

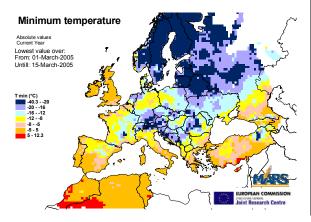
Date: 17/03/2005 Report Number: CU2005/04

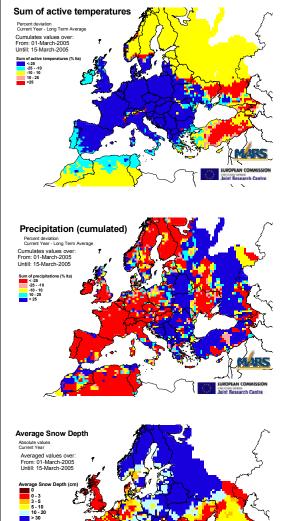
Frost spell from Eastern Europe affected also Spain and France. Continuous cooler and drier conditions in Western Europe.

OBSERVED TEMPERATURE AND RAINFALL

For the considered period the increase of sum of active temperatures was higher than usual (more than 25% above long term average) in limited areas from eastern Ukraine, south-western Russia, and central Turkey. The evolution of the active temperatures sum was close to normal for most of Russia, Belarus (except south) and Baltic area. Most of the continent was cooler than usual (-25%). Low values for minimum temperatures (down to -23°C) were recorded in southern Germany, Austria, western Balkans, Romania, Baltic states, Belarus and north-western Ukraine. Fortunately for the local winter crops, these low temperatures were **associated** with protective snow layers. As in the previous month, in some spots in **central Spain**, the crops were again exposed to **unusual low temperatures** (around -12°C) combined with poor snow layer. The same level of moderate frost was reported for areas from, France, Holland, Central Europe and most of Ukraine.

Precipitation higher than normal occurred in Scotland (more than 60 mm), Holland, Belarus, eastern Ukraine, Czech Republic, central Italy and large areas around north and western Black Sea as well as Maghreb. The rest of the continent received less than usual precipitation. **Very dry** conditions became **persistent** in the **Iberian Peninsula** and **France** and areas of concern seems to be in expansion.





FROST RISK Analysis

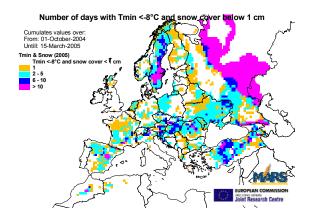
New areas in Spain, France (minimum temperatures below -8°C and snow cover lower than 1 cm), and **Ukraine** (Tmin<-18°C) joined those already affected by different degrees of frost risk (**western Poland, Hungary, Romania, and Turkey**).

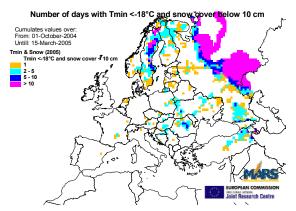
In comparison with the last year winter, the frost risk in 2004-2005 is higher for Spain, France, the Netherlands, southern Germany, northern Italy, different spots from Central Europe and some large areas from northern Black Sea.

For other areas like **Baltic region, Poland, eastern Balkans and Belarus** the **winter was milder** than in previous year.

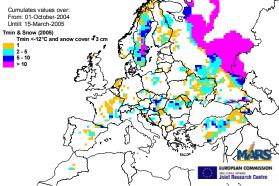
For Ukraine and Turkey the surface areas affected by frost are equivalent to last year.

Hardening index is decreasing constantly, in the next three weeks, the crops should be more susceptible to late frosts.





Number of days with Tmin <-12°C and snow cover below 3 cm



Synthetic map of differences between frost risk in 2005 and 2004

