

CCPR-K6, EUROMET-K6 and EURAMET.PR-K6.1

MEASURAND : Spectral regular transmittance

Key comparison CCPR-K6

Measurements involve five different filters designated as "Filter A", Filter B", "Filter C", "Filter D", and "Filter E", and 8 wavelengths (380 nm, 400 nm, 500 nm, 600 nm, 700 nm, 800 nm, 900 nm, and 1000 nm). The filter characteristics are detailed in Table 3 on page 7 of the Final Report. Absolute transmission measurements and associated uncertainties of all participants are available in the Annex B of the Final Report.

Key comparison EUROMET.PR-K6

Measurements involve five different filters designated as "Filter A", Filter B", "Filter C", "Filter D", and "Filter E", and 8 wavelengths (380 nm, 400 nm, 500 nm, 600 nm, 700 nm, 800 nm, 900 nm, and 1000 nm). The filter standards used are detailed in section 3.1 of the EUROMET.PR-K6 Final Report. Absolute transmission measurements and associated uncertainties of all participants in EUROMET.PR-K6 are available in the Annex B of the EUROMET.PR-K6 Final Report.

Key comparison EURAMET.PR-K6.1

Measurements involve five different filters designated as "Filter A", Filter B", "Filter C", "Filter D", and "Filter E", and 8 wavelengths (380 nm, 400 nm, 500 nm, 600 nm, 700 nm, 800 nm, 900 nm, and 1000 nm). The filter standards used are detailed in section 3.1 of the EURAMET.PR-K6.1 Final Report. Absolute transmission measurements and associated uncertainties of the participants in EURAMET.PR-K6.1 are available in page 17 of the EURAMET.PR-K6.1 Final Report.

Note:

**The Spanish laboratory IFA-CSIC is now IO-CSIC (Instituto de Óptica Daza de Valdés).
The corresponding results are presented here under the acronym IODV.**

CCPR-K6, EUROMET-K6 and EURAMET.PR-K6.1
MEASURAND : Spectral regular transmittance

Key comparison CCPR-K6

Measurements involve five different filters designated as "Filter A", "Filter B", "Filter C", "Filter D", and "Filter E", and 8 wavelengths (380 nm, 400 nm, 500 nm, 600 nm, 700 nm, 800 nm, 900 nm, and 1000 nm). The filter characteristics are detailed in Table 3 on page 7 of the Final Report.

The key comparison reference value, x_R , and its standard uncertainty, u_R , are deduced from the participants' results compared to the Pilot's results, using a weighted mean with application of a cut-off, outliers being excluded, as explained in Sections 5 and 8 of the Final Report.

| λ / nm | Filter A | | Filter B | | Filter C | | Filter D | | Filter E | |
|----------------|-----------|-----------|-----------|-----------|------------|-----------|------------|-----------|------------|-----------|
| | x_R | u_R | x_R | u_R | x_R | u_R | x_R | u_R | x_R | u_R |
| 380 | 4.357E-04 | 1.058E-04 | 1.540E-03 | 1.637E-04 | 1.211E-04 | 3.114E-05 | -1.599E-06 | 3.689E-06 | 1.049E-06 | 2.379E-06 |
| 400 | 3.701E-04 | 8.210E-05 | 1.093E-03 | 1.187E-04 | -3.117E-05 | 2.835E-05 | -1.185E-05 | 4.792E-06 | -6.444E-09 | 1.209E-06 |
| 500 | 3.234E-04 | 6.338E-05 | 9.756E-04 | 1.139E-04 | 1.156E-04 | 2.193E-05 | 8.555E-06 | 4.187E-06 | 2.954E-06 | 1.125E-06 |
| 600 | 3.075E-04 | 6.302E-05 | 7.611E-04 | 6.358E-05 | 1.777E-04 | 1.765E-05 | 4.101E-05 | 4.668E-06 | 8.210E-06 | 1.484E-06 |
| 700 | 4.225E-04 | 6.926E-05 | 3.424E-04 | 5.251E-05 | 9.633E-05 | 2.987E-05 | 3.374E-05 | 1.090E-05 | 7.620E-06 | 4.124E-06 |
| 800 | 6.383E-04 | 4.380E-05 | 2.010E-04 | 5.879E-05 | 1.455E-05 | 2.755E-05 | 6.546E-06 | 8.918E-06 | 1.543E-05 | 3.869E-06 |
| 900 | 5.228E-04 | 6.047E-05 | 7.263E-05 | 5.819E-05 | 8.838E-06 | 1.978E-05 | -4.104E-06 | 6.348E-06 | -2.187E-06 | 3.015E-06 |
| 1000 | 4.211E-04 | 6.443E-05 | 1.051E-04 | 6.384E-05 | -1.840E-06 | 1.555E-05 | -3.835E-06 | 5.411E-06 | -9.511E-06 | 2.903E-06 |

The degree of equivalence of laboratory i with respect to the key comparison reference value is given by a pair of terms: D_i and its expanded uncertainty ($k = 2$), U_i , computed according to equations 16 and 17 on page 52 of the Final Report (see also Section 9 on page 62).

The degrees of equivalence between pairs of laboratories have not been computed for this key comparison.

Linking EUROMET.PR-K6 to CCPR-K6

The linking process is described in section 6 of the EUROMET.PR-K6 Final Report. For each wavelength and each filter, the Matrix and the Graph of equivalence obtained in CCPR-K6 are extended to the participants in EUROMET.PR-K6 only.

Linking EURAMET.PR-K6.1 to CCPR-K6

The linking process is described in section 6 of the EURAMET.PR-K6.1 Final Report. For each wavelength and each filter, the Matrix and the Graph of equivalence obtained in CCPR-K6 are extended to DMDM participant in EURAMET.PR-K6.1 only.

CCPR-K6, EUROMET-K6 and EURAMET.PR-K6.1

Degrees of equivalence for Filter A

MEASURAND : Spectral regular transmittance

All reported values are absolute

Nominal transmittance at 546 nm: 92 %

| Lab <i>i</i> | Wavelength: 380 nm | |
|--------------|--------------------|-----------|
| | D_i | U_i |
| IODV | 1.188E-03 | 4.840E-03 |
| KRISS | 4.932E-05 | 8.171E-04 |
| LNE-INM | -4.357E-04 | 7.857E-04 |
| MIKES | -4.457E-04 | 1.371E-03 |
| MSL | 7.868E-04 | 6.202E-04 |
| NIST | 1.188E-03 | 1.851E-03 |
| VSL | 7.432E-05 | 9.790E-04 |
| NMIA | 1.443E-04 | 5.994E-04 |
| NMIJ | 4.213E-04 | 8.004E-04 |
| NPL | -3.032E-04 | 6.115E-04 |
| NRC | 3.493E-04 | 6.965E-04 |
| PTB | 2.994E-03 | 2.688E-03 |
| SMU | 4.217E-03 | 5.806E-04 |
| A*STAR | 1.682E-05 | 8.454E-04 |
| VNIIOFI | -2.478E-03 | 1.157E-03 |
| BEV | 3.336E-04 | 2.709E-03 |
| CMI | -4.490E-04 | 1.717E-03 |
| GUM | 9.703E-04 | 1.172E-03 |
| INM(RO) | 2.206E-03 | 4.639E-03 |
| INRIM | 4.102E-03 | 1.358E-03 |
| IPQ | -1.866E-05 | 9.762E-03 |
| METAS | 1.418E-04 | 1.126E-03 |
| MKEH | 6.760E-04 | 2.497E-03 |
| SP | -2.307E-04 | 2.984E-03 |
| UME | 1.466E-02 | 2.806E-03 |
| DMDM | -1.77E-03 | 2.47E-03 |

| Lab <i>i</i> | Wavelength: 400 nm | |
|--------------|--------------------|-----------|
| | D_i | U_i |
| IODV | 1.217E-03 | 5.618E-03 |
| KRISS | -6.512E-05 | 9.082E-04 |
| LNE-INM | -3.701E-04 | 7.065E-04 |
| MIKES | -4.426E-04 | 9.666E-04 |
| MSL | 7.324E-04 | 3.961E-04 |
| NIST | 8.749E-04 | 1.752E-03 |
| VSL | 7.488E-05 | 1.030E-03 |
| NMIA | 1.499E-04 | 4.035E-04 |
| NMIJ | 4.239E-04 | 6.612E-04 |
| NPL | -4.026E-04 | 5.566E-04 |
| NRC | 5.874E-04 | 7.552E-04 |
| PTB | 3.257E-03 | 2.539E-03 |
| SMU | 4.088E-03 | 3.881E-04 |
| A*STAR | 2.499E-04 | 7.795E-04 |
| VNIIOFI | -2.098E-03 | 7.658E-04 |
| BEV | 9.624E-04 | 2.633E-03 |
| CMI | -8.826E-04 | 1.131E-03 |
| GUM | 1.326E-03 | 7.342E-04 |
| INM(RO) | 3.363E-03 | 3.756E-03 |
| INRIM | 4.865E-03 | 1.417E-03 |
| IPQ | 1.342E-03 | 8.374E-03 |
| METAS | 9.774E-04 | 1.378E-03 |
| MKEH | 1.418E-03 | 2.155E-03 |
| SP | 5.624E-04 | 2.857E-03 |
| UME | 1.515E-02 | 2.639E-03 |
| DMDM | -1.15E-03 | 2.41E-03 |

Black : participants in CCPR-K6

Blue: participants in EUROMET.PR-K6 only

Green: participant in EURAMET.PR-K6.1 only

CCPR-K6, EUROMET-K6 and EURAMET.PR-K6.1

Degrees of equivalence for Filter A

MEASURAND : Spectral regular transmittance

All reported values are absolute

Nominal transmittance at 546 nm: 92 %

| Lab <i>i</i> | Wavelength: 500 nm | |
|--------------|--------------------|-----------|
| | D_i | U_i |
| IODV | 1.082E-03 | 1.161E-03 |
| KRISS | -1.059E-04 | 7.621E-04 |
| LNE-INM | -3.234E-04 | 5.026E-04 |
| MIKES | -3.159E-04 | 6.418E-04 |
| MSL | 5.291E-04 | 3.822E-04 |
| NIST | 9.016E-04 | 1.204E-03 |
| VSL | -3.559E-04 | 7.054E-04 |
| NMIA | 2.541E-04 | 2.932E-04 |
| NMIJ | 2.951E-04 | 5.430E-04 |
| NPL | -2.159E-04 | 3.165E-04 |
| NRC | 1.841E-04 | 4.940E-04 |
| PTB | 2.717E-03 | 1.941E-03 |
| SMU | 3.622E-03 | 3.586E-04 |
| A*STAR | 5.162E-05 | 5.591E-04 |
| VNIIOFI | -1.208E-03 | 6.600E-04 |
| BEV | 1.012E-03 | 2.527E-03 |
| CMI | -1.123E-03 | 1.211E-03 |
| GUM | 1.505E-03 | 7.045E-04 |
| INM(RO) | 3.196E-03 | 2.396E-03 |
| INRIM | 5.285E-03 | 1.207E-03 |
| IPQ | 3.338E-03 | 6.384E-03 |
| METAS | 5.912E-05 | 8.470E-04 |
| MKEH | 1.380E-03 | 2.335E-03 |
| SP | 4.416E-04 | 2.877E-03 |
| UME | 1.552E-02 | 3.540E-03 |
| DMDM | -7.81E-04 | 2.24E-03 |

| Lab <i>i</i> | Wavelength: 600 nm | |
|--------------|--------------------|-----------|
| | D_i | U_i |
| IODV | 1.178E-03 | 1.574E-03 |
| KRISS | -1.200E-04 | 6.633E-04 |
| LNE-INM | -3.075E-04 | 5.498E-04 |
| MIKES | -4.975E-04 | 7.523E-04 |
| MSL | 4.250E-04 | 5.171E-04 |
| NIST | 5.050E-04 | 1.387E-03 |
| VSL | -3.150E-04 | 8.354E-04 |
| NMIA | 2.000E-04 | 2.216E-04 |
| NMIJ | 4.540E-04 | 4.679E-04 |
| NPL | -5.746E-05 | 4.342E-04 |
| NRC | 2.150E-04 | 5.572E-04 |
| PTB | 2.485E-03 | 1.584E-03 |
| SMU | 2.716E-03 | 3.255E-04 |
| A*STAR | -9.246E-05 | 6.677E-04 |
| VNIIOFI | -9.770E-04 | 5.970E-04 |
| BEV | 6.250E-04 | 3.045E-03 |
| CMI | 6.004E-05 | 1.752E-03 |
| GUM | 2.082E-03 | 6.806E-04 |
| INM(RO) | 1.969E-03 | 2.400E-03 |
| INRIM | 3.445E-03 | 1.285E-03 |
| IPQ | 2.269E-05 | 3.851E-03 |
| METAS | 3.400E-04 | 9.177E-04 |
| MKEH | -3.549E-04 | 1.659E-03 |
| SP | 1.275E-04 | 3.088E-03 |
| UME | 1.313E-02 | 2.161E-03 |
| DMDM | -7.95E-04 | 2.26E-03 |

Black : participants in CCPR-K6

Blue: participants in EUROMET.PR-K6 only

Green: participant in EURAMET.PR-K6.1 only

CCPR-K6, EUROMET-K6 and EURAMET.PR-K6.1

Degrees of equivalence for Filter A

MEASURAND : Spectral regular transmittance

| Lab <i>i</i> | Wavelength: 700 nm | |
|--------------|--------------------|-----------|
| | D_i | U_i |
| IODV | 1.267E-03 | 4.623E-03 |
| KRISS | -3.688E-04 | 4.121E-04 |
| LNE-INM | -4.225E-04 | 4.909E-04 |
| MIKES | -6.813E-04 | 7.826E-04 |
| MSL | 1.940E-04 | 5.330E-04 |
| NIST | 5.033E-04 | 8.868E-04 |
| VSL | -3.288E-04 | 6.721E-04 |
| NMIA | 1.082E-04 | 3.866E-04 |
| NMIJ | 4.206E-05 | 3.134E-04 |
| NPL | 2.372E-05 | 3.158E-04 |
| NRC | 1.371E-04 | 4.064E-04 |
| PTB | 3.084E-03 | 1.502E-03 |
| SMU | 2.061E-03 | 9.129E-04 |
| A*STAR | -1.378E-05 | 5.763E-04 |
| VNIIOFI | -7.928E-04 | 7.161E-04 |
| BEV | 8.121E-04 | 3.479E-03 |
| CMI | -2.162E-05 | 1.619E-03 |
| GUM | 2.524E-03 | 9.472E-04 |
| INM(RO) | 2.247E-03 | 2.487E-03 |
| INRIM | 2.337E-03 | 1.618E-03 |
| IPQ | 1.248E-05 | 2.667E-03 |
| METAS | 2.973E-04 | 7.612E-04 |
| MKEH | -4.695E-04 | 1.821E-03 |
| SP | -5.609E-04 | 3.028E-03 |
| UME | 8.719E-03 | 9.100E-04 |
| DMDM | -3.86E-04 | 2.26E-03 |

Black : participants in CCPR-K6
 Blue: participants in EUROMET.PR-K6 only
 Green: participant in EURAMET.PR-K6.1 only

All reported values are absolute

Nominal transmittance at 546 nm: 92 %

| Lab <i>i</i> | Wavelength: 800 nm | |
|--------------|--------------------|-----------|
| | D_i | U_i |
| IODV | 8.592E-04 | 1.203E-03 |
| KRISS | -6.358E-04 | 2.872E-04 |
| LNE-INM | -6.383E-04 | 4.711E-04 |
| MIKES | -3.108E-04 | 9.060E-04 |
| MSL | -1.133E-04 | 5.676E-04 |
| NIST | 4.442E-04 | 4.742E-04 |
| VSL | -1.078E-05 | 7.564E-04 |
| NMIA | -2.488E-04 | 4.095E-04 |
| NMIJ | -3.018E-04 | 2.089E-04 |
| NPL | 1.922E-05 | 1.182E-04 |
| NRC | -1.058E-04 | 2.450E-04 |
| PTB | 3.479E-03 | 1.487E-03 |
| SMU | 2.082E-03 | 2.137E-03 |
| A*STAR | 8.117E-04 | 1.869E-04 |
| VNIIOFI | -9.928E-04 | 6.068E-04 |
| BEV | 1.622E-03 | 3.666E-03 |
| CMI | -6.040E-04 | 8.481E-04 |
| GUM | 1.581E-03 | 5.974E-04 |
| INM(RO) | 1.562E-03 | 2.174E-03 |
| INRIM | 1.379E-03 | 1.029E-03 |
| IPQ | 2.687E-04 | 1.897E-03 |
| METAS | 1.726E-04 | 5.243E-04 |
| MKEH | -1.008E-03 | 1.812E-03 |
| SP | -1.356E-03 | 3.256E-03 |
| UME | 4.317E-03 | 5.074E-04 |
| DMDM | -3.93E-04 | 2.33E-03 |

CCPR-K6, EUROMET-K6 and EURAMET.PR-K6.1

Degrees of equivalence for Filter A

MEASURAND : Spectral regular transmittance

All reported values are absolute

Nominal transmittance at 546 nm: 92 %

| Lab <i>i</i> | Wavelength: 900 nm | |
|--------------|--------------------|-----------|
| | D_i | U_i |
| IODV | 1.150E-03 | 4.204E-03 |
| KRISS | -4.478E-04 | 2.896E-04 |
| LNE-INM | -5.228E-04 | 4.736E-04 |
| MIKES | -2.703E-04 | 8.536E-04 |
| MSL | -5.263E-06 | 5.551E-04 |
| NIST | 6.097E-04 | 6.165E-04 |
| VSL | 6.474E-05 | 7.670E-04 |
| NMIA | -2.518E-04 | 4.969E-04 |
| NMIJ | 2.512E-04 | 1.214E-03 |
| NPL | 7.974E-05 | 2.069E-04 |
| NRC | 3.974E-05 | 2.906E-04 |
| PTB | 6.474E-05 | 3.678E-03 |
| SMU | 1.228E-03 | 2.407E-03 |
| A*STAR | 6.647E-04 | 2.804E-04 |
| VNIIOFI | -1.010E-03 | 6.742E-04 |
| BEV | 1.797E-03 | 3.803E-03 |
| CMI | -8.427E-04 | 1.059E-03 |
| GUM | 1.261E-03 | 5.941E-04 |
| INM(RO) | 2.910E-03 | 2.835E-03 |
| INRIM | 2.579E-03 | 1.075E-03 |
| IPQ | 1.828E-03 | 2.569E-03 |
| METAS | -4.767E-04 | 7.422E-04 |
| MKEH | -7.124E-04 | 2.018E-03 |
| SP | -9.026E-05 | 2.515E-03 |
| UME | 4.137E-03 | 8.554E-04 |
| DMDM | -3.34E-04 | 2.43E-03 |

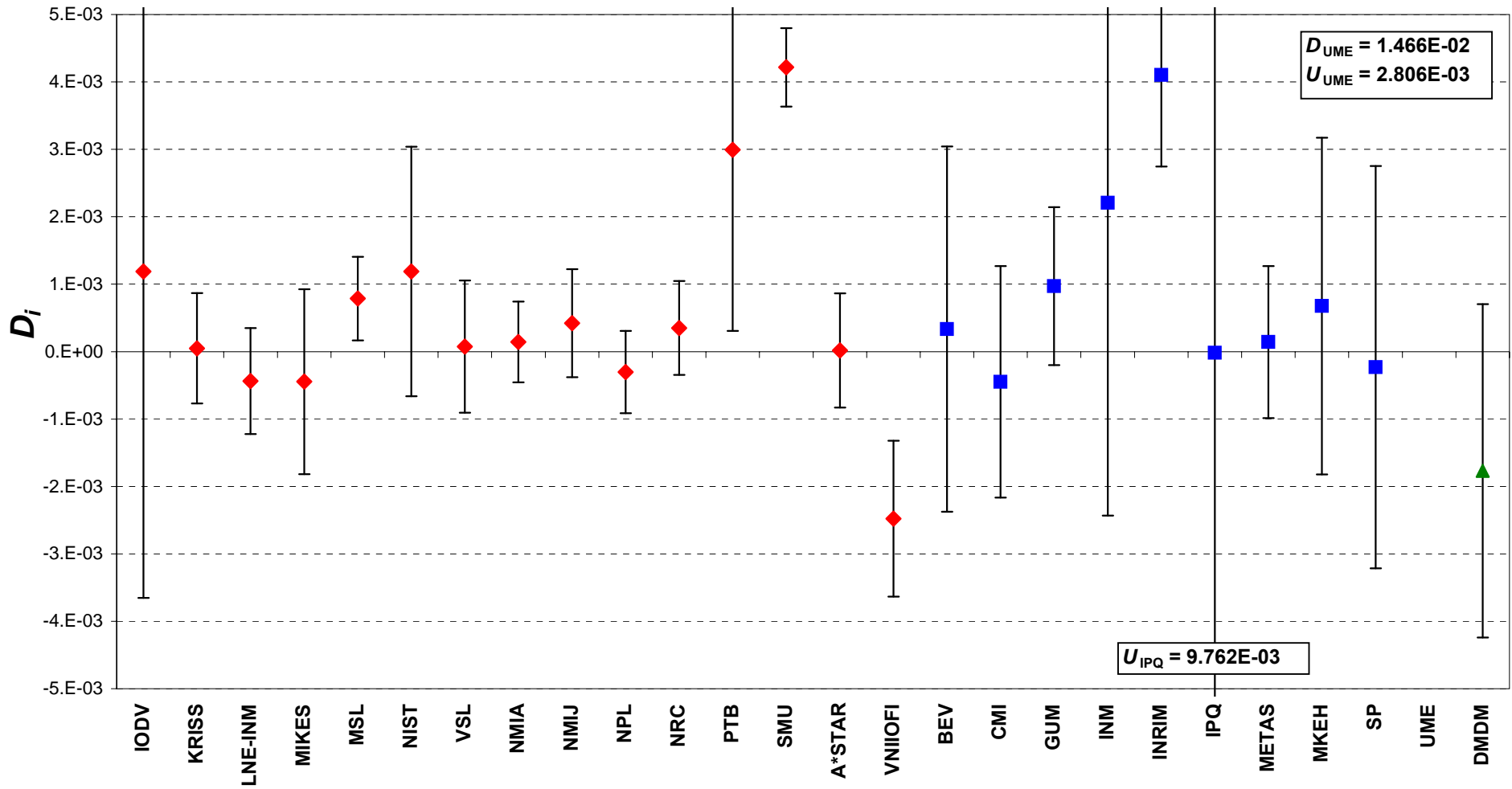
| Lab <i>i</i> | Wavelength: 1000 nm | |
|--------------|---------------------|-----------|
| | D_i | U_i |
| IODV | 1.181E-03 | 4.004E-03 |
| KRISS | -3.786E-04 | 2.925E-04 |
| LNE-INM | -4.211E-04 | 4.943E-04 |
| MIKES | -2.961E-04 | 8.982E-04 |
| MSL | 8.895E-05 | 5.919E-04 |
| NIST | 7.114E-04 | 6.456E-04 |
| VSL | 2.139E-04 | 7.862E-04 |
| NMIA | 2.514E-04 | 2.628E-04 |
| NMIJ | 4.314E-04 | 1.022E-03 |
| NPL | -1.605E-05 | 2.719E-04 |
| NRC | 4.145E-05 | 2.849E-04 |
| PTB | 8.089E-04 | 3.731E-03 |
| SMU | - | - |
| A*STAR | 7.581E-04 | 5.808E-04 |
| VNIIOFI | -6.481E-04 | 6.169E-04 |
| BEV | 1.616E-03 | 4.285E-03 |
| CMI | -5.164E-04 | 9.374E-04 |
| GUM | 1.042E-03 | 6.114E-04 |
| INM(RO) | 2.088E-03 | 3.099E-03 |
| INRIM | 2.226E-03 | 1.060E-03 |
| IPQ | 2.253E-03 | 2.426E-03 |
| METAS | 5.047E-04 | 1.190E-03 |
| MKEH | -1.007E-03 | 2.411E-03 |
| SP | 1.689E-04 | 2.471E-03 |
| UME | 4.289E-03 | 1.081E-03 |
| DMDM | -3.76E-04 | 2.33E-03 |

Black : participants in CCPR-K6

Blue: participants in EUROMET.PR-K6 only

Green: participant in EURAMET.PR-K6.1 only

CCPR-K6, EUROMET.PR-K6, and EURAMET.PR-K6.1
 Spectral regular transmittance - Filter A - $\lambda = 380$ nm
 Degrees of equivalence, D_i and expanded uncertainty U_i ($k = 2$)

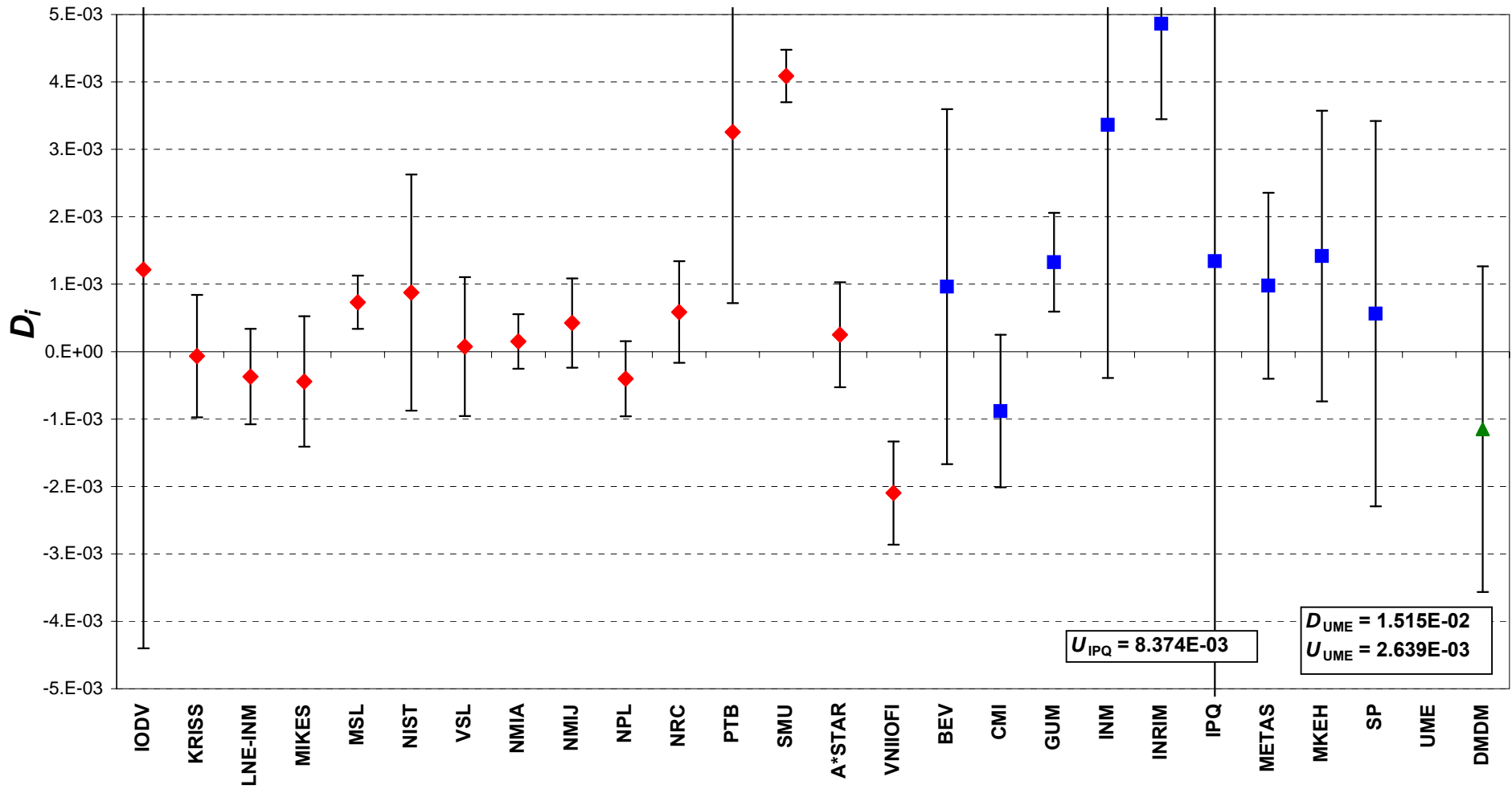


Red diamonds: participants in CCPR-K6

Blue squares: participants in EUROMET.PR-K6 only

Green triangle: participant in EURAMET.PR-K6.1 only

CCPR-K6, EUROMET.PR-K6, and EURAMET.PR-K6.1
 Spectral regular transmittance - Filter A - $\lambda = 400$ nm
 Degrees of equivalence, D_i and expanded uncertainty U_i ($k = 2$)

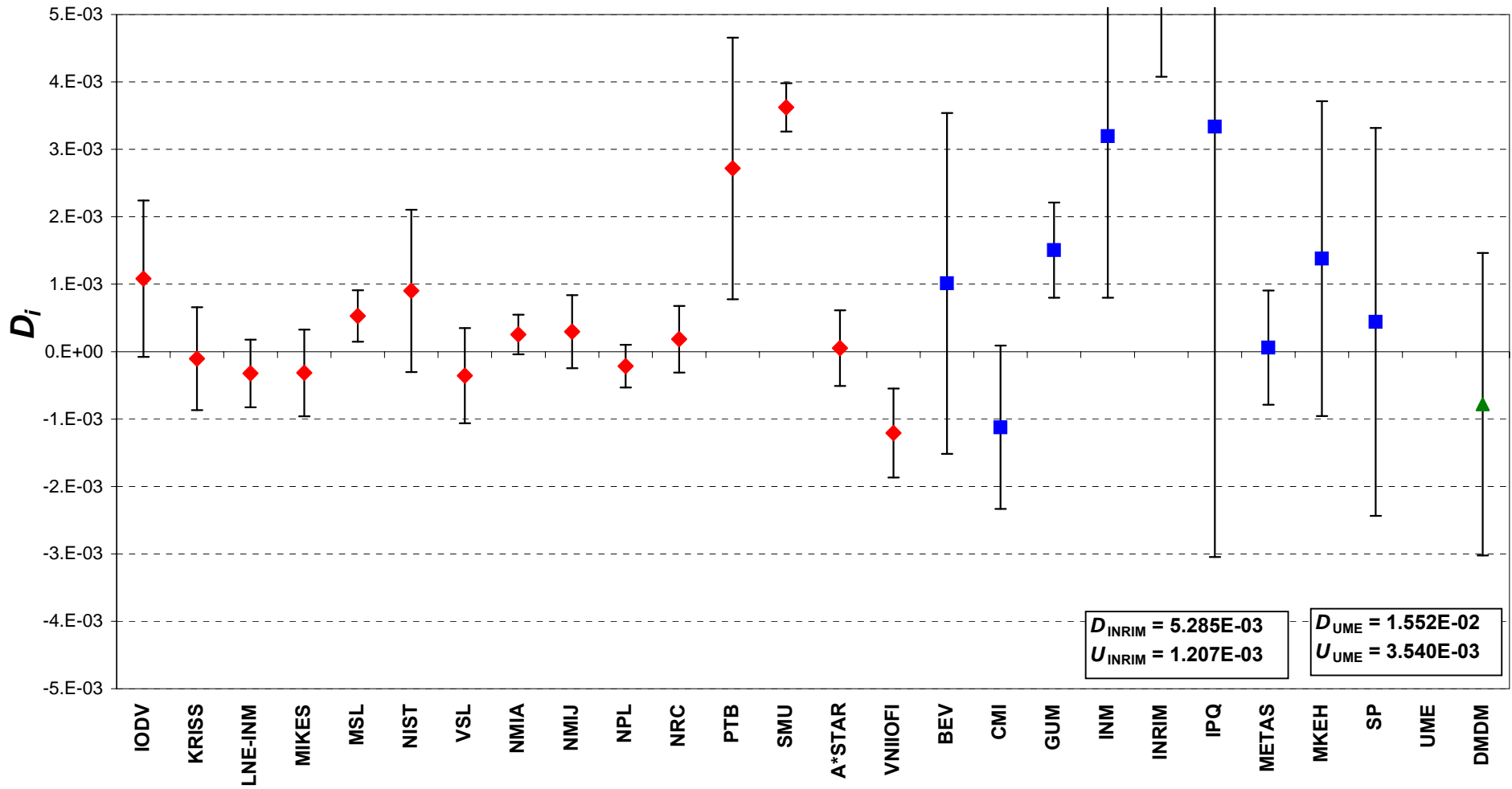


Red diamonds: participants in CCPR-K6

Blue squares: participants in EUROMET.PR-K6 only

Green triangle: participant in EURAMET.PR-K6.1 only

CCPR-K6, EUROMET.PR-K6, and EURAMET.PR-K6.1
Spectral regular transmittance - Filter A - $\lambda = 500$ nm
Degrees of equivalence, D_i and expanded uncertainty U_i ($k = 2$)

