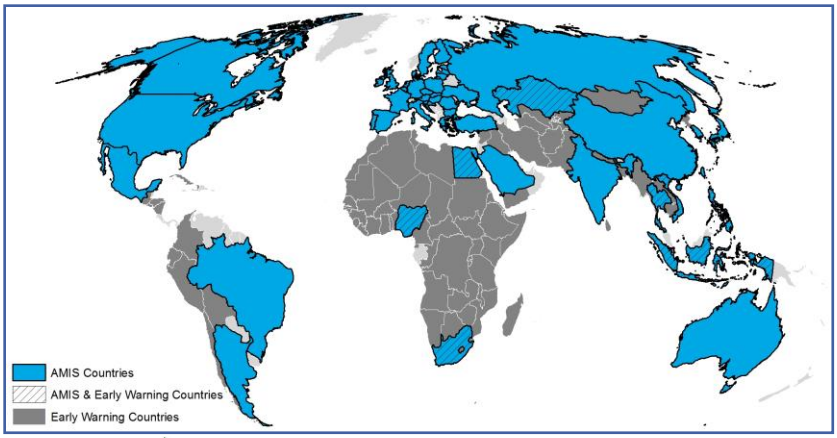
Crop Monitor for AMIS

Overview:

As of the end of January, conditions are generally favourable for all four crops. **Winter wheat** in the southern hemisphere is wrapping up harvesting under generally favourable conditions, with the exception of eastern Australia. In the northern hemisphere winter wheat is in dormancy under favourable conditions. **Maize** conditions in the southern hemisphere are generally favourable with only minor areas of concern in South America and some dryness in South Africa. **Rice** in Asia is favourable for dry-season rice in the north and wet-season rice in the south. **Soybean** conditions are generally favourable in South America, albeit with some minor areas of flooding in Argentina.



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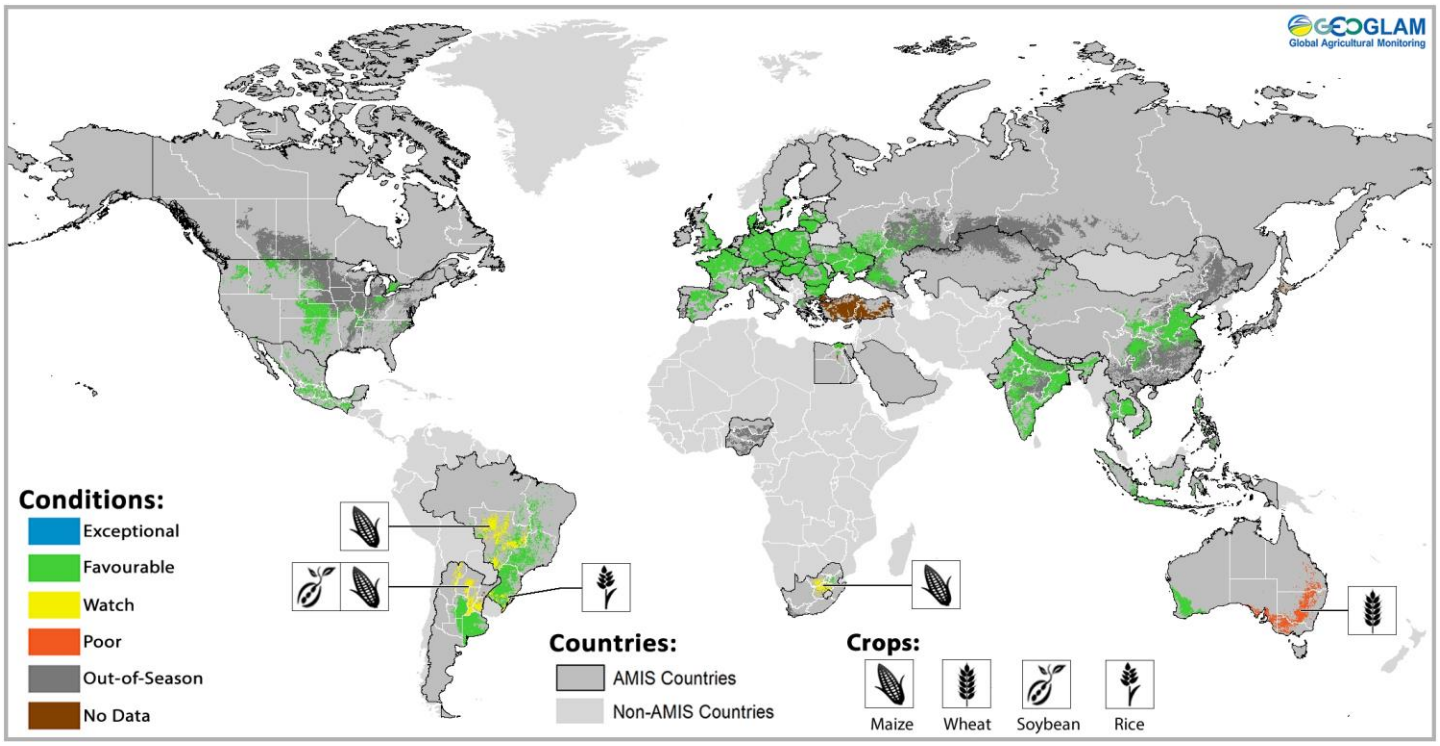
Conditions at a glance for AMIS countries (as of January 28th)



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 southern hemisphere, winter wheat harvest is wrapping up in the remaining areas under favourable conditions with the exception of eastern Australia. In the northern hemisphere, winter wheat is in dormancy under favourable conditions.

Maize - In the southern hemisphere, conditions are generally favourable for Brazil and Argentina with only minor areas of concern due to dry and wet conditions respectively. Conditions are mixed in South Africa.

Rice - In India, Rabi rice transplanting is ongoing. In Southeast Asia, conditions are favourable in the northern countries for dry-season rice, while wet-season rice is advancing favourably in Indonesia.

Soybeans - In the southern hemisphere, conditions are generally favourable in Brazil and Argentina with some flooding affecting minor areas in Argentina.

Weak to moderate El Niño expected in the first half of 2019

Currently the El Niño-Southern Oscillation (ENSO) is under a watch status. Warmer than normal El Niño region ocean temperatures are present but atmospheric conditions that would indicate a fully developed El Niño have been mainly ENSO-neutral. El Niño conditions are still expected for early 2019 (82% chance for January to March) and for northern hemisphere spring (66% chance for March to May).

Associated with the potential development of this El Niño event, between February and April, are increased chances of above normal rainfall in parts of the following regions: the southern U.S, northern Mexico, Central Asia, and southeastern South America. Drier than normal conditions are anticipated for the Indo-Pacific region including northern Australia and parts of Indonesia, the Philippines, southern Africa, Central America, and parts of northern Brazil.

