

GEOGLAM Crop Monitor

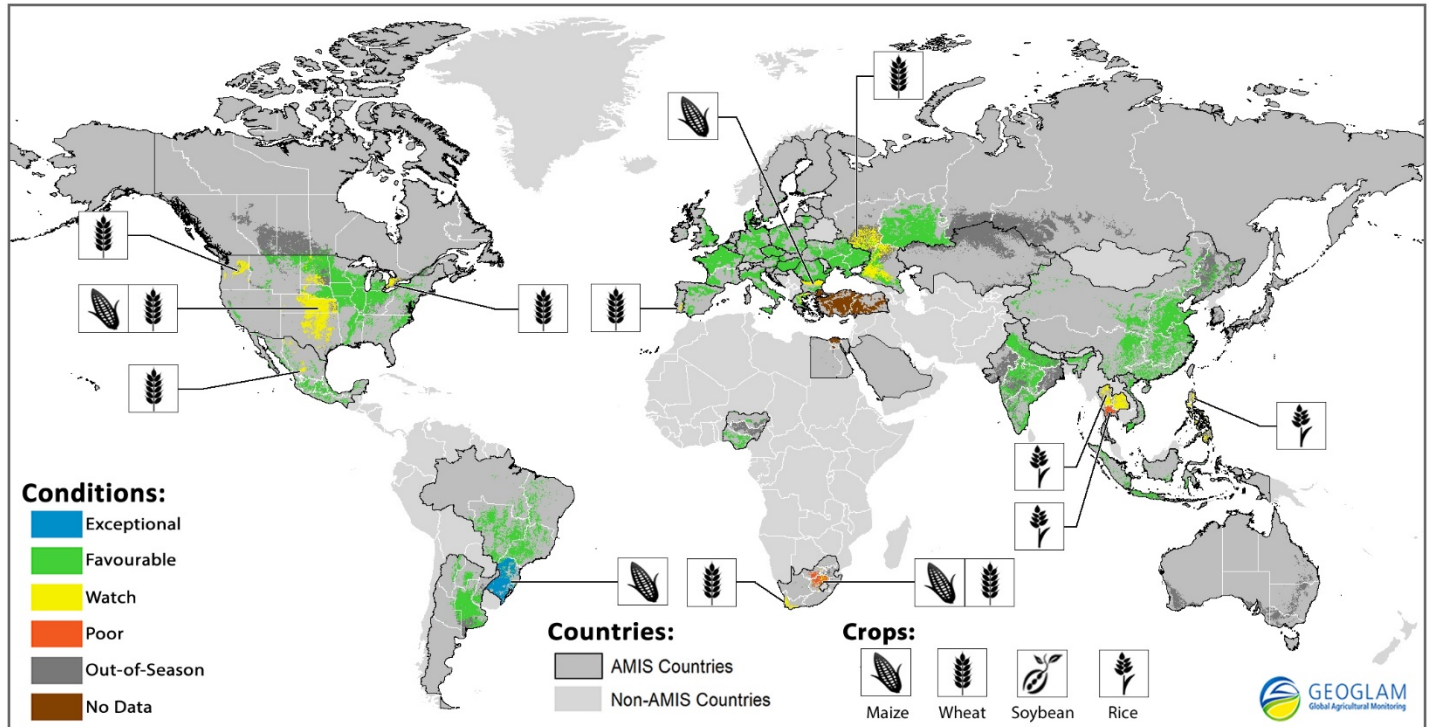
May 2015

No. 18



GEOGLAM
Global Agricultural Monitoring

Crop Conditions 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 less than favourable conditions are displayed on the map with their crop symbol.**

Beginning this month, the Crop Monitor is introducing improved pie charts to more accurately reflect the crop conditions within each country. While the pie charts used to show crop conditions within each country based upon the amount of physical cropland area per sub-national region, the improved pie charts now show crop conditions within the national slices based upon a weighted 5 year average of sub-national crop production data applied to the sub-national regions. Additionally, the pie charts now fully take into account the percent contribution of multiple growing seasons, such as winter and spring wheat, towards national totals.

Highlights

Wheat- In the northern hemisphere, conditions are generally favourable. In the EU, the crop is in good condition. In the US, there is concern over winter wheat conditions due to continued dryness in the south and west for several years now. Spring wheat planting is on average ahead of schedule. In China and Canada, winter and spring wheat conditions are favourable. In the Russian Federation, conditions are mixed due to dry conditions in the autumn and a delayed spring. In India and Ukraine, conditions are mostly favourable. In the southern hemisphere, planting has begun in Brazil and conditions are favourable. In South Africa, conditions are mixed due to hot and dry weather.

Maize- In the southern hemisphere, conditions continue to be generally favourable. In Brazil, conditions are favourable for the spring-planted crop (lower producing season) and the summer-planted crop (higher producing season). In Argentina, conditions are good. In South Africa, below-normal yields are expected for both white and yellow maize as a result of hot and dry conditions. In the northern hemisphere, conditions are favourable. In the US, China, Ukraine, Nigeria, India and the Russian Federation, conditions are favourable. In the EU, planting has begun and conditions are mostly favourable. In Mexico, conditions are favourable for the autumn-planted crop and planting has begun for the spring-planted crop.

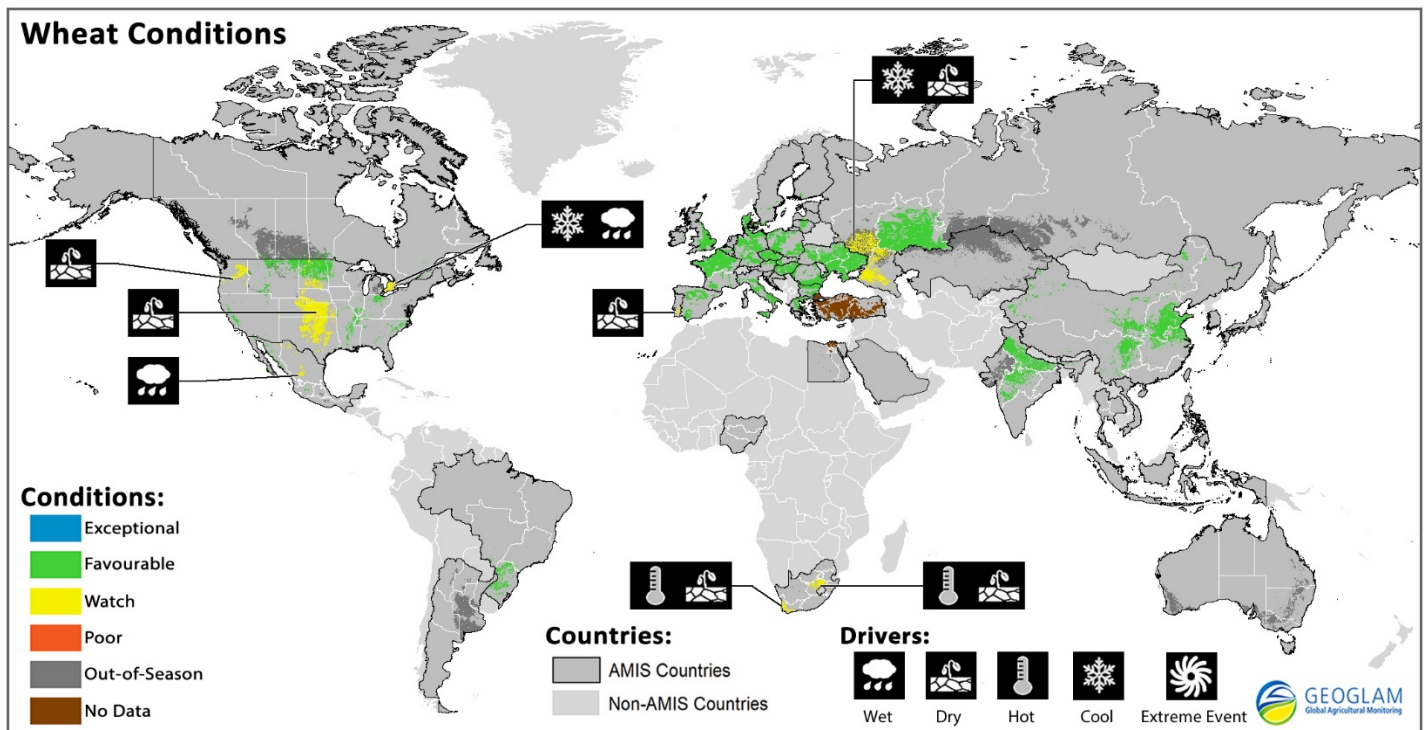
Rice- Conditions are mixed. In India and China, conditions are favourable. In Thailand and the Philippines, conditions are poor for the dry season rice. In Viet Nam, US, Nigeria, and Argentina, overall conditions are favourable. In Indonesia, conditions for the wet season rice remain good due to favourable sunlight and sufficient water availability. In Brazil, harvest is almost complete.

