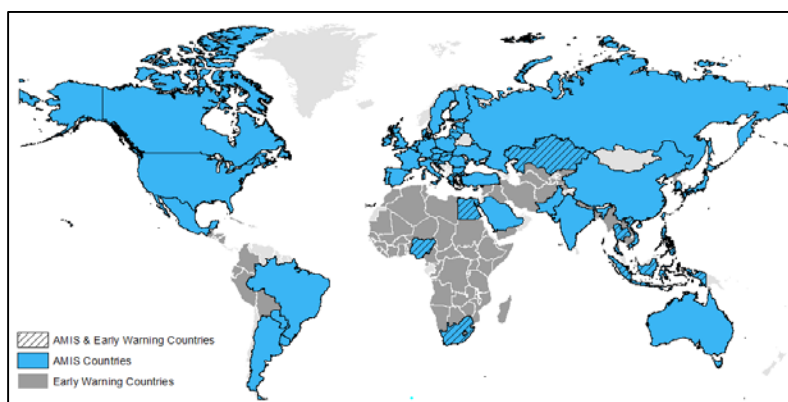


# CROP MONITOR FOR AMIS

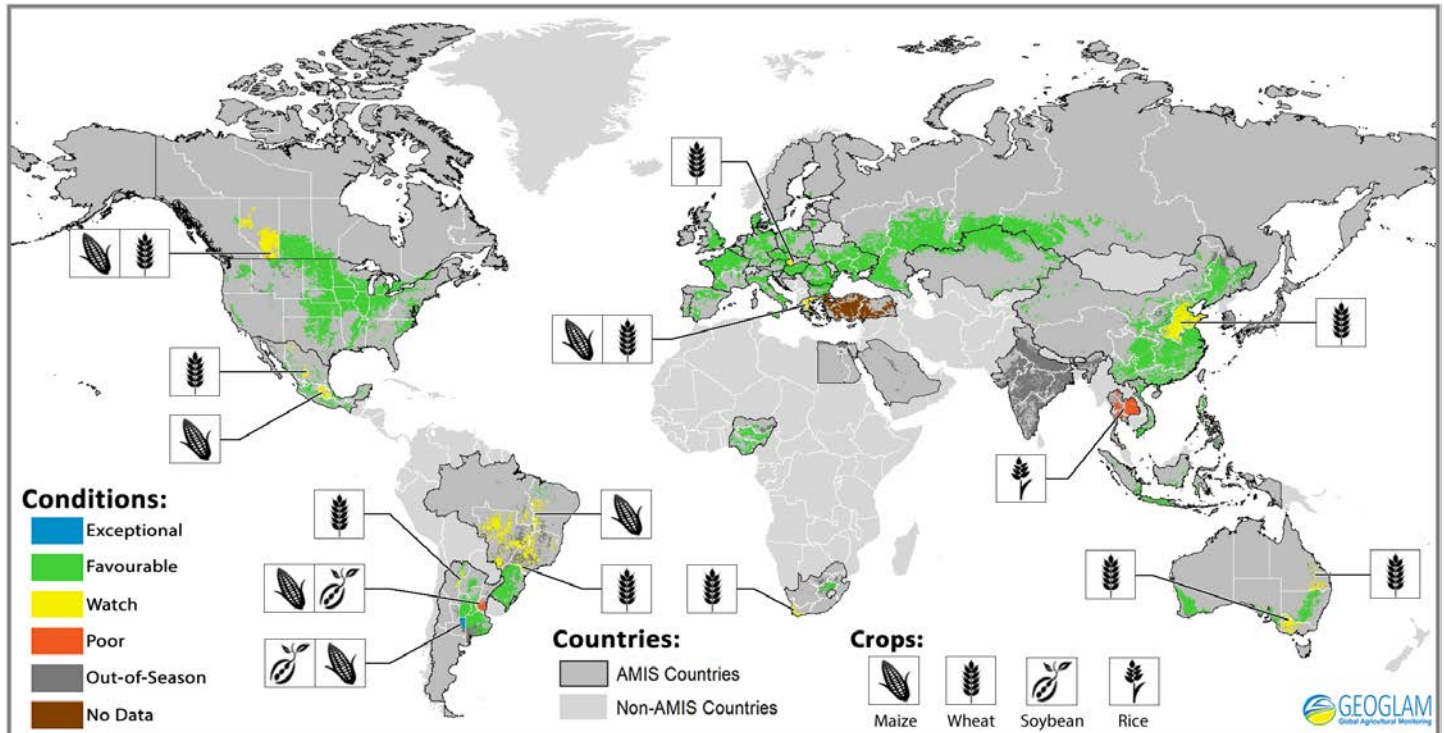
## NO. 29

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



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



Crop condition map synthesizing information for all four AMIS crops as of May 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 conditions continue to be largely favourable. Spring wheat planting is fully underway and conditions are favourable at this early stage of the season. In the southern hemisphere, the winter wheat season has started under mostly favourable conditions.

**Maize** - In the northern hemisphere, planting is almost complete under generally favourable conditions. In the southern hemisphere, conditions continue to be favourable in Argentina, however conditions remain mixed in Brazil due to the unfavourable weather earlier in the season.

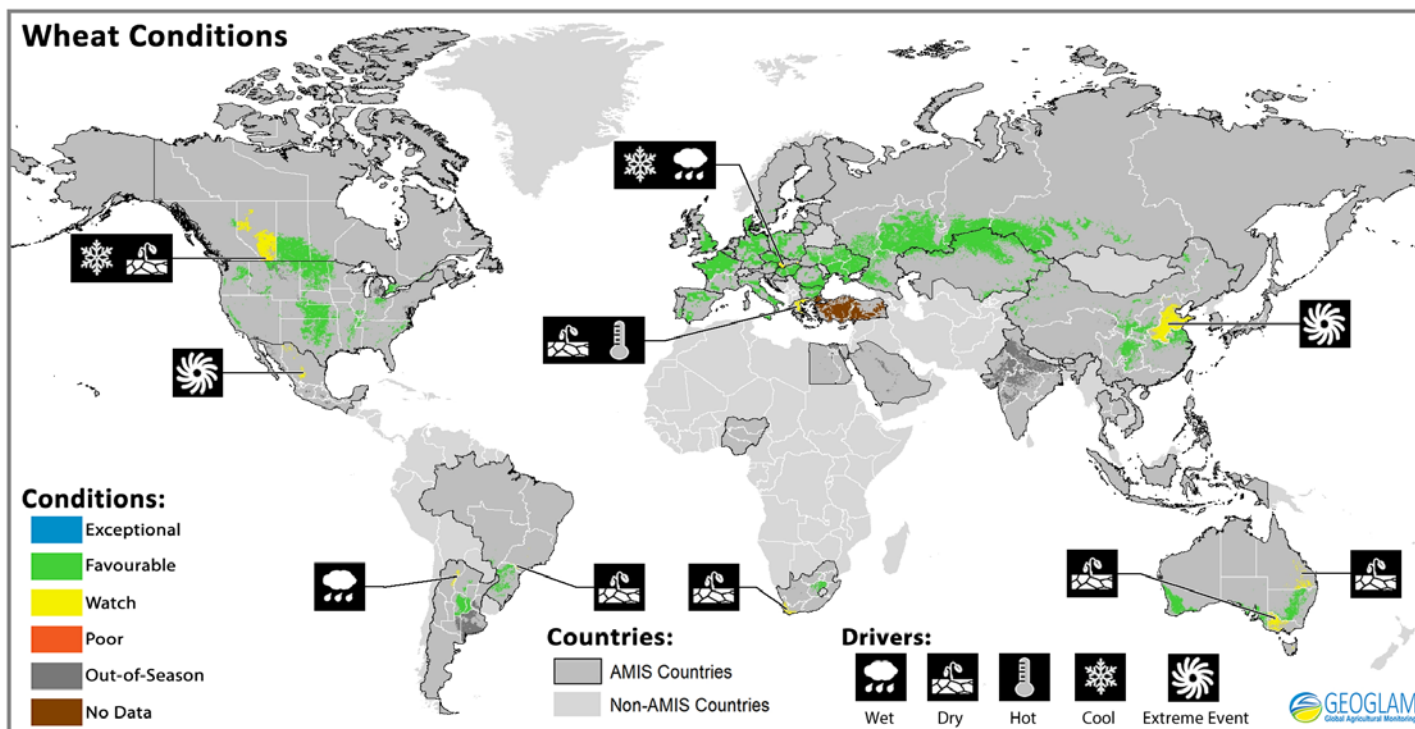
**Rice** - Overall conditions for the new season are favourable in Southeast Asia. Planting and field preparations are ongoing in Thailand, the Philippines and the US under favourable conditions. End of season conditions for Thailand's dry season crop were poor due to the impacts of El Niño witnessed throughout the season.

