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U.S. DEPARTMENT OF ENERGY
Office of Science

AUP NbTi Splices Control vs Overheated

BCMT/SMP

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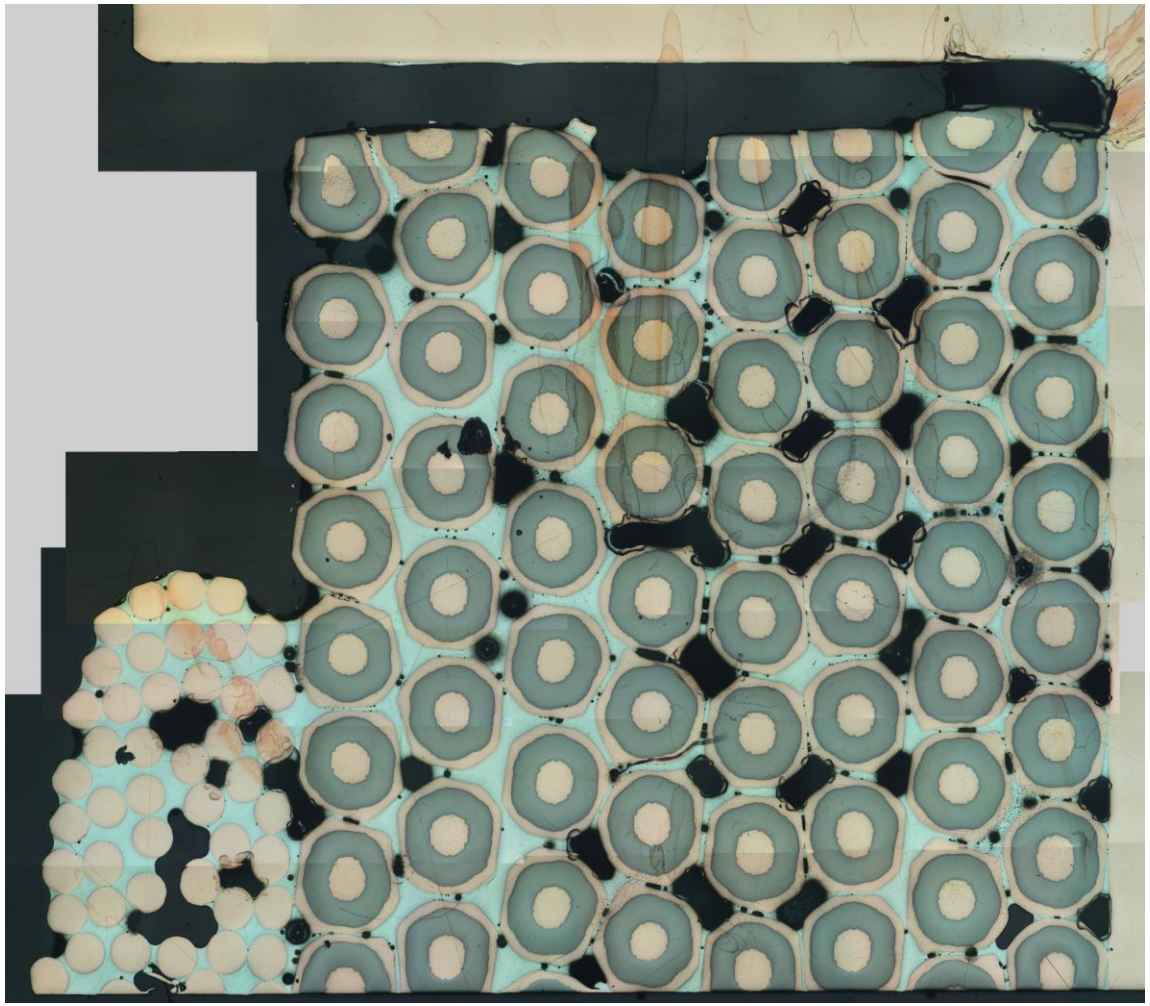
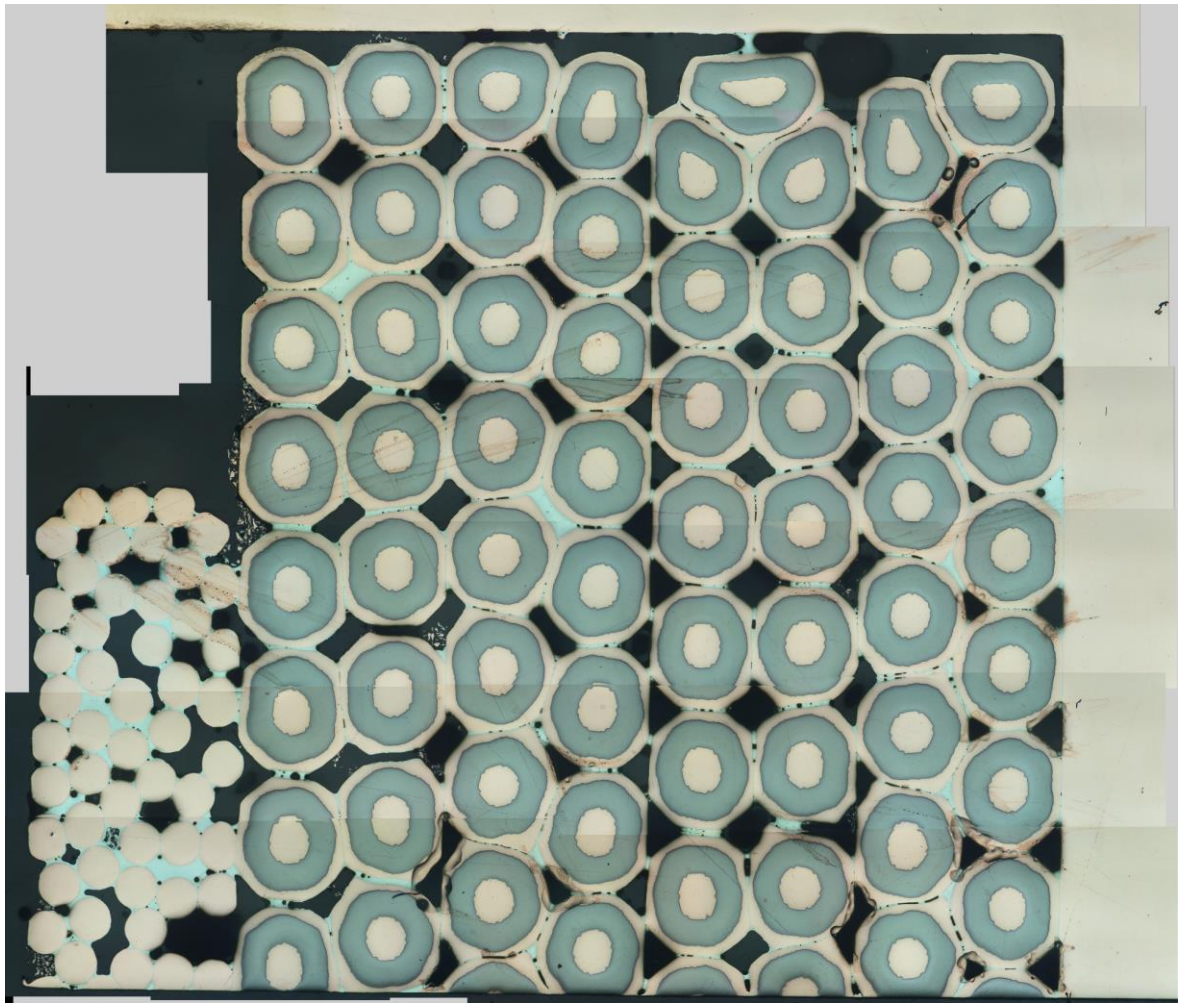
Metallography – Splices NbTi Control vs Overheated



