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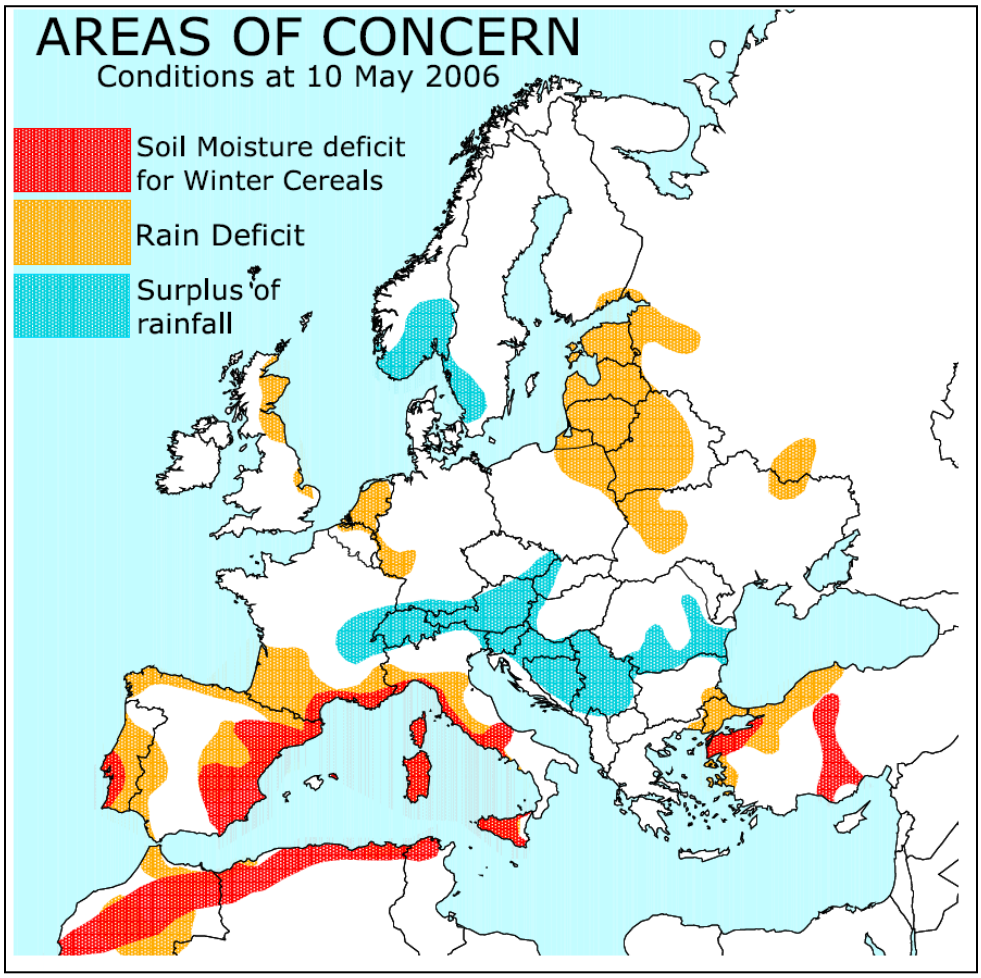


Contents

1. Crop yield forecasts

MARS STAT yield forecasts at EU25 level: 12 MAY 2006

CROPS	EU-25 yield (t/ha)				
	2005	2006	Avg. 5 years	% 06/05	% 06/Avg.
Total cereals	5.0	**5.2**	***5.0***	5.7	*5.3*
Total wheat	5.4	**5.7**	***5.3***	5.1	*7.0*
Soft wheat	6.0	**6.2**	***5.9***	3.6	*5.5*
Durum wheat	2.5	**2.9**	***2.5***	18.7	*14.8*
Total barley	4.1	**4.5**	***4.3***	10.0	*4.6*
Spring barley	3.4	**3.9**	***3.7***	13.8	*4.0*
Winter barley	5.2	**5.4**	***5.2***	4.3	*4.6*
Grain Maize	8.3	**8.2**	***7.9***	-1.6	*3.1*
Other cereals	2.9	**3.1**	***3.2***	6.6	*5.3*
Rape seed	3.3	**3.2**	***3.0***	-0.4	*8.1*

Yield figures are rounded to 100 kg

Sources:

2005 yields come from EUROSTAT CRONOS

2006 yields come from MARS CROP YIELD FORECASTING SYSTEM

2. Agrometeorological overview

2.1 Temperatures and Evapotranspiration

After a long and cold winter, progressively in April warmer conditions were re-established and the **temperatures** climbed even above the normal. At the end of April, the accumulation of the active temperatures (Tbase = 0 °C) was above normal range in the majority of EU, as well as in Maghreb, and Turkey. The surplus accumulation was more significant in central and eastern Spain (80-100° GDD above the LTA), central Italy (70-90° GDD), southern France (Rhone valley) (80° GDD) and occurred mainly during the second half of April and at the beginning of May. In contrast to the mentioned surplus of active temperatures, it must be highlighted that very low temperatures occurred at the beginning and the end of April with also some sporadic and light frost events (central France, south Germany and the Baltics.

In the first third of May, the general temperatures' increase continued and in central France, Benelux, northern Germany, and the Baltic area the maximum daily temperatures reached anomalously high values: 25-26 °C equivalents to 5-6 °C above the seasonal values.

At the end of the considered period in all of the central and northern EU countries, due to the delay accumulated in the previous months a significant winter crops development delay was still present. On the contrary, in east Spain, central and southern Italy, Central Balkans, Algeria, Tunisia, Greece and Turkey a significant advanced crop development results from simulations.

The **potential evapotranspiration** was marginally influenced by the relatively high temperature, except in northern Portugal (due also to the high level of solar radiation), central-east Spain, Sardinia, Rhone valley, Peloponnesus, the Baltics, Scotland and The Netherlands where higher than seasonal values where estimated. In the majority of the continent, due to the delay in winter crops development the crops consumptions were below the seasonal value, but higher if normalized for development stages, indicating a good potentiality of growth.

2.2 Rainfall and Climatic water balance

In April, over the EU territory the rainfall was irregularly distributed: below average (< -30 %) on the western part (mainly central and eastern Spain, southern Portugal, France, central and western Italy and

southern UK and Ireland); clearly abundant in eastern areas (mainly Austria, Poland, Czech Rep., south-eastern Germany, former Yugoslavia countries, Romania). The highest and most significant deficit values were recorded in central and southern France (in average 20-30 mm equivalent to less than 50 % of expected rains, whilst in the Rhone even less than 10 mm, corresponding to 20 % of LTA), in central and northern Italy (Po valley, Tuscany and Sardinia where the end of April was one of the driest since 1975), in Algeria and Tunisia, north Turkey and south Ukraine. In those areas the climatic water deficit was particularly impacting in consideration of the reproductive stages of development reached at that time for winter crops (mainly: wheat, barley and rapeseed). Also in Baltic Countries and north Poland worrying dry conditions persisted since the end of March.
In the Alpine areas, Czech Rep., central west Poland, Romania and former Yugoslavia opposite conditions were recorded: on average 60-90 mm of rain (maximum in Croatia and south Germany with 150-200 mm), equivalent to a surplus around 50/60 % compared to LTA. In Poland and the Baltic area the rain in April could have delayed the spring sowing activities.
Fortunately **in May,** the rain geographical distribution was specular to April: mainly concentrated in France, south Spain, UK and Ireland, Maghreb, Turkey and south Ukraine; where the soil moisture was beneficially recovered; and scarce or very weak in the areas experienced excess of water in April. The only persistent deficit conditions were recorded in central Italy, Sardinia and south Portugal. In those areas soil water content represented a clear limiting factor for final yield.

2.3 WEATHER FORECAST FOR NEXT DAYS (16-25 MAY)

TEMPERATURES: up to the 19th, temporary anomalous high max temperatures in ES and FR and again the 23-24th in central and east EU.

From today up to the 19th, an African air mass will go through Spain and south France, determining a warm anomaly with rapid increase of air temperature (Fig.1a).
Very likely the maximum daily values will be above the 30° C and in some cases also over 35° C (Fig.2).
In the following days (Fig.1b, Fig.5 and 6), with its eastward motion, that air mass will influence, but with less intensity, the temperatures also in south, central and east EU (IT, SK, AT, DE, HU, SL, PL, Baltic's). Where, however the maximum temperatures could be above the 30 °C.

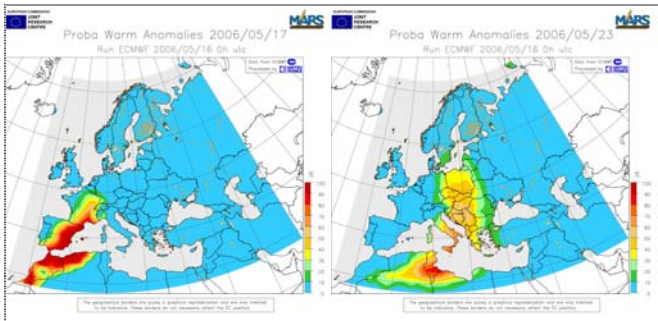


Fig.1a

Fig.1b

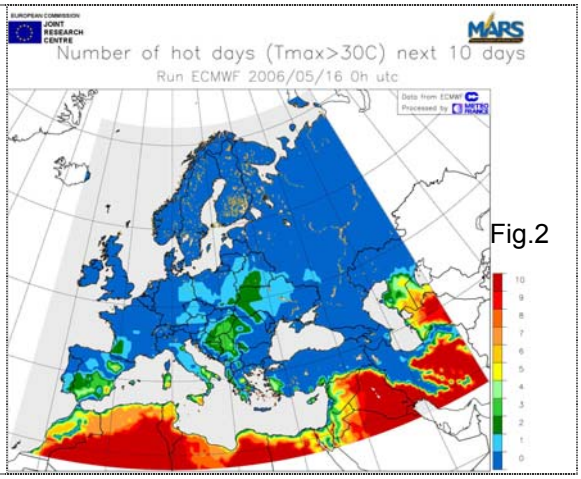


Fig.2

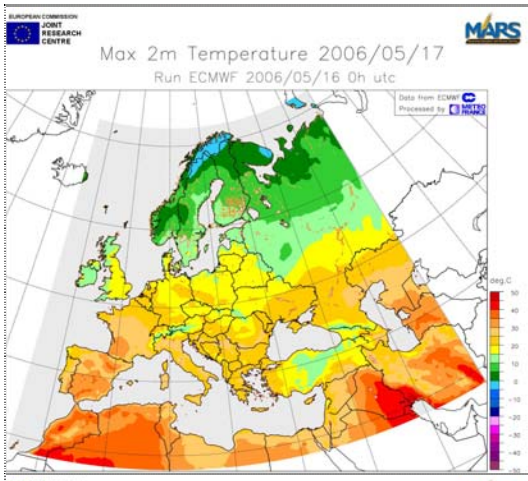


Fig.3

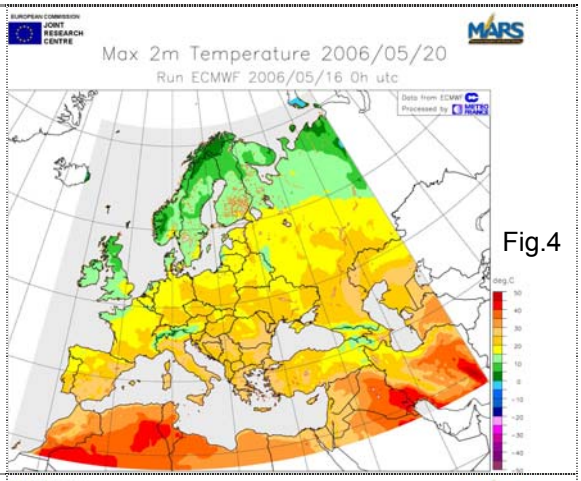


Fig.4

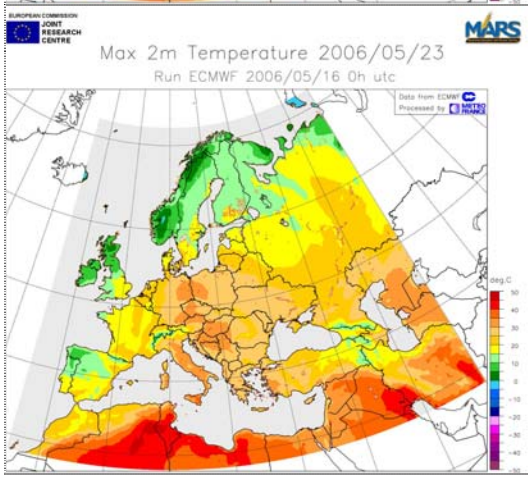


Fig.5

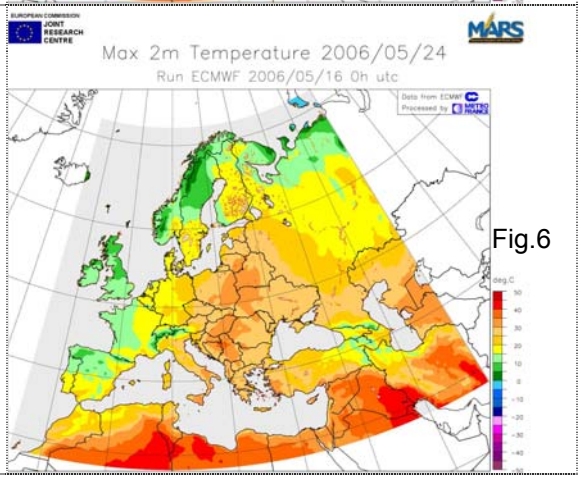


Fig.6

RAIN: worrying prosecution of dry conditions in Mediterranean areas, wet north EU

Unfortunately, the Mediterranean areas, currently suffering for insufficient water supplies (in particular, south Spain, central Italy, Sicily, Sardinia and Maghreb), will not receive any significant rain in the next 10 days. In effect, the rain will be mainly concentrated in Alpine areas, Ireland, UK, central France, Scandinavian Peninsula, Denmark, northern Germany and between Hungary, Slovakia and Romania. Beneficial rains are also expected in Benelux, NL, north and west France, and Baltic's which received scarce water supplies in the previous months. The persistent dry conditions in the Mediterranean areas very likely will impact negatively on winter cereals because of their critical reproductive stage of development. On the contrary, the well distributed and low intensity rain forecasted in the continental part of EU will be beneficial for early stages of spring-summer crops.

Furthermore must highlighted that in the English Channel areas the rain will be excessively persistent, indicating a reduced amount of solar radiation as limiting factor on that latitude.

