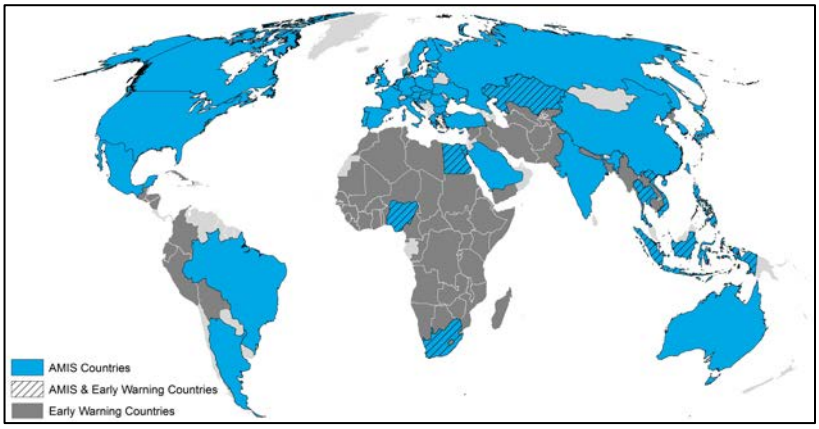
CROP MONITOR FOR **AMIS**

NO. 43

September 2017

The Group on Earth Observations' Global Agricultural Monitoring (GEOGLAM) initiative developed the Crop Monitor whose objection 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.



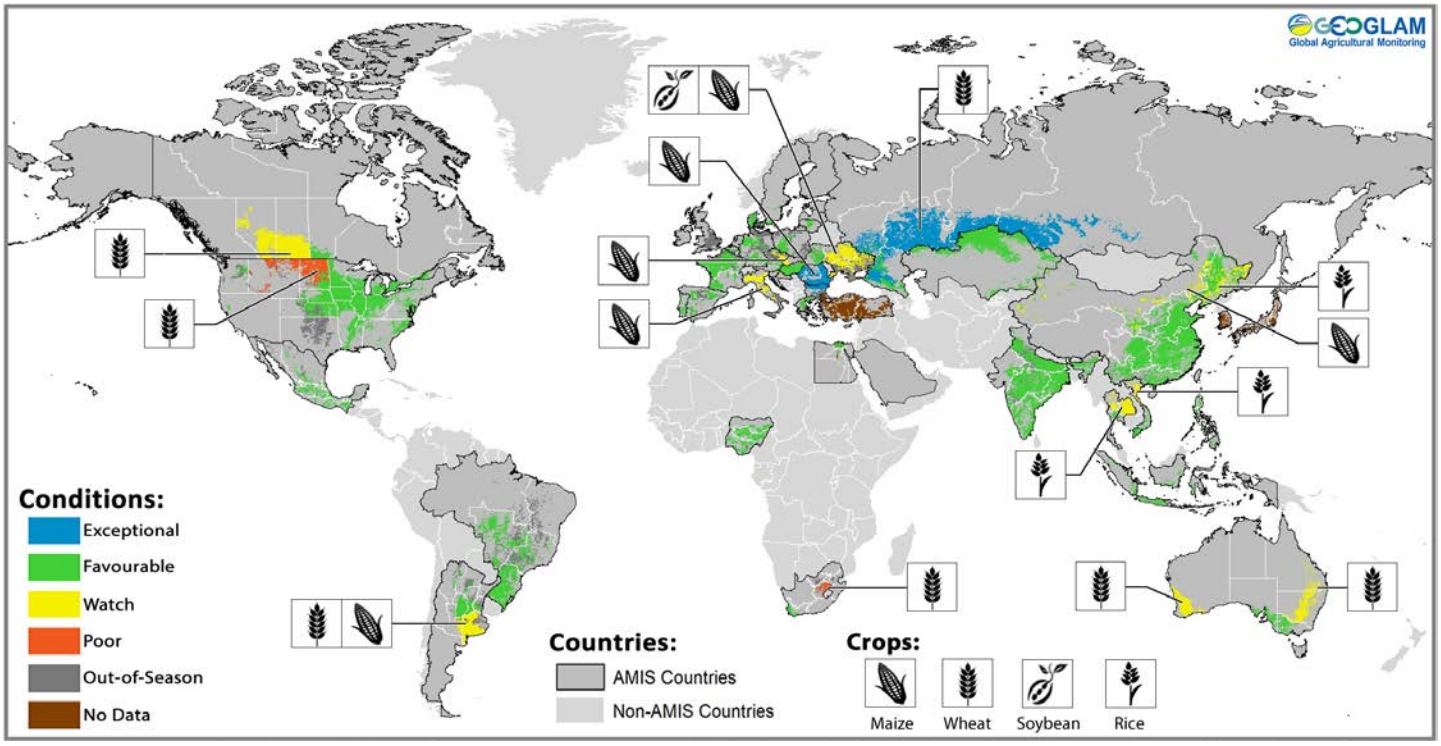
AMIS Agricultural Market Information System

GEO GROUP ON EARTH OBSERVATIONS

Crop Monitor a geoglam initiative

GEOGLAM Global Agricultural Monitoring

Conditions at a glance for AMIS countries (as of August28th)



Crop condition map synthesizing information for all four AMIS crops as of August28th. 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, conditions remain mixed as winter wheat harvest completes, and spring wheat harvest begins. The Russian Federation is experiencing exceptional conditions while in the northern plains of the US and southern prairies of Canada, dry weather persists for spring wheat. In the southern hemisphere, conditions remain mixed with adverse weather in Argentina and Australia.

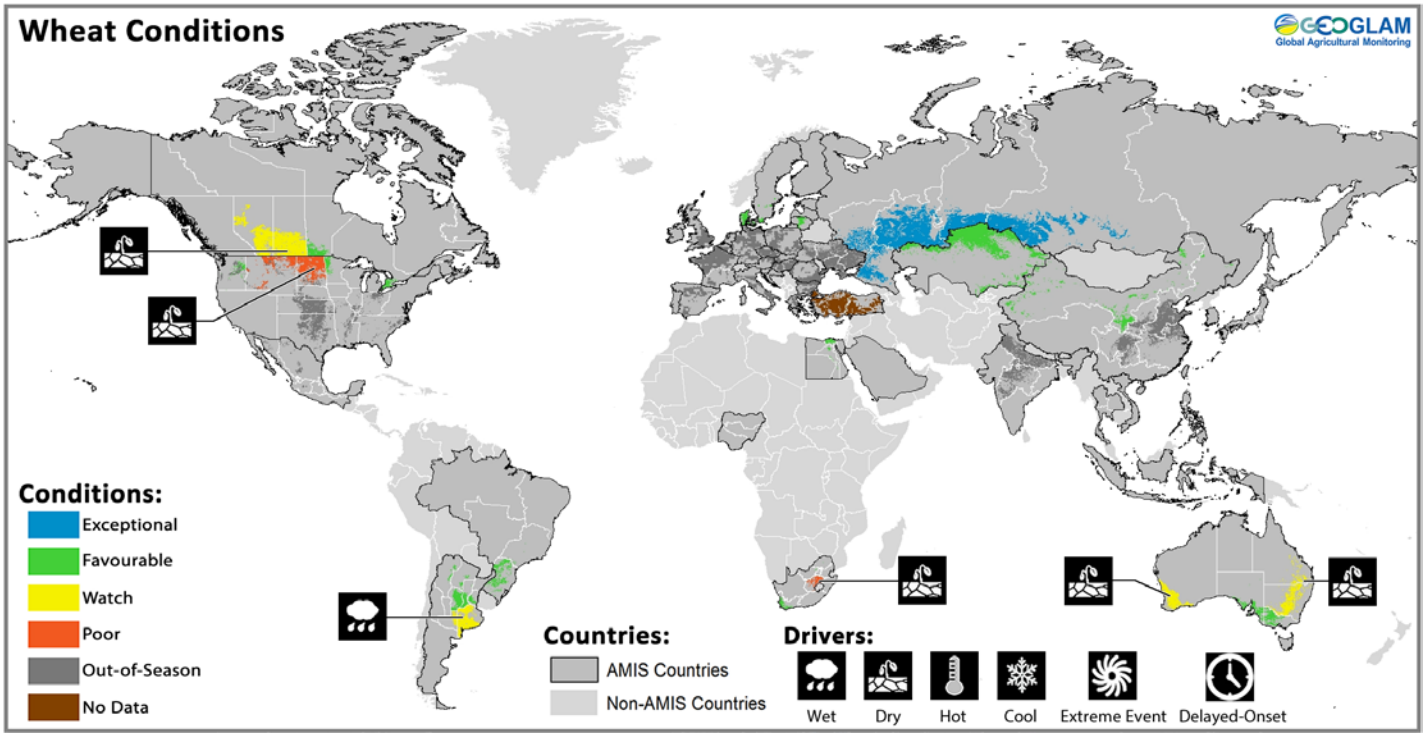
Maize - In the southern hemisphere, conditions continue to be generally favourable as harvest wraps up in Argentina and Brazil. Conditions in the northern hemisphere are generally favourable, albeit with some areas of concern in the EU, China, and Ukraine due to dry weather.

