

Ocean Tide Spectrometers

For general reading, the Wikipedia page on optical spectrometers is a great starting place. For more technical details, the Ocean Optics website has additional information on the USB-650 Red Tide Spectrometers. From the website, the spectrometers have a resolution of approximately $2nm$ using the full-width at half-max approach.

OceanView Software

The oceanview software has some basic features worth exploring. To start, it can print to a printer and copy the data to the computer's clipboard to export into Excel. Furthermore, it allows one to zoom in on portions of the spectrum and autoscale.

Warning: These spectrometers saturate (cut off) whenever the signal is larger than 3500 counts (photons per integration time). In order to have sensible data, the data must be small enough that the peaks don't saturate the spectrometer (in the range you're looking at)

OceanView Activation issues

The itap computers will take everyone signing in as separate users - So each student will have to use the "free trial" version, but since the lab is only 3 weeks, the 14 day trial is plenty for our purposes in this lab. To access the software, open the program, when asked about registration click "cancel," then on the next screen click "quick view."