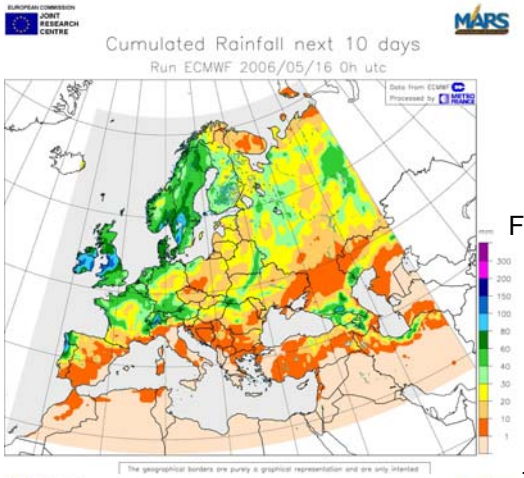


Fig.1

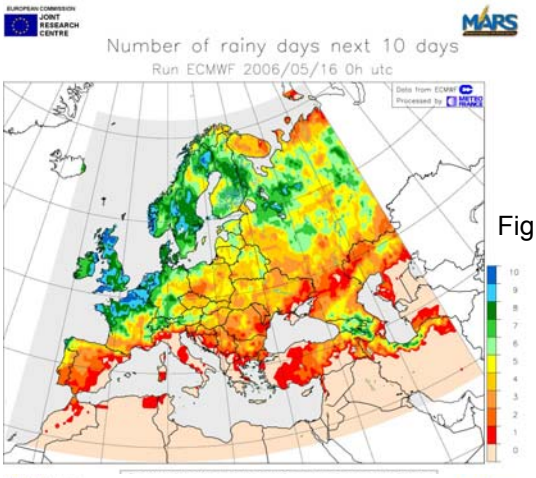


Fig.2

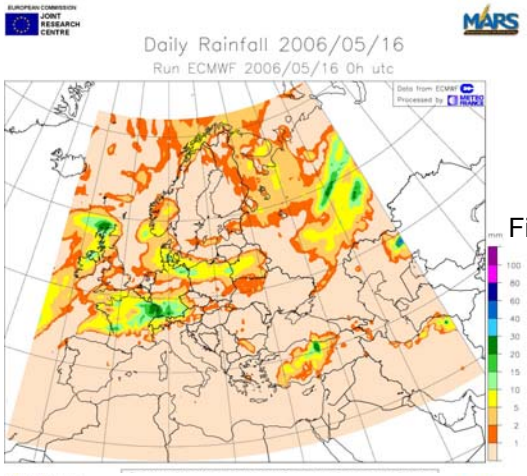


Fig.3

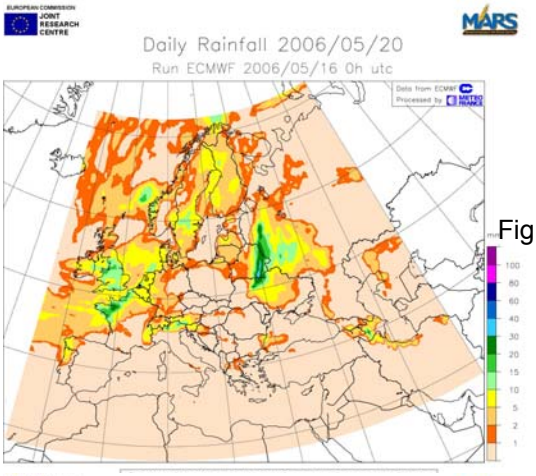


Fig.4

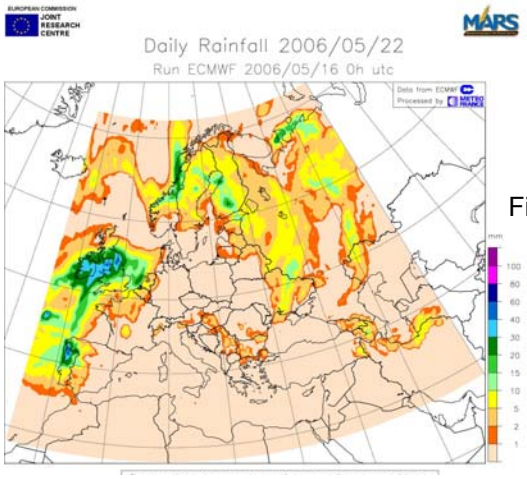


Fig.5

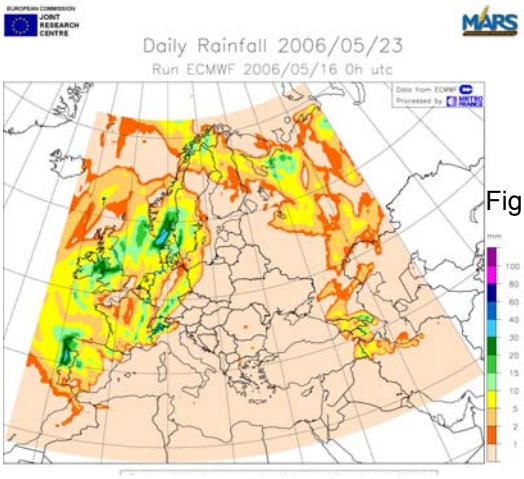


Fig.6

3. Highlights by region of interest

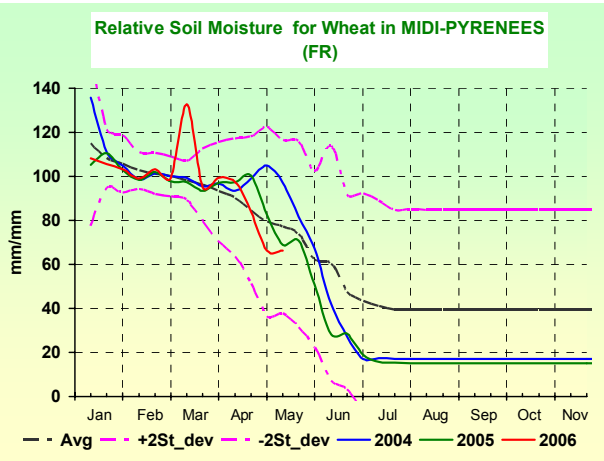
EU-25

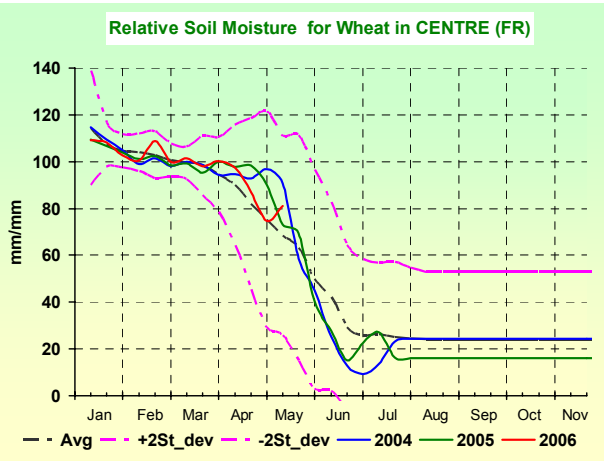
FRANCE: sub optimal soil moisture in the southern areas

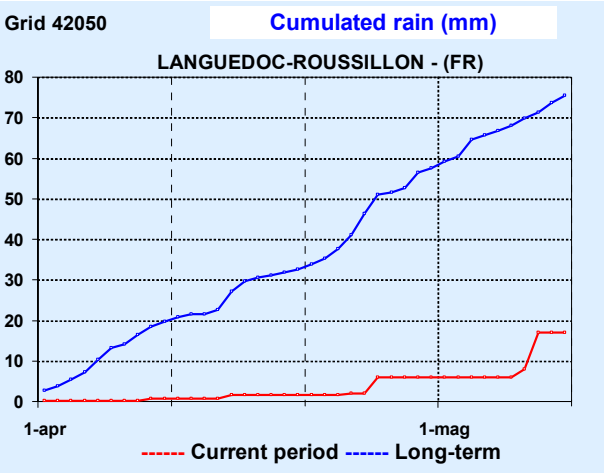
The conditions are considered as optimal for soft wheat and the crop has still a high yield potential of 7.6 t/ha. On contrary the durum wheat being in a drier conditions in the southern France its potential was reduced to 5 t/ha being however better than last year. This potential could again decrease if the soil moisture does not increase. The spring barley sowing that could have been delayed by significant precipitations particularly from Limousin to Franche Comté has kept a good yield potential with 6 t/ha: better than 2005 but lower than the linear trend.

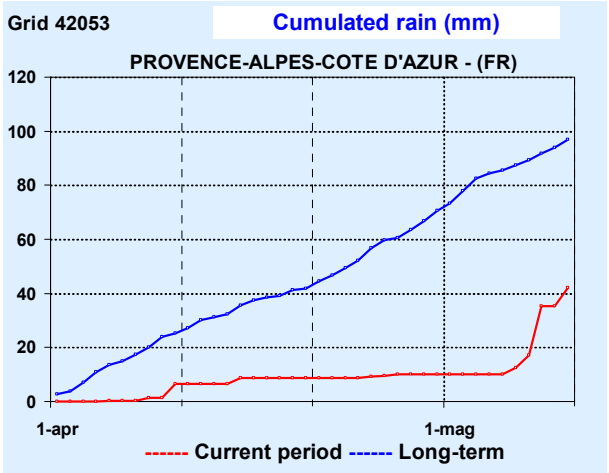
After a cold beginning of April with few days below 0 °C in the northern half of France, the temperature increased continuously and reached higher values than average from the last decade of April all over the country. During the last two decades maximum temperatures over 25 °C were recorded from the centre to the southern areas with some peaks at 28 °C in Aquitaine. These temperatures boosted the crop growth and contributed to catch up the crop development delay at least for the southern half of France.

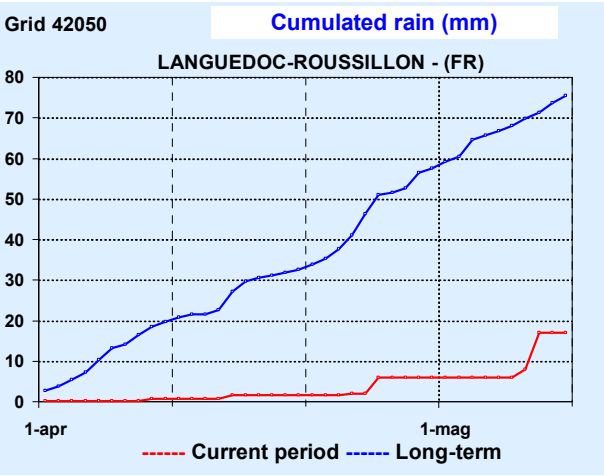
The rainfall remained below the seasonal value in April except during the first decade from Limousin to Rhone Alpes and Franche Comté which received higher precipitations. The first decade of May was wetter all over the country and replenished partially the soil moisture. However the half west of France from Normandie to Languedoc cumulated a water deficit from -30 mm to -60 mm from April to May. Further precipitations will be necessary to meet the increasing crop water needs and keep the crop yield potential particularly for winter crops in the Mediterranean border and Midi Pyrenees.
No extreme precipitation interfered with the sowing of spring crops in the main production zones of sugar beet, potato and Maize. Only Franche Comté and part of Rhones alpes could have experienced some sowing delay particularly for spring barley that was previously hindered in these areas.

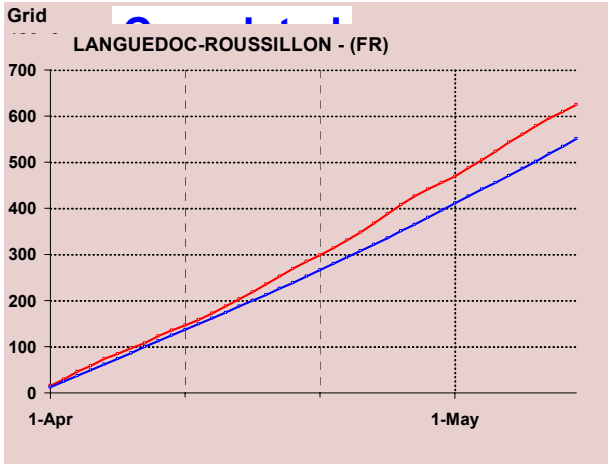












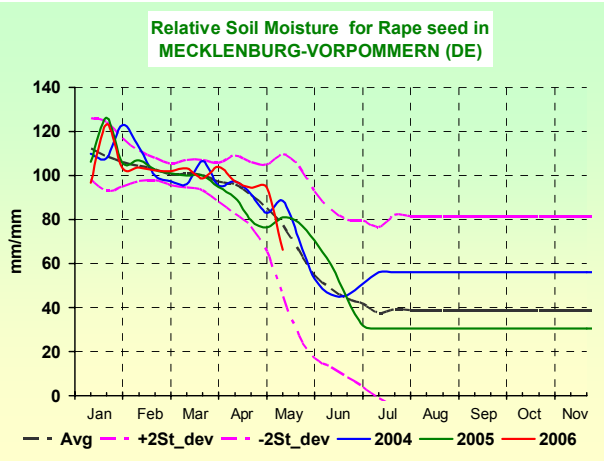
GERMANY: wet April, dry beginning of May

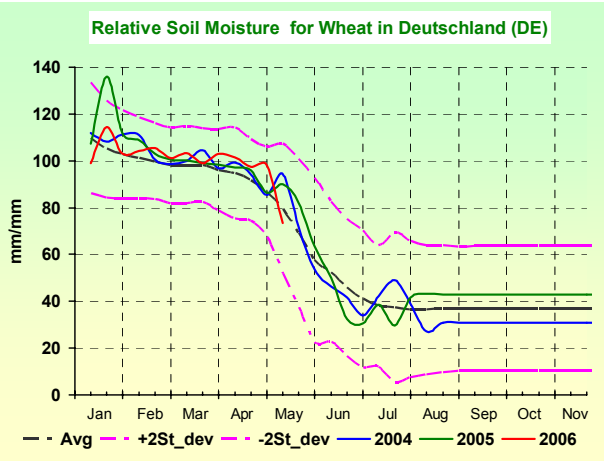
The winter wheat yield slightly progressed from the last bulletin with a forecast of 7.9 t/ha. Due to no frost impact and optimal water feed the scenario analysis identified a good year: 1996, as a similar year. For rape seed the conditions are quiet favourable and the model CGMS proposed a slight increase of yield with 3.8 t/ha. The spring barley figures proposed by the scenario analysis are still better than last year but lower than the trend and 2003/2004. The yield potential should be quiet limited due to the sowing delay as a result of the late frost and snow in March.

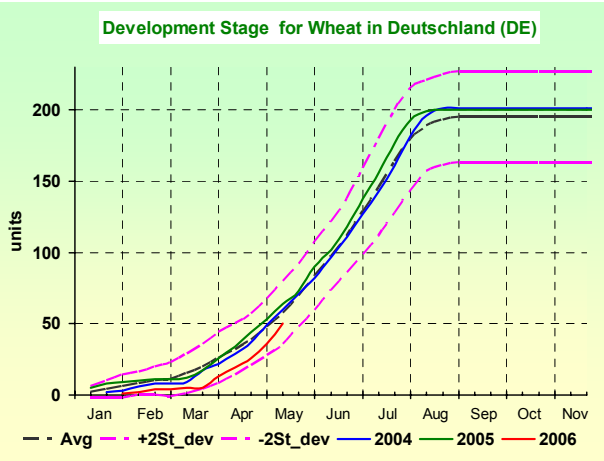
After some cold days at the beginning of April the temperatures increased regularly up to a drop of temperature at the end of the month. The major part of the country recorded normal temperatures in April except in the south where the values were higher.
In May the values reached again higher than seasonal levels particularly in the North western area. They contributed to speed up the vegetation growth and catch up partially the crop development delay.

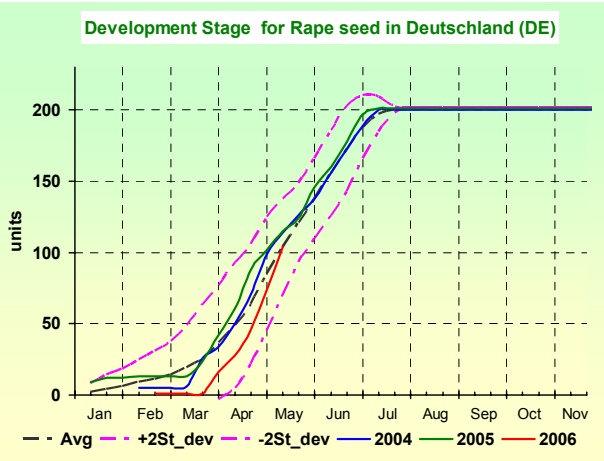
The month of April was characterized by abundant rainfall for most of the country and even excessive in the southern border with more than 100 mm above the seasonal level. Only the western Rheinland – Pfalz recorded lower precipitation than normal. These conditions should have not facilitated the sugar beet sowing and potato planting that should have been already delayed by the cold and wet conditions at the end of March. Late spring barley sowing due to the previous snow period should have also suffered from these conditions.

The first decade of May was dry all over the country with less than 5 mm. Only the extreme south west experienced wet conditions. The sowing of Maize should have been optimal in May.









