

GEOGLAM Crop Monitor

September 2014

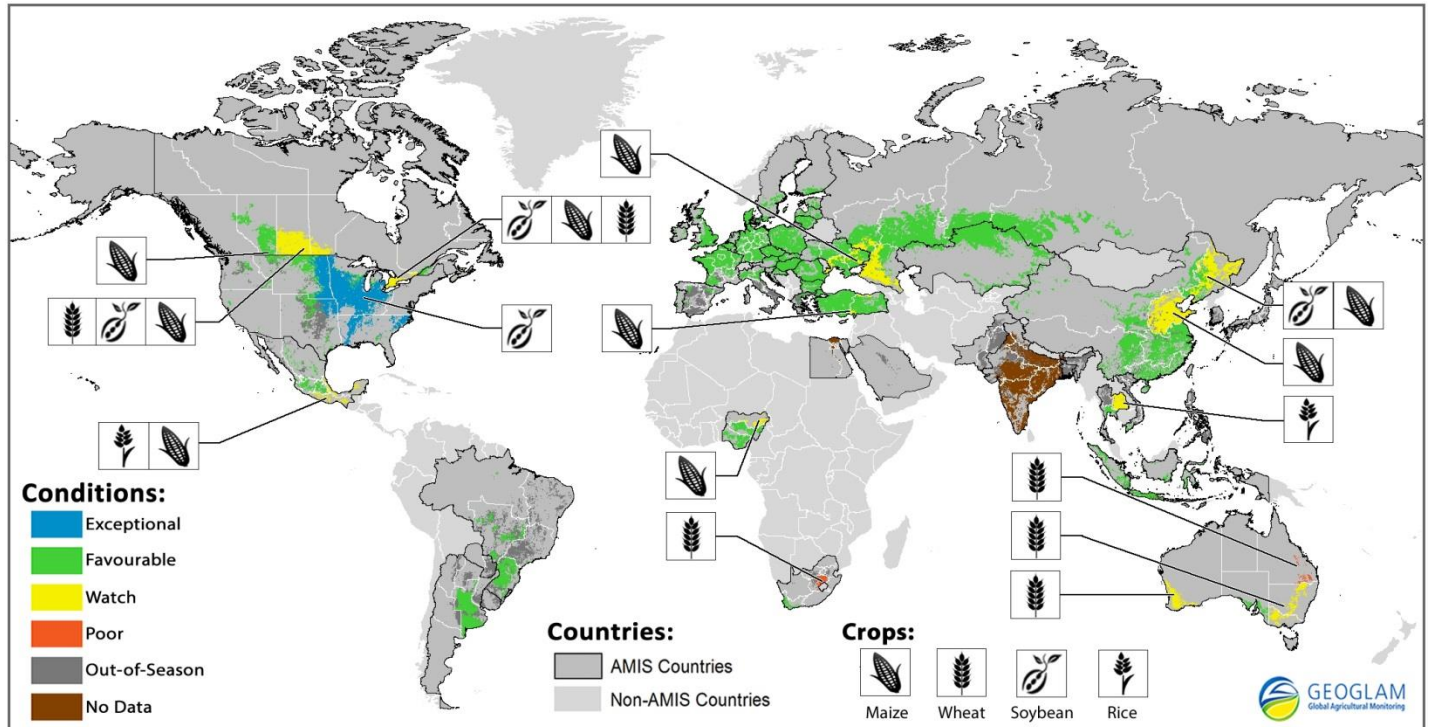
No. 11



GEOGLAM
Global Agricultural Monitoring

Prepared by members of the GEOGLAM Community of Practice

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



Crop condition map synthesizing information for all four AMIS crops as of August 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 remain mostly favourable. In the northern hemisphere spring wheat is in maturity to harvest stages. In Kazakhstan, Russia, US and China conditions remain generally favourable. In Canada conditions are mixed due to ongoing excess moisture and cool conditions. In the Southern Hemisphere wheat is mostly in vegetative to reproductive stages. In Australia, conditions have deteriorated in western and southern regions due to rainfall deficiencies during August. Although rain in August stabilized conditions in some north-eastern growing areas, yield prospects were adversely impacted by dry conditions in June and July. In Argentina there is some concern due to excess rainfall and in Brazil, conditions are favourable and planted area is up.

Maize- Overall conditions are favourable. In the southern hemisphere, the season is complete. In the Northern Hemisphere conditions are very good in the EU and US owing to favourable weather. In China, Russia, and Ukraine there is some concern due to hot, dry, weather.

