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European Commission

JRC MARS Bulletin

Crop monitoring in Europe

April 2025

A dry March casts doubt on good prospects in north-eastern Europe

Yields in Türkiye challenged by cold spells and drought

Across Europe, two distinctly different situations are observed. In central and northern Europe, dry conditions predominate, resulting in soil moisture deficits that may adversely affect winter crop development. In contrast, southern Europe has benefited from abundant rainfall, which has improved soil moisture and boosted crop yield prospects.

Sowing is progressing across the EU, with spring barley and sugar beet sowing almost complete in many countries, while maize and sunflower sowing are under way. In central and eastern Europe, a combination of cold spells and recent rain delayed the sowings of spring and summer crops. In general, while dry conditions were welcome for the sowing, additional rainfall is now required to support crop emergence and initial growth.

The yield outlook remains fair in Europe, with Spain and Romania expecting above-average yields, while our forecast remains well below average in the western Maghreb region and eastern Ukraine due to the persistent dryness.

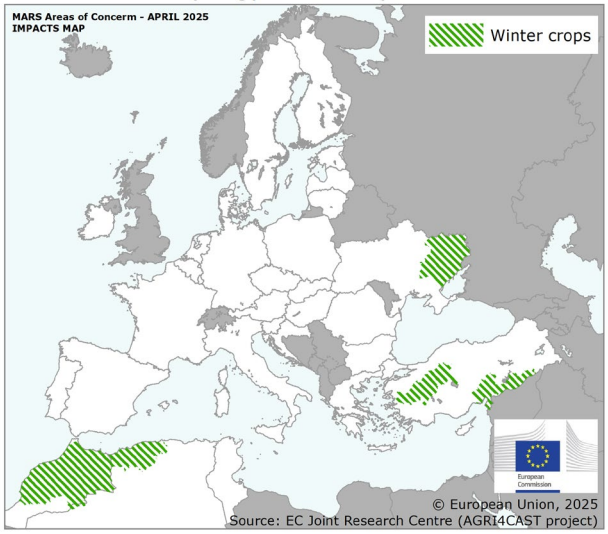
This month's bulletin features an extended section on Türkiye, where winter and spring crop development is challenged by cold spells and a lack of rainfall during the winter period, reducing the yield outlook.

Contents:

Covers the period from 1 March until 12 April

AREAS OF CONCERN - IMPACTS

Reporting period: until 12 April 2025



Crop	Yield t/ha				
	Avg 5yrs	March Bulletin	MARS 2025 forecasts	%25/5yrs	% Diff March
Cereals*	5.20	—	**5.46**	+ 5	—
Total wheat	5.55	5.80	**5.82**	+ 5	+ 0
Soft wheat	5.77	6.00	**6.03**	+ 5	+ 1
Durum wheat	3.43	3.70	**3.69**	+ 7	– 0
Total barley	4.76	5.06	**5.08**	+ 7	+ 0
Spring barley	4.66	4.87	**4.87**	+ 4	+ 0
Winter barley	4.81	5.15	**5.18**	+ 8	+ 1
Rye	4.22	4.27	**4.29**	+ 2	+ 0
Triticale	4.38	4.48	**4.51**	+ 3	+ 1
Rape and turnip rape	3.16	3.20	**3.20**	+ 1	+ 0

Issued: 22 April 2025

* Only the cereals specified in the table are included

Joint Research Centre

1. Agrometeorological overview

1.1 Areas of concern

Persistent dryness and elevated temperatures raise concerns across central and northern Europe

Dry conditions have been observed across large regions of central and northern Europe, including north-eastern France, the Benelux countries, Germany, Czechia, western and northern Poland, Denmark, Sweden, Finland and the Baltic states. All these regions are experiencing a rainfall deficit of at least 50 % compared with the average, and, for most of them, the analysis period ranks among the driest since 1991. These dry conditions are coupled with above-average temperatures boosting evapotranspiration, leading to accelerated crop development, but also to the depletion of soil moisture. Although the dry period initially allowed a recovery from the excessively wet winter conditions, further rain is now essential to avoid any reduction in yield expectations.

Dry conditions raise concerns in eastern Romania, north-eastern Bulgaria and Türkiye

In eastern Romania and north-eastern Bulgaria, the lack of precipitation – only 60 % of the long-term average (LTA) since 1 March – is becoming a concern. Winter cereals are approaching the flowering stage, while rapeseed is already flowering, and rainfall is needed to sustain optimal growth.

In Türkiye, the rainfall in April was insufficient to mitigate the water deficit observed since the start of February. In several regions, particularly where irrigation is limited, winter cereals had suboptimal growth.

Cold spells and wet conditions delay sowing in parts of central and eastern Europe

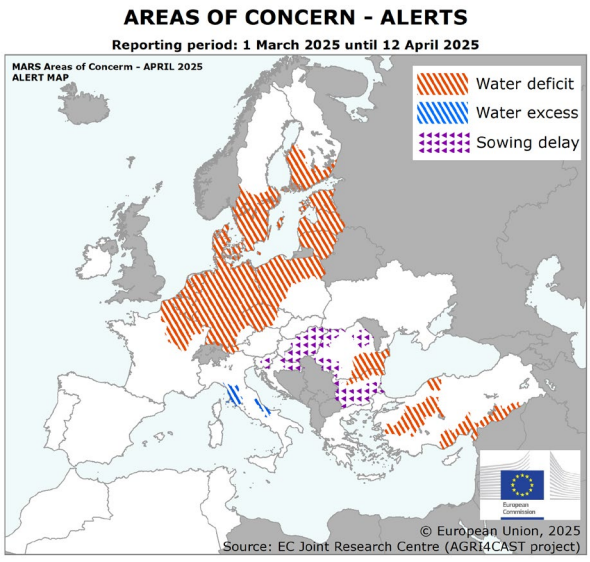
In central and eastern Europe (Hungary, Slovenia, Croatia, western and eastern Romania and southern Bulgaria) a combination of two cold spells and wet weather from mid March to early April delayed the sowing of spring and summer crops. However, the sowing window is still open, and field activities are expected to continue in April.

Excessive soil moisture may hinder winter crop development in parts of Italy

In central Italy, some regions experienced excessive precipitation in March and April, resulting in overly wet soils. The development of winter crops could be adversely affected if the wetter-than-usual conditions continue.

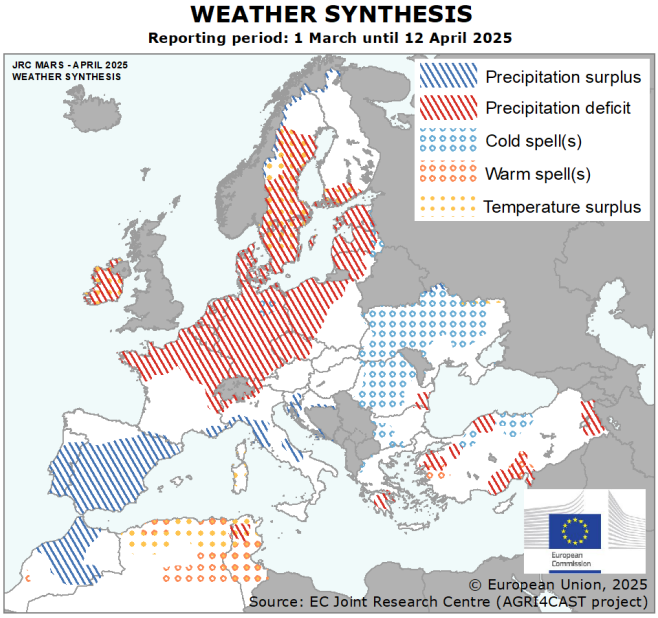
Winter crop season remains poor in western Maghreb and eastern Ukraine

The impacts observed in the western Maghreb region and in eastern Ukraine are the result of a dry winter period causing unfavourable growing conditions for winter crops. In both regions, winter crops are performing poorly, with below-average yield expectations.



1.2 Meteorological review (1 March - 12 April)

Drier-than-usual mostly in northern and north-western regions, contrasted with wetter-than-usual conditions in south-western Europe; unusual intrusion of cold air from the Arctic into eastern Europe and the Balkans.



The weather synthesis map summarises, for the countries covered in the bulletin, the most distinct anomalies during the reporting period compared with the 1991–2024 long-term average (LTA) for the same period. Precipitation deficit and surplus are unusual absolute and relative deviations from the LTA, considering the entire reporting period. Cold and warm spells are periods of at least five days with temperatures below the 10th and above the 90th percentile, respectively, for the years since 1991. The weather indicator maps provide further context for each event.

A **precipitation deficit** was observed in most of northern Europe, including the North European Plain, and in parts of central and western Europe, and regionally in eastern Romania, parts of Türkiye, southern Greece and northern Tunisia. In Ireland, most of Sweden and southern Finland, drier-than-usual conditions were accompanied by a **surplus in temperature accumulation**, which also affected northern Algeria and most of Tunisia, with distinct **warm spells** in the latter regions and locally in westernmost Türkiye.

A distinct **precipitation surplus** characterised most of the Iberian Peninsula, southernmost France, and parts of Italy and the western Balkans. In some of these regions, particularly Portugal and Spain, up to 15 days of precipitation exceeding the 5-mm daily threshold were observed, resulting in cumulative precipitation up to 150 % above the LTA.

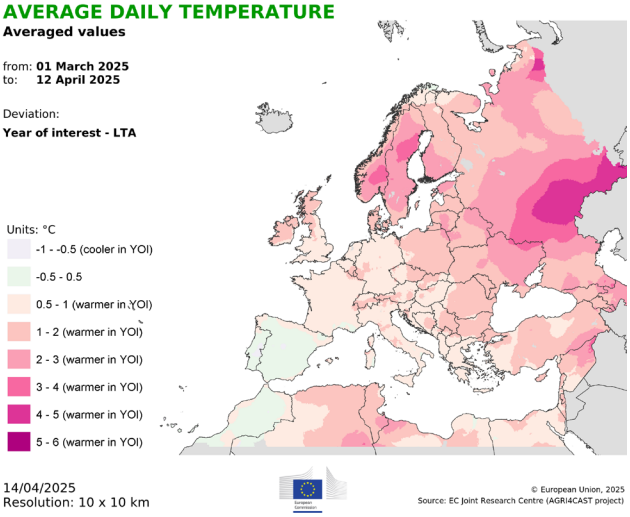
In early April, an intrusion of cold air masses from the Arctic led to abrupt **cold spells** in many regions of central and eastern Europe, and the Balkan peninsula, with snowfall in some areas, particularly between 6 and 9 April. In some of these regions, minimum daily temperatures dropped to – 10 °C (locally lower in the Carpathian Mountains) following an overall warmer-than-usual period, during which maximum daily temperatures reached 20 °C (locally more).

AVERAGE DAILY TEMPERATURE

Averaged values

from: **01 March 2025**
to: **12 April 2025**

Deviation:
Year of interest - LTA

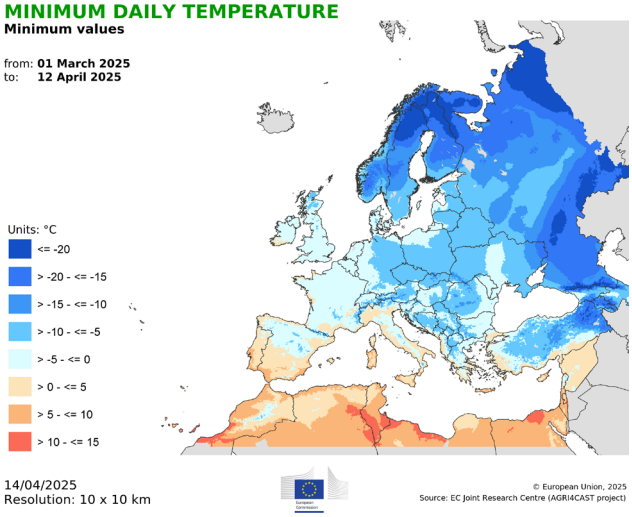


14/04/2025
Resolution: 10 x 10 km

MINIMUM DAILY TEMPERATURE

Minimum values

from: **01 March 2025**
to: **12 April 2025**

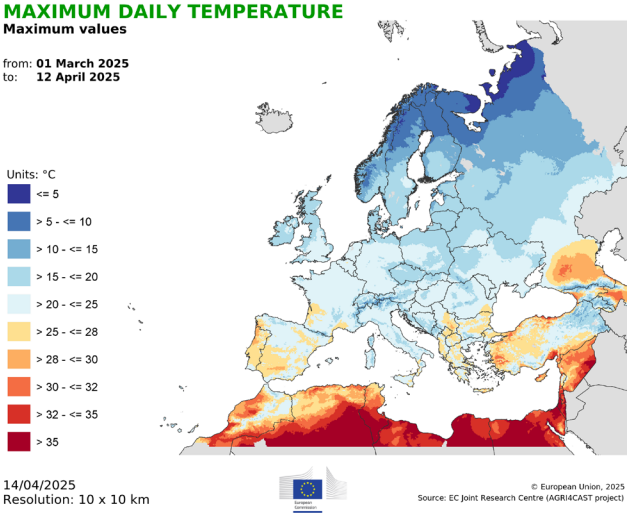


14/04/2025
Resolution: 10 x 10 km

MAXIMUM DAILY TEMPERATURE

Maximum values

from: **01 March 2025**
to: **12 April 2025**

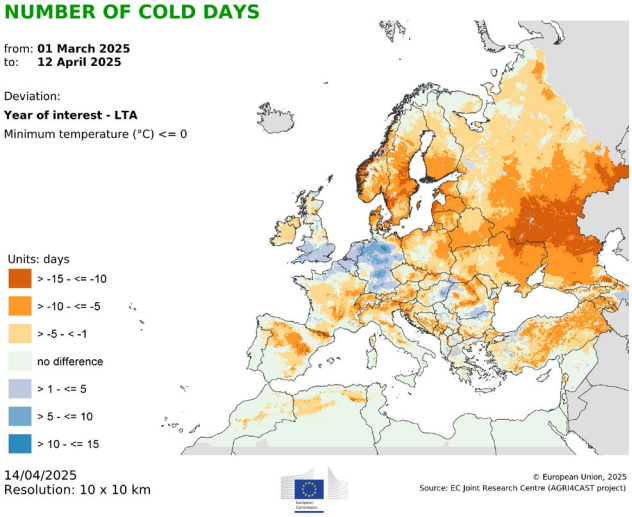


14/04/2025
Resolution: 10 x 10 km

NUMBER OF COLD DAYS

from: **01 March 2025**
to: **12 April 2025**

Deviation:
Year of interest - LTA
Minimum temperature (°C) <= 0



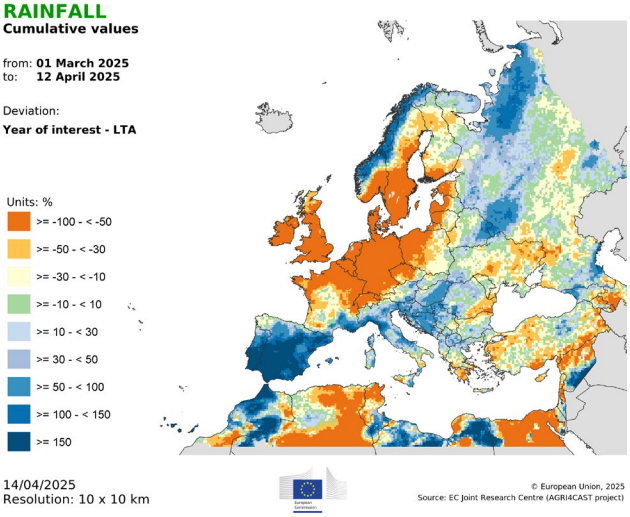
14/04/2025
Resolution: 10 x 10 km

RAINFALL

Cumulative values

from: **01 March 2025**
to: **12 April 2025**

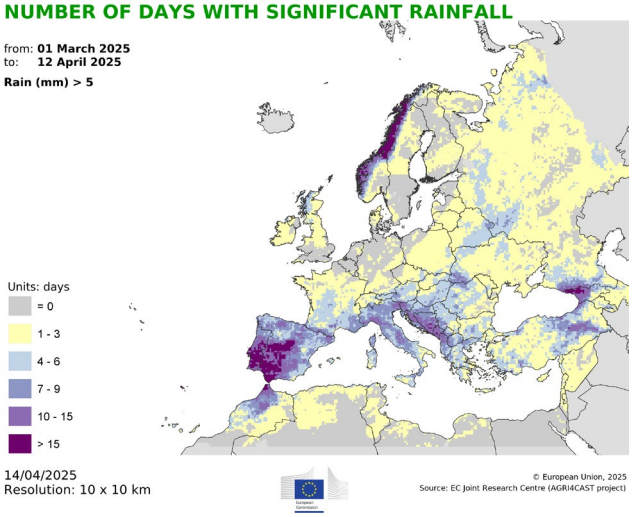
Deviation:
Year of interest - LTA



14/04/2025
Resolution: 10 x 10 km

NUMBER OF DAYS WITH SIGNIFICANT RAINFALL

from: **01 March 2025**
to: **12 April 2025**
Rain (mm) > 5



14/04/2025
Resolution: 10 x 10 km

1.3 Weather forecast (16 - 25 April)

Warmer-than-usual conditions are forecast for most of Europe, and colder-than-usual conditions for western regions and North Africa. A low-pressure system is bringing wet conditions, particularly to the central Mediterranean region.

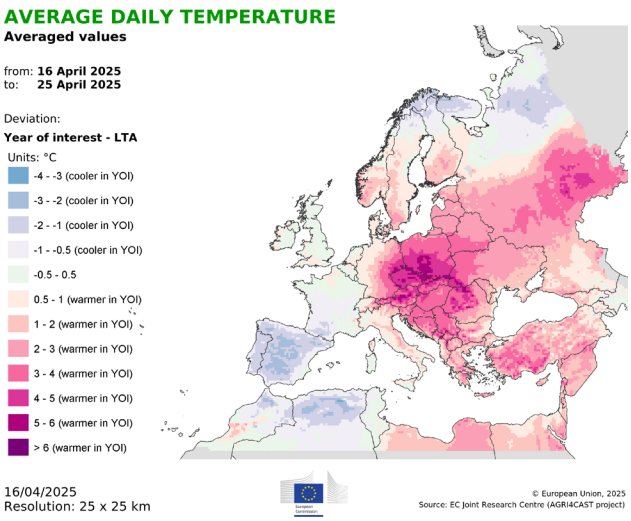
Warmer-than-usual conditions, with average daily temperatures up to 3 °C above LTA, are forecast for most of central, eastern and south-eastern Europe, with more substantial temperature anomalies (up to 6 °C above LTA) in southern Poland and neighbouring regions.

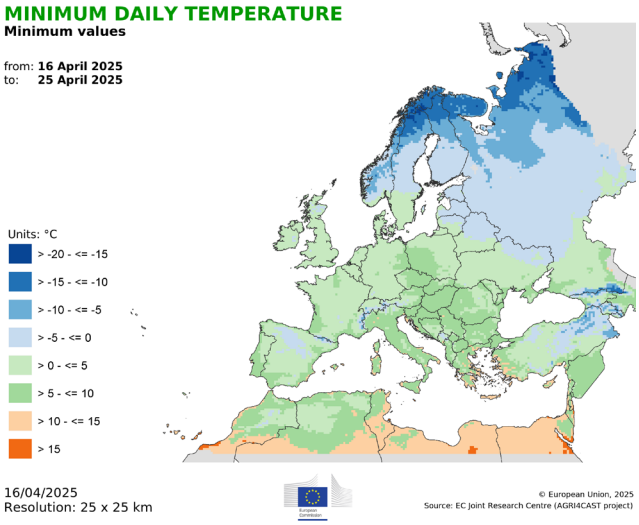
Colder-than-usual conditions are forecast in the Iberian peninsula and northern Morocco and Algeria, with average daily temperatures up to 3 °C (in most of France up to 1 °C) below the LTA. Minimum daily temperatures as low as – 1 °C are forecast in northern Spain, the Alps region, parts of central and eastern Türkiye, Scandinavia, the Baltic Sea region and north-eastern Ukraine.

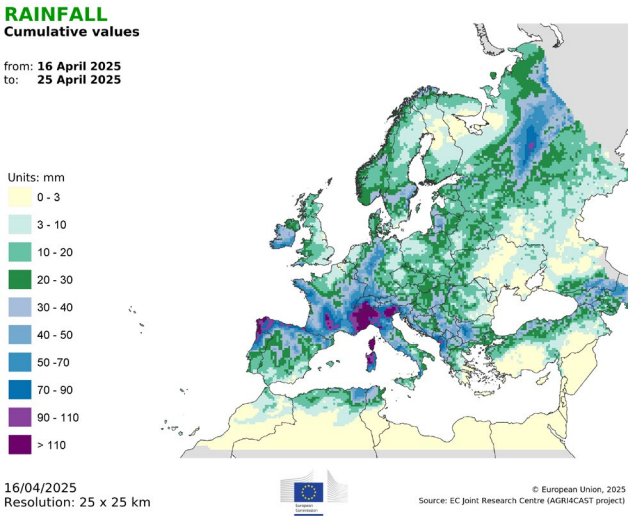
Wet conditions (precipitation above 30 mm and up to 70 mm) are forecast in most of western and central Europe, the Baltic countries, the Balkan peninsula and northern Türkiye. **Very wet conditions** (above 70 mm) are forecast in the northern Iberian peninsula, southern France and northern Italy, including *Corse* and *Sardegna*. In these regions, rainfall totals exceeding 110 mm are forecast, with 7–9 days with rainfall above 5 mm.

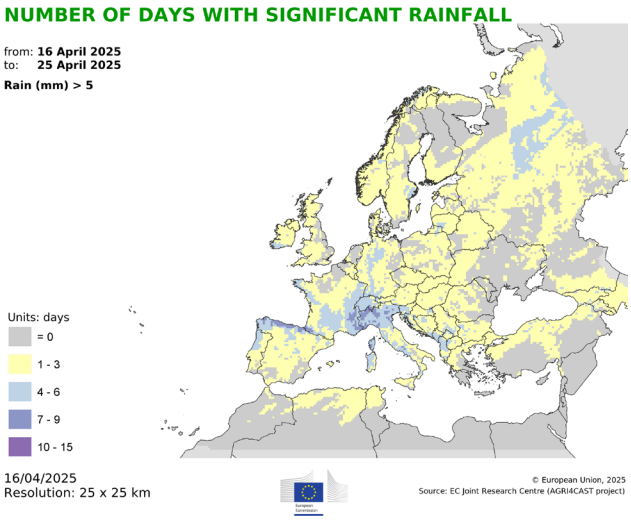
Dry conditions (total precipitation below 3 mm) are forecast for parts of central and southern Ukraine, most of southern Türkiye and Morocco.

The long-range weather forecast points to a moderate likelihood of warm conditions, exceeding the 24-year climatological median by up to 1 °C in most of Europe in May to July. Albeit with high uncertainty, precipitation is forecast to be up to 50 mm below average in the Iberian peninsula in May to June, extending to Italy and the Balkan peninsula in July.



