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Royal Hallamshire Hospital
Sheffield

Groot Brittannië

INPUTS 2013.1

Survey	INPUTS 2013.1
Start date	January, 1 2013
Supervisor	dr. C. Weykamp MCA Laboratory Streekziekenhuis Koningin Beatrix Winterswijk
Subscriptions	93
Result sets	91

Scores	Your score	MAP	reported
Quantitative	30	38	



MUSE

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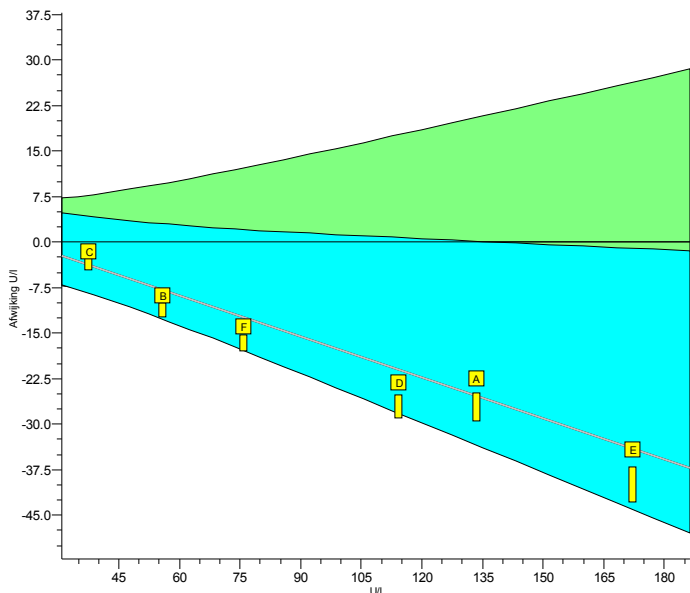
INPUTS 2013.1

Analyte		Trueness				Precision		Performance			
		your mean	ref.	cons.	SDI	your prec.	SDbl	this survey	PS	cumulative PSc	
ALAT	U/l	80.8	98.2	86.9	10.1	2.6	2.7		0		0
Alk. Phosphatase	U/l	167	188	173	15	2	2		2		2
Amylase	U/l	206	207	201	8	2	2		2		2
ASAT	U/l	65.8	78.6	71.5	6.8	1.0	1.6		0		0
Calcium	mmol/l	2.48	2.46	2.47	0.07	0.01	0.02		2		2
Chloride	mmol/l	100.8	100.0	100.8	1.8	1.1	0.9		2		2
CK	U/l	234	244	253	18	3	3		2		2
Creatinine	µmol/l	154.7	149.1	150.9	7.1	4.6	4.2		1		1
eGFR (F, 55, white)	ml/min/1,73m²	36.0	37.6	37.6	2.7	1.3	1.5		2		2
Gamma-GT	U/l	88.3	87.7	86.3	8.6	1.6	1.2		2		2
Glucose	mmol/l	14.52	13.93	14.19	0.44	0.22	0.18		1		1
LD	U/l	996	532	895	321	39	16		0		0
Magnesium	mmol/l	1.22	1.22	1.23	0.04	0.02	0.02		2		2
Potassium	mmol/l	5.40	5.39	5.30	0.10	0.04	0.04		2		2
Sodium	mmol/l	144.2	144.0	142.7	1.7	0.5	0.9		2		2
Total Protein	g/l	66.3	66.8	66.0	1.8	1.6	0.7		2		2
Urate	µmol/l	365	376	374	15	6	4		2		2
Cholesterol	mmol/l	5.18	5.07	5.15	0.14	0.04	0.05		2		2
HDL-Cholesterol	mmol/l	1.19	1.14	1.17	0.06	0.01	0.03		2		2
Total :									30		30

INPUTS 2013.1

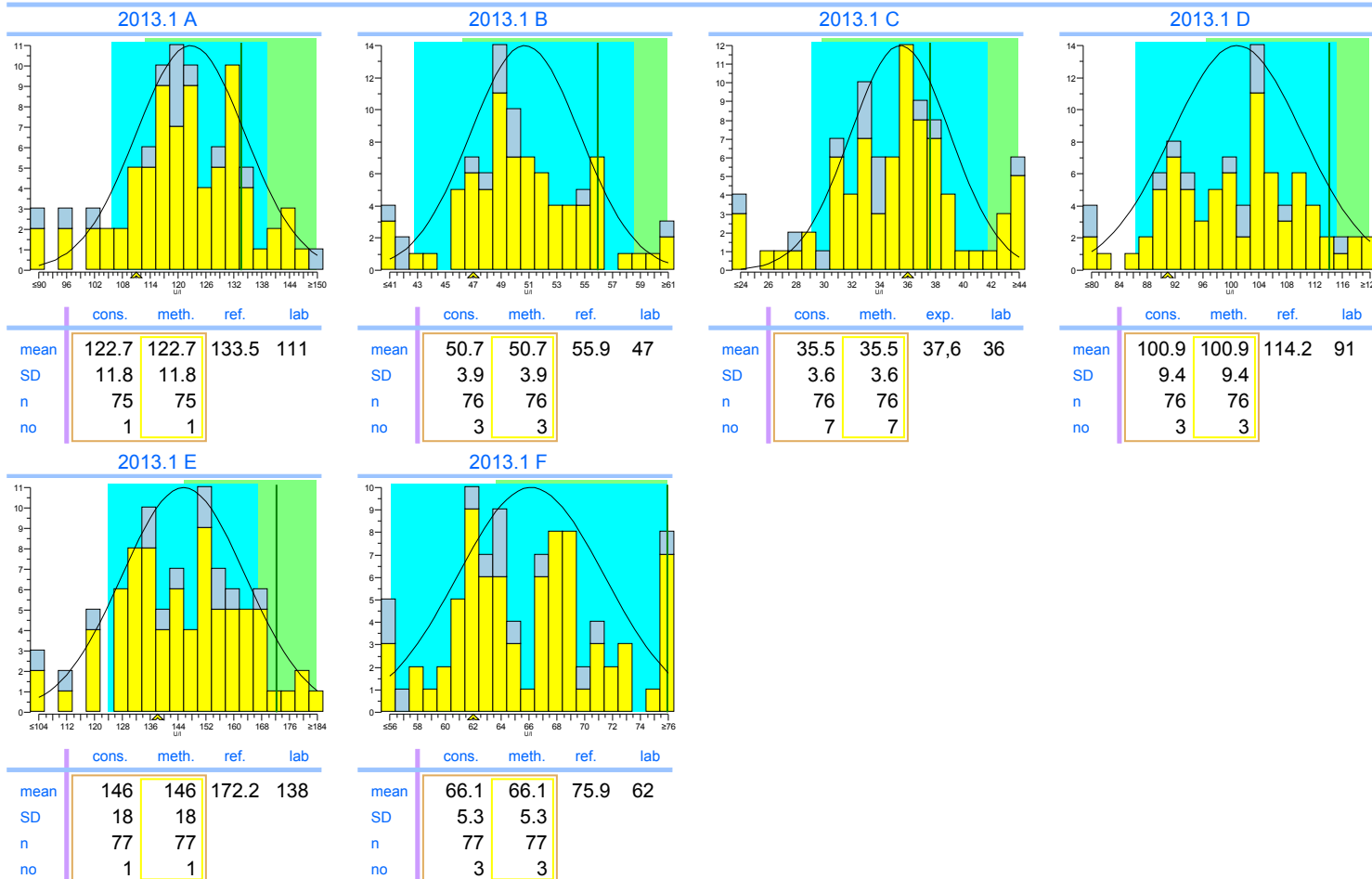
ALAT

units: U/l



	2013.1	cumulative
Trueness	-18%	-18%
Precision	3.0%	3.0%
Number	6	6
Outliers	0	0
Sigma-TE	0.8 0	0.8 0
Sigma-SA	-0.6	-0.6
Score pictogram		
Regression line	$4.7 + 0.775 \cdot x$	$4.7 + 0.775 \cdot x$

Consensus group IFCC traceerbaar
Method IFCC traceable



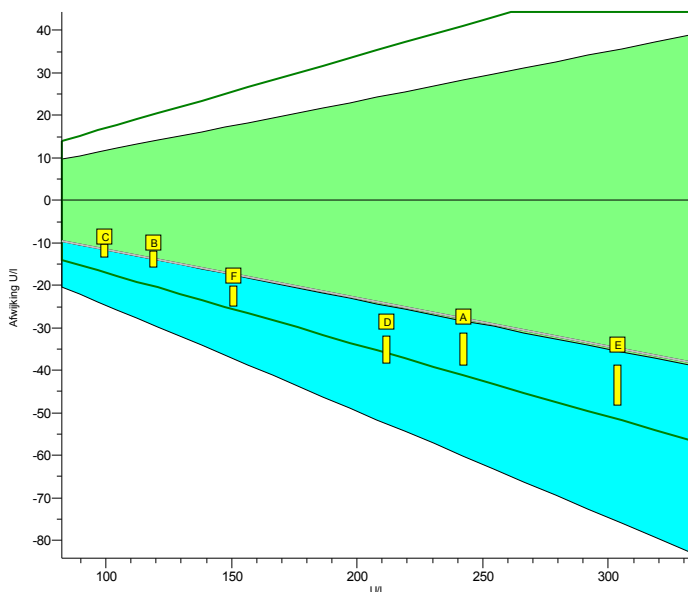
Legend

 IFCC traceable  IFCC non-traceable

INPUTS 2013.1

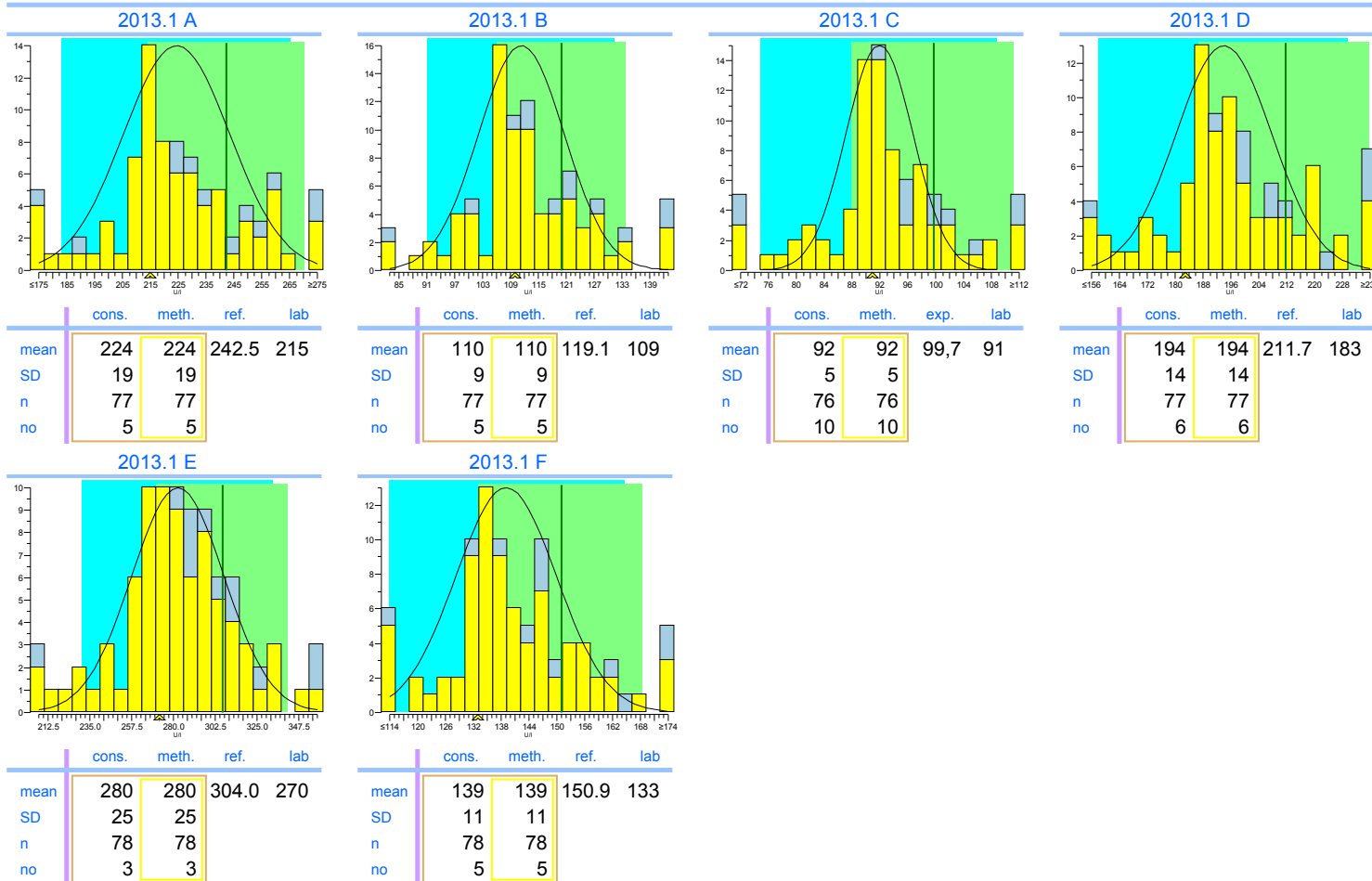
Alk. Phosphatase

units: U/l



	2013.1	cumulative
Trueness	-11%	-11%
Precision	1.4%	1.4%
Number	6	6
Outliers	0	0
Sigma-TE	1.4	1.4
Sigma-SA	5.0 2	5.0 2
Score pictogram		
Regression line	$0 + 0.885.x$	$0 + 0.885.x$

