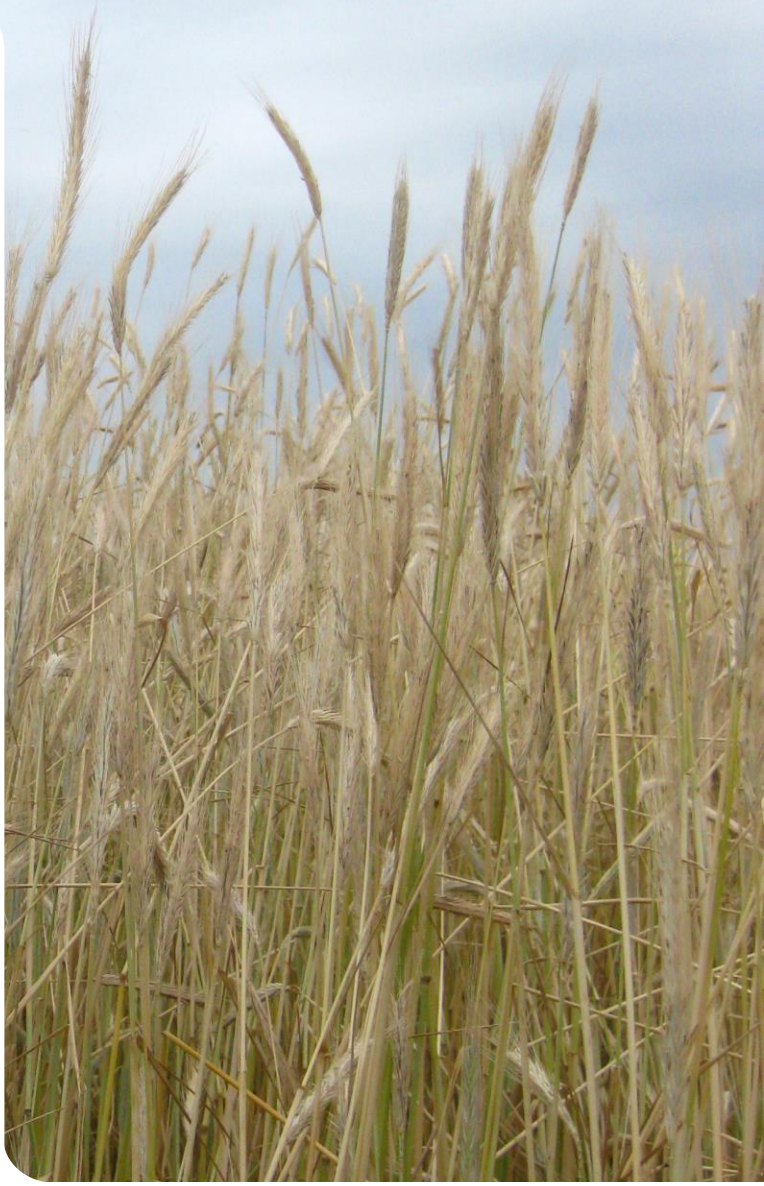
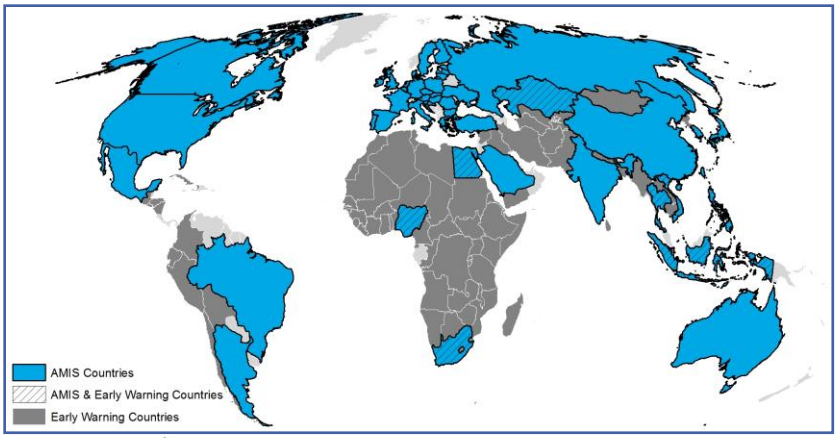
Crop Monitor for AMIS

Overview:

As of the end of August, soybean conditions are generally favourable while wheat, maize, and rice conditions are mixed. **Winter wheat** in the northern hemisphere is under mixed conditions due to dryness in the US, northern Europe, and Ukraine. While **spring wheat** conditions are generally favourable. For **maize** in the southern hemisphere, harvest draws near an end under poor conditions in Argentina and Brazil. In the northern hemisphere, conditions are mixed in the US and northern Europe. **Rice** in India is experiencing some dry conditions in the north while Indonesia is still recovering from a delayed start. **Soybean** conditions are generally favourable in the northern hemisphere with some overly wet areas in the US and dryness in Canada.





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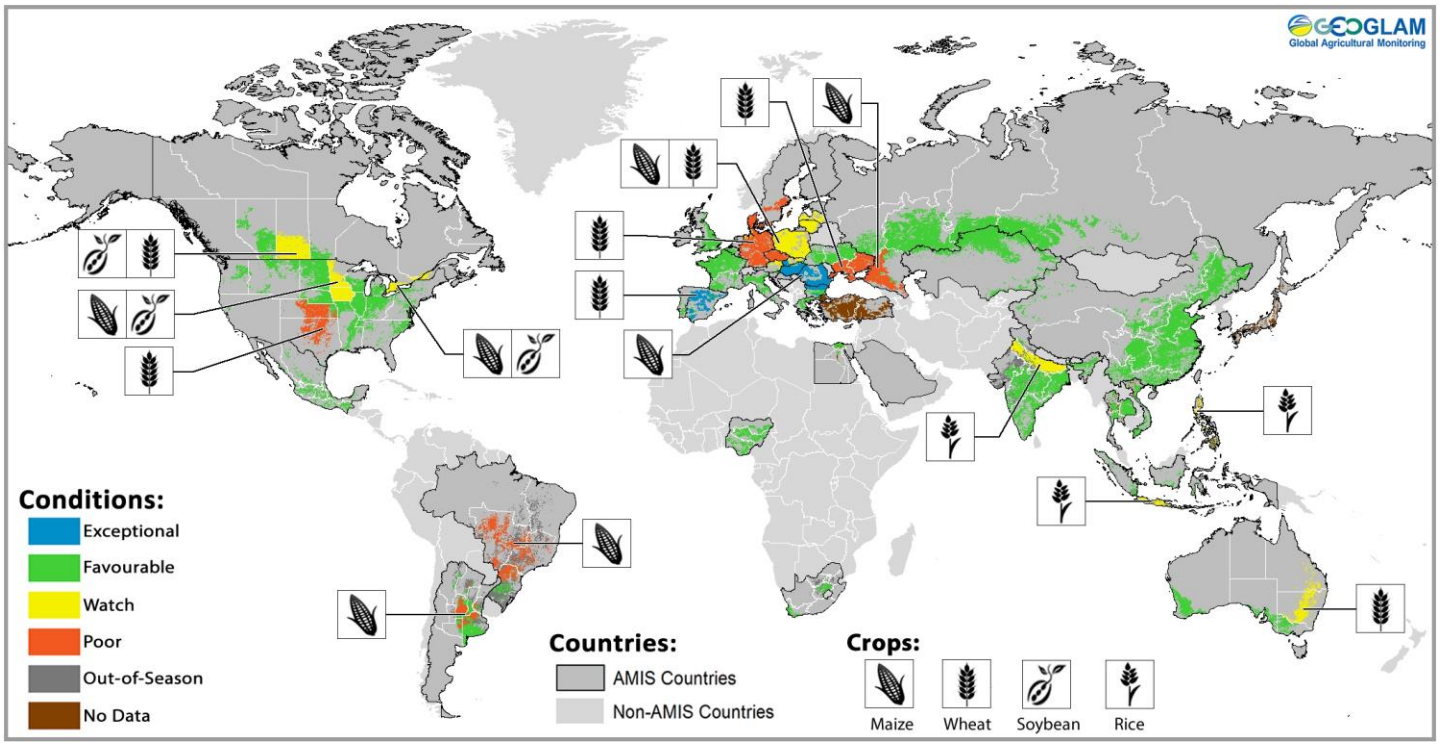
Assessment based on information as of July 28th

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



Crop condition map synthesizing information for all four AMIS crops as of July 28th. Crop conditions over the main growing areas for wheat, maize, rice, and soybean are based on a combination of national and regional crop analyst inputs along with earth observation data. ***Crops that are in other than favourable conditions are displayed on the map with their crop symbol.***

Conditions at a glance

Wheat - In the northern hemisphere, winter wheat harvest conditions are mixed in the EU, US, and Ukraine, all reducing prospects. Spring wheat conditions are generally favourable with the exception of areas in Canada. In the southern hemisphere, winter wheat conditions are favourable while drought conditions continue in eastern Australia.

