

Period of analysis: 1<sup>st</sup> March – 20<sup>th</sup> March 2011

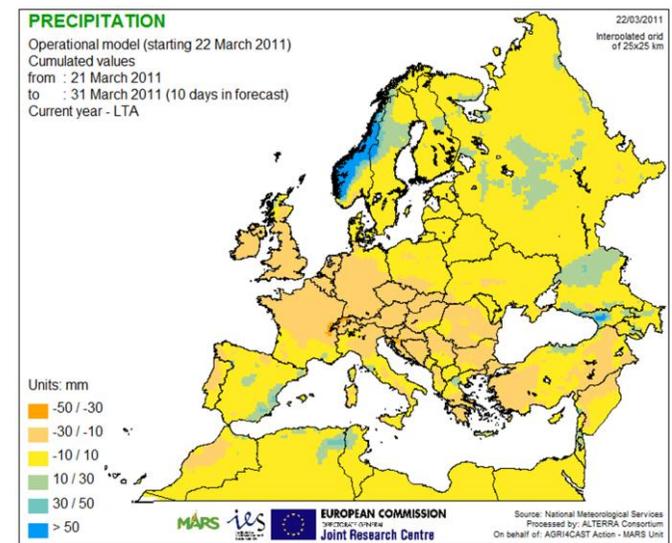
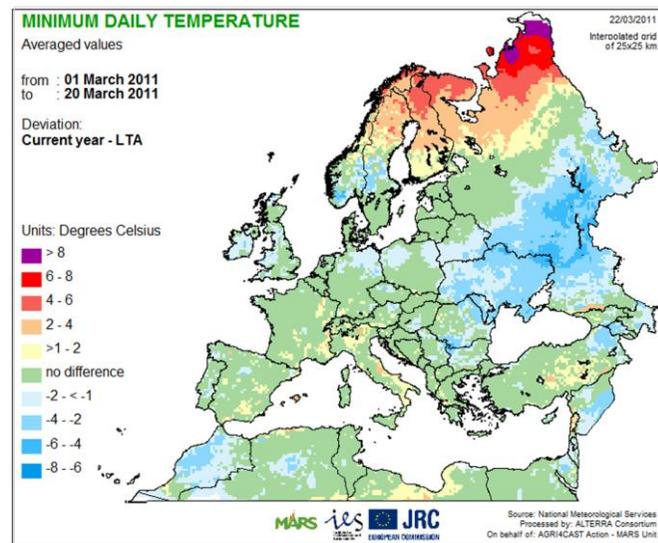
Issue date: 22<sup>nd</sup> March 2011

#### HIGHLIGHT

First dekad of March was particularly colder compared to the seasonal average values, but during the second dekad the temperatures were generally higher than usual conditions in most regions across Europe. About water supply, Italy faced intensive rainfall during this period. The forecast for the next ten days shows mainly seasonal mild weather conditions.

