

Key comparison EUROMET.T-K3

Realizations of the ITS-90 from 83.8058 K to 692.677 K

NOMINAL TEMPERATURES : Argon Triple Point, 83.8058 K
Mercury Triple Point, 234.3156 K
Gallium Melting Point, 302.9146 K
Indium Freezing Point, 429.7485 K
Tin Freezing Point, 505.078 K
Zinc Freezing Point, 692.677 K

MEASURAND : Resistance ratio, W , at fixed-point temperature
PILOT LABORATORY : LNE-INM

The key comparison EUROMET.T-K3 was carried out in five loops as described on Figure 1.1 on page 5 of the Final Report:

Loop N°	Co-Pilot	Participants	Dates of measurement
Loop 1	SMU	LNE-INM OMH	March 2003 to July 2004
Loop 2	INRIM	LNE-INM CEM METAS BEV MIRS/FE-LMK IPQ	January 2001 to August 2004
Loop 3	NMi-VSL	LNE-INM MIKES DTI SP VMT/PFI	January 2001 to January 2004
Loop 4	PTB	LNE-INM GUM CMI INM(RO) UME	January 2001 to November 2003
Loop 5	NPL	LNE-INM JV EIM SMD NML(IE)	September 2003 to October 2004

The individual laboratory measurements are given in Section 5 of the Final Report.

The temperature differences ($T_i - T_p$) and associated standard uncertainties $u_{i,p}$ are then deduced independently of the measurement loop.

The indexes "i" and "P" refer respectively to laboratory i and to the Pilot Laboratory, and T to the temperature of a given fixed point.

Key comparison EURAMET.T-K3.3

Realizations of the ITS-90 from 83.8058 K to 692.677 K

NOMINAL TEMPERATURES :

- Argon Triple Point, 83.8058 K
- Mercury Triple Point, 234.3156 K
- Gallium Melting Point, 302.9146 K
- Indium Freezing Point, 429.7485 K
- Tin Freezing Point, 505.078 K
- Zinc Freezing Point, 692.677 K

Key comparison EURAMET.T-K3.3 is a bilateral comparison between CEM and LACOMET carried out in 2009

Temperature differences $T_{\text{LACOMET}} - T_{\text{CEM}}$ and corresponding uncertainty ($k = 2$) $U(T_{\text{LACOMET}} - T_{\text{CEM}})$ are given on page 14 of the EURAMET.T-K3.3 Final Report

	$T_{\text{LACOMET}} - T_{\text{CEM}}$ / mK	$U(T_{\text{LACOMET}} - T_{\text{CEM}})$ / mK
Argon Triple Point, 83.8058 K	0.4	11
Mercury Triple Point, 234.3156 K	-0.10	0.64
Gallium Melting Point, 302.9146 K	0.26	0.61
Indium Freezing Point, 429.7485 K	0.4	1.7
Tin Freezing Point, 505.078 K	-1.3	1.7
Zinc Freezing Point, 692.677 K	-2.4	2.1

Key comparison EURAMET.T-K3.1

Realizations of the ITS-90 from 83.8058 K to 692.677 K

NOMINAL TEMPERATURES : Mercury Triple Point, 234.3156 K
 Gallium Melting Point, 302.9146 K
 Indium Freezing Point, 429.7485 K
 Tin Freezing Point, 505.078 K
 Zinc Freezing Point, 692.677 K

Key comparison EURAMET.T-K3.1 is a bilateral comparison between BIM and VSL carried out in 2008-2009

Temperature differences $T_{\text{BIM}} - T_{\text{VSL}}$ and corresponding uncertainty ($k = 2$) $U(T_{\text{BIM}} - T_{\text{VSL}})$ are given in the Table below:

	$T_{\text{BIM}} - T_{\text{VSL}}$ / mK	$U(T_{\text{BIM}} - T_{\text{VSL}})$ / mK
Mercury Triple Point, 234.3156 K	-0.17	0.49
Gallium Melting Point, 302.9146 K	0.01	0.52
Indium Freezing Point, 429.7485 K	0.31	0.90
Tin Freezing Point, 505.078 K	-0.17	1.0
Zinc Freezing Point, 692.677 K	-0.80	1.6

Key comparison EURAMET.T-K3.5

Realizations of the ITS-90 from 83.8058 K to 692.677 K

NOMINAL TEMPERATURES :

- Argon Triple Point, 83.8058 K
- Mercury Triple Point, 234.3156 K
- Gallium Melting Point, 302.9146 K
- Indium Freezing Point, 429.7485 K
- Tin Freezing Point, 505.078 K
- Zinc Freezing Point, 692.677 K

Key comparison EURAMET.T-K3.5 is a bilateral comparison between VSL and ROTH+CO.AG carried out in 2013

Temperature differences $T_{\text{ROTH+CO.AG}} - T_{\text{VSL}}$ and corresponding uncertainty ($k = 2$) $U(T_{\text{ROTH+CO.AG}} - T_{\text{VSL}})$ are given on page 10 of the EURAMET.T-K3.5 Final Report

	$T_{\text{ROTH+CO.AG}} - T_{\text{VSL}}$ / mK	$U(T_{\text{ROTH+CO.AG}} - T_{\text{VSL}})$ / mK
Argon Triple Point, 83.8058 K	0.72	1.02
Mercury Triple Point, 234.3156 K	0.38	0.96
Gallium Melting Point, 302.9146 K	0.78	0.93
Indium Freezing Point, 429.7485 K	1.47	1.99
Tin Freezing Point, 505.078 K	0.65	1.92
Zinc Freezing Point, 692.677 K	2.44	2.33

Key comparisons EUROMET.T-K3, EURAMET.T-K3.3, EURAMET.T-K3.1 and EURAMET.T-K3.5

Realizations of the ITS-90 from 83.8058 K to 692.677 K

NOMINAL TEMPERATURES :	Argon Triple Point, 83.8058 K
	Mercury Triple Point, 234.3156 K
	Gallium Melting Point, 302.9146 K
	Indium Freezing Point, 429.7485 K
	Tin Freezing Point, 505.078 K
	Zinc Freezing Point, 692.677 K

For each fixed-point temperature, the difference ($T_R - T_P$) between the EUROMET reference value, T_R , and T_P , is computed as the weighted mean of all participants' results ($T_i - T_P$), with weights inversely proportional to u_{iP} , as explained in Section 8.1 of the Final Report.

For each fixed-point temperature, the degree of equivalence of laboratory i with respect to the EUROMET reference value is given by a pair of terms, both expressed in mK: $D_i = (T_i - T_R)$, obtained from the differences relative to the Pilot Laboratory $D_i = (T_i - T_P) - (T_R - T_P)$, and U_i , its expanded uncertainty ($k = 2$), involving the measurement uncertainty at laboratory i , the uncertainty associated with the stability of the travelling SPRTs, and the repeatability of the calibration at the Pilot Laboratory (see Section 8.2 of the Final Report).

For each fixed-point temperature, the degree of equivalence between two laboratories i and j is given by a pair of terms, both expressed in mK: $D_{ij} = D_i - D_j$, and U_{ij} , its expanded uncertainty at a 95 % level of confidence. The computation of U_{ij} between participants in the same loop, and participants in different loops is explained in Sections 11.1 and 11.2 of the Final Report.

Linking key comparison EUROMET.T-K3 to key comparison CCT-K3

The Pilot Laboratory and the five Co-Pilots have participated in both comparisons. The comparison of their averaged results in both exercises shows that they perform equally within 0.1 mK for all temperatures, except for the Zinc fixed-point temperature (0.23 mK) and the Tin fixed-point temperature (0.14 mK), as explained in Section 10.1 of the Final Report. The uncertainty linked with the reproducibility between both exercises is also computed (see Table 28 on page 60 of the Final Report) and taken into account for the estimation of the pair-wise degrees of equivalence between participants in EUROMET.T-K3 and CCT-K3 (see Section 11.3 of the Final Report).

For each fixed-point temperature, the BIPM key comparison database displays the degrees of equivalence relative to the EUROMET reference value, and the pair-wise degrees of equivalence computed inside the EUROMET key comparison.

Linking key comparisons EURAMET.T-K3.3, EURAMET.T-K3.1 and EURAMET.T-K3.5 to key comparisons EUROMET.T-K3 and CCT-K3

The LACOMET results obtained in EURAMET.T-K3.3 are linked to the results of EUROMET.T-K3 and CCT-K3 using the participation of CEM in EUROMET.T-K3, whose results are linked to those of CCT-K3, as described above.

The BIM results obtained in EURAMET.T-K3.1 are linked to the results of EUROMET.T-K3 and CCT-K3 using the participation of VSL in EUROMET.T-K3.

The ROTH+CO.AG results obtained in EURAMET.T-K3.5 are linked to the results of EUROMET.T-K3 and CCT-K3 using the participation of VSL in EUROMET.T-K3.

This makes it possible to extend the EUROMET.T-K3 graphs of equivalence with LACOMET, BIM and ROTH+CO.AG results.

LACOMET, BIM and ROTH+CO.AG degrees of equivalence relative to the CCT-K3 ARV are explained/given on page 17 of the EURAMET.T-K3.3 Final Report, on pages 10 and 11 of the EURAMET.T-K3.1 Final Report, and in Section 8.1 of the EURAMET.T-K3.5 Final Report, respectively.

Key comparisons EUROMET.T-K3, EURAMET.T-K3.3 & K3.5

Argon Triple Point, 83.8058 K

Degrees of equivalence

Lab <i>i</i>	↓	Lab <i>j</i>	→
		D_i	U_i / mK
PTB		-0.17	0.79
GUM		-0.74	0.99
INM(RO)		0.28	0.89
UME		-1.00	0.89
NPL		0.11	0.45
JV		0.17	0.94
SMD		0.87	0.86
INRIM		0.28	0.59
CEM		-0.57	1.07
METAS		-0.32	0.92
IPQ		-0.23	0.98
MIRS/FE-LMK		-0.05	0.92
NMi-VSL		-0.01	0.52
MIKES		-0.30	1.14
SP		0.30	0.96
LNE-INM		0.12	0.77
LACOMET		-0.1	12
ROTH+CO.AG		0.72	1.14

PTB		GUM		INM(RO)		UME		NPL		JV		SMD	
D_{ij}	U_{ij} / mK												
		0.57	1.18	-0.45	1.09	0.83	1.09	-0.28	0.73	-0.34	1.10	-1.04	1.04
-0.57	1.18			-1.02	1.25	0.26	1.25	-0.85	0.94	-0.91	1.25	-1.61	1.20
0.45	1.09	1.02	1.25			1.28	1.17	0.17	0.84	0.11	1.18	-0.59	1.11
-0.83	1.09	-0.26	1.25	-1.28	1.17			-1.11	0.84	-1.17	1.18	-1.87	1.11
0.28	0.73	0.85	0.94	-0.17	0.84	1.11	0.84			-0.06	0.94	-0.76	0.86
0.34	1.10	0.91	1.25	-0.11	1.18	1.17	1.18	0.06	0.94			-0.70	1.19
1.04	1.04	1.61	1.20	0.59	1.11	1.87	1.11	0.76	0.86	0.70	1.19		
0.45	0.83	1.02	1.02	0.00	0.92	1.28	0.92	0.17	0.51	0.11	0.97	-0.59	0.89
-0.40	1.22	0.17	1.35	-0.85	1.28	0.43	1.28	-0.68	1.03	-0.74	1.32	-1.44	1.26
-0.15	1.09	0.42	1.24	-0.60	1.16	0.68	1.16	-0.43	0.87	-0.49	1.20	-1.19	1.14
-0.06	1.14	0.51	1.28	-0.51	1.21	0.77	1.21	-0.34	0.93	-0.40	1.25	-1.10	1.19
0.12	1.09	0.69	1.24	-0.33	1.16	0.95	1.16	-0.16	0.87	-0.22	1.20	-0.92	1.14
0.16	0.78	0.73	0.98	-0.29	0.88	0.99	0.88	-0.12	0.43	-0.18	0.93	-0.88	0.85
-0.13	1.28	0.44	1.41	-0.58	1.34	0.70	1.34	-0.41	1.10	-0.47	1.38	-1.17	1.32
0.47	1.12	1.04	1.27	0.02	1.19	1.30	1.19	0.19	0.91	0.13	1.23	-0.57	1.17
0.29	1.00	0.86	1.16	-0.16	1.08	1.12	1.08	0.01	0.77	-0.05	1.13	-0.75	1.06

