



3709 A. Dorrington  
 Leicester Royal Infirmary  
 Leicester

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	33	38	



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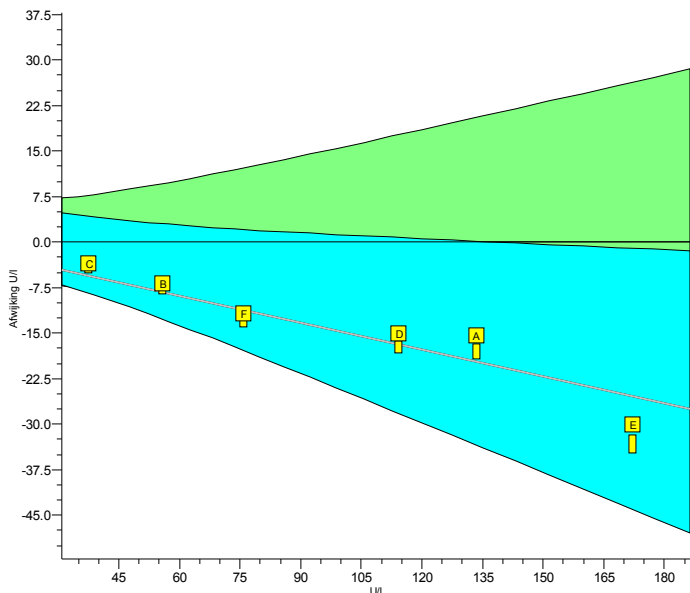
# INPUTS 2013.1

Analyte		Trueness				Precision		Performance			
		your mean	ref.	cons.	SDtI	your prec.	SDbl	this survey	PS	cumulative PSc	
ALAT	U/l	84.3	98.2	86.9	10.1	0.8	2.7		1		1
Alk. Phosphatase	U/l	184	188	173	15	2	2		2		2
Amylase	U/l	193	207	201	8	5	2		2		2
ASAT	U/l	68.2	78.6	71.5	6.8	2.4	1.6		0		0
Calcium	mmol/l	2.49	2.46	2.47	0.07	0.03	0.02		2		2
Chloride	mmol/l	101.2	100.0	100.8	1.8	0.5	0.9		2		2
CK	U/l	244	244	253	18	2	3		2		2
Creatinine	µmol/l	147.2	149.1	150.9	7.1	5.5	4.2		1		1
eGFR (F, 55, white)	ml/min/1,73m <sup>2</sup>	40.5	37.6	37.6	2.7	1.5	1.5		2		2
Gamma-GT	U/l	90.0	87.7	86.3	8.6	2.6	1.2		2		2
Glucose	mmol/l	13.92	13.93	14.19	0.44	0.09	0.18		2		2
LD	U/l	500	532	523	33	35	9		2		2
Magnesium	mmol/l	1.28	1.22	1.23	0.04	0.02	0.02		2		2
Potassium	mmol/l	5.33	5.39	5.30	0.10	0.03	0.04		2		2
Sodium	mmol/l	143.3	144.0	142.7	1.7	0.6	0.9		2		2
Total Protein	g/l	66.2	66.8	66.0	1.8	1.2	0.7		2		2
Urate	µmol/l	387	376	374	15	7	4		2		2
Cholesterol	mmol/l	5.02	5.07	5.15	0.14	0.07	0.05		2		2
HDL-Cholesterol	mmol/l	1.20	1.14	1.17	0.06	0.04	0.03		1		1
<b>Total :</b>								<b>33</b>	<b>33</b>		

# INPUTS 2013.1

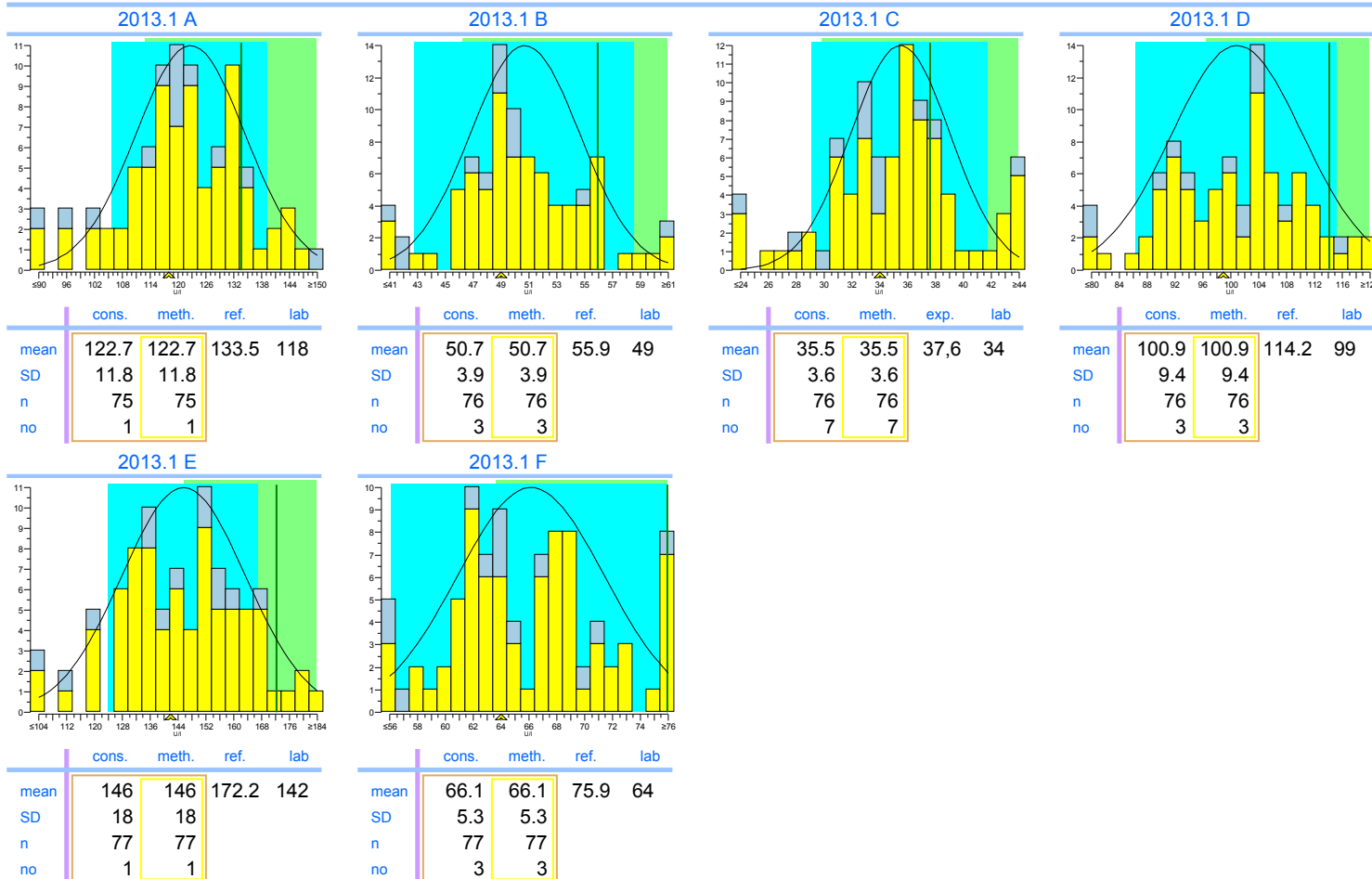
ALAT

units: U/l



	2013.1	cumulative
Trueness	-14%	-14%
Precision	0.89%	0.89%
Number	6	6
Outliers	0	0
Sigma-TE	3.9 <span style="background-color: green; color: white;">1</span>	3.9 <span style="background-color: green; color: white;">1</span>
Sigma-SA	1.1	1.1
Score pictogram		
Regression line	$0.0 + 0.853 \cdot x$	$0.0 + 0.853 \cdot x$

Consensus group IFCC traceerbaar  
Method IFCC traceable



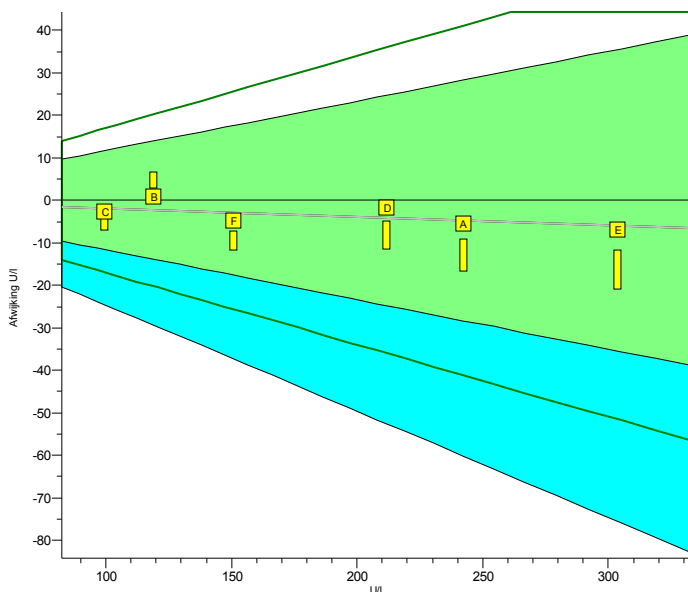
Legend



IFCC traceable  IFCC non-traceable

# INPUTS 2013.1

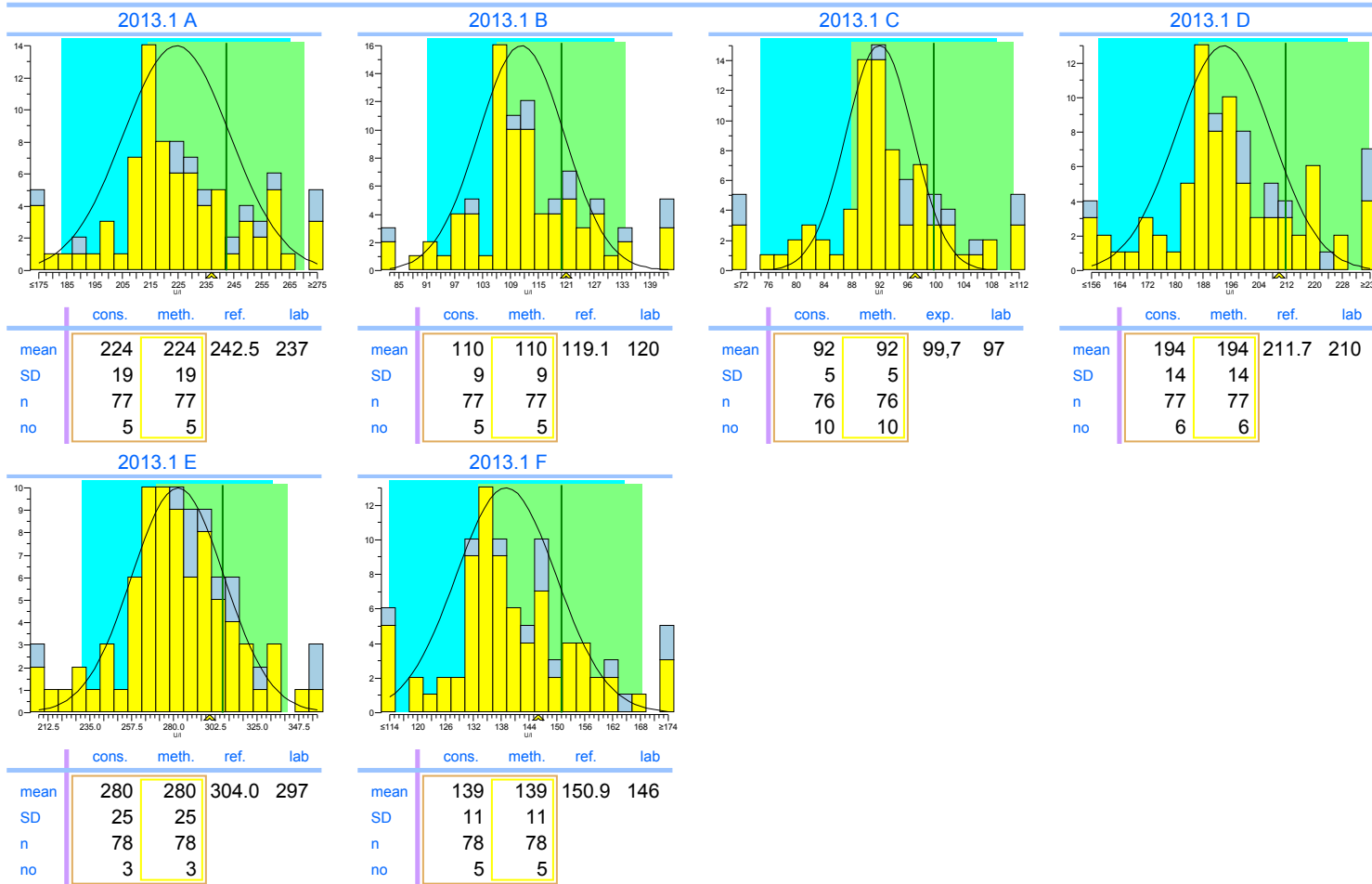
## Alk. Phosphatase

units: U/I



	2013.1	cumulative
Trueness	-1.9%	-1.9%
Precision	1.4%	1.4%
Number	6	6
Outliers	0	0
Sigma-TE	6.0	6.0
Sigma-SA	6.0 <span style="background-color: green; color: white; padding: 2px;">2</span>	6.0 <span style="background-color: green; color: white; padding: 2px;">2</span>
Score pictogram		
Regression line	$0 + 0.981.x$	$0 + 0.981.x$