Soybeans- In the southern hemisphere, conditions are favourable. In Brazil, conditions are favourable and harvest is almost complete. In Argentina, conditions of the first and second crop are favourable.

El Niño is back in the news. Weak El Niño conditions are currently present in the equatorial Pacific and there is a 70 percent chance that El Niño will persist throughout the June-September northern hemisphere growing season, according to outlook statements from the Australian Bureau of Meteorology, the International Research Institute for Climate and Society, and the U.S. National Oceanic and Atmospheric Administration. El Niño is a major driver of climatic conditions in several AMIS crop growing regions. Historically it has been associated with drier than average conditions in countries including India, Indonesia, and north central China, and wetter than average conditions in parts of the central United States. GEOGLAM will closely watch regions that have shown sensitivity to El Niño in the past and monitor possible impacts.

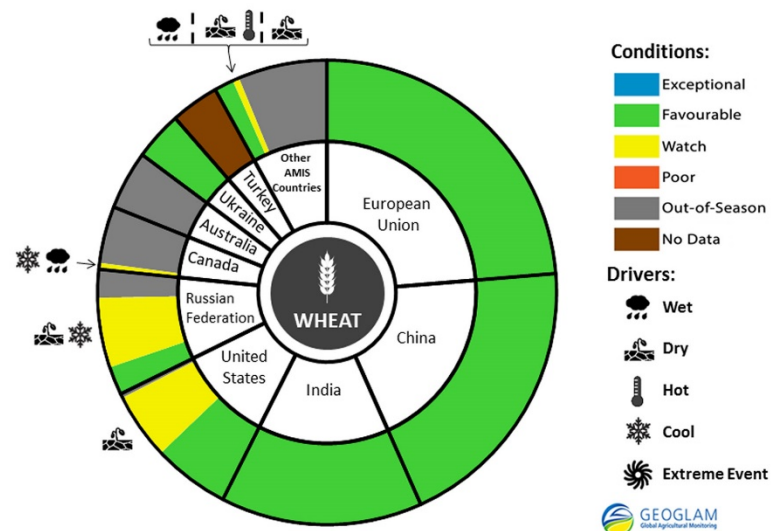
* Assessment based on information as of April 28th

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.

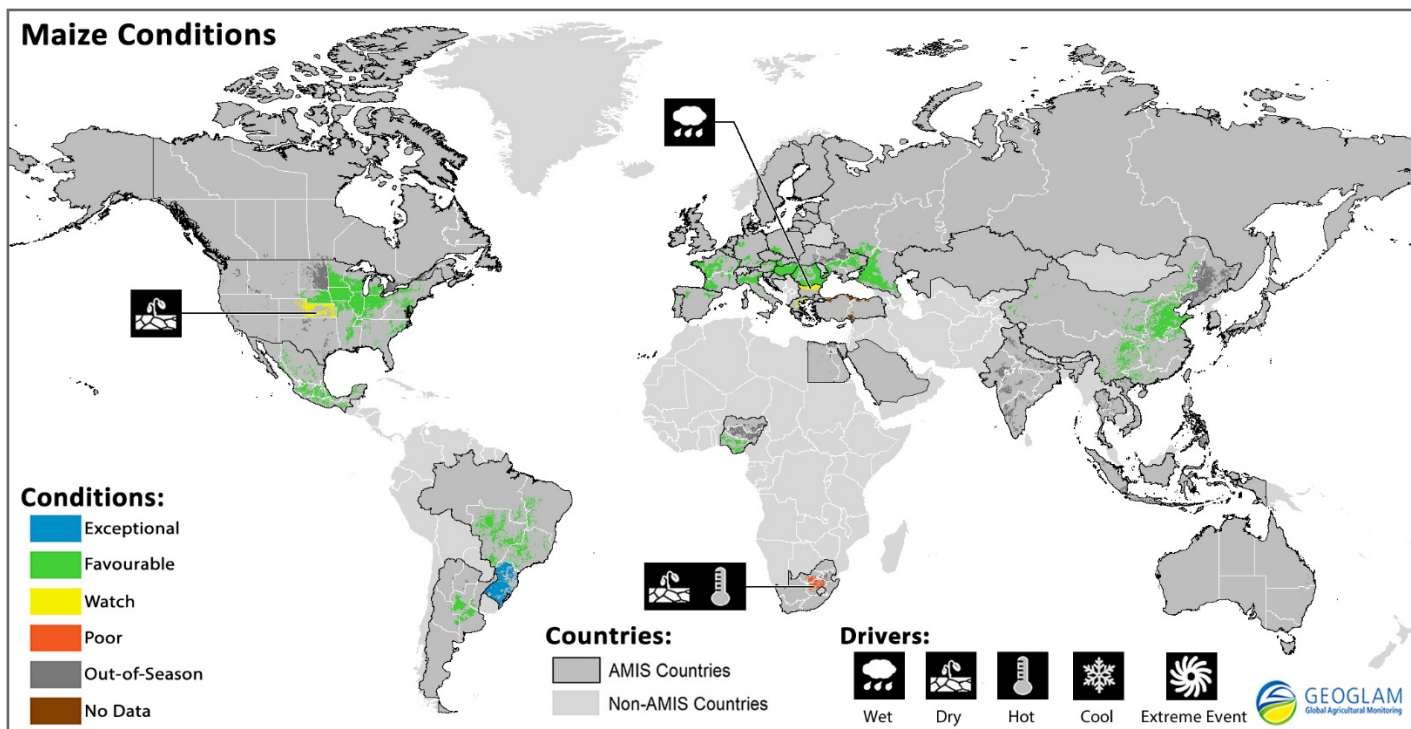
Wheat: In the northern hemisphere, conditions are favourable. In the EU, the crop is generally in good condition owing to warmer-than-usual weather, particularly over north-eastern countries. In some areas of Western Europe there is prolonged lack of precipitation. However, for the moment, the only region of concern is in northern Portugal but no crop impact has been assessed so far. In the US, winter wheat conditions are of concern as the crop is struggling, particularly in the southern Great Plains centered around the state of Oklahoma. This is due to continued drying that has plagued the area for several years now. Spring wheat planting is on average ahead of schedule. Dryness across the upper Great Plains and Northwest may become a problem, but it is too early to represent real concern at this time. In China, winter wheat conditions are favourable and the crop is at jointing (on the North China Plain) to flowering stages (in Southwest China, mainly in Sichuan, Chongqing and Guizhou). Conditions are favourable for the spring wheat crop, which is at seedling stage in Northwest China and will be sown in late April to early May in Northeast China. In the Russian Federation, winter wheat continues to emerge from dormancy and conditions are mixed despite the generally favourable climatic conditions, due to dry conditions in the fall and a delayed spring in most regions. Due to the late spring there has been a delay in sowing of cold resistant spring wheat in Central, Volga and Southern Russia. In Canada, winter wheat has begun to break dormancy and conditions are still generally favourable. The level of winter-kill has not yet been determined in most provinces; however, much-above-normal winter-kill is expected in Eastern Canada as a result of below-normal winter temperatures and some winter-kill has already been confirmed in Ontario. Seeding of spring wheat is pending the conclusion of spring runoff and warmer soil temperatures.



