



MUSE

3710 dr. C. Evans  
UHW  
-

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	



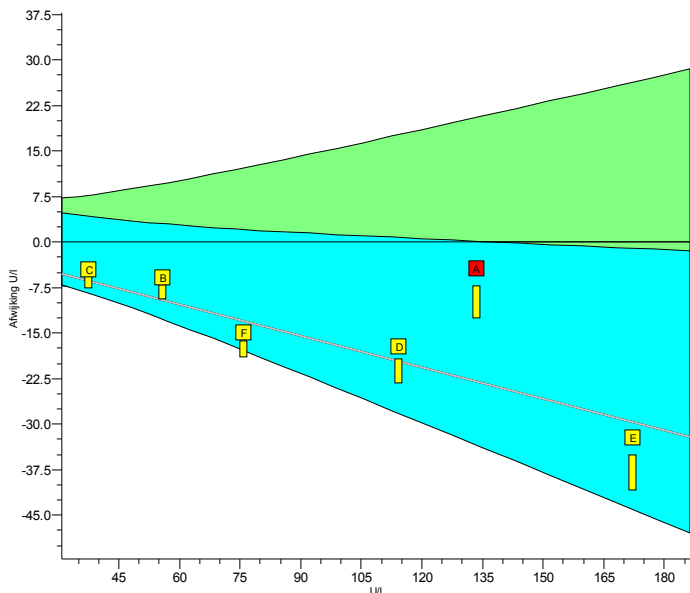
# INPUTS 2013.1

Analyte		Trueness				Precision		Performance			
		your mean	ref.	cons.	SDtI	your prec.	SDbl	this survey	PS	cumulative PSc	
ALAT	U/l	76.2	91.2	79.8	10.1	1.5	2.7		1		1
Alk. Phosphatase	U/l	175	188	173	15	4	2		2		2
Amylase	U/l	189	207	201	8	2	2		2		2
ASAT	U/l	69.5	78.6	71.5	6.8	1.0	1.6		1		1
Calcium	mmol/l	2.55	2.46	2.47	0.07	0.03	0.02		1		1
Chloride	mmol/l	102.0	100.0	100.8	1.8	0.9	0.9		1		1
CK	U/l	256	244	253	18	4	3		2		2
Creatinine	µmol/l	149.3	149.1	150.9	7.1	3.9	4.2		1		1
eGFR (F, 55, white)	ml/min/1,73m <sup>2</sup>	31.0	32.0	32.3	2.7	0.5	1.5		2		2
Gamma-GT	U/l	79.8	87.7	86.3	8.6	0.8	1.2		2		2
Glucose	mmol/l	14.95	13.93	14.19	0.44	0.20	0.18		0		0
LD	U/l	531	532	523	33	6	9		2		2
Magnesium	mmol/l	1.14	1.13	1.14	0.04	0.01	0.02		2		2
Potassium	mmol/l	5.38	5.39	5.30	0.10	0.02	0.04		2		2
Sodium	mmol/l	143.0	144.0	142.7	1.7	0.6	0.9		2		2
Total Protein	g/l	66.3	66.8	66.0	1.8	0.4	0.7		2		2
Urate	µmol/l	387	376	374	15	5	4		2		2
Cholesterol	mmol/l	5.28	5.07	5.15	0.14	0.04	0.05		2		2
HDL-Cholesterol	mmol/l	1.26	1.14	1.17	0.06	0.02	0.03		1		1
<b>Total :</b>									<b>30</b>		<b>30</b>

# INPUTS 2013.1

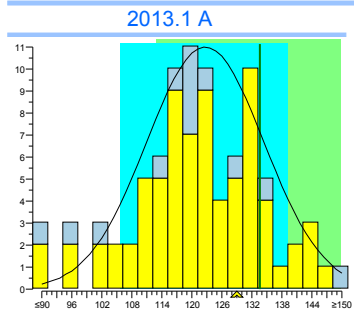
ALAT

units: U/l

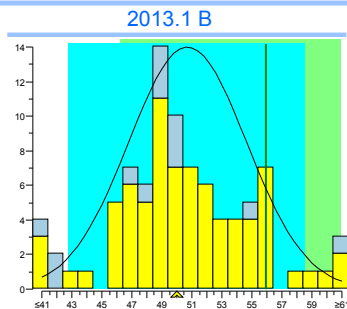


	2013.1	cumulative
Trueness	-16%	-16%
Precision	1.9%	1.9%
Number	6	6
Outliers	1	1
Sigma-TE	2.5 <span style="background-color: black; color: white; padding: 0 2px;">1</span>	2.5 <span style="background-color: black; color: white; padding: 0 2px;">1</span>
Sigma-SA	0.9	0.9
Score pictogram		
Regression line	$0.0 + 0.827 \cdot x$	$0.0 + 0.827 \cdot x$

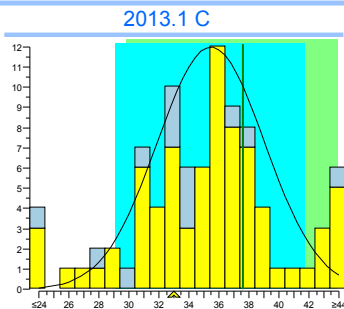
Consensus group IFCC traceerbaar  
Method IFCC traceable



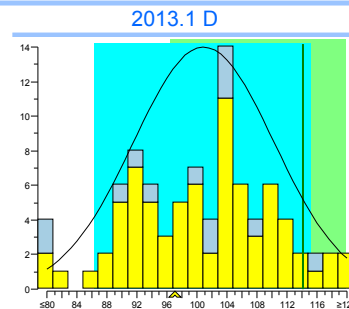
	cons.	meth.	ref.	lab
mean	122.7	122.7	133.5	129
SD	11.8	11.8		
n	75	75		
no	1	1		



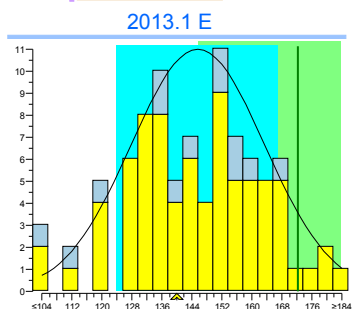
	cons.	meth.	ref.	lab
mean	50.7	50.7	55.9	50
SD	3.9	3.9		
n	76	76		
no	3	3		



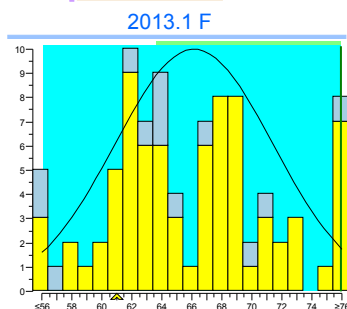
	cons.	meth.	exp.	lab
mean	35.5	35.5	37,6	33
SD	3.6	3.6		
n	76	76		
no	7	7		



	cons.	meth.	ref.	lab
mean	100.9	100.9	114.2	97
SD	9.4	9.4		
n	76	76		
no	3	3		



	cons.	meth.	ref.	lab
mean	146	146	172.2	140
SD	18	18		
n	77	77		
no	1	1		



	cons.	meth.	ref.	lab
mean	66.1	66.1	75.9	61
SD	5.3	5.3		
n	77	77		
no	3	3		

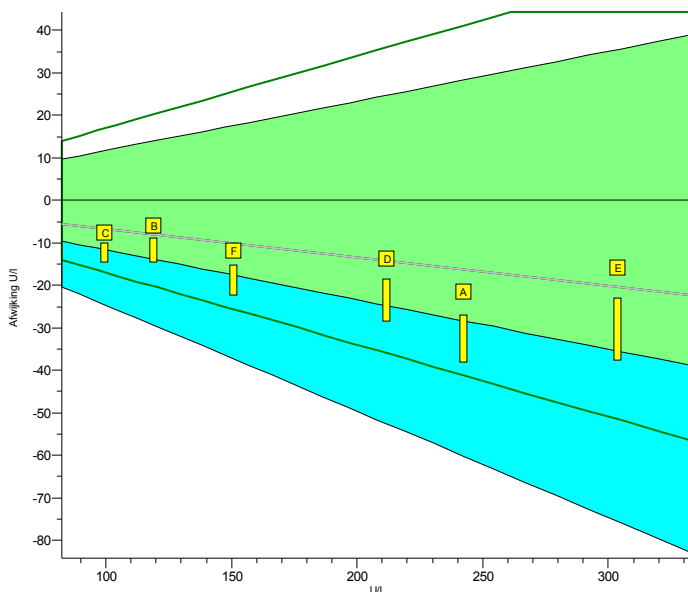
Legend



  IFCC traceable      IFCC non-traceable

# INPUTS 2013.1

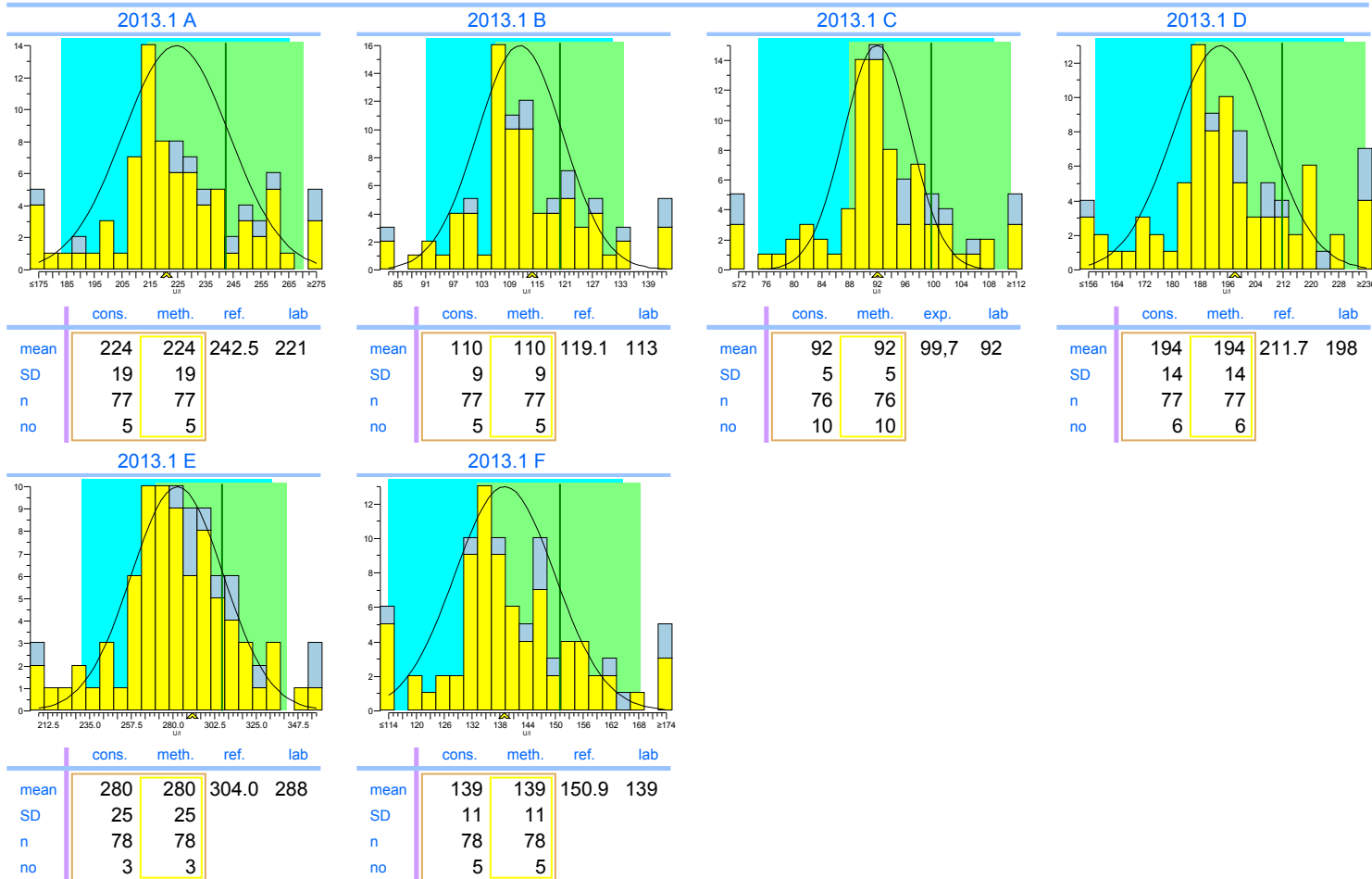
Alk. Phosphatase

units: U/l



	2013.1	cumulative
Trueness	-6.8%	-6.8%
Precision	2.1%	2.1%
Number	6	6
Outliers	0	0
Sigma-TE	3.1	3.1
Sigma-SA	5.7 <span style="background-color: green; color: white;">2</span>	5.7 <span style="background-color: green; color: white;">2</span>
Score pictogram		
Regression line	$0 + 0.933.x$	$0 + 0.933.x$