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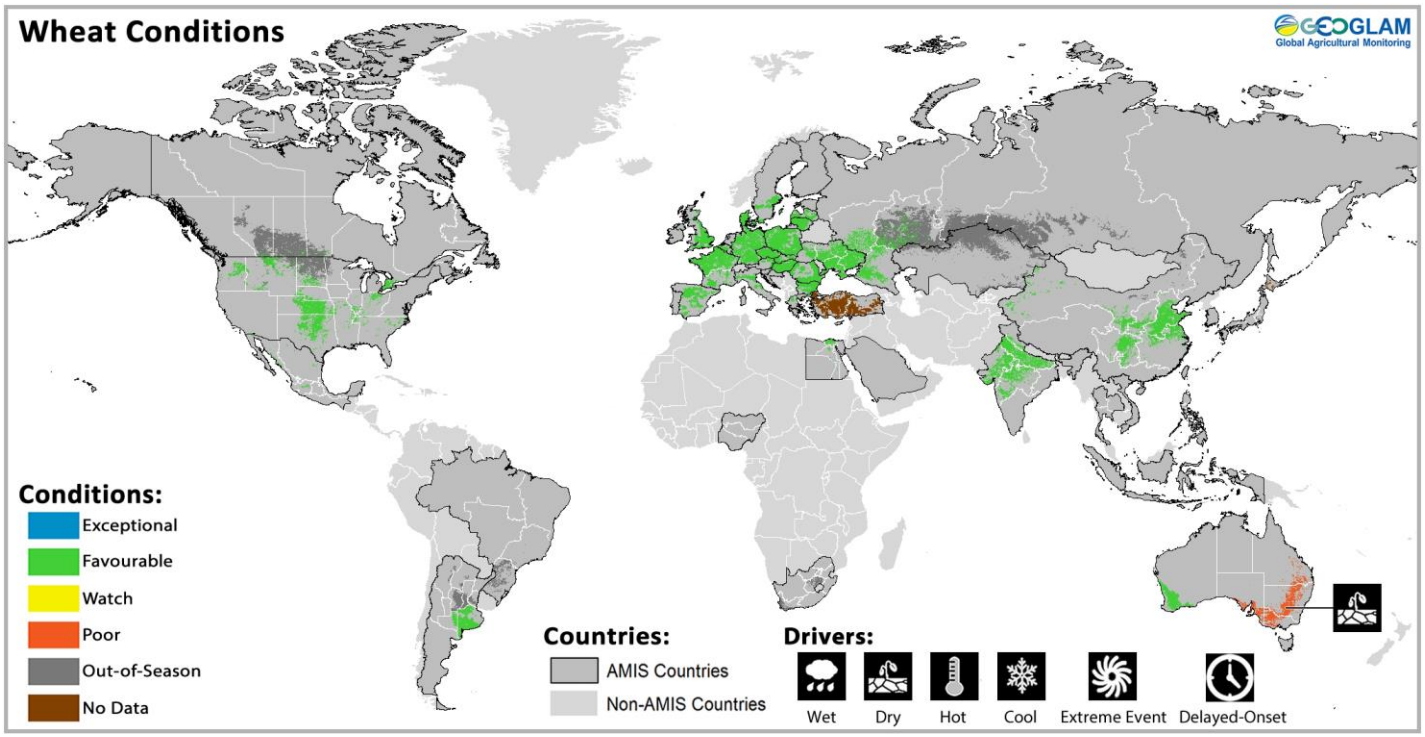
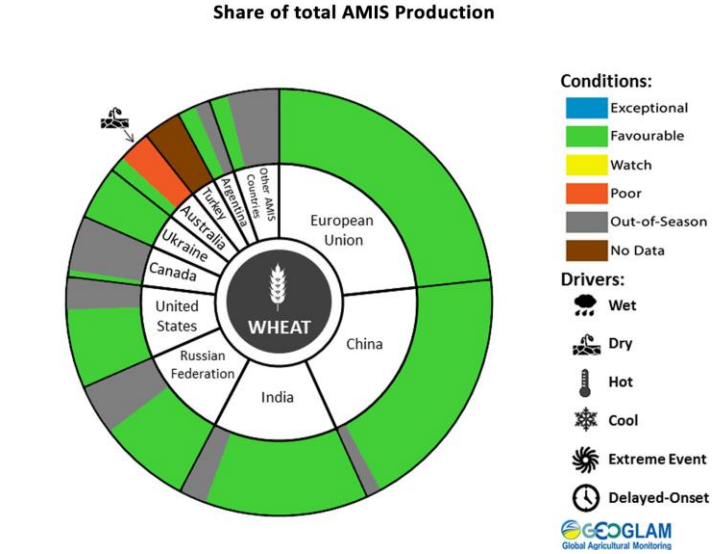
Wheat Conditions for AMIS Countries



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 favourable with no major frost events observed. In **Ukraine**, winter wheat conditions are favourable with plenty of insulating snow cover in the eastern and central regions. Total sown area is slightly up from last year. In the **Russian Federation**, conditions are favourable for winter wheat with adequate snow cover. Total sown area has increased compared to last year. In **China**, conditions are favourable. In **India**, sowing is almost complete under favourable conditions and total sown area is average. In the **US**, winter wheat conditions are favourable. In **Canada**, conditions are favourable for winter wheat in dormancy. In **Australia**, harvesting is just about wrapped up under mostly poor conditions in the eastern half of the country, while in the state of Western Australia it is completing favourably. Total production is forecast to decrease significantly year-on-year. In **Argentina**, final harvesting is wrapping up in the south under favourable conditions.



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

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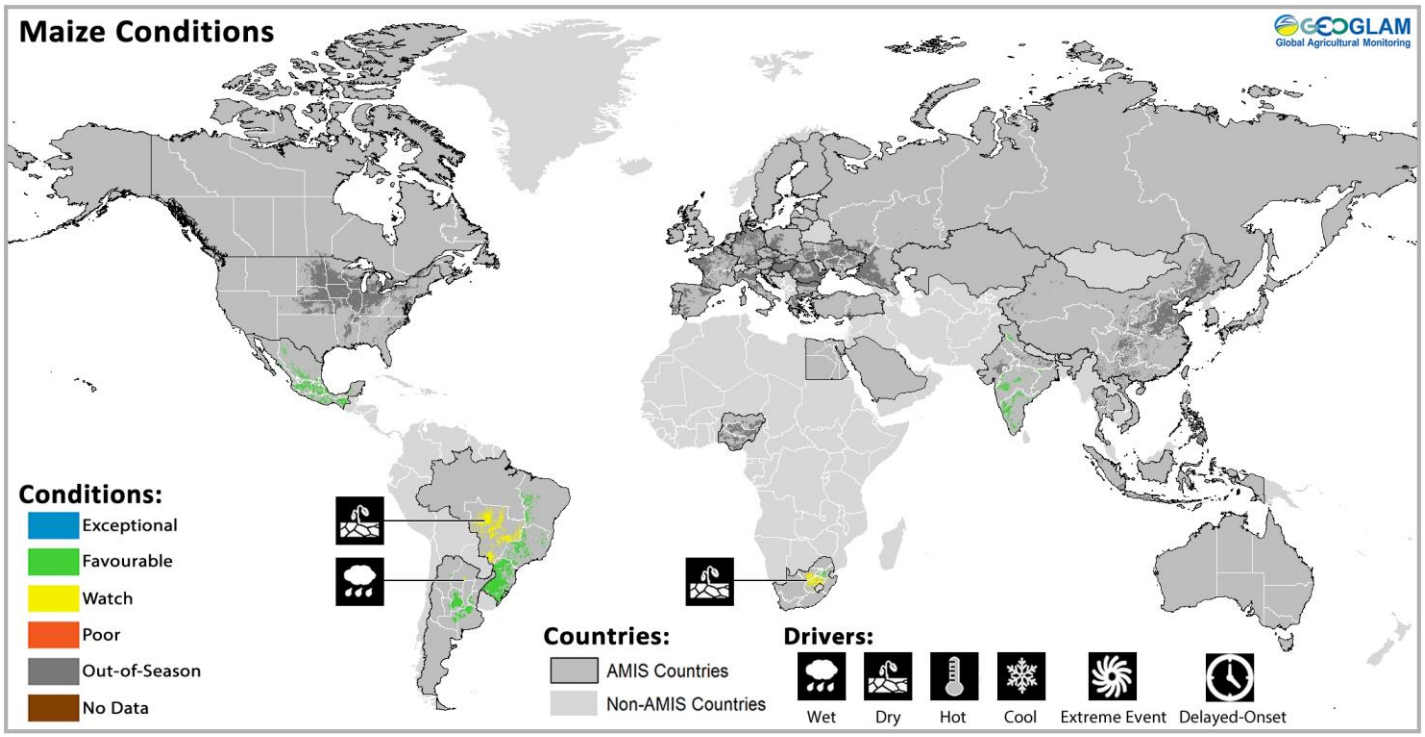
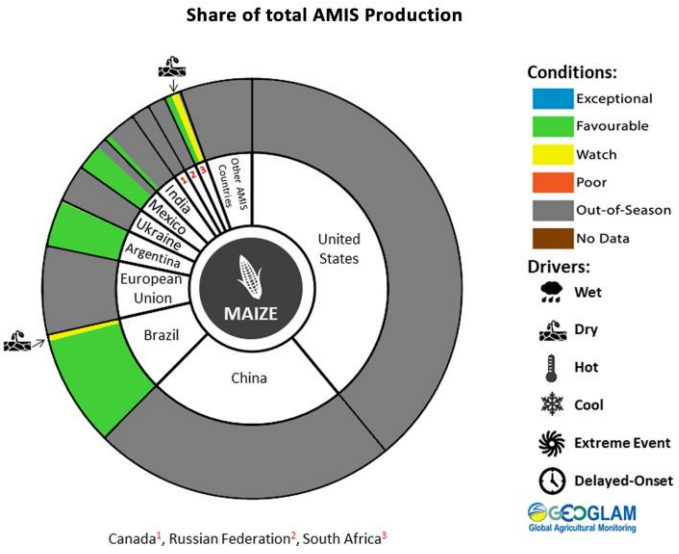
Maize Conditions for AMIS Countries



