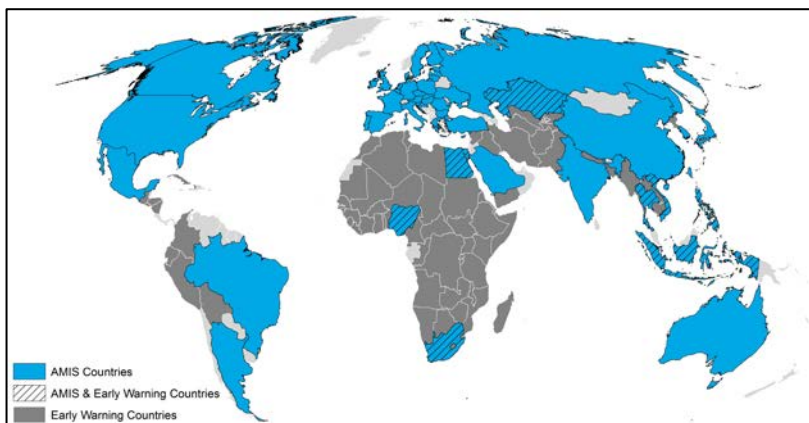


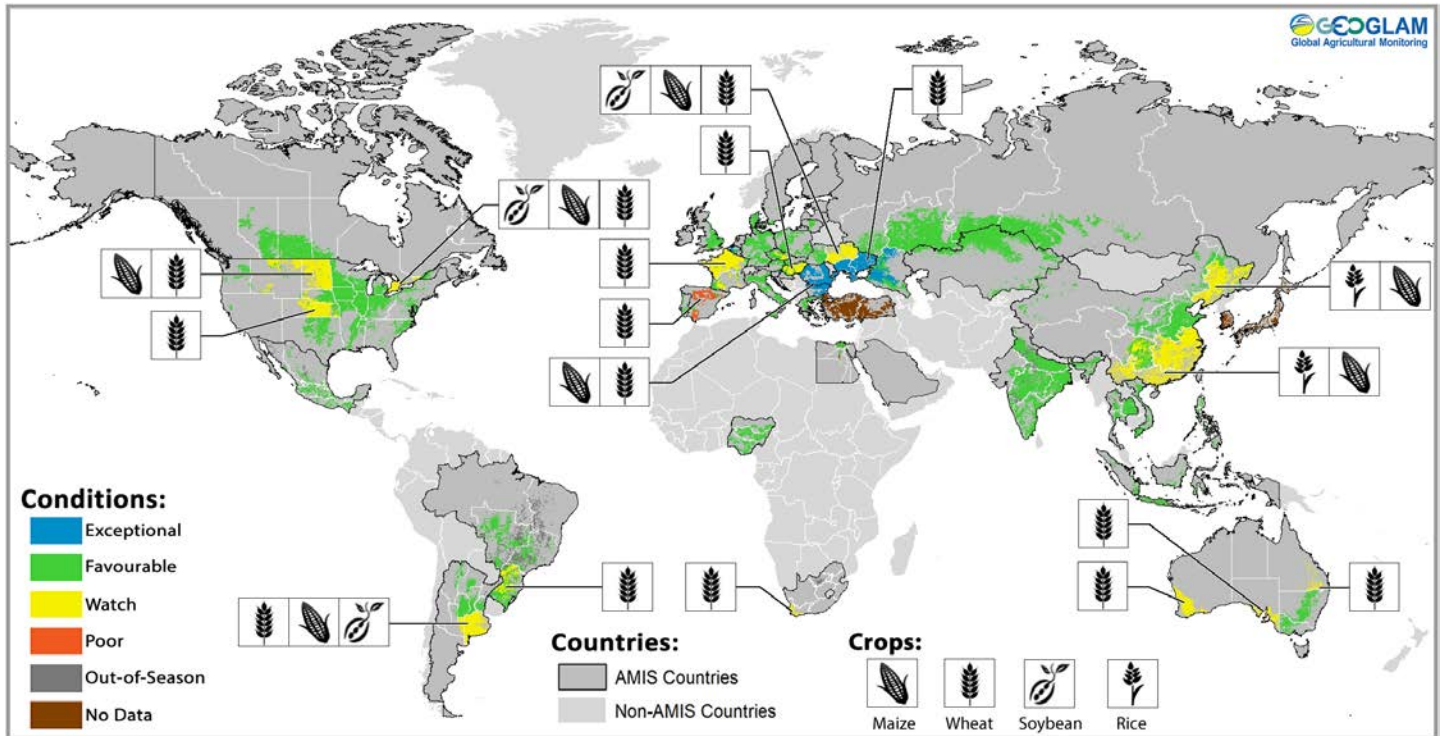
CROP MONITOR FOR AMIS

NO. 41 July 2017

The Group on Earth Observations' Global Agricultural Monitoring (GEOGLAM) initiative developed the Crop Monitor whose objective is to provide AMIS with an international and transparent multi-source, consensus assessment of crop growing conditions, status, and agro-climatic conditions, likely to impact global production. This activity covers the four primary crop types (wheat, maize, rice, and soy) within the main agricultural producing regions of the AMIS countries (G20+7). The Crop Monitor reports provide cartographic and textual summaries of crop conditions as of the 28th of each month, according to crop type. There is another Crop Monitoring initiative called the Early Warning Crop Monitor (geoglam-crop-monitor.org/), which has grown out of this initiative.



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



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

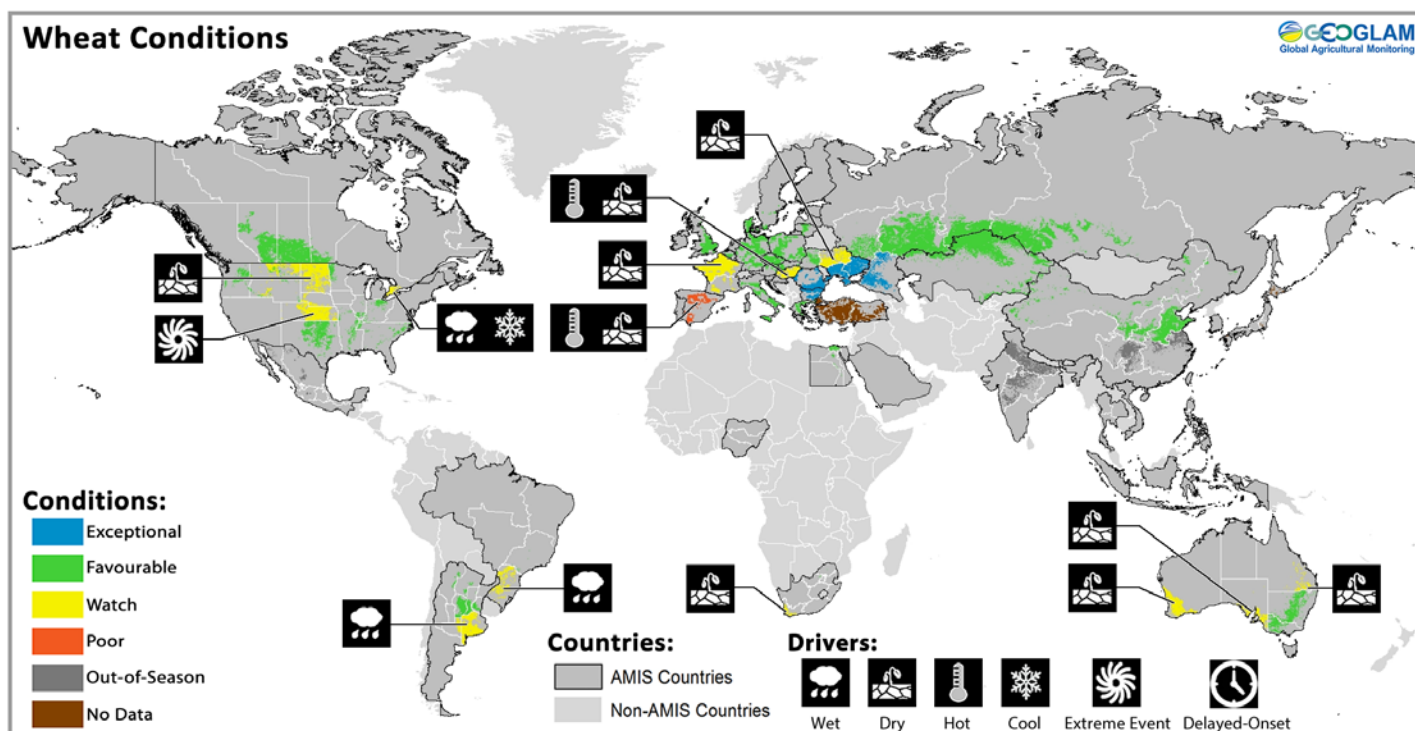
Wheat - In the northern hemisphere, conditions remain mixed as harvest begins for winter wheat, and the spring wheat crop is mostly in early vegetative to reproductive stages. There is a further downgrading of conditions most notably in the US and Europe. In the southern hemisphere, crops are in planting to early vegetative stages, and conditions remain mixed with heavy rainfall in Argentina and dry conditions in Australia, though it is still early in the season.