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

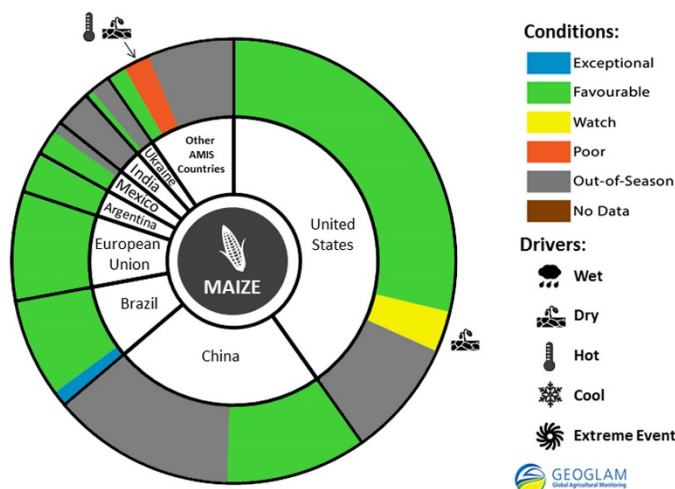
In **India**, conditions are mostly favourable and the crop is in maturity to harvest stages. There are still some concerns in the northern regions where there has been some damage due to excess rainfall. In **Ukraine**, conditions are generally good owing to ample rain in southern and eastern areas. Soil moisture is favourable, except in small areas in the northern regions, where there was little rainfall. The development of winter wheat lags behind the 2014 crop, but is still ahead of normal. In the *southern hemisphere*, planting has begun. In **Brazil**, conditions are favourable in the northern part of the southern region. In **South Africa**, planting has begun and conditions are mixed due to hot and dry conditions.

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 the *southern hemisphere*, conditions continue to be generally favourable. In **Brazil**, conditions are favourable. Harvest is almost complete for the spring-planted crop (lesser producing season). Planted area is down relative to last year due to competition with soybeans, which are more profitable. Conditions of the summer-planted crop (higher producing season) are favourable owing to good rainfall distribution. Planting is mostly complete and was slightly delayed since the crop is planted after soybeans and soybean harvest was delayed. In **Argentina**, conditions are generally good. Harvest is progressing normally owing to good weather conditions. There is some limited concern in areas that were affected by water stress earlier in the season. In **South Africa**, below-normal yields are expected for both white and yellow maize as a result of hot and dry conditions during the first half of February. In the *northern hemisphere*, conditions are favourable. In the **US**, planting has begun and conditions are mostly favourable. There is some concern over persistent dryness across the Great Plains. In

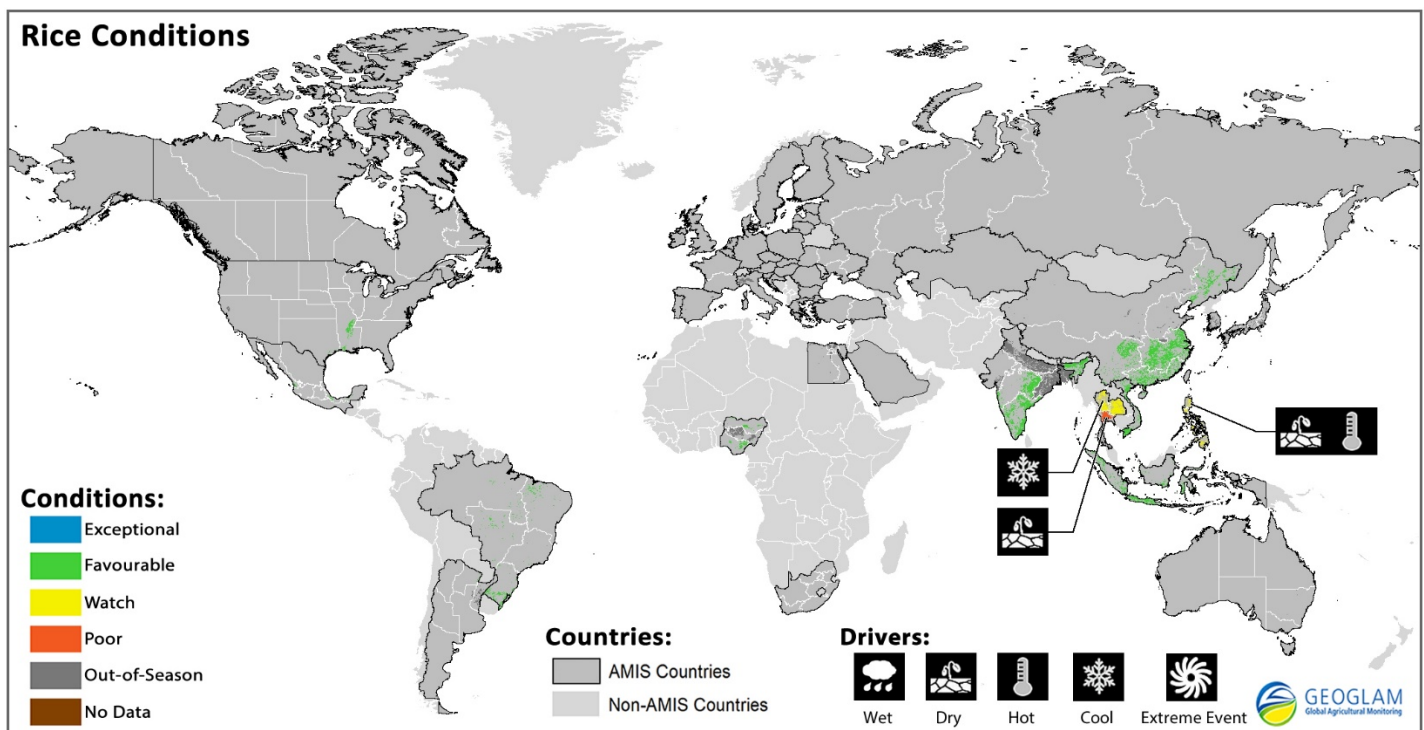


For detailed description of the pie chart please see box below.

