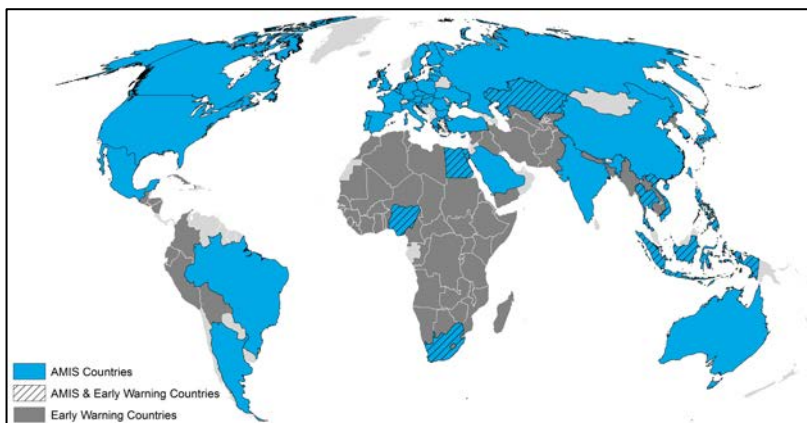


CROP MONITOR FOR AMIS

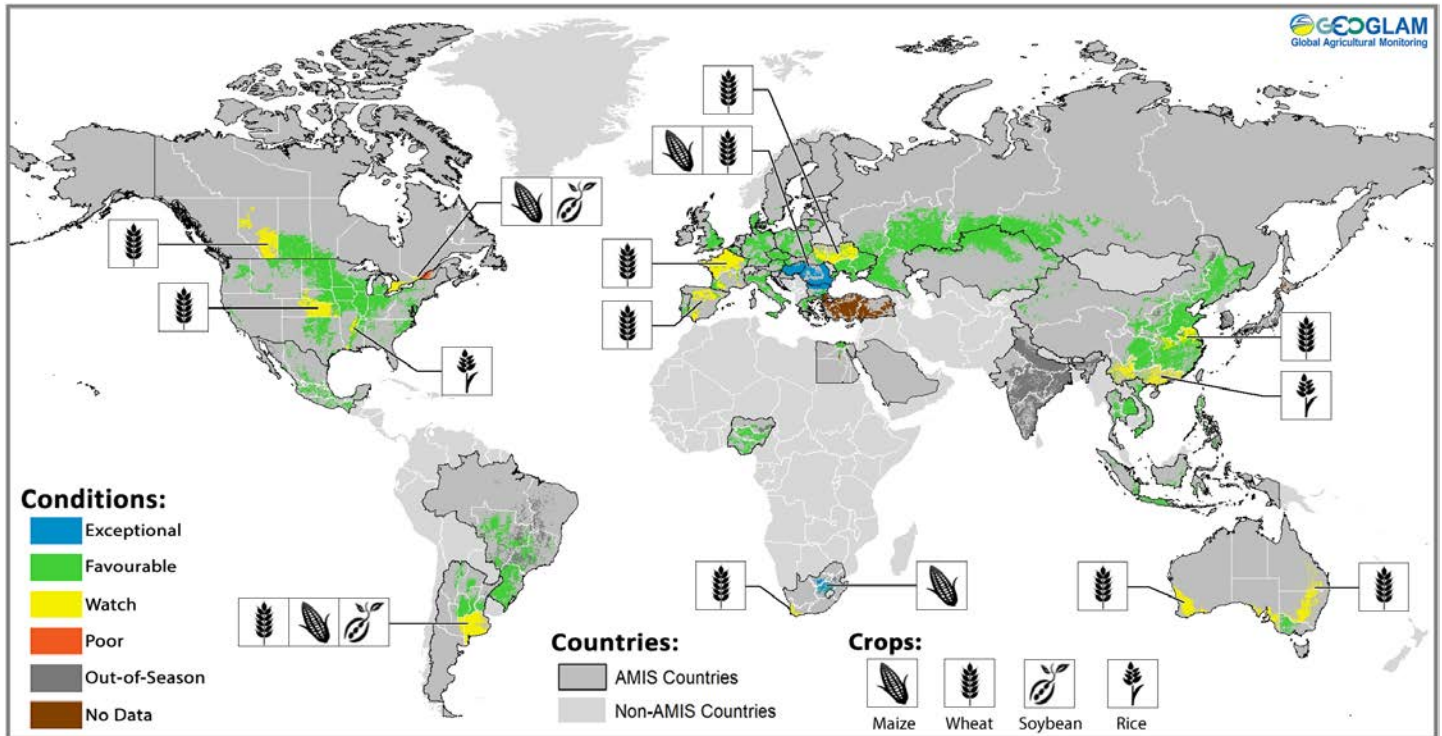
NO. 40

June 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 May28th)



Crop condition map synthesizing information for all four AMIS crops as of May28th. 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

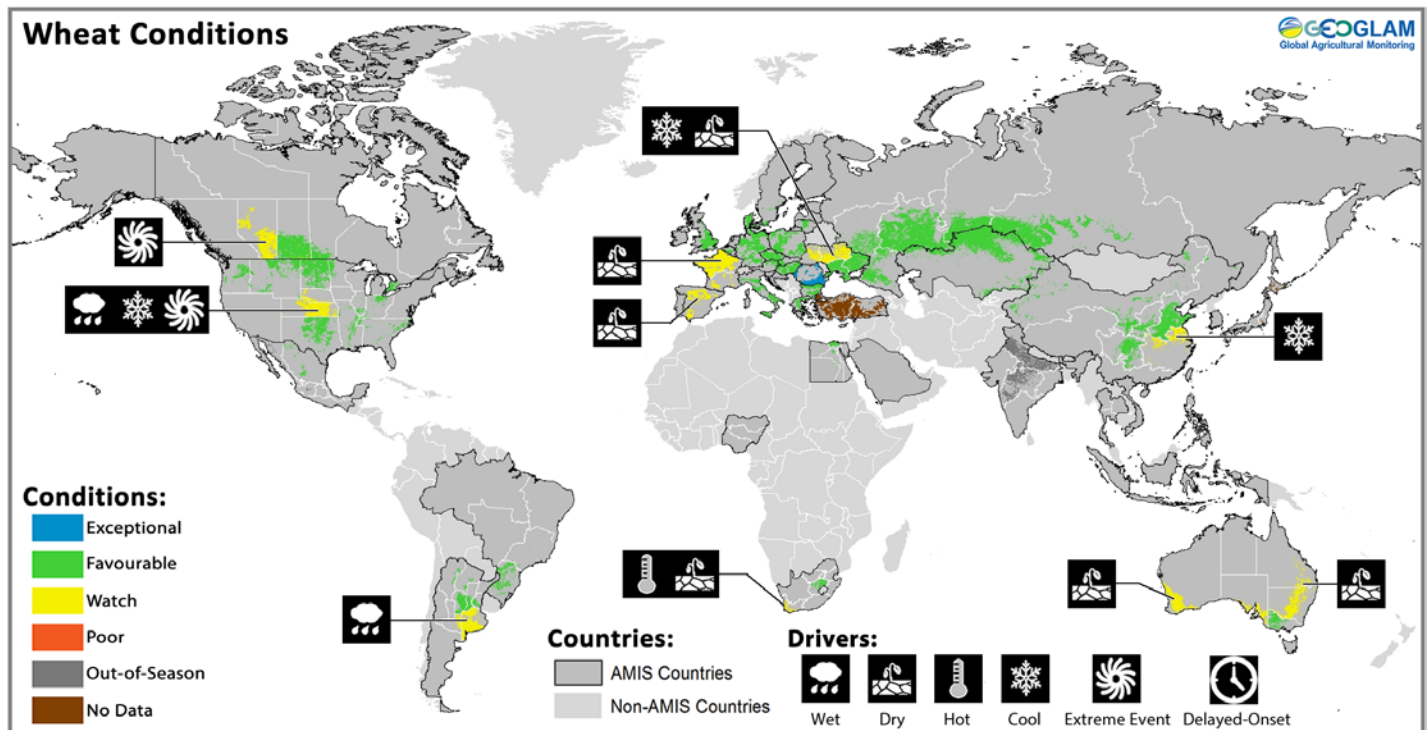
Wheat - In the northern hemisphere, wheat conditions remain mixed due to adverse weather that affected some primary growing regions within the US, Europe, China, Canada, and Ukraine, during a critical growing stage of the crops. In the southern hemisphere, wheat conditions are off to a mixed start in Australia, Argentina, and South Africa, though it is still early in the season.

