

BIOLOGICAL HEALTH RISKS
QUALITY OF LABORATORIES

CLINICAL BIOLOGY COMMISSION
COMMITTEE OF EXPERTS

EXTERNAL QUALITY ASSESSMENT
IN CLINICAL BIOLOGY

ANNUAL REPORT

Trace elements

2021

Sciensano/Trace elements/13

Expertise and service provision
Quality of laboratories
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A copy of the report was sent to the experts on: 08/03/2022

Authorisation to release report: By **Bernard China, scheme coordinator**, on 15/03/2022.

A handwritten signature in black ink, appearing to read 'Bernard China', is written over a light blue circular stamp. The signature is fluid and cursive.

All the reports are also available on our webpage:

https://www.wiv-isp.be/QML/activities/external_quality/rapports/_nl/rapports_annee.htm

https://www.wiv-isp.be/QML/activities/external_quality/rapports/_fr/rapports_annee.htm

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STATISTICS

Participants at these surveys were originated from Belgium, France, Italy, Spain, the Netherlands and Australia. In order to evaluate the Belgian labs, the results of all the participants were considered and the following statistics were performed.

The target value is the median per method (M_m) if $N_m \geq 6$ or the global median (M_g) when $N_m < 6$ and $N_g \geq 6$. If $N_g < 6$, no evaluation was possible.

For a specific element and a particular sample, M_m is the median of the participants using the same method and M_g is the median of all the participants. In the same way, N_m is the number of encoded results per method and N_g is the number of encoded.

The spread of the data was estimated using a robust standard deviation (SD): $SD = (P_{75} - P_{25})/1.349$

For a specific element and a particular sample, SD_m is the standard deviation of the encoded results per method and SD_g is the standard deviation of all encoded results.

In individual reports, your Z score was calculated per element and per sample.

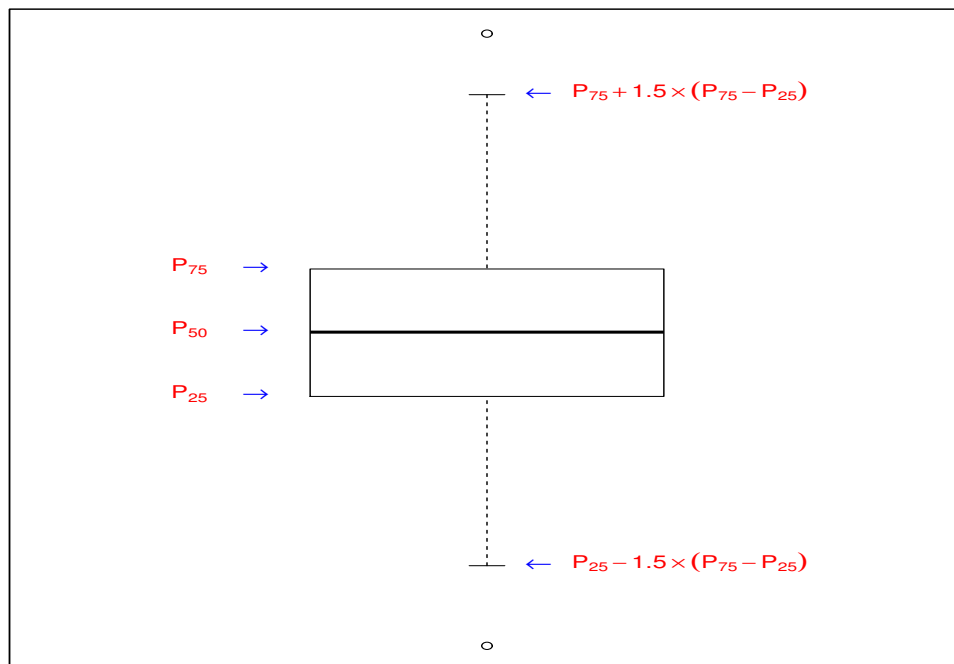
$$Z = \begin{cases} (R - M_m)/SD_m & \text{when } N_m \geq 6 \\ (R - M_g)/SD_g & \text{when } N_m < 6 \text{ and } N_g \geq 6 \end{cases}$$

Where, R is your result.

When $|Z| > 3$ the result was considered as an outlier.

GRAPHICAL REPRESENTATION

For a specific element and a particular sample, The box plot includes all the results for all the labs (Belgian and non Belgian). The results of the Belgian labs are indicated by method (using a colour code) on the graph.



- a rectangle that ranges from the percentile 25 (P_{25}) to the percentile 75 (P_{75})
- a central line that shows the median of the results (P_{50})
- a lower limit corresponding to $P_{25} - 1.5 * (P_{75} - P_{25})$
- an upper limit corresponding to $P_{75} + 1.5 * (P_{75} - P_{25})$

ABBREVIATIONS

We use the following abbreviations throughout the report:

- ETAAS: Electro thermal Atomic Absorption Spectrometry
- FAAS : Flame Atomic Absorption Spectrometry
- GA: All results for all methods
- ICP-MS : Inductively Coupled Plasma Mass Spectrometry
- MA: All results per method
- N: Number of results for all participants from all countries
- NBE : Number of results from Belgian labs eventually followed by a number in brackets referring to the number of labs evaluated using global statistics
- NC: Number of citations ($|Z| > 3$)
- NE: Number of not evaluated results
- NG: Number of good answers ($|Z| \leq 3$)
- SD: Standard deviation

THE SAMPLES AND THE DATA PROCESSING

24 samples per matrix (Serum, whole blood, urine) were sent to the lab under dry ice.

The samples were purchased by SKML, Winterwijk, Netherlands.

Two samples must be analyzed per month from April 2021 to March 2022. The results were encoded via the web page: www.trace-elements.eu.

The laboratories obtained from this site an individual report, a monthly report and an annual report.

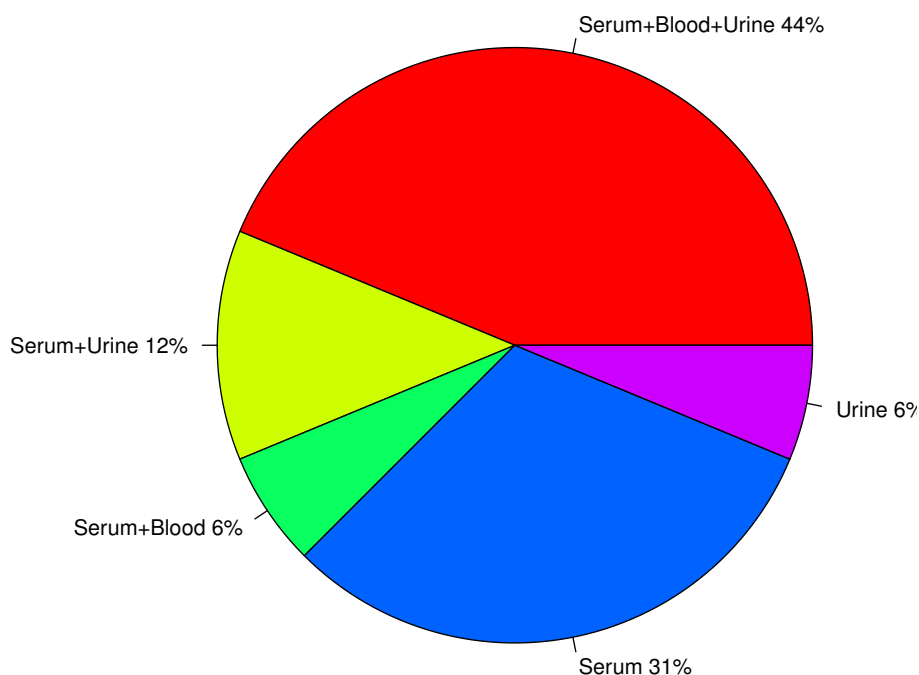
Sciensano produced individual annual reports and this global annual report.

Pay attention that in this report, the sample numbers 2021.1 to 2021.24 correspond to the samples from January (1 and 2) to December (23 and 24) which is different from the SKML identification.

PARTICIPATION

- 181 participants from 6 countries, 32 of which are belgian, participated to the EQA
- 14 belgian laboratories for serum, blood and urine
- 4 belgian laboratories for serum and urine
- 2 belgian laboratories for serum and blood
- 10 belgian laboratories for serum alone
- 2 belgian laboratories for urine alone

Repartition (%) of the belgian participants according to the matrix analysed



1 TRACE ELEMENTS IN URINE

1.1 PARTICIPATION

20 laboratories participated to the EQA for urine matrix.

Parameter	N labs	Recorded results	Expected number of results	percentage
Al	4	86	96	89.6 %
As	6	132	144	91.7 %
Be	2	46	48	95.8 %
Cd	9	194	216	89.8 %
Co	8	170	192	88.5 %
Cr	8	170	192	88.5 %
Cu	11	227	264	86 %
Hg	5	116	120	96.7 %
I	6	136	144	94.4 %
Mg	8	158	192	82.3 %
Mn	8	170	192	88.5 %
Ni	8	170	192	88.5 %
Pb	10	202	240	84.2 %
Sb	4	94	96	97.9 %
Se	6	128	144	88.9 %
Tl	7	138	168	82.1 %
V	6	114	144	79.2 %
Zn	11	239	264	90.5 %
Total		2690	3048	88.25

1.2 GLOBAL RESULTS

STAT	Element	Total number of results	Number of evaluated results	Number of Z citations	% citations
MA	Al	86	86	8	9.3
MA	As	132	132	6	4.5
MA	Be	46	42	1	2.4
MA	Cd	194	154	5	3.2
MA+GA	Cd	194	194 (+40)	19 (+14)	9.8
MA	Co	170	154	17	11
MA+GA	Co	170	170 (+16)	24 (+7)	14.1
MA	Cr	170	160	13	8.1
MA+GA	Cr	170	170 (+10)	17 (+4)	10
MA	Cu	227	227	23	10.1
MA	Hg	116	92	11	12
MA+GA	Hg	116	116 (+24)	11	9.5
MA	I	136	120	3	2.5
MA+GA	I	136	136 (+16)	14 (+11)	10.3
MA	Mg	158	136	4	2.9
MA+GA	Mg	158	158 (+22)	8 (+4)	5.1
MA	Mn	170	154	10	6.5
MA+GA	Mn	170	170 (+16)	16 (+6)	9.4
MA	Ni	170	154	20	13
MA+GA	Ni	170	170 (+16)	28 (+8)	16.5
MA	Pb	202	186	11	5.9
MA+GA	Pb	202	202 (+16)	21 (+10)	10.4
MA	Sb	94	94	13	13.8
MA	Se	128	128	24	18.8
MA	Tl	138	138	8	5.8
MA	V	114	114	12	10.5
MA	Zn	239	239	23	9.6
Total	MA+GA	2690	2686	276	10.3

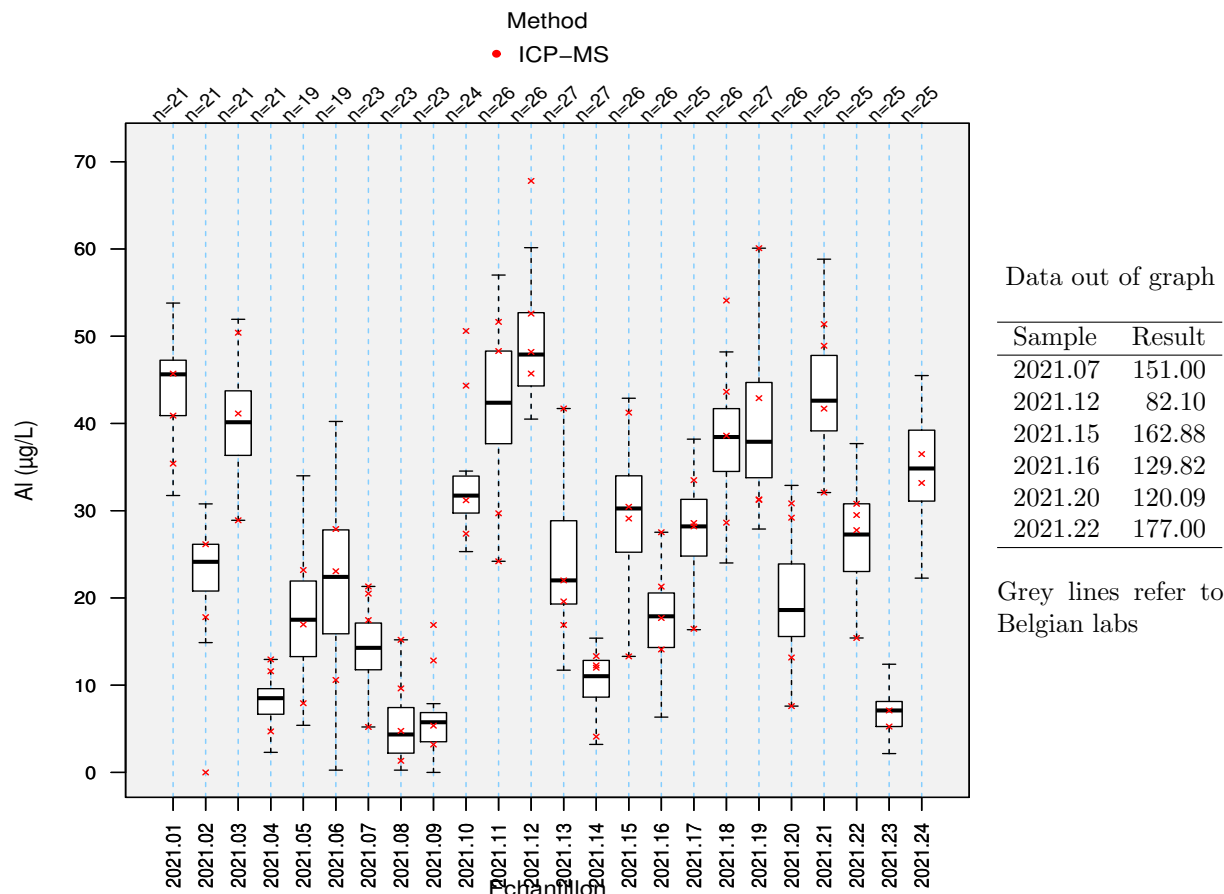
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STAT	Element	Total number of results	Number of evaluated results	Number of Z citations	% citations
	MA	2690	2510	212	8.4

1.3 RESULTS PER ELEMENT

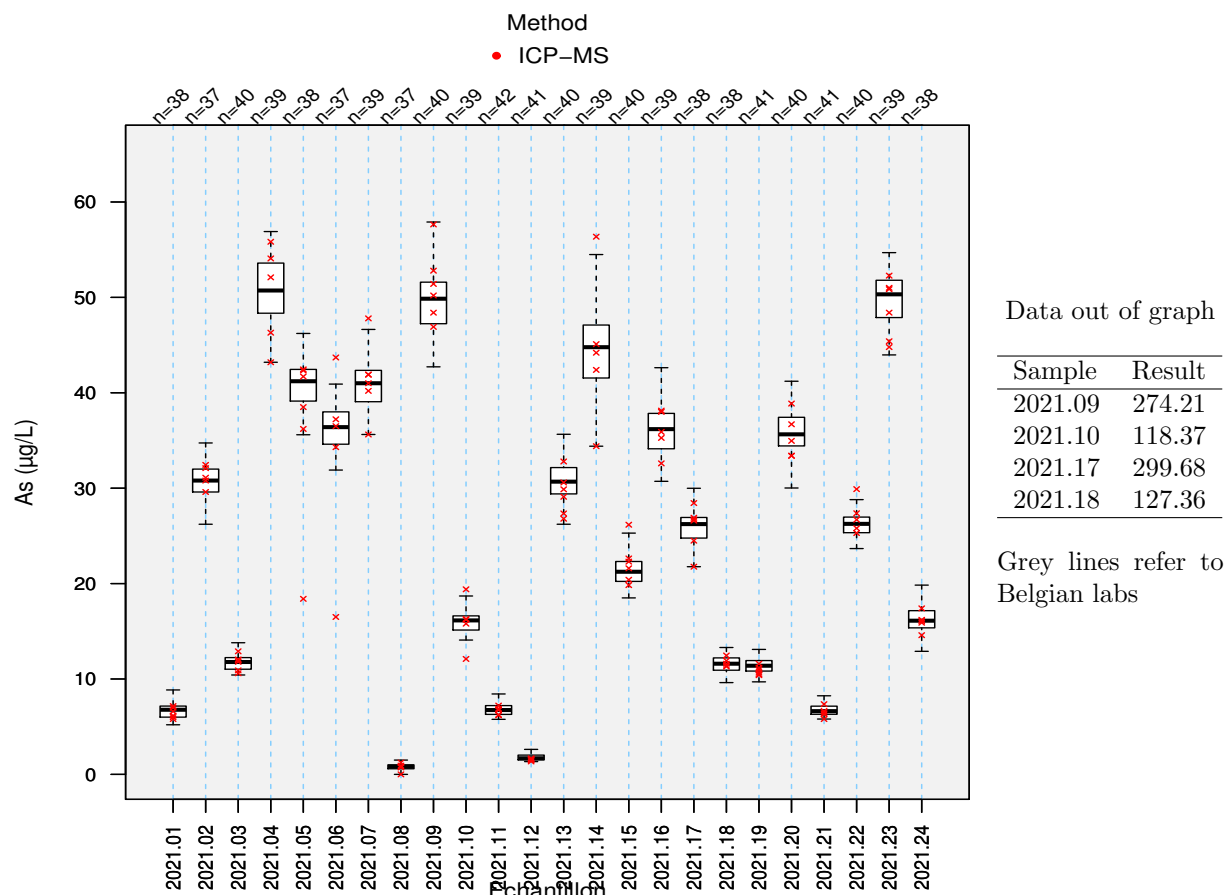
1.3.1 Al

Sample	Method	Median	SD	N	NBE	NG	NC	NE
2021.01	ICP-MS	43.6	7.36	19	3	3	0	0
2021.02	ICP-MS	24.14	5.6	19	3	2	1	0
2021.03	ICP-MS	39.7	5.26	19	3	3	0	0
2021.04	ICP-MS	8.51	2.55	19	3	3	0	0
2021.05	ICP-MS	17.26	7.41	18	3	3	0	0
2021.06	ICP-MS	22.18	9.2	18	3	3	0	0
2021.07	ICP-MS	14.28	4.31	21	4	4	0	0
2021.08	ICP-MS	4.35	3.85	21	4	4	0	0
2021.09	ICP-MS	5.75	2.52	21	4	3	1	0
2021.10	ICP-MS	31.4	2.94	22	4	2	2	0
2021.11	ICP-MS	42.38	7.94	24	4	4	0	0
2021.12	ICP-MS	47.9	5.98	24	4	3	1	0
2021.13	ICP-MS	21.2	5.72	25	4	3	1	0
2021.14	ICP-MS	11.03	3.29	25	4	4	0	0
2021.15	ICP-MS	29.58	6.85	24	4	4	0	0
2021.16	ICP-MS	17.36	4.81	24	4	4	0	0
2021.17	ICP-MS	28.2	4.91	23	4	4	0	0
2021.18	ICP-MS	37.64	5.13	24	4	3	1	0
2021.19	ICP-MS	37.9	7.02	25	4	3	1	0
2021.20	ICP-MS	19.15	6.58	24	4	4	0	0
2021.21	ICP-MS	42.61	7.21	23	4	4	0	0
2021.22	ICP-MS	27.6	6.05	23	4	4	0	0
2021.23	ICP-MS	7.1	2.4	23	2	2	0	0
2021.24	ICP-MS	35.37	6.38	23	2	2	0	0



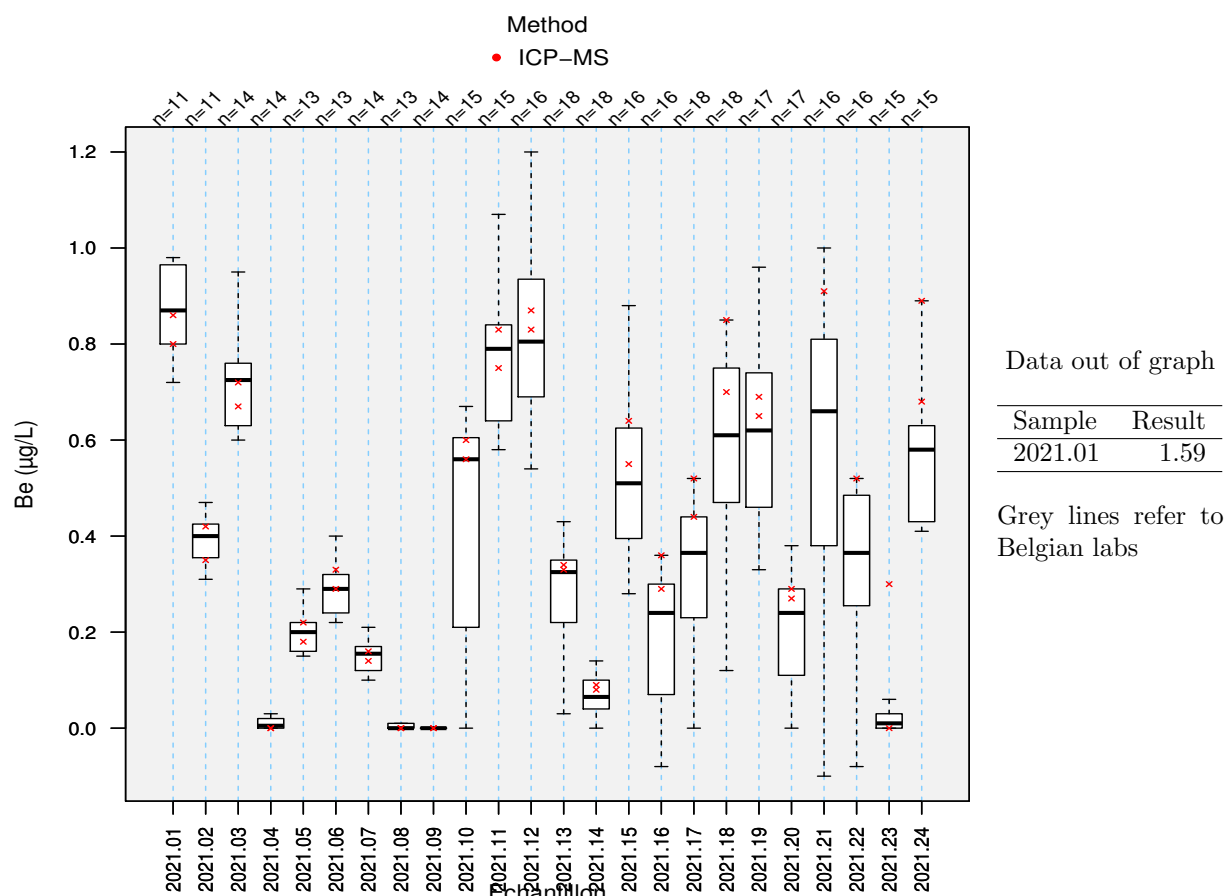
1.3.2 As

Sample	Method	Median	SD	N	NBE	NG	NC	NE
2021.01	ICP-MS	6.78	0.75	36	6	6	0	0
2021.02	ICP-MS	31	1.93	35	5	5	0	0
2021.03	ICP-MS	11.84	0.96	38	6	6	0	0
2021.04	ICP-MS	50.72	4.43	37	5	5	0	0
2021.05	ICP-MS	41.21	2.43	36	6	5	1	0
2021.06	ICP-MS	36.34	2.53	35	5	4	1	0
2021.07	ICP-MS	41	1.93	37	6	5	1	0
2021.08	ICP-MS	0.83	0.29	35	5	5	0	0
2021.09	ICP-MS	49.86	3.31	38	6	6	0	0
2021.10	ICP-MS	16	1.14	37	5	4	1	0
2021.11	ICP-MS	6.75	0.62	40	6	6	0	0
2021.12	ICP-MS	1.72	0.34	39	5	5	0	0
2021.13	ICP-MS	30.68	1.89	38	6	6	0	0
2021.14	ICP-MS	44.78	4.67	37	5	5	0	0
2021.15	ICP-MS	21.24	1.51	38	6	5	1	0
2021.16	ICP-MS	36.19	2.39	37	5	5	0	0
2021.17	ICP-MS	26.27	1.53	37	6	6	0	0
2021.18	ICP-MS	11.6	0.93	37	5	5	0	0
2021.19	ICP-MS	11.39	0.8	39	6	6	0	0
2021.20	ICP-MS	36.02	2.26	38	5	5	0	0
2021.21	ICP-MS	6.63	0.64	39	6	6	0	0
2021.22	ICP-MS	26.26	1.16	38	5	4	1	0
2021.23	ICP-MS	50.32	2.89	37	6	6	0	0
2021.24	ICP-MS	16.11	1.07	36	5	5	0	0



1.3.3 Be

Sample	Method	Median	SD	N	NBE	NG	NC	NE
2021.01	ICP-MS	0.88	0.12	10	2	2	0	0
2021.02	ICP-MS	0.4	0.05	10	2	2	0	0
2021.03	ICP-MS	0.72	0.09	13	2	2	0	0
2021.04	ICP-MS	0	0.01	13	2	2	0	0
2021.05	ICP-MS	0.2	0.04	12	2	2	0	0
2021.06	ICP-MS	0.3	0.06	12	2	2	0	0
2021.07	ICP-MS	0.15	0.03	13	2	2	0	0
2021.08	ICP-MS	0	0	12	2	0	0	2
2021.08	Global	0	0.01	13	2	2	0	0
2021.09	ICP-MS	0	0	13	2	0	0	2
2021.09	Global	0	0	14	2	0	0	2
2021.10	ICP-MS	0.52	0.33	14	2	2	0	0
2021.11	ICP-MS	0.77	0.16	14	2	2	0	0
2021.12	ICP-MS	0.78	0.16	15	2	2	0	0
2021.13	ICP-MS	0.33	0.1	17	2	2	0	0
2021.14	ICP-MS	0.06	0.04	17	2	2	0	0
2021.15	ICP-MS	0.5	0.15	15	2	2	0	0
2021.16	ICP-MS	0.24	0.16	15	2	2	0	0
2021.17	ICP-MS	0.36	0.16	17	2	2	0	0
2021.18	ICP-MS	0.63	0.21	17	2	2	0	0
2021.19	ICP-MS	0.6	0.2	16	2	2	0	0
2021.20	ICP-MS	0.24	0.13	16	2	2	0	0
2021.21	ICP-MS	0.66	0.3	16	1	1	0	0
2021.22	ICP-MS	0.36	0.17	16	1	1	0	0
2021.23	ICP-MS	0.01	0.02	15	2	1	1	0
2021.24	ICP-MS	0.58	0.15	15	2	2	0	0

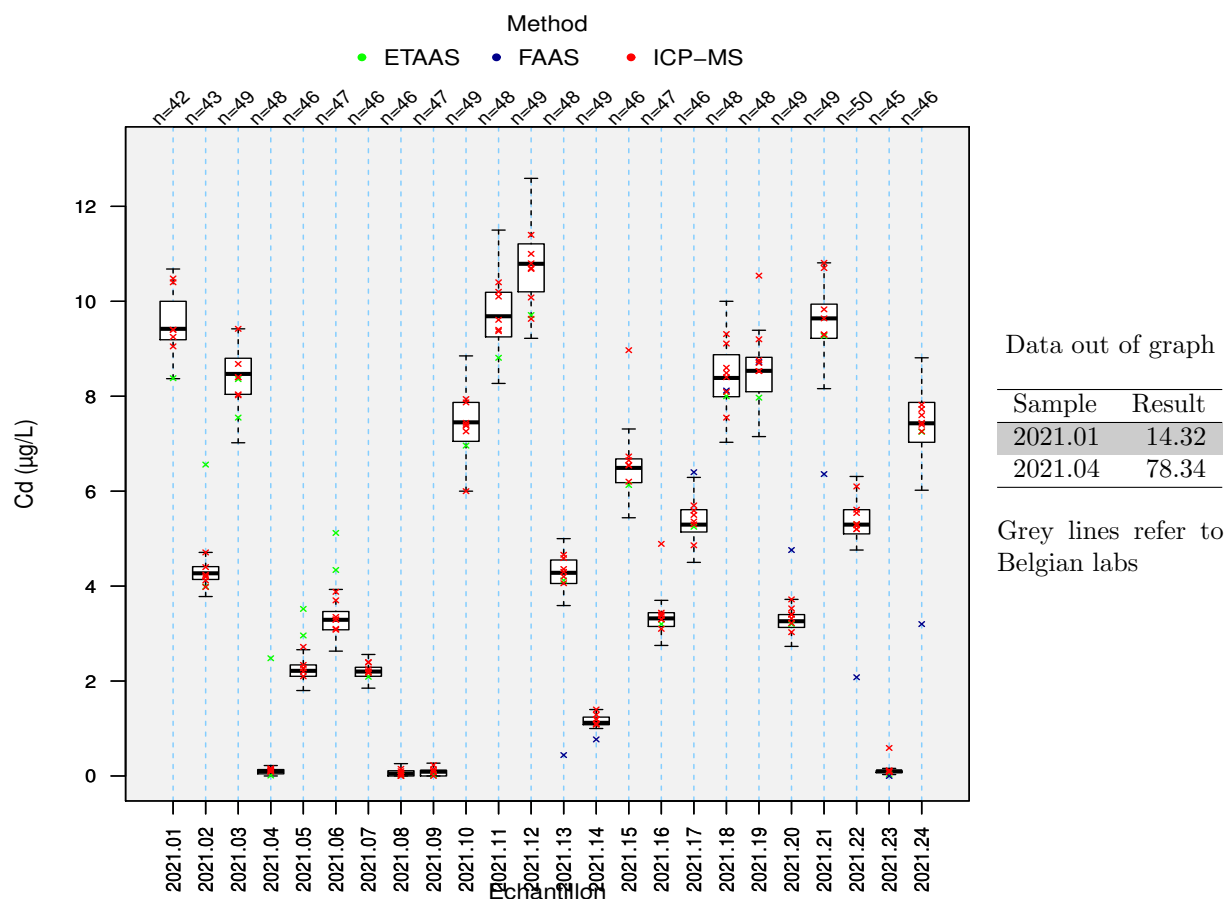


1.3.4 Cd

Sample	Method	Median	SD	N	NBE	NG	NC	NE
2021.01	ETAAS	10.07	0.67	5	2	0	0	2
2021.01	ICP-MS	9.4	0.53	37	6	6	0	0
2021.01	Global	9.42	0.58	42	8	7	1	0
2021.02	ETAAS	4.5	0.29	5	2	0	0	2
2021.02	ICP-MS	4.26	0.2	38	7	7	0	0
2021.02	Global	4.27	0.2	43	9	8	1	0
2021.03	ETAAS	8.36	0.16	5	2	0	0	2
2021.03	ICP-MS	8.5	0.65	44	6	6	0	0
2021.03	Global	8.47	0.56	49	8	8	0	0
2021.04	ETAAS	0.01	0.37	5	2	0	0	2
2021.04	ICP-MS	0.1	0.03	43	7	7	0	0
2021.04	Global	0.1	0.05	48	9	8	1	0
2021.05	ETAAS	2.24	0.61	5	2	0	0	2
2021.05	ICP-MS	2.2	0.16	41	6	5	1	0
2021.05	Global	2.21	0.17	46	8	6	2	0
2021.06	ETAAS	3.55	0.8	5	2	0	0	2
2021.06	ICP-MS	3.27	0.25	42	7	7	0	0
2021.06	Global	3.29	0.29	47	9	7	2	0
2021.07	ETAAS	2.12	0.03	4	1	0	0	1
2021.07	ICP-MS	2.22	0.15	42	6	6	0	0
2021.07	Global	2.2	0.14	46	7	7	0	0
2021.08	ETAAS	0.01	0.04	4	1	0	0	1
2021.08	ICP-MS	0.05	0.08	42	7	7	0	0
2021.08	Global	0.05	0.08	46	8	8	0	0
2021.09	ETAAS	0.01	0.05	4	1	0	0	1
2021.09	ICP-MS	0.1	0.07	43	6	6	0	0
2021.09	Global	0.09	0.09	47	7	7	0	0
2021.10	ETAAS	7.92	0.53	4	1	0	0	1
2021.10	ICP-MS	7.44	0.61	45	7	7	0	0
2021.10	Global	7.45	0.61	49	8	8	0	0
2021.11	ETAAS	9.28	0.94	4	1	0	0	1
2021.11	ICP-MS	9.74	0.65	44	6	6	0	0
2021.11	Global	9.68	0.68	48	7	7	0	0
2021.12	ETAAS	10.62	1.32	4	1	0	0	1
2021.12	ICP-MS	10.79	0.72	45	7	7	0	0
2021.12	Global	10.79	0.75	49	8	8	0	0
2021.13	ETAAS	4.57	0.18	3	1	0	0	1
2021.13	FAAS	0.44	0	1	1	0	0	1
2021.13	ICP-MS	4.28	0.34	44	6	6	0	0
2021.13	Global	4.28	0.36	48	8	7	1	0
2021.14	ETAAS	1.12	0.11	3	1	0	0	1
2021.14	FAAS	0.77	0	1	1	0	0	1
2021.14	ICP-MS	1.12	0.12	45	7	7	0	0
2021.14	Global	1.12	0.12	49	9	9	0	0
2021.15	ETAAS	6.63	0.26	3	1	0	0	1
2021.15	ICP-MS	6.47	0.36	43	6	5	1	0
2021.15	Global	6.49	0.36	46	7	6	1	0
2021.16	ETAAS	3.37	0.1	3	1	0	0	1
2021.16	ICP-MS	3.31	0.22	44	7	6	1	0
2021.16	Global	3.32	0.21	47	8	7	1	0
2021.17	ETAAS	5.25	0	2	1	0	0	1
2021.17	FAAS	6.4	0	1	1	0	0	1
2021.17	ICP-MS	5.3	0.35	43	6	6	0	0
2021.17	Global	5.29	0.34	46	8	7	1	0
2021.18	ETAAS	8.18	0.14	2	1	0	0	1
2021.18	FAAS	8.12	0	1	1	0	0	1
2021.18	ICP-MS	8.42	0.67	45	7	7	0	0
2021.18	Global	8.38	0.65	48	9	9	0	0
2021.19	ETAAS	8.54	0.42	3	1	0	0	1
2021.19	FAAS	8.72	0	1	1	0	0	1