Rice - In Asia, conditions are mixed as heavy rainfall affects areas in the north of Viet Nam, northern Thailand, and northeast China. Conditions remain favourable in India, Indonesia and the Philippines.

Soybeans - In the northern hemisphere, conditions are generally favourable with the exception of dry conditions in Ukraine. In the southern hemisphere, new-crop plantings are still to begin

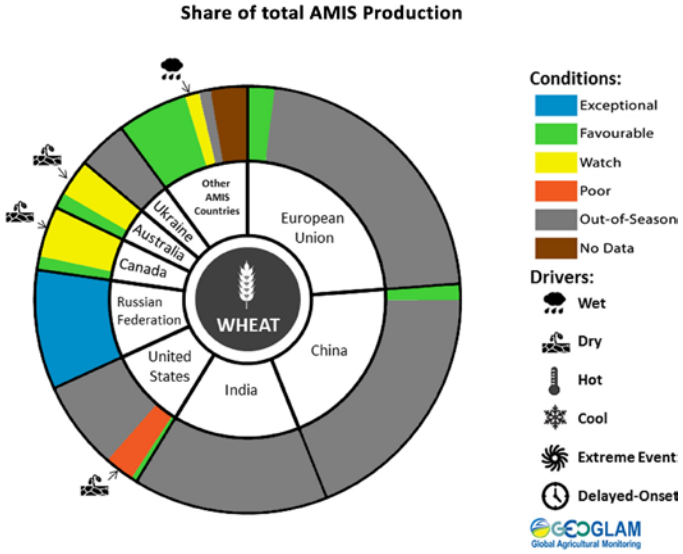
* Assessment based on information as of August28th

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 August28th. 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.

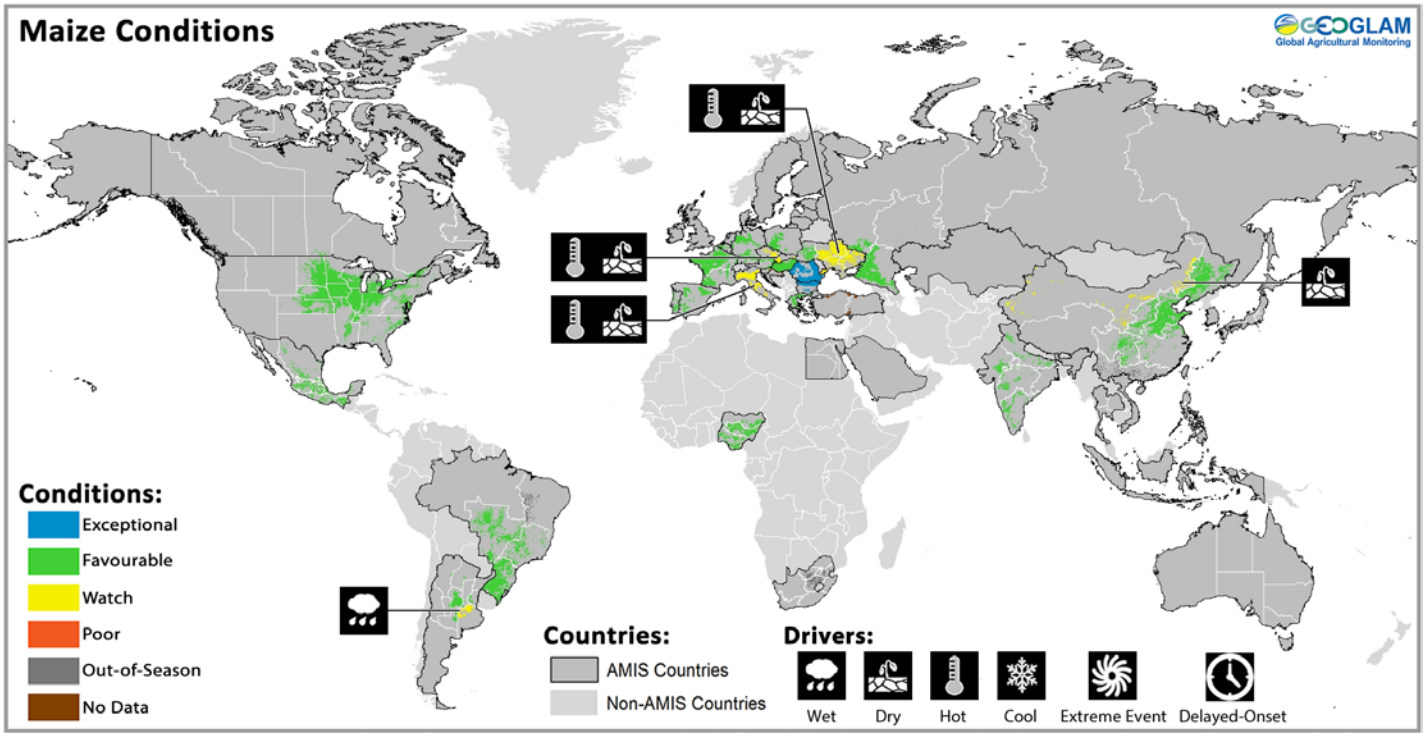
Wheat: In the **EU**, rains in western and northern Europe hampered harvesting and raised quality concerns, however overall yields are in line with the 5-year average as harvest is nearing completion. In the **Russian Federation**, conditions are exceptional for winter wheat as harvest is completing, while sowing for the next season has begun in some areas under favourable conditions. Spring wheat development continues under exceptional conditions with excellent yield prospects going into harvest. In **Kazakhstan**, conditions are generally favourable for spring wheat with the exception of dry conditions in Akmola, a main producing area. In **China**, spring wheat is under favourable conditions as harvest begins. In the **US**, harvest of spring wheat is wrapping up. Production in areas of the western Dakotas and Montana were significantly reduced due to drought. However, conditions in other parts of the spring wheat region were quite good. In **Canada**, conditions are mixed as dry conditions in the Southern Prairies are causing concern for spring wheat, while winter wheat yields in Ontario are average despite the cool wet season. In **Australia**, conditions have improved across southern production states with recent rainfall. However, dry conditions persist across northern areas in Western Australia, central and northern New South Wales and Queensland, where production is expected to be significantly affected in these areas. In **Argentina**, conditions are generally favourable as sowing is finishing, however new rains continue to delay final sowing in the southern areas.



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

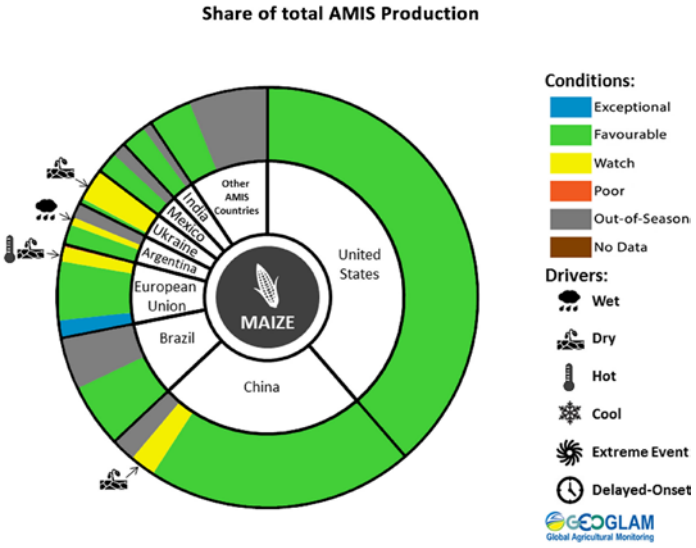
* Assessment based on information as of August28th

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 August28th. 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 **Brazil**, harvest of summer-planted maize is closing under favourable conditions. An increase in planted area and yields led to an increase in production compared to last year. In **Argentina**, conditions are generally favourable as harvest wraps up although high soils moisture and high grain moisture are delaying remaining areas. In the **US**, conditions are favourable with good yield prospects as conditions improved in the Dakotas and the eastern Midwest. In **Canada**, cool wet weather continues to slow crop development in the main producing province of Ontario. In **Mexico**, conditions are favourable for the start of the spring-summer crop as rains have begun across the country. In the **EU**, overall conditions are favourable as rains mitigated heat stress in eastern Europe, but southern Europe is still affected by a drought that potentially damaged yields. In **Ukraine**, conditions are less than favourable as a lack of rain and a rapid drying of the soil have affected crops in the southern, central, and eastern regions. In **China**, spring maize is in generally favourable condition with the exception of dry conditions in eastern Inner Mongolia. Conditions are favourable for summer planted maize in the flowering stage. In **India**, conditions are favourable for the Kharif crop as good soil moisture levels positively impact continued crop development.



