GEOGLAM Crop Monitor

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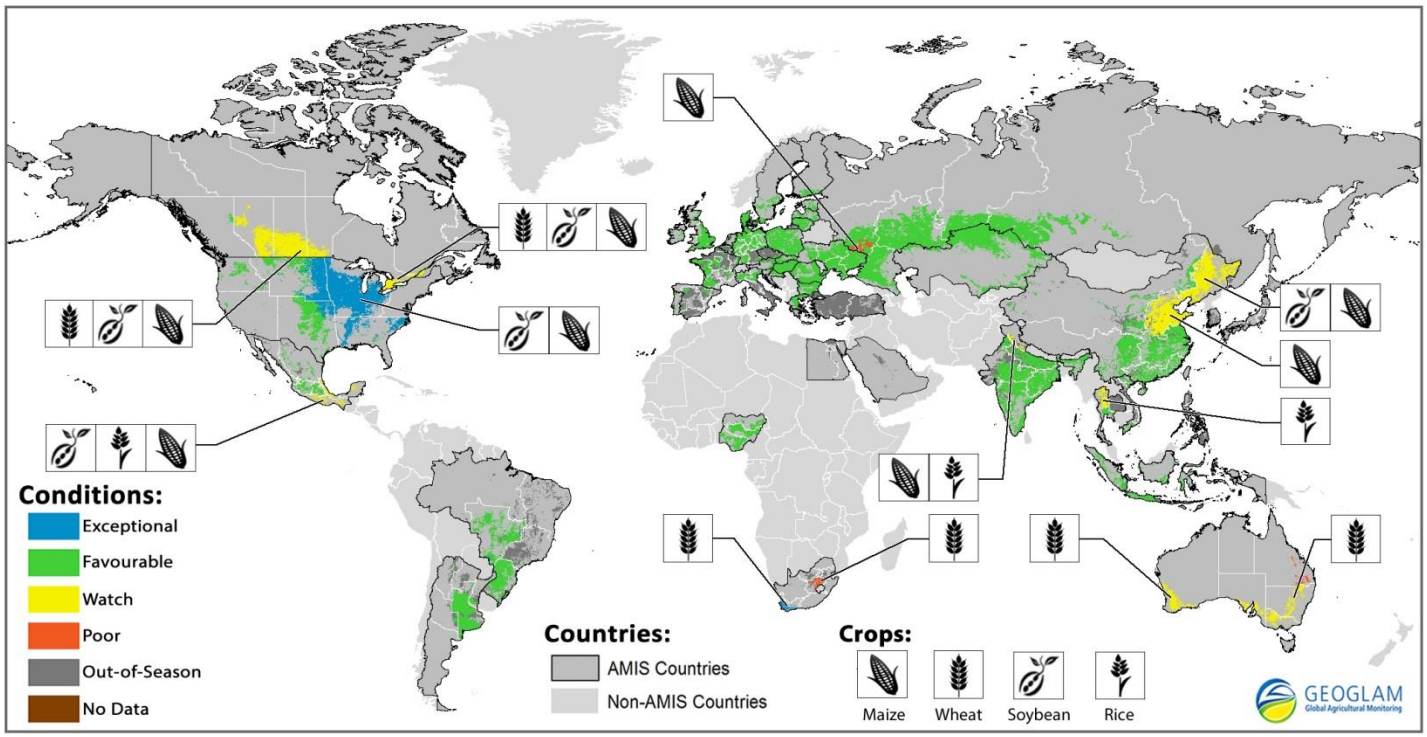
Crop Conditions for AMIS Countries (As of September 28th)*



Crop condition map synthesizing information for all four AMIS crops as of September 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, the spring wheat season is coming to a close and winter wheat planting has begun. In Kazakhstan, Russia, US and China spring wheat conditions remain generally favourable. In Canada, spring wheat conditions have deteriorated due to ongoing excess of moisture, cool conditions and frost damage. In the southern hemisphere, wheat is mostly in vegetative to reproductive stages. In Australia, conditions remain mixed and overall yield prospects are reduced. Slightly warmer temperatures and below normal precipitation exacerbated crop deterioration in southern growing regions. In contrast, recent rainfall across Western Australia and central Queensland benefited late planted crops. Timely rainfall will be critical for sustaining crops through to harvest. In South Africa, Brazil, and Argentina conditions remain favourable though there is still some concern due to excess rainfall in parts of Argentina.

Maize overall conditions remain favourable. In the northern hemisphere, conditions remain very good in the US and good in the EU owing to favourable weather. In China, concern remains due to earlier dry and hot weather. In Russia concern remains over the central region and in Ukraine conditions have improved. In Mexico conditions remain generally favourable. In the southern hemisphere, planting has begun and conditions are favourable in Brazil and Argentina.

Rice conditions remain favourable. In India, conditions are mostly favourable and the crop is in vegetative to reproductive stages. In Indonesia and Thailand conditions are favourable, however, some concern remains over excess moisture in Thailand. In China, conditions are favourable. However, there is some concern over excess moisture due to Typhoon Kalmaegi. In Viet Nam, conditions are good however total planted area is down relative to last year.

