

Crop Monitoring in Europe

AGROMETEOROLOGICAL ANALYSIS, WEATHER FORECAST & YIELD FORECAST



Period of analysis

11th May – 12th June 2011

Issue date

15th June 2011

Despite rainfall in Western Europe yields are revised down

HIGHLIGHT

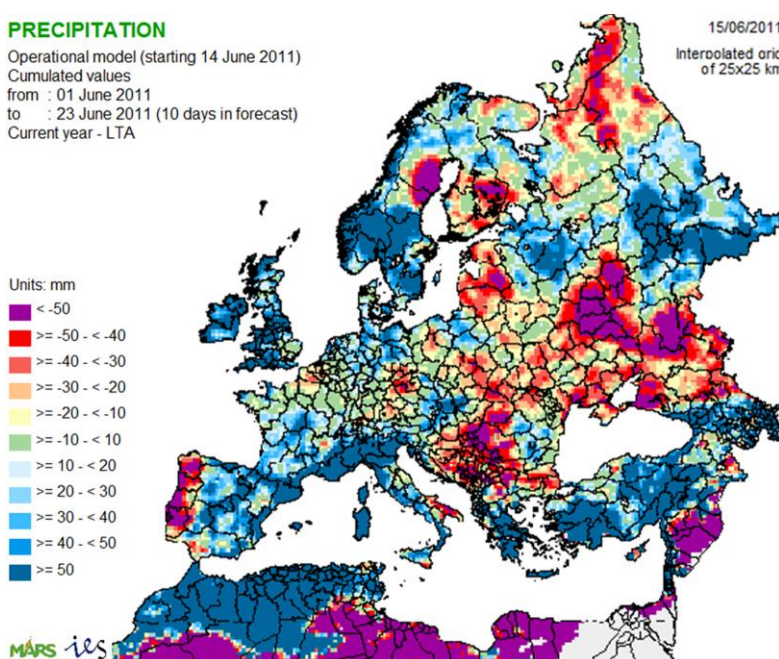
At the beginning of June the dry period in western Europe ended. Countries most affected by the dry spell received some beneficial rainfall and more rain is forecast in the coming 10 days bringing the precipitation since 1st June to average or even surplus values in the United Kingdom, France, Germany and northern Italy. This rainfall will not entirely compensate, especially in France, for the long lasting dry spell depleting soil reservoirs.

Ukraine appears as a new area of concern with lacking precipitation while crops have a high water demand.

Compared to our last forecasts from 17th May yield expectations for all cereals except spring barley decreased at EU 27 level due to the unfavourable weather conditions mainly in United Kingdom, France and Germany affecting yield prospects in these countries. Spain is experiencing a very promising year and yields have been revised up.

PRECIPITATION

Operational model (starting 14 June 2011)
Cumulated values
from : 01 June 2011
to : 23 June 2011 (10 days in forecast)
Current year - LTA



Cereals and rapeseed for EU27 as of 17.06.2011

	Yield t/ha				
	2010*	2011**	Avg 5yrs	%11/10	%11/5yrs
cereals (total)	4.95	4.88	4.89	-1.3	-0.2
wheat (total)	5.3	5.22	5.27	-1.5	-0.9
soft wheat	5.56	5.45	5.54	-1.9	-1.6
durum wheat	3.15	3.12	3.11	-1.1	+0.2
barley (total)	4.33	4.25	4.31	-1.7	-1.3
spring barley	3.69	3.79	3.74	+2.7	+1.3
winter barley	5.21	4.97	5.17	-4.7	-3.9
grain maize	7.05	6.88	6.72	-2.3	+2.5
other cereals	3.05	3	3.24	-1.7	-0.4
Rape seed	2.97	2.81	3.02	-5.5	-6.9

*Yields are forecast for crops with more than 10000 ha per country; figures are rounded to 100 kg

2006-2010 data come from EUROSTAT Eurobase , EES and DG AGRI.

**2011 yields come from MARS CROP YIELD FORECASTING SYSTEM (CGMS output up to 10/06/2011)

CONTENT

1. Agro-weather analysis
2. Weather forecast
3. Crop atlas maps
4. Crop yield forecast (EU27 and Ukraine)
Tables & maps

1. AGROMETEOROLOGICAL ANALYSIS

Towards the end of May a general change of weather for Western Europe took place. The persistent high pressure systems leading to an extremely dry spring are now replaced by a general western current bringing a deep pressure system to Western Europe alternated by short high pressure systems leading to a mix of rain and sunshine. Countries most hit by the dry conditions received some beneficial rainfall whereas Ukraine appears as a new area of concern with lacking precipitation while crops have a high water demand.

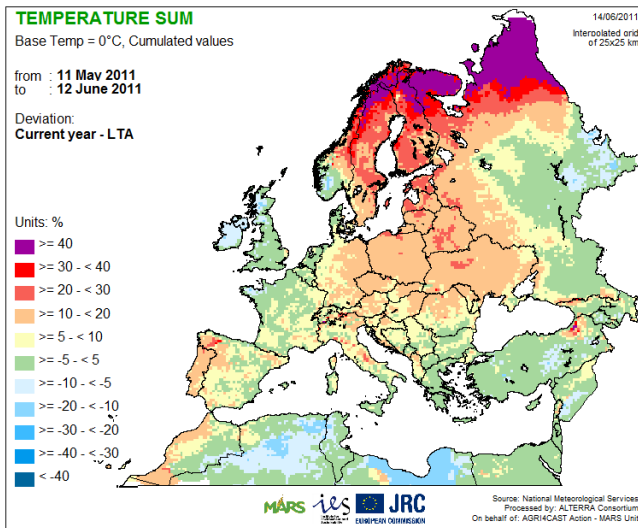
OBSERVED TEMPERATURES

Temperatures accumulated since the 10th of May are slightly above the LTA for eastern Germany, Czech Republic, Austria, Hungary, Poland, Baltic countries, Sweden, Finland and Ukraine compensating in Ukraine for the accumulated deficit in March and April. In this group of countries average temperatures are above the long-term average (LTA) as well. United Kingdom and Benelux experienced normal temperature accumulation as well as most of France, Greece and Turkey with average temperatures not deviating from the LTA. It was fresher than usual in Ireland (map 1).

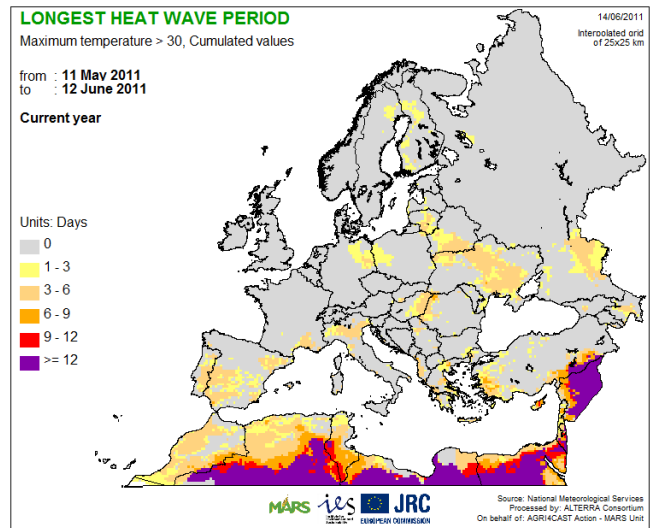
End of May, beginning of June temperatures peaked high (above 30°C) in northern Italy, east Germany, Poland, Ukraine and the border between Romania and Hungary as well as in Spain, Portugal and Greece where it is quite seasonal. Despite Méditerranée, France was spared high temperatures avoiding additional negative pressure on crops (map 2).

