GEOGLAM Crop Monitor

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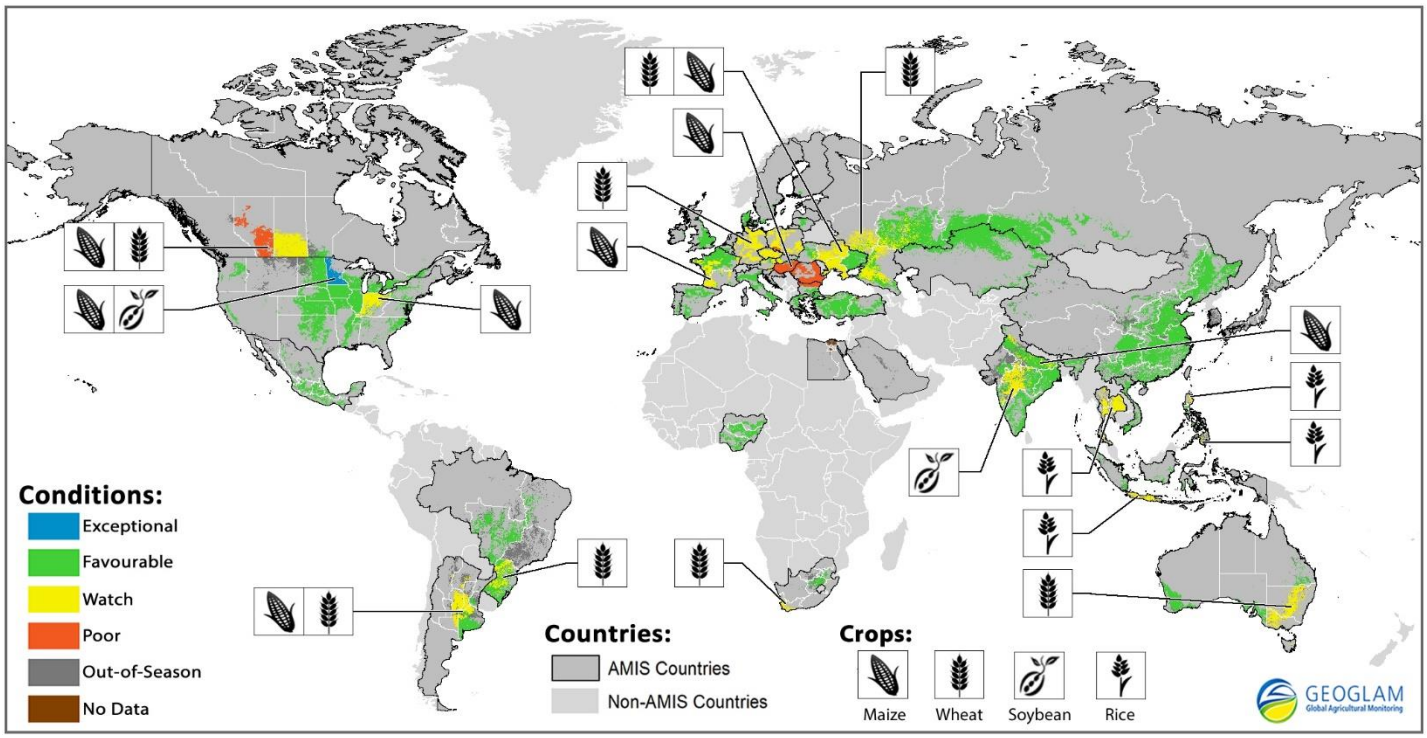
GEOGLAM
Global Agricultural Monitoring

Prepared by members of the GEOGLAM Community of Practice

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 - In the northern hemisphere, overall conditions are favourable as the spring wheat season draws to a close and winter wheat planting begins. For spring wheat, conditions are favourable in Kazakhstan and Russia, where as conditions are mixed in Canada. For winter wheat, conditions are mostly favourable in the US and Russia, whereas there is some concern in the EU and Ukraine. In the southern hemisphere, conditions are mixed. In Australia, conditions marginally deteriorated in most states. In Argentina, conditions are generally favourable and in Brazil and South Africa, there is some concern.

Maize - In the northern hemisphere, conditions are mixed. In the US and China, conditions are overall favourable. In the EU conditions are largely unfavorable due to a heat wave and dryness. In Ukraine there is concern over dry conditions. In India, there is some concern in northern regions due to dryness. In Mexico, Canada, the Russian Federation, and Nigeria, conditions are generally favourable. In the southern hemisphere planting has begun. In Brazil conditions are favourable and there is some concern over low soil moisture in parts of Argentina as well as in South Africa.

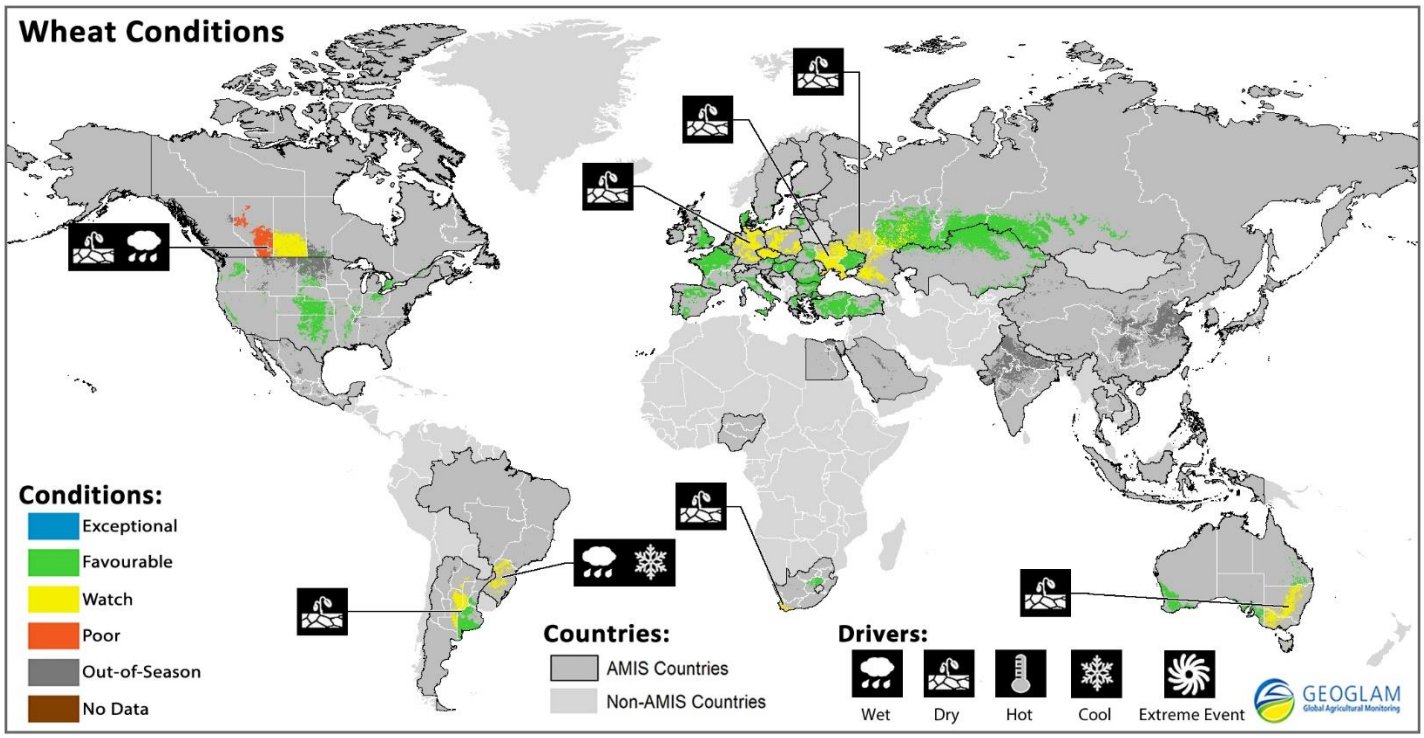
Rice - Conditions remain mixed though in some areas they have improved owing to recent rains. In India conditions are close to average and in Thailand, conditions remain mixed due to lack of precipitation. In China conditions are favourable In Viet Nam, conditions improved and the wet season crops are in favourable condition. In Indonesia, the dry season crop is generally in favourable condition except in southern regions and in the Philippines, harvest of the wet season crop is almost complete and conditions are mixed.

