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Results of environmental multiparameter studies of sediment trap material of Lago Maggiore, Italy.

M. Sturm (1), T. Kulbe (1), P. Guilizzoni (2),), A. Lami (2), A. Marchetto (2), M. Manca (2), R. Piscia (2), L. Guzzella (3), M. Camusso (3), D. Moioli (3)

(1) EAWAG/ETH-Swiss Federal Institute of Aquatic Science and Technology, Dep.of Surface Waters (SURF), CH-8600 Dübendorf, Switzerland; (2) CNR-Istituto per lo Studio degli Ecosistemi (ISE), I-28922 Verbania Pallanza, Italy; (3) CNR- Istituto di Ricerca sulle Acque (IRSA), I-20047 Brugherio (MI), Italy. (sturm@eawag.ch)

During two hydrological cycles from October 2004 to October 2006 a complex mooring was deployed in 120 m water depth in the Bay of Pallanza, Lago Maggiore-Italy. Mooring architecture included 2 microprocessor-driven sequencing traps/TECHNICAP-PPS3/3 (water depth: 57m, 119 m), 4 integrating traps/EAWAG-130 (water depth: 57m, 72m, 97m, 117m) and 6 continuously recording T-profiler/VEMCO (water depth: 0m, 50m, 57m, 72m, 97m, 117m). Intervals of sequencing trap lasted between 7 (spring/summer) to 21 days (autumn/winter).

Position of the mooring provided information on the dynamics of autochthonous particle formation as well as of event-driven influx of (partly polluted) allochthonous particles of the nearby important tributary River Toce.

Analyses of trap material included total flux measurements, analyses of C_{org}, N_{tot}, plant pigments, diatoms, cladoceras the determination of xenobiotic organic compounds (DDTs, PCBs, HCHs, HCB) and heavy metals (Hg, Zn, Cu, Pb).

Results of high resolution sediment traps material improve our understanding of dynamics on the annual-seasonal nutrient cycle and on pollutants in the Bay of Pallanza and their impact on the ecosystem of Lago Maggiore.

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