Maize - Conditions in the northern hemisphere are generally favourable at this early stage of the season, with the exception of minor areas in the US, China, Ukraine, and Canada. In the southern hemisphere, conditions are favourable as harvesting continues in Argentina and Brazil.

Rice - In Asia the rainy season has begun and crop conditions are generally favourable across most of the region. However, heavy rainfall and low solar radiation in China has affected early rice.

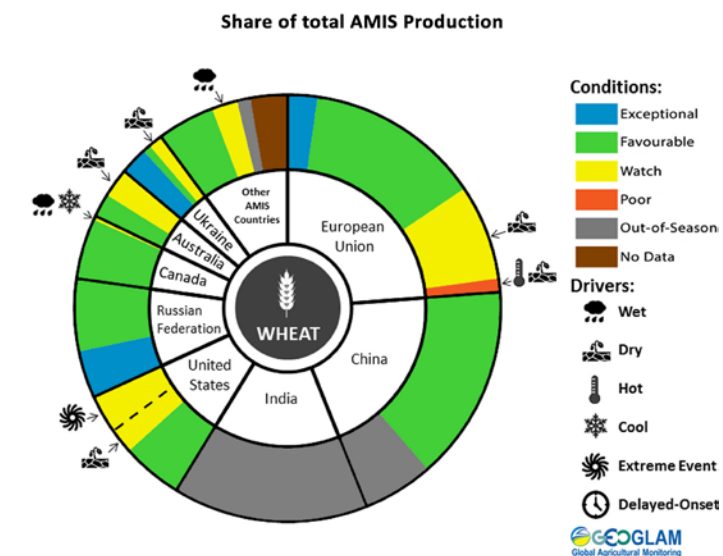
Soybeans - In the southern hemisphere, harvest is almost complete. In Argentina, good yields are expected despite recent floods. In the northern hemisphere, sowing continues under generally favourable conditions.

Wheat Conditions for AMIS Countries



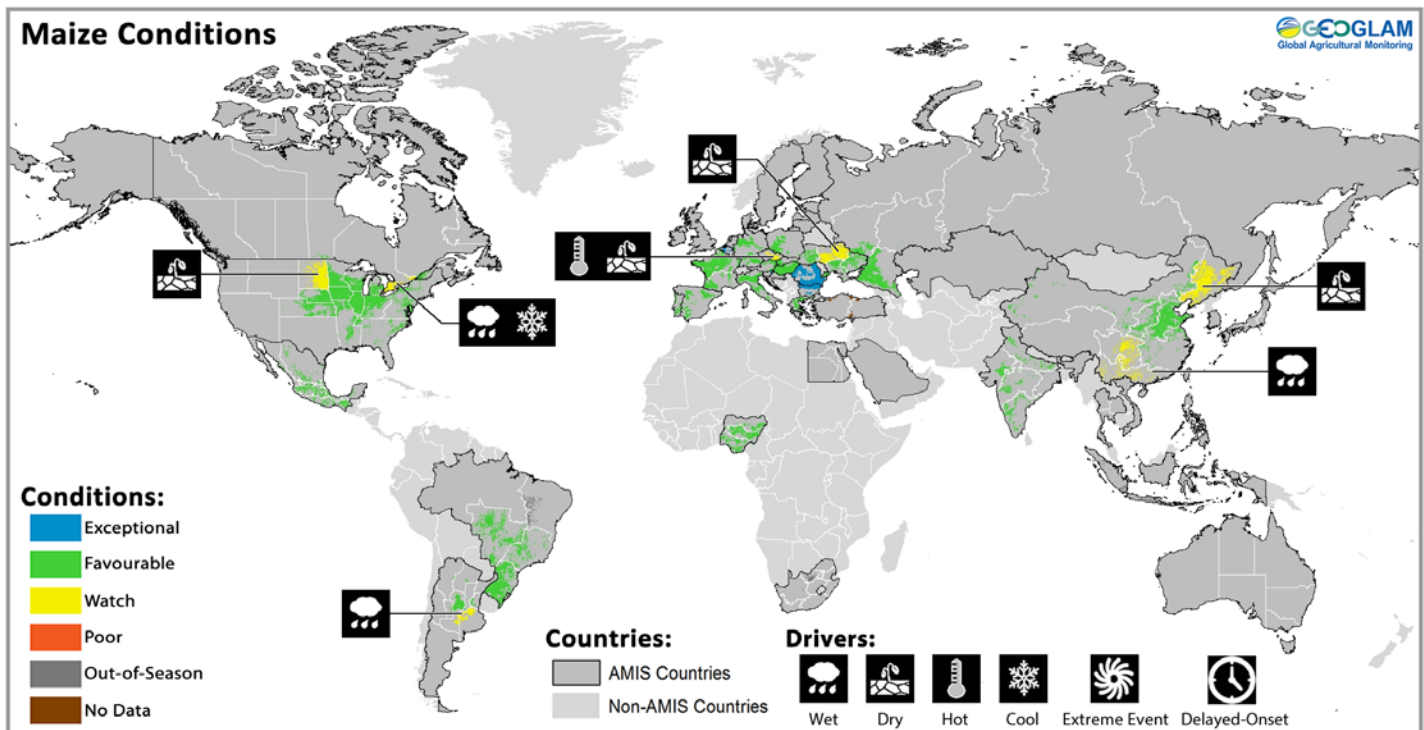
Wheat crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of June 28th. Where crops are in other than favourable conditions the climatic drivers responsible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

Wheat: In the **EU**, continued hot and dry weather resulted in unfavourable conditions for grain filling in some regions, most notably in Spain and France. In **China**, crop conditions are favourable for winter and spring wheat. In the **US**, winter wheat harvest began with much of the Great Plains area under watch conditions owing to dryness in the north and the late April winter storm, impacts of which are still being assessed. Spring wheat is also under mixed conditions due to persistent dryness in the northern Great Plains area, though it is still early in the season. In the **Russian Federation**, conditions are favourable to exceptional for winter wheat and favourable for spring wheat development. In **Ukraine**, conditions are mixed due to a shortage of spring-summer rains, however in the southern and eastern areas (major growing regions) the crop received favourable weather conditions during the critical development phase. In **Canada**, recent rainfall in the Prairies has improved crop conditions for spring wheat and sowing is complete, however heavy rains and cool weather continue to hamper development of winter wheat in Ontario. In **Australia**, conditions are mixed as dry conditions persist across much of the western and southern areas, however it is still early in the season. In **Argentina**, sowing is proceeding under mixed conditions as heavy rains hamper progress.



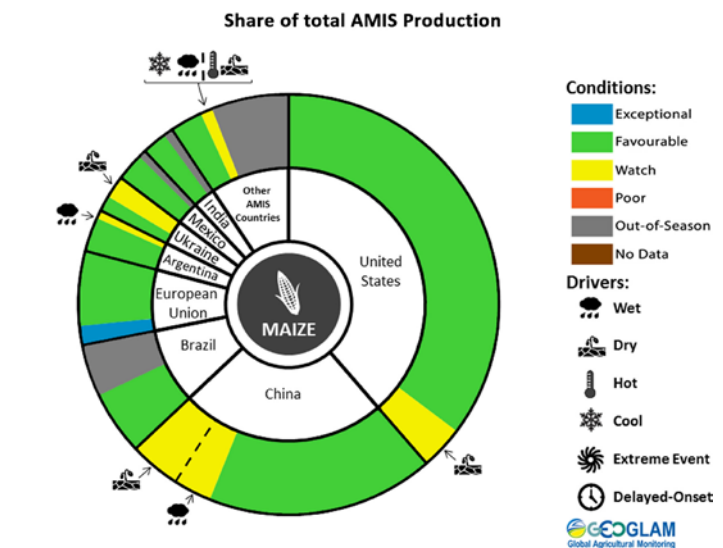
For detailed description of the pie chart please see box below.