Consensus group IFCC traceerbaar  
Method IFCC traceable



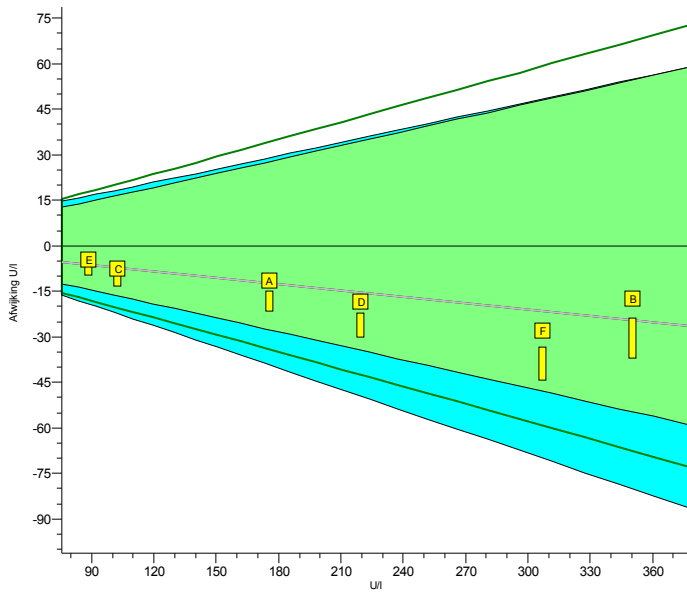
Legend



IFCC traceable     IFCC non-traceable

# INPUTS 2013.1

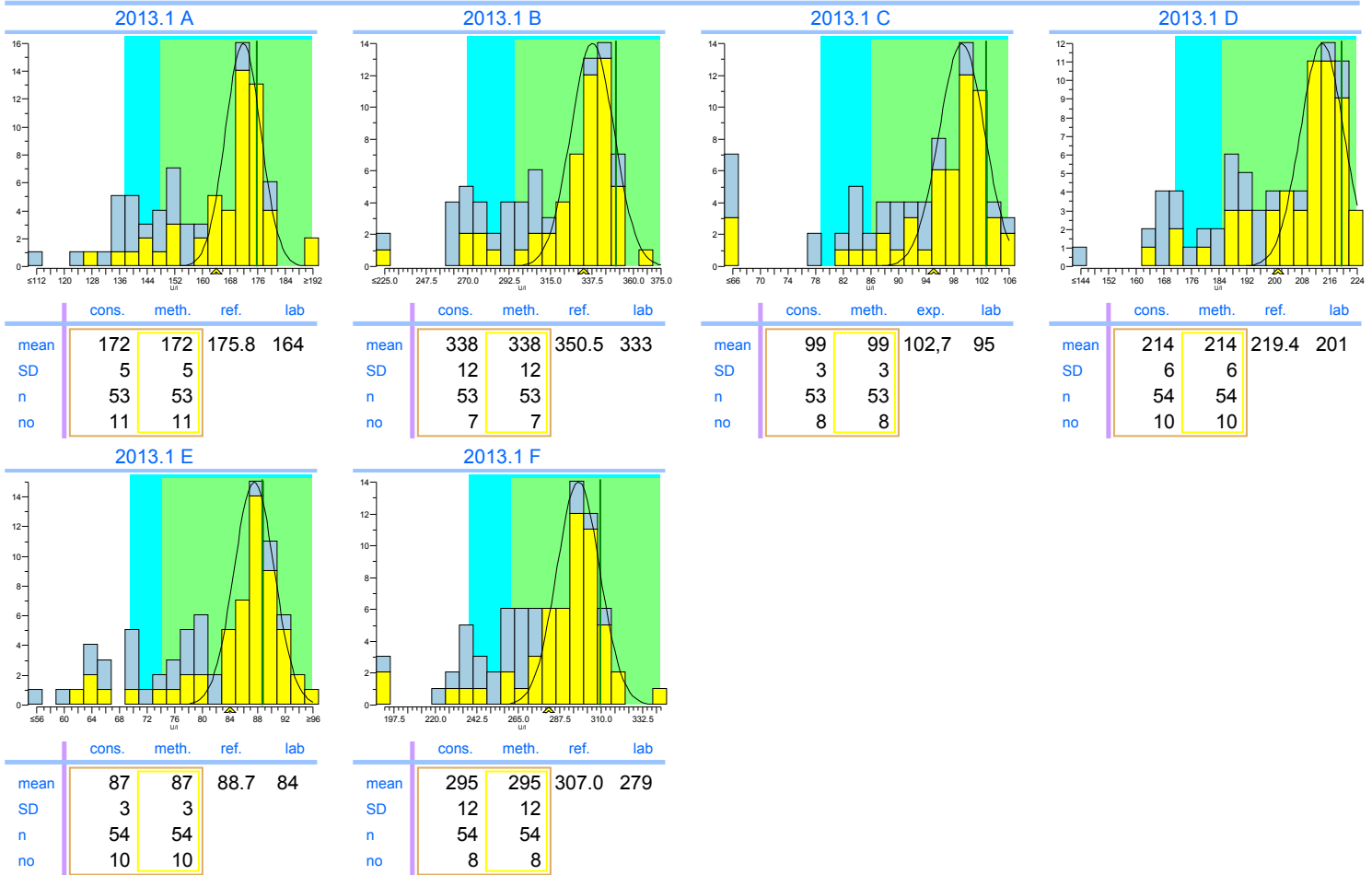
## Amylase

units: U/l



	2013.1	cumulative
Trueness	-7.1%	-7.1%
Precision	2.4%	2.4%
Number	6	6
Outliers	0	0
Sigma-TE	6.0	6.0
Sigma-SA	6.0 <span style="background-color: green; color: white; padding: 2px;">2</span>	6.0 <span style="background-color: green; color: white; padding: 2px;">2</span>
Score pictogram		
Regression line	$0 + 0.930 \cdot x$	$0 + 0.930 \cdot x$

Consensus group	IFCC traceerbaar
Method	IFCC traceable



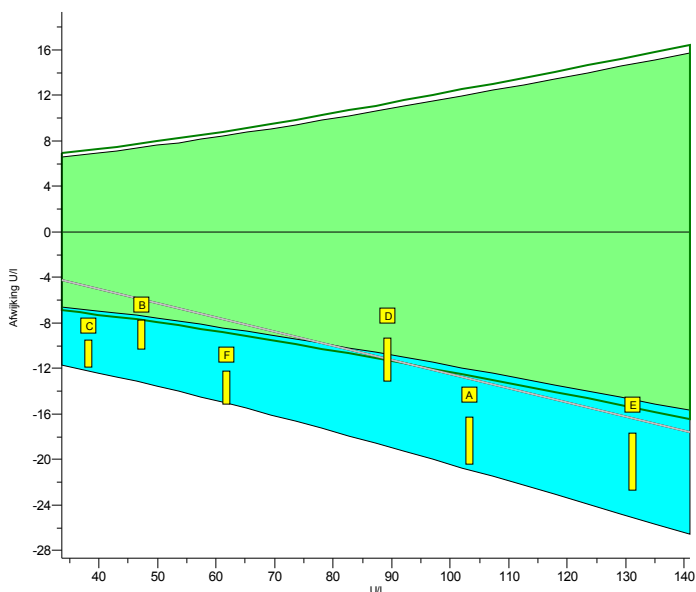
Legend

IFCC traceable     IFCC non-traceable

# INPUTS 2013.1

ASAT

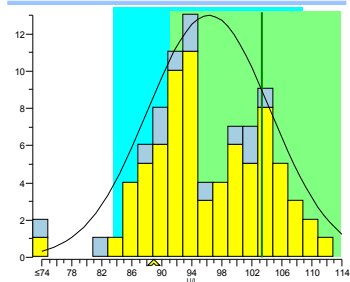
units: U/I



	2013.1	cumulative
Trueness	-13%	-13%
Precision	3.4%	3.4%
Number	6	6
Outliers	0	0
Sigma-TE	0.5	0.5
Sigma-SA	0.8 <span style="border: 1px solid red; padding: 0 2px;">0</span>	0.8 <span style="border: 1px solid red; padding: 0 2px;">0</span>
Score pictogram		
Regression line	<u>0.0 + 0.875.x</u>	<u>0.0 + 0.875.x</u>

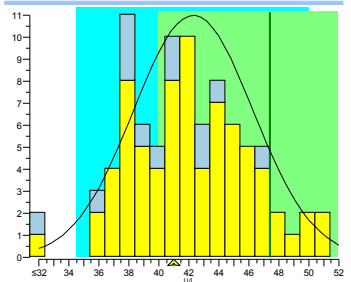
Consensus group IFCC traceerbaar  
Method IFCC traceable

2013.1 A



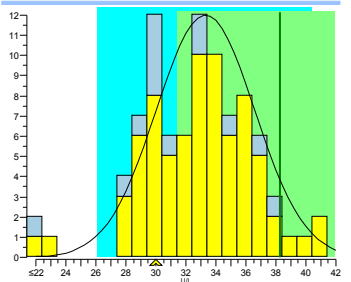
	cons.	meth.	ref.	lab
mean	96.3	96.3	103.3	89
SD	8.2	8.2		
n	75	75		
no	1	1		

2013.1 B



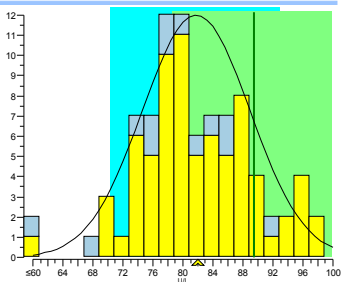
	cons.	meth.	ref.	lab
mean	42.3	42.3	47.4	41
SD	4.0	4.0		
n	75	75		
no	1	1		

2013.1 C



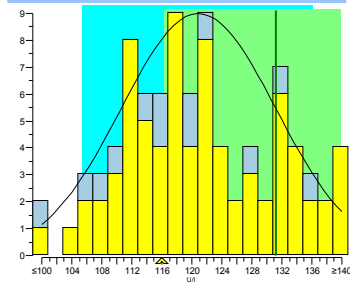
	cons.	meth.	exp.	lab
mean	33.3	33.3	38,3	30
SD	3.3	3.3		
n	75	75		
no	2	2		

2013.1 D



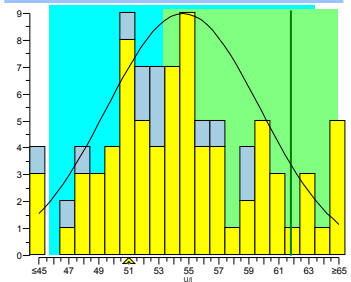
	cons.	meth.	ref.	lab
mean	81.8	81.8	89.4	82
SD	7.2	7.2		
n	74	74		
no	1	1		

2013.1 E



	cons.	meth.	ref.	lab
mean	120.9	120.9	131.2	116
SD	10.3	10.3		
n	76	76		
no	1	1		

2013.1 F



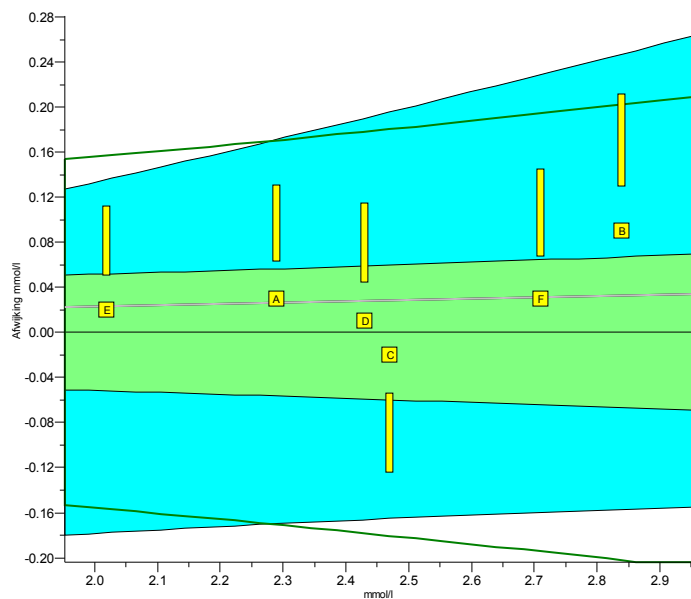
	cons.	meth.	ref.	lab
mean	54.6	54.6	61.8	51
SD	5.1	5.1		
n	76	76		
no	2	2		



