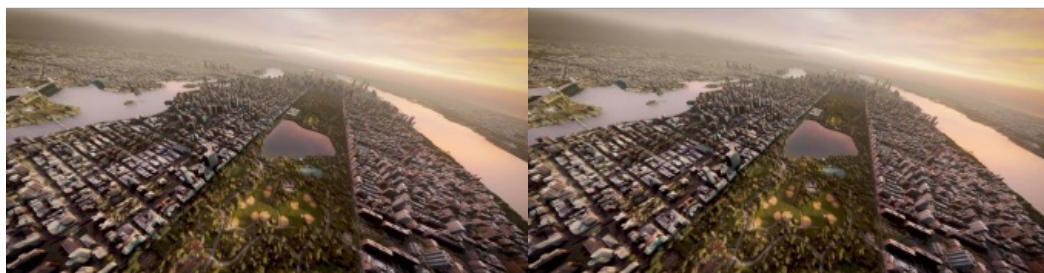# Maxar to provide highly accurate 3D data in NGA partnership

Maxar Intelligence has been awarded a contract to supply the National Geospatial-Intelligence Agency (NGA) with a Precision3D Data Suite bundle. This comprehensive package covers an extensive area of 160,000 square kilometres within the US Indo-Pacific Command's area of responsibility. Maxar is a widely acknowledged provider of secure and precise geospatial intelligence.

The commercial 3D data provided by Maxar will support the work of NGA's Office of Geomatics, which maintains accurate 3D GEOINT products in support of a diverse group of military and civilian customers.

Maxar's Precision3D Data Suite is built using multiview photogrammetry methods, resulting in highly accurate and detailed 3D models with 50cm resolution and absolute accuracy of 3m in all dimensions. The accuracy is achieved without ground control and is consistent on all surfaces and terrain types, including building facades.

Precision3D data enhances situational awareness and decision-making, providing a precise, true representation of Earth that not only reflects the terrain in all dimensions but also provides an accurate foundation for additional data sources through Precision3D Registration (P3DR).

Digital surface model and true ortho geodata

Under the contract, Maxar will provide several products to NGA. Maxar's most accurate representation of Earth is the Precision3D Surface Model. This model is a 3D triangulated irregular network (TIN) with textures on all sides, available in Open Geospatial Standard (OGC) formats, including Cesium 3D Tiles and Esri i3S. Another product is the Precision3D Digital Surface Model (DSM), a global digital surface model derived from the Precision3D Surface Model. It offers 50cm-resolution elevation data, representing every single point on Earth.

The Precision3D product line includes the Precision3D Predicted Accuracy Data, which is a metadata layer allowing exploitation tools to predict horizontal and vertical accuracies at each location in the Precision3D Digital Surface Model. Predicted accuracy data is provided in standard Generic Point-Cloud Model version 1.1 (GPM 1.1) format. Finally, Maxar provides Precision3D True Ortho geodata, which is accurate, high-resolution orthoimagery without parallax or occlusion.

"Maxar Intelligence is proud to have secured this award to provide the NGA with commercial 3D data, which speaks to the NGA's strong partnership with industry and the growing business case for utilizing unclassified, high-quality commercial geospatial data to support national security needs," said Susanne Hake, general manager, US Government, Maxar Intelligence. "Precision3D data enhances situational awareness and decision-making, providing a precise, geospatially accurate representation of Earth that not only reflects the terrain in all dimensions but also provides an accurate foundation for additional data sources through georegistration."

Maxar Precision3D imagery of New York City. (Image courtesy: Maxar)

https://www.gim-international.com/content/news/maxar-to-provide-highly-accurate-3d-data-in-nga-partnership