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**, the spring-planted crop is under generally favourable conditions, however, there is some concern over the Center-West growing area (Goiás) due to dry conditions. Most of the crop is in the reproductive stages, and harvest has begun in the south. Sowing of the summer-planted crop began under favourable conditions. In **Argentina**, conditions are generally favourable for the spring-planted and summer-planted crops with flooding affecting only minor areas. Sowing of the summer-planted crop is experiencing some delays due to the floods; however, the sowing window remains open into February. In **Mexico**, harvest of the spring-summer crop is wrapping up under favourable conditions while the sowing of the autumn-winter crop is ongoing with an increase in sown area expected. In **South Africa**, conditions are mixed with eastern areas receiving normal to above normal rainfall, while dry conditions in the west are impacting crops and have reduced the total area sown. In **India**, sowing of the Rabi crop is complete under favourable conditions.



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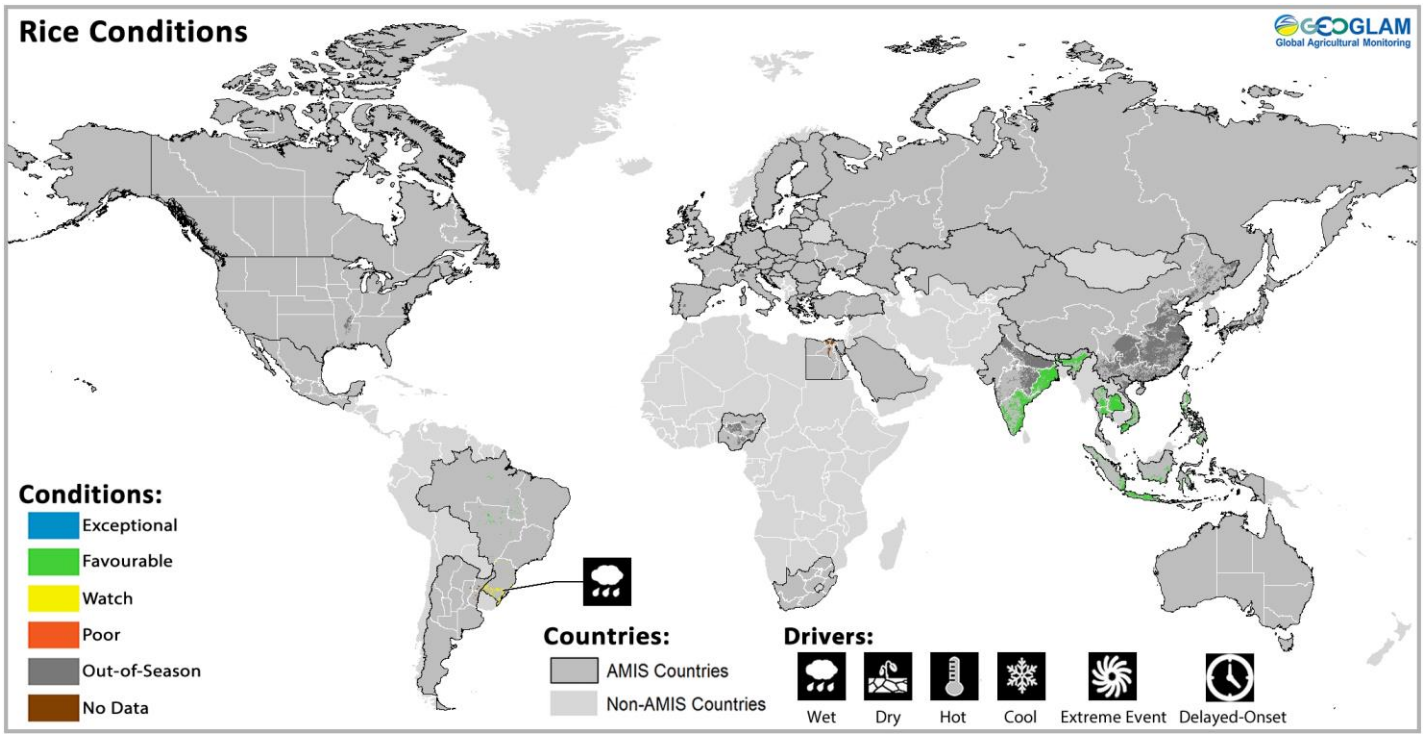
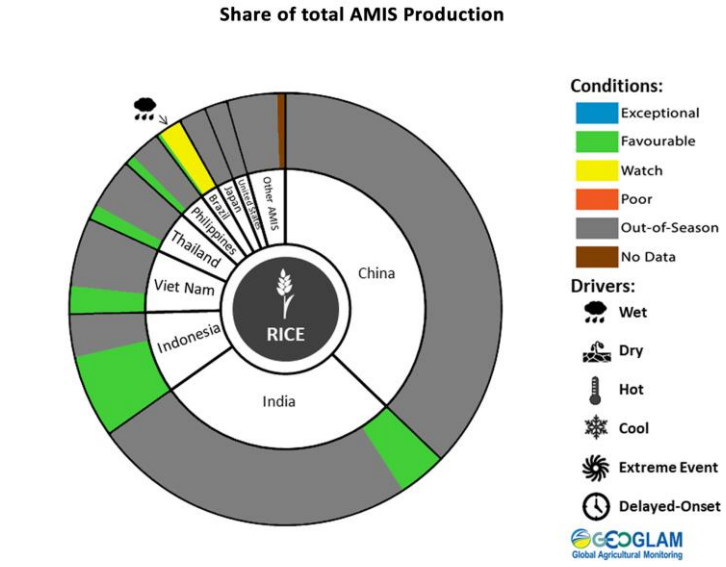
Rice Conditions for AMIS Countries



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 the Rabi rice is progressing under favourable conditions in the southern and eastern parts of the country. In **Indonesia**, sowing of wet-season rice is continuing with recent rainfall resolving irrigation water shortages. Harvest has begun on earlier sown fields with yields expected to be average this season. In **Viet Nam**, sowing of winter-spring rice (dry-season rice) has begun under favourable conditions in the south at a faster pace than last year. In **Thailand**, dry-season rice is in the early vegetative stages under favourable conditions. A reduction in total sown area is expected compared to last year due to insufficient rainfall and irrigation water, along with incentives to shift to maize. In the **Philippines**, dry-season rice is in the vegetative stage under favourable conditions with a reduction in total sown area compared to last year. In **Brazil**, conditions are under watch due to excessive rainfall and cloud cover in January.



