



Through the use of Google Earth Engine (GEE), PlanetWatchers improves crop monitoring and analysis services for the North American crop insurance industry.

THE CHALLENGE

Crop insurance is a critical component of the agriculture sector in North America, protecting producers and ensuring food supply chain stability. Providing accurate data collection and validation are some of the unique challenges crop insurance providers face. To improve these issues, PlanetWatchers partnered with Woolpert Digital Innovations to curate a remote sensing technology powered by Google Earth Engine.

Benefits



Access to accurate and scalable datasets



Achieves 14% more accuracy than manual data collection



Helps crop insurers save 40-75% of their time processing a claim

WORKING WITH WOOLPERT

PlanetWatchers has worked with Google Earth Engine since the beginning. It was essential for the team to find a partner that could provide assistance and expertise. Ori Elkin, Head of Product and Engineering at PlanetWatchers explained, "Google Earth Engine is an integral part of our business; we can't exist without it. We needed Woolpert Digital Innovations' guidance to produce accurate results in a timely and cost-efficient way."

THE SOLUTION

With the help of Google Earth Engine, PlanetWatchers built an industry-leading remote sensing platform all in one place. Their technology uses a data fusion of synthetic aperture radar (SAR) optical imagery and machine learning algorithms to detect and monitor crop planting, growth, harvest, and identify damage. Elkin said, "With Google Earth Engine, it's easy to integrate many data sources, manipulate data, and manage your code all under one roof. There is no other tool we could use to help us prototype a variety of solutions. We found that it would take 70-80% more effort to do what Google Earth Engine could do in comparison to other tools."

PlanetWatchers can deliver actionable information to crop insurance companies so they can be better equipped to assess risk, monitor crop progress, and respond quickly to crop damage events. According to Elkin, "PlanetWatchers' range of insurance claims services helps crop insurers save 40%-75% of the time spent processing a claim." Google Earth Engine allows PlanetWatchers to capture a series of agricultural satellite imagery, giving visibility and saving time. Through this technology, PlanetWatchers can enhance crop insurers' visibility of crops progress, such as planting dates, number of acres planted, and the type of crop in the field.

"Google Earth Engine's scalable and cloud-based technology helps us build reliable outputs, cutting-edge solutions, and long-term partnerships with crop insurers in a reliable and interactive way."

- Ori Elkin, Head of Product and Engineering at PlanetWatchers

Contact Us

Want more information?

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