Soybeans - In the northern hemisphere, conditions remain mostly favourable as harvest begins. In the US and Canada, harvest has begun and conditions are favourable. In China, conditions are generally favourable and in India, there is concern over moisture stress. In the southern hemisphere, conditions are favourable in Brazil at this early stage of the season.

El Niño update

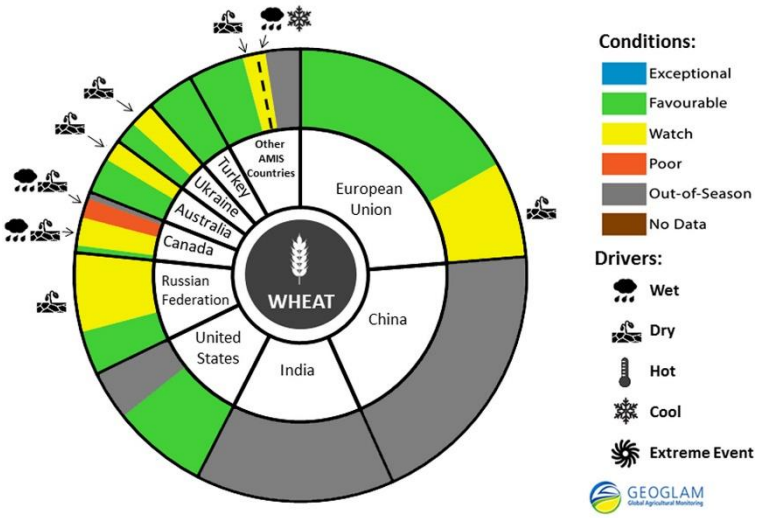
The current El Niño is forecast to remain in the strong category through the end of the southern hemisphere growing season and into early northern hemisphere summer 2016. This strength means that the forecast rainfall and temperature anomalies associated with the El Niño event have high probabilities of occurrence. Drier than average conditions are forecast to continue in Thailand, Viet Nam, the Philippines, and Indonesia. They are also expected to persist across Central America and in northern areas of South America. A dry growing season in Southern Africa is associated with El Niño, and in Australia, El Niño brings suppressed spring (October-December) rainfall in the eastern half of the country, and above-average temperatures in the south and the east for October-March. Wetter than average conditions are forecast for the summer growing season of southern Brazil and northeastern Argentina, and for the winter precipitation season in countries of Central-Southwest Asia (Afghanistan, Uzbekistan, Tajikistan, and Iran), building up snow pack for good irrigation in the summer of 2016. During the upcoming winter season in North America, expectations are for warmer than average temperatures across Canada and the northern US, and wetter than average conditions across the southern half of the US. If this El Niño follows similar historic patterns, it may make a transition quickly to La Niña, which will bring new patterns of anomalous rainfall and temperature, many of which are opposite to those of El Niño.

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.

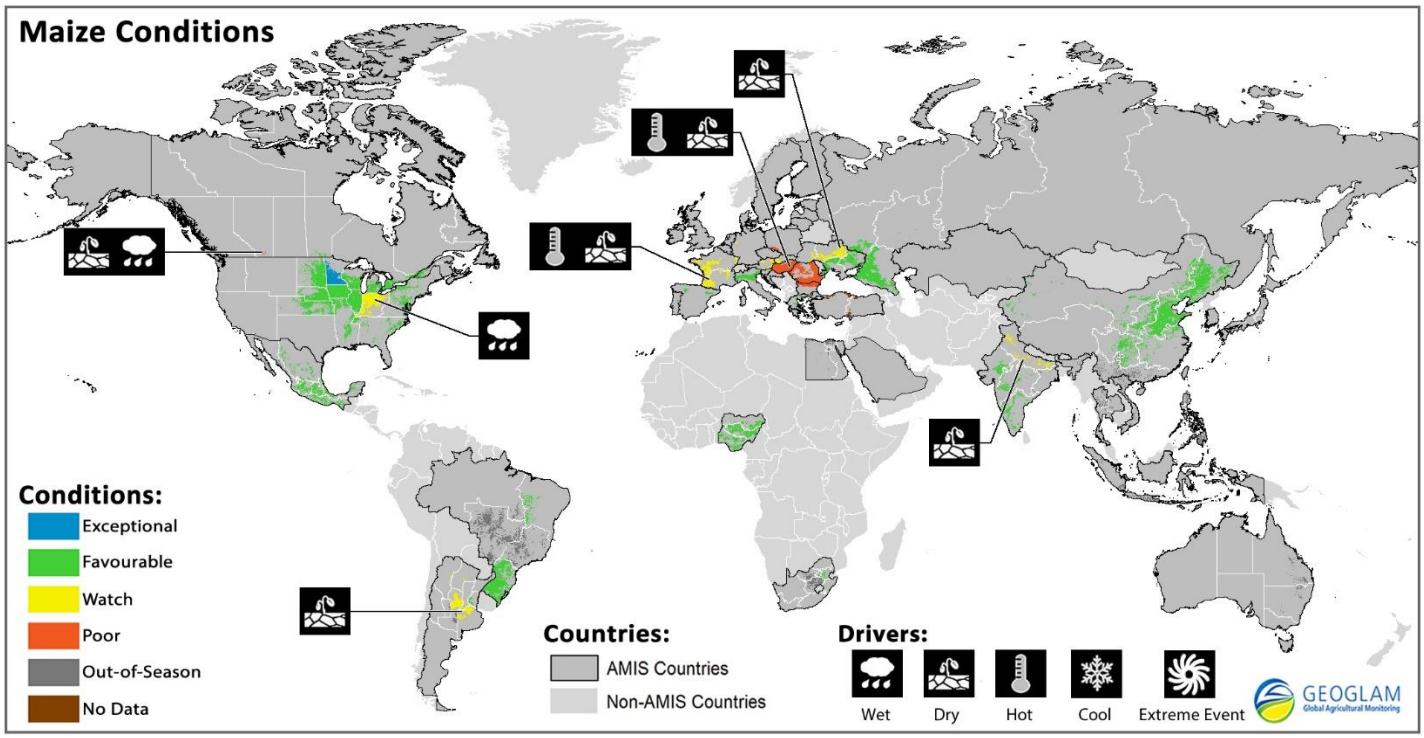
Wheat: Overall conditions in the *northern hemisphere* are favourable as the spring wheat season draws to a close and winter wheat planting begins. In the **US**, planting is ongoing under favourable conditions. In the **EU** planting has begun in northern regions under normal conditions and there is some concern over central regions due to dryness. In the **Russian Federation**, spring wheat harvest is wrapping up under mostly favourable conditions and winter wheat planting continues under satisfactory conditions with the exception of the southern regions where conditions are dry. In **Canada**, spring wheat harvest is underway and there is concern over earlier extreme dry conditions in western regions, which negatively impacted development. Recent rains have somewhat moderated conditions, however are delaying harvest. In **Ukraine**, winter wheat planting is ongoing and there is concern over southern and eastern regions due to dryness. In **Kazakhstan**, harvest has begun and conditions are favourable. In the *southern hemisphere*, conditions are mixed. In **Australia**, conditions marginally deteriorated in most states due to lack of September rainfall. Timely rainfall in October is critical for maintaining average yield potential. In **Argentina,** conditions are favourable in the primary production regions where soil moisture conditions improved in recent weeks. However, there is some limited concern due to dryness in Cordoba and northern growing regions. In **Brazil**, there is some concern due to the mixed weather earlier in the season (wet followed by dryness) and localized frosts in September. In **South Africa**, conditions remain mixed due to below normal rainfall in the main production region and therefore overall yields are expected to be below average.