OBSERVED PRECIPITATION

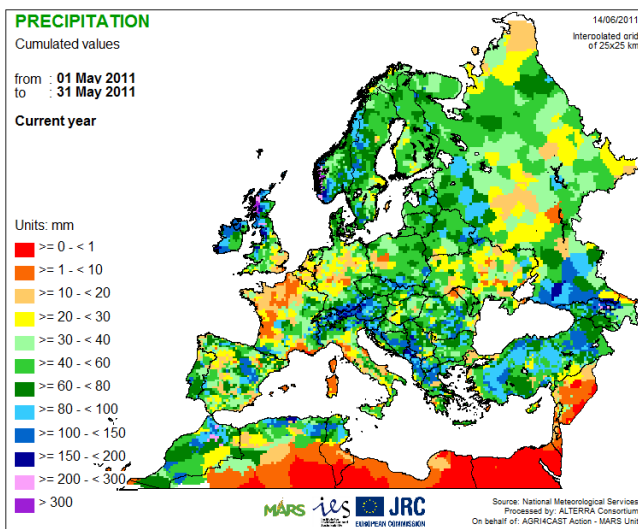
May as a whole was again a very dry month for France, most of Germany, eastern England and northern Italy but some rains are evident (map 3 and map 4). Ukraine received worrying low precipitations, whereas a surplus was recorded for Greece and Italy (Sicily and Apulia) as well as Romania and Austria. The long lasting dry period in France, Benelux, United Kingdom, Germany and northern Italy ended at the beginning of June with different levels of rainfall received in the regions affected (map 4, 5 and 6). Northern Italy saw a very rainy beginning of June (map 7) bringing extremely low soil moisture values back to average. The soil moisture levels also slightly rose or at least depletion ended in France, southern UK and Germany but is still historically low. Comparing map 9 and 10 it is evident that the regions with soil moisture levels below the 2 standard deviation for soft wheat decreased from 10th of May to 10th of June. To-date in June Spain, southern Italy and Greece remained rather dry, as well as Ukraine – here the dry period that started in May continued and the lack of precipitation has reached more than 70 % compared to the LTA for the period considered (map 8).



