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The space economy: what are the socio-economic impacts? (3)

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A STUDY ON METHODS FOR ASSESSMENT OF THE IMPACT OF SATELLITE OBSERVATIONS
ON ENVIRONMENTAL POLICY**Abstract**

The goal of this research is to develop a method for quantitative assessment of the impact of satellite Earth observations on environmental policy. For this purpose, as an initial case study the protection of the ozone layer is taken up to analyze the different phases and process where satellite observations might have had an impact, and to track if and how satellite data has produced such an impact. The method chosen for this is to use an algorithm to search relevant keywords from existing documentation, in relation to the managerial model of international regimes. Satellite observations constitute critical input to understand the Earth system works and how its many natural and social components interact. Natural scientists have been proposing such satellite observations, and achieving the knowledge on the Earth system. While as such, satellite observations is expected to contribute to enhancing the effectiveness of environmental policy, to date there has been little study on whether this expectation has been met or not. Therefore our research target is to perform an objective and quantitative assessment of the impact of satellite observations on environmental policy, and at the end of this three-year research project to propose a mission possibly on atmospheric observations and human health that would achieve an “innovation cycle”, where the assessment would feed back to new innovation for the next generation observation technology, thus contributing to the global policy demand.