

Beyond Sentinel-2 with the UrtheDaily Constellation for Agriculture Monitoring

Mr. Roberto Fabrizi

Deimos Imaging, an UrtheCast Company

Deimos Imaging, a subsidiary of UrtheCast, is one of the world leading satellite imagery providers. It owns and operates, through a 24/7 service, the Deimos-1 and Deimos-2 satellites, and it processes and distributes imagery data and value-added products on behalf of the PanGeo Alliance, a global network formed by seven satellite operators with 13 medium- and high-resolution EO sensors that assure multiple revisits per day over any target. Through Kanvas, UrtheCast's new imagery service in ArcGIS, all Esri users can access timely, reliable and quality assured imagery, directly into their apps and desktops.

UrtheCast is currently developing UrtheDaily™, an eight-satellite constellation designed to acquire scientific-quality multispectral imagery of the entire Earth's landmass, at 5-m GSD, every day at 10:30 am local time. Optimized for agricultural and change detection applications, the system enables powerful geospatial capabilities that will provide enhanced value to the agriculture industry. High-frequency and high-quality data will be pipelined directly on the cloud within few hours from acquisition.

The spectral bands of UrtheDaily™ are specifically designed to match Sentinel-2 bands, easing the constant and automatic in-flight cross-calibration with trusted references and minimizing the effects of atmospheric variations, providing improved accuracy of key information products. Following UrtheCast's long-time legacy successfully using Deimos-1 and Theia in the agricultural domain, UrtheDaily™ will be the natural evolution of this system, bringing unprecedented and disruptive services to this industry. Additionally, UrtheCast has worked with geospatial companies around the world to define and refine the data specifications required to ensure success for analytics partners.