GEOGLAM Crop Monitor

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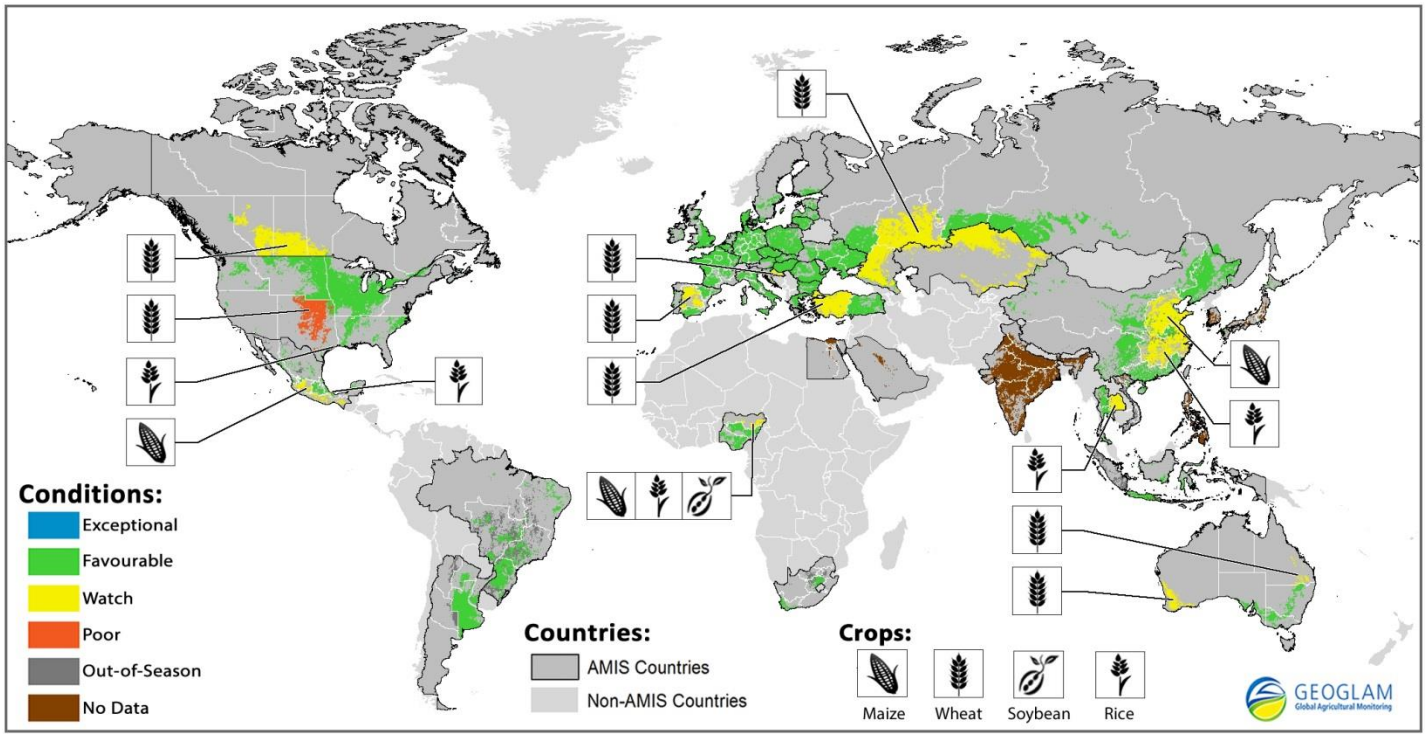
GEOGLAM
Global Agricultural Monitoring

Prepared by members of the GEOGLAM Community of Practice

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



Crop condition map synthesizing information for all four AMIS crops as of June 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 and southern hemispheres. In the northern hemisphere the winter wheat season is drawing to a close. Overall yields in the US are expected to be down due to the drought in the Southern Plains. In Canada there is increased concern over continued frequent rains and cool temperatures particularly in the Prairies region, though conditions of seeded crops remain favourable. In the EU, Russia, Ukraine and China conditions are mostly favourable. In the southern hemisphere planting is progressing and conditions are mostly favourable at this early stage of the season.

Maize- Overall conditions are favourable. In the southern hemisphere, the season is drawing to a close. In Argentina, conditions are favourable though harvest delays continue. In Brazil, the second crop is in maturity to harvest stage and is in good condition. In the northern hemisphere conditions are generally favourable at this early stage of the season. In Mexico, harvest is progressing and conditions are good.

Rice- Conditions are mixed. In Indonesia and Viet Nam conditions are mostly favourable, and in Thailand there is some concern for the main crop (planted in May-June) due to dry conditions. In China conditions are generally favourable but concern remains over excessive wet conditions affecting the early-planted rice crop. In the EU and US conditions are favourable..

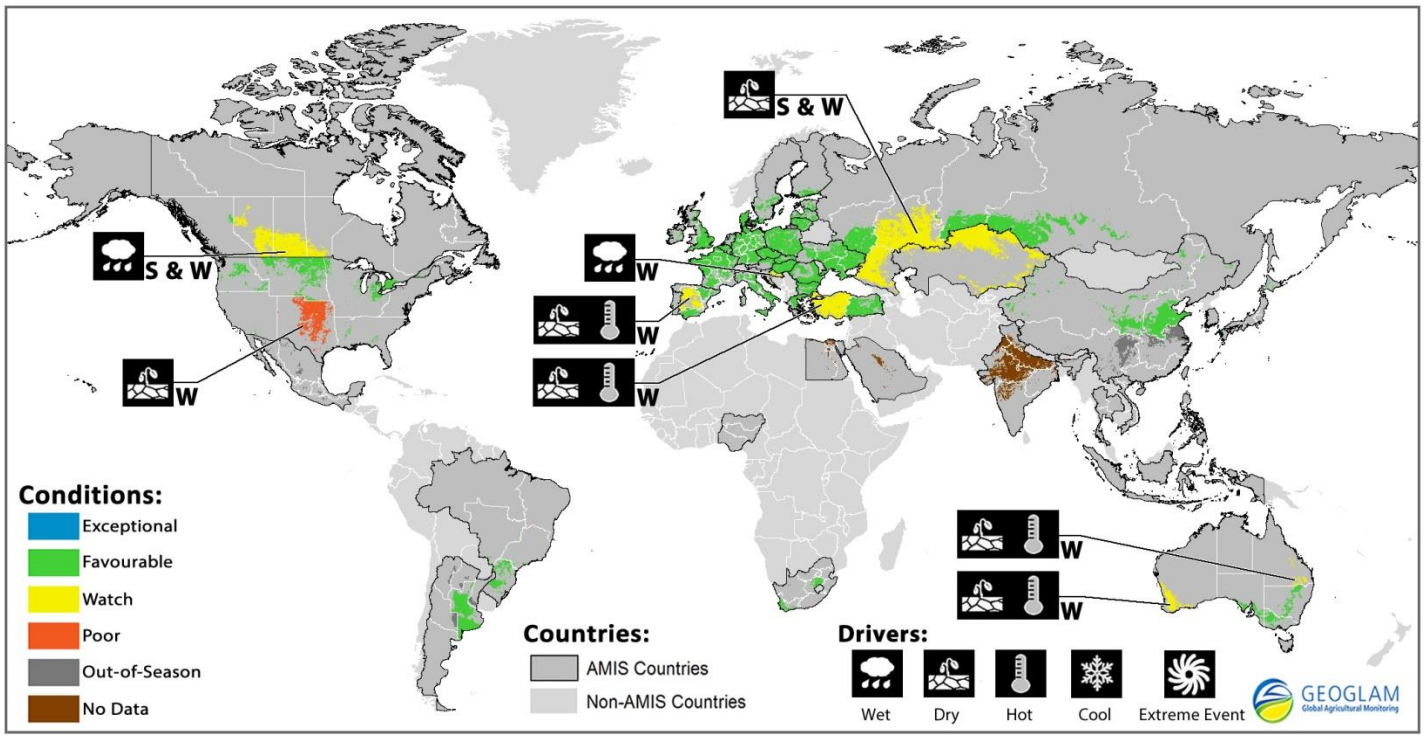
Soybeans- In the southern hemisphere the season is drawing to a close and overall prospects remain good. In Argentina, overall crop conditions are favourable, though harvest delays continue in some areas. In the northern hemisphere the crop is in early growth stages and conditions are generally favourable.