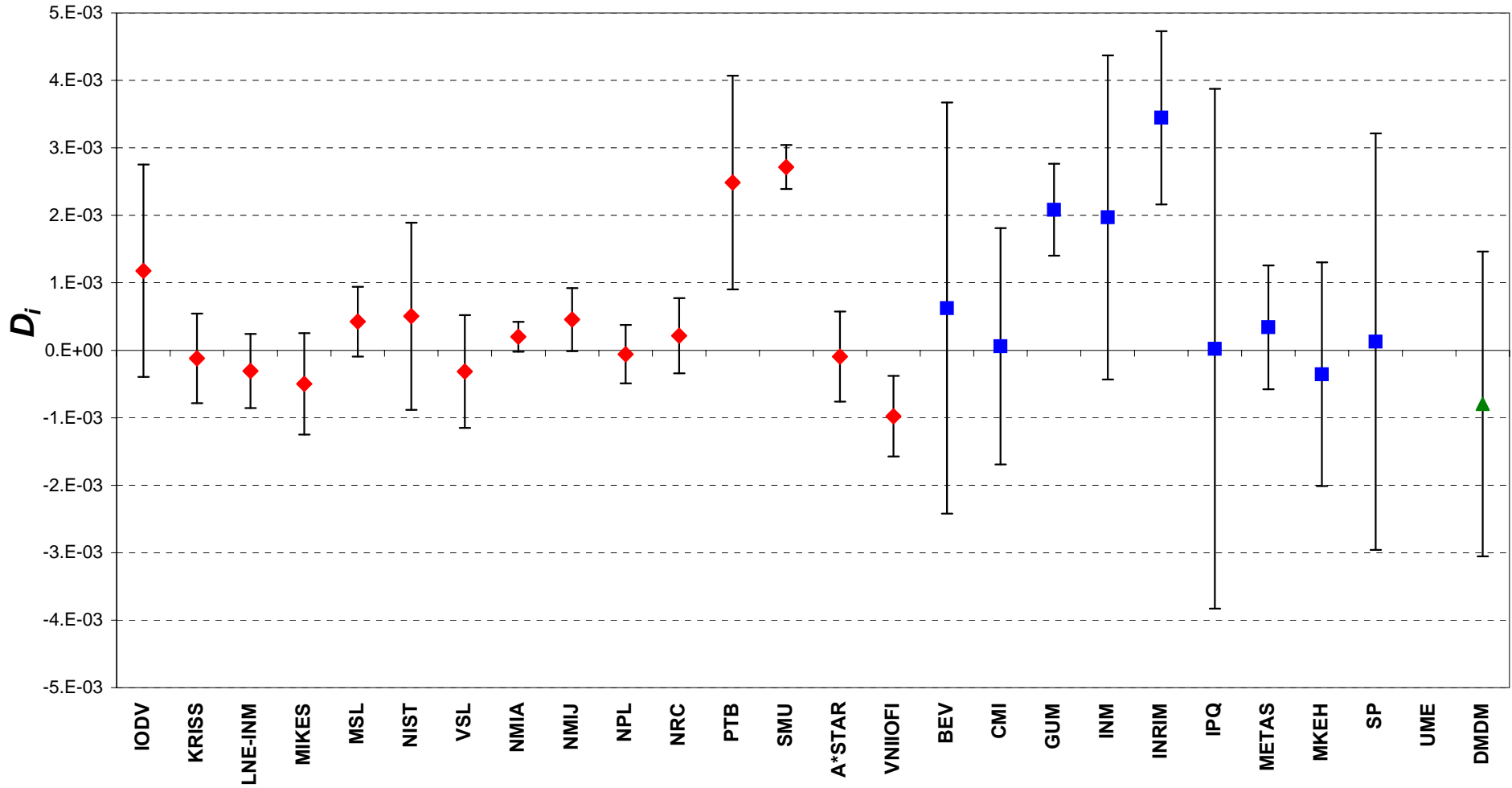


Red diamonds: participants in CCPR-K6
Blue squares: participants in EUROMET.PR-K6 only

Green triangle: participant in EURAMET.PR-K6.1 only

| | |
|---------------------------------------|-------------------------------------|
| $D_{\text{INRIM}} = 5.285\text{E-}03$ | $D_{\text{UME}} = 1.552\text{E-}02$ |
| $U_{\text{INRIM}} = 1.207\text{E-}03$ | $U_{\text{UME}} = 3.540\text{E-}03$ |

CCPR-K6, EUROMET.PR-K6, and EURAMET.PR-K6.1
Spectral regular transmittance - Filter A - $\lambda = 600$ nm
Degrees of equivalence, D_i and expanded uncertainty U_i ($k = 2$)



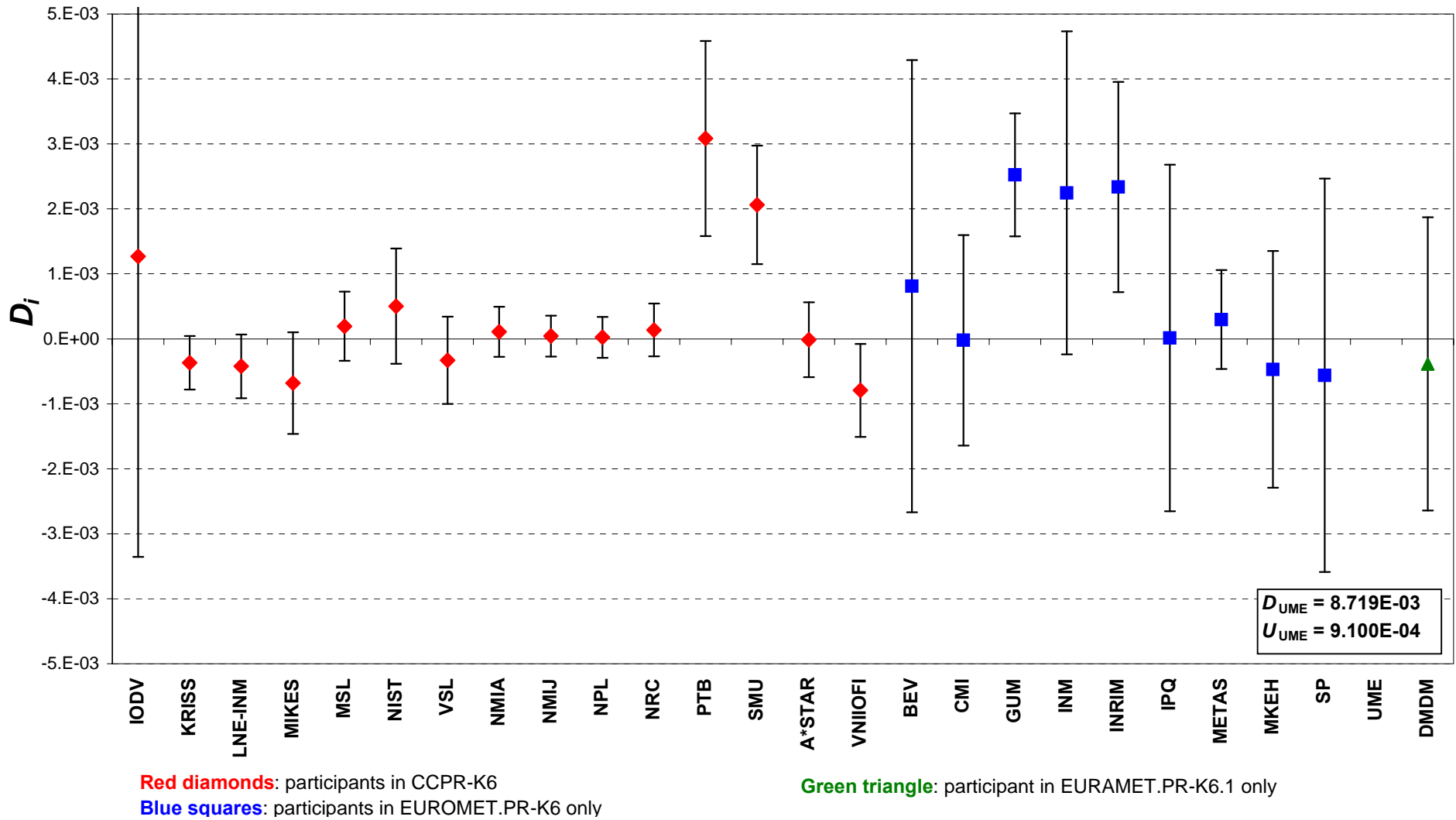
Red diamonds: participants in CCPR-K6

Blue squares: participants in EUROMET.PR-K6 only

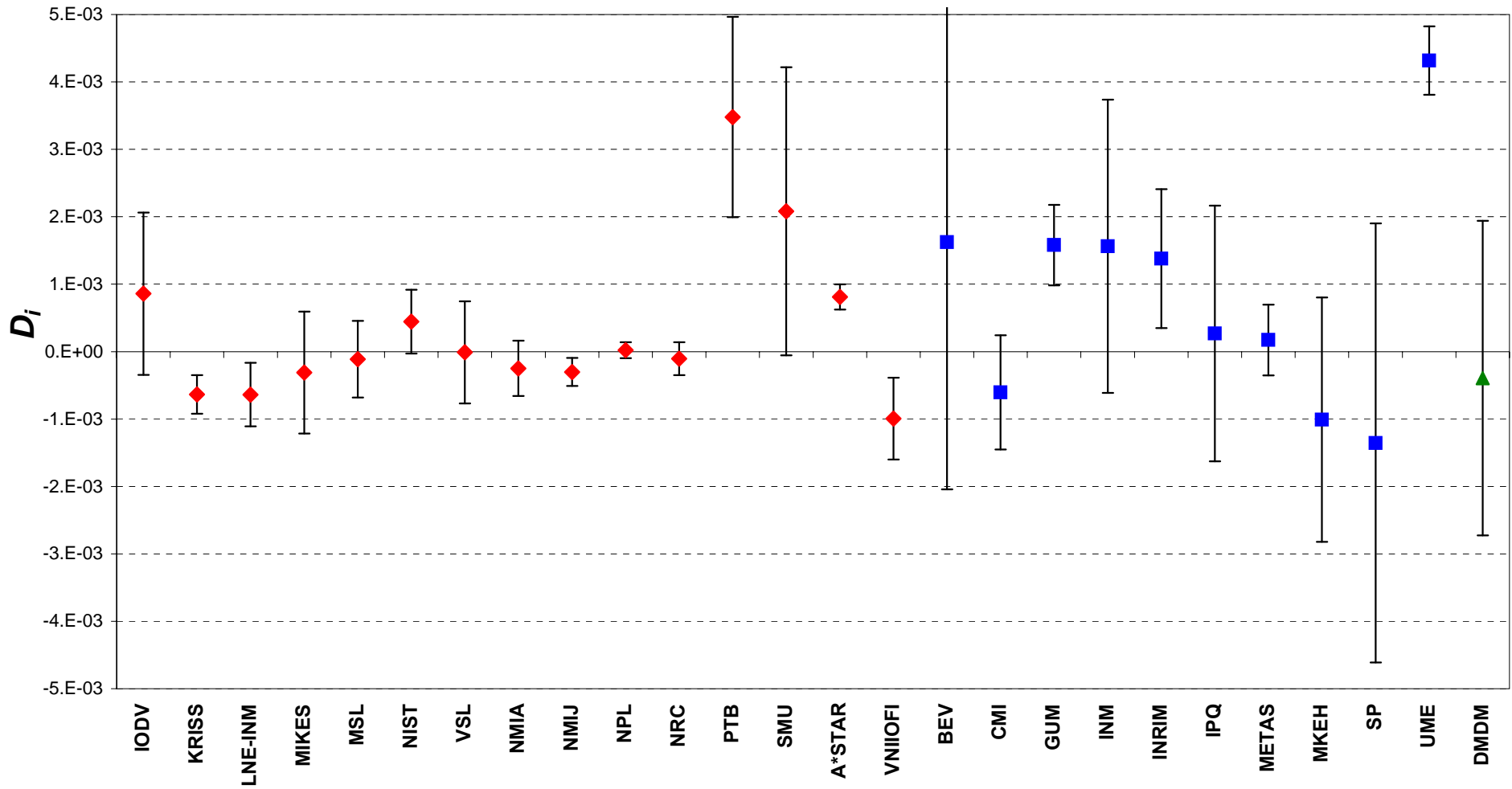
Green triangle: participant in EURAMET.PR-K6.1 only

$D_{UME} = 1.313E-02$
 $U_{UME} = 2.161E-03$

CCPR-K6, EUROMET.PR-K6, and EURAMET.PR-K6.1
Spectral regular transmittance - Filter A - $\lambda = 700$ nm
Degrees of equivalence, D_i and expanded uncertainty U_i ($k = 2$)



CCPR-K6, EUROMET.PR-K6, and EURAMET.PR-K6.1
 Spectral regular transmittance - Filter A - $\lambda = 800$ nm
 Degrees of equivalence, D_i and expanded uncertainty U_i ($k = 2$)

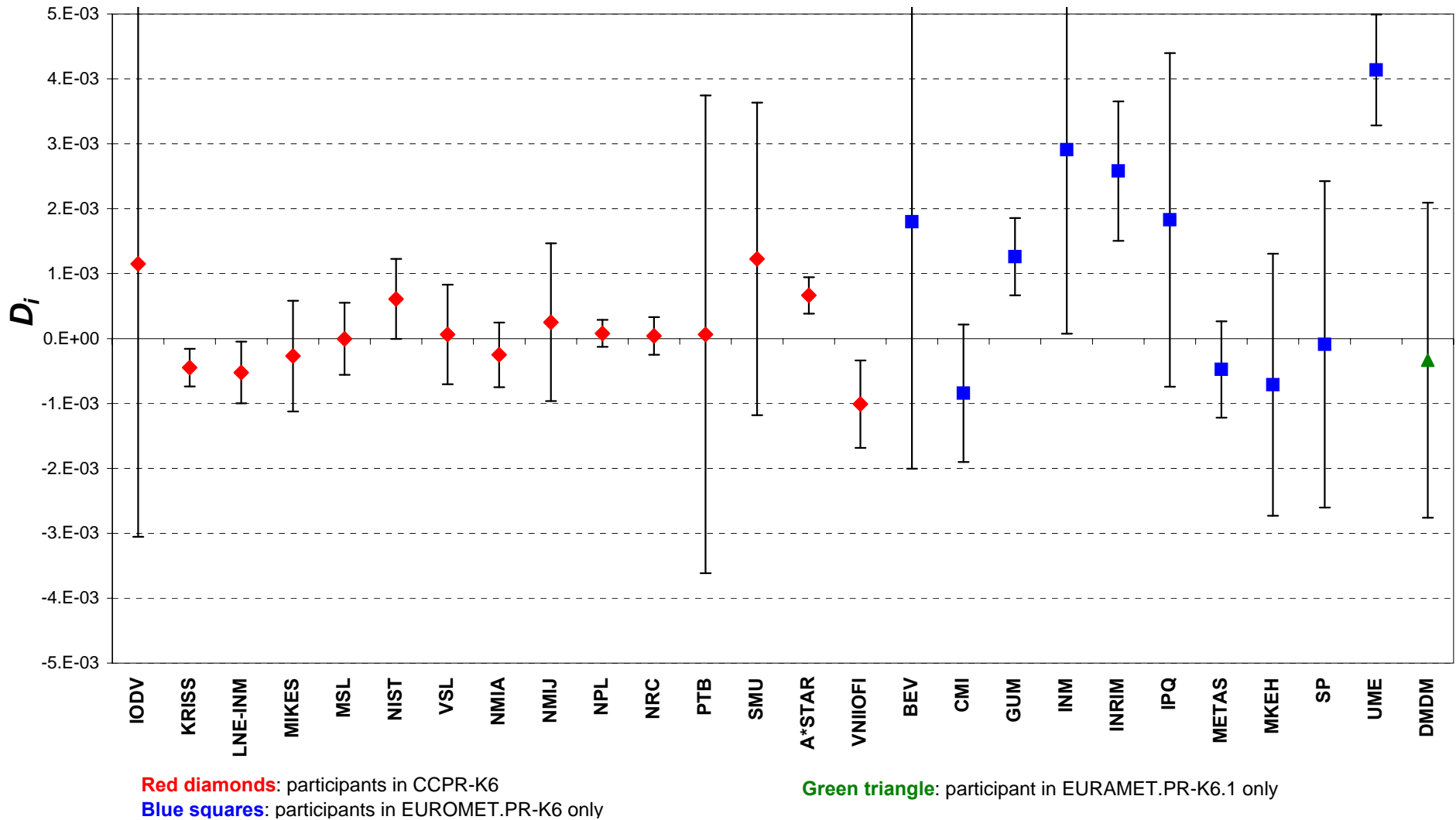


Red diamonds: participants in CCPR-K6

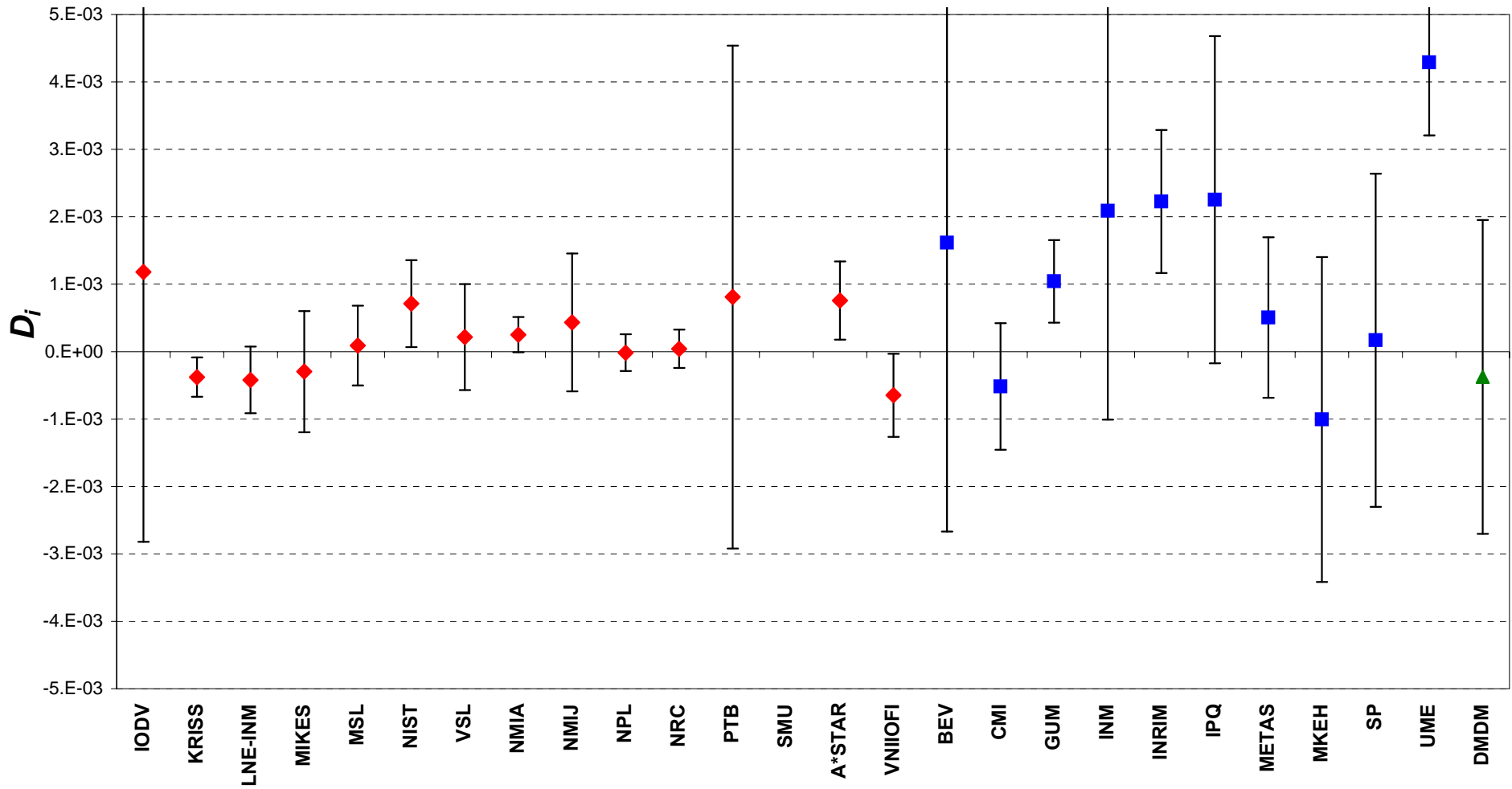
Blue squares: participants in EUROMET.PR-K6 only

Green triangle: participant in EURAMET.PR-K6.1 only

CCPR-K6, EUROMET.PR-K6, and EURAMET.PR-K6.1
Spectral regular transmittance - Filter A - $\lambda = 900$ nm
Degrees of equivalence, D_i and expanded uncertainty U_i ($k = 2$)



CCPR-K6, EUROMET.PR-K6, and EURAMET.PR-K6.1
 Spectral regular transmittance - Filter A - $\lambda = 1000$ nm
 Degrees of equivalence, D_i and expanded uncertainty U_i ($k = 2$)



Red diamonds: participants in CCPR-K6

Blue squares: participants in EUROMET.PR-K6 only

Green triangle: participant in EURAMET.PR-K6.1 only

CCPR-K6, EUROMET-K6 and EURAMET.PR-K6.1

Degrees of equivalence for Filter B

MEASURAND : Spectral regular transmittance

| Lab <i>i</i> | Wavelength: 380 nm | |
|--------------|--------------------|-----------|
| | D_i | U_i |
| IODV | -3.928E-03 | 2.009E-03 |
| KRISS | 6.248E-05 | 1.110E-03 |
| LNE-INM | -1.540E-03 | 9.948E-04 |
| MIKES | 3.777E-03 | 1.182E-03 |
| MSL | 1.877E-03 | 1.260E-03 |
| NIST | 1.165E-03 | 2.383E-03 |
| VSL | 1.900E-04 | 2.015E-03 |
| NMIA | -1.490E-04 | 1.622E-03 |
| NMIJ | 6.748E-05 | 2.469E-03 |
| NPL | -1.358E-03 | 6.092E-04 |
| NRC | -1.853E-03 | 1.451E-03 |
| PTB | -1.240E-03 | 1.801E-03 |
| SMU | -7.902E-04 | 1.100E-03 |
| A*STAR | 6.925E-04 | 3.893E-03 |
| VNIIOFI | 1.194E-03 | 6.602E-04 |
| BEV | -4.105E-03 | 9.017E-03 |
| CMI | 3.617E-03 | 4.104E-03 |
| GUM | -8.615E-04 | 7.998E-04 |
| INM(RO) | -7.098E-03 | 7.202E-03 |
| INRIM | 1.951E-03 | 5.084E-03 |
| IPQ | -1.869E-03 | 7.334E-03 |
| METAS | 4.682E-03 | 1.923E-03 |
| MKEH | -3.372E-03 | 1.904E-03 |
| SP | -1.298E-03 | 3.220E-03 |
| UME | 1.967E-02 | 4.210E-03 |
| DMDM | 5.40E-03 | 2.48E-03 |

Black : participants in CCPR-K6

Blue: participants in EUROMET.PR-K6 only

Green: participant in EURAMET.PR-K6.1 only

All reported values are absolute

Nominal transmittance at 546 nm: 56 %

| Lab <i>i</i> | Wavelength: 400 nm | |
|--------------|--------------------|-----------|
| | D_i | U_i |
| IODV | -1.301E-03 | 3.517E-03 |
| KRISS | 8.690E-04 | 1.228E-03 |
| LNE-INM | -1.093E-03 | 8.621E-04 |
| MIKES | 6.700E-04 | 7.915E-04 |
| MSL | -2.260E-04 | 9.252E-04 |
| NIST | 7.904E-05 | 6.988E-04 |
| VSL | -6.346E-05 | 1.121E-03 |
| NMIA | 1.120E-04 | 6.524E-04 |
| NMIJ | 9.354E-05 | 5.810E-04 |
| NPL | -3.185E-04 | 5.791E-04 |
| NRC | -6.385E-04 | 1.395E-03 |
| PTB | 9.923E-04 | 1.798E-03 |
| SMU | -9.642E-04 | 1.673E-03 |
| A*STAR | 1.417E-03 | 1.038E-03 |
| VNIIOFI | -3.650E-04 | 8.107E-04 |
| BEV | 7.615E-04 | 3.020E-03 |
| CMI | -3.210E-04 | 6.581E-04 |
| GUM | -3.040E-04 | 7.236E-04 |
| INM(RO) | -5.541E-03 | 3.044E-03 |
| INRIM | -7.458E-04 | 2.374E-03 |
| IPQ | -2.039E-03 | 1.576E-03 |
| METAS | -7.035E-04 | 7.905E-04 |
| MKEH | -1.492E-03 | 1.822E-03 |
| SP | -5.135E-04 | 1.991E-03 |
| UME | 1.615E-04 | 1.513E-03 |
| DMDM | -5.80E-04 | 2.08E-03 |

CCPR-K6, EUROMET-K6 and EURAMET.PR-K6.1

Degrees of equivalence for Filter B

MEASURAND : Spectral regular transmittance

All reported values are absolute

Nominal transmittance at 546 nm: 56 %

| Lab <i>i</i> | Wavelength: 500 nm | |
|--------------|--------------------|-----------|
| | D_i | U_i |
| IODV | -1.018E-03 | 1.612E-03 |
| KRISS | 1.534E-03 | 8.127E-04 |
| LNE-INM | -9.756E-04 | 8.164E-04 |
| MIKES | 2.269E-04 | 6.999E-04 |
| MSL | -6.956E-04 | 8.934E-04 |
| NIST | 4.729E-04 | 9.318E-04 |
| VSL | -2.856E-04 | 9.610E-04 |
| NMIA | -3.796E-04 | 7.427E-04 |
| NMIJ | -1.716E-04 | 5.435E-04 |
| NPL | 3.944E-04 | 6.485E-04 |
| NRC | -7.406E-04 | 1.413E-03 |
| PTB | 2.944E-04 | 1.795E-03 |
| SMU | -1.057E-03 | 1.044E-03 |
| A*STAR | 6.894E-04 | 9.243E-04 |
| VNIIOFI | 3.309E-04 | 7.756E-04 |
| BEV | 1.237E-03 | 2.109E-03 |
| CMI | 8.691E-05 | 8.804E-04 |
| GUM | 5.129E-04 | 7.564E-04 |
| INM(RO) | -2.121E-03 | 8.757E-04 |
| INRIM | 5.796E-05 | 1.583E-03 |
| IPQ | -1.533E-03 | 2.081E-03 |
| METAS | -7.506E-04 | 1.095E-03 |
| MKEH | -9.881E-04 | 1.761E-03 |
| SP | -5.231E-04 | 2.033E-03 |
| UME | 2.454E-03 | 7.415E-04 |
| DMDM | -1.36E-03 | 1.54E-03 |

| Lab <i>i</i> | Wavelength: 600 nm | |
|--------------|--------------------|-----------|
| | D_i | U_i |
| IODV | -9.486E-04 | 1.361E-03 |
| KRISS | 1.366E-03 | 4.037E-04 |
| LNE-INM | -7.611E-04 | 4.279E-04 |
| MIKES | 4.039E-04 | 5.923E-04 |
| MSL | -6.461E-04 | 5.422E-04 |
| NIST | 5.314E-04 | 8.617E-04 |
| VSL | -2.136E-04 | 8.780E-04 |
| NMIA | -8.816E-04 | 4.675E-04 |
| NMIJ | -2.706E-04 | 2.127E-04 |
| NPL | 6.689E-04 | 2.930E-04 |
| NRC | -8.086E-04 | 1.029E-03 |
| PTB | 2.464E-04 | 1.439E-03 |
| SMU | -1.071E-03 | 5.924E-04 |
| A*STAR | 6.339E-04 | 4.608E-04 |
| VNIIOFI | -1.546E-04 | 5.824E-04 |
| BEV | 9.314E-04 | 2.223E-03 |
| CMI | -2.336E-04 | 7.891E-04 |
| GUM | 8.049E-04 | 4.809E-04 |
| INM(RO) | -2.356E-03 | 8.238E-04 |
| INRIM | 9.385E-04 | 1.321E-03 |
| IPQ | -1.017E-03 | 1.143E-03 |
| METAS | 1.239E-04 | 6.361E-04 |
| MKEH | -6.894E-04 | 1.630E-03 |
| SP | -1.279E-03 | 2.383E-03 |
| UME | 2.501E-03 | 7.549E-04 |
| DMDM | -6.60E-04 | 1.51E-03 |

