



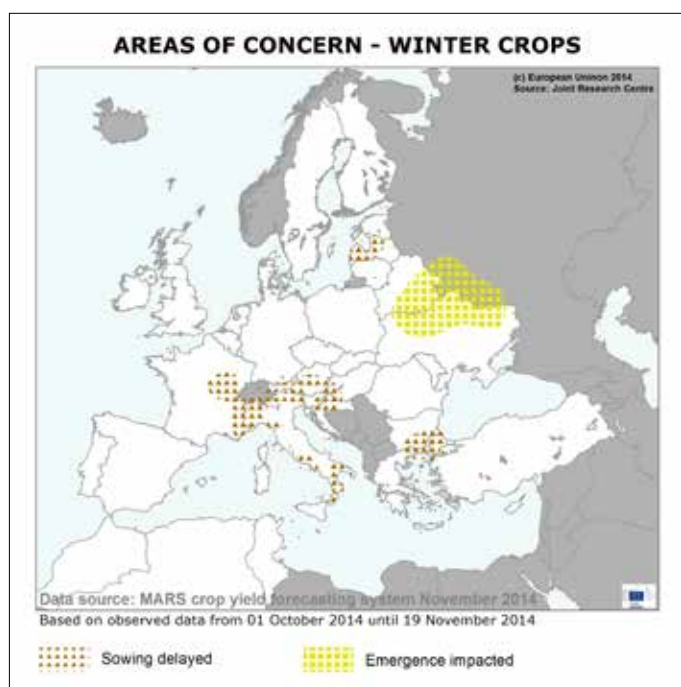
Crop Monitoring in Europe

MARS BULLETIN Vol.22 No. 11 (2014)

Predominantly favourable sowing conditions despite some delays

The period of review was generally warmer than usual in most of central and western Europe. A significant drop in air temperatures was recorded in Russia, Belarus and northern Ukraine during the second half of October. Heavy rainfall and severe thunderstorms were recorded during the first half of October and during the first two weeks of November, mainly in southern and central parts of the Scandinavian Peninsula, France, the United Kingdom, western and central parts of the Iberian Peninsula, and Italy, causing local flooding.

The sowing of winter crops proceeded normally in the majority of the European regions, but sowing activities were hampered in some areas by torrential rains. In Italy and western Greece, the sowing of durum wheat was delayed due to excessive rainfall and overly wet soil conditions. The main delays in France were to the sowing of durum wheat in the south-eastern provinces. Persistent dry conditions in northern Ukraine, Belarus and the neighbouring Russian regions are negatively impacting the emergence of winter crops.



Crop	Yield t/ha				
	2013	MARS 2014 forecasts	Avg 5yrs	%14/13	%14/5yrs
TOTAL CEREALS	5.30	5.43	5.08	+2.4	+6.8
Total Wheat	5.59	5.63	5.34	+0.9	+5.6
<i>soft wheat</i>	5.82	5.86	5.57	+0.6	+5.1
<i>durum wheat</i>	3.28	3.19	3.21	-2.6	-0.5
Total Barley	4.91	4.61	4.50	-6.1	+2.5
<i>spring barley</i>	4.55	3.91	3.96	-14.0	-1.2
<i>winter barley</i>	5.41	5.58	5.29	+3.2	+5.5
Grain maize	6.78	7.59	6.80	+12.0	+11.7
Rye	3.95	3.84	3.46	-2.8	+11.0
Triticale	4.27	4.25	4.07	-0.6	+4.3
Other cereals	3.29	3.33	3.34	+1.1	-0.2
Rape and turnip rape	3.11	3.32	3.07	+6.8	+8.2
Potato	30.98	33.75	30.62	+8.9	+10.2
Sugar beet	67.96	73.16	69.33	+7.7	+5.5
Sunflower	1.96	2.11	1.85	+7.5	+13.9

Issued: 21 November 2014

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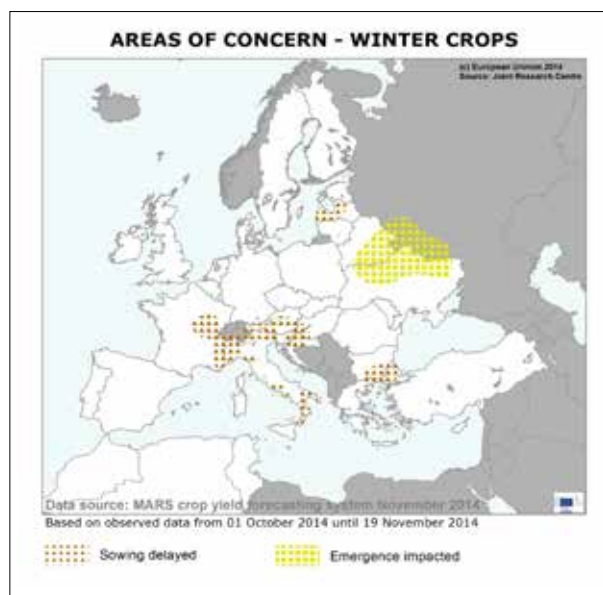
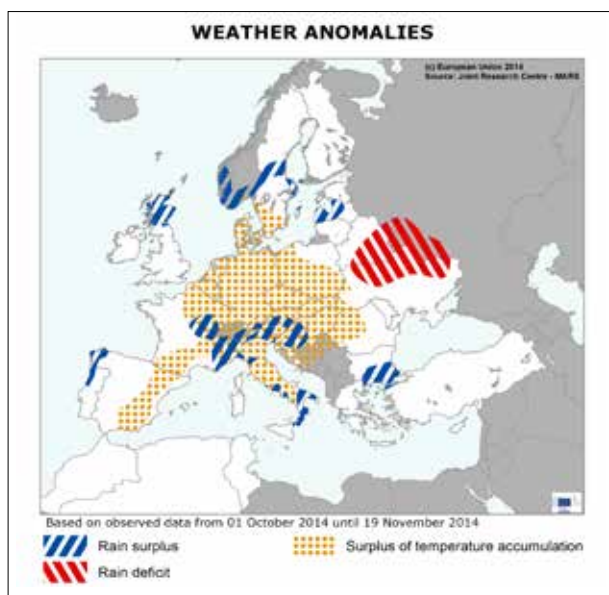
Atlas maps

1. Agro-meteorological overview

1.1 Areas of concern

The period of review was in general warmer-than-usual in most of central and western Europe. A significant drop in air temperatures was recorded in Russia, Belarus and northern Ukraine during the second half of October. Heavy rainfall and severe thunderstorms were recorded during the first half of October and during the first two weeks of November, mainly in the southern and central parts of the Scandinavian Peninsula, France, the United Kingdom, the western and central parts of the Iberian Peninsula and Italy, causing local flooding.

The sowing of winter crops proceeded normally in the majority of the European regions, but sowing activities were hampered in some areas by torrential rains. In Italy and western Greece, the sowing of durum wheat was delayed due to excessive rainfall and overly wet soil conditions. The main delays in France were to the sowing of durum wheat in the south-eastern provinces. Persistent dry conditions in northern Ukraine, Belarus and the neighbouring Russian regions are negatively impacting the emergence of winter crops.



1.2 Agro-meteorological overview (1 October – 20 November)

Observed temperatures

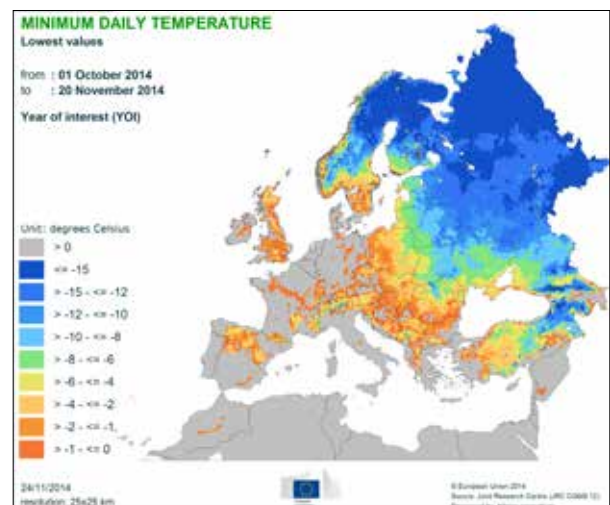
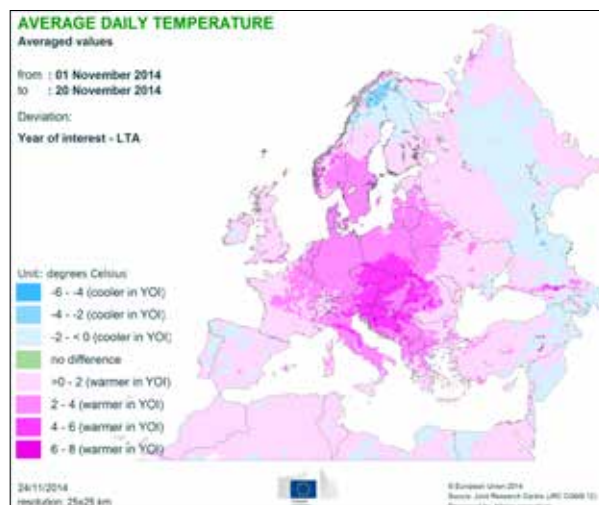
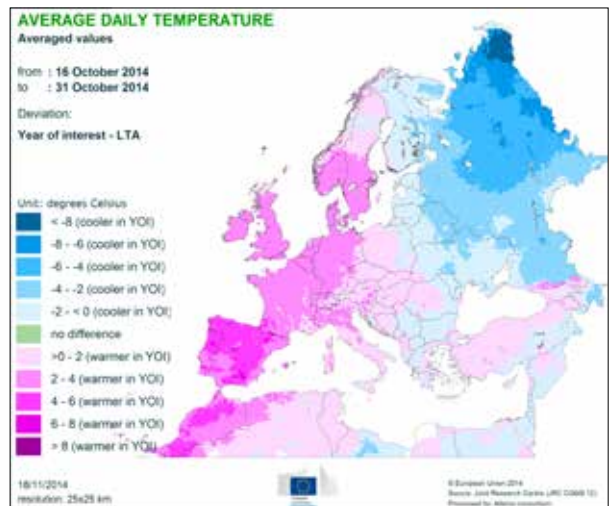
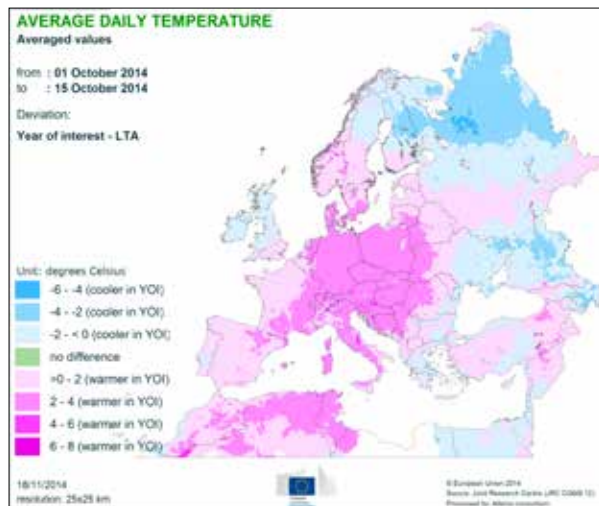
The first half of October was characterised by warmer-than-usual weather conditions in most of Europe, with the exception of Russia, eastern Ukraine and Finland. Average temperatures up to 4°C above the long-term average were observed in central Europe, southern and eastern France, Italy, Denmark, southern Sweden, the Balkan countries, Romania and western Ukraine. During the second half of October, warmer-than-usual conditions prevailed in western and central Europe, with temperature anomalies of up to +6°C in the Iberian Peninsula, and of +2 to +4°C in Denmark, the Benelux countries and southern Sweden. In Eastern Europe, however, weather