Consensus group IFCC traceerbaar  
Method IFCC traceable



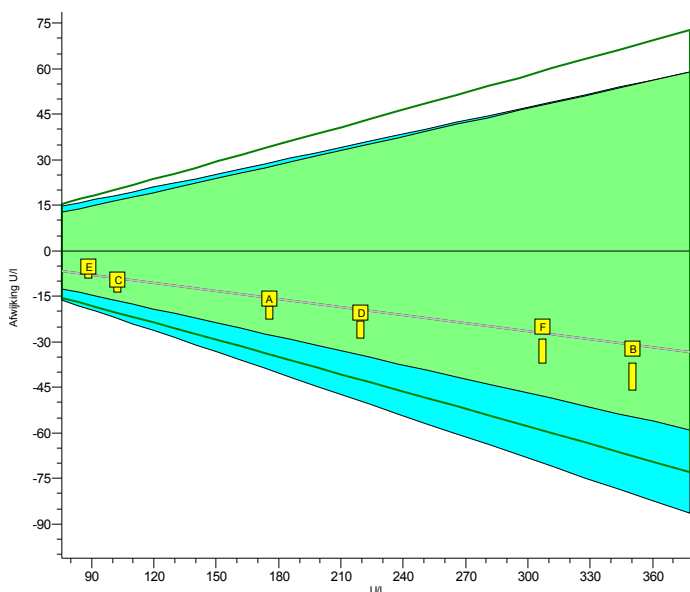
Legend

IFCC traceable     IFCC non-traceable

# INPUTS 2013.1

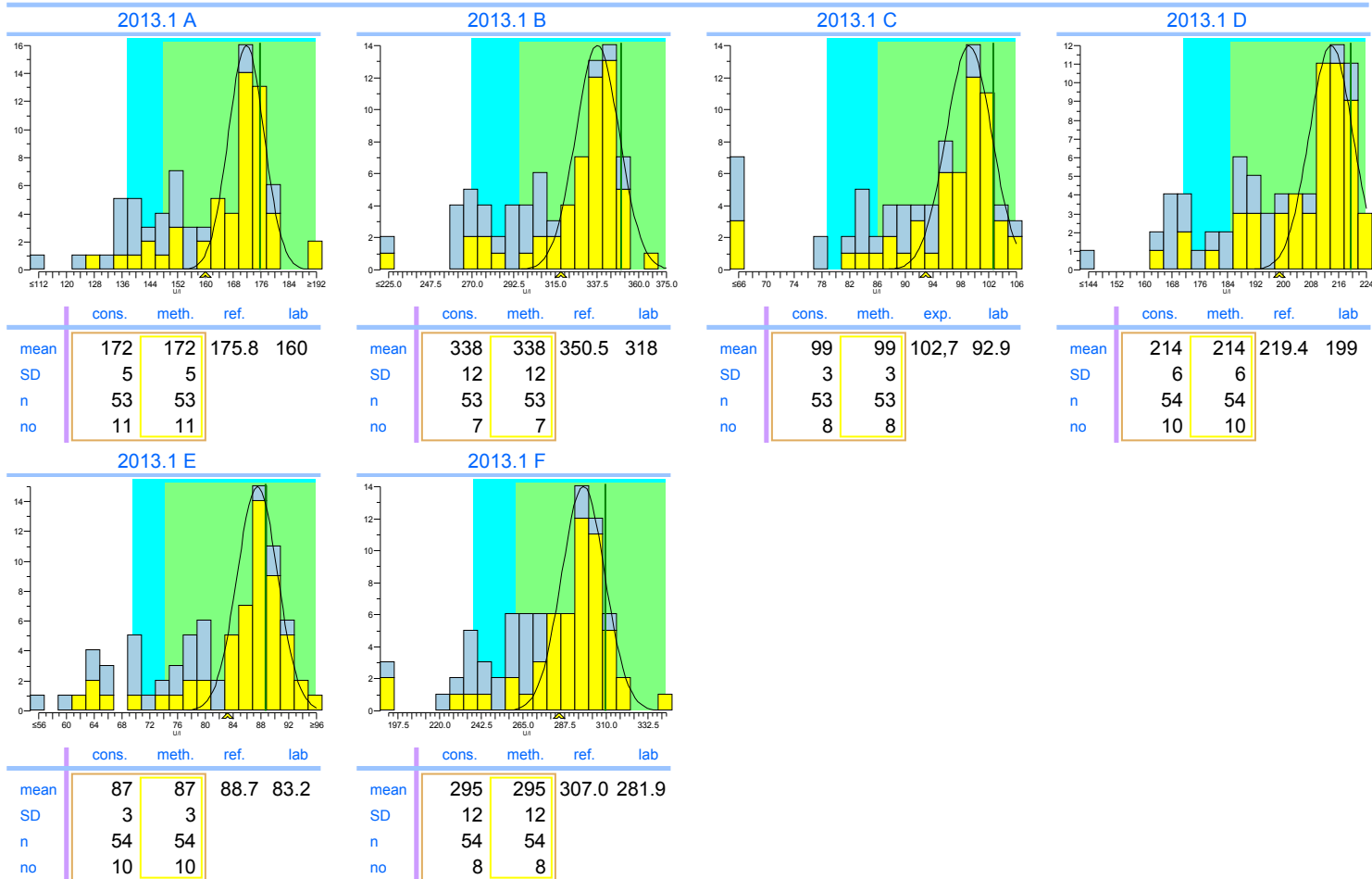
## Amylase

units: U/l



	2013.1	cumulative
Trueness	-8.8%	-8.8%
Precision	1.1%	1.1%
Number	6	6
Outliers	0	0
Sigma-TE	6.0	6.0
Sigma-SA	6.0	6.0
Score pictogram		
Regression line	$0 + 0.911 \cdot x$	$0 + 0.911 \cdot x$

Consensus group IFCC traceerbaar  
Method IFCC traceable



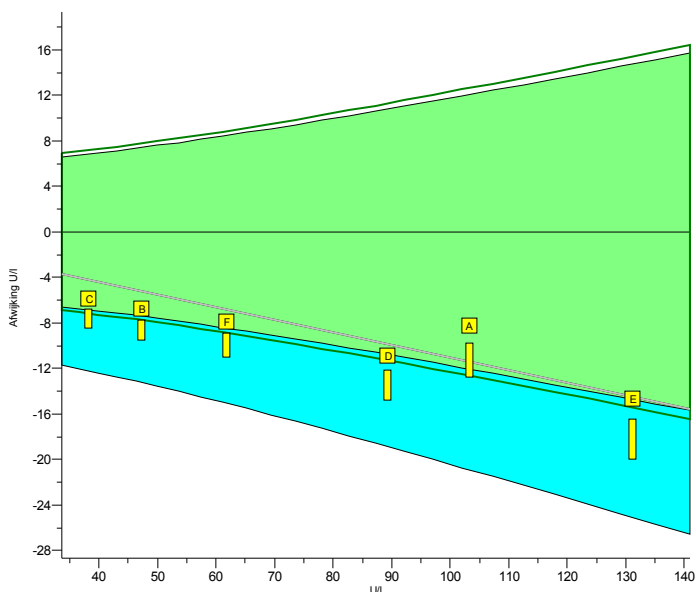
Legend



IFCC traceable IFCC non-traceable

# INPUTS 2013.1

ASAT

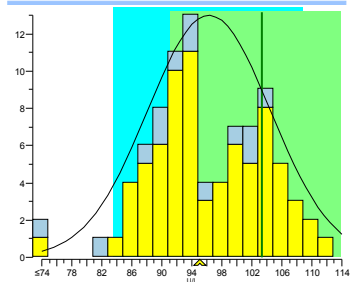
units: U/I



	2013.1	cumulative
Trueness	-12%	-12%
Precision	1.4%	1.4%
Number	6	6
Outliers	0	0
Sigma-TE	1.7	1.7
Sigma-SA	2.2 <span style="background-color: green; color: white;">1</span>	2.2 <span style="background-color: green; color: white;">1</span>
Score pictogram		
Regression line	$0.0 + 0.889x$	$0.0 + 0.889x$

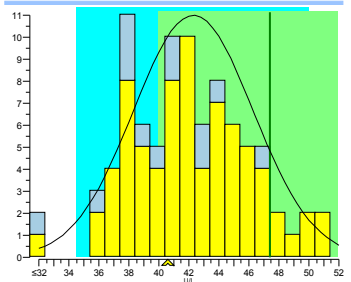
Consensus group IFCC traceerbaar  
Method IFCC traceable

2013.1 A



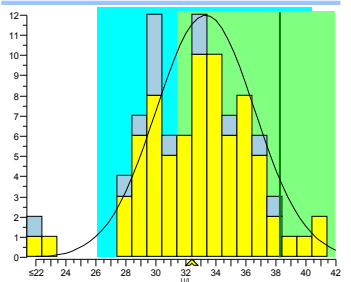
	cons.	meth.	ref.	lab
mean	96.3	96.3	103.3	95
SD	8.2	8.2		
n	75	75		
no	1	1		

2013.1 B



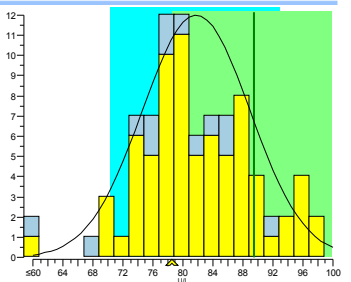
	cons.	meth.	ref.	lab
mean	42.3	42.3	47.4	40.6
SD	4.0	4.0		
n	75	75		
no	1	1		

2013.1 C



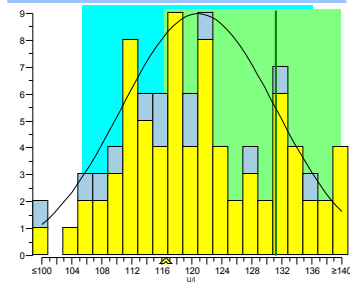
	cons.	meth.	exp.	lab
mean	33.3	33.3	38,3	32.4
SD	3.3	3.3		
n	75	75		
no	2	2		

2013.1 D



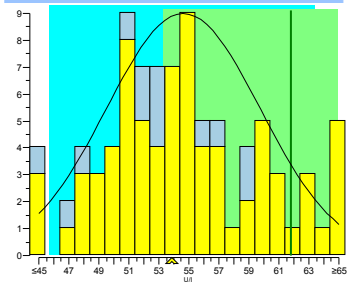
	cons.	meth.	ref.	lab
mean	81.8	81.8	89.4	78.5
SD	7.2	7.2		
n	74	74		
no	1	1		

2013.1 E



	cons.	meth.	ref.	lab
mean	120.9	120.9	131.2	116.5
SD	10.3	10.3		
n	76	76		
no	1	1		

2013.1 F



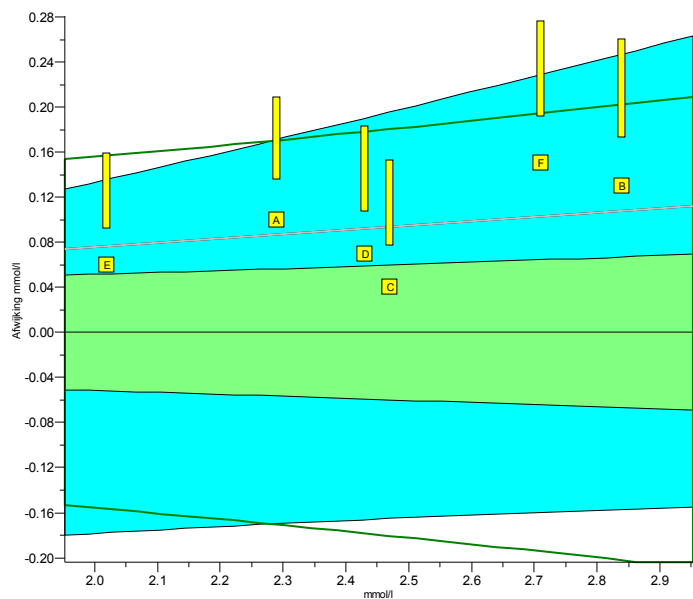
	cons.	meth.	ref.	lab
mean	54.6	54.6	61.8	53.9
SD	5.1	5.1		
n	76	76		
no	2	2		