Maize Conditions for AMIS Countries



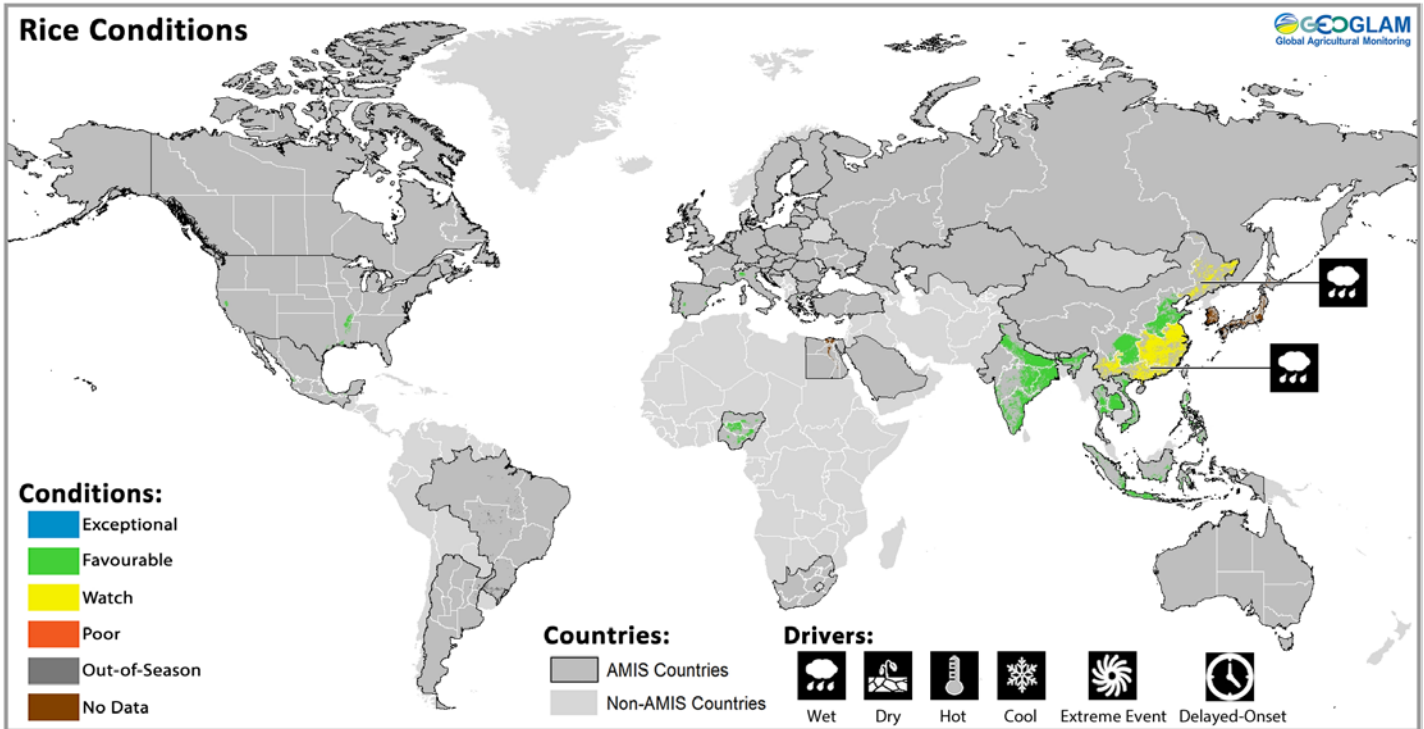
Maize crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of June 28th. Where crops are in other than favourable conditions the climatic drivers responsible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

Maize: In the **US**, conditions are generally favourable with some dryness in the northwest. In **China**, dryness in the northeast and low solar radiation in the southeast has resulted in mixed conditions for spring maize while summer maize is under favourable conditions. In the **EU**, hot weather has resulted in favourable conditions for maize in vegetative growth stages, especially in eastern European regions. In **Ukraine**, conditions are mixed due to recent rainfall deficits in the north-central regions. In **India**, sowing of the Kharif crop began under favourable conditions. In **Canada**, conditions continue to be affected by excess moisture and cool weather in the main producing province of Ontario. In **Mexico**, conditions are favourable for both the planting of the spring-summer crop and the harvesting of the autumn-winter crop. In **Brazil**, conditions are favourable for summer-planted maize. An increase in production compared to last year is expected due to an area increase and favourable weather conditions, as confirmed with the harvest advance. In **Argentina**, conditions are generally favourable as the first crop harvest is almost complete and the late planted crop harvest begins, progressing slowly due to the prioritization of soybean harvest.



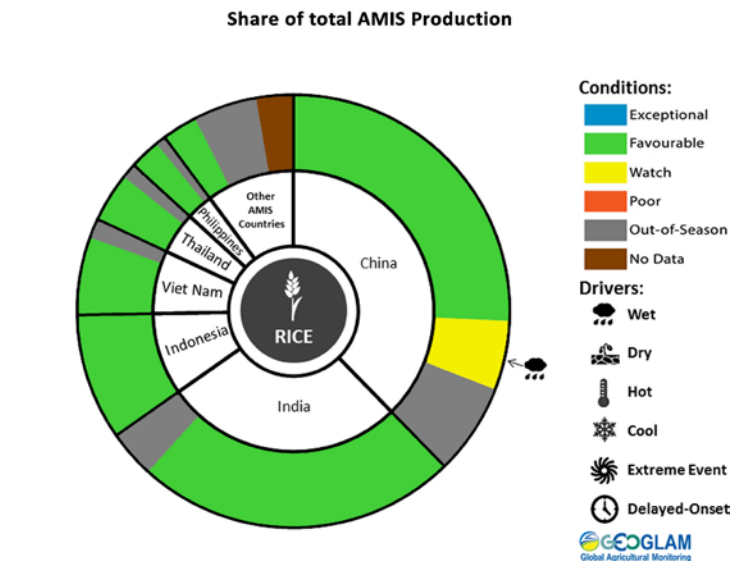
For detailed description of the pie chart please see box below.

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 June28th. Where crops are in other than favourable conditions the climatic drivers responsible for those conditions are displayed.