**Soybeans** - In the northern hemisphere, planting began under generally favourable conditions. In the southern hemisphere, as the season draws to a close, conditions in Argentina improved, though some concerns remain due to heavy rainfall throughout April.

### El Niño comes to a close: Return to neutral conditions

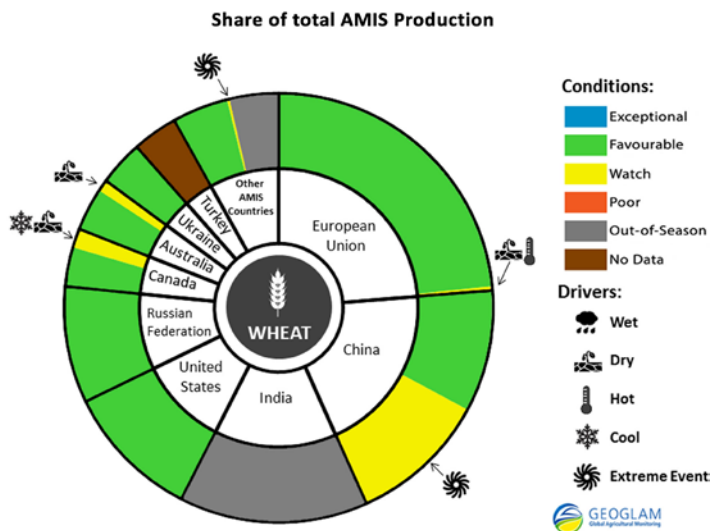
The El Niño of 2015-2016 is effectively over and will not be a factor during the 2016 northern hemisphere growing season. The return to neutral conditions should bring relief to drought stricken areas of East Africa, India, Central America, and Southeast Asia. However, there is an increased probability of a transition to La Niña by September. Should its intensity be moderate to strong, the likelihood of drier than average conditions will increase between October 2016 and June 2017 in the southern Horn of Africa, Central Asia, southeastern China, southeastern South America, Mexico, and the southern United States. Meanwhile, southern Africa, Australia, and northern South America would see above average 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 May 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.

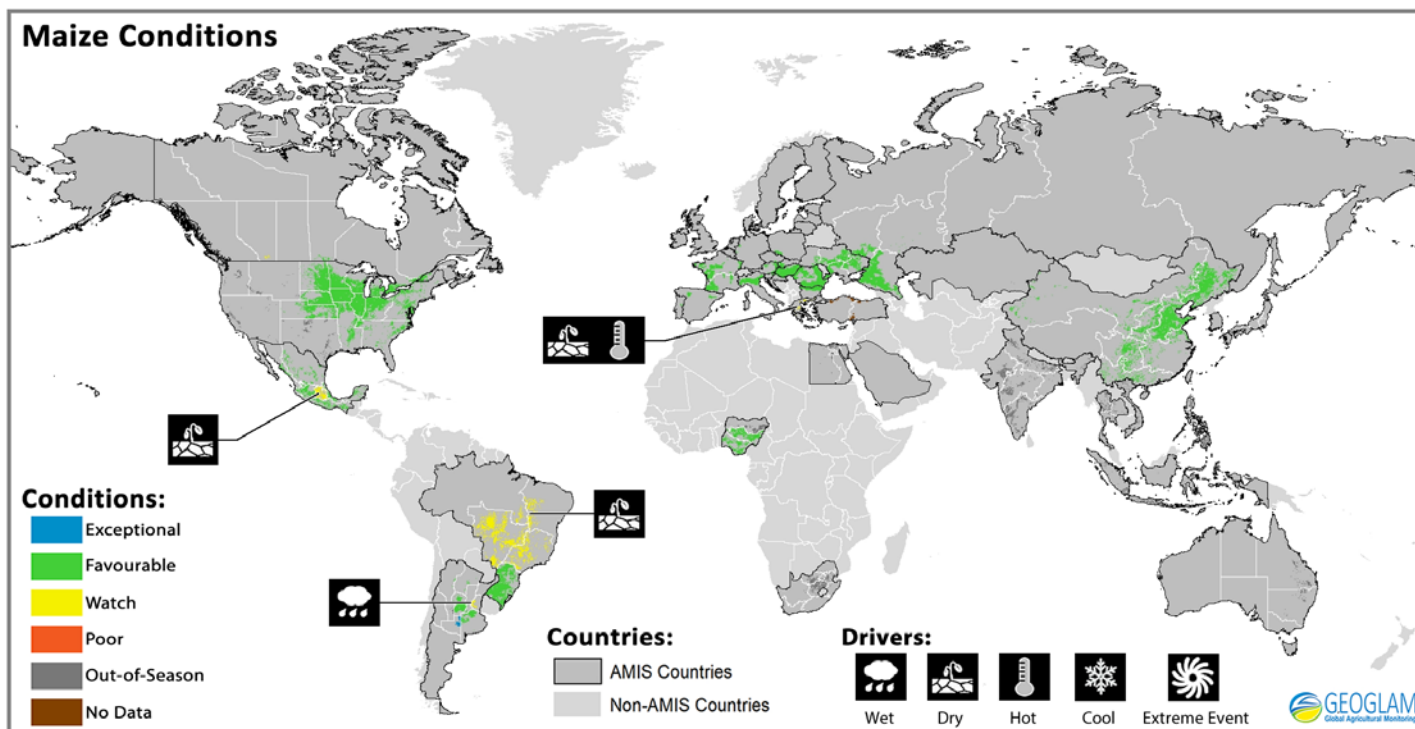
**Wheat:** In the **EU**, yields are expected to be above the five-year-average and conditions are generally favourable. Limited concern remains in some central and northern areas. In the **US**, winter wheat is in good condition as the Great Plains growing region received ample rain this spring and yields are expected to be strong. Spring wheat planting is well underway under good conditions. In **China**, winter wheat conditions are generally favourable except in the central east region where conditions are slightly below average due to pests. The spring wheat crop is in the tillering to jointing stages. In the **Russian Federation**, winter and spring wheat conditions are favourable owing to warm weather and good moisture conditions. In **Canada**, conditions for winter and spring wheat are favourable throughout the country except for in Alberta, where winter wheat conditions are poor and spring wheat conditions are mixed, due to dryness and cold weather. In **Ukraine**, conditions remain favourable and harvest prospects are good. In **Kazakhstan**, planting is proceeding under favourable moisture conditions. In **Australia**, planting is ongoing and conditions are generally favourable. However, there is some concern over dryness in the eastern growing regions.



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

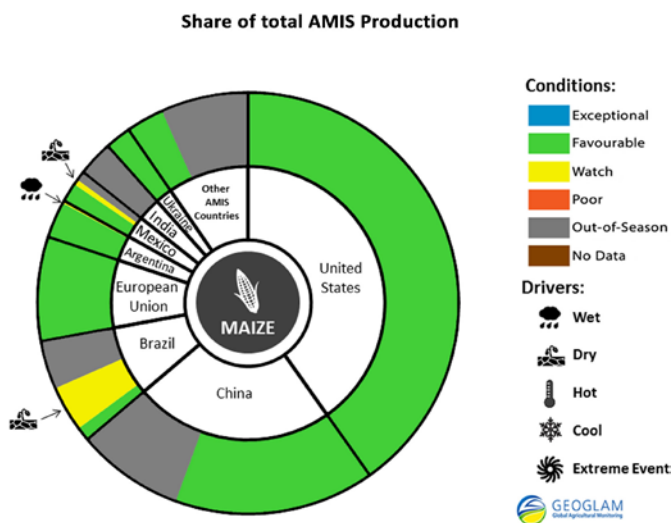
\* Assessment based on information as of May 28<sup>th</sup>

