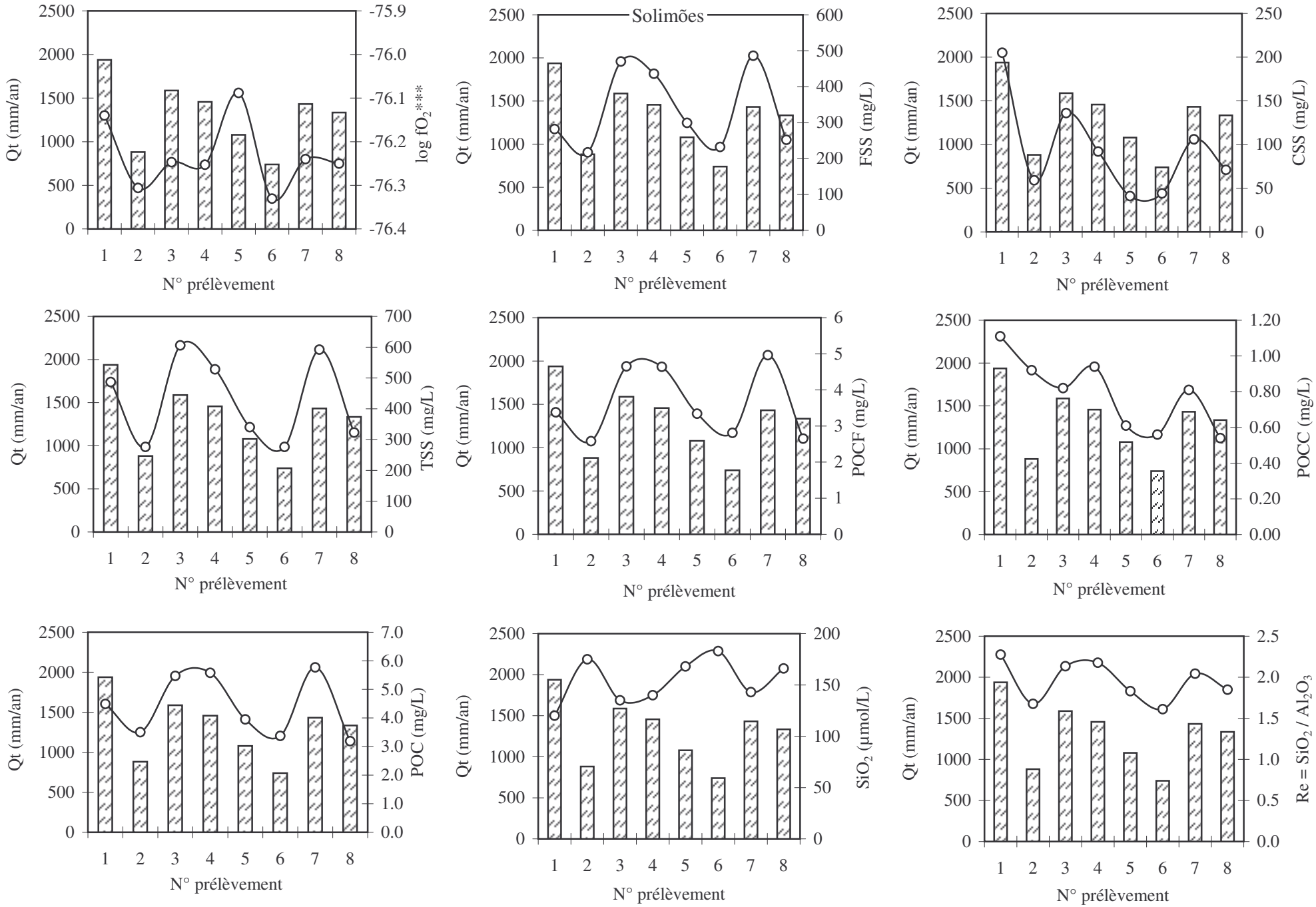

Solimões
Qt (mm/an)
log fO2***
FSS (mg/L)
CSS (mg/L)
TSS (mg/L)
POCF (mg/L)
POCC (mg/L)
POC (mg/L)
SiO2 (µmol/L)
Re = SiO2 / Al2O3
N° prélèvement

Tableau A4 (1/3)- Débit total (Qt exprimé en m3/s et en mm/an, pH, concentrations moyennes des espèces chimiques dissoutes (µmol/L), balance ionique (S + et S - , µeq/L), carbone organique dissous et teneur en suspensions (DOC et MES, mg/L), conductivité (µS/cm à 25°C) et éléments traces (Sr et Ba, µg/L) dans les eaux du fleuve Niger à l'exutoire de Bamako: 85 échantillons prélevés tous les 15 jours le long de 3 cycles hydrologiques (1990-93), d'après Boeglin et Probst (1996).

N°	Date	Qt		pH	Na^+	K^+	Ca^{2+}	Mg^{2+}	S^+	HCO_3^-	Cl^-	SO_4^{2-}	S^-	SiO_2	DOC	TSS	T°	Sr	Ba	Cond.
		m^3/s	mm/an		µmol/L				µeq/L	µmol/L			µeq/L	µmol/L	mg/L		°C	µg/L		µS/cm
1	13/01/1990	165.8	45	7.35	137	40	77	58	447	432	9	2	445	280	-	2	21.7	35	30	36.15
2	27/01/1990	110.2	30	7.36	143	40	83	60	469	456	10	2	470	260	-	2	19.9	37	29	39.85
3	13/02/1990	89.3	24	7.44	143	44	84	61	477	465	10	1	477	248	-	2	22	39	31	41.55
4	27/02/1990	91	25	7.42	143	47	84	63	484	467	10	2	481	241	-	2	23	40	32	42.46
5	14/03/1990	77.7	21	7.59	141	49	84	63	484	471	10	1	483	226	-	1.4	23.1	40	33	42.76
6	29/03/1990	97.5	26	7.62	147	51	89	67	510	483	12	4	503	205	-	3.2	26.3	42	32	44.26
7	13/04/1990	104.3	28	7.60	140	51	86	66	495	472	10	1	484	197	-	3.3	28.5	41	34	43.56
8	28/04/1990	135.5	37	7.54	147	55	95	66	524	486	14	4	508	212	-	7	30.9	41	33	46.36
9	14/05/1990	140.4	38	7.36	150	53	104	64	539.2	508	10	1	520.4	209	-	7.5	31	46	48	49
10	28/05/1990	184.3	50	7.40	148	55	101	64	532.9	510	13.3	1	525.3	209	-	6.8	29.5	45.5	47.5	48.67
11	12/06/1990	276.9	75	7.40	143	55	95	61	510.8	480	14.9	1	496.9	216	-	14.9	30.8	40.5	40.7	46.21
12	28/06/1990	286.7	77	7.44	150	49	86	59	489	453	18	3	477	208	-	29.5	27.5	37	40.1	45.96
13	13/07/1990	418.3	113	7.35	125	46	67	49	403	367	15	4	390	188	-	29.6	29.1	30.5	39.1	37.75
14	28/07/1990	1062.8	287	7.17	85	42	47	38	297	265	11	4	284	188	-	53.6	27.5	21.9	32.6	28.64
15	13/08/1990	1257.8	339	7.18	85	36	46	35	283	254	11	3	271	222	-	41.6	-	-	-	*26.79*
16	28/08/1990	1901.3	513	7.20	86	33	45	34	277	248	11	3	265	241	-	37.4	-	21	24	24.93
17	13/09/1990	2271.8	613	7.28	87	32	47	37	287	257	11	3	274	239	-	31.9	-	24	26	25.73
18	29/09/1990	2486.3	671	7.26	82	24	46	43	284	262	7	1	271	222	-	20.4	-	22	22	25.33
19	12/10/1990	2164.5	584	7.23	94	26	49	41	300	278	9	2	291	251	-	18.4	-	26	24	26.94
20	27/10/1990	1433.3	387	7.27	98	27	50	41	307	288	10	2	302	260	-	11.1	29.3	-	-	*27.94*
21	13/11/1990	832.7	225	7.31	107	28	52	41	321	300	11	2	315	268	-	7.3	28.3	28	24	28.94
22	28/11/1990	530.4	143	7.32	118	30	57	47	356	335	9	2	348	282	-	4.5	25.6	32	27	31.84
23	12/12/1990	389	105	7.33	125	32	60	48	373	354	10	1	366	286	-	2	25.1	33	30	33.74
24	28/12/1990	276.9	75	7.57	137	34	63	53	403	388	10	2	402	287	-	2	19.2	34	27	36.15
25	12/01/1991	183.3	49	7.52	134	39	71	52	419	397	13	2	414	271	-	1.7	21.6	34	30	37.75
26	28/01/1991	143.3	39	7.54	134	39	70	54	421	400	11	2	415	269	-	1.9	23.2	36	30	38.15
27	11/02/1991	114.1	31	7.49	138	40	71	55	430	411	10	2	425	264	-	2.8	23.7	36	30	38.95
28	26/02/1991	119	32	7.58	133	41	69	56	424	407	8	1	417	260	-	2.3	24.2	37	32	38.25
29	13/03/1991	123.8	33	7.52	132	42	68	56	422	402	12	1	416	264	-	3.2	27.4	38	32	38.25
30	30/03/1991	91.8	25	7.52	133	42	73	57	435	414	11	1	427	271	-	3.9	28.4	39	35	39.45

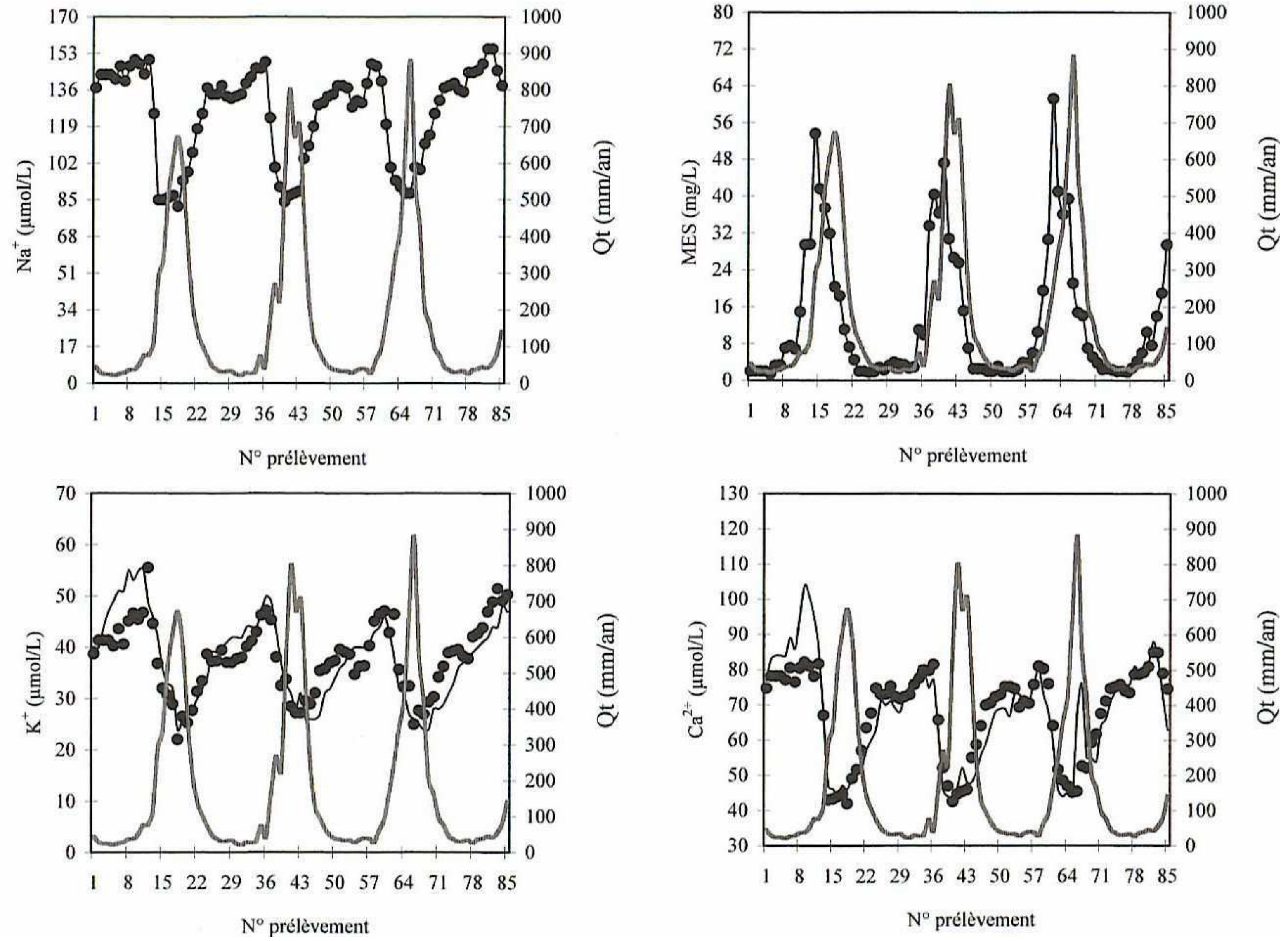
Tableau A4 (2/3)- Débit total (Qt exprimé en m3/s et en mm/an, pH, concentrations moyennes des espèces chimiques dissoutes (µmol/L), balance ionique (S + et S - , µeq/L), carbone organique dissous et teneur en suspensions (DOC et MES, mg/L), conductivité (µS/cm à 25°C) et éléments traces (Sr et Ba, µg/L) dans les eaux du fleuve Niger à l'exutoire de Bamako: 85 échantillons prélevés tous les 15 jours le long de 3 cycles hydrologiques (1990-93), d'après Boeglin et Probst (1996).

N°	Date	Qt		pH	Na^+	K^+	Ca^{2+}	Mg^{2+}	S^+	HCO_3^-	Cl^-	SO_4^{2-}	S^-	SiO_2	DOC	TSS	T°	Sr	Ba	Cond.
		m^3/s	mm/an		µmol/L				µeq/L	µmol/L			µeq/L	µmol/L	mg/L		°C	µg/L		µS/cm
31	19/04/1991	79.6	21	7.48	134	42	75	56	438	425	10	1	437	275	-	3.6	29.2	38	31	39.45
32	30/04/1991	108.2	29	7.50	139	44	75	57	447	430	10	1	442	278	-	3.4	29.8	38	29	40.45
33	14/05/1991	101.4	27	7.55	142	44	81	58	464	447	10	1	459	285	-	2.7	29.9	42	30	41.55
34	28/05/1991	119	32	7.52	146	44	80	57	464	447	10	1	459	277	-	2.9	30.2	39	29	41.55
35	10/06/1991	272	73	7.47	146	47	75	54	451	425	14	1	441	266	-	11	-	36	30	40.35
36	27/06/1991	161.9	44	7.49	149	50	77	57	467	441	15	2	460	249	-	9.9	30	38	31	42.05
37	13/07/1991	604.5	163	7.53	123	49	62	47	390	363	13	3	382	211	-	33.6	29.7	32	27	35.75
38	27/07/1991	994.5	268	7.41	100	43	46	37	309	278	10	4	296	236	-	40.4	27.1	24	23	28.84
39	10/08/1991	838.5	226	7.31	91	37	44	38	292	263	10	3	279	240	-	36.4	28.1	23	21	27.04
40	27/08/1991	2018.3	544	7.18	84	33	43	33	269	242	8	3	256	240	-	47.2	-	21	23	24.63
41	12/09/1991	2964	799	7.25	87	31	47	39	290	265	8	2	277	241	-	30.8	-	20	25	26.43
42	27/09/1991	2496	673	7.25	88	28	52	39	298	276	8	2	288	246	-	26.7	-	22	23	26.94
43	12/10/1991	2613	705	7.28	89	31	48	38	292	269	7	2	280	250	-	25.6	28.4	24	25	26.23
44	28/10/1991	1745.3	471	7.34	104	26	48	40	306	288	7	2	299	269	-	15.2	28.6	25	24	28.14
45	16/11/1991	903.8	244	7.31	110	26	51	45	328	310	7	0	317	275	-	7.1	-	27	25	31.44
46	02/12/1991	471.9	127	7.30	119	26	56	48	353	334	8	0	342	284	-	2.6	24.5	28	27	31.44
47	14/12/1991	357.8	97	7.42	129	27	59	50	374	353	10	2	367	288	-	2.6	23.1	29	28	33.54
48	30/12/1991	248.6	67	7.51	130	31	64	52	393	374	9	2	387	280	1.9	2.5	20.7	31	29	35.15
49	14/01/1992	183.3	49	7.42	133	32	68	54	409	392	8	1	402	268	2.14	2	20.5	32	31	36.45
50	28/01/1992	145.3	39	7.46	134	34	69	55	416	395	8	1	405	261	2.05	2	21.5	34	30	37.25
51	12/02/1992	133.6	36	7.65	138	36	69	57	426	404	8	1	414	270	2.45	3.1	24.1	34.3	40.9	36.75
52	28/02/1992	120.9	33	7.56	138	37	67	55	419	399	8	1	409	268	2.07	1.9	25	34	39.3	36.95
53	15/03/1992	125.8	34	7.64	137	39	73	58	438	416	8	1	426	273	2.6	1.9	22.9	36	43.1	38.75
54	28/03/1992	101.4	27	7.63	128	40	73	57	428	405	8	0	413	268	2.4	1.9	24.5	35.6	43.8	36.25
55	13/04/1992	130.7	35	7.54	131	40	71	56	425	400	9	0	409	273	2.7	2.4	27.7	34.8	43.6	36.45
56	28/04/1992	148.2	40	7.54	130	40	71	54	420	396	10	0	406	274	2.9	3.9	29.6	33.6	39	36.45
57	13/05/1992	140.4	38	7.49	139	41	76	56	444	419	10	0	429	285	2.45	3.8	30.1	35.3	39	38.65
58	28/05/1992	105.3	28	7.44	148	43	80	59	469	439	10	0	449	284	2.3	6	29.2	35.8	38.4	41.15
59	13/06/1992	236	64	7.50	147	44	73	54	445	416	10	1	428	273	2.4	10.5	29.6	32.4	34.5	39.15
60	27/06/1992	342.2	92	7.24	140	46	68	51	424	382	12	6	406	276	2.45	19.5	28.9	30.9	35.9	38.25

Tableau A4 (3/3)- Débit total (Qt exprimé en m3/s et en mm/an, pH, concentrations moyennes des espèces chimiques dissoutes (µmol/L), balance ionique (S + et S - , µeq/L), carbone organique dissous et teneur en suspensions (DOC et MES, mg/L), conductivité (µS/cm à 25°C) et éléments traces (Sr et Ba, µg/L) dans les eaux du fleuve Niger à l'exutoire de Bamako: 85 échantillons prélevés tous les 15 jours le long de 3 cycles hydrologiques (1990-93), d'après Boeglin et Probst (1996).

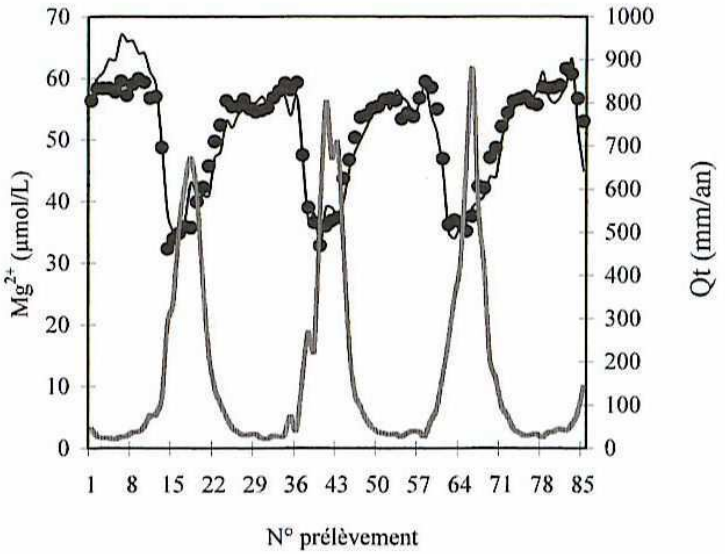
N°	Date	Qt		pH	Na^+	K^+	Ca^{2+}	Mg^{2+}	S^+	HCO_3^-	Cl^-	SO_4^{2-}	S^-	SiO_2	DOC	TSS	T°	Sr	Ba	Cond.
		m^3/s	mm/an		µmol/L				µeq/L	µmol/L			µeq/L	µmol/L	mg/L		°C	µg/L		µS/cm
61	13/07/1992	626	169	7.24	120	43	59	45	371	333	15	4	356	254	2.66	30.6	26.7	26.8	35.2	33.84
62	28/07/1992	925.3	250	7.12	100	38	46	35	300	268	10	3	284	253	3.95	61.2	27	25.7	35	*29.79*
63	12/08/1992	1296.8	350	7.16	94	32	44	34	282	252	9	2	265	252	2.33	41	28.1	18.9	28.8	25.73
64	28/08/1992	1589.3	429	7.28	91	31	45	36	284	263	8	2	275	246	2.13	36.1	-	20.1	29.7	25.23
65	12/09/1992	2457	663	7.09	88	27	44	37	277	252	8	2	264	234	2.01	39.4	-	19.7	32.2	*27.49*
66	28/09/1992	3256.5	878	7.31	88	26	68	39	328	313	7	0	320	241	2.31	21.1	-	21.6	33.7	29.74
67	13/10/1992	2057.3	555	7.47	100	25	76	40	357	340	7	2	351	261	2.07	14.8	29.2	24.3	32.5	32.64
68	28/10/1992	1550.3	418	7.33	99	24	55	41	315	305	6	0	311	262	1.9	14.1	28.9	23	29.4	28.94
69	13/11/1992	755.6	204	7.36	111	24	55	44	333	324	7	0	331	274	1.78	7	26.1	25.5	32.7	30.64
70	28/11/1992	604.5	163	7.40	115	28	54	44	339	328	8	1	338	284	1.44	5.1	22.6	26.8	35.2	31.34
71	14/12/1992	361.7	98	7.47	125	28	64	50	381	368	8	0	376	292	2.3	3.8	22.6	30.8	37.5	34.24
72	28/12/1992	282.8	76	7.52	131	29	66	53	398	383	8	1	393	283	2.3	2.4	23.1	31.6	38.4	35.85
73	13/01/1993	172.6	47	7.50	137	31	71	55	420	406	9	0	415	273	2	2.6	19.1	33.4	39.8	38.05
74	28/01/1993	133.6	36	7.52	138	33	74	57	433	417	8	1	427	270	2.2	2.3	20.2	35.4	41.6	39.35
75	13/02/1993	110.2	30	7.52	139	36	77	58	445	427	9	1	438	262	2.2	2	22.7	35.4	39.1	39.95
76	27/02/1993	114.1	31	7.50	136	37	76	57	439	419	9	1	430	266	2.1	2	24.9	35.6	42	39.45
77	15/03/1993	123.8	33	7.43	135	38	76	58	441	422	10	0	432	276	2.3	1.8	26.2	37.4	44.2	40.05
78	29/03/1993	95.6	26	7.57	144	39	81	61	467	447	10	0	457	288	2.4	2.7	27	39.2	45.5	42.15
79	13/04/1993	133.6	36	7.44	144	40	79	57	456	430	10	0	440	291	3.09	4.2	29.1	37	32	40.05
80	29/04/1993	143.3	39	7.39	145	41	80	56	458	429	11	0	440	294	3.07	6	29	37	28	39.05
81	13/05/1993	169.7	46	7.34	148	42	82	57	468	446	11	1	459	297	3.02	10.5	30.1	44	35	41.05
82	28/05/1993	156	42	7.46	155	44	88	59	493	467	9	0	476	301	2.84	7.6	30.9	43	32	*42.56*
83	14/06/1993	204.8	55	7.30	155	44	83	63	491	456	18	1	476	286	2.94	14	29.8	42	33	44.06
84	28/06/1993	300.3	81	7.25	145	48	72	52	441	415	12	2	431	281	2.83	19	29.1	38	29	40.05
85	13/07/1993	525.5	142	7.20	138	47	63	45	401	383	12	2	399	266	3.16	29.5	29.5	32	29	37.05

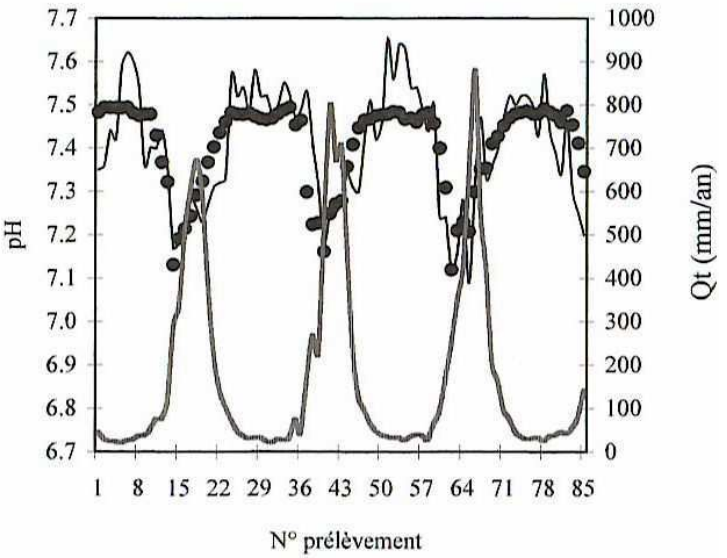
Figure A2 (1/3)

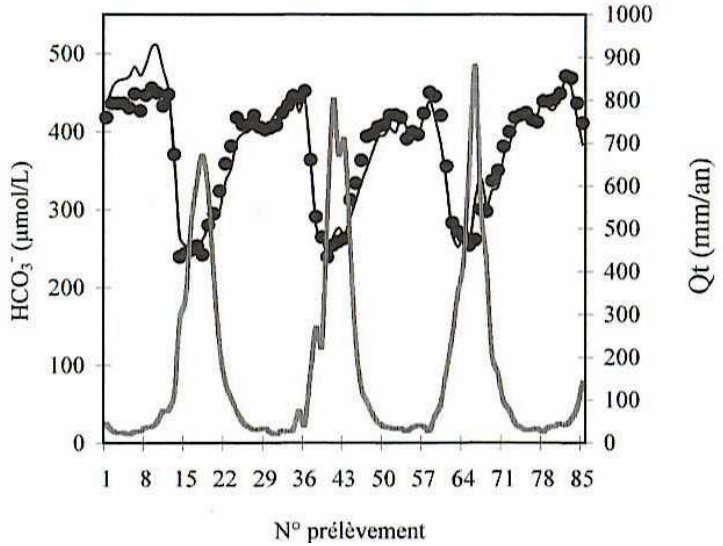


Na+ (µmol/L)
Qt (mm/an)
N° prélèvement
MES (mg/L)
Qt (mm/an)
N° prélèvement
K+ (µmol/L)
Qt (mm/an)
N° prélèvement
Ca2+ (µmol/L)
Qt (mm/an)
N° prélèvement

Figure A2 (2/3)


Mg^{2+} (µmol/L)
Qt (mm/an)
N° prélèvement


pH
Qt (mm/an)
N° prélèvement


HCO_3^- (µmol/L)
Qt (mm/an)
N° prélèvement

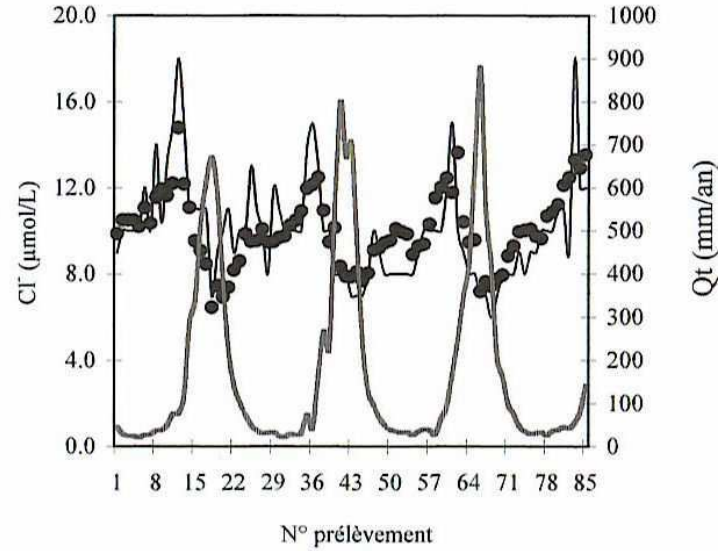

Cl^- (µmol/L)
Qt (mm/an)
N° prélèvement

Figure A2 (3/3)

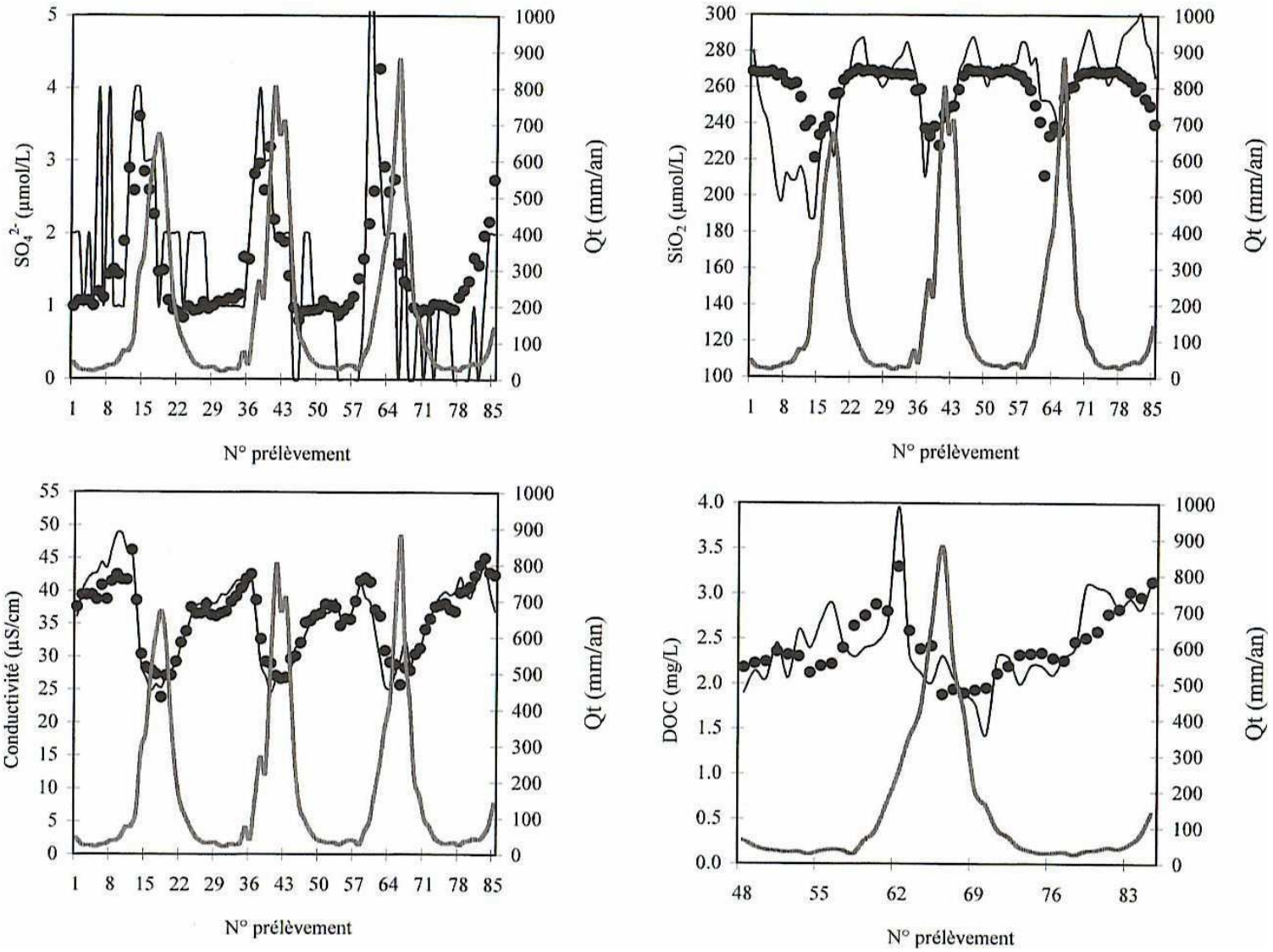

SO_4^{2-} (µmol/L)
Qt (mm/an)
N° prélèvement
SiO_2 (µmol/L)
Qt (mm/an)
N° prélèvement
Conductivité (µS/cm)
Qt (mm/an)
N° prélèvement
DOC (mg/L)
Qt (mm/an)
N° prélèvement

Tableau A5 (1/4)

Date	Qt		MES	DOC	POC	POC	Na^+	K^+	Ca^{2+}	Mg^{2+}	S^+	HCO_3^-	Cl^-	SO_4^{2-}	NO_3^-	S^-	SiO_2	Cond.
	m^3/s	mm/an		mg/L		(%)	µmol/L				µeq/L	µmol/L				µéq/L	$µmol.l^{-1}$	µS/cm
4/10/89	88	53	10	3.4	0.6	6.0	617	67	1018	279	3277	2280	558	244	154	3326	22	302
9/10/89	92	56	9	2.8	0.55	6.1	643	69	1035	317	3416	2257	566	250	130	3324	18	307
19/10/89	113	69	14	2.4	0.65	4.6	617	69	1083	300	3452	2251	524	268	143	3310	20	306
23/10/89	120	73	10	2.35	0.5	5.0	596	64	1093	313	3470	2280	470	268	141	3286	15	301
30/10/89	122	74	11	2.8	0.55	5.0	626	69	1093	329	3539	2320	524	275	148	3394	10	312
7/11/89	200	121	21	2.25	1.05	5.0	600	74	1053	288	3354	2180	527	255	152	3218	30	301
14/11/89	142	86	12	2.05	0.7	5.8	248	38	475	113	1461	934	228	121	67	1404	43	137
20/11/89	142	86	13	2	0.8	6.2	443	77	598	246	2207	1251	389	213	150	2065	43	207
30/11/89	258	157	17	1.55	0.85	5.0	287	44	215	238	1236	567	270	150	126	1138	63	123
4/12/89	127	77	11	1.6	0.65	5.9	352	51	215	217	1267	525	332	151	150	1159	67	129
15/12/89	255	155	13	2.6	0.75	5.8	496	64	1083	225	3175	2143	448	180	163	2951	58	164
20/12/89	169	103	7	1.95	0.5	7.1	257	33	1003	138	2570	1954	237	120	87	2430	50	146
29/12/89	162	98	11	1.8	1.05	9.5	483	62	853	217	2682	1751	406	193	148	2542	48	242
9/1/90	169	103	10	1.85	0.9	9.0	465	54	913	229	2802	1861	431	205	193	2702	47	260
15/1/90	171	104	8	2	1	12.5	422	56	888	250	2753	1810	372	218	176	2617	52	252
25/1/90	124	75	10	2.1	0.95	9.5	391	51	788	225	2468	1661	327	185	159	2358	57	228
30/1/90	155	94	9	2	0.85	9.4	539	59	1023	267	3176	2039	487	235	233	2998	27	289
6/2/90	169	103	10	2.3	0.85	8.5	570	59	1055	275	3289			241	209		22	
13/2/90	593	360	146	***3.3***	3.85	2.6												
14/2/90	1731	1051	415	3.4	12.2	2.9	526	79	1120	275	3396			249	289		55	
15/2/90	2287	1388	309	5.4	11.6	3.8												
16/2/90	1907	1157	237	6.45	10.7	4.5	243	67	240					168	304		102	
17/2/90	1714	1040	125	4.2	5.85	4.7												
19/2/90	1072	651	61	2.3	3.3	5.4	222	59	1048	263	2901			161	278		108	
23/2/90	565	343	22	1.8	0.95	4.3	252	51	1110	267	3057			165	272		108	
9/3/90	364	221	11	1.9	0.8	7.3	309	46	1060	254	2983			163	193		85	
16/3/90	337	205	11	1.7	1.15	10.5	335	44	923	242	2707			161	172		72	
20/3/90	129	78	10	1.85	1.8	18.0	413	49	1040	271	3083			206	178		8	
24/3/90	258	157	12	***1.9***	1.35	11.3												
26/3/90	144	87	13	1.85	1.75	13.5	378	44	953	246	2819			161	135		38	
6/4/90	353	214	15	1.95	2.25	15.0	343	41	775	217	2368			160	109		47	
11/4/90	410	249	14	2	1.3	9.3	326	41	193					148	109		68	
17/4/90	266	161	14	***2.3***	1.15	8.2												
18/4/90	271	164	15	2.35	1.3	8.7	352	44	360	213	1541			140	122		43	
24/4/90	489	297	22	2.45	1.45	6.6	291	44	400	208	1552			166	135		72	
2/5/90	328	199	18	2.2	2	11.1	296	36	908	213	2572	1800	304	161	100	2427	2	217
9/5/90	260	158	14	2.3	1.2	8.6	291	36	843	179	2371			161	109		12	
16/5/90	419	254	24	2.45	1.6	6.7	322	51	855	171	2425			161	146		35	
24/5/90	596	362	211	***3.7***	5.55	2.6												
25/5/90	1195	725	320	3.8	8.25	2.6												
26/5/90	1736	1054	391	***3.4***	12.2	3.1												
28/5/90	865	525	165	2.5	5.2	3.2	230	64	1073	229	2898	1702	248	155	161	2260	90	262
5/6/90	353	214	37	2.45	1.7	4.6	313	51	1088	233	3006	2195	324	165	135	2848	85	275
12/6/90	216	131	24	2.1	1.2	5.0												
13/6/90	274	166	***23***	***2.1***	***1.2***	***5.1***	326	46	983	221	2779	2030	324	155	80	2664	60	255
25/6/90	370	225	13	1.8	0.85	6.5	339	51	958	238	2780	2030	315	170	35	2685	50	255
26/6/90	306	186	30	***1.8***	1.45	4.8												
29/6/90	210	127	20	***1.9***	0.85	4.3												
3/7/90	159	96	23	1.9	0.85	3.7	370	46	933	213	2706	1939	335	175	26	2625	45	249

Tableau A5 (2/4)

Date	Qt		MES	DOC	POC	POC	Na^+	K^+	Ca^{2+}	Mg^{2+}	S^+	HCO_3^-	Cl^-	SO_4^{2-}	NO_3^-	S^-	SiO_2	Cond.
	m^3/s	mm/an		mg/L		(%)		µmol/L			µeq/L		µmol/L			µéq/L	µmol/L	µS/cm
11/7/90	88	53	8	2.7	0.45	5.6	387	51	948	242	2817	2034	355	185	7	2760	30	260
19/7/90	62	38	10	2.45	1.4	14.0	457	59	963	250	2940	2044	420	195	109	2854	35	275
27/7/90	50	30	***15***	***2.8***	***1.1***	***8.2***	491	56	968	263	3008	2080	465	200	20	2945	55	281
31/7/90	290	176	18	3	0.95	5.3	522	56	933	279	3001	2066	485	200	67	2950	45	279
20/8/90	56	34	22	3.65	4.9	22.3	570	59	913	267	2987	2044	490	205	35	2945	35	281
29/8/90	117	71	43	3.6	4.05	9.4	565	74	928	254	3003	2020	476	210	7	2917	35	290
9/9/90	58	35	22	***2.8***	2.05	9.3												
12/9/90	56	34	17	2.61	1.7	10.0	504	69	983	254	3047	2039	459	216	41	2930	20	295
22/9/90	97	59	20	***3.5***	1	5.0												
25/9/90	93	56	25	3.75	1.7	6.8	630	74	1033	263	3295	2085	614	213	102	3124	25	235
1/10/90	86	52	16	2.7	0.9	5.6	639	69	1043	254	3302	2085	580	245	128	3155	30	325
10/10/90	102	62	14	2.6	0.8	5.7	630	69	1003	221	3146	1951	580	235	115	3002	20	310
16/10/90	99	60	12	2.7	0.9	7.5	665	69	993	233	3186	1930	634	230	170	3024	20	315
23/10/90	135	82	21	2.5	1.35	6.4	404	69	1093	258	3175	2225	380	191	202	2986	110	310
31/10/90	2434	1477	186	3.15	7.15	3.8	278	64	1128	238	3072	2205	341	160	222	2867	110	290
5/11/90	724	439	31	***3.0***	2.15	6.9												
6/11/90	581	353	23	2.95	1.4	6.1	278	59	833	213	2427	1656	304	135	228	2231	125	240
10/11/90	486	295	20	1.95	1.25	6.3	326	56	953	221	2729	1795	369	166	228	2495	115	270
20/11/90	255	155	17	2.3	1.2	7.1	339	74	1208	250	3328	2100	434	200	391	2934	105	320
25/11/90	767	465	53	***2.5***	2.05	3.9												
30/11/90	656	398	19	2.75	1.2	6.3	387	64	1183	267	3349	2156	470	205	343	3037	100	320
7/12/90	574	348	11	2.8	0.8	7.3	557	74	1003	233	3103	2066	504	216	54	3001	15	300
11/12/90	553	336	15	2.7	1.1	7.3	374	69	1078	354	3306	2444	335	241	41	3261	25	310
18/12/90	356	216	26	3.6	1.35	5.2	278	69	988	229	2781	1905	310	160	222	2536	110	275
28/12/90	544	330	39	2.85	1.95	5.0	257	64	978	229	2734	1944	296	150	189	2540	115	260
4/1/91	701	425	16	2.65	0.8	5.0	270	64	1258	267	3382	2275	361	185	324	3007	100	330
8/1/91	474	288	15	2.4	1	6.7	322	59	1323	283	3592	2375	431	205	372	3217	100	345
14/1/91	637	387	23	2.25	1	4.3	370	69	1393	313	3849	2505	515	225	417	3470	90	371
18/1/91	537	326	***16***	***2.3***	***0.8***	***5.0***	339	56	1298	321	3632	2666	428	205	222	3504	80	346
22/1/91	410	249	9	2.25	0.6	6.7	361	56	1378	325	3822	2639	465	220	343	3544	80	360
28/1/91	390	237	6	1.55	0.5	8.3												
10/2/91	593	360	43	2.7	2.05	4.8	339	56	973	258	2857	1985	380	180	215	2726	85	279
14/2/91	656	398	12	2.3	0.95	7.9	335	51	1233	275	3401	2530	389	185	176	3289	95	321
21/2/91	631	383	12	***2.4***	1.05	8.8												
22/2/91	631	383	12	2.45	1	8.3	352	56	1133	279	3232	2361	411	180	161	3132	80	309
28/2/91	489	297	14	***2.3***	0.95	6.8												
3/3/91	609	370	16	***2.2***	1.2	7.5												
5/3/91	410	249	15	2.1	0.95	6.3	365	56	1253	321	3568	2515	434	220	237	3388	50	340
9/3/91	996	604	101	***2.4***	4.7	4.7												
10/3/91	794	482	84	***2.5***	3.4	4.0												
12/3/91	637	387	35	2.5	1.55	4.4	222	41	828	217	2351	1785	251	135	74	2307	70	230
20/3/91	495	300	17	1.85	0.9	5.3	326	46	1038	254	2956	2170	366	180	109	2897	50	285
25/3/91	1032	626	182	2.8	5.55	3.0	330	51	1113	279	3165	2290	380	191	154	3052	55	298
25/3/91	1032	626	158	3.2	5.6	3.5												
26/3/91	2539	1541	419	4.2	16.2	3.9												
28/3/91	1520	922	186	3.8	6.95	3.7												
29/3/91	1207	733	113	***3.6***	4.25	3.8												
2/4/91	628	381	25	2.75	1.1	4.4	296	46	1363	308	3683	2575	389	210	357	3385	110	347
9/4/91	489	297	37	2.9	1.55	4.2	313	46	1343	308	3661	2630	411	210	283	3462	90	347
13/4/91	534	324	18	2.7	1.3	7.2												
18/4/91	439	266	24	2.5	1.8	7.5	322	41	1128	263	3143	2234	375	191	215	2990	50	300
26/4/91	489	297	22	2.65	2.1	9.5	326	41	998	263	2887	2075	349	185	176	2796	50	278

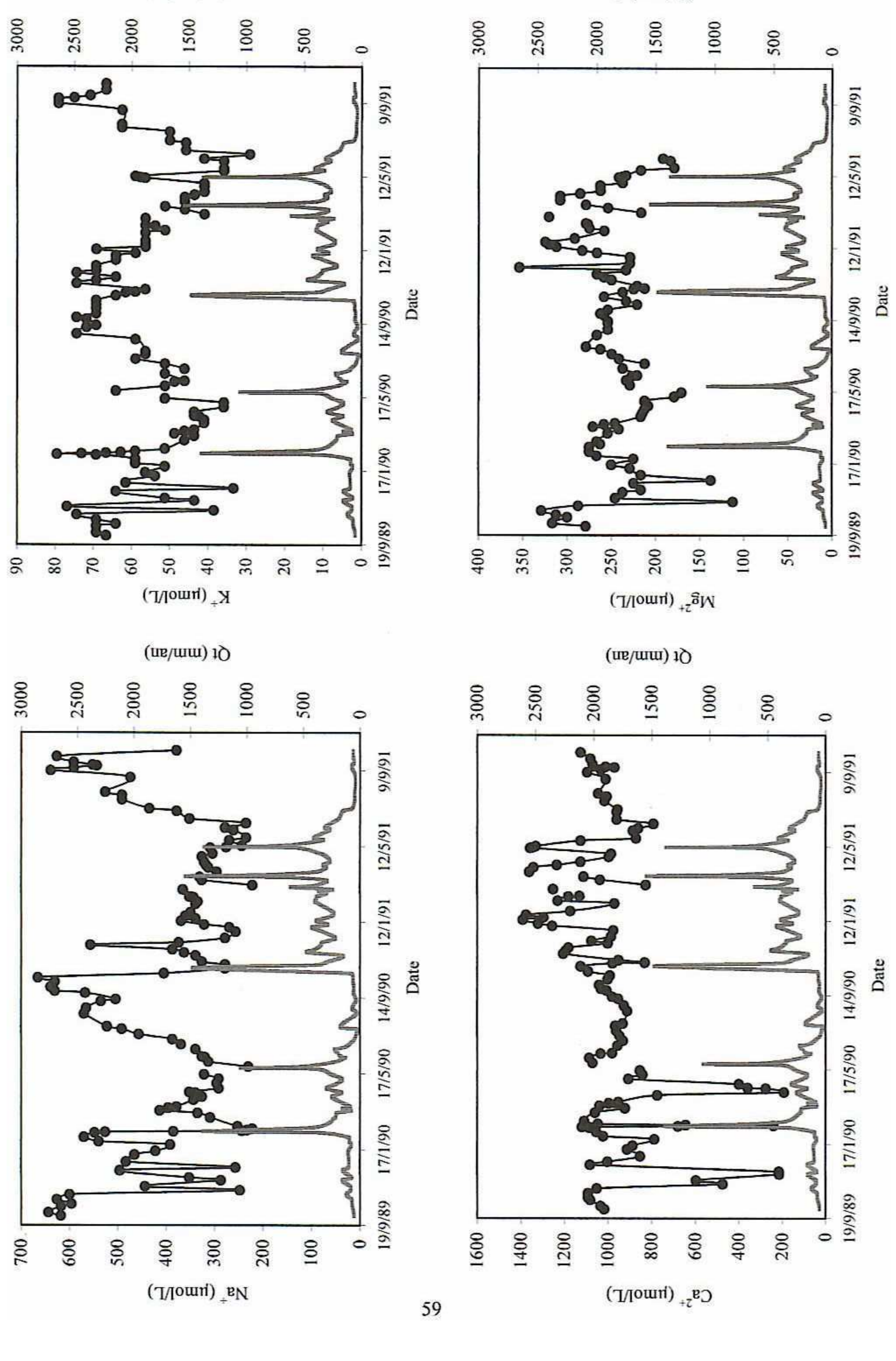
Tableau A5 (3/4)

Date	Qt		MES	DOC	POC	POC	Na^+	K^+	Ca^{2+}	Mg^{2+}	S^+	HCO_3^-	Cl^-	SO_4^{2-}	NO_3^-	S^-	SiO_2	Cond.
	m^3/s	mm/an	mg/L			(%)	µmol/L				µeq/L	µmol/L				µéq/L	µmol/L	µS/cm
1/5/91	580	352	23	2.85	2.4	10.4	304	41	988	238	2795	2034	330	166	122	2695	50	266
10/5/91	939	570	140	3.6	4.55	3.3	309	56	1358	242	3563	2556	394	210	263	3371	85	336
11/5/91	2268	1376	827	4.85	16.8	2.0												
13/5/91	1180	716	312	4.65	6.55	2.1	243	59	1333	233	3434	2461	335	185	324	3167	100	325
22/5/91	547	332	21	2.9	1.5	7.1	270	36	1128	217	2994	2166	324	185	222	2860	75	286
26/5/91	672	408	32	2.35	1.95	6.1	235	36	873	179	2374	1744	245	150	141	2289	65	229
7/6/91	445	270	41	2.45	2.45	6.0	261	36	888	183	2438	1770	270	155	148	2351	60	234
11/6/91	516	313	30	2.15	1.4	4.7	278	41	863	192	2428	1739	290	155	141	2340	55	234
18/6/91	425	258	43	1.8	2	4.7	235	29	793		1849	1539	239	141	128	2060	55	198
25/6/91	320	194	19	2.1	1.35	7.1	352	46	963		2323	1885	355	180	135	2601	45	253
7/7/91	250	152	20	1.8	1.7	8.5	378	46	963		2349	1895	369	191	115	2645	20	260
11/7/91	121	73	20	1.8	1.5	7.5	435	50	958		2400	1900	431	200	135	2731	10	268
25/7/91	77	47	6	2	0.7	11.7	491	50	1018		2576	2015	476	216	135	2922	30	286
1/8/91	82	50	17	2.25	1	5.9	491	63	1008		2569	2056	459	210	61	2936	30	282
6/8/91	76	46	5	2.15	0.65	13.0	526	63	1048		2684	2125	470	225	128	3045	25	297
29/8/91	67	41	5	2.25	0.6	12.0	474	63	1013		2561	2090	451	220	74	2980	35	288
9/9/91	99	60	9	3.9	0.6	6.7	639	79	1098		2913	2220	614	255	196	3344	35	329
13/9/91	123	75	93	2.5	2.75	3.0												
17/9/91	***117***	71	***31***	***2.4***	***1.2***	***3.9***	543	79	973		2568	1934	515	235	183	2921	40	296
18/9/91	116	70	15	2.4	0.8	5.3	552	75	1013		2652	2066	501	245	189	3057	50	300
22/9/91	88	53	13	2.4	0.7	5.4	591	71	1073		2807	2125	569	255	109	3204	40	314
1/10/91	104	63	14	2.35	0.85	6.1	626	67	1083		2858	2190	555	255	61	3256	45	317
11/10/91	103	63	13	2.65	0.6	4.6	378	67	1128		2700	2261	606	280	109	3427	25	337
15/10/91	134	81	25	3.6	1.1	4.4												
22/10/91	132	80	13	3.8	0.65	5.0												
25/10/91	125	76	11	2.9	0.8	7.3												
5/11/91	117	71	9	2.3	0.55	6.1												
16/11/91	747	453	96	***3.7***	3.7	3.9												
17/11/91	876	532	103	3.8	4.15	4.0												
19/11/91	797	484	91	3.7	3.3	3.6												
1/12/91	370	225	9	***3.2***	0.7	7.8												
2/12/91	260	158	7	3.15	0.5	7.1												
10/12/91	202	123	25	2.7	0.8	3.2												
17/12/91	208	126	5	3.4	0.5	10.0												
30/12/91	274	166	6	2.45	0.5	8.3												
18/1/92	362	220	8	1.85	0.8	10.0												
21/1/92	293	178	6	2.3	0.65	10.8												
27/1/92	339	206	7	2.9	0.7	10.0												
5/2/92	376	228	9	3.75	0.9	10.0												
13/2/92	320	194	9	2.25	0.8	8.9												
20/2/92	492	299	16	2.2	1.25	7.8												
26/2/92	268	163	9	1.95	0.65	7.2												
4/3/92	279	169	12	2.05	1.15	9.6												
13/3/92	206	125	11	2.05	1.25	11.4												
19/3/92	276	167	15	7.05	1.25	8.3												
24/3/92	215	130	12	2.7	1	8.3												
30/3/92	602	365	25	2.55	1.95	7.8												
1/4/92	599	364	16	***2.7***	1.25	7.8												
6/4/92	1398	848	218	***7***	8.75	4.0												
7/4/92	1386	841	403	7.6	15.1	3.7												
11/4/92	828	502	44	***6.0***	2.05	4.7												
21/4/92	525	319	26	1.95	1.45	5.6												

Tableau A5 (4/4)

Date	Qt		MES	DOC	POC	POC	Na^+ K^+ Ca^{2+} Mg^{2+}	S^+	HCO_3^- Cl^- SO_4^{2-} NO_3^-	S^-	SiO_2 Cond.
	m^3/s	mm/an		mg/L		(%)	µmol/L	µeq/L	µmol/L	µéq/L	µmol/L µS/cm
28/4/92	448	272	25	1.65	1.6	6.4					
12/5/92	422	256	17	1.9	1.3	7.6					
26/5/92	436	265	27	1.8	1.5	5.6					
3/6/92	818	496	117	2.55	2.2	1.9					
4/6/92	818	496	160	2.55	3.9	2.4					
5/6/92	1028	624	256	3	5.6	2.2					
6/6/92	1504	913	277	2.9	6.95	2.5					
8/6/92	1608	976	186	3.2	7.7	4.1					
9/6/92	1394	846	223	5.5	6.8	3.0					
11/6/92	2909	1765	817	4.2	21.2	2.6					
12/6/92	3393	2059	834	4.1	18.6	2.2					
13/6/92	3928	2384	329	3.85	7.85	2.4					
14/6/92	2678	1625	279	3.7	6.95	2.5					
15/6/92	1845	1120	138	3	3.85	2.8					
17/6/92	1237	751	58	4.05	2	3.4					
24/6/92	942	572	213	***3.3***	4.6	2.2					
25/6/92	1532	930	158	***3.2***	3.15	2.0					
26/6/92	1553	942	492	3.05	9.45	1.9					
29/6/92	855	519	50	***2.4***	1.8	3.6					
30/6/92	741	450	41	2.2	1.45	3.5					
10/7/92	1116	677	105	3.2	2.9	2.8					
17/7/92	698	424	32	2.35	1.3	4.1					
22/7/92	489	297	25	2.15	1.35	5.4					
30/7/92	244	148	16	2.05	1.35	8.4					
7/9/92	159	96	11	2.45	0.45	4.1					
15/9/92	197	120	16	2.25	0.55	3.4					
28/9/92	695	422	131	2.35	2.9	2.2					

Figure A3 (1/3)



Na+ (µmol/L)
K+ (µmol/L)
Ca2+ (µmol/L)
Mg2+ (µmol/L)
Qt (mm/an)
Date
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17/1/90
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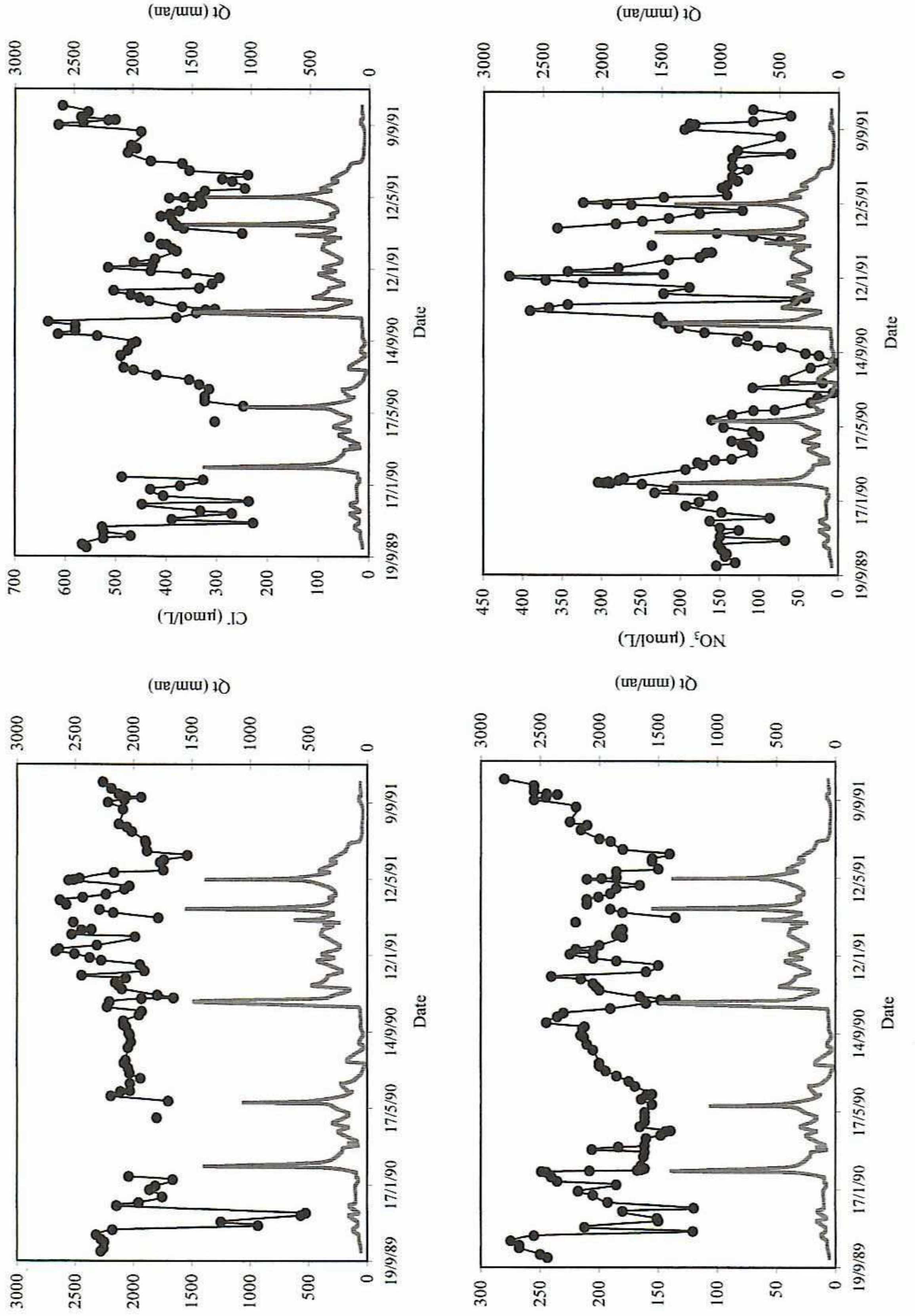
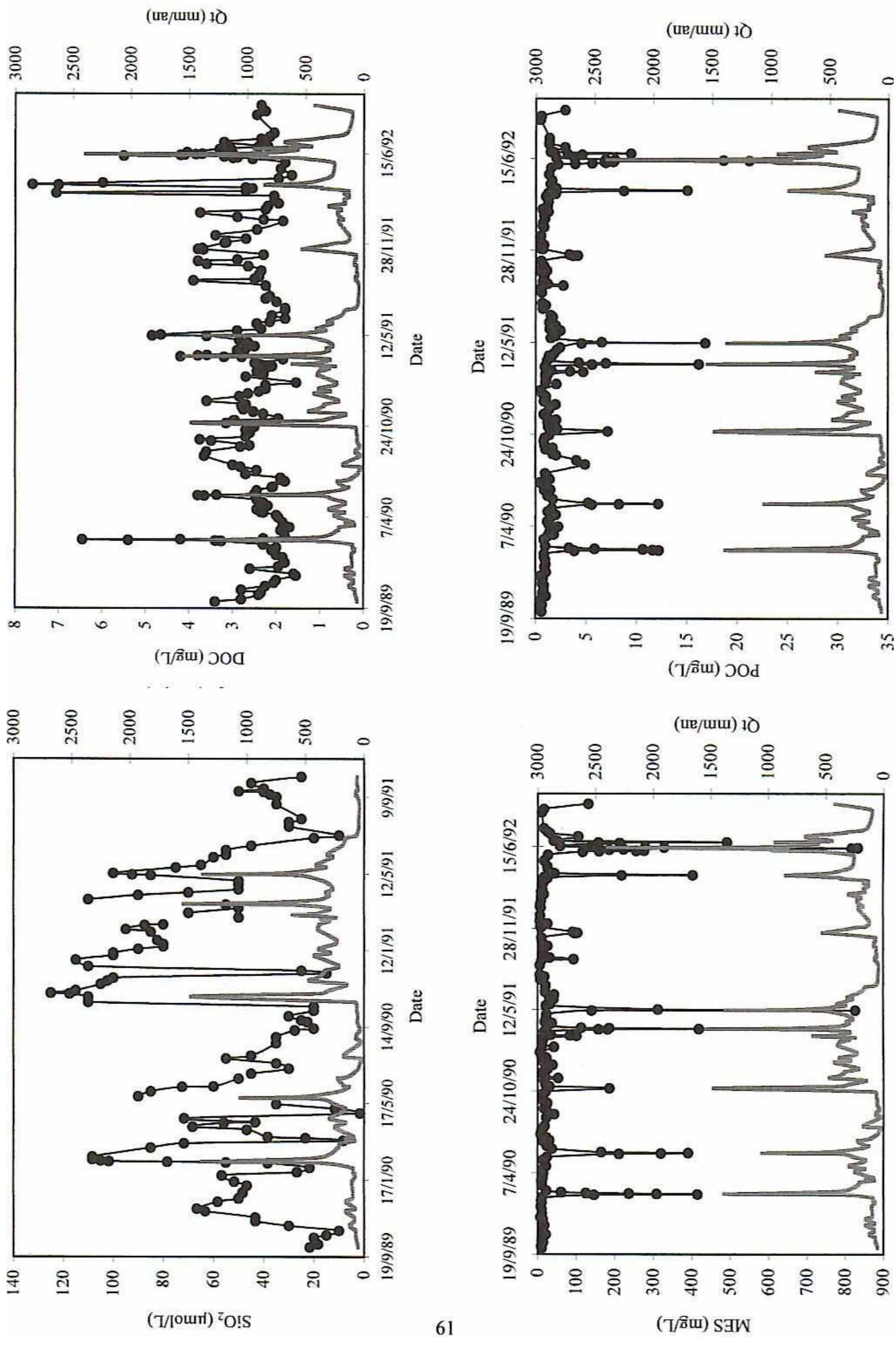
14/9/90
12/1/91
12/5/91
9/9/91

Figure A3 (2/3)



Qt (mm/an)
Cl⁻ (µmol/L)
HCO_3^- (µmol/L)
NO_3^- (µmol/L)
SO_4^{2-} (µmol/L)
Date
19/9/89
17/1/90
17/5/90
14/9/90
12/1/91
12/5/91
9/9/91

Figure A3 (3/3)



SiO$_2$ (µmol/L)
Qt (mm/an)
Date
19/9/89
17/1/90
17/5/90
14/9/90
12/1/91
12/5/91
9/9/91
DOC (mg/L)
Qt (mm/an)
Date
19/9/89
7/4/90
24/10/90
12/5/91
28/11/91
15/6/92
MES (mg/L)
Qt (mm/an)
Date
19/9/89
7/4/90
24/10/90
12/5/91
28/11/91
15/6/92
POC (mg/L)
Qt (mm/an)
Date
19/9/89
7/4/90
24/10/90
12/5/91
28/11/91
15/6/92

Tableau A6 - Débit total (Qt exprimé en m^3/s et en mm/an) et composantes estimées (QRs, QRi, QRb exprimés en mm/an), turbidité mesurée (N.T.U.), teneur en M.E.S. (mg/L) estimée à partir de la turbidité, concentration en carbone organique total (TOC, mg/L), température (°C), pH, conductivité (µS/cm), teneur en oxygène dissous (mg/L) et teneur en ammonium sur la Garonne à l'exutoire de Toulouse (10 000 km²). Données extraites de la base de données du Laboratoire de l'Eau de la Haute-Garonne pour la période allant de Juillet 1999 à Juillet 2000.

Jour	Niveau	Qt		Q Rs	Q Ri	Q Rb	Turbidité	MES	TOC		T°	pH	Cond.	O_2	NH_4^+
	m	m^3/s	mm/an		mm/an		N.T.U.	mg/L	mg/L	*mg/L*	°C		µS/cm	mg/L	mg/L
01/07/99	1.17	143	452	1	335	116	4	6	1.16	*1.13*	21	7.92	213	9.50	0.04
02/07/99	1.17	144	453	2	340	111	4	7	1.18	*1.11*	22	7.74	209	9.47	0.03
03/07/99	1.16	140	442	1	325	115	4	6	1.17	*1.14*	23	7.65	214	9.51	0.03
04/07/99	1.16	136	428	1	306	120	4	6	1.18	*1.18*	23	7.63	221	9.57	0.09
05/07/99	1.15	130	410	1	286	123	4	6	1.15	*1.21*	23	7.51	228	9.63	0.11
06/07/99	1.14	127	400	2	284	114	5	8	1.20	*1.20*	22	7.49	223	9.59	0.12
07/07/99	1.13	123	388	2	281	106	5	9	1.17	*1.17*	21	7.58	218	9.55	0.08
08/07/99	1.12	117	370	1	261	108	4	6	1.15	*1.20*	22	7.53	225	9.61	0.12
09/07/99	1.12	114	360	1	247	111	4	6	1.16	*1.23*	22	7.45	232	9.67	0.11
10/07/99	1.11	110	346	1	227	118	4	6	1.21	*1.30*	23	7.34	243	9.76	0.22
11/07/99	1.10	106	334	1	223	109	4	6	1.24	*1.27*	24	7.48	238	9.72	0.12
12/07/99	1.10	104	327	1	218	109	4	6	1.30	*1.28*	24	7.44	240	9.73	0.14
13/07/99	1.09	101	320	1	212	107	4	7	1.34	*1.28*	24	7.52	241	9.74	0.09
14/07/99	1.09	99	312	3	219	90	9	16	1.42	*1.24*	22	7.55	225	9.61	0.06
15/07/99	1.09	99	311	2	214	95	8	14	1.38	*1.26*	21	7.52	231	9.66	0.09
16/07/99	1.08	96	302	2	184	116	6	11	1.34	*1.40*	21	7.50	259	9.90	0.10
17/07/99	1.08	96	302	1	191	109	5	9	1.39	*1.35*	23	7.40	251	9.83	0.20
18/07/99	1.08	92	292	1	194	97	4	6	1.39	*1.28*	23	7.44	240	9.73	0.11
19/07/99	1.07	91	286	1	191	94	5	8	1.37	*1.28*	23	7.41	239	9.72	0.09
20/07/99	1.11	114	361	2	241	118	7	12	1.29	*1.29*	22	7.52	238	9.72	0.07
21/07/99	0.98	52	163	1	106	57	5	8	1.29	*1.32*	23	7.49	246	9.79	0.09
22/07/99	1.02	71	225	1	190	34	4	6	1.26	*0.93*	22	7.47	175	9.17	0.08
23/07/99	1.15	134	422	2	278	142	6	11	1.23	*1.31*	21	7.40	242	9.75	0.10
24/07/99	1.16	137	433	1	307	124	4	6	1.18	*1.19*	22	7.40	224	9.60	0.09
25/07/99	1.16	140	443	10	296	137	24	47	1.27	*1.41*	23	7.69	234	9.68	0.13
26/07/99	1.16	136	429	6	288	135	15	28	1.24	*1.34*	24	7.47	235	9.69	0.16
27/07/99	1.16	138	435	1	268	165	4	7	1.21	*1.37*	24	7.54	257	9.89	0.11
28/07/99	1.16	136	428	2	278	148	6	9	1.21	*1.32*	23	7.45	245	9.78	0.16
29/07/99	1.24	196	619	11	399	209	19	36	1.38	*1.42*	23	7.53	244	9.76	0.09
30/07/99	1.31	249	787	7	489	291	11	19	1.22	*1.41*	23	7.01	254	9.85	0.07
31/07/99	1.42	351	1107	85	674	348	76	154	2.28	*1.89*	22	7.48	242	9.73	0.05
01/08/99	1.41	344	1087	15	676	396	16	28	1.90	*1.43*	22	7.50	253	9.84	0.03
02/08/99	1.40	330	1041	11	652	379	12	21	1.77	*1.40*	23	7.48	252	9.84	0.08

Date	Niveau	Qt		Q Rs	Q Ri	Q Rb	Turbidité	MES	TOC		T°	pH	Cond.	O_2	NH_4^+
	m	m^3/s	mm/an	mm/an			N.T.U.	mg/L	mg/L	mg/L	°C		µS/cm	mg/L	mg/L
03/08/99	1.53	505	1595	777	592	225	417	975	3.33	*5.19*	22	7.55	229	9.44	0.09
04/08/99	1.39	341	1077	305	500	273	261	566		*3.60*	22	7.59	245	9.66	0.00
05/08/99	1.23	147	465	36	237	192	78	155	2.57	*2.09*	24	7.57	278	10.03	0.11
06/08/99	1.27	149	470	65	205	200	133	275	2.50	*2.65*	24	7.59	290	10.11	0.14
07/08/99	1.27	149	470	40	213	217	85	170	2.17	*2.26*	24	7.54	296	10.19	0.17
08/08/99	1.27	149	470	15	223	231	35	66	1.71	*1.85*	24	7.56	301	10.25	0.12
09/08/99	1.27	149	470	16	223	231	37	69	1.74	*1.87*	25	7.58	301	10.25	0.13
10/08/99	1.25	149	470	9	268	194	20	37	1.73	*1.57*	24	7.64	270	9.99	0.11
11/08/99	1.24	149	471				1	2							
12/08/99	1.23	149	471				2	3							
13/08/99	1.23	149	470				27	56							
14/08/99	1.22	149	470				1	2							
15/08/99	1.22	149	470				1	2							
16/08/99	1.21	149	470				1	2							
17/08/99	1.46	130	412	3	217	192	8	15	1.31	*1.58*	24	7.69	289	10.16	0.55
18/08/99	1.97	91	288	4	149	135	16	29	1.26	*1.64*	24	7.56	290	10.17	0.27
19/08/99	1.97	91	287	5	145	137	18	32	1.20	*1.68*	24	7.67	294	10.20	0.19
20/08/99	1.97	90	284	4	143	137	17	30	1.20	*1.67*	24	7.63	295	10.21	0.17
21/08/99	1.96	89	281	4	150	127	16	29	1.19	*1.61*	23	7.34	284	10.11	0.12
22/08/99	1.96	89	281	3	148	130	13	24	1.20	*1.61*	24	7.66	287	10.14	0.12
23/08/99	1.97	90	283	3	152	129	12	20	1.19	*1.58*	25	7.58	285	10.12	0.16
24/08/99	1.97	90	285	3	158	124	12	21	1.27	*1.54*	25	7.27	278	10.06	0.16
25/08/99	1.96	89	279	3	161	115	13	23	1.30	*1.51*	26	7.35	270	9.99	0.12
26/08/99	1.96	87	276	3	162	111	13	22	1.36	*1.49*	25	7.28	267	9.96	0.14
27/08/99	1.95	87	273	3	158	112	11	20	1.36	*1.49*	25	7.13	269	9.98	0.16
28/08/99	1.95	86	271	3	152	116	12	21	1.35	*1.53*	25	7.22	275	10.04	0.17
29/08/99	1.95	86	272	4	152	116	15	26	1.33	*1.55*	24	7.06	275	10.04	0.13
30/08/99	1.97	90	286	4	159	122	16	28	1.38	*1.56*	23	7.58	276	10.04	0.16
31/08/99	1.96	88	277	6	151	120	23	42	1.95	*1.63*	23	7.58	278	10.06	0.17
01/09/99	1.95	86	270	4	145	122	16	29	1.71	*1.61*	24	7.77	284	10.11	0.26
02/09/99	1.94	83	263	3	144	116	14	25	1.54	*1.57*	24	7.83	280	10.08	0.20
03/09/99	1.93	82	260	3	148	109	13	24	1.48	*1.52*	24	7.80	272	10.01	0.23
04/09/99	1.94	84	264	4	166	94	16	29	1.58	*1.42*	22	7.60	250	9.81	0.24
05/09/99	1.93	83	261	3	157	101	14	24	1.63	*1.46*	23	7.57	261	9.91	0.25
06/09/99	1.93	82	260	2	158	100	11	18	1.46	*1.43*	23	7.56	259	9.90	0.32
07/09/99	1.93	82	258	3	156	99	12	21	1.44	*1.45*	23	7.54	260	9.90	0.23
08/09/99	1.93	82	258	3	159	97	12	21	1.39	*1.43*	23	7.54	257	9.88	0.26
09/09/99	1.92	81	255	2	153	100	11	19	1.39	*1.45*	23	7.58	262	9.92	0.31
10/09/99	1.92	80	252	2	150	99	10	18	1.37	*1.45*	23	7.73	263	9.93	0.26

Date	Niveau	Qt		Q Rs	Q Ri	Q Rb	Turbidité	MES	TOC		T°	pH	Cond.	O_2	NH_4^+
	m	m^3/s	mm/an		mm/an		N.T.U.	mg/L	mg/L	mg/L	°C		µS/cm	mg/L	mg/L
11/09/99	1.91	79	248	2	147	100	10	18	1.32	*1.46*	24	7.65	265	9.95	0.25
12/09/99	1.91	78	246	2	145	99	10	17	1.35	*1.46*	24	7.75	266	9.95	0.18
13/09/99	1.93	82	258	2	144	112	8	14	1.35	*1.51*	24	7.51	278	10.06	0.28
14/09/99	1.93	81	257	2	142	113	9	15	1.45	*1.53*	23	7.43	279	10.07	0.28
15/09/99	1.92	79	250	3	136	111	13	23	1.48	*1.57*	21	7.52	282	10.09	0.16
16/09/99	1.94	84	266	3	152	110	14	24	1.43	*1.52*	21	7.56	271	10.00	0.14
17/09/99	1.97	89	281	3	168	110	11	19	1.39	*1.45*	20	7.50	262	9.93	0.16
18/09/99	1.91	78	246	2	153	91	10	17	1.43	*1.40*	19	7.47	255	9.86	0.15
19/09/99	1.89	74	235	2	148	85	8	14	1.42	*1.37*	19	7.44	252	9.83	0.18
20/09/99	1.90	76	239	2	156	81	10	17	1.44	*1.34*	18	7.52	243	9.76	0.12
21/09/99	1.98	93	293	3	191	99	11	19	1.34	*1.35*	18	7.42	243	9.76	0.12
22/09/99	1.86	68	215	1	139	75	7	12	1.32	*1.33*	18	7.54	247	9.79	0.18
23/09/99	1.84	65	204	1	125	78	8	13	1.56	*1.40*	20	7.54	258	9.89	0.16
24/09/99	1.83	64	202	1	122	80	7	11	1.51	*1.42*	21	7.50	262	9.93	0.21
25/09/99	1.94	85	270	2	173	95	7	13	1.65	*1.34*	21	7.54	247	9.80	0.21
26/09/99	1.98	93	295	2	186	107	7	12	1.69	*1.37*	20	7.40	252	9.84	0.18
27/09/99	1.80	59	186	1	114	71	7	12	1.70	*1.40*	20	7.32	258	9.89	0.15
28/09/99	1.78	55	175	1	107	67	7	12	1.70	*1.40*	20	7.37	259	9.89	0.13
29/09/99	1.79	57	180	1	103	76	7	11	1.73	*1.48*	20	7.40	273	10.02	0.20
30/09/99	1.79	48	152	1	89	62	7	10	1.75	*1.44*	20	7.44	267	9.97	0.18
01/10/99	1.80	59	186	1	105	80	7	11	1.71	*1.49*	19	7.62	276	10.04	0.16
02/10/99	1.79	58	183	1	101	81	6	10	1.69	*1.51*	19	7.71	279	10.08	0.17
03/10/99	1.79	58	183	1	104	78	7	11	1.67	*1.48*	19	7.91	275	10.03	0.18
04/10/99	1.79	57	180	1	101	78	7	11	1.65	*1.50*	17	7.69	277	10.05	0.21
05/10/99	1.80	58	183	1	107	75	6	10	1.72	*1.45*	16	8.11	268	9.98	0.15
06/10/99	1.79	58	182	1	104	77	6	10	1.67	*1.47*	16	8.03	272	10.01	0.13
07/10/99	1.79	57	180	1	104	75	5	9	1.68	*1.46*	15	7.93	271	10.00	0.21
08/10/99	1.79	57	181	1	106	74	6	11	1.70	*1.45*	15	8.16	268	9.97	0.15
09/10/99	1.80	58	183	1	109	73	7	12	1.73	*1.43*	16	8.18	264	9.94	0.13
10/10/99	1.79	57	181	1	102	77	8	13	1.63	*1.49*	16	7.98	275	10.03	0.11
11/10/99	1.79	47	150	1	85	64	8	11	1.63	*1.49*	16	8.13	275	10.04	0.13
12/10/99	1.79	57	180	2	106	72	11	19	1.69	*1.47*	16	8.14	266	9.96	0.23
13/10/99	1.79	57	181	2	107	72	12	22	1.62	*1.48*	16	8.03	265	9.95	0.20
14/10/99	1.79	57	180	2	107	71	12	21	1.61	*1.47*	17	8.16	263	9.93	0.14
15/10/99	1.79	57	180	2	107	71	13	24	1.57	*1.48*	17	8.01	263	9.93	0.12
16/10/99	1.78	56	177	2	106	69	11	20	1.58	*1.46*	17	8.12	262	9.93	0.11
17/10/99	1.78	56	178	2	100	76	12	22	1.60	*1.53*	17	8.05	275	10.04	0.16
18/10/99	1.79	57	178	2	132	44	14	25	1.77	*1.20*	17	7.92	211	9.48	0.23
19/10/99	1.79	57	180	2	100	79	10	17	1.93	*1.53*	17	7.83	279	10.07	0.36

Date	Niveau	Qt		Q Rs	Q Ri	Q Rb	Turbidité	MES	TOC		T°	pH	Cond.	O_2	NH_4^+
	m	m^3/s	mm/an	mm/an			N.T.U.	mg/L	mg/L	mg/L	°C		µS/cm	mg/L	mg/L
20/10/99	1.79	57	181	1	106	75	5	8	1.88	1.44	16	7.97	270	9.99	0.16
21/10/99	1.79	58	182	1	116	65	5	9	1.78	1.34	15	7.93	249	9.82	0.13
22/10/99	1.81	60	189	1	120	68	6	10	1.84	1.35	16	7.84	250	9.82	0.16
23/10/99	1.83	63	199	1	123	75	5	8	1.94	1.37	16	7.84	255	9.87	0.26
24/10/99	1.92	81	256	1	159	96	6	11	1.83	1.38	16	7.81	256	9.87	0.09
25/10/99	2.04	107	339	3	236	100	9	16	1.52	1.25	15	7.92	227	9.62	0.06
26/10/99	2.05	110	346	3	259	84	11	20	1.19	1.16	14	7.83	209	9.46	0.10
27/10/99	1.96	88	277	3	209	65	13	22	2.17	1.16	14	7.76	206	9.44	0.19
28/10/99	1.92	80	251	4	191	56	18	32	1.27	1.18	14	7.67	202	9.40	0.24
29/10/99	1.91	78	245	4	181	61	16	29	1.27	1.21	14	7.79	211	9.48	0.18
30/10/99	1.90	77	242	3	183	57	13	23	1.32	1.16	14	7.74	205	9.43	0.21
31/10/99	1.90	75	238	2	171	65	10	17	1.31	1.21	15	7.67	219	9.55	0.19
01/11/99	1.90	75	237	1	160	75	7	13	1.31	1.28	15	7.78	235	9.69	0.25
02/11/99	1.90	75	237	1	154	82	7	12	1.31	1.33	16	7.75	245	9.77	0.20
03/11/99	1.90	76	238	2	152	84	9	16	1.36	1.36	15	7.76	248	9.80	0.24
04/11/99	1.91	79	248	4	168	77	16	29	1.42	1.33	13	7.95	233	9.67	0.11
05/11/99	1.92	79	249	2	156	91	9	15	1.40	1.38	13	7.90	253	9.84	0.19
06/11/99	1.91	78	246	1	149	96	5	9	1.27	1.40	12	7.82	261	9.91	0.20
07/11/99	1.93	82	259	2	155	103	7	13	1.14	1.43	12	7.82	264	9.94	0.16
08/11/99	1.96	87	276	2	174	99	8	13	1.16	1.36	11	7.76	251	9.83	0.17
09/11/99	1.93	83	260	1	157	102	5	8	1.22	1.40	12	7.68	262	9.92	0.18
10/11/99	1.92	81	255	1	158	95	6	11	1.21	1.38	11	7.82	256	9.87	0.17
11/11/99	1.92	80	253	1	168	84	5	8	1.15	1.29	10	7.84	240	9.74	0.14
12/11/99	1.92	80	252	1	166	85	4	7	1.15	1.29	10	7.72	242	9.75	0.21
13/11/99	1.95	87	275	3	190	83	10	18	1.31	1.27	9	7.75	230	9.64	0.19
14/11/99	2.24	166	523	20	351	153	39	75	1.56	1.50	9	8.00	230	9.63	0.05
15/11/99	2.28	179	564	39	345	180	71	139	2.31	1.84	9	8.07	243	9.73	0.03
16/11/99	2.18	145	458	33	275	150	72	142	2.59	1.87	8	8.10	247	9.76	0.02
17/11/99	2.06	112	353	10	231	113	29	54	2.23	1.47	8	8.14	238	9.71	0.01
18/11/99	2.01	98	311	6	213	92	21	39	2.00	1.35	8	8.11	229	9.63	0.02
19/11/99	2.04	108	341	6	237	97	20	36	1.72	1.32	8	8.11	225	9.60	0.03
20/11/99	2.30	186	588	12	409	166	23	41	1.58	1.34	7	8.14	224	9.59	0.01
21/11/99	2.28	179	565	5	378	182	10	17	1.63	1.30	6	8.17	237	9.71	0.01
22/11/99	2.15	139	437	3	260	174	8	14	1.97	1.44	6	8.20	264	9.94	0.05
23/11/99	2.02	102	322	2	203	116	8	14	2.06	1.37	5	8.27	251	9.83	0.02
24/11/99	2.01	99	313	2	209	103	6	10	1.41	1.29	6	8.25	239	9.73	0.01
25/11/99	2.01	100	316	1	199	115	5	9	1.29	1.35	6	8.26	252	9.84	0.01
26/11/99	2.01	98	311	1	182	128	4	7	1.47	1.44	6	8.33	268	9.98	0.00
27/11/99	2.00	97	308	1	183	123	4	7	1.28	1.42	6	8.33	265	9.95	0.01

Date	Niveau	Qt		Q Rs	Q Ri	Q Rb	Turbidité	MES	TOC		T°	pH	Cond.	O_2	NH_4^+
	m	m^3/s	mm/an	mm/an			N.T.U.	mg/L	mg/L	mg/L	°C		µS/cm	mg/L	mg/L
28/11/99	2.02	102	321	1	202	119	3	5	1.19	1.35	7	8.24	253	9.85	0.02
29/11/99	2.01	100	314	1	179	135	3	5	1.30	1.46	8	8.21	275	10.04	0.11
30/11/99	1.98	92	290	1	173	116	4	7	1.31	1.41	8	8.28	265	9.95	0.03
01/12/99	2.01	99	312	0	212	100	2	3	1.16	1.24	6	8.41	235	9.69	0.00
02/12/99	1.99	94	296	1	196	99	2	4	1.16	1.27	6	8.18	241	9.75	0.04
03/12/99	1.96	89	280	0	190	90	2	3	1.14	1.24	6	8.21	236	9.70	0.02
04/12/99	1.96	88	278	0	192	86	2	3	1.13	1.22	6	8.28	231	9.66	0.01
05/12/99	1.93	82	260	0	173	86	2	3	1.13	1.26	7	8.24	240	9.73	0.04
06/12/99	1.97	91	286	1	192	94	3	4	1.20	1.26	6	8.34	239	9.72	0.04
07/12/99	1.99	94	295	1	191	103	3	5	1.34	1.31	5	8.30	246	9.79	0.14
08/12/99	1.96	89	280	1	180	99	3	4	1.31	1.31	6	8.22	248	9.80	0.19
09/12/99	1.93	81	256	0	161	95	2	4	1.34	1.34	6	8.24	254	9.85	0.21
10/12/99	1.93	82	259	1	174	84	3	5	1.33	1.26	6	8.20	238	9.71	0.17
11/12/99	1.94	83	262	1	178	82	4	6	1.32	1.24	6	8.26	234	9.68	0.08
12/12/99	2.00	96	303	1	205	97	4	7	1.40	1.25	7	8.19	235	9.70	0.06
13/12/99	2.04	107	337	1	216	120	4	7	1.50	1.33	7	8.12	248	9.81	0.14
14/12/99	2.02	102	323	2	203	119	6	9	1.66	1.36	7	8.23	253	9.85	0.16
15/12/99	2.13	134	422	8	273	141	21	38	1.76	1.42	7	8.13	243	9.75	0.14
16/12/99	2.41	233	736	45	400	292	62	121	2.33	1.91	6	8.19	270	9.97	0.04
17/12/99	2.24	167	528	19	292	216	38	73	2.47	1.72	6	8.21	272	10.00	0.05
18/12/99	2.16	139	439	8	260	171	20	36	2.02	1.52	6	8.22	263	9.92	0.05
19/12/99	2.49	284	897	69	492	336	77	154	2.01	2.01	6	7.47	264	9.91	0.04
20/12/99	2.88	557	1759	301	792	666	164	342	3.77	2.85	7	8.26	277	9.98	0.05
21/12/99	2.62	352	1109	128	624	358	113	231	3.24	2.25	6	8.31	250	9.77	0.04
22/12/99	2.45	254	803	29	490	284	38	72	2.20	1.61	5	8.14	252	9.82	0.04
23/12/99	2.40	229	722	13	442	267	20	36	1.73	1.48	5	8.30	255	9.86	0.03
24/12/99	2.24	165	522	6	323	192	13	23	1.49	1.42	6	8.31	254	9.85	0.02
25/12/99	2.14	133	419	4	248	168	10	17	1.42	1.46	6	8.31	265	9.95	0.02
26/12/99	2.12	128	403	3	226	174	9	16	1.39	1.51	7	8.33	276	10.05	0.03
27/12/99	2.16	141	446	8	254	183	20	37	1.50	1.57	8	8.30	270	9.99	0.07
28/12/99	2.38	201	634	51	306	277	88	161	2.49	2.17	8	8.29	287	10.11	0.07
29/12/99	2.53	295	929	146	424	359	152	315	3.36	2.75	7	8.26	278	10.00	0.04
30/12/99	2.43	247	778	54	381	342	71	140	2.86	2.08	6	8.29	287	10.11	0.04
31/12/99	2.26	172	543	15	261	267	30	56	2.15	1.81	6	8.31	300	10.25	0.03
01/01/00	2.17	141	446	4	212	230	11	20	1.54	1.70	7	8.43	307	10.31	0.03
02/01/00	2.16	140	442	6	198	238	15	27	1.59	1.77	7	8.36	316	10.39	0.02
03/01/00	2.17	142	448	5	200	244	12	22	1.55	1.76	7	8.39	317	10.40	0.03
04/01/00	2.13	131	413	4	189	220	10	18	1.46	1.72	7	8.40	313	10.37	0.03
05/01/00	2.09	120	378	2	184	191	7	12	2.01	1.64	7	8.40	303	10.28	0.02

Date	Niveau	Qt		Q Rs	Q Ri	Q Rb	Turbidité	MES	TOC		T°	pH	Cond.	O_2	NH_4^+
	m	m^3/s	mm/an	mm/an			N.T.U.	mg/L	mg/L	mg/L	°C		µS/cm	mg/L	mg/L
06/01/00	2.05	108	341	1	167	173	5	8	1.30	1.62	7	8.40	303	10.28	0.03
07/01/00	2.03	105	330	1	163	166	4	7	1.23	1.61	6	8.39	301	10.27	0.03
08/01/00	2.03	104	329	1	166	163	3	5	1.26	1.59	6	8.36	298	10.24	0.02
09/01/00	2.03	103	325	1	160	164	2	4	1.28	1.61	6	8.30	302	10.27	0.03
10/01/00	2.03	104	329	1	152	176	3	4	1.32	1.66	6	8.30	313	10.37	0.05
11/01/00	2.06	110	348	2	167	179	7	12	1.50	1.66	6	8.36	306	10.31	0.13
12/01/00	2.06	110	349	2	181	166	8	13	1.59	1.59	5	8.34	292	10.18	0.13
13/01/00	2.04	106	335	1	181	153	4	7	1.44	1.53	5	8.38	285	10.13	0.14
14/01/00	2.03	105	330	1	179	150	4	7	1.36	1.52	5	8.38	284	10.11	0.12
15/01/00	2.03	103	325	1	184	140	4	6	1.60	1.47	5	8.39	275	10.04	0.04
16/01/00	1.98	92	289	1	164	124	4	6	1.35	1.47	5	8.33	275	10.04	0.06
17/01/00	1.94	83	262	1	142	119	4	6	1.33	1.52	5	8.37	284	10.12	0.10
18/01/00	1.95	87	274	1	149	124	4	7	1.47	1.51	5	8.36	283	10.11	0.18
19/01/00	1.96	87	276	1	163	112	5	9	1.25	1.43	4	8.24	267	9.97	0.16
20/01/00	1.95	86	271	2	167	103	8	13	1.22	1.40	5	8.32	257	9.88	0.16
21/01/00	1.93	83	261	2	155	104	8	13	1.20	1.44	4	8.33	264	9.94	0.15
22/01/00	1.93	82	259	2	149	109	8	13	1.12	1.48	4	8.38	272	10.01	0.08
23/01/00	1.93	82	259	2	138	119	8	13	1.10	1.56	4	8.21	286	10.13	0.13
24/01/00	1.90	76	239	2	122	115	8	13	1.11	1.60	4	8.37	294	10.20	0.14
25/01/00	1.90	76	240	2	120	118	10	17	1.25	1.64	4	8.49	298	10.24	0.20
26/01/00	1.90	76	240	3	129	108	14	24	1.18	1.59	4	8.50	283	10.11	0.17
27/01/00	1.90	76	240	3	126	110	16	28	1.19	1.62	4	8.54	287	10.13	0.19
28/01/00	1.90	77	242	4	130	108	17	31	1.18	1.61	5	8.58	283	10.10	0.17
29/01/00	1.91	77	244	3	137	104	16	28	1.07	1.56	5	8.53	275	10.03	0.10
30/01/00	1.90	76	239	3	127	109	13	24	1.15	1.60	7	8.29	286	10.13	0.18
31/01/00	1.89	75	236	2	117	117	10	18	1.25	1.65	7	8.24	300	10.25	0.22
01/02/00	1.89	75	236	2	117	117	9	15	1.29	1.64	7	8.41	300	10.25	0.19
02/02/00	1.89	74	233	2	120	112	9	15	1.33	1.60	8	8.50	293	10.19	0.16
03/02/00	1.91	77	243	2	136	105	11	20	1.42	1.53	8	8.39	276	10.05	0.11
04/02/00	2.01	99	312	4	196	112	15	27	1.51	1.42	7	8.34	251	9.82	0.02
05/02/00	2.00	98	308	3	191	114	10	17	1.40	1.40	8	8.50	254	9.86	0.03
06/02/00	1.97	90	285	2	171	111	9	16	1.51	1.43	9	8.30	262	9.92	0.13
07/02/00	1.96	87	276	2	177	97	10	16	1.59	1.36	9	8.26	248	9.80	0.15
08/02/00	1.94	84	265	2	160	102	10	18	1.59	1.43	9	8.17	260	9.90	0.16
09/02/00	1.93	82	260	2	165	93	10	18	1.58	1.38	9	8.10	250	9.82	0.14
10/02/00	1.94	85	268	3	175	89	14	25	1.60	1.36	8	8.30	242	9.75	0.12
11/02/00	1.94	85	267	4	176	88	15	27	1.50	1.36	9	8.25	240	9.73	0.12
12/02/00	1.95	86	272	4	175	93	15	26	1.48	1.39	8	8.26	245	9.78	0.07
13/02/00	1.95	86	270	3	172	95	12	22	1.44	1.38	8	8.32	248	9.80	0.06

