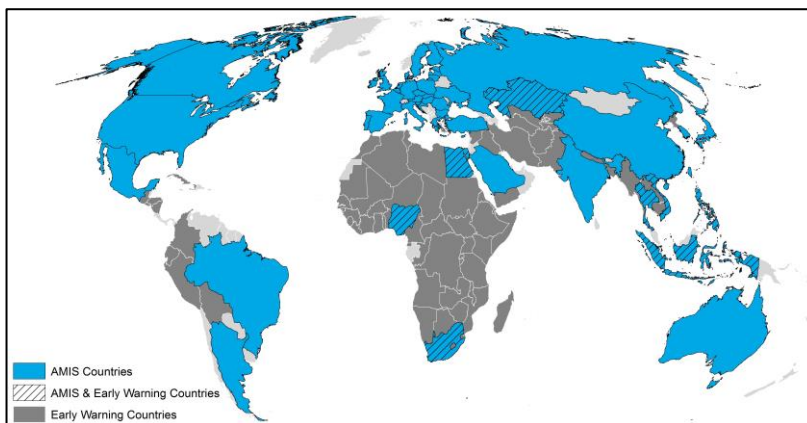


# CROP MONITOR FOR AMIS

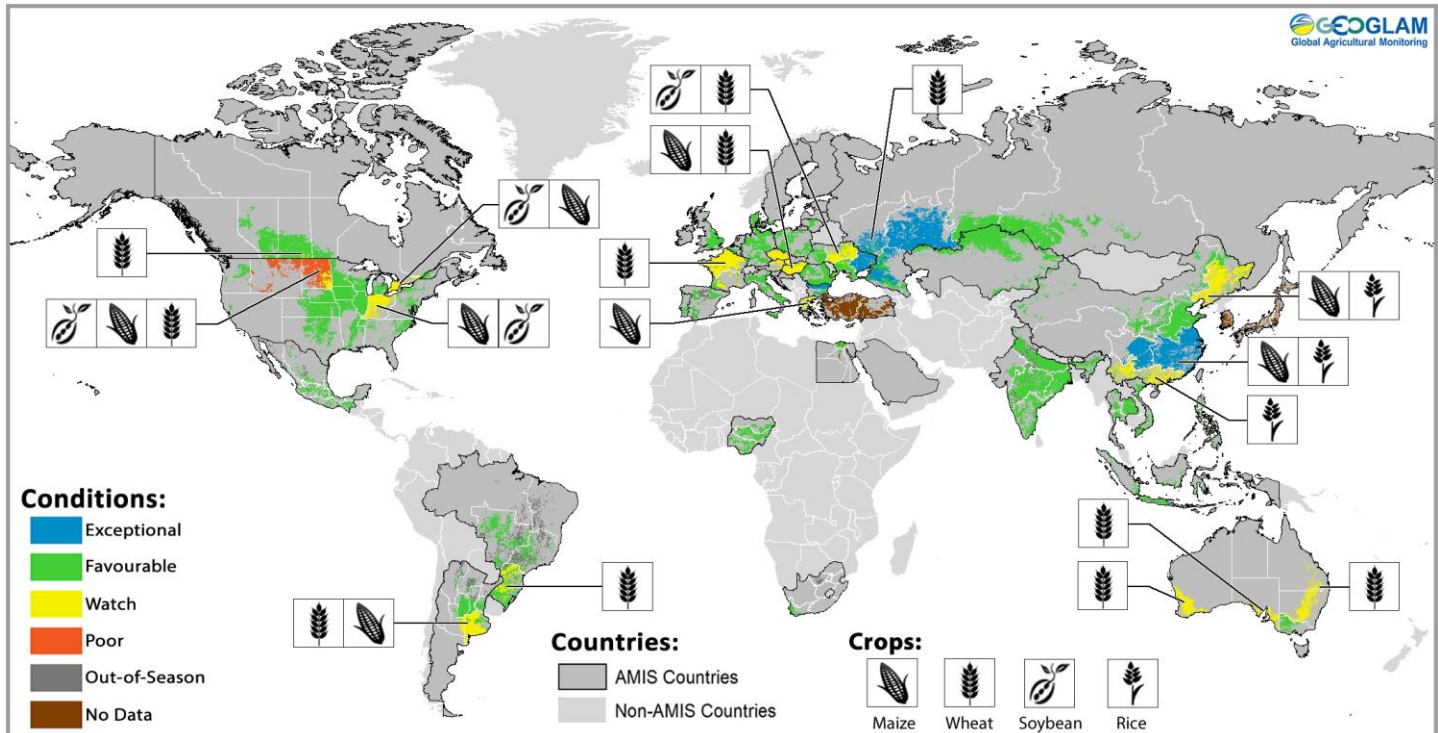
## NO. 42

August 2017

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/](http://geoglam-crop-monitor.org/)), which has grown out of this initiative.



## Conditions at a glance for AMIS countries (as of July28th)



Crop condition map synthesizing information for all four AMIS crops as of July28th. 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

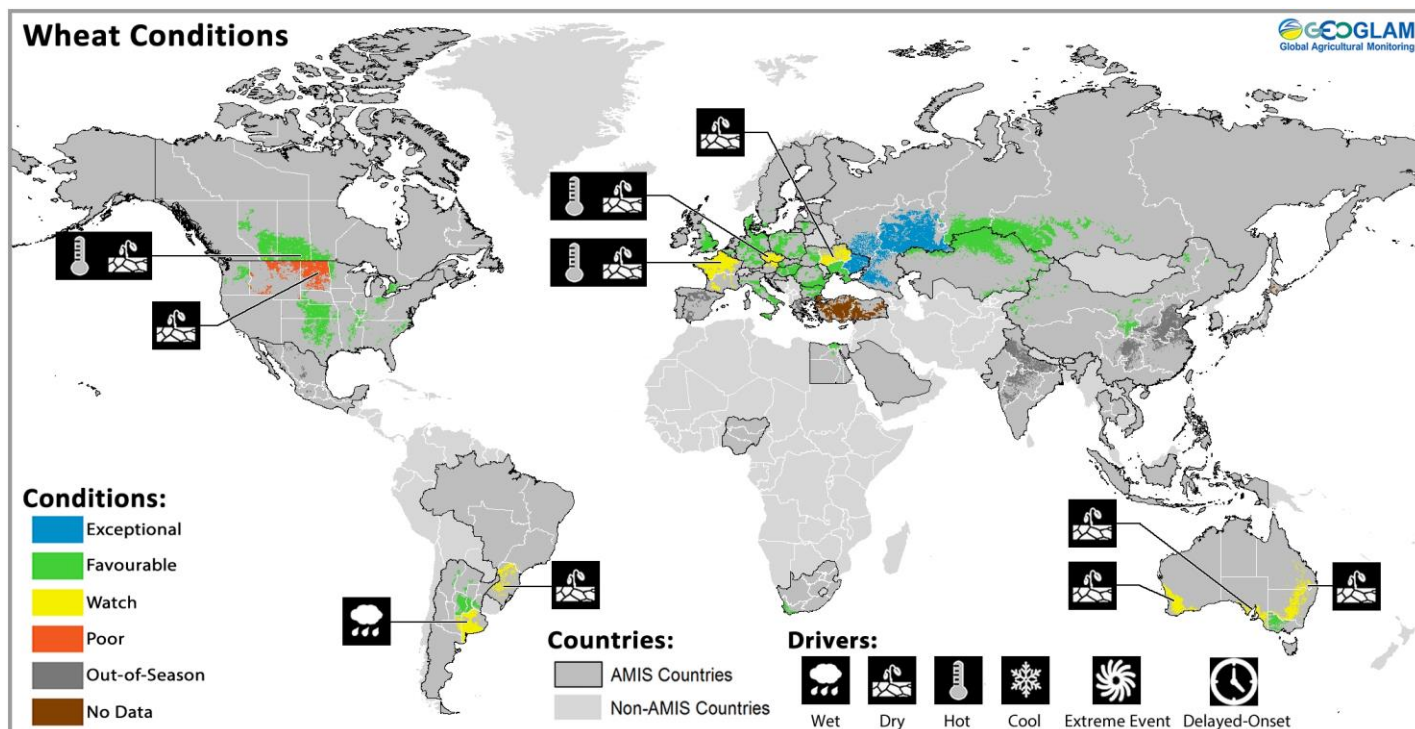
**Wheat** - In the northern hemisphere, conditions remain mixed as harvest continues for winter wheat, and spring wheat enters a critical development phase. The Russian Federation is seeing exceptional conditions while in the northern plains of the US and parts Canada, spring wheat is downgraded to poor due to drought. In the southern hemisphere, conditions remain mixed with adverse conditions in Argentina, Australia and Brazil.