* Assessment based on information as of April 28th

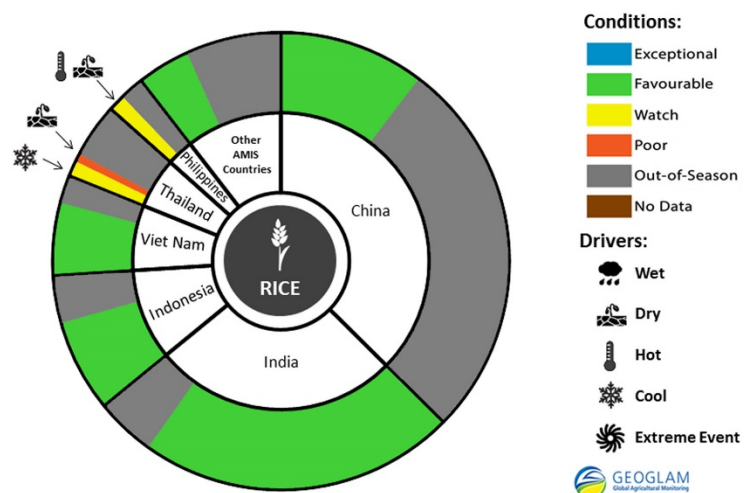
China, conditions are favourable for the spring-planted crop. Crops in Northwest China, eastern tips of Southwest China and west part of Southern China are between sowing to seedling stages. In **Ukraine**, planting has started under favourable conditions. In the **EU**, planting has begun and conditions are normal except in some of the southeastern regions (e.g. Bulgaria, Greece) where overly wet conditions caused sowing delays. In **India**, harvest is complete and the end of season conditions are favourable. In **Mexico**, conditions are favourable for the autumn-planted crop and planting has begun for the spring-planted crop. In the **Russian Federation**, planting has begun and conditions are favourable. In **Nigeria**, planting has begun and conditions are generally favourable.

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: conditions are mixed. In **India**, conditions remain favourable for the second season crop. In **China**, conditions are favourable. The early rice, mainly distributed in southern China, is in seedling to transplanting stages, and single rice in Southwest China is in sowing stage to seedling stages. In **Thailand**, conditions are poor for the dry season rice. Harvest has begun and production is expected to be significantly less than last year, mainly due to insufficient water for cultivation that resulted in reduced planted area and poor yield as well as due to pest damage and cold weather. In **Viet Nam**, overall conditions are favourable. In the north, sowing of the winter-spring is complete. In the south, harvest is almost complete for the winter-spring (dry season) rice. Yield is slightly decreased relative to the previous year. In the **US**, planting is underway and conditions are favourable. In **Indonesia**, conditions for the wet season rice remain good due to favourable sunlight and sufficient water availability. The

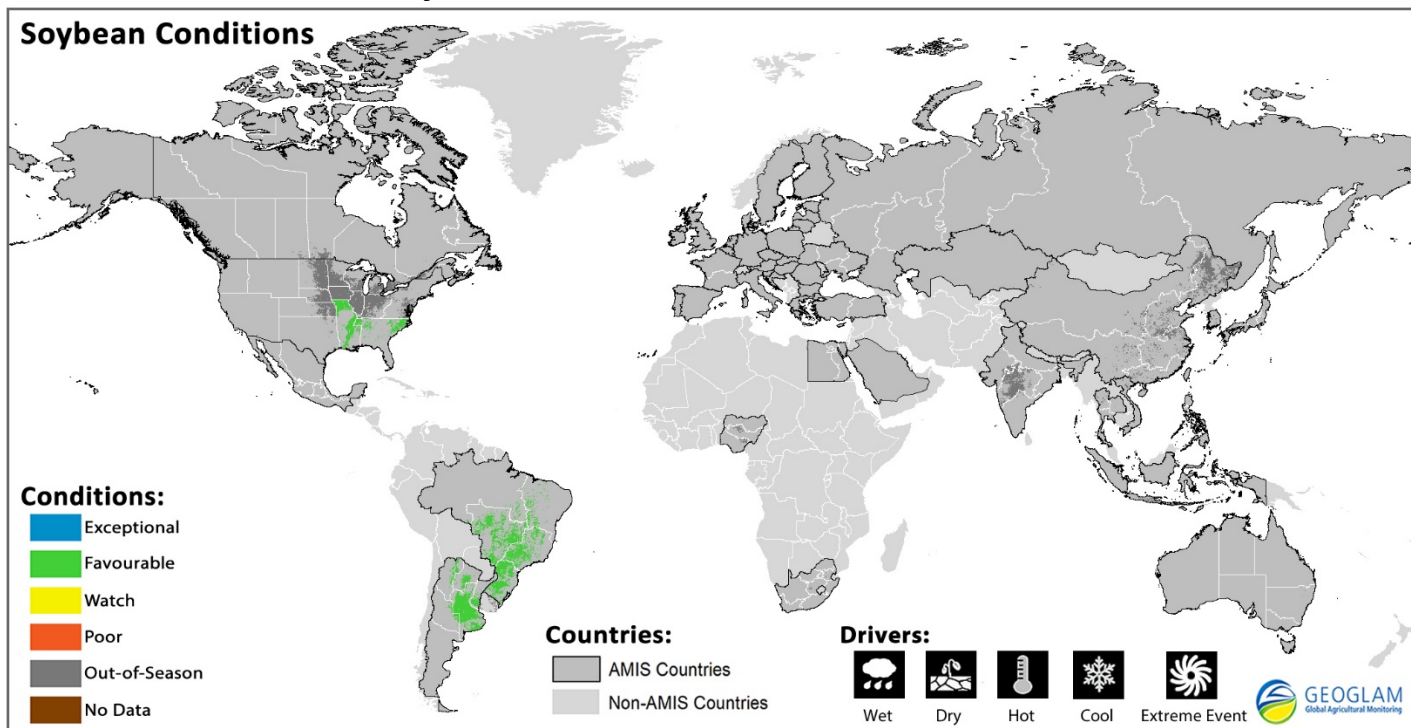


For detailed description of the pie chart please see box below.

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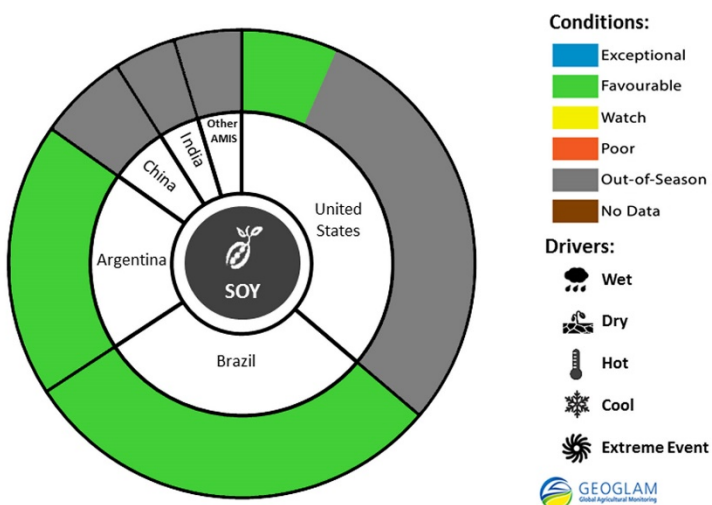
crop is in vegetative to maturity stages. In **Brazil**, harvest is almost complete. Even though planted area was reduced, production is expected to be similar to last year owing to increased yields. In the **Philippines**, harvest has concluded this month for the dry season rice and conditions are slightly poor due to intense heat and insufficient water. In **Nigeria**, conditions are favourable for both seasons of rice. In **Argentina**, harvest is almost complete and conditions are favourable.