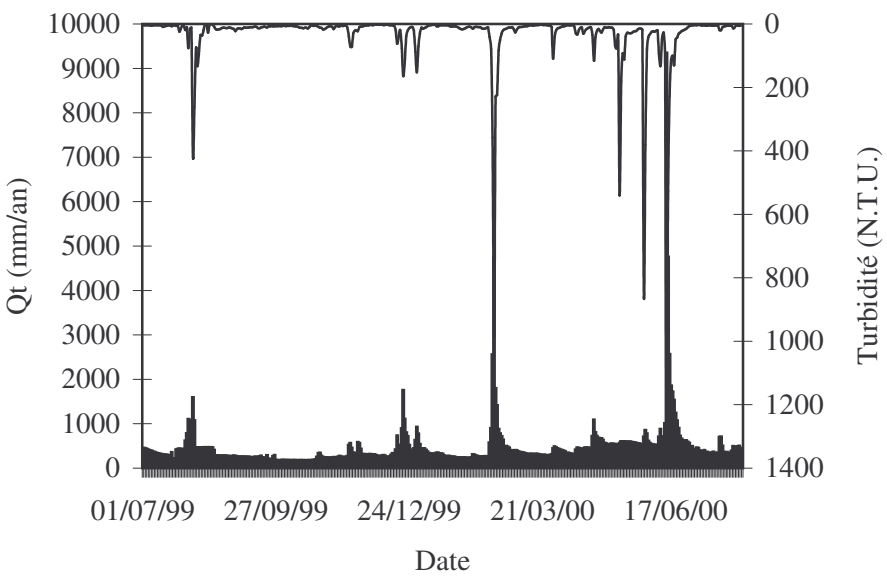
Date	Niveau	Qt		Q Rs	Q Ri	Q Rb	Turbidité	MES	TOC		T°	pH	Cond.	O_2	NH_4^+
	m	m^3/s	mm/an	mm/an			N.T.U.	mg/L	mg/L	mg/L	°C		µS/cm	mg/L	mg/L
14/02/00	1.94	84	267	3	167	97	11	20	1.47	1.40	8	8.19	253	9.84	0.11
15/02/00	2.23	183	578	23	351	204	41	79	1.93	1.64	9	8.27	252	9.82	0.11
16/02/00	2.51	286	902	70	576	256	79	156	3.15	1.84	9	8.33	231	9.63	0.07
17/02/00	2.99	812	2562	1047	1031	483	358	818	4.16	4.59	8	8.29	237	9.54	0.10
18/02/00	3.53	1506	4754	5508	-501	-253	985	2317	8.41	10.76	8	8.34	240	9.25	0.15
19/02/00	2.90	571	1801	440	887	475	229	488		3.28	9		244	9.67	0.02
20/02/00	2.76	449	1416	337	653	426	224	476	3.44	3.30	9	8.05	257	9.78	0.04
21/02/00	2.50	280	883	73	477	333	83	166	2.37	2.07	8	8.42	266	9.92	0.05
22/02/00	2.44	248	782	38	415	329	51	97	1.88	1.85	8	8.41	277	10.04	0.06
23/02/00	2.40	228	721	20	400	301	30	55	1.53	1.66	8	8.32	273	10.01	0.04
24/02/00	2.34	203	640	12	364	264	20	37	1.32	1.57	8	8.33	271	9.99	0.06
25/02/00	2.06	130	410	6	226	178	17	30	1.29	1.58	9	8.33	278	10.06	0.08
26/02/00	2.22	159	502	7	280	215	15	27	1.24	1.56	9	8.30	276	10.04	0.07
27/02/00	2.21	154	486	5	274	206	13	22	1.10	1.53	10	7.98	274	10.03	0.06
28/02/00	2.18	146	461	5	255	201	11	20	1.15	1.54	10	8.30	278	10.06	0.08
29/02/00	2.13	129	408	4	227	177	12	20	1.16	1.54	11	8.30	277	10.06	0.09
01/03/00	2.11	125	393	3	238	151	10	17	1.21	1.43	10	8.30	260	9.90	0.09
02/03/00	2.12	126	398	6	235	158	16	29	1.26	1.50	10	8.25	264	9.94	0.08
03/03/00	2.13	129	409	10	225	174	27	49	1.50	1.65	9	8.27	276	10.04	0.07
04/03/00	2.12	127	402	7	237	158	18	33	1.46	1.51	10	8.27	264	9.94	0.02
05/03/00	2.09	120	378	4	218	156	12	20	1.41	1.50	9	8.30	270	9.99	0.01
06/03/00	2.08	117	368	3	208	157	10	16	1.37	1.51	9	8.31	275	10.03	0.02
07/03/00	2.07	114	359	3	211	145	10	16	1.34	1.46	9	8.36	266	9.96	0.02
08/03/00	2.06	113	355	3	210	143	8	14	1.20	1.45	10	8.30	266	9.96	0.03
09/03/00	2.05	110	347	2	204	141	7	12	1.12	1.45	10	8.33	267	9.97	0.03
10/03/00	2.04	106	334	2	195	137	7	12	1.13	1.45	11	8.34	268	9.98	0.03
11/03/00	2.03	103	324	2	194	129	7	12	1.12	1.43	12	8.32	263	9.94	0.03
12/03/00	2.02	101	317	1	186	130	5	8	1.14	1.44	12	8.32	268	9.98	0.09
13/03/00	2.02	102	323	1	189	133	4	7	1.17	1.43	12	8.32	268	9.98	0.10
14/03/00	2.02	102	323	1	206	116	4	7	1.15	1.33	12	8.33	249	9.82	0.04
15/03/00	2.02	101	318	1	213	103	5	8	1.17	1.27	12	8.45	237	9.71	0.01
16/03/00	2.02	102	322	1	224	97	4	6	1.16	1.22	11	8.48	229	9.64	0.02
17/03/00	2.03	103	326	1	230	95	4	6	1.22	1.20	11	8.51	225	9.61	0.03
18/03/00	2.02	102	321	1	224	96	4	6	1.33	1.21	12	8.50	228	9.63	0.03
19/03/00	2.01	100	315	1	215	99	3	5	1.41	1.24	11	8.36	234	9.68	0.04
20/03/00	2.00	97	307	0	199	108	2	3	1.53	1.30	11	8.41	246	9.79	0.10
21/03/00	2.00	73	231	0	154	76	3	4	1.45	1.26	11	8.61	239	9.73	0.02
22/03/00	2.00	97	306	1	211	94	3	6	1.36	1.22	11	8.57	231	9.65	0.03
23/03/00	1.98	93	294	1	198	95	3	5	1.52	1.25	11	8.48	236	9.71	0.03

Date	Niveau	Qt		Q Rs	Q Ri	Q Rb	Turbidité	MES	TOC		T°	pH	Cond.	O_2	NH_4^+
	m	m^3/s	mm/an	mm/an			N.T.U.	mg/L	mg/L	mg/L	°C		µS/cm	mg/L	mg/L
24/03/00	1.98	93	294	1	197	96	4	7	1.57	1.27	11	8.46	238	9.72	0.03
25/03/00	1.99	94	297	1	204	92	5	8	1.46	1.24	12	8.43	232	9.66	0.03
26/03/00	1.98	93	293	1	199	94	4	7	1.47	1.26	12	8.27	235	9.70	0.05
27/03/00	2.01	99	313	3	217	94	10	17	1.60	1.26	11	8.18	229	9.64	0.04
28/03/00	2.17	142	448	49	239	159	109	220	3.25	2.27	10	7.75	261	9.87	0.03
29/03/00	2.21	155	490	19	284	186	41	79	2.68	1.69	10	8.24	262	9.91	0.01
30/03/00	2.19	149	470	9	279	182	21	37	2.18	1.52	10	8.31	262	9.92	0.00
31/03/00	2.17	142	448	5	270	172	14	24	1.80	1.46	10	8.29	260	9.90	0.01
01/04/00	2.15	137	433	5	259	169	12	22	1.64	1.46	10	8.32	262	9.92	0.01
02/04/00	2.14	132	418	4	253	162	10	18	1.33	1.43	10		260	9.91	0.00
03/04/00	2.12	129	406	3	259	144	7	13	1.48	1.35	11	8.33	249	9.81	0.02
04/04/00	2.11	126	398	3	249	145	8	14	1.48	1.38	11	8.31	253	9.84	0.04
05/04/00	2.09	120	378	2	242	134	6	10	1.43	1.34	11	8.20	248	9.81	0.14
06/04/00	2.08	106	335	1	221	113	4	7	1.43	1.29	10	8.32	242	9.75	0.07
07/04/00	2.06	111	349	1	240	108	4	7	2.82	1.23	11	8.34	231	9.66	0.09
08/04/00	2.04	106	336	1	233	102	4	7	2.35	1.22	11	8.27	229	9.64	0.10
09/04/00	2.03	104	328	1	221	106	4	7	1.04	1.26	11	8.06	237	9.71	0.14
10/04/00	2.01	100	316	1	196	119	4	7	1.06	1.36	12	8.22	256	9.87	0.18
11/04/00	2.02	102	321	2	207	111	8	14	1.07	1.34	12	8.23	246	9.78	0.13
12/04/00	2.14	132	417	11	269	136	29	55	1.42	1.48	11	8.19	241	9.73	0.04
13/04/00	2.19	147	465	15	305	145	33	62	2.08	1.49	11	8.24	236	9.69	0.05
14/04/00	2.18	145	456	8	303	146	20	36	1.72	1.38	11	8.32	237	9.70	0.04
15/04/00	2.17	141	446	5	298	143	13	22	1.38	1.32	12	8.31	236	9.70	0.03
16/04/00	2.16	138	436	4	292	140	11	20	1.21	1.31	13	8.32	237	9.70	0.03
17/04/00	2.16	139	439	13	276	150	31	58	1.35	1.53	13	8.18	247	9.78	0.06
18/04/00	2.18	147	464	9	309	145	22	40	1.40	1.39	13	8.26	235	9.69	0.04
19/04/00	2.18	147	464	7	326	132	17	30	1.36	1.29	13	8.25	224	9.59	0.04
20/04/00	2.18	147	464	5	331	129	13	23	1.28	1.24	13	8.31	221	9.57	0.04
21/04/00	2.18	144	455	4	325	126	11	20	1.23	1.23	14	8.30	221	9.57	0.04
22/04/00	2.18	145	458	4	328	126	11	19	1.12	1.22	15	8.32	220	9.56	0.05
23/04/00	2.36	230	725	24	525	175	35	67	1.23	1.37	15	8.19	211	9.47	0.05
24/04/00	2.61	346	1091	129	750	212	116	236	3.03	2.02	13	8.15	204	9.38	0.05
25/04/00	2.45	256	807	33	568	206	42	81	1.93	1.46	13	8.24	217	9.52	0.05
26/04/00	2.40	230	725	14	513	198	21	39	1.40	1.31	13	8.23	221	9.56	0.05
27/04/00	2.37	217	684	10	496	178	16	28	1.16	1.23	14	8.19	215	9.52	0.05
28/04/00	2.36	214	674	13	504	157	22	40	1.17	1.23	12	8.18	206	9.44	0.06
29/04/00	2.36	214	675	17	477	180	27	51	1.34	1.35	12	8.26	219	9.55	0.05
30/04/00	2.34	202	637	10	447	179	17	31	1.30	1.29	13	8.30	223	9.58	0.04
01/05/00	2.28	182	574	5	400	169	10	18	0.54	1.26	15		227	9.62	0.02

Date	Niveau	Qt		Q Rs	Q Ri	Q Rb	Turbidité	MES	TOC		T°	pH	Cond.	O_2	NH_4^+
	m	m^3/s	mm/an	mm/an			N.T.U.	mg/L	mg/L	mg/L	°C		µS/cm	mg/L	mg/L
02/05/00	2.27	177	557	6	389	162	12	20	1.12	1.26	15	8.16	226	9.61	0.06
03/05/00	2.25	170	536	6	384	147	12	21	1.18	1.23	15	8.26	220	9.56	0.07
04/05/00	2.25	170	536	5	404	127	10	18	1.12	1.14	16	8.23	206	9.44	0.07
05/05/00	2.27	175	551	6	441	104	12	21	1.12	1.06	15	8.18	189	9.30	0.05
06/05/00	2.26	174	550	6	451	93	12	20	1.09	1.02	15	8.14	182	9.23	0.05
07/05/00	2.26	173	546	9	456	81	19	34	1.14	1.04	15	8.09	175	9.17	0.05
08/05/00	2.26	172	544	37	438	70	69	136	1.37	1.45	15	8.02	174	9.14	0.06
09/05/00	2.26	172	542	41	435	66	77	153	1.48	1.51	15	8.01	173	9.12	0.08
10/05/00	2.25	171	538	18	448	72	36	68	1.27	1.16	15	8.03	172	9.14	0.06
11/05/00	2.28	181	570	359	248	-37	539	1261	2.59	6.06	14	8.01	172	8.88	0.04
12/05/00	2.31	192	605	114	441	49	180	378	2.11	2.43	14	8.02	172	9.07	0.04
13/05/00	2.31	191	603	57	463	83	93	188	1.74	1.70	15	8.05	181	9.19	0.05
14/05/00	2.31	191	602	68	459	75	111	227	1.72	1.85	16	8.02	178	9.16	0.05
15/05/00	2.31	191	603	22	492	88	39	73	1.33	1.21	17	8.09	177	9.18	0.05
16/05/00	2.30	189	595	15	499	81	28	51	1.21	1.09	17	8.09	172	9.14	0.03
17/05/00	2.31	190	599	16	517	66	29	53	1.19	1.05	16	7.93	163	9.06	0.03
18/05/00	2.30	189	598	16	529	53	29	55	1.19	1.01	15	7.96	155	8.99	0.03
19/05/00	2.30	187	590	15	515	59	28	52	1.07	1.03	14	8.02	159	9.03	0.03
20/05/00	2.29	185	584	13	509	62	25	45	0.97	1.01	14	8.07	161	9.05	0.03
21/05/00	2.29	183	578	12	498	68	23	41	0.97	1.01	14	8.03	165	9.08	0.02
22/05/00	2.28	180	569	11	488	69	22	40	0.98	1.01	14	8.07	166	9.09	0.03
23/05/00	2.27	176	556	8	478	70	17	30	0.99	0.98	15	8.17	167	9.10	0.03
24/05/00	2.27	177	557	7	474	76	15	26	0.99	0.98	16	8.16	170	9.13	0.05
25/05/00	2.26	171	540	7	458	75	15	26	1.02	0.99	16	8.08	172	9.14	0.05
26/05/00	2.24	166	522	9	442	72	18	33	1.11	1.01	16	8.13	171	9.14	0.06
27/05/00	2.37	225	710	741	90	-121	861	2087	2.79	9.51	16	7.95	184	8.81	0.12
28/05/00	2.49	271	856	367	423	66	381	857	2.72	4.55	15	8.03	199	9.20	0.04
29/05/00	2.44	247	781	61	600	120	78	157	1.99	1.59	15	8.01	185	9.23	0.03
30/05/00	2.32	195	616	24	491	101	41	78	1.65	1.26	16	8.04	183	9.23	0.04
31/05/00	2.28	180	567	17	454	96	33	61	1.41	1.20	17	8.06	184	9.24	0.04
01/06/00	2.26	173	545	13	447	86	25	47	1.26	1.11	17	8.07	179	9.20	0.03
02/06/00	2.25	168	531	11	430	91	23	42	1.17	1.12	19	8.12	184	9.24	0.04
03/06/00	2.24	166	525	12	424	88	25	46	1.14	1.13	20	8.16	183	9.24	0.04
04/06/00	2.24	166	525	11	439	76	22	40	1.15	1.06	19	8.02	174	9.16	0.03
05/06/00	2.24	165	520	10	440	71	20	37	1.24	1.03	17	7.92	171	9.13	0.05
06/06/00	2.37	225	709	69	539	101	95	196	1.70	1.75	16	7.96	183	9.20	0.08
07/06/00	2.50	280	883	120	613	150	132	272	2.65	2.14	15	8.13	198	9.31	0.03
08/06/00	2.40	228	719	32	550	137	47	90	2.10	1.37	15	8.17	194	9.32	0.02
09/06/00	2.34	202	636	16	486	134	27	50	1.64	1.24	17	8.24	199	9.37	0.02

Date	Niveau	Qt		Q Rs	Q Ri	Q Rb	Turbidité	MES	TOC		T°	pH	Cond.	O_2	NH_4^+
	m	m^3/s	mm/an	mm/an			N.T.U.	mg/L	mg/L	mg/L	°C		µS/cm	mg/L	mg/L
10/06/00	2.46	320	1011	101	725	186	92	199	1.56	1.84	16	8.12	198	9.33	0.03
11/06/00	3.54	2963	9351	7481	1449	421	1177	2794	25.00	7.77	14	8.42	372	9.33	0.13
12/06/00	2.31	1508	4760	2822	270	1668	527	1186	3.94	6.54	13	8.39	317	10.15	0.01
13/06/00	1.65	814	2570	623	1148	799	228	485	3.21	3.35	13	8.36	261	9.82	0.00
14/06/00	1.38	589	1858	211	1086	561	112	227	2.33	2.20	14	8.31	242	9.71	0.01
15/06/00	1.32	546	1725	176	1084	465	100	204	2.13	2.03	15	8.26	229	9.60	0.00
16/06/00	1.24	487	1537	206	1066	265	130	269	2.36	2.13	16	8.19	198	9.32	0.00
17/06/00	1.10	394	1245	59	909	277	49	94	1.69	1.45	17	8.20	206	9.42	0.00
18/06/00	1.01	340	1073	44	783	246	43	82	1.58	1.41	18	8.22	207	9.44	0.00
19/06/00	0.92	286	904	26	684	194	31	57	1.41	1.27	19	8.20	201	9.39	0.01
20/06/00	0.81	231	727	18	541	169	27	49	1.38	1.27	19	8.21	207	9.44	0.00
21/06/00	1.37	210	662	13	480	169	22	40	1.36	1.28	19	8.20	214	9.51	0.01
22/06/00	2.51	196	620	12	447	161	21	38	1.32	1.28	19	8.18	216	9.52	0.00
23/06/00	2.52	198	626	10	453	162	18	32	1.26	1.25	18	8.19	215	9.52	0.01
24/06/00	2.52	199	628	9	463	157	15	27	1.28	1.21	17	8.20	211	9.48	0.00
25/06/00	2.49	188	594	5	436	153	10	17	1.31	1.18	16	8.24	214	9.50	0.00
26/06/00	2.46	180	570	3	411	155	7	12	1.00	1.18	18	8.27	219	9.55	0.01
27/06/00	2.36	150	474	2	342	130	5	8	0.88	1.17	19	8.31	219	9.56	0.04
28/06/00	2.38	157	496	2	360	135	5	8	0.88	1.16	20	8.36	218	9.55	0.06
29/06/00	2.29	132	417	1	297	119	4	6	0.90	1.19	21	8.45	223	9.59	0.05
30/06/00	2.31	138	434	1	312	121	4	6	0.92	1.17	21	8.48	221	9.57	0.08
01/07/00	2.35	148	466	1	341	123	4	6	0.99	1.14	23	8.76	215	9.52	0.10
02/07/00	2.34	143	453	1	317	135	3	6	0.98	1.21	22	8.54	227	9.63	0.10
03/07/00	2.27	128	405	1	282	122	3	6	1.00	1.21	23	8.54	229	9.64	0.09
04/07/00	2.25	121	383	2	267	114	5	8	0.76	1.22	23	8.55	228	9.63	0.08
05/07/00	2.25	122	384	1	276	107	4	7	0.60	1.18	22	8.45	221	9.57	0.06
06/07/00	2.28	129	407	1	272	134	4	7	0.73	1.27	23	8.26	239	9.72	0.15
07/07/00	2.22	115	364	1	239	123	5	8	0.78	1.30	23	8.29	242	9.76	0.17
08/07/00	2.23	116	367	2	250	116	6	9	0.79	1.26	22	8.24	234	9.68	0.13
09/07/00	2.17	104	328	1	208	119	4	7	0.79	1.34	21	8.03	251	9.83	0.18
10/07/00	2.19	109	344	1	208	135	5	8	0.83	1.40	22	7.99	262	9.92	0.21
11/07/00	2.21	112	353	1	218	133	5	8	0.91	1.37	20	8.07	256	9.88	0.13
12/07/00	2.23	117	370	2	229	138	6	10	0.74	1.38	19	8.09	255	9.87	0.14
13/07/00	2.20	111	350	1	218	131	5	8	0.53	1.37	19	8.14	255	9.87	0.12
14/07/00	2.18	107	337	1	207	128	5	8	0.55	1.38	19	8.06	258	9.89	0.10
15/07/00	2.20	111	350	1	221	127	4	7	0.56	1.34	18	8.01	251	9.83	0.13
16/07/00	2.58	222	701	12	504	185	19	35	0.66	1.27	17	8.15	217	9.53	0.01
17/07/00	2.59	225	709	13	529	168	20	35	0.71	1.22	17	8.18	207	9.45	0.00
18/07/00	2.39	160	506	4	383	118	10	18	0.70	1.14	18	8.15	205	9.43	0.03

Date	Niveau	Qt		Q Rs	Q Ri	Q Rb	Turbidité	MES	TOC		T°	pH	Cond.	O_2	NH_4^+
	m	m^3/s	mm/an		mm/an		N.T.U.	mg/L	mg/L	mg/L	°C		µS/cm	mg/L	mg/L
19/07/00	2.23	117	368	3	273	93	8	14	0.67	1.15	20	8.01	212	9.49	0.08
20/07/00	2.20	111	349	2	247	100	7	11	0.63	1.21	21	8.02	224	9.59	0.11
21/07/00	2.22	115	363	2	252	110	6	9	0.59	1.23	22	7.90	229	9.64	0.15
22/07/00	2.20	111	349	1	241	106	5	8	0.55	1.23	23	7.98	230	9.65	0.16
23/07/00	2.17	104	330	1	221	107	5	9	0.55	1.27	23	7.90	237	9.71	0.18
24/07/00	2.26	125	393	1	253	139	4	7	0.56	1.32	23	7.94	248	9.80	0.15
25/07/00	2.39	157	497	6	311	180	14	25	0.58	1.42	23	7.82	252	9.83	0.33
26/07/00	2.38	154	486	5	318	163	11	19	0.54	1.34	22	7.70	242	9.75	0.32
27/07/00	2.37	151	476	2	298	176	5	8	0.50	1.36	24	7.93	253	9.85	0.34
28/07/00	2.39	157	494	2	312	180	5	8	0.63	1.35	24	8.03	252	9.84	0.29
29/07/00	2.40	160	506	3	330	173	6	10	0.60	1.31	22	8.11	244	9.77	0.25
30/07/00	2.34	145	456	2	293	162	4	7	0.53	1.33	23	8.17	248	9.81	0.25
31/07/00	2.32	138	436	1	267	167	3	6	0.51	1.37	24	8.15	258	9.89	0.37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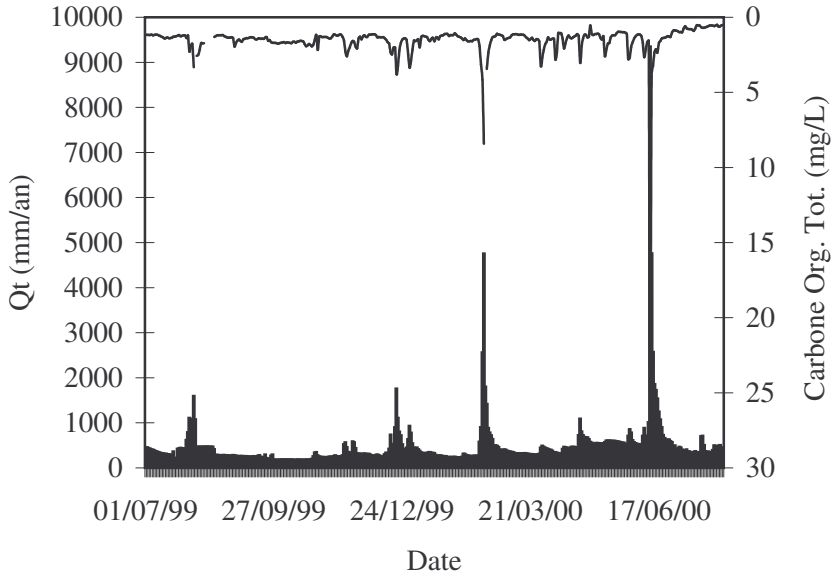
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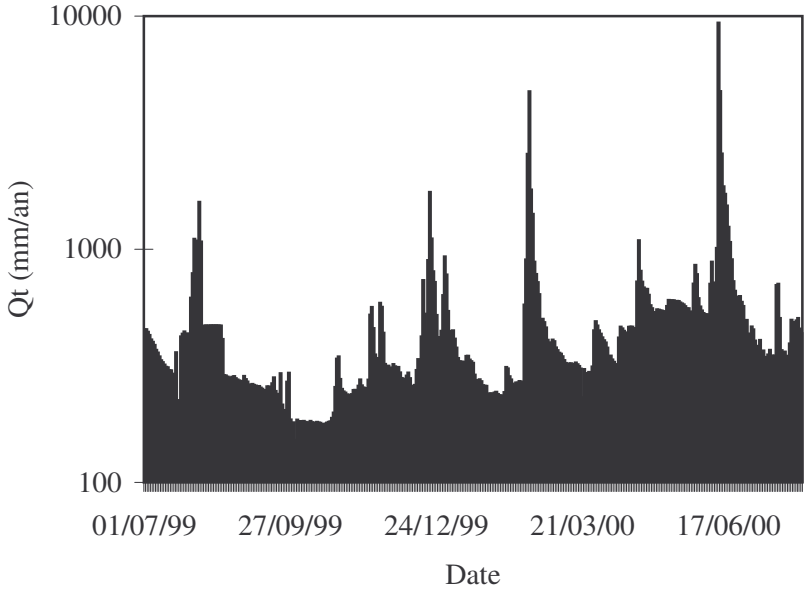
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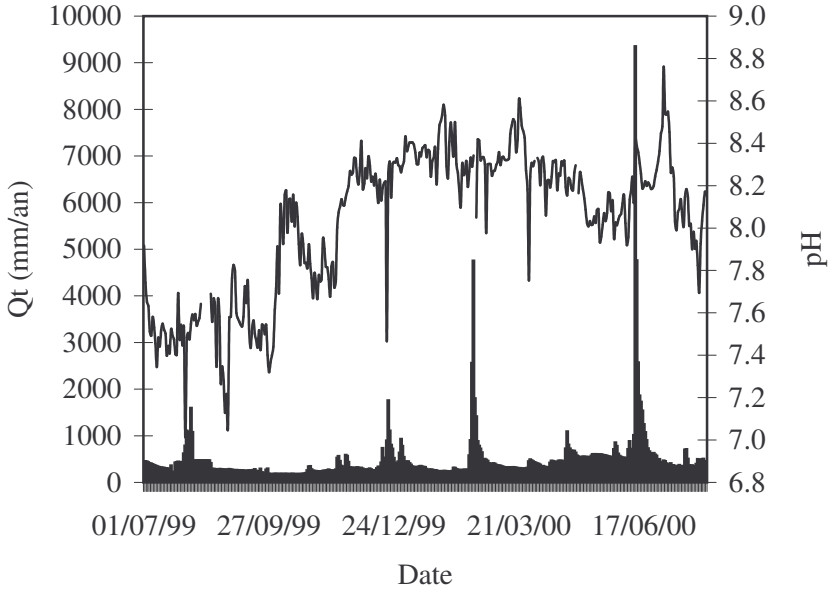
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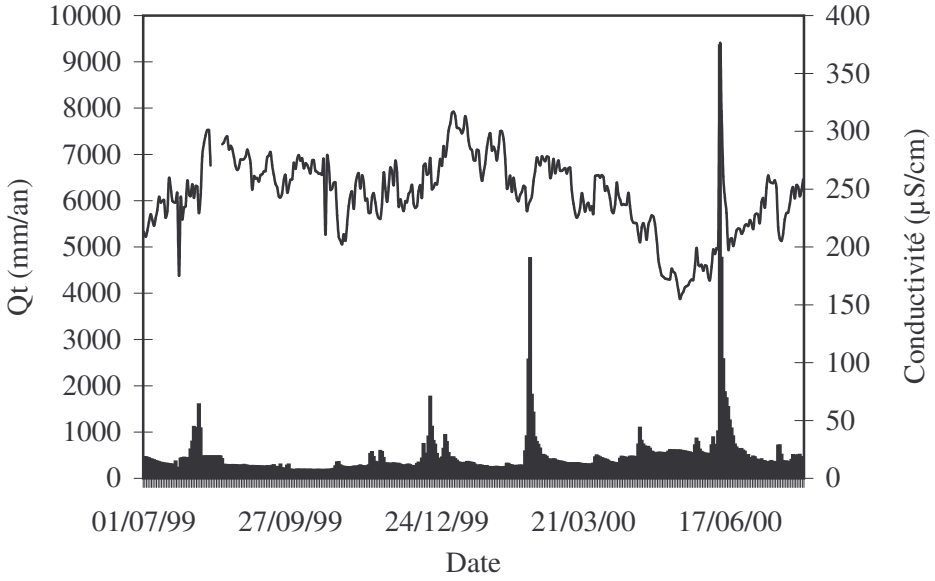
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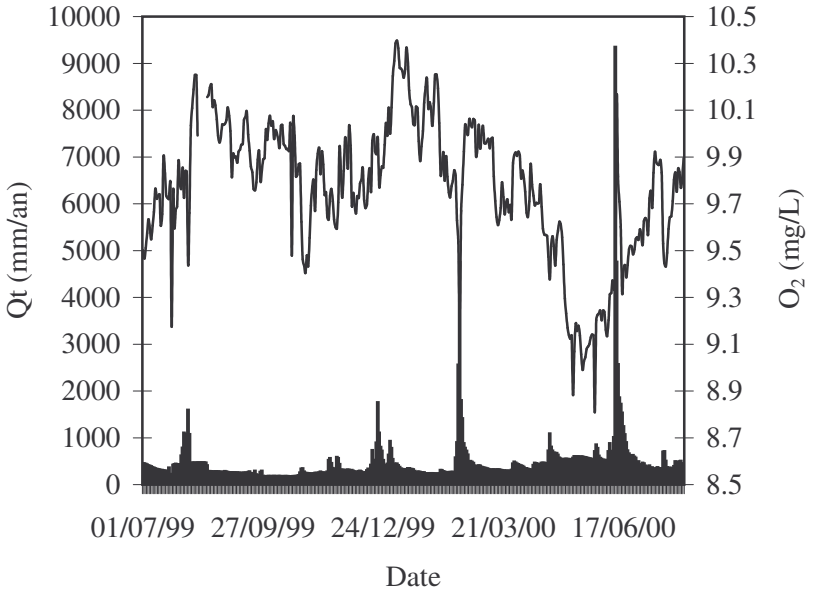
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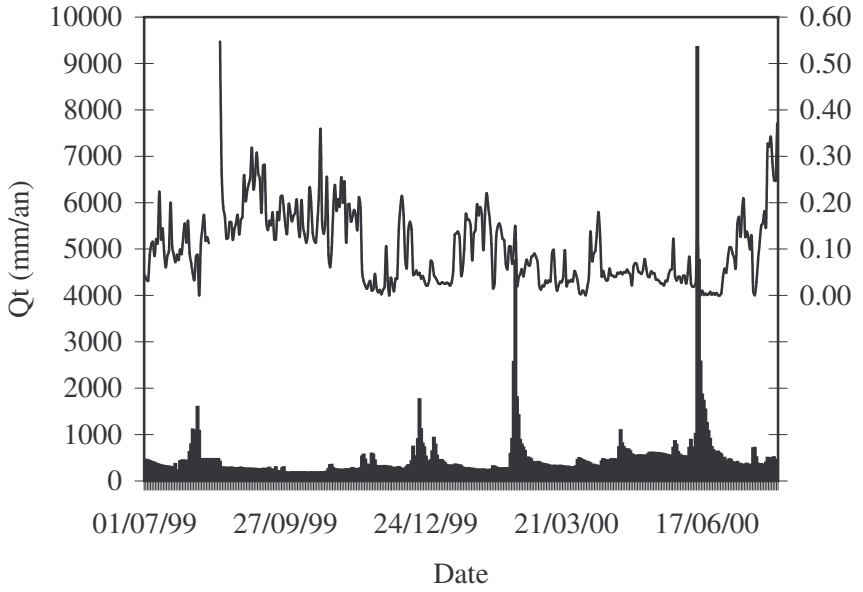
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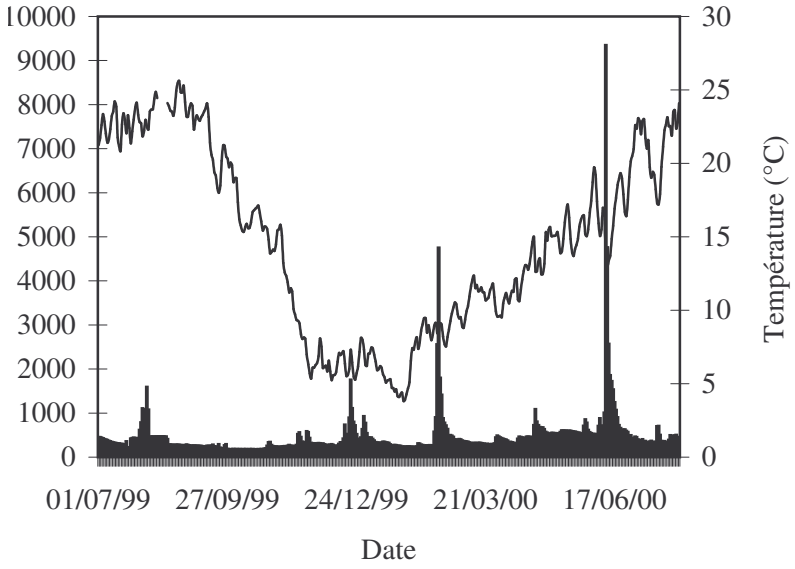
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27/09/99
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17/06/00

J	M	A	T°	Cond.	pH	SiO_2	log fCO_2	Qt		MES	Pt	NH_4^+	Na^+	K^+	Ca^{2+}	Mg^{2+}	S+	HCO_3^-	Cl^-	SO_4^{2-}	NO_3^-	NO_2^-	S-	Erreur
			°C	µS/cm		µmol/L		m^3/s	mm/an	mg/L		µmol/L					µeq/L	µmol/L					µeq/L	%
7	12	82	10.9	-	7.93	145	-1.28	15.5	937	366	0.50	-	400	106	2130	379	5525	4000	718	300	392	1.3	5710	-3.3
7	12	82	12	-	7.98	140	-1.33	16.0	967	481	0.40	-	500	96	2248	388	5866	4033	775	274	574	1.3	5930	-1.1
7	12	82	11.7	-	7.98	140	-1.32	16.0	967	435	0.40	-	500	94	2370	388	6109	4115	761	322	631	1.3	6150	-0.7
8	12	82	12.2	-	8.04	142	-1.34	15.0	907	361	0.30	-	452	97	2595	413	6564	4557	718	343	616	1.1	6577	-0.2
8	12	82	12.1	-	8.00	143	-1.27	12.5	756	256	0.40	-	457	97	2755	379	6822	4803	746	344	631	1.5	6868	-0.7
8	12	82	11.3	-	8.08	144	-1.33	10.3	623	171	0.40	-	461	85	2865	400	7076	5033	789	375	710	2.2	7281	-2.9
8	12	82	11.9	-	8.03	144	-1.28	9.4	568	134	0.30	-	487	78	2963	404	7299	5115	761	427	687	1.5	7417	-1.6
8	12	82	12.4	-	8.06	144	-1.30	8.6	520	110	0.10	-	487	100	3123	308	7449	5230	775	408	681	2.2	7501	-0.7
8	12	82	12.1	-	8.00	145	-1.24	8.4	508	67	0.30	-	483	64	3020	404	7395	5230	775	368	694	1.3	7433	-0.5
9	12	82	11.4	-	8.07	148	-1.31	9.7	586	103	0.10	-	483	76	2913	475	7334	5230	746	375	639	2.2	7365	-0.4
9	12	82	12.1	-	8.15	149	-1.38	9.8	592	109	0.30	-	461	58	2968	421	7296	5279	746	322	681	1.7	7350	-0.7
9	12	82	12.7	-	8.10	149	-1.32	9.0	544	91	0.30	-	426	39	3055	388	7350	5393	761	344	671	1.7	7512	-2.2
10	12	82	11.9	-	8.19	148	-1.39	7.2	435	70	0.30	-	400	33	3248	375	7678	5705	704	395	700	2.0	7899	-2.8
14	3	83	12.9	-	8.19	76	-1.40	3.5	212	5	-	-	530	42	2780	433	6999	5590	645	389	615	1.7	7627	-8.6
15	3	83	12.1	-	8.08	68	-1.33	4.6	278	360	-	-	539	45	2683	508	6965	5082	645	353	603	7.8	7037	-1.0
15	3	83	12.1	-	8.01	65	-1.33	5.9	357	514	-	-	517	77	2220	283	5601	4328	645	298	618	0.4	6187	-9.9
15	3	83	12	-	8.06	81	-1.40	8.7	526	344	-	-	600	76	2080	296	5427	4082	704	318	515	0.4	5936	-9.0
15	3	83	12.4	-	8.08	94	-1.39	9.3	562	168	-	-	574	65	2243	346	5815	4393	704	318	544	2.6	6277	-7.6
16	3	83	10.4	-	8.14	103	-1.37	8.3	502	75	-	-	539	63	2750	467	7035	5311	645	327	579	14.3	7190	-2.2
16	3	83	10.7	-	8.10	102	-1.35	7.4	447	593	-	-	474	70	2608	338	6434	5016	586	300	561	18.3	6764	-5.0
17	3	83	10.9	-	8.23	106	-1.43	5.6	339	51	-	-	561	53	2978	421	7411	5672	704	338	561	2.8	7613	-2.7
17	3	83	10.6	-	8.19	106	-1.38	5.2	314	31	-	-	543	49	3038	383	7435	5803	586	347	563	2.4	7646	-2.8
18	3	83	12.2	-	8.23	98	-1.42	4.8	290	26	-	-	557	47	3050	375	7454	5836	645	331	574	2.2	7718	-3.5
21	3	83	12.9	-	8.13	83	-1.33	3.8	230	17	-	-	543	42	2995	417	7409	5656	645	363	590	3.3	7616	-2.8
11	10	83	16.1	646	8.05	110	-1.25	0.1	6	14	-	-	1013	81	2683	446	7350	5672	870	324	226	0.2	7416	-0.9
14	10	83	15.7	651	8.21	83	-1.42	0.2	12	26	-	44	1039	81	2651	579	7580	5574	856	320	224	0.2	7294	3.9
24	10	83	12.1	543	8.35	88	-1.53	0.2	12	7	-	-	965	81	2620	617	7519	5902	882	301	235	0.2	7621	-1.3
25	10	83	10.5	491	8.36	90	-1.55	0.2	12	10	0.39	3	922	77	2573	588	7318	5836	848	311	239	0.4	7546	-3.1
9	11	83	14.8	630	8.26	89	-1.43	0.2	12	12	-	-	961	83	2665	654	7682	6033	910	305	227	4.6	7780	-1.3
15	11	83	-	-	-	104	-	0.3	18	8	0.03	45	952	89	2791	625	7874	-	777	299	185	2.0	-	-
16	11	83	-	-	-	114	-	0.3	18	6	-	3	1013	87	2918	533	8002	-	842	331	189	2.6	-	-
17	11	83	-	-	-	119	-	0.3	18	6	-	107	1035	92	2918	896	8754	-	932	320	174	4.3	-	-
18	11	83	-	-	-	127	-	0.3	18	4	0.04	-	987	88	2848	633	8037	-	1076	329	168	0.2	-	-
19	11	83	-	-	-	131	-	0.2	12	3	-	23	1013	87	2960	604	8229	-	972	329	169	0.4	-	-
20	11	83	-	-	-	134	-	0.2	12	4	-	-	1035	88	2993	596	8300	-	1014	322	161	0.2	-	-
21	11	83	-	-	-	131	-	0.2	12	7	0.38	-	1026	91	3015	633	8414	-	1025	318	184	0.2	-	-
22	11	83	-	-	-	131	-	0.3	18	7	-	57	1035	93	3035	638	8473	-	1011	332	192	0.2	-	-
23	11	83	-	-	-	134	-	0.3	18	5	-	331	1039	93	2880	771	8434	-	969	330	198	0.2	-	-

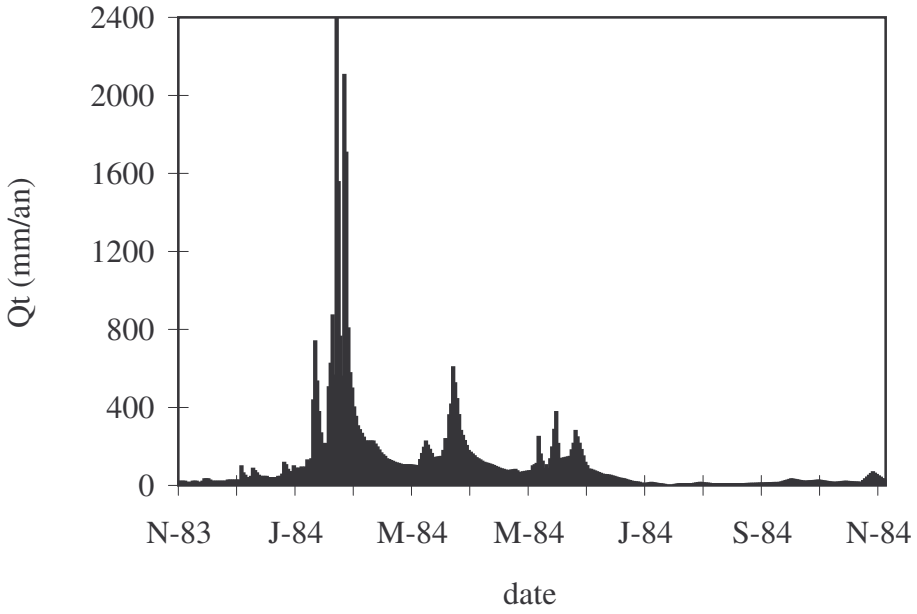
J	M	A	T°	Cond.	pH	SiO_2	log fCO_2	Qt		MES	Pt	NH_4^+	Na^+	K^+	Ca^{2+}	Mg^{2+}	S+	HCO_3^-	Cl^-	SO_4^{2-}	NO_3^-	NO_2^-	S-	Erreur
			°C	µS/cm		µmol/L		m^3/s	mm/an	mg/L		µmol/L					µeq/L	µmol/L					µeq/L	%
24	11	83	-	-	-	129	-	0.3	18	7	-	67	987	91	2993	646	8354	-	961	325	187	0.2	-	-
25	11	83	-	-	-	139	-	0.2	12	7	0.04	66	1013	89	2850	792	8386	-	966	329	168	1.7	-	-
26	11	83	-	-	-	125	-	0.2	12	6	-	454	1035	87	2975	500	8072	-	958	330	195	6.3	-	-
27	11	83	-	-	-	124	-	0.3	18	10	-	2	1043	84	2868	633	8130	-	949	341	206	0.2	-	-
28	11	83	-	-	-	139	-	0.5	30	23	1.78	24	1135	101	2820	575	8026	-	977	340	231	0.2	-	-
29	11	83	-	-	-	137	-	0.5	30	38	-	1	948	91	2805	458	7565	-	913	326	200	0.2	-	-
30	11	83	-	-	-	140	-	0.5	30	30	0.04	0	922	89	2825	525	7711	-	938	332	179	3.7	-	-
1	12	83	10.9	502	-	146	-	0.4	24	12	-	0	961	89	2873	529	7854	6197	966	348	152	1.1	8010	-2.0
2	12	83	7.5	448	-	147	-	0.3	18	13	-	2	952	92	2775	658	7911	6230	932	326	181	3.0	7995	-1.1
3	12	83	-	-	-	151	-	0.3	18	7	-	3	948	96	2843	646	8020	*6250*	935	335	165	0.0	8020	0.0
4	12	83	-	-	-	150	-	0.3	18	7	-	5	991	95	3033	513	8176	*6329*	963	343	198	3.9	8176	0.0
5	12	83	-	-	-	150	-	0.3	18	5	0.02	14	1000	98	3005	642	8392	*6577*	938	341	195	3.7	8392	0.0
6	12	83	-	-	-	148	-	0.3	18	4	-	8	1026	94	2975	692	8453	*6606*	963	339	206	3.3	8453	0.0
7	12	83	-	-	-	144	-	0.3	18	7	-	21	1039	91	3033	667	8528	*6670*	946	348	216	3.7	8528	0.0
8	12	83	-	-	-	140	-	0.3	18	6	0.07	3	1030	89	2938	721	8437	*6556*	975	341	224	3.3	8437	0.0
9	12	83	-	-	-	138	-	0.3	18	8	-	42	1030	87	3005	717	8561	*6677*	946	351	235	3.3	8561	0.0
10	12	83	-	-	-	134	-	0.4	24	10	-	3	1061	86	3000	608	8363	*6428*	1003	347	239	3.3	8363	0.0
11	12	83	-	-	-	131	-	0.4	24	8	-	9	1061	84	3090	608	8542	*6649*	949	346	252	3.3	8542	0.0
12	12	83	-	-	-	128	-	0.4	24	6	-	0	1043	84	2958	483	8009	*6127*	963	338	244	2.0	8009	0.0
13	12	83	-	-	-	140	-	0.4	24	11	-	0	1152	101	2958	604	8376	*6252*	1056	398	273	7.2	8376	0.0
14	12	83	-	-	-	126	-	0.4	24	11	-	0	1035	85	2863	604	8054	*6114*	958	364	255	3.9	8054	0.0
15	12	83	-	-	-	121	-	0.4	24	8	-	0	1000	82	2920	517	7955	*6034*	932	366	258	2.8	7955	0.0
16	12	83	-	-	-	113	-	0.4	24	8	0.02	0	996	79	2835	671	8086	*6113*	1014	352	255	2.0	8086	0.0
17	12	83	-	-	-	121	-	1.6	97	156	0.02	0	835	99	2683	546	7391	*5175*	1023	424	345	3.0	7391	0.0
18	12	83	-	-	-	135	-	1.0	60	60	0.02	0	865	112	3095	258	7684	*5287*	1059	467	405	3.3	7684	0.0
19	12	83	-	-	-	137	-	0.8	48	26	0.02	0	830	92	2943	613	8032	*5584*	1051	448	502	3.5	8032	0.0
20	12	83	-	-	-	137	-	0.6	36	19	0.01	0	861	89	3048	479	8003	*5626*	1028	445	460	3.0	8003	0.0
21	12	83	8	455	-	137	-	0.6	36	21	-	1	839	86	3038	608	8216	6098	955	420	419	3.0	8312	-1.2
22	12	83	-	-	-	135	-	0.7	42	18	-	1	878	79	2973	738	8377	*6183*	992	418	368	5.0	8377	0.0
23	12	83	-	-	-	139	-	1.4	85	80	0.02	1	978	92	2693	917	8288	*5897*	1042	473	403	4.3	8288	0.0
24	12	83	-	-	-	145	-	1.2	73	38	-	1	891	84	2995	979	8924	*6533*	1048	456	431	5.9	8924	0.0
25	12	83	-	-	-	146	-	1.0	60	22	-	0	878	77	3253	1121	9702	*7265*	1042	460	474	6.3	9702	0.0
26	12	83	-	-	-	141	-	0.8	48	11	-	0	874	81	3150	908	9071	*6723*	1011	443	452	5.2	9071	0.0
27	12	83	-	-	-	134	-	0.7	42	13	-	1	817	70	3160	900	9007	*6809*	946	403	445	4.8	9007	0.0
28	12	83	-	-	-	131	-	0.7	42	8	2.92	30	813	66	3160	875	8949	*6751*	963	405	424	5.2	8949	0.0
29	12	83	-	-	-	127	-	0.7	42	11	-	2	817	62	3140	971	9101	*6953*	932	397	423	3.3	9101	0.0
30	12	83	-	-	-	124	-	0.7	42	7	-	2	796	59	3148	546	8241	*6106*	930	394	418	3.0	8241	0.0
31	12	83	-	-	-	123	-	0.6	36	10	-	2	817	59	3045	754	8474	*6414*	879	388	406	4.1	8474	0.0

J	M	A	T°	Cond.	pH	SiO_2	log fCO_2	Qt		MES	Pt	NH_4^+	Na^+	K^+	Ca^{2+}	Mg^{2+}	S+	HCO_3^-	Cl^-	SO_4^{2-}	NO_3^-	NO_2^-	S-	Erreur
			°C	µS/cm		µmol/L		m^3/s	mm/an	mg/L		µmol/L					µeq/L	µmol/L					µeq/L	%
1	1	84	-	-	-	123	-	0.6	36	14	-	3	822	57	3100	721	8520	*6464*	887	385	398	3.9	8520	0.0
2	1	84	-	-	-	120	-	0.6	36	12	-	4	809	57	3065	717	8429	*6434*	862	370	394	3.5	8429	0.0
3	1	84	-	-	-	119	-	0.6	36	18	0.01	3	813	57	3110	671	8432	*6432*	865	373	389	3.5	8432	0.0
4	1	84	9.2	439	-	120	-	0.6	36	11	0.00	2	848	59	3005	754	8425	*6432*	865	372	384	3.0	8425	0.0
5	1	84	-	-	-	122	-	0.7	42	18	-	50	817	64	2965	904	8619	*6648*	842	374	381	7.4	8619	0.0
6	1	84	-	-	-	119	-	0.7	42	19	-	51	804	62	2945	1054	8865	*6822*	924	371	377	4.3	8865	0.0
7	1	84	-	-	-	131	-	0.9	54	137	0.07	22	935	83	2878	908	8589	*6363*	958	441	387	4.6	8589	0.0
8	1	84	-	-	-	129	-	1.9	115	133	1.53	199	939	86	2898	1104	9028	*6701*	1023	452	400	4.6	9028	0.0
9	1	84	-	-	-	133	-	1.7	103	60	-	187	761	81	2995	917	8665	*6368*	904	418	558	4.6	8665	0.0
10	1	84	-	-	-	142	-	1.3	79	25	-	37	739	81	3230	871	9022	*6621*	966	442	552	5.4	9022	0.0
11	1	84	-	-	-	132	-	1.1	67	16	-	26	748	72	3298	813	9040	*6694*	885	444	574	3.9	9040	0.0
12	1	84	-	-	-	131	-	1.1	67	16	0.03	79	809	66	3090	825	8705	*6382*	952	415	542	3.0	8705	0.0
13	1	84	-	-	-	126	-	1.6	97	33	-	39	770	64	3023	838	8553	*6330*	885	411	516	3.0	8553	0.0
14	1	84	-	-	-	128	-	1.4	85	33	-	8	804	65	3170	854	8918	*6523*	1020	431	513	2.8	8918	0.0
15	1	84	-	-	-	128	-	1.4	85	46	-	61	826	64	3100	921	8931	*6712*	876	422	500	2.8	8931	0.0
16	1	84	-	-	-	121	-	1.4	85	40	-	51	770	62	3240	988	9287	*7007*	938	410	521	3.0	9287	0.0
17	1	84	8.7	504	-	126	-	1.5	91	25	0.21	104	770	64	3100	940	8912	*6668*	896	416	518	2.8	8912	0.0
18	1	84	-	-	-	118	-	1.4	85	23	-	62	700	62	3158	892	8861	6148	915	414	563	2.6	8453	4.7
19	1	84	-	-	-	128	-	1.5	91	30	0.29	211	865	68	3188	992	9292	6131	924	436	390	0.4	8318	11.1
20	1	84	-	-	-	127	-	2.1	127	82	-	121	830	72	3098	888	8873	5721	907	419	434	0.0	7900	11.6
21	1	84	-	-	-	127	-	2.0	121	102	0.86	221	843	88	2990	921	8753	5508	913	422	506	0.2	7771	11.9
22	1	84	-	-	-	127	-	2.2	133	110	-	2	839	92	3010	1008	8967	5541	932	423	490	0.2	7810	13.8
23	1	84	-	-	-	141	-	7.2	435	362	0.40	136	683	87	2805	1096	8572	4705	870	424	710	0.9	7133	18.3
24	1	84	9.8	444	-	142	-	12.2	738	584	0.28	46	613	89	2688	754	7585	4344	814	409	755	0.7	6732	11.9
24	1	84	-	-	-	143	-	12.1	732	592	0.20	40	609	87	2755	704	7614	4410	927	417	819	0.2	6989	8.6
25	1	84	-	-	-	136	-	8.8	532	256	0.13	74	596	72	3058	900	8582	5000	876	447	900	0.2	7670	11.2
26	1	84	-	-	-	140	-	6.2	375	137	0.05	13	622	63	3320	788	8900	5377	876	452	845	0.0	8002	10.6
27	1	84	-	-	-	137	-	4.4	266	83	0.01	14	626	55	3330	1054	9450	5623	837	444	787	0.2	8134	15.0
28	1	84	-	-	-	135	-	3.5	212	65	0.03	77	609	52	3125	1375	9660	5705	814	455	782	0.2	8212	16.2
29	1	84	-	-	-	133	-	3.2	193	54	0.00	35	626	50	3155	1194	9374	5820	808	431	642	0.2	8133	14.2
30	1	84	-	-	-	125	-	3.5	212	58	0.10	65	643	53	3185	1013	9092	5623	823	421	663	0.2	7950	13.4
31	1	84	-	-	-	133	-	8.3	502	373	0.22	82	761	92	2443	704	7146	4328	769	401	506	0.2	6405	10.9
1	2	84	9.2	446	-	138	-	10.3	623	208	0.14	28	639	75	2815	767	7878	4803	786	425	697	0.7	7136	9.9
2	2	84	-	-	-	138	-	14.4	871	275	0.15	73	565	69	2603	804	7448	5066	755	393	694	0.2	7299	2.0
3	2	84	-	-	-	138	-	9.3	562	140	0.16	30	587	56	3125	733	8360	5295	828	431	787	0.2	7773	7.3
4	2	84	-	-	-	138	-	39.6	2394	1196	0.05	37	439	92	2030	371	5333	3344	566	302	605	0.2	5119	4.1
5	2	84	-	-	-	135	-	25.7	1554	316	0.17	33	435	68	2655	638	7087	4377	651	352	744	0.4	6475	9.0
6	2	84	-	-	-	136	-	12.6	762	169	0.10	39	522	56	3055	675	8038	5115	724	396	744	0.2	7374	8.6

J	M	A	T°	Cond.	pH	SiO_2	log fCO_2	Qt		MES	Pt	NH_4^+	Na^+	K^+	Ca^{2+}	Mg^{2+}	S+	HCO_3^-	Cl^-	SO_4^{2-}	NO_3^-	NO_2^-	S-	Erreur
			°C	µS/cm		µmol/L		m^3/s	mm/an	mg/L		µmol/L					µeq/L	µmol/L					µeq/L	%
7	2	84	-	-	-	136	-	9.2	556	112	0.10	53	591	55	3190	717	8460	5377	755	418	766	0.2	7734	9.0
8	2	84	-	-	-	136	-	34.8	2104	430	0.04	111	422	82	2380	400	6064	3869	541	315	629	0.7	5668	6.8
9	2	84	-	-	-	132	-	28.2	1705	255	0.08	129	400	64	2753	504	6978	4000	566	329	735	1.7	5960	15.7
10	2	84	-	-	-	131	-	13.3	804	120	0.03	81	504	52	3113	733	8248	5180	735	392	761	1.1	7460	10.0
11	2	84	-	-	-	134	-	9.5	574	86	0.00	61	526	46	3240	829	8711	5492	724	398	781	0.0	7792	11.1
12	2	84	-	-	-	131	-	8.2	496	69	0.03	41	552	44	3258	827	8766	5443	744	402	756	0.2	7747	12.3
13	2	84	-	-	-	130	-	6.6	399	70	0.01	36	543	44	2960	825	8158	5738	744	400	792	0.0	8073	1.0
14	2	84	7.9	459	-	128	-	5.8	351	76	0.01	56	517	43	3353	746	8757	5754	724	390	752	0.4	8009	8.9
15	2	84	-	-	-	132	-	5.0	302	52	0.07	105	635	48	3295	871	9014	5984	876	423	673	0.0	8378	7.3
19	2	84	-	-	-	114	-	3.7	224	44	0.02	112	557	43	3333	742	8747	5902	766	394	710	0.0	8165	6.9
23	2	84	-	-	-	114	-	3.7	224	30	0.05	119	596	46	3285	779	8770	5836	766	392	669	0.4	8055	8.5
27	2	84	-	-	-	101	-	2.7	163	40	0.00	137	600	42	3020	863	8407	5902	749	389	690	0.0	8118	3.5
2	3	84	-	-	-	81	-	2.2	133	23	0.07	134	561	39	3235	1042	9153	5803	744	404	663	0.2	8018	13.2
6	3	84	-	-	-	57	-	1.9	115	22	0.12	92	578	39	3118	1050	8952	5705	738	415	634	0.4	7906	12.4
10	3	84	-	-	-	38	-	1.7	103	12	0.10	152	583	36	2815	1142	8532	5377	735	404	618	0.2	7538	12.4
14	3	84	-	-	-	20	-	1.7	103	14	0.00	227	578	36	2875	1279	8922	5295	763	404	615	0.0	7481	17.6
18	3	84	-	-	-	22	-	1.6	97	5	0.05	141	630	44	2738	971	8091	5000	676	404	550	0.7	7034	14.0
22	3	84	-	-	-	32	-	3.7	224	131	0.20	161	543	61	2640	875	7634	4787	738	357	553	0.2	6793	11.7
26	3	84	-	-	-	41	-	2.3	139	23	0.02	188	600	50	2883	1025	8465	5443	775	384	519	0.2	7505	12.0
30	3	84	-	-	-	21	-	2.4	145	18	0.06	54	635	45	2758	904	8003	5230	769	377	455	0.2	7208	10.5
2	4	84	10.6	-	-	46	-	3.9	236	97	0.05	120	591	52	2855	917	8186	5361	718	377	500	0.2	7333	11.0
5	4	84	-	-	-	113	-	10.0	605	398	0.50	239	617	86	2000	496	5695	3623	597	345	342	1.5	5252	8.1
9	4	84	-	-	-	72	-	4.6	278	37	0.00	130	522	35	2968	1088	8666	5213	699	404	645	1.5	7365	16.2
13	4	84	-	-	-	61	-	2.9	175	24	0.00	132	535	35	2948	883	8231	5082	704	404	606	1.1	7201	13.3
17	4	84	-	-	-	50	-	2.3	139	19	0.00	97	517	35	2793	929	7995	4902	685	392	584	1.7	6953	13.9
21	4	84	-	-	-	5	-	1.9	115	15	0.00	55	552	32	2550	729	7143	4393	704	392	560	1.3	6441	10.3
25	4	84	-	579	-	3	-	1.7	103	15	0.00	149	574	35	2415	813	7064	4426	710	386	524	2.6	6433	9.3
29	4	84	-	-	-	25	-	1.4	85	15	0.22	66	622	38	2710	663	7404	5197	724	384	473	2.0	7162	3.3
3	5	84	-	-	-	45	-	1.2	73	10	0.11	102	622	36	2768	667	7526	5246	713	372	473	3.0	7175	4.8
7	5	84	-	-	-	83	-	1.3	79	21	0.31	141	617	44	2798	763	7781	5377	701	369	416	1.5	7232	7.3
10	5	84	-	610	-	89	-	0.8	48	14	0.27	189	630	43	2828	921	8170	5492	735	383	435	0.2	7429	9.5
11	5	84	14.4	-	8.37	83	-1.58	1.1	67	21	0.31	240	630	45	2758	804	7799	5541	730	378	429	1.1	7456	4.5
15	5	84	13.9	567	8.37	94	-1.59	0.9	54	9	0.10	18	609	42	2998	733	8112	5443	741	371	481	5.0	7406	9.1
15	5	84	13.6	583	8.30	96	-1.51	1.2	73	15	0.03	7	630	46	2815	727	7760	5508	730	368	468	3.7	7441	4.2
16	5	84	13.8	557	8.25	104	-1.48	1.6	97	39	0.19	10	639	48	2713	721	7554	5328	732	366	460	4.1	7251	4.1
18	5	84	-	621	8.45	121	-1.64	1.6	97	22	0.02	8	578	61	3083	779	8362	5852	741	398	687	4.1	8076	3.5
18	5	84	15.4	601	8.39	119	-1.60	1.8	109	38	0.00	12	565	59	2860	838	8019	5525	735	384	685	1.1	7714	3.9
19	5	84	14.8	479	8.12	123	-1.50	5.0	302	348	0.41	7	943	101	2055	500	6155	3721	837	354	753	0.4	6019	2.2

J	M	A	T°	Cond.	pH	SiO_2	log fCO_2	Qt		MES	Pt	NH_4^+	Na^+	K^+	Ca^{2+}	Mg^{2+}	S+	HCO_3^-	Cl^-	SO_4^{2-}	NO_3^-	NO_2^-	S-	Erreur
			°C	µS/cm		µmol/L		m^3/s	mm/an	mg/L		µmol/L					µeq/L	µmol/L					µeq/L	%
19	5	84	14.1	474	8.08	128	-1.49	5.0	302	282	0.03	18	874	97	2075	492	6104	3541	834	358	776	1.5	5867	4.0
19	5	84	14.1	521	8.10	128	-1.46	4.1	248	171	0.31	18	887	88	2263	592	6683	3902	868	386	781	6.5	6323	5.5
19	5	84	-	-	-	132	-	3.7	224	132	0.30	107	648	87	2285	542	6388	4213	848	380	710	0.2	6531	-2.2
19	5	84	14.6	585	8.22	128	-1.51	3.6	218	121	0.00	18	870	72	2608	650	7456	4607	839	396	739	3.7	6976	6.6
19	5	84	16.1	598	8.26	128	-1.52	3.1	187	95	0.02	6	626	62	2700	813	7713	4984	803	400	703	3.7	7290	5.6
20	5	84	15.3	583	8.21	130	-1.45	2.6	157	75	0.00	2	635	62	2840	813	8002	5230	831	398	729	0.7	7585	5.3
20	5	84	14.7	611	8.31	130	-1.53	2.1	127	48	0.06	8	626	53	2953	813	8209	5443	800	404	697	2.4	7748	5.8
23	5	84	-	-	-	129	-	1.7	103	28	0.35	278	661	45	2955	913	8441	5639	792	390	592	1.3	7802	7.9
24	5	84	-	-	-	114	-	1.4	85	22	0.11	43	635	45	2863	958	8322	5393	806	397	560	2.6	7553	9.7
24	5	84	16.6	625	8.45	114	-1.68	1.4	85	27	0.24	51	622	41	2790	1258	8760	5328	763	388	548	0.0	7415	16.6
25	5	84	16.6	601	8.38	120	-1.63	2.2	133	83	0.40	107	704	62	2643	1275	8601	5066	786	381	537	1.7	7151	18.4
26	5	84	16.7	579	8.29	138	-1.62	3.2	193	169	0.48	80	704	82	2358	479	6459	4246	803	392	639	1.3	6471	-0.2
28	5	84	-	-	-	151	-	6.2	375	172	0.20	82	622	77	2368	638	6709	3984	763	343	748	4.8	6181	8.2
29	5	84	13.7	518	8.20	149	-1.47	4.6	278	117	0.11	136	696	64	2625	758	7526	4803	763	350	745	4.6	7012	7.1
29	5	84	14.4	555	8.28	146	-1.51	3.5	212	87	0.08	56	700	56	2818	813	8016	5262	786	359	747	2.8	7514	6.5
29	5	84	13.2	581	8.27	143	-1.49	3.1	187	65	0.10	91	683	50	2935	842	8286	5459	775	373	716	3.7	7696	7.4
30	5	84	13.8	612	8.31	134	-1.51	2.2	133	45	0.14	73	713	44	3010	1050	8877	5639	786	381	663	3.0	7851	12.3
4	6	84	14.4	631	8.34	145	-1.56	2.4	145	57	0.33	302	635	53	2928	579	7701	5377	732	360	563	3.0	7393	4.1
7	6	84	-	-	-	146	-	4.6	278	182	0.02	729	578	67	3278	408	8017	4918	732	349	682	4.3	7031	13.1
12	6	84	-	-	-	133	-	1.9	115	41	0.18	141	617	39	3695	308	8663	5475	744	396	598	5.7	7609	13.0
15	6	84	-	-	-	130	-	1.3	79	23	0.14	84	604	39	2885	908	8230	5525	718	376	581	2.8	7576	8.3
21	6	84	18.1	686	8.35	129	-1.56	0.9	54	6	0.01	599	643	35	2965	708	8025	5623	724	386	490	-	7610	5.3
25	6	84	-	-	-	149	-	0.8	48	8	0.13	81	643	39	2350	1513	8408	5508	732	382	368	-	7373	13.1
29	6	84	-	-	-	126	-	0.6	36	7	0.00	183	674	35	2678	592	7247	5180	738	371	389	-	7049	2.8
2	7	84	-	-	-	117	-	0.5	30	7	0.23	138	717	35	2580	692	7296	5082	761	358	298	-	6858	6.2
6	7	84	-	-	-	96	-	0.3	18	10	0.20	171	804	39	2518	621	7121	5049	820	382	271	-	6904	3.1
10	7	84	-	-	-	88	-	0.2	12	26	0.13	129	891	39	2385	729	7159	4934	845	394	184	-	6751	5.9
12	7	84	22.4	822	8.30	98	-1.56	0.1	6	10	0.36	53	922	49	2348	646	6957	4967	851	384	165	-	6751	3.0
16	7	84	-	-	-	105	-	0.2	12	9	-	151	970	45	2223	671	6801	4770	918	410	150	-	6660	2.1
20	7	84	-	-	-	80	-	0.1	6	16	0.63	45	1174	51	2010	567	6378	4656	1008	375	34	-	6448	-1.1
24	7	84	-	-	-	106	-	0.0	2	7	-	17	1509	84	2000	617	6826	4721	1155	422	161	-	6881	-0.8
27	7	84	-	-	-	114	-	0.0	2	11	-	31	1583	78	1983	608	6843	4820	1192	416	102	-	6944	-1.5
31	7	84	-	-	-	129	-	0.1	6	13	-	29	1809	106	2018	600	7150	4885	1307	390	123	-	7094	0.8
6	8	84	-	-	-	14	-	0.1	6	24	-	31	1322	67	1965	638	6594	4787	1085	365	0	-	6601	-0.1
10	8	84	-	-	-	92	-	0.2	12	19	-	32	1013	62	2298	763	7195	5066	890	352	116	-	6776	6.0
17	8	84	-	-	-	72	-	0.1	6	13	0.72	33	1026	67	2225	758	7060	4934	921	347	29	-	6578	7.1
24	8	84	-	-	-	97	-	0.1	6	28	-	3	1309	75	2100	738	7059	5082	1042	354	118	-	6950	1.6
2	9	84	-	-	-	112	-	0.1	6	15	-	3	1370	90	2253	708	7381	5262	1037	345	155	-	7143	3.3

J	M	A	T°	Cond.	pH	SiO_2	log fCO_2	Qt		MES	Pt	NH_4^+	Na^+	K^+	Ca^{2+}	Mg^{2+}	S+	HCO_3^-	Cl^-	SO_4^{2-}	NO_3^-	NO_2^-	S-	Erreur
			°C	µS/cm		µmol/L		m^3/s	mm/an	mg/L		µmol/L					µeq/L	µmol/L					µeq/L	%
20	9	84	-	-	-	72	-	0.2	12	36	1.23	3	1091	88	2145	671	6811	4951	924	309	126	-	6619	2.8
26	9	84	-	-	-	124	-	0.5	30	52	0.49	4	730	97	2270	617	6601	4787	704	345	148	-	6329	4.2
2	10	84	-	-	-	113	-	0.3	18	45	0.69	4	887	90	2130	633	6503	4590	904	410	139	-	6454	0.8
9	10	84	-	-	-	128	-	0.4	24	23	1.00	10	883	96	2698	696	7765	4344	896	406	265	-	6317	20.6
17	10	84	-	-	-	86	-	0.2	12	20	0.80	6	987	85	2770	696	8004	5344	972	402	250	-	7370	8.2
23	10	84	-	-	-	88	-	0.3	18	18	1.05	3	943	79	2725	704	7881	5443	904	389	242	-	7366	6.8
31	10	84	-	-	-	91	-	0.2	12	10	0.96	3	939	79	2670	846	8050	5738	896	376	216	-	7602	5.7
6	11	84	-	-	-	135	-	1.1	67	125	0.93	3	843	102	2275	900	7296	5131	851	370	192	-	6913	5.4
12	11	84	13.7	666	8.17	164	-1.33	0.4	24	18	0.88	2	874	100	3175	767	8857	6295	972	408	310	-	8393	5.4
12	12	84	8	496	8.34	132	-1.50	0.7	42	7	1.00	4	796	68	3265	721	8836	6230	941	390	424	-	8374	5.4
4	3	85	-	532	8.27	114	-1.45	5.1	308	80	0.16	-	522	57	3303	654	8492	5951	949	394	645	-	8333	1.9
4	3	85	-	525	8.28	114	-1.45	5.3	320	75	0.01	-	565	55	3340	588	8475	6049	927	386	623	-	8370	1.2
16	3	85	8	463	8.23	81	-1.42	2.5	151	24	0.00	-	552	35	3048	758	8199	5820	904	378	600	-	8080	1.5
16	3	85	8	456	8.24	80	-1.44	2.5	151	23	0.00	-	565	36	3085	683	8138	5705	901	378	600	-	7963	2.2
17	3	85	7.2	422	8.15	80	-1.35	2.5	151	26	0.00	-	552	36	3103	679	8152	5656	882	375	592	-	7879	3.4
17	3	85	7	424	8.15	80	-1.35	2.5	151	20	0.00	-	565	38	3103	767	8342	5705	890	374	582	-	7925	5.1
18	3	85	6	397	8.15	83	-1.35	3.0	181	24	0.10	-	565	43	3103	704	8221	5689	935	382	613	-	8001	2.7
20	3	85	7	452	8.31	74	-1.51	2.4	145	11	0.00	3	578	39	3160	621	8179	5738	899	378	574	-	7967	2.6
21	3	85	6.8	426	8.16	70	-1.36	2.4	145	20	0.12	-	600	39	3103	742	8328	5738	907	378	561	-	7962	4.5
21	3	85	7	433	8.24	71	-1.45	2.8	169	30	0.18	-	639	47	2990	754	8175	5557	986	388	582	-	7901	3.4
21	3	85	7.2	423	8.19	73	-1.42	4.0	242	102	0.23	-	600	56	2898	633	7718	5328	994	380	550	-	7633	1.1
21	3	85	7	340	8.16	77	-1.51	6.0	363	606	0.26	-	600	71	1850	783	5938	4000	794	323	453	-	5893	0.7
22	3	85	7.3	321	8.07	92	-1.46	9.2	556	625	0.28	-	578	87	1840	554	5454	3689	735	294	413	-	5424	0.5
22	3	85	8.1	346	8.08	104	-1.46	13.3	804	575	0.23	-	530	74	1950	529	5562	3803	693	294	466	-	5550	0.2
22	3	85	8.4	368	8.07	108	-1.41	12.3	744	347	0.19	-	513	68	2135	596	6043	4098	741	309	508	-	5966	1.3
23	3	85	8	404	8.05	113	-1.34	10.3	623	233	0.10	-	552	64	2560	733	7203	4672	814	347	579	-	6759	6.4
23	3	85	9	456	8.11	117	-1.36	9.5	574	170	0.13	-	530	64	2788	758	7686	5115	859	365	595	-	7298	5.2
24	3	85	8	451	8.23	114	-1.45	8.0	484	132	0.01	-	565	56	2995	813	8236	5459	904	378	610	-	7729	6.4
24	3	85	9	463	8.31	110	-1.53	8.0	484	104	0.07	-	570	56	2543	1158	8027	5377	876	366	574	-	7559	6.0
25	3	85	7.9	452	8.28	108	-1.49	7.1	429	92	0.01	-	570	52	2830	1004	8290	5541	907	378	592	-	7796	6.1
25	3	85	9.5	525	8.37	105	-1.57	6.6	399	55	0.00	-	565	47	2913	1000	8437	5689	918	378	595	-	7958	5.8
26	3	85	10	542	8.38	93	-1.58	5.1	308	49	0.03	-	565	49	2943	942	8382	5721	913	375	587	-	7971	5.0
27	3	85	10	507	8.34	92	-1.56	5.6	339	66	0.00	-	583	49	2903	871	8178	5492	882	363	555	-	7653	6.6
29	3	85	8	454	8.30	98	-1.50	4.9	296	58	0.00	-	561	49	3048	758	8221	5689	851	359	550	-	7808	5.2
8	5	85	11.3	419	7.92	60	-1.29	34.8	2104	811	0.00	-	391	91	2258	438	5872	3820	589	288	723	-	5706	2.9
8	5	85	11.9	455	7.98	58	-1.31	32.4	1959	540	0.00	-	383	82	2435	492	6318	4246	580	302	740	-	6171	2.4
7	8	86	25	977	7.87	33	-1.07	0.0	0	-	2.37	-	2283	102	1550	454	6393	5672	1200	242	52	-	7407	-14.7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1200
800
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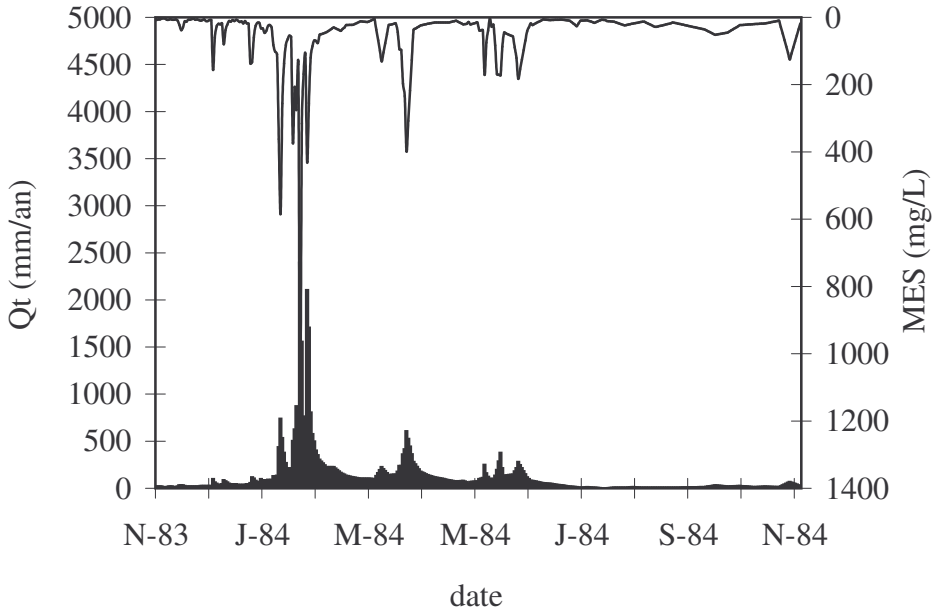
M-84
M-84
J-84
S-84
N-84
date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MES (mg/L)
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M-84
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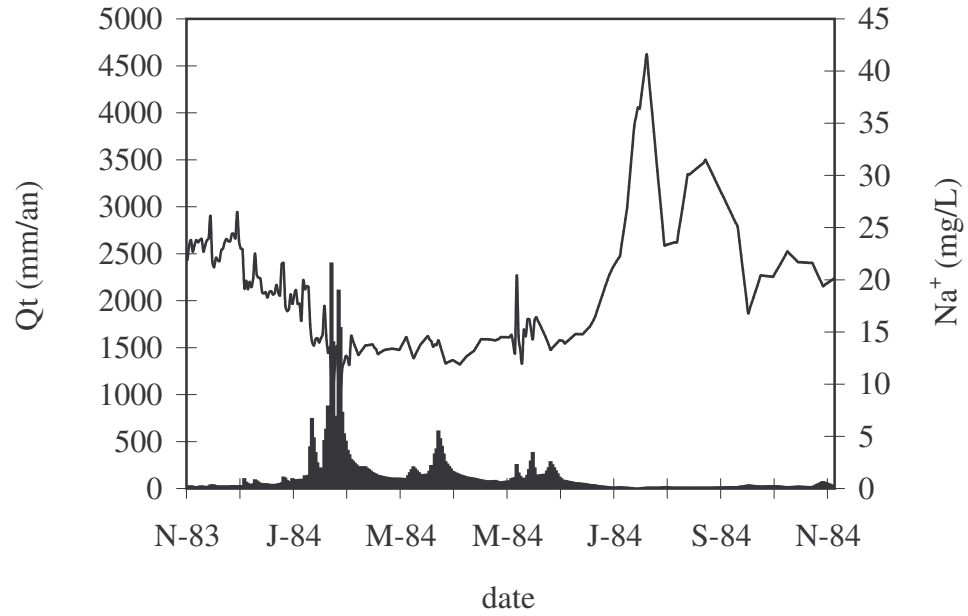
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Na+ (mg/L)
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3500
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M-84
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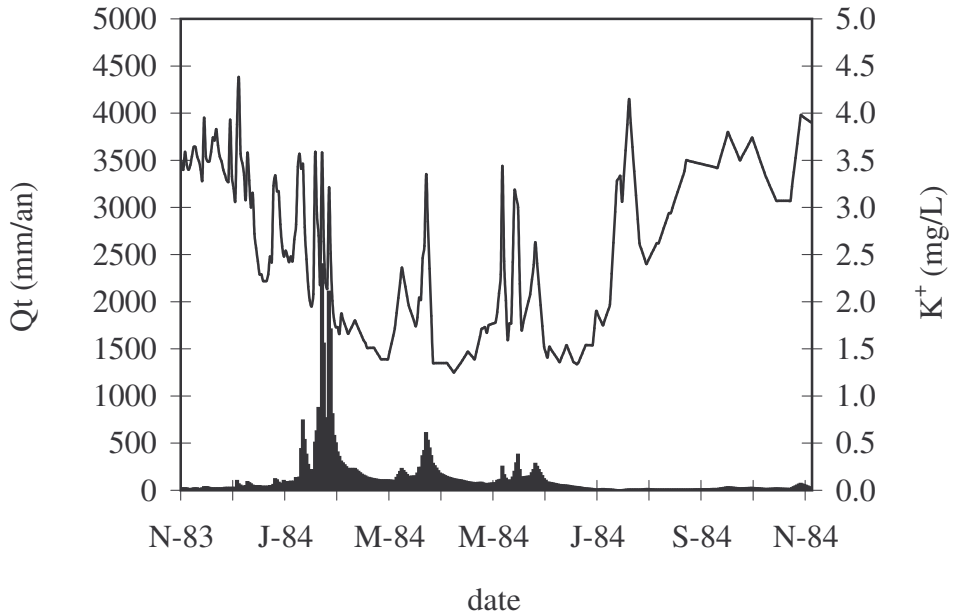
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K+ (mg/L)
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4000
3500
3000
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2000
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4.0
3.5
3.0
2.5
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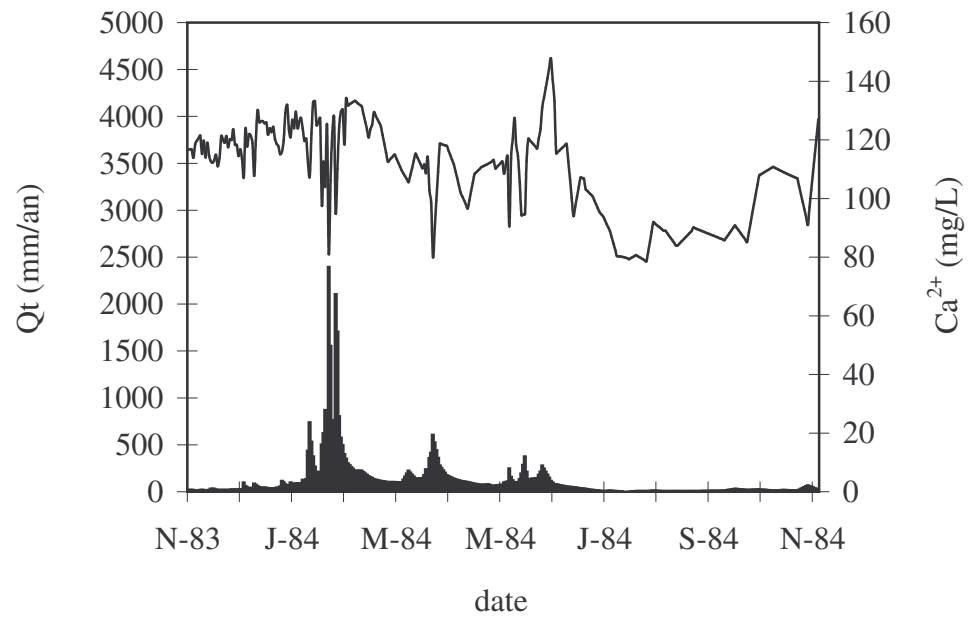
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4000
3500
3000
2500
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1500
1000
500
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100
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60
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J-84
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M-84
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S-84
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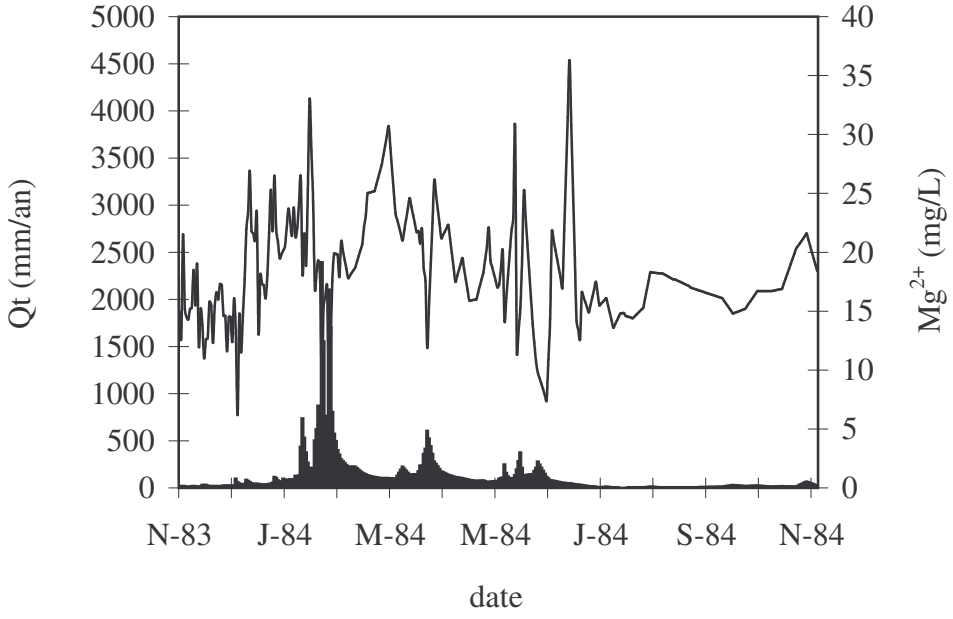
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Mg^{2+} (mg/L)
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4000
3500
3000
2500
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1000
500
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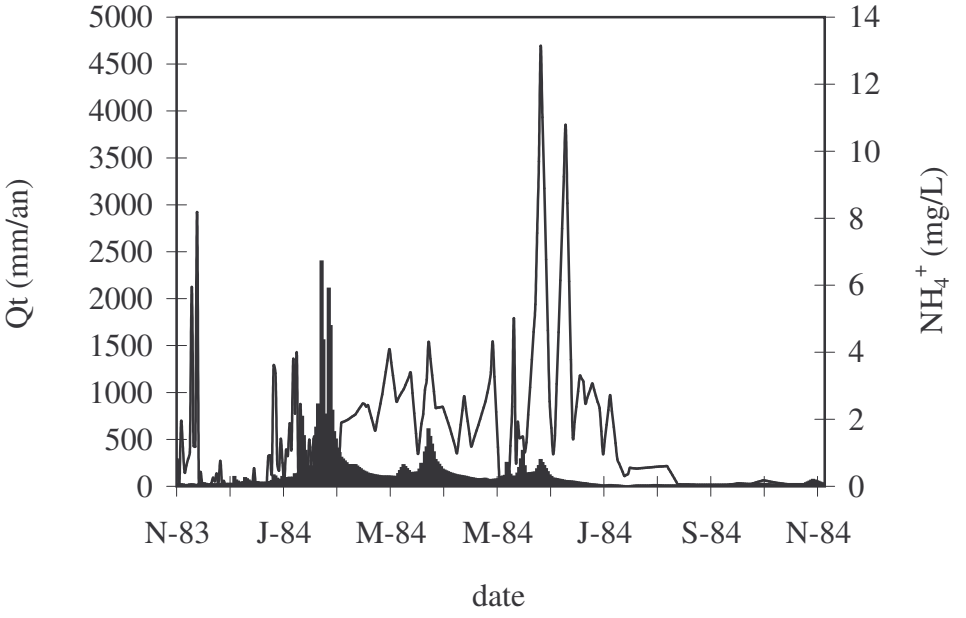
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3500
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500
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2
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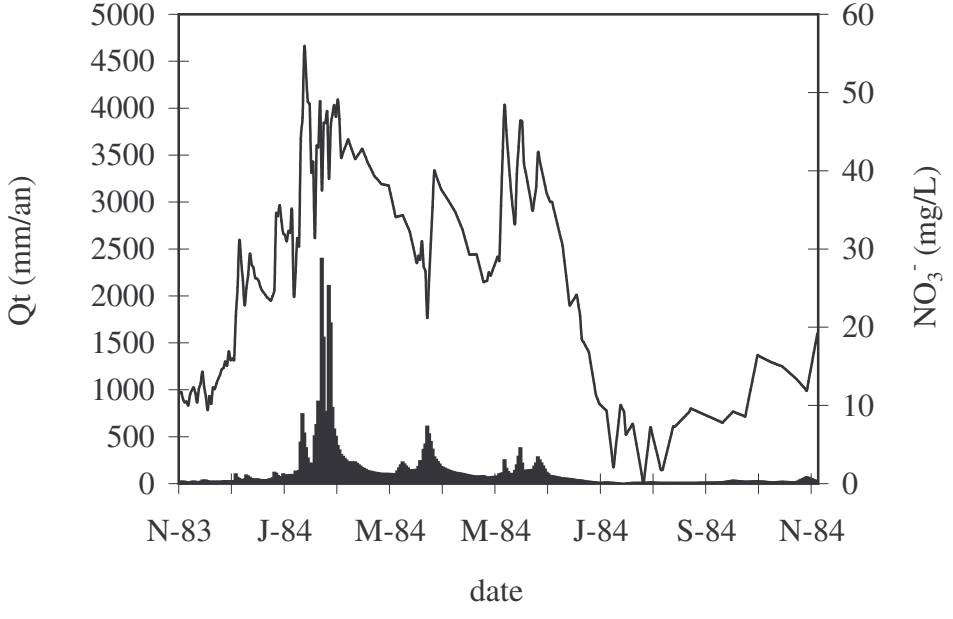
date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NO_3^- (mg/L)
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4000
3500
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1000
500
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30
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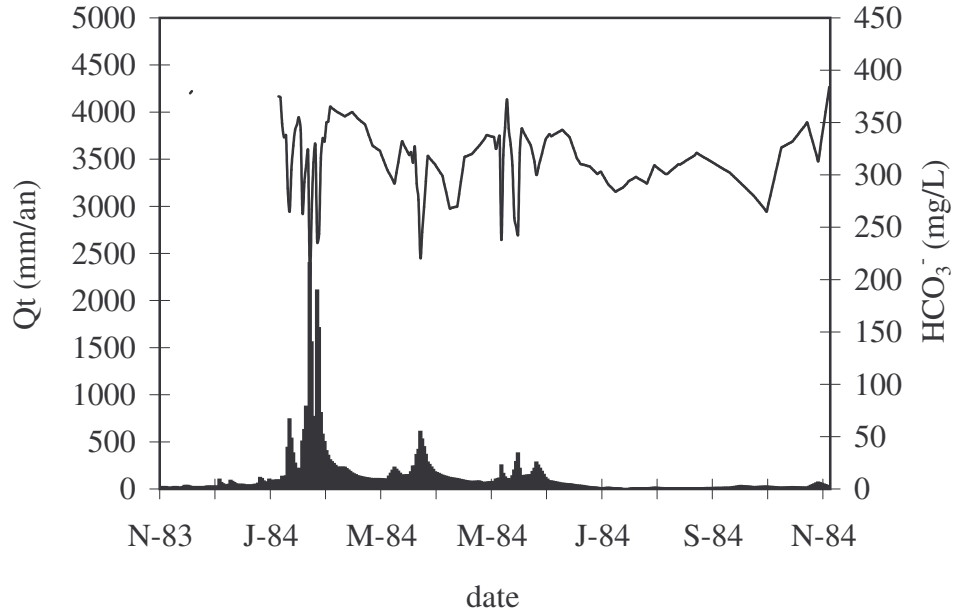
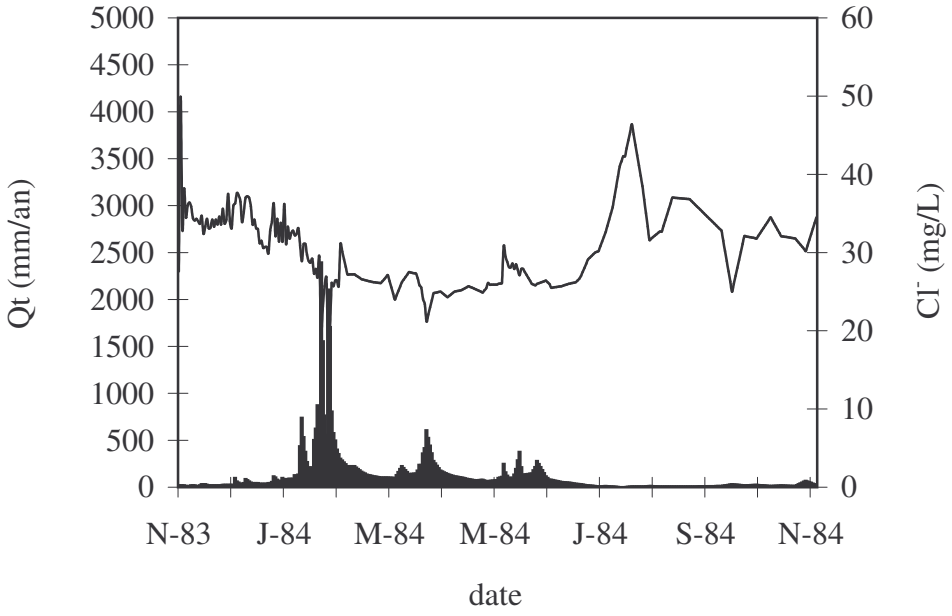
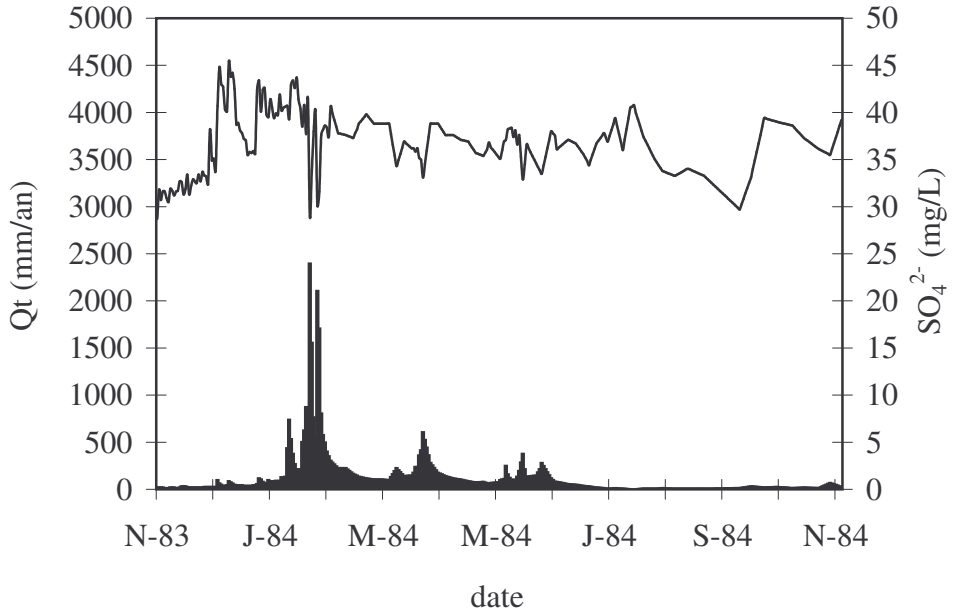
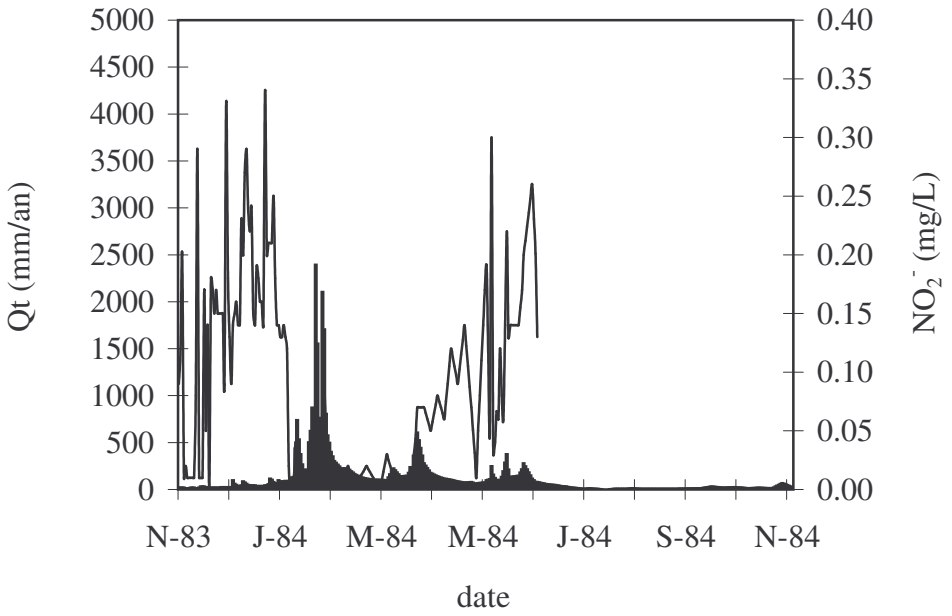
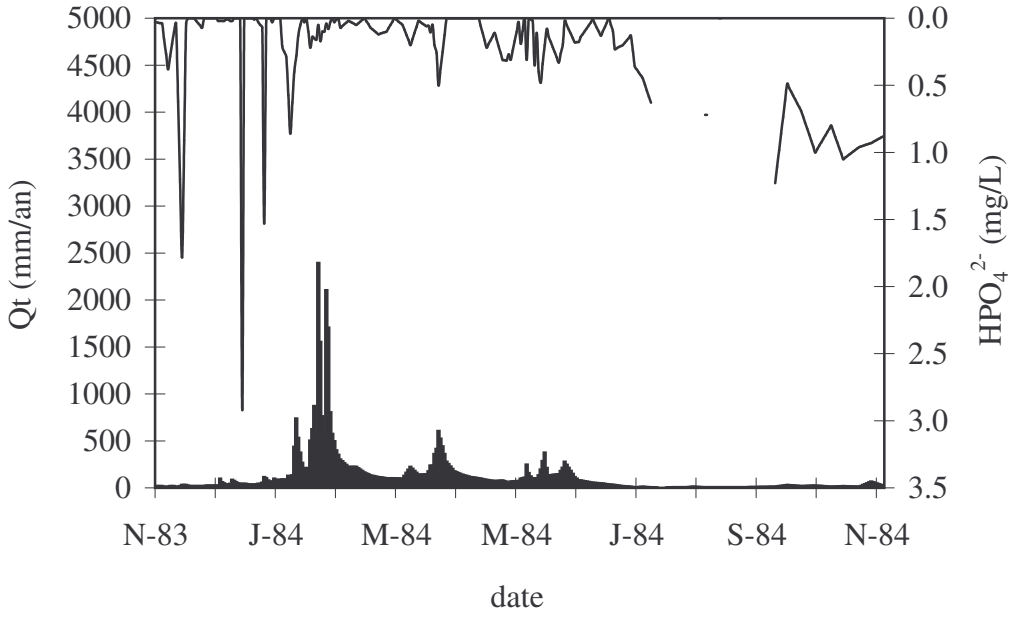
10
0
N-83
J-84
M-84
M-84
J-84
S-84
N-84
date


