

# GEOGLAM Crop Monitor

## February 2016

No. 25

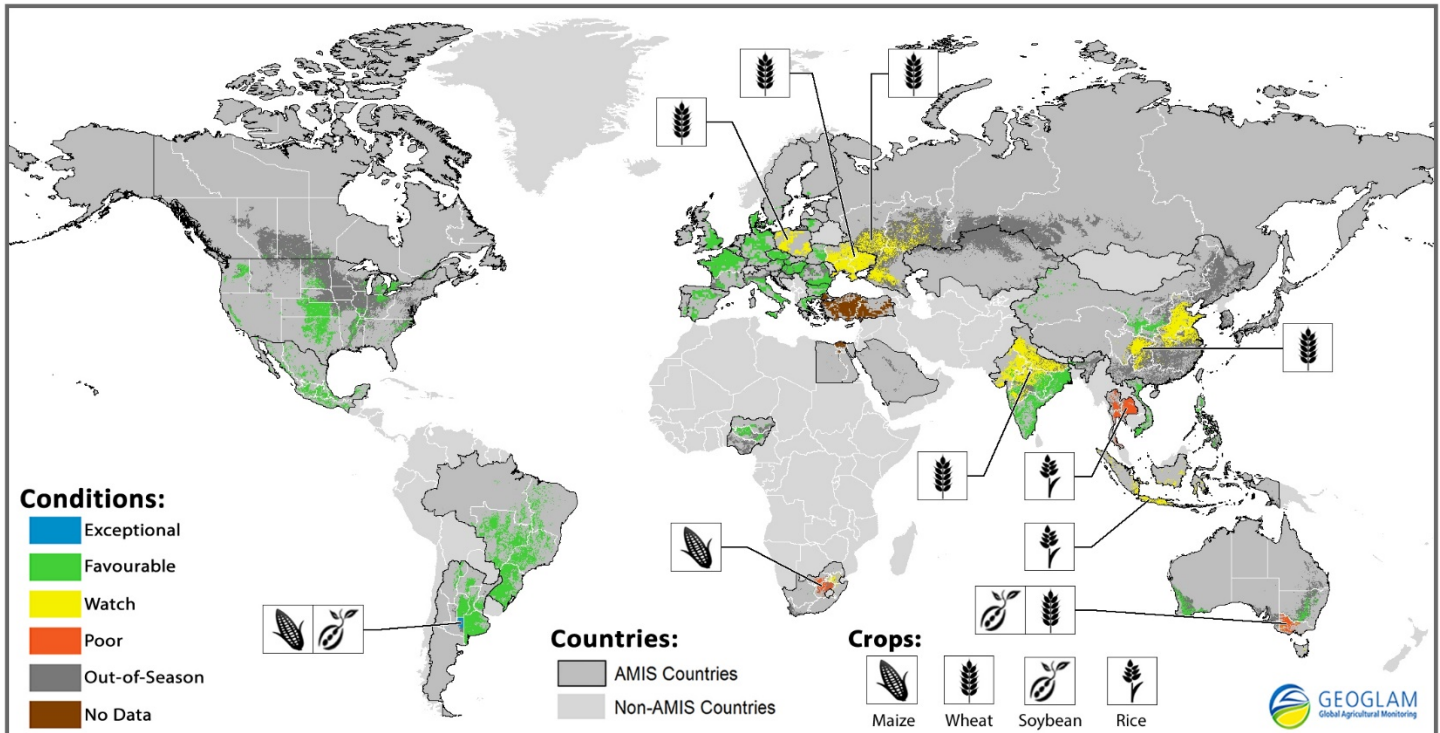


**GEOGLAM**  
Global Agricultural Monitoring

Prepared by members of the GEOGLAM Community of Practice

Coordinated by the University of Maryland

## Conditions at a glance for AMIS countries (as of January 28<sup>th</sup>)



Crop condition map synthesizing information for all four AMIS crops as of January 28<sup>th</sup>. 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.**

**WHEAT:** Conditions in the southern hemisphere remain mixed as the season draws to a close. However, in the northern hemisphere conditions are overall favourable for the dormant crop with the exception of India.

**MAIZE:** The northern hemisphere is largely out of season with the exception of India and Mexico while the season in the southern hemisphere is in full swing with largely favourable conditions.