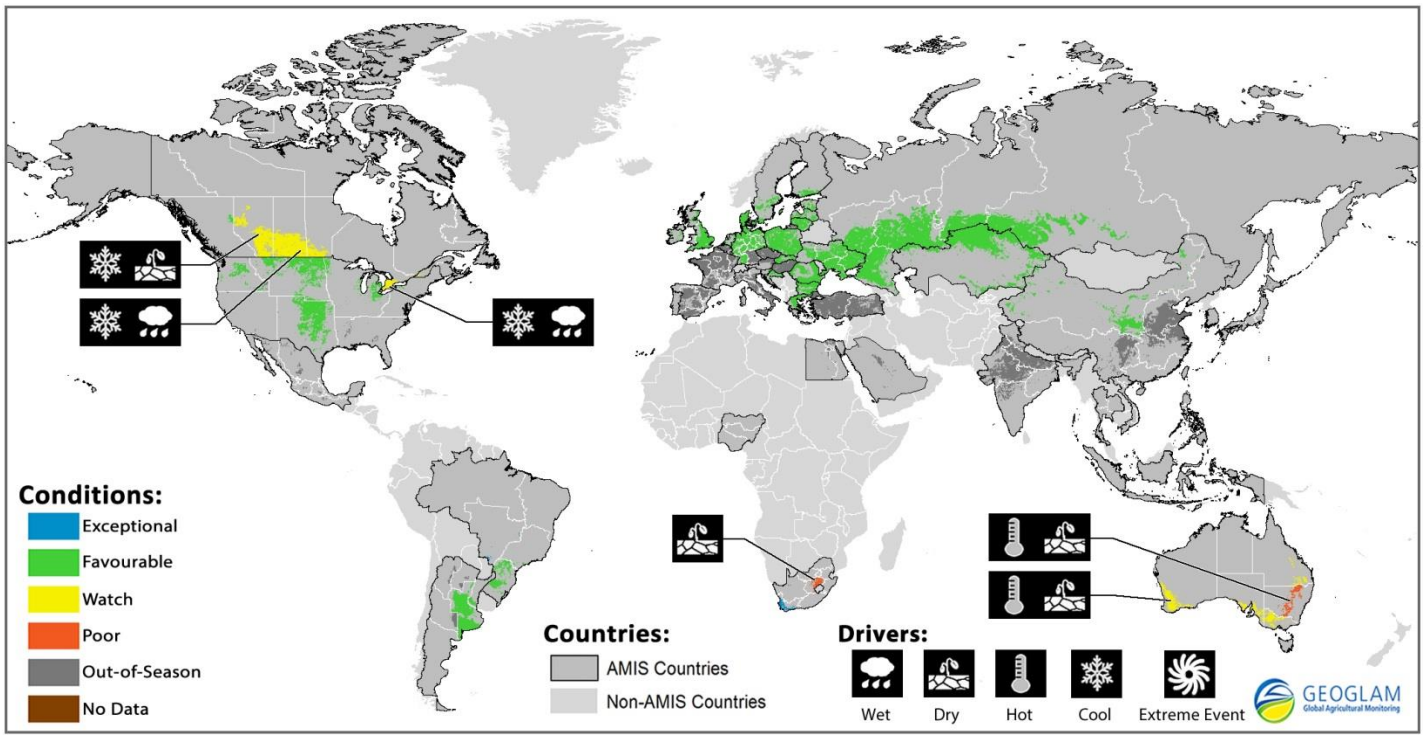
Soybeans overall conditions are very good primarily owing to the US crop. In the northern hemisphere a record crop is expected in the US owing to good weather and increased area. In China, conditions are generally favourable though concern remains due to earlier dry conditions in parts of the northeaster growing region. In Canada, conditions remain mixed due to the ongoing cool and wet weather and recent frost events. In the southern hemisphere the planting season has begun in Brazil under favourable conditions.

El Niño situation update

Outlooks released in mid and late September 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 during the 2014-2015 southern hemisphere growing season above 50%. Model projections suggest the event will not be a strong one. Potential impacts of El Niño should be considered nonetheless. 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.

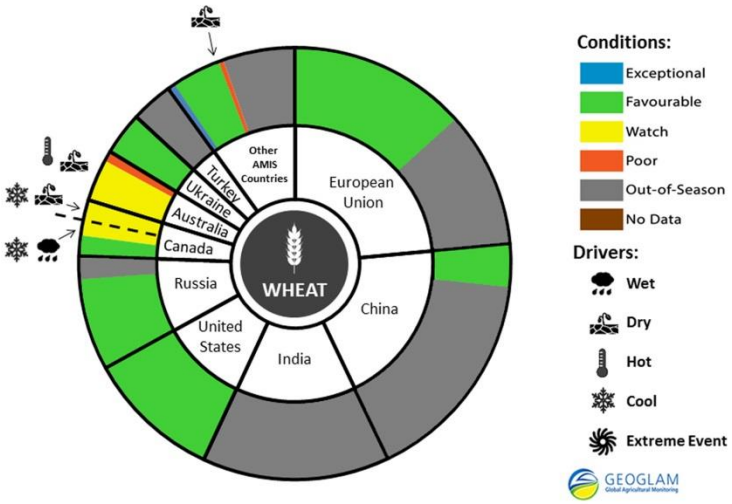
* Assessment based on information as of September 28th

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 September 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.