Black: participants in EUROMET.T-K3

Pink: participant in EURAMET.T-K3.3 only

Green: participant in EURAMET.T-K3.5 only

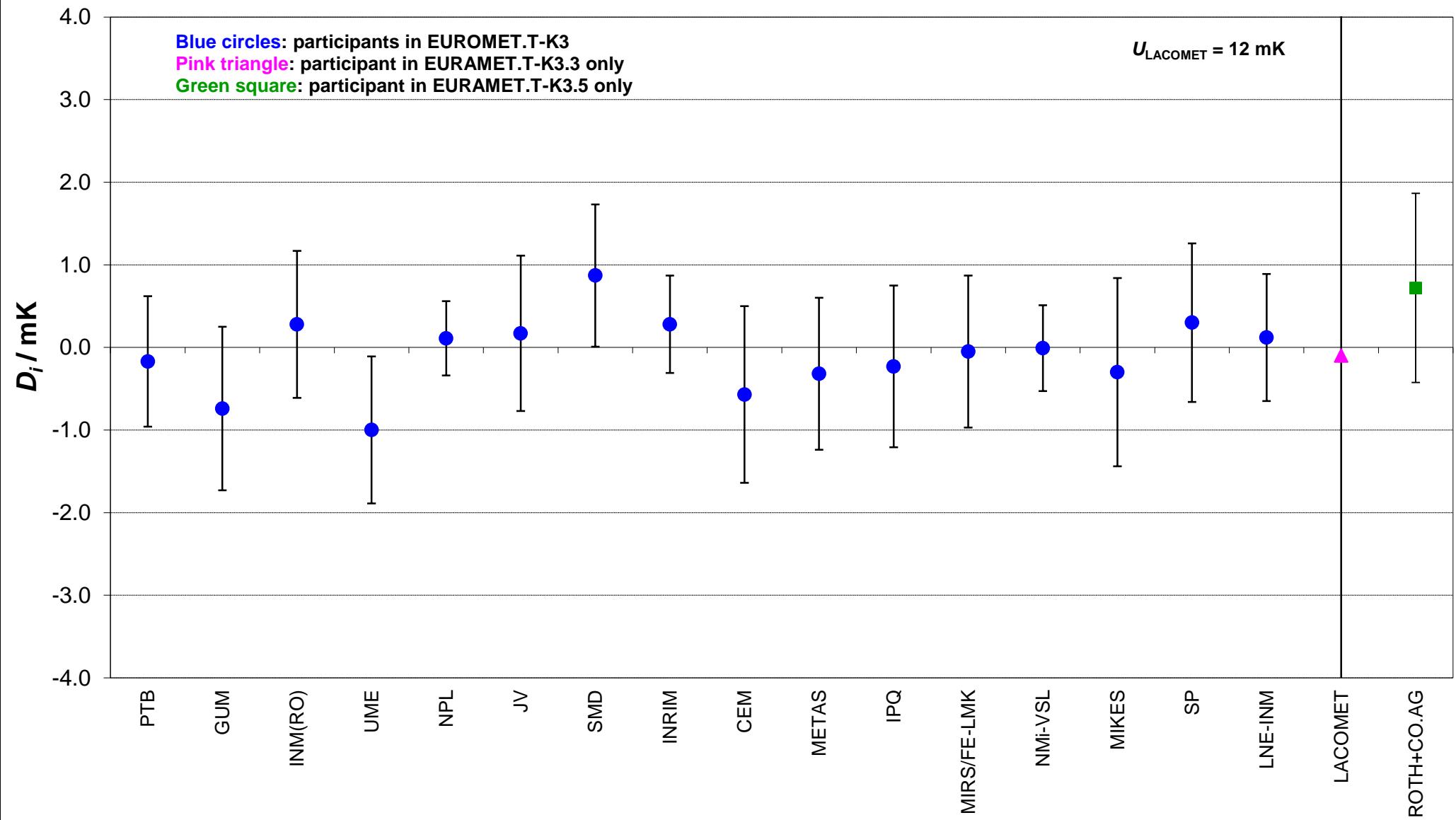
Key comparison EUROMET.T-K3

Lab <i>i</i>	Lab <i>j</i>															
	INRIM		CEM		METAS		IPQ		MIRS/FE-LMK		NMi-VSL		MIKES		SP	
	D_{ij}	U_{ij}	D_{ij}	U_{ij}	D_{ij}	U_{ij}	D_{ij}	U_{ij}	D_{ij}	U_{ij}	D_{ij}	U_{ij}	D_{ij}	U_{ij}	D_{ij}	U_{ij}
PTB	-0.45	0.83	0.40	1.22	0.15	1.09	0.06	1.14	-0.12	1.09	-0.16	0.78	0.13	1.28	-0.47	1.12
GUM	-1.02	1.02	-0.17	1.35	-0.42	1.24	-0.51	1.28	-0.69	1.24	-0.73	0.98	-0.44	1.41	-1.04	1.27
INM(RO)	0.00	0.92	0.85	1.28	0.60	1.16	0.51	1.21	0.33	1.16	0.29	0.88	0.58	1.34	-0.02	1.19
UME	-1.28	0.92	-0.43	1.28	-0.68	1.16	-0.77	1.21	-0.95	1.16	-0.99	0.88	-0.70	1.34	-1.30	1.19
NPL	-0.17	0.51	0.68	1.03	0.43	0.87	0.34	0.93	0.16	0.87	0.12	0.43	0.41	1.10	-0.19	0.91
JV	-0.11	0.97	0.74	1.32	0.49	1.20	0.40	1.25	0.22	1.20	0.18	0.93	0.47	1.38	-0.13	1.23
SMD	0.59	0.89	1.44	1.26	1.19	1.14	1.10	1.19	0.92	1.14	0.88	0.85	1.17	1.32	0.57	1.17
INRIM			0.85	1.14	0.60	1.00	0.51	1.06	0.33	1.00	0.29	0.57	0.58	1.17	-0.02	0.99
CEM	-0.85	1.14			-0.25	1.34	-0.34	1.39	-0.52	1.34	-0.56	1.06	-0.27	1.47	-0.87	1.33
METAS	-0.60	1.00	0.25	1.34			-0.09	1.27	-0.27	1.23	-0.31	0.91	-0.02	1.36	-0.62	1.22
IPQ	-0.51	1.06	0.34	1.39	0.09	1.27			-0.18	1.27	-0.22	0.97	0.07	1.40	-0.53	1.26
MIRS/FE-LMK	-0.33	1.00	0.52	1.34	0.27	1.23	0.18	1.27			-0.04	0.91	0.25	1.36	-0.35	1.22
NMi-VSL	-0.29	0.57	0.56	1.06	0.31	0.91	0.22	0.97	0.04	0.91			0.29	1.16	-0.31	0.98
MIKES	-0.58	1.17	0.27	1.47	0.02	1.36	-0.07	1.40	-0.25	1.36	-0.29	1.16			-0.60	1.41
SP	0.02	0.99	0.87	1.33	0.62	1.22	0.53	1.26	0.35	1.22	0.31	0.98	0.60	1.41		
LNE-INM	-0.16	0.87	0.69	1.25	0.44	1.12	0.35	1.17	0.17	1.12	0.13	0.80	0.42	1.29	-0.18	1.14

Key comparison EUROMET.T-K3

Lab <i>i</i>	Lab <i>j</i>	LNE-INM	
		D_{ij}	U_{ij}
		/ mK	
PTB	-0.29	1.00	
GUM	-0.86	1.16	
INM(RO)	0.16	1.08	
UME	-1.12	1.08	
NPL	-0.01	0.77	
JV	0.05	1.13	
SMD	0.75	1.06	
INRIM	0.16	0.87	
CEM	-0.69	1.25	
METAS	-0.44	1.12	
IPQ	-0.35	1.17	
MIRS/FE-LMK	-0.17	1.12	
NMi-VSL	-0.13	0.80	
MIKES	-0.42	1.29	
SP	0.18	1.14	
LNE-INM			

EUROMET.T-K3, EURAMET.T-K3.3 & K3.5 ITS-90, Argon Triple Point, 83.8058 K
 Degrees of equivalence [D_i and its expanded uncertainty ($k = 2$), U_i]



Key comparisons EUROMET.T-K3, EURAMET.T-K3.3, K3.1 & K3.5

Mercury Triple Point, 234.3156 K Degrees of equivalence

Lab <i>i</i>	Lab <i>j</i>		→													
	D _{<i>i</i>}	U _{<i>i</i>}	PTB		GUM		CMI		INM(RO)		UME		NPL		JV	
	/ mK	/ mK	D _{<i>ij</i>}	U _{<i>ij</i>}												
PTB	0.03	0.39			0.16	0.76	0.02	0.72	-0.71	0.85	0.64	0.73	-0.27	0.51	-0.14	0.91
GUM	-0.13	0.74	-0.16	0.76			-0.14	0.95	-0.87	1.06	0.48	0.96	-0.43	0.81	-0.30	1.10
CMI	0.01	0.70	-0.02	0.72	0.14	0.95			-0.73	1.03	0.62	0.93	-0.29	0.77	-0.16	1.08
INM(RO)	0.74	0.84	0.71	0.85	0.87	1.06	0.73	1.03			1.35	1.04	0.44	0.90	0.57	1.17
UME	-0.61	0.71	-0.64	0.73	-0.48	0.96	-0.62	0.93	-1.35	1.04			-0.91	0.78	-0.78	1.08
NPL	0.30	0.52	0.27	0.51	0.43	0.81	0.29	0.77	-0.44	0.90	0.91	0.78			0.13	0.95
JV	0.17	0.91	0.14	0.91	0.30	1.10	0.16	1.08	-0.57	1.17	0.78	1.08	-0.13	0.95		
EIM	0.42	0.69	0.39	0.68	0.55	0.93	0.41	0.90	-0.32	1.01	1.03	0.91	0.12	0.74	0.25	1.05
SMD	0.34	0.67	0.31	0.66	0.47	0.91	0.33	0.88	-0.40	1.00	0.95	0.89	0.04	0.72	0.17	1.04
NML(IE)	0.42	0.80	0.39	0.80	0.55	1.01	0.41	0.98	-0.32	1.09	1.03	0.99	0.12	0.84	0.25	1.13
INRIM	-0.11	0.37	-0.14	0.36	0.02	0.72	-0.12	0.68	-0.85	0.83	0.50	0.69	-0.41	0.50	-0.28	0.90
CEM	-0.19	0.57	-0.22	0.56	-0.06	0.84	-0.20	0.81	-0.93	0.93	0.42	0.82	-0.49	0.66	-0.36	1.00
METAS	-0.04	0.51	-0.07	0.50	0.09	0.80	-0.05	0.77	-0.78	0.90	0.57	0.78	-0.34	0.61	-0.21	0.96
IPQ	-0.19	0.66	-0.22	0.65	-0.06	0.91	-0.20	0.87	-0.93	0.99	0.42	0.88	-0.49	0.74	-0.36	1.05
BEV	-0.90	1.07	-0.93	1.07	-0.77	1.24	-0.91	1.21	-1.64	1.30	-0.29	1.22	-1.20	1.12	-1.07	1.35
MIRS/FE-LMK	-0.17	0.68	-0.20	0.67	-0.04	0.92	-0.18	0.89	-0.91	1.00	0.44	0.90	-0.47	0.76	-0.34	1.06
NMi-VSL	0.11	0.45	0.08	0.44	0.24	0.77	0.10	0.73	-0.63	0.86	0.72	0.74	-0.19	0.56	-0.06	0.93
MIKES	0.05	0.82	0.02	0.82	0.18	1.03	0.04	1.00	-0.69	1.10	0.66	1.01	-0.25	0.88	-0.12	1.16
VMT/PFI	-0.07	0.65	-0.10	0.64	0.06	0.90	-0.08	0.87	-0.81	0.98	0.54	0.88	-0.37	0.73	-0.24	1.04
SP	0.05	0.87	0.02	0.87	0.18	1.07	0.04	1.04	-0.69	1.14	0.66	1.05	-0.25	0.93	-0.12	1.19
DTI	2.66	3.08	2.63	3.08	2.79	3.14	2.65	3.13	1.92	3.17	3.27	3.14	2.36	3.10	2.49	3.19
SMU	0.16	0.84	0.13	0.84	0.29	1.05	0.15	1.02	-0.58	1.12	0.77	1.02	-0.14	0.90	-0.01	1.17
OMH	-0.29	0.63	-0.32	0.62	-0.16	0.89	-0.30	0.85	-1.03	0.97	0.32	0.86	-0.59	0.71	-0.46	1.03
LNE-INM	-0.25	0.68	-0.28	0.70	-0.12	0.94	-0.26	0.91	-0.99	1.02	0.36	0.92	-0.55	0.73	-0.42	1.04
LACOMET	-0.29	0.85														
BIM	-0.06	0.67														
ROTH+CO.AG	0.51	1.06														

