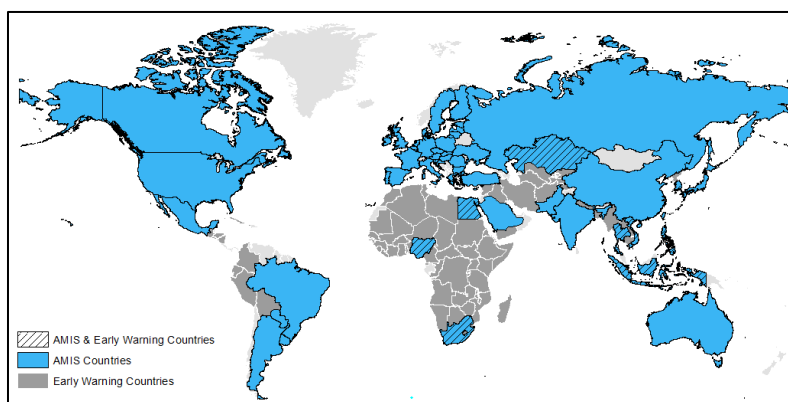


CROP MONITOR FOR AMIS

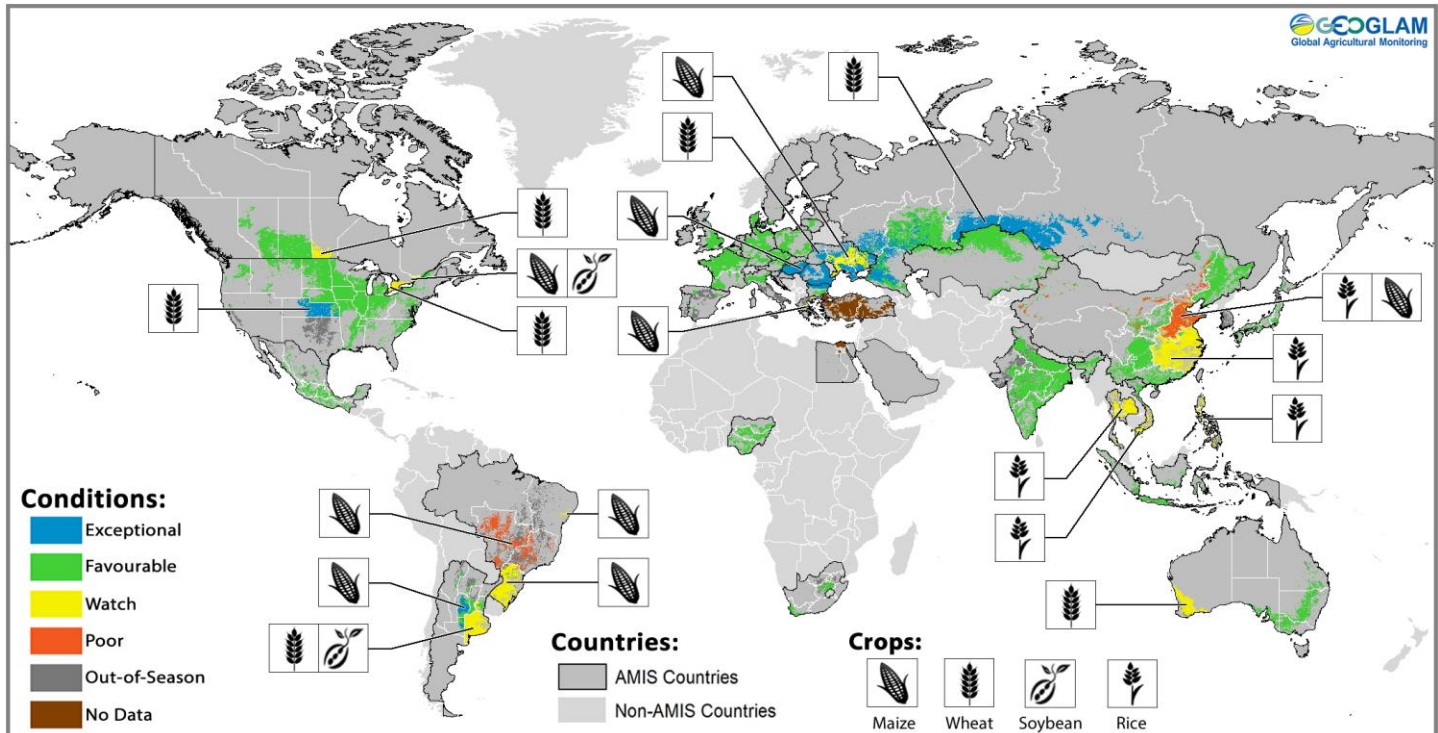
NO. 31

August 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 July 28th)



Crop condition map synthesizing information for all four AMIS crops as of July 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

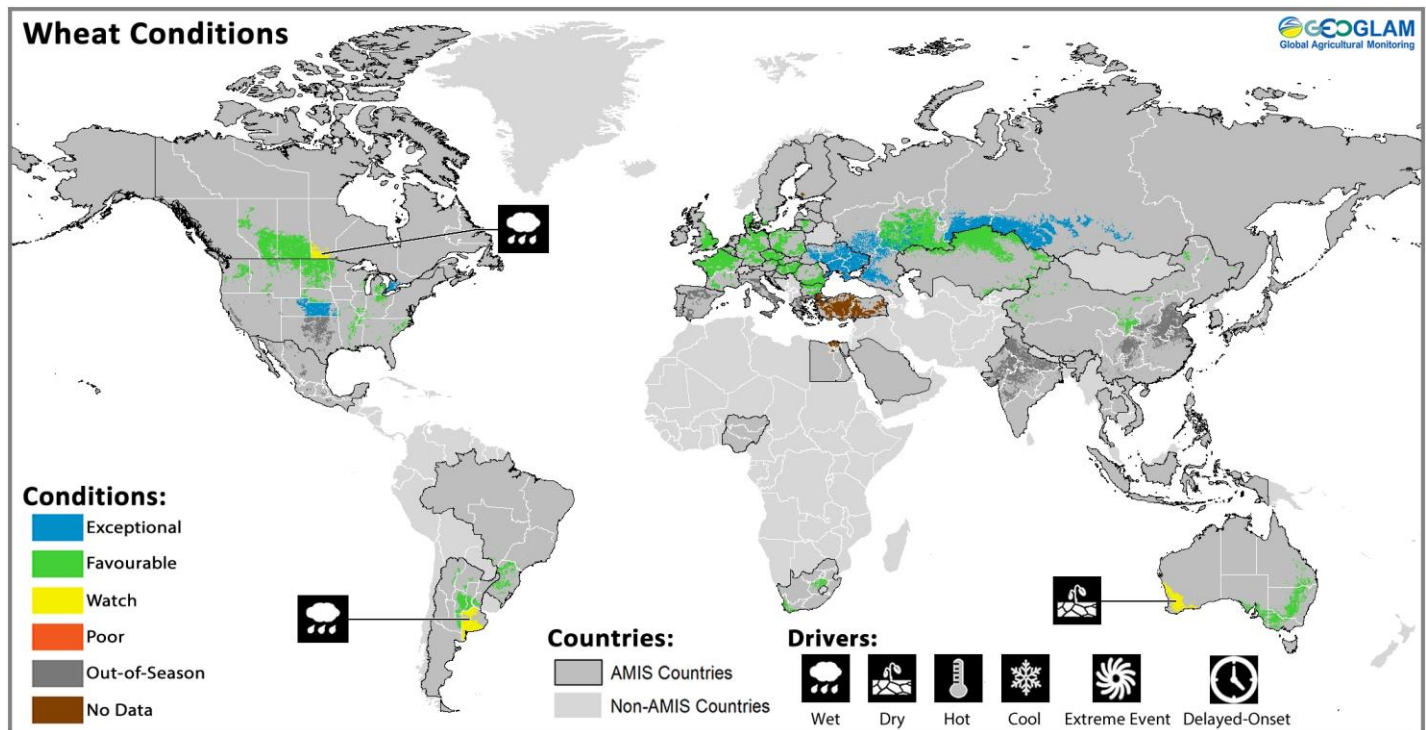
Wheat - In the northern hemisphere, winter wheat harvest is ongoing and conditions continue to be largely favourable. Spring wheat conditions remain generally favourable. In the southern hemisphere, the winter wheat crop is in generally favourable condition at this early stage of the season.

