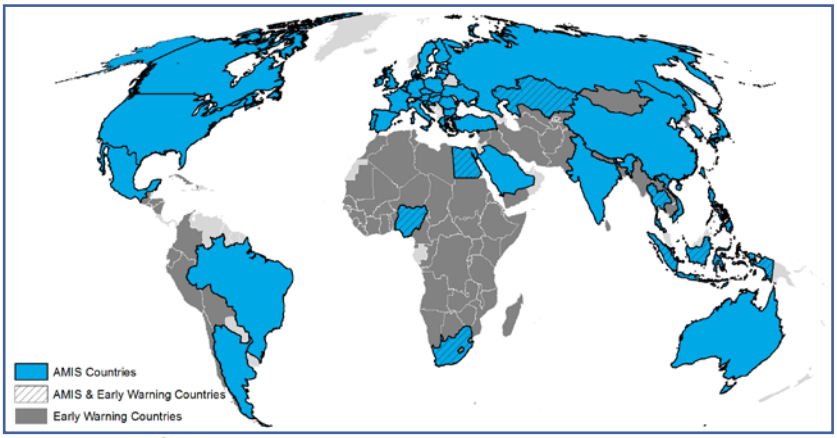
Crop Monitor for AMIS

Overview:

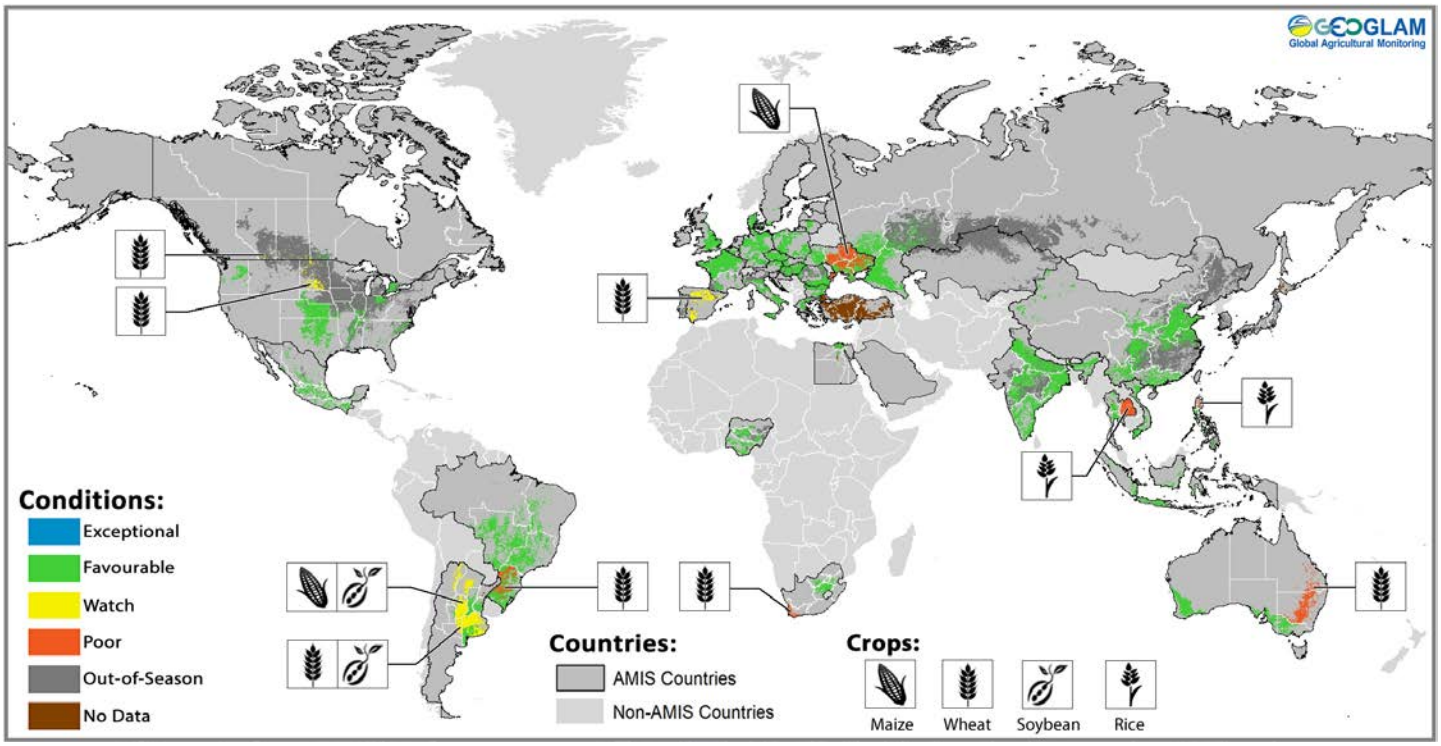
By the end of November, conditions for the four AMIS crops remain mixed. **Winter wheat** in the northern hemisphere heads into dormancy under generally favourable conditions, while in the southern hemisphere, harvest conditions vary significantly. For **maize**, harvest wraps up in the northern hemisphere, and in the southern hemisphere conditions are favourable with only minor dryness in Argentina. For **rice**, conditions generally favourable in Southeast Asia, with exceptions in parts of Thailand and the Philippines. For **soybeans**, the season has ended in the northern hemisphere and in the southern hemisphere conditions are favourable in Brazil, while mixed for sowing in Argentina.



Contents:

Assessment based on information as of November28th

Conditions at a glance for AMIS countries (as of November28th)



Crop condition map synthesizing information for all four AMIS crops as of November 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 are generally favourable heading into winter dormancy. In the southern hemisphere, harvest begins under mixed conditions, albeit with some improvement in Argentina and with significant variability across Australia.

Maize - In the northern hemisphere, harvest wrapped up favourably except in Ukraine. In the southern hemisphere, conditions are generally favourable with minor areas of dryness in Argentina.

Rice - In Asia, crop conditions are generally favourable. Harvest of wet-season rice is ongoing except in Indonesia, where dry-season rice is being harvested. Sowing of the Rabi crop has begun in India. The northeast of Thailand and the northern Philippines have been negatively impacted by heavy rainfall.

Soybeans - In the northern hemisphere, harvest wrapped up under favourable conditions. In the southern hemisphere, crop conditions are favourable for Brazil, while sowing begins under mixed conditions in Argentina.

La Niña Update

On November 9th, the U.S. Climate Prediction Center announced a change in La Nina status from Watch to Advisory, meaning that La Nina conditions are observed and expected to continue. The probability of continuation through February is about 70%, double the typical probability for this period. There is a 50% chance thereafter of La Nina persisting through April 2018. Above normal rains are favored for Central America, the Caribbean, northern South America, and parts of Southeast Asia (Philippines, Malaysia and eastern Indonesia). Drier than normal conditions are favored for western Indonesia (Java and Sumatra), southwest Asia, the Horn of Africa, southeastern South America, eastern China, and the southern United States. Though Southern Africa typically experiences above normal rains with La Nina, forecast models, responding to atypical conditions in the Indian Ocean, call for drier than normal conditions for parts of Mozambique, South Africa, and Zimbabwe.