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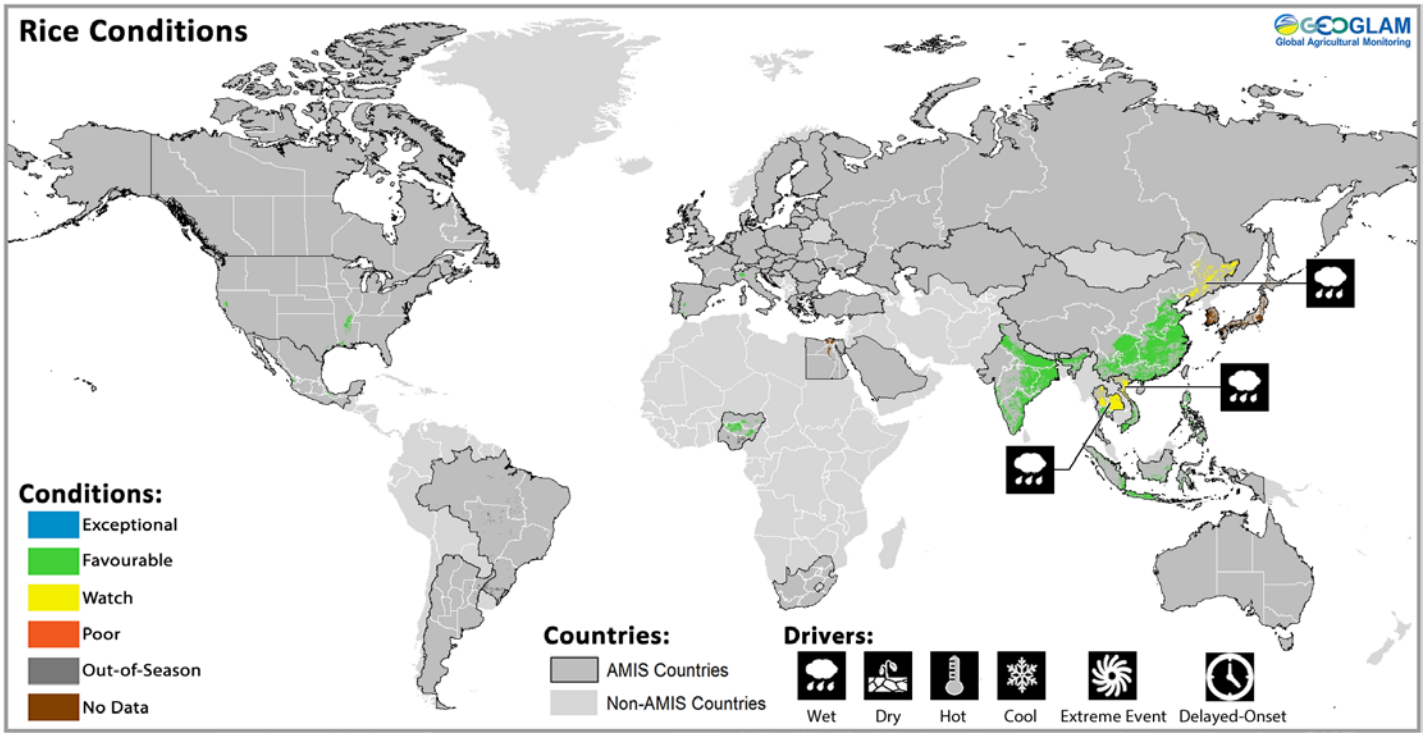
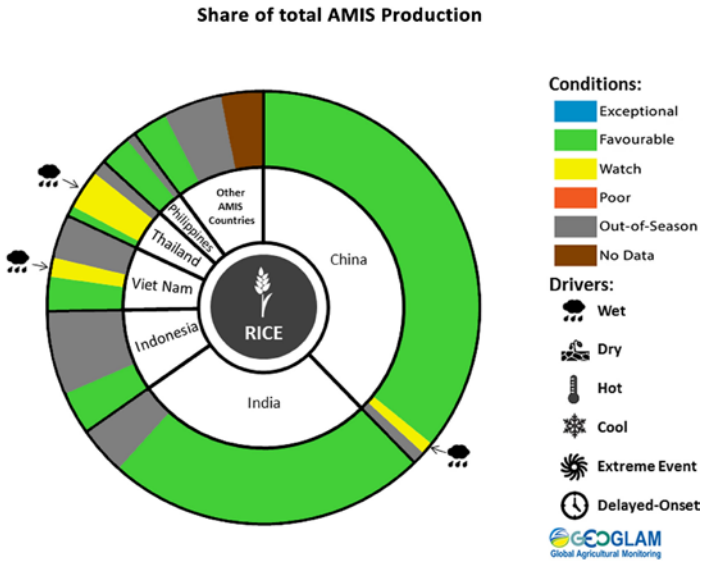
Rice Conditions for AMIS Countries



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 August28th. Where crops are in other than favourable conditions the climatic drivers responsible for those conditions are displayed.

Rice: In **China**, single-season rice is under generally favourable conditions except in the northeast due to heavy rainfall and low solar radiation. Late rice is under favourable conditions. In **India**, conditions are favourable with good soil moisture levels across the country for the Kharif crop currently in the vegetative stage. In **Indonesia**, conditions continue to be favourable for dry-season rice owing to adequate irrigation water and sunlight. Planting continues as the harvest of earlier planted rice enters the second month, with higher yields than last dry-season expected. In **Viet Nam**, conditions in the north are mixed due to heavy rains and flooding as sowing of wet-season rice has completed with an increase in area compared to last year. While in the south, harvesting of wet-season rice continues under favourable conditions with yields similar to last year. In **Thailand**, conditions are mixed as two tropical storms impacted the northern part of the country, providing ample rainfall though also causing some flood damage. In the **Philippines**, wet-season rice harvest has begun under favourable conditions, despite heavy rainfall in Luzon and western areas from several tropical storms enhancing the southwest monsoon. In the **US**, rice conditions are favourable and unaffected by hurricane Harvey due to harvest being completed in those areas.



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

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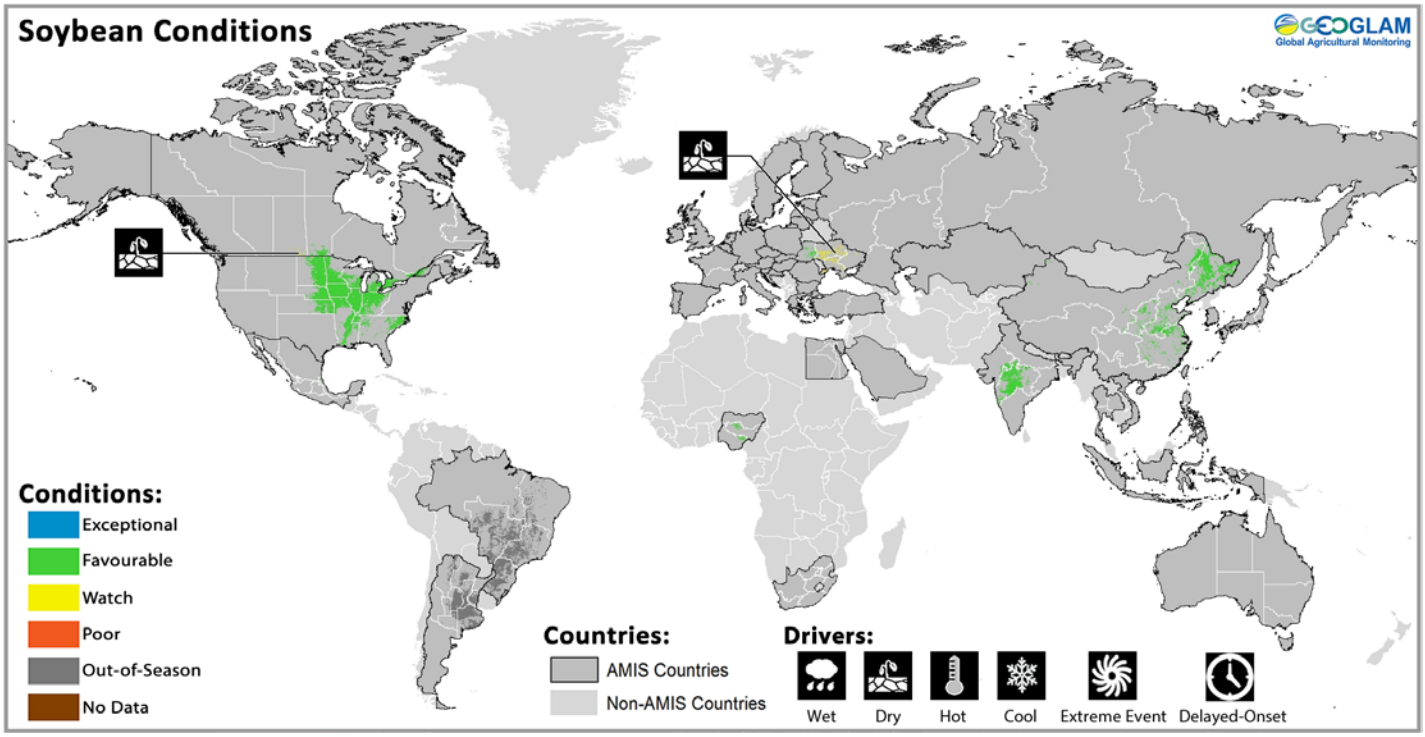
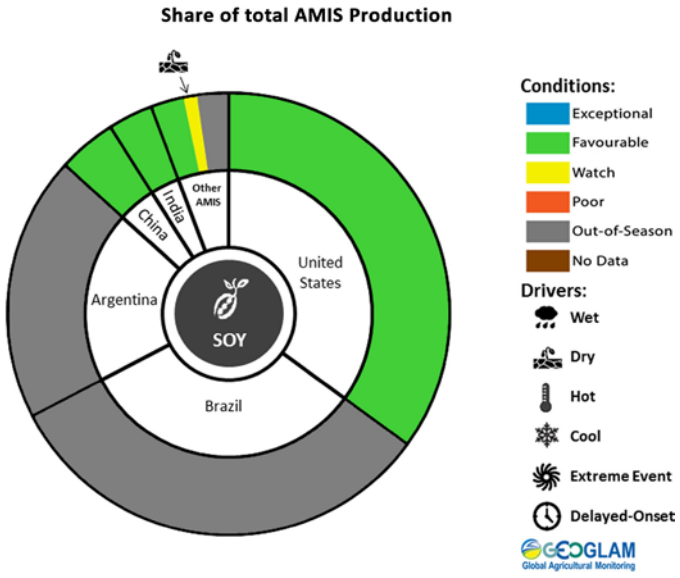
Soybean Conditions for AMIS Countries