Legend  
 IFCC traceable  
 IFCC non-traceable

# INPUTS 2013.1

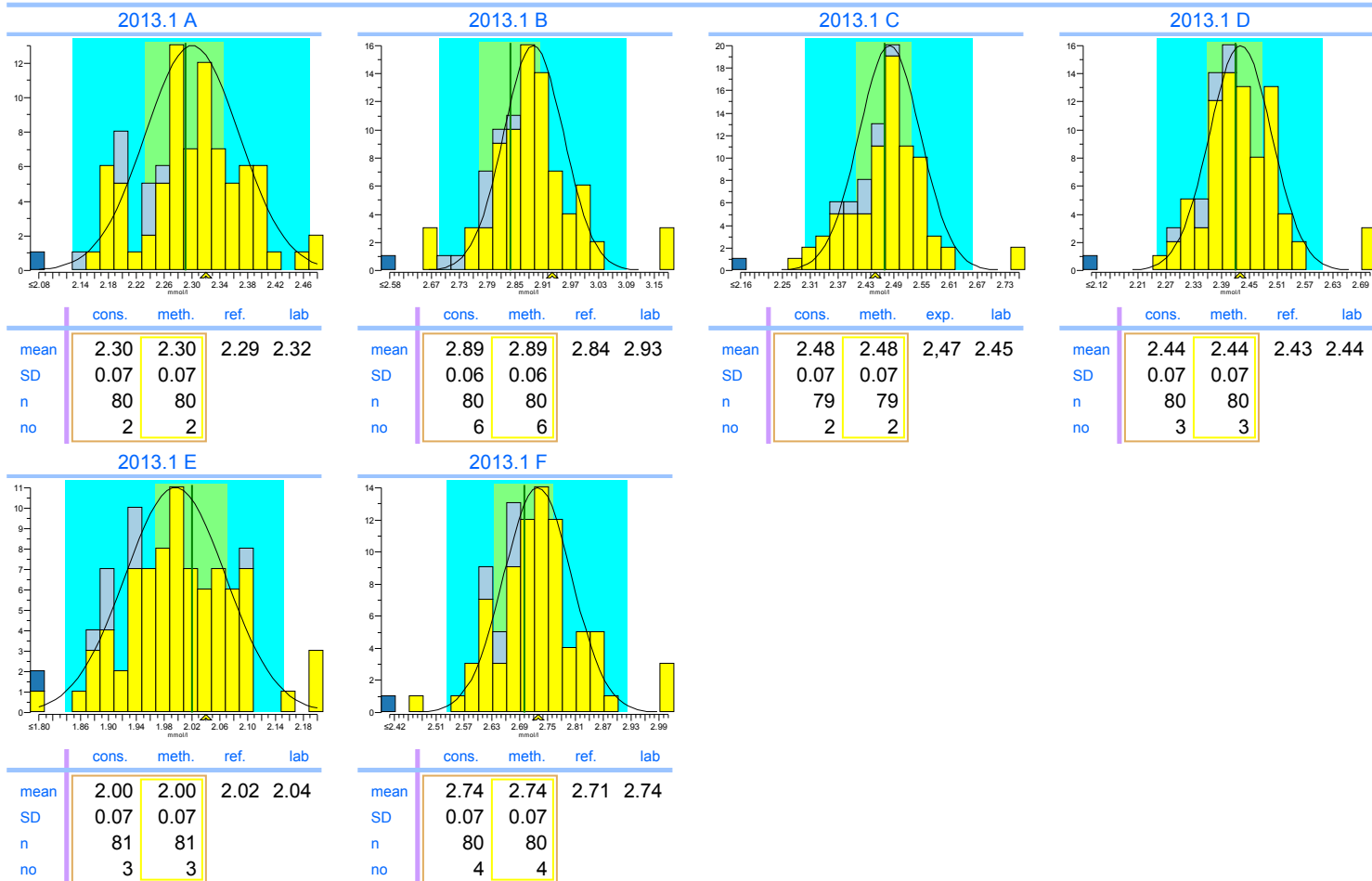
## Calcium

units: mmol/l



	2013.1	cumulative
Trueness	+1.1%	+1.1%
Precision	1.2%	1.2%
Number	6	6
Outliers	0	0
Sigma-TE	1.8	1.8
Sigma-SA	6.0 <span style="background-color: #008000; color: white; padding: 2px;">2</span>	6.0 <span style="background-color: #008000; color: white; padding: 2px;">2</span>
Score pictogram		
Regression line	$0.00 + 1.011 \cdot x$	$0.00 + 1.011 \cdot x$

Consensus group	Colorimetrisch
Method	Colorimetric, automatic, discrete



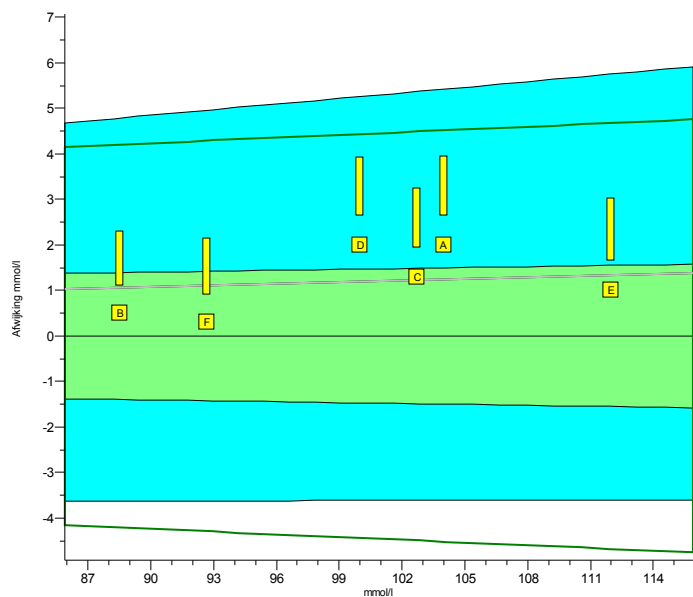
Legend



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

# INPUTS 2013.1

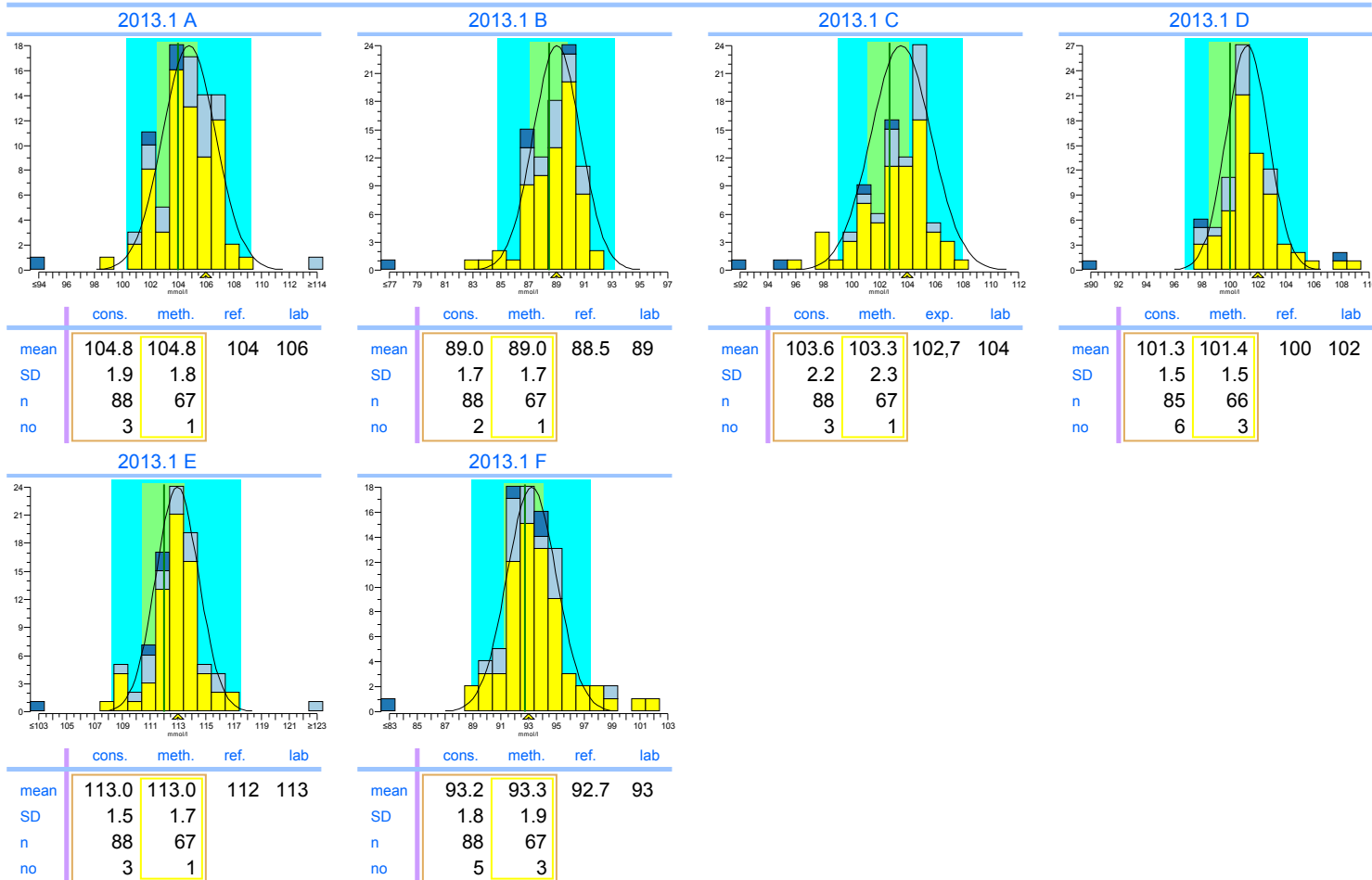
Chloride

units: mmol/l



	2013.1	cumulative
Trueness	+1.2%	+1.2%
Precision	0.51%	0.51%
Number	6	6
Outliers	0	0
Sigma-TE	1.4	1.4
Sigma-SA	6.0 <span style="background-color: green; color: white; padding: 2px;">2</span>	6.0 <span style="background-color: green; color: white; padding: 2px;">2</span>
Score pictogram		
Regression line	$0.0 + 1.012 \cdot x$	$0.0 + 1.012 \cdot x$

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



Legend

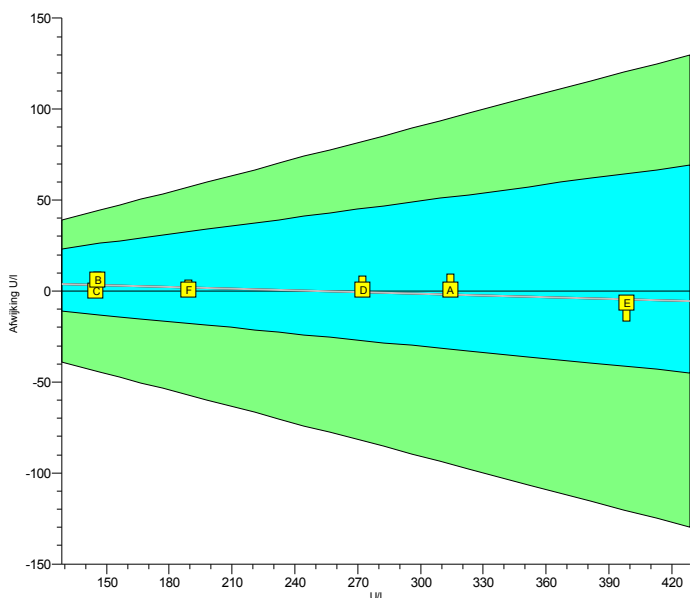
<span style="background-color: yellow; border: 1px solid black; padding: 2px;"> </span> ISE indirect (with predilution)	<span style="background-color: lightblue; border: 1px solid black; padding: 2px;"> </span> ISE direct (no predilution)	<span style="background-color: darkblue; border: 1px solid black; padding: 2px;"> </span> Other methods
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# INPUTS 2013.1

CK

units: U/I



	2013.1	cumulative
Trueness	+0.14%	+0.14%
Precision	0.71%	0.71%
Number	6	6
Outliers	0	0
Sigma-TE	6.0 <span style="background-color: green; color: white;">2</span>	6.0 <span style="background-color: green; color: white;">2</span>
Sigma-SA	6.0	6.0
Score pictogram		
Regression line	$8 + 0.970.x$	$8 + 0.970.x$

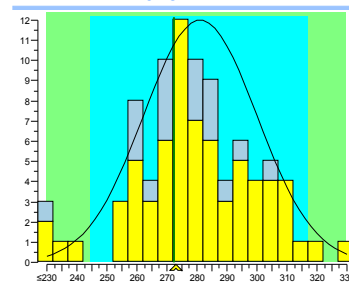
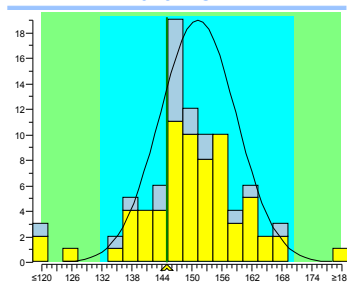
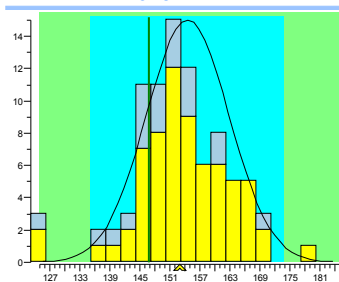
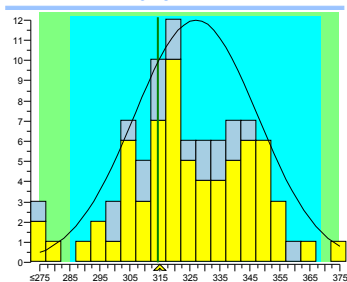
Consensus group IFCC traceerbaar  
Method IFCC traceable

2013.1 A

2013.1 B

2013.1 C

2013.1 D



	cons.	meth.	ref.	lab
mean	327	327	314.3	315
SD	21	21		
n	68	68		
no	2	2		

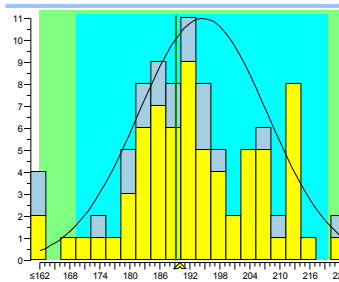
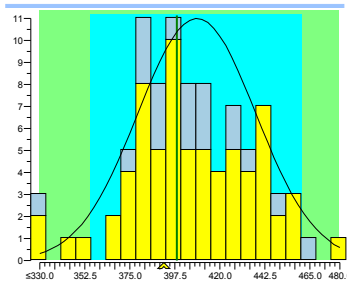
	cons.	meth.	ref.	lab
mean	154	154	145.8	152
SD	8	8		
n	67	67		
no	3	3		