Legend  
 IFCC traceable  
 IFCC non-traceable

# INPUTS 2013.1

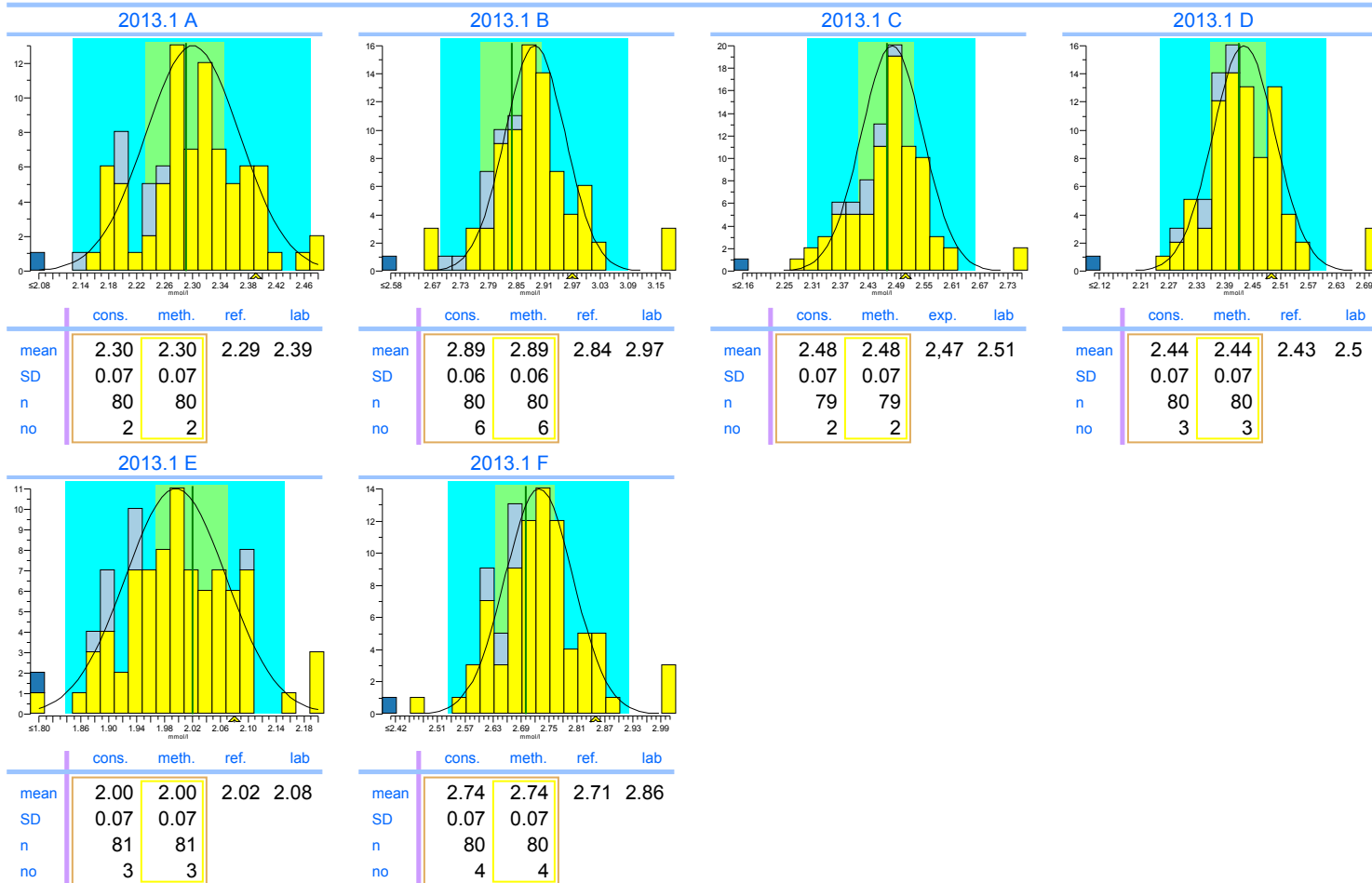
## Calcium

units: mmol/l

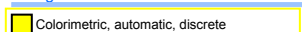
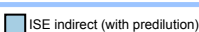
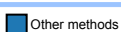


	2013.1	cumulative
Trueness	+3.7%	+3.7%
Precision	1.3%	1.3%
Number	6	6
Outliers	0	0
Sigma-TE	-0.2	-0.2
Sigma-SA	3.8 	3.8 
Score pictogram		
Regression line	<u>0.00 + 1.038.x</u>	<u>0.00 + 1.038.x</u>

Consensus group	Colorimetrisch
Method	Colorimetric, automatic, discrete



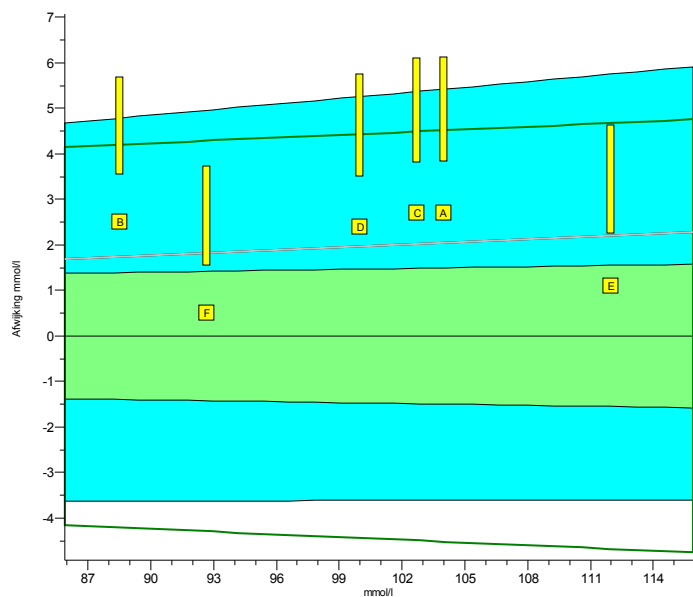
Legend





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

# INPUTS 2013.1

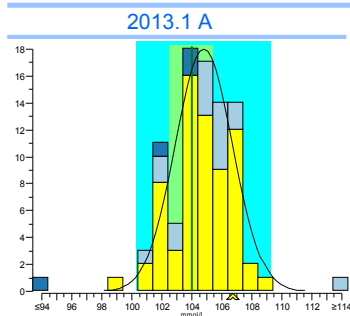
Chloride

units: mmol/l

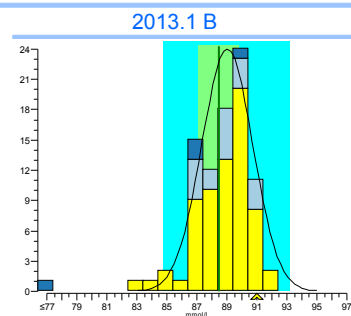


	2013.1	cumulative
Trueness	+2.0%	+2.0%
Precision	0.92%	0.92%
Number	6	6
Outliers	0	0
Sigma-TE	0.2	0.2
Sigma-SA	3.5 	3.5 
Score pictogram		
Regression line	$0.0 + 1.020 \cdot x$	$0.0 + 1.020 \cdot x$

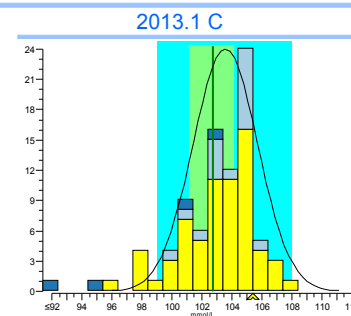
Consensus group ISE/Colorimetrie  
Method ISE indirect (with predilution)



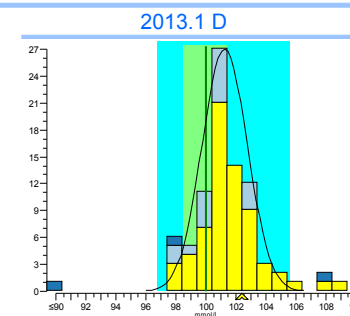
	cons.	meth.	ref.	lab
mean	104.8	104.8	104	106.7
SD	1.9	1.8		
n	88	67		
no	3	1		



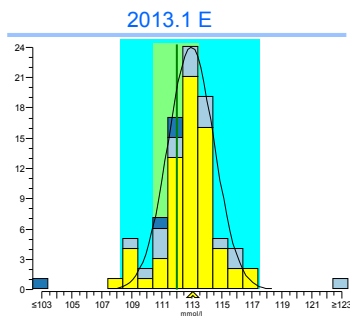
	cons.	meth.	ref.	lab
mean	89.0	89.0	88.5	91
SD	1.7	1.7		
n	88	67		
no	2	1		



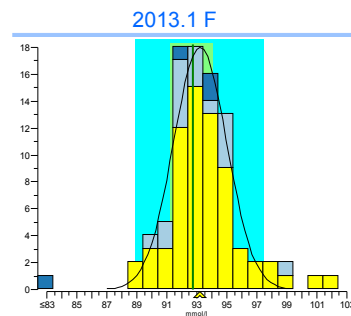
	cons.	meth.	exp.	lab
mean	103.6	103.3	102.7	105.4
SD	2.2	2.3		
n	88	67		
no	3	1		



	cons.	meth.	ref.	lab
mean	101.3	101.4	100	102.4
SD	1.5	1.5		
n	85	66		
no	6	3		



	cons.	meth.	ref.	lab
mean	113.0	113.0	112	113.1
SD	1.5	1.7		
n	88	67		
no	3	1		



	cons.	meth.	ref.	lab
mean	93.2	93.3	92.7	93.2
SD	1.8	1.9		
n	88	67		
no	5	3		

Legend

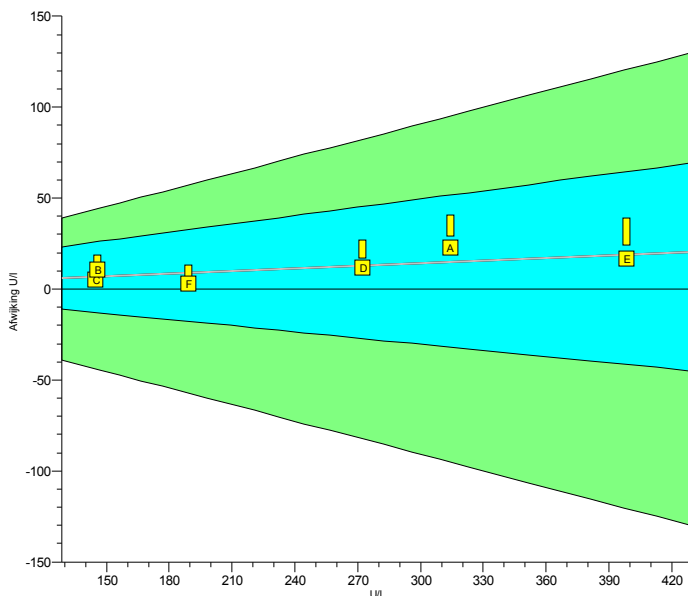
- ISE indirect (with predilution)
- ISE direct (no predilution)
- Other methods



# INPUTS 2013.1

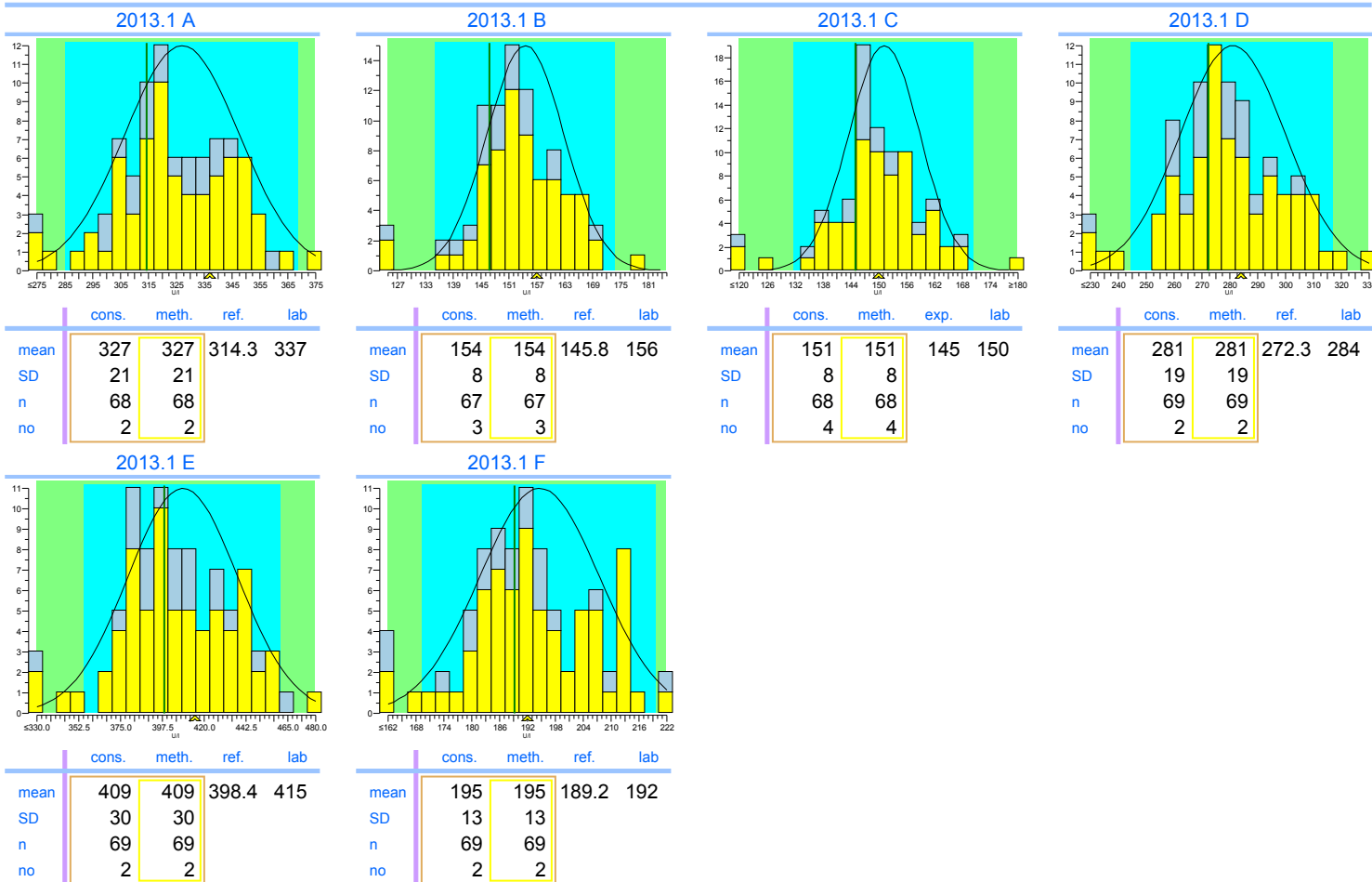
CK

units: U/l



	2013.1	cumulative
Trueness	+4.7%	+4.7%
Precision	1.5%	1.5%
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	$0 + 1.048 \cdot x$	$0 + 1.048 \cdot x$