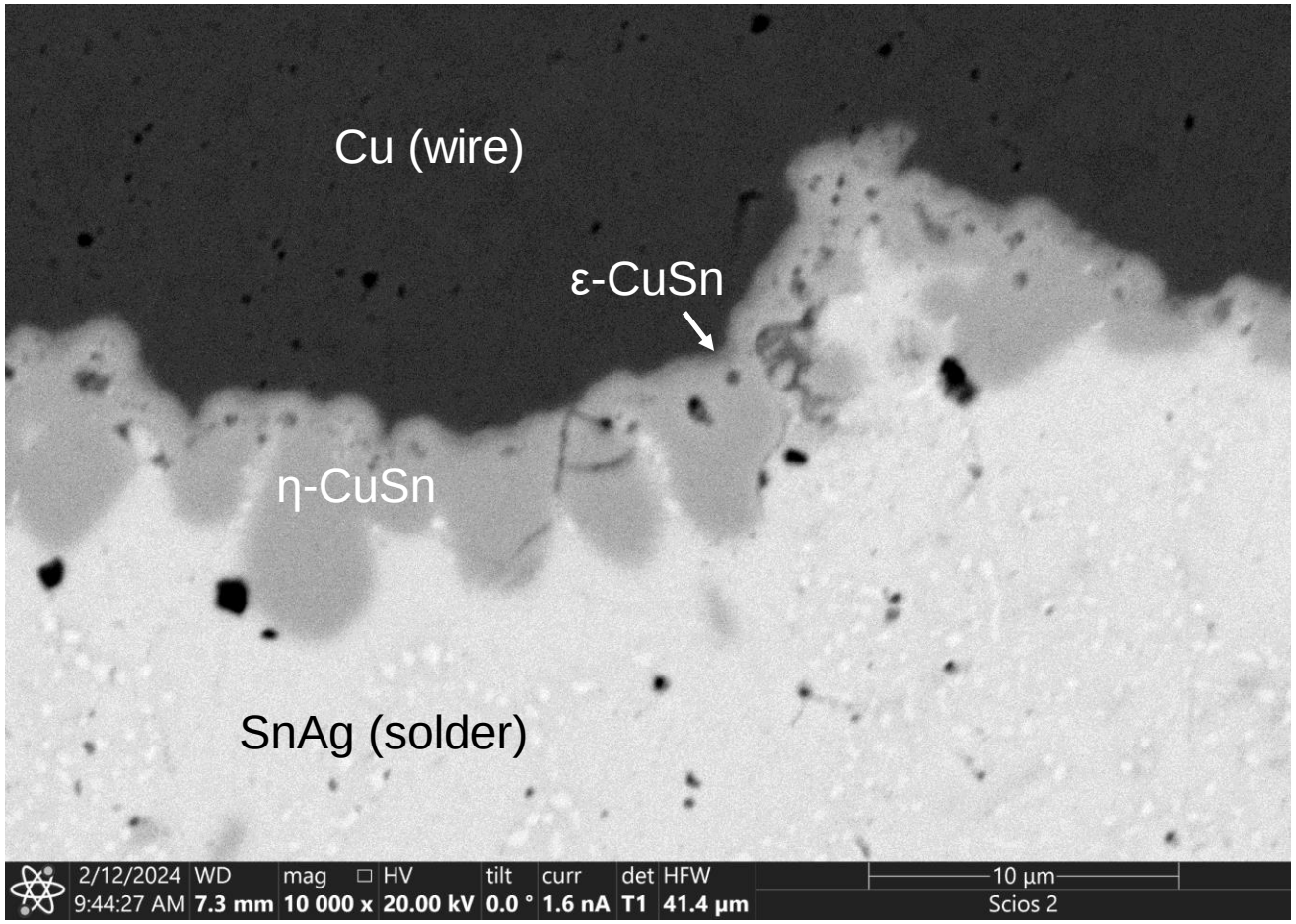
Control



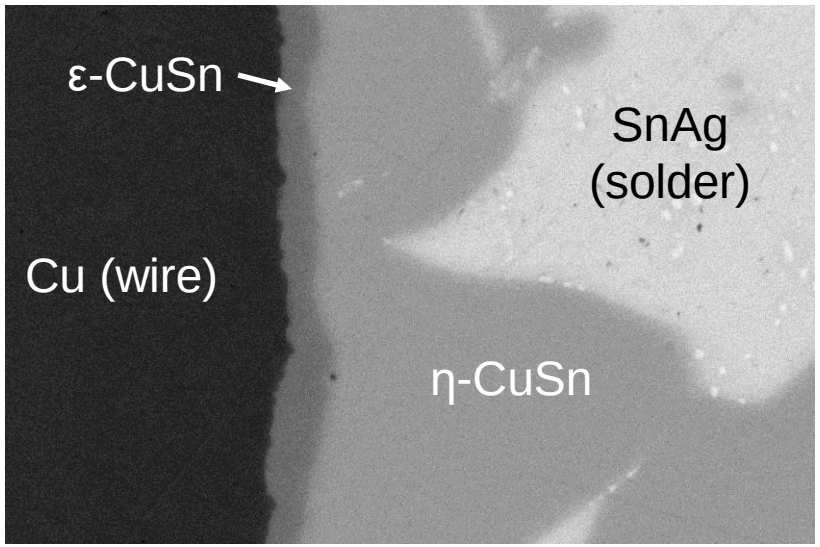
Overheated

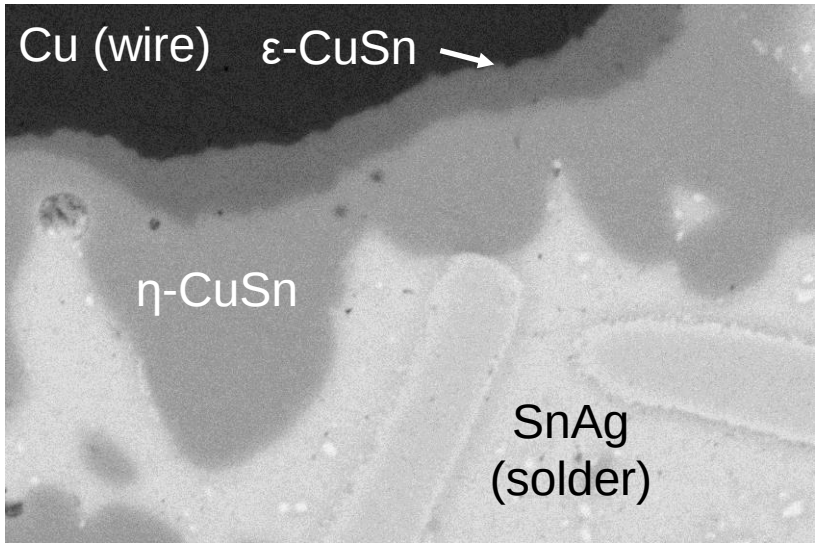