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 August28th. 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 with improvement in the Dakotas and in the Eastern Corn Belt. In **Canada**, conditions are mixed as cool wet weather continues to slow crop development in the main producing province of Ontario, while Manitoba is under favourable conditions. In **China**, conditions are favourable for the crop in the flowering stage. In **India**, conditions are generally favourable for the Kharif crop in the vegetative state. In **Ukraine**, conditions are less than favourable as a lack of rain and a rapid drying of the soil have affected crops in the southern, central and eastern regions.



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 7th 2017

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 August28th

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.
*"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

Crop Season Nomenclature:

In countries that contain multiple cropping seasons for the same crop, the following chart identifies the national season name associated with each crop season within the Crop Monitor. Within the Crop Monitor for AMIS countries the larger producing season (most recent 5 years) has been assigned to the first season.

Crop Season Nomenclature				
Country	**Crop**	**Season 1 Name**	**Season 2 Name**	**Season 3 Name**
Argentina	Soybean	Spring-planted	Summer-planted	
Brazil	Maize	Summer-planted (larger producing season)	Spring-planted (smaller producing season)	
Canada	Wheat	Winter-planted	Spring-planted	
China	Maize	Spring-planted	Summer-planted	
China	Rice	Intermediate Crop	Early Crop	Late Crop
China	Wheat	Winter-planted	Spring-planted	
Egypt	Rice	Summer-planted	Nili season (Nile Flood)	
India	Maize	Kharif	Rabi	
India	Rice	Kharif	Rabi	
India	Soybean	Kharif	Rabi	
India	Wheat	Rabi	Kharif	
Indonesia	Rice	Main-season	Second-season	
Mexico	Maize	Spring-planted	Autumn-planted	
Nigeria	Maize	Main-season	Short-season	
Nigeria	Rice	Main-season	Off-season	
Philippines	Rice	Wet season	Dry season	
Russian Federation	Wheat	Winter-planted	Spring-planted	
Thailand	Rice	Wet season	Dry season	
United States	Wheat	Winter-planted	Spring-planted	
Viet Nam	Rice	Wet season	Dry season	

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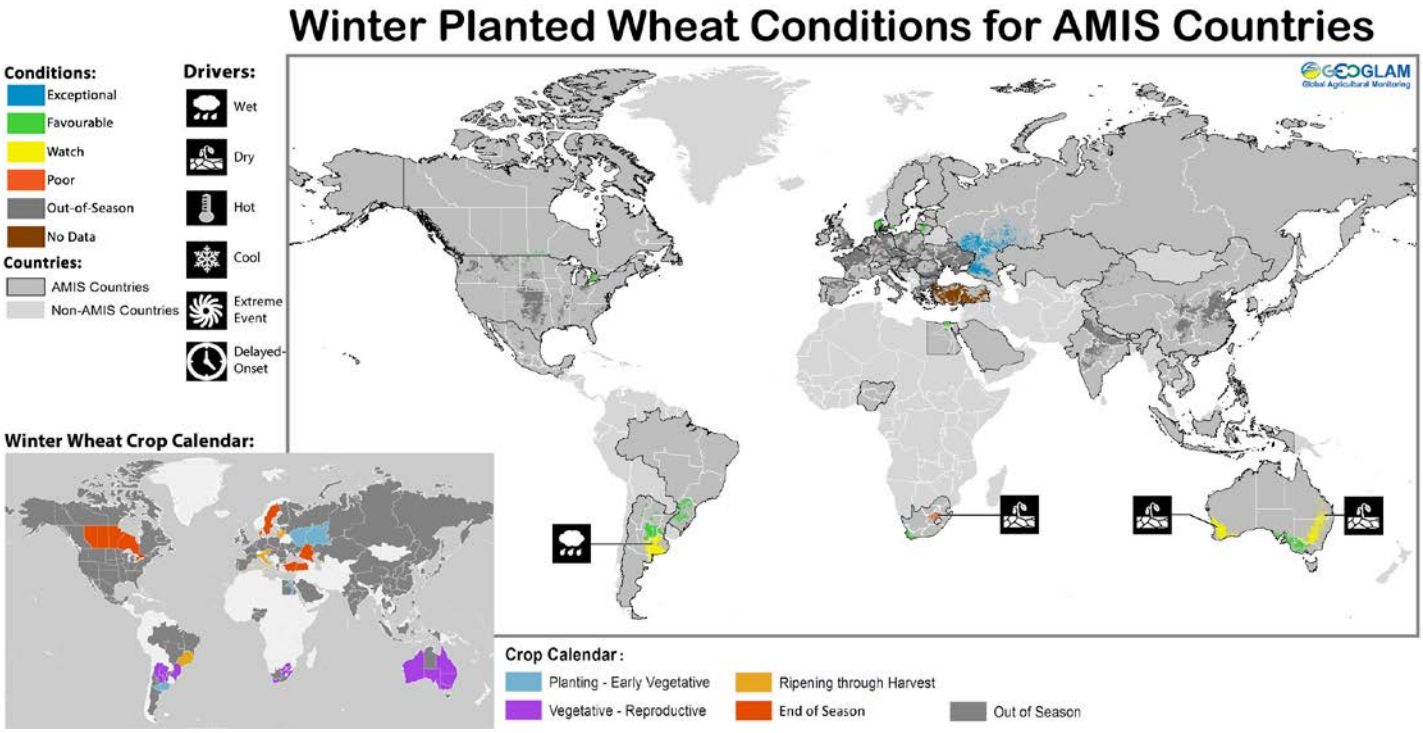
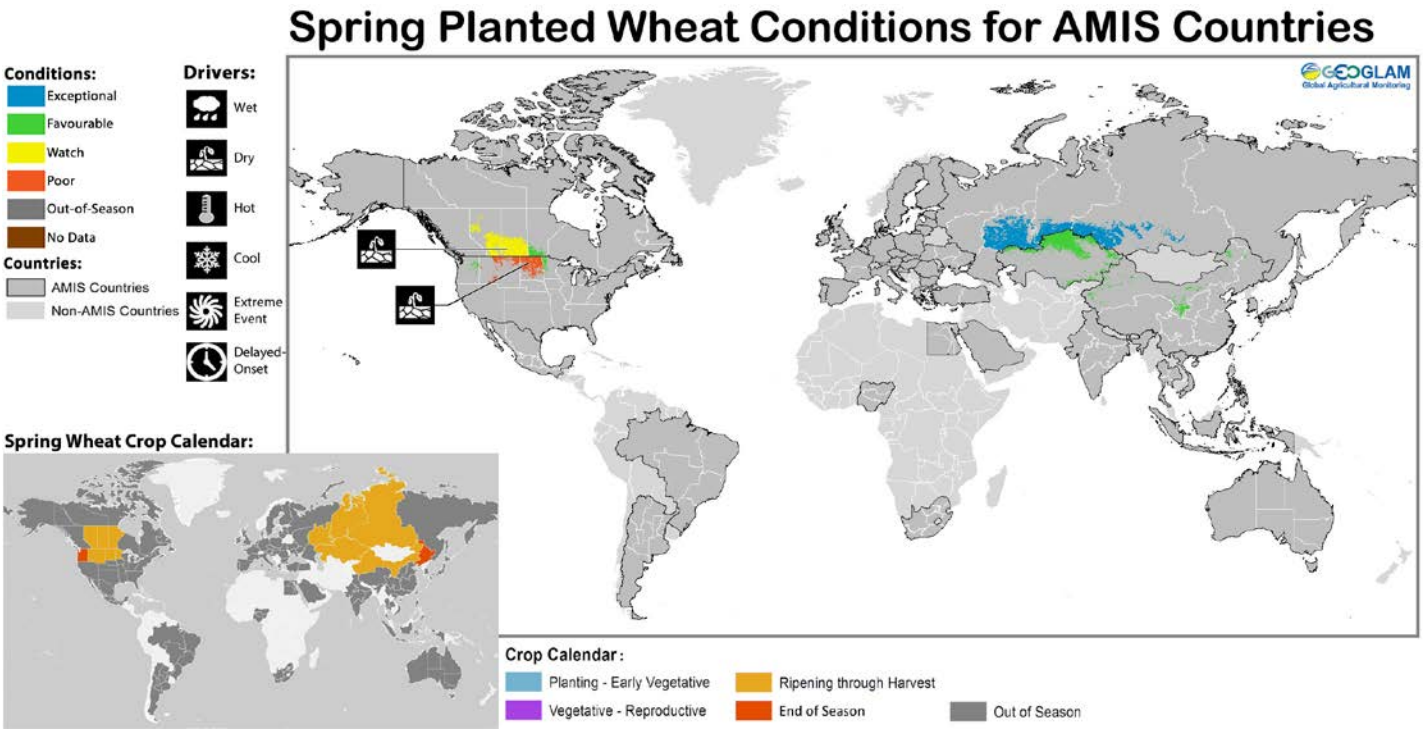
Appendix 2: Crop Season Specific Maps & Pie Charts



