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Is Space R&D Truly Fostering A Better World For Our Future? (2)

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GLOBAL HEALTH OUTCOMES THROUGH SPACE APPLICATIONS

Abstract

The present economy primarily makes use of space-based communication services in servicing the health sector. This scenario is mostly in the use of routine communication technologies, and also has essential applications in addressing issues of telemedicine and disaster medicine. Earth observation data is also used to assist public health data collection and campaigns. Space-based applications are well placed to reduce further the health inequities surrounding access to healthcare, both as a result of geography and resource availability. Earth observation satellites are increasingly capable of providing high visual and temporal resolution data that can hope to serve health issues related to demographics, the migration of people, climate change, and the vectors of infectious disease. Space-based life sciences also offer essential medical research into widely prevalent and incident conditions. Non-space actors can engage these solutions by using the available services and data. Possible challenges that may be faced are incomplete access to communication satellites that prevents the establishment of crucial telecommunication networks in rural and remote areas, and the inconsistency and lack of cooperation amongst providers of Earth observation services in the types of data collected. This work tries to show the frameworks that can be developed to help global health; through the aggregation of different service-based and data resources, and the distillation of global health issues into goals that these resources can appropriately address. This process can achieve international collaboration by broadening the criteria for access to data, by encouraging the advancement of relevant technology, and by helping new space leaders to prioritize practical cooperation in the face of global issues. Non-space actors should work together by defining clear aims in the use of space-based communication and Earth observation data. By outlining global health goals with distinct indicators of performance, the use and access to such resources will be made more efficient.