Qt (mm/an)
HCO_3^- (mg/L)
date
N-83
J-84
M-84
M-84
J-84
S-84
N-84


Qt (mm/an)
Cl^- (mg/L)
date
N-83
J-84
M-84
M-84
J-84
S-84
N-84


Qt (mm/an)
SO_4^{2-} (mg/L)
date
N-83
J-84
M-84
M-84
J-84
S-84
N-84


Qt (mm/an)
NO_2^- (mg/L)
date
N-83
J-84
M-84
M-84
J-84
S-84
N-84


5000
4500
4000
3500
3000
2500
2000
1500
1000
500
0
Qt (mm/an)
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
HPO_4^{2-} (mg/L)
N-83
J-84
M-84
M-84
J-84
S-84
N-84
date

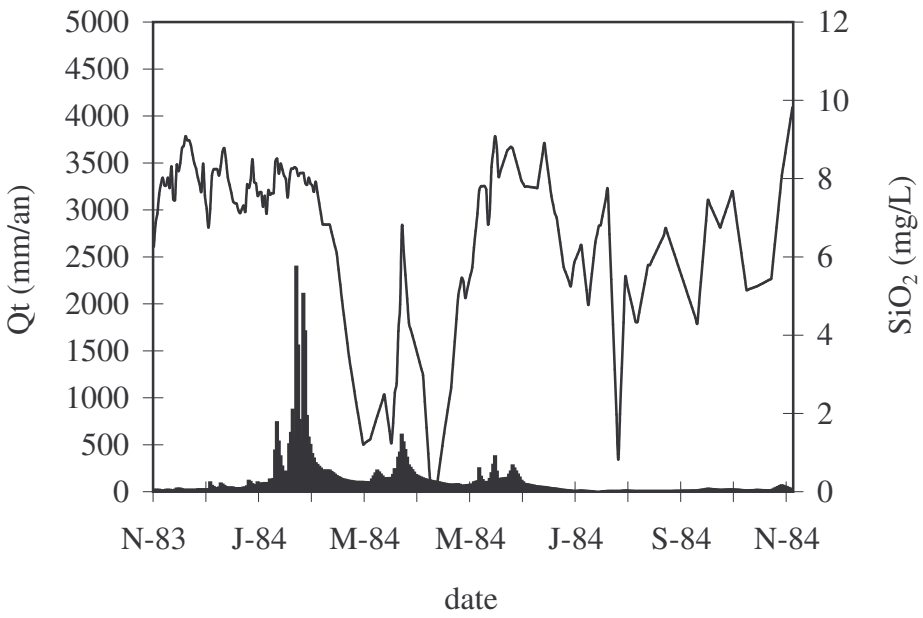

5000
4500
4000
3500
3000
2500
2000
1500
1000
500
0
Qt (mm/an)
12
10
8
6
4
2
0
SiO_2 (mg/L)
N-83
J-84
M-84
M-84
J-84
S-84
N-84
date

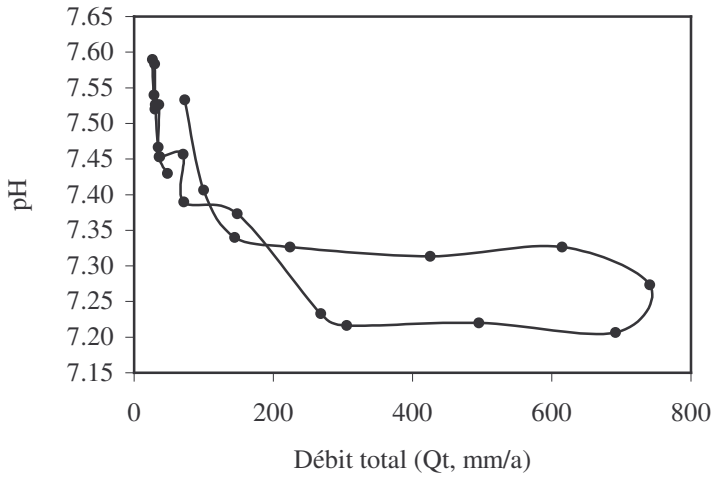
Tableau A8 (1/2)

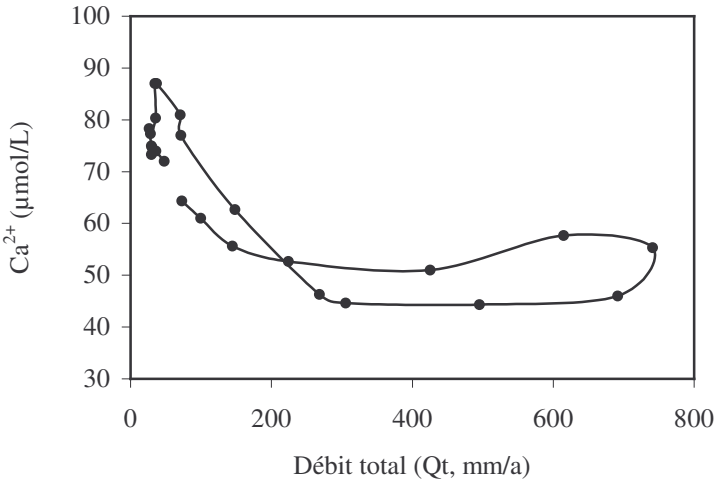
N°	Qt	pH	log fCO_2	CO_2 cons.	F CO_2	log [SiO_2]	SiO_2 rel.	F SiO_2 rel.	Re	VCh	Vm	VCh - Vm
	$mm.a^{-1}$			µmol/L	10^3 $mol.km^{-2}.a^{-1}$		µmol/L	10^3 $mol.km^{-2}.a^{-1}$		m/Ma	m/Ma	m/Myr
1	45	7.35	-2.91	394.05	17.62	-3.18	659	29	2.27	1.40	0.06	1.35
2	30	7.36	-2.90	409.82	12.18	-3.17	679	20	2.44	0.96	0.04	0.92
3	24	7.44	-2.97	419.03	10.09	-3.16	694	17	2.54	0.80	0.03	0.77
4	25	7.42	-2.95	424.69	10.42	-3.15	706	17	2.60	0.83	0.03	0.80
5	21	7.59	-3.12	425.69	8.92	-3.15	706	15	2.69	0.71	0.02	0.69
6	26	7.62	-3.14	441.02	11.60	-3.14	730	19	2.84	0.91	0.05	0.86
7	28	7.6	-3.13	432.25	12.16	-3.15	710	20	2.86	0.95	0.06	0.89
8	37	7.54	-3.05	449.12	16.41	-3.13	738	27	2.82	1.28	0.16	1.12
9	38	7.36	-2.85	466.58	17.67	-3.12	756	29	2.86	1.37	0.18	1.19
10	50	7.4	-2.89	458.61	22.80	-3.13	744	37	2.84	1.76	0.21	1.55
11	75	7.4	-2.92	440.75	32.92	-3.14	721	54	2.77	2.57	0.70	1.87
12	77	7.44	-2.98	423.25	32.73	-3.15	710	55	2.80	2.62	1.44	1.18
13	113	7.35	-2.99	354.40	39.99	-3.21	612	69	2.74	3.29	2.10	1.19
14	287	7.17	-2.95	261.25	74.89	-3.34	455	130	2.32	6.22	9.67	-3.45
15	339	7.18	-2.98	248.92	84.45	-3.36	432	146	1.92	6.98	8.88	-1.90
16	513	7.2	-3.01	243.82	125.03	-3.37	424	217	1.70	10.35	12.07	-1.72
17	613	7.28	-3.07	248.82	152.46	-3.37	424	260	1.72	12.37	12.30	0.07
18	671	7.26	-3.04	241.83	162.17	-3.41	388	260	1.69	12.41	8.61	3.80
19	584	7.23	-2.99	260.48	152.07	-3.36	435	254	1.67	12.12	6.76	5.36
20	387	7.27	-3.01	267.69	103.49	-3.35	451	174	1.68	8.31	2.70	5.61
21	225	7.31	-3.03	283.68	63.71	-3.31	486	109	1.78	5.21	1.03	4.18
22	143	7.32	-2.99	317.98	45.49	-3.26	545	78	1.91	3.72	0.41	3.31
23	105	7.33	-2.98	335.42	35.19	-3.24	577	61	1.99	2.88	0.13	2.75
24	75	7.57	-3.18	364.17	27.20	-3.20	632	47	2.16	2.25	0.09	2.15
25	49	7.52	-3.12	369.62	18.27	-3.20	628	31	2.25	1.48	0.05	1.43
26	39	7.54	-3.14	373.72	14.44	-3.20	636	25	2.28	1.17	0.05	1.12
27	31	7.49	-3.08	385.05	11.85	-3.18	659	20	2.37	0.97	0.05	0.91
28	32	7.58	-3.17	381.94	12.26	-3.19	651	21	2.38	1.00	0.05	0.95
29	33	7.52	-3.12	374.72	12.51	-3.20	636	21	2.31	1.01	0.07	0.94
30	25	7.52	-3.10	383.83	9.50	-3.19	643	16	2.29	0.76	0.06	0.70
31	21	7.48	-3.05	387.94	8.33	-3.19	651	14	2.28	0.67	0.05	0.62
32	29	7.5	-3.07	399.82	11.67	-3.17	679	20	2.33	0.94	0.06	0.88
33	27	7.55	-3.10	411.48	11.25	-3.16	690	19	2.32	0.90	0.05	0.85
34	32	7.52	-3.07	415.69	13.34	-3.15	706	23	2.40	1.08	0.06	1.02
35	73	7.47	-3.04	406.14	29.80	-3.15	702	52	2.46	2.46	0.51	1.95
36	44	7.49	-3.05	417.91	18.25	-3.14	722	32	2.59	1.50	0.27	1.23
37	163	7.53	-3.17	353.06	57.57	-3.20	624	102	2.62	4.85	3.45	1.40
38	268	7.41	-3.17	285.66	76.63	-3.28	522	140	2.17	6.67	6.82	-0.15
39	226	7.31	-3.09	262.35	59.33	-3.33	463	105	1.90	4.99	5.18	-0.19
40	544	7.18	-3.00	242.37	131.94	-3.37	428	233	1.73	11.09	16.17	-5.08
41	799	7.25	-3.03	254.92	203.80	-3.36	432	345	1.75	16.44	15.50	0.95
42	673	7.25	-3.01	256.82	172.90	-3.37	424	285	1.66	13.59	11.31	2.28
43	705	7.28	-3.05	259.58	182.95	-3.35	443	312	1.72	14.89	11.35	3.54
44	471	7.34	-3.08	277.12	130.46	-3.32	483	227	1.75	10.83	4.50	6.32
45	244	7.31	-3.02	296.45	72.27	-3.30	506	123	1.81	5.88	1.09	4.79
46	127	7.3	-2.98	316.88	40.33	-3.27	537	68	1.86	3.26	0.21	3.05
47	97	7.42	-3.07	333.86	32.22	-3.24	573	55	1.97	2.63	0.16	2.48
48	67	7.51	-3.14	350.18	23.48	-3.22	596	40	2.10	1.91	0.11	1.80
49	49	7.42	-3.03	364.95	18.04	-3.21	616	30	2.23	1.45	0.06	1.39
50	39	7.46	-3.06	371.62	14.56	-3.20	628	25	2.31	1.17	0.05	1.12
51	36	7.65	-3.24	382.94	13.80	-3.19	651	23	2.31	1.12	0.07	1.05
52	33	7.56	-3.16	380.49	12.41	-3.18	655	21	2.34	1.02	0.04	0.98
53	34	7.64	-3.22	391.05	13.27	-3.18	659	22	2.32	1.07	0.04	1.03

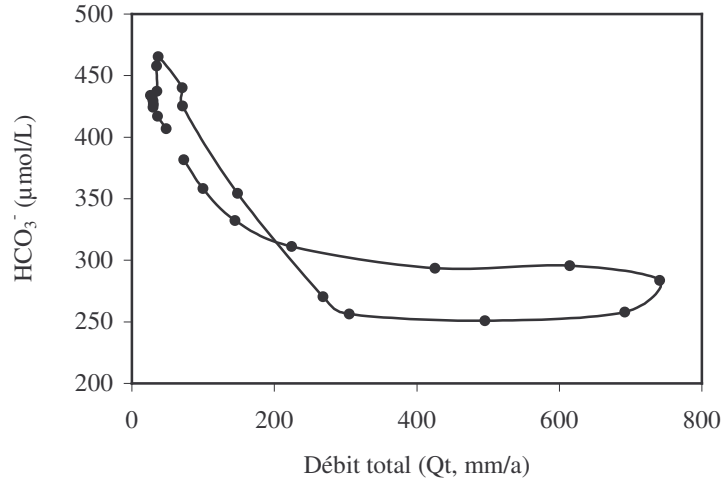
Tableau A8 (2/2)

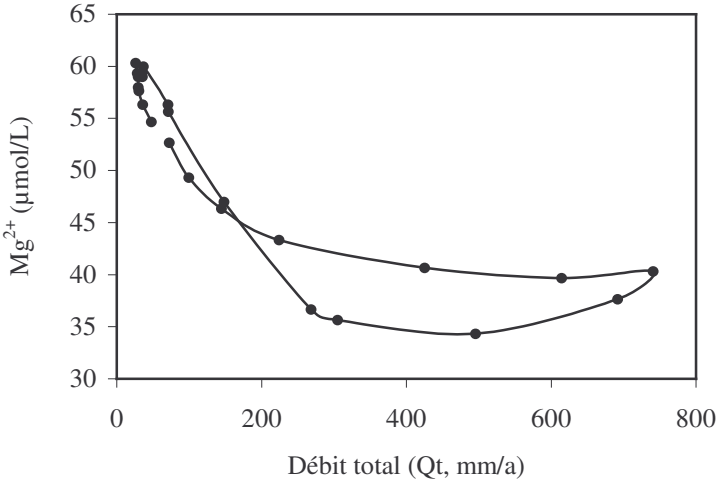
N°	Qt	pH	log fCO_2	CO_2 cons.	F CO_2	log [SiO_2]	SiO_2 rel.	F SiO_2 rel.	Re	VCh	Vm	VCh - Vm
	$mm.a^{-1}$			µmol/L	10^3 $mol.km^{-2}.a^{-1}$		µmol/L	10^3 $mol.km^{-2}.a^{-1}$		m/Ma	m/Ma	m/Myr
54	27	7.63	-3.22	378.62	10.36	-3.20	628	17	2.27	0.82	0.03	0.79
55	35	7.54	-3.14	378.72	13.35	-3.20	636	22	2.26	1.07	0.05	1.01
56	40	7.54	-3.14	373.62	14.93	-3.20	628	25	2.23	1.20	0.10	1.10
57	38	7.49	-3.07	396.15	15.00	-3.18	667	25	2.26	1.20	0.09	1.11
58	28	7.44	-3.00	420.25	11.94	-3.15	710	20	2.37	0.96	0.11	0.85
59	64	7.5	-3.08	407.25	25.92	-3.15	710	45	2.43	2.15	0.42	1.73
60	92	7.24	-2.86	383.37	35.38	-3.17	683	63	2.35	3.00	1.13	1.87
61	169	7.24	-2.92	329.97	55.71	-3.24	581	98	2.22	4.67	3.25	1.42
62	250	7.12	-2.89	276.89	69.11	-3.30	502	125	1.96	5.97	9.61	-3.64
63	350	7.16	-2.96	257.80	90.17	-3.34	459	161	1.78	7.65	9.03	-1.37
64	429	7.28	-3.06	256.14	109.80	-3.35	447	192	1.78	9.14	9.74	-0.60
65	663	7.09	-2.89	245.26	162.54	-3.38	420	278	1.75	13.26	16.43	-3.17
66	878	7.31	-3.01	273.26	240.02	-3.38	420	369	1.68	17.57	11.66	5.91
67	555	7.47	-3.14	297.35	165.00	-3.33	463	257	1.72	12.24	5.17	7.07
68	418	7.33	-3.05	277.80	116.16	-3.34	459	192	1.70	9.15	3.71	5.44
69	204	7.36	-3.05	297.89	60.71	-3.30	502	102	1.80	4.88	0.90	3.98
70	163	7.4	-3.08	306.77	50.02	-3.28	530	86	1.83	4.12	0.52	3.59
71	98	7.47	-3.10	339.31	33.10	-3.25	569	55	1.92	2.64	0.23	2.41
72	76	7.52	-3.14	354.18	27.02	-3.22	596	45	2.08	2.17	0.12	2.05
73	47	7.5	-3.09	373.06	17.37	-3.20	624	29	2.22	1.38	0.08	1.31
74	36	7.52	-3.10	383.28	13.81	-3.19	639	23	2.28	1.10	0.05	1.05
75	30	7.52	-3.09	391.94	11.65	-3.19	651	19	2.36	0.92	0.04	0.89
76	31	7.5	-3.08	386.83	11.90	-3.19	643	20	2.32	0.94	0.04	0.90
77	33	7.43	-3.00	387.28	12.93	-3.19	639	21	2.25	1.02	0.04	0.98
78	26	7.57	-3.12	410.82	10.59	-3.17	679	18	2.28	0.83	0.04	0.79
79	36	7.44	-3.01	406.37	14.64	-3.17	683	25	2.27	1.17	0.10	1.08
80	39	7.39	-2.96	407.92	15.77	-3.16	687	27	2.26	1.26	0.15	1.12
81	46	7.34	-2.89	416.14	19.05	-3.15	702	32	2.28	1.53	0.30	1.23
82	42	7.46	-2.99	442.23	18.61	-3.13	745	31	2.36	1.49	0.20	1.29
83	55	7.3	-2.84	426.25	23.55	-3.15	710	39	2.36	1.87	0.49	1.38
84	81	7.25	-2.83	403.25	32.66	-3.15	710	58	2.39	2.74	0.97	1.77
85	142	7.2	-2.82	374.82	53.13	-3.17	679	96	2.40	4.58	2.63	1.95

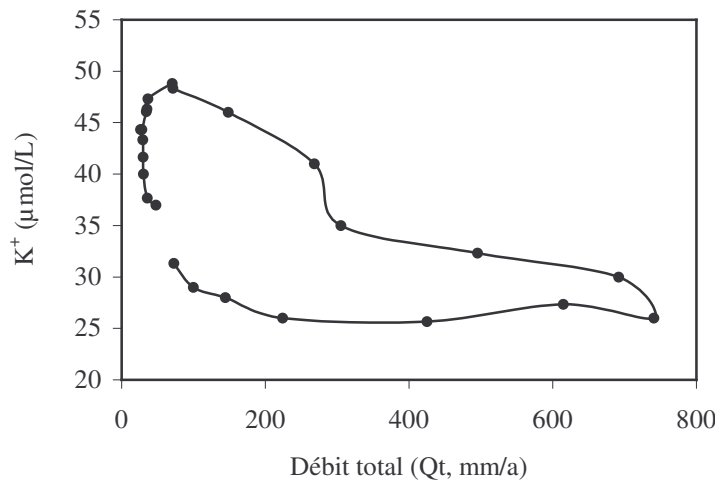
Figure A6 (1/2)


pH
7.65
7.60
7.55
7.50
7.45
7.40
7.35
7.30
7.25
7.20
7.15
0
200
400
600
800
Débit total (Qt, mm/a)


Ca2+ (µmol/L)
100
90
80
70
60
50
40
30
0
200
400
600
800
Débit total (Qt, mm/a)


HCO3- (µmol/L)
500
450
400
350
300
250
200
0
200
400
600
800
Débit total (Qt, mm/a)


Mg2+ (µmol/L)
65
60
55
50
45
40
35
30
0
200
400
600
800
Débit total (Qt, mm/a)


K+ (µmol/L)
55
50
45
40
35
30
25
20
0
200
400
600
800
Débit total (Qt, mm/a)

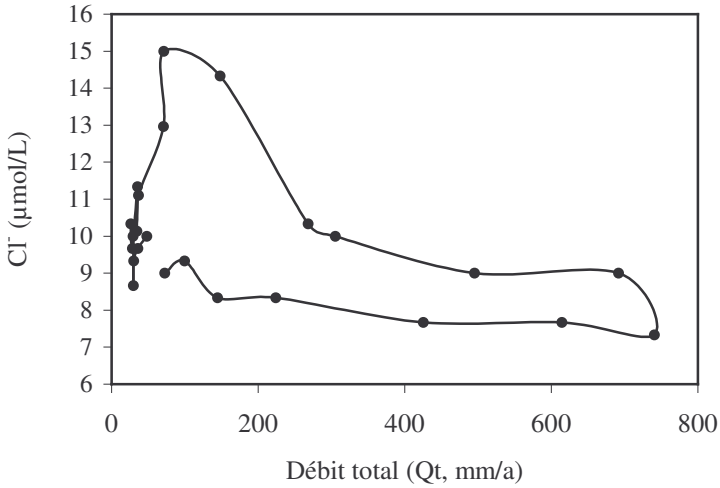
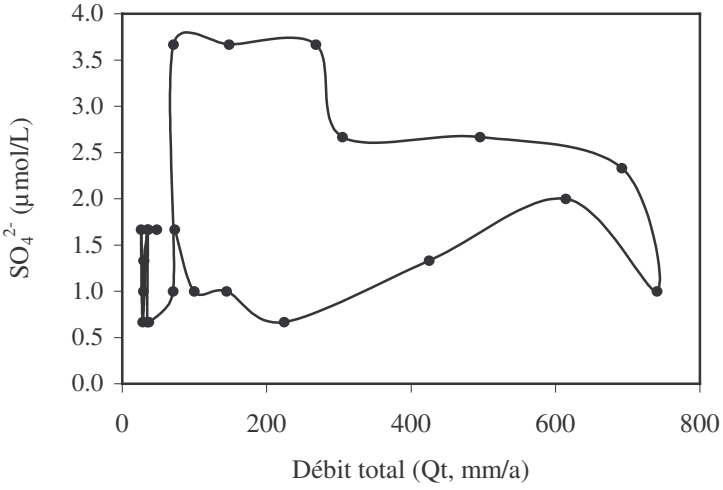
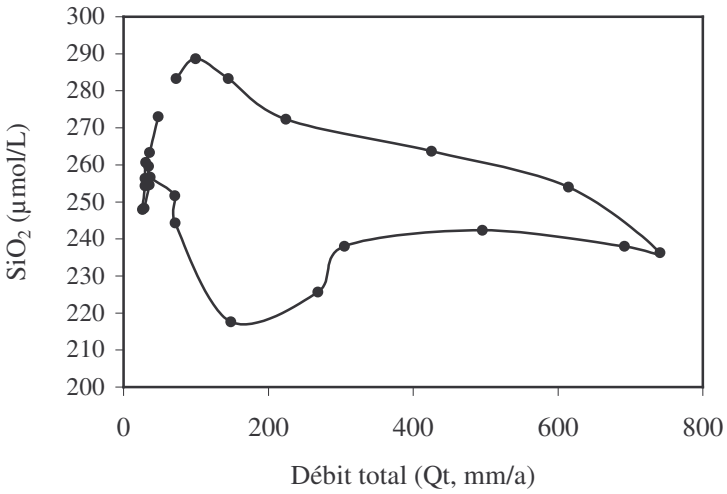
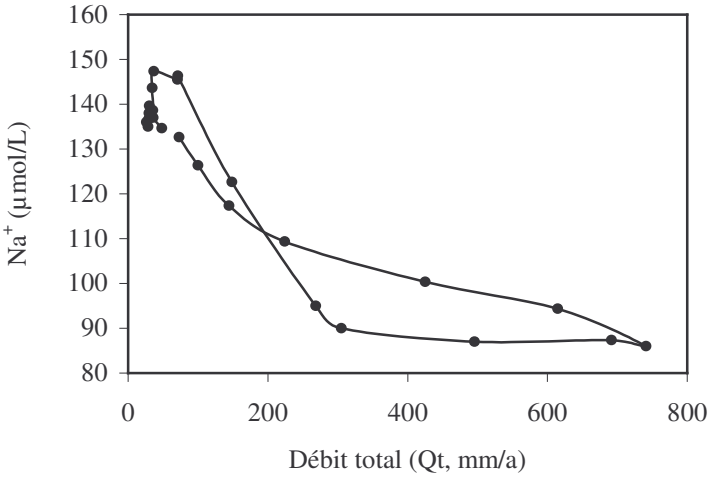

Cl- (µmol/L)
16
15
14
13
12
11
10
9
8
7
6
0
200
400
600
800
Débit total (Qt, mm/a)

Figure A6 (2/2)


4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
SO_4^{2-} (µmol/L)
0
200
400
600
800
Débit total (Qt, mm/a)


300
290
280
270
260
250
240
230
220
210
200
SiO_2 (µmol/L)
0
200
400
600
800
Débit total (Qt, mm/a)


160
150
140
130
120
110
100
90
80
Na^+ (µmol/L)
0
200
400
600
800
Débit total (Qt, mm/a)

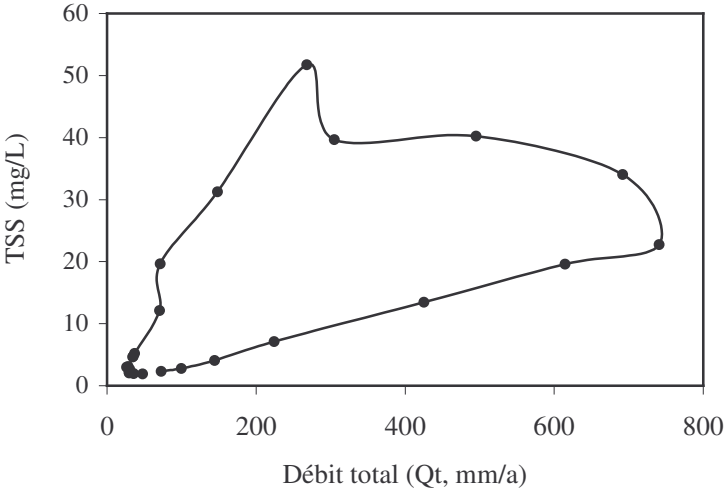

60
50
40
30
20
10
0
TSS (mg/L)
0
200
400
600
800
Débit total (Qt, mm/a)

Tableau A9 (1/5)

Amazone à Obidos. Superficie = 4 619 000 km²

	$mm.a^{-1}$	$\delta^{13}C$			$\delta^{18}O$	C/N		Cycle du carbone ($\mu mol.l^{-1}$)				
N°	Qt	DIC	POCF	POCC	H_2O	POCF	POCC	DIC	POCF	POCC	PONF	PONC
1	1503	*-16.4*	*-27.4*	*-27.9*	*-6.5*	*10.1*	*19.9*	601	200	27	*19.9*	1.4
2	1102	-16.3	-27.3	*-28.2*	-5.5	11.2	16.1	495	196	23	17.5	1.4
3	840	-12.9	-26.7	-28.2	-5.7	9.8	22.2	672	187	20	19	0.9
4	1140	-15.2	-26.7	-28.4	-4.7	10.0	25.0	676	214	35	21.4	1.4
5	1211	-16.0	-27.5	-27.3	-4.5	10.0	18.9	617	203	28	20.2	1.5
6	627	-14.0	-26.6	*-28.3*	-3.6	8.3	20.8	499	98	4	11.8	0.2
7	1209	-14.8	-27.3	-28.3	-5.8	9.2	18.6	556	273	32	29.6	1.7
8	1387	-17.7	-27.9	-27.8	-6.5	11.9	19.4	609	138	29	11.6	1.5
Ave	1127	-15.68	-27.3	-28.0	-5.5	10.2	20.0	594.5	193.6	26.4	19.2	1.3
M	1127	-15.41	-27.2	-28.1	-5.4	10.1	20.1	590.7	188.6	24.7	18.9	1.2

	$mm.a^{-1}$	$\delta^{13}C$			$\delta^{18}O$	C/N		Cycle du carbone ($\mu mol.l^{-1}$)				
N°	Qt	DIC	POCF	POCC	H_2O	POCF	POCC	DIC	POCF	POCC	PONF	PONC
1	1503	*-16.4*	*-27.4*	*-27.9*	*-5.8*	*10.8*	*19.2*	*595*	*204*	*30*	*19.3*	*1.5*
2	1102	*-17.2*	*-27.6*	*-27.8*	*-5.9*	*11.4*	*18.3*	*575*	*178*	*28*	*15.6*	*1.5*
3	840	*-14.3*	*-26.9*	*-28.2*	*-5.0*	*9.3*	*21.3*	*601*	*197*	*23*	*21.0*	*1.1*
4	1140	*-15.3*	*-27.2*	*-28.1*	*-5.6*	*10.1*	*20.4*	*612*	*222*	*30*	*22.5*	*1.5*
5	1211	*-15.8*	*-27.3*	*-28.0*	*-5.5*	*10.4*	*19.7*	*587*	*186*	*25*	*18.1*	*1.3*
6	627	*-13.8*	*-26.6*	*-28.2*	*-3.8*	*8.7*	*21.3*	*539*	*91*	*5*	*10.6*	*0.2*
7	1209	*-14.1*	*-27.0*	*-28.3*	*-5.6*	*9.3*	*21.8*	*644*	*264*	*33*	*28.3*	*1.6*
8	1387	*-16.3*	*-27.4*	*-27.9*	*-5.4*	*10.7*	*19.1*	*573*	*167*	*24*	*15.5*	*1.2*
Ave	1127	-15.59	-27.2	-28.0	-5.5	10.2	20.0	593.4	194.5	26.1	19.3	1.3
M	1127	-15.41	-27.2	-28.1	-5.4	10.1	20.1	590.7	188.6	24.7	18.9	1.2

R^2		0.67	0.44	0.18	0.44	0.68	0.22	0.20	0.91	0.82	0.86	0.87

Somme des affluents. Superficie = 4 370 000 km²

	$mm.a^{-1}$	$\delta^{13}C$			$\delta^{18}O$	C/N		Cycle du carbone ($\mu mol.l^{-1}$)				
N°	Qt	DIC	POCF	POCC	H_2O	POCF	POCC	DIC	POCF	POCC	PONF	PONC
1	1629	-15.7	-27.0	-26.3	*-7.1*	10.1	*22.5*	597.3	157.5	51.2	15.5	2.3
2	933	-15.5	-27.2	*-28.4*	-5.6	11.3	27.9	454.3	100.6	25.0	8.9	0.9
3	851	-12.8	-26.5	-27.5	-6.0	9.9	20.9	723.8	289.9	43.5	29.3	2.1
4	1067	-14.7	-26.9	-27.2	-4.9	10.1	20.8	668.2	301.9	60.8	29.8	2.9
5	1052	-15.8	-27.6	-28.0	-4.8	9.4	21.8	593.8	140.5	18.2	15.0	0.8
6	515	-13.5	-27.1	*-27.3*	-3.9	9.9	22.1	513.6	134.2	25.0	13.6	1.1
7	1163	-14.3	-27.0	-28.3	-6.0	9.0	22.7	604.2	300.4	43.9	33.4	1.9
8	1176	-15.8	-27.5	-28.9	-6.6	11.6	23.2	519.0	102.3	18.2	8.8	0.8
Ave	1051	-14.87	-27.1	-27.6	-5.8	9.9	22.3	587.7	191.5	37.3	19.4	1.7
M	1048	-14.76	-27.1	-27.7	-5.6	10.2	22.7	584.2	190.9	35.7	19.3	1.6

	$mm.a^{-1}$	$\delta^{13}C$			$\delta^{18}O$	C/N		Cycle du carbone ($\mu mol.l^{-1}$)				
N°	Qt	DIC	POCF	POCC	H_2O	POCF	POCC	DIC	POCF	POCC	PONF	PONC
1	1629	-15.5	-27.0	-26.6	*-6.3*	10.8	*21.5*	576.5	145.2	42.2	13.4	2.0
2	933	-15.5	-27.3	*-27.9*	-5.4	10.5	26.1	462.7	99.4	22.2	9.5	0.9
3	851	-13.3	-26.6	-27.6	-6.3	9.8	20.4	782.6	303.4	47.4	30.9	2.3
4	1067	-14.5	-27.0	-27.2	-5.5	9.5	20.6	649.0	290.3	53.1	30.5	2.6
5	1052	-15.4	-27.3	-27.9	-5.2	10.0	22.5	523.0	131.3	22.8	13.2	1.0
6	515	-13.9	-27.2	*-27.6*	-5.2	10.2	34.8	545.0	138.1	31.7	13.5	0.9
7	1163	-14.1	-26.8	-27.9	-5.4	9.3	22.3	607.0	295.0	47.0	31.8	2.1
8	1176	-15.5	-27.4	-27.8	-5.3	10.5	21.6	533.5	112.8	23.1	10.7	1.1
Ave	1051	-14.75	-27.1	-27.5	-5.6	9.9	22.1	583.6	188.7	36.8	19.1	1.7
M	1048	-14.69	-27.1	-27.6	-5.6	10.1	23.7	584.9	189.4	36.2	19.2	1.6

Tableau A9 (2/5)

Rio Negro à Manacapuru. Superficie = 755 000 km²

	$mm.a^{-1}$	$\delta^{13}C$			$\delta^{18}O$	C/N		Cycle du carbone ($\mu mol.l^{-1}$)				
N°	Qt	DIC	POCF	POCC	H_2O	POCF	POCC	DIC	POCF	POCC	PONF	PONC
1	2466	*-25.3*	*-27.4*	*-32.6*	*-6.0*	*9.7*	*22.2*	135	65	0	*6.7*	0.0
2	1684	-23.0	-28.8	*-32.6*	-4.8	11.5	22.2	180	18	0	1.6	0
3	209	-20.2	-27.4	-32.6	-3.5	13.5	22.2	118	3	0	*0.2*	0
4	347	-23.1	-26.8	-32.6	-2.4	13.0	22.2	72	5	0	*0.2*	0
5	1346	-26.8	-28.6	-32.6	-3.9	10.0	22.2	106	25	0	2.5	0
6	518	-24.9	-29.1	*-32.6*	-2.2	12.5	22.2	147	8	0	0.6	0
7	1170	-25.4	-28.6	-32.6	-3.8	9.3	22.2	144	54	0	5.8	0
8	1935	-26.4	-27.7	-32.6	-6.0	9.7	22.2	106	35	7	3.6	0.3
Ave	1210	-25.13	-28.1	-32.6	-4.8	9.9	22.2	132.2	37.4	1.3	3.8	0.1
M	1210	-24.39	-28.1	-32.6	-4.1	11.2	22.2	126.1	26.7	0.8	2.6	0.0

	$mm.a^{-1}$	$\delta^{13}C$			$\delta^{18}O$	C/N		Cycle du carbone ($\mu mol.l^{-1}$)				
N°	Qt	DIC	POCF	POCC	H_2O	POCF	POCC	DIC	POCF	POCC	PONF	PONC
1	2466	*-23.9*	*-27.9*	*-32.6*	*-4.2*	*11.6*	*22.2*	*124*	*21*	*0*	*2.0*	*0.0*
2	1684	*-23.7*	*-27.6*	*-32.6*	*-4.3*	*11.7*	*22.2*	*117*	*20*	*1*	*1.8*	*0.0*
3	209	*-24.3*	*-28.2*	*-32.6*	*-4.1*	*11.3*	*22.2*	*131*	*24*	*0*	*2.3*	*0.0*
4	347	*-23.4*	*-27.1*	*-32.6*	*-4.3*	*11.9*	*22.2*	*104*	*20*	*2*	*1.8*	*0.1*
5	1346	*-24.4*	*-28.5*	*-32.6*	*-4.1*	*11.2*	*22.2*	*138*	*24*	*0*	*2.3*	*0.0*
6	518	*-25.0*	*-28.6*	*-32.6*	*-3.9*	*10.6*	*22.2*	*137*	*32*	*1*	*3.3*	*0.0*
7	1170	*-25.9*	*-28.7*	*-32.6*	*-3.7*	*9.8*	*22.2*	*137*	*43*	*2*	*4.6*	*0.1*
8	1935	*-24.4*	*-27.8*	*-32.6*	*-4.0*	*11.0*	*22.2*	*121*	*29*	*2*	*2.9*	*0.1*
Ave	1210	-24.35	-28.0	-32.6	-4.1	11.2	22.2	125.8	26.2	0.8	2.6	0.0
M	1210	-24.39	-28.1	-32.6	-4.1	11.2	22.2	126.1	26.7	0.8	2.6	0.0

R^2		0.13	0.44	-	0.02	0.15	0.12	0.13	0.12	0.12	0.14	0.12

Rio Iça à São Antonio do Iça. Superficie = 148 000 km²

	$mm.a^{-1}$	$\delta^{13}C$			$\delta^{18}O$	C/N		Cycle du carbone ($\mu mol.l^{-1}$)				
N°	Qt	DIC	POCF	POCC	H_2O	POCF	POCC	DIC	POCF	POCC	PONF	PONC
1	1471	*-21.6*	*-28.9*	*-29.8*	*-8.9*	*9.4*	*16.7*	125	83	5	*8.9*	0.3
2	1557	-18.5	-27.6	*-29.3*	-5.7	13.1	20.2	222	64	38	4.9	1.2
3	1557	-20.2	-26.9	-27.7	-5.2	9.3	22.3	186	124	8	13.4	*0.4*
4	1365	-19.6	-28.1	-28.5	-3.7	9.3	22.0	206	138	17	14.9	*0.8*
5	1940	-20.5	-29.1	-29.2	-5.4	8.1	19.2	315	139	25	17.2	1.3
6	1237	-18.7	-28.2	*-28.5*	-3.6	9.5	22.2	148	147	27	15.5	1.2
7	1557	-20.3	-28.8	-28.2	-5.6	9.3	20.2	272	117	14	12.6	0.7
8	1791	-20.5	-29.0	-28.8	-6.5	11.3	22.2	236	87	13	7.7	0.6
Ave	1559	-20.04	-28.4	-28.8	-5.6	9.9	20.6	219.8	111.7	18.3	11.9	0.8
M	1559	-19.99	-28.3	-28.7	-5.6	9.9	20.6	213.9	112.4	18.3	11.9	0.8

	$mm.a^{-1}$	$\delta^{13}C$			$\delta^{18}O$	C/N		Cycle du carbone ($\mu mol.l^{-1}$)				
N°	Qt	DIC	POCF	POCC	H_2O	POCF	POCC	DIC	POCF	POCC	PONF	PONC
1	1471	*-21.3*	*-28.9*	*-29.9*	*-8.8*	*10.5*	*17.3*	*159*	*69*	*11*	*6.8*	*0.5*
2	1557	*-20.2*	*-28.5*	*-28.9*	*-6.1*	*10.0*	*20.1*	*214*	*106*	*17*	*11.1*	*0.8*
3	1557	*-19.4*	*-27.7*	*-28.4*	*-4.3*	*9.7*	*22.2*	*184*	*132*	*20*	*14.0*	*0.9*
4	1365	*-19.5*	*-28.0*	*-28.3*	*-4.4*	*9.7*	*21.9*	*215*	*129*	*21*	*13.8*	*0.9*
5	1940	*-20.0*	*-28.4*	*-28.7*	*-5.7*	*9.9*	*20.5*	*226*	*111*	*18*	*11.7*	*0.8*
6	1237	*-19.2*	*-27.6*	*-28.2*	*-3.8*	*9.6*	*22.6*	*186*	*138*	*21*	*14.7*	*0.9*
7	1557	*-20.1*	*-29.0*	*-28.5*	*-5.3*	*9.8*	*20.5*	*312*	*112*	*20*	*12.1*	*0.9*
8	1791	*-20.3*	*-28.5*	*-29.0*	*-6.3*	*10.0*	*19.9*	*214*	*102*	*17*	*10.8*	*0.7*
Ave	1559	-20.01	-28.4	-28.8	-5.6	9.9	20.6	215.3	111.5	18.2	11.8	0.8
M	1559	-19.99	-28.3	-28.7	-5.6	9.9	20.6	213.9	112.4	18.3	11.9	0.8

R^2		0.42	0.42	0.68	0.91	0.03	0.71	0.53	0.51	0.09	0.34	0.15

Rio Jutai à Xibeco. Superficie = 74,000 km²

	$mm.a^{-1}$	$\delta^{13}C$			$\delta^{18}O$	C/N		Cycle du carbone ($\mu mol.l^{-1}$)				
N°	Qt	DIC	POCF	POCC	H_2O	POCF	POCC	DIC	POCF	POCC	PONF	PONC
1	2559	*-22.8*	*-29.0*	*-31.4*	*-8.2*	*9.0*	*18.5*	420	71	3	*7.9*	0.2
2	938	-19.4	-28.8	*-32.9*	-4.5	10.6	25.0	226	12	3	1.1	0.1
3	1109	-23.5	-26.8	-28.2	-3.9	8.3	21.8	340	58	3	7	0
4	1663	-24.0	-27.0	-29.1	-3.8	8.6	21.8	503	118	3	13.6	0
5	1791	-23.5	-30.4	-33.8	-4.0	7.5	21.8	529	64	3	8.5	0
6	597	-17.7	-28.2	*-26.5*	-3.3	9.2	21.8	175	68	3	7.4	0
7	1621	-25.4	-28.8	-31.6	-5.7	8.3	21.8	414	75	3	9	0
8	1407	-24.2	-28.8	-32.6	-5.6	8.1	21.8	182	78	3	9.6	0
Ave	1461	-23.14	-28.6	-31.2	-5.3	8.6	21.3	383.1	71.8	2.5	8.5	0.1
M	1461	-22.56	-28.5	-30.8	-4.9	8.7	21.8	348.4	67.9	2.5	8.0	0.0

	$mm.a^{-1}$	$\delta^{13}C$			$\delta^{18}O$	C/N		Cycle du carbone ($\mu mol.l^{-1}$)				
N°	Qt	DIC	POCF	POCC	H_2O	POCF	POCC	DIC	POCF	POCC	PONF	PONC
1	2559	*-23.8*	*-28.7*	*-32.2*	*-5.8*	*8.7*	*21.6*	*357*	*69*	*3*	*8.2*	*0.1*
2	938	*-22.8*	*-29.6*	*-33.5*	*-5.4*	*8.8*	*22.2*	*388*	*49*	*3*	*6.1*	*0.1*
3	1109	*-21.6*	*-27.7*	*-28.2*	*-4.0*	*8.7*	*21.6*	*320*	*77*	*3*	*8.9*	*0.0*
4	1663	*-23.1*	*-27.5*	*-29.0*	*-5.0*	*8.7*	*21.2*	*315*	*87*	*3*	*10.0*	*0.0*
5	1791	*-21.1*	*-30.1*	*-33.3*	*-4.3*	*8.8*	*22.8*	*404*	*34*	*3*	*4.4*	*0.1*
6	597	*-20.1*	*-27.5*	*-26.6*	*-2.8*	*8.7*	*21.8*	*311*	*75*	*2*	*8.6*	*0.0*
7	1621	*-23.4*	*-28.5*	*-31.3*	*-5.4*	*8.7*	*21.6*	*348*	*72*	*3*	*8.5*	*0.1*
8	1407	*-24.6*	*-28.3*	*-31.9*	*-6.3*	*8.7*	*21.2*	*343*	*80*	*3*	*9.4*	*0.1*
Ave	1461	-22.84	-28.6	-31.2	-5.1	8.7	21.7	352.1	67.4	2.5	8.0	0.0
M	1461	-22.56	-28.5	-30.8	-4.9	8.7	21.8	348.4	67.9	2.5	8.0	0.0

R^2		0.32	0.70	0.96	0.51	0.00	0.10	0.06	0.37	-	0.29	0.21

Rio Japura à Jutica. Superficie = 289 000 km²

	$mm.a^{-1}$	$\delta^{13}C$			$\delta^{18}O$	C/N		Cycle du carbone ($\mu mol.l^{-1}$)				
N°	Qt	DIC	POCF	POCC	H_2O	POCF	POCC	DIC	POCF	POCC	PONF	PONC
1	2195	*-16.9*	*-26.9*	*-26.7*	*-8.9*	*9.9*	*20.8*	254	125	100	*12.6*	0.4
2	2337	-18.8	-27.2	*-27.7*	-5.3	11.4	21.9	265	158	17	13.9	0.8
3	1540	-20.0	-28.3	-29.7	-4.1	9.8	20.8	311	108	25	11	1.2
4	983	-15.4	-29.0	-28.5	-3.8	8.3	22.7	357	92	*5*	11	*0.2*
5	2097	-20.3	-28.1	-28.7	-5.3	11.4	21.9	314	158	17	13.9	0.8
6	1605	-16.7	-26.8	*-26.8*	-4.1	9.8	20.8	180	108	25	11	1.2
7	1398	-15.3	-28.8	-28.8	-5.0	9.9	24.0	321	125	100	12.6	0.4
8	1824	-21.1	-27.2	-29.3	-6.6	10.2	20.8	305	83	17	8.2	0.6
Ave	1747	-18.33	-27.6	-28.2	-5.6	10.3	21.6	283.2	124.0	39.1	12.0	0.7
M	1747	-18.06	-27.8	-28.3	-5.4	10.1	21.7	288.4	119.8	38.1	11.8	0.7

	$mm.a^{-1}$	$\delta^{13}C$			$\delta^{18}O$	C/N		Cycle du carbone ($\mu mol.l^{-1}$)				
N°	Qt	DIC	POCF	POCC	H_2O	POCF	POCC	DIC	POCF	POCC	PONF	PONC
1	2195	*-16.9*	*-26.9*	*-26.7*	*-6.4*	*10.3*	*21.2*	*225*	*133*	*55*	*12.8*	*0.7*
2	2337	*-18.8*	*-27.2*	*-27.7*	*-6.0*	*10.5*	*21.0*	*259*	*128*	*32*	*12.0*	*0.8*
3	1540	*-20.0*	*-28.3*	*-29.7*	*-4.7*	*10.2*	*21.7*	*337*	*111*	*14*	*10.8*	*0.8*
4	983	*-16.8*	*-28.4*	*-28.7*	*-4.8*	*9.6*	*22.6*	*315*	*112*	*50*	*11.6*	*0.6*
5	2097	*-20.1*	*-27.5*	*-28.6*	*-5.6*	*10.6*	*21.0*	*288*	*123*	*16*	*11.5*	*0.9*
6	1605	*-16.6*	*-27.1*	*-26.8*	*-6.2*	*10.2*	*21.5*	*234*	*131*	*57*	*12.7*	*0.7*
7	1398	*-14.5*	*-29.0*	*-28.7*	*-4.2*	*9.0*	*23.6*	*331*	*105*	*75*	*11.8*	*0.4*
8	1824	*-20.8*	*-27.9*	*-29.3*	*-5.2*	*10.5*	*21.2*	*318*	*116*	*7*	*10.9*	*0.8*
Ave	1747	-18.26	-27.7	-28.2	-5.5	10.2	21.6	282.6	121.4	36.2	11.8	0.7
M	1747	-18.06	-27.8	-28.3	-5.4	10.1	21.7	288.4	119.8	38.1	11.8	0.7

R^2		0.92	0.75	0.99	0.23	0.32	0.66	0.66	0.13	0.41	0.15	0.21

Tableau A9 (4/5)

Rio Purus à Anori. Superficie = 372 000 km²

	mm.a^{-1}	$\delta^{13}C$			$\delta^{18}O$	C/N		Cycle du carbone (µmol.l^{-1})				
N°	Qt	DIC	POCF	POCC	H_2O	POCF	POCC	DIC	POCF	POCC	PONF	PONC
1	1697	*-20.3*	*-28.3*	*-28.7*	*-7.1*	*8.5*	*23.1*	554	80	9	*9.4*	0.4
2	925	-18.3	-29.1	*-32.3*	-5.6	10.2	23.1	641	18	13	1.8	0
3	424	-15.4	-27.3	-29.5	-4.0	6.8	23.1	399	73	0	10.6	0
4	1213	-19.9	-28.1	-29.9	-3.9	8.3	23.1	484	148	20	17.8	0
5	1272	-19.7	-29.4	-28.6	-4.2	6.7	23.1	624	77	0	11.4	0
6	238	-14.1	-29.9	*-33.0*	-3.5	7.0	23.1	608	94	0	13.5	0
7	908	-19.7	-27.7	-28.8	-5.8	8.6	23.1	518	136	0	15.8	0
8	1374	-18.8	-31.2	-29.3	-6.5	9.3	23.1	633	56	0	6	0
Ave	1006	-19.15	-29.0	-29.6	-5.5	8.4	23.1	567.4	84.8	6.4	10.4	0.1
M	1006	-18.28	-28.9	-30.0	-5.1	8.2	23.1	557.5	85.1	5.2	10.8	0.1

	mm.a^{-1}	$\delta^{13}C$			$\delta^{18}O$	C/N		Cycle du carbone (µmol.l^{-1})				
N°	Qt	DIC	POCF	POCC	H_2O	POCF	POCC	DIC	POCF	POCC	PONF	PONC
1	1697	*-19.6*	*-29.0*	*-29.3*	*-5.7*	*8.6*	*23.1*	*574*	*66*	*8*	*8.1*	*0.1*
2	925	*-18.6*	*-29.6*	*-30.1*	*-5.6*	*8.5*	*23.1*	*611*	*51*	*5*	*6.7*	*0.1*
3	424	*-18.6*	*-28.4*	*-29.7*	*-5.0*	*8.1*	*23.1*	*525*	*102*	*6*	*12.7*	*0.0*
4	1213	*-19.8*	*-27.5*	*-28.7*	*-5.1*	*8.2*	*23.1*	*475*	*123*	*9*	*14.9*	*0.1*
5	1272	*-19.2*	*-29.3*	*-29.6*	*-5.6*	*8.6*	*23.1*	*591*	*59*	*7*	*7.5*	*0.1*
6	238	*-14.0*	*-30.1*	*-32.8*	*-3.9*	*7.4*	*23.1*	*611*	*82*	*-3*	*11.7*	*0.0*
7	908	*-18.2*	*-27.4*	*-29.5*	*-4.4*	*7.7*	*23.1*	*455*	*146*	*6*	*18.0*	*0.0*
8	1374	*-18.1*	*-29.8*	*-30.4*	*-5.4*	*8.4*	*23.1*	*618*	*50*	*4*	*6.7*	*0.1*
Ave	1006	-18.84	-28.8	-29.7	-5.3	8.3	23.1	558.7	80.7	6.3	10.1	0.1
M	1006	-18.28	-28.9	-30.0	-5.1	8.2	23.1	557.5	85.1	5.2	10.8	0.1

R^2		0.63	0.62	0.53	0.24	0.13	1.00	0.56	0.73	0.23	0.67	0.14

Rio Madeira à São Jose do Amatari. Superficie = 1 380 000 km²

	mm.a^{-1}	$\delta^{13}C$			$\delta^{18}O$	C/N		Cycle du carbone (µmol.l^{-1})				
N°	Qt	DIC	POCF	POCC	H_2O	POCF	POCC	DIC	POCF	POCC	PONF	PONC
1	915	*-16.8*	*-27.5*	*-25.6*	*-4.0*	*7.8*	*17.0*	501	179	70	*23.1*	*4.1*
2	313	-13.6	-27.1	*-26.3*	-5.5	7.7	20.0	542	87	*1*	11.3	*0.1*
3	528	-13.7	-26.1	-27.8	-6.9	7.9	18.1	525	366	33	46.4	1.8
4	1107	-17.9	-27.1	-26.5	-5.3	9.5	17.7	490	414	88	43.5	5
5	565	-14.7	-26.5	-26.2	-4.1	7.1	19.1	584	124	3	17.5	*0.2*
6	156	-12.4	-26.7	*-28.9*	-4.4	6.3	19.4	570	68	*1*	10.7	*0.1*
7	963	-14.2	-26.7	-28.2	-7.3	8.1	14.7	453	492	50	60.5	3.4
8	441	-15.4	-27.7	-26.0	-6.0	7.6	19.6	498	51	*1*	6.7	*0.1*
Ave	623	-15.51	-27.0	-26.8	-5.5	8.1	17.5	505.9	284.6	46.1	34.1	2.7
M	623	-14.84	-26.9	-26.9	-5.4	7.7	18.2	520.6	222.5	30.9	27.5	1.8

	mm.a^{-1}	$\delta^{13}C$			$\delta^{18}O$	C/N		Cycle du carbone (µmol.l^{-1})				
N°	Qt	DIC	POCF	POCC	H_2O	POCF	POCC	DIC	POCF	POCC	PONF	PONC
1	915	*-16.7*	*-27.4*	*-25.7*	*-4.8*	*8.3*	*18.0*	*504*	*200*	*50*	*22.8*	*2.9*
2	313	*-14.3*	*-27.1*	*-26.7*	*-4.8*	*7.2*	*19.5*	*548*	*66*	*7*	*9.7*	*0.4*
3	528	*-12.9*	*-26.1*	*-28.7*	*-6.8*	*7.6*	*17.3*	*520*	*381*	*27*	*48.1*	*1.7*
4	1107	*-17.1*	*-27.2*	*-26.2*	*-5.7*	*8.9*	*16.4*	*472*	*395*	*76*	*45.3*	*4.6*
5	565	*-14.8*	*-27.1*	*-26.6*	*-4.9*	*7.5*	*19.0*	*535*	*125*	*19*	*16.0*	*1.1*
6	156	*-12.3*	*-26.6*	*-27.8*	*-5.3*	*6.6*	*20.0*	*570*	*59*	*-16*	*10.9*	*-1.0*
7	963	*-15.4*	*-26.6*	*-27.6*	*-6.7*	*8.6*	*16.0*	*477*	*489*	*68*	*58.2*	*4.1*
8	441	*-15.1*	*-27.3*	*-26.1*	*-4.5*	*7.4*	*19.4*	*538*	*65*	*17*	*8.7*	*0.9*
Ave	623	-15.50	-27.0	-26.8	-5.6	8.1	17.6	504.8	284.9	45.6	34.1	2.7
M	623	-14.84	-26.9	-26.9	-5.4	7.7	18.2	520.6	222.5	30.9	27.5	1.8

R^2		0.85	0.72	0.72	0.51	0.75	0.75	0.62	0.99	0.80	0.99	0.83

Tableau A9 (5/5)

Rio Jurua à Tupe. Superficie = 217 000 km²

	$mm.a^{-1}$	$\delta^{13}C$			$\delta^{18}O$	C/N		Cycle du carbone ($\mu mol.l^{-1}$)				
N°	Qt	DIC	POCF	POCC	H_2O	POCF	POCC	DIC	POCF	POCC	PONF	PONC
1	684	*-18.1*	*-26.9*	*-27.6*	*-7.4*	*7.5*	*20.7*	740	69	13	*9.2*	*0.6*
2	247	-14.2	-27.5	*-32.4*	-4.7	8.1	26.0	1192	111	8	13.6	*0.3*
3	567	-14.6	-27.4	-27.5	-4.2	8.3	26.7	813	217	13	26.1	0.5
4	814	-17.8	-28.2	-28.5	-3.8	8.2	22.7	834	105	25	12.8	1.1
5	451	-19.9	-29.2	-29.7	-4.1	7.4	17.0	988	133	10	17.8	*0.6*
6	131	-13.5	-29.2	*-33.0*	-4.3	7.2	32.0	1369	103	7	14.3	*0.2*
7	756	-19.9	-27.7	-28.7	-5.3	8.9	23.8	878	205	17	23.1	0.7
8	698	-16.7	-29.5	-28.5	-6.3	9.7	24.6	915	93	12	9.5	0.4
Ave	544	-17.50	-28.1	-28.7	-5.2	8.4	23.3	889.6	132.4	15.0	15.8	0.6
M	544	-16.84	-28.2	-29.5	-5.0	8.2	24.2	966.1	129.3	13.1	15.8	0.6

	$mm.a^{-1}$	$\delta^{13}C$			$\delta^{18}O$	C/N		Cycle du carbone ($\mu mol.l^{-1}$)				
N°	Qt	DIC	POCF	POCC	H_2O	POCF	POCC	DIC	POCF	POCC	PONF	PONC
1	684	*-18.5*	*-28.2*	*-28.5*	*-5.9*	*8.1*	*20.8*	*838*	*70*	*17*	*8.7*	*0.8*
2	247	*-15.0*	*-28.5*	*-31.7*	*-4.8*	*7.9*	*27.5*	*1195*	*116*	*8*	*14.8*	*0.3*
3	567	*-17.0*	*-27.8*	*-27.9*	*-4.1*	*8.6*	*24.4*	*835*	*232*	*15*	*27.2*	*0.6*
4	814	*-18.9*	*-28.0*	*-27.5*	*-5.7*	*8.3*	*20.0*	*747*	*100*	*18*	*11.9*	*0.8*
5	451	*-17.2*	*-28.1*	*-29.0*	*-5.0*	*8.3*	*23.5*	*913*	*136*	*14*	*16.5*	*0.6*
6	131	*-13.8*	*-28.8*	*-33.3*	*-4.7*	*7.6*	*29.7*	*1355*	*99*	*5*	*13.2*	*0.1*
7	756	*-16.9*	*-28.0*	*-28.8*	*-4.6*	*8.4*	*24.4*	*912*	*175*	*14*	*20.9*	*0.6*
8	698	*-17.3*	*-28.2*	*-29.3*	*-5.3*	*8.1*	*23.2*	*933*	*107*	*14*	*13.2*	*0.6*
Ave	544	-17.44	-28.1	-28.8	-5.1	8.3	23.0	892.5	131.1	14.7	15.9	0.6
M	544	-16.84	-28.2	-29.5	-5.0	8.2	24.2	966.1	129.3	13.1	15.8	0.6

R^2		0.44	0.11	0.88	0.24	0.14	0.53	0.92	0.93	0.60	0.90	0.69

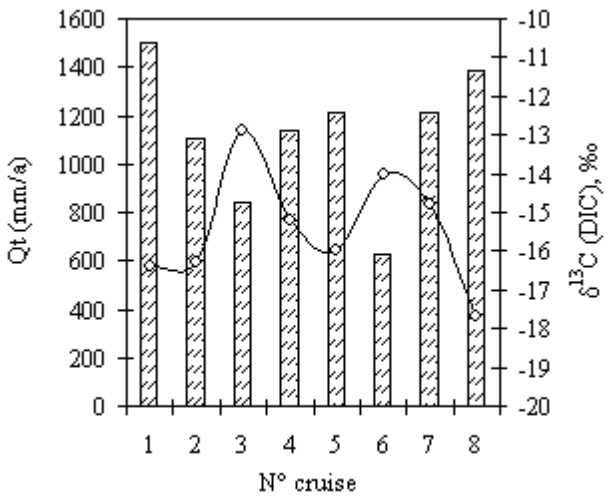
Rio Solimões à Vargem Grande. Superficie = 1 135 000 km²

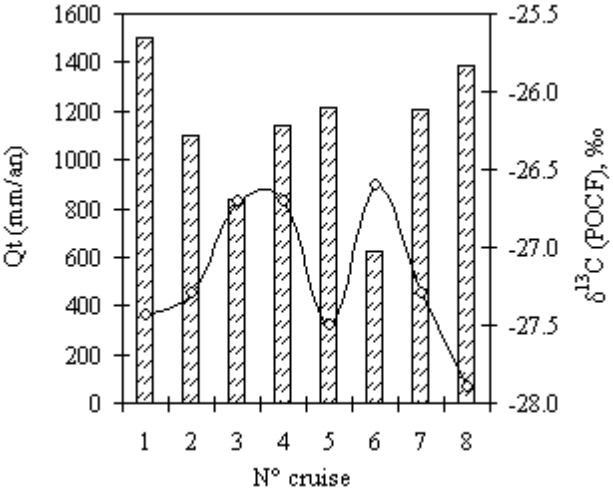
	$mm.a^{-1}$	$\delta^{13}C$			$\delta^{18}O$	C/N		Cycle du carbone ($\mu mol.l^{-1}$)				
N°	Qt	DIC	POCF	POCC	H_2O	POCF	POCC	DIC	POCF	POCC	PONF	PONC
1	1938	*-13.5*	*-26.5*	*-26.4*	*-8.9*	*11.9*	*19.7*	1238	282	93	*23.7*	4.7
2	881	-12.5	-27.0	*-28.2*	-6.8	12.2	27.4	873	215	77	17.6	2.8
3	1588	-11.6	-26.5	-27.3	-6.8	11.2	21.4	1081	388	68	34.6	3.2
4	1457	-11.9	-26.4	-27.6	-5.6	11.3	23.0	1110	387	78	34.1	3.4
5	1079	-13.1	-27.2	-27.7	-6.1	10.5	22.1	1222	278	51	26.6	2.3
6	740	-12.2	-26.8	*-27.3*	-4.5	10.6	22.2	918	234	47	22.1	2.1
7	1432	-12.0	-26.8	-28.1	-6.6	9.9	22.5	1124	413	68	41.6	3
8	1335	-13.2	-27.0	-28.4	-7.5	13.4	22.5	1002	221	45	16.5	2
Ave	1306	-12.53	-26.7	-27.5	-6.8	11.4	22.2	1095.4	313.3	68.5	28.0	3.1
M	1306	-12.50	-26.8	-27.6	-6.6	11.4	22.6	1071.0	302.2	65.7	27.1	2.9

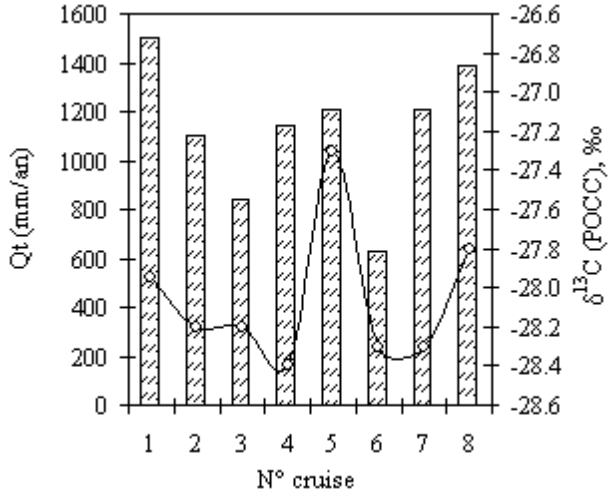
	$mm.a^{-1}$	$\delta^{13}C$			$\delta^{18}O$	C/N		Cycle du carbone ($\mu mol.l^{-1}$)				
N°	Qt	DIC	POCF	POCC	H_2O	POCF	POCC	DIC	POCF	POCC	PONF	PONC
1	1938	*-13.3*	*-26.6*	*-26.7*	*-9.0*	*12.4*	*20.4*	*1171*	*270*	*87*	*21.6*	*4.3*
2	881	*-12.9*	*-27.0*	*-27.7*	*-6.4*	*11.9*	*23.5*	*998*	*217*	*59*	*18.3*	*2.5*
3	1588	*-12.1*	*-26.5*	*-27.3*	*-7.3*	*11.0*	*21.0*	*1184*	*402*	*79*	*36.9*	*3.8*
4	1457	*-11.9*	*-26.7*	*-27.9*	*-5.9*	*10.7*	*22.7*	*1088*	*374*	*63*	*35.3*	*2.8*
5	1079	*-12.5*	*-26.9*	*-27.9*	*-5.9*	*11.3*	*23.5*	*1017*	*275*	*58*	*24.9*	*2.4*
6	740	*-12.7*	*-27.0*	*-28.0*	*-5.7*	*11.6*	*24.1*	*969*	*226*	*52*	*19.9*	*2.1*
7	1432	*-11.7*	*-26.6*	*-27.8*	*-6.0*	*10.5*	*22.3*	*1119*	*411*	*66*	*39.0*	*2.9*
8	1335	*-12.8*	*-26.9*	*-27.7*	*-6.5*	*11.7*	*23.2*	*1023*	*242*	*61*	*20.9*	*2.7*
Ave	1306	-12.50	-26.7	-27.5	-6.8	11.4	22.3	1090.4	313.3	68.5	28.1	3.1
M	1306	-12.50	-26.8	-27.6	-6.6	11.4	22.6	1071.0	302.2	65.7	27.1	2.9

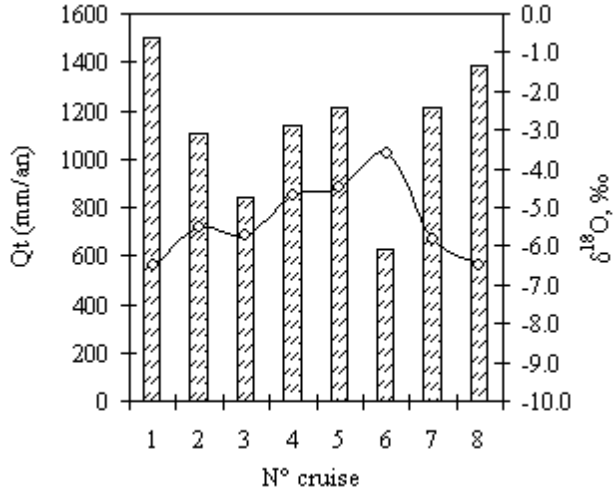
R^2		0.60	0.51	0.48	0.71	0.35	0.35	0.38	0.98	0.48	0.92	0.73

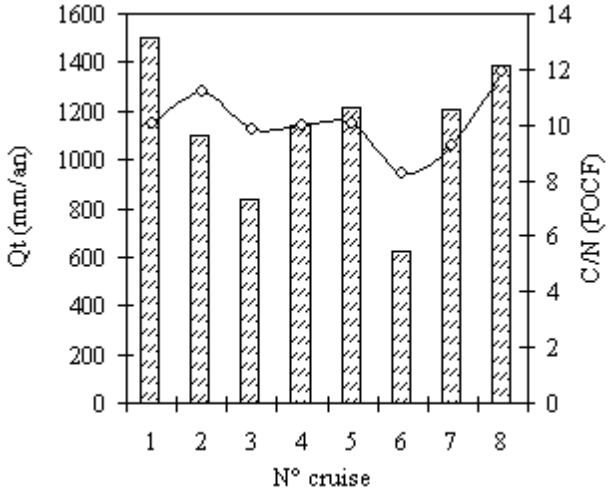
Figure A7 (1/10) : Amazone à Obidos











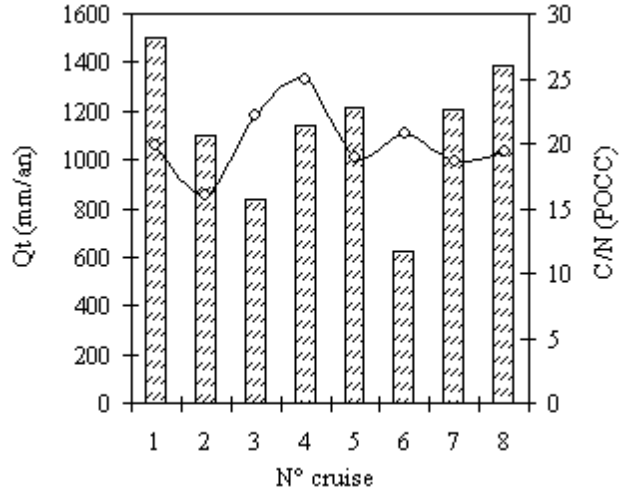
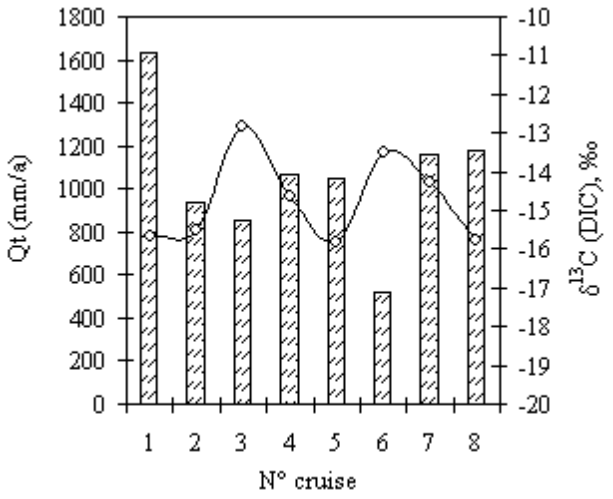
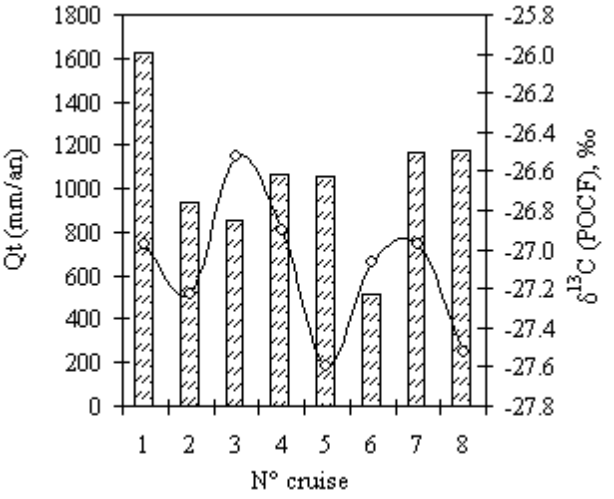
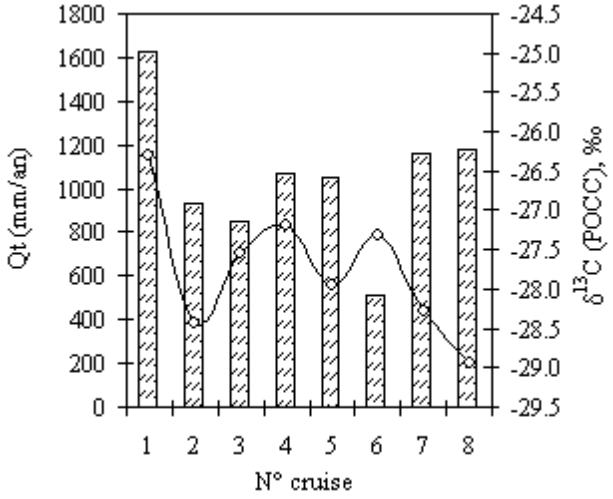
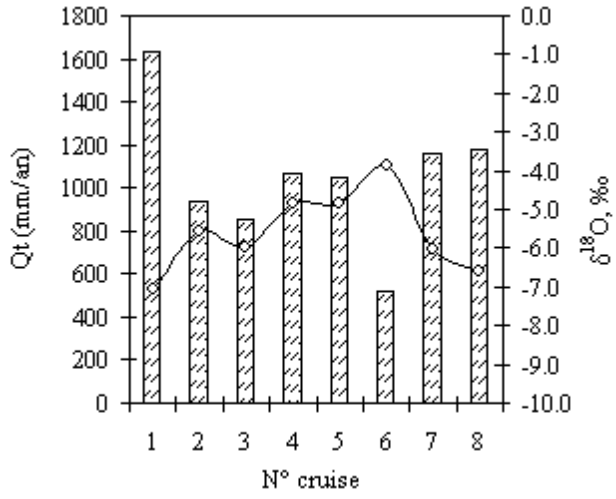


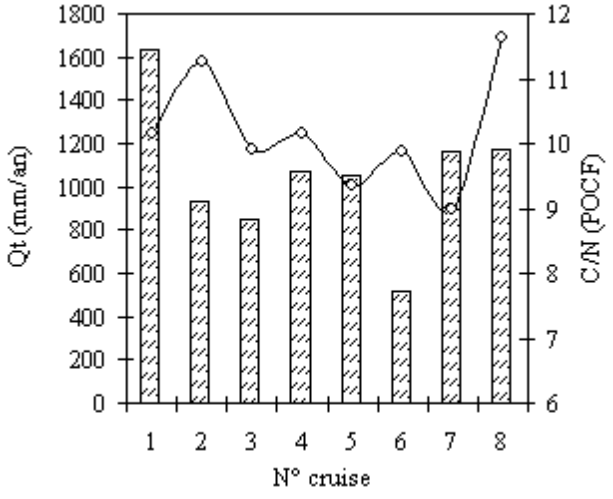
Figure A7 (2/10) : Somme des affluents











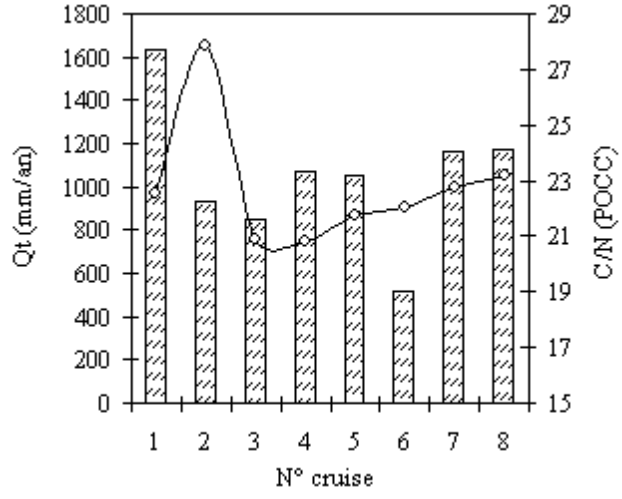
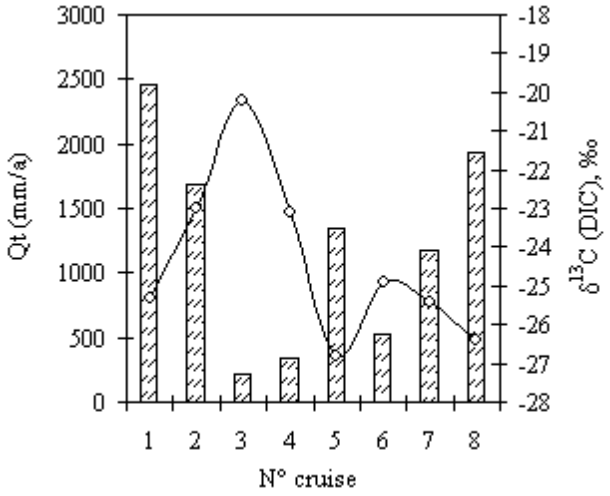
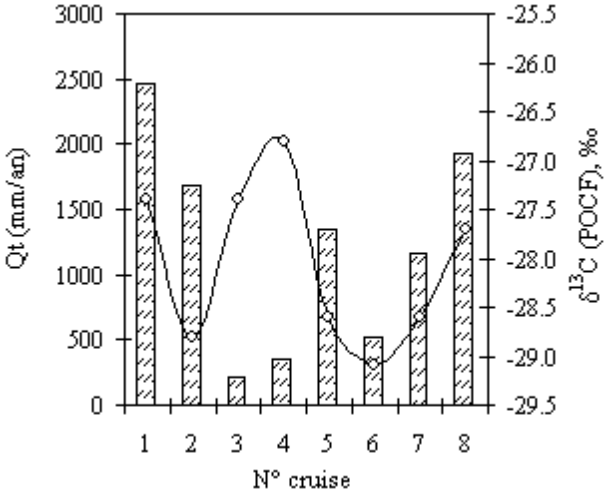
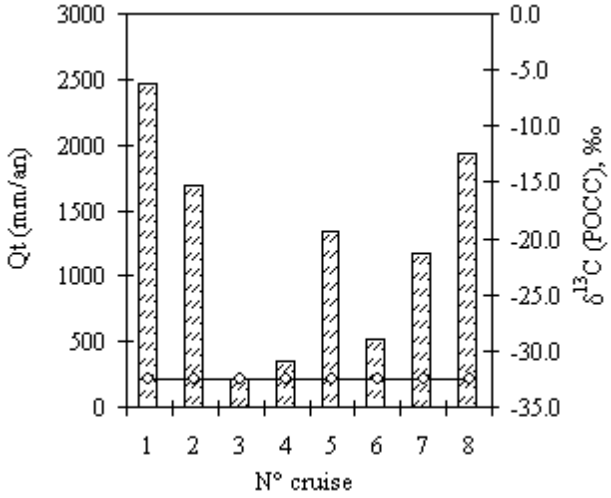
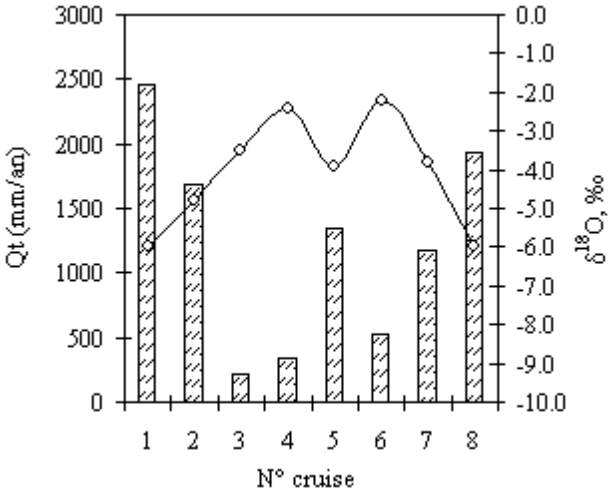


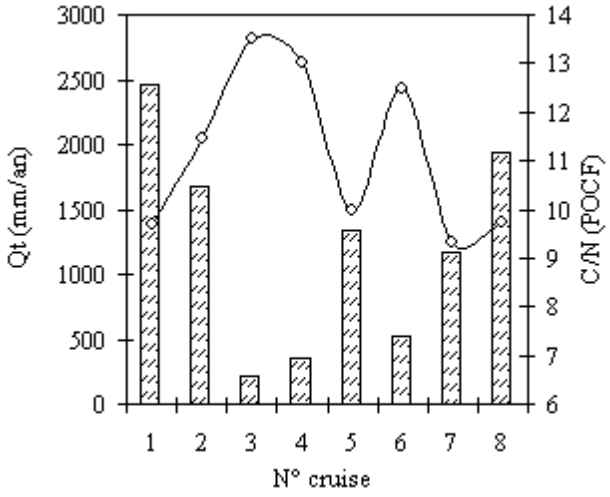
Figure A7 (3/10) : Rio Negro à Manacapuru











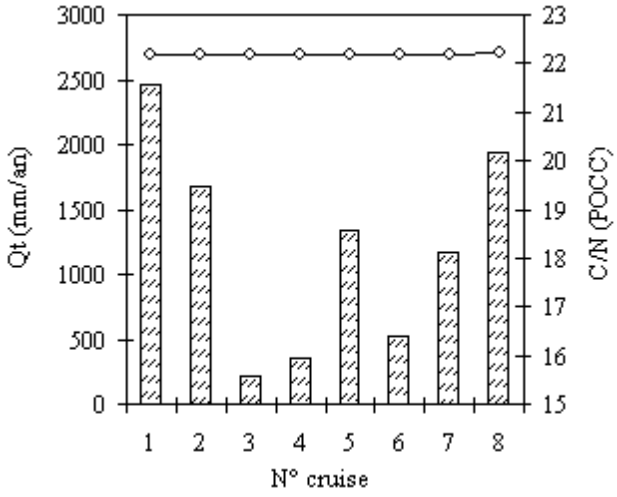
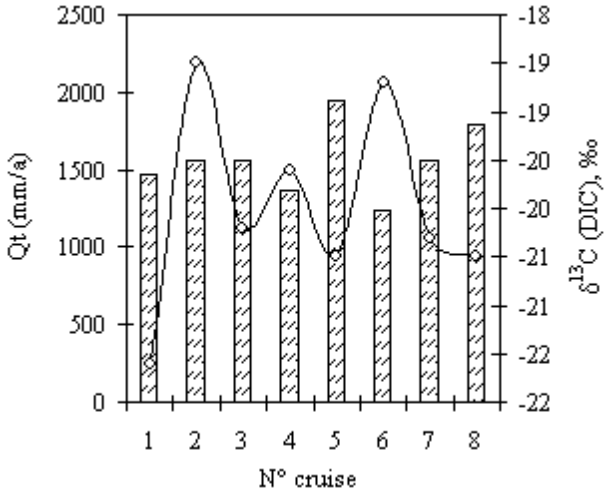
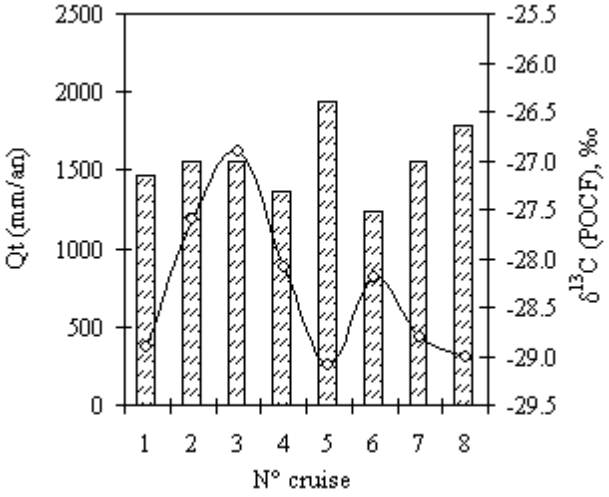
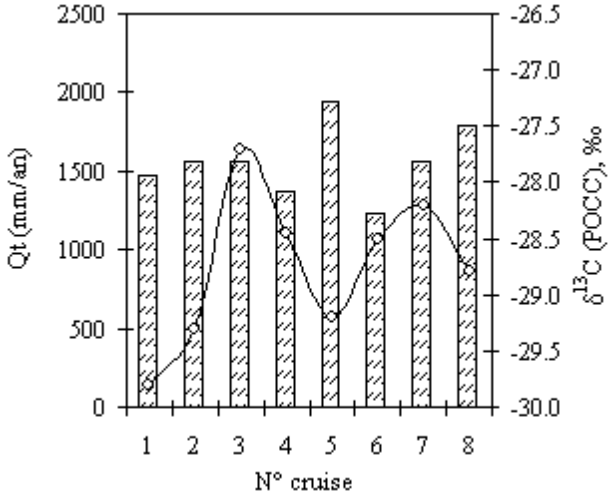
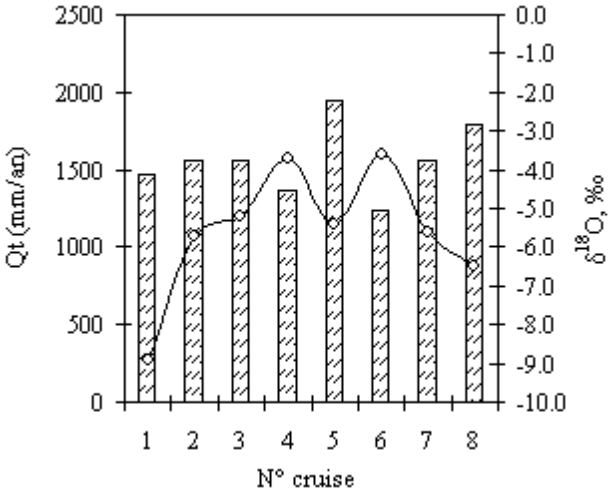


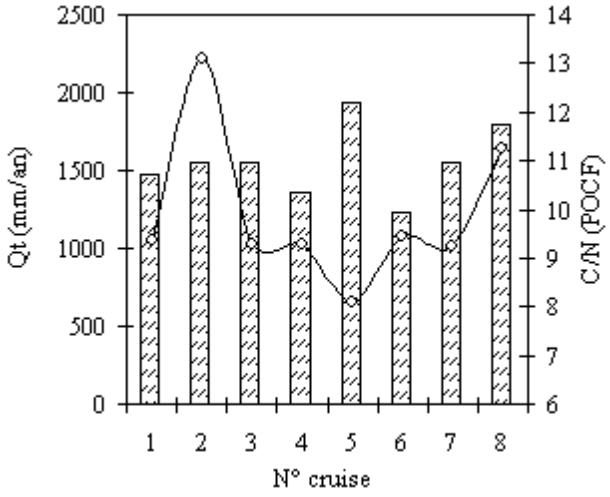
Figure A7 (4/10) : Rio Içа à Saõ Antonio do Içа











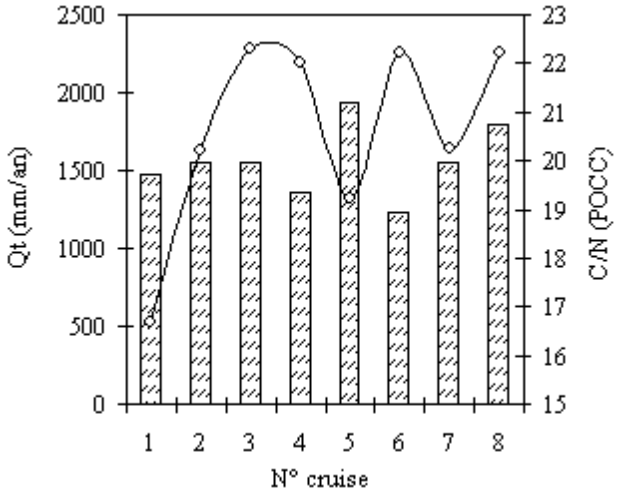
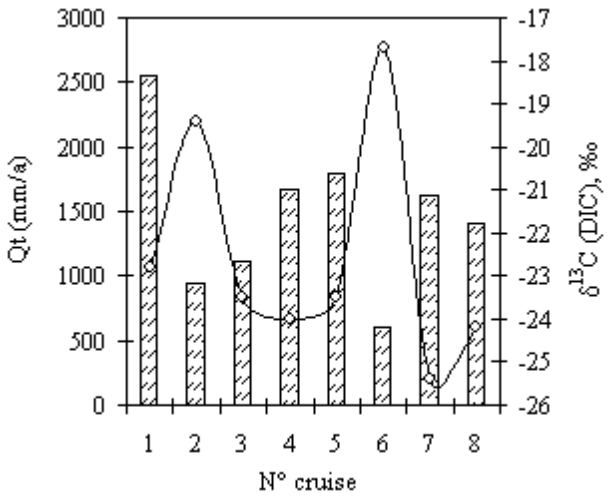
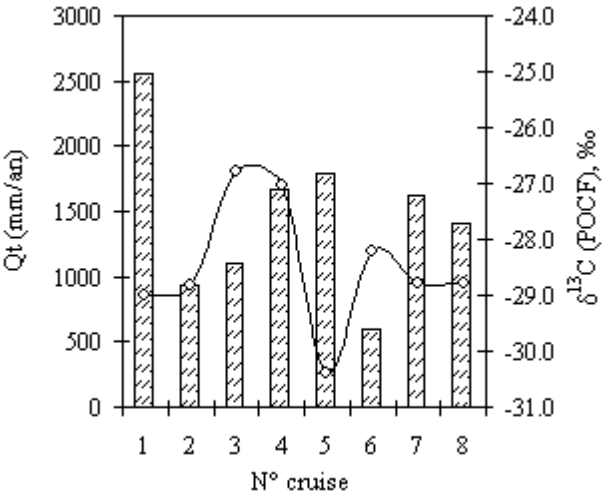
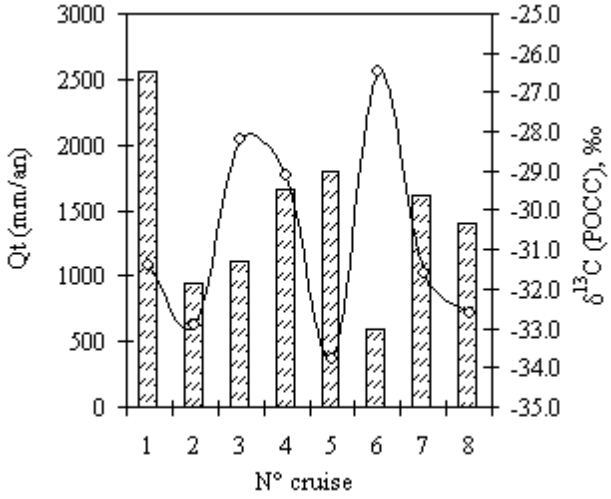
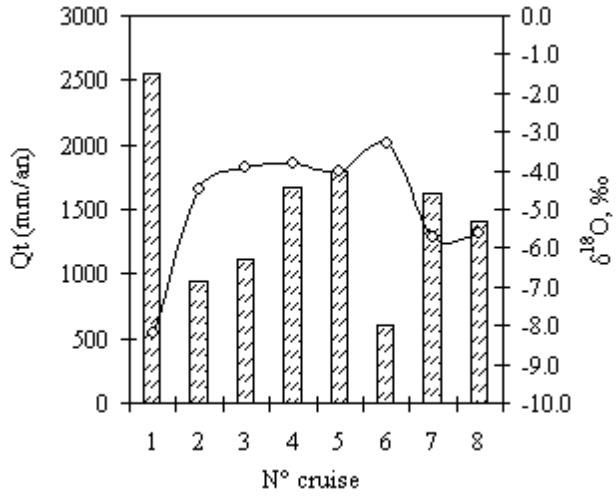


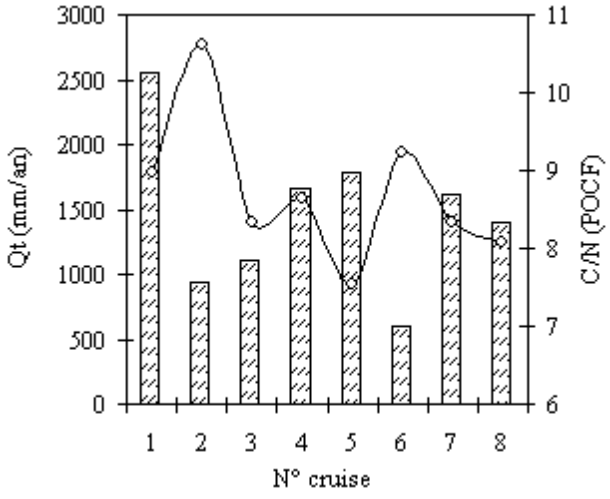
Figure A7 (5/10) : Rio Jutai à Xibeco











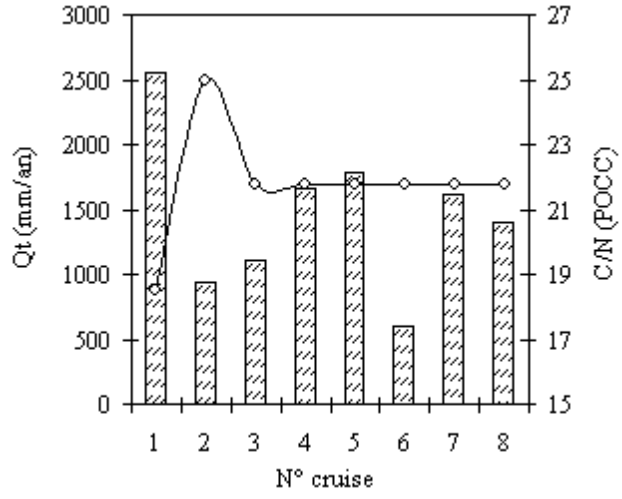
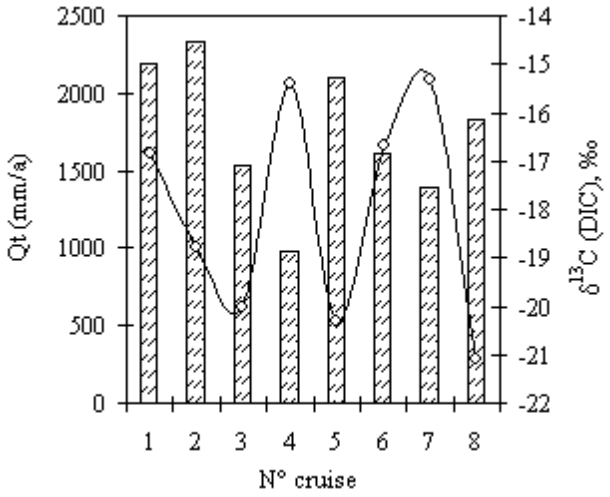
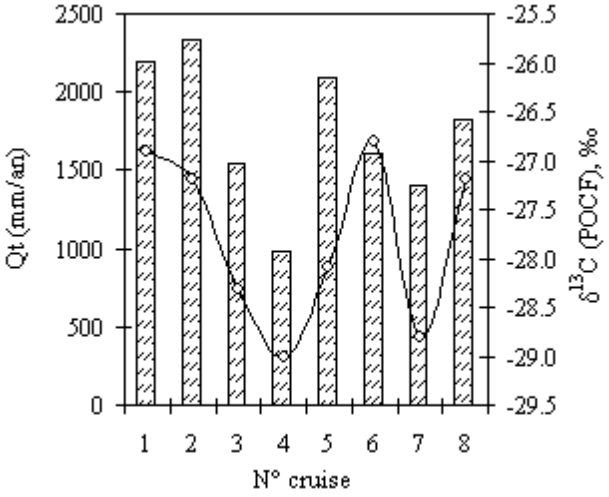
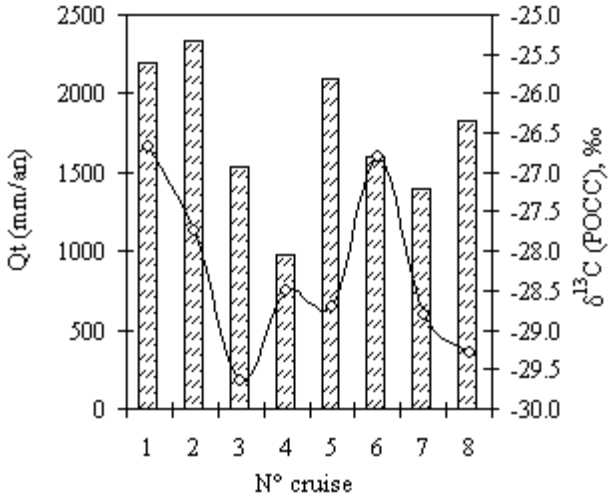
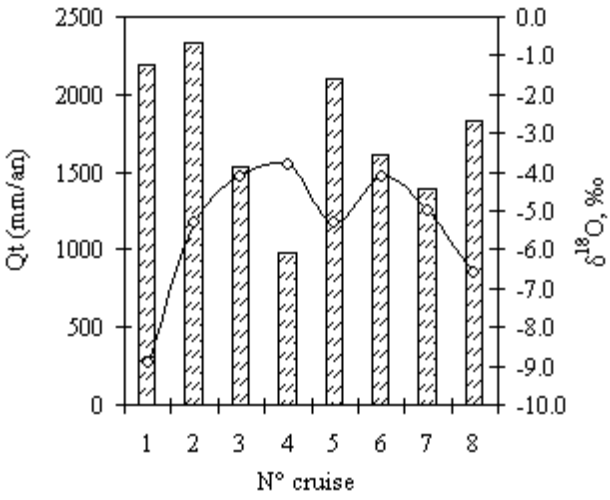