Black : participants in CCPR-K6

Blue: participants in EUROMET.PR-K6 only

Green: participant in EURAMET.PR-K6.1 only

CCPR-K6, EUROMET-K6 and EURAMET.PR-K6.1

Degrees of equivalence for Filter B

MEASURAND : Spectral regular transmittance

| Lab <i>i</i> | Wavelength: 700 nm | |
|--------------|--------------------|-----------|
| | D_i | U_i |
| IODV | -7.529E-04 | 2.852E-03 |
| KRISS | 1.085E-03 | 3.159E-04 |
| LNE-INM | -3.424E-04 | 2.892E-04 |
| MIKES | 6.301E-04 | 6.125E-04 |
| MSL | -2.212E-04 | 3.979E-04 |
| NIST | 2.561E-04 | 8.145E-04 |
| VSL | -1.045E-04 | 9.031E-04 |
| NMIA | -3.572E-04 | 2.207E-04 |
| NMIJ | 4.381E-05 | 3.486E-04 |
| NPL | -2.154E-04 | 3.433E-04 |
| NRC | -3.974E-04 | 5.121E-04 |
| PTB | 2.878E-04 | 1.251E-03 |
| SMU | -9.081E-04 | 3.295E-04 |
| A*STAR | 6.563E-04 | 2.574E-04 |
| VNIIOFI | 2.083E-04 | 6.801E-04 |
| BEV | 4.063E-04 | 2.158E-03 |
| CMI | -1.262E-03 | 7.171E-04 |
| GUM | 7.321E-04 | 3.651E-04 |
| INM(RO) | -2.430E-03 | 8.113E-04 |
| INRIM | 4.039E-04 | 1.217E-03 |
| IPQ | -3.409E-04 | 7.615E-04 |
| METAS | -4.476E-05 | 4.913E-04 |
| MKEH | -8.967E-04 | 1.490E-03 |
| SP | -1.071E-03 | 2.198E-03 |
| UME | 1.111E-03 | 5.066E-04 |
| DMDM | 5.12E-04 | 2.26E-03 |

Black : participants in CCPR-K6

Blue: participants in EUROMET.PR-K6 only

Green: participant in EURAMET.PR-K6.1 only

All reported values are absolute

Nominal transmittance at 546 nm: 56 %

| Lab <i>i</i> | Wavelength: 800 nm | |
|--------------|--------------------|-----------|
| | D_i | U_i |
| IODV | -7.985E-04 | 8.770E-04 |
| KRISS | 1.229E-03 | 7.287E-04 |
| LNE-INM | -2.010E-04 | 3.370E-04 |
| MIKES | 5.365E-04 | 6.611E-04 |
| MSL | -1.935E-04 | 3.419E-04 |
| NIST | 2.407E-04 | 6.483E-04 |
| VSL | 4.115E-04 | 8.396E-04 |
| NMIA | -9.898E-05 | 4.304E-04 |
| NMIJ | 3.115E-04 | 3.876E-04 |
| NPL | -3.785E-04 | 4.540E-04 |
| NRC | 1.565E-04 | 2.661E-04 |
| PTB | 9.115E-04 | 1.308E-03 |
| SMU | -5.305E-04 | 2.870E-04 |
| A*STAR | 4.640E-04 | 3.329E-04 |
| VNIIOFI | -3.085E-04 | 7.089E-04 |
| BEV | 9.365E-04 | 2.365E-03 |
| CMI | -1.646E-03 | 6.724E-04 |
| GUM | -1.320E-04 | 6.515E-04 |
| INM(RO) | -1.956E-03 | 5.703E-04 |
| INRIM | -1.688E-04 | 1.360E-03 |
| IPQ | -3.630E-04 | 8.842E-04 |
| METAS | -2.960E-04 | 5.865E-04 |
| MKEH | -9.610E-04 | 1.459E-03 |
| SP | -1.411E-03 | 2.249E-03 |
| UME | 6.569E-05 | 1.795E-03 |
| DMDM | 8.46E-04 | 1.61E-03 |

CCPR-K6, EUROMET-K6 and EURAMET.PR-K6.1

Degrees of equivalence for Filter B

MEASURAND : Spectral regular transmittance

All reported values are absolute

Nominal transmittance at 546 nm: 56 %

| Lab <i>i</i> | Wavelength: 900 nm | |
|--------------|--------------------|-----------|
| | D_i | U_i |
| IODV | -2.078E-03 | 1.998E-03 |
| KRISS | 9.624E-04 | 7.184E-04 |
| LNE-INM | -7.263E-05 | 3.578E-04 |
| MIKES | 4.099E-04 | 7.253E-04 |
| MSL | -4.763E-05 | 3.369E-04 |
| NIST | 3.097E-04 | 9.092E-04 |
| VSL | 4.184E-04 | 6.998E-04 |
| NMIA | -1.634E-06 | 2.651E-04 |
| NMIJ | 1.984E-04 | 1.264E-03 |
| NPL | -4.051E-04 | 3.144E-04 |
| NRC | 2.812E-05 | 2.322E-04 |
| PTB | -2.351E-04 | 5.270E-04 |
| SMU | -5.296E-04 | 3.917E-04 |
| A*STAR | 7.899E-04 | 4.284E-04 |
| VNIIOFI | 1.934E-04 | 8.109E-04 |
| BEV | 1.522E-03 | 2.378E-03 |
| CMI | -1.458E-03 | 8.447E-04 |
| GUM | 1.865E-03 | 4.476E-04 |
| INM(RO) | -2.650E-03 | 7.523E-04 |
| INRIM | 9.317E-03 | 1.199E-03 |
| IPQ | 6.296E-04 | 6.565E-04 |
| METAS | -4.037E-04 | 3.638E-04 |
| MKEH | -8.576E-04 | 1.521E-03 |
| SP | 5.070E-03 | 3.222E-03 |
| UME | 2.802E-03 | 7.137E-04 |
| DMDM | 6.80E-04 | 1.35E-03 |

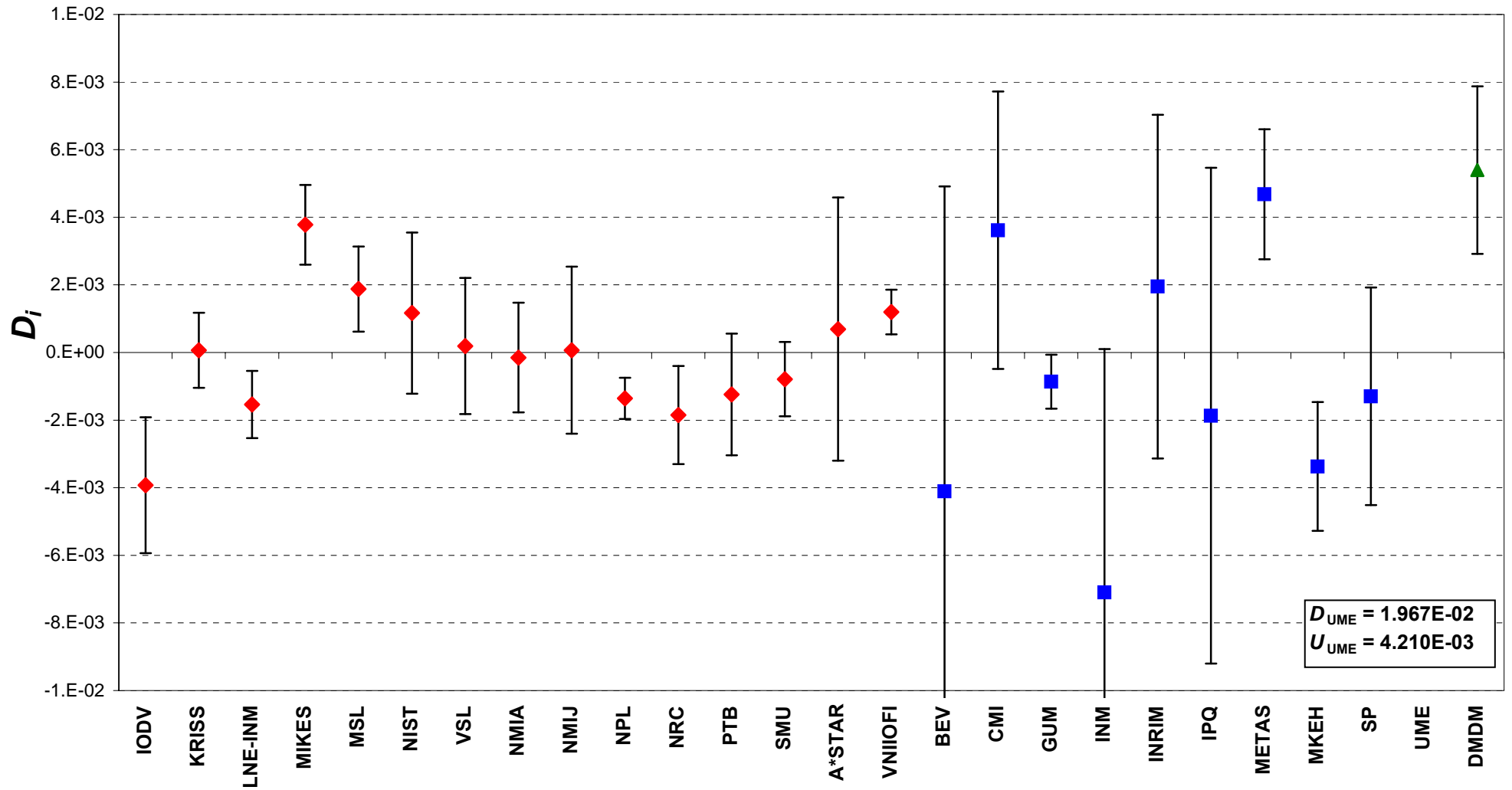
| Lab <i>i</i> | Wavelength: 1000 nm | |
|--------------|---------------------|-----------|
| | D_i | U_i |
| IODV | -2.440E-03 | 2.599E-03 |
| KRISS | 5.874E-04 | 7.949E-04 |
| LNE-INM | -1.051E-04 | 3.965E-04 |
| MIKES | 4.699E-04 | 8.428E-04 |
| MSL | 8.316E-05 | 4.166E-04 |
| NIST | 1.616E-04 | 7.961E-04 |
| VSL | 1.224E-04 | 6.555E-04 |
| NMIA | -4.909E-05 | 3.279E-04 |
| NMIJ | 4.639E-04 | 1.151E-03 |
| NPL | -3.326E-04 | 2.293E-04 |
| NRC | -6.509E-05 | 2.545E-04 |
| PTB | 3.324E-04 | 5.843E-04 |
| SMU | - | - |
| A*STAR | 7.349E-04 | 4.755E-04 |
| VNIIOFI | 1.884E-04 | 9.018E-04 |
| BEV | 3.260E-03 | 3.250E-03 |
| CMI | -9.626E-04 | 8.530E-04 |
| GUM | 1.594E-03 | 3.072E-04 |
| INM(RO) | -2.408E-03 | 2.641E-03 |
| INRIM | 8.643E-03 | 8.025E-04 |
| IPQ | 6.997E-04 | 8.919E-04 |
| METAS | -1.490E-04 | 3.879E-04 |
| MKEH | -7.651E-04 | 1.570E-03 |
| SP | 5.102E-03 | 3.203E-03 |
| UME | 3.699E-04 | 5.239E-04 |
| DMDM | 1.99E-05 | 1.14E-03 |

Black : participants in CCPR-K6

Blue: participants in EUROMET.PR-K6 only

Green: participant in EURAMET.PR-K6.1 only

CCPR-K6, EUROMET.PR-K6, and EURAMET.PR-K6.1
Spectral regular transmittance - Filter B - $\lambda = 380$ nm
Degrees of equivalence, D_i and expanded uncertainty U_i ($k = 2$)

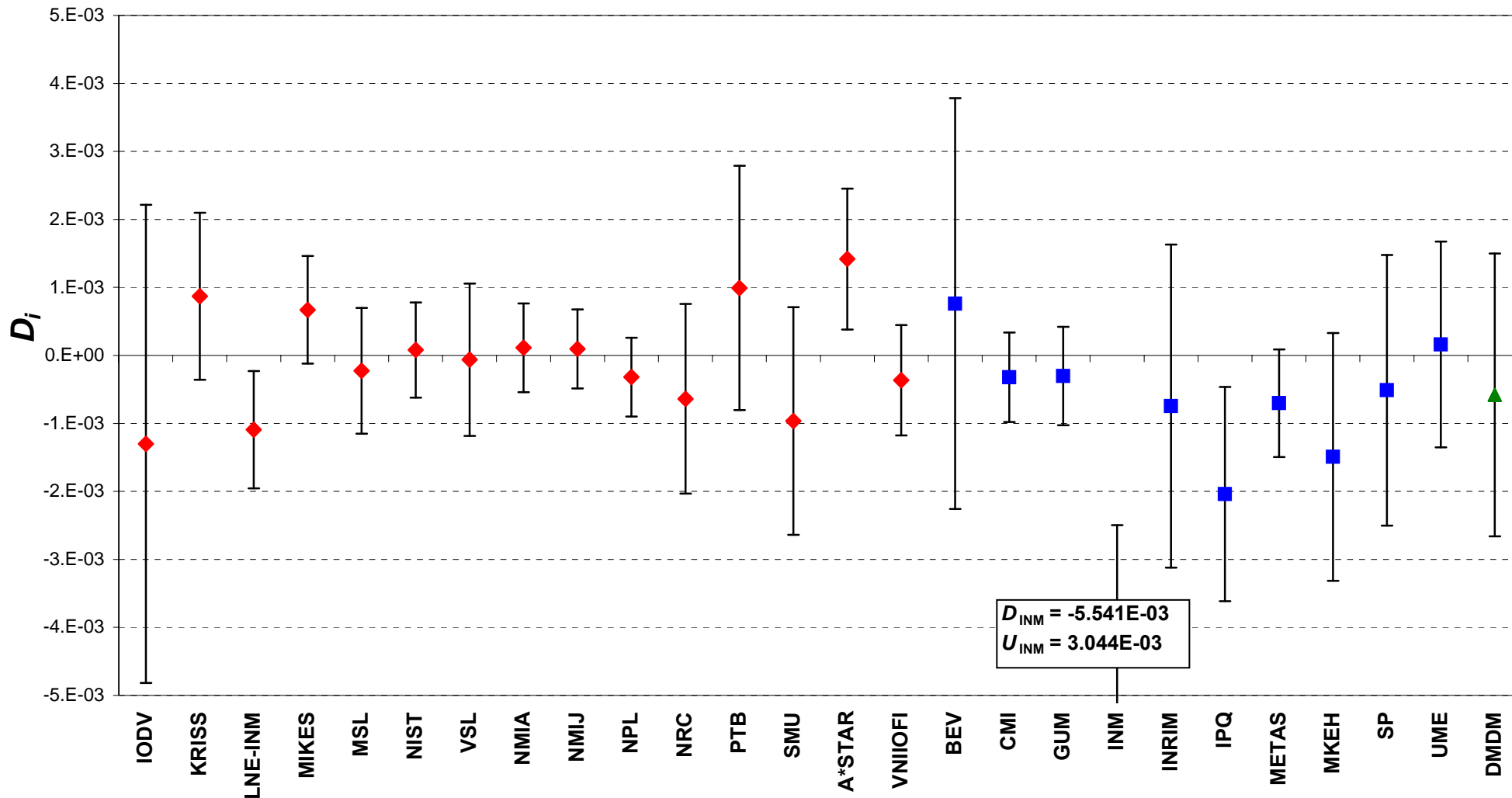


Red diamonds: participants in CCPR-K6

Blue squares: participants in EUROMET.PR-K6 only

Green triangle: participant in EURAMET.PR-K6.1 only

CCPR-K6, EUROMET.PR-K6, and EURAMET.PR-K6.1
 Spectral regular transmittance - Filter B - $\lambda = 400$ nm
 Degrees of equivalence, D_i and expanded uncertainty U_i ($k = 2$)

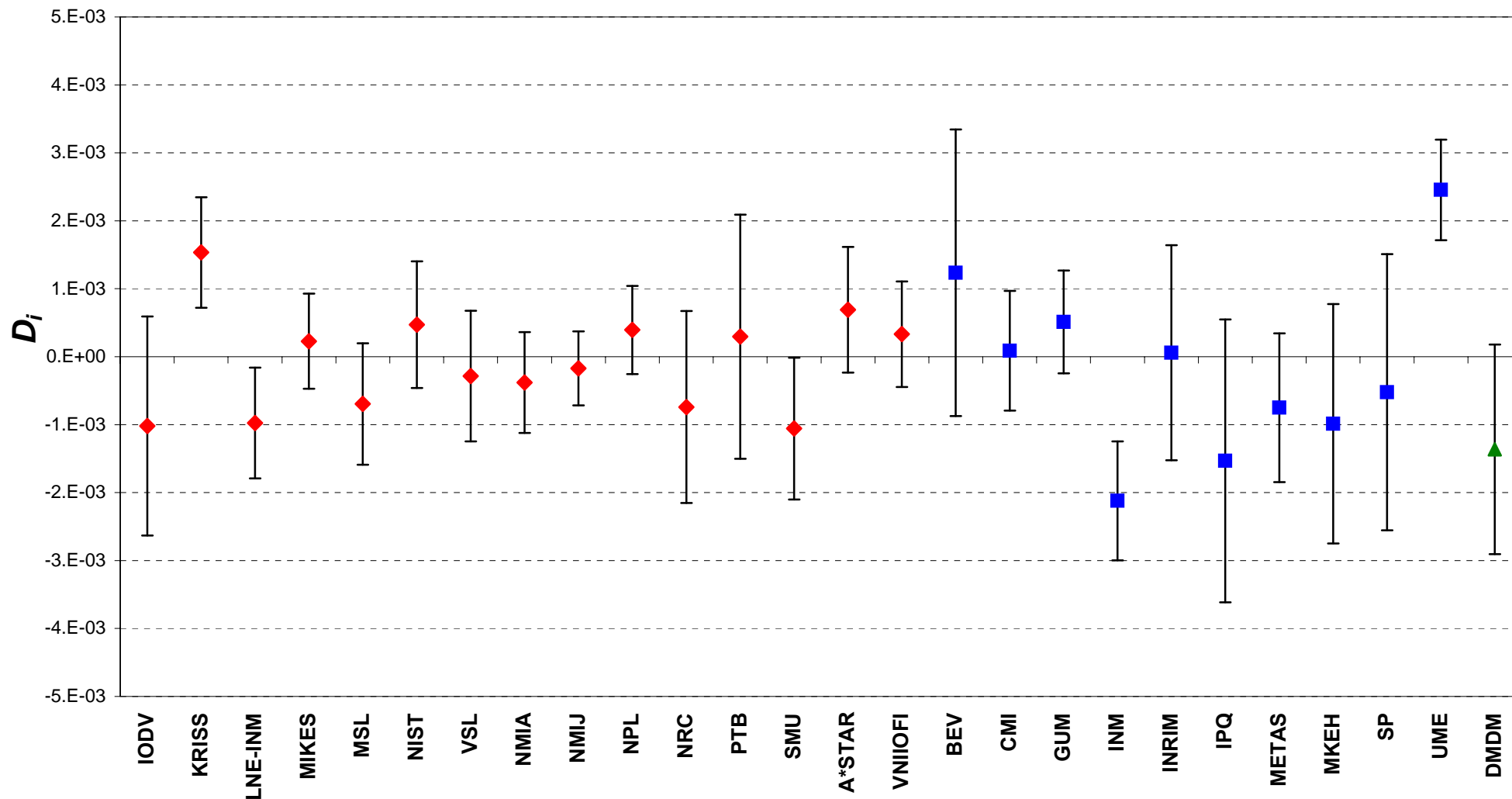


Red diamonds: participants in CCPR-K6

Blue squares: participants in EUROMET.PR-K6 only

Green triangle: participant in EURAMET.PR-K6.1 only

CCPR-K6, EUROMET.PR-K6, and EURAMET.PR-K6.1
 Spectral regular transmittance - Filter B - $\lambda = 500$ nm
 Degrees of equivalence, D_i and expanded uncertainty U_i ($k = 2$)

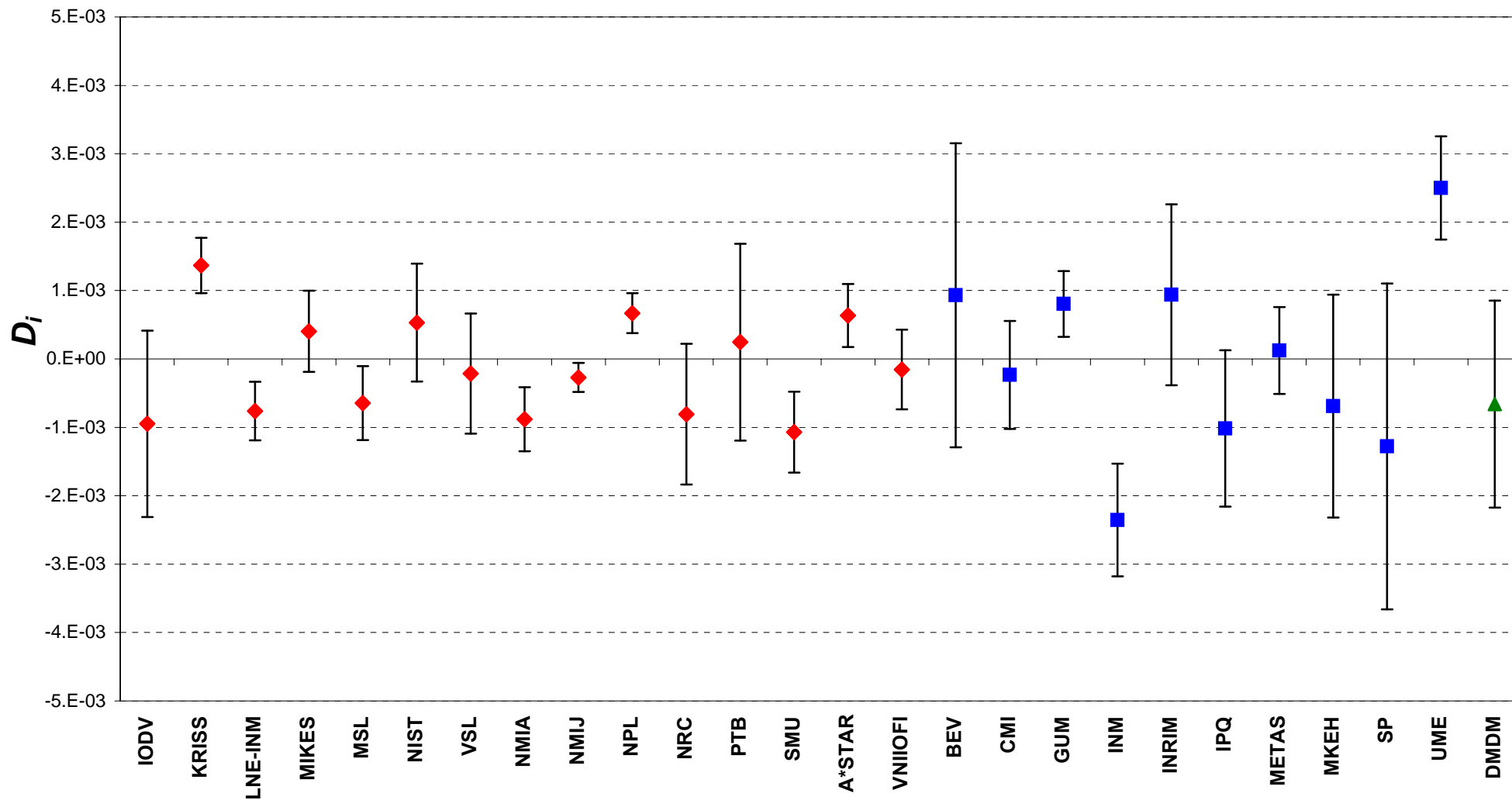


Red diamonds: participants in CCPR-K6

Green triangle: participant in EURAMET.PR-K6.1 only

Blue squares: participants in EUROMET.PR-K6 only

CCPR-K6, EUROMET.PR-K6, and EURAMET.PR-K6.1
 Spectral regular transmittance - Filter B - $\lambda = 600$ nm
 Degrees of equivalence, D_i and expanded uncertainty U_i ($k = 2$)

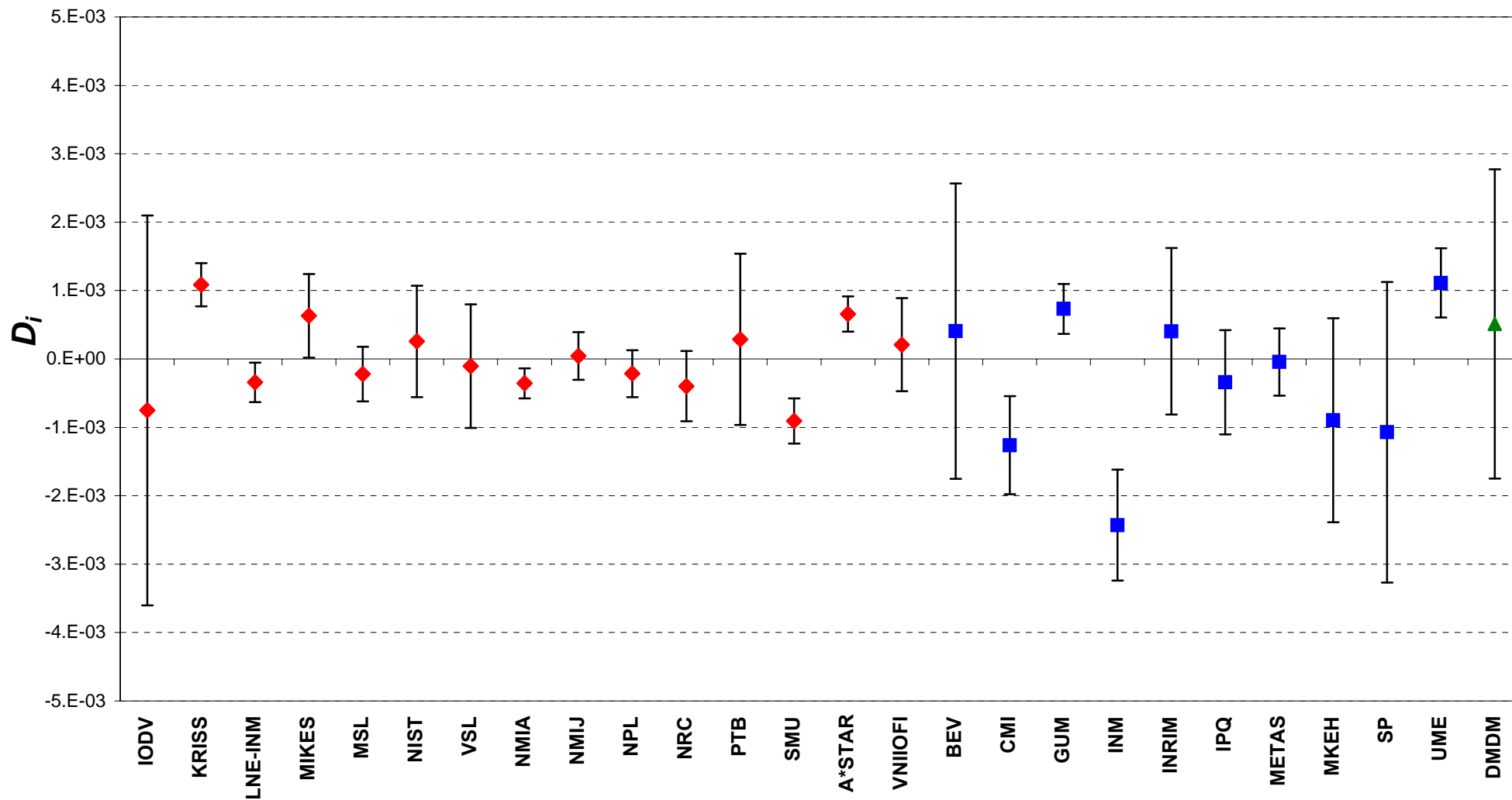


Red diamonds: participants in CCPR-K6

Green triangle: participant in EURAMET.PR-K6.1 only

Blue squares: participants in EUROMET.PR-K6 only

CCPR-K6, EUROMET.PR-K6, and EURAMET.PR-K6.1
 Spectral regular transmittance - Filter B - $\lambda = 700$ nm
 Degrees of equivalence, D_i and expanded uncertainty U_i ($k = 2$)

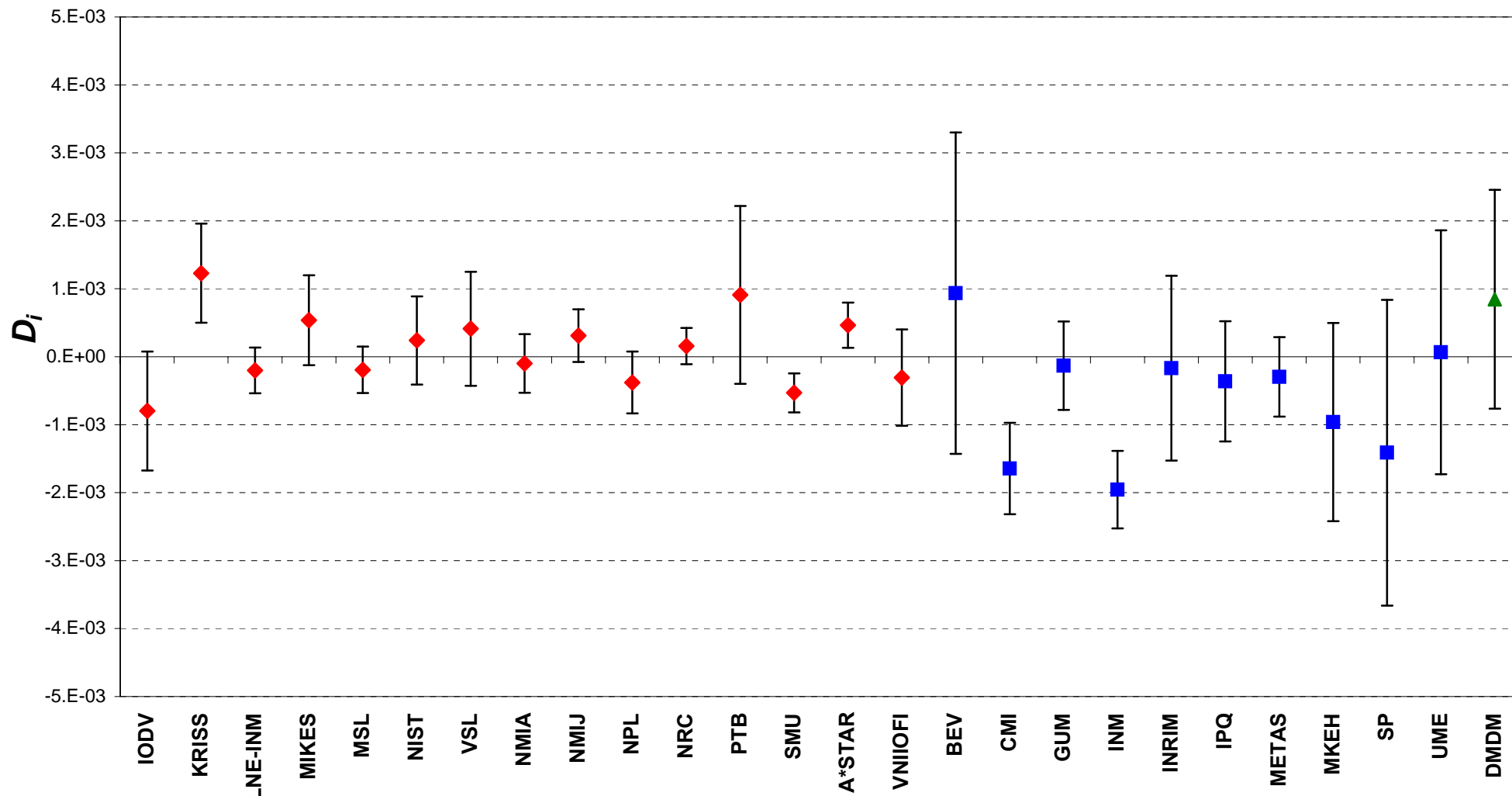


Red diamonds: participants in CCPR-K6

Blue squares: participants in EUROMET.PR-K6 only

Green triangle: participant in EURAMET.PR-K6.1 only

CCPR-K6, EUROMET.PR-K6, and EURAMET.PR-K6.1
Spectral regular transmittance - Filter B - $\lambda = 800$ nm
Degrees of equivalence, D_i and expanded uncertainty U_i ($k = 2$)

