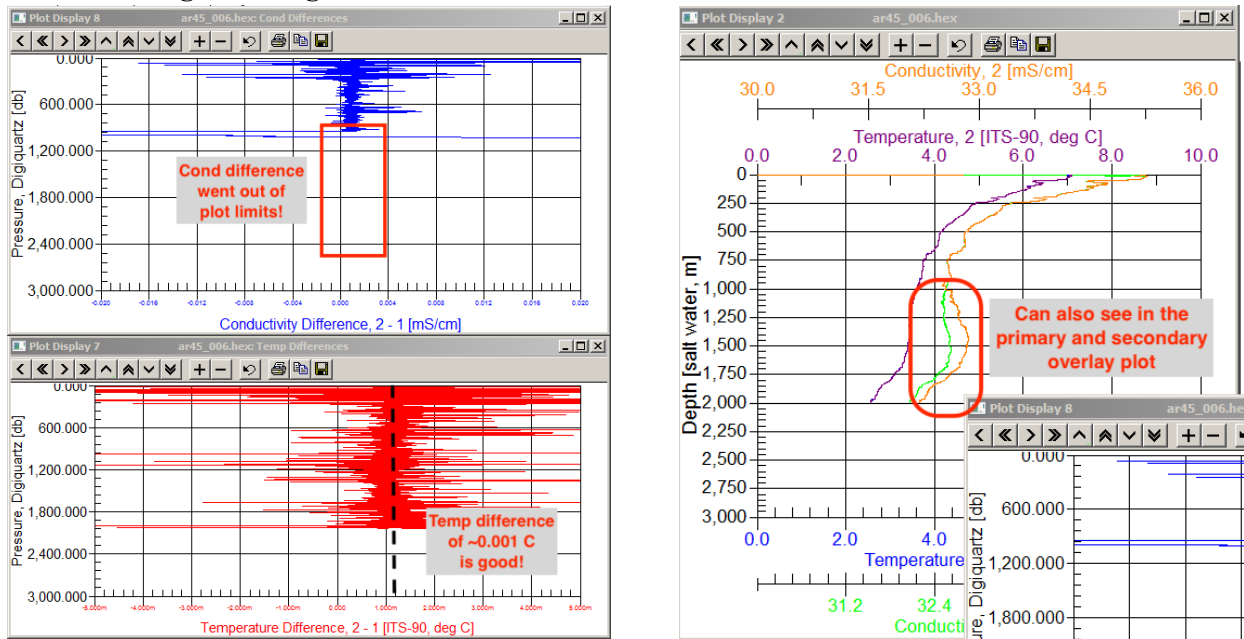


Acquisition screen CTD contamination examples

Temperature differences should be less than $\pm (2 \times 0.001 \text{ }^\circ\text{C})$
 Conductivity differences should be less than $\pm (2 \times 0.003 \text{ mS/cm})$ or $\pm (2 \times 0.0003 \text{ S/m})$
 *Note that 0.003 mS/cm is close to 0.003 psu for reasonable temperature ranges, which can be helpful

Difference plots between conductivity and temperature sensor pairs provide one method for diagnosing CTD contamination. In general, differences should fall within, or very close to, the above ranges when sensors have been calibrated by the manufacturer within the past year. The rule can be relaxed in the upper water column, however deeper than ~500-1000m, differences that consistently fall outside of this range indicate problematic sensor drift or contamination. If you notice this, please alert an SSSG tech.

Example 1: Something obvious got sucked into the CTD in the middle of a 2000m cast - alert an SSSG tech!



Example 2: The CTD is dirty and no one has noticed yet - alert an SSSG tech!