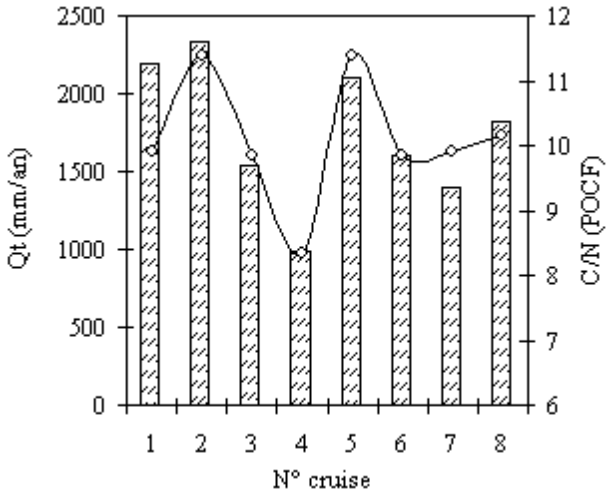
Figure A7 (6/10) : Rio Japurá à Jutica











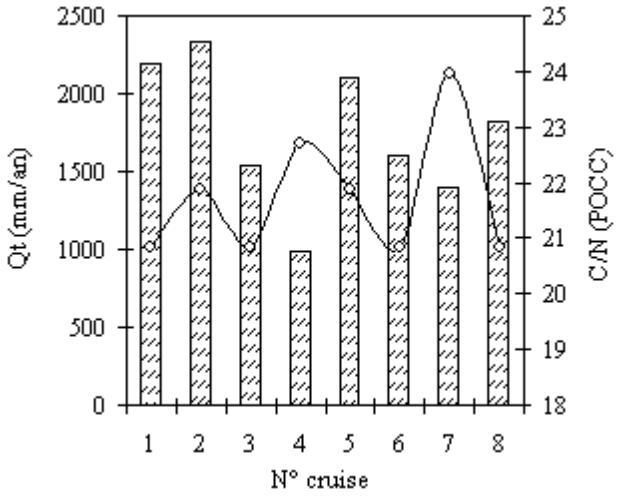
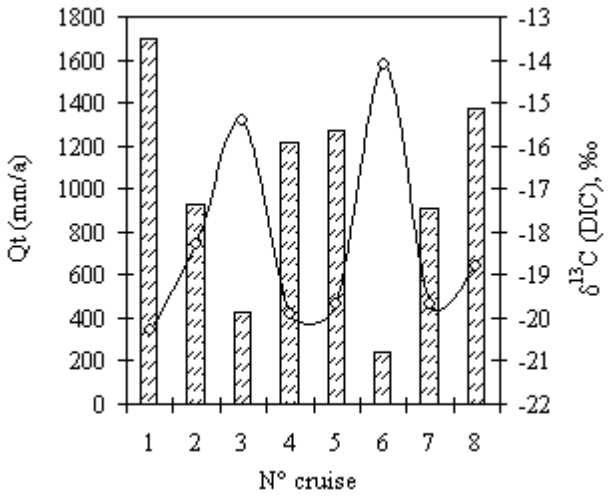
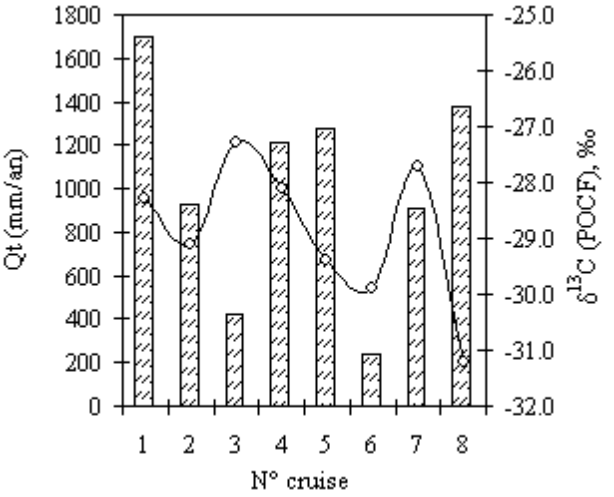
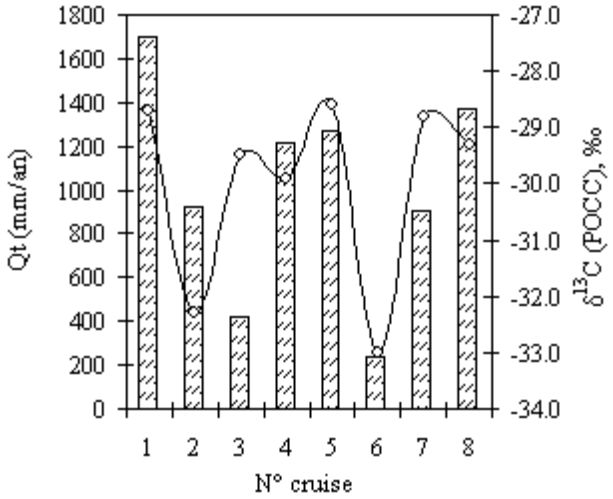
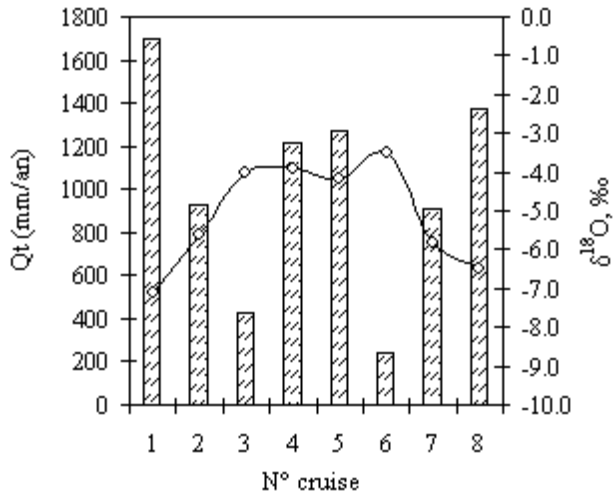


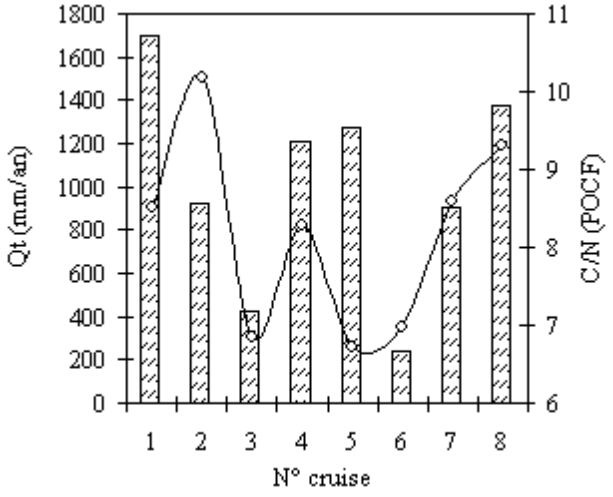
Figure A7 (7/10) : Rio Purus à Anori











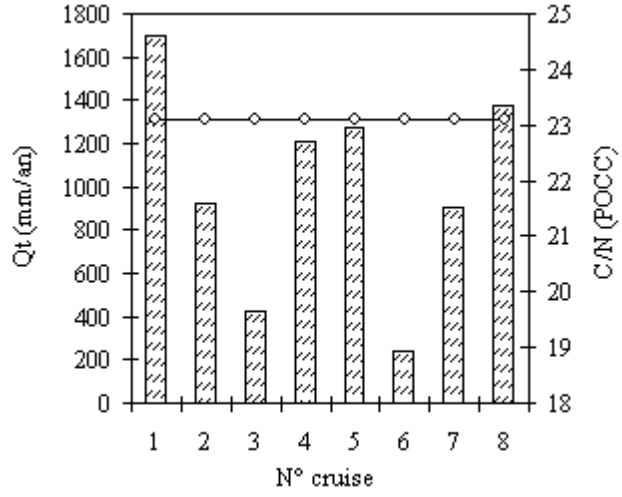
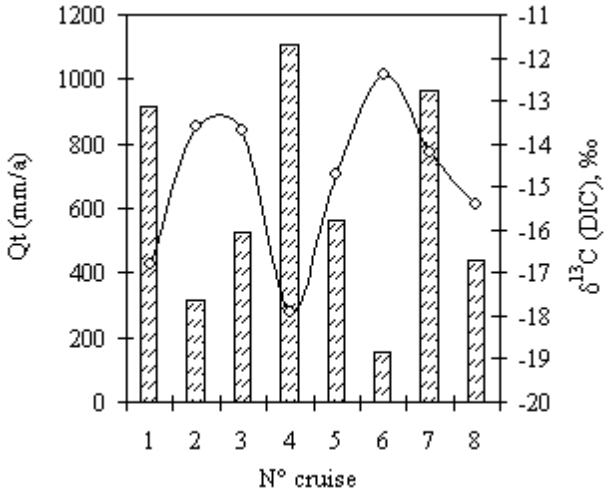
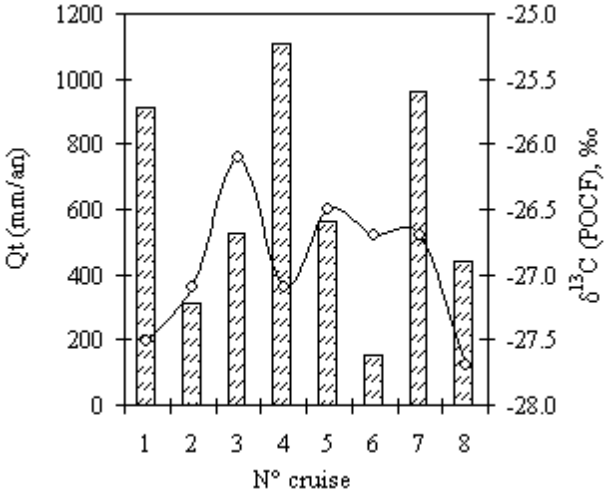
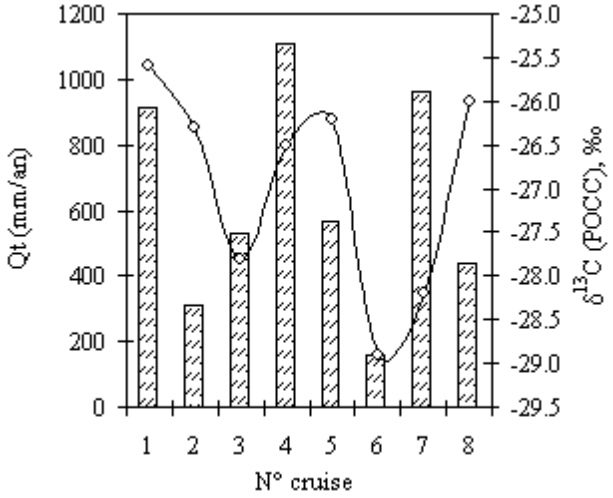
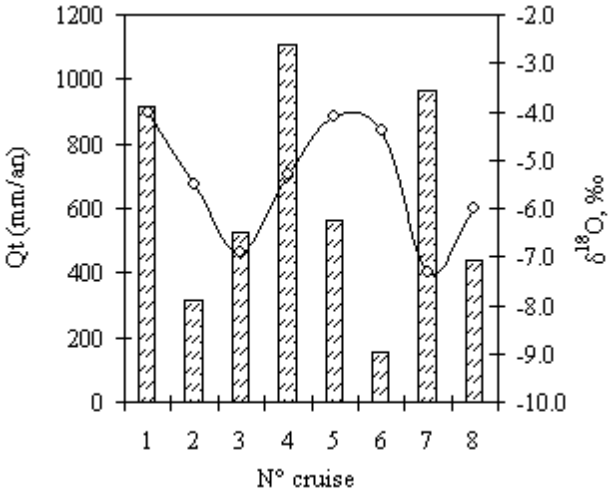


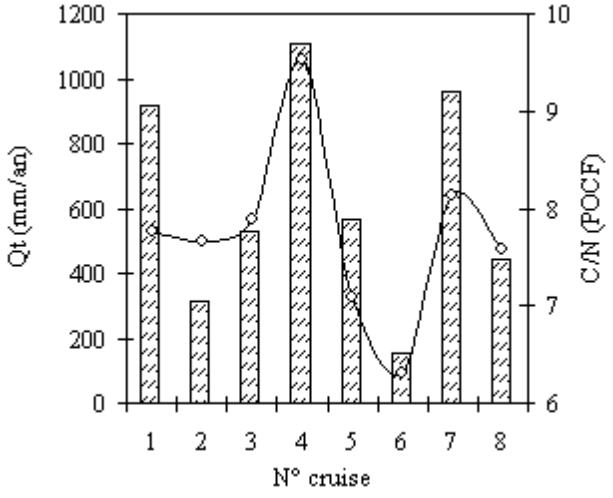
Figure A7 (8/10) : Rio Madeira at São Jose do Amatari











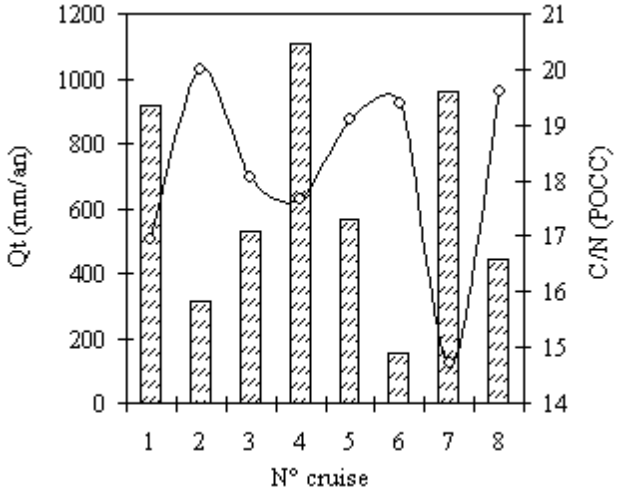
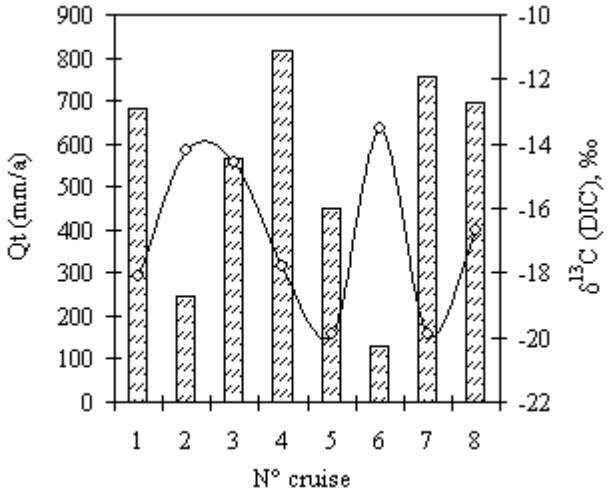
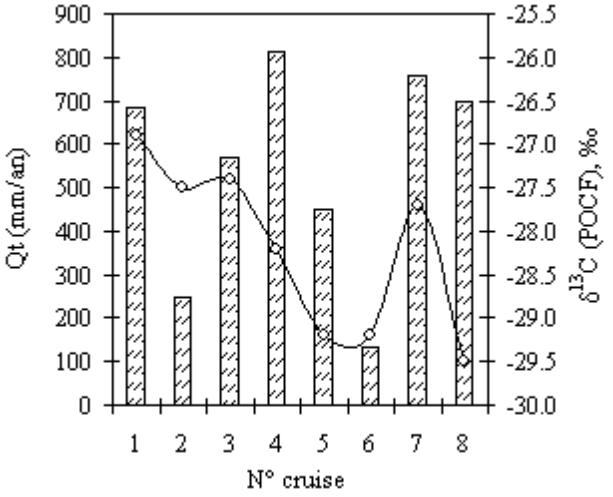
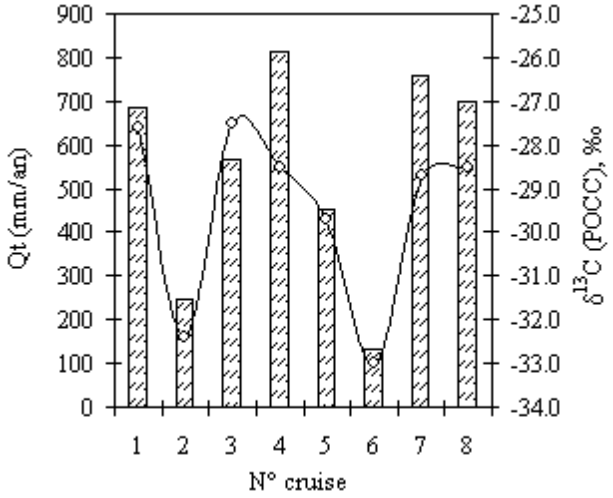
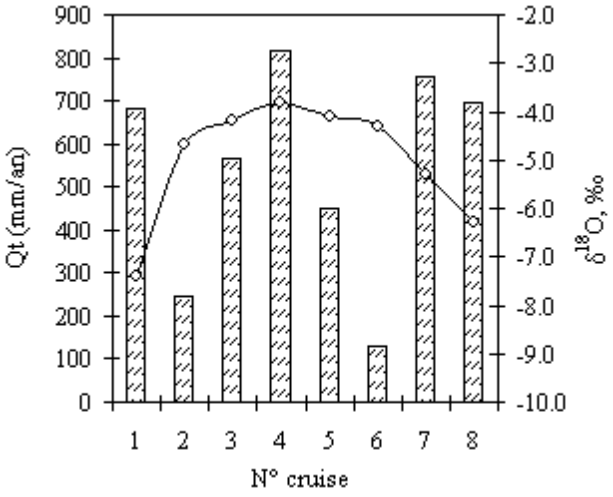


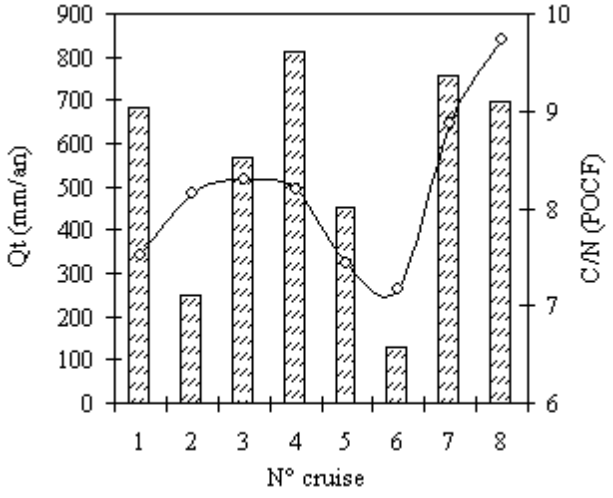
Figure A7 (9/10) : Rio Juruá à Tupe











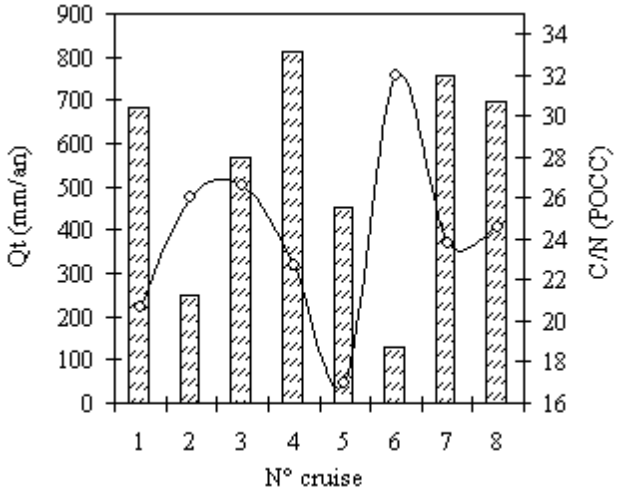
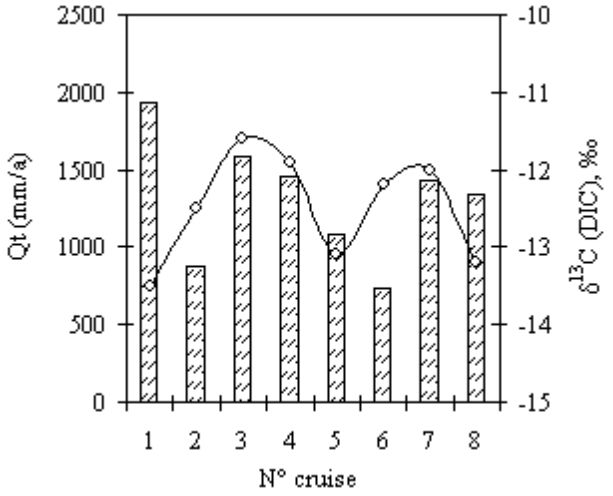
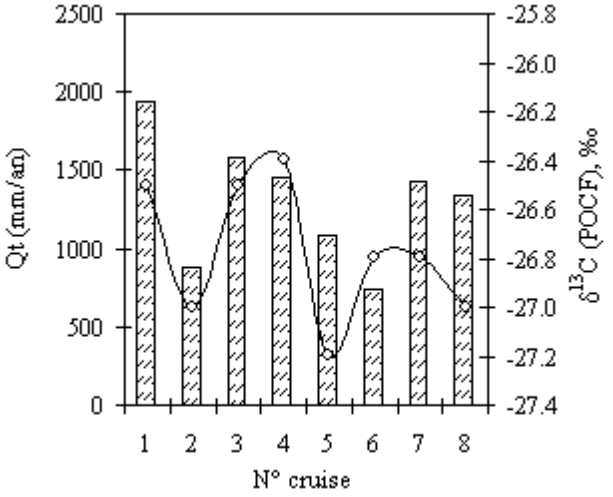
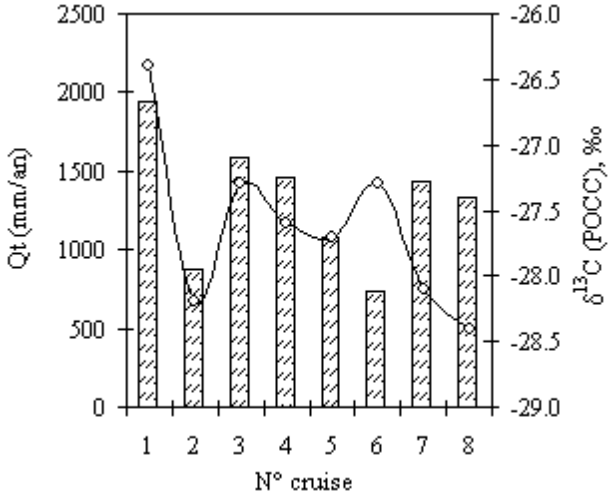
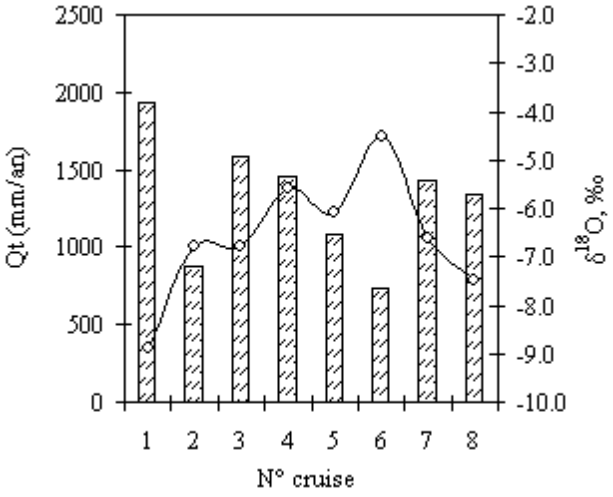


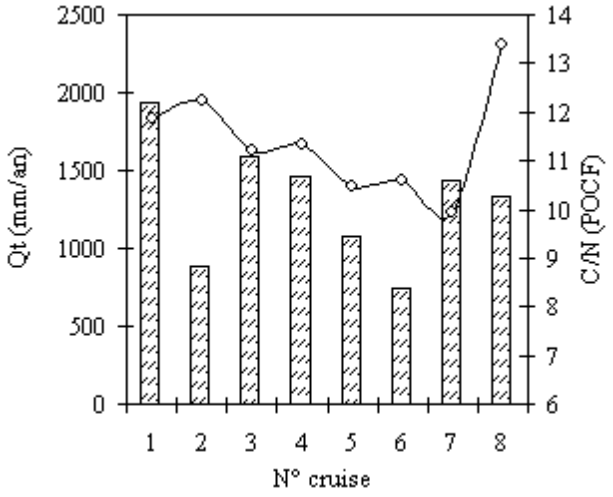
Figure A7 (10/10) : Rio Solimões à Vargem Grande











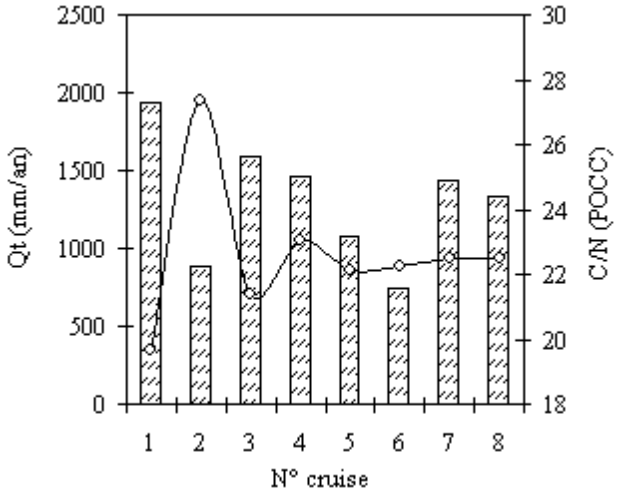


Tableau A10 (1/4)

Amazone à Obidos. Superficie = 4 619 000 km²

	$mm.a^{-1}$	Evaporites ($\mu mol.l^{-1}$)			Silicates ($\mu mol.l^{-1}$)				Carbonates ($\mu mol.l^{-1}$)		
N°	Qt	Hal.	Syl.	Gyp.	Alb.	Microc.	Anort.	Gedr.	Calc.	Dolom.	Re
1	1503	45.6	0.0	22.0	42.1	24.8	16.8	13.5	88.4	28.8	2.04
2	1102	52.8	0.0	26.0	37.2	21.0	14.9	11.9	65.0	22.1	1.69
3	840	84.0	0.0	52.0	36.0	49.0	14.4	11.5	121.1	58.5	2.49
4	1140	69.0	0.0	42.0	24.0	28.0	9.6	7.7	125.1	52.3	1.33
5	1211	58.9	0.0	20.0	46.1	23.5	18.4	14.7	94.3	25.3	1.95
6	627	89.8	0.0	55.0	93.2	19.7	37.3	29.8	68.5	17.2	2.70
7	1209	65.0	0.0	20.0	22.0	25.0	8.8	7.0	81.2	40.0	1.21
8	1387	69.1	0.0	15.0	39.6	22.5	15.9	12.7	82.3	26.7	2.02
Ave	1127	64.1	0.0	28.5	39.7	26.1	15.9	12.7	90.7	33.6	1.99

Somme des affluents. Superficie = 4 370 000 km²

	$mm.a^{-1}$	Evaporites ($\mu mol.l^{-1}$)			Silicates ($\mu mol.l^{-1}$)				Carbonates ($\mu mol.l^{-1}$)		
N°	Qt	Hal.	Syl.	Gyp.	Alb.	Microc.	Anort.	Gedr.	Calc.	Dolom.	Re
1	1629	45.6	0.0	20.3	32.5	25.9	12.7	10.2	127.8	31.2	2.06
2	933	52.8	0.0	21.7	40.7	20.7	14.4	13.4	72.0	20.2	2.03
3	851	84.0	0.0	45.7	40.2	32.9	15.9	12.9	161.1	49.9	2.24
4	1067	69.0	0.0	56.8	44.2	26.8	17.2	14.1	132.4	41.4	2.03
5	1052	58.4	0.5	22.7	42.7	20.6	16.3	12.8	104.1	28.4	1.90
6	515	89.3	0.6	30.2	47.9	18.5	17.6	14.8	102.7	31.4	1.86
7	1163	78.0	1.4	42.1	47.5	25.1	17.2	14.5	116.1	37.4	2.33
8	1176	67.9	1.1	30.9	42.8	21.2	13.1	13.5	89.1	27.3	2.04
Ave	1051	65.1	0.5	33.1	41.5	24.2	15.6	13.1	113.6	33.1	2.08

Tableau A10 (2/4)

Rio Negro à Manacapuru. Superficie = 755 000 km²

	$mm.a^{-1}$	Evaporites ($\mu mol.l^{-1}$)			Silicates ($\mu mol.l^{-1}$)				Carbonates ($\mu mol.l^{-1}$)		
N°	Qt	Hal.	Syl.	Gyp.	Alb.	Microc.	Anort.	Gedr.	Calc.	Dolom.	Re
1	2466	7.3	0.0	7.3	14.7	15.0	4.7	4.0	0.0	0.0	1.80
2	1684	8.6	0.0	8.6	13.4	12.0	0.0	5.6	0.0	0.4	0.90
3	209	7.8	0.0	7.8	18.2	10.0	2.0	5.8	0.0	1.2	2.09
4	347	11.0	0.0	6.0	22.0	10.0	0.0	6.0	0.0	0.0	2.17
5	1346	5.1	2.2	3.0	14.9	2.9	4.0	1.0	0.0	0.0	-0.17
6	518	30.6	3.4	7.0	21.4	3.0	0.0	4.0	0.0	0.0	0.34
7	1170	71.1	7.9	2.0	23.5	3.4	0.5	3.9	0.0	0.0	1.68
8	1935	36.0	4.0	9.0	18.4	8.5	0.1	5.9	0.0	0.3	1.01
Ave	1210	21.9	2.4	6.6	17.2	9.0	2.0	4.5	0.0	0.0	1.25

Rio Iça à São Antonio do Iça. Superficie = 148 000 km²

	$mm.a^{-1}$	Evaporites ($\mu mol.l^{-1}$)			Silicates ($\mu mol.l^{-1}$)				Carbonates ($\mu mol.l^{-1}$)		
N°	Qt	Hal.	Syl.	Gyp.	Alb.	Microc.	Anort.	Gedr.	Calc.	Dolom.	Re
1	1471	8.0	0.0	4.0	17.0	14.0	6.8	5.4	23.6	7.6	0.28
2	1557	7.0	0.0	7.0	36.0	14.0	14.4	11.5	6.1	0.5	1.88
3	1557	7.6	0.0	9.0	28.4	17.0	11.4	9.1	10.7	2.9	1.65
4	1365	16.0	0.0	6.0	29.0	9.0	11.6	9.3	10.7	5.7	1.09
5	1940	19.0	0.0	6.0	28.0	12.8	11.2	9.0	15.8	7.0	1.04
6	1237	10.0	0.0	7.0	27.0	7.4	10.8	8.6	9.8	4.4	0.71
7	1557	29.0	0.0	17.0	43.0	14.6	14.1	12.0	0.0	0.0	2.18
8	1791	18.0	0.0	7.0	25.0	11.8	10.0	8.0	9.2	9.0	0.97
Ave	1559	14.7	0.0	7.9	29.2	12.7	11.7	9.3	10.6	4.5	1.35

Rio Jutai à Xibeco. Superficie = 74 000 km²

	$mm.a^{-1}$	Evaporites ($\mu mol.l^{-1}$)			Silicates ($\mu mol.l^{-1}$)				Carbonates ($\mu mol.l^{-1}$)		
N°	Qt	Hal.	Syl.	Gyp.	Alb.	Microc.	Anort.	Gedr.	Calc.	Dolom.	Re
1	2559	0.0	0.0	50.5	44.0	17.0	17.6	14.1	27.0	4.9	1.72
2	938	14.4	0.0	14.4	40.6	19.0	15.6	10.0	0.0	0.0	2.18
3	1109	26.6	0.0	26.6	14.4	19.0	5.8	4.6	1.3	2.4	1.10
4	1663	6.0	0.0	35.4	29.0	9.0	11.6	9.3	2.3	0.7	0.42
5	1791	25.0	0.0	60.1	39.0	15.0	3.4	12.5	0.0	3.5	0.86
6	597	5.0	0.0	8.0	38.0	15.0	9.0	8.0	0.0	0.0	0.75
7	1621	23.0	0.0	43.0	20.0	16.0	1.4	6.4	0.0	0.6	0.86
8	1407	5.0	0.0	53.0	33.0	16.0	0.0	2.0	0.0	0.0	0.60
Ave	1461	12.4	0.0	41.7	33.1	15.5	13.2	10.6	3.1	0.5	1.30

Tableau A10 (3/4)

Rio Japurá à Jutica. Superficie = 289 000 km²

	mm.a^{-1}	Evaporites (µmol.l^{-1})			Silicates (µmol.l^{-1})				Carbonates (µmol.l^{-1})		
N°	Qt	Hal.	Syl.	Gyp.	Alb.	Microc.	Anort.	Gedr.	Calc.	Dolom.	Re
1	2195	18.7	0.0	5.6	30.9	13.2	12.3	9.9	23.3	2.5	1.55
2	2337	16.8	0.0	4.6	27.6	11.6	11.0	8.8	20.4	3.3	1.39
3	1540	20.3	0.0	5.1	32.8	10.6	13.1	10.5	25.9	4.5	1.74
4	983	26.0	0.0	10.0	43.0	15.0	17.2	13.8	65.6	9.2	2.05
5	2097	16.0	0.0	3.0	26.0	10.2	10.4	8.3	23.9	3.7	1.20
6	1605	20.0	0.0	6.0	33.0	13.3	13.2	10.6	13.4	0.4	1.68
7	1398	33.0	0.0	8.0	54.0	13.8	21.6	17.3	32.9	1.2	2.59
8	1824	17.0	0.0	4.0	27.4	9.7	10.9	8.8	9.2	3.3	1.58
Ave	1747	20.0	0.0	5.4	32.8	11.9	13.1	10.5	24.1	3.2	1.73

Rio Purus à Anori. Superficie = 372 000 km²

	mm.a^{-1}	Evaporites (µmol.l^{-1})			Silicates (µmol.l^{-1})				Carbonates (µmol.l^{-1})		
N°	Qt	Hal.	Syl.	Gyp.	Alb.	Microc.	Anort.	Gedr.	Calc.	Dolom.	Re
1	1697	3.6	0.0	3.6	46.4	27.0	18.6	14.8	39.7	8.2	2.05
2	925	7.5	0.0	7.5	62.5	30.0	25.0	20.0	66.5	12.0	2.32
3	424	12.7	0.0	12.7	65.3	37.0	26.1	20.9	53.1	12.1	2.64
4	1213	4.7	0.0	4.7	50.3	22.0	20.1	16.1	38.3	9.9	1.72
5	1272	2.4	0.0	2.4	55.6	21.7	22.2	17.8	44.2	8.2	1.80
6	238	12.5	0.0	12.5	160.5	30.4	64.2	51.4	75.7	4.6	2.85
7	908	26.4	0.0	26.4	65.6	24.0	26.2	21.0	12.5	2.1	2.41
8	1374	17.4	0.0	17.4	62.2	25.3	24.9	19.9	39.9	10.8	2.28
Ave	1006	9.7	0.0	9.7	59.5	25.8	23.8	19.0	42.0	8.7	2.18

Rio Madeira à São Jose do Amatari. Superficie = 1 380 000 km²

	mm.a^{-1}	Evaporites (µmol.l^{-1})			Silicates (µmol.l^{-1})				Carbonates (µmol.l^{-1})		
N°	Qt	Hal.	Syl.	Gyp.	Alb.	Microc.	Anort.	Gedr.	Calc.	Dolom.	Re
1	915	28.2	0.0	37.3	45.8	33.2	18.3	14.7	20.7	47.7	2.16
2	313	24.0	0.0	65.0	89.0	38.0	33.5	28.5	0.0	56.5	2.95
3	528	75.0	0.0	73.0	52.0	48.0	20.8	16.6	0.8	68.4	2.61
4	1107	20.0	0.0	20.0	44.0	32.0	17.6	14.1	18.5	43.9	2.05
5	565	33.0	0.0	45.0	71.0	38.9	28.4	22.7	13.3	49.3	2.65
6	156	81.0	0.0	76.0	61.0	29.9	24.4	19.5	12.1	87.5	2.50
7	963	30.0	0.0	40.0	57.0	39.3	22.8	18.2	20.5	54.3	2.60
8	441	22.0	0.0	52.0	78.0	35.3	16.8	25.0	0.0	51.4	2.85
Ave	623	33.1	0.0	42.9	57.1	36.7	22.8	18.3	12.4	52.6	2.49

Tableau A10 (4/4)

Rio Juruá à Tupe. Superficie = 217 000 km²

	$mm.a^{-1}$	Evaporites ($\mu mol.l^{-1}$)			Silicates ($\mu mol.l^{-1}$)				Carbonates ($\mu mol.l^{-1}$)		
N°	Qt	Hal.	Syl.	Gyp.	Alb.	Microc.	Anort.	Gedr.	Calc.	Dolom.	Re
1	684	23.0	0.0	30.0	89.0	29.0	35.6	28.5	118.9	32.5	2.38
2	247	43.0	0.0	40.0	170.0	39.0	68.0	54.4	268.4	33.6	2.96
3	567	20.0	0.0	37.0	79.0	43.0	31.6	25.3	179.7	39.7	2.38
4	814	17.0	0.0	8.0	66.0	32.0	26.4	21.1	161.7	33.9	2.34
5	451	26.0	0.0	37.0	103.0	33.2	41.2	33.0	169.8	34.0	2.55
6	131	53.0	0.0	50.0	208.0	38.6	83.2	66.6	360.4	3.4	3.06
7	756	26.0	0.0	10.0	99.7	30.7	39.9	31.9	150.2	14.2	2.65
8	698	28.0	0.0	13.0	109.0	32.2	43.6	34.9	150.3	24.5	2.64
Ave	544	25.2	0.0	22.5	98.1	33.5	39.2	31.4	166.4	28.6	2.58

Rio Solimões à Vargem Grande. Superficie = 1 135 000 km²

	$mm.a^{-1}$	Evaporites ($\mu mol.l^{-1}$)			Silicates ($\mu mol.l^{-1}$)				Carbonates ($\mu mol.l^{-1}$)		
N°	Qt	Hal.	Syl.	Gyp.	Alb.	Microc.	Anort.	Gedr.	Calc.	Dolom.	Re
1	1938	117.0	0.0	29.0	33.0	36.0	13.2	10.6	372.4	67.4	2.28
2	881	175.0	0.0	39.0	50.0	28.0	20.0	16.0	241.0	49.0	1.68
3	1588	133.0	0.0	57.0	37.0	36.0	14.8	11.8	308.0	70.2	2.13
4	1457	165.0	0.0	134.0	47.0	31.0	18.8	15.0	317.2	68.0	2.18
5	1079	177.0	0.0	41.0	50.0	29.9	20.0	16.0	338.0	66.0	1.83
6	740	188.0	0.0	50.0	53.0	26.3	21.2	17.0	242.8	60.0	1.61
7	1432	159.0	0.0	84.0	44.8	29.9	17.9	14.3	321.0	70.6	2.04
8	1335	169.0	0.0	62.0	48.4	31.2	19.4	15.5	269.2	62.9	1.85
Ave	1306	154.6	0.0	63.2	43.7	31.9	17.5	14.0	310.9	65.6	1.99

Tableau A11 (1/4)

Amazone à Obidos. Superficie = 4 619 000 km²

	$mm.a^{-1}$	$\mu mol.l^{-1}$					Ratios				
N°	Qt	CO_2 tot	CO_2 carb	CO_2 cons. carb	CO_2 cons. sil	CO_2 cons.t	(1)	(2)	(3)	(4)	(5)
1	1503	419.5	146.0	146.0	127.4	273.5	0.35	0.30	0.35	0.65	0.50
2	1102	330.2	109.2	109.2	111.8	221.0	0.33	0.34	0.33	0.67	0.57
3	840	613.0	238.1	238.1	136.9	375.0	0.39	0.22	0.39	0.61	0.17
4	1140	546.0	229.7	229.7	86.6	316.3	0.42	0.16	0.42	0.58	0.23
5	1211	425.6	144.8	144.8	135.9	280.8	0.34	0.32	0.34	0.66	0.48
6	627	452.9	102.9	102.9	247.0	349.9	0.23	0.55	0.23	0.77	0.17
7	1209	401.0	161.2	161.2	78.7	239.8	0.40	0.20	0.40	0.60	0.40
8	1387	390.8	135.8	135.8	119.2	255.0	0.35	0.31	0.35	0.65	0.55
Ave	1127	438.8	158.0	158.0	122.9	280.9	0.36	0.28	0.36	0.64	0.41

Somme des affluents. Superficie = 4 370 000 km²

	$mm.a^{-1}$	$\mu mol.l^{-1}$					Ratios				
N°	Qt	CO_2 tot	CO_2 carb	CO_2 cons. carb	CO_2 cons. sil	CO_2 cons.t	(1)	(2)	(3)	(4)	(5)
1	1629	484.3	190.1	190.1	104.1	294.2	0.39	0.21	0.39	0.61	8.3
2	933	341.6	112.3	112.3	116.9	229.2	0.33	0.34	0.33	0.67	8.7
3	851	652.5	260.9	260.9	130.6	391.5	0.40	0.20	0.40	0.60	1.2
4	1067	564.0	215.2	215.2	133.5	348.7	0.38	0.24	0.38	0.62	1.1
5	1052	443.5	160.9	160.9	121.6	282.5	0.36	0.27	0.36	0.64	7.8
6	515	461.8	165.4	165.4	131.0	296.4	0.36	0.28	0.36	0.64	6.1
7	1163	517.6	190.8	190.8	135.9	326.7	0.37	0.26	0.37	0.63	6.8
8	1176	404.8	143.7	143.7	117.3	261.1	0.36	0.29	0.36	0.64	8.7
Ave	1051	482.6	179.8	179.8	123.1	302.9	0.37	0.25	0.37	0.63	6.1

Ratios

(1) : CO_2 carb. / CO_2 tot. (2) : CO_2 cons. sil. / CO_2 tot.

(3) : CO_2 cons. carb. / CO_2 tot. (4) :CO_2 cons. / CO_2 tot.

(5) : CO_2 (aq.) / HCO_3^-

Tableau A11 (2/4)

Rio Negro à Manacapuru. Superficie = 755 000 km²

	$mm.a^{-1}$	$\mu mol.l^{-1}$					Ratios				
N°	Qt	CO_2 tot	CO_2 carb	CO_2 cons. carb	CO_2 cons. sil	CO_2 cons.t	(1)	(2)	(3)	(4)	(5)
1	2466	47.1	0.0	0.0	47.1	47.1	0.00	1.00	0.00	1.00	30.48
2	1684	38.2	0.8	0.8	36.6	37.4	0.02	0.96	0.02	0.98	26.55
3	209	48.6	2.4	2.4	43.9	46.2	0.05	0.90	0.05	0.95	14.93
4	347	44.0	0.0	0.0	44.0	44.0	0.00	1.00	0.00	1.00	8.79
5	1346	27.8	0.0	0.0	27.8	27.8	0.00	1.00	0.00	1.00	31.92
6	518	32.4	0.0	0.0	32.4	32.4	0.00	1.00	0.00	1.00	33.42
7	1170	35.7	0.0	0.0	35.7	35.7	0.00	1.00	0.00	1.00	34.99
8	1935	40.3	0.7	0.7	38.9	39.6	0.02	0.97	0.02	0.98	28.44
Ave	1210	39.3	0.0	0.0	39.3	39.3	0.00	1.00	0.00	1.00	28.14

Rio Iça à São Antonio do Iça. Superficie = 148 000 km²

	$mm.a^{-1}$	$\mu mol.l^{-1}$					Ratios				
N°	Qt	CO_2 tot	CO_2 carb	CO_2 cons. carb	CO_2 cons. sil	CO_2 cons.t	(1)	(2)	(3)	(4)	(5)
1	1471	133.0	38.8	38.8	55.5	94.2	0.29	0.42	0.29	0.71	0.31
2	1557	116.0	7.1	7.1	101.8	108.9	0.06	0.88	0.06	0.94	1.36
3	1557	119.4	16.6	16.6	86.3	102.8	0.14	0.72	0.14	0.86	1.01
4	1365	124.0	22.1	22.1	79.8	101.9	0.18	0.64	0.18	0.82	1.13
5	1940	140.8	29.8	29.8	81.1	111.0	0.21	0.58	0.21	0.79	1.79
6	1237	110.4	18.6	18.6	73.3	91.8	0.17	0.66	0.17	0.83	0.73
7	1557	109.7	0.0	0.0	109.7	109.7	0.00	1.00	0.00	1.00	2.16
8	1791	127.1	27.2	27.2	72.8	99.9	0.21	0.57	0.21	0.79	1.21
Ave	1559	123.4	19.7	19.7	84.0	103.7	0.16	0.68	0.16	0.84	1.25

Rio Jutai à Xibeco. Superficie = 74 000 km²

	$mm.a^{-1}$	$\mu mol.l^{-1}$					Ratios				
N°	Qt	CO_2 tot	CO_2 carb	CO_2 cons. carb	CO_2 cons. sil	CO_2 cons.t	(1)	(2)	(3)	(4)	(5)
1	2559	198.0	36.8	36.8	124.4	161.2	0.19	0.63	0.19	0.81	1.49
2	938	110.8	0.0	0.0	110.8	110.8	0.00	1.00	0.00	1.00	1.56
3	1109	66.2	6.0	6.0	54.2	60.2	0.09	0.82	0.09	0.91	7.66
4	1663	87.3	3.8	3.8	79.8	83.5	0.04	0.91	0.04	0.96	7.66
5	1791	99.8	7.0	7.0	85.7	92.8	0.07	0.86	0.07	0.93	6.08
6	597	87.0	0.0	0.0	87.0	87.0	0.00	1.00	0.00	1.00	1.13
7	1621	53.9	1.2	1.2	51.5	52.7	0.02	0.96	0.02	0.98	14.93
8	1407	53.0	0.0	0.0	53.0	53.0	0.00	1.00	0.00	1.00	5.81
Ave	1461	104.6	4.2	4.2	96.2	100.4	0.04	0.92	0.04	0.96	3.89

Tableau A11 (3/4)

Rio Japurá à Jutica. Superficie = 289 000 km²

	$mm.a^{-1}$	$\mu mol.l^{-1}$					Ratios				
N°	Qt	CO_2 tot	CO_2 carb	CO_2 cons. carb	CO_2 cons. Sil	CO_2 cons.t	(1)	(2)	(3)	(4)	(5)
1	2195	145.0	28.3	28.3	88.5	116.7	0.20	0.61	0.20	0.80	0.77
2	2337	132.8	26.9	26.9	79.0	105.9	0.20	0.59	0.20	0.80	1.27
3	1540	160.7	35.0	35.0	90.7	125.7	0.22	0.56	0.22	0.78	1.79
4	983	288.0	84.0	84.0	119.9	204.0	0.29	0.42	0.29	0.71	0.38
5	2097	136.2	31.3	31.3	73.6	104.9	0.23	0.54	0.23	0.77	1.84
6	1605	122.3	14.2	14.2	93.8	108.1	0.12	0.77	0.12	0.88	0.78
7	1398	216.1	35.3	35.3	145.5	180.8	0.16	0.67	0.16	0.84	0.68
8	1824	108.0	15.8	15.8	76.5	92.2	0.15	0.71	0.15	0.85	2.65
Ave	1747	153.1	30.6	30.6	91.9	122.5	0.20	0.60	0.20	0.80	1.34

Rio Purus à Anori. Superficie = 372 000 km²

	$mm.a^{-1}$	$\mu mol.l^{-1}$					Ratios				
N°	Qt	CO_2 tot	CO_2 carb	CO_2 cons. carb	CO_2 cons. Sil	CO_2 cons.t	(1)	(2)	(3)	(4)	(5)
1	1697	252.2	56.0	56.0	140.2	196.2	0.22	0.56	0.22	0.78	1.60
2	925	363.5	90.5	90.5	182.5	273.0	0.25	0.50	0.25	0.75	0.90
3	424	350.9	77.3	77.3	196.3	273.6	0.22	0.56	0.22	0.78	0.27
4	1213	260.9	58.1	58.1	144.7	202.8	0.22	0.55	0.22	0.78	1.11
5	1272	278.5	60.6	60.6	157.4	217.9	0.22	0.57	0.22	0.78	1.46
6	238	591.9	84.9	84.9	422.0	507.0	0.14	0.71	0.14	0.86	0.07
7	908	217.3	16.6	16.6	184.0	200.6	0.08	0.85	0.08	0.92	1.84
8	1374	300.1	61.6	61.6	177.0	238.6	0.21	0.59	0.21	0.79	1.30
Ave	1006	289.9	59.5	59.5	170.9	230.4	0.21	0.59	0.21	0.79	1.28

Rio Madeira à São Jose do Amatari. Superficie = 1 380 000 km²

	$mm.a^{-1}$	$\mu mol.l^{-1}$					Ratios				
N°	Qt	CO_2 tot	CO_2 carb	CO_2 cons. carb	CO_2 cons. Sil	CO_2 cons.t	(1)	(2)	(3)	(4)	(5)
1	915	377.2	116.1	116.1	145.0	261.1	0.31	0.38	0.31	0.69	0.43
2	313	477.0	113.0	113.0	250.9	364.0	0.24	0.53	0.24	0.76	0.21
3	528	450.0	137.6	137.6	174.9	312.4	0.31	0.39	0.31	0.69	0.26
4	1107	352.0	106.3	106.3	139.4	245.7	0.30	0.40	0.30	0.70	0.49
5	565	435.9	111.9	111.9	212.1	324.0	0.26	0.49	0.26	0.74	0.43
6	156	552.9	187.1	187.1	178.7	365.8	0.34	0.32	0.34	0.66	0.08
7	963	436.3	129.0	129.0	178.4	307.3	0.30	0.41	0.30	0.70	0.12
8	441	402.4	102.8	102.8	196.8	299.6	0.26	0.49	0.26	0.74	0.32
Ave	623	411.3	117.6	117.6	176.1	293.7	0.29	0.43	0.29	0.71	0.33

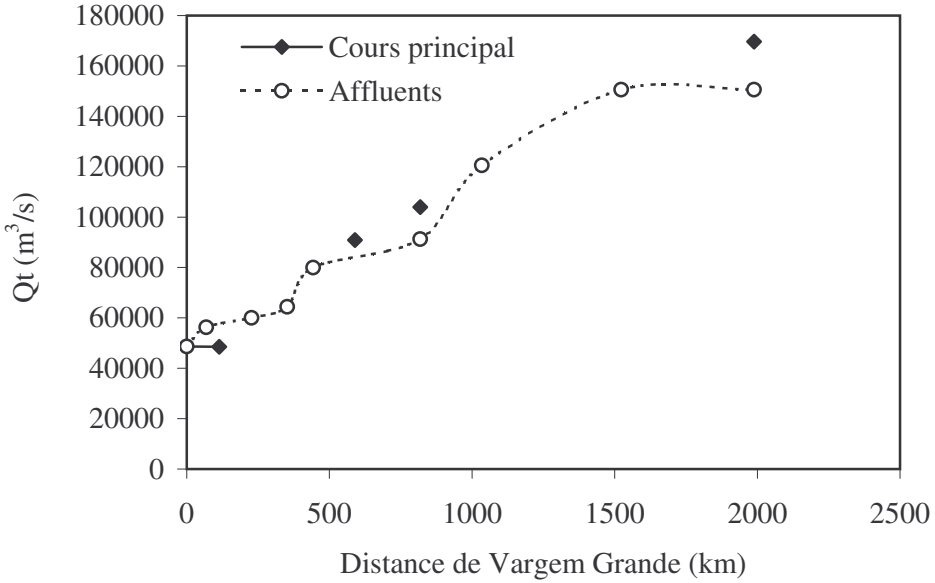
Tableau A11 (4/4)

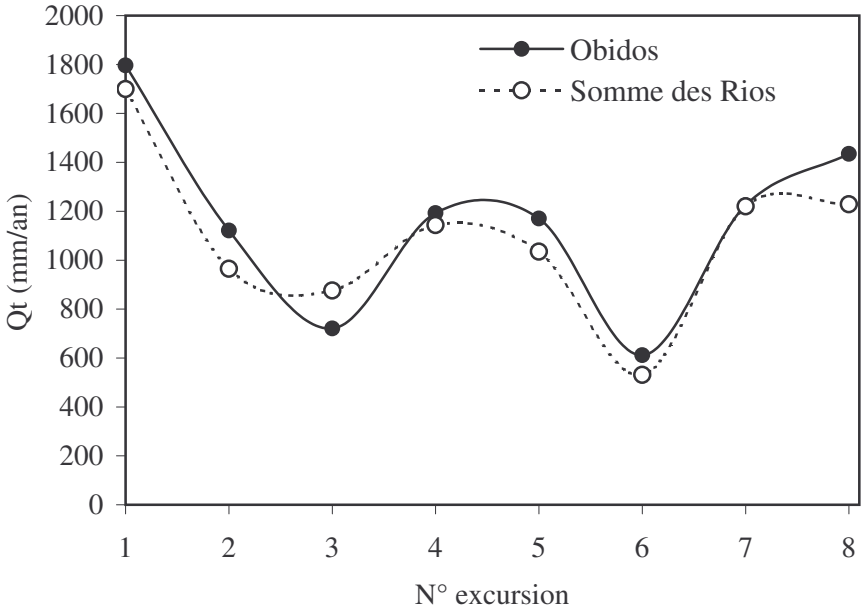
Rio Juruá à Tupe. Superficie = 217 000 km²

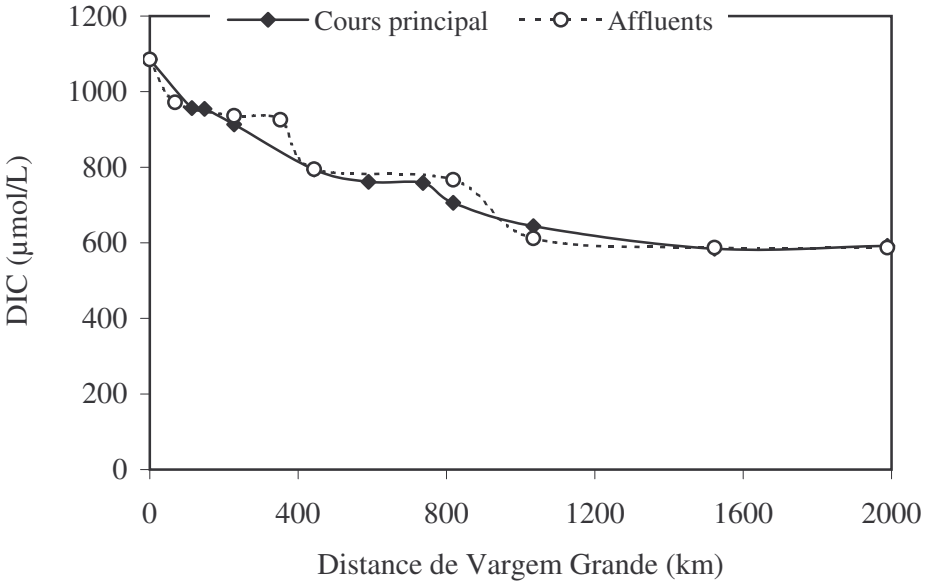
	$mm.a^{-1}$	$\mu mol.l^{-1}$					Ratios				
N°	Qt	CO_2 tot	CO_2 carb	CO_2 cons. carb	CO_2 cons. Sil	CO_2 cons.t	(1)	(2)	(3)	(4)	(5)
1	684	614.0	183.9	183.9	246.2	430.1	0.30	0.40	0.30	0.70	0.30
2	247	1125.0	335.6	335.6	453.8	789.4	0.30	0.40	0.30	0.70	0.09
3	567	754.0	259.1	259.1	235.8	494.9	0.34	0.31	0.34	0.66	0.15
4	814	652.0	229.5	229.5	193.0	422.5	0.35	0.30	0.35	0.65	0.34
5	451	760.2	237.8	237.8	284.5	522.4	0.31	0.37	0.31	0.69	0.37
6	131	1280.6	367.2	367.2	546.1	913.4	0.29	0.43	0.29	0.71	0.09
7	756	630.9	178.5	178.5	274.0	452.4	0.28	0.43	0.28	0.72	0.51
8	698	696.7	199.3	199.3	298.2	497.4	0.29	0.43	0.29	0.71	0.37
Ave	544	719.9	223.5	223.5	272.9	496.4	0.31	0.38	0.31	0.69	0.32

Rio Solimões à Vargem Grande. Superficie = 1 135 000 km²

	$mm.a^{-1}$	$\mu mol.l^{-1}$					Ratios				
N°	Qt	CO_2 tot	CO_2 carb	CO_2 cons. carb	CO_2 cons. Sil	CO_2 cons.t	(1)	(2)	(3)	(4)	(5)
1	1938	1131.0	507.2	507.2	116.5	623.8	0.45	0.10	0.45	0.55	0.13
2	881	828.0	339.0	339.0	150.0	489.0	0.41	0.18	0.41	0.59	0.10
3	1588	1023.0	448.4	448.4	126.3	574.6	0.44	0.12	0.44	0.56	0.09
4	1457	1052.0	453.2	453.2	145.7	598.8	0.43	0.14	0.43	0.57	0.09
5	1079	1091.9	470.0	470.0	151.9	621.9	0.43	0.14	0.43	0.57	0.15
6	740	881.3	362.8	362.8	155.6	518.5	0.41	0.18	0.41	0.59	0.08
7	1432	1063.9	462.3	462.3	139.2	601.6	0.43	0.13	0.43	0.57	0.09
8	1335	939.4	395.1	395.1	149.3	544.4	0.42	0.16	0.42	0.58	0.10
Ave	1306	1022.6	442.0	442.0	138.6	580.6	0.43	0.14	0.43	0.57	0.11







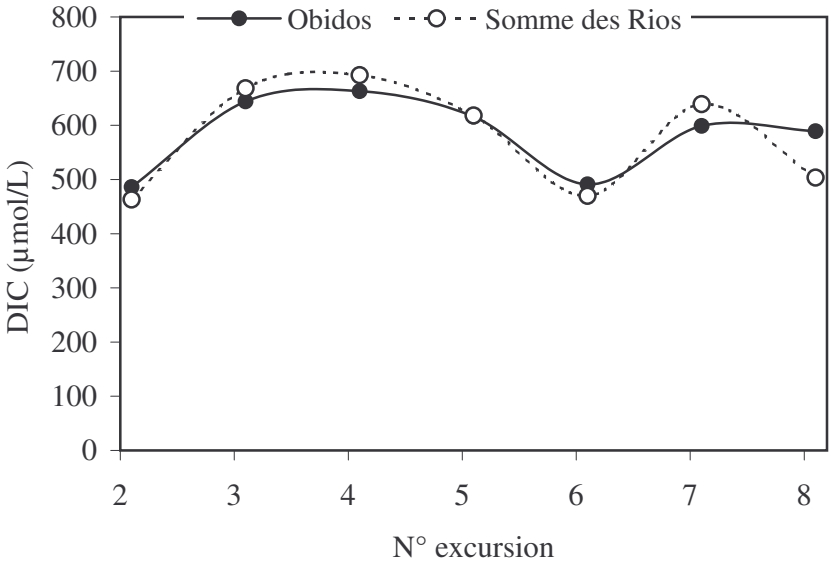
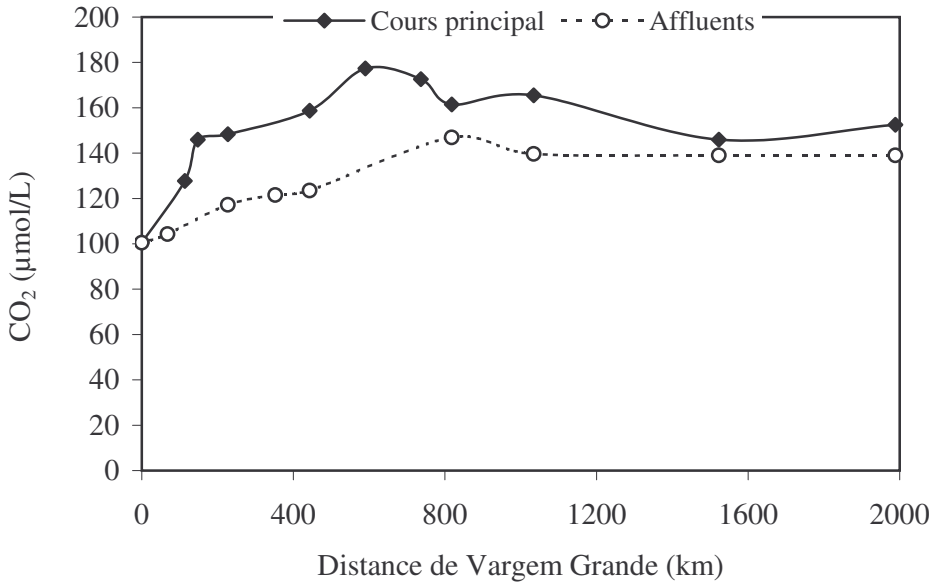
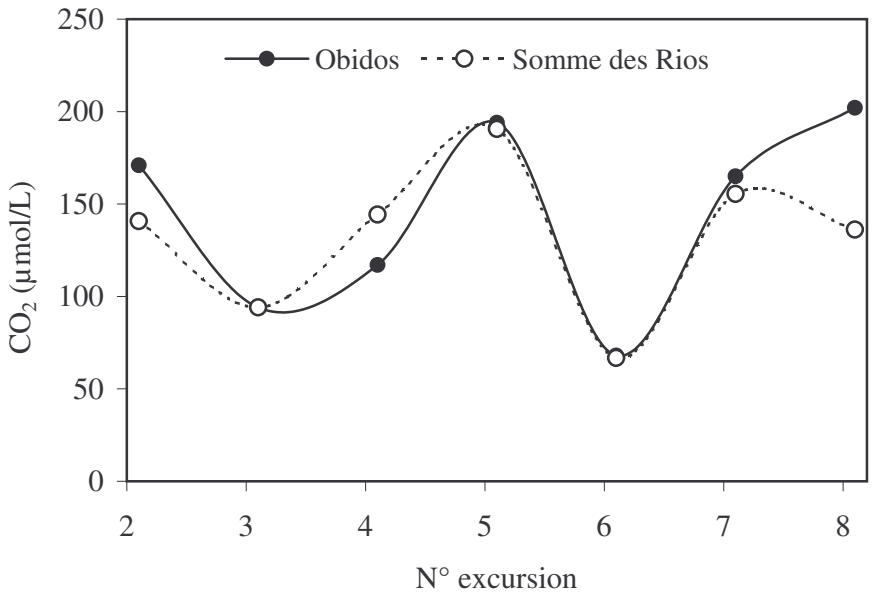
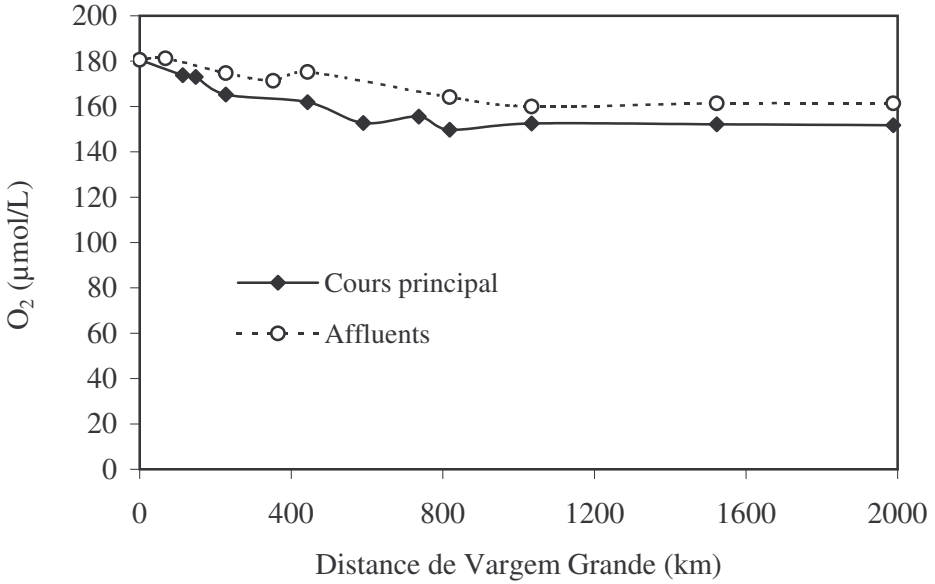
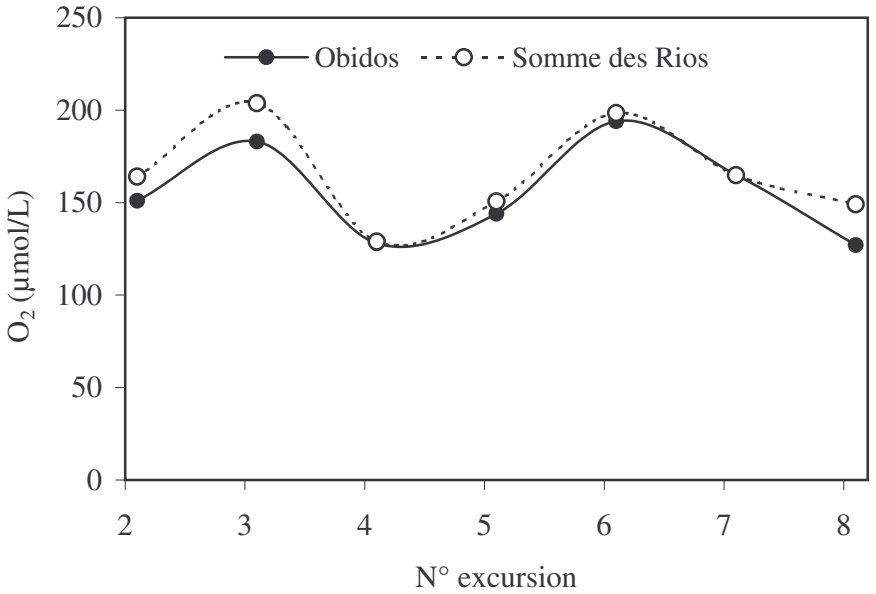


Figure A8 (1/18)









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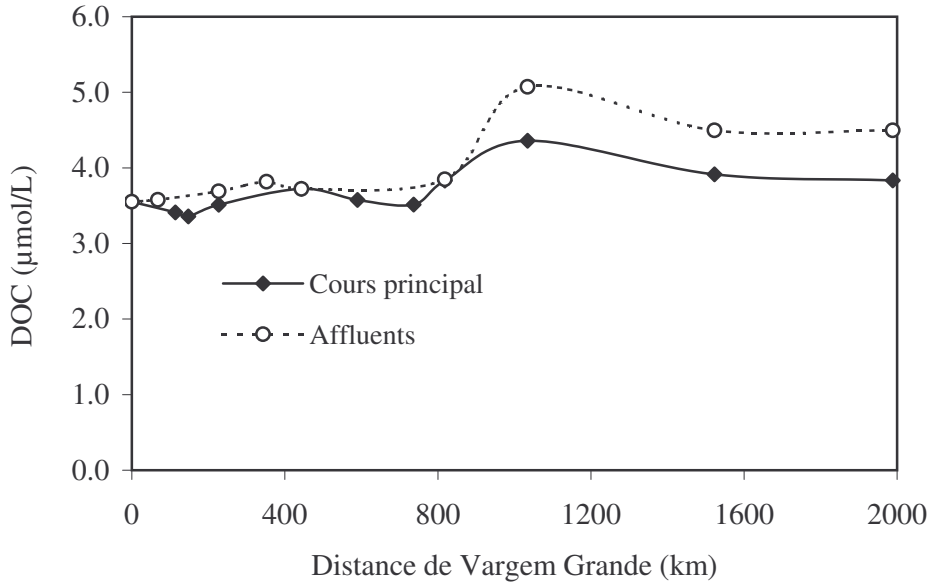
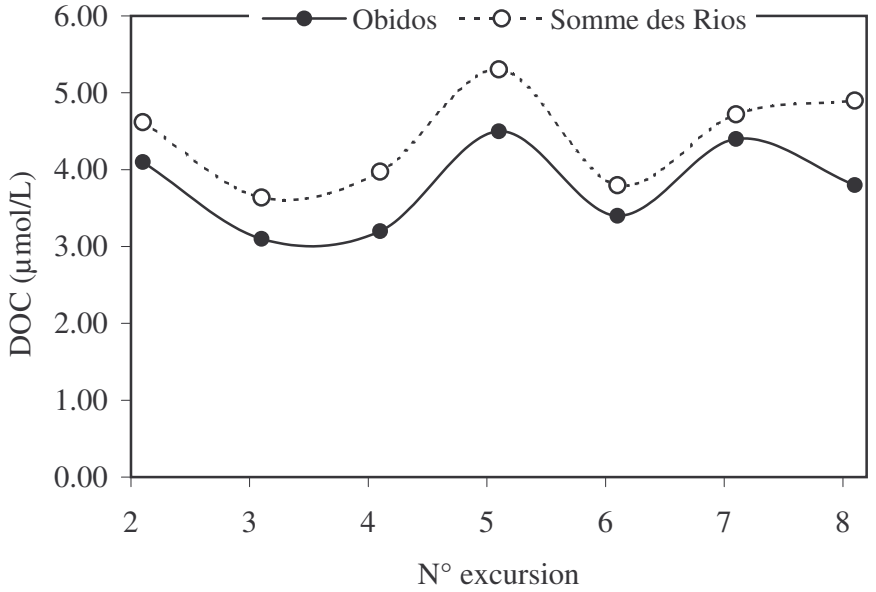
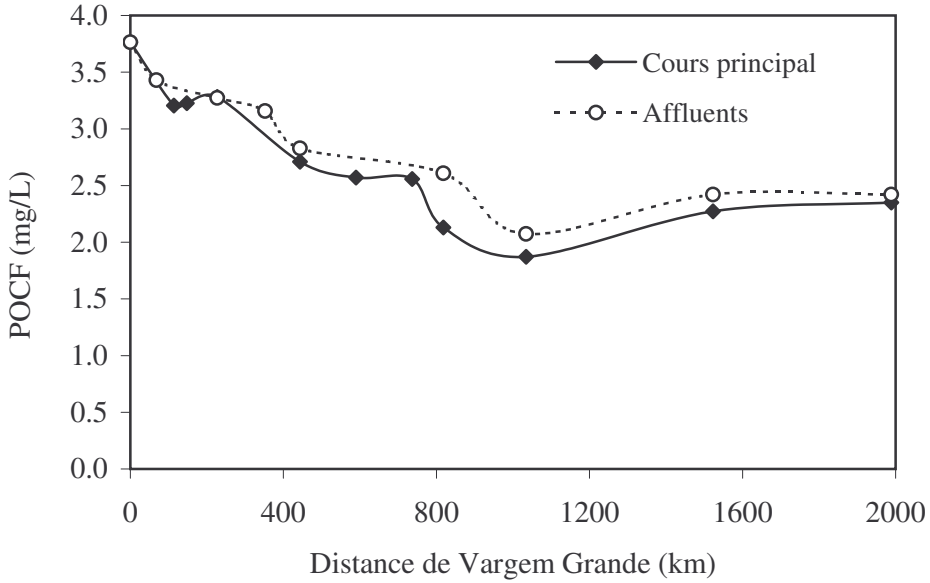






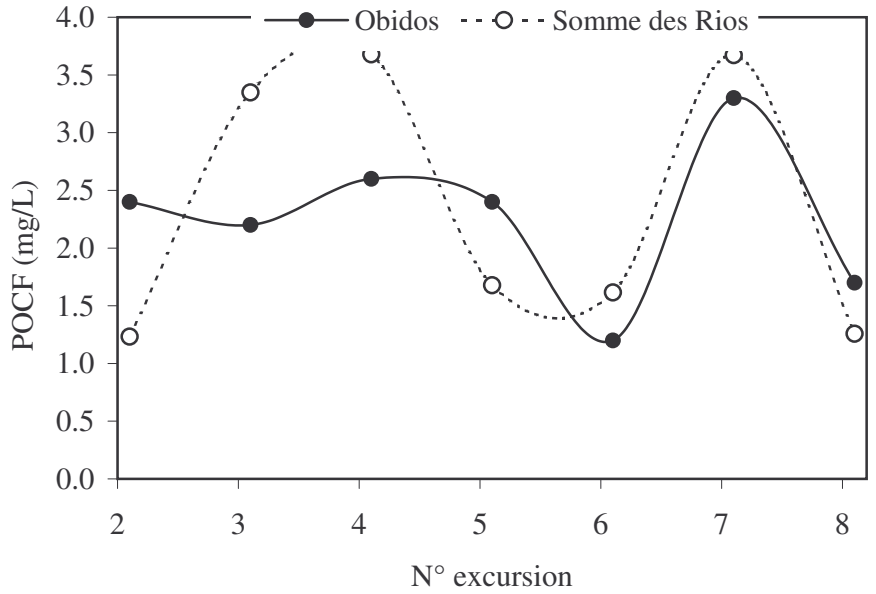
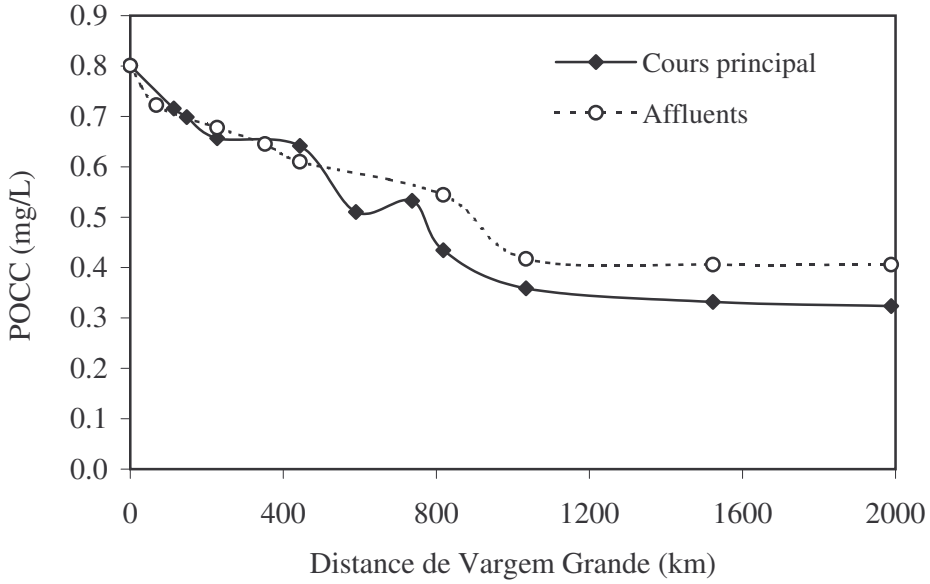
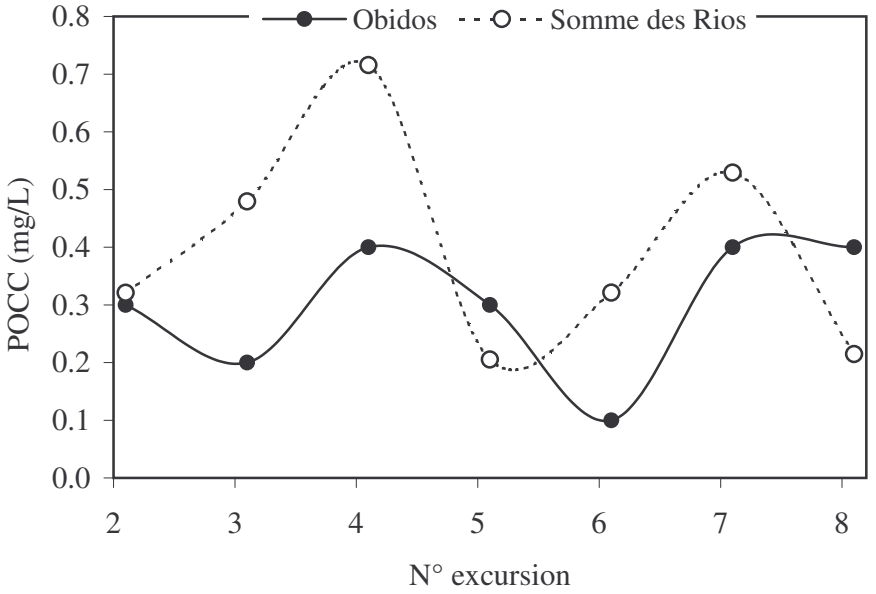
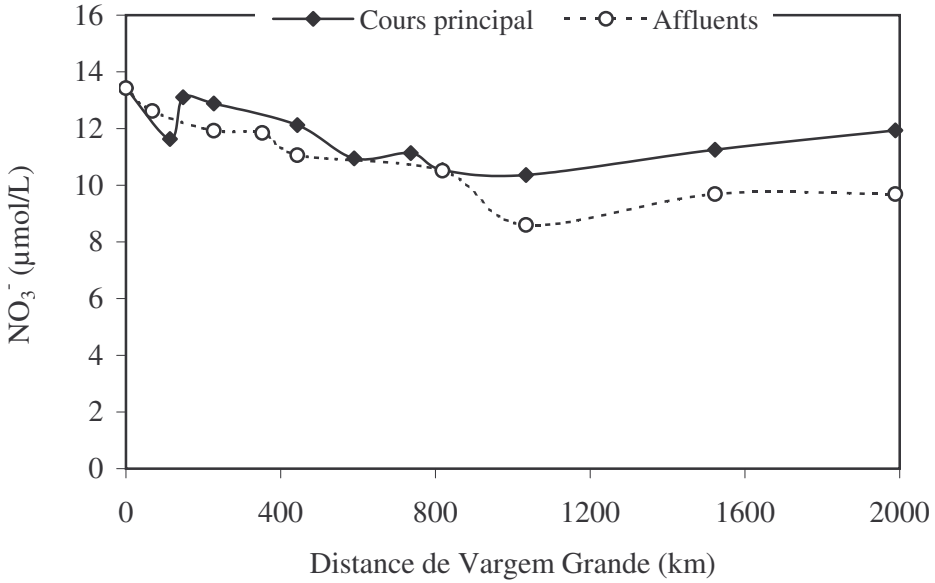


Figure A8 (3/18)







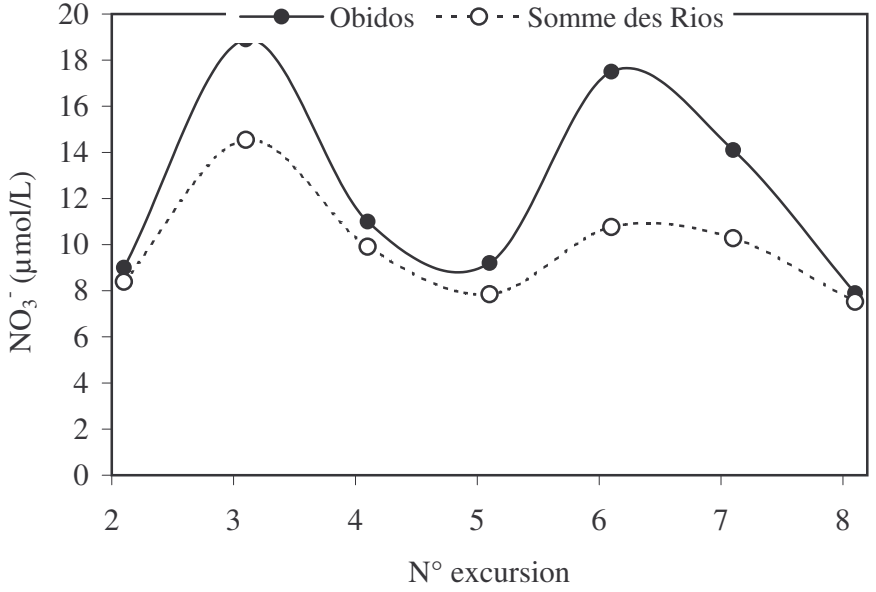
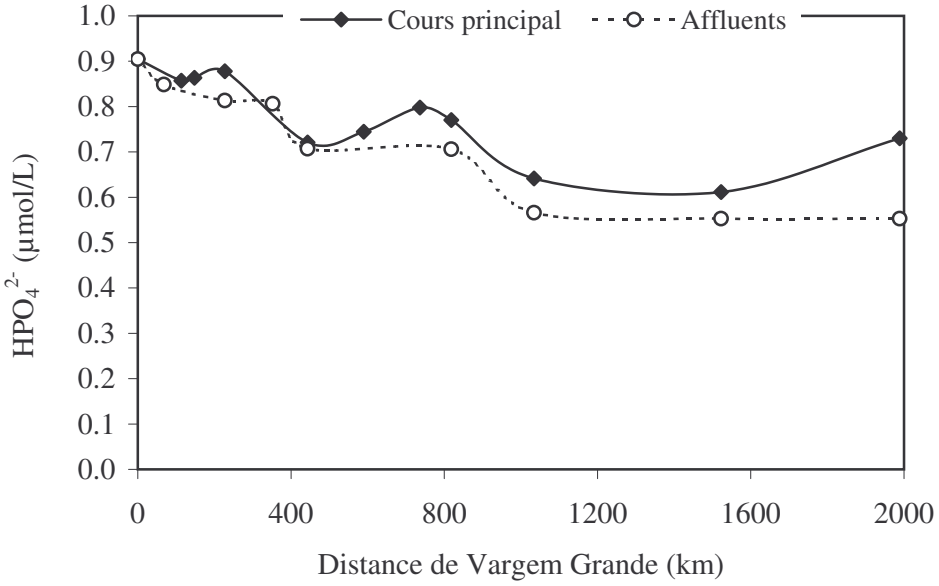
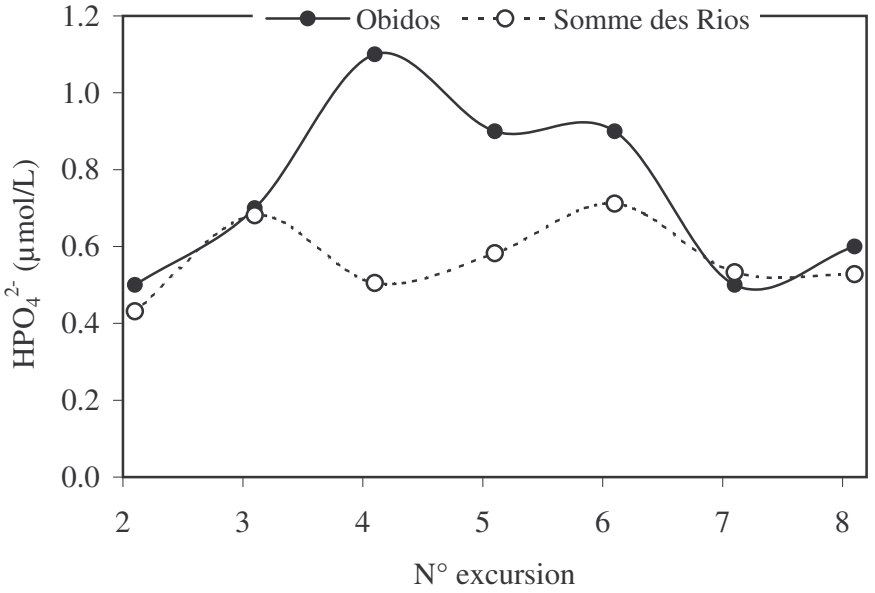
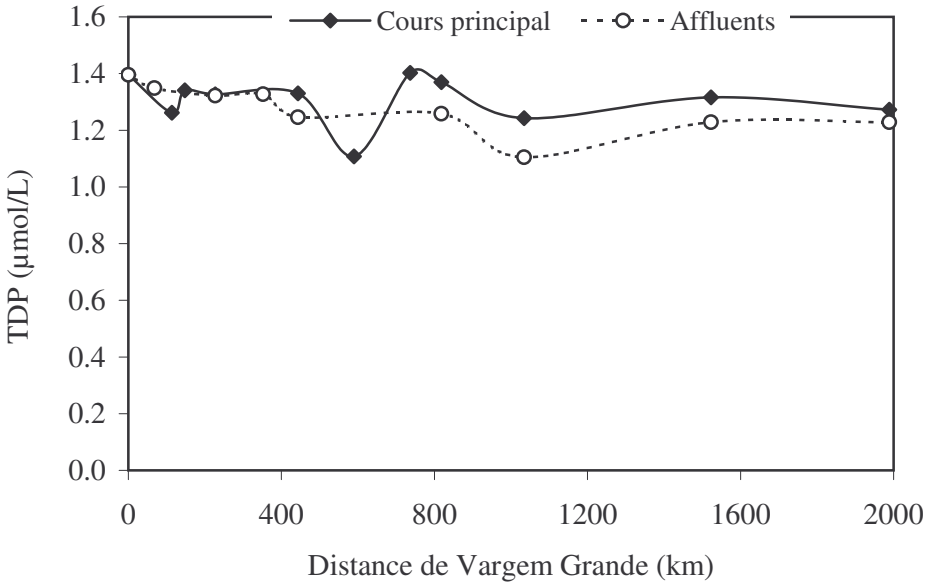


Figure A8 (4/18)







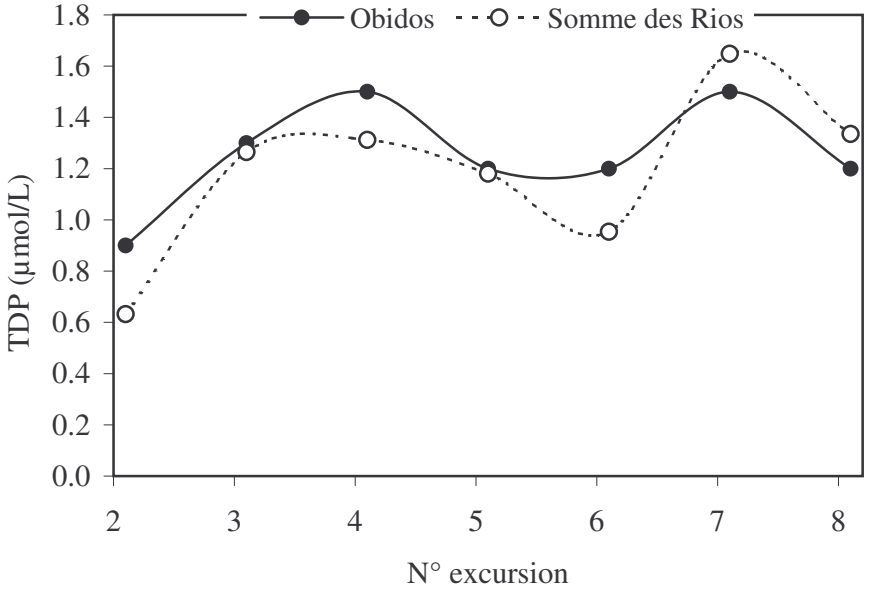
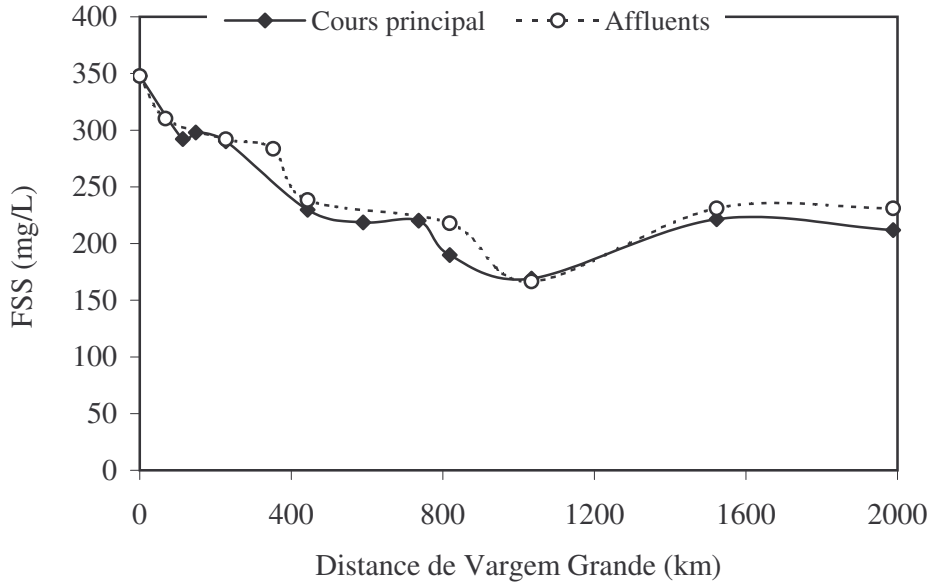
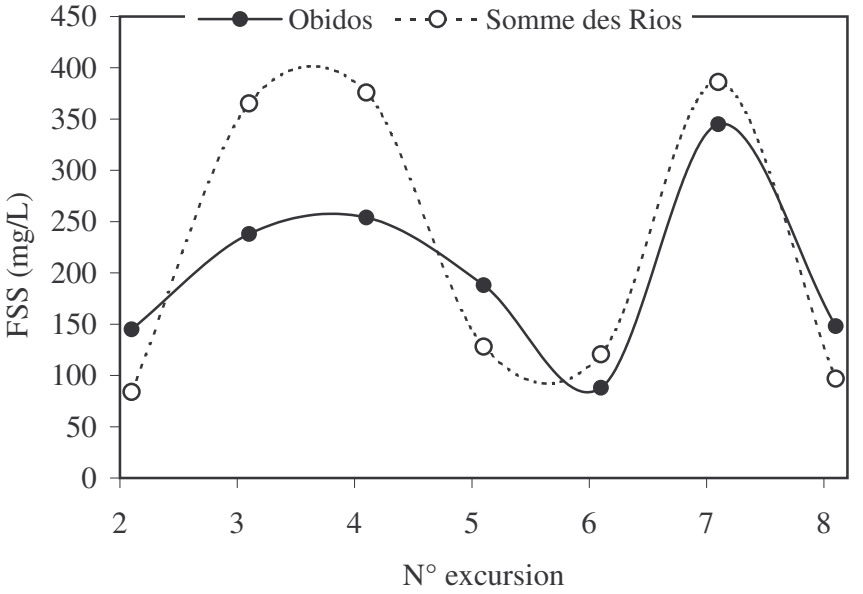
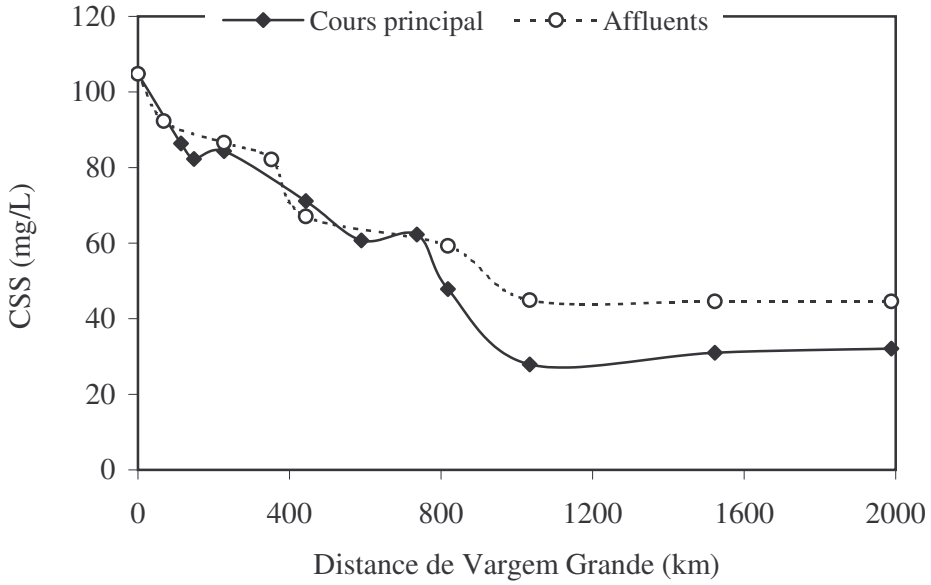


Figure A8 (5/18)