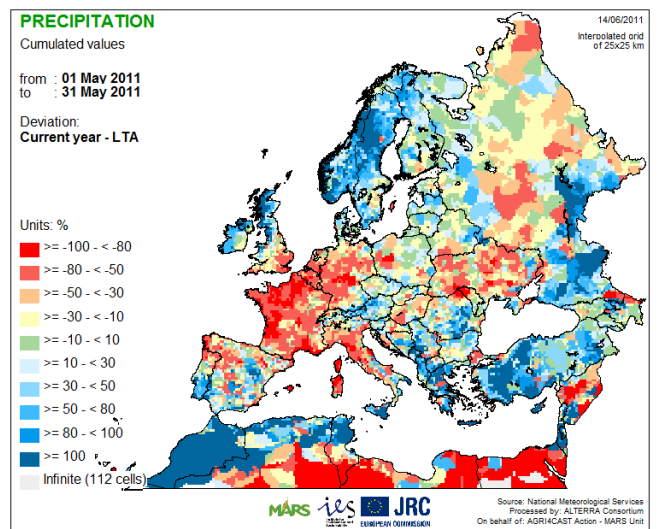
MAP 1



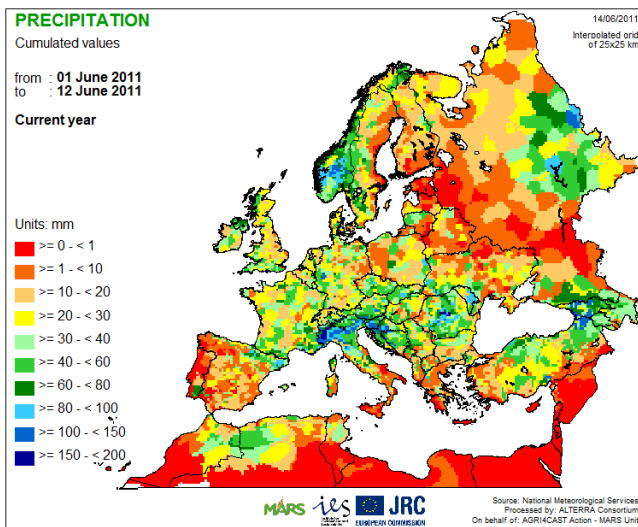
MAP 2



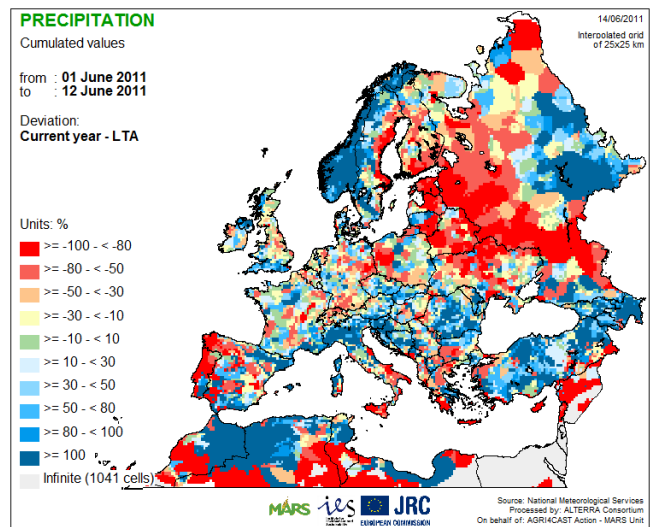
MAP 3



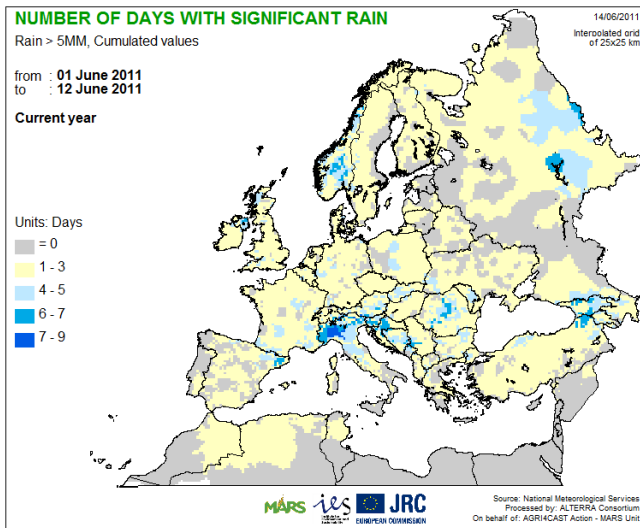
MAP 4



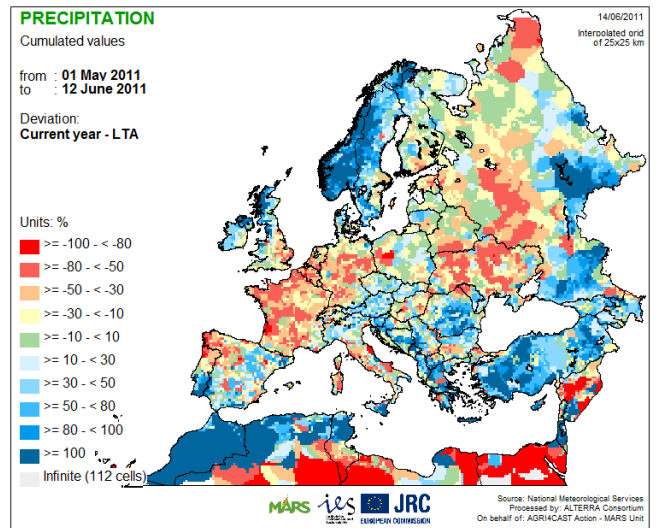
MAP 5



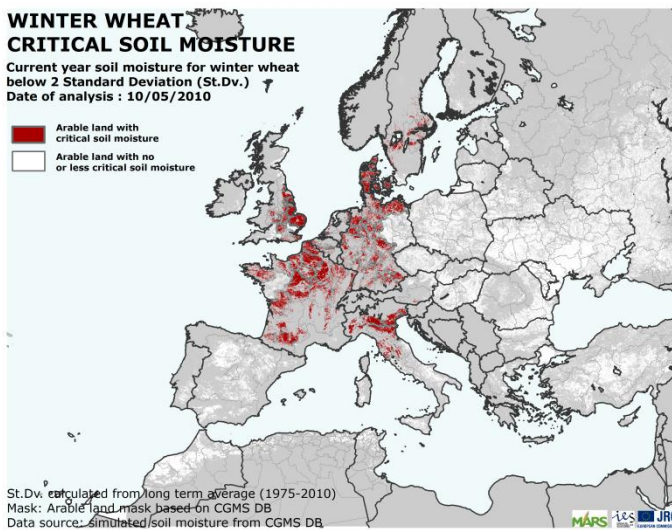
MAP 6



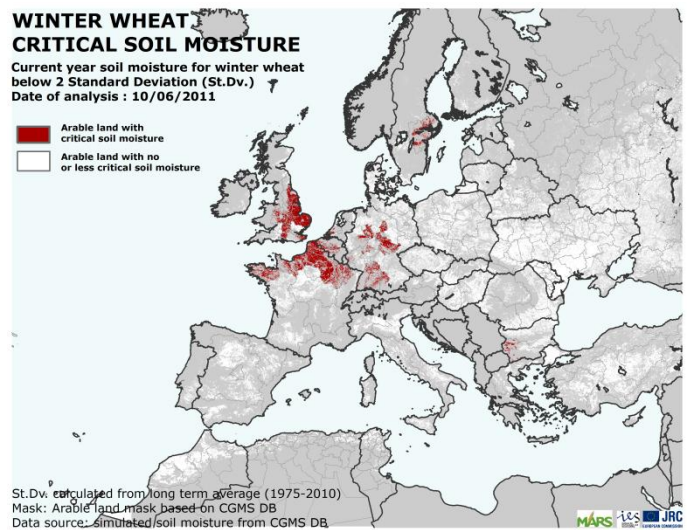
MAP 7



MAP 8



MAP 9



MAP 10

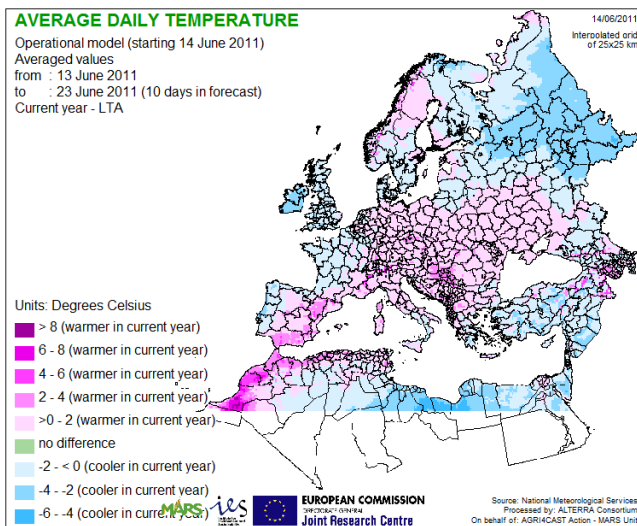
2. WEATHER FORECAST

PERIOD FORECAST: 14TH JUNE UNTIL 23RD JUNE TEMPERATURES

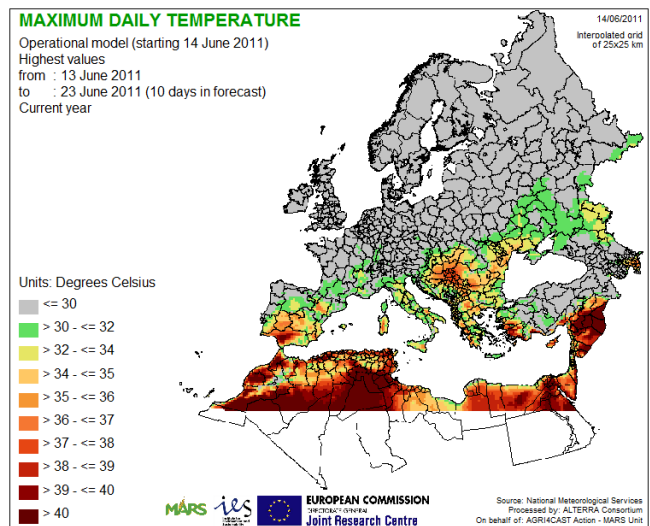
The next few days will bring average temperatures warmer than the long-term average for Central and Eastern Europe and slightly chilly temperatures for Portugal, western / central France, Ireland, United Kingdom and Denmark (map 1). High temperatures above 30°C are restricted to the regions bordering the Mediterranean Sea as well as Ukraine, Hungary, Romania and Bulgaria. In most of the regions they will last between 1 and 3 days with the exception of southern Spain where the forthcoming period is forecast as consecutive days above 30 degrees. Temperature accumulation for the next ten days shows seasonal values across Europe.

PRECIPITATION

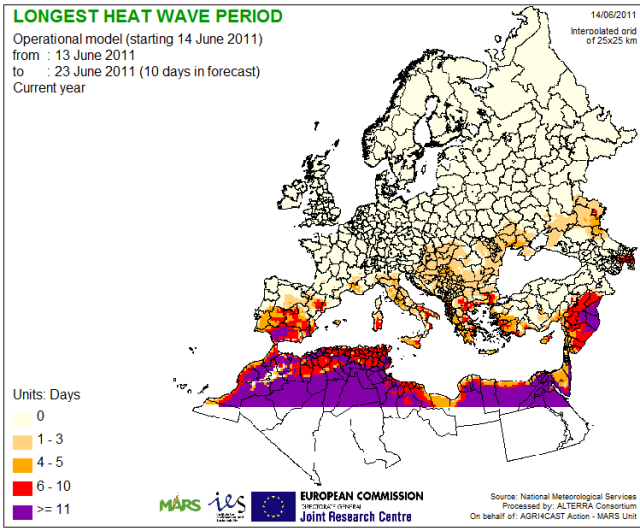
Precipitation will be scarce around the Mediterranean with the exception of Calabria (IT) and the west coast of Greece and western Turkey. Rain is expected for Ireland, United Kingdom, Benelux, Denmark, Germany, Poland, and Austria (map 4). Large parts of Hungary, Romania and Bulgaria will remain relatively dry. For Ukraine, especially in the north western part of the country beneficial rain is forecast. The situation for France remains critical – small amounts of rain are forecast to fall within 1 or 2 days (map 5) mainly towards the end of the forecast period (map 6) but not in the main agricultural areas.



