

GEOGLAM Crop Monitor

November 2014

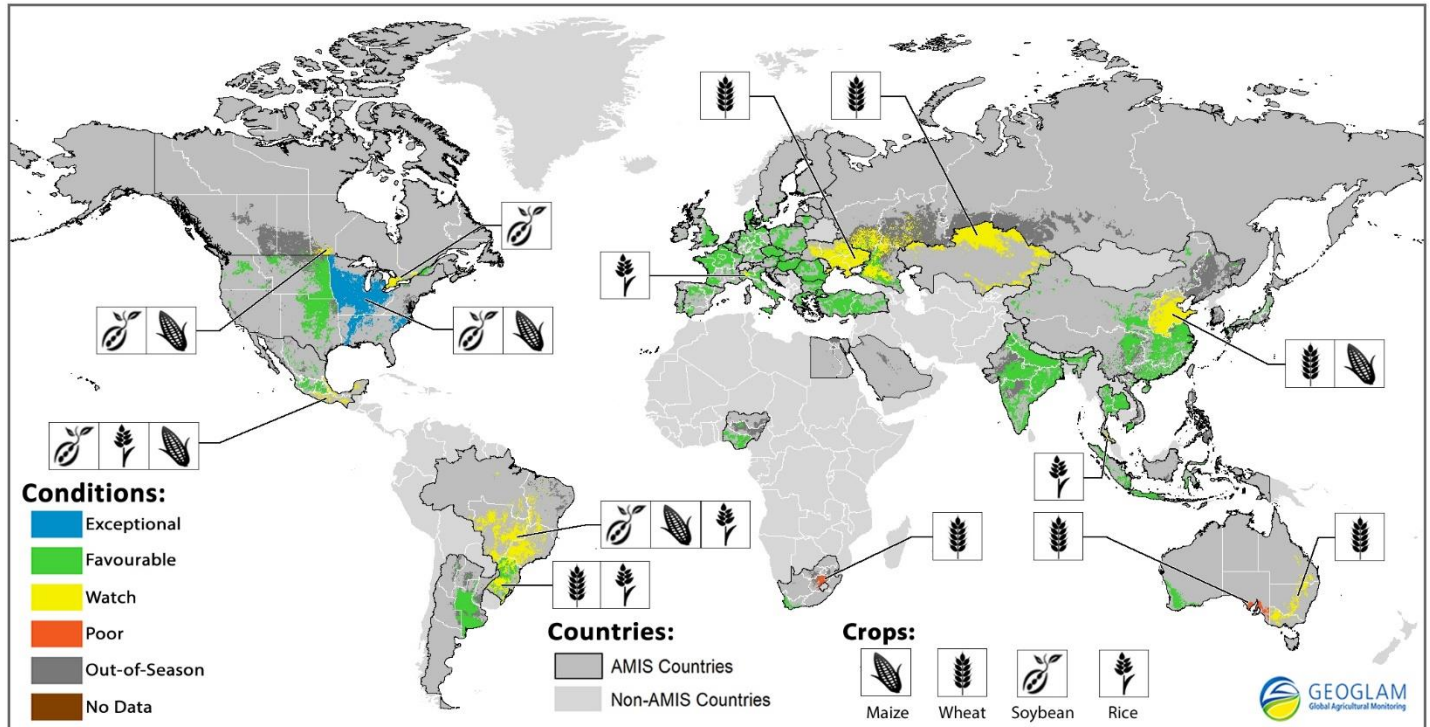
No. 13



GEOGLAM
Global Agricultural Monitoring

Prepared by members of the GEOGLAM Community of Practice

Crop Conditions for AMIS Countries (As of October 28th)*



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

Highlights

Wheat- Conditions in the northern hemisphere winter wheat planting has begun. In US, India, China and EU, planting has begun and conditions are generally favourable. In Canada, planting has begun and conditions are mixed due to excess moisture. In Kazakhstan, spring wheat harvest is still underway but is hampered by snow. In Russia and Ukraine, planting is complete and unusually cold weather in some regions has caused the crop to go into dormancy earlier than usual. In the southern hemisphere, conditions remain generally favourable. In Argentina, conditions are favourable. In Brazil, conditions are mixed. In Australia, conditions remain mixed and yields are expected to be reduced. In South Africa, conditions remain mostly favourable in the winter rainfall region. In the summer rainfall region, below normal rainfall has resulted in reduced planted area and reduced dryland yields.

Maize- Conditions in the northern hemisphere remain overall favourable. In the US and EU, harvest has begun and conditions are very good in the US and good in the EU. In Russia and Ukraine, harvest has begun. In Mexico, India, and Nigeria, conditions remain favourable. In China, harvest is mostly complete except in the central region and conditions remain mixed due to earlier dry conditions. In Canada, conditions remain mixed and harvest is slightly delayed. In the southern hemisphere, conditions are generally favourable. In Argentina, planting has begun. In Brazil, planting has begun but is delayed slightly due to below average rainfall.