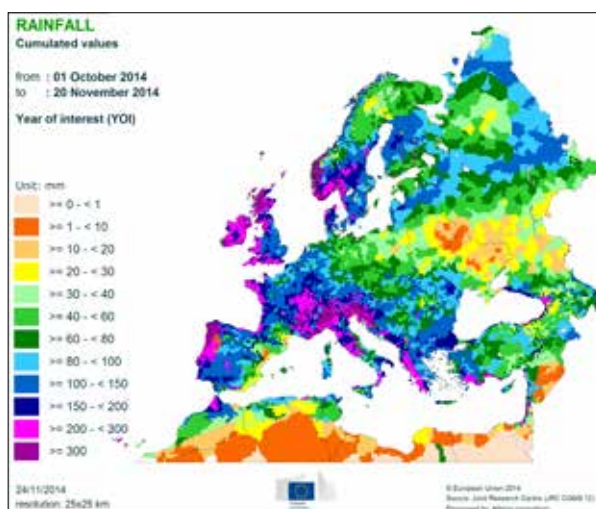
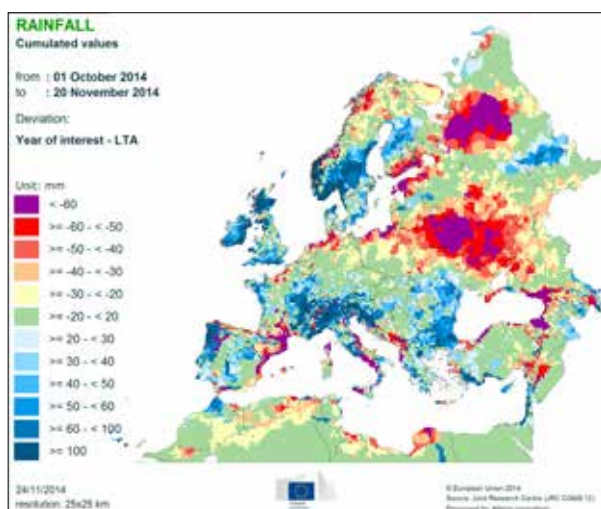
conditions were colder than usual during this period. Minimum temperatures of -10°C were experienced in Russia, Belarus and northern Ukraine. The period from 1 to 20 November was characterised by positive thermal anomalies in most of Europe. The highest warm anomalies (4 to 6°C above the long-term average) were observed in large areas in Poland, Slovakia, the Czech Republic, Austria, Hungary, Romania, the Balkans, Slovenia and northern and central Italy.

Observed precipitation

During the first half of October, cumulated rainfall was well above the long-term average (by over 50 mm) in the southern and central parts of the Scandinavian Peninsula, Latvia, central Russia, France, the United Kingdom, the western and central parts of the Iberian Peninsula, and the western part of northern Italy, where heavy rainfall and thunderstorms caused flooding, mainly in *Liguria*. Normal to drier-than-usual conditions prevailed in all other European regions. During the second half of October, drier-than usual conditions prevailed in most of western Europe and Italy, as well as in Russia, Belarus, southern Poland, and locally in Ukraine. By contrast, wetter-than-usual conditions were observed in the Balkans, southern Germany, Austria, Hungary, Slovakia, Romania, Bulgaria, Turkey, and the southern part

of the Scandinavian Peninsula. Rainfall during the first two dekads of November was well above the average in Italy, Slovenia, eastern France and Bretagne, central and eastern parts of the Iberian Peninsula, Ireland and southern England. Heavy rainfall was recorded, on 4 and 5 November and also on 14 November, in northern and central Italy, *Rhone-Alpes* in France and across the Alpine region, with over 90 mm of rain in 24 hours, resulting in several cases of water logging and flooding. Cumulated rainfall during the period from 1 to 20 November exceeded 200 mm in Slovenia, the north-western part of the Iberian Peninsula, north and the central Italy, and locally in south-eastern France, reaching the highest rainfall value recorded in our climatological records for this period.





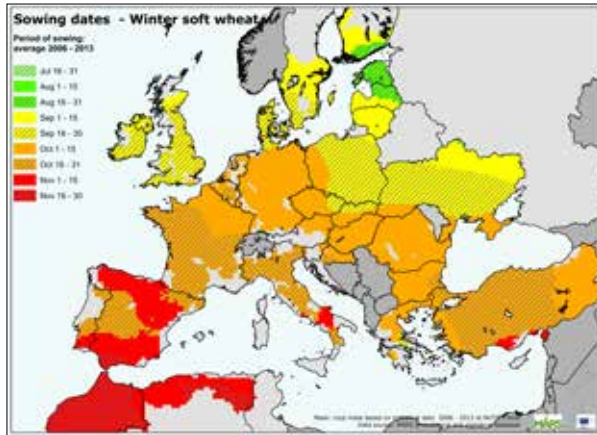
New campaign 2014 / 15

2. Sowing conditions EU-28 and neighbourhood countries

2.1 Winter crops EU-28

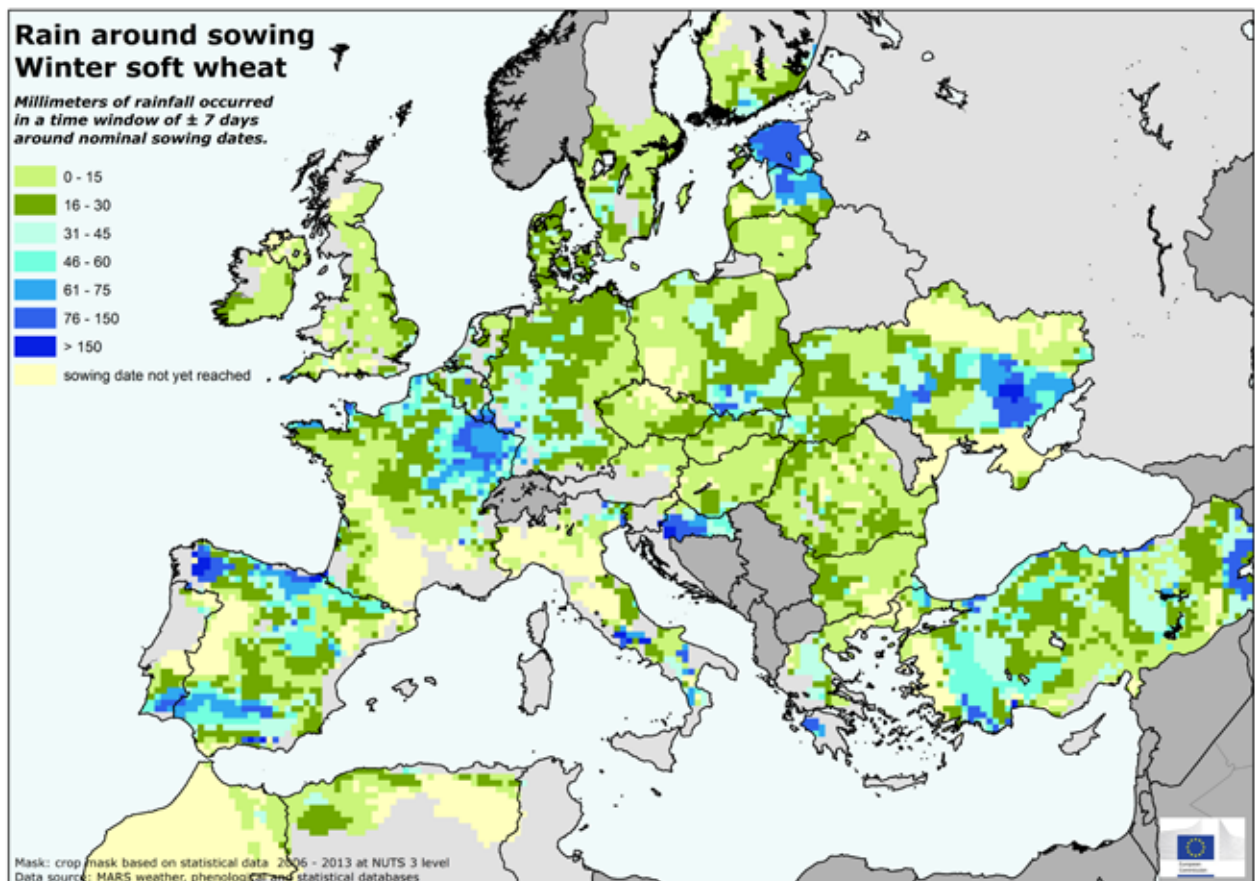
Winter wheat

Predominantly favourable conditions for sowing and emergence



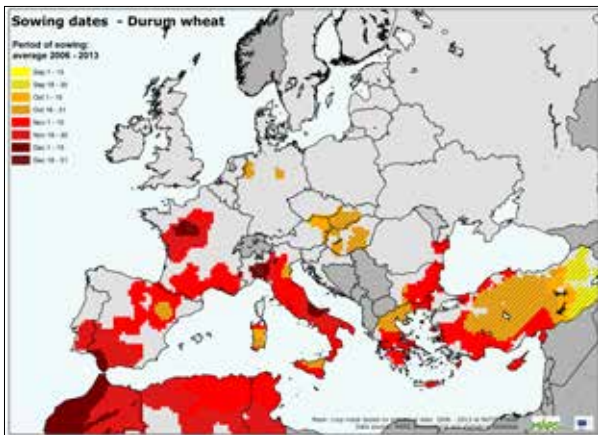
'normal' sowing period was generally around average, and sowing conditions were particularly good during the end of September and the first week of October. In Poland, rainfall during the sowing period (the second half of September and the beginning of October) was below- or around average, and concentrated in relatively short events, thus providing sufficiently wide windows of good sowing opportunities. In the UK and Ireland, sowing conditions were excellent through most of September and early October. In other parts of the EU, sowing generally proceeded with no major hiccups. Even where sowing activities were delayed, no serious problems were encountered as, once sown, emergence and early crop establishment generally progressed well, thanks to above-average temperatures across the EU-28.