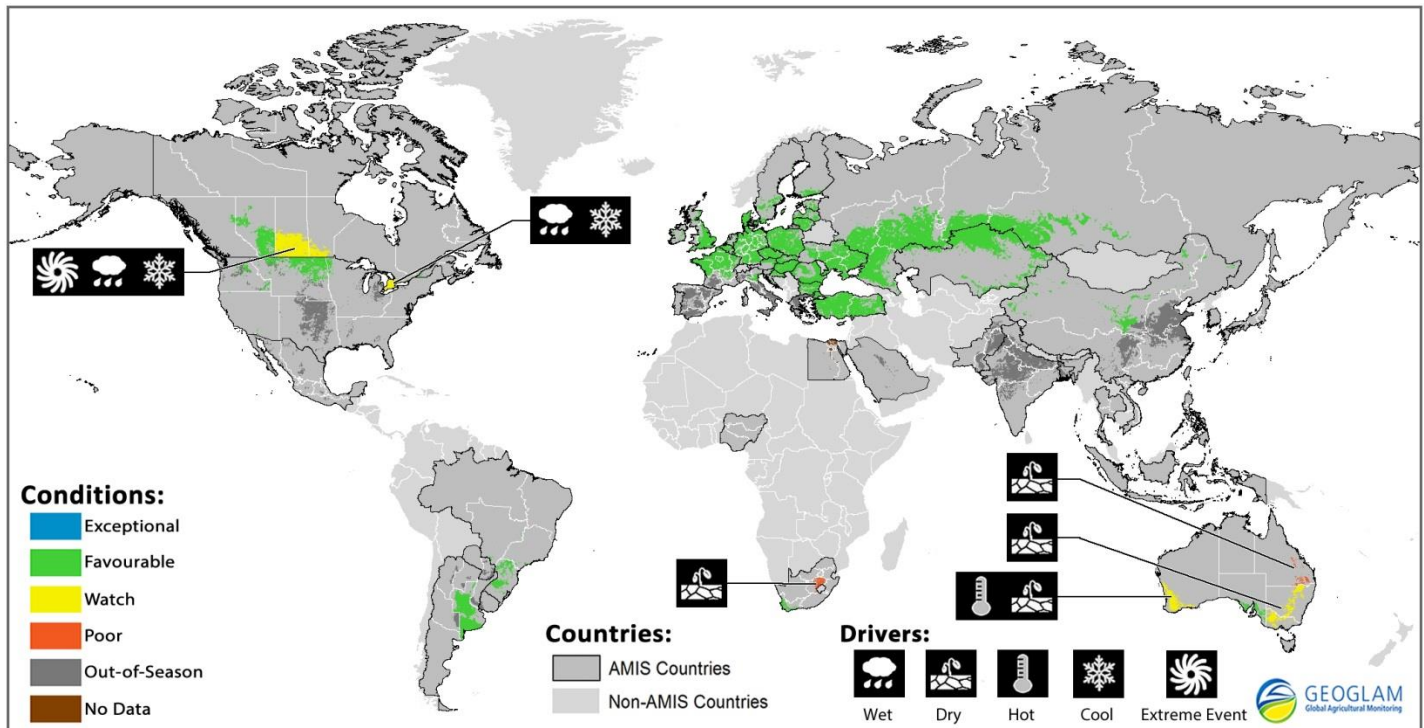
Rice- Conditions are generally favourable. In China conditions are favourable and drier weather in southern areas brought relief from excess moisture. In Thailand there is some concern in northeastern growing regions due to heavy rainfall.

Soybeans- Overall conditions are good. In the southern hemisphere the season is complete. In the northern hemisphere, conditions are exceptional in the US where production is expected to significantly surpass the previous record. In China conditions are generally favourable though there is concern due to dry condition in parts of the northeastern growing region. In Canada conditions are mixed due to the ongoing cool and wet weather.

El Niño situation update

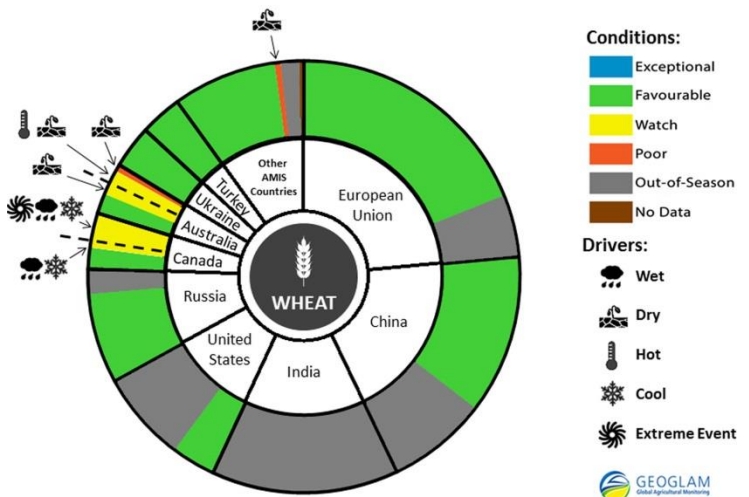
The latest outlooks from the Australian Bureau of Meteorology, the International Research Institute for Climate and Society, and the U.S. National Oceanic and Atmospheric Administration continue to call for an El Niño watch. Though it was expected in June that an El Niño event would have begun by now, the defining oceanic and atmospheric conditions in the Pacific have not yet been established. Nonetheless, the probability of seeing El Niño conditions by November is above 60%, though the event is likely to be a weak one. Potential impacts of El Niño should still be considered for the 2014/15 growing season in the southern hemisphere, even though the probabilities of occurrence and likely strength have diminished. These include below-normal rainfall in parts of Asia, Southern Africa, and Australia, potentially affecting rice, maize, and wheat. In major regions of South America, El Niño is often associated with above-average rainfall potentially benefiting maize, soy and wheat. El Niño conditions generally last six to nine months, but can persist for as long as eighteen months.

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 August 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, wheat conditions remain generally favourable. Winter wheat harvest is largely complete and early planting has started as the spring wheat season wraps up. In **Russia**, spring wheat prospects are generally favourable and harvest has started early in most regions. In central and Volga regions winter wheat planting started. In **Ukraine** winter wheat harvest is complete with good prospects expected. In **Kazakhstan**, spring wheat conditions are favourable and harvest is underway. In the **EU**, overall yields remain favourable, above the 5-year average and close to last year. However, large parts of Europe (from France to south-western Romania) experienced exceptionally high rainfall in August, slowing down or delaying harvest, but with limited negative impact. In the **US**, spring wheat harvest is underway and a good crop is expected however, mild concern is building in the most northerly areas due to damp conditions which have hampered harvest. In **Canada**, spring wheat harvest has begun and conditions are mixed. In the eastern Prairies, ongoing excess moisture and cool conditions delayed harvest by a couple of weeks and negatively impacted quality. Winter wheat harvest is mostly complete and production is close to average. In **China**, spring wheat conditions remain favourable and the crop is in maturity to harvest stages. In the southern hemisphere wheat conditions are mostly favourable. In **Argentina**, conditions are generally good, and the crop is in vegetative to

