Appendix

A1. CTD profiles

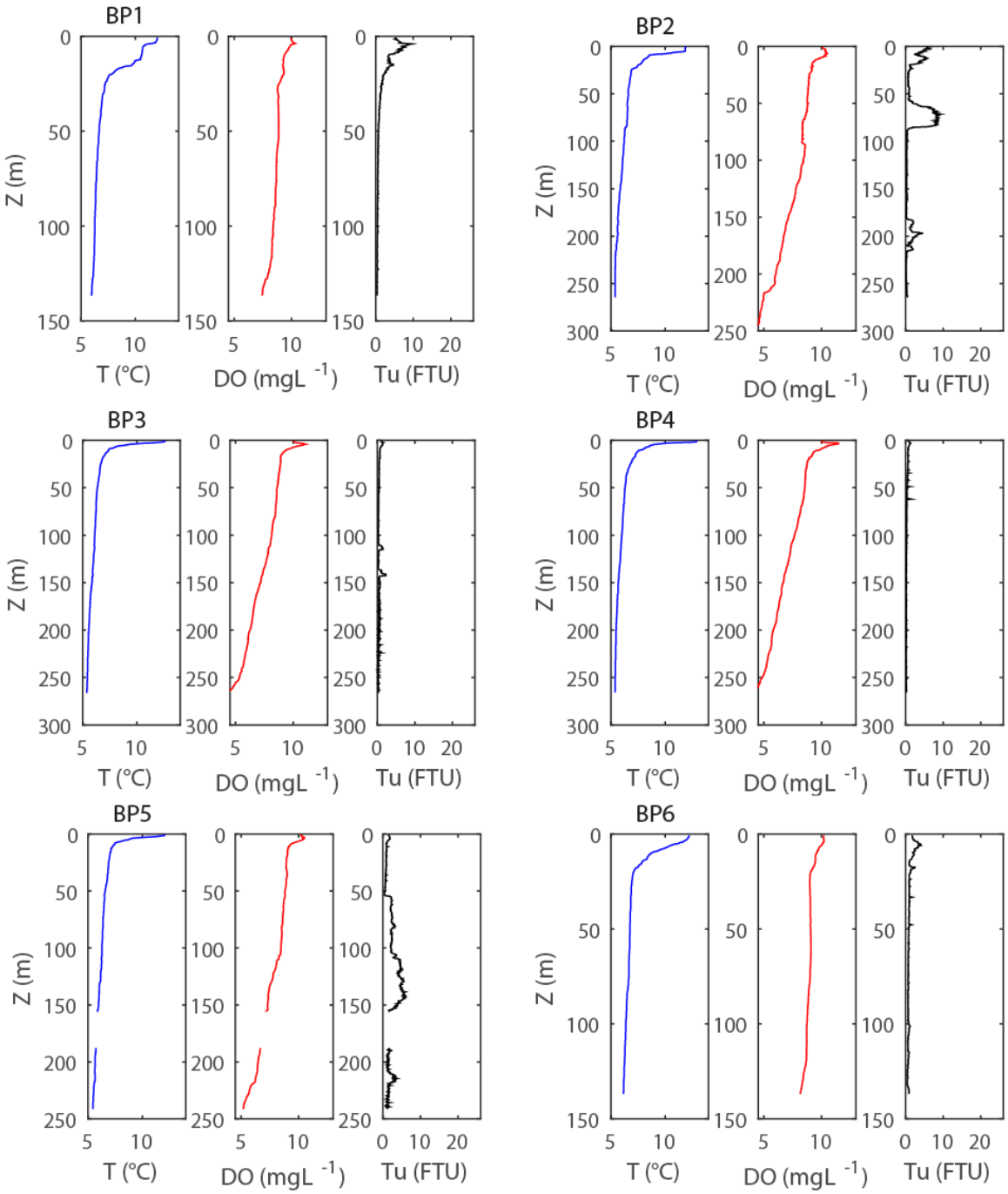
A2. CTD transect from the Rhône mouth to the lake centre. These series of CTD profiles suggest that the net O_2 effect of the Rhône intrusion is limited or null but instead efficiently homogenized the O_2 in the hypolimnetic water affected by the intrusion (reduction of the O_2 gradient close to the Rhône River). Intrusion are associated with elevated Tu signal.