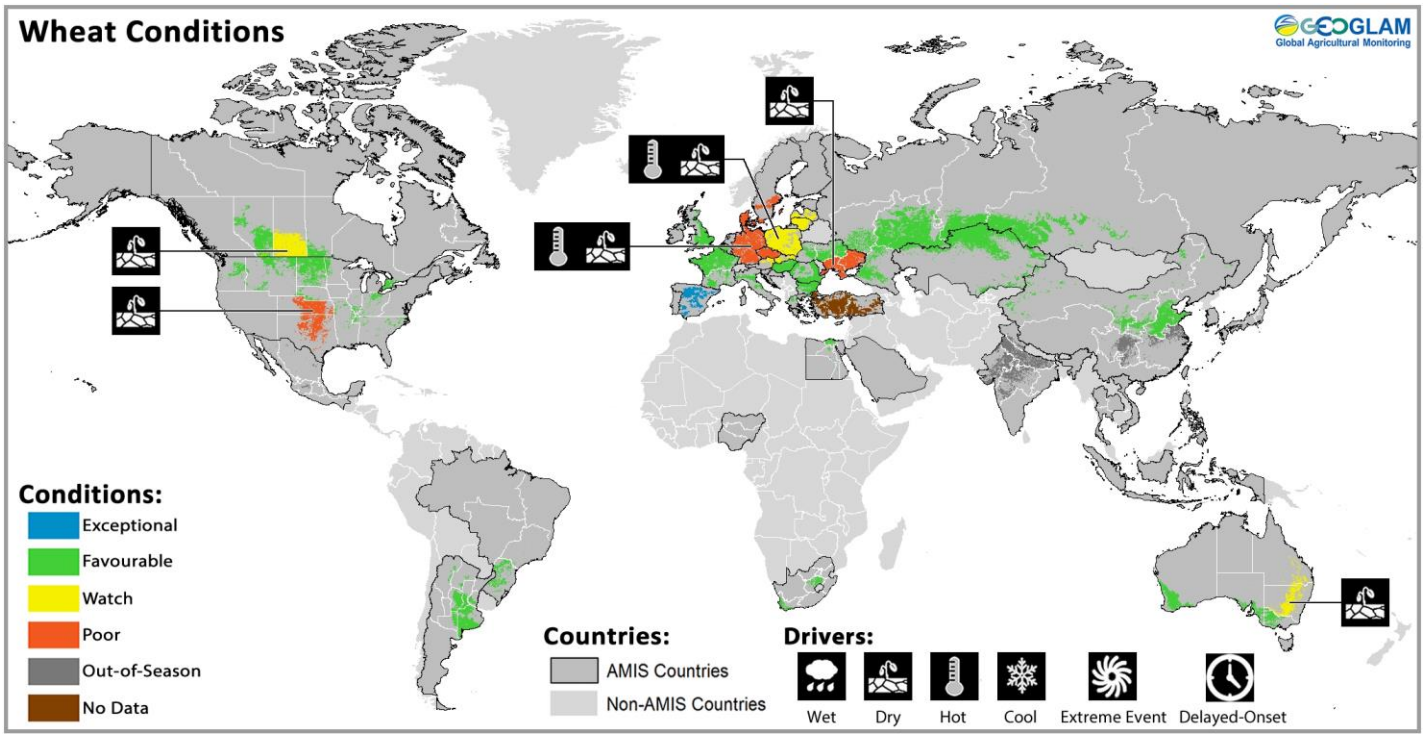
Maize - In the southern hemisphere, conditions in Brazil for the summer-planted crop (larger) harvest are poor with expected yields and production significantly reduced compared to last year. Harvest wraps up in Argentina under poor conditions. In the northern hemisphere, conditions are mixed with some wet conditions in the US and dry conditions in the EU, Canada, and the Russian Federation.

Rice - In China, conditions are favourable across the country for rice crops. In India, Kharif rice is under mixed conditions due to dryness in the north. In Southeast Asia, wet-season rice is ongoing in the northern countries under generally favourable conditions with some typhoon damage in the Philippines. In Indonesia, sowing of dry-season rice has begun albeit delayed due to earlier dry conditions.

Soybeans - In the northern hemisphere, conditions are favourable in China, India, and Ukraine. While in the US, conditions quite favourable with the exception of areas of heavy rainfall in Minnesota and Iowa. Conditions are also mixed in Canada due to drought conditions in the eastern provinces.

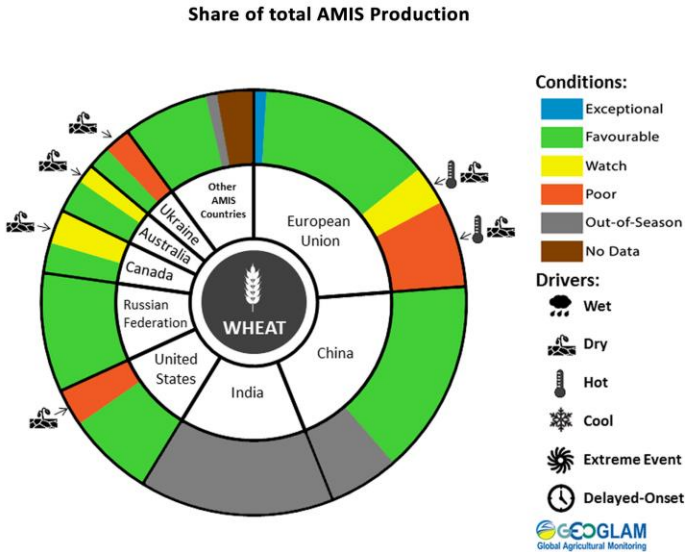
* Assessment based on information as of July 28th

Wheat Conditions for AMIS Countries



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

Wheat: In the **EU**, hot and dry conditions have affected large areas across northern and central Europe, where harvest is ongoing. The countries affected represent a little over a third of Europe's average wheat production. In **Ukraine**, harvest is nearing completion. Hot and dry conditions during the season in the south and east region have impacted yields while the rest of the country remains favourable. In the **Russian Federation**, winter wheat harvesting has begun earlier than normal due to dry conditions. In some areas, hot and dry conditions during the season have reduced yields markedly compared to last year, most noticeably in Volga and in the south, but for the most part are within the five year average. Spring wheat is under favourable conditions with recent rains benefiting soil moisture conditions across the region.