Maize - In the northern hemisphere, sowing continues under overall favourable conditions except in Canada. In the southern hemisphere, the season is drawing to close. Harvest is ongoing with minor delays in Argentina. In Brazil, the second season is ending with a good expected crop. In South Africa a record crop is also anticipated.

Rice - Crop conditions in Asia are favourable across most of the region. In China and in the US there is some concern due to areas of heavy rainfall and flooding.

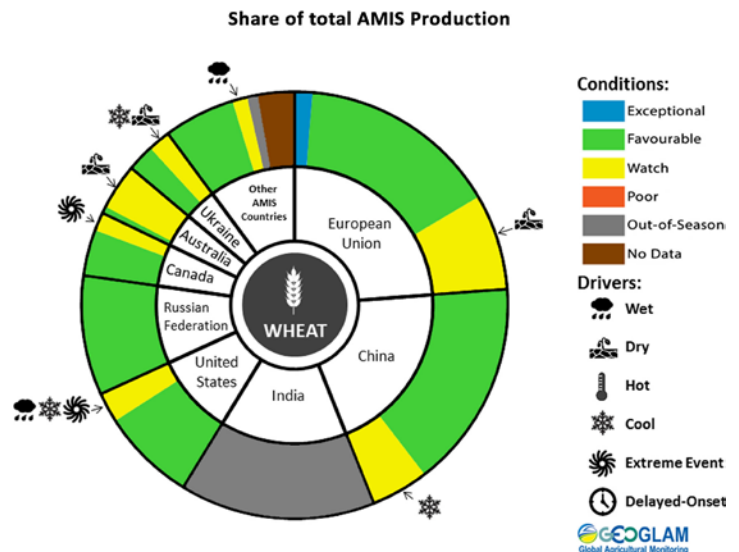
Soybeans - In the southern hemisphere, the season is drawing to a close with a good crop expected in Argentina despite some harvest delays and losses due to flooding. In the northern hemisphere, sowing is advancing under generally favourable conditions.

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 May 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.

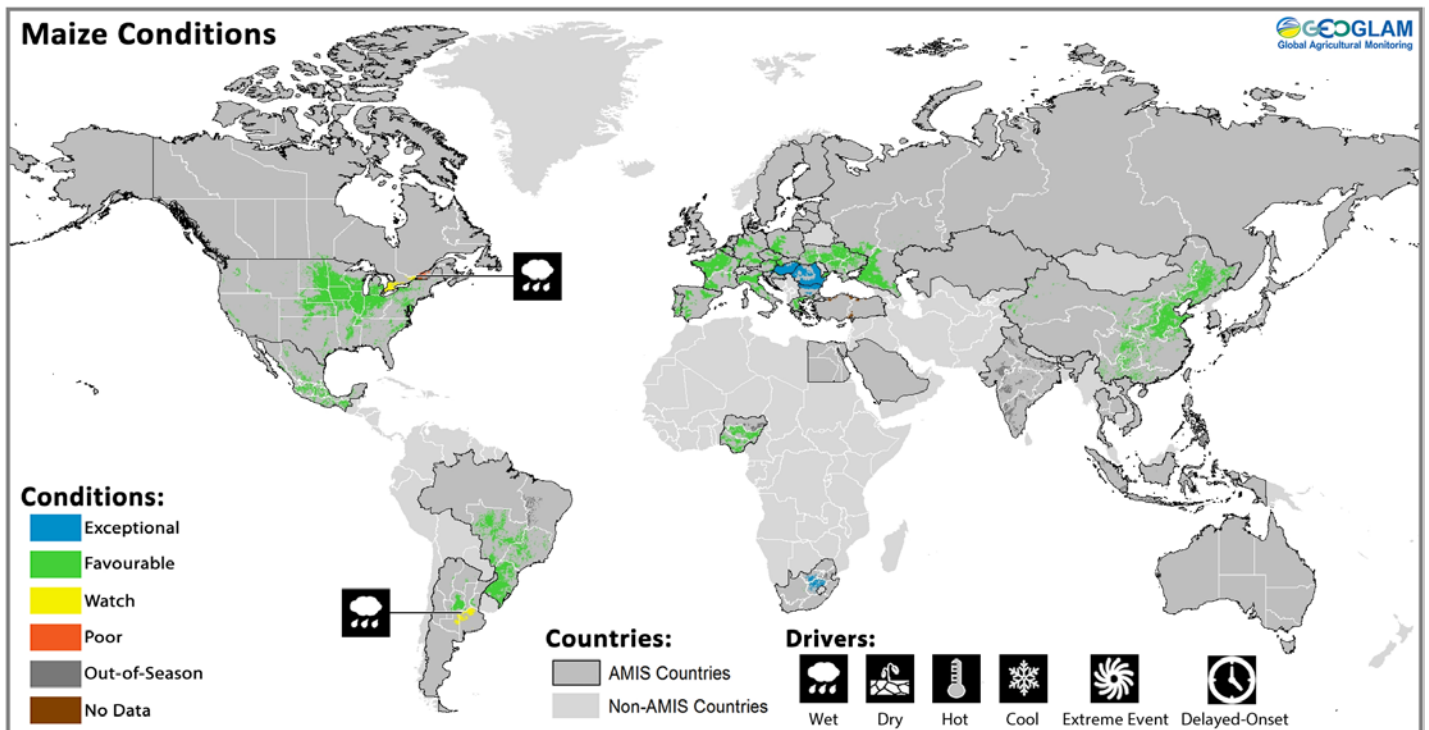
Wheat: In the northern hemisphere, the winter crop is mostly in late vegetative to reproductive stages (highly sensitive growth stages) and the spring crop is in planting to early vegetative stages. In the southern hemisphere, the crop is mostly in planting to vegetative stages. In the **EU**, dry and hot weather conditions hampered wheat growth and development in several regions, most notably in Spain and France, however overall expectations remain in-line with the average. In **China**, conditions are generally favourable for winter and spring wheat. However, there is some concern over central growing regions due to low temperatures. In the **US**, conditions are mostly favourable with the exception of the region around western Kansas (a primary growing region), where a significant winter storm occurred in late April. The extent to which the crop might have been damaged remains unclear and planted area is significantly down. In the **Russian Federation**, conditions are favourable for winter wheat development and spring wheat planting. In **Ukraine**, conditions are mixed as dry and cool conditions slowed crop development in central areas. In **Canada**, winter wheat is breaking dormancy with minimal winterkill except for in some minor production areas. Spring wheat planting is proceeding under generally favourable conditions with the exception of Alberta (a main productive region), where sowing is slowed due to excess moisture and field clearing. In **Australia**, dry conditions are present across most of the country as sowing is nearing completion.



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

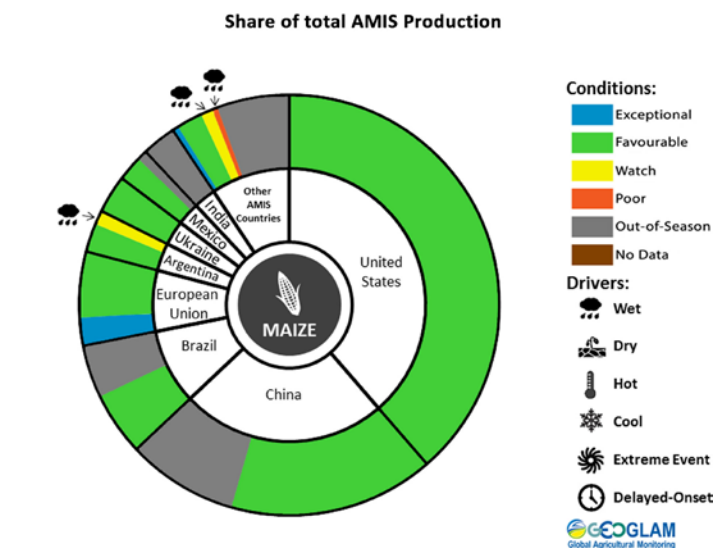
* Assessment based on information as of May 28th

