



GEOGLAM
Global Agricultural Monitoring

Crop Assessment Tool Quick Start Guide

March 2015

University of Maryland

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Contents

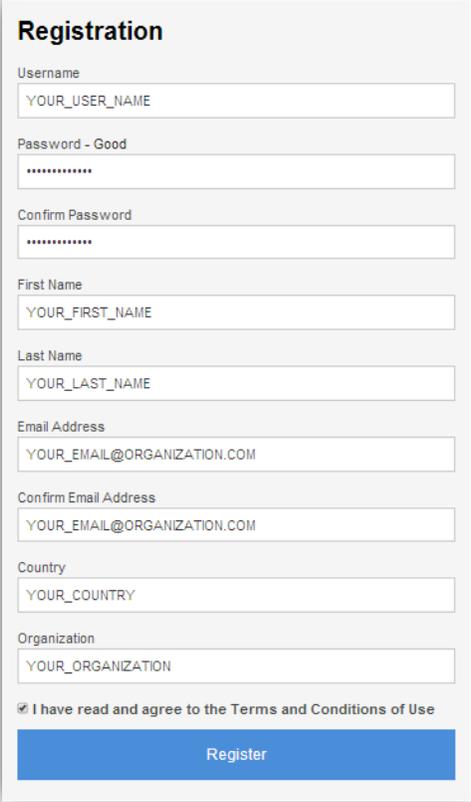
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About the Crop Assessment Tool

The Crop Assessment Tool is developed and maintained to facilitate the GEOGLAM Crop Assessments. The purpose of this tool is to offer an interactive interface to compare time series products and allow annotation of data sets provided by the Crop Monitor Group. There are two different mapping views: a single view and a swipe view. The Crop Assessment Tool also provides registered partners with two methods for providing feedback on crop conditions: a map-based view and a table-based view. Feedback should reflect the overall conditions of the crop as at the time of reporting. For more information on how to register for the map, please contact us.

Registration and Login

All users are required to register with the GEOGLAM Crop Assessment Tool before using the interface. The registration page is located at <http://geoglam-crop-monitor.org/crop/registration.php>. All fields are required to complete registration and Terms and Conditions of Use must be read and agreed to.



The registration form is titled "Registration" and contains the following fields and options:

- Username:** Text input field with placeholder "YOUR_USER_NAME".
- Password - Good:** Password input field with masked characters "*****".
- Confirm Password:** Password input field with masked characters "*****".
- First Name:** Text input field with placeholder "YOUR_FIRST_NAME".
- Last Name:** Text input field with placeholder "YOUR_LAST_NAME".
- Email Address:** Text input field with placeholder "YOUR_EMAIL@ORGANIZATION.COM".
- Confirm Email Address:** Text input field with placeholder "YOUR_EMAIL@ORGANIZATION.COM".
- Country:** Text input field with placeholder "YOUR_COUNTRY".
- Organization:** Text input field with placeholder "YOUR_ORGANIZATION".
- I have read and agree to the Terms and Conditions of Use
- Register:** A blue button to submit the registration form.

Once your account registration has been confirmed, login to the Crop Assessment Tool at <http://geoglam-crop-monitor.org/crop/> or click “Login” on the Crop Assessment Tool page. You may need to check your “Spam” folder to find the registration confirmation email.



The form contains two buttons:

- Login:** An orange button.
- Register:** A blue button.

Dashboard

The dashboard home page located at <http://geoglam-crop-monitor.org/crop/dashboard.php> is the home page for all users. From the dashboard shown below (left to right), users can view the map,

complete monthly crop outlook assessments, view past GEOGLAM Crop Monitor reports, and change their personal account settings. Each of these features is described in the following sections. To return to the main homepage, click on the GEOGLAM logo in the upper left-hand corner of the menu bar.



Settings

Before completing Crop Assessments using the Monthly Assessments page, users must first select the countries to be evaluated. The settings page located on <http://geoglam-crop-monitor.org/crop/settings.php> allows users to select the countries to be completed for monthly crop outlook assessments and select specific crops for analysis. Users account information will be displayed on the left hand panel under Account Information. An option to set monthly e-mail reminders is also available.

Regions for Monthly Crop Outlook Assessments

User countries must be set using the Country Selection panel on the settings page. The available AMIS countries are displayed on the left side of the Country Selection panel, while the user's countries are displayed on the right side of the panel. All available countries are displayed by their regions.

