

#### **EUROPEAN COMMISSION**

DIRECTORATE GENERAL JRC
JOINT RESEARCH CENTRE
Institute for the Protection and Security of the Citizens
MARS Unit

## MARS BULLETIN

# Special Issue Vol 12 1<sup>st</sup> April – 10<sup>th</sup> May Focus on Summer Sowings Conditions

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#### MARS Bulletin - Period 1<sup>st</sup> April - 10<sup>th</sup> May 2004

#### **HIGHLIGHTS**

Sub-optimal-too-wet conditions for summer crops sowings were observed in southern areas.

Rain analysis on <u>observed data</u>: abundant and above normal precipitation (up to exceptional) until 10th May concentrated in southern regions.

The analysis by dekad shows that during the period 1<sup>st</sup> April – 10<sup>th</sup> May too wet conditions affected some southern regions likely determining from sub-optimal conditions in terms of soil bed preparation and sowings, up to delaying sowings. In particular starting from the second half of April conditions were particularly humid in terms of quantity of rain fell and number of rainy days in Northern (especially North-western) and Central Italy, where only a partial break was observed during the 3<sup>rd</sup> dekad of April. During the first days of May in Central Italy fell 150 mm of rain spread in 5-8 days with a peak of 40 mm in one day. In northern Italy a maximum exceptional daily rainfall between 150 and 200 mm were observed during the first part of May.

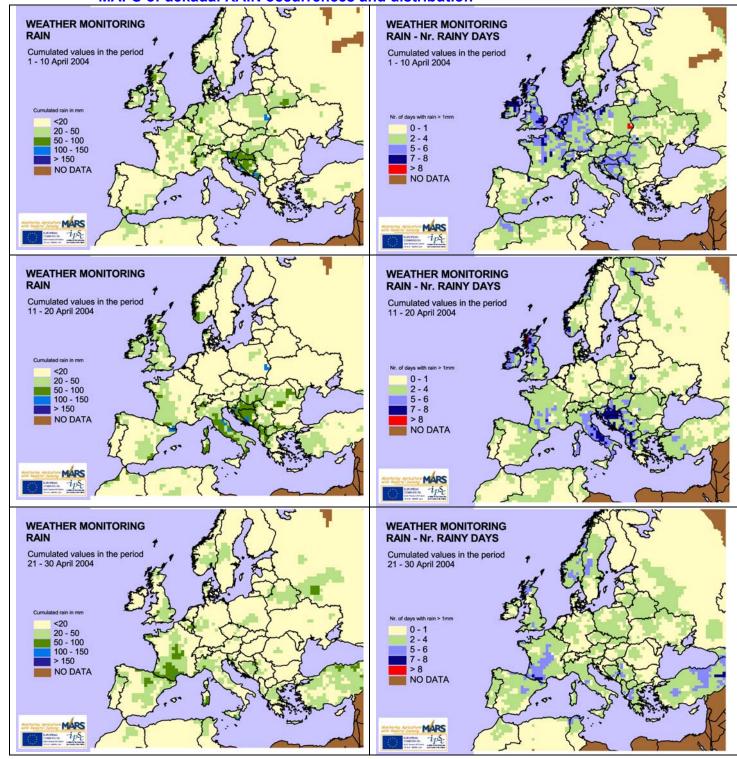
The Balkan area, especially Slovenia, Croatia and Bosnia H., was characterised by above normal to exceptional and intensive precipitation throughout the period with a break of few days during the 3<sup>rd</sup> dekad of April. Soil saturation and hindered sowings activities are likely.

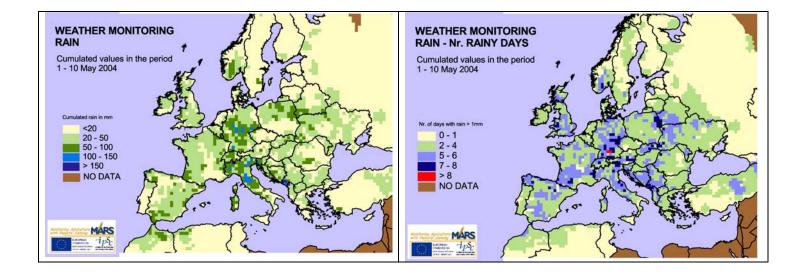
Eastern and South-eastern Spain were also interested by above normal precipitations. However the rain were more concentrated, thus intensive, in few days than other European areas. The most affected area was Communidad Valenciana where during the second dekad of April from 80 to 200 mm of rain fell on the area.

