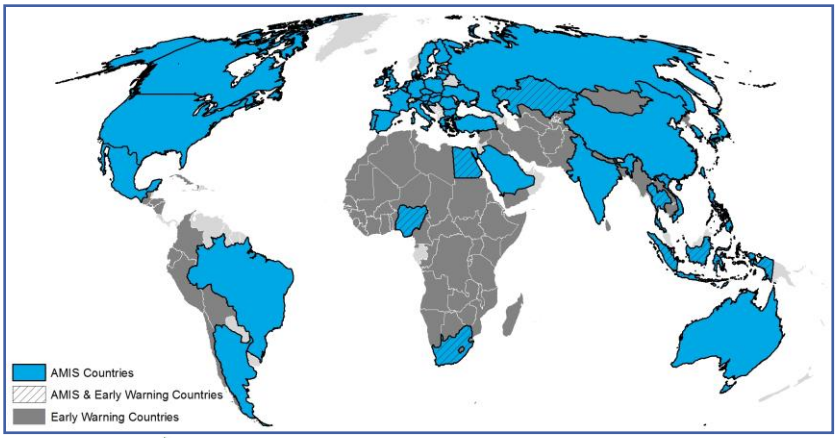
GEOGLAM Global Agricultural Monitoring

# Crop Monitor for AMIS

## Overview:

As of the end of January, conditions are mixed for rice, while generally favourable for wheat, maize, and soybeans. In the Northern Hemisphere, winter wheat is in dormancy under generally favourable conditions with some winter kill vulnerability in Europe, southern Ukraine, and southern Russian Federation. In the Southern Hemisphere, maize is under generally favourable conditions across Brazil and Argentina for both spring and summer planted crops. Rice in Southeast Asia is under watch conditions due to dry conditions. In the Southern Hemisphere, soybean conditions are favourable.

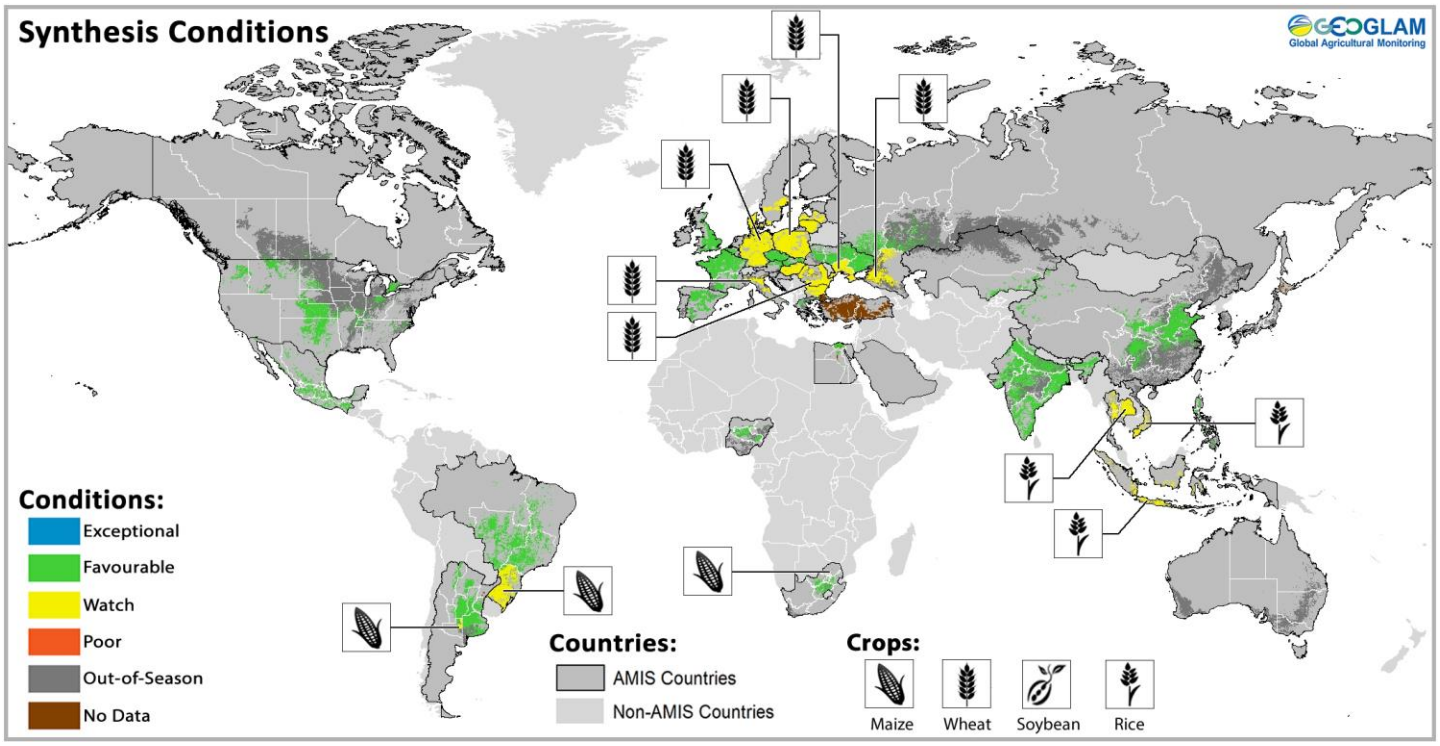



## Contents:



*Assessment based on information as of January 28th*

# Conditions at a glance for AMIS countries (as of January 28th)




*Crop condition map synthesizing information for all four AMIS crops as of January 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 other than favourable conditions are displayed on the map with their crop symbol.***

## Conditions at a glance

**Wheat -** In the northern hemisphere, winter wheat conditions remain mixed particularly in parts of Europe, the Russian Federation, and Ukraine as an unusually dry and warm winter is leaving crops vulnerable to frost damage and drought in the spring.

**Maize -** In the southern hemisphere, the return of regular rains in January has improved conditions in Brazil and Argentina. In Mexico, conditions are favourable for both the spring-summer and autumn-winter crops. In India, conditions are favourable for the Rabi crop.

**Rice -** In India, transplanting of Rabi rice is continuing. In Southeast Asia, water shortages have led to mixed conditions for dry-season rice across Thailand and southern Viet Nam along with wet-season rice in Indonesia.

**Soybeans -** In the southern hemisphere, conditions are improving in Brazil and Argentina due to the return of regular rainfall in January.

## Neutral ENSO & IOD:

El Niño-Southern Oscillation (ENSO) conditions are neutral and are most likely to remain neutral through June 2020. During late 2019 a strong positive Indian Ocean Dipole (IOD) suppressed rainfall in Australia and enhanced rainfall in East Africa. The IOD is now in a neutral state and is forecast to remain neutral through June 2020.
*Source: UCSB Climate Hazards Center*

The GEOGLAM Crop Monitors is conducting a quick user survey in order to better understand whether the information provided in the reports fulfills the needs of the readers, and to collect suggestions for continual improvement. Please help us by taking a short amount of time to provide us with some feedback. **Take the Survey**
A survey link can also be found on the front page of the Crop Monitor website.
*Thanks, The GEOGLAM Crop Monitor team*