El Niño situation update

The probability of the onset of an El Niño event in the late summer or early autumn of the northern hemisphere continues to increase, according to June outlooks from the Australian Bureau of Meteorology, the International Research Institute for Climate and Society, and the U.S. National Oceanic and Atmospheric Administration. Odds are put in the range of 70 to 80 percentage. Sea surface temperatures in the Pacific have warmed to just reach the threshold defining El Niño, and models show them continuing to rise in the months ahead. However, atmospheric features of El Niño, like weakening trade winds, have not yet appeared. Minimal influence on northern hemisphere summer crops is expected. Impacts are more likely to be felt during the 2014-2015 summer months of the southern hemisphere. In that period, below-normal rainfall could be experienced 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.

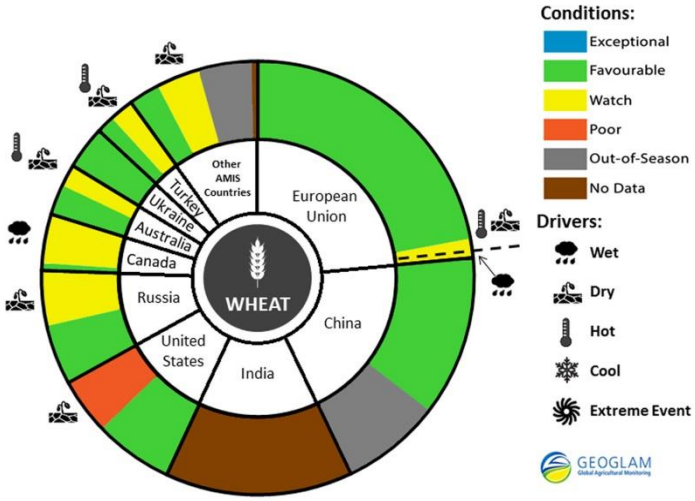
* Assessment based on information as of June 28th

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 June 28th. Where crops are in other than favourable conditions the climatic drivers responsible for those conditions are displayed. The subscript letters under the drivers refers to the crop that is affected by the driver, "S" is for spring planted wheat and "W" is for winter planted wheat. Crop Season Specific Maps can be found in Appendix 2.

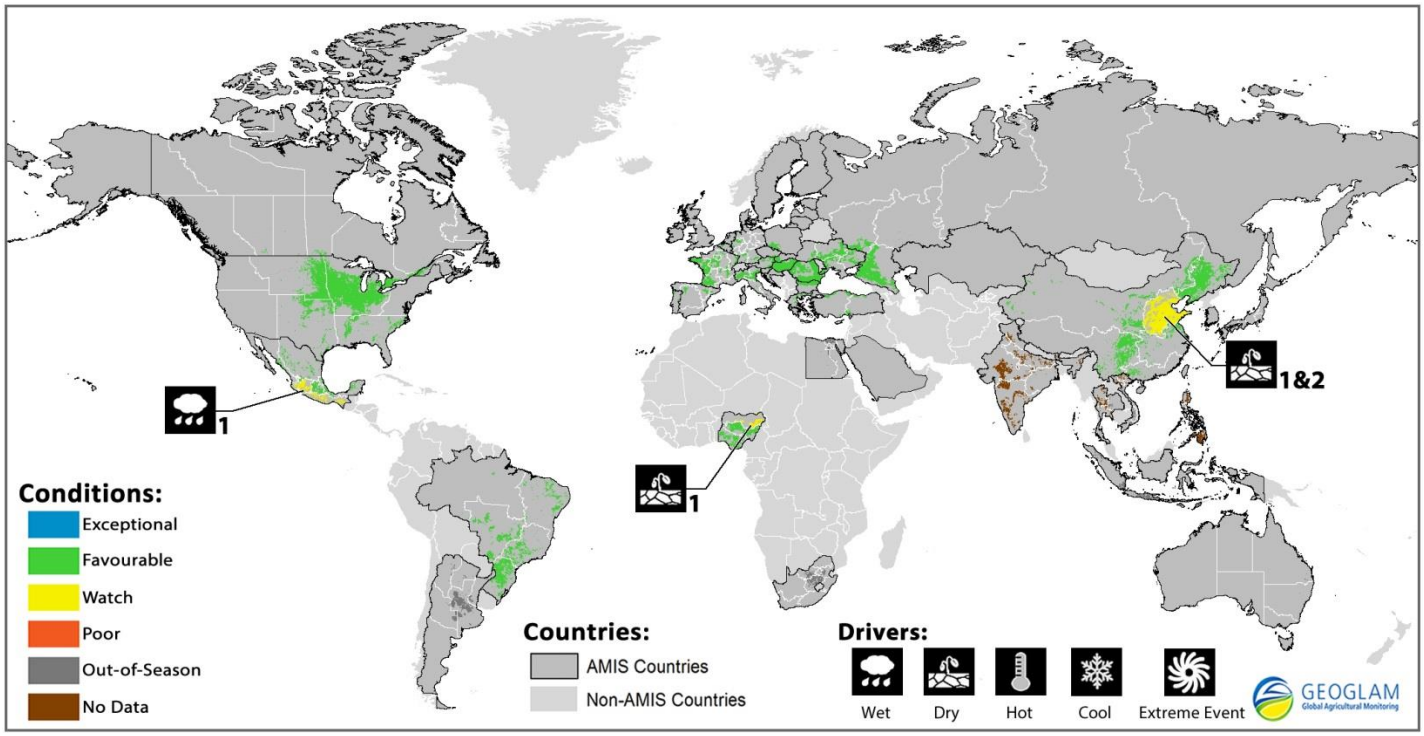
Wheat: In the *northern hemisphere,* wheat conditions are mostly favourable. In **Russia,** winter and spring wheat conditions are still generally favourable, however there is some concern due to above average temperatures and some dryness in central and southern growing regions, though conditions have improved in late June. In **Ukraine**, conditions remain favourable. Harvest has begun in the south and is in grain-filling to maturity stages elsewhere. There is some concern due to excessive rains in central and western regions, which may affect quality. In **Kazakhstan,** spring wheat is in vegetative stages, and surface moisture is slightly below normal. Water demand will increase as crop approaches reproductive stage. In the **EU,** overall prospects remain positive, above the 5-year average and close to last year. However, there is some concern over persistent dryness and high temperatures in parts of Spain. In **Turkey**, harvest began and conditions improved, however wheat is still negatively impacted by earlier dry conditions. In the **US,** winter wheat harvest is underway. Overall yields are expected to be down despite recent rains primarily due to the long-term drought in the southern Great Plains. Spring wheat conditions are favourable. In **Canada**, overall conditions of seeded crops remain generally favourable, however



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.