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

	cons.	meth.	ref.	lab
mean	281	281	272.3	273
SD	19	19		
n	69	69		
no	2	2		

2013.1 E

2013.1 F



	cons.	meth.	ref.	lab
mean	409	409	398.4	392
SD	30	30		
n	69	69		
no	2	2		

	cons.	meth.	ref.	lab
mean	195	195	189.2	190
SD	13	13		
n	69	69		
no	2	2		

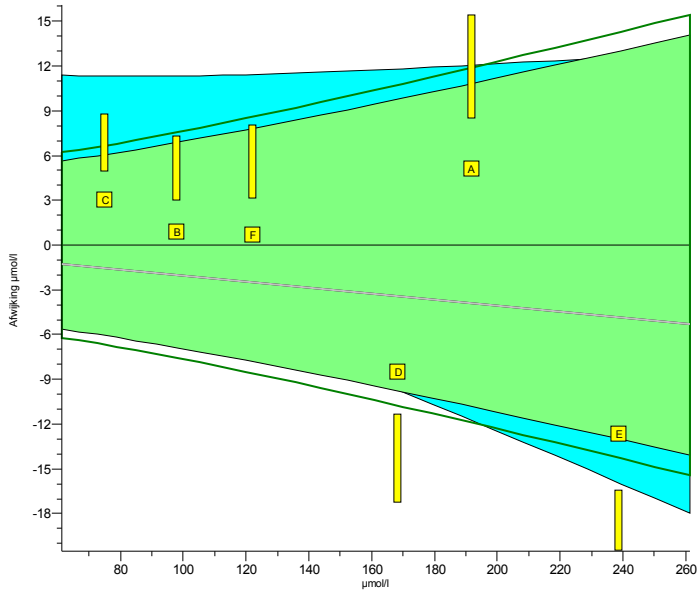
Legend

IFCC traceable  IFCC non-traceable

# INPUTS 2013.1

## Creatinine

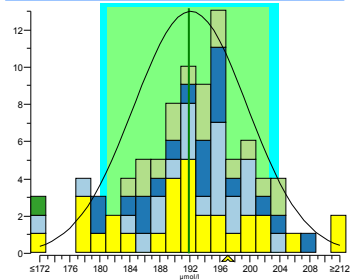
units:  $\mu\text{mol/l}$



	2013.1	cumulative
Trueness	-1.3%	-1.3%
Precision	3.7%	3.7%
Number	6	6
Outliers	0	0
Sigma-TE	2.8	2.8
Sigma-SA	3.2	3.2
Score pictogram		
Regression line	$0.0 + 0.980.x$	$0.0 + 0.980.x$

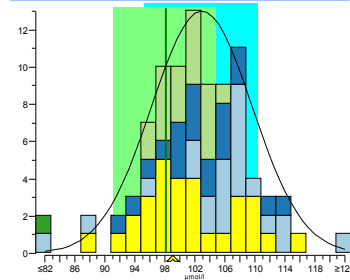
Consensus group: Jaffe  
Method: Alk. Picrate, kinetic with compensation

2013.1 A



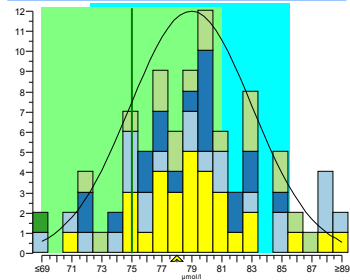
	cons.	meth.	ref.	lab
mean	192.1	190.4	191.9	197
SD	7.6	9.4		
n	71	30		
no	2	1		

2013.1 B



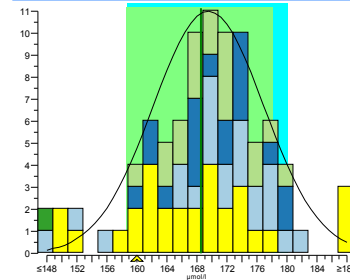
	cons.	meth.	ref.	lab
mean	102.9	101.0	98.11	99
SD	6.7	6.6		
n	71	30		
no	2	0		

2013.1 C



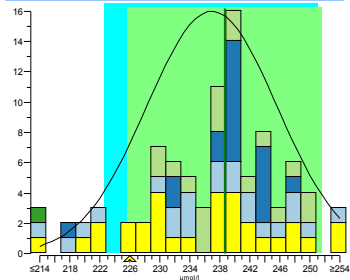
	cons.	meth.	exp.	lab
mean	78.9	79.1	75	78
SD	4.1	3.4		
n	71	30		
no	1	1		

2013.1 D



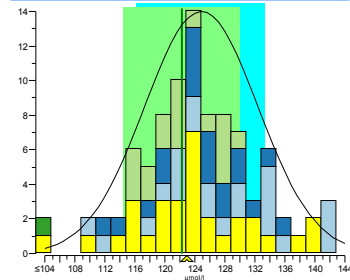
	cons.	meth.	ref.	lab
mean	169.5	167.6	168.5	160
SD	7.4	10.0		
n	70	30		
no	1	0		

2013.1 E



	cons.	meth.	ref.	lab
mean	236.9	234.2	238.7	226
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	123
SD	7.6	8.3		
n	72	31		
no	0	0		

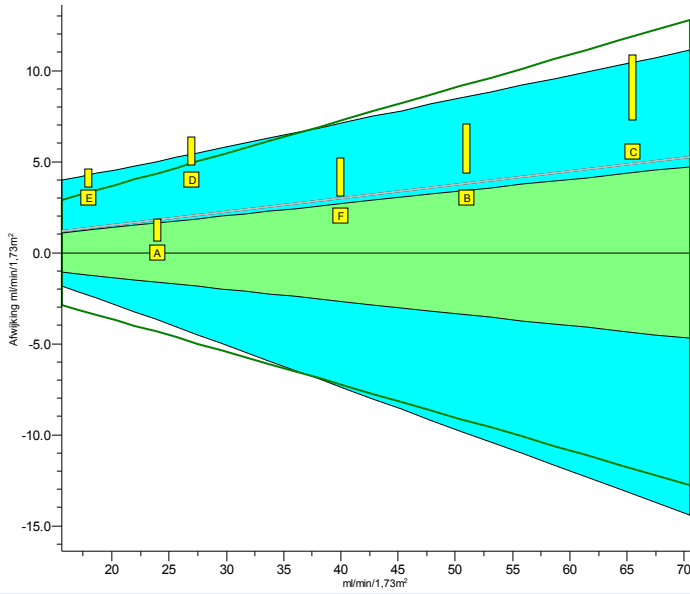
Legend



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

# INPUTS 2013.1

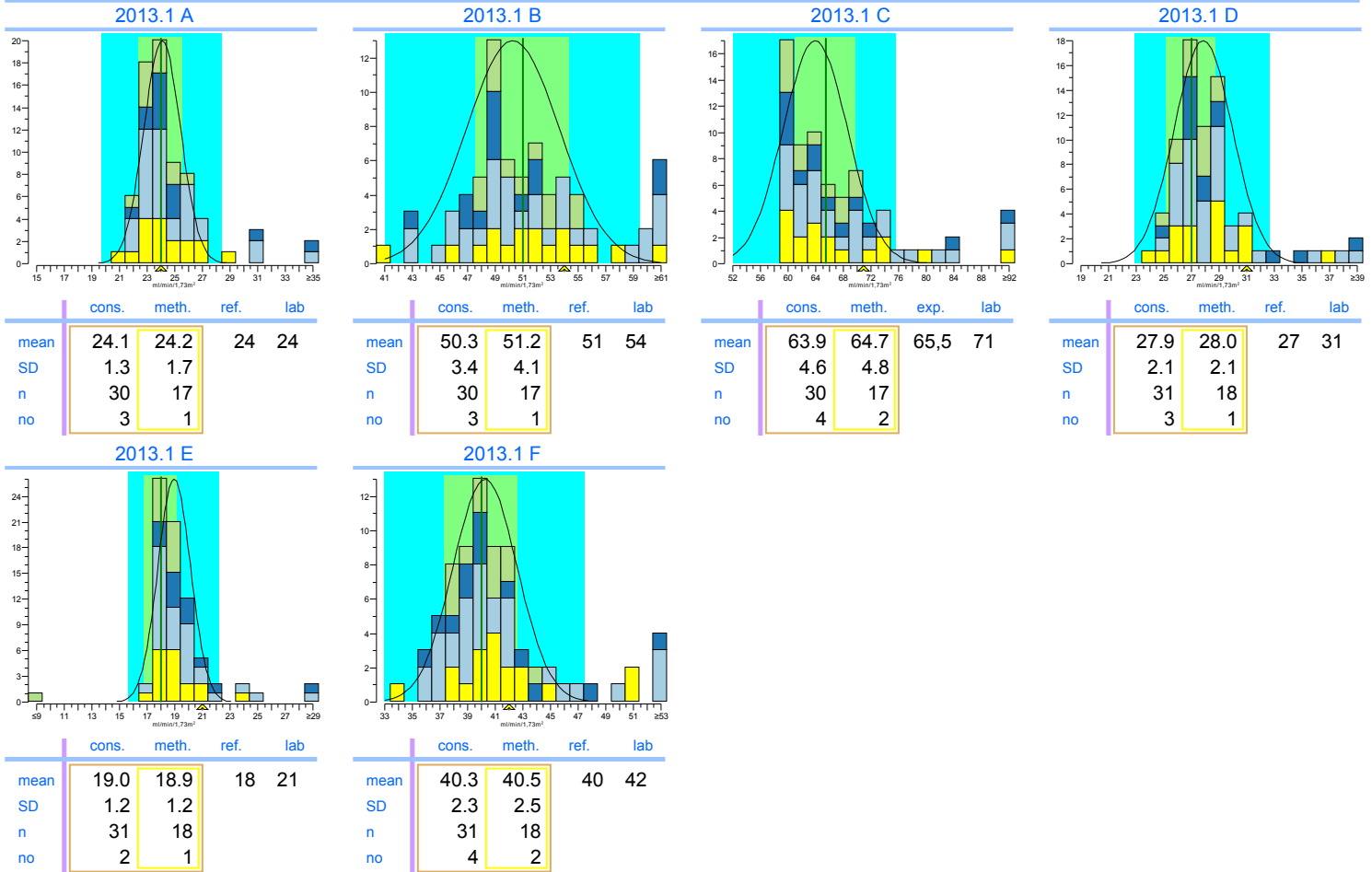
eGFR (F, 55, white)

units: ml/min/1,73m<sup>2</sup>



	2013.1	cumulative
Trueness	+7.8%	+7.8%
Precision	4.0%	4.0%
Number	6	6
Outliers	0	0
Sigma-TE	0.1	0.1
Sigma-SA	5.6 <span style="background-color: green; color: white; padding: 2px;">2</span>	5.6 <span style="background-color: green; color: white; padding: 2px;">2</span>
Score pictogram		
Regression line	$0.0 + 1.075 \cdot x$	$0.0 + 1.075 \cdot x$

Consensus group Jaffe  
Method Alk. Picrate, kinetic with compensation



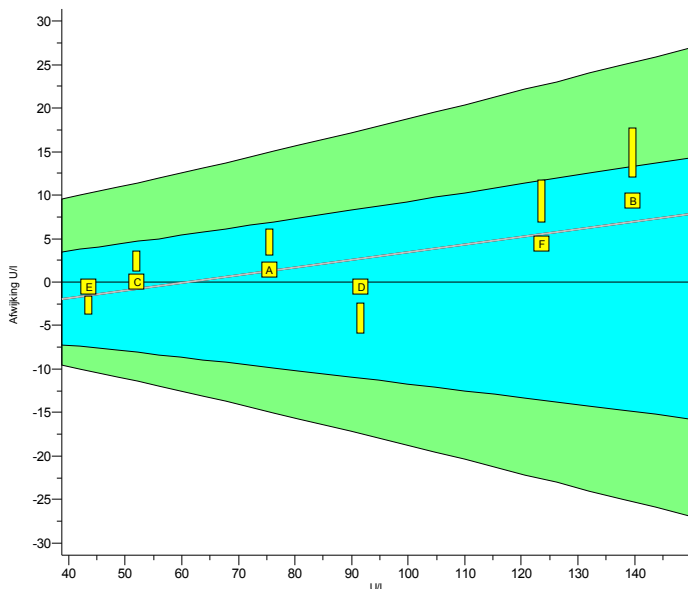
Legend

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

# INPUTS 2013.1

Gamma-GT

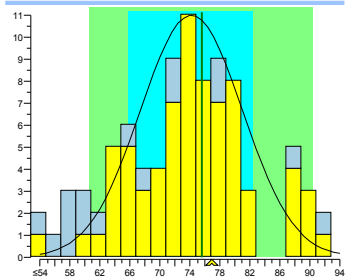
units: U/I



	2013.1	cumulative
Trueness	+2.6%	+2.6%
Precision	3.0%	3.0%
Number	6	6
Outliers	0	0
Sigma-TE	6.0 <span style="background-color: green; color: white;">2</span>	6.0 <span style="background-color: green; color: white;">2</span>
Sigma-SA	5.9	5.9
Score pictogram		
Regression line	$-5.4 + 1.088.x$	$-5.4 + 1.088.x$