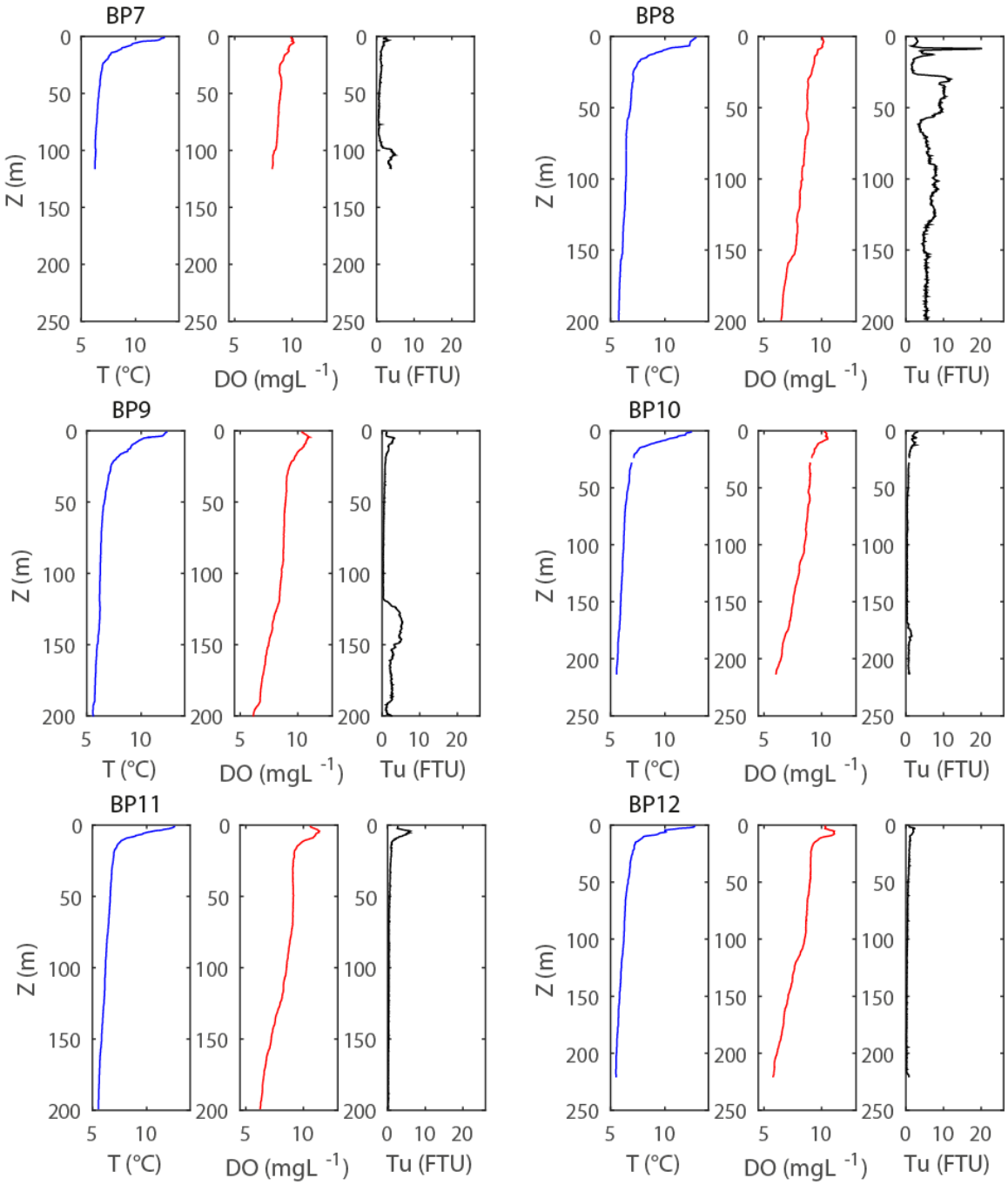
A3. Sediment rating curve of the Rhône River at La Porte-du-Scex from 1964 to 2015. Best fit Concentration [mg L^{-1}] = aQ^b, with Q = discharge [m^3 s^{-1}], yields a = 5.7 x 10^{-4} (3.1 x 10^{-4}, 8.3 x 10^{-4}) and b = 2.365 (2.29, 2.441) with the 95% confidence interval in parenthesis.