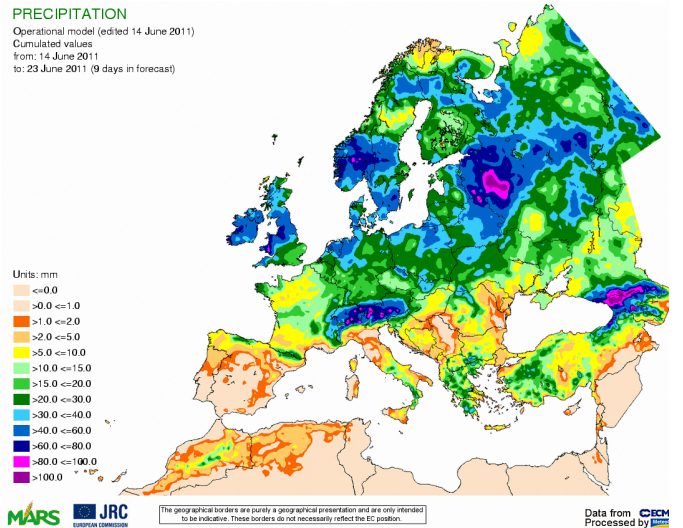
MAP 1



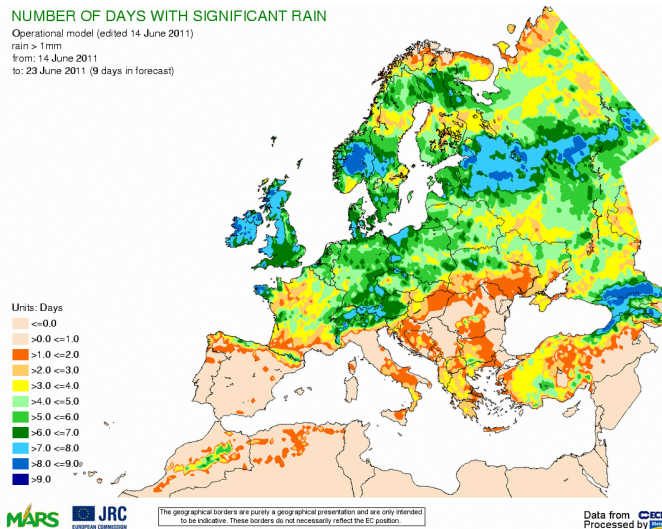
MAP 2



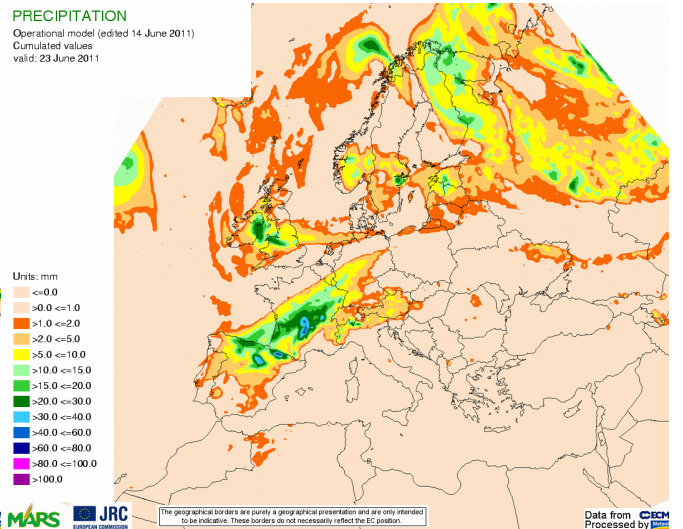
MAP 3



MAP 4

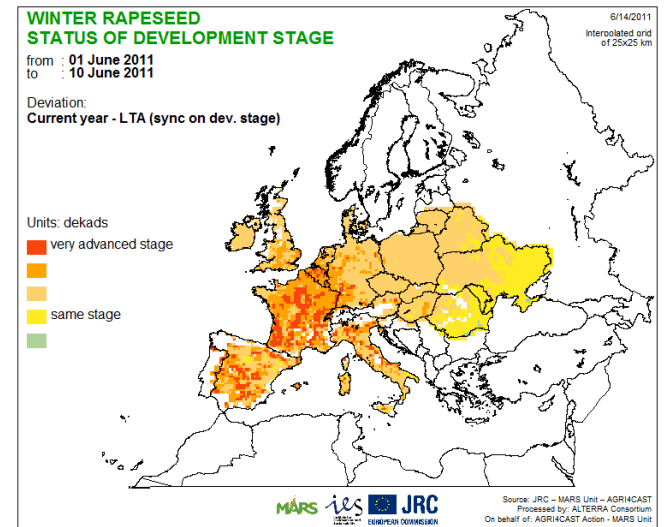
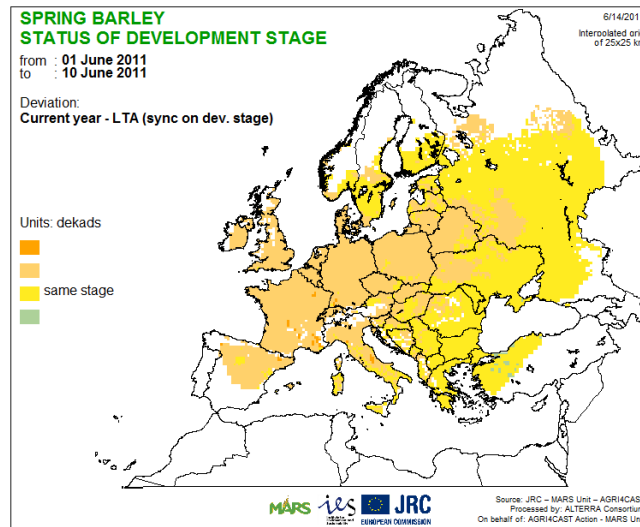
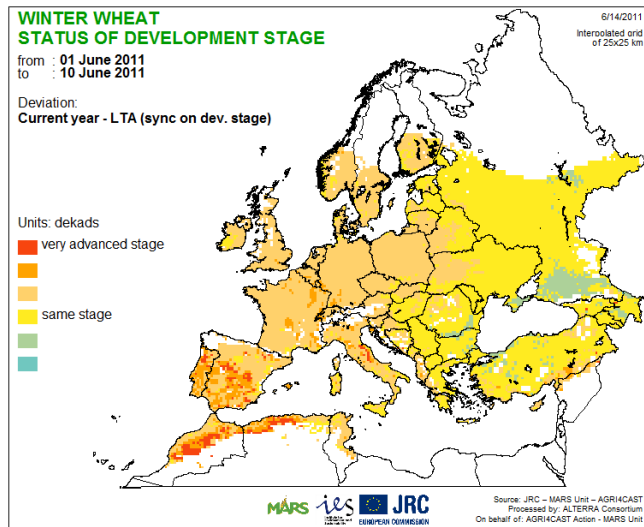
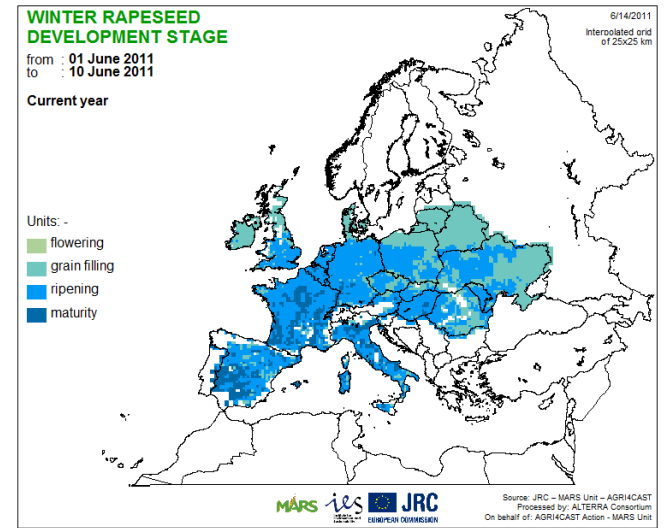
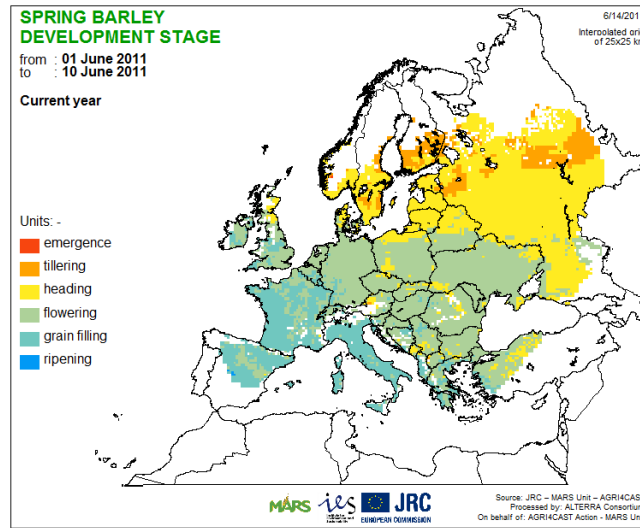
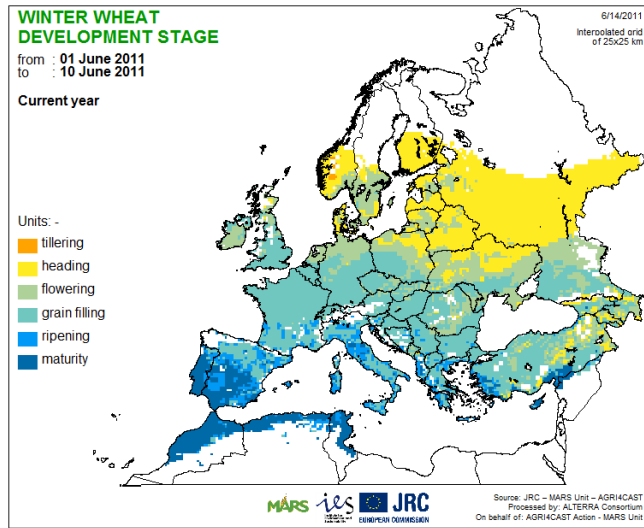