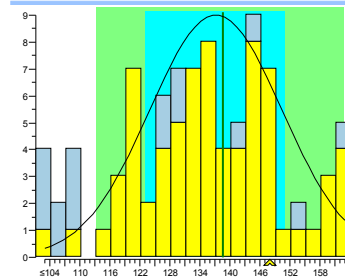
Consensus group IFCC traceerbaar  
Method IFCC traceable

2013.1 A



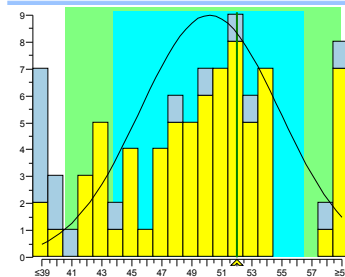
	cons.	meth.	ref.	lab
mean	74.2	74.2	75.6	77
SD	6.8	6.8		
n	72	72		
no	1	1		

2013.1 B



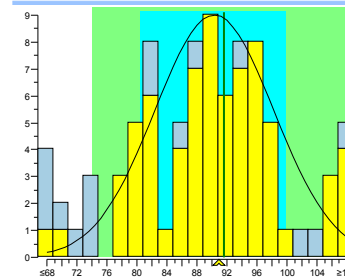
	cons.	meth.	ref.	lab
mean	138.2	138.2	139.7	149
SD	13.3	13.3		
n	72	72		
no	1	1		

2013.1 C



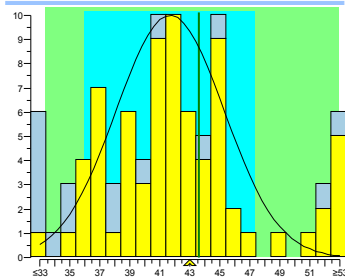
	cons.	meth.	exp.	lab
mean	50.2	50.2	52	52
SD	4.6	4.6		
n	72	72		
no	2	2		

2013.1 D



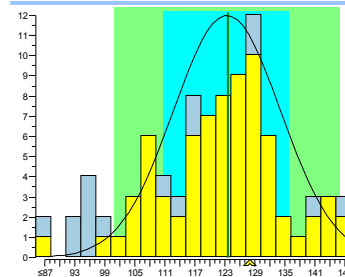
	cons.	meth.	ref.	lab
mean	90.3	90.3	91.6	91
SD	7.9	7.9		
n	71	71		
no	1	1		

2013.1 E



	cons.	meth.	ref.	lab
mean	41.7	41.7	43.6	43
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	128
SD	10.7	10.7		
n	73	73		
no	1	1		

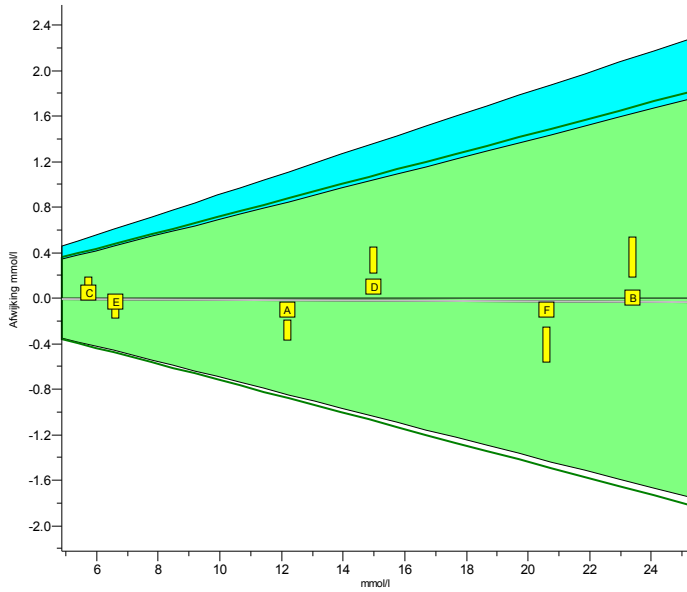
Legend

IFCC traceable     IFCC non-traceable

# INPUTS 2013.1

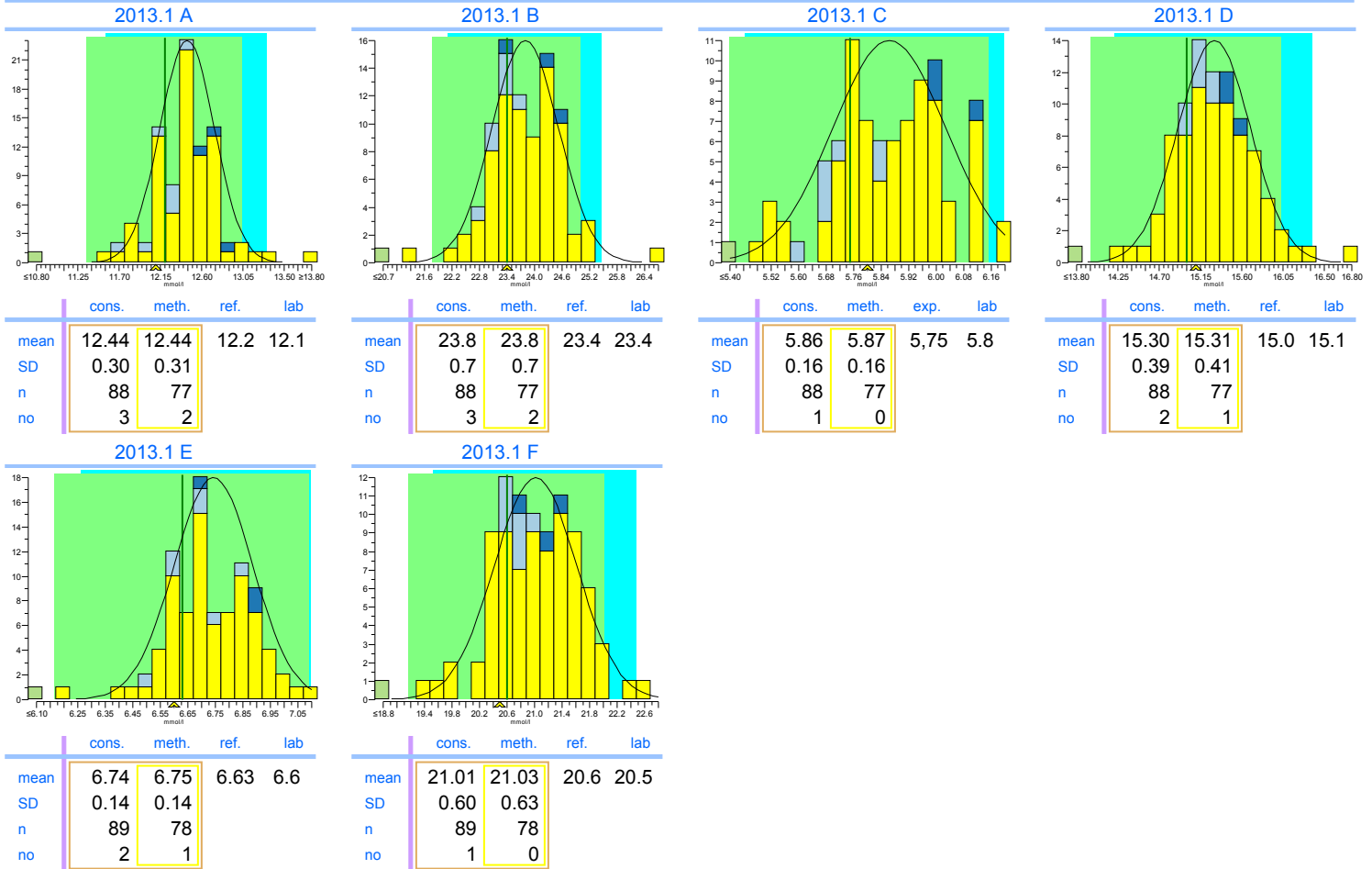
## Glucose

units: mmol/l



	2013.1	cumulative
Trueness	-0.10%	-0.10%
Precision	0.61%	0.61%
Number	6	6
Outliers	0	0
Sigma-TE	6.0	6.0
Sigma-SA	6.0 <span style="background-color: green; color: white;">2</span>	6.0 <span style="background-color: green; color: white;">2</span>
Score pictogram		
Regression line	<u>0.00 + 0.999.x</u>	<u>0.00 + 0.999.x</u>

Consensus group Natte chemie  
Method Hexokinase, automatic



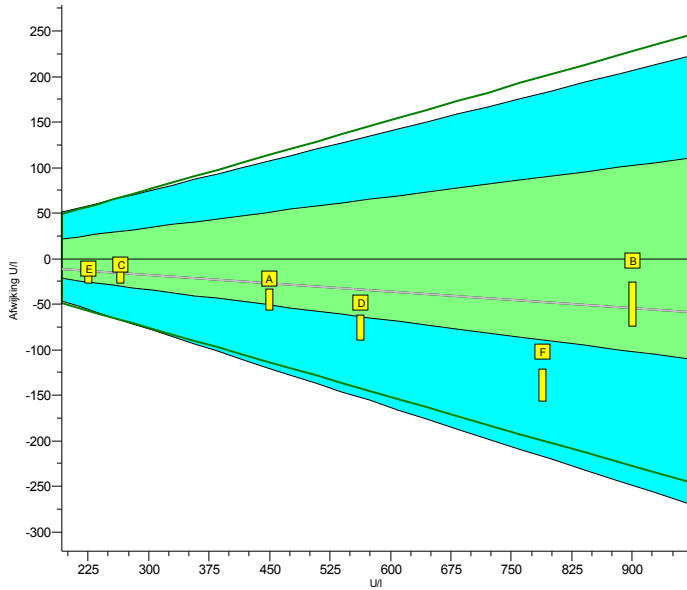
Legend



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

# INPUTS 2013.1

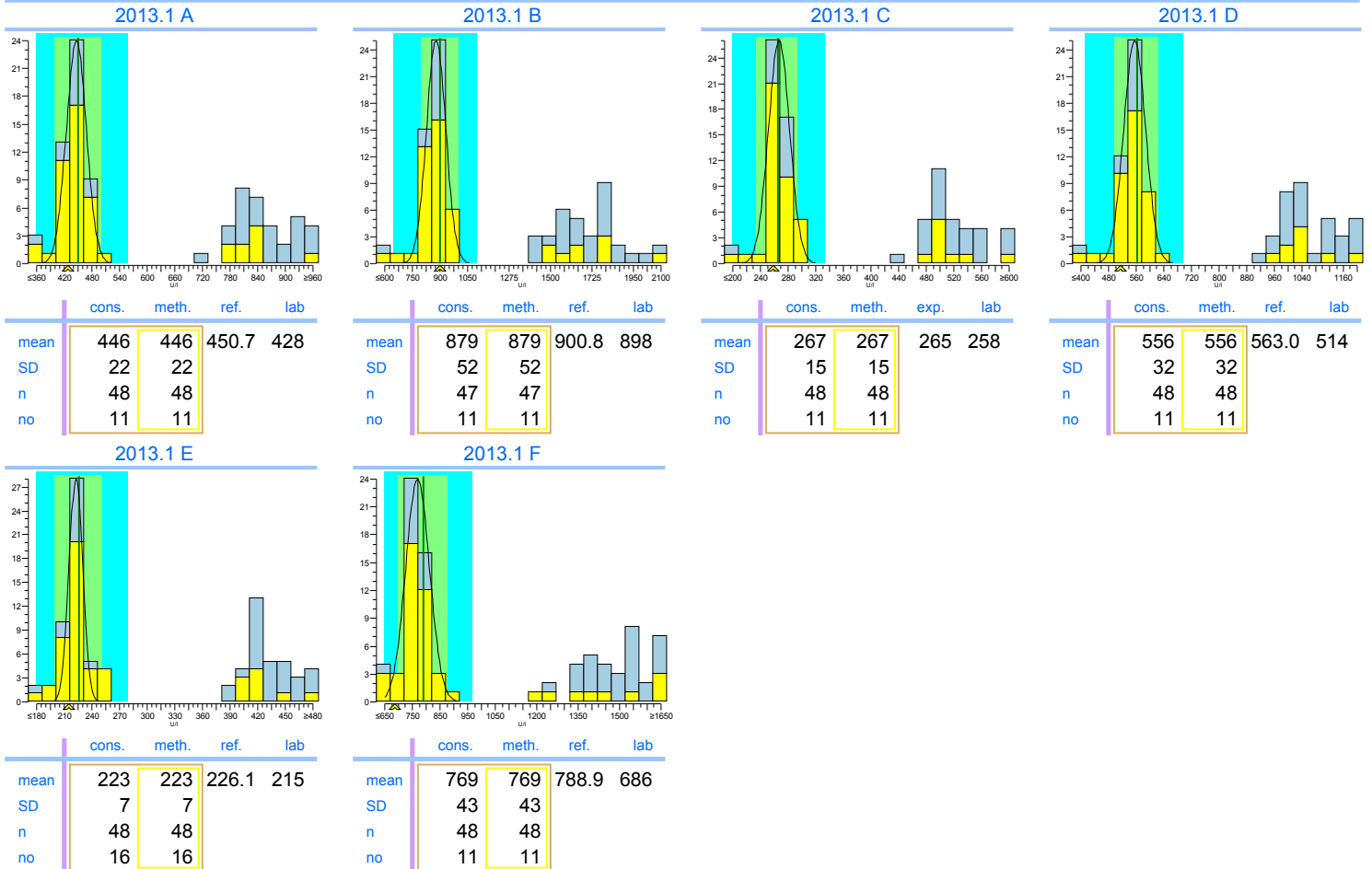
LD

units: U/I



	2013.1	cumulative
Trueness	-6.1%	-6.1%
Precision	6.6%	6.6%
Number	6	6
Outliers	0	0
Sigma-TE	3.4	3.4
Sigma-SA	6.0 <span style="background-color: green; color: white; padding: 2px;">2</span>	6.0 <span style="background-color: green; color: white; padding: 2px;">2</span>
Score pictogram		
Regression line	$0 + 0.939 \cdot x$	$0 + 0.939 \cdot x$