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 August28th. 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 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 August28th. 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.

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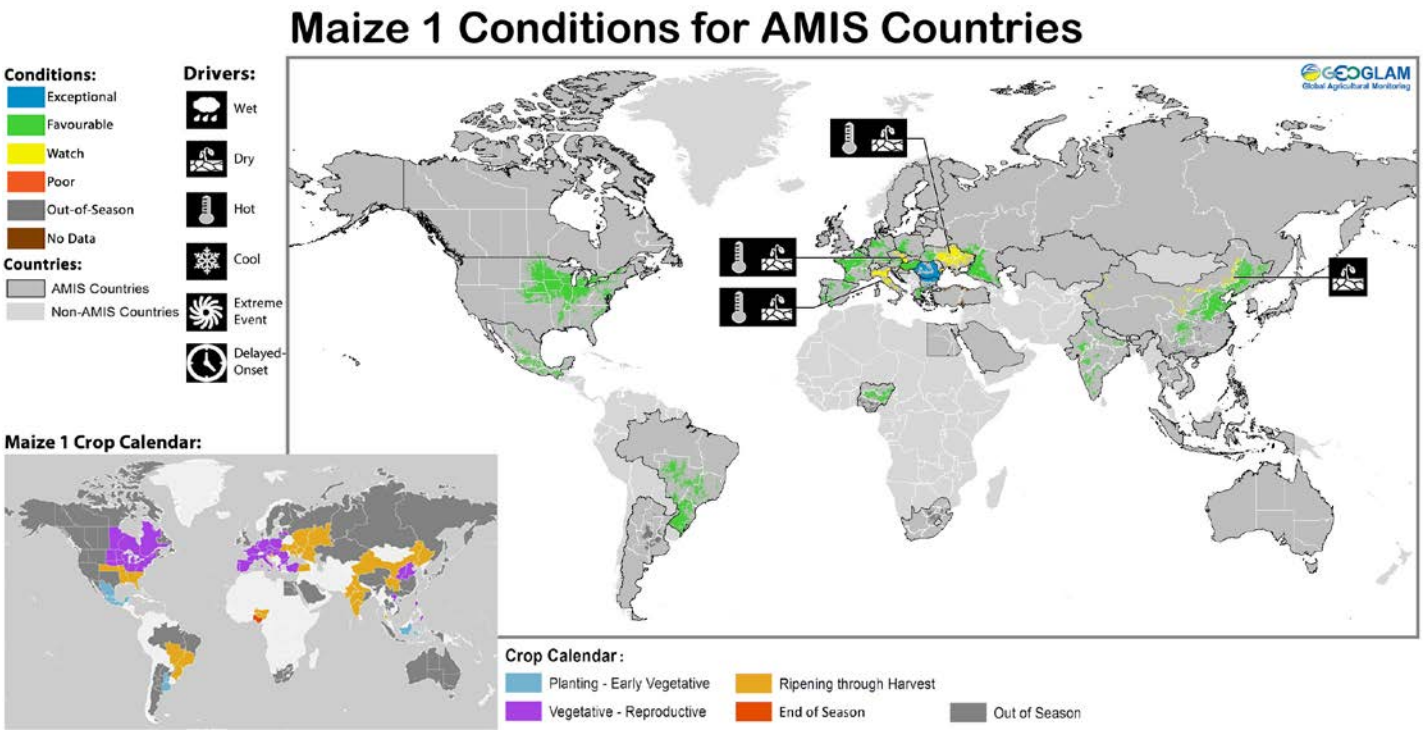
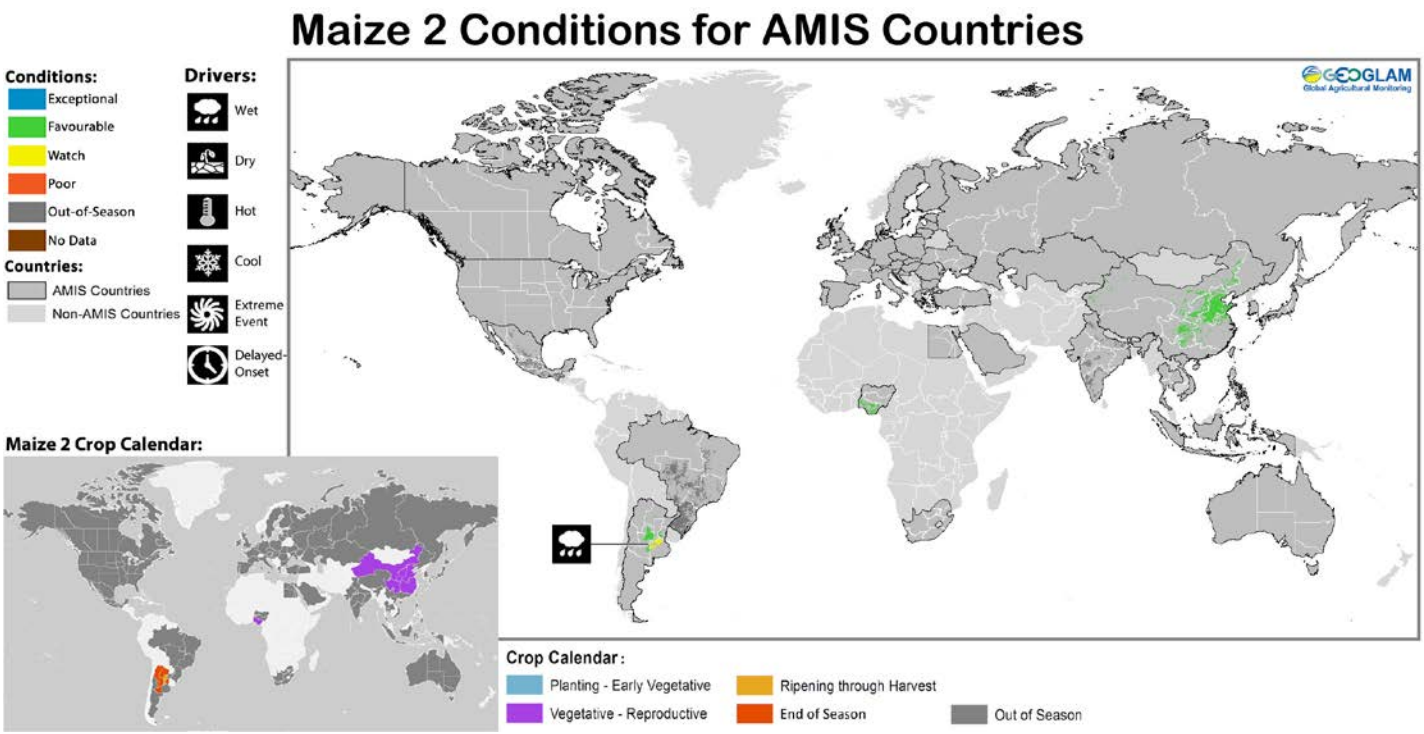


Maize 1 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of August28th. Where crops are in less than favourable conditions the climatic drivers responsible 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.



