



Correction: Double-peaked breakthrough curves as a consequence of solute transport through underground lakes: a case study of the Furfooz karst system, Belgium

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There was an error in the fluorimeter data computing for tracer test 1 ($Q = 20$ l/s) at site 4. Indeed, due to a misinterpretation of the fluorimeter recording, some data should appear as interpolated. This interpolation was based, namely, on the comparison with other tracer test results. Figure 4 is corrected here with the interpolated data appearing as a red dotted line (top graph, see ‘interpolated data’). In consequence, the recovery rate (39.9%) calculated in Table 1 is an estimation based on the interpolated data. A note has been added to Table 1.

A second correction should be applied in Table 1 in regard to tracer test 3 ($Q = 7$ l/s). A typing error exists in the recovery rate, which is not 100% but 34%. However, it has to be mentioned that the recorded C_{peak} (3,367.8 ppb) exceeds the saturation level of the fluorimeter (3,000 ppb). Therefore, this value is indicative.

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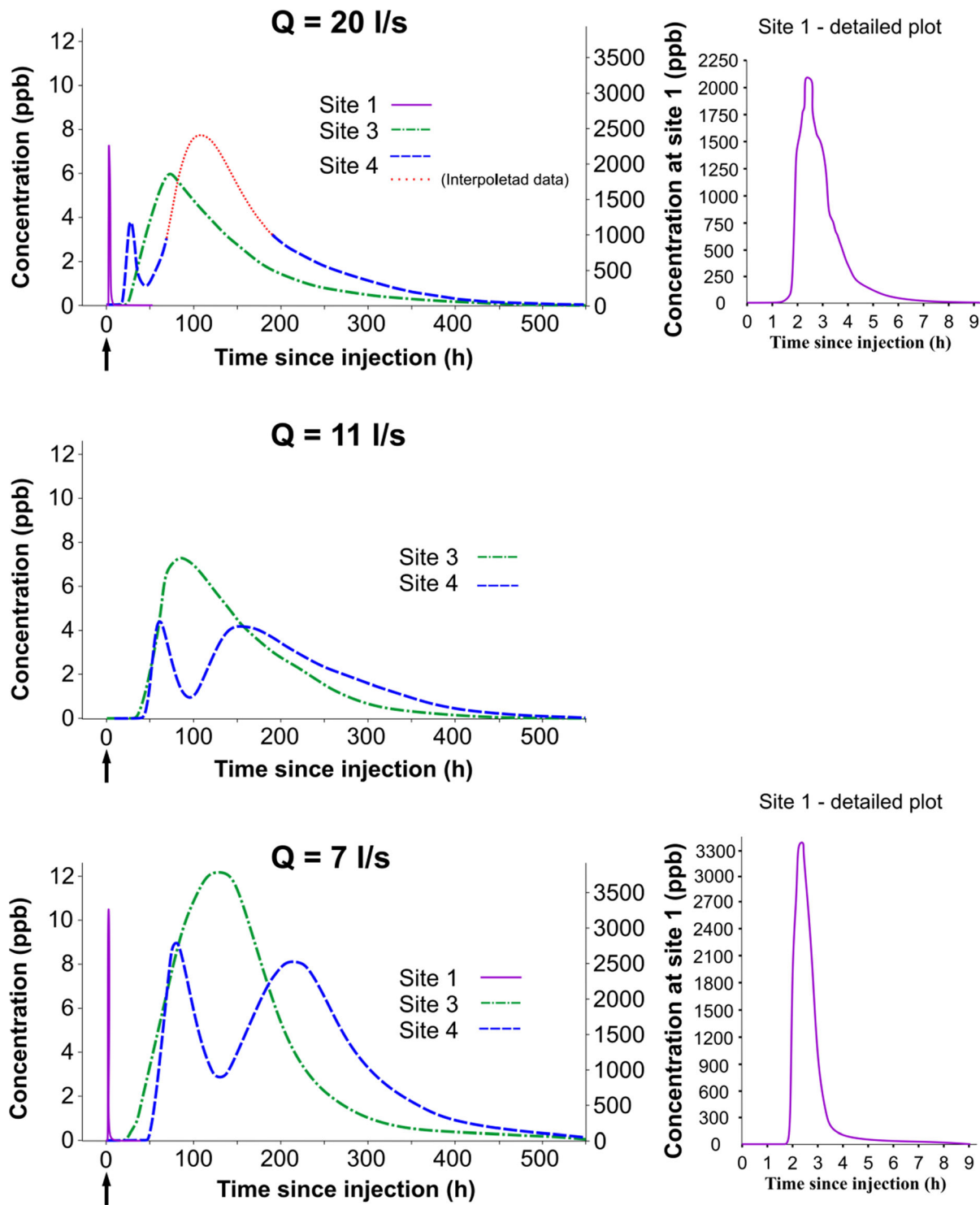


Fig. 4 Breakthrough curves of three tracer tests performed in different discharge (Q) conditions. The arrow below the X-axis shows the injection time. On the main plot (the left one), note the secondary Y-axis on the

right that gives concentration at site 1 only. On the right, detailed plots of site 1 are also given. The red dotted line on the top graph represents interpolated data.

Table 1 Main solute transport parameters from the BTCs analysis (injection at the swallow hole)

Tracer tests	1 st A. (h)	T_{mean} (h)	V_{max} (m/h)	V_{mean} (m/h)	C_{peak} (ppb)	T_{peak} (h)	R.R. (%)	
Tracer test 1, $Q = 20$ l/s	Site 1	1.5	3.1	100	45.5	2100	2.3	100
	Site 3	19.7	143.6	15.2	2.1	6.4	74.1	-
	Site 4	22.0	34.5	32.7	20.9	4.0	33.0	1.8
	1 st peak							
	Site 4	48.2	174.9	14.9	4.1	8.0	112.0	39.9*
Tracer test 2, $Q = 11$ l/s	2 nd peak							
	Site 3	36.4	148.3	8.2	2.0	7.37	82.9	-
	Site 4	38.7	68.2	19.9	11.3	4.40	61.0	2.4
	1 st peak							
	Site 4	85.0	219.1	8.4	3.5	4.20	153.7	12.9
Tracer test 3, $Q = 7$ l/s	2 nd peak							
	Site 1	1.9	3.8	78.9	38.6	3,367.8	2.4	34
	Site 3	30.0	157.8	10.3	2.0	12.7	125.8	-
	Site 4	40.3	86.8	19.1	8.9	9.5	78.2	5.5
	1 st peak							
	Site 4	129.3	270.1	5.9	2.8	8.5	214.9	18.3
	2 nd peak							

1st A.: first arrival; T_{mean} : mean travel time; V_{max} : maximum velocity; V_{mean} : mean velocity; C_{peak} : maximum peak concentration (in parts per billion); T_{peak} : time to the maximum peak concentration; R.R.: recovery rate; –: no data. * this value was calculated on the basis of interpolated data.