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 the southern hemisphere, conditions are favourable. In **Brazil**, conditions are favourable and harvest is almost complete. Owing to the increased planted area, production increased relative to last year. In **Argentina**, conditions of the first crop are favourable and harvest is drawing to a close in the central region, earlier than the previous season owing to favourable weather. The second crop is in favourable conditions. Harvest has begun in some regions and in the remaining areas it is in maturity to grain filling stages.



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 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.

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
	Favorable
	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 may or may 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

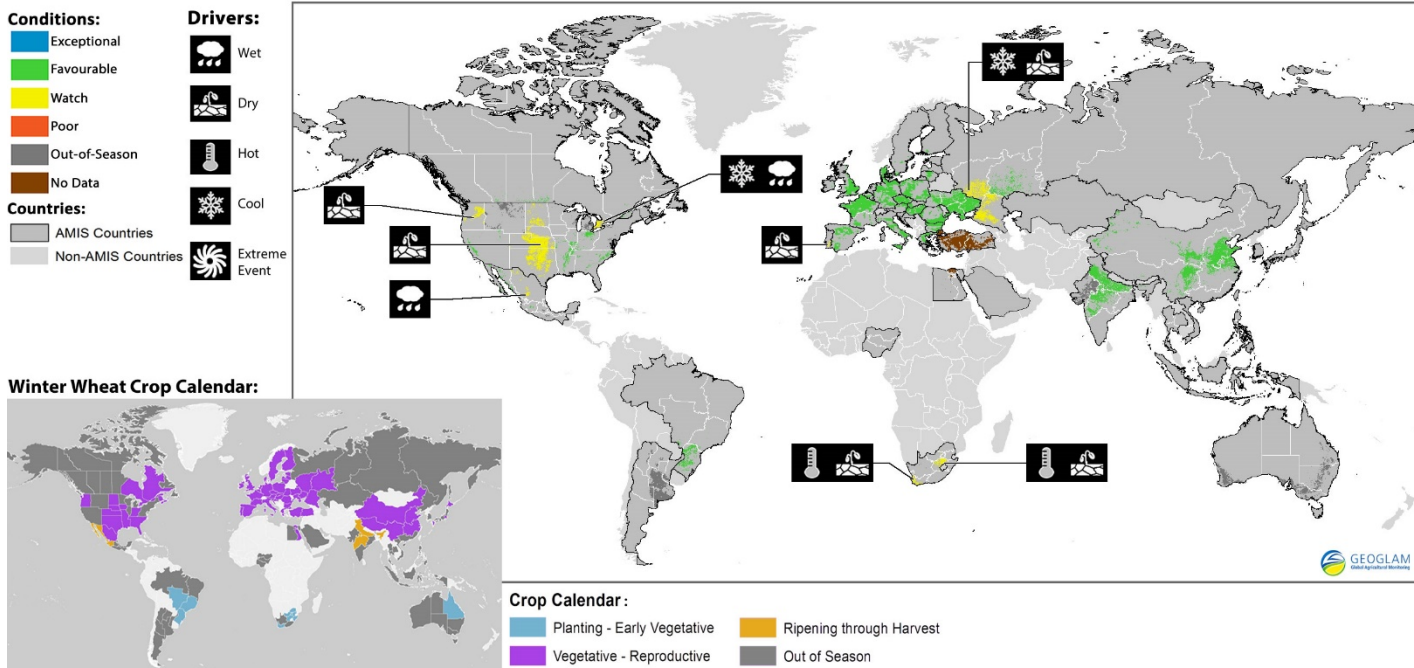
Sources and Disclaimers: The Crop Monitor assessment is conducted by GEOGLAM with inputs from the following partners (in alphabetical order): Argentina (INTA), Asia Rice Countries (AFSIS, ASEAN+3 & Asia RICE), Australia (ABARES & CSIRO), Brazil (CONAB & INPE), Canada (AAFC), China (CAS), EU (EC JRC MARS), Indonesia (LAPAN & MOA), International (CIMMYT, FAO, IFPRI & IRRI), Japan (JAXA), Mexico (SIAP), Russia (IKI), South Africa (ARC & GeoTerralimage & 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 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 beta release (2013), USDA/NASS 2013 CDL, 2013 AAFC Annual Crop Inventory Map, GLAM/UMD, GLAD/UMD, Australian Land Use and Management Classification (Version 7), SIAP, ARC, and JRC. Crop calendars based on GEOGLAM partner crop calendars and USDA crop calendars.

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

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

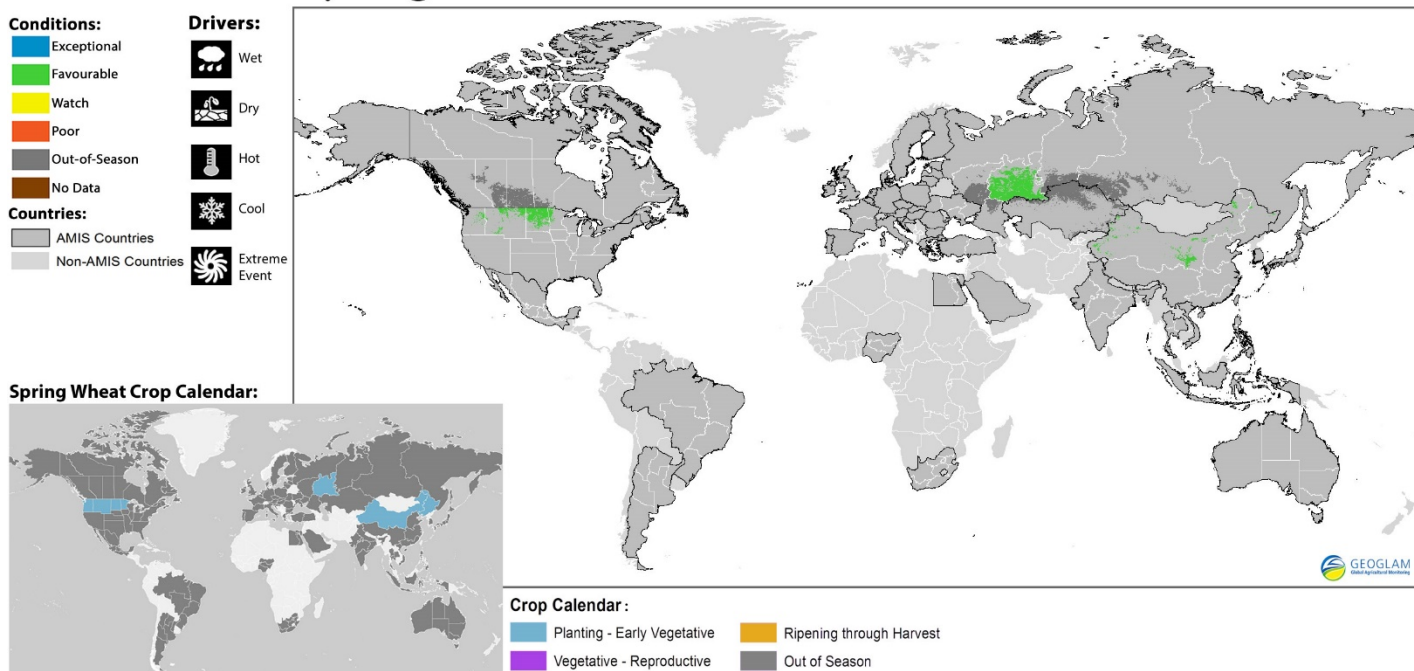
Appendix 2: Crop Season Specific Maps

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 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.