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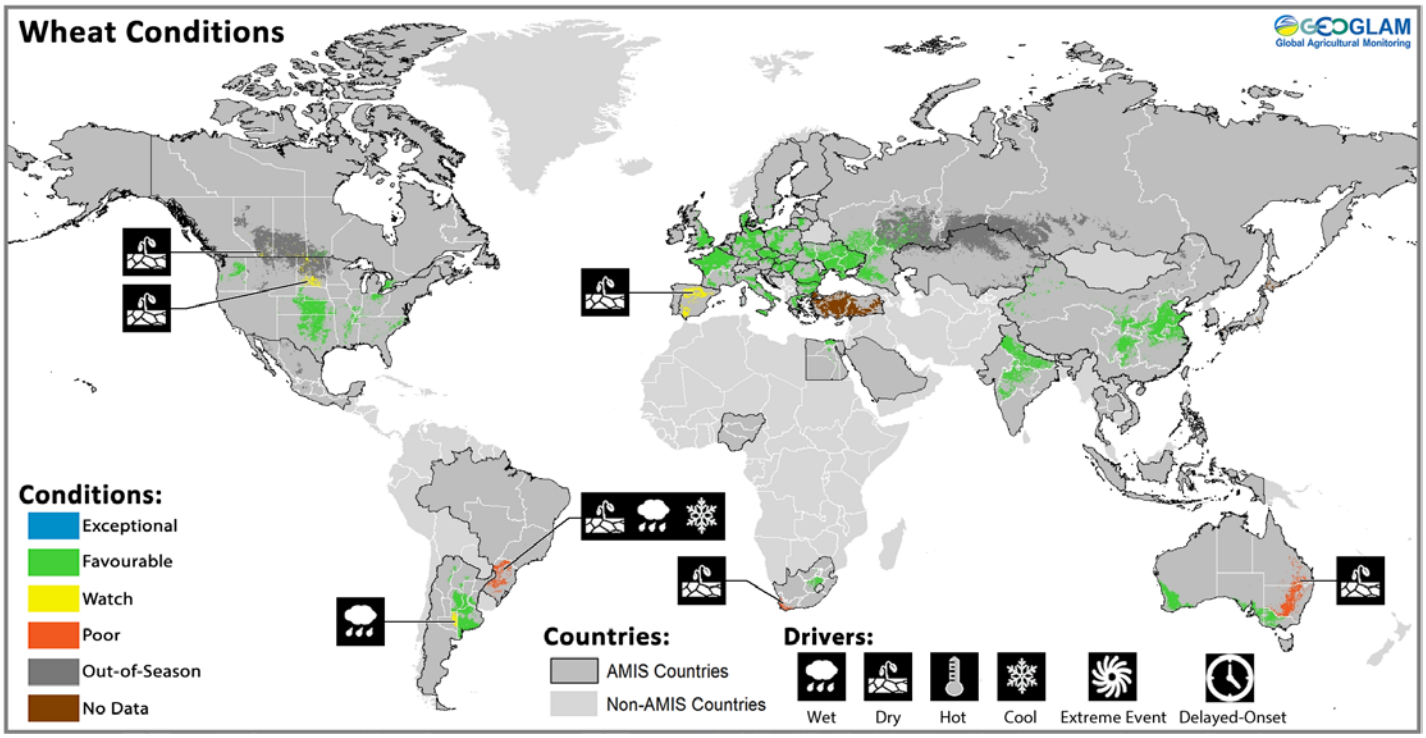
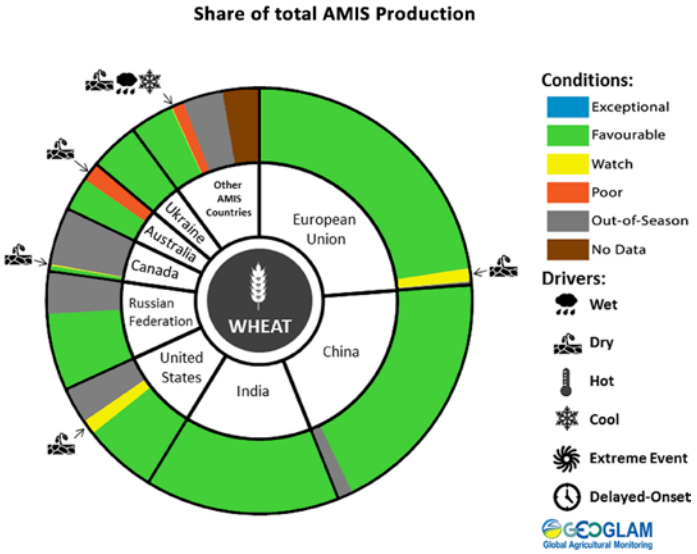
Wheat Conditions for AMIS Countries



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 November 28th. Where crops are in other than favourable conditions the climatic drivers responsible for those conditions are displayed. Crop Season Specific Maps can be found in Appendix 2.

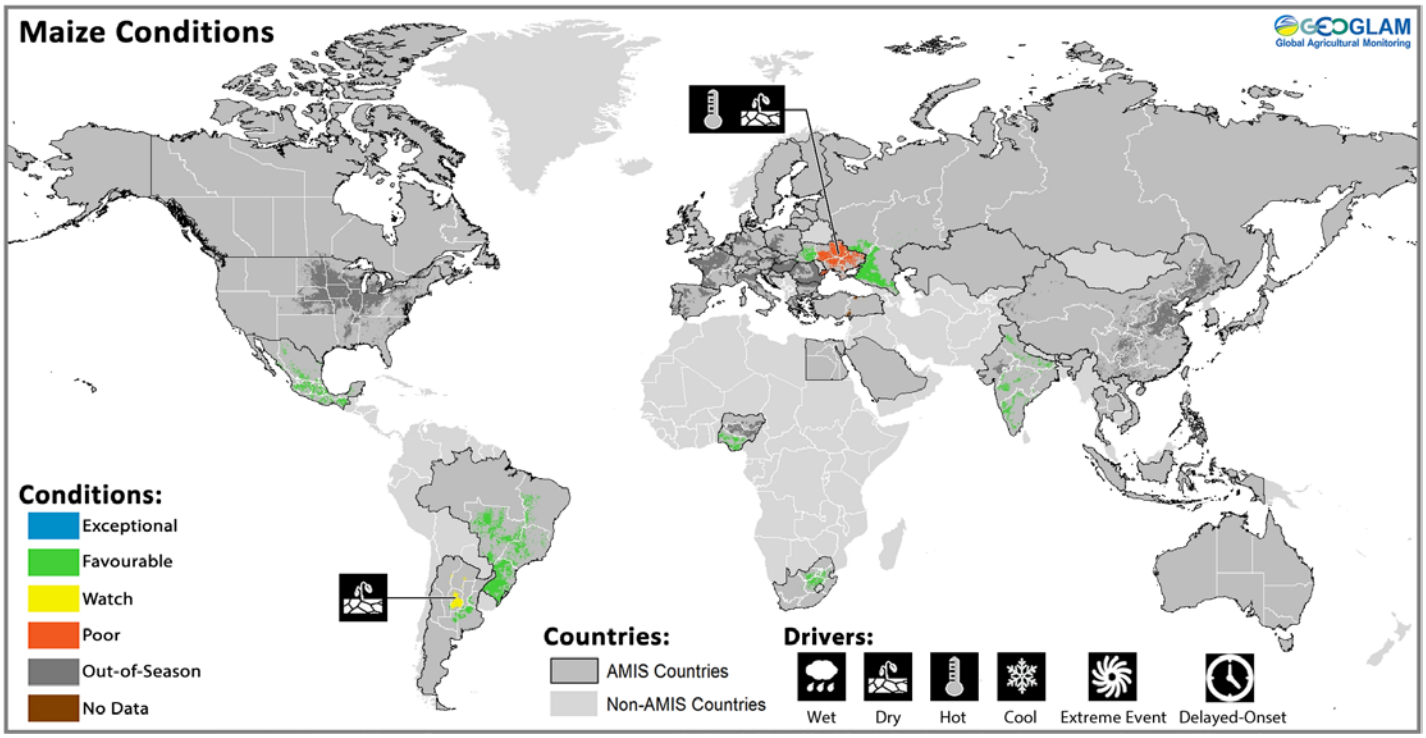
Wheat: In the **EU**, winter wheat conditions are generally favourable, while some large areas continue to experience difficult sowing conditions. In **Ukraine**, winter wheat conditions are favourable with adequate soil moisture for establishment before winter dormancy. In the **Russian Federation**, conditions are favourable for winter wheat establishment. In **China**, winter wheat conditions are favourable with improvements in temperatures and soil moisture in the southwest, which is the most productive region. In **India**, sowing of Rabi wheat have begun under favourable conditions. In the **US**, winter wheat is progressing favourably, with some continued dryness in the northern plains. In **Canada**, conditions are generally favourable for winter wheat with minor dryness in the prairies, which is limiting seeding. In **Australia**, harvest progress has been slowed by November rainfall. Conditions vary significantly across the country with improvements in Western Australia during the spring, while conditions in New South Wales have deteriorated, leading to well below average yields. In **Argentina**, harvest is almost finished in the north and beginning in the south under generally favourable conditions. Recent frosts in the southern areas during the grain filling stages will potentially impact yields.