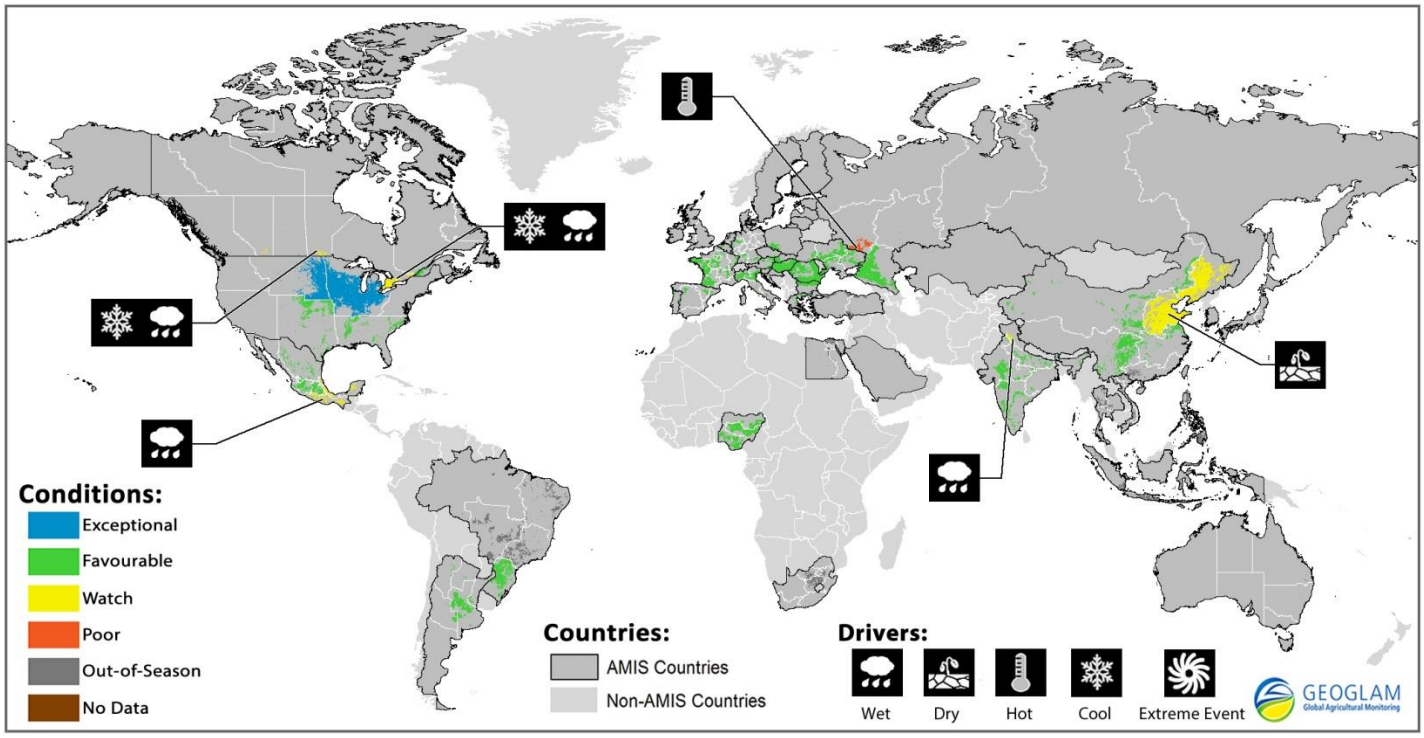
Wheat: Conditions in the northern hemisphere remain favourable. The spring wheat season is drawing to a close and winter wheat planting is in progress. In **Russia**, spring wheat prospects remain favourable as harvest is close to completion. Winter wheat planting is progressing well owing to favourable weather that boosted moisture conditions. In **Ukraine,** winter wheat planting has initiated under mostly favourable conditions. Recent precipitation helped to alleviate dry conditions, however dryness continued in southern regions. In **Kazakhstan**, spring wheat conditions remain overall favourable and harvest in the main wheat zone is in progress with reported yield slightly below average. In the **EU**, harvest is complete and overall yields remain favourable, slightly above the 5-year average. Winter wheat planting has started as normal. In the **US**, spring wheat conditions are overall favourable. Harvest is nearly complete after some delays in northern areas due to wet conditions. Planting of winter wheat is underway. In **Canada,** conditions have deteriorated. In the Prairies, dry conditions and frost in early September caused crop damage, though the full impact will not be known until harvest is complete. In addition the ongoing excess moisture and cool conditions continue to delay harvest by a couple of weeks. In eastern regions conditions were good and harvest was progressing normally until a mid-September frost event. Impacts are still to be determined. In **Argentina**, conditions remain generally good, and the crop is in vegetative



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.

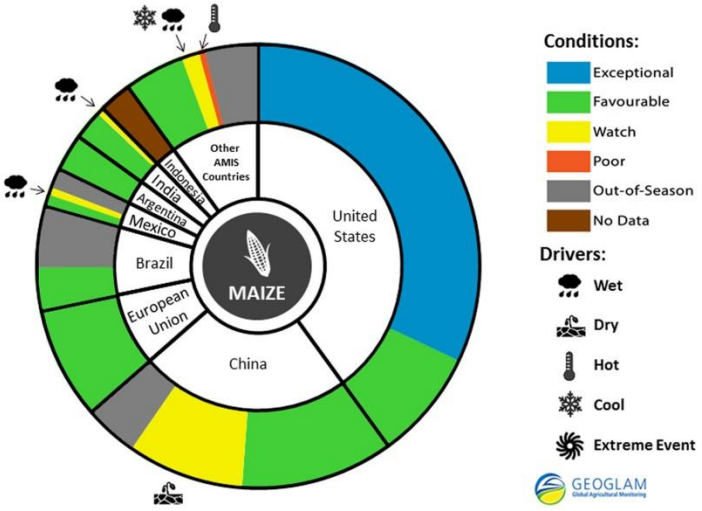
to reproductive stages. Concern remains due to excess moisture in south-western Buenos Aires region. In **Brazil**, weather conditions are favourable. Planted area increased relative to last year and an increase in production is likely. Sowing is concluded and the crop is mostly in reproductive to harvest stages. In **Australia**, conditions remain mixed and overall yield prospects are reduced. Slightly warmer temperatures and below normal precipitation exacerbated crop deterioration in southern growing regions where soil moisture deficits persisted since August. In contrast, recent rainfall across Western Australia and central Queensland benefited late planted crops. Timely rainfall will be critical for sustaining crops through to harvest. In **South Africa** 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 similar to last year. Over the summer rainfall region, below-normal rain since April resulted in reduced planted area.

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 September 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.