## Maize Conditions for AMIS Countries



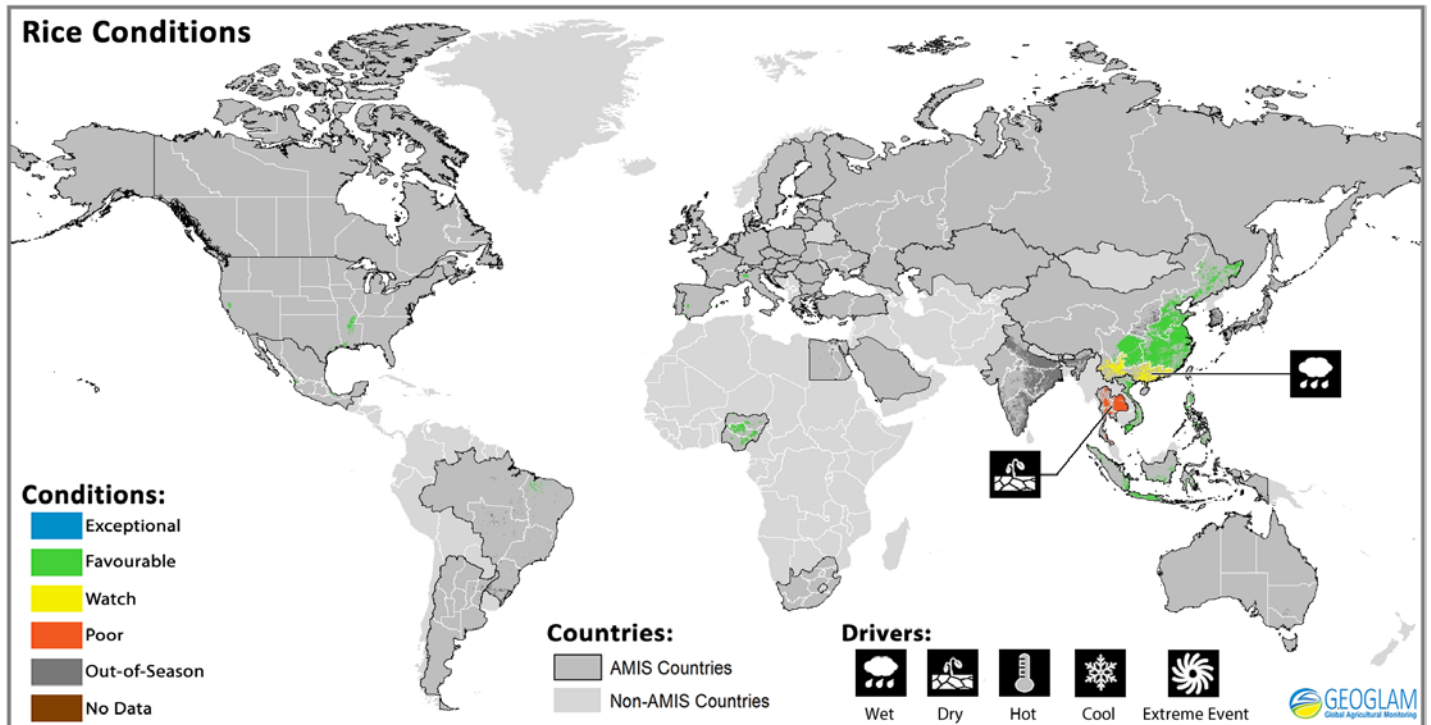
Maize crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of May 28<sup>th</sup>. Where crops are in other than favourable conditions the climatic drivers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

**Maize:** In the **US**, planting is almost complete and conditions are favourable throughout the primary growing regions. In **China**, conditions are favourable for the spring-planted crop due to beneficial agro-climatic conditions, which promoted seeding in the northern regions. In **Ukraine**, conditions continue to be good owing to optimal soil moisture. In the **EU**, conditions are favourable, although some planting delays occurred due to cold and wet conditions. In **Mexico**, conditions are generally favourable for both the autumn and spring-planted crops. However, there are some concerns over dryness in the central region. In **Canada**, planting has begun and conditions are generally favourable. In the **Russian Federation**, planting is ongoing and moisture conditions are favourable throughout. In **Nigeria**, conditions continue to be favourable. In **Brazil**, conditions for the summer-planted (the larger producing season) continue to be mixed due to unfavourable weather in April and May. Despite an increase in planted area, production is expected to be lower relative to the previous crop. Harvest is complete for the smaller producing spring-planted crop, and increased yields have partially compensated for the reduction in area in some states. In **Argentina**, harvest continues to progress slowly due to the delayed planting and excess rainfall. Conditions remain generally favourable, though the wet weather is delaying the opportunity to dry the grains.



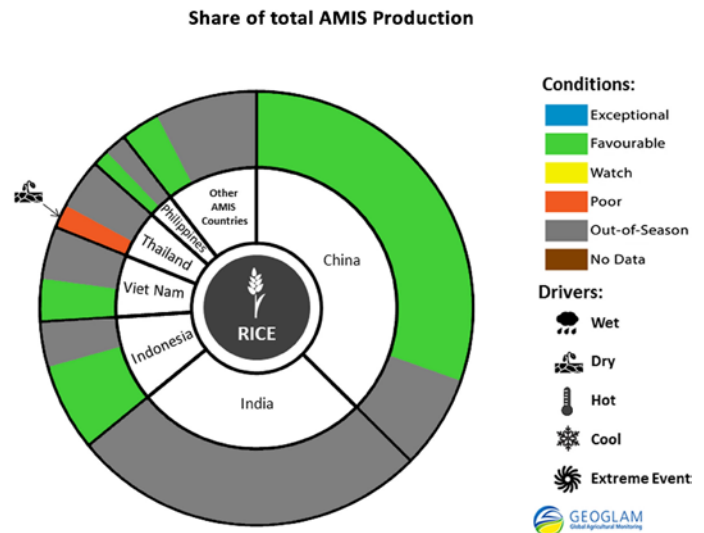
For detailed description of the pie chart please see box below.

## Rice Conditions for AMIS Countries



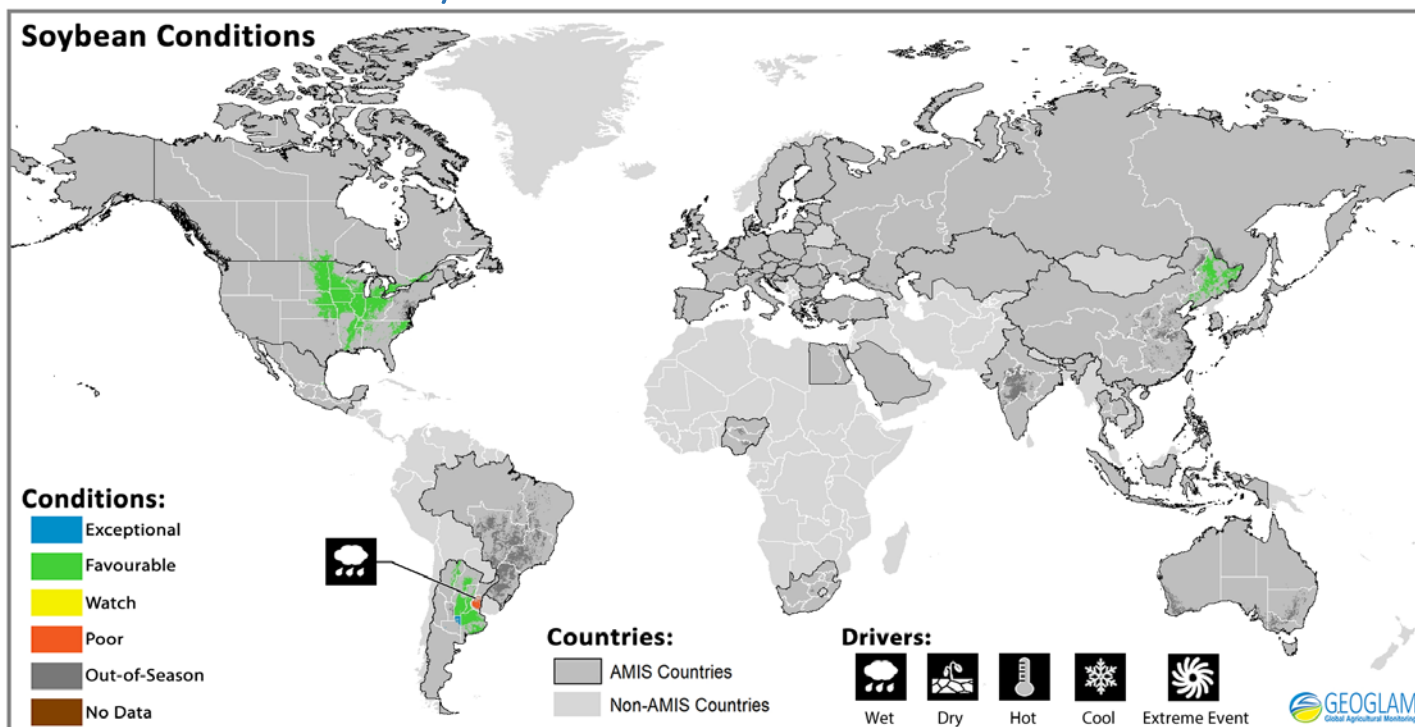
Rice crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of May 28<sup>th</sup>. Where crops are in other than favourable conditions the climatic drivers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

**Rice:** In **India**, end of season rabi conditions were favourable for the mostly irrigated crop. In **China**, conditions are favourable for both the early-planted crop and the intermediate-planted crop due to beneficial temperatures and rainfall. In **Thailand**, harvest is almost complete and conditions remain poor for the dry season crop due to insufficient water, pest outbreaks and unfavourable weather throughout the season attributed to El Niño. Field preparations began for the wet season crop. In **Viet Nam**, overall conditions are favourable. Planting of the dry season crop is complete in the northern regions and harvest continues for the winter-spring dry season crop in the southern areas. In the **US**, conditions are favourable. In **Indonesia**, conditions are favourable for the wet season crop owing to favourable rainfall. In **Brazil**, harvest is almost complete except in the northeastern region where conditions are favourable. Overall, national production is lower than the previous crop due to reduced area and unfavourable weather conditions in the main southern producing region. In the **Philippines**, field preparations and planting of the wet season crop has begun.



