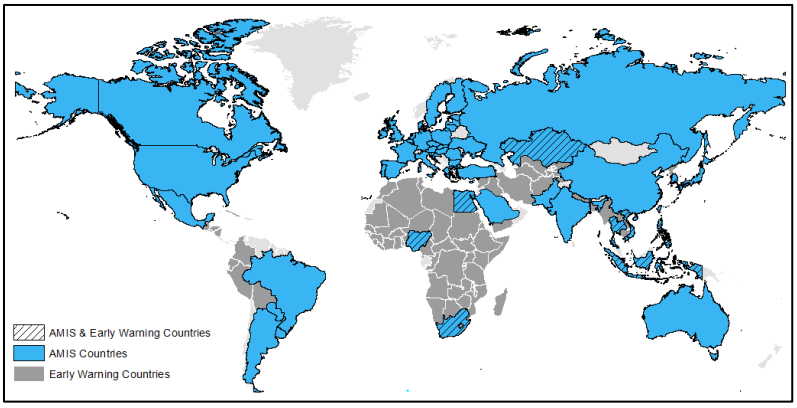
CROP MONITOR FOR **AMIS**

NO. 36

February 2017

The Group on Earth Observations' Global Agricultural Monitoring (GEOGLAM) initiative developed the Crop Monitor whose objection 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.



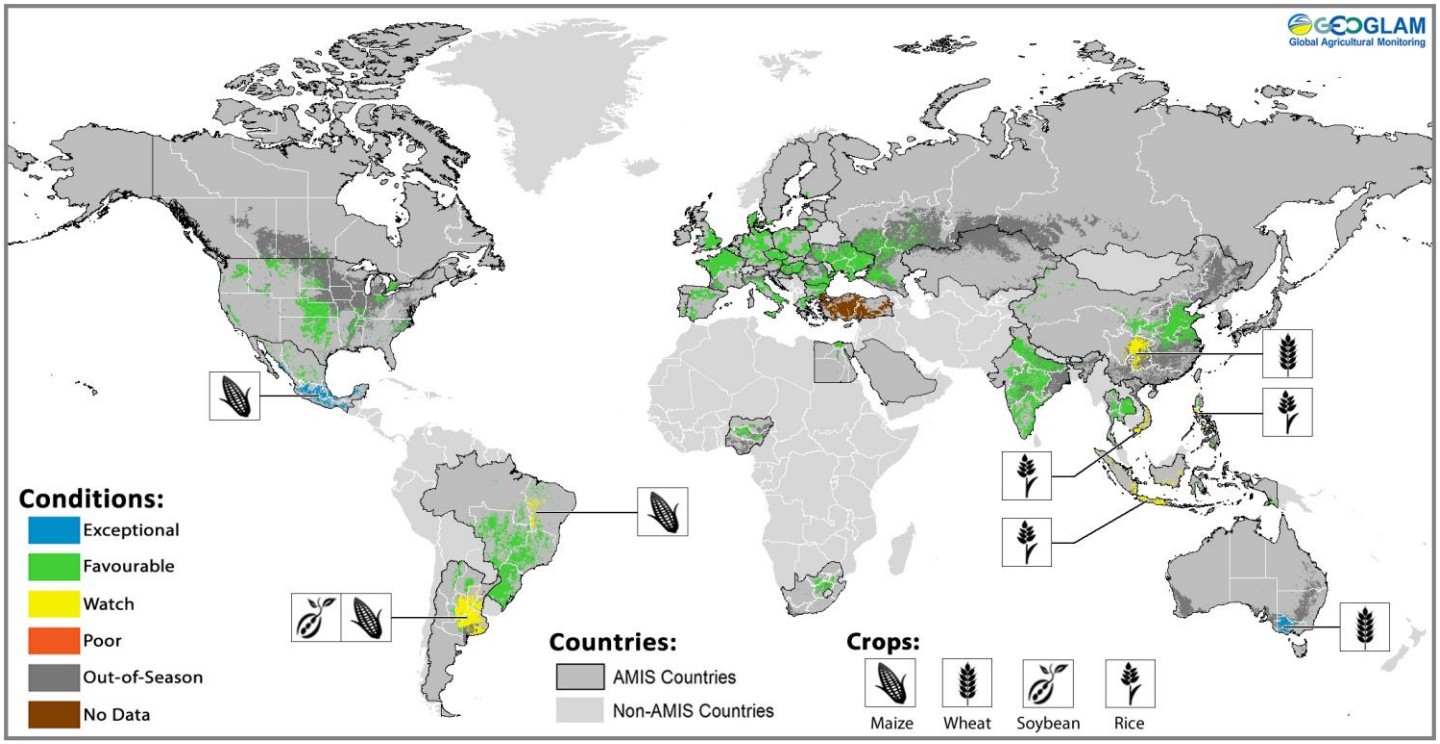
AMIS Agricultural Market Information System

GEO GROUP ON EARTH OBSERVATIONS

Crop Monitor a geoglam initiative

GEOGLAM Global Agricultural Monitoring

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



Crop condition map synthesizing information for all four AMIS crops as of January 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 is in dormancy in most countries under generally favourable conditions. In the southern hemisphere, harvest is almost complete under favourable conditions in South Africa and most of Argentina. Australia experienced exceptionally good weather conditions over large production areas with beneficial rains throughout the season and a bumper crop has been harvested.

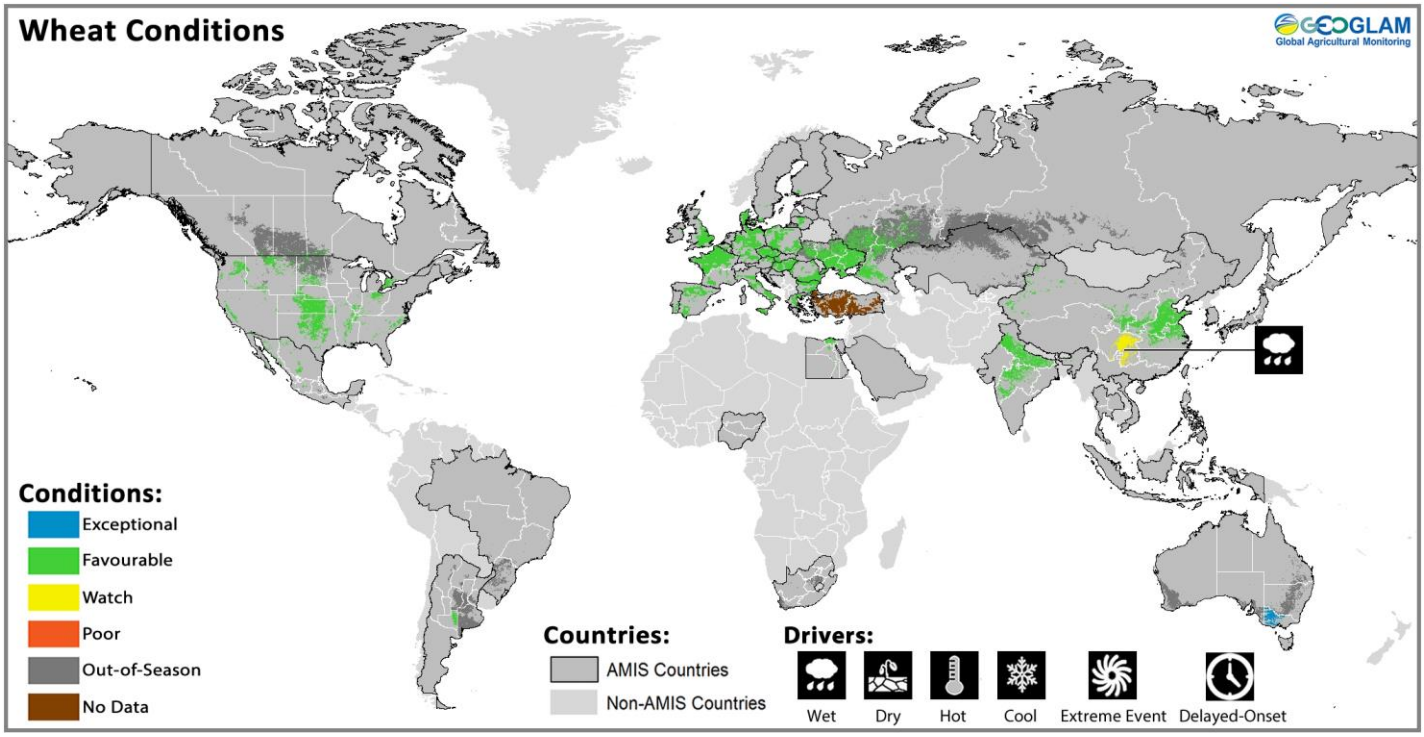
Maize - In the northern hemisphere maize is mostly out of season. In the southern hemisphere, conditions are generally favorable in Brazil, Argentina, and South Africa with only minor areas of dry or wet conditions.