Maize Conditions for AMIS Countries



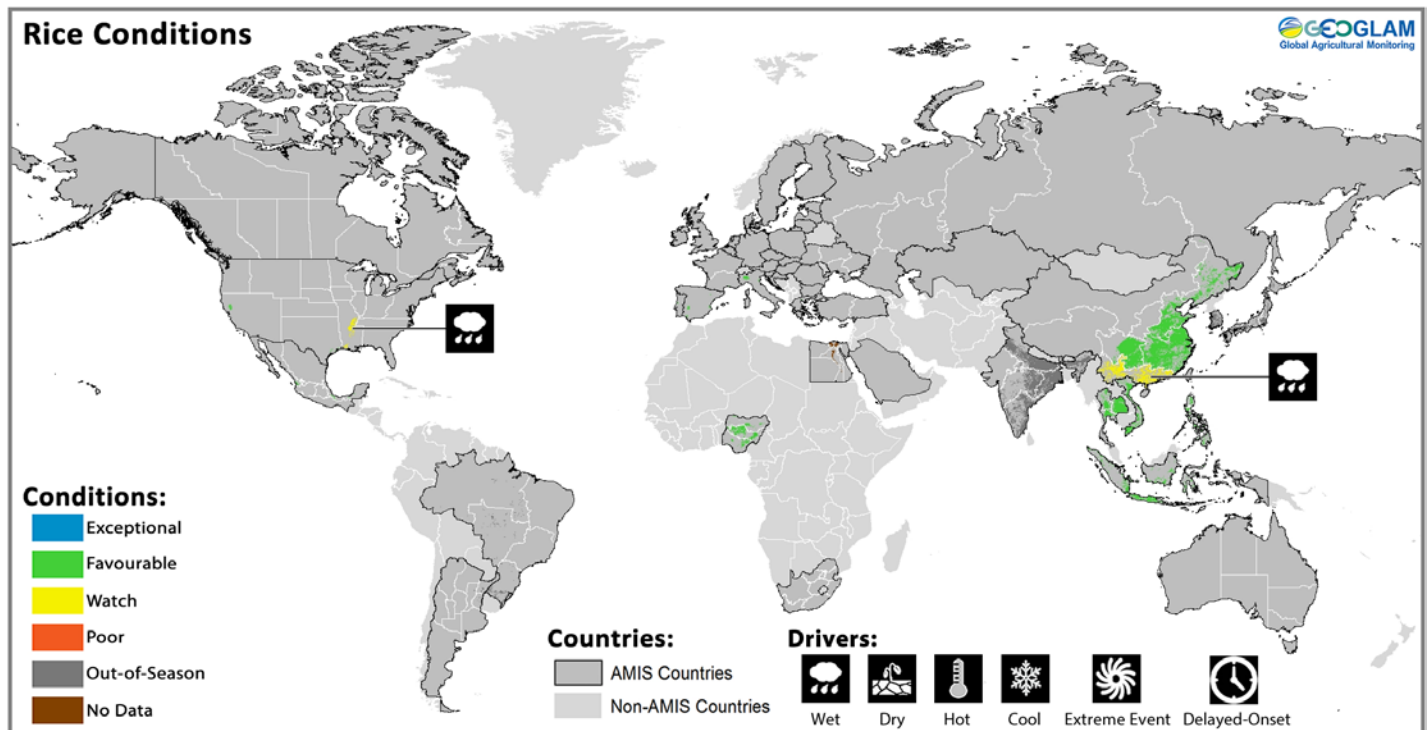
Maize crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of May 28th. Where crops are in other than favourable conditions the climatic drivers responsible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

Maize: Overall conditions in the northern hemisphere are favourable as sowing continues, while in the southern hemisphere harvest is ongoing. In the **US**, sowing is nearly complete and conditions are favourable at this early stage of the season. In **China**, conditions are favourable for both spring-planted and summer-planted crops, as sowing continues. In the **EU**, conditions are generally favourable with some areas in Eastern Europe under exceptional conditions. In **Ukraine**, sowing is complete with only localized areas of cold damage. In **Mexico**, conditions are favourable for both the spring-summer and autumn-winter crops. In **South Africa**, above-normal rain during much of summer together with a late onset of cold conditions during autumn is supporting an expectation for a record crop. In **Brazil**, conditions are favourable for the summer-planted maize as harvest begins. An increase in production compared to last year is expected due to an area increase. In **Argentina**, conditions are generally favourable though harvest is progressing slowly due to the prioritization of soybean harvest and to flooding in parts of the country.



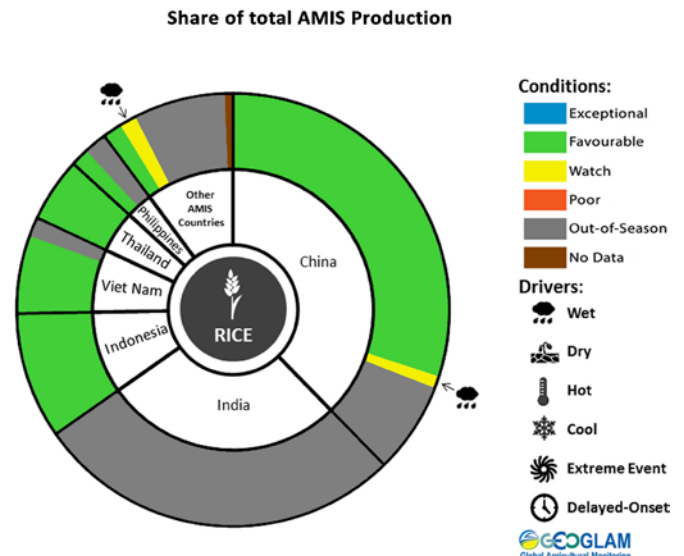
For detailed description of the pie chart please see box below.

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 May28th. Where crops are in other than favourable conditions the climatic drivers responsible for those conditions are displayed.

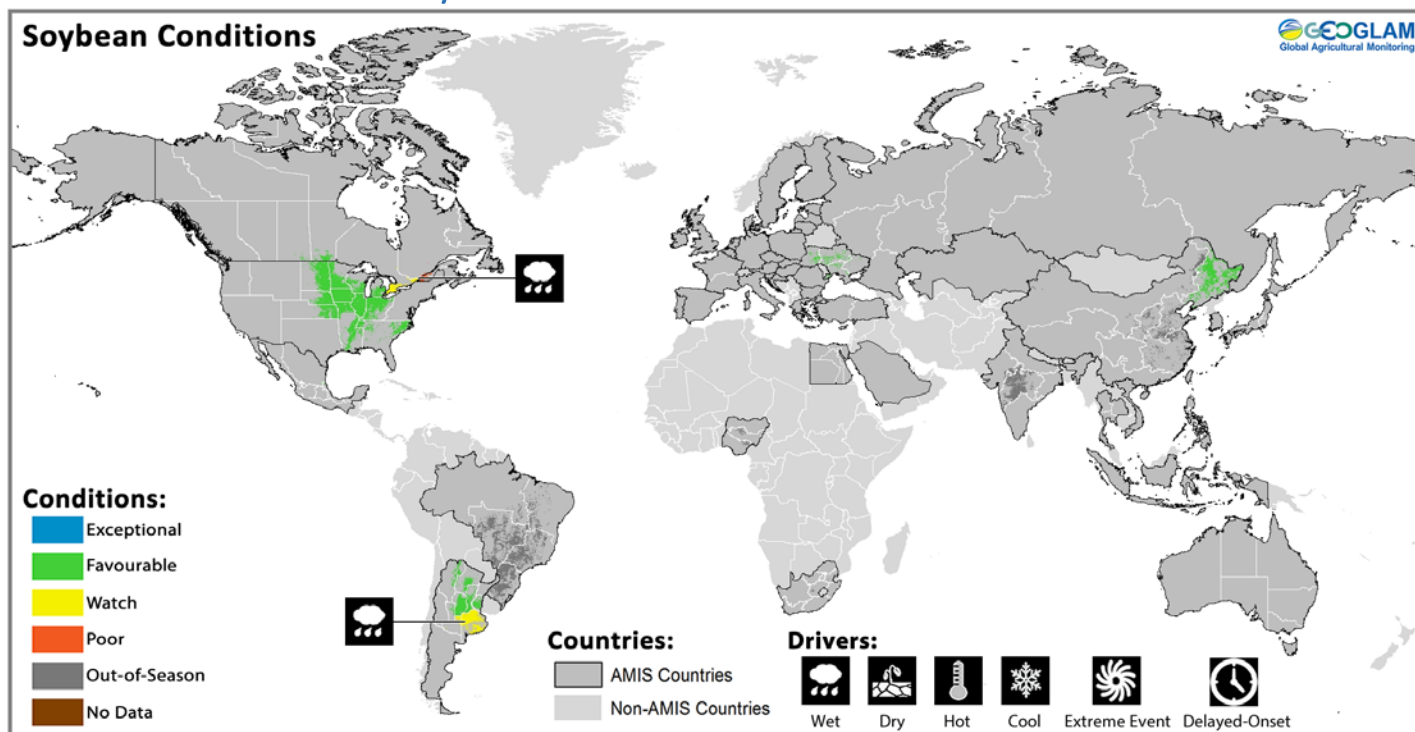
Rice: Conditions are mostly favourable throughout the major growing regions. In **China**, conditions are generally favourable for early rice and single-season rice with the exception of southern china, where there is concern due to heavy rainfall affecting early rice. In **Indonesia**, good yields are expected as harvest of the wet-season progresses, while dry-season rice sowing is off to a slow start due to the extended wet-season. In **Viet Nam**, sowing of winter-spring rice in the north was completed under favourable conditions. In the south, conditions are favourable as harvest begins for winter-spring rice and sowing commences for summer-autumn rice. In **Thailand**, harvest of dry-season rice is almost complete, good yields and increases in planted area are expected to result in increased production. Wet-season rice is undergoing field preparations with an increase in planted area forecast owing to sufficient rainfall. In the **Philippines**, harvest of dry-season rice is complete with favourable yields, and sowing of wet-season rice began under favourable conditions. In the **US**, conditions are generally favourable with the exception of some areas along the Mississippi river where there has been unusual flooding.