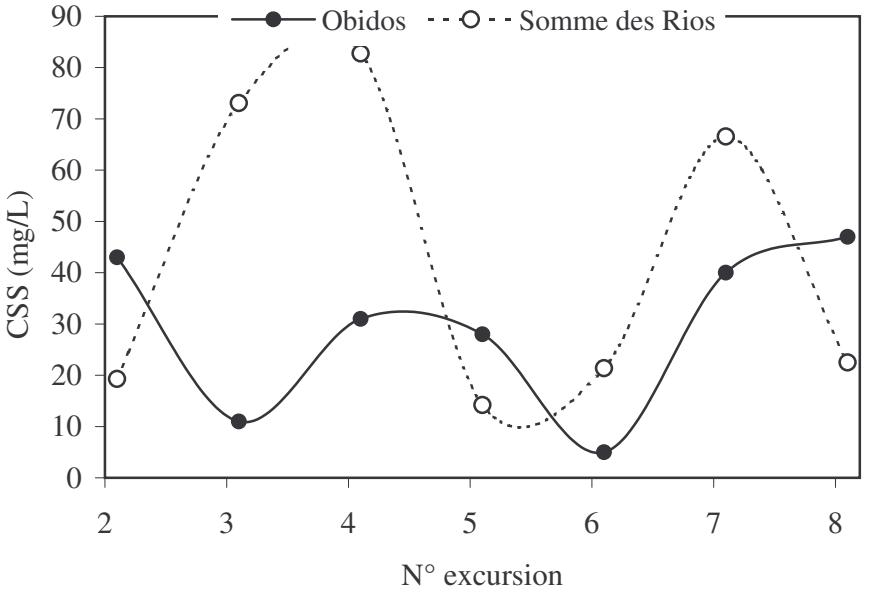
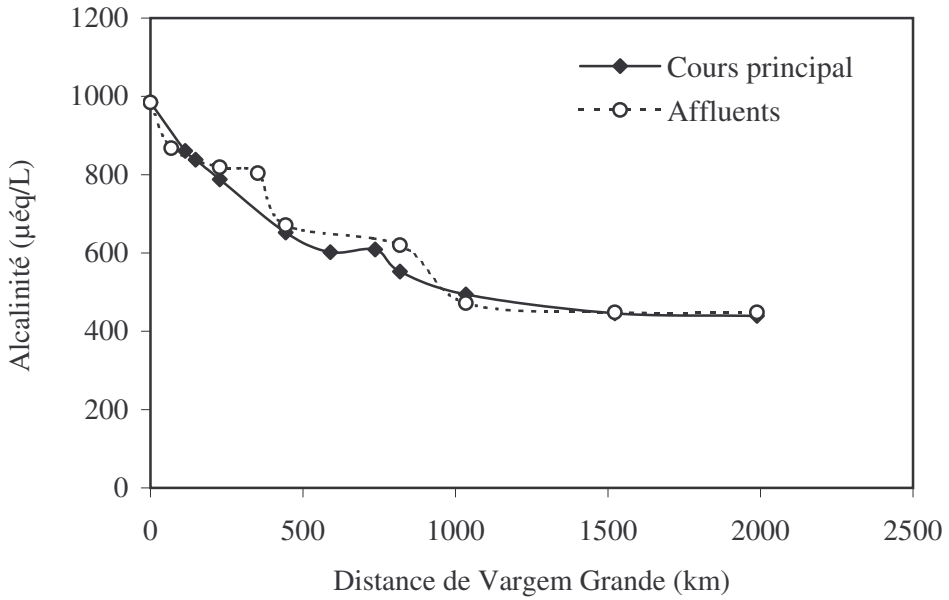
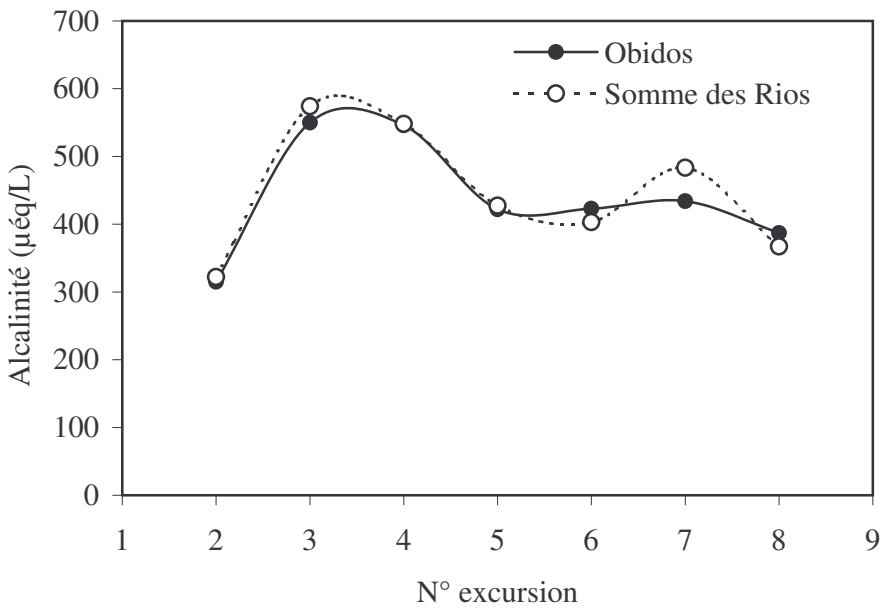
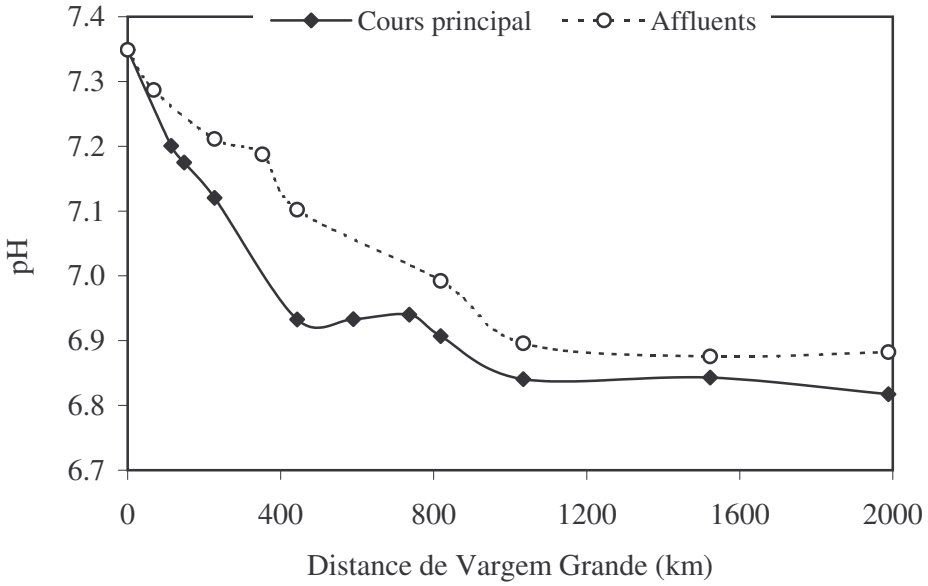


Figure A8 (6/18)







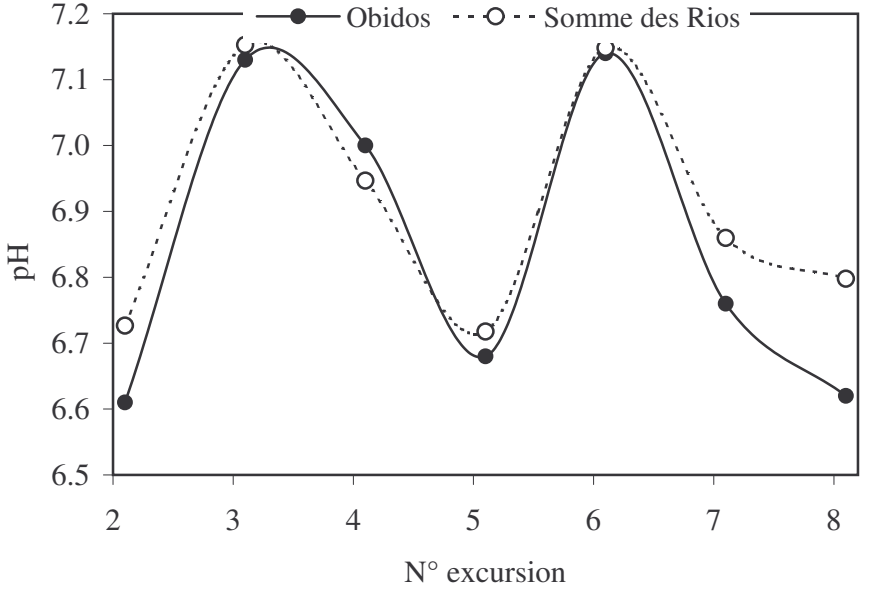
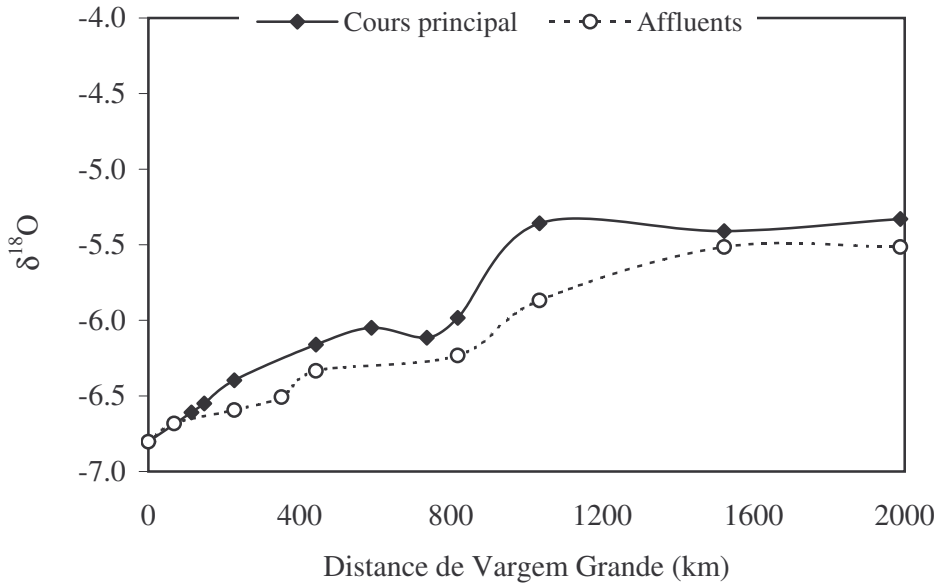
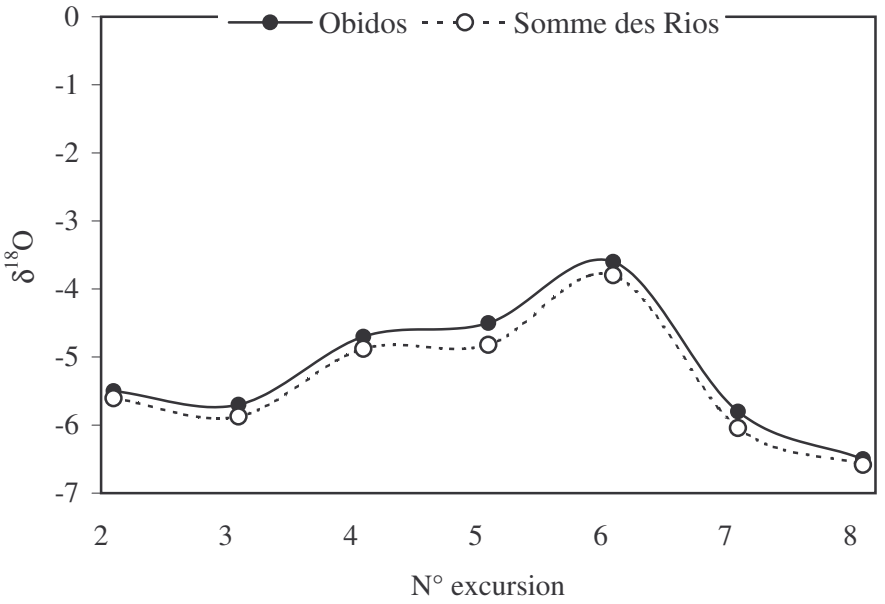
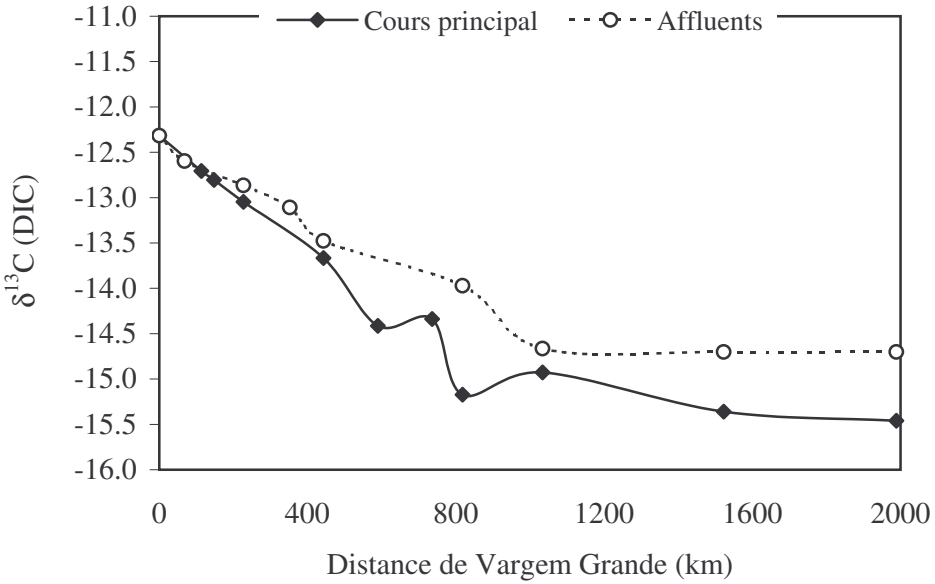


Figure A8 (7/18)







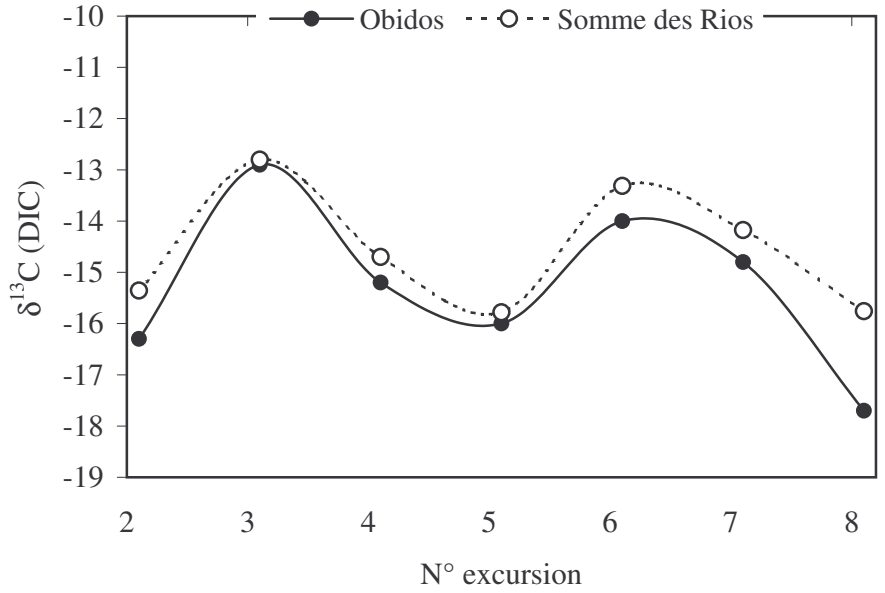
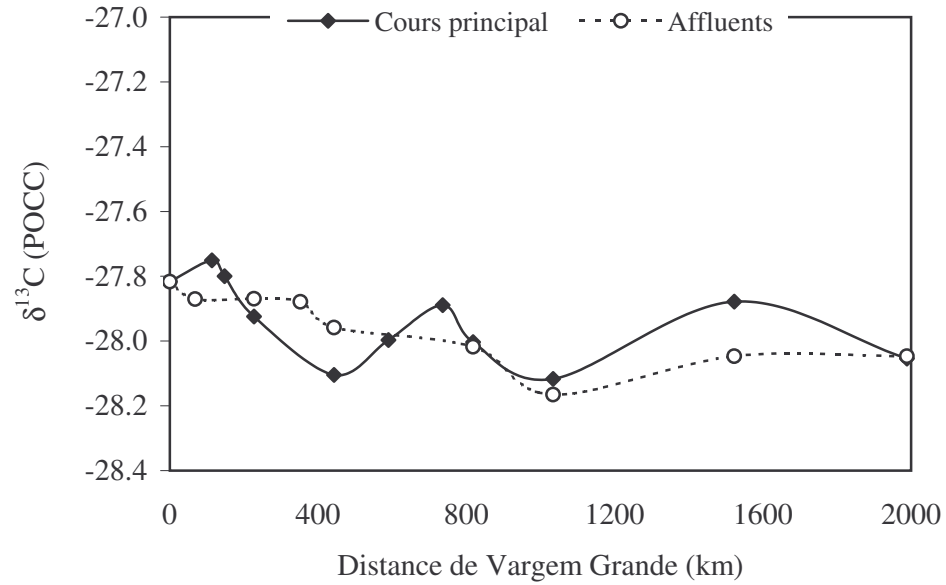
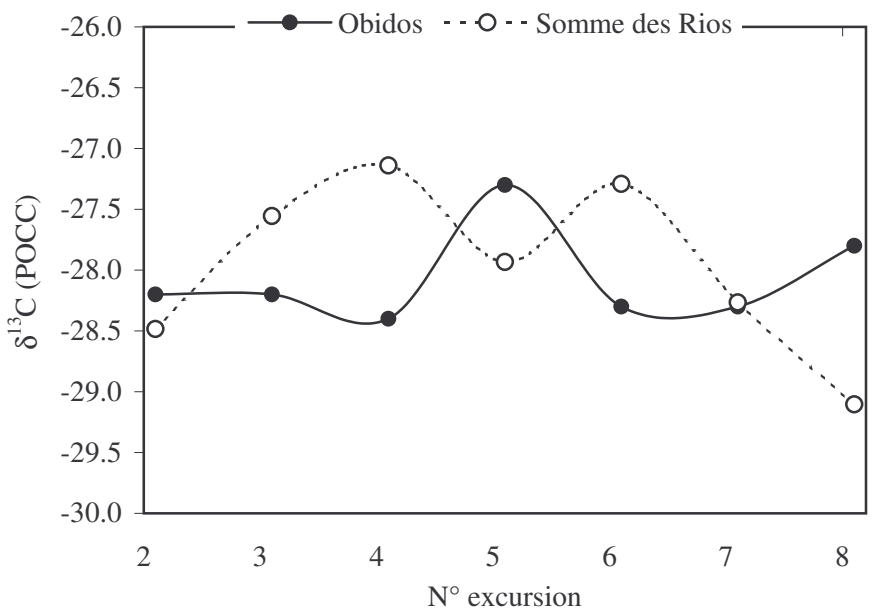
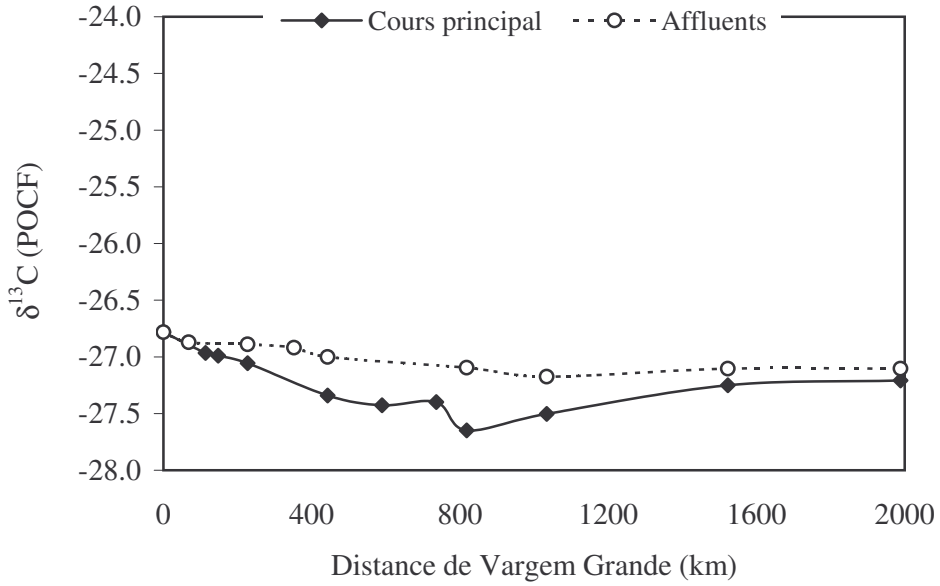


Figure A8 (8/18)







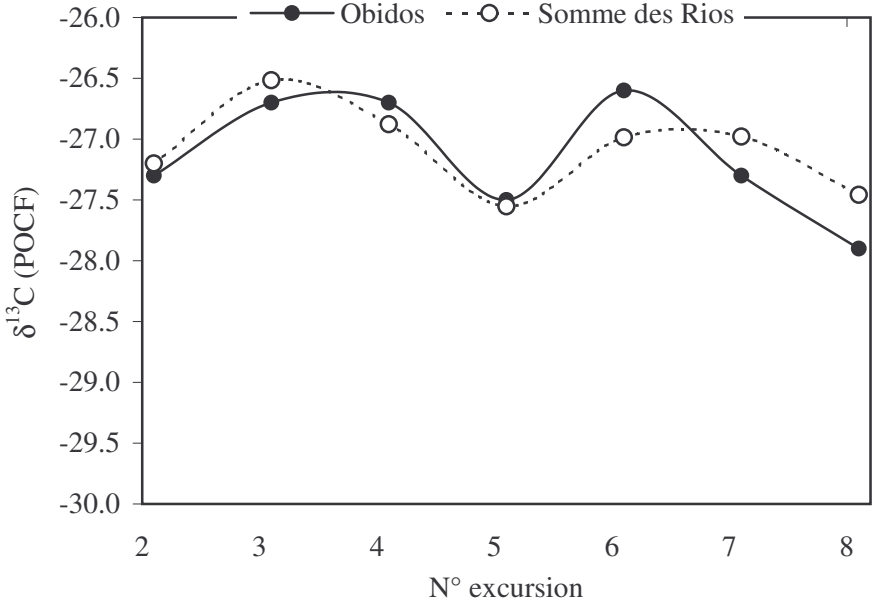
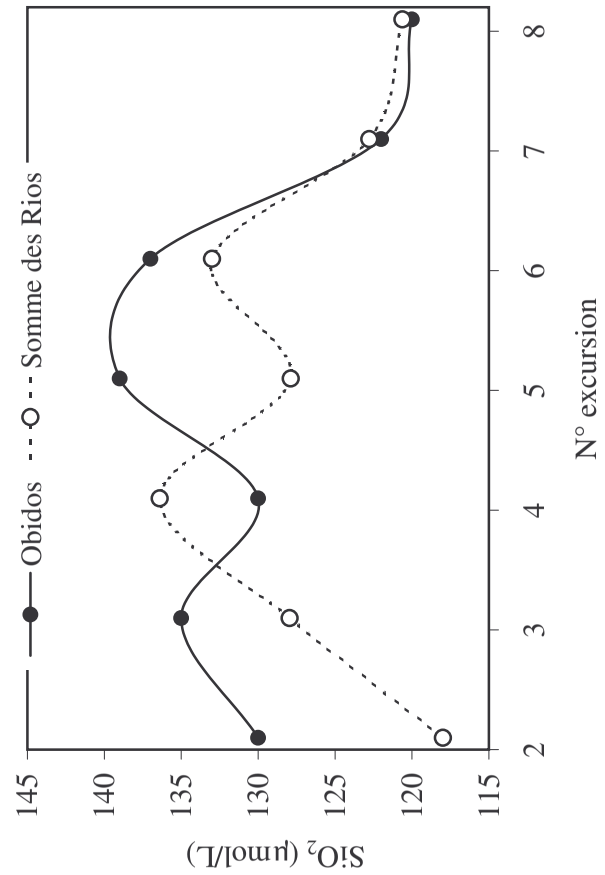
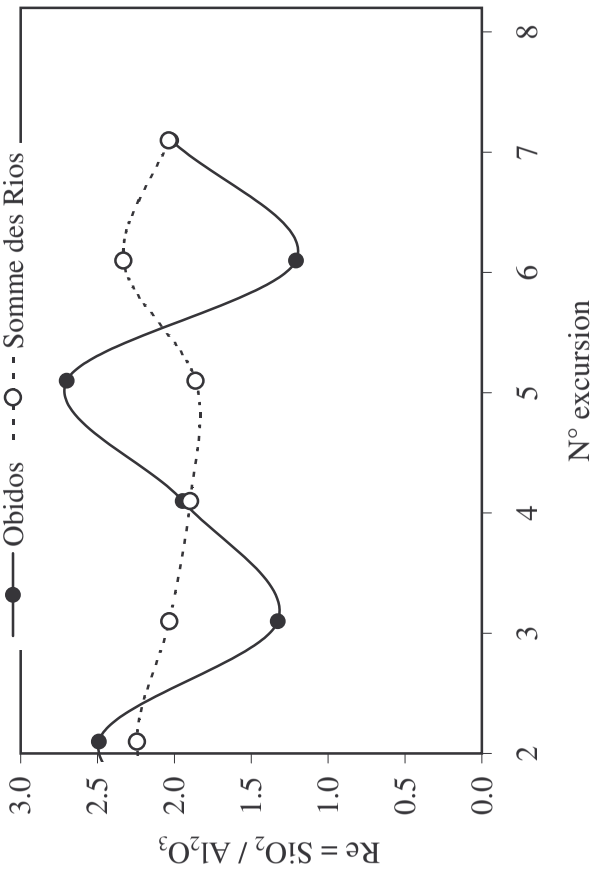
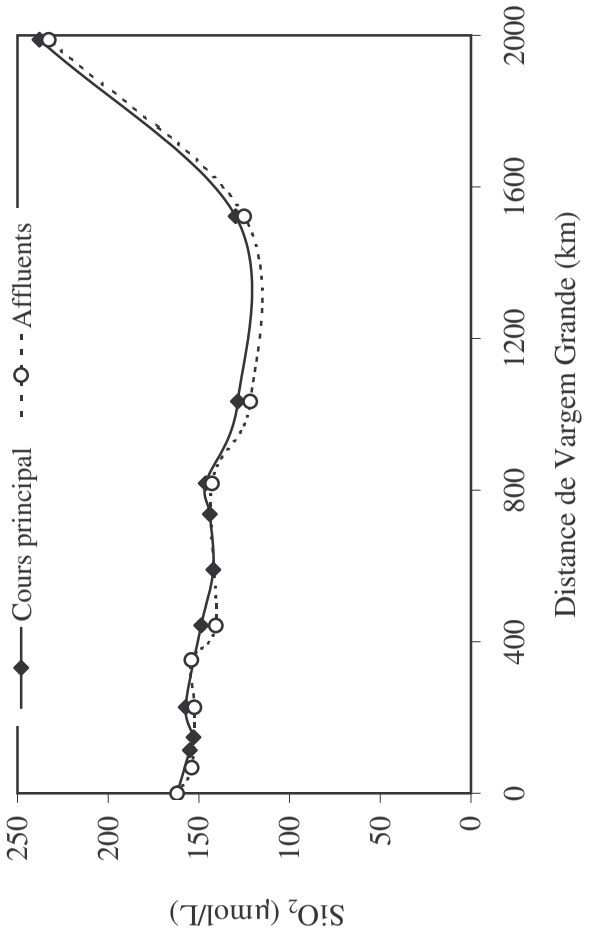
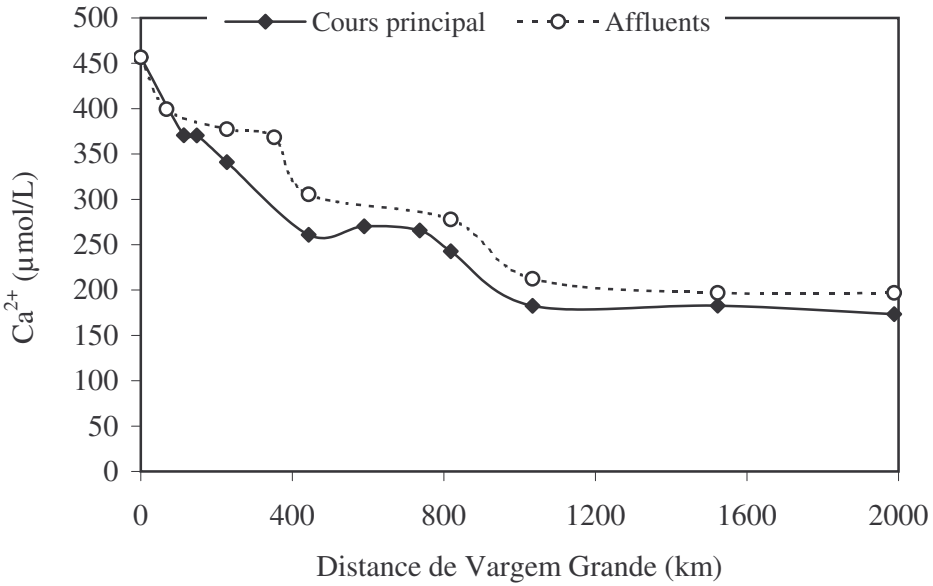


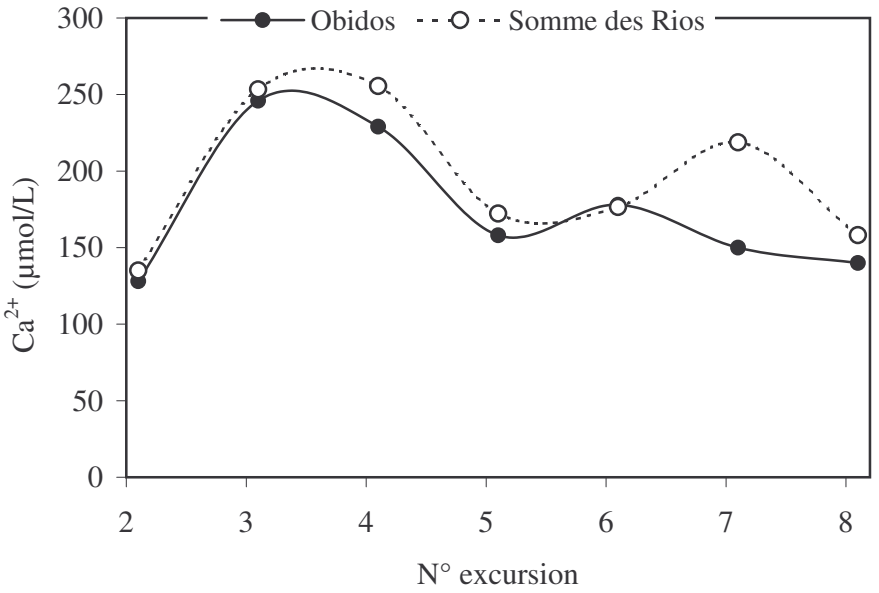
Figure A8 (9/18)

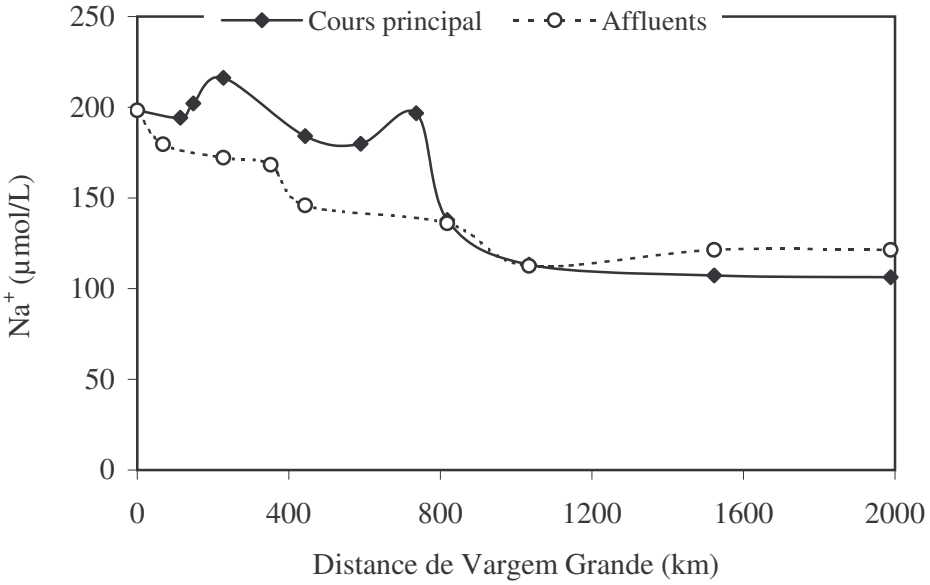

Obidos
Somme des Rios
SiO2 (µmol/L)
N° excursion


Obidos
Somme des Rios
Re = SiO2 / Al2O3
N° excursion


Cours principal
Affluents
SiO2 (µmol/L)
Distance de Vargem Grande (km)







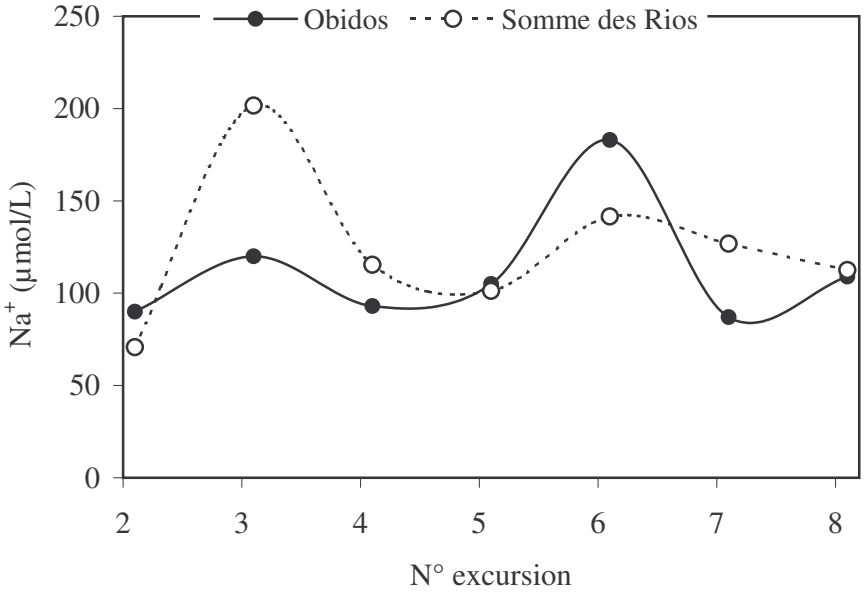
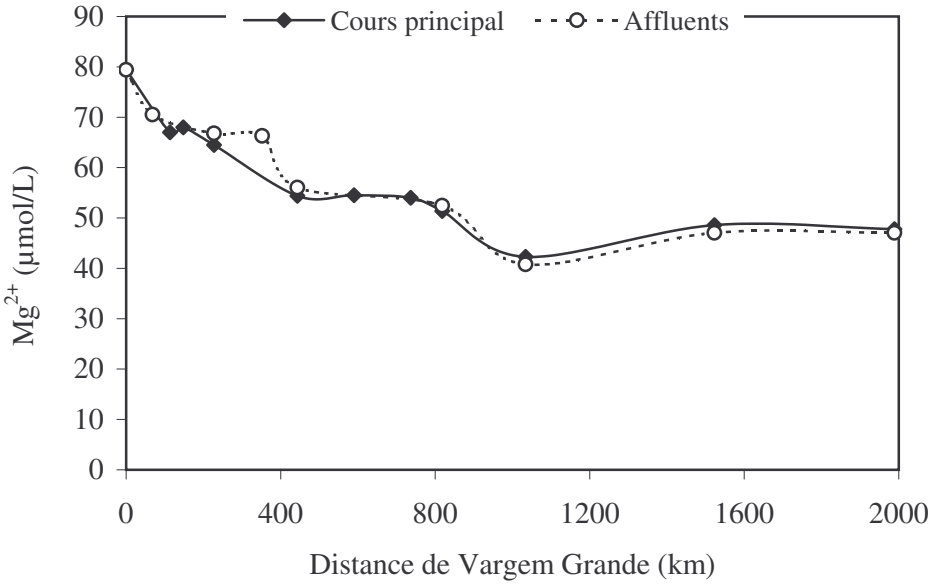
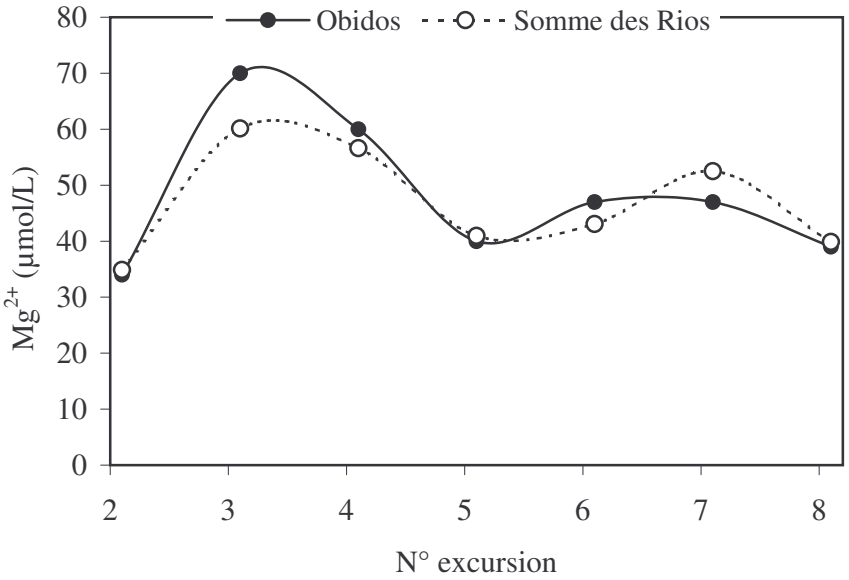
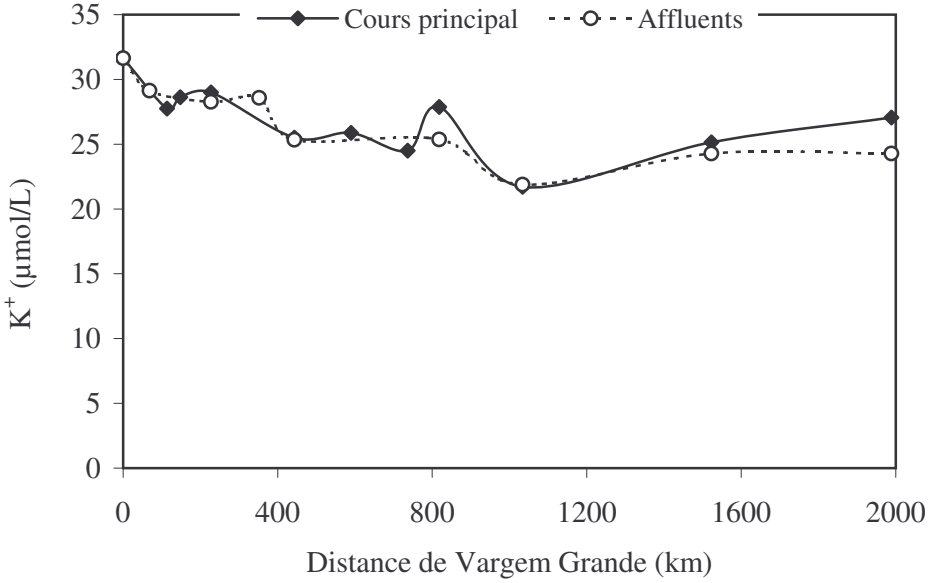


Figure A8 (11/18)







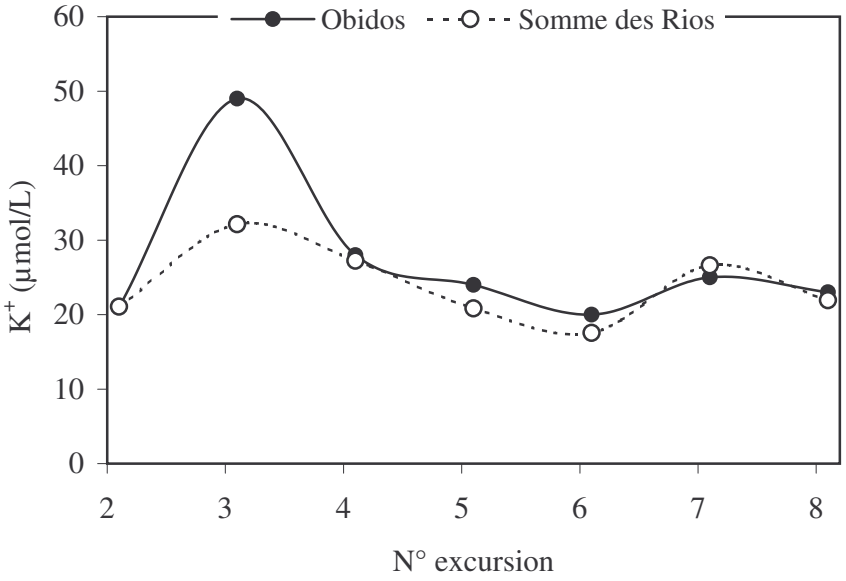
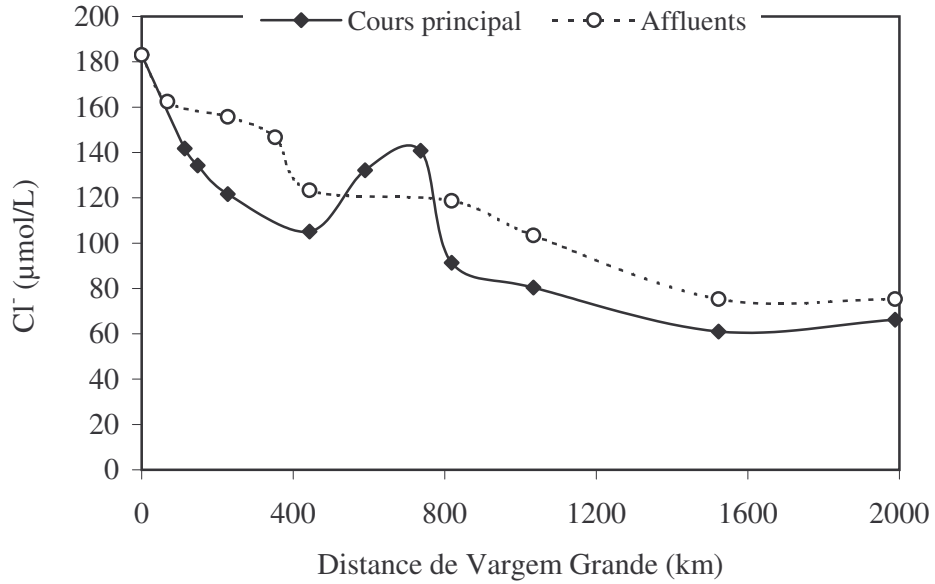
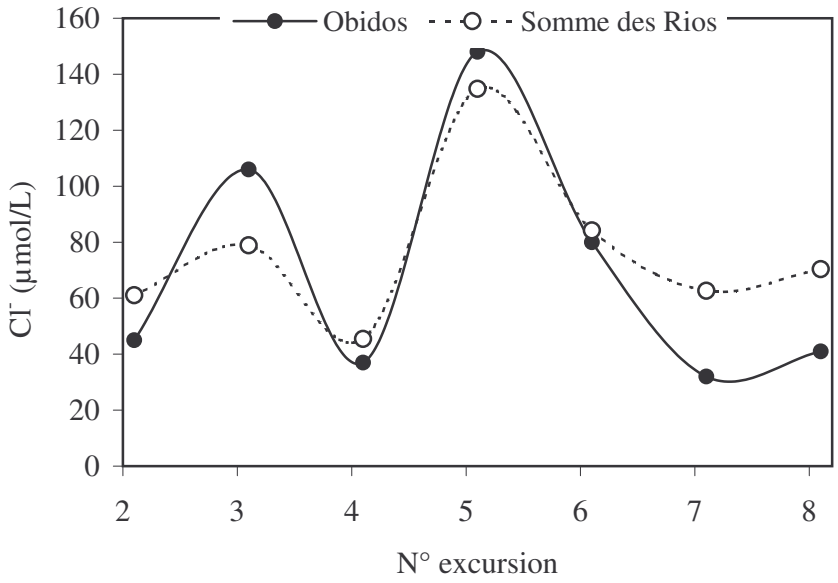
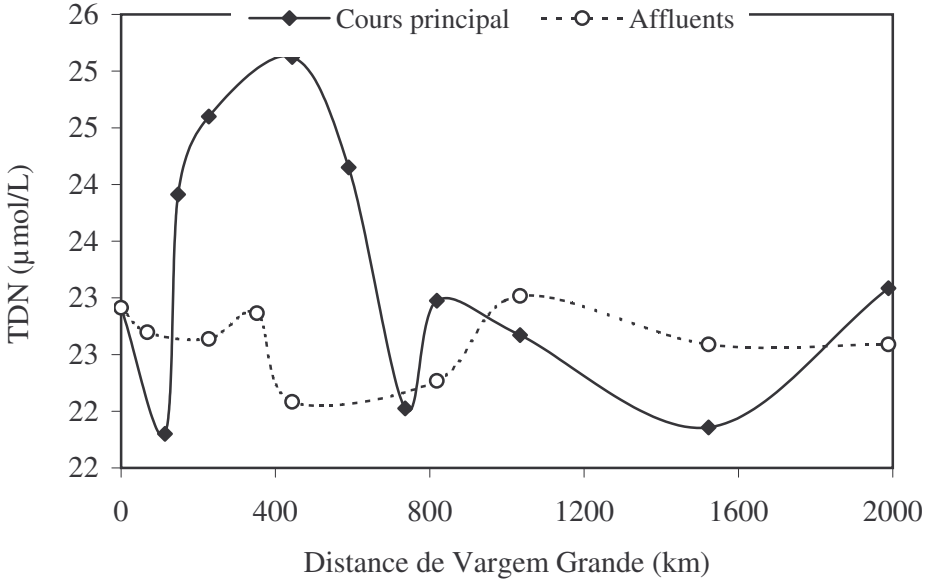


Figure A8 (12/18)







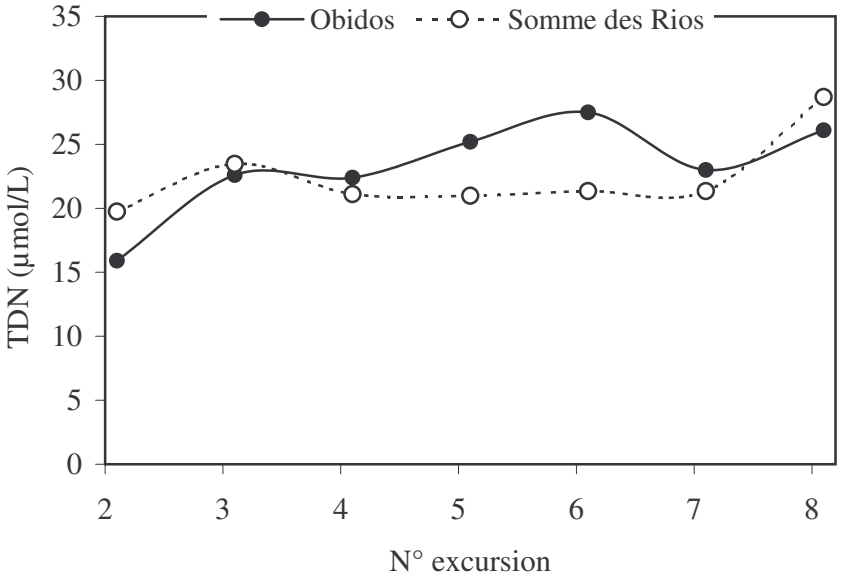
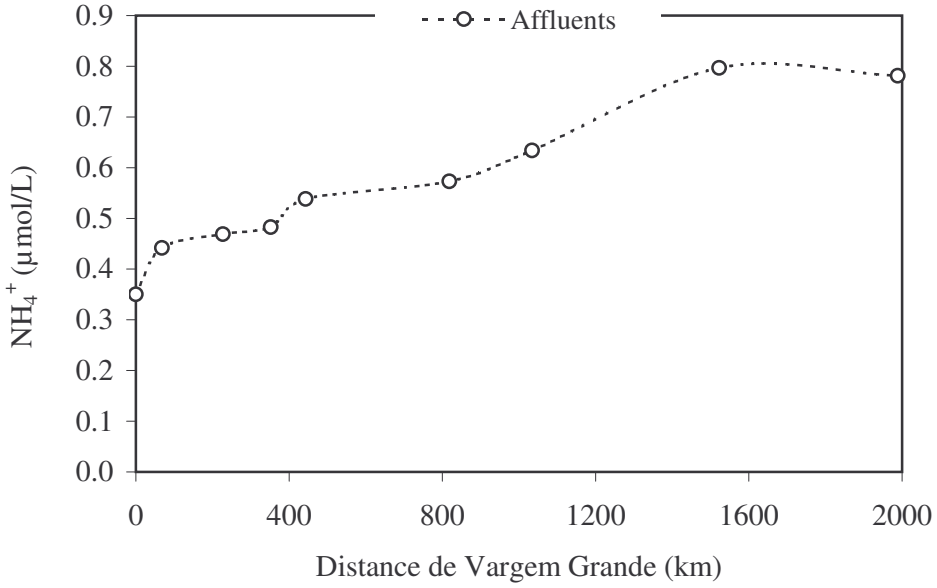
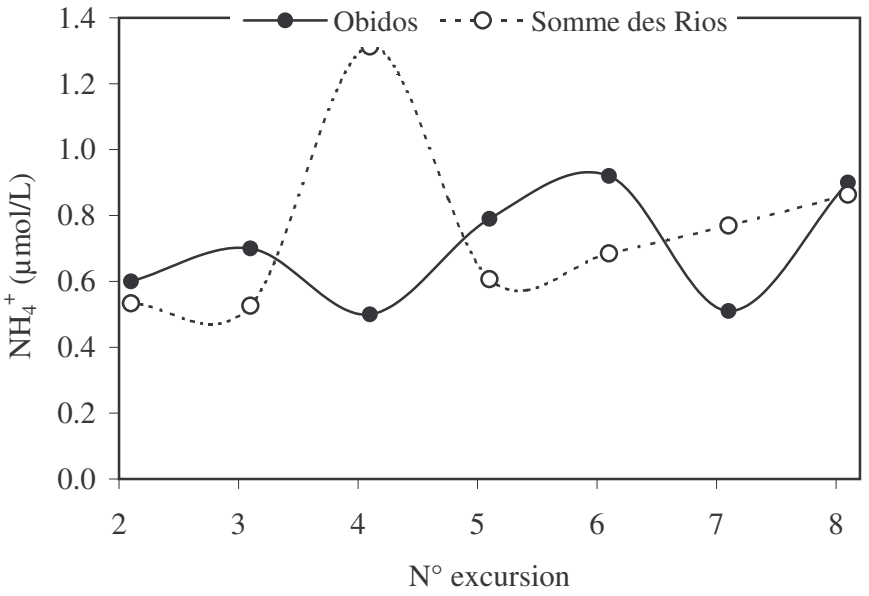
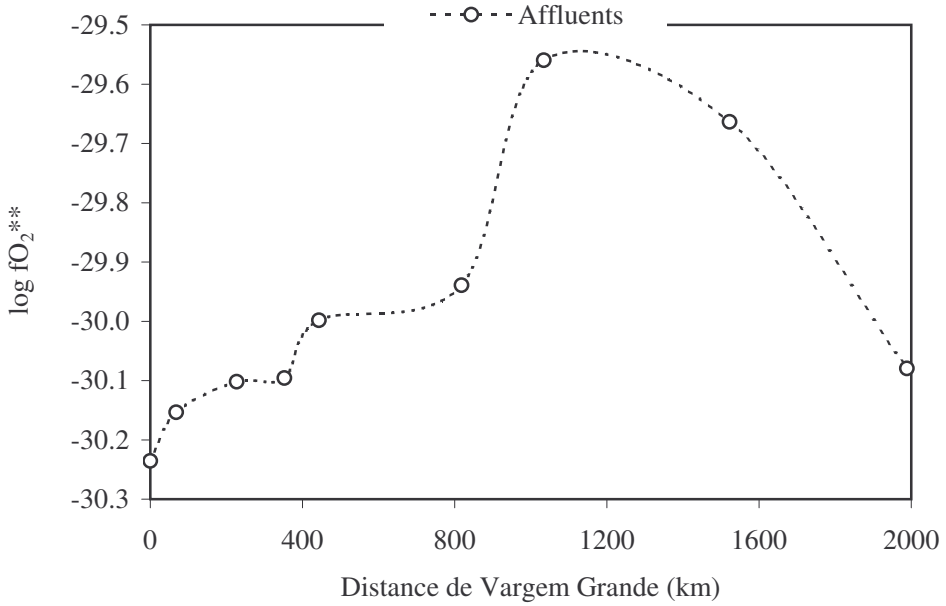


Figure A8 (13/18)







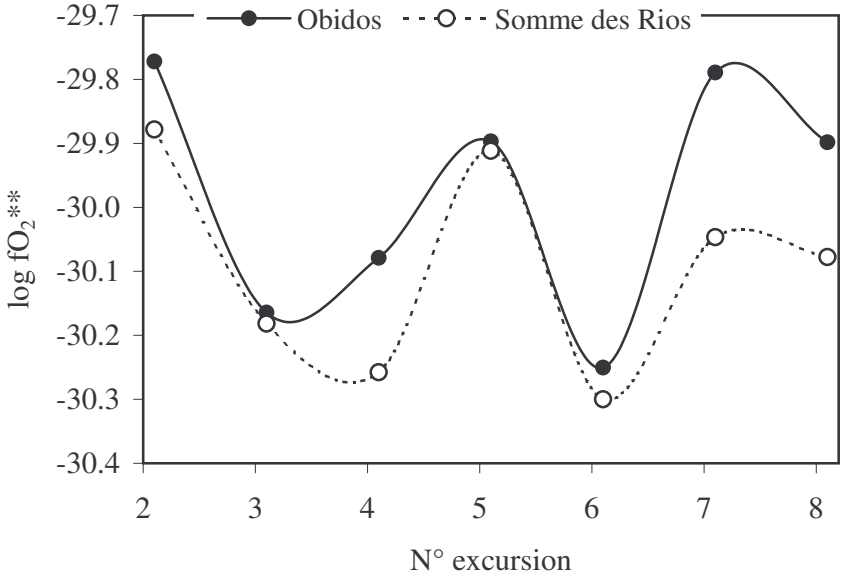
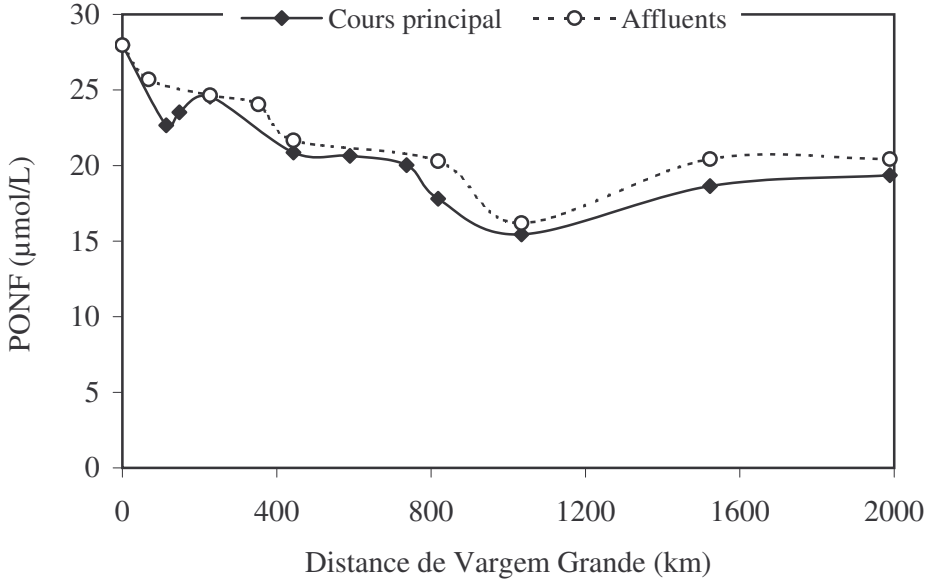
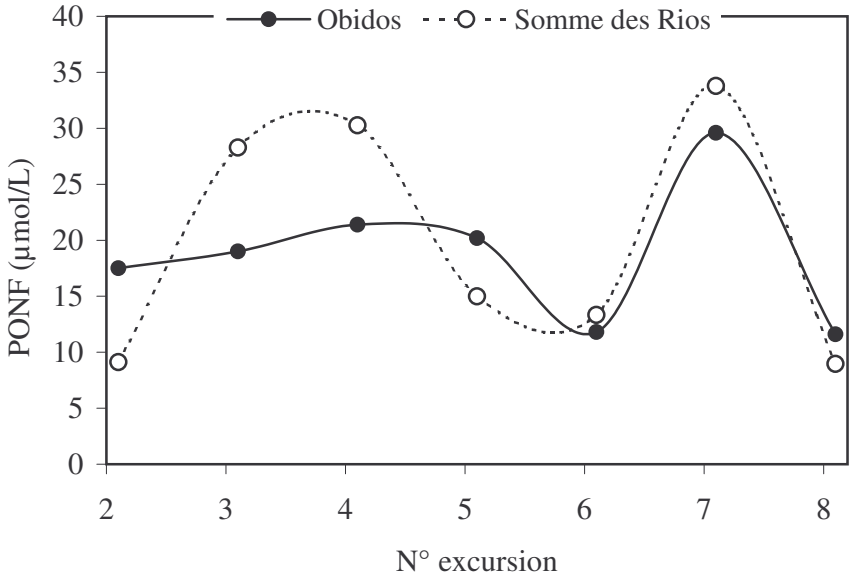
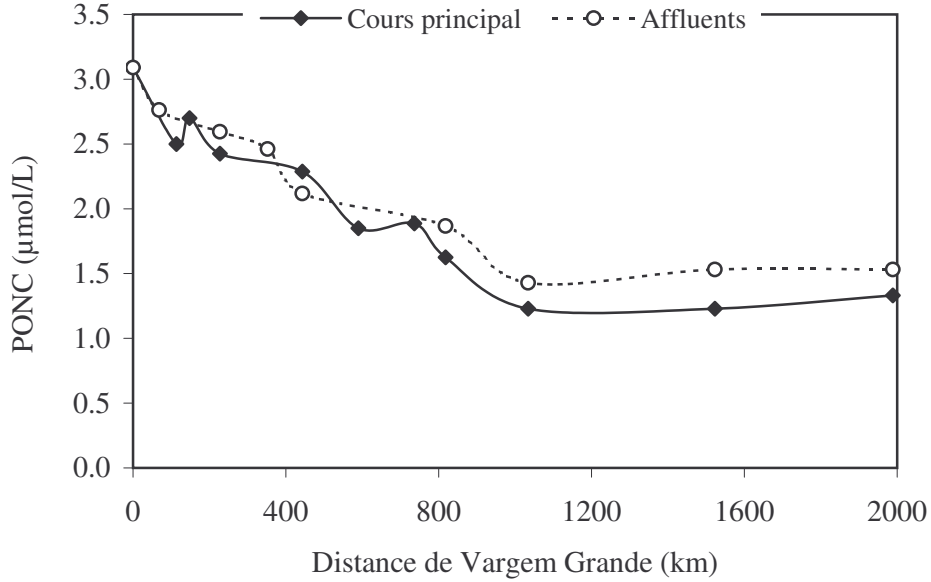


Figure A8 (14/18)







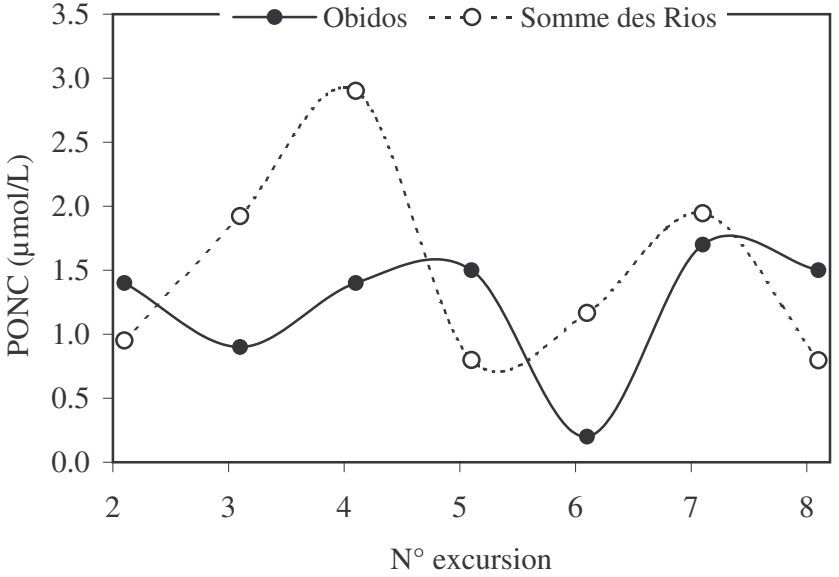
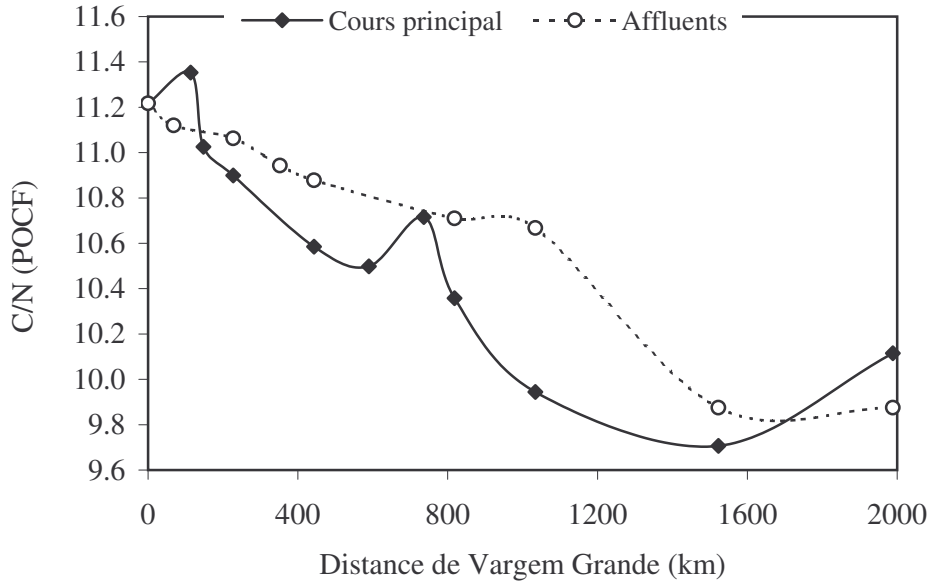
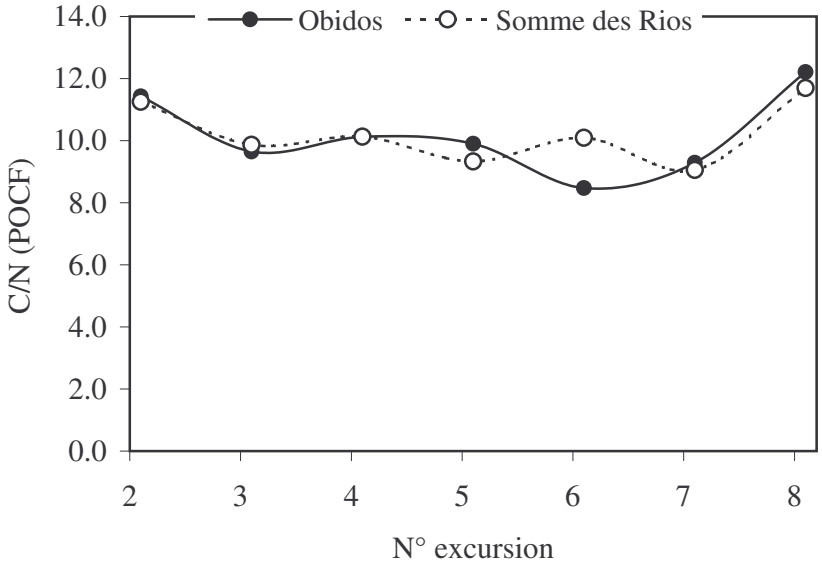
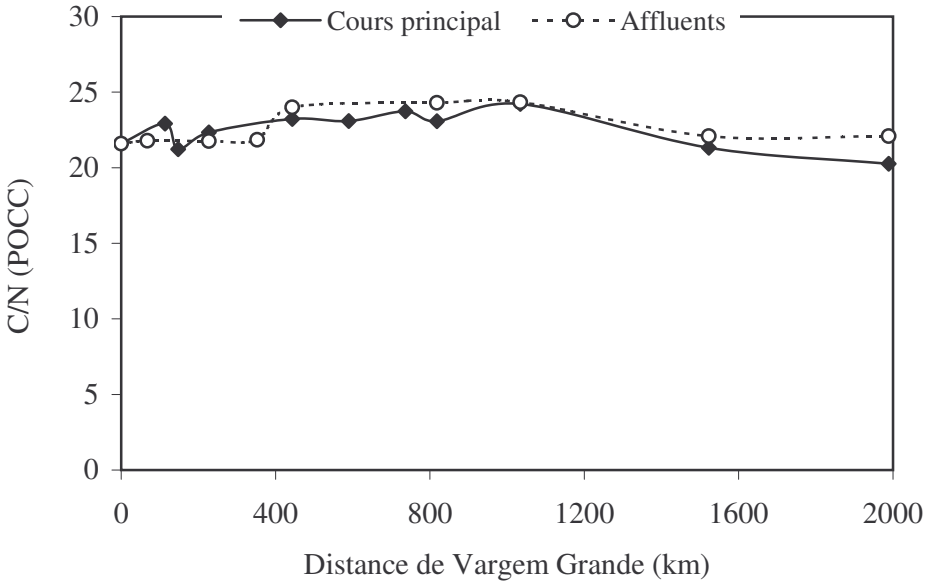


Figure A8 (15/18)







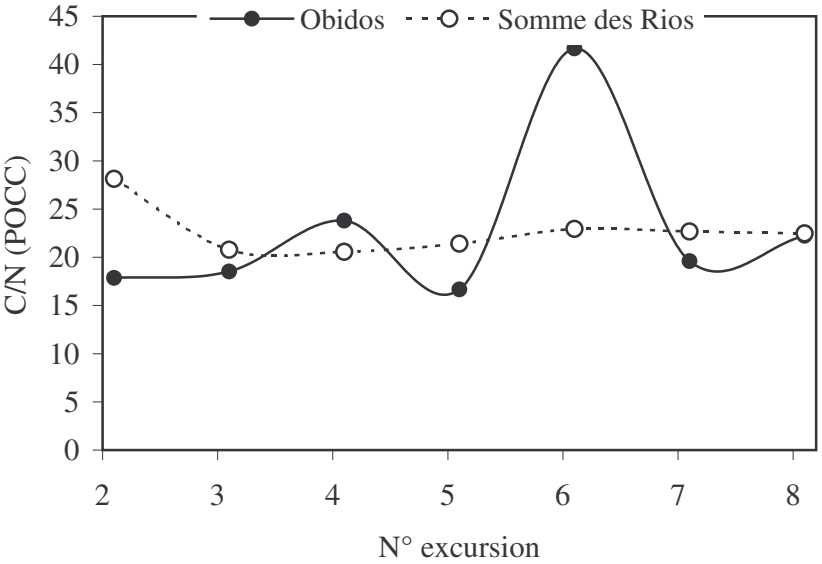
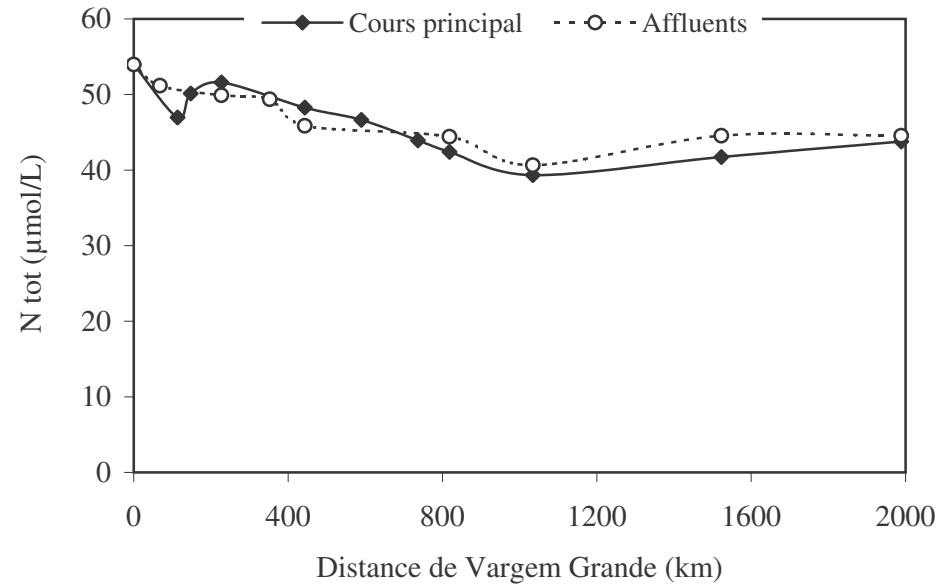
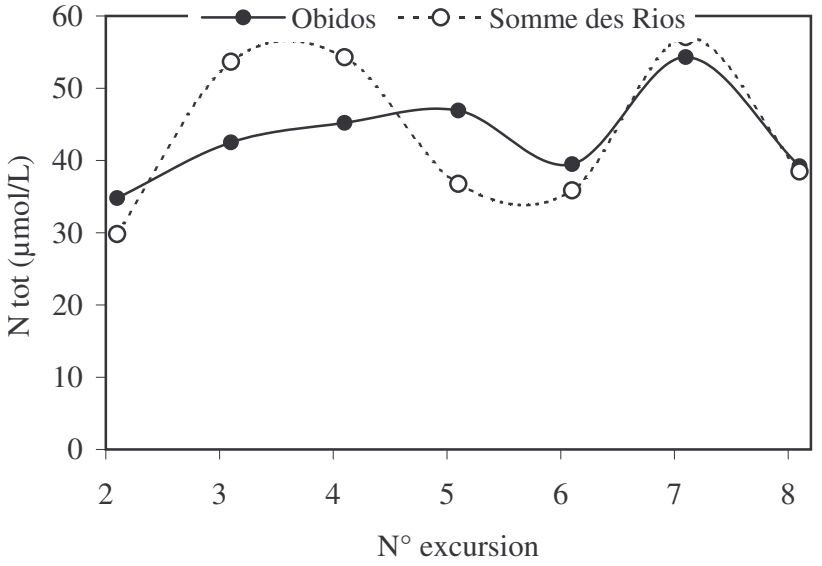
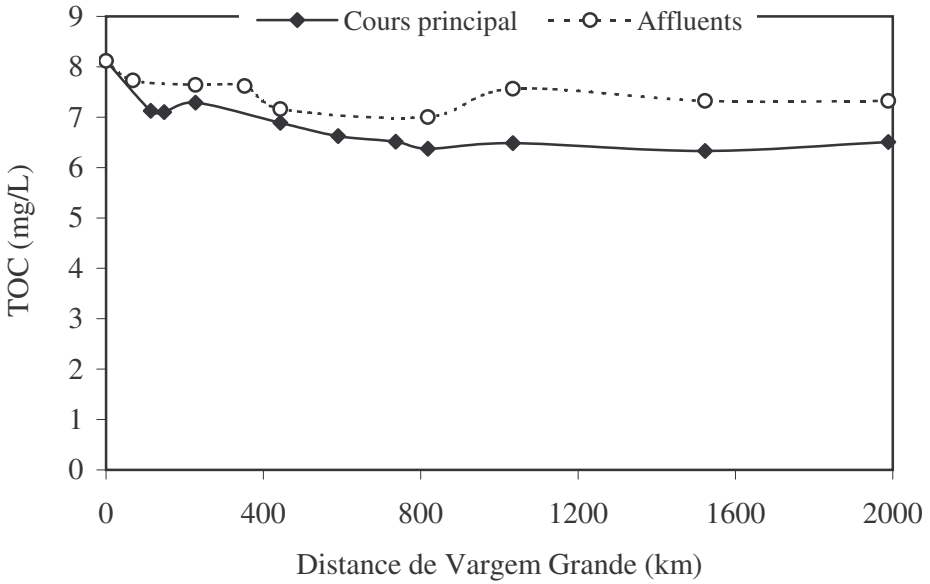


Figure A8 (16/18)







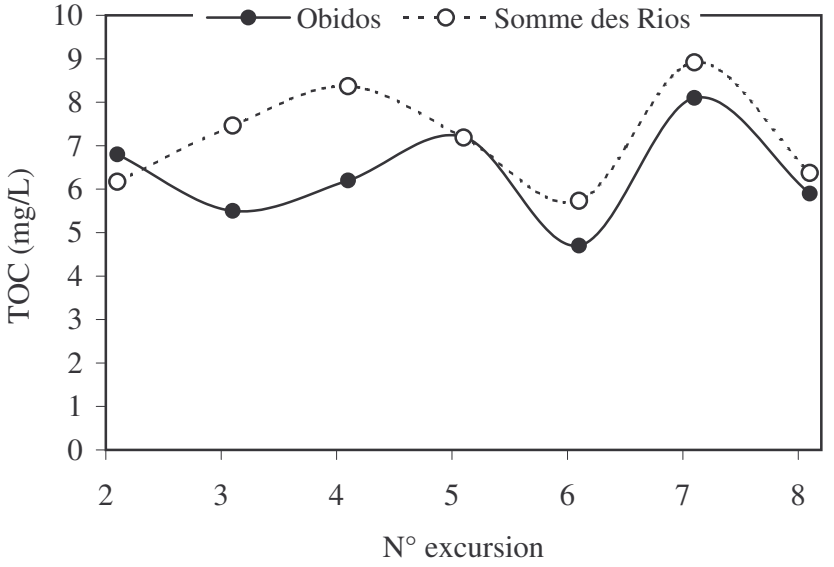
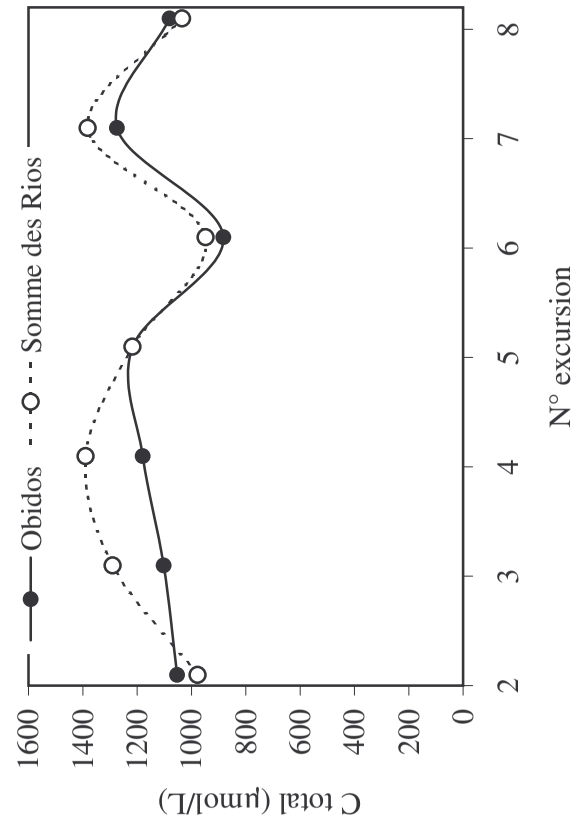


Figure A8 (17/18)


C total (µmol/L)
1600
1400
1200
1000
800
600
400
200
0
2
3
4
5
6
7
8
N° excursion
Obidos
Somme des Rios

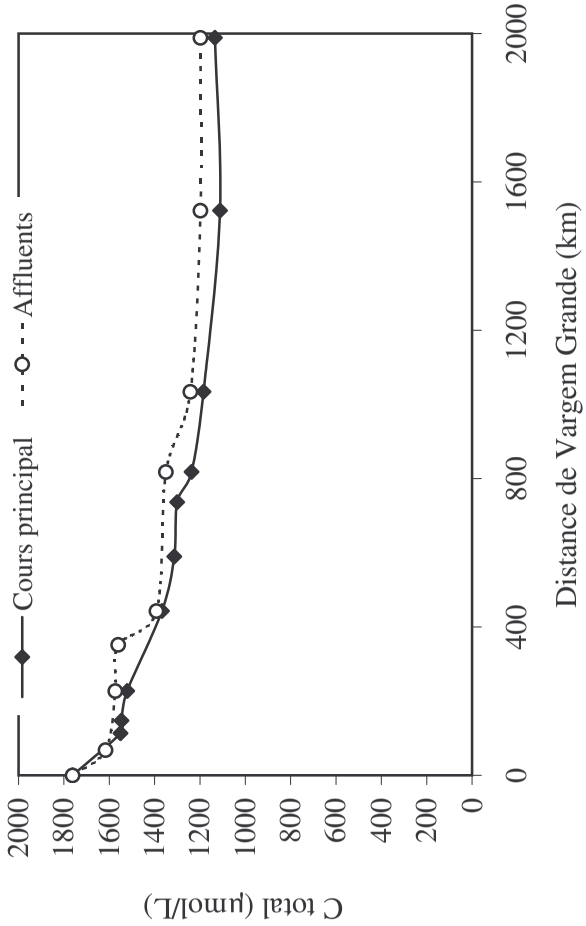

C total (µmol/L)
2000
1800
1600
1400
1200
1000
800
600
400
200
0
0
400
800
1200
1600
2000
Distance de Vargem Grande (km)
Cours principal
Affluents

Tableau A12 (1/5)

Amazone à Obidos. Superficie = 4 619 000 km²

	1	2	3	4	5	6	7	8	Moy
Débit (Qt, mm/an)	1503	1102	840	1140	1211	627	1209	1387	1127
Qt (Exc – Moy)	376	-25	-288	12	84	-501	82	260	0
Rs (%)	27%	14%	38%	40%	25%	9%	60%	16%	29%
Δ Rs (Exc – Moy)	-2%	-15%	10%	11%	-3%	-20%	32%	-12%	0%
Ri (%)	57%	71%	32%	40%	52%	41%	19%	61%	47%
Δ Ri (Exc – Moy)	10%	24%	-15%	-6%	6%	-5%	-28%	14%	0%
Rb (%)	16%	15%	30%	20%	23%	50%	21%	23%	25%
Δ Rb (Exc – Moy)	-8%	-9%	5%	-5%	-2%	25%	-4%	-2%	0%
$\delta^{13}C$ (DIC) (Moy, ‰)	-16.40	-16.30	-12.90	-15.20	-16.00	-14.00	-14.80	-17.70	-15.41
$\delta^{13}C$ (DIC) (Mes. – Moy, ‰)	-0.99	-0.89	2.51	0.21	-0.59	1.41	0.61	-2.29	0.00
CO_2 carb / CO_2 tot (Mes.)	0.348	0.331	0.388	0.421	0.340	0.310	0.402	0.347	0.36
Δ CO_2 carb / CO_2 tot (Mes.)	-0.013	-0.030	0.027	0.060	-0.021	-0.051	0.041	-0.013	0.00
$\delta^{13}C$ (DIC) (corrigé, ‰)	-26.76	-25.84	-22.99	-28.42	-25.80	-21.64	-26.76	-28.72	-25.87
Δ $\delta^{13}C$ (DIC) (corrigé, ‰)	-0.89	0.03	2.87	-2.55	0.07	4.23	-0.89	-2.86	0.00
$\delta^{18}O$ (mes.) ‰	-5.53	-5.50	-5.70	-4.70	-4.50	-3.60	-5.80	-6.50	-5.23
Δ $\delta^{18}O$ (mes.- moy.) ‰	-0.30	-0.27	-0.47	0.53	0.73	1.63	-0.57	-1.27	0.00
$\delta^{18}O$ (corrigé) ‰	-5.68	-5.21	-3.79	-6.50	-5.20	-3.11	-5.68	-6.66	-5.23
Δ $\delta^{18}O$ (corr.- moy.) ‰	-0.45	0.01	1.44	-1.27	0.03	2.11	-0.45	-1.43	0.00
Δ $\delta^{18}O$ (pluie) ‰	-0.15	0.29	1.91	-1.80	-0.70	0.49	0.12	-0.16	0.00
$\delta^{18}O$ (pluie) ‰	-5.38	-5.79	-7.61	-2.90	-3.80	-4.09	-5.92	-6.34	-5.23

Rio Negro à Manacapuru. Superficie = 755 000 km²

	1	2	3	4	5	6	7	8	Moy
Débit (Qt, mm/an)	2466	1684	209	347	1346	518	1170	1935	1210
Qt (Exc – Moy)	1257	475	-1001	-863	136	-691	-39	726	0
Rs (%)	30%	40%	21%	65%	8%	20%	35%	47%	33%
Δ Rs (Exc – Moy)	-3%	7%	-12%	32%	-25%	-14%	2%	13%	0%
Ri (%)	62%	51%	68%	17%	86%	49%	1%	20%	44%
Δ Ri (Exc – Moy)	18%	7%	24%	-27%	41%	5%	-43%	-24%	0%
Rb (%)	9%	9%	11%	18%	6%	31%	64%	34%	23%
Δ Rb (Exc – Moy)	-14%	-14%	-11%	-5%	-16%	8%	41%	11%	0%
$\delta^{13}C$ (DIC) (Moy, ‰)	-25.30	-23.00	-20.20	-23.10	-26.80	-24.90	-25.40	-26.40	-24.39
$\delta^{13}C$ (DIC) (Mes. – Moy, ‰)	-0.91	1.39	4.19	1.29	-2.41	-0.51	-1.01	-2.01	0.00
CO_2 carb / CO_2 tot (Mes.)	0.000	0.021	0.048	0.000	0.000	0.000	0.000	0.017	0.01
Δ CO_2 carb / CO_2 tot (Mes.)	-0.011	0.010	0.038	-0.011	-0.011	-0.011	-0.011	0.006	0.00
$\delta^{13}C$ (DIC) (corrigé, ‰)	-25.30	-23.56	-21.38	-23.10	-26.80	-24.90	-25.40	-26.92	-24.67
Δ $\delta^{13}C$ (DIC) (corrigé, ‰)	-0.63	1.11	3.29	1.57	-2.13	-0.23	-0.73	-2.25	0.00
$\delta^{18}O$ (mes.) ‰	-6.00	-4.80	-3.50	-2.40	-3.90	-2.20	-3.80	-6.00	-4.08
Δ $\delta^{18}O$ (mes.- moy.) ‰	-1.93	-0.73	0.57	1.68	0.17	1.88	0.27	-1.93	0.00
$\delta^{18}O$ (corrigé) ‰	-4.39	-3.52	-2.43	-3.29	-5.14	-4.19	-4.44	-5.20	-4.08
Δ $\delta^{18}O$ (corr.- moy.) ‰	-0.32	0.56	1.64	0.78	-1.07	-0.12	-0.37	-1.12	0.00
Δ $\delta^{18}O$ (pluie) ‰	1.61	1.28	1.07	-0.89	-1.24	-1.99	-0.64	0.80	0.00
$\delta^{18}O$ (pluie) ‰	-7.61	-6.08	-4.57	-1.51	-2.66	-0.21	-3.16	-6.80	-4.08

Tableau A12 (2/5)

Rio Içа à São Antonio do Içа. Superficie = 148 000 km²

	1	2	3	4	5	6	7	8	Moy
Débit (Qt, mm/an)	1471	1557	1557	1365	1940	1237	1557	1791	1559
Qt (Exc – Moy)	-88	-3	-3	-195	381	-323	-3	232	0
Rs (%)	7%	36%	58%	55%	40%	63%	39%	33%	41%
Δ Rs (Exc – Moy)	-35%	-6%	17%	14%	-2%	22%	-2%	-8%	0%
Ri (%)	93%	46%	27%	23%	38%	21%	18%	49%	39%
Δ Ri (Exc – Moy)	53%	6%	-12%	-16%	-1%	-18%	-21%	10%	0%
Rb (%)	1%	18%	15%	22%	22%	16%	43%	18%	19%
Δ Rb (Exc – Moy)	-19%	-1%	-5%	3%	3%	-3%	24%	-1%	0%
$\delta^{13}C$ (DIC) (Moy, ‰)	-21.60	-18.50	-20.20	-19.60	-20.50	-18.70	-20.30	-20.50	-19.99
$\delta^{13}C$ (DIC) (Mes. – Moy, ‰)	-1.61	1.49	-0.21	0.39	-0.51	1.29	-0.31	-0.51	0.00
CO_2 carb / CO_2 tot (Mes.)	0.291	0.061	0.139	0.178	0.212	0.168	0.000	0.214	0.16
Δ CO_2 carb / CO_2 tot (Mes.)	0.134	-0.097	-0.019	0.020	0.054	0.010	-0.158	0.056	0.00
$\delta^{13}C$ (DIC) (corrigé, ‰)	-31.72	-19.90	-23.93	-24.51	-26.82	-23.09	-20.30	-26.89	-24.64
Δ $\delta^{13}C$ (DIC) (corrigé, ‰)	-7.07	4.75	0.71	0.14	-2.18	1.56	4.34	-2.25	0.00
$\delta^{18}O$ (mes.) ‰	-8.90	-5.70	-5.20	-3.70	-5.40	-3.60	-5.60	-6.50	-5.58
Δ $\delta^{18}O$ (mes.- moy.) ‰	-3.33	-0.13	0.38	1.88	0.18	1.98	-0.02	-0.93	0.00
$\delta^{18}O$ (corrigé) ‰	-9.11	-3.20	-5.22	-5.51	-6.66	-4.80	-3.40	-6.70	-5.58
Δ $\delta^{18}O$ (corr.- moy.) ‰	-3.54	2.37	0.36	0.07	-1.09	0.78	2.17	-1.12	0.00
Δ $\delta^{18}O$ (pluie) ‰	-0.21	2.50	-0.02	-1.81	-1.26	-1.20	2.20	-0.20	0.00
$\delta^{18}O$ (pluie) ‰	-8.69	-8.20	-5.18	-1.89	-4.14	-2.40	-7.80	-6.30	-5.58

Rio Jutai à Xibeco. Superficie = 74 000 km²

	1	2	3	4	5	6	7	8	Moy
Débit (Qt, mm/an)	2559	938	1109	1663	1791	597	1621	1407	1461
Qt (Exc – Moy)	1098	-522	-352	203	331	-864	160	-53	0
Rs (%)	28%	25%	63%	50%	35%	80%	35%	25%	43%
Δ Rs (Exc – Moy)	-15%	-18%	20%	8%	-8%	38%	-8%	-18%	0%
Ri (%)	55%	51%	20%	36%	35%	0%	47%	61%	38%
Δ Ri (Exc – Moy)	17%	13%	-18%	-2%	-3%	-38%	9%	23%	0%
Rb (%)	18%	24%	18%	14%	30%	20%	18%	14%	19%
Δ Rb (Exc – Moy)	-2%	5%	-2%	-6%	11%	0%	-2%	-5%	0%
$\delta^{13}C$ (DIC) (Moy, ‰)	-22.80	-19.40	-23.50	-24.00	-23.50	-17.70	-25.40	-24.20	-22.56
$\delta^{13}C$ (DIC) (Mes. – Moy, ‰)	-0.24	3.16	-0.94	-1.44	-0.94	4.86	-2.84	-1.64	0.00
CO_2 carb / CO_2 tot (Mes.)	0.186	0.000	0.091	0.043	0.071	0.000	0.022	0.000	0.05
Δ CO_2 carb / CO_2 tot (Mes.)	0.134	-0.052	0.040	-0.009	0.019	-0.052	-0.029	-0.052	0.00
$\delta^{13}C$ (DIC) (corrigé, ‰)	-28.70	-19.40	-26.16	-25.21	-25.51	-17.70	-26.05	-24.20	-24.12
Δ $\delta^{13}C$ (DIC) (corrigé, ‰)	-4.58	4.72	-2.04	-1.10	-1.40	6.42	-1.93	-0.08	0.00
$\delta^{18}O$ (mes.) ‰	-8.90	-5.70	-5.20	-3.70	-5.40	-3.60	-5.60	-6.50	-5.58
Δ $\delta^{18}O$ (mes.- moy.) ‰	-3.33	-0.13	0.38	1.88	0.18	1.98	-0.02	-0.93	0.00
$\delta^{18}O$ (corrigé) ‰	-7.87	-3.22	-6.60	-6.12	-6.27	-2.37	-6.54	-5.62	-5.58
Δ $\delta^{18}O$ (corr.- moy.) ‰	-2.29	2.36	-1.02	-0.55	-0.70	3.21	-0.97	-0.04	0.00
Δ $\delta^{18}O$ (pluie) ‰	1.03	2.48	-1.40	-2.42	-0.87	1.23	-0.94	0.88	0.00
$\delta^{18}O$ (pluie) ‰	-9.93	-8.18	-3.80	-1.28	-4.53	-4.83	-4.66	-7.38	-5.58

Tableau A12 (3/5)

Rio Japurá à Jutica. Superficie = 289 000 km²

	1	2	3	4	5	6	7	8	Moy
Débit (Qt, mm/an)	2195	2337	1540	983	2097	1605	1398	1824	1747
Qt (Exc – Moy)	448	590	-207	-764	349	-142	-349	76	0
Rs (%)	55%	45%	31%	44%	37%	55%	49%	31%	43%
Δ Rs (Exc – Moy)	12%	2%	-12%	0%	-6%	12%	5%	-12%	0%
Ri (%)	27%	40%	51%	30%	50%	26%	16%	55%	37%
Δ Ri (Exc – Moy)	-10%	4%	14%	-7%	13%	-11%	-21%	18%	0%
Rb (%)	18%	15%	18%	26%	13%	19%	36%	14%	20%
Δ Rb (Exc – Moy)	-2%	-5%	-2%	7%	-7%	0%	16%	-6%	0%
$\delta^{13}C$ (DIC) (Moy, ‰)	-16.87	-18.80	-20.03	-15.40	-20.30	-16.70	-15.30	-21.10	-18.06
$\delta^{13}C$ (DIC) (Mes. – Moy, ‰)	1.20	-0.74	-1.97	2.66	-2.24	1.36	2.76	-3.04	0.00
CO_2 carb / CO_2 tot (Mes.)	0.195	0.203	0.218	0.292	0.230	0.116	0.163	0.146	0.20
Δ CO_2 carb / CO_2 tot (Mes.)	0.000	0.007	0.022	0.096	0.034	-0.079	-0.032	-0.049	0.00
$\delta^{13}C$ (DIC) (corrigé, ‰)	-21.68	-24.34	-26.44	-22.98	-27.25	-19.30	-18.88	-25.22	-23.26
Δ $\delta^{13}C$ (DIC) (corrigé, ‰)	1.58	-1.08	-3.18	0.28	-3.99	3.96	4.38	-1.96	0.00
$\delta^{18}O$ (mes.) ‰	-8.90	-5.30	-4.10	-3.80	-5.30	-4.10	-5.00	-6.60	-5.39
Δ $\delta^{18}O$ (mes.- moy.) ‰	-3.51	0.09	1.29	1.59	0.09	1.29	0.39	-1.21	0.00
$\delta^{18}O$ (corrigé) ‰	-4.60	-5.93	-6.98	-5.25	-7.38	-3.41	-3.20	-6.37	-5.39
Δ $\delta^{18}O$ (corr.- moy.) ‰	0.79	-0.54	-1.59	0.14	-1.99	1.98	2.19	-0.98	0.00
Δ $\delta^{18}O$ (pluie) ‰	4.30	-0.63	-2.88	-1.45	-2.08	0.69	1.80	0.23	0.00
$\delta^{18}O$ (rain) ‰	-13.20	-4.67	-1.22	-2.35	-3.22	-4.79	-6.80	-6.83	-5.39

Rio Purus à Anori. Superficie = 372 000 km²

	1	2	3	4	5	6	7	8	Moy
Débit (Qt, mm/an)	1697	925	424	1213	1272	238	908	1374	1006
Qt (Exc – Moy)	690	-82	-582	207	266	-769	-99	368	0
Rs (%)	19%	8%	38%	53%	14%	17%	63%	7%	27%
Δ Rs (Exc – Moy)	-9%	-19%	11%	26%	-13%	-10%	36%	-21%	0%
Ri (%)	64%	67%	33%	27%	66%	13%	1%	64%	42%
Δ Ri (Exc – Moy)	22%	25%	-9%	-15%	24%	-29%	-41%	22%	0%
Rb (%)	17%	25%	29%	19%	20%	70%	36%	29%	31%
Δ Rb (Exc – Moy)	-14%	-5%	-2%	-11%	-11%	39%	5%	-1%	0%
$\delta^{13}C$ (DIC) (Moy, ‰)	-20.30	-18.30	-15.40	-19.90	-19.70	-14.10	-19.70	-18.80	-18.28
$\delta^{13}C$ (DIC) (Mes. – Moy, ‰)	-2.03	-0.02	2.88	-1.63	-1.43	4.18	-1.43	-0.52	0.00
CO_2 carb / CO_2 tot (Mes.)	0.222	0.249	0.220	0.223	0.217	0.144	0.077	0.205	0.19
Δ CO_2 carb / CO_2 tot (Mes.)	0.027	0.054	0.026	0.028	0.023	-0.051	-0.118	0.011	0.00
$\delta^{13}C$ (DIC) (corrigé, ‰)	-26.95	-25.36	-20.60	-26.46	-26.01	-16.97	-21.58	-24.43	-23.54
Δ $\delta^{13}C$ (DIC) (corrigé, ‰)	-3.41	-1.82	2.95	-2.91	-2.47	6.58	1.96	-0.88	0.00
$\delta^{18}O$ (mes.) ‰	-7.10	-5.60	-4.00	-3.90	-4.20	-3.50	-5.80	-6.50	-5.08
Δ $\delta^{18}O$ (mes.- moy.) ‰	-2.03	-0.53	1.08	1.18	0.87	1.58	-0.73	-1.43	0.00
$\delta^{18}O$ (corrigé) ‰	-6.78	-5.98	-3.60	-6.53	-6.31	-1.79	-4.09	-5.52	-5.08
Δ $\delta^{18}O$ (corr.- moy.) ‰	-1.70	-0.91	1.47	-1.46	-1.23	3.29	0.98	-0.44	0.00
Δ $\delta^{18}O$ (pluie) ‰	0.32	-0.38	0.40	-2.63	-2.11	1.71	1.71	0.98	0.00
$\delta^{18}O$ (pluie) ‰	-7.42	-5.22	-4.40	-1.27	-2.09	-5.21	-7.51	-7.48	-5.08

Tableau A12 (4/5)