**Maize** - In the southern hemisphere, conditions continue to be generally favourable as harvesting continues in Argentina and Brazil. Conditions in the northern hemisphere are generally favourable as the crop heads into a critical development phase, with some areas of concern in the US, Canada, and the EU.

**Rice** - In Asia, the wet-season is off to a favourable start as crops continue to progress with adequate soil moisture and rainfall. Conditions are exceptional in central China for single-season rice while mixed in the south for the sowing of late rice. In Indonesia, the dry-season continues with earlier planted areas beginning to harvest with favourable yields compared to last year.

**Soybeans** - In the southern hemisphere, harvest is all but complete under favourable conditions for Argentina. In the northern hemisphere, conditions are generally favourable while some areas in the US, Canada, and Ukraine are suffering from adverse weather.

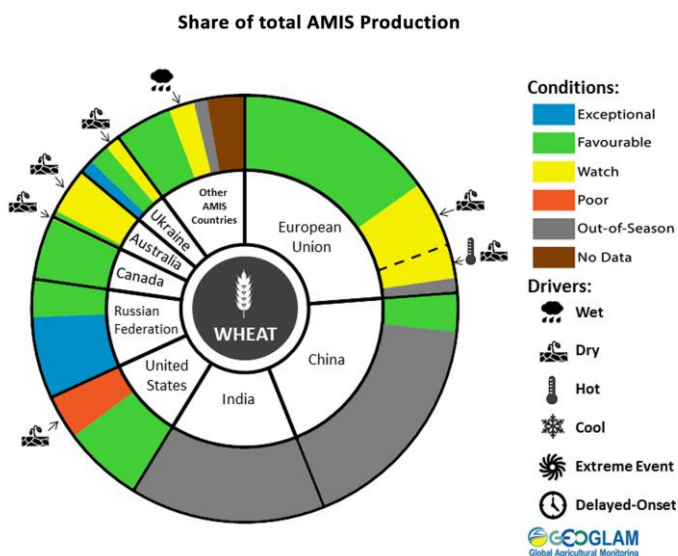
## Wheat Conditions for AMIS Countries



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 28<sup>th</sup>. 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.

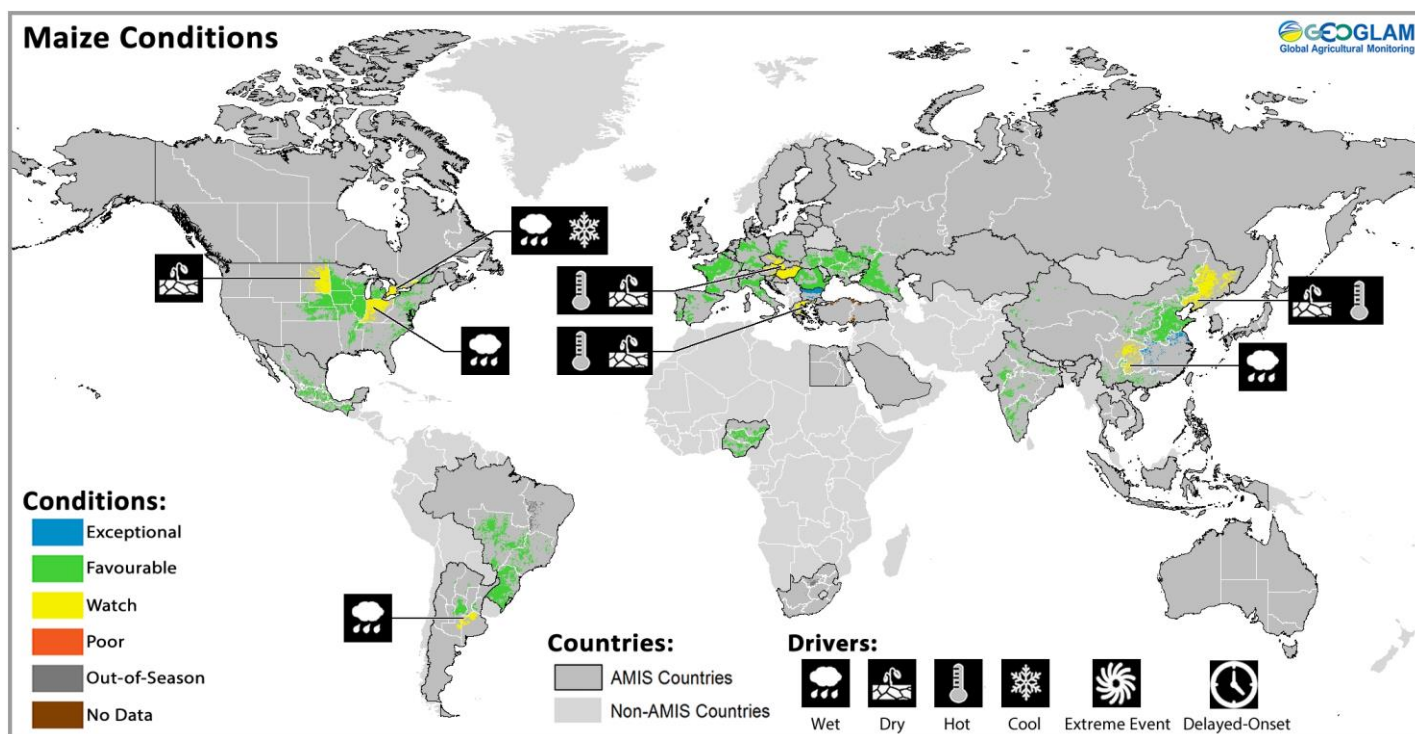
**Wheat:** In the **EU**, heat waves and low precipitation have hampered winter wheat in various part of Europe, but without diminishing yield expectation which remains in line with the 5-years average. In **Ukraine**, winter wheat harvesting is progressing under a mix of conditions, however, the output is expected to be just less than last year's exceptional crop. In the **Russian Federation**, winter wheat harvesting is underway under favourable to exceptional conditions. Due to increase in temperatures in July, spring wheat development has improved from favorable to exceptional conditions. In **Kazakhstan**, conditions are favourable for spring wheat. In **China**, spring wheat is in the flowering to ripening phase under favourable conditions. In the **US**, winter wheat harvest has wrapped up under generally favourable conditions.

Despite good yields, overall production is down due to significantly decreased planted area. Spring wheat harvesting has begun under mostly poor conditions due to persistent dryness in the Northern Great Plains. In **Canada**, conditions are mixed as hot and dry conditions in the Southern Prairies are causing concern for winter and spring wheat, while persistent wet conditions could delay winter wheat harvest and limit yields in Ontario, both very important production areas. In **Australia**, recent rainfall has progressed towards improvement, however dry and hot conditions persist across much of the country. In **Argentina**, conditions are generally favourable while sowing is continuing to be hampered by excess rainfall in areas.



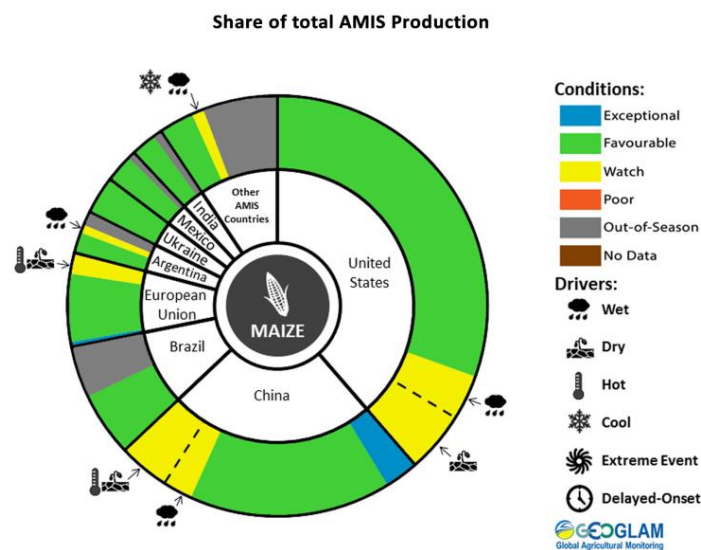
For detailed description of the pie chart please see box below.