Black: participants in EUROMET.T-K3

Pink: participant in EURAMET.T-K3.3 only

Brown: participant in EURAMET.T-K3.1 only

Green: participant in EURAMET.T-K3.5 only

Key comparison EUROMET.T-K3

Lab <i>i</i>	Lab <i>j</i>															
	D_{ij}	U_{ij}														
	$/ \text{mK}$															
PTB	-0.39	0.68	-0.31	0.66	-0.39	0.80	0.14	0.36	0.22	0.56	0.07	0.50	0.22	0.65	0.93	1.07
GUM	-0.55	0.93	-0.47	0.91	-0.55	1.01	-0.02	0.72	0.06	0.84	-0.09	0.80	0.06	0.91	0.77	1.24
CMI	-0.41	0.90	-0.33	0.88	-0.41	0.98	0.12	0.68	0.20	0.81	0.05	0.77	0.20	0.87	0.91	1.21
INM(RO)	0.32	1.01	0.40	1.00	0.32	1.09	0.85	0.83	0.93	0.93	0.78	0.90	0.93	0.99	1.64	1.30
UME	-1.03	0.91	-0.95	0.89	-1.03	0.99	-0.50	0.69	-0.42	0.82	-0.57	0.78	-0.42	0.88	0.29	1.22
NPL	-0.12	0.74	-0.04	0.72	-0.12	0.84	0.41	0.50	0.49	0.66	0.34	0.61	0.49	0.74	1.20	1.12
JV	-0.25	1.05	-0.17	1.04	-0.25	1.13	0.28	0.90	0.36	1.00	0.21	0.96	0.36	1.05	1.07	1.35
EIM			0.08	0.85	0.00	0.96	0.53	0.67	0.61	0.80	0.46	0.76	0.61	0.87	1.32	1.21
SMD	-0.08	0.85			-0.08	0.94	0.45	0.65	0.53	0.78	0.38	0.74	0.53	0.85	1.24	1.20
NML(IE)	0.00	0.96	0.08	0.94			0.53	0.79	0.61	0.90	0.46	0.86	0.61	0.96	1.32	1.27
INRIM	-0.53	0.67	-0.45	0.65	-0.53	0.79			0.08	0.58	-0.07	0.52	0.08	0.67	0.79	1.08
CEM	-0.61	0.80	-0.53	0.78	-0.61	0.90	-0.08	0.58			-0.15	0.68	0.00	0.80	0.71	1.16
METAS	-0.46	0.76	-0.38	0.74	-0.46	0.86	0.07	0.52	0.15	0.68			0.15	0.76	0.86	1.13
IPQ	-0.61	0.87	-0.53	0.85	-0.61	0.96	-0.08	0.67	0.00	0.80	-0.15	0.76			0.71	1.21
BEV	-1.32	1.21	-1.24	1.20	-1.32	1.27	-0.79	1.08	-0.71	1.16	-0.86	1.13	-0.71	1.21		
MIRS/FE-LMK	-0.59	0.88	-0.51	0.87	-0.59	0.97	-0.06	0.69	0.02	0.82	-0.13	0.77	0.02	0.88	0.73	1.22
NMi-VSL	-0.31	0.72	-0.23	0.70	-0.31	0.83	0.22	0.42	0.30	0.61	0.15	0.55	0.30	0.69	1.01	1.09
MIKES	-0.37	0.99	-0.29	0.98	-0.37	1.07	0.16	0.81	0.24	0.92	0.09	0.88	0.24	0.97	0.95	1.29
VMT/PFI	-0.49	0.86	-0.41	0.84	-0.49	0.95	0.04	0.63	0.12	0.77	-0.03	0.72	0.12	0.84	0.83	1.19
SP	-0.37	1.04	-0.29	1.02	-0.37	1.11	0.16	0.86	0.24	0.96	0.09	0.93	0.24	1.02	0.95	1.32
DTI	2.24	3.13	2.32	3.13	2.24	3.16	2.77	3.08	2.85	3.11	2.70	3.10	2.85	3.12	3.56	3.24
SMU	-0.26	1.01	-0.18	1.00	-0.26	1.09	0.27	0.83	0.35	0.93	0.20	0.90	0.35	0.99	1.06	1.30
OMH	-0.71	0.84	-0.63	0.83	-0.71	0.94	-0.18	0.61	-0.10	0.75	-0.25	0.70	-0.10	0.82	0.61	1.18
LNE-INM	-0.67	0.86	-0.59	0.84	-0.67	0.95	-0.14	0.69	-0.06	0.82	-0.21	0.77	-0.06	0.88	0.65	1.22

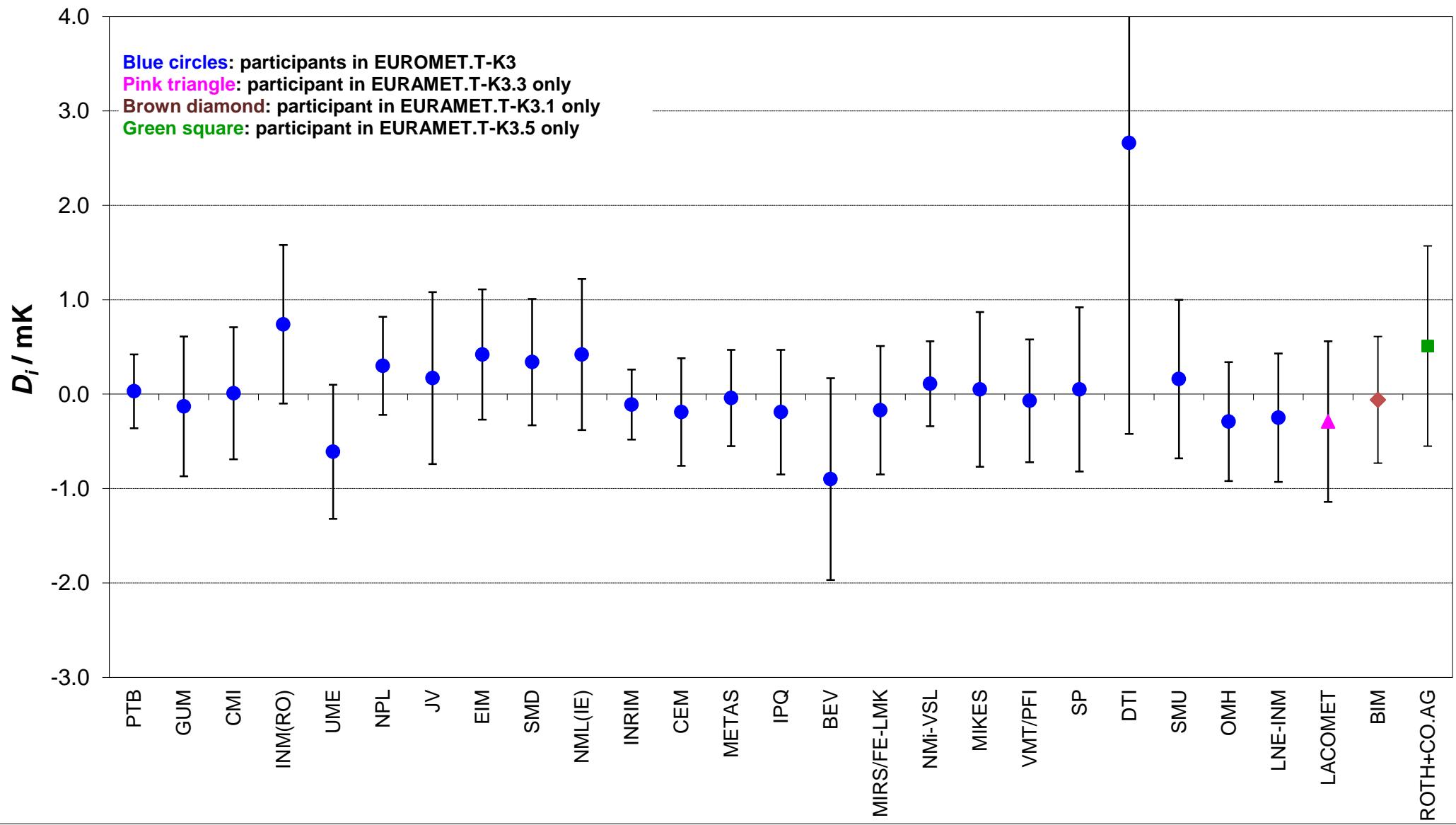
Key comparison EUROMET.T-K3

Lab <i>i</i>	Lab <i>j</i>															
	MIRS/FE-LMK		NMi-VSL		MIKES		VMT/PFI		SP		DTI		SMU		OMH	
	D_{ij} / mK	U_{ij}														
PTB	0.20	0.67	-0.08	0.44	-0.02	0.82	0.10	0.64	-0.02	0.87	-2.63	3.08	-0.13	0.84	0.32	0.62
GUM	0.04	0.92	-0.24	0.77	-0.18	1.03	-0.06	0.90	-0.18	1.07	-2.79	3.14	-0.29	1.05	0.16	0.89
CMI	0.18	0.89	-0.10	0.73	-0.04	1.00	0.08	0.87	-0.04	1.04	-2.65	3.13	-0.15	1.02	0.30	0.85
INM(RO)	0.91	1.00	0.63	0.86	0.69	1.10	0.81	0.98	0.69	1.14	-1.92	3.17	0.58	1.12	1.03	0.97
UME	-0.44	0.90	-0.72	0.74	-0.66	1.01	-0.54	0.88	-0.66	1.05	-3.27	3.14	-0.77	1.02	-0.32	0.86
NPL	0.47	0.76	0.19	0.56	0.25	0.88	0.37	0.73	0.25	0.93	-2.36	3.10	0.14	0.90	0.59	0.71
JV	0.34	1.06	0.06	0.93	0.12	1.16	0.24	1.04	0.12	1.19	-2.49	3.19	0.01	1.17	0.46	1.03
EIM	0.59	0.88	0.31	0.72	0.37	0.99	0.49	0.86	0.37	1.04	-2.24	3.13	0.26	1.01	0.71	0.84
SMD	0.51	0.87	0.23	0.70	0.29	0.98	0.41	0.84	0.29	1.02	-2.32	3.13	0.18	1.00	0.63	0.83
NML(IE)	0.59	0.97	0.31	0.83	0.37	1.07	0.49	0.95	0.37	1.11	-2.24	3.16	0.26	1.09	0.71	0.94
INRIM	0.06	0.69	-0.22	0.42	-0.16	0.81	-0.04	0.63	-0.16	0.86	-2.77	3.08	-0.27	0.83	0.18	0.61
CEM	-0.02	0.82	-0.30	0.61	-0.24	0.92	-0.12	0.77	-0.24	0.96	-2.85	3.11	-0.35	0.93	0.10	0.75
METAS	0.13	0.77	-0.15	0.55	-0.09	0.88	0.03	0.72	-0.09	0.93	-2.70	3.10	-0.20	0.90	0.25	0.70
IPQ	-0.02	0.88	-0.30	0.69	-0.24	0.97	-0.12	0.84	-0.24	1.02	-2.85	3.12	-0.35	0.99	0.10	0.82
BEV	-0.73	1.22	-1.01	1.09	-0.95	1.29	-0.83	1.19	-0.95	1.32	-3.56	3.24	-1.06	1.30	-0.61	1.18
MIRS/FE-LMK			-0.28	0.71	-0.22	0.99	-0.10	0.85	-0.22	1.03	-2.83	3.13	-0.33	1.00	0.12	0.84
NMi-VSL	0.28	0.71			0.06	0.84	0.18	0.68	0.06	0.89	-2.55	3.09	-0.05	0.86	0.40	0.66
MIKES	0.22	0.99	-0.06	0.84			0.12	0.96	0.00	1.12	-2.61	3.16	-0.11	1.10	0.34	0.95
VMT/PFI	0.10	0.85	-0.18	0.68	-0.12	0.96			-0.12	1.01	-2.73	3.12	-0.23	0.98	0.22	0.81
SP	0.22	1.03	-0.06	0.89	0.00	1.12	0.12	1.01			-2.61	3.17	-0.11	1.14	0.34	1.00
DTI	2.83	3.13	2.55	3.09	2.61	3.16	2.73	3.12	2.61	3.17			2.50	3.17	2.95	3.12
SMU	0.33	1.00	0.05	0.86	0.11	1.10	0.23	0.98	0.11	1.14	-2.50	3.17			0.45	0.91
OMH	-0.12	0.84	-0.40	0.66	-0.34	0.95	-0.22	0.81	-0.34	1.00	-2.95	3.12	-0.45	0.91		
LNE-INM	-0.08	0.90	-0.36	0.71	-0.30	0.98	-0.18	0.85	-0.30	1.03	-2.91	3.13	-0.41	0.95	0.04	0.77

Key comparison EUROMET.T-K3

Lab <i>i</i>	Lab <i>j</i>	\rightarrow
	LNE-INM	
	D_{ij}	U_{ij} / mK
PTB	0.28	0.70
GUM	0.12	0.94
CMI	0.26	0.91
INM(RO)	0.99	1.02
UME	-0.36	0.92
NPL	0.55	0.73
JV	0.42	1.04
EIM	0.67	0.86
SMD	0.59	0.84
NML(IE)	0.67	0.95
INRIM	0.14	0.69
CEM	0.06	0.82
METAS	0.21	0.77
IPQ	0.06	0.88
BEV	-0.65	1.22
MIRS/FE-LMK	0.08	0.90
NMi-VSL	0.36	0.71
MIKES	0.30	0.98
VMT/PFI	0.18	0.85
SP	0.30	1.03
DTI	2.91	3.13
SMU	0.41	0.95
OMH	-0.04	0.77
LNE-INM		

EUROMET.T-K3, EURAMET.T-K3.3, K3.1 & K3.5 ITS-90, Mercury Triple Point, 234.3156 K
Degrees of equivalence [D_i and its expanded uncertainty ($k = 2$), U_i]