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

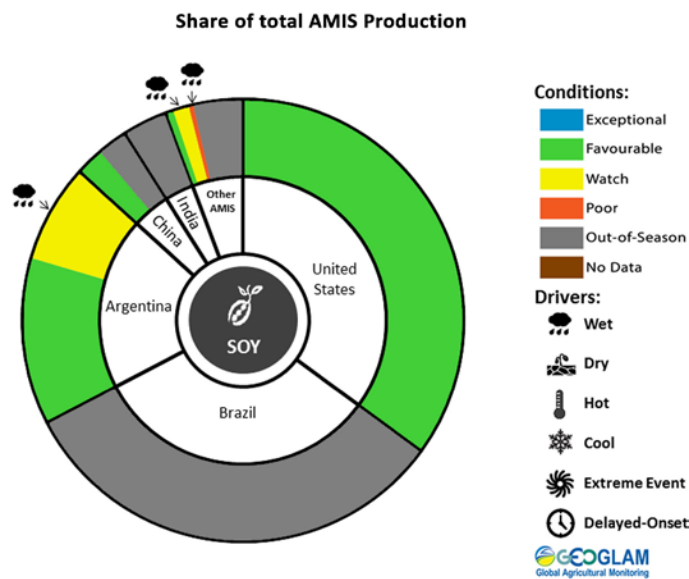
* Assessment based on information as of May28th

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 May28th. 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 northern hemisphere, there are no major concerns at this very early stage of the season. In the **US**, sowing is well underway and conditions are favourable throughout and in **China**, sowing is proceeding under favourable conditions. The southern hemisphere experienced an overall good season, which is now drawing to a close. **Argentina** is completing its harvest with some delays due to flooding. Production prospects remain positive owing to good yields, which are expected to offset the losses from flooding.



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 June 8th 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 May28th

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.

Conditions:

	Exceptional
	Favourable
	Watch
	Poor
	Out-of-Season
	No Data

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

Drivers:

These represent the key climatic drivers that are having an impact on crop condition status. They 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

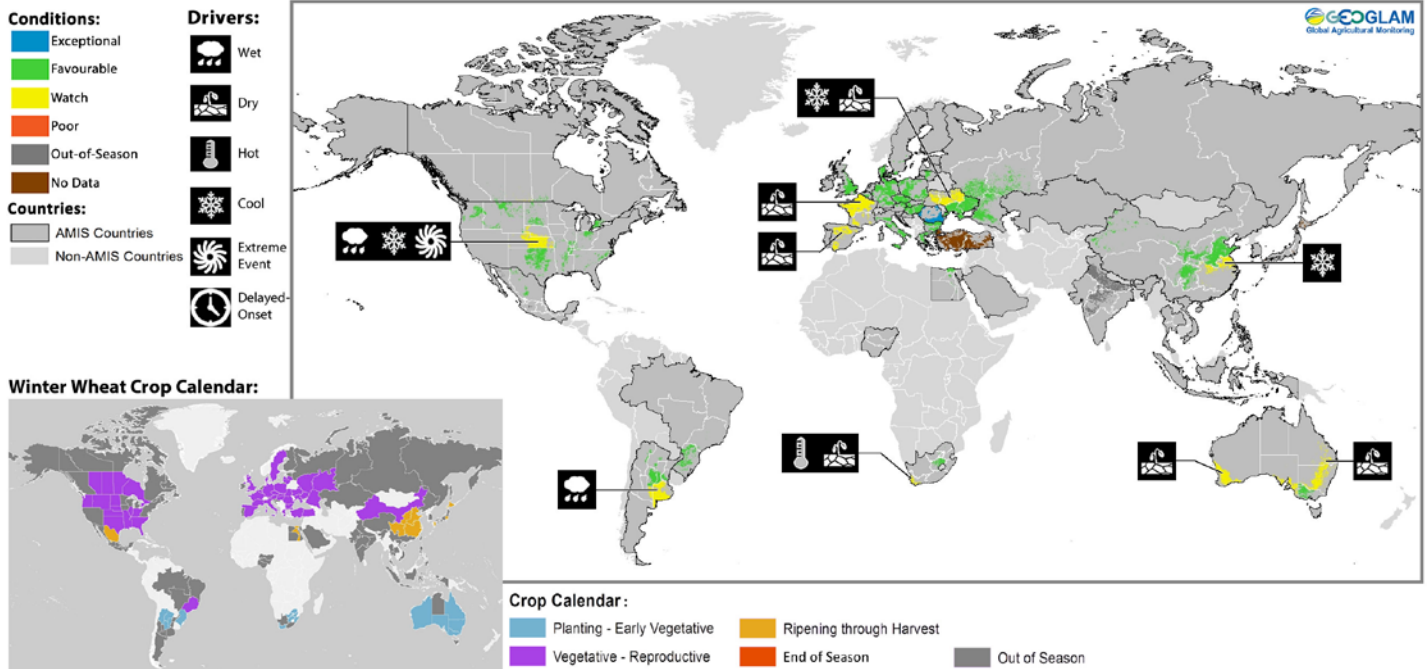
Sources & Disclaimer

Sources and Disclaimers: The Crop Monitor assessment is conducted by GEOGLAM with inputs from the following partners (in alphabetical order): Argentina (Buenos Aires Grains Exchange, INTA), Asia Rice Countries (AFSIS, ASEAN+3 & Asia RiCE), Australia (ABARES & CSIRO), Brazil (CONAB & INPE), Canada (AAFC), China (CAS), EU (EC JRC MARS), Indonesia (LAPAN & MOA), International (CIMMYT, FAO 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.

More detailed information on the GEOGLAM crop assessments is available at www.geoglam-crop-monitor.org

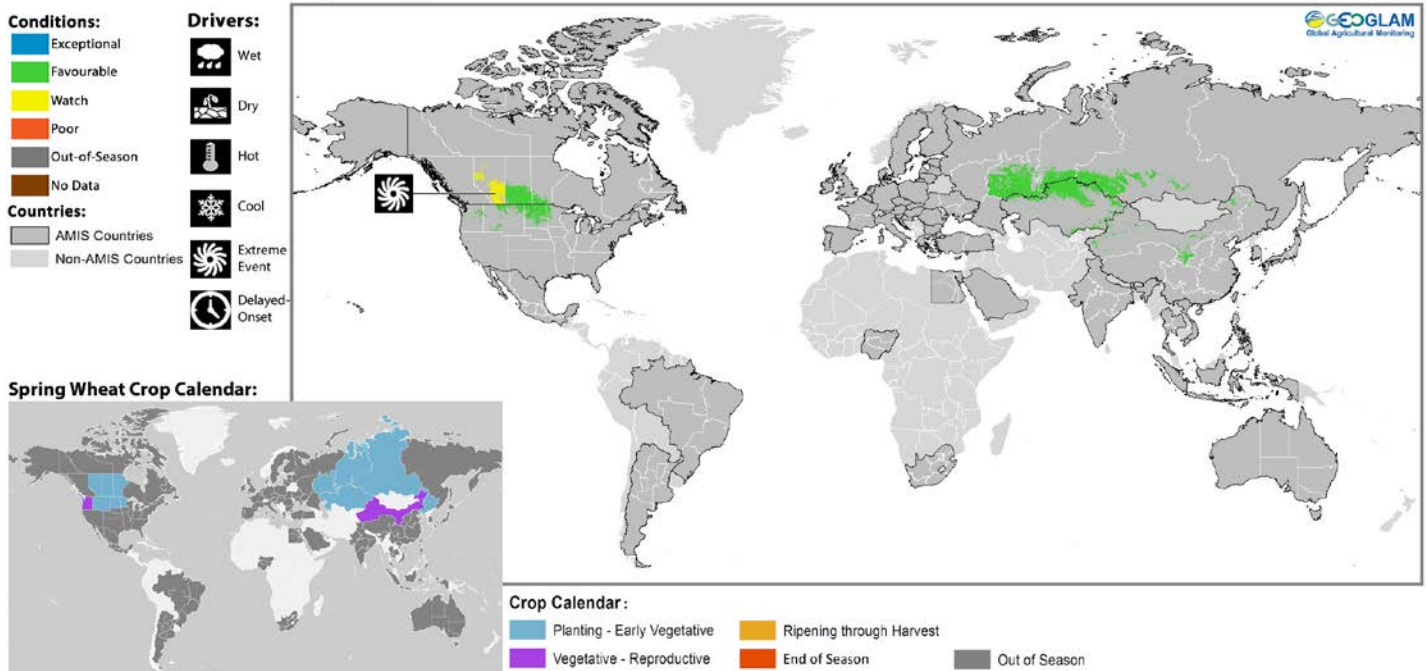
Appendix 2: Crop Season Specific Maps & Pie Charts

