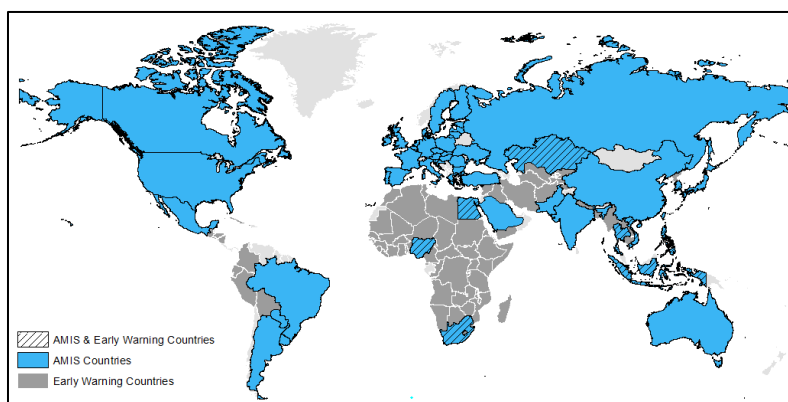


CROP MONITOR FOR AMIS

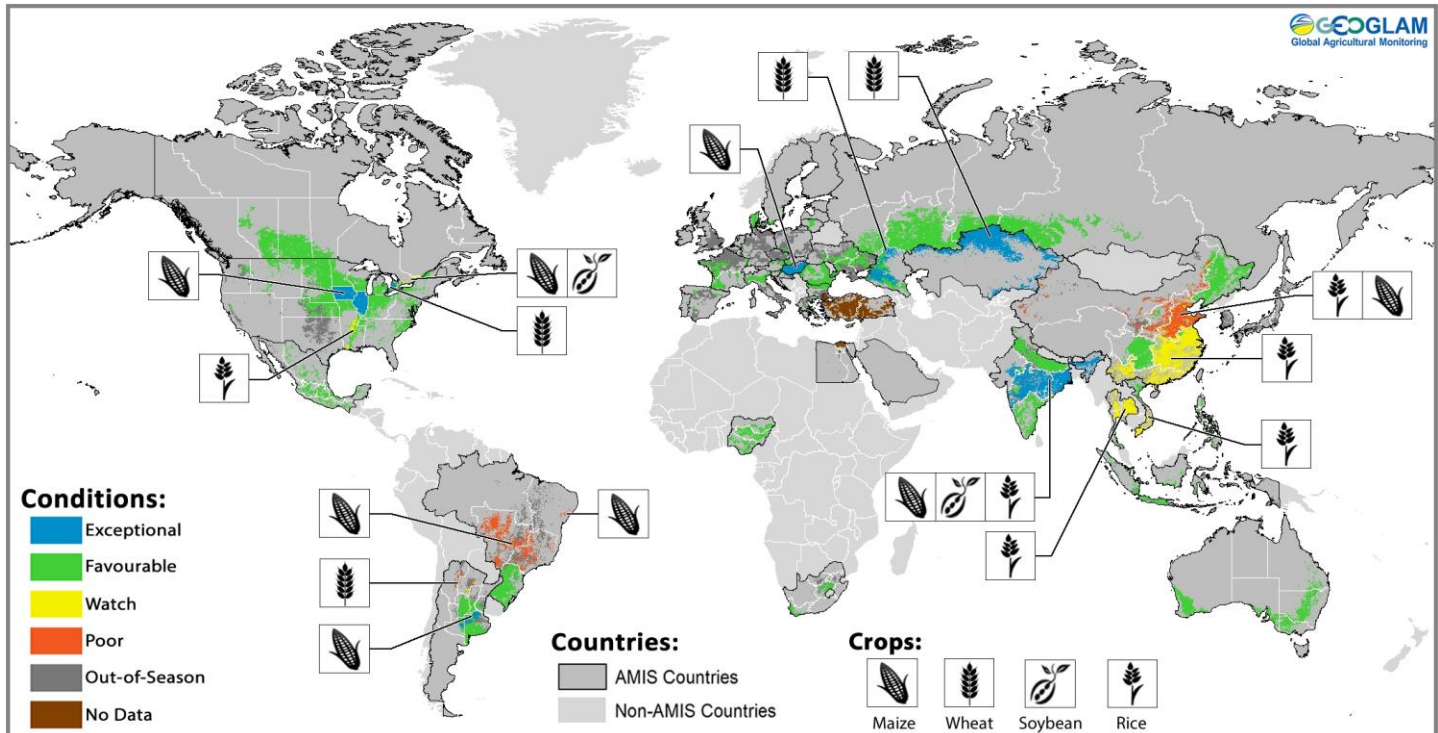
NO. 32

September 2016

The Group on Earth Observations' Global Agricultural Monitoring (GEOGLAM) initiative developed the Crop Monitor whose objective is to provide AMIS with an international and transparent multi-source, consensus assessment of crop growing conditions, status, and agro-climatic conditions, likely to impact global production. This activity covers the four primary crop types (wheat, maize, rice, and soy) within the main agricultural producing regions of the AMIS countries (G20+7). The Crop Monitor reports provide cartographic and textual summaries of crop conditions as of the 28th of each month, according to crop type. There is another Crop Monitoring initiative called the Early Warning Crop Monitor (geoglam-crop-monitor.org/), which has grown out of this initiative.



Conditions at a glance for AMIS countries (as of August 28th)



Crop condition map synthesizing information for all four AMIS crops as of August 28th. Crop conditions over the main growing areas for wheat, maize, rice, and soybean are based on a combination of national and regional crop analyst inputs along with earth observation data. **Crops that are in other than favourable conditions are displayed on the map with their crop symbol.**

Conditions at a glance

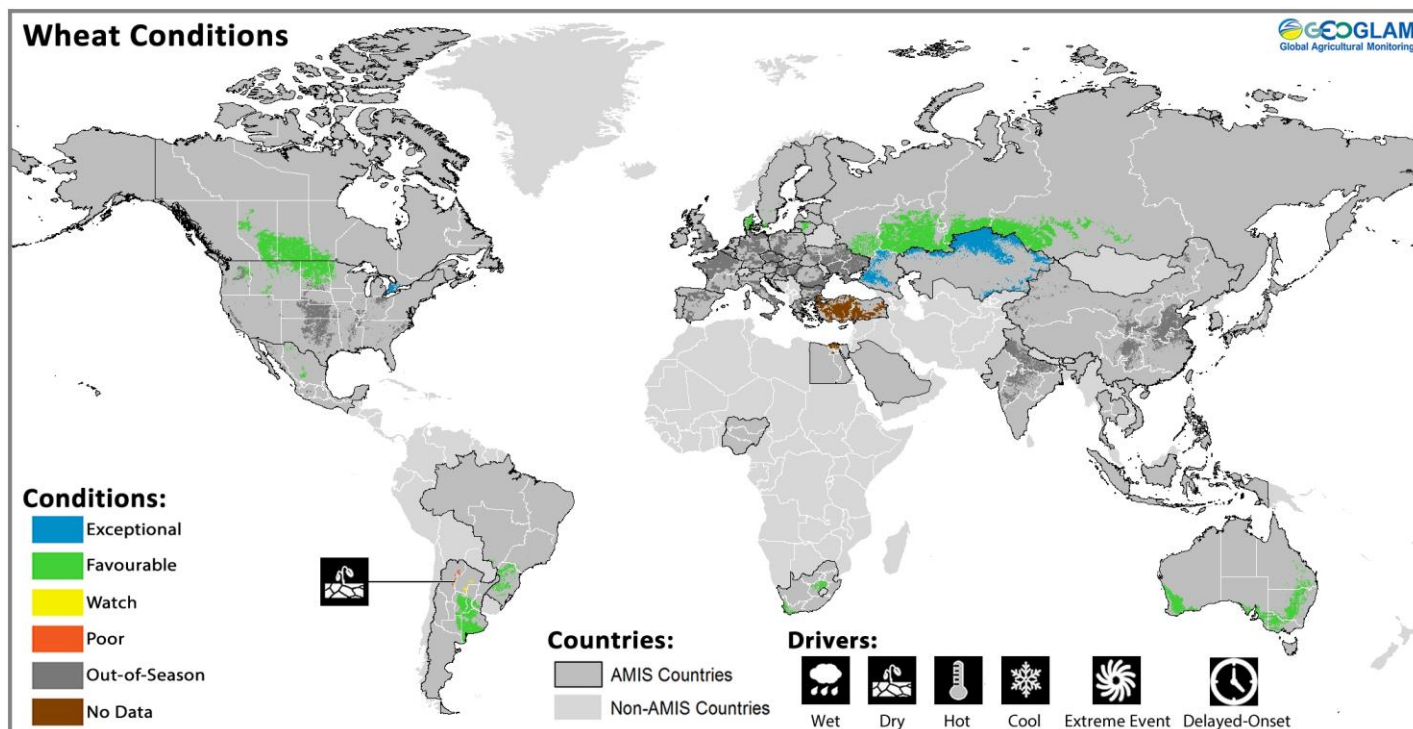
Wheat - In the northern hemisphere overall wheat prospects remain good. The winter wheat season is drawing to a close and spring wheat harvest is ongoing under good conditions. In the southern hemisphere conditions are favourable.