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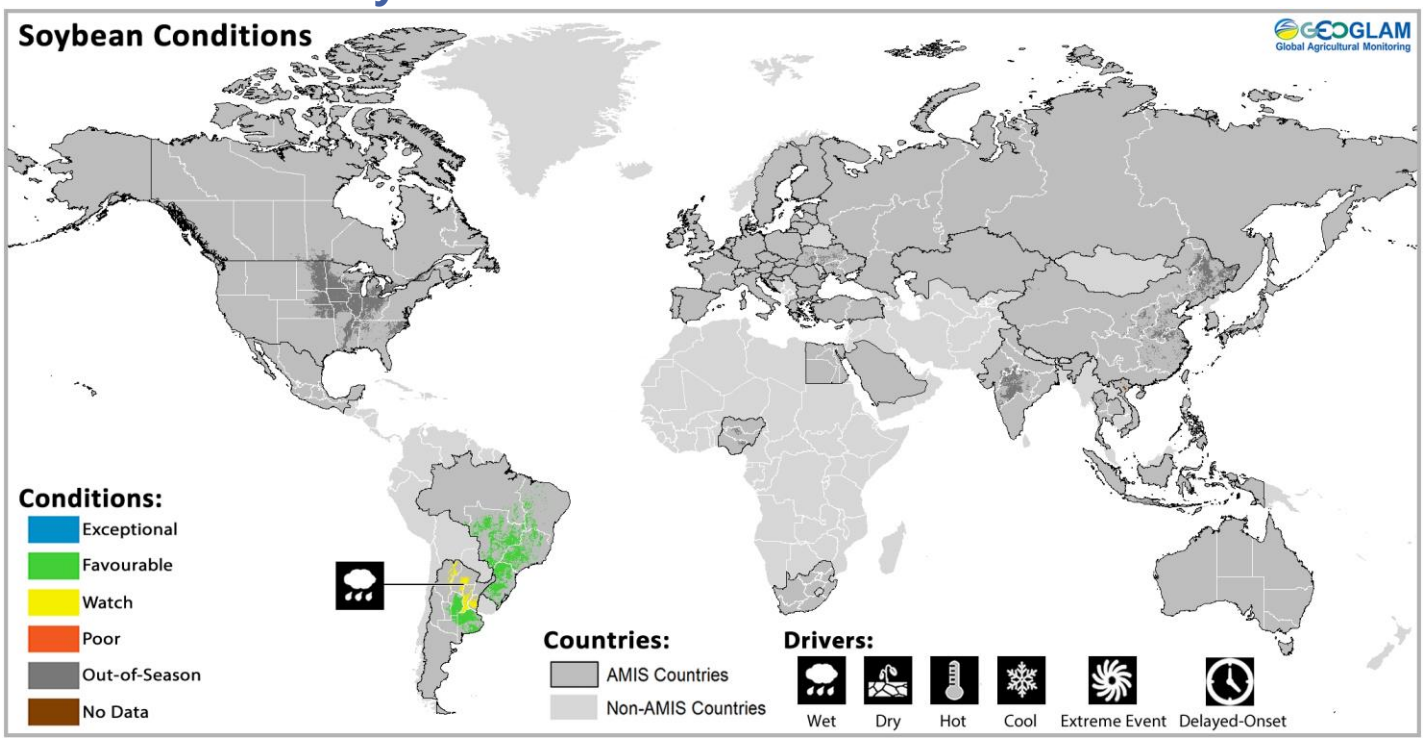
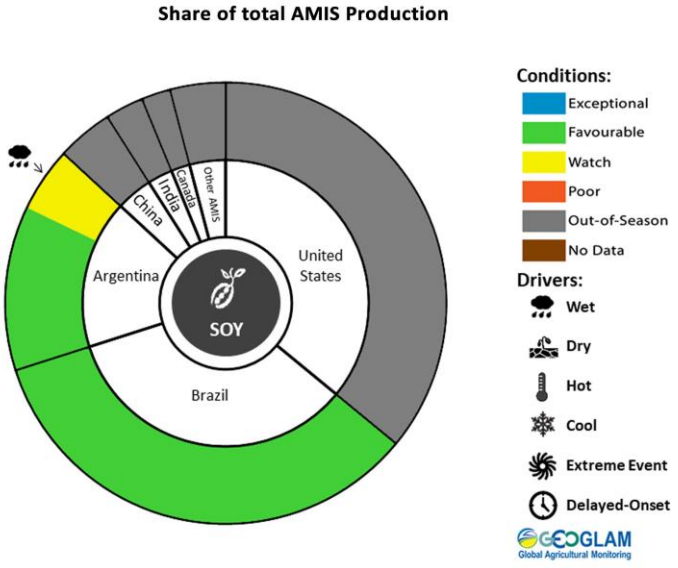
Soybean Conditions for AMIS Countries



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 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.

Soybeans: In **Brazil**, there is an increase in total sown area compared to last year. Conditions are generally favourable despite pockets of dryness that affected the states of Mato Grosso do Sul and Paraná. A more consistent rainfall pattern during January in Paraná, along with beneficial weather across the region, has prevented larger crop losses. The majority of the crop is in the reproductive stage while harvest has begun. In **Argentina**, conditions are mixed for both the spring-planted and summer-planted crops. Heavy rains and flooding delayed sowing, resulting in a reduction of total sown area. Some remaining areas continue to deal with field saturation from the heavy rainfall.



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 7th

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.

* Assessment based on information as of January 28th

Appendix 1: Terminology & 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 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: 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.)
Delayed-Onset: Late start of the season