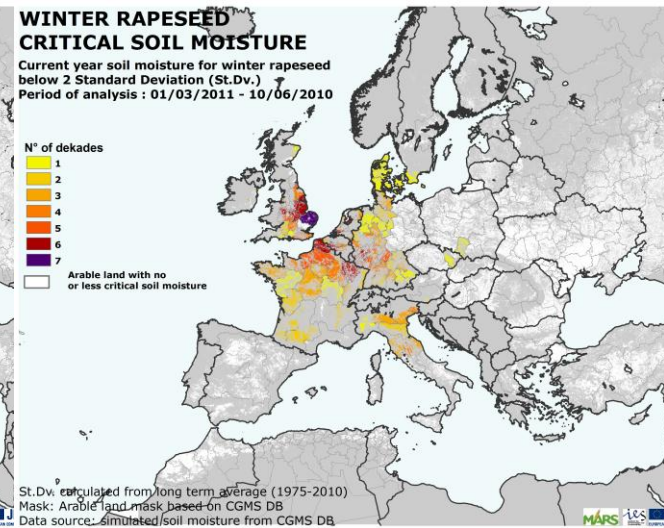
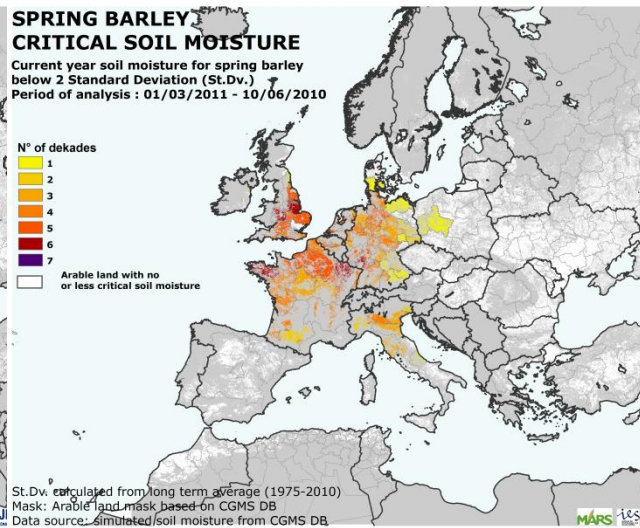
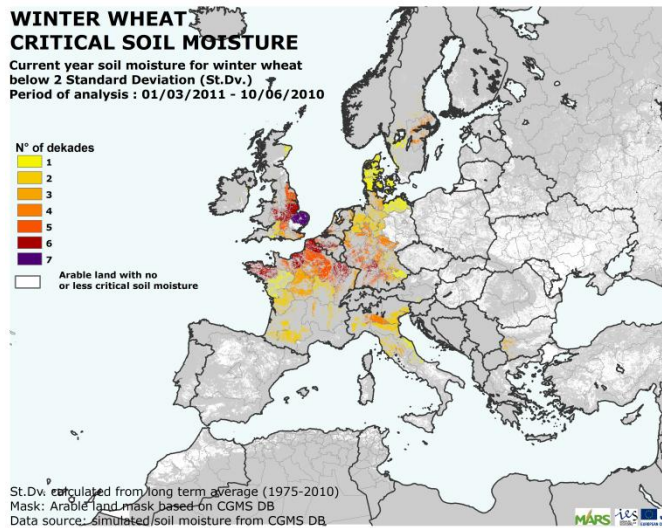
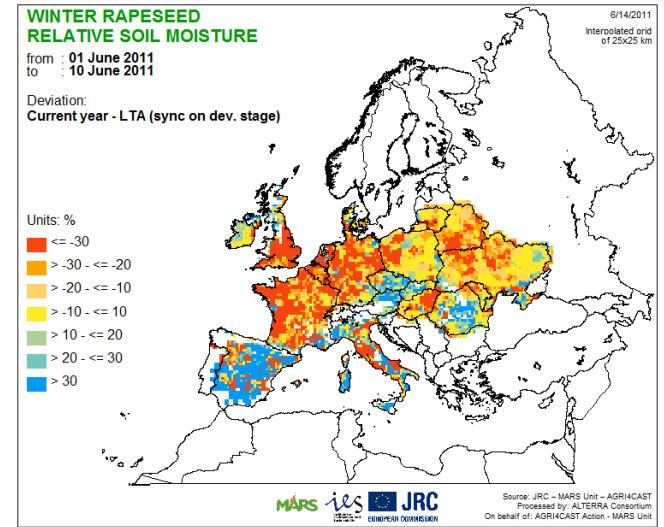
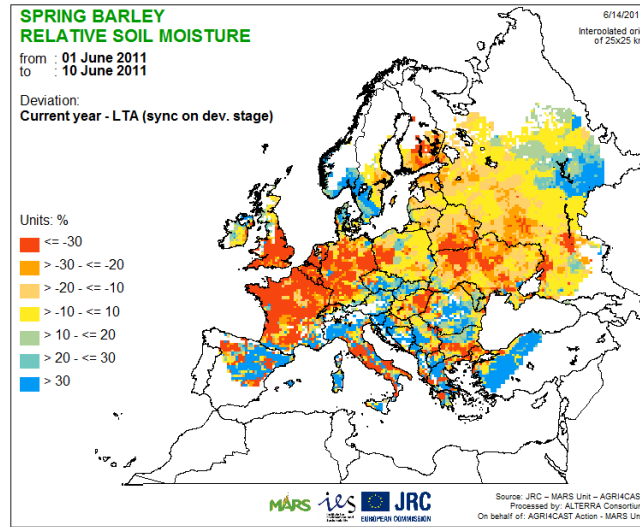
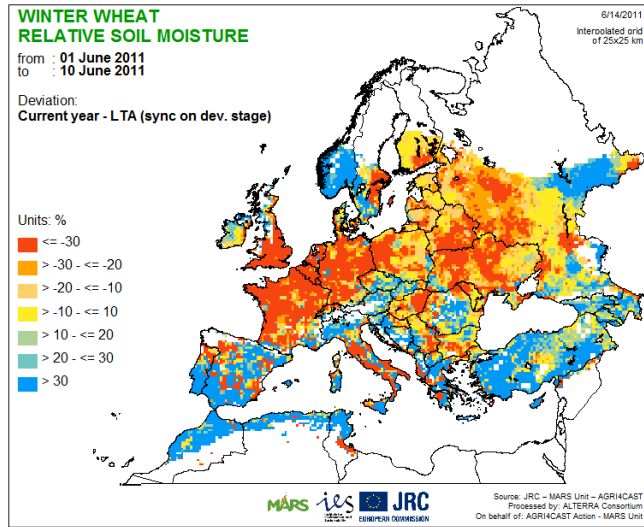
MAP 5