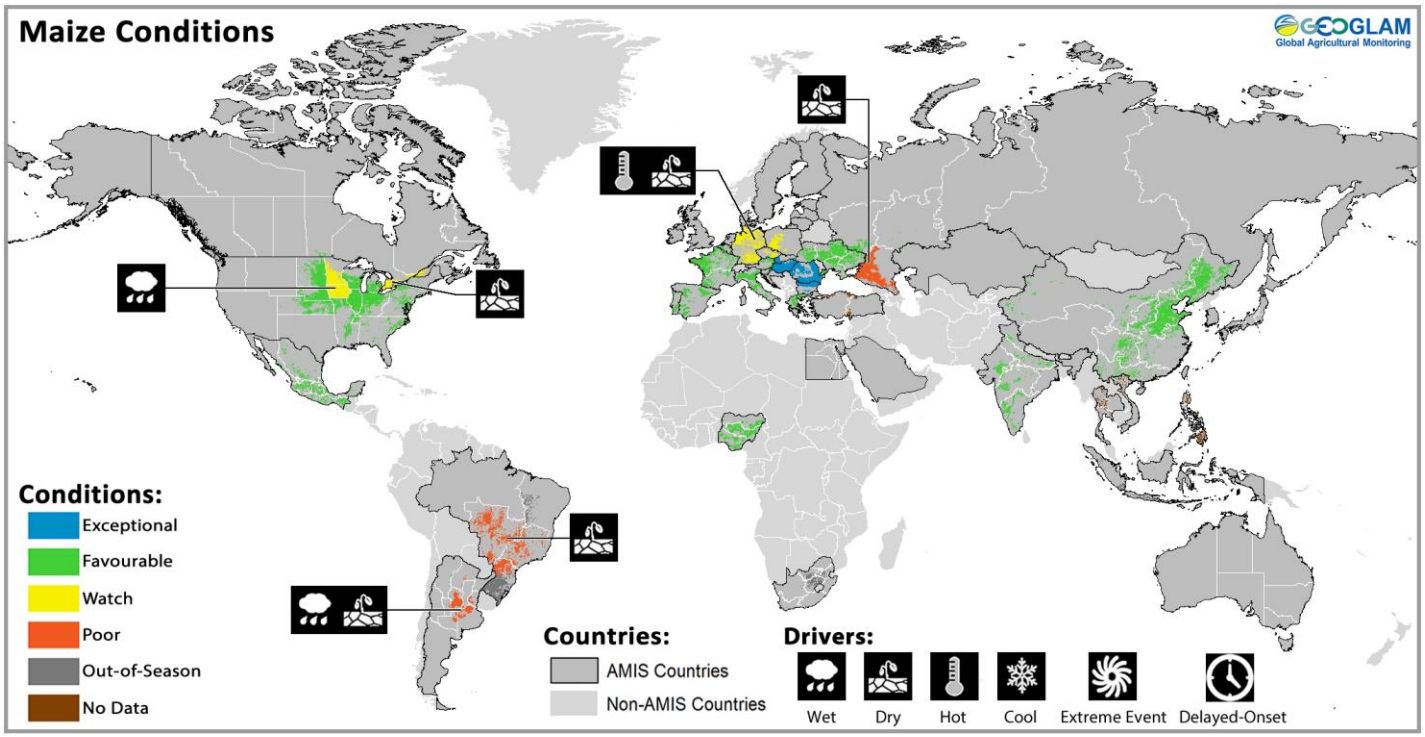


For detailed description of the pie chart please see box below.

In **Kazakhstan**, spring wheat conditions are favourable, benefitting from good climatic conditions in the north. In **China**, conditions are generally favourable as harvest wraps up for winter wheat and continues for spring wheat. In the **US**, winter wheat harvest has wrapped up with a much lower than normal production in the southern Great Plains due to constant drought. However, the rest of the country is under favourable conditions. Spring wheat conditions are favourable as harvesting is beginning. In **Canada**, spring and winter wheat conditions are mixed across the prairies, with dryness along the southern border and favourable conditions further north. In **Australia**, rainfall deficits continue in New South Wales, Queensland, and parts of South Australia in the vegetative stage, potentially affecting final yields. Generally average rainfall during July in the rest of the country has benefited crop development.

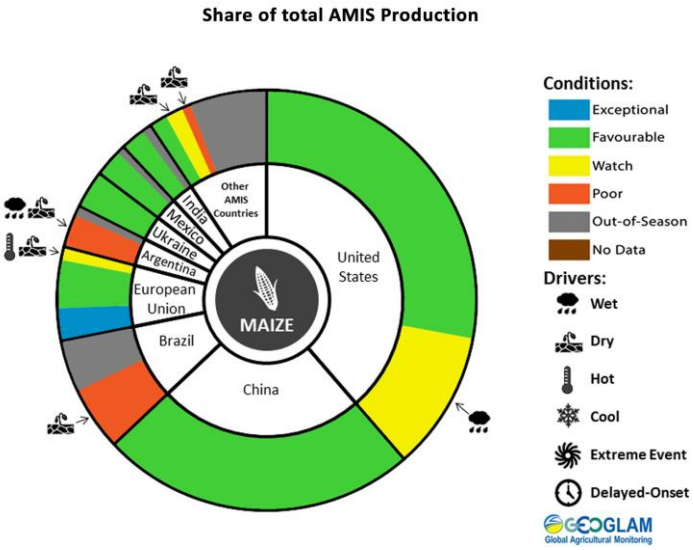
* Assessment based on information as of July 28th

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

Maize: In **Brazil**, the summer-planted crop (larger) is in harvest and conditions are poor in the main producing regions due to lack of rainfall during the critical reproductive stage. Together with a reduction in total sown area, expectations for yields and final production are significantly reduced compared to last year. In **Argentina**, harvest is wrapping up with significantly reduced yields and total production attributed to the prolonged drought throughout the season. In the **US**, conditions are quite favourable owing to ideal growing conditions in the vegetative to reproductive stage, with the exception of Minnesota and Iowa that are experiencing persistent rains. In **Canada**, conditions are mixed due to low soil moisture. In **Mexico**, harvest of the autumn-winter planted crop is nearing completion under favourable conditions. Sowing of the spring-summer crop is over halfway complete with a slight increase in expected total sown area. In **China**, conditions are favourable with spring-planted maize in the tasseling stage and summer planted maize in the jointing stage. In **India**, sowing of the Kharif crop is progressing well under favourable conditions. In the **EU**, conditions are mixed, with a lack of rainfall in northern Europe and beneficial rainfall in southern Europe. In **Ukraine**, conditions have improved to favourable across most of the country due to improvements in soil moisture.



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

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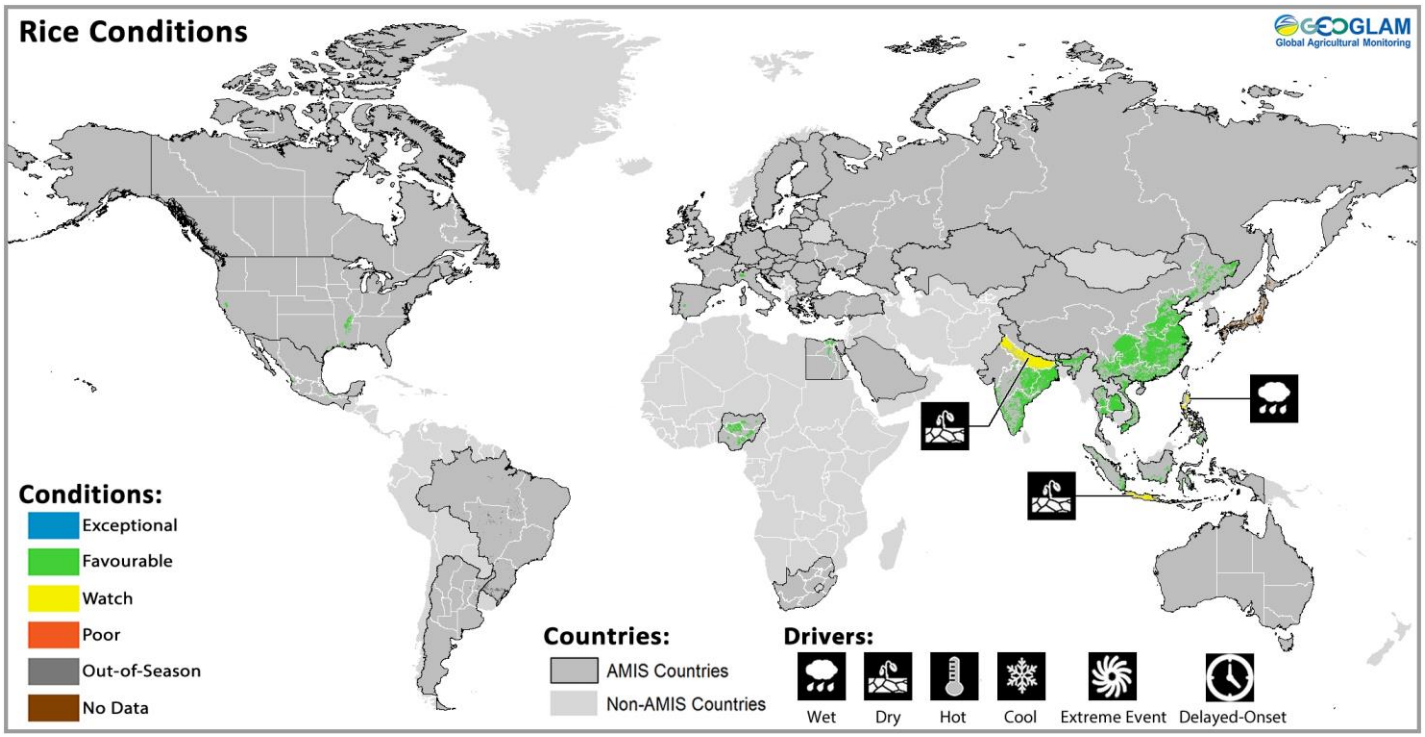
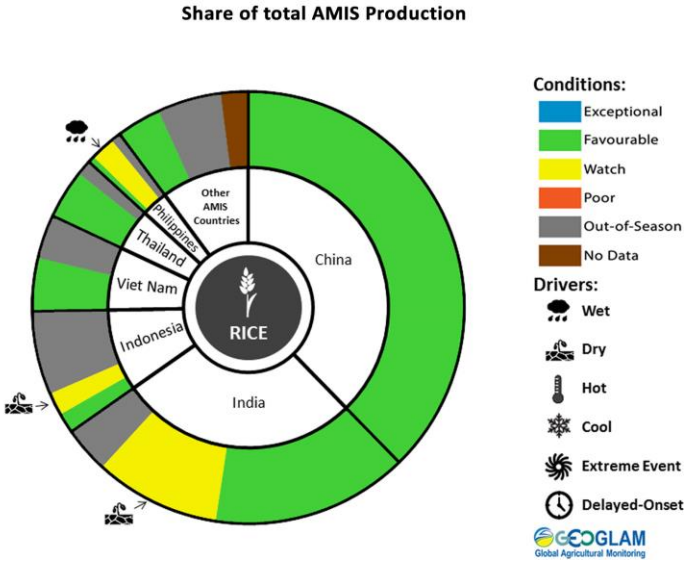
Rice Conditions for AMIS Countries