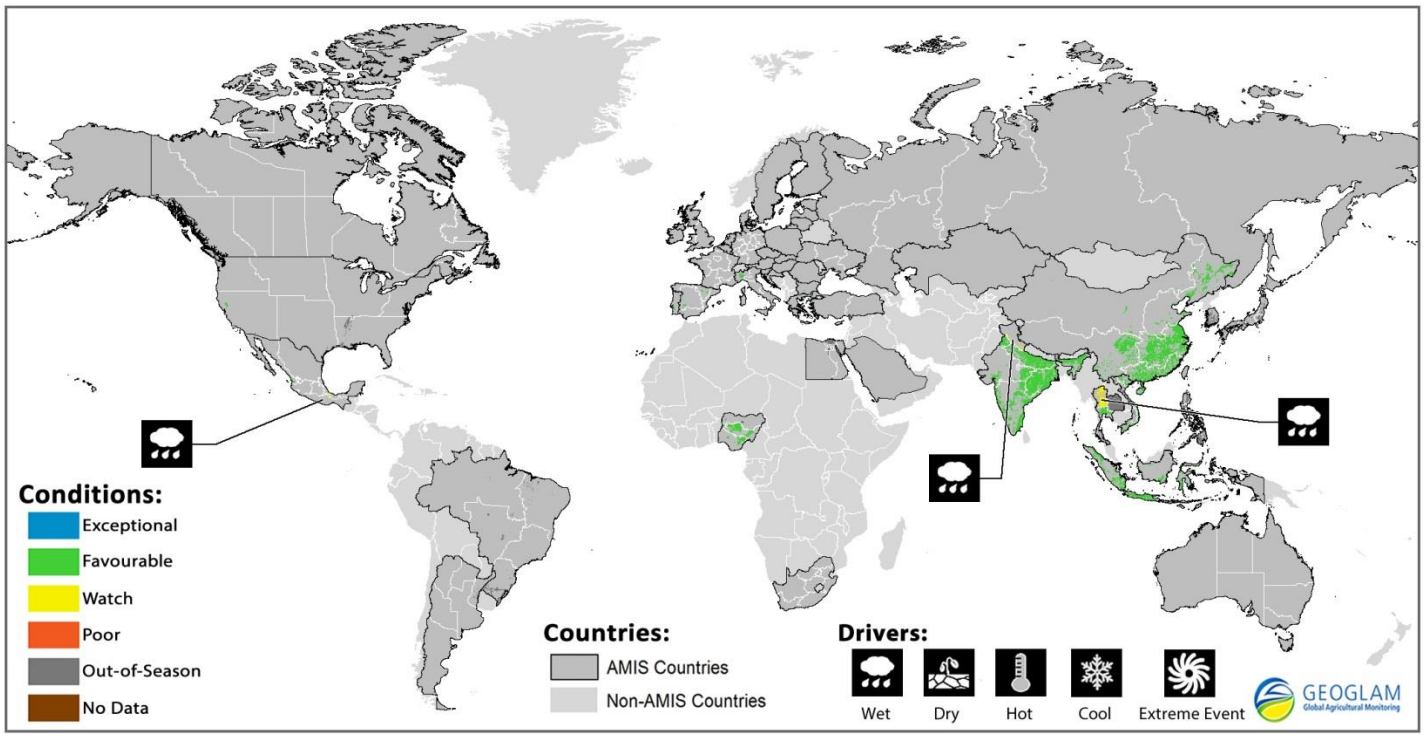
Maize: Conditions in the northern hemisphere remain overall favourable. In the **US**, the crop will likely surpass both yield and production records in large part due to excellent and consistent summer conditions, particularly in the dominant Corn Belt region. In the **EU**, yield prospects of grain maize remain good despite limited local concerns due to excessive rainfall. In **Russia,** harvest is underway. Concern remains in the central region where yields are expected to be down relative to last year. In **Ukraine**, prospects improved for maize. Quality is expected to be average and harvest is progressing. In **China**, conditions remain mixed with concern across much of the North China Plain and Northeast growing regions due to earlier dry conditions. In south-western regions, maize harvest is mostly complete. In **Mexico** conditions remain



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

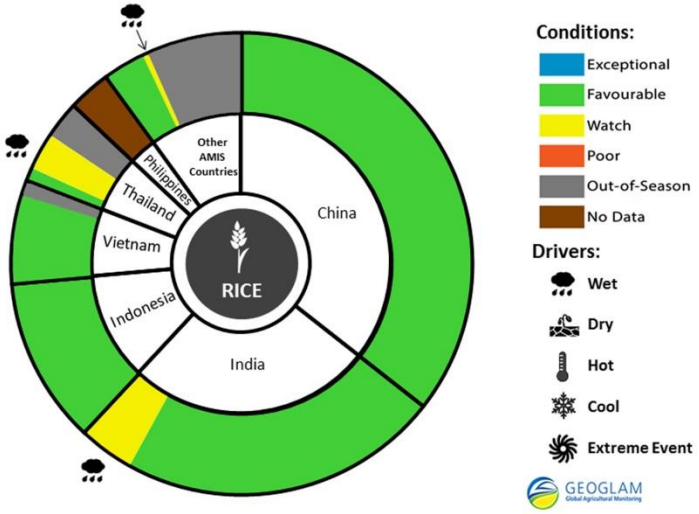
generally favourable with sufficient moisture for crop development. Sowing of the spring-planted crop is complete. There is some concern over excess moisture in a few production areas in southern growing regions, but without considerable damage to production. In **Canada**, conditions remain mixed and harvest is underway. Wet weather remains a concern and is delaying harvest. In addition, there is some concern over the September frost events. In **Nigeria,** conditions improved and are favourable. In the southern hemisphere conditions are favourable. In **Brazil** weather conditions are favourable for sowing of the first crop. In **Argentina**, planting is progressing in Buenos Aires, Cordoba and Santa Fe and conditions are overall favourable for the emerging crops.

