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Overview:

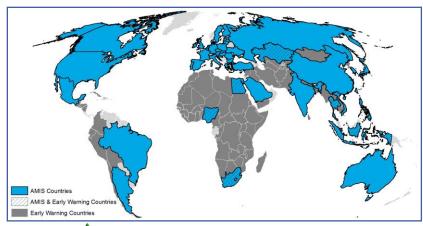
As of the end of February, conditions are generally favourable for all four crops. **Winter wheat** in the northern hemisphere winter wheat is primarily in dormancy under favourable conditions. **Maize** conditions in the southern hemisphere are generally favourable with some dryness in South Africa. **Rice** in Asia is generally 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 concerns due to an early frost in Argentina.













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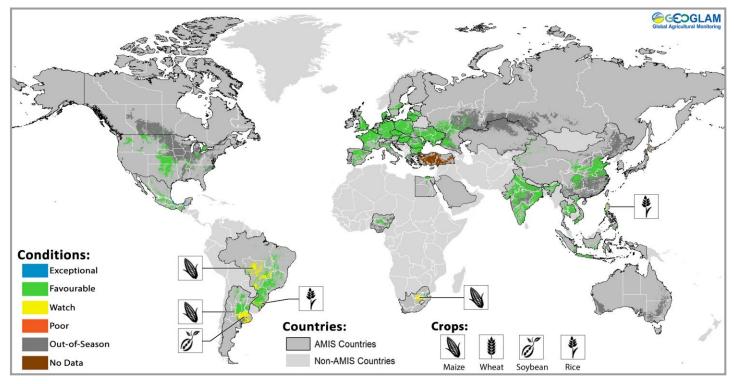
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The Crop Monitor is a part of GEOGLAM, a GEO global initiative.



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



Crop condition map synthesizing information for all four AMIS crops as of February 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 is primarily in dormancy under favourable conditions.

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

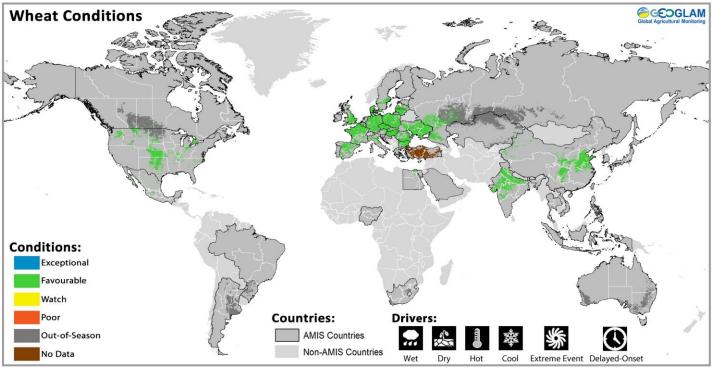
Rice - In India, Rabi rice transplanting is advancing faster than usual. In Southeast Asia, conditions are generally favourable in the northern countries for dry-season rice, while wet-season rice is advancing favourably in Indonesia.

Soybeans - In the southern hemisphere, conditions are favourable in Brazil and generally favourable in Argentina where there has been an early frost potentially affecting crops in the south.

El Niño Advisory

Weak-to-moderate El Niño-Southern Oscillation (ENSO) conditions are now present in the central Pacific. These conditions are forecast to continue through the Northern Hemisphere spring (55% chance for March to May). There is around a 50% chance for El Niño to persist into summer.

Major global impacts are not expected because of the weak strength of this El Niño, but some areas may still see El Niñorelated impacts in March to May 2019. Associated with this event are increased chances of above normal rainfall in the southeastern United States and in parts of central Asia and southeastern South America. There are increased chances of below normal rainfall in the Philippines and other parts of Southeast Asia, in northern Australia, and in eastern Southern Africa.