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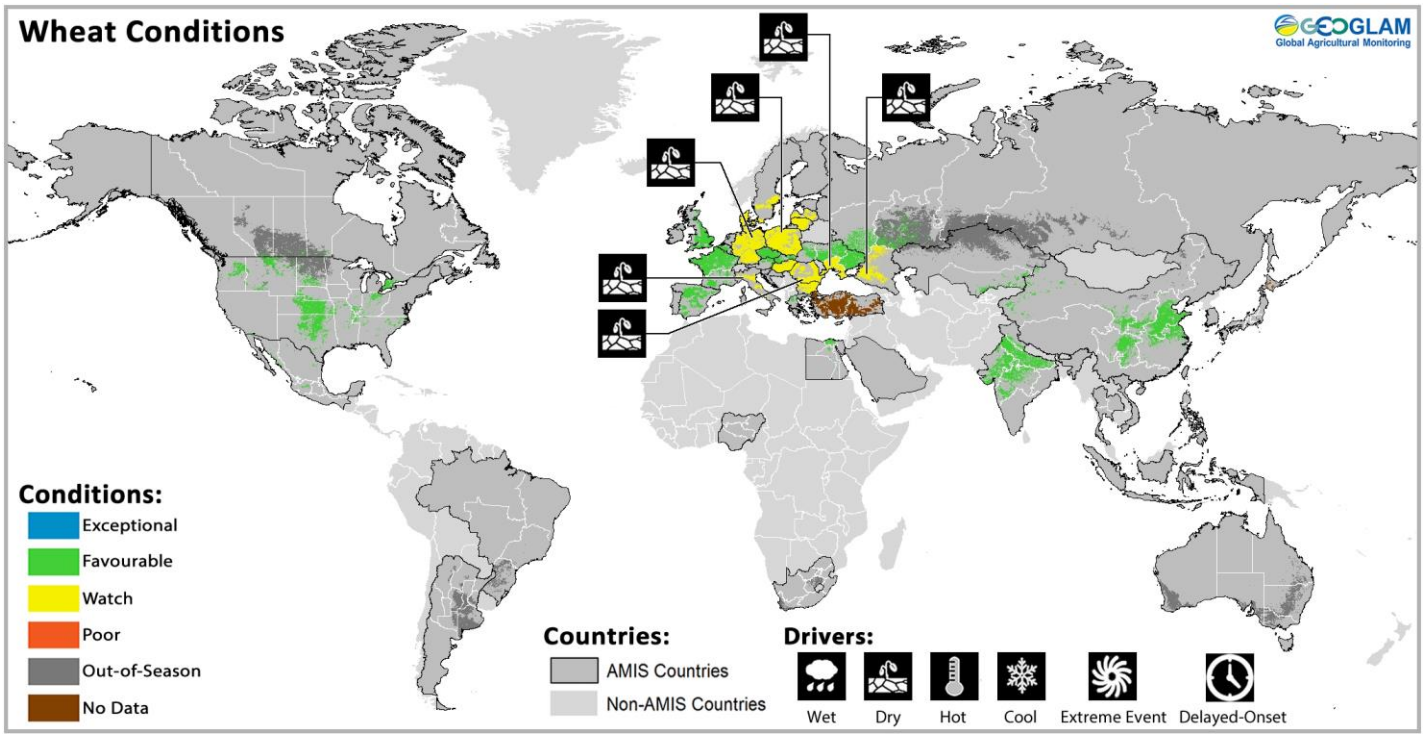
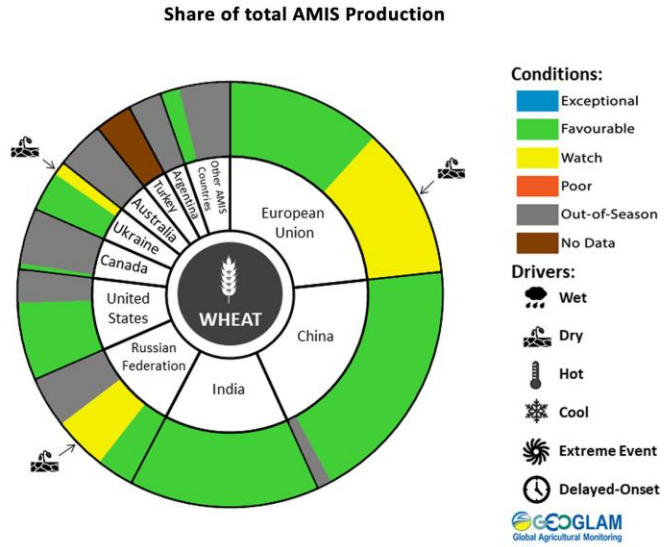
# Wheat Conditions for AMIS Countries




*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 January 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 **EU**, winter wheat conditions are generally favourable, however, the unusually mild and locally dry winter has reduced the hardening of the crops in north-eastern Europe, placing them under watch conditions due to their vulnerability to frost damage. In **Ukraine**, winter wheat conditions are generally favourable, albeit with areas of low soil moisture particularly in the south due to a dry autumn and a deficit of precipitation during December and January. In the **Russian Federation**, conditions are generally favourable for winter wheat in dormancy, however little to no snow cover in the southern district places crops vulnerable to frost damage. In **Kazakhstan**, winter wheat conditions remain favourable during dormancy. In **China**, winter wheat conditions are favourable in dormancy. In **India**, conditions are favourable as winter wheat sowing has completed across most of the country with an increase in total sown area compared to last year. In the **US**, winter wheat is under generally favourable conditions while in dormancy. In **Canada**, winter wheat is in dormancy under favourable conditions with an increase in total sown area compared to last year.




*For detailed description of the pie chart please see box on page 6.*

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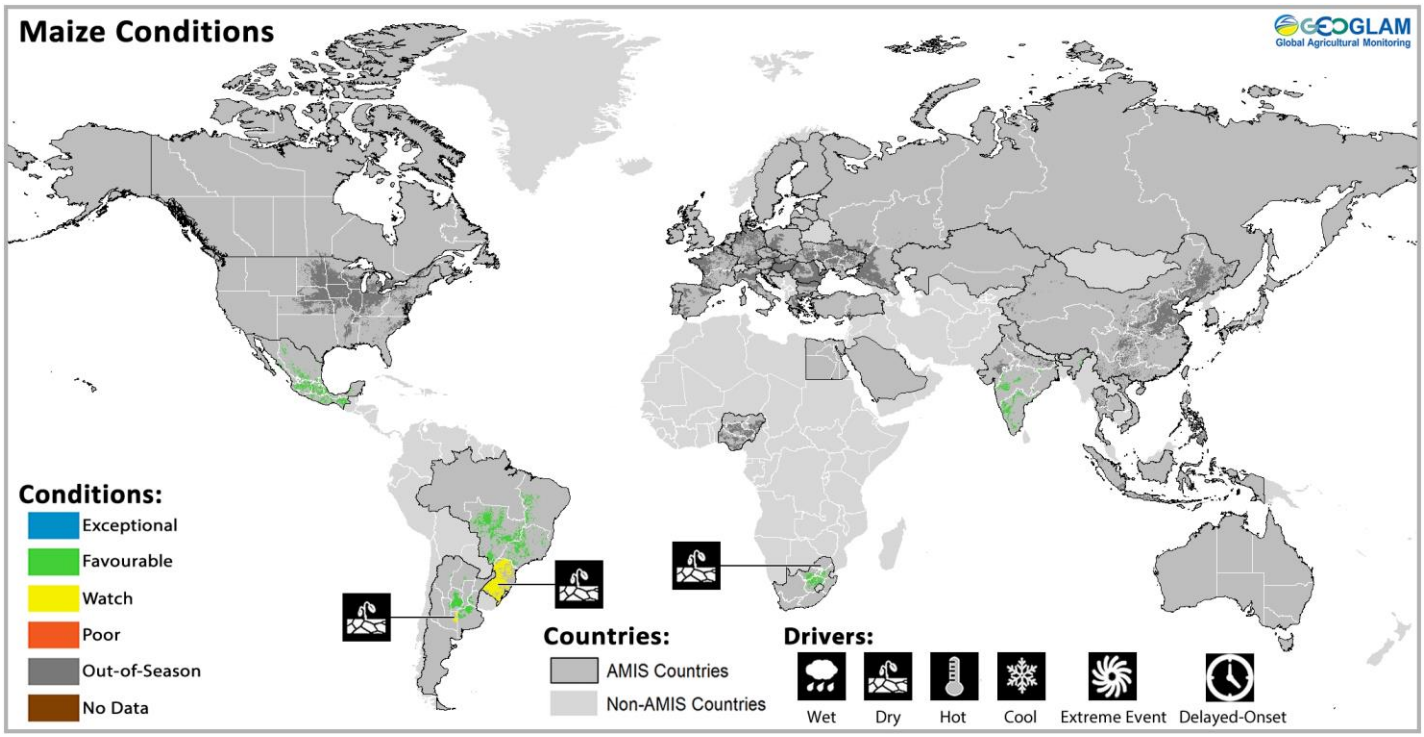
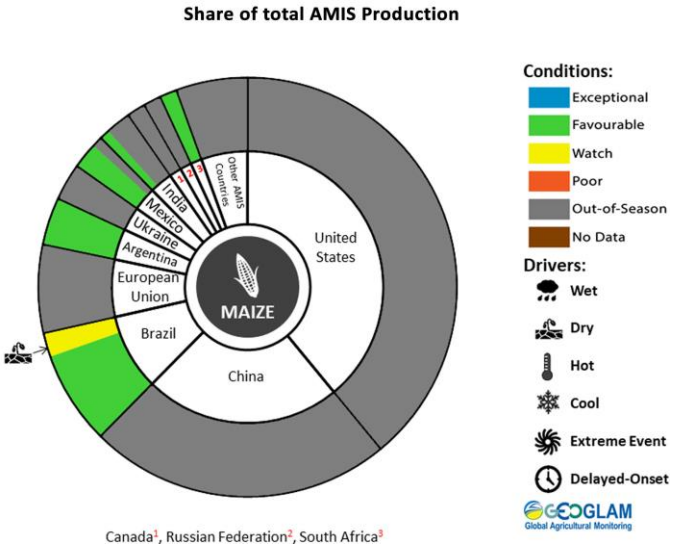
# Maize Conditions for AMIS Countries




