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FULFILLING THE POTENTIAL OF SMART CITIES BY HARNESSING SPACE DATA

**Abstract**

In this paper, I argue that Space remains under-utilized when it comes to fulfilling the potential of Smart Cities around the globe. In 2019, Paris was struck by a gaz explosion of the Rue de Trévisé caused by a ground subsidence. Such an incident could have been avoided by recourse to EO SAR data and commercial services are starting to emerge in metropolis and cities. Yet, public officials seem largely unaware of existing solutions. The objective of this paper is to shed light on new opportunities offered by space assets and space data in creating safer, cleaner and more citizen-friendly urban developments. I start by looking at several use cases for space-based data services, focusing on Earth Observation but also briefly mentioning Navigation and Communications data for the development of Smart Cities at global level, focusing on concrete policy-level applications. Indeed, EO data can be used to support decision-making when it comes to urban planning, to understanding where to place solar-panels with optimal sun exposure and energy generation to name just a few of the potential use cases. I then focus more specifically on the Paris Rue de Trévisé incident in order to highlight how the City hosting the 2022 edition of the IAC could concretely benefit from space data in monitoring urban pipe networks in the future, among other benefits. I finish by providing a set of recommendations on how Metropolis and Cities could implement policy-oriented actions that leverage space assets.