Rice - The growing season of main crops is mostly over in the majority of Southeast Asia. The Rabi crop in India, and the dry season crop in Thailand are in favourable conditions. In Indonesia, harvest of the early planted main crops has begun with concerns over final yields due to a lack of sunlight during critical growing stages. Planting of the dry season crop has begun in Viet Nam and the Philippines under mixed conditions.

Soybeans - In the southern hemisphere, growing conditions in Brazil are favourable and harvesting has already started in some areas. In Argentina, conditions are mixed for both early and late planted crops owing to excessive rainfall in the central regions and dry conditions in the south.

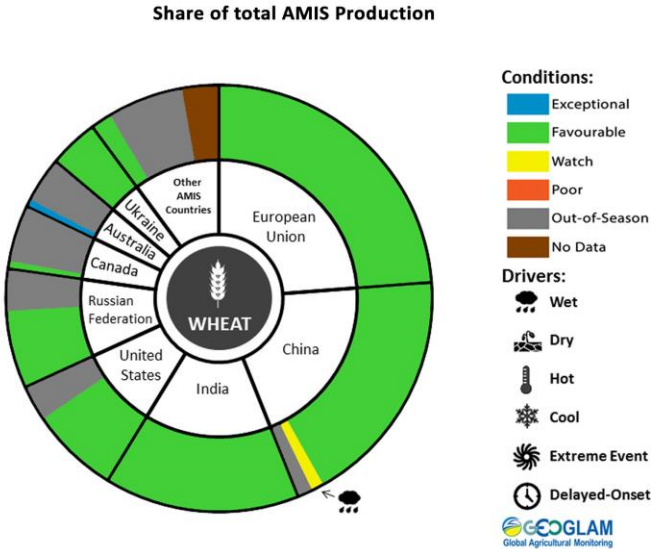
* Assessment based on information as of January 28th

Wheat Conditions for AMIS Countries



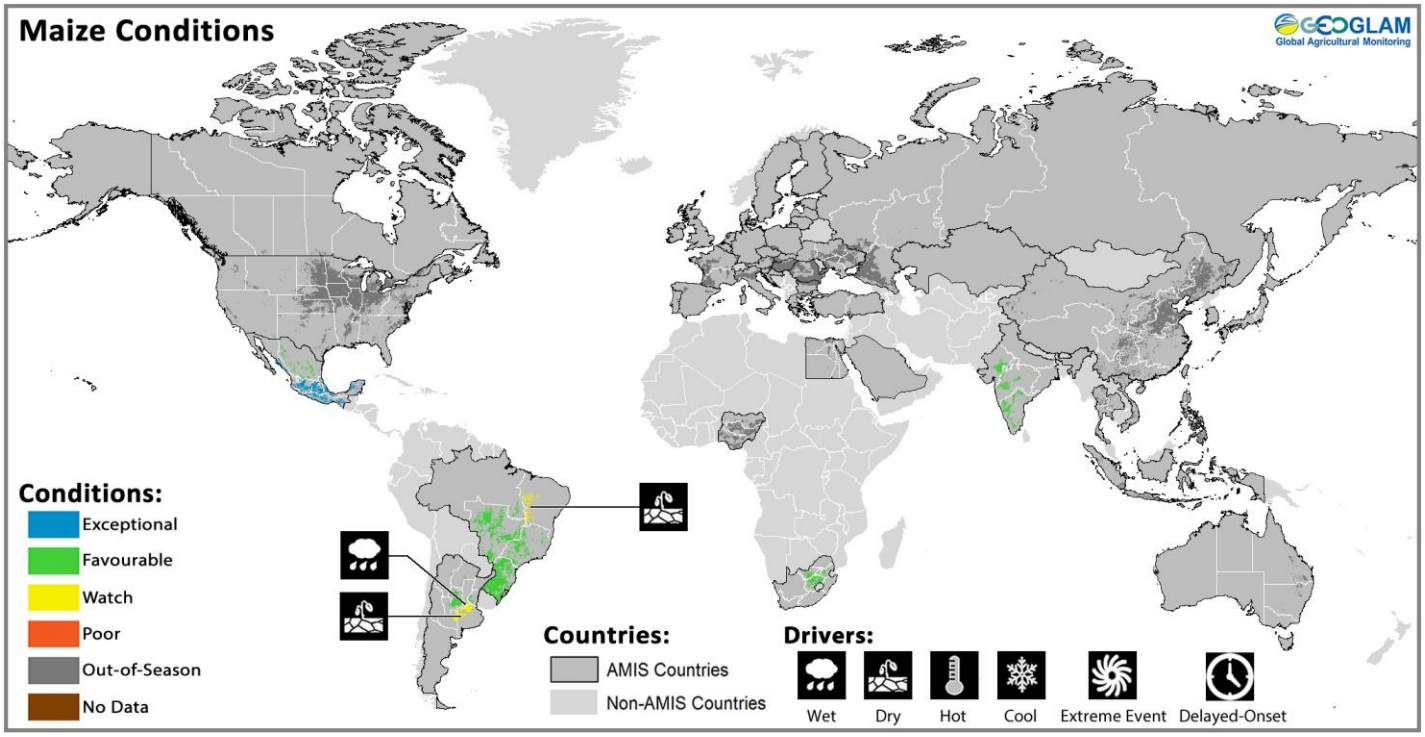
Wheat crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of January 28th. Where crops are in other than favourable conditions the climatic drivers responsible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

Wheat: In the **EU**, overall conditions are favourable for the dormant winter wheat crop. In the **US**, winter wheat is dormant and under favourable conditions and planted area is down. In **Canada**, winter wheat is under favourable conditions with a minor area currently monitored for winter kill in Alberta. In **China**, conditions for winter wheat are generally favourable, though there are some concerns due to excessive rain in parts of the Southwestern growing region. In **India**, winter wheat is in the jointing stage under generally favourable conditions. In the **Russian Federation** and **Ukraine**, conditions are favourable with adequate snow cover providing protection from low temperatures. In **Australia**, harvest is complete with a bumper crop owing to excellent growing conditions throughout the season including good rainfall that began early in the season and continued through critical growing stages. In **Argentina**, harvest is all but complete under generally favourable conditions, reduced yields occurred in some main producing areas, however reductions were offset by recent expansions of wheat growing areas further north.



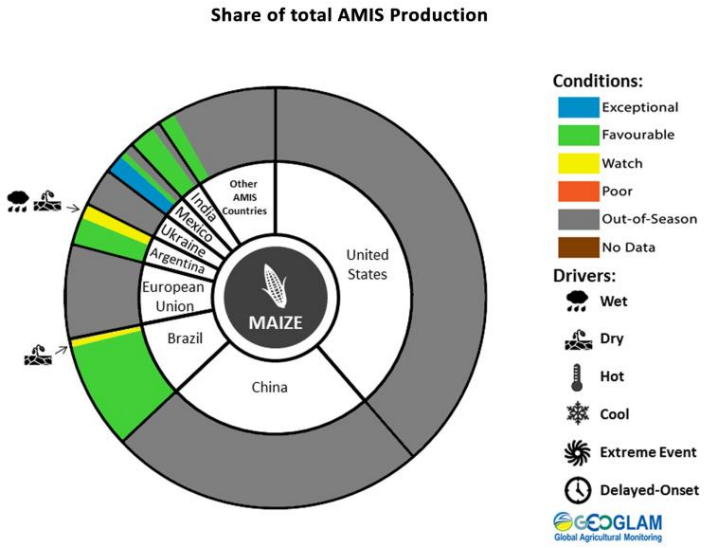
For detailed description of the pie chart please see box below.