Consensus group IFCC traceerbaar
Method IFCC traceable



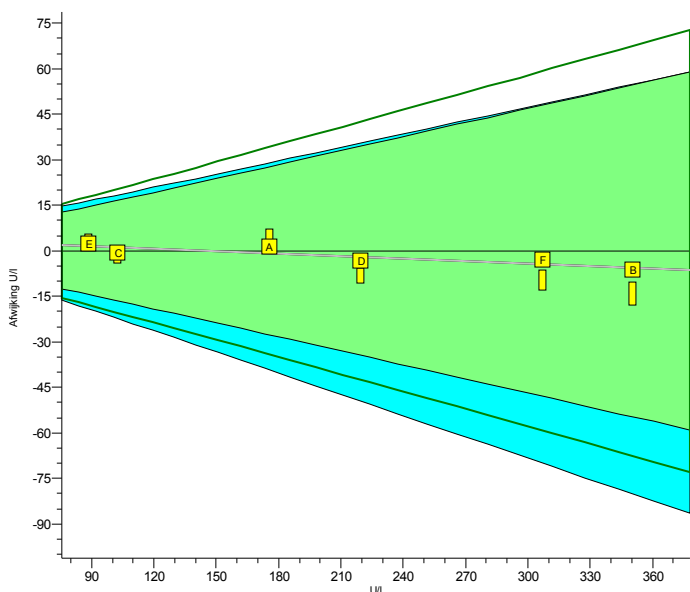
Legend



IFCC traceable IFCC non-traceable

INPUTS 2013.1

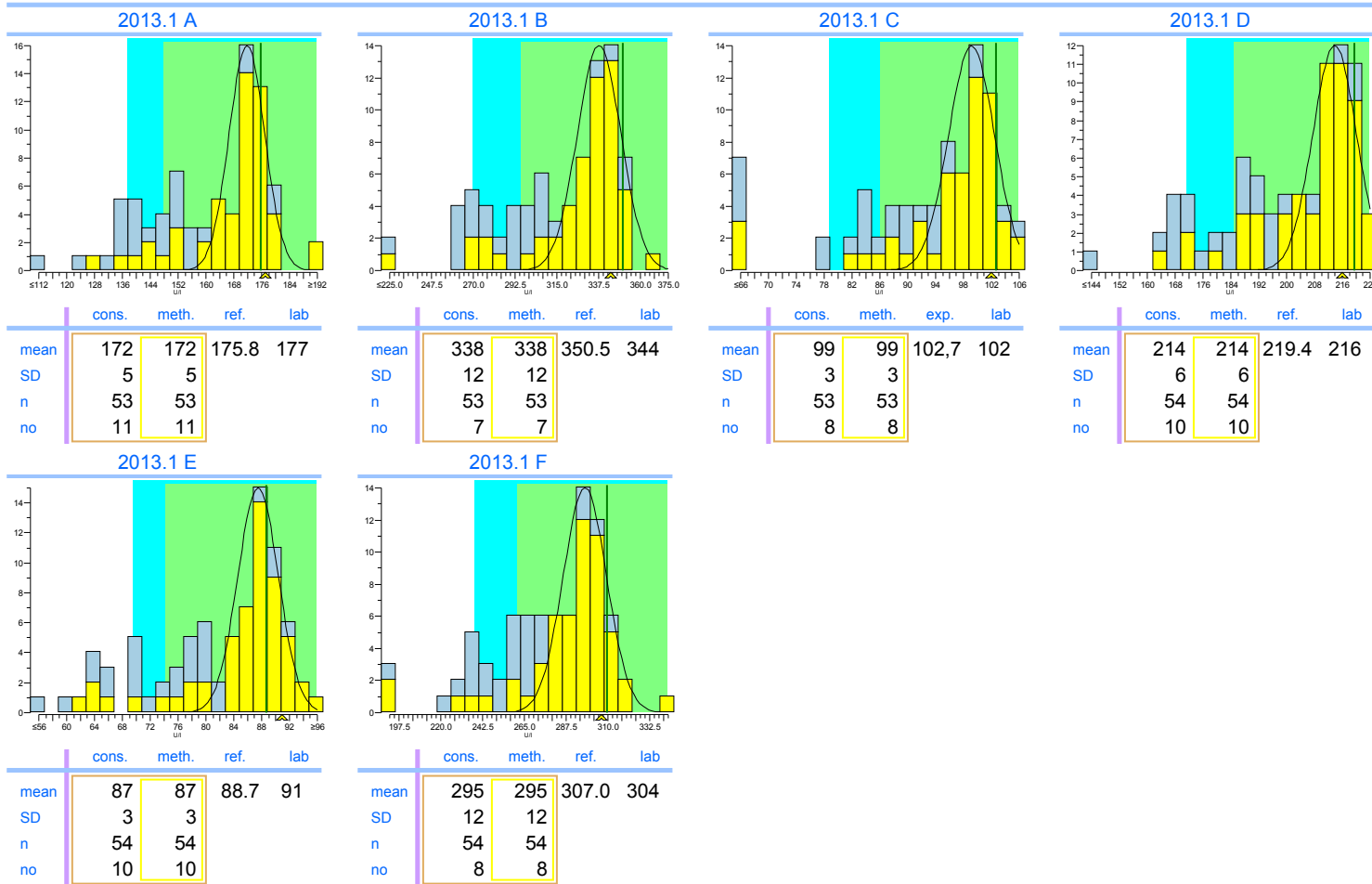
Amylase

units: U/l



	2013.1	cumulative
Trueness	-0.81%	-0.81%
Precision	1.0%	1.0%
Number	6	6
Outliers	0	0
Sigma-TE	6.0	6.0
Sigma-SA	6.0 2	6.0 2
Score pictogram		
Regression line	$4 + 0.973.x$	$4 + 0.973.x$

Consensus group IFCC traceerbaar
Method IFCC traceable



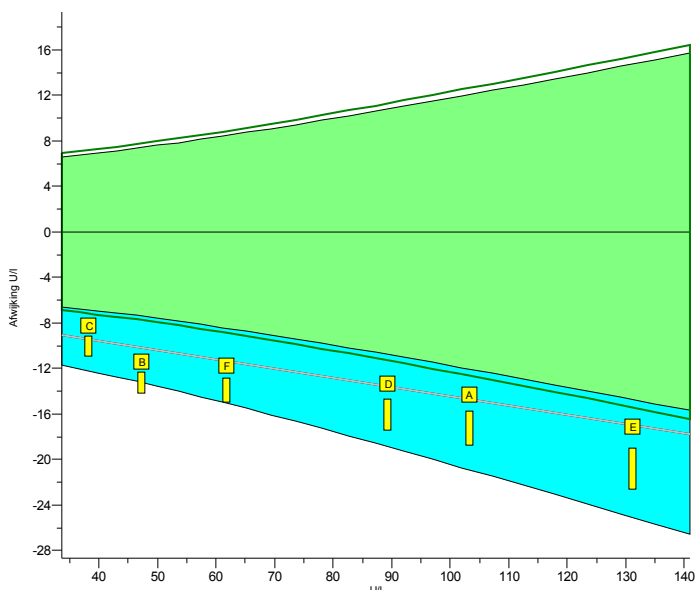
Legend

IFCC traceable IFCC non-traceable

INPUTS 2013.1

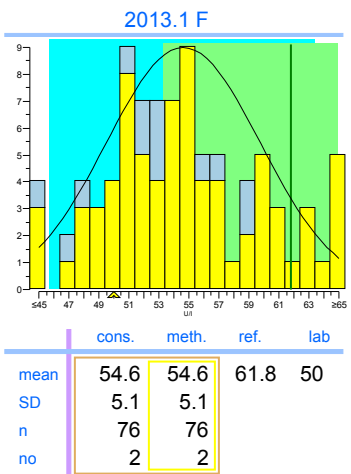
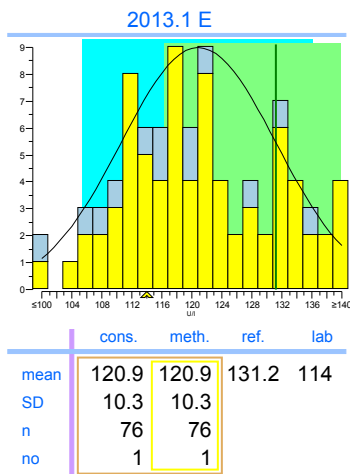
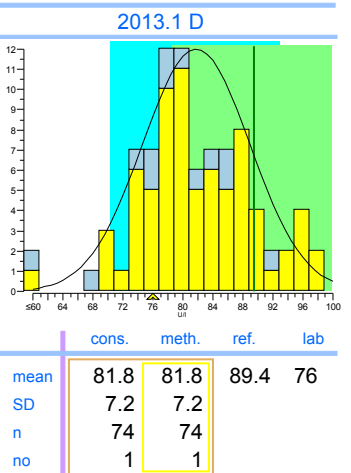
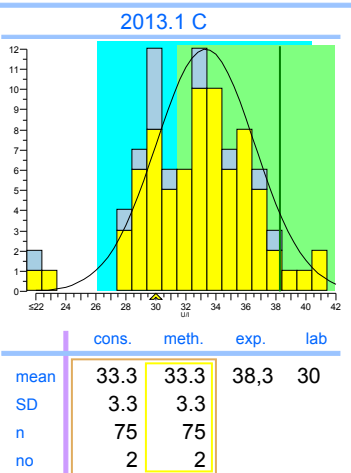
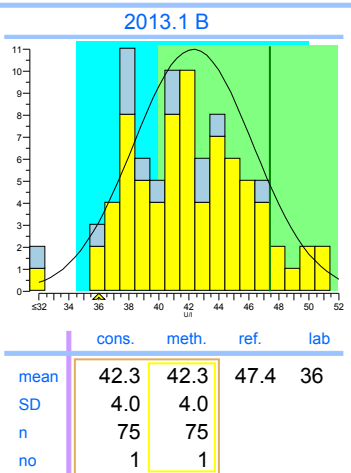
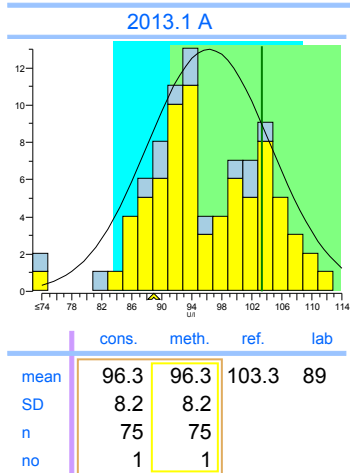
ASAT

units: U/I



	2013.1	cumulative
Trueness	-16%	-16%
Precision	1.4%	1.4%
Number	6	6
Outliers	0	0
Sigma-TE	-1.6	-1.6
Sigma-SA	-1.2 0	-1.2 0
Score pictogram		
Regression line	$-6.4 + 0.919 \cdot x$	$-6.4 + 0.919 \cdot x$