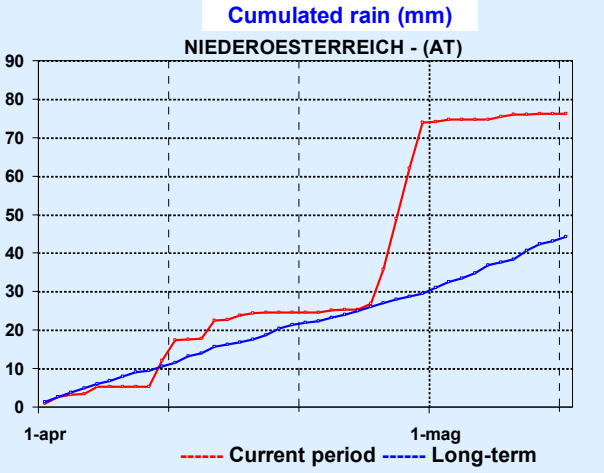
AUSTRIA: wet spring

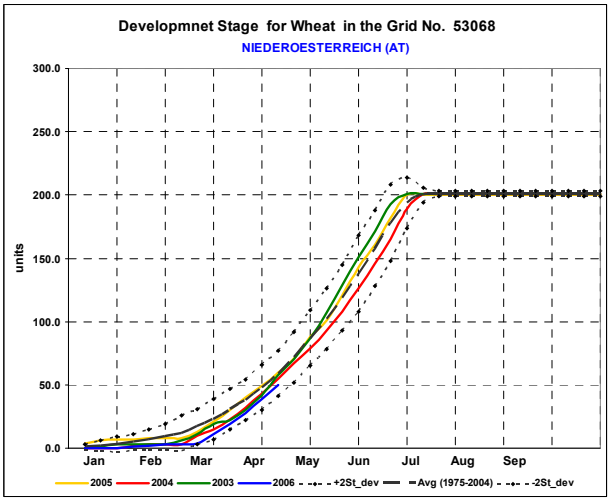
Yield forecasts are 5.4 t/ha for soft wheat (+6.5 % compared with 2005), 2.8 t/ha for rapeseed (-0.6 %), 5.5 t/ha for winter barley (+0.7 %) and 4.1 t/ha for spring barley (+0.6 %).

The rainfall tendency to be higher than the average (started in February) is still continuing. Current cumulated values since the beginning of the year are almost doubled with respect to the average ones. With the exception of a cold air irruption which occurred at the end of April, temperatures above the average allowed the crops to recover almost all the delay accumulated between the last decade of February and the second of March. Soil moisture excesses are simulated for Niederoesterreich.

Winter wheat: the delay in development shown in the previous bulletin is now reduced to about one week. The crop is now in the first part of the stem elongation phase. Rainfall above the average and melting snow are probably creating problems due to excessive soil moisture especially in the north-eastern part of the country. Since the second decade of April, simulated biomass and leaf area index trends are similar to those recorded for 2003 and are characterized by a 1-decade delay with respect to the norm.

Rape seed is entering the flowering stage (already entered in Niederoesterreich) showing no more significant delay. The unfavourable conditions experienced in April (mainly soil moisture excess) are portraying 2006 as a worse year than 2004 and 2005.
Spring crops: suboptimal conditions characterized the sowings because of the high soil water contents.





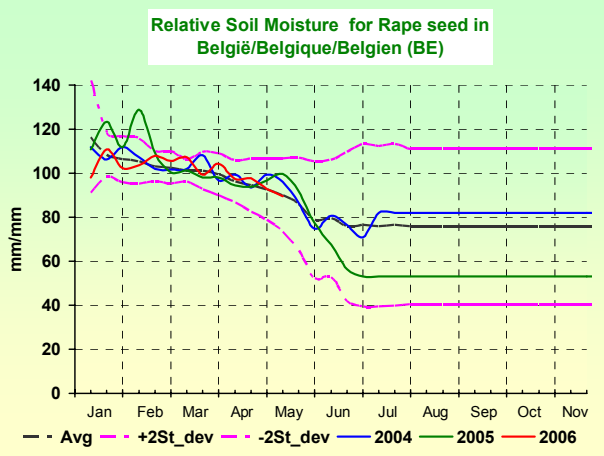
BELGIUM and NETHERLAND: Sub optimal soil moisture

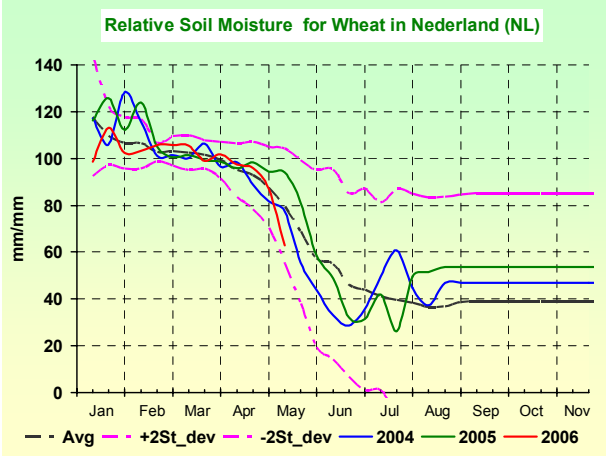
For Belgium the winter wheat yield forecast with 8.9 t/ha is similar to the last month figure considering that the potential was not reduced. For the Netherlands the scenario analysis based on a logarithmic trend has proposed the same previous forecast of 8.9 t/ha. This yield potential could soon drop if the soil moisture does not improve in the coming weeks.

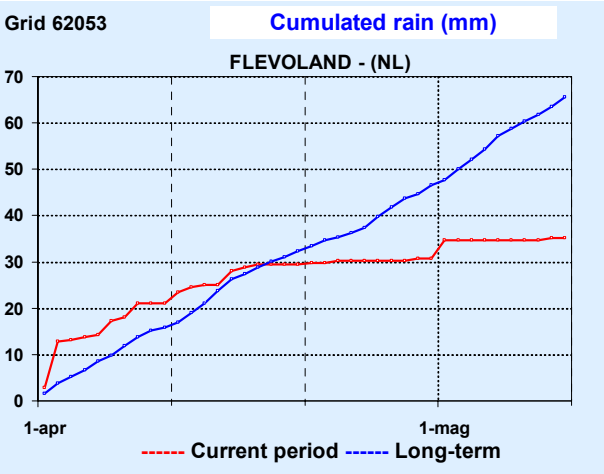
After a cold start the temperature increased regularly with higher minimum temperatures than normal and some much higher maximum around 25 °C in May. Despite some temperature drops at the end of April the growing degree days were higher than average from mid April. It boosted the crop growth and partially caught up the development delay.

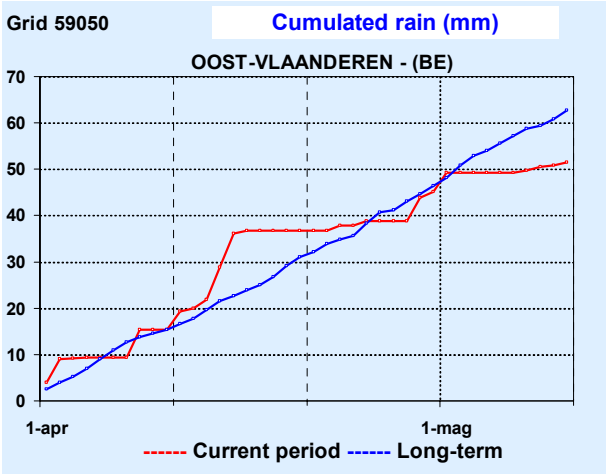
Belgium received on the extreme north west and south east up to 100 mm of rain particularly during the two first decades of April. Apart from these two zones the precipitation in Belgium was lower than the seasonal levels. The deficit in the Netherlands was even higher. The soil moisture was sufficient to meet the low water needs due to the winter crop delay. Further rainfalls will be necessary to face the increasing crop water demand and keep the yield potential particularly in the Netherlands.

Potato, sugar beet and maize should have been planted and sown under optimal conditions.









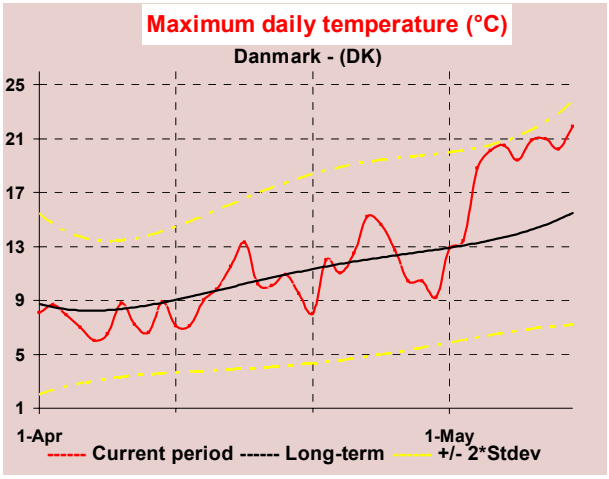
DENMARK, SWEDEN and FINLAND: seasonal temperatures but quite wet April, significantly warmer May

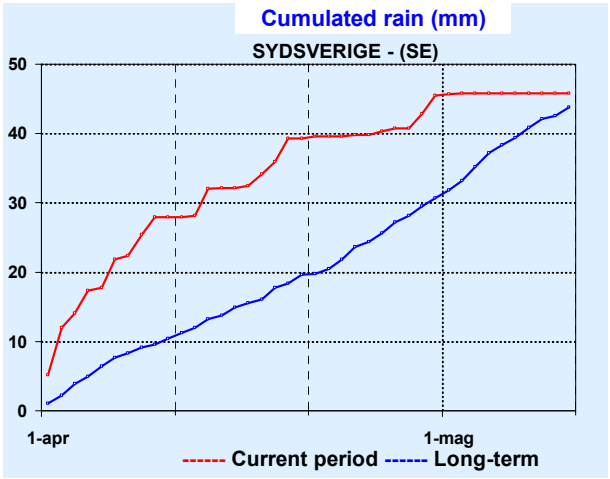
At the moment, in Denmark only limited impacts are considered on winter crops because of the development delay. The expected yields are: soft wheat 7.21 t/ha (0.5 % compared to 2005) and rapeseed at 3.10 t/ha (1.5 %). In Sweden: soft wheat 6.39 t/ha (0.7 % compared to 2005). In Finland the yield forecast for soft wheat are revised slightly downward at 3.46 t/ha (-7.1 % compared to 2005).

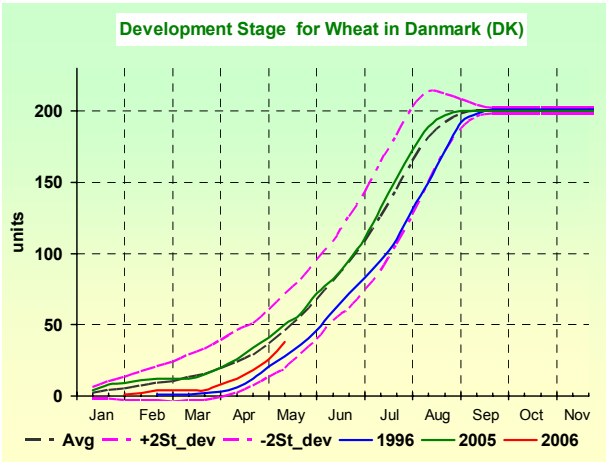
Similarly to the weather course which occurred in 1996, an anomalous cold March was followed in April by recovered seasonal thermal conditions. Both the minimum and maximum daily values returned within the normal range of variation interrupting the winter cereal dormancy. In May the temperatures continued to climb and on the 7th of May, maximum daily values, 5-6 °C above the seasonal average, were recorded. Due to these favourable temperatures, the winter crops development was boosted, but in general at the end of the first decade of May a significant delay was still present (estimable as more than 2 weeks).

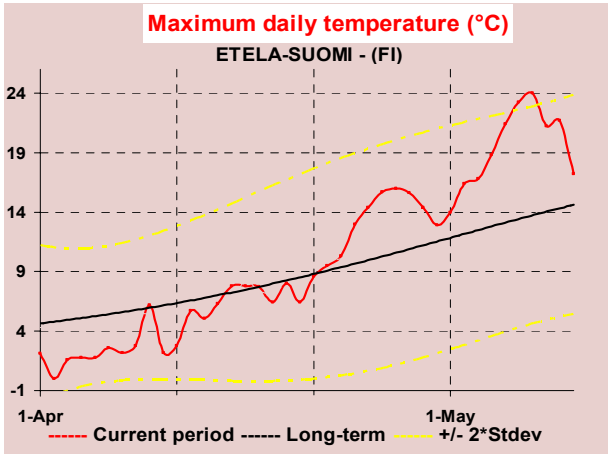
The rain was mainly concentrated in the first half of April, delaying even more the field activities and the spring sowing (in March the low temperatures and the persistent snow cover impeded any operation).

In Finland the snow cover was reported up to mid of April, when the daily average temperatures started to be stably above 1-2 °C.







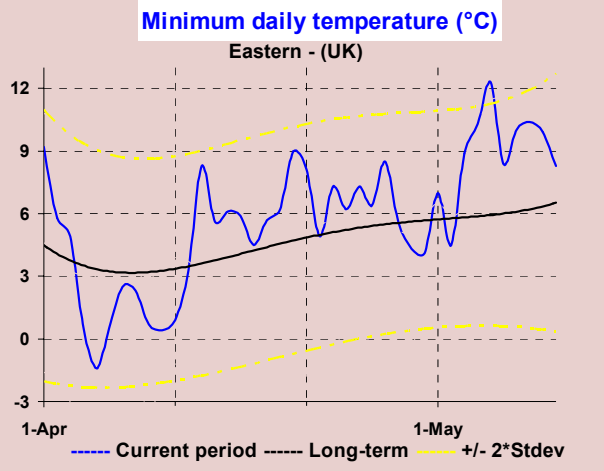


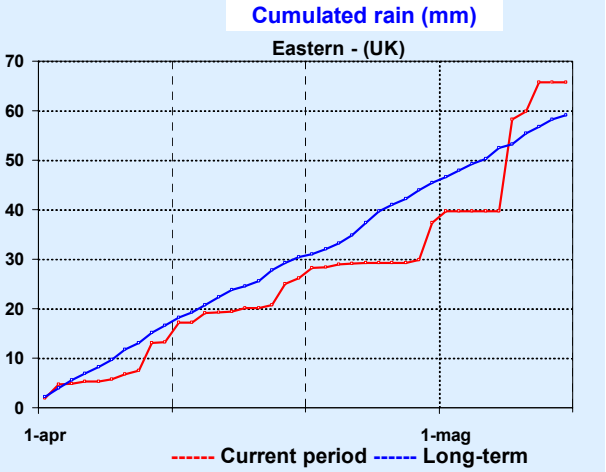
UK and REPUBLIC of IRELAND: optimal agrometeorological conditions

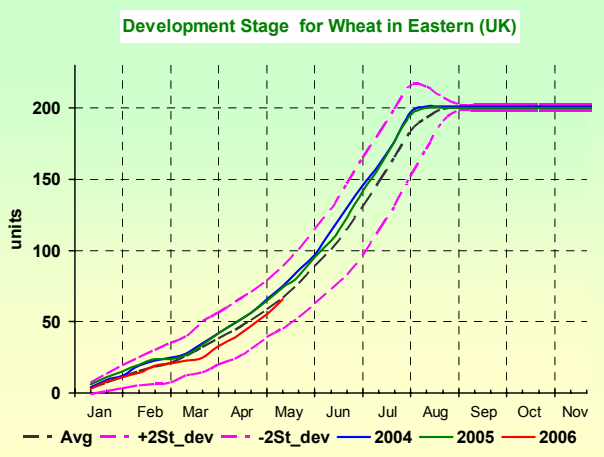
The favourable conditions allow to maintain at high level the forecasted yields in UK and revise them upward in Ireland. For soft wheat respectively at 8.0 t/ha, (0.1 % as compared to 2005) and 9.90 t/ha (+17.5 % compared to 2005, but 11.7 % compared to the 5-year average). As regard barley it is expected in UK (5.78 t/ha, -1.9 % compared to 2005, but +1.1 % compared to the 5-year average) and in Ireland (7.19 t/ha, +15.4 %). Rapeseed yield is expected at 3.18 t/ha (+0.2 %) in UK.