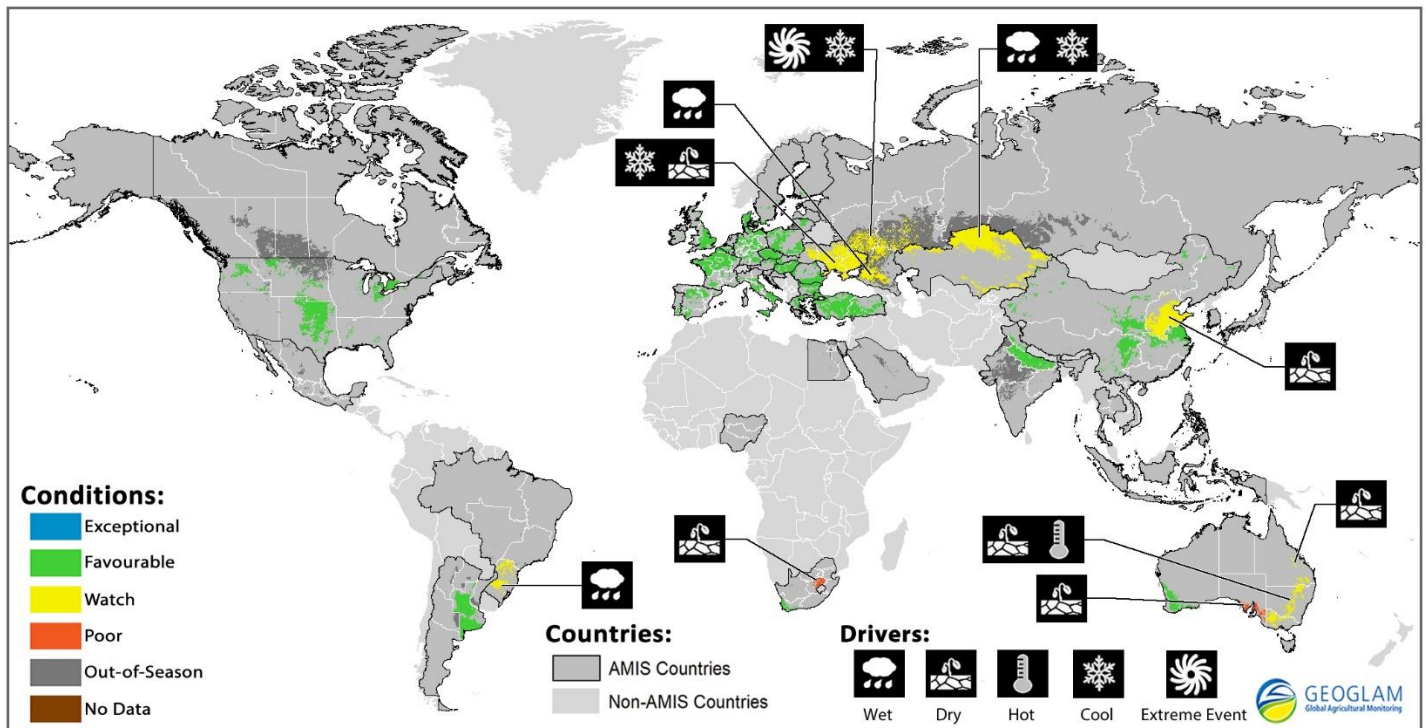
Rice- Overall conditions are generally favourable. In the US, Nigeria and India, conditions are good and harvest is progressing. In Indonesia, Japan, China, and Viet Nam, conditions are favourable. In Thailand, harvest has begun in the north and central regions and conditions are generally favourable. There are some concerns over dryness in the south. In the EU, rice is progressing as normal except for Italy, where the crop suffered due to a wetter and colder than usual summer. In Brazil, planting has been delayed due to excess rainfall in parts of the southern regions.

Soybeans- Overall conditions in the northern hemisphere are good due to a very good US crop. The soybean harvest is well underway in the US. Conditions are exceptional and a record yield is expected due to favourable weather over the growing season. In Canada, conditions are mixed due to excess moisture. In India and Nigeria, conditions are favourable. In the southern hemisphere, conditions are mixed. In Brazil, planting has begun but is delayed due to below average rainfall. In Argentina, fields are being prepared for planting.

El Niño situation update

The El Niño event that has been anticipated since April has still not materialized. Although sea surface temperatures in the Pacific are warmer than average, they do not meet the criteria for El Niño, and the corresponding atmospheric features are yet to appear. Model projections cited in mid and late October by the Australian Bureau of Meteorology, the International Research Institute for Climate and Society, and the U.S. National Oceanic and Atmospheric Administration put the probability of an El Niño event above 50% during the 2014-2015 southern hemisphere growing season. However, it is not expected to be a strong event. Potential impacts of El Niño should be considered: below-normal rainfall in parts of Asia, Southern Africa, and Australia, affecting rice, maize, and wheat; and above-average rainfall in major regions of South America, benefiting maize, soy and wheat.

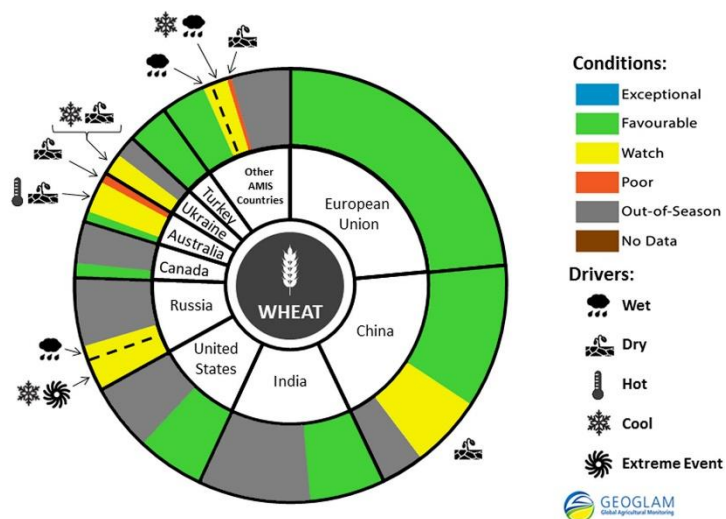
Wheat Conditions for AMIS Countries



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 October 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.

