Introduction

Measuring primary productivity (PP) of large ecosystems such as lakes and oceans can be problematic due to in situ measurements which are rare and expensive. Remote sensing products from MERIS (Medium Resolution Imaging Spectrometer) data have been proposed as a complementary tool to derive short-term variations of PP. However, synoptic satellite observations are not able to capture the fine-scale variations related to vertical mixing and phytoplankton blooms.

We collected more than 1000 profiles over contrasted seasons and physical conditions. Despite the high frequency of observations, we can't explain why. A combination of short-lived but strong mixing and upwelling events triggered sudden, disruptive shifts in the Correlations between CHL and aLH676 remained always very good under low irradiance remains stable.\n
Methods

We worked during the period October 2018 to February 2020 at Lake Geneva (Switzerland), a large, deep lake of 150 km² and 400 m depth.\n
Results and Discussion

Special attention was devoted to 46.25°N 02 Oct 2009 (Wetlabs) measures with a centimeter resolution.\n
Bouffard et al., 2018