Consensus group IFCC traceerbaar
Method IFCC traceable



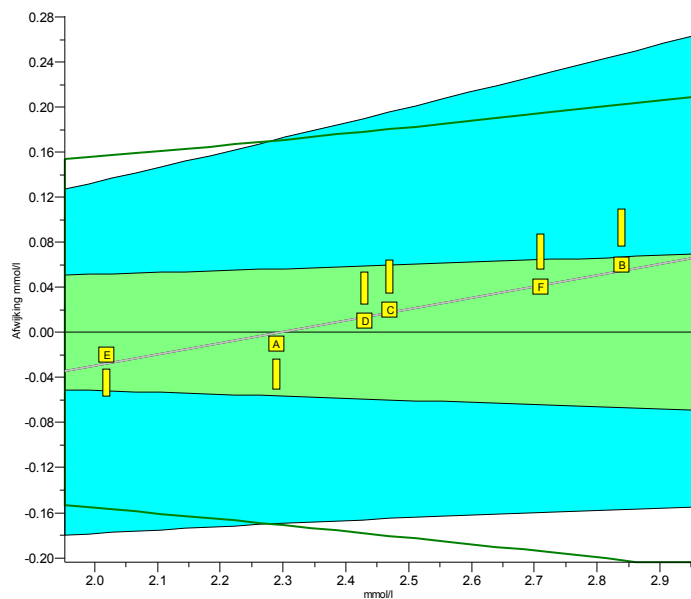
Legend

IFCC traceable IFCC non-traceable

INPUTS 2013.1

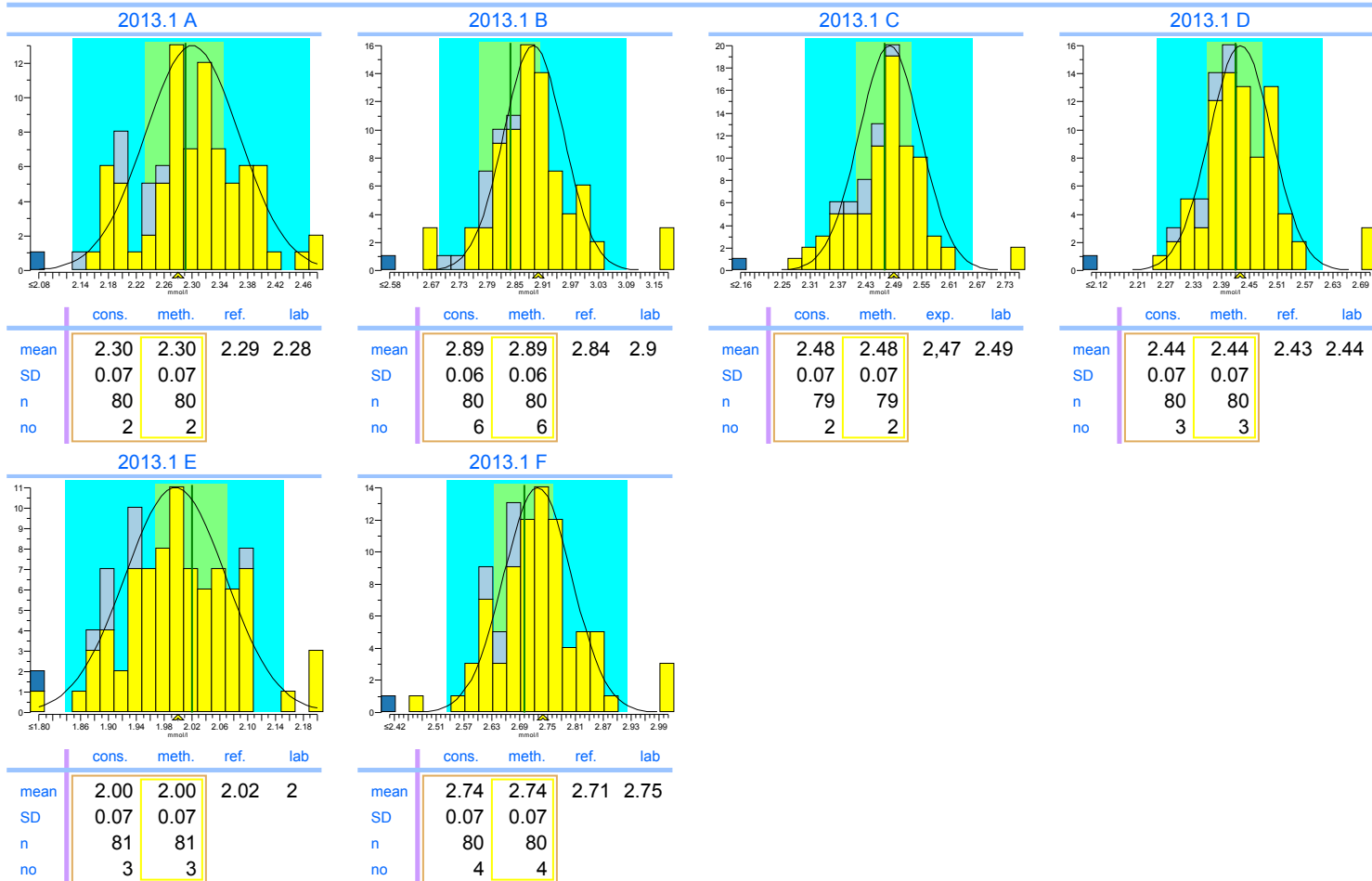
Calcium

units: mmol/l



	2013.1	cumulative
Trueness	+0.68%	+0.68%
Precision	0.48%	0.48%
Number	6	6
Outliers	0	0
Sigma-TE	3.7	3.7
Sigma-SA	6.0 2	6.0 2
Score pictogram		
Regression line	$-0.23 + 1.100 \cdot x$	$-0.23 + 1.100 \cdot x$

Consensus group	Colorimetrisch
Method	Colorimetric, automatic, discrete



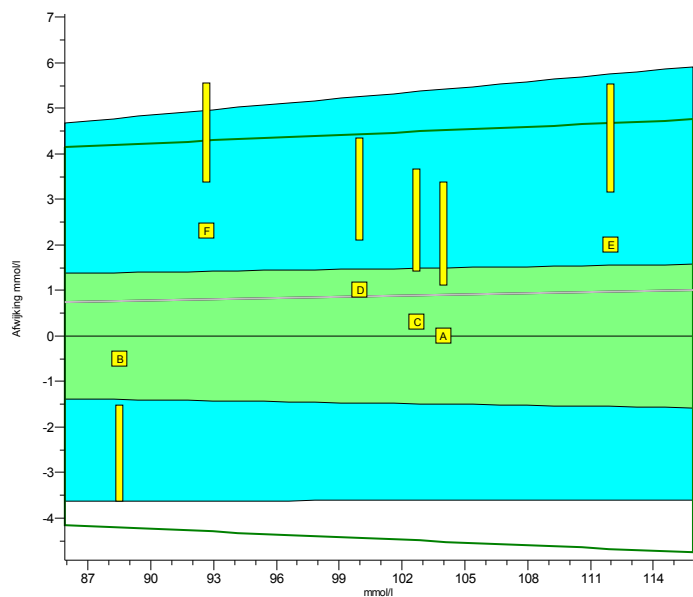
Legend

- Colorimetric, automatic, discrete
- ISE indirect (with predilution)
- Other methods

INPUTS 2013.1

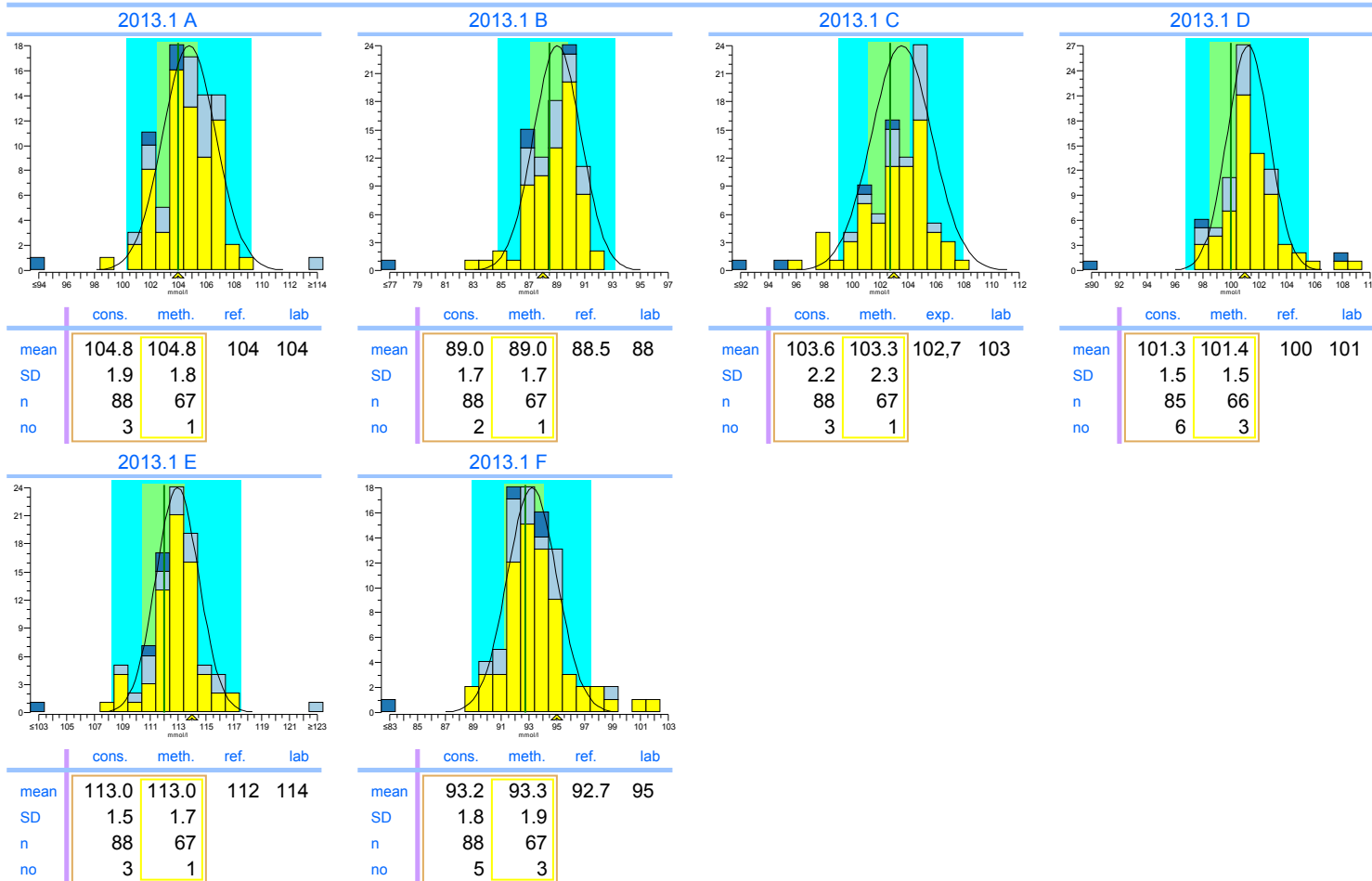
Chloride

units: mmol/l



	2013.1	cumulative
Trueness	+0.85%	+0.85%
Precision	1.1%	1.1%
Number	6	6
Outliers	0	0
Sigma-TE	1.3	1.3
Sigma-SA	4.6 2	4.6 2
Score pictogram		
Regression line	$0.0 + 1.009.x$	$0.0 + 1.009.x$

Consensus group	ISE/Colorimetrie
Method	ISE indirect (with predilution)



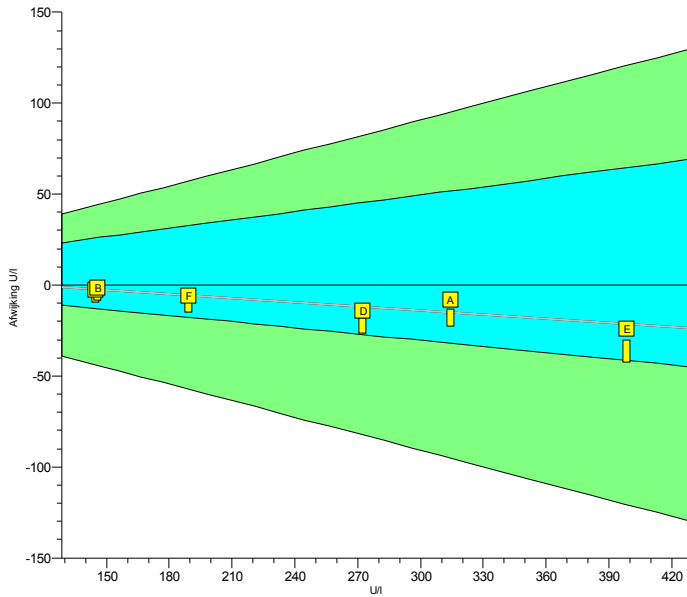
Legend

 ISE indirect (with predilution)	 ISE direct (no predilution)	 Other methods
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INPUTS 2013.1

CK

units: U/I



	2013.1	cumulative
Trueness	-4.0%	-4.0%
Precision	1.2%	1.2%
Number	6	6
Outliers	0	0
Sigma-TE	6.0 2	6.0 2
Sigma-SA	6.0	6.0
Score pictogram		
Regression line	$9 + 0.924 \cdot x$	$9 + 0.924 \cdot x$

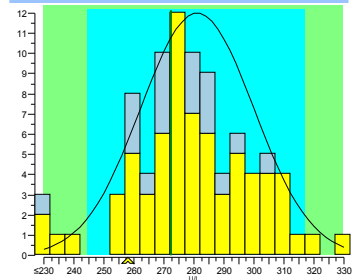
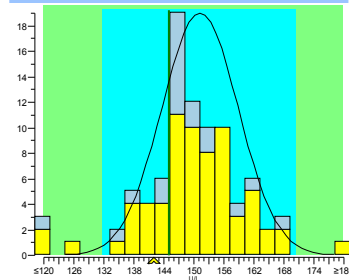
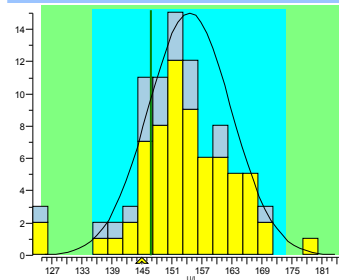
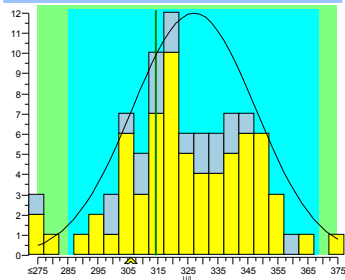
Consensus group IFCC tracerbaar
Method IFCC traceable