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 May28th. 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.

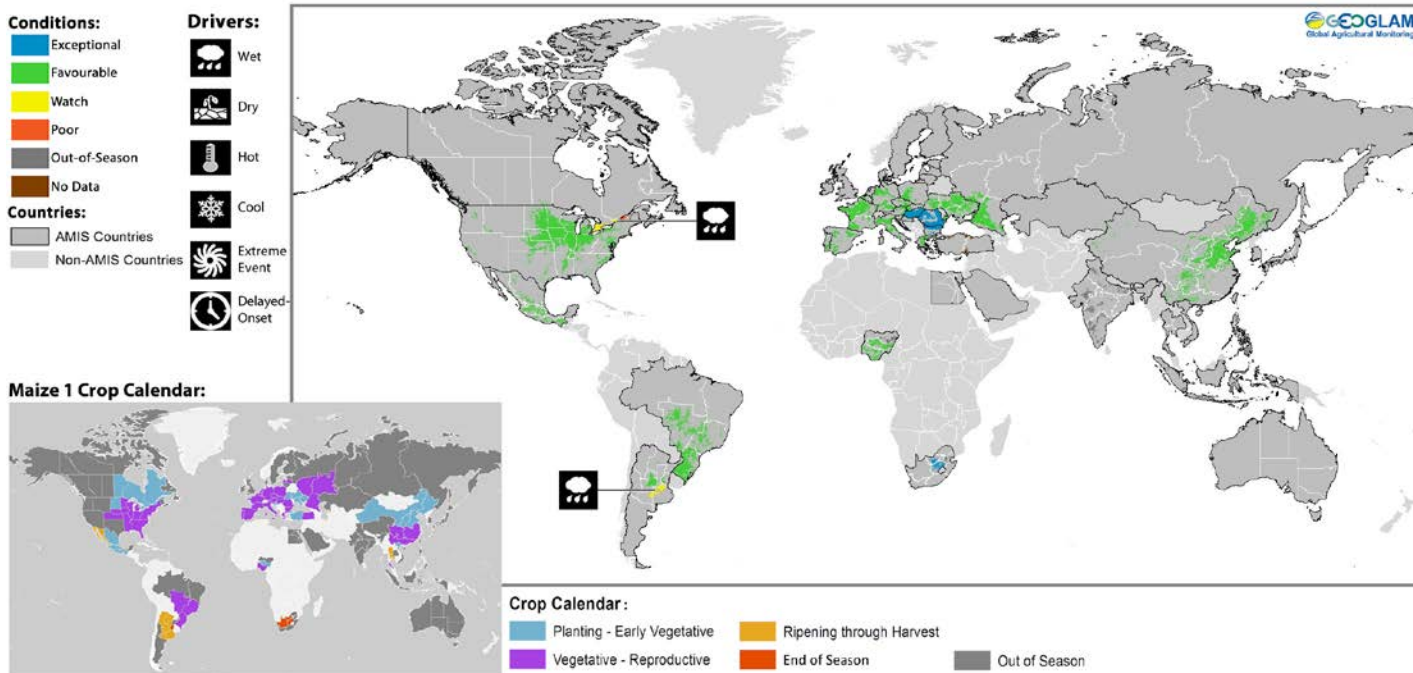
Spring Planted Wheat Conditions for AMIS Countries



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 May28th. 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.

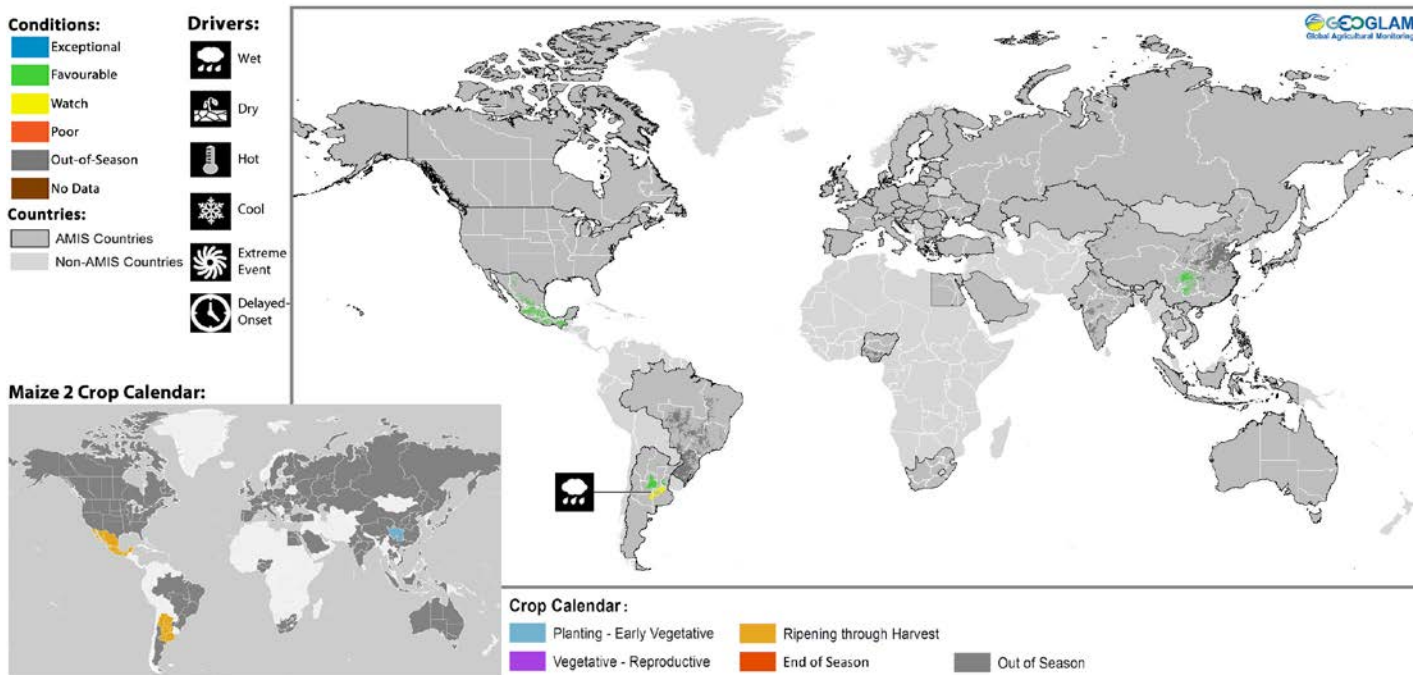
* Assessment based on information as of May28th

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 May28th. 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.