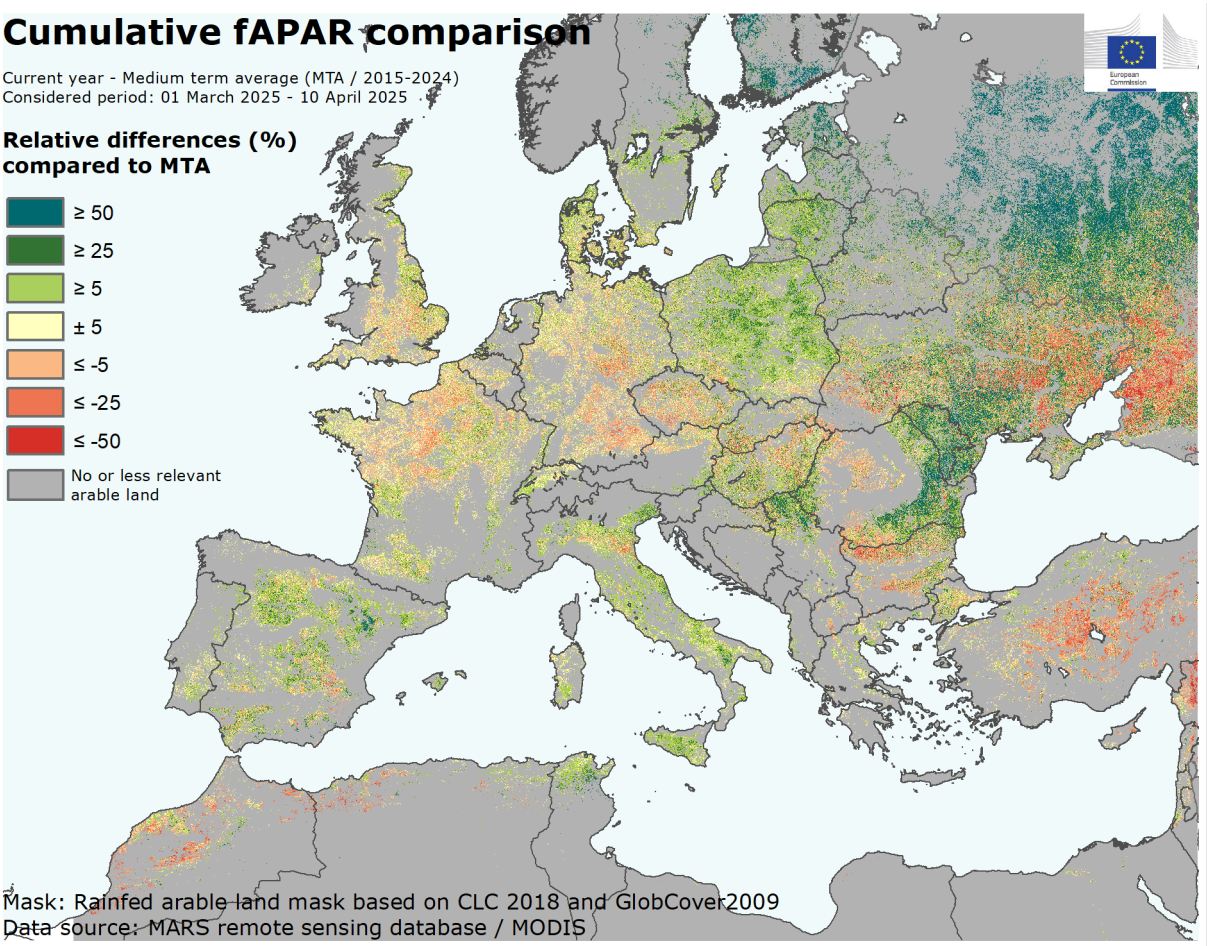






2. Remote sensing – observed canopy conditions

Contrasted spring onset reveals early crop concerns across Europe



The map displays the relative differences (in percentages) between the cumulative fraction of absorbed photosynthetically active radiation (fAPAR) from 1 March to 10 April 2025 and the medium-term average (MTA, 2015–2024) for the same period. Positive anomalies (in green) reflect above-average biomass or early crop development, while negative anomalies (in red) reflect below-average biomass or late crop development.

The map above shows predominantly winter crop conditions, with almost no contribution from summer crops to the remote sensing signal at this time of the season.

In the **Iberian Peninsula**, particularly in Spain, abundant rainfall since winter has fostered favourable conditions for crop growth, resulting in above-average biomass accumulation. Similarly, in southern **Italy** and in **Greece**, favourable growing conditions have led to a comparable increase in biomass accumulation.

In southern **France**, winter and spring crops continue to benefit from favourable conditions, with phenology either aligning with or slightly ahead of the MTA. In central and northern France, and in the **Benelux countries**, winter crop development is delayed due to the excessively wet conditions during the sowing campaign and weak root establishment. The dry conditions observed in March are not yet reflected in the remote sensing signal, so a further deterioration of the fAPAR is expected.

In **Germany**, northern **Austria** and **Czechia**, dry conditions have begun to hamper the green-up of winter crops, causing delays in development. In contrast, **Slovakia** and **Hungary** display biomass signals close to the average, indicating fair conditions.

Poland and the **Baltic states** have benefited from favourable winter conditions, resulting in above-average biomass accumulation. Although it is still very early in the season, green-up in these regions appears slightly advanced compared with the MTA. In **Denmark** and **Sweden**, the green-up is just commencing, in line with the MTA.

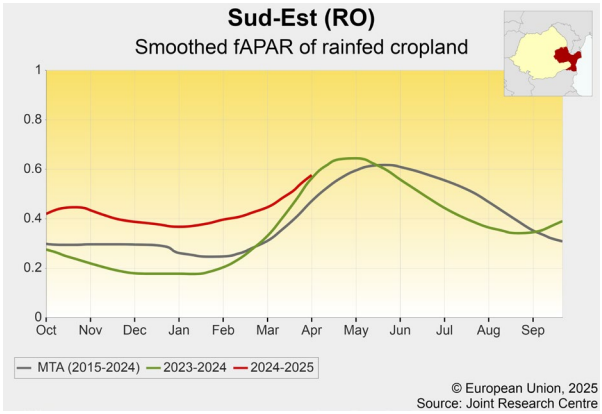
In **Romania**, favourable winter conditions in the northern and eastern regions have provided positive growing conditions. Conversely, the south-west of Romania and

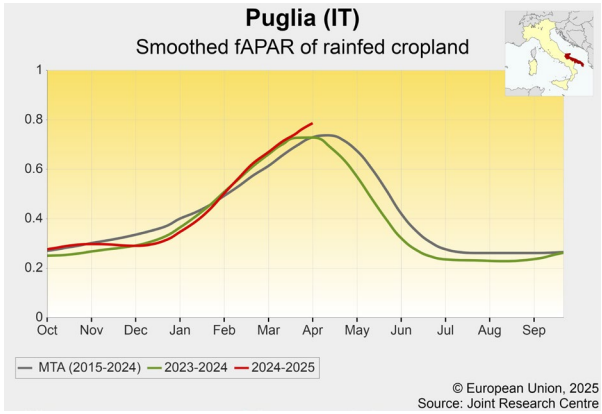
central and eastern parts of **Bulgaria** have been affected by dry conditions since winter, resulting in reduced winter biomass accumulation and delayed spring green-up.

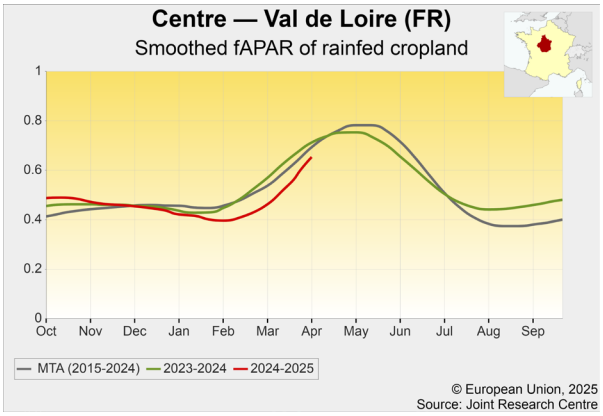
In western **Ukraine**, conditions remain positive, thanks to sufficient rainfall during winter. However, in the eastern regions, persistent rain deficits have significantly affected crop development, leading to negative anomalies in biomass accumulation.

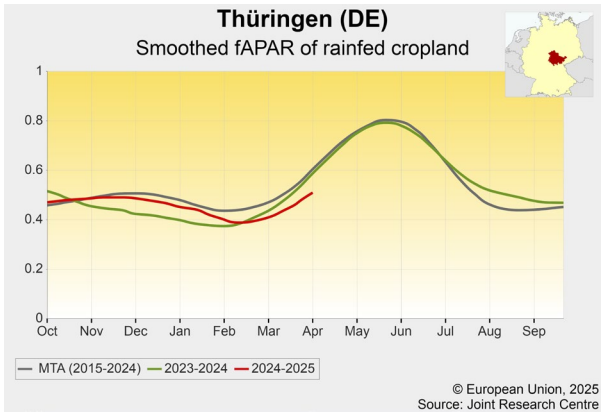
In **Türkiye**, dry and cold conditions have delayed the green-up of cereals, resulting in below-average crop growth.

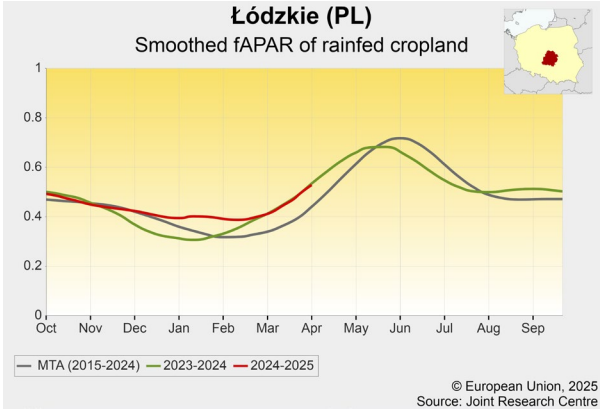
The **Maghreb** region is experiencing another challenging season. Prolonged dry conditions in **Morocco** have severely hampered crop recovery. Rainfall contributing to vegetation green-up arrived too late in most winter-cereal-producing regions to enable a meaningful recovery. However, decent yields may still be achievable in the north-west, where rainfall totals have been close to the MTA. In **Tunisia**, conditions have been more favourable thanks to abundant rainfall, supporting crop growth and biomass accumulation.

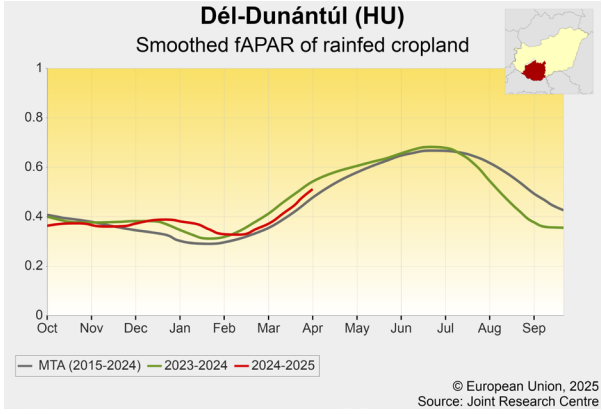








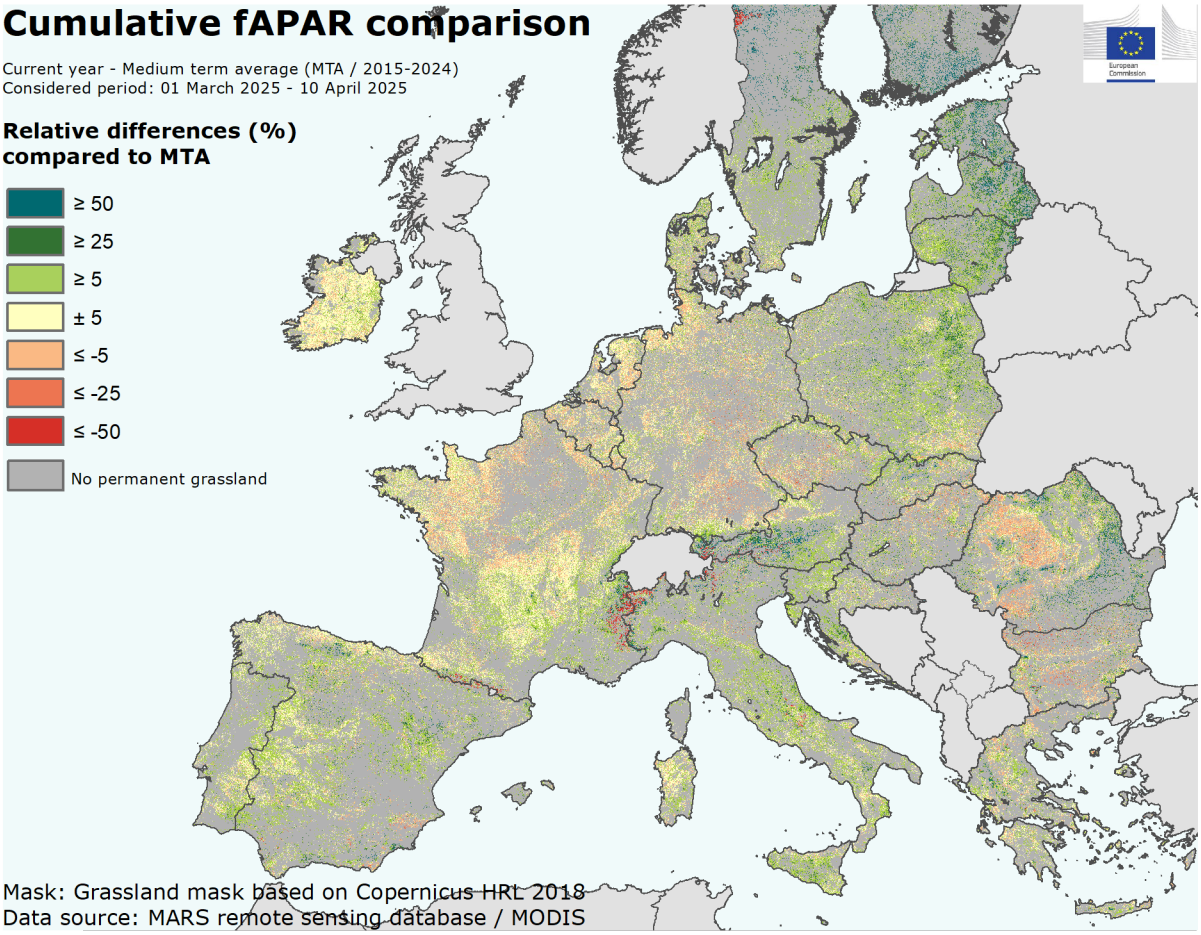




3. Grassland and fodder monitoring

Good overall start to the growing season with some delays in the north-west

Grasslands are in a fair to good state in most of the EU. In northern Europe, the rainfall deficit did not compromise growth on a large scale. In south-eastern countries, such as Hungary or western Romania, scarce rainfall and a cold spell locally reduced the biomass accumulation to below-normal levels.



A rainfall deficit has persisted since the beginning of March in most of northern Europe, while temperatures were above average during the reporting period. In the **Baltic states**, **Finland**, **Sweden**, **Denmark**, **Poland**, **Slovakia** and **Czechia**, above-average biomass accumulation confirms that grassland growth has restarted early thanks to the warmer-than-usual temperatures and resulting early snowmelt. However, recent precipitation deficits are drying out the soils, and additional rain is required to maintain the beneficial growth conditions. In **Ireland**, the **Benelux countries**, **Germany**, and parts of **Czechia** and **Austria**, average to late growth onset is meeting dry soils, with a limited effect on the fAPAR and biomass accumulation so far. A slight delay in regrowth is still observed in northern **France**, where grasslands are still recovering from overly wet conditions at the beginning of the year. In and around mountainous areas, the signal is mixed, because snow is still limiting the interpretability of the remote sensing signal at this time of the year.

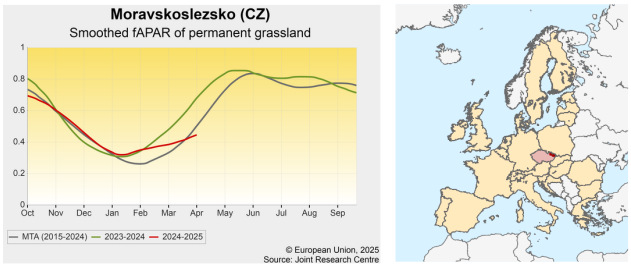
In **Hungary**, mild temperatures and abundant rainfall were beneficial for the phenological onset of grasslands, but frost in early April slowed down the development. In **Slovakia** and western **Romania**, productivity is currently improving but remains below average. In **Bulgaria** and eastern **Romania**, photosynthetic activity is now slightly above average, benefiting from sufficient rainfall and/or mild temperatures.

Conditions are predominantly good in southern Europe, despite local concerns linked to excessive wetness or below-average temperatures. In southern **France** and in **Spain**, temperatures were close to or slightly below average, and, despite heavy rainfall in Spain, productivity is in line with the average. A positive pattern is also

reported for **Italy** and **Greece**, although below-average temperatures are expected to reduce the growth rate in northern Italy. In **Slovenia** and **Croatia**, productivity is above normal, but the abundant rainfall and mild temperatures observed during the reporting period may slow down the growth.

Czechia

Reference period: 01 Mar to 10 Apr 2025

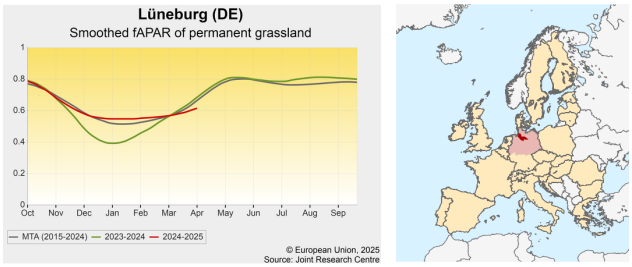


BULLETIN ISSUE

	APR	MAY	JUN	JUL	AUG	SEP	OCT
RAINFALL							
TEMPERATURE							
RADIATION							

Germany - North

Reference period: 01 Mar to 10 Apr 2025

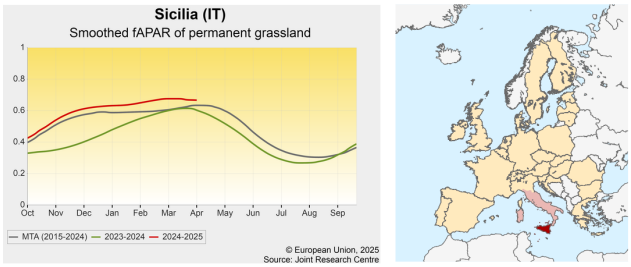


BULLETIN ISSUE

	APR	MAY	JUN	JUL	AUG	SEP	OCT
RAINFALL							
TEMPERATURE							
RADIATION							

Italy - Center, South and Islands

Reference period: 01 Mar to 10 Apr 2025

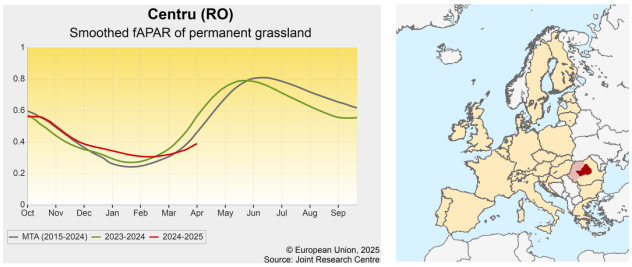


BULLETIN ISSUE

	APR	MAY	JUN	JUL	AUG	SEP	OCT
RAINFALL							
TEMPERATURE							
RADIATION							

Romania - West and Center

Reference period: 01 Mar to 10 Apr 2025



BULLETIN ISSUE

	APR	MAY	JUN	JUL	AUG	SEP	OCT
RAINFALL							
TEMPERATURE							
RADIATION							

4. Sowing conditions

Spring barley – sowing nearly complete across Europe, rain now needed in many areas

In **France**, sowing progressed rapidly and was completed by mid March despite a slow start caused by wet conditions during winter. Dry weather in March supported crop emergence and development, and conditions are currently favourable, with crops reaching the tillering stage. In the **Benelux countries**, sowing proceeded smoothly in good weather conditions since mid February. In **Spain**, sowing was completed by February after some initial delays due to early-year rains, and crops are overall in good condition.

Thanks to the favourable conditions up to early April, sowing progressed well and is mostly complete in **Ireland**, **Germany**, **Austria**, **Czechia** and **Slovakia**, while it started seamlessly in **Denmark** and **Sweden**. However, soil moisture levels are now declining across these countries, and additional rainfall will be necessary in the coming weeks to support crop emergence and early development.

In the **Baltic Sea region**, warmer-than-usual weather enabled an early start, especially in **Lithuania** and **Latvia**, although soil moisture is now suboptimal, and rain will be needed. In **Finland** and **Estonia**, sowing should have just started, and only marginal areas have been planted so far.

In **Poland**, sowing is assumed to be complete after the overall dry and mild conditions in March, although the continued rainfall deficit could negatively affect emergence. In **Hungary** and **Romania**, sowing is nearly finished; it progressed well thanks to the dry topsoil, with recent rains facilitating emergence and early development.

Sugar beet – fair start to the season in most parts, rain needed in central Europe

In **France**, **Germany**, **Belgium** and the **Netherlands**, thanks to the warm temperatures and the relatively dry soil conditions, sowing of sugar beet started a little earlier than usual this year, at the beginning of March, in the hope of achieving higher yields with a lengthened season. The sowing campaign is expected to conclude in mid to late April.

In central Europe, the sowing conditions were optimal, and sowing started on schedule in the last dekad of March. However, the cold spell that hit **Germany**, **Austria**, **Czechia**, **Poland**, **Hungary** and **Romania** at the beginning of April delayed the completion of sowing and may have locally caused some damage to the seedlings. In addition, these countries have faced a long-lasting water deficit and need more rain in the coming weeks to provide fair conditions for emergence and early development. Similarly, in the **Baltic states**, where soil moisture was favourable for sowing, more rain is needed.

Further south, sugar beet sowing in **Spain** was completed by January in *Andalucía*. In *Castilla y León*, the country's main producing region, heavy rain delayed a significant portion of the sowing originally scheduled for March and early April. The sown area in Spain this season may decrease from previous years due to farmers' strategy of shifting towards more profitable crops. In **Italy**, the sowing campaign started at the beginning of March but was slowed down due to excess soil water. It was, however, concluded with good expectations thanks to the dry weather period at the end of March.