Consensus group IFCC traceerbaar  
Method IFCC traceable

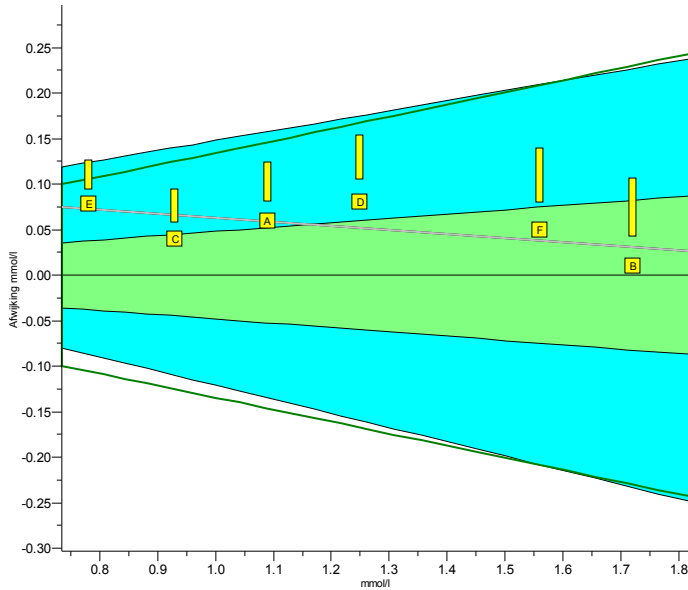


Legend  
  IFCC traceable  
  IFCC non-traceable

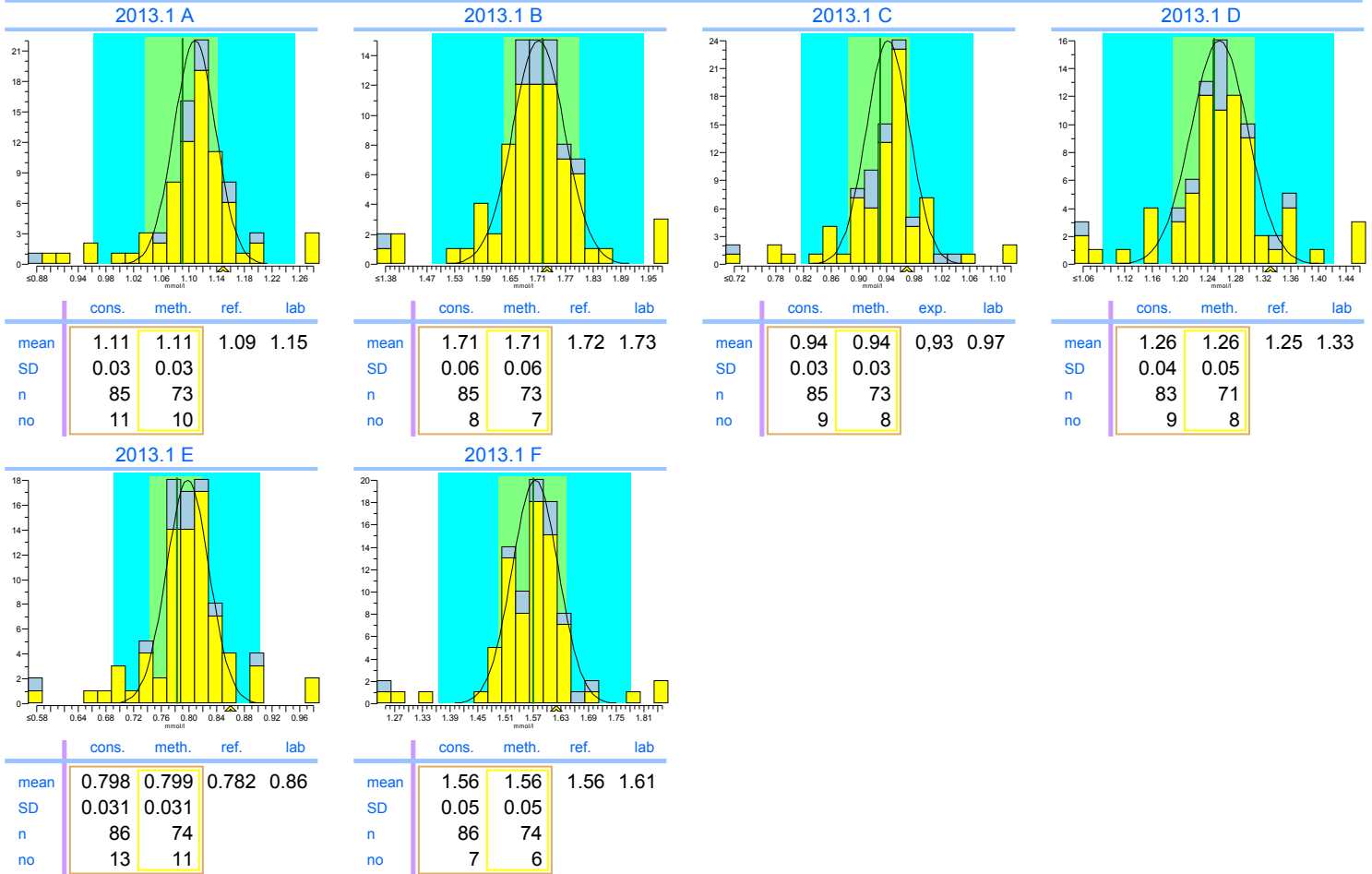
# INPUTS 2013.1

## Magnesium

units: mmol/l



	2013.1	cumulative
Trueness	+4.3%	+4.3%
Precision	1.6%	1.6%
Number	6	6
Outliers	0	0
Sigma-TE	0.7	0.7
Sigma-SA	6.0 <span style="border: 1px solid black; padding: 2px;">2</span>	6.0 <span style="border: 1px solid black; padding: 2px;">2</span>
Score pictogram		
Regression line	<u>0.11 + 0.955.x</u>	<u>0.11 + 0.955.x</u>
Consensus group	Overall	
Method	Colorimetric	



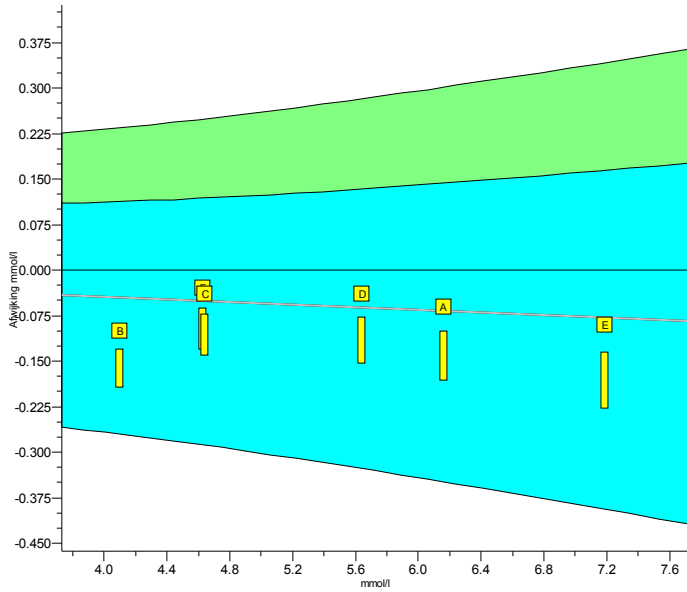
Legend



# INPUTS 2013.1

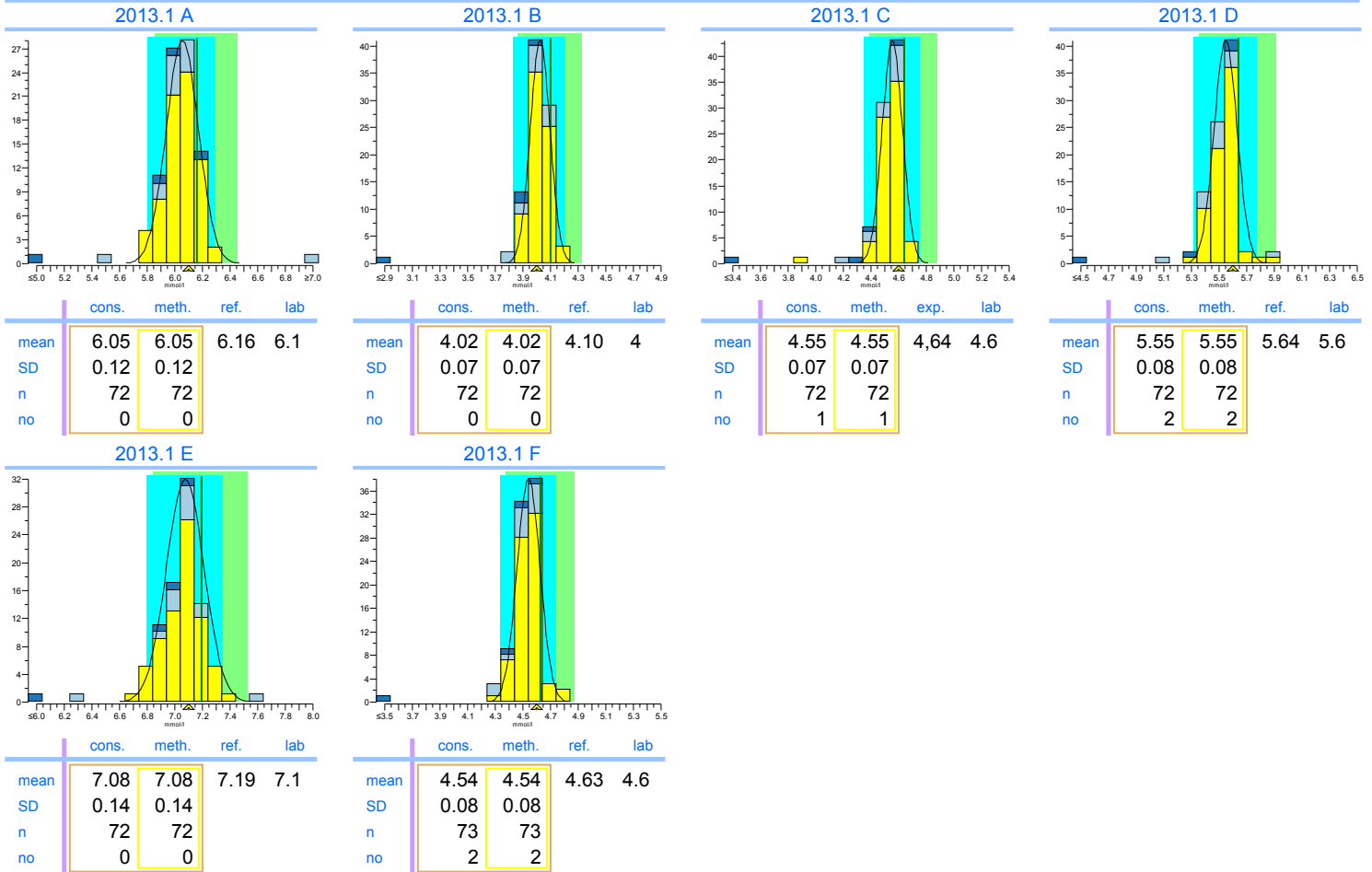
## Potassium

units: mmol/l



	2013.1	cumulative
Trueness	-1.1%	-1.1%
Precision	0.57%	0.57%
Number	6	6
Outliers	0	0
Sigma-TE	6.0 <span style="border: 1px solid green; padding: 2px;">2</span>	6.0 <span style="border: 1px solid green; padding: 2px;">2</span>
Sigma-SA	6.0	6.0
Score pictogram		
Regression line	<u>0.00 + 0.989.x</u>	<u>0.00 + 0.989.x</u>

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



Legend

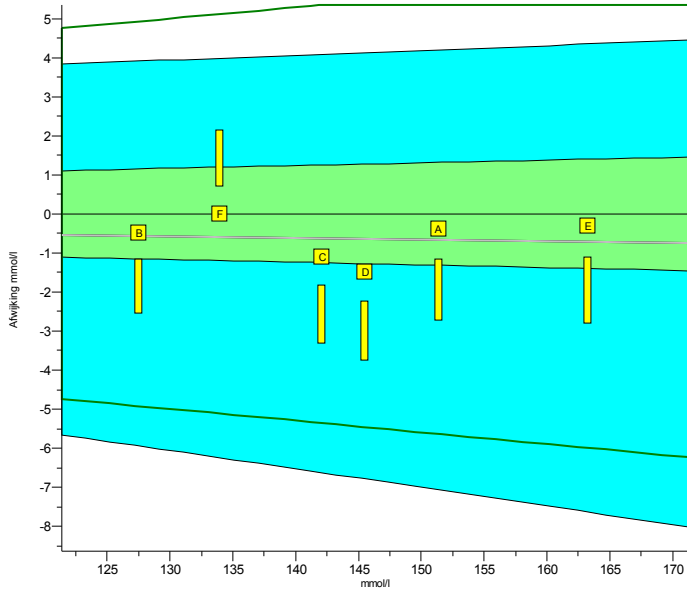
- ISE indirect (with predilution)
- ISE direct (no predilution)
- Other methods