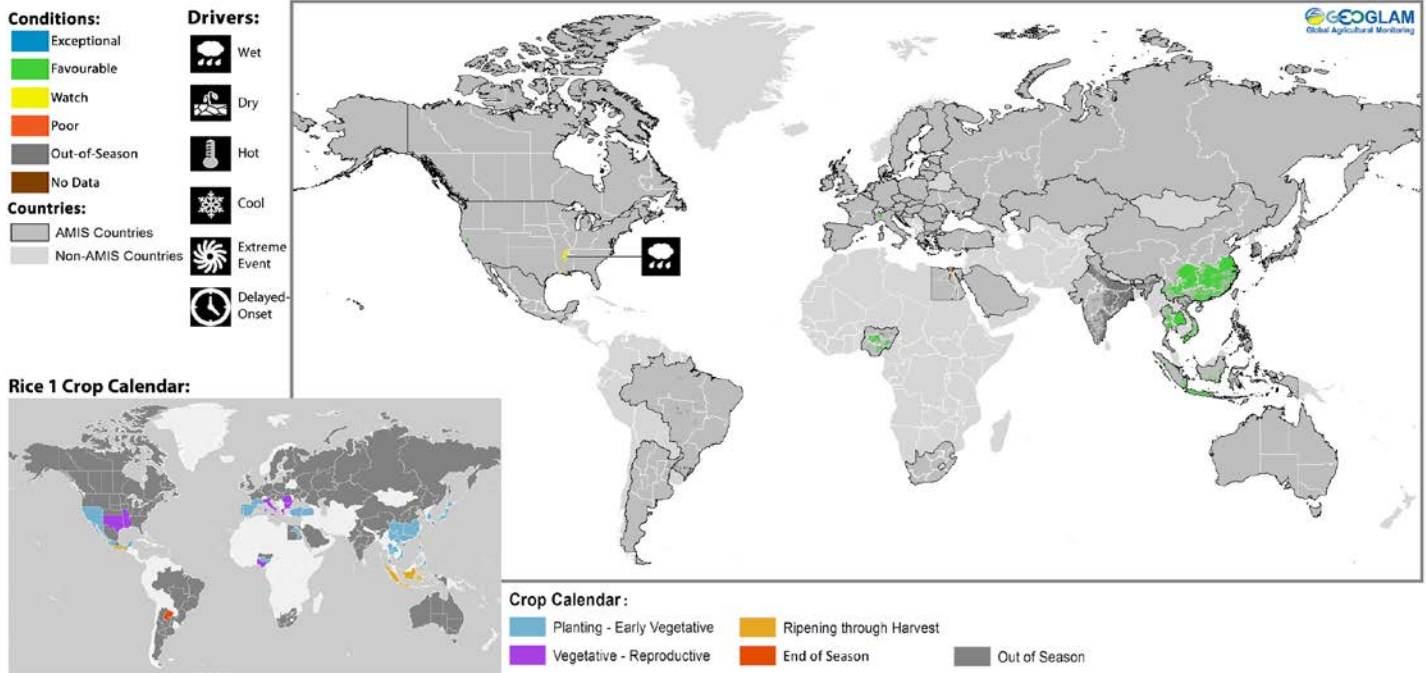
Maize 2 Conditions for AMIS Countries



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 May28th. 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.

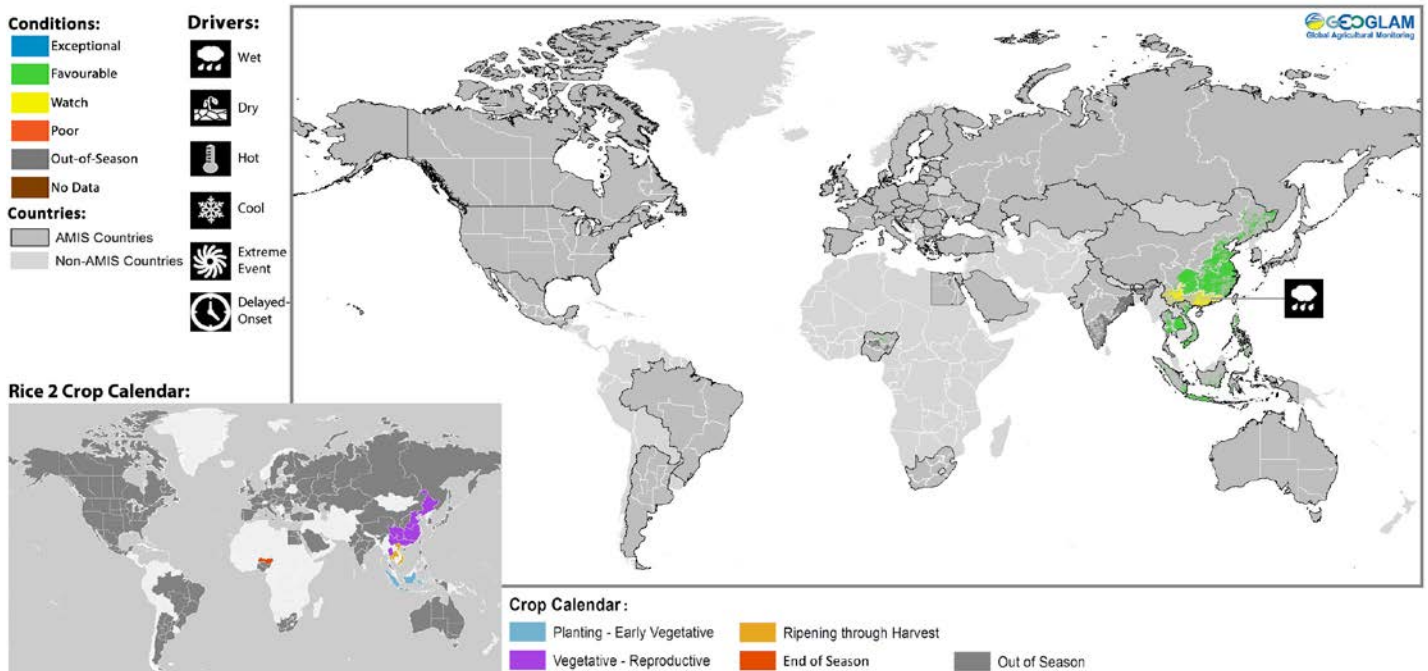
* Assessment based on information as of May28th

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 May28th. 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.

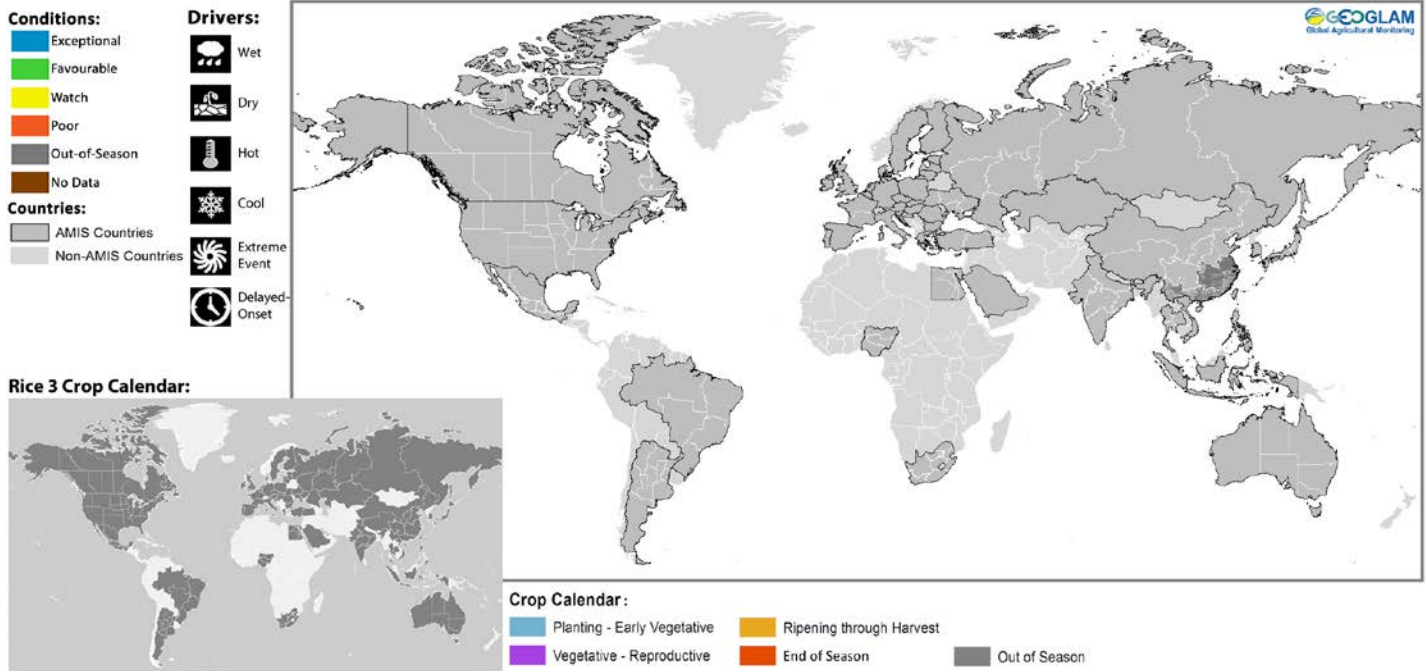
Rice 2 Conditions for AMIS Countries



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 May28th. 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.