Grain maize – sowing under way or about to start across Europe, with some delay due to weather conditions

In April, the grain maize sowing campaign is expected to have begun or to be approaching initiation in many countries. In **Italy** and **Greece**, sowing is halfway through and conditions for emergence are favourable. The sown area in Greece may be larger than last year. Suitable weather and soil conditions also enabled a swift start to the campaign in **France**. In the **Benelux countries**, **Germany** and **Poland**, sowing is expected to begin during the second half of April, although some fields in western Germany have started ahead of schedule. In **Austria** and

Czechia, sowing has just started, but more rain is needed to sustain growth, as the soil water content is below average after a dry winter and start of spring. In southern **Portugal** and southern **Spain**, frequent and abundant rainfall during March delayed field operations. The sowing was postponed and will now commence simultaneously with the northern regions. In **Romania**, **Hungary**, **Slovenia** and **Croatia**, the sowing campaign was initially delayed due to excessive rainfall and soil wetness in March. Following a slow onset, the campaign was halted there and in **Bulgaria** in early April by a cold spell. However, in those countries, the time window for maize sowing is open until early May, which provides enough time for its completion. Finally, sowing has started in **Ukraine** as expected.

Sunflowers – slightly advanced sowing progress in western Europe, but moderate delay in eastern Europe

Sparse precipitation supported the start of the sowing campaign in **France**, where the field work is currently progressing well thanks to dry topsoils. However, a prolonged rainfall deficit could affect negatively crop emergence and development.

In southern **Germany**, **Austria**, **Czechia** and **Slovakia**, the sowing campaign is just starting and still sporadic. In **Poland**, the soil is still too cold for the sowing of sunflowers.

In **Hungary** and **Croatia**, the sowing campaign started in the last dekad of March in some places, but progress was hampered firstly by the abundant rain in the last dekad of March and later, around 7 April, by a cold wave. In **Romania** and **Bulgaria**, sowing started on time from the third dekad of March onwards thanks to warm temperatures, but precipitation from late March and a drop in temperatures, with frost events in the first dekad of April, slowed it down. The area sown with sunflowers is expected to increase in **Romania**, **Bulgaria**, **Hungary** and **Croatia** this year.

In southern **Spain** (*Andalucía*), sunflower sowing started in February in good conditions. However, heavy rain throughout March hampered progress. In *Castilla y León* and *Castilla-La Mancha* (the main producing regions), the sowing campaign is expected to begin in April with some delay due to over-wet topsoil conditions. In **Italy**, weather and soil conditions are currently favourable in all regions for a timely sowing campaign. In northern **Greece**, cold weather delayed the sowing, similarly to Bulgaria. Regarding **Ukraine**, sowing just started in the southern and south-western oblasts in the first dekad of April.

Potatoes – overall good progress

The sowing progress of potatoes across Europe is heterogeneous, advanced in some countries while delayed or normal in others. Among the large potato producers, field work progressed rapidly in **Germany** and the **Netherlands**, where favourable weather conditions have prevailed since the end of February. Dry conditions in March also permitted a slightly early start of the sowing campaign in **France** and **Poland**. However, while the recent dryness since mid February was favourable for field operations, the persistent rainfall deficit may cause issues with emergence and early development due to depleted soil moisture, especially in **Poland**, **Germany**, **Denmark** and the **Netherlands**. In contrast, countries such as **Portugal** and **Spain** are experiencing a rainfall surplus that is hampering field operations and causing delays in the sowing campaign. Meanwhile in **Romania**, the potato sowing started on schedule, but is now halted due to low temperatures, and the frost in early April may have caused damage to early potato seedlings. Some countries such as the **Netherlands** and **Spain** are reporting an increase in planted area compared with 2024.

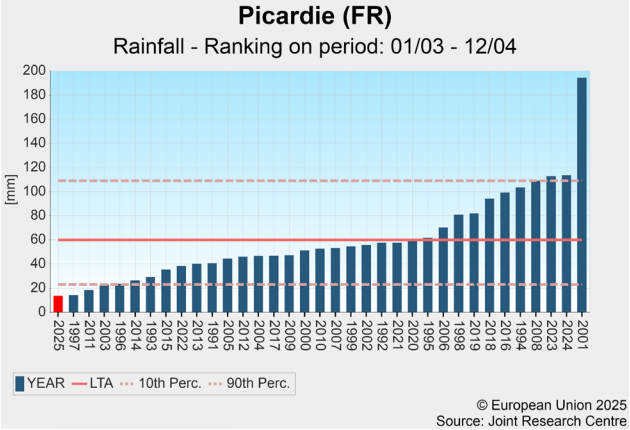
5. Country analysis

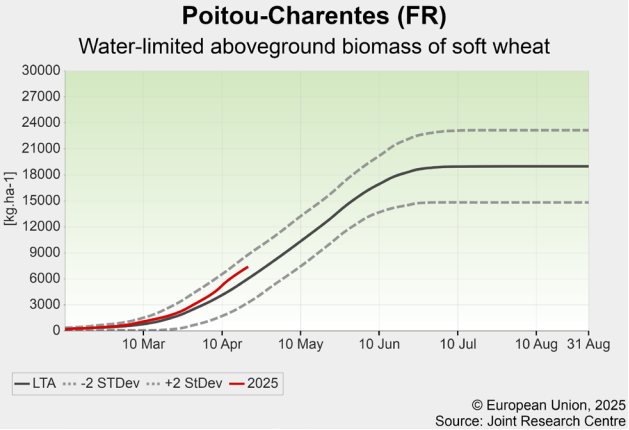
5.1 European Union

France – some concerns in the north

Significantly drier-than-usual conditions prevailed during the reporting period in the northern regions and helped winter crops to recover from a prolonged period of excessive rainfall during winter that resulted in insufficiently developed root systems. However, if these dry conditions continue, the yield potential for winter and spring crops could become compromised. In contrast, crops are in good condition in southern France, thanks to mild temperatures and adequate soil moisture. Winter cereals are progressing into the mid-vegetative phase, consistent with the LTA. The overall outlook for winter crops was slightly revised down but remains around the five-year average. Rainfall patterns in the coming weeks will be crucial, particularly in the north.

Spring barley sowing concluded by mid March without any delay, in favourable dry weather and with sufficient soil moisture. Meanwhile, the sowing of summer crops commenced in late March, ahead of the typical timeline, aided by conducive dry conditions.

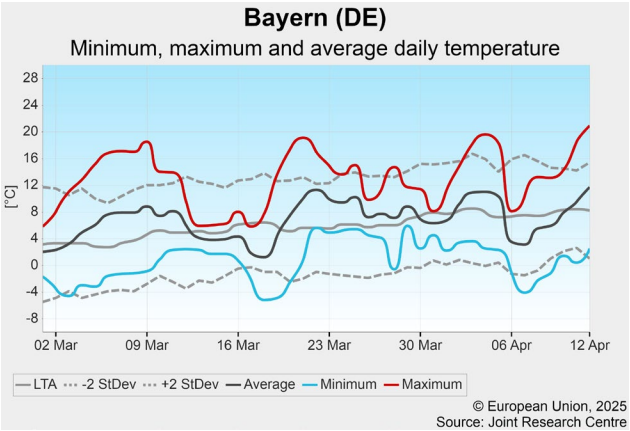


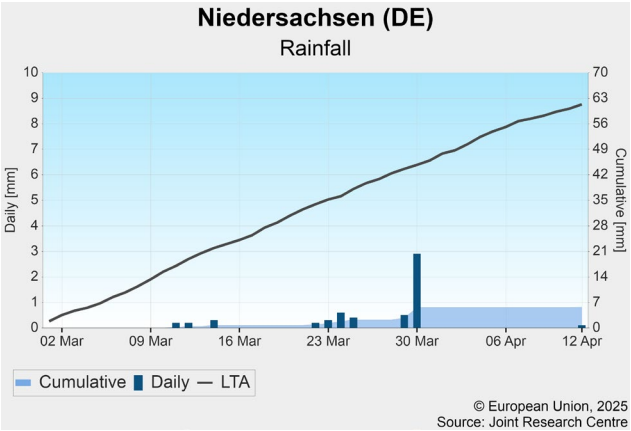


Germany – lack of rainfall depleting soil moisture

The reporting period was characterised as the driest March on record, with a continued absence of rain in early April, which heavily dried up soils, especially in northern Germany. On the other hand, the lack of rainfall was very beneficial for field preparation and the rapid conclusion of the spring barley and wheat sowing. Sugar beet and potato sowings are ahead of schedule too, and will conclude in April, while the sowing of other summer crops has just started. The sowing campaign was interrupted by a colder period in mid April that had no major impacts on cereals but may have caused local damage to early-sown sugar beet seedlings. At the same time, the cold period slowed down diseases, especially in rapeseed, which is currently flowering. Altogether, all crops need substantial rainfall in the coming weeks to sustain beneficial growth conditions.

Given the early stages of crop development, we have kept our forecasts based on historical trends.



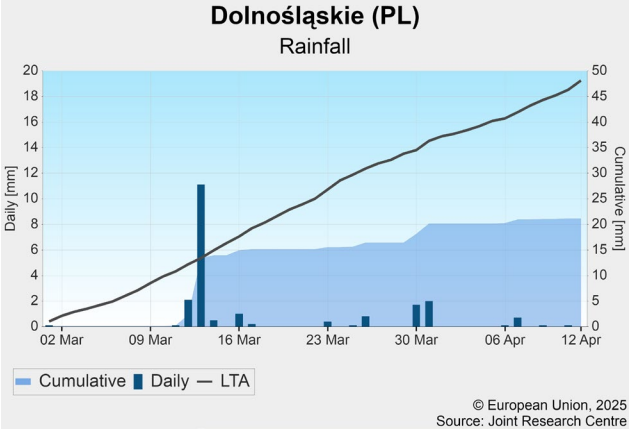


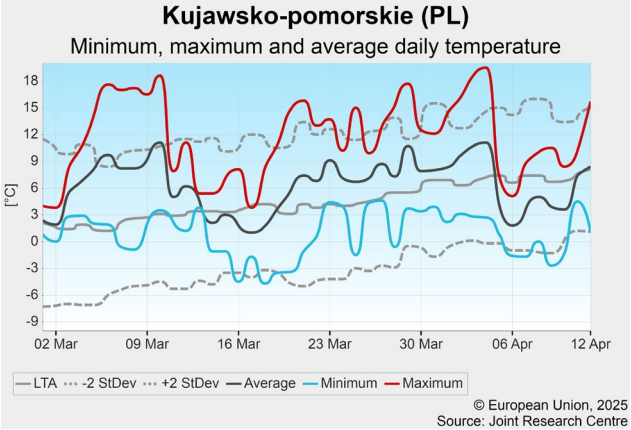
Poland – rainfall needed to sustain crop development

Mild weather throughout March with daily average temperatures constantly up to 4 °C above the LTA presented favourable conditions for boosting the vegetative development of winter crops and for a timely start to, and an abundant time window for, the spring crops sowing campaign, despite the relatively cooler-than-usual temperatures in the first dekad of April.

The observed water deficit during the reporting period is not expected to have had a negative impact on crops so far. Rainfall was 20 % to 50 % below the LTA in the central and eastern parts (*Łódzkie*, *Mazowiecki regionalny*) and 50 % to 80 % below the LTA in the north-western regions (*Lubuskie*, *Zachodniopomorskie*), resulting in further depleted soil moisture compared with the previous month. Now rainfall is needed to avoid a deterioration of the yield potential and to provide adequate growth conditions for spring and summer crops.

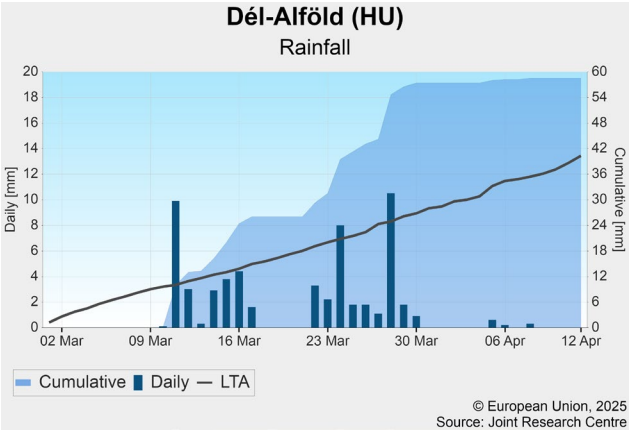
Considering the early stage of the season, our crop yield estimates remain consistent with historical trends.

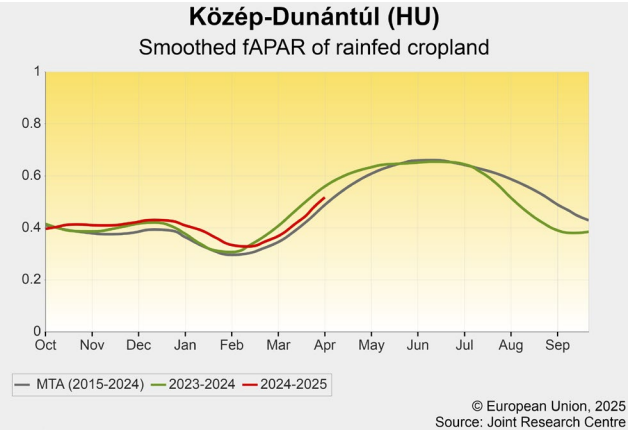




Hungary – promising winter crops, but delays in sowing

A mild March and early April supported the early regrowth of winter crops. Abundant rainfall after 10 March significantly improved the topsoil moisture, from which winter crops clearly benefited. Despite the cold spell between 5 and 10 April, crop development remains advanced by about one week. Remote sensing imagery indicates above-average photosynthetic activity. The cold spell in the first dekad of April with temperatures between - 4 and - 8 °C caused damage locally to rapeseed stands which were just before flowering, and to cereal leaves. Flowering orchards also suffered considerable damage. The sowing of spring barley was completed on time, with favourable March precipitation supporting crop emergence. However, the sowing of sugar beet and sunflower was delayed by the rainfall and cold soil conditions of early April. Nonetheless, the sowing window remains open. Yield forecasts for winter crops are moderately optimistic, but remain close to the seasonal trend at this early stage of the cropping season.



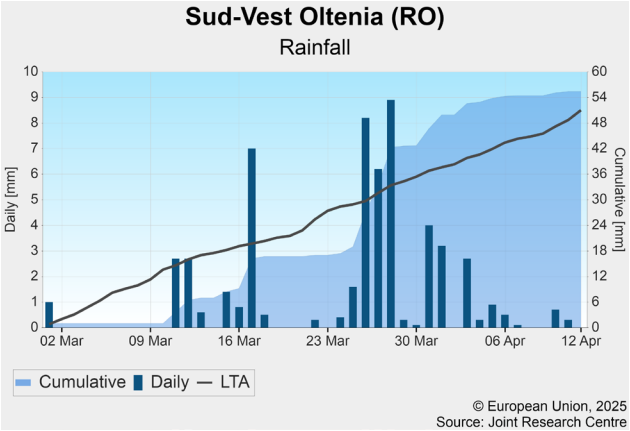


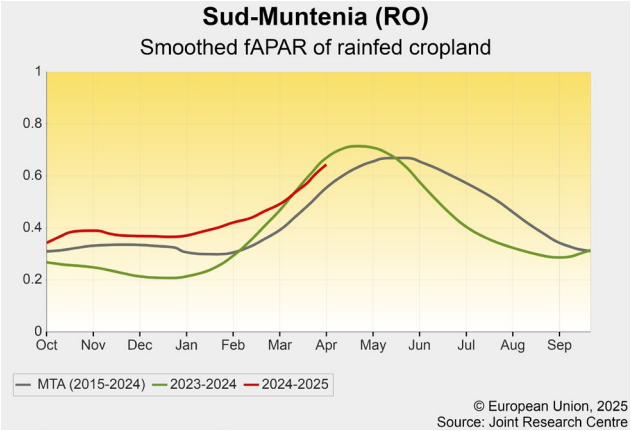
Romania – winter crops in good shape

During our review period (1 March to 12 April), above-average temperatures predominated, supporting the regrowth of winter crops and accelerating their phenological development. Around 20 March and 10 April, two cold spells with minimum temperatures of – 3 °C and – 8 °C caused frost damage locally, primarily to rapeseed and fruit trees (buds, flowers), but wheat and barley (foliar apparatus) were also affected sporadically.

After a dry winter, precipitation since mid March has been providing an adequate water supply for winter crops. Only some regions in the south-east remained drier than usual. Biomass accumulation and canopy expansion are remarkably high, particularly in the south and east. Satellite information confirms the positive expectations; therefore, our yield forecasts for winter crops were increased to above the trend level.

Dry and mild weather conditions in early March facilitated good progress of the spring barley sowing campaign, but the following rainfall and cold spell delayed the start of the sowing of sunflower and maize and slowed down the sowing of sugar beet and potatoes.



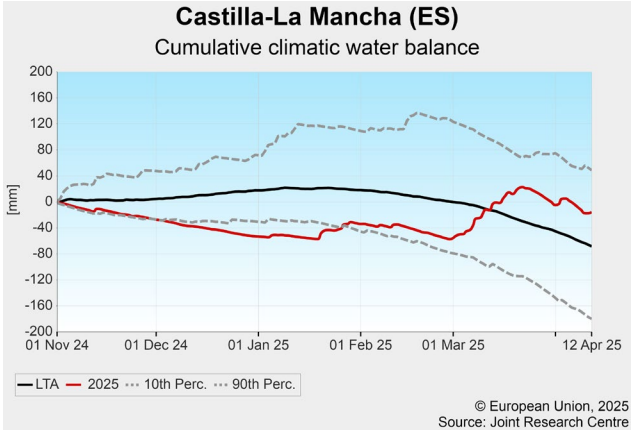


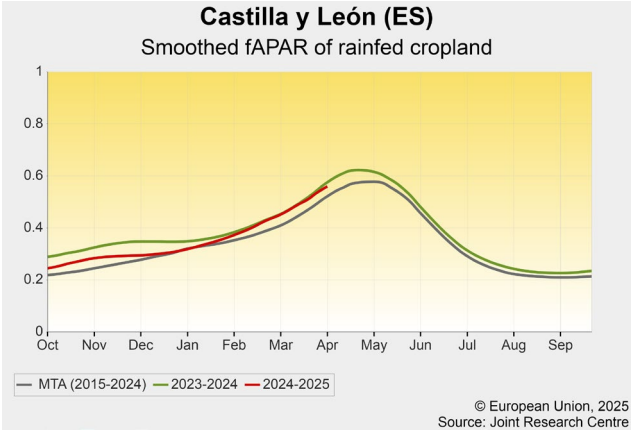
Spain and Portugal – overall benefits from March rainfall

Abundant rainfall prevailed during the review period, significantly improving soil moisture conditions across the Iberian Peninsula. This has generally had a positive impact on both winter and summer crops prospects, while also replenishing water reservoirs and securing irrigation supplies for the upcoming summer crop campaign.

Cooler-than-average temperatures during the first half of the reporting period were offset by warmer conditions in the second half, enabling crops to continue their development without delay. Crops are expected to benefit from vigorous growth in the coming weeks, although under increased disease pressure. Biomass indicators derived from our model simulations and satellite observations remain above average. As a result, winter crop yield forecasts have been revised slightly upwards, and are now estimated at 5–10 % above the five-year average in both countries.

Although excessive soil moisture delayed some summer crop field operations, they can still be completed within an appropriate time frame, given favourable weather conditions in April.

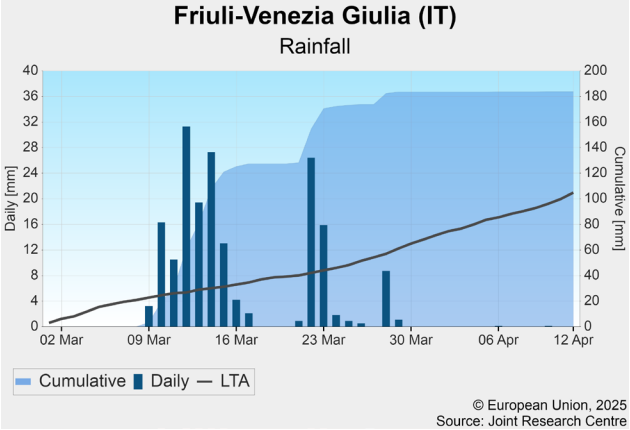


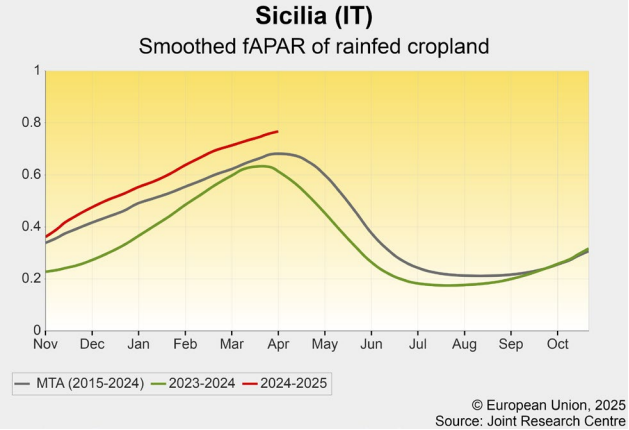


Italy – crops in favourable condition despite wet spring

In northern Italy, warm temperatures from 20 March onwards and dry conditions in April supported the favourable development of winter crops and enabled a timely start of the summer crop sowing campaign. However, persistently wet and overly wet soils (e.g. in *Friuli-Venezia Giulia*) could cause suboptimal growing conditions, especially if the forecast rainfall in the coming week materialises. In the central regions, winter crops have recently developed well, thanks to the dry and warm weather in April. Most crops are in the heading stage, except in *Toscana,* where abundant rainfall in March (120 mm, > 120 % of the LTA) significantly slowed down their development. In southern Italy, well-distributed precipitation has led to good growing conditions, confirmed by biomass indicators that show above-average values (e.g. in *Sicilia*). Crops are nearing flowering, with good yield expectations.

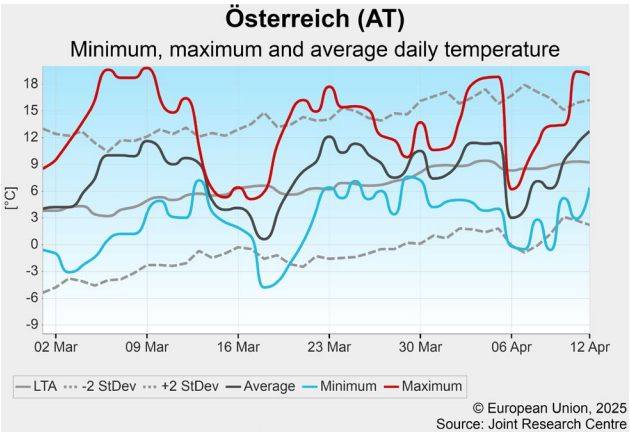
At the country level, our yield forecasts for winter cereals remain well above the last year value.