Maize - In the northern hemisphere, there are some concerns in parts of China, Ukraine, and Canada. Conditions are mostly favourable elsewhere. In the southern hemisphere, harvest is ongoing and significant concern remains over poor conditions in Brazil due to insufficient rainfall and high temperatures in April and May.

Rice - Overall conditions are mixed. In China, there is concern due to strong rainfall and a lack of sunlight, which are causing below average conditions for multiple rice seasons. In Thailand, Viet Nam and the Philippines, dry conditions are causing concern for the wet season crop.

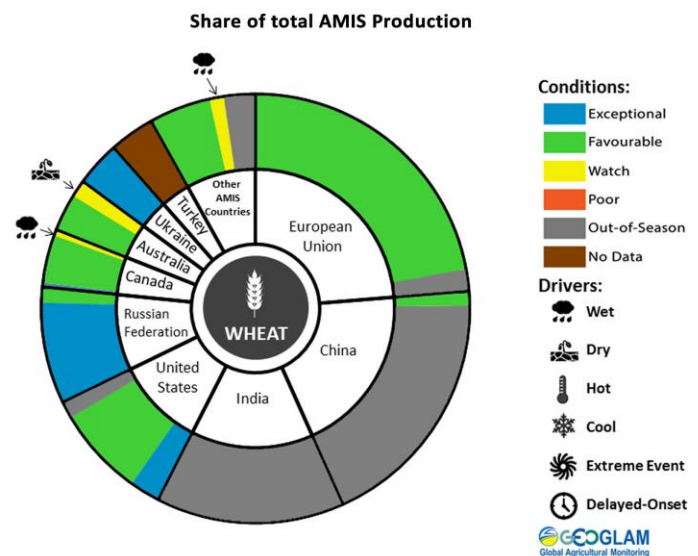
Soybeans - In the northern hemisphere, conditions are generally favourable, except in Canada, where conditions deteriorated from last month in the main producing areas due to abnormally hot and dry weather. In the southern hemisphere, harvest is nearly complete, except in parts of Argentina where there are significant delays due to heavy rainfall.

Wheat Conditions for AMIS Countries



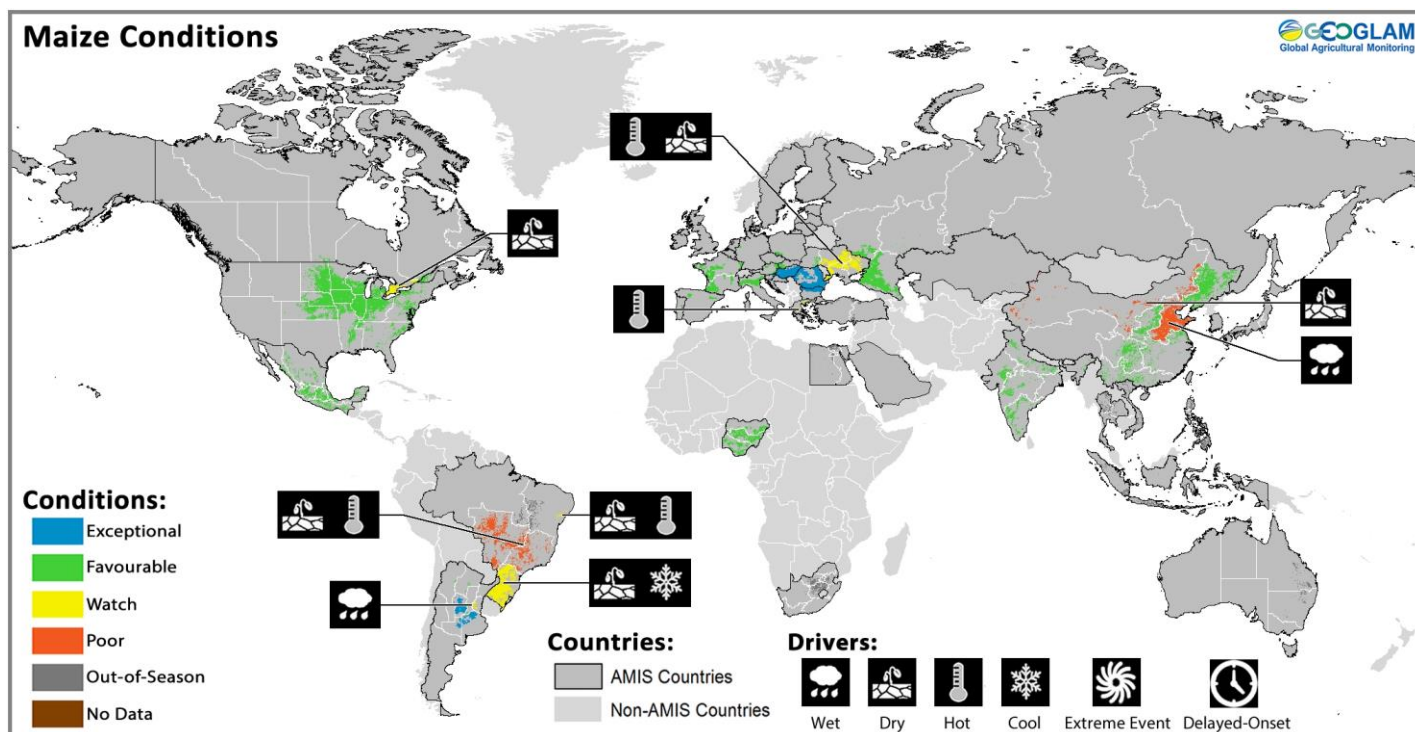
Wheat crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of July 28th. Where crops are in other than favourable conditions the climatic drivers responsible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

Wheat: In the **EU**, harvest is ongoing and the forecast for winter wheat production remains above the five-year average but below last year's levels. In the **US**, harvest is nearly complete with favourable to exceptional conditions throughout. Final yields are expected to be above record. However, since planted area is down it will not be record production. Spring wheat is favourable throughout with the exception of a few small areas, particularly in South Dakota. In **China**, spring wheat is at ripening to maturity stages in northern regions and overall crop conditions are at the 5-year average owing to favourable weather. In the **Russian Federation**, winter wheat harvest is ongoing and conditions are largely exceptional. The spring wheat crop is in good to exceptional condition and the crop is in vegetative to reproductive stages. In **Canada**, winter and spring wheat conditions continue to be favourable and the dry weather in Ontario is good for winter wheat harvest. In **Ukraine**, harvest continues and conditions are exceptional. In **Kazakhstan**, conditions are favourable for the spring-planted crop. In **Australia**, planting is complete and conditions are mostly favourable at this early stage of the season. Average to above average rainfall during June and July across most of Australia provided ample moisture for the planting, growth and development of crops and benefited soil moisture. However, there are some areas of concern in Western Australia due to dry conditions. In **Argentina**, wheat planting continues to be hindered by rainfall and excessive moisture in the center and south of the agricultural area, especially in southern parts of Buenos Aires province (the main wheat area). The early planted crops in the rest of the country are in vegetative stages and in favourable conditions.



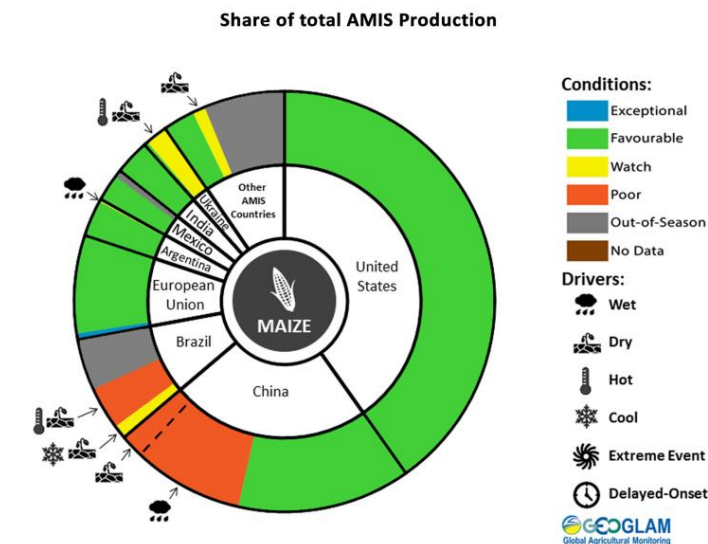
For detailed description of the pie chart please see box below.