MAP 6

3. CROP ATLAS MAPS





3. YIELD FORECAST (EU27 AND UKRAINE)

EU27 CEREALS AND RAPESEED YIELD FORECASTS AS OF 16 JUNE 2011 *

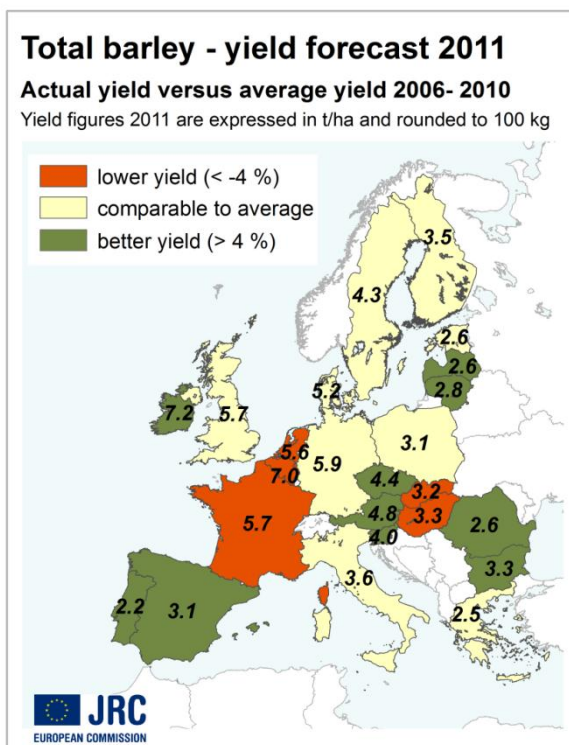
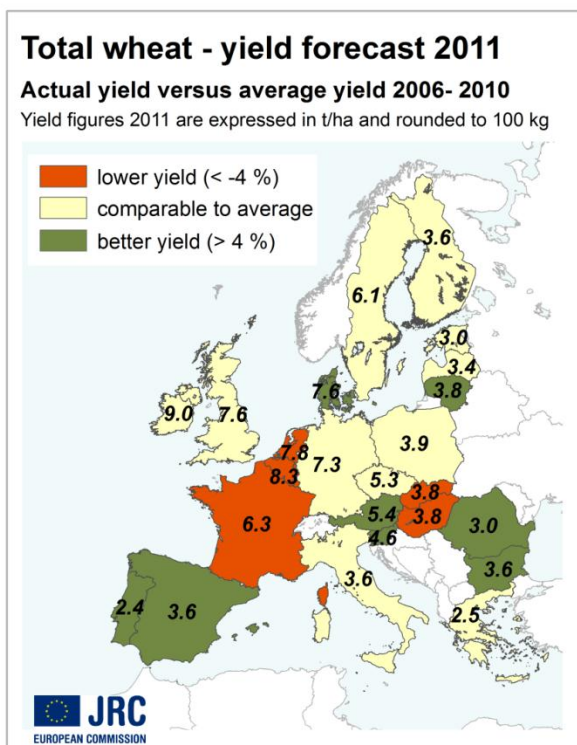
	Yield t/ha				
	2010*	2011	Avg 5yrs	%11/10	%11/5yrs
cereals (total)	4.95	4.88	4.89	-1.3	-0.2
wheat (total)	5.30	5.22	5.27	-1.5	-0.9
soft wheat	5.56	5.45	5.54	-1.9	-1.6
durum wheat	3.15	3.12	3.11	-1.1	+0.2
barley (total)	4.33	4.25	4.31	-1.7	-1.3
spring barley	3.69	3.79	3.74	+2.7	+1.3
winter barley	5.21	4.97	5.17	-4.7	-3.9
grain maize	7.05	6.88	6.72	-2.3	+2.5
other cereals	3.05	3.00	3.24	-1.7	-0.4
Rape seed	2.97	2.81	3.02	-5.5	-6.9

*NOTE FOR ALL TABLES PRODUCED FOR EU27

Note: Yields are forecast for crops with more than 10000 ha per country; figures are rounded to 100 kg
 Sources: *2006-2010 data come from EUROSTAT Eurobase, EES and DG AGR1.

2011 yields come from MARS CROP YIELD FORECASTING SYSTEM (CGMS output up to 10/06/2011)

YIELD MAPS

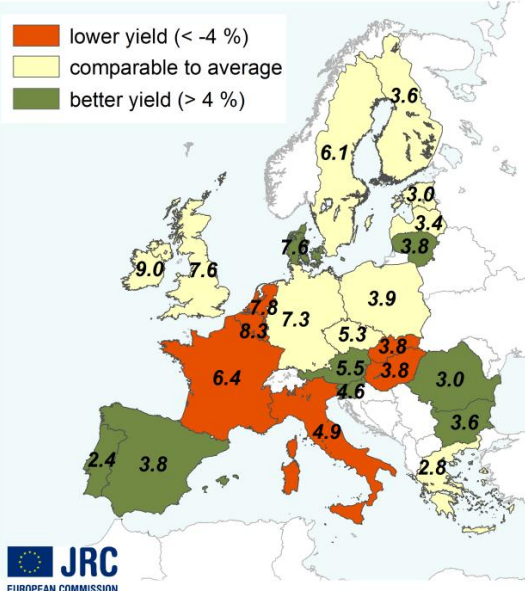


Soft wheat - yield forecast 2011

Actual yield versus average yield 2006- 2010

Yield figures 2011 are expressed in t/ha and rounded to 100 kg

- lower yield (< -4 %)
- comparable to average
- better yield (> 4 %)

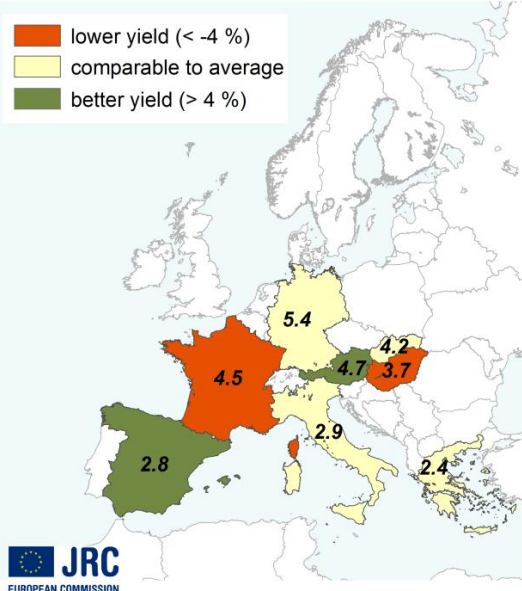


Durum wheat - yield forecast 2011

Actual yield versus average yield 2006- 2010

Yield figures 2011 are expressed in t/ha and rounded to 100 kg

- lower yield (< -4 %)
- comparable to average
- better yield (> 4 %)

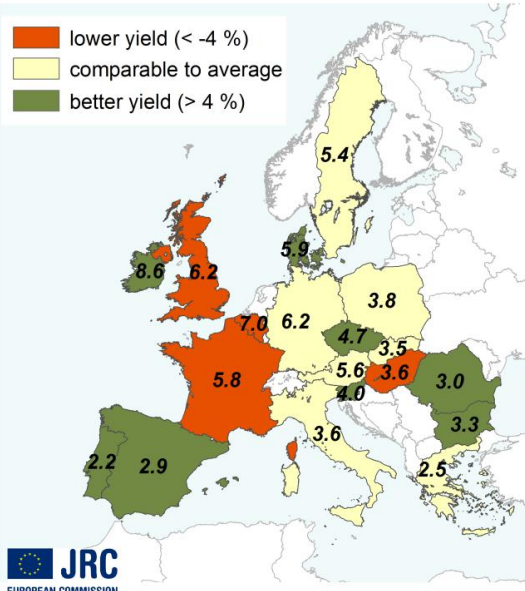


Winter barley - yield forecast 2011

Actual yield versus average yield 2006- 2010

Yield figures 2011 are expressed in t/ha and rounded to 100 kg

- lower yield (< -4 %)
- comparable to average
- better yield (> 4 %)

