



Geospatial Data Analysis Corporation

*"Monitoring the World, For a Better Tomorrow"*

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## **GDA Continues to Provide Global Agricultural Intelligence Services to USDA Foreign Agricultural Service**

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*Geospatial Data Analysis Corporation (GDA), a leader in satellite-based agricultural and environmental intelligence gathering, analysis and distribution, is pleased to announce a new, multi-year contract award with the USDA Foreign Agricultural Service (FAS), Office of Global Analysis (OGA), International Production Assessment Division (IPAD).*

**Geospatial Data Analysis Corporation (GDA)**, a leader in satellite-based agricultural and environmental intelligence gathering, analysis and distribution, is pleased to announce a new, multi-year contract award with the USDA Foreign Agricultural Service (FAS), Office of Global Analysis (OGA), International Production Assessment Division (IPAD).

USDA FAS/OGA/IPAD is responsible for global crop condition assessments and estimates of area, yield, and production, especially for grains, oilseeds, and cotton. IPAD's primary mission is to target, collect, analyze, and disseminate to the U.S. Government, U.S. agribusiness and the public most objective, timely, useful, cost-effective, and reliable global crop condition and agricultural market intelligence information.

The contract continues and expands a successful long term relationship between the USDA and GDA. GDA President, Dr. Stephanie Hulina, stated "we are honored to be selected once again to continue our work for IPAD. GDA is uniquely positioned to supply remote sensing inputs to IPAD's convergence of evidence methodologies and to support the IPAD mission to provide unbiased commodity estimates to create a marketing edge for U.S. producers in world markets. We have been continually developing a science-based program in agricultural remote sensing and analysis over the last decade while further evolving our technology to be truly operational, web interactive and transparent to our clients."

Via this USDA SBIR Phase III award, GDA will be continuing to provide to USDA's IPAD subscription-level services of both GeoSynergy and CropSignal web applications, global monthly crop yield forecasts and crop condition assessments, in-season regional crop maps, as well as NRT satellite image processing products for regional crop travel and analysis, disaster response, and special studies.

### **CropSignal® Web Service**

GDA CropSignal® web service is an operational, interactive agricultural intelligence web service supporting the analysis of global national and sub-national crop statistics and crop relevant data, crop condition assessments, yield forecasting, data modeling, and better decisions.

CropSignal® provides USDA FAS with an unprecedented combination of data from a multitude of most credible international and national sources available in one easy to use, online application. CropSignal® comprehensive, hierarchical and synchronized database combines crop statistics, crop progress, crop condition, weather and other crop relevant data sources and links them to standardized location and crop classification schemas.

CropSignal® features state-of-the-art analytical tools, a highly interactive environment, and customizable user interface for the easiest search, display, and analysis of the data. CropSignal® powerful query, filtering and visualization tools allow crop analysts to personalize the data, to perform high-level analysis, to set up and share dashboards, alerts, RSS feeds, web bookmarks, and an online calendars tailored to the users' topics of interest. CropSignal® further offers access to a rich array of reports, charts, tables, and maps; personalized dashboard views of data that are not only interactive but also automatically updated; customizable data update alerts to ensure 24/7 crop intelligence monitoring; access to external reports, web pages and feeds via CropSignal®; data modeling; GDA interactive crop yield, area, and production forecasts for USDA FAS; and much more.

## GeoSynergy® WebGIS Service

GDA GeoSynergy® webGIS service is an operational, interactive web platform offering rich and easy-to-use set of spatial data, tools, and capabilities in support of local-to-global visualization, monitoring, analysis, and collaboration for enhanced and simplified decision making. GeoSynergy® offers a state-of-the-art, transparent, and reliable source of detailed, historical and most current data and tools for monitoring and analysis of local-to-global land cover, agriculture, and weather.

GeoSynergy® provides access to NRT and historical global imagery from moderate, medium, and high resolution satellite sensors. Imagery offerings include MODIS Terra and Aqua imagery, MODIS NDVI, MODIS Land Surface Temperature (LST), Landsat 5/7/8, Landsat-class imagery from USDA SIA and INPE (Brazil), and more. Satellite imagery is updated a few times a day and is provided in a true GIS format at full, native resolution. All Landsat-class imagery contains all multi-spectral bands. Landsat-class imagery is orthorectified, surface reflectance calibrated, and added to GeoSynergy within 24 hours of imagery release by the source. GeoSynergy® further offers maps depicting global crop statistics at national and sub-national levels from a multitude of most credible sources available, ancillary global and regional land cover and crop type maps, real-time and historical satellite and WMO based weather maps, other agriculture relevant data.

GeoSynergy® provides USDA/FAS with timely access to GDA global analytical products, including (among others) GDA in-season land cover and crop type maps; crop disaster maps; weekly crop progress and condition maps; monthly yield assessments; and 16-day mosaics of Landsat-class imagery.

Using GeoSynergy® Tools, USDA FAS crop analysts interactively mosaic and analyze surface reflectance calibrated Landsat, Landsat-class, and MODIS imagery; in real-time monitor and map crops and land cover; calculate crop acreage statistics; analyze crop progress and conditions; model crop yield and acreage; monitor changes over time; and perform data masking, time series analysis, and charting.

## Value Added Data Products

GDA will provide USDA FAS/IPAD with value-added data products derived from medium and high resolution satellite imagery. GDA maintains an operational end-to-end processing system for massive volume image processing, and delivers rapid, 24 hours turn around products such as orthorectification, true surface reflection calibration, indices calculation, cloud and shadow assessments, crop type and flood maps to crop analysts to support their regional efforts. GDA will perform operational, on schedule delivery of calibrated Landsat / Landsat-class imagery and regional gap filled mosaics of Landsat-class imagery for all international areas of IPAD concern. GDA will deliver in-season crop maps for predefined regions. Further GDA will provide support for special events such as targeted crop field travel, floods, droughts and other natural events.

## About GDA Corp

Established in 2002, GDA is a woman-owned small business (WOSB) that provides geospatial information products and services from the majority of commercial and public Remote Sensing platforms and aids clients with their geospatial work in the agricultural, resource management, and intelligence domains, to name just a few. GDA proudly serves USDA FAS for the last 8 years.

GDA's Product/Service focus is in four primary areas: (i) automated, operational image pre-processing, processing, and analysis, (ii) Remote Sensing-based agricultural intelligence detailing crop conditions, crop yield, crop maps and acreage estimates at sub-national levels for major agricultural areas across the globe, (iii) regional land cover and processes monitoring and mapping, and (iv) interactive spatial analytical web processing and online geospatial services. GDA has invested years of R&D which are backed by several U.S. Federal Small Business Innovative Research (SBIR) awards.

*To learn more about GDA and GDA products and services please visit our corporate website at [www.GDAcorp.com](http://www.GDAcorp.com) or contact Dr. Stephanie Hulina ([stephanie@gdacorp.com](mailto:stephanie@gdacorp.com)).*

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