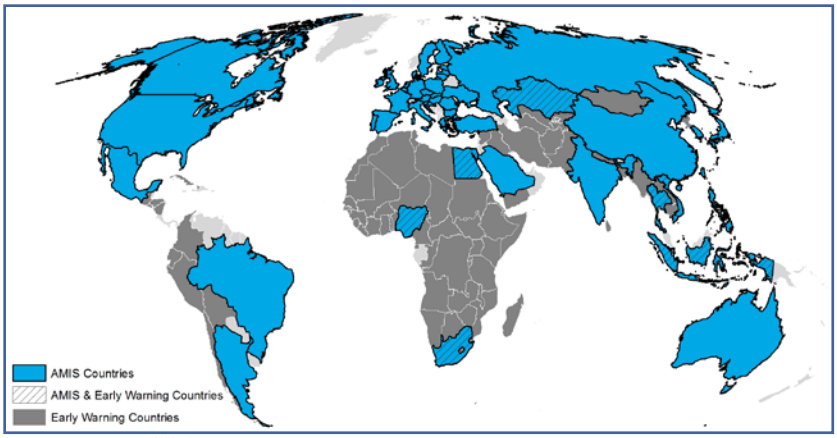
Crop Monitor for AMIS

Overview:

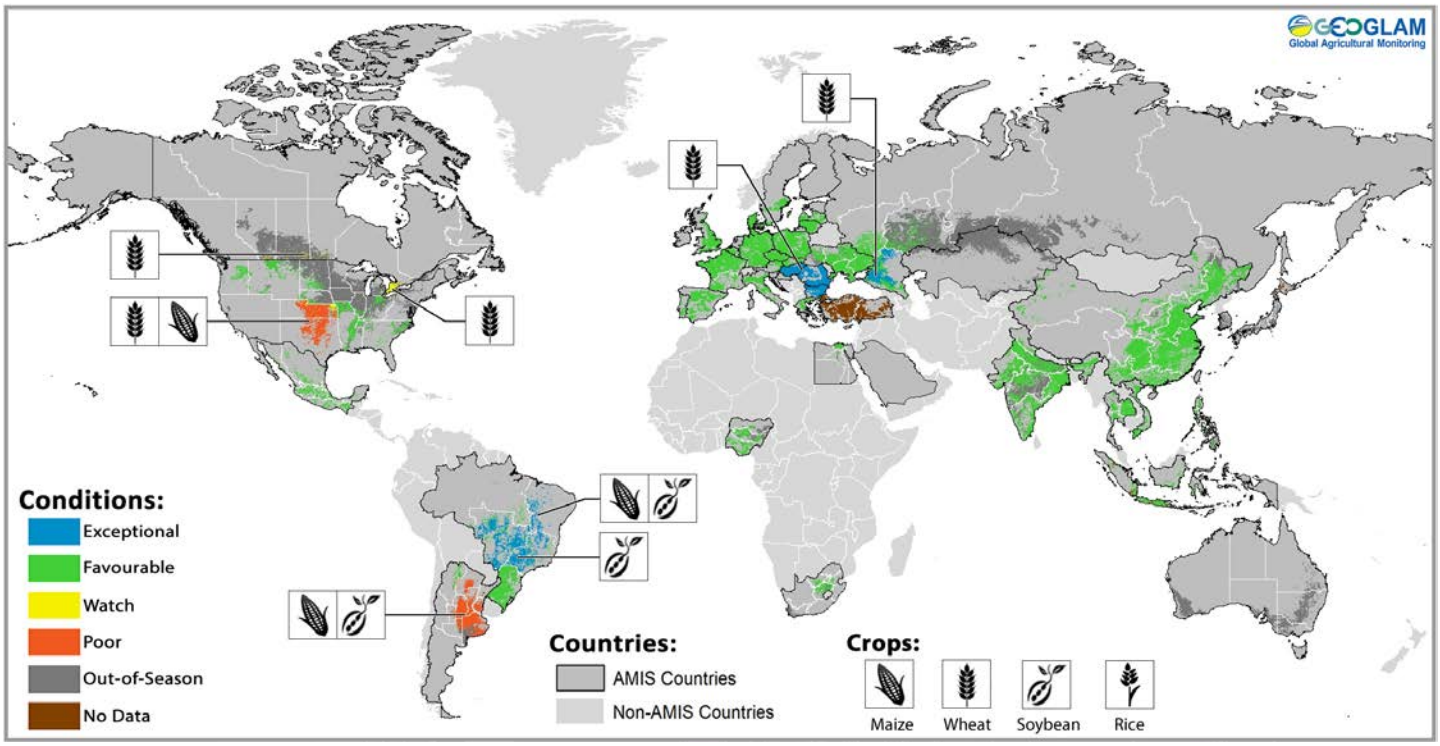
As of the end of April, conditions of wheat, maize, and rice crops are generally favourable while soybean conditions are mixed. **Winter wheat** in the northern hemisphere are under favourable conditions with the exception of the southern Great Plains in the US and in Canada. **Spring wheat** sowing is beginning. For **maize** in the southern hemisphere, conditions are mixed due to dry conditions in Argentina. Sowing is progressing in the northern hemisphere. **Rice** conditions continue to be favourable in Asia. **Soybeans** conditions in the southern hemisphere are mixed due poor conditions in Argentina and exceptional conditions in Brazil.



Contents:

Assessment based on information as of April 28th

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



Crop condition map synthesizing information for all four AMIS crops as of April 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, conditions are generally favourable for winter wheat with spring wheat sowing beginning. In the US, conditions continue to deteriorate in the southern Great Plains due to prolonged drought. In contrast, areas in the eastern parts of EU and southern Russia Federation are in exceptional conditions owing to favourable temperatures and soil moisture.

Maize - In the southern hemisphere, harvest begins for early-planted crops under mixed conditions owing to poor conditions in Argentina, while conditions are favourable for Brazil. In the northern hemisphere, sowing is ongoing in the US, EU, Ukraine, China and Mexico under mostly favourable conditions.

Rice - In China and India, conditions are favourable. In India, the Rabi crop is progressing favourably. In Southeast Asia, crop conditions remain favourable as dry-season rice begins harvesting in the northern countries and wet-season rice harvest is well underway in Indonesia