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

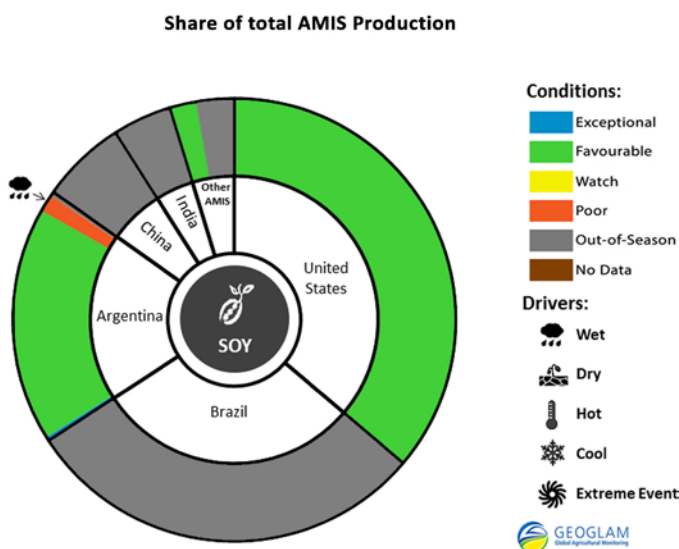
## Soybean Conditions for AMIS Countries



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 May 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 the **US**, planting is ongoing and conditions are favourable at this early stage of the season. In **Canada**, planting began and conditions are generally favourable. In **Brazil**, harvest is complete and an increase in planted area resulted in overall higher production. However, despite higher area, the total production of the current crop is similar to the previous year due to unfavourable weather conditions, which reduced yields. In **Argentina**, conditions have improved and harvest is ongoing, though significant delays remain. The grain quality was impacted by heavy rainfall during April.

**Information on crop conditions in non-AMIS countries can be found in the [GEOGLAM Early Warning Crop Monitor](#), published June 2nd 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 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 production.

**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 may result in production impacts and they 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.)

### Drivers:

	Wet
	Dry
	Hot
	Cool
	Extreme Event

### 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 & 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.

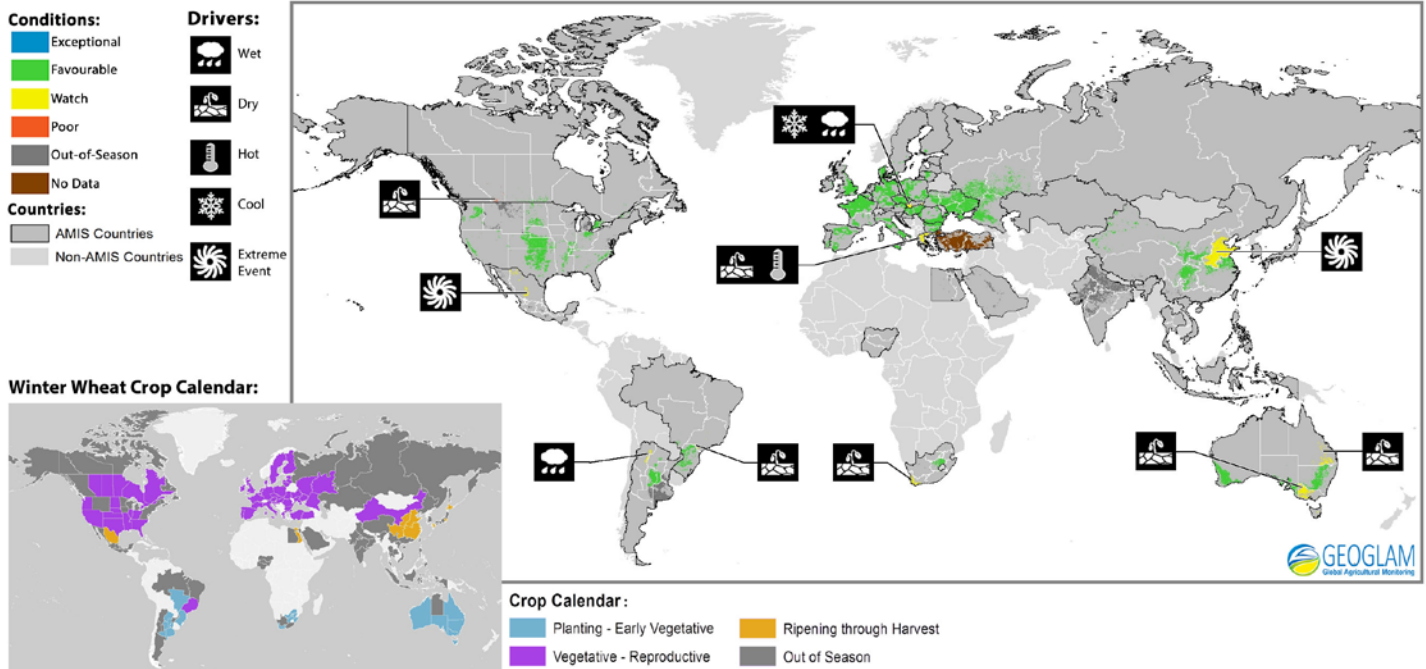
More detailed information on the GEOGLAM crop assessments is available at [www.geoglam-crop-monitor.org](http://www.geoglam-crop-monitor.org)

For information on country coverage and criteria:

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

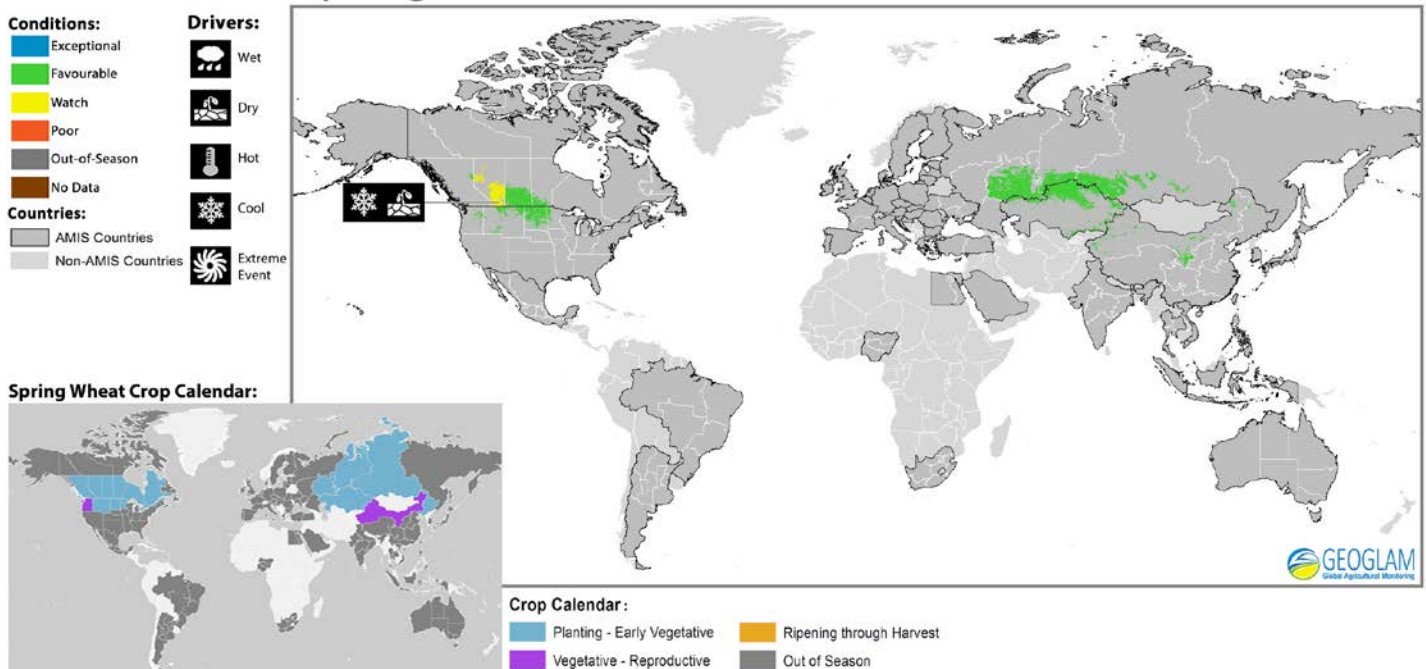
## Appendix 2: Crop Season Specific Maps & Pie Charts