Rio Madeira à São Jose do Amatari. Superficie = 1 380 000 km²

	1	2	3	4	5	6	7	8	Moy
Débit (Qt, mm/an)	915	313	528	1107	565	156	963	441	623
Qt (Exc – Moy)	291	-310	-95	483	-59	-468	339	-182	0
Rs (%)	10%	1%	30%	27%	6%	2%	37%	0%	14%
Δ Rs (Exc – Moy)	-4%	-13%	16%	13%	-9%	-12%	23%	-14%	0%
Ri (%)	68%	63%	27%	54%	61%	50%	35%	68%	53%
Δ Ri (Exc – Moy)	14%	9%	-26%	1%	8%	-3%	-18%	15%	0%
Rb (%)	22%	37%	43%	19%	33%	48%	28%	32%	33%
Δ Rb (Exc – Moy)	-11%	4%	10%	-14%	1%	15%	-5%	-1%	0%
$\delta^{13}C$ (DIC) (Moy, ‰)	-16.80	-13.60	-13.70	-17.90	-14.70	-12.40	-14.20	-15.40	-14.84
$\delta^{13}C$ (DIC) (Mes. – Moy, ‰)	-1.96	1.24	1.14	-3.06	0.14	2.44	0.64	-0.56	0.00
CO_2 carb / CO_2 tot (Mes.)	0.308	0.237	0.306	0.302	0.257	0.338	0.296	0.255	0.29
Δ CO_2 carb / CO_2 tot (Mes.)	0.021	-0.050	0.018	0.015	-0.031	0.051	0.008	-0.032	0.00
$\delta^{13}C$ (DIC) (corrigé, ‰)	-25.61	-18.76	-21.05	-26.94	-20.81	-20.28	-21.42	-21.71	-22.07
Δ $\delta^{13}C$ (DIC) (corrigé, ‰)	-3.54	3.32	1.02	-4.87	1.26	1.80	0.66	0.36	0.00
$\delta^{18}O$ (mes.) ‰	-5.26	-5.50	-6.90	-5.30	-4.10	-4.40	-7.30	-6.00	-5.59
Δ $\delta^{18}O$ (mes.- moy.) ‰	0.34	0.09	-1.31	0.29	1.49	1.19	-1.71	-0.41	0.00
$\delta^{18}O$ (corrigé) ‰	-7.36	-3.94	-5.08	-8.03	-4.96	-4.70	-5.27	-5.41	-5.59
Δ $\delta^{18}O$ (corr.- moy.) ‰	-1.77	1.66	0.51	-2.44	0.63	0.90	0.33	0.18	0.00
Δ $\delta^{18}O$ (pluie) ‰	-2.11	1.56	1.82	-2.73	-0.86	-0.30	2.03	0.59	0.00
$\delta^{18}O$ (pluie) ‰	-3.15	-7.06	-8.72	-2.57	-3.24	-4.10	-9.33	-6.59	-5.59

Rio Juruá à Tupe. Superficie = 217 000 km²

	1	2	3	4	5	6	7	8	Moy
Débit (Qt, mm/an)	684	247	567	814	451	131	756	698	544
Qt (Exc – Moy)	140	-296	24	271	-93	-413	213	155	0
Rs (%)	0%	14%	52%	10%	21%	9%	33%	12%	19%
Δ Rs (Exc – Moy)	-19%	-5%	33%	-9%	2%	-10%	15%	-7%	0%
Ri (%)	81%	17%	22%	82%	47%	2%	33%	55%	42%
Δ Ri (Exc – Moy)	39%	-25%	-20%	40%	4%	-40%	-10%	12%	0%
Rb (%)	19%	69%	26%	8%	32%	89%	34%	33%	39%
Δ Rb (Exc – Moy)	-20%	30%	-13%	-30%	-7%	50%	-5%	-5%	0%
$\delta^{13}C$ (DIC) (Moy, ‰)	-18.10	-14.20	-14.60	-17.80	-19.90	-13.50	-19.90	-16.70	-16.84
$\delta^{13}C$ (DIC) (Mes. – Moy, ‰)	-1.26	2.64	2.24	-0.96	-3.06	3.34	-3.06	0.14	0.00
CO_2 carb / CO_2 tot (Mes.)	0.300	0.298	0.344	0.352	0.313	0.287	0.283	0.286	0.31
Δ CO_2 carb / CO_2 tot (Mes.)	-0.008	-0.009	0.036	0.044	0.005	-0.021	-0.025	-0.022	0.00
$\delta^{13}C$ (DIC) (corrigé, ‰)	-27.12	-21.51	-23.82	-29.10	-30.33	-20.13	-28.93	-24.59	-25.69
Δ $\delta^{13}C$ (DIC) (corrigé, ‰)	-1.43	4.18	1.88	-3.41	-4.64	5.56	-3.24	1.10	0.00
$\delta^{18}O$ (mes.) ‰	-7.40	-4.70	-4.20	-3.80	-4.10	-4.30	-5.30	-6.30	-5.01
Δ $\delta^{18}O$ (mes.- moy.) ‰	-2.39	0.31	0.81	1.21	0.91	0.71	-0.29	-1.29	0.00
$\delta^{18}O$ (corrigé) ‰	-5.73	-2.92	-4.07	-6.72	-7.33	-2.23	-6.63	-4.46	-5.01
Δ $\delta^{18}O$ (corr.- moy.) ‰	-0.72	2.09	0.94	-1.70	-2.32	2.78	-1.62	0.55	0.00
Δ $\delta^{18}O$ (pluie) ‰	1.67	1.78	0.13	-2.92	-3.23	2.07	-1.33	1.84	0.00
$\delta^{18}O$ (pluie) ‰	-9.07	-6.48	-4.33	-0.88	-0.87	-6.37	-3.97	-8.14	-5.01

Tableau A12 (5/5)

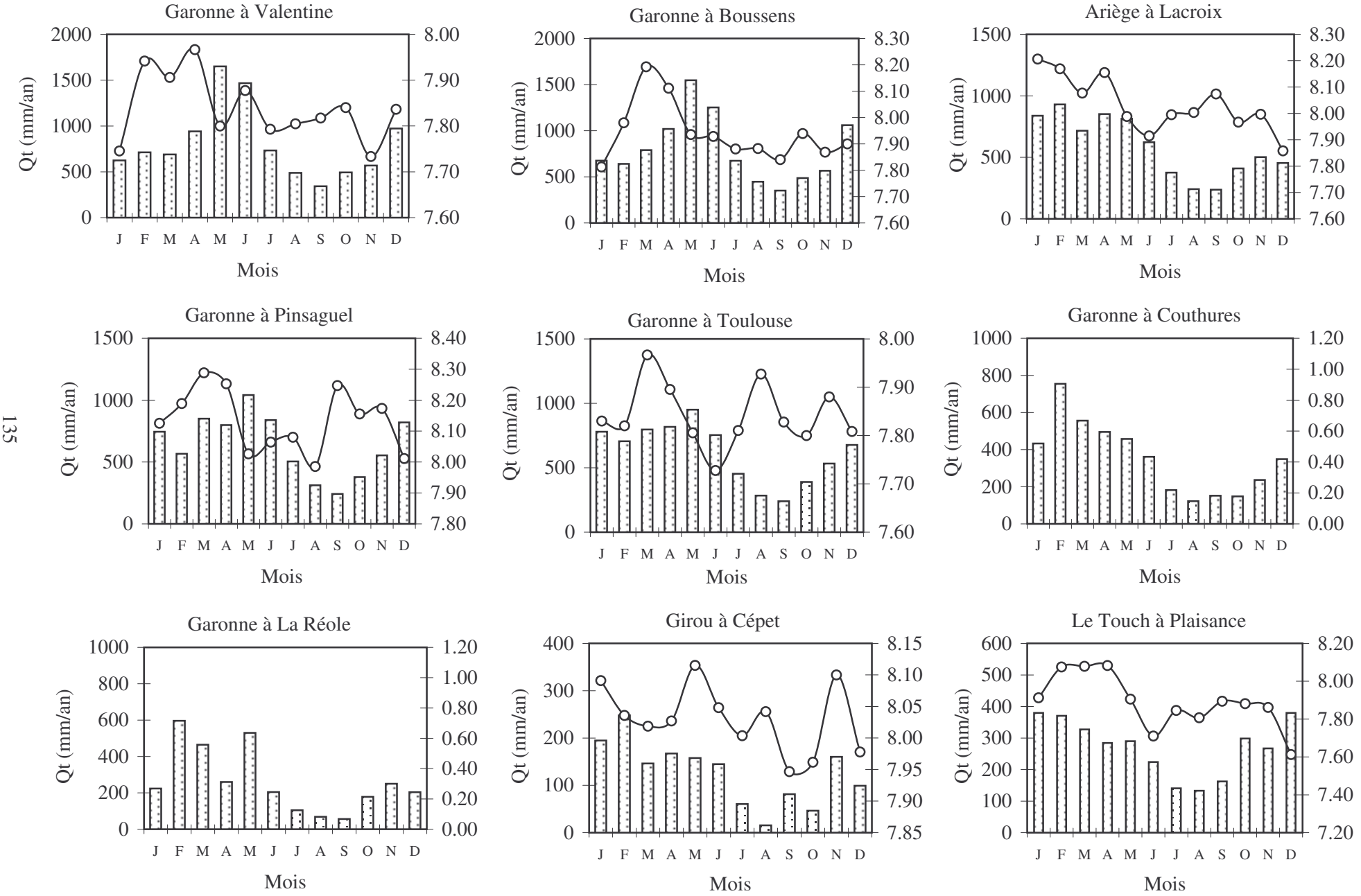
Rio Solimões à Vargem Grande. Superficie = 1 135 000 km²

	1	2	3	4	5	6	7	8	Moy
Débit (Qt, mm/an)	1939	882	1588	1458	1079	740	1432	1335	1307
Qt (Exc – Moy)	632	-425	282	151	-227	-567	126	29	0
Rs (%)	14%	7%	58%	55%	26%	12%	65%	14%	31%
Δ Rs (Exc – Moy)	-18%	-24%	26%	23%	-6%	-19%	34%	-17%	0%
Ri (%)	81%	72%	22%	17%	49%	62%	6%	65%	47%
Δ Ri (Exc – Moy)	34%	25%	-25%	-30%	2%	16%	-41%	18%	0%
Rb (%)	6%	21%	20%	28%	25%	25%	29%	21%	22%
Δ Rb (Exc – Moy)	-16%	-1%	-2%	7%	3%	3%	7%	-1%	0%
$\delta^{13}C$ (DIC) (Moy, ‰)	-13.50	-12.50	-11.60	-11.90	-13.10	-12.20	-12.00	-13.20	-12.50
$\delta^{13}C$ (DIC) (Mes. – Moy, ‰)	-1.00	0.00	0.90	0.60	-0.60	0.30	0.50	-0.70	0.00
CO_2 carb / CO_2 tot (Mes.)	0.448	0.409	0.438	0.431	0.430	0.412	0.435	0.421	0.43
Δ CO_2 carb / CO_2 tot (Mes.)	0.020	-0.019	0.010	0.003	0.002	-0.016	0.007	-0.007	0.00
$\delta^{13}C$ (DIC) (corrigé, ‰)	-26.92	-23.25	-22.99	-23.18	-25.27	-22.84	-23.53	-24.96	-24.12
Δ $\delta^{13}C$ (DIC) (corrigé, ‰)	-2.80	0.87	1.12	0.94	-1.15	1.28	0.59	-0.84	0.00
$\delta^{18}O$ (mes.) ‰	-8.90	-6.80	-6.80	-5.60	-6.10	-4.50	-6.60	-7.50	-6.60
Δ $\delta^{18}O$ (mes.- moy.) ‰	-2.30	-0.20	-0.20	1.00	0.50	2.10	0.00	-0.90	0.00
$\delta^{18}O$ (corrigé) ‰	-8.00	-6.17	-6.04	-6.13	-7.18	-5.96	-6.31	-7.02	-6.60
Δ $\delta^{18}O$ (corr.- moy.) ‰	-1.40	0.43	0.56	0.47	-0.58	0.64	0.29	-0.42	0.00
Δ $\delta^{18}O$ (pluie) ‰	0.90	0.63	0.76	-0.53	-1.08	-1.46	0.29	0.48	0.00
$\delta^{18}O$ (pluie) ‰	-9.80	-7.43	-7.56	-5.07	-5.02	-3.04	-6.89	-7.98	-6.60

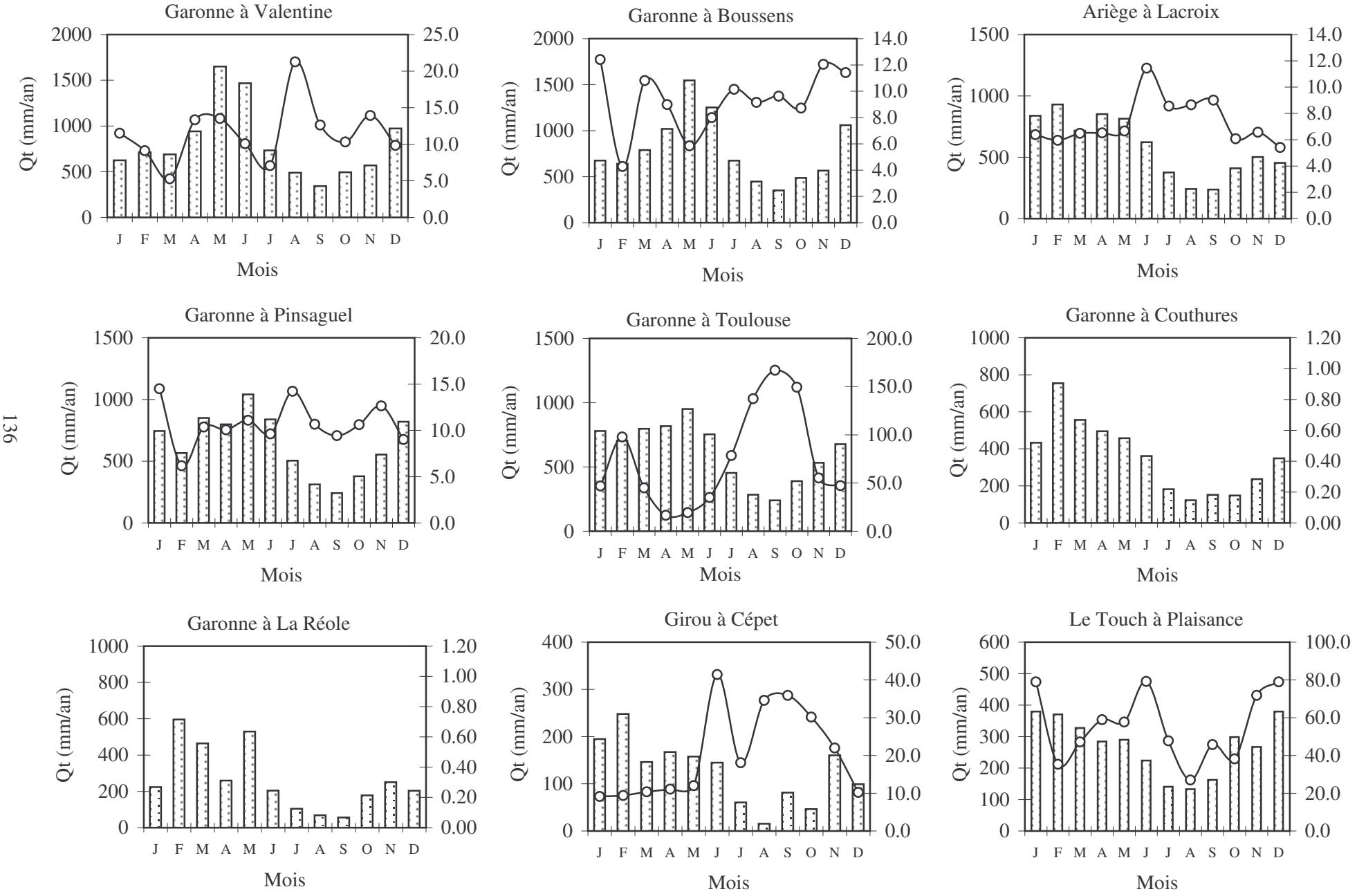
Somme des affluents. Superficie = 4 370 000 km²

	1	2	3	4	5	6	7	8	Moy
Débit (Qt, mm/an)	1635	933	853	1071	1057	516	1166	1177	1051
Qt (Exc – Moy)	584	-118	-198	20	6	-535	115	126	0
Rs (%)	21%	25%	47%	44%	20%	27%	48%	24%	32%
Δ Rs (Exc – Moy)	-11%	-7%	15%	12%	-12%	-5%	16%	-8%	0%
Ri (%)	67%	56%	29%	34%	60%	44%	16%	50%	45%
Δ Ri (Exc – Moy)	22%	12%	-15%	-11%	15%	0%	-29%	6%	0%
Rb (%)	12%	19%	24%	22%	20%	29%	36%	26%	23%
Δ Rb (Exc – Moy)	-12%	-5%	1%	-1%	-3%	5%	13%	2%	0%
$\delta^{13}C$ (DIC) (Moy, ‰)	-15.68	-15.50	-12.84	-14.65	-15.81	-13.50	-14.29	-15.79	-14.76
$\delta^{13}C$ (DIC) (Mes. – Moy, ‰)	-0.92	-0.74	1.92	0.10	-1.05	1.26	0.47	-1.03	0.00
CO_2 carb / CO_2 tot (Mes.)	0.393	0.329	0.400	0.382	0.363	0.358	0.369	0.355	0.37
Δ CO_2 carb / CO_2 tot (Mes.)	0.024	-0.040	0.031	0.013	-0.006	-0.010	0.000	-0.013	0.00
$\delta^{13}C$ (DIC) (corrigé, ‰)	-27.75	-24.56	-23.40	-25.55	-26.52	-22.70	-24.39	-26.13	-25.12
Δ $\delta^{13}C$ (DIC) (corrigé, ‰)	-2.63	0.57	1.73	-0.43	-1.40	2.42	0.74	-1.01	0.00
$\delta^{18}O$ (mes.) ‰	-7.29	-5.56	-5.99	-4.85	-4.83	-3.87	-6.01	-6.58	-5.62
Δ $\delta^{18}O$ (mes.- moy.) ‰	-1.67	0.06	-0.37	0.77	0.79	1.75	-0.39	-0.96	0.00
$\delta^{18}O$ (corrigé) ‰	-6.94	-5.34	-4.76	-5.84	-6.32	-4.41	-5.25	-6.13	-5.62
Δ $\delta^{18}O$ (corr.- moy.) ‰	-1.31	0.28	0.86	-0.21	-0.70	1.21	0.37	-0.50	0.00
Δ $\delta^{18}O$ (pluie) ‰	0.36	0.22	1.23	-0.98	-1.49	-0.54	0.75	0.45	0.00
$\delta^{18}O$ (pluie) ‰	-7.65	-5.78	-7.22	-3.87	-3.34	-3.33	-6.76	-7.03	-5.62

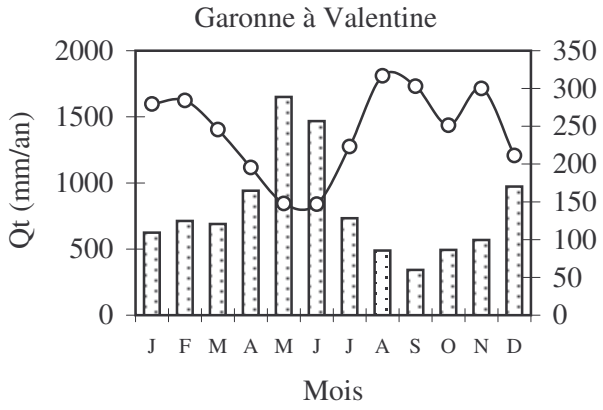
Paramètre représenté : le pH

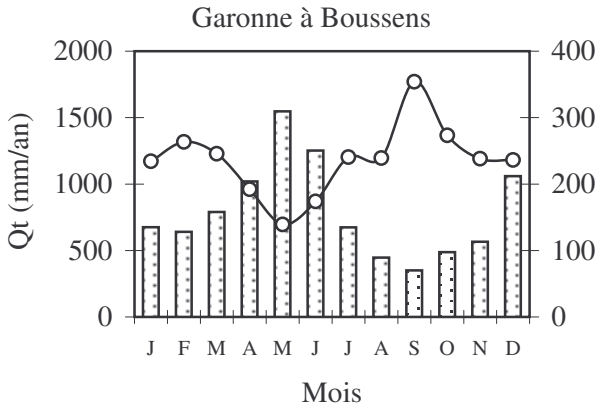


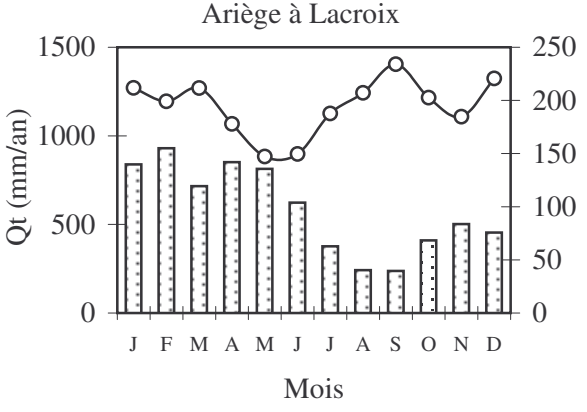
Paramètre représenté : NH_4^+ ($\mu mol.l^{-1}$)

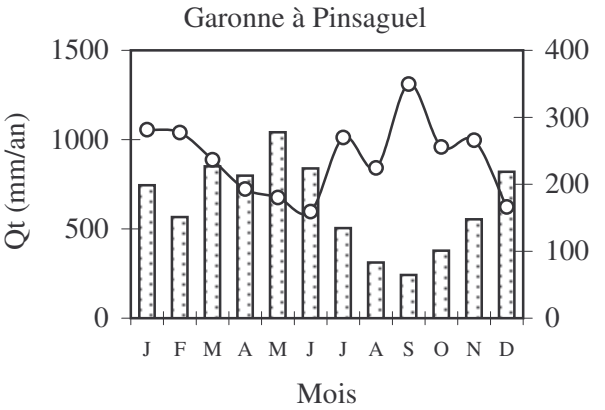


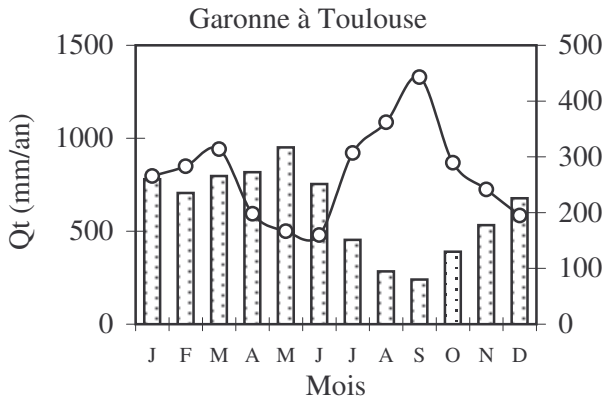
Paramètre représenté : Na^+ ($\mu mol.l^{-1}$)

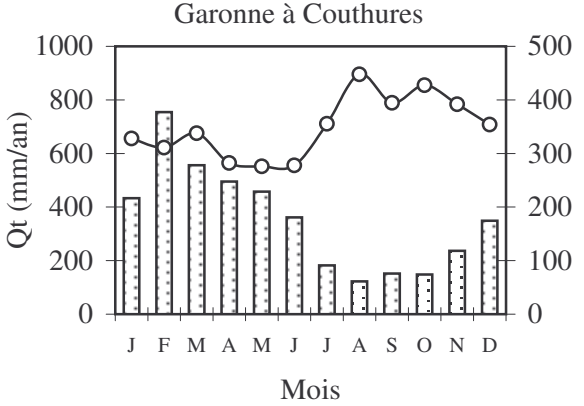


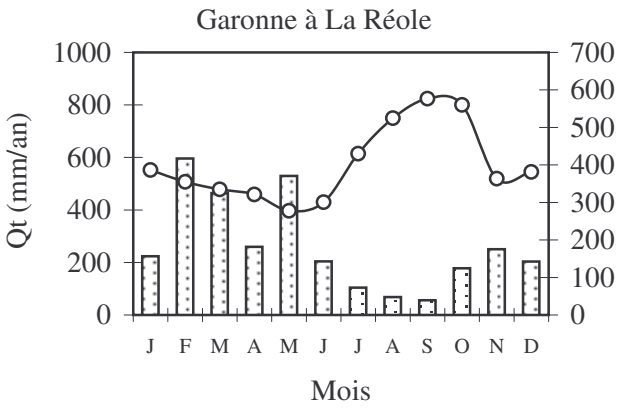


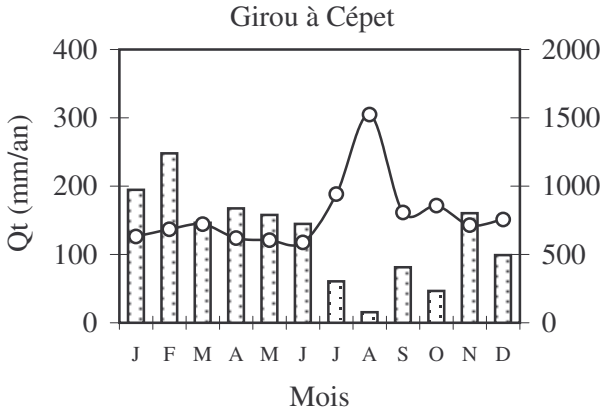


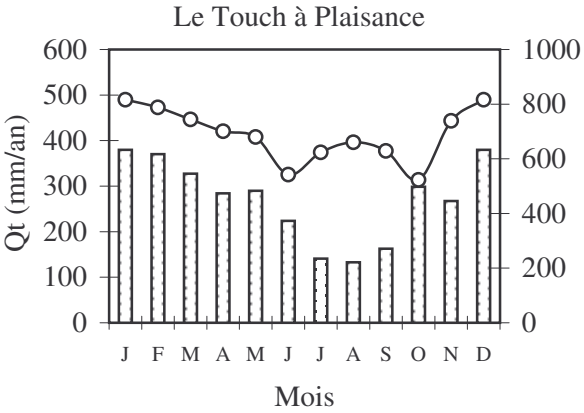




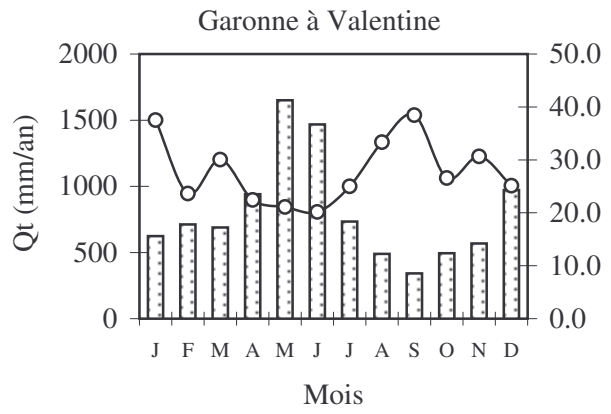


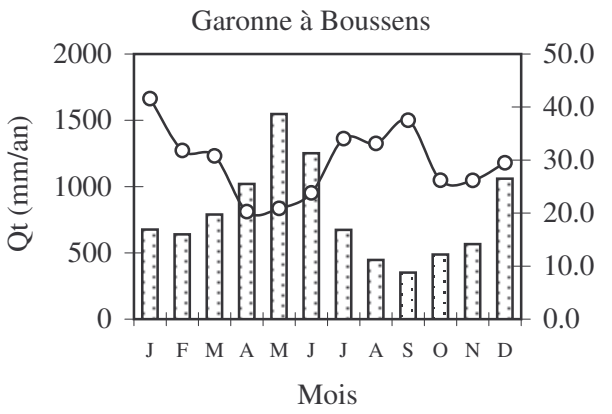


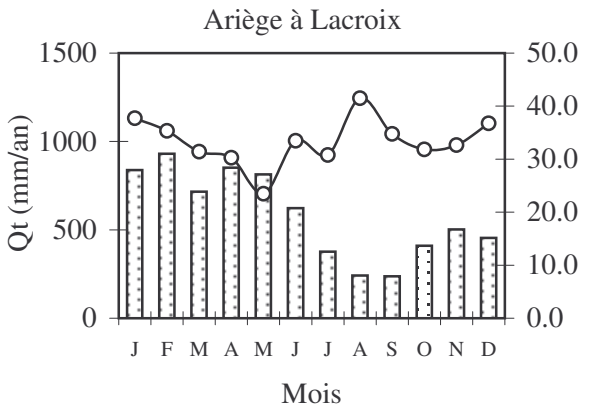


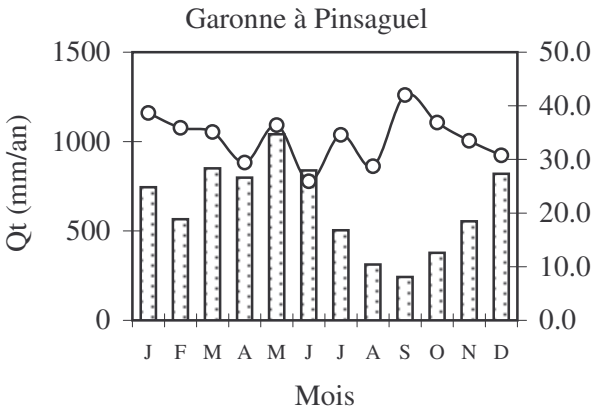


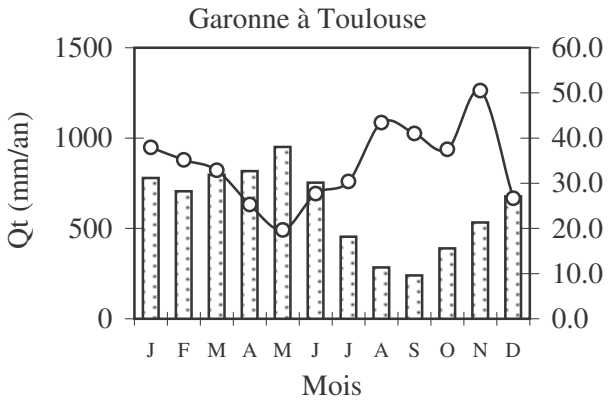
Paramètre représenté : K^+ ($\mu mol.l^{-1}$)

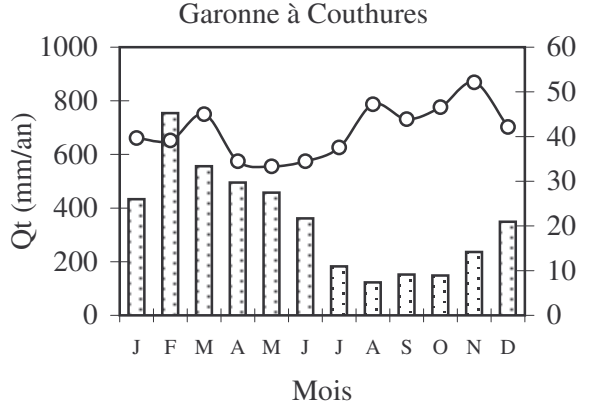


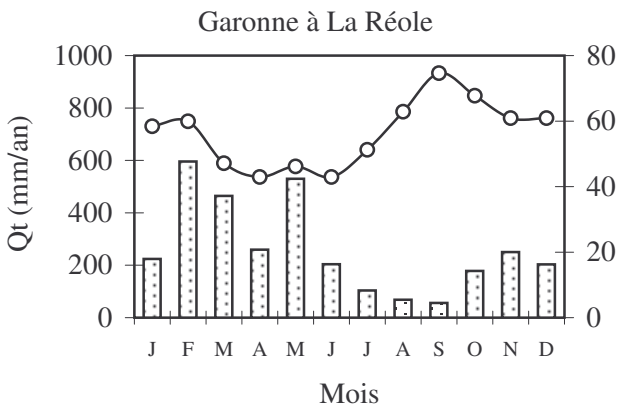


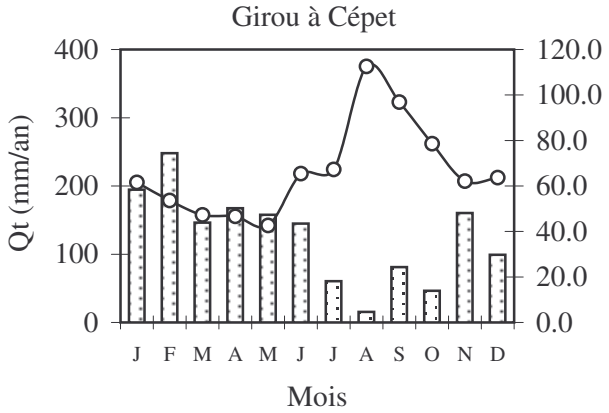


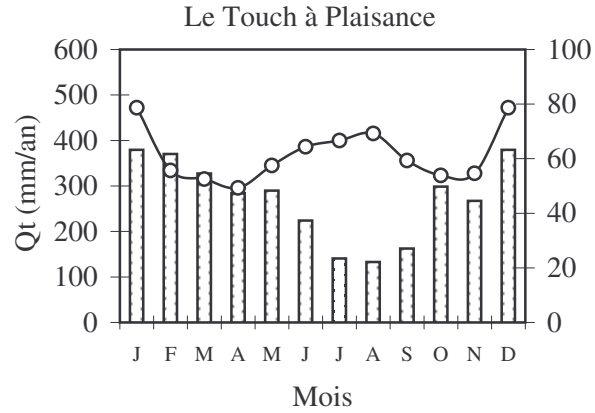




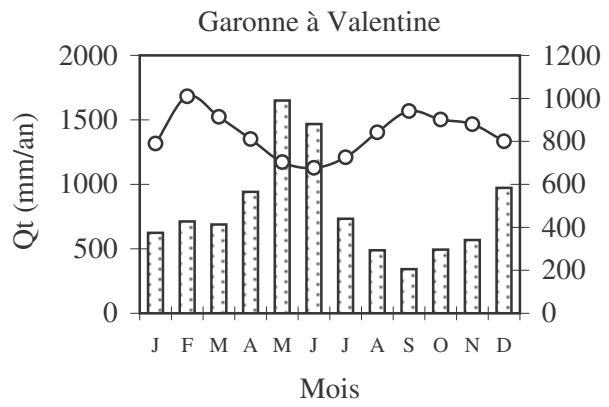


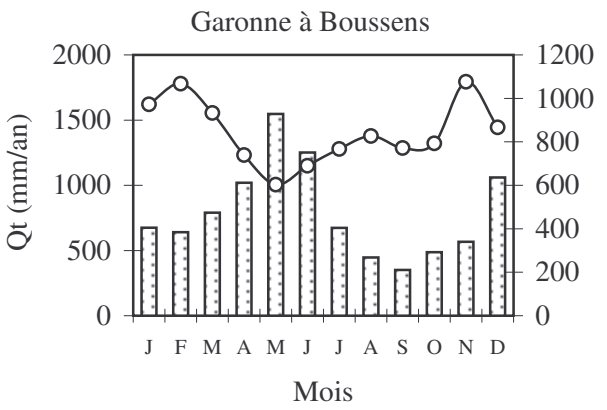


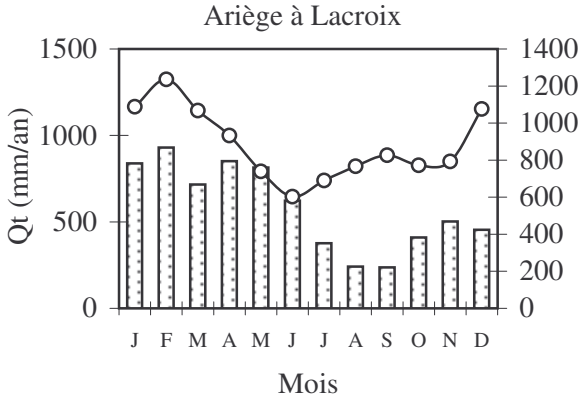


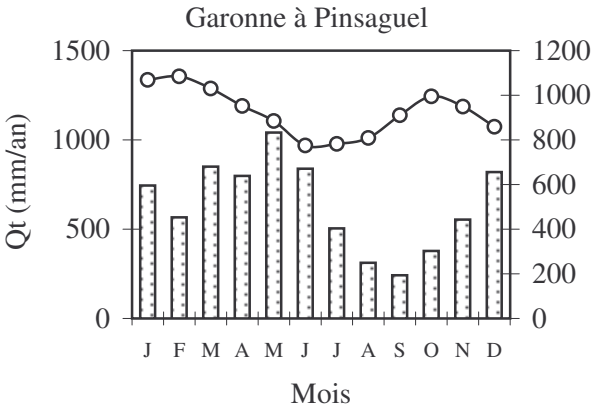


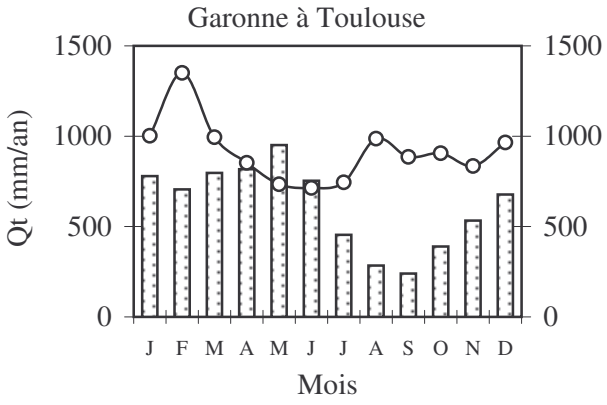
Paramètre représenté : Ca^{2+} ($\mu mol.l^{-1}$)

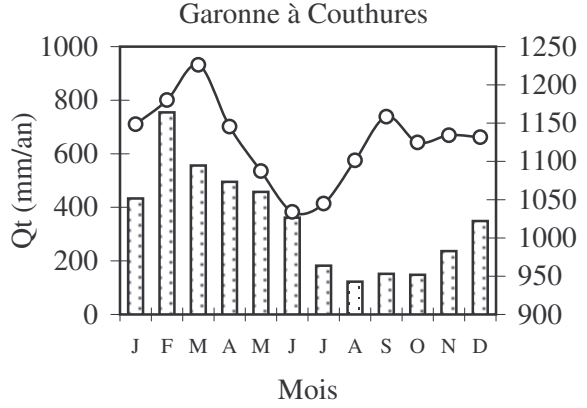


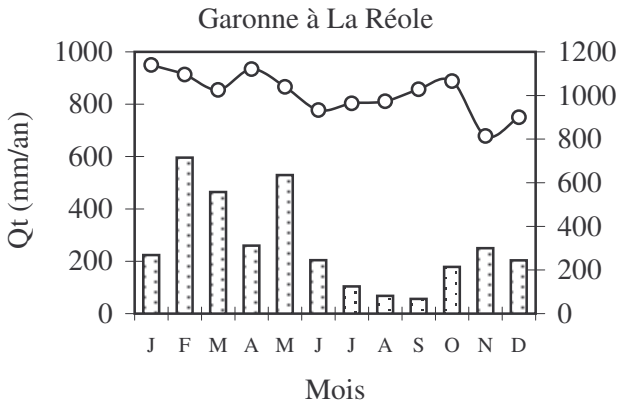


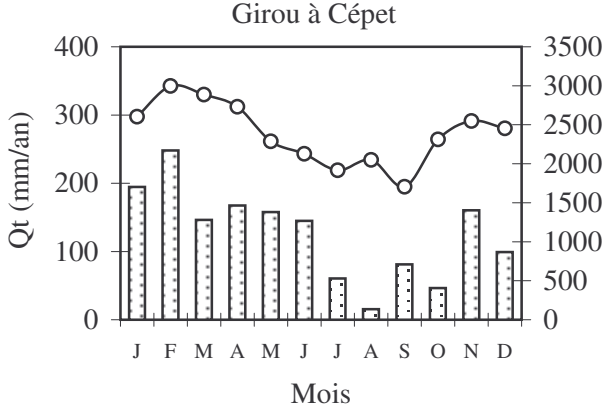


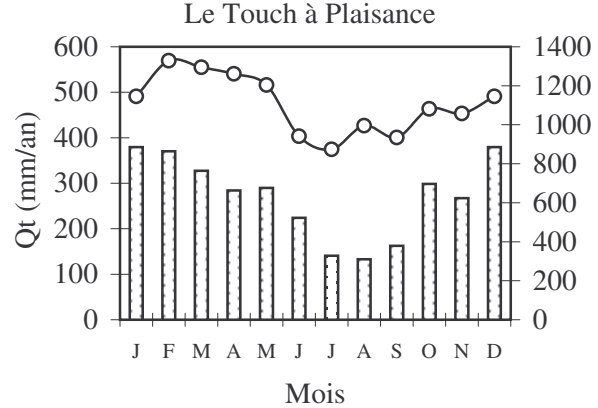




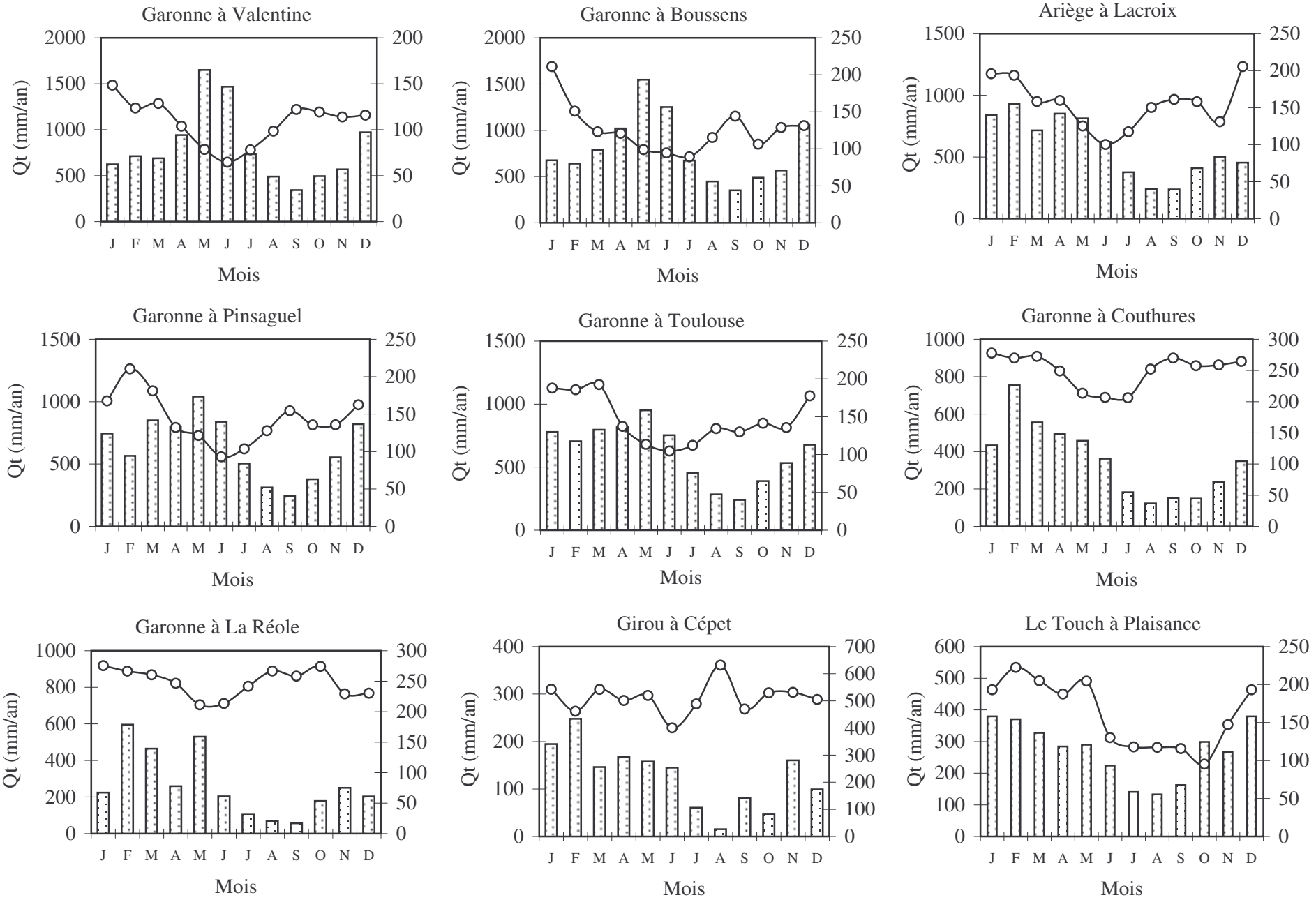




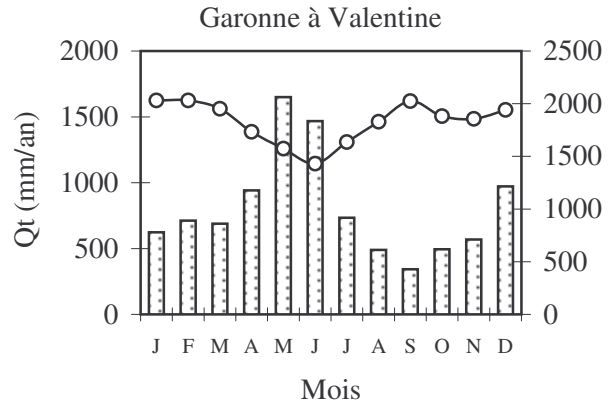


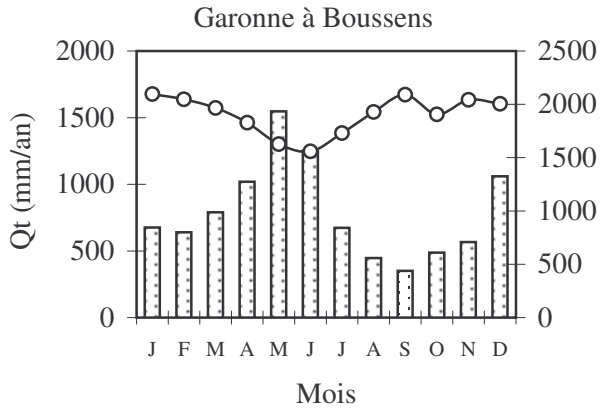


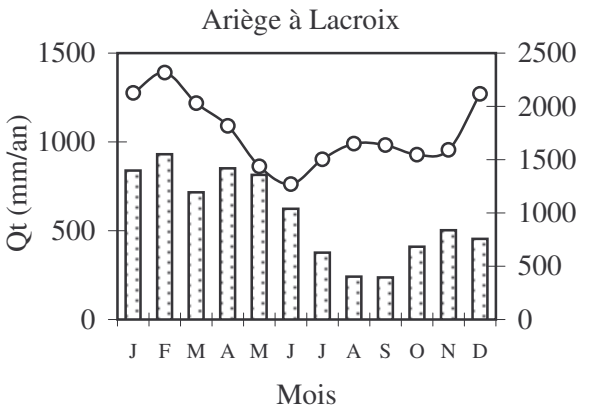
Paramètre représenté : Mg^{2+} ($\mu mol.l^{-1}$)

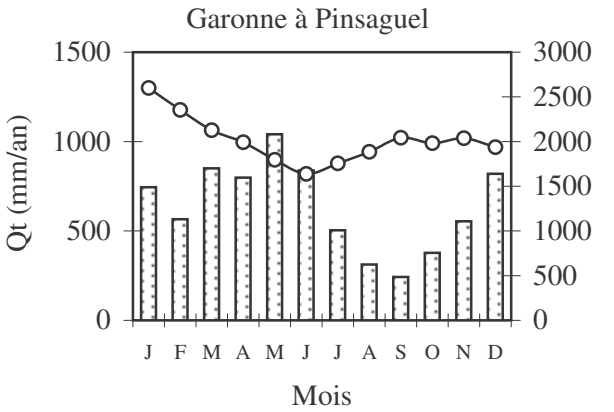


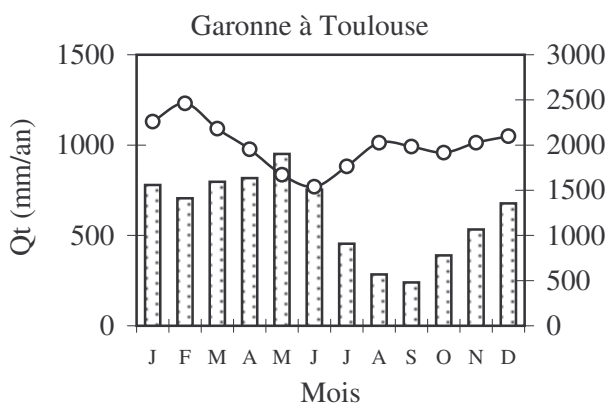
Paramètre représenté : HCO_3^- ($\mu mol.l^{-1}$)

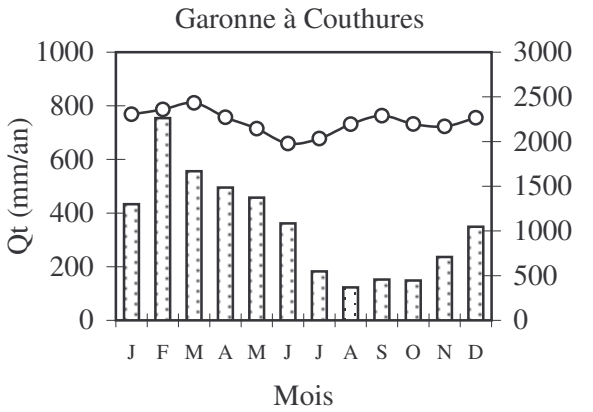


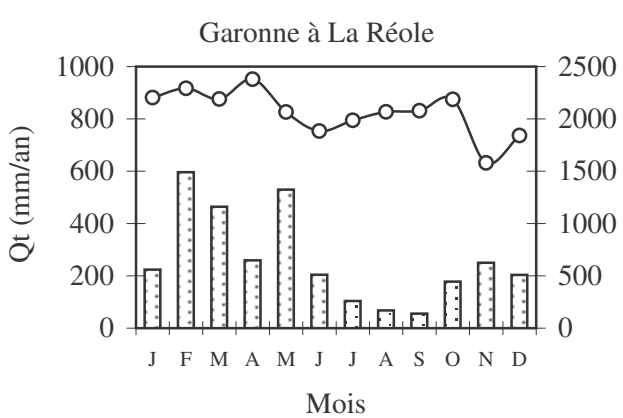


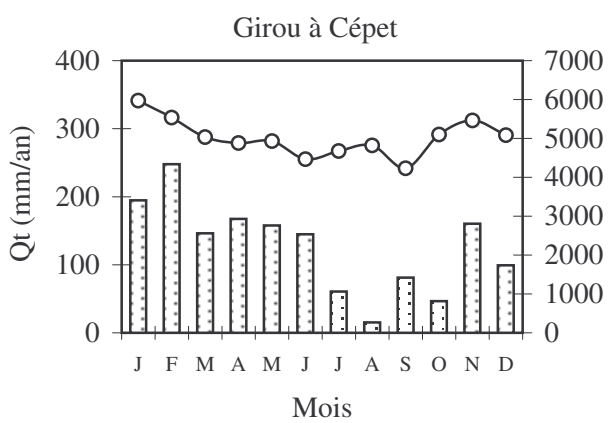


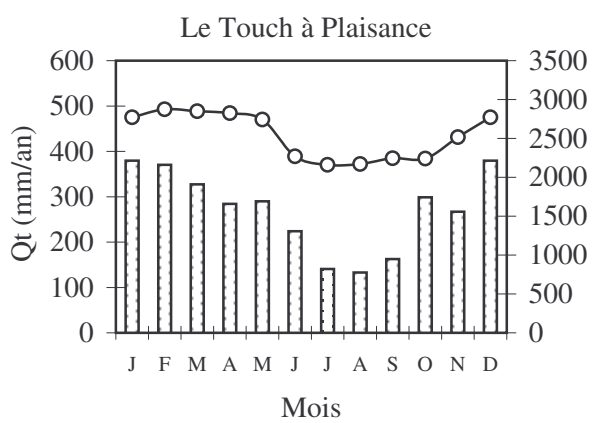




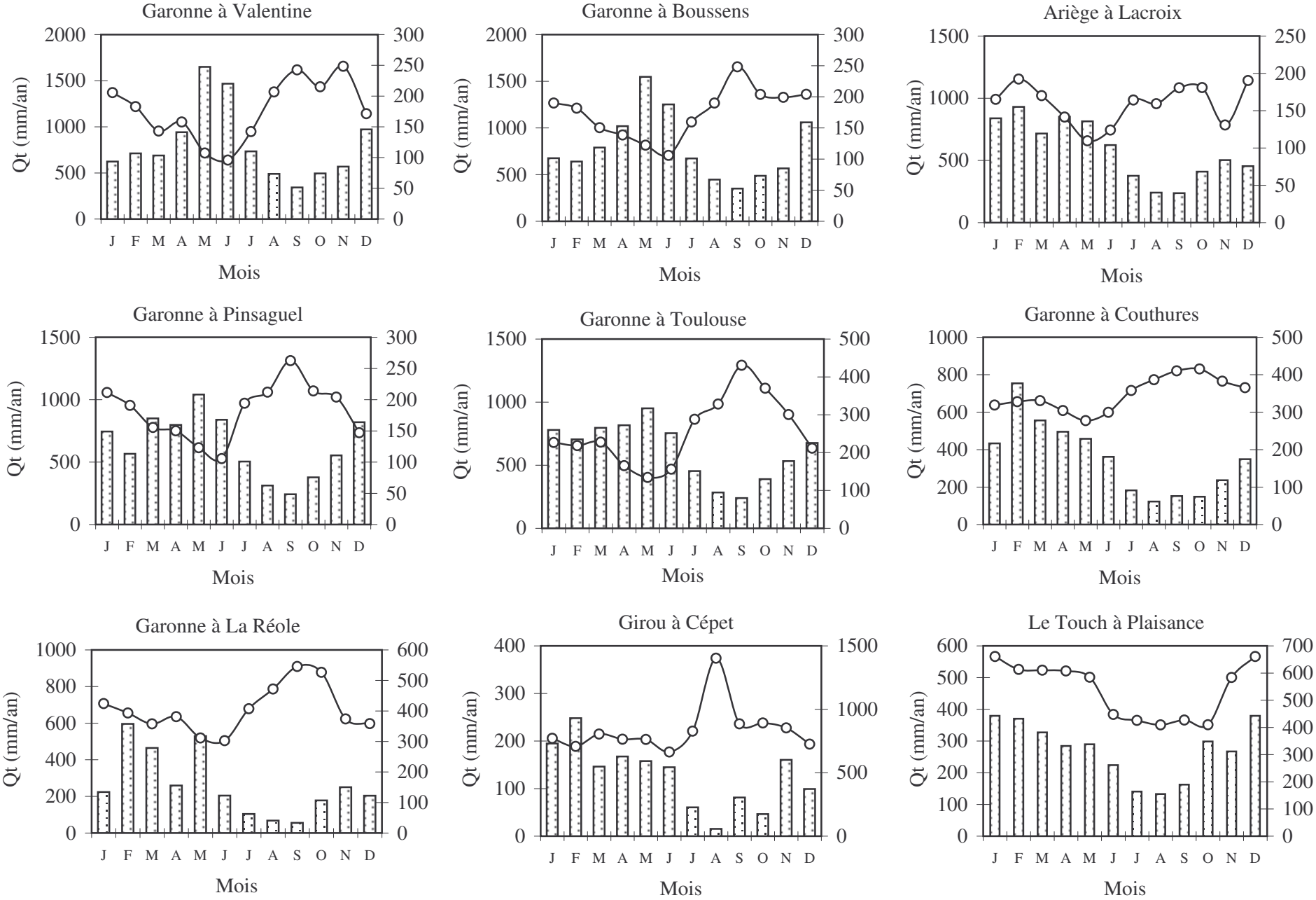




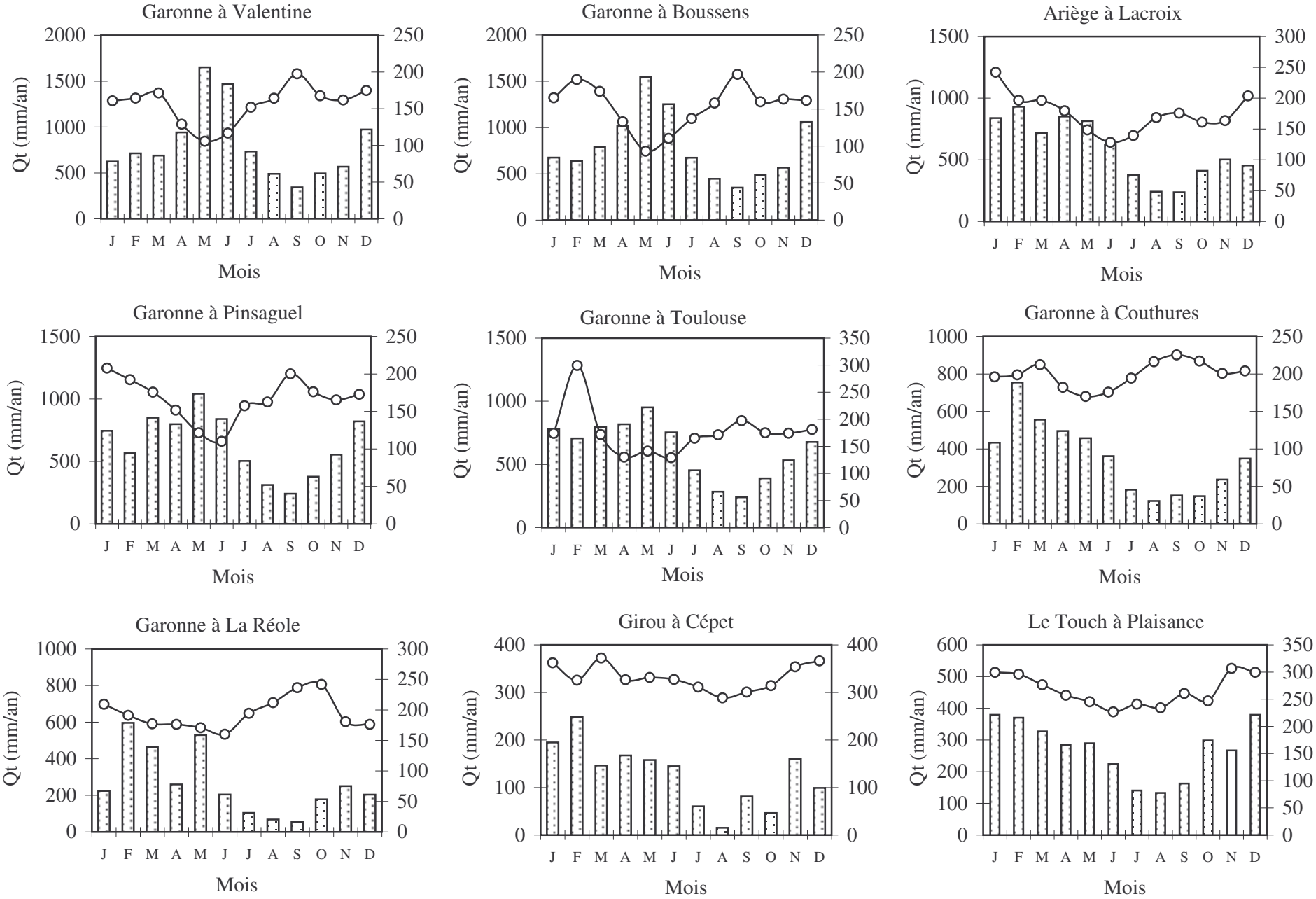




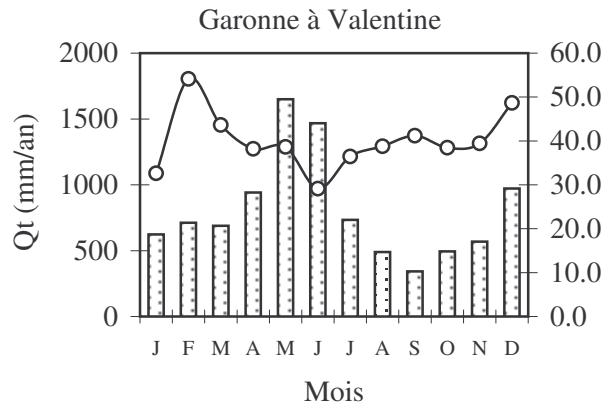
Paramètre représenté : Cl^- ($\mu mol.l^{-1}$)

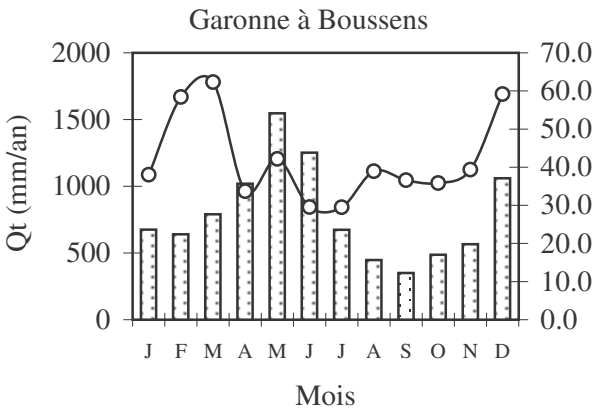


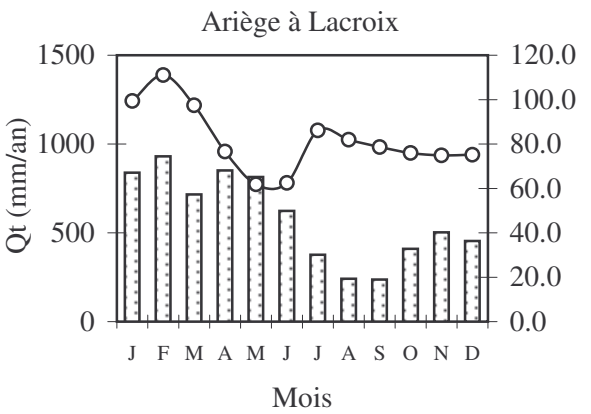
Paramètre représenté : SO_4^{2-} (µmol.l^{-1})

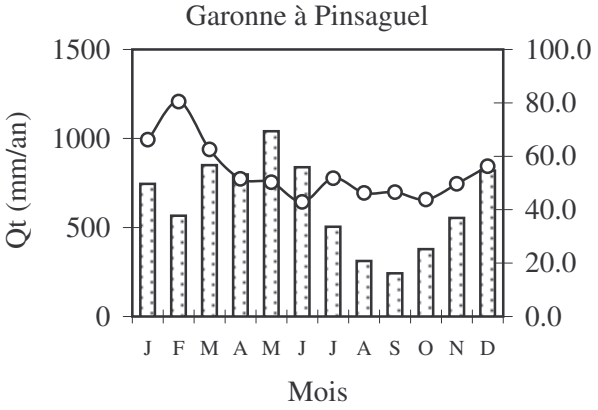


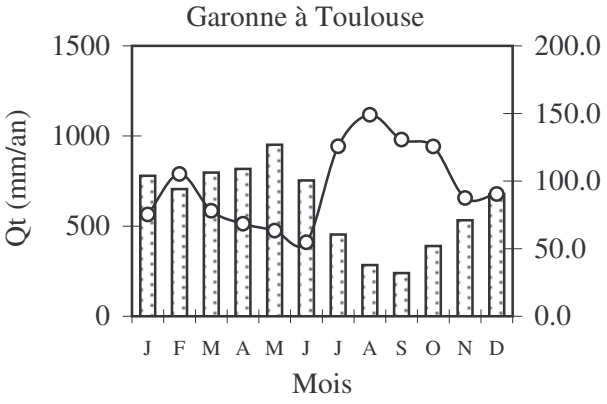
Paramètre représenté : NO_3^- ($\mu mol.l^{-1}$)

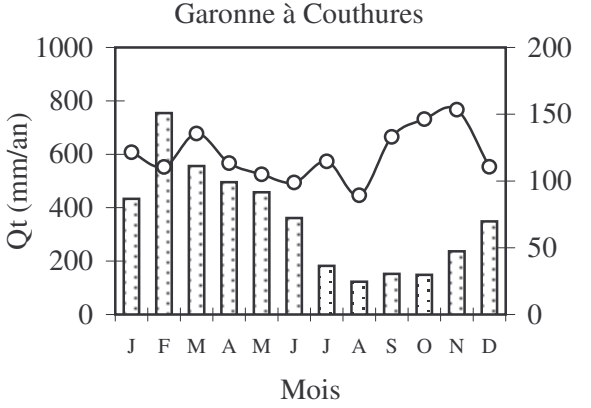


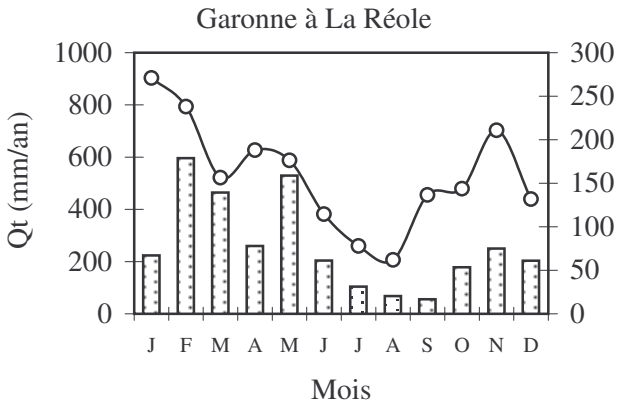


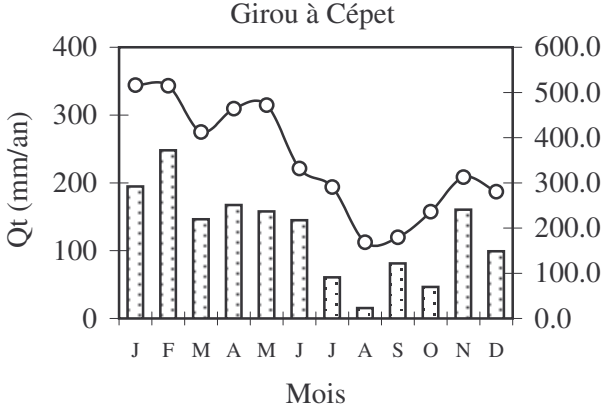


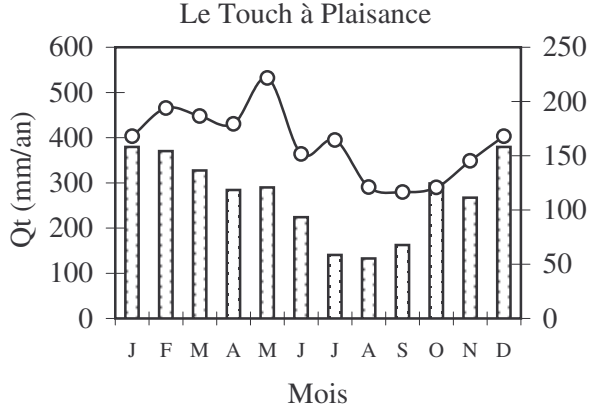




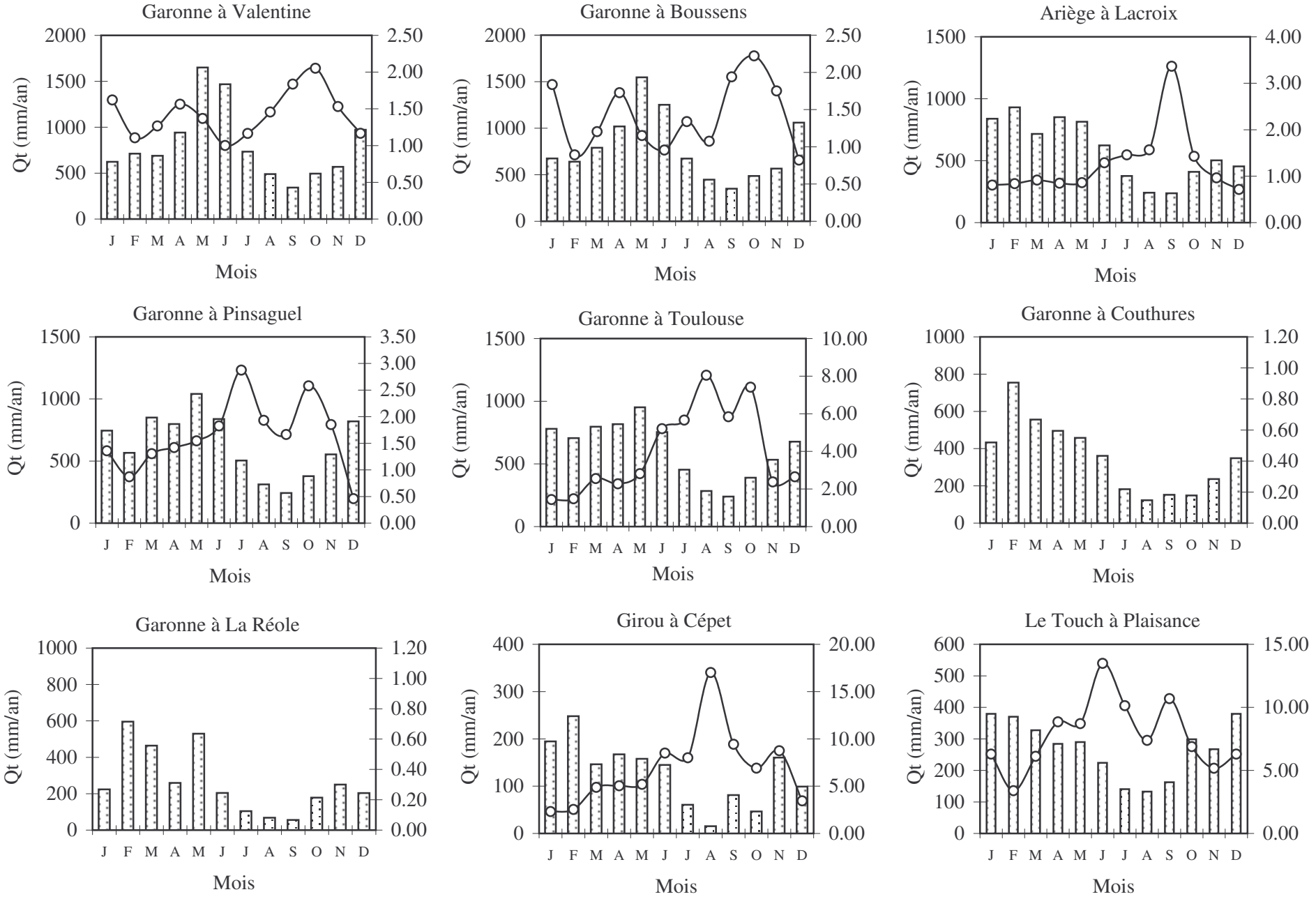




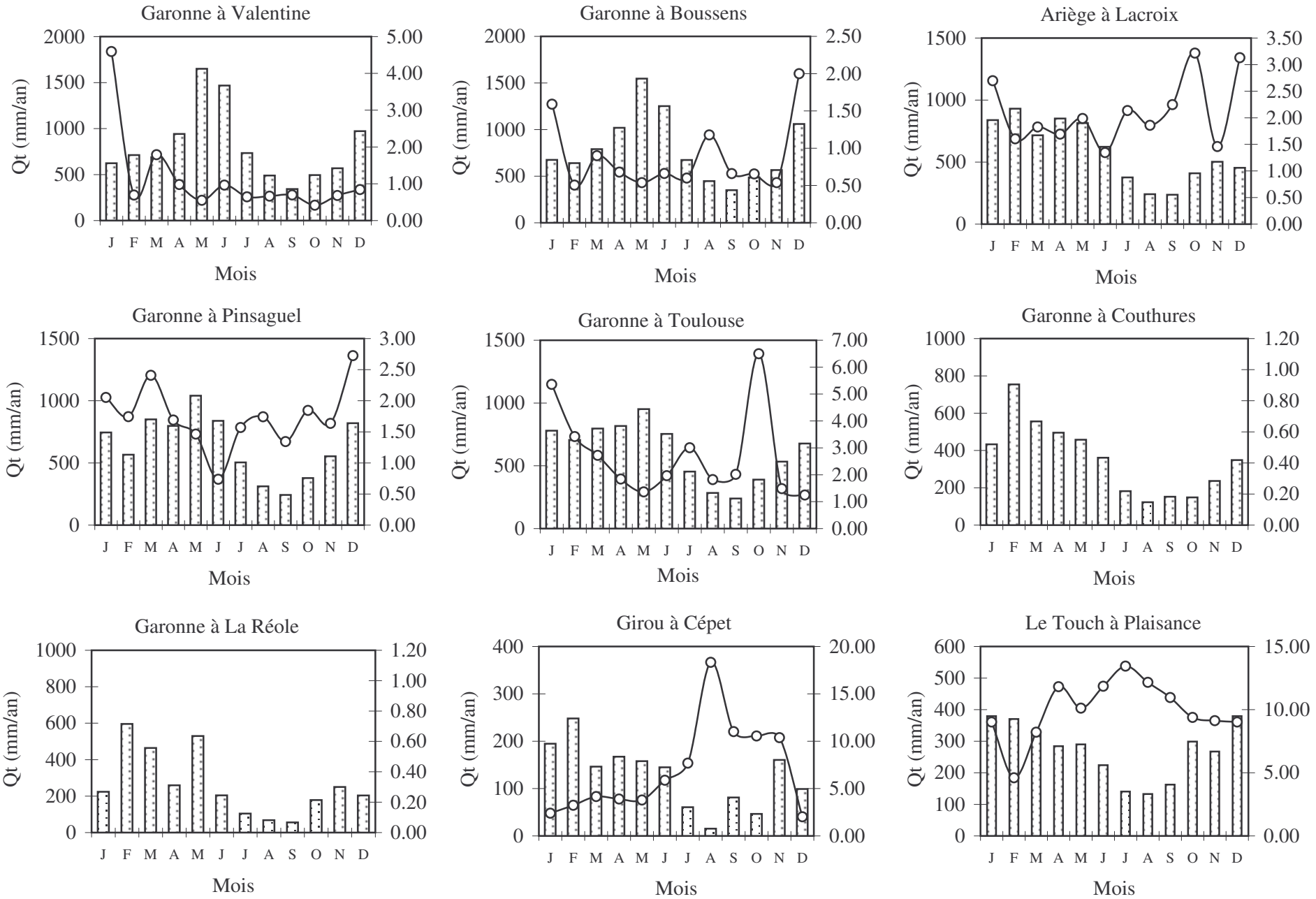




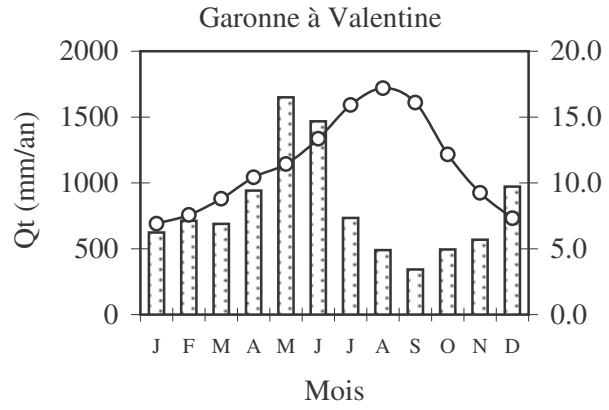
Paramètre représenté : NO_2^- ($\mu mol.l^{-1}$)

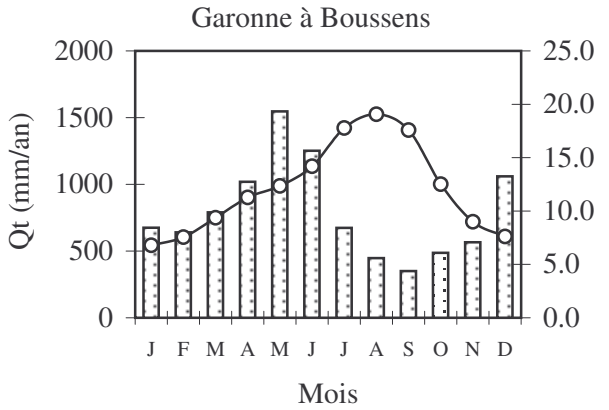


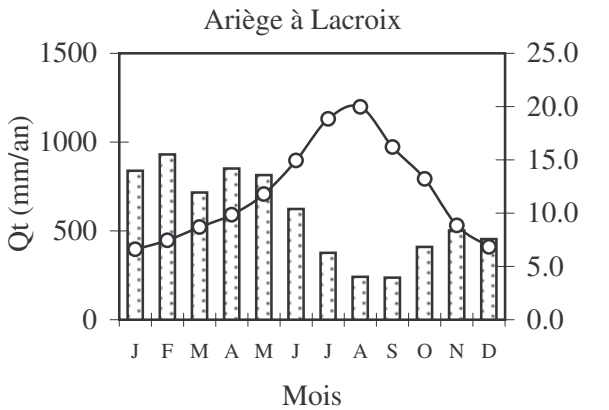
Paramètre représenté : HPO_4^{2-} ($\mu mol.l^{-1}$)

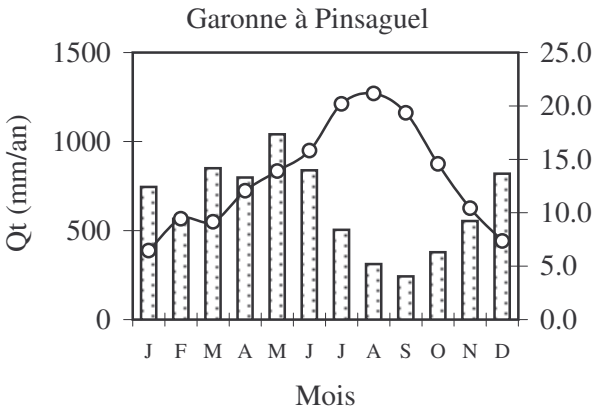


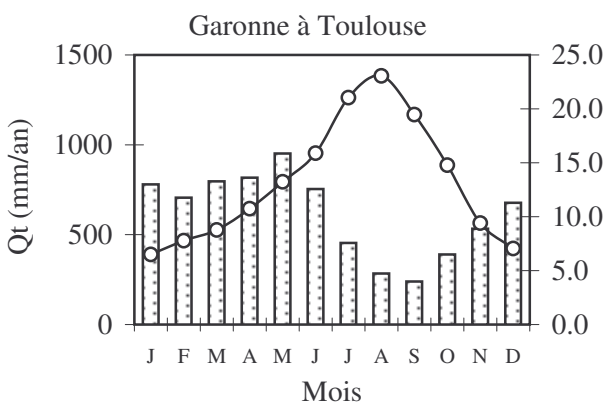
Paramètre représenté : T (°C)

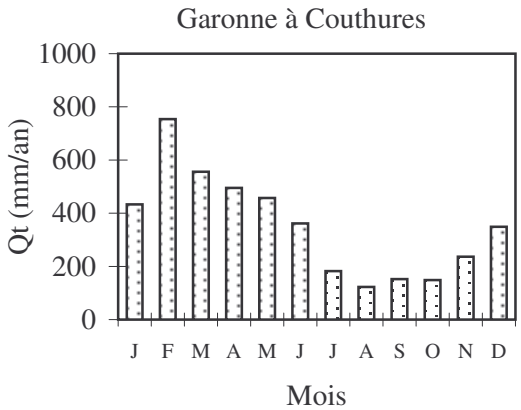


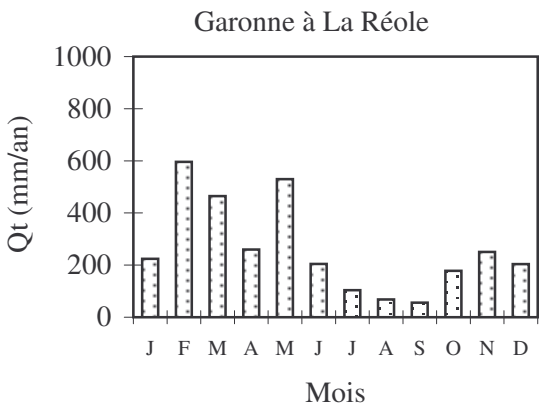


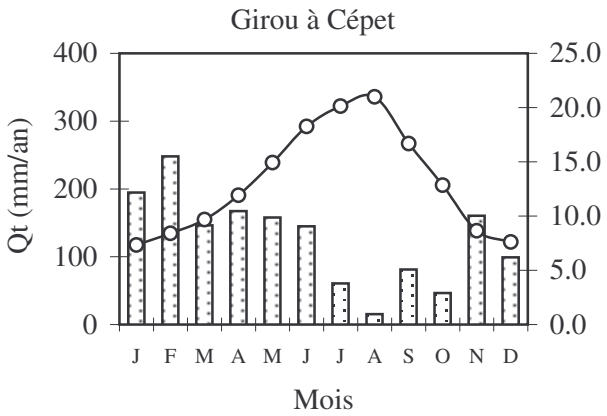


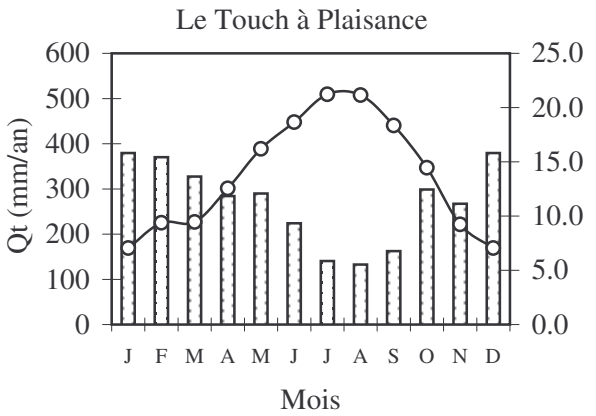




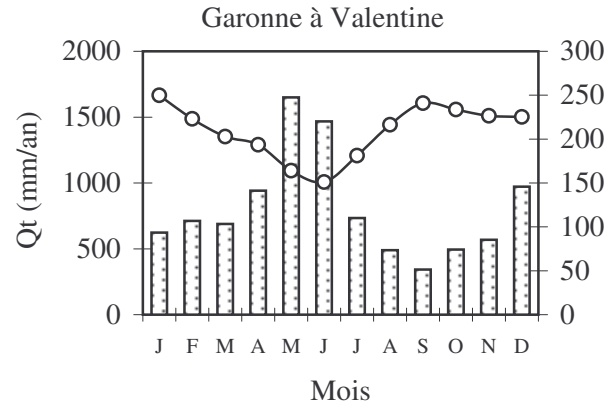


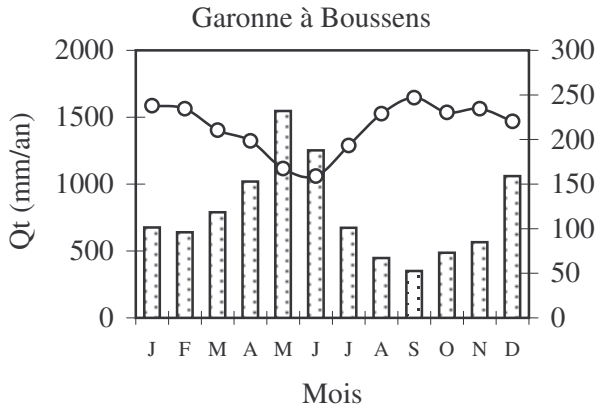


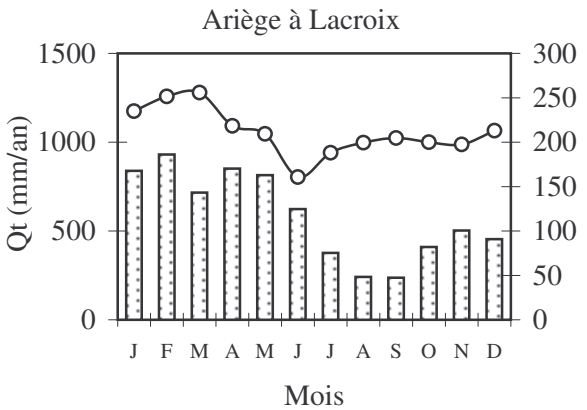


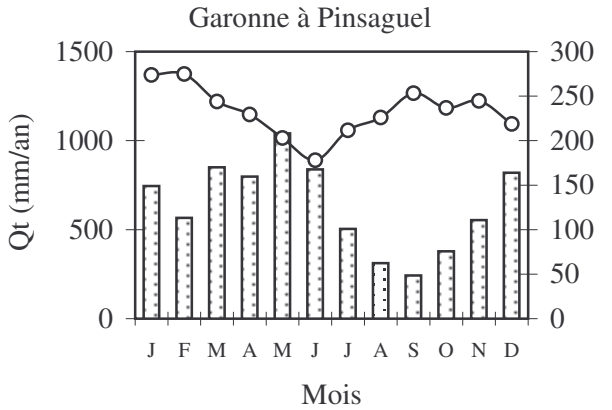


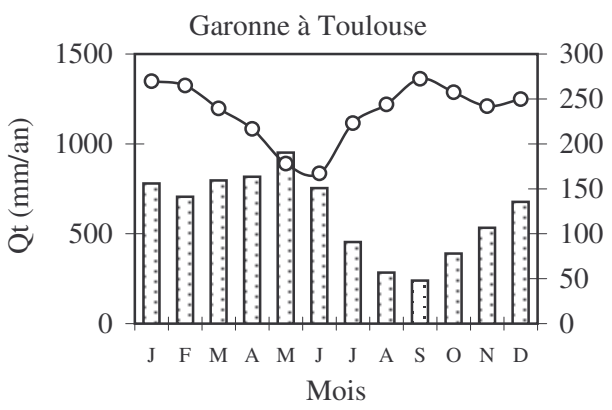
Paramètre représenté : conductivité (µS/cm)

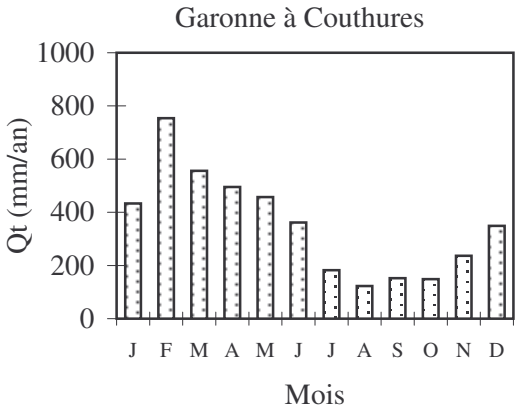


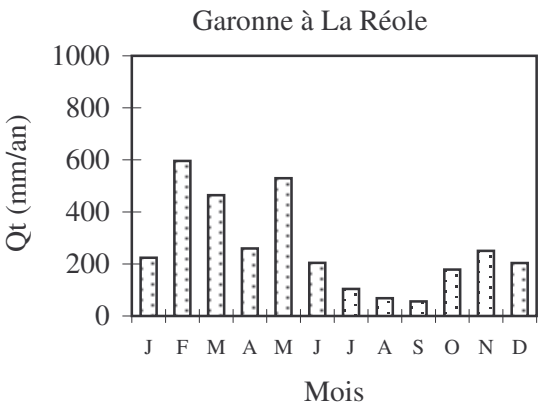


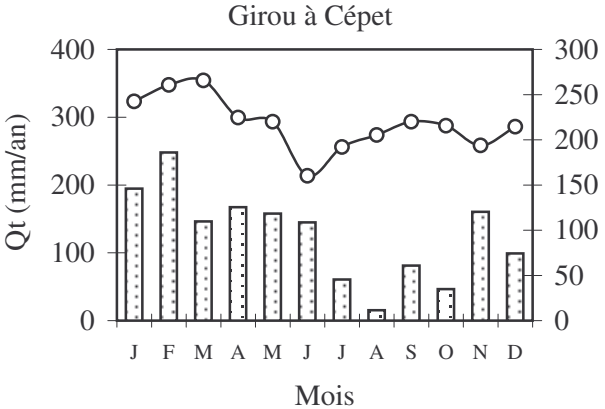


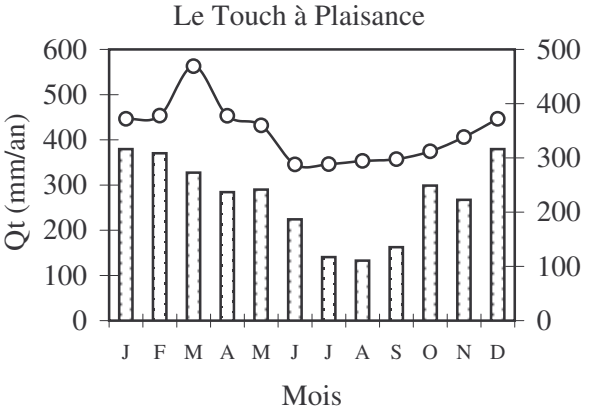




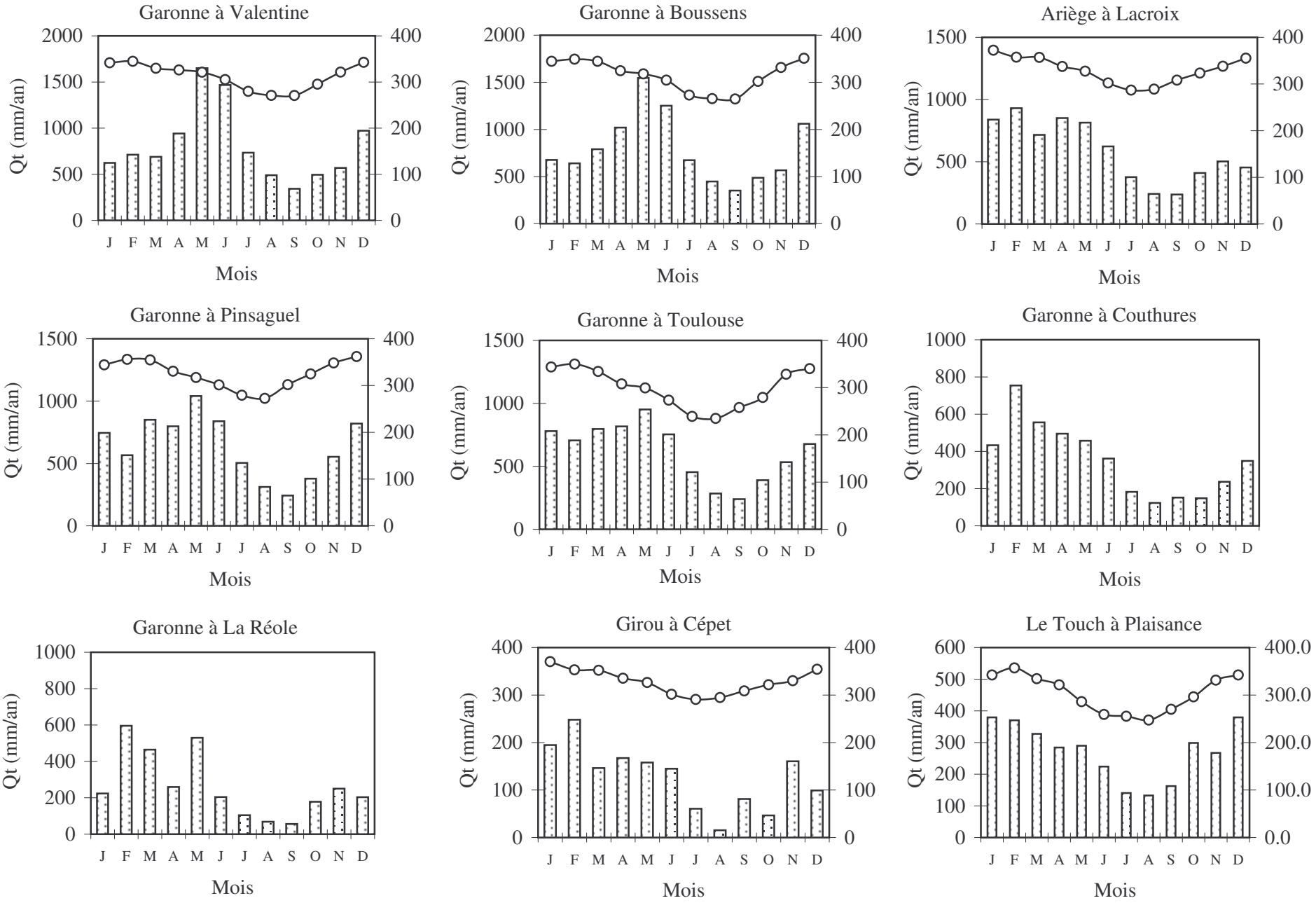




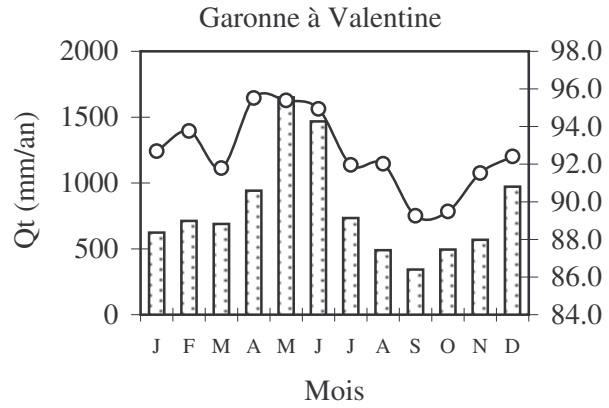


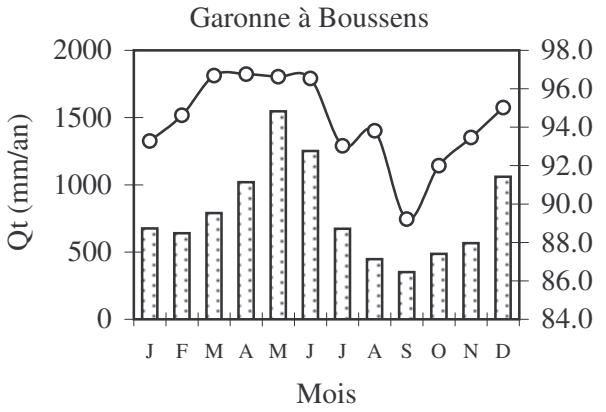


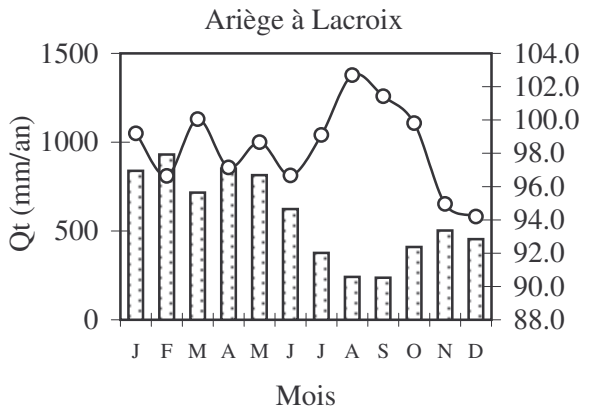
Paramètre représenté : O_2 ($\mu mol.l^{-1}$)

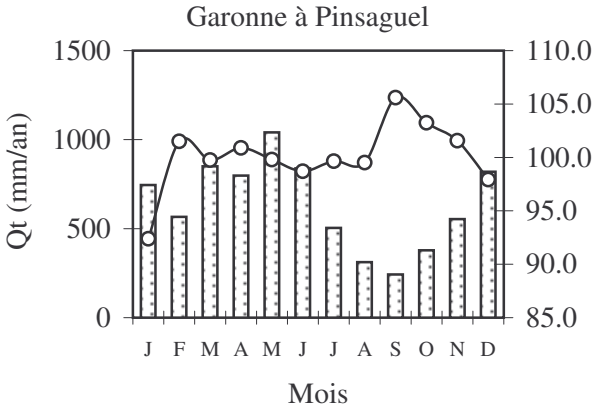


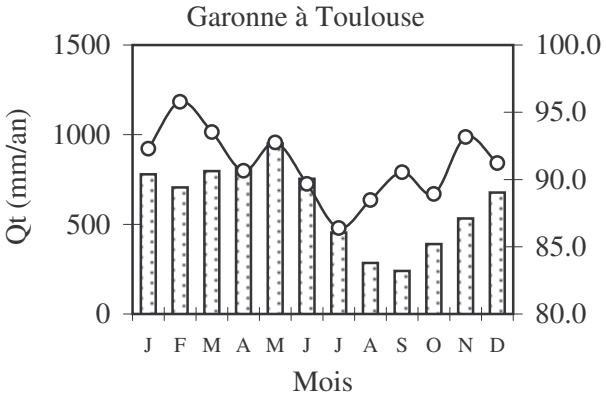
Paramètre représenté : O_2 (% sat.)