#### CONTENT

1. Agrometeorological analysis
2. Weather forecast



## 1. AGROMETEOROLOGICAL ANALYSIS

### OBSERVED TEMPERATURES

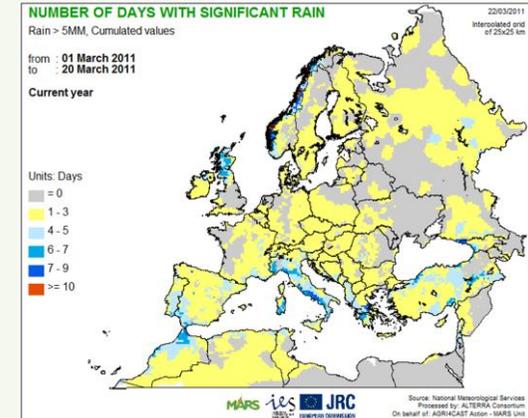
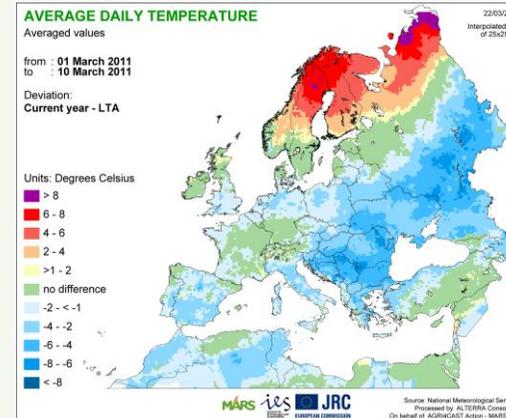
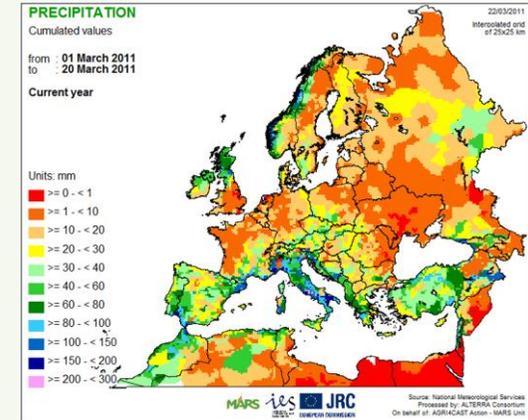
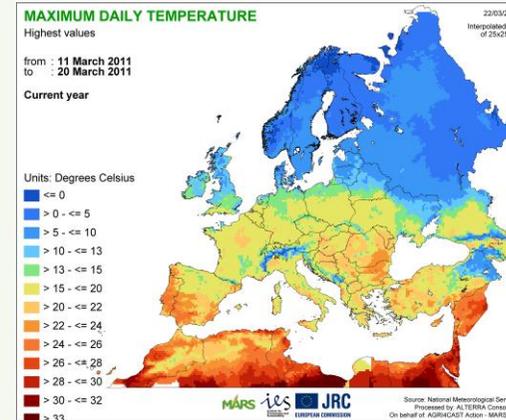
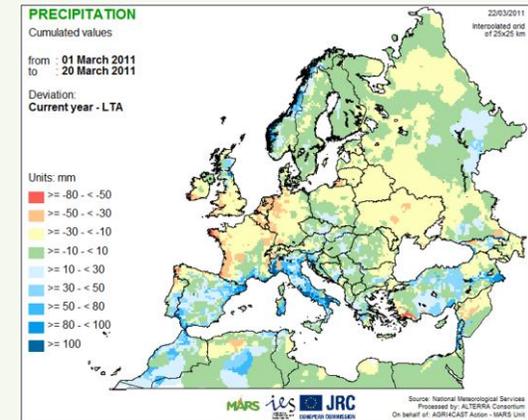
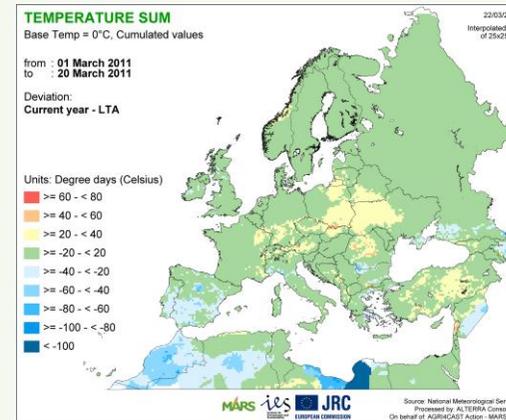
The harsh winter weather in February continued into the first dekad of March over eastern Europe. The mean temperature was below the average in Spain, Italy, Northern Germany, Poland and Central Europe by -1 to -3°C; on the Balkan Peninsula as well as in Ukraine, Belarus and southern parts of Russia by -3 to -6°C. In northern Scandinavia and on the high latitudes in Russia the thermal conditions were +4 to +10°C milder than usual. The British Isles, France, Italy, the Benelux countries, the Iberian Peninsula and the Mediterranean coastline experienced none or light frost events. Going eastwards from the French-German border the severe frosts reached -6°C to -12°C and leaving the territory of the EU the daily minimum temperatures decreased below -15°C. In the Volga region the absolute minimum values lowered near to -30°C. The daily maximum temperatures characteristically reached +10°C in France, Italy, Spain and Portugal. In these last two countries along the Atlantic coastline the values even exceeded +15°C. Along the eastern border of the European Union the thermometers hardly indicated positive values.

