1. Upon recovery of the mooring, the DFLS is recalibrated against pure water and 0.2 micron filtered seawater to check for instrument drift and for biofouling of the optical face. If significant instrument drift or biofouling is detected, a linear correction is applied to the temporal data to account for these effects based on the pre- and post-calibrations against the phytoplankton dilutions.
2. The fluorometric chlorophyll concentration values are compared to Morel's chlorophyll estimates using $K_d(z,\lambda)$ values calculated from the downwelling irradiance data (see above). Comparisons are only made between the average night time fluorometric chlorophyll data and the day time $K_d(z,\lambda)$ values in order to minimize the influence of fluorescence quenching of the fluorometric data. Note that in many of the GoMOOS mooring locations, the surface fluorometric chlorophyll data time series show a strong diurnal response, with high chlorophyll values at night and the lowest values at local noon due to fluorescence quenching.

Quality Control

1. The data are inspected to ensure that all values fall between minimum and maximum limits derived from the DFLS calibrations. Any data point that is outside of these limits is flagged as questionable data.
2. The entire raw data set of chlorophyll fluorometric data is analyzed after recovery of the mooring and corrections are applied based on the pre- and post-calibrations of the DFLS sensor.

3.7 RECORDKEEPING AND DATA ARCHIVAL

Logs and supporting documentation

The configuration of a mooring or drifter design and instrumentation can change continuously due to various upgrades between deployments. Therefore, concise documentation of deployment, maintenance, recovery and any changes to instruments should be clearly recorded in both hard and soft copy format. Serial numbers should be issued to each part of a mooring or drifter to determine the life span of the hardware from eventual corrosion. Instrument serial numbers and calibration files must also be carefully documented and stored. Examples of deployment reports for respective projects covered in this chapter can be found at

- MOOS: http://www.mbari.org/bog/MOOS/mooringlog.html
- TAO/TRITON (optical platforms only): http://bog.shore.mbari.org/~bog/eqpac_log.txt
- BTM: http://www.opl.ucsb.edu
- HOT: http://hahana.soest.hawaii.edu/hot/hale-aloha/instruments.html
- OSU Drifters and moorings: http://picasso.coas.oregonstate.edu/ORSOO
- GoMOOS: http://gyre.umeoce.maine.edu/GoMoos/gominfo.php

Data Archival

Data archiving and methods also vary with projects. For example, MBARI maintains an extensive mooring data archive in NetCDF format. All of the data from high frequency raw to averaged quality controlled data is stored in internal databases. Data access to the public is limited to the quality controlled data. The various projects described in this chapter offer websites with limited access to there respective data as follows

- MOOS: http://www.mbari.org/oasis/
- TAO/TRITON: http://www.pmel.noaa.gov/tao/jsdisplay/
- PIRATA: http://www.pmel.noaa.gov/tao/data_deliv/deliv-pir.html
- EQPAC: http://bog.shore.mbari.org/~bog/oasis.html
- BTM: http://www.opl.ucsb.edu