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

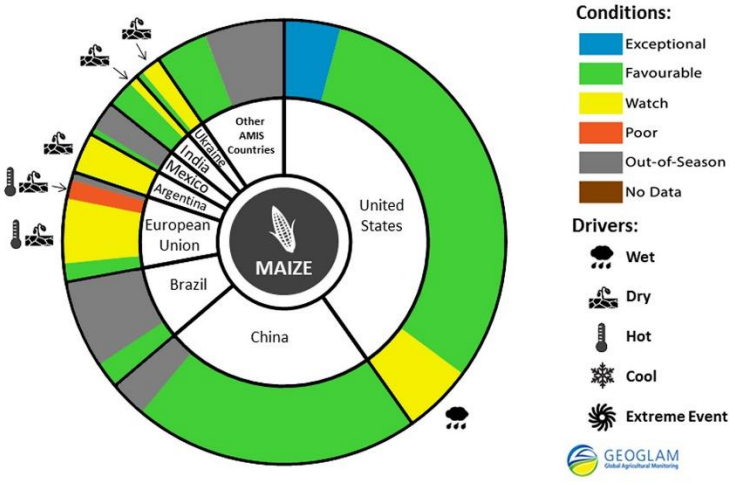
* Assessment based on information as of September 28th

Maize Conditions for AMIS Countries



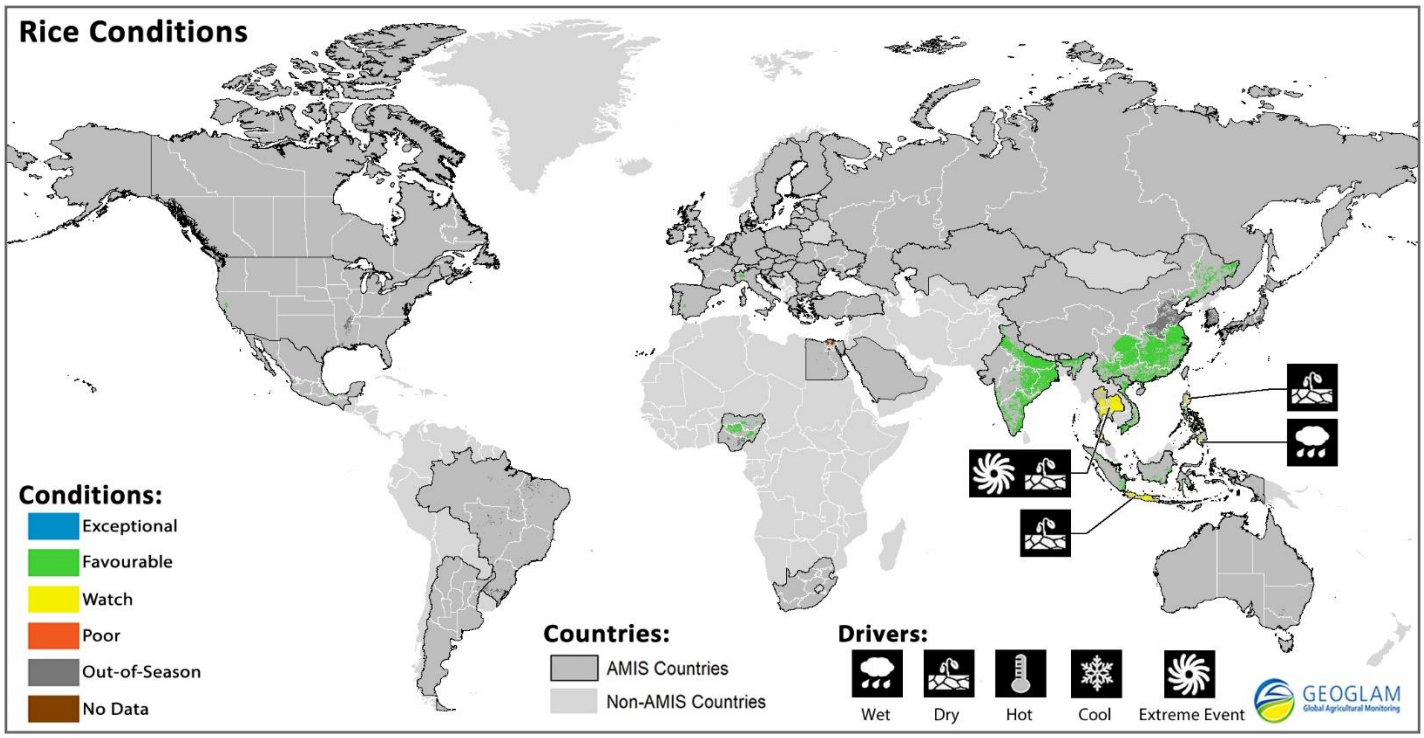
Maize crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of September 28th. Where crops are in other than favourable conditions the climatic drivers responsible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

Maize: Conditions in the *northern hemisphere*, are mixed as harvest begins. In the **US** harvest is underway and a good crop is materializing. Some areas, particularly around Minnesota, will likely see record yields and will offset underperforming areas in the eastern Corn Belt. Overall, production is expected to be slightly less than the last two high production years. In **China** conditions are overall favourable. In **Ukraine**, harvest is ongoing and there is concern due to persistent dryness and high temperatures in central and western regions. In the **EU** conditions are largely unfavorable and production is expected to be below the 5 year average due to the heat wave and lack of rainfall in central and Eastern Europe. In **India**, conditions improved owing to significant rainfall in late September however, there is still some concern over dry weather in northern regions. In **Mexico**, sowing of the spring-planted cycle is complete and, conditions are generally favourable. In **Canada**, conditions are mostly favourable and harvest is ongoing. In the **Russian Federation**, conditions are favourable. In **Nigeria**, conditions are favourable for both the main and short season crops. In the *southern hemisphere* conditions are favourable at this early stage of the season. In **Brazil**, planting of the spring-planted crop began in the south and conditions are favourable despite localized frosts in September. In **Argentina**, there is some concern due to low soil moisture, which is slowing planting in some regions. In **South Africa**, planting began and there are concerns over dry conditions in the central eastern provinces.