### 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 May 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.

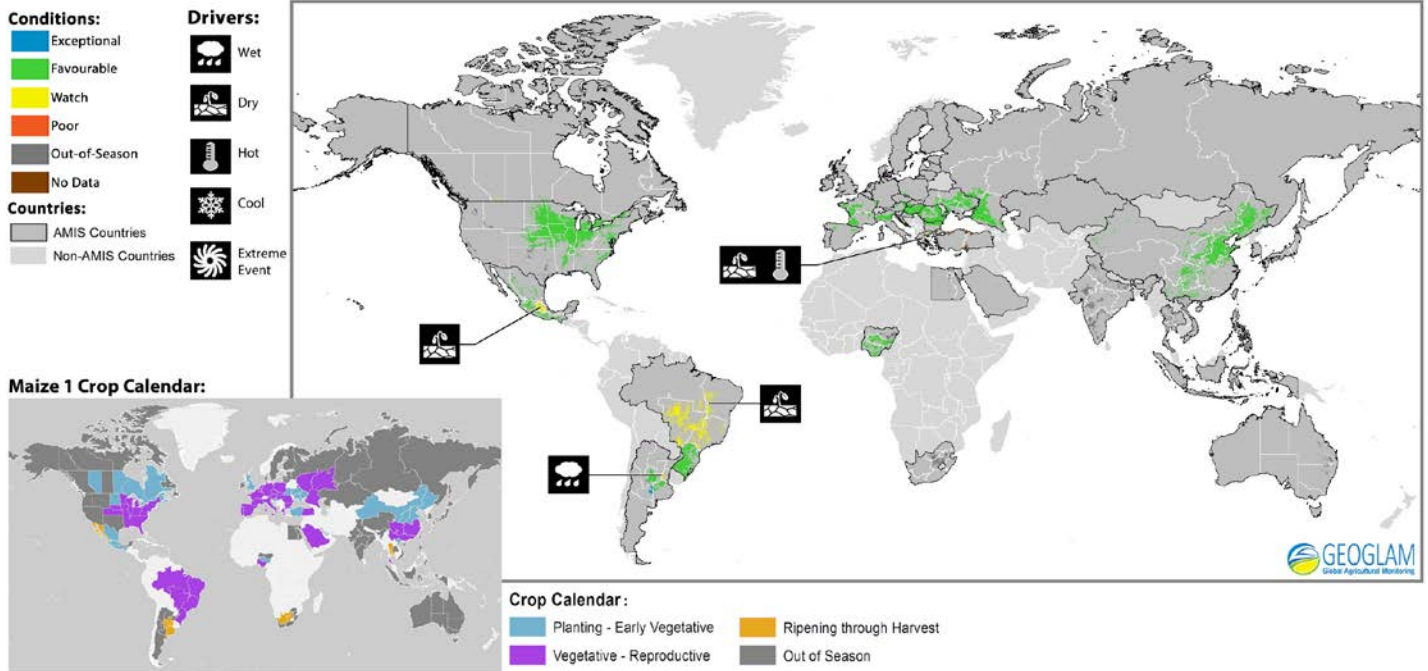
### Spring Planted Wheat Conditions for AMIS Countries



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 May 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.

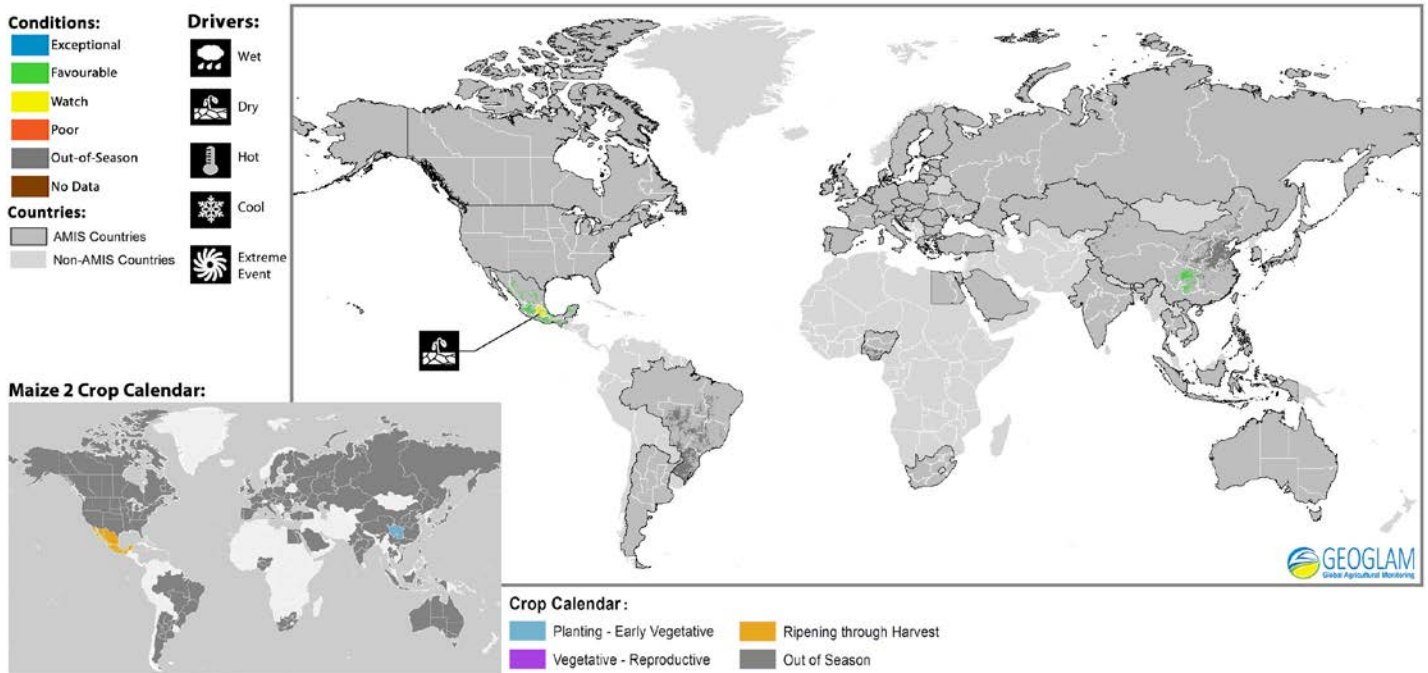


## Maize 1 Conditions for AMIS Countries



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 May 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.

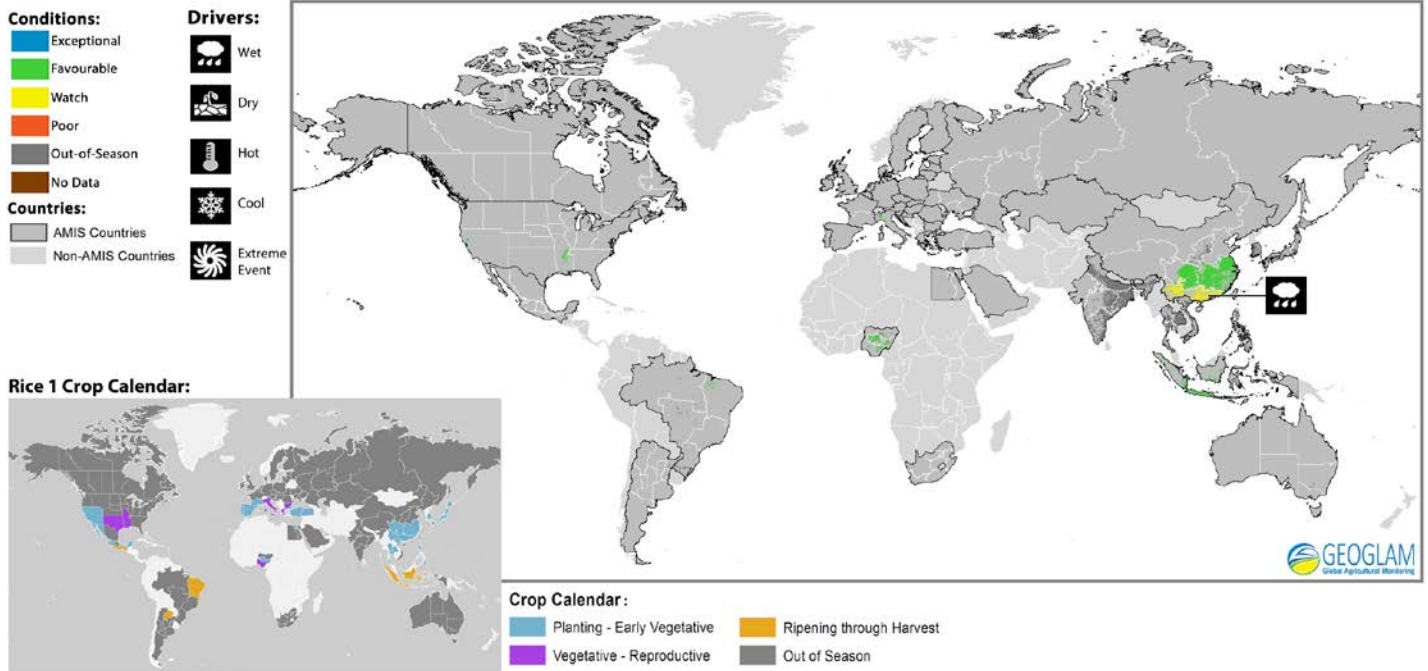
## Maize 2 Conditions for AMIS Countries