## Maize Conditions for AMIS Countries



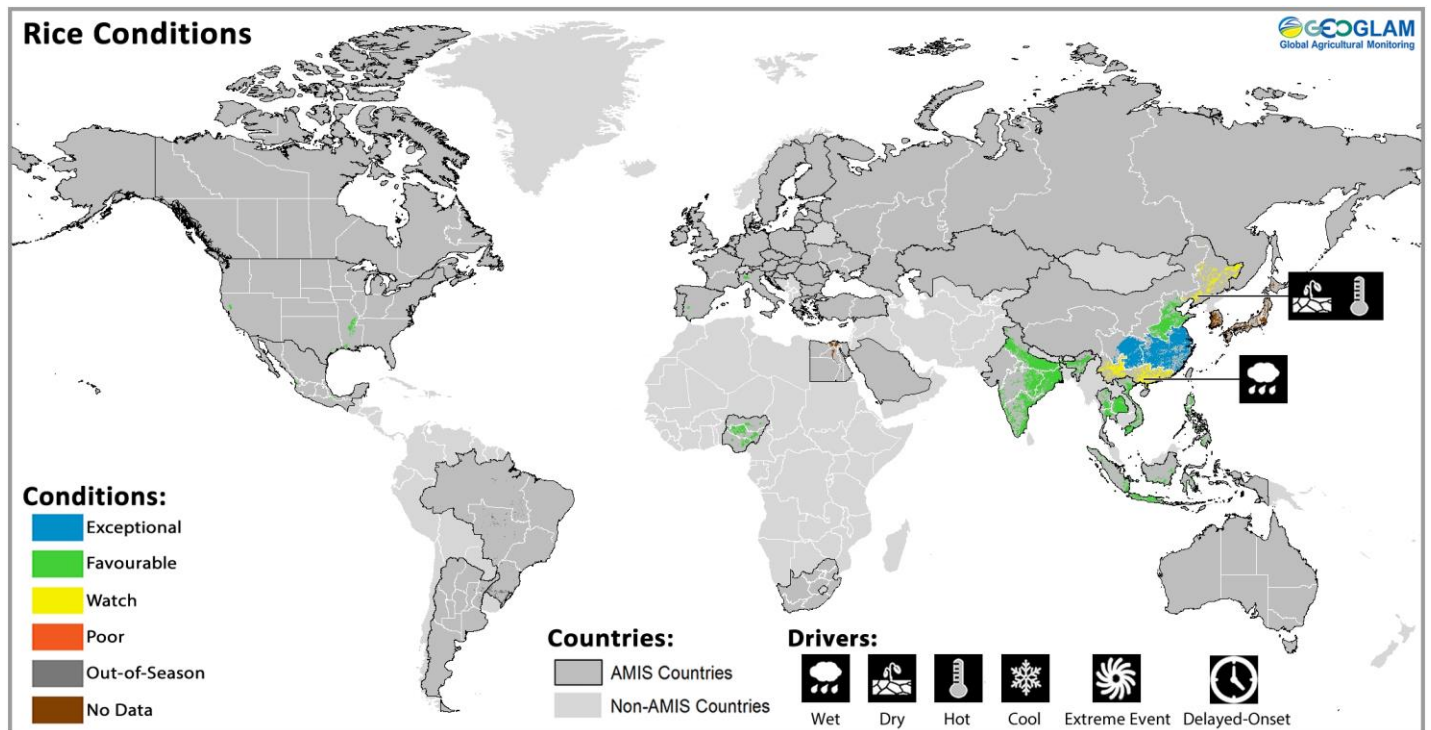
Maize crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of July 28<sup>th</sup>. Where crops are in other than favourable conditions the climatic drivers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

**Maize:** In **Brazil**, conditions continue to be favourable for summer-planted maize during harvesting. An increase in overall production compared to last year is expected due to increased planted area and favourable weather conditions. In **Argentina**, conditions are generally favourable as harvest of the first crop and late-planted crop continues. However, the progress is slow due to flooding and prioritization of soybean harvest. In the **US**, conditions are generally favourable with the exception of some notable areas of dryness in the Dakotas and excess rainfall in Indiana and Ohio. In **Canada**, cool wet weather continues to slow crop development in the main producing province of Ontario. In **Mexico**, harvesting of the autumn-winter crop is wrapping up under favourable conditions while sowing of spring-summer crop is experiencing delays in the north due to dry weather. In the **EU**, heat waves have impacted the flowering of maize in Eastern and Southern Europe, potentially damaging yields. In **Ukraine**, conditions are generally favourable with the exception of soil moisture deficits, potentially affecting crop development in the central and southern regions. In **China**, conditions are generally favourable for both the spring-planted and summer-planted crops except in the northeast and southwest due to adverse climatic conditions. In **India**, conditions are favourable for the Kharif crop as sowing continues while emergence has begun with current soil moisture levels boding well for the season.



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

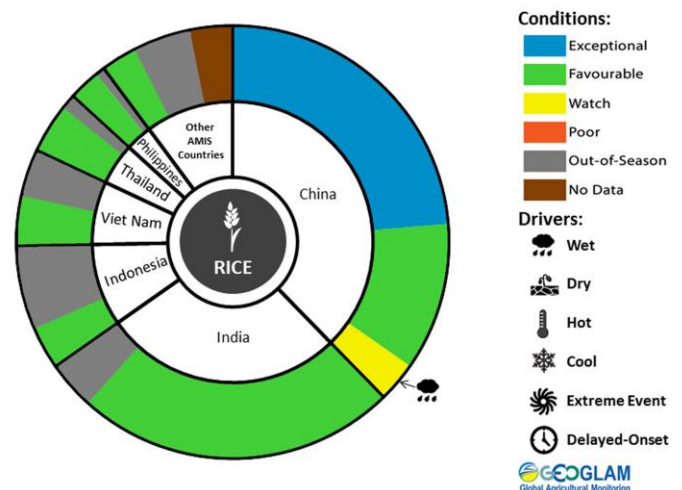
## Rice Conditions for AMIS Countries



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 28<sup>th</sup>. Where crops are in other than favourable conditions the climatic drivers responsible for those conditions are displayed.

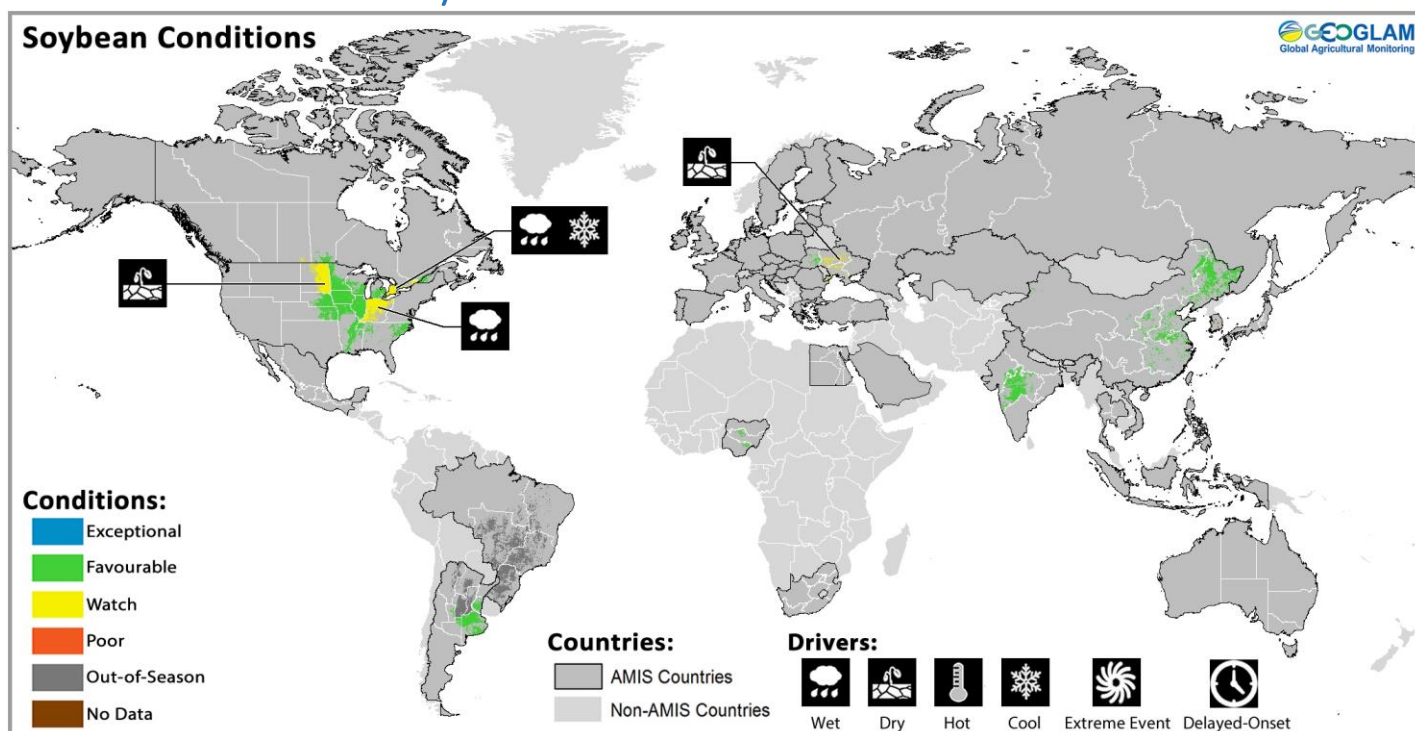
**Rice:** In **China**, overall conditions for single-season rice are favourable with exceptional conditions in the Southwest and Lower Yangtze, while below average in the Northeast due to hot and dry conditions. Sowing of late rice has begun under mixed conditions due to poor solar radiation in the south affecting crop growth. In **India**, conditions are favourable for the Kharif crop currently in the transplanting stage, with a good outlook through mid-season due to current soil moisture levels and projected monsoon rains. In **Indonesia**, conditions continue to be favourable for the sowing of dry-season rice, with earlier planted areas beginning to be harvested. Favourable yields are reported compared to last year due to enough irrigation water and sunlight during the critical flowering phase. In **Viet Nam**, conditions are favourable in the North as dry-season rice harvest is almost completed and the sowing of wet-season rice has begun. In the south, harvesting of wet-season rice has begun under favourable conditions due to proper rainfall supply. In **Thailand**, wet-season rice is in the tillering stage under favourable conditions due to ample rainfall and good weather. Planted area is expected to increase slightly from last year. In the **Philippines**, wet-season rice is in the vegetative stage under favourable conditions due to good weather in the north and central regions, plus above normal rainfall in the south. In the **US**, conditions are favourable.