* Assessment based on information as of October 28th

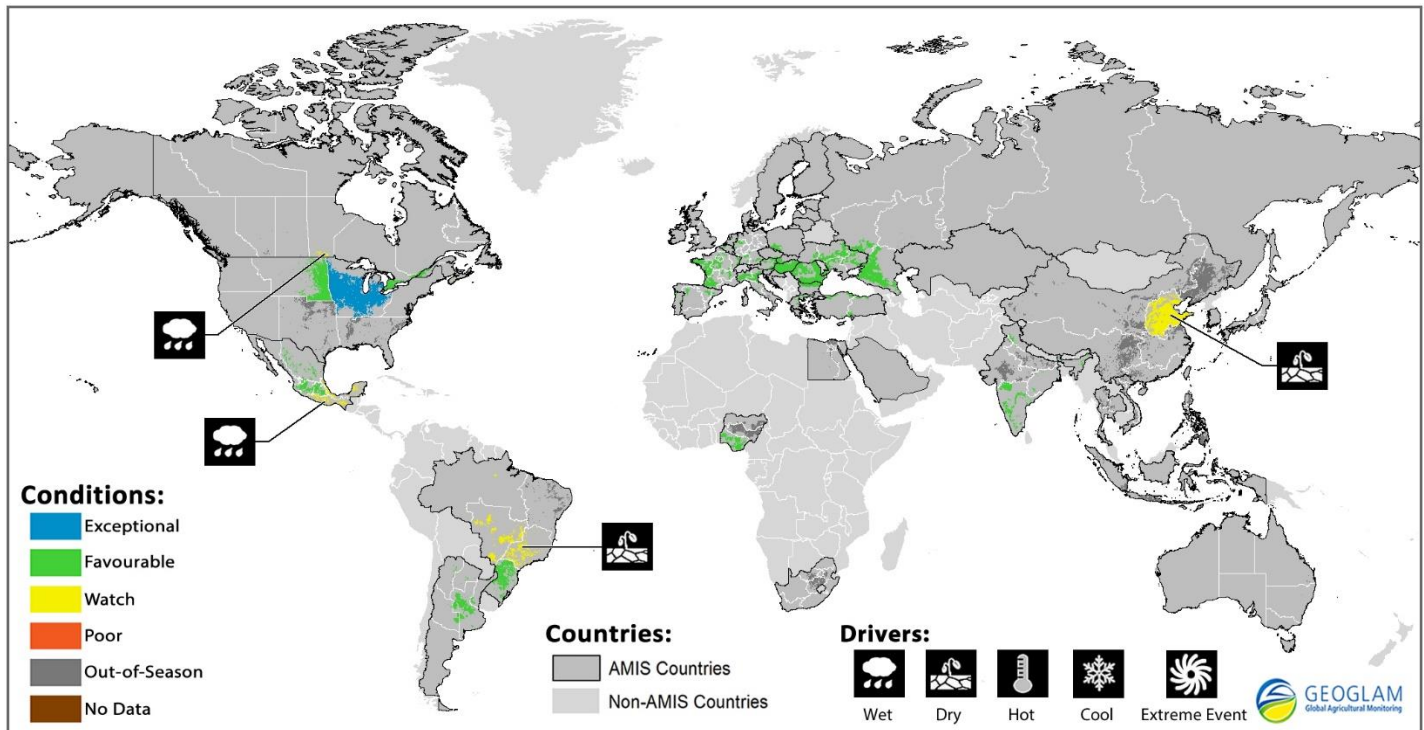
Wheat: conditions in the northern hemisphere remain favourable. In **Russia**, winter wheat planting is complete. Freezing temperatures in some areas of the Central, South and Volga regions have made the crop enter the dormancy stage early, thereby shortening the vegetative stage. In **Ukraine**, winter wheat conditions are mixed. Due to unusually cold weather, the crop has gone into dormancy early in some regions. In **Kazakhstan**, the spring wheat harvest is still underway but nearing completion. Some fields are currently under snow, which could limit harvest and potentially impact yields. In the **EU**, winter wheat planting has begun and conditions are favourable. In the **US**, planting of winter wheat is nearing completion and emergence is on pace with past years. In **Canada**, spring wheat harvest is complete and yields are slightly lower than the five year average. Winter wheat planting has begun and conditions are mixed due to excess moisture delaying field operations. In **China**, planting has begun and conditions are generally favourable. There are some concerns over poor soil moisture, which may hamper wheat emergence. In **India**, planting has begun. In the southern hemisphere conditions are mostly favourable. In **Argentina**, harvest has begun in the northern growing regions and conditions are good. In **Brazil**, conditions are mixed. In southern growing regions, above average rainfall has caused a loss of grain quality. The crops are mostly in reproductive to harvest stages. In **Australia**, conditions remain mixed and overall yield prospects are reduced. Warm temperatures and below normal precipitation exacerbated crop deterioration particularly in southern growing regions where soil moisture deficits persisted since August. In contrast, September rainfall across Western Australia benefited late planted crops. Harvest will begin early November and continue through December. In **South Africa**, harvest has begun and conditions remain favourable over the winter rainfall region (main area) owing to normal to above-normal rainfall in winter, and yields are expected to be above average. Over the summer rainfall region, below-normal rain since April resulted in reduced planted area and reduced dryland yields.



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 area within each slice is divided between crops in-season (colour) and out-of-season (gray). The in-season portion is coloured according to the various crop conditions within that country. When conditions are labelled as 'poor' or 'watch', icons are added that provide information on the key climatic drivers affecting conditions. The coloured areas reflect conditions by area rather than overall national production.

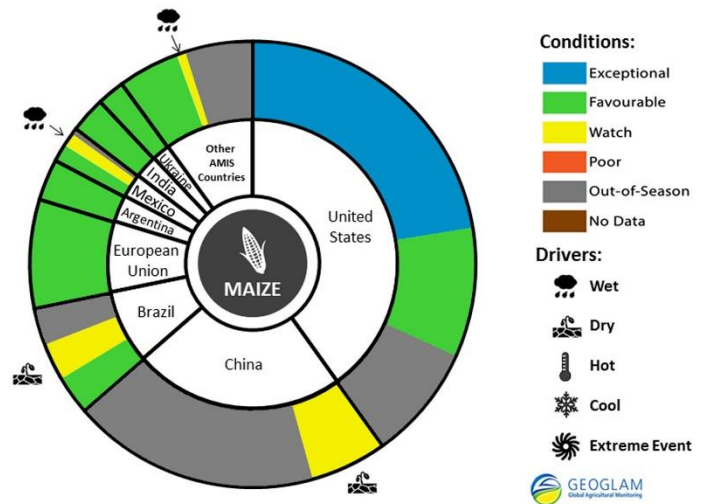
* Assessment based on information as of October 28th

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 October 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.

