SNAPSHOTS OF DISCHARGE AND NUTRIENT LOADS IN THE DRAINAGE NETWORK OF THE THAU CATCHMENT DURING THE WET SEASON

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Fourteen hydrological sub-catchments of the Thau lagoon basin were selected for their relatively homogeneous characteristics (land use, land occupation, human activities). At two different stages of the wet season, 30th of November and 16th of May, the sub-catchment outlets were simultaneously sampled for water quality and gauged for discharge estimation. The water samples were measured for nitrogen (nitrate, nitrite and ammonium) and phosphorus (total phosphorus, orthophosphate) concentrations. Analysis of the surveys allows to derive the spatial distribution of water and nutrients loads over the Thau basin at the beginning and at the termination of the wet season. Comparisons of the two observed flow and contaminant spatial distributions are processed.

A statistic analysis is conducted combining the sub-catchment characteristics and the hydrology with the nutrient loads. The analysis involves regression techniques and allows to identify the basin characteristics which best explain sub-catchment nutrient exportation.