Maize Conditions for AMIS Countries



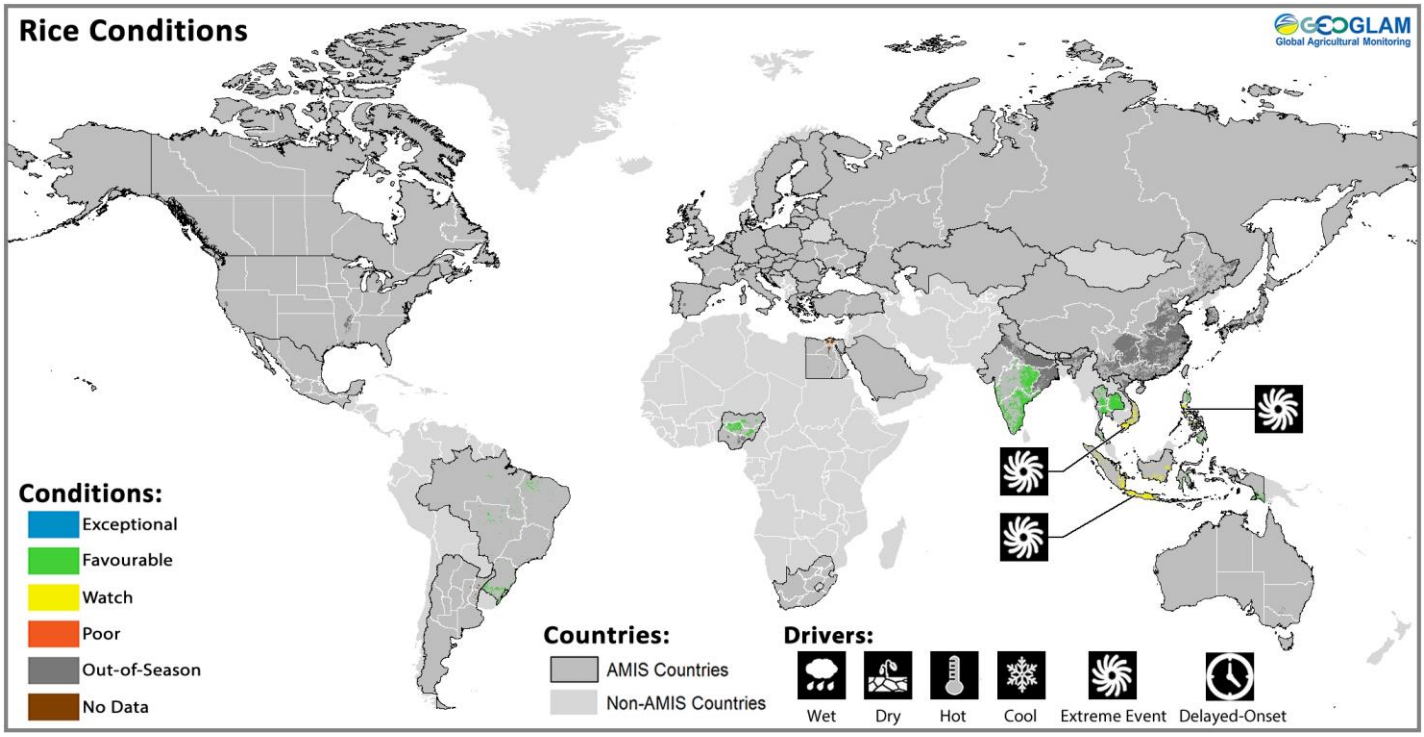
Maize crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of January 28th. Where crops are in other than favourable conditions the climatic drivers responsible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

Maize: In **India**, harvest is nearing completion under generally favourable conditions. In **Mexico**, the spring-summer crop is being harvested under favourable conditions with a larger crop than last year expected owing to a mix of factors including increased planted area, yield increases, as well as less crop damage. In **Brazil**, the spring crop is under generally favourable conditions with the exception of the northeast region (a relatively minor production region) due to dryness. Harvest has begun in the south and planting has started for the summer planted crop under favourable conditions. In **Argentina**, planting is almost complete under mixed conditions due to excess rainfall causing flooding in some areas and a lack of rainfall in southern regions. In **South Africa**, an average to slightly above average yield is expected over both the eastern and western maize production regions owing to favourable weather conditions.



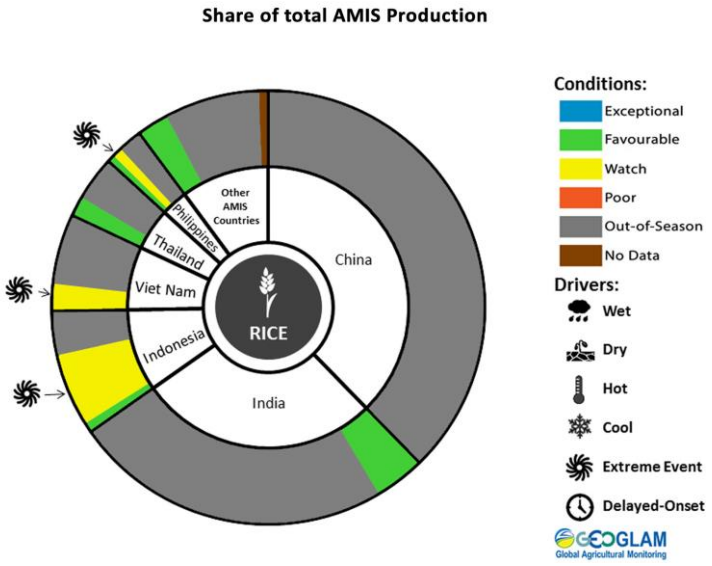
For detailed description of the pie chart please see box below.

Rice Conditions for AMIS Countries



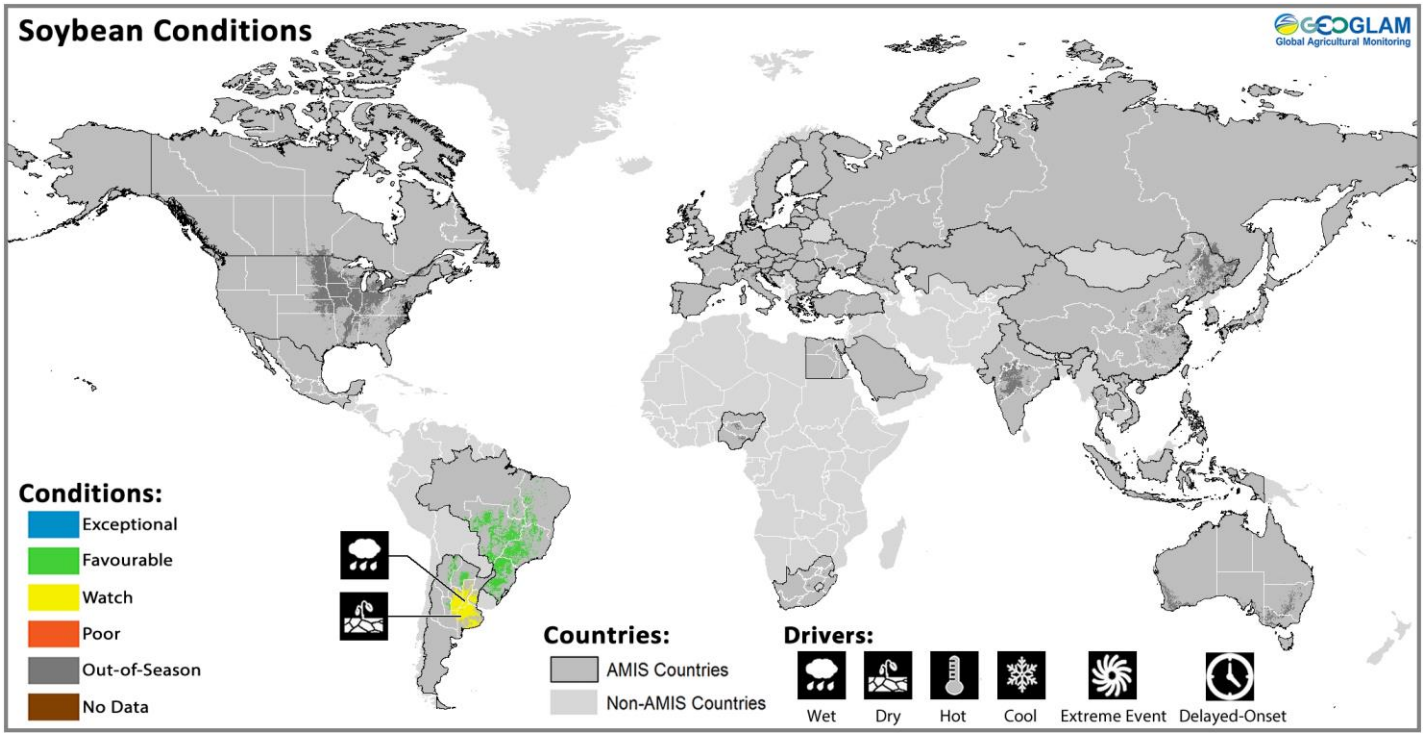
Rice crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of January 28th. Where crops are in other than favourable conditions the climatic drivers responsible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

Rice: In **India**, the Rabi crop is entering the reproductive stage under generally favourable conditions, with spot dryness in the south. In **Indonesia**, harvest of the early planted main crops has begun with concerns over final yields due to a lack of sunlight during critical growing stages. The planting of wet season rice started earlier than usual due to unseasonable precipitation from La Niña. In **Viet Nam**, sowing has begun in the south for dry season rice under less than favourable conditions due to salinization. In **Thailand**, dry season rice is in the tillering stage under favourable conditions with an increase in planted area compared to last year owing to sufficient rainfall and irrigation water. In the **Philippines**, dry season rice is in the planting to early vegetative stages under generally favourable conditions with the exceptions of the central and eastern regions, where typhoon Nock-Ten caused some crop damage. Planted area is up compared to last year owing to adequate irrigation water and rainfall. In **Brazil**, conditions are favourable with planting completed in the south, which is the main producing region.