2013.1 A

2013.1 B

2013.1 C

2013.1 D



	cons.	meth.	ref.	lab
mean	327	327	314.3	306
SD	21	21		
n	68	68		
no	2	2		

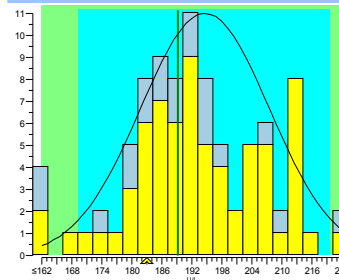
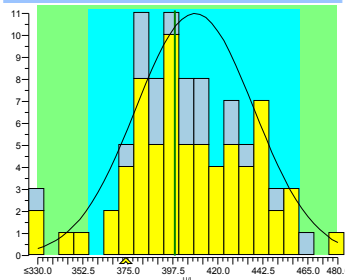
	cons.	meth.	ref.	lab
mean	154	154	145.8	144
SD	8	8		
n	67	67		
no	3	3		

	cons.	meth.	exp.	lab
mean	151	151	145	142
SD	8	8		
n	68	68		
no	4	4		

	cons.	meth.	ref.	lab
mean	281	281	272.3	258
SD	19	19		
n	69	69		
no	2	2		

2013.1 E

2013.1 F



	cons.	meth.	ref.	lab
mean	409	409	398.4	374
SD	30	30		
n	69	69		
no	2	2		

	cons.	meth.	ref.	lab
mean	195	195	189.2	183
SD	13	13		
n	69	69		
no	2	2		

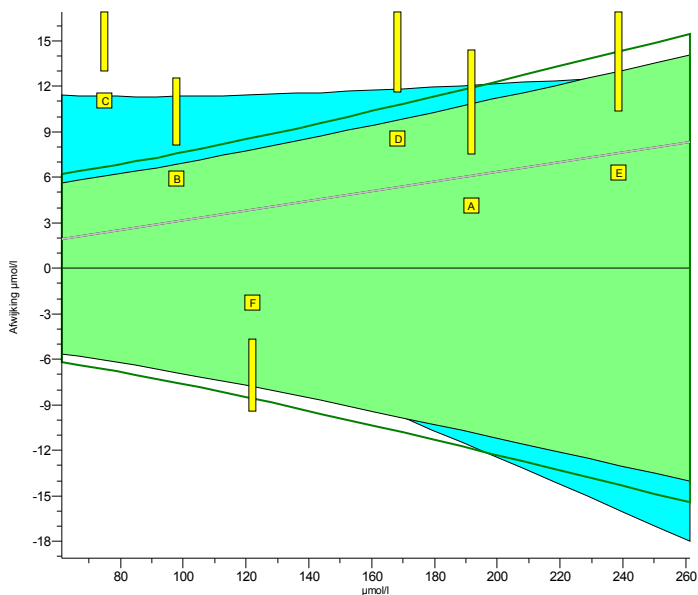
Legend





IFCC traceable IFCC non-traceable

INPUTS 2013.1

Creatinine

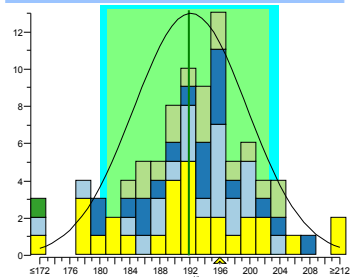
units: $\mu\text{mol/l}$



	2013.1	cumulative
Trueness	+3.7%	+3.7%
Precision	3.1%	3.1%
Number	6	6
Outliers	0	0
Sigma-TE	1.7	1.7
Sigma-SA	2.1 	2.1 
Score pictogram		
Regression line	$0.0 + 1.032.x$	$0.0 + 1.032.x$

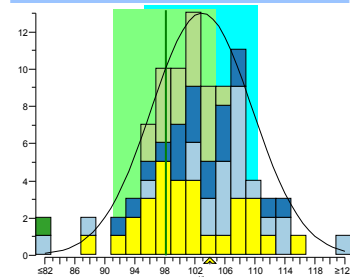
Consensus group	Jaffe
Method	Alk. Picrate, kinetic with compensation

2013.1 A



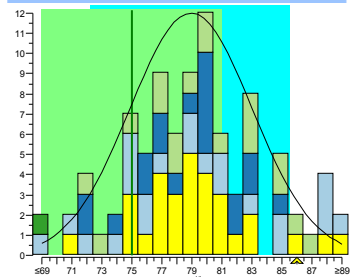
	cons.	meth.	ref.	lab
mean	192.1	190.4	191.9	196
SD	7.6	9.4		
n	71	30		
no	2	1		

2013.1 B



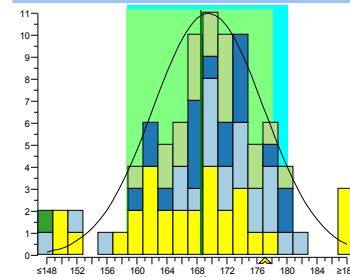
	cons.	meth.	ref.	lab
mean	102.9	101.0	98.11	104
SD	6.7	6.6		
n	71	30		
no	2	0		

2013.1 C



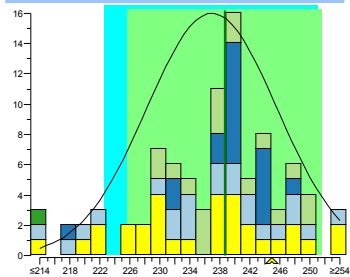
	cons.	meth.	exp.	lab
mean	78.9	79.1	75	86
SD	4.1	3.4		
n	71	30		
no	1	1		

2013.1 D



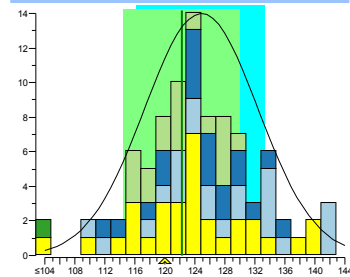
	cons.	meth.	ref.	lab
mean	169.5	167.6	168.5	177
SD	7.4	10.0		
n	70	30		
no	1	0		

2013.1 E



	cons.	meth.	ref.	lab
mean	236.9	234.2	238.7	245
SD	8.7	9.4		
n	72	31		
no	3	2		

2013.1 F



	cons.	meth.	ref.	lab
mean	124.9	123.5	122.3	120
SD	7.6	8.3		
n	72	31		
no	0	0		

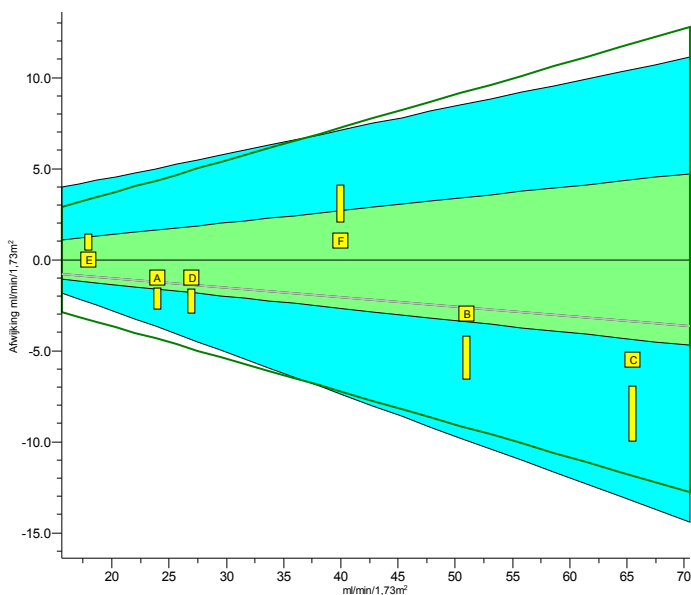
Legend

- Alk. Picrate, kinetic with compensation
- Alk. Picrate, kinetic
- Alk. Picrate, endpoint
- Enzymatic, automatic
- Other methods

INPUTS 2013.1

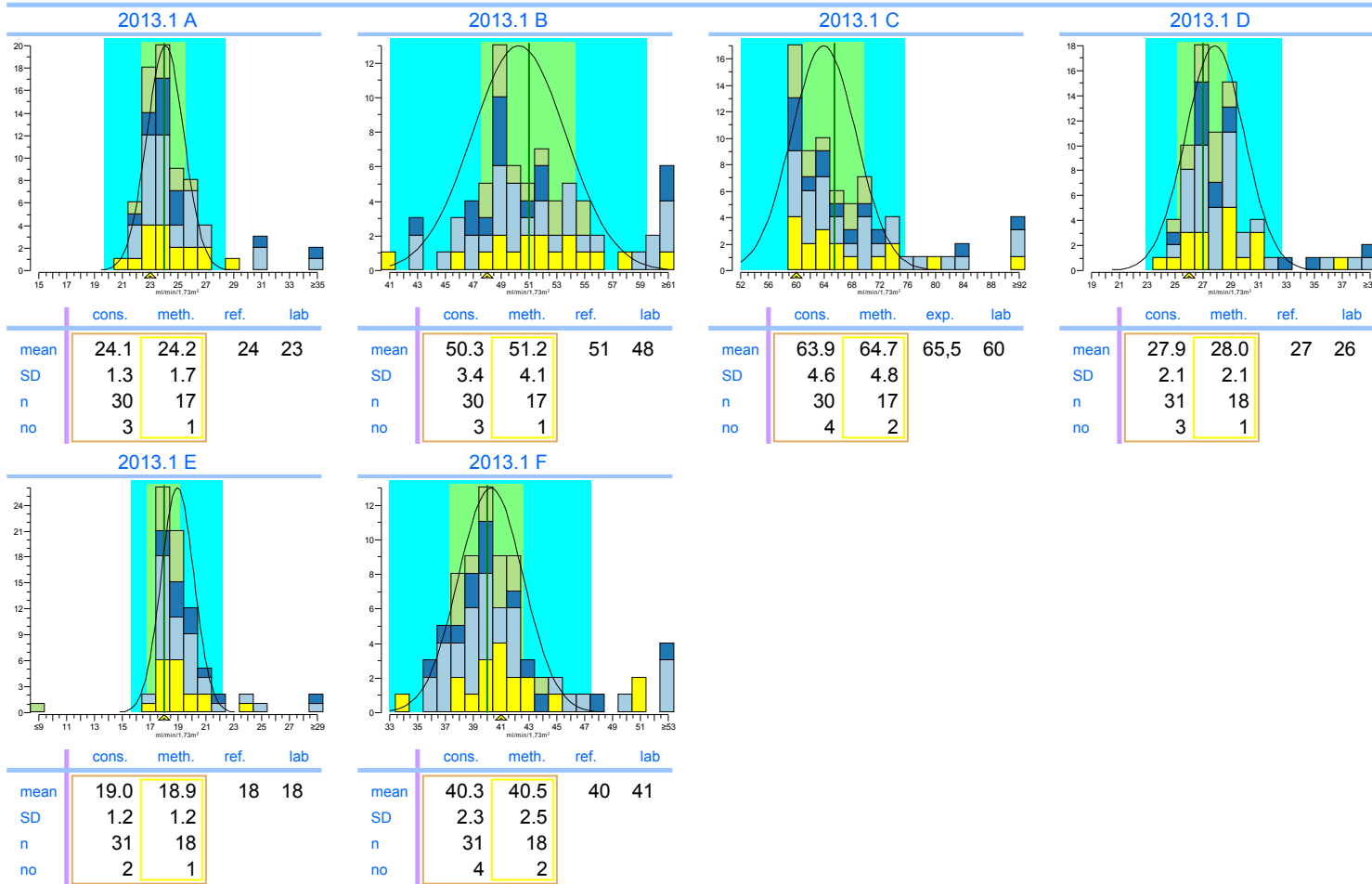
eGFR (F, 55, white)

units: ml/min/1,73m²



	2013.1	cumulative
Trueness	-4.2%	-4.2%
Precision	3.4%	3.4%
Number	6	6
Outliers	0	0
Sigma-TE	2.1	2.1
Sigma-SA	6.0 2	6.0 2
Score pictogram		
Regression line	<u>0.0 + 0.948.x</u>	<u>0.0 + 0.948.x</u>

Consensus group Jaffe
Method Alk. Picrate, kinetic with compensation



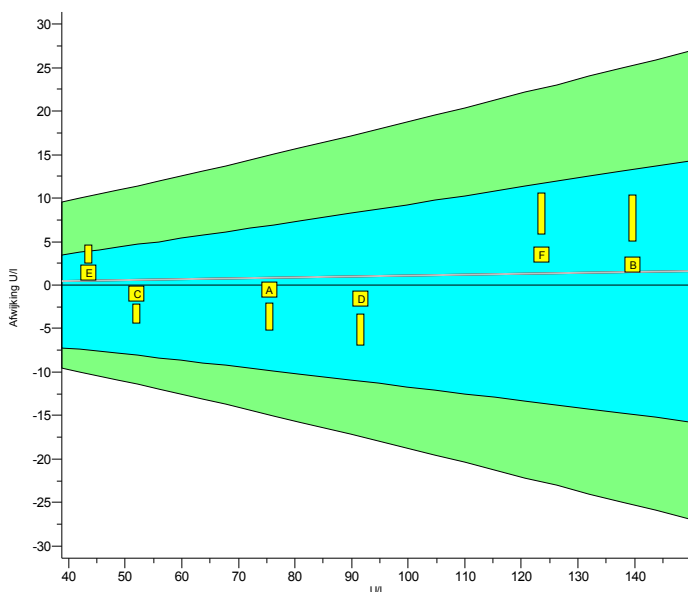
Legend



- Alk. Picrate, kinetic with compensation
- Other methods
- Alk. Picrate, kinetic
- Enzymatic, automatic