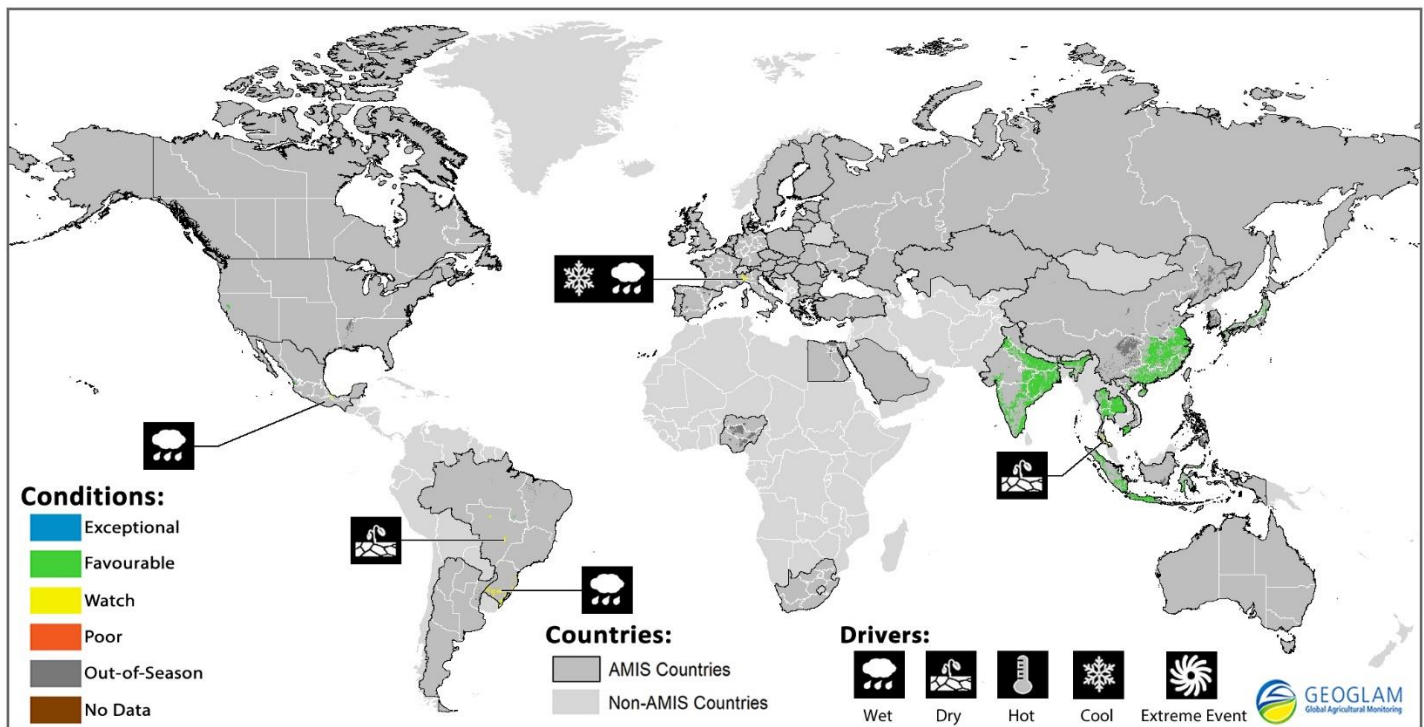
Maize: Conditions in the northern hemisphere remain overall favourable. In the **US**, the maize harvest is underway. Yields are expected to be well above average leading to what will likely be the largest production on record. In the **EU**, crops are in good condition and harvest has begun. Yields are expected to be above the five year average. In **Russia**, harvest is underway and advancing without delay. Yields are slightly down from last year. In **Ukraine**, harvest is progressing and conditions are favourable. In **China**, conditions remain mixed with concern across North China Plain and Northeast growing regions due to earlier dry conditions. Maize harvest is mostly complete except in the central region. In **Mexico**, conditions remain generally favourable for the spring-planted crop with the exception of a few areas in the south that had excess moisture. In **Canada**, conditions remain mixed due to excess moisture and harvest is underway though slightly delayed. In **India**, conditions are mostly favourable. In **Nigeria**, conditions are favourable. In the southern hemisphere conditions are generally favourable. In **Brazil**, conditions are mixed. Planting has begun but is delayed in some regions due to below average rainfall and insufficient soil moisture. In **Argentina**, planting continues and conditions remain favourable.



Top producers of maize within AMIS participating countries and their current crop conditions (as of October 28th). (The description is as for wheat)

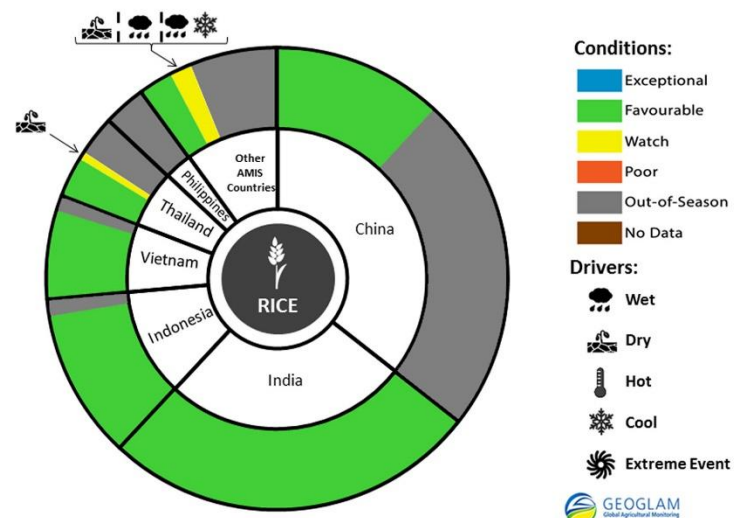
* Assessment based on information as of October 28th

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 October 28th. Where crops are in other than favourable conditions the climatic drivers responsible for those conditions are displayed.