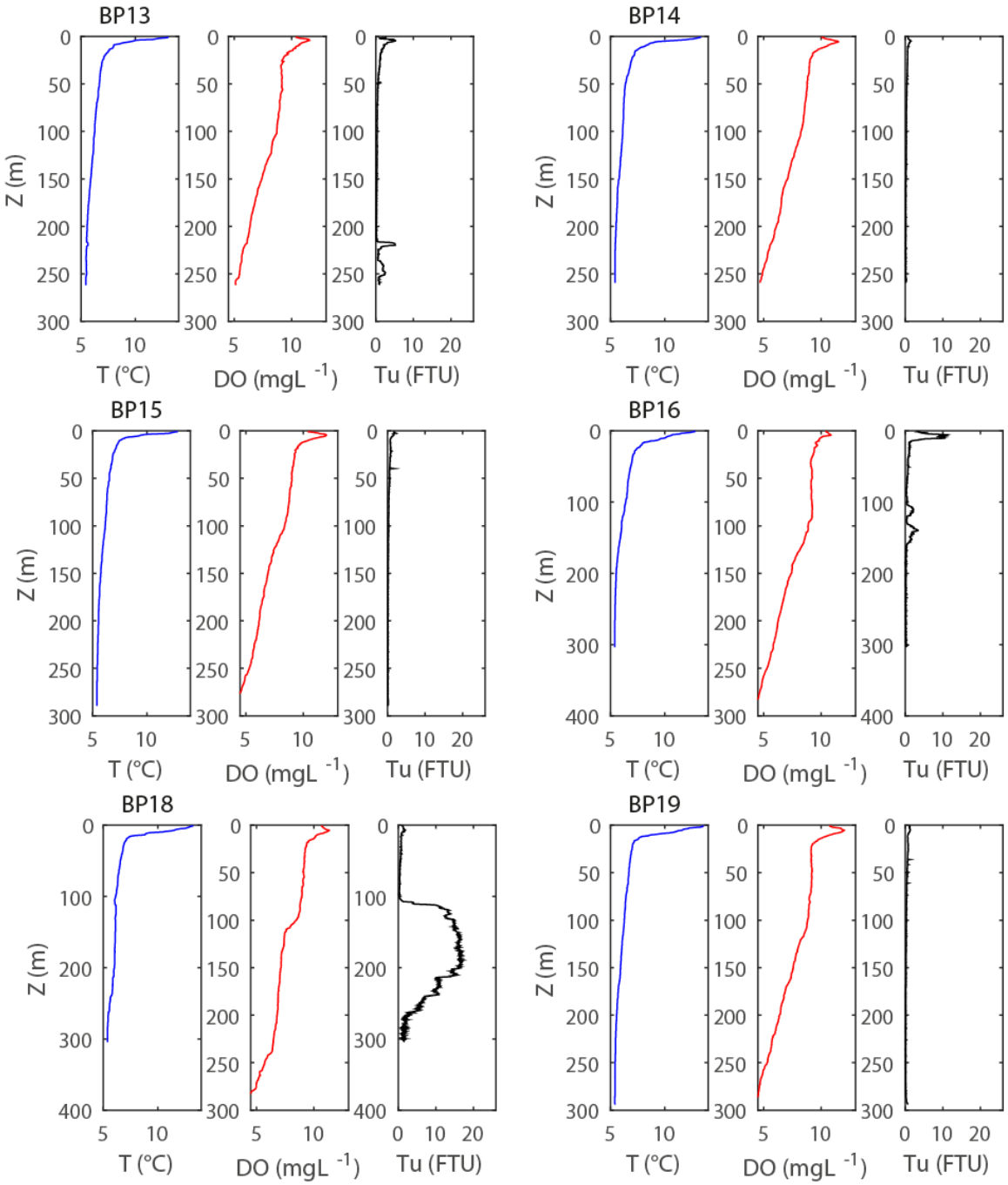
A4. GPS coordinate (geodetic datum CH1903+) of the CTD profiles carried out on May 7th 2015