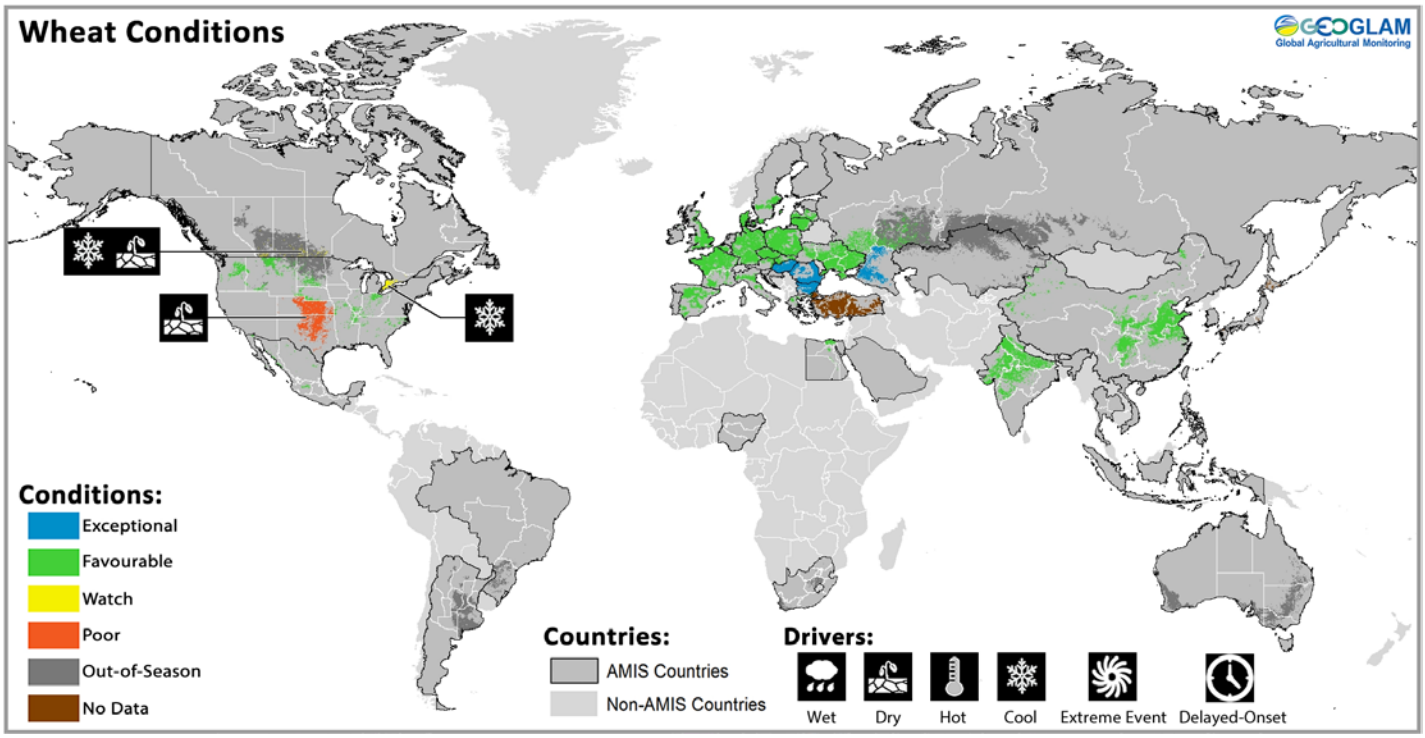
Soybeans - In the southern hemisphere, harvest is underway with exceptional crop conditions in Brazil as opposed to poor crop conditions in Argentina due to dry weather.

La Niña Update

La Nina conditions are still present, though they are weak and in transition to a neutral state. There is a 70% chance that the neutral state will be established by the end of May. Thereafter, neutral conditions are expected (with greater than 50% probability) to persist throughout the northern hemisphere summer of 2018. Seasonal forecast models point to a possible shift to El Nino conditions by December 2018, but given the long lead time that outcome is quite uncertain at this time.

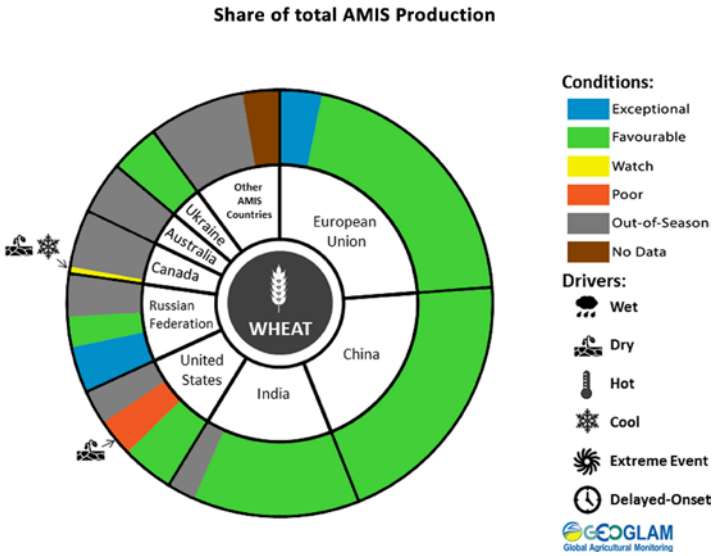
* Assessment based on information as of April 28th

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 April 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.

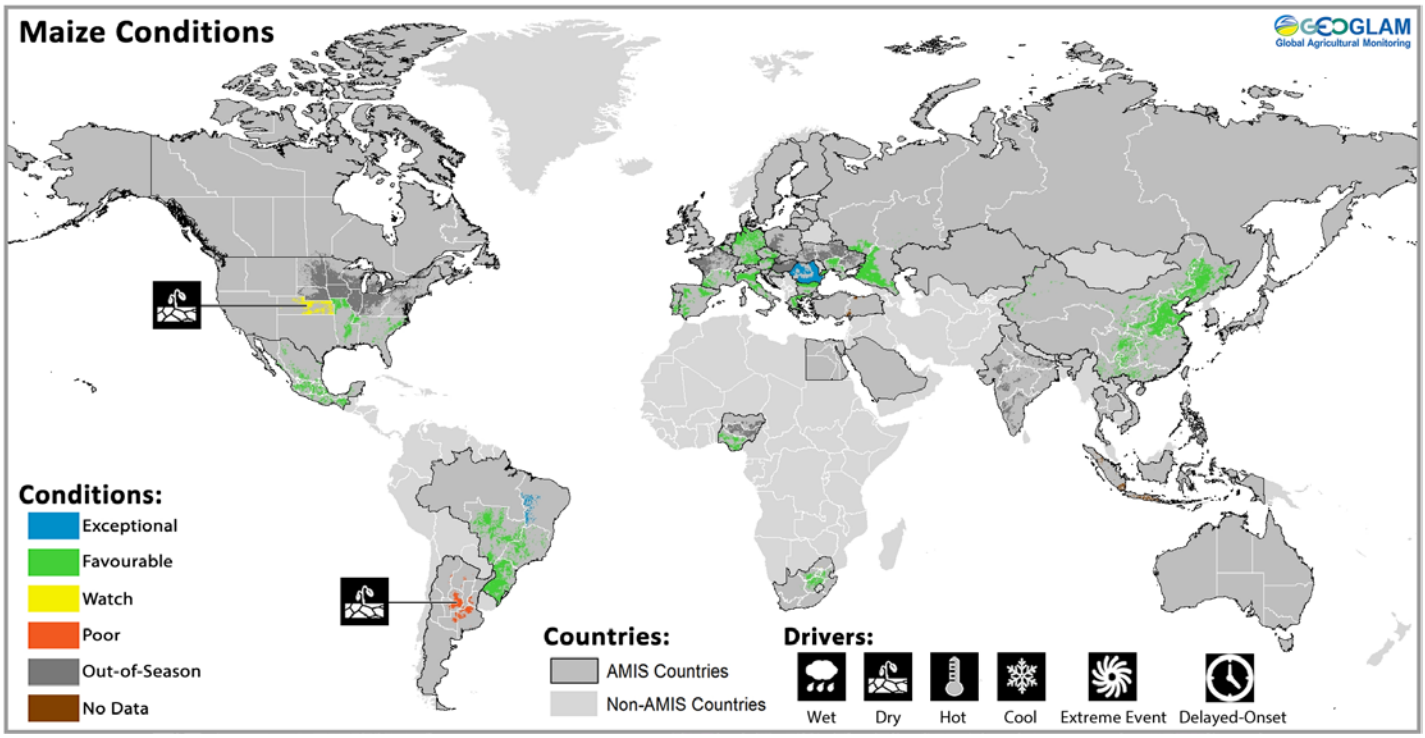
Wheat: In the **EU**, conditions remain favourable despite the recent cold and wet weather which hampered crop development. In **Ukraine**, winter wheat conditions are favourable with very warm weather and good soil moisture in April accelerating crop development, and compensating for earlier delays. In the **Russian Federation**, conditions are favourable for winter wheat with the majority of the crop out of dormancy. Conditions in the south are above average owing to ample water availability and favourable temperatures. In **China**, winter wheat is under favourable conditions while approaching harvesting in the south. Spring wheat is sowing in the north under favourable conditions. In **India**, harvest is finishing in the major producing regions under favourable conditions. In the **US**, conditions continued to deteriorate in the southern Great Plains due to persistent extreme dryness. At this stage of the season, it is not clear if late season moisture would enable the crop to recover. The rest of the US is under favourable conditions. Spring wheat sowing is proceeding under favourable conditions. In **Canada**, conditions are mixed as limited snow cover during much of the winter in the prairies may contribute to winterkill. In the main winter wheat producing province of Ontario, emergence is delayed due to persistent cold weather in April.