The last dekad of April and the first of May were also unfavourably wet in South-Western France and Germany, in terms of seed bed preparation determining sub-optimal soil conditions for the first maize sowings.

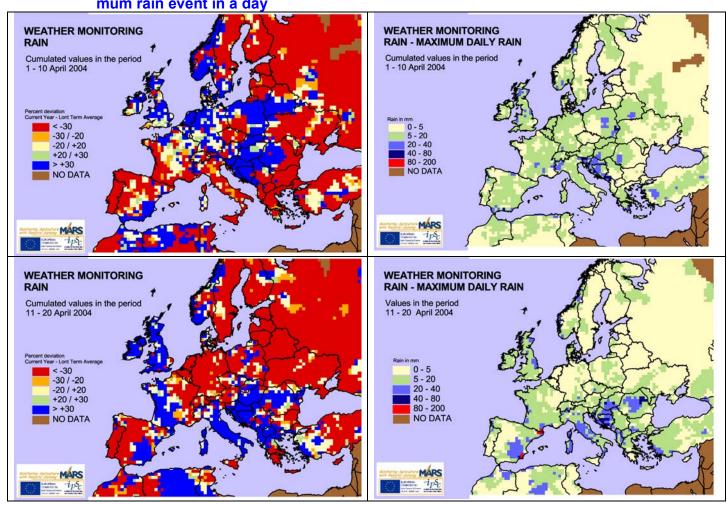
In northern regions, Scotland showed, up to the second half of April, sub-optimal wet conditions for late spring barley sowings.

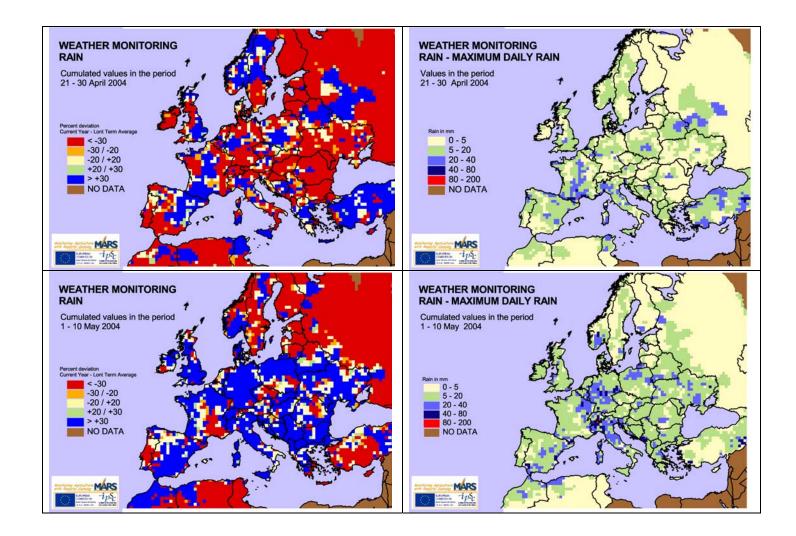
#### MAPS of dekadal RAIN occurrences and distribution





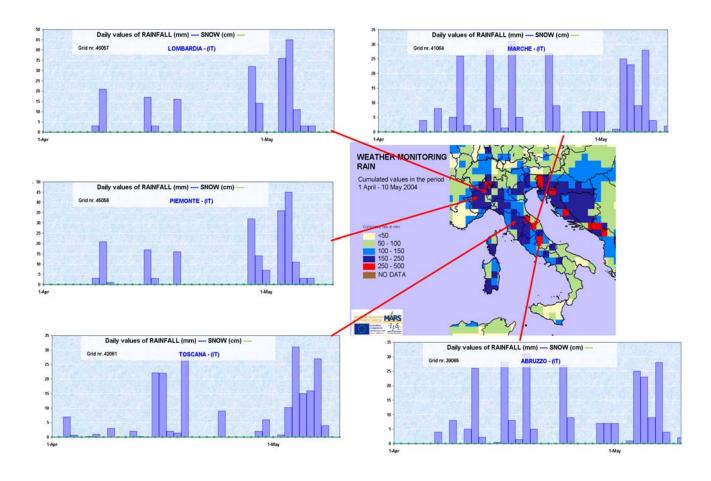
MAPS of dekadal RAIN comparisons with long term average and maximum rain event in a day





#### **ZOOM** on Italy

The zoom on Italy shows that a partial break for field access was available during the last dekad of April in North-western Italy. In other Central areas the few days of break between rainy events were likely not enough to recover a good soil trafficability (only 1 to 3 consecutive dry days available, see also annex), for sure not to allow optimal sowings conditions on soil recovering from saturation.