*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 January 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 **Brazil**, with the resumption of regular rains the spring-planted (smaller season) crop is under generally favourable conditions except in the south, where dry conditions in December impacted the crop during the critical reproductive stage. Sowing of the summer-planted (larger season) crop has begun in the main producing regions under favourable conditions. In **Argentina**, conditions have improved for both the spring-planted and summer-planted crops due to the resumption of rainfall. However, some areas of spring-planted crops have been stunted by the earlier cool dry conditions. In **Mexico**, conditions are favourable for the wrapping up of the spring-summer crop harvest and the sowing of the autumn-winter crop. In **India**, sowing of the Rabi crop is continuing under favourable conditions. In **South Africa**, conditions are generally favourable with widespread rains occurring during November through January.

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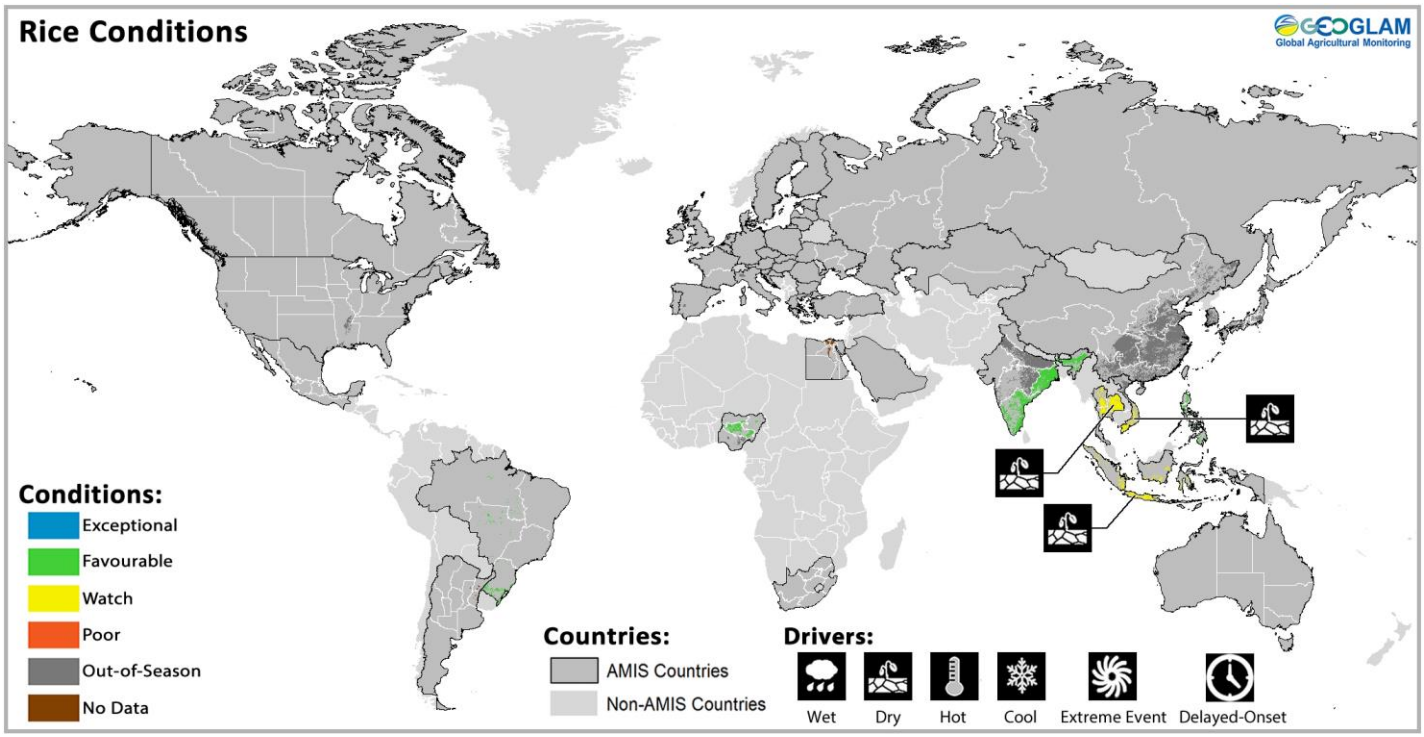
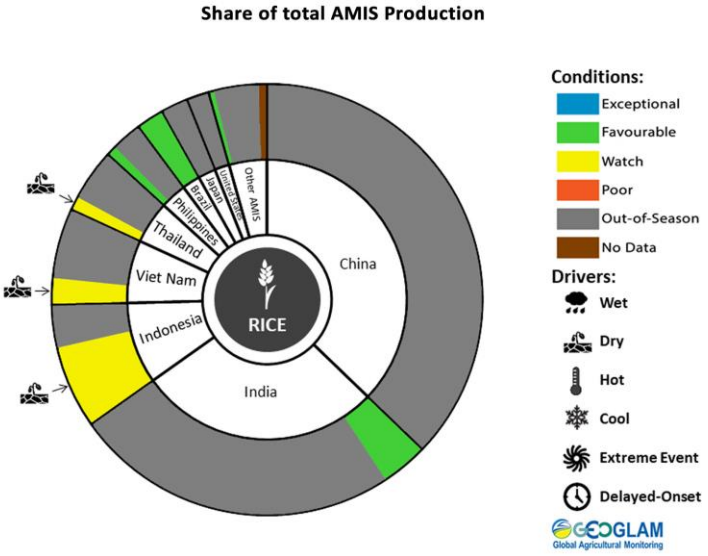
# Rice Conditions for AMIS Countries




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

**Rice:** In **India**, transplanting of Rabi rice is continuing in the eastern parts of the country under favourable conditions with an increase in total sown area observed. In **Indonesia**, wet-season rice sowing is continuing for the fourth month, albeit with a reduction in total sown area due to continuing water shortages. Harvesting has begun with yields slightly lower than last year due to the drought. In **Viet Nam**, dry-season rice (winter-spring rice) is developing in the south under watch conditions because of an expected shortage of fresh water for irrigation due to saline intrusion. Sowing has not yet begun in the north. In **Thailand**, dry-season rice conditions are under watch due to the reduction of available water for irrigation, which is also expected to decrease the total sown area compared to last year. In the **Philippines**, conditions are generally favourable for dry-season rice in the vegetative stage. However, two typhoons in December brought some damage to central and southern parts of Luzon and parts of Visayas. In **Brazil**, conditions are favourable with high luminosity benefiting crops.