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

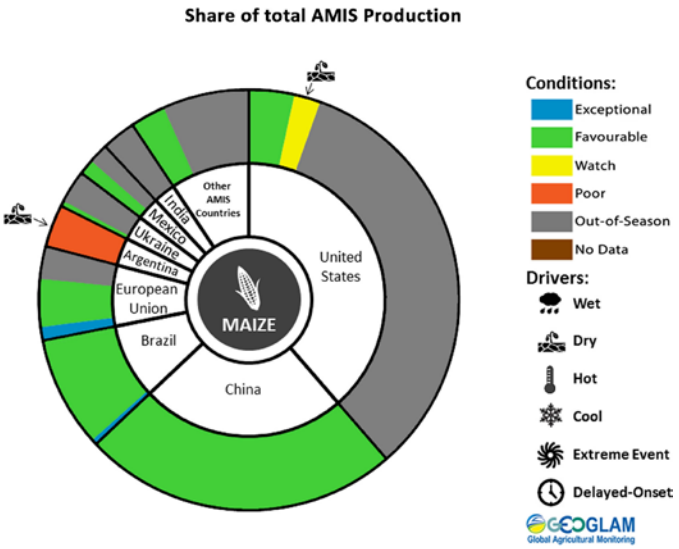
* Assessment based on information as of April 28th

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 April 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.

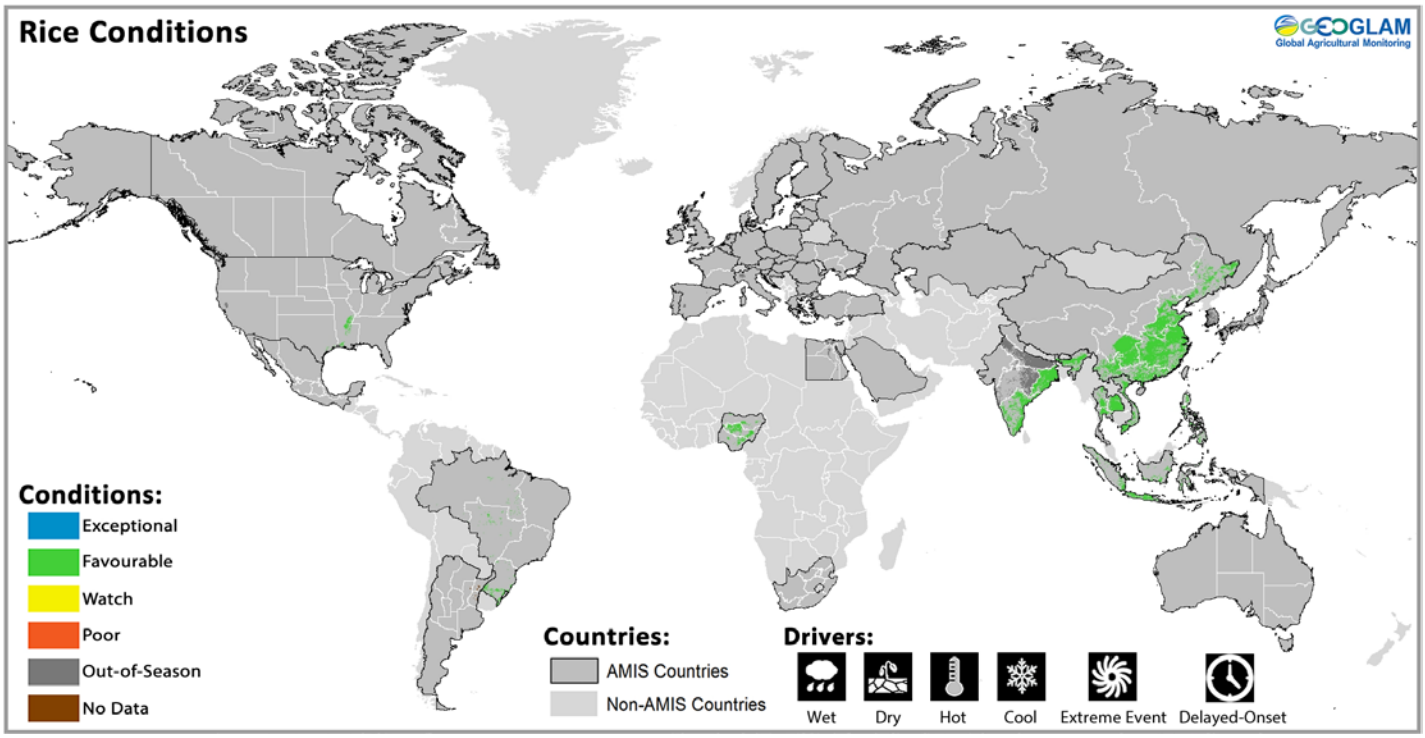
Maize: In **Brazil**, conditions for the spring-planted crop are favourable as harvest progresses, and yield estimates are in line with the five year average while total sown area is down from last year. The summer-planted crop (larger) has also recorded a reduction in total sown area, though conditions are favourable with some minor dry areas in the south. In **Argentina**, despite recent rains, conditions are mostly poor across the country with some minor exceptions as harvest begins. Prolonged drought throughout the season has taken its toll on the crops with the exception of the far northwest. Yields and total production are expected to be significantly reduced compared to the previous year. In **South Africa**, as harvest continues conditions are generally favourable owing to above-average rainfall since mid-January and a very late onset of frost. In the **US**, sowing is ramping up across the country under mostly favourable conditions with the exception of the southern half of the Great Plains where there are some delays due to dry conditions. In **Mexico**, conditions are favourable for the autumn-winter crop which is in the vegetative to reproductive stages. Sowing of the spring-summer crop began under favourable conditions as well. In **China**, the spring-planted crop is developing under favourable conditions and the summer-planted crop is sowing under favourable conditions. In the **EU**, sowing began under generally favourable conditions with some delays due to unfavourable weather.



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

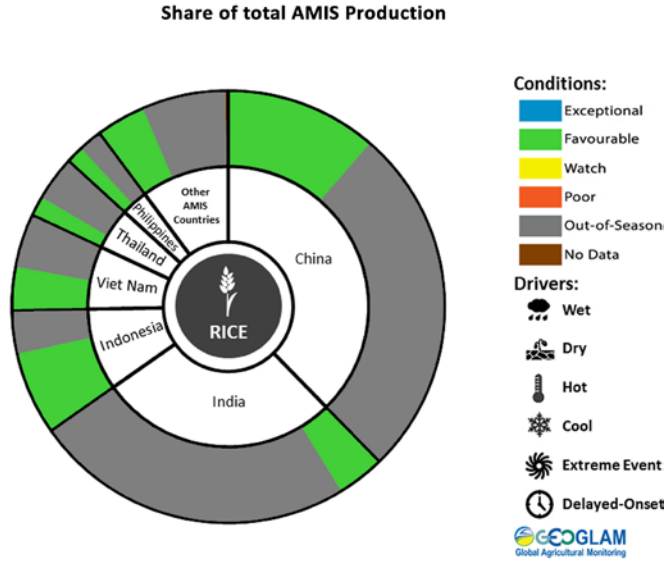
* Assessment based on information as of April 28th

