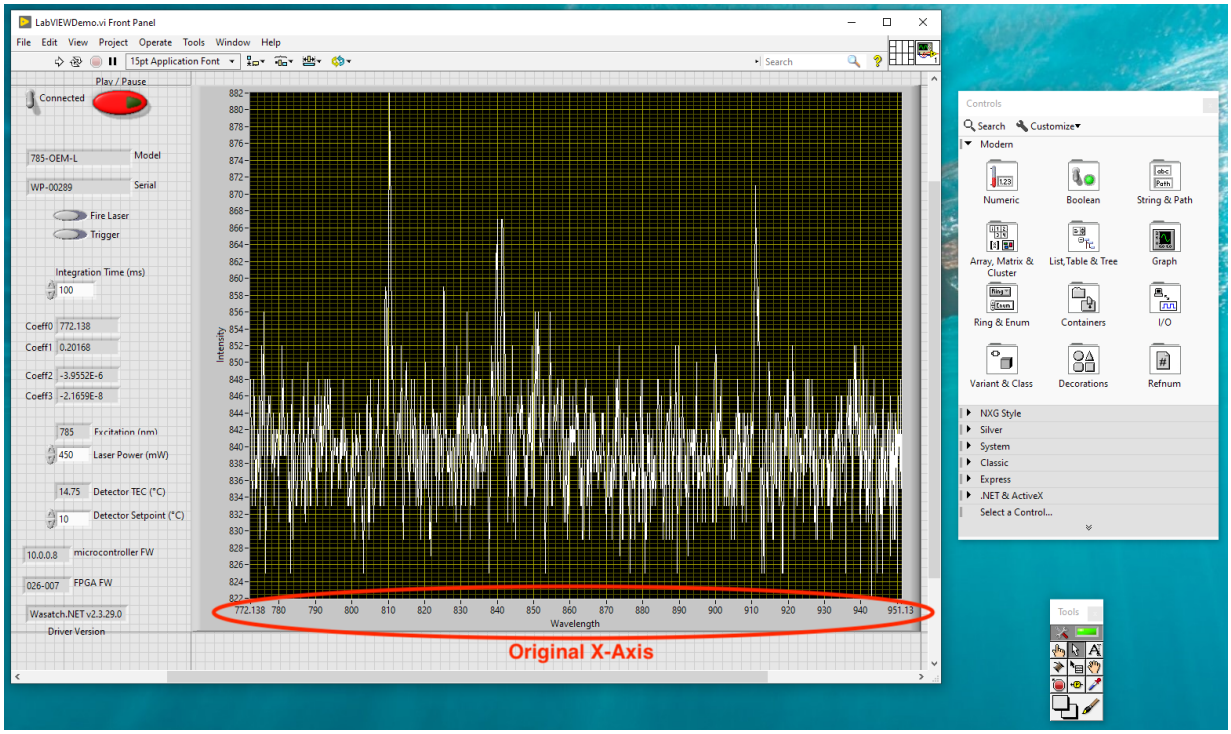
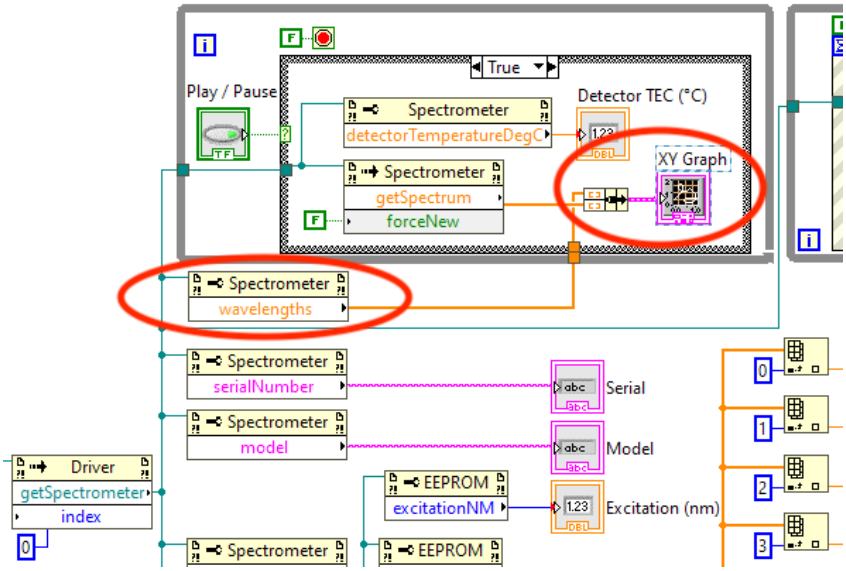
LabVIEW by Example

Changing x-axis from wavelength (λ, nm) to Raman shifts in wavenumber (ṽ, cm^{-1})