Rain Analysis on <u>weather forecasts</u>\* data (period 11<sup>th</sup> May-19<sup>th</sup> May): after a last wave of rain during the 13<sup>th</sup> and 14<sup>th</sup> in Central Italy and Balkans favorable drier days are expected.

In the next few days finally the weather forecasts shows a significant turn towards dryer conditions. During the 13<sup>th</sup> and 14<sup>th</sup> of May some rainfalls are still possible in Southern Spain, Central Italy, Balkans, Austria, Check Republic and Poland but dry conditions are foreseen in the others European Countries. This should benefit especially France for the latest maize sowings in south-western areas.

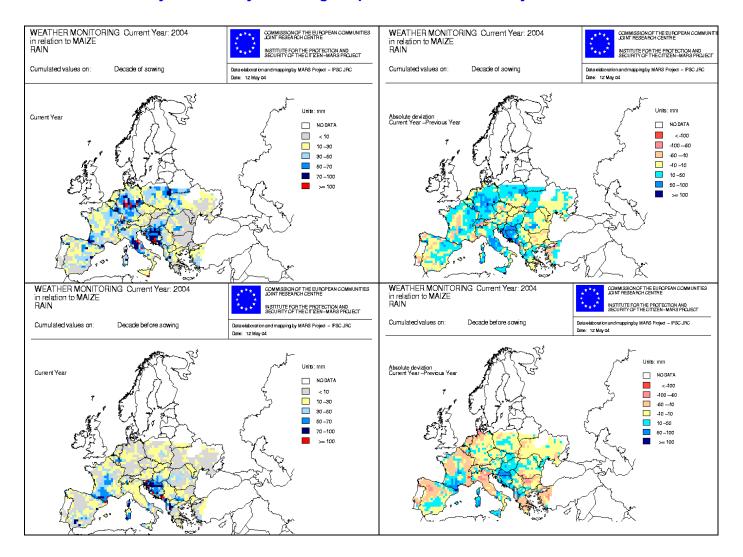
After the 14<sup>th</sup> of May the rains will shift eastwards and only scattered and light rainfalls are possible in Italy, Romania, Poland, Bulgaria, western Germany, northern Austria, Greece, Morocco and Algeria.

In the whole considered period, France, Benelux, UK, the main part of Germany, Denmark, Southern Sweden should experience widespread dry conditions

\*An animation file with rain forecasts is annexed

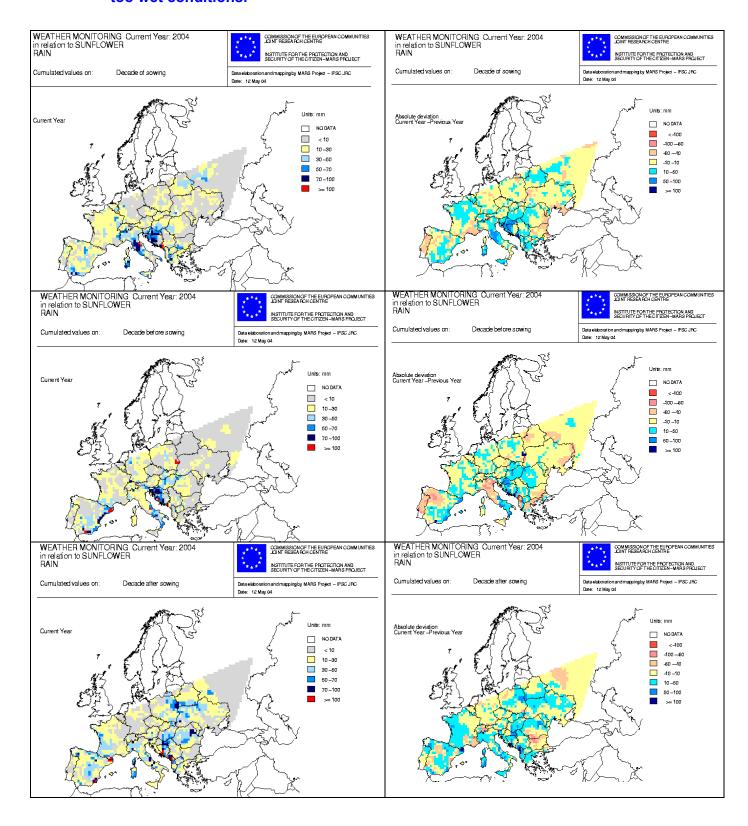
## Analysis on average dates of summer crop sowings\*\*:

**Maize:** The central period of sowing was hampered by too wet conditions in Central Italy, Balkan area, Central Germany and partially southwestern France for the early sowings. However, in these last two areas a recovery of the delayed sowings is possible in the next days.