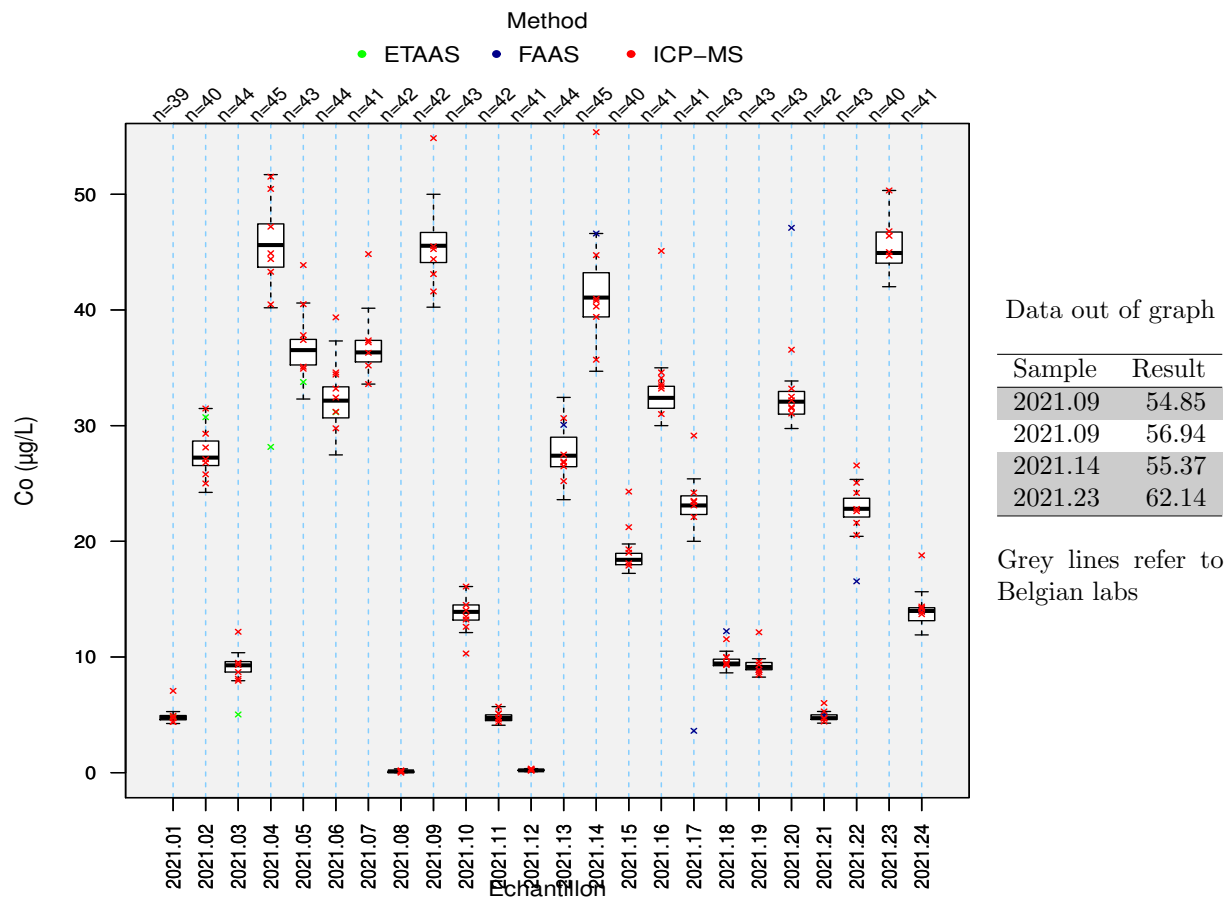
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Sample	Method	Median	SD	N	NBE	NG	NC	NE
2021.19	ICP-MS	8.53	0.53	44	6	5	1	0
2021.19	Global	8.54	0.53	48	8	7	1	0
2021.20	ETAAS	3.31	0.06	3	1	0	0	1
2021.20	FAAS	4.76	0	1	1	0	0	1
2021.20	ICP-MS	3.26	0.25	45	7	7	0	0
2021.20	Global	3.26	0.2	49	9	8	1	0
2021.21	ETAAS	9.44	0.4	3	1	0	0	1
2021.21	FAAS	6.36	0	1	1	0	0	1
2021.21	ICP-MS	9.67	0.53	45	6	6	0	0
2021.21	Global	9.64	0.53	49	8	7	1	0
2021.22	ETAAS	5.62	0.26	3	1	0	0	1
2021.22	FAAS	2.08	0	1	1	0	0	1
2021.22	ICP-MS	5.29	0.36	46	7	7	0	0
2021.22	Global	5.29	0.36	50	9	8	1	0
2021.23	ETAAS	0.03	0.06	3	1	0	0	1
2021.23	FAAS	0	0	1	1	0	0	1
2021.23	ICP-MS	0.1	0.02	41	5	4	1	0
2021.23	Global	0.1	0.03	45	7	5	2	0
2021.24	ETAAS	7.25	0.3	3	1	0	0	1
2021.24	FAAS	3.2	0	1	1	0	0	1
2021.24	ICP-MS	7.45	0.59	42	6	6	0	0
2021.24	Global	7.43	0.59	46	8	7	1	0



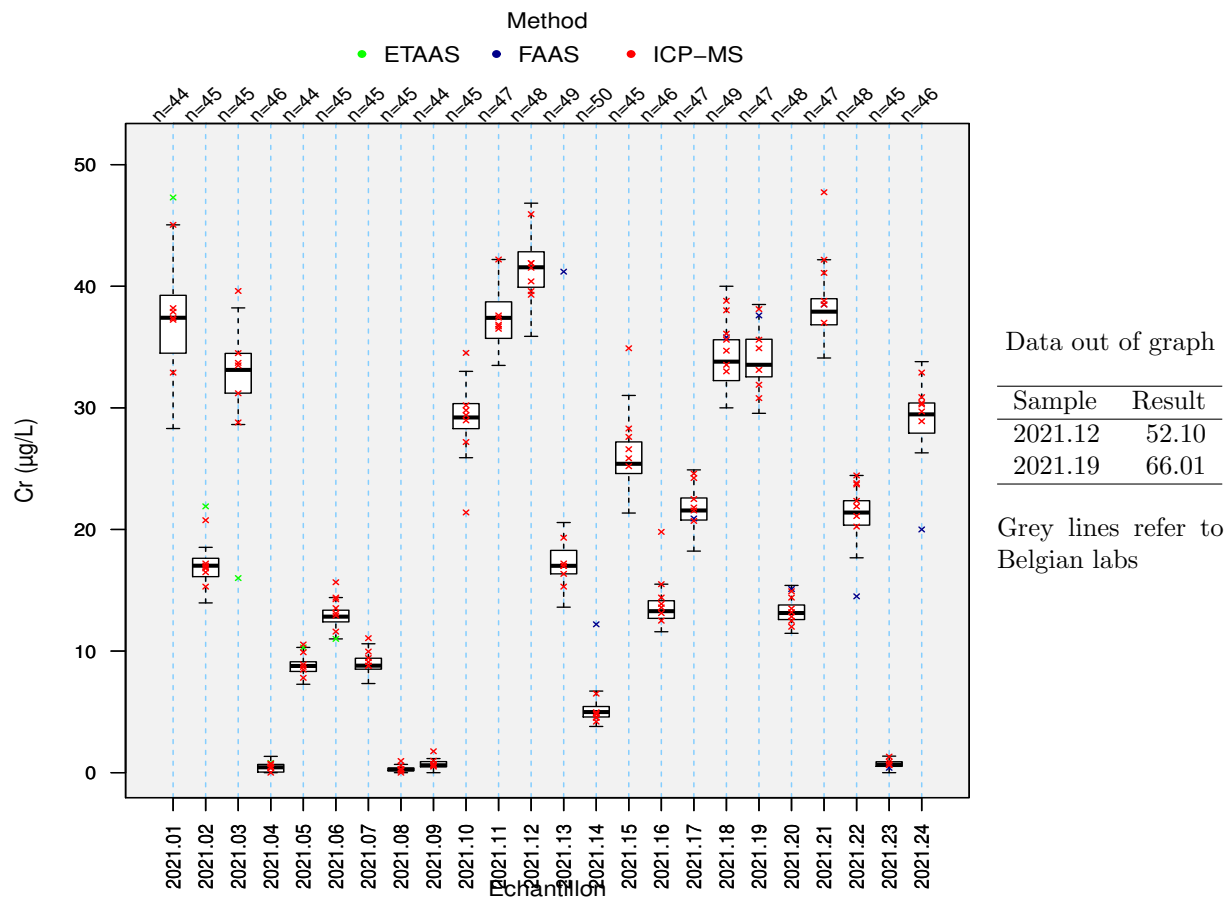
1.3.5 Co

Sample	Method	Median	SD	N	NBE	NG	NC	NE
2021.01	ETAAS	4.99	0.1	2	1	0	0	1
2021.01	ICP-MS	4.73	0.28	37	6	5	1	0
2021.01	Global	4.75	0.27	39	7	6	1	0
2021.02	ETAAS	28.56	1.6	2	1	0	0	1
2021.02	ICP-MS	27.23	1.5	38	7	7	0	0
2021.02	Global	27.23	1.54	40	8	8	0	0
2021.03	ETAAS	6.9	1.91	3	1	0	0	1
2021.03	ICP-MS	9.31	0.63	41	6	5	1	0
2021.03	Global	9.28	0.66	44	7	5	2	0
2021.04	ETAAS	32.6	6.19	3	1	0	0	1
2021.04	ICP-MS	45.75	2.69	42	7	7	0	0
2021.04	Global	45.61	2.77	45	8	7	1	0
2021.05	ETAAS	33.77	1.46	3	1	0	0	1
2021.05	ICP-MS	36.55	1.53	40	6	5	1	0
2021.05	Global	36.53	1.64	43	7	6	1	0
2021.06	ETAAS	31.16	2.68	3	1	0	0	1
2021.06	ICP-MS	32.38	2.01	41	7	6	1	0
2021.06	Global	32.16	1.96	44	8	7	1	0
2021.07	ICP-MS	36.5	1.47	40	6	5	1	0
2021.08	ICP-MS	0.12	0.1	41	7	7	0	0
2021.09	ICP-MS	45.6	1.93	41	6	5	1	0
2021.10	ICP-MS	13.88	0.97	42	7	6	1	0
2021.11	ICP-MS	4.72	0.37	41	6	6	0	0
2021.12	ICP-MS	0.21	0.06	40	7	7	0	0
2021.13	FAAS	30.07	0	1	1	0	0	1
2021.13	ICP-MS	27.4	1.85	42	6	6	0	0
2021.13	Global	27.4	1.88	44	7	7	0	0
2021.14	FAAS	46.61	0	1	1	0	0	1
2021.14	ICP-MS	41.07	3.08	43	7	6	1	0
2021.14	Global	41.07	2.83	45	8	7	1	0
2021.15	ICP-MS	18.4	0.73	39	6	4	2	0
2021.16	ICP-MS	32.45	1.45	40	7	6	1	0
2021.17	FAAS	3.62	0	1	1	0	0	1
2021.17	ICP-MS	23.15	1.19	40	6	5	1	0
2021.17	Global	23.1	1.19	41	7	5	2	0
2021.18	FAAS	12.23	0	1	1	0	0	1
2021.18	ICP-MS	9.43	0.39	42	7	6	1	0
2021.18	Global	9.44	0.42	43	8	6	2	0
2021.19	FAAS	8.86	0	1	1	0	0	1
2021.19	ICP-MS	9.14	0.46	41	6	5	1	0
2021.19	Global	9.14	0.46	43	7	6	1	0
2021.20	FAAS	47.1	0	1	1	0	0	1
2021.20	ICP-MS	31.82	1.45	41	7	6	1	0
2021.20	Global	32.07	1.45	43	8	6	2	0
2021.21	FAAS	4.96	0	1	1	0	0	1
2021.21	ICP-MS	4.71	0.28	40	6	5	1	0
2021.21	Global	4.71	0.29	42	7	6	1	0
2021.22	FAAS	16.54	0	1	1	0	0	1
2021.22	ICP-MS	22.81	1.27	41	7	7	0	0
2021.22	Global	22.81	1.2	43	8	6	2	0
2021.23	FAAS	62.14	0	1	1	0	0	1
2021.23	ICP-MS	44.9	1.95	38	5	5	0	0
2021.23	Global	44.92	1.96	40	6	5	1	0
2021.24	FAAS	13.98	0	1	1	0	0	1
2021.24	ICP-MS	13.9	0.85	39	6	5	1	0
2021.24	Global	13.98	0.83	41	7	6	1	0



1.3.6 Cr

Sample	Method	Median	SD	N	NBE	NG	NC	NE
2021.01	ETAAS	36.37	3.35	6	1	0	1	0
2021.01	ICP-MS	37.41	3.27	38	6	6	0	0
2021.02	ETAAS	17	1.68	6	1	1	0	0
2021.02	ICP-MS	17.02	0.97	39	7	6	1	0
2021.03	ETAAS	33.36	2.03	6	1	0	1	0
2021.03	ICP-MS	33.07	2.35	39	6	6	0	0
2021.04	ETAAS	0.33	0.46	6	1	1	0	0
2021.04	ICP-MS	0.46	0.43	40	7	7	0	0
2021.05	ETAAS	8.37	0.96	6	1	1	0	0
2021.05	ICP-MS	8.82	0.49	38	6	5	1	0
2021.06	ETAAS	11.96	1.4	6	1	1	0	0
2021.06	ICP-MS	12.92	0.72	39	7	6	1	0
2021.07	ICP-MS	8.8	0.49	40	6	5	1	0
2021.08	ICP-MS	0.26	0.16	40	7	6	1	0
2021.09	ICP-MS	0.61	0.34	40	6	5	1	0
2021.10	ICP-MS	29.21	1.39	41	7	5	2	0
2021.11	ICP-MS	37.41	1.91	42	6	6	0	0
2021.12	ICP-MS	41.52	1.89	43	7	7	0	0
2021.13	FAAS	41.2	0	1	1	0	0	1
2021.13	ICP-MS	17.11	1.26	42	6	6	0	0
2021.13	Global	17.01	1.43	49	7	6	1	0
2021.14	FAAS	12.2	0	1	1	0	0	1
2021.14	ICP-MS	4.97	0.59	43	7	7	0	0
2021.14	Global	4.99	0.62	50	8	7	1	0
2021.15	ICP-MS	25.49	2	40	6	5	1	0
2021.16	ICP-MS	13.3	1.07	41	7	6	1	0
2021.17	FAAS	21.3	0.3	2	1	0	0	1
2021.17	ICP-MS	21.58	1.4	42	6	6	0	0
2021.17	Global	21.56	1.35	47	7	7	0	0
2021.18	FAAS	34.75	0.78	2	1	0	0	1
2021.18	ICP-MS	33.95	2.51	44	7	7	0	0
2021.18	Global	33.8	2.49	49	8	8	0	0
2021.19	FAAS	37.6	0	1	1	0	0	1
2021.19	ICP-MS	33.56	2.36	42	6	6	0	0
2021.19	Global	33.54	2.29	47	7	7	0	0
2021.20	FAAS	15.1	0	1	1	0	0	1
2021.20	ICP-MS	13.1	0.89	43	7	7	0	0
2021.20	Global	13.13	0.85	48	8	8	0	0
2021.21	FAAS	38.5	0	1	1	0	0	1
2021.21	ICP-MS	37.96	1.68	42	6	5	1	0
2021.21	Global	37.91	1.59	47	7	6	1	0
2021.22	FAAS	14.5	0	1	1	0	0	1
2021.22	ICP-MS	21.4	1.46	43	7	7	0	0
2021.22	Global	21.39	1.48	48	8	7	1	0
2021.23	FAAS	14.9	10.75	2	1	0	0	1
2021.23	ICP-MS	0.65	0.28	39	5	5	0	0
2021.23	Global	0.66	0.28	45	6	6	0	0
2021.24	FAAS	10.15	7.3	2	1	0	0	1
2021.24	ICP-MS	29.67	1.77	40	6	6	0	0
2021.24	Global	29.46	1.8	46	7	6	1	0

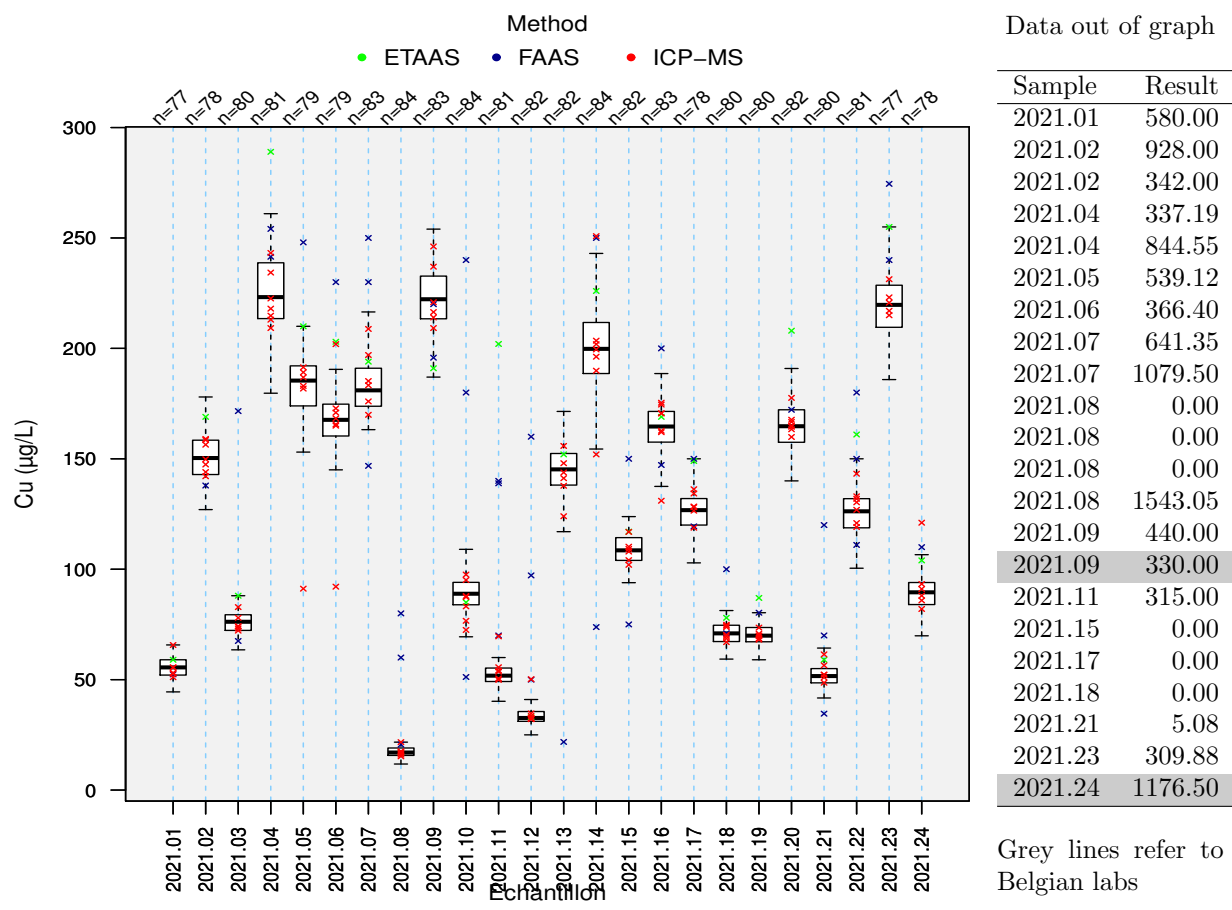


1.3.7 Cu

Sample	Method	Median	SD	N	NBE	NG	NC	NE
2021.01	ETAAS	55.25	7.32	15	1	1	0	0
2021.01	FAAS	56	3.11	7	1	1	0	0
2021.01	ICP-MS	55.7	4.24	51	6	6	0	0
2021.02	ETAAS	145.42	19.29	15	1	1	0	0
2021.02	FAAS	153.04	20.17	7	1	1	0	0
2021.02	ICP-MS	151.22	8.82	52	7	7	0	0
2021.03	ETAAS	76.2	6.31	15	1	1	0	0
2021.03	FAAS	80.97	7.56	6	2	1	1	0
2021.03	ICP-MS	76.2	4.99	55	6	6	0	0
2021.04	ETAAS	216.7	14.12	15	1	0	1	0
2021.04	FAAS	241.75	9.98	6	2	2	0	0
2021.04	ICP-MS	224.16	15.56	56	7	7	0	0
2021.05	ETAAS	187.31	12.99	16	1	1	0	0
2021.05	FAAS	191.77	34.93	7	1	1	0	0
2021.05	ICP-MS	184.15	9.84	52	6	5	1	0
2021.06	ETAAS	167.01	12.59	15	1	1	0	0
2021.06	FAAS	181	24.95	7	1	1	0	0
2021.06	ICP-MS	166.48	9.41	53	7	5	2	0
2021.07	ETAAS	177.76	14.63	14	1	1	0	0
2021.07	FAAS	206.38	25.18	11	3	3	0	0
2021.07	ICP-MS	180	10.14	54	6	6	0	0
2021.08	ETAAS	16.39	3.66	14	1	1	0	0
2021.08	FAAS	20.32	14.04	11	3	2	1	0
2021.08	ICP-MS	16.89	1.64	55	7	7	0	0
2021.09	ETAAS	211.9	13.71	14	1	1	0	0
2021.09	FAAS	234.95	24.3	11	3	2	1	0
2021.09	ICP-MS	223.35	12.46	54	6	6	0	0
2021.10	ETAAS	85.73	3.22	14	1	1	0	0
2021.10	FAAS	109	23.07	11	3	1	2	0
2021.10	ICP-MS	90	6.81	55	7	7	0	0
2021.11	ETAAS	49.6	6.09	13	1	0	1	0
2021.11	FAAS	63.02	11.23	10	3	1	2	0
2021.11	ICP-MS	51.27	4.04	54	6	5	1	0
2021.12	ETAAS	31.75	2.82	13	1	1	0	0
2021.12	FAAS	40.82	10.85	10	3	1	2	0
2021.12	ICP-MS	32.85	2.66	55	7	6	1	0
2021.13	ETAAS	144.39	9.77	14	1	1	0	0
2021.13	FAAS	144	56.02	9	1	1	0	0
2021.13	ICP-MS	146.01	8.47	55	6	6	0	0
2021.14	ETAAS	198.38	24.42	14	1	1	0	0
2021.14	FAAS	204.5	67.2	10	2	2	0	0
2021.14	ICP-MS	202.16	12.62	56	7	5	2	0
2021.15	ETAAS	109.11	11.43	14	1	1	0	0
2021.15	FAAS	113.98	21.11	10	2	2	0	0
2021.15	ICP-MS	107.97	6.72	54	6	6	0	0
2021.16	ETAAS	159.47	15.84	14	1	1	0	0
2021.16	FAAS	168.28	31.81	10	2	2	0	0
2021.16	ICP-MS	165.1	8.08	55	7	6	1	0
2021.17	ETAAS	119.53	14.61	12	1	1	0	0
2021.17	FAAS	146.05	19.77	9	2	2	0	0
2021.17	ICP-MS	126.51	7.26	53	6	6	0	0
2021.18	ETAAS	66.6	8.39	12	1	1	0	0
2021.18	FAAS	74	21.5	9	2	2	0	0
2021.18	ICP-MS	71.12	4.7	55	7	7	0	0
2021.19	ETAAS	69.56	5.01	13	1	0	1	0
2021.19	FAAS	87.46	24.04	8	1	1	0	0
2021.19	ICP-MS	69.85	3.97	55	6	6	0	0
2021.20	ETAAS	164	23.72	13	1	1	0	0
2021.20	FAAS	181.1	33.78	8	1	1	0	0
2021.20	ICP-MS	164	9.24	57	7	7	0	0

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Sample	Method	Median	SD	N	NBE	NG	NC	NE
2021.21	ETAAS	49.53	7.14	13	1	1	0	0
2021.21	FAAS	55.36	25.03	10	3	3	0	0
2021.21	ICP-MS	51.84	3.14	53	6	5	1	0
2021.22	ETAAS	118.75	14.06	13	1	1	0	0
2021.22	FAAS	136.87	42.2	10	3	3	0	0
2021.22	ICP-MS	127	8.35	54	7	7	0	0
2021.23	ETAAS	211.91	16.75	14	1	1	0	0
2021.23	FAAS	229.87	25.51	8	2	2	0	0
2021.23	ICP-MS	220.52	11.05	52	5	5	0	0
2021.24	ETAAS	83.3	7.5	14	1	1	0	0
2021.24	FAAS	97.31	24.32	8	2	1	1	0
2021.24	ICP-MS	89.54	5.37	53	6	5	1	0

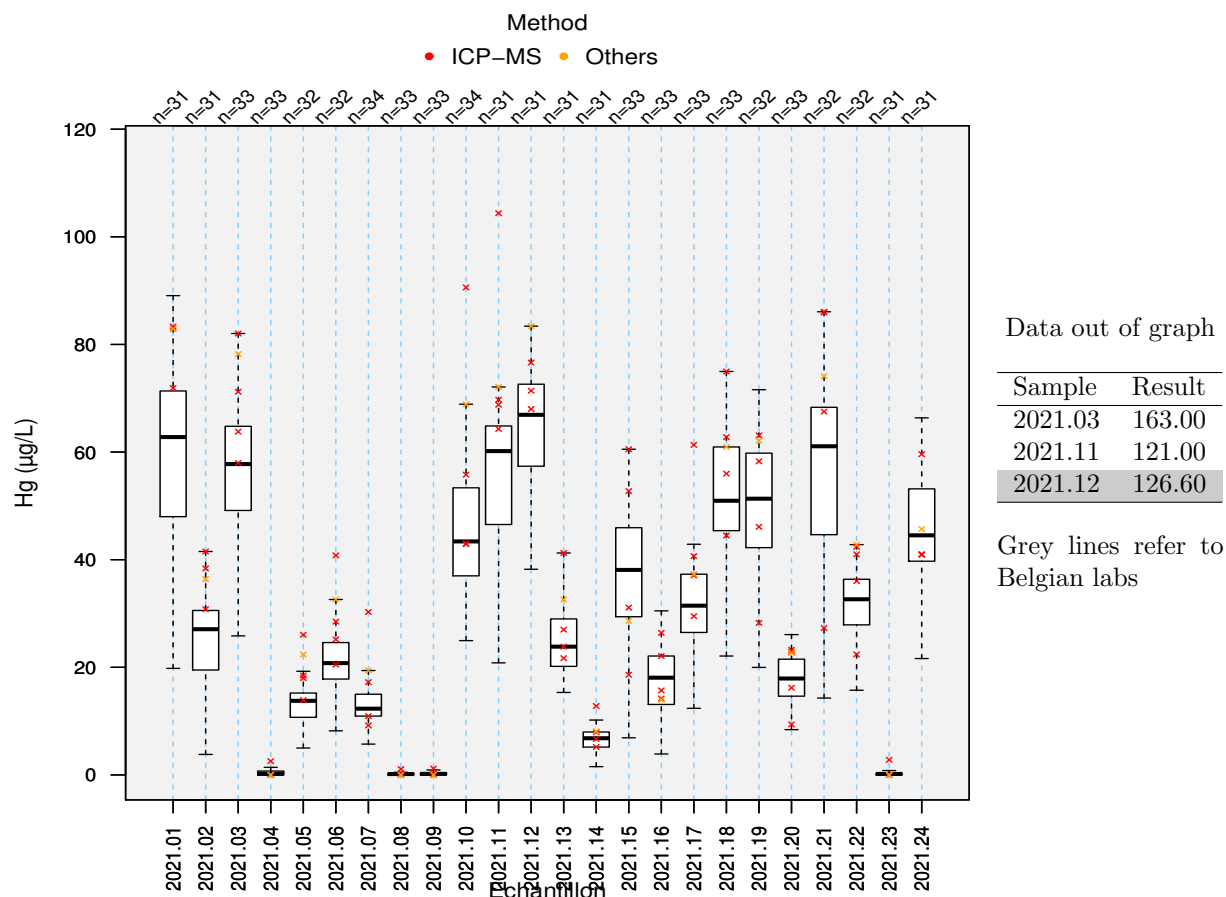


1.3.8 Hg

Sample	Method	Median	SD	N	NBE	NG	NC	NE
2021.01	ICP-MS	58.6	17.25	26	3	3	0	0
2021.01	Others	73.35	15.52	4	1	0	0	1
2021.01	Global	62.79	17.31	31	4	4	0	0
2021.02	ICP-MS	26.88	9.22	26	3	3	0	0
2021.02	Others	26.02	7.85	4	1	0	0	1
2021.02	Global	27.08	8.2	31	4	4	0	0
2021.03	ICP-MS	56.57	14.75	29	4	4	0	0
2021.03	Others	61.06	7.33	3	1	0	0	1
2021.03	Global	57.77	11.59	33	5	5	0	0
2021.04	ICP-MS	0.2	0.64	29	4	3	1	0
2021.04	Others	0	0.17	3	1	0	0	1
2021.04	Global	0.2	0.53	33	5	4	1	0
2021.05	ICP-MS	13.9	2.92	27	4	3	1	0
2021.05	Others	12.78	4.28	4	1	0	0	1
2021.05	Global	13.77	3.26	32	5	4	1	0
2021.06	ICP-MS	21.06	5.28	27	4	3	1	0
2021.06	Others	20.17	4.9	4	1	0	0	1
2021.06	Global	20.78	4.78	32	5	4	1	0
2021.07	ICP-MS	12.24	3.02	29	4	3	1	0
2021.07	Others	12.29	1.53	4	1	0	0	1
2021.07	Global	12.31	2.97	34	5	4	1	0
2021.08	ICP-MS	0.18	0.31	28	4	4	0	0
2021.08	Others	0.08	0.14	4	1	0	0	1
2021.08	Global	0.17	0.24	33	5	4	1	0
2021.09	ICP-MS	0.2	0.3	28	4	3	1	0
2021.09	Others	0.3	0.28	4	1	0	0	1
2021.09	Global	0.2	0.3	33	5	4	1	0
2021.10	ICP-MS	43.02	12.34	29	4	3	1	0
2021.10	Others	41.79	7.92	4	1	0	0	1
2021.10	Global	43.4	11.82	34	5	4	1	0
2021.11	ICP-MS	58.17	14.15	26	4	3	1	0
2021.11	Others	63.44	6.08	4	1	0	0	1
2021.11	Global	60.18	13.57	31	5	4	1	0
2021.12	ICP-MS	65.19	12.97	26	4	3	1	0
2021.12	Others	66.44	5.06	4	1	0	0	1
2021.12	Global	66.92	11.29	31	5	4	1	0
2021.13	ICP-MS	23.76	6.16	28	4	4	0	0
2021.13	Others	26.96	4.18	2	1	0	0	1
2021.13	Global	23.84	6.53	31	5	5	0	0
2021.14	ICP-MS	6.76	2.05	28	4	4	0	0
2021.14	Others	6.43	1.24	2	1	0	0	1
2021.14	Global	6.82	2.07	31	5	5	0	0
2021.15	ICP-MS	37.43	12.29	28	4	4	0	0
2021.15	Others	28.63	8.02	3	1	0	0	1
2021.15	Global	38.1	12.26	33	5	5	0	0
2021.16	ICP-MS	18.06	6.8	28	4	4	0	0
2021.16	Others	13.97	5.42	3	1	0	0	1
2021.16	Global	18.07	6.67	33	5	5	0	0
2021.17	ICP-MS	31.45	7.85	29	4	3	1	0
2021.17	Others	31.33	5.15	3	1	0	0	1
2021.17	Global	31.45	8.02	33	5	4	1	0
2021.18	ICP-MS	50.48	7.85	29	4	3	1	0
2021.18	Others	52.9	6.8	3	1	0	0	1
2021.18	Global	50.95	11.53	33	5	5	0	0
2021.19	ICP-MS	51.34	11.97	28	4	4	0	0
2021.19	Others	47.93	15.12	3	1	0	0	1
2021.19	Global	51.34	12.8	32	5	5	0	0
2021.20	ICP-MS	17.92	4.02	29	4	4	0	0
2021.20	Others	14.79	5.29	3	1	0	0	1

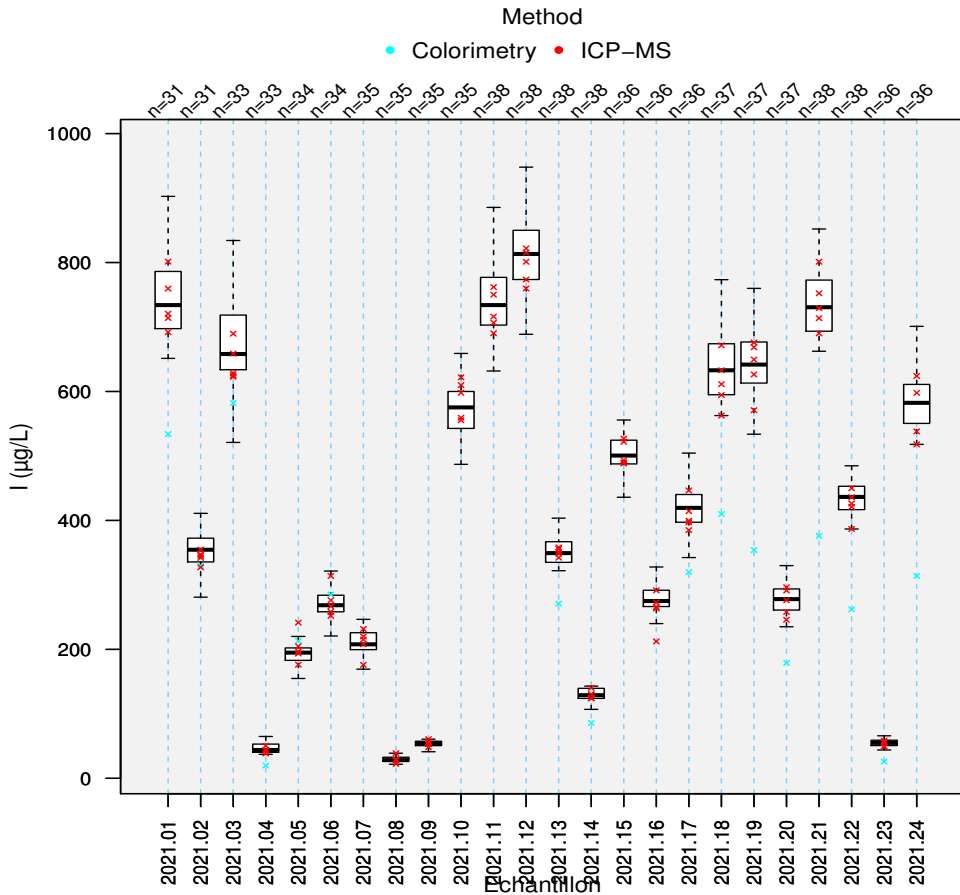
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Sample	Method	Median	SD	N	NBE	NG	NC	NE
2021.20	Global	17.92	5.09	33	5	5	0	0
2021.21	ICP-MS	61.58	17.43	28	4	4	0	0
2021.21	Others	54.95	12.11	3	1	0	0	1
2021.21	Global	61.08	17.43	32	5	5	0	0
2021.22	ICP-MS	32.65	5.78	28	4	4	0	0
2021.22	Others	30.18	7.01	3	1	0	0	1
2021.22	Global	32.65	5.78	32	5	5	0	0
2021.23	ICP-MS	0.16	0.29	27	3	2	1	0
2021.23	Others	0.32	0.13	3	1	0	0	1
2021.23	Global	0.19	0.25	31	4	3	1	0
2021.24	ICP-MS	43.6	9.96	27	3	3	0	0
2021.24	Others	45.7	2.99	3	1	0	0	1
2021.24	Global	44.53	9.96	31	4	4	0	0