Key comparisons EUROMET.T-K3, EURAMET.T-K3.3, K3.1 & K3.5

Gallium Melting Point, 302.9146 K Degrees of equivalence

Lab <i>i</i>	Lab <i>j</i>		Gallium Melting Point, 302.9146 K Degrees of equivalence													
			PTB		GUM		CMI		INM(RO)		UME		NPL		JV	
	D _{<i>i</i>}	U _{<i>i</i>}	D _{<i>ij</i>}	U _{<i>ij</i>}	D _{<i>ij</i>}	U _{<i>ij</i>}	D _{<i>ij</i>}	U _{<i>ij</i>}	D _{<i>ij</i>}	U _{<i>ij</i>}	D _{<i>ij</i>}	U _{<i>ij</i>}	D _{<i>ij</i>}	U _{<i>ij</i>}	D _{<i>ij</i>}	U _{<i>ij</i>}
PTB	0.15	0.30			-0.02	0.63	-0.03	0.61	-0.01	0.50	0.13	0.62	0.26	0.38	-0.40	0.61
GUM	0.17	0.59	0.02	0.63			-0.01	0.79	0.01	0.71	0.15	0.80	0.28	0.64	-0.38	0.79
CMI	0.18	0.56	0.03	0.61	0.01	0.79			0.02	0.69	0.16	0.78	0.29	0.61	-0.37	0.77
INM(RO)	0.16	0.44	0.01	0.50	-0.01	0.71	-0.02	0.69			0.14	0.69	0.27	0.50	-0.39	0.69
UME	0.02	0.57	-0.13	0.62	-0.15	0.80	-0.16	0.78	-0.14	0.69			0.13	0.62	-0.53	0.78
NPL	-0.11	0.42	-0.26	0.38	-0.28	0.64	-0.29	0.61	-0.27	0.50	-0.13	0.62			-0.66	0.71
JV	0.55	0.63	0.40	0.61	0.38	0.79	0.37	0.77	0.39	0.69	0.53	0.78	0.66	0.71		
EIM	0.25	0.61	0.10	0.58	0.08	0.77	0.07	0.75	0.09	0.67	0.23	0.76	0.36	0.70	-0.30	0.84
SMD	-0.18	0.56	-0.33	0.53	-0.35	0.74	-0.36	0.71	-0.34	0.62	-0.20	0.72	-0.07	0.65	-0.73	0.80
NML(IE)	0.10	0.74	-0.05	0.72	-0.07	0.88	-0.08	0.86	-0.06	0.79	0.08	0.87	0.21	0.81	-0.45	0.94
INRIM	-0.11	0.28	-0.26	0.22	-0.28	0.55	-0.29	0.52	-0.27	0.39	-0.13	0.53	0.00	0.37	-0.66	0.60
CEM	0.20	0.55	0.05	0.52	0.03	0.73	0.02	0.70	0.04	0.61	0.18	0.71	0.31	0.60	-0.35	0.76
METAS	0.02	0.68	-0.13	0.66	-0.15	0.83	-0.16	0.81	-0.14	0.73	0.00	0.82	0.13	0.72	-0.53	0.86
IPQ	-0.13	0.83	-0.28	0.81	-0.30	0.96	-0.31	0.94	-0.29	0.87	-0.15	0.95	-0.02	0.86	-0.68	0.98
BEV	-0.42	1.04	-0.57	1.03	-0.59	1.14	-0.60	1.13	-0.58	1.07	-0.44	1.13	-0.31	1.07	-0.97	1.17
MIRS/FE-LMK	0.16	0.51	0.01	0.48	-0.01	0.70	-0.02	0.67	0.00	0.58	0.14	0.68	0.27	0.56	-0.39	0.73
NMi-VSL	-0.17	0.35	-0.32	0.30	-0.34	0.59	-0.35	0.56	-0.33	0.44	-0.19	0.57	-0.06	0.42	-0.72	0.63
MIKES	0.02	0.67	-0.13	0.65	-0.15	0.82	-0.16	0.80	-0.14	0.72	0.00	0.81	0.13	0.71	-0.53	0.85
VMT/PFI	-0.18	0.54	-0.33	0.51	-0.35	0.72	-0.36	0.70	-0.34	0.60	-0.20	0.70	-0.07	0.59	-0.73	0.75
SP	0.21	0.56	0.06	0.53	0.04	0.74	0.03	0.71	0.05	0.62	0.19	0.72	0.32	0.61	-0.34	0.77
DTI	-0.14	0.61	-0.29	0.58	-0.31	0.77	-0.32	0.75	-0.30	0.67	-0.16	0.76	-0.03	0.65	-0.69	0.81
SMU	-0.13	0.51	-0.28	0.48	-0.30	0.70	-0.31	0.67	-0.29	0.58	-0.15	0.68	-0.02	0.56	-0.68	0.73
OMH	-0.28	0.66	-0.43	0.64	-0.45	0.81	-0.46	0.79	-0.44	0.71	-0.30	0.80	-0.17	0.70	-0.83	0.84
LNE-INM	-0.09	0.28	-0.24	0.36	-0.26	0.62	-0.27	0.60	-0.25	0.49	-0.11	0.61	0.02	0.44	-0.64	0.64
LACOMET	0.46	0.82														
BIM	-0.16	0.63														
ROTH+CO.AG	0.66	1.06														

Black: participants in EUROMET.T-K3

Pink: participant in EURAMET.T-K3.3 only

Brown: participant in EURAMET.T-K3.1 only

Green: participant in EURAMET.T-K3.5 only

Key comparison EUROMET.T-K3

Lab <i>i</i>	Lab <i>j</i>															
	EIM		SMD		NML(IE)		INRIM		CEM		METAS		IPQ		BEV	
	D_{ij}	U_{ij}	D_{ij}	U_{ij}	D_{ij}	U_{ij}	D_{ij}	U_{ij}	D_{ij}	U_{ij}	D_{ij}	U_{ij}	D_{ij}	U_{ij}	D_{ij}	U_{ij}
PTB	-0.10	0.58	0.33	0.53	0.05	0.72	0.26	0.22	-0.05	0.52	0.13	0.66	0.28	0.81	0.57	1.03
GUM	-0.08	0.77	0.35	0.74	0.07	0.88	0.28	0.55	-0.03	0.73	0.15	0.83	0.30	0.96	0.59	1.14
CMI	-0.07	0.75	0.36	0.71	0.08	0.86	0.29	0.52	-0.02	0.70	0.16	0.81	0.31	0.94	0.60	1.13
INM(RO)	-0.09	0.67	0.34	0.62	0.06	0.79	0.27	0.39	-0.04	0.61	0.14	0.73	0.29	0.87	0.58	1.07
UME	-0.23	0.76	0.20	0.72	-0.08	0.87	0.13	0.53	-0.18	0.71	0.00	0.82	0.15	0.95	0.44	1.13
NPL	-0.36	0.70	0.07	0.65	-0.21	0.81	0.00	0.37	-0.31	0.60	-0.13	0.72	0.02	0.86	0.31	1.07
JV	0.30	0.84	0.73	0.80	0.45	0.94	0.66	0.60	0.35	0.76	0.53	0.86	0.68	0.98	0.97	1.17
EIM			0.43	0.79	0.15	0.92	0.36	0.57	0.05	0.74	0.23	0.85	0.38	0.97	0.67	1.15
SMD	-0.43	0.79			-0.28	0.89	-0.07	0.52	-0.38	0.70	-0.20	0.81	-0.05	0.94	0.24	1.13
NML(IE)	-0.15	0.92	0.28	0.89			0.21	0.71	-0.10	0.85	0.08	0.94	0.23	1.06	0.52	1.23
INRIM	-0.36	0.57	0.07	0.52	-0.21	0.71			-0.31	0.56	-0.13	0.69	0.02	0.84	0.31	1.05
CEM	-0.05	0.74	0.38	0.70	0.10	0.85	0.31	0.56			0.18	0.84	0.33	0.96	0.62	1.15
METAS	-0.23	0.85	0.20	0.81	-0.08	0.94	0.13	0.69	-0.18	0.84			0.15	1.04	0.44	1.22
IPQ	-0.38	0.97	0.05	0.94	-0.23	1.06	-0.02	0.84	-0.33	0.96	-0.15	1.04			0.29	1.31
BEV	-0.67	1.15	-0.24	1.13	-0.52	1.23	-0.31	1.05	-0.62	1.15	-0.44	1.22	-0.29	1.31		
MIRS/FE-LMK	-0.09	0.72	0.34	0.67	0.06	0.83	0.27	0.52	-0.04	0.71	0.14	0.81	0.29	0.94	0.58	1.13
NMi-VSL	-0.42	0.61	0.01	0.56	-0.27	0.74	-0.06	0.28	-0.37	0.55	-0.19	0.68	-0.04	0.83	0.25	1.04
MIKES	-0.23	0.84	0.20	0.80	-0.08	0.94	0.13	0.64	-0.18	0.79	0.00	0.89	0.15	1.01	0.44	1.19
VMT/PFI	-0.43	0.74	0.00	0.70	-0.28	0.85	-0.07	0.50	-0.38	0.69	-0.20	0.80	-0.05	0.93	0.24	1.12
SP	-0.04	0.75	0.39	0.71	0.11	0.86	0.32	0.52	0.01	0.70	0.19	0.81	0.34	0.94	0.63	1.13
DTI	-0.39	0.79	0.04	0.75	-0.24	0.89	-0.03	0.57	-0.34	0.74	-0.16	0.85	-0.01	0.97	0.28	1.15
SMU	-0.38	0.72	0.05	0.67	-0.23	0.83	-0.02	0.47	-0.33	0.67	-0.15	0.78	0.00	0.91	0.29	1.11
OMH	-0.53	0.83	-0.10	0.79	-0.38	0.93	-0.17	0.63	-0.48	0.79	-0.30	0.88	-0.15	1.00	0.14	1.18
LNE-INM	-0.34	0.62	0.09	0.57	-0.19	0.75	0.02	0.30	-0.29	0.56	-0.11	0.69	0.04	0.84	0.33	1.05