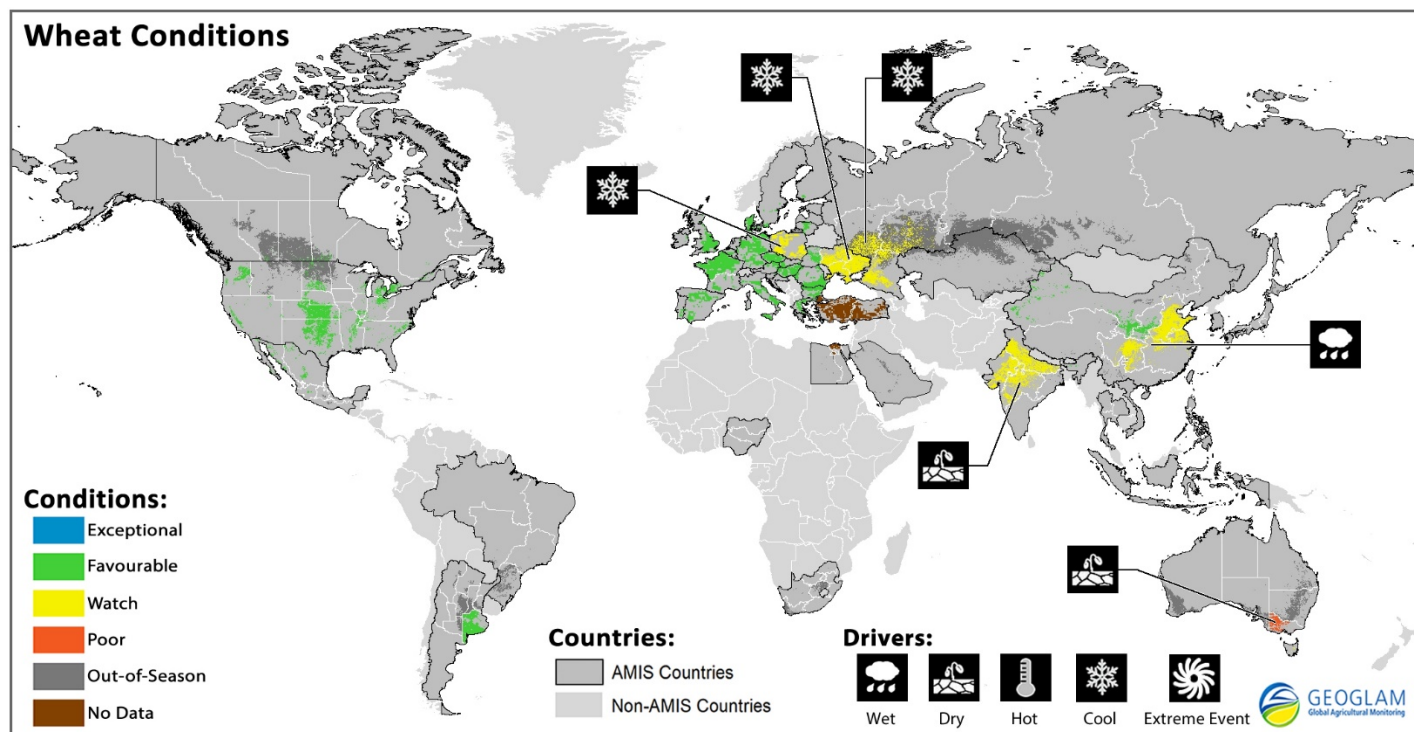
### El Niño update

The El Niño of 2015-2016 peaked in late November-early December, but remains strong and will only decline to neutral around June. The growing season in South Africa has been characterized by severe drought, with many crop growing areas having their driest early season since 1981. As a consequence, maize production is projected to be down by 35% compared to average, and imports to the region will be required to meet needs both nationally and in neighboring countries that are likewise drought stricken. Drought is expected to continue in Southeast Asia and across northern South America, including northeast Brazil. The southeast of Brazil and Uruguay, on the other hand, should continue to have abundant rainfall. In the U.S., the western and southern states are expected to continue to experience above average precipitation. This is benefiting California, though one good season will be insufficient to reverse the impacts of the multi-year 2012-2015 drought. The Great Lakes region, conversely, is projected to continue to experience drier than normal conditions, as are the southern parts of the Canadian Prairie Provinces. No impacts are anticipated across Europe and western Russia.

For information on non-AMIS countries please visit: <http://cropmonitor.org/pages/currentreport.php>

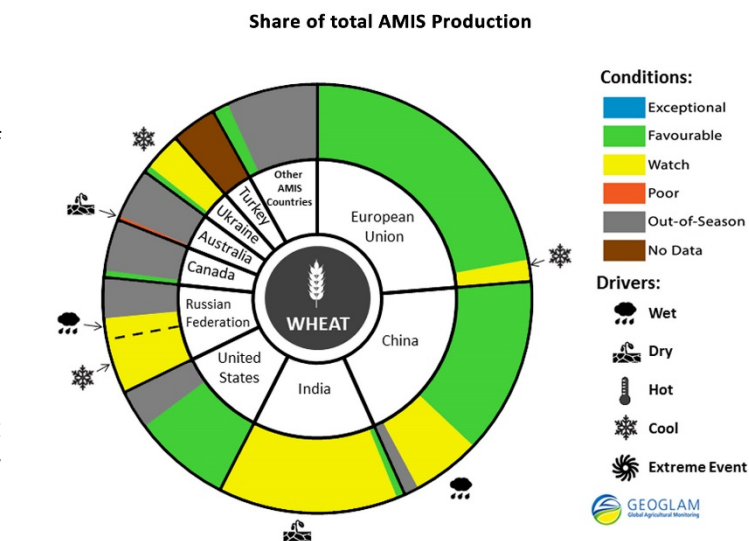
This is a new GEOGLAM activity called the Early Warning Crop Monitor and the first issue will be released on Friday, February 5<sup>th</sup>, 2016.

## Wheat Conditions for AMIS Countries



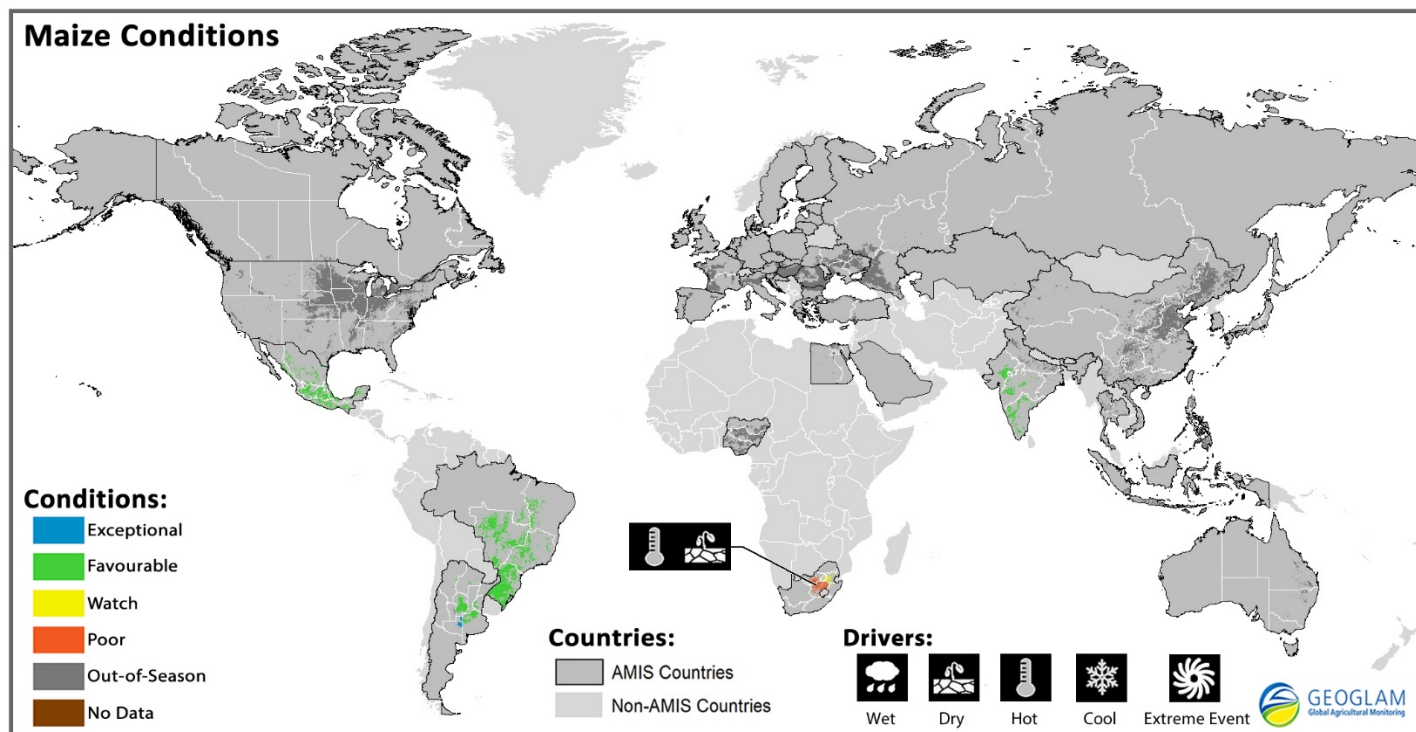
Wheat crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of January 28<sup>th</sup>. Where crops are in other than favourable conditions the climatic drivers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

**Wheat:** In **Australia**, harvest is almost complete with unfavourable end of season conditions. In **Argentina**, harvest is complete with variable end-of-season conditions. In the **EU**, the extremely mild weather of last December delayed the hardening of winter crops and intense cold temperatures in January combined with shallow snow cover caused some frost damage in eastern Europe. In the **US**, the crop is dormant and progressing without major concern. In **China**, conditions are variable for the wintering crop. Crop conditions in the northern part of China are in favourable condition but unfavourable conditions exist in the eastern and southern regions caused by continuously rainy weather and lack of sufficient sunlight. In the **Russian Federation**, warm temperatures followed by colder and drier than usual weather is causing some concern. In **Canada**, conditions remain favourable, however there is an increased risk of winterkill due to low snowcover in the southern prairies, especially in Alberta and Saskatchewan. However, the absence of prolonged or rapid cooling in these areas suggests that any damage to date likely minimal. In **India**, conditions are mixed due to dryness affecting the main producing region. The crop is in vegetative stages. In **Ukraine**, there is concern as conditions prior to winter dormancy were worse than average due to severe autumn dryness, which caused planted area to be down. Winter damage will be assessed in the spring.