1.3.9 I

Sample	Method	Median	SD	N	NBE	NG	NC	NE
2021.01	Colorimetry	632	72.65	2	1	0	0	1
2021.01	ICP-MS	734.69	64.55	28	5	5	0	0
2021.01	Global	734	65.71	31	6	5	1	0
2021.02	Colorimetry	345	11.12	2	1	0	0	1
2021.02	ICP-MS	354.63	25.37	28	5	5	0	0
2021.02	Global	354.56	27.32	31	6	6	0	0
2021.03	Colorimetry	656	54.86	2	1	0	0	1
2021.03	ICP-MS	658.41	55.14	30	5	5	0	0
2021.03	Global	658.12	62.83	33	6	6	0	0
2021.04	Colorimetry	41	15.57	2	1	0	0	1
2021.04	ICP-MS	43.83	9	30	5	5	0	0
2021.04	Global	44	9.45	33	6	6	0	0
2021.05	Colorimetry	198	11.12	2	1	0	0	1
2021.05	ICP-MS	195.93	13.08	31	5	4	1	0
2021.05	Global	194.97	14.06	34	6	5	1	0
2021.06	Colorimetry	277	5.93	2	1	0	0	1
2021.06	ICP-MS	268	17.31	31	5	5	0	0
2021.06	Global	268.5	18.17	34	6	6	0	0
2021.07	ICP-MS	208.01	20.57	33	5	5	0	0
2021.08	ICP-MS	28.25	4.45	33	5	5	0	0
2021.09	ICP-MS	54.57	4.23	33	5	5	0	0
2021.10	ICP-MS	577.78	35.15	33	5	5	0	0
2021.11	ICP-MS	736	51.65	36	5	5	0	0
2021.12	ICP-MS	813.28	57.51	36	5	5	0	0
2021.13	Colorimetry	307	26.69	2	1	0	0	1
2021.13	ICP-MS	350.5	23.17	36	5	5	0	0
2021.13	Global	349.35	22.8	38	6	5	1	0
2021.14	Colorimetry	107.5	15.94	2	1	0	0	1
2021.14	ICP-MS	128.97	11.63	36	5	5	0	0
2021.14	Global	128.97	11.52	38	6	5	1	0
2021.15	ICP-MS	502.9	26.82	34	5	5	0	0
2021.16	ICP-MS	275.44	18.18	34	5	4	1	0
2021.17	Colorimetry	355.5	26.32	2	1	0	0	1
2021.17	ICP-MS	420.17	34.41	33	5	5	0	0
2021.17	Global	419.5	29.86	36	6	5	1	0
2021.18	Colorimetry	488	57.82	2	1	0	0	1
2021.18	ICP-MS	635.19	50.74	34	5	5	0	0
2021.18	Global	632.87	58.56	37	6	5	1	0
2021.19	Colorimetry	476	90.44	2	1	0	0	1
2021.19	ICP-MS	649.8	43.24	34	5	5	0	0
2021.19	Global	641.71	47.23	37	6	5	1	0
2021.20	Colorimetry	228.5	36.69	2	1	0	0	1
2021.20	ICP-MS	279.09	25.28	34	5	5	0	0
2021.20	Global	278	24.29	37	6	5	1	0
2021.21	Colorimetry	543	123.8	2	1	0	0	1
2021.21	ICP-MS	734.5	55.5	35	5	5	0	0
2021.21	Global	730.63	56.84	38	6	5	1	0
2021.22	Colorimetry	354	68.2	2	1	0	0	1
2021.22	ICP-MS	435.99	25.53	35	5	5	0	0
2021.22	Global	436.5	25.51	38	6	5	1	0
2021.23	Colorimetry	36.5	7.78	2	1	0	0	1
2021.23	ICP-MS	55.3	5.41	33	5	5	0	0
2021.23	Global	55	6.01	36	6	5	1	0
2021.24	Colorimetry	440	93.4	2	1	0	0	1
2021.24	ICP-MS	584.5	47.37	33	5	4	1	0
2021.24	Global	582.37	42.42	36	6	4	2	0



Data out of graph

Sample	Result
2021.01	1125.38
2021.03	2959.00
2021.03	0.00
2021.04	3462.00
2021.07	1682.76
2021.10	1173.02
2021.11	1703.00
2021.12	1167.48
2021.12	1767.00
2021.18	1264.00
2021.19	1214.73
2021.21	11230.17
2021.21	0.00
2021.22	5293.66
2021.23	15882.69
2021.24	1372.02
2021.24	17256.08

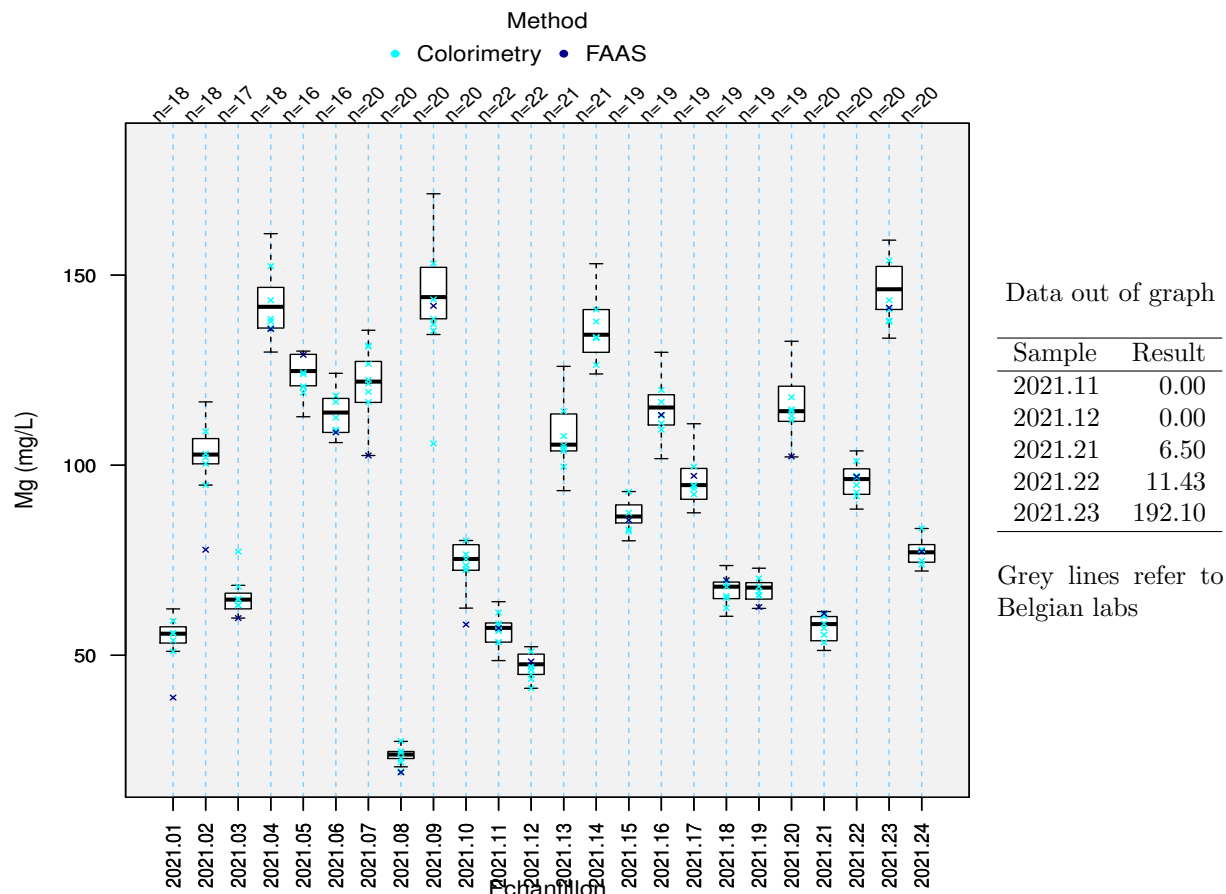
Grey lines refer to Belgian labs

1.3.10 Mg

Sample	Method	Median	SD	N	NBE	NG	NC	NE
2021.01	Colorimetry	55.67	1.09	6	5	3	2	0
2021.01	FAAS	53.42	3.88	4	1	0	0	1
2021.01	Global	55.67	2.87	18	6	5	1	0
2021.02	Colorimetry	102.55	3.87	6	5	5	0	0
2021.02	FAAS	98.19	7.85	4	1	0	0	1
2021.02	Global	102.79	4.67	18	6	5	1	0
2021.03	Colorimetry	64.88	3.2	7	6	5	1	0
2021.03	FAAS	59.78	0.9	3	1	0	0	1
2021.03	Global	64.64	3.06	17	7	6	1	0
2021.04	Colorimetry	138.51	8.11	7	6	6	0	0
2021.04	FAAS	132.44	2.25	3	1	0	0	1
2021.04	Global	141.67	7.11	18	7	7	0	0
2021.05	Colorimetry	122.35	2.75	6	5	5	0	0
2021.05	FAAS	125.02	7.52	4	1	0	0	1
2021.05	Global	124.77	6.04	16	6	6	0	0
2021.06	Colorimetry	110.93	4.77	6	5	5	0	0
2021.06	FAAS	108.62	2.93	4	1	0	0	1
2021.06	Global	113.84	6.47	16	6	6	0	0
2021.07	Colorimetry	124.53	7.66	8	7	7	0	0
2021.07	FAAS	116.28	4.1	4	1	0	0	1
2021.07	Global	121.98	7.69	20	8	8	0	0
2021.08	Colorimetry	23.57	2.12	8	7	7	0	0
2021.08	FAAS	22.48	2.97	4	1	0	0	1
2021.08	Global	23.88	1.33	20	8	6	2	0
2021.09	Colorimetry	138.51	9.01	7	6	5	1	0
2021.09	FAAS	140.21	3.56	4	1	0	0	1
2021.09	Global	144.22	9.65	20	7	6	1	0
2021.10	Colorimetry	75.33	3.87	7	6	6	0	0
2021.10	FAAS	71.32	3.33	4	1	0	0	1
2021.10	Global	75.33	4.57	20	7	6	1	0
2021.11	Colorimetry	57.34	2.52	8	7	7	0	0
2021.11	FAAS	53.09	1.98	4	1	0	0	1
2021.11	Global	57.2	3.73	22	8	8	0	0
2021.12	Colorimetry	46.53	2.56	8	7	7	0	0
2021.12	FAAS	46.53	2.65	4	1	0	0	1
2021.12	Global	47.62	3.57	22	8	8	0	0
2021.13	Colorimetry	105.22	3.71	7	6	6	0	0
2021.14	Colorimetry	133.65	3.08	7	6	6	0	0
2021.15	Colorimetry	86.51	5.9	6	5	5	0	0
2021.15	FAAS	83.96	1.14	4	1	0	0	1
2021.15	Global	86.51	3.52	19	6	6	0	0
2021.16	Colorimetry	114.82	5.54	6	5	5	0	0
2021.16	FAAS	110.93	5.05	4	1	0	0	1
2021.16	Global	115.18	5.9	19	6	6	0	0
2021.17	Colorimetry	94.65	3.29	6	5	5	0	0
2021.17	FAAS	89.06	1.93	4	1	0	0	1
2021.17	Global	94.77	6.02	19	6	6	0	0
2021.18	Colorimetry	66.83	2.61	6	5	5	0	0
2021.18	FAAS	64.52	3.51	4	1	0	0	1
2021.18	Global	68.04	3.22	19	6	6	0	0
2021.19	Colorimetry	67.44	1.86	6	5	5	0	0
2021.19	FAAS	63.42	2.7	4	1	0	0	1
2021.19	Global	67.8	3.21	19	6	6	0	0
2021.20	Colorimetry	114.45	2.79	6	5	5	0	0
2021.20	FAAS	108.62	8.06	4	1	0	0	1
2021.20	Global	114.21	6.85	19	6	6	0	0
2021.21	Colorimetry	58.32	2.91	7	6	6	0	0
2021.21	FAAS	56.98	4.59	4	1	0	0	1
2021.21	Global	58.2	4.55	20	7	7	0	0

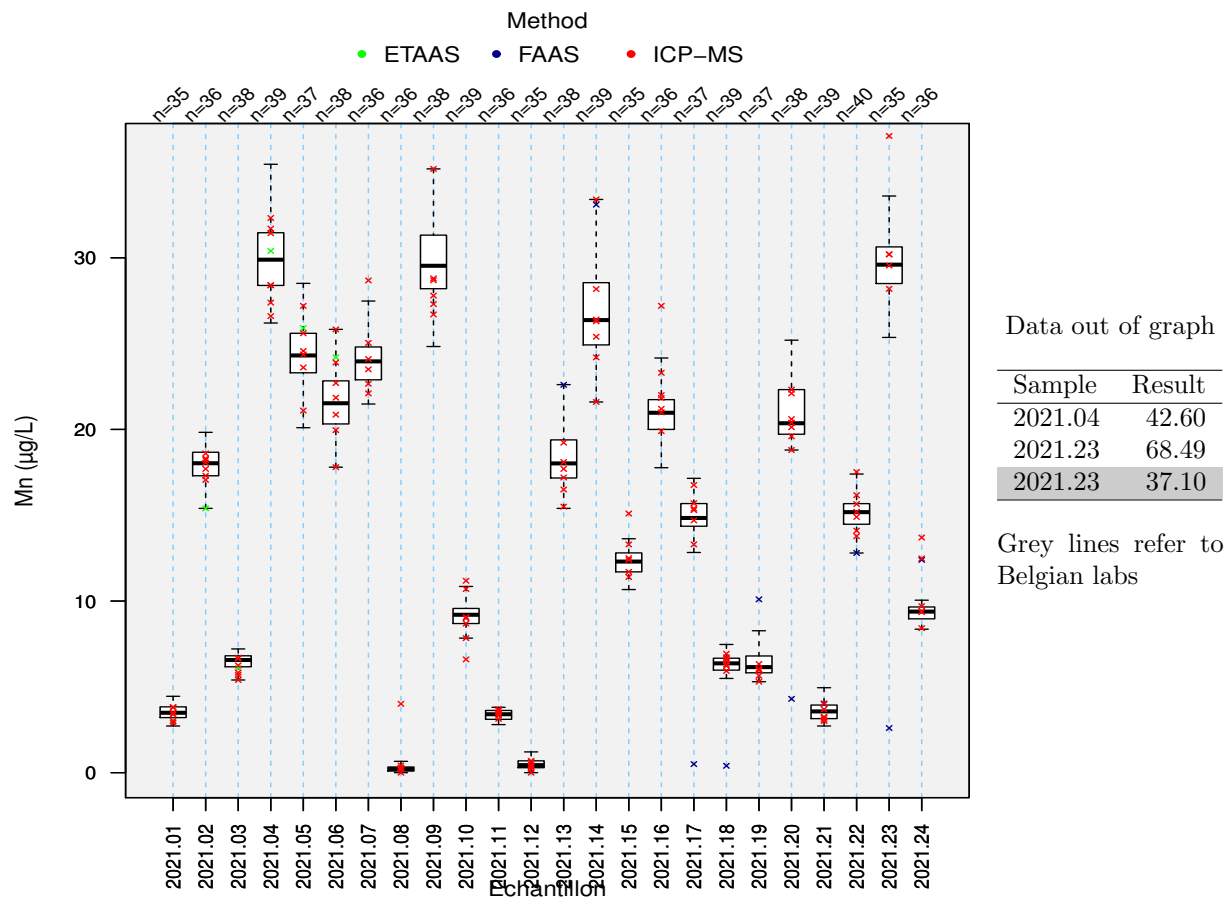
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Sample	Method	Median	SD	N	NBE	NG	NC	NE
2021.22	Colorimetry	96.71	3.96	7	6	6	0	0
2021.22	FAAS	95.75	3.29	4	1	0	0	1
2021.22	Global	96.35	4.74	20	7	7	0	0
2021.23	Colorimetry	142.16	9.23	6	5	5	0	0
2021.23	FAAS	140.58	3.24	4	1	0	0	1
2021.23	Global	146.29	8.09	20	6	6	0	0
2021.24	Colorimetry	77.76	2.54	6	5	5	0	0
2021.24	FAAS	73.63	1.76	4	1	0	0	1
2021.24	Global	77.09	3.35	20	6	6	0	0



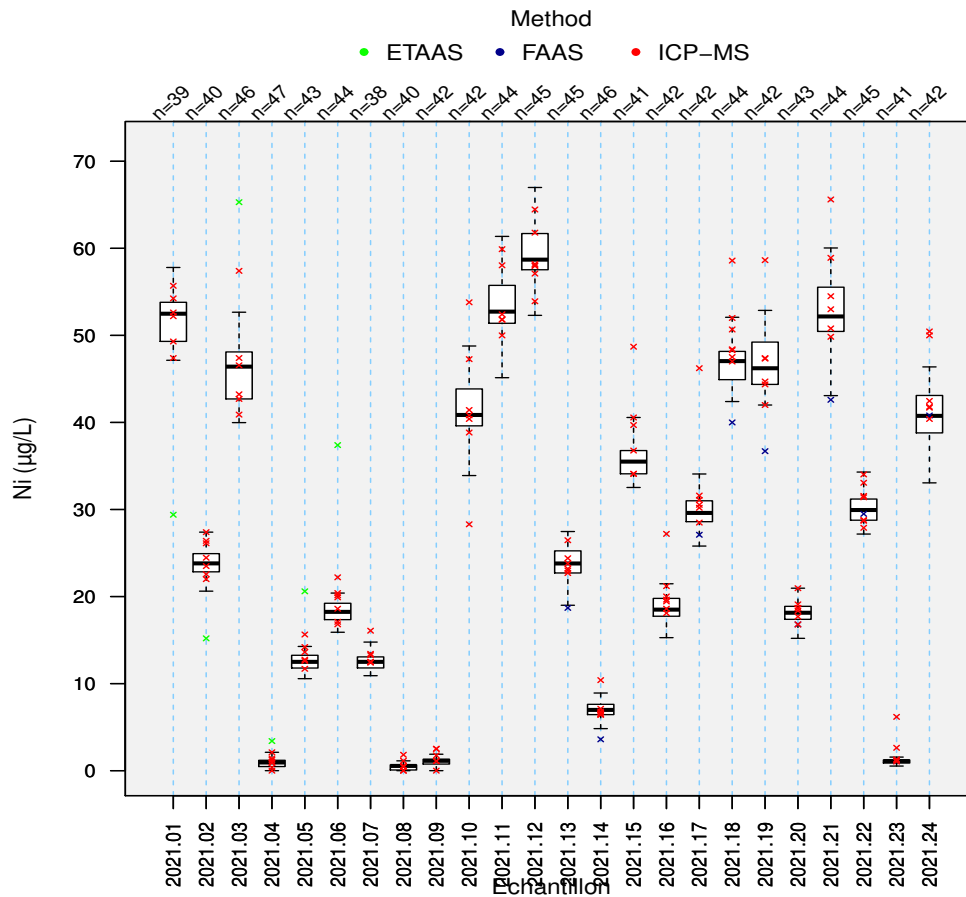
1.3.11 Mn

Sample	Method	Median	SD	N	NBE	NG	NC	NE
2021.01	ETAAS	3	0.82	3	1	0	0	1
2021.01	ICP-MS	3.56	0.42	32	6	6	0	0
2021.01	Global	3.49	0.46	35	7	7	0	0
2021.02	ETAAS	15.4	4.11	3	1	0	0	1
2021.02	ICP-MS	18.06	0.98	33	7	7	0	0
2021.02	Global	18.03	0.99	36	8	8	0	0
2021.03	ETAAS	6.1	1.59	3	1	0	0	1
2021.03	ICP-MS	6.59	0.42	35	6	6	0	0
2021.03	Global	6.56	0.46	38	7	7	0	0
2021.04	ETAAS	28.4	6.78	3	1	0	0	1
2021.04	ICP-MS	30.14	2.31	36	7	7	0	0
2021.04	Global	29.89	2.28	39	8	8	0	0
2021.05	ETAAS	25.9	1.15	3	1	0	0	1
2021.05	ICP-MS	24.25	1.53	34	6	6	0	0
2021.05	Global	24.31	1.7	37	7	7	0	0
2021.06	ETAAS	23.21	0.97	3	1	0	0	1
2021.06	ICP-MS	21.43	1.75	35	7	7	0	0
2021.06	Global	21.52	1.83	38	8	8	0	0
2021.07	ICP-MS	23.92	1.42	35	6	5	1	0
2021.08	ICP-MS	0.2	0.15	35	7	6	1	0
2021.09	ICP-MS	29.67	2.28	37	6	6	0	0
2021.10	ICP-MS	9.23	0.64	38	7	5	2	0
2021.11	ICP-MS	3.4	0.36	35	6	6	0	0
2021.12	ICP-MS	0.44	0.29	34	7	7	0	0
2021.13	FAAS	22.6	0	1	1	0	0	1
2021.13	ICP-MS	17.87	1.59	36	6	6	0	0
2021.13	Global	18.02	1.61	38	7	7	0	0
2021.14	FAAS	33.1	0	1	1	0	0	1
2021.14	ICP-MS	26.3	2.82	37	7	7	0	0
2021.14	Global	26.37	2.69	39	8	8	0	0
2021.15	ICP-MS	12.35	0.85	34	6	5	1	0
2021.16	ICP-MS	20.99	1.17	35	7	6	1	0
2021.17	FAAS	0.5	0	1	1	0	0	1
2021.17	ICP-MS	14.84	0.95	35	6	6	0	0
2021.17	Global	14.84	0.98	37	7	6	1	0
2021.18	FAAS	0.4	0	1	1	0	0	1
2021.18	ICP-MS	6.39	0.44	37	7	7	0	0
2021.18	Global	6.37	0.52	39	8	7	1	0
2021.19	FAAS	10.1	0	1	1	0	0	1
2021.19	ICP-MS	6.15	0.61	35	6	6	0	0
2021.19	Global	6.15	0.73	37	7	6	1	0
2021.20	FAAS	4.3	0	1	1	0	0	1
2021.20	ICP-MS	20.44	1.73	36	7	7	0	0
2021.20	Global	20.36	1.86	38	8	7	1	0
2021.21	FAAS	4	0	1	1	0	0	1
2021.21	ICP-MS	3.57	0.53	37	6	6	0	0
2021.21	Global	3.57	0.59	39	7	7	0	0
2021.22	FAAS	12.8	0	1	1	0	0	1
2021.22	ICP-MS	15.22	0.58	38	7	6	1	0
2021.22	Global	15.18	0.83	40	8	8	0	0
2021.23	FAAS	2.6	0	1	1	0	0	1
2021.23	ICP-MS	29.6	1.31	33	5	4	1	0
2021.23	Global	29.6	1.58	35	6	4	2	0
2021.24	FAAS	12.4	0	1	1	0	0	1
2021.24	ICP-MS	9.38	0.52	34	6	4	2	0
2021.24	Global	9.39	0.42	36	7	4	3	0



1.3.12 Ni

Sample	Method	Median	SD	N	NBE	NG	NC	NE
2021.01	ETAAS	38.83	6.99	2	1	0	0	1
2021.01	ICP-MS	52.5	3.06	37	6	6	0	0
2021.01	Global	52.49	3.33	39	7	6	1	0
2021.02	ETAAS	20.43	3.88	2	1	0	0	1
2021.02	ICP-MS	23.81	1.08	38	7	6	1	0
2021.02	Global	23.81	1.33	40	8	7	1	0
2021.03	ETAAS	41.7	9.38	3	1	0	0	1
2021.03	ICP-MS	46.42	3.44	43	6	5	1	0
2021.03	Global	46.41	3.89	46	7	6	1	0
2021.04	ETAAS	0.91	1.26	3	1	0	0	1
2021.04	ICP-MS	0.94	0.48	44	7	7	0	0
2021.04	Global	0.94	0.53	47	8	7	1	0
2021.05	ETAAS	12.68	5.15	3	1	0	0	1
2021.05	ICP-MS	12.47	1.05	40	6	5	1	0
2021.05	Global	12.5	1.09	43	7	6	1	0
2021.06	ETAAS	18.49	10.01	3	1	0	0	1
2021.06	ICP-MS	18.2	1.36	41	7	7	0	0
2021.06	Global	18.24	1.38	44	8	7	1	0
2021.07	ICP-MS	12.5	0.94	37	6	5	1	0
2021.08	ICP-MS	0.53	0.42	39	7	6	1	0
2021.09	ICP-MS	1.12	0.41	41	6	4	2	0
2021.10	ICP-MS	40.82	3.14	41	7	5	2	0
2021.11	ICP-MS	52.73	3.14	42	6	6	0	0
2021.12	ICP-MS	58.7	3.08	43	7	7	0	0
2021.13	FAAS	24.9	4.6	2	1	0	0	1
2021.13	ICP-MS	23.75	1.87	42	6	6	0	0
2021.13	Global	23.8	1.88	45	7	7	0	0
2021.14	FAAS	8.6	3.71	2	1	0	0	1
2021.14	ICP-MS	6.96	0.78	43	7	6	1	0
2021.14	Global	6.98	0.85	46	8	6	2	0
2021.15	ICP-MS	35.5	2	40	6	5	1	0
2021.16	ICP-MS	18.5	1.52	41	7	6	1	0
2021.17	FAAS	27.1	0	1	1	0	0	1
2021.17	ICP-MS	29.71	1.78	41	6	5	1	0
2021.17	Global	29.61	1.76	42	7	6	1	0
2021.18	FAAS	40	0	1	1	0	0	1
2021.18	ICP-MS	47.09	2.28	43	7	6	1	0
2021.18	Global	47.05	2.29	44	8	6	2	0
2021.19	FAAS	36.7	0	1	1	0	0	1
2021.19	ICP-MS	46.22	3.45	40	6	5	1	0
2021.19	Global	46.22	3.45	42	7	6	1	0
2021.20	FAAS	16.8	0	1	1	0	0	1
2021.20	ICP-MS	18.14	0.99	41	7	7	0	0
2021.20	Global	18.14	1.1	43	8	8	0	0
2021.21	FAAS	42.6	0	1	1	0	0	1
2021.21	ICP-MS	52.17	3.74	42	6	5	1	0
2021.21	Global	52.17	3.62	44	7	6	1	0
2021.22	FAAS	29.5	0	1	1	0	0	1
2021.22	ICP-MS	29.96	1.85	43	7	7	0	0
2021.22	Global	29.94	1.8	45	8	8	0	0
2021.23	FAAS	1.1	0	1	1	0	0	1
2021.23	ICP-MS	1.1	0.27	39	5	3	2	0
2021.23	Global	1.1	0.26	41	6	4	2	0
2021.24	FAAS	40.8	0	1	1	0	0	1
2021.24	ICP-MS	40.75	2.92	40	6	4	2	0
2021.24	Global	40.75	3.04	42	7	5	2	0

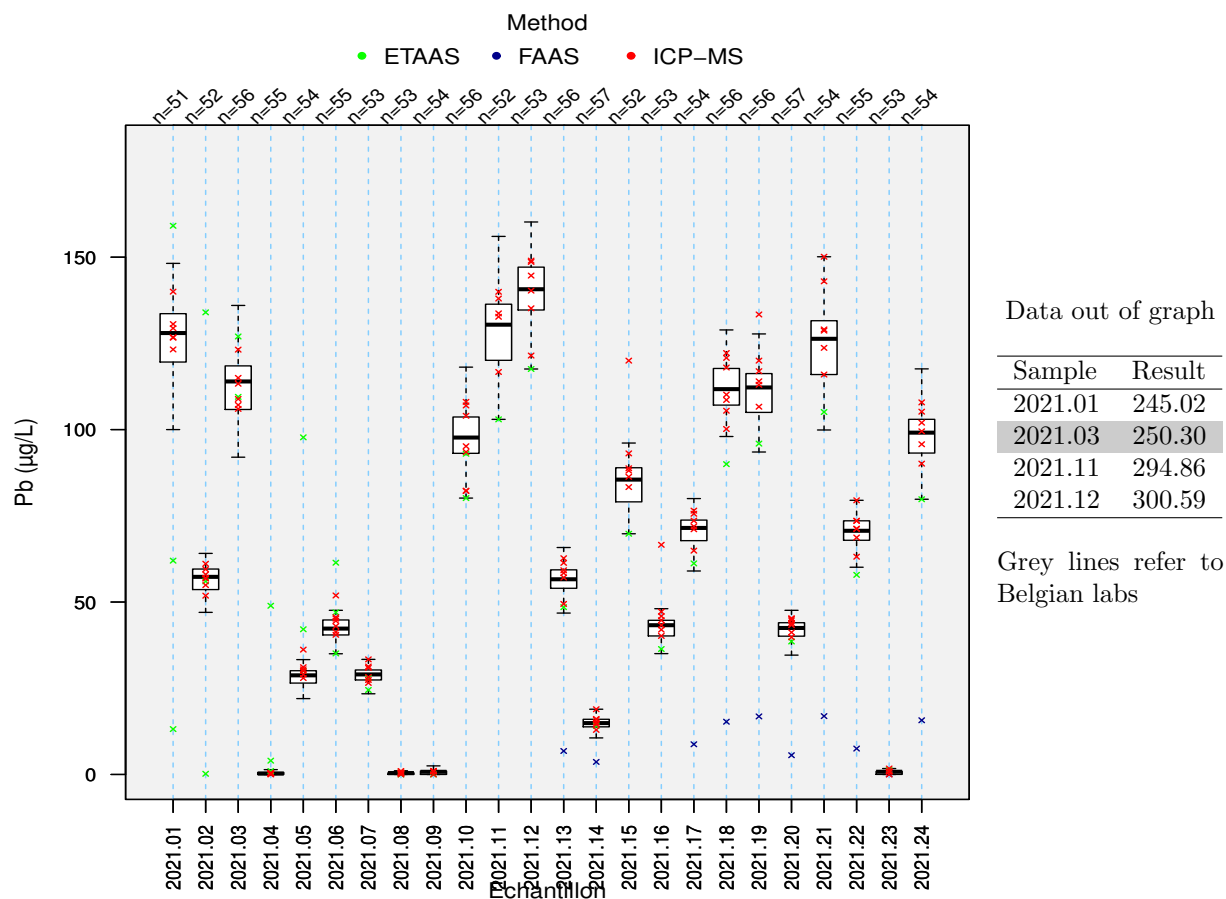


1.3.13 Pb

Sample	Method	Median	SD	N	NBE	NG	NC	NE
2021.01	ETAAS	126	35.46	8	3	2	1	0
2021.01	ICP-MS	128	9.91	43	6	6	0	0
2021.02	ETAAS	57.01	9.4	8	3	1	2	0
2021.02	ICP-MS	57.3	3.95	44	7	7	0	0
2021.03	ETAAS	117.03	11.42	8	3	2	1	0
2021.03	ICP-MS	113.63	8.56	48	6	6	0	0
2021.04	ETAAS	1.2	2.11	8	3	2	1	0
2021.04	ICP-MS	0.25	0.35	47	7	7	0	0
2021.05	ETAAS	29.51	4.78	8	3	2	1	0
2021.05	ICP-MS	28.59	2.79	46	6	6	0	0
2021.06	ETAAS	42.45	3.8	8	3	2	1	0
2021.06	ICP-MS	42.3	3.05	47	7	6	1	0
2021.07	ETAAS	29.61	2.61	7	2	2	0	0
2021.07	ICP-MS	29.01	2.05	46	6	6	0	0
2021.08	ETAAS	0	0.74	7	2	2	0	0
2021.08	ICP-MS	0.41	0.34	46	7	7	0	0
2021.09	ETAAS	0	0.82	7	2	2	0	0
2021.09	ICP-MS	0.79	0.67	47	6	6	0	0
2021.10	ETAAS	102.1	9.04	7	2	2	0	0
2021.10	ICP-MS	96.56	7.24	49	7	7	0	0
2021.11	ETAAS	137.2	12.11	7	1	1	0	0
2021.11	ICP-MS	130.27	10.75	45	5	5	0	0
2021.12	ETAAS	146	14.42	7	1	1	0	0
2021.12	ICP-MS	140.15	8.75	46	6	6	0	0
2021.13	ETAAS	56.14	1.51	6	1	0	1	0
2021.13	FAAS	6.81	0	1	1	0	0	1
2021.13	ICP-MS	56.79	4	49	6	6	0	0
2021.13	Global	56.6	3.88	56	8	7	1	0
2021.14	ETAAS	15.24	2.68	6	1	1	0	0
2021.14	FAAS	3.64	0	1	1	0	0	1
2021.14	ICP-MS	14.91	1.57	50	7	7	0	0
2021.14	Global	14.9	1.62	57	9	8	1	0
2021.15	ETAAS	82.11	13.12	6	1	1	0	0
2021.15	ICP-MS	85.5	5.76	46	6	5	1	0
2021.16	ETAAS	38.91	6.08	6	1	1	0	0
2021.16	ICP-MS	43.3	3.11	47	7	6	1	0
2021.17	ETAAS	71.2	2.94	5	1	0	0	1
2021.17	FAAS	8.75	0	1	1	0	0	1
2021.17	ICP-MS	71.8	4.35	48	6	6	0	0
2021.17	Global	71.48	4.35	54	8	7	1	0
2021.18	ETAAS	113.4	5.86	5	1	0	0	1
2021.18	FAAS	15.3	0	1	1	0	0	1
2021.18	ICP-MS	111.73	7.76	50	7	7	0	0
2021.18	Global	111.73	7.74	56	9	8	1	0
2021.19	ETAAS	113.38	8.62	6	1	1	0	0
2021.19	FAAS	16.83	0	1	1	0	0	1
2021.19	ICP-MS	112	7.93	49	6	6	0	0
2021.19	Global	112.22	8.14	56	8	7	1	0
2021.20	ETAAS	42.98	2.31	6	1	1	0	0
2021.20	FAAS	5.58	0	1	1	0	0	1
2021.20	ICP-MS	42.5	2.41	50	7	7	0	0
2021.20	Global	42.48	2.89	57	9	8	1	0
2021.21	ETAAS	126.39	10.08	5	1	0	0	1
2021.21	FAAS	16.92	0	1	1	0	0	1
2021.21	ICP-MS	126.63	9.97	48	6	6	0	0
2021.21	Global	126.33	11.53	54	8	7	1	0
2021.22	ETAAS	69.72	6.37	5	1	0	0	1
2021.22	FAAS	7.51	0	1	1	0	0	1
2021.22	ICP-MS	71	3.57	49	7	7	0	0
2021.22	Global	70.66	4.18	55	9	7	2	0