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 May 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.

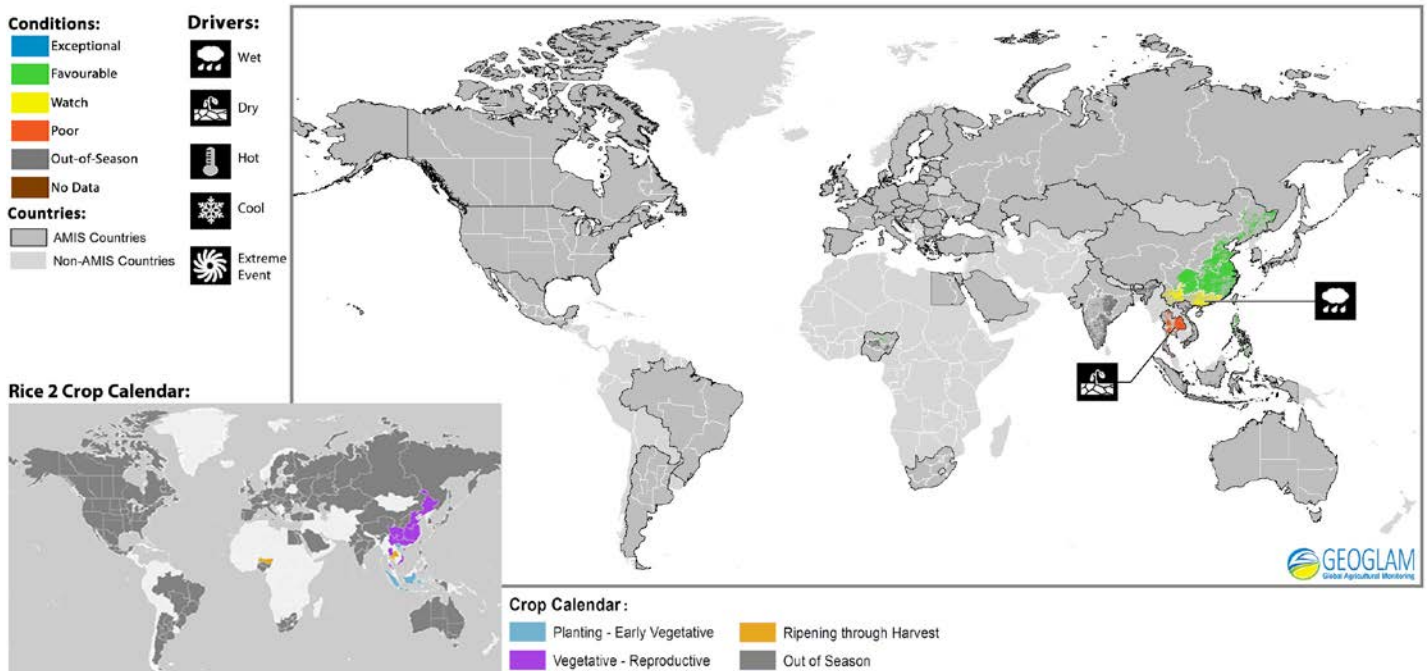
\* Assessment based on information as of May 28<sup>th</sup>

## Rice 1 Conditions for AMIS Countries



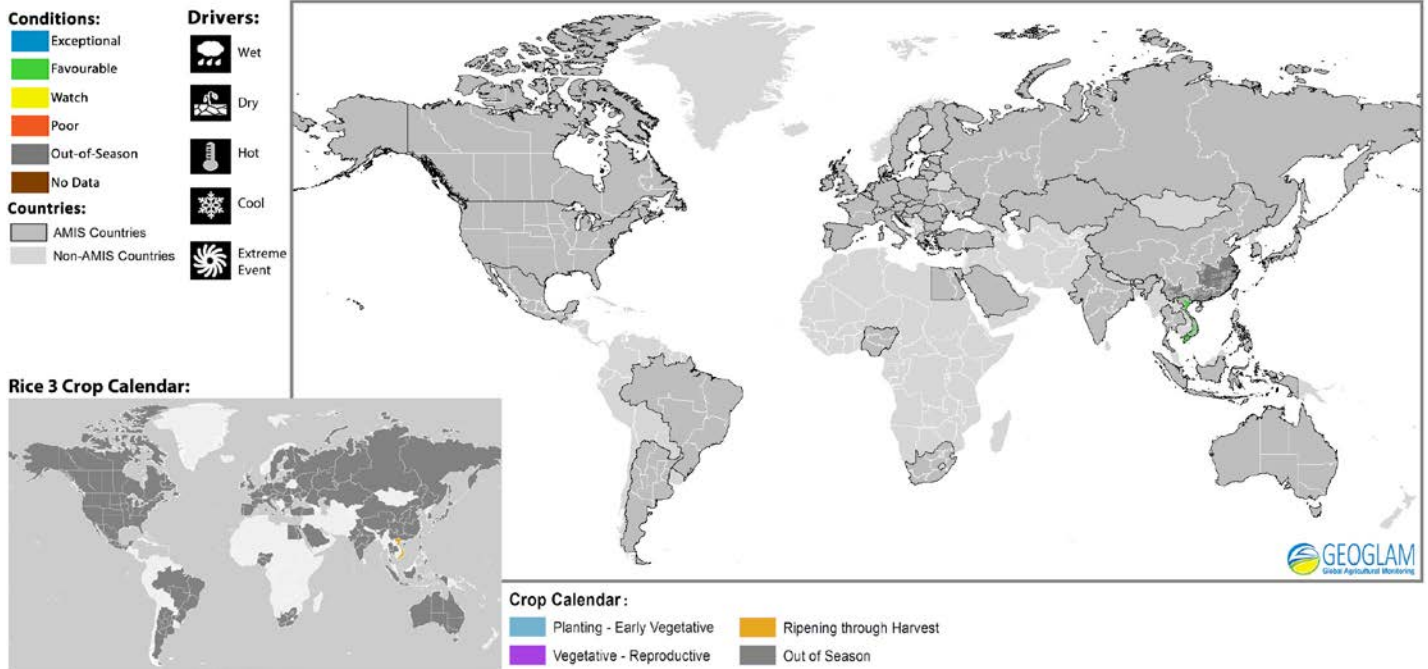
Rice 1 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of May 28th. Where crops are in less than favourable conditions the climatic drivers responsible 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