The screenshot displays the 'Settings' page of the Geoglam Crop Monitor. The page is divided into several sections:

- Account Information:** Includes input fields for First Name, Last Name, Email Address, Country, and Organization. A checkbox labeled 'Receive Crop Monitor Email' is checked.
- Country Selection:** A central panel with two columns: 'Available Countries' and 'Selected Countries'. The 'Available Countries' list is grouped by region: Africa & Middle East (Egypt, Nigeria, Saudi Arabia), Asia Pacific (Australia, Japan, Korea, Philippines, Republic of Korea), Central Asia (Bangladesh, India, Kazakhstan, Pakistan), and Eastern Europe (Russian Federation). The 'Selected Countries' list includes: Africa & Middle East (South Africa, Turkey), Asia Pacific (China, Indonesia, Thailand, Viet Nam), and North America (United States of America). A blue highlight is visible on 'China' in the Selected Countries list.
- Selected Crops:** Four columns of crop selection options, each with a checkbox:
 - Wheat:** Spring Wheat, Winter Wheat
 - Soybean:** Soybean 1, Soybean 2
 - Rice:** Rice 1, Rice 2, Rice 3, Rice 4, Rice 5
 - Maize:** Maize 1, Maize 2

A 'Submit Changes' button is located in the top right corner of the settings area.

To *add a country* to “Selected Countries”, navigate to the country or region group desired in the left panel. *Click* on the country or region group to add the entry to “Selected Countries”. To *remove entries*, click on the country you wish to remove in the “Selected Countries” in the right panel. Click “Submit Changes” in the upper right hand corner to save any changes made.

Crops for Monthly Crop Outlook Assessments

User-specific crops are set through the Selected Crops panel on the settings page. The available crops are displayed in four categories: Wheat, Soybean, Rice, and Maize. Select the desired crops by checking the boxes next to each crop. Click “Submit Changes” in the upper right hand corner to save any changes made.

The screenshot displays the 'Settings' page with a blue navigation bar at the top containing 'Dashboard', 'Map', 'Monthly Assessment', 'Archive', 'Settings', and 'Logout'. A 'Submit Changes' button is located in the top right corner of the settings area.

Account Information

First Name:
Last Name:
Email Address:
Country:
Organization:
 Receive Crop Monitor Email

Country Selection

Available Countries

- Africa & Middle East
- Egypt
- Nigeria
- Saudi Arabia
- Asia Pacific
- Australia
- Japan
- Korea
- Philippines
- Republic of Korea
- Central Asia
- Bangladesh
- India
- Kazakhstan
- Pakistan
- Eastern Europe
- Russian Federation

Selected Countries

- Africa & Middle East
- South Africa
- Turkey
- Asia Pacific
- China**
- Indonesia
- Thailand
- Viet Nam
- North America
- United States of America

Selected Crops

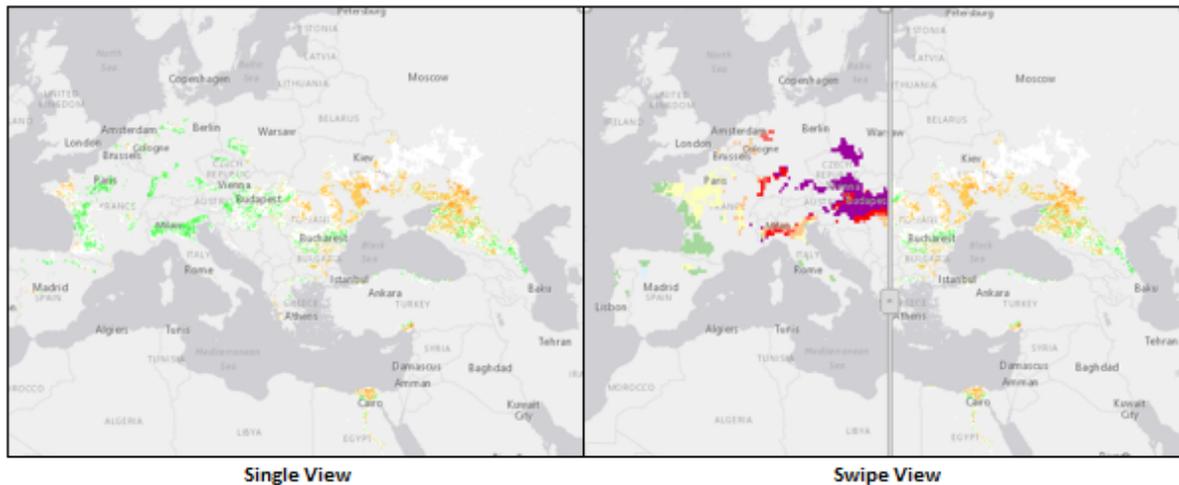
Wheat	Soybean	Rice	Maize
<input type="checkbox"/> Spring Wheat	<input checked="" type="checkbox"/> Soybean 1	<input checked="" type="checkbox"/> Rice 1	<input type="checkbox"/> Maize 1
<input type="checkbox"/> Winter Wheat	<input type="checkbox"/> Soybean 2	<input checked="" type="checkbox"/> Rice 2	<input type="checkbox"/> Maize 2
		<input type="checkbox"/> Rice 3	
		<input type="checkbox"/> Rice 4	
		<input type="checkbox"/> Rice 5	