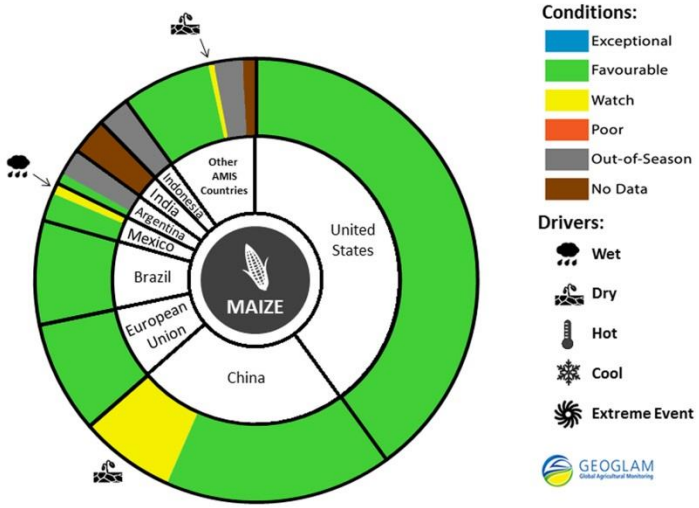
concerns increased in the Prairie region due to stormy, wet, and unseasonably cool weather. One to two week delays in field operations continue, and there is excess moisture and some flooding. As well as concern over fields being left fallow. In **China,** winter wheat harvest is almost complete and spring wheat conditions remain favourable. In the *southern hemisphere* wheat is in early growth stages and conditions are favourable. In **Brazil**, wheat is in the early vegetative stages and conditions are good. Planted area has increased significantly relative to last season. In **South Africa** conditions are favourable due to sufficient moisture conditions over the main production region (winter rainfall region in the southwest). In **Australia,** conditions during May were generally favourable for establishment and early development. Precipitation during June has been largely average or better across the wheat belt, with Western Australia and parts of Queensland being notable exceptions recording below average falls. In **Argentina**, planting is still delayed due to excess moisture conditions, however drier weather, has improved 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 May 28th. Where crops are in other than favourable conditions the climatic drivers responsible for those conditions are displayed. The subscript numbers under the drivers refers to the particular season of crop affected by the driver. Crop Season Specific Maps can be found in Appendix 2.

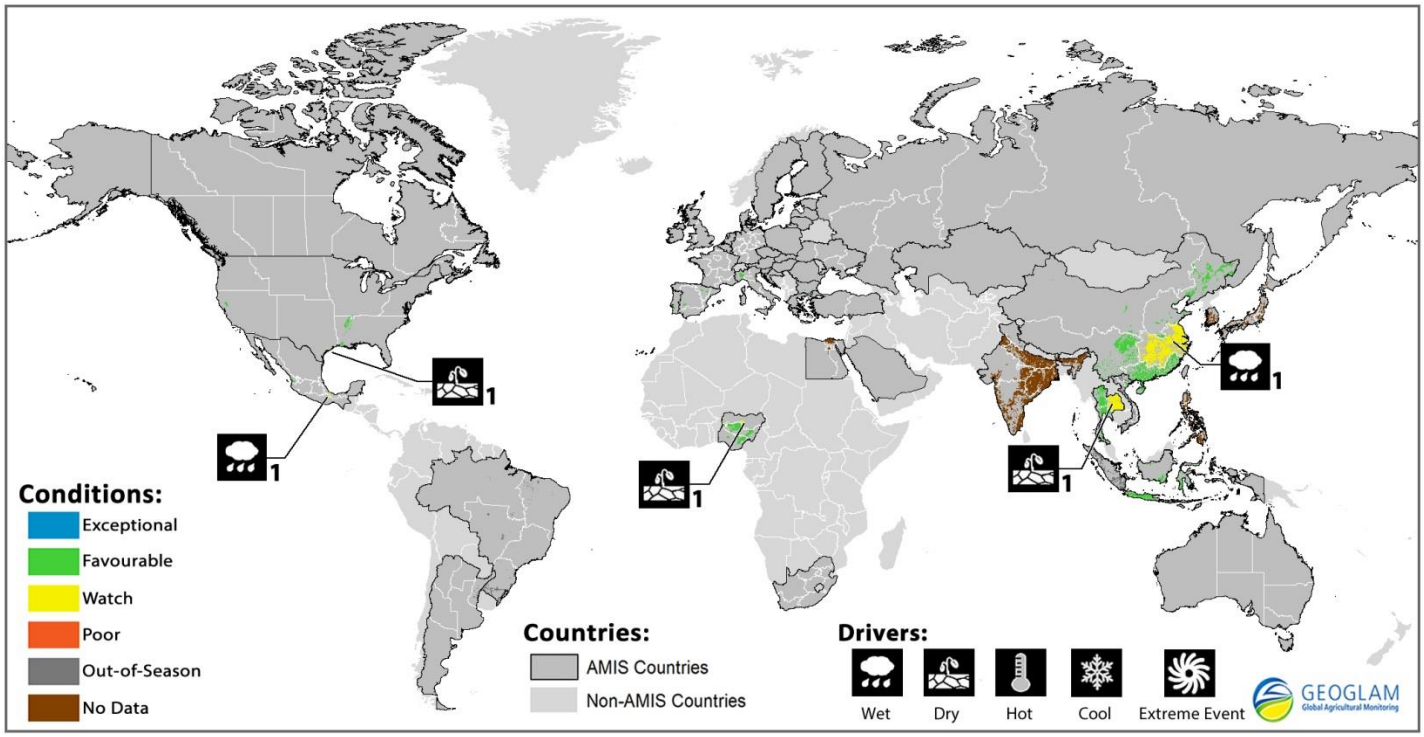
Maize: In the *southern hemisphere,* harvest is nearly complete and conditions are favourable**.** In **Argentina** overall conditions remain favourable and harvest is progressing with significant delay relative to last year due to excess moisture. In **Brazil** the second maize crop, which is in maturity to harvest stages, is in good condition. In the *northern hemisphere,* conditions are generally favourable at this early stage of the season. In the **US**, conditions remain good despite heavy rains in the northern plains. In the **EU**, the crop is still in early development stages with a promising start to the season. In **Russia**, moisture conditions are favourable for the emergence and establishment stages. In **Ukraine**, moisture



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

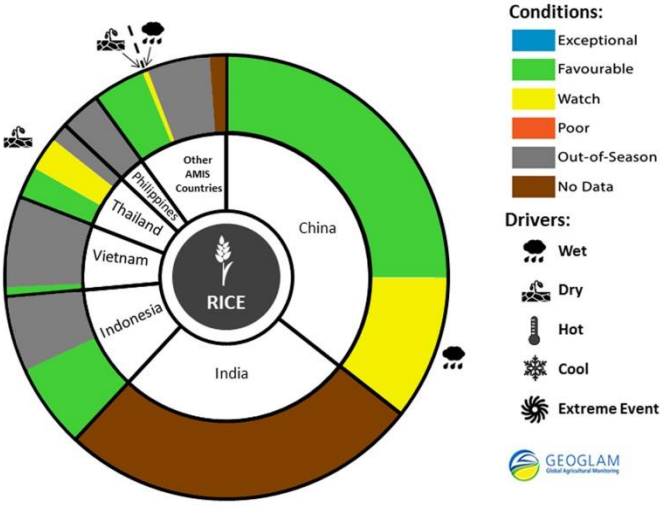
conditions are good for crop development while temperatures have been slightly cool. In **China**, overall conditions remain favourable and the crop is between seedling to flowering stages. There is some concern over pockets of dryness in central growing regions. In **Mexico** conditions are good across the country. Harvest of the winter crop is progressing and production is expected to be higher than last year. Sowing of the spring-summer crop is at its peak, and favourable conditions prevail, though there are some slight delays due to heavy rains in the south western regions. In **Nigeria**, conditions are mostly favourable owing to good moisture in central and southern regions where maize is in maturity stages. There is some concern over the northern drier region where warm temperatures and long dry spells, mainly in May and early June, affected maize that is in early vegetative stages.