# INPUTS 2013.1

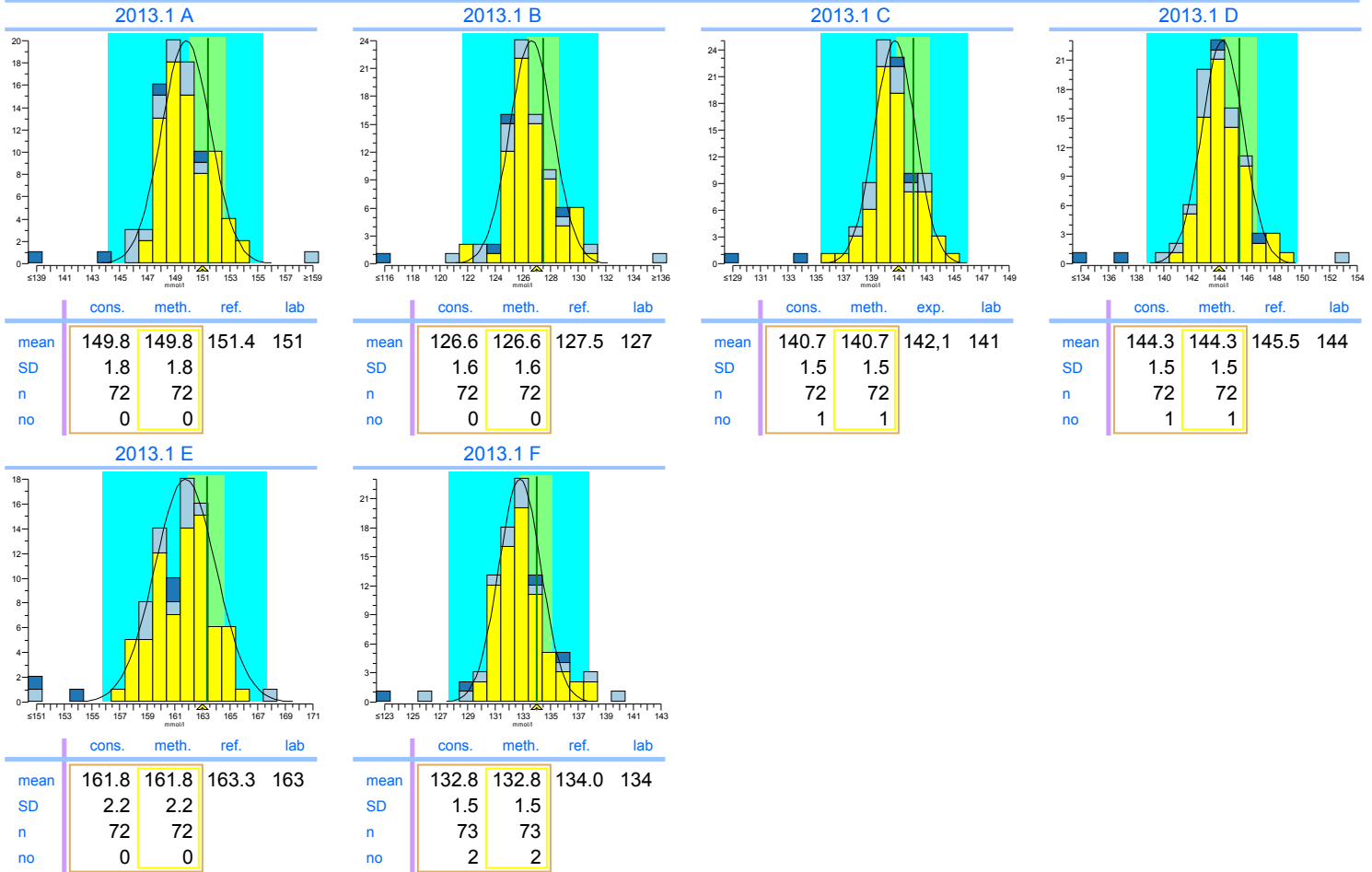
## Sodium

units: mmol/l



	2013.1	cumulative
Trueness	-0.44%	-0.44%
Precision	0.43%	0.43%
Number	6	6
Outliers	0	0
Sigma-TE	1.8	1.8
Sigma-SA	6.0 <span style="background-color: green; color: white; padding: 2px;">2</span>	6.0 <span style="background-color: green; color: white; padding: 2px;">2</span>
Score pictogram		
Regression line	$0.0 + 0.996.x$	$0.0 + 0.996.x$

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



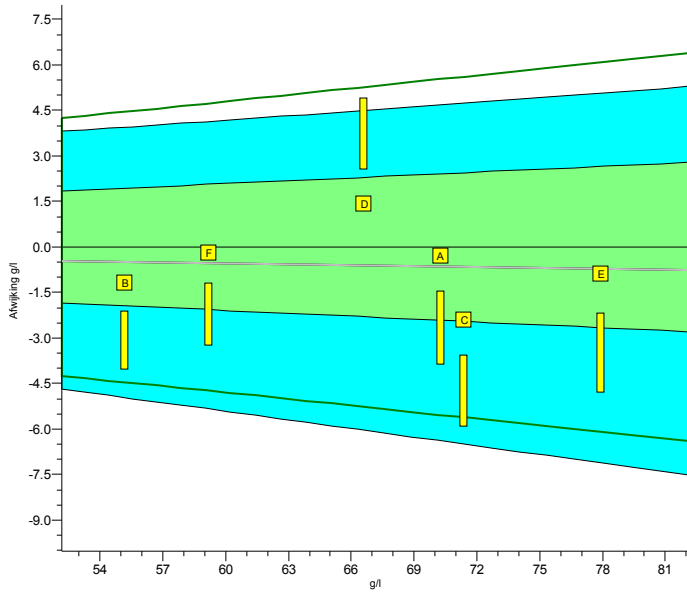
Legend



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

# INPUTS 2013.1

Total Protein

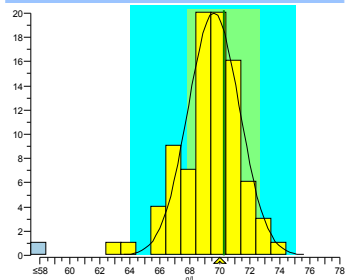
units: g/l



	2013.1	cumulative
Trueness	-0.90%	-0.90%
Precision	1.9%	1.9%
Number	6	6
Outliers	0	0
Sigma-TE	2.1	2.1
Sigma-SA	5.3 <span style="background-color: #008000; color: white; padding: 2px;">2</span>	5.3 <span style="background-color: #008000; color: white; padding: 2px;">2</span>
Score pictogram		
Regression line	$0.0 + 0.991.x$	$0.0 + 0.991.x$

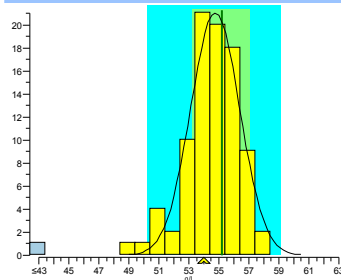
Consensus group Biureet  
Method Biurete, automatic

2013.1 A



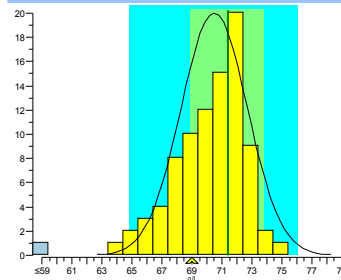
	cons.	meth.	ref.	lab
mean	69.6	69.6	70.3	70
SD	1.7	1.7		
n	88	88		
no	2	2		

2013.1 B



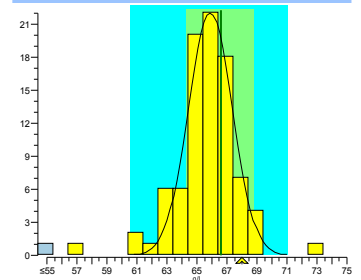
	cons.	meth.	ref.	lab
mean	54.8	54.8	55.2	54
SD	1.6	1.6		
n	88	88		
no	1	1		

2013.1 C



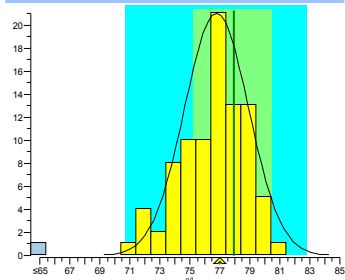
	cons.	meth.	exp.	lab
mean	70.5	70.5	71.4	69
SD	2.2	2.2		
n	87	87		
no	0	0		

2013.1 D



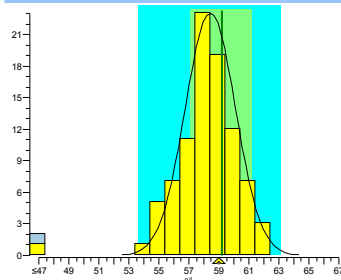
	cons.	meth.	ref.	lab
mean	65.9	65.9	66.6	68
SD	1.5	1.5		
n	88	88		
no	4	4		

2013.1 E



	cons.	meth.	ref.	lab
mean	76.8	76.8	77.9	77
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	59
SD	1.7	1.7		
n	89	89		
no	1	1		

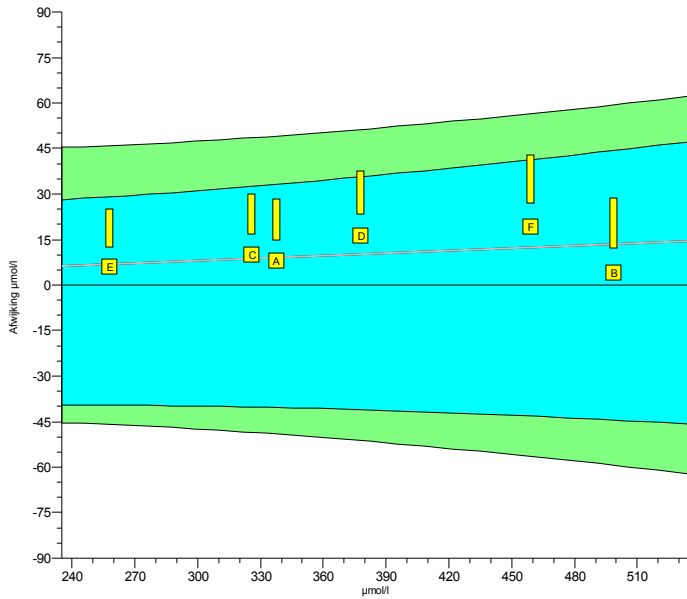
Legend



Biurete, automatic     Other methods

# INPUTS 2013.1

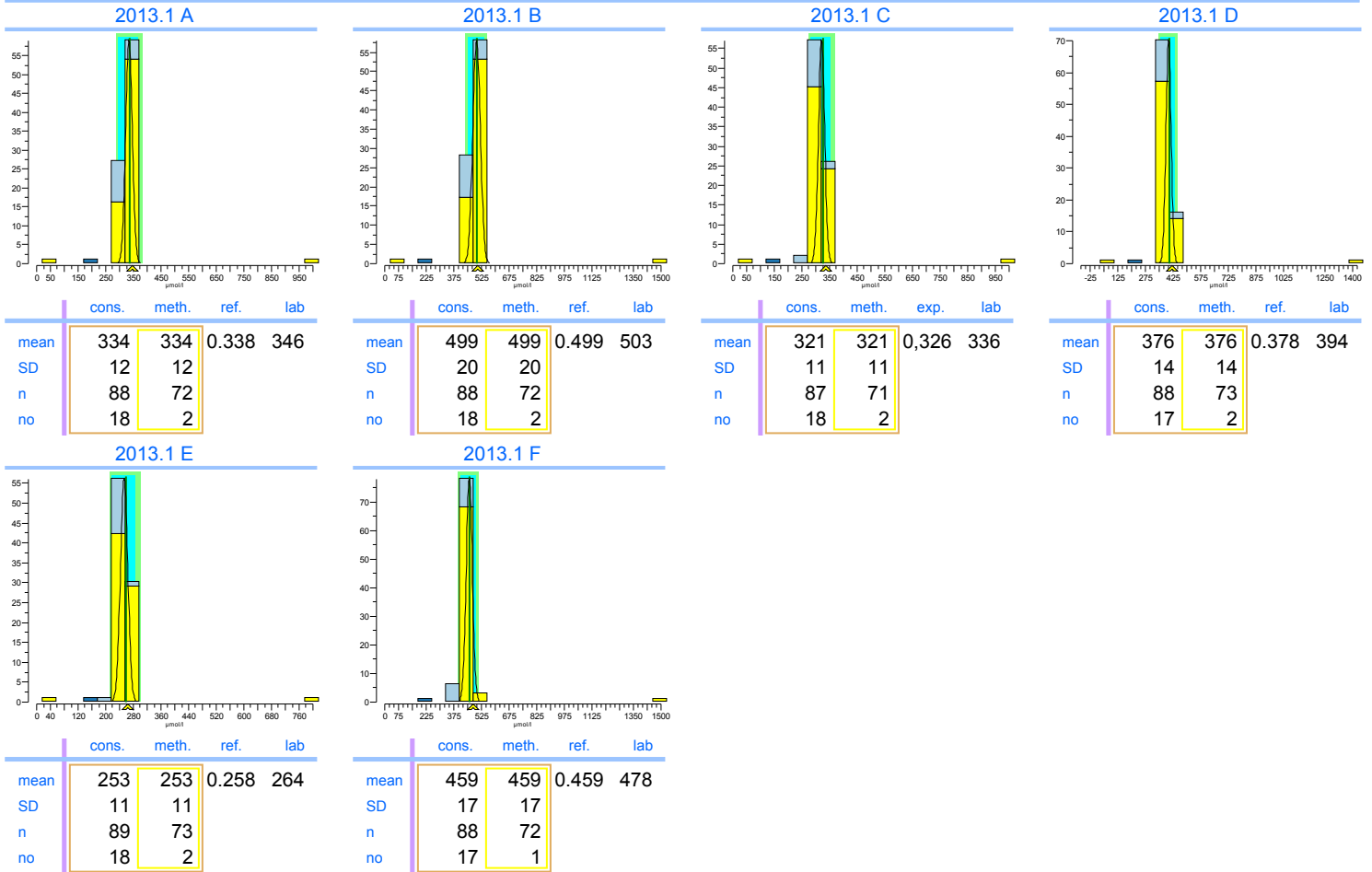
## Urate

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



	2013.1	cumulative
Trueness	+2.8%	+2.8%
Precision	1.8%	1.8%
Number	6	6
Outliers	0	0
Sigma-TE	6.0 <span style="border: 1px solid black; padding: 0 2px;">2</span>	6.0 <span style="border: 1px solid black; padding: 0 2px;">2</span>
Sigma-SA	5.7	5.7
Score pictogram		
Regression line	$0 + 1.027 \cdot x$	$0 + 1.027 \cdot x$