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

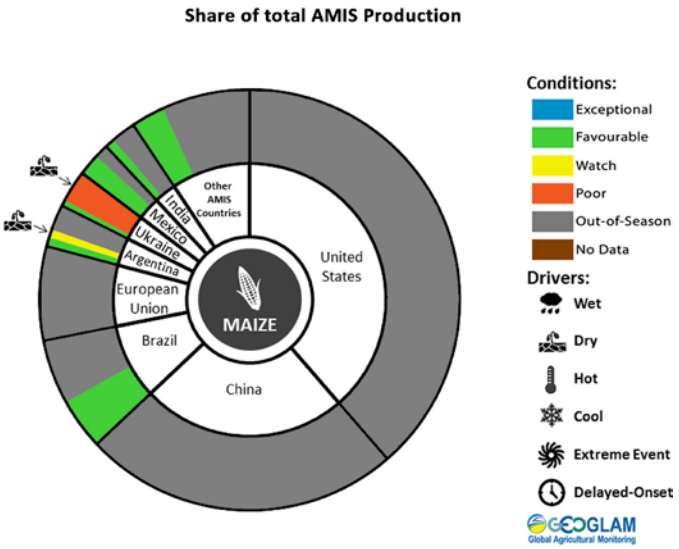
* Assessment based on information as of November 28th

Maize Conditions for AMIS Countries



Maize crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of November 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**, harvest finished under favourable conditions with yields just above last year's record. In **Mexico**, harvest of the spring-planted crop continues under good conditions. In the **EU**, harvest finished under favourable conditions in eastern countries, counterbalancing unfavourable conditions in Mediterranean and central countries. In **Ukraine**, harvest is all but completed under generally poor conditions due to drought and heat stress during the season, with the exception of the west. In **India**, sowing of the Rabi crop is progressing under favourable conditions. In **Brazil**, conditions are favourable as the sowing of spring-planted maize has concluded in the main regions. In **Argentina**, conditions are mixed for early planted maize with high temperatures and low soil moisture affecting areas in Córdoba and areas in the north entering the vegetative stage. In **South Africa**, conditions are generally favourable as sowing continues.



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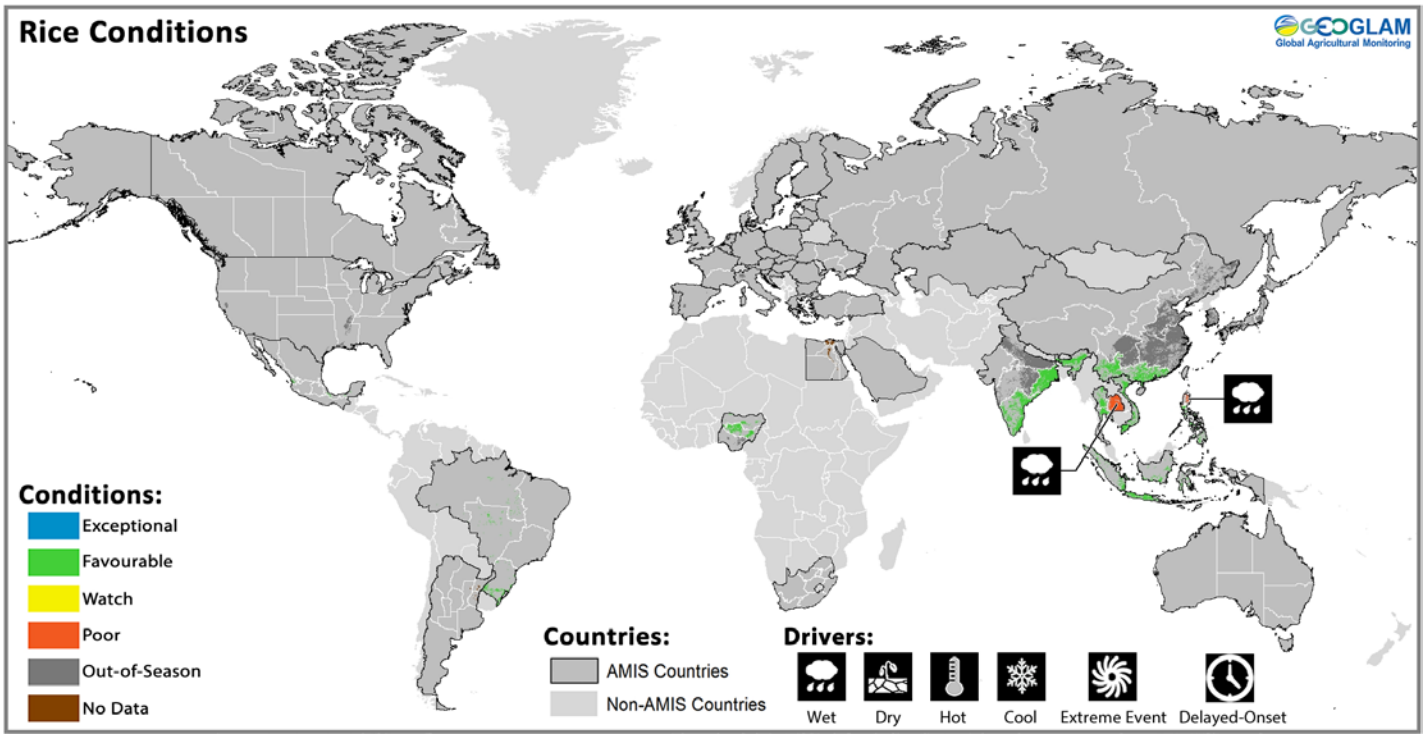
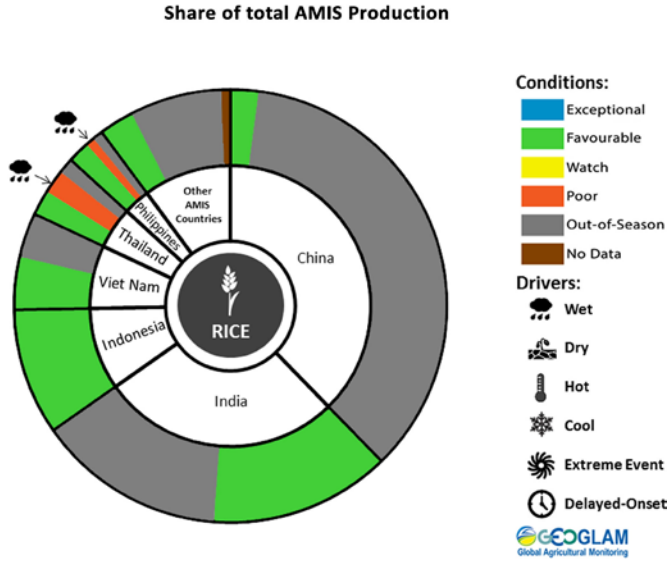
Rice Conditions for AMIS Countries



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 November 28th. Where crops are in other than favourable conditions the climatic drivers responsible for those conditions are displayed.