Share of total AMIS Production



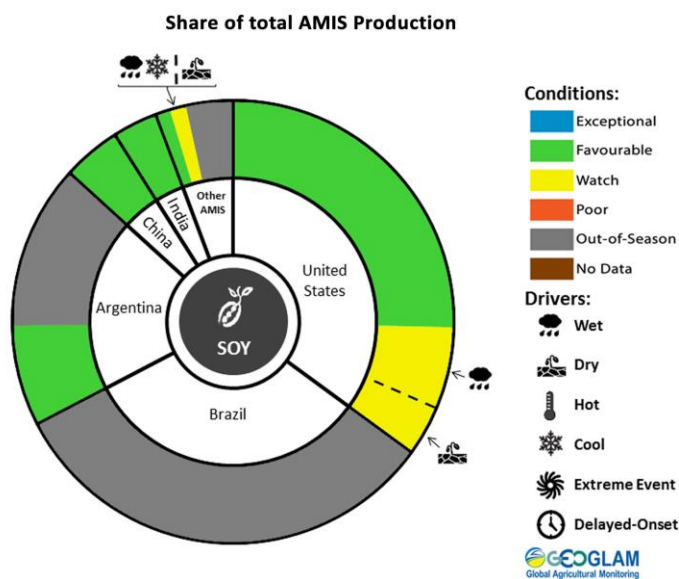
For detailed description of the pie chart please see box below.

## 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 28<sup>th</sup>. 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 **Argentina**, harvesting is all but complete under favourable conditions with only scattered plots remaining due to adverse weather conditions. In the **US**, maturity of the crop is progressing under favourable conditions except in the Dakotas due to dry weather, and in the Eastern Corn Belt due to wet conditions. In **Canada**, sown area is significantly increased this year, while cool wet weather continues to slow crop development in the main producing province of Ontario. In **China**, conditions are favourable as the crop enters the flowering stage. In **India**, conditions are favourable for the Kharif crop as sowing continues and emergence has begun with current soil moisture levels bode well for the season. In **Ukraine**, conditions are generally favourable with locations of soil moisture deficits affecting crop development in the central and southern 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 August 3<sup>rd</sup> 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 slice 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.

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

### Conditions:

	Exceptional
	Favourable
	Watch
	Poor
	Out-of-Season
	No Data

### 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

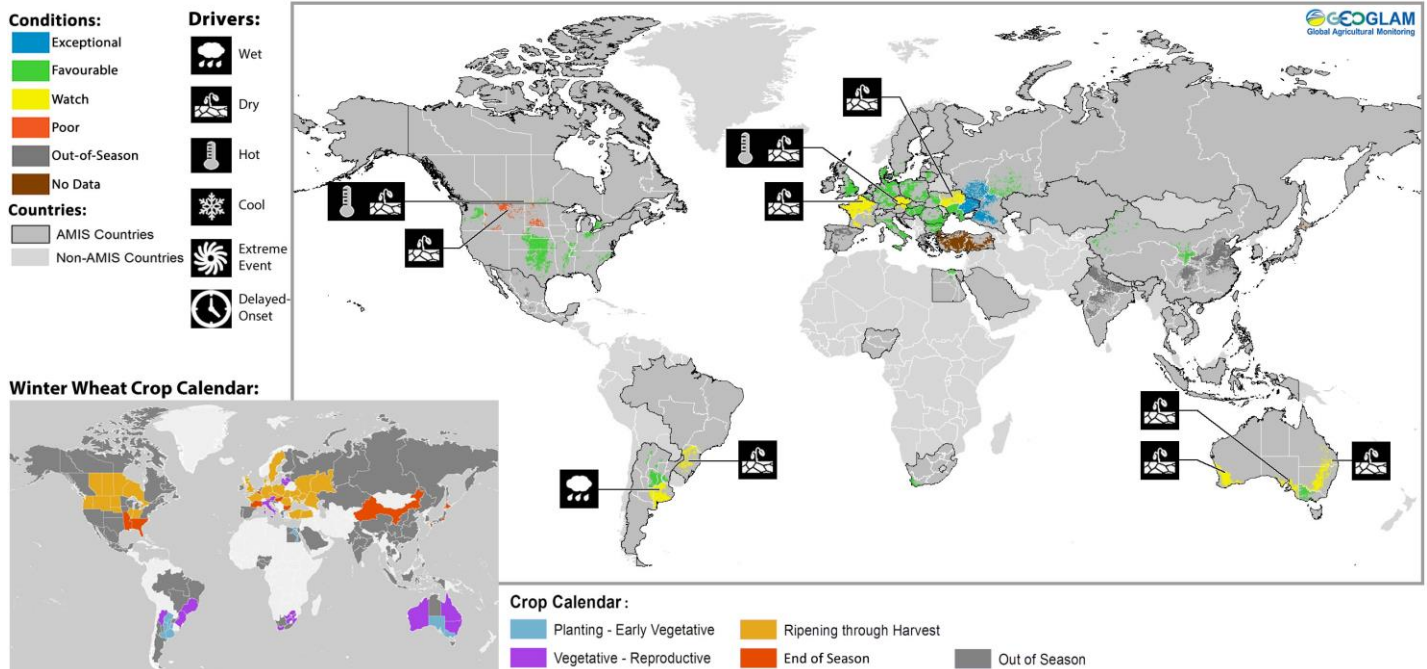
### Crop Season Nomenclature:

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	

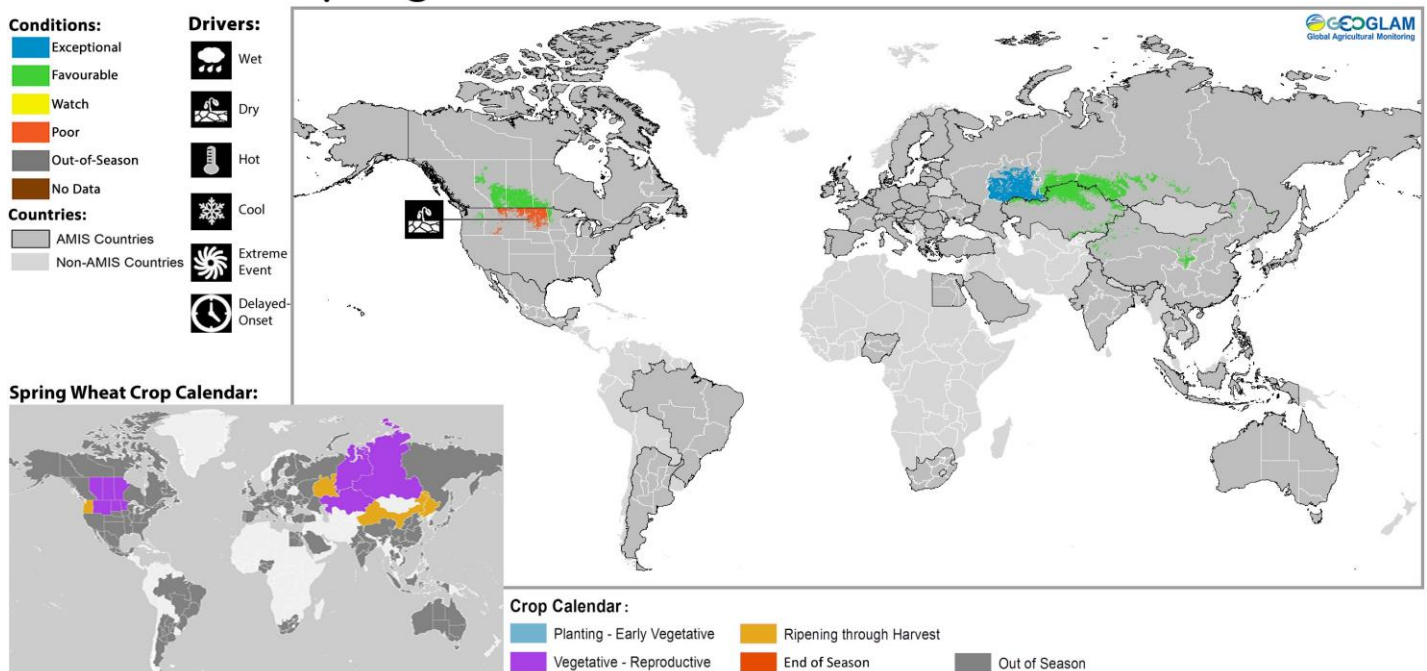
## Appendix 2: Crop Season Specific Maps & Pie Charts