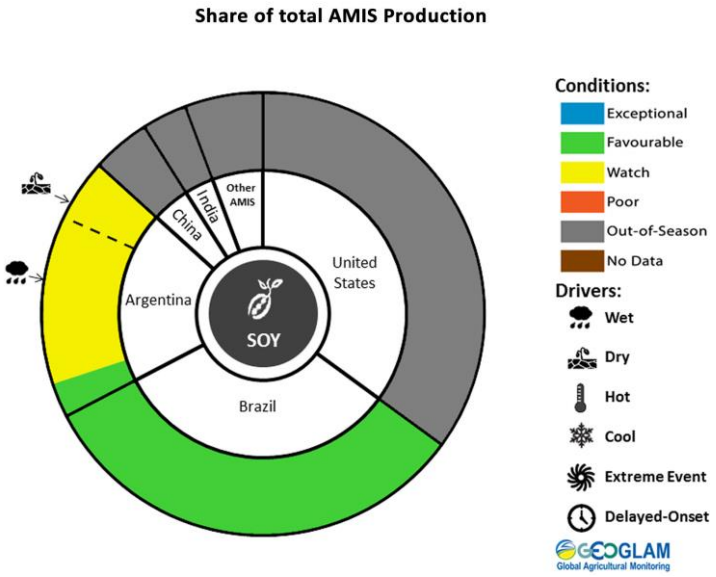
For detailed description of the pie chart please see box below.

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 January 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 and harvest has started for the short cycle crops in a number of areas following good growing conditions. In **Argentina**, conditions are mixed for both early and late planted crops. In the central regions excess rainfall is causing flooding and has caused losses of crops in low lying areas. A lack of rainfall in the southern regions during planting has caused a reduction of planted area and has impacted the conditions of late planted 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 Early Warning Crop Monitor, published February 2nd 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 January 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.

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.

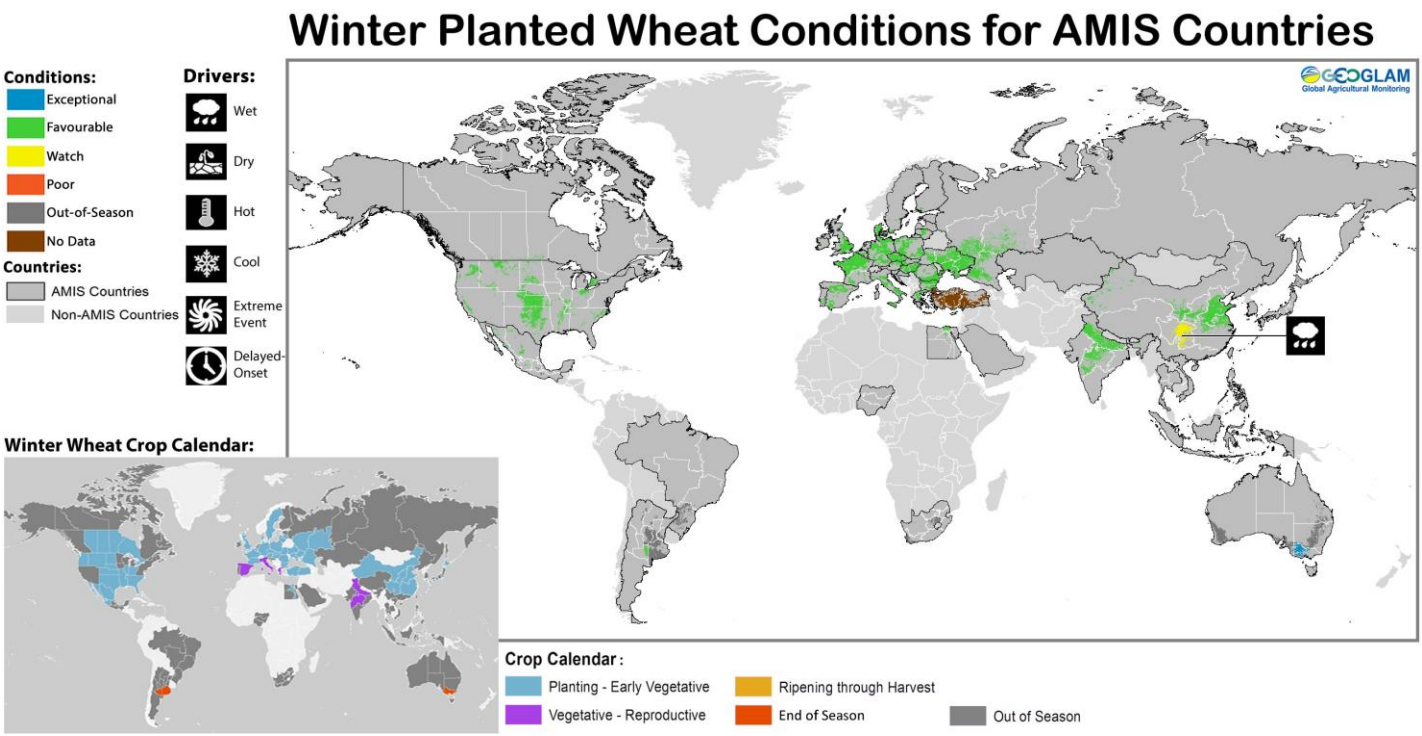
Wet: Higher than average wetness.
Dry: Drier than average.
Hot: Hotter than average.
Cool: Cooler than average or risk of frost damage.
Extreme Events: This is a catch-all for all other climate risks (i.e. hurricane, typhoon, frost, hail, winterkill, wind damage, etc.)
Delayed-Onset: Late start of the season

Sources & Disclaimer

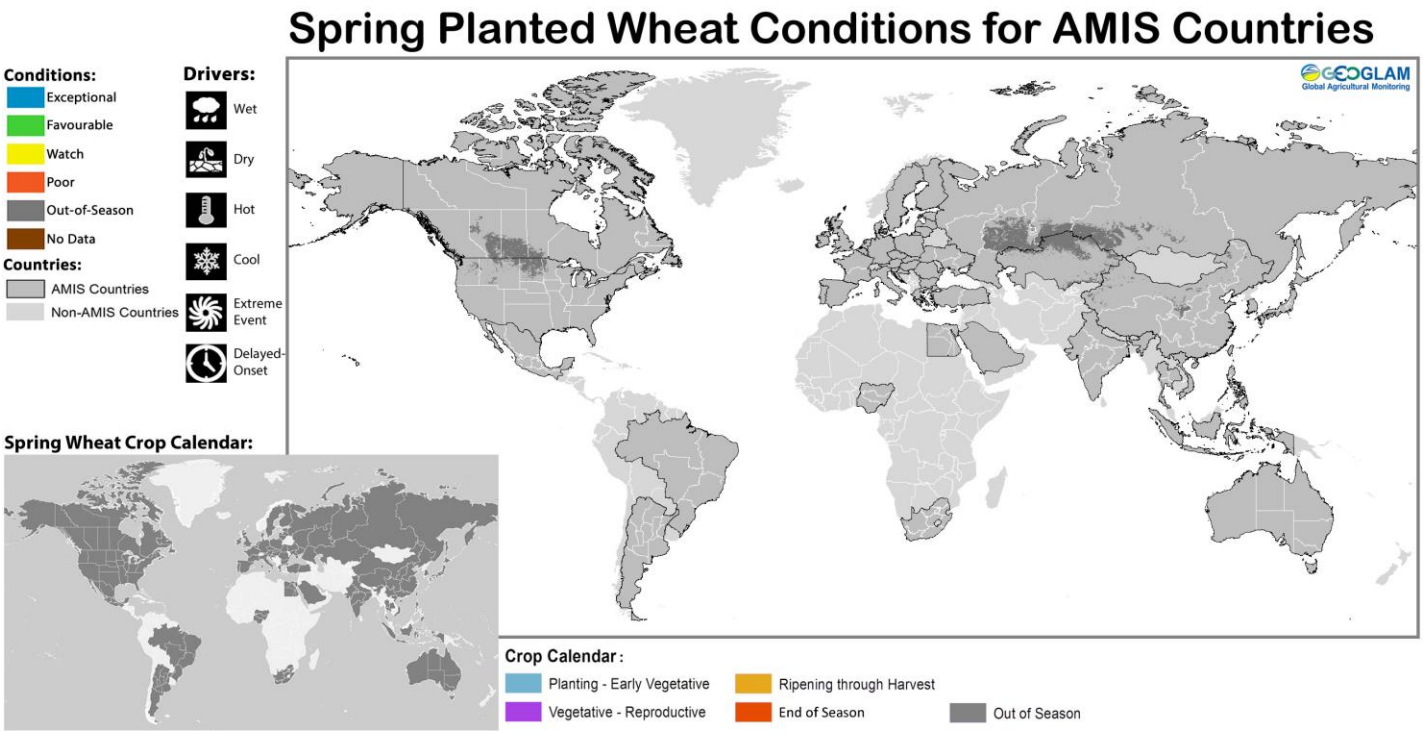
Sources and Disclaimers: The Crop Monitor assessment is conducted by GEOGLAM with inputs from the following partners (in alphabetical order): Argentina (Buenos Aires Grains Exchange, INTA), Asia Rice Countries (AFSIS, ASEAN+3 & Asia RiCE), Australia (ABARES & CSIRO), Brazil (CONAB & INPE), Canada (AAFC), China (CAS), EU (EC JRC MARS), Indonesia (LAPAN & MOA), International (CIMMYT, FAO, 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
For information on country coverage and criteria:
http://geoglam-crop-monitor.org/pages/about.php?target=approach