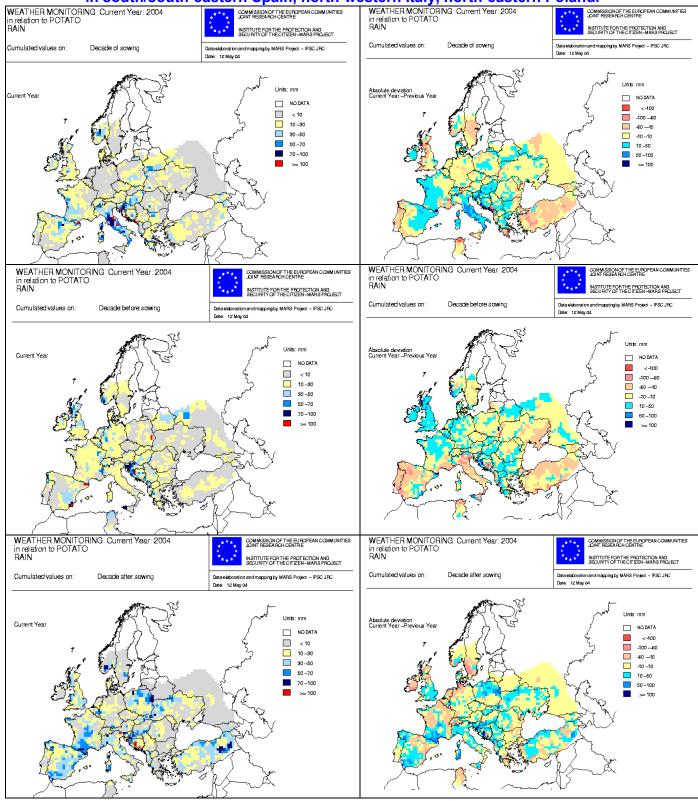


<sup>\*\*</sup>Theoretical median and average sowing periods calculated basing on observations (MARS ground surveys Activity C 1994/1996) and estimated data ("Estimation of the phenological calendars MARS/KUL-Univ. of Leuven (B), MARS report contract 13118-97-07 F1ED ISP B JRC 1997")

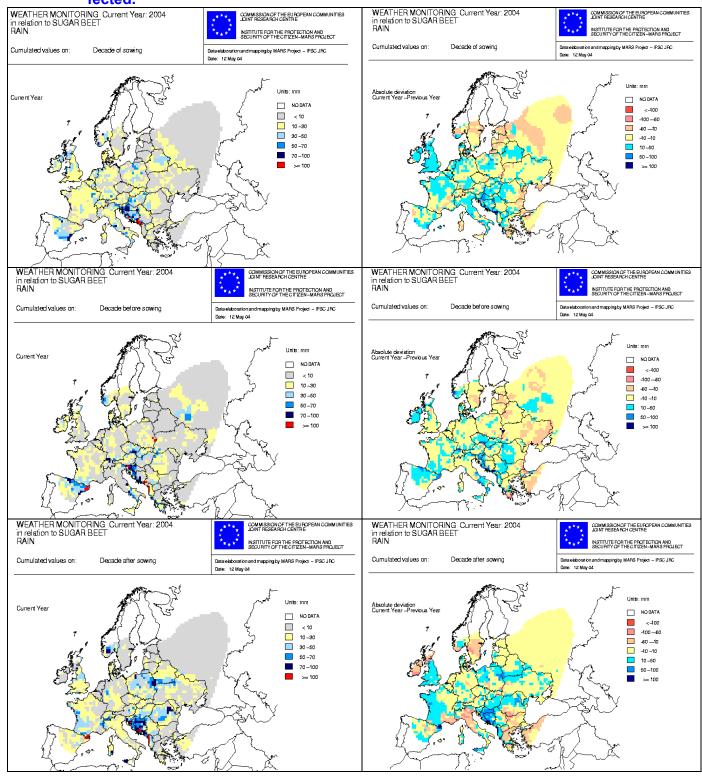
## **Sunflower:** The most affected areas are still Central Italy (not the early sowings) and the Balkan region. Southern Andalucia showed also too wet conditions.



**Potato:** The most affected areas are still Central Italy (not the early sowings) and the Balkan region. Late plantings were possibly affected in south/south-eastern Spain, north-western Italy, north-eastern Poland.



### **Sugar Beet:** Generally favourable conditions. Balkans area affected.



#### **ANNEX: Consecutive dry days in the period**