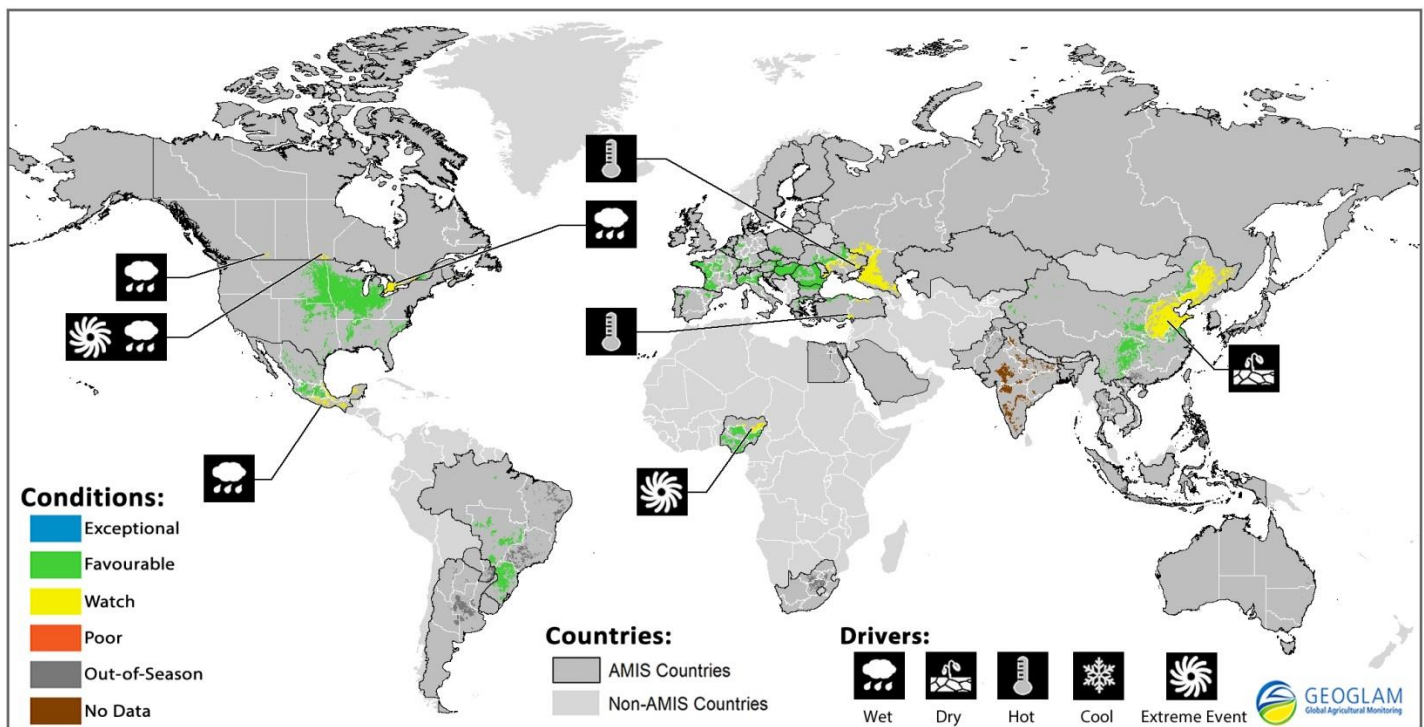


Each slice represents a country's share of total AMIS production (5-year average). Main producing countries (representing 90 percent of production) are shown individually, with the remaining 10 percent grouped into the "Other AMIS Countries" category. The area within each slice is divided between crops 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 August 28th

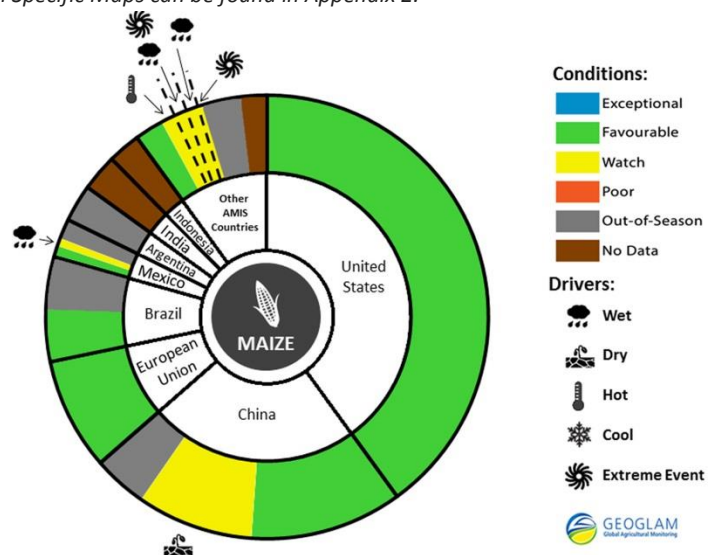
reproductive stages. There is however concern due to excess rainfall in southwestern Buenos Aires. In **Brazil** conditions are good; planted area increased relative to last year and an increase in production is likely. The crop is mostly in reproductive to harvest stages. In **Australia**, conditions are variable, and overall yield prospects are reduced due to rainfall deficits during the southern winter period. Conditions deteriorated across western and southern growing regions during August due to severe rainfall deficits in many areas. In contrast, above average rains stabilized yield prospects in Queensland and northern New South Wales where crops had been stressed from June and July rainfall deficits. Timely rainfall in the next month will be critical for sustaining crops through to harvest. In **South Africa** conditions are favourable over the winter rainfall region (main area) owing to normal to above-normal rainfall in winter, and yields are expected to be similar to last year. Over the summer rainfall region, below-normal rain since April resulted in reduced planted area. Some rain occurred during August, but totals were generally low.

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 August 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 northern hemisphere, conditions are overall favourable. In the **US**, the crop is in very good condition throughout most of the country. Total production is expected to be at record levels, driven by near perfect growing conditions. In the **EU** yield prospects of grain maize are presently excellent with near-average temperatures and humid weather boosting growth. In **Russia** conditions have deteriorated in the main southern central growing regions due to high temperatures and low precipitation, which may affect yield potentials. Similarly, in **Ukraine**, conditions deteriorated due to hot temperatures in August, particularly in eastern and southern regions. Consequently harvest has begun very early in these areas. In **China**, conditions are mixed and