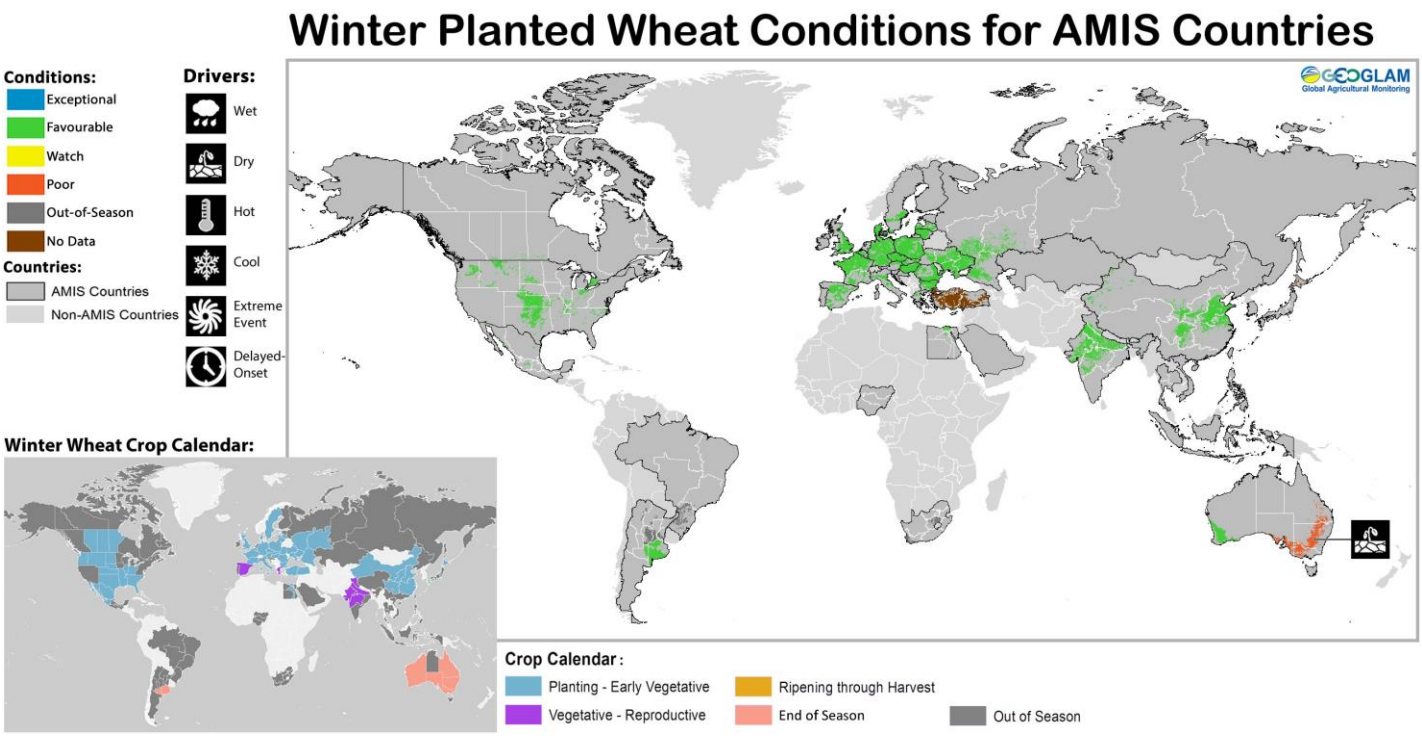
Crop Season Nomenclature:

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.

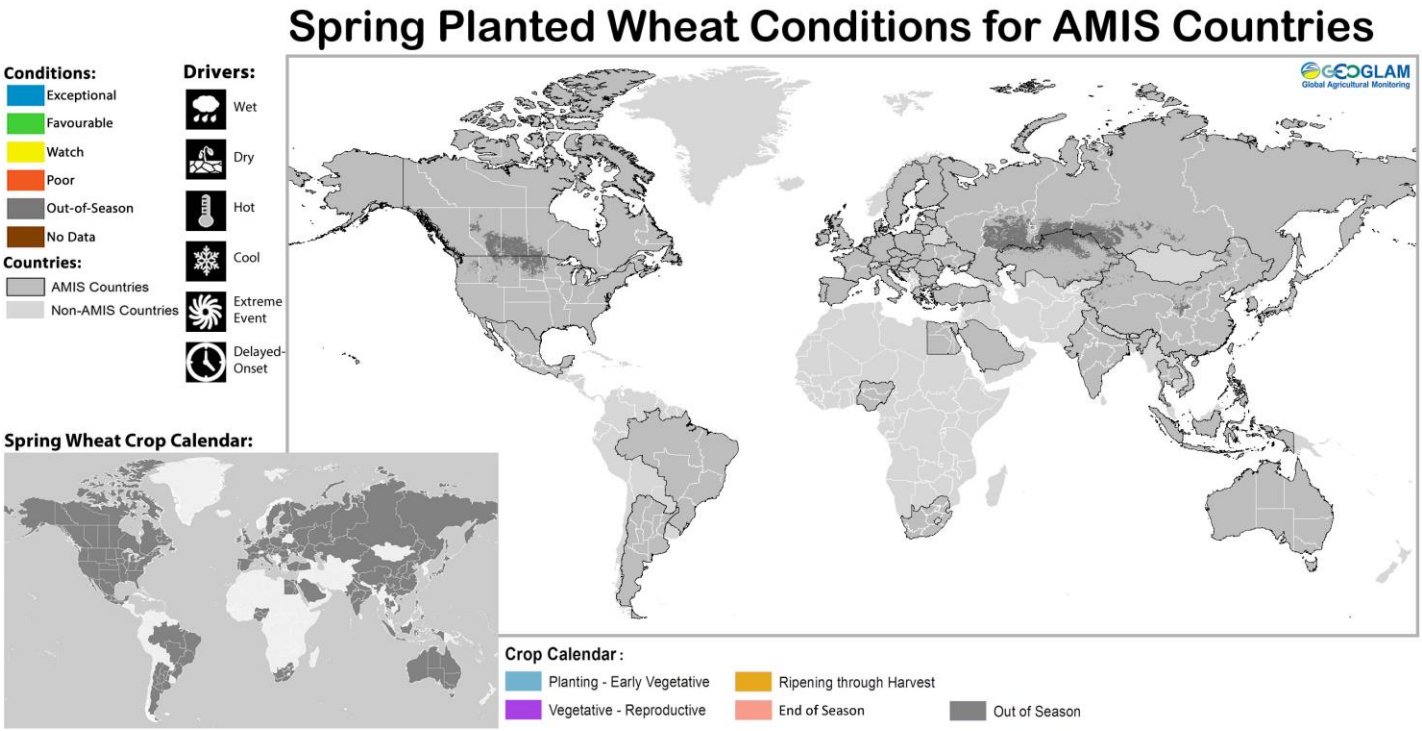
Crop Season Nomenclature				
Country	**Crop**	**Season 1 Name**	**Season 2 Name**	**Season 3 Name**
Argentina	Soybean	Spring-planted	Summer-planted	
Brazil	Maize	Summer-planted (larger producing season)	Spring-planted (smaller producing season)	
Canada	Wheat	Winter-planted	Spring-planted	
China	Maize	Spring-planted	Summer-planted	
China	Rice	Intermediate Crop	Early Crop	Late Crop
China	Wheat	Winter-planted	Spring-planted	
Egypt	Rice	Summer-planted	Nili season (Nile Flood)	
India	Maize	Kharif	Rabi	
India	Rice	Kharif	Rabi	
India	Soybean	Kharif	Rabi	
India	Wheat	Rabi	Kharif	
Indonesia	Rice	Main-season	Second-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	