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 June 28th. Where crops are in other than favourable conditions the climatic drivers responsible for those conditions are displayed. The subscript numbers under the drivers refers to the particular season of crop affected by the driver. Crop Season Specific Maps can be found in Appendix 2.

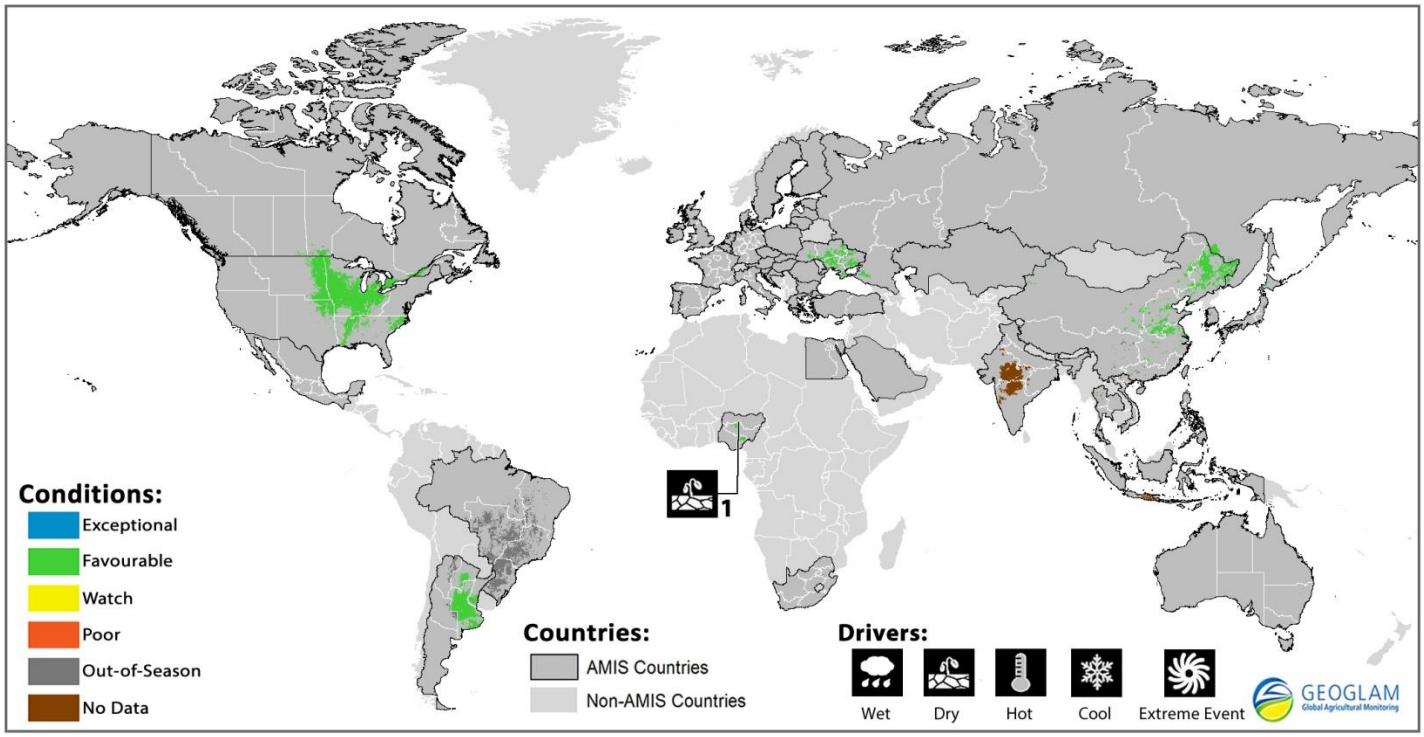
Rice: Conditions remain mixed. In **Indonesia,** conditions are still mostly favourable. In **Viet Nam** prospects are generally favourable for the winter-spring planted crop, and harvest is nearly complete. Planting of the summer-fall crop is in progress in southern growing regions. In **Thailand,** conditions are mixed. Conditions for the second crop, planted before February remain favourable and harvest is nearly complete, except in the southern regions where it is in vegetative to flowering stages. Conditions for the May and June planted crop (main crop) are mostly favourable, however there is some concern over dry conditions in the northeast and western regions. In **China** conditions are generally favourable, however there is some concern due to excess moisture in southern regions. Single rice is in



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

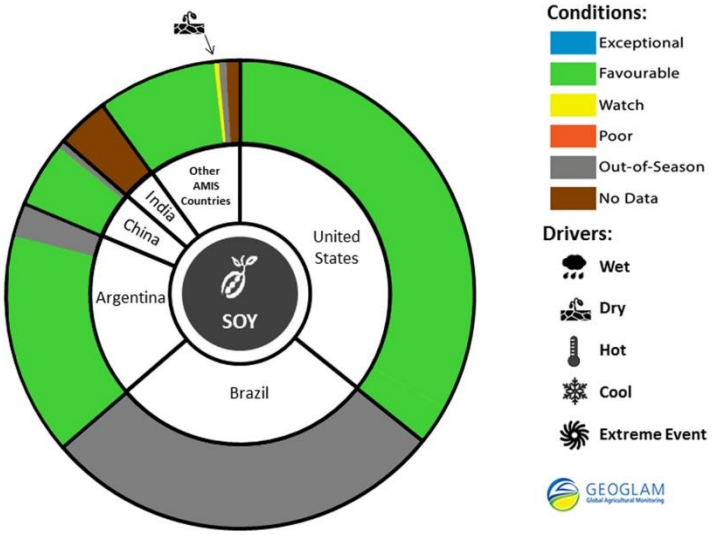
transplanting to tillering stages, early season rice is in heading to maturity stages and late planted rice is in seeding stages. In the **EU** conditions are close to average with slightly late development in northern Italy. In the **US,** rice conditions are favourable. In **Nigeria**, rainfed, upland rice is in planting to early vegetative stages. Conditions are generally favourable, except in the northern regions where there is concern over dry conditions.

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 June 28th. Where crops are in other than favourable conditions the climatic drivers responsible for those conditions are displayed. The subscript numbers under the drivers refers to the particular season of crop affected by the driver. Crop Season Specific Maps can be found in Appendix 2.

Soybeans: In the *southern hemisphere,* prospects are still favourable as the season draws to a close. In **Argentina** overall conditions for both the first and second planted crops are still good. The harvest is still delayed compared to the previous season, but there was good progress in the northeast and northwest areas of the country with the welcome drier conditions. In the *northern hemisphere,* conditions are favourable. In the **US** conditions are good at this early stage of the season. In **China** conditions are favourable. Planting is complete and the crop is in early vegetative stages. In **Nigeria** planting has started and conditions are favourable except for in the northern region.



Top producers of soy within AMIS participating countries and their current crop conditions (as of June 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.