Maize - In the northern hemisphere overall conditions and prospects remain good. With the exception of China and Canada, an average to above average crop is expected in the main producing countries. In the southern hemisphere the season is drawing to a close. In Brazil overall condition and production prospects are significantly reduced due dry conditions and high temperatures. In Argentina prospects remain favorable.

Rice - Overall rice conditions have improved in Southeast Asia owing to good rainfall. However, concern remains over the wet season rice in Thailand, and southern Viet Nam. In China, conditions are below average due to high temperatures in Lower Yangtze, and heavy rainfall in the south.

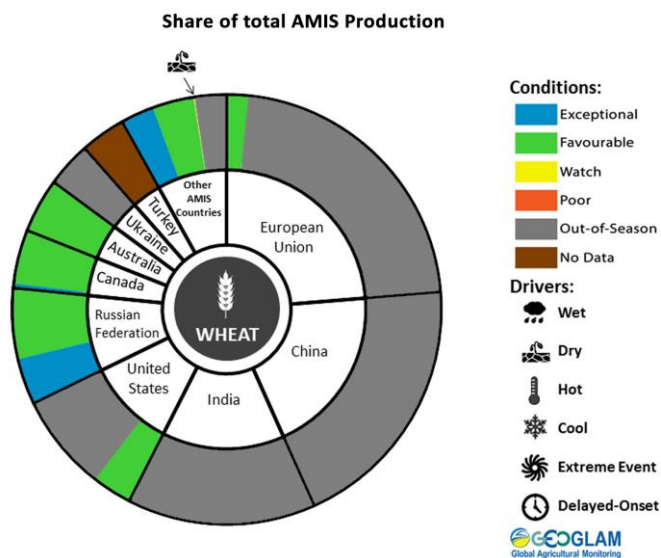
Soybeans - In the northern hemisphere conditions remain generally favourable with a good crop expected in the US despite recent flooding in some regions. In the southern hemisphere, the season has completed in Argentina with near record production.

Wheat Conditions for AMIS Countries



Wheat crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of August 28th. Where crops are in other than favourable conditions the climatic drivers responsible for those conditions are displayed. Crop Season Specific Maps can be found in Appendix 2.

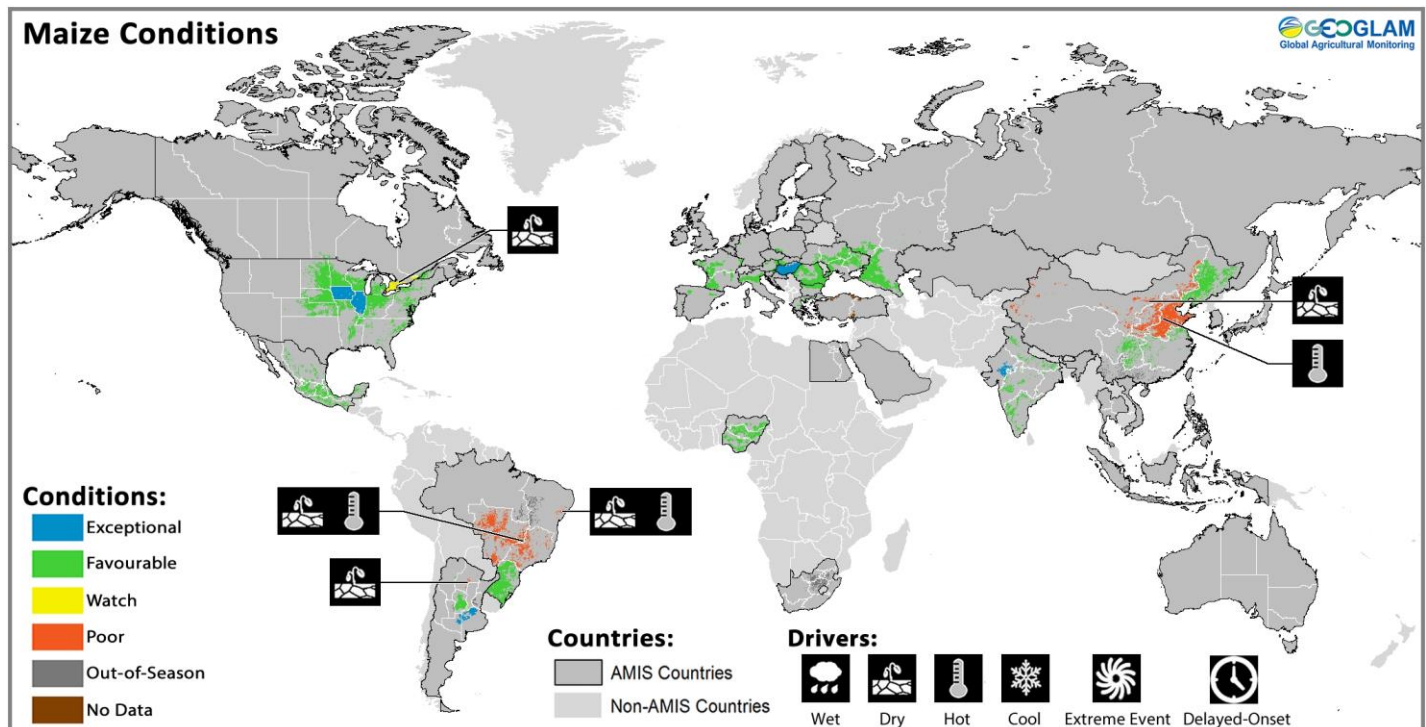
Wheat: In the **EU**, winter wheat harvest is ending in the northern European countries with production in line with the five-year average. In the **US**, spring wheat harvest is well underway and conditions are favourable throughout the northern tier of the US growing region. In **China**, spring wheat harvest has completed under generally favourable conditions. In the **Russian Federation**, winter wheat harvest is largely complete and conditions are exceptional. Planting has begun under favourable conditions for next year’s winter crop. The spring wheat harvest began and conditions are favourable. In **Canada**, spring wheat conditions have deteriorated slightly due to wet conditions in the west and dry conditions in the east. Ontario winter wheat harvest has potential record yields. In **Ukraine**, harvest is complete with above average yields. In **Kazakhstan**, harvest is just beginning in the main production region with high yields expected. In **Australia**, conditions are favourable with average to above average rainfall during July and August across most of Australia that provided ample soil moisture for growth and development of crops. Rainfall in August improved the dry conditions in Western Australia. In **Argentina**, wheat planting has completed and is in generally favourable conditions. Poor soil conditions in the northwest and northern regions are causing some concern as the crop entered the critical heading stage.



For detailed description of the pie chart please see box below.

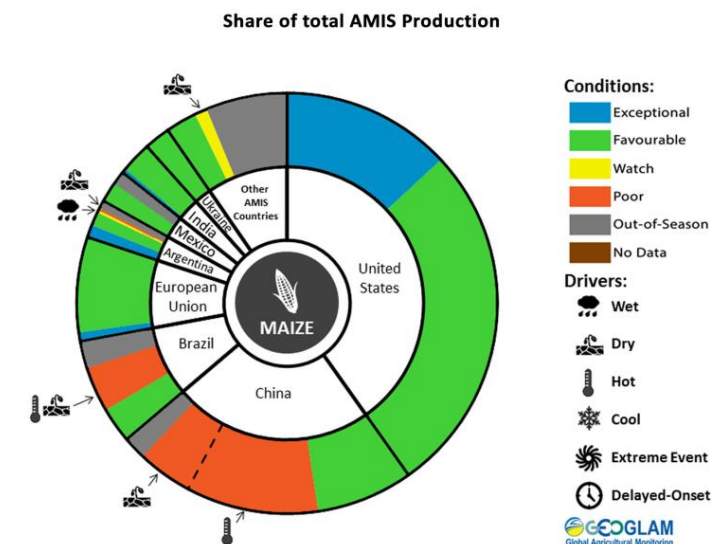
* Assessment based on information as of August 28th