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

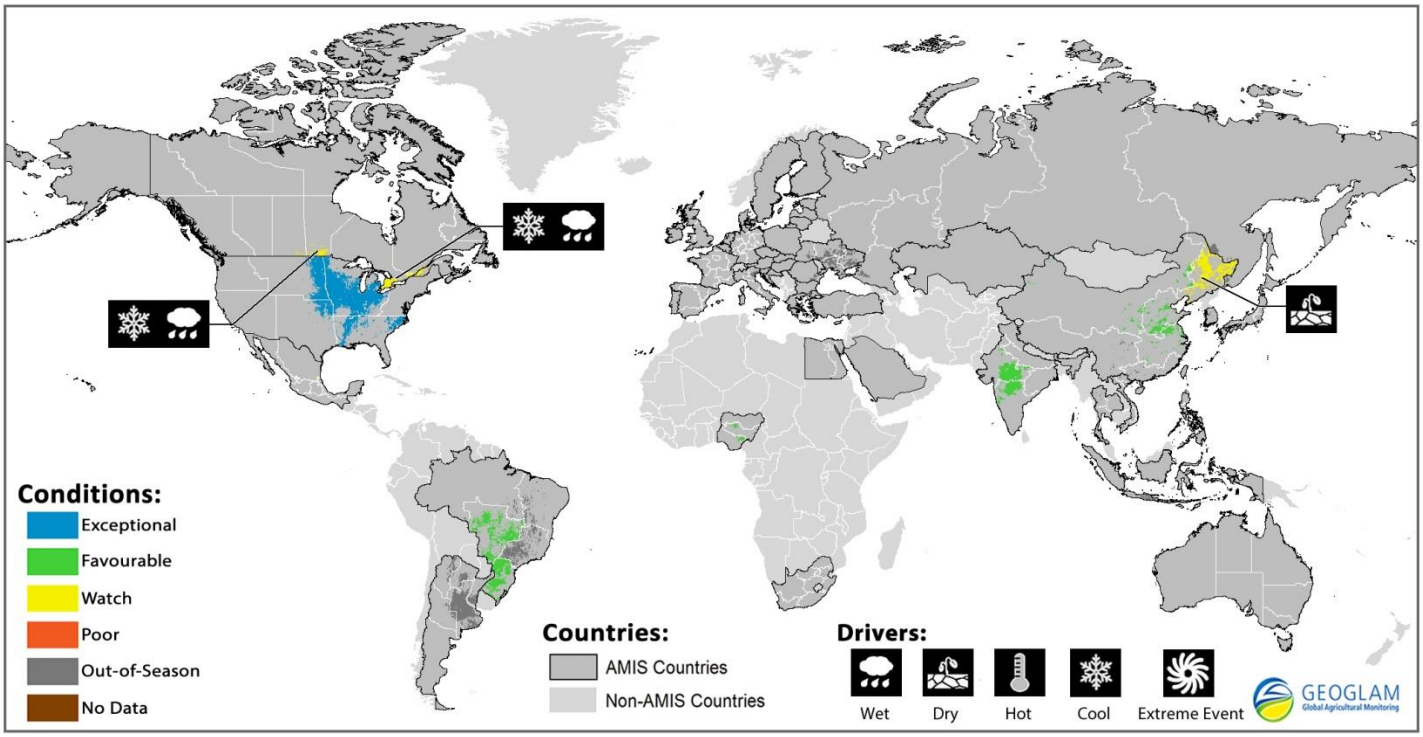
Rice: Conditions are generally favourable. In **India**, conditions are mostly favourable and the crop is in vegetative to reproductive stages. In **Indonesia**, the dry season crop conditions remain favourable. Rice growth stages range between vegetative to maturity stages depending on planting date. In **Viet Nam**, overall conditions of the summer, the summer-autumn, and autumn-winter crops are good. However, total planted area is lower relative to last year. Growth stages range from transplanting to harvest. In **Thailand**, overall conditions are favourable. Some concern remains over wet season rice in some provinces in the north and northeast due to heavy rainfall and some flooding. Overall planted area of wet season rice has decreased relative to last year in favour of other crops. In **China,** conditions remain generally favourable. However, there is some concern due to typhoon Kalmaegi, which brought heavy rainstorms to southern growing regions. Single



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

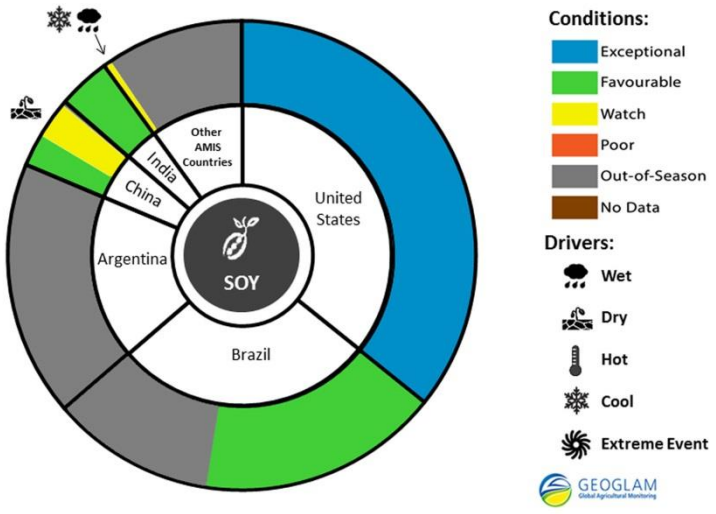
cropped rice is mostly in heading to harvest stages, while late season rice is in booting to flowering stages. In the **EU**, the rice crop is still progressing as normal. In the **US**, conditions are favourable and much of the crop has been harvested. In **Nigeria**, conditions are favourable. In **Brazil**, the main producer state started the soil tillage in preparation for the next crop.

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 September 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 are overall very good primarily owing to the US crop. In the **US**, there will be an exceptionally large soybean crop, well surpassing past production records. This is due to both very good growing conditions, which have occurred throughout the summer, and a big increase in planted area from previous years. In **Canada,** conditions remain mixed due to excess moisture and a cooler than normal summer and recent frost events. Development is generally a week behind normal, with frost becoming an increasing risk. In **China,** conditions remain generally favourable except in the western and southern parts of the northeast soybean producing area where persistent drought occurred earlier in the season. The crop is mainly in maturity stages. In **Nigeria,** conditions are favourable owing to good moisture conditions. In addition planted area has been on the rise. In **Brazil**, the planting season began in main producer states under mostly favourable conditions.



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

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.

*"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.)