INPUTS 2013.1

Gamma-GT

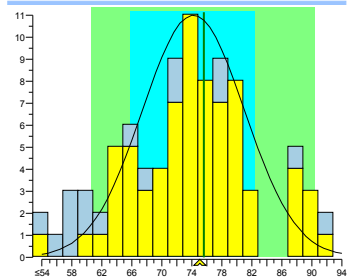
units: U/I



	2013.1	cumulative
Trueness	+0.74%	+0.74%
Precision	1.9%	1.9%
Number	6	6
Outliers	0	0
Sigma-TE	6.0 2	6.0 2
Sigma-SA	6.0	6.0
Score pictogram		
Regression line	$0.0 + 1.010 \cdot x$	$0.0 + 1.010 \cdot x$

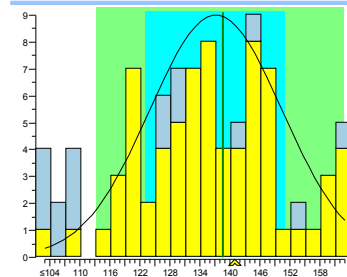
Consensus group IFCC traceerbaar
Method IFCC traceable

2013.1 A



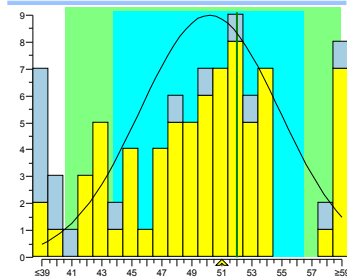
	cons.	meth.	ref.	lab
mean	74.2	74.2	75.6	75
SD	6.8	6.8		
n	72	72		
no	1	1		

2013.1 B



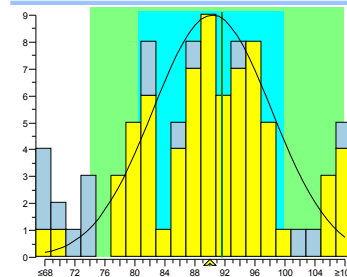
	cons.	meth.	ref.	lab
mean	138.2	138.2	139.7	142
SD	13.3	13.3		
n	72	72		
no	1	1		

2013.1 C



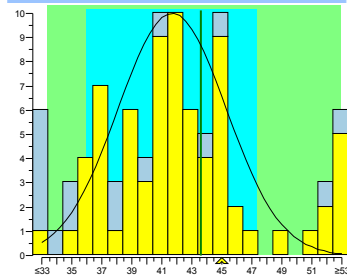
	cons.	meth.	exp.	lab
mean	50.2	50.2	52	51
SD	4.6	4.6		
n	72	72		
no	2	2		

2013.1 D



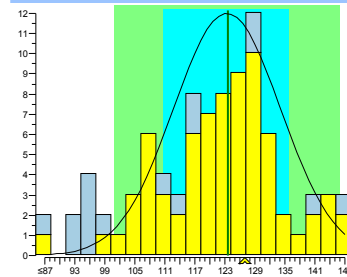
	cons.	meth.	ref.	lab
mean	90.3	90.3	91.6	90
SD	7.9	7.9		
n	71	71		
no	1	1		

2013.1 E



	cons.	meth.	ref.	lab
mean	41.7	41.7	43.6	45
SD	3.6	3.6		
n	73	73		
no	6	6		

2013.1 F



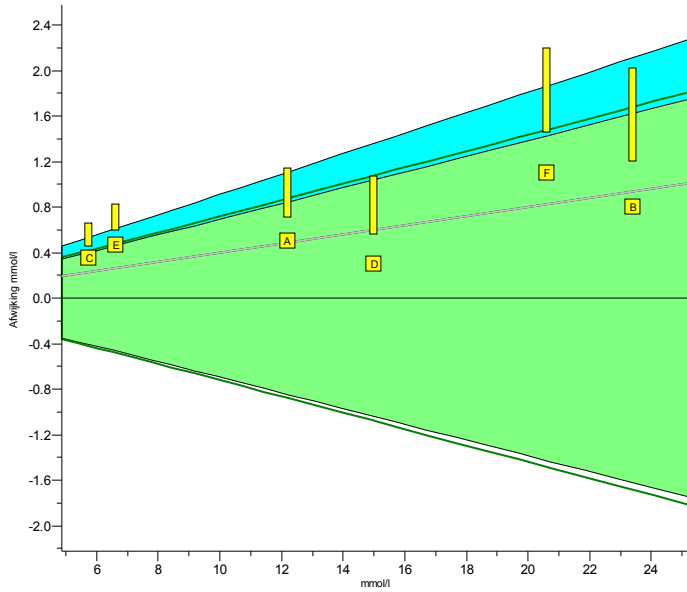
	cons.	meth.	ref.	lab
mean	123.4	123.4	123.6	127
SD	10.7	10.7		
n	73	73		
no	1	1		





Legend
 IFCC traceable
 IFCC non-traceable

INPUTS 2013.1

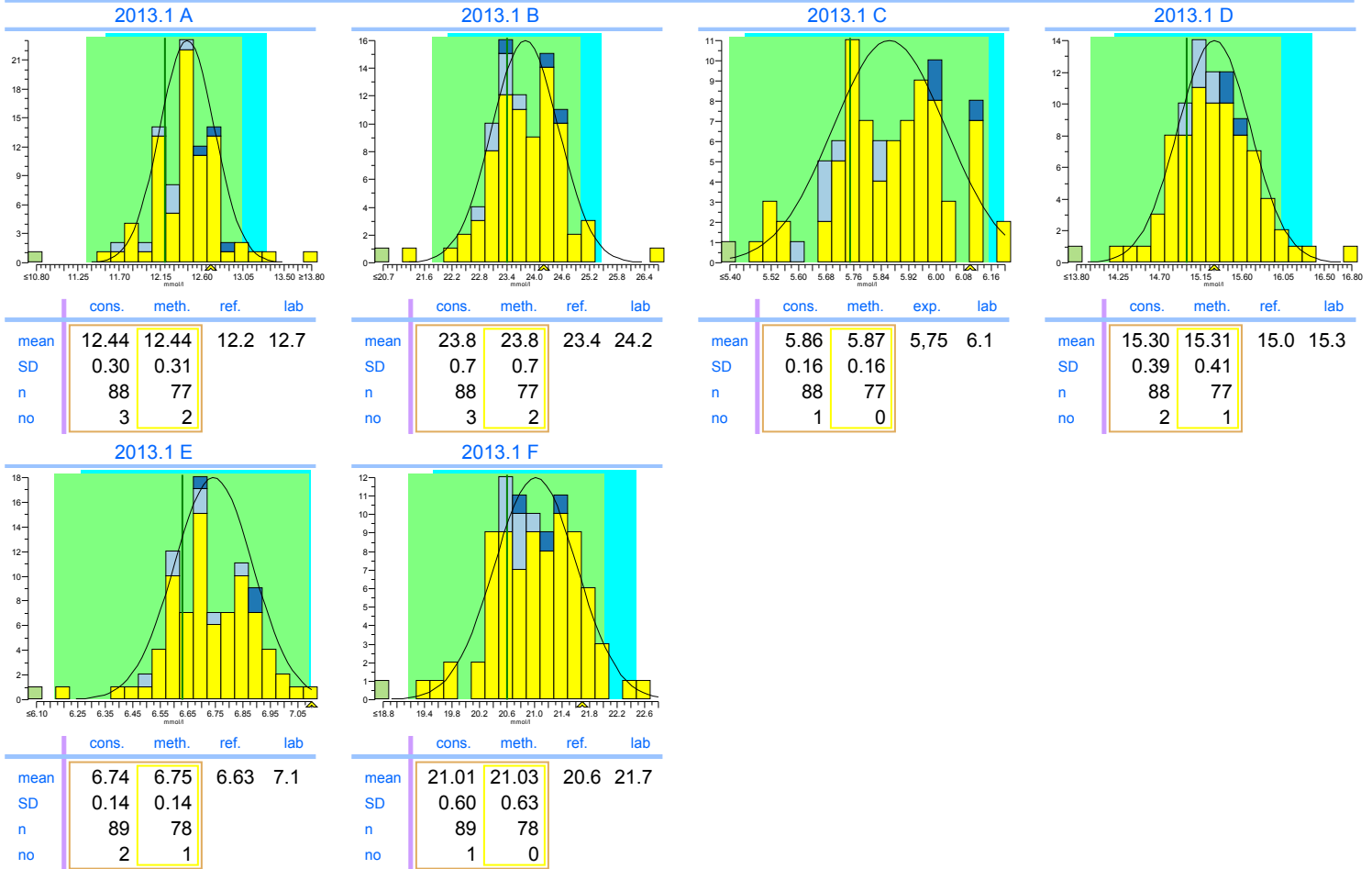
Glucose

units: mmol/l



	2013.1	cumulative
Trueness	+4.2%	+4.2%
Precision	1.5%	1.5%
Number	6	6
Outliers	0	0
Sigma-TE	2.5	2.5
Sigma-SA	2.7 	2.7 
Score pictogram		
Regression line	$0.00 + 1.040 \cdot x$	$0.00 + 1.040 \cdot x$

Consensus group Natte chemie
Method Hexokinase, automatic



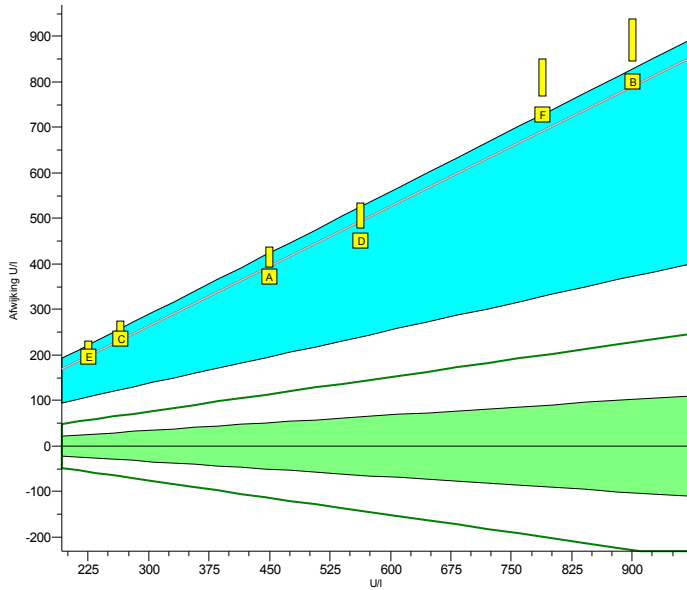
Legend

- Hexokinase, automatic
- Glucose-oxidase, amperometric, H2O2
- Glucose-oxidase/POD, automatic
- Other methods

INPUTs 2013.1

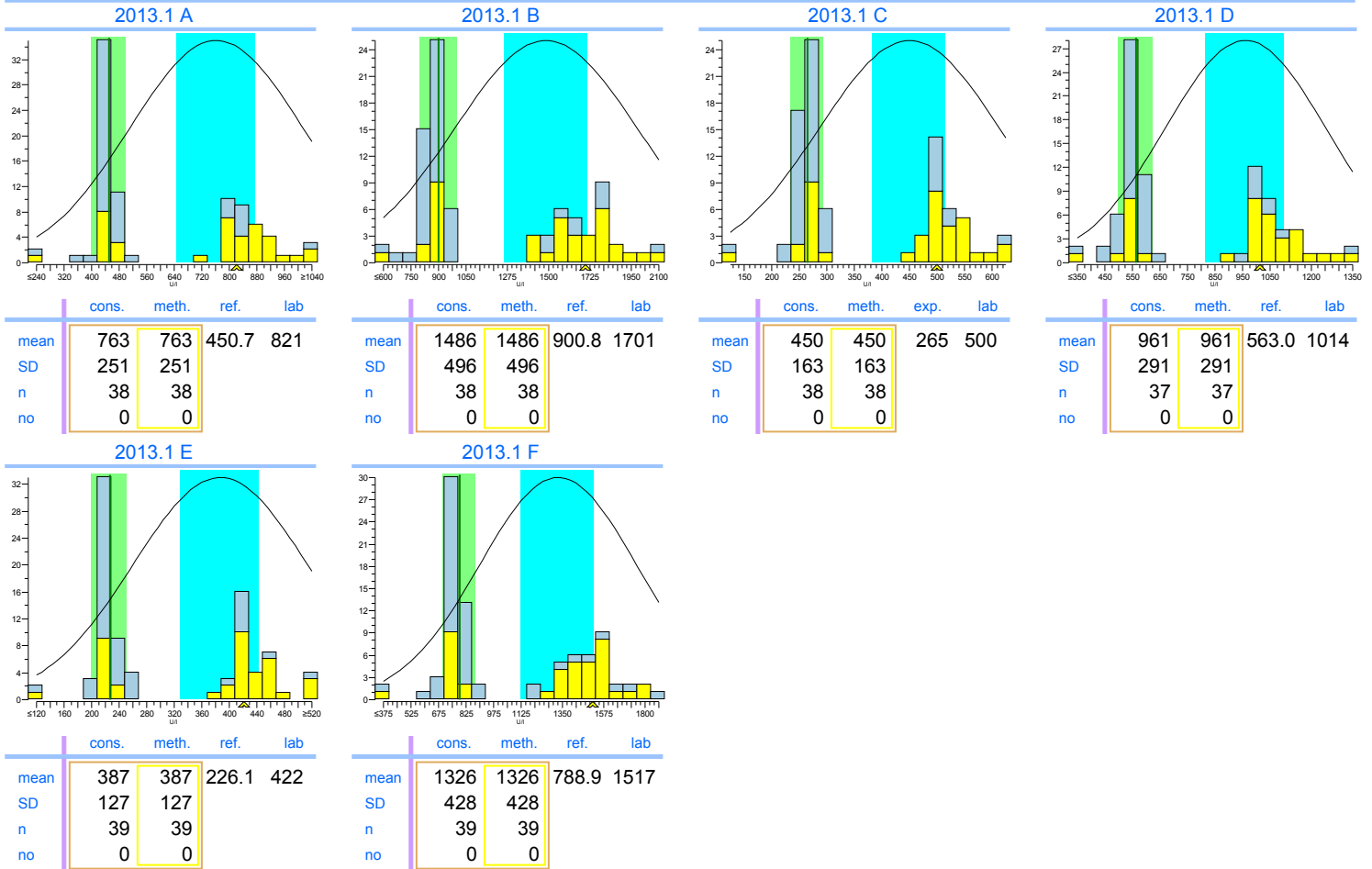
LD

units: U/I



	2013.1	cumulative
Trueness	+87%	+87%
Precision	4.3%	4.3%
Number	6	6
Outliers	0	0
Sigma-TE	-3.0	-3.0
Sigma-SA	-3.0 0	-3.0 0
Score pictogram		
Regression line	$0 + 1.878.x$	$0 + 1.878.x$