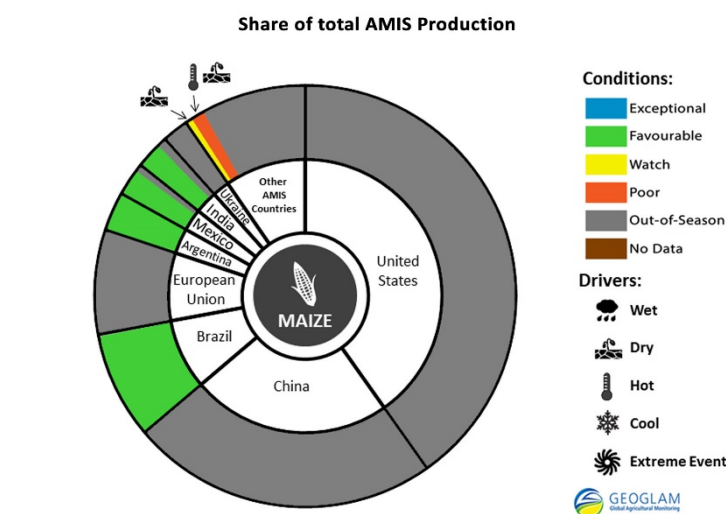
For detailed description of the pie chart please see box below.

## 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 28<sup>th</sup>. 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.

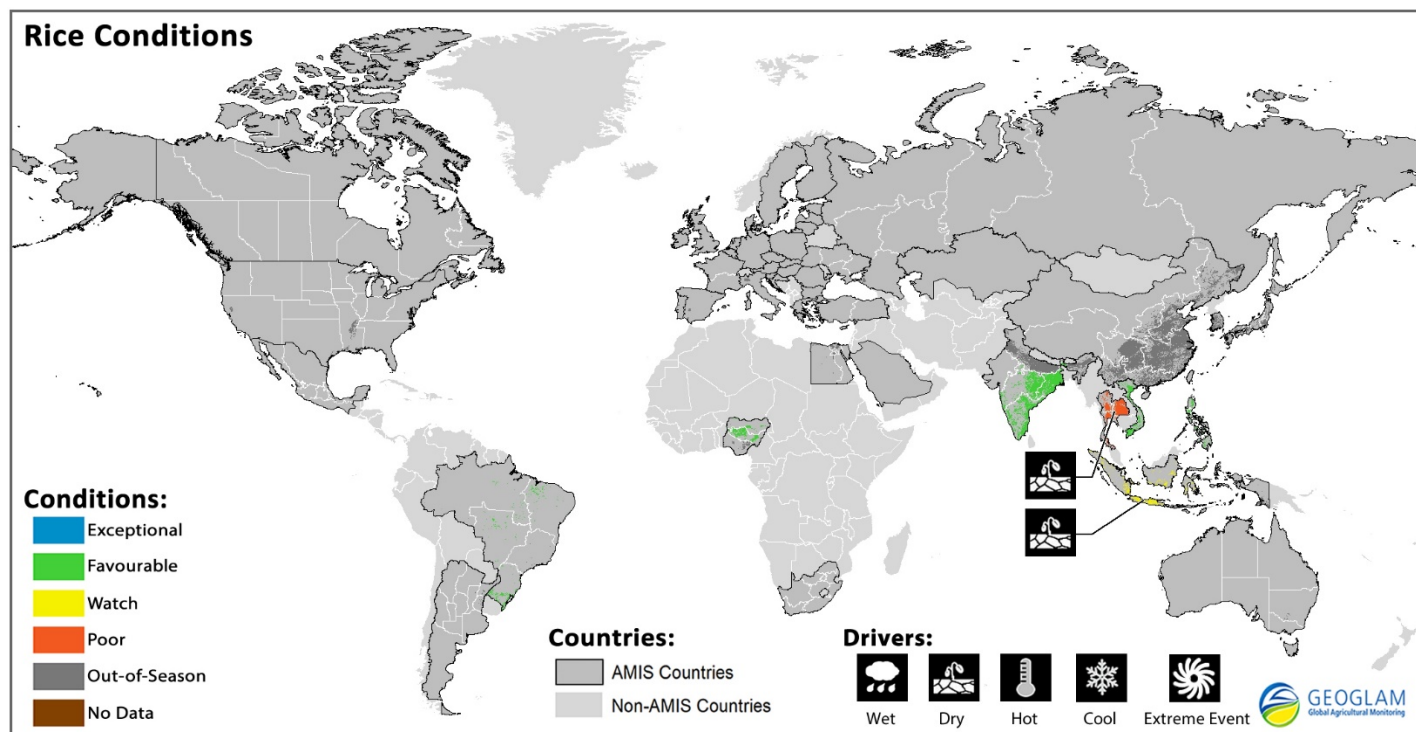
**Maize:** In **Brazil**, planting begun for the summer-planted crop (the larger producing season) and conditions are favourable during this early stage. The spring-planted crop is largely in the reproductive stage and conditions are favourable for crop development. In **Argentina**, conditions are favourable owing to mostly good weather. The crop is mostly in the vegetative to reproductive stages. In **South Africa**, hot and dry conditions during November and December across the western half of the production region resulted in poor conditions. Wet conditions since early January will have a positive impact although area planted is down. In **India**, harvest has begun and conditions are favourable. In **Mexico**, conditions are favourable for the spring-planted crop that is in vegetative to harvest stages. Planting has begun for the autumn-planted crop and conditions are favourable.



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

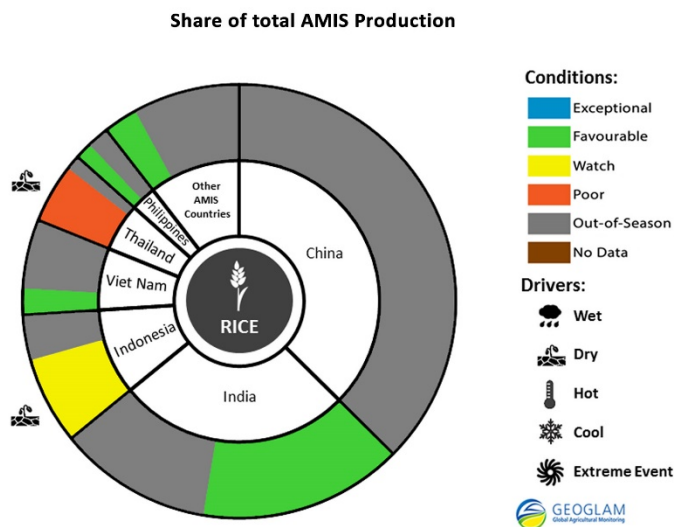
\* Assessment based on information as of January 28<sup>th</sup>