Weather conditions throughout the EU have been predominantly favourable for the sowing of winter wheat. In the northern half of France, the largest wheat producer of the EU-28, rainfall was well above average between 4 and 16 October, causing some delay, but this was followed by a drier period which created good sowing conditions. In Germany's main wheat-producing areas, rainfall during the



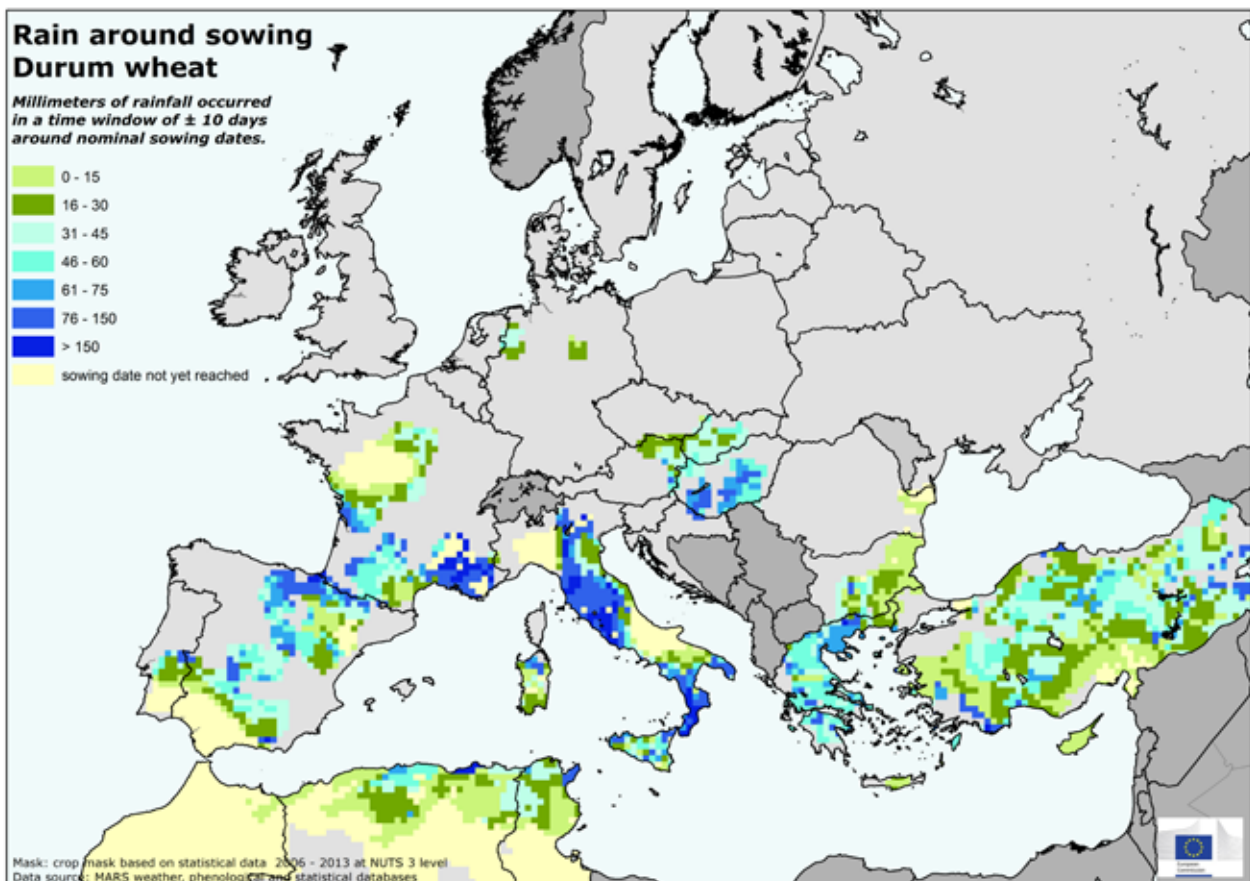
Durum Wheat

Late start of sowings



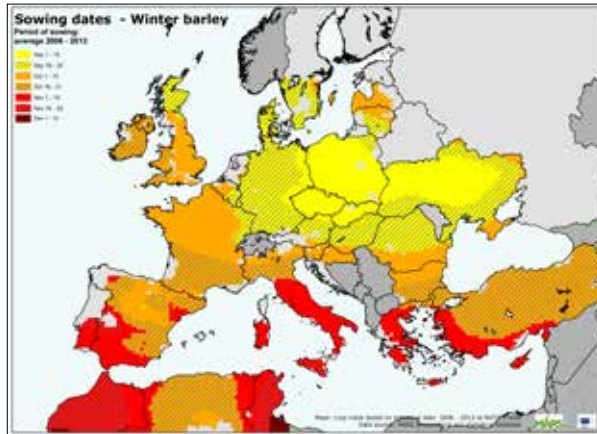
In Italy, the largest durum wheat producer of the EU-28, sowing usually occurs later than soft wheat. Rainfall during the first dekad of November hampered the start of sowing activities, mainly in Puglia and in the eastern part of Sicily. However, the dry period expected in most of southern regions

during the coming weeks may lead to good sowing conditions. The sowing of durum wheat in Greece was delayed due to significant rainfall events since the second half of October, but intermittent dry periods and daily temperatures above the average could permit sowing activities to start during the first half of November. In France, the sowing of durum wheat suffered similar problems, due to the wetter-than-usual conditions recorded in the south-eastern regions, while cumulated rainfall below the average was observed in western areas. Good sowing conditions prevailed in Spain, thanks to the sufficient rainfall recorded during the first dekad of November.



Winter barley

Sowing complete in northern Europe under favourable weather; ongoing in the south with no major constraints

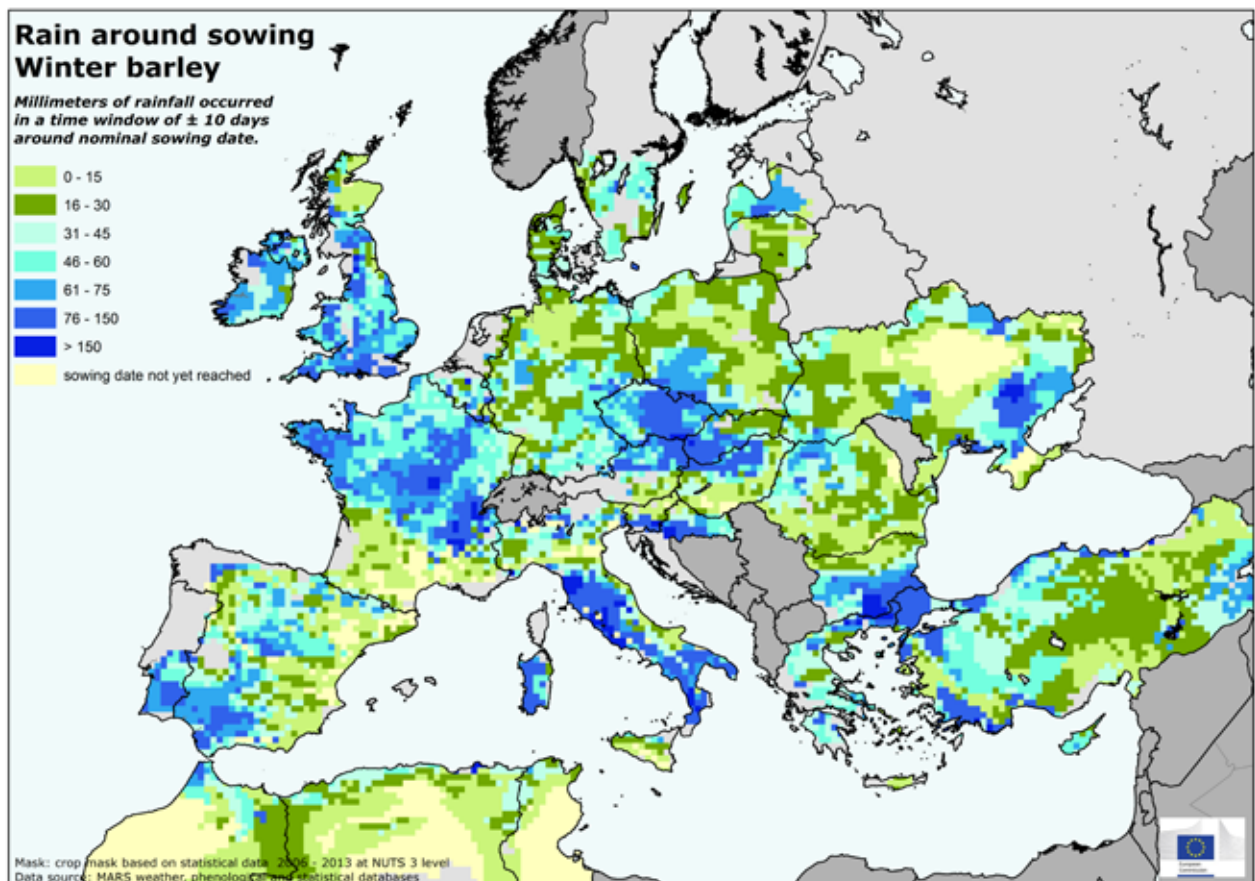


Sowing has finished in central and northern Europe, where weather conditions throughout the sowing period were generally rather positive. In France, the amount of rainfall received during September and October was close to seasonal values, and temperatures were higher than the long-term average, especially from the second half of October. That

made it possible for early crop emergence in almost all regions, about two weeks earlier than in 2013. Similar warm conditions were observed in the UK, Ireland, Poland and Germany, and also in Sweden, Finland and Denmark, leading to a rapid crop emergence.