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

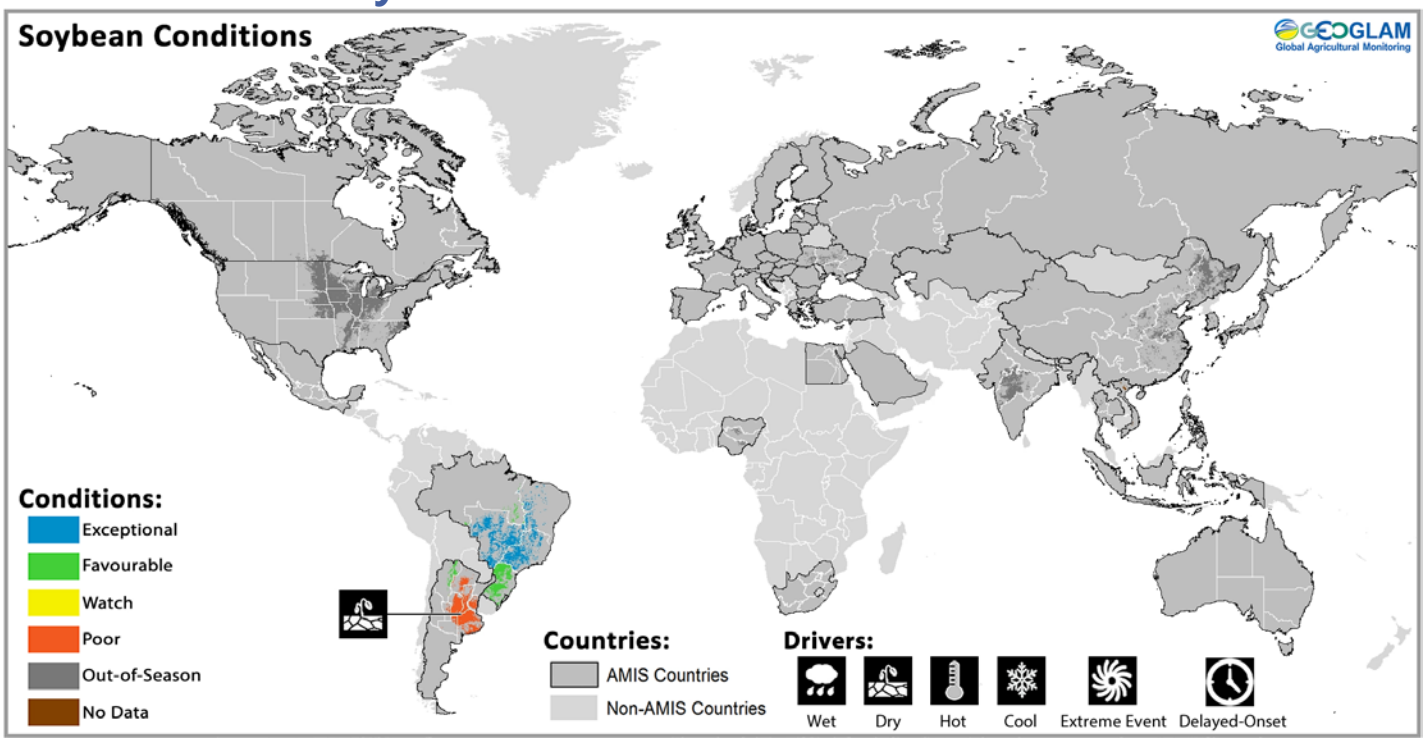
Rice: In **China**, early rice is under favourable conditions while one-season rice sowing has begun in the south and parts of the northeast. In **India**, conditions are favourable for the Rabi crop in the maturity stage with a total sown area similar to last year's. In **Indonesia**, harvest of wet-season rice continues with favourable yields owing to enough irrigation water and sunlight during the critical development period. Sowing of dry-season rice is delayed by one to two months due to unstable rainfall which is needed to build up the season's irrigation water. In **Viet Nam**, winter-spring rice (dry season rice) is under favourable conditions with a slight decrease in total sown area in the north, while a slight increase in total sown area in the south is reported. Harvest has begun in the south with early yields estimated to be slightly above last year's. In **Thailand**, dry-season rice is being harvested across the country under favourable conditions owing to sufficient rainfall and irrigation water throughout the season. In the **Philippines**, conditions are generally favourable for dry-season rice which is currently being harvested. For the dry-rice sown during November-December, yields are expected to be around average. In the **US**, sowing is proceeding under favourable conditions.



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

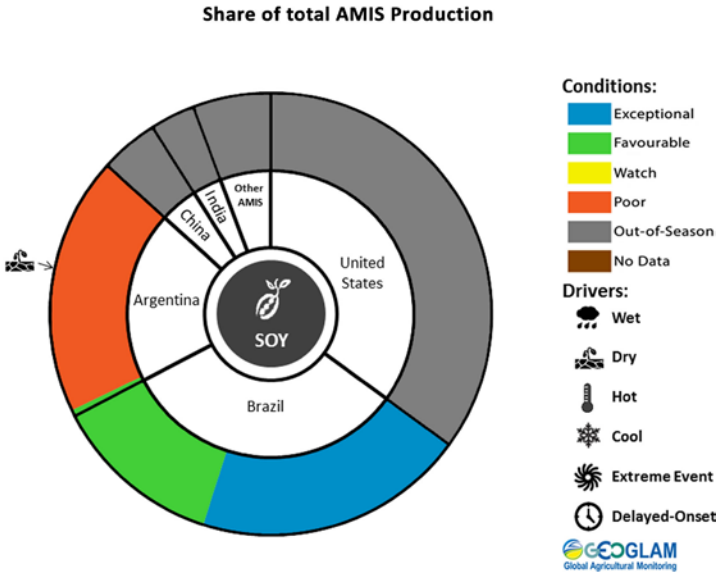
* Assessment based on information as of April 28th

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 April 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 **Brazil**, conditions are favourable to exceptional as harvest advances. Exceptional conditions in the Central-West, Northeast and Southeast regions combined with an increase in sown area across the country will result in a highly productive season. In **Argentina**, conditions are mostly poor across the country for both the spring-planted crop (larger) and the summer-planted crops with some exceptions in the northwest regions. The prolonged drought throughout the season caused widespread damage and significantly reduced production. The impact on the summer-planted crops is more severe as this crop did not receive the needed rains. Prospects are for a significant reduction in yields and overall production.



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 May 3rd 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 April 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