* Assessment based on information as of January 28th

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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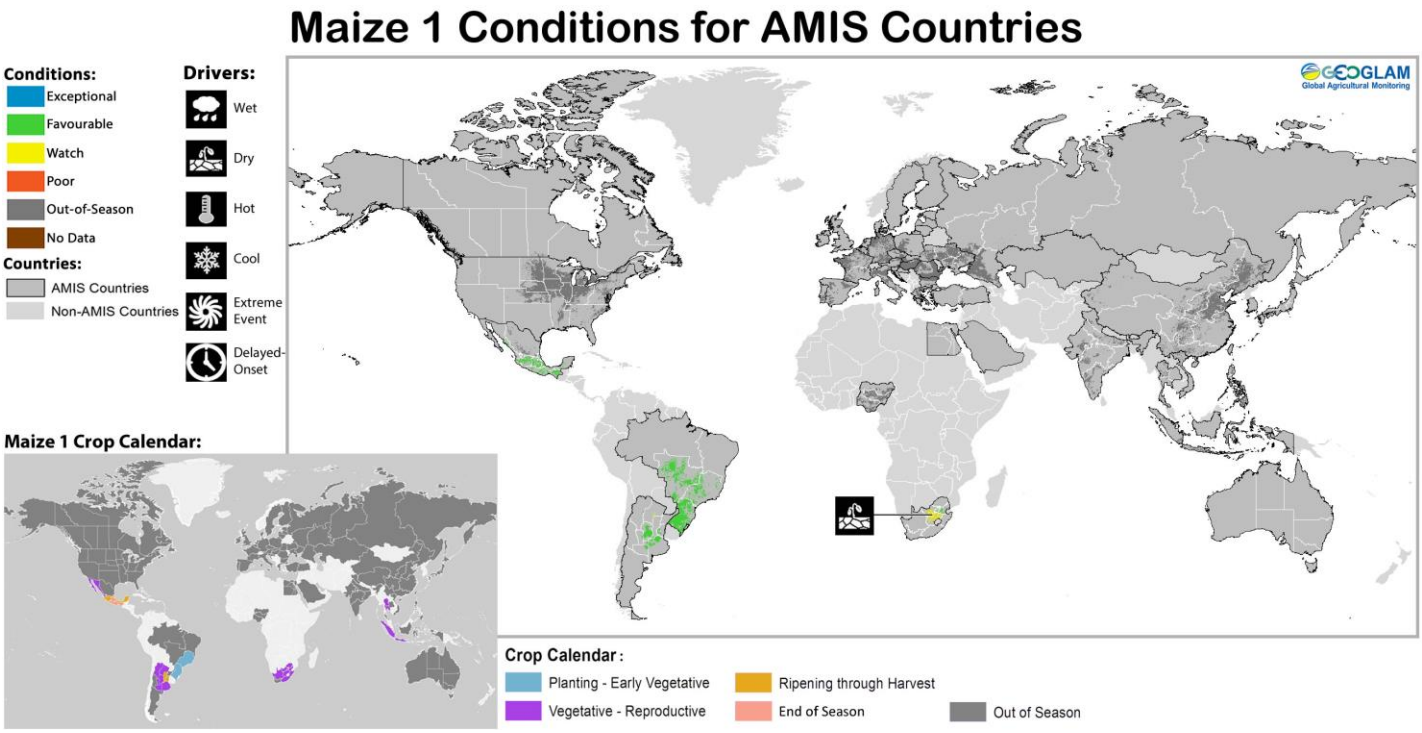
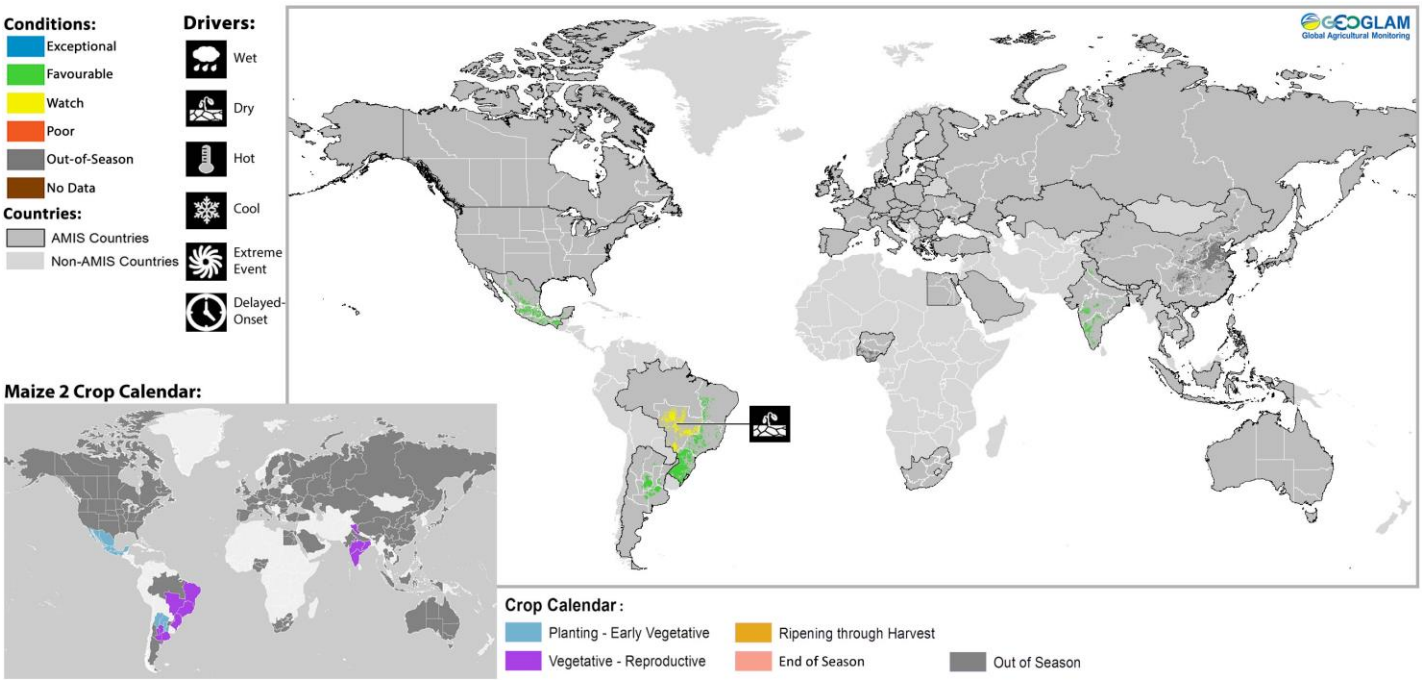


Maize 1 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of January 28th. Where crops are in less than favourable conditions the climatic drivers responsible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