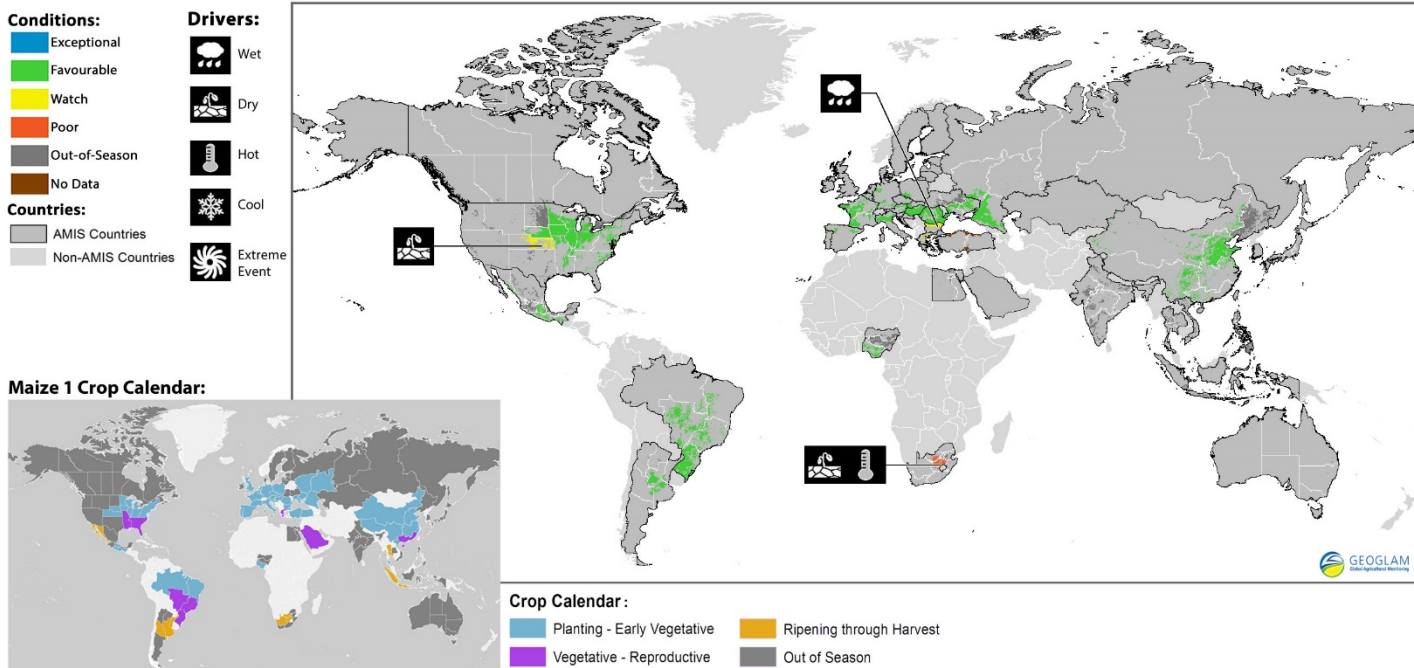
Spring Planted Wheat Conditions for AMIS Countries



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 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.

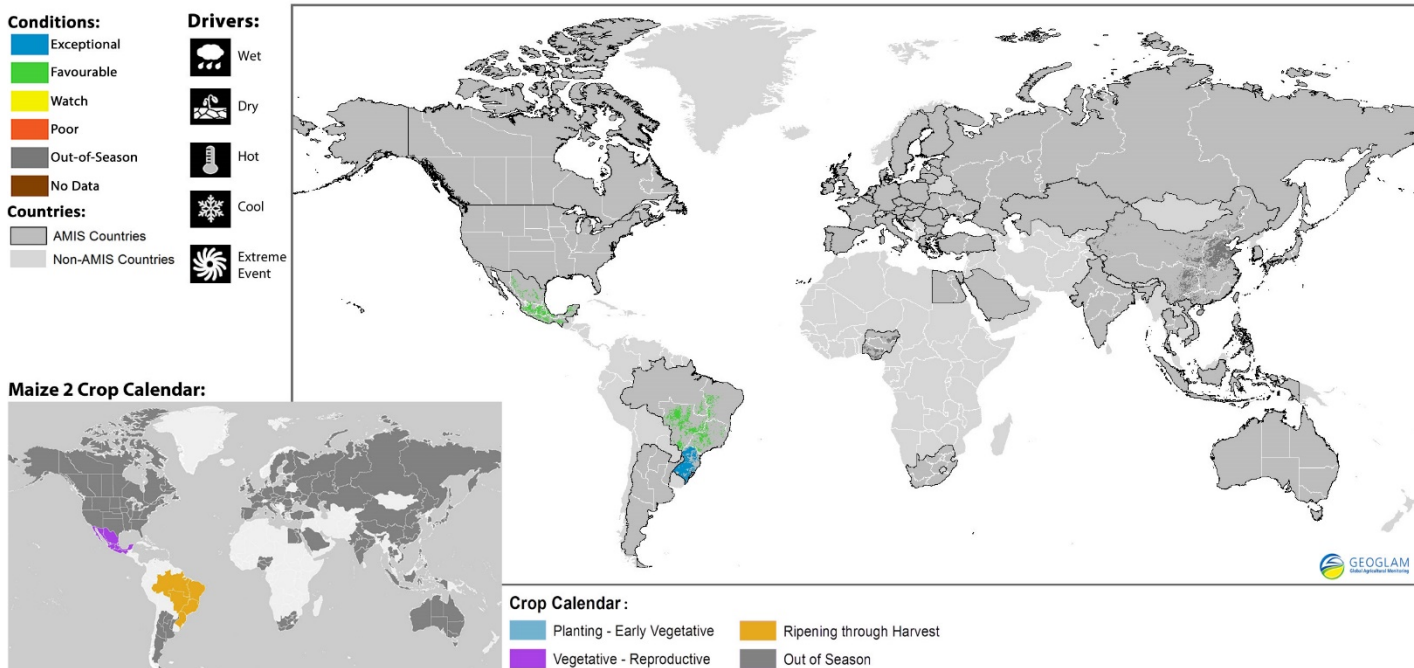
* Assessment based on information as of April 28th

Maize 1 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 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.