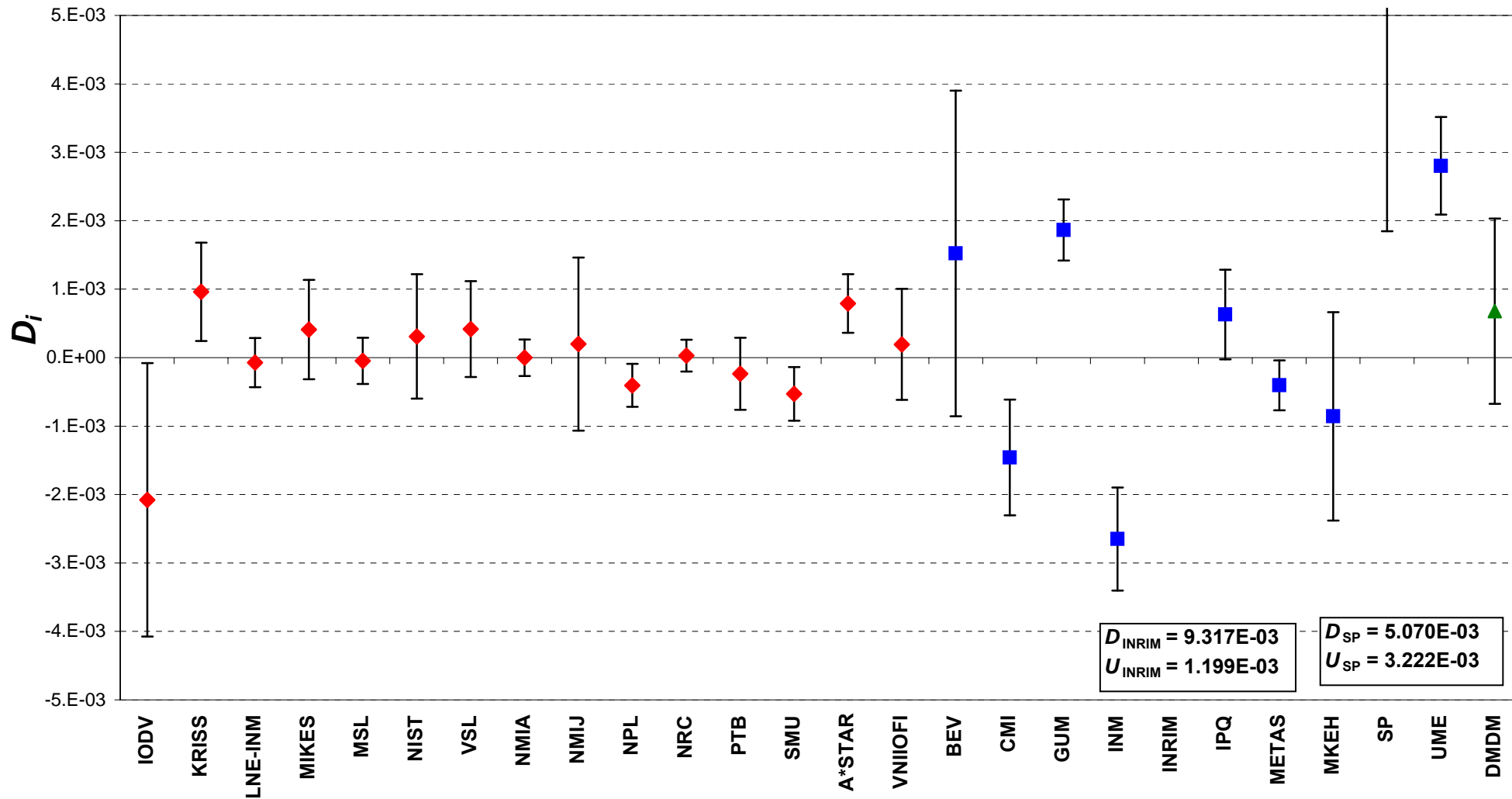


Red diamonds: participants in CCPR-K6

Green triangle: participant in EURAMET.PR-K6.1 only

Blue squares: participants in EUROMET.PR-K6 only

CCPR-K6, EUROMET.PR-K6, and EURAMET.PR-K6.1
Spectral regular transmittance - Filter B - $\lambda = 900$ nm
Degrees of equivalence, D_i and expanded uncertainty U_i ($k = 2$)

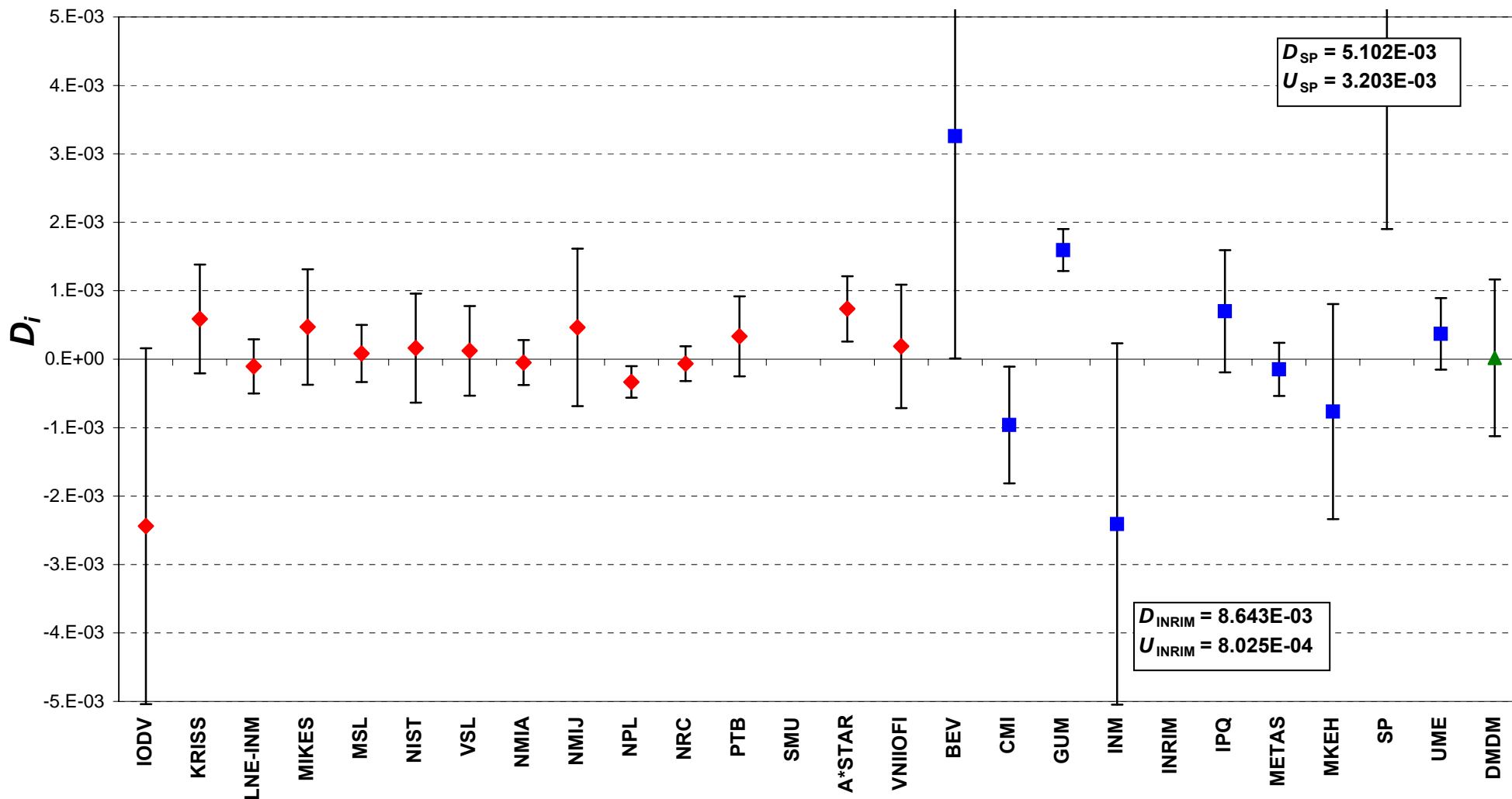


Red diamonds: participants in CCPR-K6
Blue squares: participants in EUROMET.PR-K6 only

Green triangle: participant in EURAMET.PR-K6.1 only

| | |
|---------------------------------------|------------------------------------|
| $D_{\text{INRIM}} = 9.317\text{E-}03$ | $D_{\text{SP}} = 5.070\text{E-}03$ |
| $U_{\text{INRIM}} = 1.199\text{E-}03$ | $U_{\text{SP}} = 3.222\text{E-}03$ |

CCPR-K6, EUROMET.PR-K6, and EURAMET.PR-K6.1
Spectral regular transmittance - Filter B - $\lambda = 1000$ nm
Degrees of equivalence, D_i and expanded uncertainty U_i ($k = 2$)



Red diamonds: participants in CCPR-K6
Blue squares: participants in EUROMET.PR-K6 only

Green triangle: participant in EURAMET.PR-K6.1 only

CCPR-K6, EUROMET-K6 and EURAMET.PR-K6.1

Degrees of equivalence for Filter C

MEASURAND : Spectral regular transmittance

All reported values are absolute

Nominal transmittance at 546 nm: 10 %

| Lab <i>i</i> | Wavelength: 380 nm | |
|--------------|--------------------|-----------|
| | D_i | U_i |
| IODV | -5.986E-04 | 2.766E-04 |
| KRISS | -2.251E-04 | 1.984E-04 |
| LNE-INM | -1.211E-04 | 3.009E-04 |
| MIKES | 8.371E-04 | 2.522E-04 |
| MSL | 5.334E-04 | 1.939E-04 |
| NIST | 2.267E-04 | 2.735E-04 |
| VSL | -6.432E-05 | 7.506E-04 |
| NMIA | 2.106E-04 | 2.700E-04 |
| NMIJ | 6.276E-05 | 4.526E-04 |
| NPL | -1.928E-04 | 1.345E-04 |
| NRC | -2.091E-04 | 1.649E-04 |
| PTB | -1.358E-04 | 1.977E-04 |
| SMU | -1.547E-04 | 1.189E-04 |
| A*STAR | 2.793E-05 | 7.778E-04 |
| VNIIOFI | 2.824E-04 | 6.350E-04 |
| BEV | -6.776E-04 | 2.202E-03 |
| CMI | 1.269E-03 | 1.503E-03 |
| GUM | -1.950E-04 | 1.800E-04 |
| INM(RO) | -1.171E-03 | 2.009E-03 |
| INRIM | 2.714E-04 | 1.537E-03 |
| IPQ | -1.879E-04 | 7.726E-04 |
| METAS | 1.051E-03 | 3.987E-04 |
| MKEH | -3.462E-04 | 9.016E-04 |
| SP | -1.571E-06 | 7.026E-04 |
| UME | 4.691E-03 | 7.527E-04 |
| DMDM | 8.45E-04 | 6.27E-04 |

| Lab <i>i</i> | Wavelength: 400 nm | |
|--------------|--------------------|-----------|
| | D_i | U_i |
| IODV | -2.726E-04 | 4.872E-04 |
| KRISS | -4.223E-04 | 1.486E-04 |
| LNE-INM | 3.117E-05 | 1.491E-04 |
| MIKES | 2.199E-04 | 2.172E-04 |
| MSL | 3.637E-04 | 1.738E-04 |
| NIST | 1.515E-04 | 2.348E-04 |
| VSL | -6.133E-05 | 4.165E-04 |
| NMIA | 2.967E-04 | 2.548E-04 |
| NMIJ | 2.784E-04 | 3.065E-04 |
| NPL | -1.476E-04 | 1.136E-04 |
| NRC | 6.923E-06 | 1.492E-04 |
| PTB | 3.204E-04 | 5.632E-04 |
| SMU | -3.251E-04 | 2.351E-04 |
| A*STAR | 2.214E-04 | 3.429E-04 |
| VNIIOFI | -3.808E-04 | 6.350E-04 |
| BEV | -2.843E-04 | 2.002E-03 |
| CMI | 1.897E-04 | 1.947E-04 |
| GUM | -2.519E-04 | 4.743E-04 |
| INM(RO) | 2.787E-04 | 1.220E-03 |
| INRIM | 1.188E-04 | 1.020E-03 |
| IPQ | 1.792E-04 | 3.024E-04 |
| METAS | -6.533E-05 | 9.208E-04 |
| MKEH | 6.345E-04 | 6.803E-04 |
| SP | 1.146E-03 | 9.944E-04 |
| UME | -1.126E-03 | 5.635E-04 |
| DMDM | -2.51E-05 | 7.06E-04 |

Black : participants in CCPR-K6

Blue: participants in EUROMET.PR-K6 only

Green: participant in EURAMET.PR-K6.1 only

CCPR-K6, EUROMET-K6 and EURAMET.PR-K6.1

Degrees of equivalence for Filter C

MEASURAND : Spectral regular transmittance

All reported values are absolute

Nominal transmittance at 546 nm: 10 %

| Lab <i>i</i> | Wavelength: 500 nm | |
|--------------|--------------------|-----------|
| | D_i | U_i |
| IODV | -1.211E-04 | 2.851E-04 |
| KRISS | 1.209E-04 | 8.430E-05 |
| LNE-INM | -1.156E-04 | 1.661E-04 |
| MIKES | -2.609E-05 | 1.580E-04 |
| MSL | -1.511E-04 | 1.268E-04 |
| NIST | 1.522E-04 | 2.225E-04 |
| VSL | 1.512E-04 | 4.292E-04 |
| NMIA | -1.126E-04 | 1.792E-04 |
| NMIJ | 7.791E-05 | 2.718E-04 |
| NPL | 3.139E-04 | 1.023E-04 |
| NRC | -1.078E-04 | 1.191E-04 |
| PTB | 3.584E-04 | 5.377E-04 |
| SMU | -3.916E-04 | 1.817E-04 |
| A*STAR | -9.909E-05 | 1.916E-04 |
| VNIIOFI | 5.991E-05 | 6.916E-04 |
| BEV | 4.412E-04 | 1.004E-03 |
| CMI | -2.259E-02 | 1.087E-04 |
| GUM | 2.343E-05 | 3.046E-04 |
| INM(RO) | 4.254E-04 | 3.073E-04 |
| INRIM | 8.389E-05 | 4.192E-04 |
| IPQ | 3.981E-04 | 2.798E-04 |
| METAS | -1.326E-04 | 2.536E-04 |
| MKEH | 7.944E-04 | 5.359E-04 |
| SP | 2.741E-05 | 4.613E-04 |
| UME | 6.791E-05 | 2.629E-04 |
| DMDM | 2.67E-04 | 2.84E-04 |

| Lab <i>i</i> | Wavelength: 600 nm | |
|--------------|--------------------|-----------|
| | D_i | U_i |
| IODV | -2.007E-04 | 2.526E-04 |
| KRISS | 2.278E-04 | 7.732E-05 |
| LNE-INM | -1.777E-04 | 1.311E-04 |
| MIKES | 1.306E-04 | 1.868E-04 |
| MSL | -1.717E-04 | 7.047E-05 |
| NIST | 1.145E-04 | 1.614E-04 |
| VSL | 1.251E-04 | 3.734E-04 |
| NMIA | -1.214E-04 | 1.046E-04 |
| NMIJ | -3.794E-05 | 1.756E-04 |
| NPL | 2.418E-04 | 8.810E-05 |
| NRC | -1.059E-04 | 1.382E-04 |
| PTB | 9.131E-05 | 4.584E-04 |
| SMU | -2.698E-04 | 1.976E-04 |
| A*STAR | -3.669E-05 | 1.169E-04 |
| VNIIOFI | 2.581E-05 | 7.001E-04 |
| BEV | 1.373E-04 | 2.402E-03 |
| CMI | 6.881E-05 | 1.961E-04 |
| GUM | 1.572E-04 | 2.695E-04 |
| INM(RO) | 3.283E-04 | 5.511E-04 |
| INRIM | 3.636E-04 | 2.223E-04 |
| IPQ | -1.222E-05 | 2.728E-04 |
| METAS | 1.758E-04 | 9.793E-05 |
| MKEH | 2.485E-04 | 3.420E-04 |
| SP | 6.872E-01 | 4.260E-04 |
| UME | 1.783E-04 | 1.254E-04 |
| DMDM | -1.30E-04 | 2.44E-04 |

Black : participants in CCPR-K6

Blue: participants in EUROMET.PR-K6 only

Green: participant in EURAMET.PR-K6.1 only

CCPR-K6, EUROMET-K6 and EURAMET.PR-K6.1

Degrees of equivalence for Filter C

MEASURAND : Spectral regular transmittance

| Lab <i>i</i> | Wavelength: 700 nm | |
|--------------|--------------------|-----------|
| | D_i | U_i |
| IODV | -1.488E-04 | 6.950E-04 |
| KRISS | 3.142E-05 | 1.709E-04 |
| LNE-INM | -9.633E-05 | 1.559E-04 |
| MIKES | 1.487E-04 | 2.394E-04 |
| MSL | 2.324E-04 | 1.939E-04 |
| NIST | 6.842E-05 | 3.467E-04 |
| VSL | 7.117E-05 | 6.723E-04 |
| NMIA | 8.617E-05 | 1.628E-04 |
| NMIJ | -3.133E-05 | 3.930E-04 |
| NPL | 1.118E-04 | 9.696E-05 |
| NRC | -1.632E-04 | 1.595E-04 |
| PTB | -2.095E-05 | 8.373E-04 |
| SMU | -5.366E-04 | 2.451E-04 |
| A*STAR | -1.031E-04 | 4.638E-04 |
| VNIIOFI | 6.053E-04 | 6.361E-04 |
| BEV | -4.909E-04 | 2.401E-03 |
| CMI | -1.505E-04 | 2.391E-04 |
| GUM | 3.977E-05 | 4.793E-04 |
| INM(RO) | 9.607E-04 | 9.055E-04 |
| INRIM | 9.624E-05 | 9.331E-04 |
| IPQ | -7.338E-05 | 3.784E-04 |
| METAS | 9.088E-05 | 4.005E-04 |
| MKEH | 1.145E-04 | 3.256E-04 |
| SP | -1.967E-04 | 8.536E-04 |
| UME | -2.476E-04 | 2.084E-04 |
| DMDM | 4.75E-04 | 4.59E-04 |

Black : participants in CCPR-K6

Blue: participants in EUROMET.PR-K6 only

Green: participant in EURAMET.PR-K6.1 only

All reported values are absolute

Nominal transmittance at 546 nm: 10 %

| Lab <i>i</i> | Wavelength: 800 nm | |
|--------------|--------------------|-----------|
| | D_i | U_i |
| IODV | -1.846E-04 | 2.861E-04 |
| KRISS | 2.474E-04 | 2.340E-04 |
| LNE-INM | -1.455E-05 | 2.618E-04 |
| MIKES | -6.455E-05 | 2.144E-04 |
| MSL | -6.705E-05 | 1.082E-04 |
| NIST | 5.545E-05 | 2.822E-04 |
| VSL | 1.859E-04 | 6.323E-04 |
| NMIA | 6.320E-05 | 5.117E-04 |
| NMIJ | 5.495E-05 | 2.920E-04 |
| NPL | 1.304E-04 | 1.465E-04 |
| NRC | 9.295E-05 | 9.598E-05 |
| PTB | 2.754E-04 | 8.518E-04 |
| SMU | -4.078E-04 | 2.322E-04 |
| A*STAR | 5.449E-06 | 1.707E-04 |
| VNIIOFI | -1.511E-04 | 6.605E-04 |
| BEV | 2.684E-04 | 2.201E-03 |
| CMI | -6.918E-05 | 2.277E-04 |
| GUM | 7.797E-05 | 3.893E-04 |
| INM(RO) | 3.729E-04 | 7.452E-04 |
| INRIM | 7.460E-05 | 4.704E-04 |
| IPQ | -2.391E-04 | 5.221E-04 |
| METAS | -1.073E-04 | 4.957E-04 |
| MKEH | 4.254E-04 | 3.329E-04 |
| SP | -2.616E-04 | 8.668E-04 |
| UME | -2.246E-04 | 3.290E-04 |
| DMDM | 8.62E-04 | 4.64E-04 |

CCPR-K6, EUROMET-K6 and EURAMET.PR-K6.1

Degrees of equivalence for Filter C

MEASURAND : Spectral regular transmittance

All reported values are absolute

Nominal transmittance at 546 nm: 10 %

| Lab <i>i</i> | Wavelength: 900 nm | |
|--------------|--------------------|-----------|
| | D_i | U_i |
| IODV | 5.366E-05 | 4.075E-04 |
| KRISS | 1.502E-04 | 1.441E-04 |
| LNE-INM | -8.838E-06 | 1.744E-04 |
| MIKES | -4.834E-05 | 1.926E-04 |
| MSL | -5.384E-05 | 9.642E-05 |
| NIST | 4.966E-05 | 1.936E-04 |
| VSL | 4.472E-04 | 5.307E-04 |
| NMIA | -2.634E-05 | 1.736E-04 |
| NMIJ | -8.534E-05 | 1.208E-03 |
| NPL | -1.338E-06 | 6.122E-05 |
| NRC | 4.366E-05 | 6.298E-05 |
| PTB | 1.012E-04 | 2.936E-04 |
| SMU | -3.900E-04 | 1.952E-04 |
| A*STAR | 6.116E-05 | 1.349E-04 |
| VNIIOFI | 8.162E-06 | 5.839E-04 |
| BEV | 8.792E-04 | 2.202E-03 |
| CMI | -3.332E-05 | 1.495E-04 |
| GUM | 9.643E-04 | 3.506E-04 |
| INM(RO) | -2.608E-04 | 5.298E-04 |
| INRIM | 3.672E-03 | 4.112E-04 |
| IPQ | 5.416E-04 | 2.850E-04 |
| METAS | -1.149E-04 | 2.326E-04 |
| MKEH | 2.462E-04 | 3.251E-04 |
| SP | 2.226E-03 | 1.183E-03 |
| UME | 1.594E-03 | 2.472E-04 |
| DMDM | 6.47E-04 | 3.17E-04 |

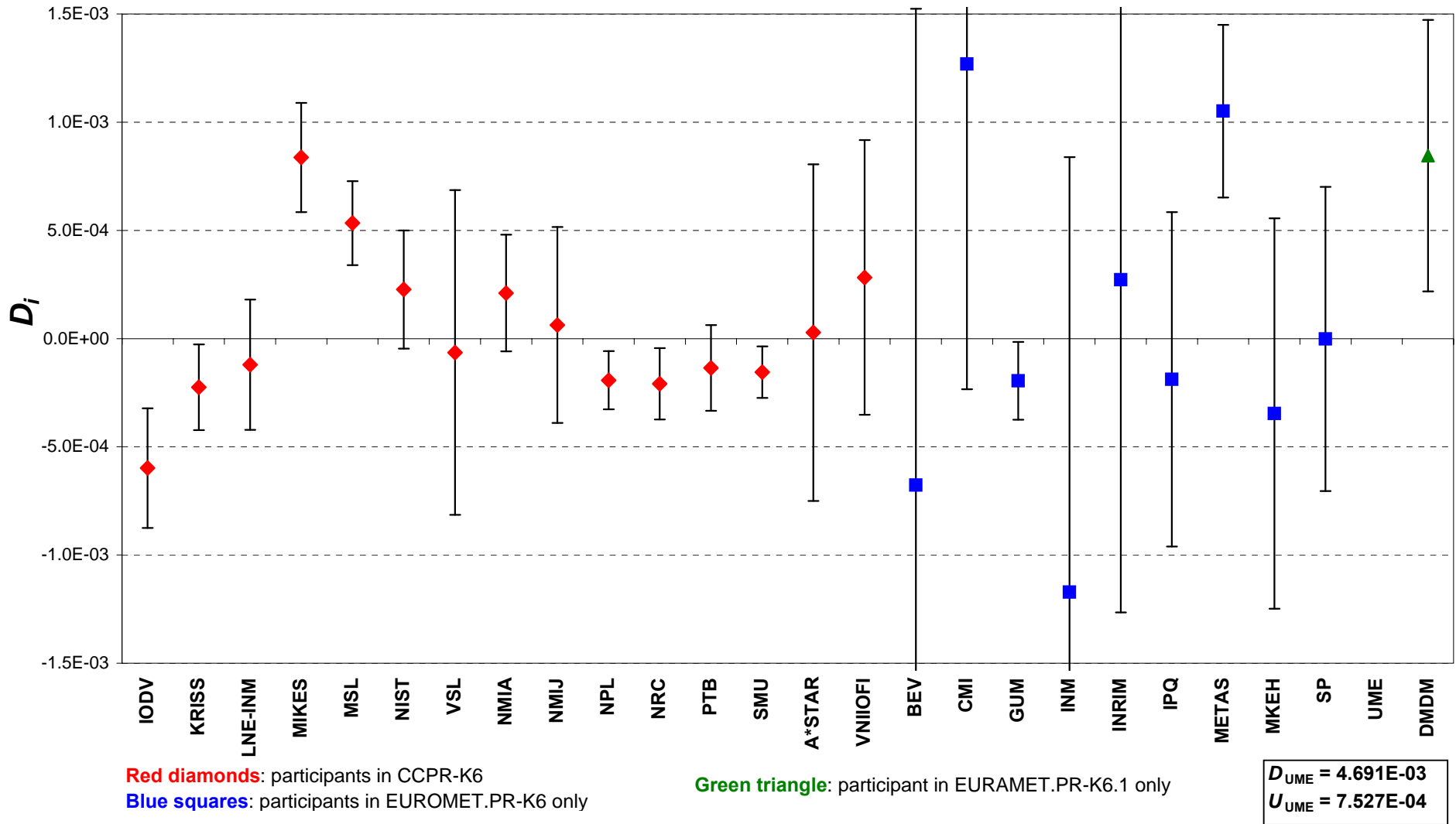
| Lab <i>i</i> | Wavelength: 1000 nm | |
|--------------|---------------------|-----------|
| | D_i | U_i |
| IODV | -1.466E-05 | 1.664E-04 |
| KRISS | -4.091E-05 | 1.598E-04 |
| LNE-INM | 1.840E-06 | 1.355E-04 |
| MIKES | 6.590E-06 | 1.616E-04 |
| MSL | 2.034E-05 | 9.770E-05 |
| NIST | 2.084E-05 | 1.546E-04 |
| VSL | 2.381E-04 | 4.256E-04 |
| NMIA | 3.284E-05 | 1.526E-04 |
| NMIJ | 5.034E-05 | 1.017E-03 |
| NPL | -1.566E-05 | 4.644E-05 |
| NRC | -2.841E-05 | 4.572E-05 |
| PTB | 1.582E-04 | 2.158E-04 |
| SMU | - | - |
| A*STAR | -1.660E-06 | 1.113E-04 |
| VNIIOFI | -4.516E-05 | 5.951E-04 |
| BEV | 1.533E-03 | 2.200E-03 |
| CMI | 5.458E-05 | 1.342E-04 |
| GUM | 6.872E-04 | 2.445E-04 |
| INM(RO) | -5.407E-04 | 4.910E-04 |
| INRIM | 2.689E-03 | 1.614E-04 |
| IPQ | 3.629E-04 | 2.102E-04 |
| METAS | 6.426E-05 | 2.085E-04 |
| MKEH | 1.537E-04 | 3.416E-04 |
| SP | 1.561E-03 | 9.206E-04 |
| UME | 5.784E-05 | 5.594E-04 |
| DMDM | 3.41E-04 | 2.31E-04 |

Black : participants in CCPR-K6

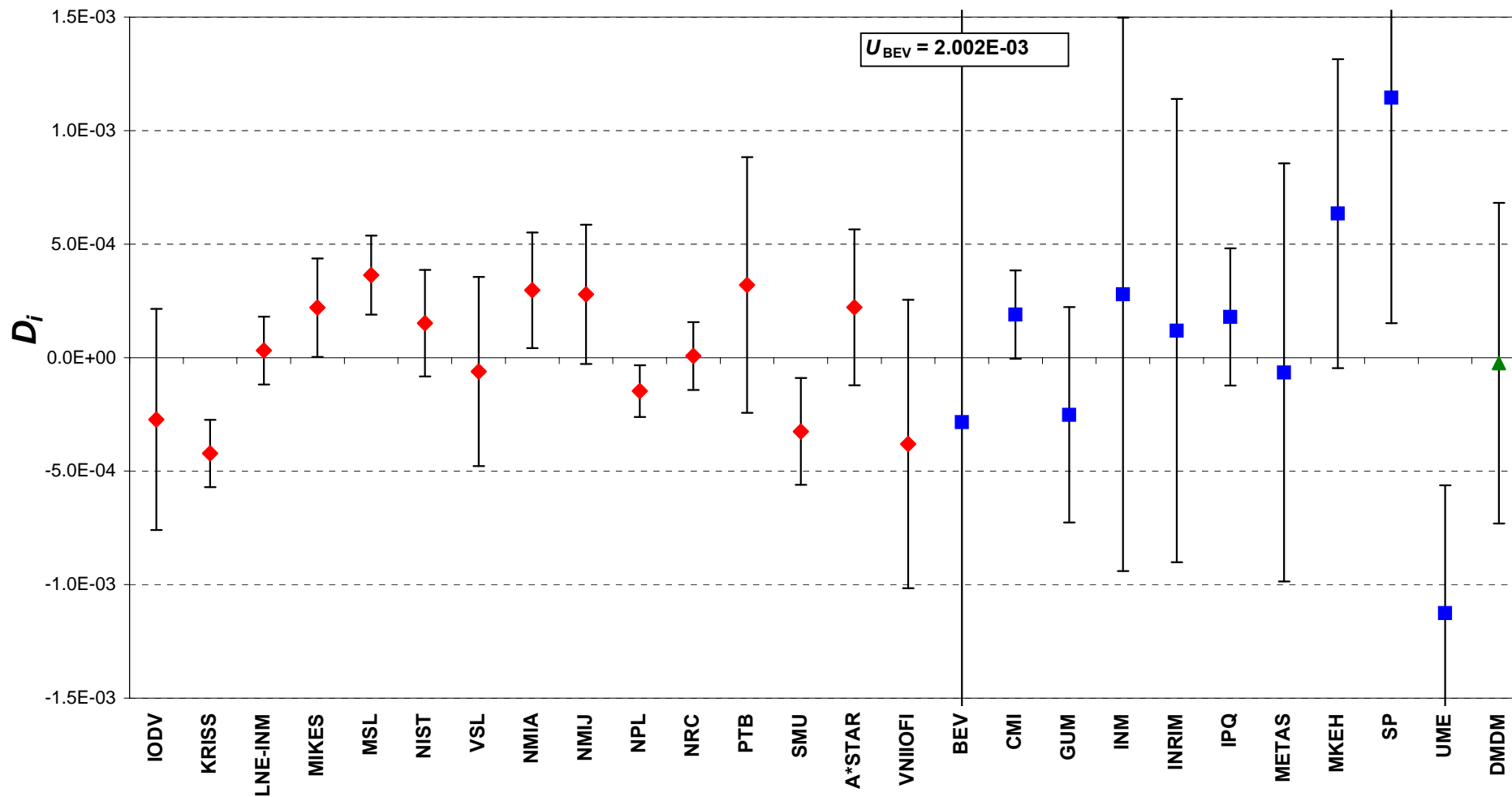
Blue: participants in EUROMET.PR-K6 only

