



## Satellite remote sensing for land use and flooding duration monitoring

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We show limits and potential applications of satellite images linked with agricultural and natural habitats and flooded duration problematic. Satellite images could play a major role in the study and monitoring context. When we started our satellite images collection in 1975, it allowed us to map annual variations of habitats and flooded areas. Since the year 2004, we've acquired an important quantity of Spot 5 images through a special programming (ISIS program), which cover the area during all the hydrological year. Using them, the knowledge of spatiotemporal dynamics of habitats and flooded areas, could then, be formalised in a much better way. We present results of inventory and monitoring in the Rhone delta context, South of France, an area of high wetland biodiversity in a Mediterranean catchment area. Our objective is to propose an operational methodology for inventory and monitoring of wetland habitats and wetland flooded duration. The exceptional spatial and temporal resolution sharpness is demonstrated.