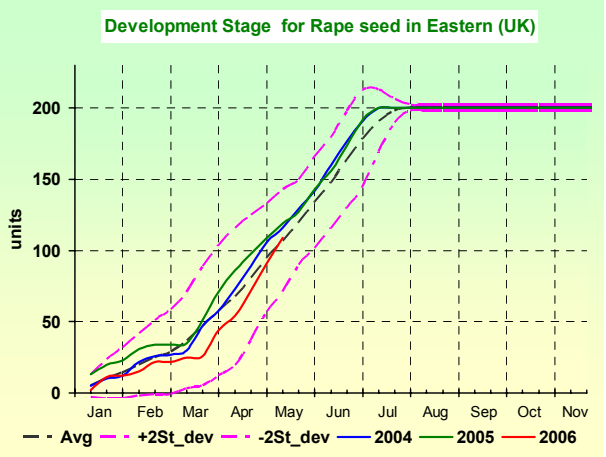
Delayed thermal conditions persisted up to the second decade of April, but then progressively more seasonal **temperatures** were restored. During the first part of May some anomalous high maximum daily values were recorded (25 °C on 4th of May in eastern UK, around 8 °C above the seasonal average). All of the winter crops reacted and in particular **rapeseed**, which almost recovered the accumulated delay and presented the stage of "visible flower buds" in the second half of April and "flowering" since the beginning of May. **Rain** was well distributed and on average seasonal quantity. Therefore, no stressing conditions were present and the **spring crops sowings** were executed during an adequate "time window" in the second half of April, however, they likely occurred a little bit in delay comparing to

the canonical calendar. **In Ireland**, in general, more seasonal crops conditions are simulated with good yield potentiality.







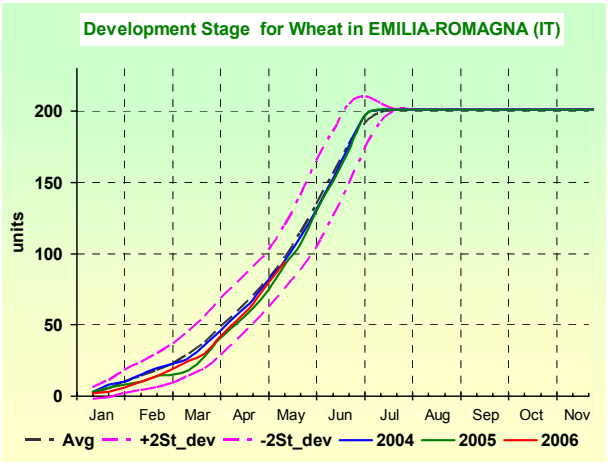


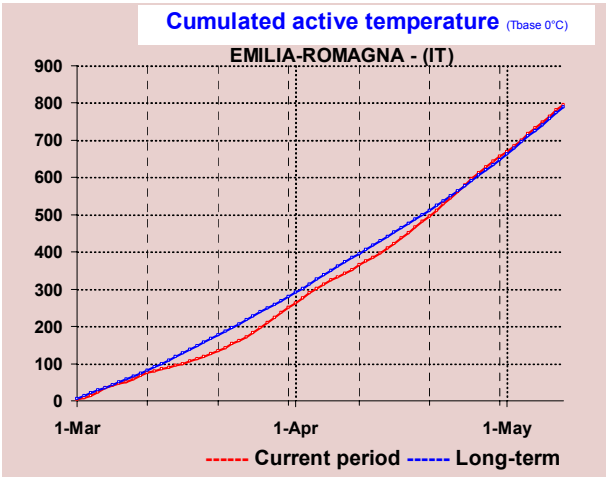
ITALY: fluctuating temperatures in April, dryer than seasonal in the centre, north-west and main Islands, wetter in southern areas

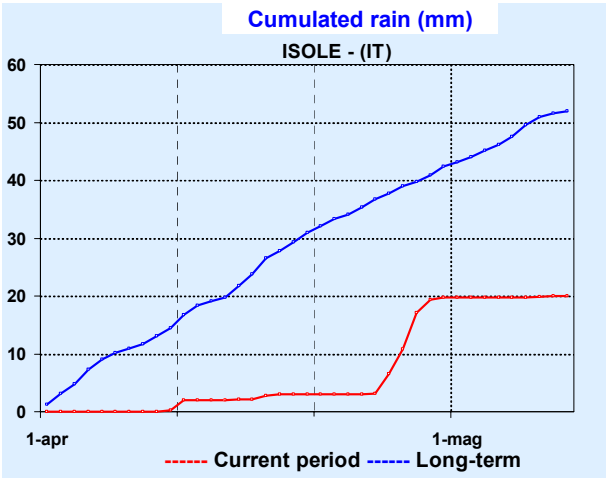
Compared to the last bulletin the soft wheat forecast is revised upward at 5.25 t/ha (-3.8 % compared to 2005 and +7.5 % than last 5-year average), durum wheat is decreased at 2.85 t/ha (-2.2 % compared to 2005 and +10.7 % compared to the last 5-year average). The barley yield forecast is maintained at 3.78 t/ha (-0.4 % compared to 2005), rape seed yield is estimated at 1.72 t/ha.

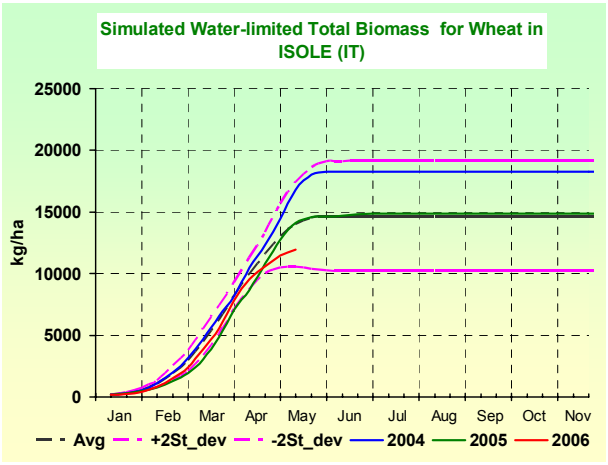
Up to mid April, Italy experienced the last "tale" of winter (except in the two biggest islands), when the synoptic configuration significantly changed and more than seasonal (and even higher) **temperatures** were restored. On the contrary in Sicily and Sardinia, during the whole considered period the thermal conditions were almost constantly higher than seasonal average with even some exceptional events (in 4-5 days the highest maximum values in April, since 1975, were recorded: e.g. 27.7 °C on the 24th of April in Sardinia). Both in April and in the first part of May, the **rain** was abundant (even more than the seasonal average) in eastern and southern districts. On the opposite, in central Italy, north-west, Sardinia and Sicily, the expected rain was significantly lower than average, i.e. only 30-40 % of the

expected rain for the period. The more favourable thermal conditions which have occurred since the second half of April allowed the **soft wheat** to almost recover the delay in development accumulated in the previous months and the crop potentiality remains comparable with the previous year. The **durum wheat** faced optimal soil water reservoirs in south Italy (Apulia) but definitively too dry in Sicily and Sardinia, where its potentiality was very likely affected. The **rape seed** recovered the delayed development accumulated and reached the "*flowering*" in average at mid April, when in the whole country the soil water content was not representing a limiting factor. Unfortunately, in central Italy (Tuscany and Umbria), in the following decades the persistent dry conditions likely compromised the good results expected so far. **Spring crops sowing** faced general optimal weather conditions both during the soil preparation and during the sowing activities, but were followed by an excessive dry period.







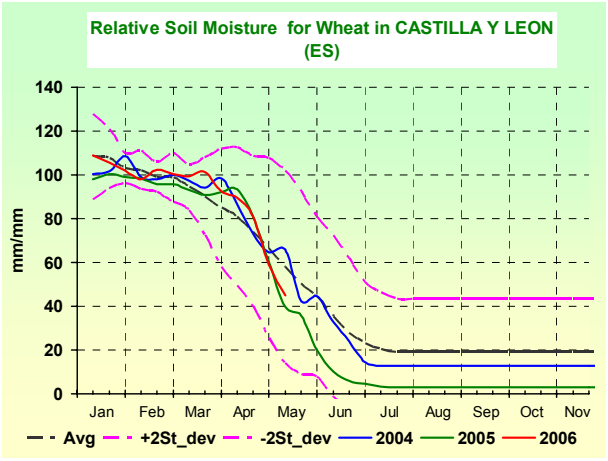


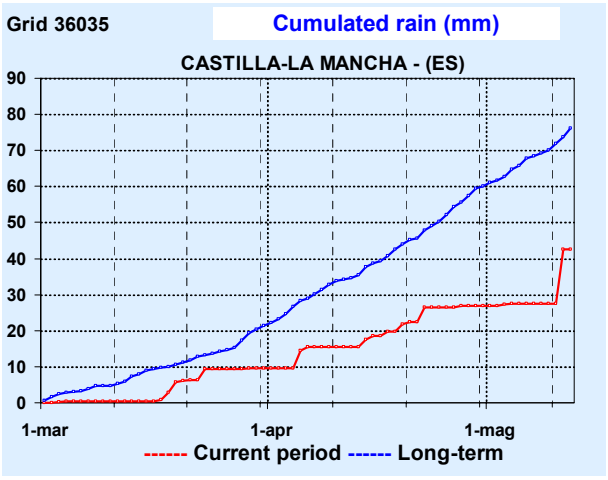
SPAIN and PORTUGAL: Development conditions for winter cereals are progressively deteriorating as a consequence of a prolonged dry spell.

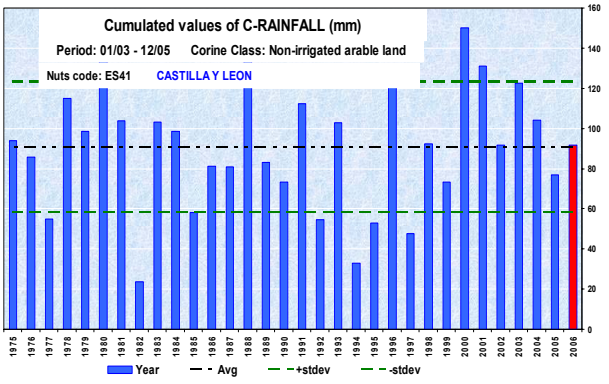
Following a favourable winter, April reported a decline of precipitation in north and central Spain. Though susceptible to some fluctuation, the expected yield of spring barley is 2.81 t/ha (double on 2005 and +13.3 % on the 5 yrs average). A similar forecast can be filed for winter barley (2.47 t/ha, +2.4 % on the 5 years average and +67.5 % on 2005). Expectations for winter

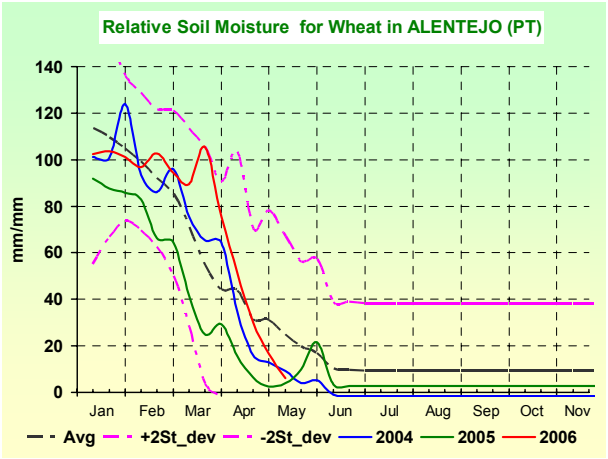
soft wheat is for a yield of 2.85 t/ha, with a 28.5 % increase on 2005 (-1 % on the 5yrs average). In this scenario much depends on the evolution of the season. Prospects are more positive for durum wheat with a forecast of 2.35 t/ha.

April and early May 2006 saw a worsening of the overall climatic conditions. The precipitation pattern was characterized by scarce and scattered showers. However, this has to be compared to a total lack of rain in 2005. The reduction in rainfall in the main winter cereals production areas of north and north-central Spain finds the crops in their most critical development stages (heading and flowering). Minimum temperatures remained above average, further enhancing the effects of the water deficit. The situation appears more favourable in southern Spain (Andalucía) with good rains at the beginning of May but conditions remained on the dry side in the south-western area (Extremadura). Similar circumstances are experienced in Portugal, especially in the southern Alentejo region. There was a recovery following 2005 but durum wheat almost disappeared from the cultivation scene.









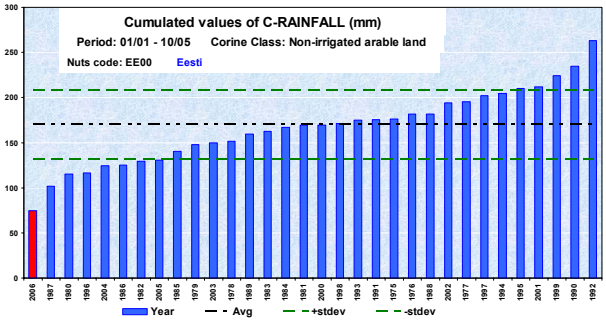
ESTONIA, LATVIA and LITHUANIA: Unusually dry period

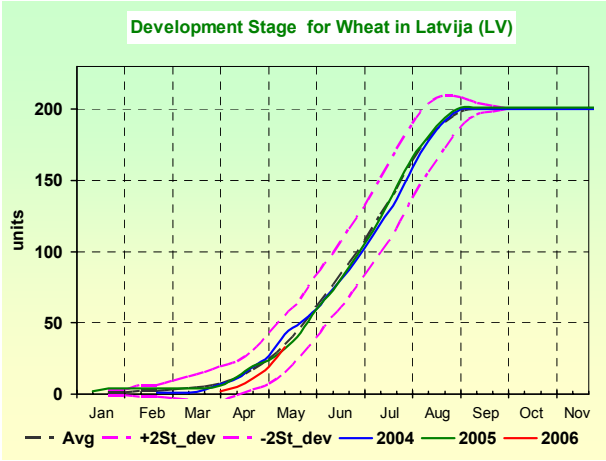
The forecasted yields for Estonia are: 2.5 t/ha (-20 %) for wheat (total) and 2.2 t/ha (-13 %) for barley (total). The forecasted figures for Latvia are: 3.5 t/ha (-3.2 %) for wheat (total) and 2.2 t/ha

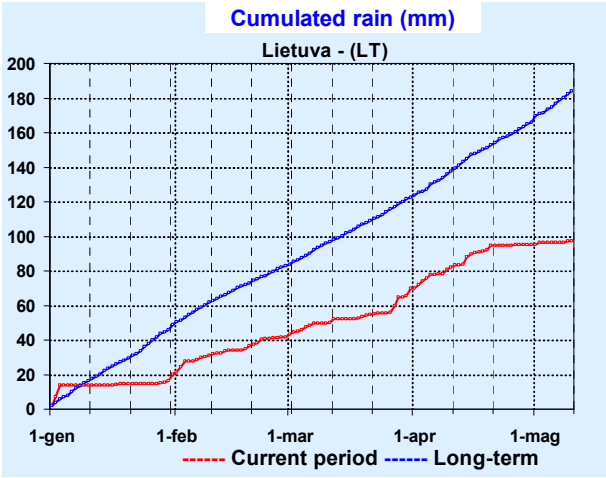
(-10.7 %) for barley (total). In the case of Lithuania the expected values are: 3.8 t/ha (0.6 %) for wheat (total) and 2.9 t/ha (6 %) for barley (total).

The temperature of the considered period was close to normal level except the western areas (especially around the Gulf of Riga) where it was warmer than usual (>+15 %) and a limited eastern area where the average temperature was lower than usual (<-15 %). Global solar radiation received during this period was higher than normal (>+10 to +16 %). The received precipitation was below long term average and so was the climatic water balance, the cumulated precipitation from the beginning of the year was the lowest from the last 32 years.

The delay in development of winter wheat was recovered at the end of the first decade of May. The sowing of the spring crops was performed under dry conditions.