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 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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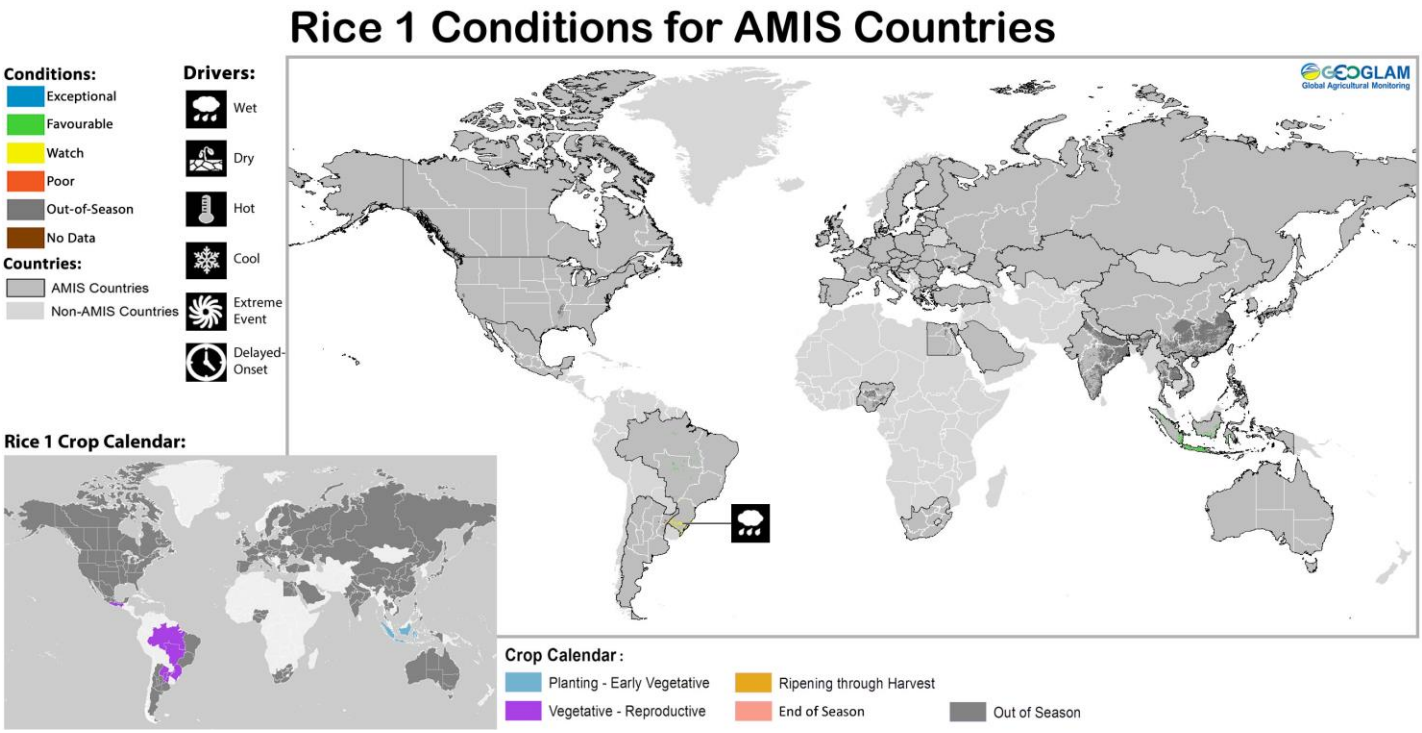
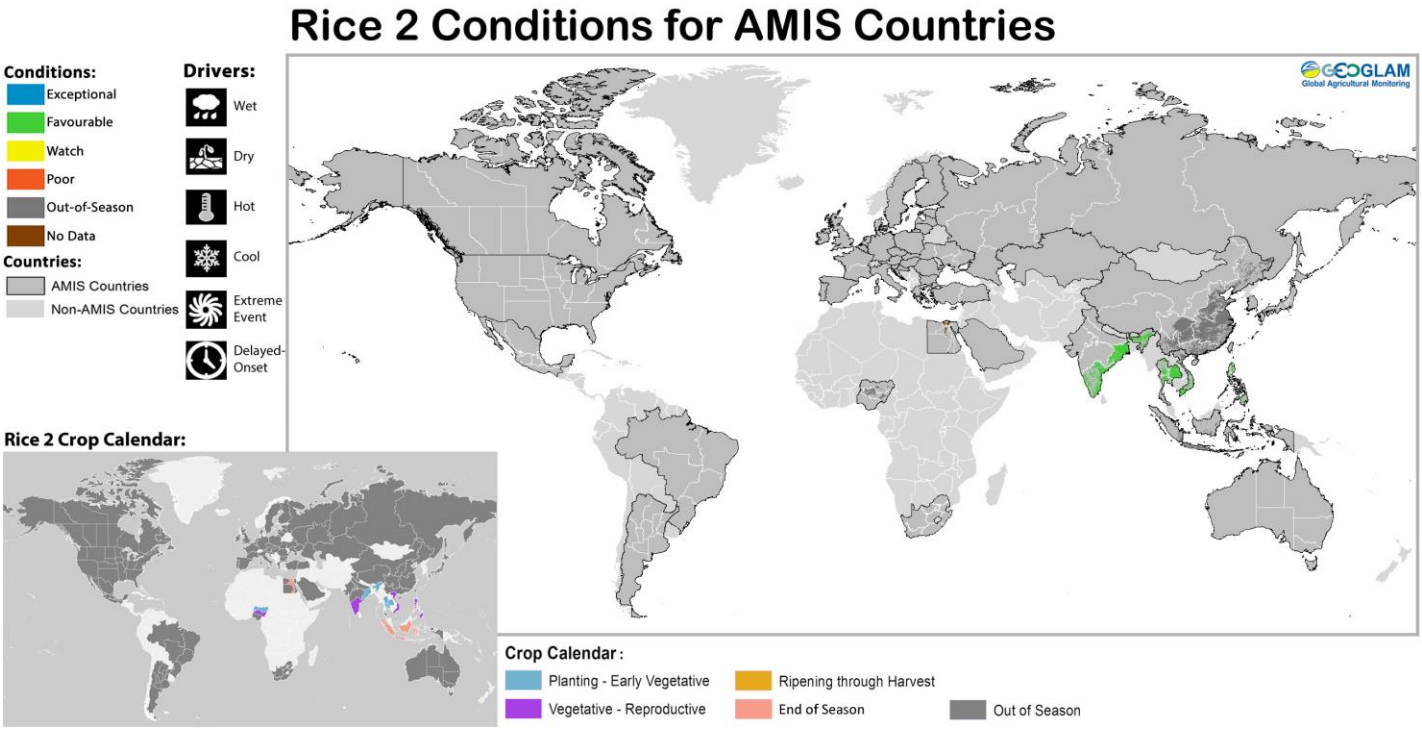


Rice 1 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of January 28th. Where crops are in less than favourable conditions the climatic drivers responsible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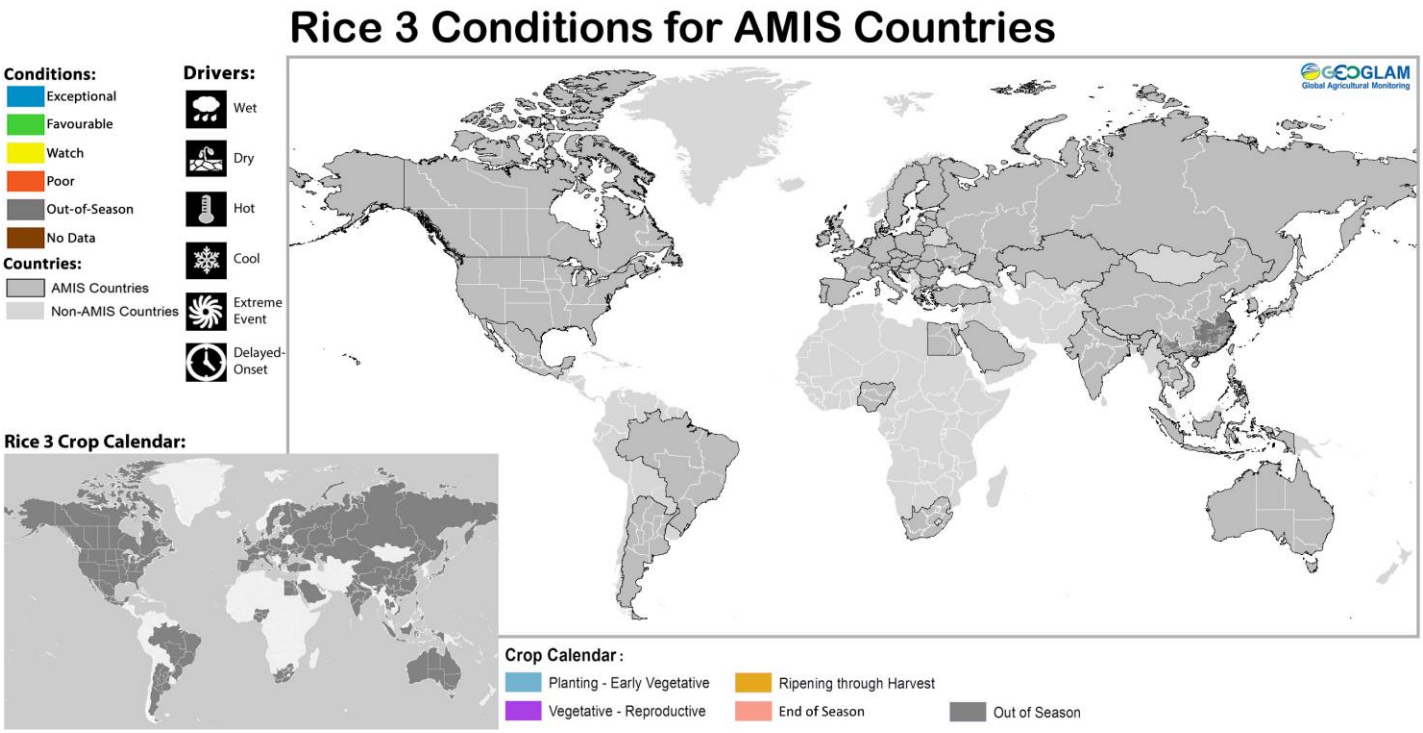