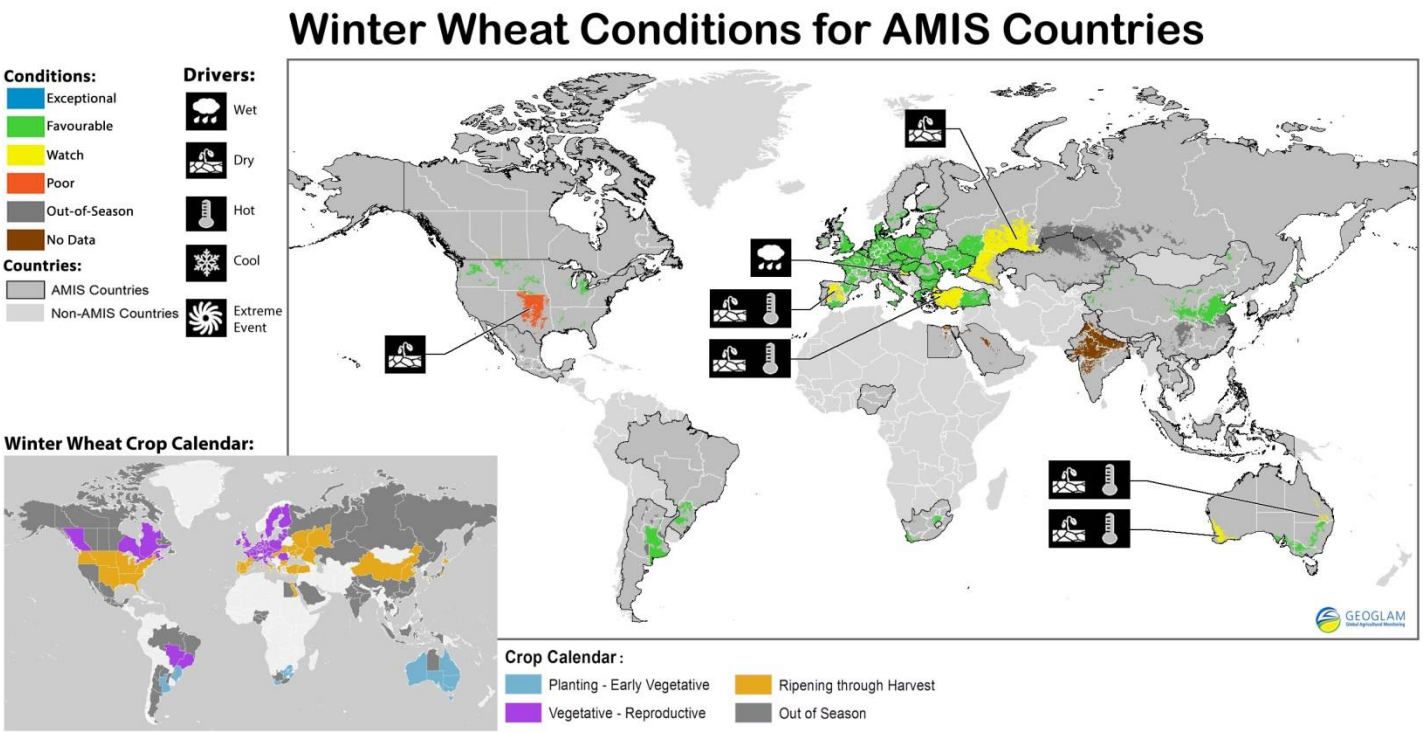
Wet: Higher than average wetness.
Dry: Drier than average.
Hot: Hotter than average.
Cool: Cooler than average or risk of frost damage.
Extreme Events: This is a catch-all for all other climate risks (i.e. hurricane, typhoon, frost, hail, winterkill, wind damage, etc.)

Sources & Disclaimer

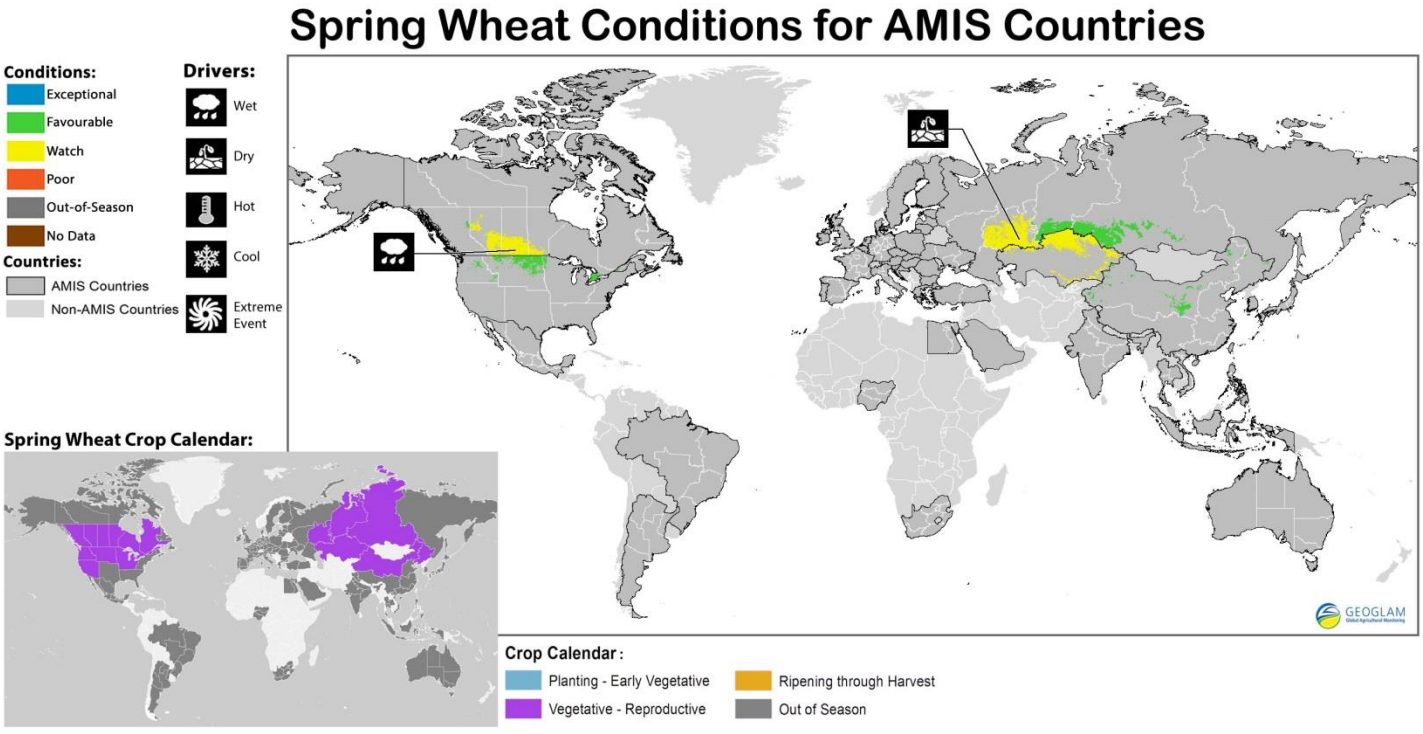
Sources and Disclaimers: The Crop Monitor assessment is conducted by GEOGLAM with inputs from the following partners (in alphabetical order): Argentina (INTA), Asia Rice Countries (AFSIS, ASEAN+3 & Asia RiCE), Australia (ABARES & CSIRO), Brazil (CONAB & INPE), Canada (AAFC), China (CAS), EU (EC JRC MARS),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