SEM Cu-Sn Phase Investigation

Images share the 10 μm scale bar



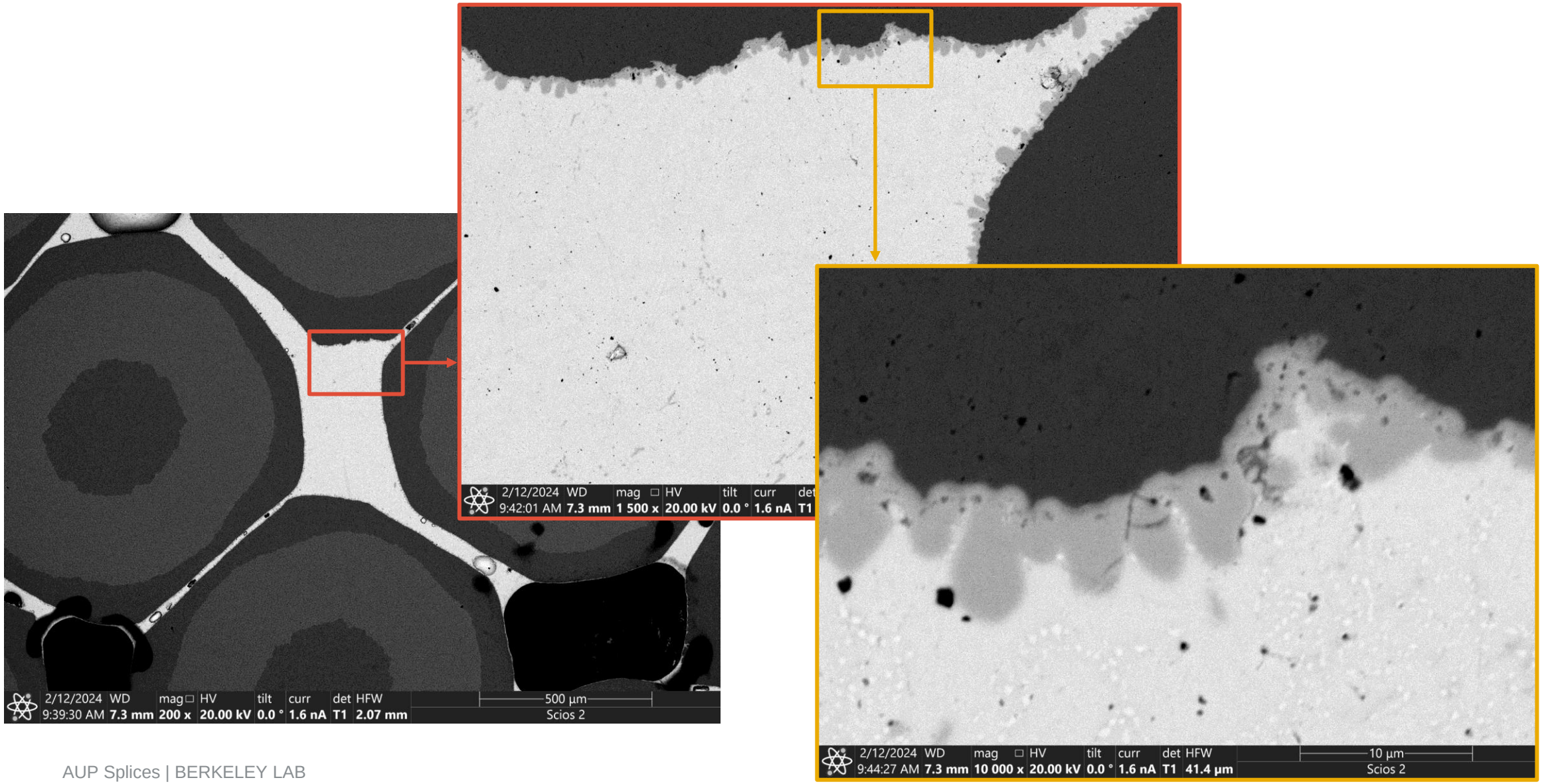
Control



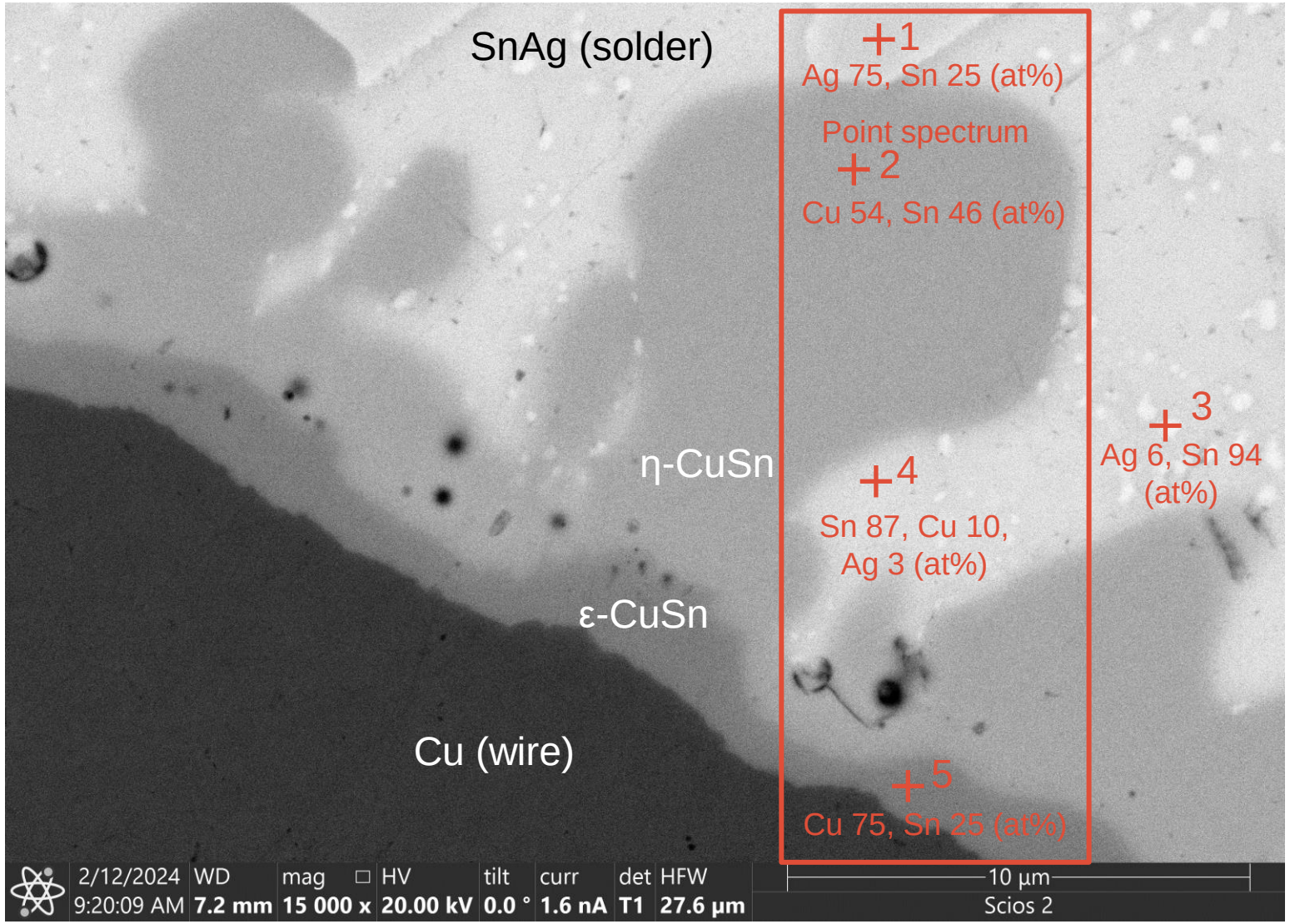