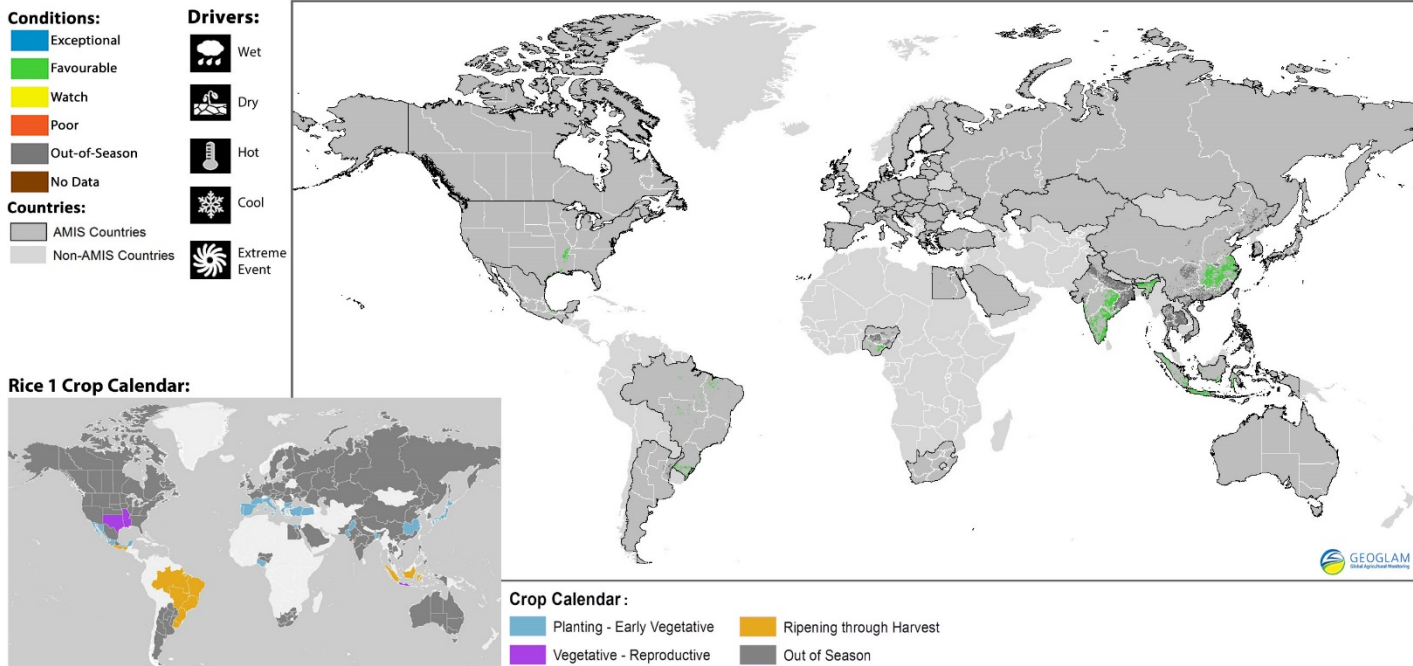
Maize 2 Conditions for AMIS Countries



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 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.

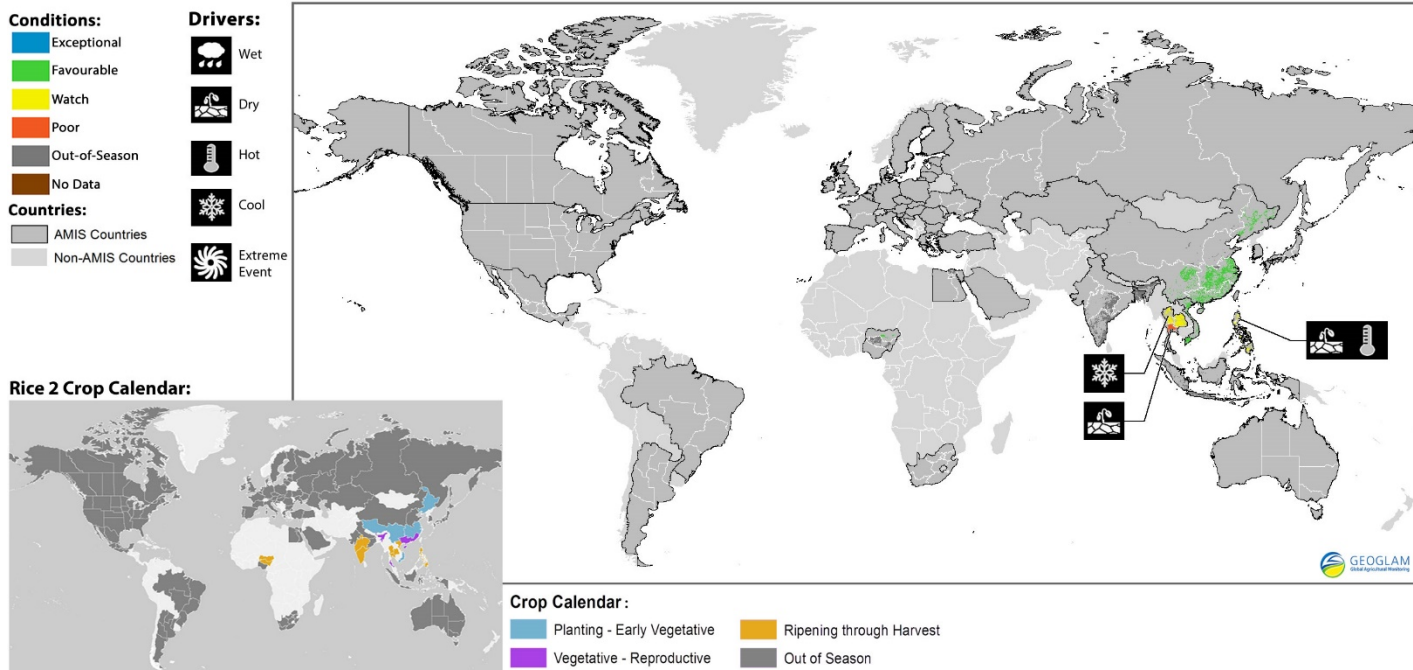
* Assessment based on information as of April 28th

Rice 1 Conditions for AMIS Countries



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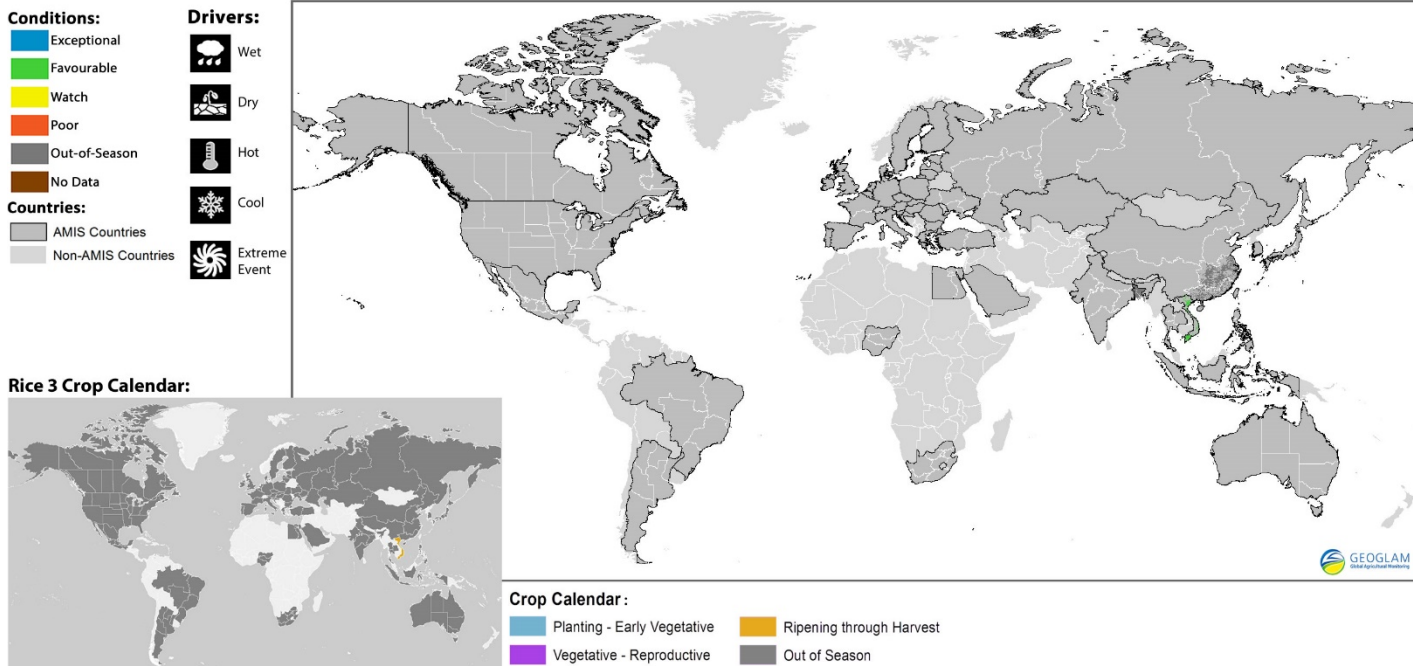
Rice 2 Conditions for AMIS Countries