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 August28th. 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.

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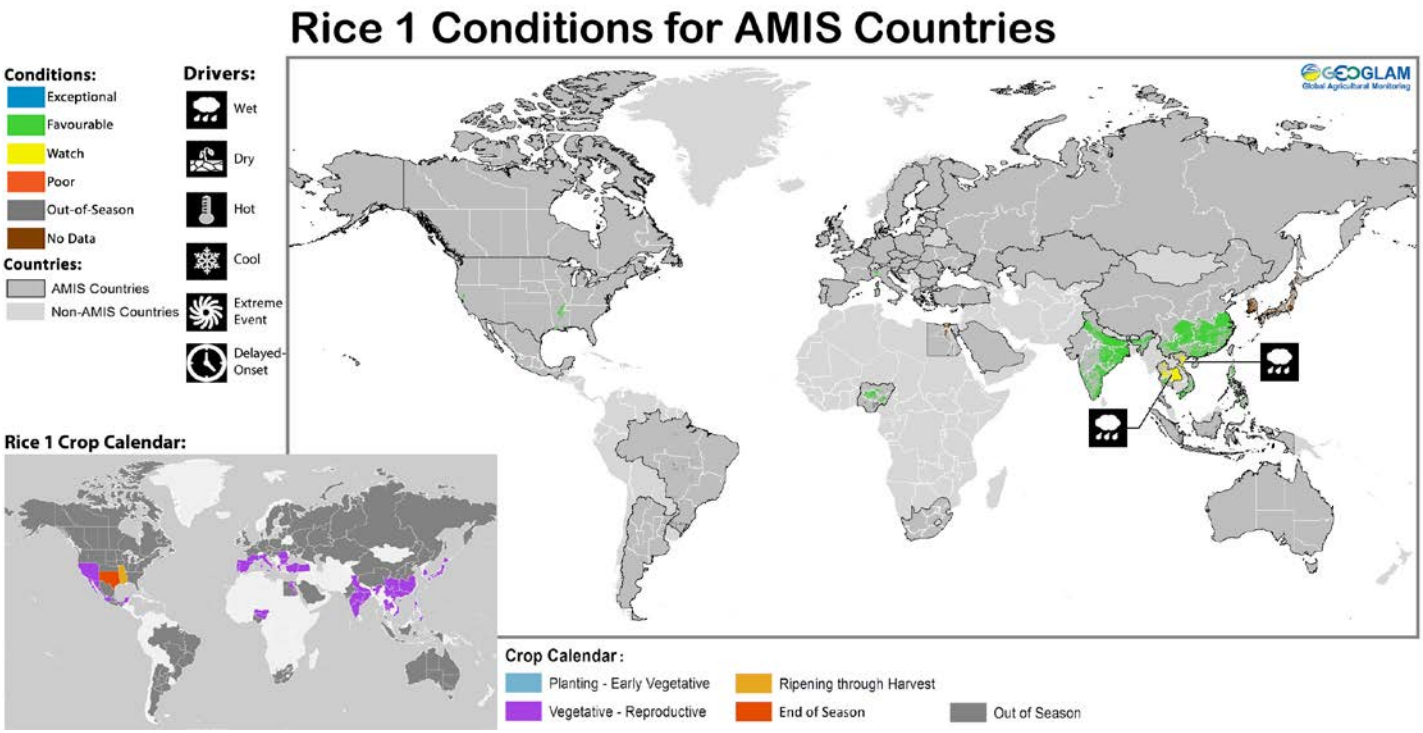

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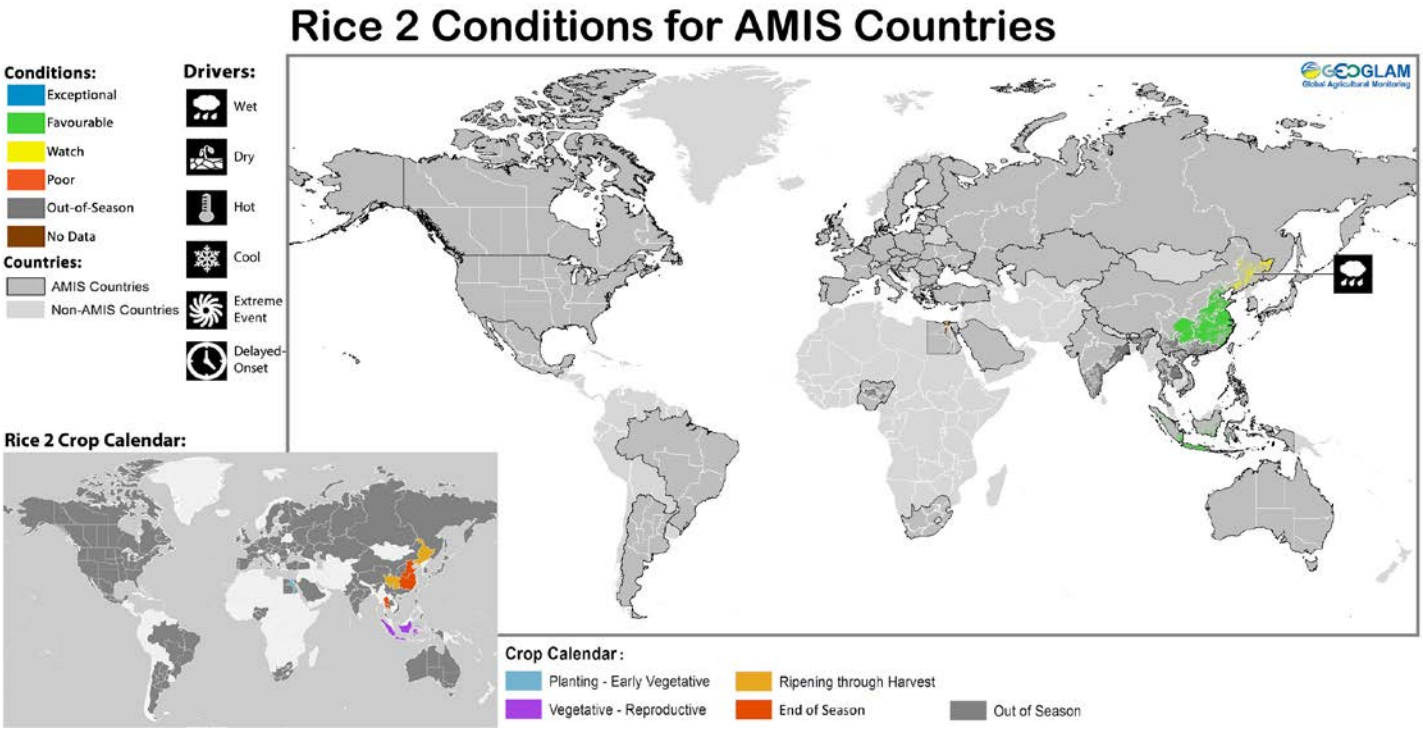