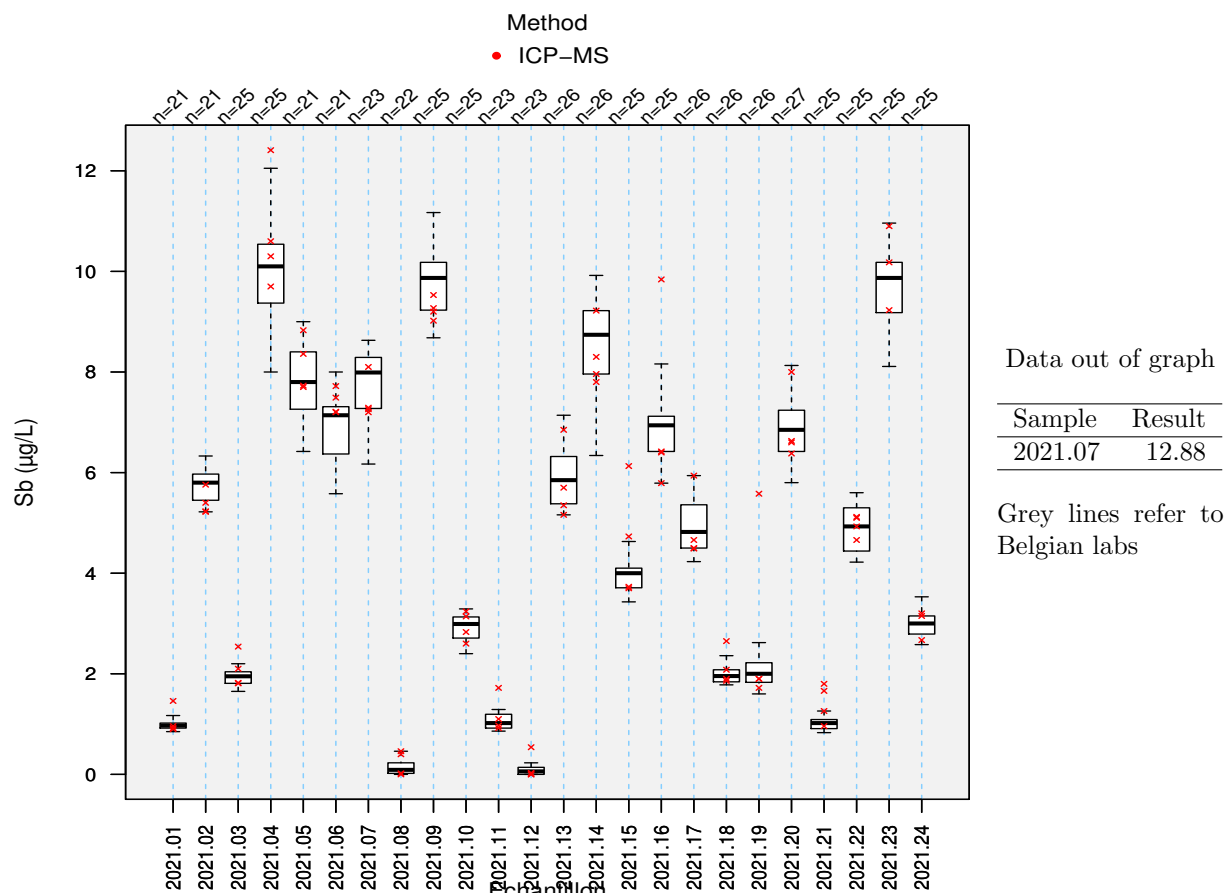
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Sample	Method	Median	SD	N	NBE	NG	NC	NE
2021.23	ETAAS	1.25	1.16	5	1	0	0	1
2021.23	FAAS	0.05	0	1	1	0	0	1
2021.23	ICP-MS	0.79	0.47	47	5	5	0	0
2021.23	Global	0.79	0.66	53	7	7	0	0
2021.24	ETAAS	91.17	18.31	5	1	0	0	1
2021.24	FAAS	15.72	0	1	1	0	0	1
2021.24	ICP-MS	99.45	6.16	48	6	6	0	0
2021.24	Global	99.12	7.01	54	8	7	1	0



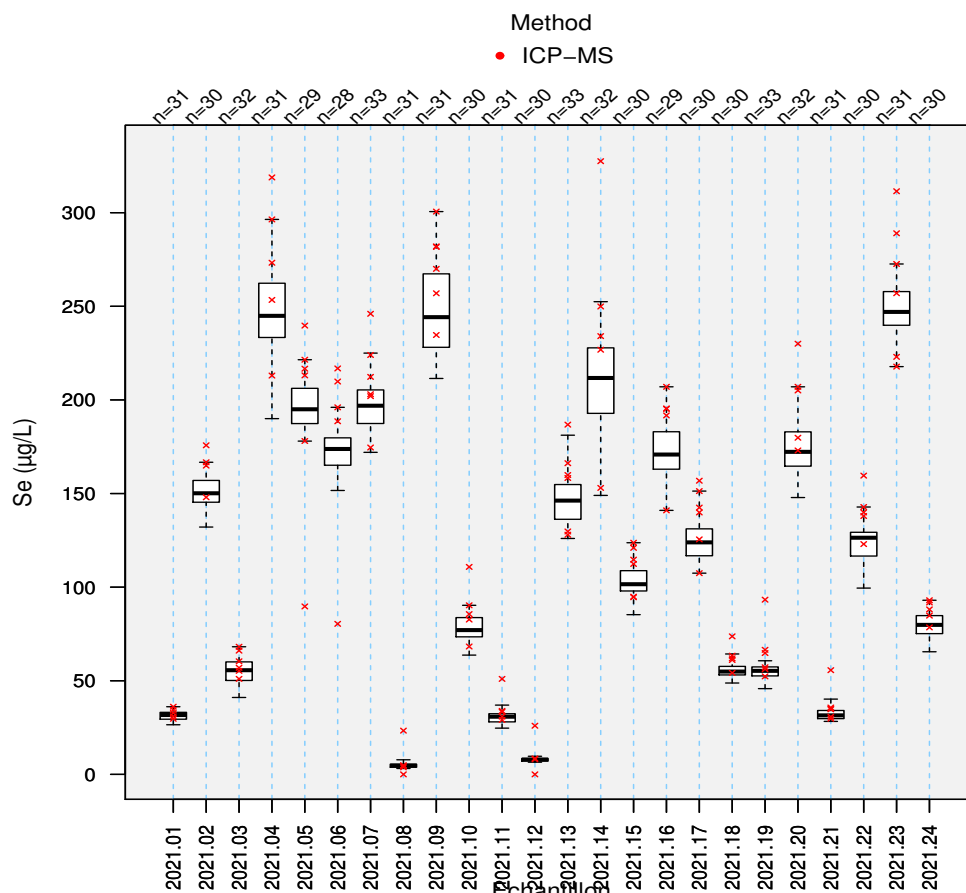
1.3.14 Sb

Sample	Method	Median	SD	N	NBE	NG	NC	NE
2021.01	ICP-MS	0.97	0.08	20	4	3	1	0
2021.02	ICP-MS	5.8	0.31	20	4	4	0	0
2021.03	ICP-MS	1.96	0.18	24	4	3	1	0
2021.04	ICP-MS	10.1	0.74	24	4	3	1	0
2021.05	ICP-MS	7.92	0.73	20	4	4	0	0
2021.06	ICP-MS	7.17	0.54	20	4	4	0	0
2021.07	ICP-MS	8.01	0.8	22	4	4	0	0
2021.08	ICP-MS	0.08	0.07	21	4	2	2	0
2021.09	ICP-MS	9.87	0.71	24	4	4	0	0
2021.10	ICP-MS	2.99	0.3	24	4	4	0	0
2021.11	ICP-MS	1	0.19	22	4	3	1	0
2021.12	ICP-MS	0.05	0.09	22	4	3	1	0
2021.13	ICP-MS	5.85	0.7	25	4	4	0	0
2021.14	ICP-MS	8.77	0.93	25	4	4	0	0
2021.15	ICP-MS	4	0.29	24	4	3	1	0
2021.16	ICP-MS	6.89	0.49	24	4	3	1	0
2021.17	ICP-MS	4.78	0.46	25	4	4	0	0
2021.18	ICP-MS	1.92	0.17	25	4	3	1	0
2021.19	ICP-MS	1.99	0.26	25	4	3	1	0
2021.20	ICP-MS	6.84	0.58	26	4	4	0	0
2021.21	ICP-MS	1	0.14	24	4	2	2	0
2021.22	ICP-MS	4.92	0.57	24	4	4	0	0
2021.23	ICP-MS	9.93	0.72	24	3	3	0	0
2021.24	ICP-MS	3	0.24	24	3	3	0	0



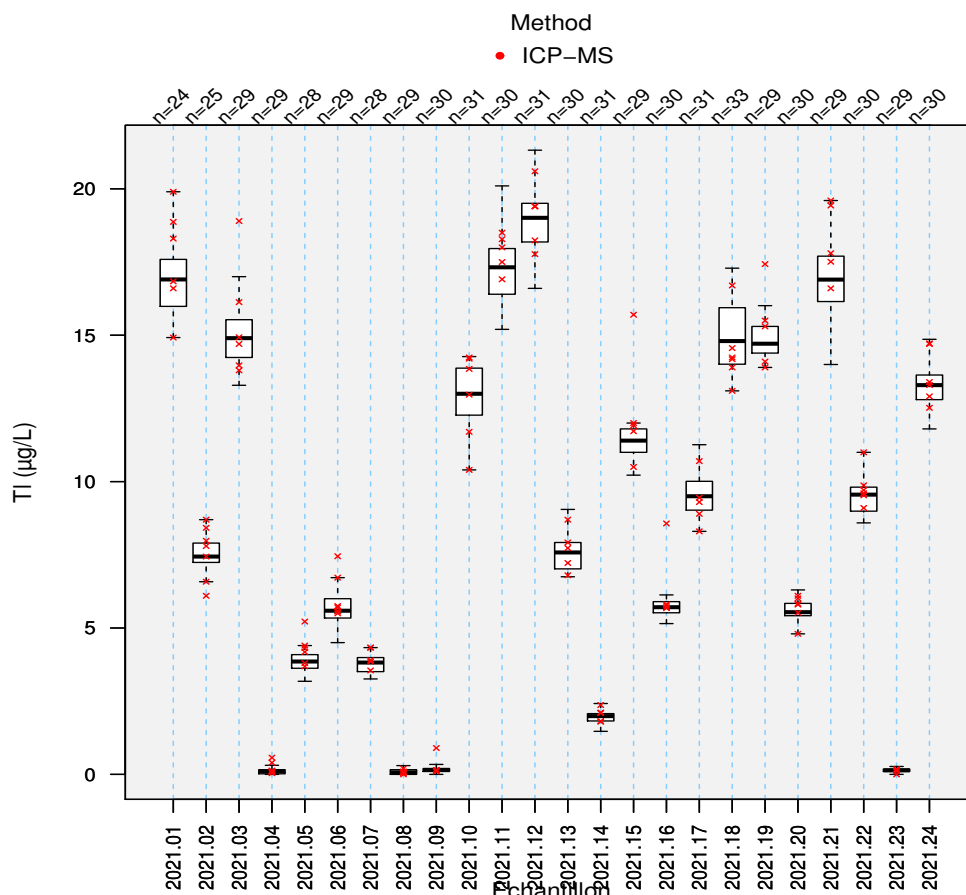
1.3.15 Se

Sample	Method	Median	SD	N	NBE	NG	NC	NE
2021.01	ICP-MS	31.7	2.36	30	5	5	0	0
2021.02	ICP-MS	150.17	8.04	29	4	3	1	0
2021.03	ICP-MS	55.98	6.89	31	6	6	0	0
2021.04	ICP-MS	245.72	20.01	30	5	4	1	0
2021.05	ICP-MS	193.09	14.06	28	6	4	2	0
2021.06	ICP-MS	173.8	9.73	27	5	2	3	0
2021.07	ICP-MS	197.6	12.53	32	6	5	1	0
2021.08	ICP-MS	4.59	1.07	30	5	3	2	0
2021.09	ICP-MS	244.05	27.4	30	6	6	0	0
2021.10	ICP-MS	77.42	7.52	29	5	4	1	0
2021.11	ICP-MS	30.82	2.55	30	5	4	1	0
2021.12	ICP-MS	7.9	1.03	29	4	2	2	0
2021.13	ICP-MS	146.58	14.45	32	6	6	0	0
2021.14	ICP-MS	212.51	25.93	31	5	4	1	0
2021.15	ICP-MS	101.23	8.04	29	6	6	0	0
2021.16	ICP-MS	170.74	15.04	28	5	5	0	0
2021.17	ICP-MS	124.82	10.54	29	6	5	1	0
2021.18	ICP-MS	55	3.17	29	5	4	1	0
2021.19	ICP-MS	55.3	3.19	32	6	4	2	0
2021.20	ICP-MS	172.3	12.64	31	5	4	1	0
2021.21	ICP-MS	31.57	3.47	30	6	5	1	0
2021.22	ICP-MS	126.4	8.71	29	5	4	1	0
2021.23	ICP-MS	245.95	12.55	30	6	4	2	0
2021.24	ICP-MS	80.1	6.05	29	5	5	0	0



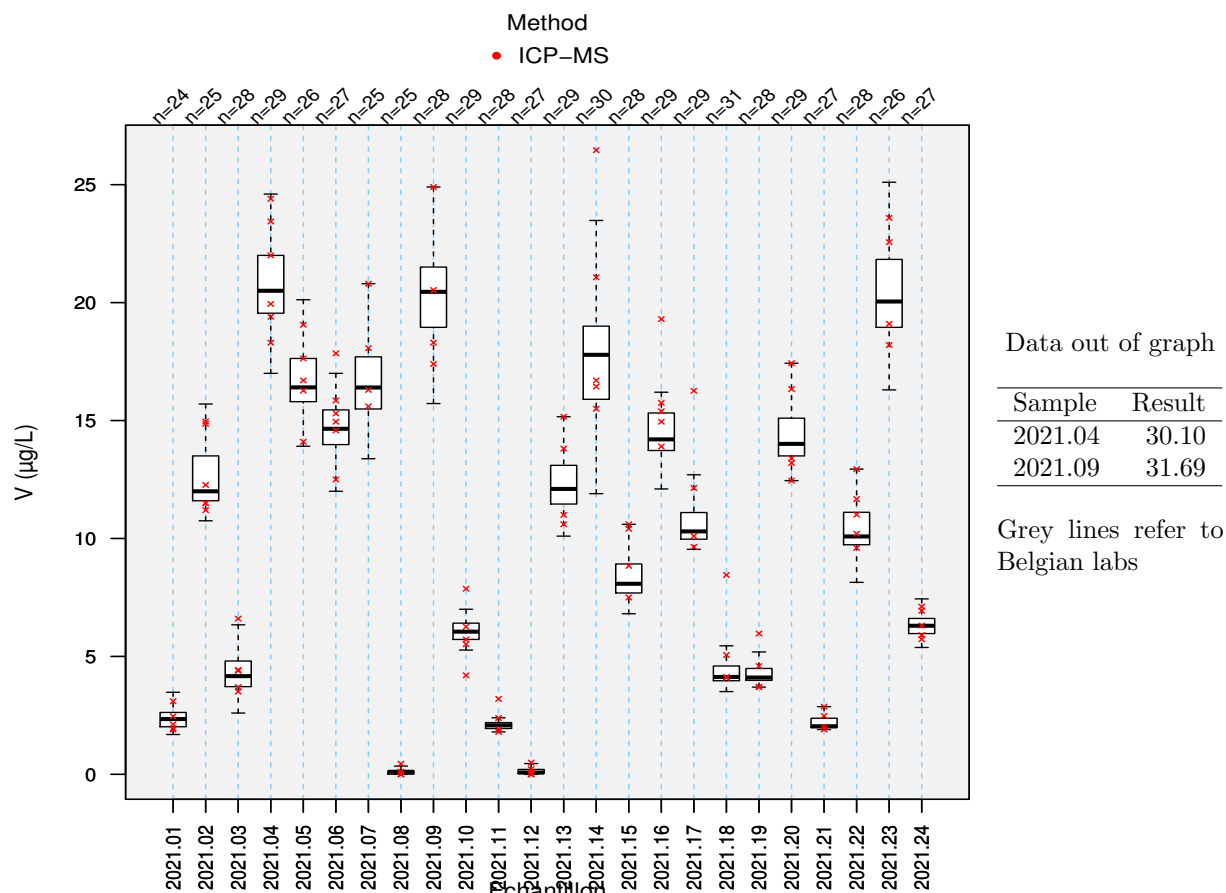
1.3.16 Tl

Sample	Method	Median	SD	N	NBE	NG	NC	NE
2021.01	ICP-MS	16.91	1.18	24	6	6	0	0
2021.02	ICP-MS	7.44	0.49	25	7	7	0	0
2021.03	ICP-MS	14.9	0.96	29	6	5	1	0
2021.04	ICP-MS	0.11	0.1	29	7	6	1	0
2021.05	ICP-MS	3.86	0.34	28	6	5	1	0
2021.06	ICP-MS	5.59	0.49	29	7	6	1	0
2021.07	ICP-MS	3.82	0.32	28	5	5	0	0
2021.08	ICP-MS	0.07	0.12	29	6	6	0	0
2021.09	ICP-MS	0.15	0.07	30	5	4	1	0
2021.10	ICP-MS	13	1.19	31	6	6	0	0
2021.11	ICP-MS	17.32	1.13	30	5	5	0	0
2021.12	ICP-MS	19.01	0.98	31	6	6	0	0
2021.13	ICP-MS	7.58	0.64	30	5	5	0	0
2021.14	ICP-MS	1.99	0.19	31	6	6	0	0
2021.15	ICP-MS	11.4	0.59	29	5	4	1	0
2021.16	ICP-MS	5.71	0.28	30	6	5	1	0
2021.17	ICP-MS	9.5	0.73	31	5	5	0	0
2021.18	ICP-MS	14.8	1.43	33	6	6	0	0
2021.19	ICP-MS	14.71	0.67	29	5	4	1	0
2021.20	ICP-MS	5.54	0.3	30	6	6	0	0
2021.21	ICP-MS	16.9	1.15	29	5	5	0	0
2021.22	ICP-MS	9.55	0.58	30	6	6	0	0
2021.23	ICP-MS	0.14	0.06	29	5	5	0	0
2021.24	ICP-MS	13.29	0.61	30	6	6	0	0



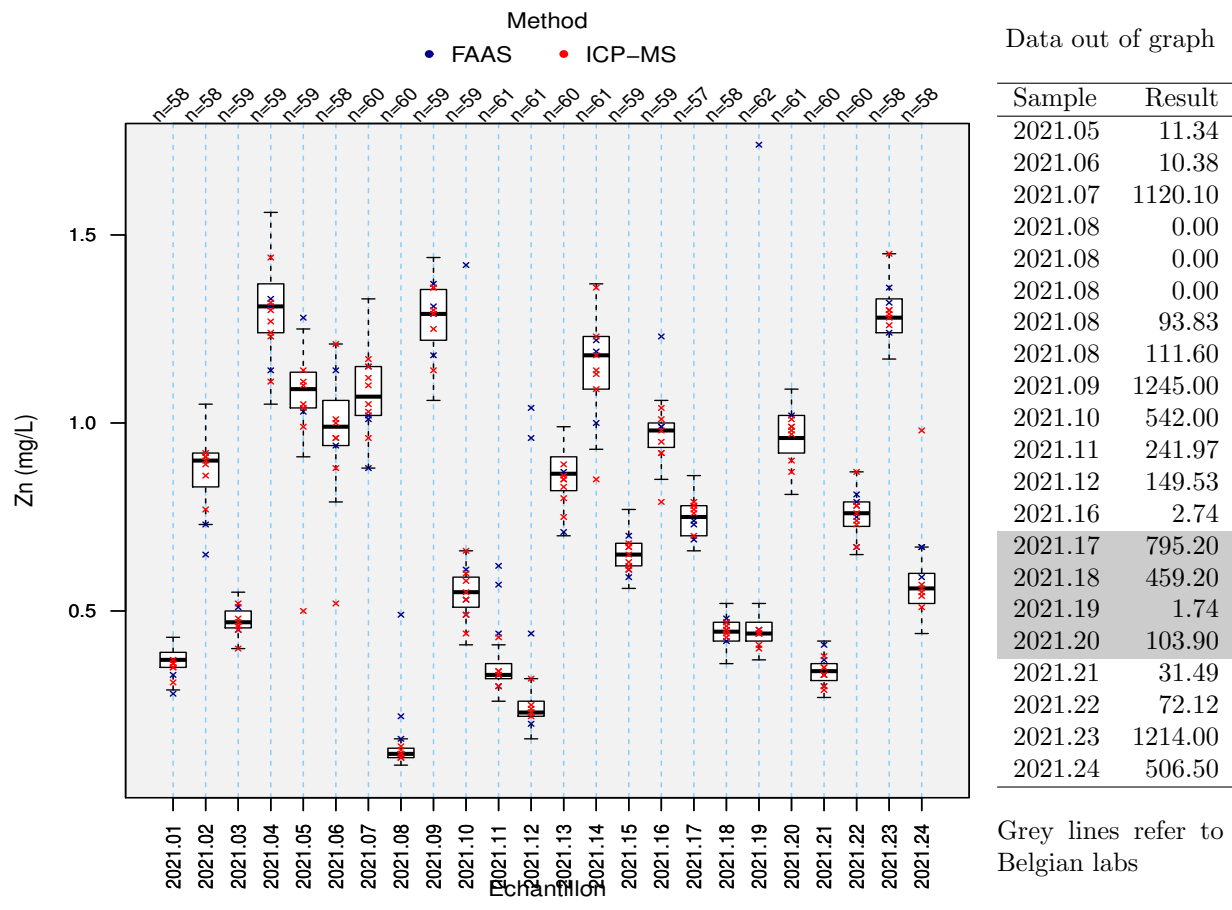
1.3.17 V

Sample	Method	Median	SD	N	NBE	NG	NC	NE
2021.01	ICP-MS	2.29	0.45	23	5	5	0	0
2021.02	ICP-MS	12.09	1.52	24	6	6	0	0
2021.03	ICP-MS	4.13	0.8	27	5	4	1	0
2021.04	ICP-MS	20.54	1.76	28	6	6	0	0
2021.05	ICP-MS	16.51	1.36	25	5	5	0	0
2021.06	ICP-MS	14.62	1.16	26	6	6	0	0
2021.07	ICP-MS	16.35	1.57	24	4	4	0	0
2021.08	ICP-MS	0.11	0.11	24	5	4	1	0
2021.09	ICP-MS	20.41	1.81	27	4	4	0	0
2021.10	ICP-MS	6.03	0.46	28	5	3	2	0
2021.11	ICP-MS	2.07	0.17	27	4	3	1	0
2021.12	ICP-MS	0.08	0.12	26	5	4	1	0
2021.13	ICP-MS	12.13	1.3	28	4	4	0	0
2021.14	ICP-MS	18	2.3	29	5	4	1	0
2021.15	ICP-MS	8.06	0.91	27	4	4	0	0
2021.16	ICP-MS	14.34	1.18	28	5	4	1	0
2021.17	ICP-MS	10.29	0.9	28	4	3	1	0
2021.18	ICP-MS	4.12	0.45	30	5	4	1	0
2021.19	ICP-MS	4.08	0.36	27	4	3	1	0
2021.20	ICP-MS	14	1.12	28	5	4	1	0
2021.21	ICP-MS	2.04	0.29	27	4	4	0	0
2021.22	ICP-MS	10.09	0.96	28	5	5	0	0
2021.23	ICP-MS	20.05	1.97	26	4	4	0	0
2021.24	ICP-MS	6.3	0.47	27	5	5	0	0



1.3.18 Zn

Sample	Method	Median	SD	N	NBE	NG	NC	NE
2021.01	FAAS	0.37	0.04	11	2	2	0	0
2021.01	ICP-MS	0.36	0.02	43	7	7	0	0
2021.02	FAAS	0.9	0.08	11	2	1	1	0
2021.02	ICP-MS	0.9	0.06	43	7	7	0	0
2021.03	FAAS	0.47	0.03	10	3	3	0	0
2021.03	ICP-MS	0.47	0.03	45	7	7	0	0
2021.04	FAAS	1.33	0.01	10	3	2	1	0
2021.04	ICP-MS	1.31	0.1	45	7	7	0	0
2021.05	FAAS	1.11	0.07	11	2	2	0	0
2021.05	ICP-MS	1.08	0.06	44	7	6	1	0
2021.06	FAAS	0.99	0.06	10	2	2	0	0
2021.06	ICP-MS	0.99	0.08	44	7	6	1	0
2021.07	FAAS	1.14	0.09	15	4	4	0	0
2021.07	ICP-MS	1.05	0.07	42	7	7	0	0
2021.08	FAAS	0.13	0.04	15	4	3	1	0
2021.08	ICP-MS	0.12	0.01	42	7	7	0	0
2021.09	FAAS	1.29	0.09	15	4	4	0	0
2021.09	ICP-MS	1.29	0.1	41	7	7	0	0
2021.10	FAAS	0.55	0.07	15	4	3	1	0
2021.10	ICP-MS	0.54	0.06	41	7	7	0	0
2021.11	FAAS	0.36	0.04	15	4	2	2	0
2021.11	ICP-MS	0.33	0.03	43	7	6	1	0
2021.12	FAAS	0.25	0.03	15	4	1	3	0
2021.12	ICP-MS	0.23	0.03	43	7	7	0	0
2021.13	FAAS	0.89	0.04	13	2	1	1	0
2021.13	ICP-MS	0.86	0.05	44	7	7	0	0
2021.14	FAAS	1.21	0.03	14	3	2	1	0
2021.14	ICP-MS	1.16	0.1	44	7	6	1	0
2021.15	FAAS	0.68	0.04	14	3	3	0	0
2021.15	ICP-MS	0.64	0.03	42	7	7	0	0
2021.16	FAAS	1	0.05	14	3	2	1	0
2021.16	ICP-MS	0.96	0.04	42	7	6	1	0
2021.17	FAAS	0.78	0.05	14	3	3	0	0
2021.17	ICP-MS	0.74	0.06	41	7	6	1	0
2021.18	FAAS	0.46	0.03	14	3	3	0	0
2021.18	ICP-MS	0.44	0.04	42	7	6	1	0
2021.19	FAAS	0.47	0.03	13	2	1	1	0
2021.19	ICP-MS	0.44	0.03	46	7	7	0	0
2021.20	FAAS	1.02	0.06	13	2	1	1	0
2021.20	ICP-MS	0.96	0.05	45	7	7	0	0
2021.21	FAAS	0.34	0.04	14	4	4	0	0
2021.21	ICP-MS	0.33	0.03	43	7	7	0	0
2021.22	FAAS	0.78	0.02	14	4	3	1	0
2021.22	ICP-MS	0.76	0.04	43	7	7	0	0
2021.23	FAAS	1.32	0.09	13	3	3	0	0
2021.23	ICP-MS	1.27	0.07	43	6	6	0	0
2021.24	FAAS	0.61	0.05	13	3	3	0	0
2021.24	ICP-MS	0.55	0.04	43	6	5	1	0



2 TRACE ELEMENTS IN SERUM

2.1 PARTICIPATION

30 laboratories participated to the EQA for serum matrix.

Parameter	N labs	Recorded results	Expected number of results	percentage of
Al	8	183	192	95.3 %
Co	6	142	144	98.6 %
Cr	7	166	168	98.8 %
Cu	24	512	576	88.9 %
Li	10	140	240	58.3 %
Mg	5	90	120	75 %
Mo	3	70	72	97.2 %
Se	12	270	288	93.8 %
Tl	2	30	48	62.5 %
V	1	6	24	25 %
Zn	26	558	624	89.4 %
Total		2167	2496	86.82

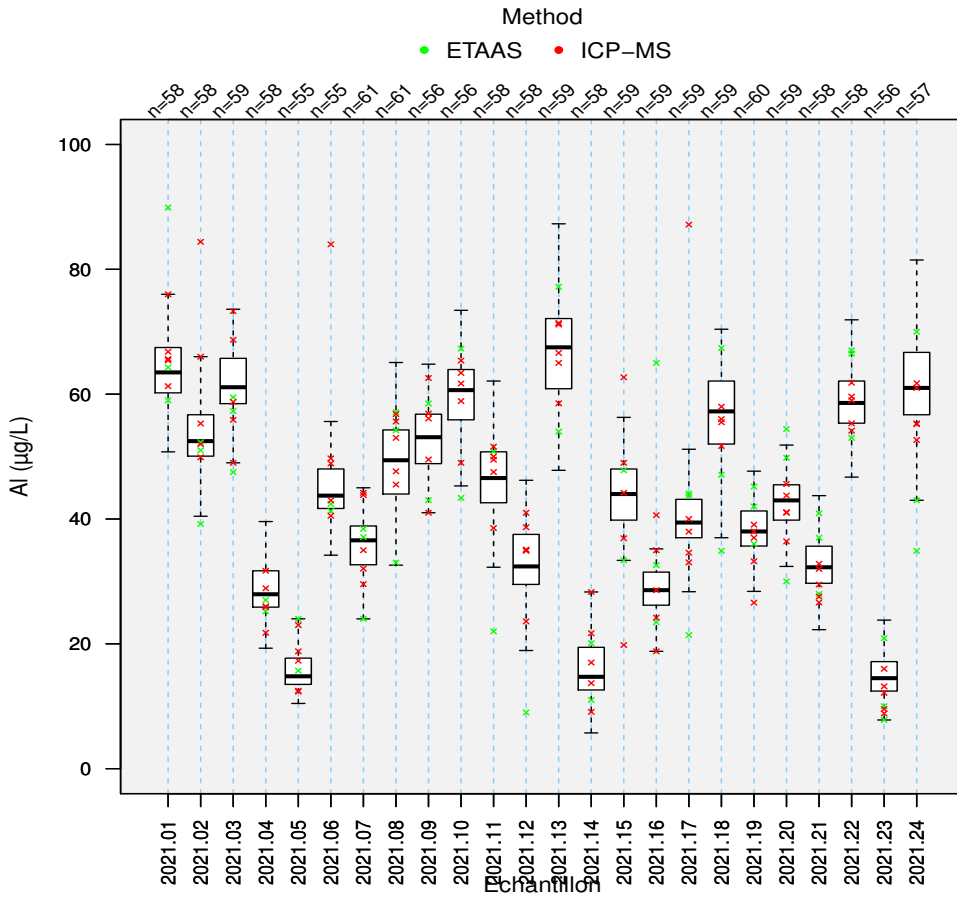
2.2 GLOBAL RESULTS

STAT	Element	Total number of results	Number of evaluated results	Number of Z citations	% citations
MA	Al	183	183	20	10.9
MA	Co	142	142	6	4.2
MA	Cr	166	166	14	8.4
MA	Cu	512	512	54	10.6
MA	Li	140	129	8	6.2
MA+GA	Li	140	140 (+11)	10 (+2)	7.1
MA	Mg	90	90	5	5.6
MA	Mo	70	70	4	5.7
MA	Se	270	260	8	3.1
MA+GA	Se	270	270 (+10)	10 (+2)	3.7
MA	Tl	30	30	3	10
MA	V	6	6	1	16.7
MA	Zn	558	536	52	9.7
MA+GA	Zn	558	558 (+22)	57 (+5)	10.2
Total	MA+GA	2167	2167	184	8.5
	MA	2167	2124	175	8.2