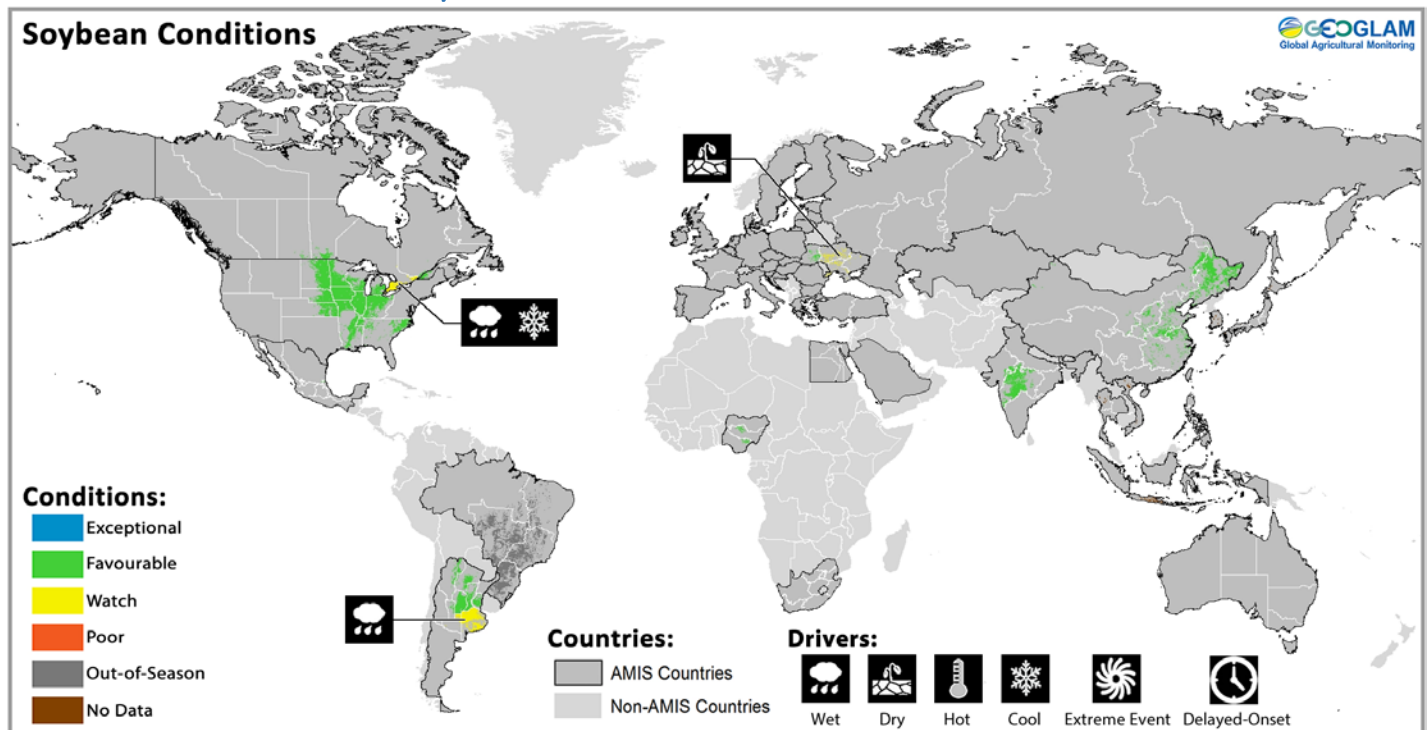
Rice: Conditions are generally favourable throughout the major growing regions. In **China**, conditions are mixed for early rice due to heavy rainfall in the south and southeast, along with low solar radiation in the northeast. In **India**, conditions are favourable for the Kharif crop currently in nursery bed development and transplanting in the southwest. In **Indonesia**, harvest of wet-season rice is near complete with good yields expected, while conditions are favourable for the continued sowing of dry-season rice, with some earlier planted areas advancing to vegetative stage. In **Viet Nam**, conditions are favourable across the country for harvest of winter-spring rice with average or just below average yields expected. In the south, sowing continues for the summer-autumn rice under favourable conditions. In **Thailand**, conditions are favourable as sowing of wet-season rice is underway with an increase in planted area forecasted compared to last year, owing to an early start of the rainy season. In the **Philippines**, the majority of wet-season rice advanced to the vegetative stage under favourable conditions with the starting of the rainy season bringing above average to near average rainfall. In the **US**, conditions are favourable.



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

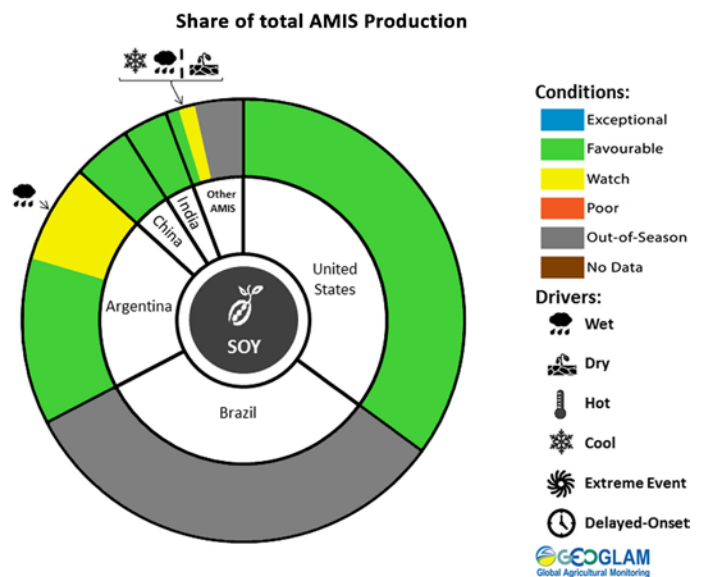
* Assessment based on information as of June28th

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 June 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 **Argentina**, in spite of recent flooding, overall yields are expected to be good as harvest nears completion. In the **US**, sowing is coming to a close under favourable conditions throughout the country. In **China**, the crop is in planting to early vegetative stage under favourable conditions. In **India**, sowing of the Kharif crop began under favourable conditions. In **Canada**, conditions continue to be affected by excess moisture and cool weather in the main producing province of Ontario. In **Ukraine**, conditions are mixed due to recent rainfall deficits.



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 July 6th 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 June 28th

Appendix 1: Definitions

Crop Conditions:

Exceptional: Conditions are much better than average* at time of reporting. This label is only used during the grain-filling through harvest stages.

Favourable: Conditions range from slightly lower to slightly better than average* at reporting time.

Watch: Conditions are not far from average* but there is a potential risk to final production. The crop can still recover to average or near average conditions if the ground situation improves. This label is only used during the planting-early vegetative and the vegetative-reproductive stages.

Poor: Crop conditions are well below average*. Crop yields are likely to be more than 5% below average. This is only used when conditions are not likely to be able to recover, and impact on production is likely.

Out Of Season: Crops are not currently planted or in development during this time.

No Data: No reliable source of data is available at this time.

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

Conditions:

	Exceptional
	Favourable
	Watch
	Poor
	Out-of-Season
	No Data

Drivers:

These represent the key climatic drivers that are having an impact on crop condition status. They result in production impacts and can act as either positive or negative drivers of crop conditions.

Wet: Higher than average wetness.

Dry: Drier than average.

Hot: Hotter than average.

Cool: Cooler than average or risk of frost damage.

Extreme Events: This is a catch-all for all other climate risks (i.e. hurricane, typhoon, frost, hail, winterkill, wind damage, etc.)

Delayed-Onset: Late start of the season

	Wet
	Dry
	Hot
	Cool
	Extreme Event
	Delayed-Onset

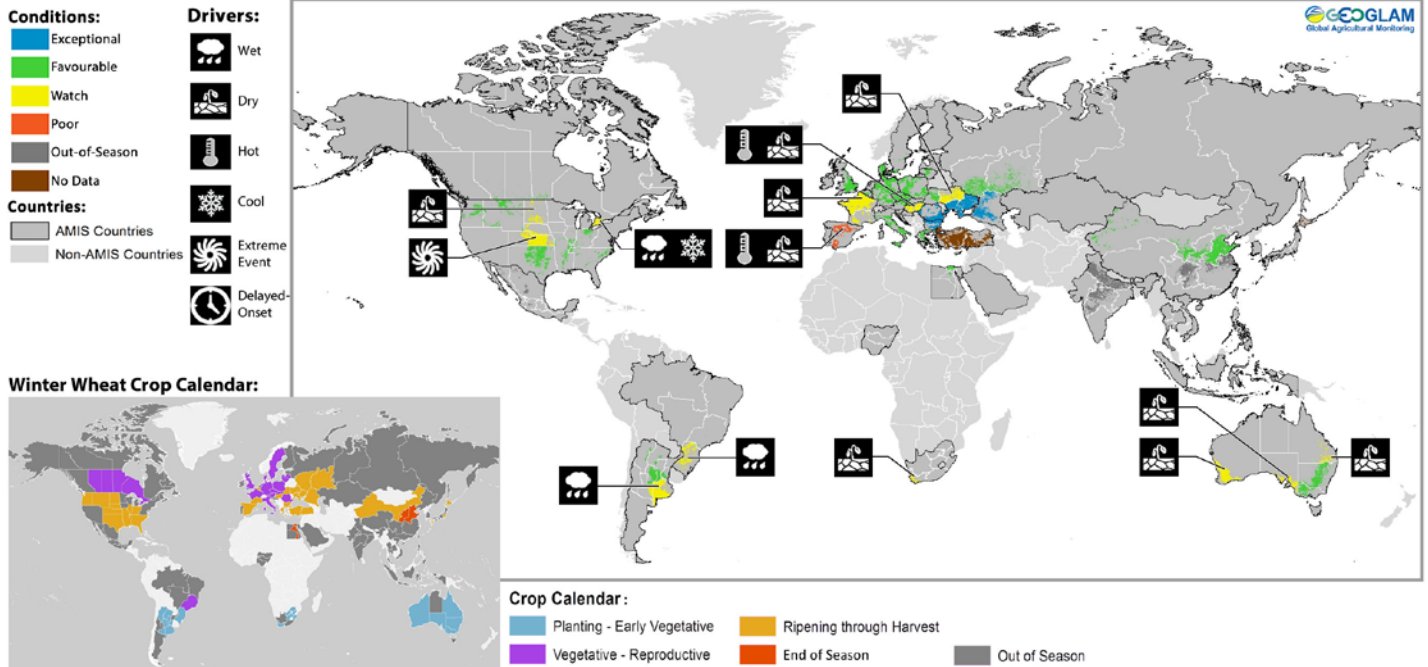
Crop Season Nomenclature:

In countries that contain multiple cropping seasons for the same crop, the following chart identifies the national season name associated with each crop season within the Crop Monitor. Within the Crop Monitor for AMIS countries the larger producing season (most recent 5 years) has been assigned to the first season.