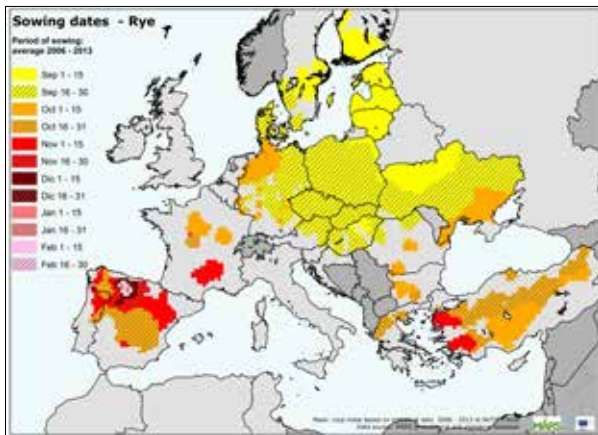
In Romania, precipitation was slightly below the average in October. The absence of heavy rainfall permitted sowing activities to progress adequately. In Hungary, although showers were abundant in mid-September and the second half of October, a period of about a month was almost free of rain, which permitted the sowing to be completed.

In Spain, barley sowing is currently starting in northern regions, where the precipitation registered during the first half of October and the first week of November helped to reach adequate soil moisture levels. In southern regions, sowing is expected to occur in the last week of November. Substantial rainfall occurred during the first half of November, which is helping to prepare the soils for sowing.



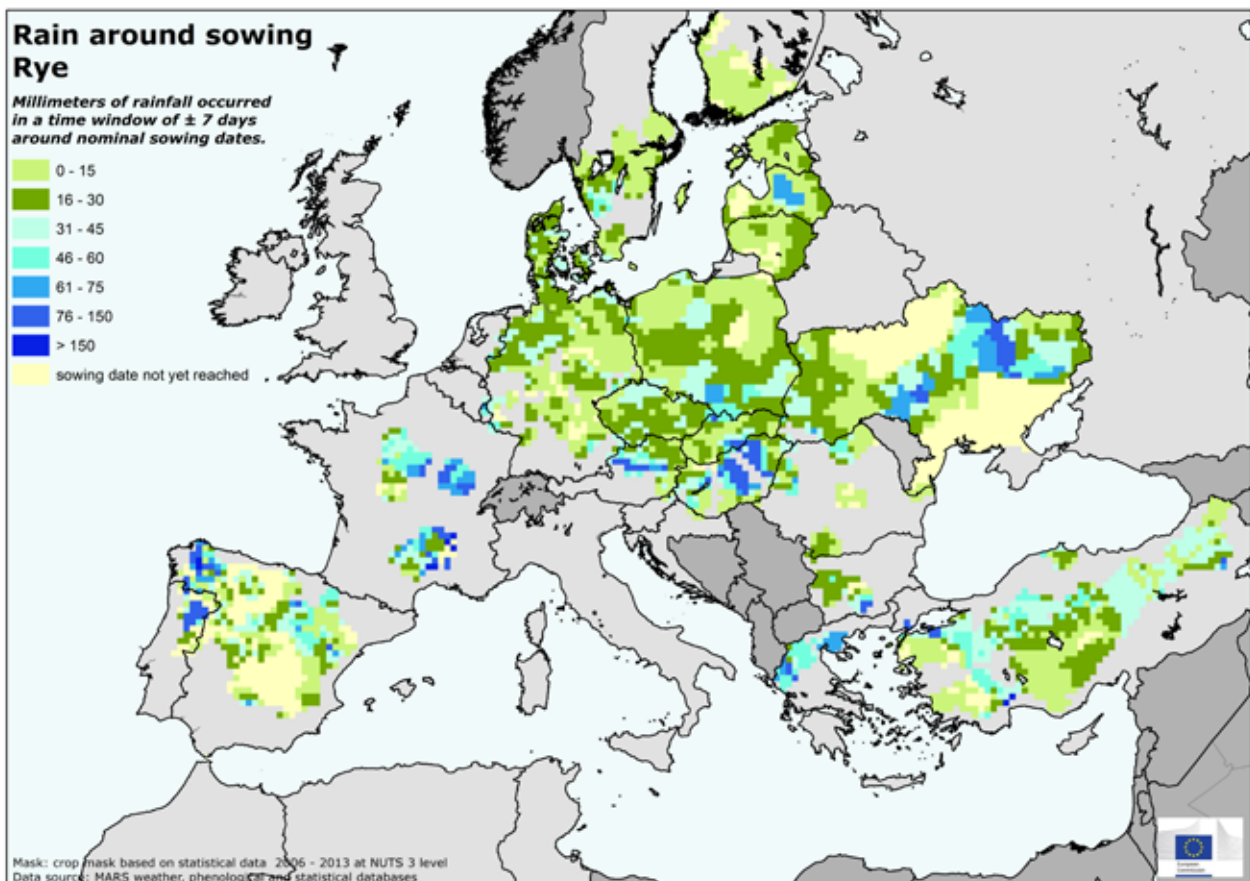
Rye

Favourable weather conditions for timely sowing and crop establishment



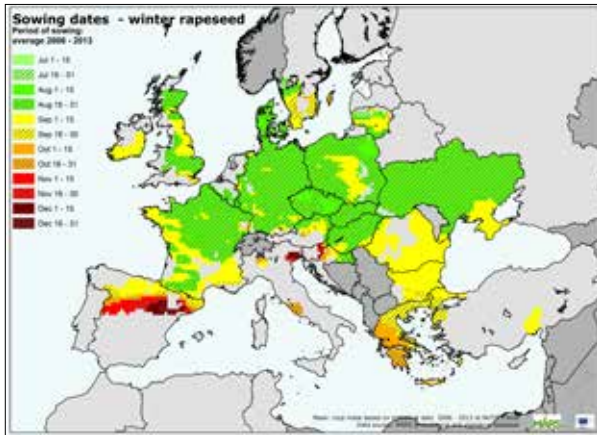
Weather conditions have been predominantly favourable for the sowing of rye in the EU's main rye-producing areas. In Germany, which accounts for more than 40% of EU-28 rye production, rainfall during the normal sowing period was generally below or around average, and sowing conditions were particularly good during the end of September and the

first week of October. In Poland, which accounts for another 40% of EU-rye production, rainfall during the normal sowing period (mainly in the second half of September) tended to be concentrated in relatively short periods. This led to sufficiently wide windows of good sowing opportunities, even in the south where total rainfall amounts during this period exceeded the average. Similar conditions were recorded in Denmark, and by the smaller rye producers in central Europe. Once sown, emergence and early crop establishment generally progressed well, thanks to above-average temperatures during most of October. In Spain, where rye is sown much later (mainly in *Castilla y Leon*), abundant rains during the second week of October ensured good initial soil moisture conditions. The following weeks until the beginning of November were predominantly dry, creating excellent opportunities for sowing.



Winter rapeseed

Moderately good sowing conditions and development before winter

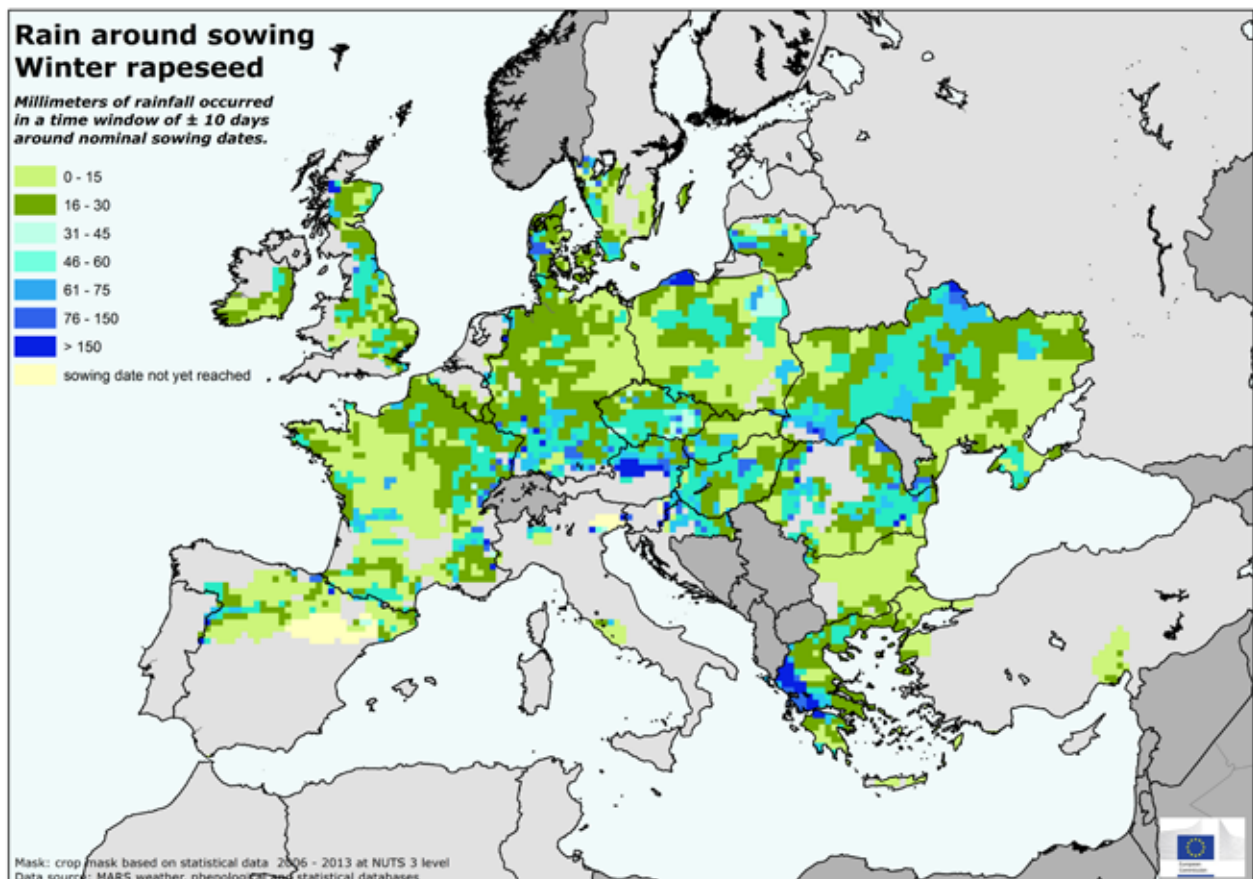


Considering the main EU-28 producers of rapeseed, precipitation was near average during mid-August in Poland and eastern Germany, which permitted an adequate progression of sowing activities. In the eastern UK, although showers were recorded in early and late August, some days in mid-August were almost free of rain, which allowed the sowing to be completed.