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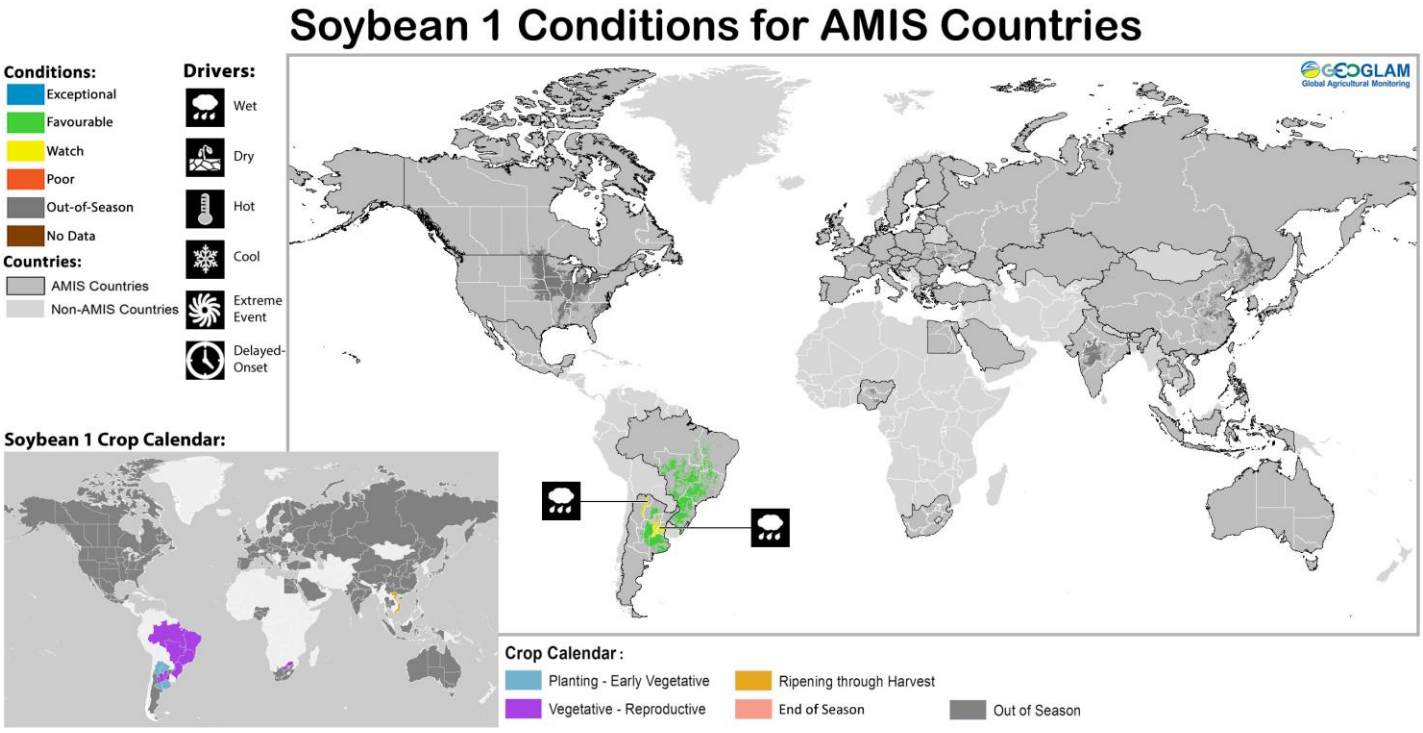

Soybean 1 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of January 28th. Where crops are in less than favourable conditions the climatic drivers responsible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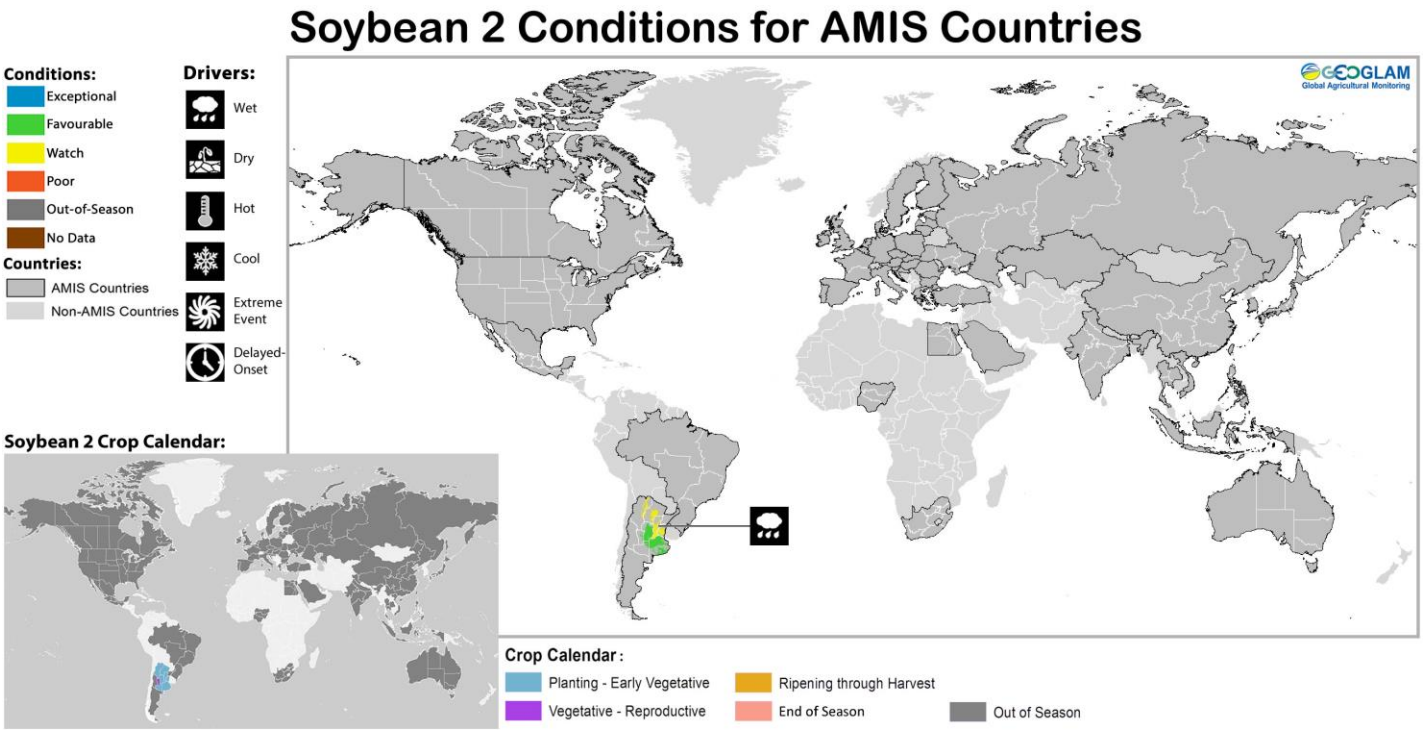

Soybean 2 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of January 28th. Where crops are in less than favourable conditions the climatic drivers responsible 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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Prepared by members of the GEOGLAM Community of Practice
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Climatic update by Climate Hazards Group of UC Santa Barbara

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

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Sources & Disclaimer

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