Key comparison EUROMET.T-K3

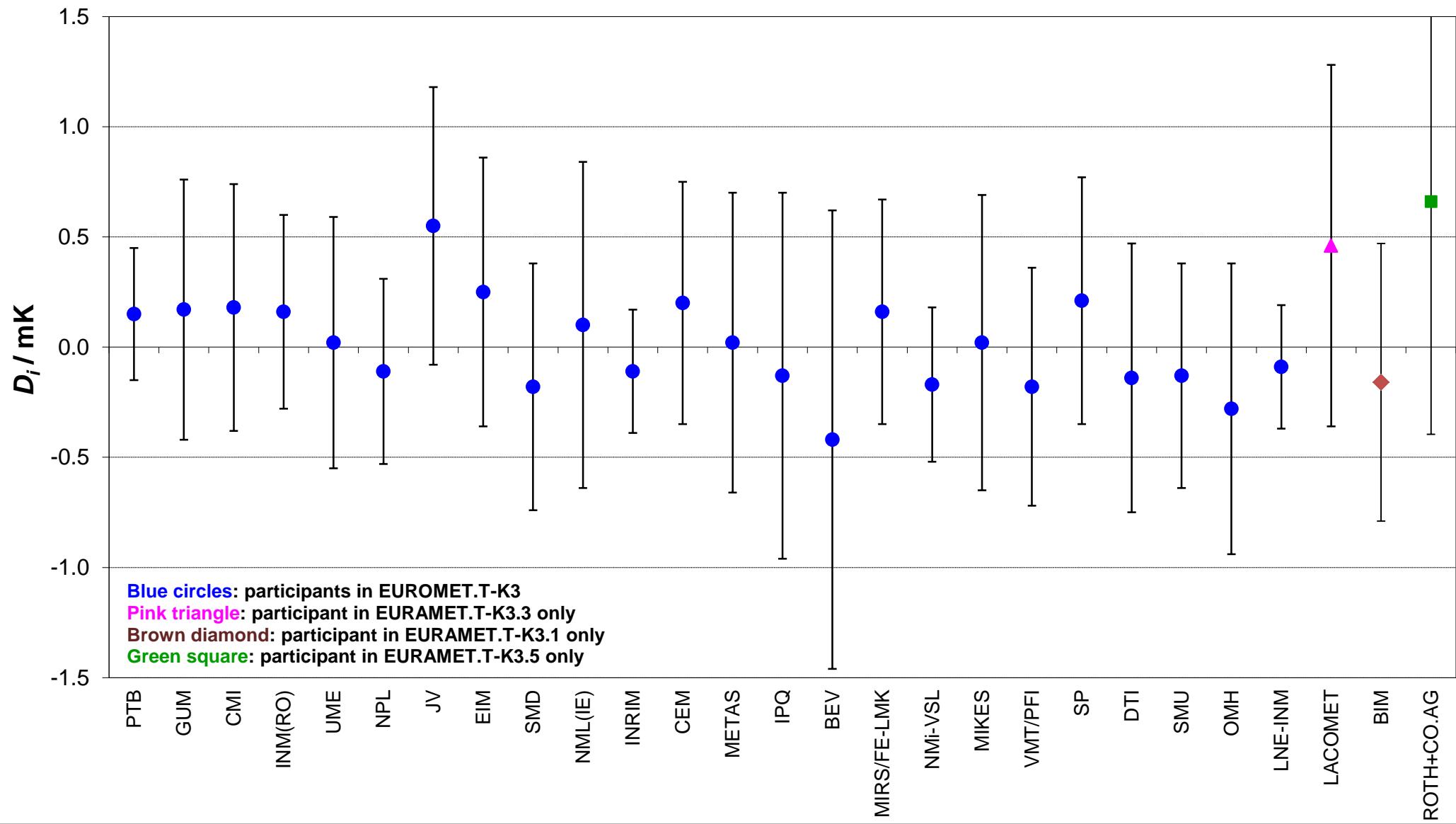
Lab *j* \longrightarrow

Lab <i>i</i>	MIRS/FE-LMK		NMi-VSL		MIKES		VMT/PFI		SP		DTI		SMU		OMH	
	D_{ij}	U_{ij}	D_{ij}	U_{ij}	D_{ij}	U_{ij}	D_{ij}	U_{ij}	D_{ij}	U_{ij}	D_{ij}	U_{ij}	D_{ij}	U_{ij}	D_{ij}	U_{ij}
	/ mK	/ mK	/ mK	/ mK	/ mK	/ mK	/ mK	/ mK	/ mK	/ mK	/ mK	/ mK	/ mK	/ mK	/ mK	/ mK
PTB	-0.01	0.48	0.32	0.30	0.13	0.65	0.33	0.51	-0.06	0.53	0.29	0.58	0.28	0.48	0.43	0.64
GUM	0.01	0.70	0.34	0.59	0.15	0.82	0.35	0.72	-0.04	0.74	0.31	0.77	0.30	0.70	0.45	0.81
CMI	0.02	0.67	0.35	0.56	0.16	0.80	0.36	0.70	-0.03	0.71	0.32	0.75	0.31	0.67	0.46	0.79
INM(RO)	0.00	0.58	0.33	0.44	0.14	0.72	0.34	0.60	-0.05	0.62	0.30	0.67	0.29	0.58	0.44	0.71
UME	-0.14	0.68	0.19	0.57	0.00	0.81	0.20	0.70	-0.19	0.72	0.16	0.76	0.15	0.68	0.30	0.80
NPL	-0.27	0.56	0.06	0.42	-0.13	0.71	0.07	0.59	-0.32	0.61	0.03	0.65	0.02	0.56	0.17	0.70
JV	0.39	0.73	0.72	0.63	0.53	0.85	0.73	0.75	0.34	0.77	0.69	0.81	0.68	0.73	0.83	0.84
EIM	0.09	0.72	0.42	0.61	0.23	0.84	0.43	0.74	0.04	0.75	0.39	0.79	0.38	0.72	0.53	0.83
SMD	-0.34	0.67	-0.01	0.56	-0.20	0.80	0.00	0.70	-0.39	0.71	-0.04	0.75	-0.05	0.67	0.10	0.79
NML(IE)	-0.06	0.83	0.27	0.74	0.08	0.94	0.28	0.85	-0.11	0.86	0.24	0.89	0.23	0.83	0.38	0.93
INRIM	-0.27	0.52	0.06	0.28	-0.13	0.64	0.07	0.50	-0.32	0.52	0.03	0.57	0.02	0.47	0.17	0.63
CEM	0.04	0.71	0.37	0.55	0.18	0.79	0.38	0.69	-0.01	0.70	0.34	0.74	0.33	0.67	0.48	0.79
METAS	-0.14	0.81	0.19	0.68	0.00	0.89	0.20	0.80	-0.19	0.81	0.16	0.85	0.15	0.78	0.30	0.88
IPQ	-0.29	0.94	0.04	0.83	-0.15	1.01	0.05	0.93	-0.34	0.94	0.01	0.97	0.00	0.91	0.15	1.00
BEV	-0.58	1.13	-0.25	1.04	-0.44	1.19	-0.24	1.12	-0.63	1.13	-0.28	1.15	-0.29	1.11	-0.14	1.18
MIRS/FE-LMK			0.33	0.51	0.14	0.77	0.34	0.66	-0.05	0.67	0.30	0.72	0.29	0.63	0.44	0.76
NMi-VSL	-0.33	0.51			-0.19	0.63	0.01	0.49	-0.38	0.51	-0.03	0.56	-0.04	0.51	0.11	0.66
MIKES	-0.14	0.77	0.19	0.63			0.20	0.75	-0.19	0.77	0.16	0.80	0.15	0.77	0.30	0.87
VMT/PFI	-0.34	0.66	-0.01	0.49	-0.20	0.75			-0.39	0.65	-0.04	0.70	-0.05	0.66	0.10	0.78
SP	0.05	0.67	0.38	0.51	0.19	0.77	0.39	0.65			0.35	0.71	0.34	0.67	0.49	0.79
DTI	-0.30	0.72	0.03	0.56	-0.16	0.80	0.04	0.70	-0.35	0.71			-0.01	0.72	0.14	0.83
SMU	-0.29	0.63	0.04	0.51	-0.15	0.77	0.05	0.66	-0.34	0.67	0.01	0.72			0.15	0.69
OMH	-0.44	0.76	-0.11	0.66	-0.30	0.87	-0.10	0.78	-0.49	0.79	-0.14	0.83	-0.15	0.69		
LNE-INM	-0.25	0.52	0.08	0.15	-0.11	0.59	0.09	0.44	-0.30	0.46	0.05	0.52	0.04	0.34	0.19	0.54

Key comparison EUROMET.T-K3

Lab <i>i</i>	Lab <i>j</i>	→
	LNE-INM	
	D_{ij}	U_{ij} / mK
PTB	0.24	0.36
GUM	0.26	0.62
CMI	0.27	0.60
INM(RO)	0.25	0.49
UME	0.11	0.61
NPL	-0.02	0.44
JV	0.64	0.64
EIM	0.34	0.62
SMD	-0.09	0.57
NML(IE)	0.19	0.75
INRIM	-0.02	0.30
CEM	0.29	0.56
METAS	0.11	0.69
IPQ	-0.04	0.84
BEV	-0.33	1.05
MIRS/FE-LMK	0.25	0.52
NMi-VSL	-0.08	0.15
MIKES	0.11	0.59
VMT/PFI	-0.09	0.44
SP	0.30	0.46
DTI	-0.05	0.52
SMU	-0.04	0.34
OMH	-0.19	0.54
LNE-INM		

EUROMET.T-K3 , EURAMET.T-K3.3, K3.1 & K3.5 ITS-90, Gallium Melting Point, 302.9146 K
 Degrees of equivalence [D_i and its expanded uncertainty ($k = 2$), U_i]



Key comparisons EUROMET.T-K3, EURAMET.T-K3.3, K3.1 & K3.5

Indium Freezing Point, 429.7485 K

Degrees of equivalence

Lab <i>i</i>	Lab <i>j</i>		Indium Freezing Point, 429.7485 K											
	PTB	GUM	CMI	INM(RO)	UME	NPL	JV	PTB	GUM	CMI	INM(RO)	UME	NPL	JV
	D_i	U_i	D_{ij}	U_{ij}	D_{ij}	U_{ij}	D_{ij}	U_{ij}	D_{ij}	U_{ij}	D_{ij}	U_{ij}	D_{ij}	U_{ij}
PTB	0.16	0.92	-1.55	1.58	-1.08	1.44	4.06	5.02	-0.06	1.90	0.89	1.23	0.44	2.12
GUM	1.71	1.35	1.55	1.58	0.47	1.75	5.61	5.11	1.49	2.14	2.44	1.58	1.99	2.34
CMI	1.24	1.18	1.08	1.44	-0.47	1.75	5.14	5.07	1.02	2.04	1.97	1.43	1.52	2.25
INM(RO)	-3.90	4.95	-4.06	5.02	-5.61	5.11	-5.14	5.07	-4.12	5.22	-3.17	5.02	-3.62	5.31
UME	0.22	1.71	0.06	1.90	-1.49	2.14	-1.02	2.04	4.12	5.22	0.95	1.89	0.50	2.57
NPL	-0.73	0.83	-0.89	1.23	-2.44	1.58	-1.97	1.43	3.17	5.02	-0.95	1.89	-0.45	2.06
JV	-0.28	1.92	-0.44	2.12	-1.99	2.34	-1.52	2.25	3.62	5.31	-0.50	2.57	0.45	2.06
EIM	1.25	1.68	1.09	1.91	-0.46	2.15	0.01	2.05	5.15	5.22	1.03	2.39	1.98	1.84
SMD	-0.56	1.68	-0.72	1.91	-2.27	2.15	-1.80	2.05	3.34	5.22	-0.78	2.39	0.17	1.84
INRIM	-0.03	0.72	-0.19	1.16	-1.74	1.52	-1.27	1.37	3.87	5.00	-0.25	1.85	0.70	1.09
CEM	0.17	1.25	0.01	1.54	-1.54	1.83	-1.07	1.71	4.07	5.10	-0.05	2.11	0.90	1.49
METAS	0.40	1.12	0.24	1.44	-1.31	1.75	-0.84	1.62	4.30	5.07	0.18	2.04	1.13	1.38
IPQ	0.92	2.03	0.76	2.22	-0.79	2.43	-0.32	2.34	4.82	5.35	0.70	2.65	1.65	2.19
BEV	0.41	1.15	0.25	1.46	-1.30	1.76	-0.83	1.64	4.31	5.08	0.19	2.05	1.14	1.41
MIRS/FE-LMK	0.41	1.41	0.25	1.67	-1.30	1.94	-0.83	1.83	4.31	5.14	0.19	2.21	1.14	1.63
NMi-VSL	-0.45	0.56	-0.61	1.06	-2.16	1.45	-1.69	1.29	3.45	4.98	-0.67	1.79	0.28	0.99
MIKES	-0.14	1.99	-0.30	2.19	-1.85	2.40	-1.38	2.31	3.76	5.33	-0.36	2.62	0.59	2.15
SP	0.29	1.24	0.13	1.53	-1.42	1.82	-0.95	1.70	4.19	5.10	0.07	2.11	1.02	1.48
DTI	-0.29	2.14	-0.45	2.32	-2.00	2.52	-1.53	2.44	3.61	5.39	-0.51	2.73	0.44	2.29
SMU	-0.33	0.99	-0.49	1.34	-2.04	1.67	-1.57	1.53	3.57	5.05	-0.55	1.97	0.40	1.28
LNE-INM	-0.15	0.99	-0.31	1.29	-1.86	1.62	-1.39	1.49	3.75	5.03	-0.37	1.93	0.58	1.24
LACOMET	0.6	2.1												
BIM	-0.14	1.1												
ROTH+CO.AG	1.09	2.07												