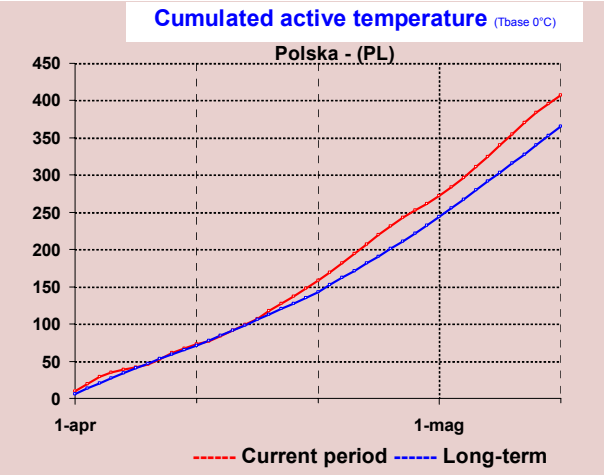


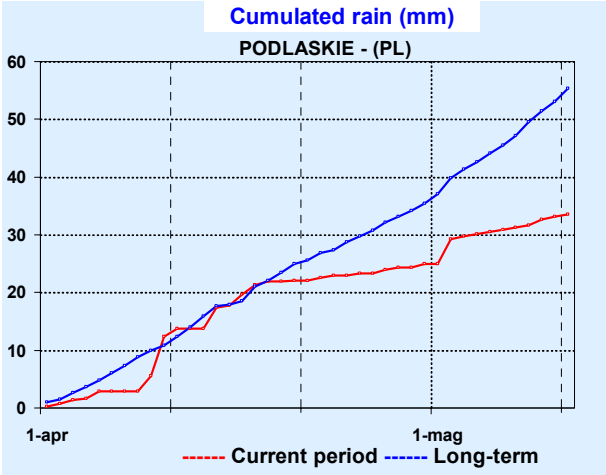
POLAND: almost recovered the delay in development

Except for the yield forecasted for spring barley (3.2 t/ha; +1.1 % compared to the previous year), forecasts are lower than those recorded for 2005: 2.4 t/ha for rapeseed (-9.4 %), 3.9 t/ha for soft wheat (-2.4 %) and 2.3 t/ha for winter barley (-12.3 %).

With the exception of the north-eastern part of the country (the belt covering Warminsko-Mazurskie and Podlaskie) where rainfall below the average was recorded, precipitations are allowing a satisfactory water supply. Temperatures higher than the average are recorded since the beginning of April. This has allowed winter wheat (starting the stem elongation phase) to partially recover the development delay

accumulated in the first part of the year. The delay has been completely recovered by rapeseed, which is entering the flowering stage. Data are depicting discrete conditions for spring sowings.

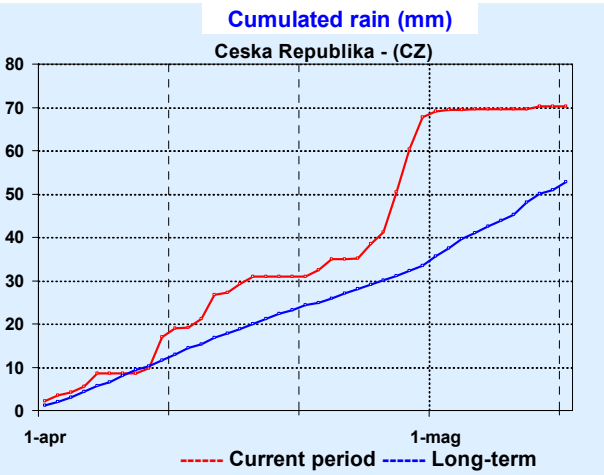


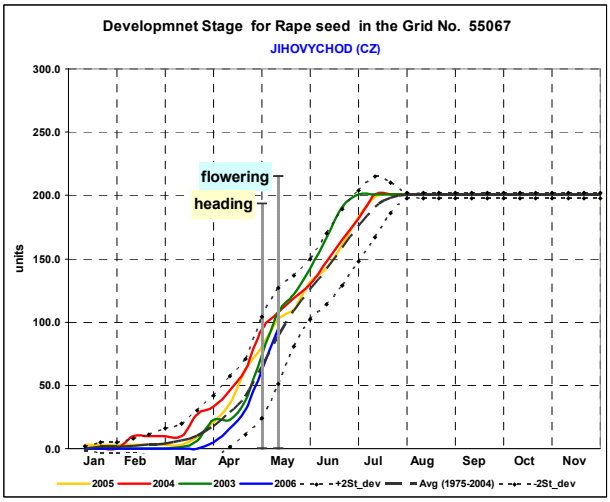


CZECH REPUBLIC: frequent precipitations at the end of April

Yield forecasts are 2.7 t/ha for rapeseed (-13.5 % compared to 2005), 5.1 t/ha for soft wheat (+0.8 %), 4.2 t/ha for winter barley (-3.4 %) and 3.9 t/ha for spring barley (-6.0 %).

Possible problems due to water excess are expected because of the rainfall (not abundant but frequent compared to the average) which interested all the country and because of melting snow. Active temperatures accumulated since the beginning of April lead to recovery of the delay in development accumulated during the first two decades of March. Winter wheat has entered into the stem elongation phase with something more than 1 decade-delay with respect to long term average. Rapeseed is correctly starting the flowering phase, after a considerable delay has been recovered during the last 40 days. A delay in the sowings of spring crops probably verified because of the high soil water content.

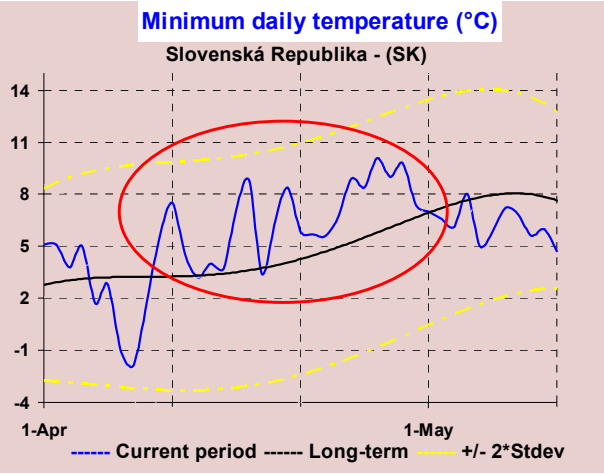


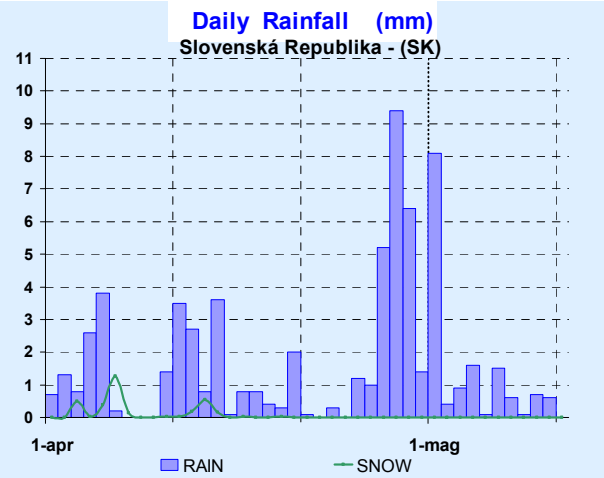


SLOVAK REPUBLIC: favourable thermal conditions since the beginning of April

Forecasted yields are lower with respect to the last year: 2.1 t/ha (-1.8 %) for rapeseed, 3.9 t/ha (-9.7 %) for soft wheat, 3.3 t/ha (-8.2 %) for winter barley and 3.4 t/ha (-5.5 %) for spring barley.

Above-average rainfall and temperatures are assuring good conditions for winter crops. Some problems to spring crops could be caused by the storm event which occurred during the last decade of April, especially in the western part of the country. The not high forecasted yields for winter sown crops are mainly due to concerns caused by the frost risk discussed in the previous bulletin. Winter wheat is in the first half of the stem elongation phase. Only a few-days delay is simulated for the south-western part of the country. Rapeseed is correctly beginning the flowering stage.

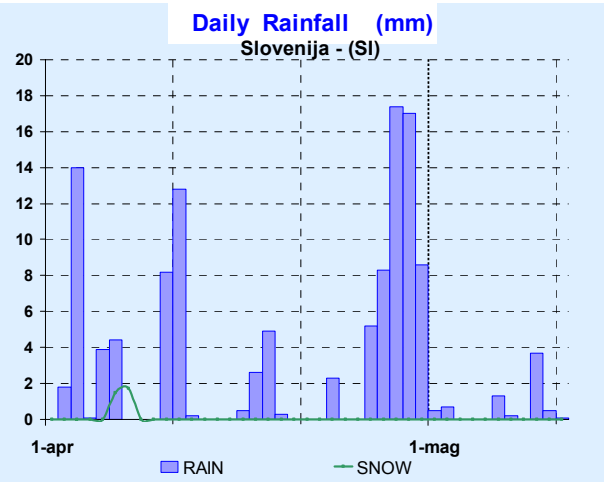


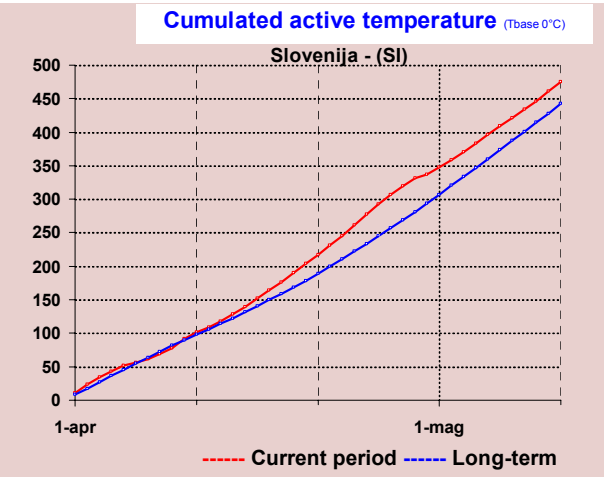


SLOVENIA: delays in spring sowings are expected

Forecasted yields (4.4 t/ha for soft wheat, 3.8 t/ha for total barley) are higher with respect to the average, although always lower than those recorded in the last year: -5.3 % and -5.1 % respectively for soft wheat and total barley.

Temperatures slightly higher than the 5-year average were recorded since the beginning of April, mainly because of high thermal minimums during the night. The low temperatures recorded at the end of April are related to storm events which lead to high soil moisture. Spring crops could have been delayed because of soil water excess during the sowing period. Winter wheat is entering the flowering stage: the delay in development simulated till the end of March is now completely recovered.

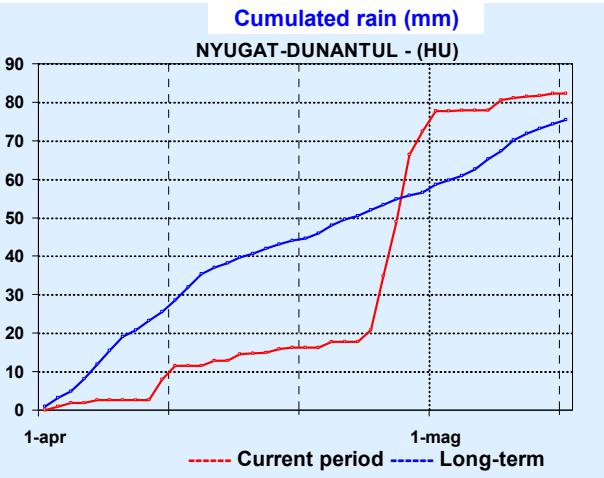


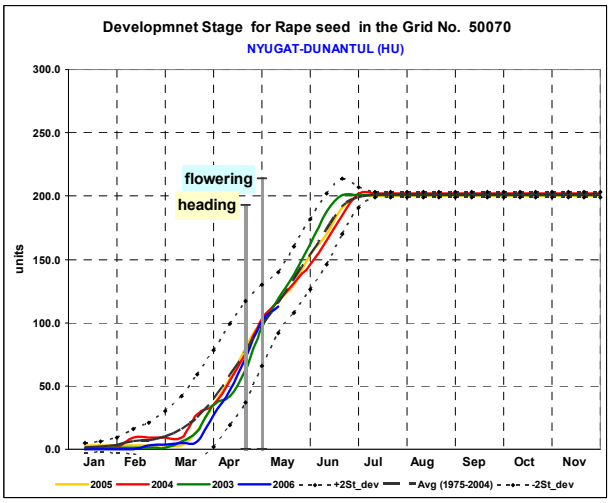


HUNGARY: good potential for wheat if frost damage are not verified

Yield forecasts are 2.5 t/ha for rapeseed (+10.0 % compared to 2005), 4.5 t/ha for wheat (+1 %), 4.2 t/ha for winter barley (+3.9 %), 3.0 t/ha for spring barley (-14.1 %) and 3.6 t/ha for durum wheat (-16.1 %).

In the eastern part of the country (in particular in the Nyugat-Dunantul), the storm event which occurred during the last days of May allowed to refill the topsoil after the relatively dry period started in the second decade of March. In the rest of the country, more than sufficient soil water contents are simulated. Winter wheat is regularly concluding the heading stage in the southern part of the country; in the second part of the stem elongation elsewhere. The considerable delay in development accumulated by rapeseed 'til the second decade of March is now completely recovered (the crop is in the first part of the flowering stage). If no frost damages verified, a good potential for wheat is expected.



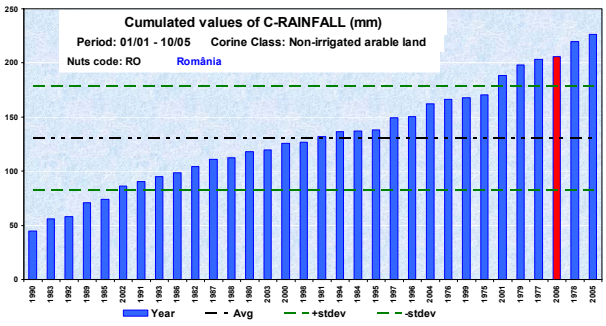


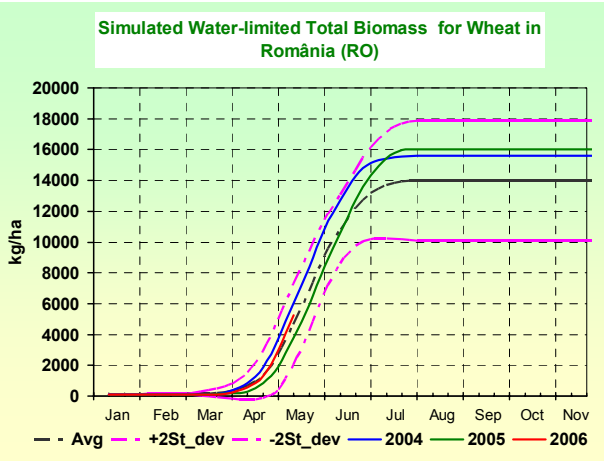
Black Sea area

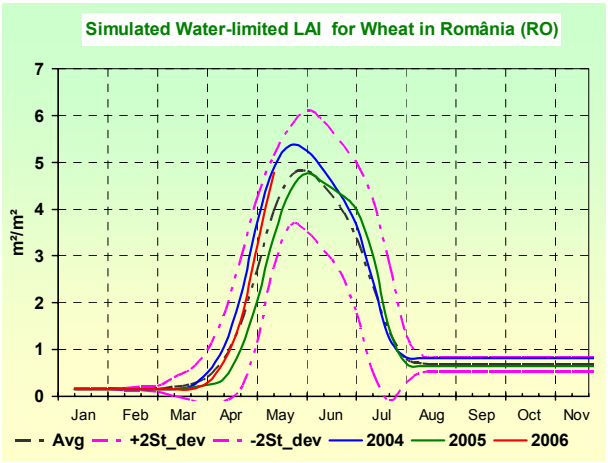
ROMANIA: wetter period, possible delay of spring sowings

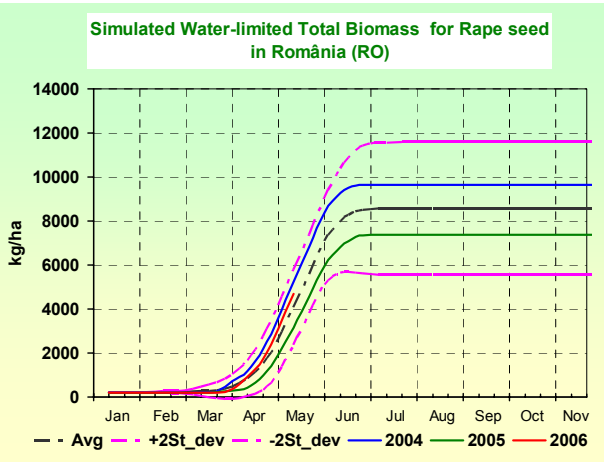
The forecasted yields (excluding the sown surfaces totally eliminated by frost) are: 3 t/ha (-2 % as compared to previous year) for wheat; 2.2 t/ha (-0.4 %) for barley and 1.6 t/ha (-3.5 %) for oil seed rape.