Consensus group	Colorimetrisch
Method	Uricase, colorim., automatic



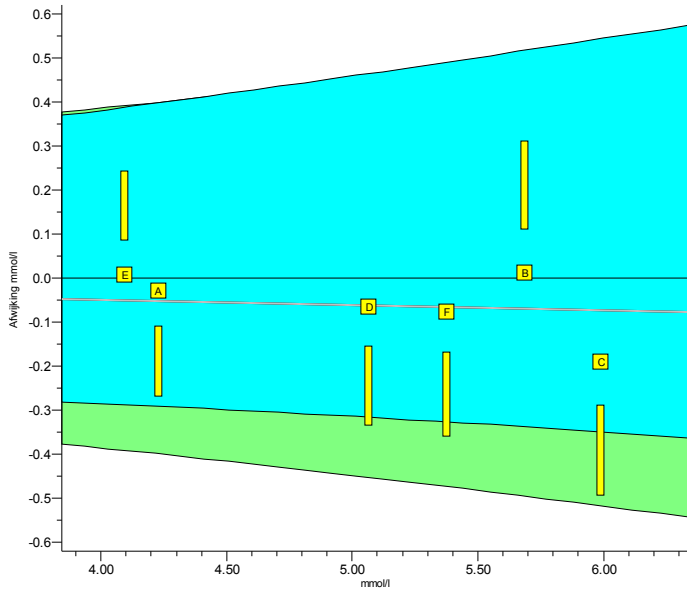
Legend

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

# INPUTS 2013.1

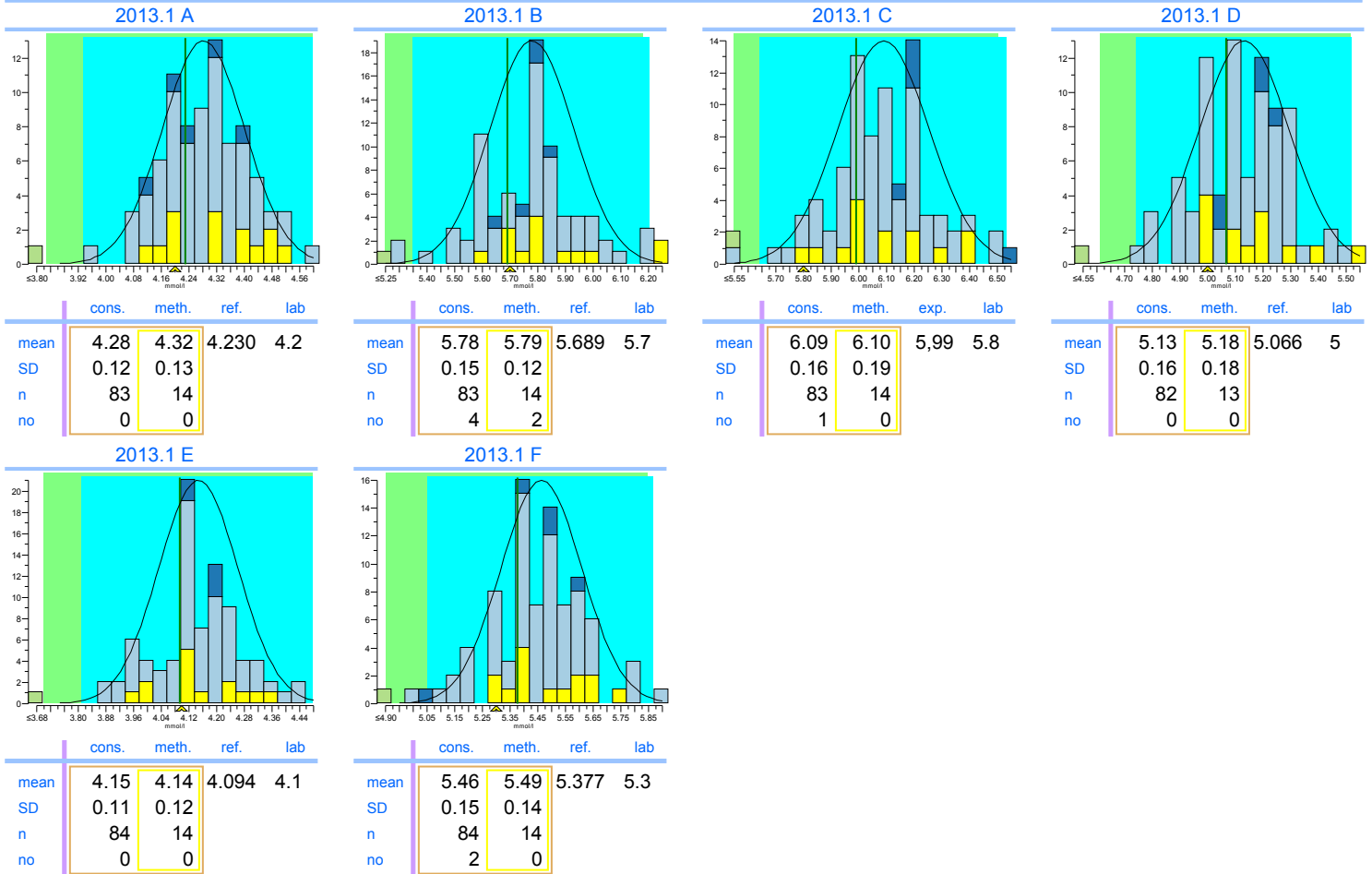
## Cholesterol

units: mmol/l



	2013.1	cumulative
Trueness	-1.1%	-1.1%
Precision	1.4%	1.4%
Number	6	6
Outliers	0	0
Sigma-TE	6.0 <span style="border: 1px solid green; padding: 2px;">2</span>	6.0 <span style="border: 1px solid green; padding: 2px;">2</span>
Sigma-SA	5.3	5.3
Score pictogram		
Regression line	<u>0.00 + 0.988.x</u>	<u>0.00 + 0.988.x</u>

Consensus group: Enzymatisch  
Method: Enzymatic, automatic, kinetic



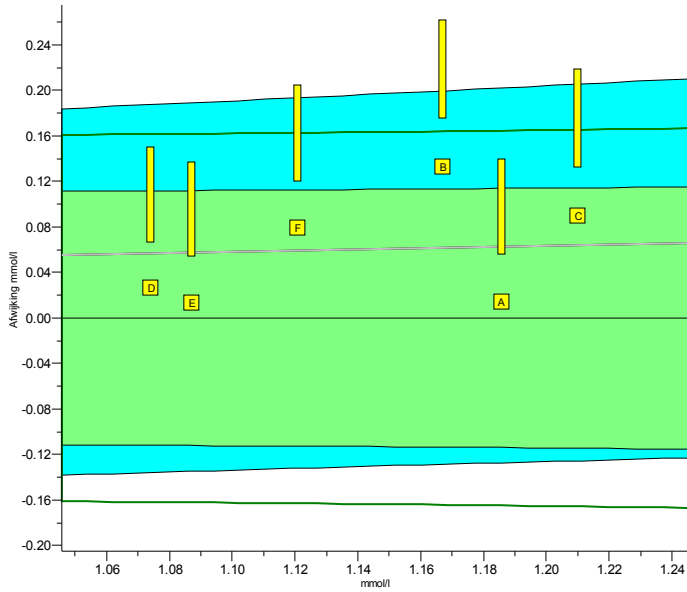
Legend

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

# INPUTS 2013.1

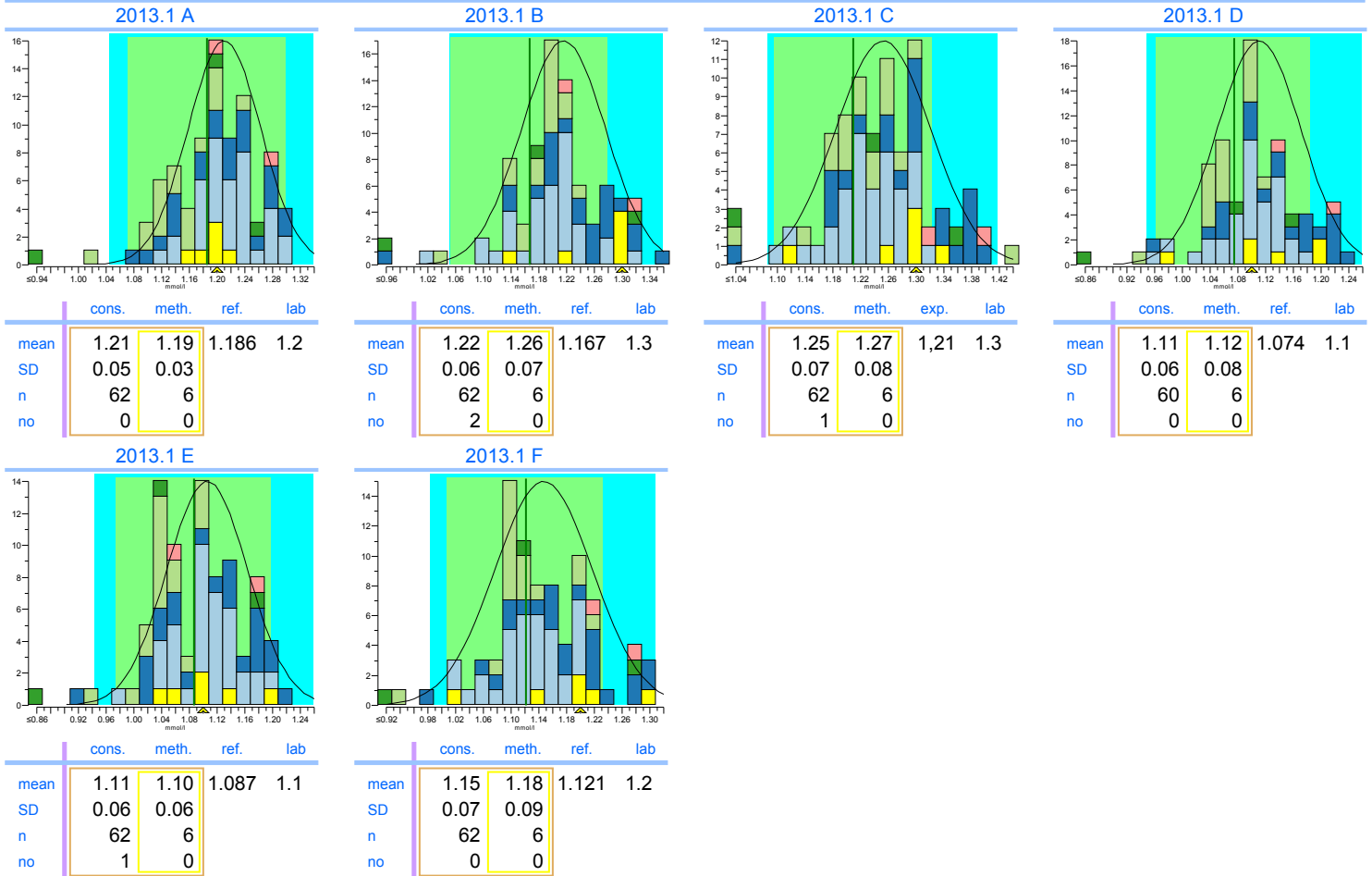
## HDL-Cholesterol

units: mmol/l



	2013.1	cumulative
Trueness	+5.2%	+5.2%
Precision	3.4%	3.4%
Number	6	6
Outliers	0	0
Sigma-TE	2.4	2.4
Sigma-SA	3.9	3.9
Score pictogram		
Regression line	$0.00 + 1.053.x$	$0.00 + 1.053.x$

Consensus group	Direct
Method	Catalase method (Denka Seiken)



Legend

- Catalase method (Denka Seiken)
- PEG modified enzyme, PEGME (Kyowa Medex)
- Accelerator Selective Detergent ("Ultra HDL")
- Immuno-inhibition
- Overige methoden
- Precipitation Technique