Green: participant in EURAMET.PR-K6.1 only

CCPR-K6, EUROMET.PR-K6, and EURAMET.PR-K6.1
Spectral regular transmittance - Filter C - $\lambda = 380$ nm
Degrees of equivalence, D_i and expanded uncertainty U_i ($k = 2$)



CCPR-K6, EUROMET.PR-K6, and EURAMET.PR-K6.1
Spectral regular transmittance - Filter C - $\lambda = 400$ nm
Degrees of equivalence, D_i and expanded uncertainty U_i ($k = 2$)

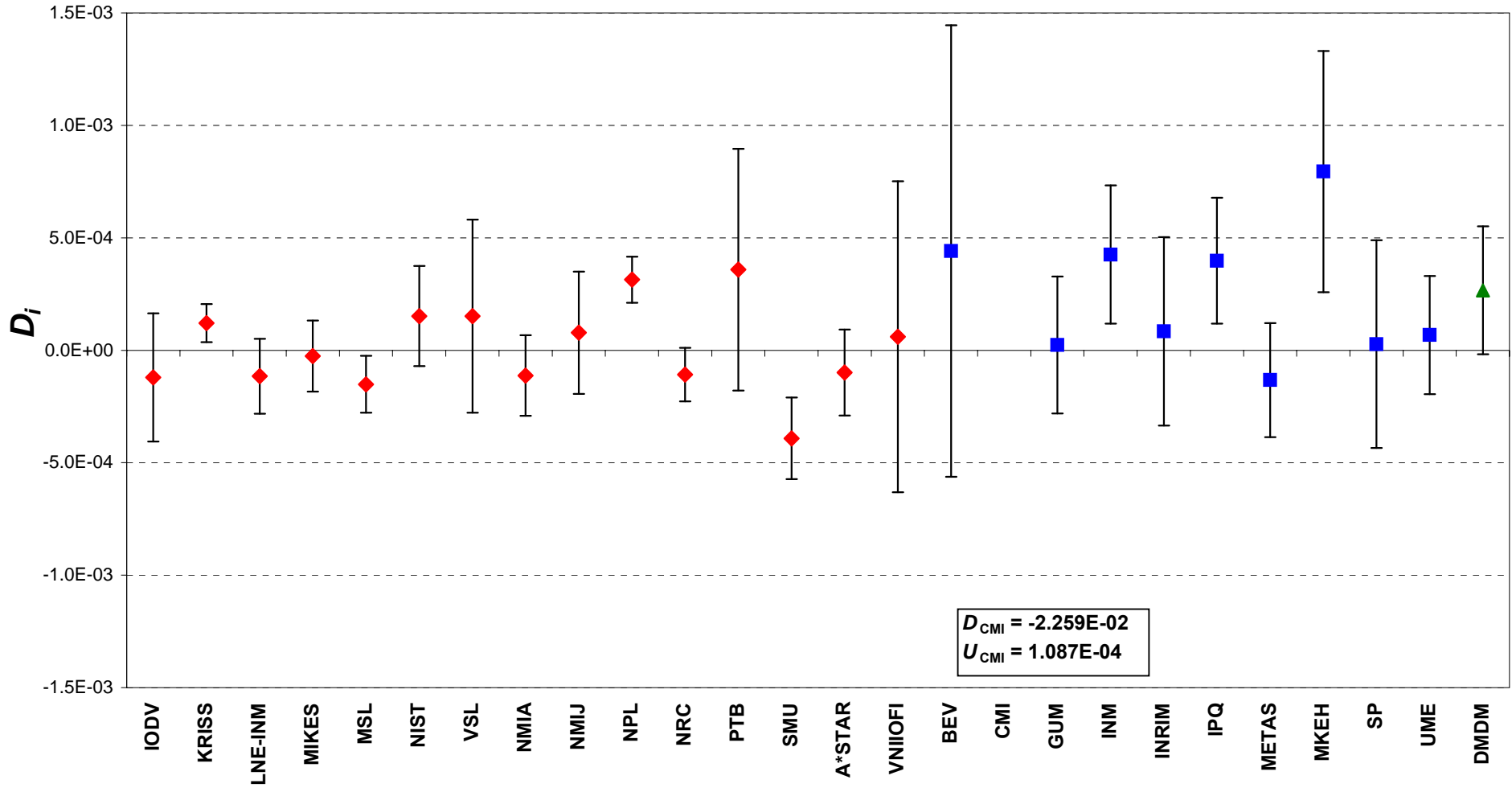


Red diamonds: participants in CCPR-K6

Blue squares: participants in EUROMET.PR-K6 only

Green triangle: participant in EURAMET.PR-K6.1 only

CCPR-K6, EUROMET.PR-K6, and EURAMET.PR-K6.1
 Spectral regular transmittance - Filter C - $\lambda = 500$ nm
 Degrees of equivalence, D_i and expanded uncertainty U_i ($k = 2$)

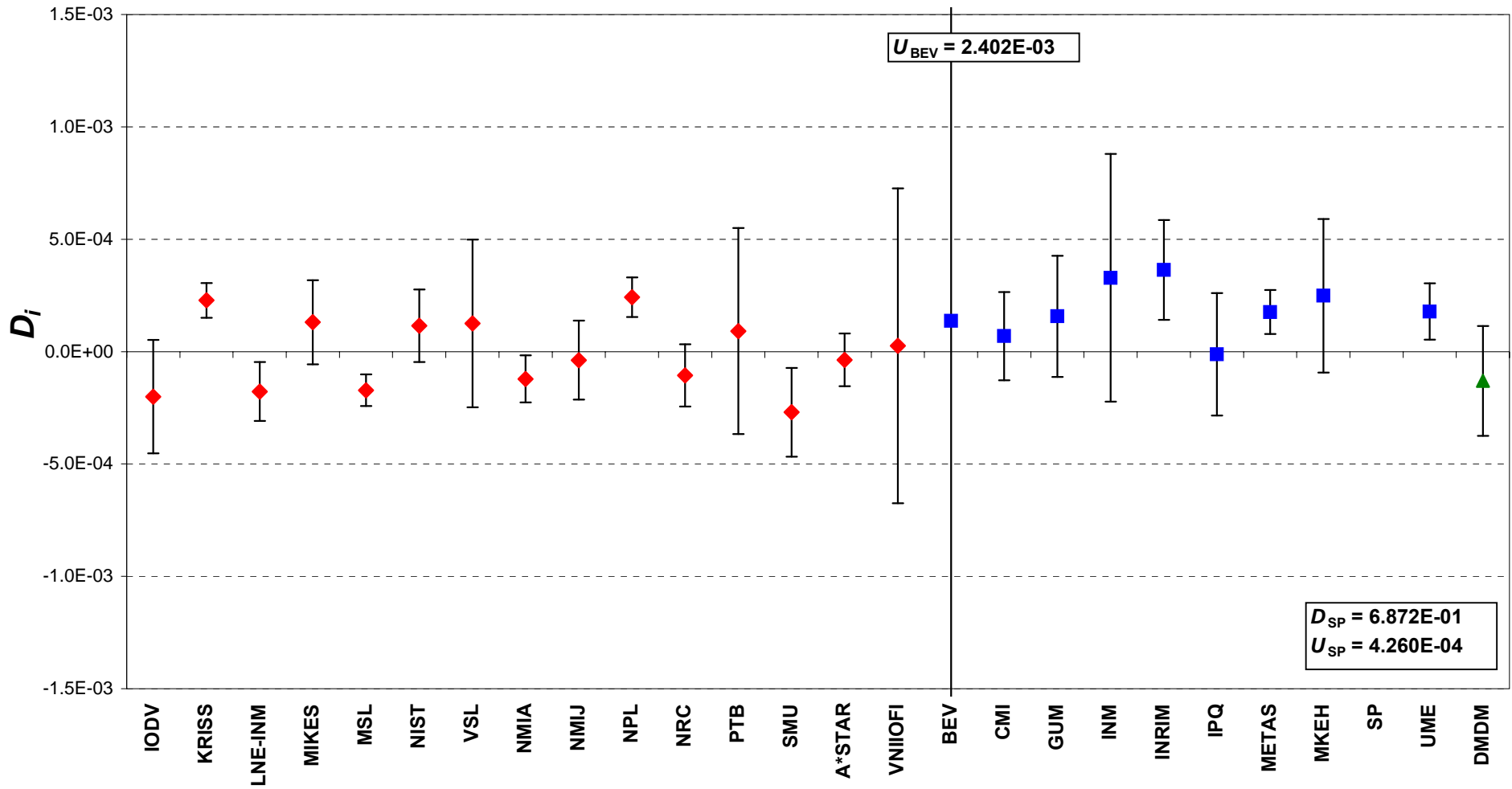


Red diamonds: participants in CCPR-K6

Blue squares: participants in EUROMET.PR-K6 only

Green triangle: participant in EURAMET.PR-K6.1 only

CCPR-K6, EUROMET.PR-K6, and EURAMET.PR-K6.1
 Spectral regular transmittance - Filter C - $\lambda = 600$ nm
 Degrees of equivalence, D_i and expanded uncertainty U_i ($k = 2$)

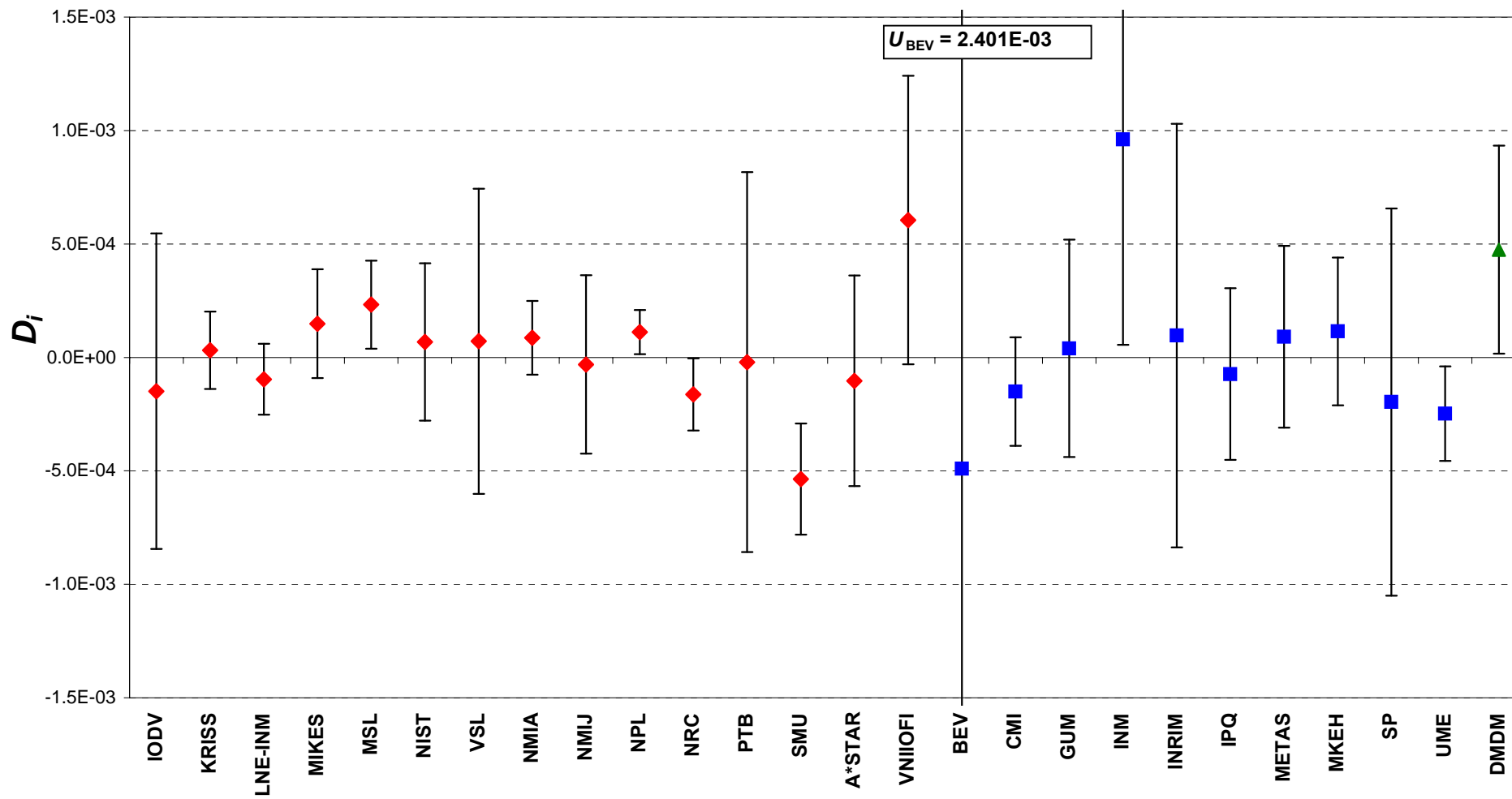


Red diamonds: participants in CCPR-K6

Blue squares: participants in EUROMET.PR-K6 only

Green triangle: participant in EURAMET.PR-K6.1 only

CCPR-K6, EUROMET.PR-K6, and EURAMET.PR-K6.1
 Spectral regular transmittance - Filter C - $\lambda = 700 \text{ nm}$
 Degrees of equivalence, D_i and expanded uncertainty U_i ($k = 2$)

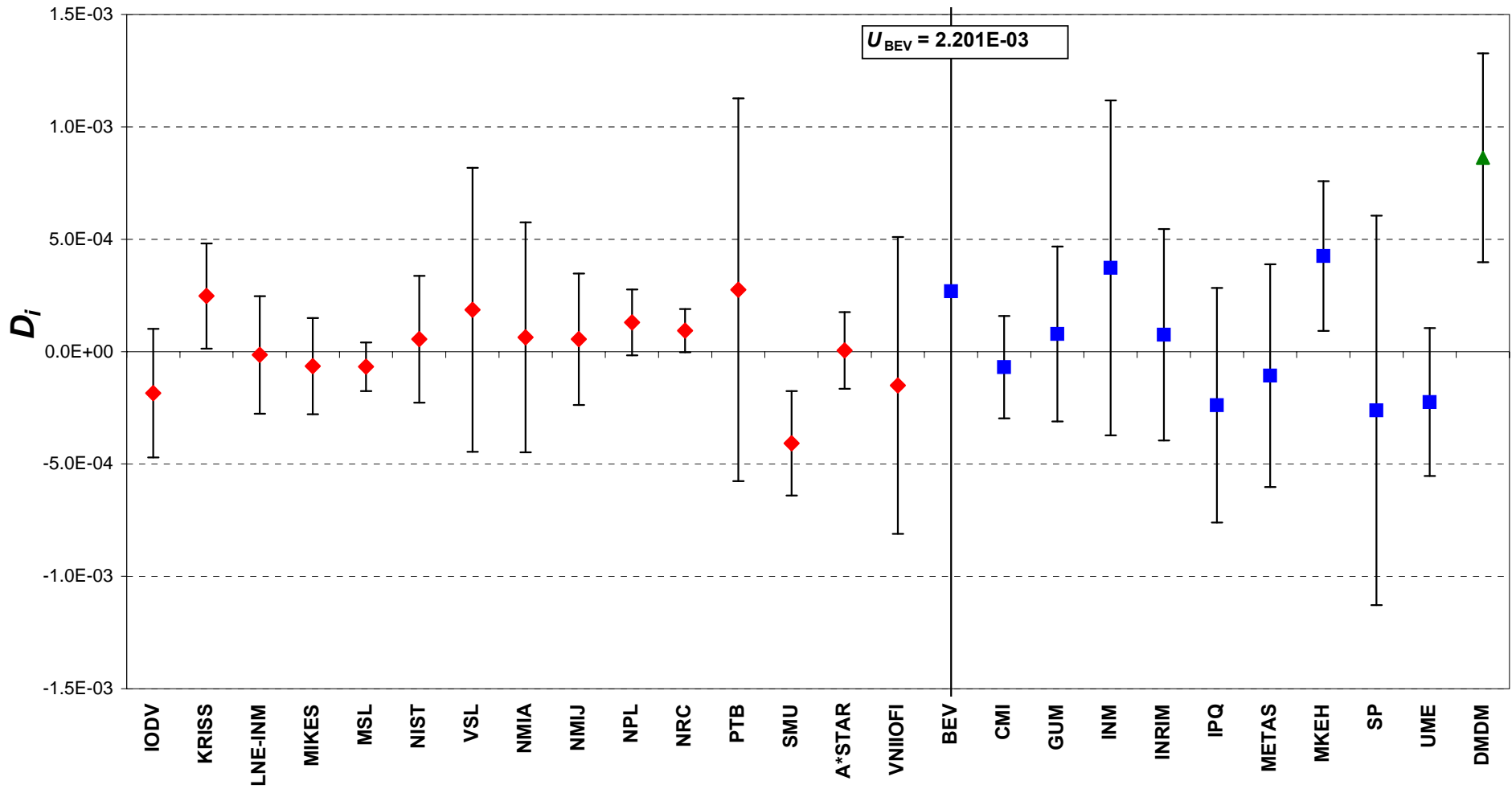


Red diamonds: participants in CCPR-K6

Blue squares: participants in EUROMET.PR-K6 only

Green triangle: participant in EURAMET.PR-K6.1 only

CCPR-K6, EUROMET.PR-K6, and EURAMET.PR-K6.1
 Spectral regular transmittance - Filter C - $\lambda = 800$ nm
 Degrees of equivalence, D_i and expanded uncertainty U_i ($k = 2$)

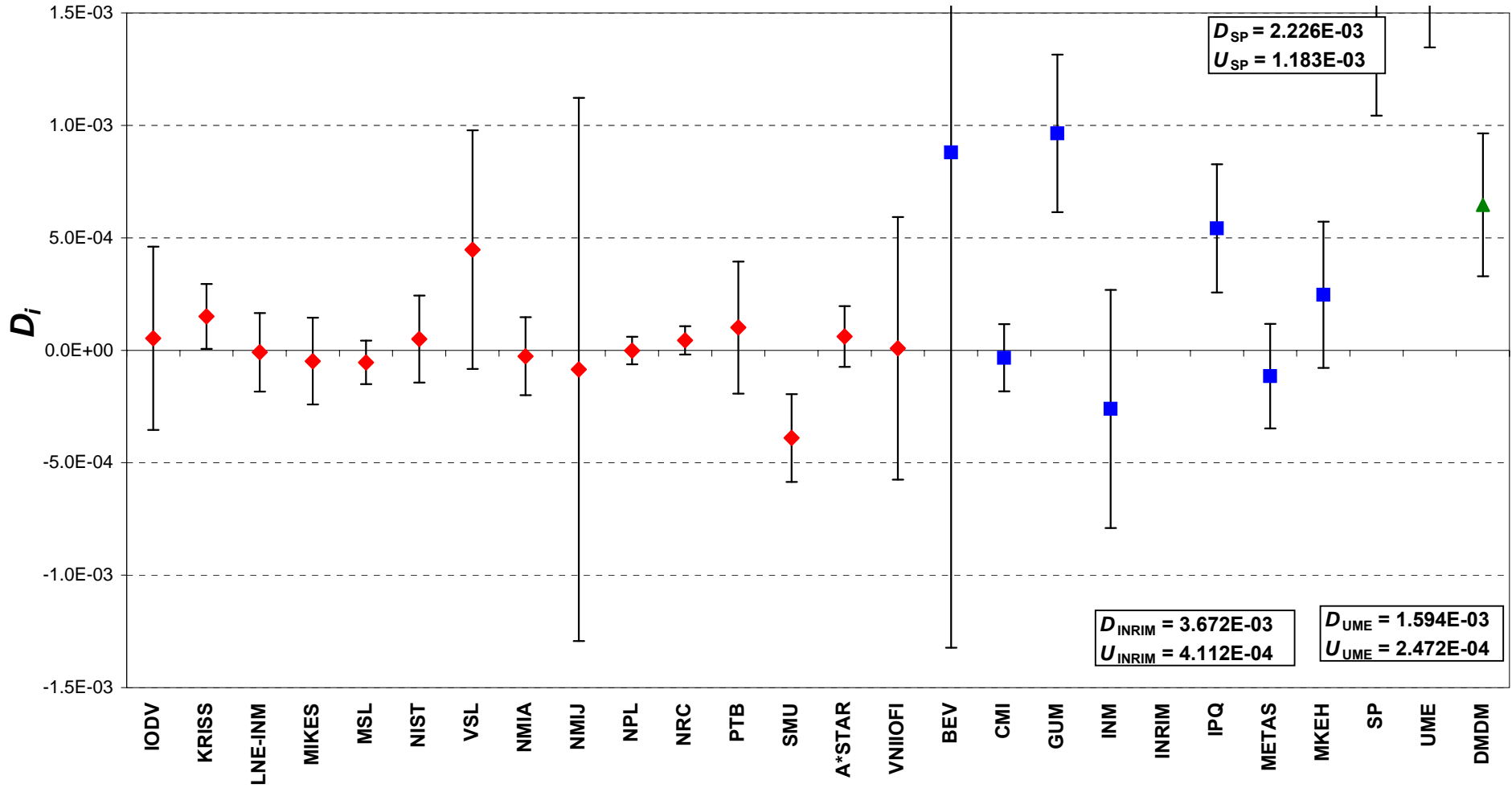


Red diamonds: participants in CCPR-K6

Blue squares: participants in EUROMET.PR-K6 only

Green triangle: participant in EURAMET.PR-K6.1 only

CCPR-K6, EUROMET.PR-K6, and EURAMET.PR-K6.1
 Spectral regular transmittance - Filter C - $\lambda = 900$ nm
 Degrees of equivalence, D_i and expanded uncertainty U_i ($k = 2$)

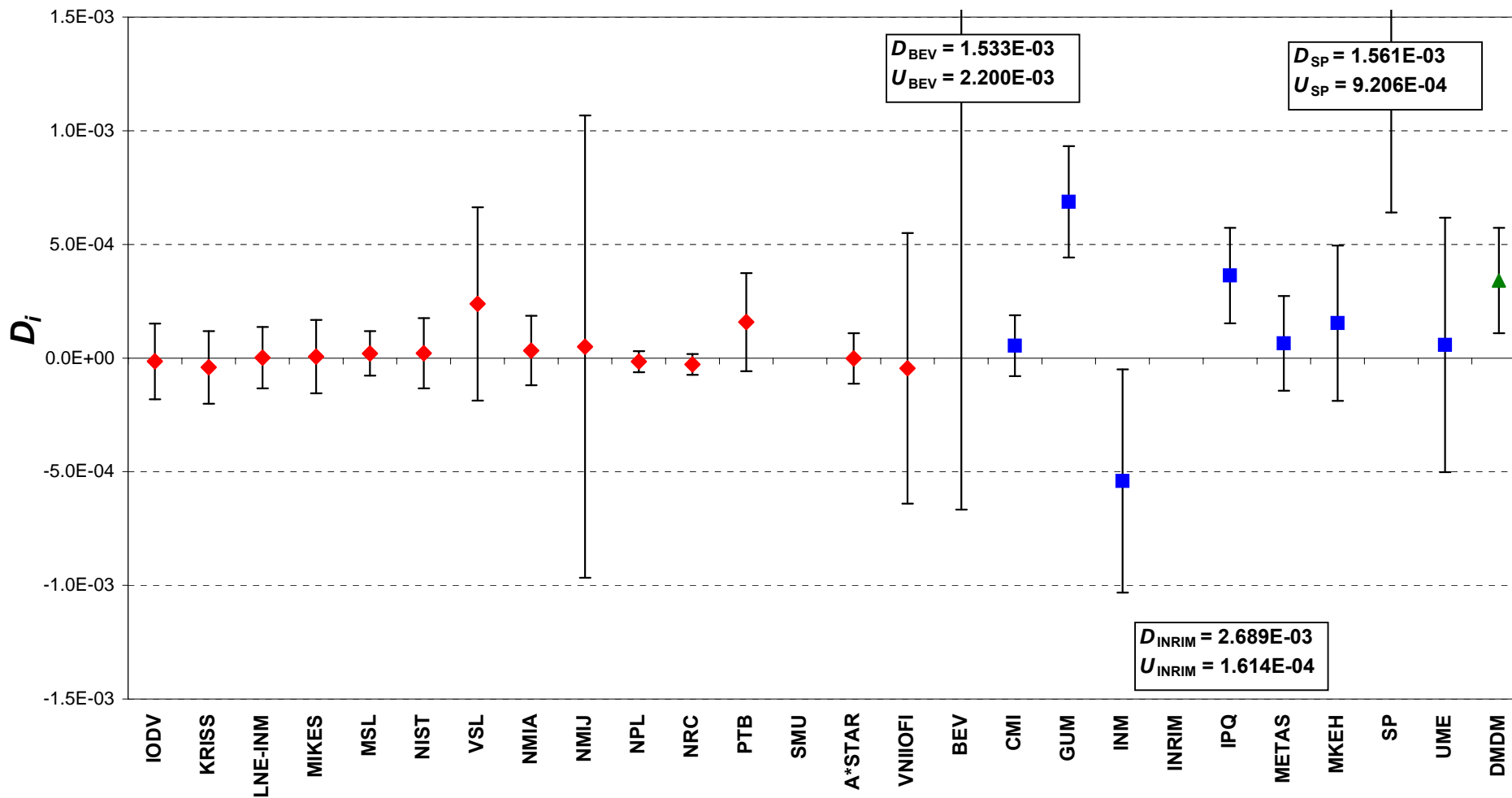


Red diamonds: participants in CCPR-K6

Blue squares: participants in EUROMET.PR-K6 only

Green triangle: participant in EURAMET.PR-K6.1 only

CCPR-K6, EUROMET.PR-K6, and EURAMET.PR-K6.1
Spectral regular transmittance - Filter C - $\lambda = 1000$ nm
Degrees of equivalence, D_i and expanded uncertainty U_i ($k = 2$)



Red diamonds: participants in CCPR-K6
Blue squares: participants in EUROMET.PR-K6 only

Green triangle: participant in EURAMET.PR-K6.1 only

CCPR-K6, EUROMET-K6 and EURAMET.PR-K6.1

Degrees of equivalence for Filter D

MEASURAND : Spectral regular transmittance

All reported values are absolute

Nominal transmittance at 546 nm: 1 %

| Lab <i>i</i> | Wavelength: 380 nm | |
|--------------|--------------------|-----------|
| | D_i | U_i |
| IODV | -4.886E-05 | 4.246E-05 |
| KRISS | -1.091E-05 | 1.973E-05 |
| LNE-INM | 1.599E-06 | 2.950E-05 |
| MIKES | 4.697E-05 | 3.430E-05 |
| MSL | 1.939E-05 | 2.818E-05 |
| NIST | 2.038E-05 | 6.193E-05 |
| VSL | -2.030E-06 | 5.614E-05 |
| NMIA | 2.710E-05 | 1.180E-04 |
| NMIJ | -1.319E-05 | 7.743E-05 |
| NPL | -2.057E-05 | 2.651E-05 |
| NRC | -3.214E-06 | 1.157E-05 |
| PTB | -1.438E-05 | 3.213E-05 |
| SMU | 6.978E-06 | 1.638E-05 |
| A*STAR | 8.932E-06 | 3.042E-05 |
| VNIIOFI | -2.294E-05 | 6.540E-04 |
| BEV | 4.520E-05 | 1.685E-03 |
| CMI | 3.253E-04 | 2.072E-04 |
| GUM | 2.159E-05 | 1.027E-04 |
| INM(RO) | 6.826E-05 | 1.213E-04 |
| INRIM | - | - |
| IPQ | -4.105E-07 | 2.000E-04 |
| METAS | 6.823E-05 | 8.156E-05 |
| MKEH | -3.926E-06 | 9.465E-05 |
| SP | -2.030E-05 | 1.261E-04 |
| UME | 3.136E-04 | 1.055E-04 |
| DMDM | 4.24E-06 | 1.27E-04 |

| Lab <i>i</i> | Wavelength: 400 nm | |
|--------------|--------------------|-----------|
| | D_i | U_i |
| IODV | -9.919E-05 | 6.334E-05 |
| KRISS | -6.535E-05 | 2.764E-05 |
| LNE-INM | 1.185E-05 | 2.368E-05 |
| MIKES | 5.037E-05 | 2.714E-05 |
| MSL | 6.313E-05 | 3.393E-05 |
| NIST | 4.052E-05 | 5.484E-05 |
| VSL | -3.011E-05 | 3.603E-05 |
| NMIA | -3.655E-06 | 8.989E-05 |
| NMIJ | 2.362E-06 | 7.571E-05 |
| NPL | -2.602E-05 | 2.041E-05 |
| NRC | 1.194E-05 | 2.570E-05 |
| PTB | -1.745E-05 | 3.942E-05 |
| SMU | -2.091E-05 | 4.586E-05 |
| A*STAR | 5.844E-05 | 5.000E-05 |
| VNIIOFI | -6.162E-05 | 6.622E-04 |
| BEV | 2.308E-06 | 1.542E-03 |
| CMI | 1.811E-04 | 1.324E-04 |
| GUM | -7.222E-06 | 8.692E-05 |
| INM(RO) | -2.688E-06 | 1.083E-04 |
| INRIM | 2.768E-05 | 1.470E-04 |
| IPQ | 1.184E-05 | 1.823E-04 |
| METAS | 3.815E-05 | 8.671E-05 |
| MKEH | 1.654E-05 | 1.186E-04 |
| SP | 6.802E-05 | 1.000E-04 |
| UME | 1.021E-04 | 1.098E-04 |
| DMDM | 3.65E-05 | 2.99E-04 |