### 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.

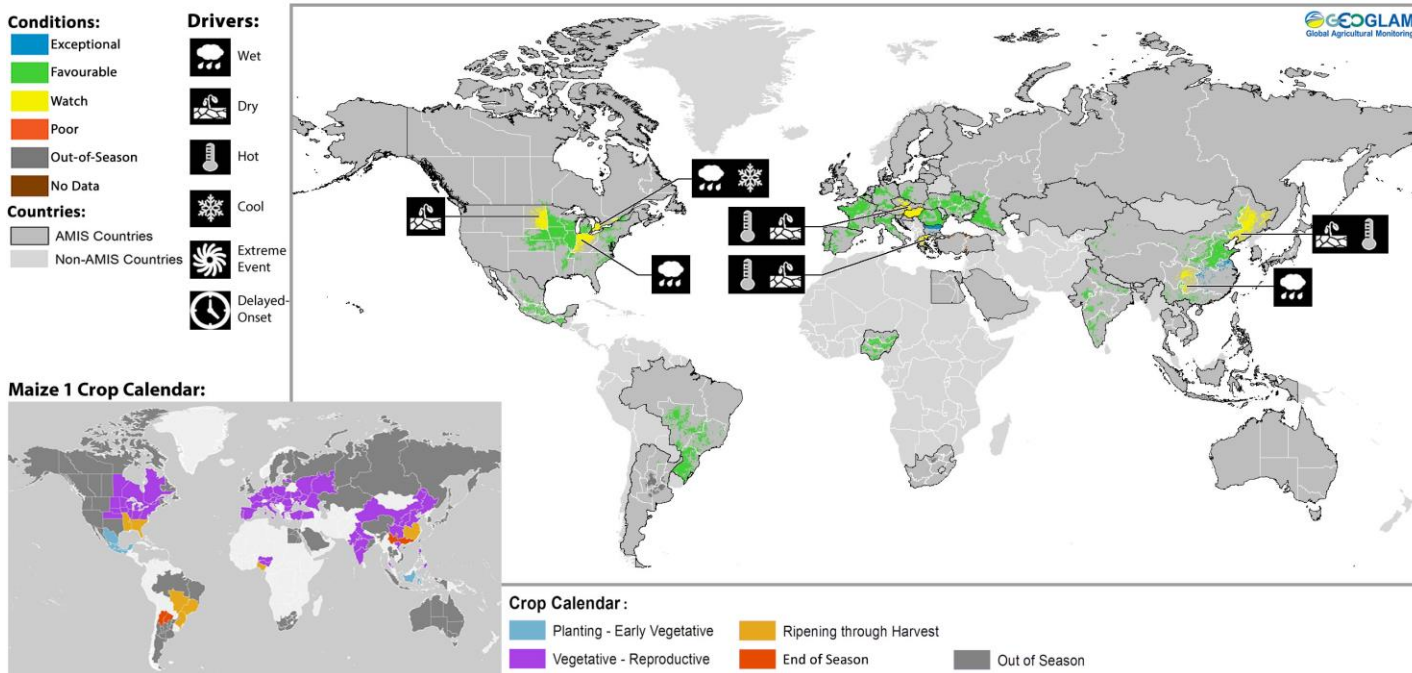
### Spring Planted Wheat Conditions for AMIS Countries



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.

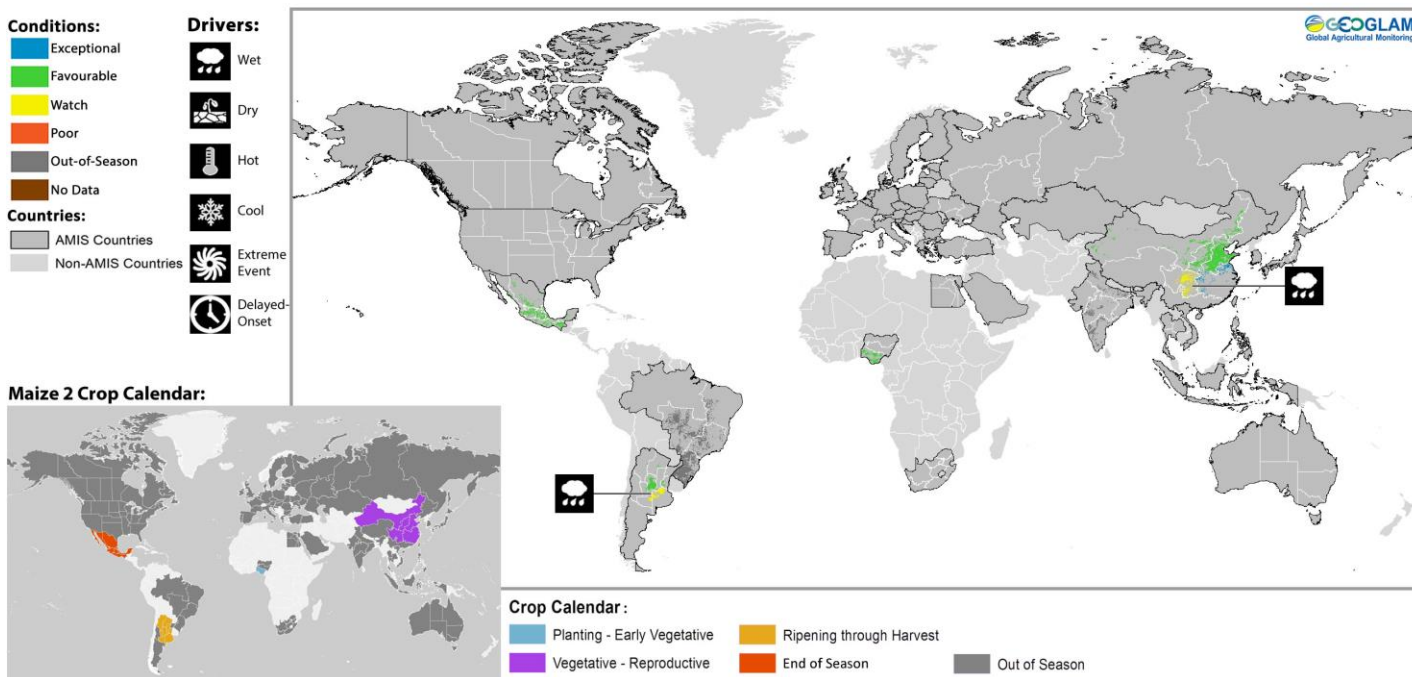


## Maize 1 Conditions for AMIS Countries



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 July28th. 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.

