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2014-2024, THE GOOD OLD DAYS IN NEW SPACE: FACTS AND FIGURES, LESSONS LEARNT AND NEW TRENDS IN EARTH OBSERVATION

Abstract

Between teenage crisis and age of reason, new space is now getting older: this paper reports a study on the fulfilment of the promises of New Space entrepreneurs in Earth Observation, its impact on commercial imagery market and a discussion of future evolution.

The first new space initiatives in Earth Observation are certainly Planet and Skybox Imaging. Ten years after the launch of the first SkySat satellite and the acquisition of Skybox Imaging by Google, before its cession to Planet, it is time for an assessment of New Space actual achievements in Earth Observation.

The focus on a specific segment (commercial imagery) is deliberate. First, it allows an in-depth analysis intependantly of the big elephant in the room: the massive communication constellations. The second interest is to target a market sector where the new space expectations was to unleash a wealth of commercial applications and reach new customers. It allows to compare the rise of the new space actors with the situation of the usual suspects, i.e. the large commercial EO data providers and the overall impact on the ecosystem.

The study is mainly built on the analysis of OSINT (open-source intelligence) data sources over 10+ years (2014-2024), combining information on launches and deployed satellites (mass, orbit, mission, owner, country), cross-referenced with economic, financial and market data. All main actors worldwide are reviewed: large legacy players, new commercial companies, institutional organisations and new spacefairing nations investing in sovereign remote sensing means with possible impacts on the size of the market. Pure service players are not included.

After a presentation of the methodology, the data sources and their limitations (e.g. lack of public data on revenues and orders), the main sections of this paper summarise the facts, figures and evidence derived from these data sets. The first one provides an analysis of the deployment in orbit of the new satellites. The second part addresses economic, financial and market figures over the same period.

Based on these findings, the discussion covers several topics: the achievements of the emerging actors and, when applicable, the evolution of their strategy (e.g. pivot) and, from an organisation ecology perspective, their actual impact on the EO value chain, on market evolution and on the other players, including strategic partnerships and acquisitions.

The last part proposes a more prospective view, with possible scenarios for the future. It highlights links with national and sovereignty issues or defence geospatial policies.