How the Weighted Mean affects the ARV (NIST-meeting protocol)

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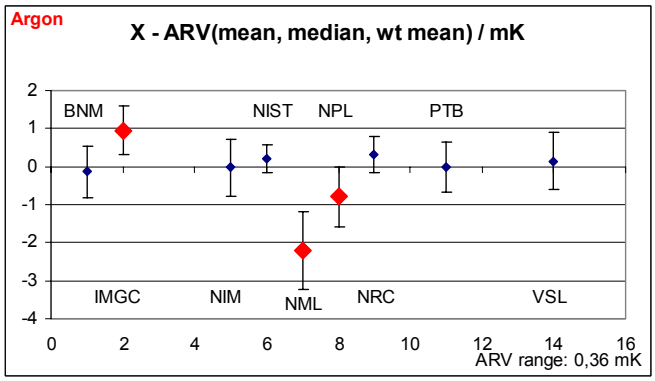
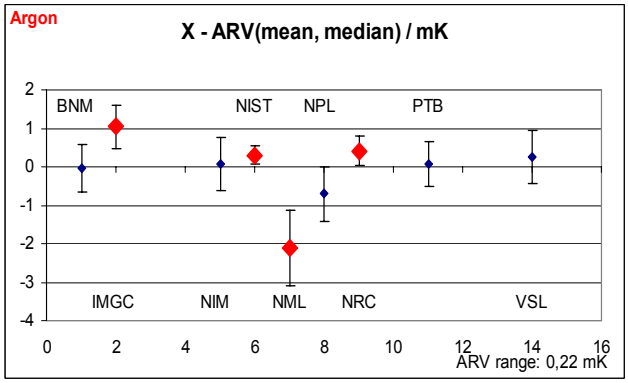
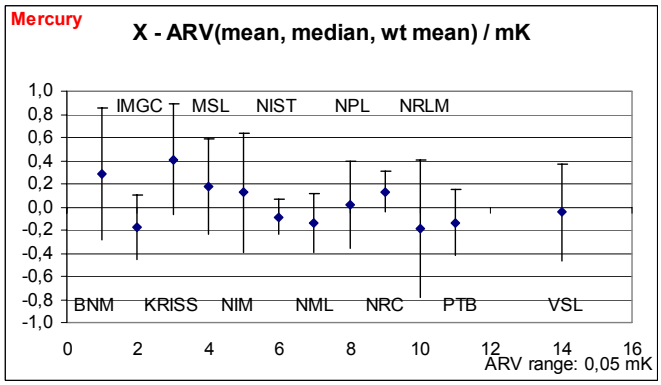
As supporting evidence for the discussions, additional calculations have been performed at IMGC to learn what the effect is of the inclusion of the Weighted Mean in the ARV (as generated at the NIST- meeting of March this year). The results of the calculations are:

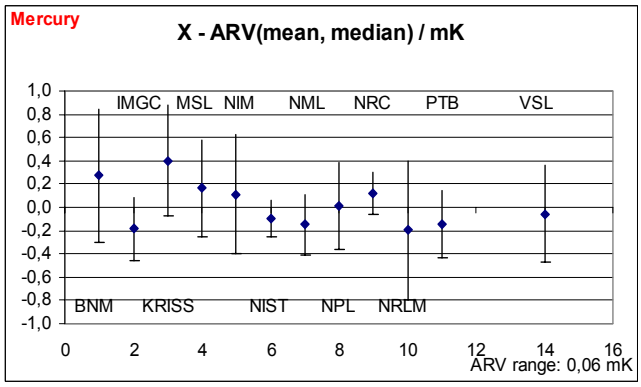
Argon (σ_{ARV} = 0.11 mK): where in the previous method SUDs[1] were IMGC, NML and NRC, with the alternative method they are IMGC, NIST, NML and NRC.



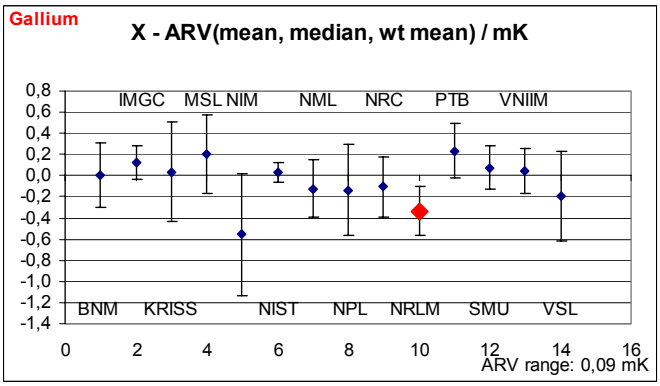


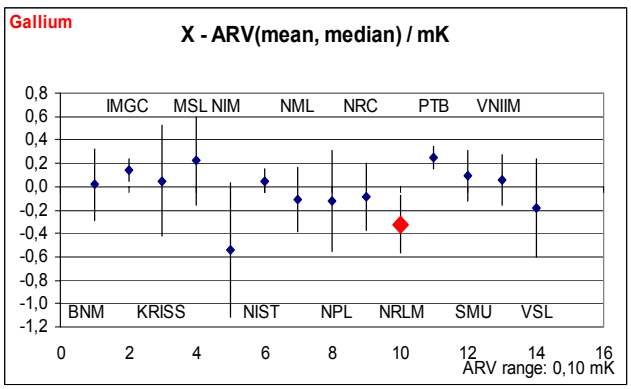
Mercury (σ_{ARV} = 0.03 mK): no SUDs are present, with both methods.