Rice: In **China**, conditions are favourable for late-rice in the south with the crop in the maturing stage. In **India**, conditions are favourable for the sowing of the Rabi crop. In **Indonesia**, conditions are favourable as harvest of dry-season rice enters the peak period, with expected higher yields than last year. Sowing of wet-season rice continues slowly, while producers are waiting for higher rainfall levels. In **Viet Nam**, harvesting of wet-season rice continues under favourable conditions with yields slightly below average in the north and slightly above average in the south. In **Thailand**, wet-season rice is in the grain filling stage under generally favourable conditions except in the northeast, where conditions are poor due to October flood damage and disease outbreaks. In the **Philippines**, harvesting has begun for wet-season rice planted in July-August under generally favourable conditions. Heavy rainfall and cyclones in October and November brought flood damage to northern regions of Luzon Island affecting final yields.



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

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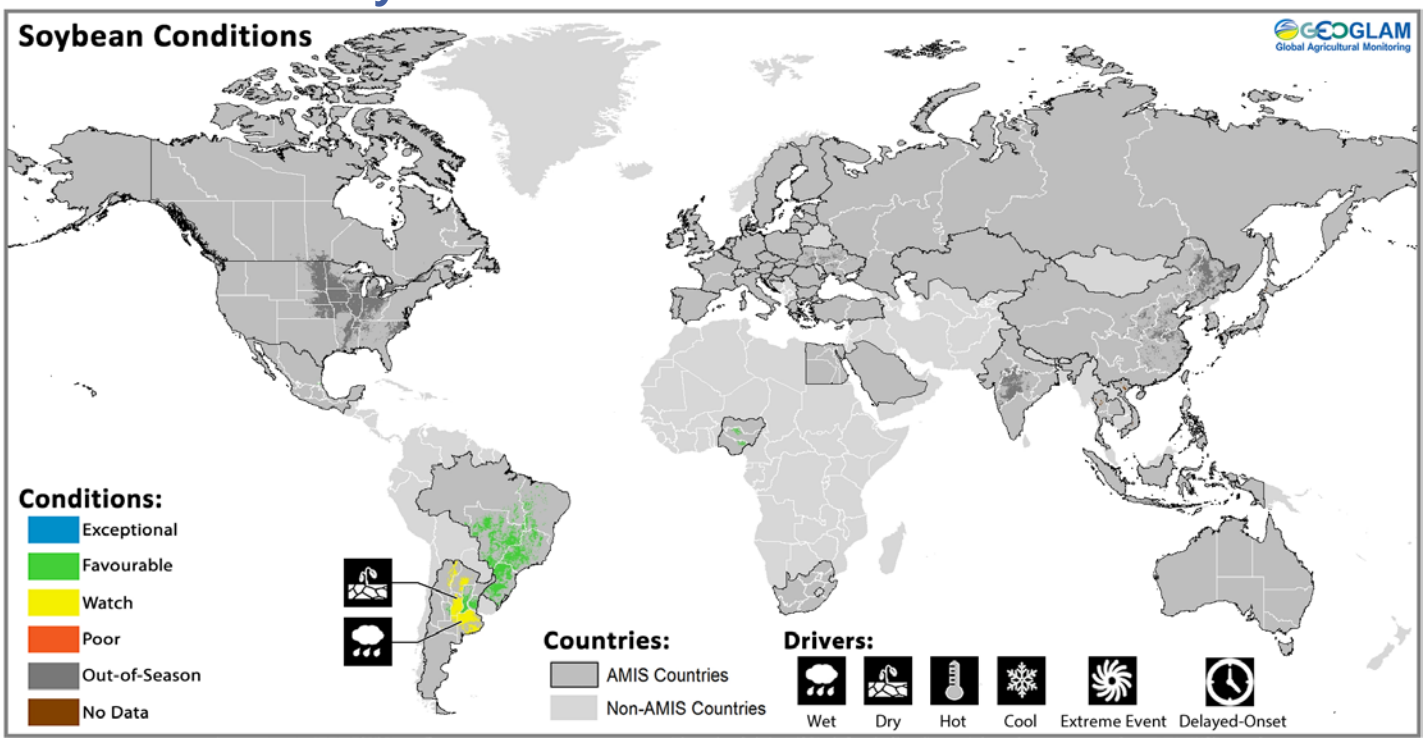
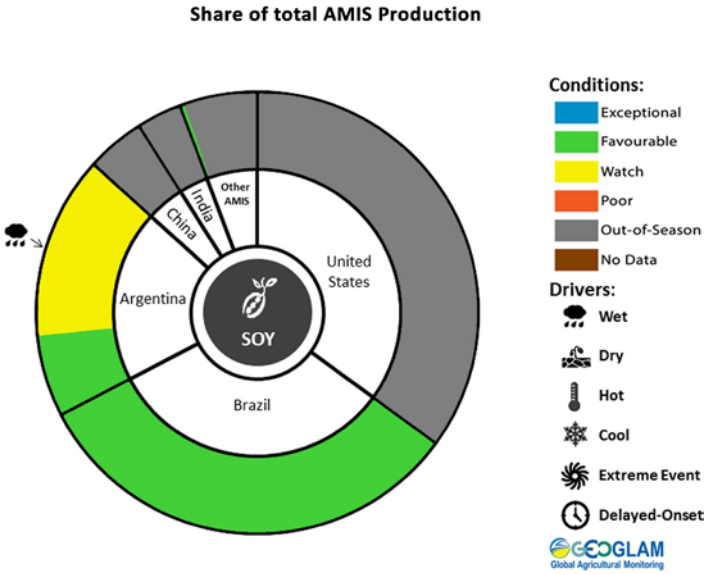
Soybean Conditions for AMIS Countries



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 November 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**, harvest is completed with a record production due to an increase in sown area and good yields. In **Brazil**, sowing wraps up under favourable conditions owing to the return of rains. An increase in area is expected for this season. In **Argentina**, sowing of spring-planted crop continues under mixed conditions due to low soil moisture in the north. By contrast, soil saturation is improving in the south, due to recent dry conditions and increasing temperatures.