Crop Season Nomenclature				
Country	Crop	Season 1 Name	Season 2 Name	Season 3 Name
Argentina	Soybean	Spring-planted	Summer-planted	
Brazil	Maize	Summer-planted (larger producing season)	Spring-planted (smaller producing season)	
Canada	Wheat	Winter-planted	Spring-planted	
China	Maize	Spring-planted	Summer-planted	
China	Rice	Intermediate Crop	Early Crop	Late Crop
China	Wheat	Winter-planted	Spring-planted	
Egypt	Rice	Summer-planted	Nili season (Nile Flood)	
India	Maize	Kharif	Rabi	
India	Rice	Kharif	Rabi	
India	Soybean	Kharif	Rabi	
India	Wheat	Rabi	Kharif	
Indonesia	Rice	Main-season	Second-season	
Mexico	Maize	Spring-planted	Autumn-planted	
Nigeria	Maize	Main-season	Short-season	
Nigeria	Rice	Main-season	Off-season	
Philippines	Rice	Wet season	Dry season	
Russian Federation	Wheat	Winter-planted	Spring-planted	
Thailand	Rice	Wet season	Dry season	
United States	Wheat	Winter-planted	Spring-planted	
Viet Nam	Rice	Wet season	Dry season	

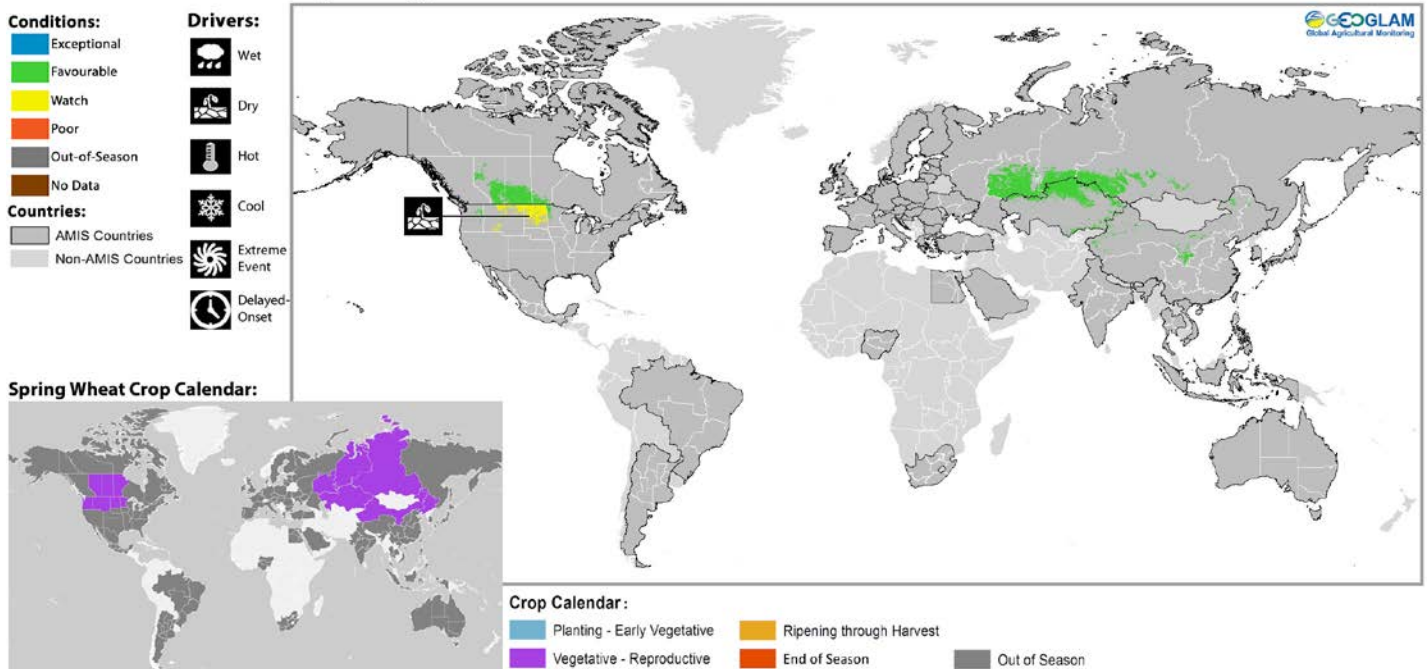
Appendix 2: Crop Season Specific Maps & Pie Charts

Winter Planted Wheat Conditions for AMIS Countries



Winter wheat crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of June 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.

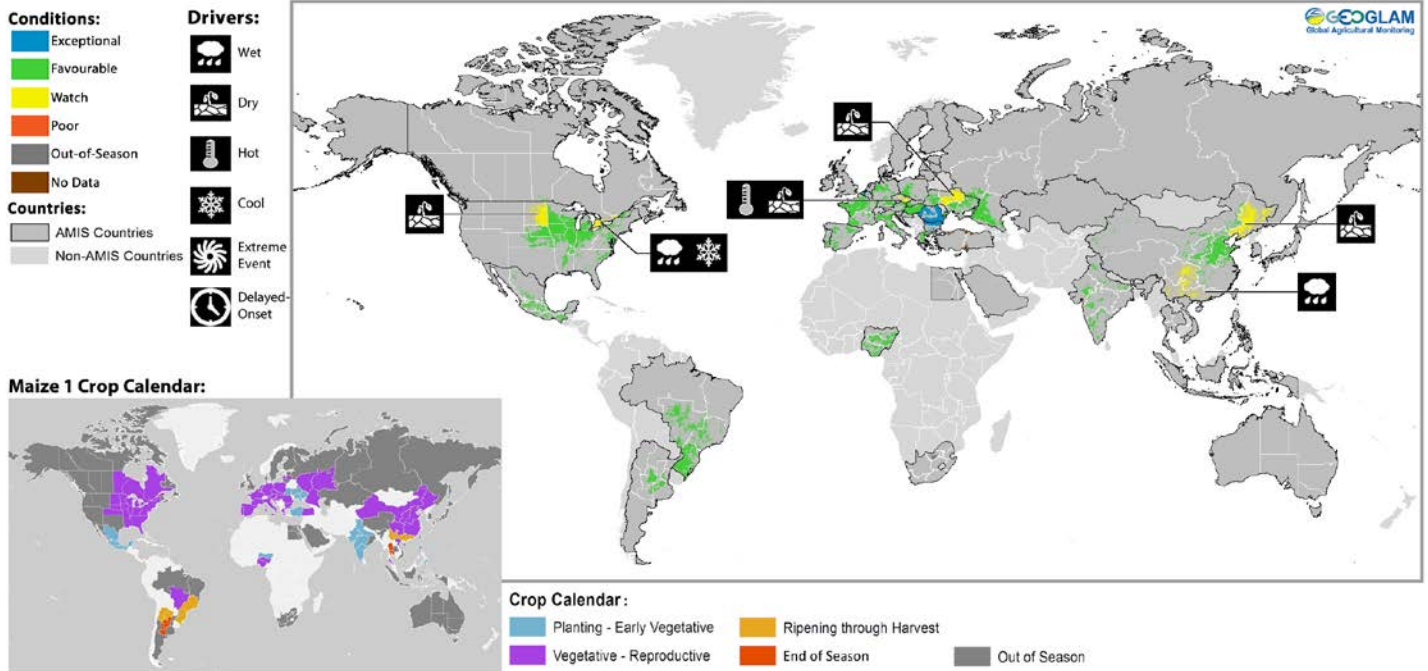
Spring Planted Wheat Conditions for AMIS Countries



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 June 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.