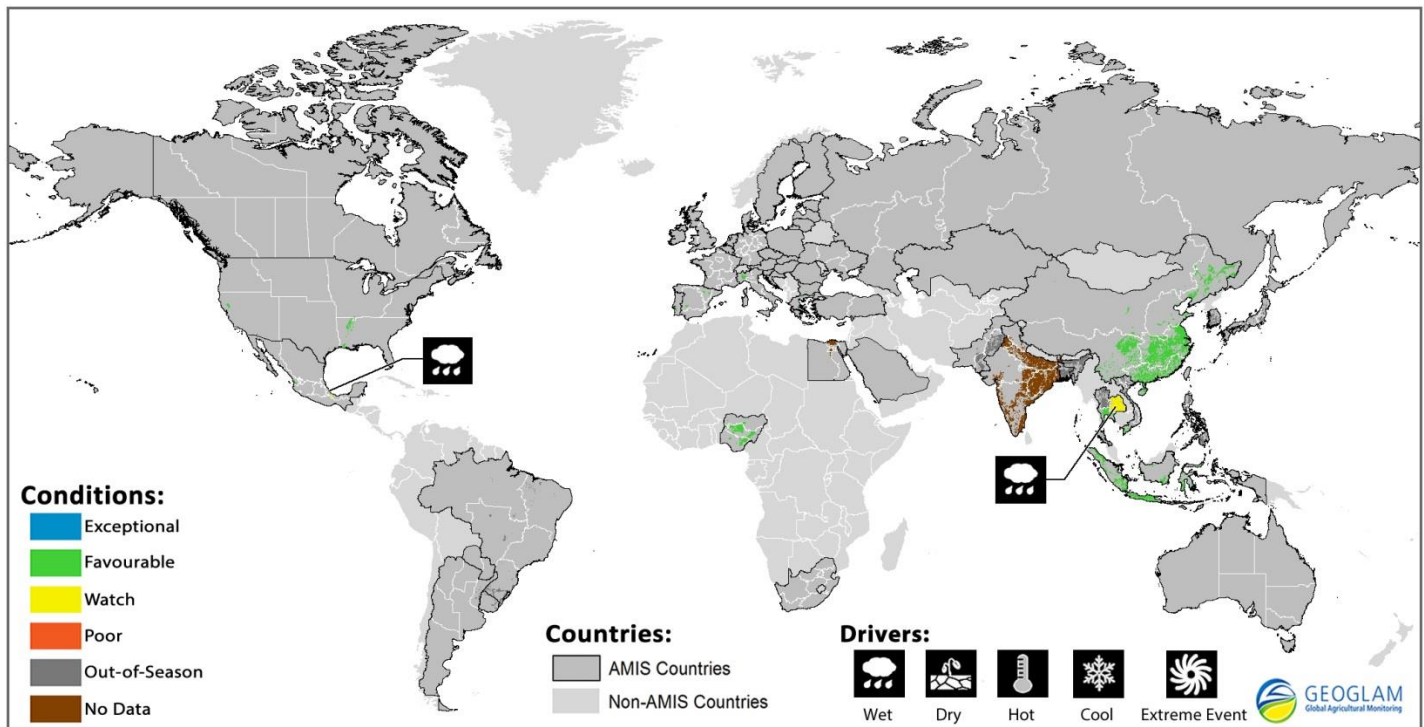


Top producers of maize within AMIS participating countries and their current crop conditions (as of August 28th). (The description is as for wheat)

* Assessment based on information as of August 28th

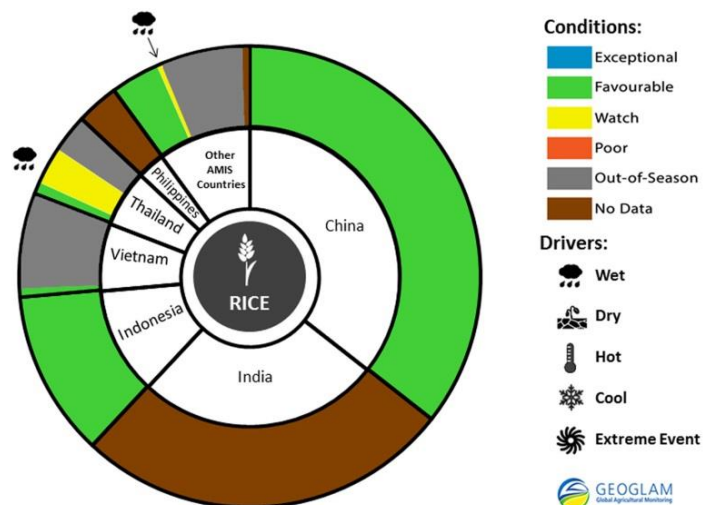
concern remains across much of the North China Plain and northeast due to persistent dry conditions. Precipitation in late August helped relieve dry conditions in affected areas in the northeast including Liaoning, western Jilin and Heilongjiang provinces and southeast of Inner Mongolia Autonomous. The crop is mainly in silking to maturity stages. In **Mexico** conditions are favourable and planting of the spring-summer crop is almost complete. In the southern growing region excess rainfall delayed sowing though is not expected to impact national production. In **Canada**, conditions are mixed and the crop is in vegetative to reproductive stages. Due to a cool, wet summer in the main production areas the crop needs up to three weeks of sunny, dry, frost-free weather to reach full maturity. In **Nigeria**, conditions are mixed, and the crop is in ripening to harvest stages. Prospects for the northern region are very low due to fallow in substantial parts of the primary maize area. In the south, harvest is complete and production is very good. In the southern hemisphere, harvest of the second maize crop was completed in August in **Brazil**. Conditions are favourable and prospects are similar to last year.