While the precipitation regime in northern France and central

Germany was above average during the typical sowing window (mid- to end of August), no serious sowing delay occurred as some days in the second half of August were free of rain, and first two weeks in September were optimal for sowing. Similar conditions were observed for the Czech Republic, Hungary and Romania. Good sowing conditions also prevailed in Denmark, Bulgaria and Lithuania.

The higher-than-average temperatures during September, accompanied by moderate rainfall in the second half of September, created optimal temperatures and enough soil moisture supply for appropriate germination and emergence in all of the main EU-28 rapeseed-producing countries. However, widespread damages are reported in Germany (esp. *Mecklenburg-Vorpommern*) and the UK, where warm temperatures and the unusually dry conditions during September created optimal conditions for certain insects, especially flea beetles. October was characterised by warm temperatures and seasonal rainfall in all rapeseed-growing areas across Europe. These mild conditions favoured the development and a good establishment of rapeseed.



2.2 Winter crops – Neighbourhood countries

Turkey

Favourable sowing conditions for winter cereals

Weather conditions throughout the country have been favourable for the sowing of winter wheat and barley, which is still ongoing. The sowing campaign started in mid-October in eastern areas (e.g. *Agri, Van*). It is progressing with no particular problems, and is expected to be finalised by the end of November in the rest of the country.

The rainy month of September was followed by a mild October with sporadic rains and temperatures that were above the long-term average, except for a few days around 20 October, when temperatures dropped steeply (by 10°C in several areas) and minimum temperatures even reached slightly negative values (e.g. -3°C and -2°C). November was almost dry, with few rainy days and low levels of precipitation. Temperatures

were mainly above the average, but a cold spell hit the central-eastern parts of the country around 5 November, when the minimum temperature decreased to between -5 and -11°C (e.g. *Kuzeygogu Anadolu, Dogu Karadeniz*). Overall, however, weather conditions created appropriate windows for the preparation of the soil and timely sowing during October and November. Moreover, occasional precipitation in the main cereal areas has kept soil moisture at levels that are favourable for the emergence and the early development of crops.

Ukraine

Bad conditions for winter crops emergence

After a summer characterised by dry conditions in southern regions, the rainfall regime was marked by no significant rainfall and a few intense showers, reaching, for example, 55 mm on 23 September in *Dnipropetrovs'ka*. These intense rains pushed the cumulated rainfall above the average in *Khersons'ka* and *Zaporiz'ka* from 1 September until 10 November, but cumulated rainfall is still below average for all other regions. In *Zhytomyrs'ka*, only 20% of the average amount of cumulated rainfall was recorded, 43% in *Kirovohruds'ka*. The dry conditions and low rainfall intensity are not favourable for the emergence of winter cereals. Firstly, the dry conditions will delay the emergence of some crops

or even damage some plants that have already emerged. Secondly the intense rainfall followed by dry conditions may have created a soil crust or washed the soil surface away. A late emergence is therefore expected, which could lead to reduced yields. The main concern is for southern regions of *Odes'ka, Mykolaevs'ka, and Khersons'ka*, which were already dry and where the soil water holding capacity is the lowest.

Belarus

Good sowing conditions, but serious concerns for crop emergence

Meteorological conditions were favourable for the sowing of winter cereals, due to dry weather and above-average temperatures since the beginning of September. The sowing of winter cereals was therefore accomplished on a timely basis throughout the country: during early September in the north and at the end of September in the southern districts. Serious concerns have arisen regarding crop emergence, however, as dry conditions have persisted since the beginning of September. *Gomel, Mogilev* and *Minsk* received the lowest cumulated precipitation recorded during this period since 1975: only about 30% of the normal amount of rainfall was

recorded. Moreover, a cold spell during the last dekad of October increased concerns about crop establishment. Winter crops, already delayed by the dry conditions, were exposed to temperatures that dropped to -10°C in the eastern districts. This cold spell further delayed crop development, increasing the risk of winter frost damage should further adverse thermal conditions occur during the coming winter.

Russia

Quick sowing campaign, but very poor crop conditions

The dry weather conditions of late August and September allowed for the sowing of winter wheat to progress well in most of European Russia. During the last days of August and again in mid-September, considerable rainfall caused a delay of one to two weeks in the southern part of the *Central Okrug* and the middle areas of the *Near Volga Okrug*. Despite this delay, the overall autumn sowing campaign can be considered to have been exceptionally trouble-free. However, the scarce rainfall in most of the winter crop areas did not provide enough soil moisture supply for appropriate germination and emergence. In mid-October, above-average temperatures and some rainfall (15-40 mm) partially eased the situation in some regions, but this was followed by a steep drop in temperatures

(5 to 10°C below the average) in the last dekad of October. During the most severe frost events, minimum temperatures fell to between -5 and -10°C in the *Southern Federal District*, and to between -10 and -15°C in the *Central and Near Volga Okrugs*. This cold spell further delayed crop development. Due to soil moisture deficiencies and adverse thermal conditions, winter wheat is generally poorly established, although the situation may improve if November conditions prove to be warm and wet. The risk of winter frost kill is high. An early start to the winter season with freezing temperatures and unusual snow cover may cause significant damages to the underdeveloped crops.

Maghreb

Morocco, Algeria and Tunisia

Good sowing conditions in Morocco and Algeria, slightly drier in Tunisia

Cumulated rainfall in **Morocco** since the start of September was about the same as the long-term average. Although there was a dry period towards the end of October, well-separated rainfall events should have kept soil moisture at adequate levels, and elevated rainfall since the start of November will have replenished any deficit that might otherwise have arisen. This, combined with the average to above-average temperatures that were recorded during the same period, suggests that sowing conditions in Morocco have been satisfactory.

Algeria received slightly above-average rainfall during this period, with a fairly consistent temporal distribution, and soil

moisture levels are therefore expected to be good. Average to above-average temperatures were also recorded during this same period. Sowing conditions are expected to have been favourable.

Tunisia received slightly below-average rainfall since the start of September. However, the rainfall occurred in more frequent episodes, and is therefore expected to have maintained more even soil moisture levels. Temperatures were average to warm, and sowing conditions are expected to have been adequate.

3. Crop yield forecasts

Country	TOTAL WHEAT t/ha					TOTAL BARLEY t/ha				
	2013	2014	Avg 5yrs	%14/13	%14/5yrs	2013	2014	Avg 5yrs	%14/13	%14/5yrs
EU28	5.59	5.63	5.34	+0.9	+5.6	4.91	4.61	4.50	-6.1	+2.5
AT	5.37	5.45	5.06	+1.4	+7.7	5.43	5.11	4.85	-5.8	+5.5
BE	9.13	8.66	8.78	-5.2	-1.4	8.54	8.41	8.51	-1.5	-1.1
BG	4.19	4.19	3.72	-0.1	+12.5	3.72	4.09	3.59	+9.8	+14.0
CY	-	-	-	-	-	1.58	0.98	1.87	-37.9	-47.5
CZ	5.67	5.33	5.23	-5.9	+2.1	4.57	4.51	4.35	-1.3	+3.5
DE	8.00	8.16	7.48	+1.9	+9.1	6.59	6.77	6.23	+2.8	+8.8
DK	7.29	7.69	7.14	+5.5	+7.7	5.77	5.58	5.54	-3.4	+0.7
EE	3.27	3.50	3.15	+6.9	+11.2	3.32	3.27	2.81	-1.5	+16.0
ES	3.64	2.93	3.06	-19.6	-4.2	3.59	2.55	2.80	-28.9	-8.9
FI	3.82	3.72	3.70	-2.6	+0.6	3.85	3.52	3.51	-8.5	+0.4
FR	7.26	7.26	7.02	-0.1	+3.4	6.31	6.48	6.42	+2.7	+0.8
GR	2.86	3.46	2.78	+21.1	+24.5	3.01	3.59	2.84	+19.4	+26.5
HR	4.89	4.20	4.98	-14.1	-15.6	3.78	4.18	4.09	+10.4	+2.2
HU	4.64	4.53	4.03	-2.3	+12.4	4.05	4.16	3.62	+2.6	+15.0
IE	9.00	9.02	8.54	+0.2	+5.7	7.58	7.59	7.07	+0.3	+7.5
IT	3.71	3.65	3.79	-1.6	-3.6	3.62	3.55	3.61	-2.2	-1.7
LT	4.30	4.36	4.03	+1.4	+8.2	3.28	3.37	3.06	+2.6	+9.9
LU	6.37	5.63	6.07	-11.6	-7.1	-	-	-	-	-
LV	3.89	3.68	3.68	-5.2	+0.2	2.73	2.78	2.65	+2.0	+5.1
MT	-	-	-	-	-	-	-	-	-	-
NL	8.73	8.70	8.75	-0.3	-0.5	0.00	6.84	6.30	+0.0	+8.6
PL	4.44	4.42	4.15	-0.3	+6.5	3.95	3.56	3.41	-9.9	+4.3
PT	1.75	1.77	1.43	+1.1	+23.9	1.77	1.75	1.55	-1.3	+12.8
RO	3.48	3.50	2.97	+0.7	+18.1	3.12	3.20	2.70	+2.5	+18.4
SE	5.79	6.27	5.77	+8.3	+8.6	5.00	4.51	4.55	-9.8	-0.7
SI	4.35	4.40	4.71	+1.1	-6.8	3.98	4.03	4.19	+1.4	-3.8
SK	4.58	3.80	4.00	-17.1	-5.1	3.68	3.80	3.38	+3.2	+12.2
UK	7.38	8.24	7.49	+11.6	+10.0	5.85	5.82	5.74	-0.4	+1.5