* Assessment based on information as of January 28th

Appendix 2: Crop Season Specific Maps & Pie Charts



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 January 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 January 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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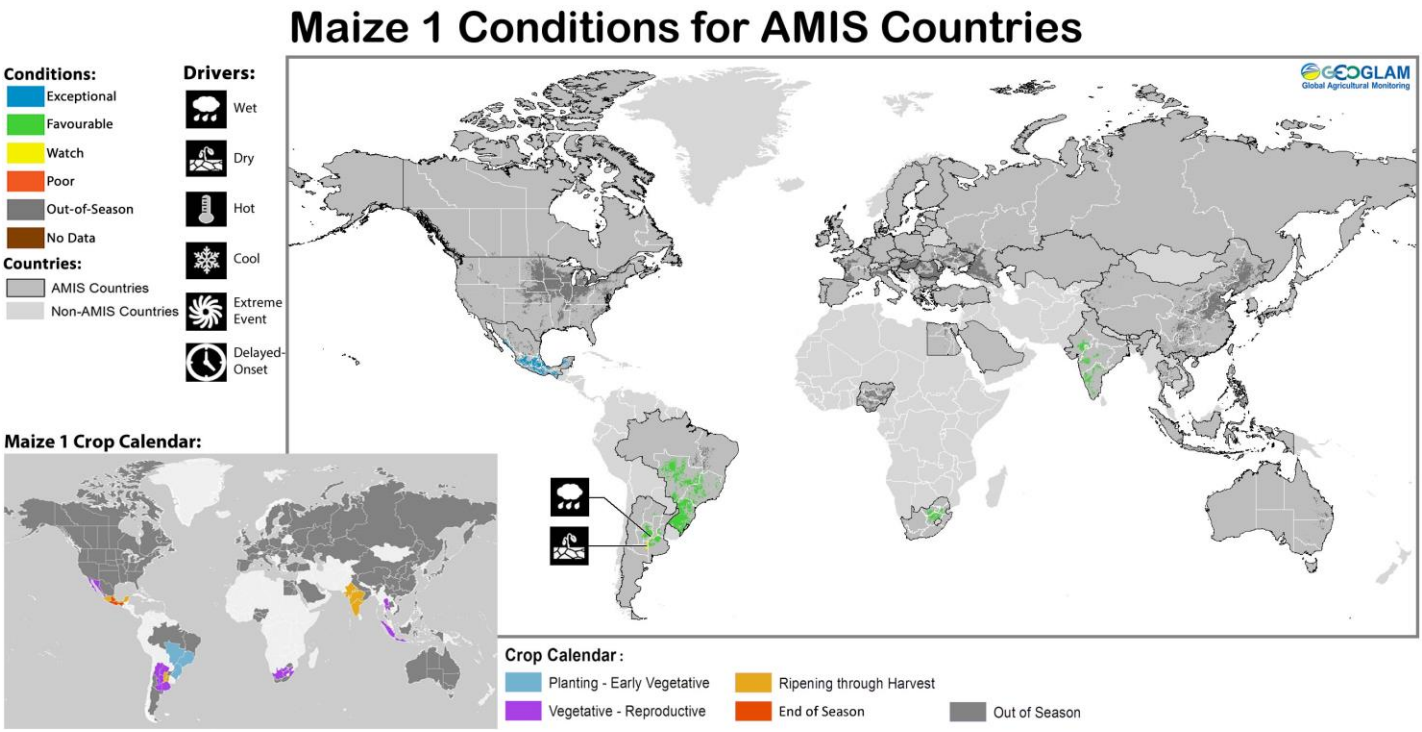
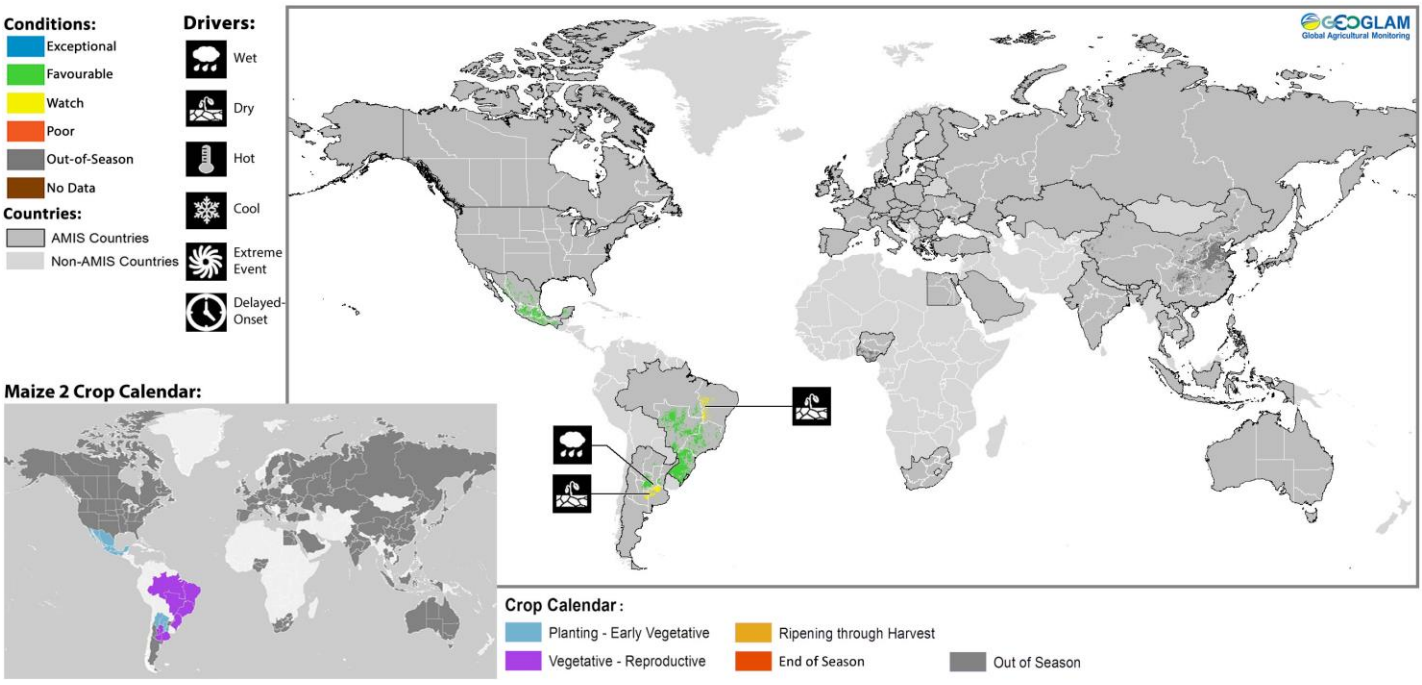