2.3 RESULTS PER ELEMENT

2.3.1 Al

Sample	Method	Median	SD	N	NBE	NG	NC	NE
2021.01	ETAAS	62.23	4.41	20	3	2	1	0
2021.01	ICP-MS	65.52	4.86	36	5	5	0	0
2021.02	ETAAS	52.81	4.08	20	3	2	1	0
2021.02	ICP-MS	52.32	6.25	36	5	4	1	0
2021.03	ETAAS	60.45	3.81	19	3	2	1	0
2021.03	ICP-MS	61.88	6.32	38	5	5	0	0
2021.04	ETAAS	28.08	3.97	18	2	2	0	0
2021.04	ICP-MS	27.81	4.15	38	5	5	0	0
2021.05	ETAAS	15.58	3.4	18	2	2	0	0
2021.05	ICP-MS	14.31	3.54	35	5	5	0	0
2021.06	ETAAS	45.55	3.92	18	2	2	0	0
2021.06	ICP-MS	43.74	5.34	35	5	4	1	0
2021.07	ETAAS	37.1	4.4	17	3	3	0	0
2021.07	ICP-MS	35.2	5.35	42	5	5	0	0
2021.08	ETAAS	49.68	6.23	17	3	3	0	0
2021.08	ICP-MS	48.73	7.43	42	5	5	0	0
2021.09	ETAAS	52.65	5.3	15	2	2	0	0
2021.09	ICP-MS	54.54	5.53	39	5	5	0	0
2021.10	ETAAS	59.4	4.31	15	2	1	1	0
2021.10	ICP-MS	61.83	6.67	39	5	5	0	0
2021.11	ETAAS	47.79	5.61	14	2	1	1	0
2021.11	ICP-MS	46.43	6	42	5	5	0	0
2021.12	ETAAS	33.12	3.7	14	2	1	1	0
2021.12	ICP-MS	32	6.13	42	5	5	0	0
2021.13	ETAAS	65.06	11.11	14	2	2	0	0
2021.13	ICP-MS	67.5	7.65	43	5	5	0	0
2021.14	ETAAS	15.52	4.82	14	2	2	0	0
2021.14	ICP-MS	14.36	4.39	42	5	4	1	0
2021.15	ETAAS	46.61	7.97	14	3	2	1	0
2021.15	ICP-MS	43.7	5.77	43	5	3	2	0
2021.16	ETAAS	28.74	4.98	14	3	2	1	0
2021.16	ICP-MS	28.6	3.64	43	5	4	1	0
2021.17	ETAAS	39.8	5.36	15	3	2	1	0
2021.17	ICP-MS	38.88	3.02	43	5	4	1	0
2021.18	ETAAS	51.3	11.06	15	3	3	0	0
2021.18	ICP-MS	58	5.93	43	5	4	1	0
2021.19	ETAAS	39.69	5.25	15	3	3	0	0
2021.19	ICP-MS	38	3.69	43	5	4	1	0
2021.20	ETAAS	43.2	7.83	15	3	3	0	0
2021.20	ICP-MS	42.55	4.16	42	5	5	0	0
2021.21	ETAAS	31.24	5.16	14	3	3	0	0
2021.21	ICP-MS	32.27	3.91	42	5	5	0	0
2021.22	ETAAS	59.7	6.44	14	3	3	0	0
2021.22	ICP-MS	58.41	4.57	42	5	5	0	0
2021.23	ETAAS	15.66	2.59	13	3	2	1	0
2021.23	ICP-MS	14.31	4.17	41	5	5	0	0
2021.24	ETAAS	61.02	7.41	13	3	2	1	0
2021.24	ICP-MS	60.27	5.33	42	5	5	0	0



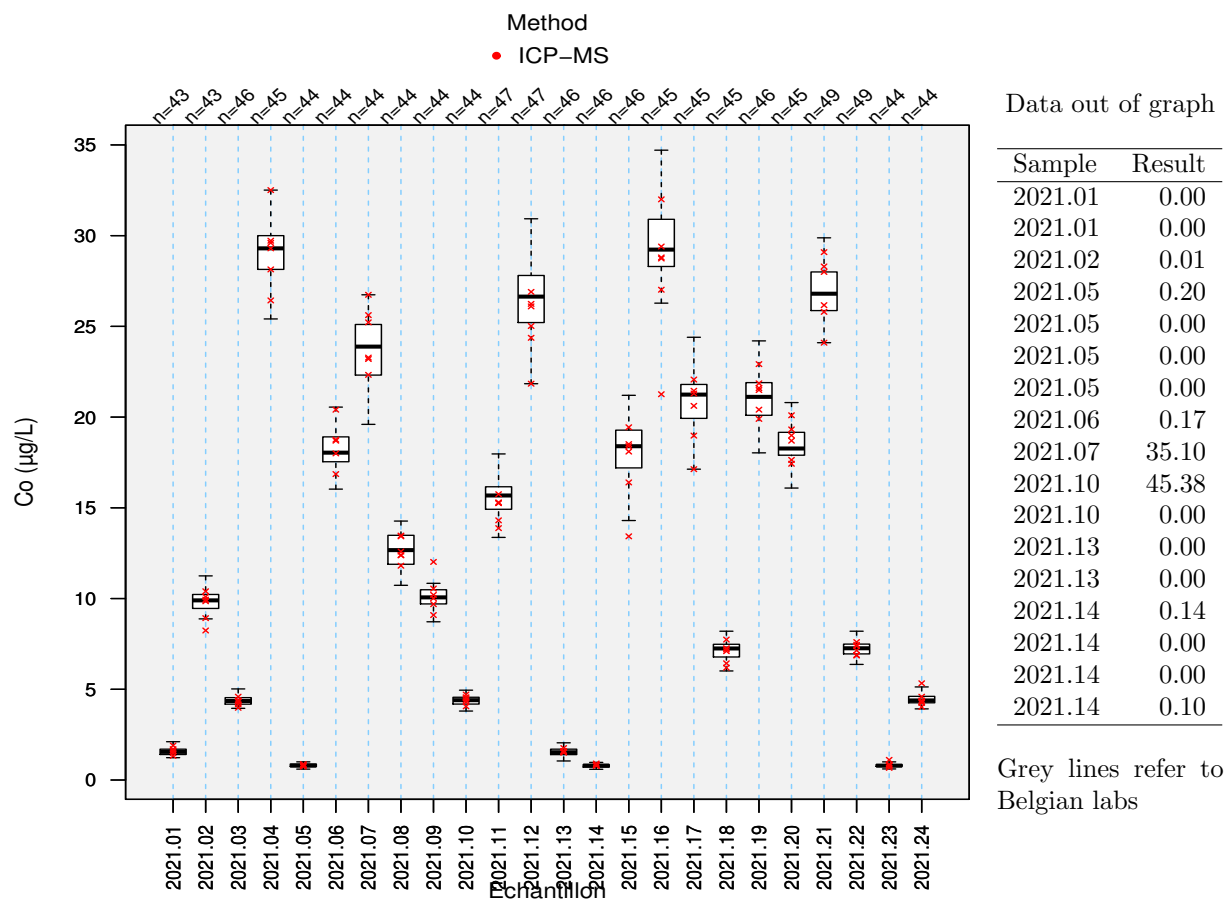
Data out of graph

Sample	Result
2021.03	100.17
2021.05	367.20
2021.13	108.81
2021.15	149.60
2021.15	305.48
2021.16	382.84
2021.18	274.19
2021.19	395.82
2021.20	436.79
2021.21	9466.60
2021.22	102.01
2021.22	258.46
2021.22	115.00
2021.23	680.28
2021.24	446.80

Grey lines refer to Belgian labs

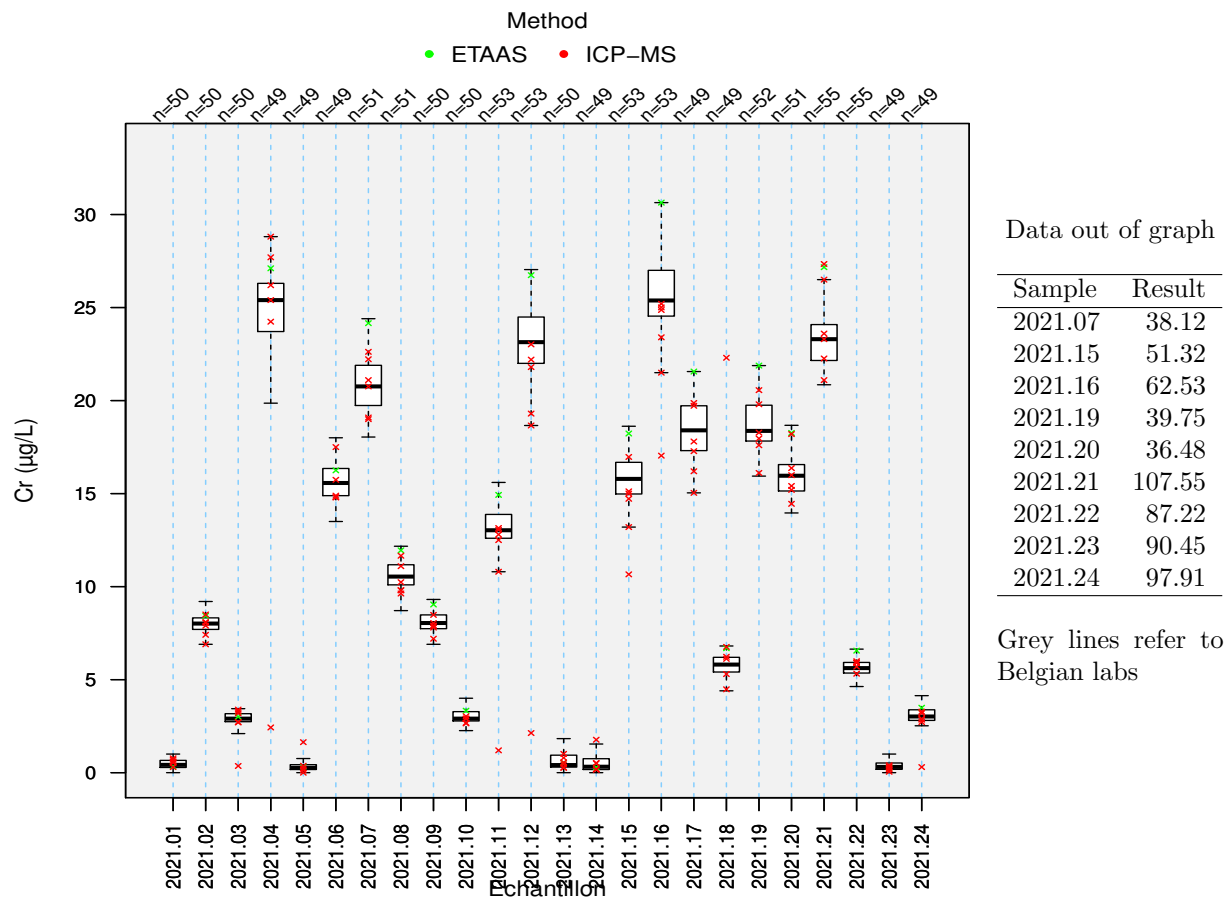
2.3.2 Co

Sample	Method	Median	SD	N	NBE	NG	NC	NE
2021.01	ICP-MS	1.56	0.19	37	6	6	0	0
2021.02	ICP-MS	9.9	0.62	37	6	6	0	0
2021.03	ICP-MS	4.36	0.24	39	6	6	0	0
2021.04	ICP-MS	29.35	1.17	39	6	6	0	0
2021.05	ICP-MS	0.8	0.1	37	5	5	0	0
2021.06	ICP-MS	18.27	1.22	37	5	5	0	0
2021.07	ICP-MS	23.98	1.78	38	6	6	0	0
2021.08	ICP-MS	12.71	0.82	38	6	6	0	0
2021.09	ICP-MS	10.07	0.46	38	6	5	1	0
2021.10	ICP-MS	4.41	0.23	38	6	6	0	0
2021.11	ICP-MS	15.59	0.9	42	6	6	0	0
2021.12	ICP-MS	26.46	1.84	42	6	6	0	0
2021.13	ICP-MS	1.56	0.16	41	6	6	0	0
2021.14	ICP-MS	0.8	0.07	41	6	6	0	0
2021.15	ICP-MS	18.4	1.1	41	6	5	1	0
2021.16	ICP-MS	29.23	1.83	41	6	5	1	0
2021.17	ICP-MS	21.27	1.35	40	6	5	1	0
2021.18	ICP-MS	7.25	0.51	40	6	6	0	0
2021.19	ICP-MS	21.38	1.4	41	6	6	0	0
2021.20	ICP-MS	18.48	1.03	40	6	6	0	0
2021.21	ICP-MS	26.89	1.67	44	6	6	0	0
2021.22	ICP-MS	7.29	0.4	44	6	6	0	0
2021.23	ICP-MS	0.79	0.06	39	6	5	1	0
2021.24	ICP-MS	4.41	0.24	39	6	5	1	0



2.3.3 Cr

Sample	Method	Median	SD	N	NBE	NG	NC	NE
2021.01	ETAAS	0.32	0.13	12	1	1	0	0
2021.01	ICP-MS	0.48	0.29	38	6	6	0	0
2021.02	ETAAS	8.24	0.39	12	1	1	0	0
2021.02	ICP-MS	7.9	0.44	38	6	6	0	0
2021.03	ETAAS	2.92	0.13	12	1	1	0	0
2021.03	ICP-MS	2.88	0.34	38	6	5	1	0
2021.04	ETAAS	25.91	1.97	11	1	1	0	0
2021.04	ICP-MS	25.34	1.97	38	6	5	1	0
2021.05	ETAAS	0.28	0.12	12	1	1	0	0
2021.05	ICP-MS	0.26	0.23	37	5	4	1	0
2021.06	ETAAS	15.44	0.87	12	1	1	0	0
2021.06	ICP-MS	15.65	1.09	37	5	5	0	0
2021.07	ETAAS	20.55	1.96	10	1	1	0	0
2021.07	ICP-MS	20.79	1.58	41	6	6	0	0
2021.08	ETAAS	10.63	0.98	10	1	1	0	0
2021.08	ICP-MS	10.54	0.71	41	6	6	0	0
2021.09	ETAAS	7.9	0.48	10	1	1	0	0
2021.09	ICP-MS	8.11	0.52	40	6	6	0	0
2021.10	ETAAS	2.84	0.21	10	1	1	0	0
2021.10	ICP-MS	2.95	0.43	40	6	6	0	0
2021.11	ETAAS	12.9	0.65	9	1	0	1	0
2021.11	ICP-MS	13.04	1.19	44	6	5	1	0
2021.12	ETAAS	23.3	1.15	9	1	1	0	0
2021.12	ICP-MS	23.08	1.89	44	6	5	1	0
2021.13	ETAAS	0.51	0.25	8	1	1	0	0
2021.13	ICP-MS	0.4	0.47	42	6	6	0	0
2021.14	ETAAS	0.32	0.26	7	1	1	0	0
2021.14	ICP-MS	0.36	0.46	42	6	5	1	0
2021.15	ETAAS	16.2	1.69	9	1	1	0	0
2021.15	ICP-MS	15.65	1.16	44	6	5	1	0
2021.16	ETAAS	26.5	3.26	9	1	1	0	0
2021.16	ICP-MS	25.25	1.82	44	6	5	1	0
2021.17	ETAAS	19.07	1	8	1	1	0	0
2021.17	ICP-MS	17.96	1.82	41	6	6	0	0
2021.18	ETAAS	6.06	0.39	8	1	1	0	0
2021.18	ICP-MS	5.74	0.65	41	6	5	1	0
2021.19	ETAAS	18.36	0.74	9	1	0	1	0
2021.19	ICP-MS	18.38	1.49	43	6	6	0	0
2021.20	ETAAS	15.82	0.38	9	1	0	1	0
2021.20	ICP-MS	15.99	1.16	42	6	6	0	0
2021.21	ETAAS	23.5	1.32	9	1	1	0	0
2021.21	ICP-MS	23.14	1.85	46	6	6	0	0
2021.22	ETAAS	5.51	0.25	9	1	0	1	0
2021.22	ICP-MS	5.64	0.43	46	6	6	0	0
2021.23	ETAAS	0.29	0.29	8	1	1	0	0
2021.23	ICP-MS	0.33	0.24	41	6	6	0	0
2021.24	ETAAS	2.98	0.28	8	1	1	0	0
2021.24	ICP-MS	3.02	0.42	41	6	5	1	0



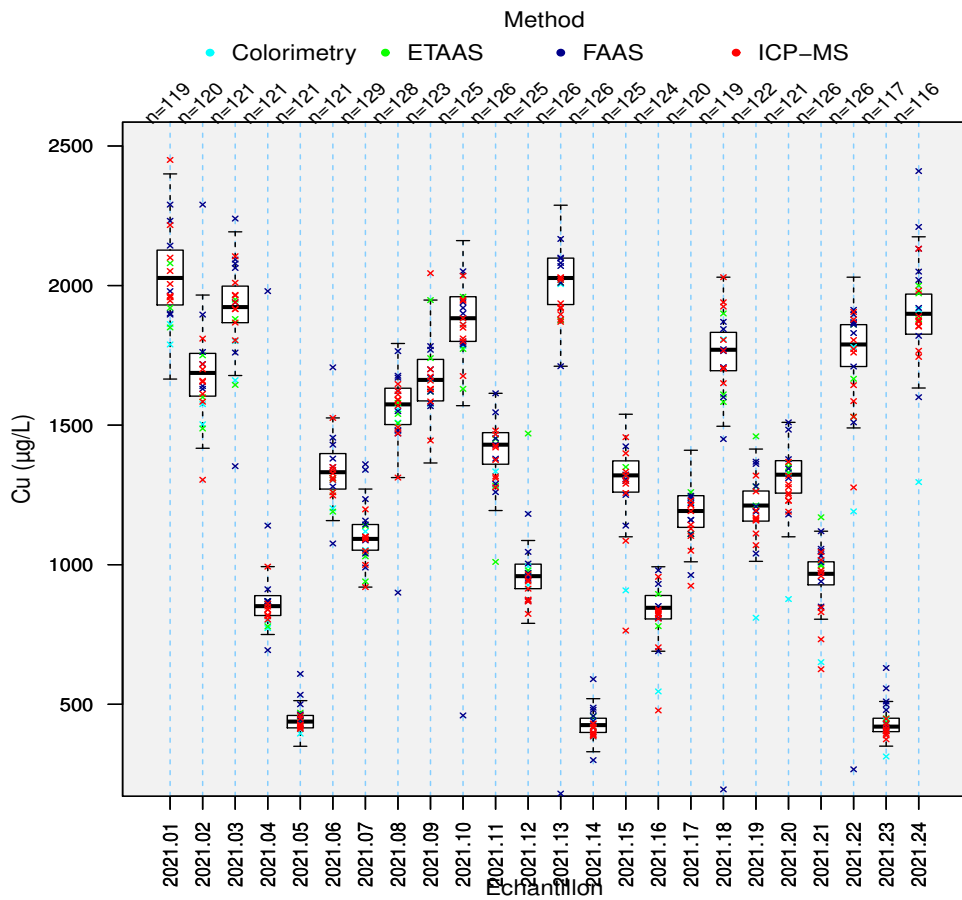
2.3.4 Cu

Sample	Method	Median	SD	N	NBE	NG	NC	NE
2021.01	Colorimetry	1970.05	224.93	11	2	2	0	0
2021.01	ETAAS	2049.5	133.35	12	3	3	0	0
2021.01	FAAS	2034.26	145.57	38	6	6	0	0
2021.01	ICP-MS	2020.89	115.42	53	9	8	1	0
2021.02	Colorimetry	1620.53	175.04	11	2	2	0	0
2021.02	ETAAS	1699.97	137.77	12	3	3	0	0
2021.02	FAAS	1719	98.54	39	6	5	1	0
2021.02	ICP-MS	1659	108.35	53	9	7	2	0
2021.03	Colorimetry	1851.47	118.53	10	2	2	0	0
2021.03	ETAAS	1938	103.72	11	3	3	0	0
2021.03	FAAS	1931.92	102.13	39	7	5	2	0
2021.03	ICP-MS	1925.55	70.69	56	9	9	0	0
2021.04	Colorimetry	800	50.75	10	2	2	0	0
2021.04	ETAAS	887.1	27.23	10	3	2	1	0
2021.04	FAAS	869.68	49.38	40	8	5	3	0
2021.04	ICP-MS	843.12	40.04	56	9	7	2	0
2021.05	Colorimetry	419.43	30.65	11	2	2	0	0
2021.05	ETAAS	440	25.82	11	3	3	0	0
2021.05	FAAS	447.39	54.34	41	7	7	0	0
2021.05	ICP-MS	433.5	25.44	53	8	8	0	0
2021.06	Colorimetry	1334.55	127.91	11	2	2	0	0
2021.06	ETAAS	1290	79.45	11	3	3	0	0
2021.06	FAAS	1346.75	113.15	41	7	6	1	0
2021.06	ICP-MS	1327.3	83.98	53	8	8	0	0
2021.07	Colorimetry	1118.74	80.09	12	2	2	0	0
2021.07	ETAAS	1105	135.61	11	3	3	0	0
2021.07	FAAS	1087	85.58	43	9	8	1	0
2021.07	ICP-MS	1090	60.87	57	9	9	0	0
2021.08	Colorimetry	1579.38	79.6	12	2	2	0	0
2021.08	ETAAS	1556.98	102.43	11	3	3	0	0
2021.08	FAAS	1565.16	125.09	42	9	8	1	0
2021.08	ICP-MS	1584	82.41	57	9	8	1	0
2021.09	Colorimetry	1696.79	304.51	11	2	2	0	0
2021.09	ETAAS	1675.3	86.01	10	3	2	1	0
2021.09	FAAS	1665.01	100.14	39	7	7	0	0
2021.09	ICP-MS	1658.66	89.51	57	9	8	1	0
2021.10	Colorimetry	1860	352.03	11	2	2	0	0
2021.10	ETAAS	1881.08	91.81	11	3	3	0	0
2021.10	FAAS	1896.89	95.2	40	8	7	1	0
2021.10	ICP-MS	1883	114.75	57	9	9	0	0
2021.11	Colorimetry	1450	104.3	12	2	2	0	0
2021.11	ETAAS	1417.17	87.11	11	3	2	1	0
2021.11	FAAS	1434.6	95.91	39	7	7	0	0
2021.11	ICP-MS	1419	75.38	58	8	8	0	0
2021.12	Colorimetry	961.62	50.64	12	2	2	0	0
2021.12	ETAAS	971	78.09	11	3	2	1	0
2021.12	FAAS	971.86	65	38	7	6	1	0
2021.12	ICP-MS	947.22	63.4	58	8	8	0	0
2021.13	Colorimetry	2033.6	88.79	12	2	2	0	0
2021.13	ETAAS	1968.46	97.3	10	3	2	1	0
2021.13	FAAS	2027.25	123.8	41	8	7	1	0
2021.13	ICP-MS	2028.62	125.39	58	9	9	0	0
2021.14	Colorimetry	415.19	49.56	12	2	2	0	0
2021.14	ETAAS	421.9	47.54	11	3	2	1	0
2021.14	FAAS	435.95	47.78	40	8	6	2	0
2021.14	ICP-MS	426.2	33.6	58	9	9	0	0
2021.15	Colorimetry	1307.38	171.05	10	1	1	0	0
2021.15	ETAAS	1323.92	77.83	10	3	2	1	0
2021.15	FAAS	1310	111.94	41	7	6	1	0
2021.15	ICP-MS	1324	75.66	58	9	7	2	0

Continued on next page

Sample	Method	Median	SD	N	NBE	NG	NC	NE
2021.16	Colorimetry	864.85	96.98	10	1	0	1	0
2021.16	ETAAS	818	38.93	9	3	2	1	0
2021.16	FAAS	858	85.99	41	7	6	1	0
2021.16	ICP-MS	833.25	47.36	58	9	8	1	0
2021.17	Colorimetry	1271	75.46	9	1	1	0	0
2021.17	ETAAS	1130	96.74	9	3	3	0	0
2021.17	FAAS	1194.74	69.36	41	8	6	2	0
2021.17	ICP-MS	1188.39	69.61	55	9	8	1	0
2021.18	Colorimetry	1842.95	87.62	9	1	1	0	0
2021.18	ETAAS	1680	107.41	9	3	3	0	0
2021.18	FAAS	1768.35	91.12	40	8	6	2	0
2021.18	ICP-MS	1779.4	95.64	55	9	8	1	0
2021.19	Colorimetry	1220.16	208.31	11	2	2	0	0
2021.19	ETAAS	1255.12	35.53	10	3	2	1	0
2021.19	FAAS	1225.85	73.92	38	7	6	1	0
2021.19	ICP-MS	1194	70.67	57	9	9	0	0
2021.20	Colorimetry	1334.55	256.9	11	2	2	0	0
2021.20	ETAAS	1354.99	48.53	10	3	3	0	0
2021.20	FAAS	1317.5	88.13	38	7	6	1	0
2021.20	ICP-MS	1302.89	70.51	56	9	9	0	0
2021.21	Colorimetry	956.42	128.64	12	2	2	0	0
2021.21	ETAAS	987	39.21	10	3	2	1	0
2021.21	FAAS	989.48	69.13	40	9	8	1	0
2021.21	ICP-MS	958.05	57.95	58	9	7	2	0
2021.22	Colorimetry	1800.35	114.29	12	2	1	1	0
2021.22	ETAAS	1788.93	108.3	10	3	3	0	0
2021.22	FAAS	1788.7	130.71	40	9	8	1	0
2021.22	ICP-MS	1788.93	96.6	58	9	8	1	0
2021.23	Colorimetry	414	57.82	9	2	2	0	0
2021.23	ETAAS	428.07	22.42	10	3	3	0	0
2021.23	FAAS	458	63.66	40	9	8	1	0
2021.23	ICP-MS	411.26	28.53	54	9	9	0	0
2021.24	Colorimetry	1914	176.87	9	2	1	1	0
2021.24	ETAAS	1880	97.08	9	3	3	0	0
2021.24	FAAS	1908.25	184	40	9	8	1	0
2021.24	ICP-MS	1890.15	81.36	54	9	9	0	0

Data out of graph



Sample	Result
2021.01	206.00
2021.02	0.00
2021.02	170.00
2021.04	84.40
2021.07	112.00
2021.08	2759.30
2021.08	160.00
2021.09	229.00
2021.13	2.11
2021.13	180.00
2021.14	0.44
2021.14	50.00
2021.15	1.37
2021.15	101.40
2021.15	116.30
2021.16	0.86
2021.16	47.40
2021.16	177.22
2021.17	91.00
2021.18	195.00
2021.18	0.00
2021.19	113.00
2021.20	136.00
2021.21	91.00
2021.21	25.42
2021.22	95.33
2021.23	43.00
2021.23	46.20
2021.23	222.43
2021.24	127.00
2021.24	190.00
2021.24	206.30

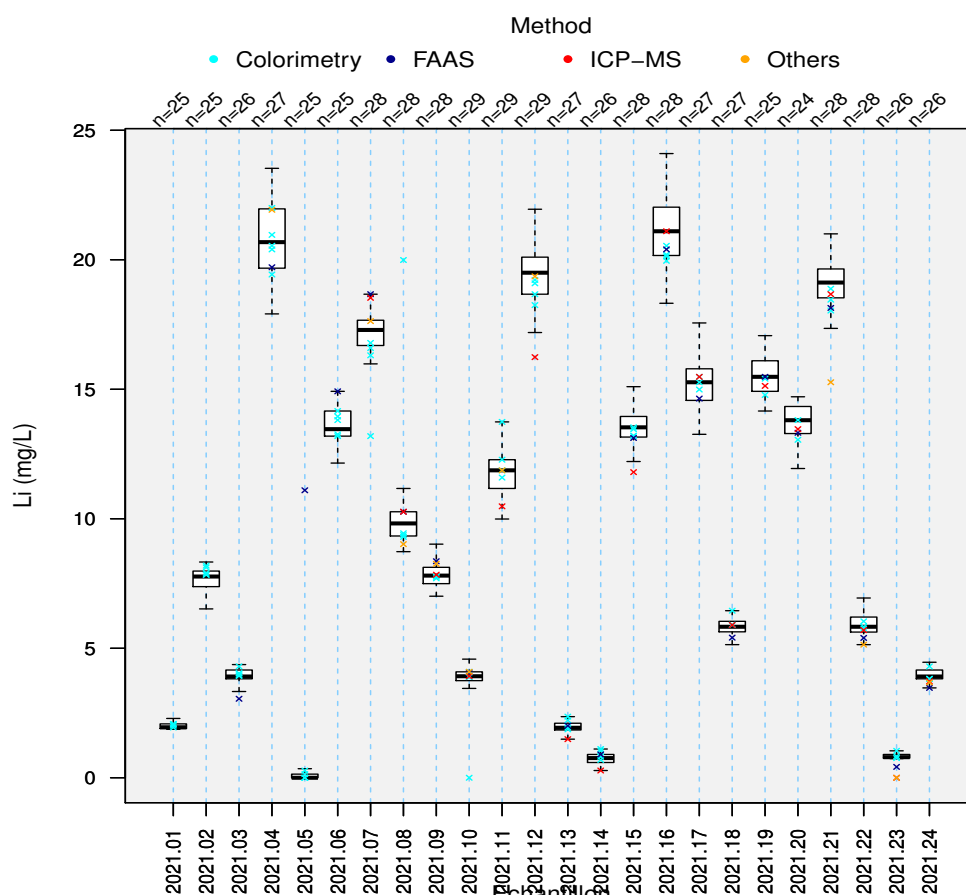
Grey lines refer to Belgian labs

2.3.5 Li

Sample	Method	Median	SD	N	NBE	NG	NC	NE
2021.01	Colorimetry	2.05	0.1	9	5	5	0	0
2021.02	Colorimetry	7.91	0.26	9	5	5	0	0
2021.03	Colorimetry	4.03	0.27	9	5	5	0	0
2021.03	FAAS	3.86	0.52	6	1	1	0	0
2021.04	Colorimetry	20.54	0.42	9	5	4	1	0
2021.04	FAAS	20.23	1.1	6	1	1	0	0
2021.04	Others	21.93	2.06	3	1	0	0	1
2021.04	Global	20.68	1.7	27	7	7	0	0
2021.05	Colorimetry	0	0.1	9	5	5	0	0
2021.05	FAAS	0.08	0.1	6	1	0	1	0
2021.06	Colorimetry	13.81	0.51	9	5	5	0	0
2021.06	FAAS	13.42	1.58	6	1	1	0	0
2021.07	Colorimetry	16.79	0.62	9	4	3	1	0
2021.07	FAAS	17.07	1.22	6	1	1	0	0
2021.07	ICP-MS	17.56	0.74	9	1	1	0	0
2021.07	Others	18.05	0.31	2	1	0	0	1
2021.07	Global	17.29	0.67	28	7	6	1	0
2021.08	Colorimetry	9.51	0.62	9	4	3	1	0
2021.08	FAAS	10	0.85	6	1	1	0	0
2021.08	ICP-MS	9.99	0.42	9	1	1	0	0
2021.08	Others	9.54	0.39	2	1	0	0	1
2021.08	Global	9.82	0.68	28	7	6	1	0
2021.09	Colorimetry	7.73	0.19	8	3	3	0	0
2021.09	FAAS	7.15	1.22	6	1	1	0	0
2021.09	ICP-MS	7.98	0.25	10	1	1	0	0
2021.09	Others	8.37	0.08	2	1	0	0	1
2021.09	Global	7.8	0.44	28	6	6	0	0
2021.10	Colorimetry	3.89	0.31	9	4	3	1	0
2021.10	FAAS	3.89	0.44	6	1	1	0	0
2021.10	ICP-MS	4.03	0.06	10	1	1	0	0
2021.10	Others	4.12	0.03	2	1	0	0	1
2021.10	Global	3.92	0.25	29	7	6	1	0
2021.11	Colorimetry	11.87	0.67	9	4	4	0	0
2021.11	ICP-MS	11.9	0.92	11	1	1	0	0
2021.11	Others	12.36	0.36	2	1	0	0	1
2021.11	Global	11.87	0.82	29	6	6	0	0
2021.12	Colorimetry	18.74	0.56	9	4	4	0	0
2021.12	ICP-MS	20.1	2.5	11	1	1	0	0
2021.12	Others	20.61	0.93	2	1	0	0	1
2021.12	Global	19.5	1.06	29	6	5	1	0
2021.13	Colorimetry	1.94	0.26	9	4	4	0	0
2021.13	FAAS	2.04	0.17	6	1	1	0	0
2021.13	ICP-MS	1.87	0.26	10	1	1	0	0
2021.14	Colorimetry	0.81	0.21	9	4	4	0	0
2021.14	FAAS	0.84	0.09	6	1	1	0	0
2021.14	ICP-MS	0.76	0.21	9	1	1	0	0
2021.15	Colorimetry	13.53	0.29	9	4	4	0	0
2021.15	FAAS	13.19	0.71	6	1	1	0	0
2021.15	ICP-MS	13.6	0.65	10	1	1	0	0
2021.16	Colorimetry	20.2	0.53	9	4	4	0	0
2021.16	FAAS	20.61	2.05	6	1	1	0	0
2021.16	ICP-MS	21.34	0.6	10	1	1	0	0
2021.17	Colorimetry	15.38	0.4	8	3	3	0	0
2021.17	FAAS	14.78	1.23	6	1	1	0	0
2021.17	ICP-MS	15.27	0.6	10	1	1	0	0
2021.18	Colorimetry	5.94	0.14	8	3	2	1	0
2021.18	FAAS	5.58	0.52	6	1	1	0	0
2021.18	ICP-MS	5.77	0.16	10	1	1	0	0
2021.19	Colorimetry	15.13	0.62	7	2	2	0	0
2021.19	FAAS	15.41	0.49	6	1	1	0	0