Consensus group IFCC traceerbaar  
Method IFCC traceable



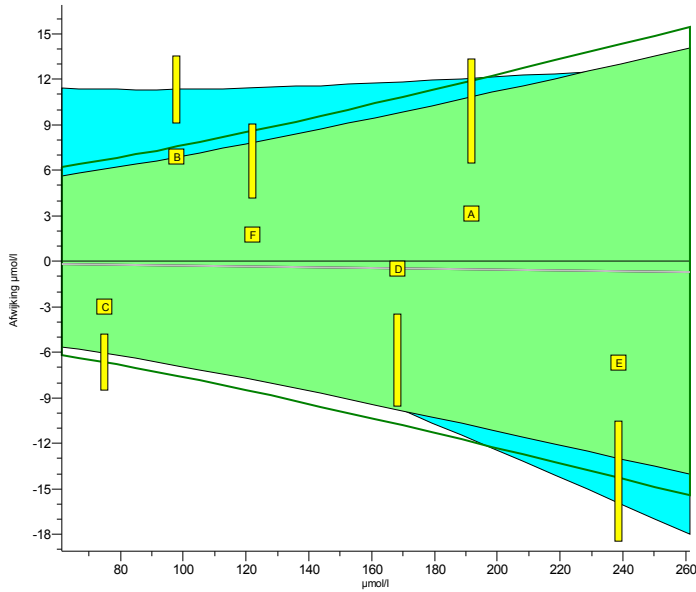
Legend

IFCC traceable     IFCC non-traceable

# INPUTS 2013.1

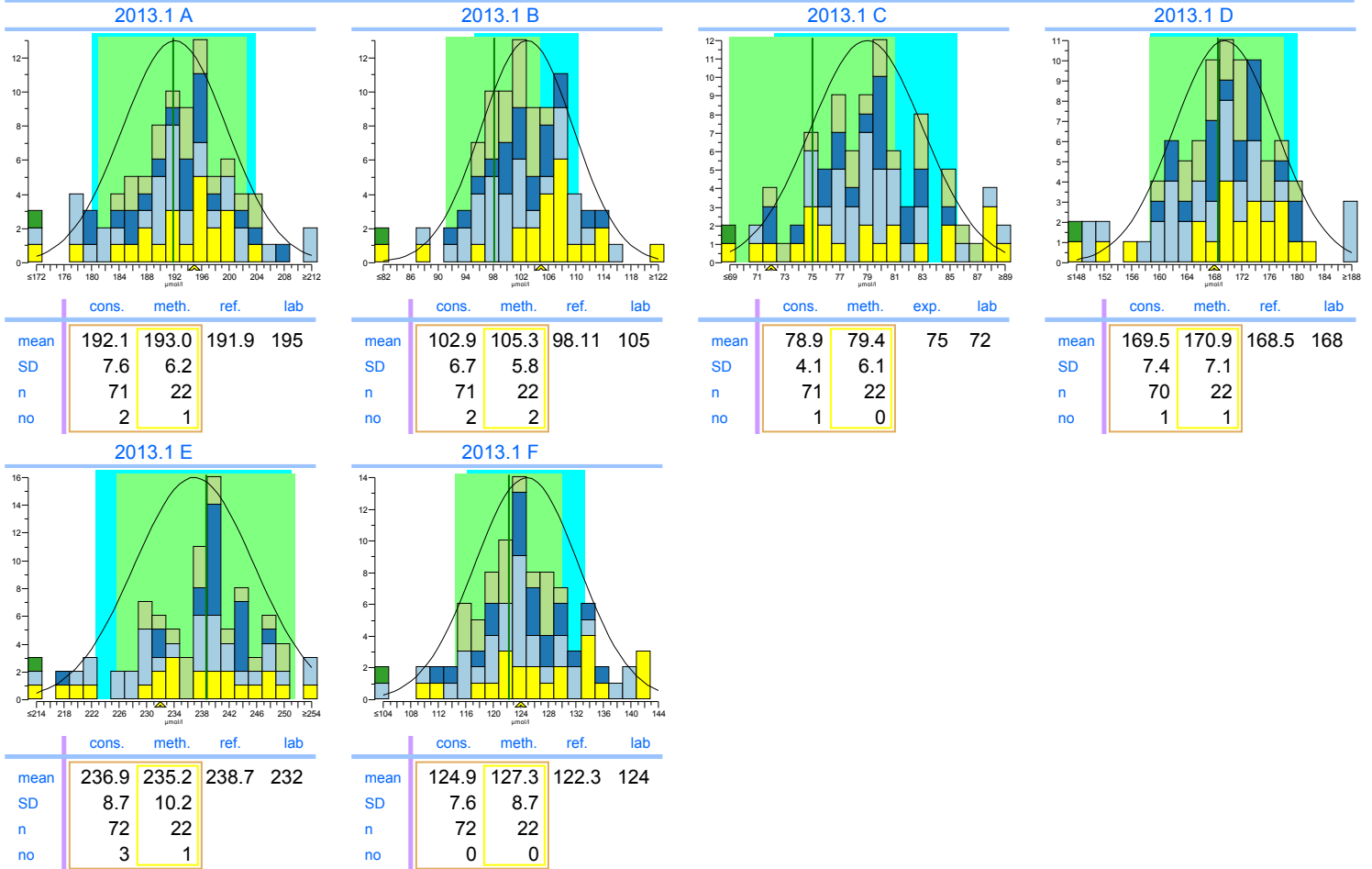
## Creatinine

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



	2013.1	cumulative
Trueness	+0.17%	+0.17%
Precision	2.6%	2.6%
Number	6	6
Outliers	0	0
Sigma-TE	3.1	3.1
Sigma-SA	3.5 <span style="background-color: green; color: white;">1</span>	3.5 <span style="background-color: green; color: white;">1</span>
Score pictogram		
Regression line	$0.0 + 0.997 \cdot x$	$0.0 + 0.997 \cdot x$

Consensus group Jaffe  
Method Alk. Picrate, kinetic

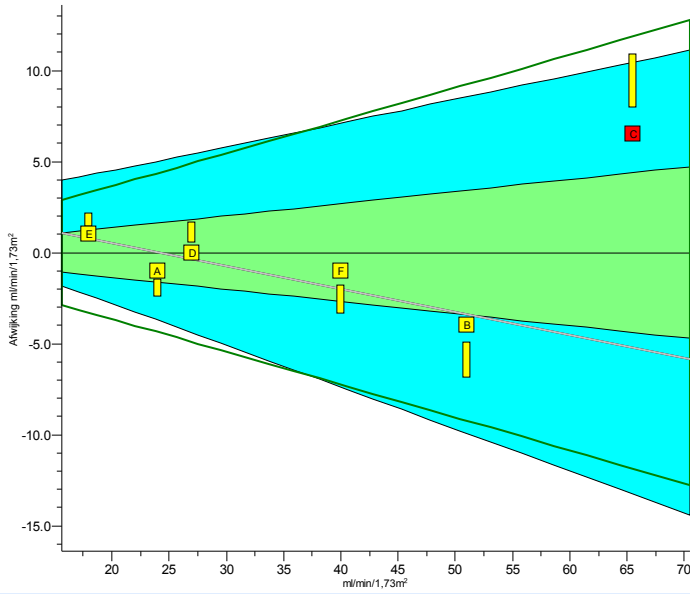




Legend  
Alk. Picrate, kinetic
Alk. Picrate, kinetic with compensation
Alk. Picrate, endpoint
Enzymatic, automatic
Other methods

# INPUTs 2013.1

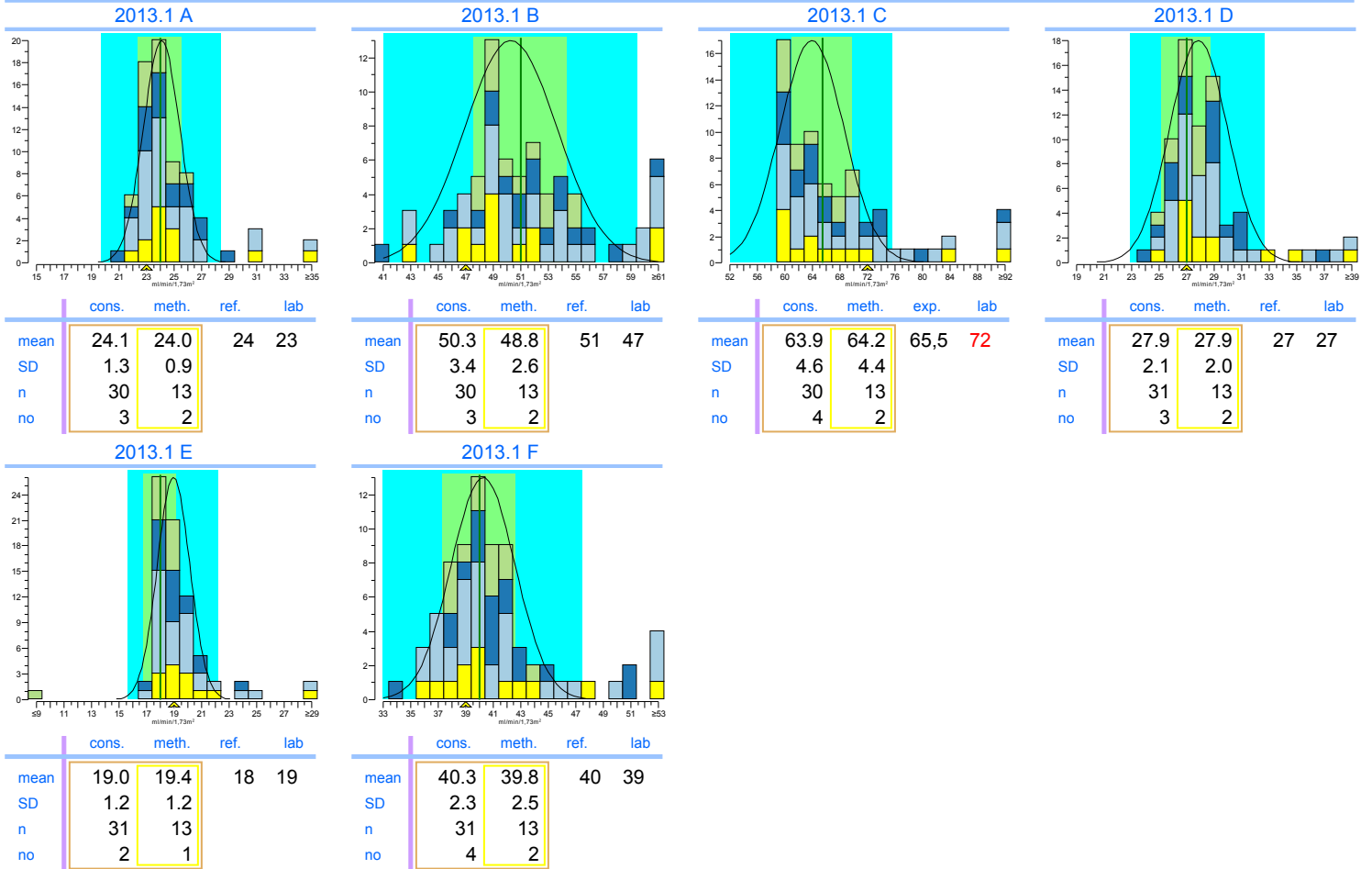
eGFR (F, 55, white)

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



	2013.1	cumulative
Trueness	-3.1%	-3.1%
Precision	1.6%	1.6%
Number	6	6
Outliers	1	1
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	$3.1 + 0.873.x$	$3.1 + 0.873.x$