Maize 1 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of January 28th. Where crops are in less than favourable conditions the climatic drivers responsible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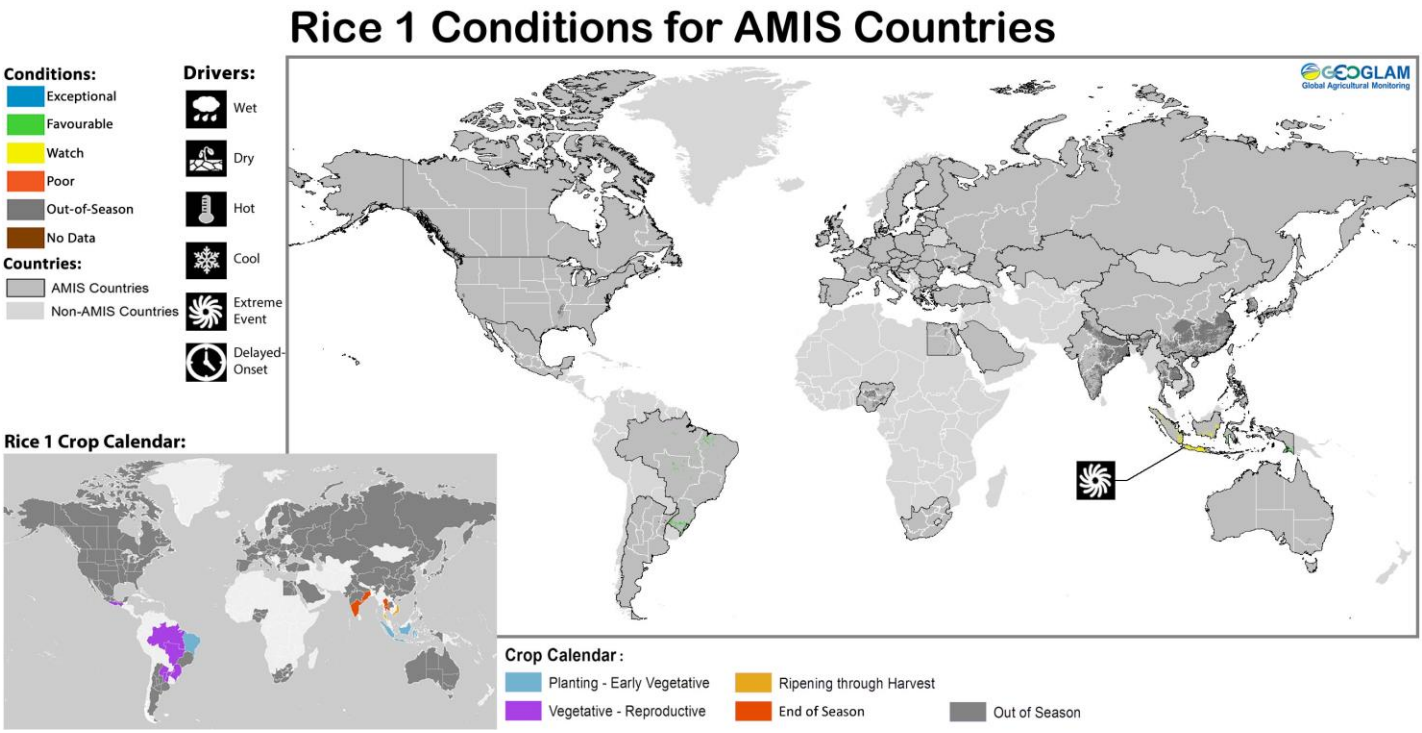
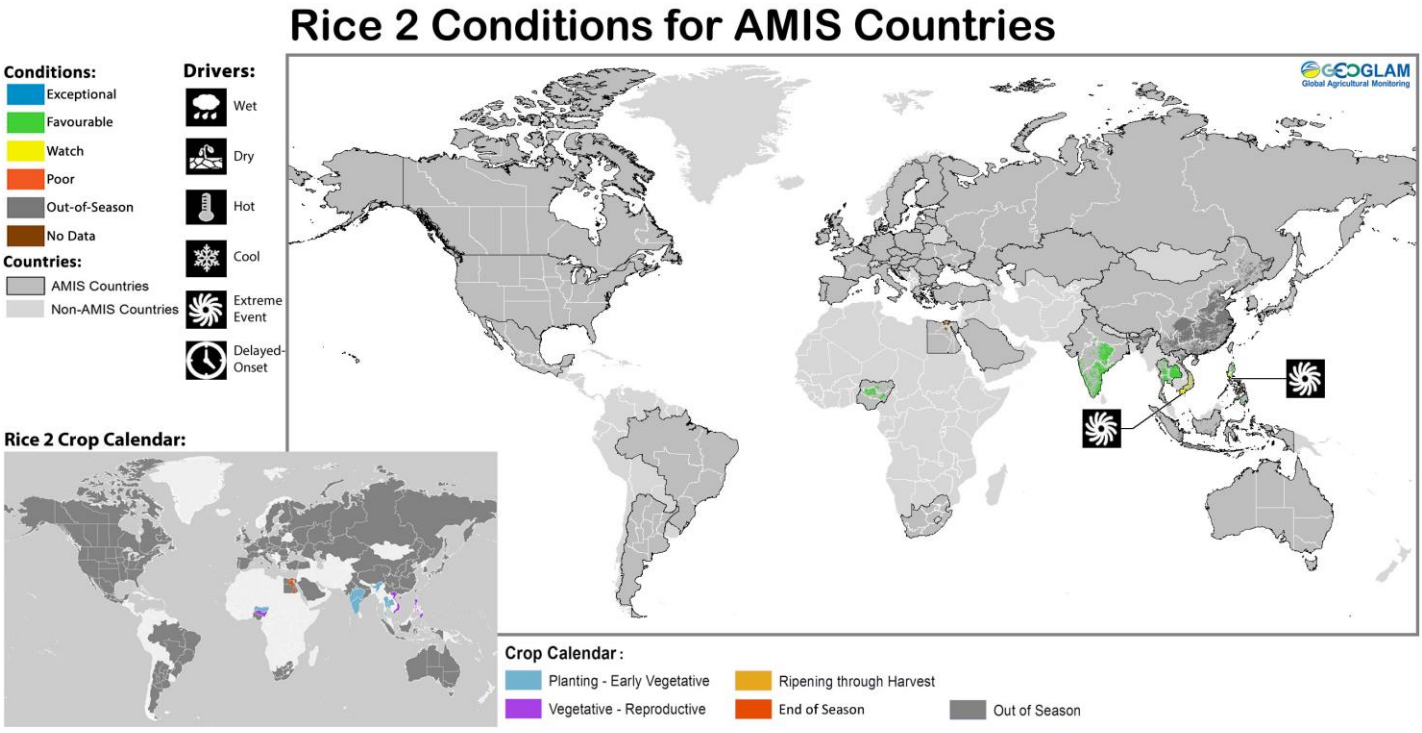