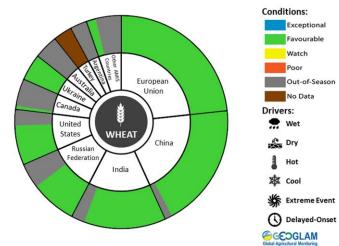


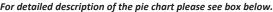
Wheat Conditions for AMIS Countries

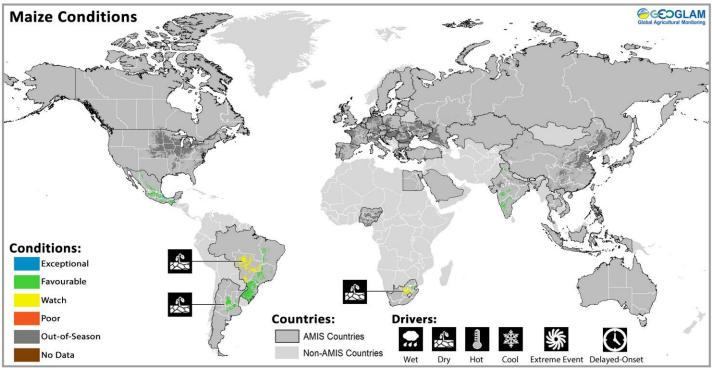
Wheat crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of February 28th. Where crops are in other than favourable conditions the climatic drivers responsible 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 only minor frost damage. In Ukraine, winter wheat conditions are favourable with no winterkill reported to date. The crop is still mostly dormant with the exception of southern and western regions where the crop is resuming vegetative growth. In the Russian Federation, conditions are favourable with the majority of the crop still in dormancy. Warmer than average temperatures this winter helped to avoid incidents of winterkill. In China, conditions are favourable for winter wheat still in dormancy. In India, sowing is complete and crop conditions are favourable owing to adequate rainfall and mild temperatures. In the **US**, winter wheat conditions are favourable. Total sown area is down from last year and the lowest since records have been kept, continuing a long-term decreasing trend since a national high in 1981. In Canada, winter wheat conditions are generally favourable for the dormant crop. However, the combination of extreme cold temperatures and little snow cover in the southern Prairies could increase the incidence of winterkill.

Share of total AMIS Production





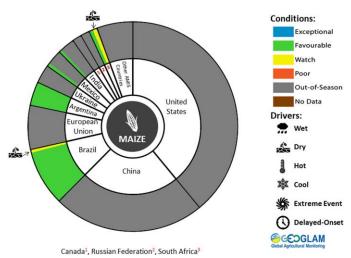


Maize Conditions for AMIS Countries

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 February 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, with some concern in the Center-West (Goiás and Mato Grosso do Sul) due to dry conditions earlier in the season during critical crop development stages. Most of the crop is in the reproductive stages, and harvest has begun in the south. Sowing of the summer-planted crop (higher producing season) is continuing under favourable conditions. In Argentina, conditions are generally favourable for the spring-planted and summerplanted crops with some minor concerns over dry conditions in San Luis. In Mexico, sowing of the autumn-winter crop is continuing under favourable conditions. In South Africa, conditions are mixed with dry conditions in the west experienced earlier in the season resulting in reduced sown area. Widespread rainfall during late January to mid-February is supporting average yields so long as rains continue in the near term. In India, the Rabi crop is progressing well under favourable conditions.

Share of total AMIS Production



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

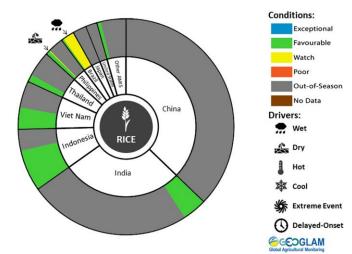
GEOGLAM **Rice Conditions Conditions:** Exceptional Favourable Watch **Countries:** Poor **Drivers: AMIS Countries** Out-of-Season Non-AMIS Countries No Data Extreme Event Delaved-Onset Wet Dry Hot Cool

