

CDOM Analysis in Water Science

Purpose: Develop community methods for fluorescence analysis of natural CDOM

Outcome: Publication of recommendations

Conveners: Andy Baker and Paula Coble

Program Committee:

- **Calibration** – George Aiken, Diane McKnight, and group
- **Data Analysis** – Colin Stedmon
- **Matrix effects** – Rob Spencer
- **Standards** – Jennifer Boehme

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Community Intercomparison Activity

George Aiken and Diane McKnight

- Summer 2007
- EEMs, abs, spectral slope, other parameters
- Natural fulvic acid isolates
- Fluorescence standards
- Unconcentrated natural water samples from various freshwater and marine environments
- Dissolved Organic Carbon



Community Intercomparison Activity

Absorbance:

- Absorbance data 240-700
- Spectral slope values (300-650), (300-650), (350-440), (350-412), (280-350), (280-312)
- Absorption coefficients at 250, 312, 350, 412, 440

Fluorescence:

- 250/450, 265/420, 265/470, 313/420, 320/414, 350/450, 350/490, 370/494
- EEM, ex 240-450 em 300-600
- Fluorescence index: ratio of emission at 470/520 at excitation 370

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