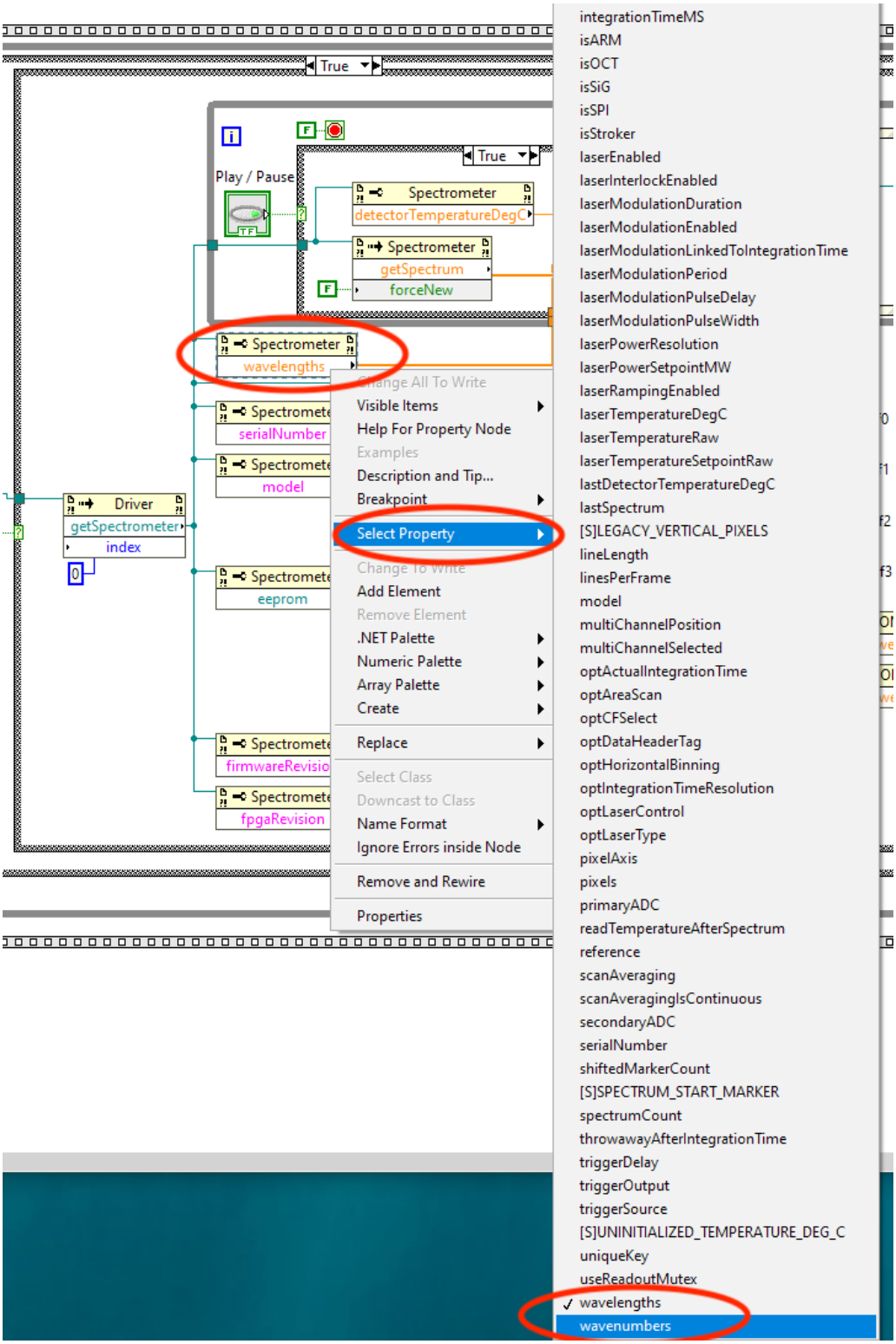
1. In the Front Panel, confirm the default graph x-axis in Wasatch.LV's LabVIEWDemo.vi is in wavelength, and shows your spectrometer's calibrated spectral range in nm.