Rice 1 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of January 28th. Where crops are in less than favourable conditions the climatic drivers responsible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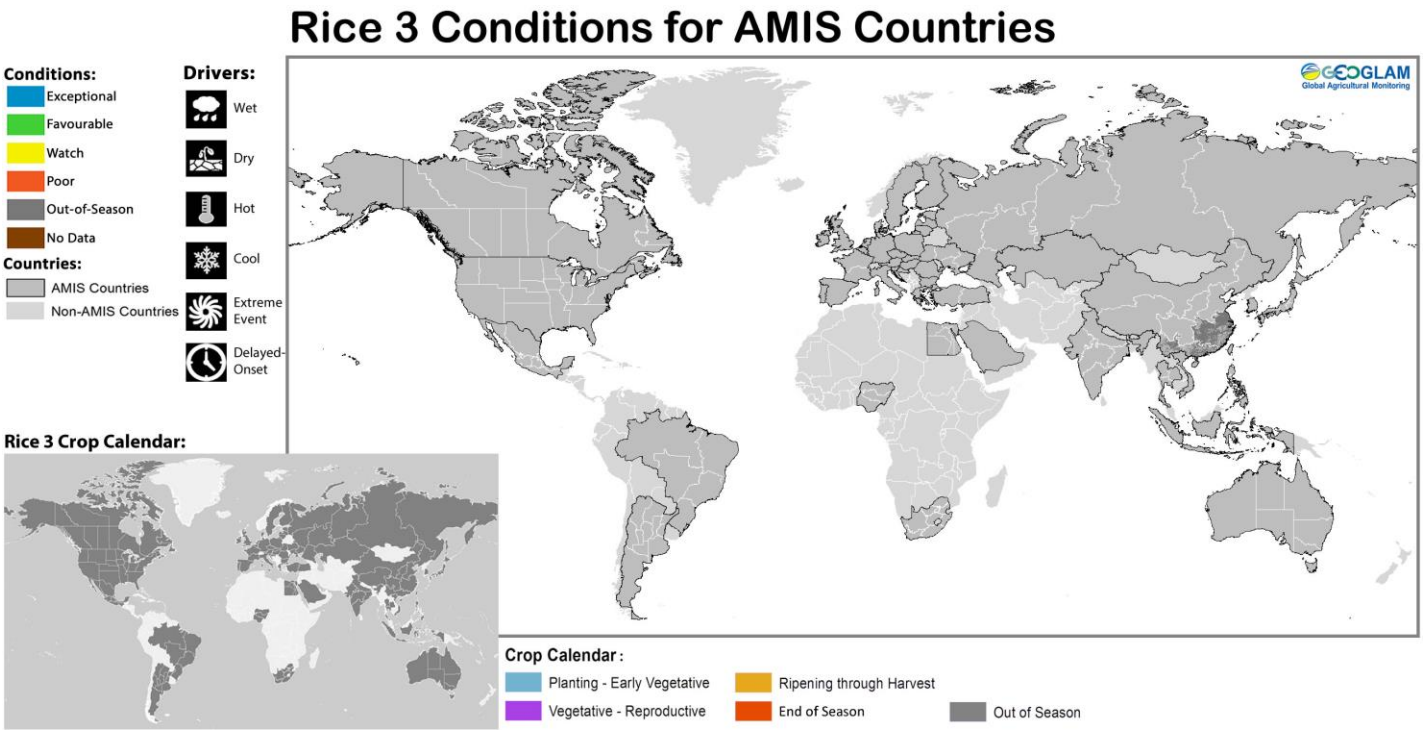
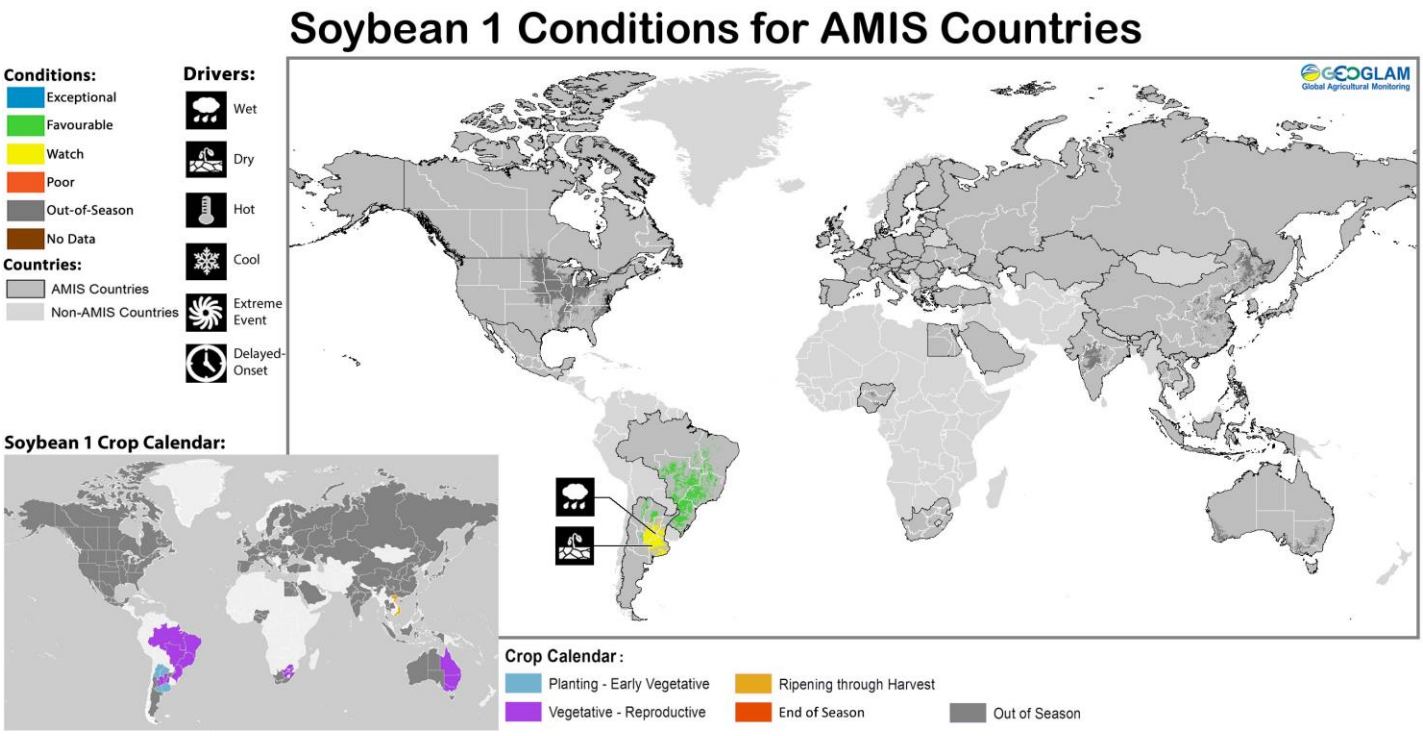


Rice 3 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of January 28th. Where crops are in less than favourable conditions the climatic drivers responsible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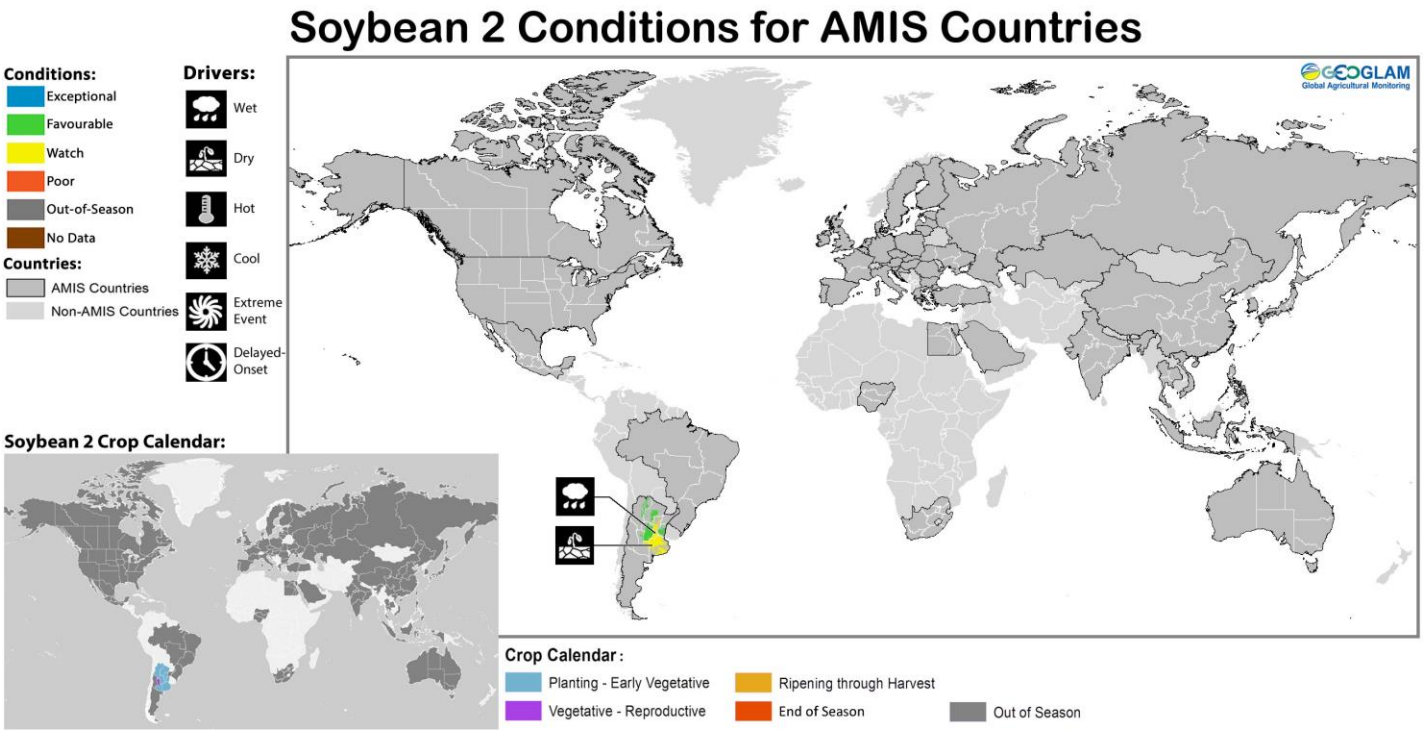