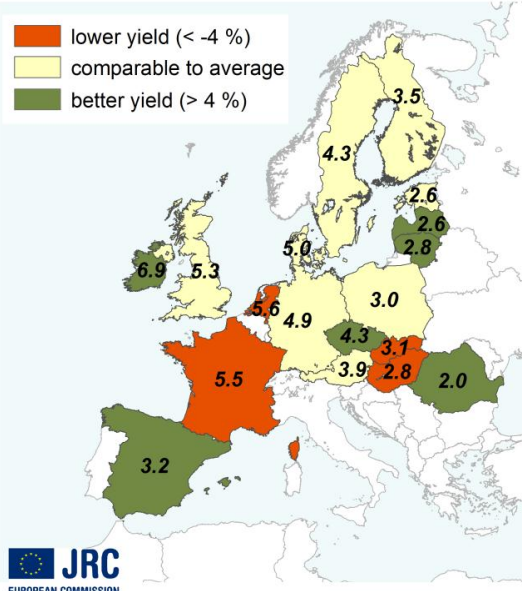


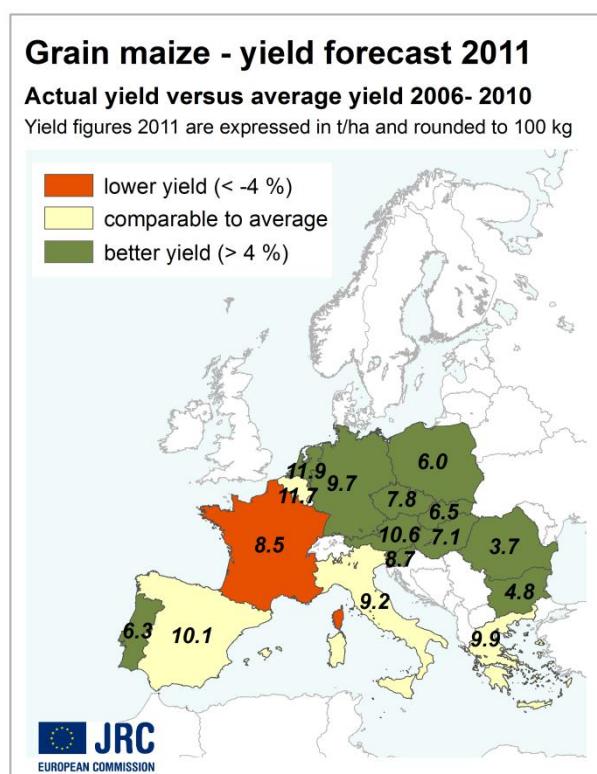
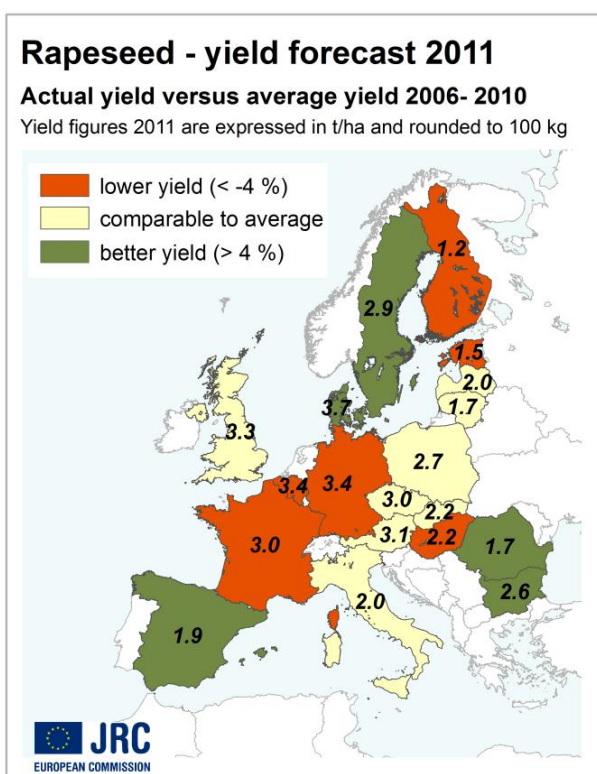
Spring barley - yield forecast 2011

Actual yield versus average yield 2006- 2010

Yield figures 2011 are expressed in t/ha and rounded to 100 kg

- lower yield (< -4 %)
- comparable to average
- better yield (> 4 %)





EU27 TOTAL WHEAT YIELD FORECAST AS OF 16 JUNE 2011

		Yield t/ha				
	2010*	MARS 2011 forecasts	Avg 5yrs	%11/10	%11/5yrs	
EU27	5.3	5.22	5.27	-1.5	-0.9	
AT	5.01	5.4	5.06	+7.9	+6.7	
BE	9.35	8.27	8.68	-11.5	-4.6	
BG	3.74	3.62	3.34	-3.2	+8.3	
CZ	4.99	5.28	5.09	+5.8	+3.8	
DE	7.23	7.26	7.46	+0.5	-2.7	
DK	6.63	7.64	7.22	+15.2	+5.8	
EE	2.71	2.97	2.96	+9.7	+0.4	
ES	3.01	3.56	3.08	+18.1	+15.4	
FI	3.43	3.63	3.71	+5.7	-2.2	
FR	7.04	6.26	6.92	-11.0	-9.5	
GR	2.59	2.51	2.54	-2.9	-0.9	
HU	3.72	3.79	4.05	+1.7	-6.4	
IE	8.75	9.01	8.71	+3.0	+3.5	
IT	3.7	3.55	3.65	-4.2	-2.8	
LT	3.31	3.76	3.61	+13.6	+4.1	
LU	5.96	5.75	6.15	-3.5	-6.5	
LV	3.28	3.37	3.43	+2.8	-1.7	
NL	8.91	7.75	8.52	-13.0	-9.0	
PL	3.94	3.91	3.87	-0.7	+1.0	
PT	2.75	2.44	2.19	-11.5	+11.1	
RO	2.8	2.99	2.58	+6.7	+15.7	
SE	5.4	6.08	5.86	+12.7	+3.8	
SI	4.8	4.6	4.33	-4.2	+6.3	
SK	3.47	3.83	4.01	+10.4	-4.5	
UK	8.05	7.64	7.89	-5.2	-3.3	

EU27 SOFT WHEAT YIELD FORECASTS AS OF 16 JUNE 2011

	Yield t/ha				
	2010*	MARS 2011 forecasts	Avg 5yrs	%11/10	%11/5yrs
EU27	5.56	5.45	5.54	-1.9	-1.6
AT	5.04	5.45	5.1	+8.1	+6.7
BE	9.35	8.27	8.68	-11.5	-4.6
BG	3.74	3.62	3.34	-3.2	+8.3
CZ	4.99	5.28	5.09	+5.8	+3.8
DE	7.24	7.27	7.47	+0.4	-2.6
DK	6.63	7.64	7.22	+15.2	+5.8
EE	2.71	2.97	2.96	+9.7	+0.4
ES	3.37	3.8	3.31	+12.8	+14.8
FI	3.43	3.63	3.71	+5.7	-2.2
FR	7.24	6.42	7.11	-11.3	-9.7
GR	2.91	2.8	2.79	-3.8	+0.4
HU	3.73	3.79	4.05	+1.6	-6.4
IE	8.75	9.01	8.71	+3.0	+3.5
IT	5.16	4.91	5.19	-4.9	-5.4
LT	3.31	3.76	3.61	+13.6	+4.1
LU	5.96	5.75	6.15	-3.5	-6.5
LV	3.28	3.37	3.43	+2.8	-1.7
NL	8.91	7.75	8.52	-13.0	-9.0
PL	3.94	3.91	3.87	-0.7	+1.0
PT	2.75	2.44	2.19	-11.5	+11.1
RO	2.8	2.99	2.58	+6.7	+15.7
SE	5.4	6.08	5.86	+12.7	+3.8
SI	4.8	4.6	4.33	-4.2	+6.3
SK	3.46	3.8	4	+9.9	-4.9
UK	8.05	7.64	7.89	-5.2	-3.3

EU27 DURUM WHEAT YIELD FORECASTS AS OF 16 JUNE 2011

	Yield t/ha				
	2010*	MARS 2011 forecasts	Avg 5yrs	%11/10	%11/5yrs
EU27	3.15	3.12	3.11	-1.1	+0.2
AT	4.5	4.74	4.37	+5.4	+8.6
DE	5.35	5.41	5.48	+1.1	-1.3
ES	1.95	2.79	2.47	+43.3	+12.9
FR	5.06	4.52	4.81	-10.7	-6.0
GR	2.49	2.42	2.45	-2.7	-1.1
HU	3.32	3.66	3.82	+10.1	-4.2
IT	3.04	2.87	2.97	-5.6	-3.4
SK	3.58	4.22	4.33	+17.8	-2.5