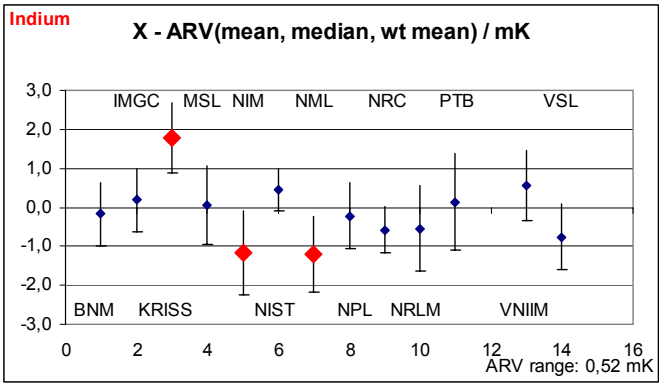
Gallium (σ_{ARV} = 0.04 mK): with both methods, only one SUD is present, NRLM.

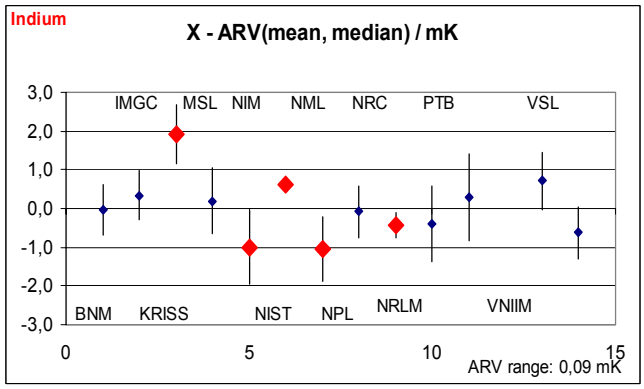




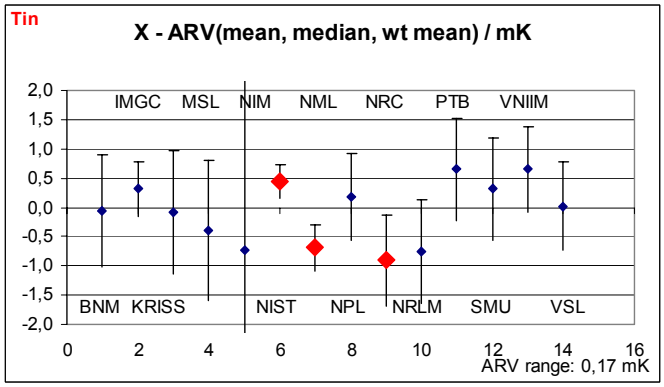
[1] for SUD is taken any point whose uncertainty range does not include the ARV

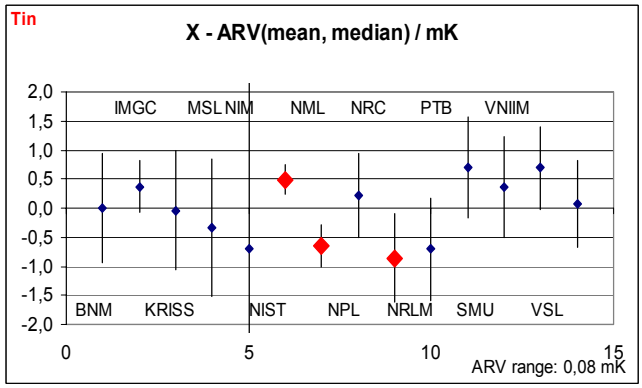
Indium (σ_{ARV} = 0.05 mK): where in the previous method SUDs were KRISS, NIM and NML, with the alternative method also NIST and NRC are added.



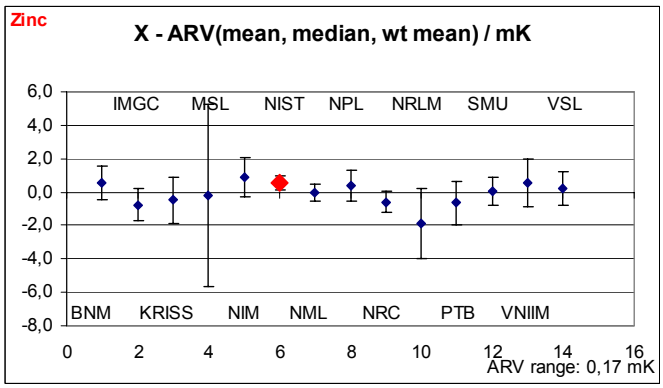


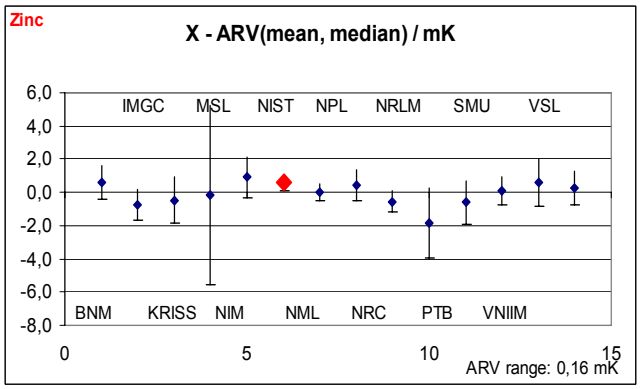
Tin (σ_{ARV} = 0.04 mK): with both methods three SUDs are present, NIST, NML and NRC.





Zinc (σ_{ARV} = 0.08 mK): with both methods only one, slight SUD is present, NIST.





Aluminum (σ_{ARV} = 0.12 mK): with both methods five SUDs are present, BNM, IMGC, KRISS, NRC and SMU.