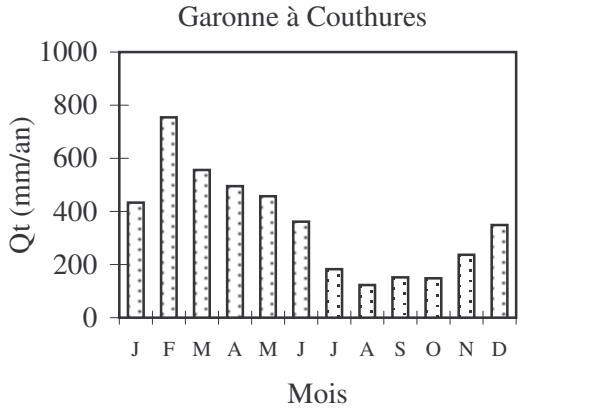


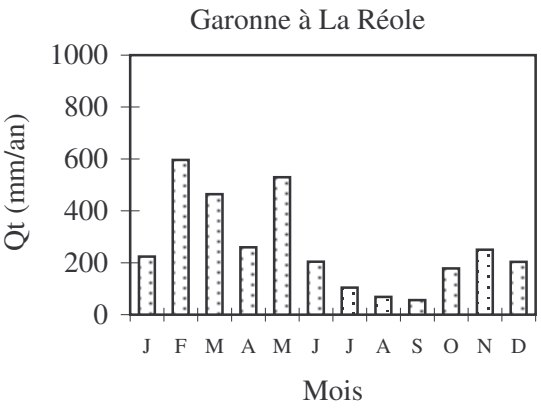


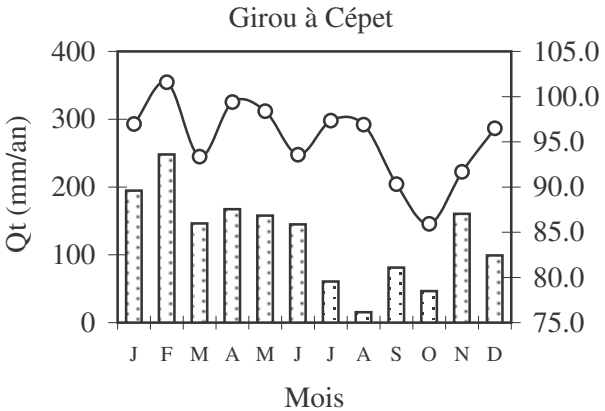


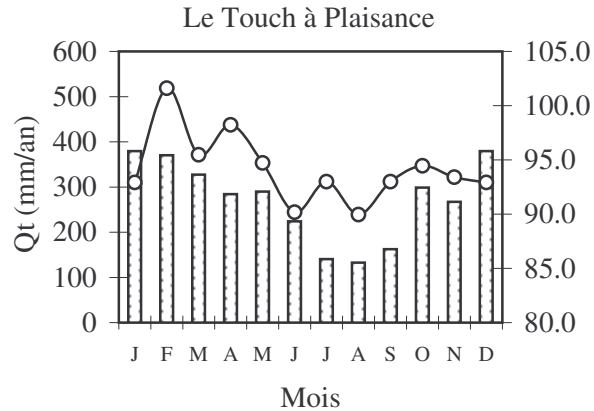




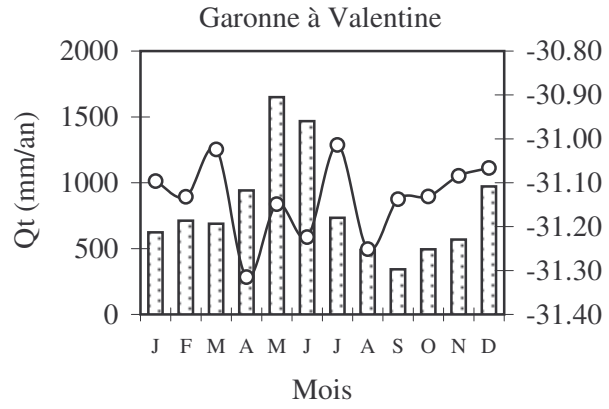


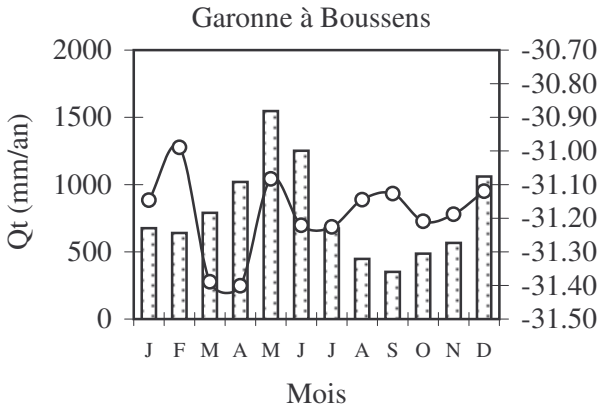


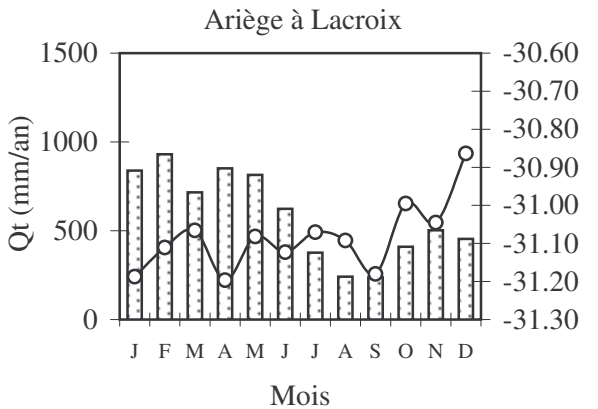


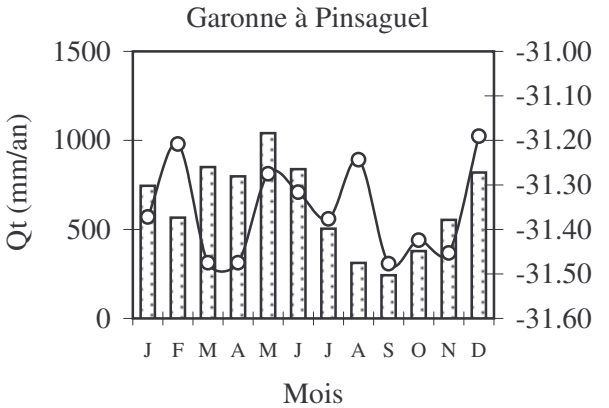


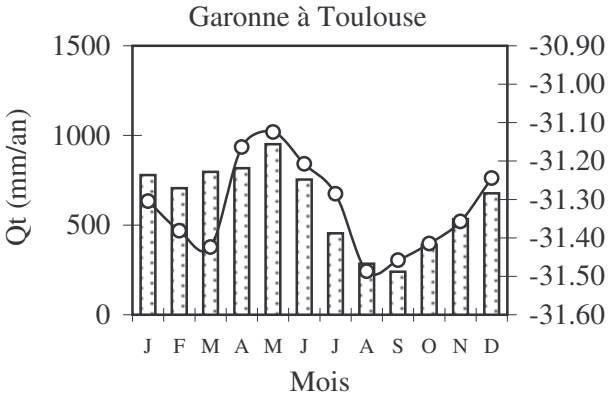
Paramètre représenté : log fO_2

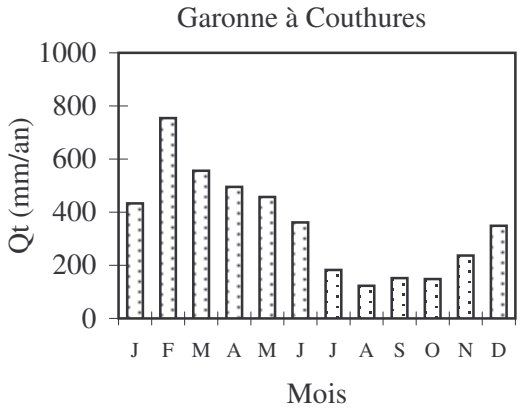


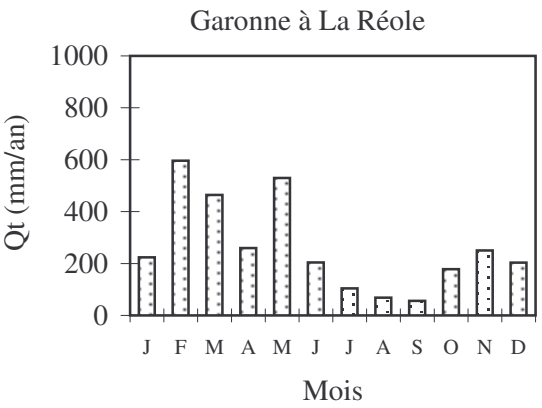


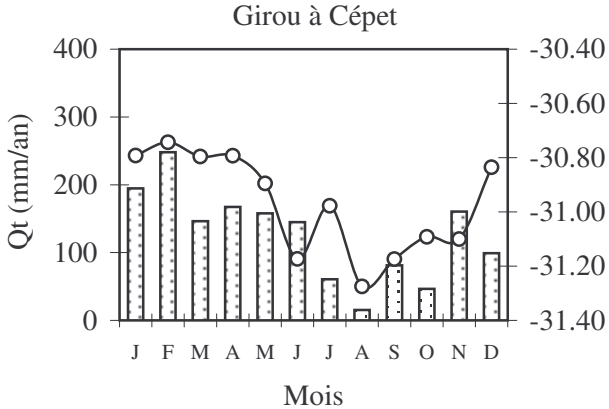


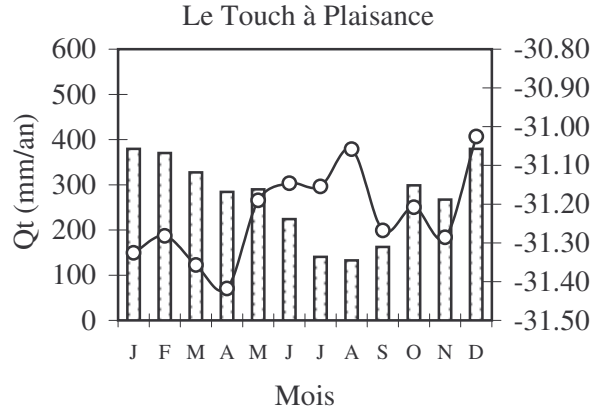




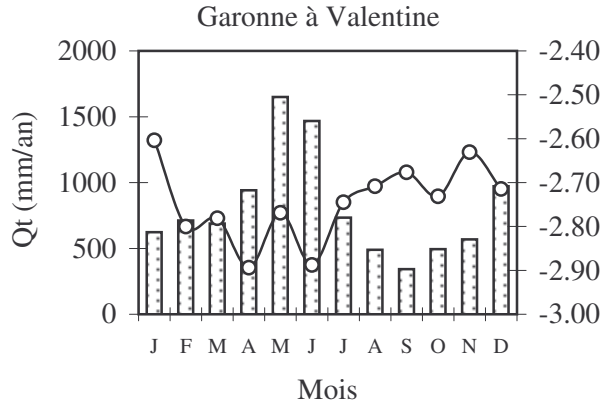


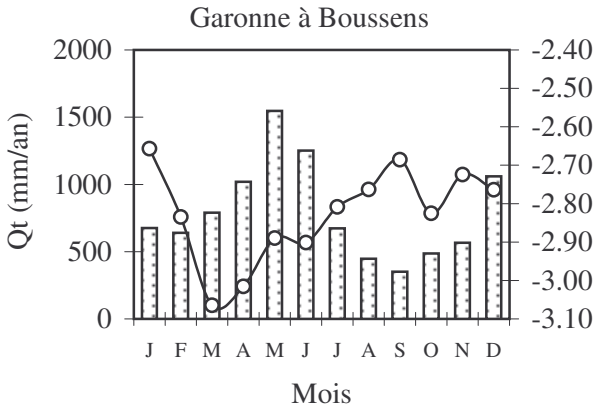


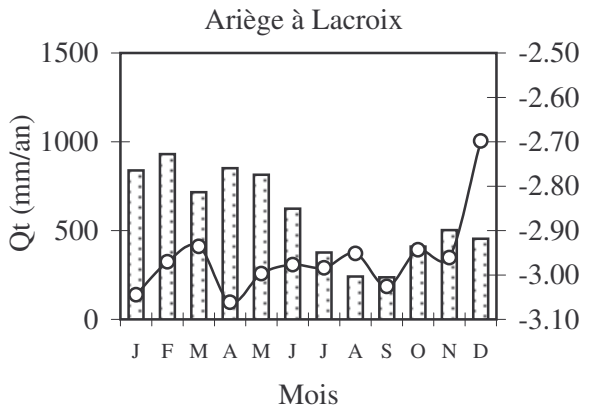


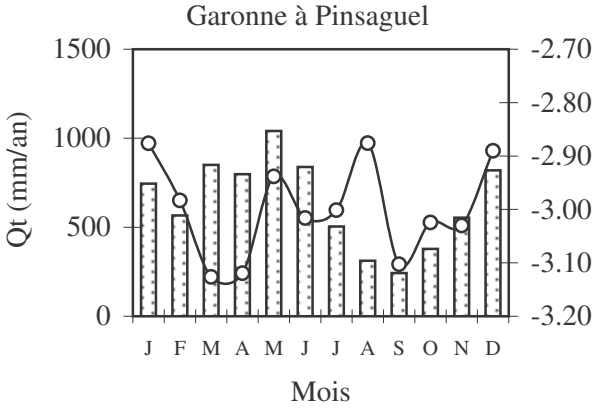


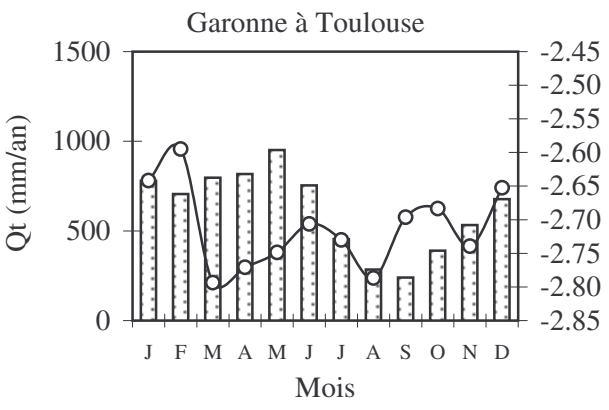
Paramètre représenté : log fCO_2

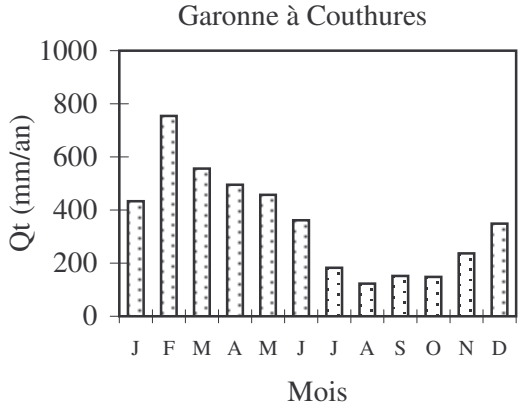


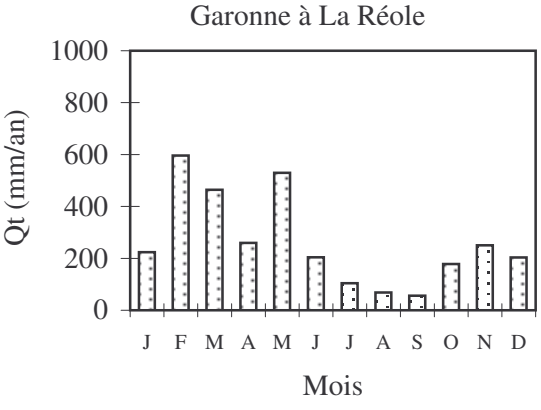


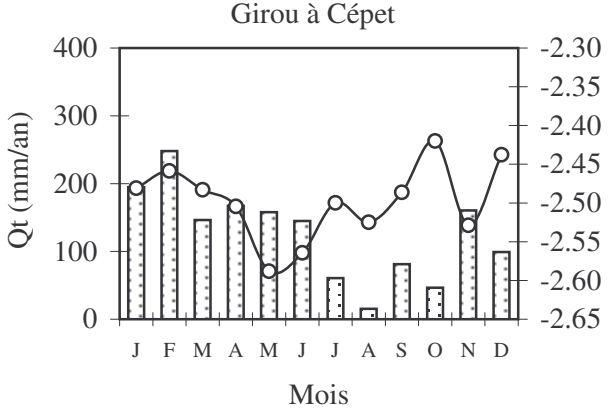


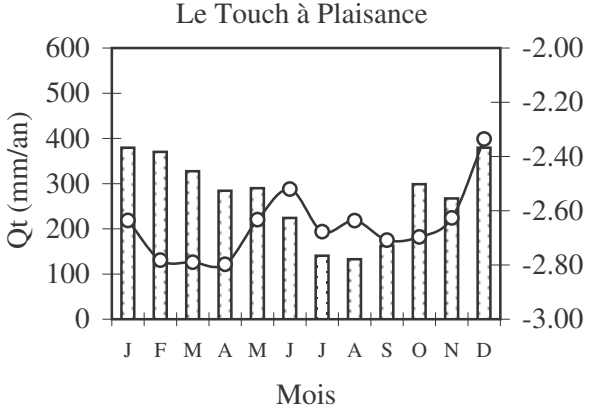




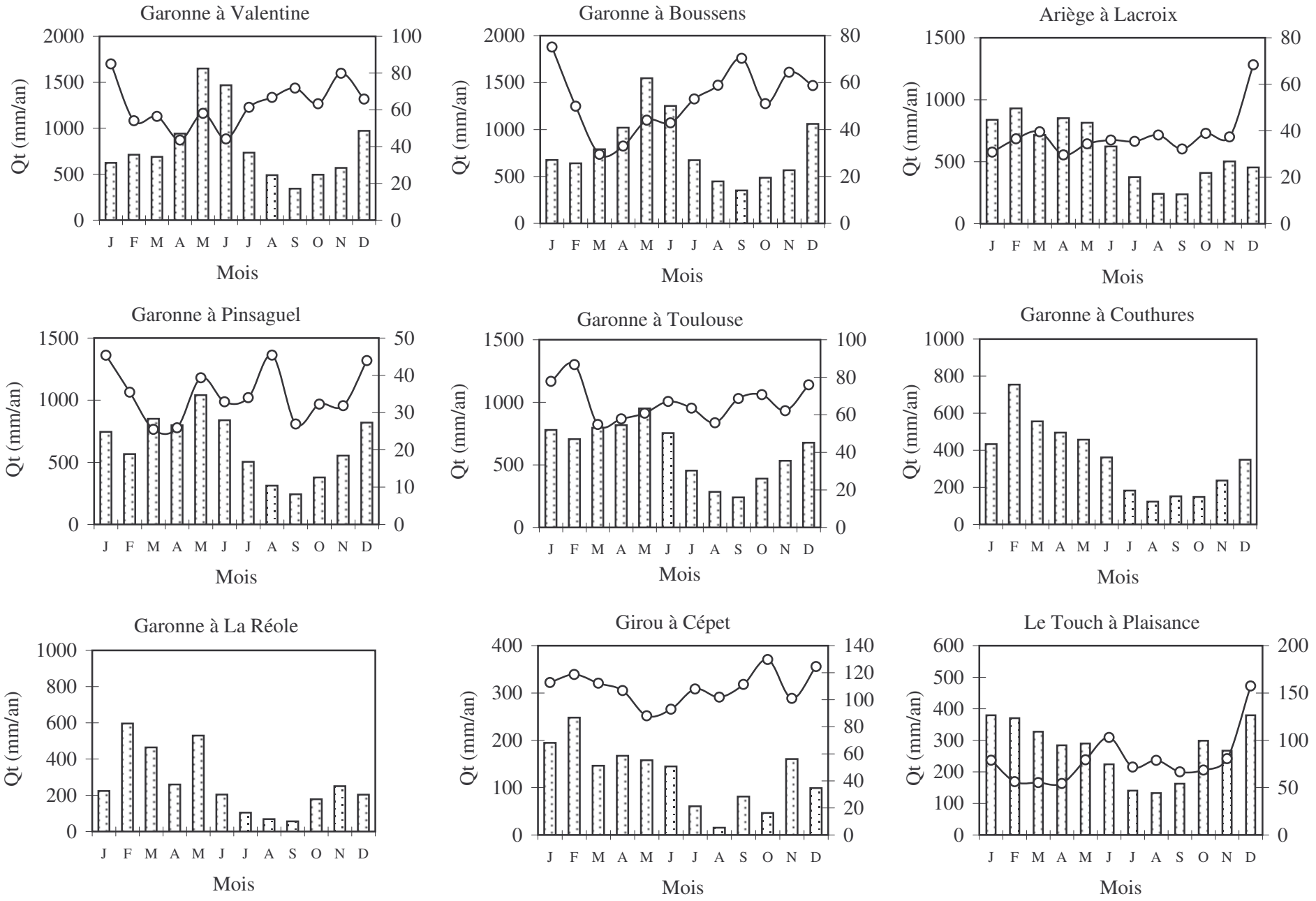




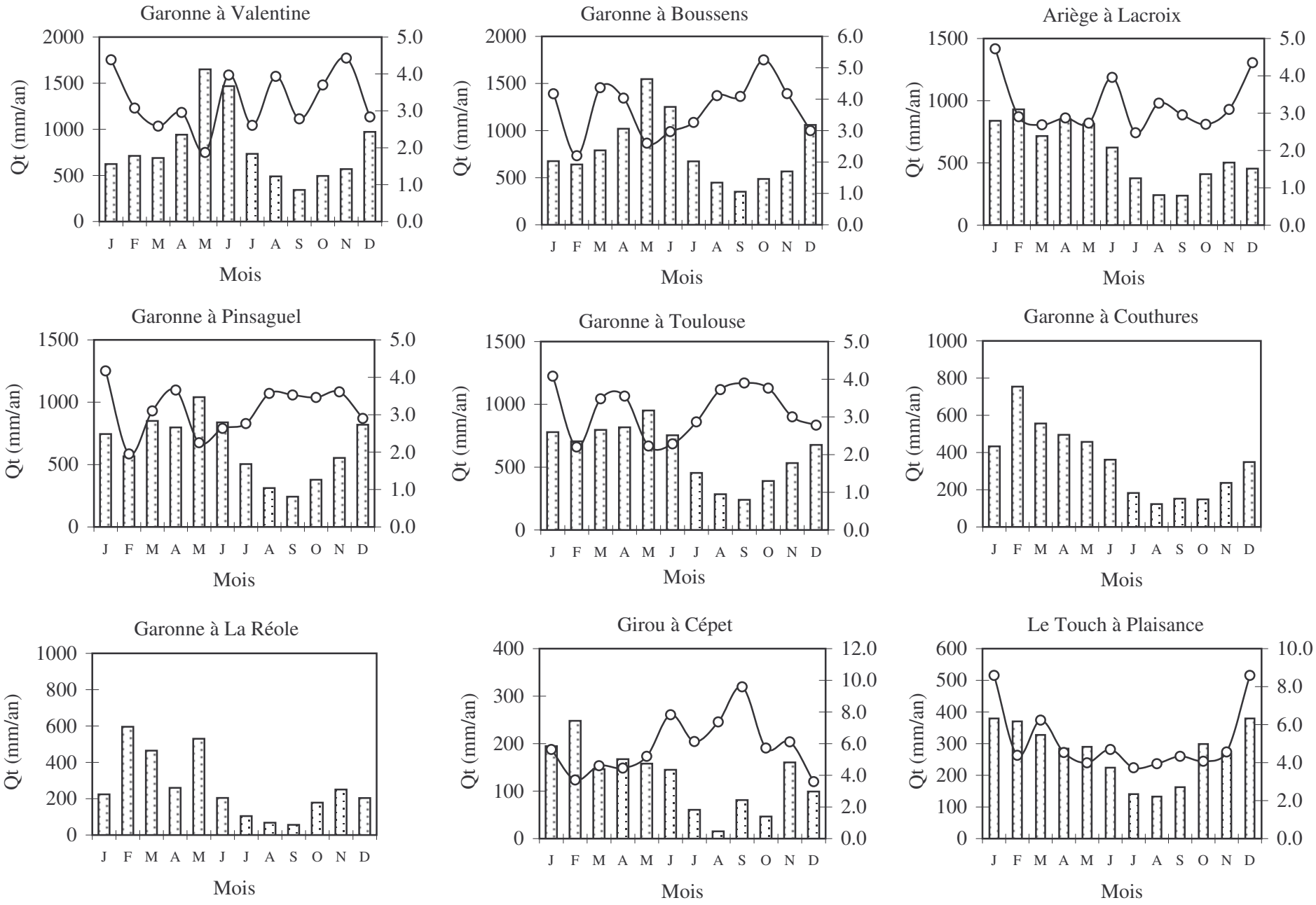




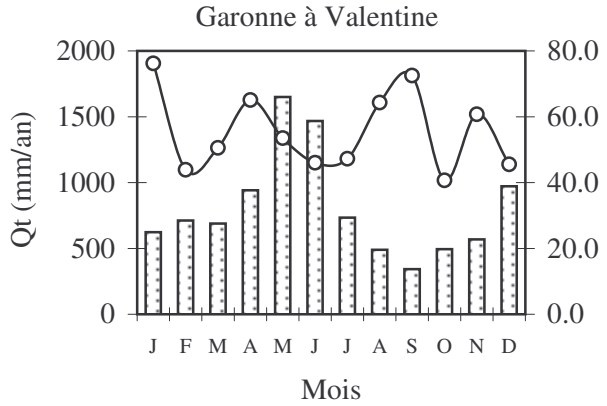
Paramètre représenté : CO_2 ($\mu mol.l^{-1}$)

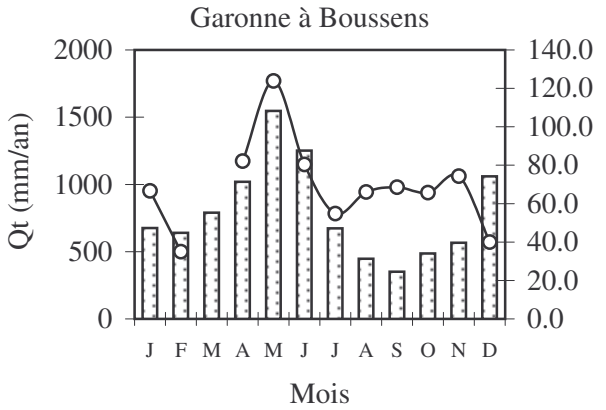


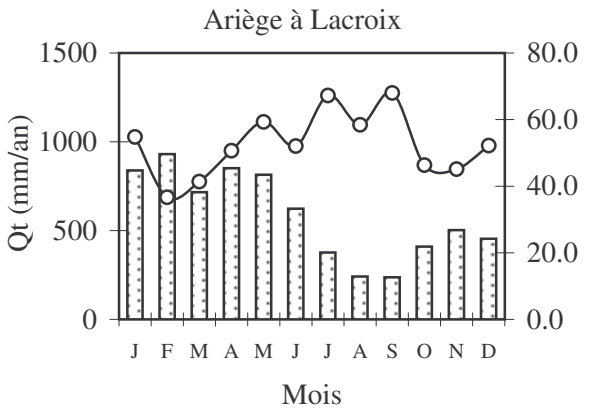
Paramètre représenté : COT ($mg.l^{-1}$)

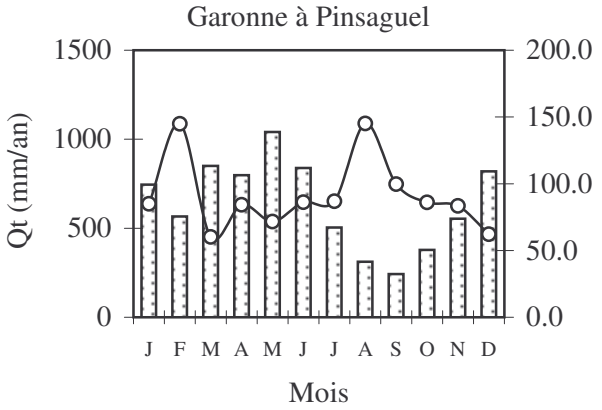


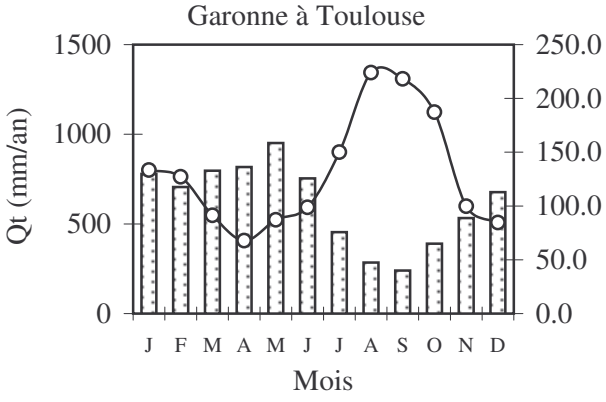
Paramètre représenté : N total ($\mu mol.l^{-1}$)

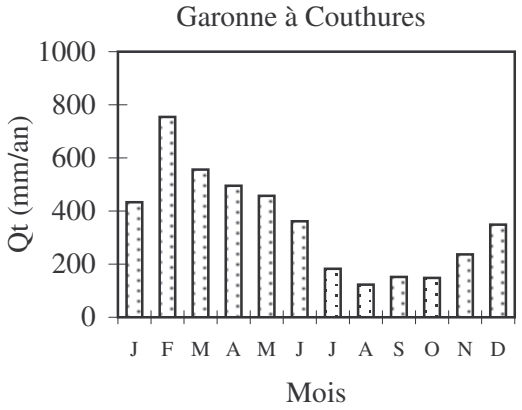


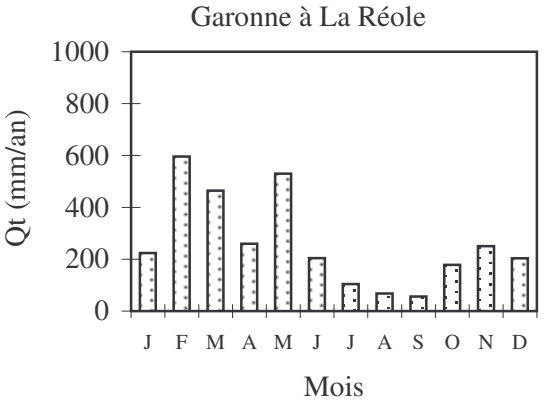


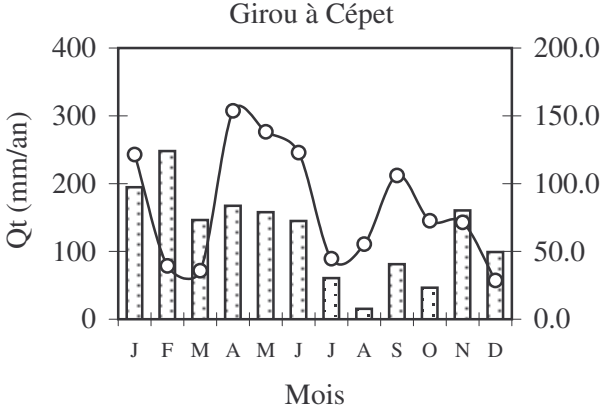


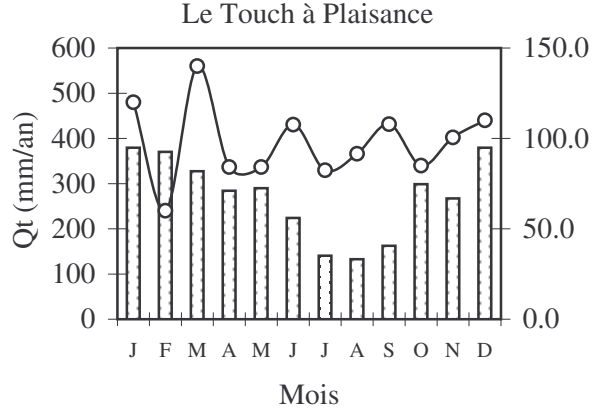




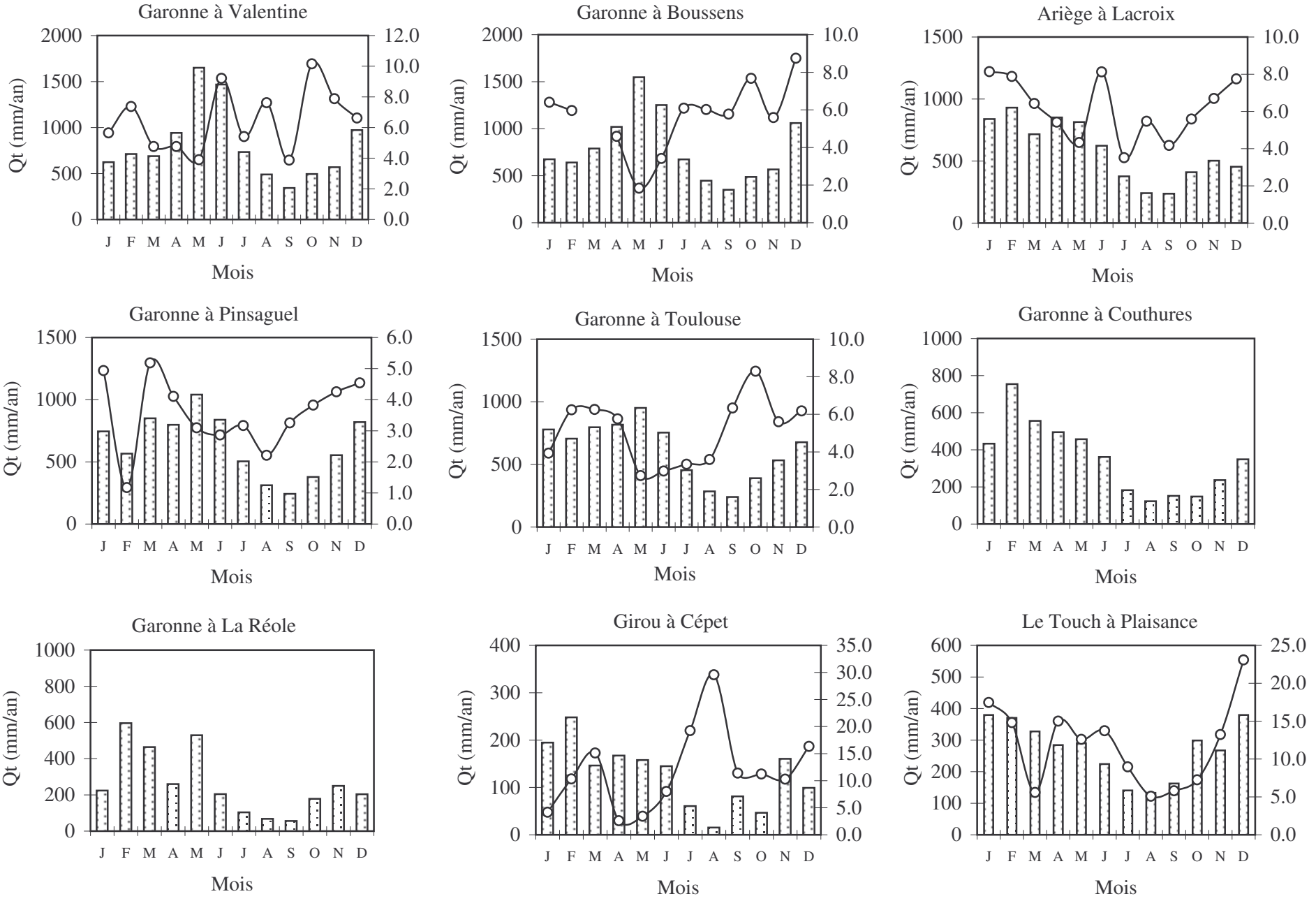




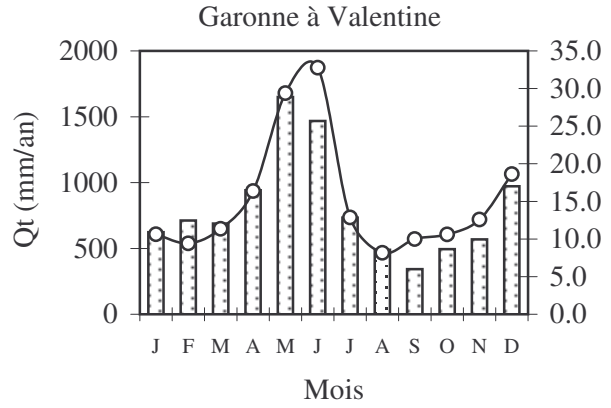


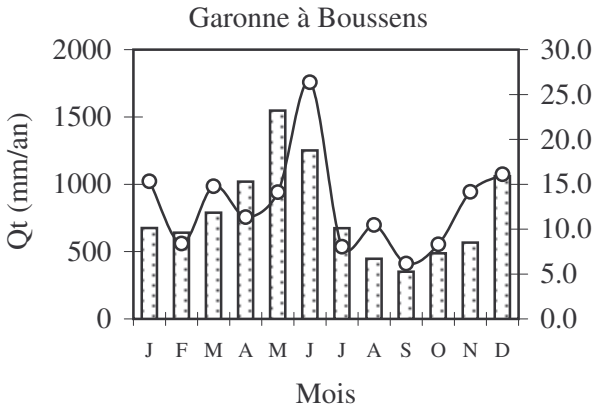


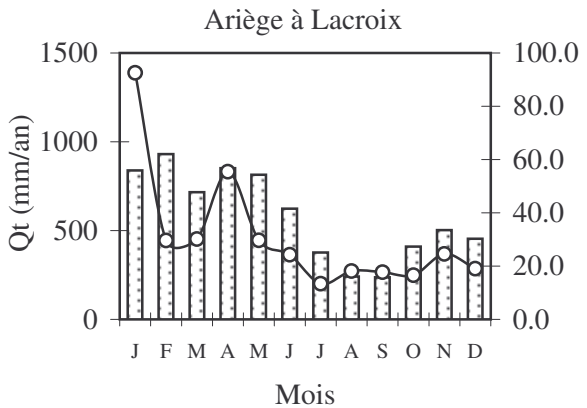
Paramètre représenté : C/N de la matière organique

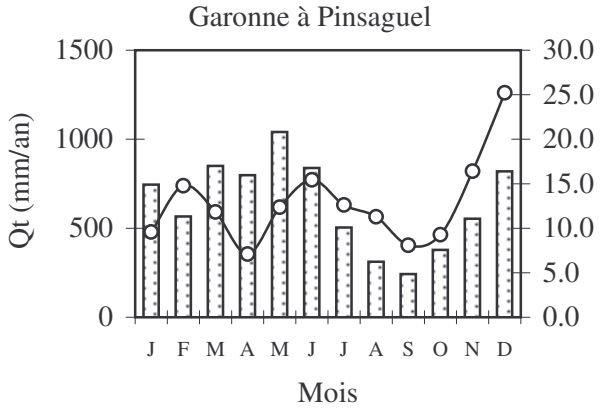


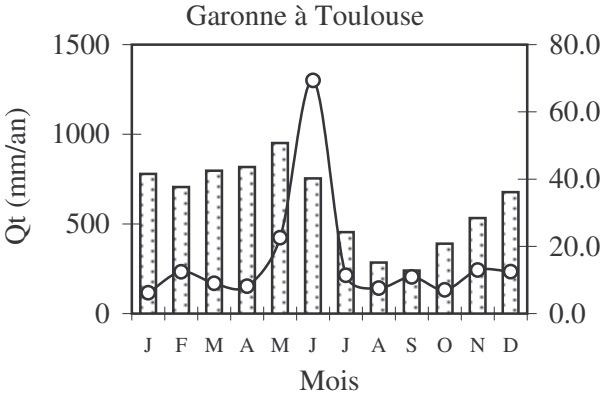
Paramètre représenté : MES ($mg.l^{-1}$)

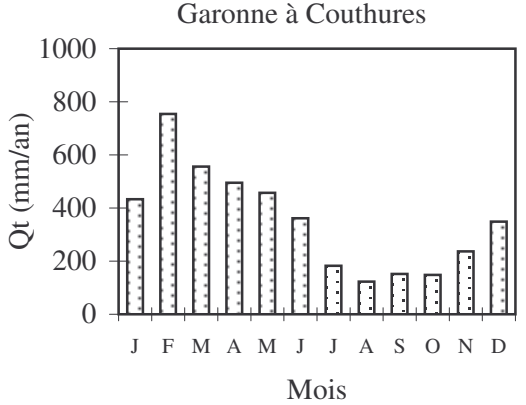


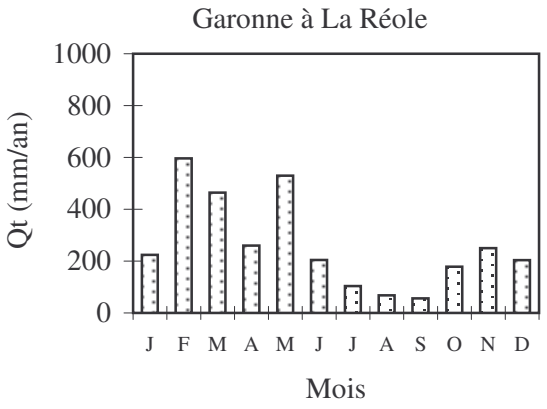


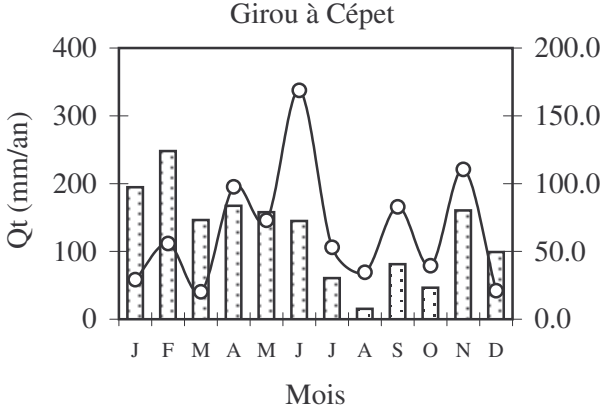


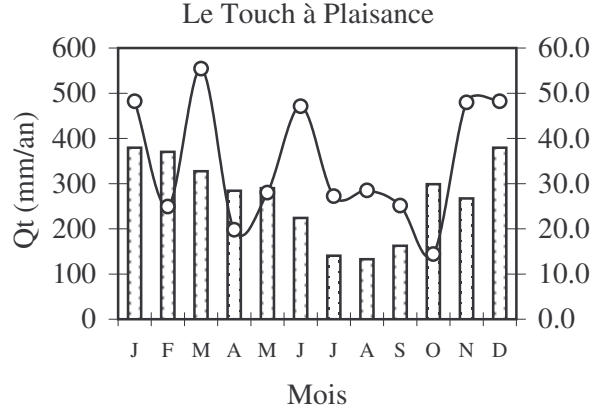




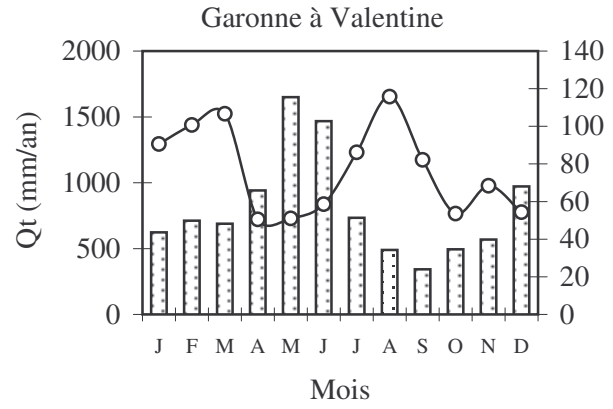


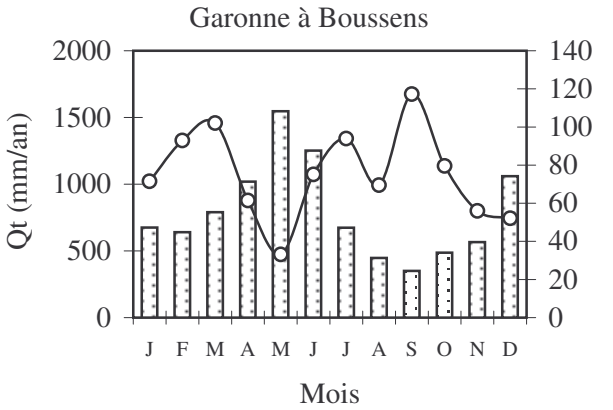


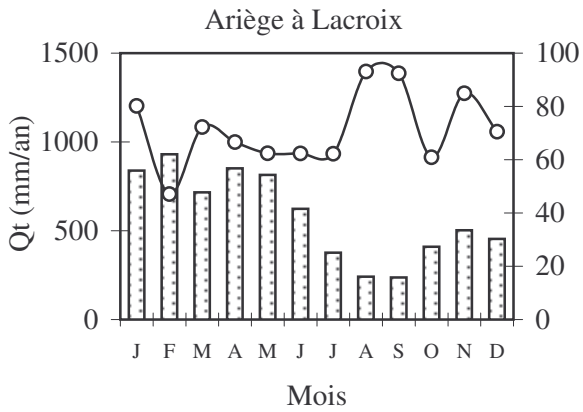


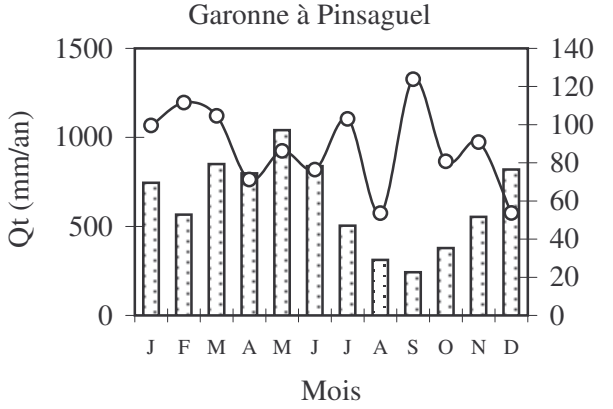


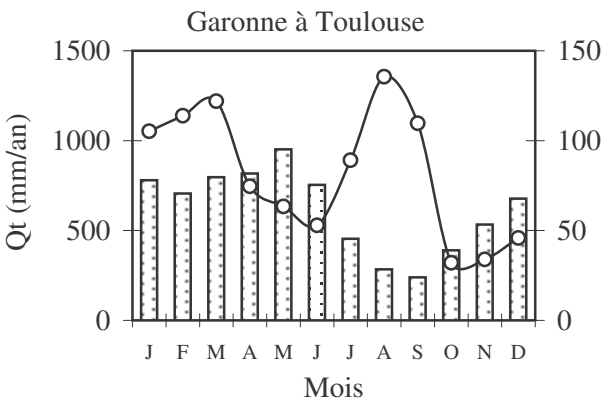
Paramètre représenté : Na Sil (µmol.l^{-1})

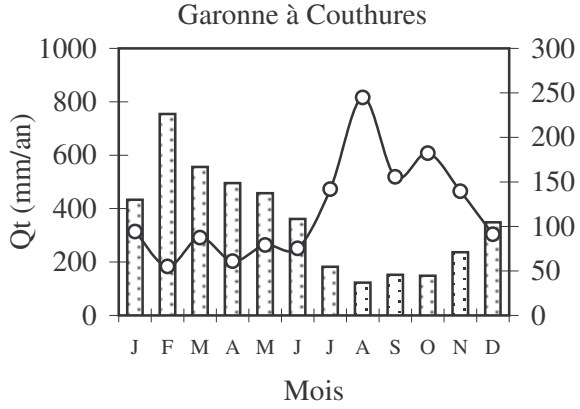


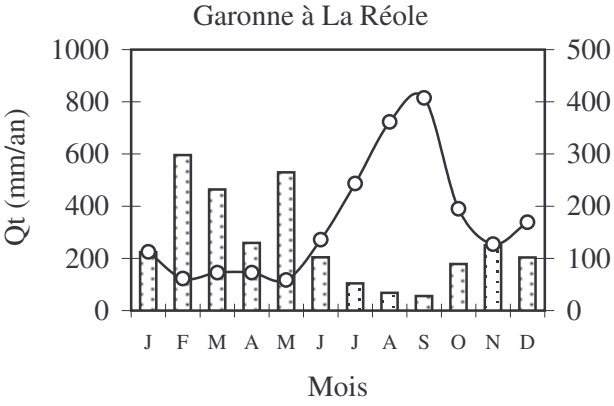


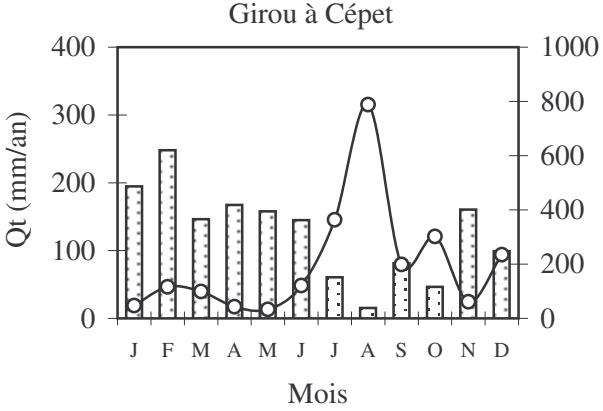


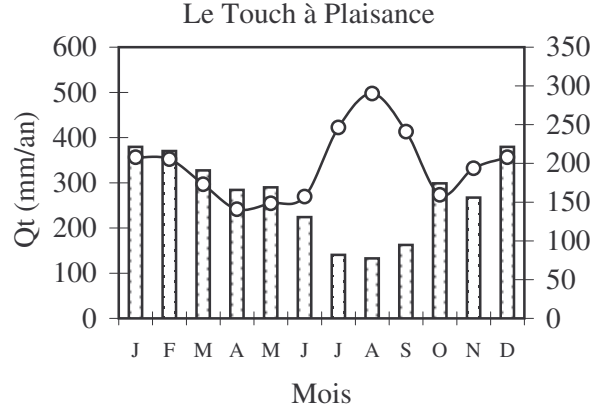




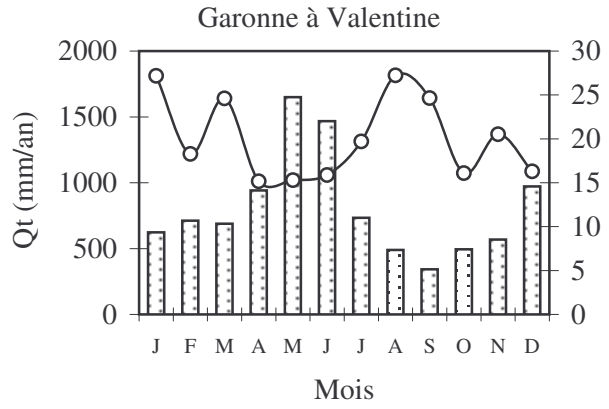


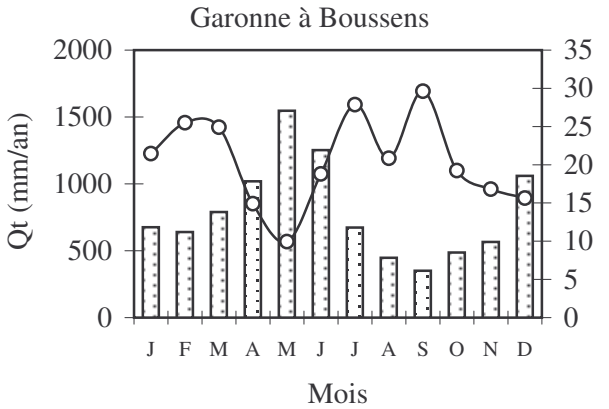


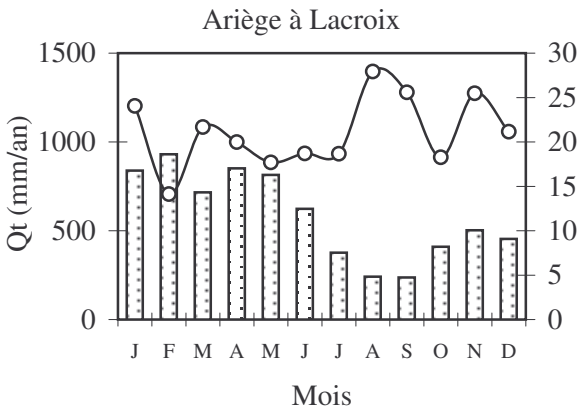


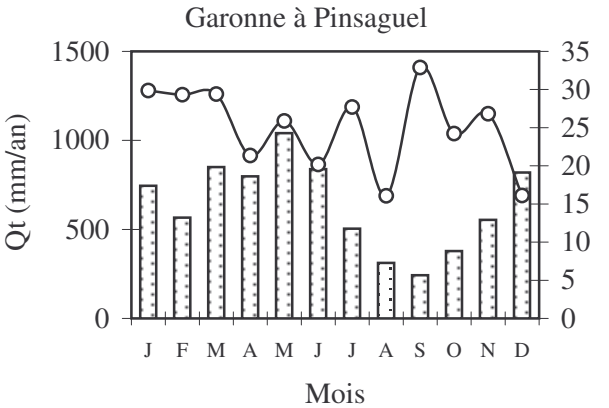


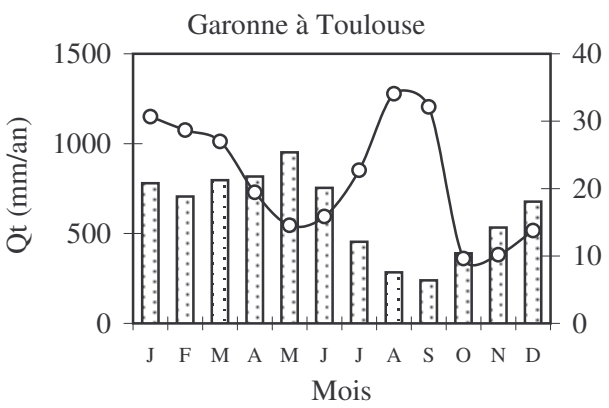
Paramètre représenté : K Sil (µmol.l^{-1})

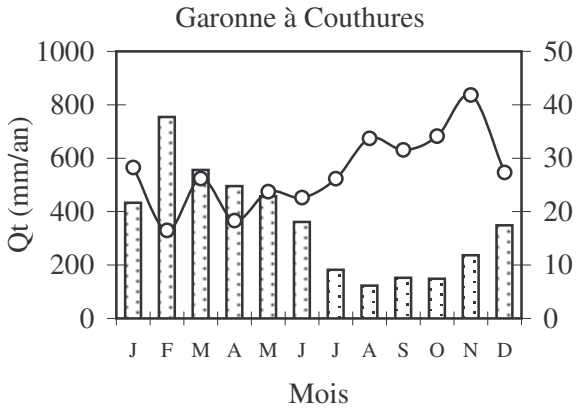


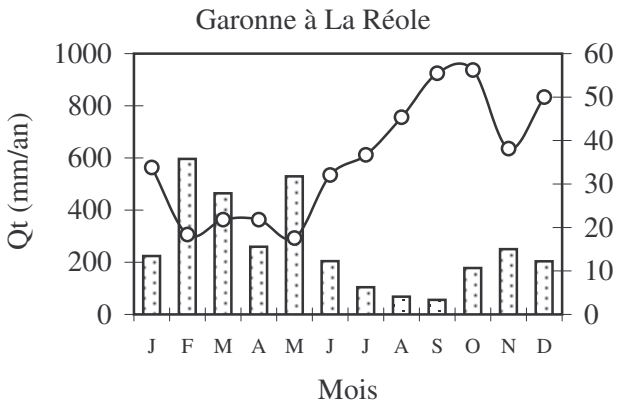


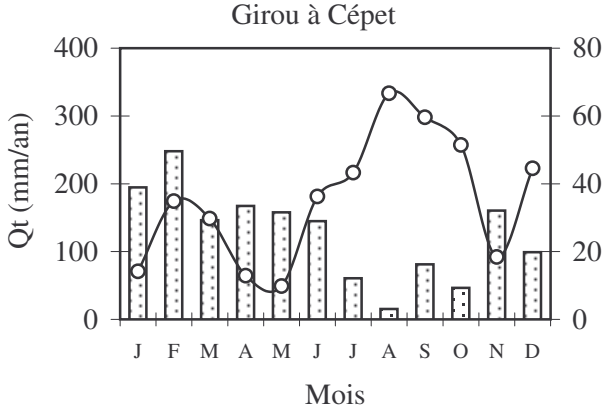


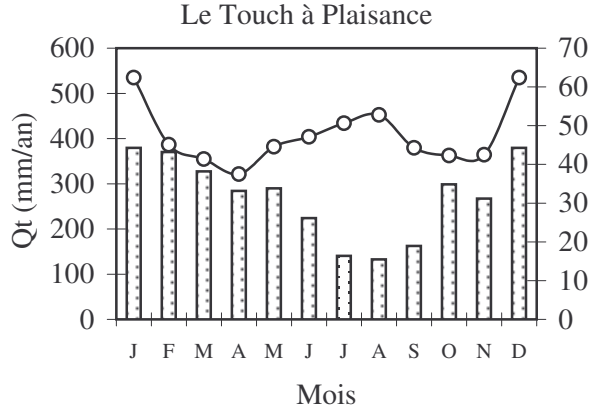




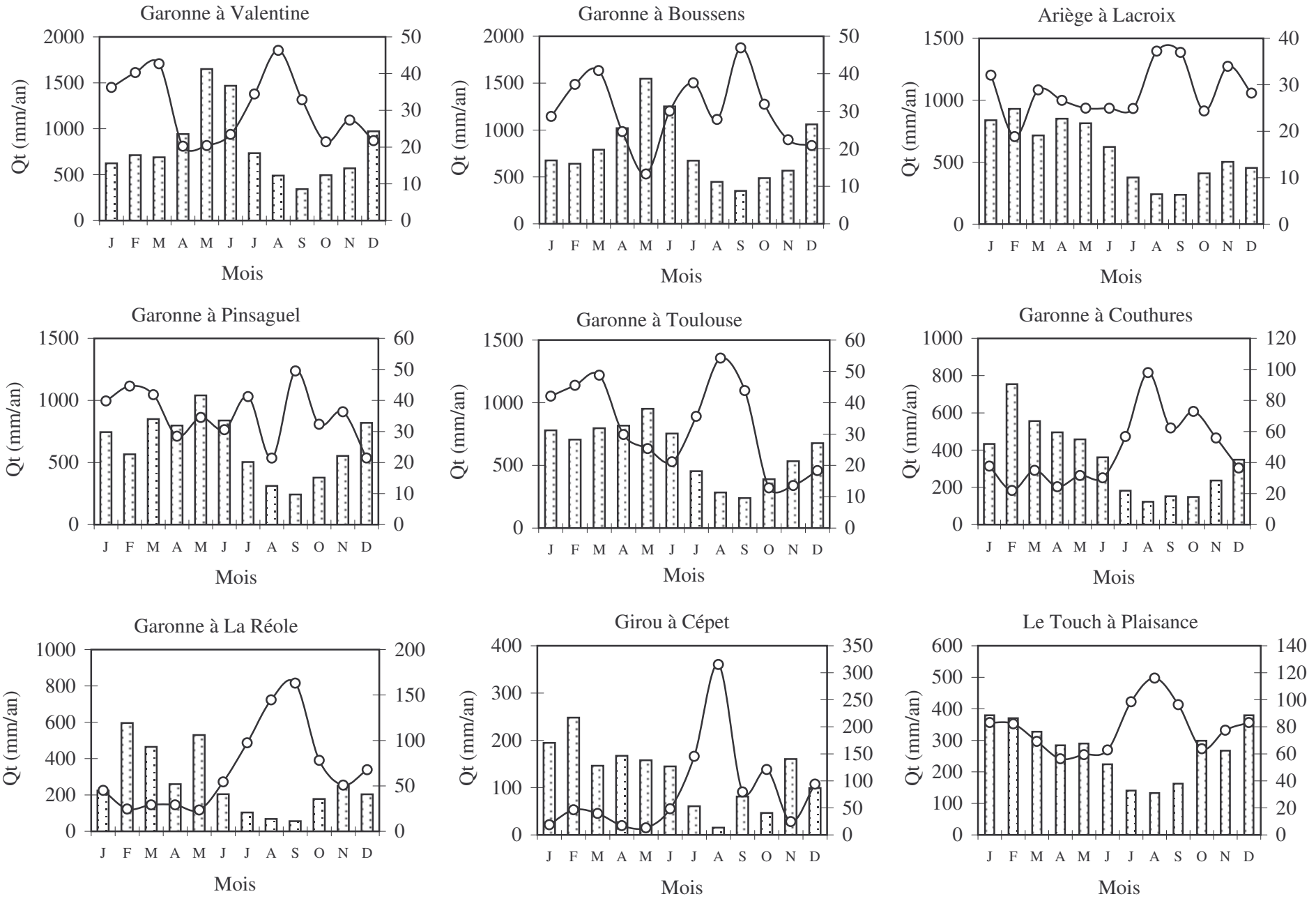




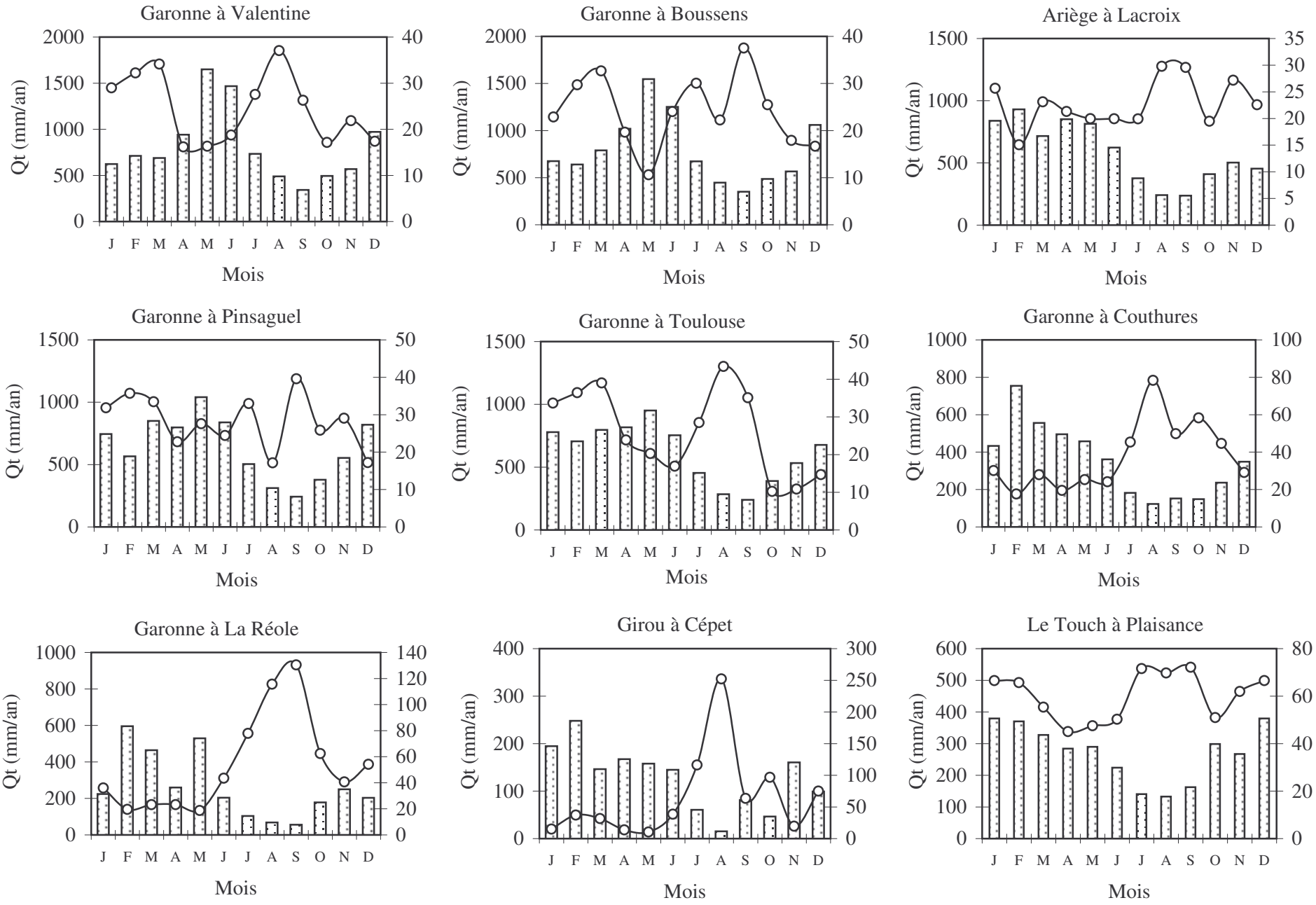




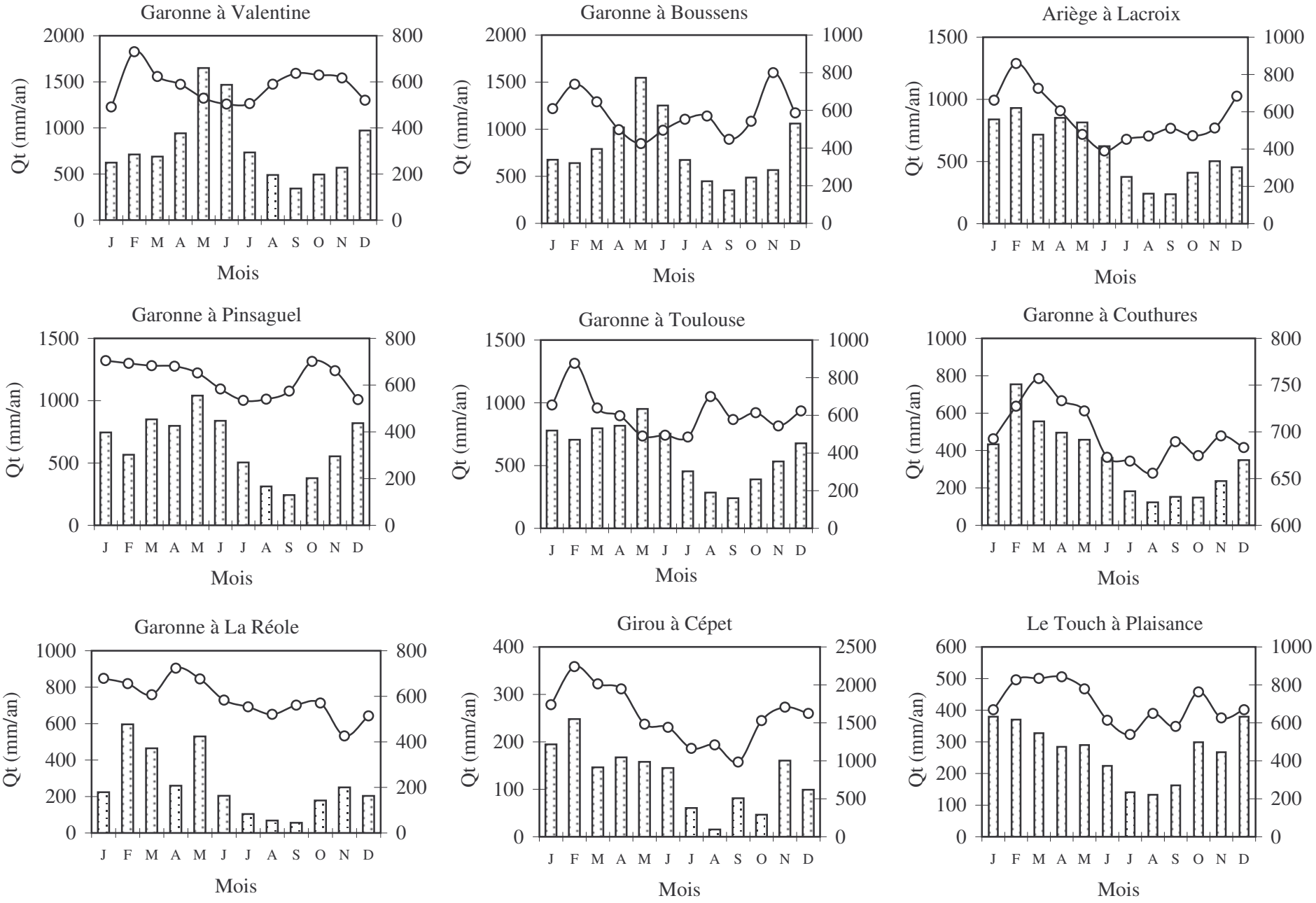
Paramètre représenté : Ca Sil (µmol.l^{-1})



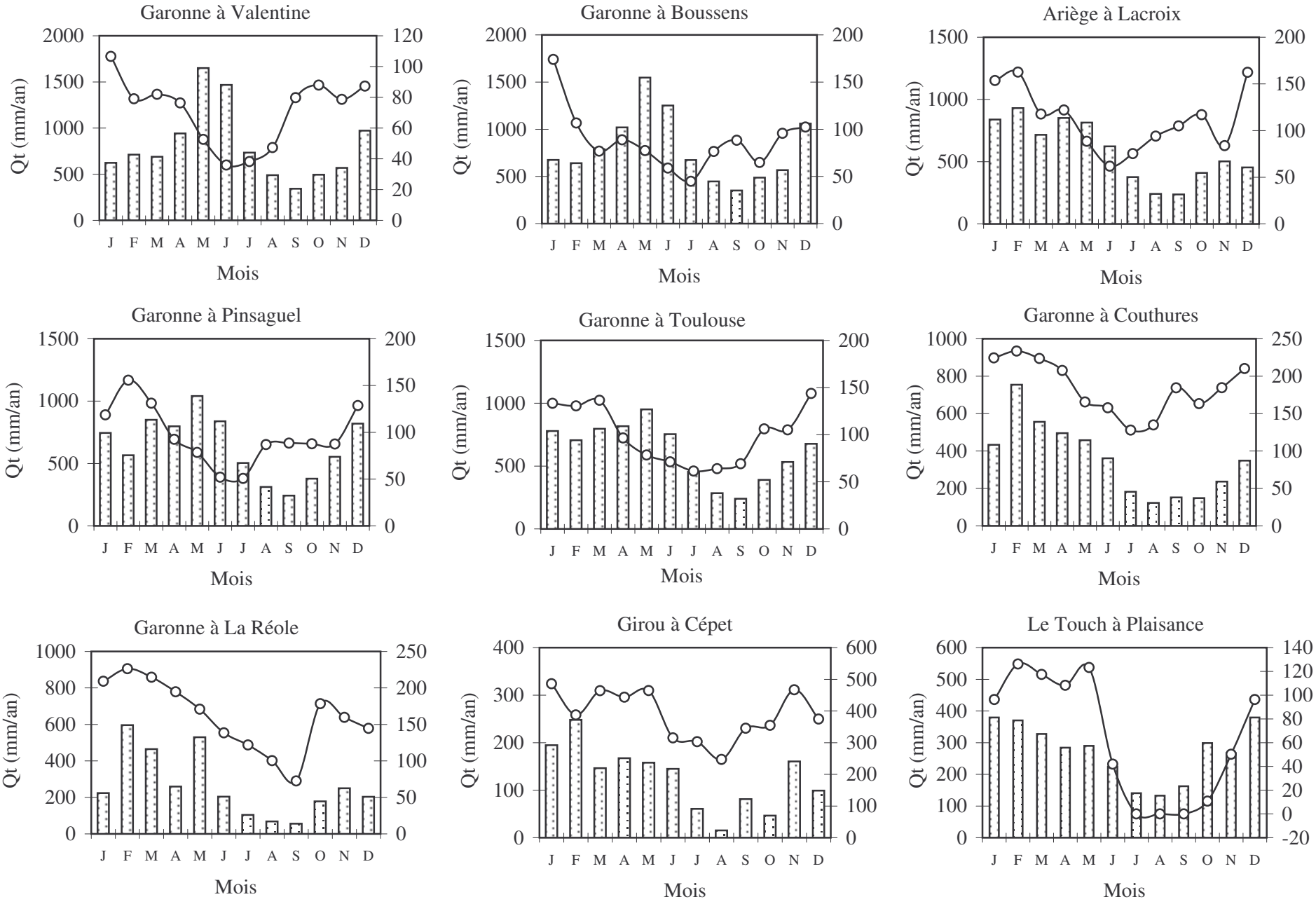
Paramètre représenté : Mg Sil ($\mu mol.l^{-1}$)



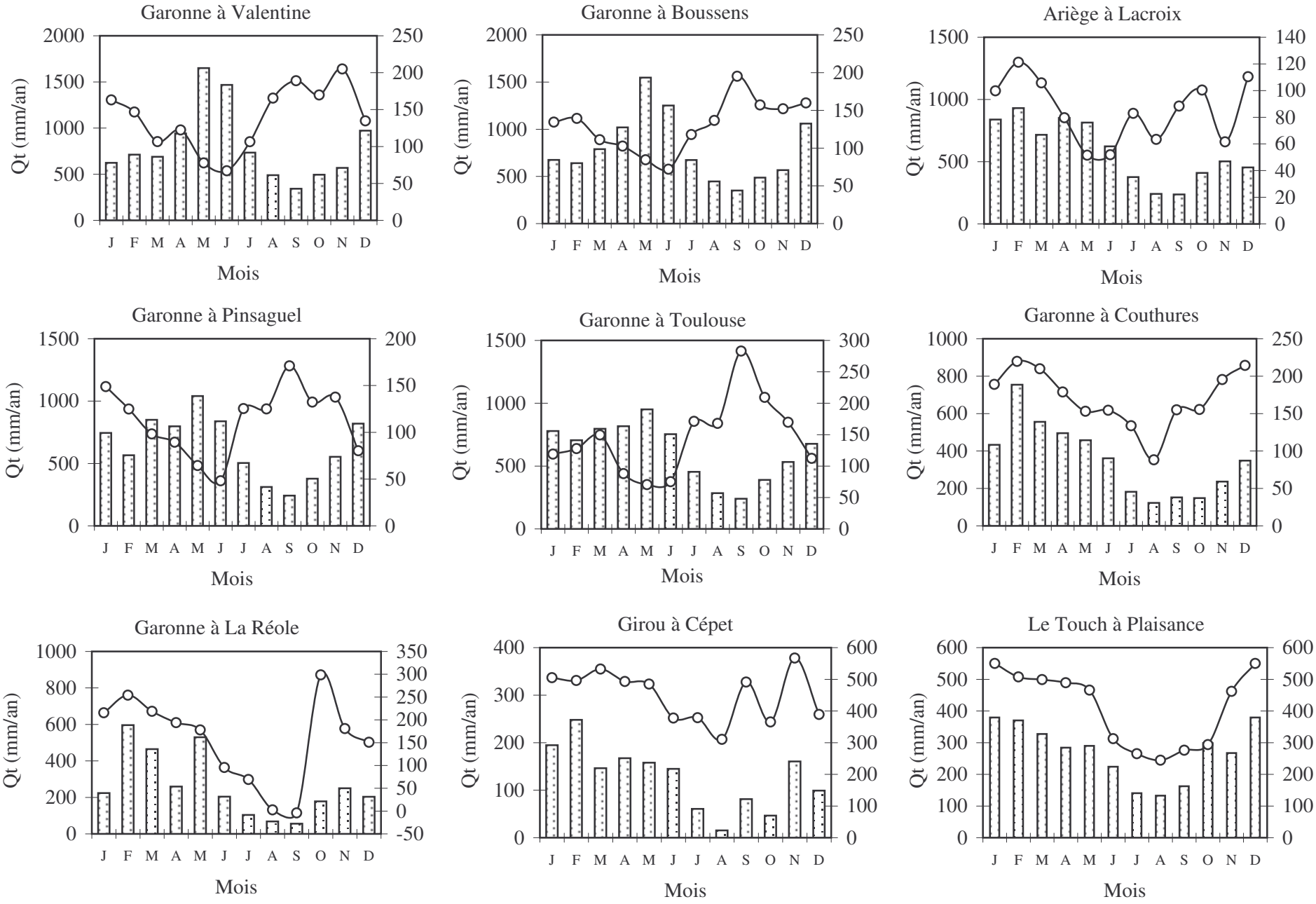
Paramètre représenté : $CaCO_3$ ($\mu mol.l^{-1}$)



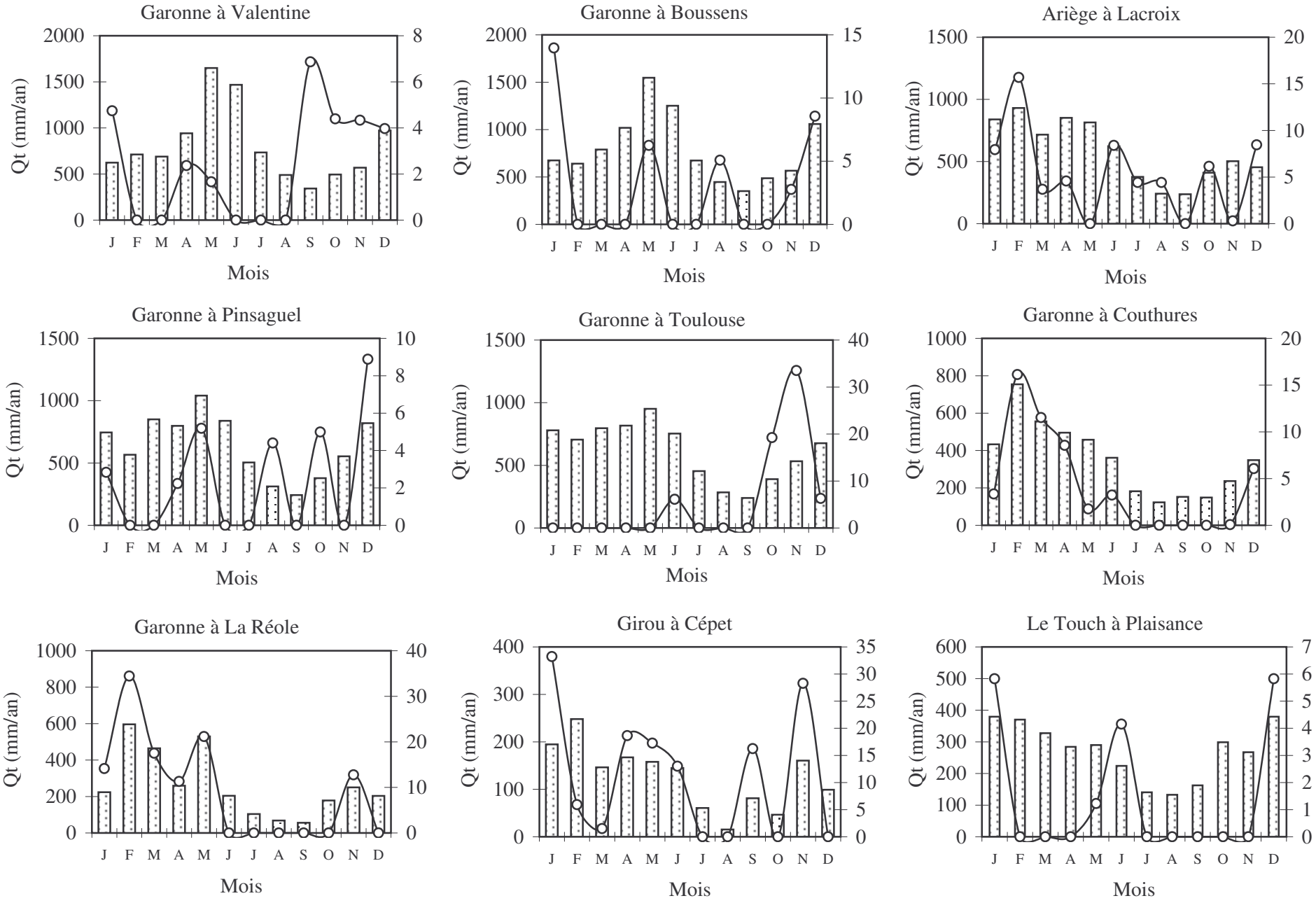
Paramètre représenté : $MgCa(CO_3)_2$ ($\mu mol.l^{-1}$)



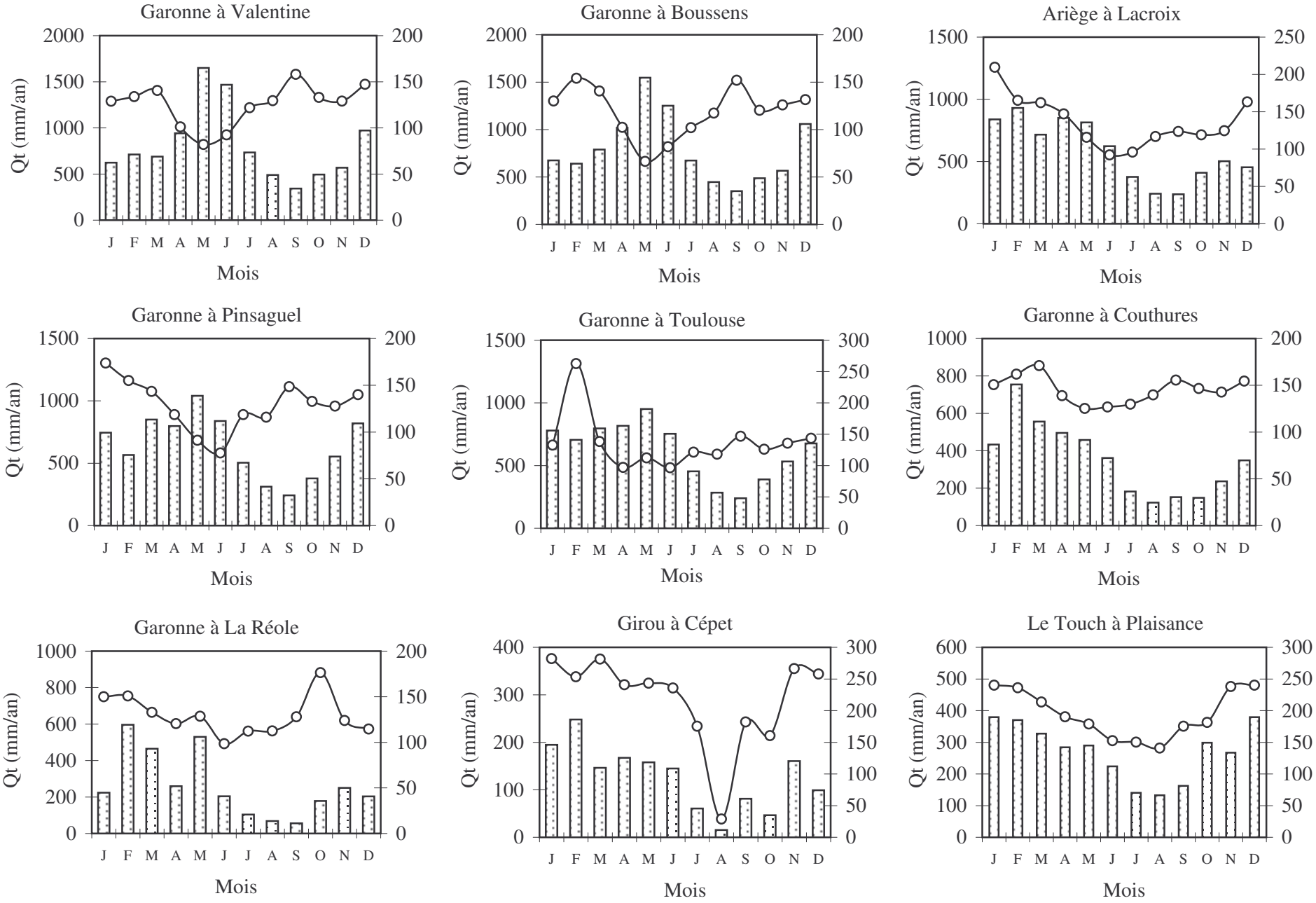
Paramètre représenté : Na ev (µmol.l^{-1})



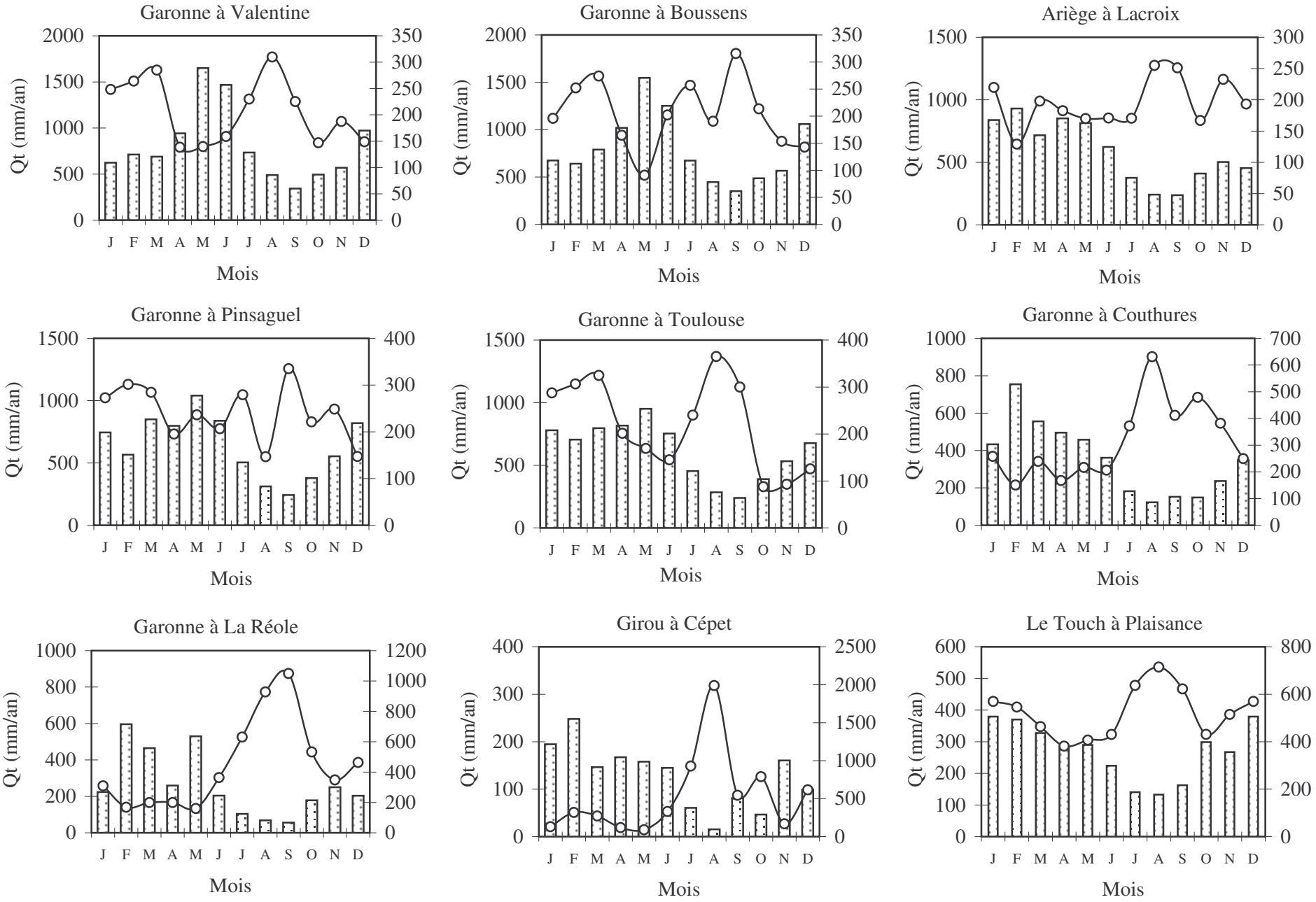
Paramètre représenté : K ev (µmol.l^{-1})



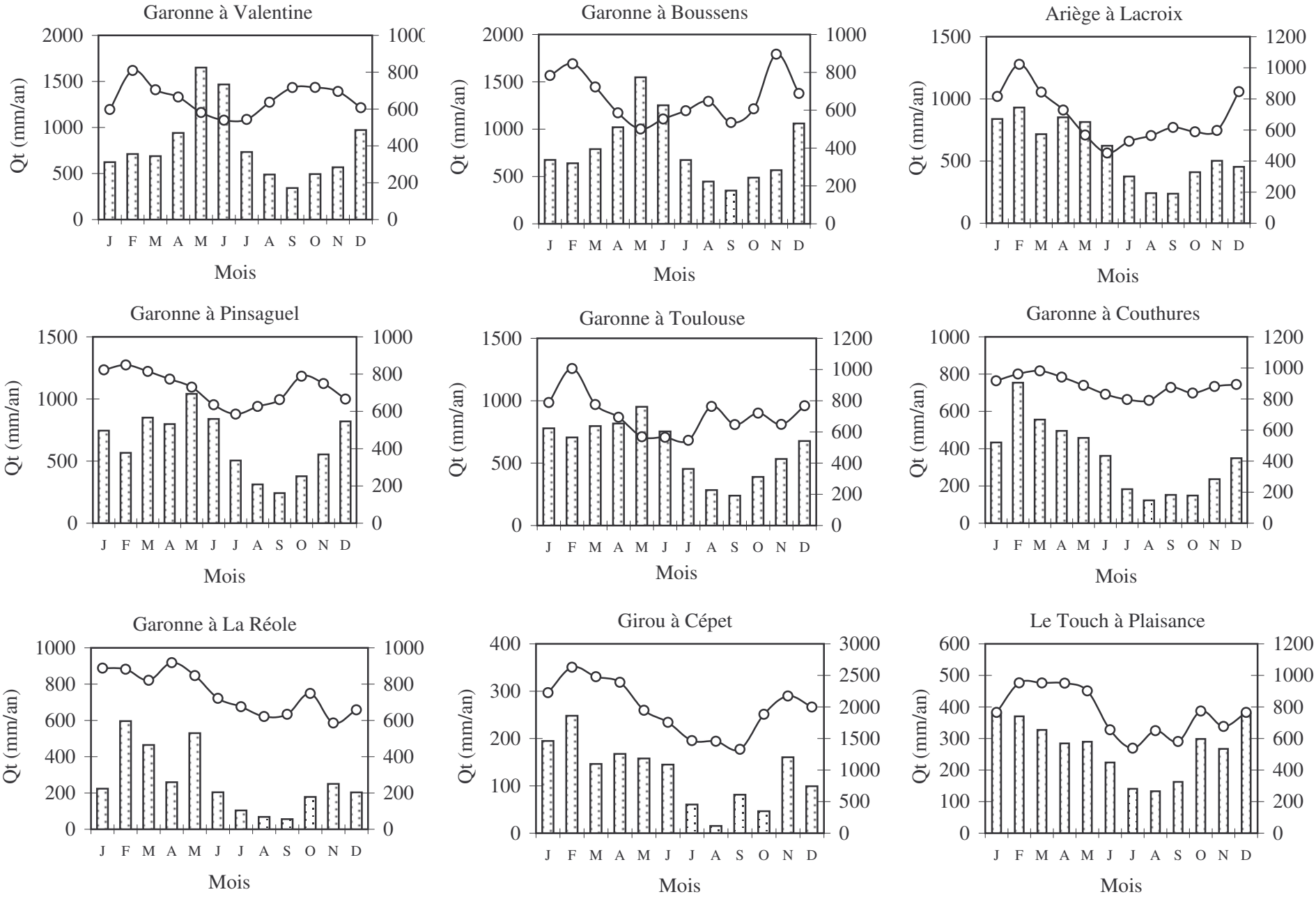
Paramètre représenté : Ca ev (µmol.l^{-1})



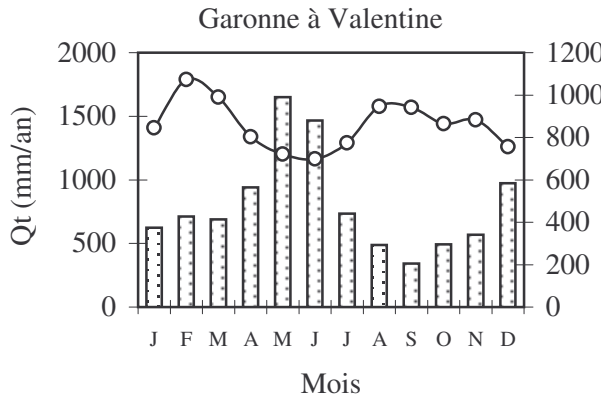
Paramètre représenté : CO_2 sil ($\mu mol.l^{-1}$)