The sum of active temperatures was close to long term average for all agricultural areas of the country. The cumulated rainfall of the considered period was higher than normal (4th in rank for the last 32 years) and this is increasing the value of the cumulated precipitation from the beginning of the year (3rd rank). Intense rains were recorded in south-eastern Romania. Local flooding and excessive soil moisture of the agricultural areas around rivers was likely, but the extent of these problems should be lower than in the previous year. In addition the winter crops from the other areas, under condition of a proper management (compensation of nitrogen leakage, weed and pest control) should be able to take advantage of the increased water supply. The development stage of winter crops was close to normal. Simulated leaf area index was above long term average for winter wheat and rape seed but close to this level for winter barley. Even if some days without rain were present during the optimal sowing period of spring crops this activity was probably hampered in southern and eastern Romania due to higher level of soil moisture.





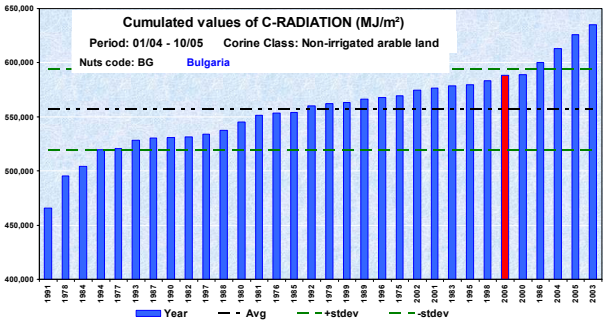


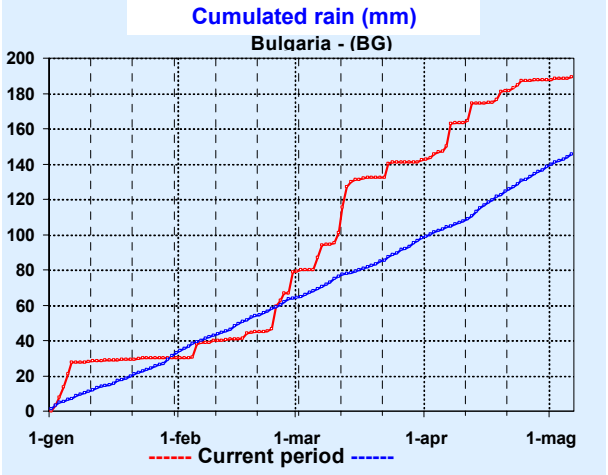


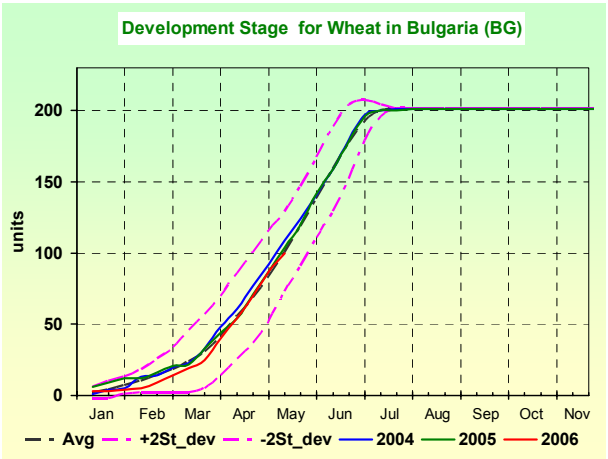
BULGARIA: Wetter than usual, good solar radiation, spring sowings made under acceptable conditions

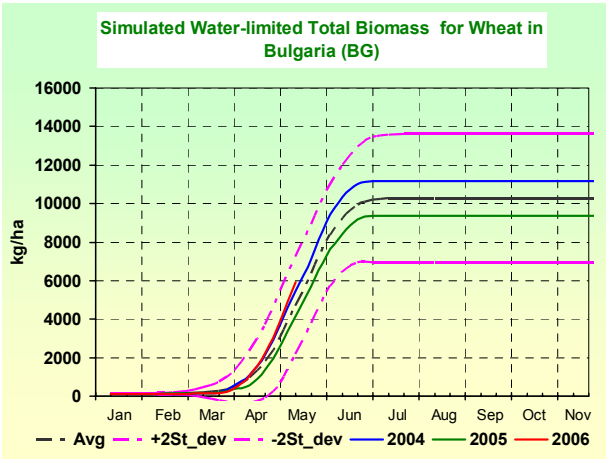
The forecasted yields are: 3.3 t/ha (+5 % as compared to previous year) for wheat and 2.9 t/ha (+14.8 %) for barley.

The thermal resources available for winter crops (Tbase =0 °C) were close to normal for the considered period so the advance present at the beginning of April was maintained. The rainfall received during this period was generally above the normal level except in south eastern Bulgaria were it was drier than usual. The cumulated global solar radiation estimated for this period exceeded the long term average (4th in rank within the sorted values from the last 32 years) and this fact increased the potential of the crops. During the first decade of April the development of winter wheat recovered the previous delay and remained close to normal level. Development of barley crops was also normal and the development of rape seed was anticipating. Simulated water limited above ground biomass of winter crops was above the long term level. Sowing of grain maize and field beans was not hampered by precipitations, however, in some areas the preliminary spring field preparation was delayed due to the rainy March. Regarding the delayed sowing of other spring crops, it is supposed that activities finished in the first decade of April.





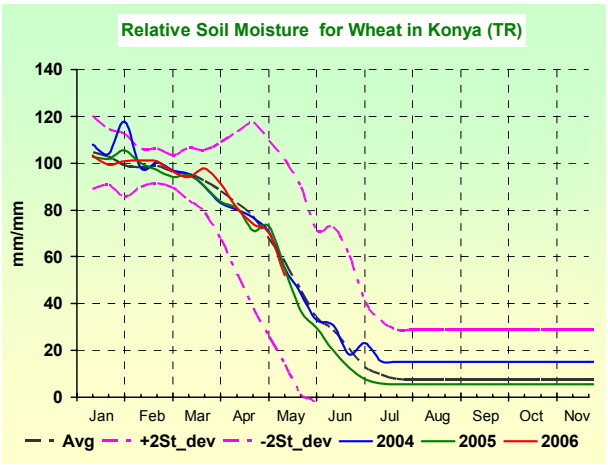


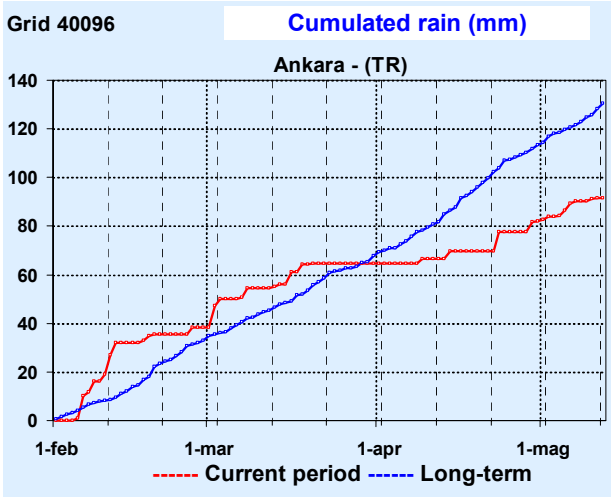


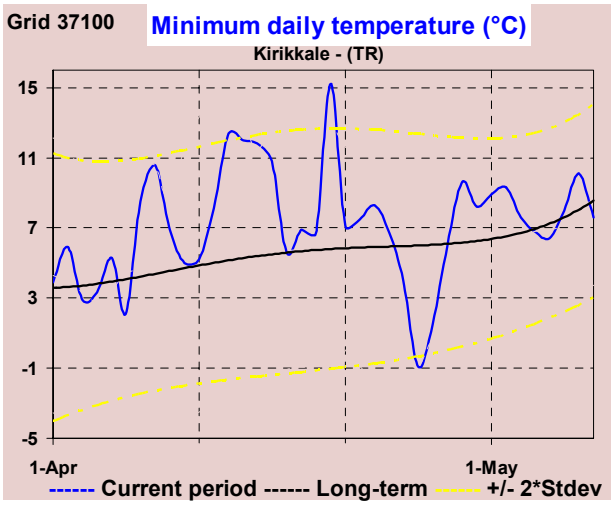
TURKEY: The condition of winter cereals appears to be relatively positive

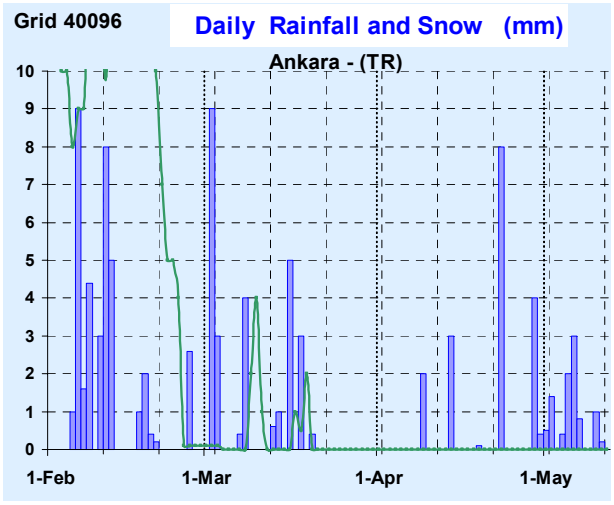
The overall climatic conditions appear moderately positive and the average yield for winter wheat is expected to reach 2.24 t/ha (+5.5 % on the 5 yrs average and +4.8 % on 2005). For winter barley if the present conditions continue, the expected yield is 2.56 t/ha (+8.7 % on the 5 yrs average and +1.7 % on 2005).

Rainfall throughout April was significantly lower than average in the main cereal production areas of north-west and central Anatolia. However, the abundance of precipitation during winter left a sufficient soil moisture supply and, also considering the low temperatures which had delayed cereal development, this condition should not significantly affect the outcome of the productive season. The momentary rain shortage found winter wheat in the less susceptible stage of heading in the central and northern highlands while barley had completed flowering. A return of rain at the beginning of April improved expectations, finding both crops in the grain formation stages. In the south-western Mediterranean areas, the climate was moderate all across and there were no rain shortages thus favouring crops. Temperatures during April and early May were slightly higher than average in most of the country and on the same level as in 2005. There was however a sudden but short cold spell at the end of April but of such a degree not to significantly affect the crops. Global radiation remained on normal levels.







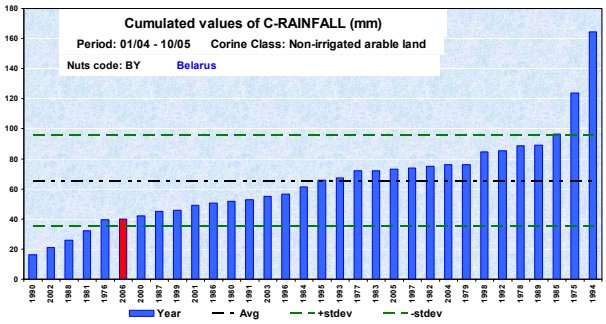


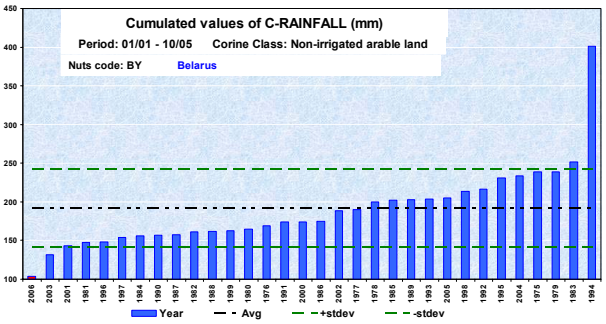
Eastern Countries and Russia

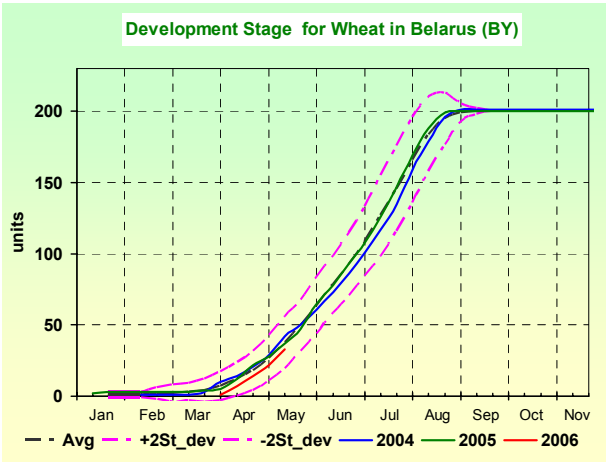
BELARUS: Unusually dry

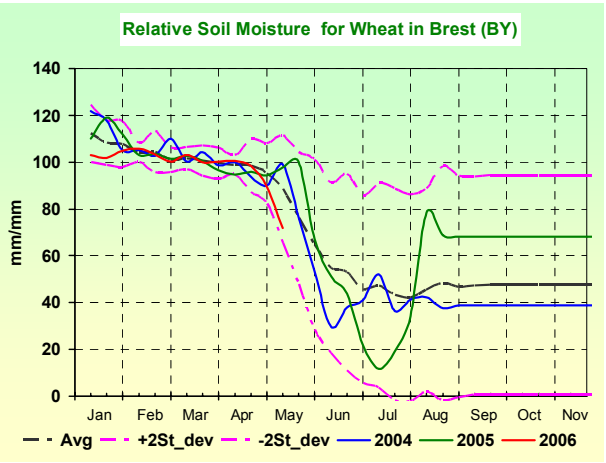
The forecasted yields are: 2.7 t/ha (-34.3 % as compared to previous year) for wheat and 0.8 t/ha (38.1 %) for oil seed rape.

The considered period was unusually dry (<-25 %), the 6th driest since 1975. If the period from the beginning of the year is considered then this period of 2006 was the driest as from MARS weather DB. Solar radiation exceeded with one standard deviation the normal level (5th highest year since 1975). In many agricultural areas, the negative impact of these very dry conditions may be reduced by the contribution of ground water table, but the situation may deteriorate if the drought conditions persist. The development stage of winter wheat was slightly below normal level; winter barley was close to this level meanwhile during the considered period the rape seed was initially below normal but the delay was recovered during the end of the first decade of May. The sowing of the spring crops was performed under dry conditions.