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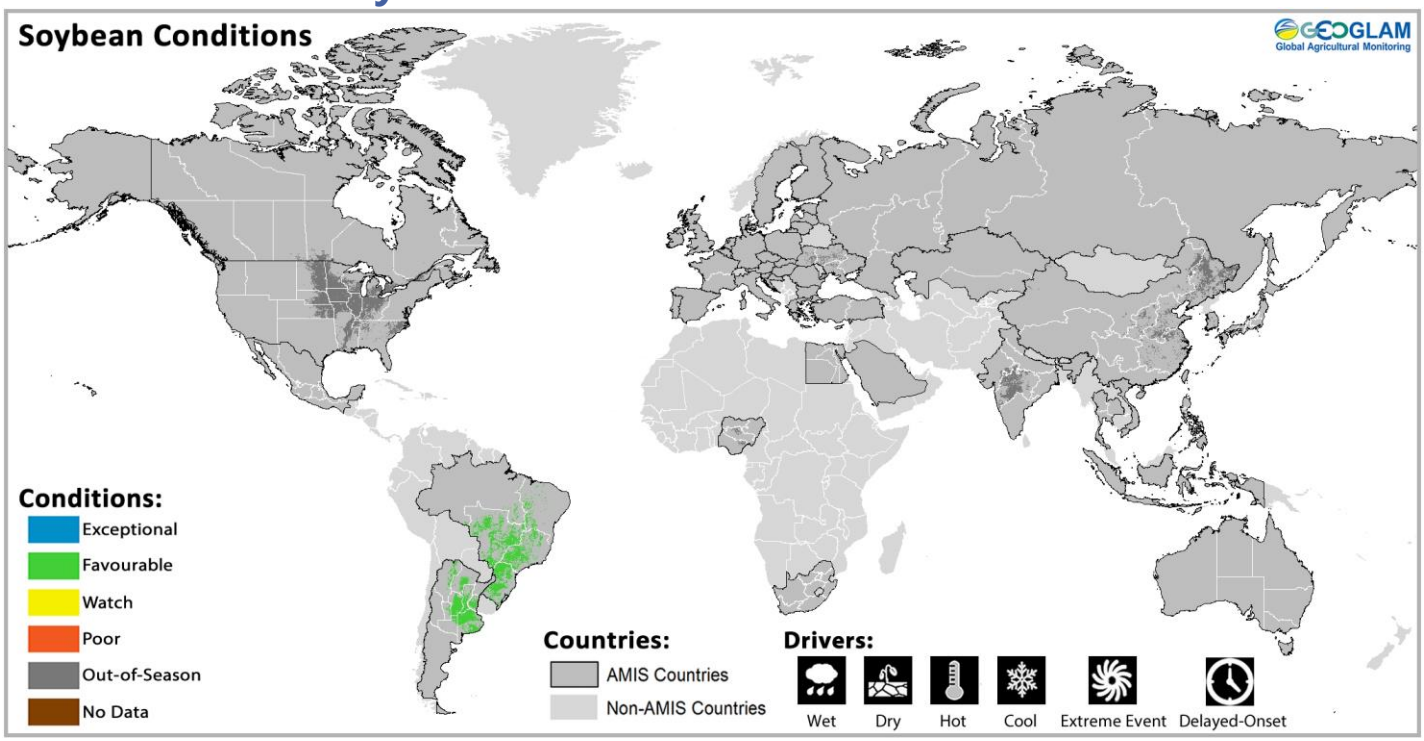
# Soybean Conditions for AMIS Countries

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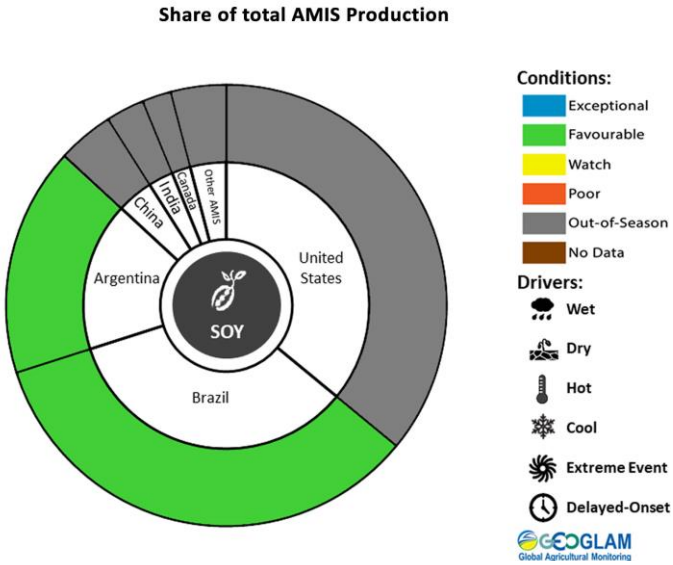
**Soybeans:** In **Brazil**, conditions are favourable across the country as harvesting begins thanks to a return of regular rainfall in January, which is providing the crops with the chance to recover. An increase in total sown area is expected compared to last year. In **Argentina**, spring-planted and summer-planted crop conditions have improved due to the resumption of rainfall in January. Despite the recent rainfall, some areas of spring-planted crops were affected by the dry and low-temperature conditions while they were in the reproductive stage.




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

***Information on crop conditions in non-AMIS countries can be found in the GEOGLAM Crop Monitor for Early Warning, published February 6th***

**Pie chart description:** Each slice represents a country's share of total AMIS production (5-year average). Main producing countries (representing 95 percent of production) are shown individually, with the remaining 5 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.

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# Appendix 1: Terminology & Definitions

## Crop Conditions:

**Exceptional:** Conditions are much better than average* at the 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 final production. The crop can still recover to average or near average conditions if the ground situation improves. This label is only used during the planting-early vegetative and the vegetative-reproductive stages.
**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 result in production impacts and can act as either positive or negative drivers of crop conditions.

**Wet:** Wetter than average (includes water logging and floods).
**Dry:** Drier than average.
**Hot:** Hotter than average.
**Cool**: Cooler than average or risk of frost damage.
**Extreme Events:** Catch-all for all other climate risks (i.e. hurricane, typhoon, frost, hail, winter kill, wind damage, etc.). When this category is used the analyst will also specify the type of extreme event in the text.
**Delayed-Onset**: Late start of the season


## Crop Season Nomenclature:

In countries that contain multiple cropping seasons for the same crop, the following chart identifies the national season name associated with each crop season within the Crop Monitor. Within the Crop Monitor for AMIS countries, the larger producing season (most recent 5 years) has been assigned to the first season.

| Crop Season Nomenclature | | | | |
|---|---|---|---|---|
| **Country** | **Crop** | **Season 1 Name** | **Season 2 Name** | **Season 3 Name** |
| Argentina | Soybean | Spring-planted | Summer-planted | |
| Brazil | Maize | Summer-planted (larger producing season) | Spring-planted (smaller producing season) | |
| Canada | Wheat | Winter-planted | Spring-planted | |
| China | Maize | Spring-planted | Summer-planted | |
| China | Rice | Single-season | Late-season | Early-season |
| China | Wheat | Winter-planted | Spring-planted | |
| Egypt | Rice | Summer-planted | Nili season (Nile Flood) | |
| India | Maize | Kharif | Rabi | |
| India | Rice | Kharif | Rabi | |
| Indonesia | Rice | Wet-season | Dry-season | |
| Mexico | Maize | Spring-planted | Autumn-planted | |
| Nigeria | Maize | Main-season | Short-season | |
| Nigeria | Rice | Main-season | Off-season | |
| Philippines | Rice | Wet-season | Dry-season | |
| Russian Federation | Wheat | Winter-planted | Spring-planted | |
| Thailand | Rice | Wet-season | Dry-season | |
| United States | Wheat | Winter-planted | Spring-planted | |
| Viet Nam | Rice | Wet-season | Dry-season | |