Black: participants in EUROMET.T-K3

Pink: participant in EURAMET.T-K3.3 only

Brown: participant in EURAMET.T-K3.1 only

Green: participant in EURAMET.T-K3.5 only

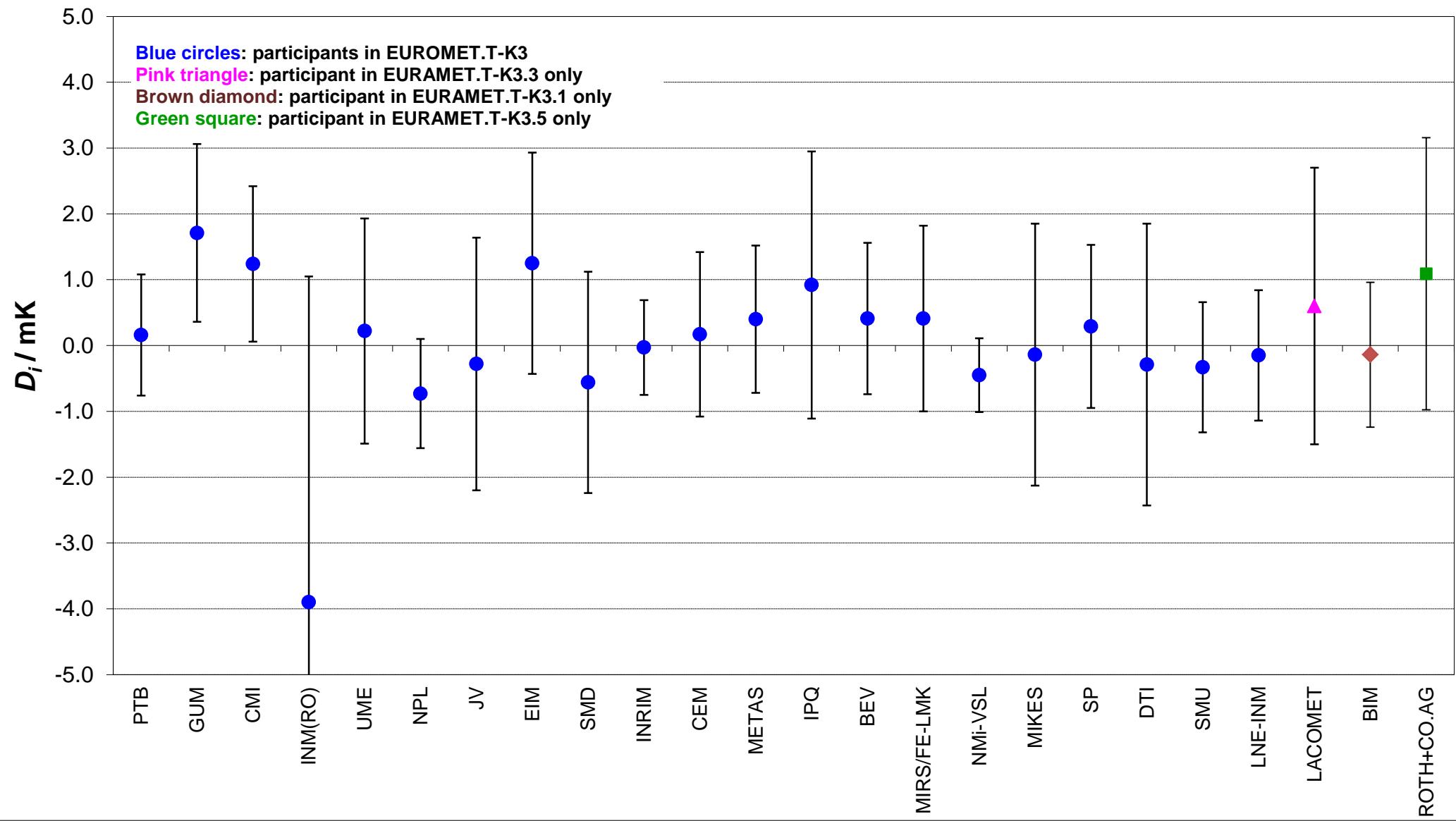
Key comparison EUROMET.T-K3

Lab <i>i</i>	Lab <i>j</i>															
	EIM		SMD		INRIM		CEM		METAS		IPQ		BEV		MIRS/FE-LMK	
	D_{ij}	U_{ij}	D_{ij}	U_{ij}	D_{ij}	U_{ij}	D_{ij}	U_{ij}	D_{ij}	U_{ij}	D_{ij}	U_{ij}	D_{ij}	U_{ij}	D_{ij}	U_{ij}
PTB	-1.09	1.91	0.72	1.91	0.19	1.16	-0.01	1.54	-0.24	1.44	-0.76	2.22	-0.25	1.46	-0.25	1.67
GUM	0.46	2.15	2.27	2.15	1.74	1.52	1.54	1.83	1.31	1.75	0.79	2.43	1.30	1.76	1.30	1.94
CMI	-0.01	2.05	1.80	2.05	1.27	1.37	1.07	1.71	0.84	1.62	0.32	2.34	0.83	1.64	0.83	1.83
INM(RO)	-5.15	5.22	-3.34	5.22	-3.87	5.00	-4.07	5.10	-4.30	5.07	-4.82	5.35	-4.31	5.08	-4.31	5.14
UME	-1.03	2.39	0.78	2.39	0.25	1.85	0.05	2.11	-0.18	2.04	-0.70	2.65	-0.19	2.05	-0.19	2.21
NPL	-1.98	1.84	-0.17	1.84	-0.70	1.09	-0.90	1.49	-1.13	1.38	-1.65	2.19	-1.14	1.41	-1.14	1.63
JV	-1.53	2.52	0.28	2.52	-0.25	2.04	-0.45	2.28	-0.68	2.22	-1.20	2.79	-0.69	2.23	-0.69	2.38
EIM			1.81	2.35	1.28	1.82	1.08	2.09	0.85	2.01	0.33	2.63	0.84	2.03	0.84	2.19
SMD	-1.81	2.35			-0.53	1.82	-0.73	2.09	-0.96	2.01	-1.48	2.63	-0.97	2.03	-0.97	2.19
INRIM	-1.28	1.82	0.53	1.82			-0.20	1.38	-0.43	1.26	-0.95	2.11	-0.44	1.29	-0.44	1.52
CEM	-1.08	2.09	0.73	2.09	0.20	1.38			-0.23	1.62	-0.75	2.35	-0.24	1.64	-0.24	1.83
METAS	-0.85	2.01	0.96	2.01	0.43	1.26	0.23	1.62			-0.52	2.28	-0.01	1.55	-0.01	1.75
IPQ	-0.33	2.63	1.48	2.63	0.95	2.11	0.75	2.35	0.52	2.28			0.51	2.29	0.51	2.43
BEV	-0.84	2.03	0.97	2.03	0.44	1.29	0.24	1.64	0.01	1.55	-0.51	2.29			0.00	1.77
MIRS/FE-LMK	-0.84	2.19	0.97	2.19	0.44	1.52	0.24	1.83	0.01	1.75	-0.51	2.43	0.00	1.77		
NMi-VSL	-1.70	1.76	0.11	1.76	-0.42	0.90	-0.62	1.36	-0.85	1.24	-1.37	2.10	-0.86	1.27	-0.86	1.51
MIKES	-1.39	2.60	0.42	2.60	-0.11	2.11	-0.31	2.34	-0.54	2.28	-1.06	2.84	-0.55	2.29	-0.55	2.43
SP	-0.96	2.08	0.85	2.08	0.32	1.42	0.12	1.75	-0.11	1.66	-0.63	2.37	-0.12	1.68	-0.12	1.87
DTI	-1.54	2.72	0.27	2.72	-0.26	2.25	-0.46	2.47	-0.69	2.41	-1.21	2.94	-0.70	2.42	-0.70	2.56
SMU	-1.58	1.94	0.23	1.94	-0.30	1.21	-0.50	1.59	-0.73	1.48	-1.25	2.25	-0.74	1.51	-0.74	1.71
LNE-INM	-1.40	1.91	0.41	1.91	-0.12	1.15	-0.32	1.54	-0.55	1.43	-1.07	2.22	-0.56	1.46	-0.56	1.67

Key comparison EUROMET.T-K3

Lab <i>i</i>	Lab <i>j</i>											
	NMi-VSL		MIKES		SP		DTI		SMU		LNE-INM	
	D_{ij} / mK	U_{ij}										
PTB	0.61	1.06	0.30	2.19	-0.13	1.53	0.45	2.32	0.49	1.34	0.31	1.29
GUM	2.16	1.45	1.85	2.40	1.42	1.82	2.00	2.52	2.04	1.67	1.86	1.62
CMI	1.69	1.29	1.38	2.31	0.95	1.70	1.53	2.44	1.57	1.53	1.39	1.49
INM(RO)	-3.45	4.98	-3.76	5.33	-4.19	5.10	-3.61	5.39	-3.57	5.05	-3.75	5.03
UME	0.67	1.79	0.36	2.62	-0.07	2.11	0.51	2.73	0.55	1.97	0.37	1.93
NPL	-0.28	0.99	-0.59	2.15	-1.02	1.48	-0.44	2.29	-0.40	1.28	-0.58	1.24
JV	0.17	1.99	-0.14	2.76	-0.57	2.28	0.01	2.87	0.05	2.15	-0.13	2.13
EIM	1.70	1.76	1.39	2.60	0.96	2.08	1.54	2.72	1.58	1.94	1.40	1.91
SMD	-0.11	1.76	-0.42	2.60	-0.85	2.08	-0.27	2.72	-0.23	1.94	-0.41	1.91
INRIM	0.42	0.90	0.11	2.11	-0.32	1.42	0.26	2.25	0.30	1.21	0.12	1.15
CEM	0.62	1.36	0.31	2.34	-0.12	1.75	0.46	2.47	0.50	1.59	0.32	1.54
METAS	0.85	1.24	0.54	2.28	0.11	1.66	0.69	2.41	0.73	1.48	0.55	1.43
IPQ	1.37	2.10	1.06	2.84	0.63	2.37	1.21	2.94	1.25	2.25	1.07	2.22
BEV	0.86	1.27	0.55	2.29	0.12	1.68	0.70	2.42	0.74	1.51	0.56	1.46
MIRS/FE-LMK	0.86	1.51	0.55	2.43	0.12	1.87	0.70	2.56	0.74	1.71	0.56	1.67
NMi-VSL			-0.31	2.04	-0.74	1.31	-0.16	2.18	-0.12	1.12	-0.30	1.08
MIKES	0.31	2.04			-0.43	2.32	0.15	2.90	0.19	2.22	0.01	2.19
SP	0.74	1.31	0.43	2.32			0.58	2.45	0.62	1.58	0.44	1.55
DTI	0.16	2.18	-0.15	2.90	-0.58	2.45			0.04	2.35	-0.14	2.33
SMU	0.12	1.12	-0.19	2.22	-0.62	1.58	-0.04	2.35			-0.18	1.35
LNE-INM	0.30	1.08	-0.01	2.19	-0.44	1.55	0.14	2.33	0.18	1.35		

EUROMET.T-K3, EURAMET.T-K3.3, K3.1 & K3.5 ITS-90, Indium Freezing Point, 429.7485 K
 Degrees of equivalence [D_i and its expanded uncertainty ($k = 2$), U_i]



Key comparisons EUROMET.T-K3, EURAMET.T-K3.3, K3.1 & K3.5

Tin Freezing Point, 505.078 K

Degrees of equivalence

Lab <i>i</i>	Lab <i>j</i>		Tin Freezing Point, 505.078 K													
			PTB		GUM		CMI		INM(RO)		UME		NPL		JV	
	D_i	U_i	D_{ij}	U_{ij}	D_{ij}	U_{ij}	D_{ij}	U_{ij}	D_{ij}	U_{ij}	D_{ij}	U_{ij}	D_{ij}	U_{ij}	D_{ij}	U_{ij}
PTB	0.43	0.90			0.80	1.48	0.43	1.22	2.77	2.83	0.58	1.44	0.72	1.22	1.08	1.69
GUM	-0.37	1.26	-0.80	1.48			-0.37	1.51	1.97	2.96	-0.22	1.69	-0.08	1.51	0.28	1.90
CMI	0.00	0.95	-0.43	1.22	0.37	1.51			2.34	2.84	0.15	1.47	0.29	1.26	0.65	1.71
INM(RO)	-2.34	2.72	-2.77	2.83	-1.97	2.96	-2.34	2.84			-2.19	2.94	-2.05	2.84	-1.69	3.07
UME	-0.15	1.22	-0.58	1.44	0.22	1.69	-0.15	1.47	2.19	2.94			0.14	1.47	0.50	1.88
NPL	-0.29	0.87	-0.72	1.22	0.08	1.51	-0.29	1.26	2.05	2.84	-0.14	1.47			0.36	1.61
JV	-0.65	1.45	-1.08	1.69	-0.28	1.90	-0.65	1.71	1.69	3.07	-0.50	1.88	-0.36	1.61		
EIM	-0.16	1.42	-0.59	1.66	0.21	1.88	-0.16	1.69	2.18	3.06	-0.01	1.85	0.13	1.58	0.49	1.96
SMD	-2.24	1.22	-2.67	1.49	-1.87	1.73	-2.24	1.52	0.10	2.97	-2.09	1.70	-1.95	1.41	-1.59	1.82
NML(IE)	0.06	1.59	-0.37	1.81	0.43	2.01	0.06	1.83	2.40	3.14	0.21	1.99	0.35	1.74	0.71	2.09
INRIM	0.06	0.95	-0.37	1.28	0.43	1.56	0.06	1.32	2.40	2.87	0.21	1.52	0.35	1.26	0.71	1.71
CEM	0.61	1.43	0.18	1.67	0.98	1.89	0.61	1.70	2.95	3.06	0.76	1.86	0.90	1.65	1.26	2.02
METAS	0.69	1.07	0.26	1.37	1.06	1.63	0.69	1.41	3.03	2.91	0.84	1.60	0.98	1.35	1.34	1.78
IPQ	1.07	1.43	0.64	1.67	1.44	1.89	1.07	1.70	3.41	3.06	1.22	1.86	1.36	1.65	1.72	2.02
BEV	1.02	1.40	0.59	1.64	1.39	1.86	1.02	1.67	3.36	3.05	1.17	1.84	1.31	1.63	1.67	2.00
MIRS/FE-LMK	0.44	1.15	0.01	1.44	0.81	1.69	0.44	1.47	2.78	2.94	0.59	1.66	0.73	1.42	1.09	1.83
NMi-VSL	0.22	0.92	-0.21	1.26	0.59	1.54	0.22	1.30	2.56	2.86	0.37	1.50	0.51	1.24	0.87	1.70
MIKES	-0.50	1.34	-0.93	1.59	-0.13	1.82	-0.50	1.62	1.84	3.02	-0.35	1.79	-0.21	1.58	0.15	1.96
VMT/PFI	0.03	1.63	-0.40	1.84	0.40	2.04	0.03	1.87	2.37	3.16	0.18	2.02	0.32	1.83	0.68	2.17
SP	-0.09	1.20	-0.52	1.48	0.28	1.72	-0.09	1.51	2.25	2.96	0.06	1.69	0.20	1.46	0.56	1.86
DTI	-0.39	1.98	-0.82	2.16	-0.02	2.33	-0.39	2.18	1.95	3.35	-0.24	2.31	-0.10	2.15	0.26	2.44
SMU	0.18	1.39	-0.25	1.63	0.55	1.86	0.18	1.66	2.52	3.04	0.33	1.83	0.47	1.62	0.83	1.99
OMH	0.20	1.90	-0.23	2.09	0.57	2.26	0.20	2.11	2.54	3.31	0.35	2.24	0.49	2.07	0.85	2.38
LNE-INM	0.06	1.00	-0.37	1.26	0.43	1.54	0.06	1.30	2.40	2.86	0.21	1.51	0.35	1.22	0.71	1.68
LACOMET	-0.7	2.2														
BIM	0.05	1.4														
ROTH+CO.AG	0.82	2.13														

Black: participants in EUROMET.T-K3

Pink: participant in EURAMET.T-K3.3 only

Brown: participant in EURAMET.T-K3.1 only

Green: participant in EURAMET.T-K3.5 only

Key comparison EUROMET.T-K3

Lab <i>i</i>	Lab <i>j</i>															
	EIM		SMD		NML(IE)		INRIM		CEM		METAS		IPQ		BEV	
	D_{ij}	U_{ij}	D_{ij}	U_{ij}	D_{ij}	U_{ij}	D_{ij}	U_{ij}	D_{ij}	U_{ij}	D_{ij}	U_{ij}	D_{ij}	U_{ij}	D_{ij}	U_{ij}
PTB	0.59	1.66	2.67	1.49	0.37	1.81	0.37	1.28	-0.18	1.67	-0.26	1.37	-0.64	1.67	-0.59	1.64
GUM	-0.21	1.88	1.87	1.73	-0.43	2.01	-0.43	1.56	-0.98	1.89	-1.06	1.63	-1.44	1.89	-1.39	1.86
CMI	0.16	1.69	2.24	1.52	-0.06	1.83	-0.06	1.32	-0.61	1.70	-0.69	1.41	-1.07	1.70	-1.02	1.67
INM(RO)	-2.18	3.06	-0.10	2.97	-2.40	3.14	-2.40	2.87	-2.95	3.06	-3.03	2.91	-3.41	3.06	-3.36	3.05
UME	0.01	1.85	2.09	1.70	-0.21	1.99	-0.21	1.52	-0.76	1.86	-0.84	1.60	-1.22	1.86	-1.17	1.84
NPL	-0.13	1.58	1.95	1.41	-0.35	1.74	-0.35	1.26	-0.90	1.65	-0.98	1.35	-1.36	1.65	-1.31	1.63
JV	-0.49	1.96	1.59	1.82	-0.71	2.09	-0.71	1.71	-1.26	2.02	-1.34	1.78	-1.72	2.02	-1.67	2.00
EIM			2.08	1.80	-0.22	2.07	-0.22	1.69	-0.77	2.00	-0.85	1.76	-1.23	2.00	-1.18	1.98
SMD	-2.08	1.80			-2.30	1.94	-2.30	1.52	-2.85	1.86	-2.93	1.60	-3.31	1.86	-3.26	1.84
NML(IE)	0.22	2.07	2.30	1.94			0.00	1.83	-0.55	2.12	-0.63	1.90	-1.01	2.12	-0.96	2.10
INRIM	0.22	1.69	2.30	1.52	0.00	1.83			-0.55	1.57	-0.63	1.25	-1.01	1.57	-0.96	1.54
CEM	0.77	2.00	2.85	1.86	0.55	2.12	0.55	1.57			-0.08	1.65	-0.46	1.90	-0.41	1.88
METAS	0.85	1.76	2.93	1.60	0.63	1.90	0.63	1.25	0.08	1.65			-0.38	1.65	-0.33	1.62
IPQ	1.23	2.00	3.31	1.86	1.01	2.12	1.01	1.57	0.46	1.90	0.38	1.65			0.05	1.88
BEV	1.18	1.98	3.26	1.84	0.96	2.10	0.96	1.54	0.41	1.88	0.33	1.62	-0.05	1.88		
MIRS/FE-LMK	0.60	1.81	2.68	1.66	0.38	1.94	0.38	1.32	-0.17	1.70	-0.25	1.41	-0.63	1.70	-0.58	1.67
NMi-VSL	0.38	1.67	2.46	1.50	0.16	1.82	0.16	1.30	-0.39	1.68	-0.47	1.39	-0.85	1.68	-0.80	1.65
MIKES	-0.34	1.93	1.74	1.79	-0.56	2.06	-0.56	1.62	-1.11	1.94	-1.19	1.69	-1.57	1.94	-1.52	1.92
VMT/PFI	0.19	2.15	2.27	2.02	-0.03	2.26	-0.03	1.87	-0.58	2.15	-0.66	1.93	-1.04	2.15	-0.99	2.13
SP	0.07	1.84	2.15	1.69	-0.15	1.97	-0.15	1.51	-0.70	1.85	-0.78	1.59	-1.16	1.85	-1.11	1.82
DTI	-0.23	2.42	1.85	2.31	-0.45	2.53	-0.45	2.18	-1.00	2.43	-1.08	2.24	-1.46	2.43	-1.41	2.41
SMU	0.34	1.97	2.42	1.83	0.12	2.10	0.12	1.66	-0.43	1.98	-0.51	1.73	-0.89	1.98	-0.84	1.96
OMH	0.36	2.36	2.44	2.24	0.14	2.46	0.14	2.11	-0.41	2.36	-0.49	2.16	-0.87	2.36	-0.82	2.35
LNE-INM	0.22	1.66	2.30	1.49	0.00	1.81	0.00	1.19	-0.55	1.60	-0.63	1.29	-1.01	1.60	-0.96	1.57