EU27 TOTAL BARLEY YIELD FORECASTS AS OF 16 JUNE 2011

	Yield t/ha				
	2010*	MARS 2011 forecasts	Avg 5yrs	%11/10	%11/5yrs
EU27	4.33	4.25	4.31	-1.7	-1.3
AT	4.5	4.79	4.58	+6.4	+4.7
BE	8.62	6.97	8.24	-19.2	-15.4
BG	3.41	3.34	3.21	-2.1	+4.1
CY	1.77	1.37	1.26	-22.6	+8.7
CZ	4.08	4.39	4.12	+7.6	+6.4
DE	6.3	5.91	6.05	-6.1	-2.3
DK	5.11	5.24	5.07	+2.5	+3.3
EE	2.41	2.56	2.49	+6.3	+3.0
ES	2.84	3.14	2.94	+10.8	+6.8
FI	3.07	3.45	3.45	+12.3	+0.0
FR	6.38	5.66	6.36	-11.3	-10.9
GR	2.84	2.47	2.42	-13.2	+2.0
HU	3.37	3.31	3.6	-1.8	-8.1
IE	7.01	7.23	6.73	+3.1	+7.4
IT	3.62	3.56	3.64	-1.8	-2.4
LT	2.7	2.76	2.64	+2.1	+4.6
LV	2.8	2.58	2.38	-7.7	+8.5
NL	5.56	5.64	6	+1.4	-6.0
PL	3.15	3.13	3.08	-0.8	+1.5
PT	1.59	2.19	2.02	+37.8	+8.6
RO	2.54	2.58	2.33	+1.9	+11.0
SE	3.97	4.32	4.19	+8.7	+3.1
SI	4.3	3.98	3.82	-7.5	+4.2
SK	2.72	3.15	3.39	+15.7	-7.0
UK	6	5.65	5.87	-5.9	-3.8

EU27 WINTER BARLEY YIELD FORECASTS AS OF 16 JUNE 2011

	Yield t/ha				
	2010*	MARS 2011 forecasts	Avg 5yrs	%11/10	%11/5yrs
EU27	5.21	4.97	5.17	-4.7	-3.9
AT	5.39	5.62	5.47	+4.3	+2.8
BE	8.62	6.97	8.24	-19.2	-15.4
BG	3.41	3.34	3.21	-2.1	+4.1
CY	1.77	1.37	1.26	-22.6	+8.7
CZ	4.5	4.71	4.53	+4.7	+4.1
DE	6.66	6.23	6.48	-6.5	-3.9
DK	5.43	5.92	5.69	+9.1	+4.1
ES	2.29	2.87	2.61	+25.5	+10.3
FR	6.5	5.76	6.48	-11.5	-11.2
GR	2.84	2.47	2.42	-13.2	+2.0
HU	3.57	3.57	3.88	+0.0	-8.1
IE	8.6	8.6	8.22	+0.0	+4.6
IT	3.62	3.56	3.64	-1.8	-2.4
PL	3.92	3.83	3.84	-2.3	-0.3
PT	1.59	2.19	2.02	+37.8	+8.6
RO	2.89	2.98	2.66	+3.1	+12.2
SE	4.64	5.36	5.18	+15.5	+3.4
SI	4.3	3.98	3.82	-7.5	+4.2
SK	3.17	3.48	3.57	+9.7	-2.4
UK	6.72	6.24	6.54	-7.1	-4.5

EU27 SPRING BARLEY YIELD FORECASTS AS OF 16 JUNE 2011

	Yield t/ha				
	2010*	MARS 2011 forecasts	Avg 5yrs	%11/10	%11/5yrs
EU27	3.69	3.79	3.74	+2.7	+1.3
AT	3.59	3.9	3.92	+8.7	-0.5
CY	1.77	1.37	1.26	-22.6	+8.7
CZ	3.91	4.29	3.98	+9.7	+7.8
DE	4.95	4.88	4.76	-1.4	+2.5
DK	5	5.03	4.88	+0.7	+3.1
EE	2.41	2.56	2.49	+6.3	+3.0
ES	2.94	3.19	3.02	+8.6	+5.6
FI	3.07	3.45	3.45	+12.3	+0.0
FR	6.06	5.45	6.06	-10.1	-10.1
HU	3.02	2.84	3.17	-5.9	-10.2
IE	6.7	6.92	6.54	+3.3	+5.8
LT	2.7	2.76	2.64	+2.1	+4.6
LV	2.8	2.58	2.38	-7.7	+8.5
NL	5.56	5.64	6	+1.4	-6.0
PL	2.98	2.99	2.94	+0.4	+1.7
RO	1.76	1.99	1.83	+13.2	+9.0
SE	3.93	4.27	4.15	+8.7	+3.0
SK	2.67	3.11	3.37	+16.6	-7.7
UK	5.56	5.29	5.43	-4.7	-2.6

EU27 GRAIN MAIZE YIELD FORECASTS AS OF 16 JUNE 2011

	Yield t/ha				
	2010*	MARS 2011 forecasts	Avg 5yrs	%11/10	%11/5yrs
EU27	7.05	6.88	6.72	-2.3	+2.5
AT	9.28	10.56	10.02	+13.8	+5.4
BE	12.12	11.74	11.67	-3.1	+0.6
BG	6.05	4.78	4.08	-21.0	+17.3
CZ	6.71	7.76	7.21	+15.6	+7.5
DE	8.79	9.69	9.17	+10.3	+5.8
ES	9.92	10.1	9.94	+1.8	+1.6
FR	8.92	8.52	9.04	-4.5	-5.7
GR	10.18	9.88	9.92	-3.0	-0.4
HU	6.63	7.09	6.21	+6.9	+14.1
IT	9.11	9.19	9.11	+0.9	+0.8
NL	9.74	11.91	11.05	+22.3	+7.8
PL	5.75	5.99	5.7	+4.2	+5.0
PT	6.49	6.34	6.03	-2.4	+5.0
RO	4.06	3.68	3.2	-9.4	+14.9
SI	8.54	8.71	7.63	+2.0	+14.1
SK	5.49	6.53	6.04	+19.0	+8.1

EU27 RAPE SEED YIELD FORECASTS AS OF 16 JUNE 2011

	Yield t/ha				
	2010*	MARS 2011 forecasts	Avg 5yrs	%11/10	%11/5yrs
EU27	2.97	2.81	3.02	-5.5	-6.9
AT	3.17	3.07	3.1	-3.0	-0.7
BE	4.03	3.42	3.89	-15.1	-12.1
BG	2.57	2.55	2.18	-0.6	+17.2
CZ	2.83	3.02	3	+6.7	+0.5
DE	3.9	3.41	3.82	-12.5	-10.8
DK	3.48	3.73	3.57	+7.2	+4.5
EE	1.32	1.45	1.51	+10.0	-4.1
ES	1.81	1.86	1.74	+2.7	+7.0
FI	1.13	1.21	1.37	+7.3	-11.7
FR	3.29	2.96	3.25	-10.1	-8.8
HU	2.16	2.19	2.32	+1.5	-5.6
IT	2.48	2.04	2.1	-17.8	-3.0
LT	1.65	1.72	1.75	+4.1	-2.1
LV	2.13	2.04	2.06	-4.2	-0.9
PL	2.7	2.68	2.77	-0.6	-3.0
RO	1.79	1.74	1.51	-3.0	+14.7
SE	2.55	2.89	2.69	+13.2	+7.4
SK	1.97	2.22	2.21	+12.8	+0.5
UK	3.5	3.27	3.25	-6.6	+0.7

YIELD FORECAST (UKRAINE AS OF 15/06/2011)

	Yield t/ha				
	2010	MARS 2011 forecasts	Avg 5yrs	%11/10	%11/5yrs
Barley	-	2.23	2.26	-	-1.7
Wheat	-	2.82	2.91	-	-3.2

2011 yields come from MARS CROP YIELD FORECASTING SYSTEM
output up to 10/06/2011)

(5 last years is calculated from data provided by EUROSTAT)

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22 Mar	Agrometeorological analysis and weather forecast	Vol. 19 No. 3
12 Apr	Crop yield forecast	Vol. 19 No.4
12 Apr	Agrometeorological analysis and weather forecast	Vol. 19 No. 5
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Special issues are planned for crop monitoring in coun-

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