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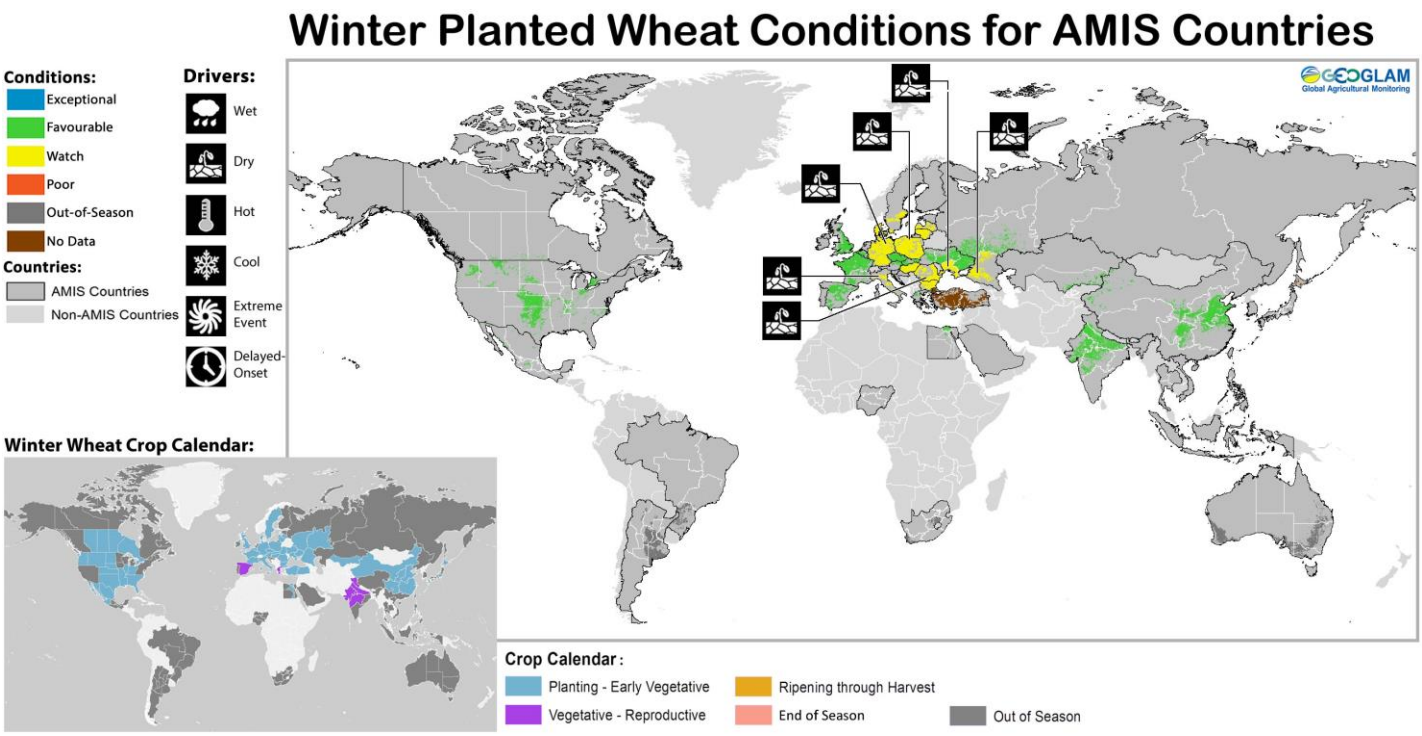
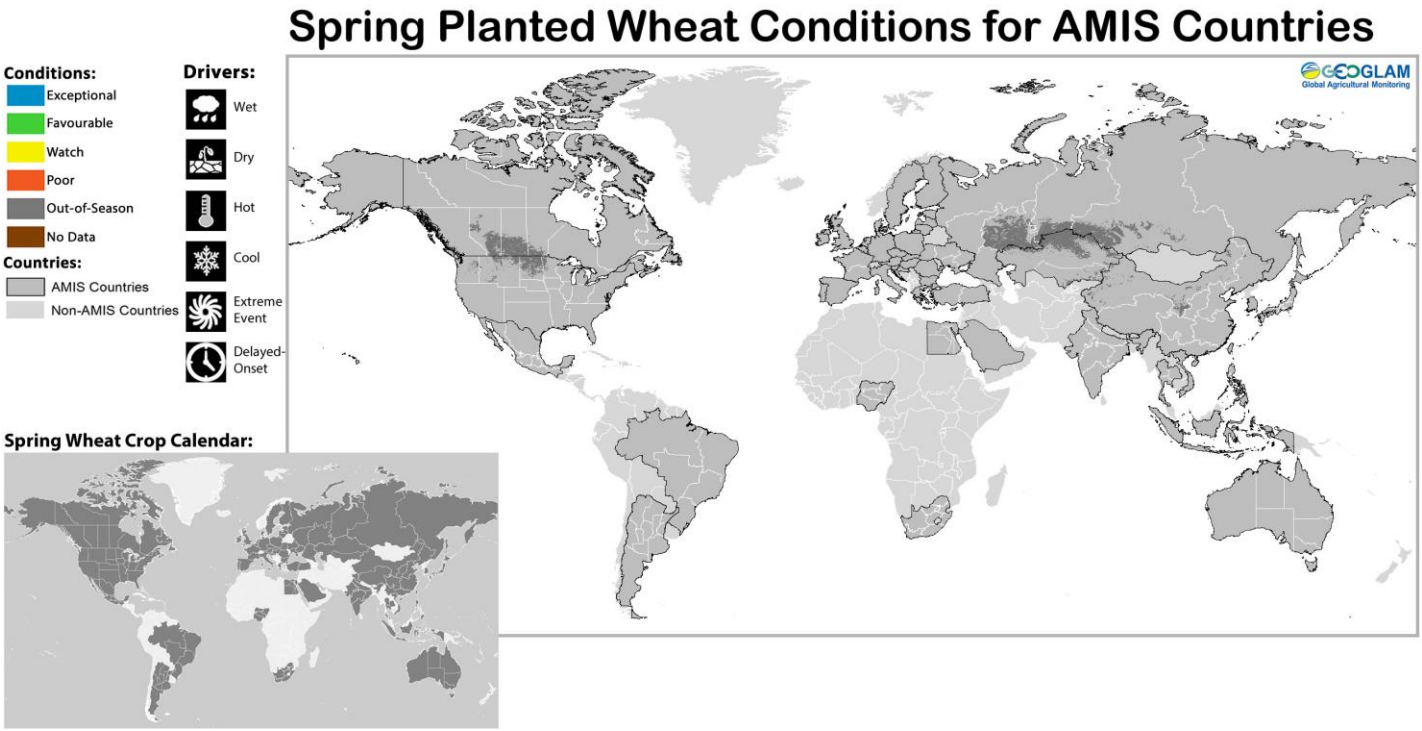
# Appendix 2: Crop Season Specific Maps