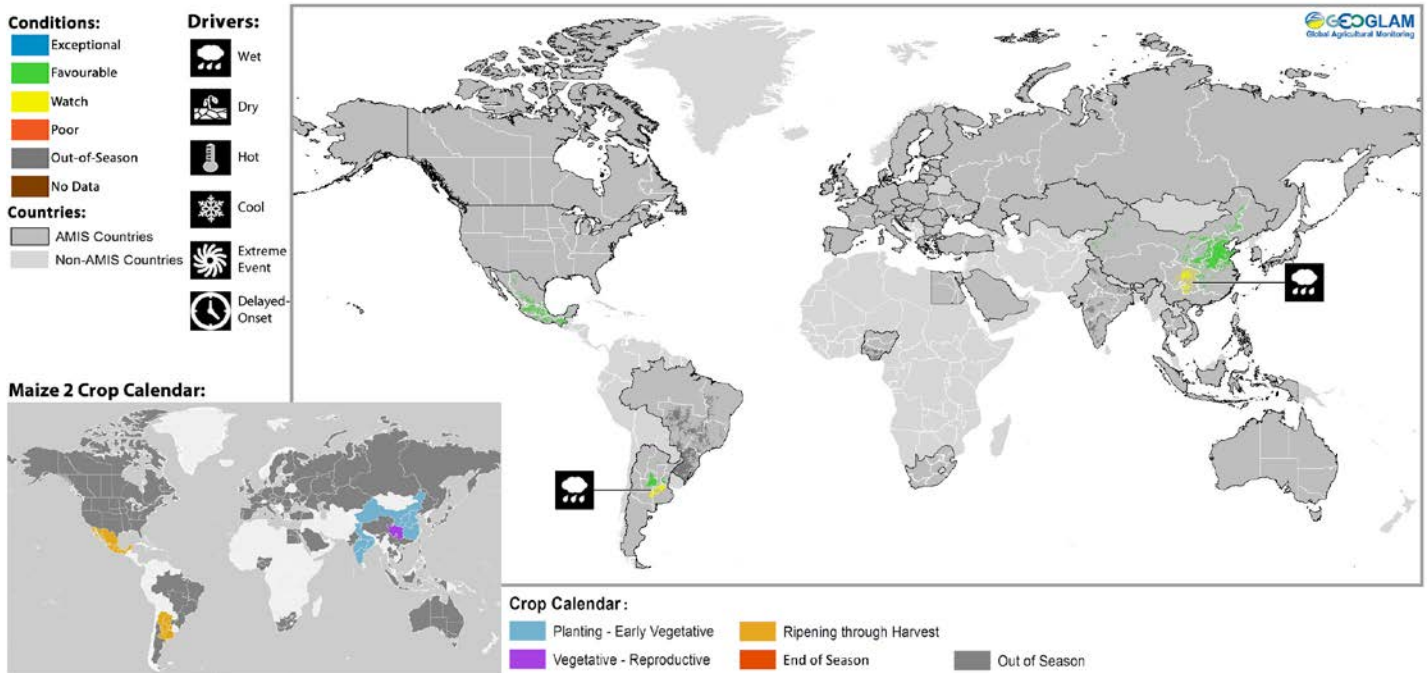
* Assessment based on information as of June 28th

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 June28th. 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.

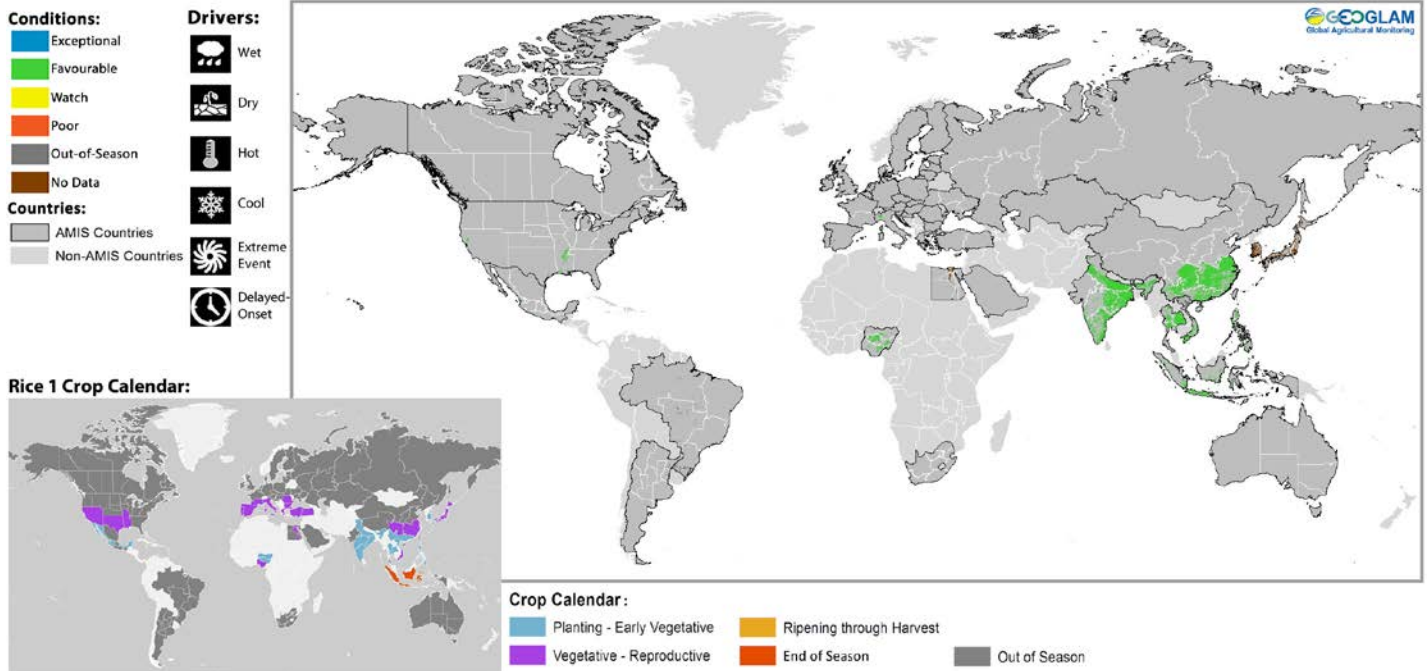
Maize 2 Conditions for AMIS Countries



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 June28th. 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.

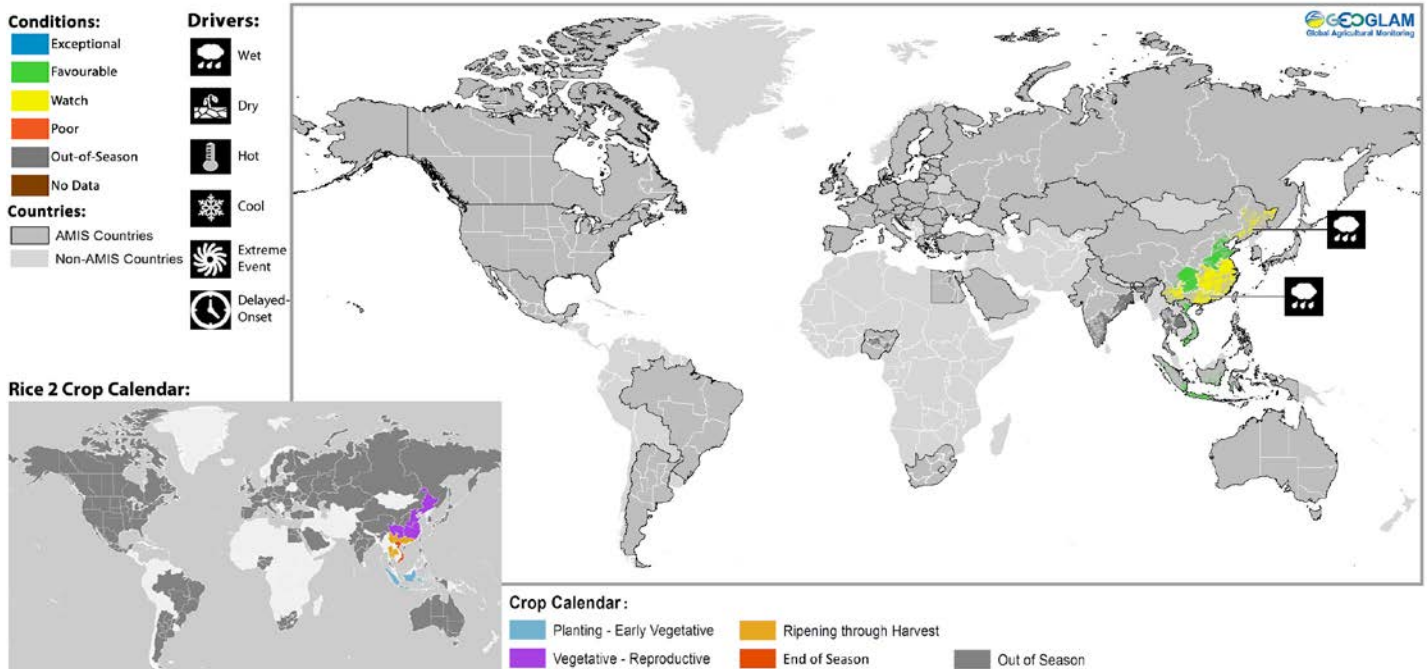
* Assessment based on information as of June28th

