



Validation of Ferrybox Observations and Comparison between Ferrybox Ferries

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The annual Alg@line ferrybox instrument calibration is carried out annually in January in Finnish Environment institute (SYKE). The chlorophyll and phycocyanin fluorometers are calibrated with algae cultures. All sensors are compared also with each other. Fluorometer readings are validated against water sample analysis in laboratory biweekly during the year. This validation step using water samples is necessary due to different optical properties of phytoplankton species. When calibration and validation are carried out with similar protocols, there is a possibility to compare the ferrybox observations in the same area by different ferries. The Ferryboxes operating in the Central Baltic occasionally occur in the same area within the 24 hours. Spatiotemporal comparisons of chlorophyll fluorescence, temperature and salinity observations are demonstrated.