## Rice Conditions for AMIS Countries



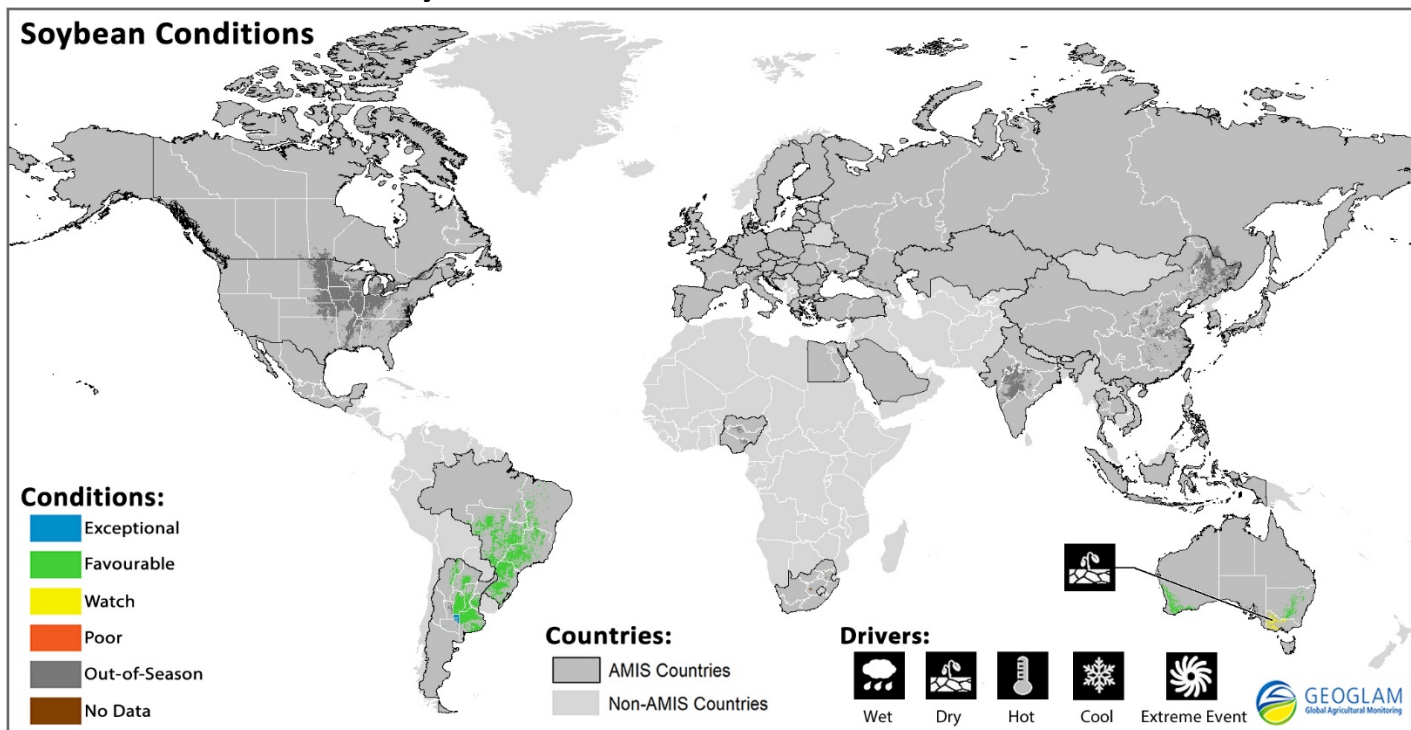
Rice crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of January 28<sup>th</sup>. Where crops are in other than favourable conditions the climatic drivers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

**Rice:** In **India**, conditions are favourable for both the kharif crop currently being harvested and for the newly planted rabi crop. In **Brazil**, conditions are favourable although some planting delays have occurred due to excess rainfall. In **Thailand**, harvest is almost complete for the wet season crop and conditions remain poor. Planting begun for the dry season crop and conditions are also poor due to a water shortage attributed to El Niño. In **Viet Nam**, harvest is ongoing for both the summer-autumn and autumn-winter crops and end of season conditions are favourable. In **Indonesia**, planting on crop and area is drastically lower than previous years due to dryness and a delayed monsoon caused by El Niño. In the **Philippines**, the dry season crop conditions are favourable but developing dry conditions are expected to impact the crop next month due to El Niño. In **Argentina**, conditions are generally favourable and most areas are starting the flowering stage.



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

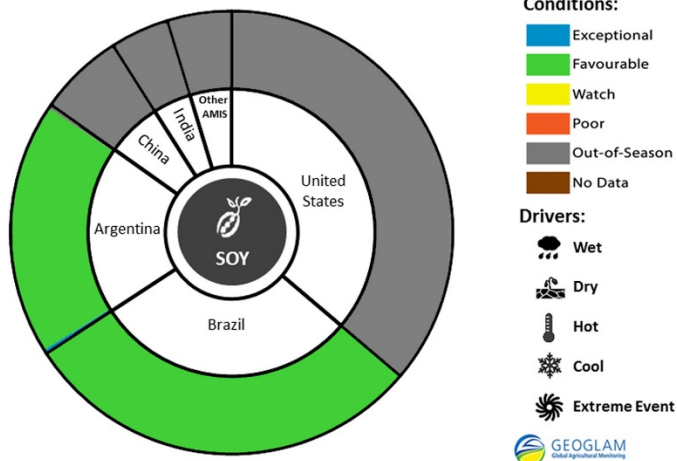
## Soybean Conditions for AMIS Countries



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 28<sup>th</sup>. 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.

Share of total AMIS Production

**Soybeans:** In Brazil, the crop is largely in the reproductive stage and is in generally favourable condition. Some planting delays occurred throughout the country due to below average rainfall during previous months but overall conditions are currently favourable for development. In **Argentina**, planting is almost complete and conditions are generally favourable for both the spring and summer planted crops.



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

**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 slice 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

## 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 production.

**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 January or January not result in production impacts and they 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.)

### Drivers:

	Wet
	Dry
	Hot
	Cool
	Extreme Event

### Sources & Disclaimer

Sources and Disclaimers: The Crop Monitor assessment is conducted by GEOGLAM with coordination from the University of Maryland. Inputs are 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 & SANS), 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 multi-agency report are consensual statements from the GEOGLAM experts, and do not necessarily reflect those of the individual agencies represented by these experts. Map data sources: Major crop type areas based on the IFPRI/IIASA SPAM 2005 v2.0 release (2015), USDA/NASS CDL 5 yr average (2010-2014), AAFC Annual Crop Inventory Map 4 yr average (2011-2014), GLAM/UMD, GLAD/UMD, ABARES 2014 Land Use of Australia, Interim Version 5, SIAP, ARC, and JRC/IES/MARS. The crop calendars are compiled with information from AAFC, ABARES, ARC, Asia RiCE, Bolsa de cereales, CONAB, INPE, JRC, FAO, FEWS NET, IKI, INTA, SIAP, UHMC, USDA FAS, and USDA NASS. The crop calendars are compiled with information from AAFC, ABARES, ARC, Asia RiCE, Bolsa de cereales, CONAB, INPE, JRC, FAO, FEWS NET, IKI, INTA, SIAP, UHMC, USDA FAS, and USDA NASS.