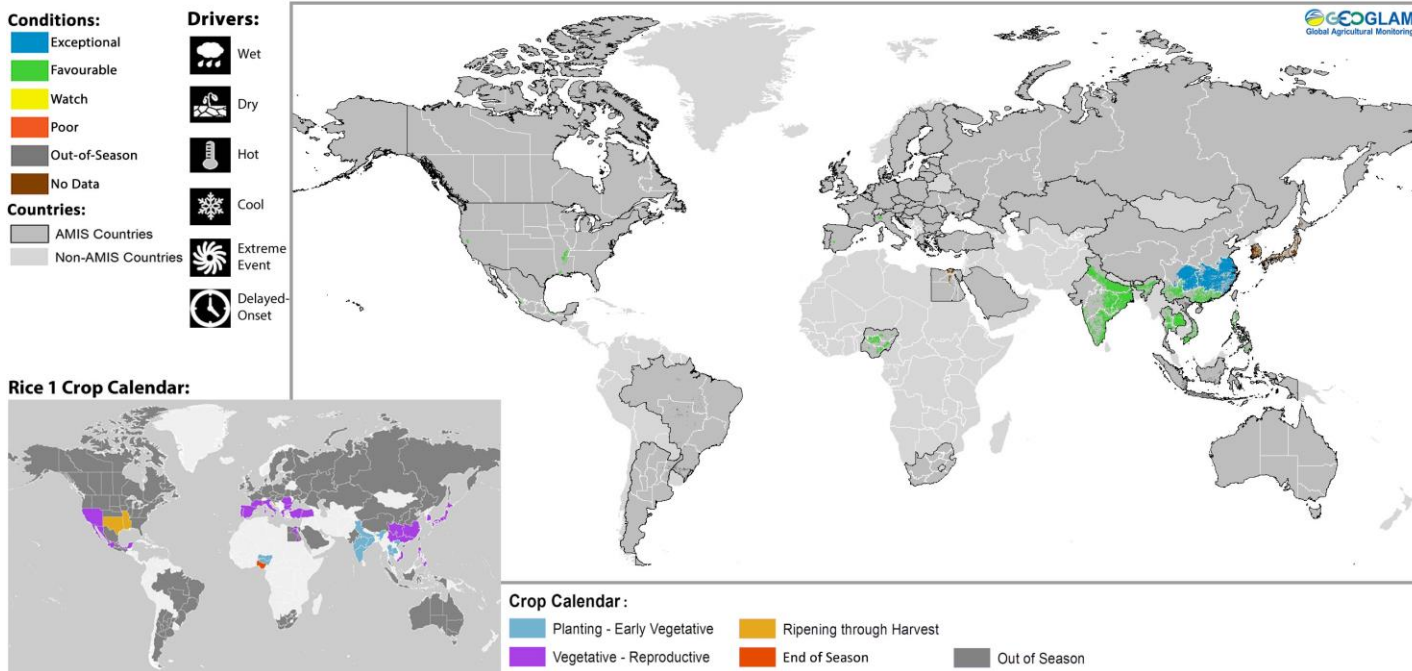
## Maize 2 Conditions for AMIS Countries



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 July28th. 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.

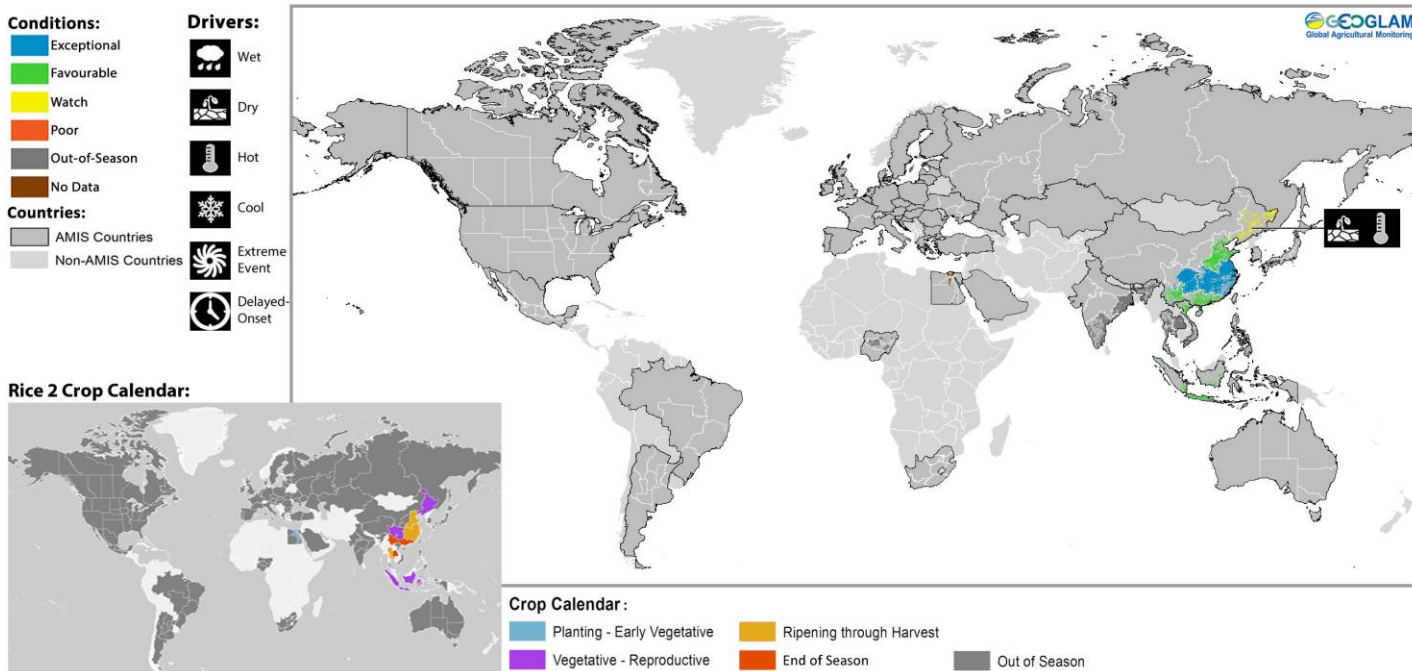
\* Assessment based on information as of July28<sup>th</sup>

## Rice 1 Conditions for AMIS Countries



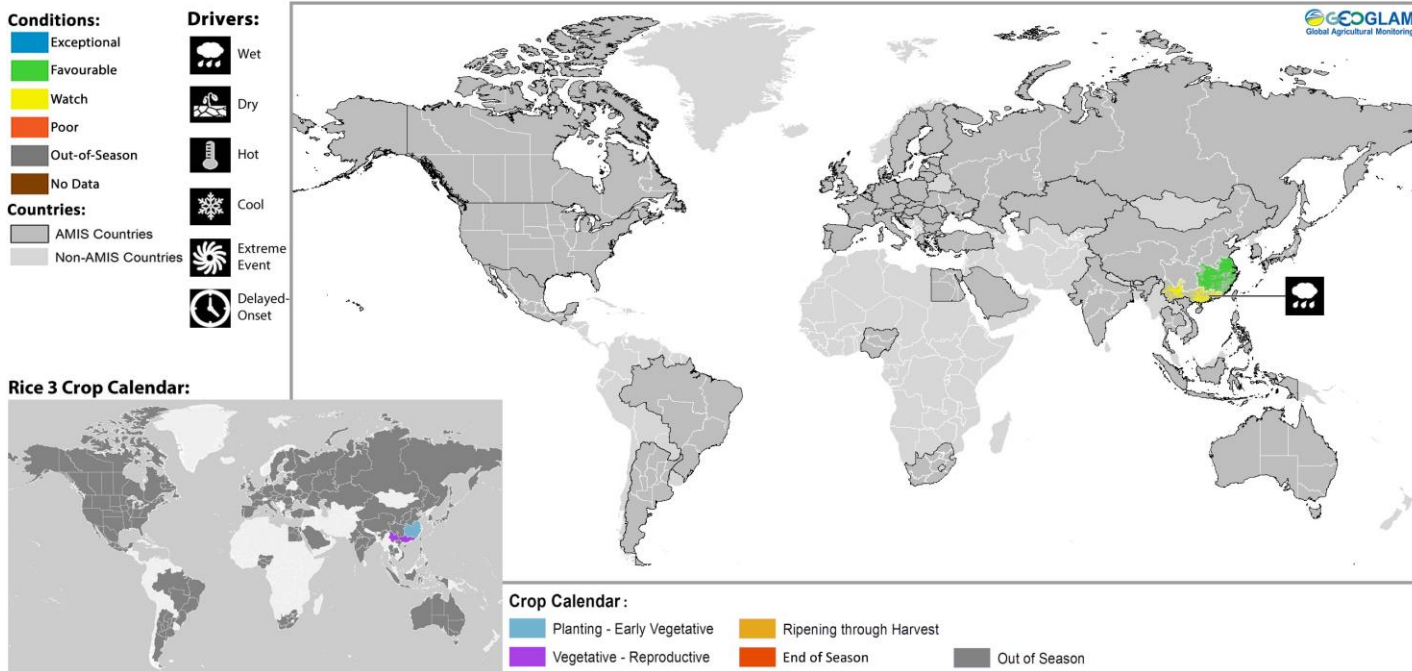
Rice 1 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of July28th. Where crops are in less than favourable conditions the climatic drivers responsible 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