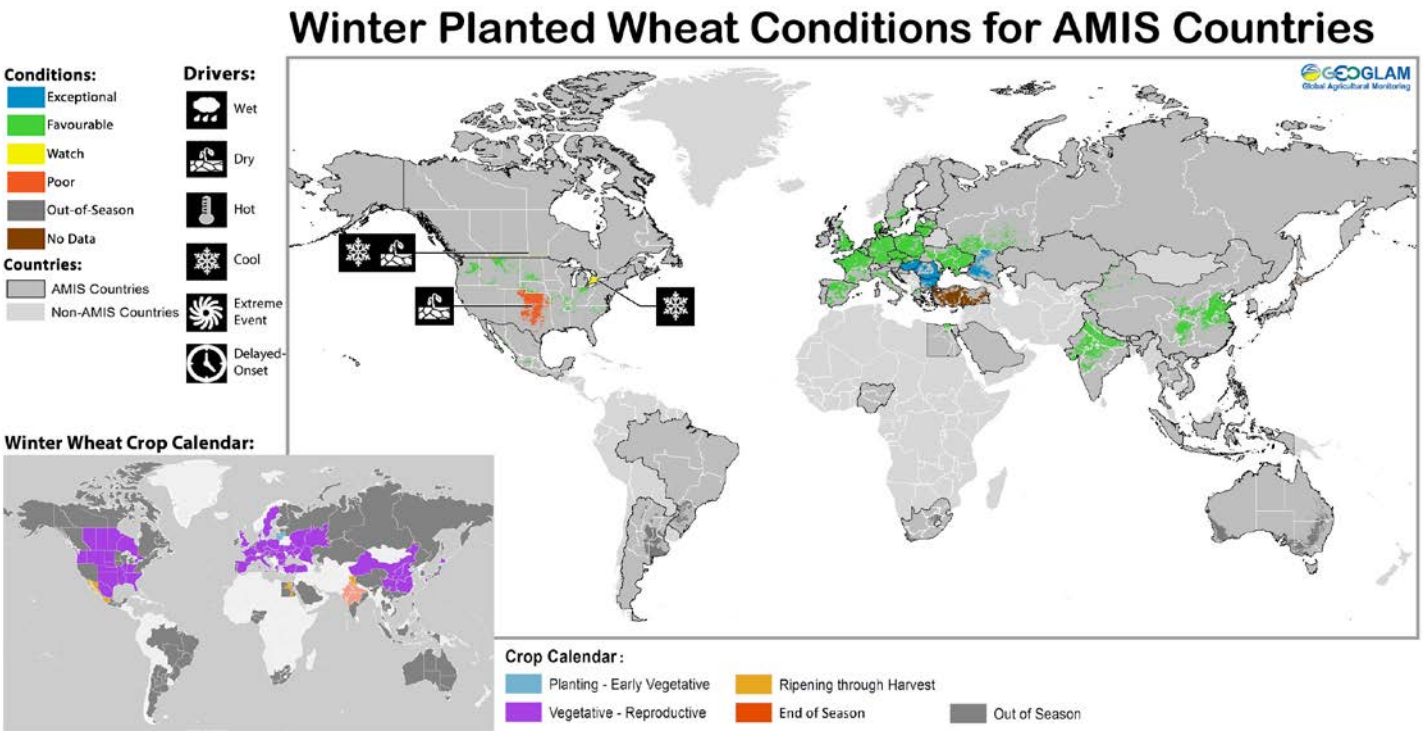
Crop Season Nomenclature:

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.

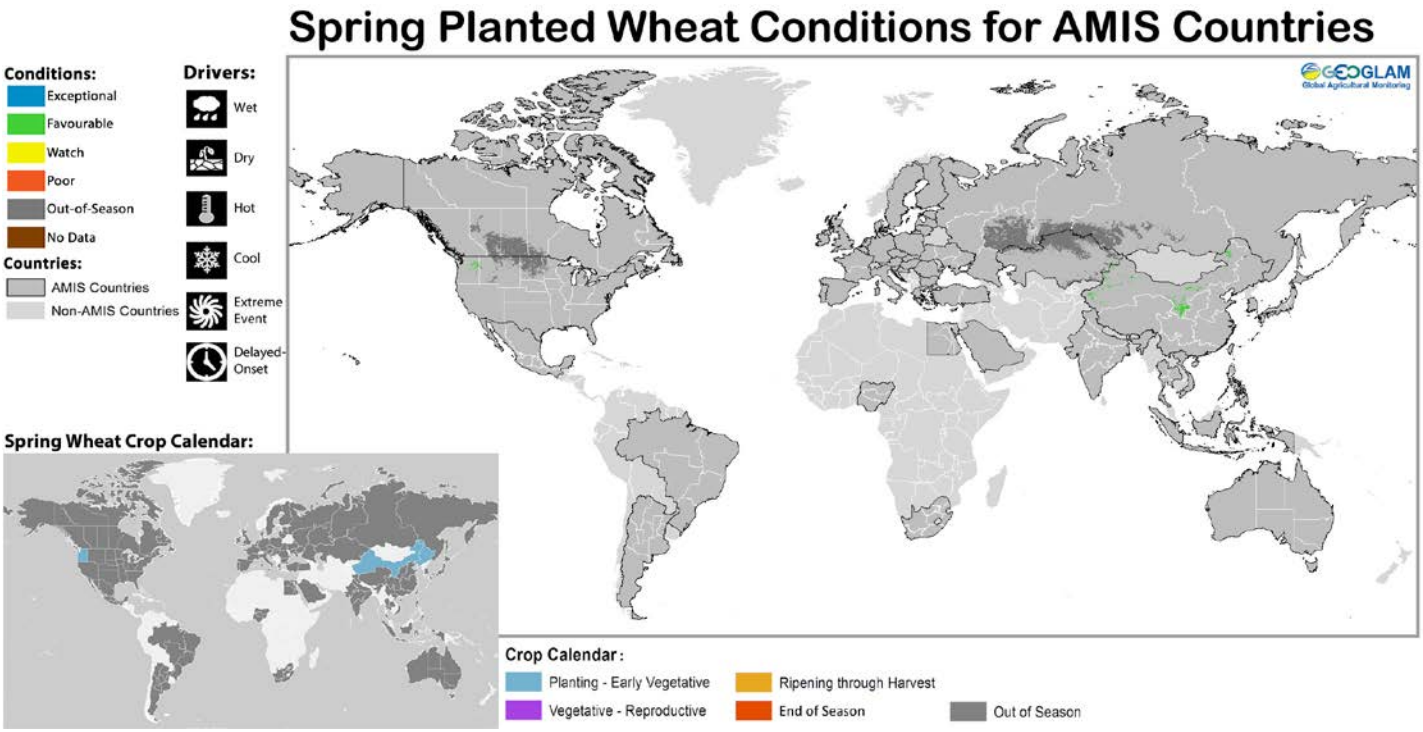
Crop Season Nomenclature				
Country	**Crop**	**Season 1 Name**	**Season 2 Name**	**Season 3 Name**
Argentina	Soybean	Spring-planted	Summer-planted	
Brazil	Maize	Summer-planted (larger producing season)	Spring-planted (smaller producing season)	
Canada	Wheat	Winter-planted	Spring-planted	
China	Maize	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 April 28th