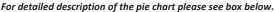
Rice Conditions for AMIS Countries

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

Rice: In India, conditions are favourable as transplanting of the Rabi rice is almost complete in the southern and eastern parts of the country, and is advanced compared to the same time last year. In Indonesia, conditions are favourable as sowing of wetseason rice continues into its fifth month. Harvest of the earlier sown fields continues with yields expected to be close to average owing to sufficient sunlight during the growing season. In Viet Nam, sowing of winter-spring rice (dry-season rice) continues in the south and is starting in the north under favourable conditions. Sowing in the north is advancing faster than normal due to warm weather and better irrigation preparation. In **Thailand**, dry-season rice is in the 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 away from dry-season rice. In the **Philippines**, dry-season rice is in the vegetative stage under mixed conditions as dry conditions in Northern Luzon has led to a delay in sowing and a deterioration in conditions. In Brazil, the South region continues in watch conditions due to excessive rainfall and cloud cover in January.

Share of total AMIS Production





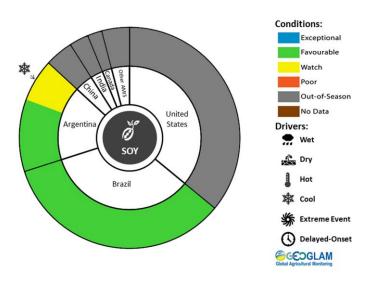
GEOGLAM Soybean Conditions Conditions: Exceptional Favourable Watch Poor **Countries: Drivers: AMIS Countries** Out-of-Season Non-AMIS Countries No Data Cool Extreme Event Delayed-Onset Wet Dry Hot

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 February 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**, conditions are generally favourable as the harvest advances in the centralwest regions and crops are in the grain filling stage in the south. Despite pockets of dryness that especially affected the states of Mato Grosso do Sul and Paraná earlier in the season, overall yields are estimated to be near average. In **Argentina**, conditions are generally favourable for both the spring-planted and summer-planted crops with earlier sown crops showing better performance than later sown crops due to recent dry conditions. However, an early frost in the last week of February in southern Buenos Aires and La Pampa has potentially negatively affected crops.

Share of total AMIS Production



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

Information on crop conditions in non-AMIS countries can be found in the <u>GEOGLAM Crop</u> <u>Monitor for Early Warning</u>, published March 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 February 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
	Dry
Wet: Higher than average wetness.	â
Dry: Drier than average.	Hot
Hot: Hotter than average.	with -
Cool : Cooler than average or risk of frost damage.	🕸 Cool
Extreme Events: This is a catch-all for all other climate risks (i.e. hurricane, typhoon, frost, hail, winterkill, wind damage, etc.)	🗱 Extreme Event
Delayed-Onset: Late start of the season	O Delayed-Onset

Crop Season Nomenclature:

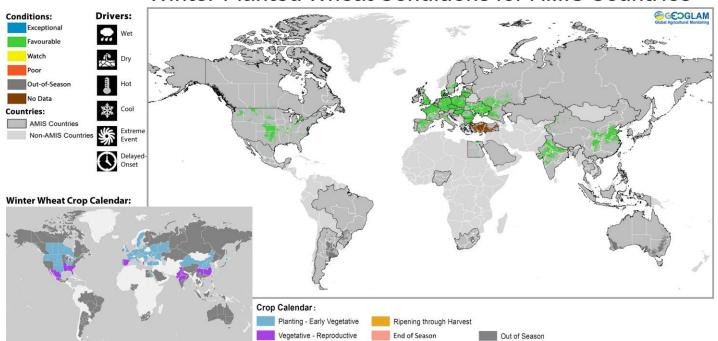
In countries that contain multiple cropping seasons for the same crop, the following chart identifies the national season name associated with each crop season within the Crop Monitor. Within the Crop Monitor for AMIS countries the larger producing season (most recent 5 years) has been assigned to the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