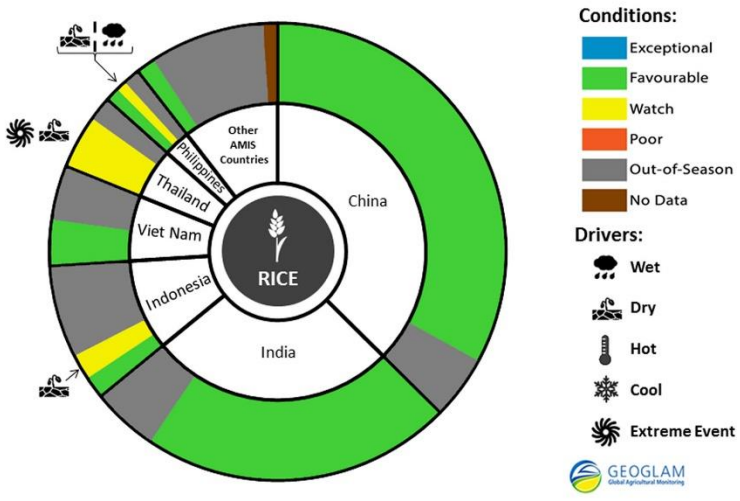
For detailed description of the pie chart please see box below.

Rice Conditions for AMIS Countries



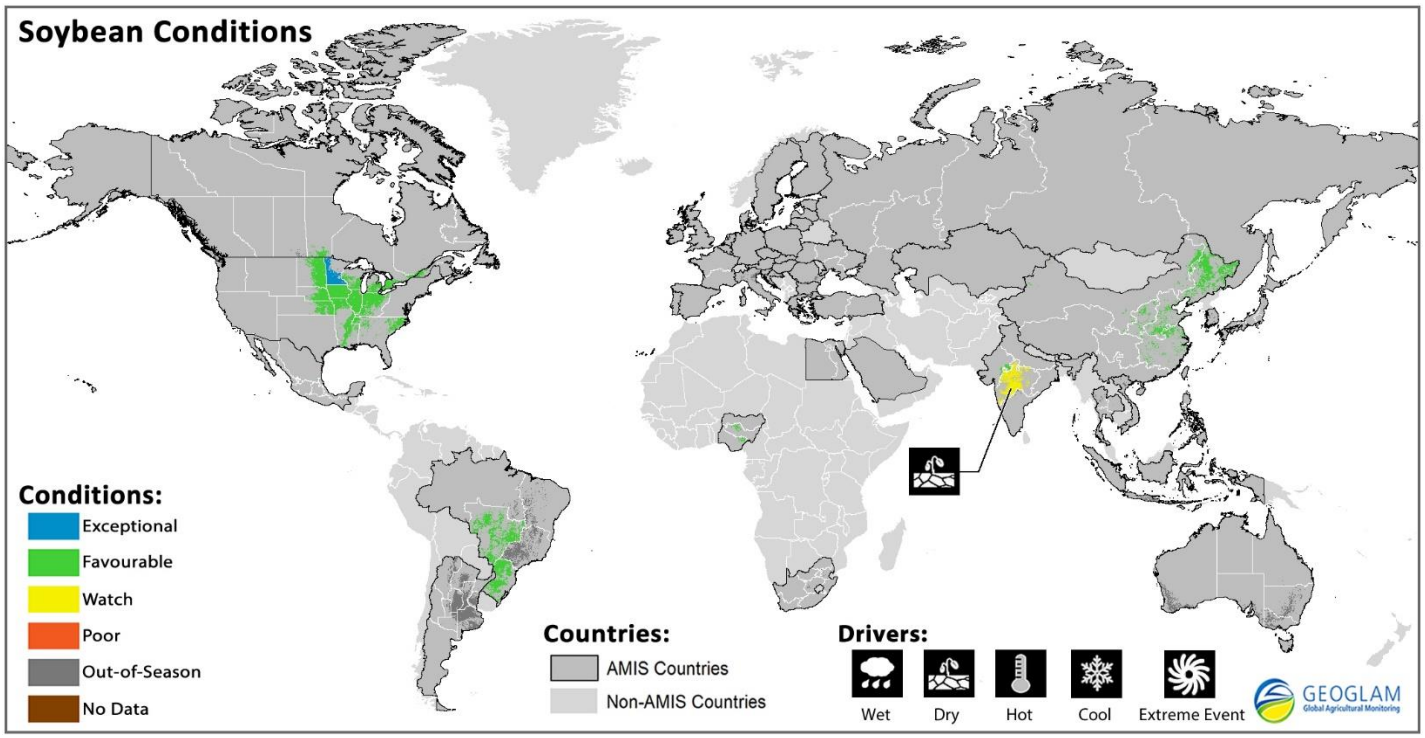
Rice crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of September 28th. Where crops are in other than favourable conditions the climatic drivers responsible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

Rice: Conditions remain mixed in part due to the current El Niño affecting large parts of Asia, though some areas have improved owing to recent rains. In **China** conditions are generally favourable. In **India**, conditions are close to average. In **Thailand**, conditions remain mixed due to lack of precipitation and shortage of irrigation water attributed to El Niño. There are also concerns over pests in the northern and central regions and yields are expected to be down. In **Viet Nam**, the summer-autumn wet season rice conditions have improved and conditions are favourable. The autumn-winter planted wet season crop is also in generally favourable condition in the Mekong Delta. In **Indonesia**, the dry season crop is in vegetative to maturity stages. There is concern in the southern regions over dry conditions, which are expected to continue into November due to El Niño. In the **Philippines**, harvest of the wet season crop is almost complete and there is concern over heavy rainfall in the southern regions and in contrast, over dryness attributed to El Niño affecting northern regions. The dry conditions are expected to intensify in October and persist until the first quarter of 2016. In the **US**, harvest is ongoing and conditions are favourable.



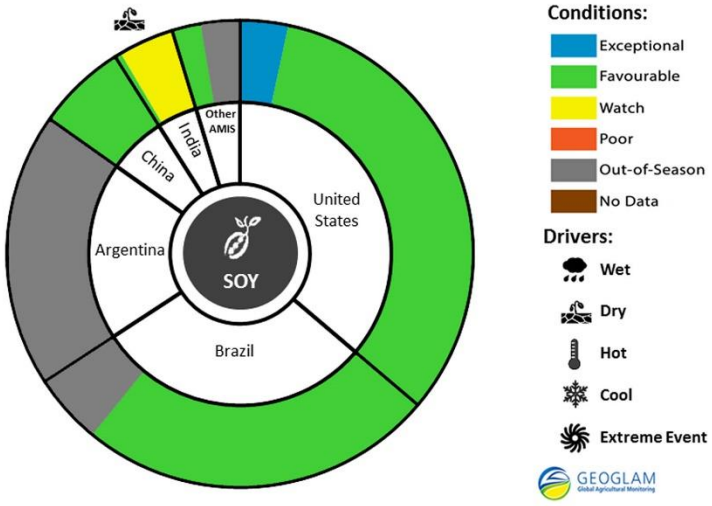
For detailed description of the pie chart please see box below.

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 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: Conditions in the *northern hemisphere* remain mostly favourable as harvest begins. In the **US**, a very good crop is expected as conditions have been mostly favourable and consistent throughout the season. Harvest has begun and production is expected to be just under the record of last year. In **China** and **Canada**, conditions are generally favourable and harvest has begun. In **India**, conditions are mixed, as there is some concern in central growing regions due to moisture stress. In **Brazil**, planting has begun in the southern and central west regions and conditions are favourable.



