Day 3

- Platforms
- Biological sensors
- Chemical sensors
Bio (optical) instruments

- Fluorometers
- Transmissometers
- Backscatter sensors
- Absorption meters
- Radiance sensors
- Irradiance sensors
- Fast repetition rate fluorometer (bacteria)
- Molecular probes
Figure 2. (Above) The UCSB BLOOMS-II mooring package included sensors for determination of optical backscattering, chlorophyll fluorescence, downwelling irradiance (4 wavelengths), and upwelling radiance (4 wavelengths). (Upper right) The WET Labs backscattering and fluorescence sensors incorporated newly designed anti-fouling shutters developed for this project (Lower left). UCSB engineers developed an external shutter module for incorporation with the Satlantic downwelling and upwelling optical sensors.
Figure 3. Fouling remains one of the foremost challenges in deploying instruments over longer time periods. The above photographs show the UCSB/WET Labs’ optical packages after a 4-month deployment. Note that while the instrument packages are heavily fouled, optical surfaces remained in tact.