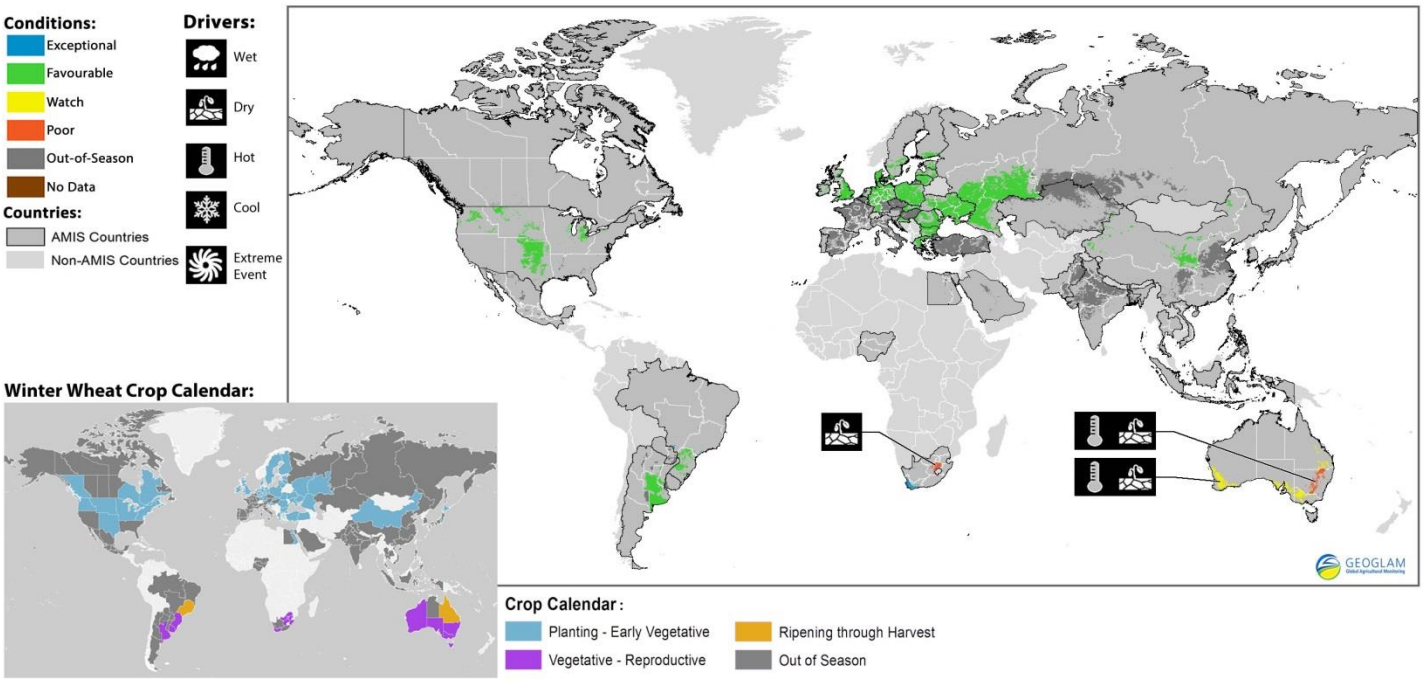
Sources & Disclaimer

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.

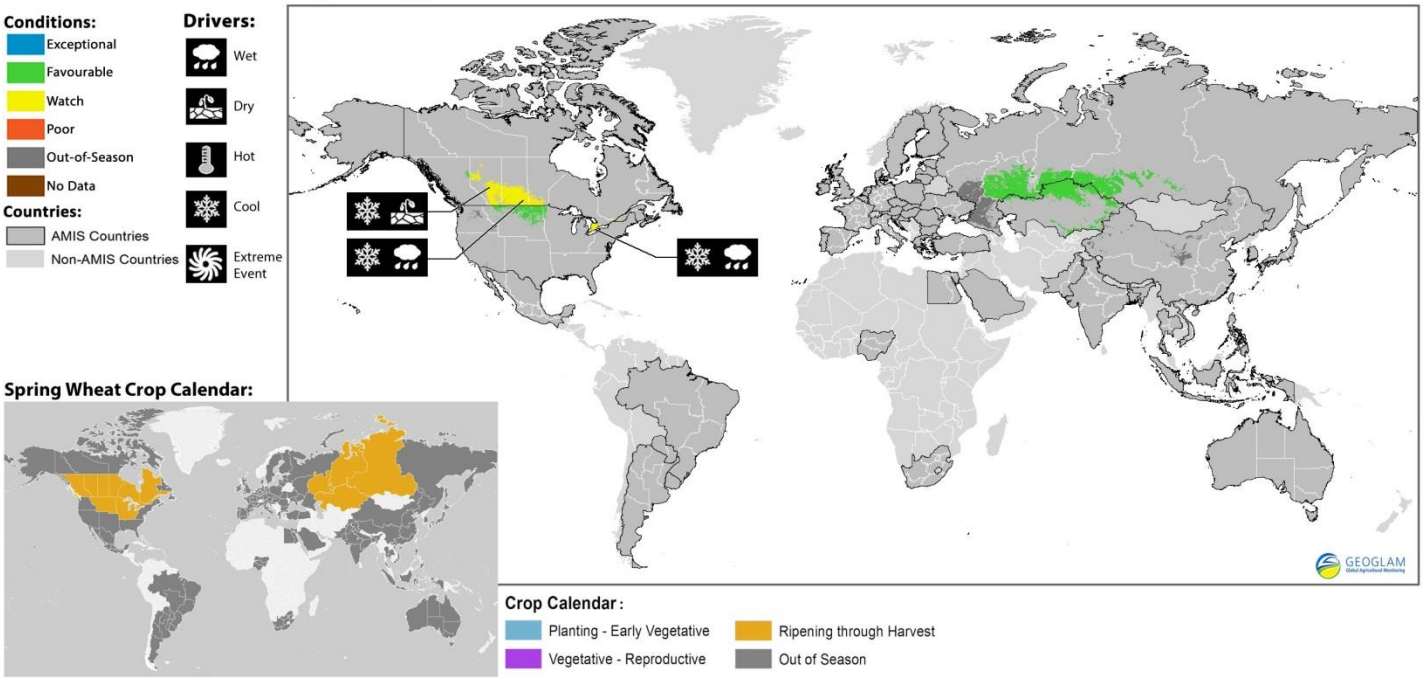
Appendix 2: Crop Season Specific Maps

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 September 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