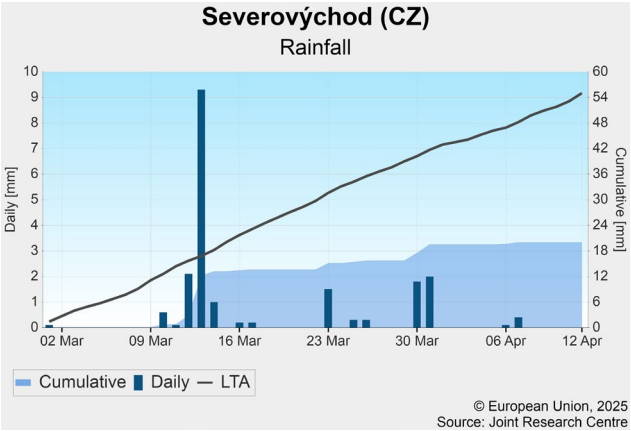




Czechia, Austria and Slovakia – winter crops in fair condition, more rain needed

A few rainy days in March partially mitigated the long-lasting rainfall deficit, but cumulative rainfall remains significantly below the LTA, especially in western and central Czechia. After a relatively early break of dormancy, due to mild conditions in early spring, the winter crops' growth has been hampered by the low rainfall totals and a cold spell in the first dekad of April. Cloud-free days and relatively dry soils were favourable for sowing spring crops in good conditions in March. To date, the spring barley sowing campaign has been completed, with sugar beet and potatoes to follow in April. The recent showers partially supported the emergence of seedlings, but more rain is needed to secure the early development stages of spring and summer crops and to prevent the yield potential of winter crops from deteriorating. We maintain our forecasts aligned with the historical trends.

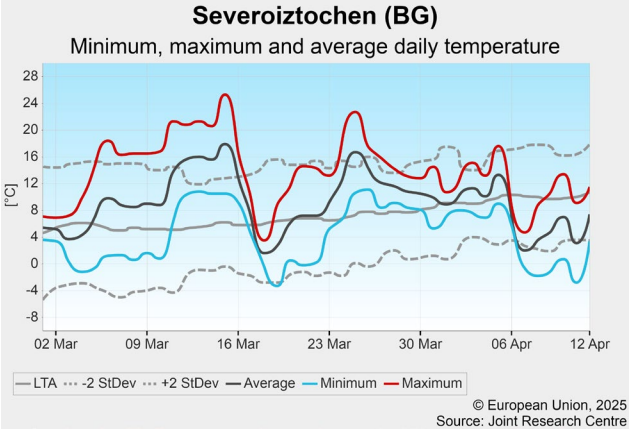


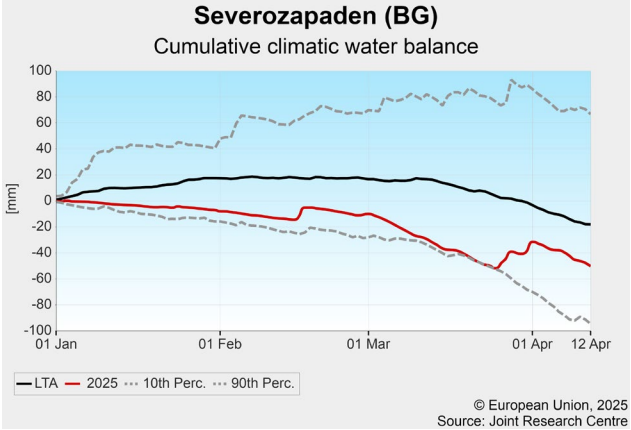


Bulgaria – beneficial rain for winter crops, sowing delayed by a cold snap

Warmer-than-usual conditions predominated, accelerating the phenological development of winter crops by 1–2 weeks. Soil moisture reserves were low due to the sparse precipitation since early January; however, rainfall from late March improved moisture content in the upper soil layers. As a result, the water supply for winter crops improved, but more rain will be needed to ensure sufficient moisture provision during the coming weeks. Satellite imagery indicates near- or slightly above-average biomass accumulation in the east, while values remain largely below normal in the west. The yield outlook for winter crops is close to the historical trend.

The sowing campaign for summer crops was hampered by rain in late March and a cold spell with unexpected snowfall in the first dekad of April; seeds already sown were delayed in sprouting and emergence. With increasing temperatures in the coming weeks, sowing is expected to accelerate again.

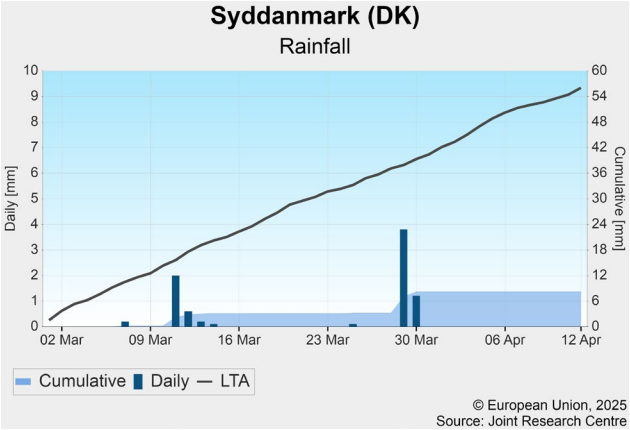


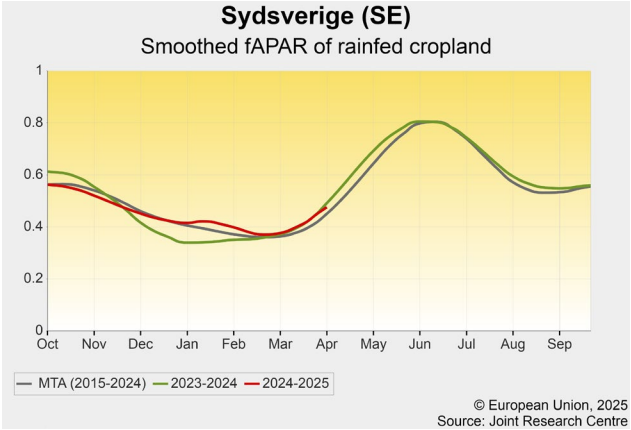


Denmark and Sweden – good start of season, but more rain needed

Temperatures were predominantly above normal during the review period, while rainfall was largely below the LTA, with deficits reaching as much as 80 % in *Syddanmark* or *Östra Mellansverige*. These conditions were favourable for the sowing campaign, which started approximately two weeks earlier than usual and progressed swiftly in Denmark and southern Sweden. Currently it is still ongoing in the central and northern producing regions of Sweden.

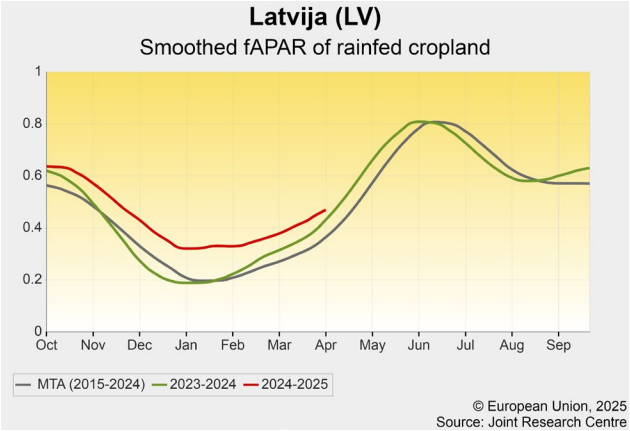
Winter and spring crops are expected to be in good condition, as underlined by our satellite data, with the fAPAR signal slightly above the MTA. Nevertheless, more rain is needed in the coming weeks to ensure the continued growth of winter crops and the emergence of the spring crops. This month, our crop yield forecasts are still based on historical trends.

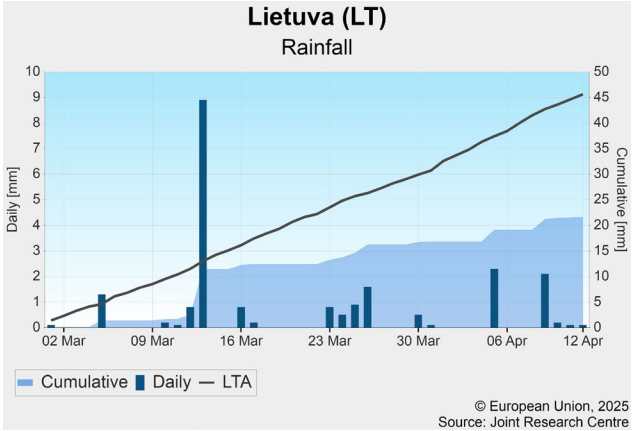




Estonia, Latvia, Lithuania, Finland - crops in good condition, but more rain needed

Precipitation was approximately 50 % below the LTA in all four countries, with some regional disparities. Temperatures were predominantly above average. These conditions were favourable for spring sowings, which are expected to have progressed rapidly. The satellite signal is largely above average, indicating an early onset of winter crops thanks to the mild conditions that prevailed throughout the winter and the reporting period. Although the current outlook is positive, more rain will be needed in the coming weeks to maintain the yield potential. The yield forecasts in April for all four countries still follow the historical trends.



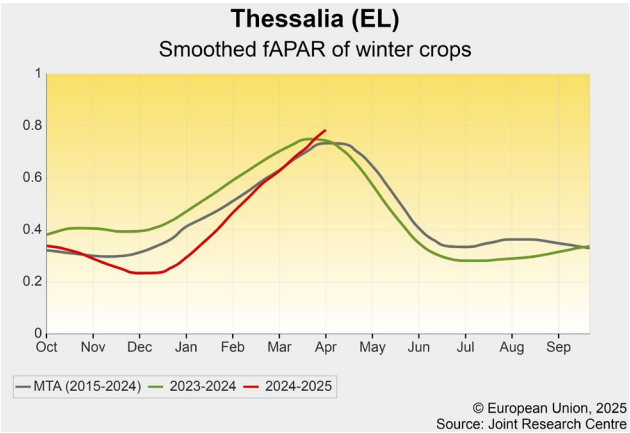


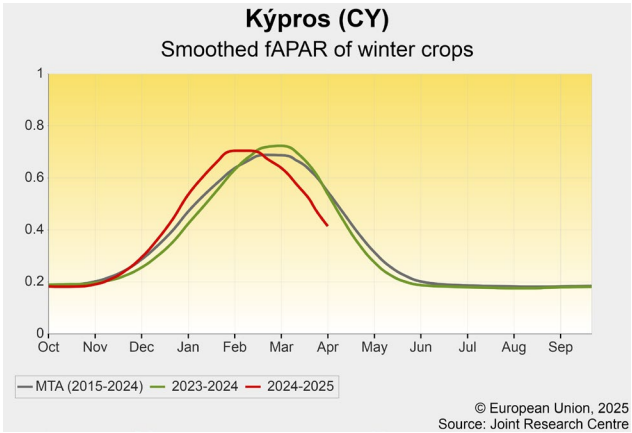
Greece and Cyprus – above-average yield outlook

In March, Greece experienced three cold spells, delaying the spring sowing campaign and causing serious damage to fruit trees ([1]) in some regions, including *Kentriki Makedonia*, *Dytiki Makedonia* and *Thessalia*. Winter crops, however, were hardly affected and have been showing a positive biomass accumulation in spring so far.

In Cyprus, satellite imagery shows biomass levels higher than the five-year average, probably due to the warmer-than-usual average daily temperatures in December and January, which accelerated crop growth. At the same time, the imagery also indicates early senescence of barley, marking the end of its growing season, caused by the cold spells, a rainfall deficit and a lack of irrigation water due to a recent failure at the *Mavrokolympos* dam in Paphos ([2]).

Our yield forecasts in April remain above the five-year average in both countries. The forecasts for summer crop yields are based on historical trends





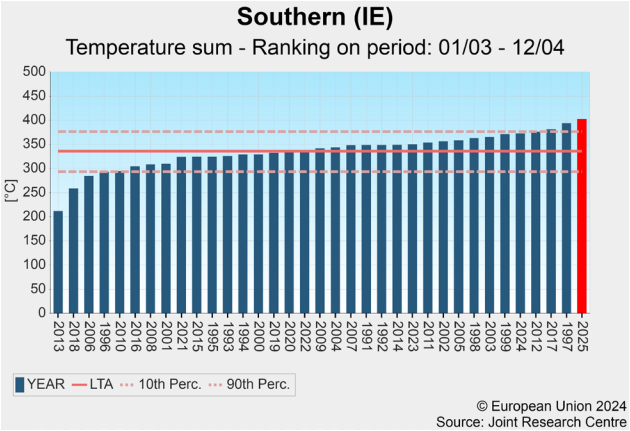
([1]) https://www.in.gr/2025/03/20/economy/agro-in/pagetos-katastrofes-se-dendrokalliergeies-kai-ampelia-se-apognosi-oi-agrotes/; https://www.ot.gr/2025/03/20/agro/pagetos-sovares-zimies-se-dendrokalliergeia-kai-ampelia-se-apognosi-oi-agrotes/.

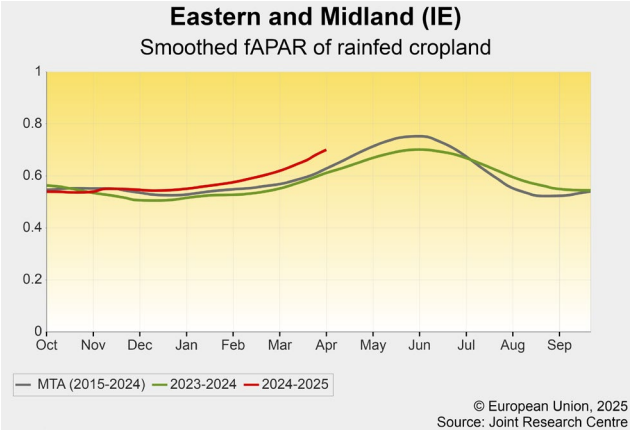
([2]) https://cyprus-mail.com/2025/01/20/massive-leak-at-mavrokolymbos-dam-authorities-pessimistic.

Ireland – promising start but rainfall needed

Mild and dry weather supported crop development throughout March and early April. Winter cereals and rapeseed benefited from timely field operations and favourable soil conditions for early growth. They are now well advanced in the tillering phase. During the reporting period, the highest temperature and radiation accumulation in our records were observed. They accelerated the crop water uptake and led to a rapid decline in soil moisture. As a result, rain will be needed in the coming weeks to sustain the positive outlook for winter crops.

The sowing campaign for spring crops has benefited from the dry conditions, which allowed early field preparation and sowing on adequately moist soils. However, additional rain is also essential for spring crops to secure smooth establishment and emergence. Our yield forecasts have been slightly revised upwards for winter barley and confirmed for the other crops. Nonetheless, the positive outlook remains highly dependent on the arrival of further rainfall in the coming weeks. That is likely to happen, according to the latest weather forecasts.

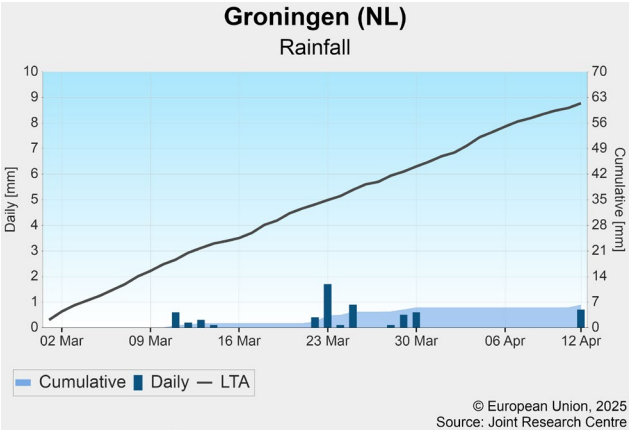


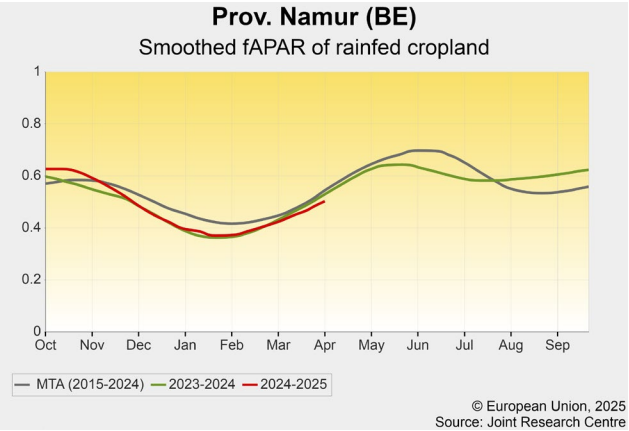


Benelux countries – dry spring slowing down vegetative growth

Above-average radiation and warm temperatures have created favourable conditions for an early start of the spring sowing campaign and have triggered winter crops to break dormancy slightly ahead of schedule. However, the observed lack of precipitation during the reporting period, with less than 10 mm recorded in most regions, is raising concerns. Seedlings may face delays or difficulties in emergence and early growth, and satellite imagery has been indicating a slow winter crop development since early March. Rainfall is urgently needed to avoid a deterioration in crop conditions; however, the latest weather forecasts predict only a little rainfall, most likely not sufficient to meet the increasing crop water requirements.

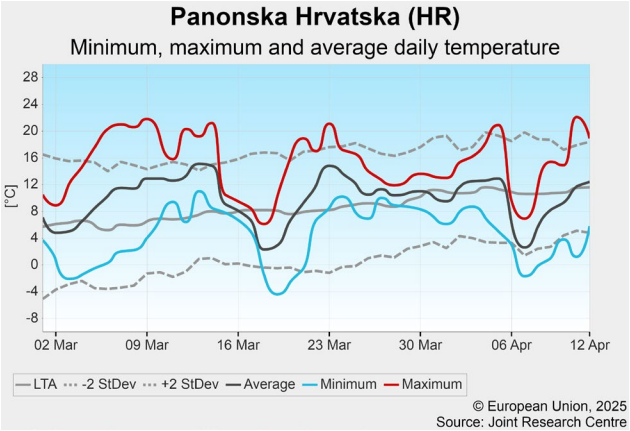
Our crop yield forecasts remain based on historical trends, as the dry conditions have not yet had an irreversible impact on the crops..

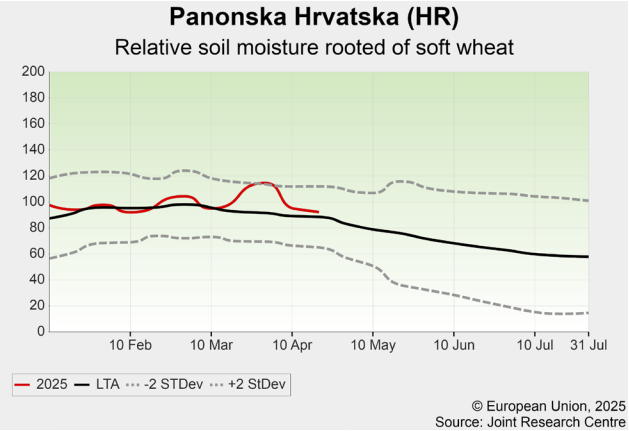




Slovenia and Croatia - challenging weather slows field work

Field operations in both countries have been hindered by relatively unfavourable weather conditions. The reporting period was characterised by generally mild temperatures, with two cold spells around 15 March and 6 April, and above-average precipitation. Rainfall was pronounced in western Slovenia (*Zahodna Slovenija*) and eastern Croatia (*Panonska Hrvatska*), where the sowing of spring and summer crops remains largely on hold, with some sowing activities only gradually beginning. However, the sowing window for spring and summer crops may extend into late April and even early May. On the other hand, the wet conditions helped maintain adequate soil moisture levels, supporting the vegetative growth of winter crops. Our yield forecasts remain in line with, or slightly above, the 5-year average.

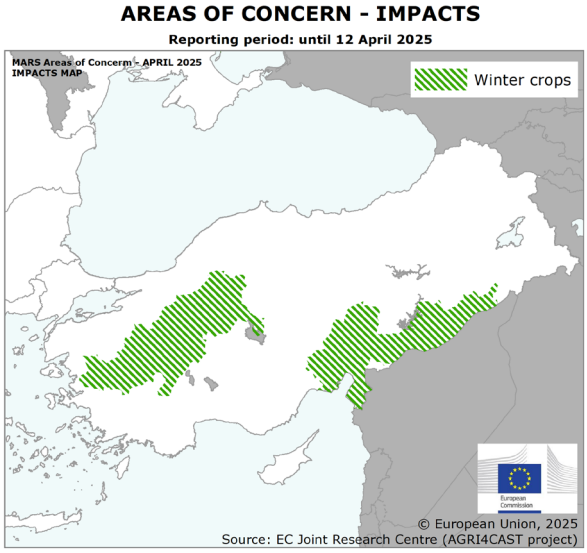




5.2 Black Sea Area

Türkiye - continued dry conditions affect winter crops

Overview and forecasts

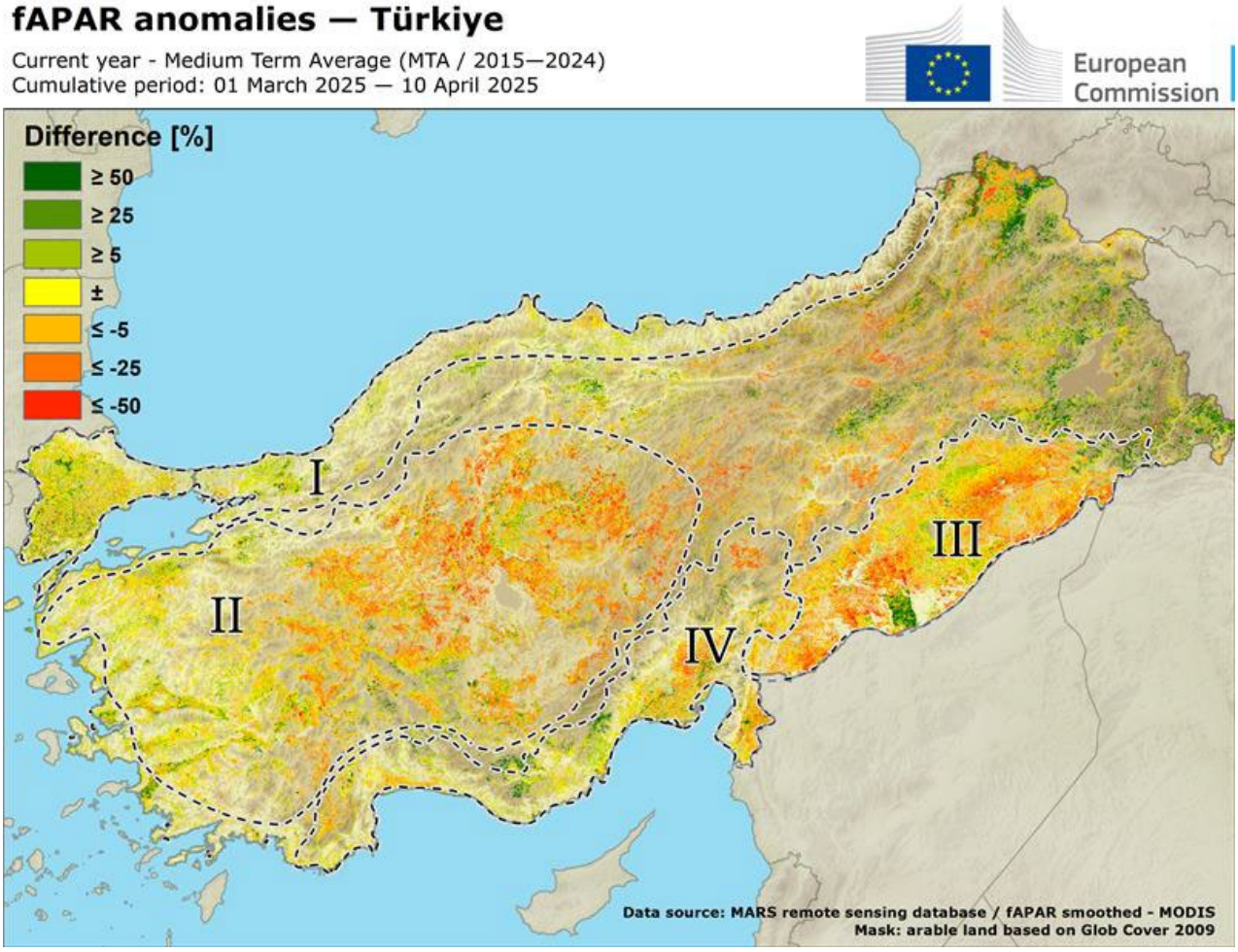


In Türkiye, the season to date has been marked by dry weather. The sowing of winter crops took place later than usual, between November and December, and since then precipitation totals have remained below 70 % of the LTA.

