Overview:
As of the end of August, soybean conditions are favourable while wheat, maize, and rice conditions are mixed. Winter wheat in the northern hemisphere has wrapped up with further reduced yield prospects in the EU and Ukraine. While spring wheat conditions are favourable with the exception of Canada. For maize in the southern hemisphere, the summer-planted crop in Brazil finishes up with a good national production despite lower yields. In the northern hemisphere, conditions are mixed in Europe and exceptional in the US. Rice in China and India are favourable while in Southeast Asia conditions are mixed. Soybean conditions are exceptional in US Midwest and mostly favourable throughout the rest of the northern hemisphere.
Conditions at a glance for AMIS countries (as of August 28th)

Crop condition map synthesizing information for all four AMIS crops as of August 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 harvest has wrapped up with further reduced yield prospects in the EU and Ukraine. Spring wheat harvest is ongoing in the northern hemisphere, with favourable production prospects across the major growing regions, with the exception of Canada where there is some concern due to persistent hot and dry conditions. In the southern hemisphere, winter wheat conditions are favourable in most growing regions, with the exception of eastern Australia where prolonged dry conditions are significantly impacting yield prospects.

**Maize** - In the southern hemisphere, the season is mostly over. Harvest of the summer-planted crop in Brazil is wrapping up, with reduced yield prospects in parts of the country due to dry conditions. However, total national production remains above the five-year-average, owing in part to increased area. In the northern hemisphere, conditions are mixed, with dry conditions impacting yield prospects in northern Europe, Canada, and the Russian Federation. Exceptional conditions are observed in the Midwest of the US and in southeastern Europe.

**Rice** - In China and India, conditions are favourable. In Southeast Asia, the wet-season is ongoing with mixed conditions in the Philippines due to typhoon damage, and in parts of Thailand, due to floods. In Indonesia, sowing of dry-season rice is progressing slowly due to dry conditions.

**Soybeans** - In the northern hemisphere, the US is experiencing exceptional growing conditions in the main producing regions, with record yields forecast in many areas. Conditions are favourable across China, India, and Ukraine, while there is some concern in Canada due to hot and dry conditions.

**El Niño Update**

Current ENSO conditions are neutral. Models indicate that a weak to moderate strength El Niño may develop during the northern hemisphere 2018 fall season and be present through the northern hemisphere 2018-19 winter (60-70% chance). This event is forecast to be substantially weaker than the most recent El Niño in 2015-16. Should El Niño materialize, normal to above normal rains could occur in Central Asia, southern North America, southeastern South America, and East Africa. Normal to drier than normal conditions could occur in Central America, Caribbean, northern South America, Southern Africa, the Maritime Continent, and Australia.

* Assessment based on information as of August 28th
Wheat Conditions for AMIS Countries

Wheat: In the EU, harvest wrapped up under mixed conditions. Hot and dry weather across northern and central Europe impacted final yields in these regions, while the season completed favourably in the rest of Europe. In Ukraine, harvest completed under favourable conditions for most of the country with the exception of the southern region, where hot and dry conditions reduced yields. In the Russian Federation, winter wheat harvest is nearing completion under favourable conditions. National yields are within the five-year-average, despite the hot and dry conditions, which affected some growing areas during the season. Spring wheat conditions are favourable as harvest begins. Yields are expected to be lower than last year while production is expected to be higher due to an increase in sown area. In Kazakhstan, spring wheat conditions are favourable, with good yield prospects in most of the north-central region. In the US, spring wheat conditions are favourable as harvest nears completion. In Canada, spring wheat conditions are mixed across the prairies due to hot and dry conditions. As a result, early harvested yields are highly variable. In Australia, production prospects continue to deteriorate in New South Wales, Queensland, and parts of South Australia and Victoria as recent rainfall is likely to have arrived too late to benefit failing winter crops. Generally, average rainfall over the rest of the country has benefited crop development, with Western Australia experiencing exceptional growing conditions. In Argentina, sowing is completed under favourable conditions.

* Assessment based on information as of August 28th
Maize Conditions for AMIS Countries

Maize: In Brazil, harvest of the summer-planted crop (larger) is nearing completion under generally poor conditions due to lack of rainfall during the critical reproductive stage. While overall yields are down, total national production remains above the five-year-average in part owing to the increase in planted area, as well as the lower impact of negative climatic conditions in the main producing state of Mato Grosso. In the US, conditions are exceptional in the core producing US Midwest and are favourable throughout much of the remaining areas. Crop maturity is overall ahead of schedule and harvest will begin soon with record yields expected in many areas. In Canada, conditions are mixed due to prolonged high temperatures and low soil moisture. In Mexico, sowing of the spring-summer crop is nearing completion with a notable increase in total sown area expected. In China, conditions are generally favourable and the crop is in the flowering and maturing stages. In India, sowing is completed and the crop has progressed well into the tasseling and silking stage in most states. In the EU, conditions are mixed due to extreme hot and dry conditions that impacted crops in northern Europe. By contrast, conditions in southeastern Europe are favourable to exceptional. In Ukraine, crops in central and western areas are in exceptional condition while conditions in southern and eastern areas remain favourable.