Consensus group Jaffe  
Method Alk. Picrate, kinetic



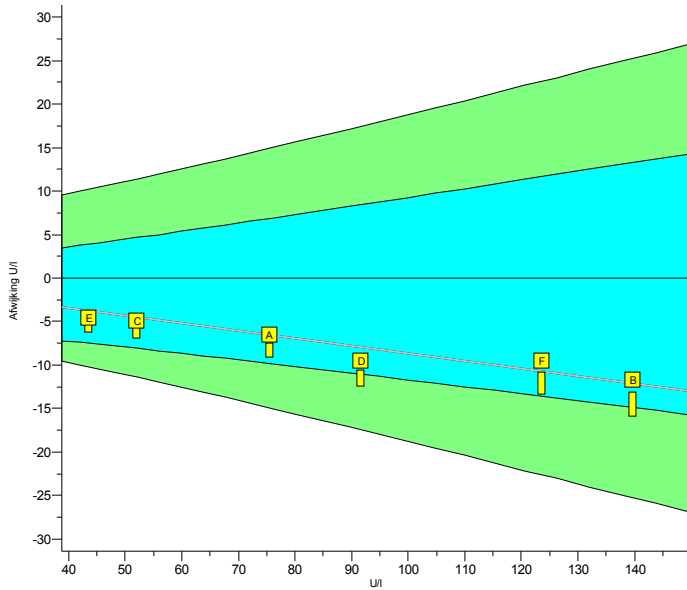
Legend

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

# INPUTS 2013.1

Gamma-GT

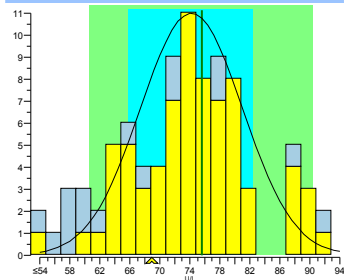
units: U/I



	2013.1	cumulative
Trueness	-9.0%	-9.0%
Precision	0.90%	0.90%
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	2.7	2.7
Score pictogram		
Regression line	$0.0 + 0.913.x$	$0.0 + 0.913.x$

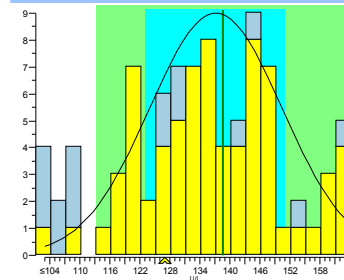
Consensus group IFCC traceerbaar  
Method IFCC traceable

2013.1 A



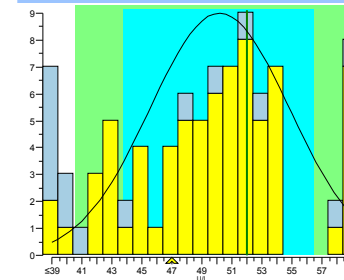
	cons.	meth.	ref.	lab
mean	74.2	74.2	75.6	69
SD	6.8	6.8		
n	72	72		
no	1	1		

2013.1 B



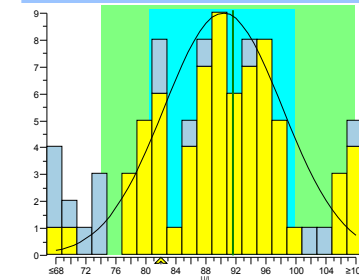
	cons.	meth.	ref.	lab
mean	138.2	138.2	139.7	128
SD	13.3	13.3		
n	72	72		
no	1	1		

2013.1 C



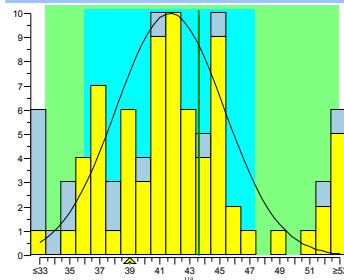
	cons.	meth.	exp.	lab
mean	50.2	50.2	52	47
SD	4.6	4.6		
n	72	72		
no	2	2		

2013.1 D



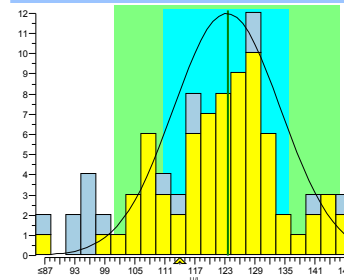
	cons.	meth.	ref.	lab
mean	90.3	90.3	91.6	82
SD	7.9	7.9		
n	71	71		
no	1	1		

2013.1 E



	cons.	meth.	ref.	lab
mean	41.7	41.7	43.6	39
SD	3.6	3.6		
n	73	73		
no	6	6		

2013.1 F



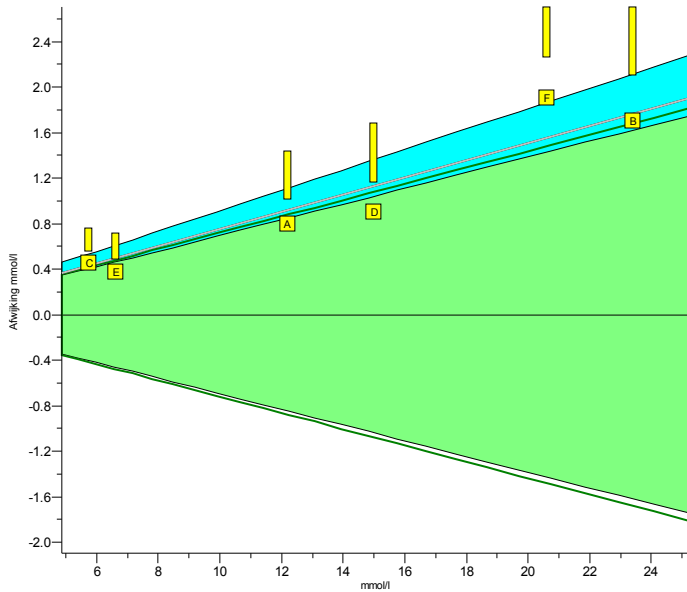
	cons.	meth.	ref.	lab
mean	123.4	123.4	123.6	114
SD	10.7	10.7		
n	73	73		
no	1	1		



Legend  
 IFCC traceable  
 IFCC non-traceable

# INPUTS 2013.1

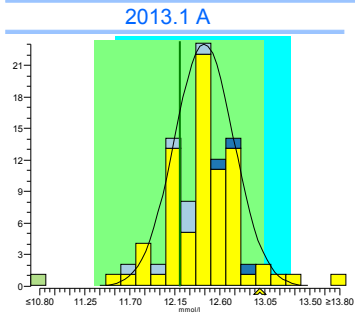
## Glucose

units: mmol/l

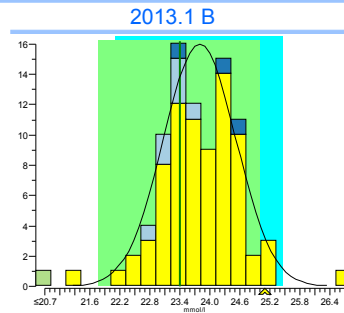


	2013.1	cumulative
Trueness	+7.3%	+7.3%
Precision	1.4%	1.4%
Number	6	6
Outliers	0	0
Sigma-TE	0.7	0.7
Sigma-SA	0.9 <span style="border: 1px solid red; padding: 2px;">0</span>	0.9 <span style="border: 1px solid red; padding: 2px;">0</span>
Score pictogram		
Regression line	<u>0.00 + 1.075.x</u>	<u>0.00 + 1.075.x</u>

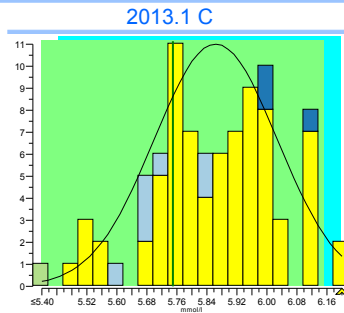
Consensus group Natte chemie  
Method Hexokinase, automatic



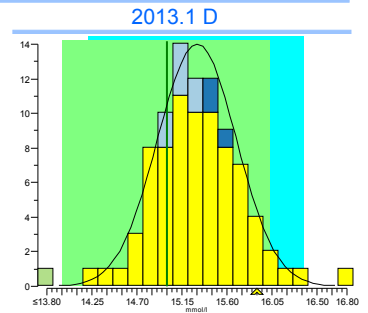
	cons.	meth.	ref.	lab
mean	12.44	12.44	12.2	13
SD	0.30	0.31		
n	88	77		
no	3	2		



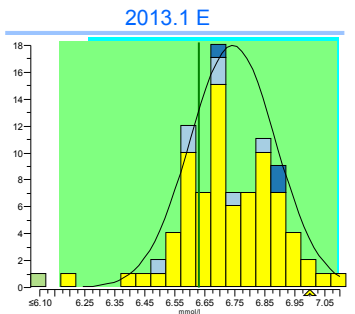
	cons.	meth.	ref.	lab
mean	23.8	23.8	23.4	25.1
SD	0.7	0.7		
n	88	77		
no	3	2		



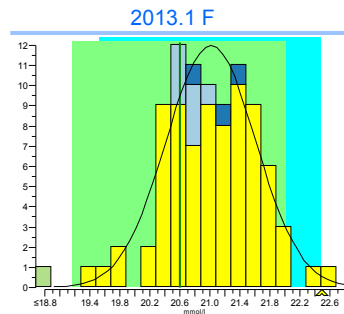
	cons.	meth.	exp.	lab
mean	5.86	5.87	5.75	6.2
SD	0.16	0.16		
n	88	77		
no	1	0		



	cons.	meth.	ref.	lab
mean	15.30	15.31	15.0	15.9
SD	0.39	0.41		
n	88	77		
no	2	1		



	cons.	meth.	ref.	lab
mean	6.74	6.75	6.63	7
SD	0.14	0.14		
n	89	78		
no	2	1		



	cons.	meth.	ref.	lab
mean	21.01	21.03	20.6	22.5
SD	0.60	0.63		
n	89	78		
no	1	0		

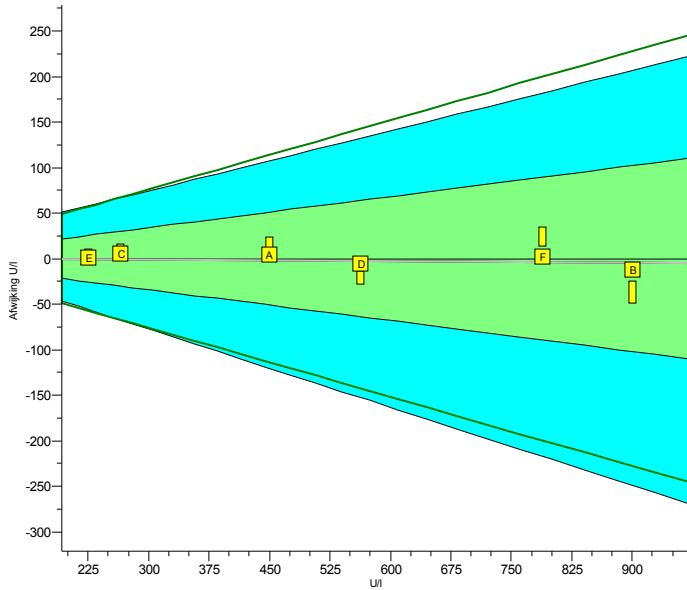
Legend

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

# INPUTS 2013.1

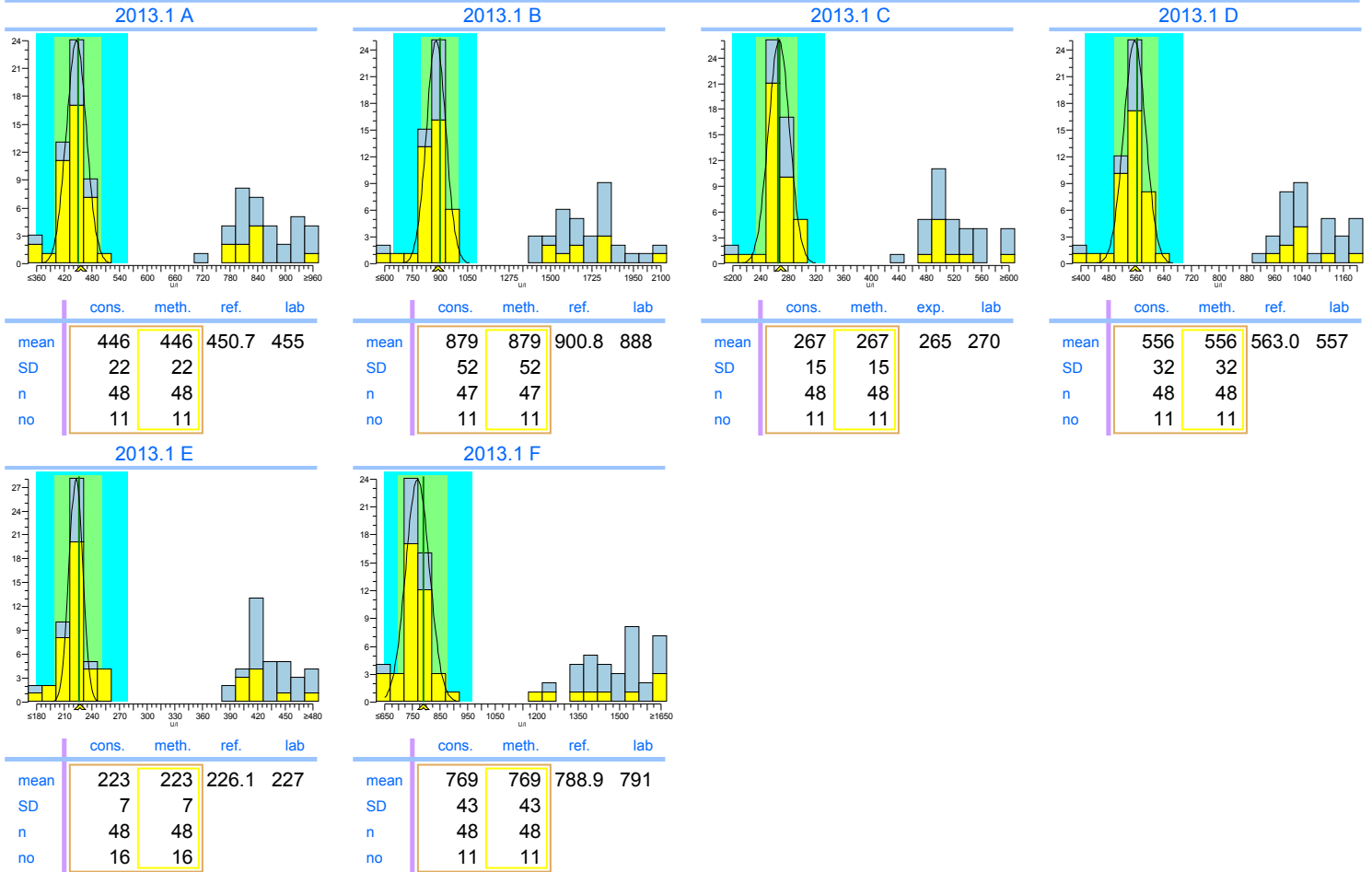
LD

units: U/I



	2013.1	cumulative
Trueness	-0.20%	-0.20%
Precision	1.1%	1.1%
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	$0 + 0.995 \cdot x$	$0 + 0.995 \cdot x$