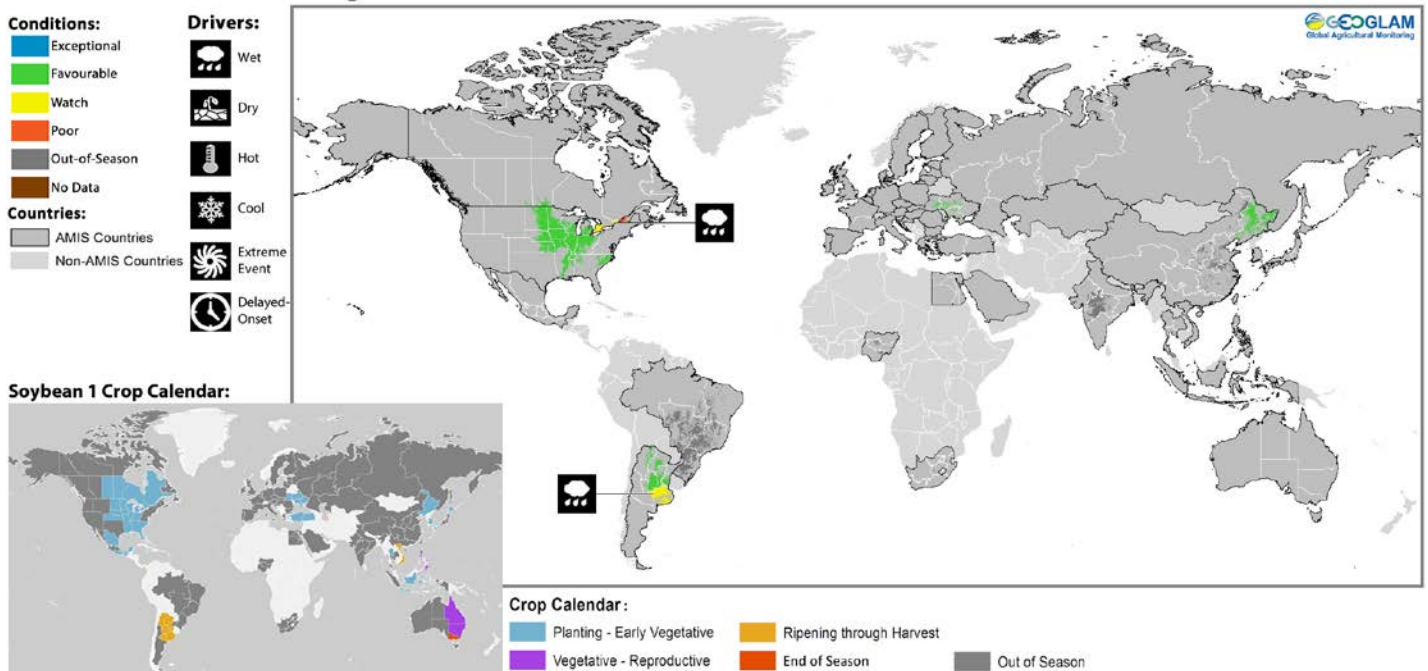
* Assessment based on information as of May28th

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 May28th. 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.

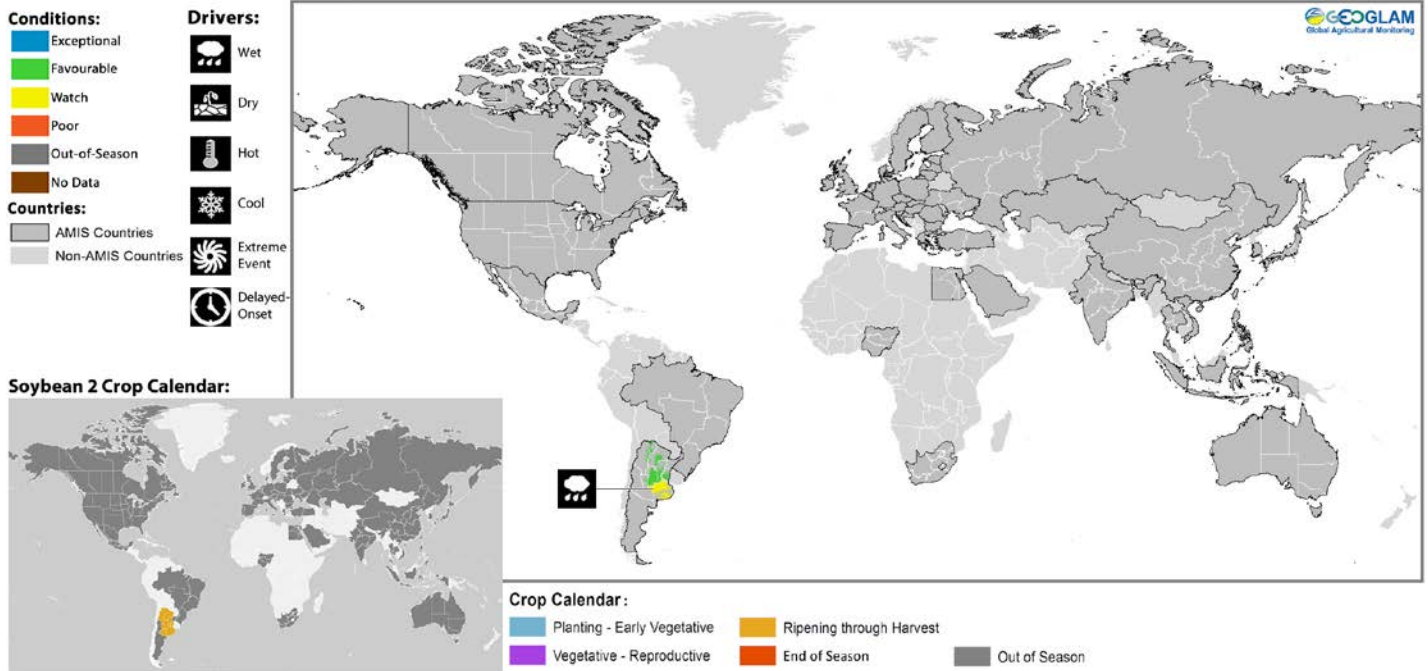
Soybean 1 Conditions for AMIS Countries



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 May28th. 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.

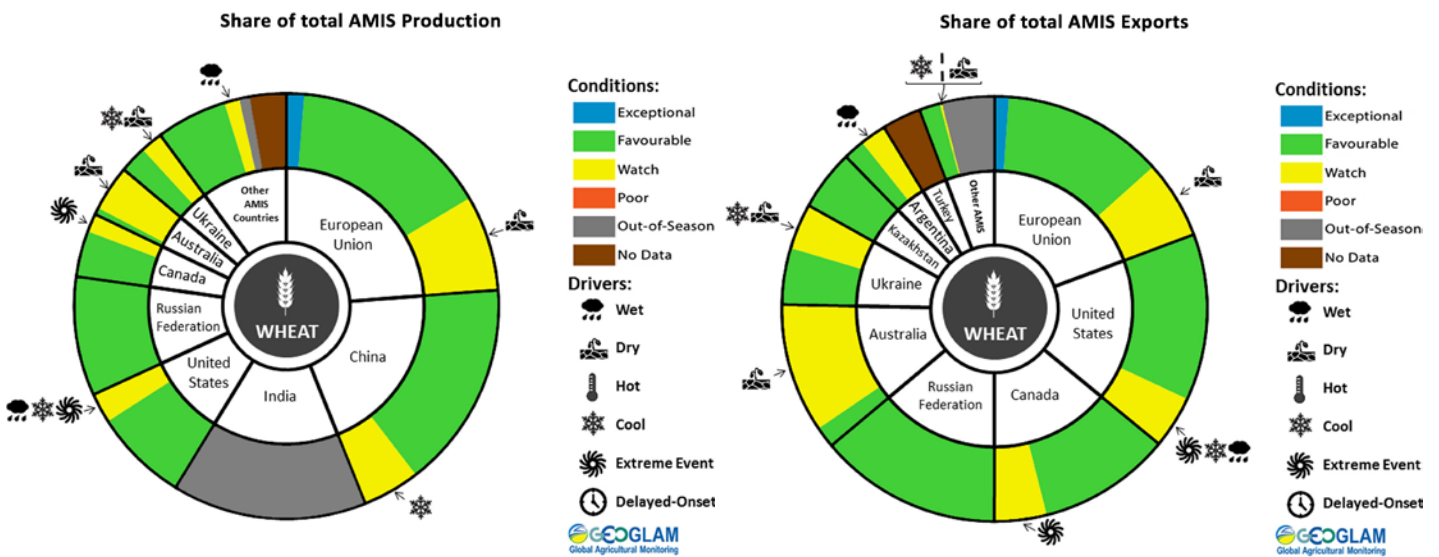
* Assessment based on information as of May28th