Consensus group niet IFCC traceerbaar
Method IFCC non-traceable



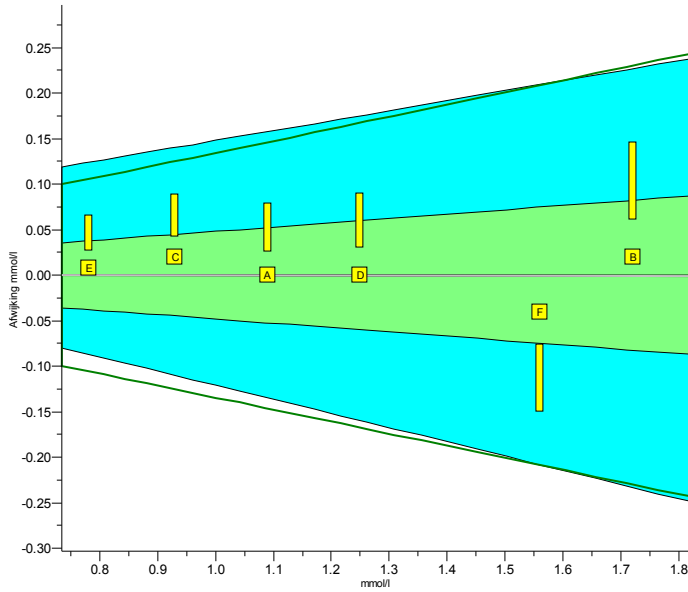
Legend

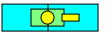
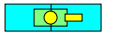
 IFCC non-traceable IFCC traceable

INPUTS 2013.1

Magnesium

units: mmol/l



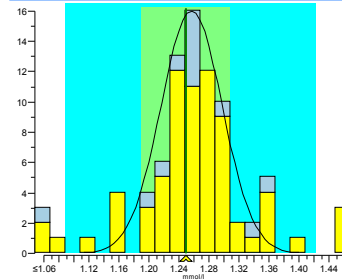
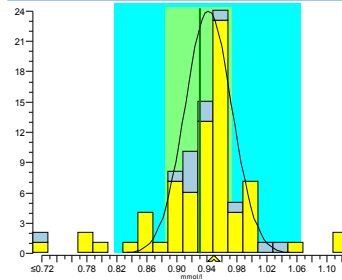
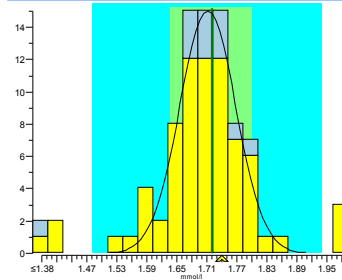
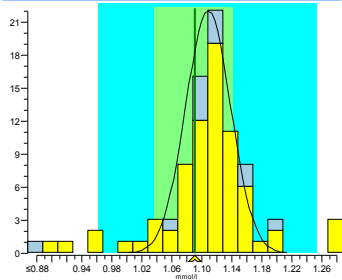
	2013.1	cumulative
Trueness	+0.11%	+0.11%
Precision	2.0%	2.0%
Number	6	6
Outliers	0	0
Sigma-TE	2.7	2.7
Sigma-SA	6.0 2	6.0 2
Score pictogram		
Regression line	$0.00 + 1.000 \cdot x$	$0.00 + 1.000 \cdot x$
Consensus group	Overall	
Method	Colorimetric	

2013.1 A

2013.1 B

2013.1 C

2013.1 D



	cons.	meth.	ref.	lab
mean	1.11	1.11	1.09	1.09
SD	0.03	0.03		
n	85	73		
no	11	10		

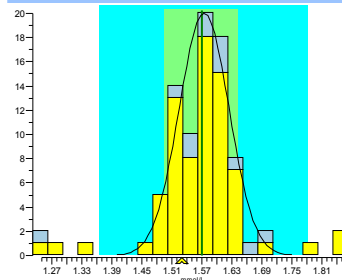
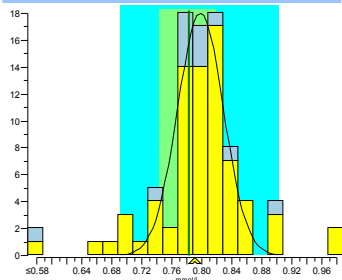
	cons.	meth.	ref.	lab
mean	1.71	1.71	1.72	1.74
SD	0.06	0.06		
n	85	73		
no	8	7		

	cons.	meth.	exp.	lab
mean	0.94	0.94	0.93	0.95
SD	0.03	0.03		
n	85	73		
no	9	8		

	cons.	meth.	ref.	lab
mean	1.26	1.26	1.25	1.25
SD	0.04	0.05		
n	83	71		
no	9	8		

2013.1 E

2013.1 F



	cons.	meth.	ref.	lab
mean	0.798	0.799	0.782	0.79
SD	0.031	0.031		
n	86	74		
no	13	11		

	cons.	meth.	ref.	lab
mean	1.56	1.56	1.56	1.52
SD	0.05	0.05		
n	86	74		
no	7	6		

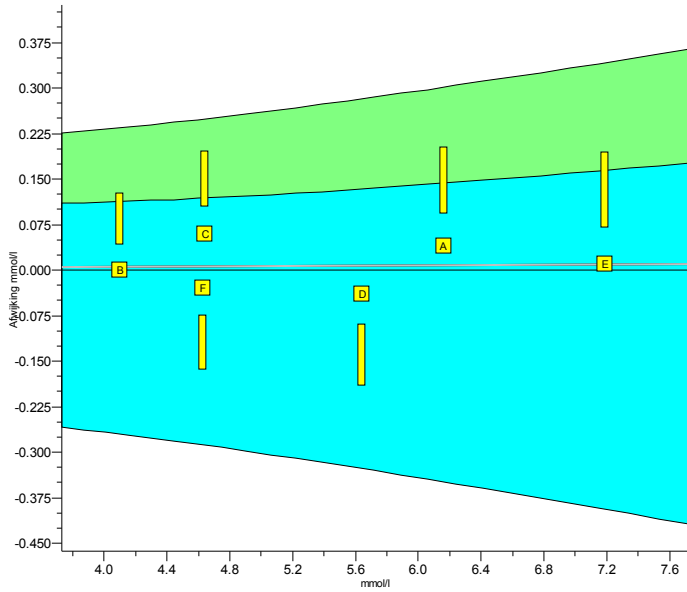
Legend

- Colorimetric
- Other methods

INPUTS 2013.1

Potassium

units: mmol/l



	2013.1	cumulative
Trueness	+0.12%	+0.12%
Precision	0.75%	0.75%
Number	6	6
Outliers	0	0
Sigma-TE	6.0 2	6.0 2
Sigma-SA	5.6	5.6
Score pictogram		
Regression line	<u>0.00 + 1.001.x</u>	<u>0.00 + 1.001.x</u>

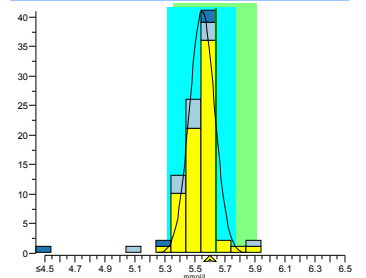
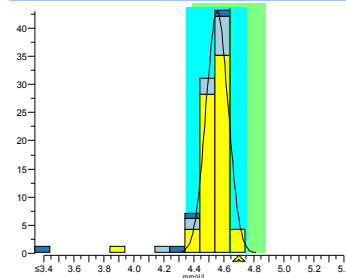
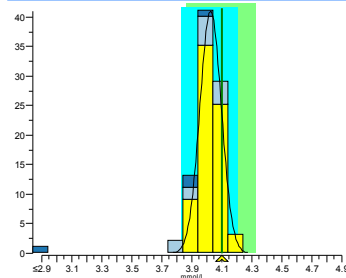
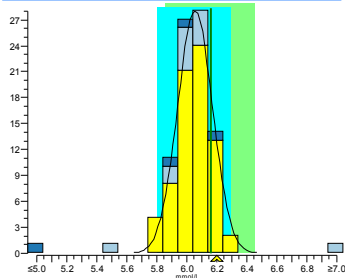
Consensus group ISE verdund/Vlamfotometrie
Method ISE indirect (with predilution)

2013.1 A

2013.1 B

2013.1 C

2013.1 D



	cons.	meth.	ref.	lab
mean	6.05	6.05	6.16	6.2
SD	0.12	0.12		
n	72	72		
no	0	0		

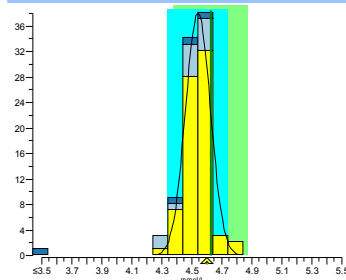
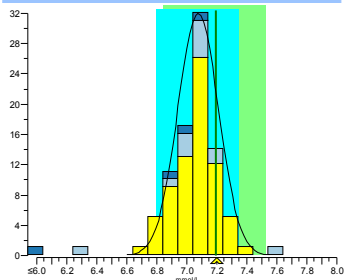
	cons.	meth.	ref.	lab
mean	4.02	4.02	4.10	4.1
SD	0.07	0.07		
n	72	72		
no	0	0		