Black : participants in CCPR-K6

Blue: participants in EUROMET.PR-K6 only

Green: participant in EURAMET.PR-K6.1 only

CCPR-K6, EUROMET-K6 and EURAMET.PR-K6.1

Degrees of equivalence for Filter D

MEASURAND : Spectral regular transmittance

All reported values are absolute

Nominal transmittance at 546 nm: 1 %

| Lab <i>i</i> | Wavelength: 500 nm | |
|--------------|--------------------|-----------|
| | D_i | U_i |
| IODV | -7.035E-06 | 2.736E-05 |
| KRISS | 3.273E-05 | 3.566E-05 |
| LNE-INM | -8.555E-06 | 2.257E-05 |
| MIKES | 1.288E-05 | 1.565E-05 |
| MSL | -1.500E-05 | 4.447E-05 |
| NIST | 4.406E-05 | 4.532E-05 |
| VSL | -7.313E-07 | 5.254E-05 |
| NMIA | -2.287E-05 | 6.204E-05 |
| NMIJ | -9.400E-06 | 6.726E-05 |
| NPL | 2.495E-06 | 2.190E-05 |
| NRC | -9.793E-06 | 1.975E-05 |
| PTB | -8.246E-06 | 5.608E-05 |
| SMU | -2.728E-05 | 4.861E-05 |
| A*STAR | -7.462E-06 | 3.268E-05 |
| VNIIOFI | -1.655E-05 | 5.983E-04 |
| BEV | 6.428E-05 | 1.403E-03 |
| CMI | -2.016E-03 | 9.717E-05 |
| GUM | -1.335E-06 | 1.041E-04 |
| INM(RO) | 4.581E-05 | 1.049E-04 |
| INRIM | 2.237E-05 | 9.588E-05 |
| IPQ | -2.954E-05 | 2.433E-04 |
| METAS | 5.015E-06 | 9.915E-05 |
| MKEH | 4.165E-05 | 1.266E-04 |
| SP | 4.833E-05 | 1.180E-04 |
| UME | 1.109E-04 | 1.176E-04 |
| DMDM | 5.63E-05 | 4.54E-05 |

| Lab <i>i</i> | Wavelength: 600 nm | |
|--------------|--------------------|-----------|
| | D_i | U_i |
| IODV | -4.026E-05 | 2.762E-05 |
| KRISS | 4.727E-05 | 2.816E-05 |
| LNE-INM | -4.101E-05 | 2.917E-05 |
| MIKES | 2.298E-05 | 2.407E-05 |
| MSL | -2.657E-05 | 4.437E-05 |
| NIST | 3.458E-05 | 3.412E-05 |
| VSL | 1.215E-05 | 6.303E-05 |
| NMIA | -3.690E-05 | 6.277E-05 |
| NMIJ | -7.012E-06 | 8.439E-05 |
| NPL | 2.055E-05 | 1.850E-05 |
| NRC | -1.320E-05 | 2.760E-05 |
| PTB | -2.865E-05 | 5.616E-05 |
| SMU | -2.572E-05 | 4.387E-05 |
| A*STAR | 3.476E-06 | 5.176E-05 |
| VNIIOFI | 4.505E-07 | 6.281E-04 |
| BEV | -3.200E-05 | 2.404E-03 |
| CMI | 1.710E-05 | 1.564E-04 |
| GUM | -3.877E-07 | 1.367E-04 |
| INM(RO) | 3.191E-05 | 1.374E-04 |
| INRIM | 1.764E-05 | 1.297E-04 |
| IPQ | -2.106E-05 | 2.037E-04 |
| METAS | 8.243E-06 | 1.391E-04 |
| MKEH | 6.131E-05 | 2.134E-04 |
| SP | -8.513E-06 | 1.455E-04 |
| UME | 1.185E-04 | 1.487E-04 |
| DMDM | -1.35E-05 | 5.15E-05 |

Black : participants in CCPR-K6

Blue: participants in EUROMET.PR-K6 only

Green: participant in EURAMET.PR-K6.1 only

CCPR-K6, EUROMET-K6 and EURAMET.PR-K6.1

Degrees of equivalence for Filter D

MEASURAND : Spectral regular transmittance

| Lab <i>i</i> | Wavelength: 700 nm | |
|--------------|--------------------|-----------|
| | D_i | U_i |
| IODV | -5.891E-05 | 1.068E-04 |
| KRISS | 6.940E-05 | 9.470E-05 |
| LNE-INM | -3.374E-05 | 5.525E-05 |
| MIKES | 1.007E-04 | 5.097E-05 |
| MSL | 2.035E-05 | 1.147E-04 |
| NIST | 5.957E-05 | 9.329E-05 |
| VSL | 2.424E-05 | 1.449E-04 |
| NMIA | 2.300E-05 | 1.183E-04 |
| NMIJ | -1.200E-05 | 1.028E-04 |
| NPL | 6.769E-06 | 4.430E-05 |
| NRC | -3.783E-05 | 4.611E-05 |
| PTB | -7.294E-05 | 1.296E-04 |
| SMU | -1.114E-04 | 8.845E-05 |
| A*STAR | -1.813E-05 | 1.840E-04 |
| VNIIOFI | 2.112E-04 | 5.707E-04 |
| BEV | -4.614E-05 | 2.217E-03 |
| CMI | -1.261E-05 | 2.777E-04 |
| GUM | -1.690E-05 | 2.941E-04 |
| INM(RO) | 1.083E-04 | 3.664E-04 |
| INRIM | 6.244E-06 | 3.350E-04 |
| IPQ | -4.714E-05 | 3.208E-04 |
| METAS | -4.886E-05 | 2.776E-04 |
| MKEH | 4.879E-05 | 3.257E-04 |
| SP | -1.046E-04 | 3.774E-04 |
| UME | 1.482E-04 | 3.101E-04 |
| DMDM | 1.36E-04 | 1.33E-04 |

All reported values are absolute

Nominal transmittance at 546 nm: 1 %

| Lab <i>i</i> | Wavelength: 800 nm | |
|--------------|--------------------|-----------|
| | D_i | U_i |
| IODV | -9.859E-05 | 5.253E-05 |
| KRISS | 4.899E-05 | 3.588E-05 |
| LNE-INM | -6.546E-06 | 6.089E-05 |
| MIKES | 1.464E-05 | 5.321E-05 |
| MSL | -3.032E-06 | 1.049E-04 |
| NIST | -2.094E-05 | 1.538E-04 |
| VSL | 9.077E-05 | 1.743E-04 |
| NMIA | 2.369E-05 | 2.961E-04 |
| NMIJ | 2.793E-05 | 8.228E-05 |
| NPL | 3.675E-05 | 3.963E-05 |
| NRC | 1.163E-05 | 3.733E-05 |
| PTB | 2.990E-05 | 2.253E-04 |
| SMU | -1.164E-04 | 9.684E-05 |
| A*STAR | -6.850E-06 | 6.734E-05 |
| VNIIOFI | 7.777E-06 | 6.029E-04 |
| BEV | 8.182E-05 | 2.002E-03 |
| CMI | 7.213E-05 | 1.357E-04 |
| GUM | -6.643E-05 | 1.106E-04 |
| INM(RO) | 7.914E-05 | 1.652E-04 |
| INRIM | 3.450E-05 | 8.407E-05 |
| IPQ | -7.339E-05 | 1.824E-04 |
| METAS | -7.603E-05 | 7.377E-05 |
| MKEH | -3.626E-05 | 1.194E-04 |
| SP | -9.073E-05 | 2.238E-04 |
| UME | 1.636E-04 | 1.054E-04 |
| DMDM | 2.18E-04 | 1.24E-04 |

Black : participants in CCPR-K6

Blue: participants in EUROMET.PR-K6 only

Green: participant in EURAMET.PR-K6.1 only

CCPR-K6, EUROMET-K6 and EURAMET.PR-K6.1

Degrees of equivalence for Filter D

MEASURAND : Spectral regular transmittance

| Lab <i>i</i> | Wavelength: 900 nm | |
|--------------|--------------------|-----------|
| | D_i | U_i |
| IODV | 5.728E-06 | 4.580E-05 |
| KRISS | -2.911E-05 | 2.990E-05 |
| LNE-INM | 4.104E-06 | 4.531E-05 |
| MIKES | 1.145E-05 | 3.923E-05 |
| MSL | -1.645E-05 | 8.108E-05 |
| NIST | 2.597E-05 | 5.219E-05 |
| VSL | -6.347E-06 | 1.118E-04 |
| NMIA | 8.644E-05 | 1.639E-04 |
| NMIJ | 1.664E-05 | 1.178E-03 |
| NPL | -1.361E-06 | 2.630E-05 |
| NRC | 1.962E-05 | 1.900E-05 |
| PTB | 5.666E-05 | 9.084E-05 |
| SMU | -7.880E-05 | 7.454E-05 |
| A*STAR | -1.012E-05 | 4.632E-05 |
| VNIIOFI | -1.093E-05 | 6.081E-04 |
| BEV | 1.303E-04 | 2.000E-03 |
| CMI | 4.985E-05 | 8.976E-05 |
| GUM | 3.355E-04 | 9.129E-05 |
| INM(RO) | -3.530E-06 | 1.267E-04 |
| INRIM | 9.023E-04 | 1.082E-04 |
| IPQ | 1.473E-04 | 2.301E-04 |
| METAS | -4.296E-05 | 5.369E-05 |
| MKEH | -2.274E-05 | 1.206E-04 |
| SP | 4.793E-04 | 4.019E-04 |
| UME | -4.094E-05 | 1.102E-04 |
| DMDM | 2.07E-04 | 9.17E-05 |

Black : participants in CCPR-K6

Blue: participants in EUROMET.PR-K6 only

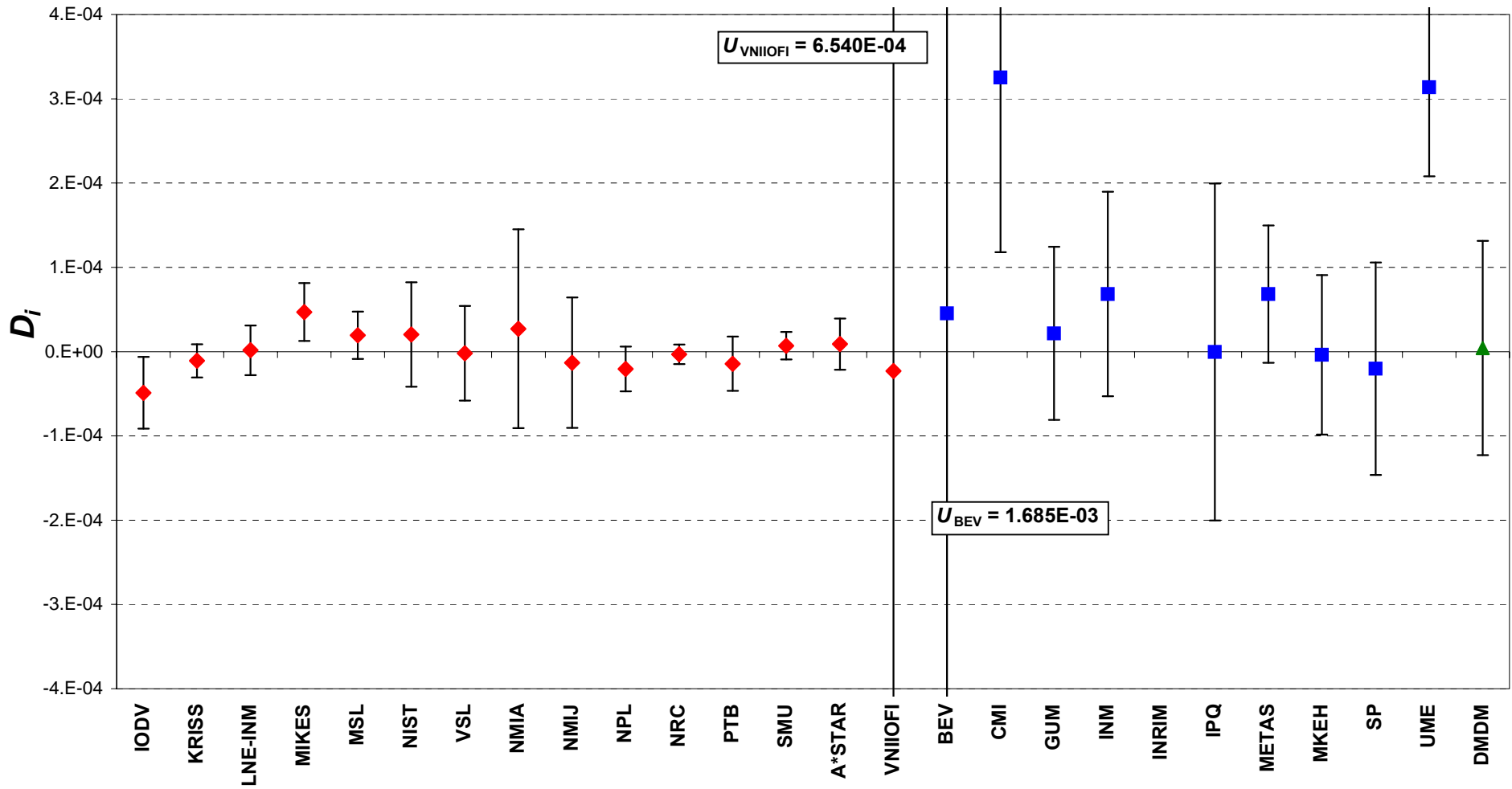
Green: participant in EURAMET.PR-K6.1 only

All reported values are absolute

Nominal transmittance at 546 nm: 1 %

| Lab <i>i</i> | Wavelength: 1000 nm | |
|--------------|---------------------|-----------|
| | D_i | U_i |
| IODV | 9.942E-05 | 4.055E-05 |
| KRISS | -6.370E-05 | 2.626E-05 |
| LNE-INM | 3.835E-06 | 3.548E-05 |
| MIKES | 2.101E-05 | 3.323E-05 |
| MSL | 2.035E-07 | 6.676E-05 |
| NIST | -3.192E-06 | 4.811E-05 |
| VSL | -3.646E-05 | 8.361E-05 |
| NMIA | 7.118E-05 | 9.597E-05 |
| NMIJ | -2.537E-05 | 1.030E-03 |
| NPL | -1.192E-05 | 3.150E-05 |
| NRC | 4.595E-06 | 1.799E-05 |
| PTB | 4.045E-05 | 7.154E-05 |
| SMU | - | - |
| A*STAR | -6.843E-06 | 2.597E-05 |
| VNIIOFI | -6.447E-06 | 6.161E-04 |
| BEV | 2.788E-04 | 1.801E-03 |
| CMI | 4.755E-05 | 7.968E-05 |
| GUM | 2.657E-04 | 7.792E-05 |
| INM(RO) | -1.074E-04 | 1.138E-04 |
| INRIM | 6.069E-04 | 6.151E-05 |
| IPQ | 1.173E-04 | 2.138E-04 |
| METAS | -1.556E-05 | 6.157E-05 |
| MKEH | -3.024E-05 | 1.293E-04 |
| SP | 2.803E-04 | 3.830E-04 |
| UME | -1.097E-04 | 1.545E-04 |
| DMDM | 1.10E-04 | 6.53E-05 |

CCPR-K6, EUROMET.PR-K6, and EURAMET.PR-K6.1
 Spectral regular transmittance - Filter D - $\lambda = 380 \text{ nm}$
 Degrees of equivalence, D_i and expanded uncertainty U_i ($k = 2$)

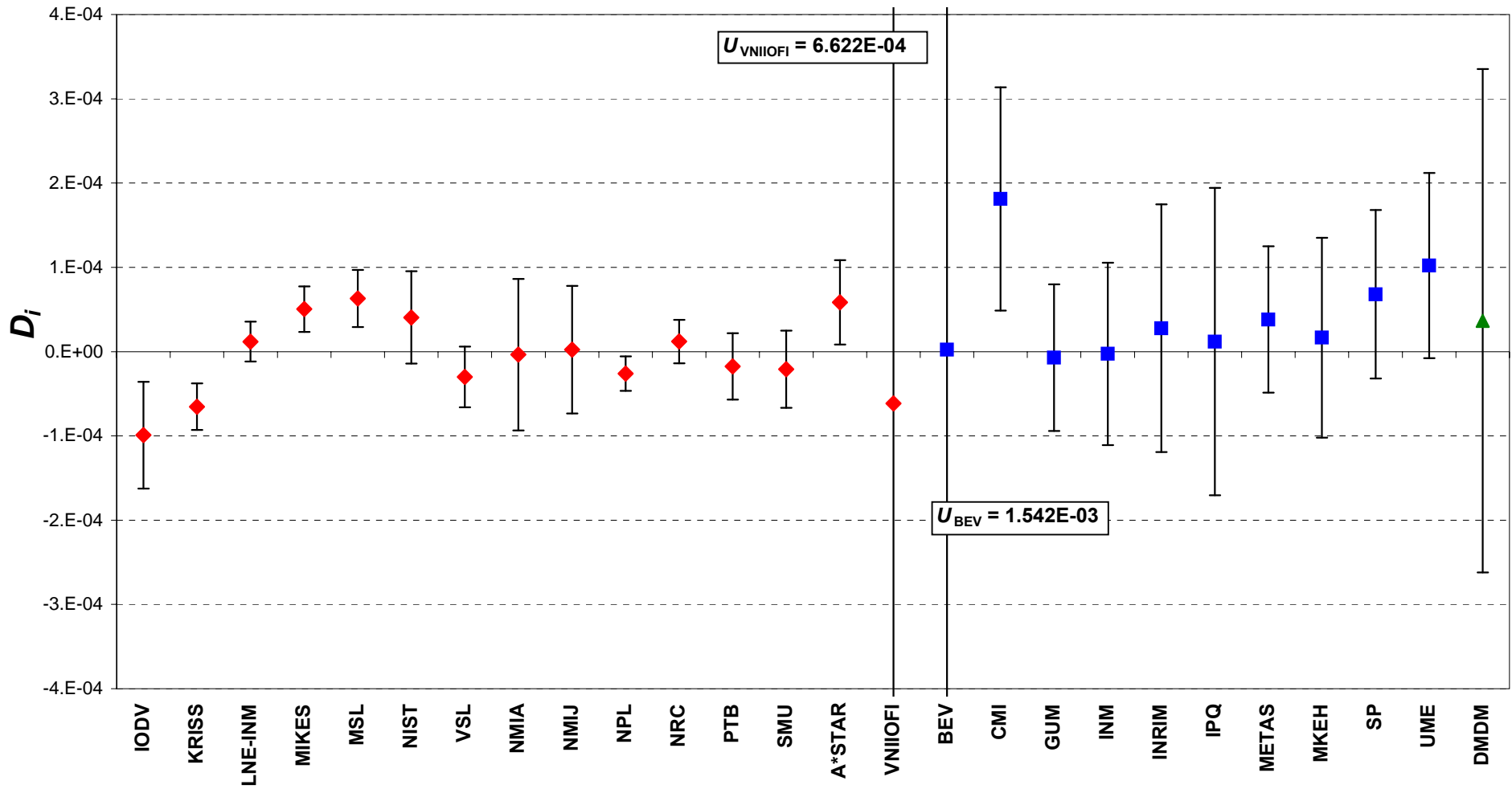


Red diamonds: participants in CCPR-K6

Blue squares: participants in EUROMET.PR-K6 only

Green triangle: participant in EURAMET.PR-K6.1 only

CCPR-K6, EUROMET.PR-K6, and EURAMET.PR-K6.1
 Spectral regular transmittance - Filter D - $\lambda = 400$ nm
 Degrees of equivalence, D_i and expanded uncertainty U_i ($k = 2$)

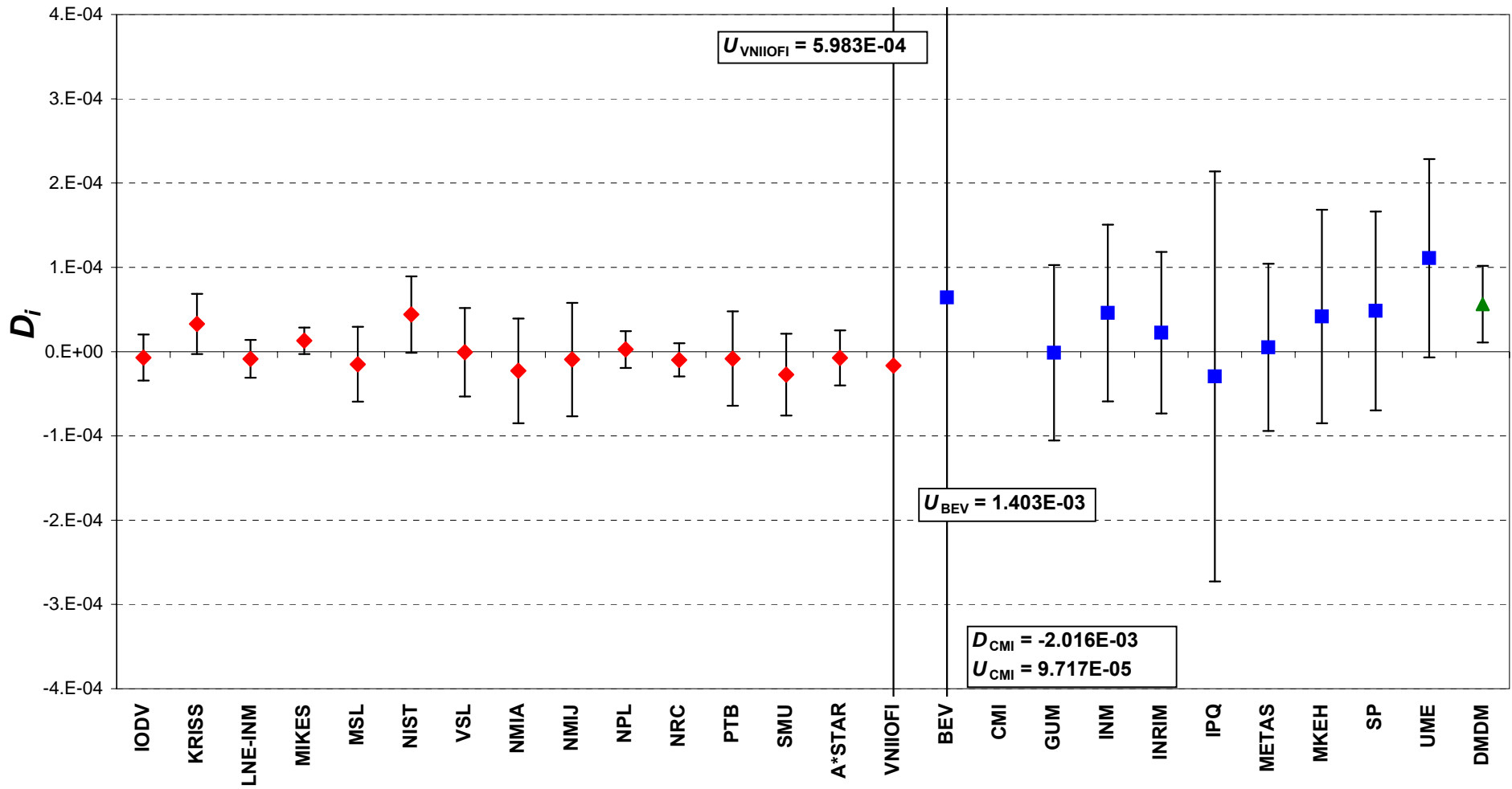


Red diamonds: participants in CCPR-K6

Blue squares: participants in EUROMET.PR-K6 only

Green triangle: participant in EURAMET.PR-K6.1 only

CCPR-K6, EUROMET.PR-K6, and EURAMET.PR-K6.1
 Spectral regular transmittance - Filter D - $\lambda = 500$ nm
 Degrees of equivalence, D_i and expanded uncertainty U_i ($k = 2$)

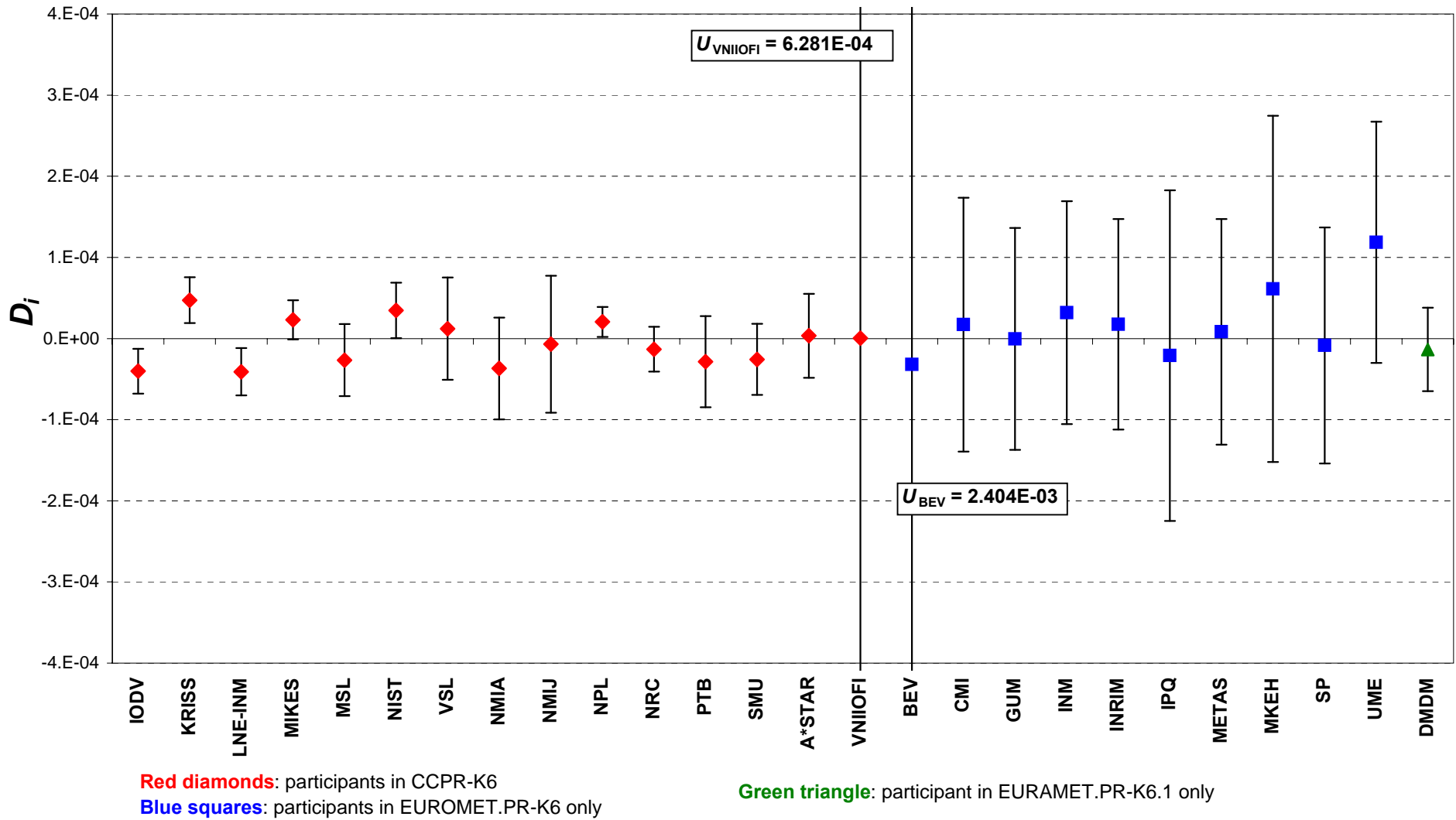


Red diamonds: participants in CCPR-K6

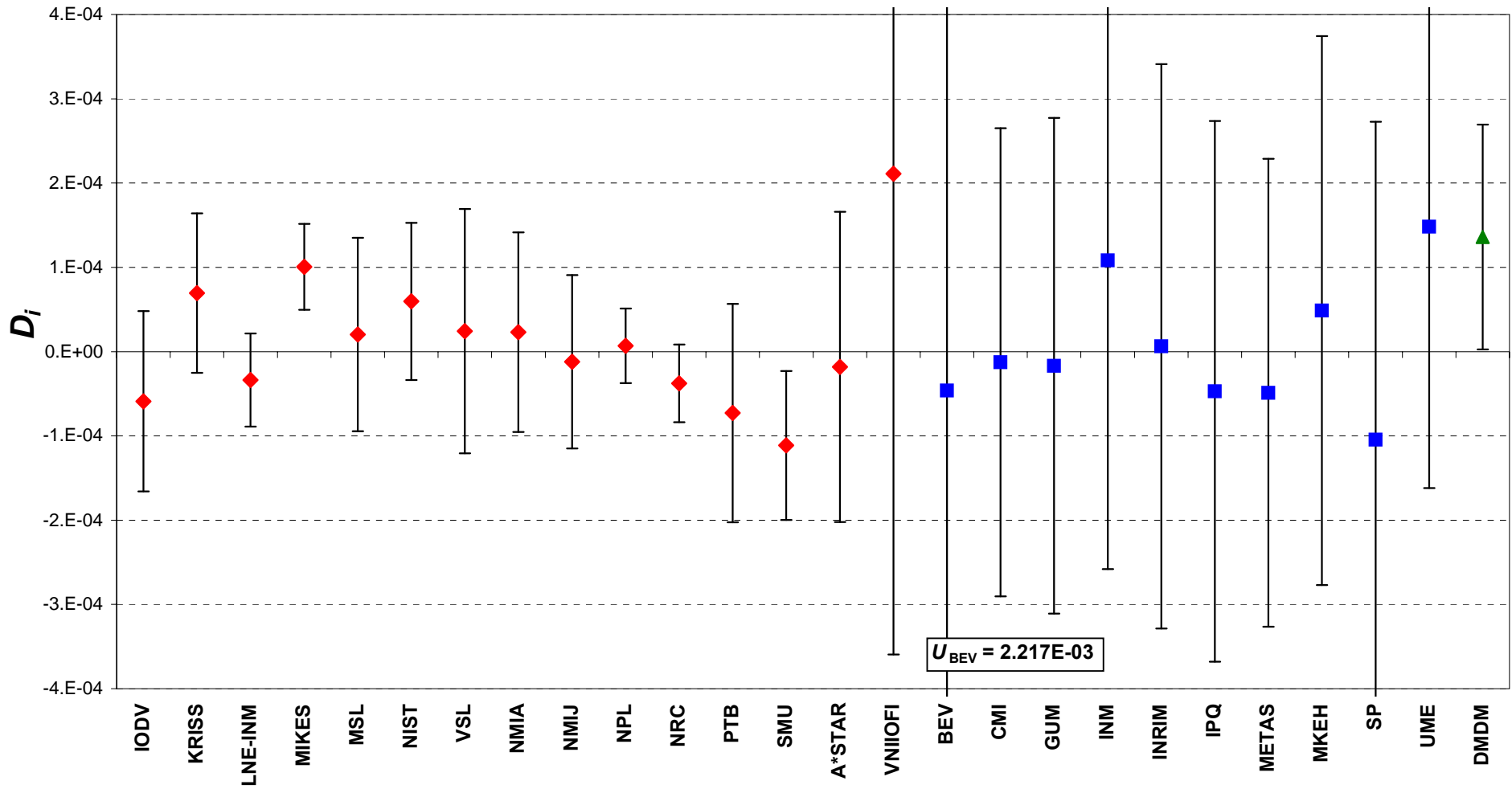
Blue squares: participants in EUROMET.PR-K6 only