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

Rice: Conditions are generally favourable. In **Indonesia**, the dry season crop conditions are favourable. In **Viet Nam**, overall conditions of the summer and the summer-autumn crops are favourable. However, in the southern growing regions, autumn-winter crop seeding is delayed due to fears of flooding. In **Thailand**, conditions are fair but there is concern over some provinces in the northeast due to heavy rainfall and some flooding which has caused some crop damage. In **China**, conditions remain generally favourable. Drier weather in southern growing regions brought relief from excess moisture. Single cropped rice is mostly in heading to maturity stages, while late season rice is

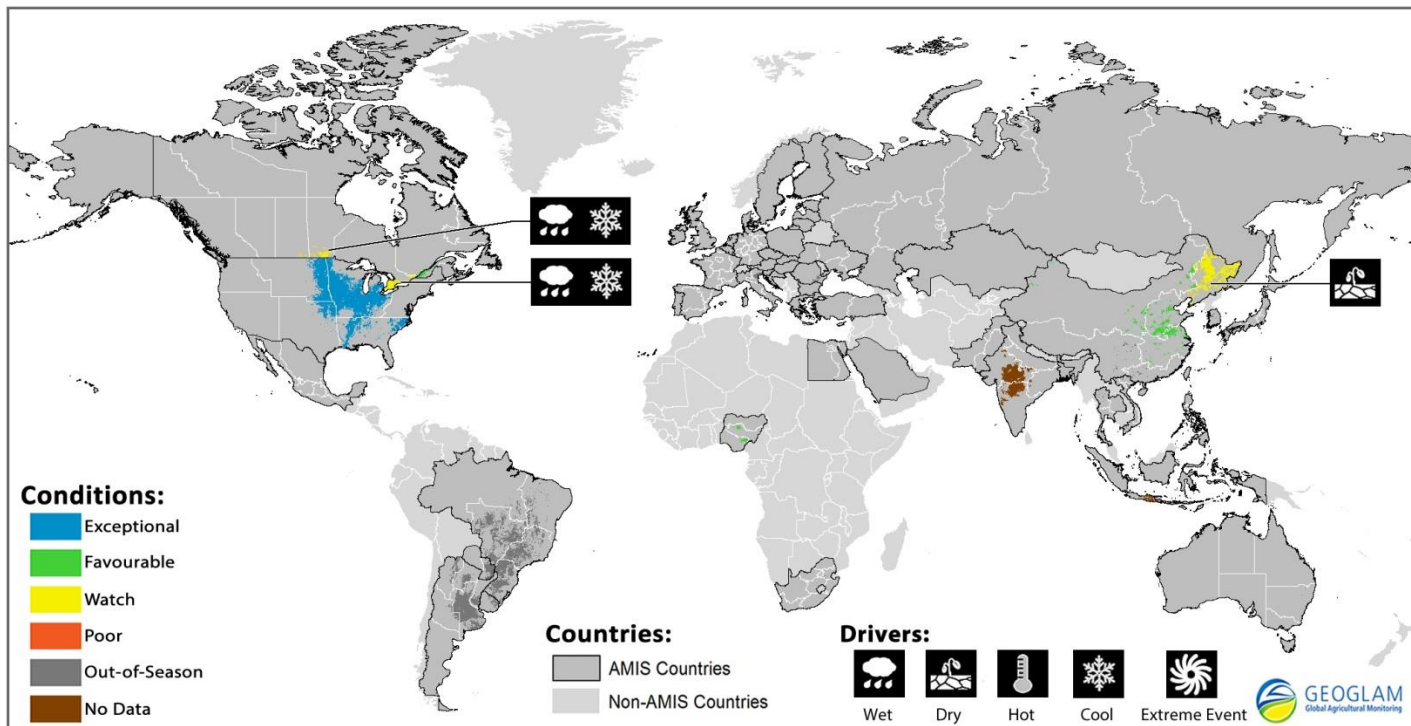


Top producers of rice within AMIS participating countries and their current crop conditions (as of August 28th). (The description is as for wheat)

* Assessment based on information as of August 28th

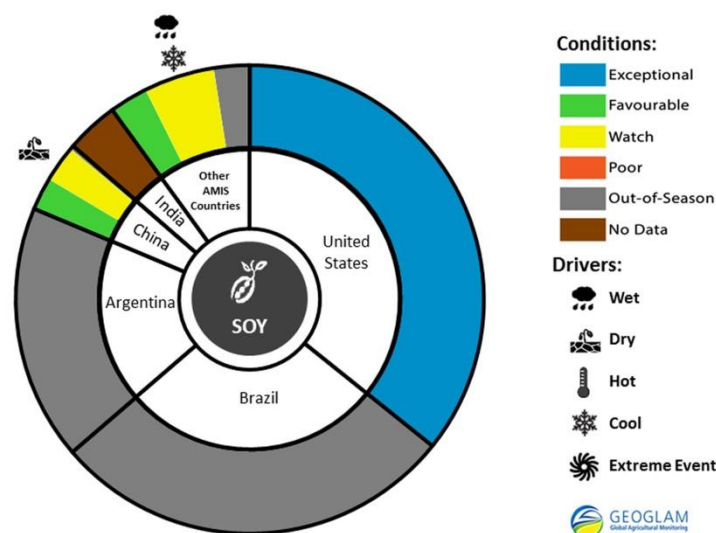
in jointing to tillering stages. In the **EU** and the **US**, the rice crop is progressing as normal. In **Nigeria**, conditions are good and the crop is in vegetative to reproductive stages.

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 August 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 northern hemisphere prospect are overall good. In the **US** crop conditions are exceptional and production is projected to surpass previous records significantly. This is based equally on strong yield prospects and on an increase in planted area. In **Canada**, conditions are mixed due to excess moisture and a cooler than normal summer in the Prairie region and Ontario. Conditions are favourable in Quebec. In **China**, conditions are generally favourable except in the western and southern parts of the northeast soybean producing area where persistent drought occurred. The crop is mainly in maturity stages. In **Nigeria**, Conditions are favourable and the crop is in vegetative to reproductive stages.