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

Rice: In **China**, conditions are generally favourable for rice across the country with good crop growth observed. In **India**, conditions are generally favourable as transplanting of the Kharif crop continues across the majority country, albeit with some slight delays in the north awaiting further rainfall. In **Indonesia**, sowing of dry-season rice has begun in irrigated areas. Overall sowing is behind last year's progress due to low levels of precipitation, however irrigation water levels in Java and Lesser Sunda Islands have recovered with recent rains. In **Viet Nam**, winter-spring rice (dry-season rice) harvest has completed under favourable conditions. Sowing of summer-autumn rice (wet-season rice) is almost complete in the south and just beginning in the north. In the south, total sown area is reduced compared to last year due to the late harvest of dry-season rice. In **Thailand**, wet-season rice is in the tillering stage under favourable conditions thanks to ample rainfall. An increase in total sown area is expected. In the **Philippines**, wet-season rice is under mixed conditions as a result of damage concerns from consecutive typhoons hitting the country in the major producing regions. In the **US**, conditions are favourable.



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

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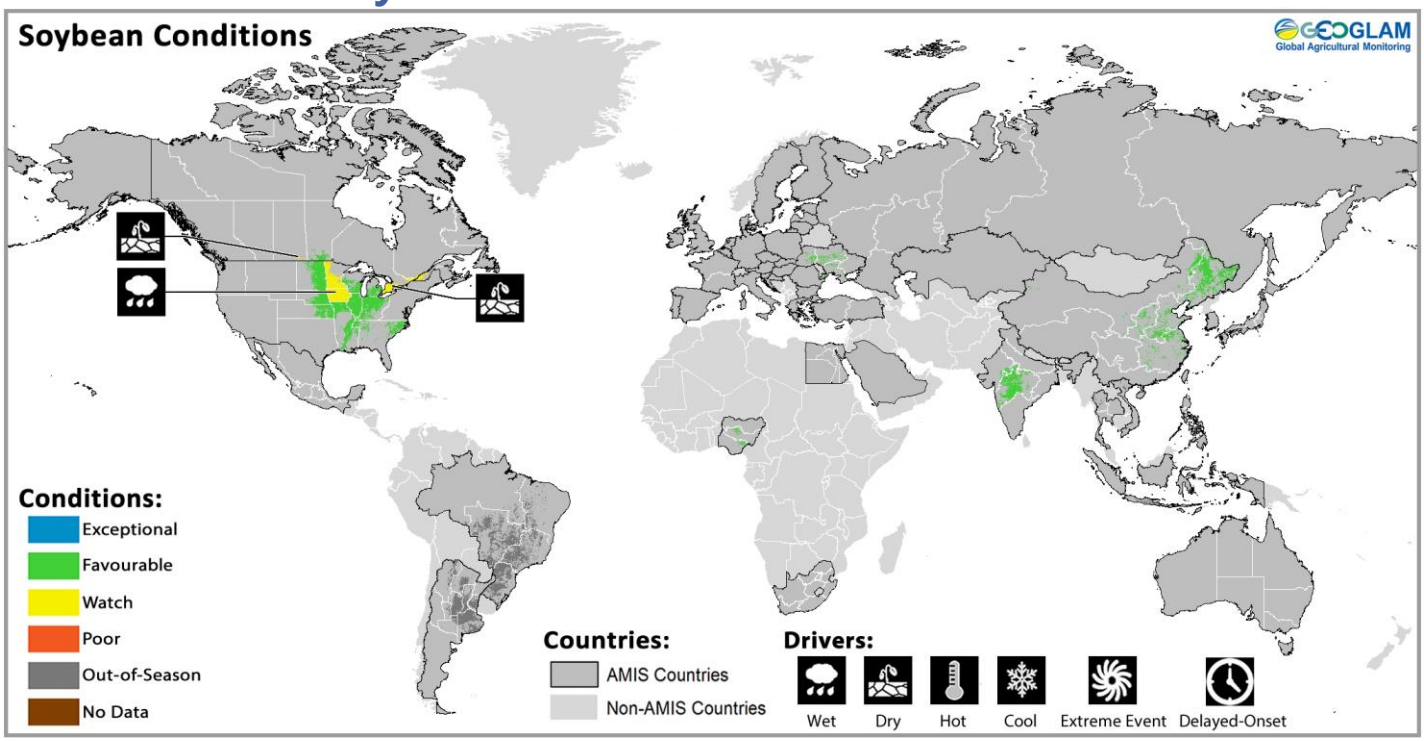
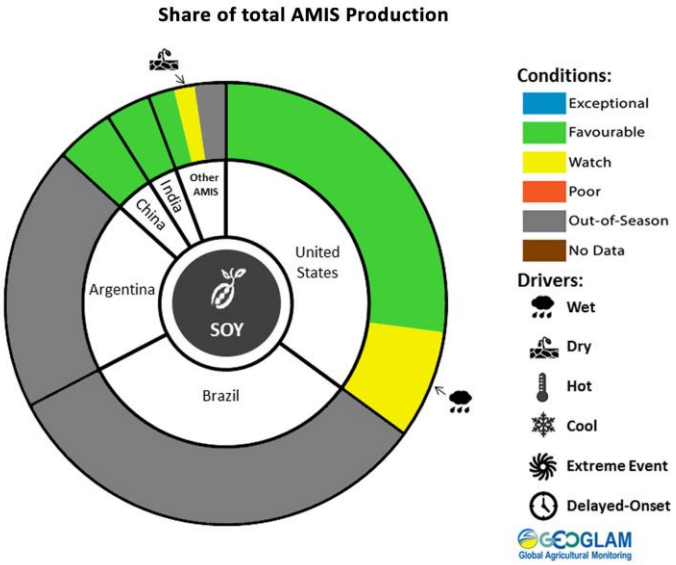
Soybean Conditions for AMIS Countries



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

Soybeans: In the **US**, the crop is progressing with favourable conditions throughout most of the country. However, constant rain in Minnesota and Iowa have deluged fields with standing water, creating uncertainty if all areas will produce a crop. In **Canada**, conditions are mixed due to drought, however conditions remain extremely variable depending on the amount of rainfall received in each local area. In **China**, conditions are favourable the crop in the vegetative to reproductive stage. In **India**, sowing is progressing well under favourable conditions. In **Ukraine**, conditions are favourable across most of the country with recent improvements in soil moisture benefiting crops.