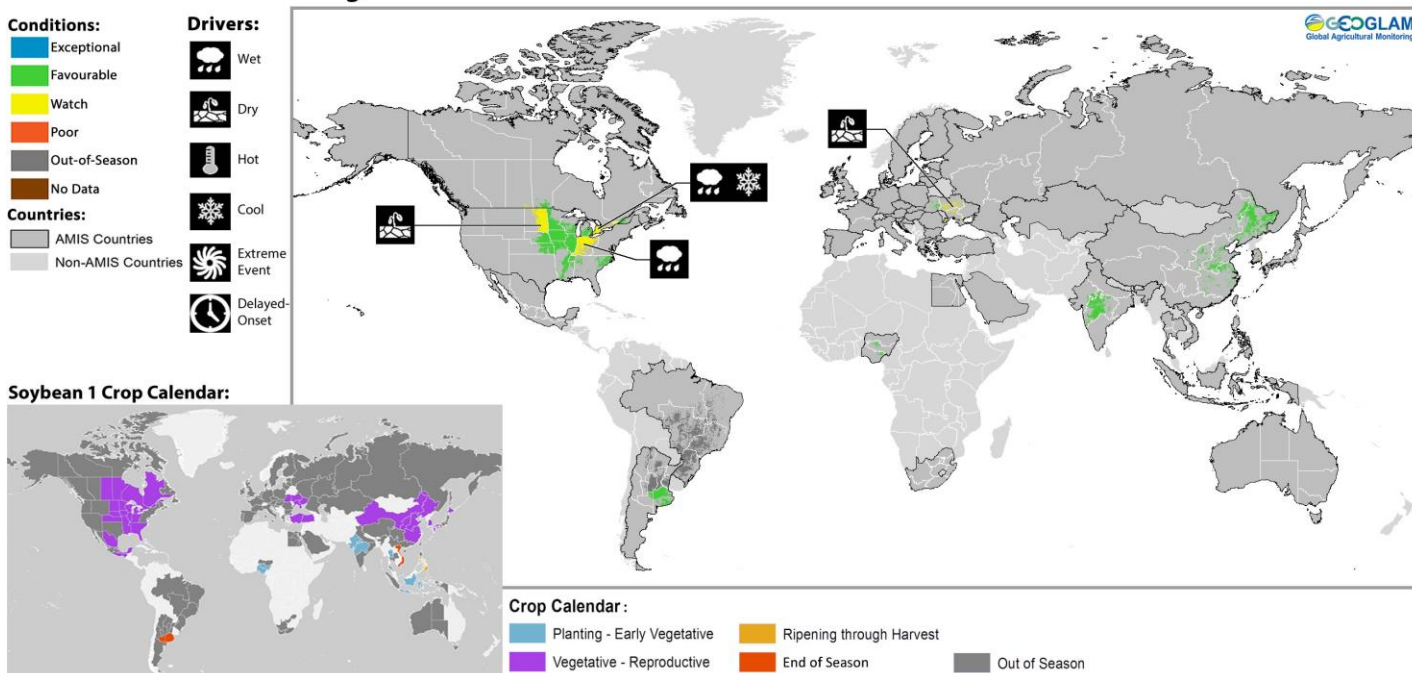
Rice 2 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of July28th. Where crops are in less than favourable conditions the climatic drivers responsible 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 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 July28th. 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.

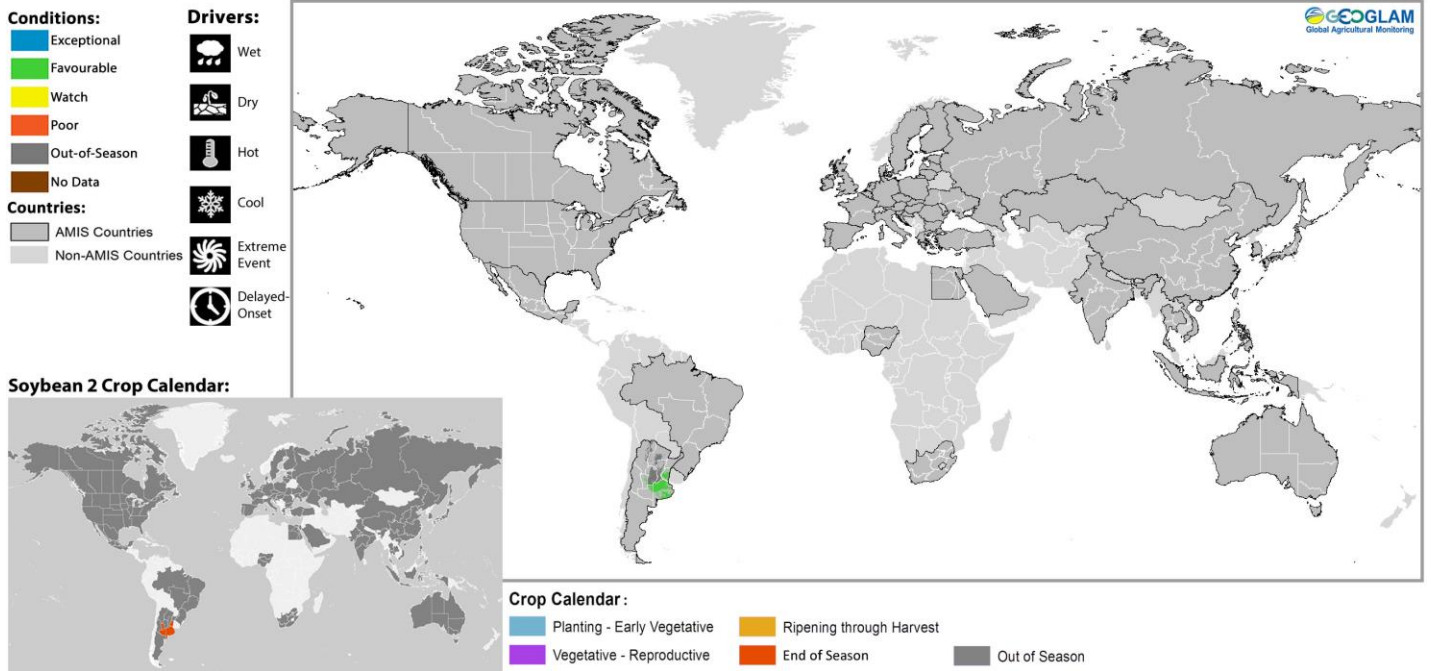
## Soybean 1 Conditions for AMIS Countries



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 July28th. 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.

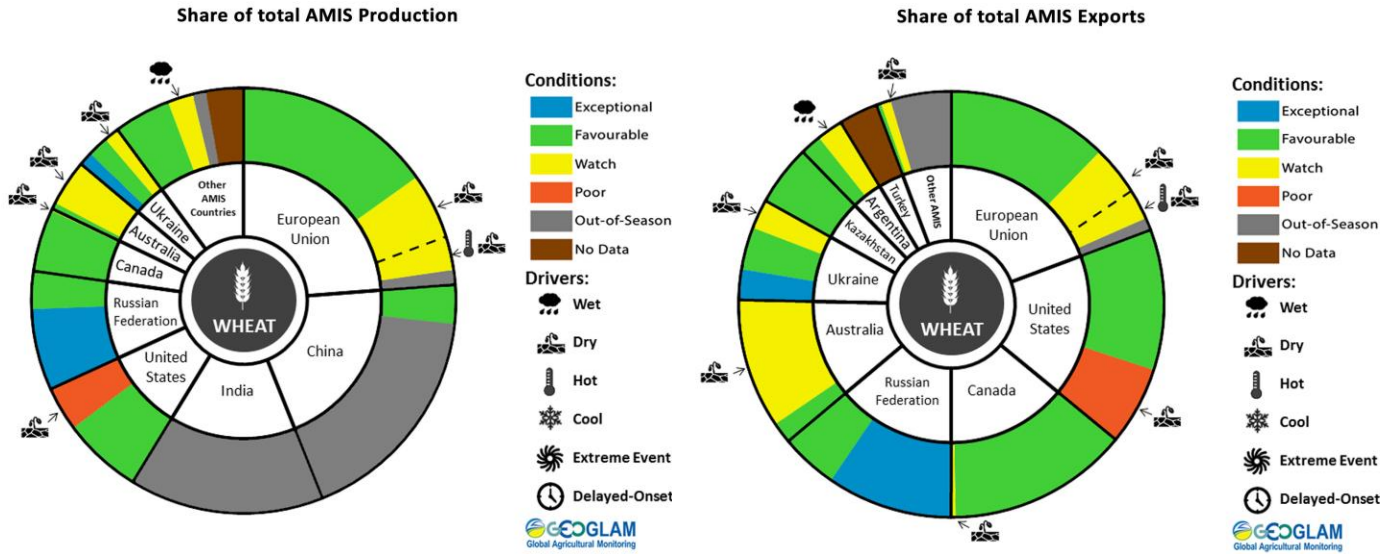
\* Assessment based on information as of July28<sup>th</sup>