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

* Assessment based on information as of August 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

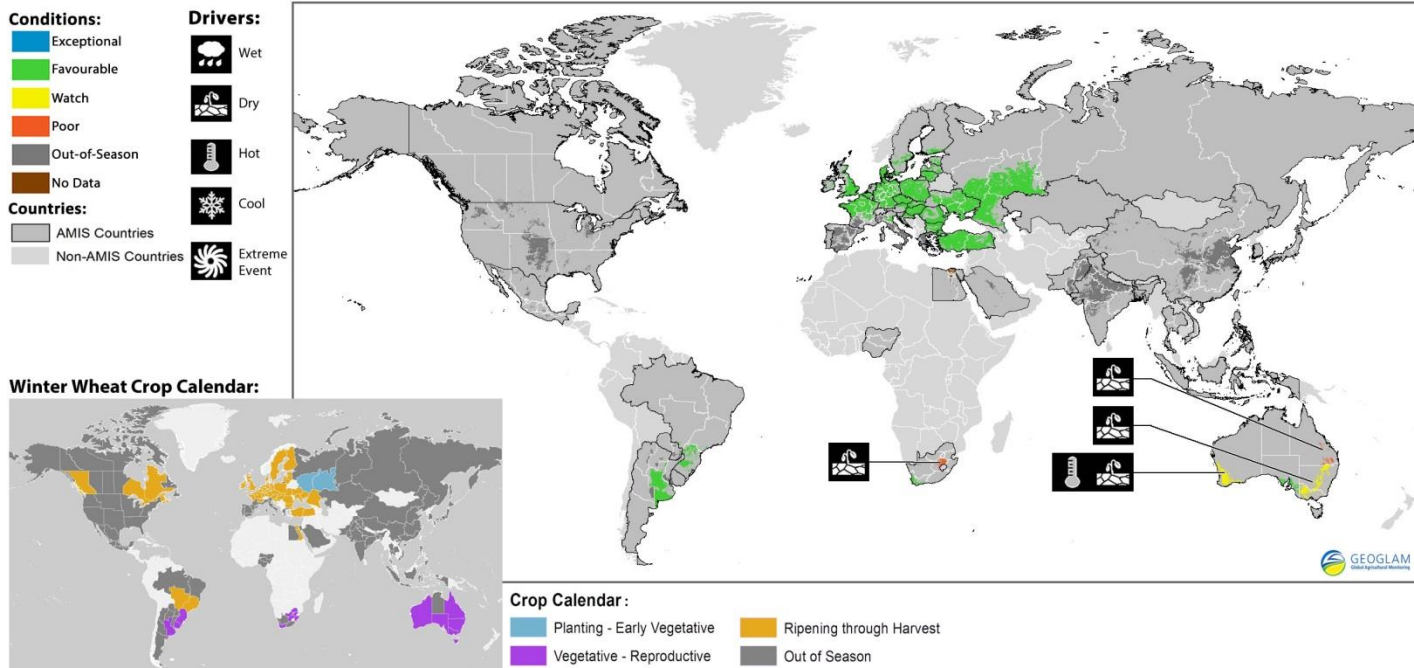
Sources and Disclaimers: The Crop Monitor assessment is conducted by GEOGLAM with inputs from the following partners (in alphabetical order): Argentina (INTA), Asia Rice Countries (AFSIS, ASEAN+3 & Asia RiCE), Australia (ABARES & CSIRO), Brazil (CONAB & INPE), Canada (AAFC), China (CAS), EU (EC JRC MARS),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

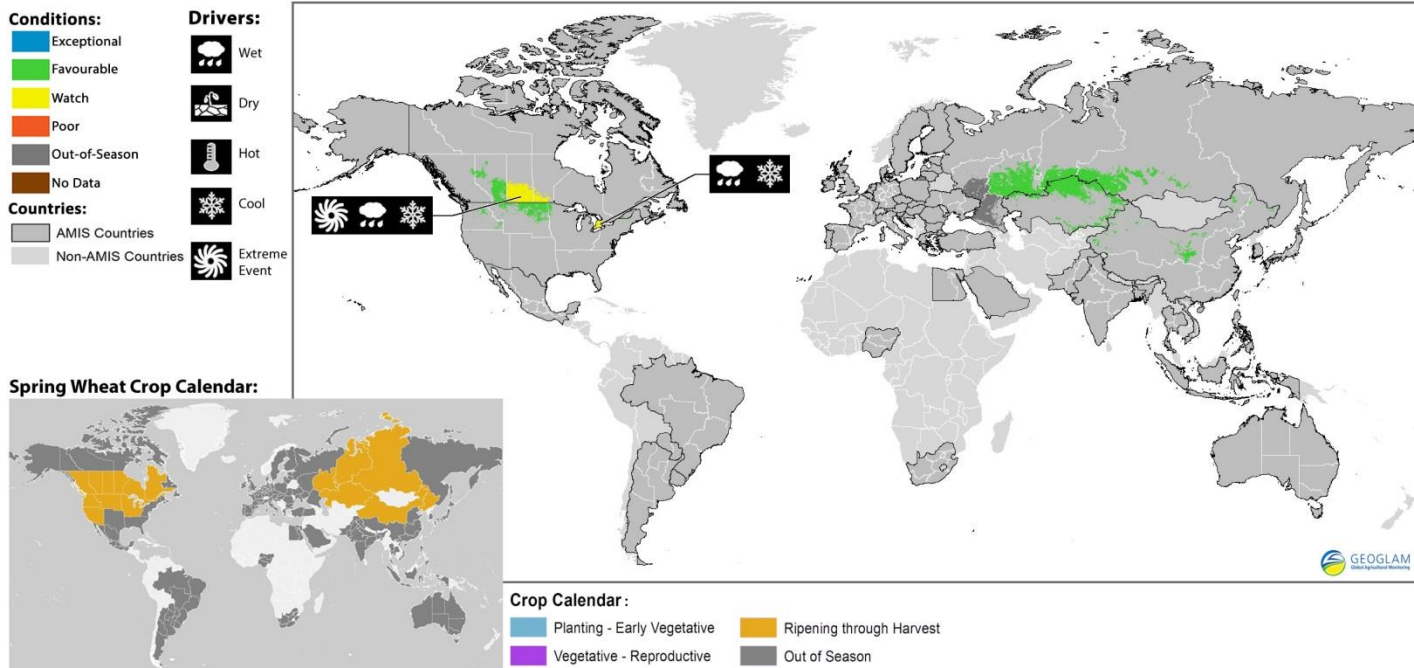
Appendix 2: Crop Season Specific Maps

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 August 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.