Maize Conditions for AMIS Countries



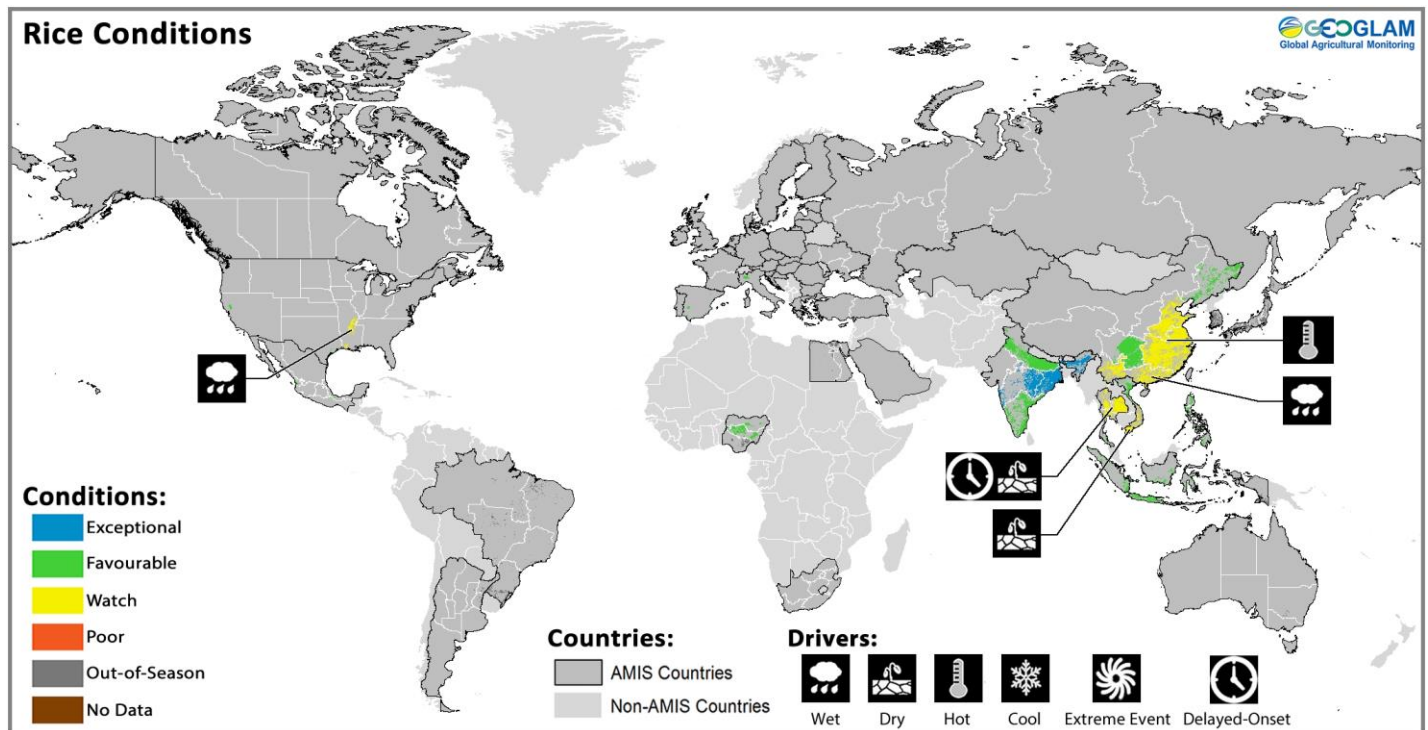
Maize crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of August 28th. Where crops are in other than favourable conditions the climatic drivers responsible for those conditions are displayed. Crop Season Specific Maps can be found in Appendix 2.

Maize: In the **US**, conditions are favourable throughout the country and excellent in the heart of the Corn Belt itself, with a good crop expected. In **China**, overall conditions are generally poor, due to dryness in the north and high temperatures in the Loess and Huanghuaihai regions. In the **EU**, conditions are generally favorable, especially in Northern / Central Europe, and despite some worsening drought in Bulgaria and Romania. In **Ukraine**, conditions are favourable with a good crop expected despite some minor damage caused by the dry conditions in July and early August. In **India**, conditions are generally favourable owing to ample rains, although pockets of dryness are reported. In **Mexico**, planting for the spring-summer cycle is 90% complete under favourable conditions and expected to be slightly higher than last year's area. In **Canada**, conditions remain mixed with reduced yields expected in the main producing provinces of Ontario and Quebec despite recent rains. In the **Russian Federation**, conditions are favourable and the crops have likely avoided damage due to high temperatures in July as it occurred before the critical reproductive stage. In **Nigeria**, conditions continue to be favourable with only limited damage along the Benue and Niger rivers due to flooding. In **Brazil**, harvest completed this month for the summer-planted crop. With the exception of the southern region, conditions were generally poor conditions due to dry conditions and high temperatures earlier in the season. Overall production is expected to be down despite an increase in planted area. Planting of the spring crop has begun in the South under favourable conditions. In **Argentina**, conditions remain favourable to exceptional with the harvest progressing for the late planted maize with only a few delays due to rains.



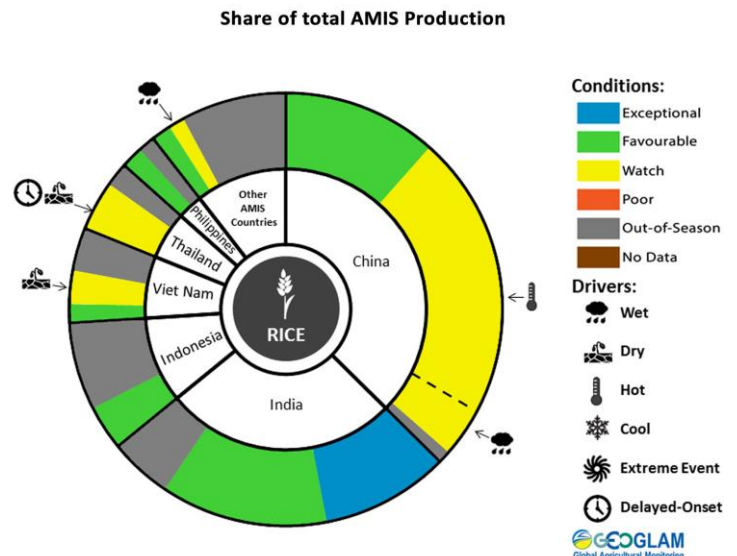
For detailed description of the pie chart please see box below.

Rice Conditions for AMIS Countries



Rice crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of August 28th. Where crops are in other than favourable conditions the climatic drivers responsible for those conditions are displayed.

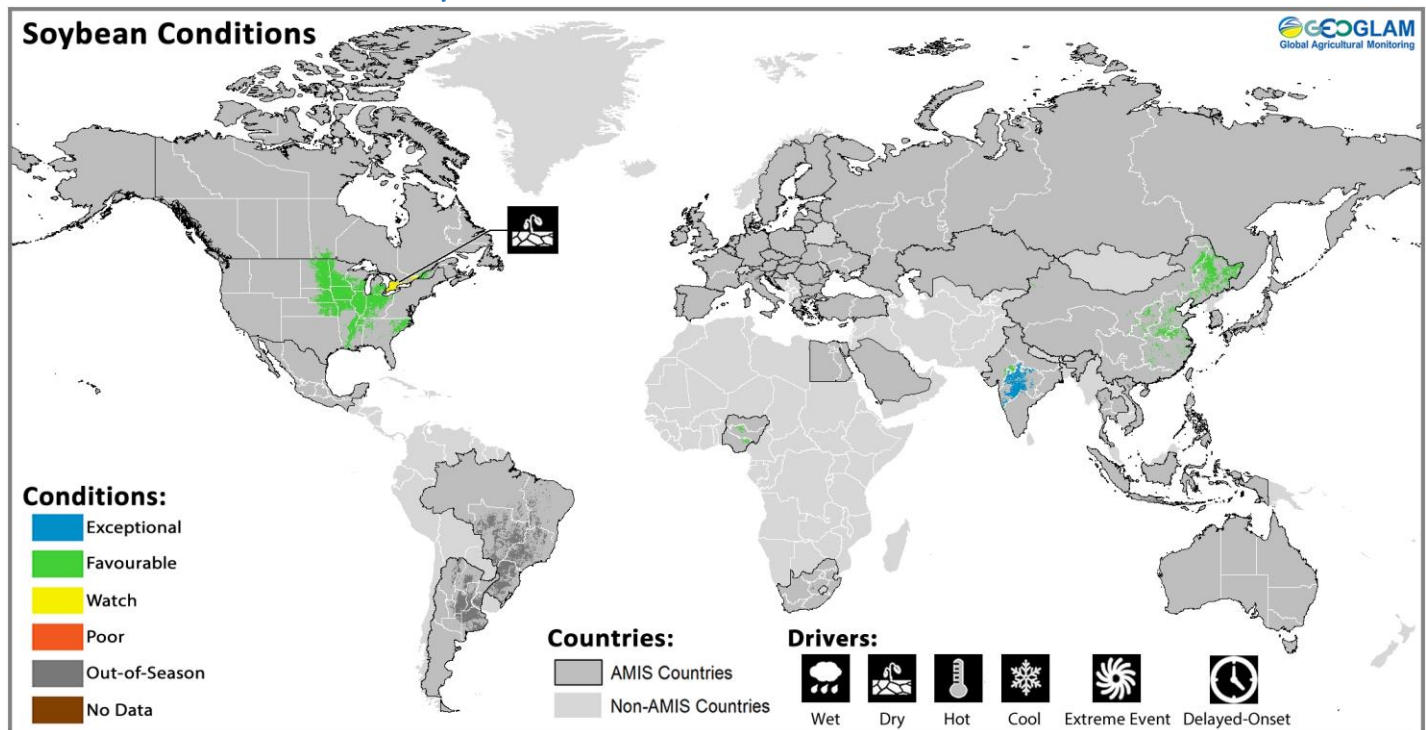
Rice: In **China**, overall conditions for the three rice seasons are below average. High temperatures affected both late and single crop rice in the Lower Yangtze. Late rice was also below average in Southern China due to heavy rainfall and insufficient radiation. Single crop rice in Northeast China is in favourable condition. In **India**, Conditions for the kharif crop are favourable to exceptional owing to the strong monsoon rains. In **Indonesia**, conditions are favourable for the dry season crop, and yields are expected to be higher than the last two years. However, planted area is decreased due to water shortages during planting. In **Viet Nam**, conditions are favourable in the northern and central regions, however dry conditions in the south are raising some concern for the wet season crop. In **Thailand**, development of the wet season crop has been delayed due to the delayed the rainy season and a lack of irrigation water. Conditions have improved owing to recent rainfall. In the **Philippines**, conditions have improved and are currently favourable for the wet season crop owing to the recent average to above average rainfall. In the **US**, conditions remain favourable except in the far south where losses are likely due to extreme flooding.