Maize Conditions for AMIS Countries



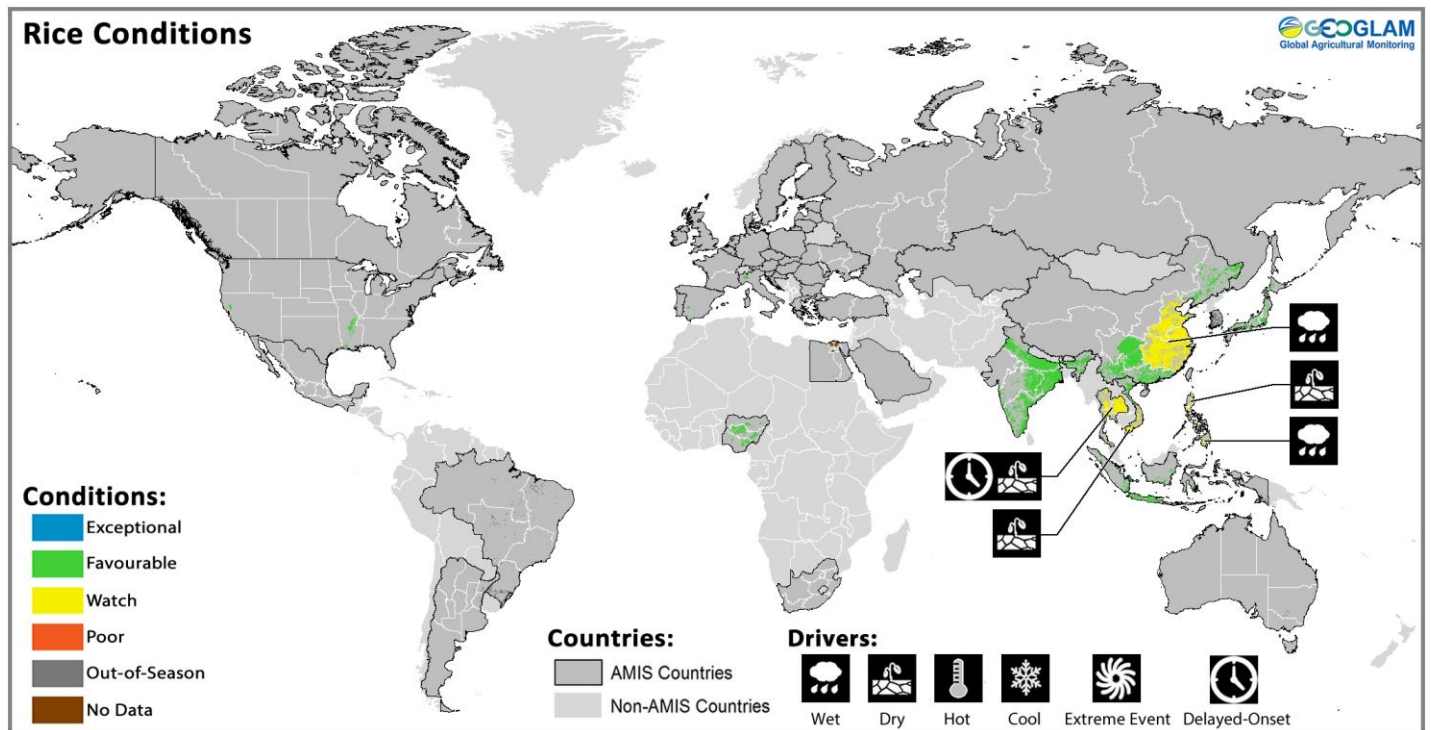
Maize crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of July 28th. Where crops are in other than favourable conditions the climatic drivers responsible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

Maize: In the **US**, conditions are good across most of the agricultural area and the crop is in the vegetative to reproductive stage. In **China**, overall conditions for spring maize are at the 5-year average. However, conditions in the Huanghuaihai region are poor for the spring and summer crop due to heavy rainfall. In contrast, below average precipitation and drought affected Inner Mongolia, leading to poor spring maize conditions in this area. In **Ukraine**, conditions are mixed due to high temperatures and dry conditions. In the **EU**, conditions are favourable, but weather conditions in the coming weeks will determine the final yields. In **India**, conditions are good. In **Mexico**, harvest is almost complete for the autumn-winter cycle and conditions are favourable. Planting for the spring-summer cycle is ongoing and conditions are favourable. In **Canada**, conditions deteriorated from last month in Ontario, the main producing region, due to abnormally dry and hot weather. A reduction in overall yields is expected. In the **Russian Federation**, conditions are favourable though there are some localized concerns over high temperatures in the central region. In **Nigeria**, conditions continue to be favourable and the crop is in ripening through harvest stages in the south and in vegetative to reproductive stage in the rest of the country. In **Brazil**, harvest has begun for the summer-planted (the larger producing season) and conditions are poor due to insufficient rainfall and high temperatures in April and May, which affected major producing regions during the critical stages. Overall production is expected to be significantly down. In **Argentina**, harvest progress was delayed by rainfall. Nevertheless, crop conditions remain favourable to exceptional.



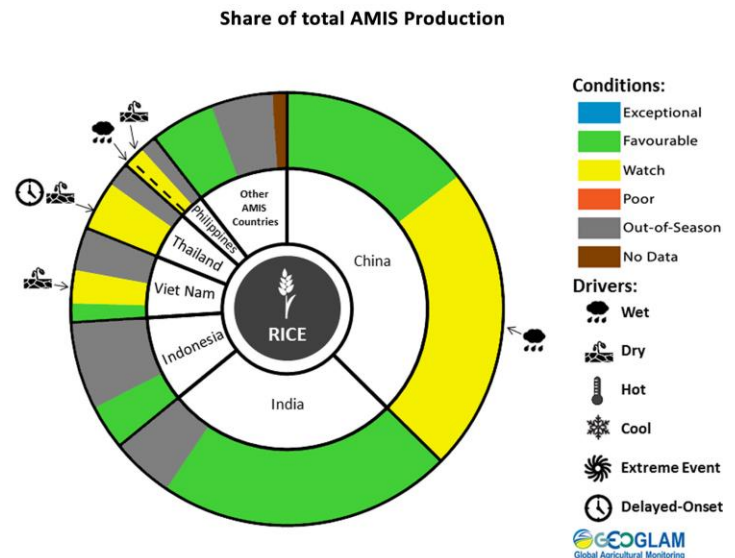
For detailed description of the pie chart please see box below.

Rice Conditions for AMIS Countries



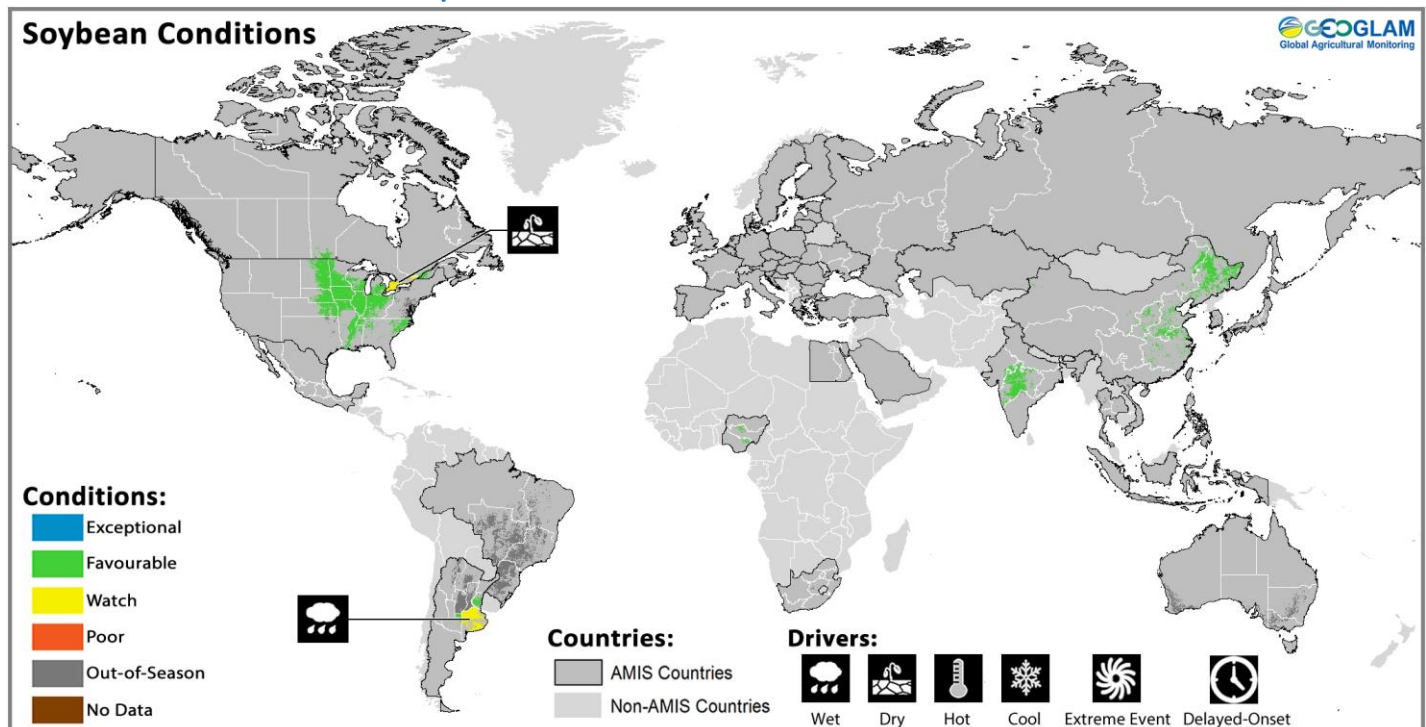
Rice crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of July 28th. Where crops are in other than favourable conditions the climatic drivers responsible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