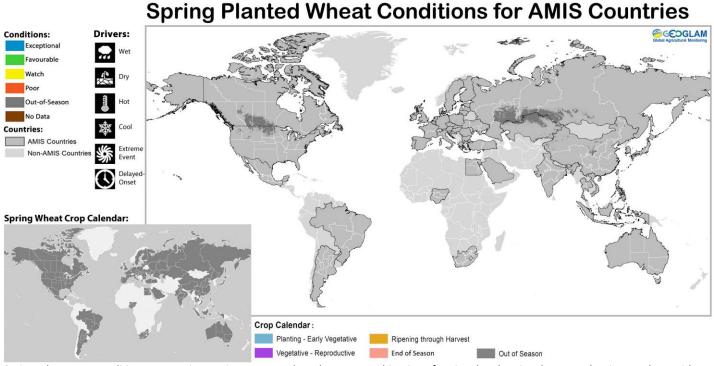
* Assessment based on information as of February 28th



Appendix 2: Crop Season Specific Maps

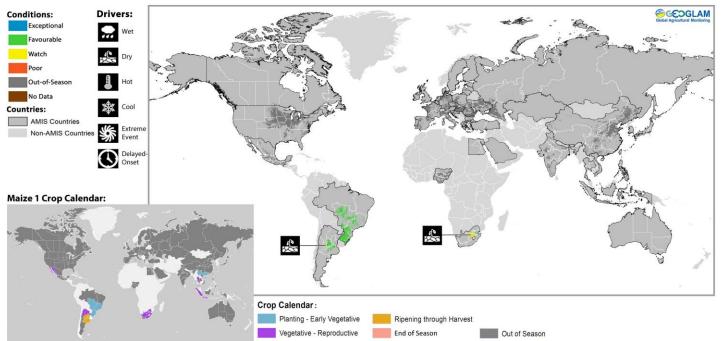


Winter wheat crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of February 28th. Where crops are in less than favourable conditions the climatic drivers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



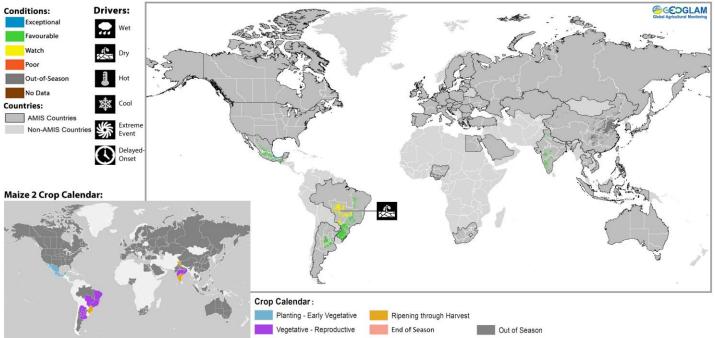
Spring wheat crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of February 28th. Where crops are in less than favourable conditions the climatic drivers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

Winter Planted Wheat Conditions for AMIS Countries



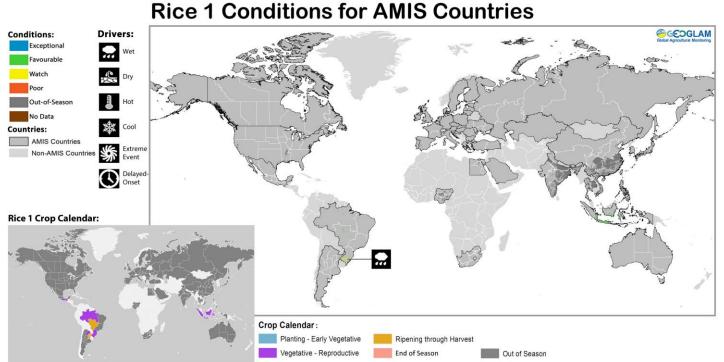
Maize 1 Conditions for AMIS Countries

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 February 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.