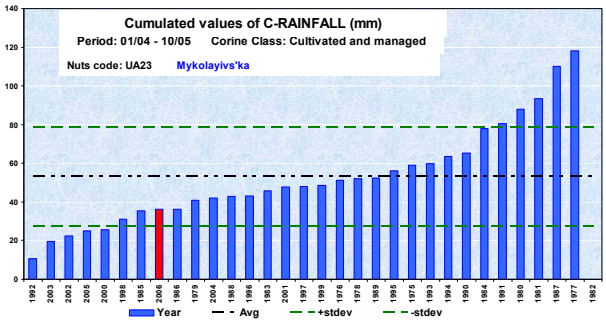


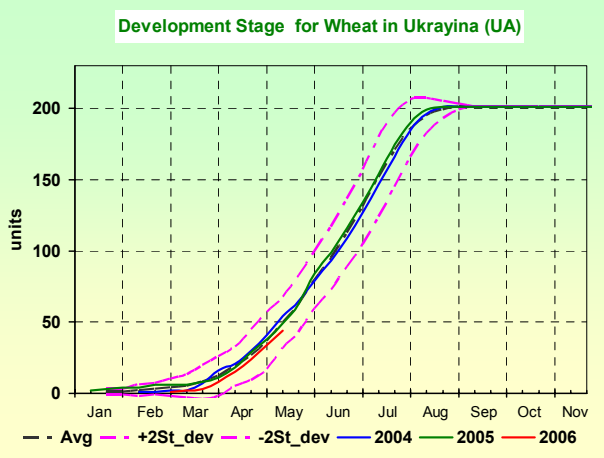
UKRAINE: Drier than usual in southern and western areas, beneficial rains for winter crops in the other regions. Good sowing conditions for spring wheat

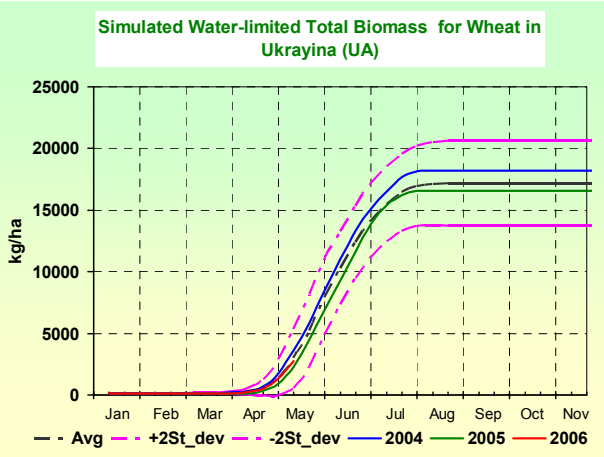
The forecasted yields (excluding the sown surfaces totally eliminated by frost) are: 2.5 t/ha (-8.4 % as compared to previous year) for wheat; 1.8 t/ha (-18.7 %) for barley and 1.1 t/ha (-16.6 %) for oil seed rape.

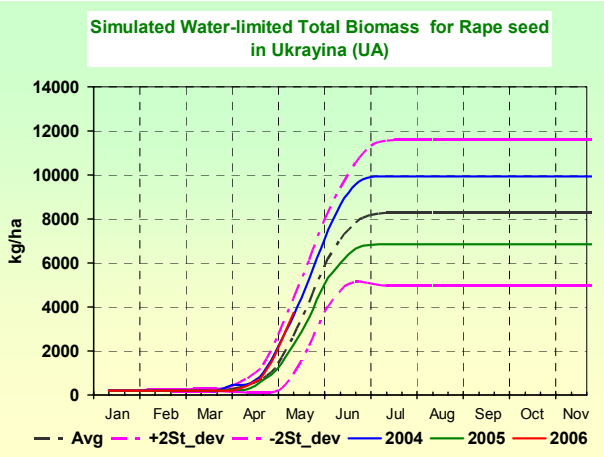
Central and northern areas of Ukraine were cooler than normal (<-30 %). Western (for example Volyns'ka) and southern areas (Nykolaev) were drier in this period than usual (-25 %) but the previous

concerns about the water supplies in different areas from northern and eastern were reduced by some beneficial rain. Most of the rain was concentrated in the first two decades of April. The global solar radiation received by eastern areas of Ukraine was with -20 % less than long term average. Development of rape-seed and barley remained at normal level meanwhile the winter wheat experienced a slight delay. The simulated above ground water limited biomass of the winter crops from the areas not affected by winter conditions is close to normal – for rape seed the biomass accumulation seems better than usual. The relative soil moisture of winter wheat is still normal, but for the rape-seed crops this indicator is lower than usual. The weather was relatively dry during the optimal period for sowing of the spring wheat but the sowing period of spring barley was rainy in some south-western. Sowing of maize was probably delayed in some areas of Poltavs'k –Dnipropet due to rainy weather, but for the other areas the weather conditions were rather optimal.









RUSSIA: favourable conditions for spring crop sowing

The period under analysis is the period of start of winter crop growth after the winter, and time for spring crop sowing.

The April 2006 was slightly colder than normal. The air minimal temperature in the northern part of the European Russia in some days was below 0^0C, and in southern part, it was near +5 +10^0C. However, the air temperature was not extreme for winter crops, and was optimal for spring crops sowing. The snow cover had disappeared in March practically everywhere.

Amount of precipitation was higher during the April than in previous year and than normal in Northern Caucasus, and North-western regions of Russia. In the Central Chernozemic, northern Volga regions, and Kaliningrad oblast the amount of precipitation was lower than normal. Extremely low rain was observed in near Caspian region, and in some districts of Central Chernozemic region.

Such meteorological conditions were optimal for winter crops. However, due to abnormal winter, winter crops have worse status than in previous year practically everywhere. Remote sensing indicators show that winter crop status at the beginning of May 2006 was better than in previous year only in Northwestern regions of Russia.

Analysis of the results of crop growth simulation demonstrates worse winter crop status in all regions of Russia, excluding Northern Caucasus.

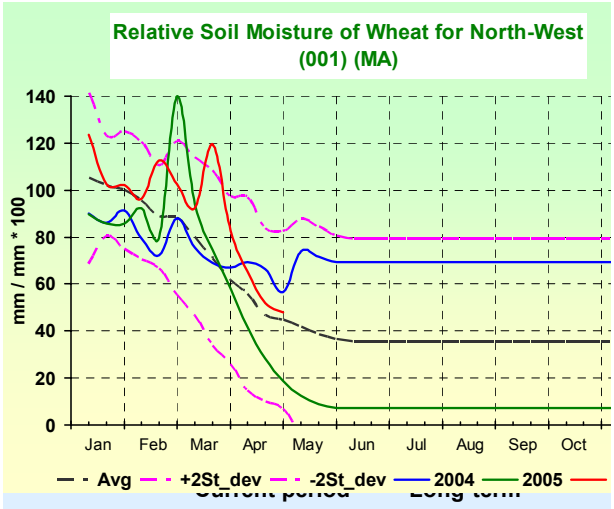
Meteorological conditions during April 2006 were favourable for spring crops sowing practically everywhere, and sowing campaign is likely to be finished without delay.

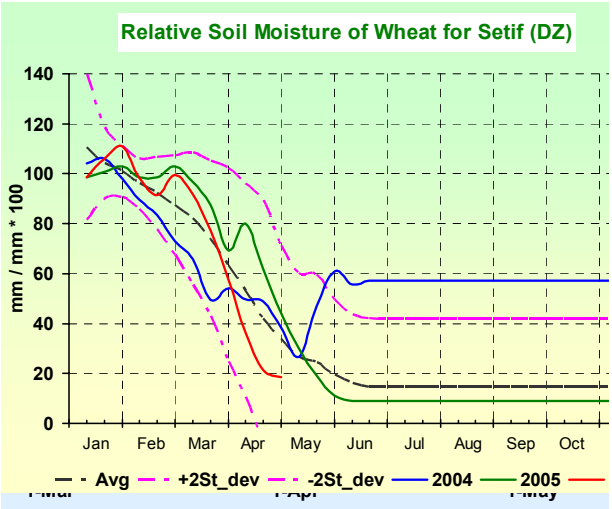
Maghreb

MOROCCO, TUNISIA and ALGERIA: A positive outcome is expected regardless a dry and warm spell in April

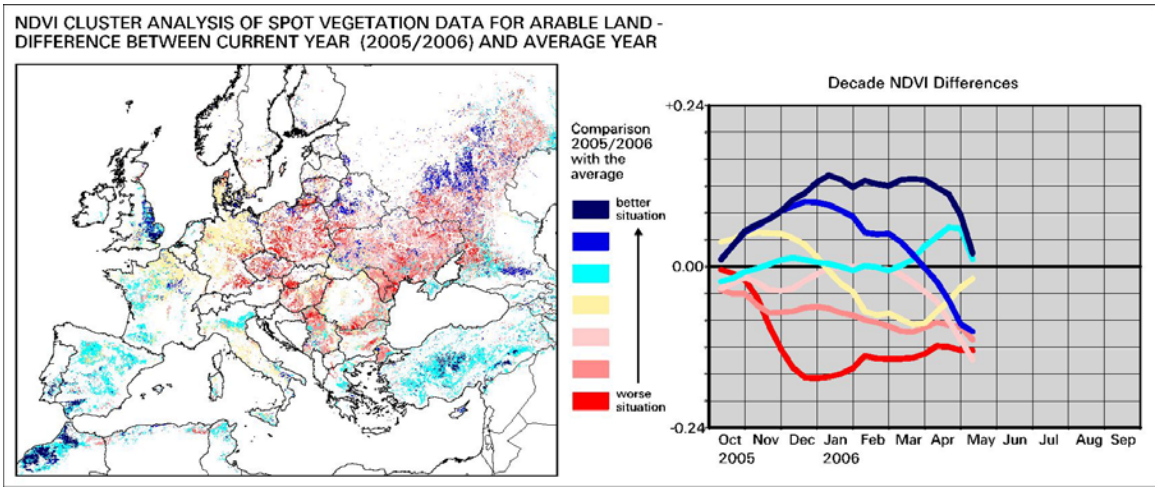
The evolution of winter cereals has been favourable and promising in the whole region until the end of March but it was later affected by dry and warm weather in April. The expected yield is 1.9 t/ha for durum wheat in Tunisia, 1.4 t/ha in Algeria and 1.22 t/ha in Morocco. These figures correspond to an increase on 2005 for Morocco and Tunisia while they can be considered stable for Algeria though with a 10 % increase on the 5 years' average.

Following a favourable winter, which had been characterized by higher than average precipitation coupled with low temperatures in the entire Maghreb region, weather conditions started deteriorating at the end of March when warm and dry weather lowered soil moisture availability to winter cereal (essentially durum wheat). The phenological development of the crop had been delayed by the cold weather but the moisture deficit developed when the crop had passed its most vulnerable stages of late flowering and grain formation. This condition was more marked on the northern coastal areas of Tunisia and in western Morocco while circumstances remained moderately favourable in the central portions of coastal Algeria and the eastern Mediterranean coast of Tunisia. Rainfall started increasing again across much of the region in the end of April and early May, however finding the cereal crop well advanced in the maturation stage.





4. SPOT-VEGETATION satellite analysis



Map highlights: Important crop delay for Eastern Europe, Germany and central Italy are partially catching up a normal crop development, France and Mediterranean countries have a normal to better crop biomass.

The classification of the ten day NDVI differences (2005/2006 – average) from the beginning of the campaign highlights 4 main areas:

1- **"dark blue"**: country like Morocco that experienced much higher crop biomass production for most of the whole period
2- **"cyan"**: half west of France, Iberian peninsula, Maghreb, Sicily, Greece and Turkey shown a biomass production within the average with a higher level in April.
3- **"yellow"**: after a better crop growth in autumn the vegetation remained at lower level reflecting the crop development delay. However from April the biomass tended to a normal level.
4- **"red"**: all the eastern Europe countries from Baltic to Balkans shown an important delay, with lower NDVI level for the all campaign.

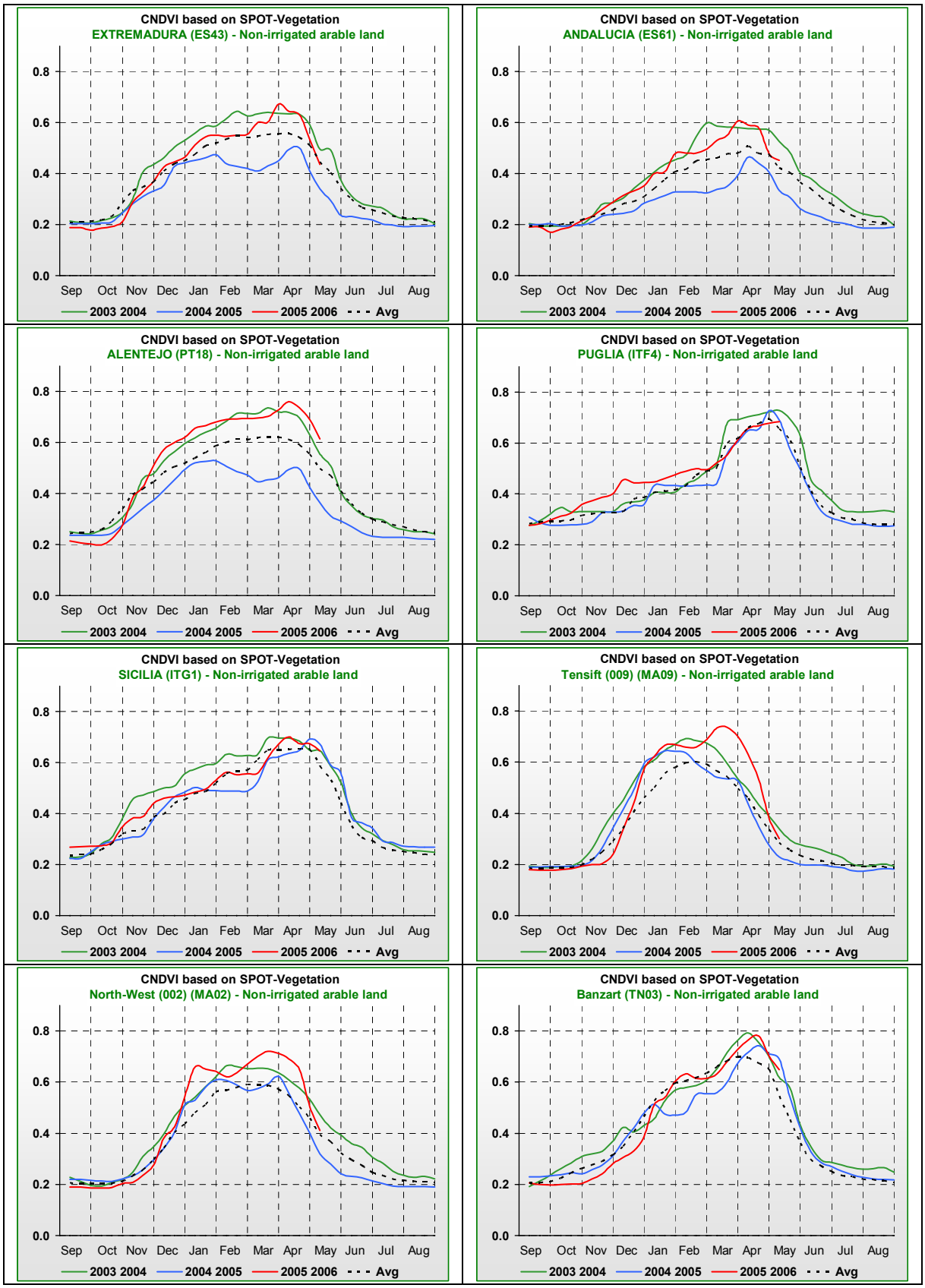
CNDVI profile highlights: Late boosted biomass production in Iberian Peninsula and Maghreb. Shorter crop maturation in Spain and Morocco. Good potential in Portugal and Tunisia.

The two profiles of **Spain** (**Extremadura** and **Andalucía**) show a higher biomass production from mid March to mid April followed by an abrupt decrease. The maturation phase should have been shortened and the yield elaboration should be lower than expected. In **Alentejo (Portugal)** the biomass production already high was boosted in April and then initiated a normal senescence phase. The yield potential is quite good and should be similar to 2004.

In **Puglia (Italy)** the crop cycle is close to the average and reached its peak of production. For **Sicilia (Italy)** after a depletion in March, the NDVI profile shown a late increase of the crop canopy in April (higher than the average) followed by the start of the senescence phase. The yield promised to be within the average.

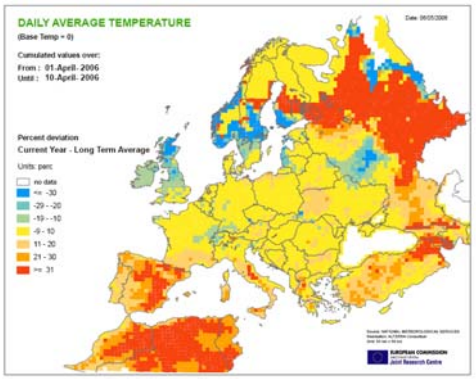
In **Morocco (Tensif** and **North West)** the vegetation development was exceptional but a little bit too late to fully benefit to the yield elaboration. In some areas like in North West the profile is characterized by a sharp decrease corresponding to a short maturation. In such case the yield should not be as good as expected.