Rice: In **India**, planting continues for the kharif crop and conditions are generally favourable. In **China**, overall conditions for the three rice seasons are below average. Strong rainfall and a lack of sunlight is causing below average conditions for early rice and single rice in the northern Lower Yangtze region and single-season rice in Huanghuaihai region. Additionally, heavy rain may adversely impact the seeding of late rice in the Lower Yangtze region. In **Thailand**, the wet season crop is in the tillering stage and conditions are mixed at this early stage due to the lateness of the rainy season and a lack of irrigation water. In **Viet Nam**, conditions are favourable in the northern and central regions, however there is concern in southern regions for the wet season crop due to dry conditions. Harvest is complete for the winter-spring dry season crop in the southern areas and end of season conditions were poor due to drought conditions. In the **US**, conditions remain favourable. In **Indonesia**, harvest is complete for the wet season crop and yields are estimated to be higher than the average due to enough sunlight and sufficient water. Planting is ongoing for the dry season crop and conditions are favourable. In the **Philippines**, conditions are mixed for the wet season crop due to the adverse lingering effects of El Niño and insufficient irrigation water in major producing provinces in the northern and central regions during the young panicle forming stage. In southern regions there is concern due to excess rains.



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

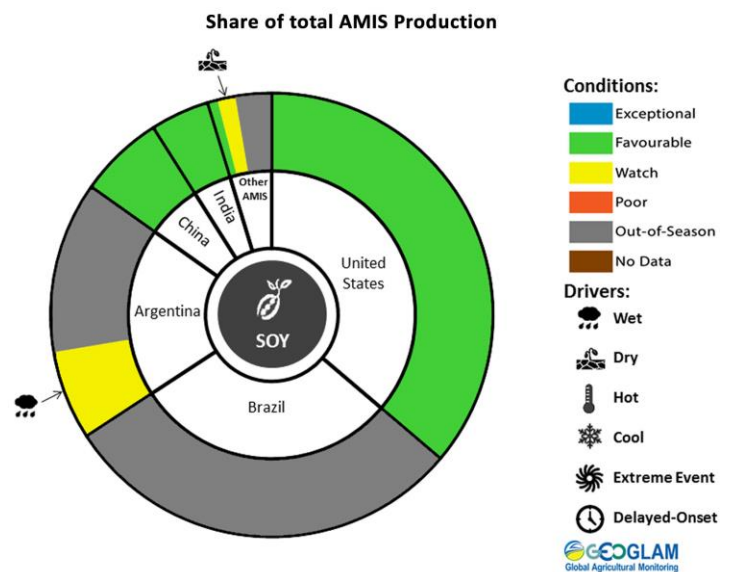
Soybean Conditions for AMIS Countries



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 July 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 throughout. In **Canada**, conditions deteriorated from last month in Ontario, which is the main producing region, due to abnormally dry and hot weather, which is expected to decrease yields. Conditions are favourable in the other regions. In **China**, conditions are favourable and the crop is in the flowering stage. In **India**, planting has begun and conditions are favourable for this early stage in the season. In **Argentina**, harvest is mostly complete, except in the south of Buenos Aires region where significant delays remain due to heavy rainfall. Conditions remain favourable for the crops that remain on the ground.

Information on crop conditions in non-AMIS countries can be found in the [GEOGLAM Early Warning Crop Monitor](#), published August 4th 2016



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

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.

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 & GeoTerralimage & SANSA), 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.

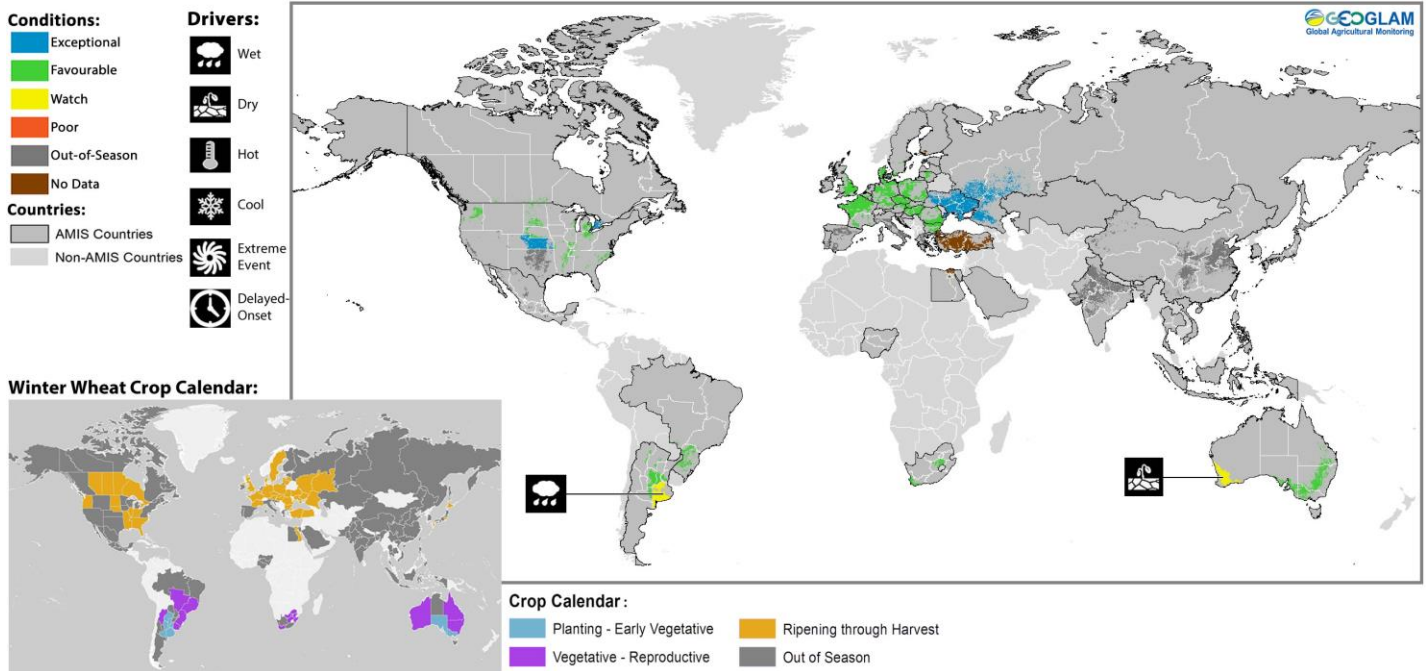
More detailed information on the GEOGLAM crop assessments is available at www.geoglam-crop-monitor.org

For information on country coverage and criteria:

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

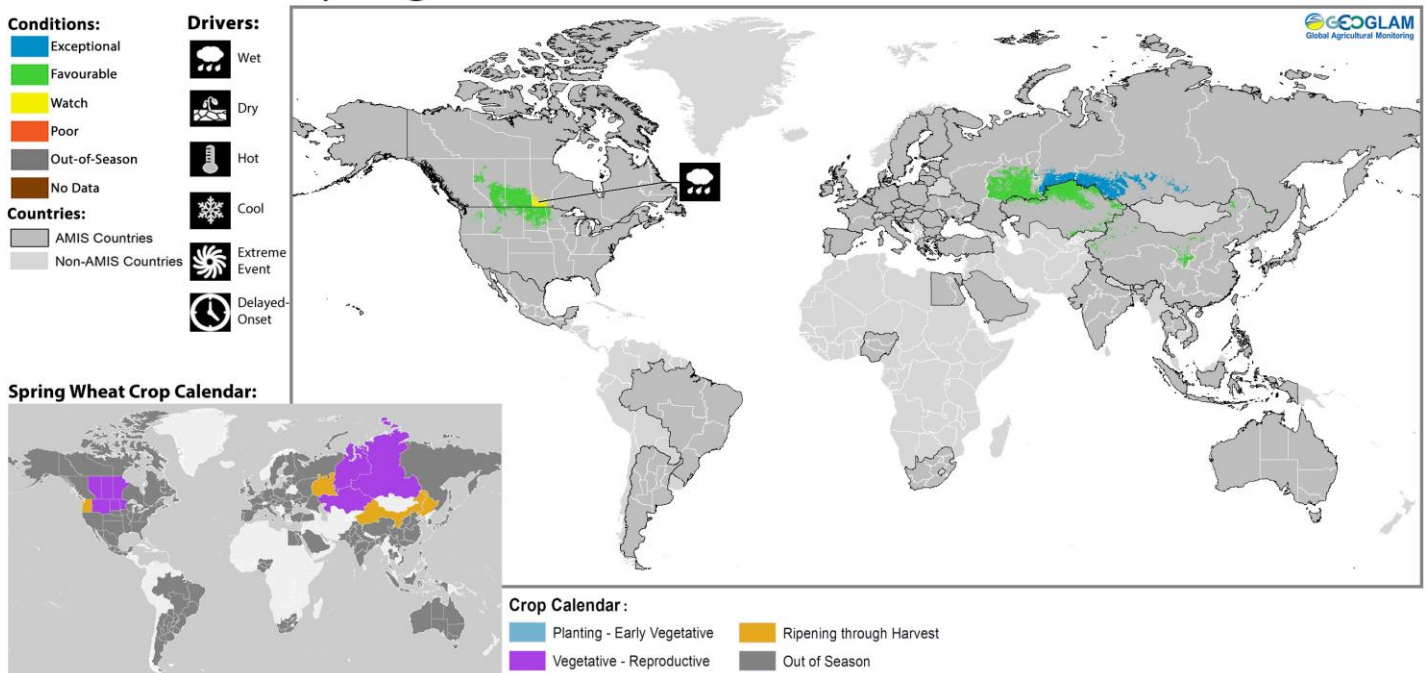
Appendix 2: Crop Season Specific Maps & Pie Charts

Winter Planted Wheat Conditions for AMIS Countries



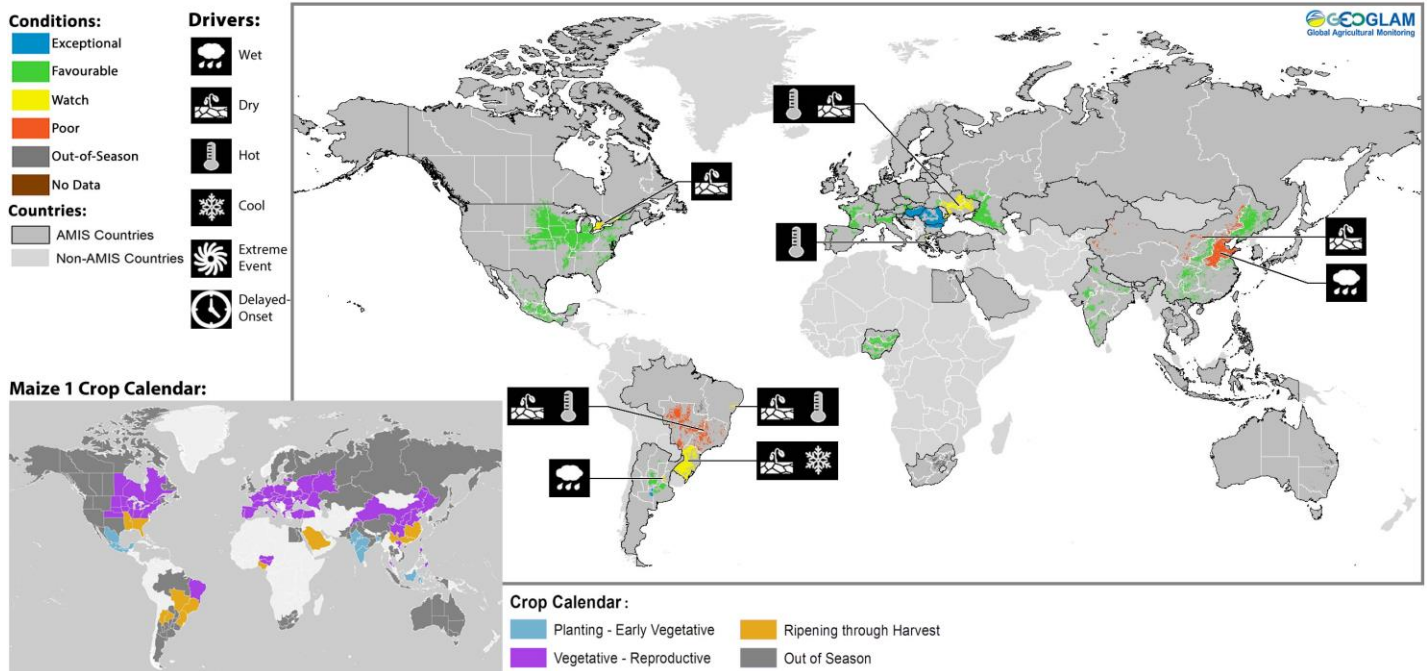
Winter wheat crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of July 28th. Where crops are in less than favourable conditions the climatic drivers responsible 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



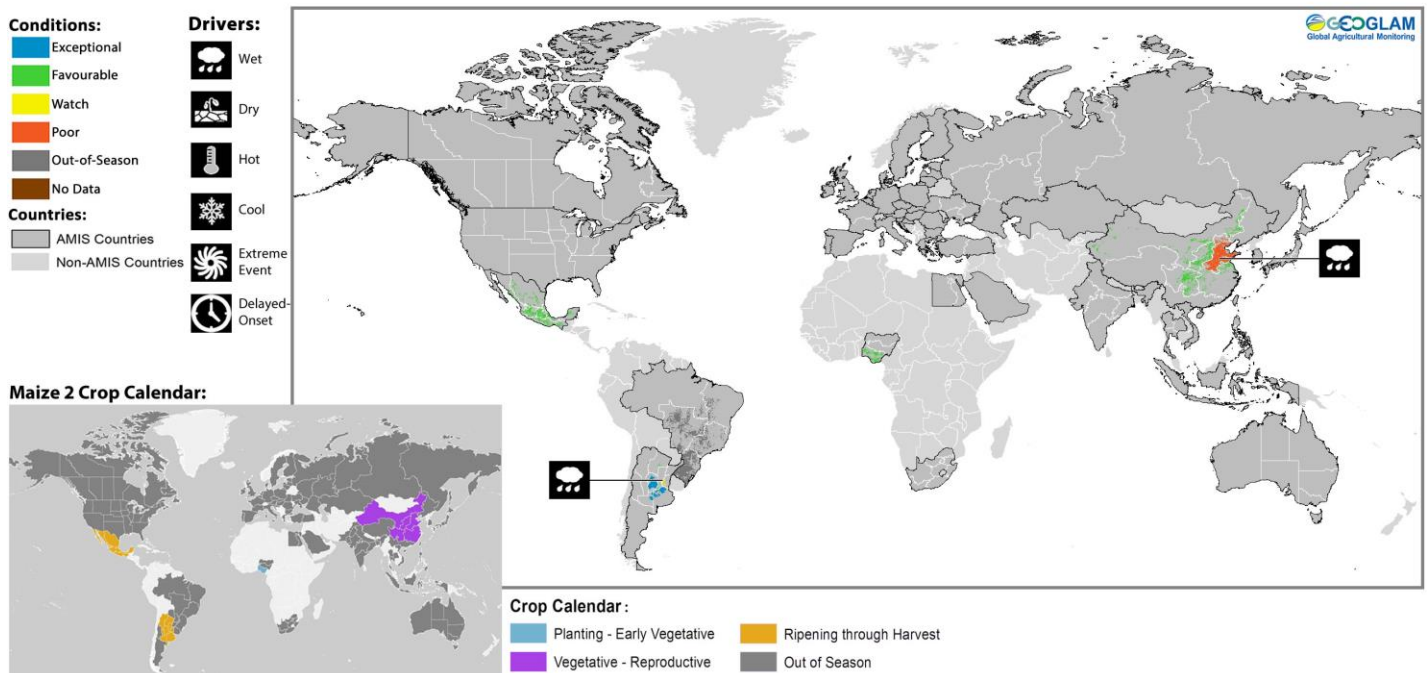
Spring wheat crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of July 28th. Where crops are in less than favourable conditions the climatic drivers responsible 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 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 July 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.

