The growing impact of satellite data in daily life

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Satellite images have a growing role in our daily life. Weather previsions, telecommunications, environmental planning, disaster mitigation and monitoring: these are only some of the fieldworks where space remote sensing data, and related processing techniques, provide extremely useful information to policy/decision makers, scientists, or to the “simple” citizen.

The demonstration of the level of attention provided by the International Community to the impact of new technologies and satellite Earth Observation, in particular, onto everyday life is testified by the recent and forthcoming project calls. Horizon 2020, for instance, identified “Societal challenges” and “Science with and for Society” among the main pillars. In sub-themes we may read references to the “Environment”, “Secure societies”, “Climate changes”, and many others, most of which soliciting the use of remote sensing technologies. In such scenario the scientists should be conscious about the capabilities and the implications in applying new technologies.

Recent examples might be explanatory. Satellite data properly managed can be used to measure millimetric and/or centimetric movements of buildings and infrastructures. It has been demonstrated how long term monitoring of urban areas detecting pre-collapse deformations might provide useful hints to prevent such dramatic events. Or, in different frameworks, satellite data can be an advanced instrument for intelligence and military purposes. With such premises, ethic issues assume a key role to properly address the use of satellite technologies.