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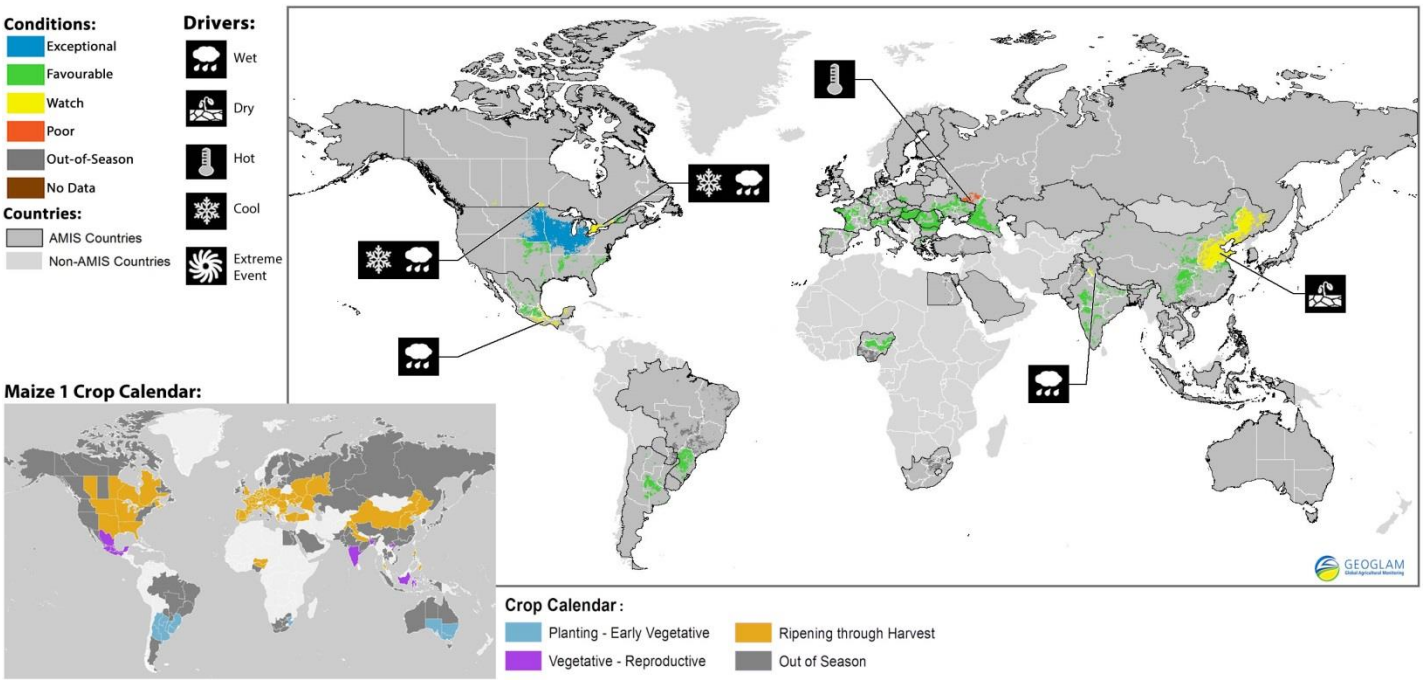
* Assessment based on information as of September 28th

Maize 1 Conditions for AMIS Countries



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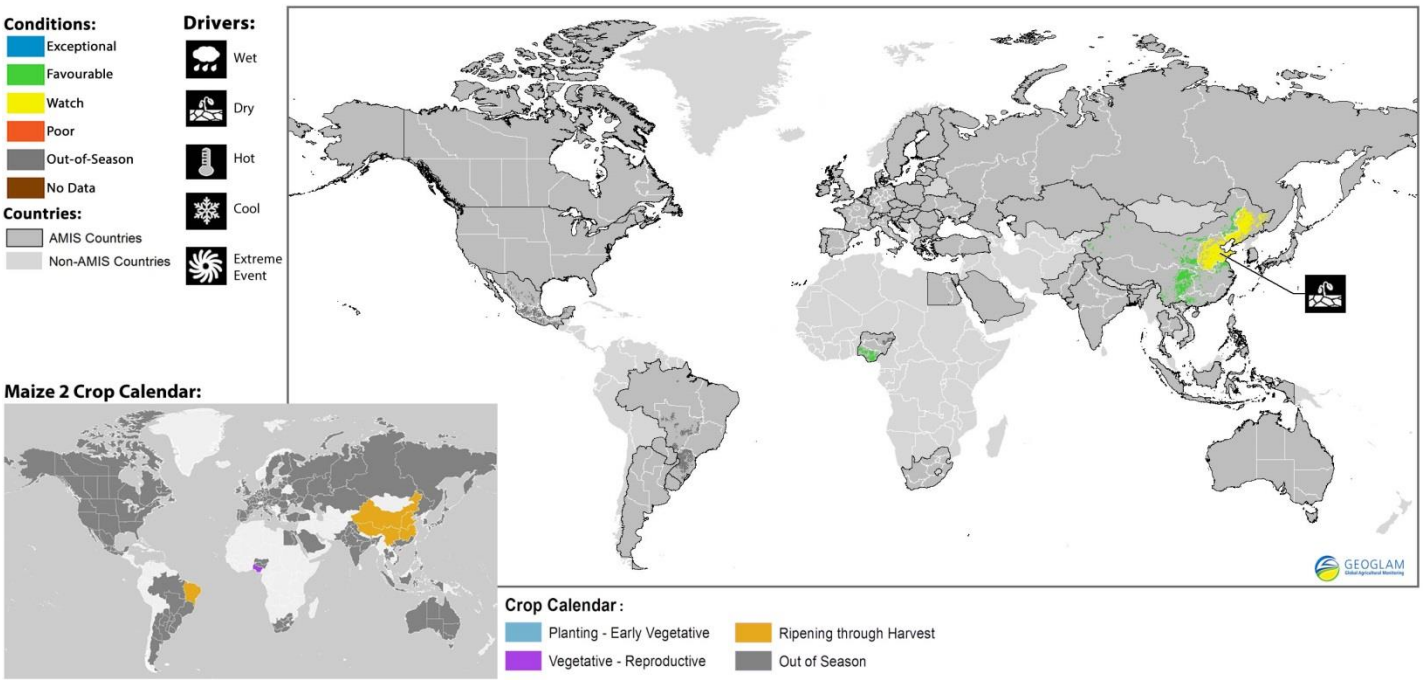
Maize 2 Conditions for AMIS Countries