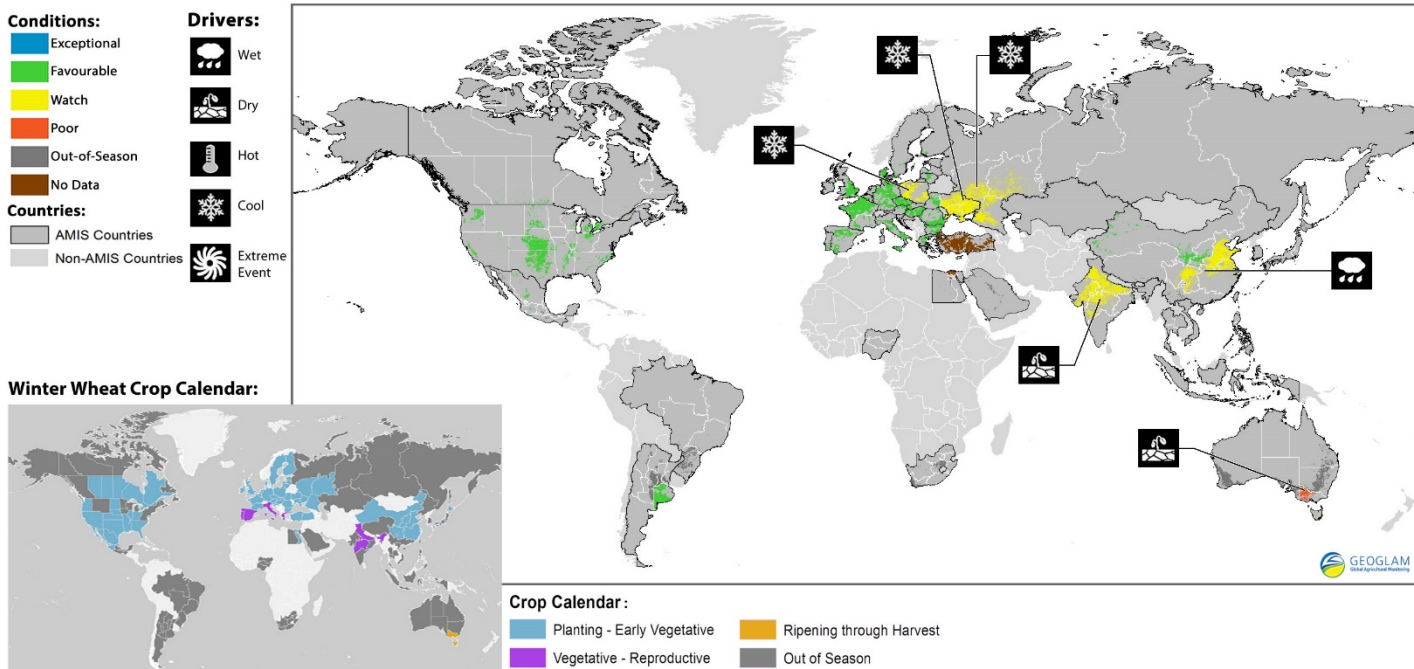
More detailed information on the GEOGLAM crop assessments is available at [www.geoglam-crop-monitor.org](http://www.geoglam-crop-monitor.org).

For information on country coverage and criteria: <http://geoglam-crop-monitor.org/pages/about.php?target=approach>

\*For more information regarding the new crop monitor and pie charts: <http://geoglam-crop-monitor.org/pages/about.php?target=maps-charts>

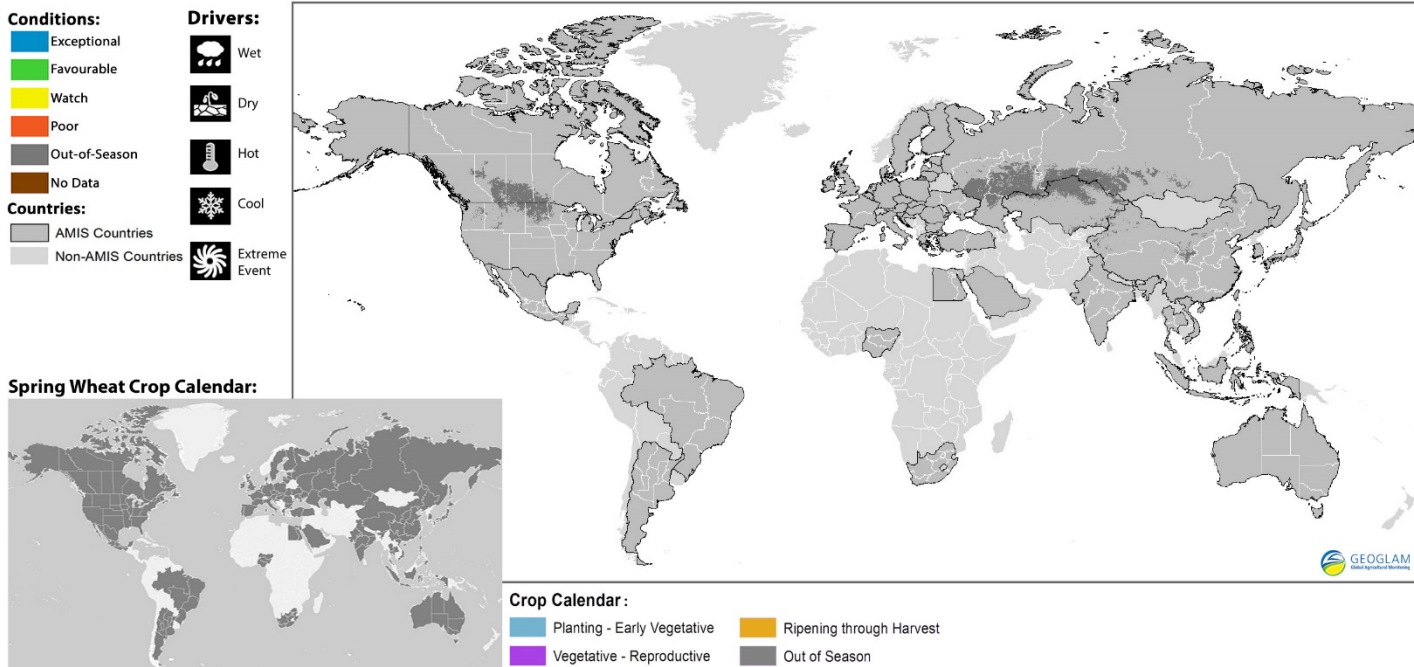
## Appendix 2: Crop Season Specific Maps

### 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 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 Planted Wheat Conditions for AMIS Countries