Towards 10<sup>th</sup> March the weather turned warmer and supported vegetation. The average temperature was higher with +2/+5°C than LTA (long term-average) in a large area between the Atlantic, Baltic, Mediterranean and Black Sea as well as on the northern territory of Russia. The exception was eastern Turkey, Ireland, Scotland, Sweden and Norway, where colder than normal conditions happened. The number of cold days was less than usual by 2-6 days in this area. On the warmest days the maximum temperatures rose above +14°C south of Baltic Sea. In Portugal, southern Spain, Bulgaria, Romania, Hungary and Greece they were above +20°C.

The sum of active temperatures (base temperature = 0°C) for the considered period was below the seasonal average, -20 /-50 GDD (growing degree days) in Ireland, Portugal, Spain and some parts of Italy, Greece and Bulgaria. The presence of negative thermal anomalies could have caused a slight delay in winter crop development in these concerned areas. Some favourable positive differences (+20/+40 GDD compared to LTA) were recorded in the Czech Republic, Slovakia, Central Romania, eastern Poland as well as in southern Germany, eastern France and the western part of Ukraine.

### OBSERVED RAINFALL and SNOWFALL

The precipitation was seasonal in Scandinavia and central Europe. Scarce precipitation in France and Germany (especially the western parts of the countries); also in Benelux and southern areas of the UK and Ireland. Lower than usual amounts of rain were also recorded in eastern Romania, Ukraine, Belorussia and the bordering areas of Russia. All these areas, as well as north-eastern Poland, Lithuania and central Sweden, obtained less than 10 mm of rainfall. Rain was concentrated in Mediterranean areas, mainly in Italy and Slovenia. The majority areas in Italy obtained at least 50 mm more than usual. Iberian Peninsula, Morocco and most of Turkey recorded also more than usual rainfall. These areas present positive values of climatic water balance. The weather conditions in central Europe favoured snow melting and recovering crops after winter dormancy.



## 2. WEATHER FORECAST

### SITUATION OVER THE NEXT FEW DAYS (ECMWF weather forecast: March 21<sup>th</sup> – 30<sup>th</sup>)

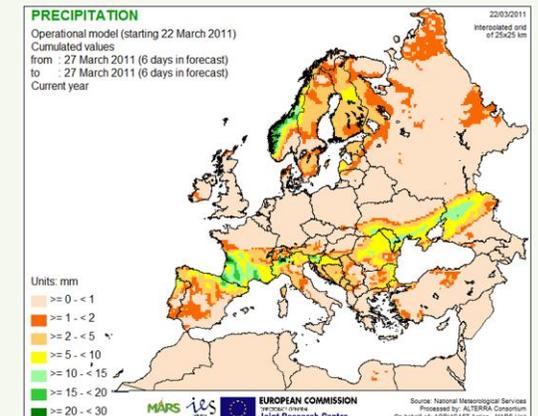
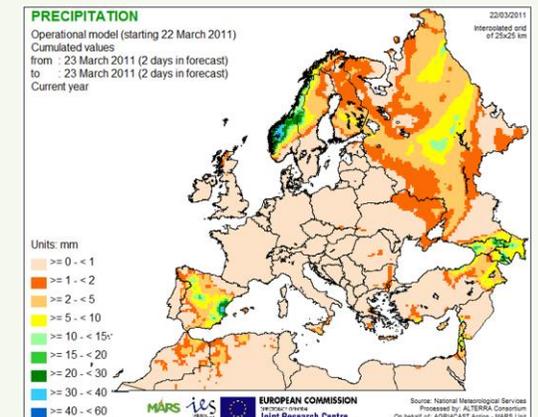
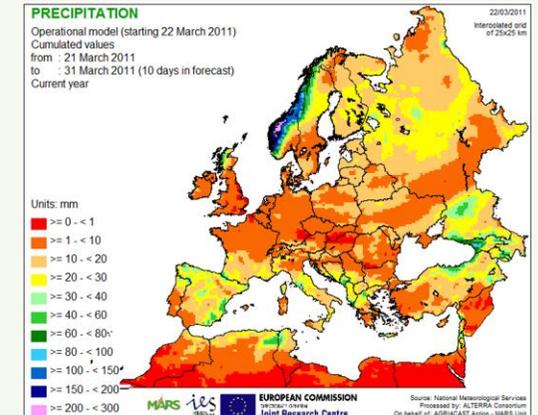
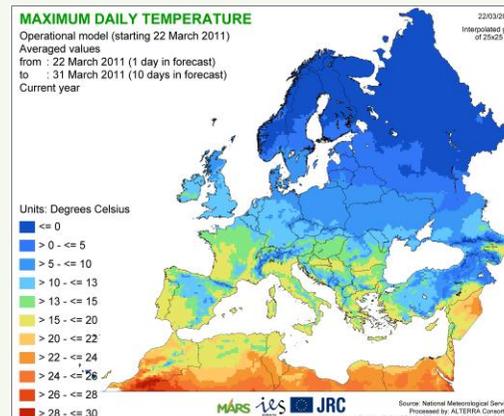
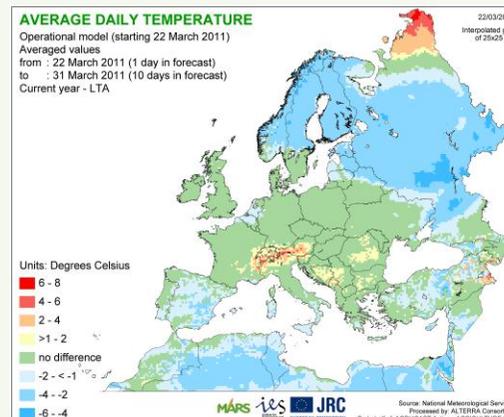
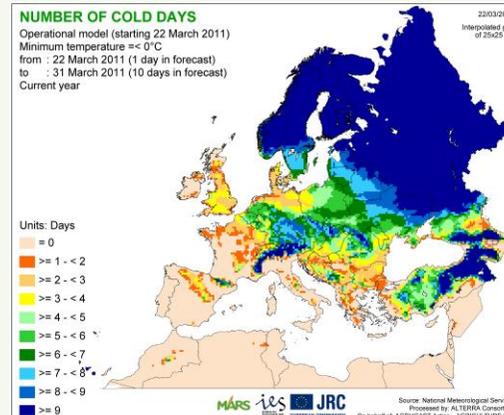
#### TEMPERATURES

