

# Seasonal Fluctuations of Carbon Levels in a Temperate River: the Loire (France)

by

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With 8 Figures

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## Abstract

Within a general geochemical study of the Loire estuary (France), the particulate and dissolved organic carbon contents were measured during three years, covering very different hydrological and biological conditions. The analysis of pigments has enlightened the nature and the origin of the river-borne transported organic matter. Combined influences of hydrological and biological processes determine the observed time series.

Inverse - for POC levels in suspended matter - and direct - for DOC - correlations with discharge are noted: they could be a basis for simple models of organic carbon transport for this type of highly eutrophied rivers.

## 1. Introduction

Most of the estimated carbon inputs by world rivers should be periodically reevaluated on the basis of new results (SCHLESINGER & MELACK, 1981; MEYBECK, 1982, 1986).

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