E-mail Reminders

To set e-mail reminders, check the box next to “Receive Crop Monitor Email” beneath Account Information. To opt out of e-mail reminders, uncheck the box next to “Receive Crop Monitor Email”. Click “Submit Changes” in the upper right hand corner to save any changes made. As of March, 2015 this feature has not yet been implemented.

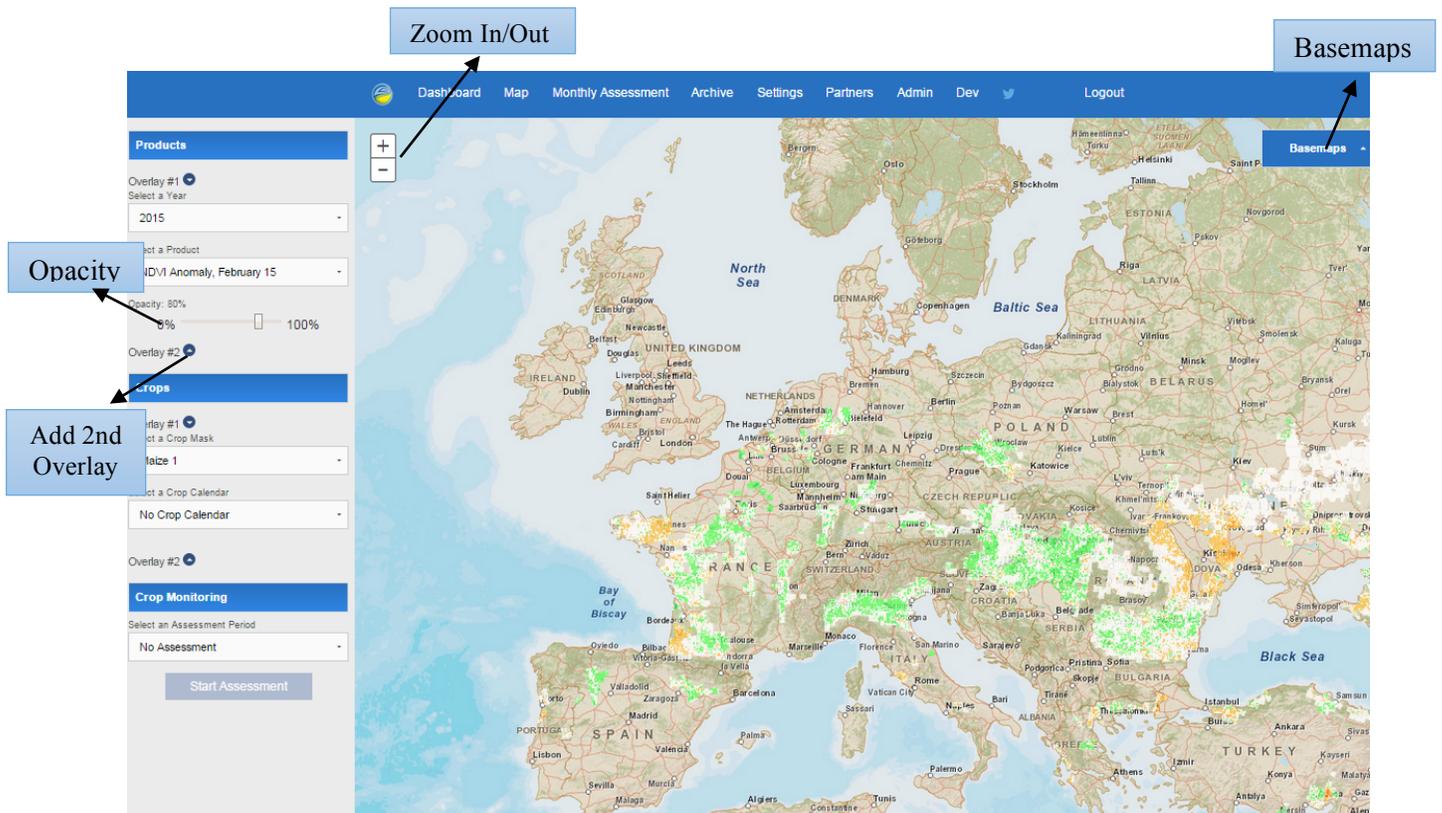
Viewing Products on the Map

All registered users may access data products submitted to the GEOGLAM Crop Monitor on the Crop Assessment Tool map located at <http://geoglam-crop-monitor.org/crop/map.php> or by selecting “Map” from the dashboard menu. Satellite derived products are updated monthly. Users with partner level access may also view the monthly crop outlook assessments as a layer on the map, described in the next section. The map provides two different views to show one product (single view) or two products for quick comparison (swipe view).



Zoom In/Out: To zoom in on a section of the map, click the + button at the top left of the map. To zoom out, click on the – button.

Base maps: To change the base maps, click on the blue base map button on the right hand side of the map. All of the available base maps will appear.



Each product may be viewed using one of the four crop masks (wheat, rice, soybean, maize). The crop periods layer may be displayed over any layer to indicate the stage of crop development (planting-early vegetative, vegetative-reproductive, reproductive-maturity, or out of season/not planted) for a region.

- *Products*: To select the product, select the entries under “Overlay #1”. To select two products, click the  next to “Overlay#2” to add a second overlay. Percentage of opacity can be changed by moving the cursor below the overlay to the desired level.
- *Crops*: To select the crop mask, select the entry by clicking the desired crop under “Select a Crop Mask”. To view the crop calendar, select the desired crop calendar under “Select a Crop Calendar”. To add a second crop mask and calendar, click the  next to “Overlay#2” to add a second overlay.