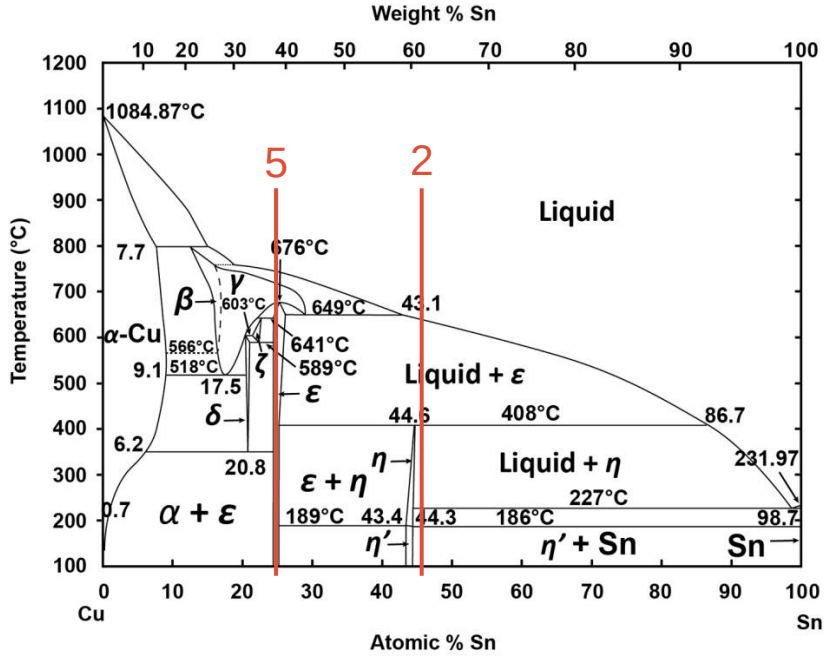
Overheated

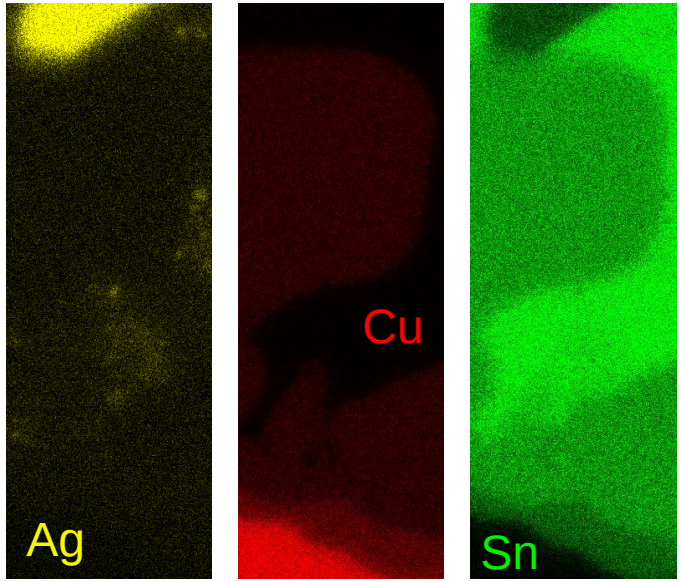
Phase Investigation – Control



Phase Investigation – Overheated