For detailed description of the pie chart please see box below.

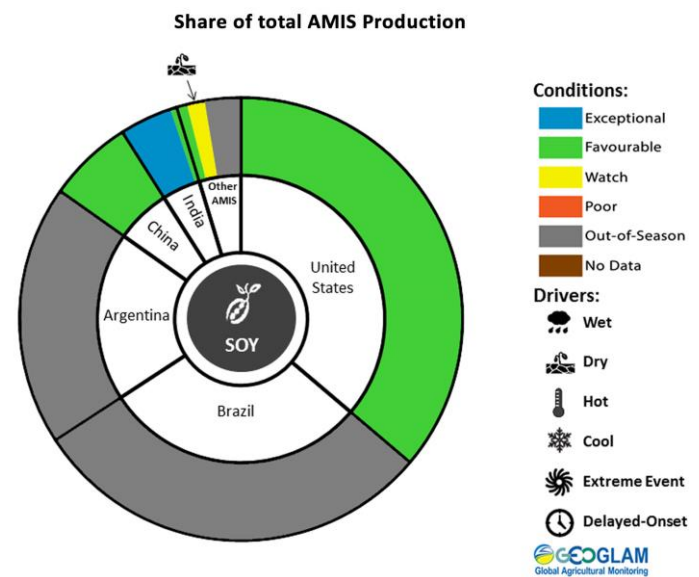
* Assessment based on information as of August 28th

Soybean Conditions for AMIS Countries



Soybean crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of August 28th. Where crops are in other than favourable conditions the climatic drivers responsible for those conditions are displayed. Crop Season Specific Maps can be found in Appendix 2.

Soybeans: In the **US**, conditions are favourable across most of the country with the exception of minor areas in the southern states of Louisiana and Mississippi, where some of the crop is likely impacted by recent flooding. In **Canada**, rains alleviated stress from an abnormally dry summer in Ontario. Overall conditions remain mixed with the dry weather reducing yield expectations in the main producing province of Ontario and also in Quebec. In **China**, conditions are favourable and the crop is in the podding to seed-filling stage. In **India**, the crop is in the vegetative stage with favourable to exceptional conditions owing to the strong monsoon rains. Minor pockets of flooding occurred in some areas. In **Argentina**, harvest is complete with the second largest crop of the last five years.



For detailed description of the pie chart please see box below.

Information on crop conditions in non-AMIS countries can be found in the [GEOGLAM Early Warning Crop Monitor](#), published September 4th

Pie chart description: Each slice represents a country's share of total AMIS production (5-year average). Main producing countries (representing 90 percent of production) are shown individually, with the remaining 10 percent grouped into the "Other AMIS Countries" category. The proportion within each national slice is coloured according to the crop conditions within a specific growing area; grey indicates that the respective area is out of season. Sections within each slide are weighted by the sub-national production statistics (5-year average) of the respective country. The section within each national slice also accounts for multiple cropping seasons (i.e. spring and winter wheat). When conditions are other than 'favourable', icons are added that provide information on the key climatic drivers affecting conditions.

* Assessment based on information as of August 28th

Appendix 1: Definitions

Crop Conditions:

Exceptional: Conditions are much better than average* at time of reporting. This label is only used during the grain-filling through harvest stages.

Favourable: Conditions range from slightly lower to slightly better than average* at reporting time.

Watch: Conditions are not far from average* but there is a potential risk to final production. The crop can still recover to average or near average conditions if the ground situation improves. This label is only used during the planting-early vegetative and the vegetative-reproductive stages.

Poor: Crop conditions are well below average*. Crop yields are likely to be more than 5% below average. This is only used when conditions are not likely to be able to recover, and impact on production is likely.

Out Of Season: Crops are not currently planted or in development during this time.

No Data: No reliable source of data is available at this time.

Conditions:

	Exceptional
	Favourable
	Watch
	Poor
	Out-of-Season
	No Data

*"Average" refers to the average conditions over the past 5 years.

Drivers:

These represent the key climatic drivers that are having an impact on crop condition status. They result in production impacts and can act as either positive or negative drivers of crop conditions.

Wet: Higher than average wetness.

Dry: Drier than average.

Hot: Hotter than average.

Cool: Cooler than average or risk of frost damage.

Extreme Events: This is a catch-all for all other climate risks (i.e. hurricane, typhoon, frost, hail, winterkill, wind damage, etc.)

Delayed-Onset: Late start of the season

	Wet
	Dry
	Hot
	Cool
	Extreme Event
	Delayed-Onset

Sources & Disclaimer

Sources and Disclaimers: The Crop Monitor assessment is conducted by GEOGLAM with inputs from the following partners (in alphabetical order): Argentina (Buenos Aires Grains Exchange, INTA), Asia Rice Countries (AFSIS, ASEAN+3 & Asia RiCE), Australia (ABARES & CSIRO), Brazil (CONAB & INPE), Canada (AAFC), China (CAS), EU (EC JRC MARS), Indonesia (LAPAN & MOA), International (CIMMYT, FAO, IFPRI & IRRI), Japan (JAXA), Mexico (SIAP), Russian Federation (IKI), South Africa (ARC & GeoTerraImage & SANS), Thailand (GISTDA & OAE), Ukraine (NASU-NSAU & UHMC), USA (NASA, UMD, USGS – FEWS NET, USDA (FAS, NASS)), Viet nam (VAST & VIMHE-MARD). The findings and conclusions in this joint multiagency report are consensual statements from the GEOGLAM experts, and do not necessarily reflect those of the individual agencies represented by these experts.

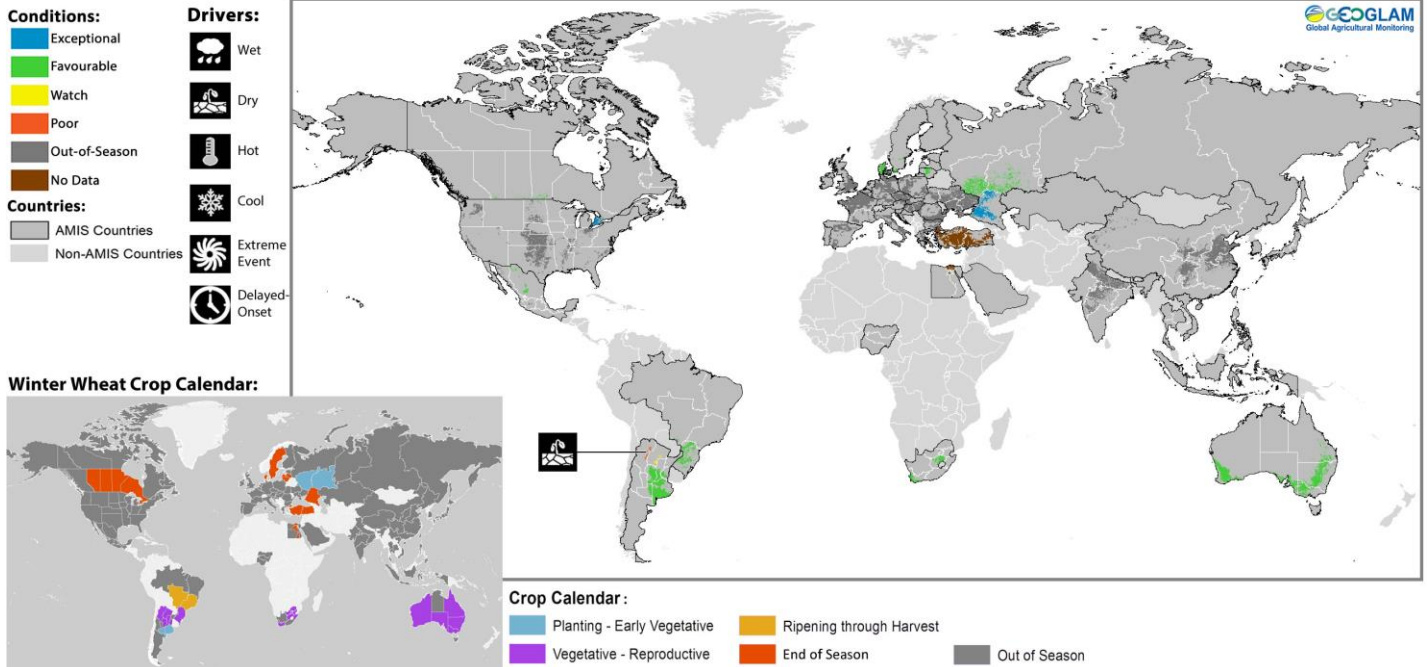
More detailed information on the GEOGLAM crop assessments is available at www.geoglam-crop-monitor.org

For information on country coverage and criteria:

<http://geoglam-crop-monitor.org/pages/about.php?target=approach>

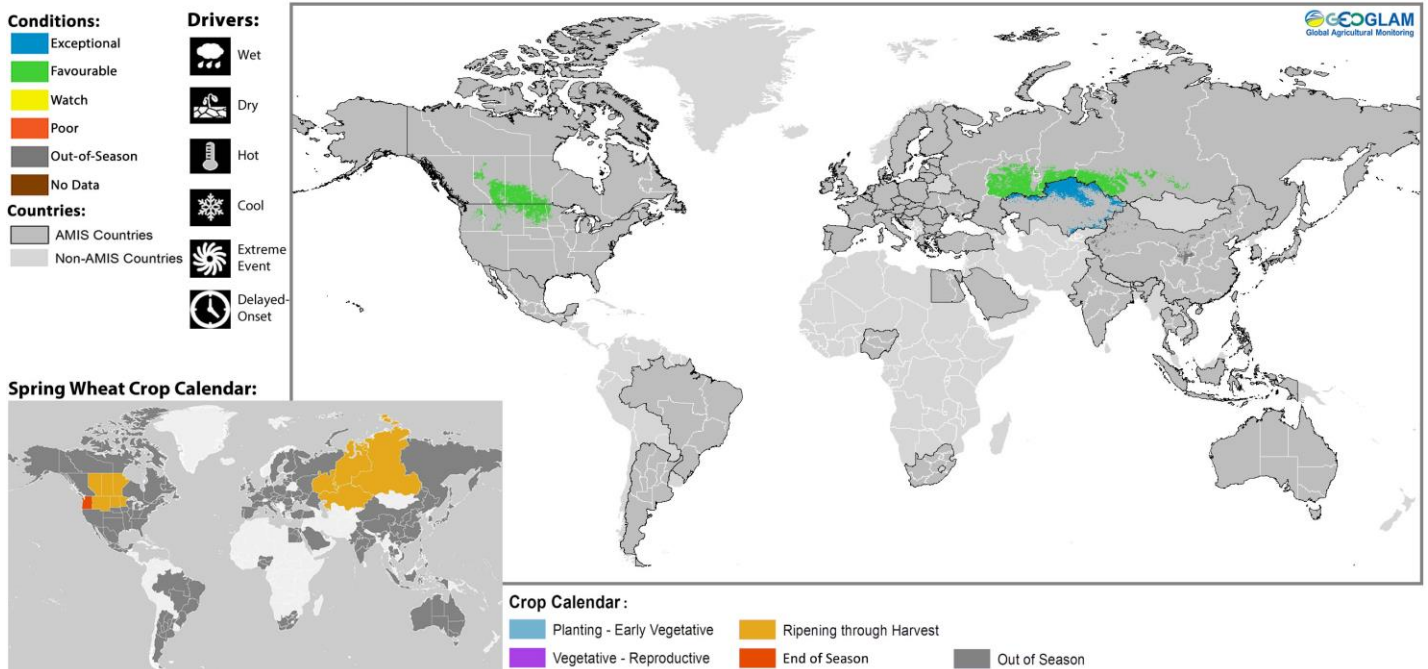
Appendix 2: Crop Season Specific Maps & Pie Charts

Winter Planted Wheat Conditions for AMIS Countries



Winter wheat crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of August 28th. Where crops are in less than favourable conditions the climatic drivers responsible for those conditions are displayed. The crop calendar is provided as a point of reference to provide information on what part of the life cycle the crops are currently in for each area.

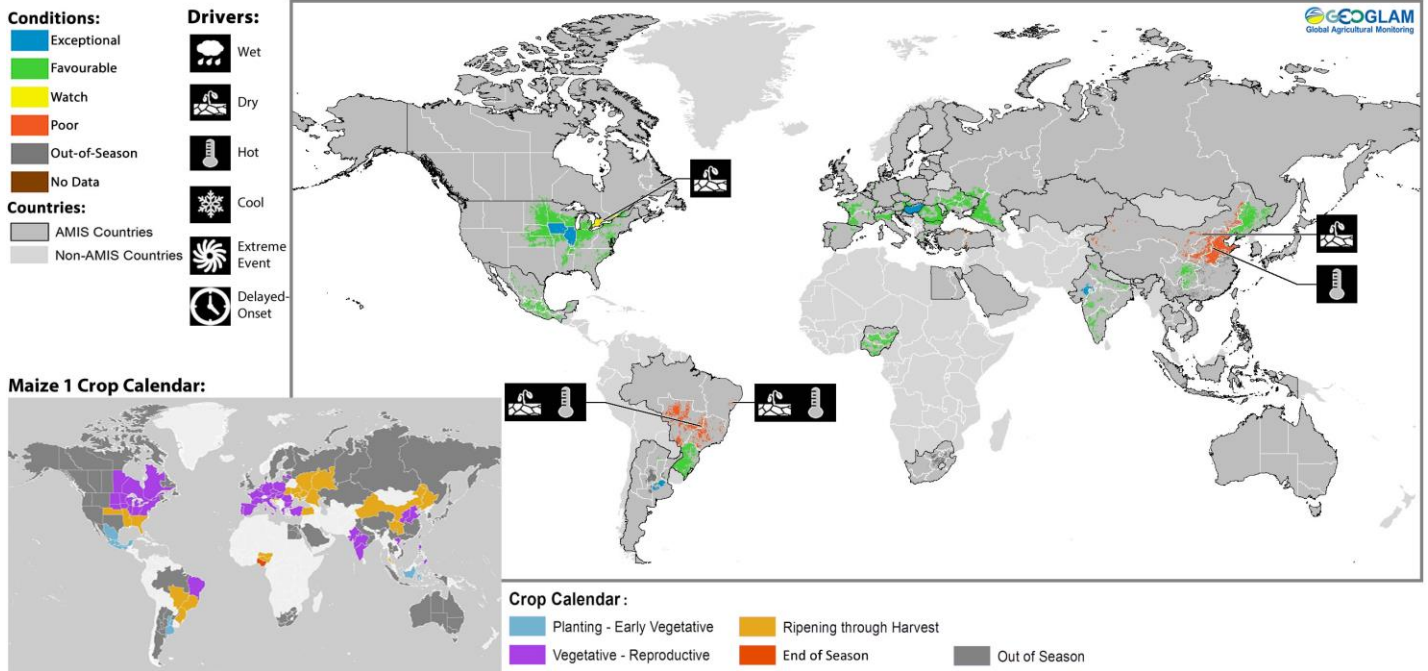
Spring Planted Wheat Conditions for AMIS Countries



Spring wheat crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of August 28th. Where crops are in less than favourable conditions the climatic drivers responsible for those conditions are displayed. The crop calendar is provided as a point of reference to provide information on what part of the life cycle the crops are currently in for each area.

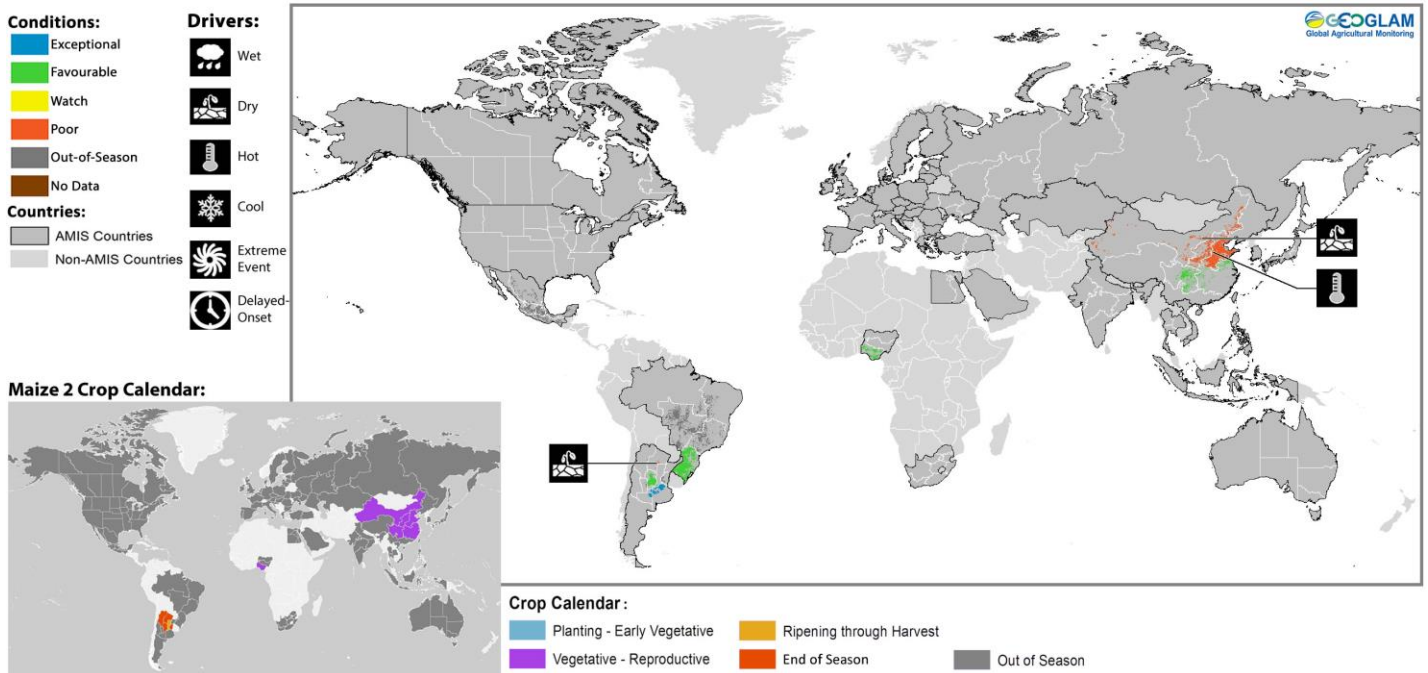
* Assessment based on information as of August 28th

Maize 1 Conditions for AMIS Countries



Maize 1 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of August 28th. Where crops are in less than favourable conditions the climatic drivers responsible for those conditions are displayed. The crop calendar is provided as a point of reference to provide information on what part of the life cycle the crops are currently in for each area.