Consensus group IFCC traceerbaar  
Method IFCC traceable

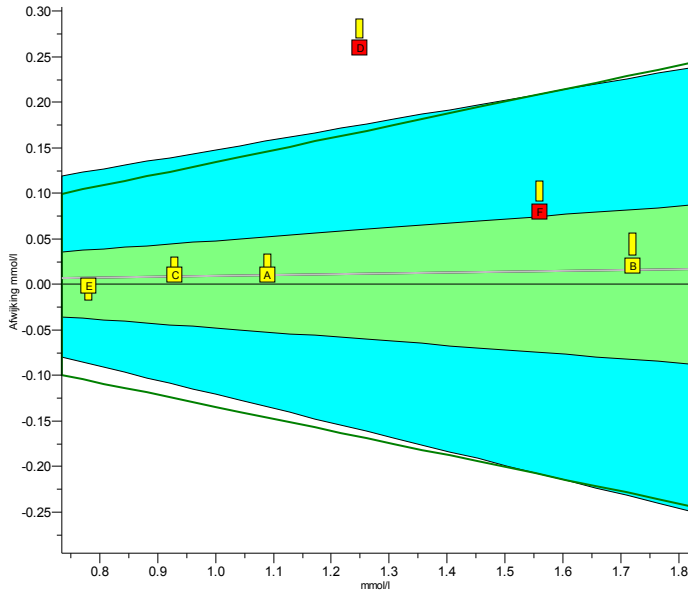


Legend  
 IFCC traceable  
 IFCC non-traceable

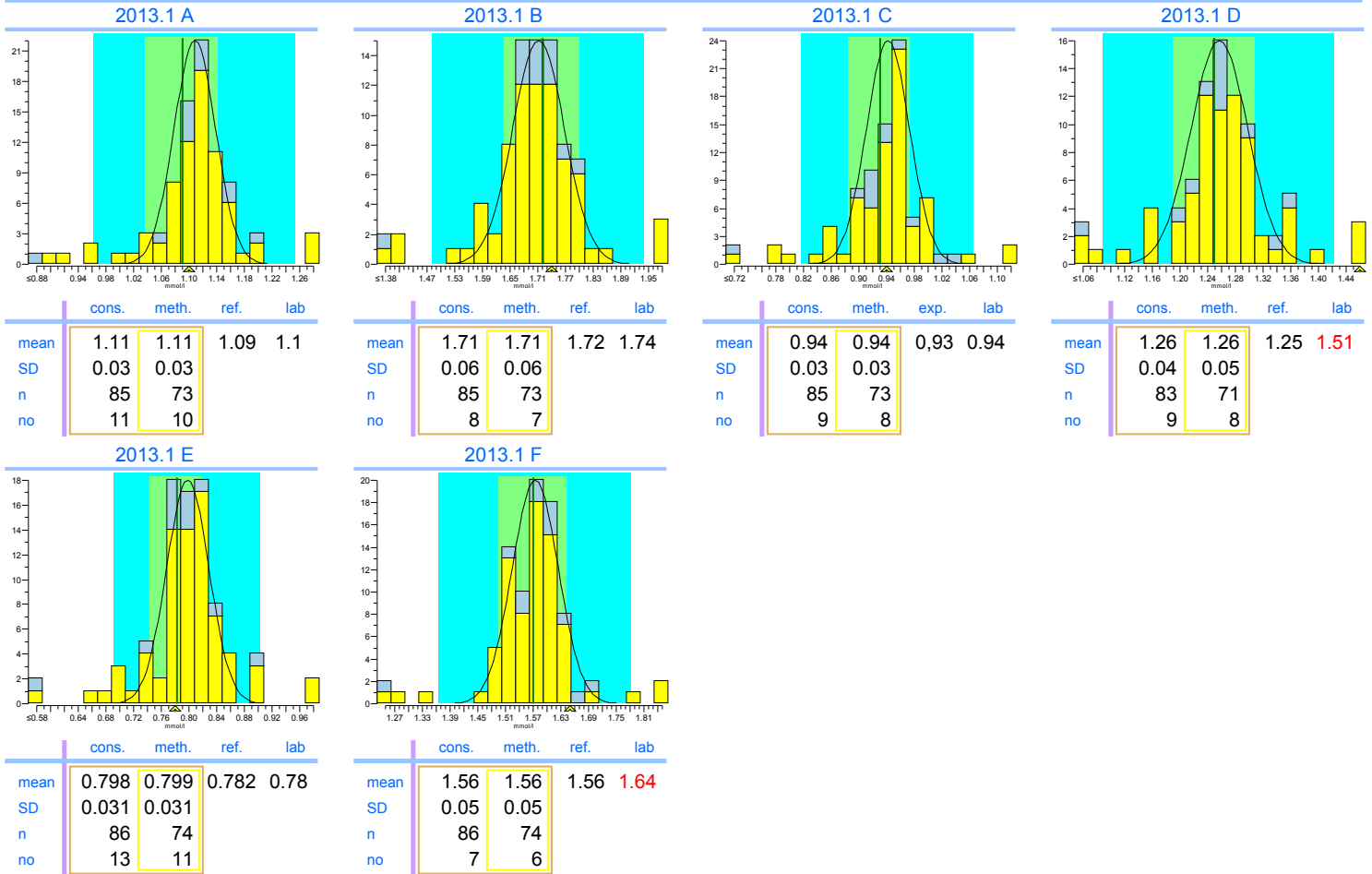
# INPUTS 2013.1

## Magnesium

units: mmol/l



	2013.1	cumulative
Trueness	+0.84%	+0.84%
Precision	0.56%	0.56%
Number	6	6
Outliers	2	2
Sigma-TE	4.8	4.8
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	<u>0.00 + 1.009.x</u>	<u>0.00 + 1.009.x</u>
Consensus group	Overall	
Method	Colorimetric	



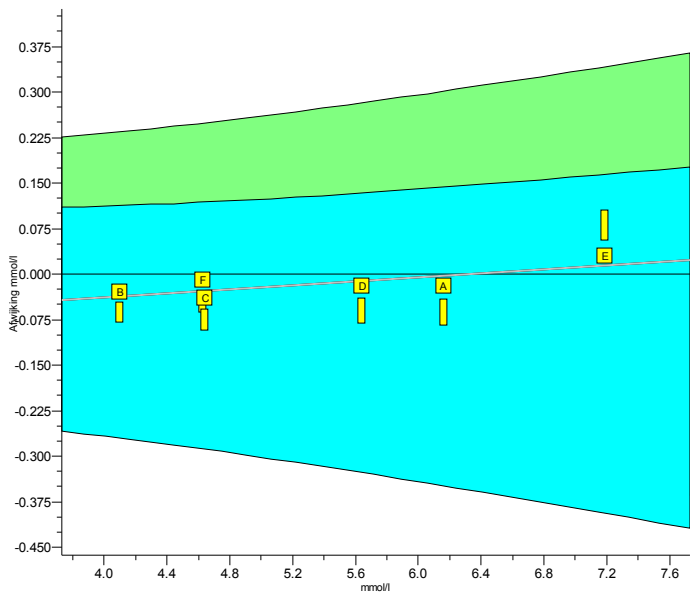
Legend



- Colorimetric
- Other methods

# INPUTS 2013.1

## Potassium

units: mmol/l



	2013.1	cumulative
Trueness	-0.28%	-0.28%
Precision	0.30%	0.30%
Number	6	6
Outliers	0	0
Sigma-TE	6.0 <span style="border: 1px solid black; padding: 2px;">2</span>	6.0 <span style="border: 1px solid black; padding: 2px;">2</span>
Sigma-SA	6.0	6.0
Score pictogram		
Regression line	$-0.10 + 1.016.x$	$-0.10 + 1.016.x$

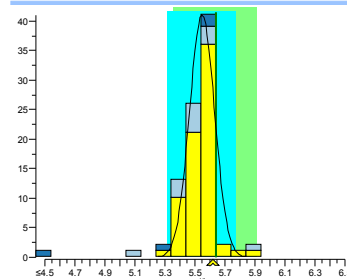
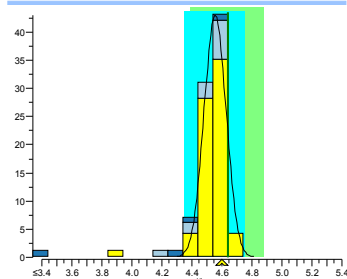
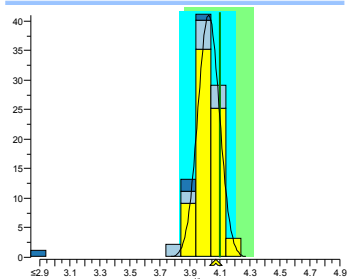
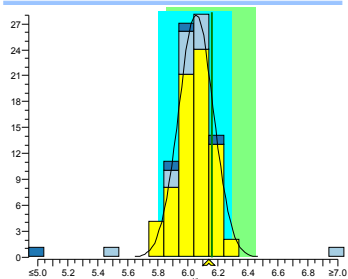
Consensus group ISE verdund/Vlamfotometrie  
Method ISE indirect (with predilution)

2013.1 A

2013.1 B

2013.1 C

2013.1 D



	cons.	meth.	ref.	lab
mean	6.05	6.05	6.16	6.14
SD	0.12	0.12		
n	72	72		
no	0	0		

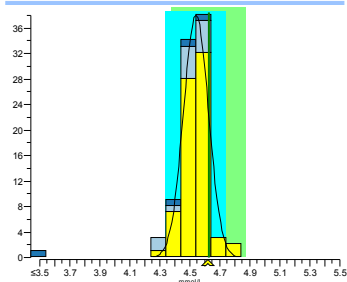
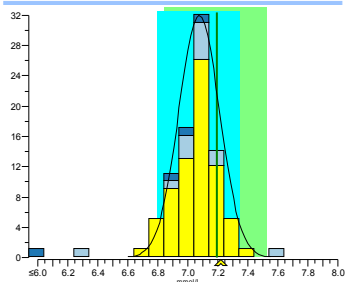
	cons.	meth.	ref.	lab
mean	4.02	4.02	4.10	4.07
SD	0.07	0.07		
n	72	72		
no	0	0		

	cons.	meth.	exp.	lab
mean	4.55	4.55	4.64	4.6
SD	0.07	0.07		
n	72	72		
no	1	1		

	cons.	meth.	ref.	lab
mean	5.55	5.55	5.64	5.62
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	7.22
SD	0.14	0.14		
n	72	72		
no	0	0		

	cons.	meth.	ref.	lab
mean	4.54	4.54	4.63	4.62
SD	0.08	0.08		
n	73	73		
no	2	2		

Legend

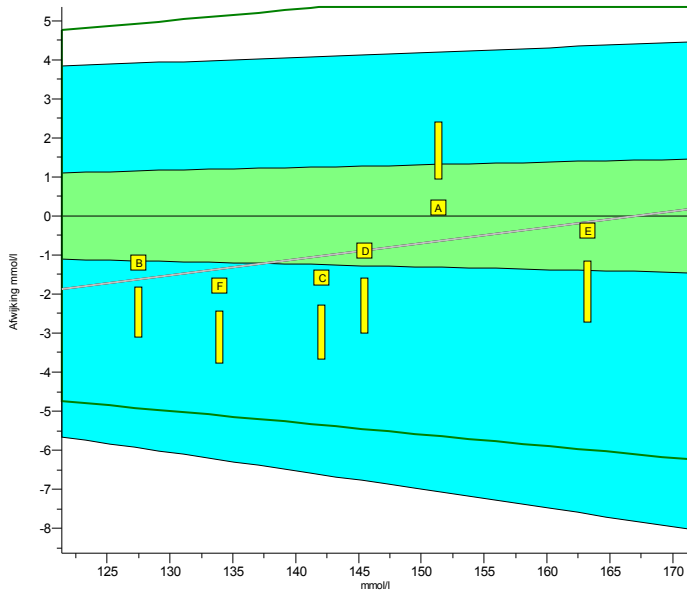
- ISE indirect (with predilution)
- ISE direct (no predilution)
- Other methods