	cons.	meth.	exp.	lab
mean	4.55	4.55	4.64	4.7
SD	0.07	0.07		
n	72	72		
no	1	1		

	cons.	meth.	ref.	lab
mean	5.55	5.55	5.64	5.6
SD	0.08	0.08		
n	72	72		
no	2	2		

2013.1 E

2013.1 F



	cons.	meth.	ref.	lab
mean	7.08	7.08	7.19	7.2
SD	0.14	0.14		
n	72	72		
no	0	0		

	cons.	meth.	ref.	lab
mean	4.54	4.54	4.63	4.6
SD	0.08	0.08		
n	73	73		
no	2	2		

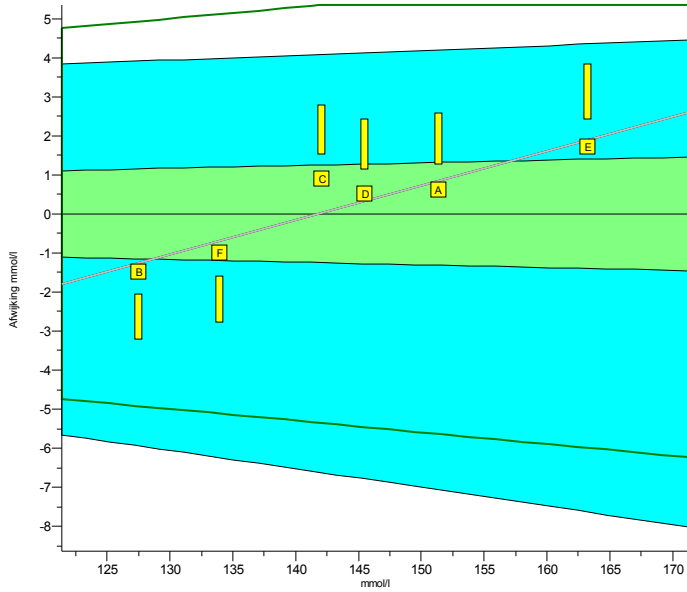
Legend

- ISE indirect (with predilution)
- ISE direct (no predilution)
- Other methods

INPUTS 2013.1

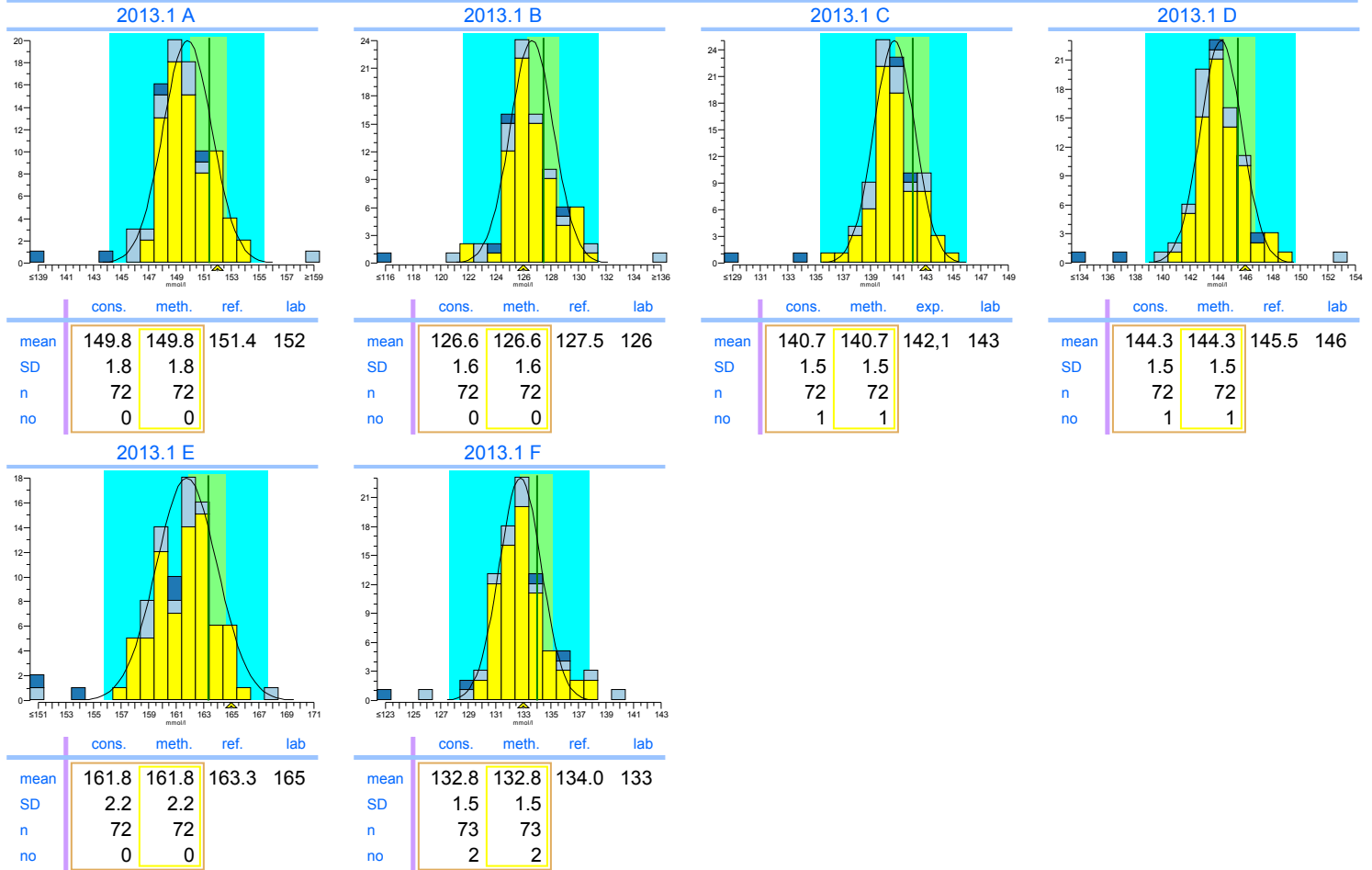
Sodium

units: mmol/l



	2013.1	cumulative
Trueness	+0.14%	+0.14%
Precision	0.36%	0.36%
Number	6	6
Outliers	0	0
Sigma-TE	1.2	1.2
Sigma-SA	6.0 2	6.0 2
Score pictogram		
Regression line	$-12.5 + 1.088.x$	$-12.5 + 1.088.x$

Consensus group ISE verdund/Vlamfotometrie
Method ISE indirect (with predilution)



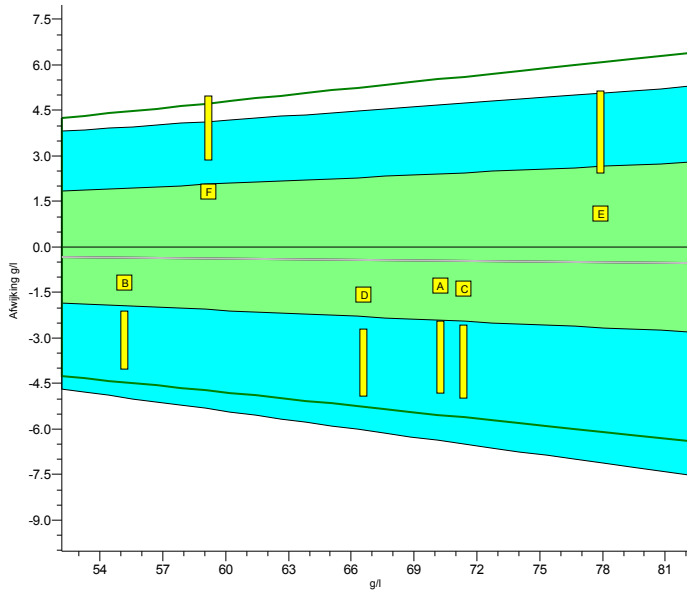
Legend



- ISE indirect (with predilution)
- ISE direct (no predilution)
- Other methods

INPUTS 2013.1

Total Protein

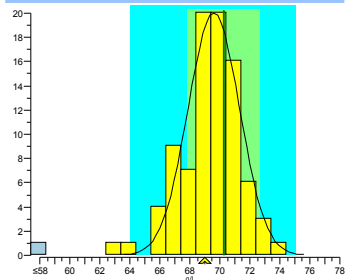
units: g/l



	2013.1	cumulative
Trueness	-0.65%	-0.65%
Precision	2.4%	2.4%
Number	6	6
Outliers	0	0
Sigma-TE	1.7	1.7
Sigma-SA	4.9 2	4.9 2
Score pictogram		
Regression line	$0.0 + 0.994.x$	$0.0 + 0.994.x$

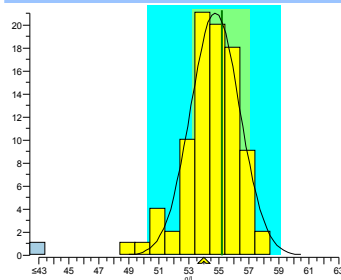
Consensus group Biureet
Method Biurete, automatic

2013.1 A



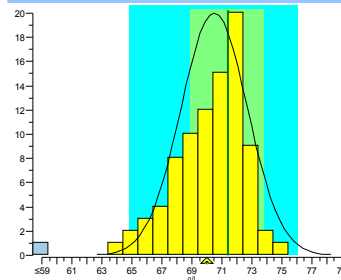
	cons.	meth.	ref.	lab
mean	69.6	69.6	70.3	69
SD	1.7	1.7		
n	88	88		
no	2	2		

2013.1 B



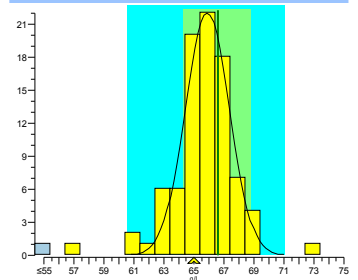
	cons.	meth.	ref.	lab
mean	54.8	54.8	55.2	54
SD	1.6	1.6		
n	88	88		
no	1	1		

2013.1 C



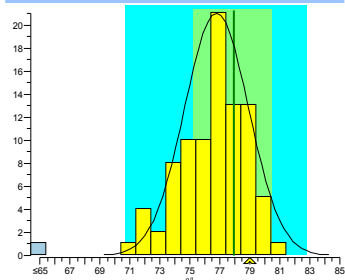
	cons.	meth.	exp.	lab
mean	70.5	70.5	71.4	70
SD	2.2	2.2		
n	87	87		
no	0	0		

2013.1 D



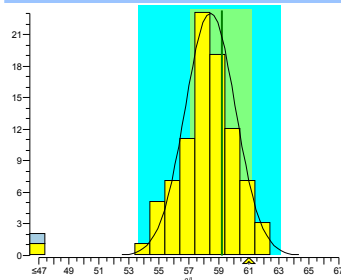
	cons.	meth.	ref.	lab
mean	65.9	65.9	66.6	65
SD	1.5	1.5		
n	88	88		
no	4	4		

2013.1 E



	cons.	meth.	ref.	lab
mean	76.8	76.8	77.9	79
SD	2.1	2.1		
n	88	88		
no	0	0		

2013.1 F



	cons.	meth.	ref.	lab
mean	58.4	58.4	59.2	61
SD	1.7	1.7		
n	89	89		
no	1	1		

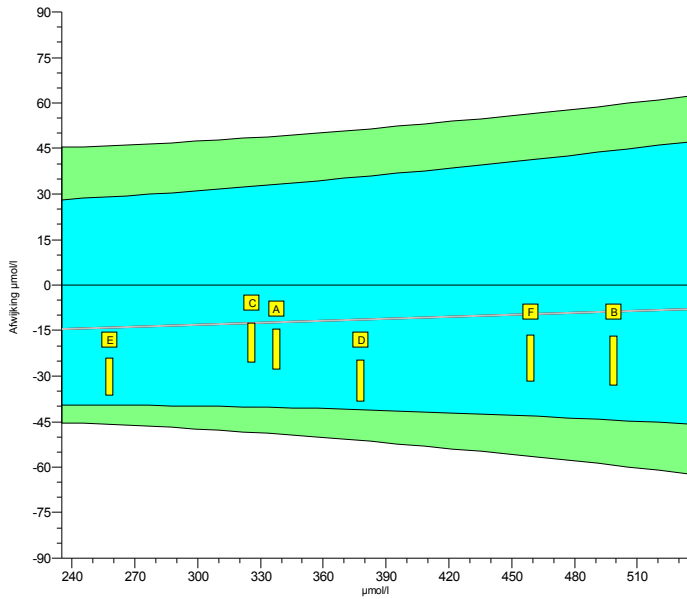
Legend

Biurete, automatic Other methods

INPUTS 2013.1

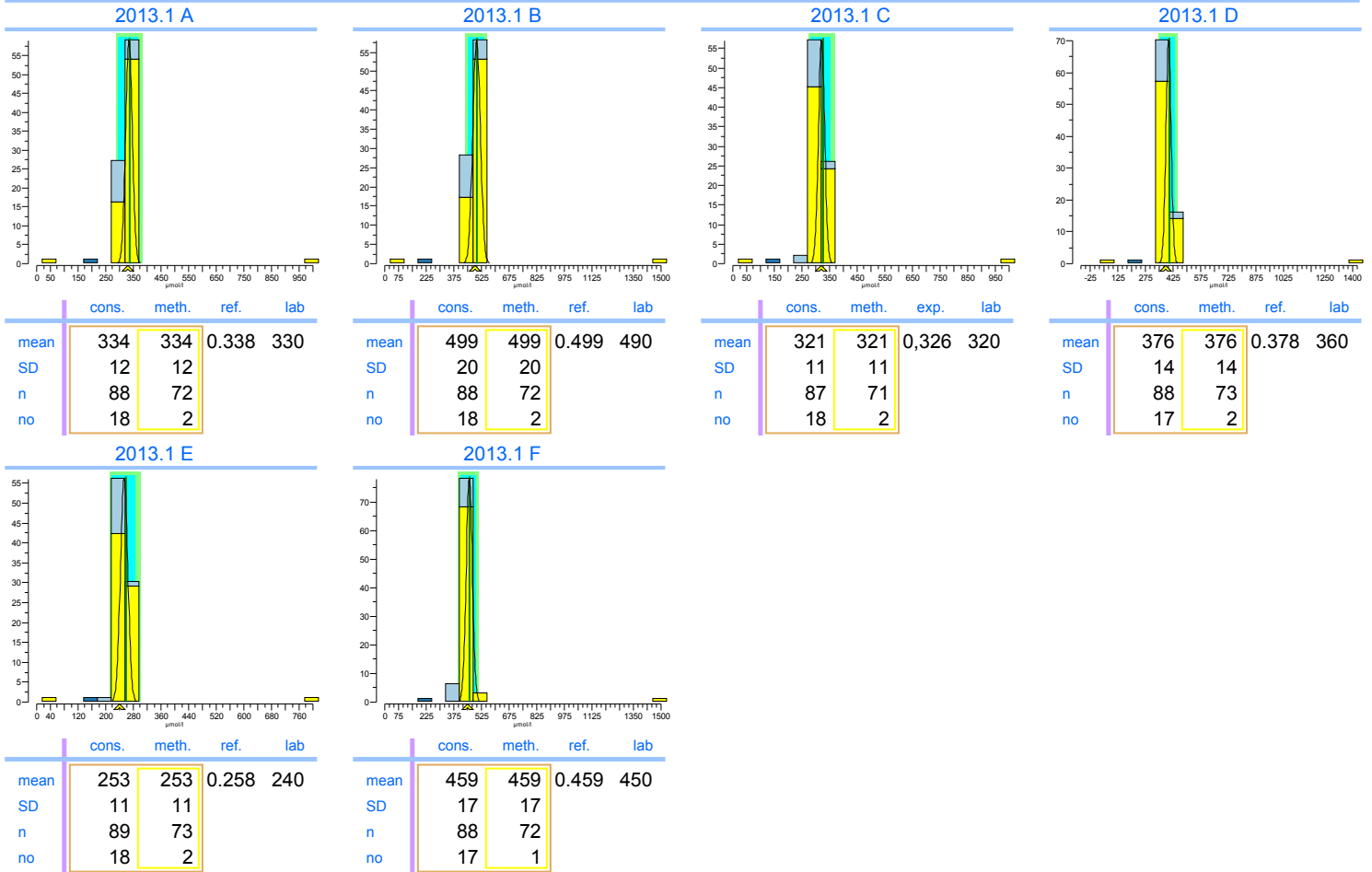
Urate

units: $\mu\text{mol/l}$



	2013.1	cumulative
Trueness	-3.0%	-3.0%
Precision	1.5%	1.5%
Number	6	6
Outliers	0	0
Sigma-TE	6.0 2	6.0 2
Sigma-SA	5.5	5.5
Score pictogram		
Regression line	$0 + 1.022 \cdot x$	$0 + 1.022 \cdot x$

