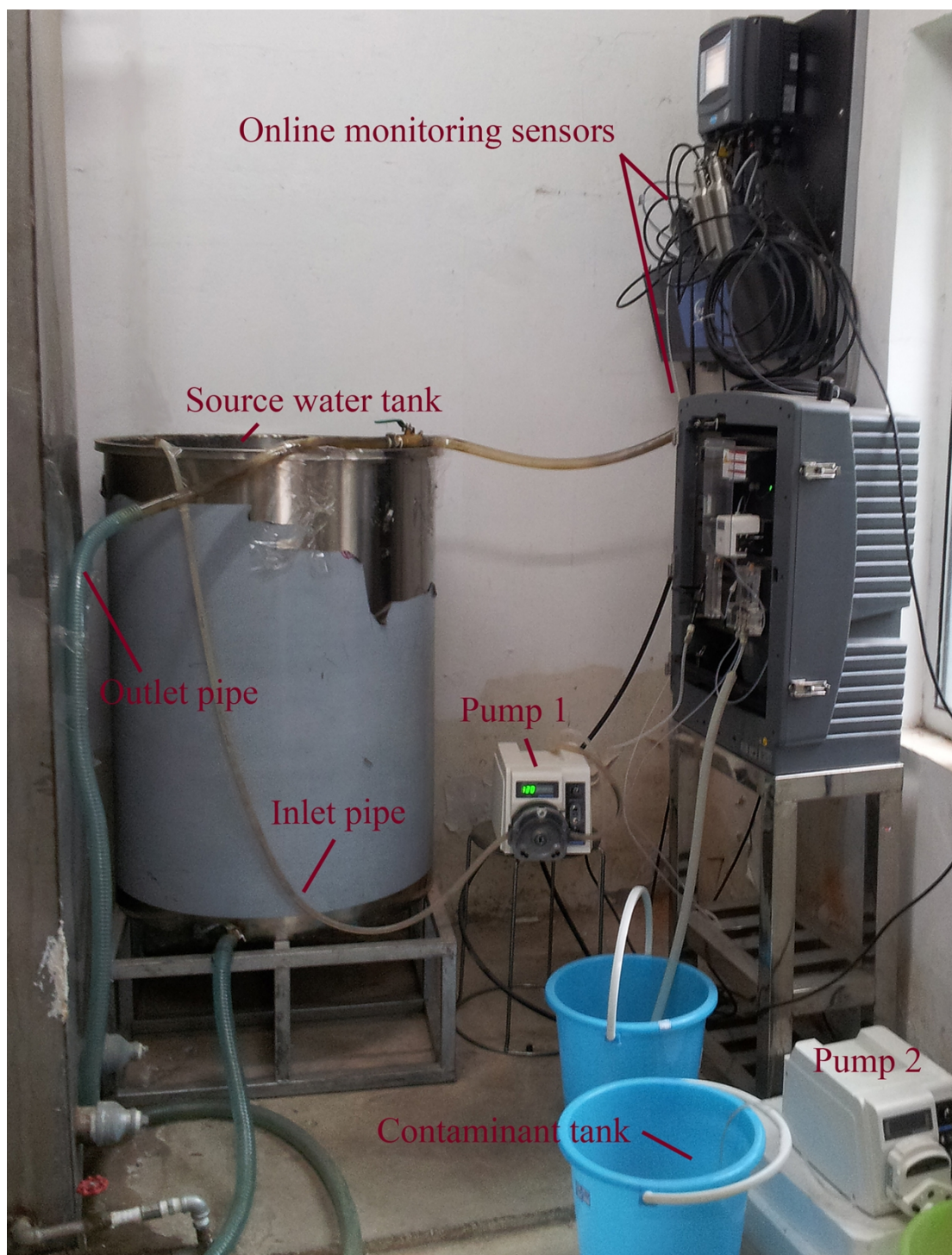


Supporting information:



Photograph P1 photograph of Experiment set up

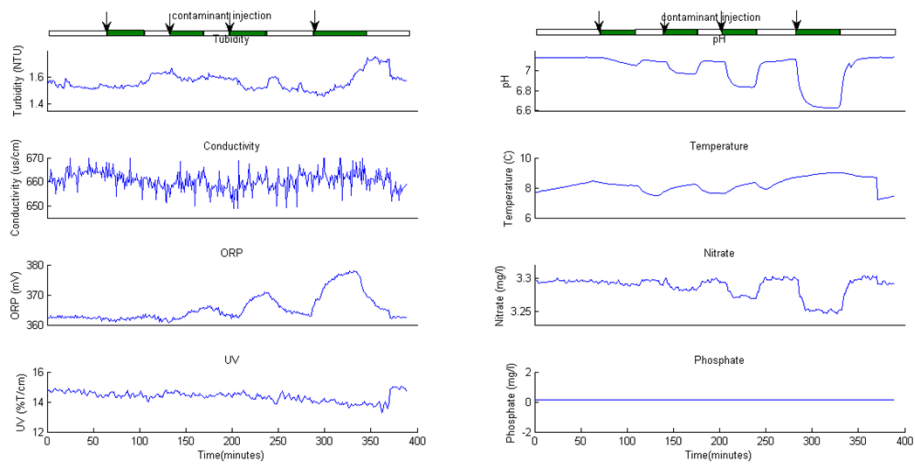


Figure F1 Sensors' responses for trivalent chromium

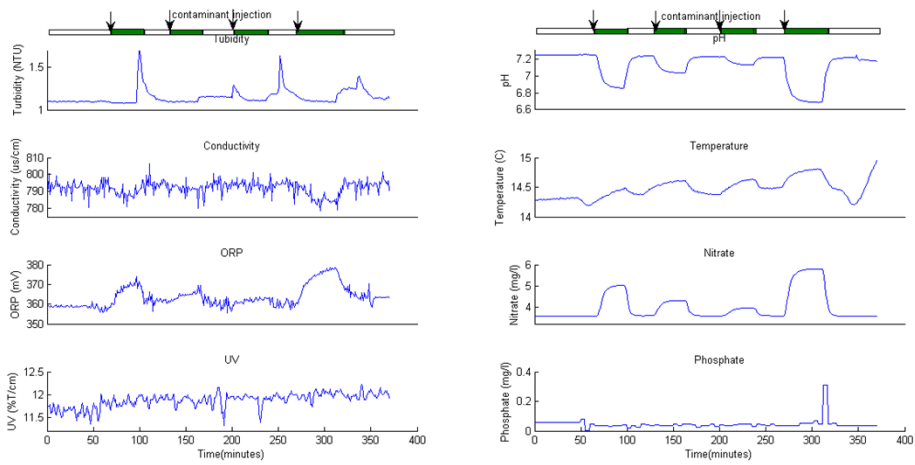


Figure F2 Sensors' responses for nickel nitrate

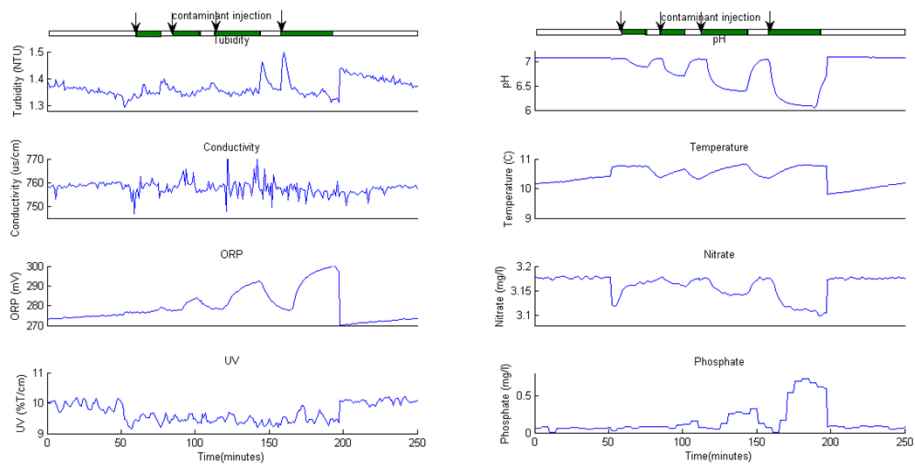


Figure F3 Sensors' responses for glyphosate