# INPUTS 2013.1

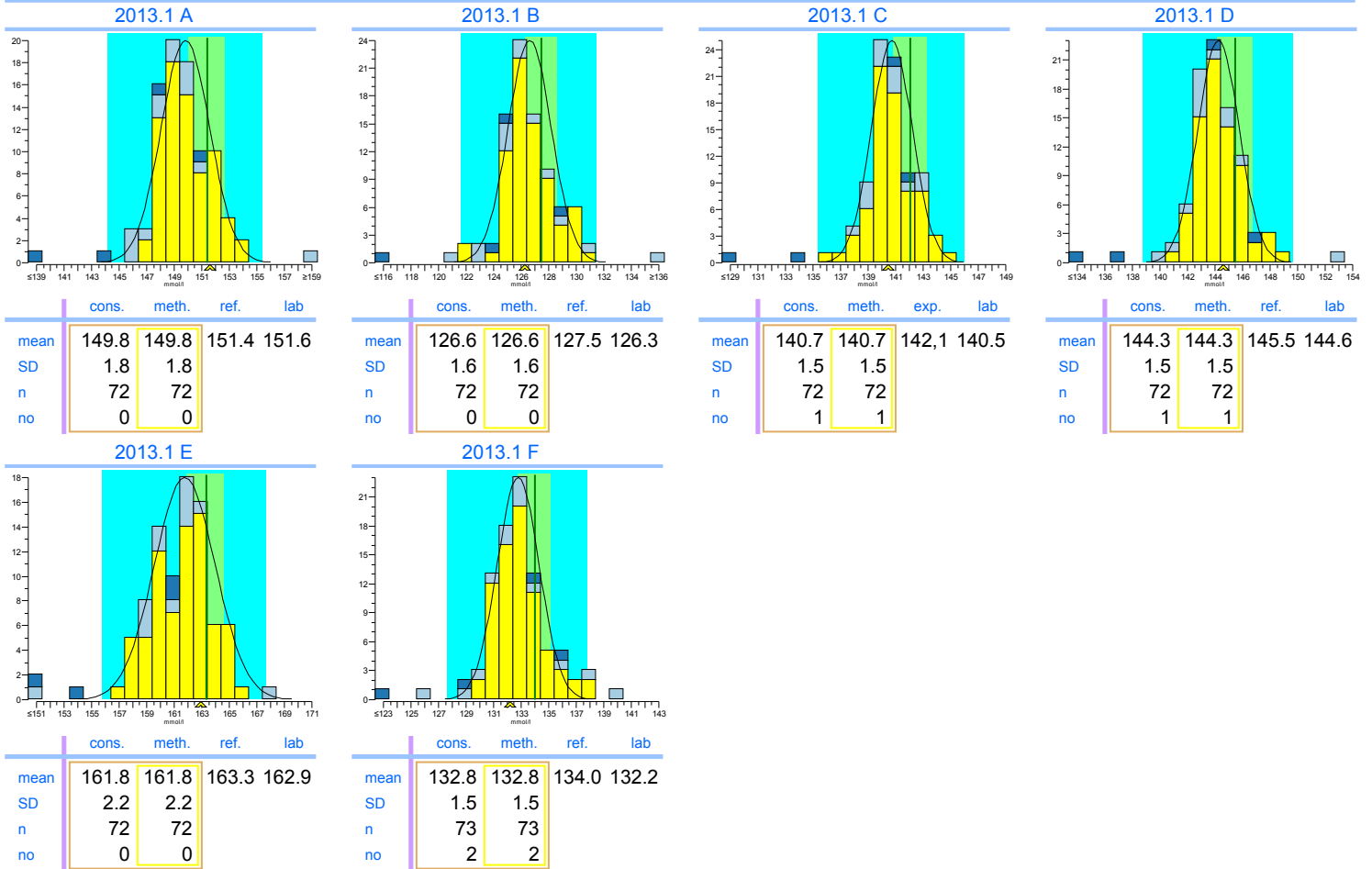
## Sodium

units: mmol/l



	2013.1	cumulative
Trueness	-0.66%	-0.66%
Precision	0.40%	0.40%
Number	6	6
Outliers	0	0
Sigma-TE	1.2	1.2
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	$-6.9 + 1.041 \cdot x$	$-6.9 + 1.041 \cdot x$

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



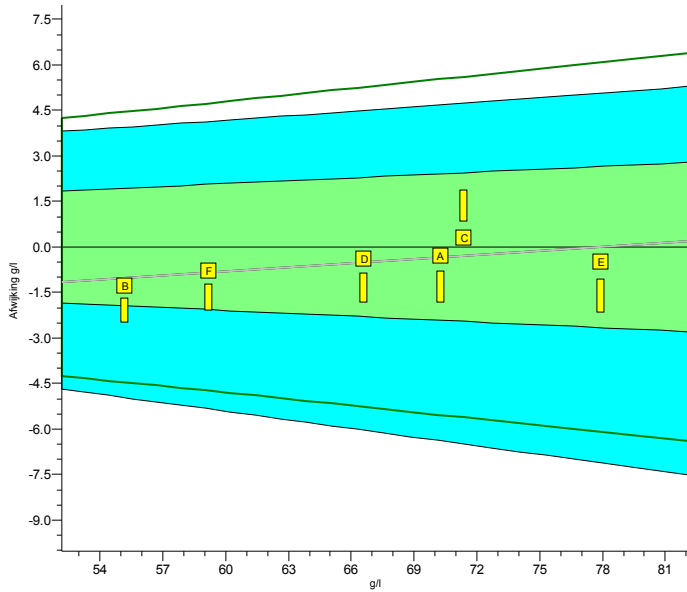
Legend



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

# INPUTS 2013.1

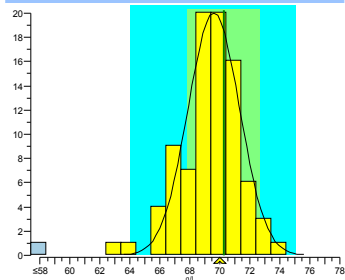
Total Protein

units: g/l



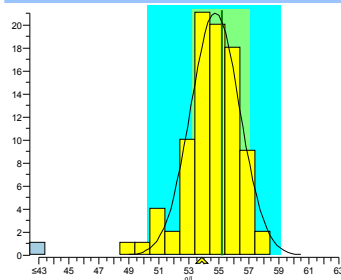
	2013.1	cumulative
Trueness	-0.75%	-0.75%
Precision	0.60%	0.60%
Number	6	6
Outliers	0	0
Sigma-TE	5.0	5.0
Sigma-SA	6.0 <span style="background-color: green; color: white; padding: 2px;">2</span>	6.0 <span style="background-color: green; color: white; padding: 2px;">2</span>
Score pictogram		
Regression line	$-3.5 + 1.046 \cdot x$	$-3.5 + 1.046 \cdot x$
Consensus group	Biureet	
Method	Biurete, automatic	

2013.1 A



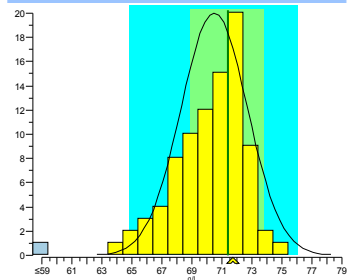
	cons.	meth.	ref.	lab
mean	69.6	69.6	70.3	70
SD	1.7	1.7		
n	88	88		
no	2	2		

2013.1 B



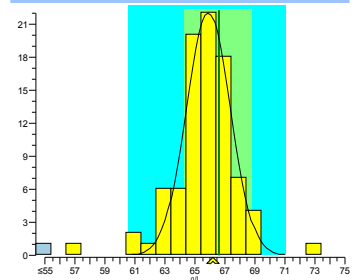
	cons.	meth.	ref.	lab
mean	54.8	54.8	55.2	53.9
SD	1.6	1.6		
n	88	88		
no	1	1		

2013.1 C



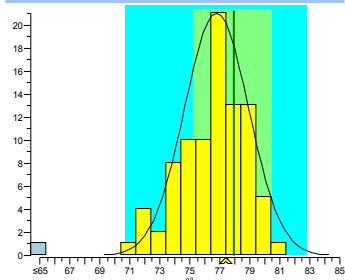
	cons.	meth.	exp.	lab
mean	70.5	70.5	71.4	71.7
SD	2.2	2.2		
n	87	87		
no	0	0		

2013.1 D



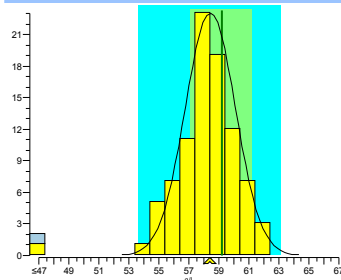
	cons.	meth.	ref.	lab
mean	65.9	65.9	66.6	66.2
SD	1.5	1.5		
n	88	88		
no	4	4		

2013.1 E



	cons.	meth.	ref.	lab
mean	76.8	76.8	77.9	77.4
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	58.4
SD	1.7	1.7		
n	89	89		
no	1	1		

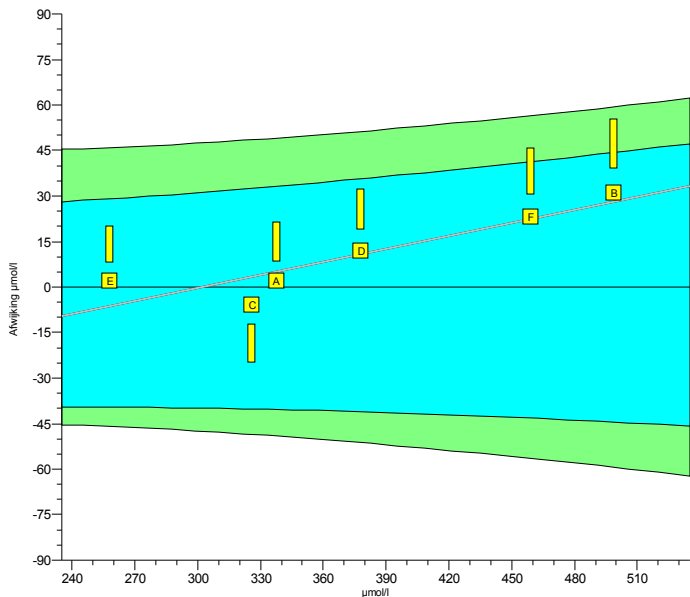
Legend



Biurete, automatic     Other methods

# INPUTS 2013.1

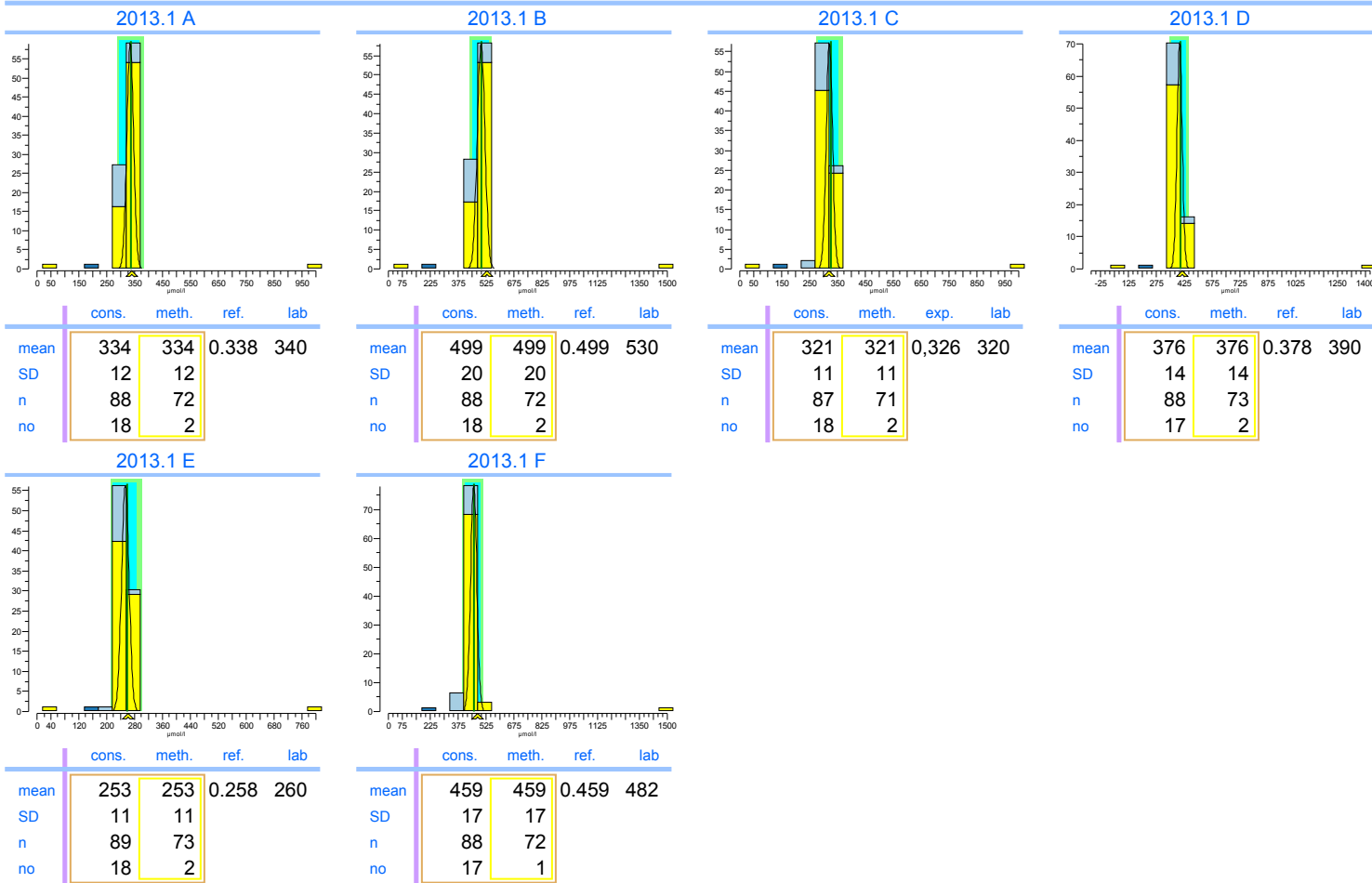
## Urate

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



	2013.1	cumulative
Trueness	+2.8%	+2.8%
Precision	1.5%	1.5%
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	$0 + 1.143.x$	$0 + 1.143.x$

