



## Climatic changes and flooding durations in relation with public health

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Climatic Changes, and more generally Global Changes, play a major role in environmental modifications in relation with public health. Modifications of temperatures, precipitations... influence ecological habitats. These habitats can be adapted for some animal species, responsible of certain pandemics. Mosquitoes and birds represent for certain pandemics the essential elements of virus transmission. Abundance of mosquitoes and birds species, is heavily conditioned by flooded areas extent and specific habitats and their variations. The study we carried, has been done in South of France. We show present status of ecological habitats and flooded durations and future previsions. We reach environment impact for certain virus like West Nile virus. This virus affects bird, horse and sometimes man. Presence of the virus is conditioned by different factors, primarily including vector distribution (mosquitoes). We show how it's possible to localise favorable areas for the virus and to predict its future expansion areas. We present maps of the possibilities for future concerning previsions of bioclimatic steps variations. Thanks to the latest remote sensing and spatial analysis techniques. Our maps may be used as precious tools to help decision makers when faced with mosquito related problems.