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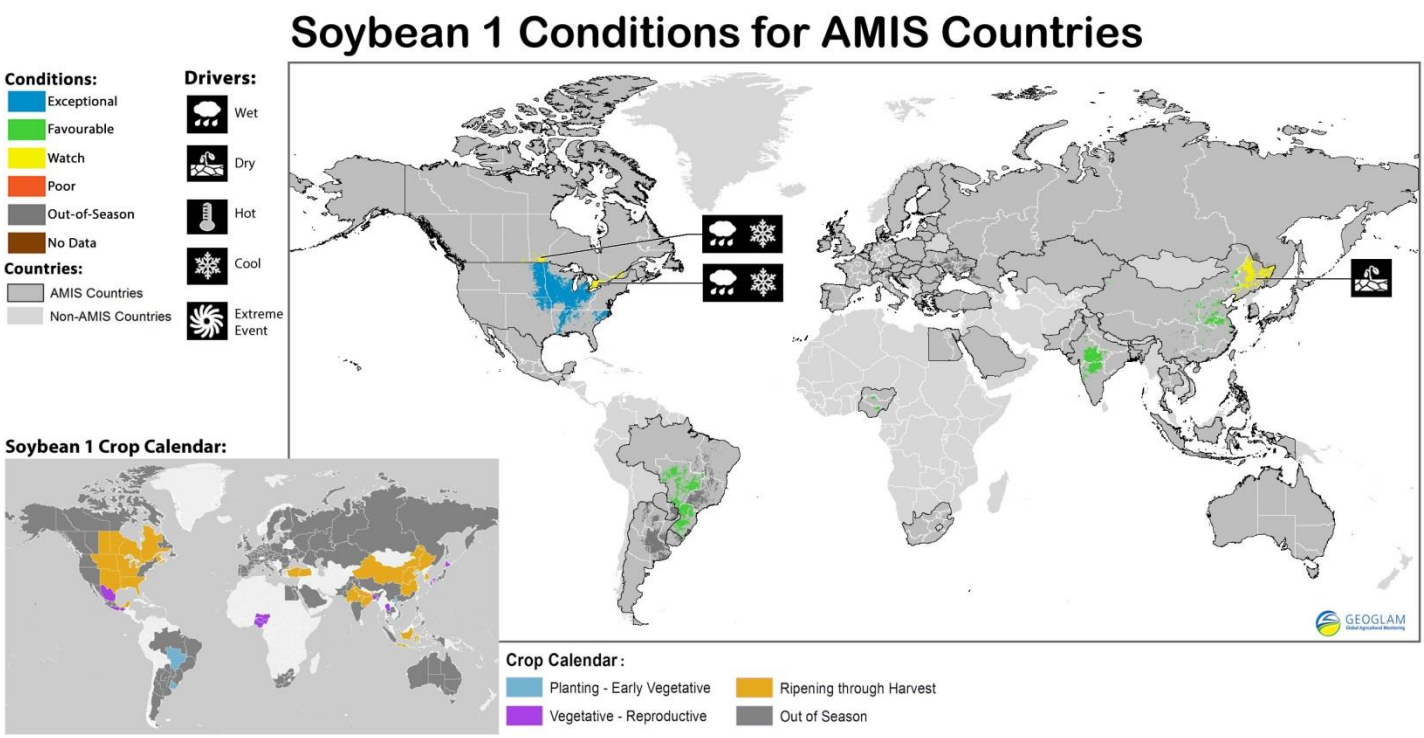
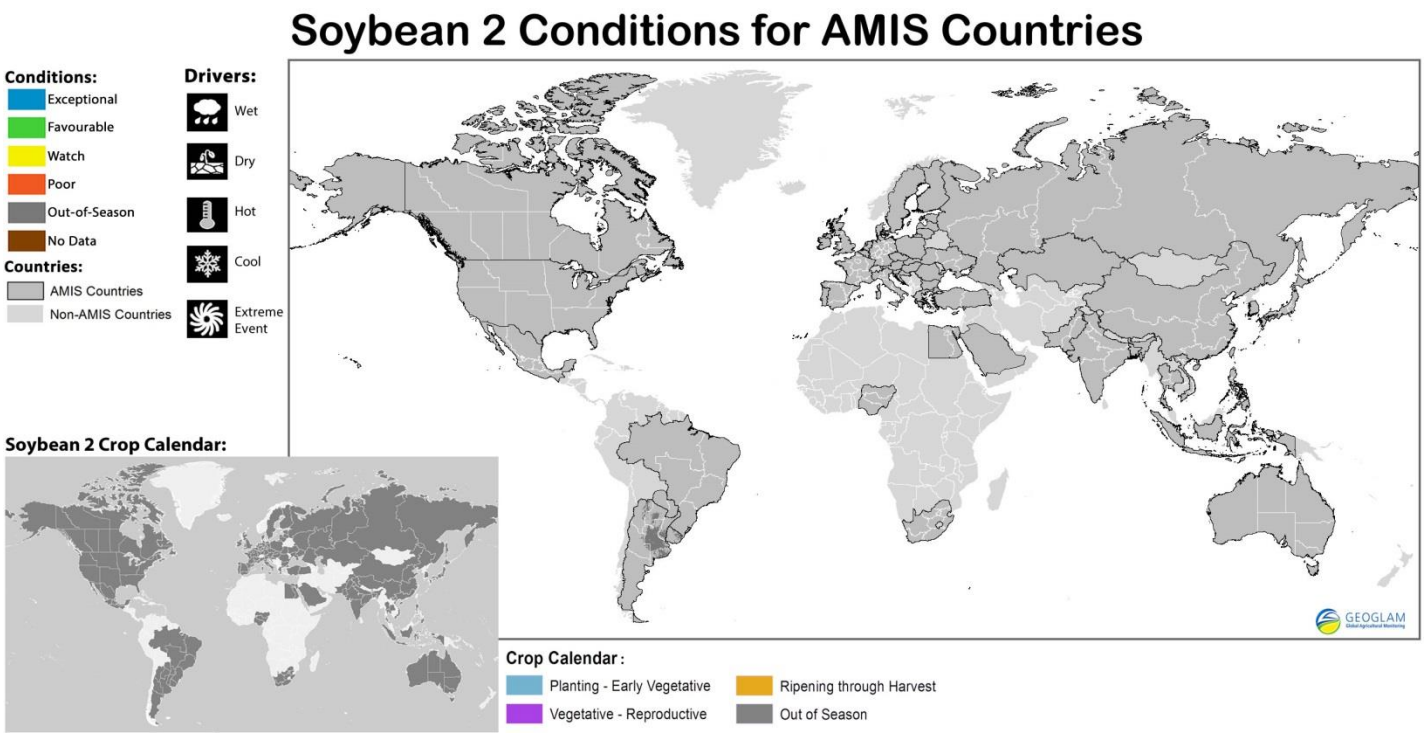


Soybean 1 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of September 28th. Where crops are in less than favourable conditions the climatic drivers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