The rainfall deficit was exacerbated by a warm winter that increased the evaporative demand and reduced soil moisture. These warmer-than-usual conditions were interrupted by two severe cold spells that delayed the winter crop development at the end of March.

The delayed growth is clearly illustrated in the remote-sensing-derived fAPAR map below, which shows below-average fAPAR values for most arable land. The map also highlights a few areas supported by irrigation – in green colours, contrasting with the predominant orange – that show above-average biomass accumulation. This contrast is clearly visible in south-eastern Anatolia (III), close to the Syrian border, where a green patch marks a continuous and permanently irrigated area.

Rainfall in early April played a fundamental role in sustaining biomass accumulation in rainfed areas but was insufficient to restore adequate soil moisture conditions. Overall, crop growth remains delayed and below average;



however, it still has the potential to recover to at least average conditions, notably in the very important region of *Konya* (II). Furthermore, the delays in the development of winter crops have increased the risk of exposure to heat stress from the flowering stage onwards.

Our yield forecasts for winter crops – namely winter barley, soft wheat and durum wheat – consider both the difficulties encountered in the past few months and the possibility of still recovering to average biomass accumulation. Our yield forecasts have been revised downwards compared with our March estimates, by 6.5 % for barley, 6.9 % for durum wheat and 7.6 % for soft wheat. They now range below the 5-year average by 1.7 %, 3.5 % and 4.1 %, respectively.

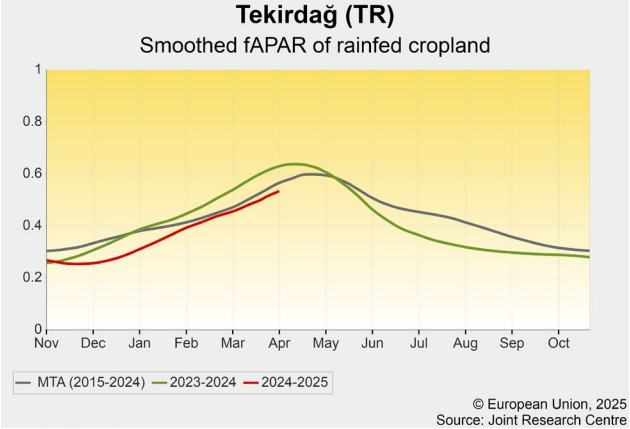
Precipitation in May will be crucial for the final yield formation. Continued sparse rainfall could further worsen yield expectations, whereas average or above-average precipitation may lead to yields closer to average values. The 'areas of concern' map indicates regions where winter crops suffered impacts from the combined effect of cold spells and dry conditions, and are at risk of not recovering to average yields, in our judgement.

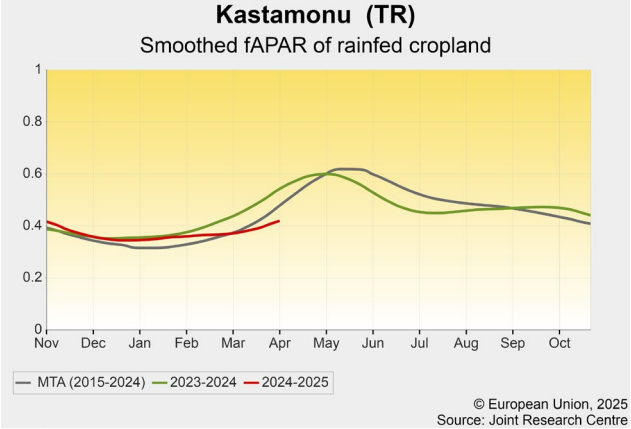
Black Sea region (I)

In the regions along the Black Sea coast, crops are in different stages of development. In *Tekirdağ* in the west, winter crops are slightly delayed and are approaching the flowering stage, while in *Kastamonu* and *Samsun* (central regions) they are still in the stem elongation phase.

In *Tekirdağ*, winter sowing started late in December but in favourable conditions, supported by warm weather with sufficient rainfall. From February onwards, the weather became dry and slightly cooler than usual; however, crop development progressed well and caught up with average levels. In March, a cold spell temporarily slowed crop growth for a few days. Since then, crop development and biomass accumulation have accelerated again and are now in line with the average.

In the central regions such as *Kastamonu*, the cropping season started later than in the west, as usual, with similar weather. Crop growth is slightly delayed due to colder temperatures in February and a dry March.





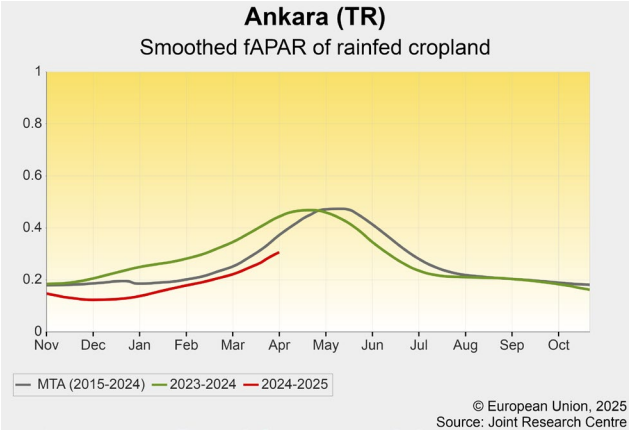
Western and central Anatolia (II)

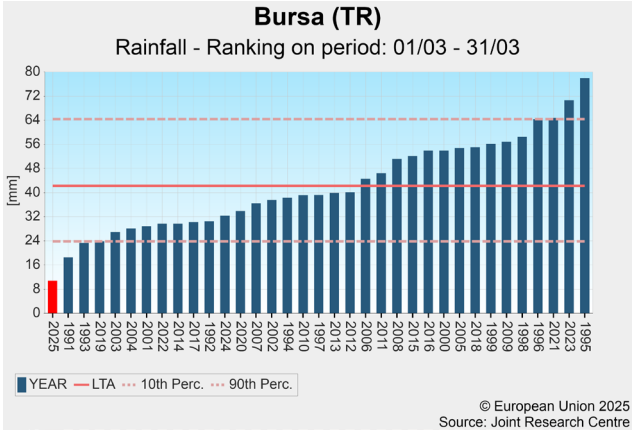
In these important regions for winter barley production, the start of season was unfavourable, with a cold spell around 15 December, just after sowing, with minimum temperatures even below – 6 °C, notably in the *Ankara* region. The region of *Konya*, which is the most important agricultural region for soft and durum wheat, saw similar low temperatures, but the crops are better adapted and resistant to such weather events. In the first 15 days of January, crops started leaf area expansion thanks to wet and warm conditions, notably in the *Aegean* region. Around 15 February, average temperatures fell sharply within a few days, from 5 °C to – 8 °C. Similarly, around 15 March, average temperatures dropped within a few days from 16 °C to 0 °C. Although no major damage has been observed, these two cold spells have slowed crop development and are likely to have reduced the yield potential of crops.

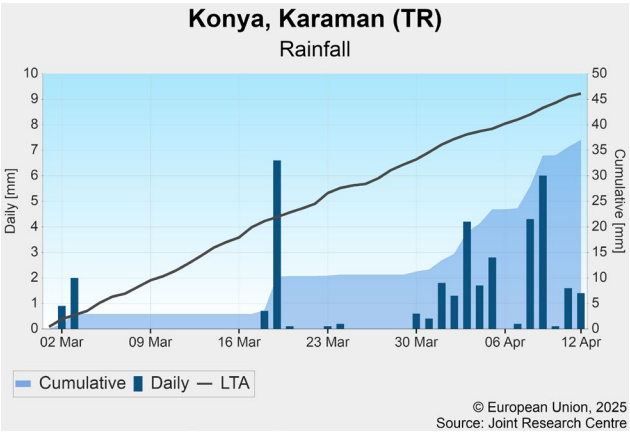
While the temperature accumulation surplus of + 30 % since January compared with the LTA points to advanced development of winter crops, they are, in fact, delayed,

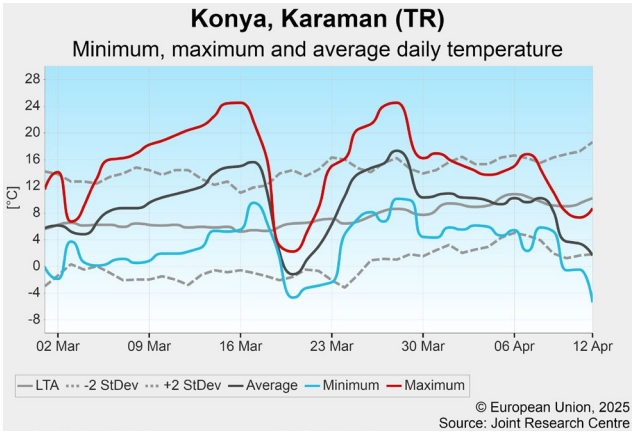
with below-average biomass accumulation due to the complete lack of precipitation in March, which was the driest since 1990 (e.g. *Bursa*). From 1 April onwards, well-distributed precipitation (30 mm by 12 April) brought relief to crops, which have since been developing in more favourable conditions but still show lower-than-average biomass accumulation.

The sowing of summer crops has just begun, and the outlook for the season will largely be dependent on rainfall in the coming weeks, as water reservoirs for irrigation are already partially depleted.



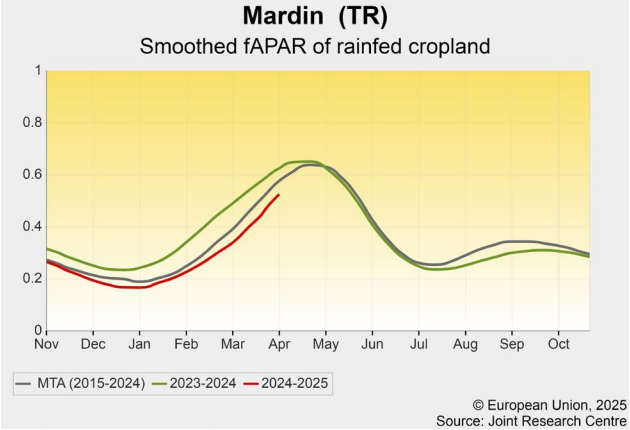


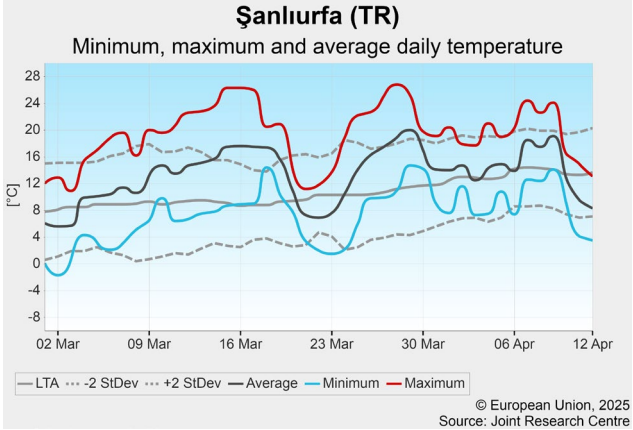


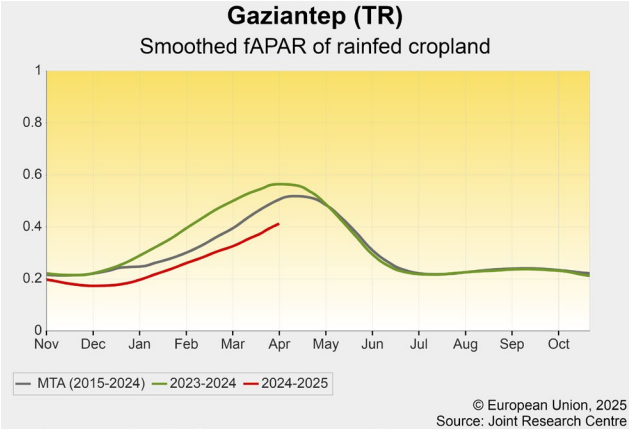


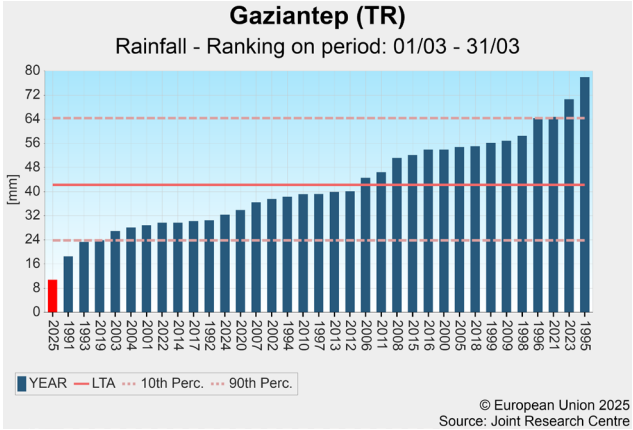
South-eastern Anatolia (III)

In south-eastern Anatolia, the sowing of winter crops (durum wheat, soft wheat and barley) took place in late December – later than usual – due to a significant lack of precipitation (less than 50 % of the LTA since 1 November). Despite low rainfall towards the end of the year, the weather remained essentially dry, creating unfavourable conditions for germination and tillering. The limited precipitation of February was not sufficient to recover crop development. As a result, famers started to irrigate fields one month earlier than usual. Altogether, 1 January to 31 March was the driest period since 1990 in south-eastern Anatolia. In areas where water availability for irrigation has been limited (e.g. *Gaziantep*), crops began to lag behind in crop development and biomass accumulation. The lack of soil moisture was exacerbated by the increased evaporation due to the above-average temperatures until mid March. Around 15 March, daily temperatures dropped from 18 °C to 6 °C for a few days, returning to seasonal averages afterwards (e.g. in *Şanlıurfa*). This cold spell weakened crops and further delayed crop growth. The precipitation in the first half of April (20–30 mm) has been vital to sustain biomass accumulation (e.g. in *Mardin*) and to reduce the need for irrigation, as water resources are already scarce and critical for the upcoming summer season.



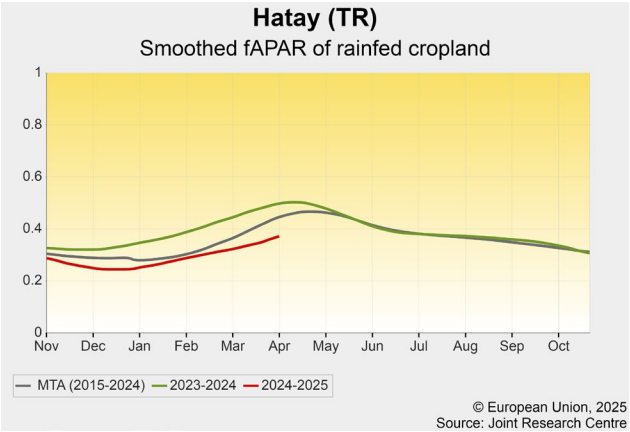


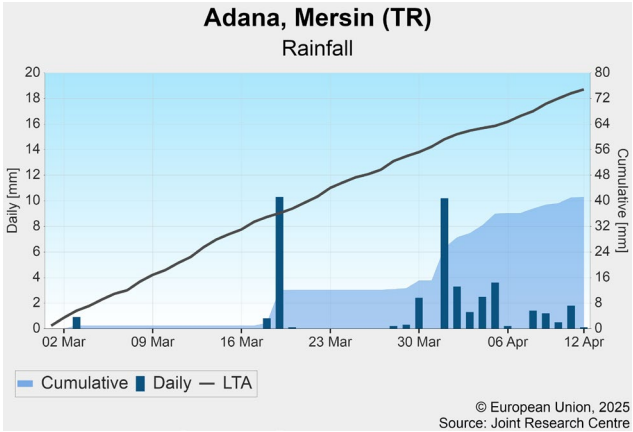




Mediterranean regions (IV)

In the Mediterranean regions of *Adana*, *Mersin*, *Hatay*, *Kahramanmaraş* and *Adıyaman*, rainfall has been scarce since sowing, occurring only at the end of November and at the end of December. In January, precipitation remained limited (< 10 mm), but still sufficient to meet the initial water demand of crops. In February, when plants transitioned from tillering to stem elongation, a cold spell with minimum temperatures down to an unusual low of – 6 °C caused some frost damage to both soft wheat and barley, particularly in the fields sown last November. Temperatures returned to above-average values thereafter, but precipitation remained scarce, with less than 20 mm recorded in March. The combination of frost damage and dry soils had a particularly negative impact on unirrigated crops. As a result, by the end of March, average biomass accumulation was below normal (e.g. in *Hatay*), as indicated by remote sensing indicators (fAPAR). Crop conditions improved in April, when more than 20 mm of rainfall was recorded in less than 15 days (e.g. in *Adana* and *Mersin*). However, water reservoirs in the region had already been heavily used to sustain winter crops, so water availability for the summer cropping season may be limited.





Yield forecasts for Türkiye - April 2025 Bulletin

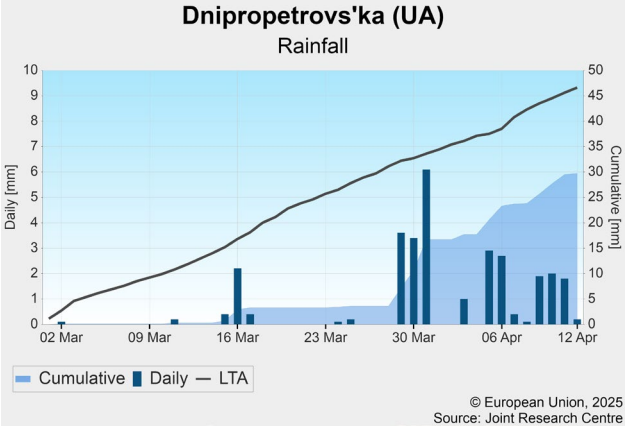
Crop	Area (x 1000 ha)					Yield (t/ha)					Production (x 1000 t)				
	Avg 5yrs	2024	2025	%25/5yrs	%25/24	Avg 5yrs	2024	MARS 2025 forecasts	%25/5yrs	%25/24	Avg 5yrs	2024	2025	%25/5yrs	%25/24
Wheat	6 779	6 925	**6 925**	+ 2	+ 0	2.97	3.00	**2.85**	– 4	– 5	20 146	20 809	**19 768**	– 2	– 5
Soft wheat	5 540	5 619	**5 619**	+ 1	+ 0	2.93	2.92	**2.81**	– 4	– 4	16 225	16 408	**15 779**	– 3	– 4
Durum wheat	1 239	1 306	**1 306**	+ 5	+ 0	3.16	3.37	**3.06**	– 3	– 9	3 920	4 401	**3 990**	+ 2	– 9
Barley	3 043	3 131	**3 131**	+ 3	+ 0	2.49	2.49	**2.45**	– 2	– 2	7 575	7 796	**7 659**	+ 1	– 2
Grain maize	821	789	**789**	– 4	+ 0	9.46	10.3	**10.4**	+ 10	+ 1	7 769	8 099	**8 218**	+ 6	+ 1
Soybean	39	44	**44**	+ 13	+ 0	4.19	4.12	**4.20**	+ 0	+ 2	162	180	**183**	+ 13	+ 2

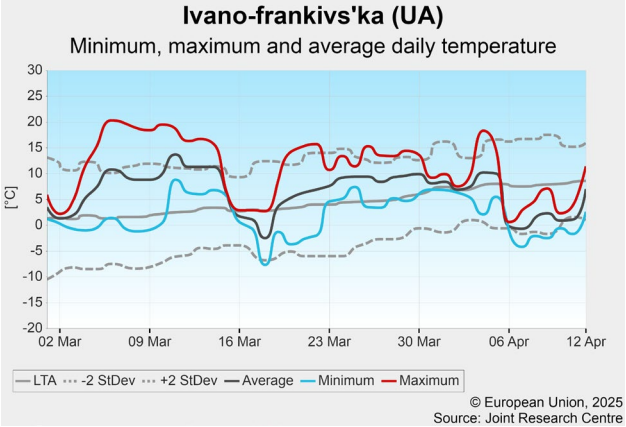
Sources: 2020-2025 data come from Turkish Statistical Institute (TurkStat) and Eurostat Eurobase (last update: 27.03.2025).
2025 yields come from MARS Crop Yield Forecasting System (output up to 10.04.2025).
The column header '%25/5yrs' stands for the 2025 change with respect to the 5-year average(%). Similarly, '%25/24' stands for the 2025 change with respect to 2024(%).

Ukraine – persistent dry conditions in the east

Winter crops profited from fair conditions during the reporting period to initiate the green-up. Although recent precipitation in April has brought some relief, conditions in the east remain concerning due to the long-lasting moisture deficit, and more rainfall is needed. In contrast, in western Ukraine, particularly in the oblasts of *Odes'ka* and *Vinnyts'ka*, crops appear to be in a satisfactory condition. Overall, winter crops restarted their vegetative growth and can still recover from the severe water deficit experienced during winter.

Early April was significantly cooler than usual in the extreme south-west, with minimum temperatures decreasing to – 12 °C. This may have negatively affected rapeseed, notably in the *Ivano-Frankivs'ka* oblast, but a limited impact on cereals is expected. The spring sowing campaign concluded successfully in the west under favourable conditions, while the dry weather in the east has hindered progress. The sowing of summer crops such as sunflowers and soybean commenced in early April, albeit with some delay compared with last year.

