

Topics (T)

An Outer Space Perspective on Climate Change (Space Law and Policy) (5)

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THE CONTRIBUTION OF SATELLITE DATA TO LOCAL AUTHORITIES' CLIMATE ACTION PLANS

Abstract

This paper looks at how satellite data can be used by local authorities and cities more specifically in order to improve the delivery of pre-existing public services or unlock new policies. We begin with a brief recall of the main use cases unlocked by satellite-based data in the fields of Earth Observation (EO), Navigation (GNSS) and satellite communications including Internet of Things (IoT) for local authorities. Local authorities are defined as the political authorities that oversee policy planning and management and include municipalities, greater metropolitan areas or regions to name the most prominent examples. We then focus on the climate-specific applications of satellite data that are developed by local authorities by looking not only at the increased number of climate action plans being developed but looking also at how satellite data enables urban development that are more sustainable and aligned with climate-friendly priorities. Examples include the applications developed by the Space for Climate Observatory (SCO) and the several use cases developed in French local authorities, but also explore global examples in the United States, Latin America and Asia. Use cases are benchmarked to their non-space alternatives to highlight their respective added value while barriers to adoption and key enablers are identified from a technical, economic, and political perspective. This allows us to close this article by a series of recommendations on how to encourage local authorities to leverage space data in support of their climate action plans.