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 Crop Monitor for Early Warning, published August 2nd 2018

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 July 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

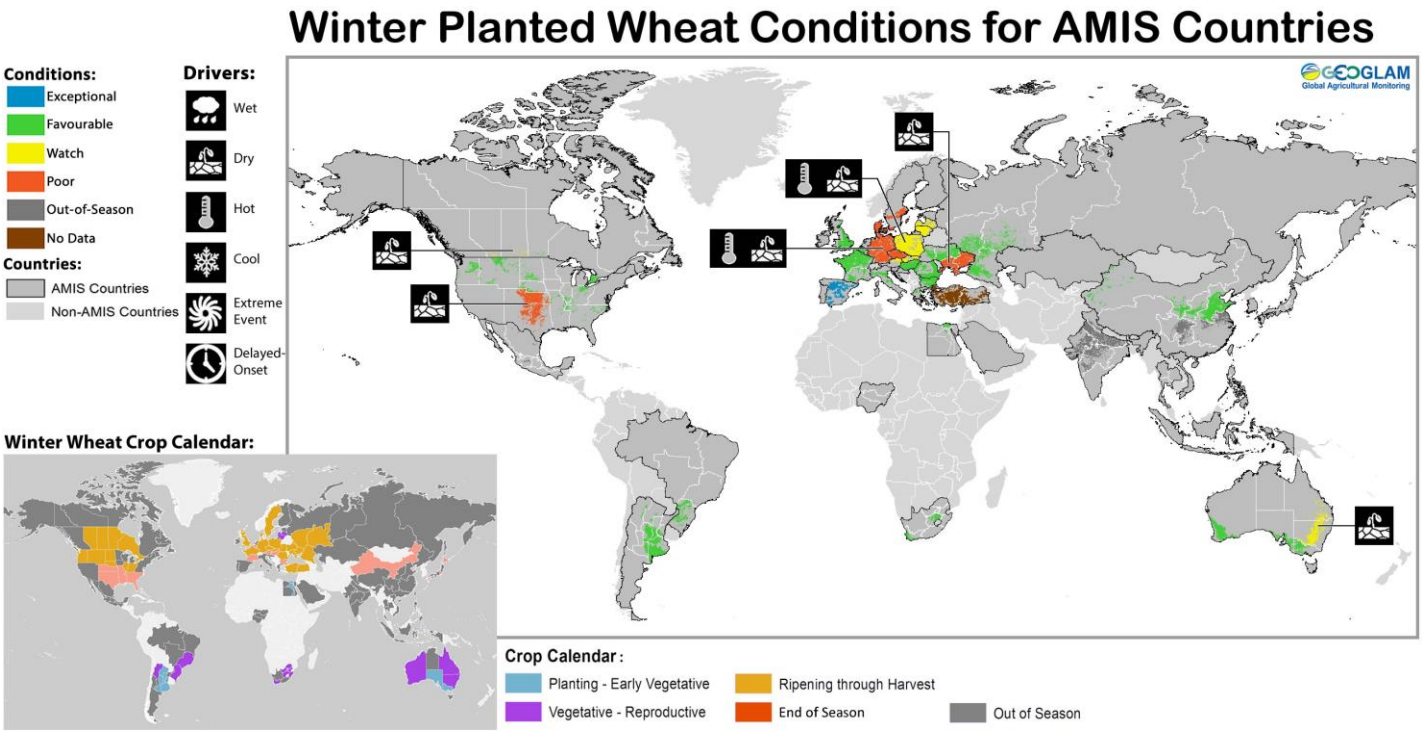
Crop Season Nomenclature:

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.

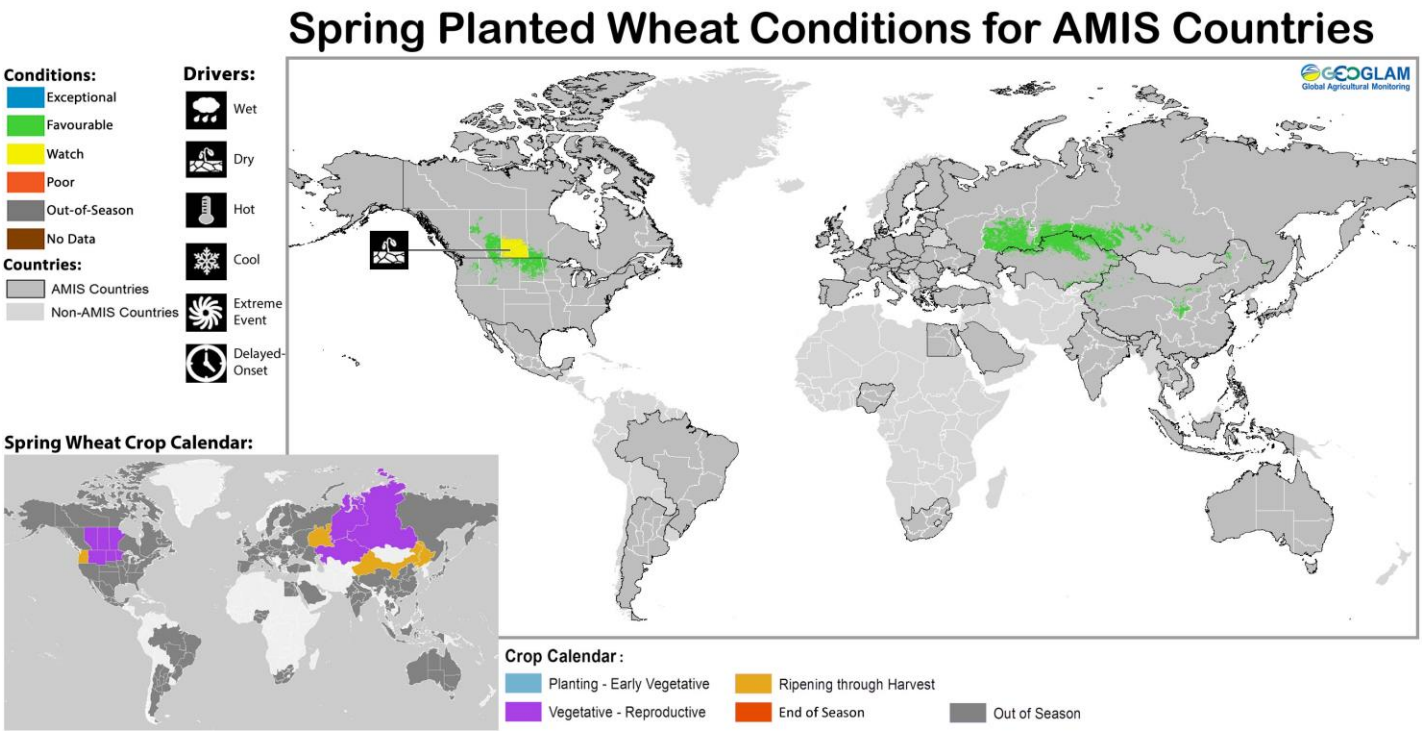
Crop Season Nomenclature				
Country	**Crop**	**Season 1 Name**	**Season 2 Name**	**Season 3 Name**
Argentina	Soybean	Spring-planted	Summer-planted	
Brazil	Maize	Summer-planted (larger producing season)	Spring-planted (smaller producing season)	
Canada	Wheat	Winter-planted	Spring-planted	
China	Maize	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	

* Assessment based on information as of July 28th

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 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 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.