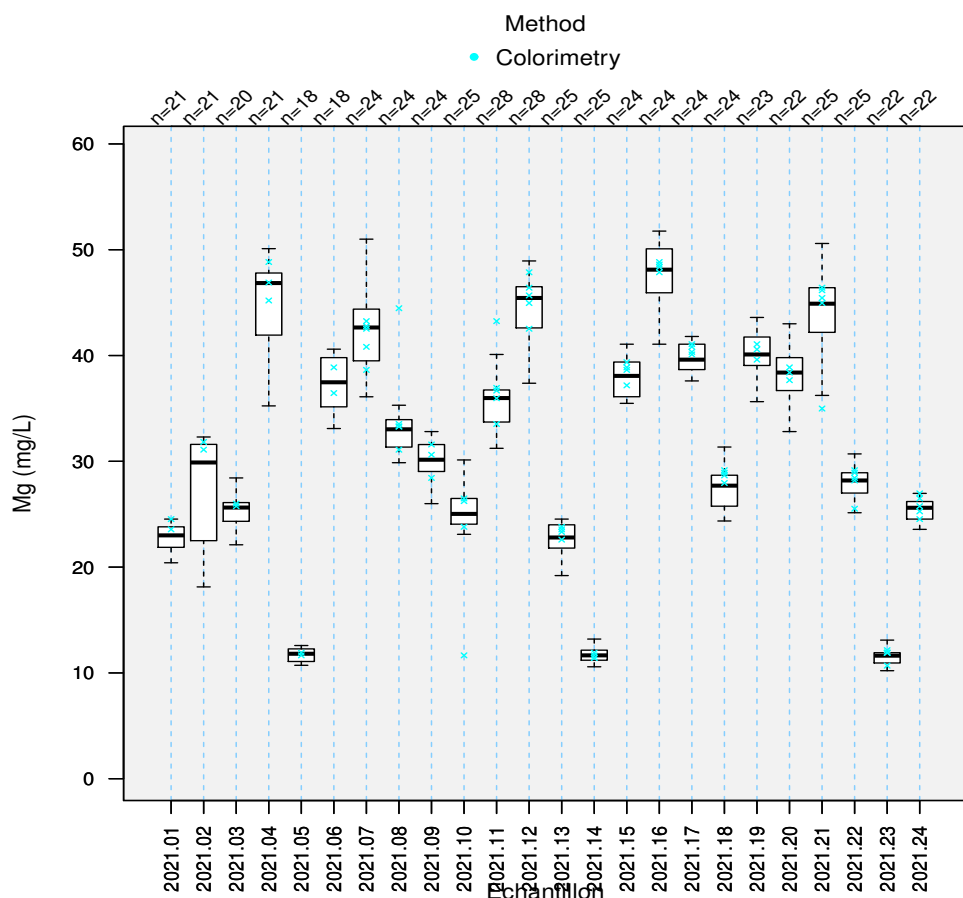
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Sample	Method	Median	SD	N	NBE	NG	NC	NE
2021.19	ICP-MS	16	0.72	9	1	1	0	0
2021.20	Colorimetry	13.81	0.67	7	2	2	0	0
2021.20	FAAS	13.32	1.05	6	1	1	0	0
2021.20	ICP-MS	13.84	0.72	8	1	1	0	0
2021.21	Colorimetry	18.63	0.81	8	3	3	0	0
2021.21	FAAS	19.29	0.82	6	1	1	0	0
2021.21	ICP-MS	19.39	0.89	10	1	1	0	0
2021.21	Others	18.39	2.31	2	1	0	0	1
2021.21	Global	19.12	0.75	28	6	5	1	0
2021.22	Colorimetry	5.9	0.26	8	3	3	0	0
2021.22	FAAS	5.96	0.52	6	1	1	0	0
2021.22	ICP-MS	5.77	0.36	10	1	1	0	0
2021.22	Others	5.83	0.51	2	1	0	0	1
2021.22	Global	5.83	0.41	28	6	6	0	0
2021.23	Colorimetry	0.83	0.18	7	3	3	0	0
2021.23	FAAS	0.82	0.1	6	1	0	1	0
2021.23	ICP-MS	0.76	0.1	9	1	0	1	0
2021.23	Others	0.38	0.28	2	1	0	0	1
2021.23	Global	0.8	0.1	26	6	3	3	0
2021.24	Colorimetry	3.82	0.31	7	3	3	0	0
2021.24	FAAS	4.03	0.39	6	1	1	0	0
2021.24	ICP-MS	3.93	0.14	9	1	1	0	0
2021.24	Others	3.75	0.05	2	1	0	0	1
2021.24	Global	3.91	0.23	26	6	6	0	0



2.3.6 Mg

Sample	Method	Median	SD	N	NBE	NG	NC	NE
2021.01	Colorimetry	24.3	0.41	6	2	2	0	0
2021.02	Colorimetry	31.7	0.44	6	2	2	0	0
2021.03	Colorimetry	26	0.22	6	2	2	0	0
2021.04	Colorimetry	47.2	1.53	7	3	3	0	0
2021.05	Colorimetry	12	0.28	6	2	2	0	0
2021.06	Colorimetry	38.44	2.03	6	2	2	0	0
2021.07	Colorimetry	42.53	1.62	9	5	5	0	0
2021.08	Colorimetry	33.29	1.06	9	5	4	1	0
2021.09	Colorimetry	30.2	1.4	7	3	3	0	0
2021.10	Colorimetry	24.41	4.49	8	4	4	0	0
2021.11	Colorimetry	36.1	0.62	9	5	3	2	0
2021.12	Colorimetry	45.68	1.93	9	5	5	0	0
2021.13	Colorimetry	23.06	0.87	8	4	4	0	0
2021.14	Colorimetry	11.42	0.42	8	4	4	0	0
2021.15	Colorimetry	38.76	2.01	8	4	4	0	0
2021.16	Colorimetry	48.48	1.41	8	4	4	0	0
2021.17	Colorimetry	40.58	0.97	8	4	4	0	0
2021.18	Colorimetry	28.34	2.54	8	4	4	0	0
2021.19	Colorimetry	41.07	1.23	7	3	3	0	0
2021.20	Colorimetry	39	0.6	7	3	3	0	0
2021.21	Colorimetry	44.96	4.94	9	5	5	0	0
2021.22	Colorimetry	28.43	1.42	9	5	5	0	0
2021.23	Colorimetry	11.91	0.05	8	5	3	2	0
2021.24	Colorimetry	25.98	0.62	8	5	5	0	0



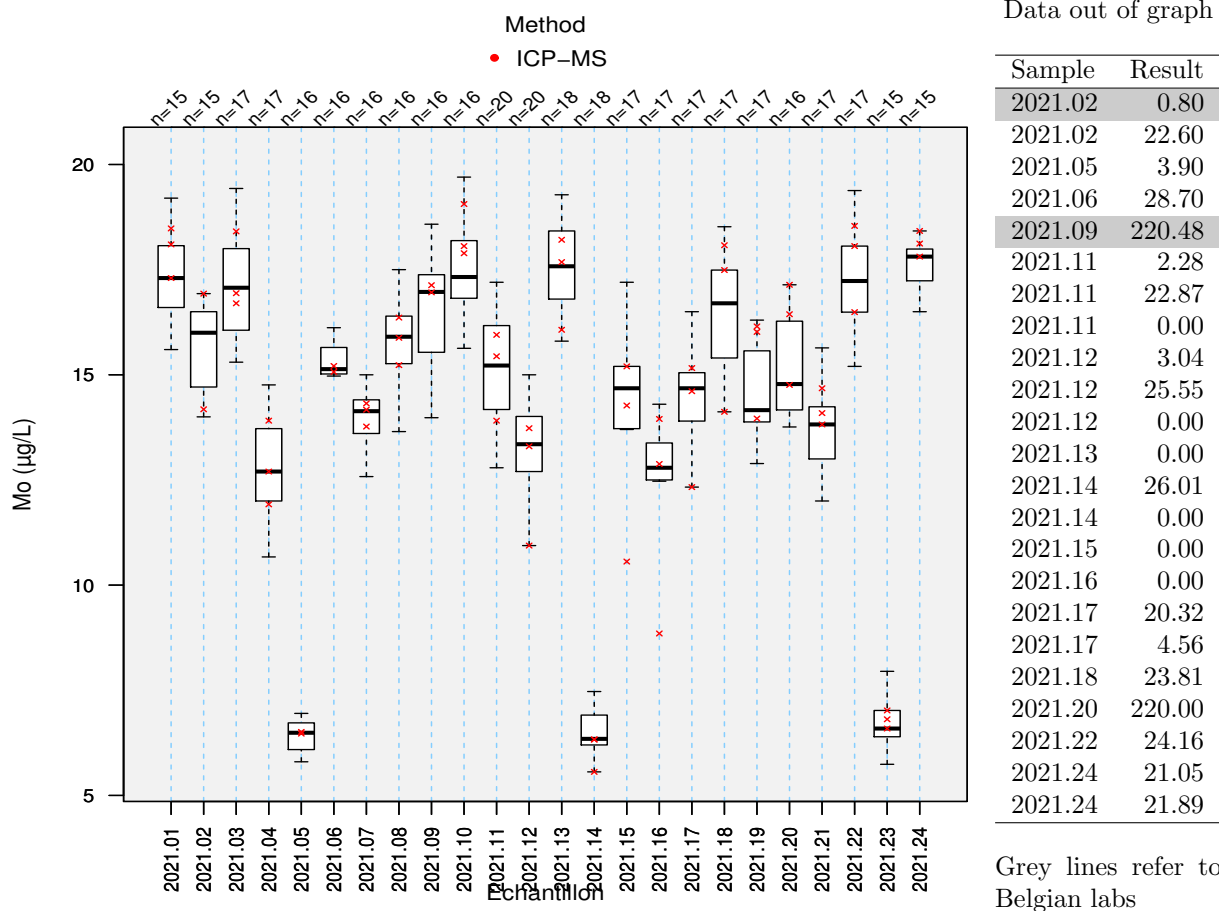
Data out of graph

Sample	Result
2021.01	0.25
2021.03	0.27
2021.05	0.13
2021.08	0.26
2021.09	0.28
2021.10	0.23
2021.11	0.00
2021.12	0.00
2021.13	0.00
2021.15	0.00
2021.16	0.00
2021.18	0.28
2021.20	62.64

Grey lines refer to Belgian labs

2.3.7 Mo

Sample	Method	Median	SD	N	NBE	NG	NC	NE
2021.01	ICP-MS	17.3	1.09	15	3	3	0	0
2021.02	ICP-MS	16	1.33	15	3	2	1	0
2021.03	ICP-MS	17.07	1.44	17	3	3	0	0
2021.04	ICP-MS	12.7	1.28	17	3	3	0	0
2021.05	ICP-MS	6.49	0.44	16	2	2	0	0
2021.06	ICP-MS	15.13	0.32	16	2	2	0	0
2021.07	ICP-MS	14.13	0.56	16	3	3	0	0
2021.08	ICP-MS	15.91	0.81	16	3	3	0	0
2021.09	ICP-MS	16.97	1.26	16	3	2	1	0
2021.10	ICP-MS	17.33	0.96	16	3	3	0	0
2021.11	ICP-MS	15.22	1.43	20	3	3	0	0
2021.12	ICP-MS	13.35	0.97	20	3	3	0	0
2021.13	ICP-MS	17.58	1.14	18	3	3	0	0
2021.14	ICP-MS	6.34	0.49	18	3	3	0	0
2021.15	ICP-MS	14.68	1.1	17	3	2	1	0
2021.16	ICP-MS	12.79	0.65	17	3	2	1	0
2021.17	ICP-MS	14.68	0.85	17	3	3	0	0
2021.18	ICP-MS	16.7	1.55	17	3	3	0	0
2021.19	ICP-MS	14.16	1.25	17	3	3	0	0
2021.20	ICP-MS	14.78	1.46	16	3	3	0	0
2021.21	ICP-MS	13.82	0.92	17	3	3	0	0
2021.22	ICP-MS	17.23	1.16	17	3	3	0	0
2021.23	ICP-MS	6.59	0.46	15	3	3	0	0
2021.24	ICP-MS	17.81	0.56	15	3	3	0	0



2.3.8 Se

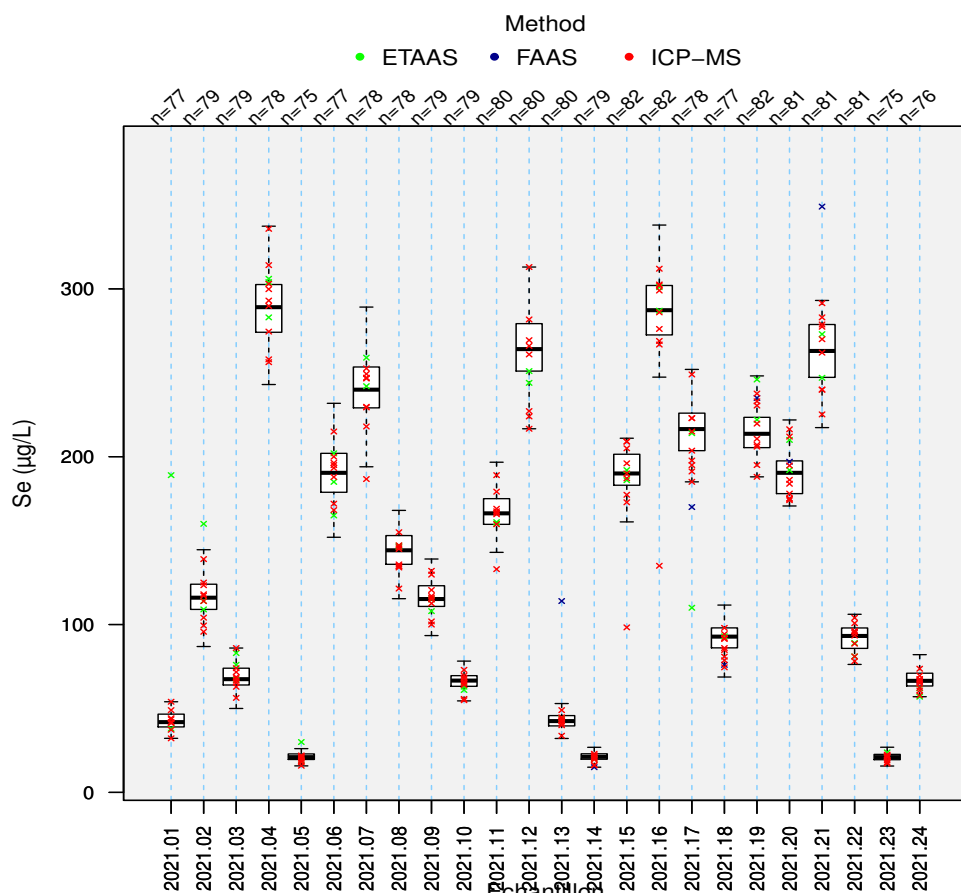
Sample	Method	Median	SD	N	NBE	NG	NC	NE
2021.01	ETAAS	38.9	5.27	21	2	1	1	0
2021.01	ICP-MS	42.1	5.01	54	9	9	0	0
2021.02	ETAAS	110.5	12.22	23	3	2	1	0
2021.02	ICP-MS	116.56	10.28	54	9	9	0	0
2021.03	ETAAS	66.28	8.33	22	3	3	0	0
2021.03	ICP-MS	67.69	7.29	56	9	9	0	0
2021.04	ETAAS	284	13.47	21	3	3	0	0
2021.04	ICP-MS	290.45	21.24	56	9	9	0	0
2021.05	ETAAS	21.48	2.45	21	2	1	1	0
2021.05	ICP-MS	20.54	2.46	53	8	8	0	0
2021.06	ETAAS	186	17.14	23	3	3	0	0
2021.06	ICP-MS	192	18.09	53	8	8	0	0
2021.07	ETAAS	238	14.85	19	2	2	0	0
2021.07	ICP-MS	245.35	16.49	58	9	8	1	0
2021.08	ETAAS	144.37	16.77	19	2	2	0	0
2021.08	ICP-MS	144.33	12.93	58	9	9	0	0
2021.09	ETAAS	113	9.78	19	2	2	0	0
2021.09	ICP-MS	115.34	8.47	59	9	9	0	0
2021.10	ETAAS	63	6.62	19	2	2	0	0
2021.10	ICP-MS	67.61	4.39	59	9	9	0	0
2021.11	ETAAS	162.74	6.14	18	2	2	0	0
2021.11	ICP-MS	167	10.38	61	8	7	1	0
2021.12	ETAAS	259.95	15.09	18	2	2	0	0
2021.12	ICP-MS	266	20.73	61	8	8	0	0
2021.13	ETAAS	40.9	3.51	17	1	1	0	0
2021.13	FAAS	100.5	10.01	2	1	0	0	1
2021.13	ICP-MS	42.66	3.68	61	9	9	0	0
2021.13	Global	42.48	4.42	80	11	10	1	0
2021.14	ETAAS	21.71	2.56	16	1	1	0	0
2021.14	FAAS	29	10.38	2	1	0	0	1
2021.14	ICP-MS	21	2.34	61	9	9	0	0
2021.14	Global	21.18	2.41	79	11	11	0	0
2021.15	ETAAS	185	16.43	19	2	2	0	0
2021.15	ICP-MS	191	12.94	61	9	8	1	0
2021.16	ETAAS	287	19.62	19	2	2	0	0
2021.16	ICP-MS	287.56	21.57	61	9	8	1	0
2021.17	ETAAS	215.62	17.13	18	2	1	1	0
2021.17	FAAS	170	0	1	1	0	0	1
2021.17	ICP-MS	218.04	16.35	59	9	9	0	0
2021.17	Global	216.46	16.33	78	12	11	1	0
2021.18	ETAAS	93.5	6.18	17	1	1	0	0
2021.18	FAAS	76	0	1	1	0	0	1
2021.18	ICP-MS	92	8.07	59	9	9	0	0
2021.18	Global	92.8	8.81	77	11	11	0	0
2021.19	ETAAS	213.3	14.94	19	2	2	0	0
2021.19	FAAS	241.57	4.87	2	1	0	0	1
2021.19	ICP-MS	213.7	12.31	61	9	9	0	0
2021.19	Global	213.64	13.19	82	12	12	0	0
2021.20	ETAAS	184.07	16.4	19	2	2	0	0
2021.20	FAAS	207.56	7.83	2	1	0	0	1
2021.20	ICP-MS	190.2	12.73	60	9	9	0	0
2021.20	Global	190.39	14.46	81	12	12	0	0
2021.21	ETAAS	265.44	22.53	16	2	2	0	0
2021.21	FAAS	283	27.43	3	1	0	0	1
2021.21	ICP-MS	262.14	22.4	62	9	9	0	0
2021.21	Global	263	23.34	81	12	11	1	0
2021.22	ETAAS	88.5	12.38	16	2	2	0	0
2021.22	FAAS	97	23.28	3	1	0	0	1
2021.22	ICP-MS	93.1	8.65	62	9	9	0	0
2021.22	Global	93.2	9.01	81	12	12	0	0

Continued on next page

Sample	Method	Median	SD	N	NBE	NG	NC	NE
2021.23	ETAAS	21.5	2.8	15	1	1	0	0
2021.23	FAAS	21	9.97	3	1	0	0	1
2021.23	ICP-MS	20.99	2.25	57	9	9	0	0
2021.23	Global	21	2.35	75	11	11	0	0
2021.24	ETAAS	64.1	4.37	16	2	2	0	0
2021.24	FAAS	68.48	2.22	3	1	0	0	1
2021.24	ICP-MS	66.85	5.83	57	9	9	0	0
2021.24	Global	66.45	5.52	76	12	12	0	0

Data out of graph

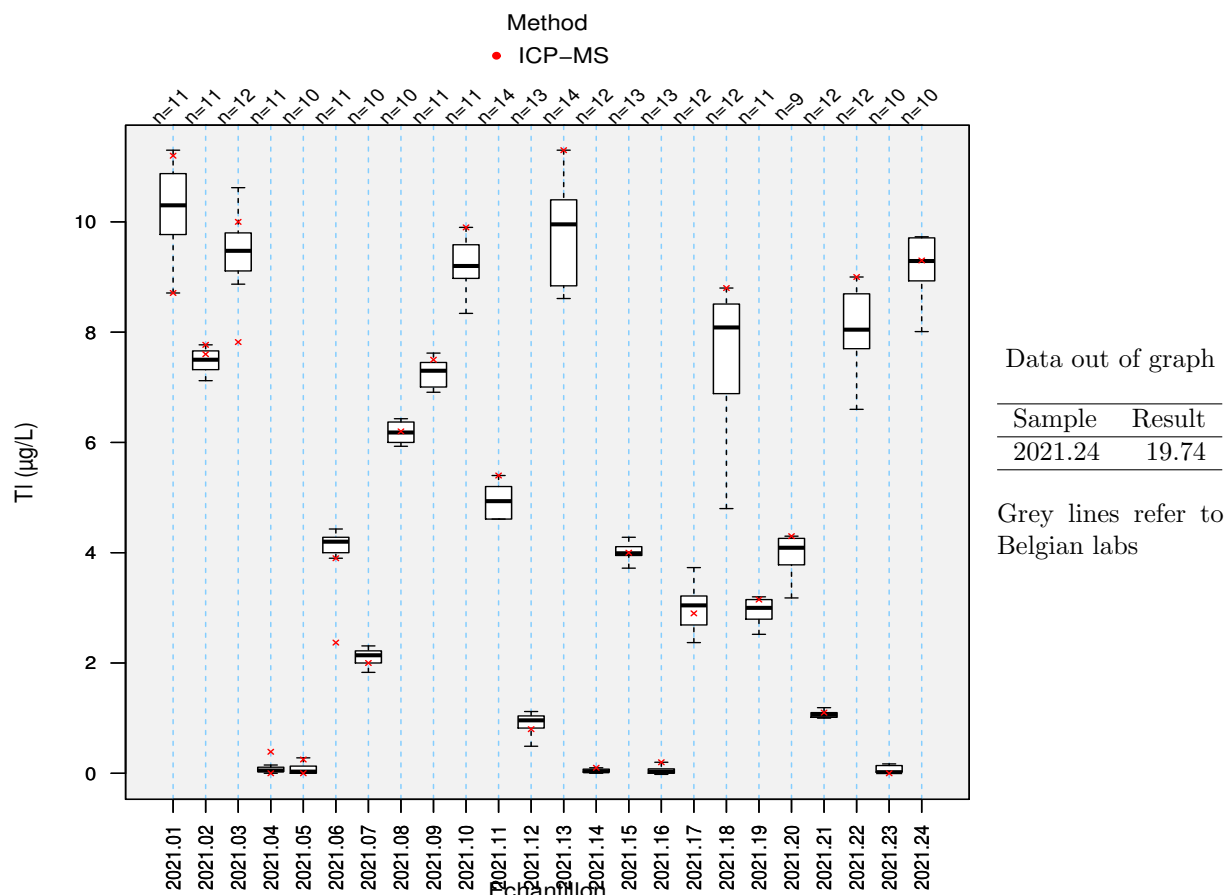
Sample	Result
2021.04	388.68
2021.05	0.00
2021.07	14844.10
2021.07	1370.74
2021.08	384.61
2021.08	9890.80
2021.08	765.64
2021.09	8792.70
2021.09	567.48
2021.10	5135.00
2021.11	10830.90
2021.11	1591.00
2021.12	17285.20
2021.12	3134.50
2021.13	0.00
2021.13	2907.20
2021.14	0.00
2021.14	1414.10
2021.15	11162.70
2021.16	18304.30
2021.16	418.00
2021.17	384.73
2021.19	0.00
2021.20	0.00
2021.23	0.00
2021.23	0.00



Grey lines refer to Belgian labs

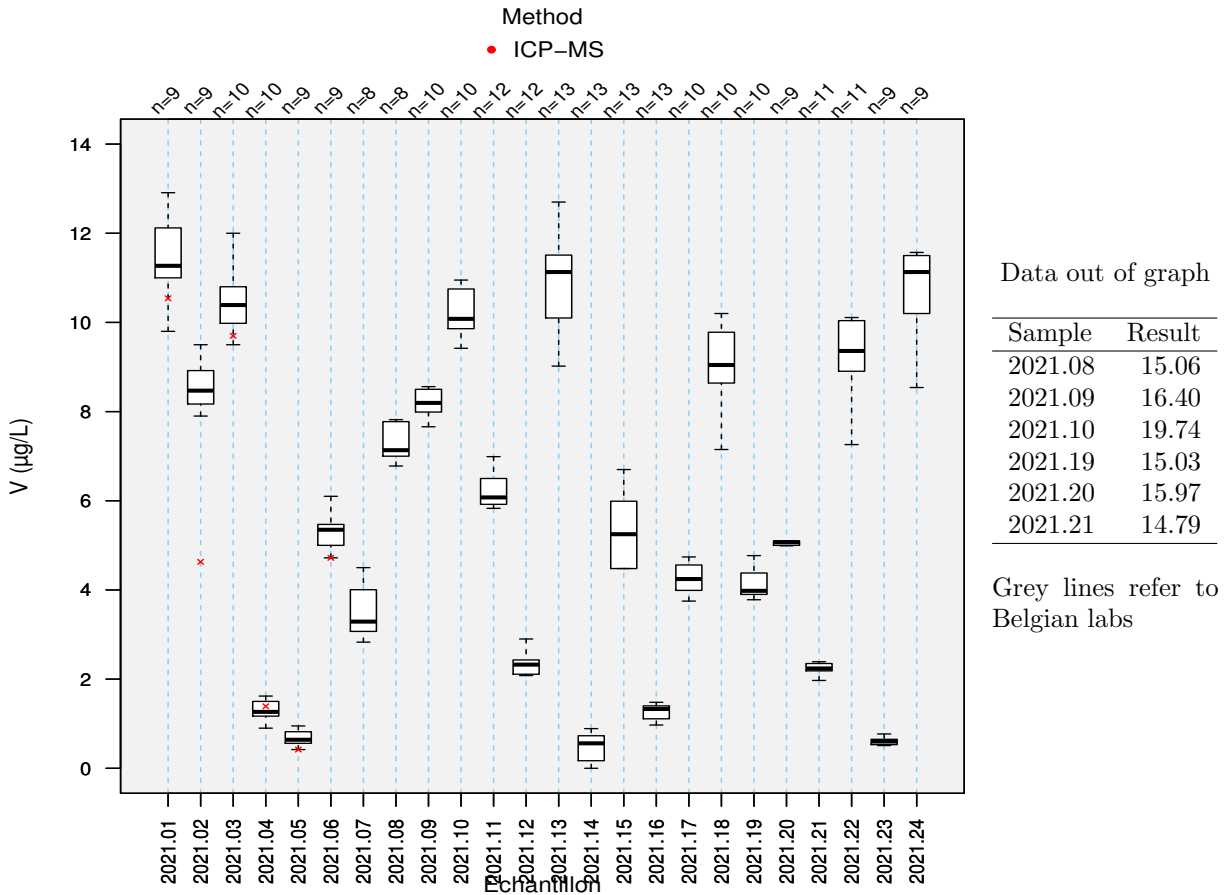
2.3.9 Tl

Sample	Method	Median	SD	N	NBE	NG	NC	NE
2021.01	ICP-MS	10.3	0.82	11	2	2	0	0
2021.02	ICP-MS	7.5	0.25	11	2	2	0	0
2021.03	ICP-MS	9.48	0.44	12	2	1	1	0
2021.04	ICP-MS	0.05	0.06	11	2	1	1	0
2021.05	ICP-MS	0.03	0.09	10	2	2	0	0
2021.06	ICP-MS	4.2	0.21	11	2	1	1	0
2021.07	ICP-MS	2.14	0.15	10	1	1	0	0
2021.08	ICP-MS	6.18	0.25	10	1	1	0	0
2021.09	ICP-MS	7.3	0.33	11	1	1	0	0
2021.10	ICP-MS	9.2	0.45	11	1	1	0	0
2021.11	ICP-MS	4.94	0.42	14	1	1	0	0
2021.12	ICP-MS	0.96	0.16	13	1	1	0	0
2021.13	ICP-MS	9.96	1.1	14	1	1	0	0
2021.14	ICP-MS	0.04	0.03	12	1	1	0	0
2021.15	ICP-MS	3.99	0.12	13	1	1	0	0
2021.16	ICP-MS	0.03	0.06	13	1	1	0	0
2021.17	ICP-MS	3.04	0.31	12	1	1	0	0
2021.18	ICP-MS	8.09	1.15	12	1	1	0	0
2021.19	ICP-MS	3	0.26	11	1	1	0	0
2021.20	ICP-MS	4.09	0.36	9	1	1	0	0
2021.21	ICP-MS	1.06	0.06	12	1	1	0	0
2021.22	ICP-MS	8.04	0.64	12	1	1	0	0
2021.23	ICP-MS	0.02	0.08	10	1	1	0	0
2021.24	ICP-MS	9.29	0.53	10	1	1	0	0



2.3.10 V

Sample	Method	Median	SD	N	NBE	NG	NC	NE
2021.01	ICP-MS	11.27	0.83	9	1	1	0	0
2021.02	ICP-MS	8.47	0.56	9	1	0	1	0
2021.03	ICP-MS	10.39	0.58	10	1	1	0	0
2021.04	ICP-MS	1.27	0.22	10	1	1	0	0
2021.05	ICP-MS	0.64	0.19	9	1	1	0	0
2021.06	ICP-MS	5.35	0.35	9	1	1	0	0



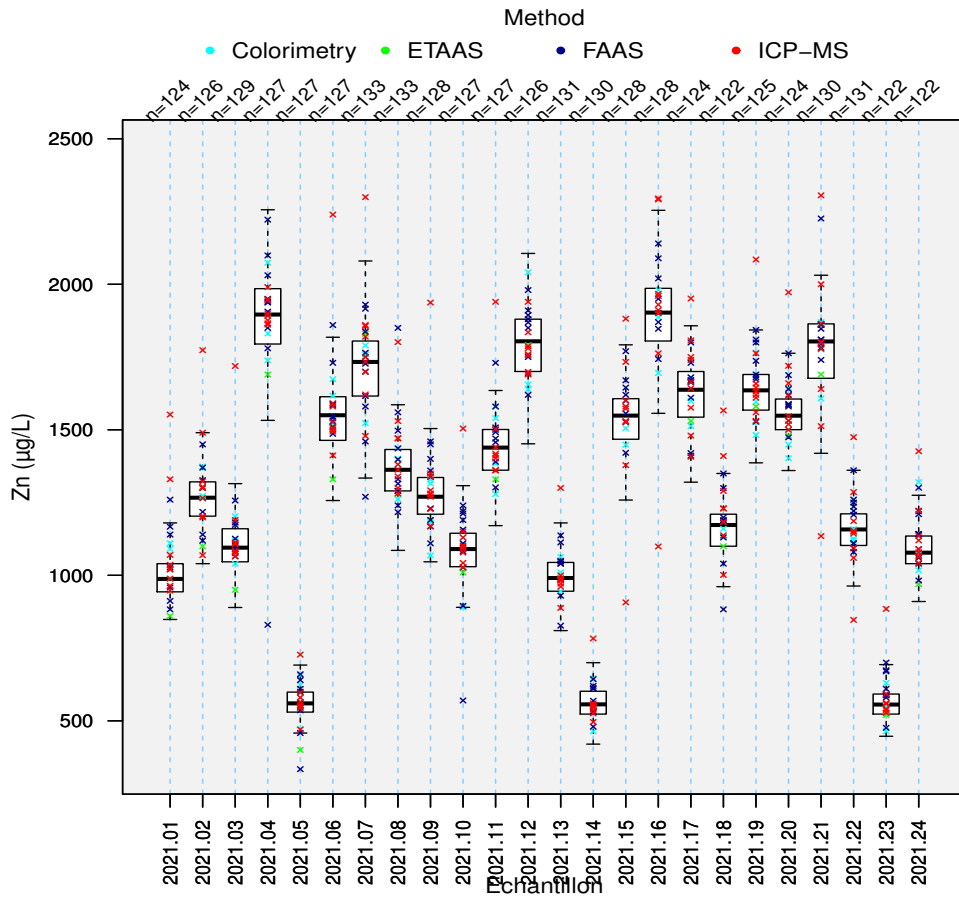
2.3.11 Zn

Sample	Method	Median	SD	N	NBE	NG	NC	NE
2021.01	Colorimetry	985.5	161.42	20	4	4	0	0
2021.01	ETAAS	1036.59	109.27	6	1	1	0	0
2021.01	FAAS	990.81	65.01	39	7	6	1	0
2021.01	ICP-MS	981	61.21	54	9	7	2	0
2021.02	Colorimetry	1258.7	165.48	20	4	4	0	0
2021.02	ETAAS	1262.22	127.16	6	1	1	0	0
2021.02	FAAS	1281.84	81.45	41	7	7	0	0
2021.02	ICP-MS	1263.59	80.96	54	9	8	1	0
2021.03	Colorimetry	1106.87	120.28	18	4	4	0	0
2021.03	ETAAS	1092.18	79.32	5	1	0	0	1
2021.03	FAAS	1095	90.21	44	9	9	0	0
2021.03	ICP-MS	1096.76	70.87	57	9	8	1	0
2021.03	Global	1095	84.21	129	23	22	1	0
2021.04	Colorimetry	1873.71	175.35	18	4	4	0	0
2021.04	ETAAS	1750.79	130.12	4	1	0	0	1
2021.04	FAAS	1906	116.88	43	10	9	1	0
2021.04	ICP-MS	1895.95	125.47	57	9	8	1	0
2021.04	Global	1895.95	140.98	127	24	22	2	0
2021.05	Colorimetry	550	109.71	19	4	4	0	0
2021.05	ETAAS	568.98	74.53	5	1	0	0	1
2021.05	FAAS	561.72	44.02	44	9	8	1	0
2021.05	ICP-MS	553.59	43.28	54	8	7	1	0
2021.05	Global	560	50.93	127	22	19	3	0
2021.06	Colorimetry	1519.72	124.23	19	4	4	0	0
2021.06	ETAAS	1520	116.35	5	1	0	0	1
2021.06	FAAS	1543	108.53	44	9	9	0	0
2021.06	ICP-MS	1569.6	89.1	54	8	7	1	0
2021.06	Global	1549.98	111.08	127	22	21	1	0
2021.07	Colorimetry	1597	288.01	23	4	4	0	0
2021.07	ETAAS	1805	52.44	5	1	0	0	1
2021.07	FAAS	1700	108.6	45	11	10	1	0
2021.07	ICP-MS	1749.45	93.47	55	9	8	1	0
2021.07	Global	1733.1	140.11	133	25	23	2	0
2021.08	Colorimetry	1308	175.07	23	4	4	0	0
2021.08	ETAAS	1393.02	92.43	5	1	0	0	1
2021.08	FAAS	1353.78	108.23	45	11	10	1	0
2021.08	ICP-MS	1381	82.42	55	9	8	1	0
2021.08	Global	1362.54	105.46	133	25	23	2	0
2021.09	Colorimetry	1205.01	189.88	20	4	4	0	0
2021.09	ETAAS	1242.6	34.86	5	1	0	0	1
2021.09	FAAS	1301.46	97.3	43	9	9	0	0
2021.09	ICP-MS	1270	74.73	55	9	8	1	0
2021.09	Global	1270	92.77	128	23	22	1	0
2021.10	Colorimetry	1027.17	157.63	19	4	4	0	0
2021.10	ETAAS	1111.8	53.23	5	1	0	0	1
2021.10	FAAS	1110	75.26	43	10	9	1	0
2021.10	ICP-MS	1090	78.58	55	9	8	1	0
2021.10	Global	1090.22	85.14	127	24	22	2	0
2021.11	Colorimetry	1379.34	144.97	20	4	4	0	0
2021.11	ETAAS	1478.04	79.81	5	1	0	0	1
2021.11	FAAS	1447.67	107.86	42	9	9	0	0
2021.11	ICP-MS	1445.34	77.57	55	8	7	1	0
2021.11	Global	1438.8	103.61	127	22	21	1	0
2021.12	Colorimetry	1655.74	222.29	19	4	4	0	0
2021.12	ETAAS	1843	22.85	5	1	0	0	1
2021.12	FAAS	1795.98	110.27	42	9	9	0	0
2021.12	ICP-MS	1822.04	95.98	55	8	8	0	0
2021.12	Global	1804.02	131.36	126	22	22	0	0
2021.13	Colorimetry	964.65	122.54	22	4	4	0	0
2021.13	ETAAS	1046.4	220.09	4	1	0	0	1