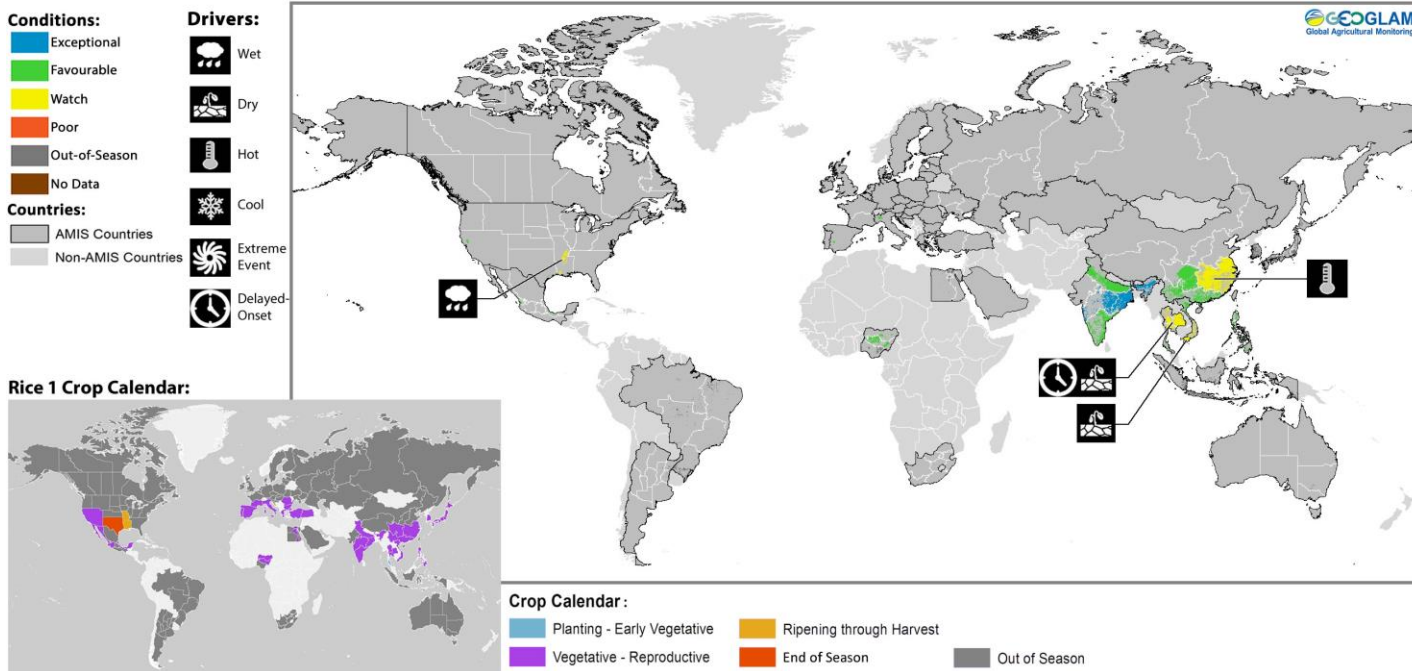
Maize 2 Conditions for AMIS Countries



Maize2 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of August 28th. Where crops are in less than favourable conditions the climatic drivers responsible for those conditions are displayed. The crop calendar is provided as a point of reference to provide information on what part of the life cycle the crops are currently in for each area.

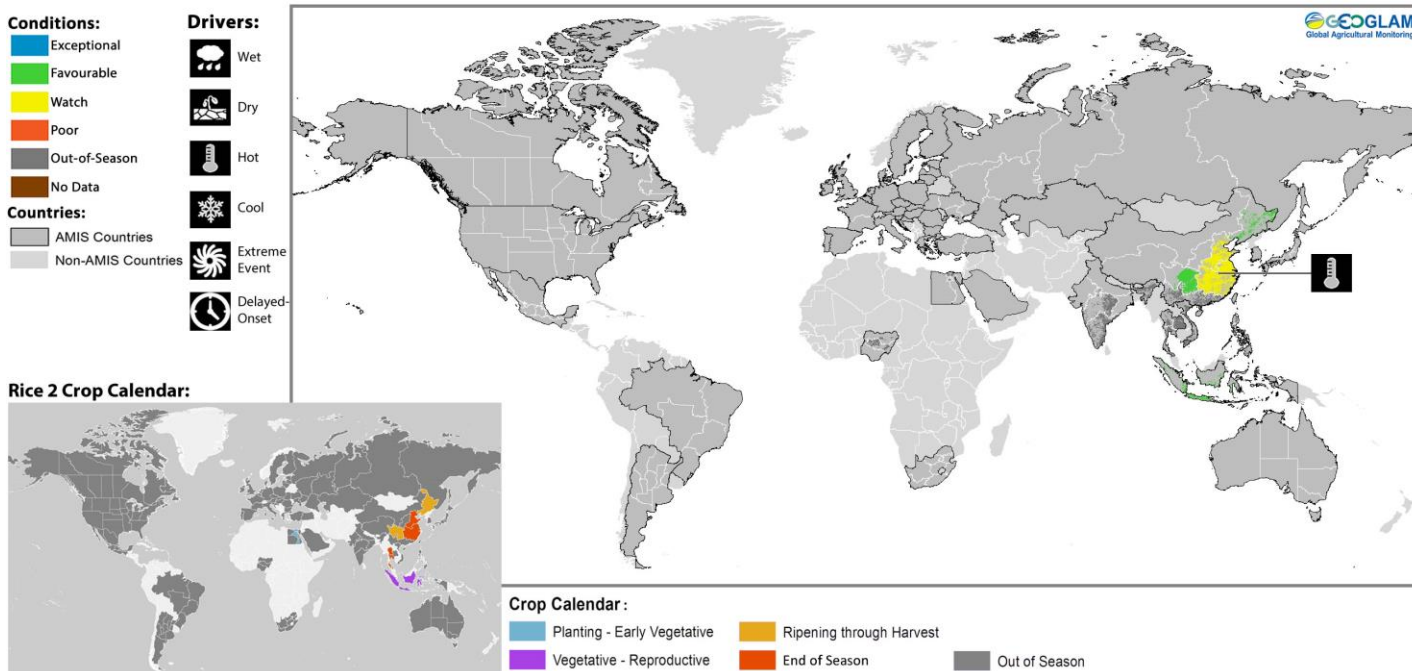
* Assessment based on information as of August 28th

Rice 1 Conditions for AMIS Countries



Rice 1 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of August 28th. Where crops are in less than favourable conditions the climatic drivers responsible for those conditions are displayed. The crop calendar is provided as a point of reference to provide information on what part of the life cycle the crops are currently in for each area.