Appendix 2: Crop Season Specific Maps

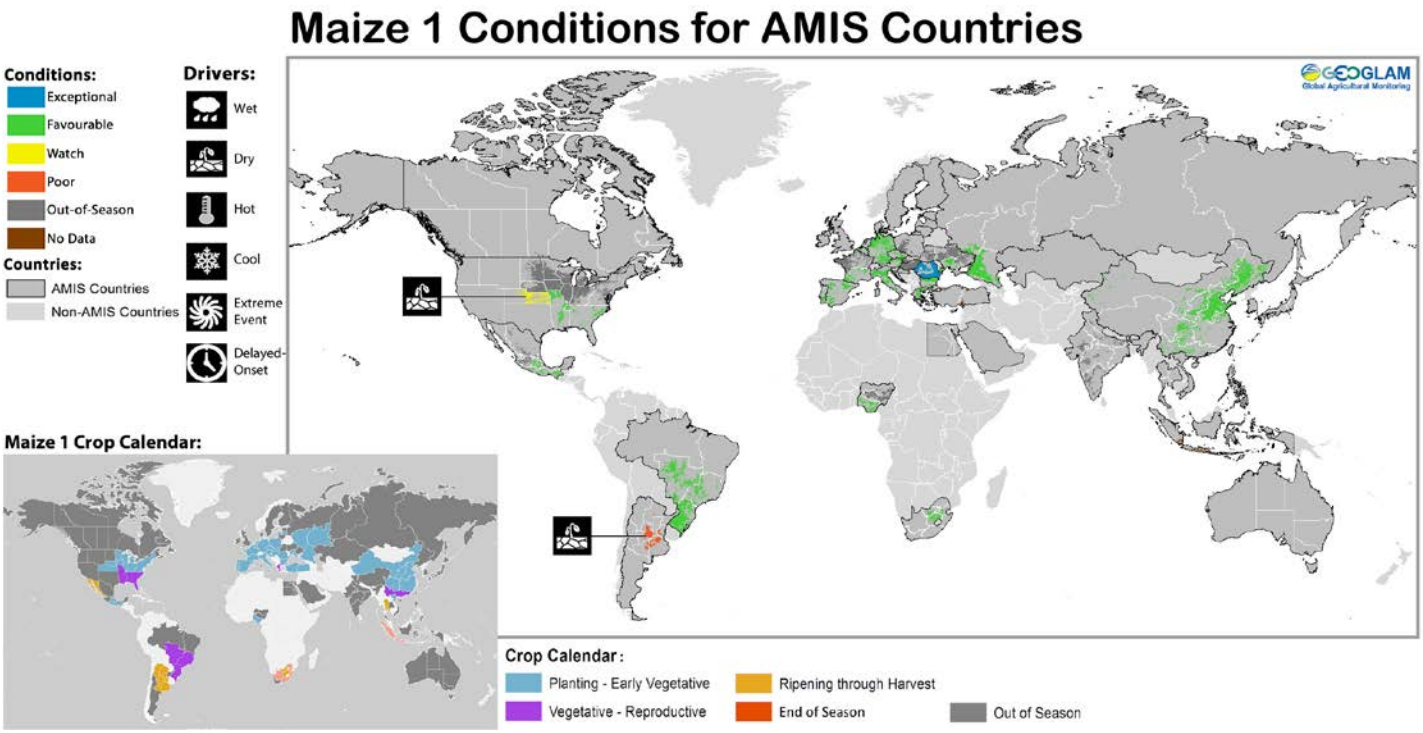


Winter wheat crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of April 28th. Where crops are in less than favourable conditions the climatic drivers responsible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

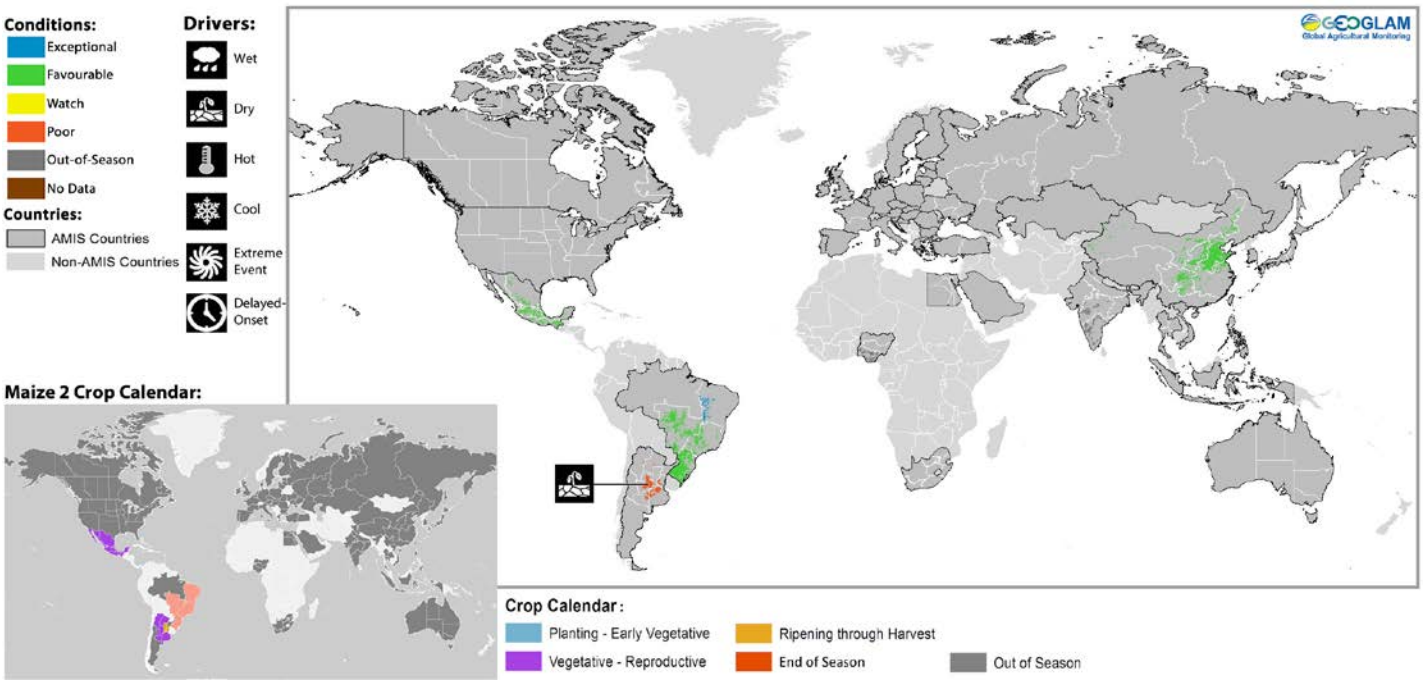


Spring wheat crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of April 28th. Where crops are in less than favourable conditions the climatic drivers responsible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

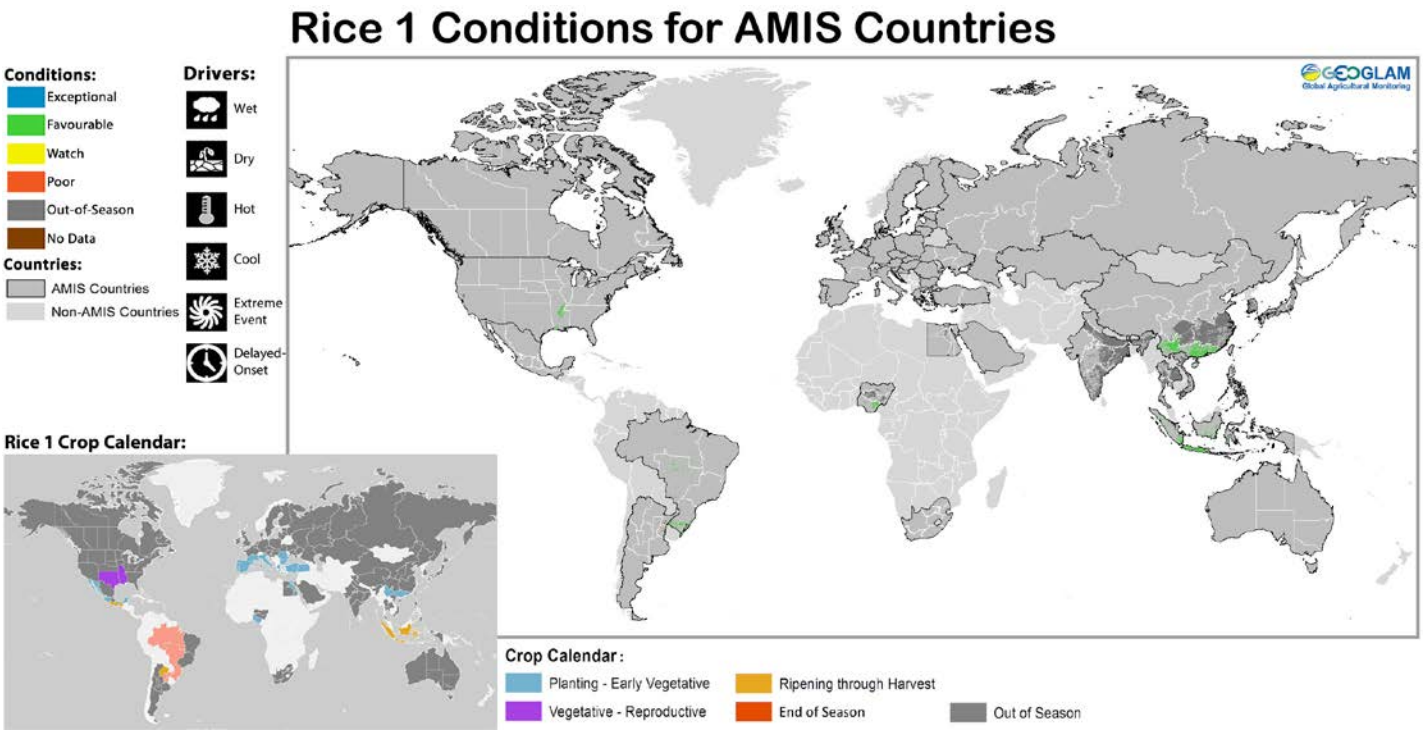


Maize 1 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of April 28th. Where crops are in less than favourable conditions the climatic drivers responsible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