- *Crop Monitoring*: To make an assessment through the Map, select the desired month and season. Click “Start Assessment” to begin. Further information will be provided for the assessment in the next section.

As of March, 2015 the following products are available on the Crop Assessment Tool (in alphabetical order):

- Crop Periods (USDA / FAO / Contributions from Crop Monitor Partners)
- NDVI Anomaly (NASA / USDA / University of Maryland)
- Rainfall Anomaly (Joint Research Centre / NOAA)
- Temperature Sum Anomaly (Joint Research Centre / NOAA)

Additional information about map usage and data can be found at <http://geoglam-crop-monitor.org/content/crop-assessment-tool-prototype>

Monthly Crop Outlook Assessments

Monthly crop outlook assessments are an integral part of the GEOGLAM Crop Monitor. Crop outlook assessment entries should summarize the state of the crop at the time of reporting while being mindful toward the potential impacts on production. Two options are available for updating the monthly crop outlook assessments: a standard interactive view and a map-based view.

Standard View

Monthly crop outlook assessments can be completed using the standard interactive view at http://geoglam-crop-monitor.org/crop/monthly_assesment.php. Alternatively, select “Monthly Assessment” from the dashboard menu.

1. Main panel: Presents an overview of all user regions selected on the Settings page with the current crop stage and completion status. To view the summary, click on the [+] next to the crop or click on summary in the crop’s panel. Regions where the crop stage is “Out of Season” should not be filled out as part of the monthly assessment. Regions with a status of “Incomplete” have either not been filled out, or have been filled out but were not yet submitted. Finally, regions with a status of “Complete” have been submitted successfully to the Crop Monitor system. “Complete” entries can be edited by selecting the edit icon in the edit field. To view another summary select a crop in the navigation bar, click [+] for another crop, or click summary for another crop. To hide the overview for a specific crop, click [-] at the top of the overview.