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 December 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 November 28th

Appendix 1: Terminology & 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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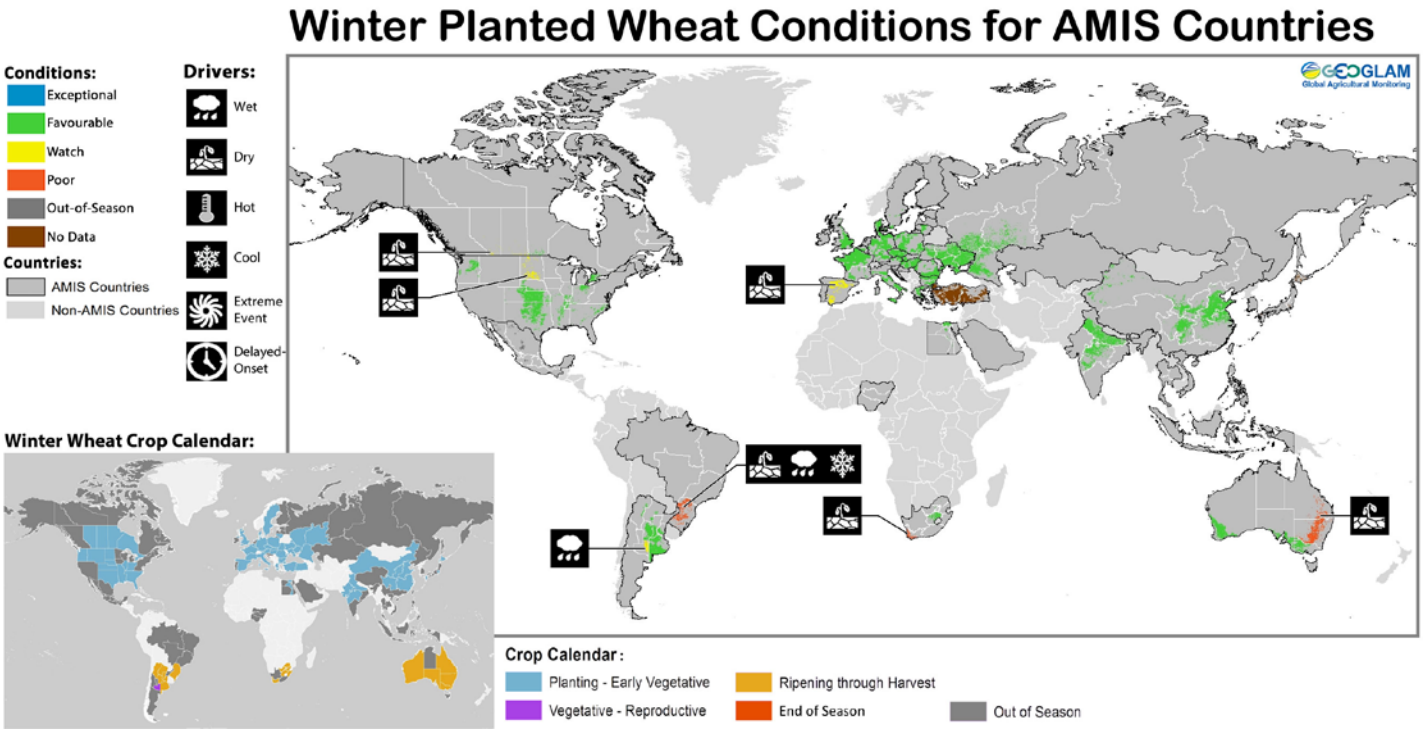
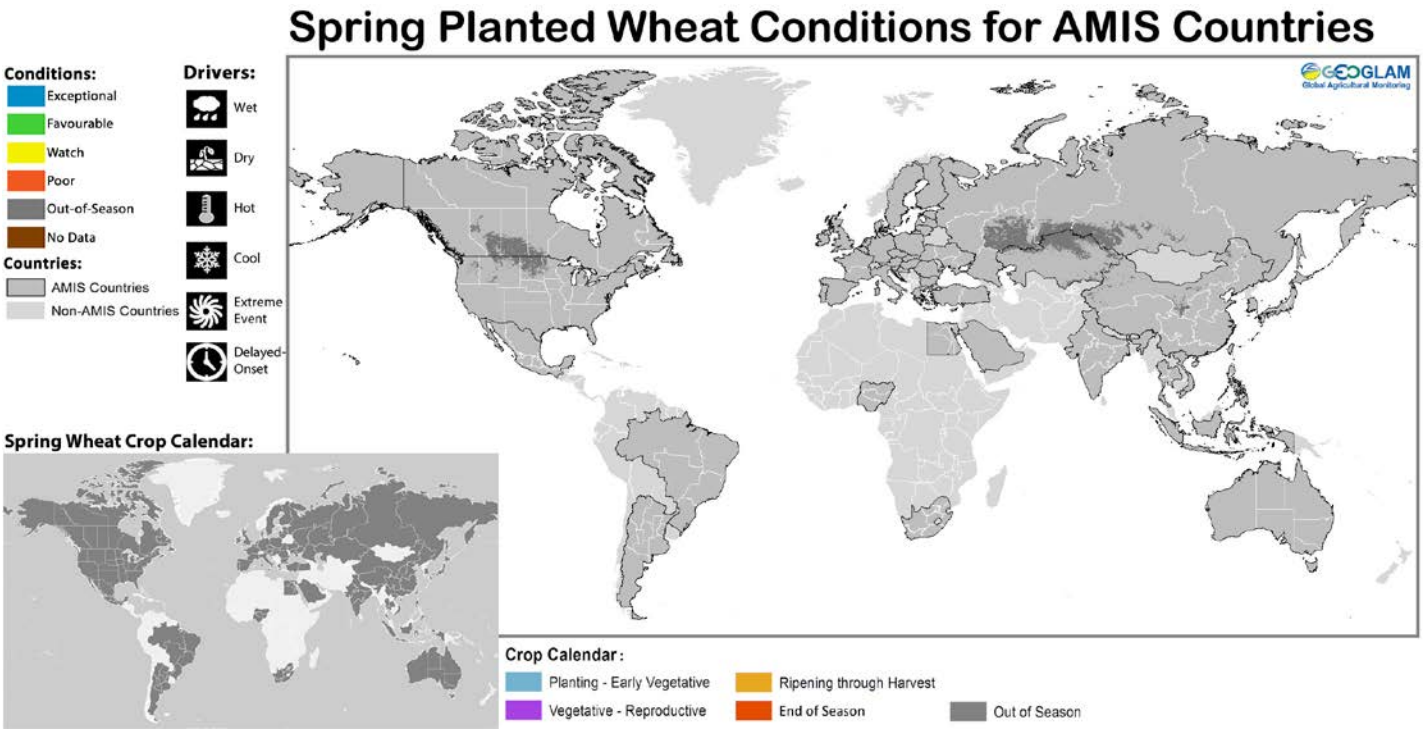
Appendix 2: Crop Season Specific Maps



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 November 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 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 November 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.