Soybean 2 Conditions for AMIS Countries



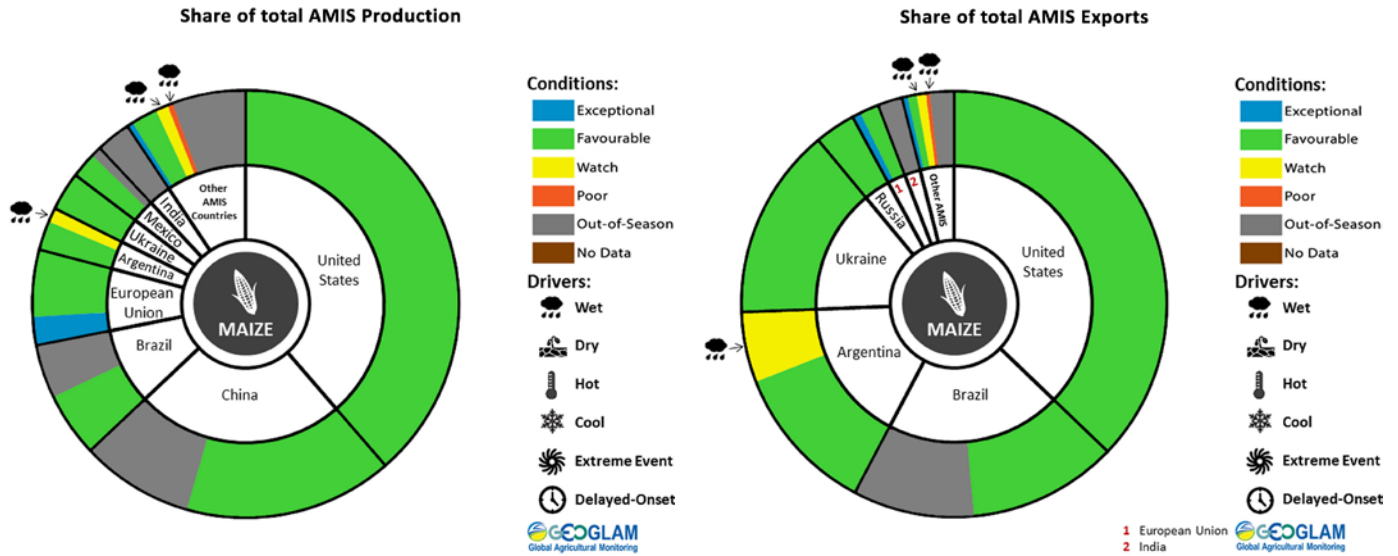
Soybean 2 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of May28th. Where crops are in less than favourable conditions the climatic drivers responsible for those conditions are displayed. The crop calendar is provided as a point of reference to provide information on what part of the life cycle the crops are currently in for each area.

Wheat AMIS Comparisons

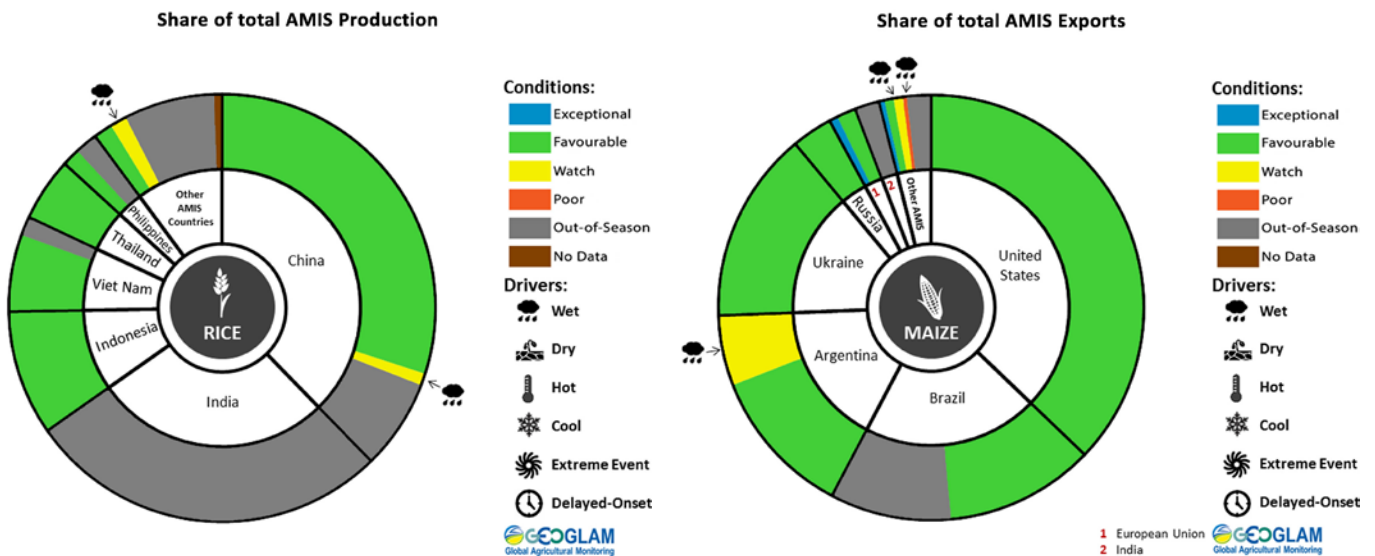


* Assessment based on information as of May28th

Maize AMIS Comparisons

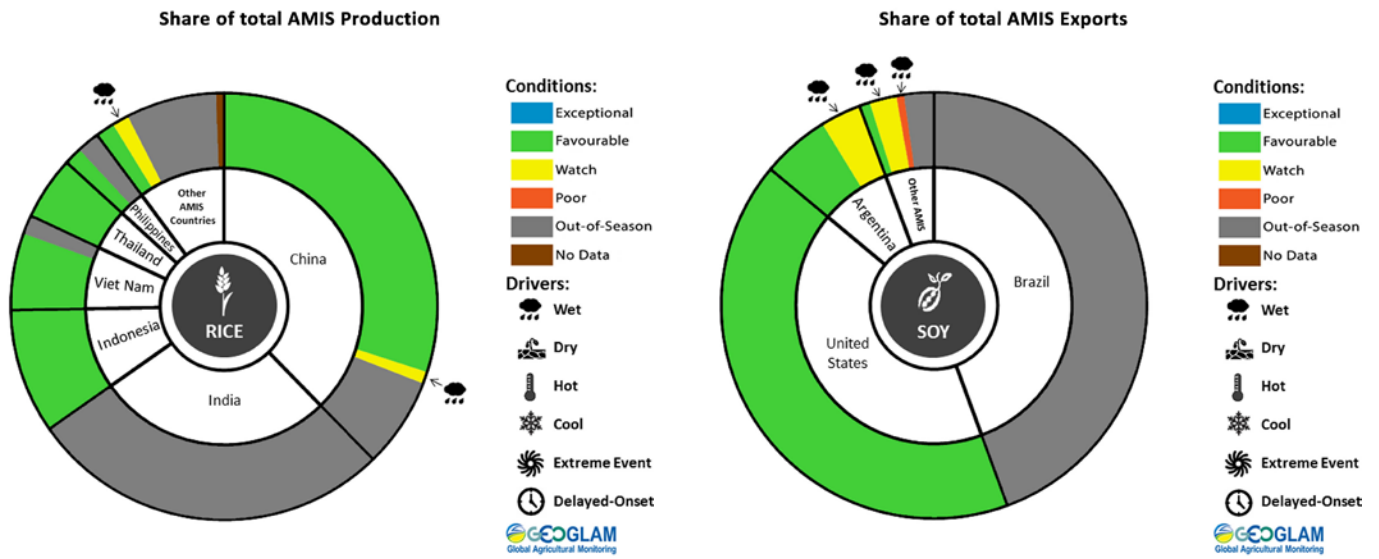


Rice AMIS Comparisons



* Assessment based on information as of May28th

Soybean AMIS Comparisons



* Assessment based on information as of May 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: Inbal Becker-Reshef

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