

## Promising 2010-2011 crop season for winter cereals

### Highlight

Meteorological conditions during the sowing period were favourable in general over all the country, but particularly in the main provinces where winter cereals are produced (from Tanger to Safi along the Atlantic coast, to Nador in the east along the Mediterranean sea and to Meknes/Fez in the Centre).

Weather conditions during December and January were better than usual in the Centre, Centre Nord and Nord Ouest. In the other regions, the amount of rain was below the average but still above the lower limit of the seasonal variation. Generally, temperatures during this period were higher than the seasonal values.

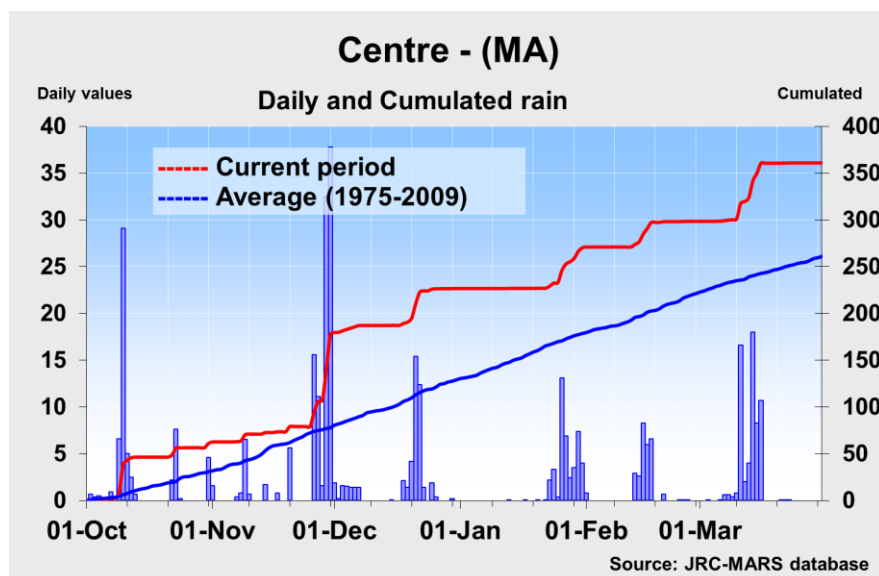
The weather conditions in February and March, with good water supply and temperatures relatively low allowed a positive growth of the crops with a slight extension of the vegetative cycle in most provinces where winter cereals grow.

Winter cereals development is at the grain filling stage in most regions of Morocco, the weather conditions in April will be therefore crucial to confirm the current yield forecast. The production for total cereals (barley and wheat) is estimated at **8.7 Mt/ha**.

MOROCCO	Yield t/ha (04/04/2011)				
	2010*	MARS 2011 forecasts**	Avg 5yrs	%11/10	%11/5yrs
<b>Wheat</b>					
Blé القمح	1.7	1.9	1.6	+8.0	+17.6
<b>Barley</b>					
Orge الشعير	1.3	1.6	1.1	+20.1	+52.0