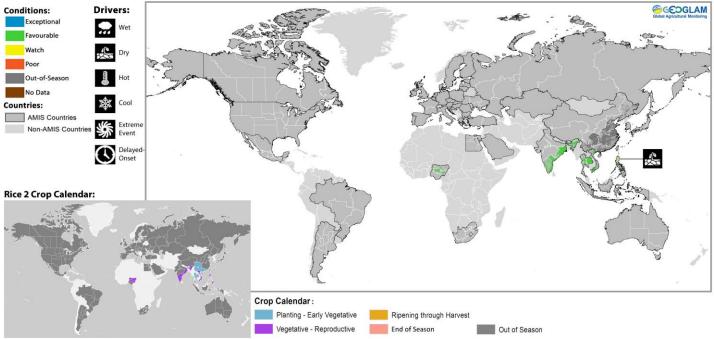


Maize 2 Conditions for AMIS Countries

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 February 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.



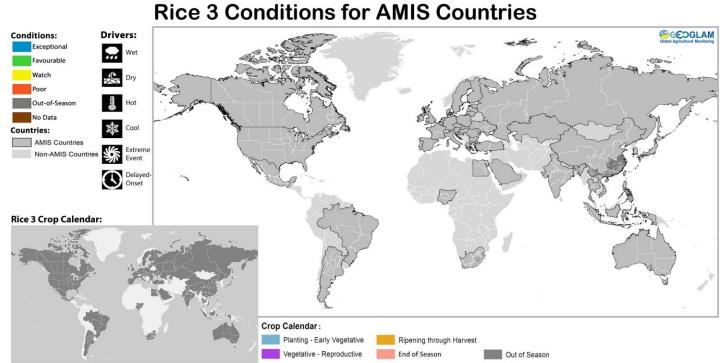
Rice 1 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of February 28th. Where crops are in less than favourable conditions the climatic drivers responsible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



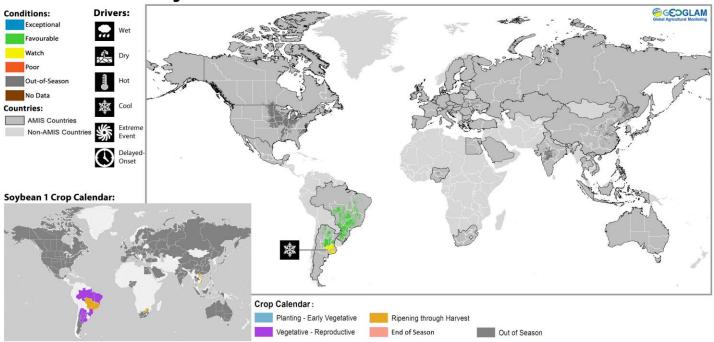
Rice 2 Conditions for AMIS Countries

Rice 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 February 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 February 28th



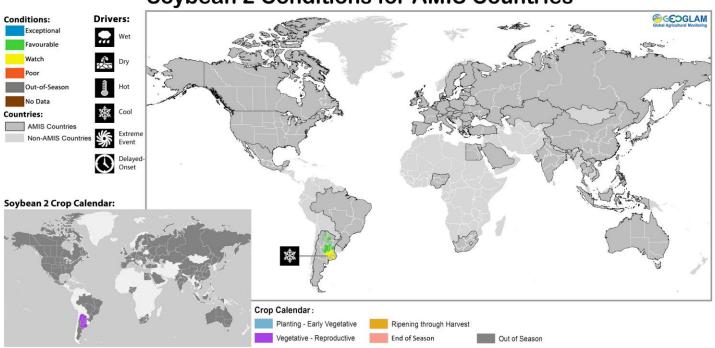
Rice 3 crop conditions over main growing areas are based upon a combination of national and regional crop analyst inputs along with earth observation data. Condition information is based upon information as of February 28th. Where crops are in less than favourable conditions the climatic drivers responsible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

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 February 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 February 28th



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 February 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 2 Conditions for AMIS Countries



Prepared by members of the GEOGLAM Community of Practice Coordinated by the University of Maryland with funding from NASA Harvest Climatic update by Climate Hazards Center 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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