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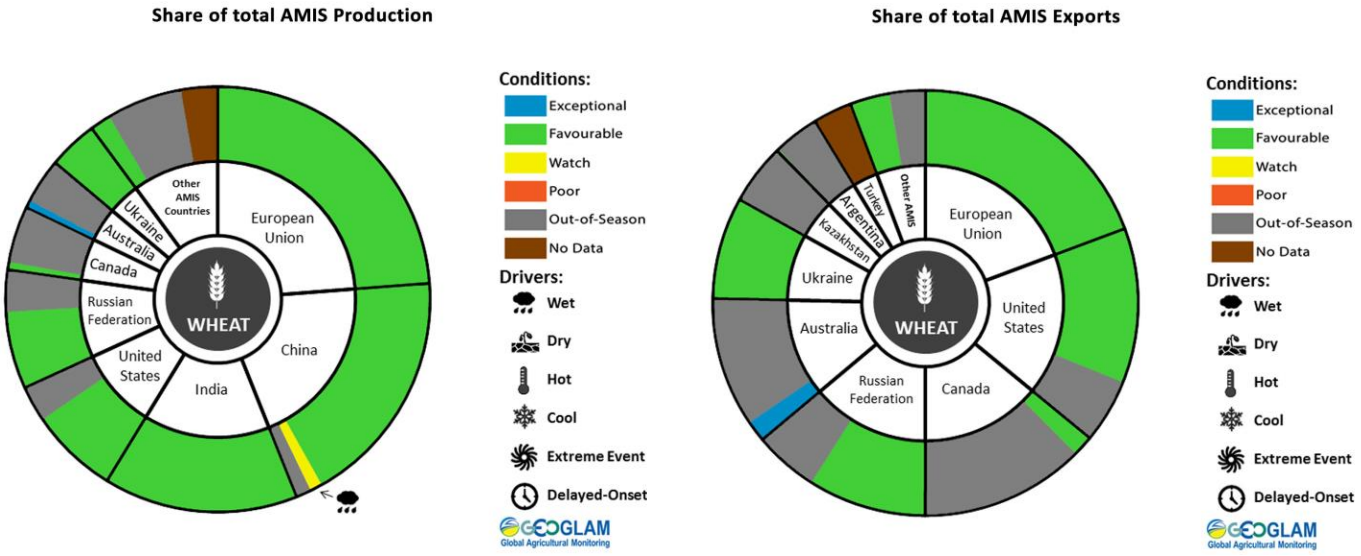
Wheat AMIS Comparisons



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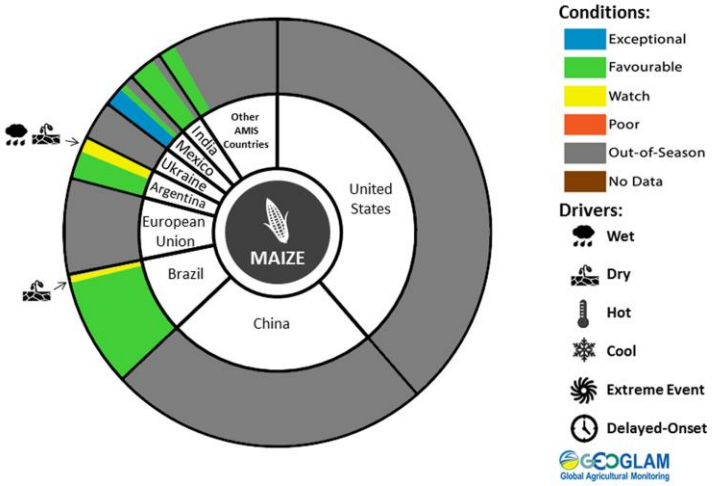
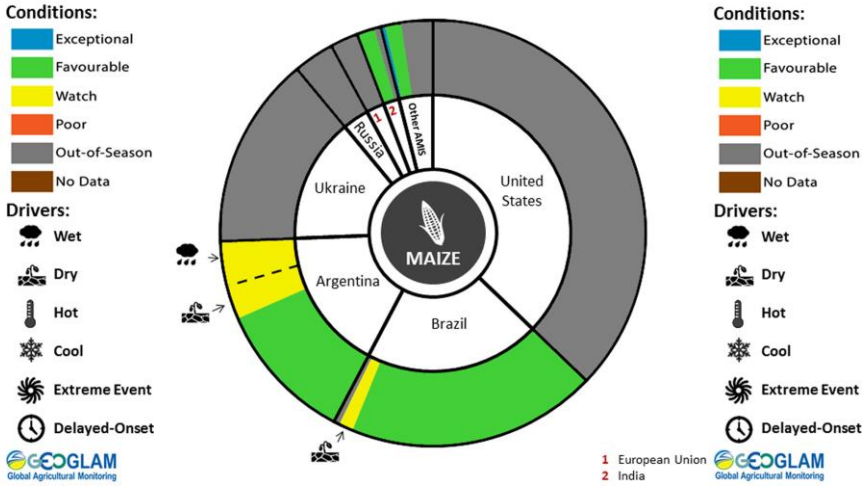
Maize AMIS Comparisons

Share of total AMIS Production





Share of total AMIS Exports

1 European Union
2 India

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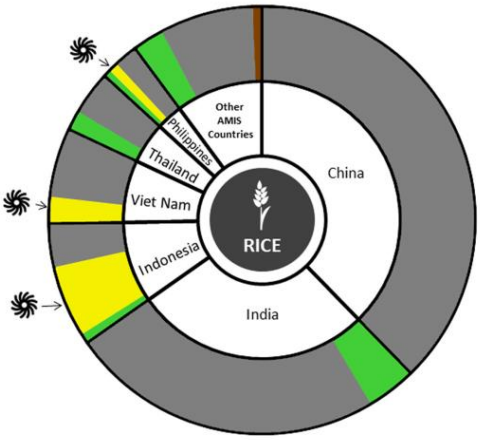
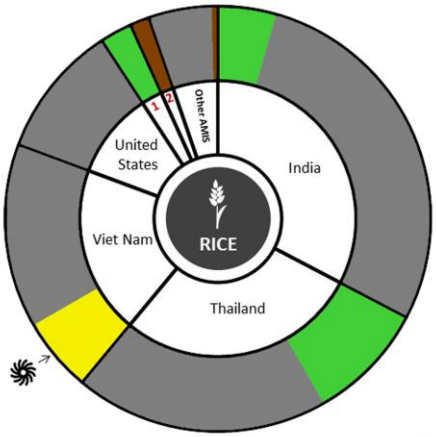
Rice AMIS Comparisons

Share of total AMIS Production



Share of total AMIS Exports



1 Brazil
2 Argentina

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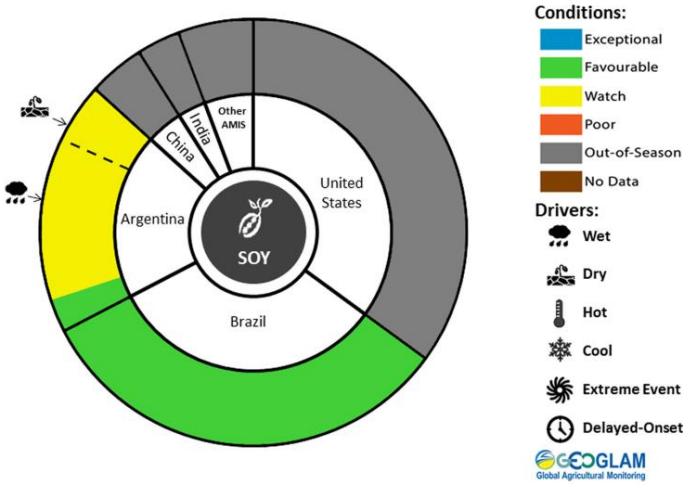
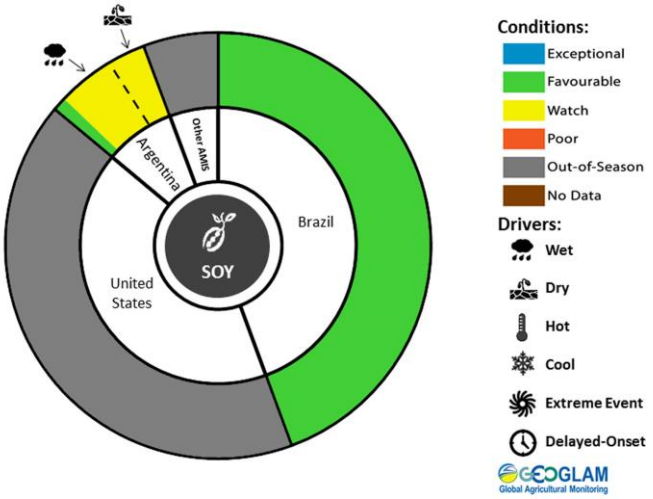
Soybean AMIS Comparisons

Share of total AMIS Production



Share of total AMIS Exports



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Prepared by members of the GEOGLAM Community of Practice
Coordinated by the University of Maryland

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

Photo by: Dave Johnson

www.geoglam-crop-monitor.org

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