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.

* Assessment based on information as of September 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.

*"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 September or September 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.)

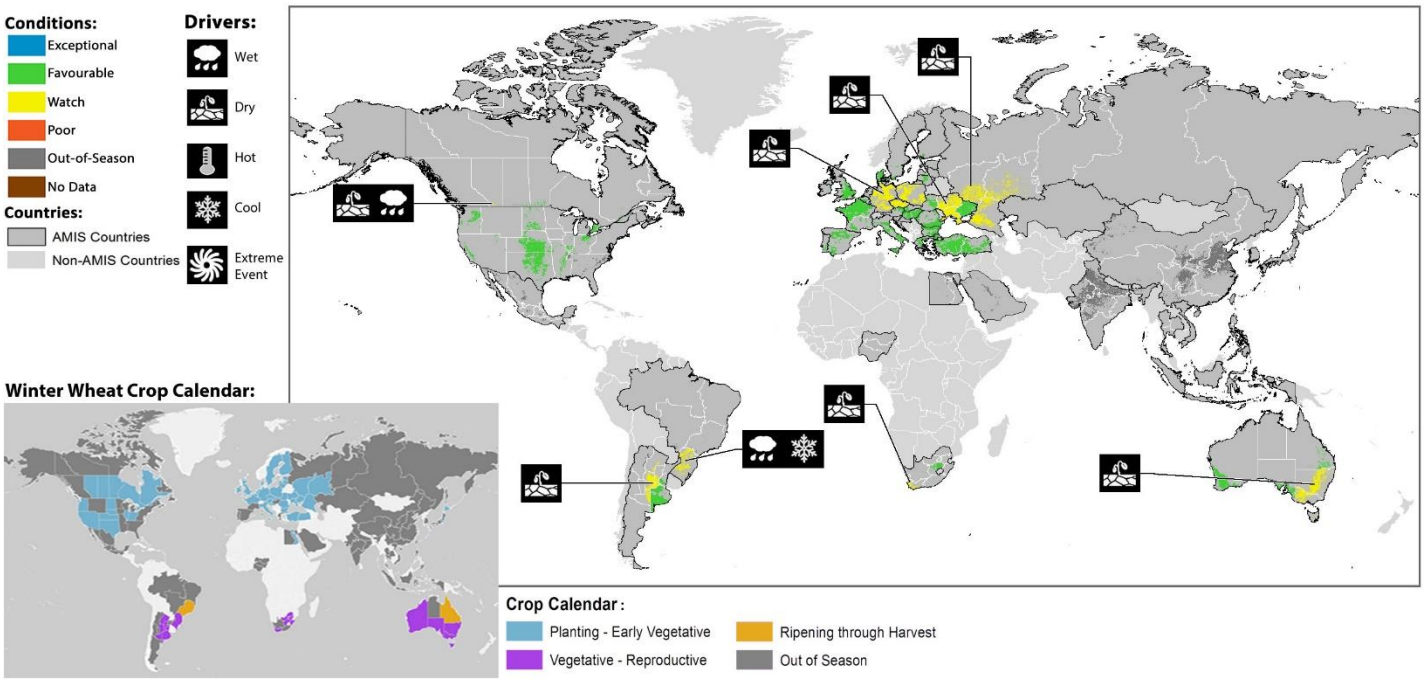
Sources & Disclaimer

Sources and Disclaimers: The Crop Monitor assessment is conducted by GEOGLAM with inputs from the following partners (in alphabetical order): Argentina (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), Russia (IKI), South Africa (ARC & GeoTerraImage & 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.

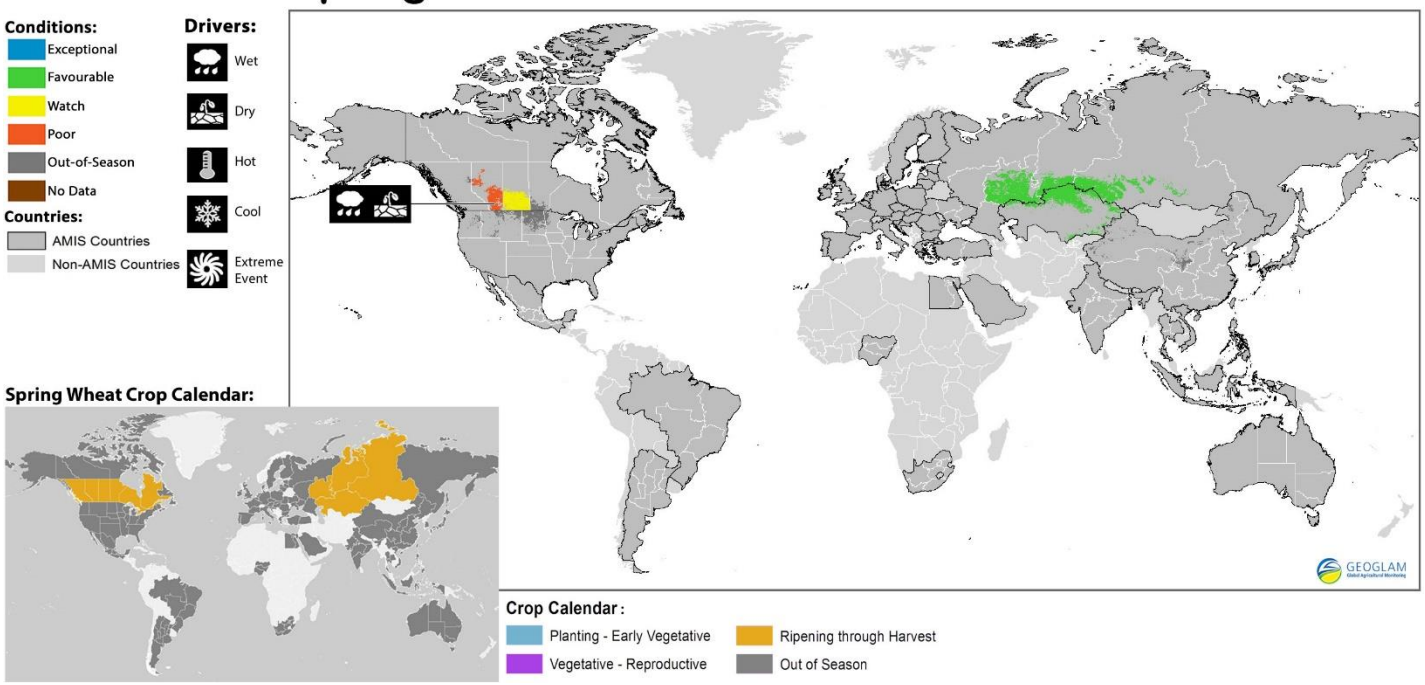
Appendix 2: Crop Season Specific Maps

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 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 Planted Wheat Conditions for AMIS Countries