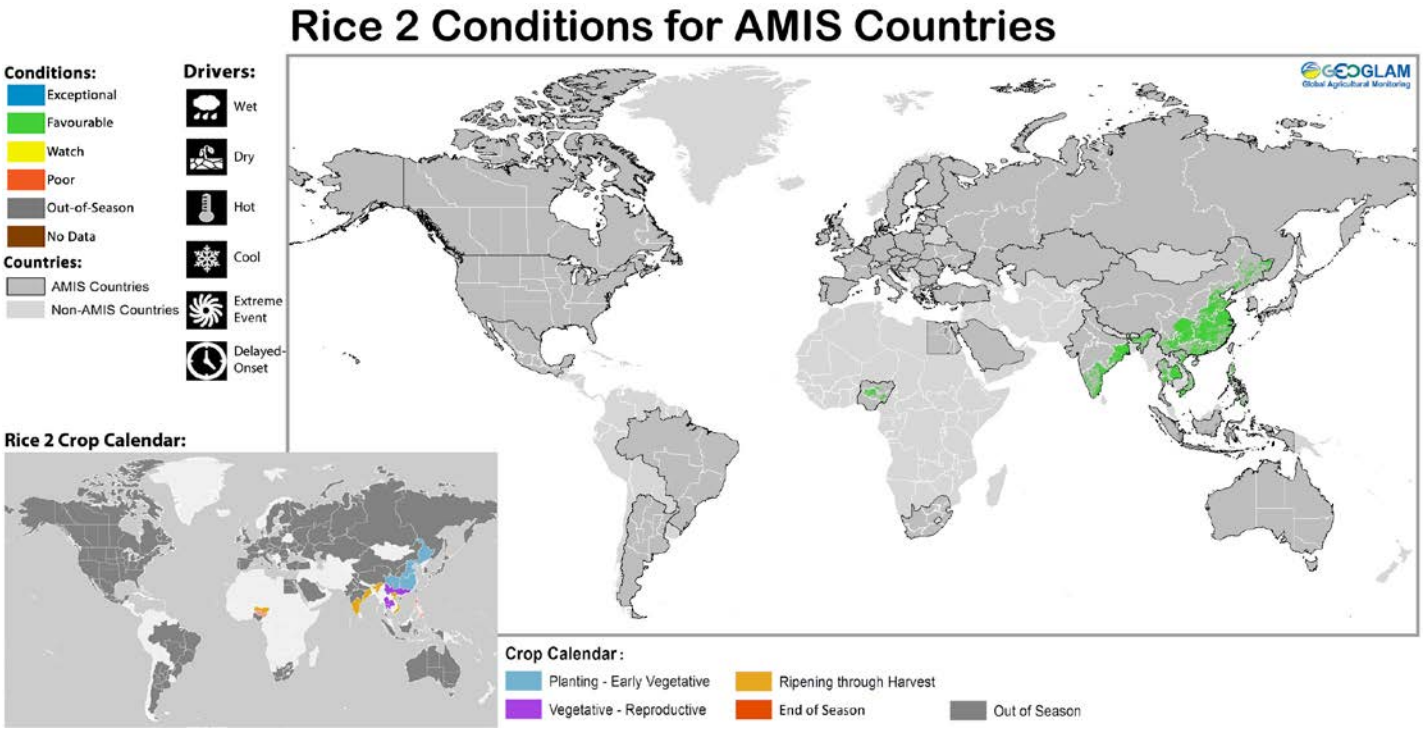


Maize2 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of April 28th. Where crops are in less than favourable conditions the climatic drivers responsible 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 April 28th

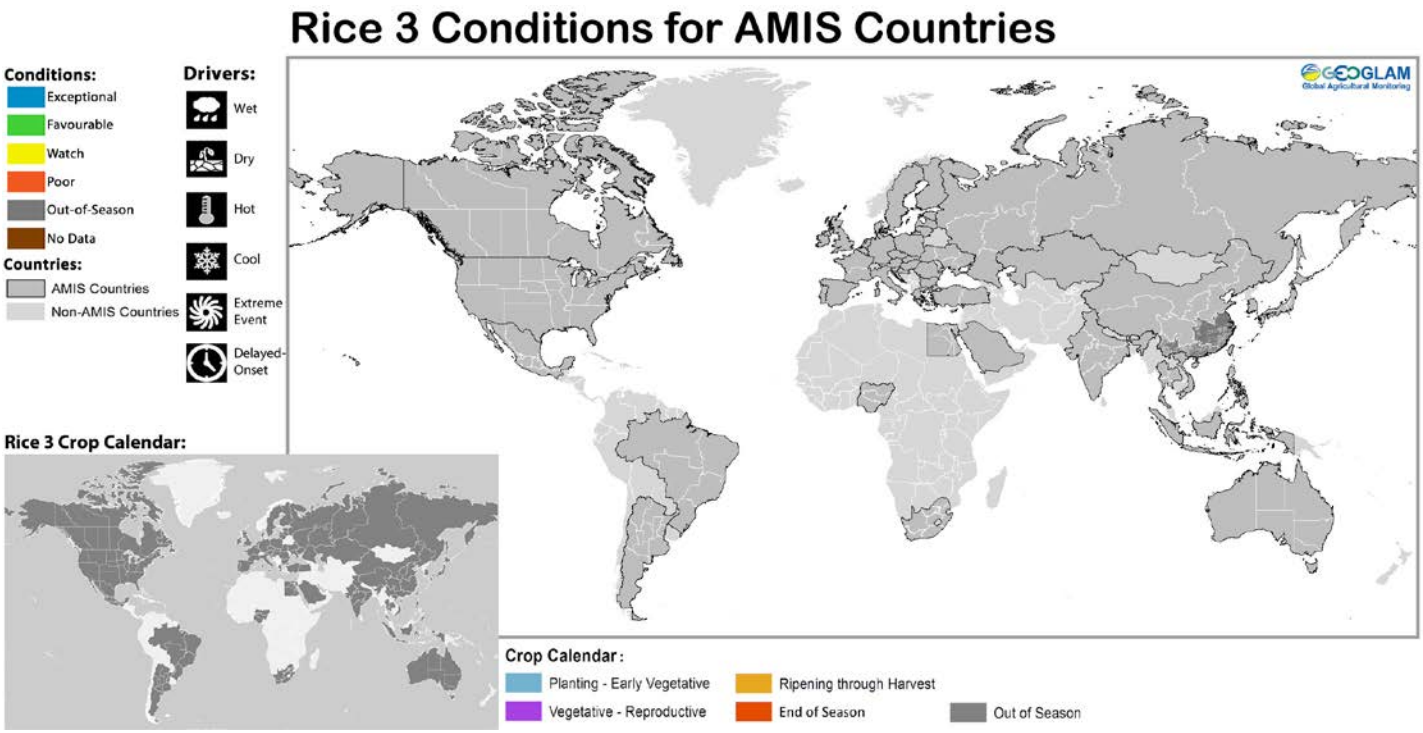


Rice 1 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of April 28th. Where crops are in less than favourable conditions the climatic drivers responsible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