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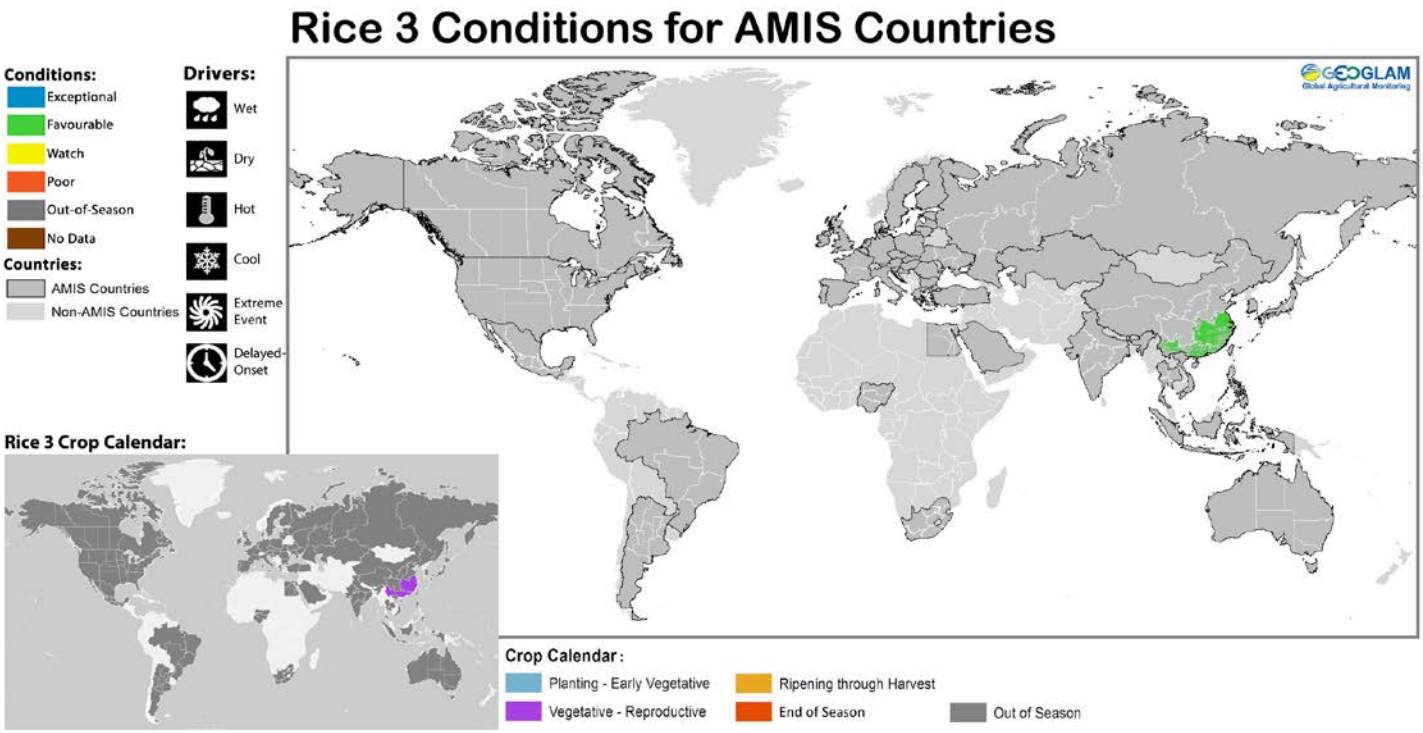

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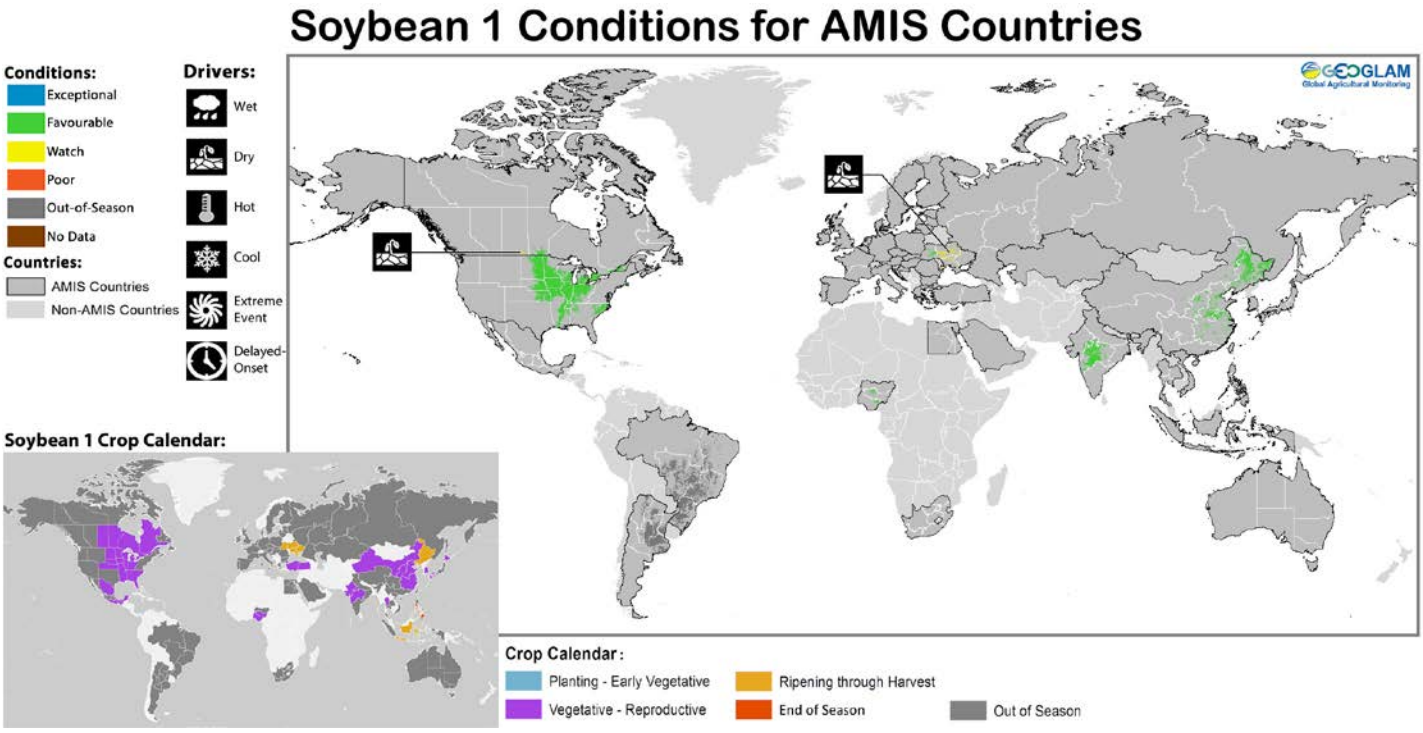

Soybean 1 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of August28th. Where crops are in less than favourable conditions the climatic drivers responsible 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.

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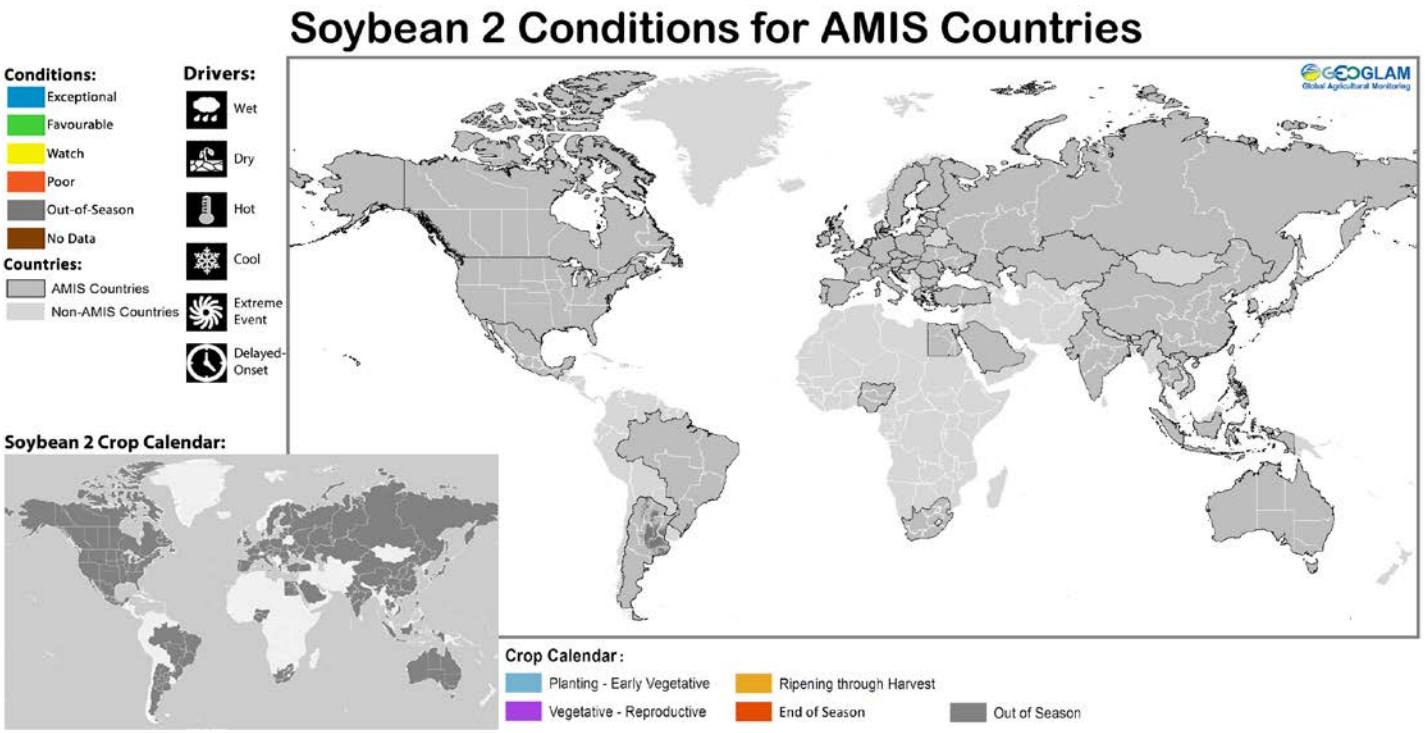