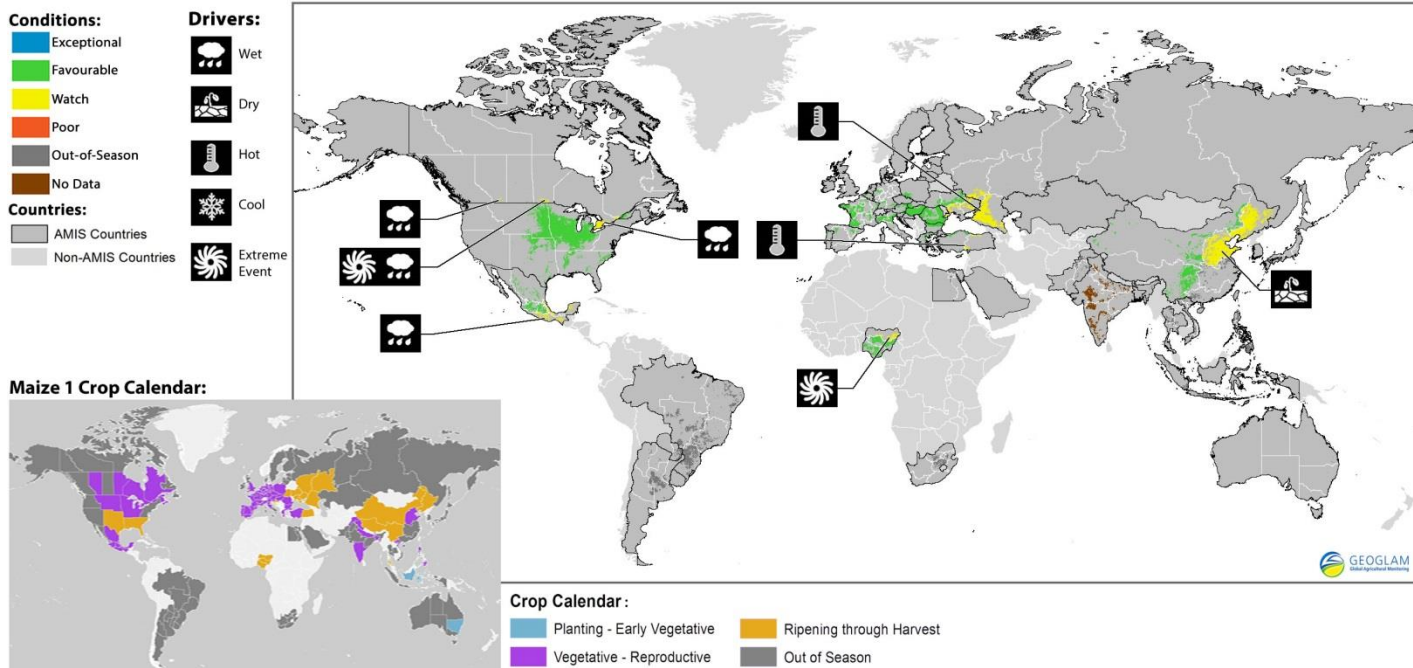
Spring Wheat Conditions for AMIS Countries



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 August 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.

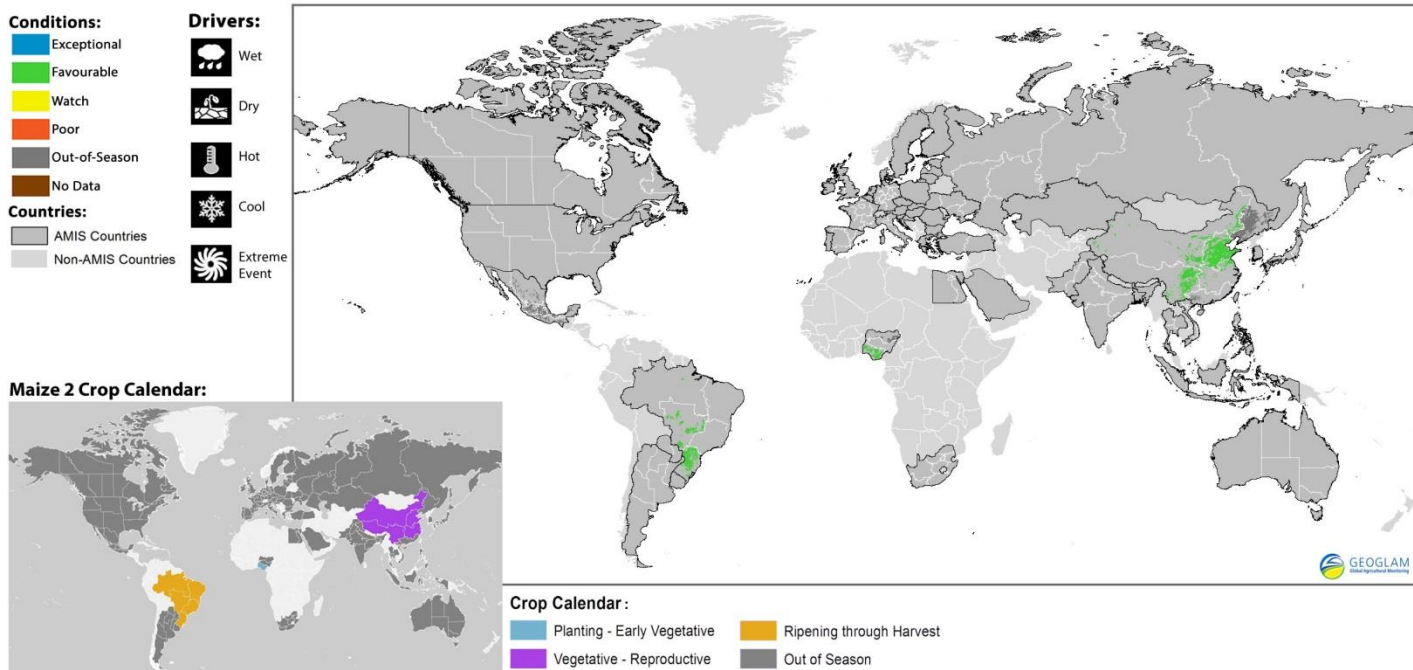
* Assessment based on information as of August 28th

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 August 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.