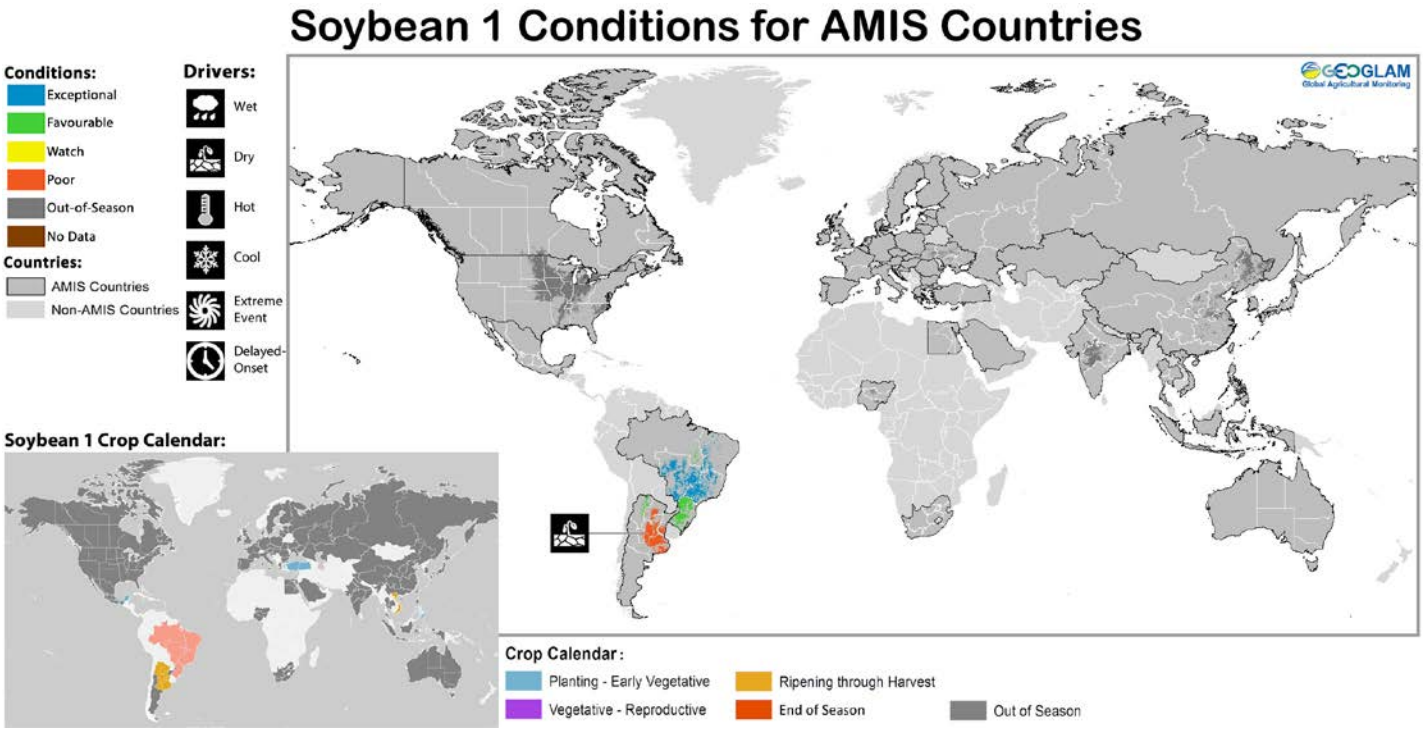


Rice 2 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of April 28th. Where crops are in less than favourable conditions the climatic drivers responsible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

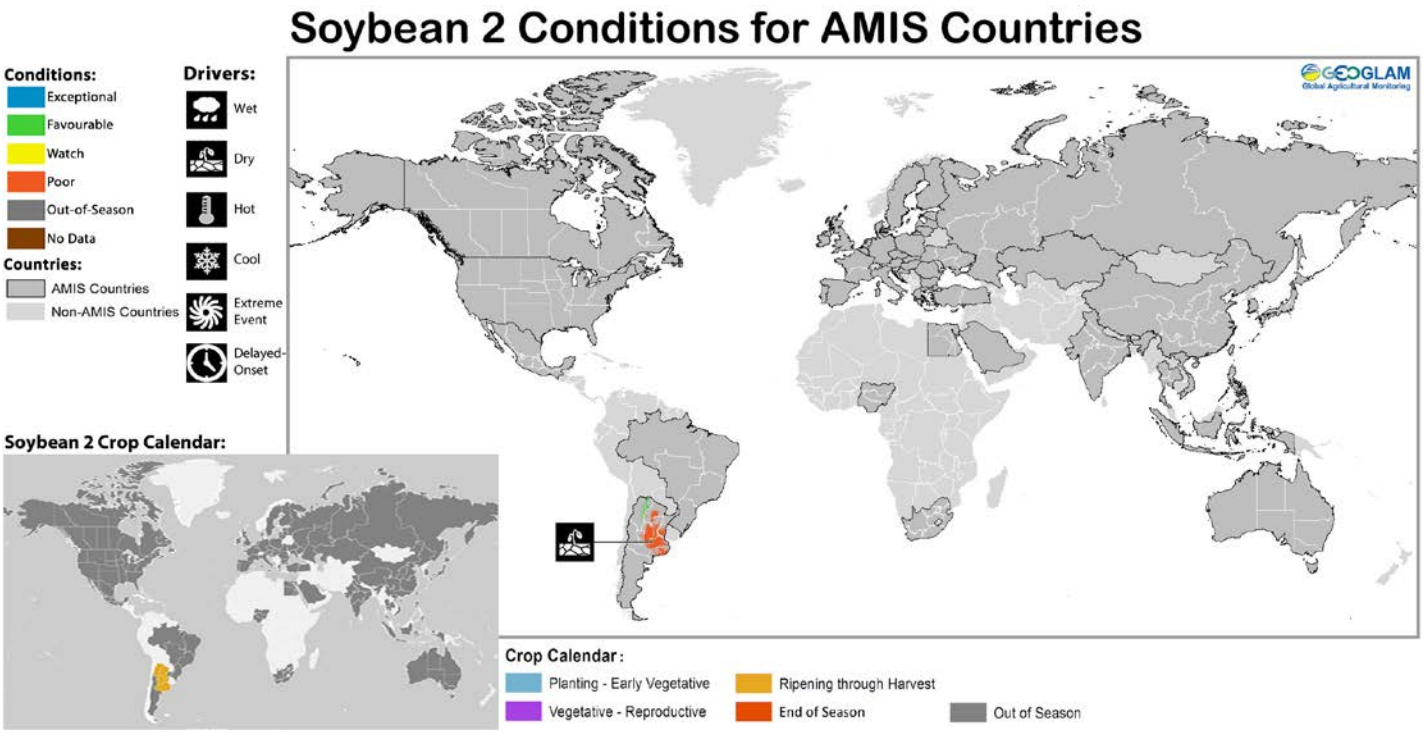


Rice 3 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of April 28th. Where crops are in less than favourable conditions the climatic drivers responsible 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 April 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 April 28th



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 April 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 April 28th

Prepared by members of the GEOGLAM Community of Practice
Coordinated by the University of Maryland with funding from EOFSAC

The Crop Monitor is a part of GEOGLAM, a GEO global initiative.

Photo by: Brian Barker

www.geoglam-crop-monitor.org

@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), India(NCFC), Indonesia (LAPAN & MOA), International (CIMMYT, FAO GIEWS, IFPRI & IRRI), Japan (JAXA), Mexico (SIAP), Russian Federation (IKI), South Africa (ARC & CSIR & 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