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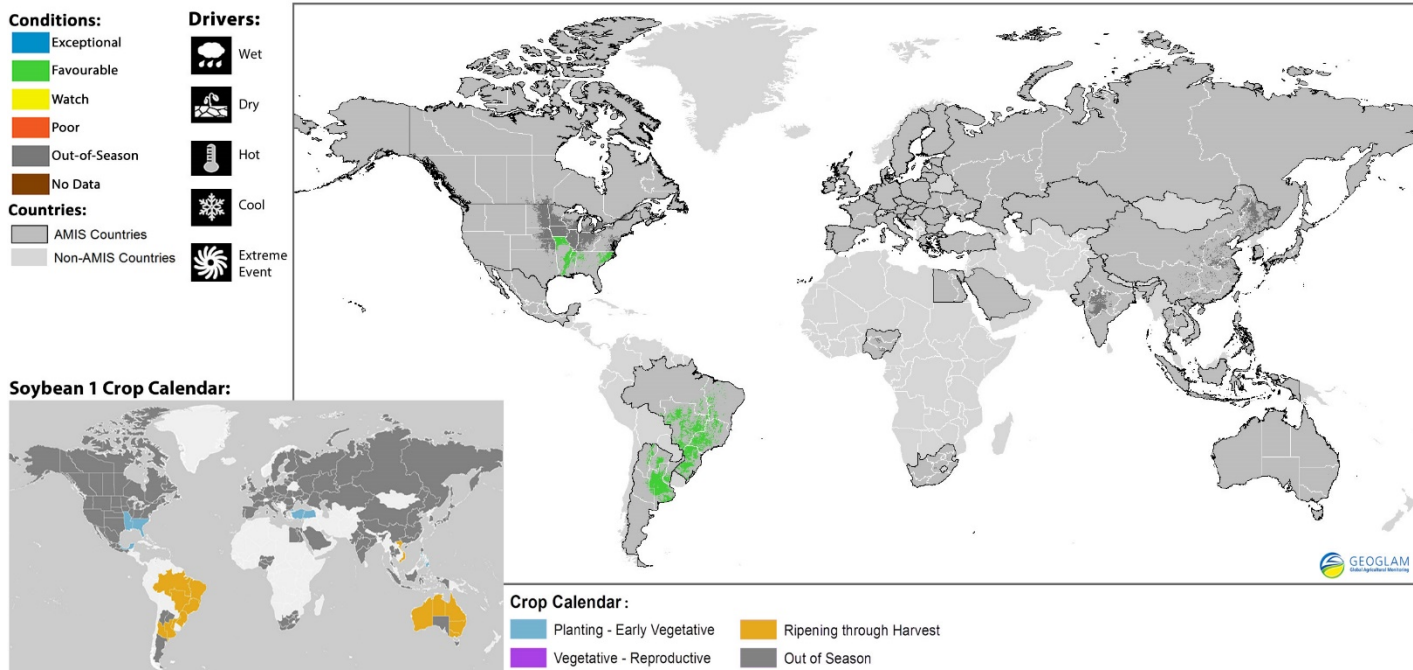
* Assessment based on information as of April 28th

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 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.

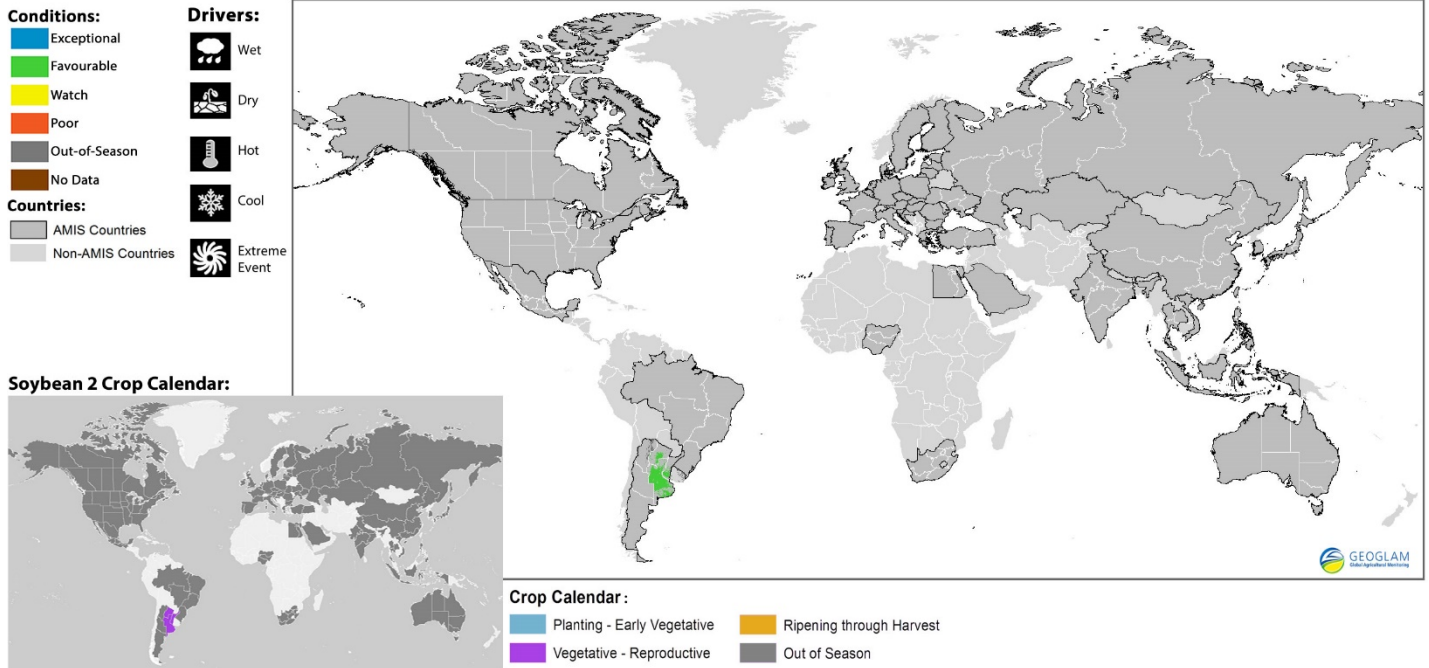
Soybean 1 Conditions for AMIS Countries



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 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 Conditions for AMIS Countries



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