For most of Europe seasonal temperatures are forecast for the last dekad of March. The daily minimum and maximum temperatures will be adequate for this period of the year. The temperature is expected to be below the average in Spain, Scandinavia and wide areas of Europe, part of Russia as well as in the Maghreb countries. Towards 28th March cold air intrusion is expected into Western and Central Europe. France and the Mediterranean region could remain free of frost. On Balkan Peninsula just 2-3 cold days are expected, but from Germany to Ukraine the provision indicates frequent frosts with intensity of -3/-8°C. No serious frost injuries of winter crops are therefore expected for these areas.

The impression of spring will be felt during the day. The daily maximum temperatures will reach on average +8/+12°C from England to Ukraine. In France and the Mediterranean countries the highest values will probably exceed +14-17°C. Mild weather is forecast for eastern France, southern Germany, the Alpine region, Hungary, Romania and Bulgaria where the maximum temperatures can be +1/+4°C higher than the long term average. On the contrary, significantly -2°C to -5°C colder than usual daytime thermal conditions are expected in Spain, Southern Italy, Turkey and North Africa postponing the appropriate phenological development of winter cereals.

#### RAINFALL

In the next few days mild weather conditions are expected. Scarce rain is forecast in western and central Europe, what in conjunction with mild temperatures will bring favourable conditions for spring field activities. Rain will be concentrated in southern and northern Europe. Spain, north of Portugal, southern France, Italy and areas in the Balkans as well as in Turkey and coastal areas eastward from Black Sea will experience wetter than usual period (locally above 30 mm). Also in north Africa favourable rains are expected over the Algerian-Tunisian border. Heavy precipitation is forecast in the coastal areas of Norway (above 100 mm). During the next few days only limited amounts of rain will spread across the Scandinavian Peninsula to Russia.



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\*MARS stands for **M**onitoring **A**griculture **R**esources **S** Unit

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| ✓ 22 Mar                 | Agrometeorological analysis and weather forecast            | Vol. 19 No. 3         |
| 12 Apr                   | Crop yield forecast   | Vol. 19 No.4          |
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