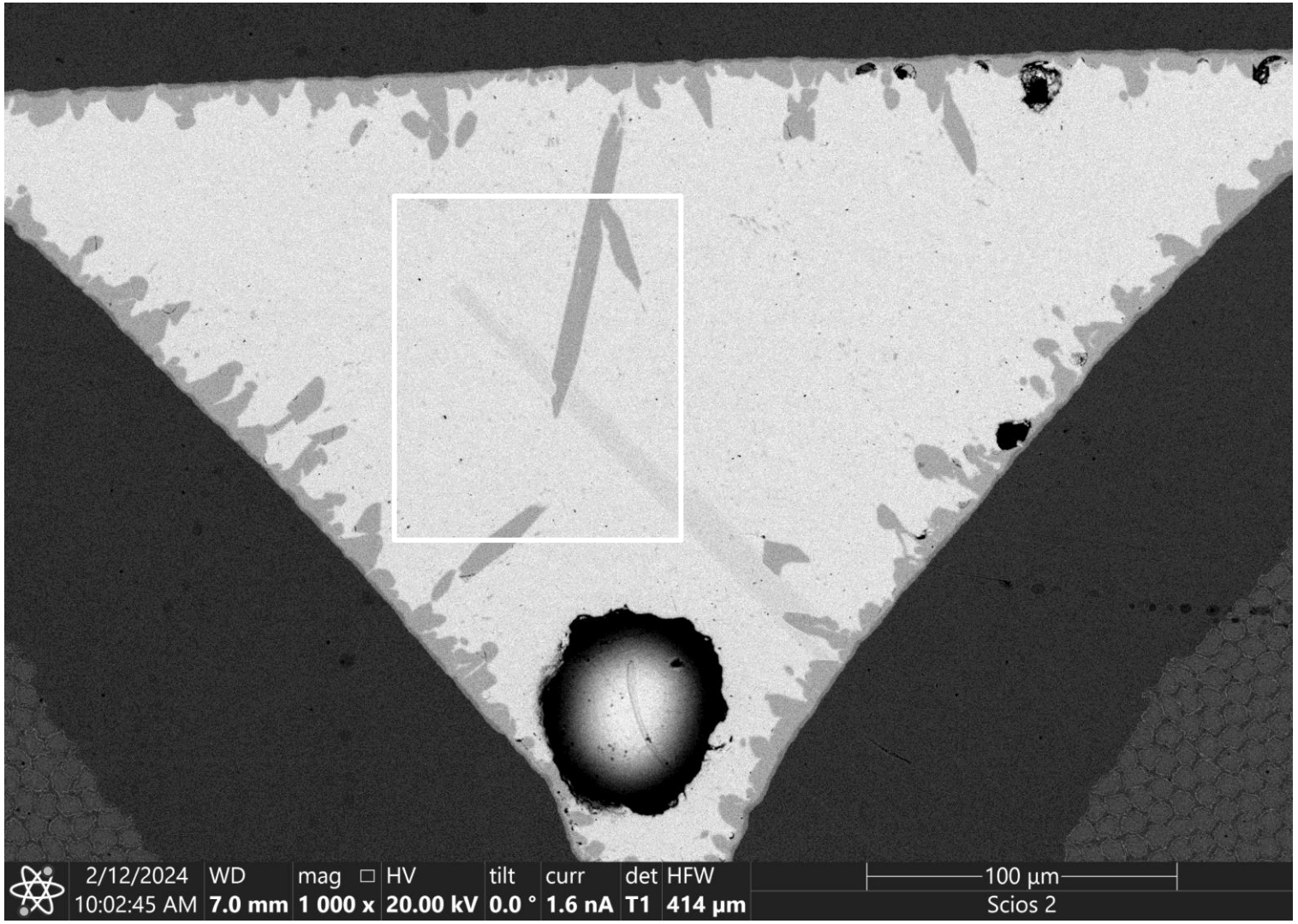




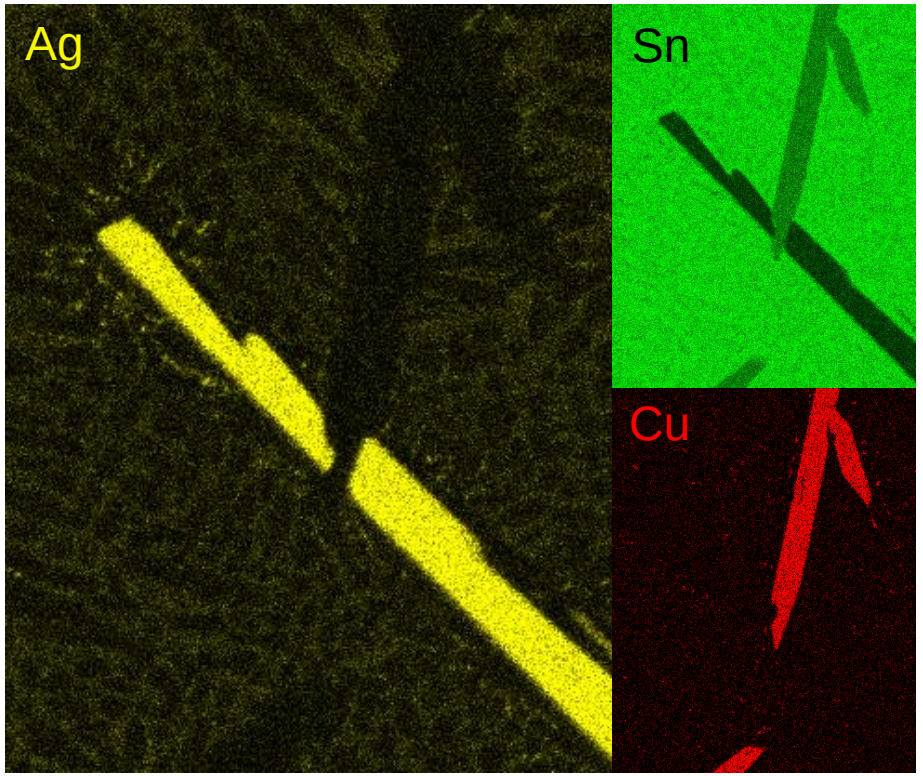


Elemental composition maps

Phase Investigation – Overheated



Ag_3Sn phase found in solder (from EDX spectrum data)



Elemental composition maps

Phase Investigation – Overheated (high magnification)

No phase with a darker shade of grey, i.e. with a higher Cu content, was found at the wire/ε-CuSn interface, supporting our observation that no δ-CuSn was formed