## Soybean 2 Conditions for AMIS Countries

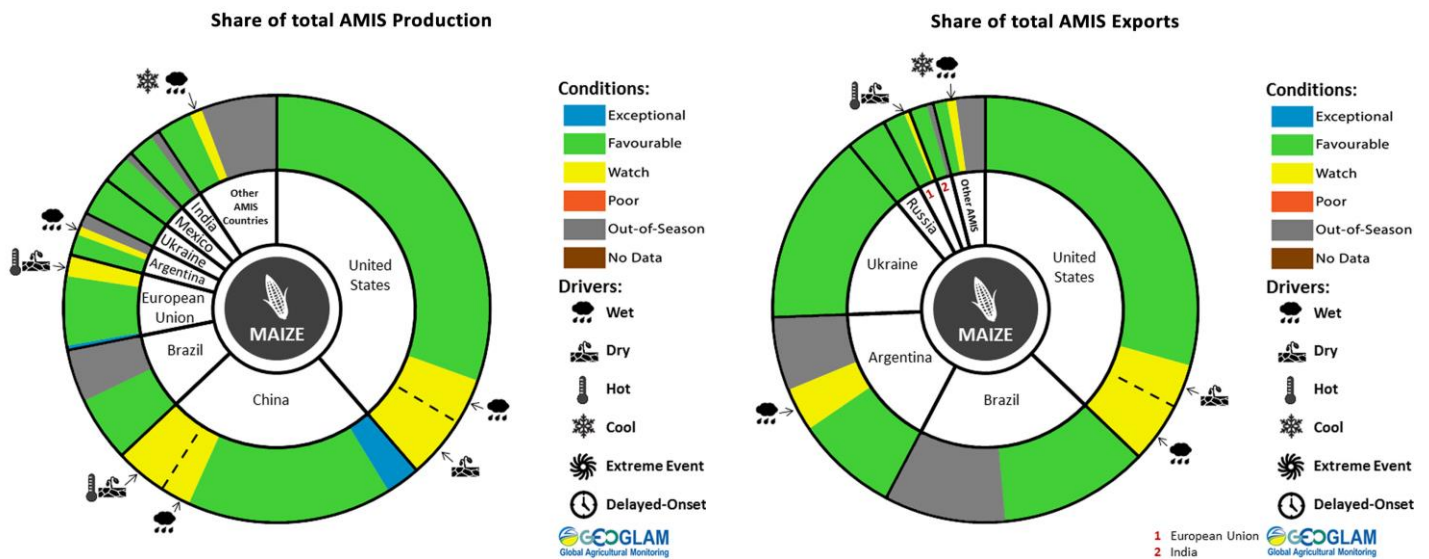


Soybean 2 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of July 28<sup>th</sup>. Where crops are in less than favourable conditions the climatic drivers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

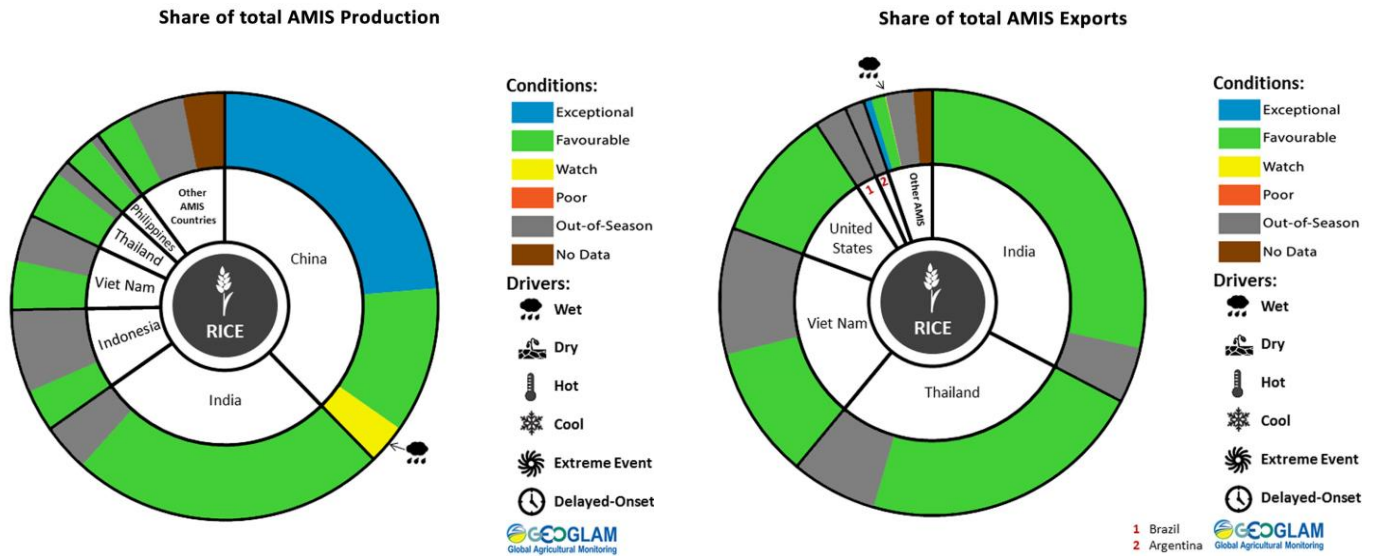


## Maize AMIS Comparisons

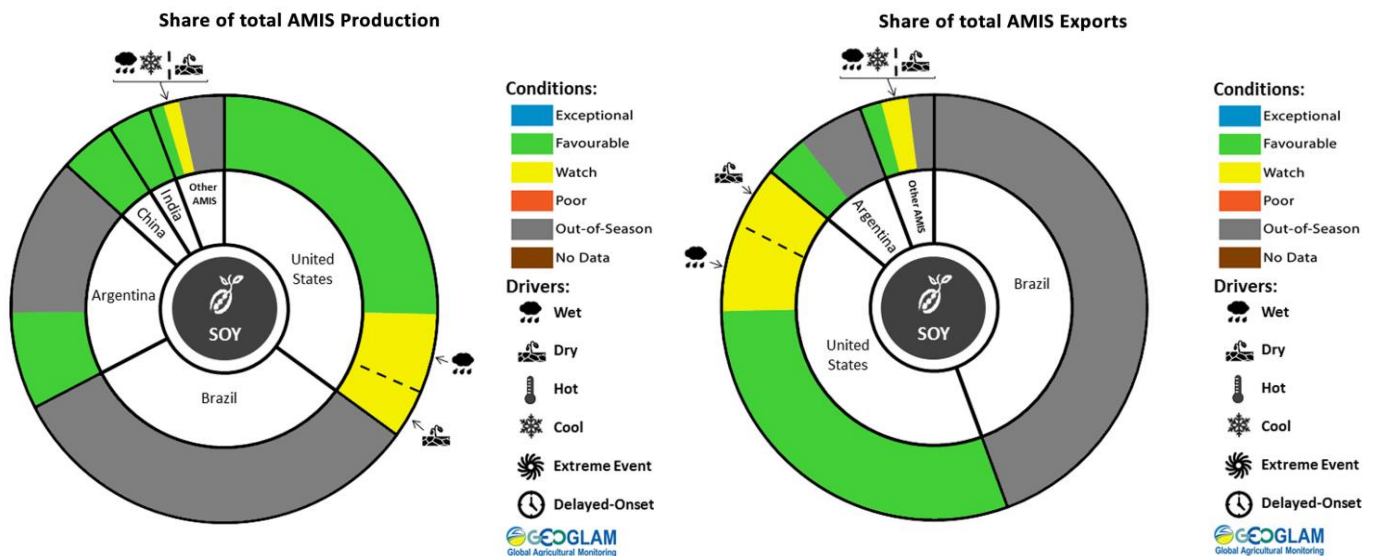


\* Assessment based on information as of July 28<sup>th</sup>

### Rice AMIS Comparisons



### Soybean AMIS Comparisons



\* Assessment based on information as of July 28<sup>th</sup>



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: Inbal Becker-Reshef*

[www.geoglam-crop-monitor.org](http://www.geoglam-crop-monitor.org)

[@GEOCropMonitor](https://twitter.com/GEOCropMonitor)

#### 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.

More detailed information on the GEOGLAM crop assessments is available at [www.geoglam-crop-monitor.org](http://www.geoglam-crop-monitor.org)