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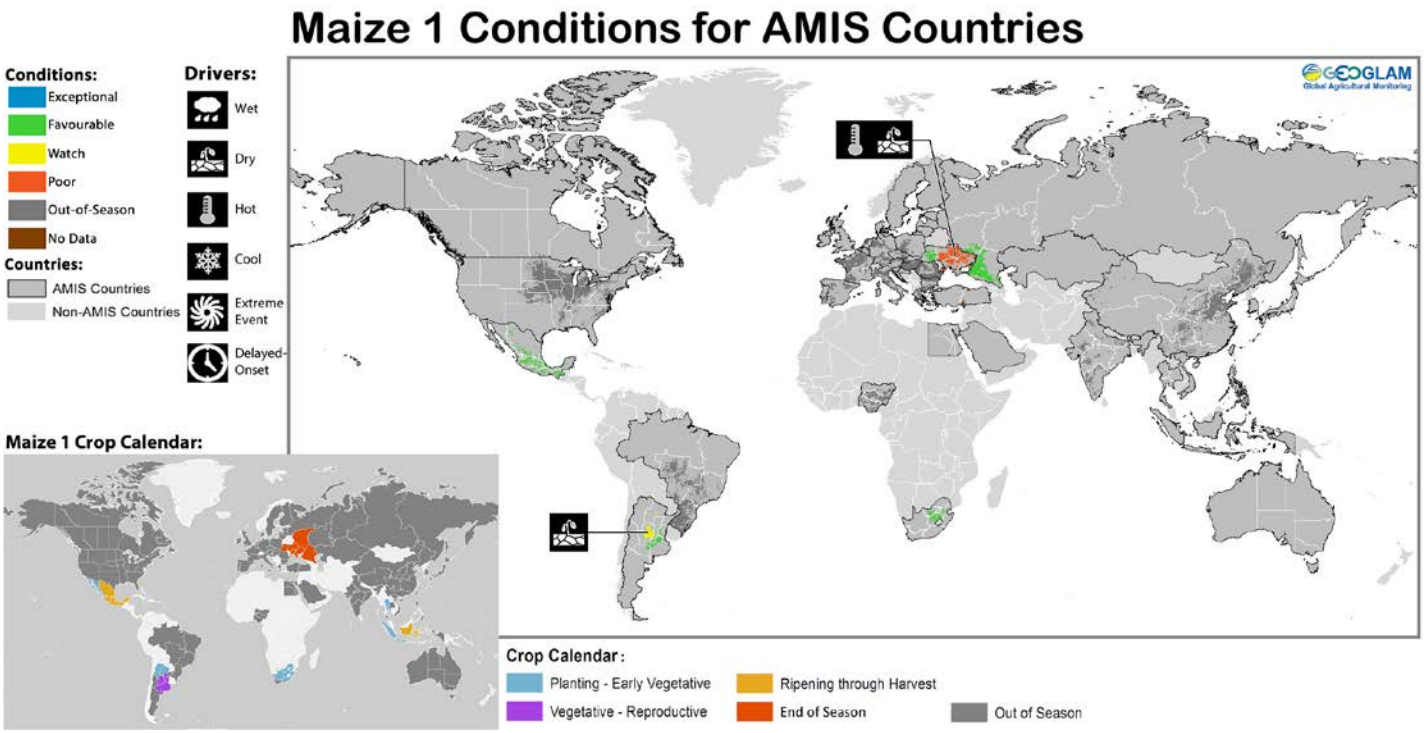
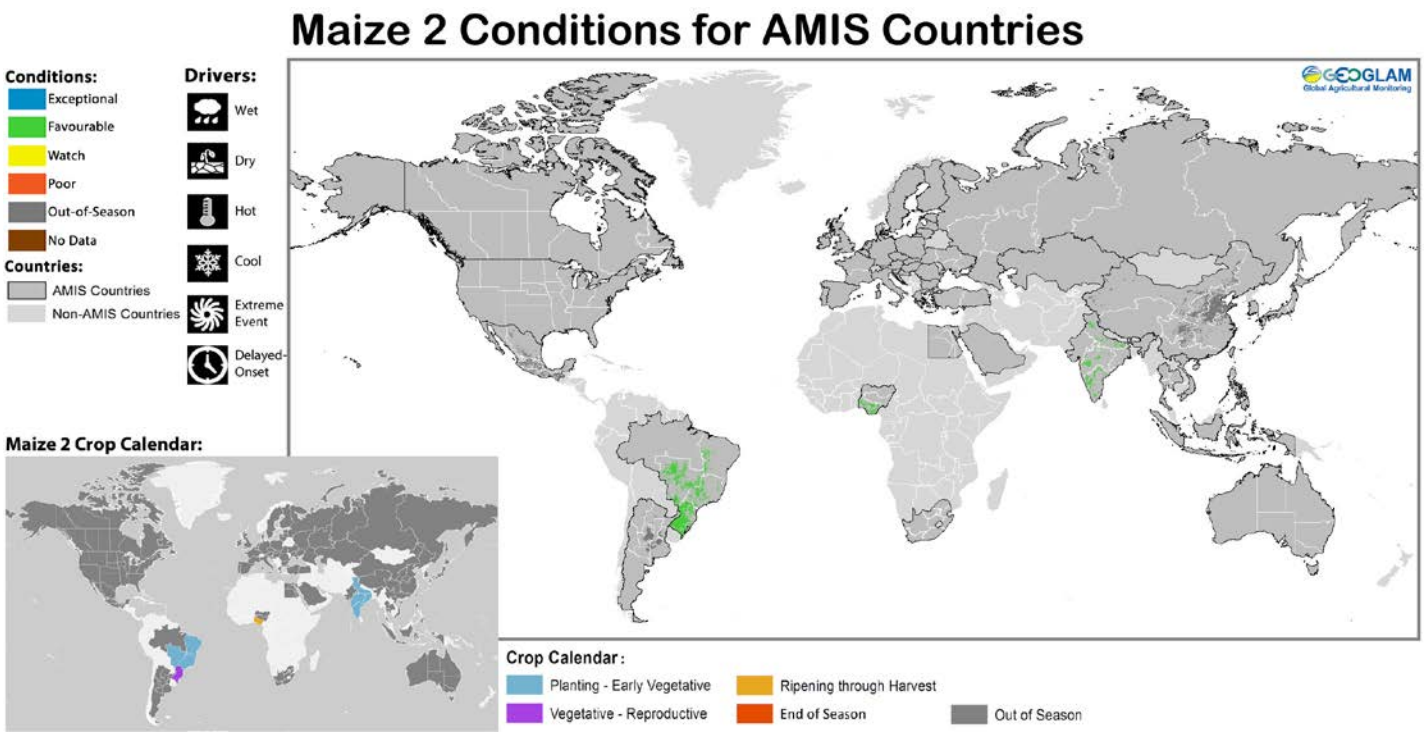


Maize 1 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of November 28th. Where crops are in less than favourable conditions the climatic drivers responsible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



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 November 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.

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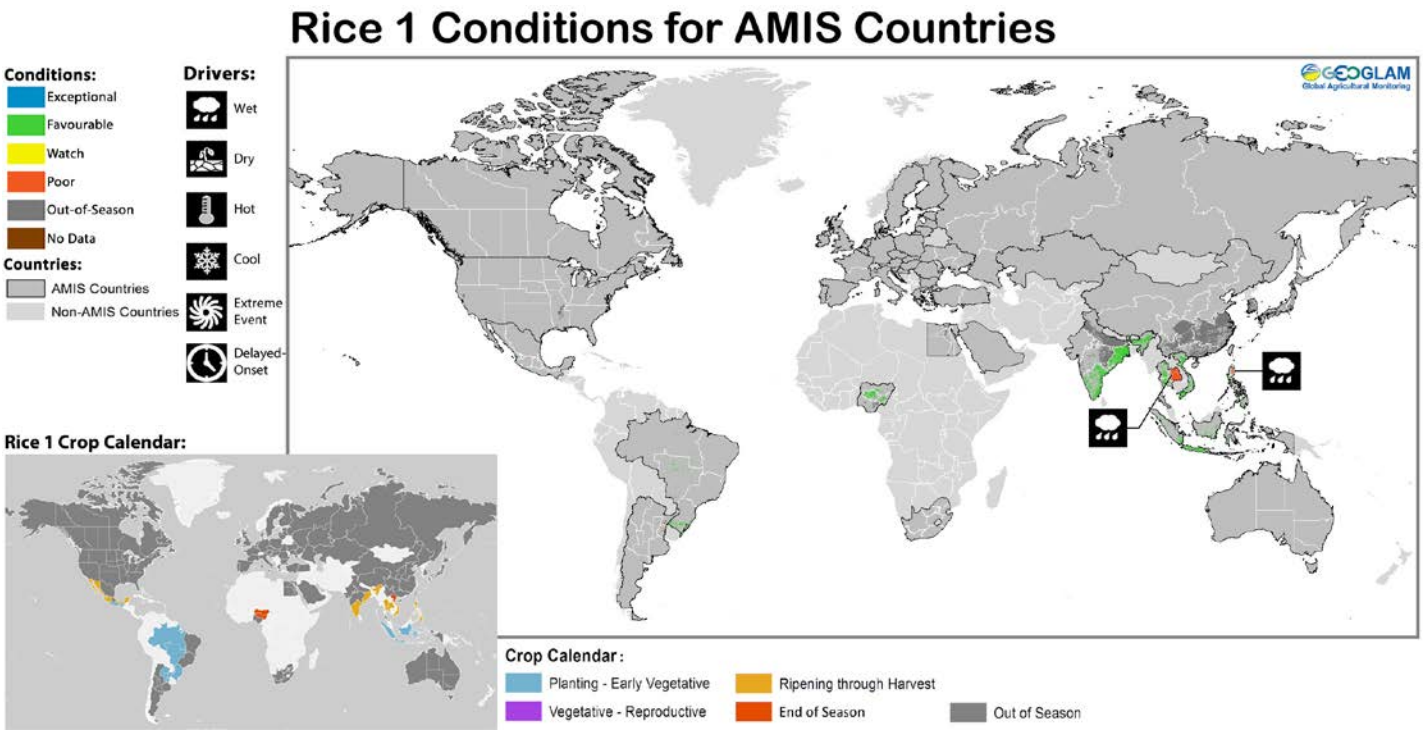