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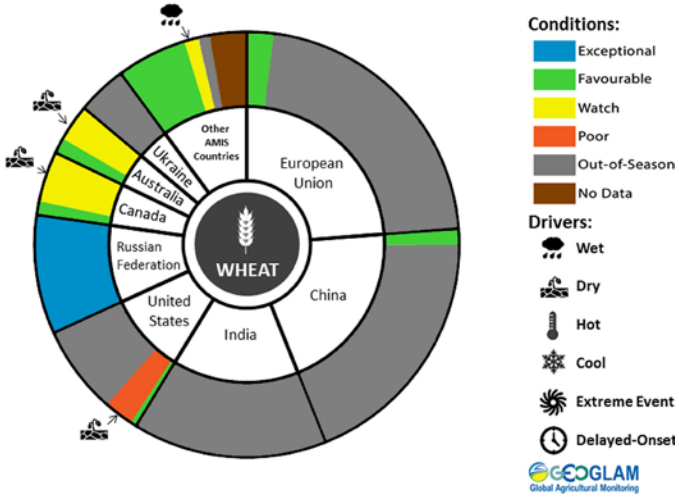
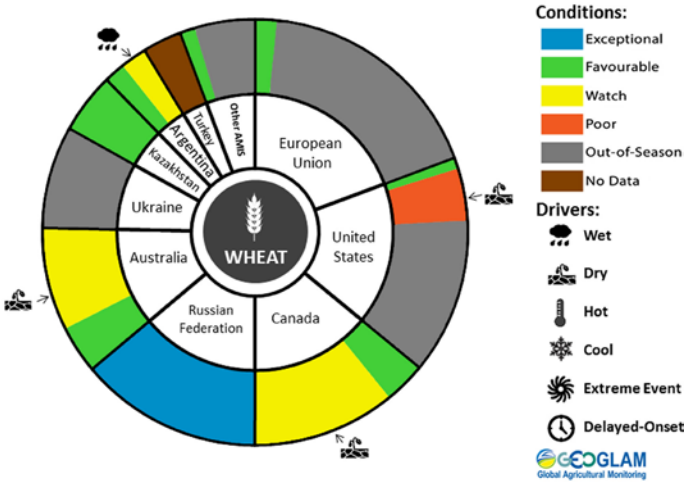
Wheat AMIS Comparisons

Share of total AMIS Production

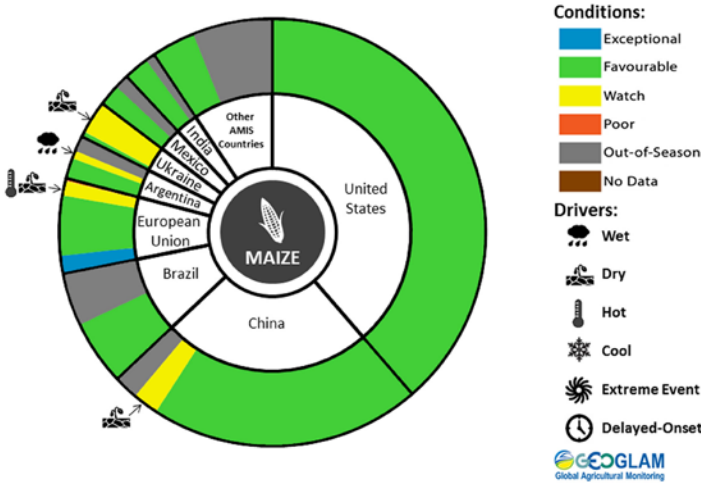


Share of total AMIS Exports

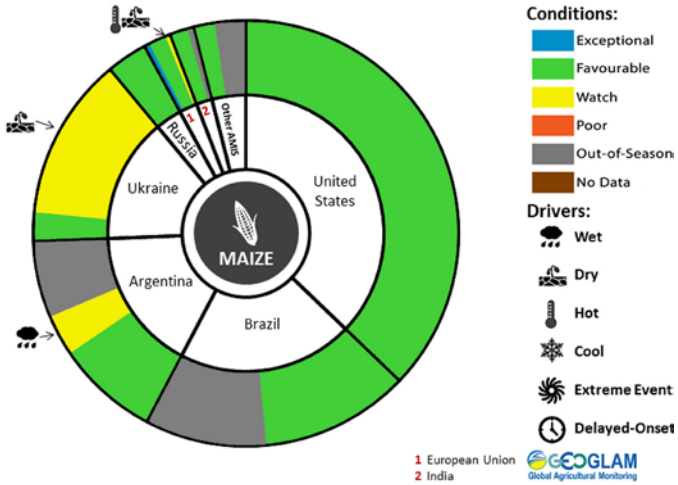


Maize AMIS Comparisons

Share of total AMIS Production



Share of total AMIS Exports



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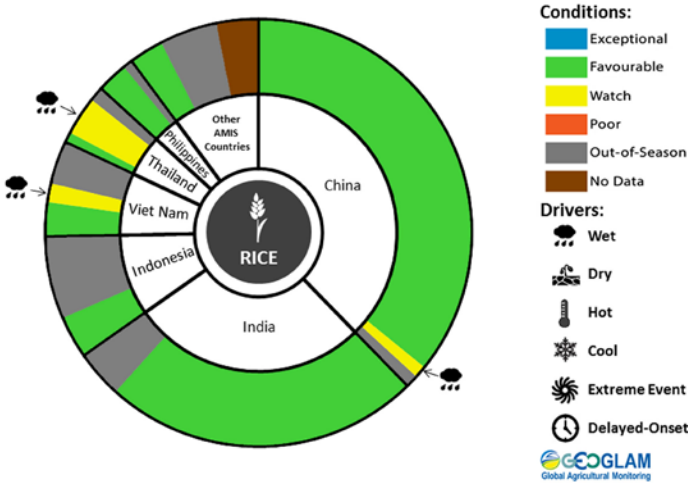
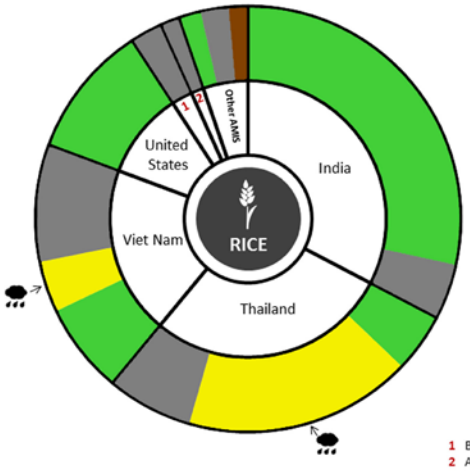
Rice AMIS Comparisons

Share of total AMIS Production

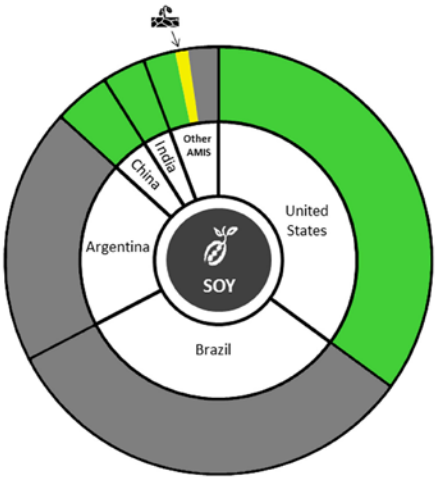


Share of total AMIS Exports

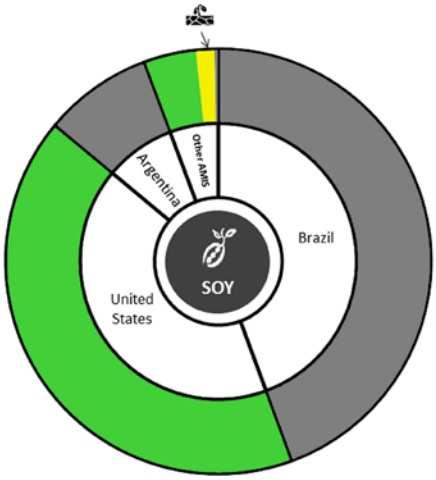


Soybean AMIS Comparisons

Share of total AMIS Production



Share of total AMIS Exports



* Assessment based on information as of August28th

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: Conab

www.geoglam-crop-monitor.org

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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, Agroindustry ministry), 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 GIEWS, IFPRI & IRRI), Japan (JAXA), Mexico (SIAP), Russian Federation (IKI), South Africa (ARC & GeoTerraImage & 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.
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