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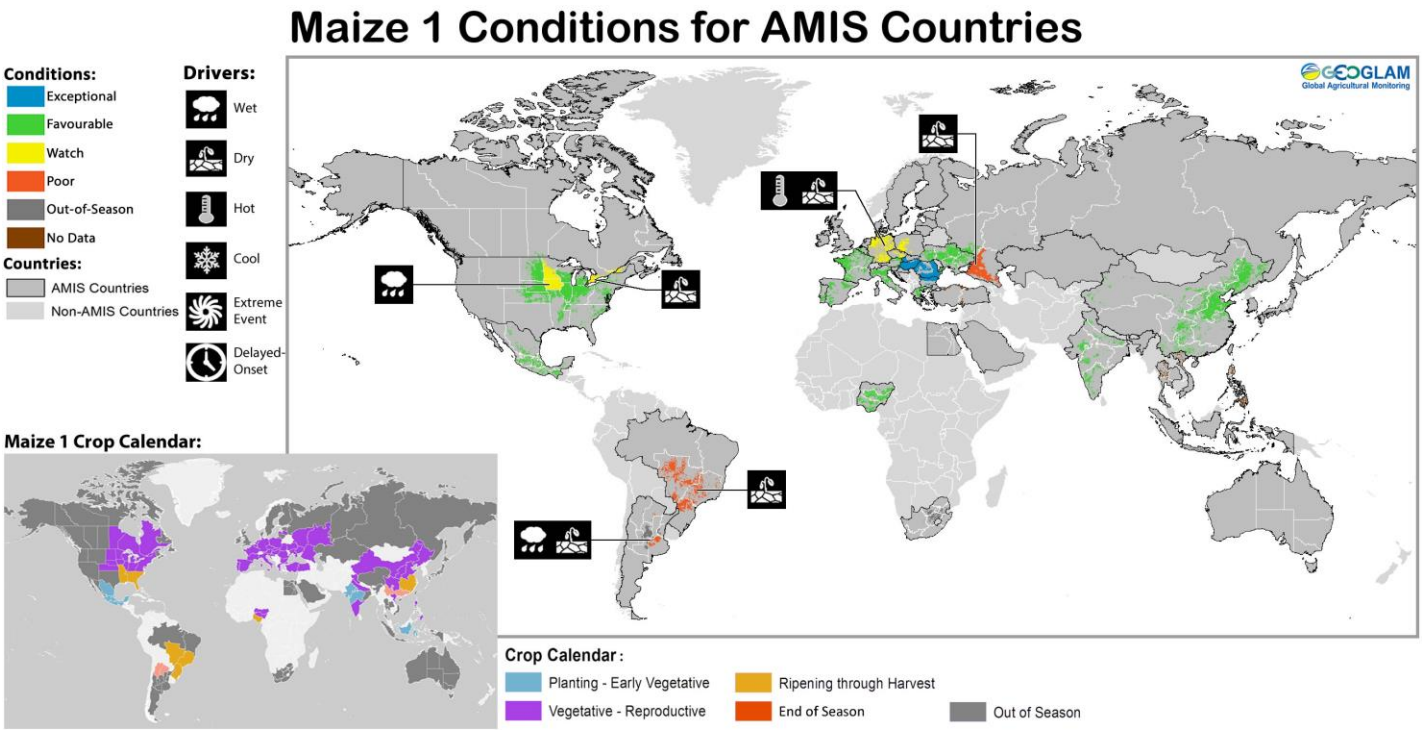
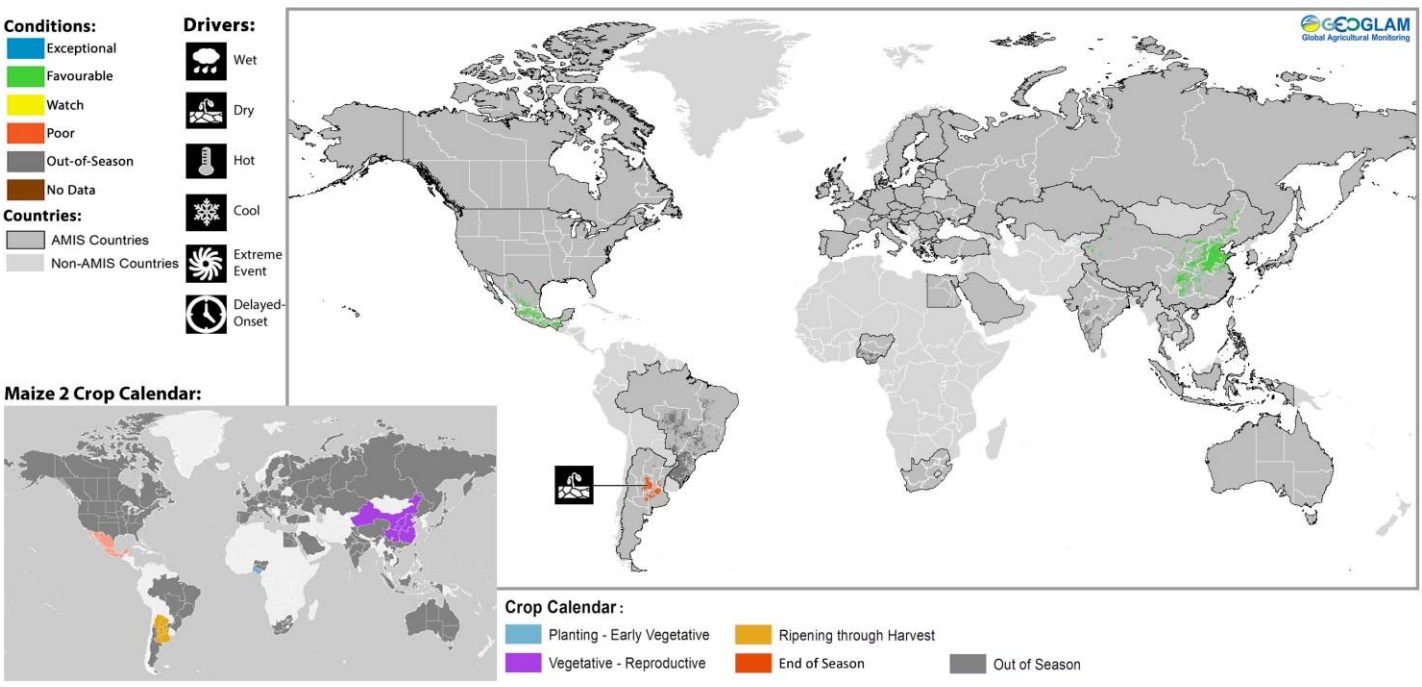


Maize 1 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of July 28th. Where crops are in less than favourable conditions the climatic drivers responsible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



Maize2 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of July 28th. Where crops are in less than favourable conditions the climatic drivers responsible for those conditions are displayed. The crop calendar is provided as a point of reference to provide information on what part of the life cycle the crops are currently in for each area.