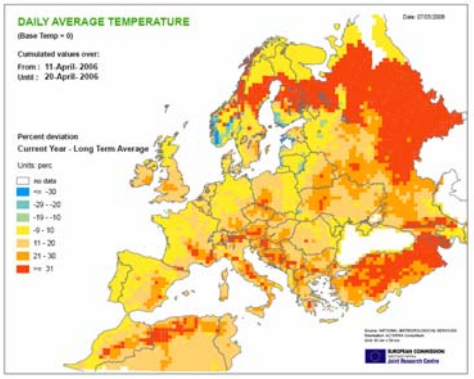
The profile of **Bansart (Tunisia)** reached higher level than average close to 2004. The crop followed a normal senescence cycle. The yield expectations are better than average

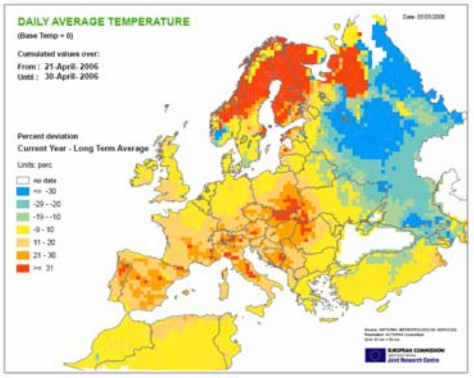

CNDVI based on SPOT-Vegetation
EXTREMADURA (ES43) - Non-irrigated arable land
CNDVI based on SPOT-Vegetation
ANDALUCIA (ES61) - Non-irrigated arable land
CNDVI based on SPOT-Vegetation
ALENTEJO (PT18) - Non-irrigated arable land
CNDVI based on SPOT-Vegetation
PUGLIA (ITF4) - Non-irrigated arable land
CNDVI based on SPOT-Vegetation
SICILIA (ITG1) - Non-irrigated arable land
CNDVI based on SPOT-Vegetation
Tensift (009) (MA09) - Non-irrigated arable land
CNDVI based on SPOT-Vegetation
North-West (002) (MA02) - Non-irrigated arable land
CNDVI based on SPOT-Vegetation
Banzart (TN03) - Non-irrigated arable land
0.0
0.2
0.4
0.6
0.8
Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug
2003 2004
2004 2005
2005 2006
Avg

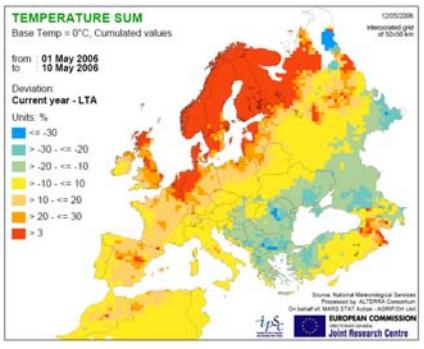
5- TEMPERATURE and RAINFALL MAPS

Temperature: 1 April - 10 May 2005

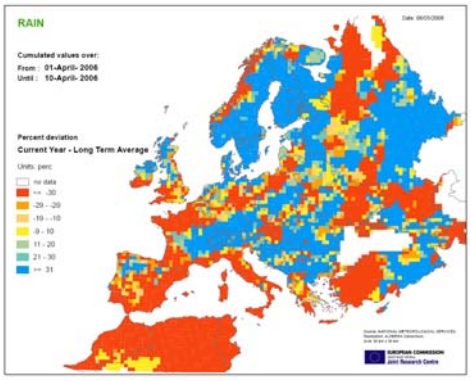


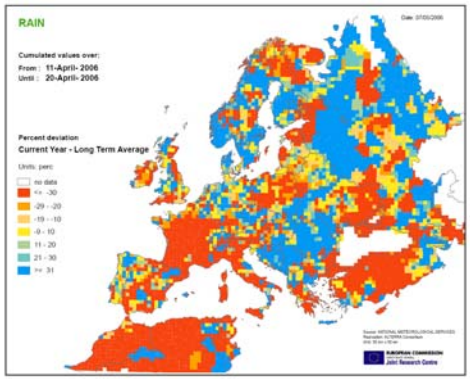


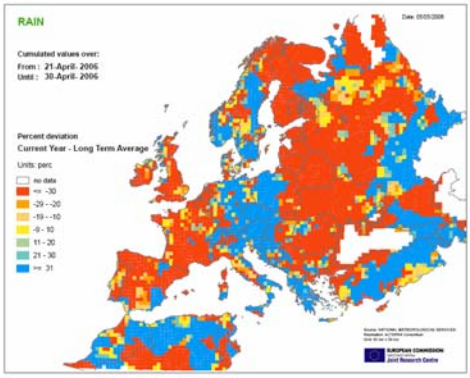


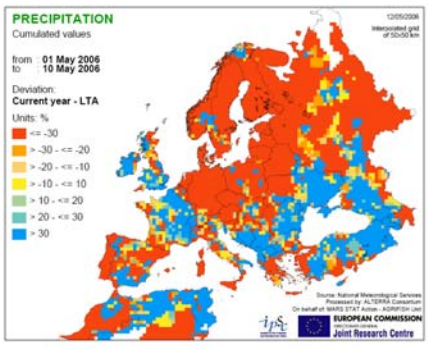


Rainfall: 1 April - 10 May 2005

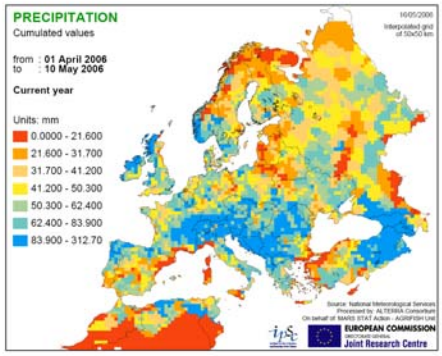


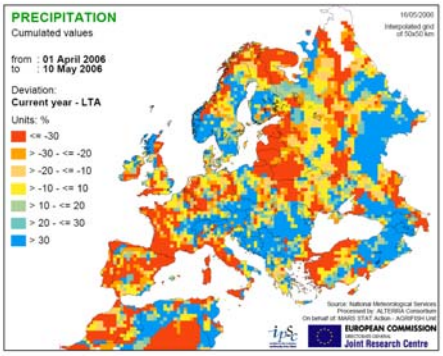


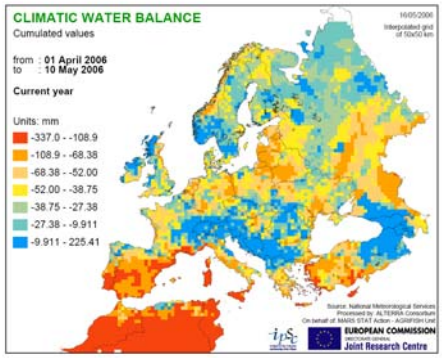


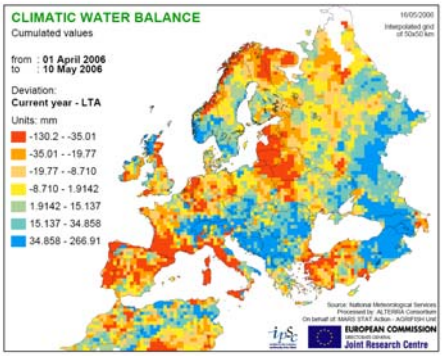


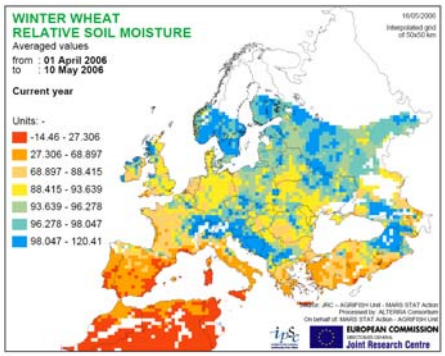
6- METEO and AGROMETEO MAPS

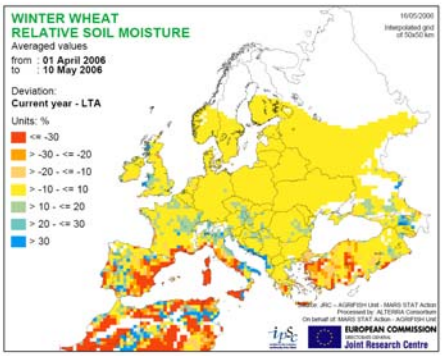


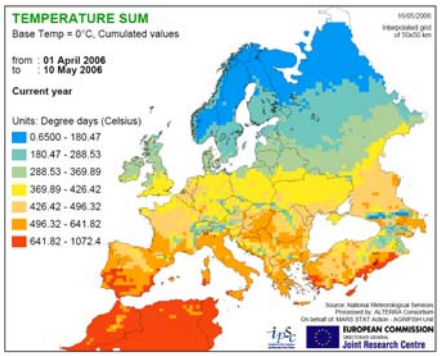


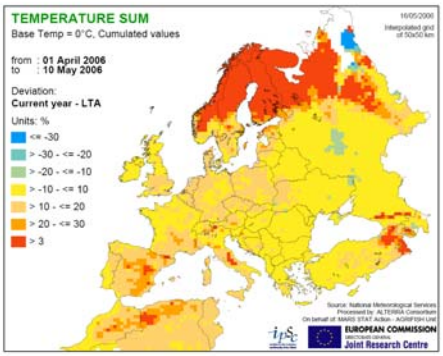




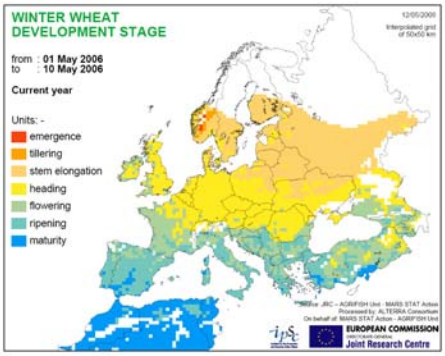


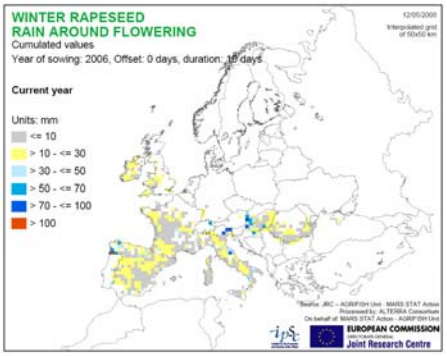


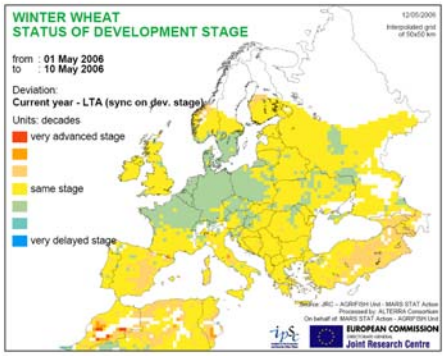


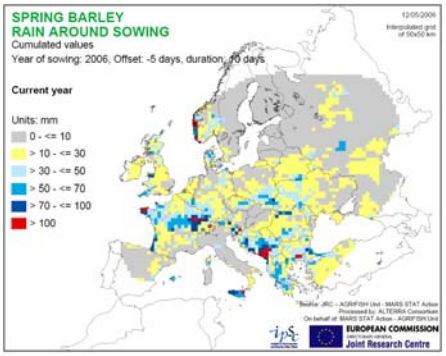


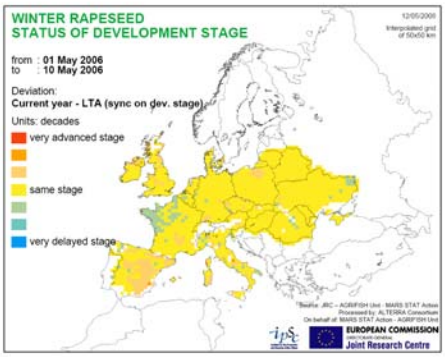
7 - CROP MAPS

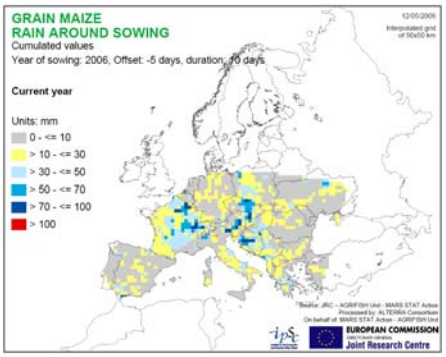

WINTER WHEAT
DEVELOPMENT STAGE
from : 01 May 2006
to : 10 May 2006
Current year
Units: -
emergence
tillering
stem elongation
heading
flowering
ripening
maturity
EUROPEAN COMMISSION
Joint Research Centre

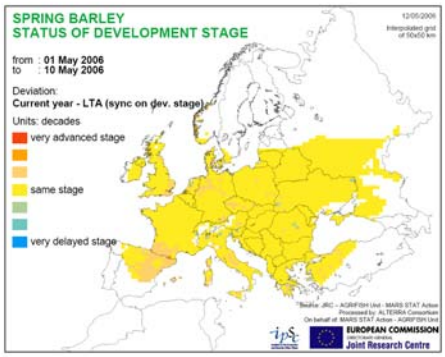

WINTER RAPESEED
RAIN AROUND FLOWERING
Cumulated values
Year of sowing: 2006, Offset: 0 days, duration: 10 days
Current year
Units: mm
<= 10
> 10 - <= 30
> 30 - <= 50
> 50 - <= 70
> 70 - <= 100
> 100
EUROPEAN COMMISSION
Joint Research Centre

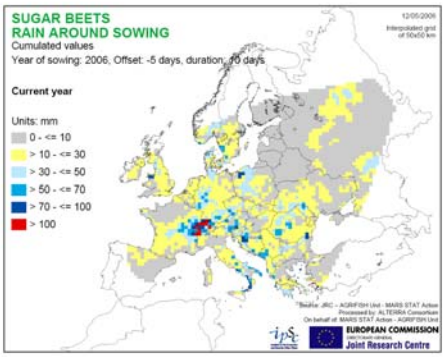

WINTER WHEAT
STATUS OF DEVELOPMENT STAGE
from : 01 May 2006
to : 10 May 2006
Deviation:
Current year - LTA (sync on dev. stage)
Units: decades
very advanced stage
same stage
very delayed stage
EUROPEAN COMMISSION
Joint Research Centre


SPRING BARLEY
RAIN AROUND SOWING
Cumulated values
Year of sowing: 2006, Offset: -5 days, duration: 10 days
Current year
Units: mm
0 - <= 10
> 10 - <= 30
> 30 - <= 50
> 50 - <= 70
> 70 - <= 100
> 100
EUROPEAN COMMISSION
Joint Research Centre


WINTER RAPESEED
STATUS OF DEVELOPMENT STAGE
from : 01 May 2006
to : 10 May 2006
Deviation:
Current year - LTA (sync on dev. stage)
Units: decades
very advanced stage
same stage
very delayed stage
EUROPEAN COMMISSION
Joint Research Centre


GRAIN MAIZE
RAIN AROUND SOWING
Cumulated values
Year of sowing: 2006, Offset: -5 days, duration: 10 days
Current year
Units: mm
0 - <= 10
> 10 - <= 30
> 30 - <= 50
> 50 - <= 70
> 70 - <= 100
> 100
EUROPEAN COMMISSION
Joint Research Centre


SPRING BARLEY
STATUS OF DEVELOPMENT STAGE
from : 01 May 2006
to : 10 May 2006
Deviation:
Current year - LTA (sync on dev. stage)
Units: decades
very advanced stage
same stage
very delayed stage
EUROPEAN COMMISSION
Joint Research Centre


SUGAR BEETS
RAIN AROUND SOWING
Cumulated values
Year of sowing: 2006, Offset: -5 days, duration: 10 days
Current year
Units: mm
0 - <= 10
> 10 - <= 30
> 30 - <= 50
> 50 - <= 70
> 70 - <= 100
> 100
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