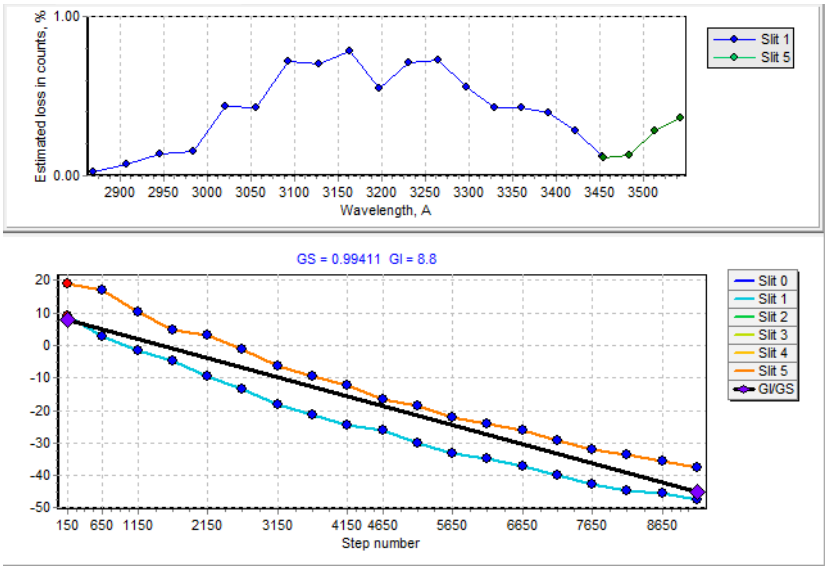
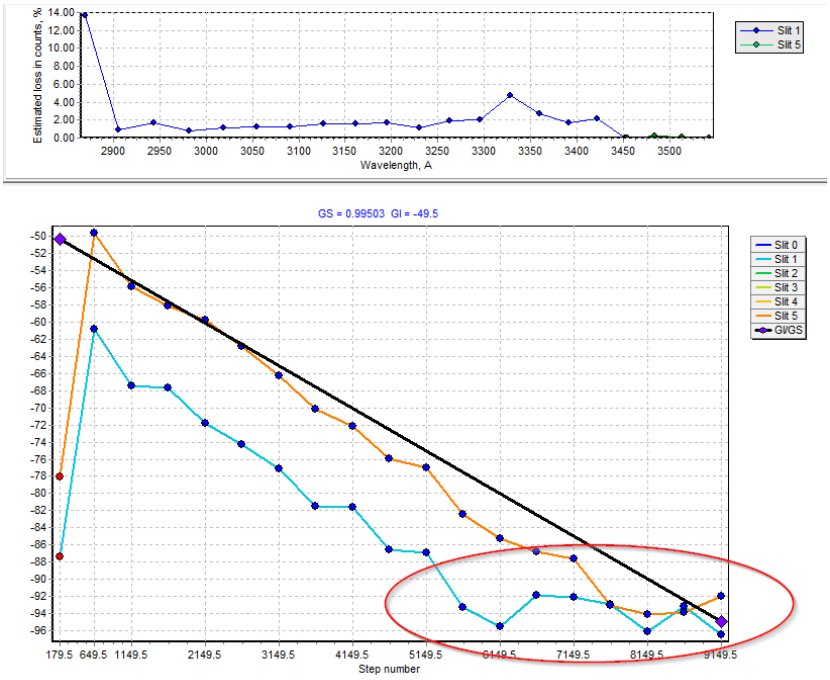
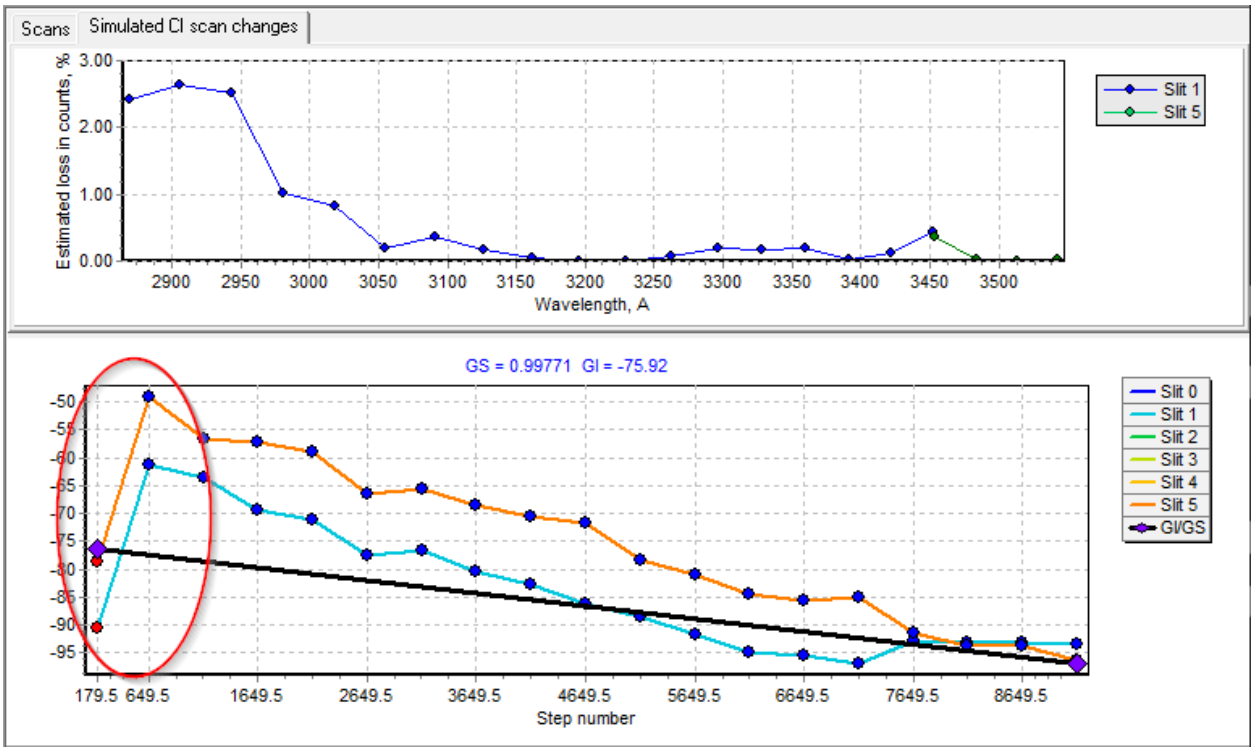
Normal grating scans have Slit 1 and slit 5 running parallel.



Where scans cross, either a mirror or grating has come out of alignment



Reseat the mirrors and gratings by flexing them against their springs ensure no optical surfaces are touched.



In this circled area, one of the micrometers is stopping before reaching the minimum wavelengths causing the drop in counts. This means the micrometer readings are becoming larger and are likely running off the end of thread; the pushrod is meeting the face of the micrometer or the spring has stopped pulling the grating arm. Whatever the cause, one of the gratings has stopped rotating toward the mirror side of the assembly. Often the solution is mounting the micrometer in the clamp in such a way, as the micrometer is closer to the mirror. The amount of thread in the micrometer travel is very near equal to the wavelength measurement range for the instrument. Make adjustments by 0.010” at a time or less. Larger adjustments will likely introduce problems in the highest wavelengths, where the micrometer will run out of thread at the zero end before reaching measurements at the highest wavelengths and the minimum micrometer reading.