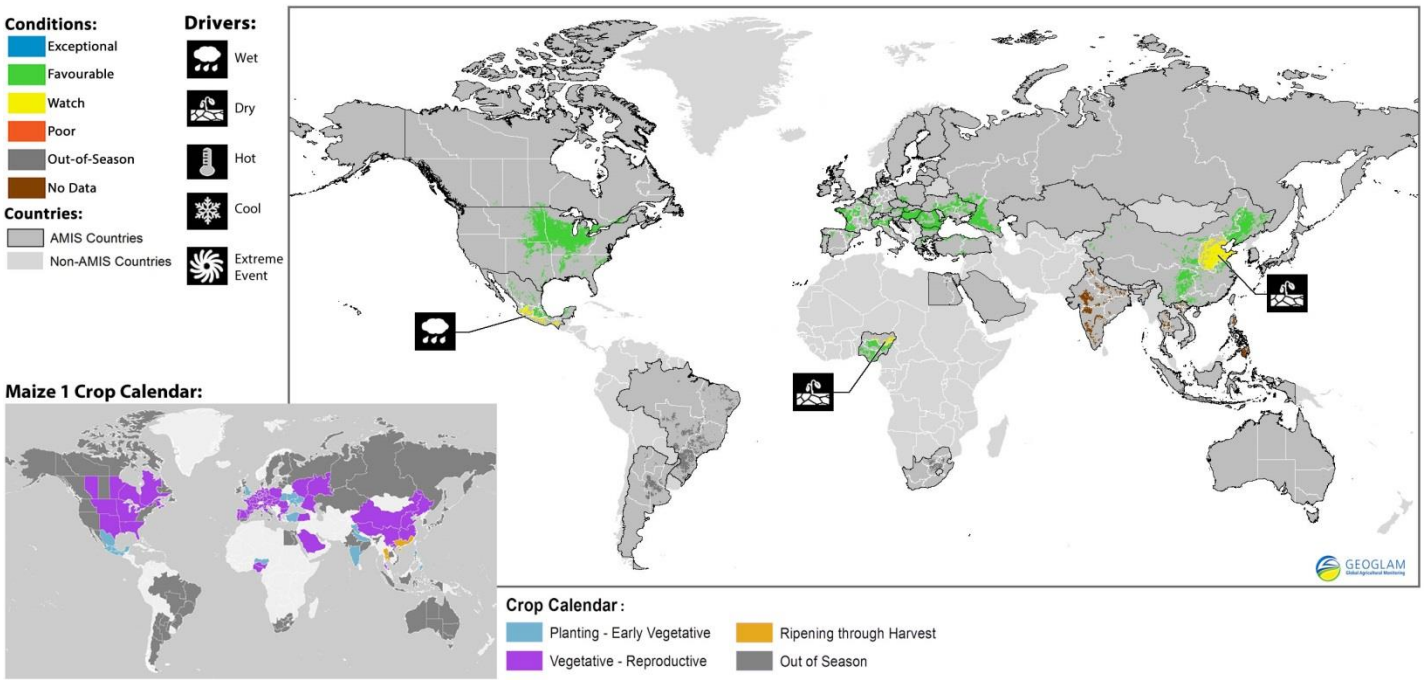
Winter wheat crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of June 28th. Where crops are in less than favourable conditions the climatic drivers responsible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

Maize 1 Conditions for AMIS Countries



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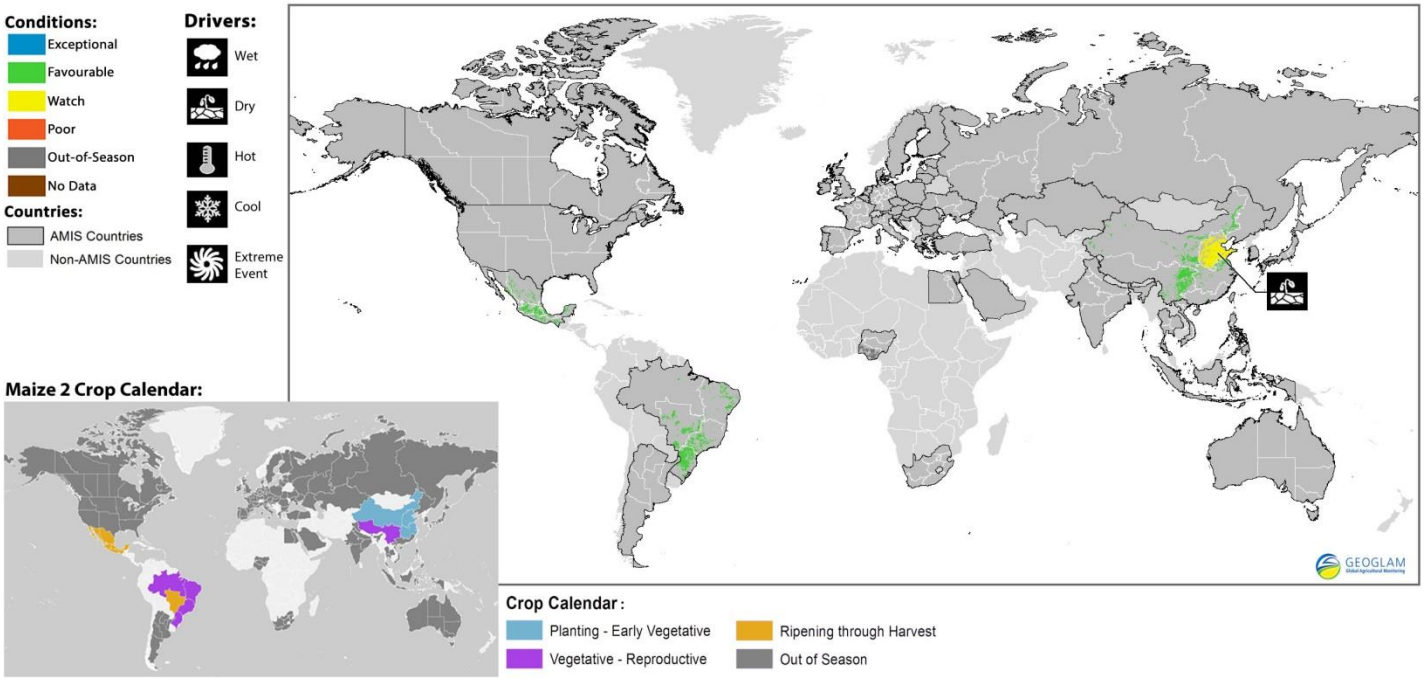
Maize 2 Conditions for AMIS Countries