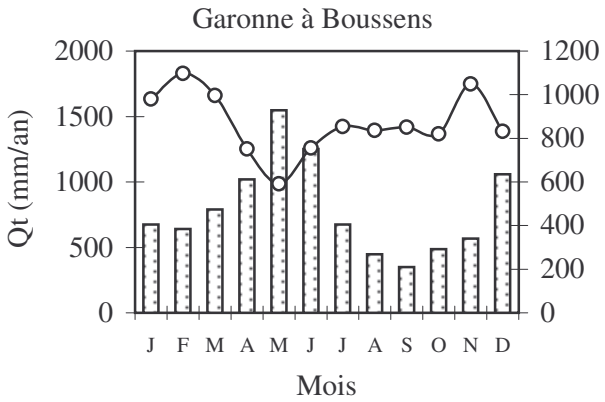


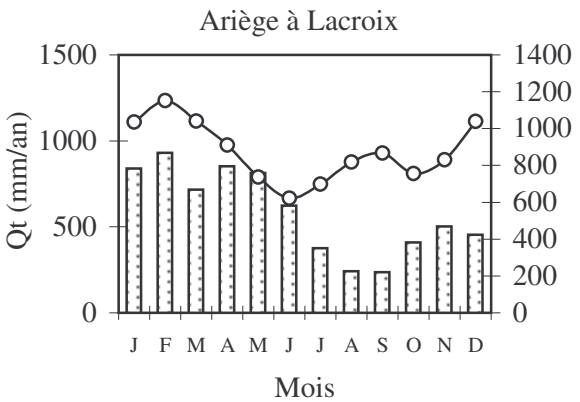
Paramètre représenté : CO_2 carb ($\mu mol.l^{-1}$)

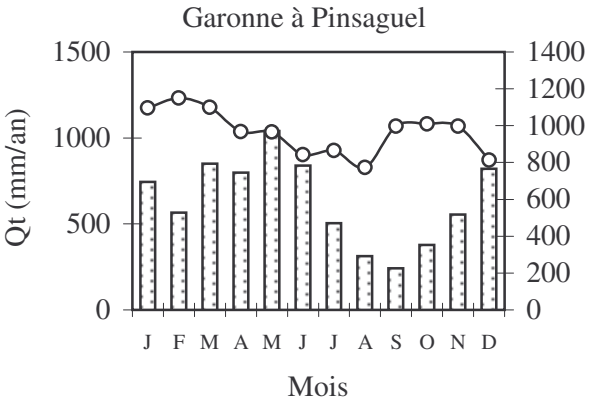


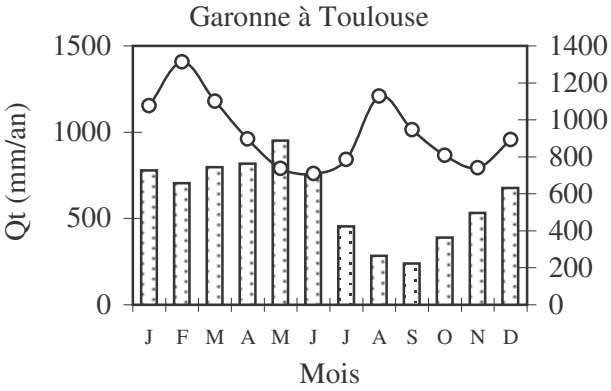
Paramètre représenté : CO_2 cons ($\mu mol.l^{-1}$)

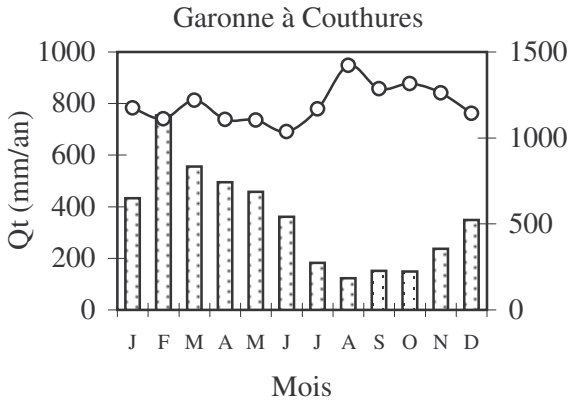


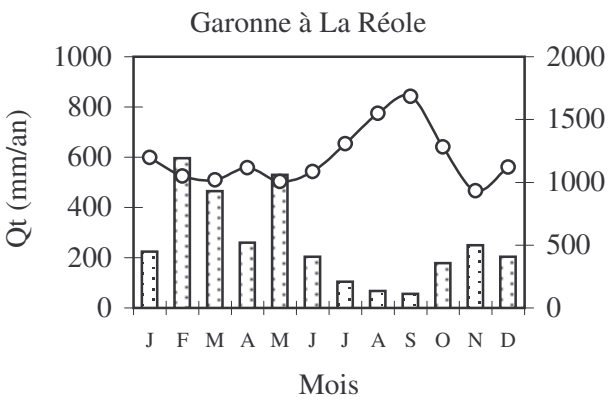


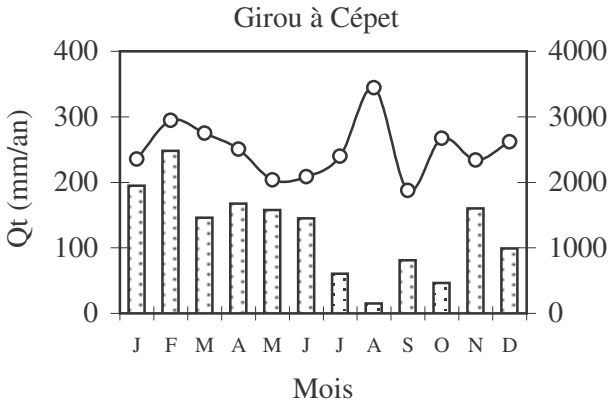


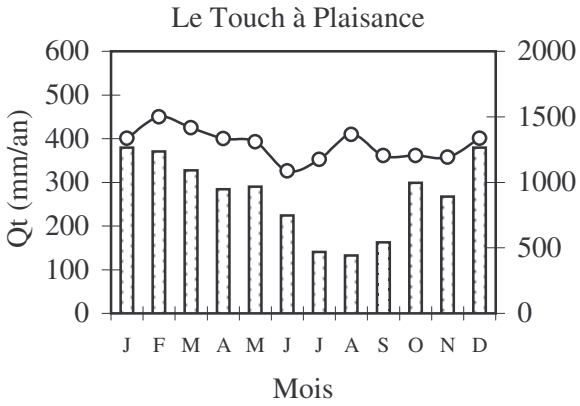




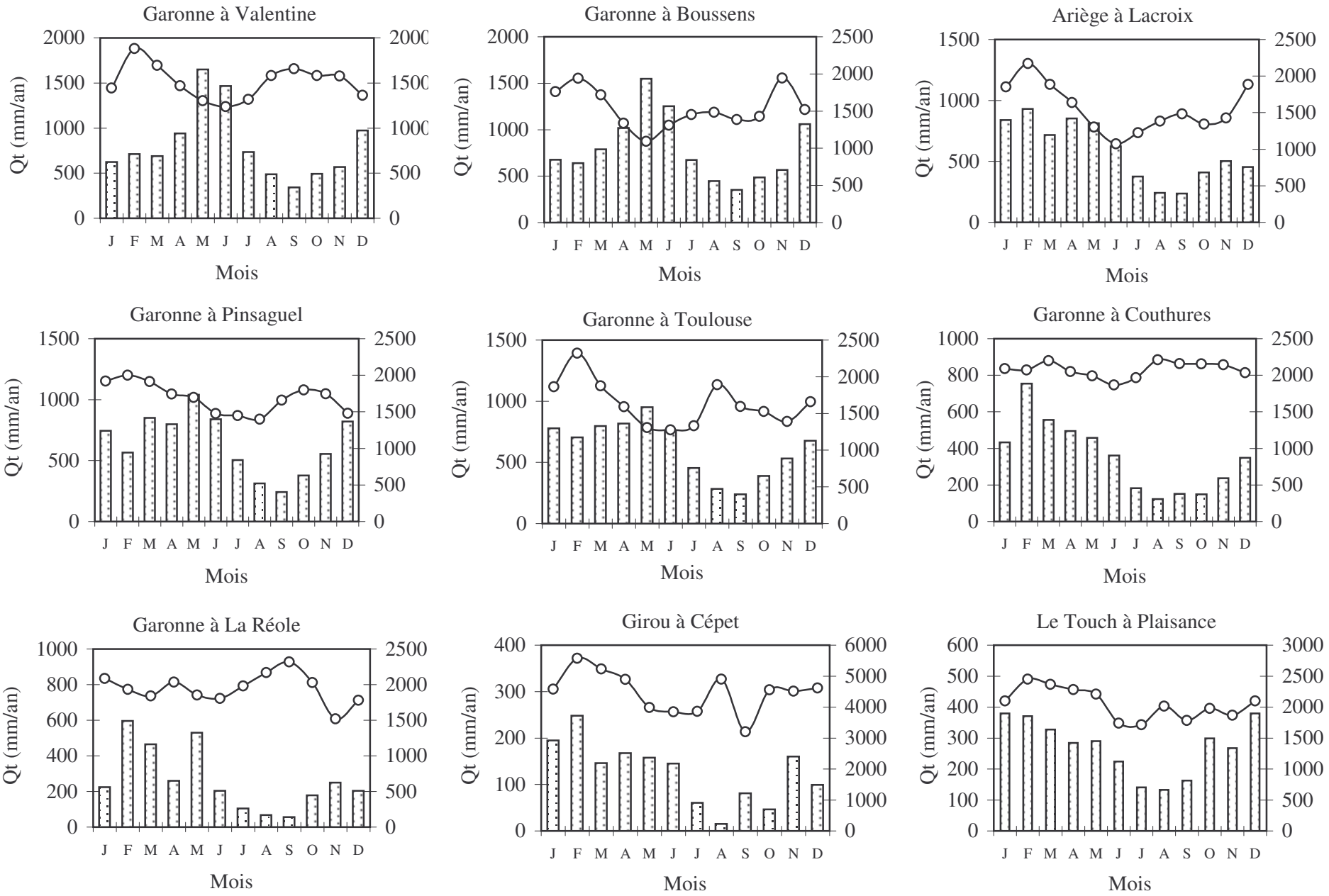




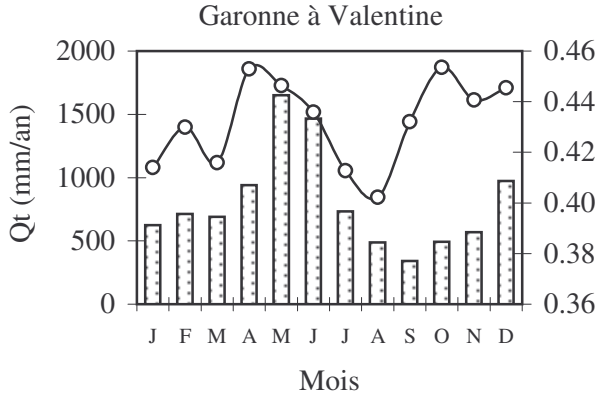


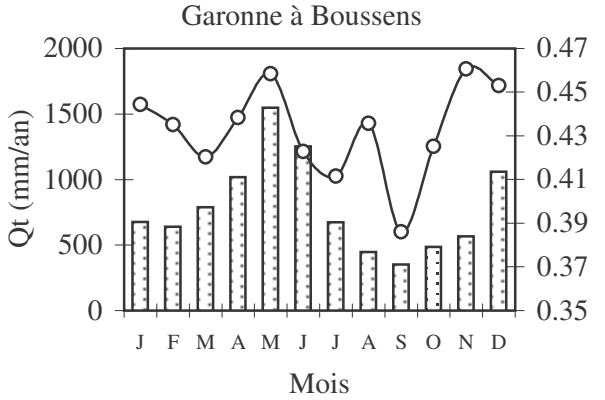


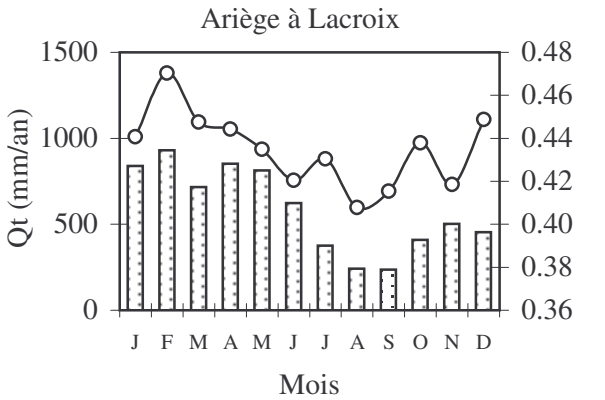
Paramètre représenté : CO_2 tot ($\mu mol.l^{-1}$)

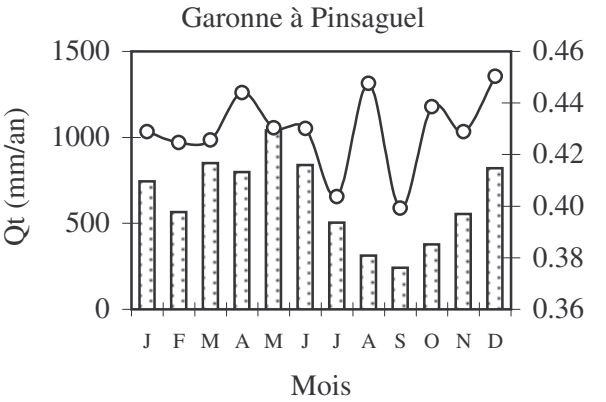


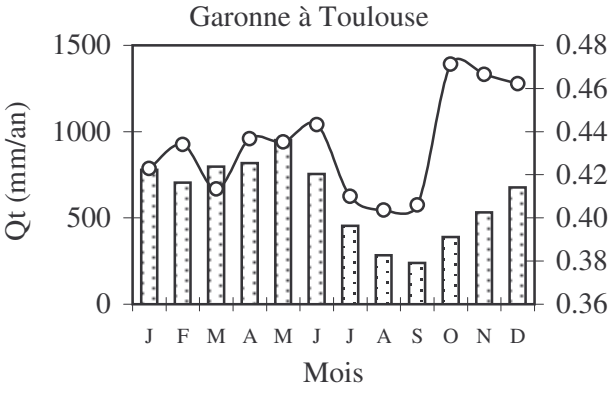
Paramètre représenté : CO_2 carb / CO_2 tot

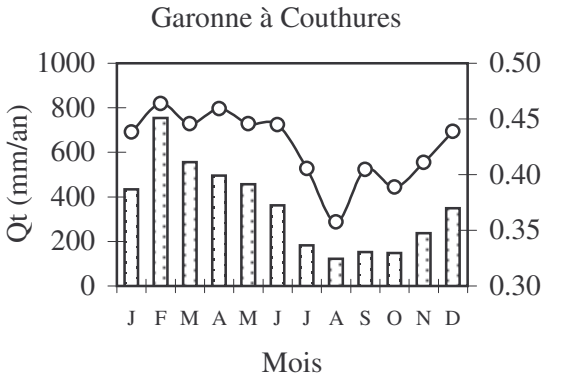


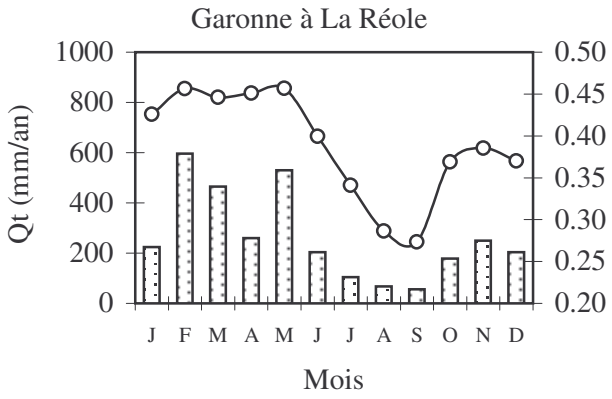


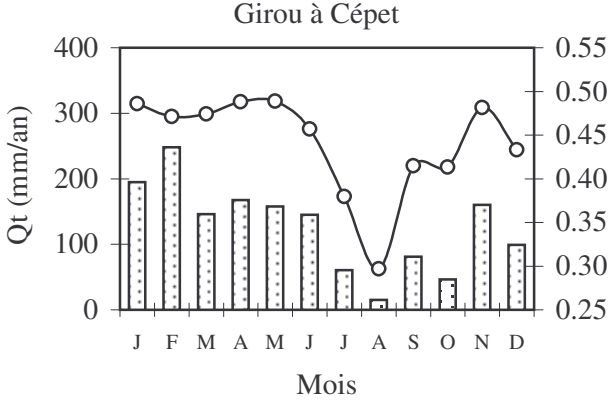


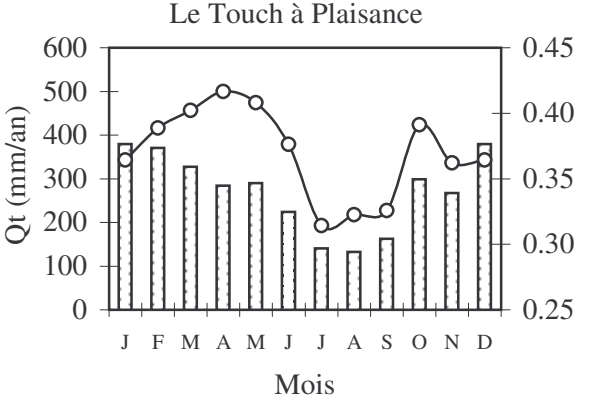












Paramètre représenté : F CO_2 cons ($T.km^{-2}.an^{-1}$)

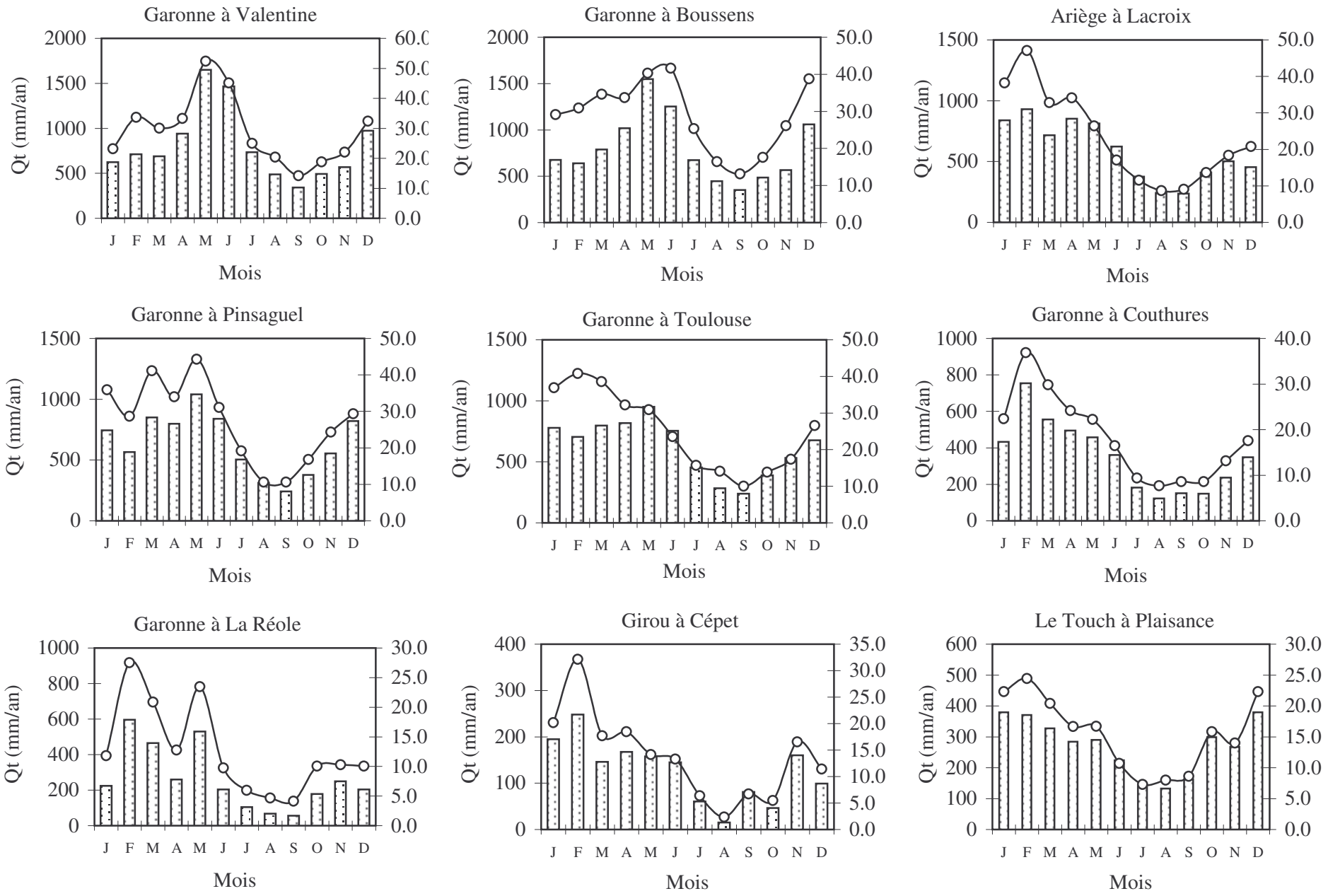
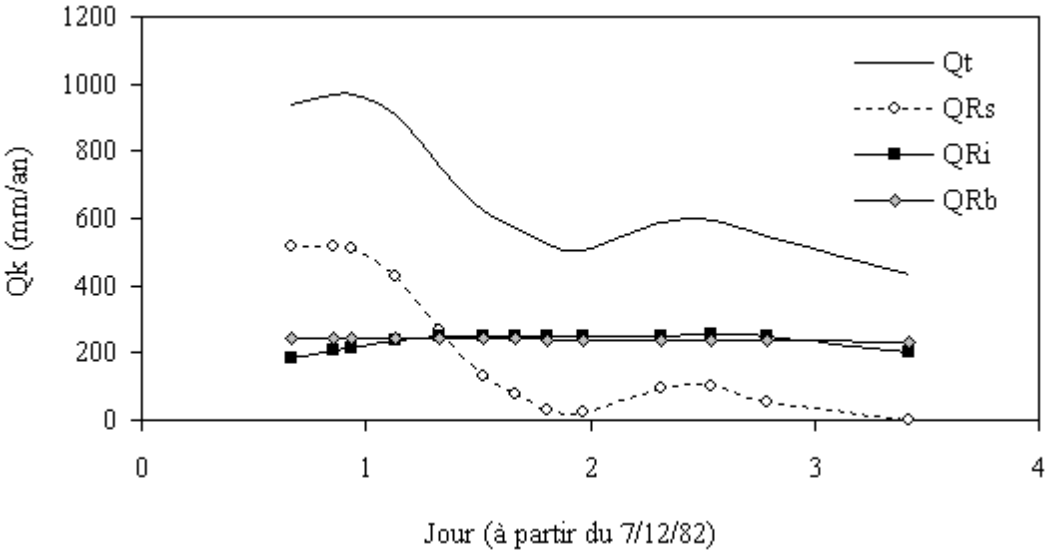
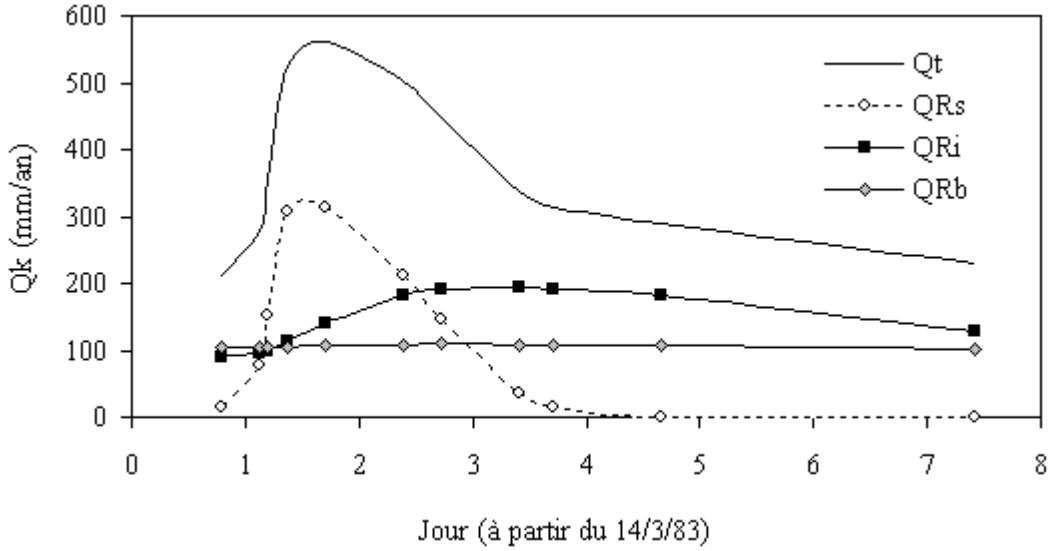


Figure A10 : Girou





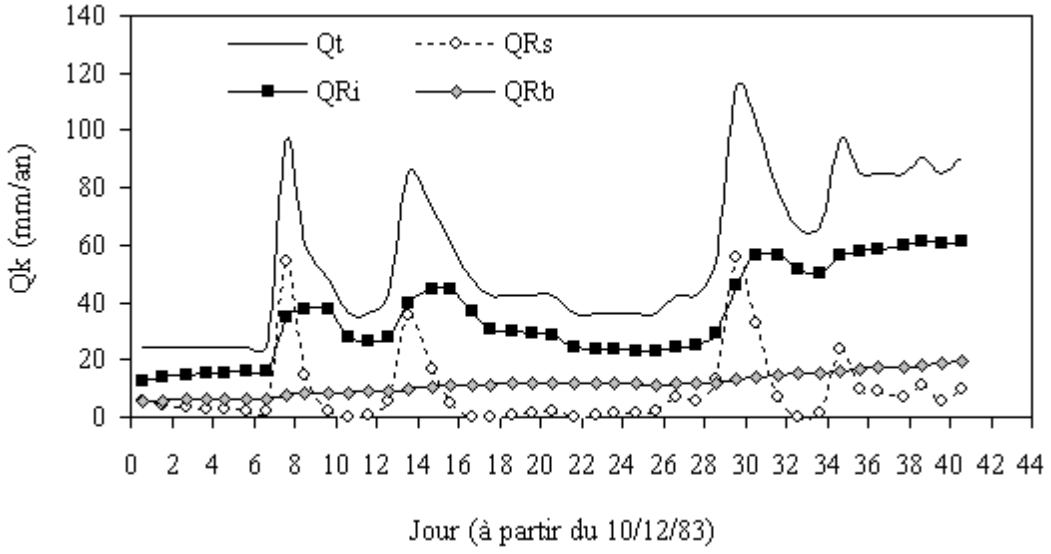
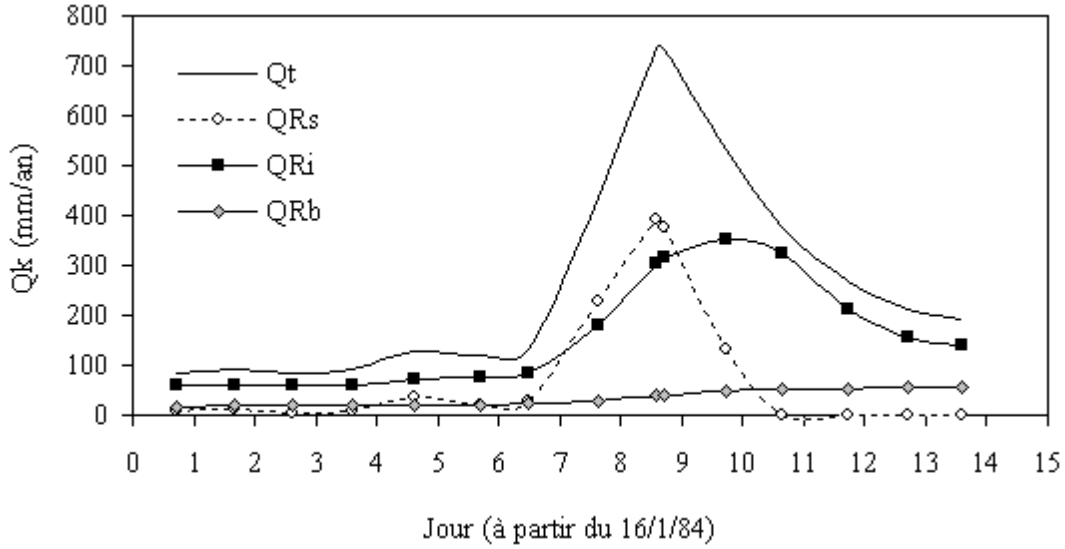
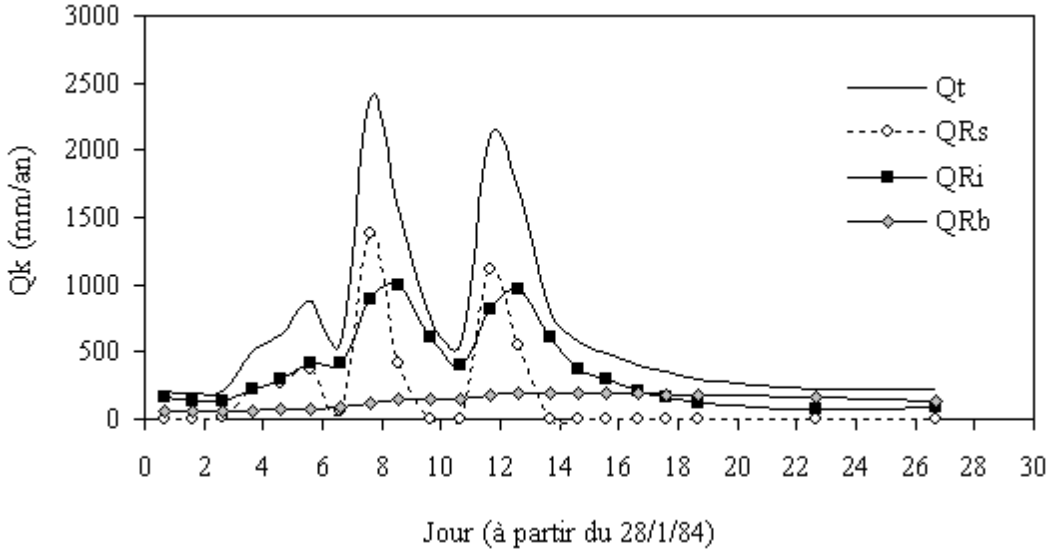


Figure A10 : Girou





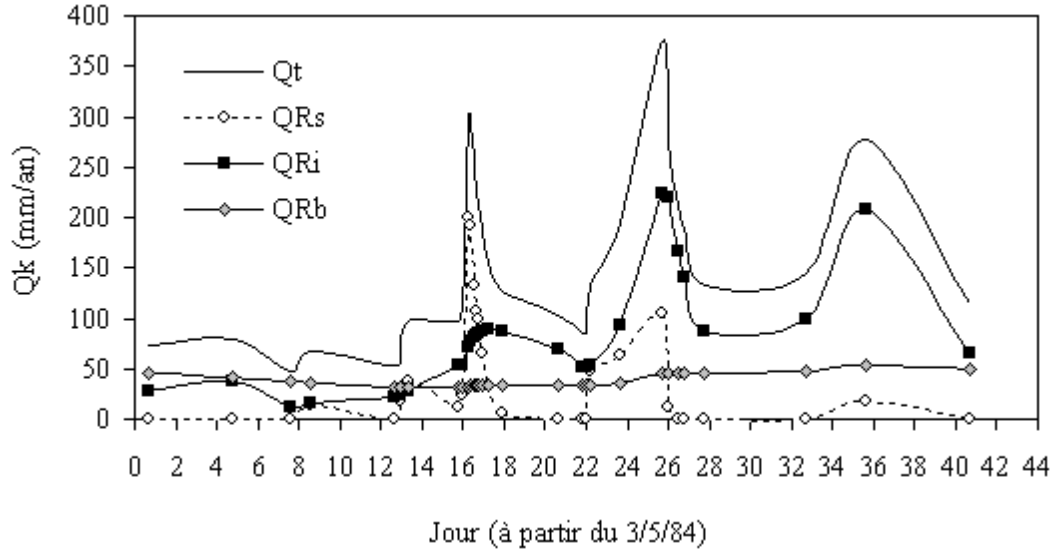


Figure A10: Girou

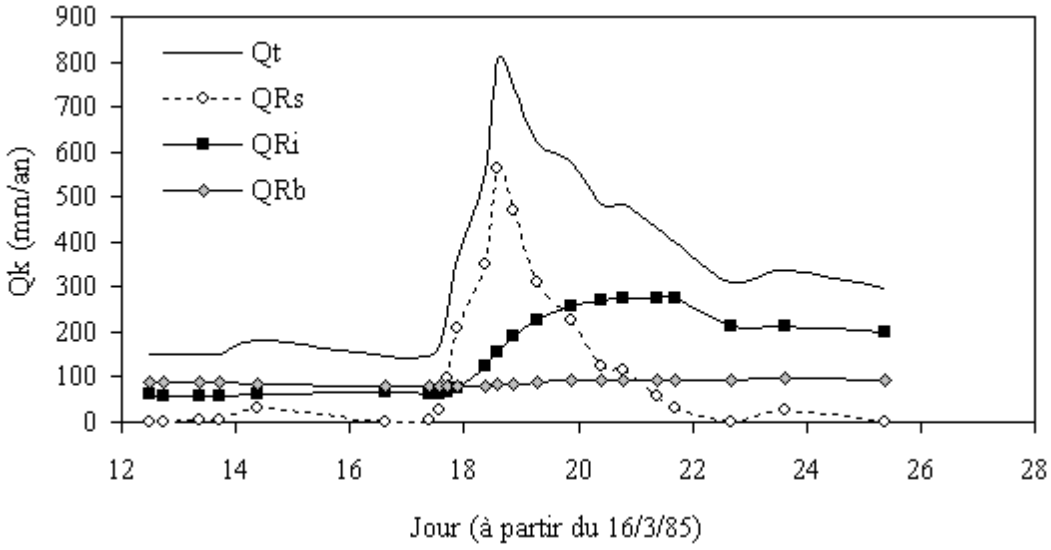
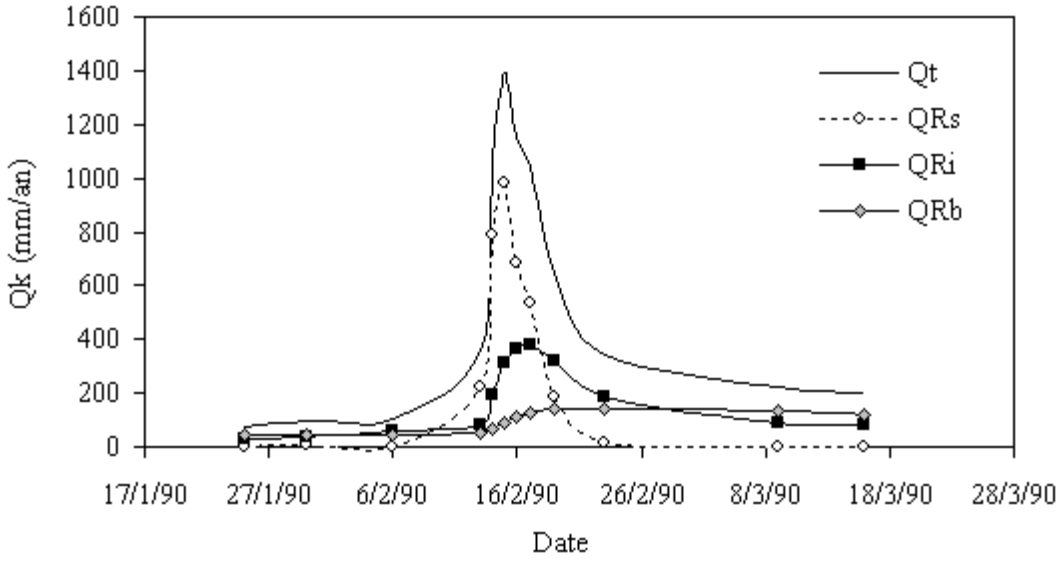
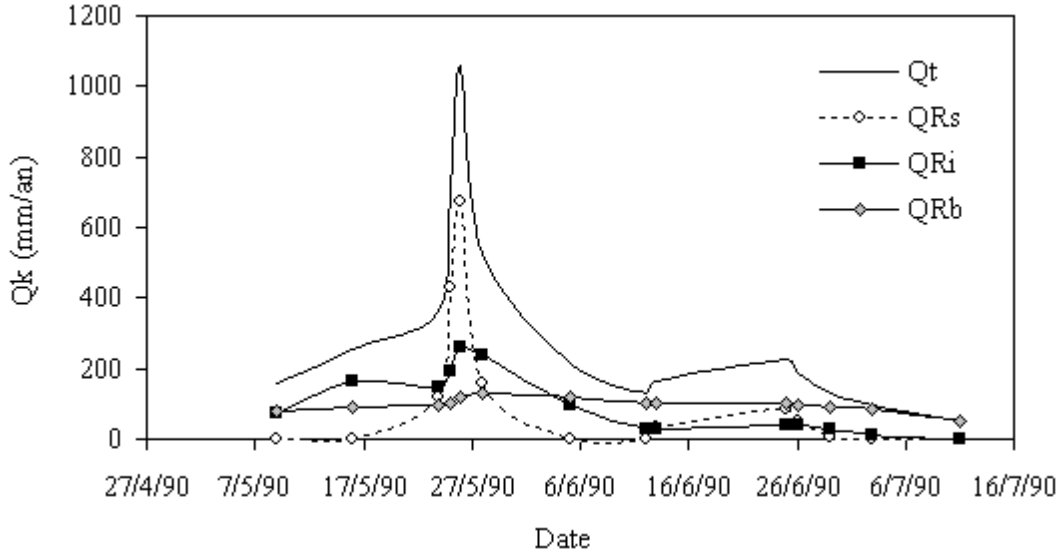


Figure A10: Garonne aval





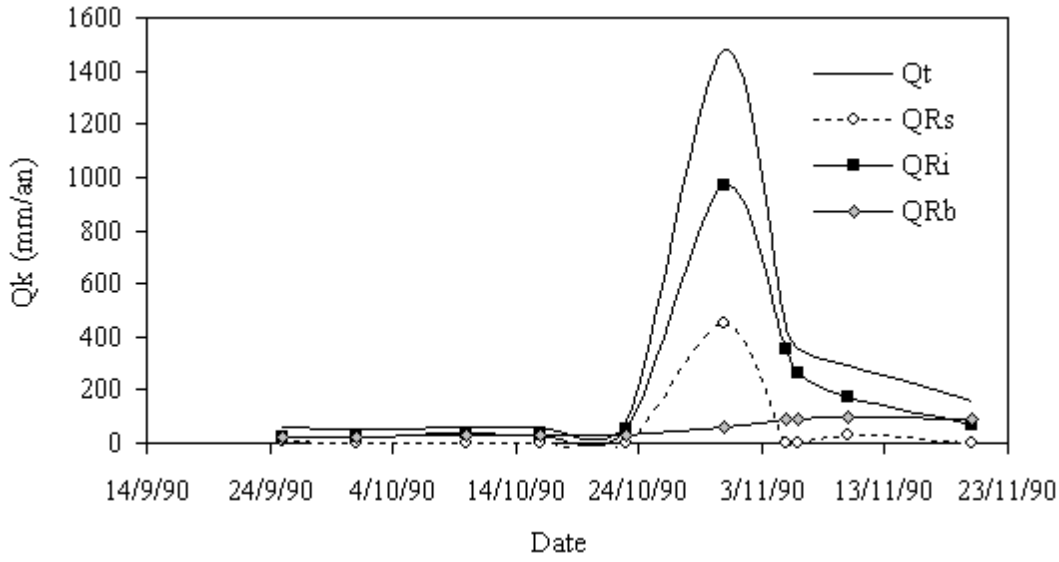
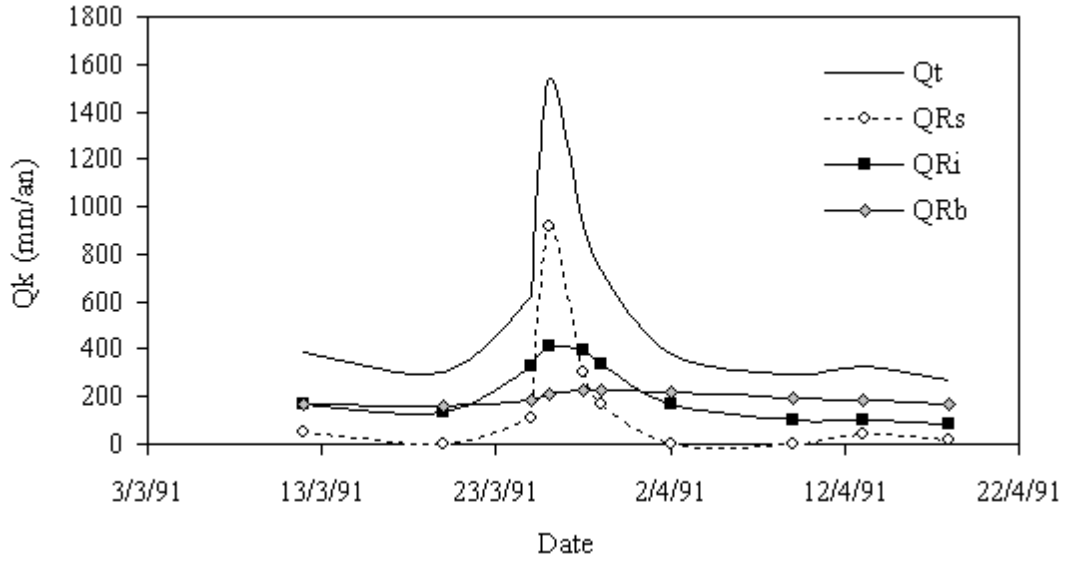
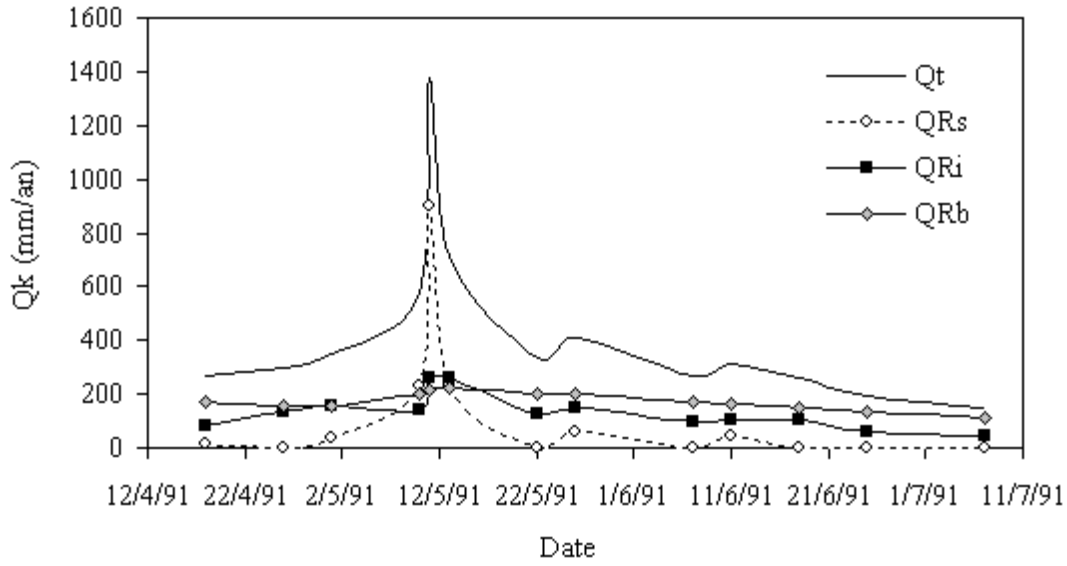


Figure A10 : Garonne aval





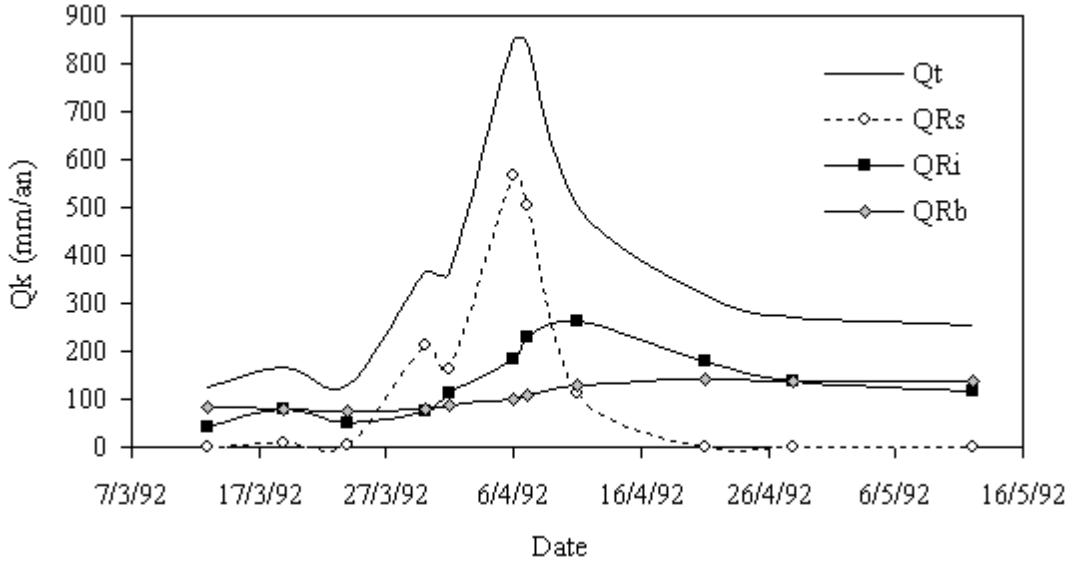


Figure A10 : Garonne aval

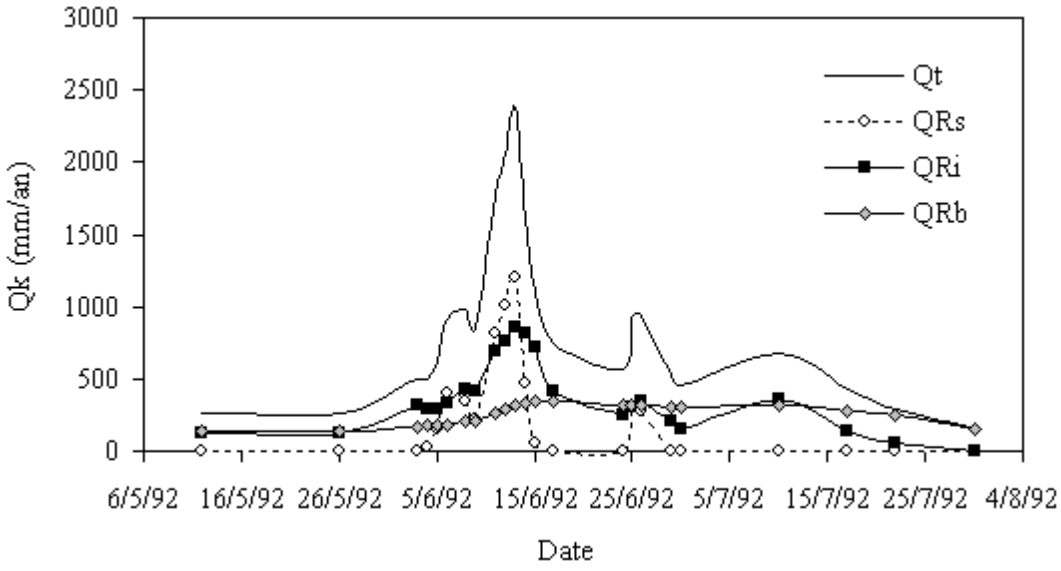
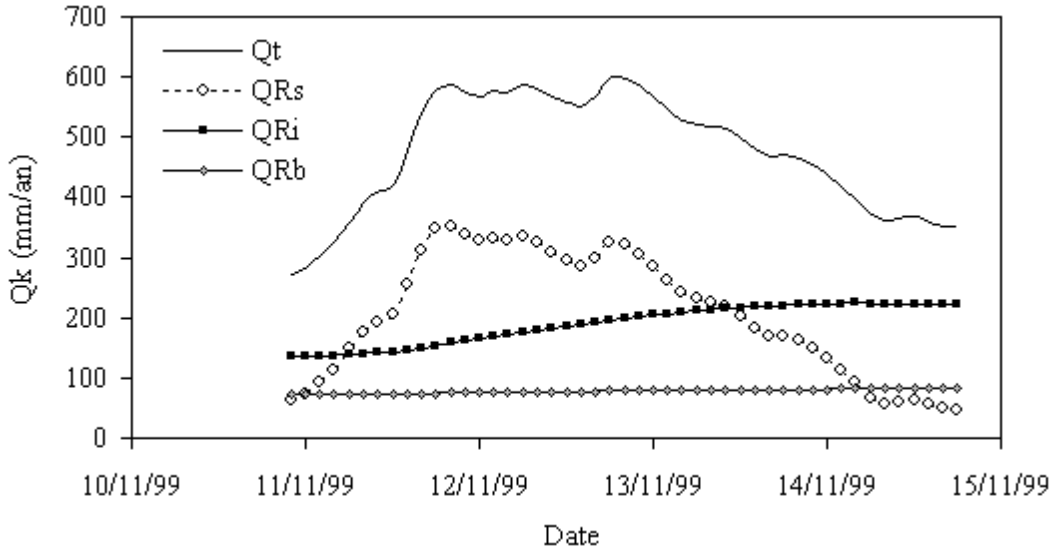
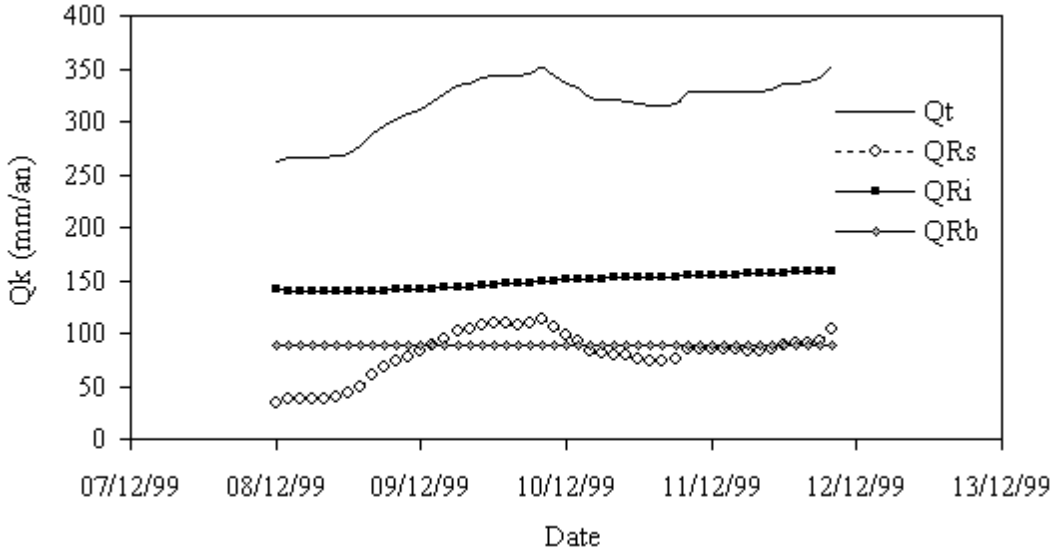


Figure A10 : Garonne amont





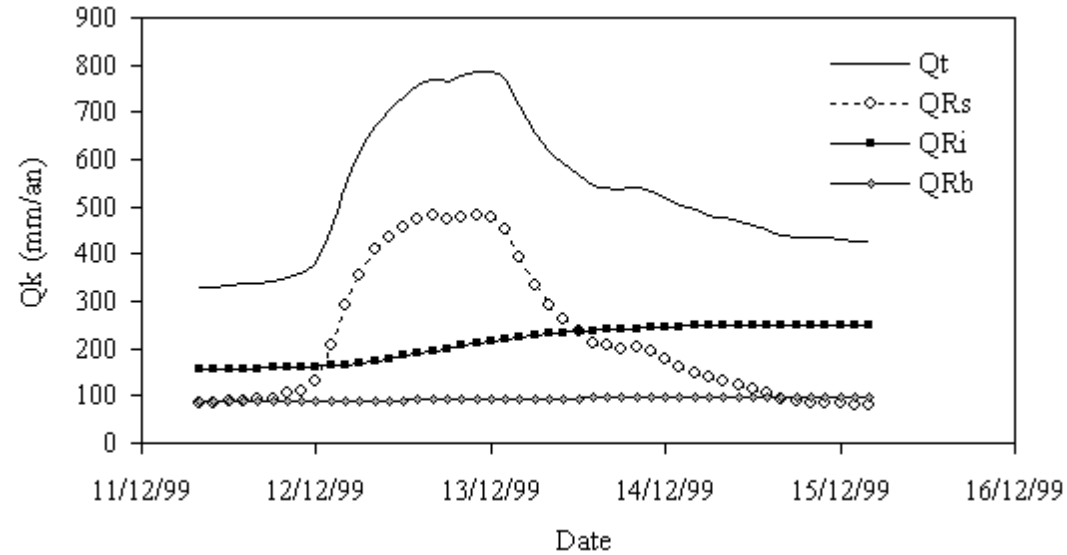
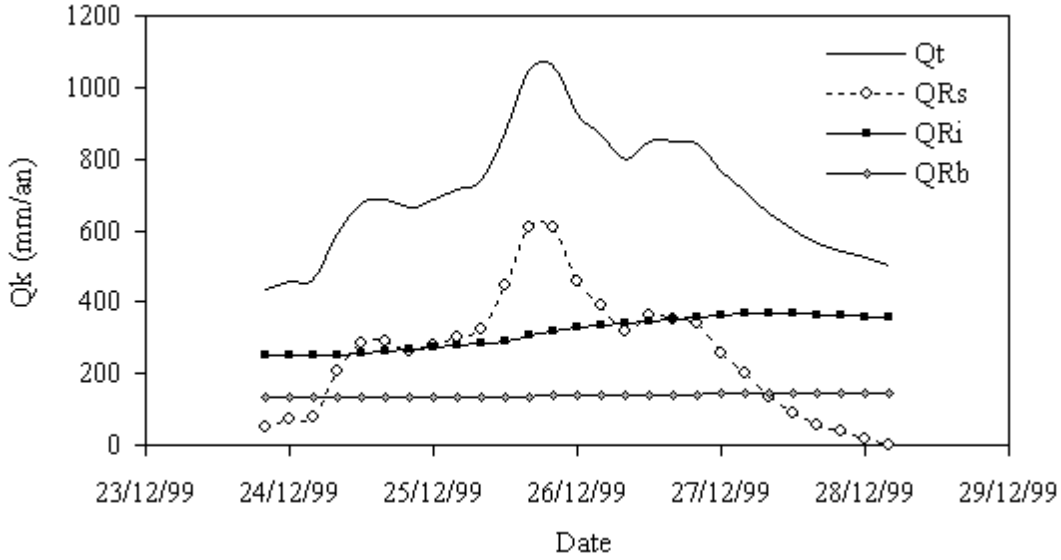


Figure A10 : Garonne amont



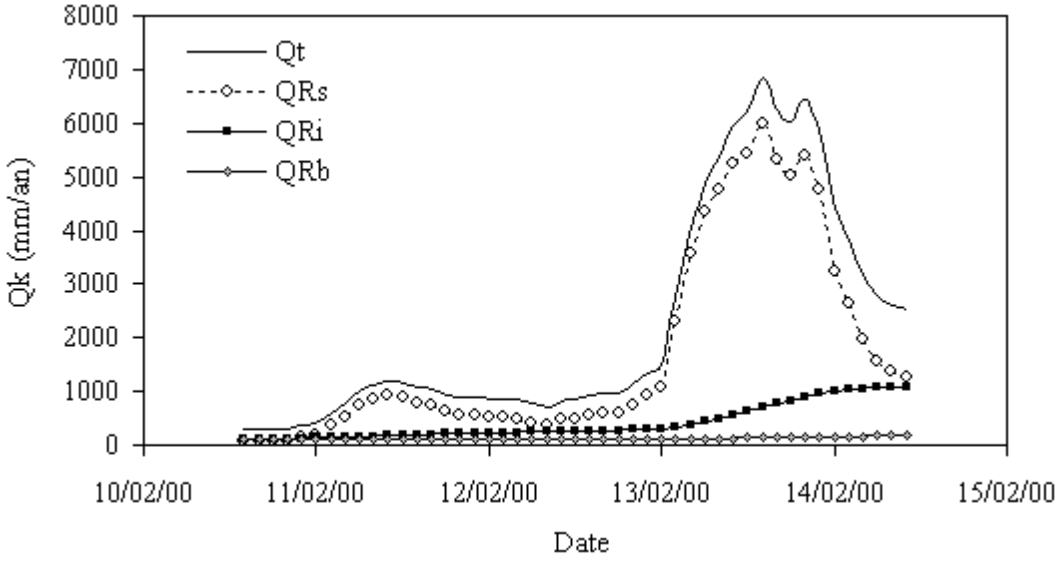
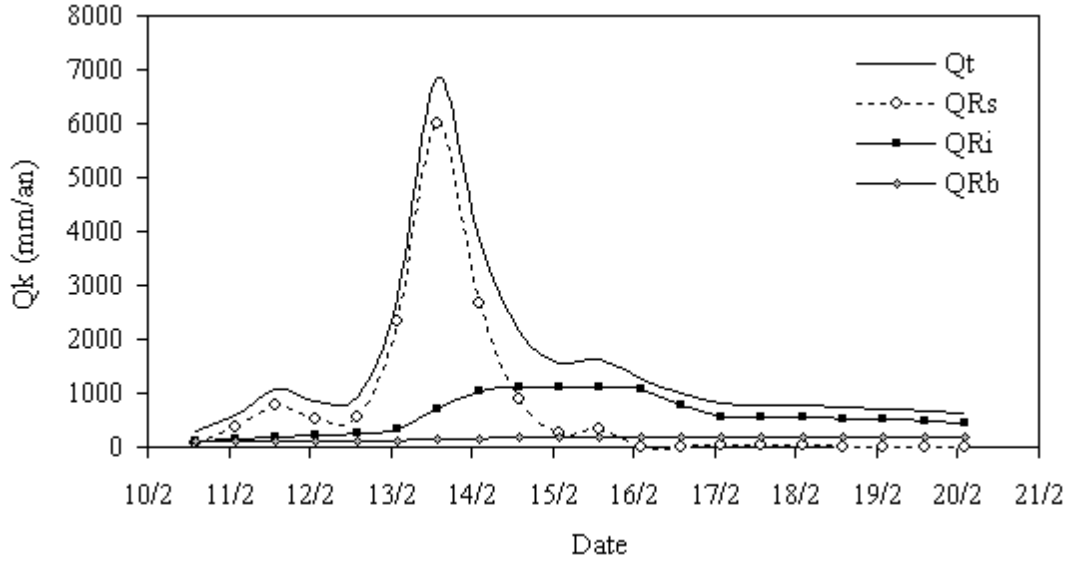
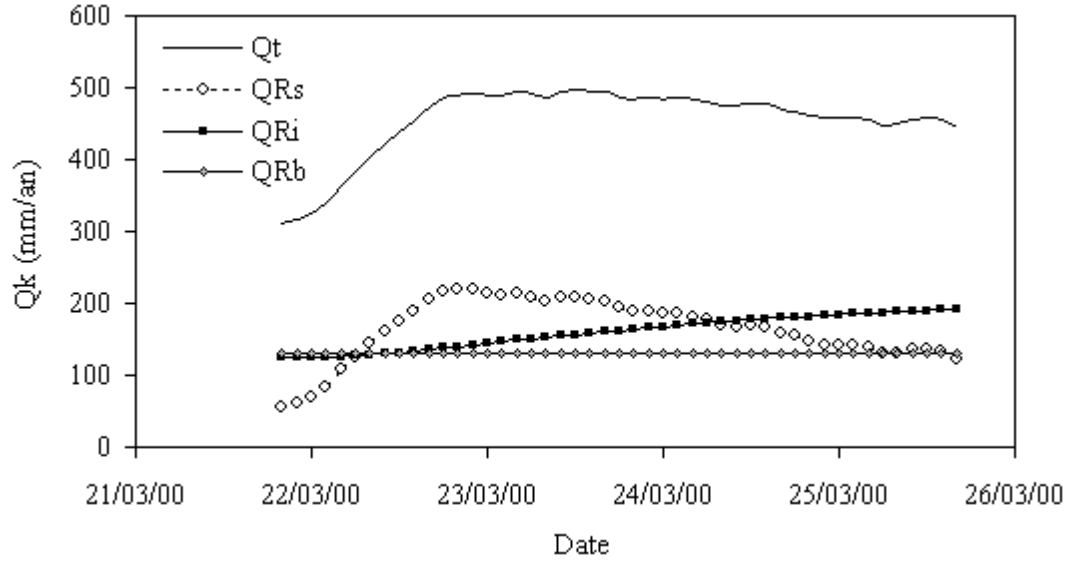


Figure A10 : Garonne amont





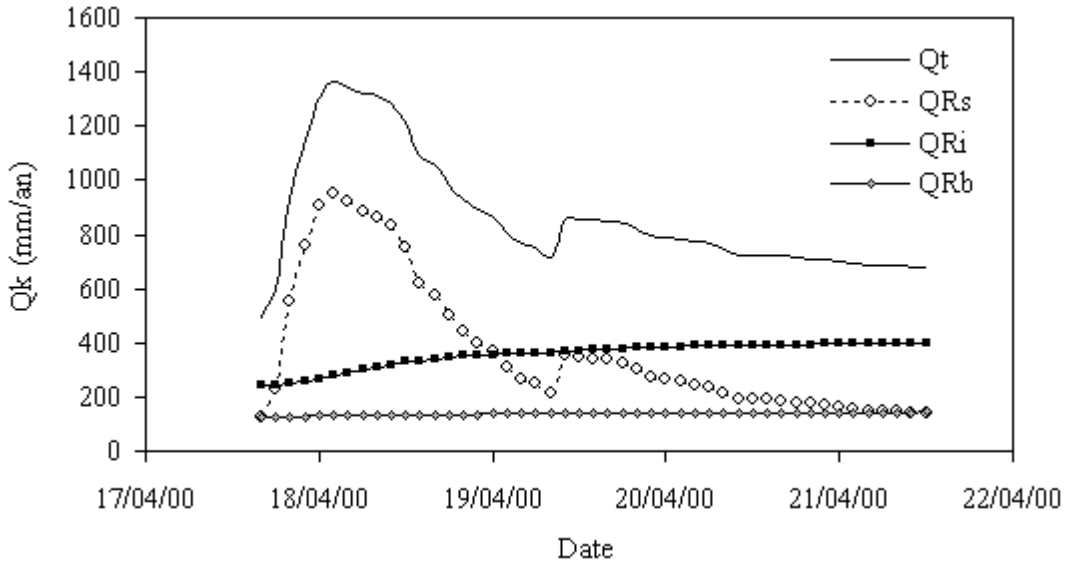
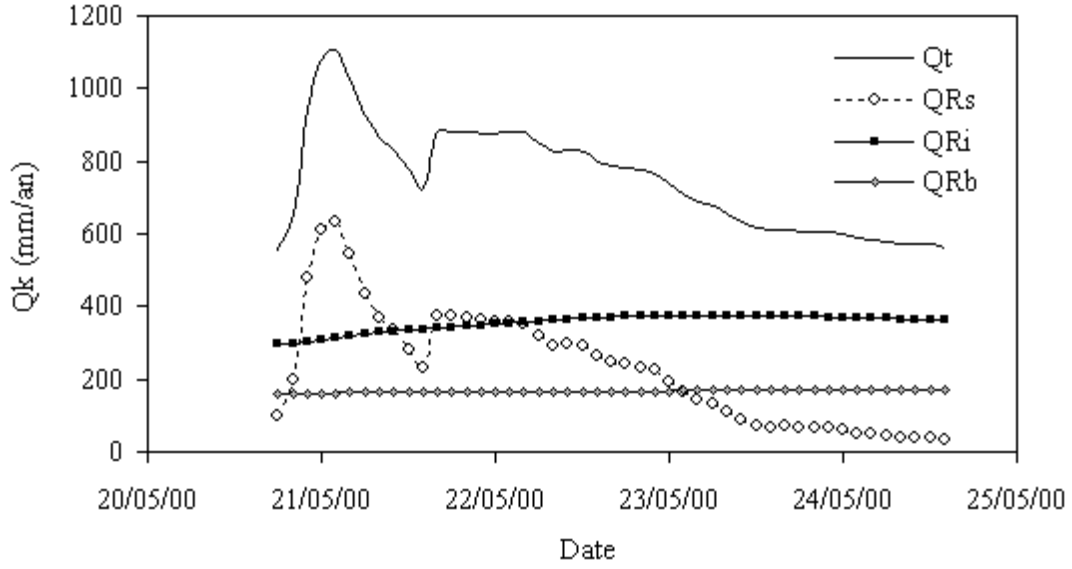
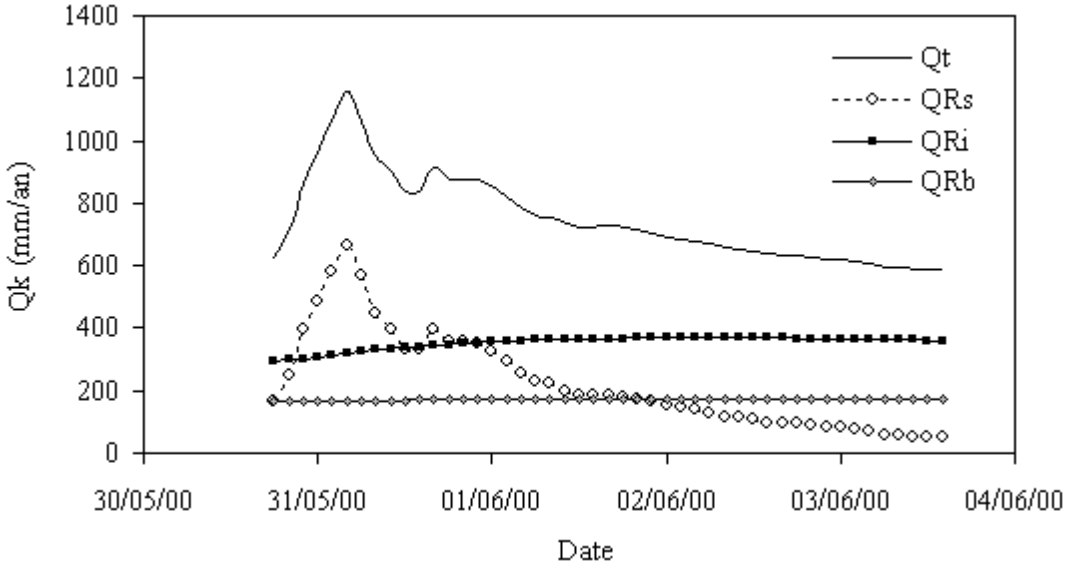


Figure A10 : Garonne amont





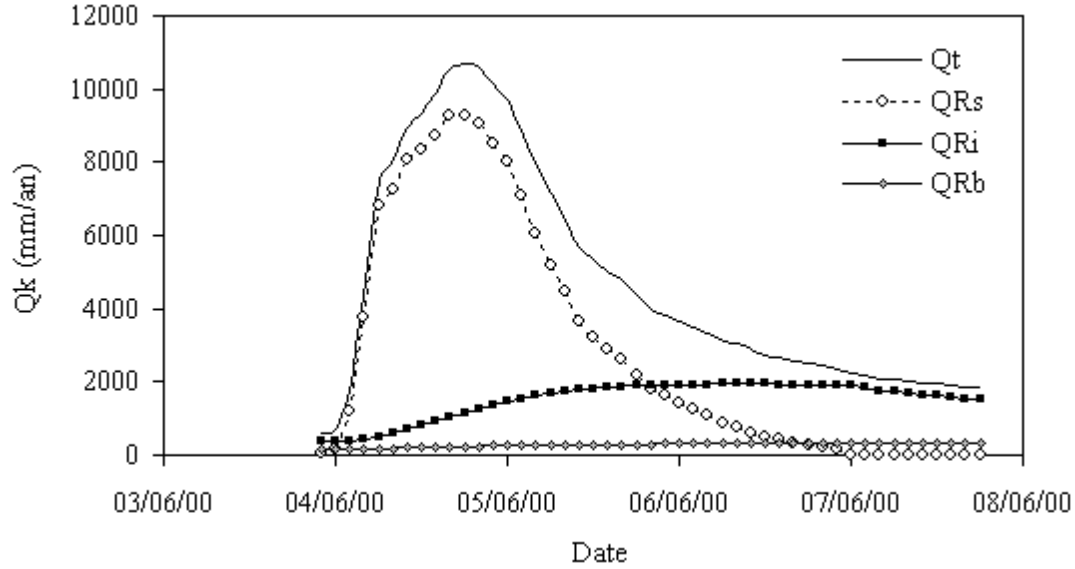


Tableau A13 : Garonne

	Mois												
Année	1	2	3	4	5	6	7	8	9	10	11	12	M
1914	250	458	1226	868	473	482	299	367	216	213	482	510	487
1915	1432	1123	631	740	789	686	254	141	102	216	586	510	601
1916	310	971	880	746	461	260	288	147	164	173	355	807	464
1917	473	458	722	573	771	486	261	144	129	169	434	401	418
1918	479	197	214	825	1080	340	189	101	98	185	267	777	396
1919	898	1068	935	813	534	340	222	118	117	213	470	746	540
1920	874	370	649	537	334	189	198	101	154	583	537	531	421
1921	340	510	238	316	583	340	130	183	131	87	101	198	263
1922	325	722	440	1487	929	482	189	101	151	133	343	175	456
1923	425	795	989	995	449	272	178	89	97	89	266	1026	472
1924	1026	379	334	513	349	208	118	129	102	137	210	223	311
1925	131	201	284	680	522	303	187	104	86	92	237	226	254
1926	543	692	245	674	965	464	194	94	107	96	364	240	390
1927	425	257	1341	655	449	275	218	151	264	179	285	668	431
1928	674	813	904	886	637	334	162	90	90	121	573	455	478
1929	358	273	237	176	425	273	107	101	129	212	464	492	271
1930	971	783	1457	801	777	513	276	186	138	367	473	698	620
1931	947	1068	1293	434	546	300	179	165	230	235	531	434	530
1932	355	269	364	625	807	795	740	281	223	355	296	886	500
1933	298	498	661	343	316	340	238	120	110	470	476	379	354
1934	343	155	825	746	555	243	130	121	123	101	226	722	358
1935	637	577	1226	680	492	340	151	113	134	185	498	1578	551
1936	1020	1159	734	765	680	516	255	141	121	132	163	175	488
1937	215	1038	995	862	482	286	179	94	90	322	313	904	482
1938	598	631	232	161	244	231	126	97	187	239	273	461	290
1939	874	498	580	661	583	385	254	158	128	147	358	558	432
1940	279	549	343	449	1117	595	316	143	138	275	282	807	441
1941	795	1390	777	437	492	734	242	167	148	164	413	306	505
1942	525	637	552	434	388	205	122	92	103	112	167	118	288
1943	391	352	237	215	214	132	88	76	91	229	358	655	253
1944	229	291	225	458	211	127	104	83	100	306	722	1183	337
1945	643	746	251	210	155	123	82	67	74	59	84	268	230
1946	173	232	254	217	283	265	102	53	63	64	78	198	165
1947	337	379	504	382	222	138	73	50	77	101	134	263	222
1948	649	407	162	177	449	325	110	91	110	75	76	81	226
1949	83	57	101	86	152	133	50	27	31	42	279	322	113
1950	183	567	325	422	288	158	52	31	47	50	230	385	228
1951	661	831	1135	504	661	771	207	119	96	118	340	254	475
1952	759	977	464	361	269	158	81	53	52	114	489	910	391
1953	373	343	187	170	161	161	137	58	63	146	170	504	206
1954	240	637	686	404	589	250	143	130	147	136	158	552	339
1955	1608	1038	294	174	129	140	89	61	88	115	116	265	343
1956	401	292	310	293	404	310	175	103	171	144	177	172	246
1957	237	674	343	510	361	783	175	78	84	80	118	122	297

Tableau A13 : Garonne

	Mois												
Année	1	2	3	4	5	6	7	8	9	10	11	12	M
1958	278	229	661	625	266	163	169	71	67	120	169	446	272
1959	583	361	297	619	589	313	147	89	198	159	266	1402	419
1960	922	507	722	346	198	149	113	104	115	537	604	668	415
1961	1177	910	282	242	242	241	121	83	64	158	222	464	350
1962	492	367	340	789	346	277	117	73	73	79	361	492	317
1963	495	586	577	837	313	470	212	195	398	223	382	437	427
1964	198	328	686	668	419	273	99	68	76	172	177	203	280
1965	519	277	501	413	473	306	137	81	217	316	519	1748	459
1966	1359	898	443	434	759	300	151	105	89	217	388	1147	524
1967	819	531	473	255	251	205	137	85	113	124	175	204	281
1968	625	458	328	331	473	455	163	126	161	159	283	564	344
1969	668	543	1032	674	856	352	205	132	263	281	276	589	489
1970	595	1262	704	686	655	440	172	99	71	121	129	123	421
1971	370	1013	680	777	613	674	256	129	121	104	157	246	428
1972	734	1159	631	631	507	413	235	140	184	138	173	241	432
1973	337	613	382	232	316	254	128	81	66	164	134	495	267
1974	401	837	795	686	464	281	160	115	302	489	704	619	488
1975	625	583	510	537	434	394	187	108	178	154	259	328	358
1976	185	401	310	358	367	155	93	51	92	467	710	916	342
1977	501	837	449	419	941	601	564	361	222	232	223	303	471
1978	507	1287	898	868	892	504	306	138	127	117	100	158	492
M	557	621	577	537	495	345	184	116	131	189	314	522	382

Tableau A13 : Amazone à Obidos

	Mois												
Année	1	2	3	4	5	6	7	8	9	10	11	12	M
1911				1022	1026	946	869	763	633	533	470	427	
1912	435	425	448	455	506	579	603	587	504	448	518	549	505
1913	673	869	1038	1178	1167	1230	1184	1074	911	742	692	666	952
1914	737	839	979	1090	1111	1070	981	836	723	615	618	647	854
1915	748	831	873	856	888	856	815	740	663	578	540	573	747
1916	633	700	851	931	1011	1004	954	837	696	566	514	529	769
1917	608	731	855	1016	1154	1218	1202	1104	977	859	784	753	938
1918	803	921	1020	1062	1047	995	868	718	591	490	451	507	789
1919	583	705	821	884	894	843	749	649	578	517	559	614	700
1920	700	813	936	1063	1172	1219	1156	1126	1048	909	807	741	974
1921	787	921	1096	1247	1372	1395	1285	1124	954	838	767	865	1054
1922	1002	1206	1295	1370	1301	1224	1071	905	743	636	595	674	1002
1923	721	910	1134	1236	1328	1276	1147	967	770	650	570	568	940
1924	653	775	890	994	1050	1108	1150	1097	987	816	777	780	923
1925	795	902	969	1078	1153	1206	1139	993	819	674	602	574	909
1926	581	694	770	892	908	946	904	808	711	662	652	817	779
1927	963	1107	1251	1433	1486	1537	1465	1328	1181	1020	963	1049	1232
1928	747	929	1219	1387	1461	1441	1333	1138	788	574	576	607	1017
1929	700	862	956	1226	1407	1448	1340	1158	923	612	539	632	984
1930	768	970	1152	1306	1374	1354	1293	1172	929	680	605	605	1017
1931	630	741	896	1098	1279	1354	1306	1172	657	549	582	633	908
1932	801	1091	1266	1380	1421	1401	1320	1145	882	630	578	626	1045
1933	747	943	1118	1273	1401	1394	1347	1131	721	512	542	613	978
1934	741	983	1226	1360	1481	1455	1414	1232	1003	801	795	869	1113
1935	963	1077	1212	1367	1488	1455	1327	1125	869	613	525	539	1047
1936	707	956	1091	1185	1300	1219	1091	909	620	586	552	552	897
1937	646	889	1064	1212	1286	1300	1219	1051	734	572	545	512	919
1938	586	835	1071	1259	1394	1401	1320	1199	936	613	593	660	989
1939	822	1030	1158	1293	1428	1455	1401	1286	1104	929	781	747	1120
1940	896	1024	1077	1178	1286	1306	1246	1104	916	741	747	714	1020
1941	869	1030	1178	1306	1354	1313	1259	1084	801	552	586	606	995
1942	781	929	1118	1259	1333	1360	1327	1138	822	593	593	620	989
1943	653	875	1104	1320	1421	1401	1360	1253	1003	646	559	667	1022
1944	795	997	1205	1380	1502	1495	1428	1279	1017	707	599	626	1086
1945	754	842	1051	1239	1380	1380	1239	956	700	552	559	667	943
1946	902	1125	1259	1380	1461	1455	1354	1199	970	687	589	633	1084
1947	761	970	1138	1192	1266	1306	1273	1152	976	640	589	754	1001
1948	857	1001	1194	1324	1357	1334	1233	1080	874	730	646	631	1022
1949	649	764	883	1050	1176	1268	1198	1047	850	712	593	602	899
1950	635	837	989	1200	1338	1377	1310	1148	968	776	730	719	1002
1951	814	993	1141	1246	1379	1457	1480	1392	1199	1033	938	938	1167
1952	1002	1122	1361	1533	1667	1705	1615	1390	1157	965	882	827	1269
1953	987	1113	1291	1398	1395	1355	1162	1012	857	735	665	706	1056
1954	776	930	1065	1167	1234	1164	1033	867	720	644	588	670	905

Tableau A13 : Amazone à Obidos

	Mois												
Année	1	2	3	4	5	6	7	8	9	10	11	12	M
1955	808	961	1142	1325	1390	1410	1290	1137	937	796	743	762	1058
1956	862	995	1109	1162	1203	1179	1103	957	839	713	673	758	963
1957	828	1022	1176	1232	1282	1209	1088	886	730	579	535	586	929
1958	621	785	953	1029	1117	1096	1013	849	711	608	586	594	830
1959	706	847	958	1035	1067	1021	942	807	669	596	477	472	800
1960	464	506	562	595	786	891	946	888	826	760	793	886	742
1961	1051	1184	1353	1448	1487	1507	1424	1250	1024	831	780	807	1179
1962	962	1175	1422	1583	1624	1587	1459	1251	1042	831	713	689	1195
1963	689	779	890	993	1081	1135	1107	995	826	709	622	647	873
1964	715	863	915	1063	1182	1277	1261	1125	990	869	829	830	993
1965	955	1133	1213	1397	1490	1545	1414	1200	978	758	674	653	1117
1966	683	780	906	1012	1069	1173	1218	1182	1055	1001	889	931	992
1967	997	1183	1341	1464	1629	1671	1571	1333	1053	828	642	603	1193
1968	594	822	928	1266	1447	1637	1604	1513	1262	1174	1046	1048	1195
1969	1071	1159	1044	1185	1374	1367	1232	1064	916	835	768	768	1065
1970	727	916	1131	1300	1428	1434	1367	1239	1024	795	626	613	1050
1971	741	1003	1239	1455	1562	1589	1535	1394	1172	882	768	815	1180
1972	842	1111	1340	1441	1535	1542	1468	1313	1104	862	694	741	1166
1973	768	869	1044	1226	1428	1515	1461	1340	1131	909	727	768	1099
1974	896	1118	1313	1481	1589	1582	1488	1327	1098	842	727	727	1182
1975	862	1077	1279	1488	1623	1657	1569	1421	1192	869	599	593	1186
1976	923	1165	1273	1468	1596	1603	1562	1414	1192	714	485	626	1168
1977	842	916	1084	1286	1455	1522	1488	1367	1104	808	815	923	1134
1978	1091	1165	1199	1327	1461	1448	1448	1333	1057	721	687	768	1142
1979	1017	1111	1199	1360	1495	1508	1394	1158	848	613	606	660	1081
1980	822	936	990	1111	1199	1219	1165	990	727	593	687	761	933
1981	842	983	1118	1259	1300	1286	1239	1118	848	613	572	653	986
1982	916	1165	1313	1441	1576	1576	1468	1273	1010	727	646	761	1156
1983	923	1017	1057	1165	1226	1239	1131	875	653	572	586	680	927
1984	896	1084	1253	1374	1468	1448	1387	1259	1044	774	700	774	1122
1985	1003	1192	1205	1219	1286	1313	1259	1145	997	795	721	727	1072
M	791	949	1090	1220	1311	1322	1252	1105	901	719	658	692	1001

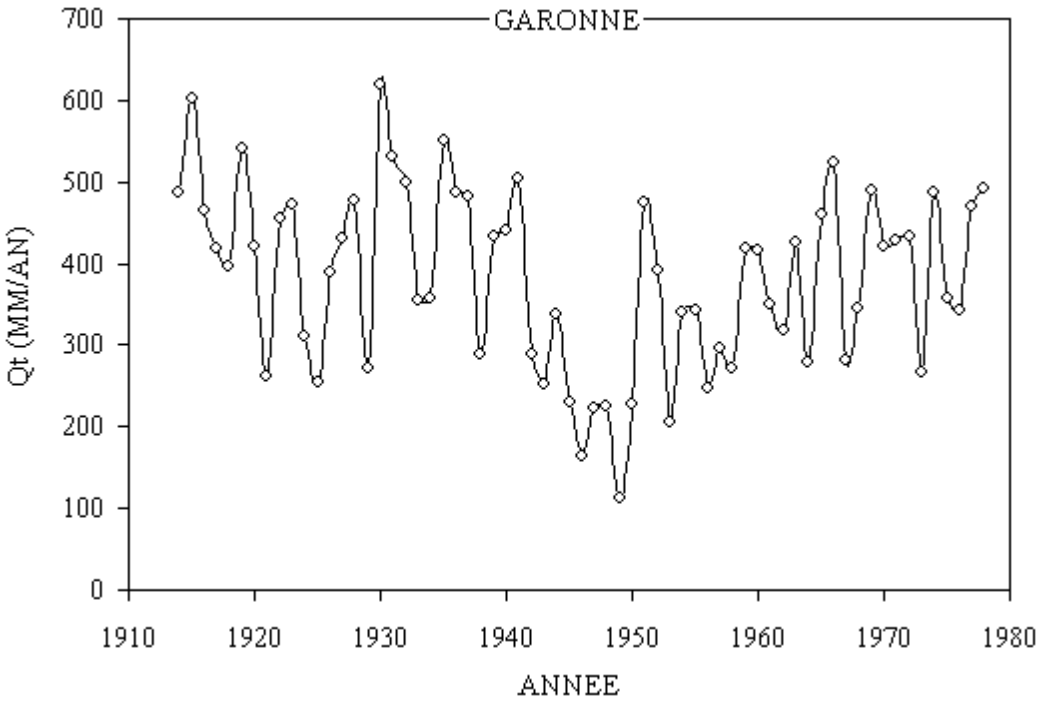
Tableau A13 : Niger

	Mois												
Année	1	2	3	4	5	6	7	8	9	10	11	12	M
1907	88	39	21	13	14	71	222	510	1010	829	535	248	300
1908	91	41	19	10	10	53	178	619	1103	1088	450	213	323
1909	81	42	24	16	48	242	516	1310	1682	1213	723	306	517
1910	135	49	22	14	13	50	229	815	1208	987	388	152	339
1911	64	23	13	9	14	79	324	1097	1676	1102	474	210	424
1912	94	42	22	11	8	22	253	620	1222	1249	454	180	348
1913	95	39	14	7	8	34	175	349	828	622	376	135	223
1914	52	16	12	13	23	74	160	329	979	850	316	156	248
1915	51	18	9	8	28	163	431	775	1294	1004	402	175	363
1916	89	43	18	11	13	37	386	899	1361	1112	337	127	369
1917	60	30	20	6	12	64	210	962	1583	1003	408	259	385
1918	122	60	31	32	45	244	456	1070	1229	1111	497	231	427
1919	103	49	31	13	16	159	436	868	1263	1008	389	169	375
1920	75	32	17	13	19	101	412	707	1176	847	398	167	330
1921	68	30	19	12	12	28	190	639	1077	763	335	155	277
1922	57	27	13	9	24	56	165	613	1204	1524	644	303	387
1923	123	48	23	35	25	85	373	805	1342	1137	655	273	410
1924	124	66	29	12	10	61	505	1356	1958	1884	699	290	583
1925	144	70	34	19	23	125	432	1099	1826	2275	1044	369	621
1926	180	93	39	20	16	150	589	1013	1583	1079	486	254	458
1927	119	50	21	12	24	76	425	859	1510	1668	1090	361	518
1928	164	74	31	16	33	107	350	1358	2046	2421	789	306	641
1929	161	68	42	27	31	211	629	1131	1669	1698	679	277	552
1930	138	75	39	22	23	251	490	1242	1637	1570	710	275	539
1931	147	70	33	29	85	255	461	1057	1492	1262	455	240	465
1932	146	70	35	30	43	151	477	867	1756	1273	587	263	475
1933	127	59	36	22	24	134	545	1056	1656	936	403	241	437
1934	113	52	26	17	14	37	259	968	1347	1113	553	217	393
1935	99	50	21	15	11	26	307	1072	1389	1106	402	169	389
1936	72	33	20	12	98	191	376	805	1471	1546	565	273	455
1937	116	53	29	24	25	55	235	619	1271	1070	494	181	348
1938	79	34	22	16	15	49	207	828	1416	1277	582	199	394
1939	85	36	18	11	20	70	184	606	1225	1309	544	231	362
1940	101	42	22	13	13	49	249	714	932	969	504	181	316
1941	81	37	16	9	12	59	259	647	1433	825	404	195	332
1942	88	40	18	13	32	78	206	602	1089	580	331	165	270
1943	63	28	14	12	20	44	184	579	1264	1059	402	148	318
1944	66	27	12	8	14	29	129	495	1180	754	363	145	269
1945	54	24	11	6	10	31	119	739	1219	1132	441	163	329
1946	59	27	12	12	21	78	262	804	1281	1402	658	235	404
1947	101	41	17	7	9	45	248	693	1331	1157	336	132	343
1948	49	22	13	9	14	89	446	1032	1635	1206	560	209	440
1949	99	51	28	25	22	32	169	889	1682	926	389	181	374
1950	78	38	20	12	18	34	200	674	1384	1483	640	212	399

Tableau A13 : Niger

	Mois												
Année	1	2	3	4	5	6	7	8	9	10	11	12	M
1951	102	55	36	23	57	150	428	996	1429	1445	1452	489	555
1952	207	114	56	30	26	50	329	856	1369	1474	620	249	448
1953	140	64	38	22	25	153	584	1181	1759	1376	636	293	523
1954	167	88	51	49	55	177	524	1136	1643	1371	871	453	549
1955	210	118	77	54	59	185	549	1082	1623	1587	737	337	552
1956	182	102	63	45	32	52	269	608	1280	1215	468	213	377
1957	107	50	28	16	19	88	363	1022	1717	1835	952	342	545
1958	173	102	43	37	73	226	403	596	1201	1180	602	377	418
1959	168	90	46	22	27	87	381	809	1532	1200	502	211	423
1960	101	49	24	17	23	82	386	1014	1594	1316	602	234	453
1961	102	46	22	10	20	26	264	805	1451	898	354	135	344
1962	56	25	12	9	30	57	305	895	1905	1624	757	325	500
1963	137	73	47	19	35	37	180	666	1304	1594	755	241	424
1964	100	45	20	12	12	113	331	1001	1459	1372	494	260	435
1965	141	68	37	25	23	92	494	742	1290	1235	522	190	405
1966	80	46	27	22	21	52	165	753	1242	1363	662	241	389
1967	107	51	30	16	28	38	256	900	1613	2160	819	295	526
1968	146	78	44	28	31	199	314	900	1203	1045	493	248	394
1969	115	52	31	23	17	81	499	1008	1866	1553	1179	342	564
1970	163	75	37	26	22	49	144	671	1413	792	325	170	324
1971	65	29	16	10	15	29	199	930	1479	973	312	179	353
1972	71	31	15	12	46	182	356	656	997	743	374	175	305
1973	73	31	12	5	5	39	98	742	986	602	334	113	253
1974	49	19	9	7	7	19	274	902	1514	1246	419	148	384
1975	60	27	11	9	25	62	320	866	1509	1414	484	197	415
1976	90	37	15	8	17	73	218	684	923	1253	1065	340	394
1977	161	73	29	12	11	46	163	423	890	713	283	105	242
1978	43	21	11	13	30	120	311	681	1141	1144	512	195	352
1979	94	43	16	11	16	97	413	1153	1404	931	458	189	402
M	106	50	26	17	25	92	323	842	1393	1220	561	231	407

Figure A11 (1/3)



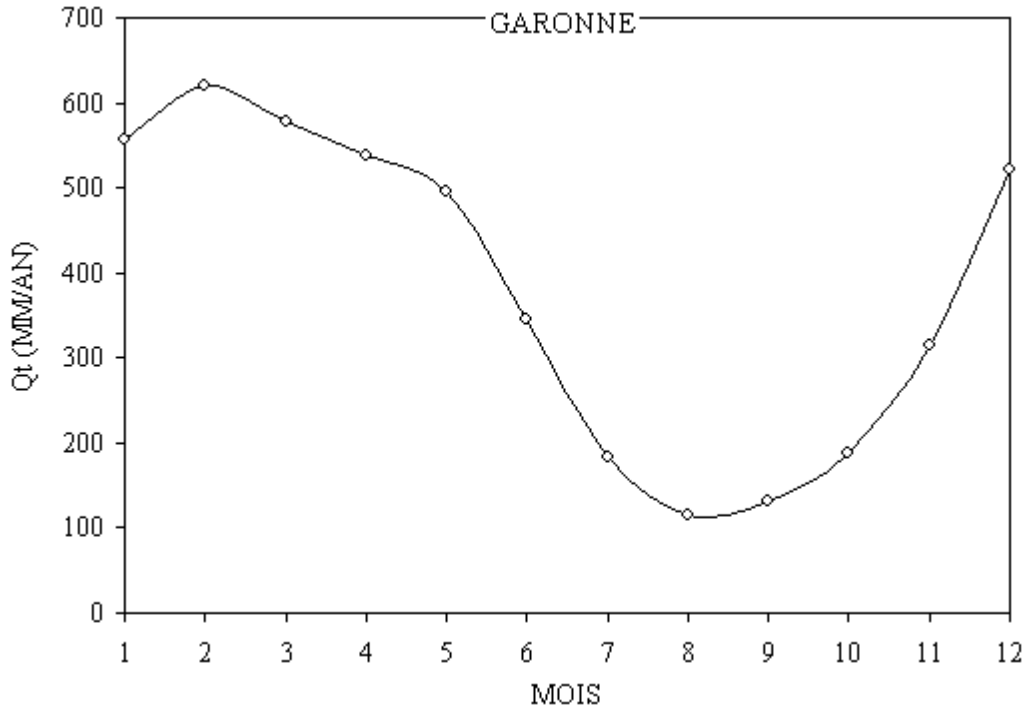


Figure A11 (2/3)

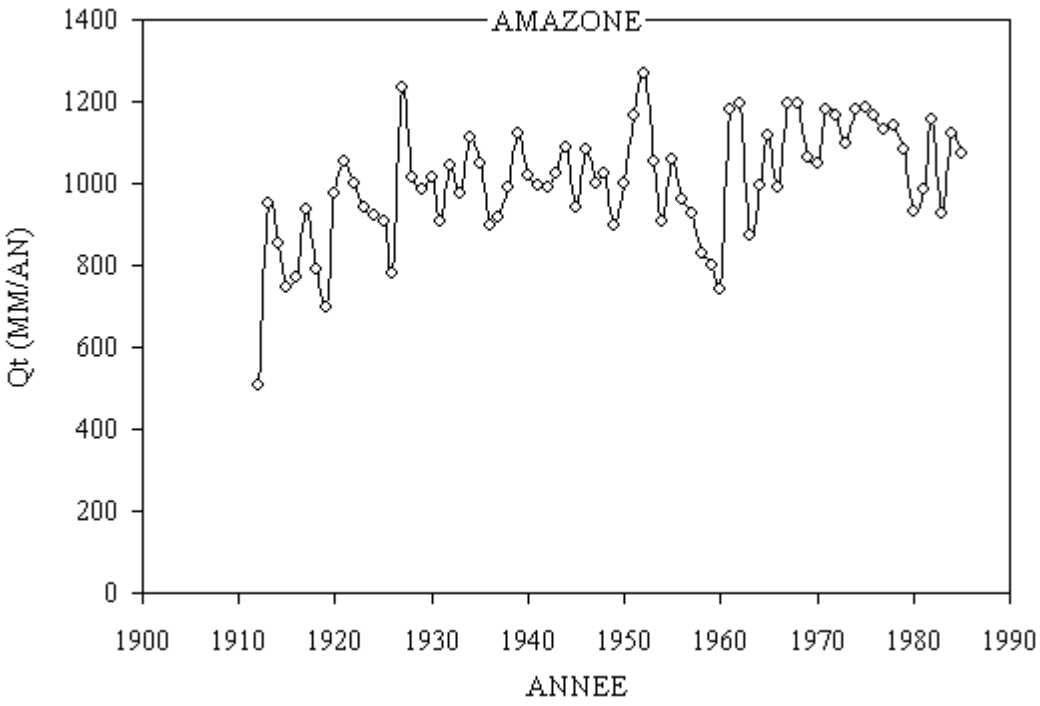


Figure A11 (3/3)