*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 January 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 January 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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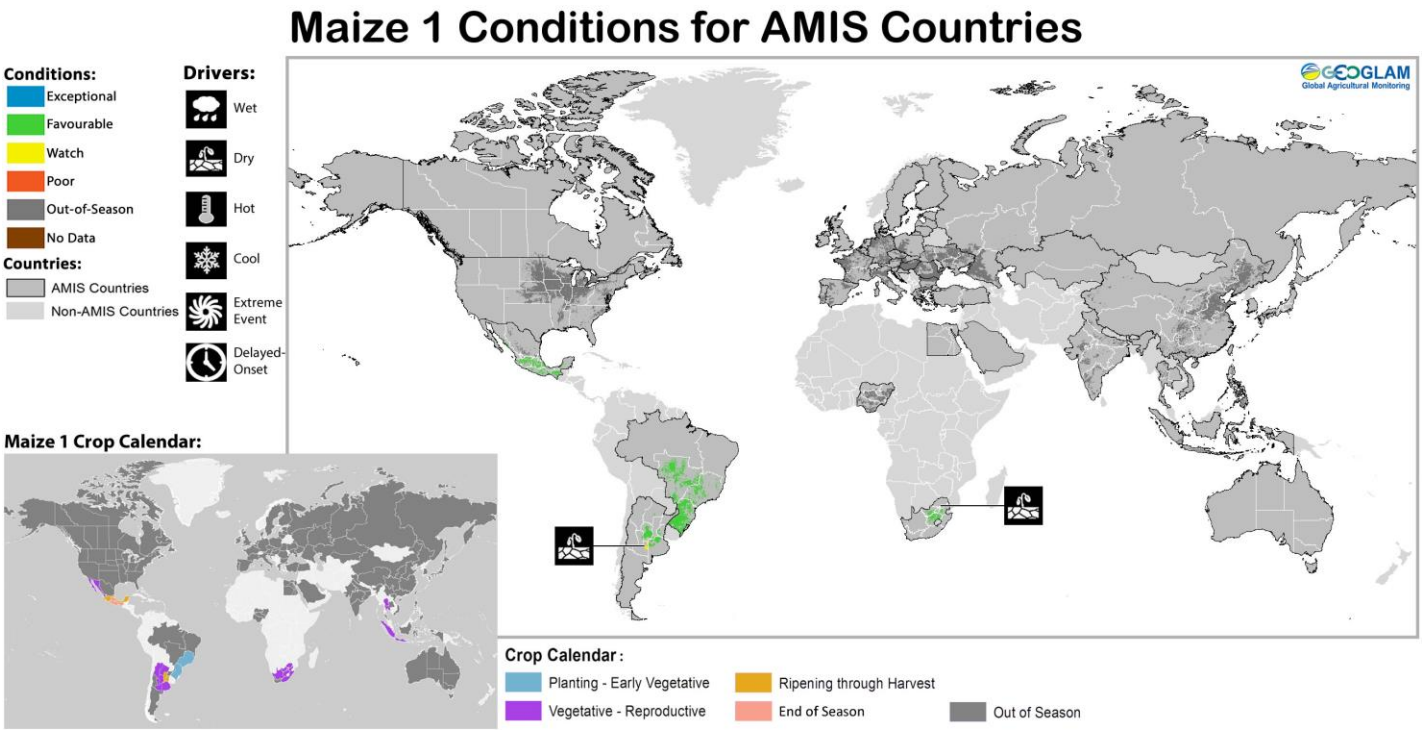


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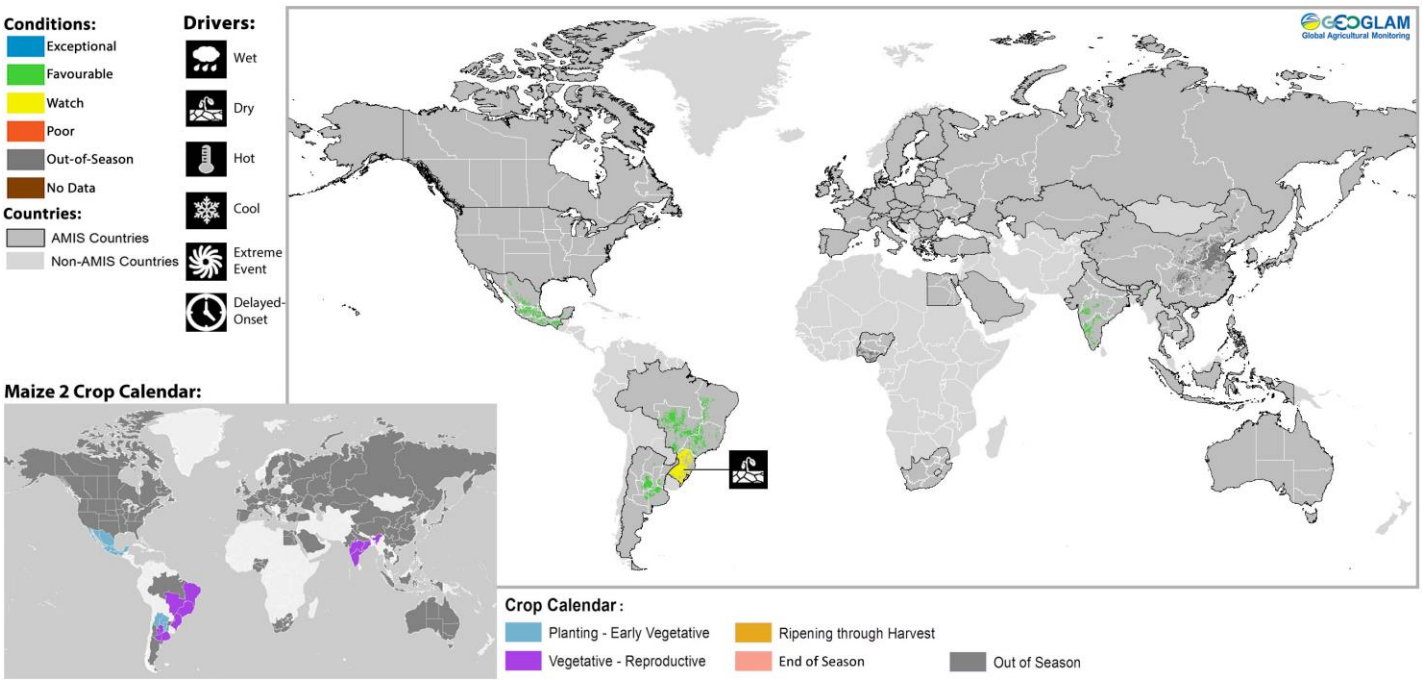


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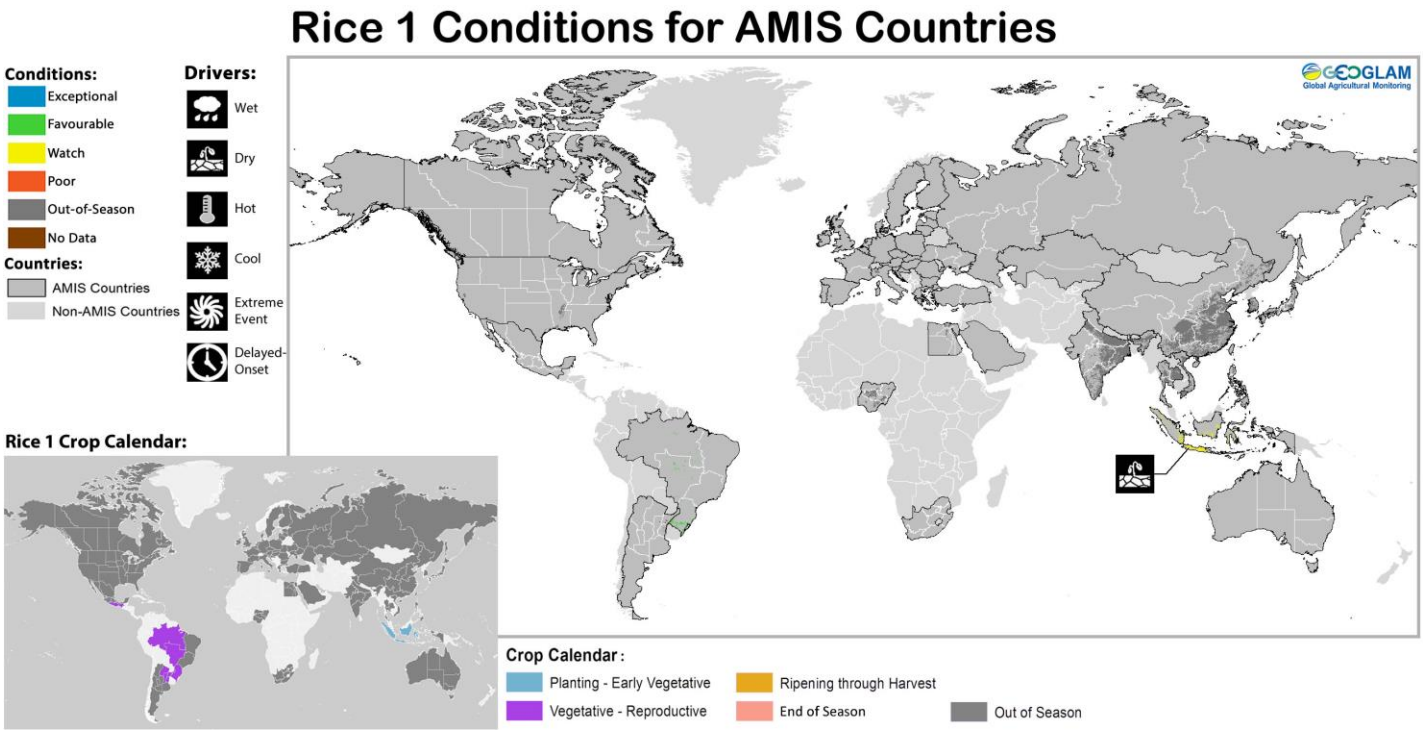