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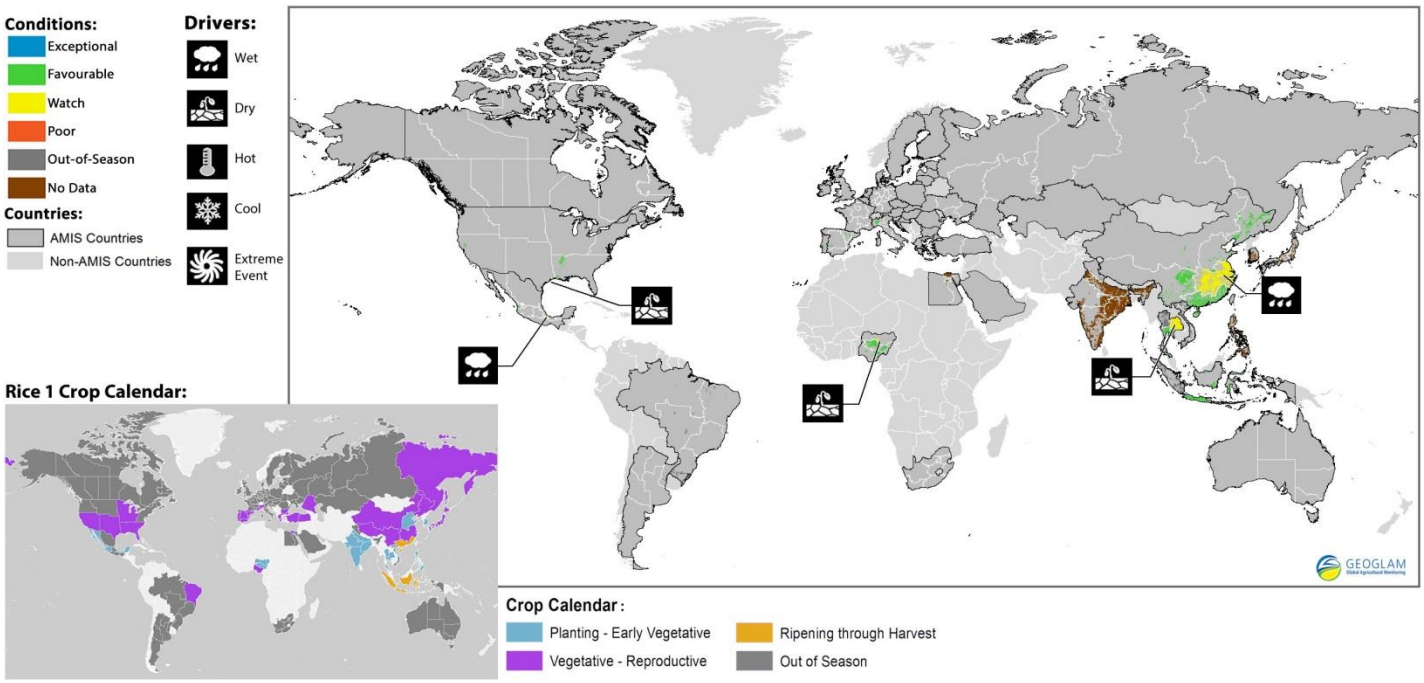
Rice 1 Conditions for AMIS Countries



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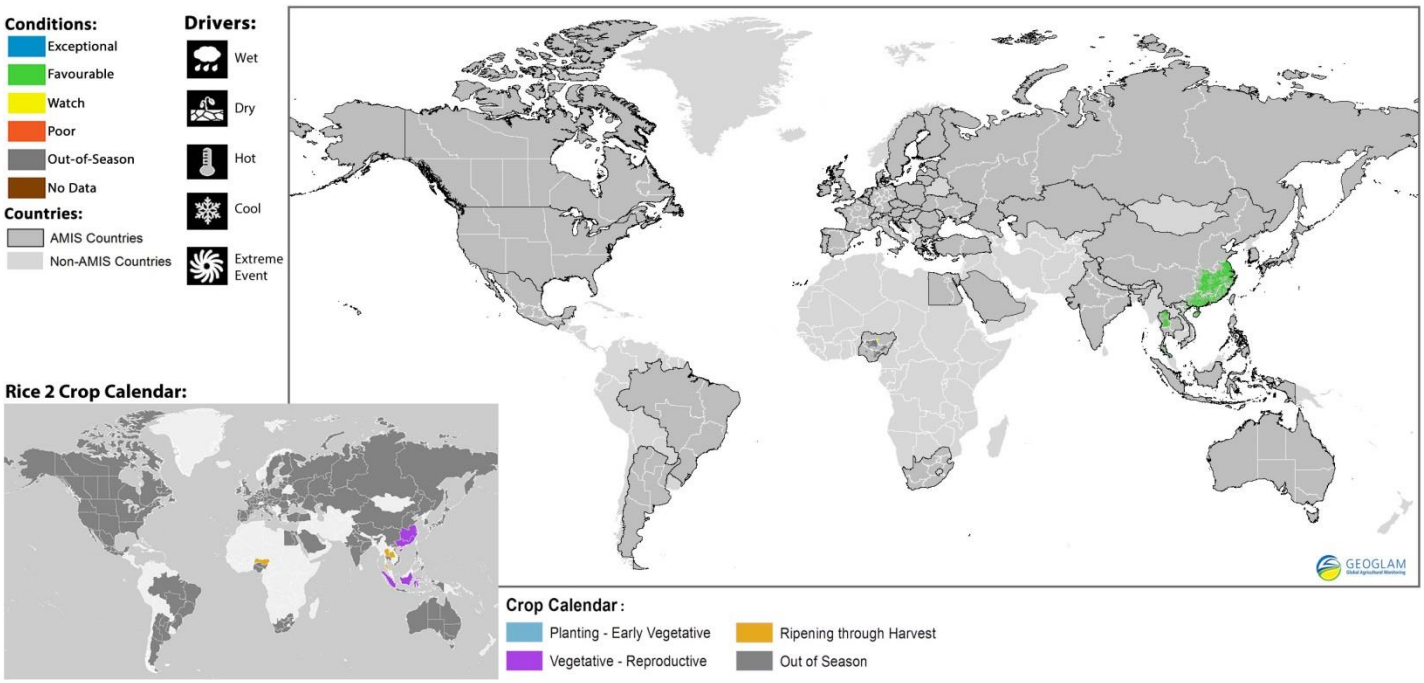