\* From DSS and INRA-Morocco

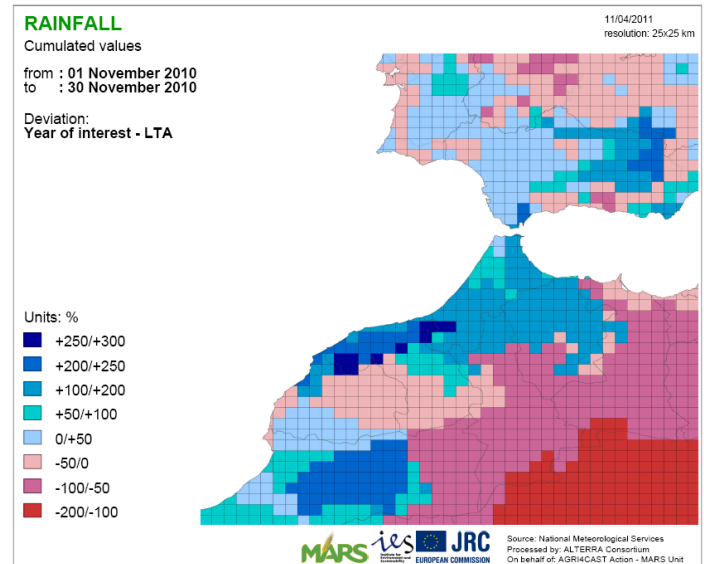
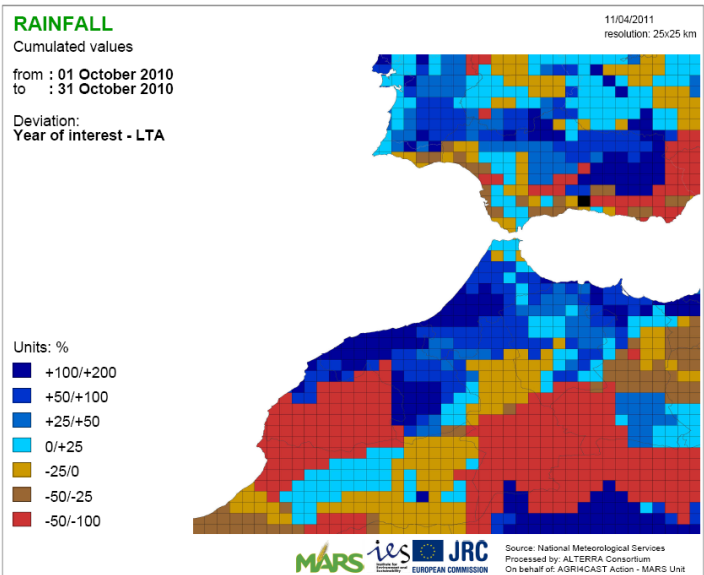
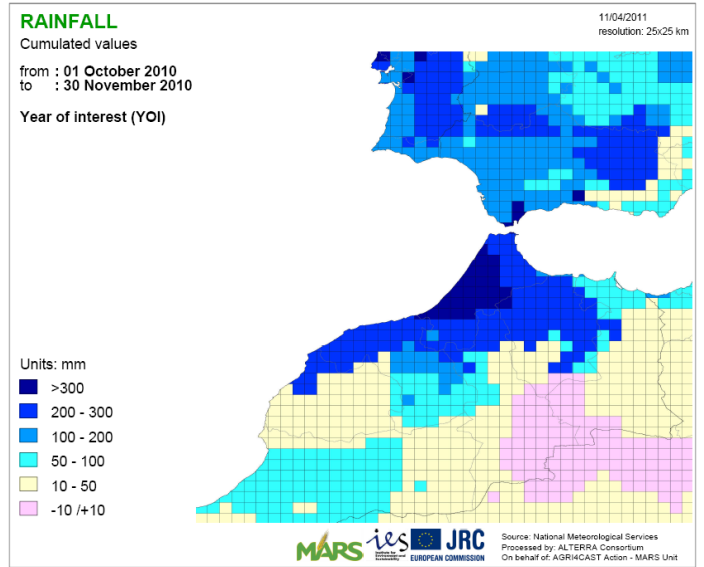
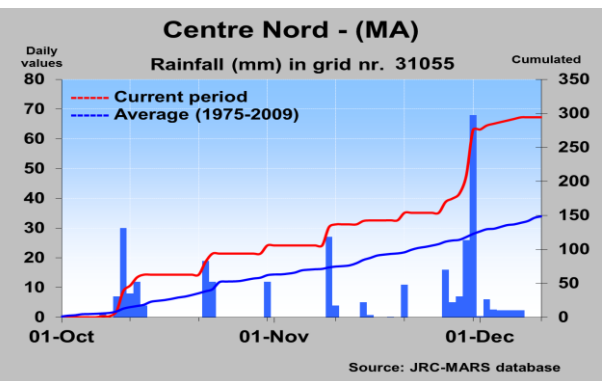
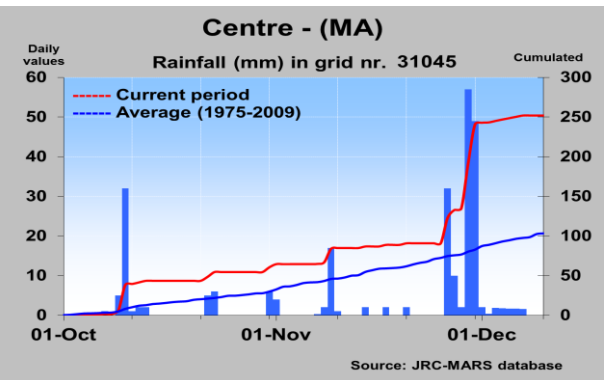
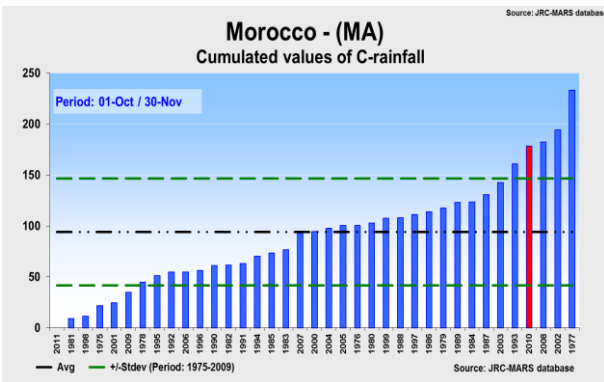
\*\* As 04/04/2011 using the MARS Crop Yield Forecast System - CGMS