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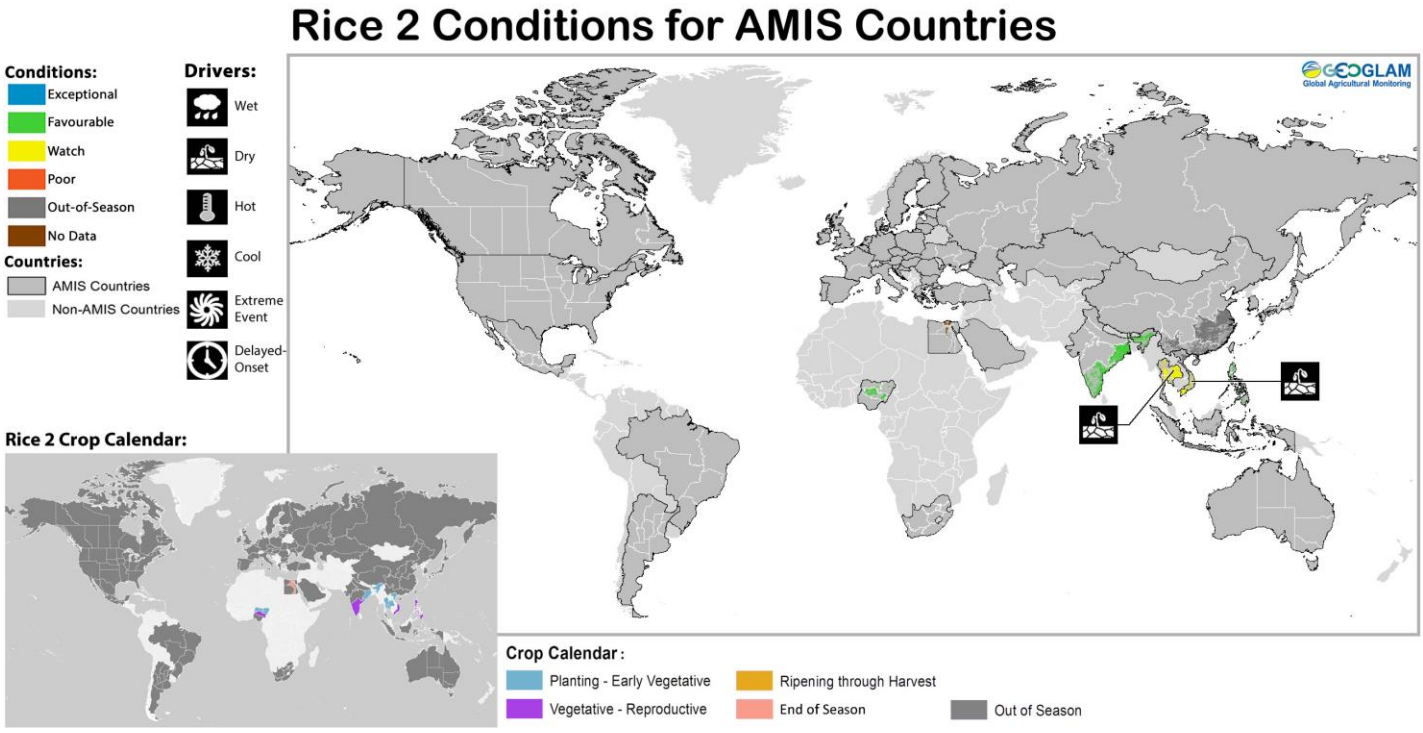