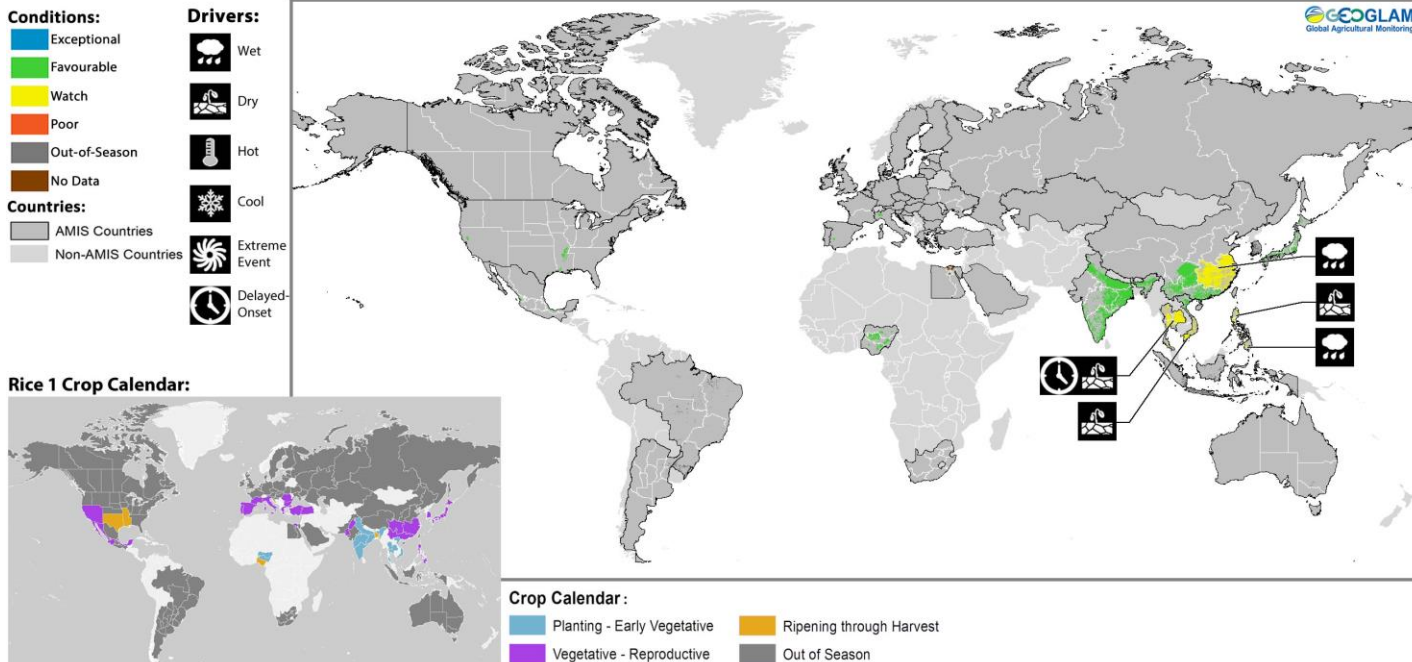
Maize 2 Conditions for AMIS Countries



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 July 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.

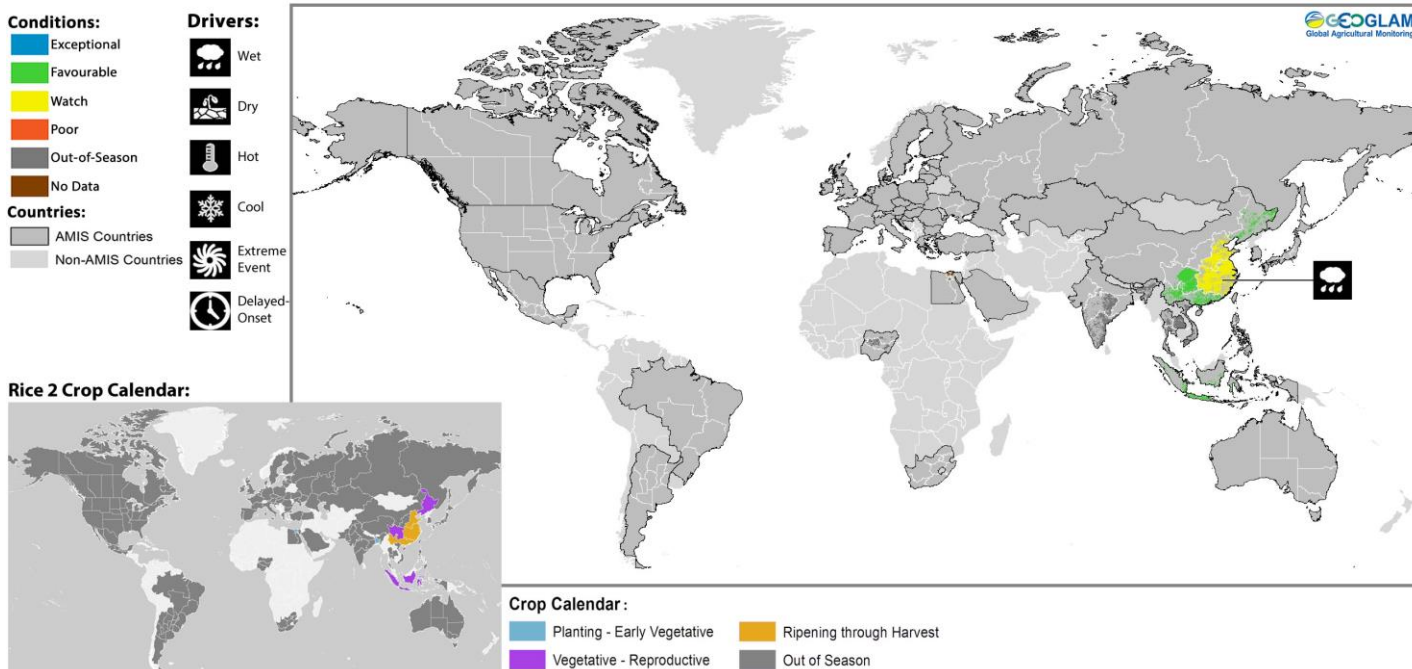
* Assessment based on information as of July 28th

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 July 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.

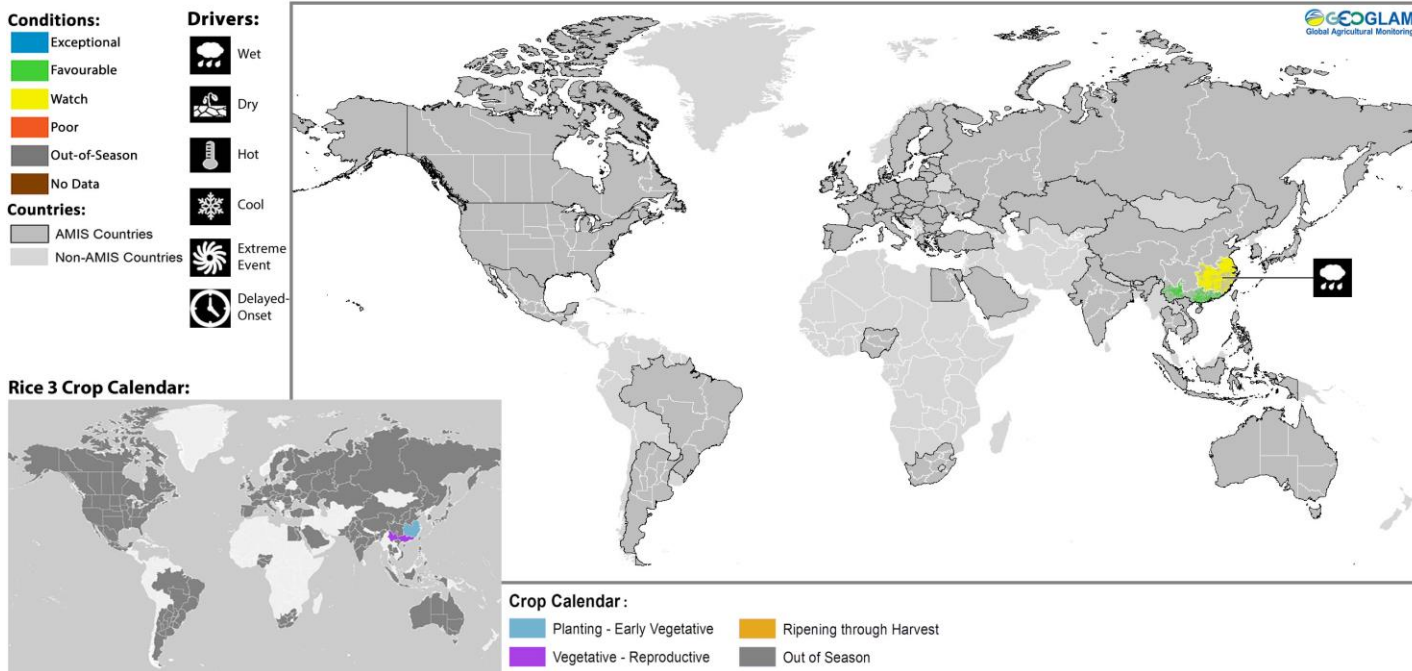
Rice 2 Conditions for AMIS Countries



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 July 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.