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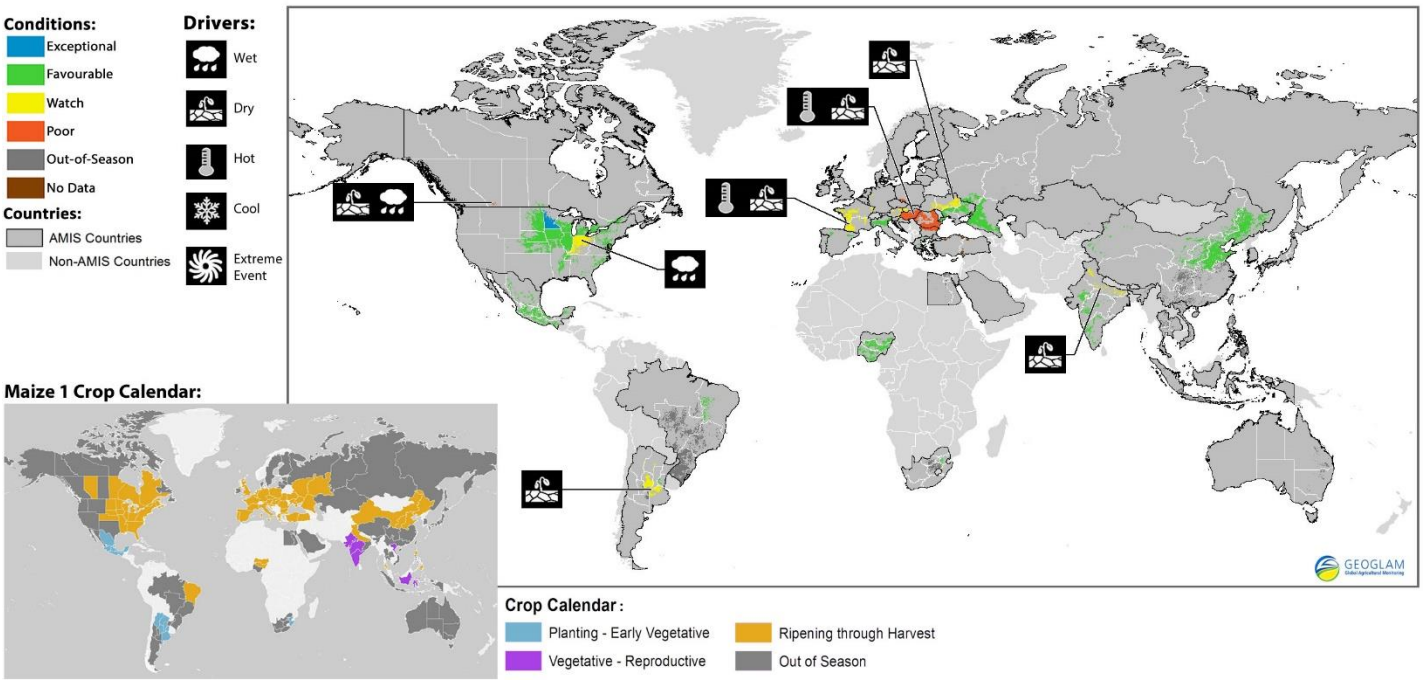

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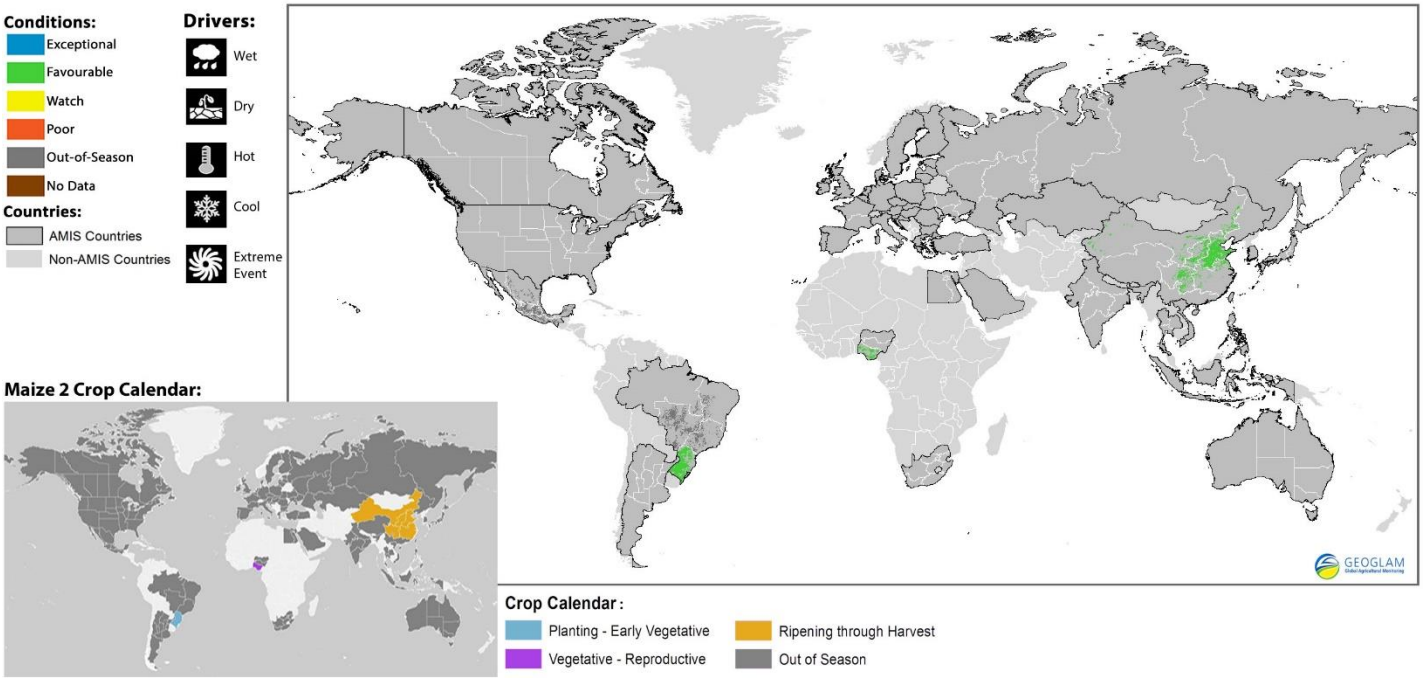
Maize 2 Conditions for AMIS Countries



