



How to Empower Citizens with Information: 20 years of personal experience based on the use of Earth Observation

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During the last 20 years, the development of geographical information systems and satellites for Earth Observation has made important progress in the monitoring of the weather, climate, environmental and anthropogenic factors that influence the reduction or the reemergence of vector borne diseases, changes in land cover (agriculture, forest) and monitoring of natural disasters.

In this session, I will present examples of operational use of Remote Sensing that I developed to facilitate access of monitoring and forecasting products for the environmental issues mentioned above to the citizens. I will present and discuss products and challenges I had to overcome while working at the International Research Institute for Climate and Society (IRI), Columbia University, New York, USA and SPACEBEL, Liège, Belgium. Examples will encompass the development of interfaces for forecasting and monitoring vector borne diseases (e.g. development of smartphone for the Maasai communities in Tanzania), the use of Google Earth Engine to map floods and impact on populations, the development of interfaces for the citizens to record atmospheric pollution (Omniscient project), and tools to help UN FAO & Ministries of agriculture to control Desert Locusts. The presentation will discuss the different tools developed such as the IRI Data Library <http://iridl.ldeo.columbia.edu/maproom/> , Google Earth Engine, and the challenges still to overcome.