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<i>Topic</i>	XXXX
<i>Oral or Poster Presentation</i>	Oral

LONG-TERM STABILITY OF TRIPLE POINT OF WATER CELLS AT NRC

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Sufficient time has elapsed since our last comparison of NRC triple point of water (TPW) cells (*K.D. Hill, Int. J. Thermophys. 35 (2014) 611*) that it seemed worthwhile to update our knowledge of the temperature differences among the NRC TPW cells. To add to the available experimental data, we performed a comparison of 34 NRC TPW cells of various ages (from 0 years to 64 years), manufacturers (NRC, Jarrett, Isotech, Hart Scientific, Fluke), and materials (borosilicate glass and fused quartz). Four cells from other NMIs (NPL, PTB, VSL, LNE-Cnam) were also added to this comparison for the purpose of linking TPW realizations in different countries. Twenty two NRC cells from this group were compared to one another in 2013 (*ibid*). By comparing the current inter-cell temperature differences to those determined 5 years earlier, it was found that some cells have remained stable, others have become colder (as might be expected from ongoing dissolution of the glass). Also included among the 34 cells are five cells of borosilicate glass and five of fused quartz that were purchased 15 years ago and last compared 5 years ago. We found that the average temperature of these borosilicate glass cells has decreased compared to fused-quartz cells since the last comparison confirming once again that fused quartz is the superior container for TPW cells.