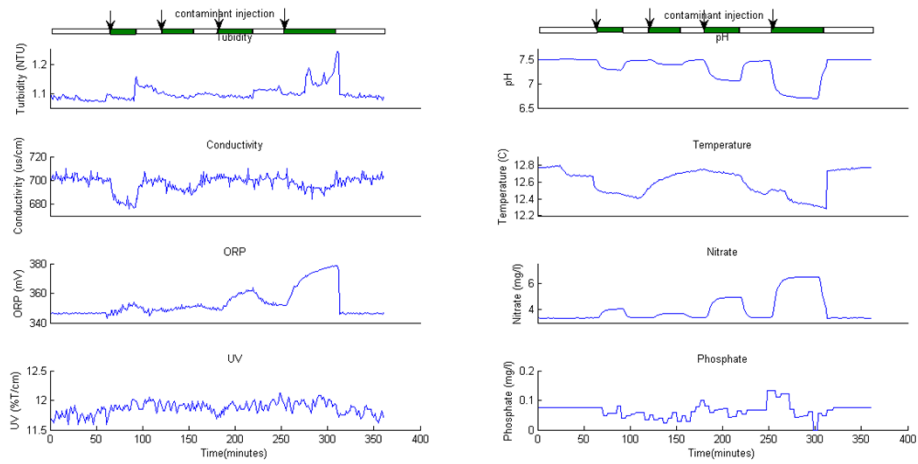


Figure F4 Sensors' responses for cadmium nitrate

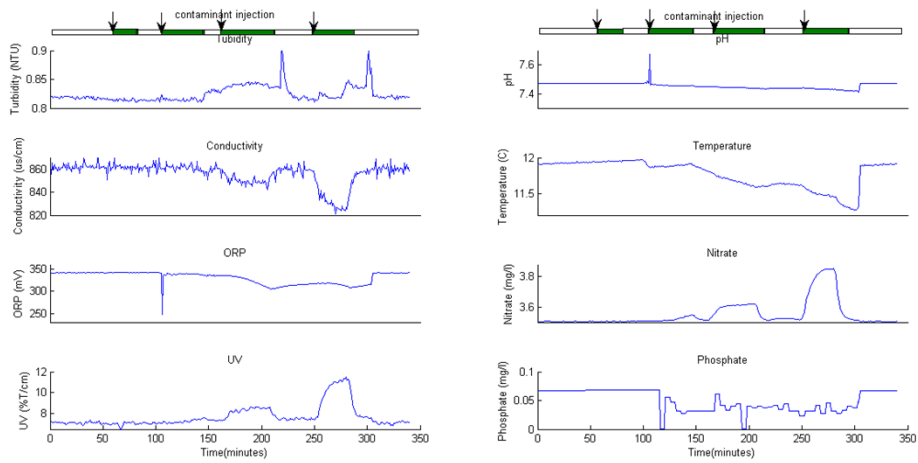


Figure F5 Sensors' responses for atrazine

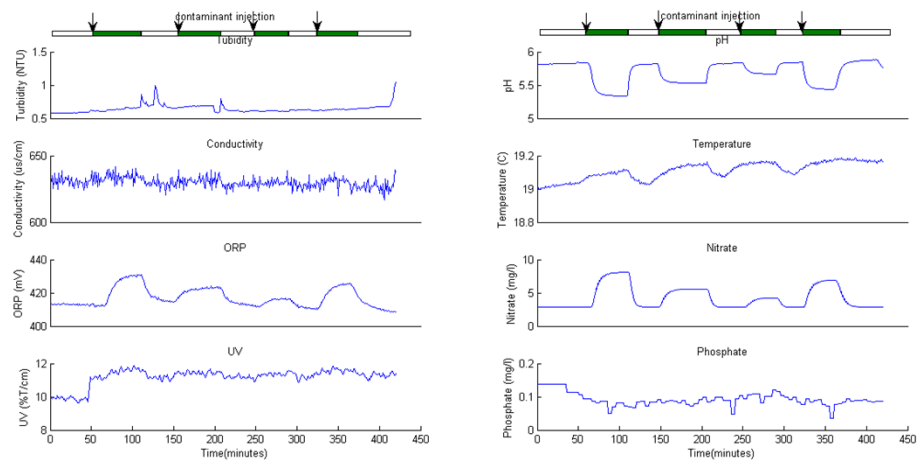


Figure F6 Sensors' responses for lead nitrate (drinking water)

