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Fluorescence indexes and PARAFAC components - what is the best way?

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Fluorescence indexes are used since a long time to characterize the natural fluorescent dissolved organic matter in term of humification, aromaticity, age, size. Today, lot of work uses excitation emission fluorescence matrices (EEM) to examine the FDOM. A lot of studies uses both ways of analysing FDOM, however there is no study evaluating the possible link between these indexes and the PARAFAC component (CP) decomposition. This work deal with an inter-annual study of a Croatian estuary (Krk River) were FDOM was analyzed from the river to the sea. Comparison of fluorescence indexes and CP/PARAFAC is done in the way to understand if it is more relevant to use discrete fluorescence response or CP/PARAFAC decomposition.