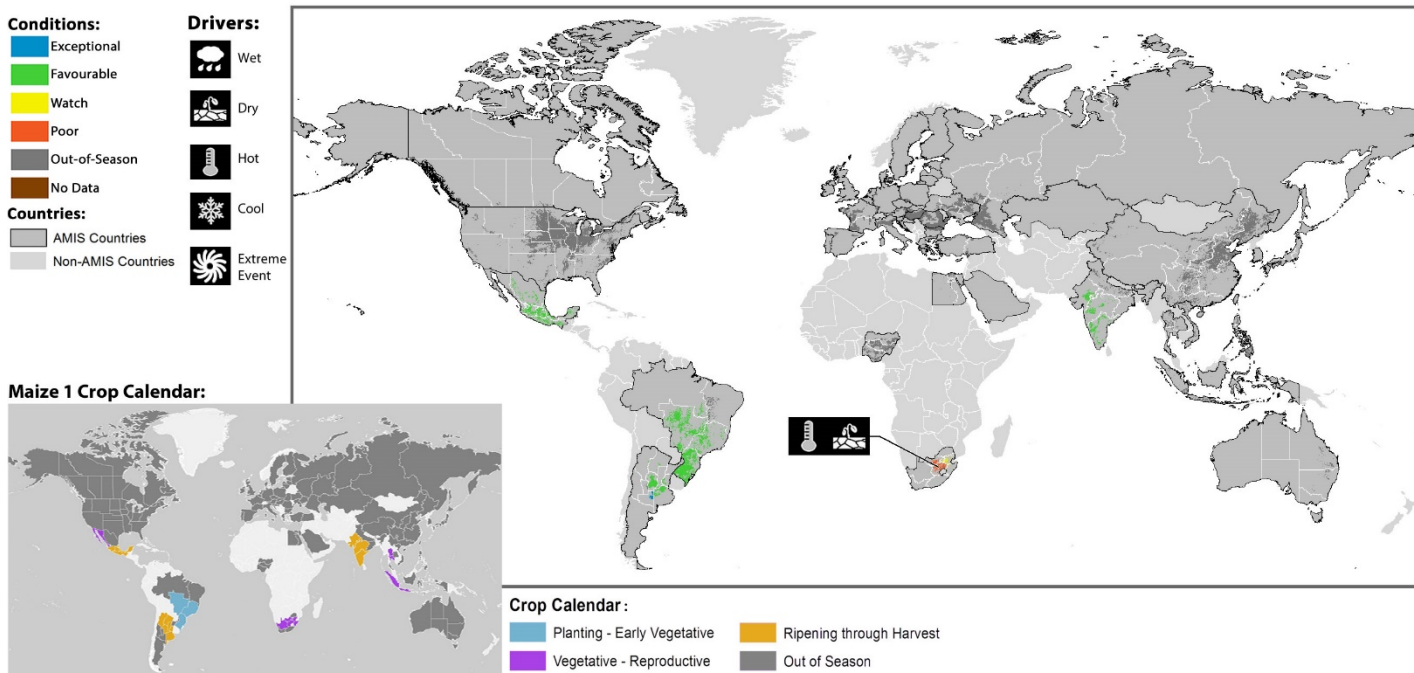


\* Assessment based on information as of January 28<sup>th</sup>



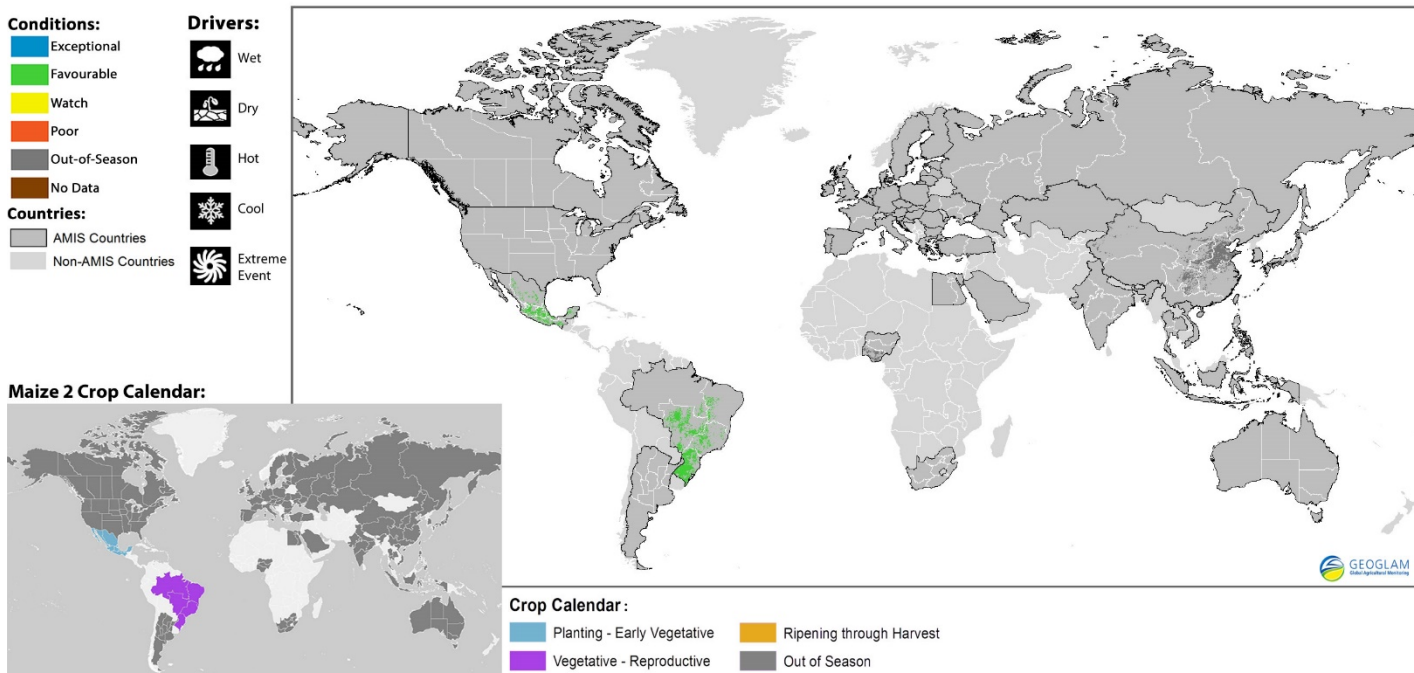
Spring wheat crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of January 28<sup>th</sup>. Where crops are in less than favourable conditions the climatic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