Dashboard Map Monthly Assessment Archive Settings Partners Admin Dev Logout

Monthly Assessment

Main Wheat Soybean Rice Maize

Wheat

Spring Wheat
[Assessment](#) | [Summary](#)

Winter Wheat
[Assessment](#) | [Summary](#)



Soybean

Soybean 1
[Assessment](#) | [Summary](#)



Rice

Rice 1
[Assessment](#) | [Summary](#)

Rice 2
[Assessment](#) | [Summary](#)



Maize

Maize 1
[Assessment](#) | [Summary](#)



Wheat - Spring Wheat [-]					[Assessment] [Top]
Country	Region	Crop Name	Stage	Status	Edit
India	Central	Spring Wheat	Out of Season or N/A	Incomplete	
India	East	Spring Wheat	Out of Season or N/A	Incomplete	
India	North	Spring Wheat	Out of Season or N/A	Incomplete	
India	Northeast	Spring Wheat	Out of Season or N/A	Incomplete	
India	South	Spring Wheat	Out of Season or N/A	Incomplete	

- Entry panels: Click on Assessment in the crop’s panel or in the navigation bar after clicking the down arrow. Each crop has a panel for entering Crop Assessment information. All regions with an “Incomplete” status are presented as individual blocks, each with a variety of input options and a preview of the region. For an entry to be considered valid, at minimum the “Condition” field must be completed. To submit the monthly assessment entries, select the blue “Submit” button at the bottom right of each entry or click “Submit All” at the top left to submit all entries.

Dashboard Map Monthly Assessment Archive Settings
Logout

Monthly Assessment

Main
Wheat
Rice

Rice - Rice 1 Submit All

Central East, China

Rice 1 (Vegetative - Reproductive)



Condition: Watch

Trend: Improving

Provenance: Official National Verification

Observed Date: 06/02/2014

Comments: Comment about the conditions in Central East, China.

Drivers and Impacts

Wet	<input checked="" type="checkbox"/>	Select Impact
Dry	<input type="checkbox"/>	Select Impact
Hot	<input type="checkbox"/>	Select Impact
Cold	<input type="checkbox"/>	Select Impact
Extreme Event	<input type="checkbox"/>	Select Impact

Submit

North, China

Rice 1 (Vegetative - Reproductive)



Condition: Select A Condition

Trend: Select A Trend

Provenance: Select A Provenance

Observed Date:

Comments:

Drivers and Impacts

Wet	<input type="checkbox"/>	Select Impact
Dry	<input type="checkbox"/>	Select Impact
Hot	<input type="checkbox"/>	Select Impact
Cold	<input type="checkbox"/>	Select Impact
Extreme Event	<input type="checkbox"/>	Select Impact

Submit

Map View

Monthly crop outlook assessments can be completed using the map view at <http://geoglam-crop-monitor.org/crop/map.php> or by selecting “Map” from the dashboard menu. The Crop Outlook Assessment Tool is activated by the choosing the assessment period and clicking “Start Assessment” located on the left menu panel under Crop Monitoring. Note that the crop stage layer depicted for the Crop Impact Assessment Tool is *always* the current month’s crop stage, specific to the currently selected crop.

The Crop Impact Assessment window will open. Ensure that the correct crop and crop calendar are selected before proceeding. Condition and driver definitions are provided by clicking the . Once ready, click on “Begin” to start the assessment. While completing the monthly assessments, past crop conditions are also viewable on the map. Select the desired region and the region’s information regarding the crop stage and the most recent observed entry will pop up. Click on “Begin Report” to begin.

Crop Monitoring

You have selected the 2015 March 15 - April 14
(CURRENT) assessment.

Please select a crop from the list below.

You will not be able to change the crop type until the Assessment tool is turned off.

Rice 2 -

Please select a crop calendar from the list below.

March 15 -

To re-enable the map features, click the "End Assessment" button in the left panel.

Condition Definitions ▾
Driver Definitions ▾

- **Wet:** Wetter than average.
- **Dry:** Drier than average or lack of snow cover.
- **Hot:** Hotter than average.
- **Cold:** Cooler than average or risk of frost damage.
- **Extreme Event:** Catch-all for all other climate risks (i.e. hurricane, typhoon, frost, hail, winterkill, wind damage, etc).

Begin
Cancel

Hungary, Hungary ✕

You have selected the **Hungary** region of **Hungary**.

The crop stage for **Maize** in this region is: **Maturity - Harvest**.

The most recent observed entry for this region is: **None**.

The most recent observed entry for this region submitted by you is: **None**.