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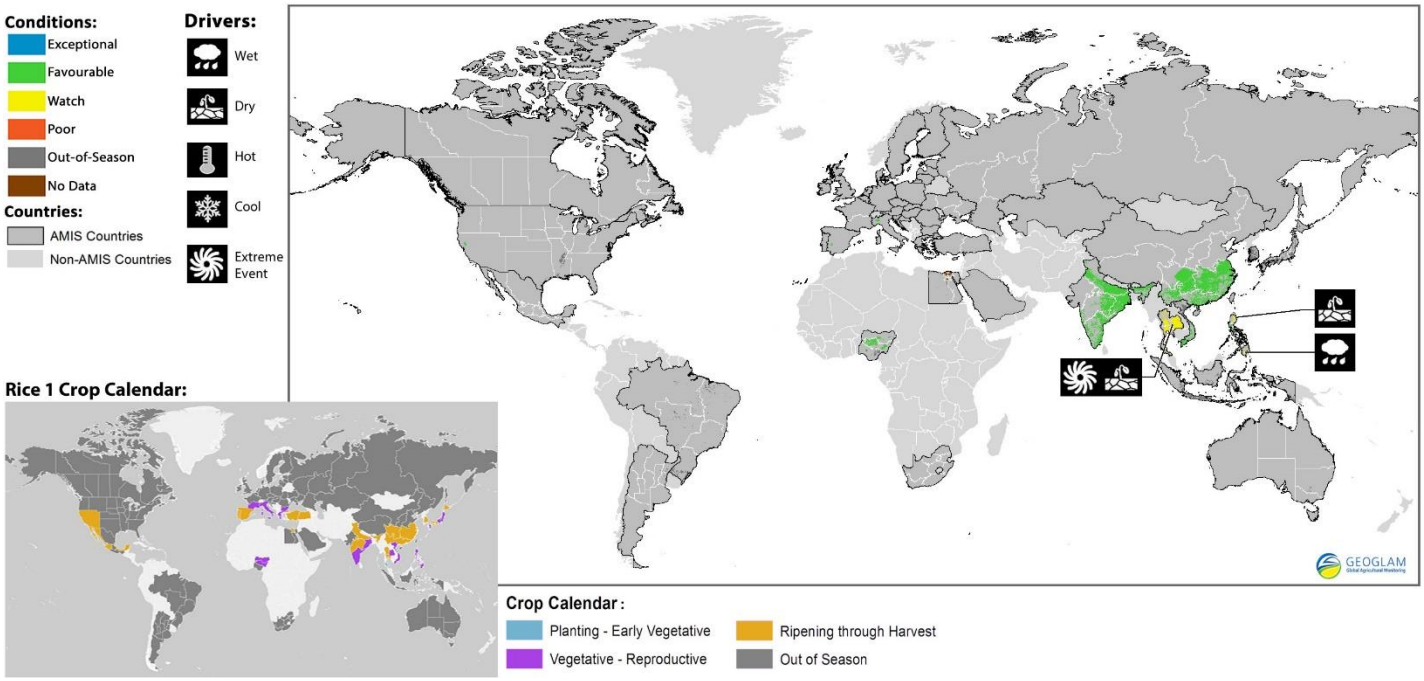

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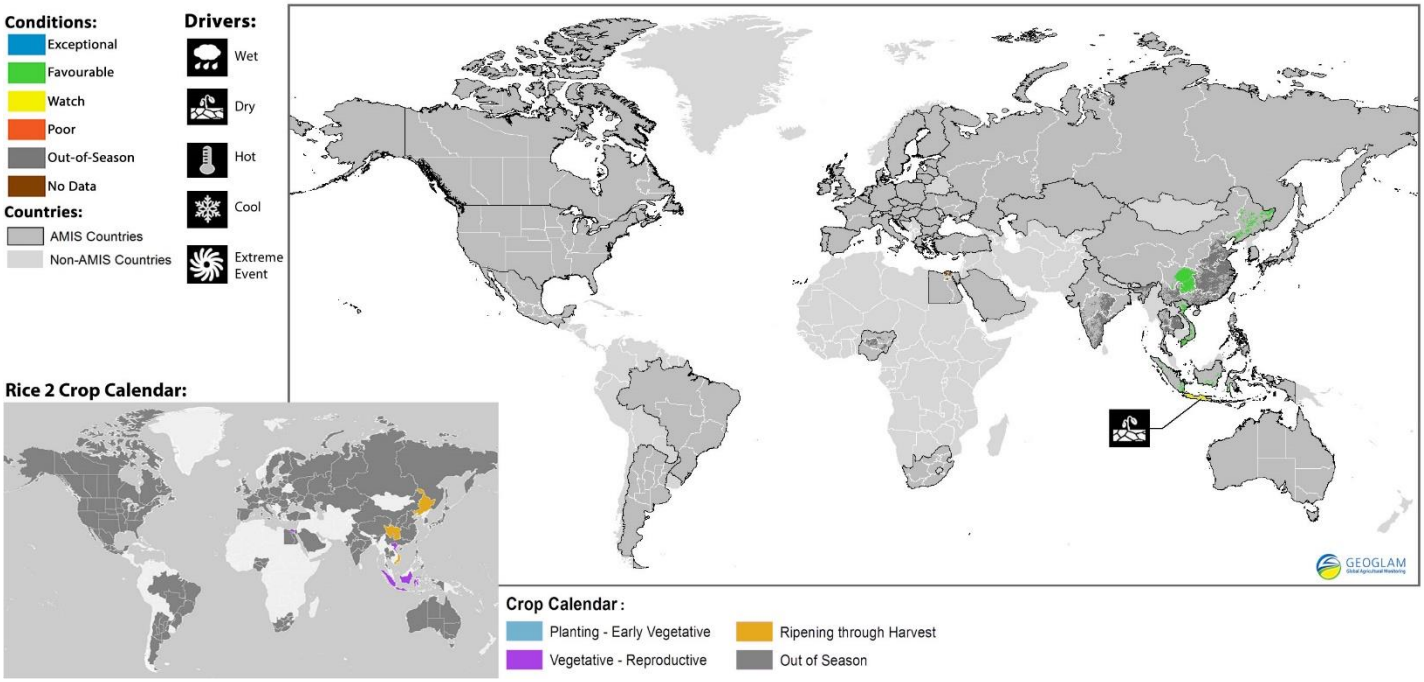