Country	SOFT WHEAT t/ha					DURUM WHEAT t/ha				
	2013	2014	Avg 5yrs	%14/13	%14/5yrs	2013	2014	Avg 5yrs	%14/13	%14/5yrs
EU28	5.82	5.86	5.57	+0.6	+5.1	3.28	3.19	3.21	-2.6	-0.5
AT	5.39	5.50	5.10	+2.1	+7.9	5.09	4.42	4.33	-13.1	+2.2
BE	9.13	8.66	8.78	-5.2	-1.4	-	-	-	-	-
BG	4.20	4.19	3.73	-0.2	+12.3	3.17	3.77	3.22	+19.0	+17.1
CY	-	-	-	-	-	-	-	-	-	-
CZ	5.67	5.33	5.23	-5.9	+2.1	-	-	-	-	-
DE	8.00	8.16	7.48	+1.9	+9.1	-	-	-	-	-
DK	7.29	7.69	7.14	+5.5	+7.7	-	-	-	-	-
EE	3.27	3.50	3.15	+6.9	+11.2	-	-	-	-	-
ES	3.82	3.03	3.30	-20.7	-8.1	2.72	2.35	2.14	-13.7	+9.4
FI	3.82	3.72	3.70	-2.6	+0.6	-	-	-	-	-
FR	7.40	7.39	7.19	-0.1	+2.8	5.27	5.01	5.12	-5.0	-2.2
GR	2.72	3.50	2.94	+28.7	+19.1	2.93	3.45	2.72	+17.8	+26.6
HR	4.89	4.20	4.98	-14.1	-15.6	-	-	-	-	-
HU	4.64	4.54	4.03	-2.2	+12.5	4.44	4.08	3.84	-8.1	+6.3
IE	9.00	9.02	8.54	+0.2	+5.7	-	-	-	-	-
IT	5.22	5.22	5.34	-0.1	-2.2	2.97	2.86	3.08	-3.9	-7.2
LT	4.30	4.36	4.03	+1.4	+8.2	-	-	-	-	-
LU	6.37	5.63	6.07	-11.6	-7.1	-	-	-	-	-
LV	3.89	3.68	3.68	-5.2	+0.2	-	-	-	-	-
MT	-	-	-	-	-	-	-	-	-	-
NL	8.73	8.70	8.75	-0.3	-0.5	-	-	-	-	-
PL	4.44	4.42	4.15	-0.3	+6.5	-	-	-	-	-
PT	1.75	1.77	1.43	+1.1	+23.9	-	-	-	-	-
RO	3.48	3.50	2.97	+0.7	+18.1	-	-	-	-	-
SE	5.79	6.27	5.77	+8.3	+8.6	-	-	-	-	-
SI	4.35	4.40	4.71	+1.1	-6.8	-	-	-	-	-
SK	4.58	3.79	4.00	-17.3	-5.4	4.68	4.16	3.95	-11.0	+5.4
UK	7.38	8.24	7.49	+11.6	+10.0	-	-	-	-	-

Country	TRITICALE t/ha					RAPE AND TURNIP RAPE t/ha				
	2013	2014	Avg 5yrs	%14/13	%14/5yrs	2013	2014	Avg 5yrs	%14/13	%14/5yrs
EU28	4.27	4.25	4.07	-0.6	+4.3	3.11	3.32	3.07	+6.8	+8.2
AT	4.98	5.05	4.97	+1.4	+1.6	3.39	2.72	3.12	-19.8	-12.8
BE	-	-	-	-	-	4.26	4.31	4.22	+1.3	+2.1
BG	2.82	3.31	2.76	+17.0	+19.7	2.54	2.61	2.37	+2.8	+10.4
CY	-	-	-	-	-	-	-	-	-	-
CZ	4.58	4.51	4.33	-1.4	+4.3	3.45	2.95	3.03	-14.4	-2.8
DE	6.57	6.46	5.94	-1.8	+8.7	3.95	4.20	3.77	+6.3	+11.4
DK	5.71	5.45	5.14	-4.7	+5.9	3.87	3.88	3.68	+0.1	+5.3
EE	-	-	-	-	-	2.02	2.01	1.71	-0.3	+17.7
ES	2.77	2.30	2.25	-17.1	+2.2	2.56	1.87	2.04	-27.0	-8.3
FI	-	-	-	-	-	1.52	1.37	1.43	-9.8	-3.9
FR	5.28	5.37	5.38	+1.8	-0.1	3.04	3.45	3.39	+13.4	+1.6
GR	-	-	-	-	-	-	-	-	-	-
HR	3.40	3.00	3.65	-11.6	-17.8	2.66	2.70	2.62	+1.4	+3.0
HU	3.89	3.68	3.28	-5.3	+12.4	2.60	2.67	2.31	+2.3	+15.2
IE	-	-	-	-	-	-	-	-	-	-
IT	-	-	-	-	-	2.17	2.27	2.27	+4.3	-0.1
LT	3.13	3.31	3.00	+5.6	+10.1	2.13	2.15	2.06	+1.0	+4.4
LU	-	-	-	-	-	-	-	-	-	-
LV	-	-	-	-	-	2.36	2.11	2.18	-10.5	-3.2
MT	-	-	-	-	-	-	-	-	-	-
NL	-	-	-	-	-	-	-	-	-	-
PL	3.63	3.64	3.44	+0.2	+5.9	2.80	3.06	2.69	+9.3	+13.5
PT	1.54	1.45	1.24	-6.1	+16.8	-	-	-	-	-
RO	3.38	3.61	3.09	+6.9	+16.8	2.42	2.47	1.86	+2.1	+32.7
SE	4.88	5.69	4.82	+16.6	+18.1	2.64	2.93	2.76	+10.7	+6.2
SI	-	-	-	-	-	-	-	-	-	-
SK	3.35	2.92	3.10	-12.8	-5.9	2.74	2.24	2.28	-18.2	-1.8
UK	3.75	4.14	3.90	+10.4	+6.1	2.98	3.81	3.43	+28.1	+11.4

Country	SUGAR BEETS t/ha					POTATO t/ha				
	2013	2014	Avg 5yrs	%14/13	%14/5yrs	2013	2014	Avg 5yrs	%14/13	%14/5yrs
EU28	67.96	73.16	69.33	+7.7	+5.5	30.98	33.75	30.62	+8.9	+10.2
AT	68.16	72.37	69.07	+6.2	+4.8	28.59	34.45	31.65	+20.5	+8.8
BE	74.07	77.29	76.32	+4.3	+1.3	46.15	47.29	44.97	+2.5	+5.2
BG	-	-	-	-	-	15.69	18.84	14.86	+20.1	+26.8
CY	-	-	-	-	-	-	-	-	-	-
CZ	60.00	63.00	59.66	+5.0	+5.6	23.12	27.13	26.68	+17.4	+1.7
DE	63.88	74.80	67.94	+17.1	+10.1	39.83	45.26	42.95	+13.6	+5.4
DK	60.52	61.67	60.76	+1.9	+1.5	40.00	39.13	39.59	-2.2	-1.2
EE	-	-	-	-	-	-	-	-	-	-
ES	89.85	89.44	83.95	-0.5	+6.5	30.49	30.16	30.18	-1.1	-0.1
FI	38.78	38.04	36.19	-1.9	+5.1	27.56	27.41	26.03	-0.6	+5.3
FR	85.40	90.51	88.10	+6.0	+2.7	43.39	46.97	43.16	+8.3	+8.8
GR	-	-	-	-	-	25.36	24.63	25.72	-2.9	-4.2
HR	52.00	57.85	48.91	+11.3	+18.3	-	-	-	-	--
HU	49.94	63.63	51.00	+27.4	+24.8	23.26	27.86	23.92	+19.8	+16.4
IE	-	-	-	-	-	34.00	34.25	31.43	+0.7	+9.0
IT	53.04	57.04	56.22	+7.5	+1.5	25.61	24.87	24.82	-2.9	+0.2
LT	51.00	52.08	48.70	+2.1	+7.0	18.00	15.48	15.80	-14.0	-2.1
LU	-	-	-	-	-	-	-	-	-	-
LV	-	-	-	-	-	19.00	17.34	17.40	-8.7	-0.4
MT	-	-	-	-	-	-	-	-	-	-
NL	76.00	82.71	77.43	+8.8	+6.8	41.50	45.69	44.13	+10.1	+3.5
PL	52.90	52.79	52.08	-0.2	+1.4	21.40	22.28	20.55	+4.1	+8.4
PT	-	-	-	-	-	18.22	17.71	16.44	-2.8	+7.7
RO	32.28	37.07	33.60	+14.8	+10.3	15.03	16.59	14.47	+10.4	+14.6
SE	64.20	61.14	59.07	-4.8	+3.5	33.79	33.18	31.94	-1.8	+3.9
SI	-	-	-	-	-	-	-	-	-	-
SK	-	-	-	-	-	-	-	-	-	-
UK	68.40	72.23	68.03	+5.6	+6.2	40.10	43.52	41.07	+8.5	+6.0

Country	SUNFLOWER t/ha				
	2013	2014	Avg 5yrs	%14/13	%14/5yrs
EU28	1.96	2.11	1.85	+7.5	+13.9
AT	2.35	2.78	2.58	+18.0	+7.7
BE	-	-	-	-	-
BG	2.10	2.40	1.97	+14.6	+22.0
CY	-	-	-	-	-
CZ	2.20	2.46	2.38	+11.9	+3.4
DE	2.11	2.26	2.15	+7.3	+5.0
DK	-	-	-	-	-
EE	-	-	-	-	-
ES	1.21	1.03	1.11	-15.1	-7.4
FI	-	-	-	-	-
FR	2.05	2.48	2.32	+21.0	+7.2
GR	2.54	2.37	2.19	-6.7	+8.2
HR	3.24	2.59	2.74	-20.0	-5.2
HU	2.48	2.67	2.25	+8.0	+18.7
IE	-	-	-	-	-
IT	1.75	2.34	2.16	+33.8	+8.2
LT	-	-	-	-	-
LU	-	-	-	-	-
LV	-	-	-	-	-
MT	-	-	-	-	-
NL	-	-	-	-	-
PL	-	-	-	-	-
PT	0.64	0.62	0.56	-2.8	+10.8
RO	2.00	2.06	1.65	+3.0	+25.1
SE	-	-	-	-	-
SI	-	-	-	-	-
SK	2.33	2.40	2.22	+3.0	+7.7
UK	-	-	-	-	-