Rice 1 Conditions for AMIS Countries



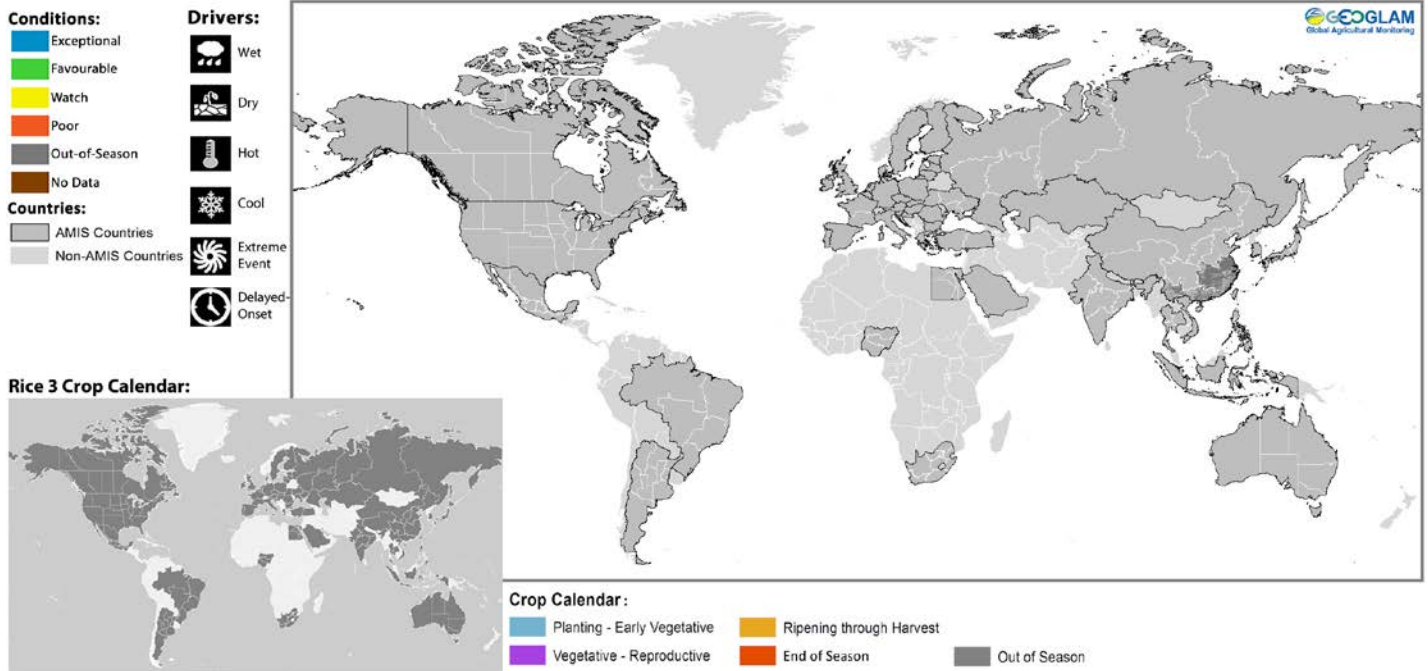
Rice 1 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of June28th. Where crops are in less than favourable conditions the climatic drivers responsible 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



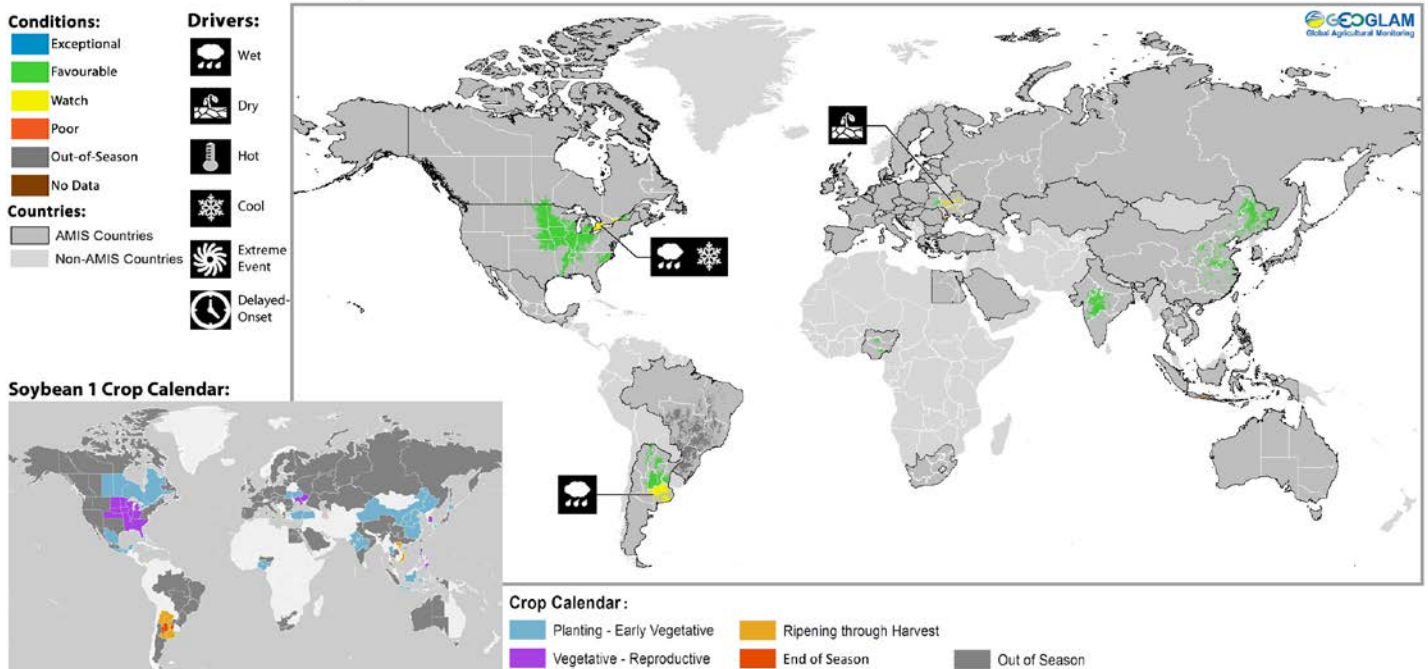
Rice 2 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of June28th. Where crops are in less than favourable conditions the climatic drivers responsible 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 June28th. 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.