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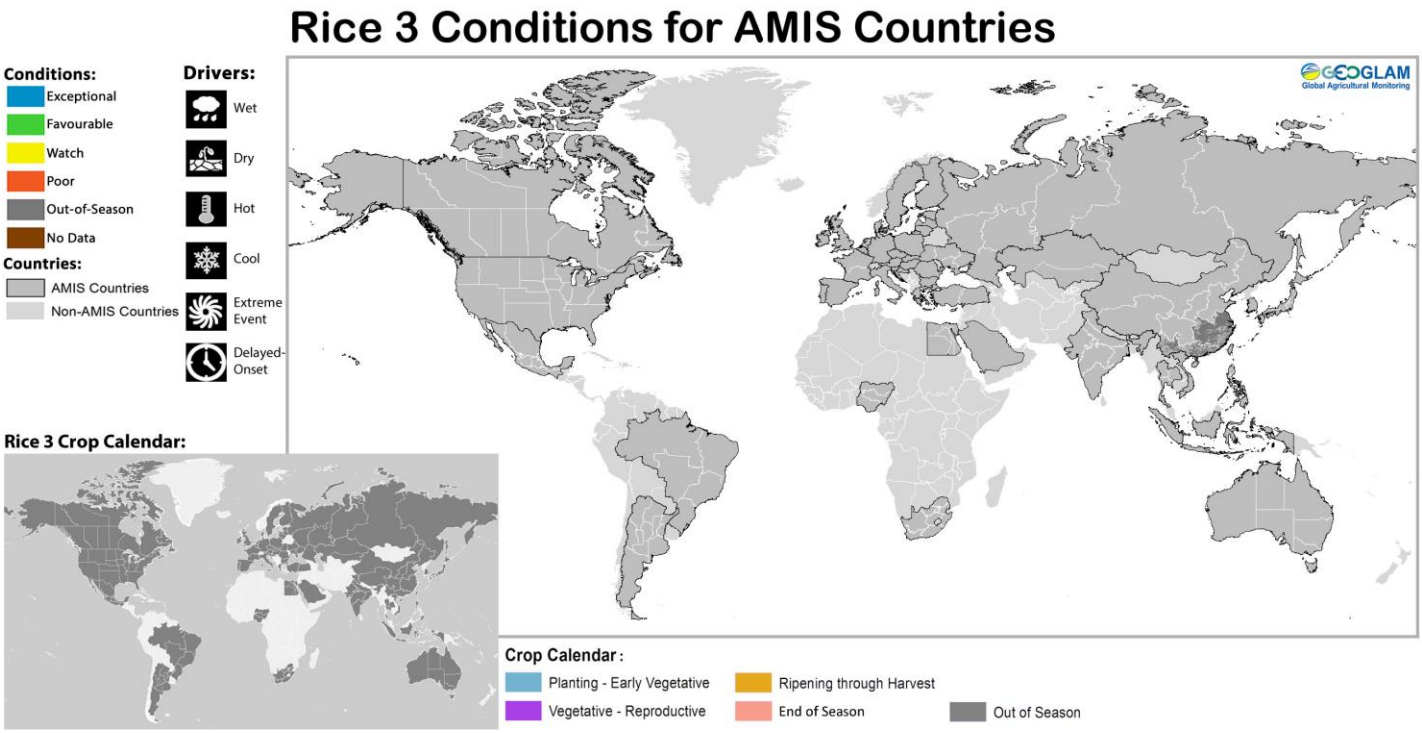
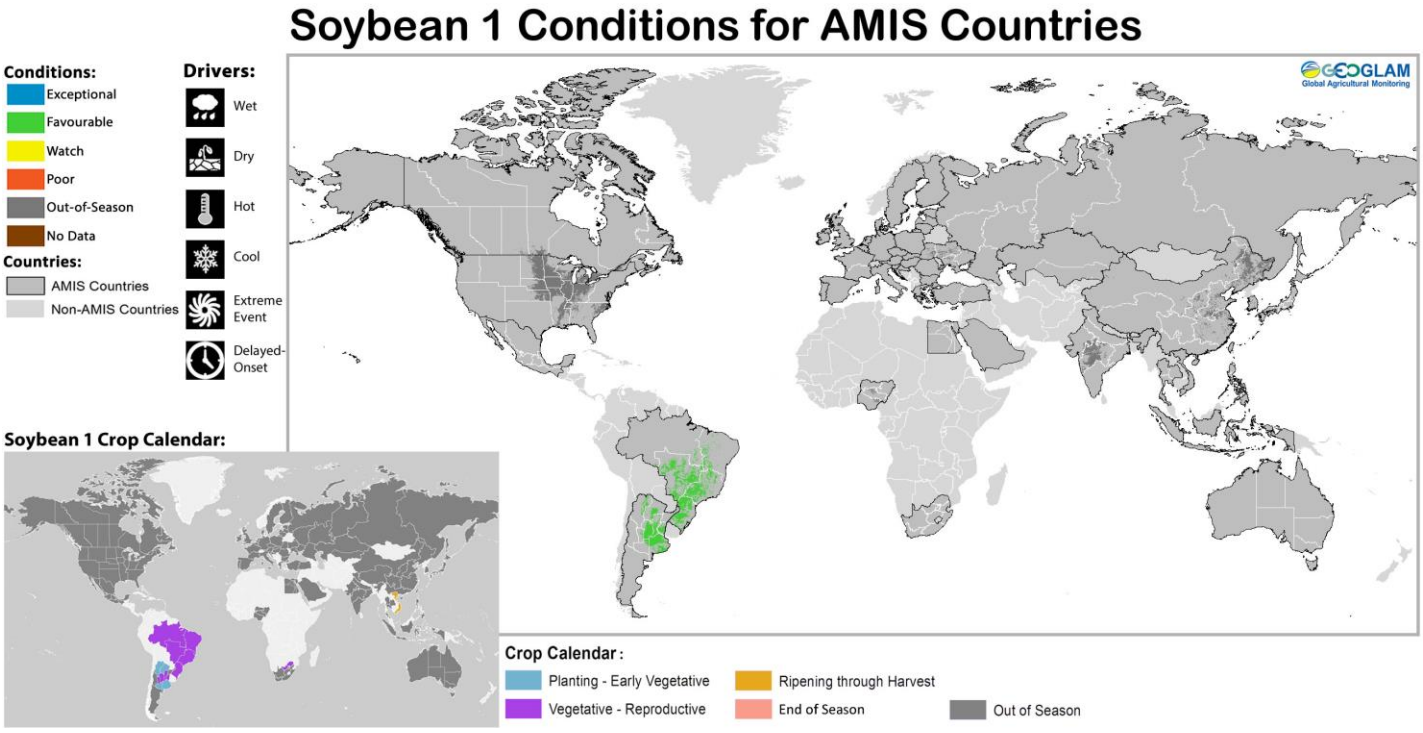



*Rice 3 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of January 28th. Where crops are in less than favourable conditions the climatic drivers responsible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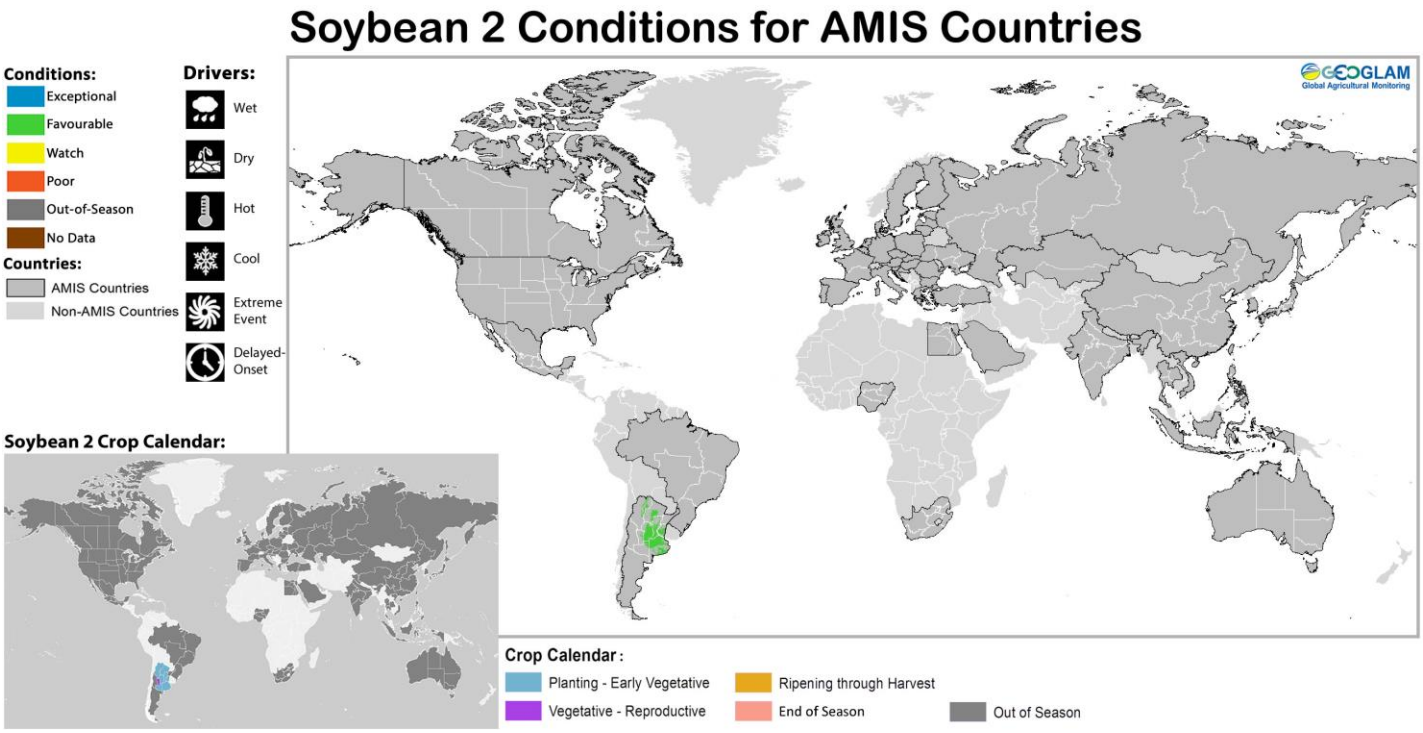


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Climatic update by Climate Hazards Center of UC Santa Barbara

The Crop Monitor is a part of GEOGLAM, a GEO global initiative.

*Photo courtesy of Mike Humber*

**https://cropmonitor.org/**

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## 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, Agroindustry ministry), Asia Rice Countries (AFSIS, ASEAN+3 & Asia RiCE), Australia (ABARES & CSIRO), Brazil (CONAB & INPE), Canada (AAFC), China (CAS), EU (EC JRC MARS), Gro Intelligence, India (NCFC), Indonesia (LAPAN & MOA), International (CIMMYT, FAO GIEWS, IFPRI & IRRI), Japan (JAXA, MAFF), Mexico (SIAP), Russian Federation (IKI), South Africa (ARC & CSIR & 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 multiagency report are consensual statements from the GEOGLAM experts, and do not necessarily reflect those of the individual agencies represented by these experts.
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