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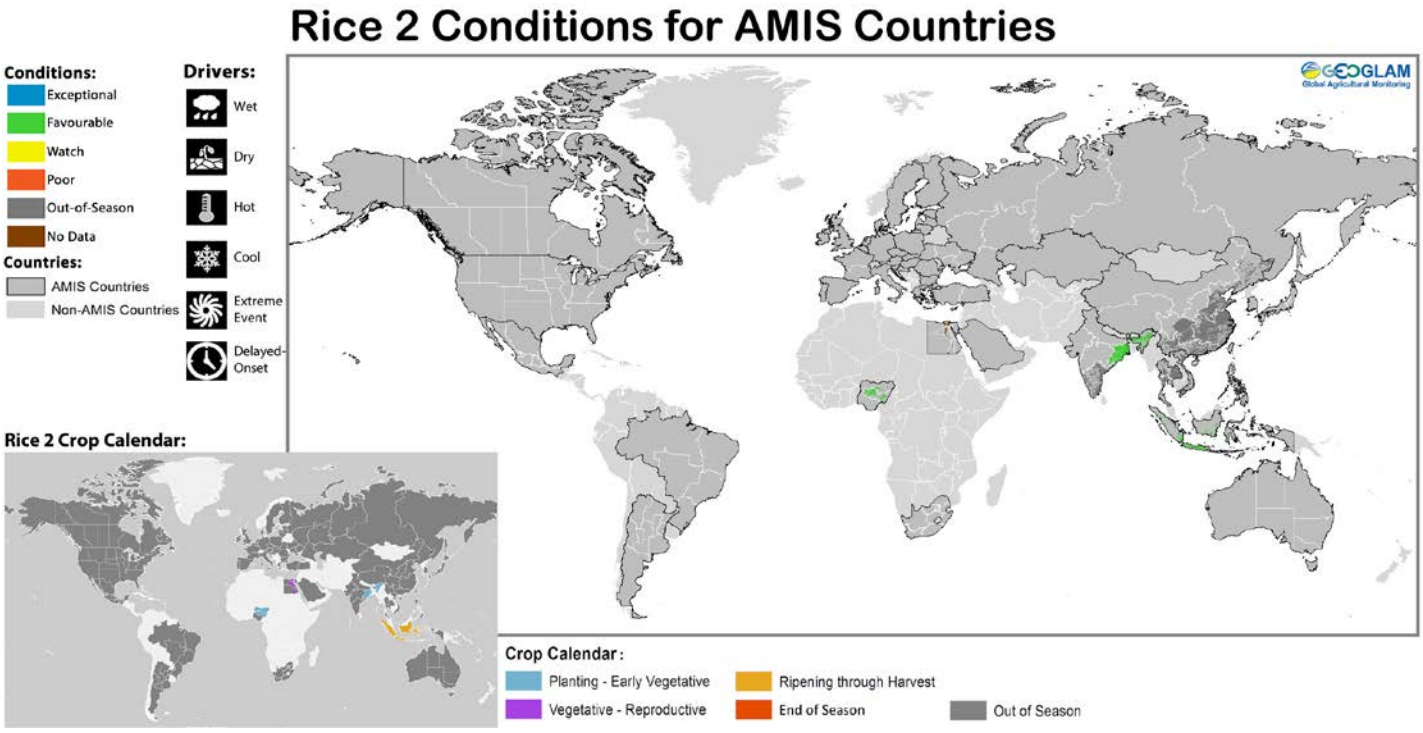

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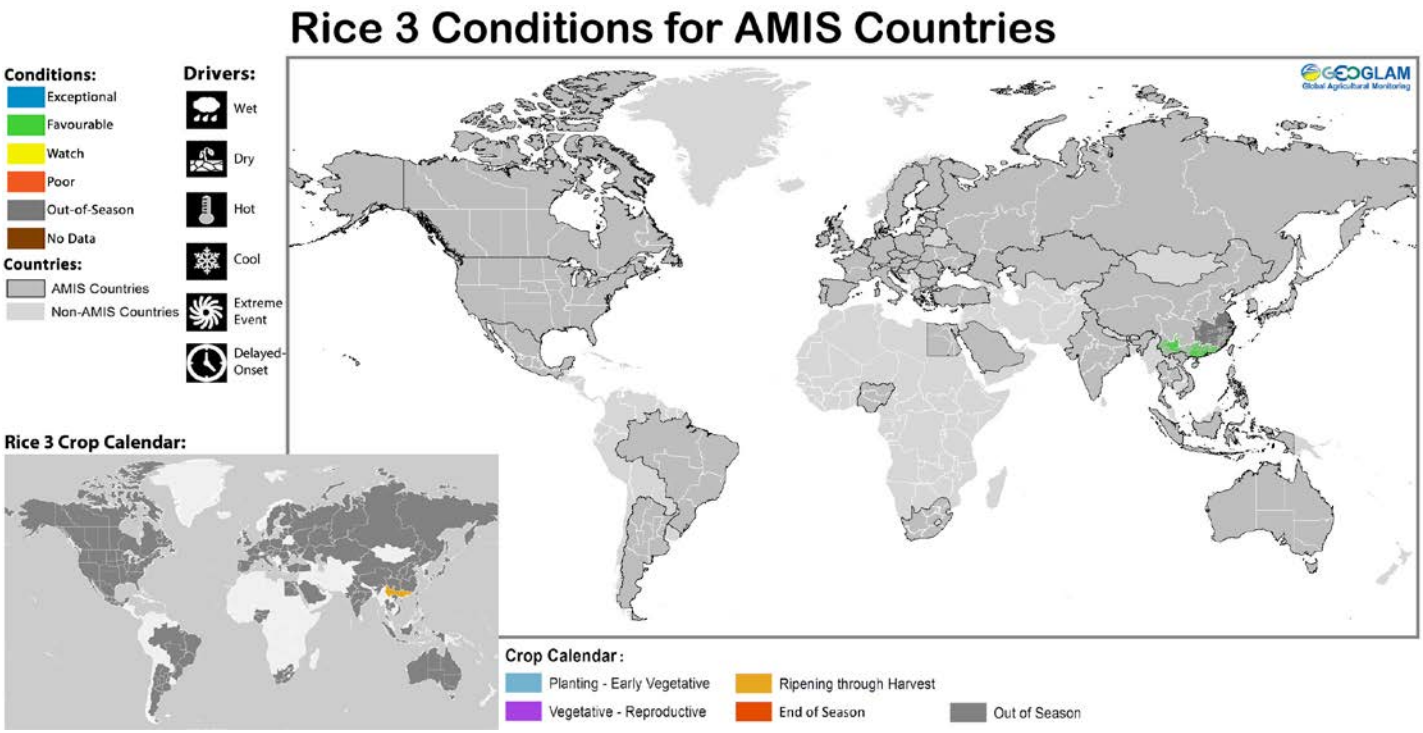