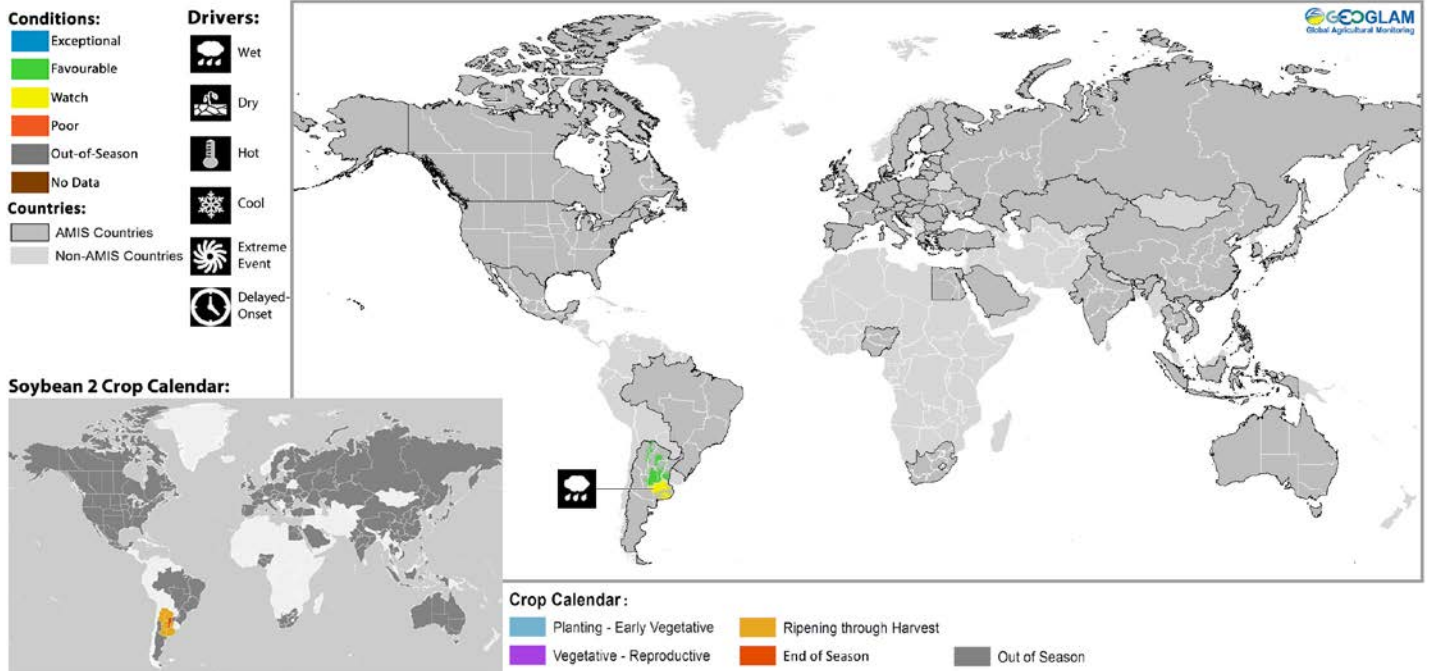
Soybean 1 Conditions for AMIS Countries



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 June28th. 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.

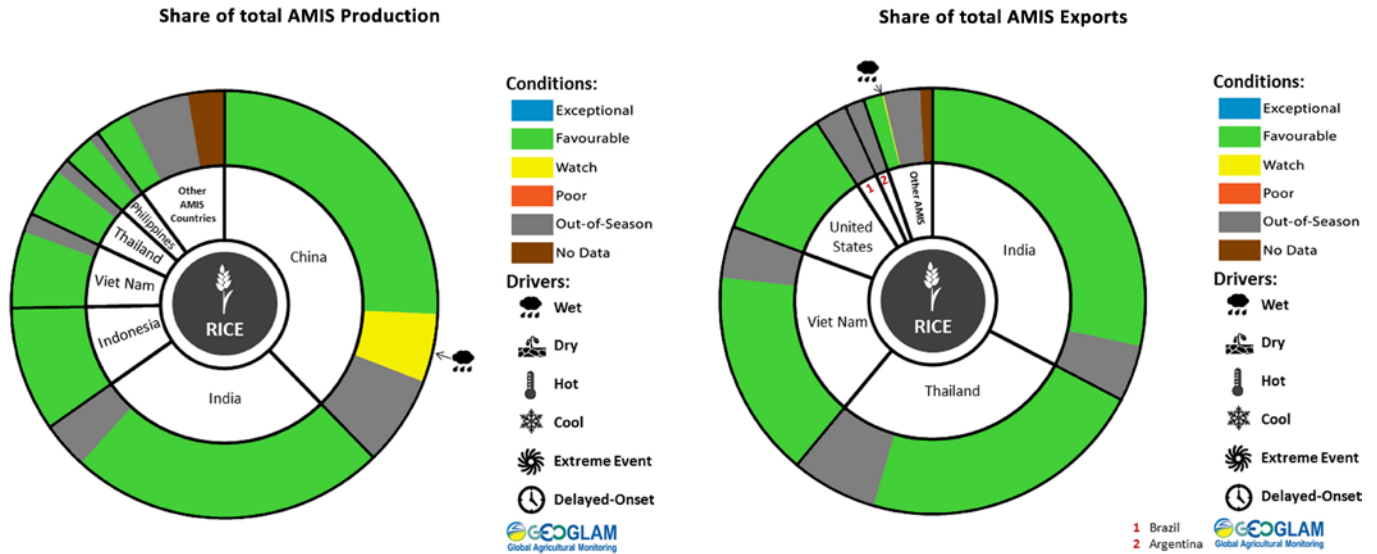
* Assessment based on information as of June28th

Soybean 2 Conditions for AMIS Countries

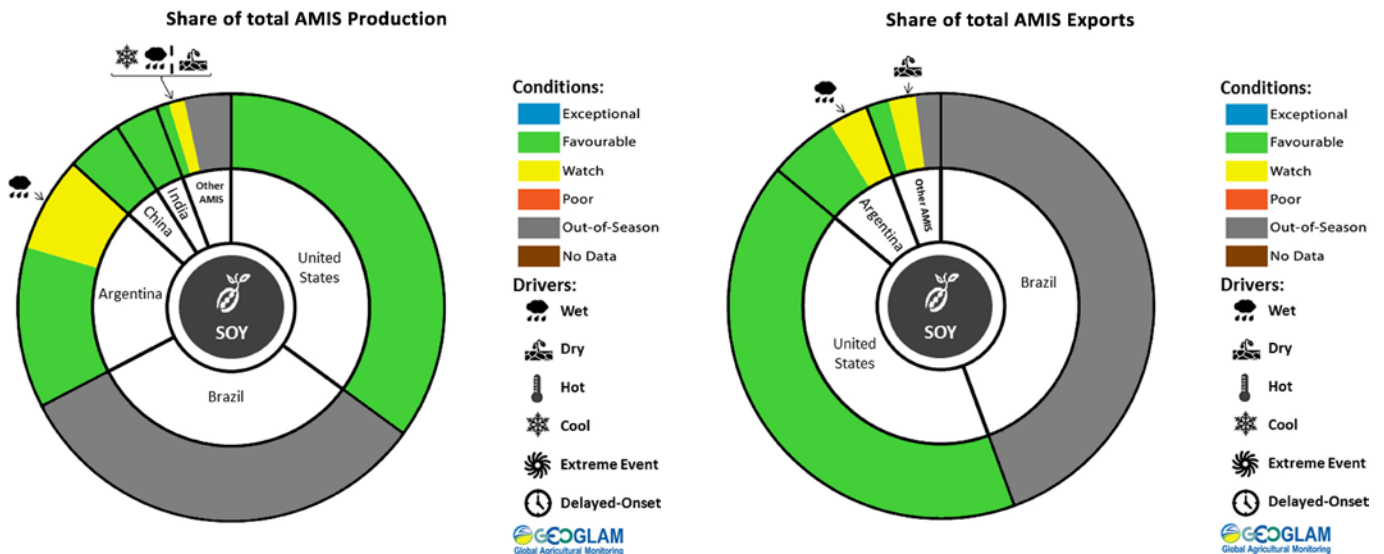


Soybean 2 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of June 28th. Where crops are in less than favourable conditions the climatic drivers responsible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



Soybean AMIS Comparisons



* Assessment based on information as of June 28th



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: Toshio Okumura

www.geoglam-crop-monitor.org

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Sources & Disclaimer

Sources and Disclaimers: The Crop Monitor assessment is conducted by GEOGLAM with inputs from the following partners (in alphabetical order): Argentina (Buenos Aires Grains Exchange, INTA, Agroindustry ministry), Asia Rice Countries (AFSIS, ASEAN+3 & Asia RiCE), Australia (ABARES & CSIRO), Brazil (CONAB & INPE), Canada (AAFC), China (CAS), EU (EC JRC MARS), Indonesia (LAPAN & MOA), International (CIMMYT, FAO GIEWS, IFPRI & IRRI), Japan (JAXA), Mexico (SIAP), Russian Federation (IKI), South Africa (ARC & GeoTerraImage & SANSa), Thailand (GISTDA & OAE), Ukraine (NASU-NSAU & UHMC), USA (NASA, UMD, USGS – FEWS NET, USDA (FAS, NASS)), Viet Nam (VAST & VIMHE-MARD). The findings and conclusions in this joint multiagency report are consensual statements from the GEOGLAM experts, and do not necessarily reflect those of the individual agencies represented by these experts.

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