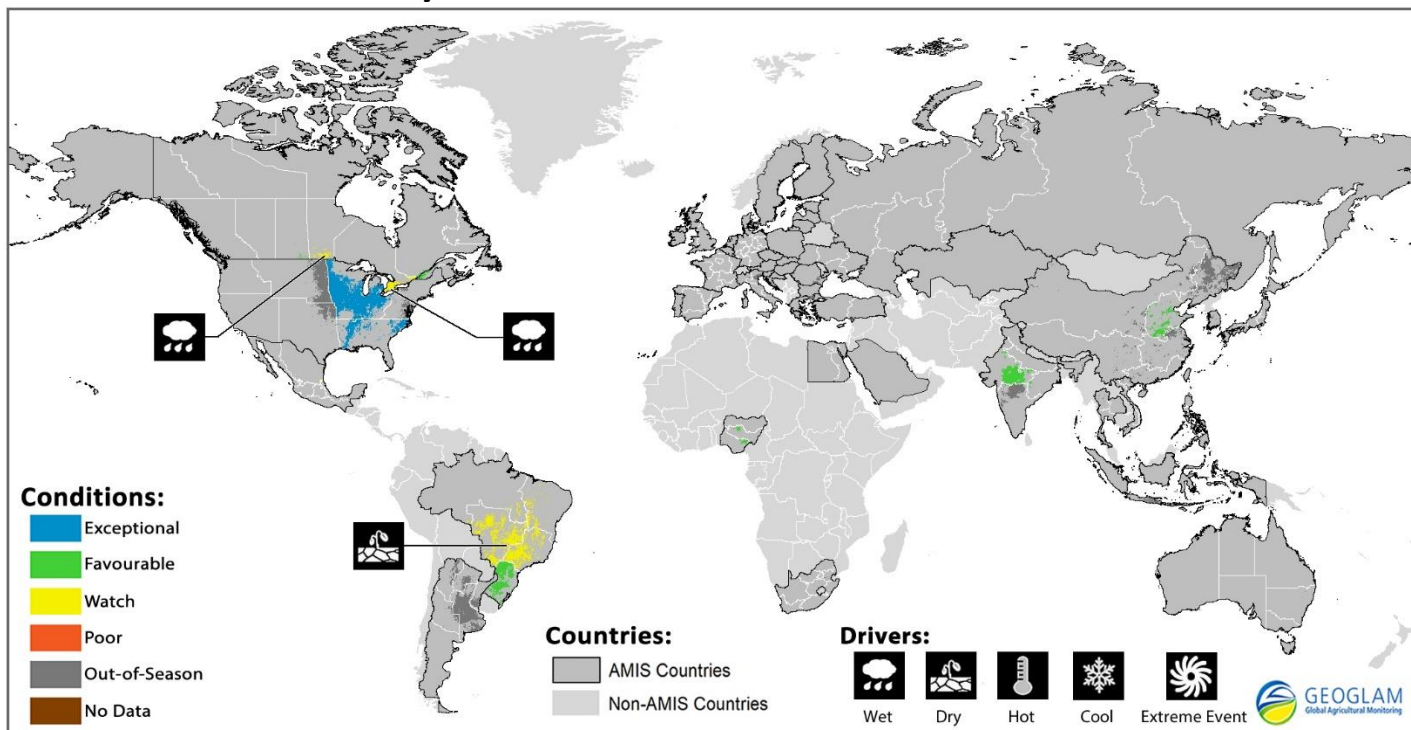
Rice: Conditions are generally favourable. In **India**, conditions are good and harvest has begun. In **Indonesia**, the dry season crop conditions remain good due to favourable weather. In **Viet Nam**, overall conditions are favourable and the rice growth stages range from transplanting to harvest. In **Thailand**, harvest of the wet season crop has begun in the north and central regions and the crop is generally in favourable conditions. There are some concerns in the southern region due to dryness. In **Japan**, conditions are favourable. In **China**, conditions remain generally favourable. Single cropped rice is mostly harvested in major producing regions. Late season rice ranges from heading to maturity stages. In the **EU**, the rice crop is still progressing as normal with the exception of Italy, where the crop was hampered by infections due to the wetter and colder than usual summer. In the **US**, rice harvest is nearly complete and conditions are favourable. Production is expected to be similar to last year. In **Nigeria**, harvest has begun and conditions are favourable. In **Brazil**, planting has been delayed due to excess rainfall in the main southern planting region. However, it is too early to measure the impact on production.



Top producers of rice within AMIS participating countries and their current crop conditions (as of October 28th). (The description is as for wheat)

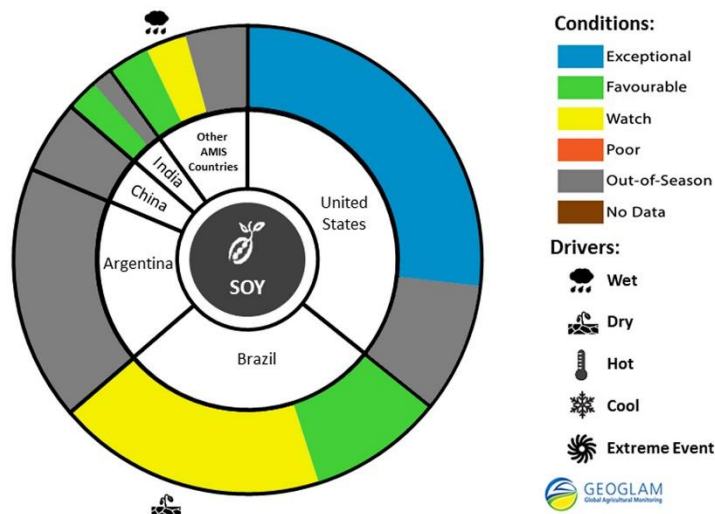
* Assessment based on information as of October 28th

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 October 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: Prospects in the northern hemisphere remain overall very good primarily owing to the US crop. In the **US**, the soybean harvest is well underway. Conditions are exceptional and a record yield is expected due to favourable weather over the growing season. In **Canada**, harvest has begun and conditions remain mixed due to excess moisture. In **China**, harvest is mostly complete except in the central region. In **India**, conditions are favourable. In **Nigeria**, conditions are favourable owing to good moisture conditions. In addition, planted area has increased. In the southern hemisphere conditions are mixed. In **Brazil**, planting has begun and conditions are mixed. There is a delay in planting due to below average rainfall mainly in the centre-west and southeast regions. In **Argentina**, field preparations for planting the next crop have begun.