Green triangle: participant in EURAMET.PR-K6.1 only

CCPR-K6, EUROMET.PR-K6, and EURAMET.PR-K6.1
 Spectral regular transmittance - Filter D - $\lambda = 600$ nm
 Degrees of equivalence, D_i and expanded uncertainty U_i ($k = 2$)



CCPR-K6, EUROMET.PR-K6, and EURAMET.PR-K6.1
 Spectral regular transmittance - Filter D - $\lambda = 700 \text{ nm}$
 Degrees of equivalence, D_i and expanded uncertainty U_i ($k = 2$)



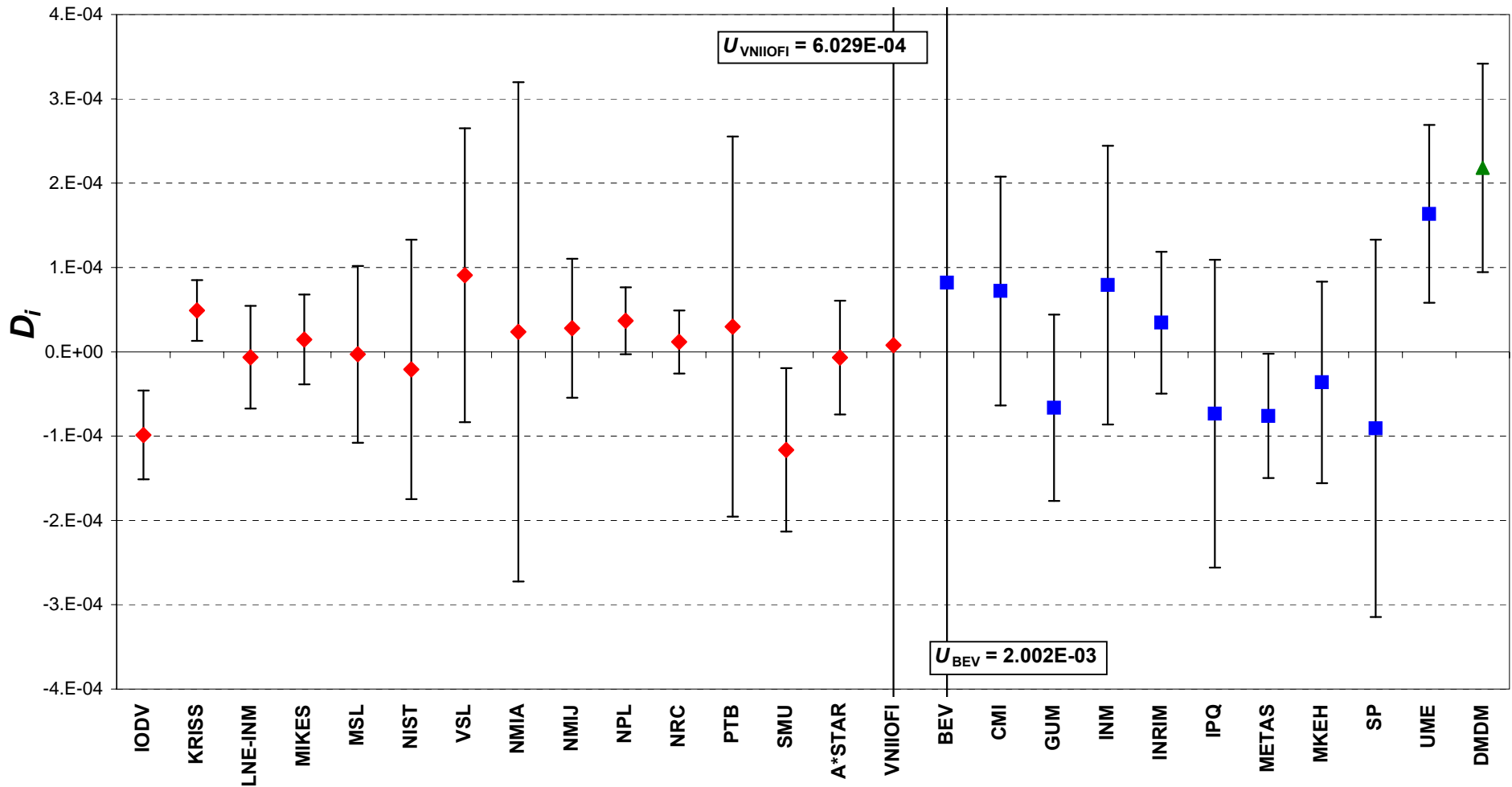
Red diamonds: participants in CCPR-K6

Blue squares: participants in EUROMET.PR-K6 only

Green triangle: participant in EURAMET.PR-K6.1 only

$U_{BEV} = 2.217E-03$

CCPR-K6, EUROMET.PR-K6, and EURAMET.PR-K6.1
 Spectral regular transmittance - Filter D - $\lambda = 800 \text{ nm}$
 Degrees of equivalence, D_i and expanded uncertainty U_i ($k = 2$)

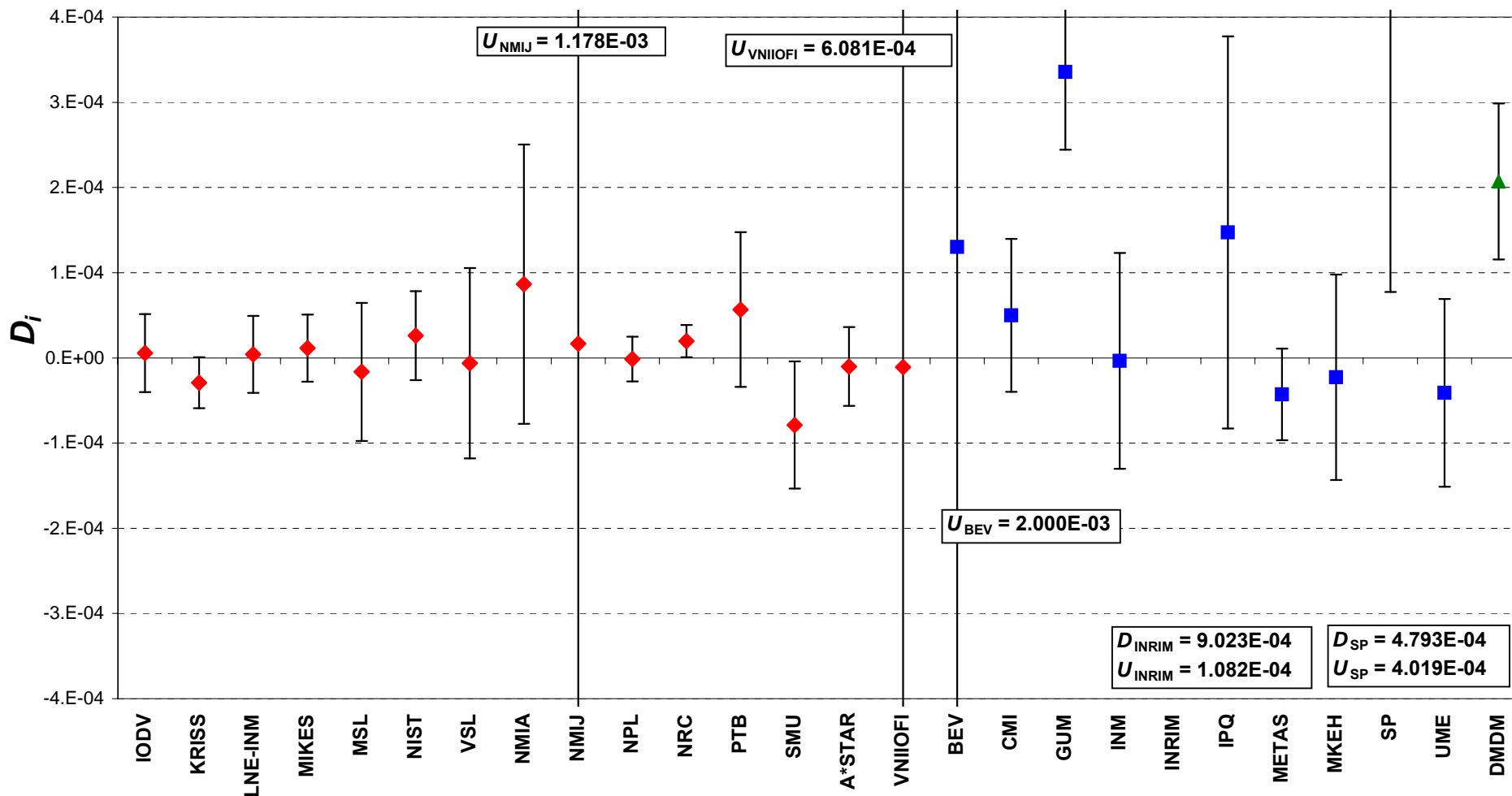


Red diamonds: participants in CCPR-K6

Blue squares: participants in EUROMET.PR-K6 only

Green triangle: participant in EURAMET.PR-K6.1 only

CCPR-K6, EUROMET.PR-K6, and EURAMET.PR-K6.1
Spectral regular transmittance - Filter D - $\lambda = 900$ nm
Degrees of equivalence, D_i and expanded uncertainty U_i ($k = 2$)

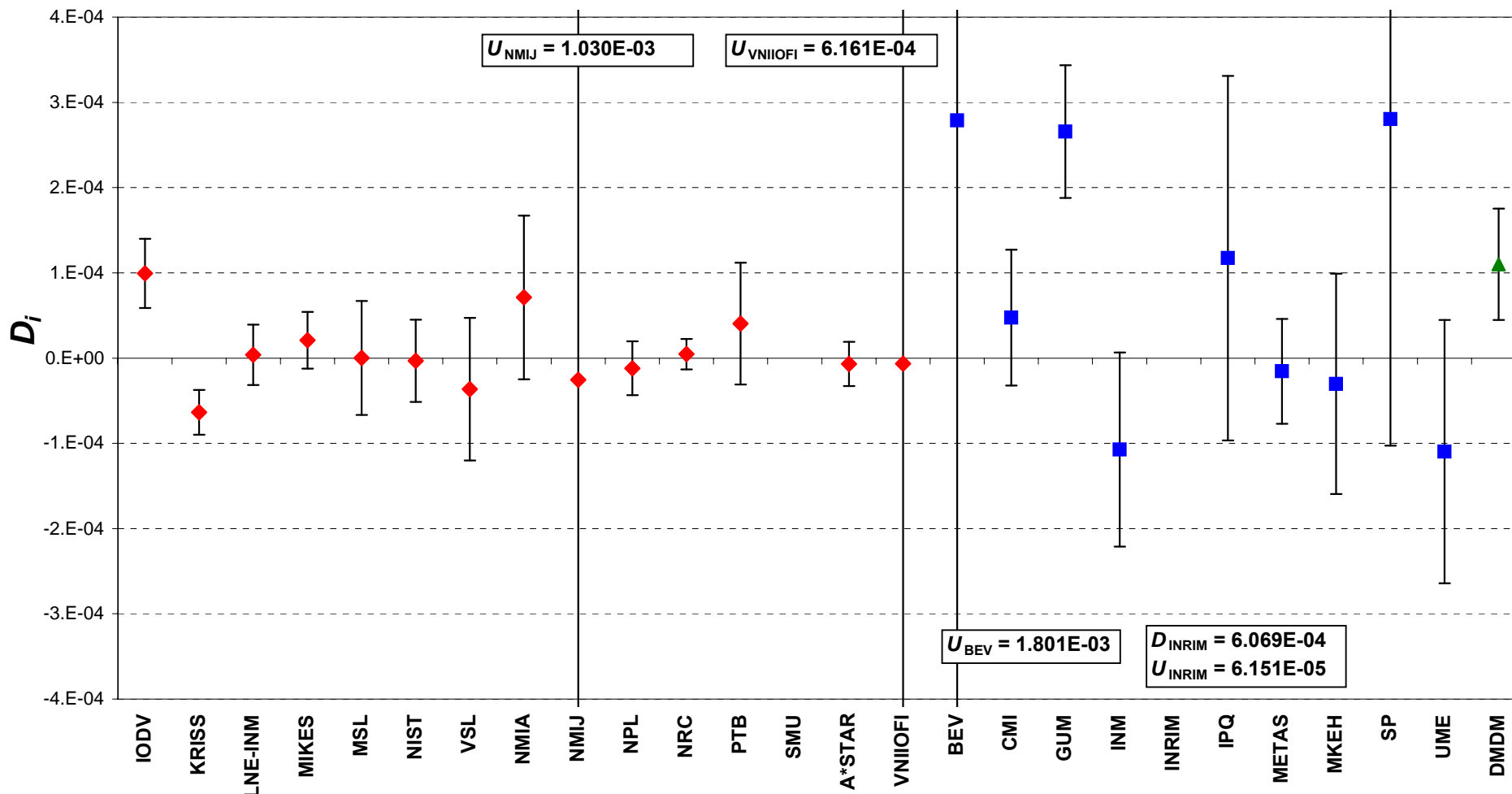


Red diamonds: participants in CCPR-K6

Blue squares: participants in EUROMET.PR-K6 only

Green triangle: participant in EURAMET.PR-K6.1 only

CCPR-K6, EUROMET.PR-K6, and EURAMET.PR-K6.1
Spectral regular transmittance - Filter D - $\lambda = 1000$ nm
Degrees of equivalence, D_i and expanded uncertainty U_i ($k = 2$)



Red diamonds: participants in CCPR-K6

Blue squares: participants in EUROMET.PR-K6 only

Green triangle: participant in EURAMET.PR-K6.1 only

CCPR-K6, EUROMET-K6 and EURAMET.PR-K6.1

Degrees of equivalence for Filter E

MEASURAND : Spectral regular transmittance

| Lab <i>i</i> | Wavelength: 380 nm | |
|--------------|--------------------|-----------|
| | D_i | U_i |
| IODV | 7.840E-05 | 1.016E-04 |
| KRISS | 2.498E-06 | 1.257E-05 |
| LNE-INM | -1.049E-06 | 1.406E-05 |
| MIKES | 2.338E-07 | 1.906E-05 |
| MSL | 1.256E-06 | 1.766E-05 |
| NIST | 4.332E-06 | 4.205E-05 |
| VSL | -1.630E-06 | 2.028E-05 |
| NMIA | - | - |
| NMIJ | -5.783E-07 | 6.407E-05 |
| NPL | -1.921E-06 | 8.463E-06 |
| NRC | -4.058E-06 | 2.034E-05 |
| PTB | -7.642E-06 | 1.813E-05 |
| SMU | 6.279E-06 | 1.333E-05 |
| A*STAR | 6.442E-09 | 1.411E-05 |
| VNIIOFI | 9.914E-05 | 6.583E-04 |
| BEV | -5.973E-05 | 1.686E-03 |
| CMI | -2.767E-07 | 6.449E-05 |
| GUM | 1.071E-05 | 8.862E-05 |
| INM(RO) | - | - |
| INRIM | - | - |
| IPQ | 4.684E-05 | 1.750E-04 |
| METAS | -9.170E-06 | 7.332E-05 |
| MKEH | -3.190E-05 | 5.471E-05 |
| SP | 6.587E-06 | 1.355E-04 |
| UME | 3.500E-04 | 7.136E-05 |
| DMDM | - | - |

Black : participants in CCPR-K6

Blue: participants in EUROMET.PR-K6 only

Green: participant in EURAMET.PR-K6.1 only

All reported values are absolute

Nominal transmittance at 546 nm: 0.1 %

| Lab <i>i</i> | Wavelength: 400 nm | |
|--------------|--------------------|-----------|
| | D_i | U_i |
| IODV | 6.807E-05 | 8.056E-05 |
| KRISS | -1.978E-06 | 7.732E-06 |
| LNE-INM | 6.444E-09 | 8.025E-06 |
| MIKES | 6.766E-07 | 8.462E-06 |
| MSL | 3.936E-06 | 1.769E-05 |
| NIST | -2.309E-06 | 6.131E-05 |
| VSL | -2.071E-06 | 3.839E-06 |
| NMIA | -4.870E-05 | 5.824E-05 |
| NMIJ | -1.455E-06 | 6.605E-05 |
| NPL | -7.880E-07 | 9.120E-06 |
| NRC | -3.766E-06 | 6.875E-06 |
| PTB | -7.490E-07 | 9.127E-06 |
| SMU | 6.262E-06 | 6.969E-06 |
| A*STAR | 4.441E-06 | 7.735E-06 |
| VNIIOFI | -3.343E-05 | 6.181E-04 |
| BEV | 2.708E-07 | 1.541E-03 |
| CMI | 1.057E-04 | 8.093E-05 |
| GUM | -1.346E-05 | 2.704E-05 |
| INM(RO) | 1.916E-05 | 4.031E-05 |
| INRIM | - | - |
| IPQ | 1.748E-06 | 1.546E-04 |
| METAS | 3.964E-06 | 1.728E-05 |
| MKEH | -6.467E-06 | 3.199E-05 |
| SP | -3.832E-06 | 1.220E-05 |
| UME | 2.801E-04 | 7.619E-05 |
| DMDM | - | - |

CCPR-K6, EUROMET-K6 and EURAMET.PR-K6.1

Degrees of equivalence for Filter E

MEASURAND : Spectral regular transmittance

| Lab <i>i</i> | Wavelength: 500 nm | |
|--------------|--------------------|-----------|
| | D_i | U_i |
| IODV | -2.985E-05 | 2.078E-05 |
| KRISS | 1.537E-06 | 3.779E-06 |
| LNE-INM | -2.954E-06 | 6.142E-06 |
| MIKES | 3.731E-06 | 6.680E-06 |
| MSL | -1.711E-06 | 1.744E-05 |
| NIST | 4.460E-06 | 6.231E-06 |
| VSL | -6.609E-07 | 1.171E-05 |
| NMIA | -1.145E-05 | 4.011E-05 |
| NMIJ | -1.102E-05 | 6.617E-05 |
| NPL | -4.516E-06 | 7.668E-06 |
| NRC | -3.987E-07 | 9.786E-06 |
| PTB | 4.892E-07 | 8.100E-06 |
| SMU | 5.598E-06 | 9.222E-06 |
| A*STAR | -2.633E-06 | 7.393E-06 |
| VNIIOFI | -1.594E-05 | 6.140E-04 |
| BEV | -3.043E-06 | 1.400E-03 |
| CMI | 3.831E-05 | 4.124E-05 |
| GUM | -8.998E-06 | 2.079E-05 |
| INM(RO) | -5.669E-06 | 6.501E-06 |
| INRIM | 2.871E-06 | 5.305E-06 |
| IPQ | 1.208E-05 | 1.520E-04 |
| METAS | -7.600E-06 | 1.154E-05 |
| MKEH | -8.764E-06 | 2.612E-05 |
| SP | 6.653E-06 | 2.515E-05 |
| UME | 5.921E-05 | 4.806E-05 |
| DMDM | 1.20E-05 | 2.91E-05 |

Black : participants in CCPR-K6

Blue: participants in EUROMET.PR-K6 only

Green: participant in EURAMET.PR-K6.1 only

All reported values are absolute

Nominal transmittance at 546 nm: 0.1 %

| Lab <i>i</i> | Wavelength: 600 nm | |
|--------------|--------------------|-----------|
| | D_i | U_i |
| IODV | 4.551E-06 | 1.285E-05 |
| KRISS | 1.093E-05 | 3.255E-05 |
| LNE-INM | -8.210E-06 | 1.001E-05 |
| MIKES | 3.908E-06 | 1.069E-05 |
| MSL | -4.349E-06 | 1.787E-05 |
| NIST | 4.635E-06 | 7.636E-06 |
| VSL | -8.743E-07 | 1.209E-05 |
| NMIA | -2.713E-06 | 4.225E-05 |
| NMIJ | -1.356E-05 | 6.619E-05 |
| NPL | -1.443E-06 | 7.597E-06 |
| NRC | -4.165E-06 | 7.603E-06 |
| PTB | -4.705E-06 | 1.111E-05 |
| SMU | 9.800E-06 | 1.157E-05 |
| A*STAR | 8.356E-07 | 6.426E-06 |
| VNIIOFI | -4.087E-06 | 6.360E-04 |
| BEV | 1.170E-05 | 2.400E-03 |
| CMI | 4.603E-05 | 7.306E-05 |
| GUM | -7.587E-06 | 2.418E-05 |
| INM(RO) | -4.606E-06 | 9.266E-06 |
| INRIM | 4.972E-06 | 1.834E-05 |
| IPQ | 6.228E-06 | 1.536E-04 |
| METAS | -4.479E-05 | 6.715E-05 |
| MKEH | -5.845E-07 | 3.330E-05 |
| SP | 1.372E-05 | 3.623E-05 |
| UME | 1.018E-05 | 5.434E-05 |
| DMDM | -6.15E-06 | 2.33E-05 |

CCPR-K6, EUROMET-K6 and EURAMET.PR-K6.1

Degrees of equivalence for Filter E

MEASURAND : Spectral regular transmittance

| Lab <i>i</i> | Wavelength: 700 nm | |
|--------------|----------------------|----------------------|
| | <i>D_i</i> | <i>U_i</i> |
| IODV | -1.505E-05 | 2.605E-05 |
| KRISS | 3.836E-05 | 5.074E-05 |
| LNE-INM | -7.620E-06 | 2.063E-05 |
| MIKES | 1.999E-05 | 2.054E-05 |
| MSL | 1.048E-05 | 3.039E-05 |
| NIST | 1.358E-05 | 3.559E-05 |
| VSL | 6.554E-07 | 3.719E-05 |
| NMIA | -3.462E-05 | 6.849E-05 |
| NMIJ | -1.616E-05 | 6.896E-05 |
| NPL | -1.843E-06 | 2.550E-05 |
| NRC | 3.757E-06 | 1.827E-05 |
| PTB | -1.373E-05 | 3.561E-05 |
| SMU | -1.562E-05 | 3.033E-05 |
| A*STAR | -5.719E-06 | 4.371E-05 |
| VNIIOFI | 4.379E-05 | 5.621E-04 |
| BEV | 4.879E-05 | 2.000E-03 |
| CMI | 2.389E-05 | 4.902E-05 |
| GUM | 1.026E-05 | 4.600E-05 |
| INM(RO) | 9.267E-06 | 5.791E-05 |
| INRIM | 2.813E-05 | 3.010E-05 |
| IPQ | 3.110E-05 | 1.565E-04 |
| METAS | -3.472E-05 | 4.899E-05 |
| MKEH | -3.116E-05 | 3.423E-05 |
| SP | 1.540E-05 | 4.947E-05 |
| UME | 2.781E-06 | 1.062E-04 |
| DMDM | 3.09E-05 | 2.70E-05 |

Black : participants in CCPR-K6

Blue: participants in EUROMET.PR-K6 only

Green: participant in EURAMET.PR-K6.1 only

All reported values are absolute

Nominal transmittance at 546 nm: 0.1 %

| Lab <i>i</i> | Wavelength: 800 nm | |
|--------------|----------------------|----------------------|
| | <i>D_i</i> | <i>U_i</i> |
| IODV | 6.389E-05 | 2.310E-05 |
| KRISS | -5.613E-06 | 1.821E-05 |
| LNE-INM | -1.543E-05 | 2.232E-05 |
| MIKES | -1.053E-05 | 1.949E-05 |
| MSL | -6.210E-06 | 2.942E-05 |
| NIST | 8.533E-06 | 4.099E-05 |
| VSL | -2.075E-05 | 6.438E-05 |
| NMIA | 2.677E-04 | 3.741E-04 |
| NMIJ | -2.814E-05 | 6.845E-05 |
| NPL | 9.232E-06 | 1.994E-05 |
| NRC | -4.962E-06 | 1.870E-05 |
| PTB | -1.555E-05 | 5.734E-05 |
| SMU | -5.503E-05 | 3.920E-05 |
| A*STAR | -6.917E-06 | 3.124E-05 |
| VNIIOFI | -1.768E-05 | 6.160E-04 |
| BEV | -4.161E-05 | 2.000E-03 |
| CMI | 4.906E-05 | 4.432E-05 |
| GUM | -1.271E-05 | 4.358E-05 |
| INM(RO) | -2.576E-05 | 3.375E-05 |
| INRIM | 1.932E-06 | 1.506E-05 |
| IPQ | -2.075E-06 | 1.636E-04 |
| METAS | -1.638E-05 | 2.209E-05 |
| MKEH | -1.354E-05 | 3.010E-05 |
| SP | 5.582E-05 | 8.748E-05 |
| UME | -6.291E-06 | 4.730E-05 |
| DMDM | 5.46E-05 | 7.28E-05 |

CCPR-K6, EUROMET-K6 and EURAMET.PR-K6.1

Degrees of equivalence for Filter E

MEASURAND : Spectral regular transmittance

| Lab <i>i</i> | Wavelength: 900 nm | |
|--------------|--------------------|-----------|
| | D_i | U_i |
| IODV | 1.296E-05 | 2.033E-05 |
| KRISS | -1.752E-05 | 1.222E-05 |
| LNE-INM | 2.187E-06 | 1.757E-05 |
| MIKES | 6.480E-06 | 1.878E-05 |
| MSL | 3.958E-06 | 2.628E-05 |
| NIST | 1.270E-05 | 2.387E-05 |
| VSL | -1.178E-05 | 5.560E-05 |
| NMIA | 3.380E-05 | 1.960E-04 |
| NMIJ | -7.750E-06 | 1.194E-03 |
| NPL | -3.229E-06 | 1.545E-05 |
| NRC | 1.733E-06 | 1.244E-05 |
| PTB | 5.115E-05 | 5.789E-05 |
| SMU | -3.968E-05 | 3.648E-05 |
| A*STAR | 1.503E-06 | 2.146E-05 |
| VNIIOFI | -2.235E-05 | 6.020E-04 |
| BEV | -9.385E-06 | 2.000E-03 |
| CMI | 5.972E-05 | 4.062E-05 |
| GUM | 2.892E-04 | 4.061E-05 |
| INM(RO) | -3.227E-05 | 2.879E-05 |
| INRIM | 3.580E-04 | 1.890E-05 |
| IPQ | 1.606E-04 | 2.010E-04 |
| METAS | -1.324E-05 | 1.938E-05 |
| MKEH | -2.253E-05 | 4.092E-05 |
| SP | 6.794E-05 | 3.204E-04 |
| UME | -2.229E-04 | 7.100E-05 |
| DMDM | 4.27E-05 | 1.39E-04 |

Black : participants in CCPR-K6

Blue: participants in EUROMET.PR-K6 only

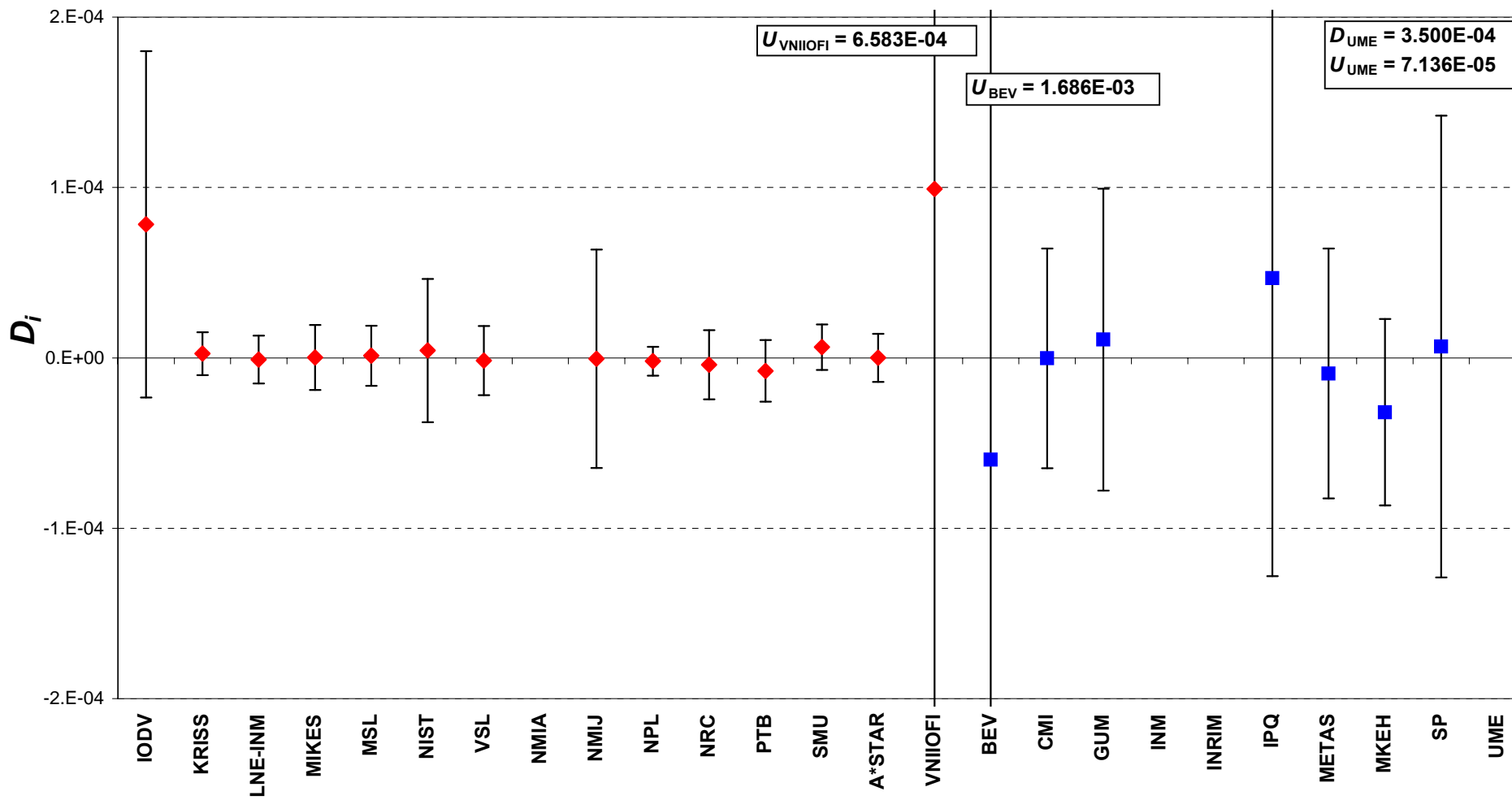
Green: participant in EURAMET.PR-K6.1 only