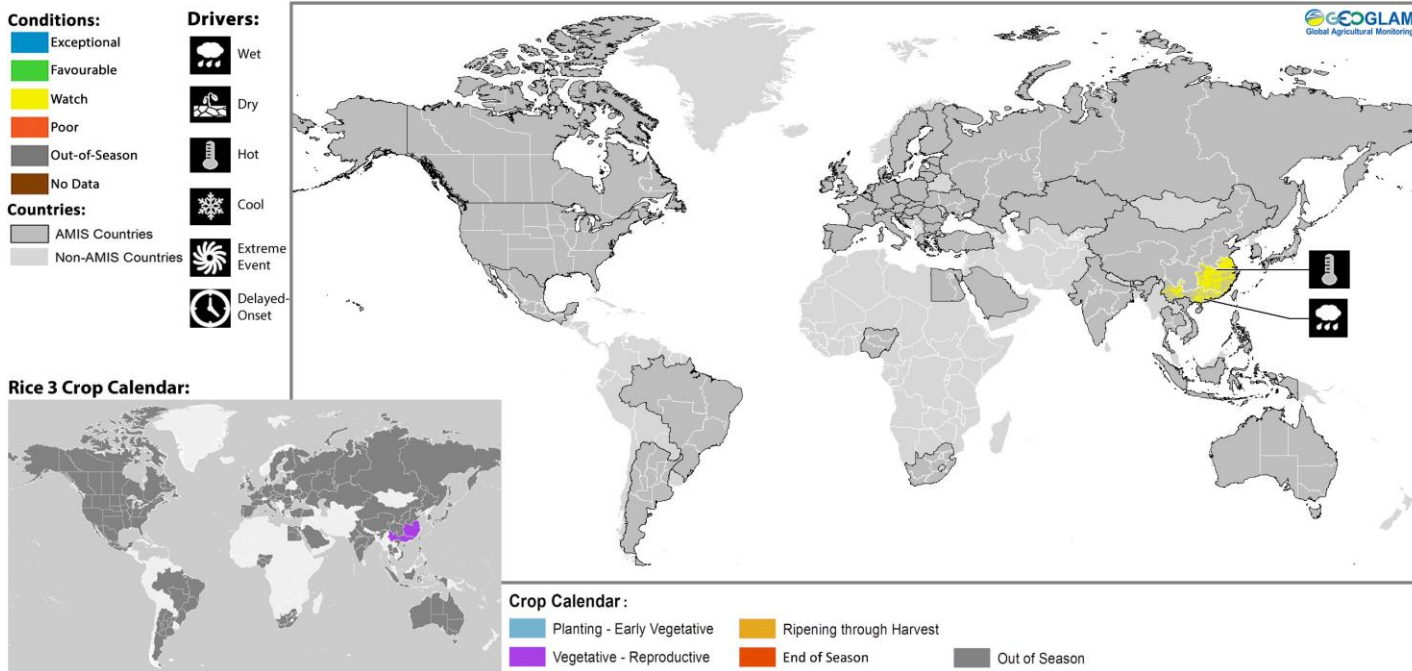
Rice 2 Conditions for AMIS Countries



Rice 2 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of August 28th. Where crops are in less than favourable conditions the climatic drivers responsible for those conditions are displayed. The crop calendar is provided as a point of reference to provide information on what part of the life cycle the crops are currently in for each area.

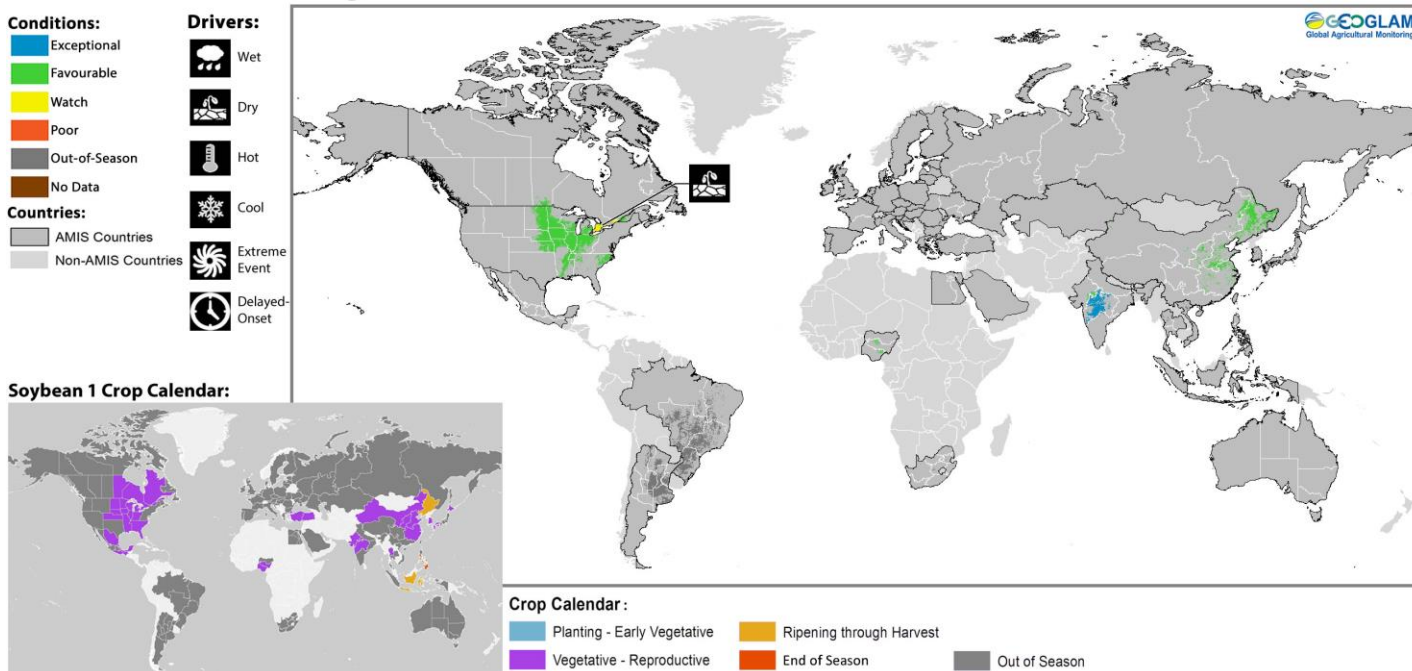
* Assessment based on information as of August 28th

Rice 3 Conditions for AMIS Countries



Rice 3 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of August 28th. Where crops are in less than favourable conditions the climatic drivers responsible for those conditions are displayed. The crop calendar is provided as a point of reference to provide information on what part of the life cycle the crops are currently in for each area.

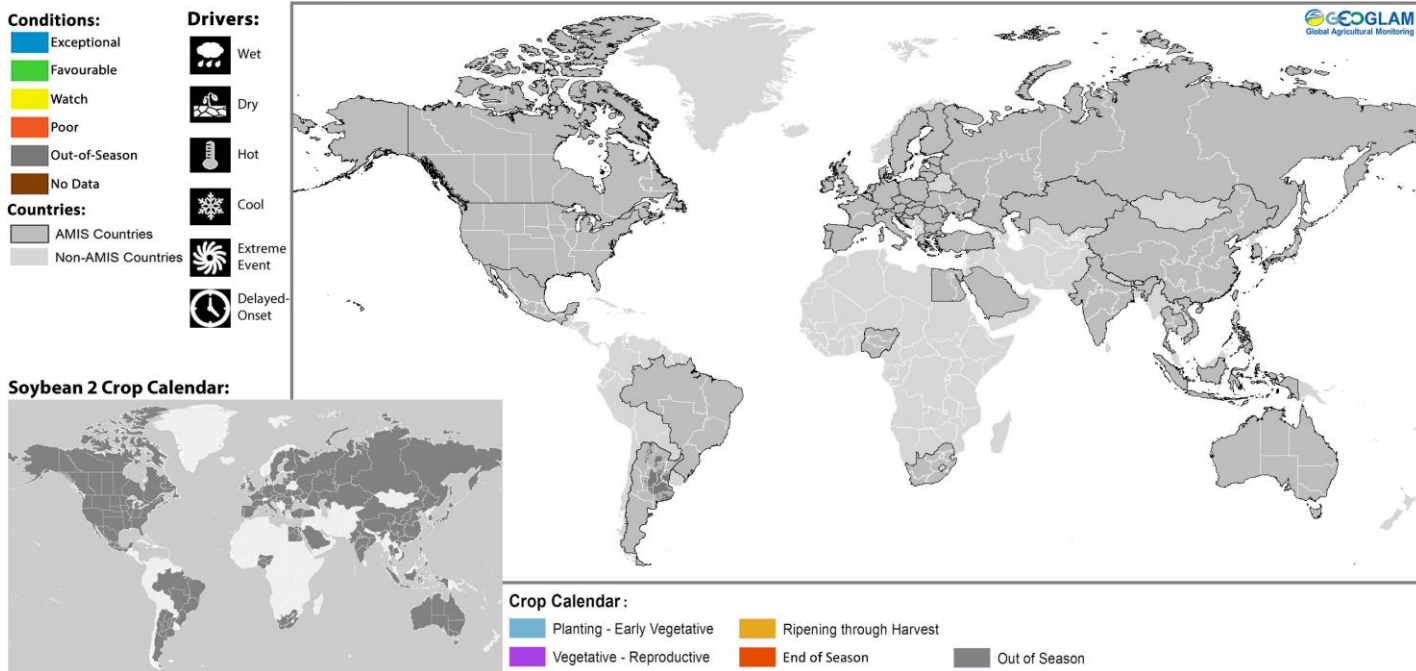
Soybean 1 Conditions for AMIS Countries



Soybean 1 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of August 28th. Where crops are in less than favourable conditions the climatic drivers responsible for those conditions are displayed. The crop calendar is provided as a point of reference to provide information on what part of the life cycle the crops are currently in for each area.

