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NICFI SATELLITE DATA PROGRAM - LESSONS LEARNED FROM THE USER COMMUNITY IN $2020\mbox{-}2024$

Abstract

In September 2020, Norway's Ministry of Climate and Environment awarded a consortium of commercial satellite imagery providers, Kongsberg Satellite Services with partners Planet and Airbus, a contract to open comprehensive access to high-resolution satellite monitoring of the tropics to help reduce and reverse tropical forest loss. Through Norway's International Climate Forests Initiative (NICFI) anyone can access Planet's high-resolution, analysis-ready mosaics, in pursuit of the program's purpose to help reduce and reverse the loss of tropical forests, combat climate change, conserve biodiversity, and facilitate sustainable development.

This study assesses the outcomes of the program in reducing deforestation through spatial and survey-based analysis. By examining the more than 5,000 use cases compiled from over 2,000 users across 129 countries, and correlating this data with geographic region and satellite image footprints, we aim to identify patterns and insights. We analyze the distribution of use cases by region, survey participation trends by country, and the temporal distribution of user stories to understand the demand for satellite imagery, regional engagement levels, and program impact over time. Using statistical techniques, the relationships between these factors and the footprints of satellite images is quantified to pinpoint areas of high demand, engagement, and impact.

This research offers an in-depth analysis from an innovative public-private partnership, advancing a blueprint for the deployment of high-resolution satellite data as a digital public good at scale, to users from a variety of industries, geographies, and problem areas, from all over the world.

The lessons learned from the NICFI Satellite Data Program's user community between 2020 and 2024 provide valuable insights for decision-making and resource allocation for future similar initiatives that aim to advance the UN Sustainable Development Goals.