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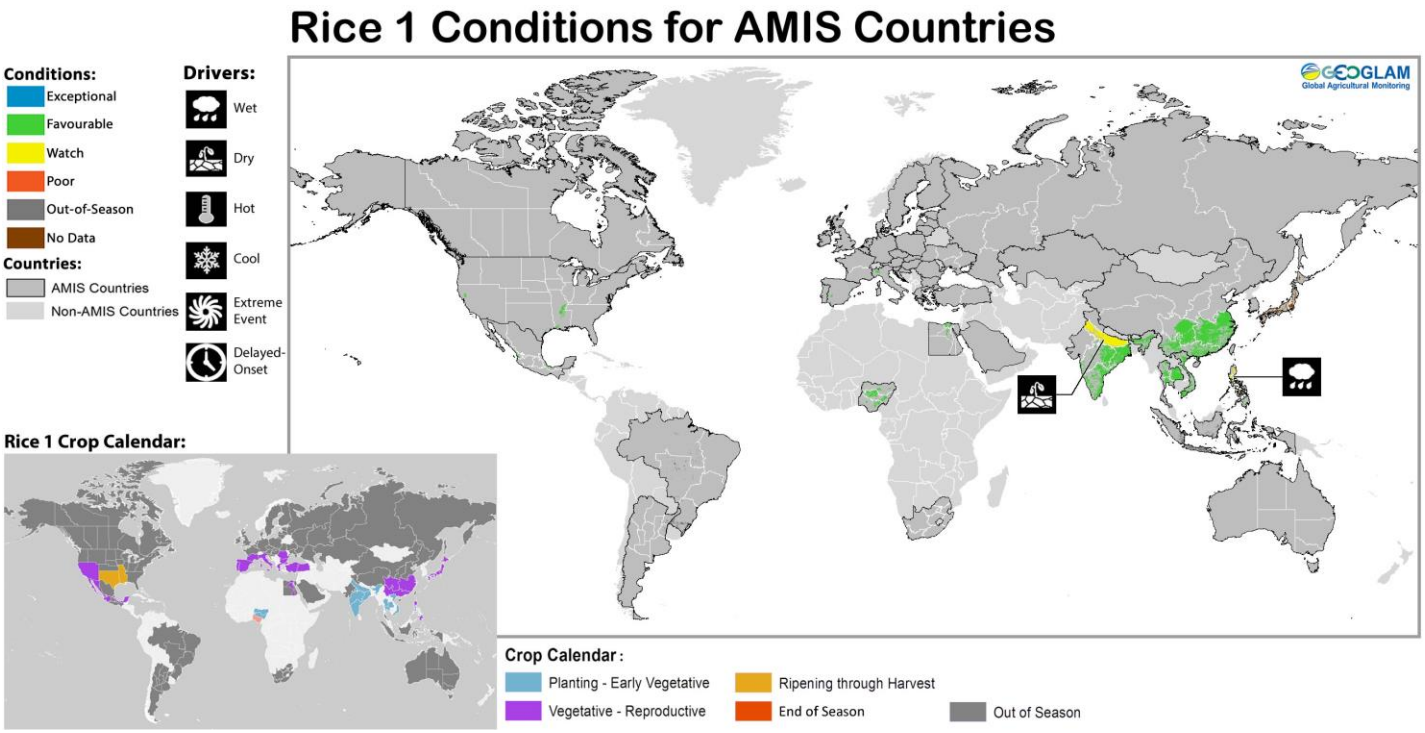

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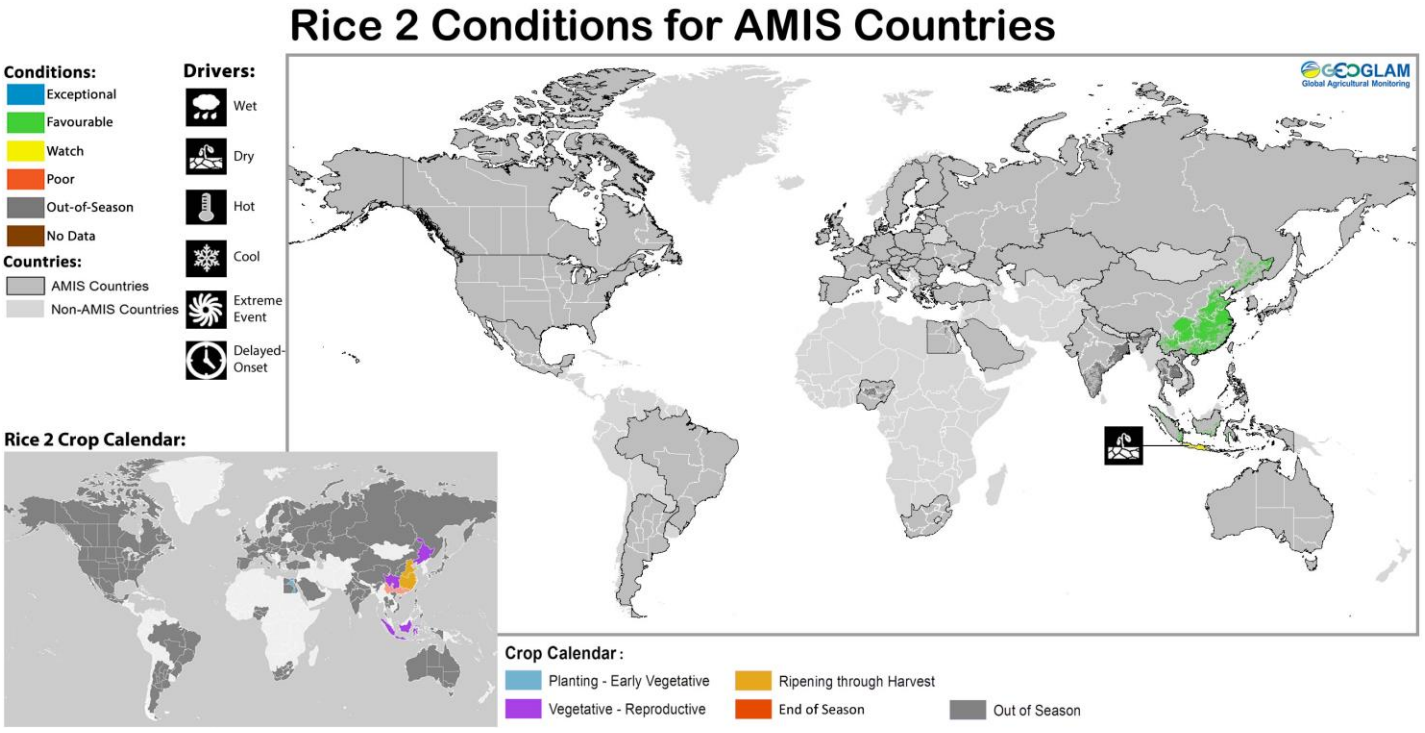