Notes: Yields are forecast for crops with more than 10000 ha per country
Sources: 2009-2014 data come from DG AGRICULTURE short term Outlook data (dated November 2014, received on 12/11/2014), EUROSTAT Eurobase (last update: 16/10/2014) and EES (last update: 10/10/2014)
2014 yields come from MARS CROP YIELD FORECASTING SYSTEM (CGMS output up to 10/11/2014)

Country	WHEAT (t/ha)				
	2013	2014	Avg 5yrs	%14/13	%14/5yrs
BY	3.33*	3.67	3.31	+10.2	+10.8
DZ	1.72*	1.70	1.62	-1.4	+4.5
MA	2.10*	1.71	1.75	-22.8	-2.3
TN	1.55*	2.09	1.92	+34.7	+8.6
TR	2.78	2.55	2.63	-8.2	-3.0
UA	3.39	3.78	3.08	+11.4	+22.8

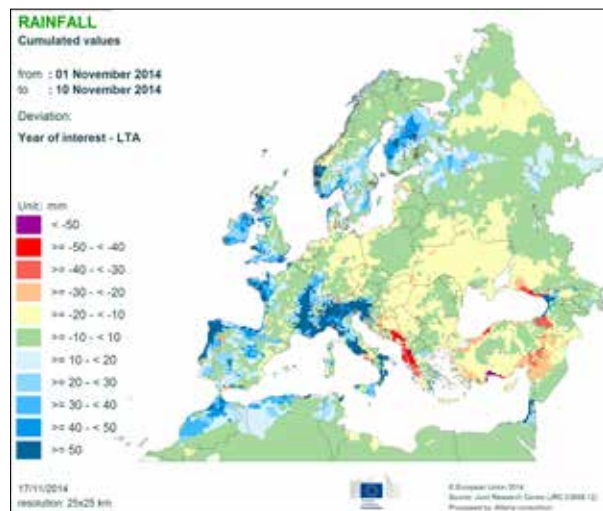
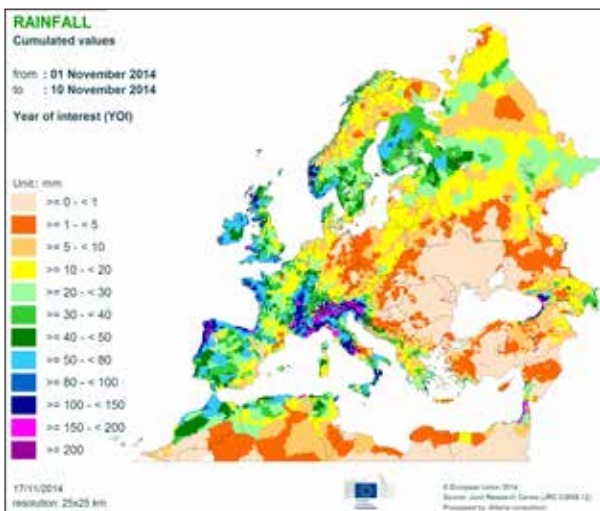
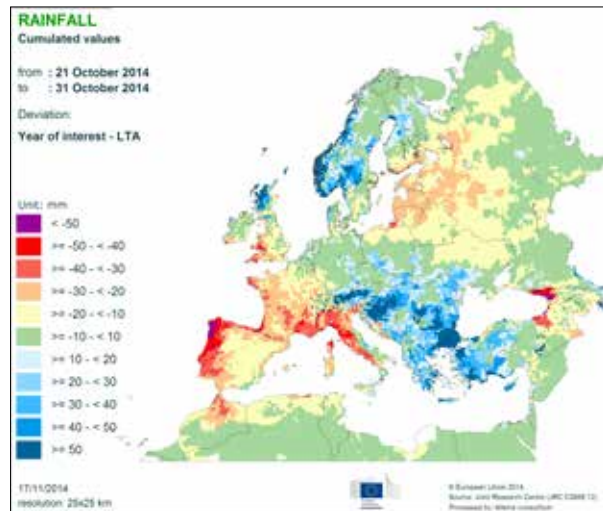
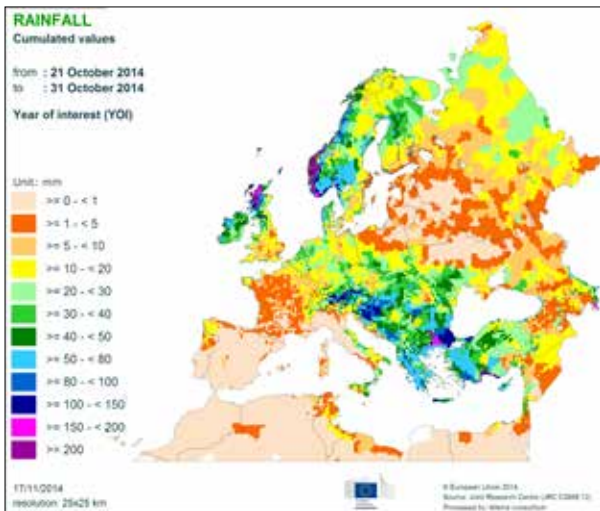
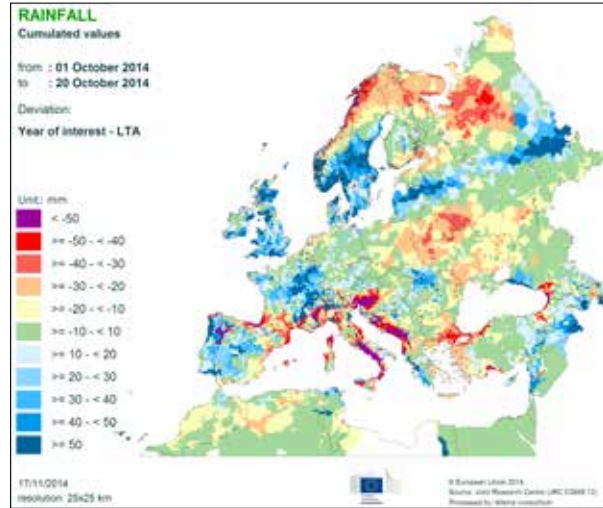
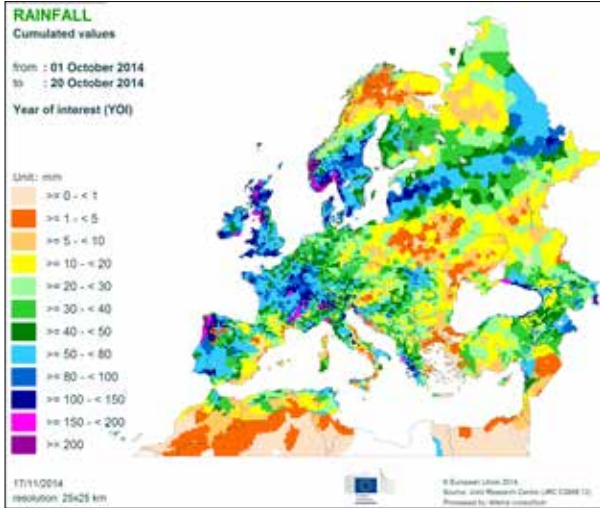
Country	BARLEY (t/ha)				
	2013	2014	Avg 5yrs	%14/13	%14/5yrs
BY	3.09	3.29	3.12	+6.4	+5.3
DZ	1.65*	1.42	1.53	-14.1	-7.1
MA	1.24*	1.16	1.27	-6.5	-8.6
TN	0.94*	1.41	1.24	+50.3	+13.5
TR	2.89	2.47	2.58	-14.8	-4.3
UA	2.34	2.56	2.25	+9.5	+13.8