Consensus group Colorimetrisch
Method Uricase, colorim., automatic



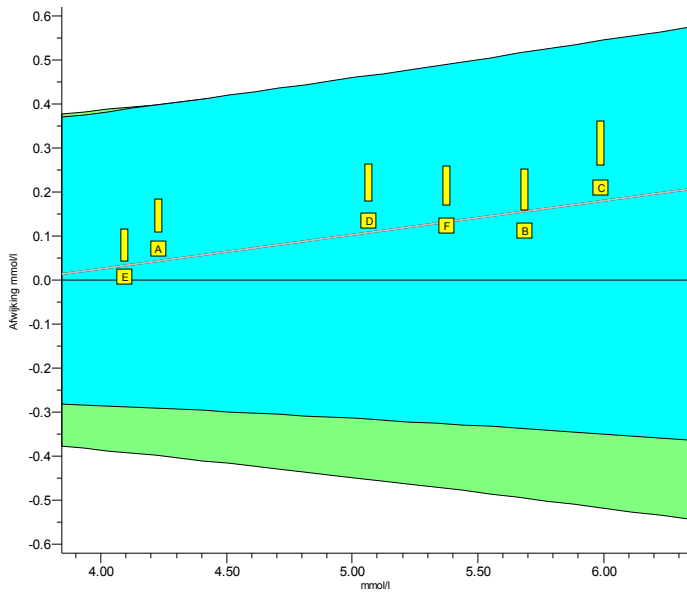
Legend



- Uricase, colorim., automatic
- Uricase, differential UV, automatic
- Overige methoden

INPUTS 2013.1

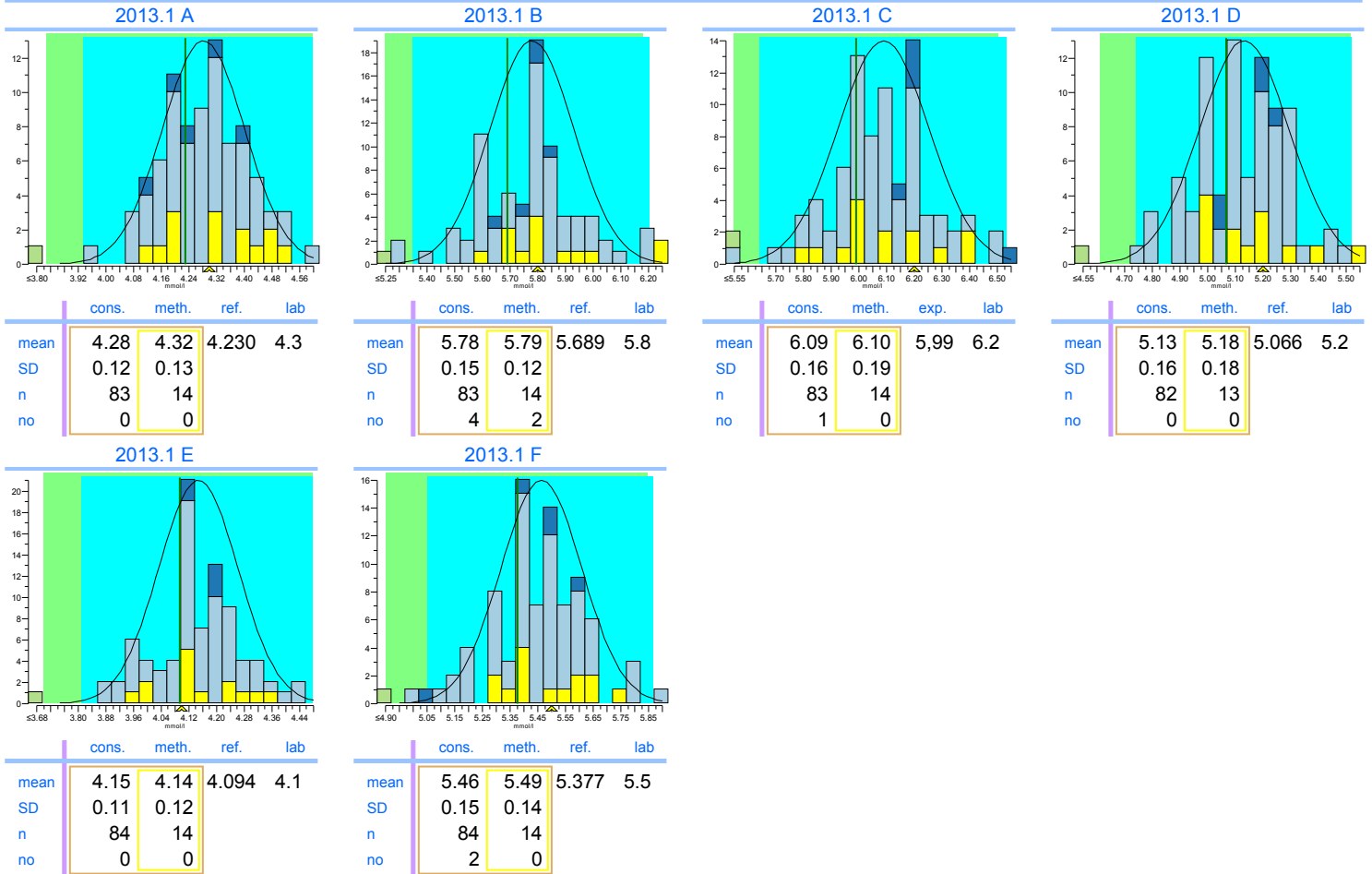
Cholesterol

units: mmol/l



	2013.1	cumulative
Trueness	+2.1%	+2.1%
Precision	0.68%	0.68%
Number	6	6
Outliers	0	0
Sigma-TE	6.0 2	6.0 2
Sigma-SA	6.0	6.0
Score pictogram		
Regression line	$-0.29 + 1.078.x$	$-0.29 + 1.078.x$

Consensus group	Enzymatisch
Method	Enzymatic, automatic, kinetic



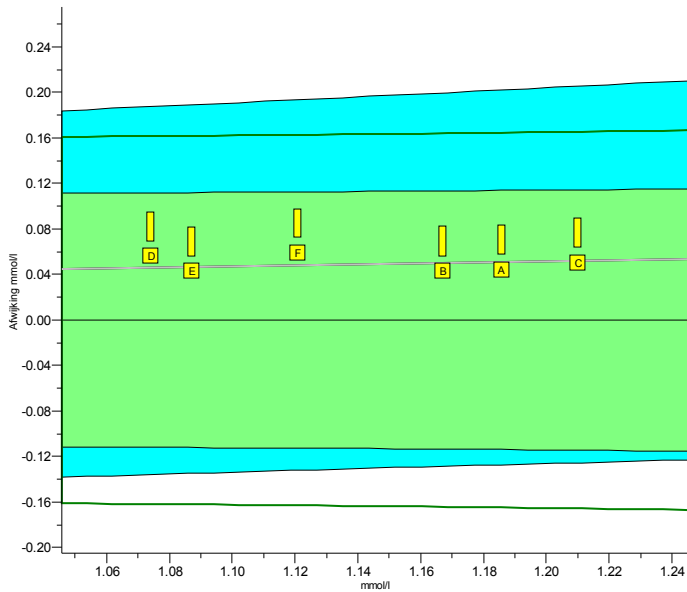
Legend



- Enzymatic, automatic, kinetic
- Enzymatic, automatic, discrete
- Abell-Kendall reference values
- Overige methoden

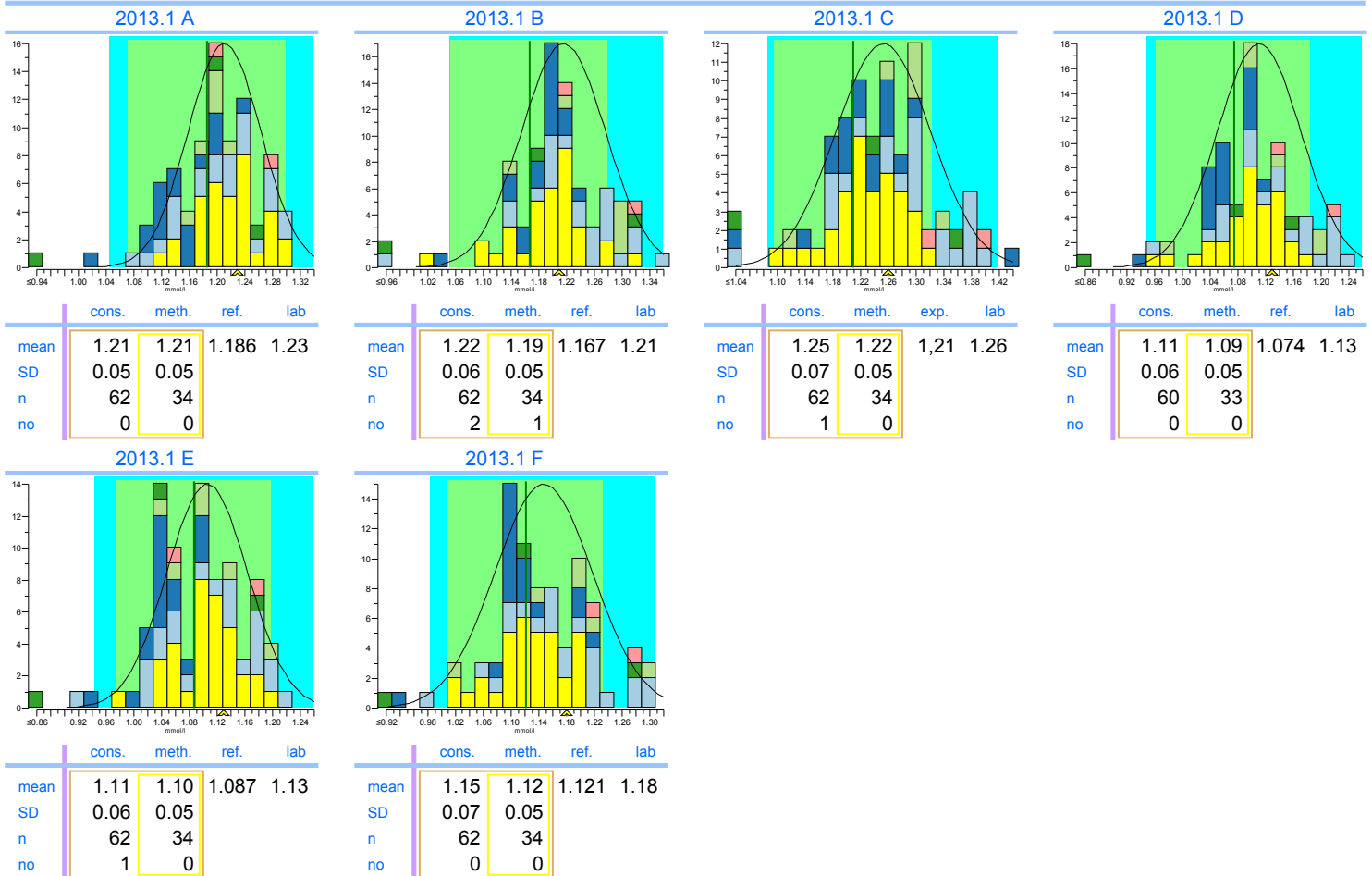
INPUTS 2013.1

HDL-Cholesterol

units: mmol/l



	2013.1	cumulative
Trueness	+4.3%	+4.3%
Precision	0.90%	0.90%
Number	6	6
Outliers	0	0
Sigma-TE	6.0	6.0
Sigma-SA	6.0 2	6.0 2
Score pictogram		
Regression line	$0.00 + 1.043 \cdot x$	$0.00 + 1.043 \cdot x$
Consensus group	Direct	
Method	PEG modified enzyme, PEGME (Kyowa Medex)	



Legend

- PEG modified enzyme, PEGME (Kyowa Medex)
- Accelerator Selective Detergent (=Ultra HDL⁺)
- Immunoinhibition
- Catalase method (Denka Seiken)
- Overige methoden
- Precipitation Technique