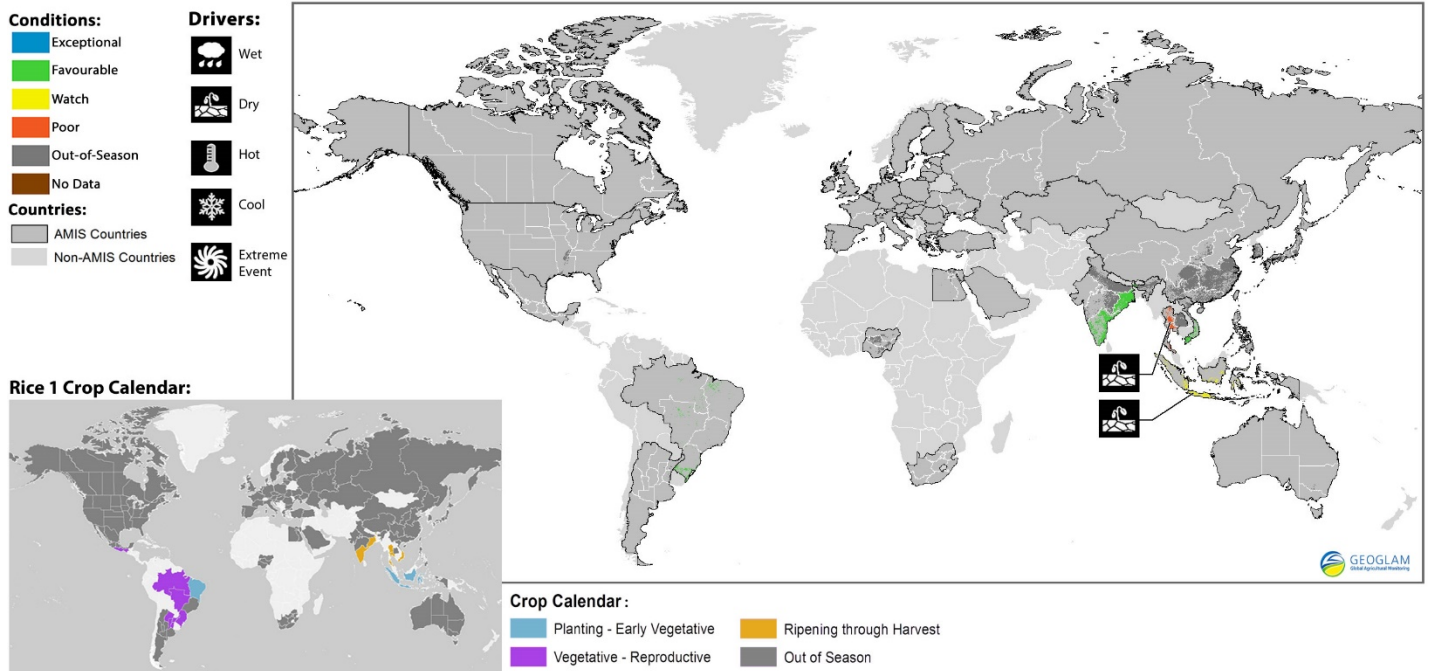


Maize2 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of January 28<sup>th</sup>. Where crops are in less than favourable conditions the climatic

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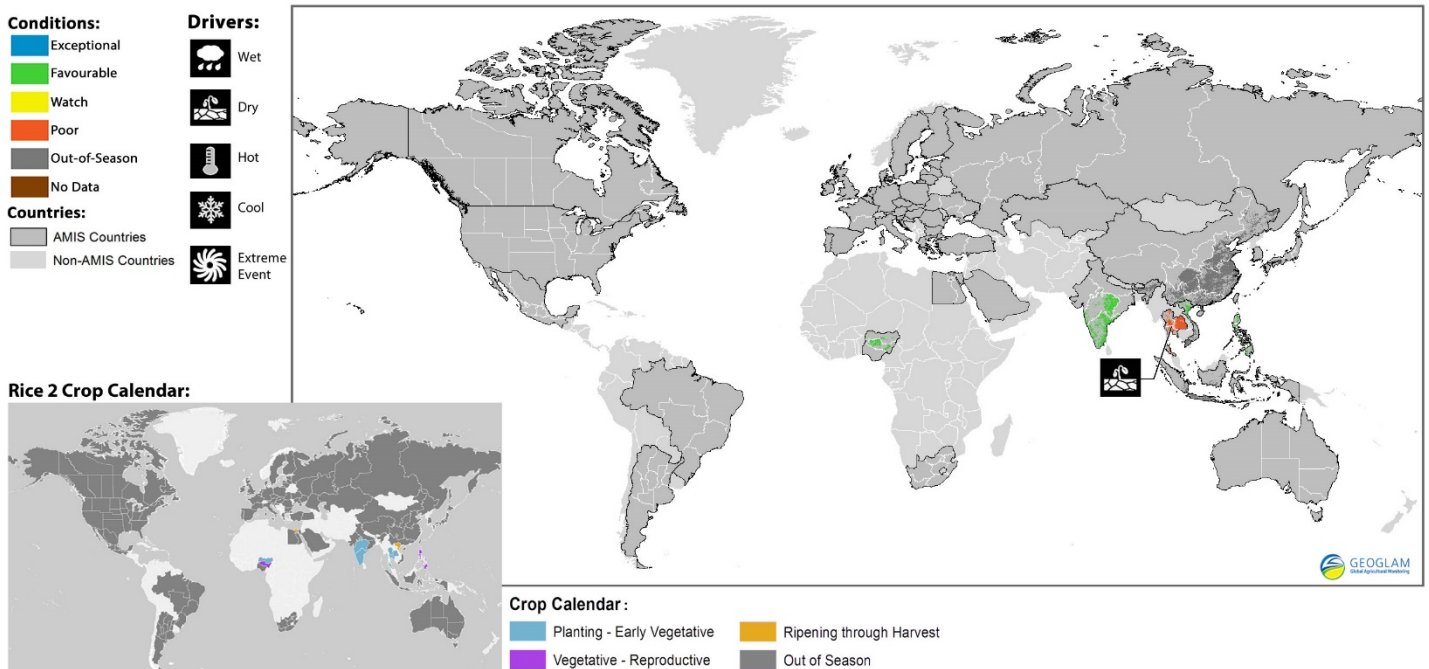
drivers responsible for those conditions are displayed. The crop calendar is provided as a point of reference to provide information on what part of the life cycle the crops are currently in for each area.

## Rice 1 Conditions for AMIS Countries



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## Rice 2 Conditions for AMIS Countries