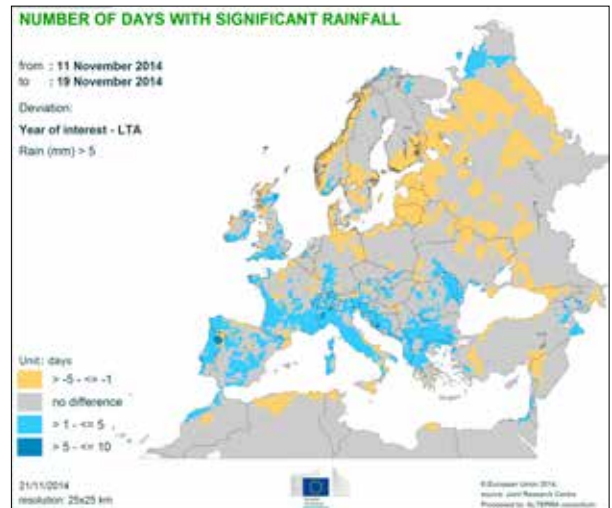
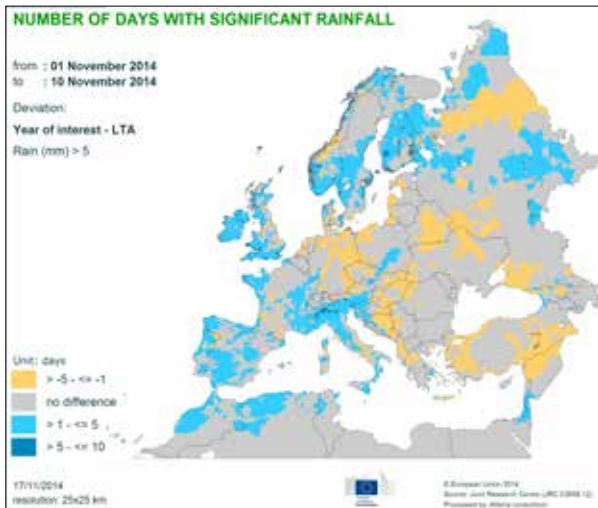
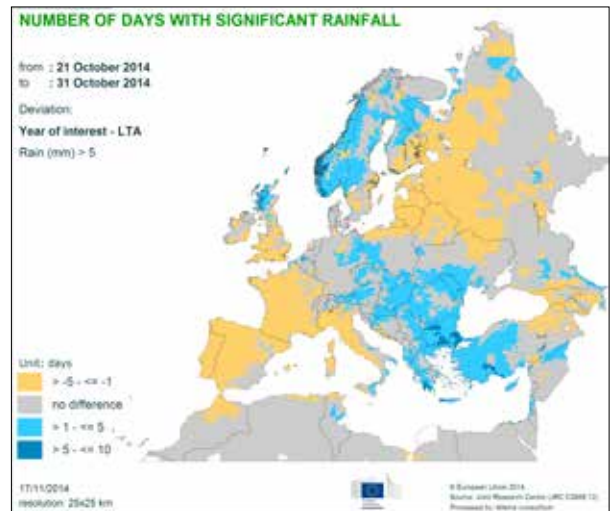
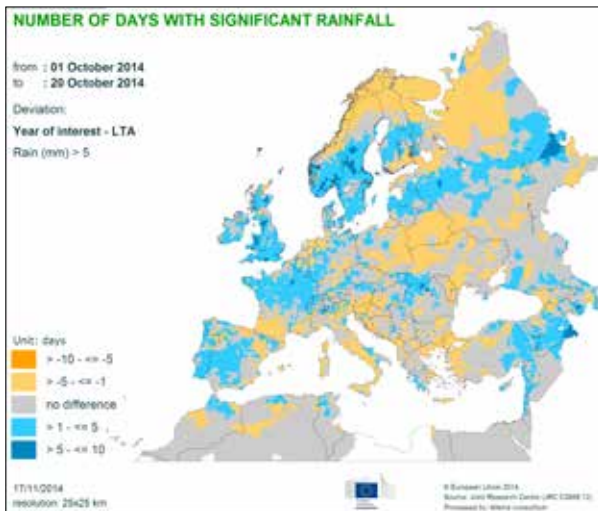
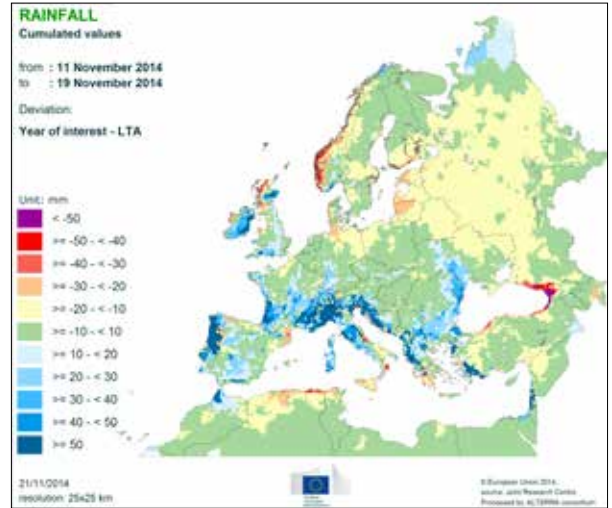
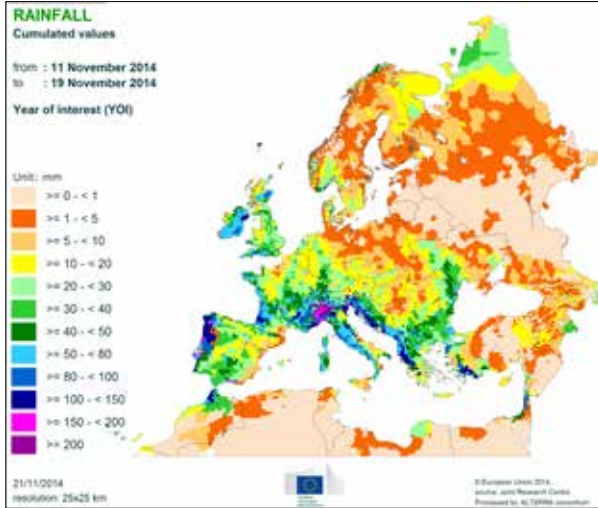
Country	GRAIN MAIZE (t/ha)				
	2013	2014	Avg 5yrs	%14/13	%14/5yrs
BY	6.00*	5.67	5.65	-5.5	+0.4
DZ	-	-	-	-	-
MA	-	-	-	-	-
TN	-	-	-	-	-
TR	8.90	8.27	7.60	-7.1	+8.8
UA	6.40	5.70	5.56	-11.0	+2.6

Notes: Yields are forecast for crops with more than 10000 ha per country
Sources: 2009-2013 data come from FAO, PSD-online, INRA Maroc, MinAGRI Tunisia and DSASI Algeria
*2013 yields come from MARS CROP YIELD FORECASTING SYSTEM as reported values were not available
2014 yields come from MARS CROP YIELD FORECASTING SYSTEM (CGMS output up to 10/10/2014; for DZ, MA and TN CGMS output was used up to 10/06/2014 as the season has finished)

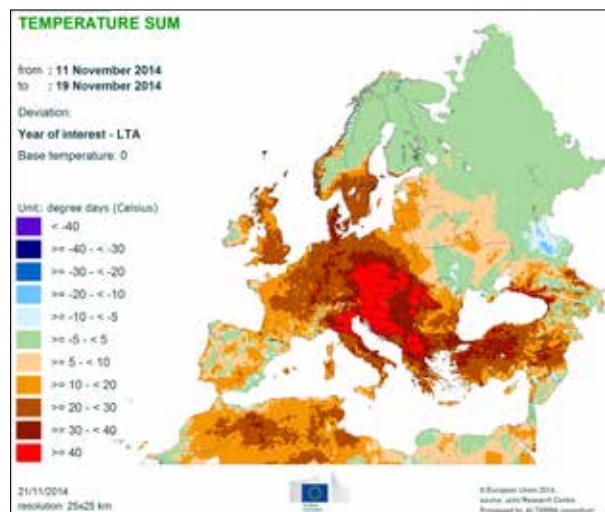
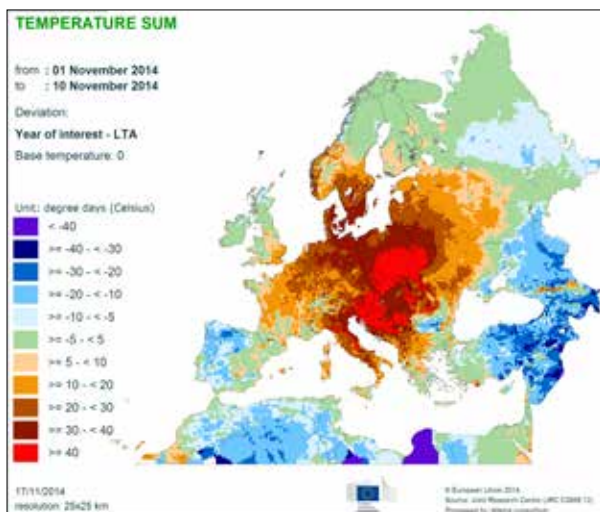
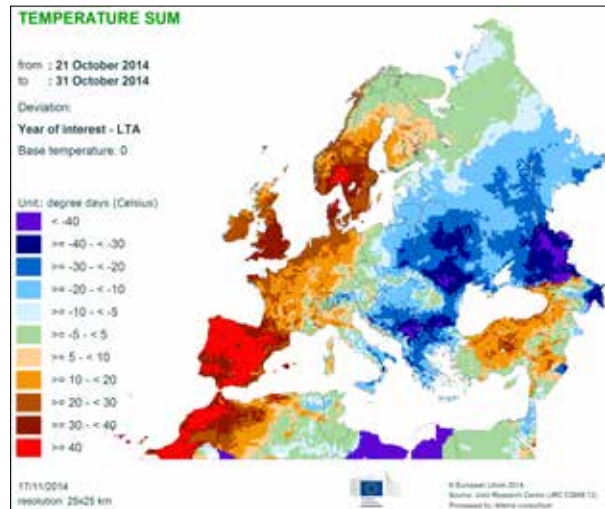
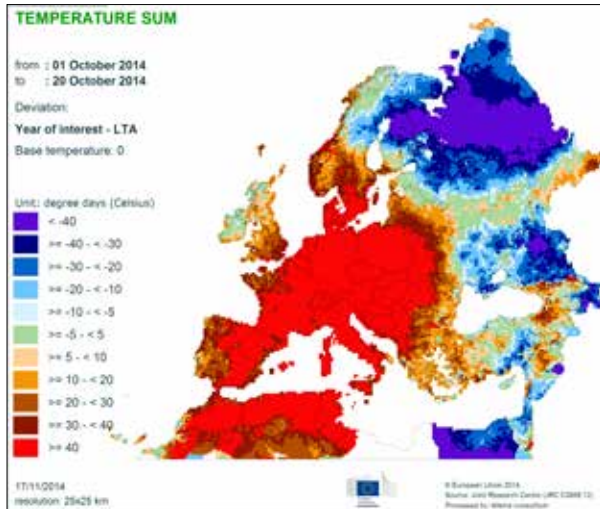
4. Atlas maps

Precipitation





Temperatures



2014 MARS Bulletins

Date	Publication	Reference
27 Jan	Agromet. analysis	Vol. 22 No. 1
24 Feb	Agromet analysis	Vol. 22 No. 2
24 Mar	Agromet analysis and yield forecast	Vol. 22 No. 3
14 Apr	Agromet analysis, remote sensing and yield forecast	Vol. 22 No. 4
12 May	Agromet analysis, remote sensing, yield forecast and pasture analysis	Vol. 22 No. 5
23 Jun	Agromet analysis, remote sensing, yield forecast and pasture update	Vol. 22 No. 6
21 Jul	Agromet analysis, remote sensing, yield forecast, pasture update and rice analysis	Vol. 22 No. 7
25 Aug	Agromet analysis, yield forecast and pasture update	Vol. 22 No. 8
22 Sep	Agromet analysis, remote sensing, yield forecast and pasture update	Vol. 22 No. 9
27 Oct	Agromet analysis, remote sensing, yield forecast, pasture analysis and rice analysis	Vol. 22 No. 10
24 Nov	Agromet analysis and yield forecast, sowing conditions	Vol. 22 No. 11
15 Dec	Agromet analysis	Vol. 22 No. 12

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The long term average (LTA) used within this Bulletin as a reference is based on an archive of data covering 1975-2013.