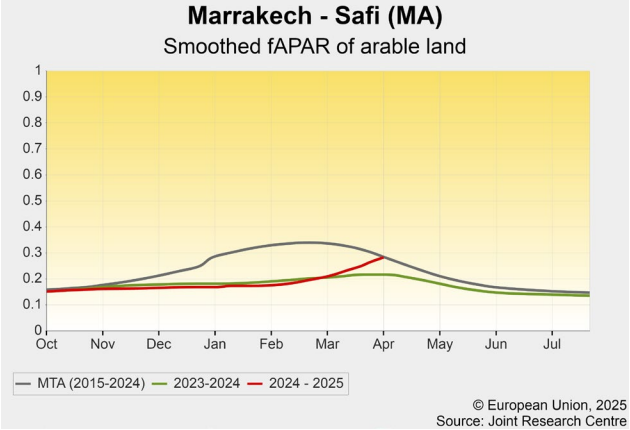


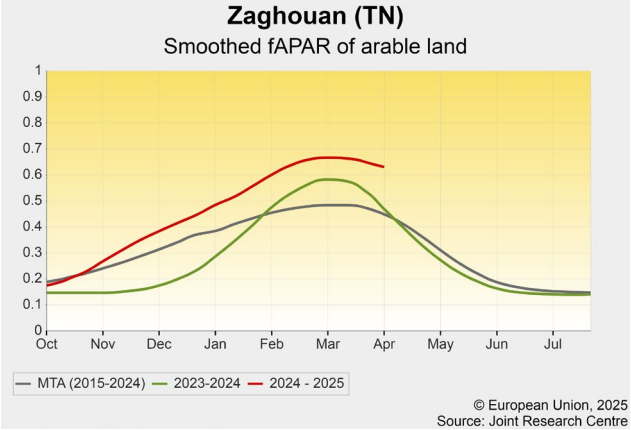


5.3 Maghreb

Morocco, Algeria and Tunisia - a mix of poor to good prospects

After a long-lasting rainfall deficit in Morocco, significant precipitation arrived in March in the north-west (*Rabat*, *Tanger*), too late for winter cereals to recover, as they were already beyond the grain-filling stage. In Algeria, there is a contrast between conditions in the western regions (e.g. *Sidi Bel Abbès*, *Tiaret*), where the water deficit also has a negative impact on the yield outlook, and the eastern regions (e.g. *Souk Ahras*, *Oum El Bouaghi*, *Constantine*), which have benefited from a sufficient water supply, as have irrigated fields. In Tunisia, rainfall favoured crop development during the growth and grain-filling stages, and the limited rainfall in early April has been beneficial for ripening crops. Our yield forecasts remain unchanged, reflecting poor prospects in Morocco, a mixed outlook but near the five-year average in Algeria, and yields substantially above the five-year average in Tunisia, nearing record levels.

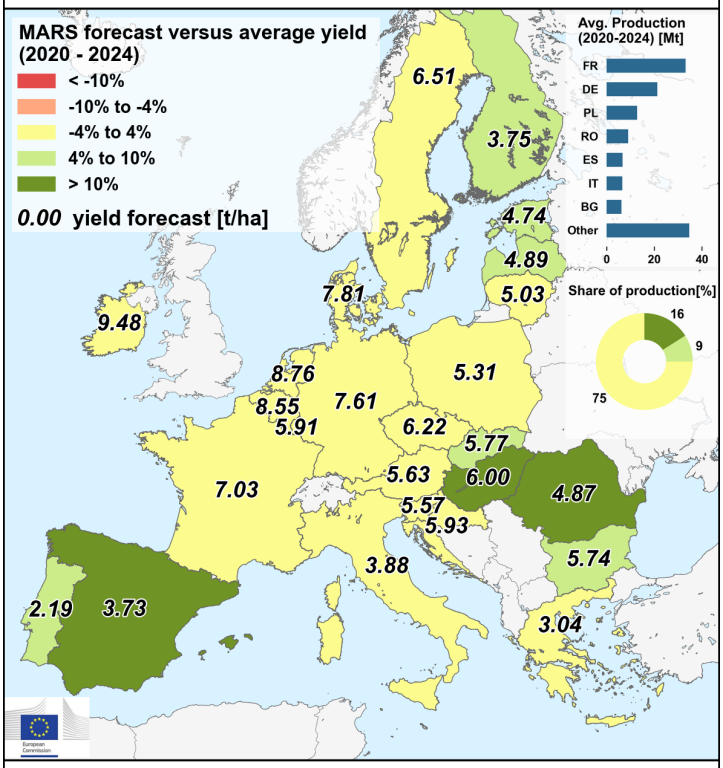




6. Crop yield forecast

Country	Total wheat (t/ha)					
	Avg 5yrs	2024	MARS 2025 forecasts	%25/5yrs	%25/24	% Diff April/March
EU	5.55	5.39	**5.82**	+ 5	+ 8	+ 0
AT	5.80	5.71	**5.63**	– 3	– 1	+ 0
BE	8.43	7.77	**8.55**	+ 1	+ 10	+ 0
BG	5.23	5.67	**5.74**	+ 10	+ 1	+ 0
CY	—	—	—	—	—	—
CZ	6.18	5.95	**6.22**	+ 1	+ 5	– 4
DE	7.45	7.08	**7.61**	+ 2	+ 7	+ 0
DK	7.76	7.12	**7.81**	+ 1	+ 10	+ 0
EE	4.42	4.30	**4.74**	+ 7	+ 10	+ 0
EL	2.96	3.15	**3.04**	+ 3	– 4	+ 0
ES	3.30	3.68	**3.73**	+ 13	+ 1	+ 6
FI	3.42	3.51	**3.75**	+ 9	+ 7	+ 0
FR	6.85	6.03	**7.03**	+ 3	+ 17	– 1
HR	5.77	5.85	**5.93**	+ 3	+ 1	+ 0
HU	5.45	5.79	**6.00**	+ 10	+ 4	+ 4
IE	9.67	8.66	**9.48**	– 2	+ 9	+ 0
IT	3.75	3.57	**3.88**	+ 4	+ 9	– 2
LT	4.87	5.04	**5.03**	+ 3	– 0	+ 0
LU	5.82	5.20	**5.91**	+ 1	+ 14	+ 0
LV	4.63	4.57	**4.89**	+ 6	+ 7	+ 0
MT	—	—	—	—	—	—
NL	8.45	7.05	**8.76**	+ 4	+ 24	+ 0
PL	5.27	5.20	**5.31**	+ 1	+ 2	+ 0
PT	2.11	2.35	**2.19**	+ 4	– 7	+ 0
RO	4.11	4.61	**4.87**	+ 18	+ 6	+ 6
SE	6.39	6.16	**6.51**	+ 2	+ 6	+ 0
SI	5.67	5.48	**5.57**	– 2	+ 2	+ 0
SK	5.54	5.45	**5.77**	+ 4	+ 6	+ 0

Total wheat - yield forecast 2025



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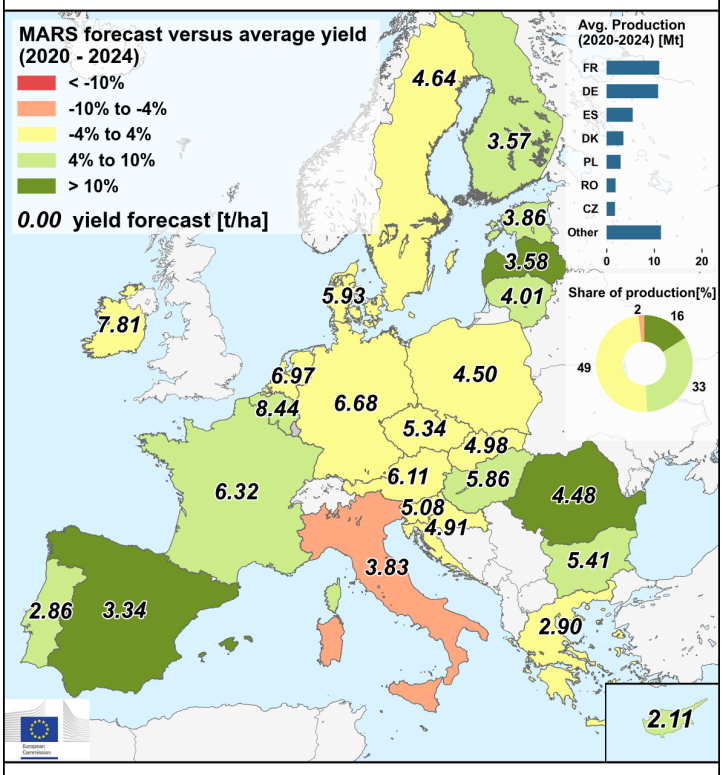
Country	Total barley (t/ha)					
	Avg 5yrs	2024	MARS 2025 forecasts	%25/5yrs	%25/24	% Diff April/March
EU	4.76	4.82	**5.08**	+ 7	+ 5	+ 0
AT	6.11	5.70	**6.11**	+ 0	+ 7	+ 0
BE	8.03	7.67	**8.44**	+ 5	+ 10	+ 0
BG	5.08	5.44	**5.41**	+ 7	– 1	+ 0
CY	2.01	1.75	**2.11**	+ 5	+ 20	+ 0
CZ	5.44	5.27	**5.34**	– 2	+ 1	+ 0
DE	6.70	6.39	**6.68**	– 0	+ 4	+ 0
DK	5.84	5.57	**5.93**	+ 2	+ 6	+ 0
EE	3.63	3.32	**3.86**	+ 6	+ 16	+ 0
EL	2.81	2.63	**2.90**	+ 3	+ 10	+ 0
ES	2.38	3.26	**3.34**	+ 40	+ 2	+ 3
FI	3.34	3.61	**3.57**	+ 7	– 1	+ 0
FR	6.03	5.45	**6.32**	+ 5	+ 16	– 1
HR	4.85	4.93	**4.91**	+ 1	– 0	+ 0
HU	5.51	5.53	**5.86**	+ 6	+ 6	+ 3
IE	7.75	7.51	**7.81**	+ 1	+ 4	+ 1
IT	4.06	3.73	**3.83**	– 6	+ 3	– 4
LT	3.83	3.90	**4.01**	+ 5	+ 3	+ 0
LU	—	—	—	—	—	—
LV	3.20	2.99	**3.58**	+ 12	+ 20	+ 0
MT	—	—	—	—	—	—
NL	6.74	6.24	**6.97**	+ 3	+ 12	+ 0
PL	4.37	4.34	**4.50**	+ 3	+ 4	+ 0
PT	2.72	3.23	**2.86**	+ 5	– 12	+ 0
RO	3.99	4.71	**4.48**	+ 12	– 5	+ 2
SE	4.49	4.44	**4.64**	+ 3	+ 4	+ 0
SI	5.08	4.83	**5.08**	+ 0	+ 5	+ 2
SK	5.07	4.72	**4.98**	– 2	+ 6	+ 0

Total barley - yield forecast 2025



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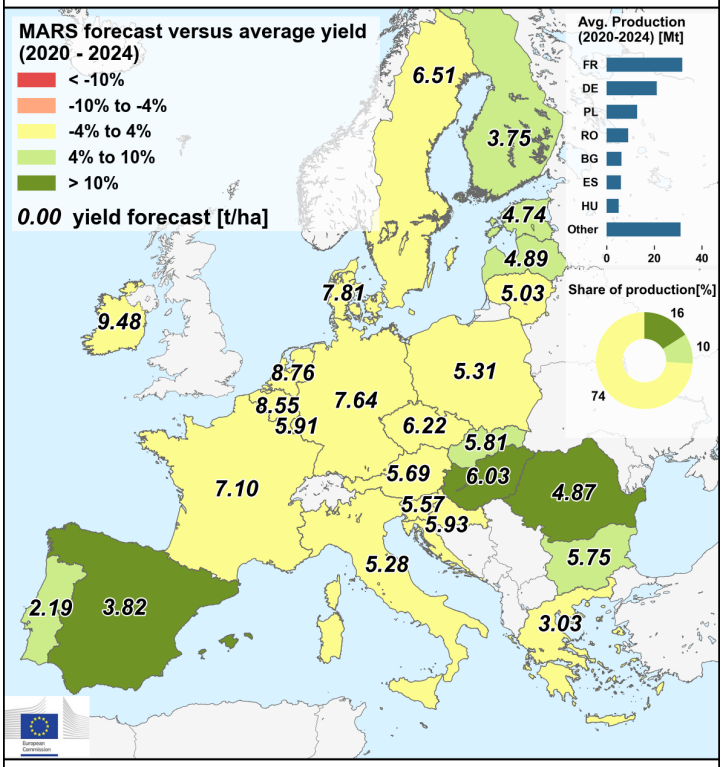
Country	Soft wheat (t/ha)					
	Avg 5yrs	2024	MARS 2025 forecasts	%25/5yrs	%25/24	% Diff April/March
EU	5.77	5.58	**6.03**	+ 4	+ 8	+ 1
AT	5.86	5.76	**5.69**	– 3	– 1	+ 0
BE	8.43	7.77	**8.55**	+ 1	+ 10	+ 0
BG	5.23	5.68	**5.75**	+ 10	+ 1	+ 0
CY	—	—	—	—	—	—
CZ	6.18	5.95	**6.22**	+ 1	+ 5	– 4
DE	7.48	7.11	**7.64**	+ 2	+ 8	+ 0
DK	7.76	7.12	**7.81**	+ 1	+ 10	+ 0
EE	4.42	4.30	**4.74**	+ 7	+ 10	+ 0
EL	2.96	2.98	**3.03**	+ 2	+ 2	+ 0
ES	3.40	3.79	**3.82**	+ 12	+ 1	+ 6
FI	3.42	3.51	**3.75**	+ 9	+ 7	+ 0
FR	6.94	6.08	**7.10**	+ 2	+ 17	– 1
HR	5.77	5.85	**5.93**	+ 3	+ 1	+ 0
HU	5.47	5.82	**6.03**	+ 10	+ 4	+ 4
IE	9.67	8.66	**9.48**	– 2	+ 9	+ 0
IT	5.30	4.93	**5.28**	– 0	+ 7	– 1
LT	4.87	5.04	**5.03**	+ 3	– 0	+ 0
LU	5.82	5.20	**5.91**	+ 1	+ 14	+ 0
LV	4.63	4.57	**4.89**	+ 6	+ 7	+ 0
MT	—	—	—	—	—	—
NL	8.45	7.05	**8.76**	+ 4	+ 24	+ 0
PL	5.27	5.20	**5.31**	+ 1	+ 2	+ 0
PT	2.11	2.35	**2.19**	+ 4	– 7	+ 0
RO	4.11	4.61	**4.87**	+ 18	+ 6	+ 6
SE	6.39	6.16	**6.51**	+ 2	+ 6	+ 0
SI	5.67	5.48	**5.57**	– 2	+ 2	+ 0
SK	5.54	5.46	**5.81**	+ 5	+ 6	+ 0

Soft wheat - yield forecast 2025



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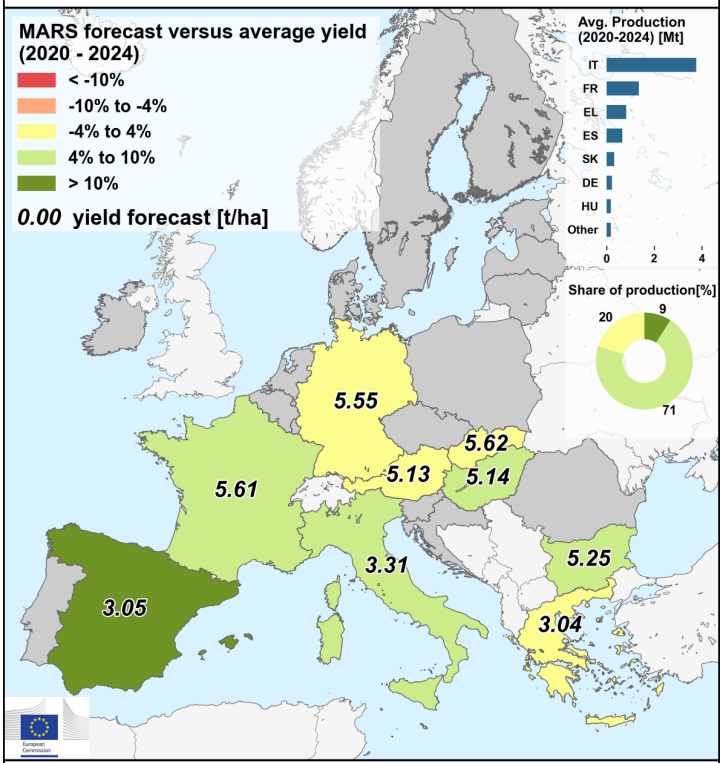
Country	Durum wheat (t/ha)					
	Avg 5yrs	2024	MARS 2025 forecasts	%25/5yrs	%25/24	% Diff April/March
EU	3.43	3.51	**3.69**	+ 7	+ 5	– 0
AT	5.17	5.31	**5.13**	– 1	– 3	+ 0
BE	—	—	—	—	—	—
BG	4.82	5.00	**5.25**	+ 9	+ 5	+ 0
CY	—	—	—	—	—	—
CZ	—	—	—	—	—	—
DE	5.60	5.89	**5.55**	– 1	– 6	+ 0
DK	—	—	—	—	—	—
EE	—	—	—	—	—	—
EL	2.96	3.25	**3.04**	+ 3	– 6	+ 0
ES	2.57	2.92	**3.05**	+ 19	+ 4	+ 6
FI	—	—	—	—	—	—
FR	5.32	5.08	**5.61**	+ 5	+ 10	+ 0
HR	—	—	—	—	—	—
HU	4.89	5.34	**5.14**	+ 5	– 4	+ 2
IE	—	—	—	—	—	—
IT	3.08	2.97	**3.31**	+ 8	+ 11	– 2
LT	—	—	—	—	—	—
LU	—	—	—	—	—	—
LV	—	—	—	—	—	—
MT	—	—	—	—	—	—
NL	—	—	—	—	—	—
PL	—	—	—	—	—	—
PT	—	—	—	—	—	—
RO	—	—	—	—	—	—
SE	—	—	—	—	—	—
SI	—	—	—	—	—	—
SK	5.52	5.42	**5.62**	+ 2	+ 4	+ 0

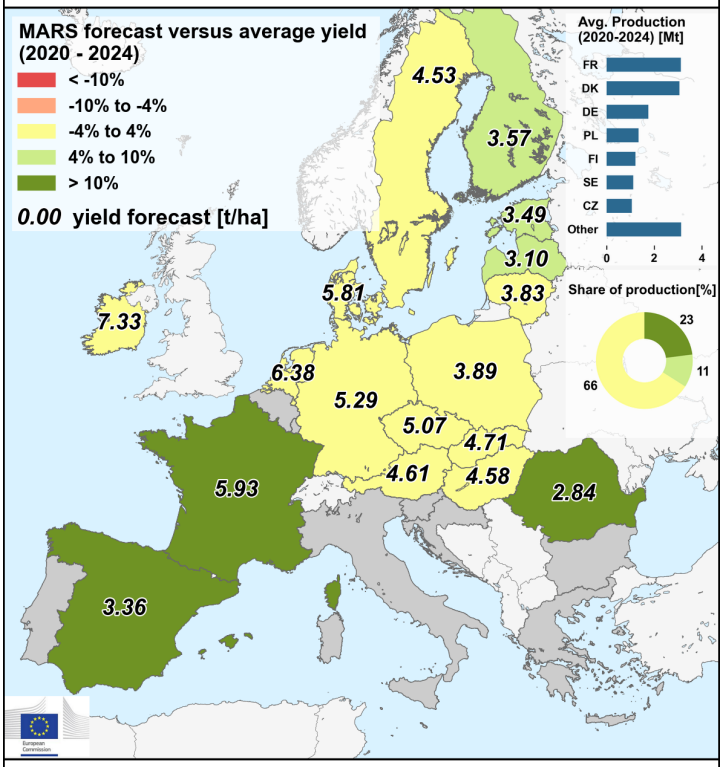
Durum wheat - yield forecast 2025



MARS Bulletin Vol. 33 No.3 (2025)

Country	Spring barley (t/ha)					
	Avg 5yrs	2024	MARS 2025 forecasts	%25/5yrs	%25/24	% Diff April/March
EU	4.66	4.71	**4.87**	+ 4	+ 3	– 0
AT	4.62	4.74	**4.61**	– 0	– 3	+ 0
BE	—	—	—	—	—	—
BG	—	—	—	—	—	—
CY	—	—	—	—	—	—
CZ	5.18	5.43	**5.07**	– 2	– 7	+ 0
DE	5.12	5.19	**5.29**	+ 3	+ 2	+ 0
DK	5.71	5.47	**5.81**	+ 2	+ 6	+ 0
EE	3.34	3.01	**3.49**	+ 5	+ 16	+ 0
EL	—	—	—	—	—	—
ES	2.59	3.28	**3.36**	+ 30	+ 2	+ 3
FI	3.34	3.61	**3.57**	+ 7	– 1	+ 0
FR	5.36	5.21	**5.93**	+ 11	+ 14	+ 0
HR	—	—	—	—	—	—
HU	4.50	4.44	**4.58**	+ 2	+ 3	+ 0
IE	7.32	7.32	**7.33**	+ 0	+ 0	+ 0
IT	—	—	—	—	—	—
LT	3.69	3.63	**3.83**	+ 4	+ 6	+ 0
LU	—	—	—	—	—	—
LV	2.87	2.67	**3.10**	+ 8	+ 16	+ 0
MT	—	—	—	—	—	—
NL	6.15	5.95	**6.38**	+ 4	+ 7	+ 0
PL	3.87	3.84	**3.89**	+ 0	+ 1	+ 0
PT	—	—	—	—	—	—
RO	2.44	3.22	**2.84**	+ 16	– 12	+ 0
SE	4.38	4.36	**4.53**	+ 3	+ 4	+ 0
SI	—	—	—	—	—	—
SK	4.79	4.54	**4.71**	– 2	+ 4	+ 0

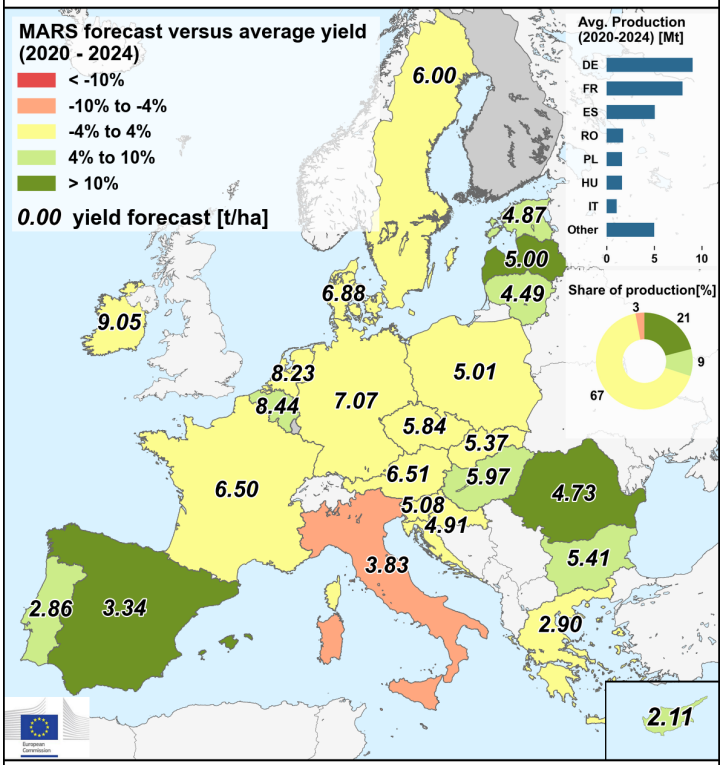
Spring barley - yield forecast 2025



MARS Bulletin Vol. 33 No.3 (2025)