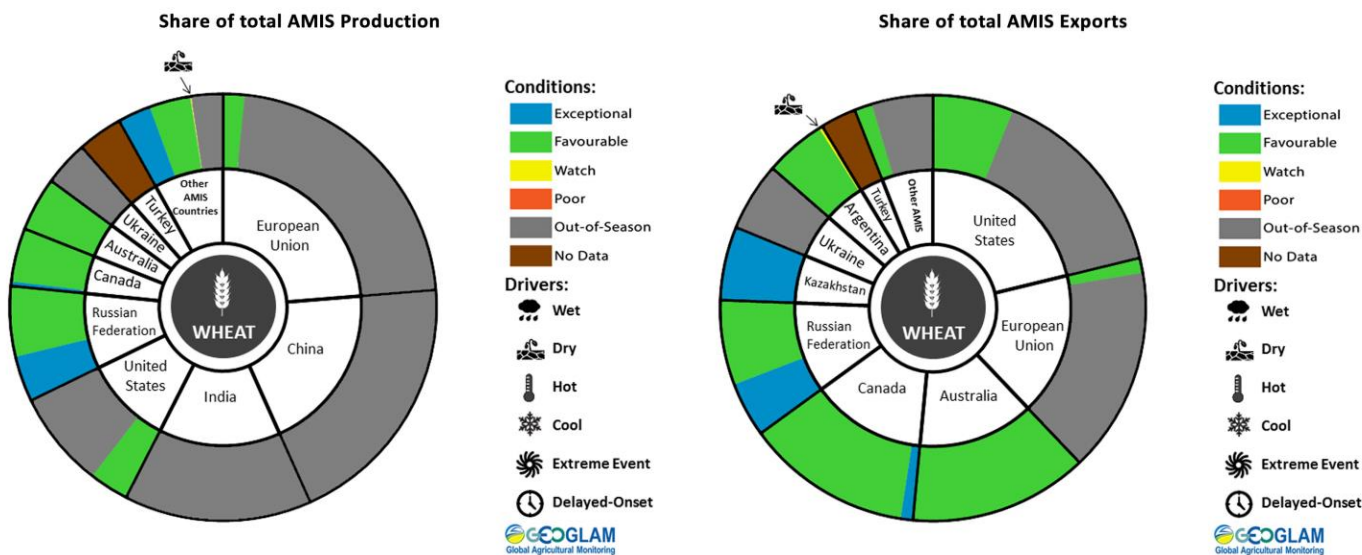
* Assessment based on information as of August 28th

Soybean 2 Conditions for AMIS Countries



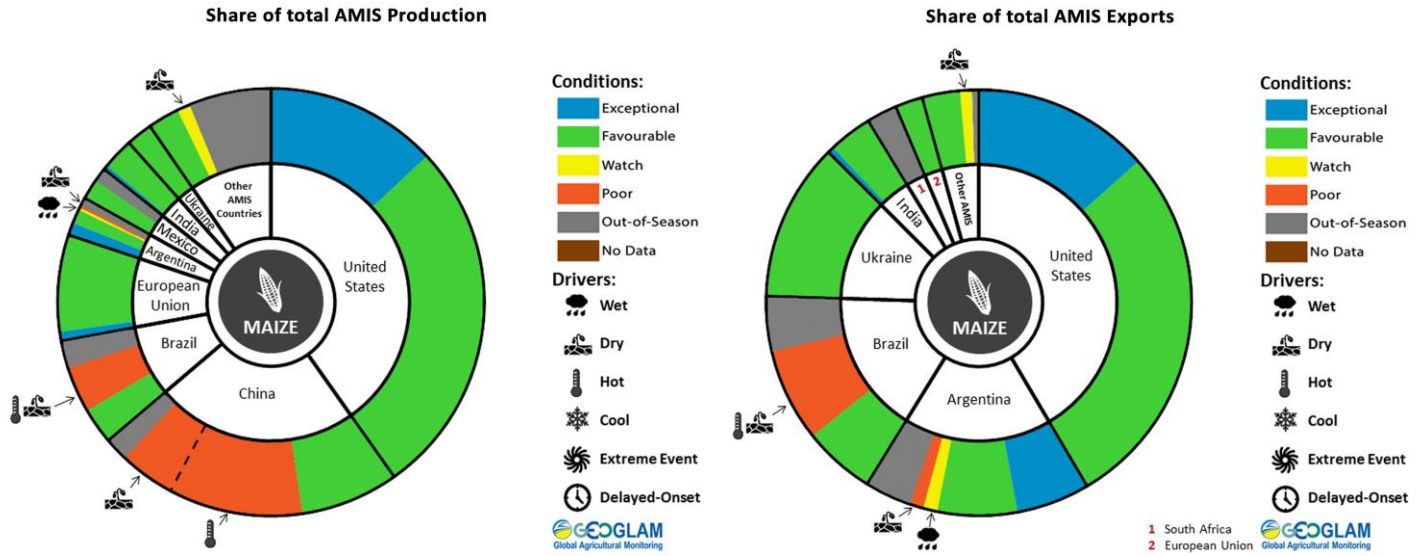
Soybean 2 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of August 28th. Where crops are in less than favourable conditions the climatic drivers responsible for those conditions are displayed. The crop calendar is provided as a point of reference to provide information on what part of the life cycle the crops are currently in for each area.

Wheat AMIS Comparisons

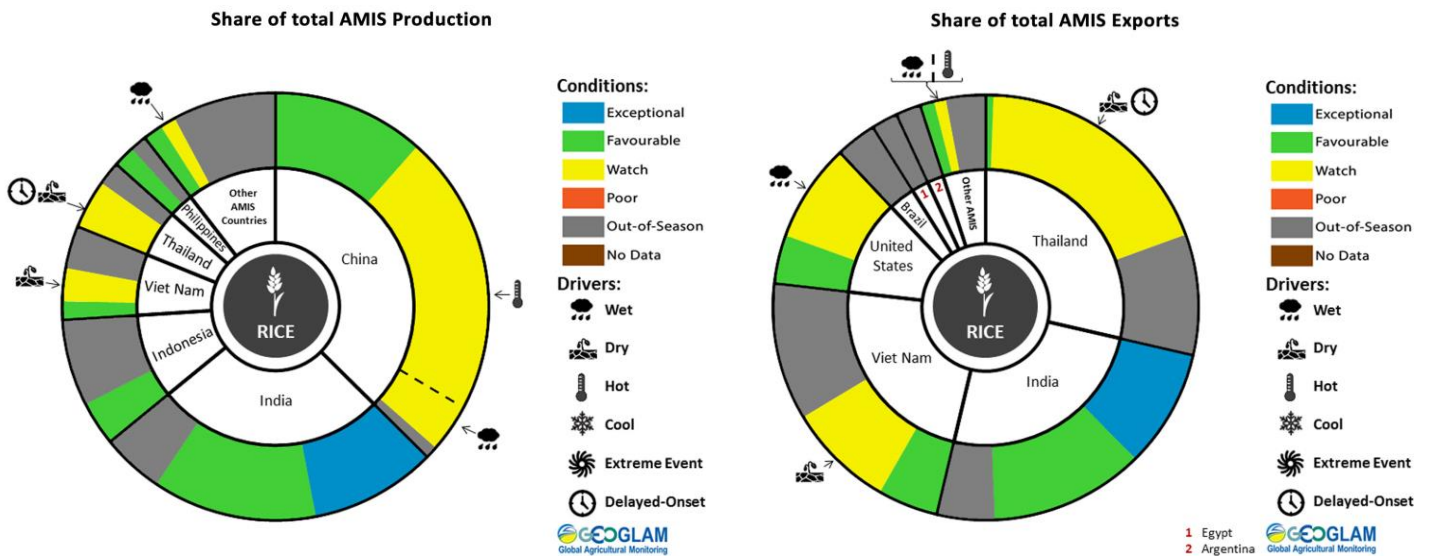


* Assessment based on information as of August 28th

Maize AMIS Comparisons

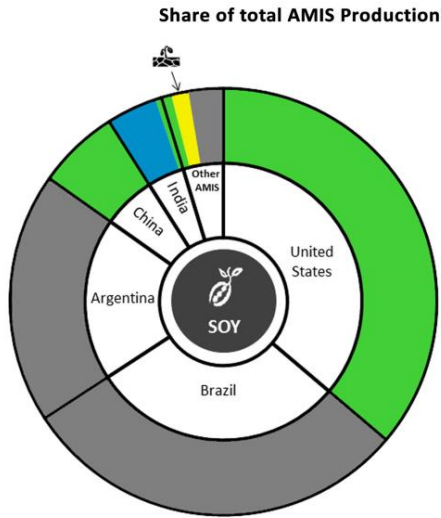


Rice AMIS Comparisons

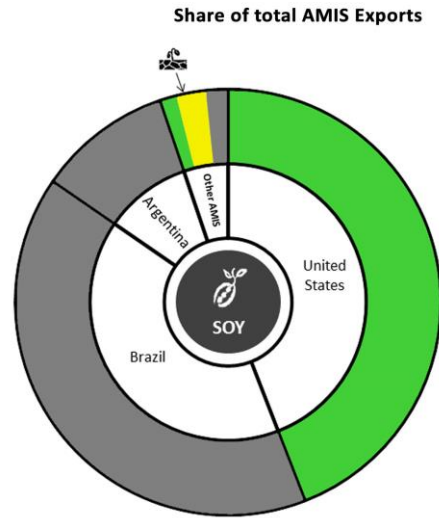


* Assessment based on information as of August 28th

Soybean AMIS Comparisons



- Conditions:**
- Exceptional
 - Favourable
 - Watch
 - Poor
 - Out-of-Season
 - No Data
- Drivers:**
- Wet
 - Dry
 - Hot
 - Cool
 - Extreme Event
 - Delayed-Onset



- Conditions:**
- Exceptional
 - Favourable
 - Watch
 - Poor
 - Out-of-Season
 - No Data
- Drivers:**
- Wet
 - Dry
 - Hot
 - Cool
 - Extreme Event
 - Delayed-Onset



* Assessment based on information as of August 28th



Prepared by members of the GEOGLAM Community of Practice
Coordinated by the University of Maryland

The Crop Monitor is a part of GEOGLAM, a GEO global initiative.

Photo by: Agriculture and Agri-Food Canada

www.geoglam-crop-monitor.org

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