Top producers of soy within AMIS participating countries and their current crop conditions (as of October 28th). (The description is as for wheat)

* Assessment based on information as of October 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 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

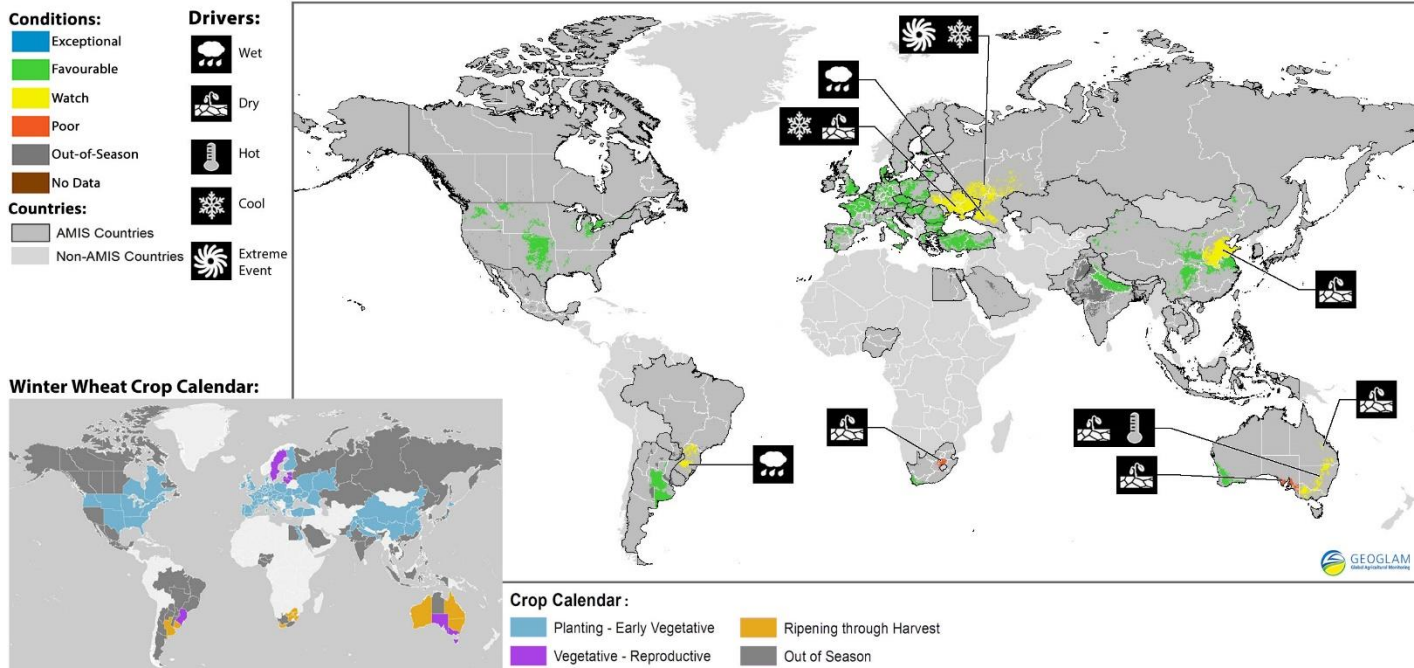
Sources and Disclaimers: The Crop Monitor assessment is conducted by GEOGLAM with inputs from the following partners (in alphabetical order): Argentina (INTA), Asia Rice Countries (AFSIS, ASEAN+3 & Asia RiCE), Australia (ABARES & CSIRO), Brazil (CONAB & INPE), Canada (AAFC), China (CAS), EU (EC JRC MARS), Indonesia (LAPAN & MOA), International (CIMMYT, FAO, IFPRI & IRRI), Japan (JAXA), Mexico (SIAP), Russia (IKI), South Africa (ARC & GeoTerraImage & SANSA), Thailand (GISTDA & OAE), Ukraine (NASU-NSAU & UHMC), USA (NASA, UMD, USGS – FEWS NET, USDA (FAS, NASS)), Vietnam (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/content/about-geoglam-crop-monitor>.

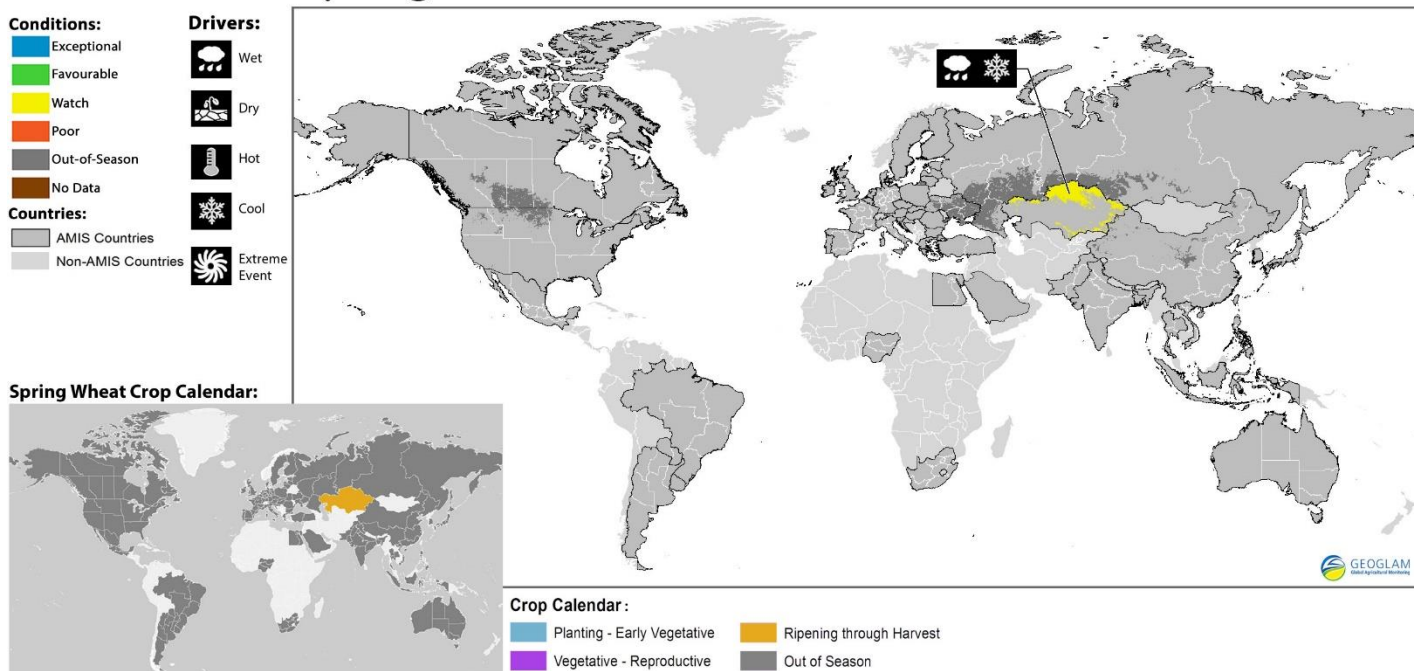
Appendix 2: Crop Season Specific Maps

Winter 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 October 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.