Key comparison EUROMET.T-K3

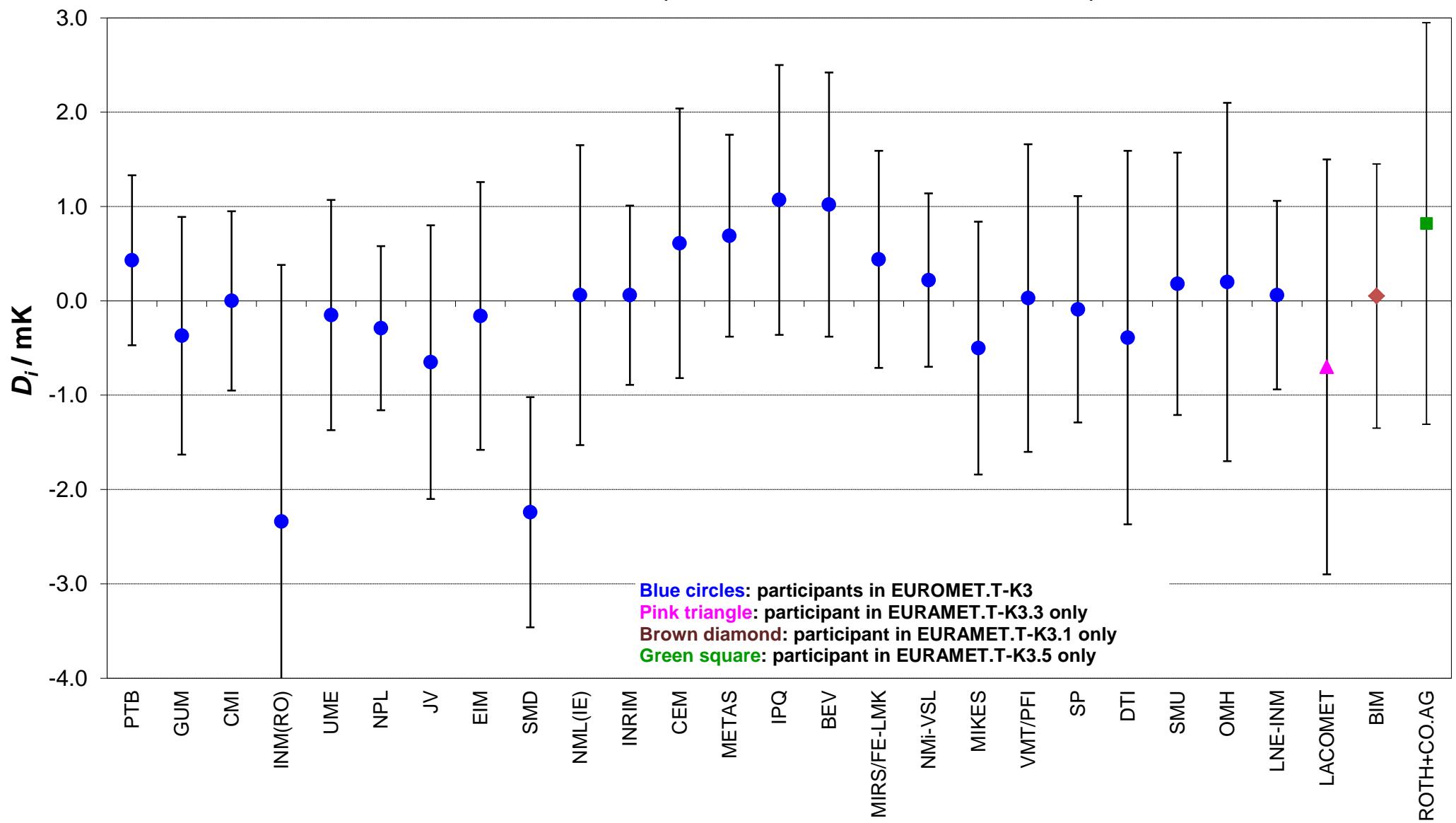
Lab *j* →

Lab <i>i</i>	MIRS/FE-LMK		NMi-VSL		MIKES		VMT/PFI		SP		DTI		SMU		OMH	
	D_{ij}	U_{ij}	D_{ij}	U_{ij}	D_{ij}	U_{ij}	D_{ij}	U_{ij}	D_{ij}	U_{ij}	D_{ij}	U_{ij}	D_{ij}	U_{ij}	D_{ij}	U_{ij}
	/ mK	/ mK	/ mK	/ mK	/ mK	/ mK	/ mK	/ mK	/ mK	/ mK	/ mK	/ mK	/ mK	/ mK	/ mK	/ mK
PTB	-0.01	1.44	0.21	1.26	0.93	1.59	0.40	1.84	0.52	1.48	0.82	2.16	0.25	1.63	0.23	2.09
GUM	-0.81	1.69	-0.59	1.54	0.13	1.82	-0.40	2.04	-0.28	1.72	0.02	2.33	-0.55	1.86	-0.57	2.26
CMI	-0.44	1.47	-0.22	1.30	0.50	1.62	-0.03	1.87	0.09	1.51	0.39	2.18	-0.18	1.66	-0.20	2.11
INM(RO)	-2.78	2.94	-2.56	2.86	-1.84	3.02	-2.37	3.16	-2.25	2.96	-1.95	3.35	-2.52	3.04	-2.54	3.31
UME	-0.59	1.66	-0.37	1.50	0.35	1.79	-0.18	2.02	-0.06	1.69	0.24	2.31	-0.33	1.83	-0.35	2.24
NPL	-0.73	1.42	-0.51	1.24	0.21	1.58	-0.32	1.83	-0.20	1.46	0.10	2.15	-0.47	1.62	-0.49	2.07
JV	-1.09	1.83	-0.87	1.70	-0.15	1.96	-0.68	2.17	-0.56	1.86	-0.26	2.44	-0.83	1.99	-0.85	2.38
EIM	-0.60	1.81	-0.38	1.67	0.34	1.93	-0.19	2.15	-0.07	1.84	0.23	2.42	-0.34	1.97	-0.36	2.36
SMD	-2.68	1.66	-2.46	1.50	-1.74	1.79	-2.27	2.02	-2.15	1.69	-1.85	2.31	-2.42	1.83	-2.44	2.24
NML(IE)	-0.38	1.94	-0.16	1.82	0.56	2.06	0.03	2.26	0.15	1.97	0.45	2.53	-0.12	2.10	-0.14	2.46
INRIM	-0.38	1.32	-0.16	1.30	0.56	1.62	0.03	1.87	0.15	1.51	0.45	2.18	-0.12	1.66	-0.14	2.11
CEM	0.17	1.70	0.39	1.68	1.11	1.94	0.58	2.15	0.70	1.85	1.00	2.43	0.43	1.98	0.41	2.36
METAS	0.25	1.41	0.47	1.39	1.19	1.69	0.66	1.93	0.78	1.59	1.08	2.24	0.51	1.73	0.49	2.16
IPQ	0.63	1.70	0.85	1.68	1.57	1.94	1.04	2.15	1.16	1.85	1.46	2.43	0.89	1.98	0.87	2.36
BEV	0.58	1.67	0.80	1.65	1.52	1.92	0.99	2.13	1.11	1.82	1.41	2.41	0.84	1.96	0.82	2.35
MIRS/FE-LMK			0.22	1.45	0.94	1.75	0.41	1.98	0.53	1.64	0.83	2.27	0.26	1.78	0.24	2.21
NMi-VSL	-0.22	1.45			0.72	1.46	0.19	1.73	0.31	1.34	0.61	2.06	0.04	1.65	0.02	2.09
MIKES	-0.94	1.75	-0.72	1.46			-0.53	1.99	-0.41	1.65	-0.11	2.28	-0.68	1.91	-0.70	2.31
VMT/PFI	-0.41	1.98	-0.19	1.73	0.53	1.99			0.12	1.90	0.42	2.46	-0.15	2.13	-0.17	2.49
SP	-0.53	1.64	-0.31	1.34	0.41	1.65	-0.12	1.90			0.30	2.20	-0.27	1.82	-0.29	2.23
DTI	-0.83	2.27	-0.61	2.06	0.11	2.28	-0.42	2.46	-0.30	2.20			-0.57	2.40	-0.59	2.73
SMU	-0.26	1.78	-0.04	1.65	0.68	1.91	0.15	2.13	0.27	1.82	0.57	2.40			-0.02	2.08
OMH	-0.24	2.21	-0.02	2.09	0.70	2.31	0.17	2.49	0.29	2.23	0.59	2.73	0.02	2.08		
LNE-INM	-0.38	1.36	-0.16	1.16	0.56	1.51	0.03	1.78	0.15	1.39	0.45	2.10	-0.12	1.31	-0.14	1.84

Key comparison EUROMET.T-K3

Lab <i>i</i>	Lab <i>j</i>	\rightarrow
	LNE-INM	
	D_{ij}	U_{ij} / mK
PTB	0.37	1.26
GUM	-0.43	1.54
CMI	-0.06	1.30
INM(RO)	-2.40	2.86
UME	-0.21	1.51
NPL	-0.35	1.22
JV	-0.71	1.68
EIM	-0.22	1.66
SMD	-2.30	1.49
NML(IE)	0.00	1.81
INRIM	0.00	1.19
CEM	0.55	1.60
METAS	0.63	1.29
IPQ	1.01	1.60
BEV	0.96	1.57
MIRS/FE-LMK	0.38	1.36
NMi-VSL	0.16	1.16
MIKES	-0.56	1.51
VMT/PFI	-0.03	1.78
SP	-0.15	1.39
DTI	-0.45	2.10
SMU	0.12	1.31
OMH	0.14	1.84
LNE-INM		

EUROMET.T-K3, EURAMET.T-K3.3, K3.1 & K3.5 ITS-90, Tin Freezing Point, 505.078 K
 Degrees of equivalence [D_i and its expanded uncertainty ($k = 2$), U_i]