Country	Winter barley (t/ha)					
	Avg 5yrs	2024	MARS 2025 forecasts	%25/5yrs	%25/24	% Diff April/March
EU	4.81	4.87	**5.18**	+ 8	+ 6	+ 1
AT	6.52	5.93	**6.51**	– 0	+ 10	+ 0
BE	8.03	7.67	**8.44**	+ 5	+ 10	+ 0
BG	5.08	5.44	**5.41**	+ 7	– 1	+ 0
CY	2.01	1.75	**2.11**	+ 5	+ 20	+ 0
CZ	5.89	5.04	**5.84**	– 1	+ 16	+ 0
DE	7.13	6.72	**7.07**	– 1	+ 5	+ 0
DK	6.81	6.52	**6.88**	+ 1	+ 6	+ 0
EE	4.47	3.95	**4.87**	+ 9	+ 23	+ 0
EL	2.81	2.63	**2.90**	+ 3	+ 10	+ 0
ES	2.37	3.26	**3.34**	+ 41	+ 2	+ 3
FI	—	—	—	—	—	—
FR	6.33	5.55	**6.50**	+ 3	+ 17	– 1
HR	4.85	4.93	**4.91**	+ 1	– 0	+ 0
HU	5.59	5.65	**5.97**	+ 7	+ 6	+ 3
IE	8.71	8.13	**9.05**	+ 4	+ 11	+ 2
IT	4.06	3.73	**3.83**	– 6	+ 3	– 4
LT	4.29	4.42	**4.49**	+ 5	+ 2	+ 0
LU	—	—	—	—	—	—
LV	4.21	3.57	**5.00**	+ 19	+ 40	+ 0
MT	—	—	—	—	—	—
NL	7.97	6.78	**8.23**	+ 3	+ 21	+ 0
PL	4.90	4.67	**5.01**	+ 2	+ 7	+ 0
PT	2.72	3.23	**2.86**	+ 5	– 12	+ 0
RO	4.22	4.90	**4.73**	+ 12	– 4	+ 3
SE	5.82	5.61	**6.00**	+ 3	+ 7	+ 0
SI	5.08	4.83	**5.08**	+ 0	+ 5	+ 2
SK	5.48	4.99	**5.37**	– 2	+ 8	+ 0

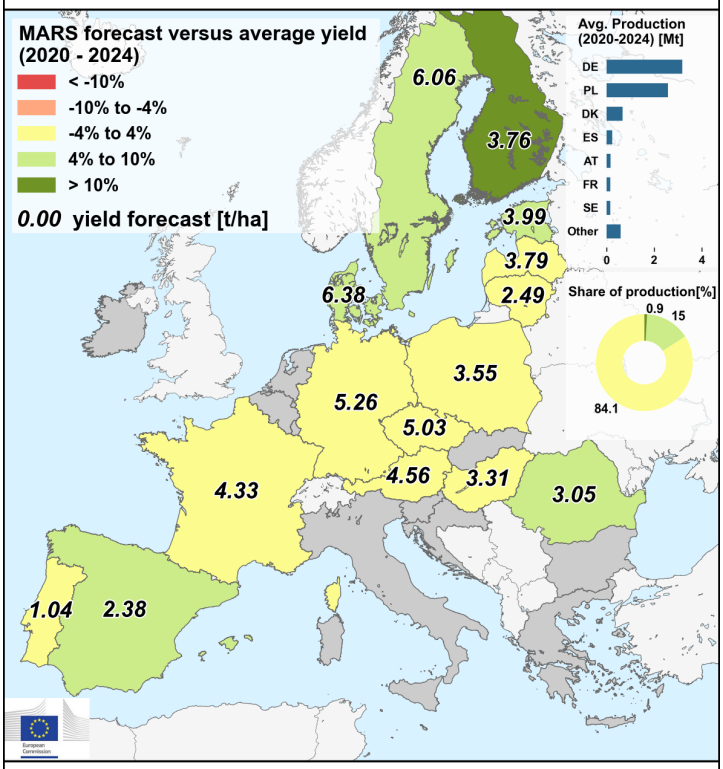
Winter barley - yield forecast 2025



MARS Bulletin Vol. 33 No.3 (2025)

Country	Rye (t/ha)					
	Avg 5yrs	2024	MARS 2025 forecasts	%25/5yrs	%25/24	% Diff April/March
EU	4.22	4.19	**4.29**	+ 2	+ 2	+ 0
AT	4.66	3.98	**4.56**	– 2	+ 15	+ 0
BE	—	—	—	—	—	—
BG	—	—	—	—	—	—
CY	—	—	—	—	—	—
CZ	5.06	4.32	**5.03**	– 1	+ 16	+ 0
DE	5.28	5.28	**5.26**	– 0	– 0	+ 0
DK	6.07	5.91	**6.38**	+ 5	+ 8	+ 0
EE	3.79	3.98	**3.99**	+ 5	+ 0	+ 0
EL	—	—	—	—	—	—
ES	2.26	2.22	**2.38**	+ 6	+ 7	+ 8
FI	3.41	2.74	**3.76**	+ 10	+ 37	+ 0
FR	4.17	3.74	**4.33**	+ 4	+ 16	+ 0
HR	—	—	—	—	—	—
HU	3.19	3.22	**3.31**	+ 4	+ 3	+ 3
IE	—	—	—	—	—	—
IT	—	—	—	—	—	—
LT	2.54	2.38	**2.49**	– 2	+ 5	+ 0
LU	—	—	—	—	—	—
LV	3.71	3.37	**3.79**	+ 2	+ 13	+ 0
MT	—	—	—	—	—	—
NL	—	—	—	—	—	—
PL	3.50	3.57	**3.55**	+ 1	– 1	+ 0
PT	1.03	1.01	**1.04**	+ 0	+ 2	– 0
RO	2.78	2.98	**3.05**	+ 9	+ 2	+ 2
SE	5.79	5.66	**6.06**	+ 5	+ 7	+ 0
SI	—	—	—	—	—	—
SK	—	—	—	—	—	—

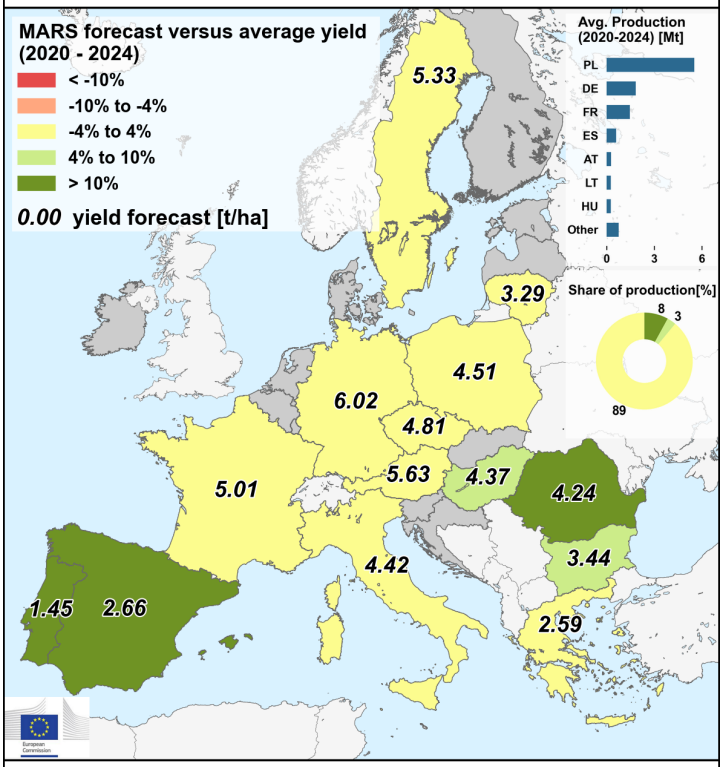
Rye - yield forecast 2025



MARS Bulletin Vol. 33 No.3 (2025)

Country	Triticale (t/ha)					
	Avg 5yrs	2024	MARS 2025 forecasts	%25/5yrs	%25/24	% Diff April/March
EU	4.38	4.30	**4.51**	+ 3	+ 5	+ 1
AT	5.51	5.08	**5.63**	+ 2	+ 11	+ 0
BE	—	—	—	—	—	—
BG	3.30	3.93	**3.44**	+ 4	– 12	+ 0
CY	—	—	—	—	—	—
CZ	4.87	4.48	**4.81**	– 1	+ 7	+ 0
DE	5.87	5.69	**6.02**	+ 3	+ 6	+ 0
DK	—	—	—	—	—	—
EE	—	—	—	—	—	—
EL	2.50	2.13	**2.59**	+ 4	+ 21	+ 0
ES	2.35	2.65	**2.66**	+ 13	+ 0	+ 7
FI	—	—	—	—	—	—
FR	4.85	4.31	**5.01**	+ 3	+ 16	+ 0
HR	—	—	—	—	—	—
HU	4.03	4.12	**4.37**	+ 8	+ 6	+ 2
IE	—	—	—	—	—	—
IT	4.48	4.41	**4.42**	– 1	+ 0	+ 0
LT	3.33	3.44	**3.29**	– 1	– 4	+ 0
LU	—	—	—	—	—	—
LV	—	—	—	—	—	—
MT	—	—	—	—	—	—
NL	—	—	—	—	—	—
PL	4.42	4.40	**4.51**	+ 2	+ 2	+ 0
PT	1.28	1.44	**1.45**	+ 13	+ 1	+ 0
RO	3.65	4.27	**4.24**	+ 16	– 1	+ 5
SE	5.21	5.12	**5.33**	+ 2	+ 4	+ 0
SI	—	—	—	—	—	—
SK	—	—	—	—	—	—

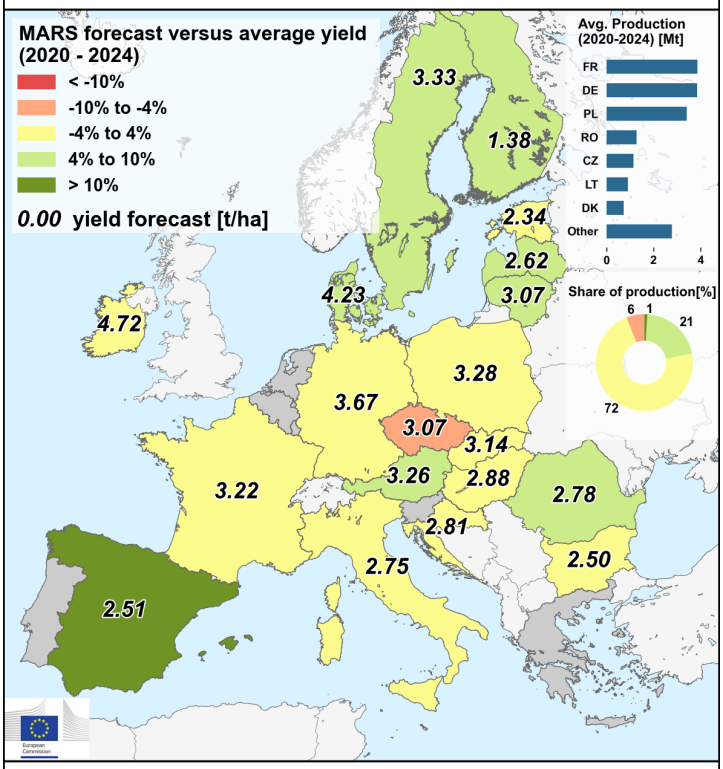
Triticale - yield forecast 2025



MARS Bulletin Vol. 33 No.3 (2025)

Country	Rape and turnip rape (t/ha)					
	Avg 5yrs	2024	MARS 2025 forecasts	%25/5yrs	%25/24	% Diff April/March
EU	3.16	2.95	**3.20**	+ 1	+ 9	– 0
AT	3.13	2.98	**3.26**	+ 4	+ 9	+ 0
BE	—	—	—	—	—	—
BG	2.49	2.49	**2.50**	+ 0	+ 0	+ 0
CY	—	—	—	—	—	—
CZ	3.20	2.77	**3.07**	– 4	+ 11	+ 0
DE	3.61	3.34	**3.67**	+ 2	+ 10	+ 0
DK	4.03	3.87	**4.23**	+ 5	+ 9	+ 0
EE	2.31	1.41	**2.34**	+ 1	+ 66	+ 0
EL	—	—	—	—	—	—
ES	2.19	2.52	**2.51**	+ 15	– 1	+ 4
FI	1.30	1.34	**1.38**	+ 6	+ 3	+ 0
FR	3.21	2.92	**3.22**	+ 0	+ 10	– 2
HR	2.78	2.88	**2.81**	+ 1	– 3	+ 0
HU	2.80	2.48	**2.88**	+ 3	+ 16	+ 3
IE	4.62	4.60	**4.72**	+ 2	+ 3	+ 0
IT	2.81	2.72	**2.75**	– 2	+ 1	– 3
LT	2.87	2.87	**3.07**	+ 7	+ 7	+ 0
LU	—	—	—	—	—	—
LV	2.47	1.74	**2.62**	+ 6	+ 50	+ 0
MT	—	—	—	—	—	—
NL	—	—	—	—	—	—
PL	3.28	3.23	**3.28**	– 0	+ 2	+ 0
PT	—	—	—	—	—	—
RO	2.63	2.38	**2.78**	+ 6	+ 17	+ 6
SE	3.11	3.07	**3.33**	+ 7	+ 9	+ 0
SI	—	—	—	—	—	—
SK	3.12	2.75	**3.14**	+ 0	+ 14	+ 0

Rapeseed - yield forecast 2025



MARS Bulletin Vol. 33 No.3 (2025)

Country	Wheat (t/ha)				
	Avg 5yrs	2024	MARS 2025 forecasts	%25/5yrs	%25/24
DZ	1.53	1.52	**1.52**	– 1	– 0
MA	1.58	1.39	**1.16**	– 26	– 16
TN	1.95	1.81	**2.21**	+ 13	+ 22
TR	2.97	3.00	**2.85**	– 4	– 5
UA	4.26	4.53	**4.31**	+ 1	– 5

Country	Barley (t/ha)				
	Avg 5yrs	2024	MARS 2025 forecasts	%25/5yrs	%25/24
DZ	1.13	1.17	**1.20**	+ 6	+ 3
MA	1.01	0.95	**0.83**	– 19	– 13
TN	1.09	1.23	**1.65**	+ 52	+ 34
TR	2.49	2.49	**2.45**	– 2	– 2
UA	3.54	3.99	**3.60**	+ 2	– 10

Country	Grain maize (t/ha)				
	Avg 5yrs	2024	MARS 2025 forecasts	%25/5yrs	%25/24
DZ	—	—	—	—	—
MA	—	—	—	—	—
TN	—	—	—	—	—
TR	9.46	10.3	**10.4**	+ 10	+ 2
UA	6.76	6.43	**6.91**	+ 2	+ 8

Country	Soybean (t/ha)				
	Avg 5yrs	2024	MARS 2025 forecasts	%25/5yrs	%25/24
DZ	—	—	—	—	—
MA	—	—	—	—	—
TN	—	—	—	—	—
TR	4.19	4.12	**4.20**	+ 0	+ 2
UA	2.37	2.30	**2.50**	+ 6	+ 9

NB: Yields are forecast for crops with more than 10 000 ha per country with sufficently long and coherent yield time series.

Sources: 2020-2025 data come from DG Agriculture and Rural Development short-term-outlook data (dated March 2025, received on 24.03.2025), Eurostat Eurobase (last update: 27.03.2025), ELSTAT, Statistics Netherlands (CBS) and EES (until 2017).

Non-EU 2020-2024 data come from USDA, INRA Maroc, ONICL Maroc, Ministère de l'agriculture des ressources hydrauliques et de la pêche Tunisie, MED-Amin baseline DB, DSASI-MADR Algeria, Turkish Statistical Institute (TurkStat), Eurostat Eurobase (last update: 27.03.2025), Ministry for Development of Economy, Trade and Agriculture of Ukraine, FAO and PSD-online.

2025 yields come from MARS Crop Yield Forecasting System (output up to 10.04.2025).
The EU aggregate is reported from 2020 onward.
N/A = Data not available.
The column header '%25/5yrs' stands for the 2025 change with respect to the 5-year average(%). Similarly, '%25/24' stands for the 2025 change with respect to 2024(%).

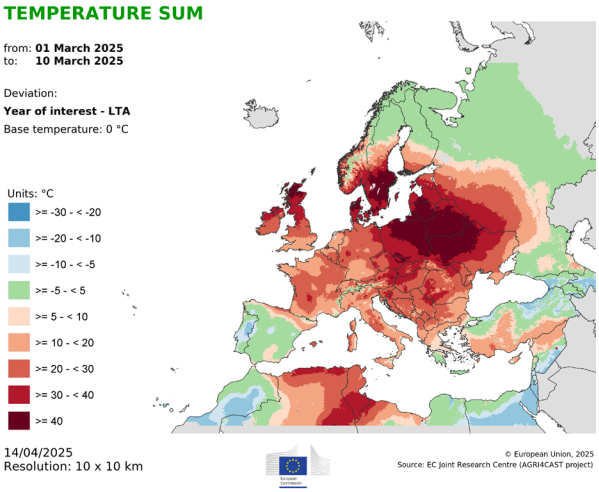
* Due to a change in the definition to distinguish spring and winter barley in Spain, the "5-year average" for this country is based only on data for 2023 and 2024. The 2025 area is based on the average of the reported area from 2023 and 2024. See text box accompanying the text on Spain and Portugal section in the March bulletin (Vol. 33, No. 2) for additional information.

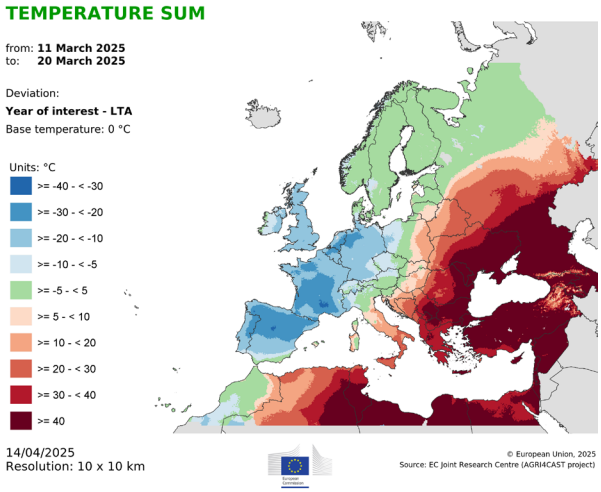
Cop name	Eurostat Crop name	Eurostat Crop Code	Official Eurostat Crop definition*
Total wheat	Wheat and spelt	C1100	Common wheat (*Triticum aestivum* L. emend. Fiori et Paol.), spelt (*Triticum spelta* L.), einkorn wheat (*Triticum monococcum* L.) and durum wheat (*Triticum durum* Desf.).
Total barley	Barley	C1300	Barley (*Hordeum vulgare* L.).
Soft wheat	Common wheat and spelt	C1110	Common wheat (*Triticum aestivum* L. emend. Fiori et Paol.), spelt (*Triticum spelta* L.) and einkorn wheat (*Triticum monococcum* L.).
Durum what	Durum wheat	C1120	*Triticum durum* Desf.
Spring barley	Spring barley	C1320	Barley (*Hordeum vulgare* L.) sown in the spring.
Winter barley	Winter barley	C1310	Barley (*Hordeum vulgare* L.) sown before or during winter.
Grain maize	Grain maize and corn-cob-mix	C1500	Maize (*Zea mays* L.) harvested for grain, as seed or as corn-cob-mix.
Green maize	Green maize	G3000	All forms of maize (*Zea mays* L.) grown mainly for silage (whole cob, parts of or whole plant) and not harvested for grain.
Rye	Rye and winter cereal mixtures (maslin)	C1200	Rye (*Secale cereale* L.) sown any time, mixtures of rye and other cereals and other cereal mixtures sown before or during the winter (maslin).
Triticale	Triticale	C1600	Triticale (x *Triticosecale* Wittmack).
Rape and turnip rape	Rape and turnip rape seeds	I1110	Rape (*Brassica napus* L.) and turnip rape (*Brassica rapa* L. var. oleifera (Lam.)) grown for the production of oil, harvested as dry grains.
Sugar beet	Sugar beet (excluding seed)	R2000	Sugar beet (*Beta vulgaris* L.) intended for the sugar industry, alcohol production or renewable energy production.
Potatoes	Potatoes (including seed potatoes)	R1000	Potatoes (*Solanum tuberosum* L.).
Sunflower	Sunflower seed	I1120	Sunflower (*Helianthus annuus* L.) harvested as dry grains.
Soybeans	Soya	I1130	Soya (*Glycine max* L. Merril) harvested as dry grains.
Field beans	Broad and field beans	P1200	All varieties of broad and field beans (Faba vulgaris (Moench) syn. Vicia faba L. (partim)) harvested dry for grain, including seed.
Field peas	Field peas	P1100	All varieties of field peas (Pisum sativum L. convar. sativum or Pisum sativum L. convar. arvense L. or convar. speciosum) harvested dry for grain, including seed.
Rice	Rice	C2000	Rice (*Oryza sativa*, L.).