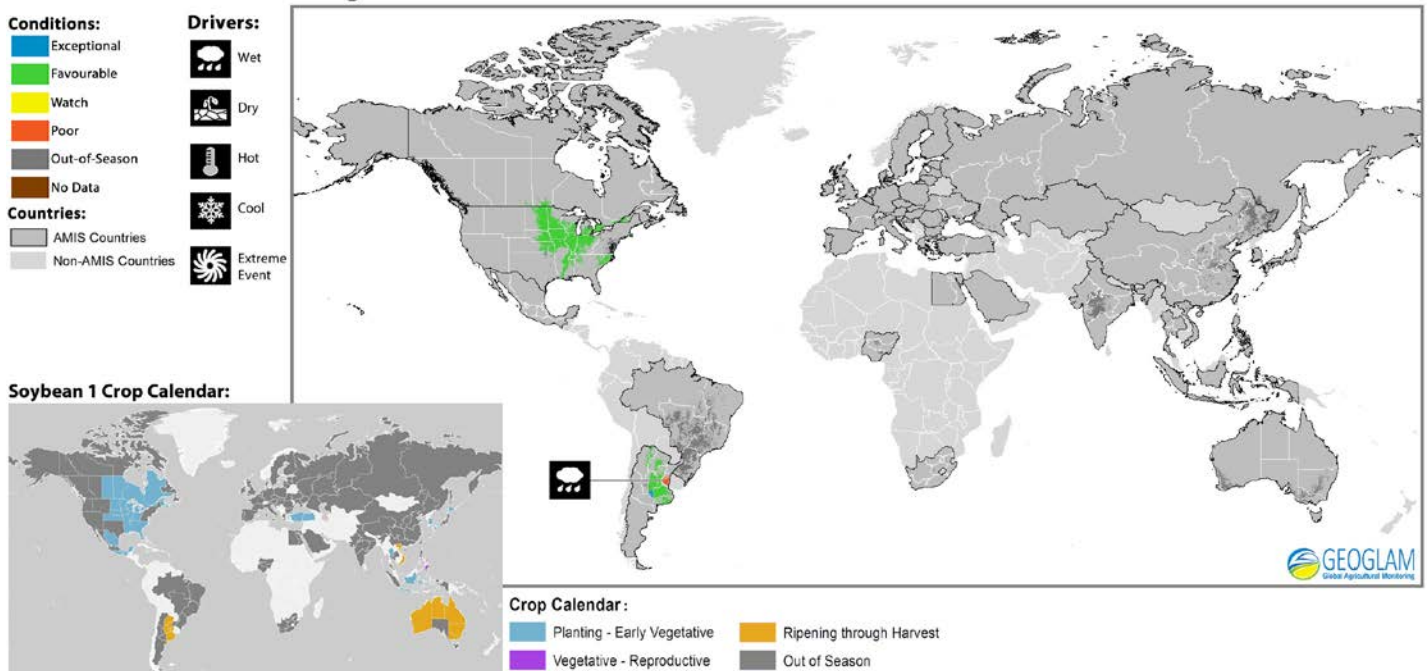
Rice 2 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of May 28th. Where crops are in less than favourable conditions the climatic drivers responsible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

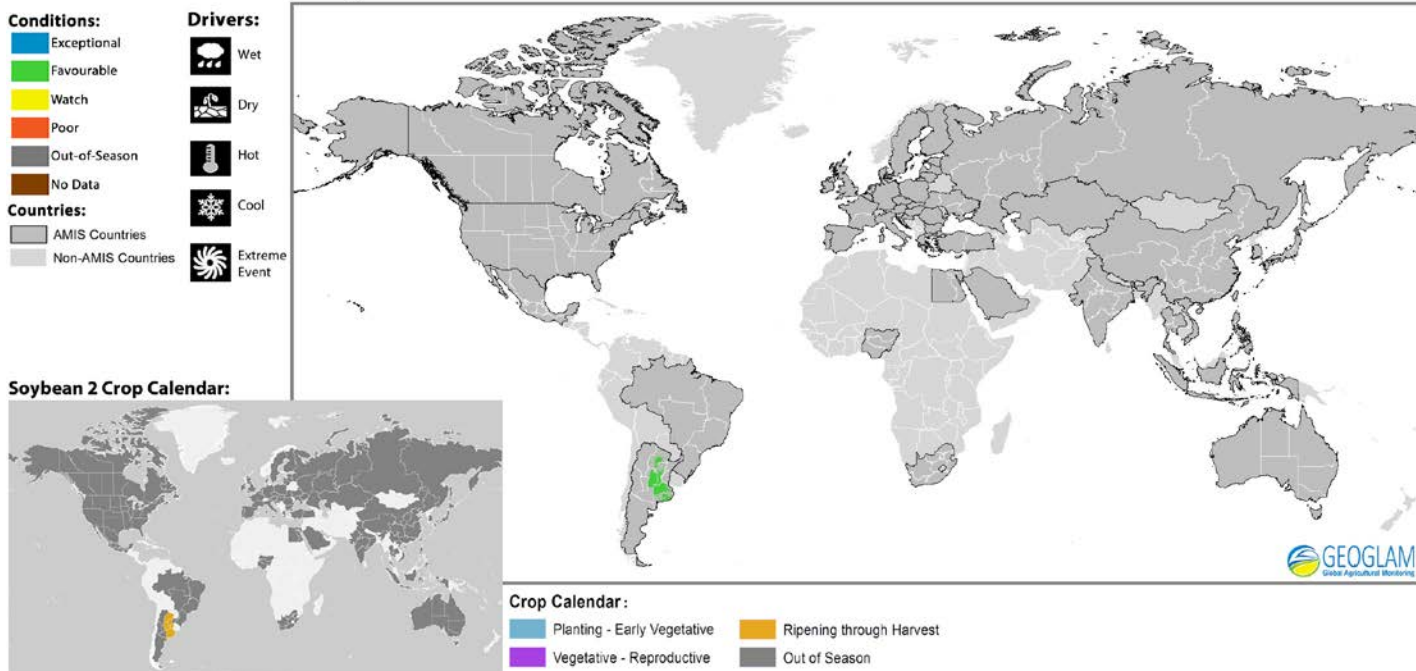
### Soybean 1 Conditions for AMIS Countries



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 May 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.

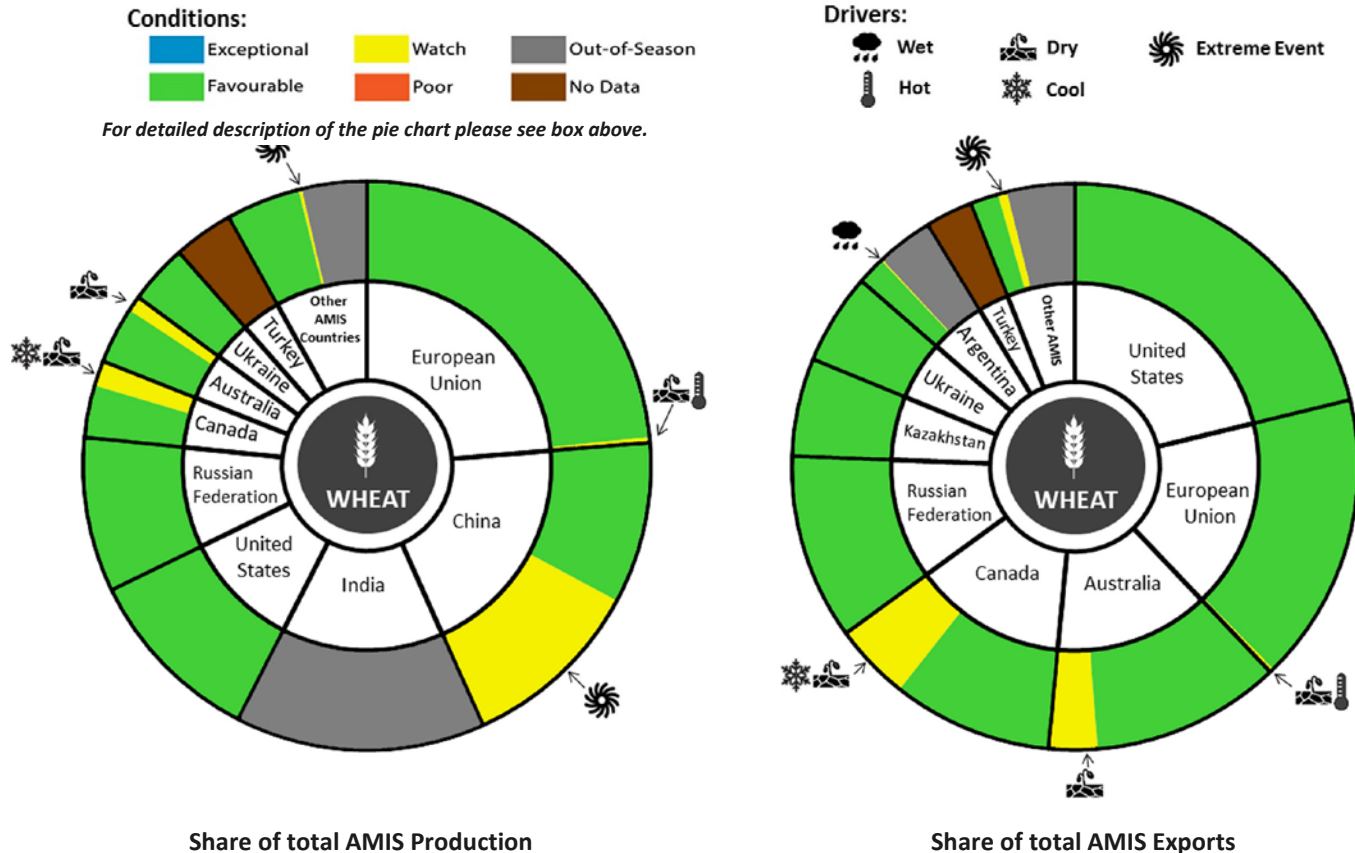
\* Assessment based on information as of May 28<sup>th</sup>