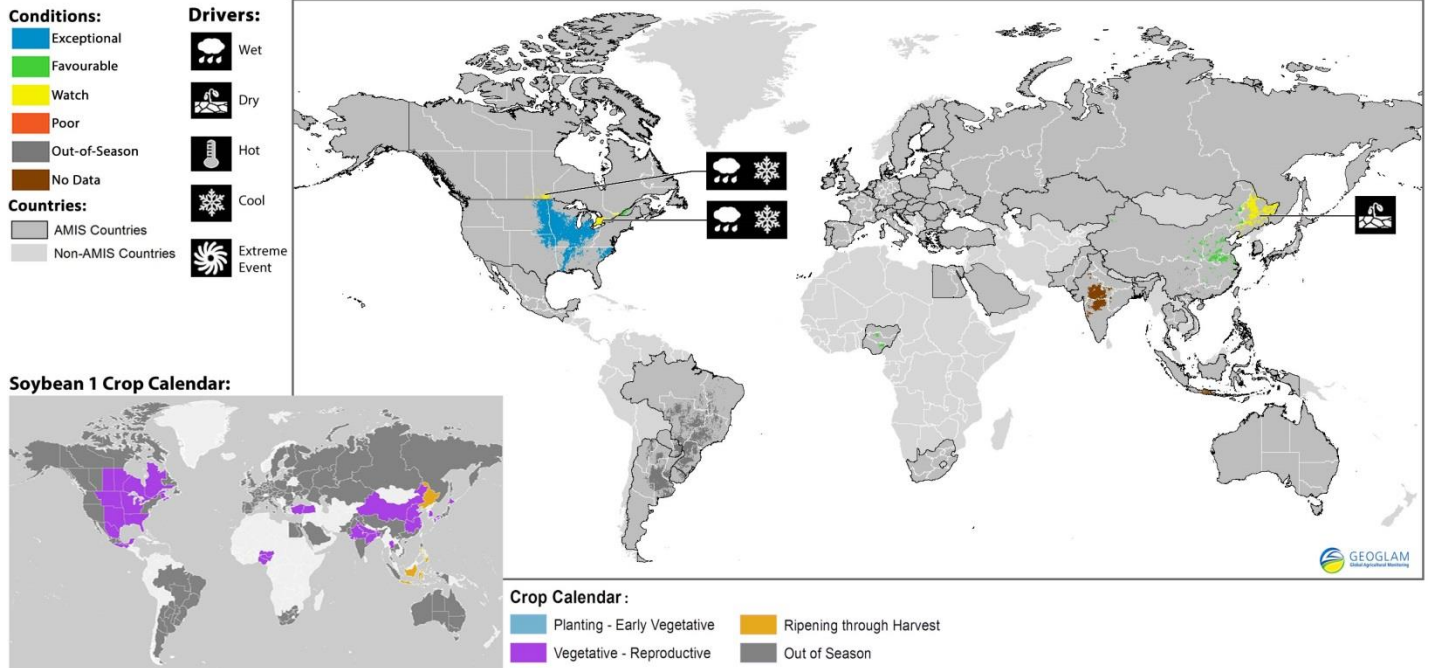
Maize 2 Conditions for AMIS Countries



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 August 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.

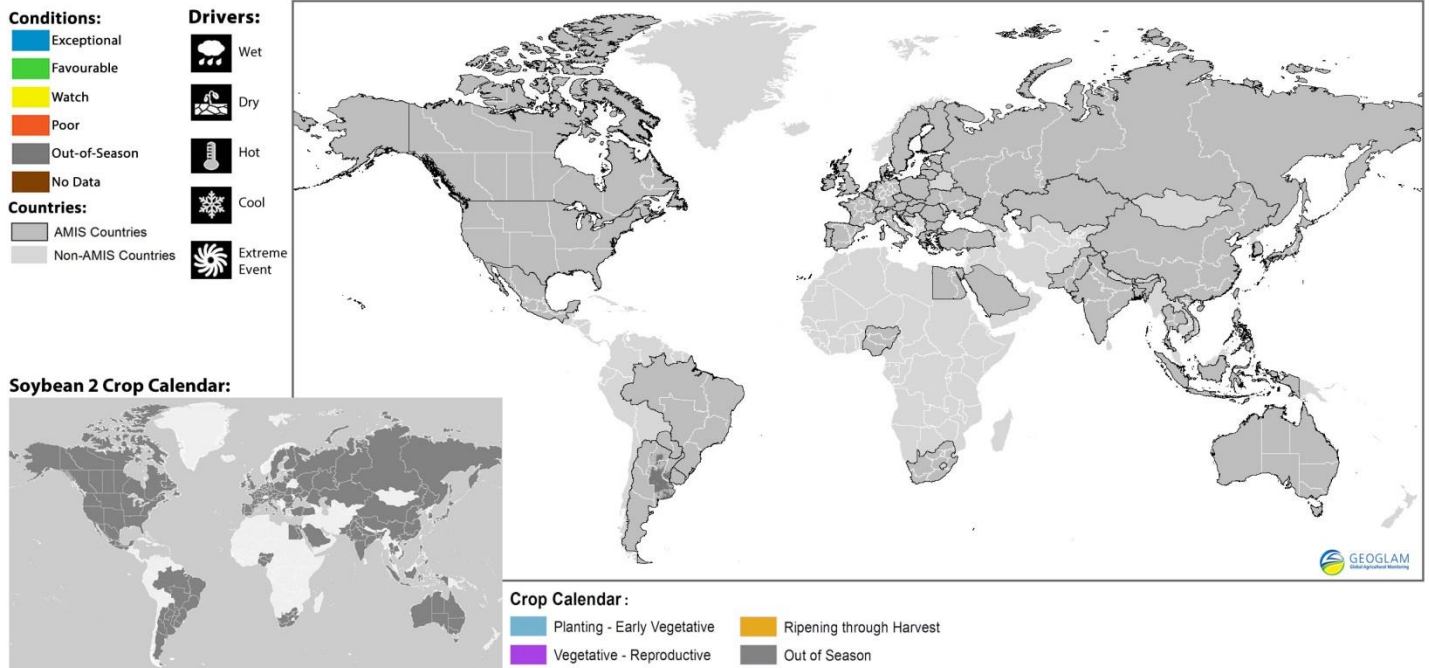
* Assessment based on information as of August 28th

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 August 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 August 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 August 28th