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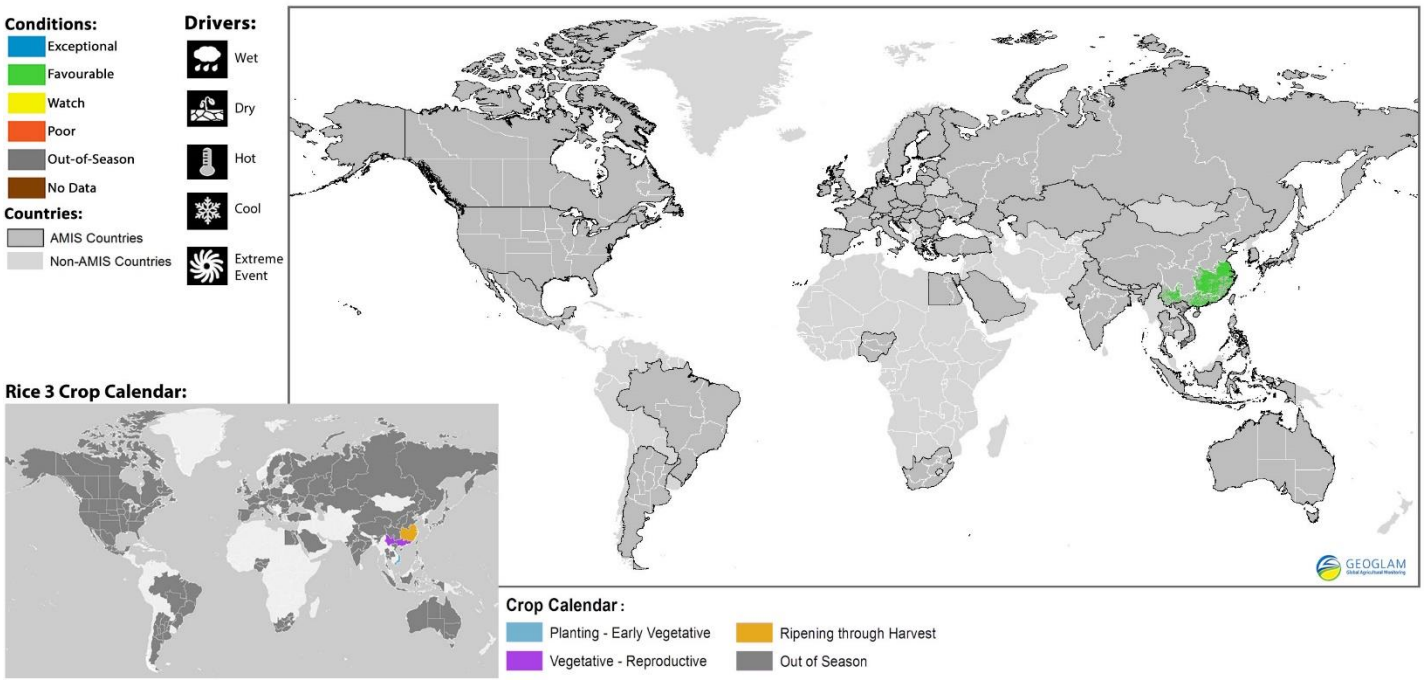
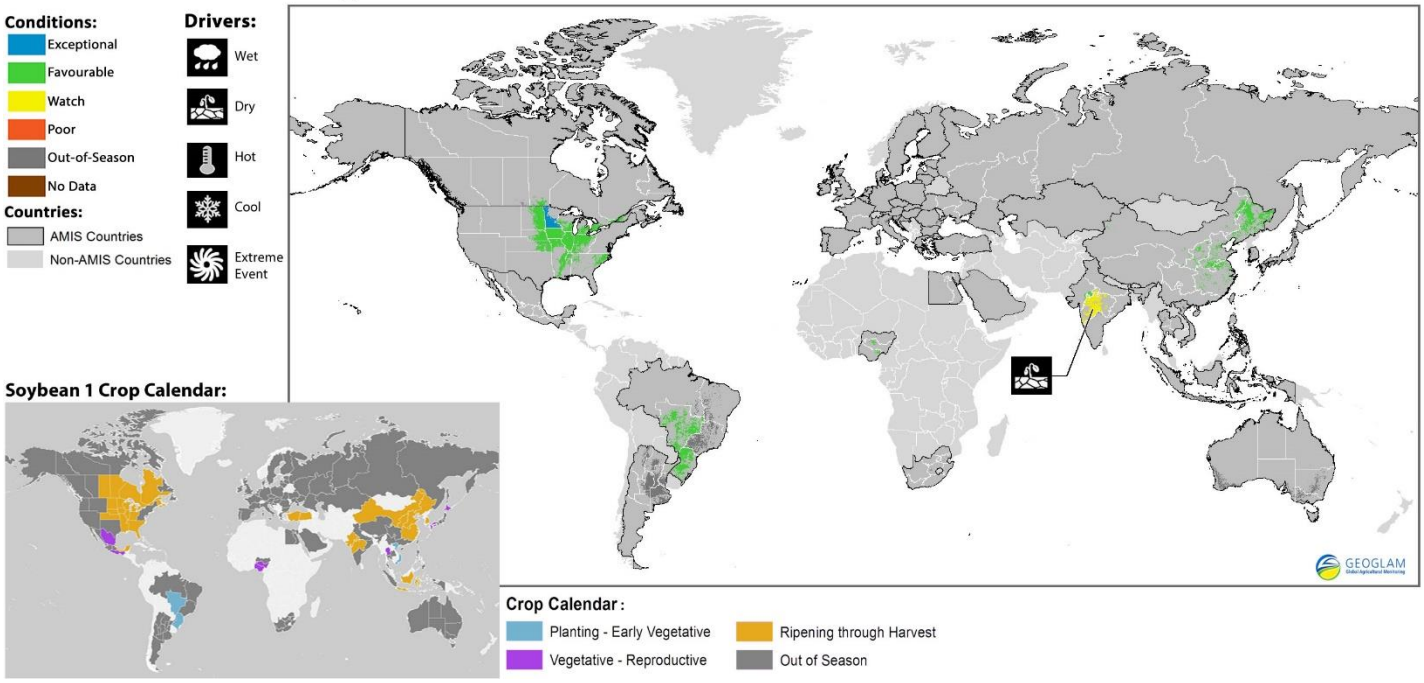
Rice 3 Conditions for AMIS Countries



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 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.

Soybean 1 Conditions for AMIS Countries



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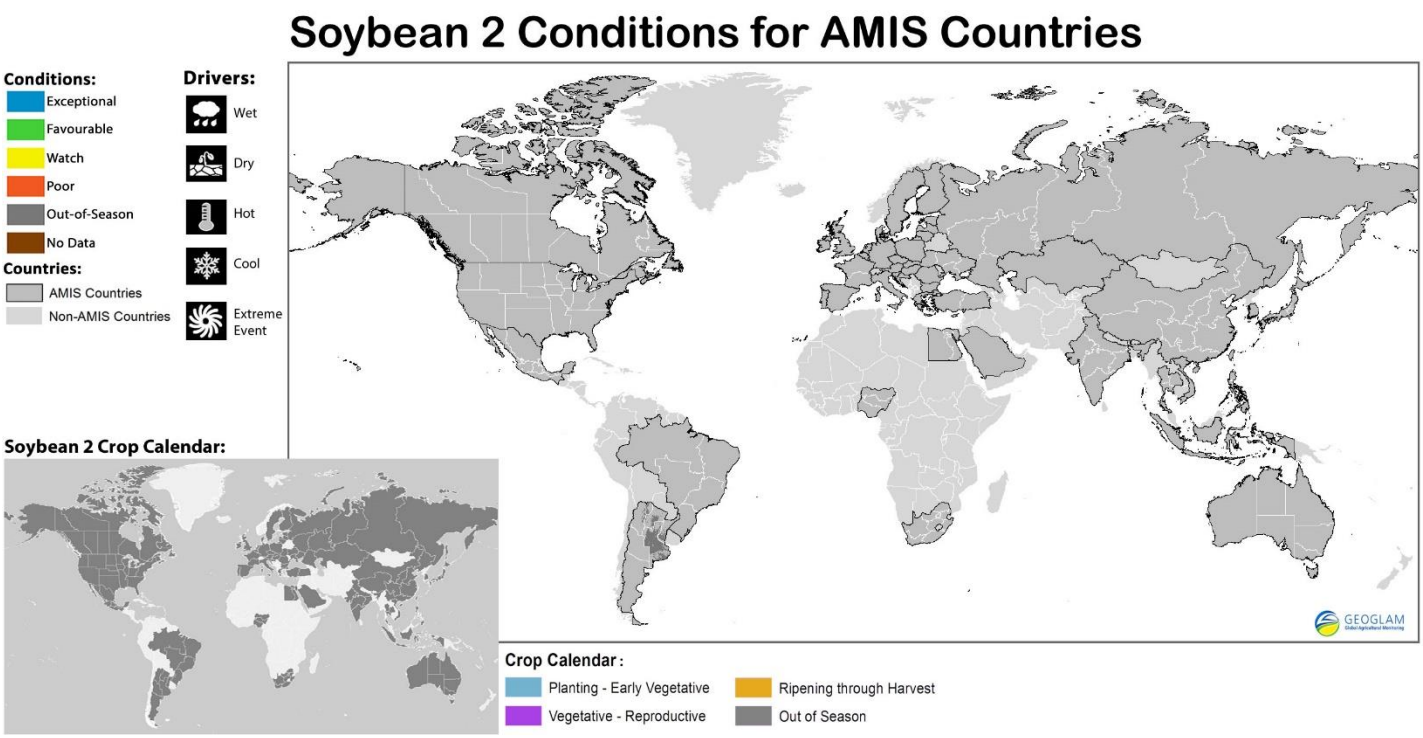

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