Continued on next page

Sample	Method	Median	SD	N	NBE	NG	NC	NE
2021.13	FAAS	992.44	66.43	44	10	9	1	0
2021.13	ICP-MS	996.04	46.94	57	9	8	1	0
2021.13	Global	990.81	73.25	131	24	21	3	0
2021.14	Colorimetry	513.56	76.36	22	4	4	0	0
2021.14	ETAAS	595.14	169.7	4	1	0	0	1
2021.14	FAAS	570	59.74	43	10	9	1	0
2021.14	ICP-MS	556	48.48	57	9	8	1	0
2021.14	Global	556.6	58.06	130	24	21	3	0
2021.15	Colorimetry	1446.99	210.17	18	3	3	0	0
2021.15	ETAAS	1507.29	318.29	4	1	0	0	1
2021.15	FAAS	1548.68	87.13	44	9	8	1	0
2021.15	ICP-MS	1569.6	98.44	57	9	7	2	0
2021.15	Global	1548.67	102.89	128	22	18	4	0
2021.16	Colorimetry	1794	221.88	19	3	3	0	0
2021.16	ETAAS	1866.95	388.48	4	1	0	0	1
2021.16	FAAS	1902	153.99	43	9	8	1	0
2021.16	ICP-MS	1942.38	100.84	57	9	6	3	0
2021.16	Global	1902.57	133.4	128	22	19	3	0
2021.17	Colorimetry	1530	238.08	17	3	3	0	0
2021.17	ETAAS	1700	63.16	3	1	0	0	1
2021.17	FAAS	1654	106.96	44	10	9	1	0
2021.17	ICP-MS	1621.92	103.78	55	9	8	1	0
2021.17	Global	1637.5	116.13	124	23	22	1	0
2021.18	Colorimetry	1136.8	161.31	16	3	3	0	0
2021.18	ETAAS	1177.2	33.36	3	1	0	0	1
2021.18	FAAS	1183.74	71.89	43	10	8	2	0
2021.18	ICP-MS	1170.52	70.62	55	9	7	2	0
2021.18	Global	1172.83	80.37	122	23	20	3	0
2021.19	Colorimetry	1526.15	213.15	19	4	4	0	0
2021.19	ETAAS	1594.42	38.35	4	1	0	0	1
2021.19	FAAS	1654.62	93.55	41	9	8	1	0
2021.19	ICP-MS	1642.84	72.86	56	9	8	1	0
2021.19	Global	1635.46	90.71	125	23	21	2	0
2021.20	Colorimetry	1449.32	181.92	19	4	4	0	0
2021.20	ETAAS	1541.72	18.52	4	1	0	0	1
2021.20	FAAS	1563.06	86.32	41	9	8	1	0
2021.20	ICP-MS	1556.52	71.2	55	9	8	1	0
2021.20	Global	1548.45	76.52	124	23	21	2	0
2021.21	Colorimetry	1670	183.1	21	4	4	0	0
2021.21	ETAAS	1760.6	231.19	4	1	0	0	1
2021.21	FAAS	1829.24	126.02	43	11	9	2	0
2021.21	ICP-MS	1816	87.27	57	9	6	3	0
2021.21	Global	1803.52	136.33	130	25	21	4	0
2021.22	Colorimetry	1119.41	111.51	21	4	4	0	0
2021.22	ETAAS	1143.6	121.31	4	1	0	0	1
2021.22	FAAS	1166.83	79.5	44	11	10	1	0
2021.22	ICP-MS	1157.58	54.6	57	9	7	2	0
2021.22	Global	1157.58	80.49	131	25	22	3	0
2021.23	Colorimetry	526.1	116.73	18	4	4	0	0
2021.23	ETAAS	528	21.02	4	1	0	0	1
2021.23	FAAS	588.05	45.31	44	11	10	1	0
2021.23	ICP-MS	543	34.43	53	9	8	1	0
2021.23	Global	555.95	50.63	122	25	23	2	0
2021.24	Colorimetry	1065.5	138.17	18	4	4	0	0
2021.24	ETAAS	982.04	47.66	4	1	0	0	1
2021.24	FAAS	1082.82	84.19	44	11	10	1	0
2021.24	ICP-MS	1078.49	43.02	53	9	7	2	0
2021.24	Global	1077.74	70.05	122	25	21	4	0

Data out of graph



Sample	Result
2021.03	3348.48
2021.04	2943.00
2021.04	2861.78
2021.05	300.00
2021.07	133.00
2021.07	3311.91
2021.12	185.08
2021.13	110.00
2021.13	0.87
2021.13	91.00
2021.14	60.10
2021.14	0.50
2021.14	52.00
2021.15	1.45
2021.15	154.10
2021.15	11887.10
2021.16	1.79
2021.16	203.60
2021.16	2611.00
2021.16	7479.80
2021.17	157.00
2021.18	117.00
2021.19	145.00
2021.20	157.00
2021.21	176.00
2021.21	191687.40
2021.21	2620.00
2021.22	104.00
2021.23	254.40
2021.23	96.00
2021.23	61.00
2021.23	63.58
2021.23	306.00
2021.24	102.00
2021.24	121.00

Grey lines refer to Belgian labs

3 TRACE ELEMENTS IN BLOOD

3.1 PARTICIPATION

16 laboratories participated to the EQA for blood matrix.

Parameter	N labs	Recorded results	Expected number of results	percentage of
As	4	96	96	100 %
Cd	11	244	264	92.4 %
Co	5	120	120	100 %
Cr	5	118	120	98.3 %
Hg	6	140	144	97.2 %
Mg	3	50	72	69.4 %
Mn	8	170	192	88.5 %
Pb	15	324	360	90 %
Se	3	72	72	100 %
Tl	5	119	120	99.2 %
Zn	2	48	48	100 %
Total		1501	1608	93.35

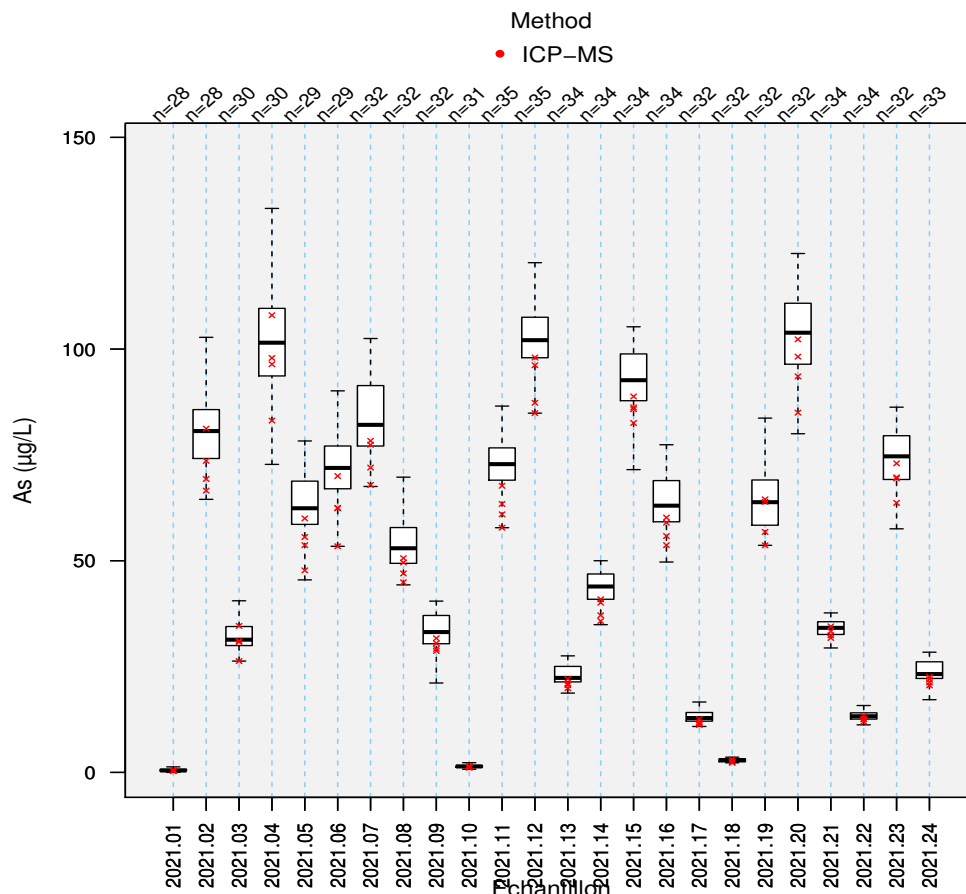
3.2 GLOBAL RESULTS

STAT	Element	Total number of results	Number of evaluated results	Number of Z citations	% citations
MA	As	96	96	0	0
MA	Cd	244	234	15	6.4
MA+GA	Cd	244	244 (+10)	25 (+10)	10.2
MA	Co	120	120	9	7.5
MA	Cr	118	118	3	2.5
MA	Hg	140	140	5	3.6
MA	Mg	50	42	1	2.4
MA+GA	Mg	50	50 (+8)	2 (+1)	4
MA	Mn	170	168	11	6.5
MA+GA	Mn	170	170 (+2)	11	6.5
MA	Pb	324	312	26	8.3
MA+GA	Pb	324	324 (+12)	36 (+10)	11.1
MA	Se	72	72	2	2.8
MA	Tl	119	119	7	5.9
MA	Zn	48	48	5	10.4
Total	MA+GA	1501	1501	105	7
	MA	1501	1469	84	5.7

3.3 RESULTS PER ELEMENT

3.3.1 As

Sample	Method	Median	SD	N	NBE	NG	NC	NE
2021.01	ICP-MS	0.45	0.27	26	4	4	0	0
2021.02	ICP-MS	80.63	8.74	26	4	4	0	0
2021.03	ICP-MS	31.35	2.98	28	4	4	0	0
2021.04	ICP-MS	102.4	10.08	28	4	4	0	0
2021.05	ICP-MS	61	7.3	27	4	4	0	0
2021.06	ICP-MS	71.49	8.21	27	4	4	0	0
2021.07	ICP-MS	80.85	8.63	30	4	4	0	0
2021.08	ICP-MS	52.67	5.6	30	4	4	0	0
2021.09	ICP-MS	32.59	5.01	30	4	4	0	0
2021.10	ICP-MS	1.41	0.33	29	4	4	0	0
2021.11	ICP-MS	72.82	5.5	33	4	4	0	0
2021.12	ICP-MS	101.65	8.99	33	4	4	0	0
2021.13	ICP-MS	22.33	2.77	32	4	4	0	0
2021.14	ICP-MS	43.92	4.56	32	4	4	0	0
2021.15	ICP-MS	92.2	8.26	32	4	4	0	0
2021.16	ICP-MS	62.66	6.42	32	4	4	0	0
2021.17	ICP-MS	12.8	1.43	31	4	4	0	0
2021.18	ICP-MS	2.92	0.49	31	4	4	0	0
2021.19	ICP-MS	63.83	8.5	30	4	4	0	0
2021.20	ICP-MS	103.86	11.23	30	4	4	0	0
2021.21	ICP-MS	34.09	2.13	32	4	4	0	0
2021.22	ICP-MS	13.27	1.07	32	4	4	0	0
2021.23	ICP-MS	73.95	7.55	30	4	4	0	0
2021.24	ICP-MS	23.23	3.01	31	4	4	0	0

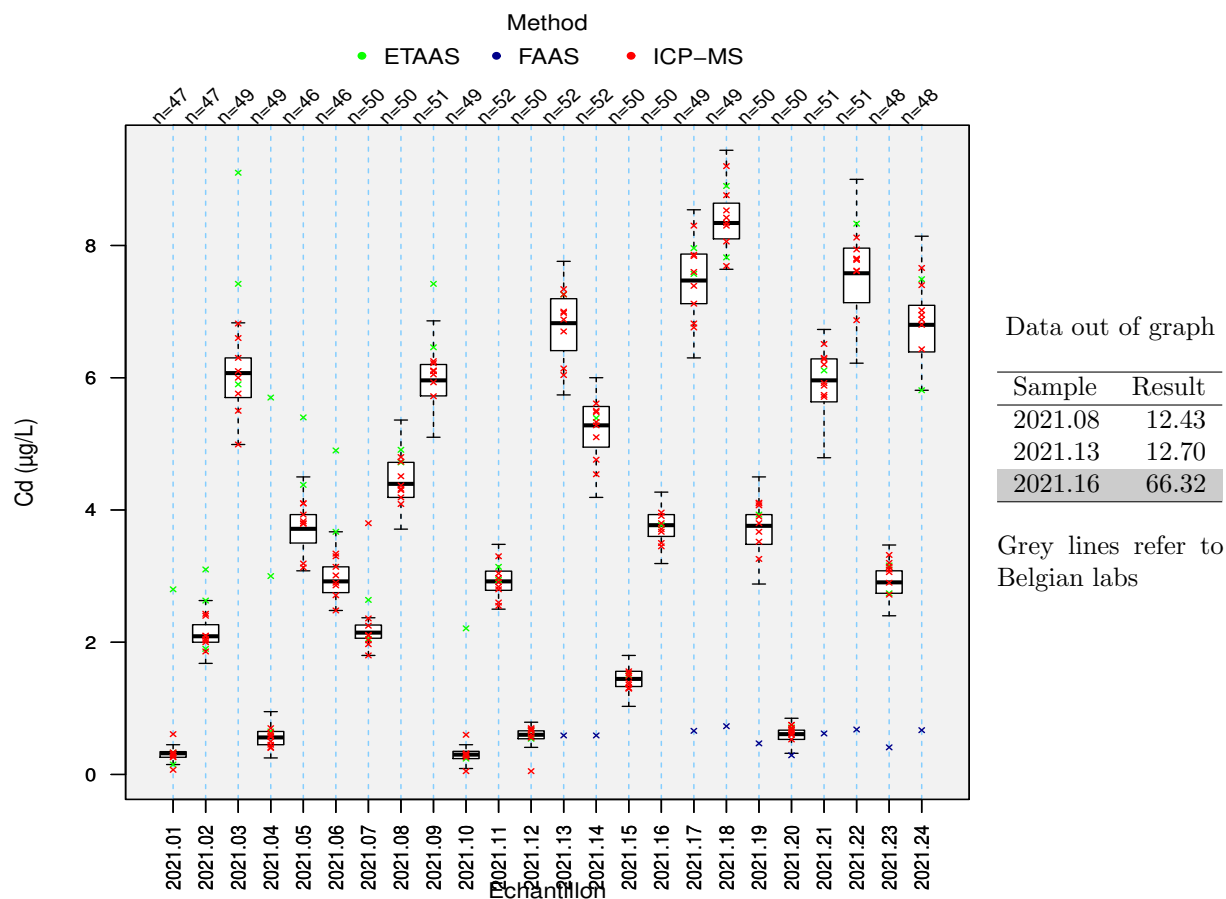


3.3.2 Cd

Sample	Method	Median	SD	N	NBE	NG	NC	NE
2021.01	ETAAS	0.33	0.16	11	3	2	1	0
2021.01	ICP-MS	0.32	0.06	36	8	6	2	0
2021.02	ETAAS	2.07	0.32	11	3	2	1	0
2021.02	ICP-MS	2.09	0.17	36	8	8	0	0
2021.03	ETAAS	6.1	0.64	11	3	2	1	0
2021.03	ICP-MS	6.07	0.42	38	8	8	0	0
2021.04	ETAAS	0.53	0.2	11	3	1	2	0
2021.04	ICP-MS	0.56	0.15	38	8	8	0	0
2021.05	ETAAS	3.7	0.34	10	2	1	1	0
2021.05	ICP-MS	3.72	0.29	36	8	8	0	0
2021.06	ETAAS	3.12	0.48	10	2	1	1	0
2021.06	ICP-MS	2.91	0.21	36	8	8	0	0
2021.07	ETAAS	2.15	0.19	9	2	2	0	0
2021.07	ICP-MS	2.14	0.13	41	8	7	1	0
2021.08	ETAAS	4.54	0.42	9	2	2	0	0
2021.08	ICP-MS	4.37	0.36	41	8	8	0	0
2021.09	ETAAS	5.96	0.85	10	2	2	0	0
2021.09	ICP-MS	5.96	0.29	41	8	8	0	0
2021.10	ETAAS	0.3	0.14	10	2	1	1	0
2021.10	ICP-MS	0.3	0.08	39	8	6	2	0
2021.11	ETAAS	3.04	0.17	10	2	2	0	0
2021.11	ICP-MS	2.91	0.25	42	8	8	0	0
2021.12	ETAAS	0.51	0.25	10	2	2	0	0
2021.12	ICP-MS	0.61	0.08	40	8	7	1	0
2021.13	ETAAS	6.75	0.87	9	1	1	0	0
2021.13	FAAS	0.59	0	1	1	0	0	1
2021.13	ICP-MS	6.87	0.5	42	8	8	0	0
2021.13	Global	6.82	0.58	52	10	9	1	0
2021.14	ETAAS	5.39	0.22	9	1	1	0	0
2021.14	FAAS	0.59	0	1	1	0	0	1
2021.14	ICP-MS	5.28	0.48	42	8	8	0	0
2021.14	Global	5.28	0.45	52	10	9	1	0
2021.15	ETAAS	1.5	0.17	7	1	1	0	0
2021.15	ICP-MS	1.44	0.15	43	8	8	0	0
2021.16	ETAAS	3.72	0.07	7	1	1	0	0
2021.16	ICP-MS	3.82	0.24	43	8	7	1	0
2021.17	ETAAS	7.58	0.52	8	2	2	0	0
2021.17	FAAS	0.66	0	1	1	0	0	1
2021.17	ICP-MS	7.45	0.53	40	8	8	0	0
2021.17	Global	7.47	0.56	49	11	10	1	0
2021.18	ETAAS	8.3	0.45	8	2	2	0	0
2021.18	FAAS	0.73	0	1	1	0	0	1
2021.18	ICP-MS	8.35	0.37	40	8	8	0	0
2021.18	Global	8.34	0.4	49	11	10	1	0
2021.19	ETAAS	3.84	0.17	8	1	1	0	0
2021.19	FAAS	0.47	0	1	1	0	0	1
2021.19	ICP-MS	3.73	0.33	41	8	8	0	0
2021.19	Global	3.76	0.32	50	10	9	1	0
2021.20	ETAAS	0.56	0.14	8	1	1	0	0
2021.20	FAAS	0.29	0	1	1	0	0	1
2021.20	ICP-MS	0.62	0.08	41	8	8	0	0
2021.20	Global	0.61	0.1	50	10	9	1	0
2021.21	ETAAS	6.11	0.45	7	1	1	0	0
2021.21	FAAS	0.62	0	1	1	0	0	1
2021.21	ICP-MS	5.96	0.45	43	8	8	0	0
2021.21	Global	5.96	0.48	51	10	9	1	0
2021.22	ETAAS	7.36	0.59	7	1	1	0	0
2021.22	FAAS	0.68	0	1	1	0	0	1
2021.22	ICP-MS	7.59	0.57	43	8	8	0	0
2021.22	Global	7.58	0.61	51	10	9	1	0

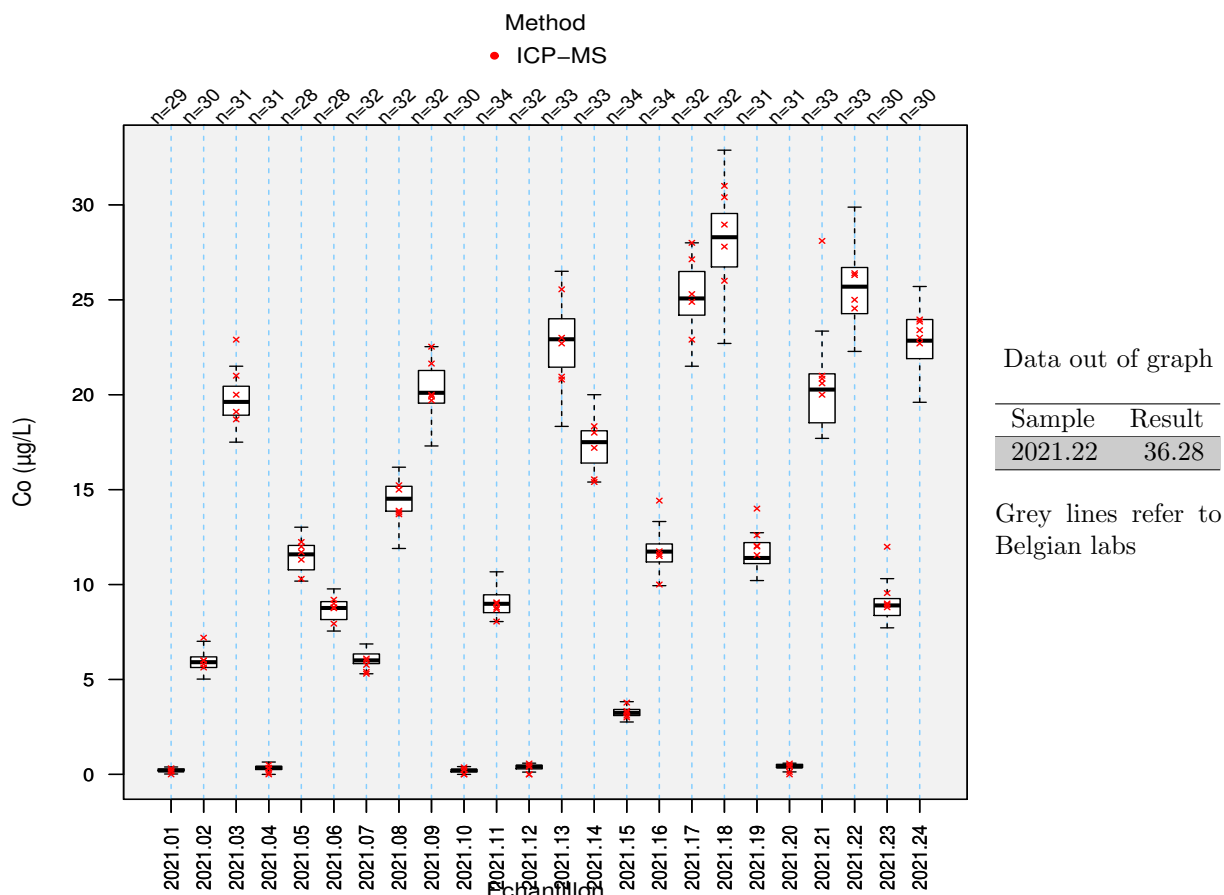
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Sample	Method	Median	SD	N	NBE	NG	NC	NE
2021.23	ETAAS	2.74	0.17	8	2	2	0	0
2021.23	FAAS	0.41	0	1	1	0	0	1
2021.23	ICP-MS	2.92	0.24	39	7	7	0	0
2021.23	Global	2.91	0.24	48	10	9	1	0
2021.24	ETAAS	6.42	0.39	8	2	2	0	0
2021.24	FAAS	0.67	0	1	1	0	0	1
2021.24	ICP-MS	6.82	0.56	39	7	7	0	0
2021.24	Global	6.8	0.49	48	10	9	1	0



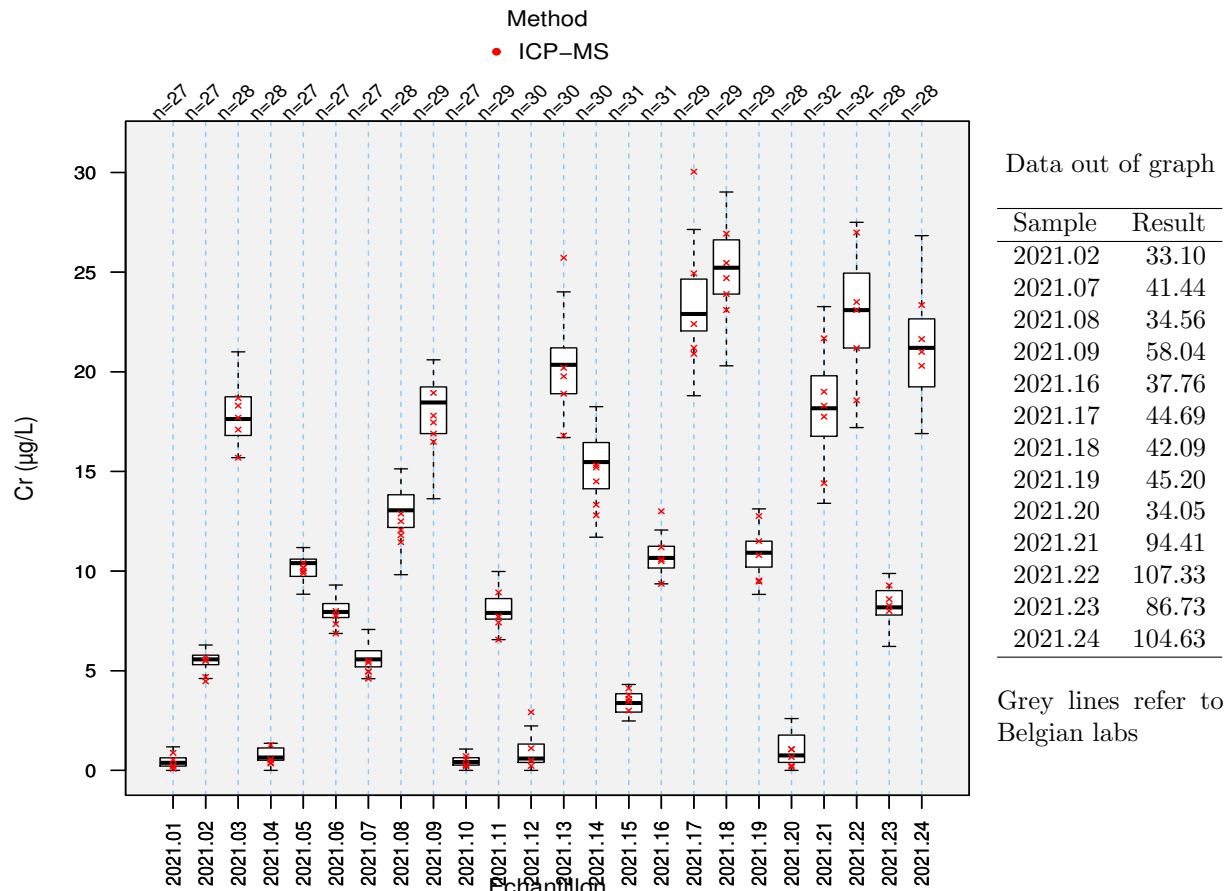
3.3.3 Co

Sample	Method	Median	SD	N	NBE	NG	NC	NE
2021.01	ICP-MS	0.2	0.07	27	5	5	0	0
2021.02	ICP-MS	5.91	0.25	28	5	4	1	0
2021.03	ICP-MS	19.73	1.08	29	5	5	0	0
2021.04	ICP-MS	0.3	0.12	29	5	5	0	0
2021.05	ICP-MS	11.59	0.91	26	5	5	0	0
2021.06	ICP-MS	8.77	0.58	26	5	5	0	0
2021.07	ICP-MS	6	0.33	30	5	5	0	0
2021.08	ICP-MS	14.54	0.96	30	5	5	0	0
2021.09	ICP-MS	20.1	1.26	30	5	5	0	0
2021.10	ICP-MS	0.21	0.08	28	5	5	0	0
2021.11	ICP-MS	8.98	0.72	32	5	5	0	0
2021.12	ICP-MS	0.41	0.11	30	5	3	2	0
2021.13	ICP-MS	23	1.95	31	5	5	0	0
2021.14	ICP-MS	17.64	1.29	31	5	5	0	0
2021.15	ICP-MS	3.24	0.2	32	5	5	0	0
2021.16	ICP-MS	11.73	0.62	32	5	4	1	0
2021.17	ICP-MS	25.22	1.61	30	5	5	0	0
2021.18	ICP-MS	28.34	1.8	30	5	5	0	0
2021.19	ICP-MS	11.4	0.85	29	5	4	1	0
2021.20	ICP-MS	0.41	0.13	29	5	4	1	0
2021.21	ICP-MS	20.6	1.86	31	5	4	1	0
2021.22	ICP-MS	25.81	1.8	31	5	4	1	0
2021.23	ICP-MS	8.9	0.56	28	5	4	1	0
2021.24	ICP-MS	22.99	1.36	28	5	5	0	0



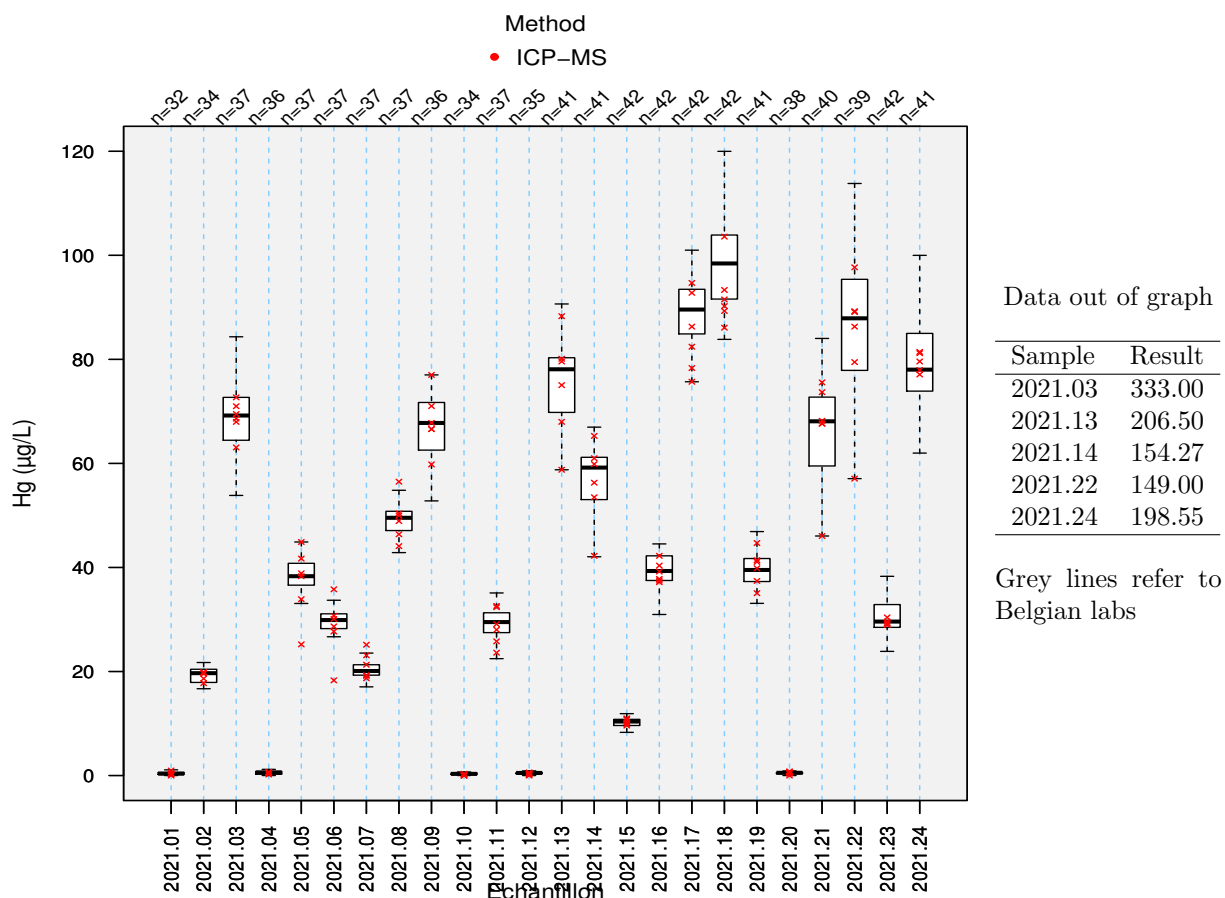
3.3.4 Cr

Sample	Method	Median	SD	N	NBE	NG	NC	NE
2021.01	ICP-MS	0.3	0.43	23	5	5	0	0
2021.02	ICP-MS	5.56	0.41	23	5	5	0	0
2021.03	ICP-MS	17.66	1.7	24	5	5	0	0
2021.04	ICP-MS	0.64	0.45	24	5	5	0	0
2021.05	ICP-MS	10.44	0.72	23	5	5	0	0
2021.06	ICP-MS	7.95	0.52	23	5	5	0	0
2021.07	ICP-MS	5.55	0.68	24	5	5	0	0
2021.08	ICP-MS	13.05	1.11	24	5	5	0	0
2021.09	ICP-MS	18.53	1.65	25	5	5	0	0
2021.10	ICP-MS	0.42	0.3	23	5	5	0	0
2021.11	ICP-MS	8.1	0.8	25	5	5	0	0
2021.12	ICP-MS	0.6	0.59	26	5	4	1	0
2021.13	ICP-MS	20.35	1.66	26	5	4	1	0
2021.14	ICP-MS	15.38	1.47	26	5	5	0	0
2021.15	ICP-MS	3.42	0.72	27	5	5	0	0
2021.16	ICP-MS	10.66	0.83	27	5	5	0	0
2021.17	ICP-MS	23.05	1.78	26	5	4	1	0
2021.18	ICP-MS	25.2	1.98	26	5	5	0	0
2021.19	ICP-MS	10.92	0.99	25	5	5	0	0
2021.20	ICP-MS	0.75	1.18	24	5	5	0	0
2021.21	ICP-MS	18.61	2.27	28	5	5	0	0
2021.22	ICP-MS	23.25	2.85	28	5	5	0	0
2021.23	ICP-MS	8.29	0.98	24	4	4	0	0
2021.24	ICP-MS	21.2	2.47	24	4	4	0	0