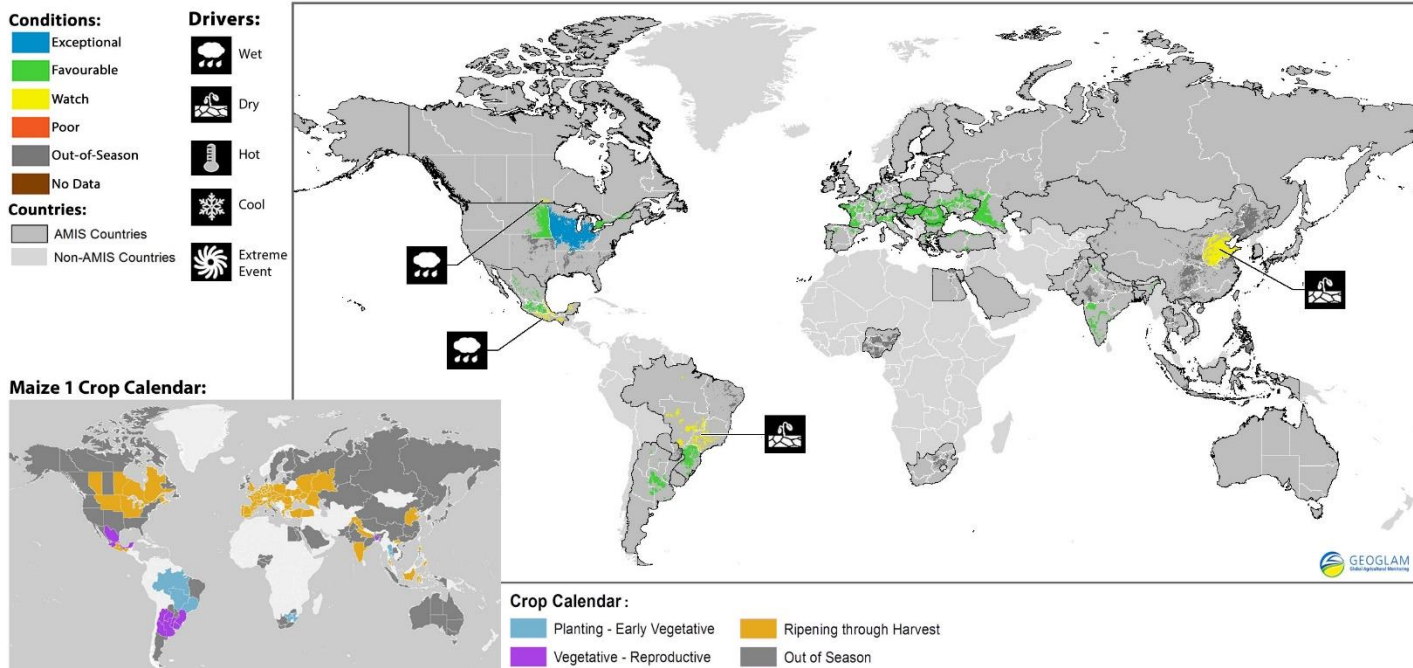
Spring Wheat Conditions for AMIS Countries



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 October 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.

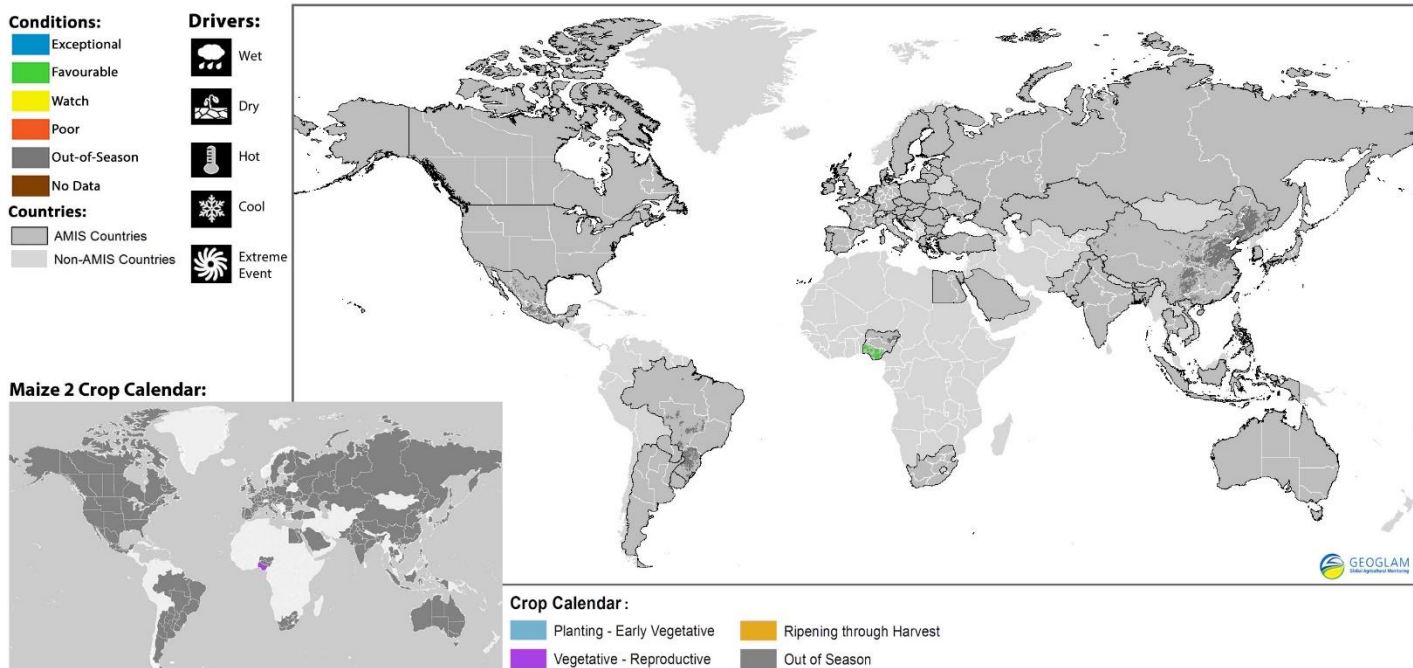
* Assessment based on information as of October 28th

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 October 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.