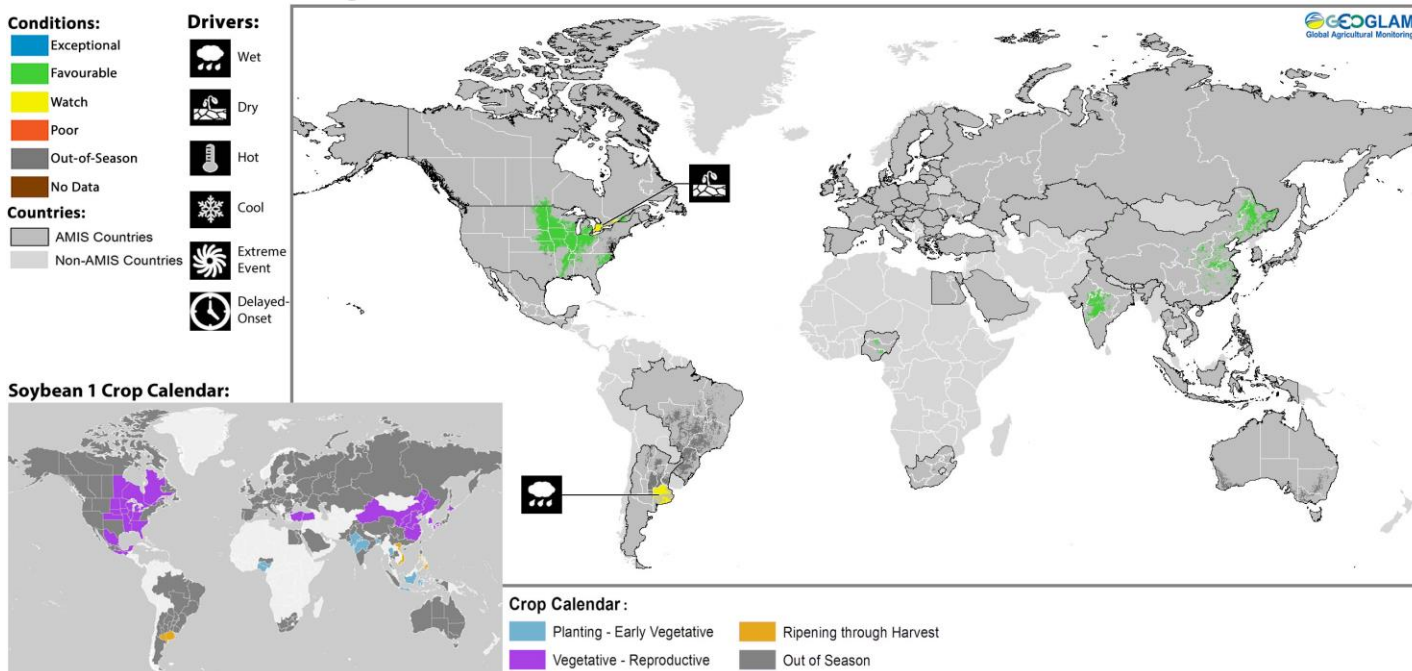
* Assessment based on information as of July 28th

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 July 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.

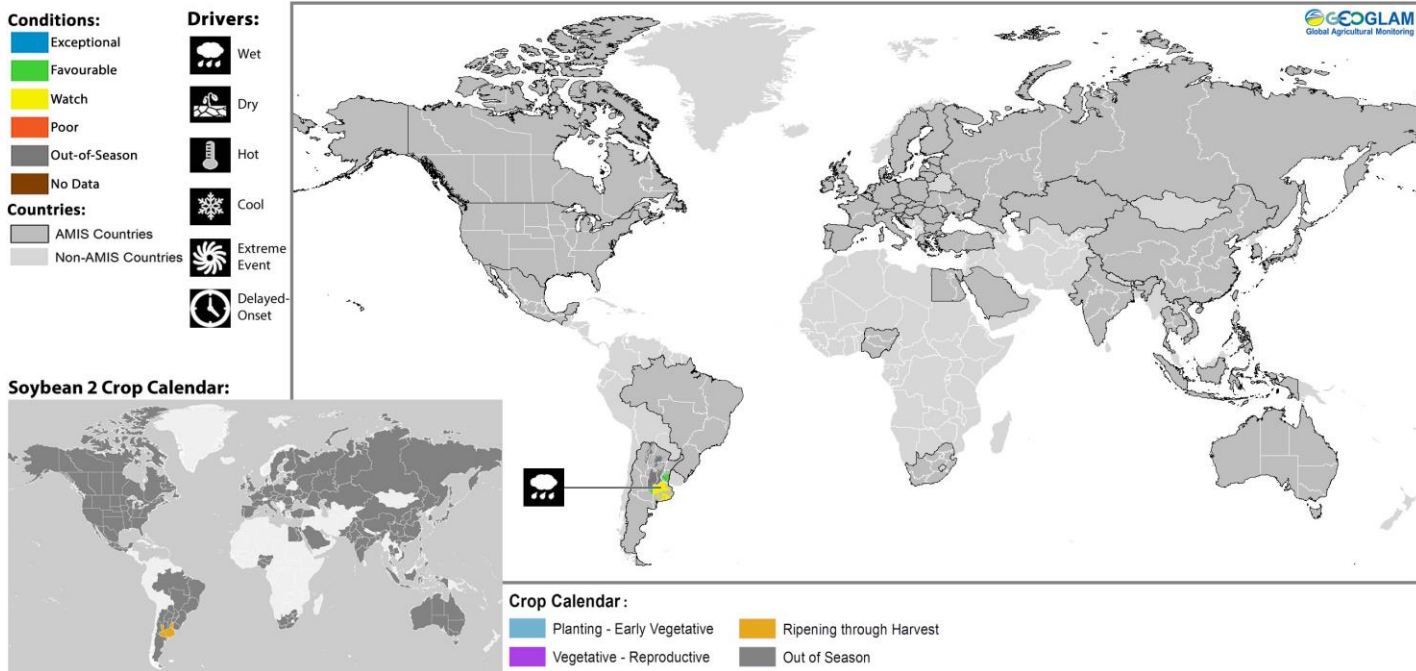
Soybean 1 Conditions for AMIS Countries



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 July 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.