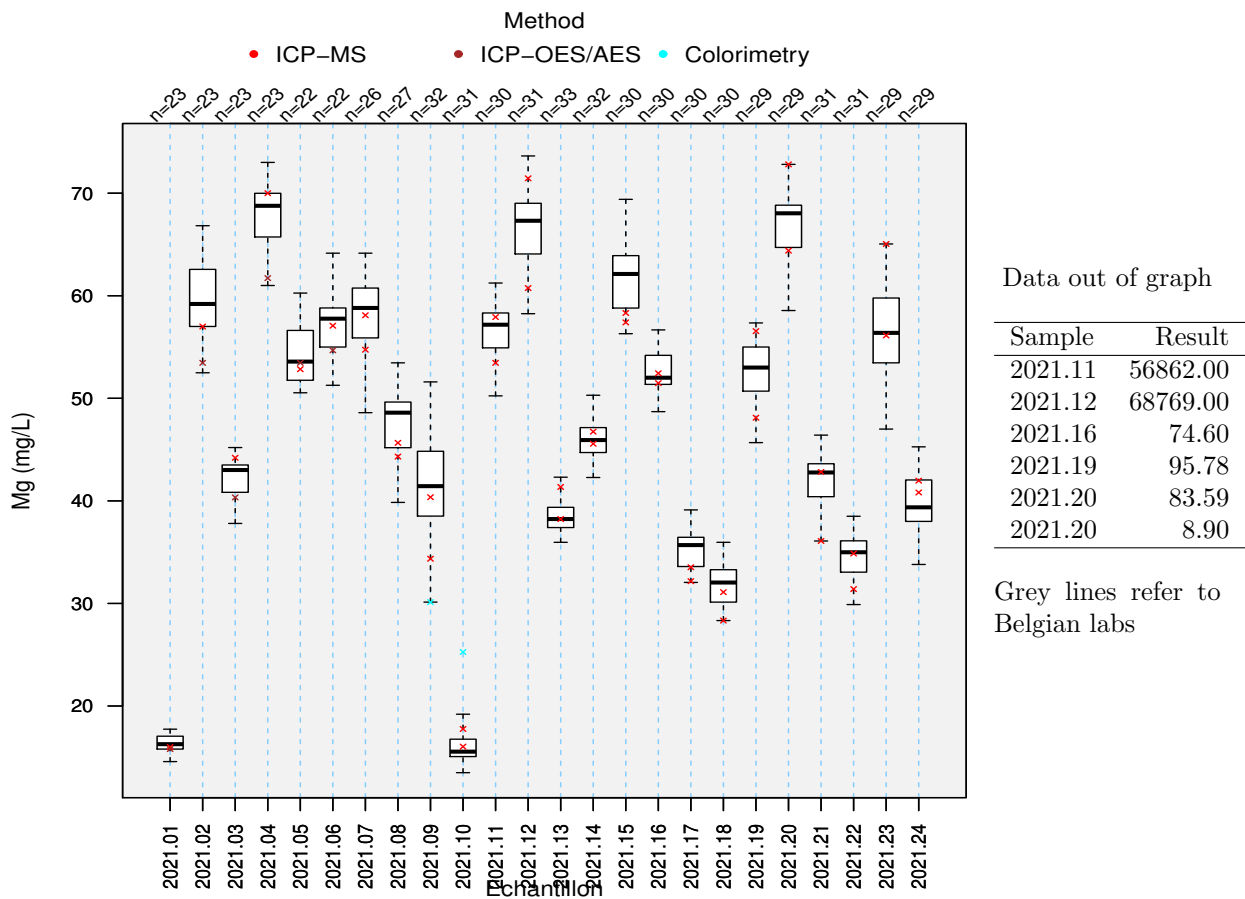
3.3.5 Hg

Sample	Method	Median	SD	N	NBE	NG	NC	NE
2021.01	ICP-MS	0.32	0.21	28	5	4	1	0
2021.02	ICP-MS	19.73	1.48	30	5	5	0	0
2021.03	ICP-MS	69.21	5.26	33	6	6	0	0
2021.04	ICP-MS	0.59	0.35	32	6	6	0	0
2021.05	ICP-MS	38.72	3.07	33	6	5	1	0
2021.06	ICP-MS	29.89	1.93	33	6	4	2	0
2021.07	ICP-MS	20.26	1.48	33	6	5	1	0
2021.08	ICP-MS	50	2.74	33	6	6	0	0
2021.09	ICP-MS	67.2	6.69	32	6	6	0	0
2021.10	ICP-MS	0.29	0.15	30	6	6	0	0
2021.11	ICP-MS	29.59	2.89	34	6	6	0	0
2021.12	ICP-MS	0.42	0.2	32	6	6	0	0
2021.13	ICP-MS	78.23	8.96	37	6	6	0	0
2021.14	ICP-MS	59.38	6.03	37	6	6	0	0
2021.15	ICP-MS	10.32	0.85	38	6	6	0	0
2021.16	ICP-MS	39.27	3.4	38	6	6	0	0
2021.17	ICP-MS	89.98	6.1	38	6	6	0	0
2021.18	ICP-MS	98.75	8.33	38	6	6	0	0
2021.19	ICP-MS	39.68	3.1	36	6	6	0	0
2021.20	ICP-MS	0.5	0.22	34	6	6	0	0
2021.21	ICP-MS	68.1	7.94	36	6	6	0	0
2021.22	ICP-MS	87.9	10.69	35	6	6	0	0
2021.23	ICP-MS	29.35	3.2	37	5	5	0	0
2021.24	ICP-MS	78.34	8.25	36	5	5	0	0



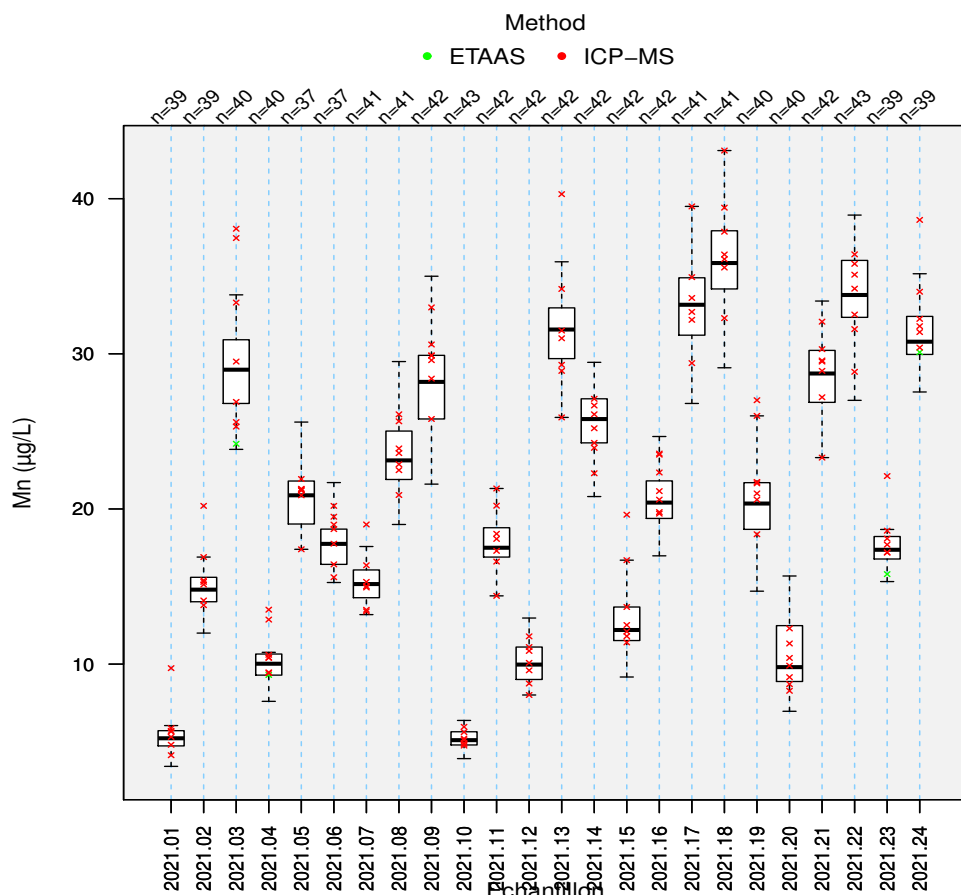
3.3.6 Mg

Sample	Method	Median	SD	N	NBE	NG	NC	NE
2021.01	ICP-MS	16.04	1.11	15	1	1	0	0
2021.01	ICP-OES/AES	16.16	0.27	2	1	0	0	1
2021.01	Global	16.28	0.93	23	2	2	0	0
2021.02	ICP-MS	58.81	3.82	15	1	1	0	0
2021.02	ICP-OES/AES	57.95	3.33	2	1	0	0	1
2021.02	Global	59.2	4.13	23	2	2	0	0
2021.03	ICP-MS	43.13	1.26	14	1	1	0	0
2021.03	ICP-OES/AES	41.67	0.99	2	1	0	0	1
2021.03	Global	43.01	1.98	23	2	2	0	0
2021.04	ICP-MS	68.89	2.86	14	1	1	0	0
2021.04	ICP-OES/AES	64.39	1.98	2	1	0	0	1
2021.04	Global	68.77	3.16	23	2	2	0	0
2021.05	ICP-MS	53.7	3.42	13	1	1	0	0
2021.05	ICP-OES/AES	53.34	0.09	2	1	0	0	1
2021.05	Global	53.58	3.29	22	2	2	0	0
2021.06	ICP-MS	57.83	1.28	13	1	1	0	0
2021.06	ICP-OES/AES	56.02	0.99	2	1	0	0	1
2021.06	Global	57.77	2.79	22	2	2	0	0
2021.07	ICP-MS	58.1	3.69	19	2	2	0	0
2021.08	ICP-MS	48.6	3.31	19	2	2	0	0
2021.09	ICP-MS	41.8	3.96	21	2	2	0	0
2021.09	Colorimetry	30.13	0	1	1	0	0	1
2021.09	Global	41.44	4.5	32	3	3	0	0
2021.10	ICP-MS	15.55	1.44	21	2	2	0	0
2021.10	Colorimetry	25.27	0	1	1	0	0	1
2021.10	Global	15.55	1.26	31	3	2	1	0
2021.11	ICP-MS	56.7	2.4	21	2	2	0	0
2021.12	ICP-MS	66.25	3.01	22	2	2	0	0
2021.13	ICP-MS	38.15	1.64	23	2	2	0	0
2021.14	ICP-MS	45.31	2.05	22	2	2	0	0
2021.15	ICP-MS	62	3.79	21	2	2	0	0
2021.16	ICP-MS	52	1.98	21	2	2	0	0
2021.17	ICP-MS	35.91	1.89	22	2	2	0	0
2021.18	ICP-MS	32.2	1.87	22	2	2	0	0
2021.19	ICP-MS	52.98	3.17	20	2	2	0	0
2021.20	ICP-MS	66.82	3.3	20	2	2	0	0
2021.21	ICP-MS	42.44	2.58	22	2	2	0	0
2021.22	ICP-MS	34.93	2.33	22	2	2	0	0
2021.23	ICP-MS	56.5	2.56	20	2	1	1	0
2021.24	ICP-MS	39.37	2.5	20	2	2	0	0



3.3.7 Mn

Sample	Method	Median	SD	N	NBE	NG	NC	NE
2021.01	ICP-MS	5.22	0.76	32	7	6	1	0
2021.02	ICP-MS	15.12	1.46	32	7	6	1	0
2021.03	ETAAS	28.98	2.55	8	1	1	0	0
2021.03	ICP-MS	28.84	2.7	32	7	5	2	0
2021.04	ETAAS	9.08	0.63	8	1	1	0	0
2021.04	ICP-MS	10.39	0.84	32	7	6	1	0
2021.05	ICP-MS	21.15	2.1	30	7	7	0	0
2021.06	ICP-MS	17.81	1.8	30	7	7	0	0
2021.07	ICP-MS	15.09	1.48	36	7	7	0	0
2021.08	ICP-MS	23.07	1.99	36	7	7	0	0
2021.09	ICP-MS	28.34	2.55	38	7	7	0	0
2021.10	ICP-MS	5.1	0.64	38	7	7	0	0
2021.11	ICP-MS	17.5	1.5	38	7	7	0	0
2021.12	ICP-MS	10.07	1.76	38	7	7	0	0
2021.13	ICP-MS	31.5	2.38	38	7	6	1	0
2021.14	ICP-MS	25.64	1.91	38	7	7	0	0
2021.15	ICP-MS	12.2	1.68	38	7	6	1	0
2021.16	ICP-MS	20.41	2.07	38	7	7	0	0
2021.17	ICP-MS	33.19	2.61	38	7	6	1	0
2021.18	ICP-MS	36.18	2.92	38	7	7	0	0
2021.19	ICP-MS	20.48	2.17	36	7	6	1	0
2021.20	ICP-MS	9.86	2.64	36	7	7	0	0
2021.21	ICP-MS	28.87	2.47	38	7	7	0	0
2021.22	ICP-MS	33.79	3.21	39	7	7	0	0
2021.23	ETAAS	17.09	0.37	5	1	0	0	1
2021.23	ICP-MS	17.56	1.01	34	6	5	1	0
2021.23	Global	17.37	1.07	39	7	6	1	0
2021.24	ETAAS	30.1	0.82	5	1	0	0	1
2021.24	ICP-MS	30.96	1.92	34	6	5	1	0
2021.24	Global	30.78	1.82	39	7	6	1	0



Data out of graph

Sample	Result
2021.01	0.53
2021.03	48.84
2021.05	1.21
2021.06	1.06
2021.09	48.90
2021.09	47.83
2021.13	46.71
2021.17	48.40
2021.20	63.70
2021.21	55.76
2021.22	82.37
2021.22	92.50
2021.24	43.66
2021.24	49.00

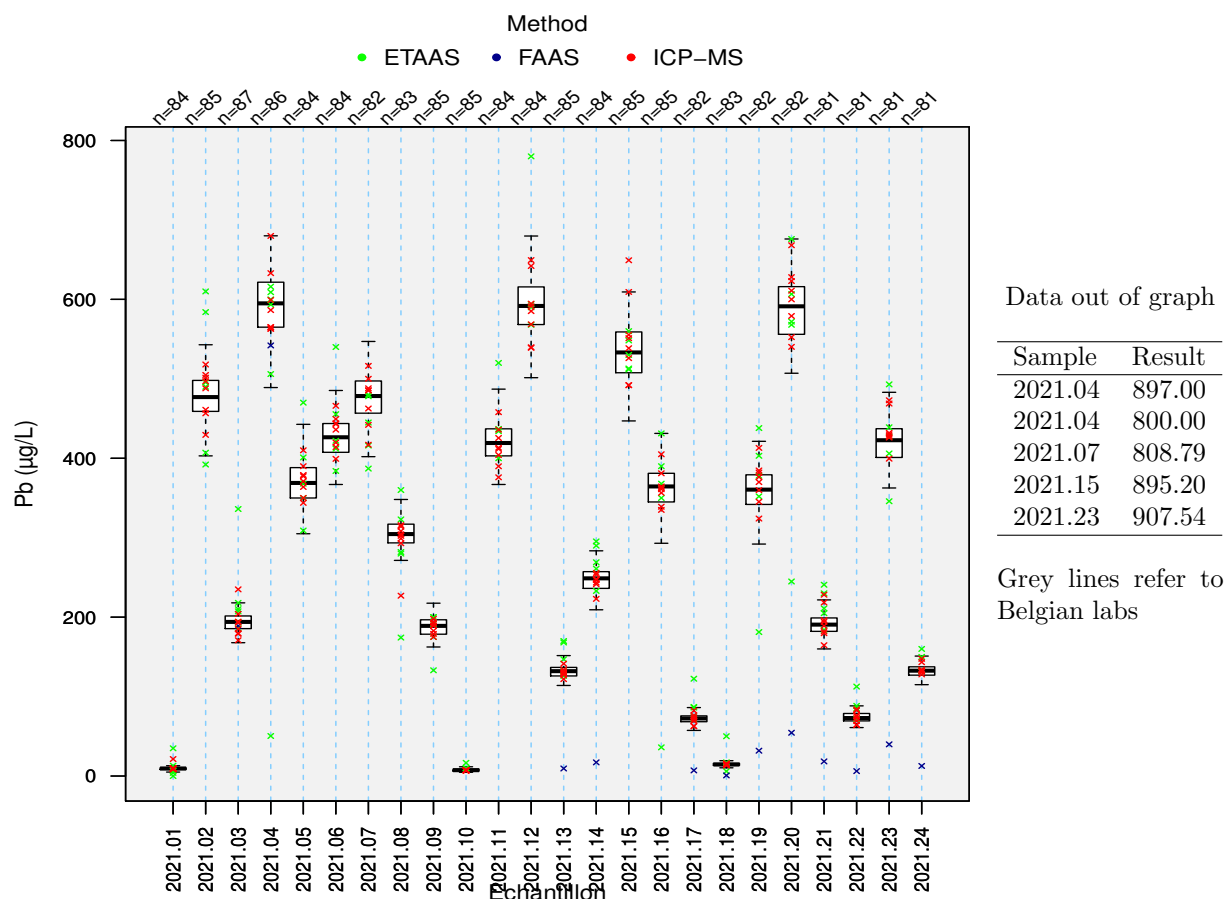
Grey lines refer to Belgian labs

3.3.8 Pb

Sample	Method	Median	SD	N	NBE	NG	NC	NE
2021.01	ETAAS	9.95	4.88	30	6	5	1	0
2021.01	ICP-MS	9.54	1.35	50	8	7	1	0
2021.02	ETAAS	478.63	41.81	31	6	5	1	0
2021.02	ICP-MS	476.12	26.66	50	8	8	0	0
2021.03	ETAAS	195	15.82	30	6	5	1	0
2021.03	FAAS	189	6.14	3	1	0	0	1
2021.03	ICP-MS	194.06	11.41	52	8	7	1	0
2021.03	Global	194	11.82	87	15	13	2	0
2021.04	ETAAS	584.67	51.23	29	6	5	1	0
2021.04	FAAS	590.52	24.9	3	1	0	0	1
2021.04	ICP-MS	597.97	45.37	52	8	8	0	0
2021.04	Global	594.97	41.85	86	15	14	1	0
2021.05	ETAAS	374	32.05	30	5	5	0	0
2021.05	ICP-MS	364.26	30.17	50	8	8	0	0
2021.06	ETAAS	432	26.33	30	5	4	1	0
2021.06	ICP-MS	421.35	28.58	50	8	8	0	0
2021.07	ETAAS	478	27.95	27	5	4	1	0
2021.07	ICP-MS	478.63	28.86	55	8	8	0	0
2021.08	ETAAS	306.66	23.67	28	5	4	1	0
2021.08	ICP-MS	304.58	15.58	55	8	7	1	0
2021.09	ETAAS	191	13.29	27	5	4	1	0
2021.09	ICP-MS	187	11.86	57	8	8	0	0
2021.10	ETAAS	6.3	6.02	27	5	5	0	0
2021.10	ICP-MS	7.4	1.26	57	8	8	0	0
2021.11	ETAAS	429.5	31.63	27	4	4	0	0
2021.11	ICP-MS	416.1	28.43	56	8	8	0	0
2021.12	ETAAS	593.9	31.49	27	4	3	1	0
2021.12	ICP-MS	590.97	35.9	56	8	8	0	0
2021.13	ETAAS	134	7.06	27	5	3	2	0
2021.13	FAAS	80.55	52.67	2	1	0	0	1
2021.13	ICP-MS	130.95	8.28	56	8	8	0	0
2021.13	Global	132	7.97	85	14	11	3	0
2021.14	ETAAS	248	17.79	27	5	5	0	0
2021.14	FAAS	142	92.51	2	1	0	0	1
2021.14	ICP-MS	249	13.14	55	8	8	0	0
2021.14	Global	248.85	15.47	84	14	13	1	0
2021.15	ETAAS	530	30.91	27	5	5	0	0
2021.15	ICP-MS	540	40.36	57	8	8	0	0
2021.16	ETAAS	366.74	27.61	27	5	4	1	0
2021.16	ICP-MS	364.51	23.8	57	8	8	0	0
2021.17	ETAAS	74.4	7.69	25	5	4	1	0
2021.17	FAAS	390.05	283.88	2	1	0	0	1
2021.17	ICP-MS	72.2	4.68	55	8	8	0	0
2021.17	Global	72.46	5.35	82	14	12	2	0
2021.18	ETAAS	14.5	3.26	25	5	4	1	0
2021.18	FAAS	80.9	59.38	2	1	0	0	1
2021.18	ICP-MS	14.71	1.16	55	8	8	0	0
2021.18	Global	14.5	1.88	83	14	11	3	0
2021.19	ETAAS	360.1	21.78	26	5	3	2	0
2021.19	FAAS	31.9	0	1	1	0	0	1
2021.19	ICP-MS	361	29.81	55	8	8	0	0
2021.19	Global	360.5	27.49	82	14	12	2	0
2021.20	ETAAS	577.55	28.49	26	5	3	2	0
2021.20	FAAS	54.5	0	1	1	0	0	1
2021.20	ICP-MS	593.96	52.03	55	8	8	0	0
2021.20	Global	591.25	44.11	82	14	12	2	0
2021.21	ETAAS	195.1	13.95	24	5	4	1	0
2021.21	FAAS	18.4	0	1	1	0	0	1
2021.21	ICP-MS	186.74	13.72	56	8	7	1	0
2021.21	Global	190.6	12.52	81	14	10	4	0

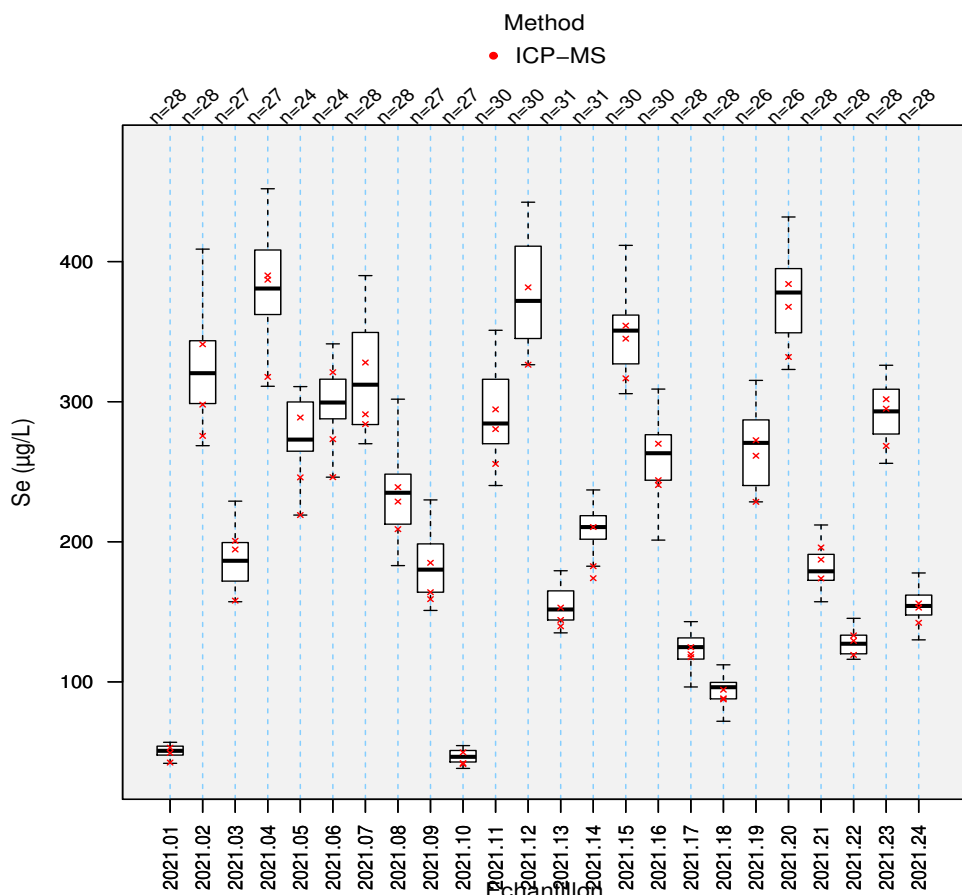
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Sample	Method	Median	SD	N	NBE	NG	NC	NE
2021.22	ETAAS	75.23	7.95	24	5	4	1	0
2021.22	FAAS	6.2	0	1	1	0	0	1
2021.22	ICP-MS	72.81	6.25	56	8	8	0	0
2021.22	Global	73	6.92	81	14	12	2	0
2021.23	ETAAS	418.7	19.71	27	5	3	2	0
2021.23	FAAS	213.75	128.88	2	1	0	0	1
2021.23	ICP-MS	426.41	31.75	52	7	7	0	0
2021.23	Global	422.69	26.83	81	13	12	1	0
2021.24	ETAAS	133	10.06	27	5	5	0	0
2021.24	FAAS	81.7	51.15	2	1	0	0	1
2021.24	ICP-MS	132.41	8.01	52	7	7	0	0
2021.24	Global	132.61	7.78	81	13	11	2	0



3.3.9 Se

Sample	Method	Median	SD	N	NBE	NG	NC	NE
2021.01	ICP-MS	50.56	4.22	25	3	3	0	0
2021.02	ICP-MS	331.8	33.05	25	3	3	0	0
2021.03	ICP-MS	186.44	19.2	25	3	3	0	0
2021.04	ICP-MS	381.57	26.46	25	3	3	0	0
2021.05	ICP-MS	274.92	25.46	22	3	3	0	0
2021.06	ICP-MS	300.2	22.87	22	3	3	0	0
2021.07	ICP-MS	318.16	48.16	26	3	3	0	0
2021.08	ICP-MS	234.99	29.05	26	3	3	0	0
2021.09	ICP-MS	179.22	24.83	25	3	3	0	0
2021.10	ICP-MS	46.39	5.86	25	3	3	0	0
2021.11	ICP-MS	288.38	33.12	28	3	3	0	0
2021.12	ICP-MS	375.89	45.22	28	3	2	1	0
2021.13	ICP-MS	151.68	15.43	29	3	3	0	0
2021.14	ICP-MS	213.19	11.65	29	3	2	1	0
2021.15	ICP-MS	353.53	22.07	28	3	3	0	0
2021.16	ICP-MS	264.4	24.07	28	3	3	0	0
2021.17	ICP-MS	124.8	11.21	27	3	3	0	0
2021.18	ICP-MS	96	8.71	27	3	3	0	0
2021.19	ICP-MS	272.92	35.38	24	3	3	0	0
2021.20	ICP-MS	383.1	37.34	24	3	3	0	0
2021.21	ICP-MS	180.47	13.98	26	3	3	0	0
2021.22	ICP-MS	128.11	9.94	26	3	3	0	0
2021.23	ICP-MS	295	23.43	25	3	3	0	0
2021.24	ICP-MS	155.63	8.75	25	3	3	0	0



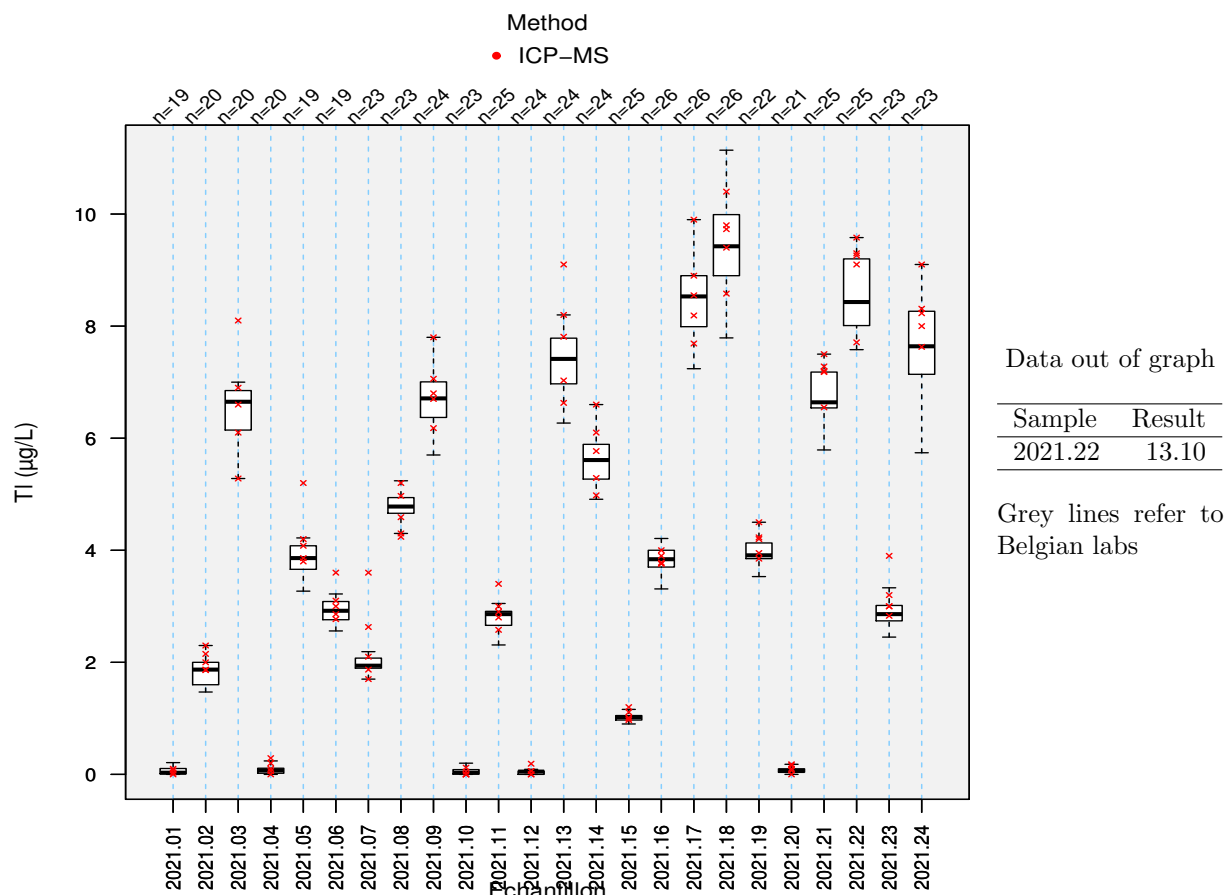
Data out of graph

Sample	Result
2021.07	27.00
2021.08	2.89
2021.08	28.00
2021.10	12.27
2021.11	0.00
2021.12	1763985.00
2021.12	0.00
2021.13	17.50
2021.13	0.00
2021.14	18.70
2021.14	0.00
2021.15	0.00
2021.16	0.00
2021.20	14.70
2021.23	21.25

Grey lines refer to Belgian labs

3.3.10 Tl

Sample	Method	Median	SD	N	NBE	NG	NC	NE
2021.01	ICP-MS	0.03	0.07	19	4	4	0	0
2021.02	ICP-MS	1.87	0.28	20	5	5	0	0
2021.03	ICP-MS	6.65	0.49	20	5	5	0	0
2021.04	ICP-MS	0.07	0.06	20	5	4	1	0
2021.05	ICP-MS	3.86	0.31	19	5	4	1	0
2021.06	ICP-MS	2.92	0.24	19	5	5	0	0
2021.07	ICP-MS	1.94	0.13	23	5	3	2	0
2021.08	ICP-MS	4.78	0.21	23	5	5	0	0
2021.09	ICP-MS	6.71	0.45	24	5	5	0	0
2021.10	ICP-MS	0.03	0.06	23	5	5	0	0
2021.11	ICP-MS	2.86	0.19	25	5	5	0	0
2021.12	ICP-MS	0.05	0.04	24	5	4	1	0
2021.13	ICP-MS	7.42	0.58	24	5	5	0	0
2021.14	ICP-MS	5.61	0.45	24	5	5	0	0
2021.15	ICP-MS	1.02	0.06	25	5	5	0	0
2021.16	ICP-MS	3.84	0.21	26	5	5	0	0
2021.17	ICP-MS	8.53	0.62	26	5	5	0	0
2021.18	ICP-MS	9.43	0.75	26	5	5	0	0
2021.19	ICP-MS	3.91	0.19	22	5	4	1	0
2021.20	ICP-MS	0.06	0.04	21	5	5	0	0
2021.21	ICP-MS	6.64	0.47	25	5	5	0	0
2021.22	ICP-MS	8.43	0.88	25	5	5	0	0
2021.23	ICP-MS	2.86	0.2	23	5	4	1	0
2021.24	ICP-MS	7.64	0.83	23	5	5	0	0



3.3.11 Zn

Sample	Method	Median	SD	N	NBE	NG	NC	NE
2021.01	ICP-MS	3.07	0.21	19	2	2	0	0
2021.02	ICP-MS	11.89	0.9	19	2	1	1	0
2021.03	ICP-MS	8.24	0.47	20	2	2	0	0
2021.04	ICP-MS	13.54	0.88	20	2	2	0	0
2021.05	ICP-MS	10.4	0.88	18	2	2	0	0
2021.06	ICP-MS	11.03	0.99	18	2	2	0	0
2021.07	ICP-MS	12	0.5	20	2	2	0	0
2021.08	ICP-MS	9.8	0.64	20	2	2	0	0
2021.09	ICP-MS	8.18	0.39	20	2	2	0	0
2021.10	ICP-MS	3	0.15	20	2	2	0	0
2021.11	ICP-MS	11.02	0.55	23	2	2	0	0
2021.12	ICP-MS	13.25	0.42	24	2	2	0	0
2021.13	ICP-MS	7.58	0.59	25	2	1	1	0
2021.14	ICP-MS	9.31	0.63	24	2	1	1	0
2021.15	ICP-MS	12.49	0.86	23	2	2	0	0
2021.16	ICP-MS	10.4	0.56	23	2	2	0	0
2021.17	ICP-MS	6.85	0.42	23	2	2	0	0
2021.18	ICP-MS	6.14	0.43	23	2	1	1	0
2021.19	ICP-MS	10.3	0.59	21	2	2	0	0
2021.20	ICP-MS	13.34	0.56	21	2	2	0	0
2021.21	ICP-MS	8.44	0.77	23	2	2	0	0
2021.22	ICP-MS	7	0.78	23	2	2	0	0
2021.23	ICP-MS	11.15	0.67	20	2	1	1	0
2021.24	ICP-MS	7.59	0.59	20	2	2	0	0