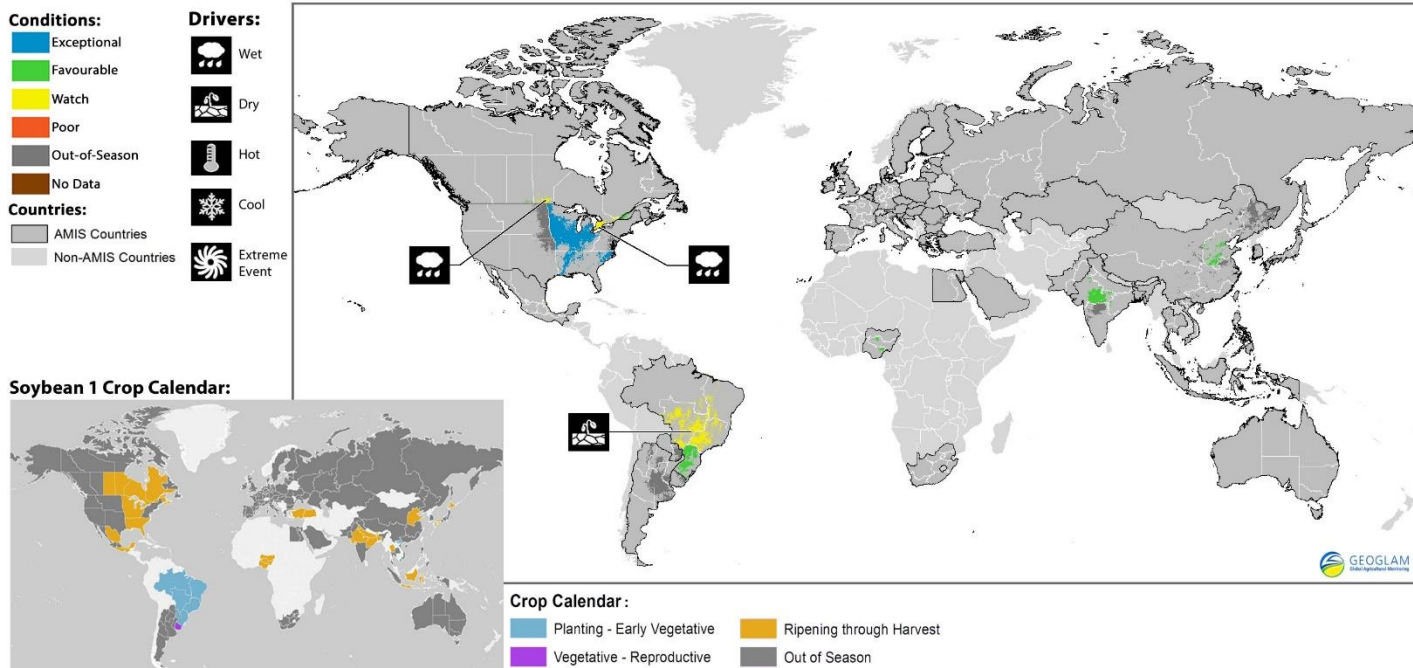
Maize 2 Conditions for AMIS Countries



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 October 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.

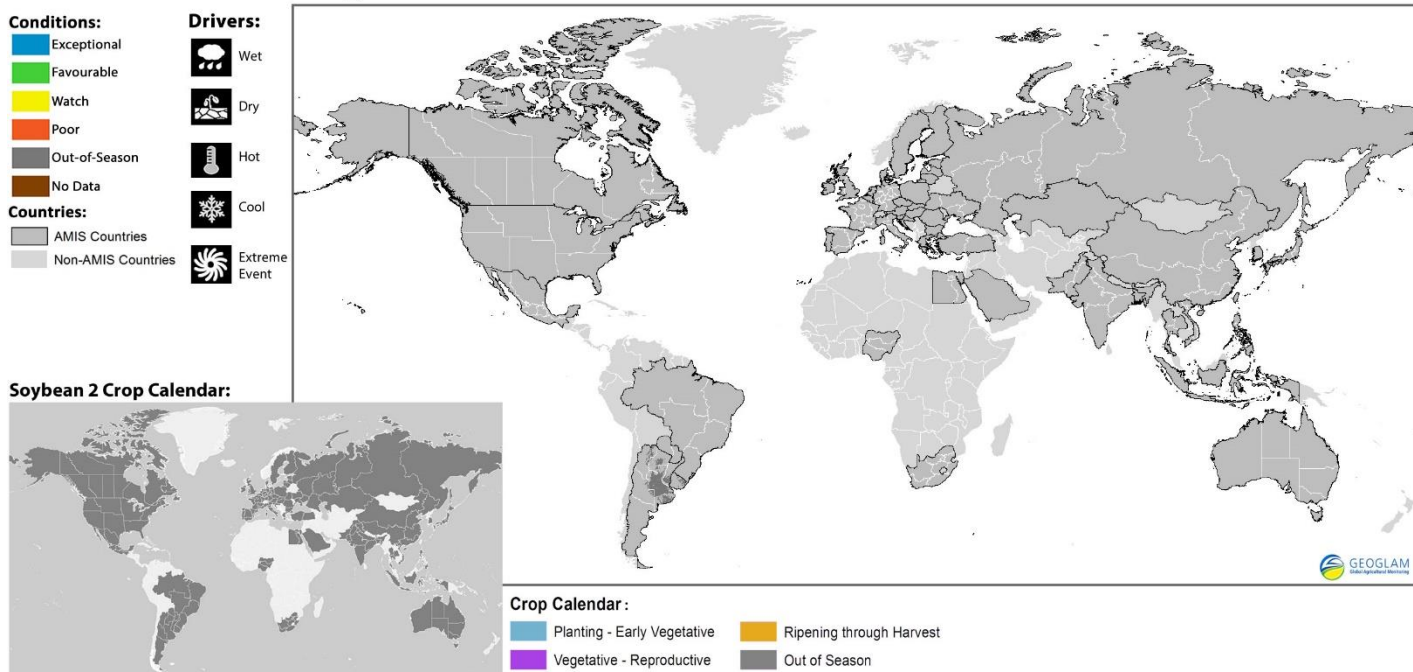
* Assessment based on information as of October 28th

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 October 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 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 October 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 October 28th