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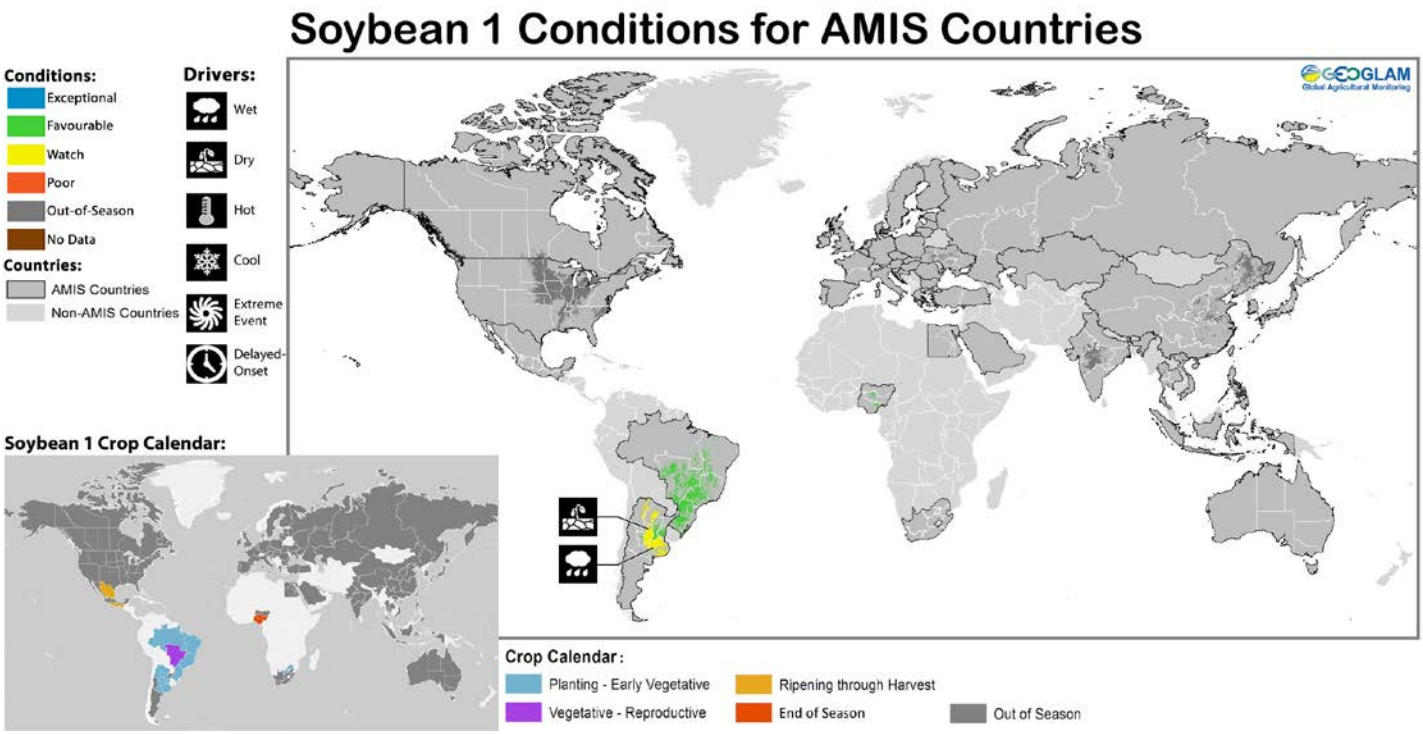

Soybean 1 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of November 28th. Where crops are in less than favourable conditions the climatic drivers responsible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

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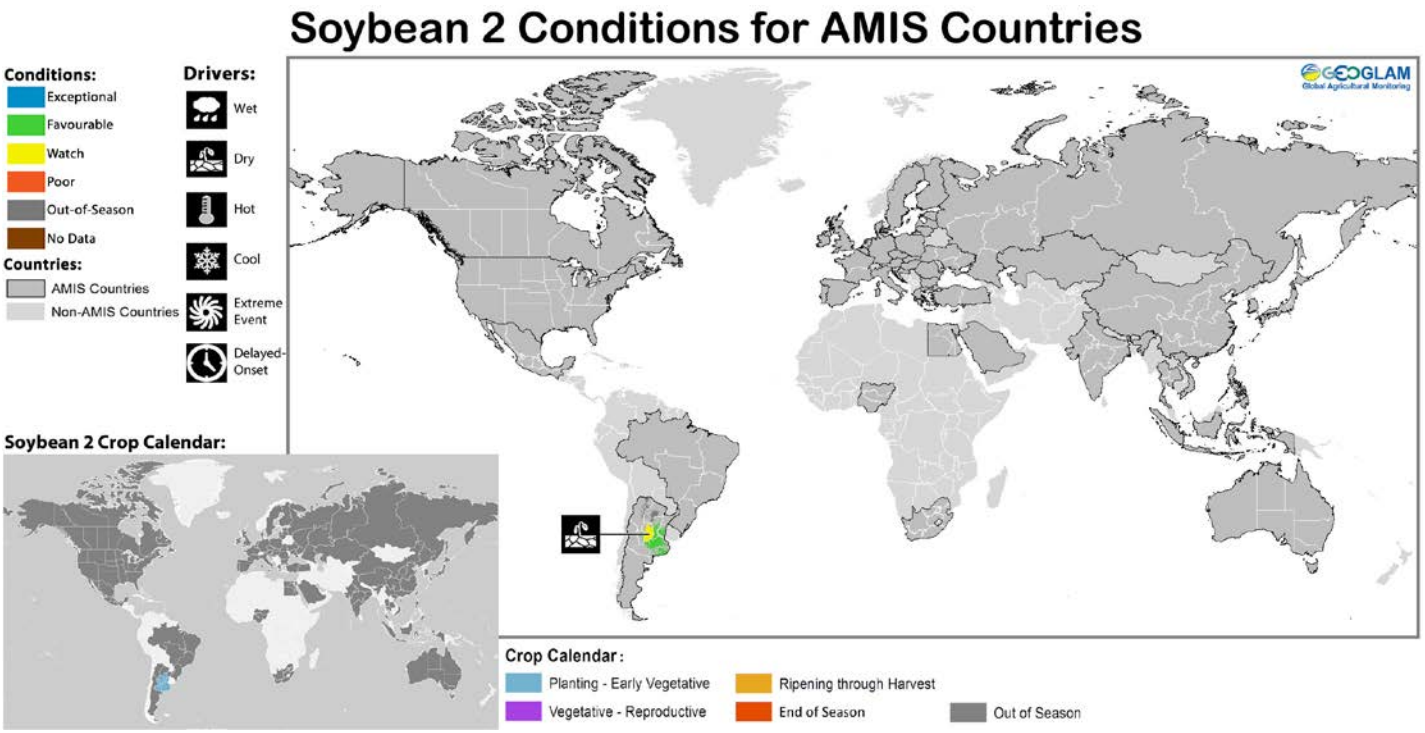

Soybean 2 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of November 28th. Where crops are in less than favourable conditions the climatic drivers responsible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

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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: Bolsa de Cereales

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Sources & Disclaimer

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