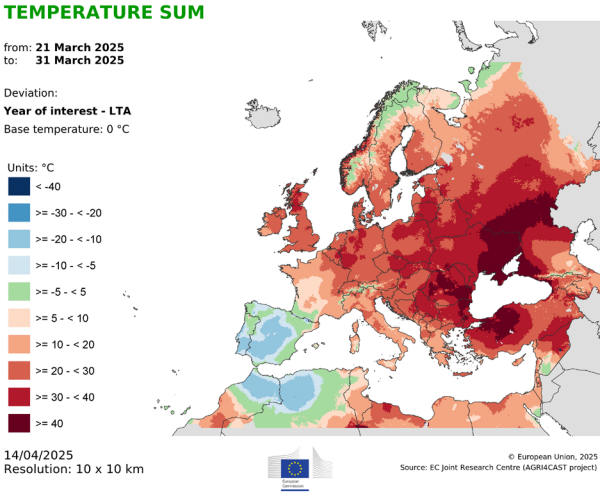
* *Source:* Eurostat - Annual crop statistics (Handbook 2020 Edition)

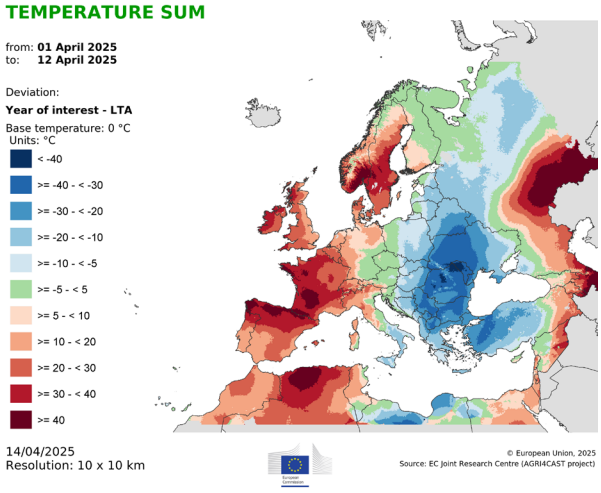
7. Atlas

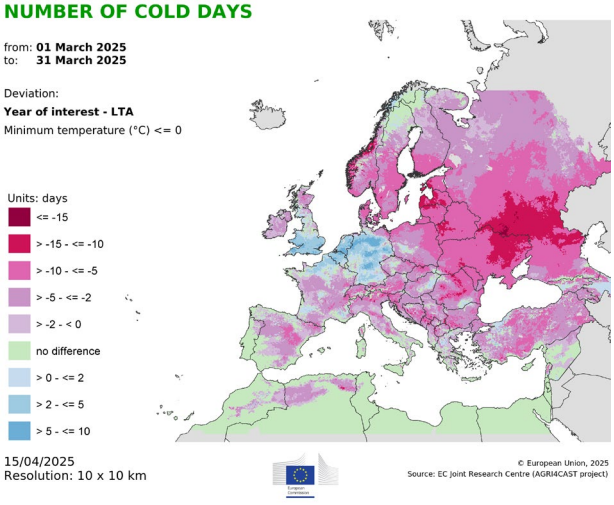
Temperature regime

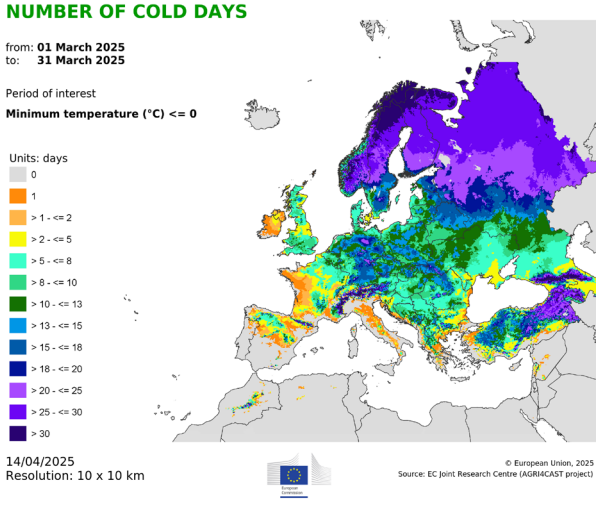








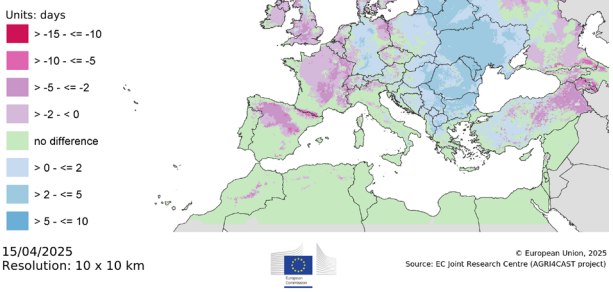




NUMBER OF COLD DAYS

from: **01 April 2025**
to: **12 April 2025**

Deviation:
Year of interest - LTA
Minimum temperature (°C) <= 0

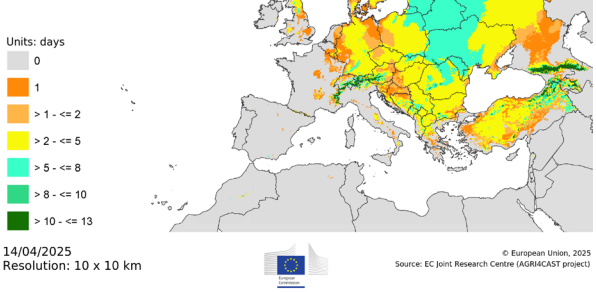


15/04/2025
Resolution: 10 x 10 km

NUMBER OF COLD DAYS

from: **01 April 2025**
to: **12 April 2025**

Period of interest
Minimum temperature (°C) <= 0



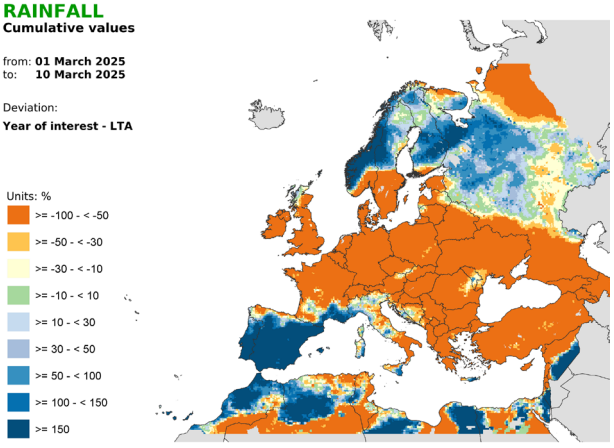
14/04/2025
Resolution: 10 x 10 km

Precipitation

RAINFALL
Cumulative values

from: **01 March 2025**
to: **10 March 2025**

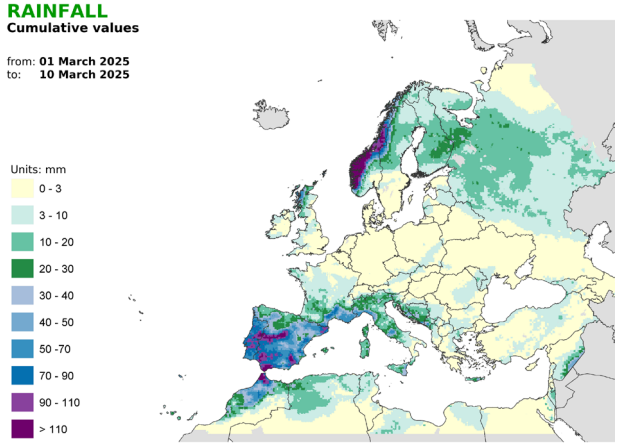
Deviation:
Year of interest - LTA



14/04/2025
Resolution: 10 x 10 km

RAINFALL
Cumulative values

from: **01 March 2025**
to: **10 March 2025**

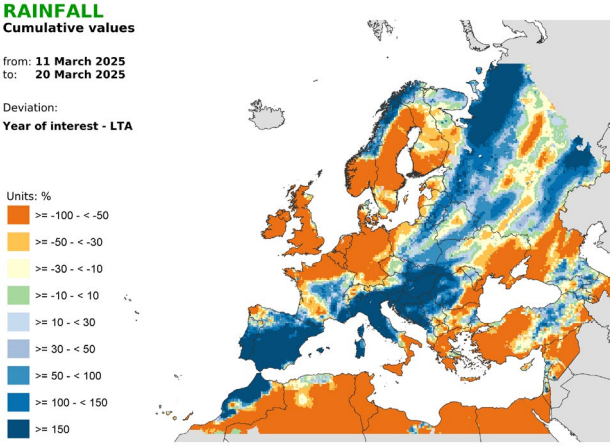


14/04/2025
Resolution: 10 x 10 km

RAINFALL
Cumulative values

from: **11 March 2025**
to: **20 March 2025**

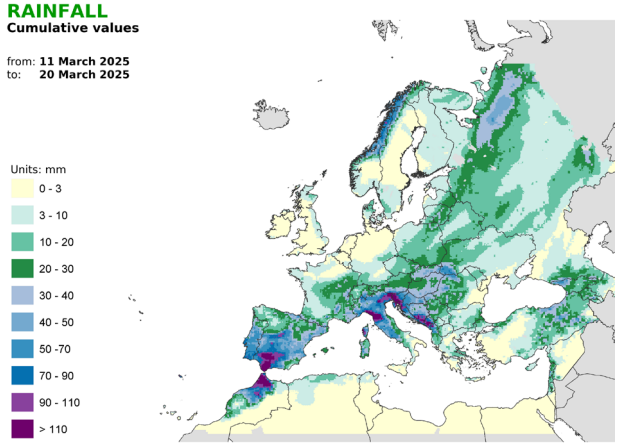
Deviation:
Year of interest - LTA



14/04/2025
Resolution: 10 x 10 km

RAINFALL
Cumulative values

from: **11 March 2025**
to: **20 March 2025**



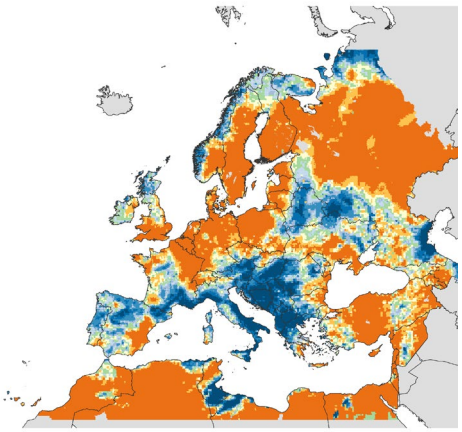
14/04/2025
Resolution: 10 x 10 km

RAINFALL
Cumulative values

from: **21 March 2025**
to: **31 March 2025**

Deviation:
Year of interest - LTA

Units: %
- >= -100 - < -50
- >= -50 - < -30
- >= -30 - < -10
- >= -10 - < 10
- >= 10 - < 30
- >= 30 - < 50
- >= 50 - < 100
- >= 100 - < 150
- >= 150

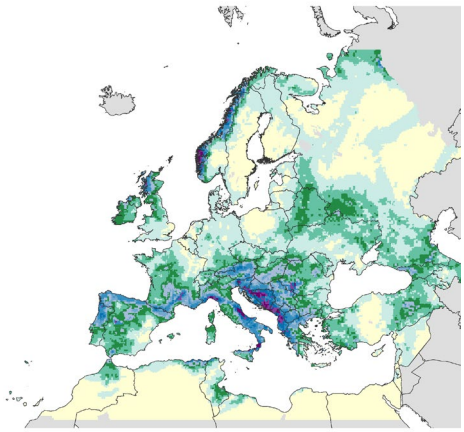


14/04/2025
Resolution: 10 x 10 km

RAINFALL
Cumulative values

from: **21 March 2025**
to: **31 March 2025**

Units: mm
- 0 - 3
- 3 - 10
- 10 - 20
- 20 - 30
- 30 - 40
- 40 - 50
- 50 -70
- 70 - 90
- 90 - 110
- > 110



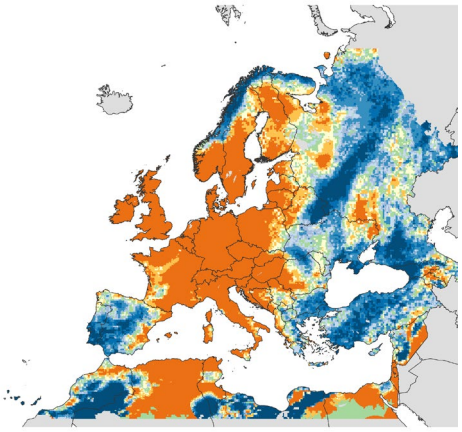
14/04/2025
Resolution: 10 x 10 km

RAINFALL
Cumulative values

from: **01 April 2025**
to: **12 April 2025**

Deviation:
Year of interest - LTA

Units: %
- >= -100 - < -50
- >= -50 - < -30
- >= -30 - < -10
- >= -10 - < 10
- >= 10 - < 30
- >= 30 - < 50
- >= 50 - < 100
- >= 100 - < 150
- >= 150

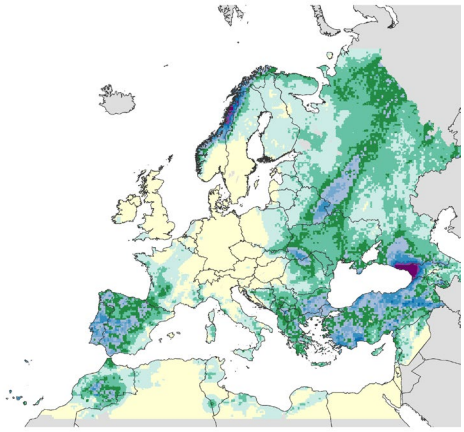


14/04/2025
Resolution: 10 x 10 km

RAINFALL
Cumulative values

from: **01 April 2025**
to: **12 April 2025**

Units: mm
- 0 - 3
- 3 - 10
- 10 - 20
- 20 - 30
- 30 - 40
- 40 - 50
- 50 -70
- 70 - 90
- 90 - 110
- > 110



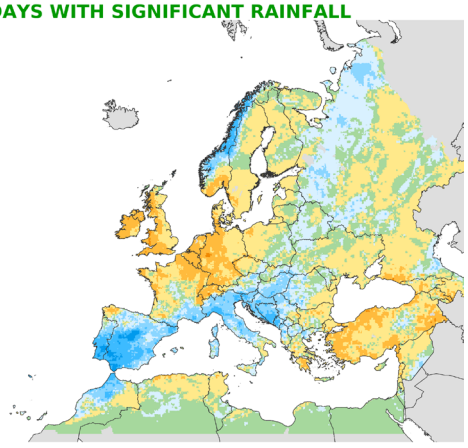
14/04/2025
Resolution: 10 x 10 km

NUMBER OF DAYS WITH SIGNIFICANT RAINFALL

from: **01 March 2025**
to: **31 March 2025**

Deviation:
Year of interest - LTA
Rain (mm) > 5

Units: days
- 11 - 15
- 6 - 10
- 3 - 5
- 1 - 2
- no difference
- -2 - -1
- -5 - -3
- -10 - -6



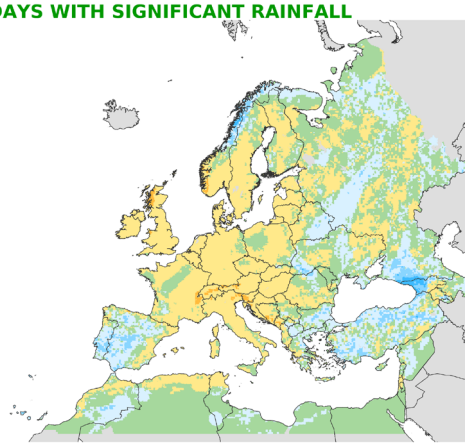
14/04/2025
Resolution: 10 x 10 km

NUMBER OF DAYS WITH SIGNIFICANT RAINFALL

from: **01 April 2025**
to: **12 April 2025**

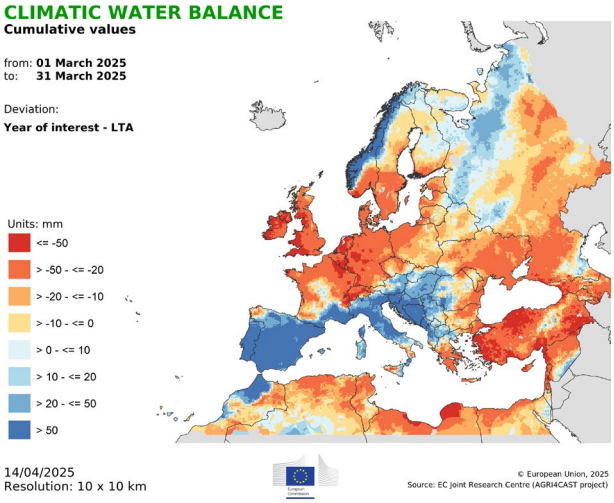
Deviation:
Year of interest - LTA
Rain (mm) > 5

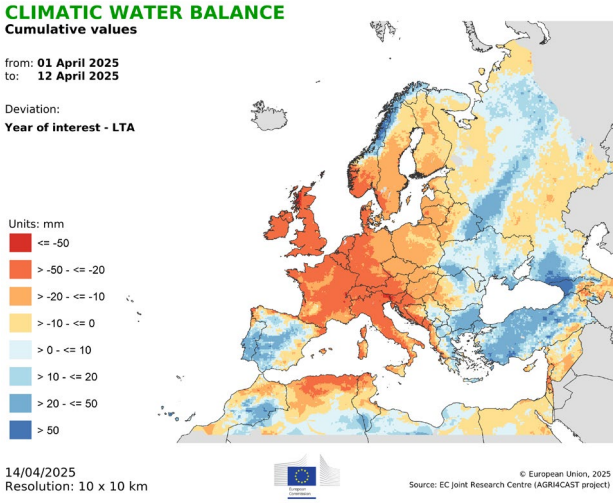
Units: days
- 6 - 10
- 3 - 5
- 1 - 2
- no difference
- -2 - -1
- -5 - -3



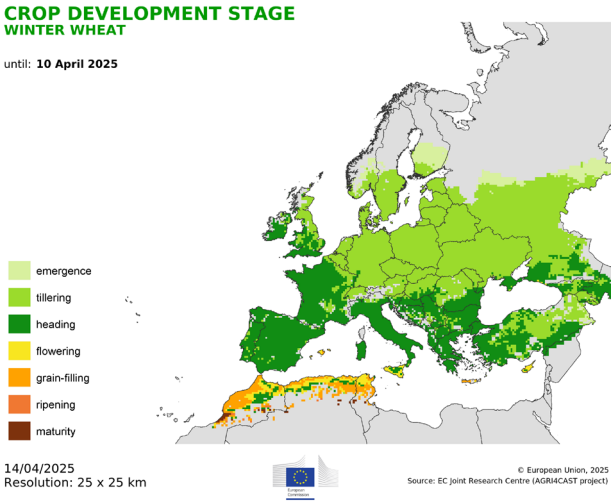
14/04/2025
Resolution: 10 x 10 km

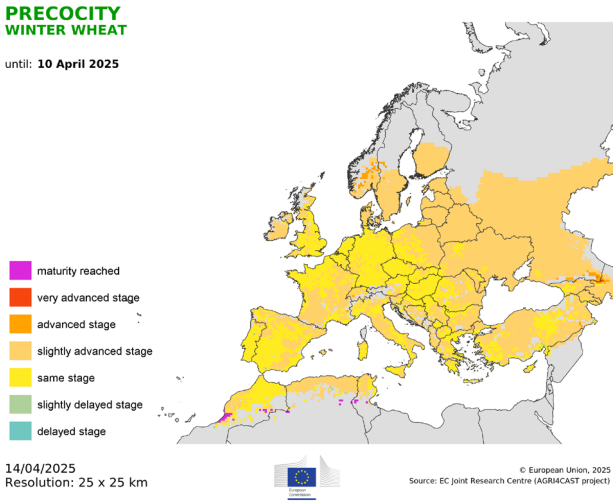
Climatic water balance

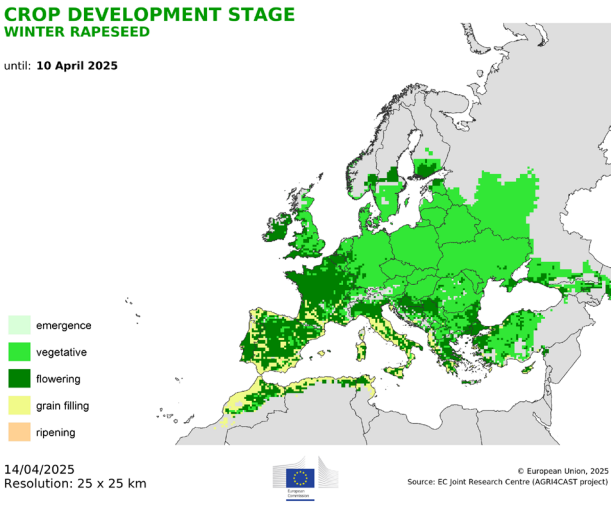


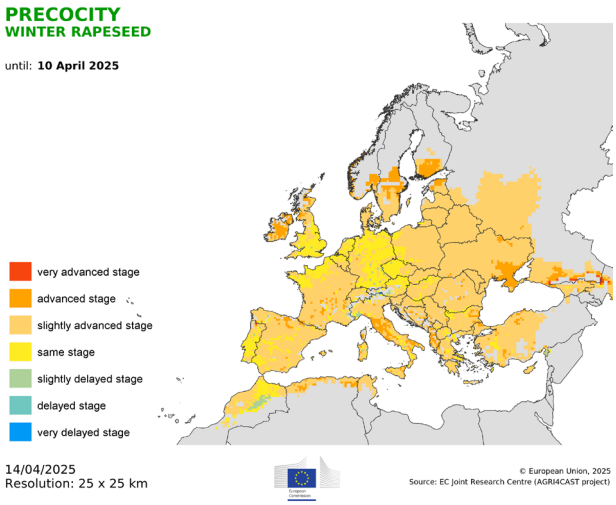


Crop development stages and precocity









JRC MARS Bulletin 2025

Date	Publication	Reference
24 Feb	Agromet analysis	Vol. 33 No 1
24 Mar	Agromet analysis, yield forecast	Vol. 33 No 2
22 Apr	Agromet analysis, remote sensing, grassland analysis, sowing conditions, yield forecast	Vol. 33 No 3
26 May	Agromet analysis, remote sensing, grassland analysis, sowing update, yield forecast	Vol. 33 No 4
23 Jun	Agromet analysis, remote sensing, grassland analysis, rice analysis, yield forecast	Vol. 33 No 5
21 Jul	Agromet analysis, remote sensing, grassland analysis, harvesting conditions, yield forecast	Vol. 33 No 6
25 Aug	Agromet analysis, remote sensing, grassland update, harvesting update, yield forecast	Vol. 33 No 7
22 Sep	Agromet analysis, remote sensing, grassland analysis, rice analysis, harvesting update, yield forecast	Vol. 33 No 8
27 Oct	Agromet analysis, grassland update, sowing conditions, harvesting update, yield forecast	Vol. 33 No 9
24 Nov	Agromet analysis, sowing update, harvesting update	Vol. 33 No 10

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Analysis and reports
Ben Aoun, W., Biavetti, I., Bussay, A., Cerrani, I., Claverie, M., De Palma, P., Fumagalli, D., Henin, R., Luque Reyes, J., Manfron, G., Morel, J., Niemeyer, S., Nisini, L., Ozalp, O., Panarello, L., Rossi, M., Seguini, L., Tarnavsky, E., Thiemig, V., Todoroff, P., Zucchini, A.

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Technical note
The long-term average (LTA) used within this Bulletin as a reference is calculated on the basis of weather data from 1991-2024. The medium-term average (MTA) used within this Bulletin as a reference is calculated on the basis of weather data from 2015-2024.

Mission statement
The Joint Research Centre provides independent, evidence-based knowledge and science, supporting EU policies to positively impact society.

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