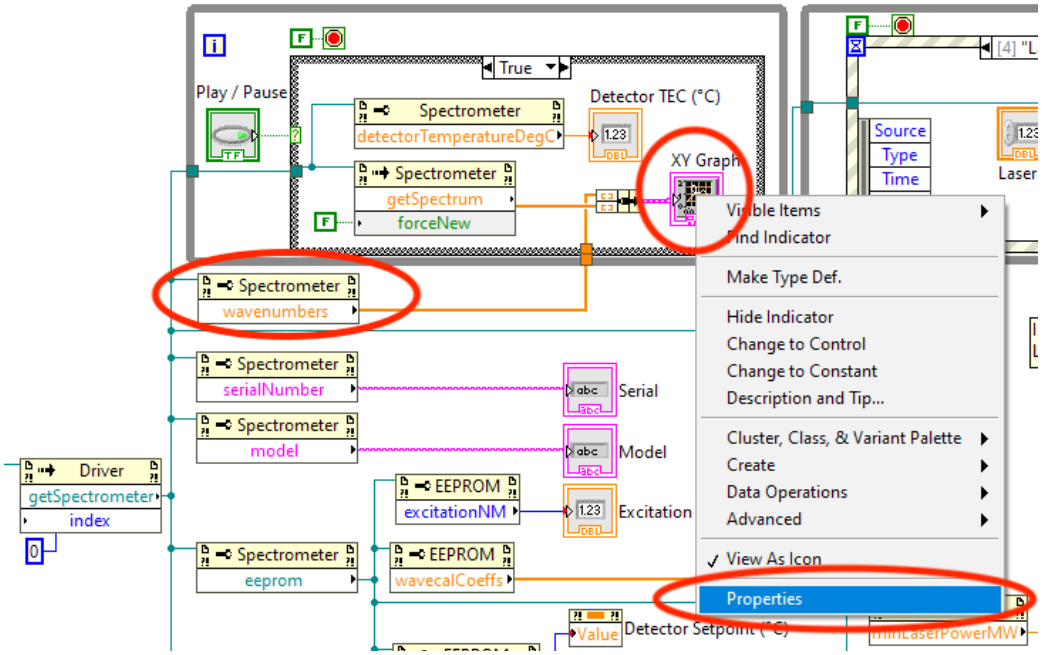
2. In the Block Diagram, find the terminal which represents the XY Graph, and trace back to the WasatchNET.Spectrometer Property Node which provides the x-axis array (currently "Spectrometer.wavelengths").



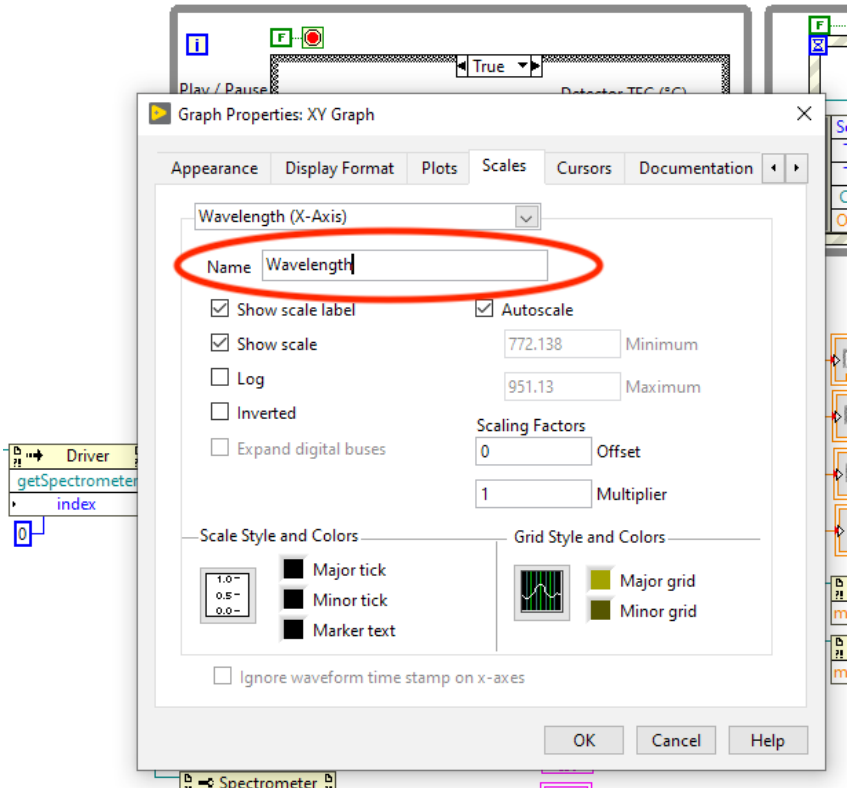
3. Right-click on the wavelengths Property, choose “Select Property”, and scroll down to the bottom. Confirm that “wavelengths” is currently checked. Change the selected Property to “wavenumbers.”



4. Confirm the graph array input Property now reads “wavenumbers.” Now let’s update the horizontal axis label on the chart. Right-click the XY Graph and select Properties.



5. On the “Scales” tab, edit the x-axis title to read “Wavenumbers”.



6. All done! When you run your updated .vi, the graph should now show the spectrometer's spectral range as Raman shifts from the laser in wavenumbers (cm-1), and the label should make that plain to the user.