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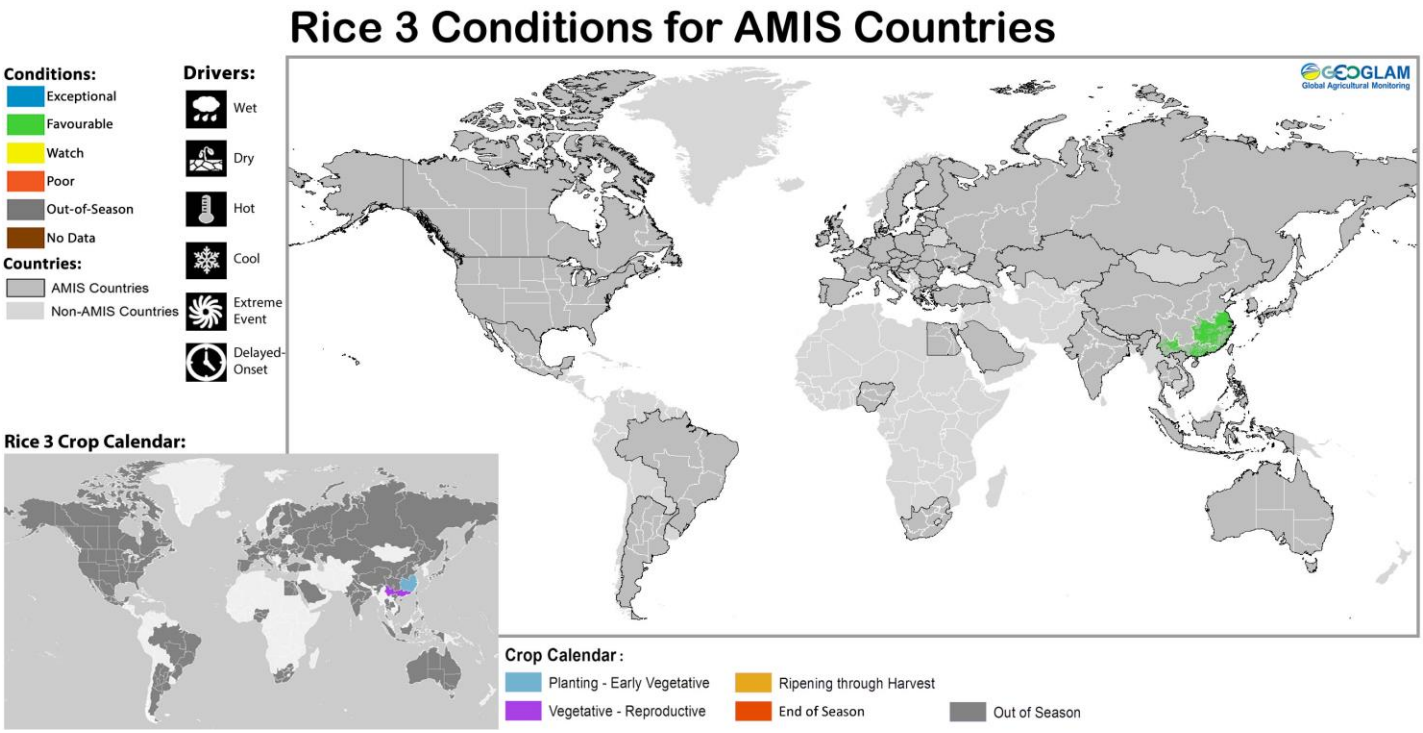
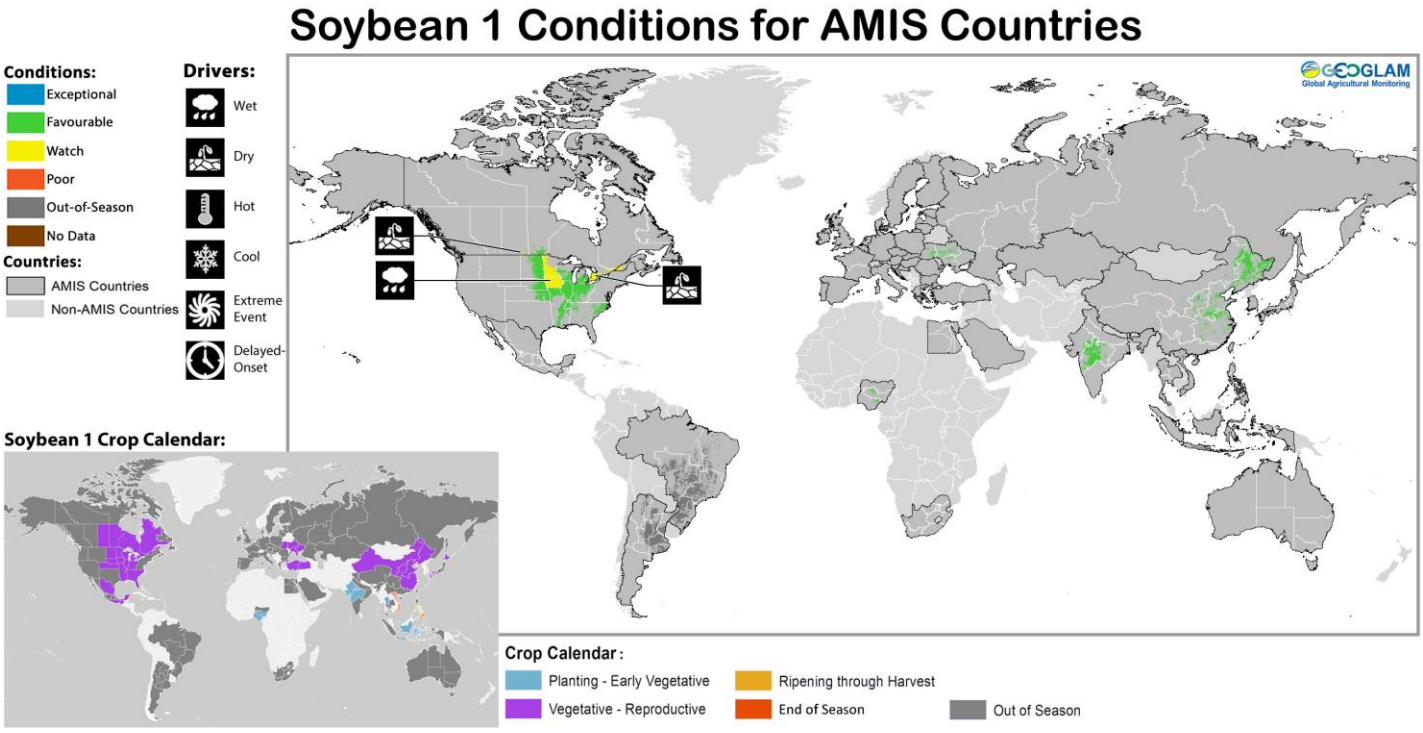


Rice 3 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of July 28th. Where crops are in less than favourable conditions the climatic drivers responsible for those conditions are displayed. The crop calendar is provided as a point of reference to provide information on what part of the life cycle the crops are currently in for each area.



Soybean 1 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.

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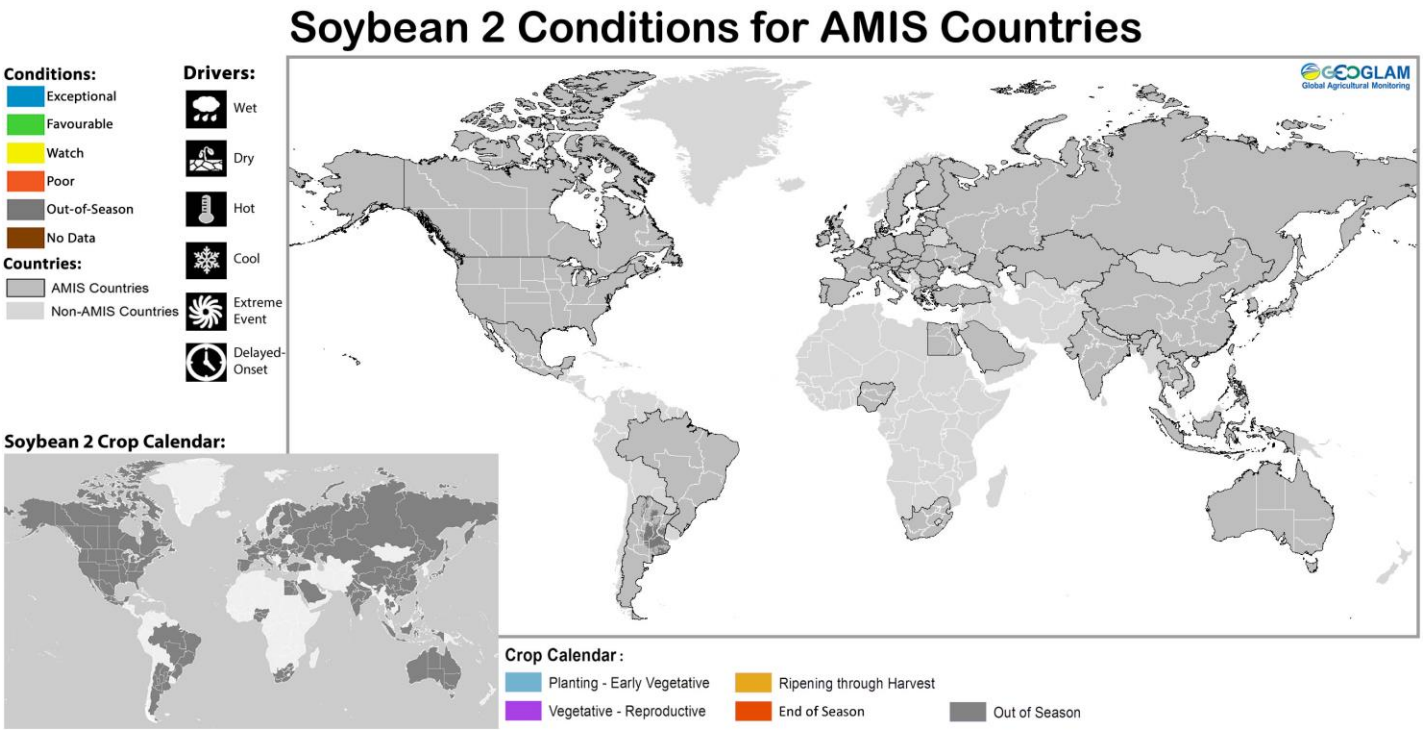

Soybean 2 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of July 28th. Where crops are in less than favourable conditions the climatic drivers responsible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

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Prepared by members of the GEOGLAM Community of Practice
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The Crop Monitor is a part of GEOGLAM, a GEO global initiative.

Photo by: Inbal Becker-Reshef

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Sources & Disclaimer

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