## 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 May 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 May 28<sup>th</sup>

### Maize AMIS Comparisons

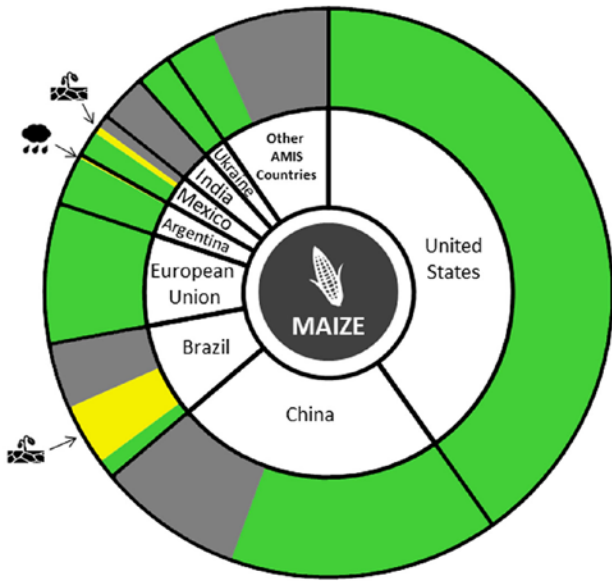
**Conditions:**

- Exceptional
- Watch
- Out-of-Season
- Favourable
- Poor
- No Data

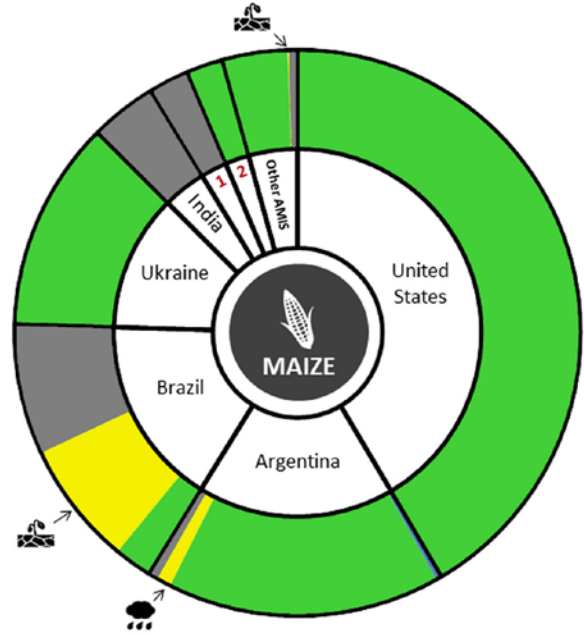
**Drivers:**

- Wet
- Hot
- Dry
- Cool
- Extreme Event

*For detailed description of the pie chart please see box above.*



Share of total AMIS Production



Share of total AMIS Exports

### Rice AMIS Comparisons

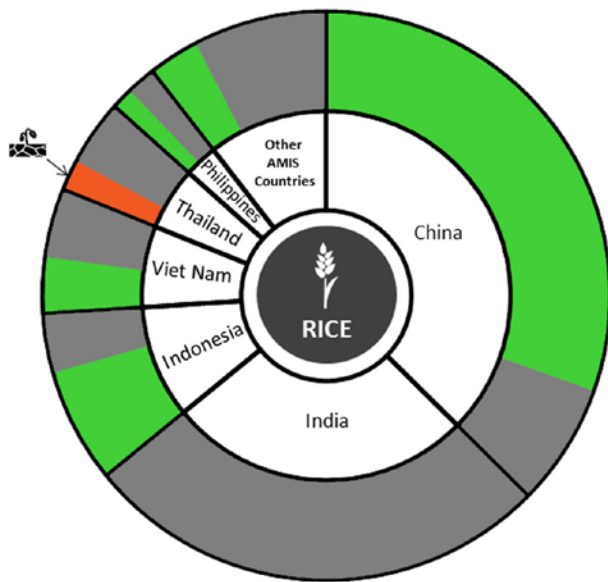
**Conditions:**

- Exceptional
- Watch
- Out-of-Season
- Favourable
- Poor
- No Data

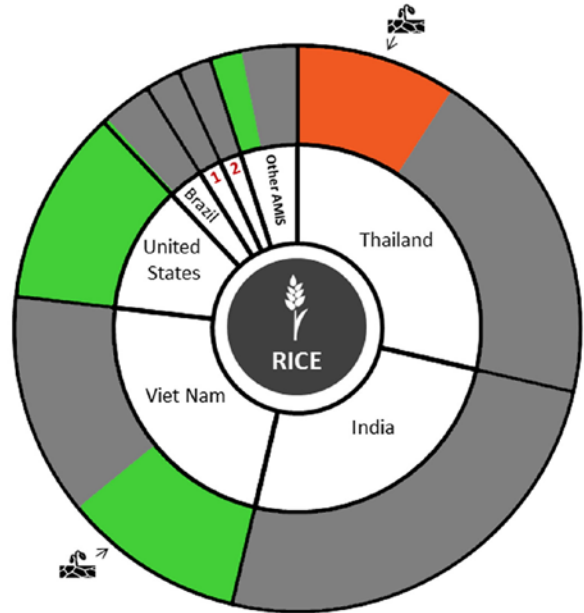
**Drivers:**

- Wet
- Hot
- Dry
- Cool
- Extreme Event

*For detailed description of the pie chart please see box above.*



Share of total AMIS Production



Share of total AMIS Exports

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

### Soybean AMIS Comparisons

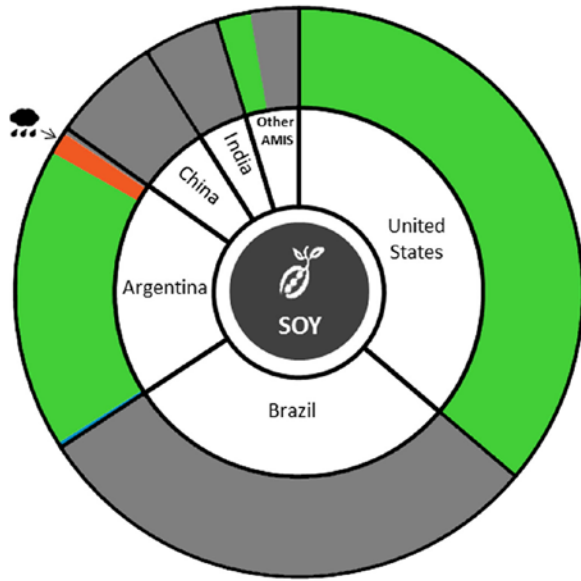
**Conditions:**

- Exceptional
- Watch
- Out-of-Season
- Favourable
- Poor
- No Data

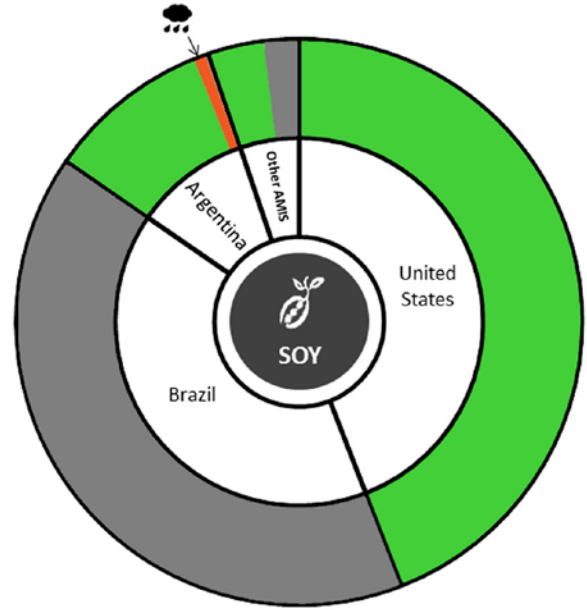
**Drivers:**

- Wet
- Dry
- Extreme Event
- Hot
- Cool

*For detailed description of the pie chart please see box above.*



Share of total AMIS Production



Share of total AMIS Exports

\* Assessment based on information as of May 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)

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