All reported values are absolute

Nominal transmittance at 546 nm: 0.1 %

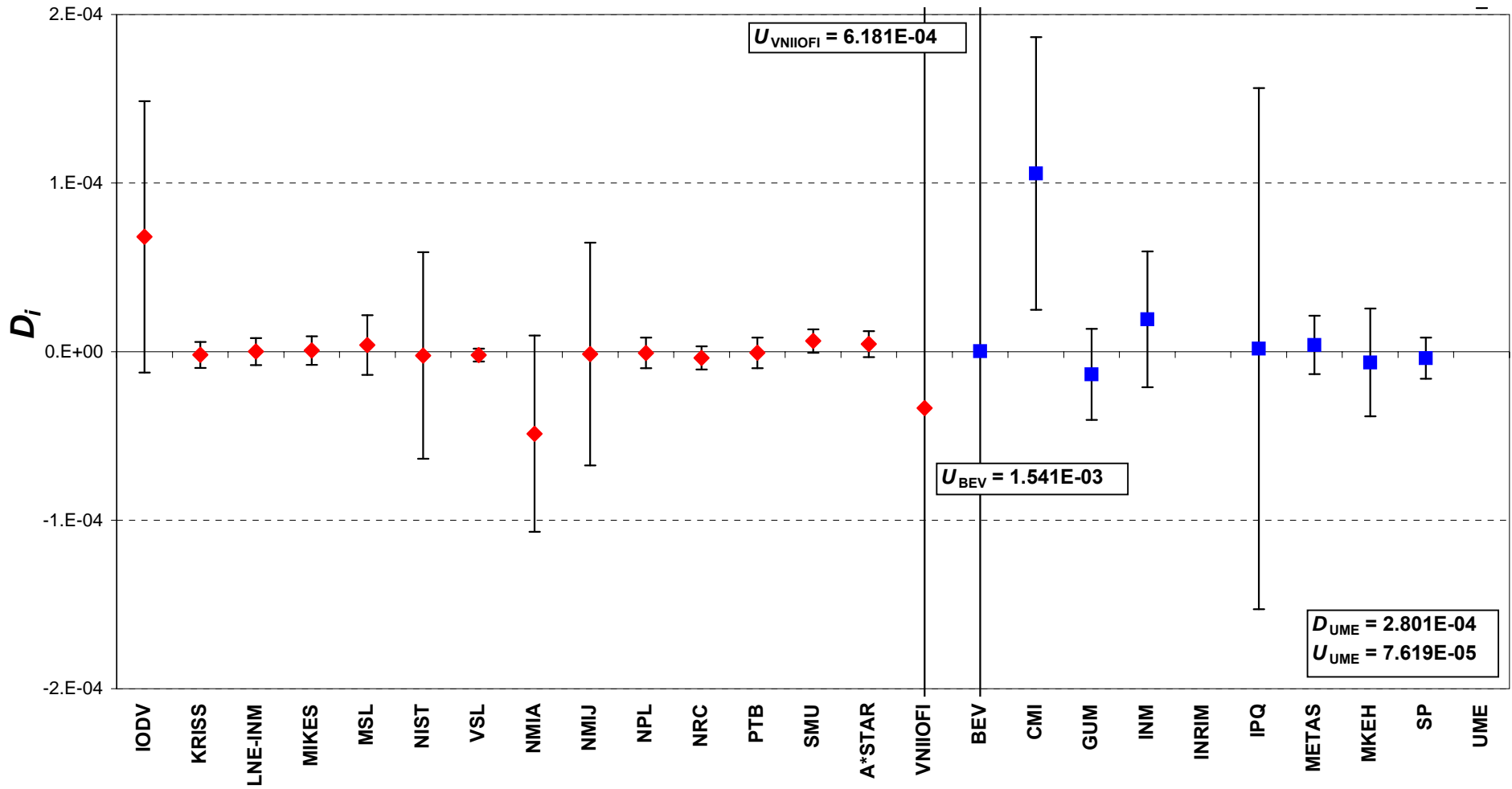
| Lab <i>i</i> | Wavelength: 1000 nm | |
|--------------|---------------------|-----------|
| | D_i | U_i |
| IODV | 1.360E-05 | 2.422E-05 |
| KRISS | -2.973E-05 | 1.127E-05 |
| LNE-INM | 9.511E-06 | 1.559E-05 |
| MIKES | 1.752E-05 | 1.669E-05 |
| MSL | 1.619E-05 | 2.391E-05 |
| NIST | 8.853E-06 | 4.345E-05 |
| VSL | -1.589E-05 | 4.696E-05 |
| NMIA | -9.105E-05 | 1.019E-04 |
| NMIJ | 2.363E-05 | 1.006E-03 |
| NPL | 3.417E-06 | 1.981E-05 |
| NRC | -3.953E-06 | 1.109E-05 |
| PTB | 2.113E-05 | 3.065E-05 |
| SMU | - | - |
| A*STAR | -2.943E-06 | 1.793E-05 |
| VNIIOFI | -1.473E-05 | 6.300E-04 |
| BEV | -1.170E-05 | 1.800E-03 |
| CMI | -1.676E-03 | 2.142E-05 |
| GUM | 2.525E-04 | 4.062E-05 |
| INM(RO) | -1.556E-04 | 4.545E-05 |
| INRIM | 2.970E-04 | 1.727E-05 |
| IPQ | 1.600E-04 | 2.311E-04 |
| METAS | -2.628E-06 | 2.600E-05 |
| MKEH | -5.499E-06 | 3.168E-05 |
| SP | 2.885E-04 | 2.402E-04 |
| UME | -1.661E-04 | 1.413E-04 |
| DMDM | 6.57E-05 | 4.21E-05 |

CCPR-K6 and EUROMET.PR-K6
Spectral regular transmittance - Filter E - $\lambda = 380$ nm
Degrees of equivalence, D_i and expanded uncertainty U_i ($k = 2$)



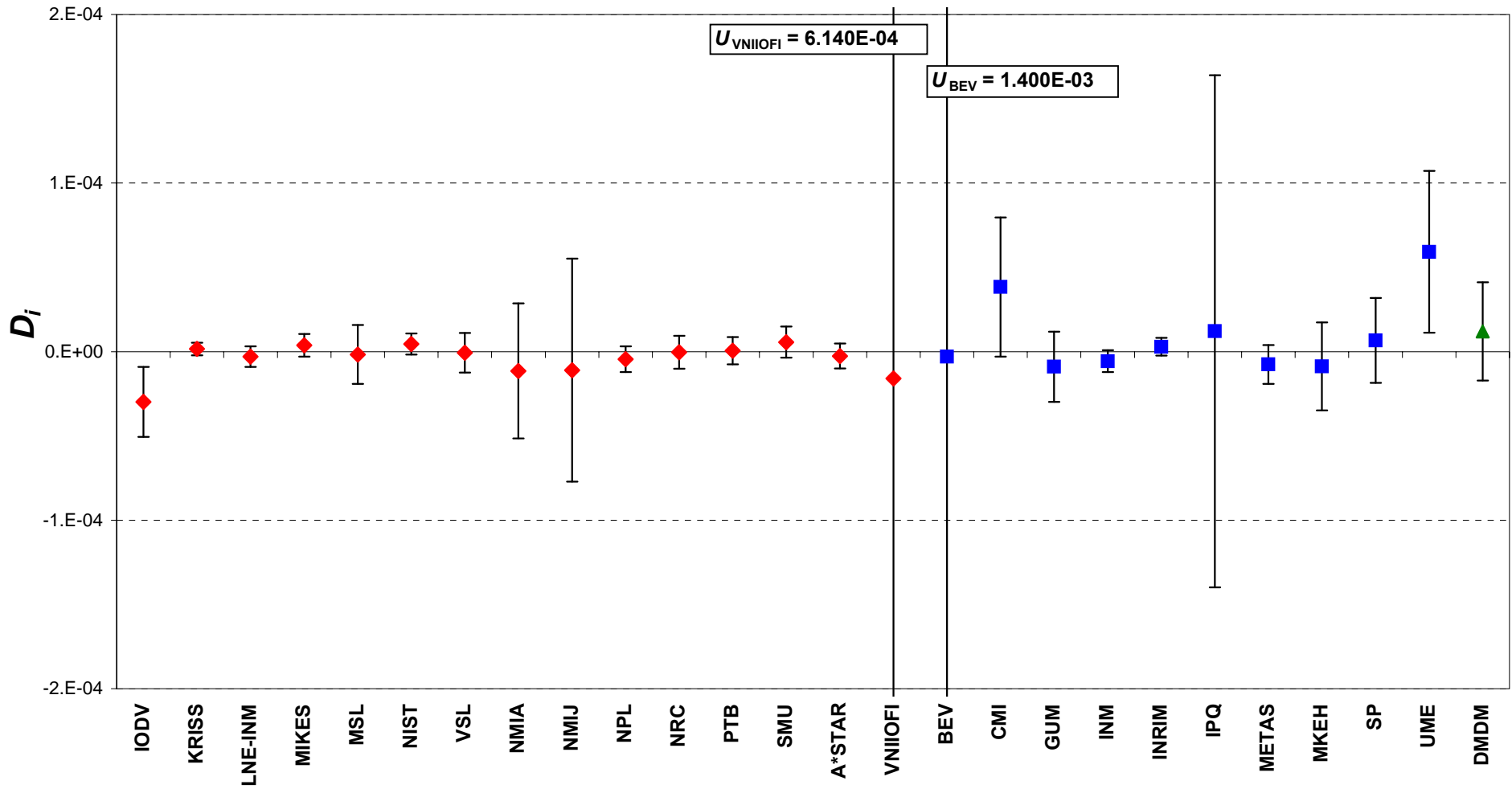
Red diamonds: participants in CCPR-K6
Blue squares: participants in EUROMET.PR-K6 only

CCPR-K6 and EUROMET.PR-K6
Spectral regular transmittance - Filter E - $\lambda = 400$ nm
Degrees of equivalence, D_i and expanded uncertainty U_i ($k = 2$)



Red diamonds: participants in CCPR-K6
Blue squares: participants in EUROMET.PR-K6 only

CCPR-K6, EUROMET.PR-K6, and EURAMET.PR-K6.1
 Spectral regular transmittance - Filter E - $\lambda = 500 \text{ nm}$
 Degrees of equivalence, D_i and expanded uncertainty U_i ($k = 2$)

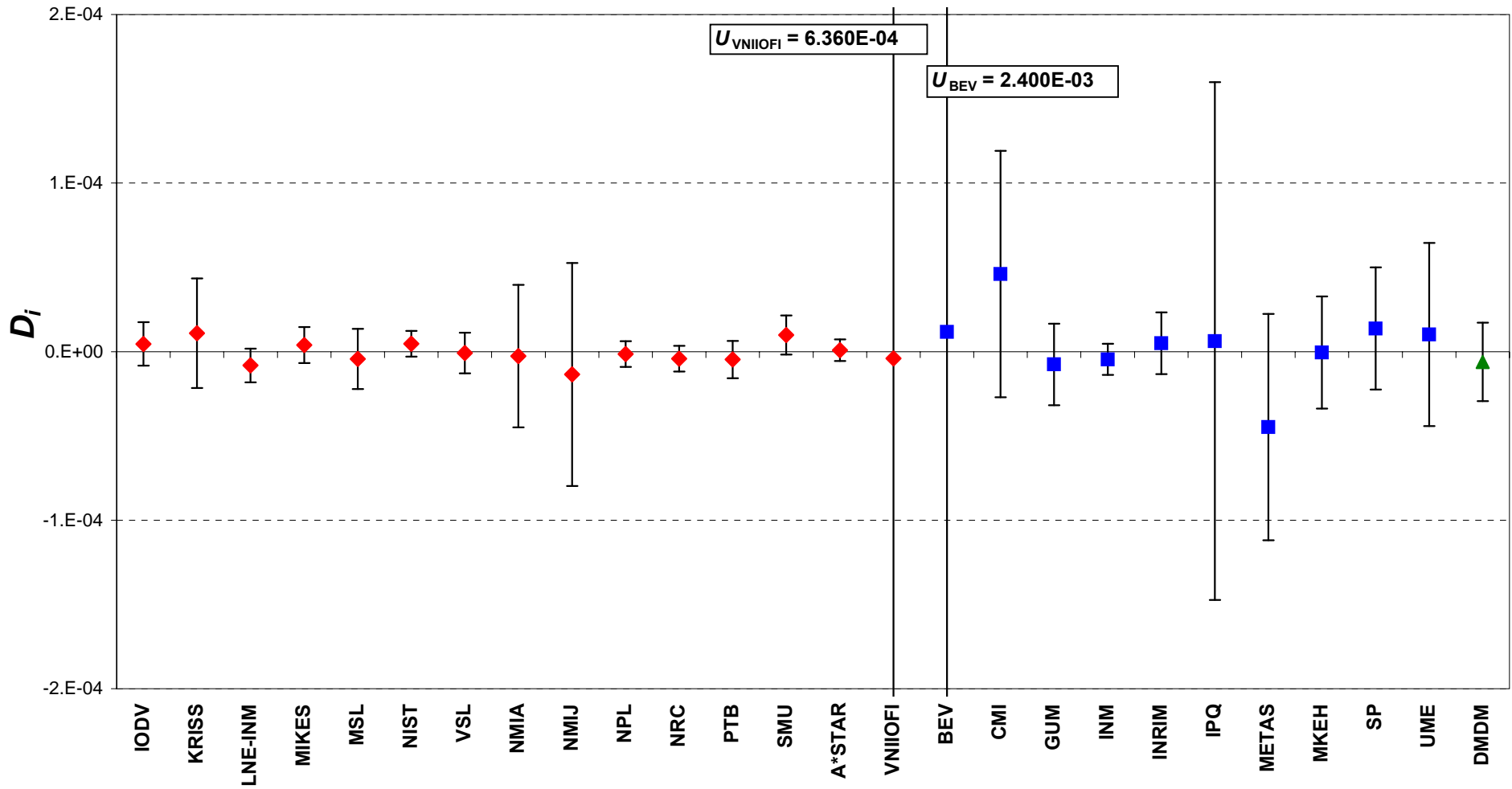


Red diamonds: participants in CCPR-K6

Blue squares: participants in EUROMET.PR-K6 only

Green triangle: participant in EURAMET.PR-K6.1 only

CCPR-K6, EUROMET.PR-K6, and EURAMET.PR-K6.1
 Spectral regular transmittance - Filter E - $\lambda = 600$ nm
 Degrees of equivalence, D_i and expanded uncertainty U_i ($k = 2$)

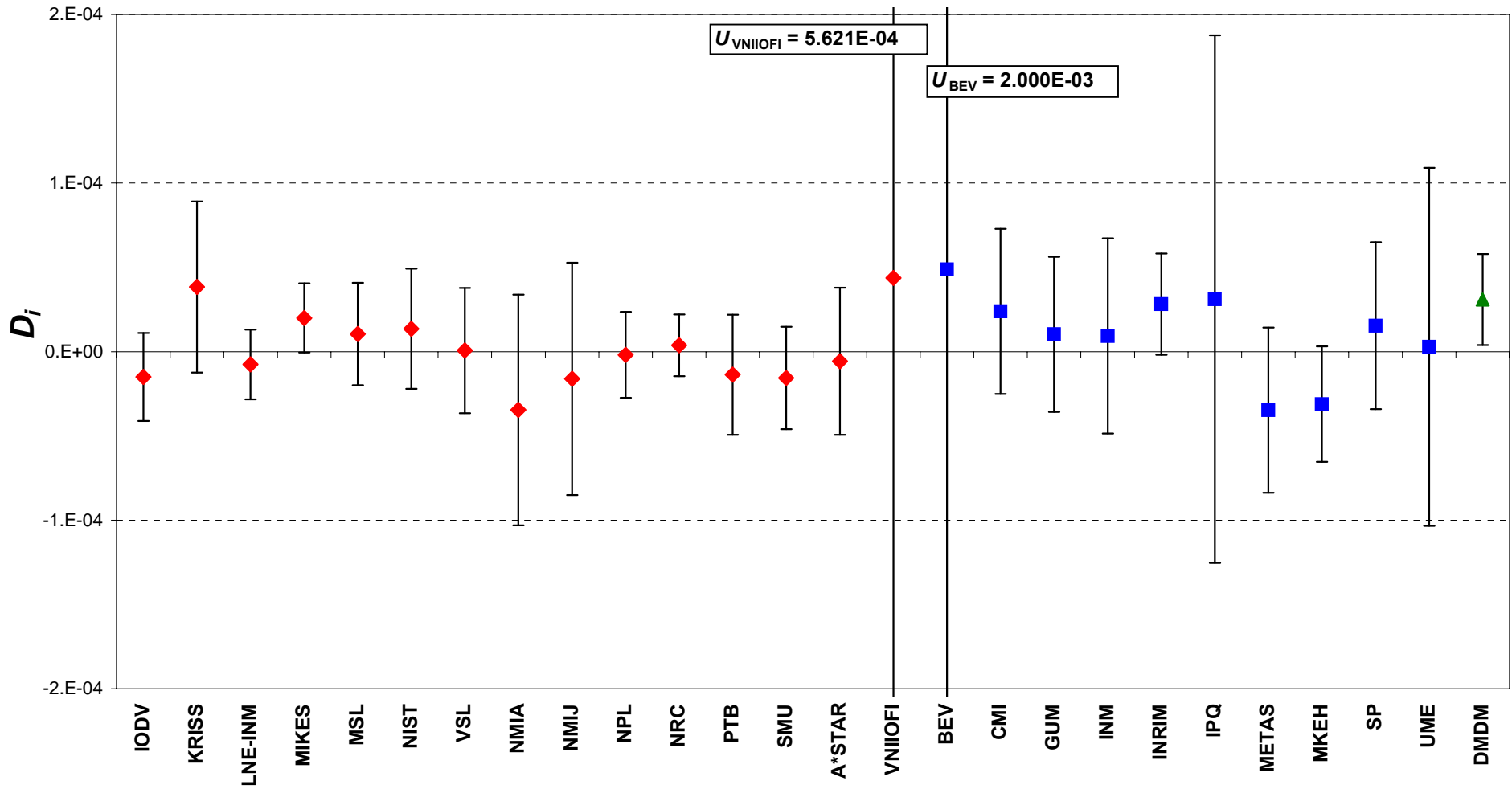


Red diamonds: participants in CCPR-K6

Blue squares: participants in EUROMET.PR-K6 only

Green triangle: participant in EURAMET.PR-K6.1 only

CCPR-K6, EUROMET.PR-K6, and EURAMET.PR-K6.1
 Spectral regular transmittance - Filter E - $\lambda = 700$ nm
 Degrees of equivalence, D_i and expanded uncertainty U_i ($k = 2$)

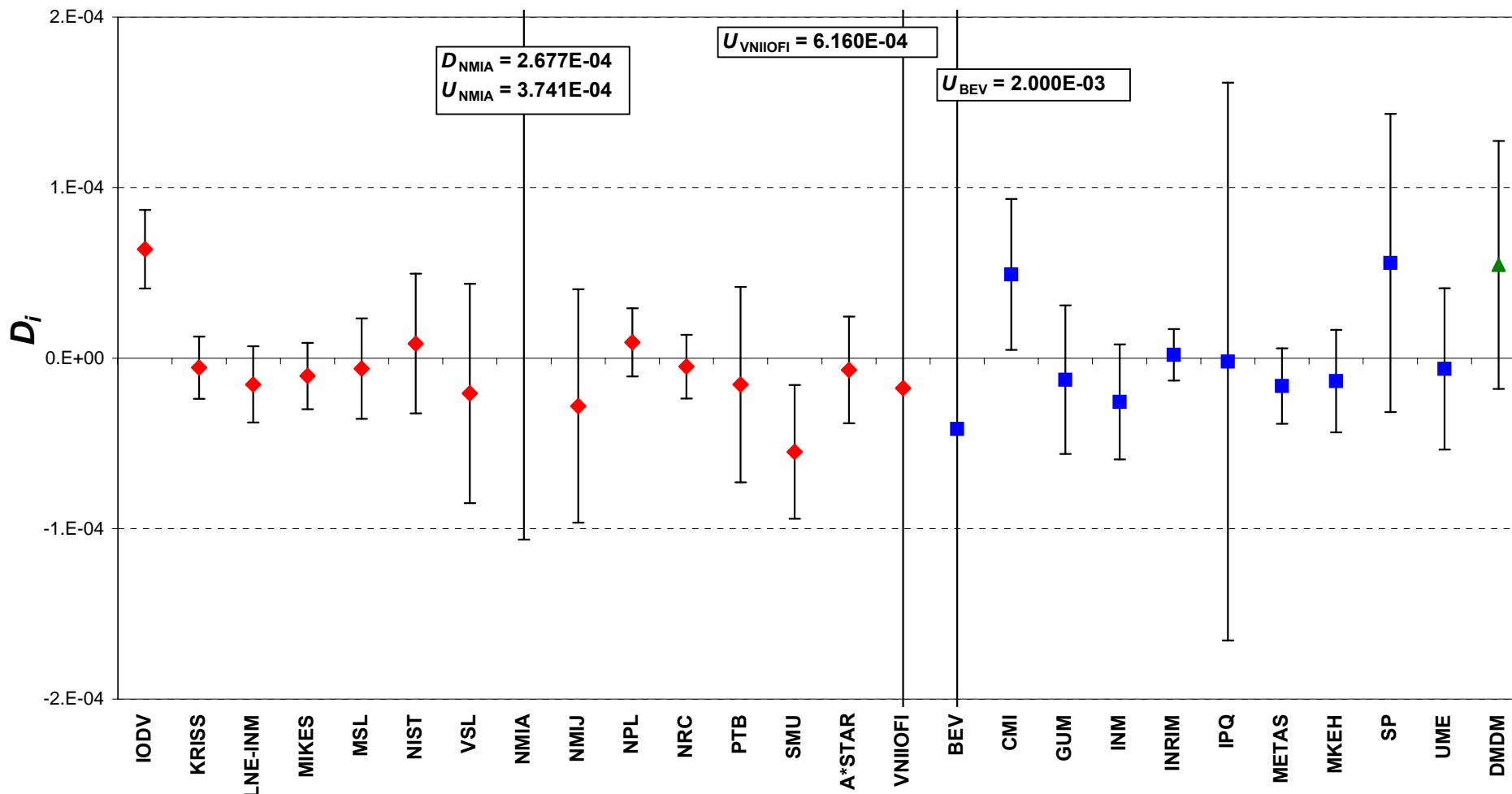


Red diamonds: participants in CCPR-K6

Blue squares: participants in EUROMET.PR-K6 only

Green triangle: participant in EURAMET.PR-K6.1 only

CCPR-K6, EUROMET.PR-K6, and EURAMET.PR-K6.1
 Spectral regular transmittance - Filter E - $\lambda = 800$ nm
 Degrees of equivalence, D_i and expanded uncertainty U_i ($k = 2$)

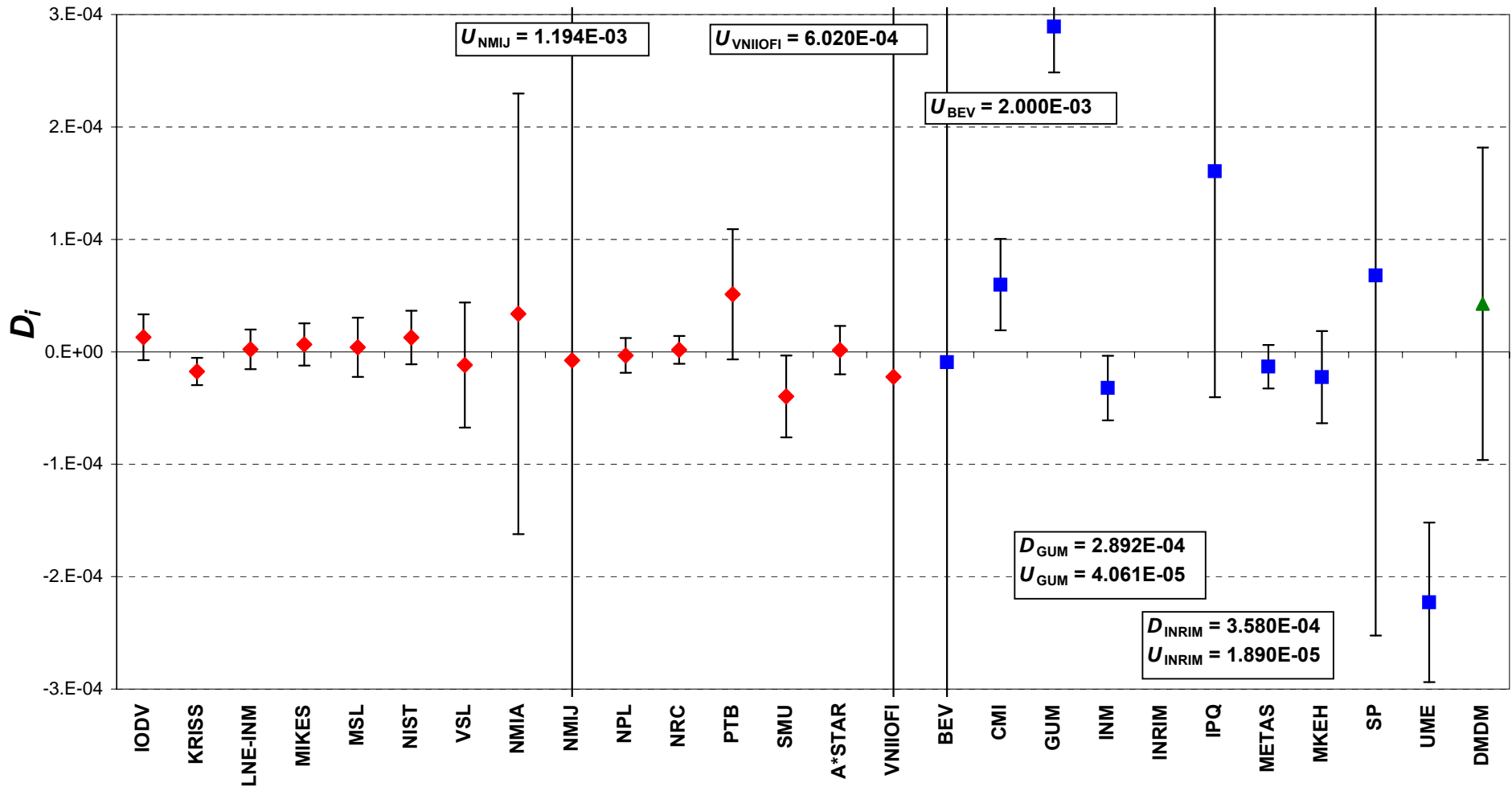


Red diamonds: participants in CCPR-K6

Blue squares: participants in EUROMET.PR-K6 only

Green triangle: participant in EURAMET.PR-K6.1 only

CCPR-K6, EUROMET.PR-K6, and EURAMET.PR-K6.1
Spectral regular transmittance - Filter E - $\lambda = 900$ nm
Degrees of equivalence, D_i and expanded uncertainty U_i ($k = 2$)

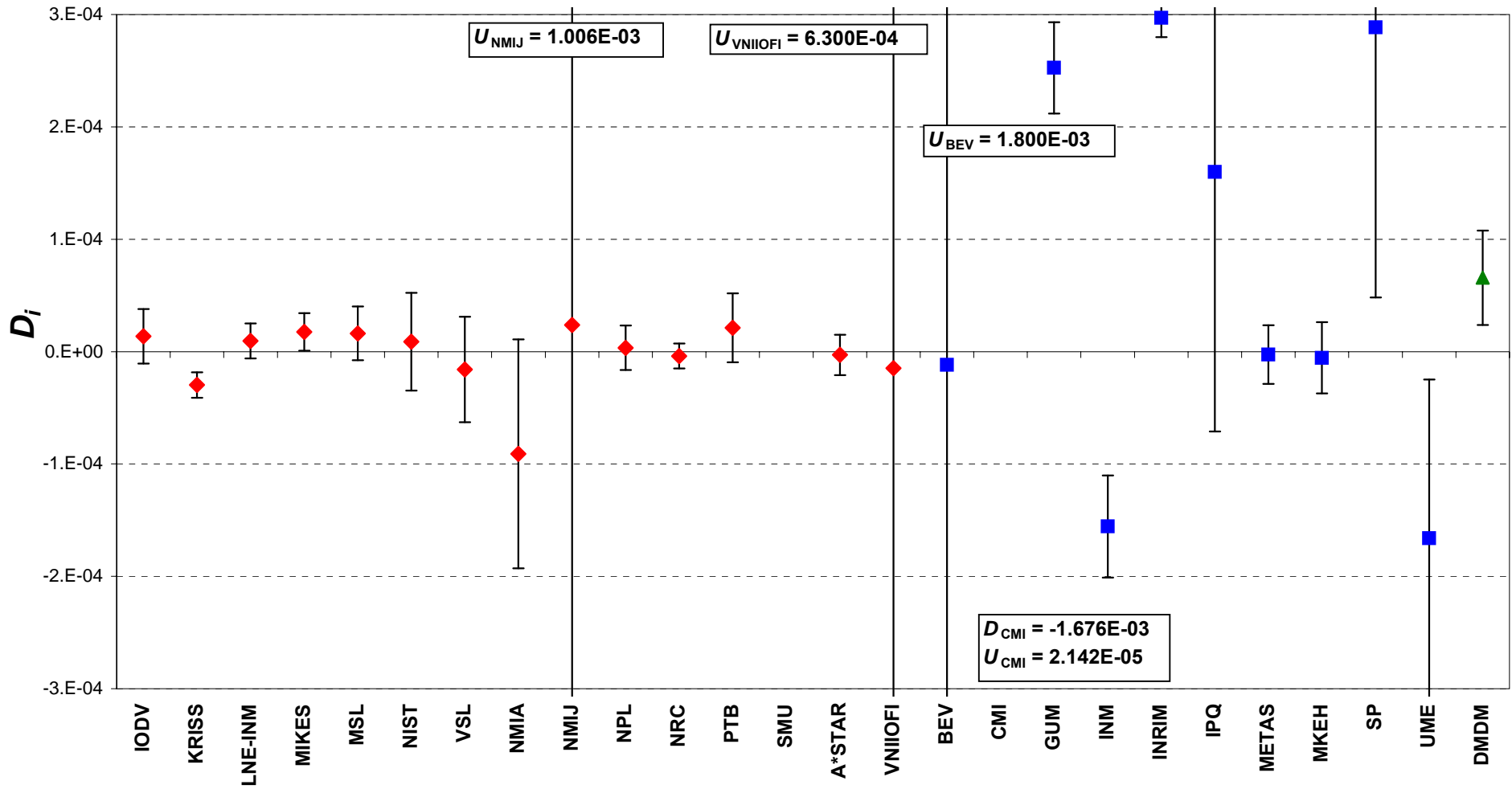


Red diamonds: participants in CCPR-K6

Blue squares: participants in EUROMET.PR-K6 only

Green triangle: participant in EURAMET.PR-K6.1 only

CCPR-K6, EUROMET.PR-K6, and EURAMET.PR-K6.1
Spectral regular transmittance - Filter E - $\lambda = 1000$ nm
Degrees of equivalence, D_i and expanded uncertainty U_i ($k = 2$)



Red diamonds: participants in CCPR-K6

Blue squares: participants in EUROMET.PR-K6 only

Green triangle: participant in EURAMET.PR-K6.1 only