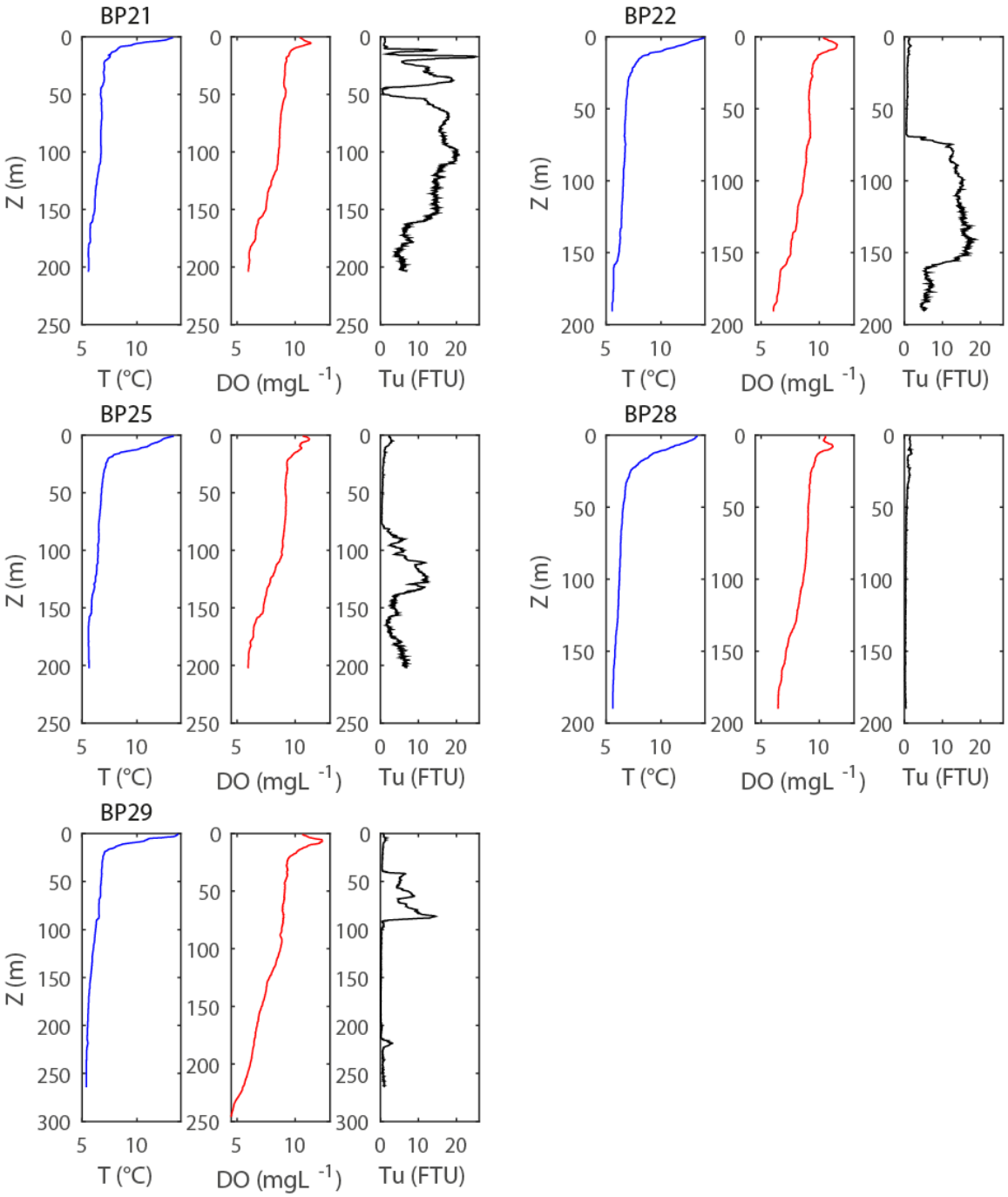
Appendix

A1.