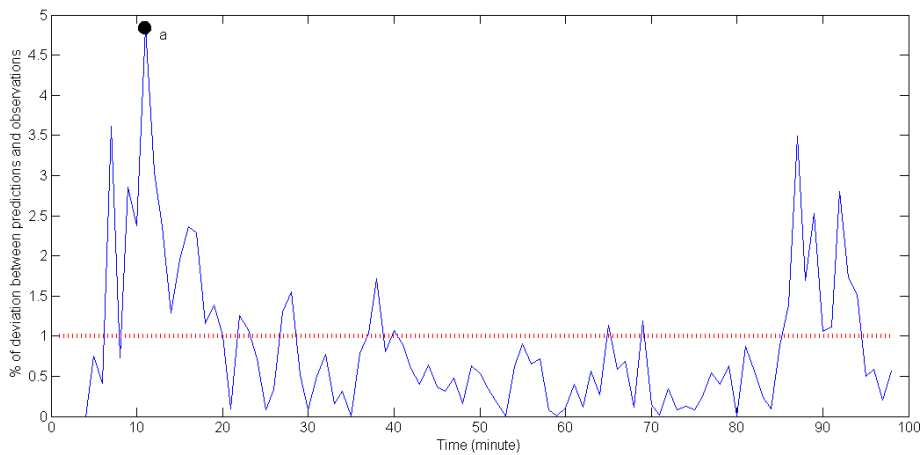


Figure F7 Deviations between predictions and observations (lead nitrate)

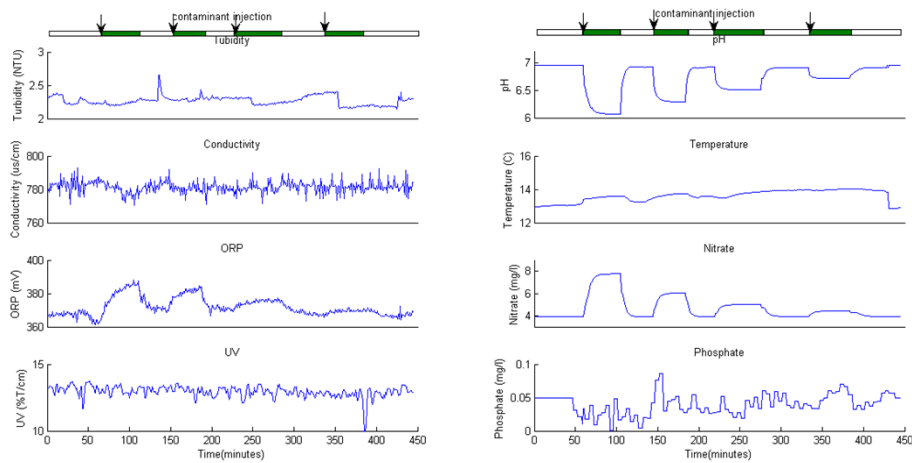


Figure F8 Sensors' response for lead nitrate (the 2<sup>nd</sup> experiment)

Table T1 The detection times of lead nitrate at different correlation indicators

Correlative indicators Concentration	0.6	0.65	0.7	0.75	0.8	0.85	0.9
0.01 mg/l	4	4	7	9	9	10	11
0.02 mg/l	1	1	1	1	1	10	11
0.04 mg/l	1	1	1	1	8	8	10
0.08 mg/l	1	1	1	1	6	7	7

$threshold_{alarm} = 8$  and  $window\ size = 30$