Begin Report

Fill out the fields as desired, then submit the entry to the database by selecting the “Submit” button. The “Observation Date” field will default to the current date if no date is selected. The “Submitted Date” field will reflect the current date regardless of any entry. Graphics on the map will be immediately updated and the changes will also be reflected in the monthly assessment, dashboard, and search and edit pages.

Romania, Romania

This region is not in season, you do not need to complete this report.

Condition
 Exceptional

Trend
 Improving

Provenance
 Official National Endorsement

Observed Date
 03/17/2015

Drivers

- Wet
 Select Impact
- Dry
 Minor Negative
- Hot
 Select Impact
- Cold
 Select Impact
- Extreme Event
 Select Impact

Comments
 Comments for Romania, Romania

Searching the Archive

Users may view the current month's crop outlook assessments submitted by any user. Crop outlook assessments can be viewed and edited using the table view at <http://geoglam-crop-monitor.org/crop/archive.php>, also available by selecting "Archive" on the dashboard menu.

Entries appeared in the table are ordered by the most recent date of entry. The table can be ordered (ascending or descending) by field by clicking the column header. To search for specific results click "Show Filter" at the top.

Country Name	Region Name	Crop Name	Condition	Trend	Comment
Argentina	Humid Pampa	Winter Wheat	Watch	Stable	Humidity and precipitation
Mexico	Norte	Winter Wheat	Favorable	Stable	
Turkey	East	Winter Wheat	Favorable		From EU MARS report
Canada	Manitoba	Soybean 1	Favorable		USDA Report
Canada	New Brunswick	Soybean 1	Favorable		USDA Report
Canada	Nova Scotia	Soybean 1	Favorable		
Canada	Ontario	Soybean 1	Favorable		USDA Report
Canada	Quebec	Soybean 1	Favorable		USDA Report
Canada	Saskatchewan	Soybean 1	Favorable		USDA Report
Mexico	Golfo Peninsula	Soybean 1	Favorable	Stable	
Mexico	Norte	Soybean 1	Favorable	Stable	
Mexico	Pacifico	Soybean 1	Favorable	Stable	

Populate the search fields to reduce the number of results visible in the table and click update. Any matched results will be shown.

Country Name	Region Name	Crop Name	Condition	Trend	Comment	Provenance
Canada	Alberta	Spring Wheat	Favorable	Improving		
Canada	Manitoba	Spring Wheat	Watch	Improving	Overall for all crop types, seeding was most advanced in the central region at 60 per cent, and was least advanced in the southwest and northwest regions at 25 per cent seeded.	

Crop Monitor Partners

The Crop Monitor assessment is conducted by GEOGLAM with inputs from the following partners (in alphabetical order):

- Argentina (INTA)
- Asia Rice Countries (AFSISASEAN+3 & Asia RiCE)
- Australia (ABARES & CSIRO)
- Brazil (CONAB & INPE)
- Canada (AAFC)
- China (CAS)
- EU (EC JRC MARS)
- India (ISRO)
- Indonesia (LAPAN & MOA)
- International (CIMMYT, FAO, IFPRI & IRRI)
- Japan (JAXA)
- Mexico (SIAP)
- Russia (IKI)
- South Africa (ARC & GeoTerraImage & SANSA)
- Thailand (GISTDA & OAE)
- Ukraine (NASU-NSAU & UHMC)
- USA (NASA, UMD, USGS - FEWS NET & USDA (FAS & NASS))
- Vietnam (VAST STI & VIMHE-MARD)

The findings and conclusions found in this joint multiple-agency reporting are only consensual statements from the GEOGLAM expert group, and do not necessarily reflect those of the individual agencies represented by these experts.

UMD Coordination Team

The Crop Monitor Assessments are coordinated by the Global Agricultural Monitoring Center, in the Department of Geographical Sciences at the University of Maryland (UMD).

Coordinators:

- Dr. Inbal Becker-Reshef
- Dr. Chris Justice

Interface Design & Development Team:

- Mike Humber
- Antonio Sanchez

Product Design & Implementation Team:

- Brian Barker
- Katie McGaughey

Data Integration and R&D:

- Dr. Eric Vermote
- Dr. Martin Claverie
- Dr. Alyssa Whitcraft

Interns:

- Heather Lam
- Taylor Robey

Questions and Concerns

Please submit any bugs or questions about the GEOGLAM interface to support@geoglam-crop-monitor.org and any questions about data to cropdata@geoglam-crop-monitor.org.