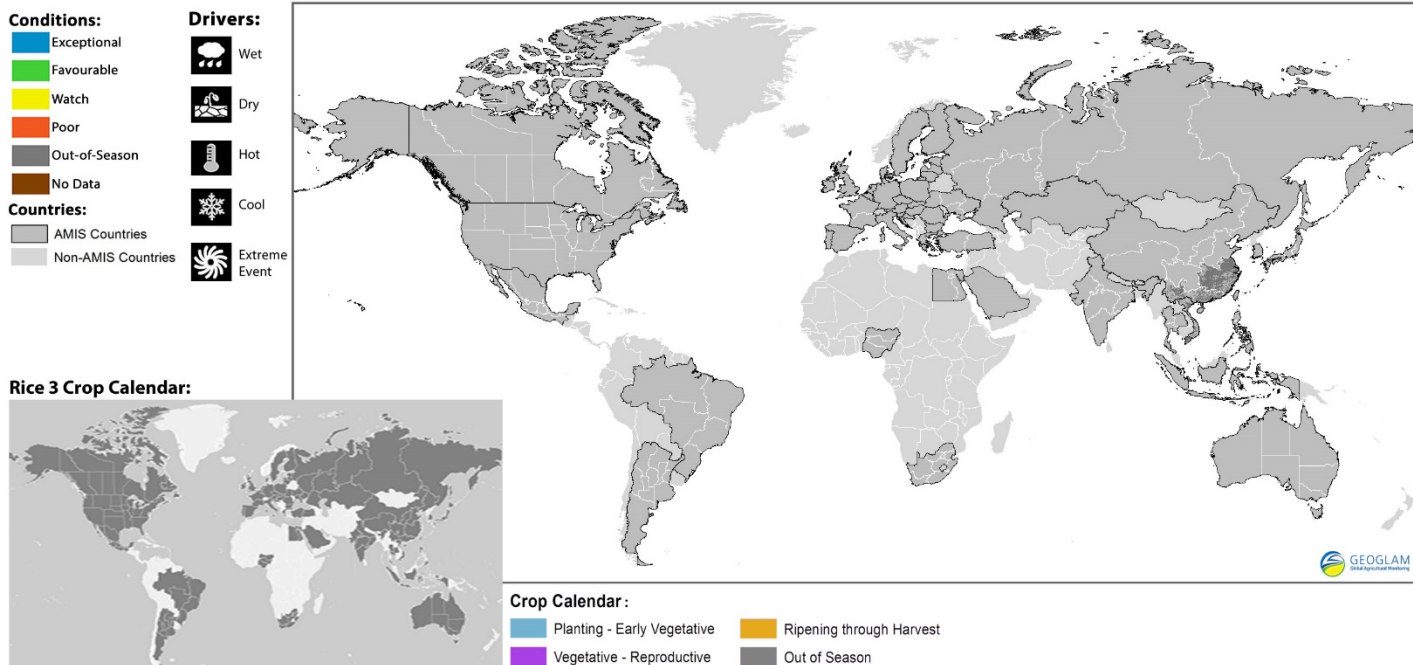


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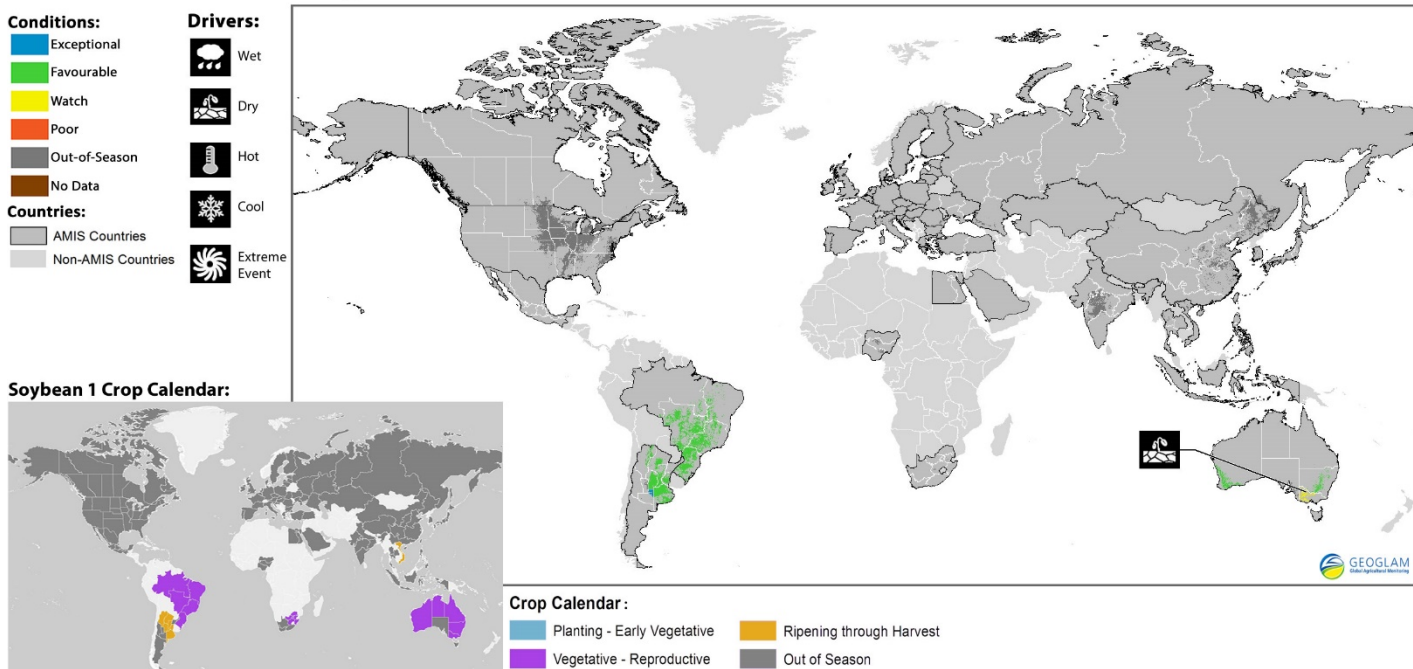
drivers responsible for those conditions are displayed. The crop calendar is provided as a point of reference to provide information on what part of the life cycle the crops are currently in for each area.

## 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 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.

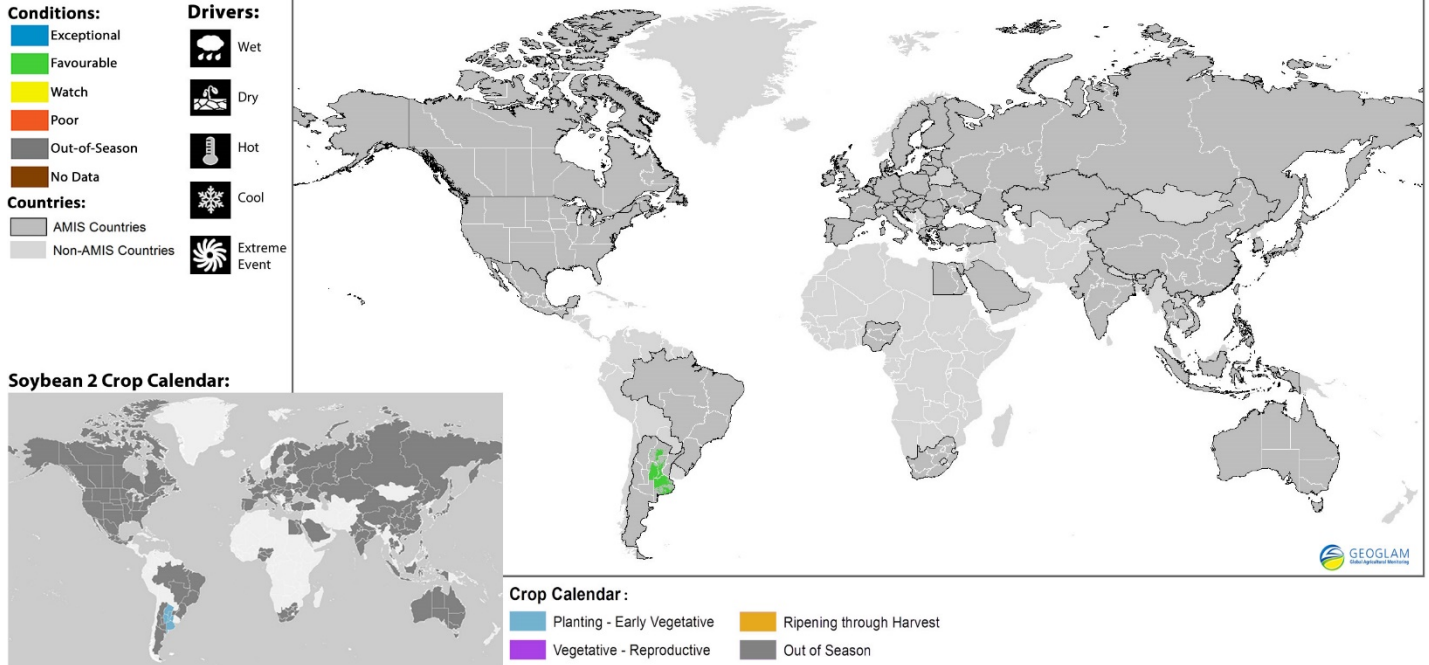
## Soybean 1 Conditions for AMIS Countries



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\* Assessment based on information as of January 28<sup>th</sup>

## Soybean 2 Conditions for AMIS Countries



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