Key comparisons EUROMET.T-K3, EURAMET.T-K3.3, K3.1 & K3.5

Zinc Freezing Point, 692.677 K

Degrees of equivalence

Lab <i>i</i>	Lab <i>j</i>		Zinc Freezing Point, 692.677 K															
			PTB		GUM		CMI		INM(RO)		UME		NPL		JV			
			D_{ij}	U_i	D_{ij}	U_{ij}												
			/ mK	/ mK	/ mK	/ mK	/ mK	/ mK	/ mK	/ mK	/ mK	/ mK	/ mK	/ mK	/ mK	/ mK		
PTB			-0.49	1.44			-1.70	1.98	-0.56	1.88	1.21	3.79	0.01	2.06	0.24	2.11	0.43	2.62
GUM			1.21	1.51	1.70	1.98	1.14	1.94	2.91	3.82	1.71	2.11	1.94	2.16	2.13	2.66		
CMI			0.07	1.38	0.56	1.88	-1.14	1.94			1.77	3.77	0.57	2.02	0.80	2.07	0.99	2.59
INM(RO)			-1.70	3.57	-1.21	3.79	-2.91	3.82	-1.77	3.77			-1.20	3.86	-0.97	3.89	-0.78	4.19
UME			-0.50	1.61	-0.01	2.06	-1.71	2.11	-0.57	2.02	1.20	3.86			0.23	2.23	0.42	2.72
NPL			-0.73	1.57	-0.24	2.11	-1.94	2.16	-0.80	2.07	0.97	3.89	-0.23	2.23			0.19	2.43
JV			-0.92	2.21	-0.43	2.62	-2.13	2.66	-0.99	2.59	0.78	4.19	-0.42	2.72	-0.19	2.43		
EIM			-0.75	2.20	-0.26	2.61	-1.96	2.65	-0.82	2.58	0.95	4.18	-0.25	2.71	-0.02	2.43	0.17	2.88
SMD			-1.35	2.31	-0.86	2.71	-2.56	2.75	-1.42	2.68	0.35	4.24	-0.85	2.80	-0.62	2.53	-0.43	2.97
NML(IE)			-0.34	3.09	0.15	3.40	-1.55	3.43	-0.41	3.37	1.36	4.71	0.16	3.47	0.39	3.25	0.58	3.61
INRIM			-0.43	1.96	0.06	2.42	-1.64	2.46	-0.50	2.38	1.27	4.06	0.07	2.52	0.30	2.50	0.49	2.94
CEM			0.30	2.36	0.79	2.75	-0.91	2.79	0.23	2.72	2.00	4.27	0.80	2.84	1.03	2.82	1.22	3.22
METAS			0.27	2.13	0.76	2.56	-0.94	2.60	0.20	2.52	1.97	4.15	0.77	2.65	1.00	2.63	1.19	3.06
IPQ			1.92	2.21	2.41	2.62	0.71	2.66	1.85	2.59	3.62	4.19	2.42	2.72	2.65	2.70	2.84	3.11
BEV			0.92	2.13	1.41	2.56	-0.29	2.60	0.85	2.52	2.62	4.15	1.42	2.65	1.65	2.63	1.84	3.06
MIRS/FE-LMK			-0.30	2.54	0.19	2.91	-1.51	2.94	-0.37	2.88	1.40	4.37	0.20	2.99	0.43	2.97	0.62	3.35
NMi-VSL			-0.82	1.58	-0.33	2.12	-2.03	2.17	-0.89	2.08	0.88	3.89	-0.32	2.24	-0.09	2.21	0.10	2.70
MIKES			0.19	1.98	0.68	2.43	-1.02	2.47	0.12	2.40	1.89	4.07	0.69	2.54	0.92	2.51	1.11	2.95
VMT/PFI			-0.37	2.11	0.12	2.54	-1.58	2.58	-0.44	2.51	1.33	4.14	0.13	2.64	0.36	2.61	0.55	3.04
SP			-0.44	1.87	0.05	2.34	-1.65	2.39	-0.51	2.31	1.26	4.02	0.06	2.45	0.29	2.43	0.48	2.88
DTI			0.16	2.34	0.65	2.73	-1.05	2.77	0.09	2.70	1.86	4.26	0.66	2.83	0.89	2.80	1.08	3.21
SMU			0.60	1.32	1.09	1.93	-0.61	1.99	0.53	1.89	2.30	3.80	1.10	2.06	1.33	2.03	1.52	2.56
OMH			0.91	2.39	1.40	2.78	-0.30	2.81	0.84	2.75	2.61	4.29	1.41	2.87	1.64	2.85	1.83	3.24
LNE-INM			0.86	1.69	1.35	2.12	-0.35	2.17	0.79	2.08	2.56	3.90	1.36	2.24	1.59	1.98	1.78	2.51
LACOMET			-2.1	3.2														
BIM			-1.62	2.2														
ROTH+CO.AG			1.72	2.82														

Black: participants in EUROMET.T-K3

Pink: participant in EURAMET.T-K3.3 only

Brown: participant in EURAMET.T-K3.1 only

Green: participant in EURAMET.T-K3.5 only

Key comparison EUROMET.T-K3

Lab <i>i</i>	Lab <i>j</i>															
	EIM		SMD		NML(IE)		INRIM		CEM		METAS		IPQ		BEV	
	D_{ij}	U_{ij}	D_{ij}	U_{ij}	D_{ij}	U_{ij}	D_{ij}	U_{ij}	D_{ij}	U_{ij}	D_{ij}	U_{ij}	D_{ij}	U_{ij}	D_{ij}	U_{ij}
PTB	0.26	2.61	0.86	2.71	-0.15	3.40	-0.06	2.42	-0.79	2.75	-0.76	2.56	-2.41	2.62	-1.41	2.56
GUM	1.96	2.65	2.56	2.75	1.55	3.43	1.64	2.46	0.91	2.79	0.94	2.60	-0.71	2.66	0.29	2.60
CMI	0.82	2.58	1.42	2.68	0.41	3.37	0.50	2.38	-0.23	2.72	-0.20	2.52	-1.85	2.59	-0.85	2.52
INM(RO)	-0.95	4.18	-0.35	4.24	-1.36	4.71	-1.27	4.06	-2.00	4.27	-1.97	4.15	-3.62	4.19	-2.62	4.15
UME	0.25	2.71	0.85	2.80	-0.16	3.47	-0.07	2.52	-0.80	2.84	-0.77	2.65	-2.42	2.72	-1.42	2.65
NPL	0.02	2.43	0.62	2.53	-0.39	3.25	-0.30	2.50	-1.03	2.82	-1.00	2.63	-2.65	2.70	-1.65	2.63
JV	-0.17	2.88	0.43	2.97	-0.58	3.61	-0.49	2.94	-1.22	3.22	-1.19	3.06	-2.84	3.11	-1.84	3.06
EIM			0.60	2.96	-0.41	3.60	-0.32	2.93	-1.05	3.21	-1.02	3.05	-2.67	3.11	-1.67	3.05
SMD	-0.60	2.96			-1.01	3.67	-0.92	3.02	-1.65	3.29	-1.62	3.13	-3.27	3.18	-2.27	3.13
NML(IE)	0.41	3.60	1.01	3.67			0.09	3.65	-0.64	3.88	-0.61	3.74	-2.26	3.79	-1.26	3.74
INRIM	0.32	2.93	0.92	3.02	-0.09	3.65			-0.73	2.63	-0.70	2.43	-2.35	2.50	-1.35	2.43
CEM	1.05	3.21	1.65	3.29	0.64	3.88	0.73	2.63			0.03	2.76	-1.62	2.82	-0.62	2.76
METAS	1.02	3.05	1.62	3.13	0.61	3.74	0.70	2.43	-0.03	2.76			-1.65	2.63	-0.65	2.57
IPQ	2.67	3.11	3.27	3.18	2.26	3.79	2.35	2.50	1.62	2.82	1.65	2.63			1.00	2.63
BEV	1.67	3.05	2.27	3.13	1.26	3.74	1.35	2.43	0.62	2.76	0.65	2.57	-1.00	2.63		
MIRS/FE-LMK	0.45	3.35	1.05	3.42	0.04	3.99	0.13	2.79	-0.60	3.09	-0.57	2.92	-2.22	2.97	-1.22	2.92
NMi-VSL	-0.07	2.69	0.53	2.78	-0.48	3.46	-0.39	2.50	-1.12	2.83	-1.09	2.64	-2.74	2.70	-1.74	2.64
MIKES	0.94	2.95	1.54	3.03	0.53	3.66	0.62	2.77	-0.11	3.07	-0.08	2.89	-1.73	2.95	-0.73	2.89
VMT/PFI	0.38	3.04	0.98	3.12	-0.03	3.73	0.06	2.87	-0.67	3.15	-0.64	2.98	-2.29	3.04	-1.29	2.98
SP	0.31	2.87	0.91	2.96	-0.10	3.60	-0.01	2.69	-0.74	3.00	-0.71	2.82	-2.36	2.88	-1.36	2.82
DTI	0.91	3.20	1.51	3.28	0.50	3.87	0.59	3.04	-0.14	3.31	-0.11	3.15	-1.76	3.21	-0.76	3.15
SMU	1.35	2.55	1.95	2.65	0.94	3.35	1.03	2.35	0.30	2.69	0.33	2.49	-1.32	2.56	-0.32	2.49
OMH	1.66	3.24	2.26	3.31	1.25	3.90	1.34	3.08	0.61	3.35	0.64	3.19	-1.01	3.24	-0.01	3.19
LNE-INM	1.61	2.51	2.21	2.60	1.20	3.31	1.29	2.05	0.56	2.44	0.59	2.22	-1.06	2.29	-0.06	2.22

Key comparison EUROMET.T-K3

Lab <i>i</i>	Lab <i>j</i>															
	MIRS/FE-LMK		NMi-VSL		MIKES		VMT/PFI		SP		DTI		SMU		OMH	
	D_{ij} / mK	U_{ij}														
PTB	-0.19	2.91	0.33	2.12	-0.68	2.43	-0.12	2.54	-0.05	2.34	-0.65	2.73	-1.09	1.93	-1.40	2.78
GUM	1.51	2.94	2.03	2.17	1.02	2.47	1.58	2.58	1.65	2.39	1.05	2.77	0.61	1.99	0.30	2.81
CMI	0.37	2.88	0.89	2.08	-0.12	2.40	0.44	2.51	0.51	2.31	-0.09	2.70	-0.53	1.89	-0.84	2.75
INM(RO)	-1.40	4.37	-0.88	3.89	-1.89	4.07	-1.33	4.14	-1.26	4.02	-1.86	4.26	-2.30	3.80	-2.61	4.29
UME	-0.20	2.99	0.32	2.24	-0.69	2.54	-0.13	2.64	-0.06	2.45	-0.66	2.83	-1.10	2.06	-1.41	2.87
NPL	-0.43	2.97	0.09	2.21	-0.92	2.51	-0.36	2.61	-0.29	2.43	-0.89	2.80	-1.33	2.03	-1.64	2.85
JV	-0.62	3.35	-0.10	2.70	-1.11	2.95	-0.55	3.04	-0.48	2.88	-1.08	3.21	-1.52	2.56	-1.83	3.24
EIM	-0.45	3.35	0.07	2.69	-0.94	2.95	-0.38	3.04	-0.31	2.87	-0.91	3.20	-1.35	2.55	-1.66	3.24
SMD	-1.05	3.42	-0.53	2.78	-1.54	3.03	-0.98	3.12	-0.91	2.96	-1.51	3.28	-1.95	2.65	-2.26	3.31
NML(IE)	-0.04	3.99	0.48	3.46	-0.53	3.66	0.03	3.73	0.10	3.60	-0.50	3.87	-0.94	3.35	-1.25	3.90
INRIM	-0.13	2.79	0.39	2.50	-0.62	2.77	-0.06	2.87	0.01	2.69	-0.59	3.04	-1.03	2.35	-1.34	3.08
CEM	0.60	3.09	1.12	2.83	0.11	3.07	0.67	3.15	0.74	3.00	0.14	3.31	-0.30	2.69	-0.61	3.35
METAS	0.57	2.92	1.09	2.64	0.08	2.89	0.64	2.98	0.71	2.82	0.11	3.15	-0.33	2.49	-0.64	3.19
IPQ	2.22	2.97	2.74	2.70	1.73	2.95	2.29	3.04	2.36	2.88	1.76	3.21	1.32	2.56	1.01	3.24
BEV	1.22	2.92	1.74	2.64	0.73	2.89	1.29	2.98	1.36	2.82	0.76	3.15	0.32	2.49	0.01	3.19
MIRS/FE-LMK			0.52	2.98	-0.49	3.21	0.07	3.29	0.14	3.14	-0.46	3.44	-0.90	2.85	-1.21	3.48
NMi-VSL	-0.52	2.98			-1.01	2.14	-0.45	2.26	-0.38	2.04	-0.98	2.48	-1.42	2.04	-1.73	2.85
MIKES	0.49	3.21	1.01	2.14			0.56	2.56	0.63	2.36	0.03	2.75	-0.41	2.36	-0.72	3.09
VMT/PFI	-0.07	3.29	0.45	2.26	-0.56	2.56			0.07	2.47	-0.53	2.84	-0.97	2.47	-1.28	3.18
SP	-0.14	3.14	0.38	2.04	-0.63	2.36	-0.07	2.47			-0.60	2.67	-1.04	2.27	-1.35	3.02
DTI	0.46	3.44	0.98	2.48	-0.03	2.75	0.53	2.84	0.60	2.67			-0.44	2.67	-0.75	3.33
SMU	0.90	2.85	1.42	2.04	0.41	2.36	0.97	2.47	1.04	2.27	0.44	2.67			-0.31	2.51
OMH	1.21	3.48	1.73	2.85	0.72	3.09	1.28	3.18	1.35	3.02	0.75	3.33	0.31	2.51		
LNE-INM	1.16	2.61	1.68	1.88	0.67	2.22	1.23	2.34	1.30	2.13	0.70	2.55	0.26	1.86	-0.05	2.73

Key comparison EUROMET.T-K3

Lab <i>i</i>	Lab <i>j</i>	→
LNE-INM		
	D_{ij}	U_{ij}
	$/ \text{mK}$	
PTB	-1.35	2.12
GUM	0.35	2.17
CMI	-0.79	2.08
INM(RO)	-2.56	3.90
UME	-1.36	2.24
NPL	-1.59	1.98
JV	-1.78	2.51
EIM	-1.61	2.51
SMD	-2.21	2.60
NML(IE)	-1.20	3.31
INRIM	-1.29	2.05
CEM	-0.56	2.44
METAS	-0.59	2.22
IPQ	1.06	2.29
BEV	0.06	2.22
MIRS/FE-LMK	-1.16	2.61
NMi-VSL	-1.68	1.88
MIKES	-0.67	2.22
VMT/PFI	-1.23	2.34
SP	-1.30	2.13
DTI	-0.70	2.55
SMU	-0.26	1.86
OMH	0.05	2.73
LNE-INM		

EUROMET.T-K3, EURAMET.T-K3.3, K3.1 & K3.5 ITS-90, Zinc Freezing Point, 692.677 K
 Degrees of equivalence [D_i and its expanded uncertainty ($k = 2$), U_i]