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

* Assessment based on information as of August 28th
Rice Conditions for AMIS Countries

Rice: In China, conditions are generally favourable with single-season rice reaching maturity. In India, Kharif rice is under favourable conditions with transplanting completed across the majority of areas. In Indonesia, sowing of dry-season rice continues slowly into the fifth month due to below-average rainfall and minor drought damage in Java. Harvest has begun in early sown plots with higher yield expectations relative to last year. In Viet Nam, summer-autumn rice (wet-season rice) is under favourable conditions with a slight reduction in total sown area in the south. Harvest is slightly delayed due to rainstorms, but has begun in some southern provinces. In Thailand, continuous and heavy rainfall in the northeastern region has caused some flooding. Outside the flooding area, the wet-season rice is under generally favourable conditions with a slight increase in total sown area. In the Philippines, wet-season rice conditions are mixed due to continued adverse weather conditions over the past month, including four tropical cyclones. Damage is particularly noted in Luzon and some parts of Visayas. Impacts from these weather systems, earlier in-season damage, and delayed sowings, have led to a reduction in estimated harvested area and final yields. In the US, conditions are favourable.

* Assessment based on information as of August 28th
Soybean Conditions for AMIS Countries

Soybeans: In the US, the crop is favourable in most of the country with exceptional conditions in the core producing US Midwest. Record yields are forecast in many areas, and there is potential for the areas with exceptional conditions to further expand. Dry conditions in lower producing states of Kansas and Missouri are the only cause for concern in the US. In Canada, conditions are mixed as crops across most of the country are starting to exhibit moisture stress due to above-average temperatures and poor soil moisture. However, at this time, crops are generally on track, and recent rains have replenished soil moisture in the main producing province of Ontario. In China, conditions are generally favourable, with the crop in flowering stage in central China and in pod filling stage in the northeast of the country. In India, sowing is complete, and the crop has progressed well into the flowering and pod formation stages in most states. In Ukraine, conditions remain favourable as the crop matures ahead of schedule owing to recent high temperatures and adequate soil moisture.

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 August 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.

<table>
<thead>
<tr>
<th>Country</th>
<th>Crop</th>
<th>Season 1 Name</th>
<th>Season 2 Name</th>
<th>Season 3 Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>Soybean</td>
<td>Spring-planted</td>
<td>Summer-planted</td>
<td></td>
</tr>
<tr>
<td>Brazil</td>
<td>Maize</td>
<td>Summer-planted (larger producing season)</td>
<td>Spring-planted (smaller producing season)</td>
<td></td>
</tr>
<tr>
<td>Canada</td>
<td>Wheat</td>
<td>Winter-planted</td>
<td>Spring-planted</td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>Maize</td>
<td>Spring-planted</td>
<td>Summer-planted</td>
<td>Late Crop</td>
</tr>
<tr>
<td>China</td>
<td>Rice</td>
<td>Intermediate Crop</td>
<td>Early Crop</td>
<td></td>
</tr>
<tr>
<td>Egypt</td>
<td>Rice</td>
<td>Summer-planted</td>
<td>Spring-planted</td>
<td></td>
</tr>
<tr>
<td>India</td>
<td>Maize</td>
<td>Kharif</td>
<td>Rabi</td>
<td></td>
</tr>
<tr>
<td>India</td>
<td>Rice</td>
<td>Kharif</td>
<td>Rabi</td>
<td></td>
</tr>
<tr>
<td>India*</td>
<td>Soybean</td>
<td>Kharif</td>
<td>Rabi</td>
<td></td>
</tr>
<tr>
<td>India</td>
<td>Wheat</td>
<td>Rabi</td>
<td>Kharif</td>
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</tr>
<tr>
<td>Indonesia</td>
<td>Rice</td>
<td>Main-season</td>
<td>Second-season</td>
<td></td>
</tr>
<tr>
<td>Mexico</td>
<td>Maize</td>
<td>Spring-planted</td>
<td>Autumn-planted</td>
<td></td>
</tr>
<tr>
<td>Nigeria</td>
<td>Maize</td>
<td>Main-season</td>
<td>Short-season</td>
<td></td>
</tr>
<tr>
<td>Nigeria</td>
<td>Rice</td>
<td>Main-season</td>
<td>Off-season</td>
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<td>Philippines</td>
<td>Rice</td>
<td>Wet season</td>
<td>Dry season</td>
<td></td>
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<tr>
<td>Russian Federation</td>
<td>Wheat</td>
<td>Winter-planted</td>
<td>Spring-planted</td>
<td></td>
</tr>
<tr>
<td>Thailand</td>
<td>Rice</td>
<td>Wet season</td>
<td>Dry season</td>
<td></td>
</tr>
<tr>
<td>United States</td>
<td>Wheat</td>
<td>Winter-planted</td>
<td>Spring-planted</td>
<td></td>
</tr>
<tr>
<td>Viet Nam</td>
<td>Rice</td>
<td>Wet season</td>
<td>Dry season</td>
<td></td>
</tr>
</tbody>
</table>

* Assessment based on information as of August 28th
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 August 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

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 August 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 August 28th
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 August 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 August 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 August 28th
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 August 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 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 August 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 August 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 August 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 August 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 August 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 August 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.
Prepared by members of the GEOGLAM Community of Practice
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Climatic update by Climate Hazards Group of UC Santa Barbara

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Photo courtesy of: Bolsa de cereales

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