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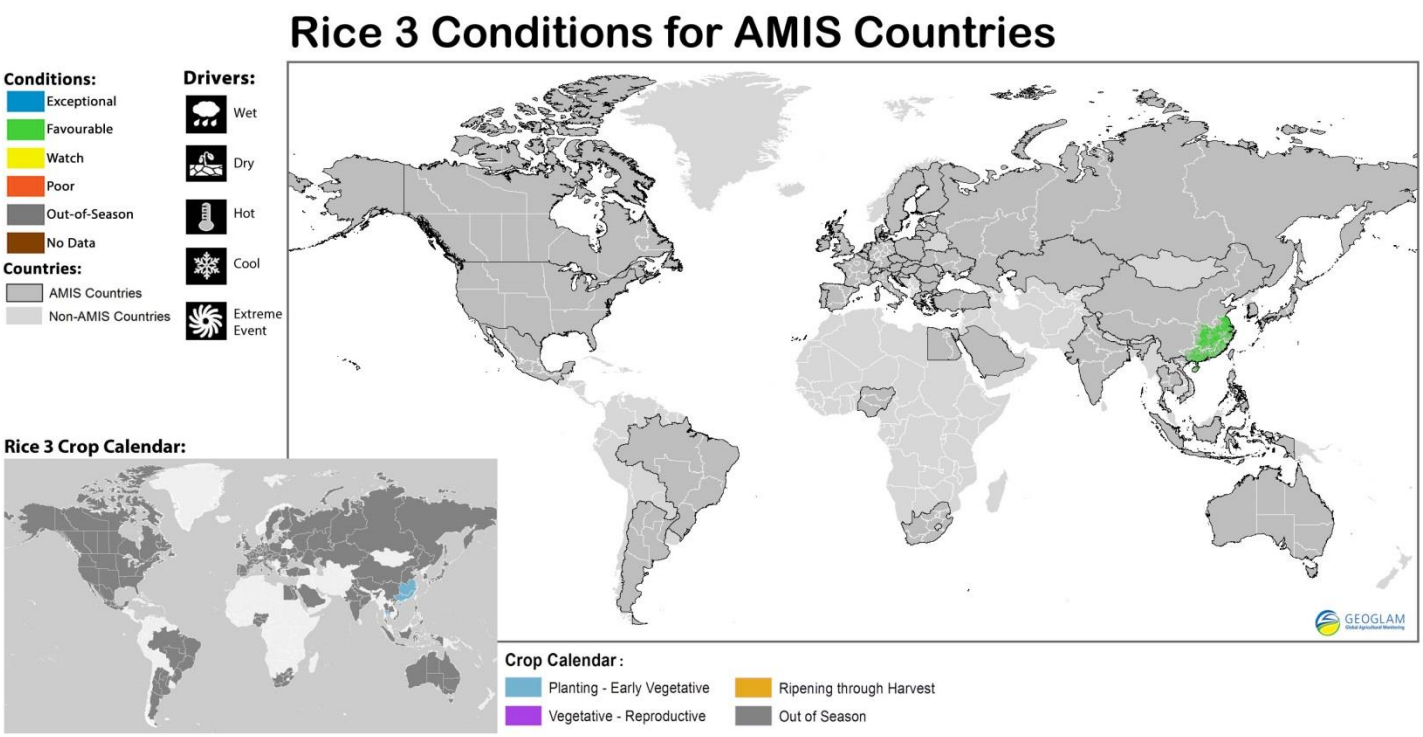
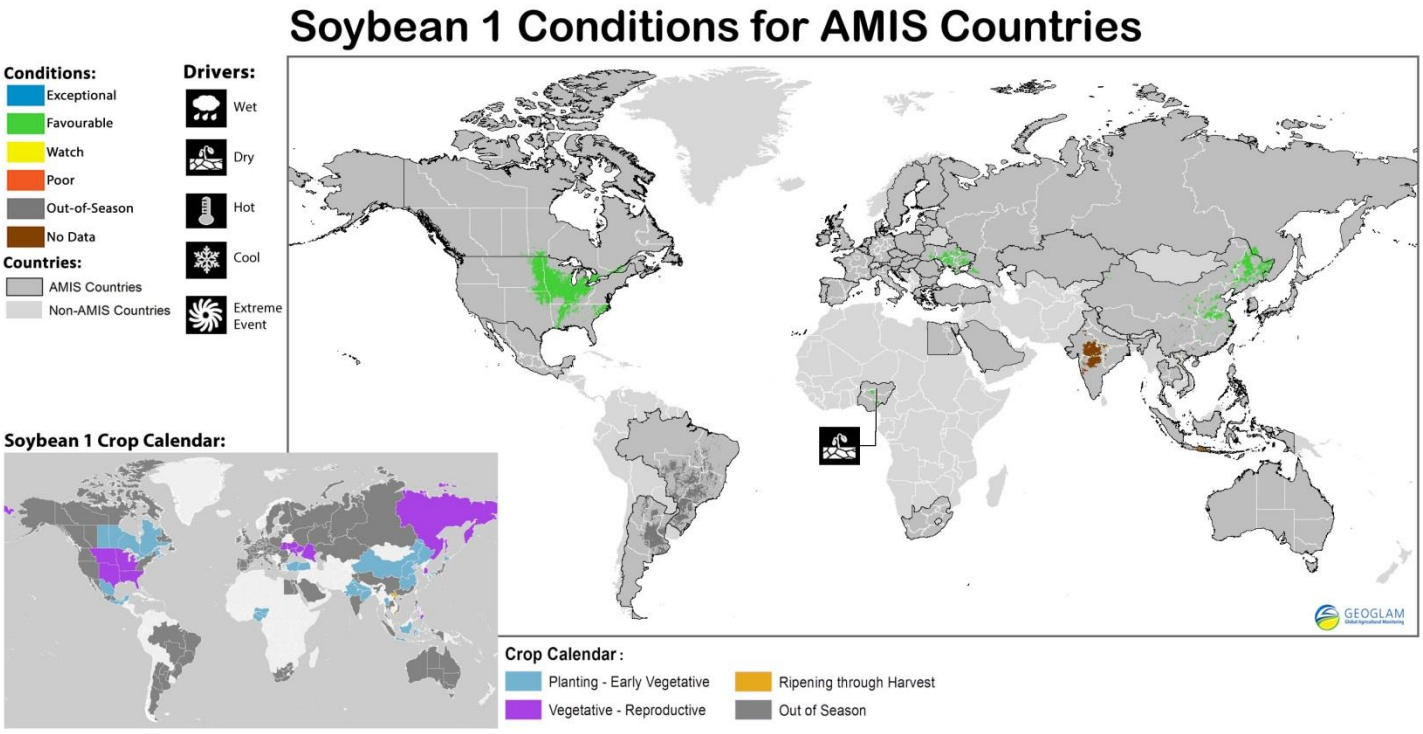
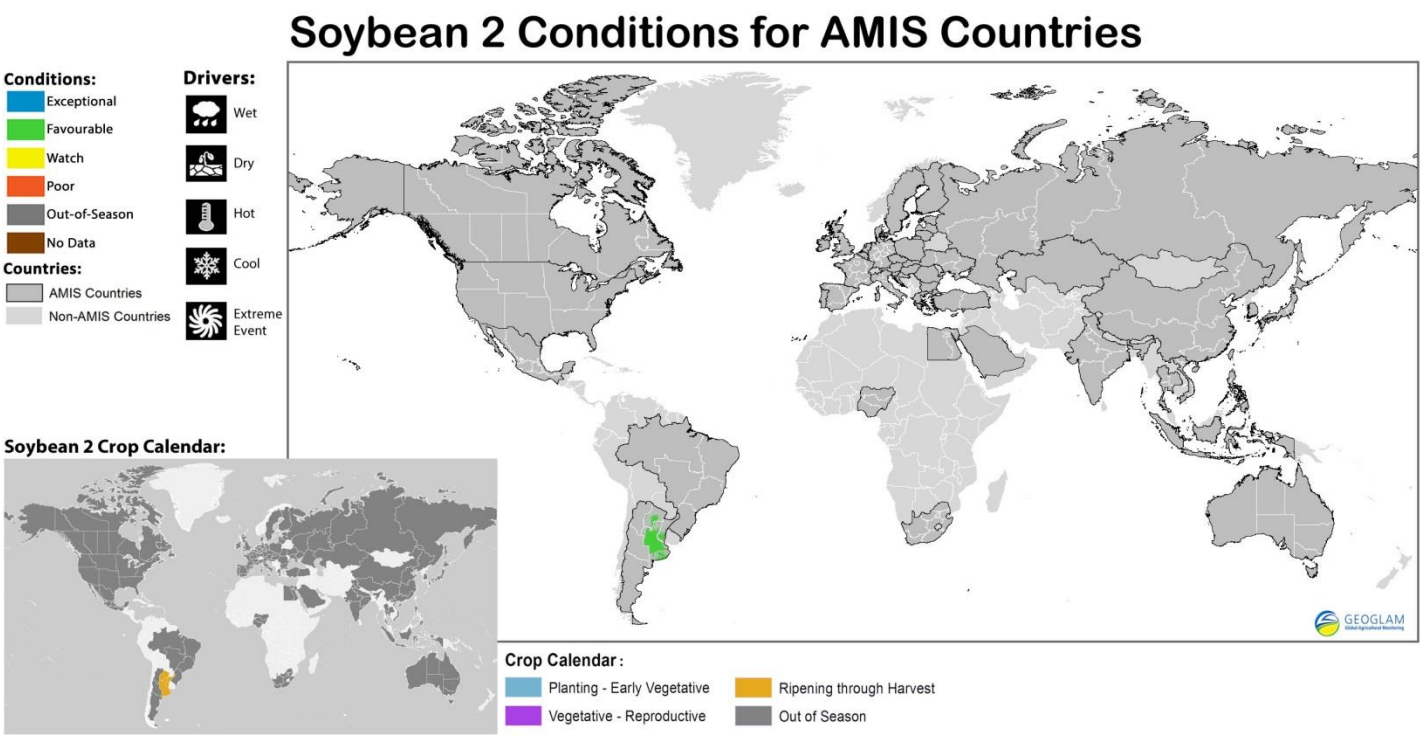


Rice 3 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of June 28th. Where crops are in less than favourable conditions the climatic drivers responsible 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 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 June 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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