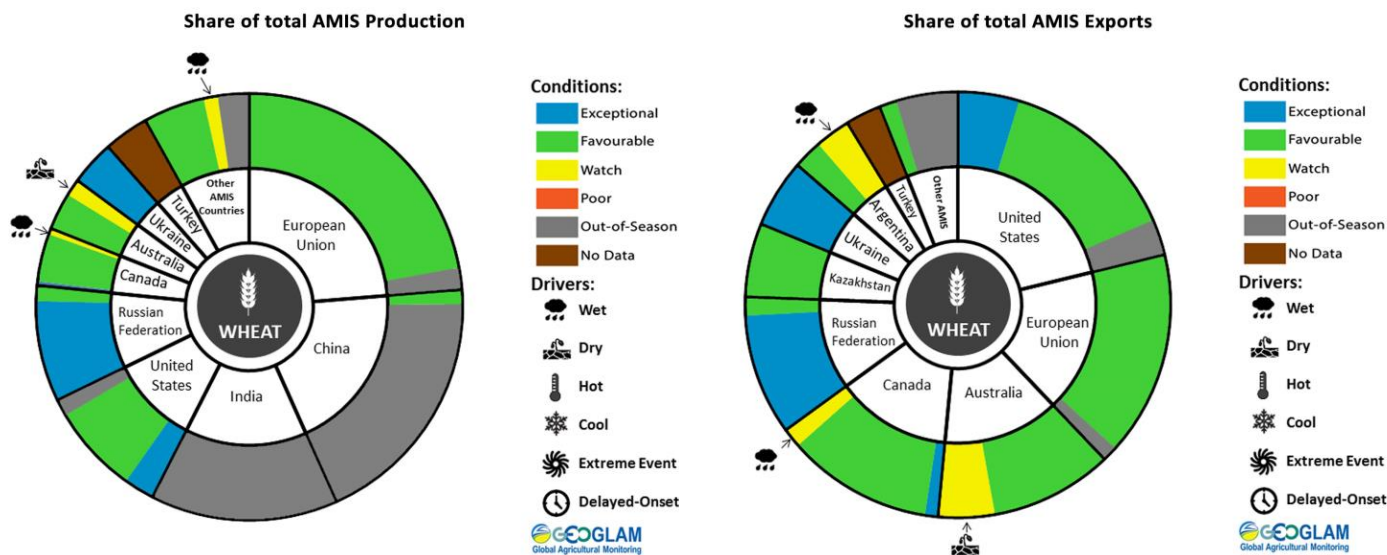
* Assessment based on information as of July 28th

Soybean 2 Conditions for AMIS Countries



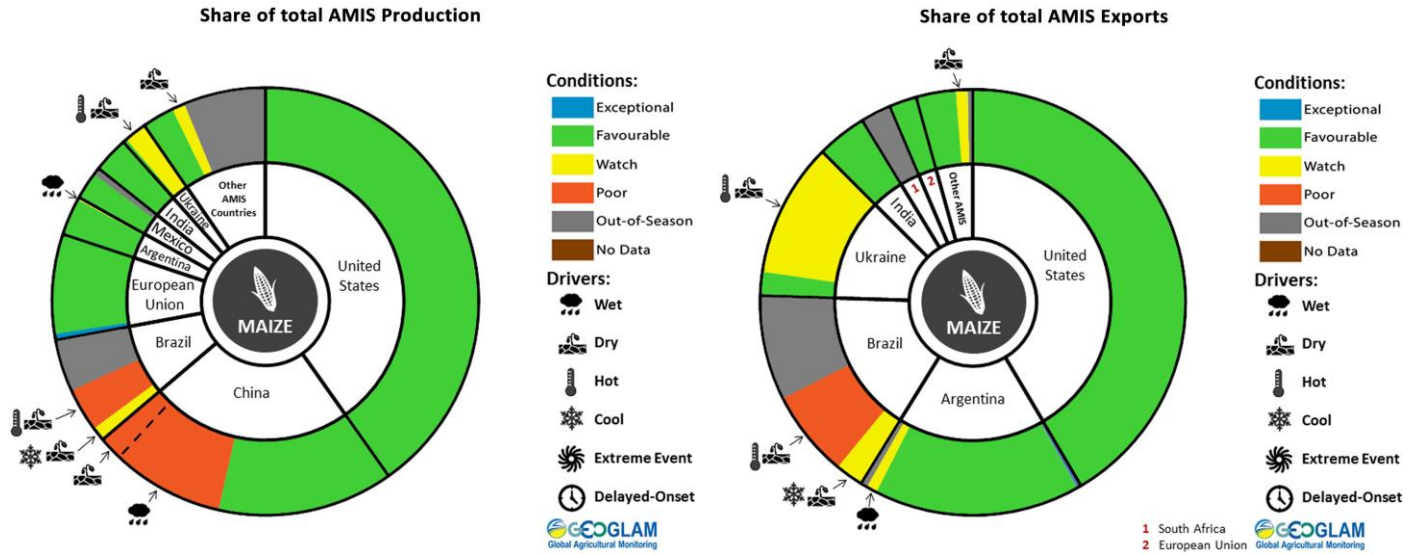
Soybean 2 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of July 28th. Where crops are in less than favourable conditions the climatic drivers responsible 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

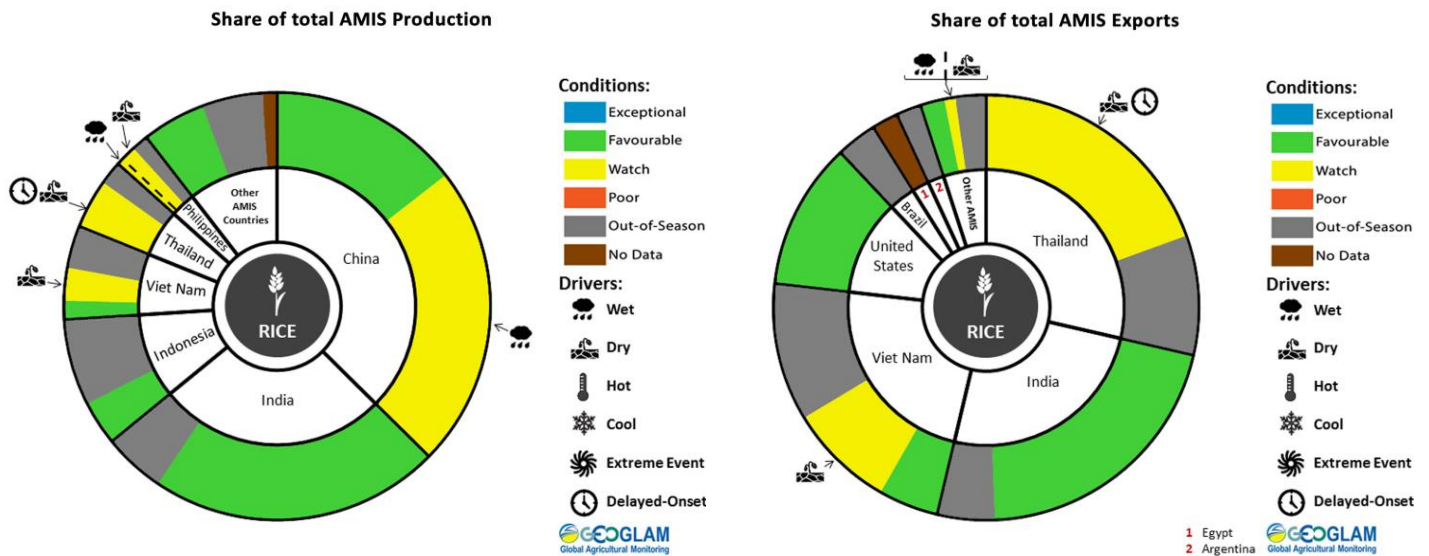


* Assessment based on information as of July 28th

Maize AMIS Comparisons

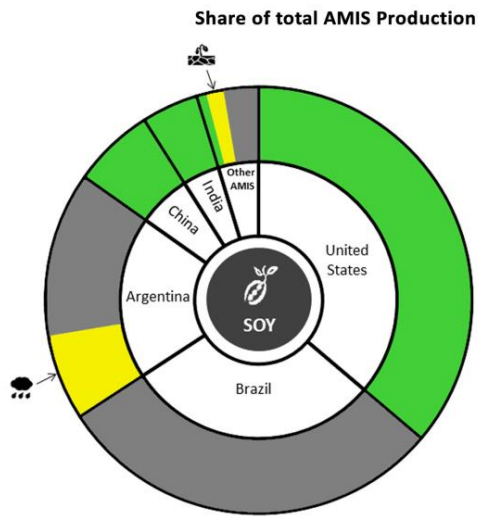


Rice AMIS Comparisons

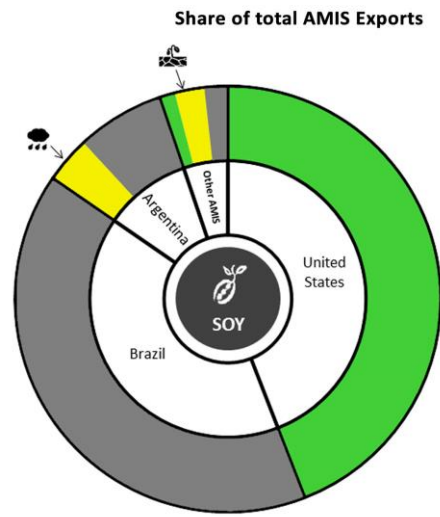


* Assessment based on information as of July 28th

Soybean AMIS Comparisons



Share of total AMIS Production



Share of total AMIS Exports



* Assessment based on information as of July 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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