Consensus group	Colorimetrisch
Method	Uricase, colorim., automatic



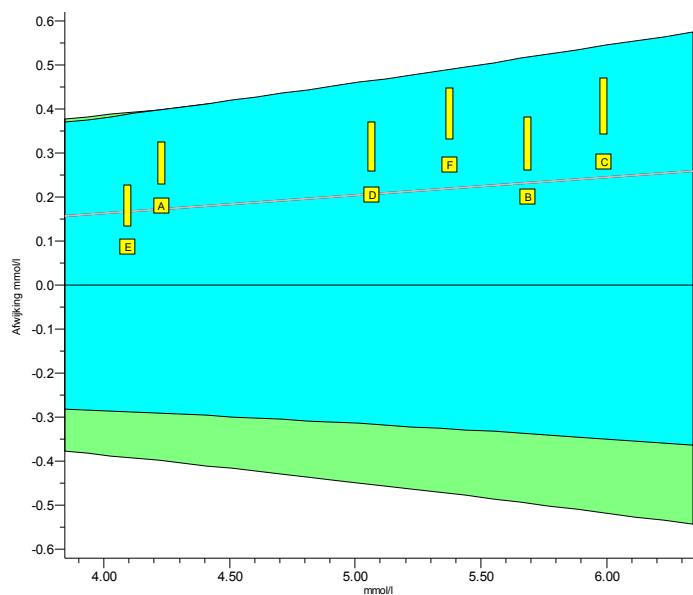
Legend

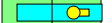
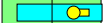
- Uricase, colorim., automatic
- Uricase, differential UV, automatic
- Overige methoden

# INPUTS 2013.1

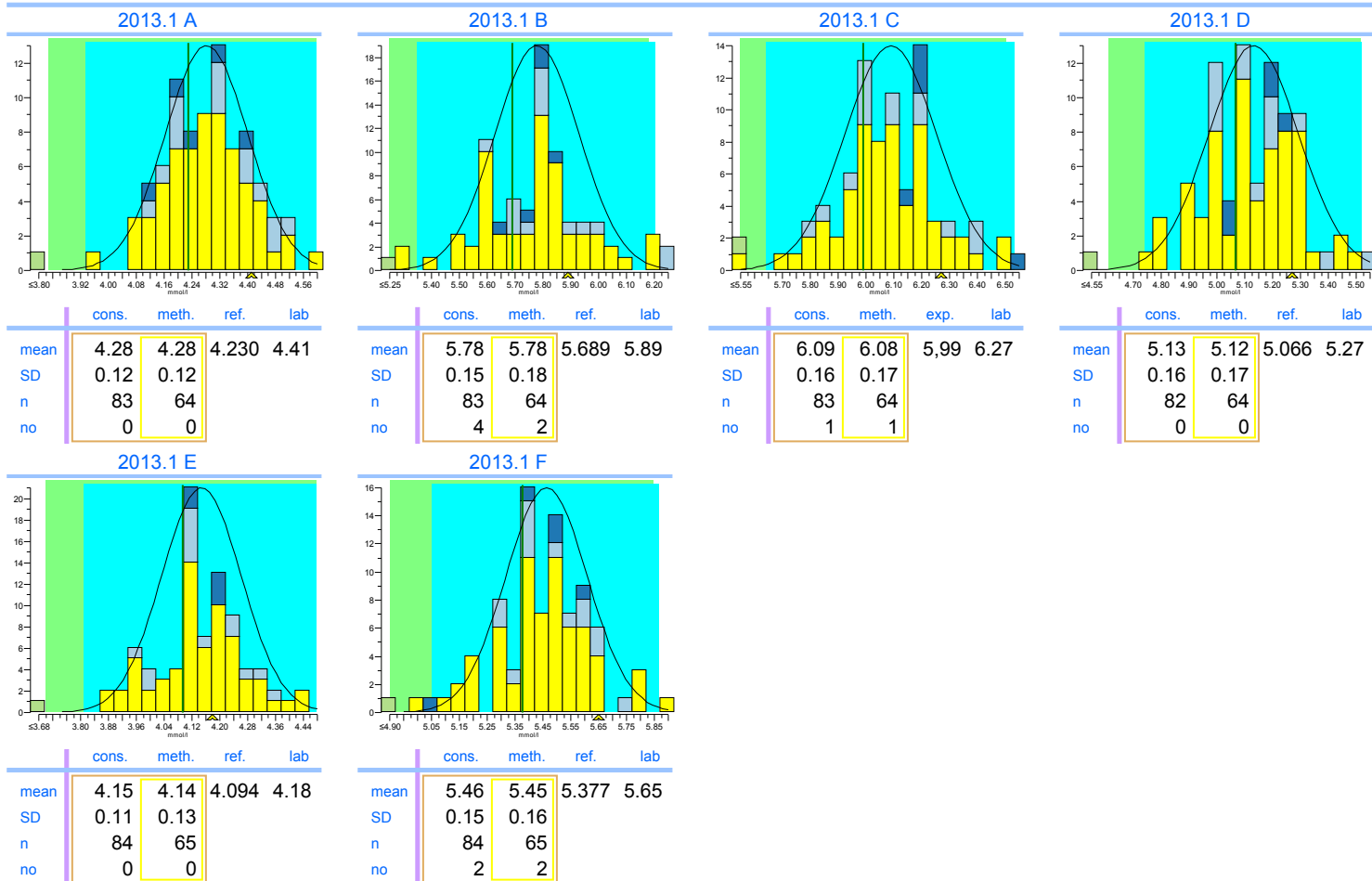
## Cholesterol

units: mmol/l



	2013.1	cumulative
Trueness	+4.0%	+4.0%
Precision	0.87%	0.87%
Number	6	6
Outliers	0	0
Sigma-TE	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>
Sigma-SA	5.2	5.2
Score pictogram		
Regression line	<u>0.00 + 1.041.x</u>	<u>0.00 + 1.041.x</u>

Consensus group	Enzymatisch
Method	Enzymatic, automatic, discrete



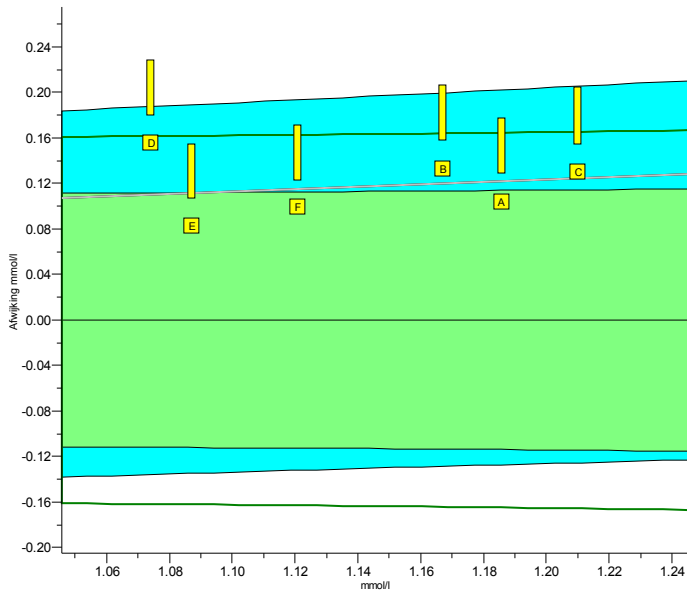
Legend

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

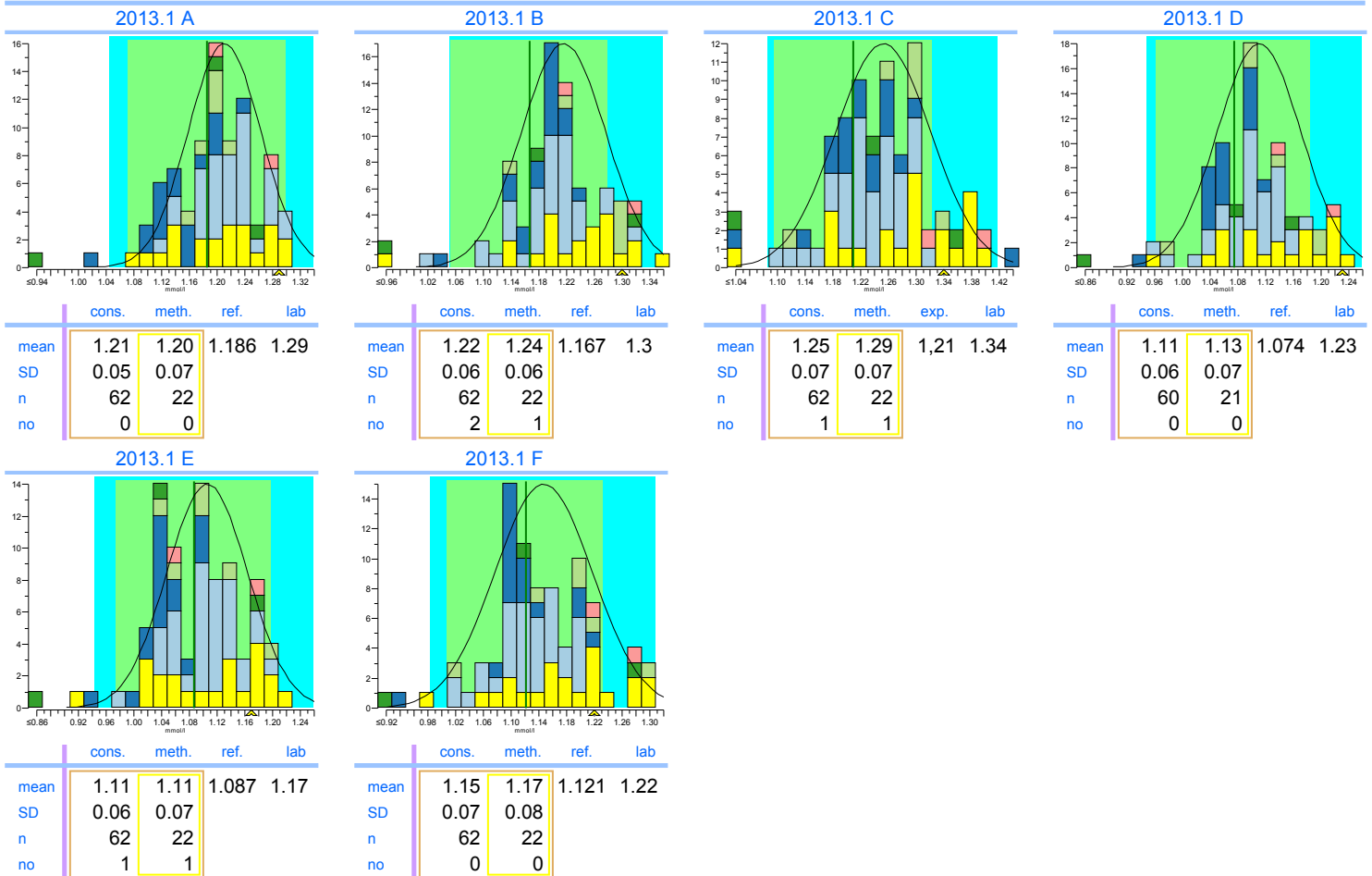
# INPUTS 2013.1

## HDL-Cholesterol

units: mmol/l



	2013.1	cumulative
Trueness	+10%	+10%
Precision	1.7%	1.7%
Number	6	6
Outliers	0	0
Sigma-TE	0.6	0.6
Sigma-SA	3.2	3.2
Score pictogram		
Regression line	$0.00 + 1.103.x$	$0.00 + 1.103.x$
Consensus group	Direct	
Method	Accelerator Selective Detergent ("Ultra HDL")	



Legend

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