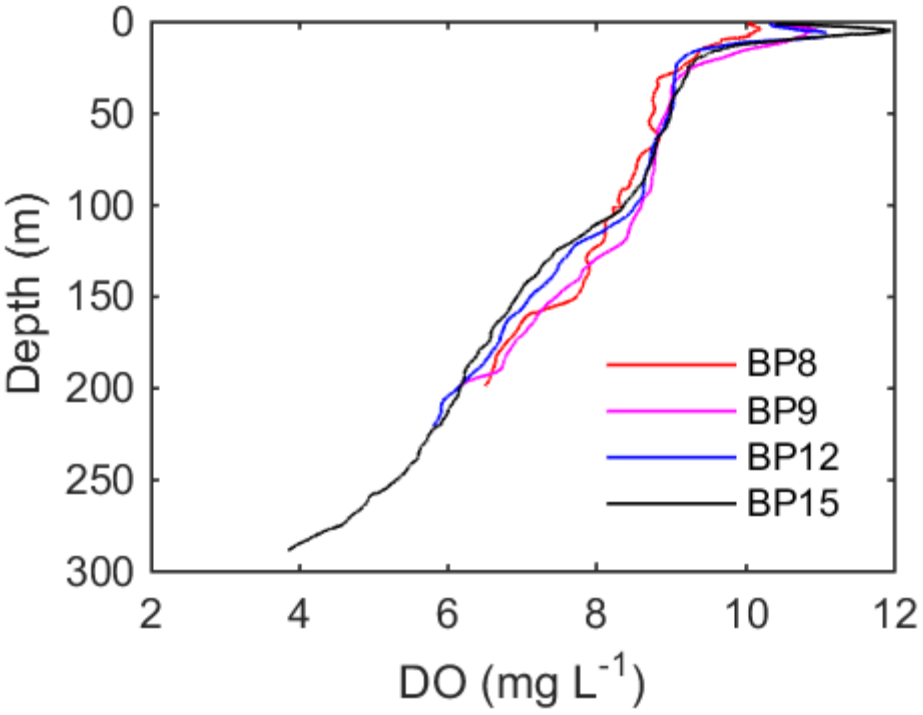

BP1
BP2
BP3
BP4
BP5
BP6
Z (m)
T (°C)
DO (mgL -1)
Tu (FTU)


BP7
BP8
BP9
BP10
BP11
BP12
Z (m)
T (°C)
DO (mgL -1)
Tu (FTU)

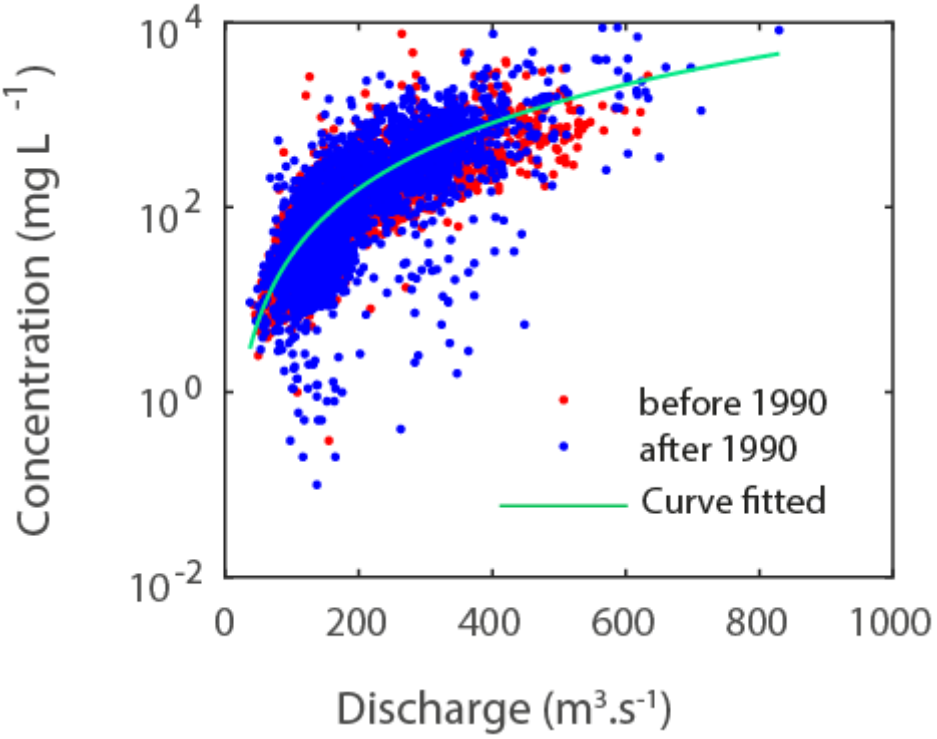

BP13
BP14
BP15
BP16
BP18
BP19
Z (m)
T (°C)
DO (mgL -1)
Tu (FTU)


BP21
BP22
BP25
BP28
BP29
Z (m)
T (°C)
DO (mgL -1)
Tu (FTU)

A2.


0
50
100
150
200
250
300
Depth (m)
2
4
6
8
10
12
DO (mg L-1)
BP8
BP9
BP12
BP15

A3.


Concentration (mg L -1)
10 4
10 2
10 0
10 -2
0
200
400
600
800
1000
Discharge (m³.s-1)
before 1990
after 1990
Curve fitted

A4.

BP1	539852	148149
BP2	546865	146980
BP3	546130	145135
BP4	545300	143805
BP5	548235	143210
BP6	552530	141959
BP7	550715	141620
BP8	551700	139970
BP9	550005	140470
BP10	549005	139620
BP11	547105	140800
BP12	547745	141800
BP13	545035	140800
BP14	545565	142395
BP15	542500	143400
BP16	538714	144815
BP18	534700	144950
BP19	531138	142474
BP21	530889	140513
BP22	529829	140498
BP25	529014	140688
BP28	525772	144919
BP29	532112	146469
BP30	536069	149236