## Agrometeorological overview

### Conditions around sowing period

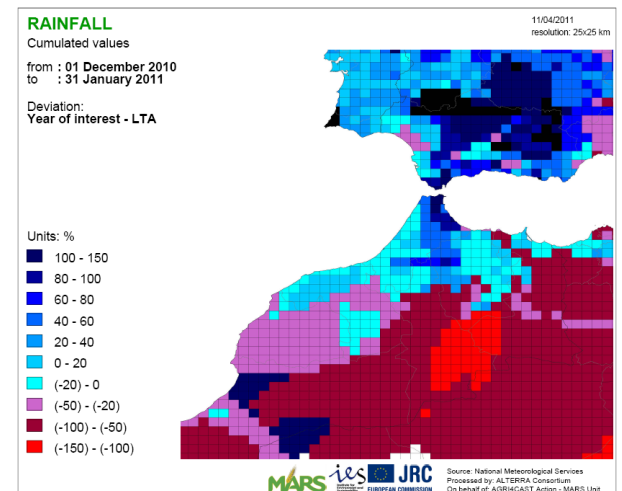
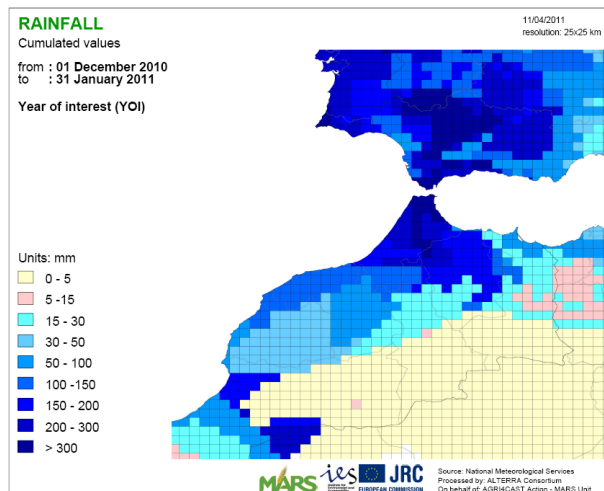
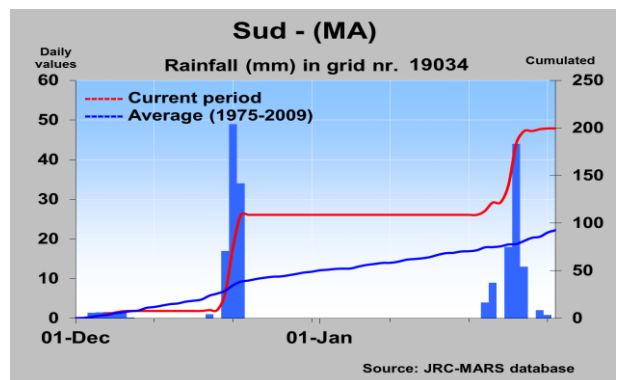
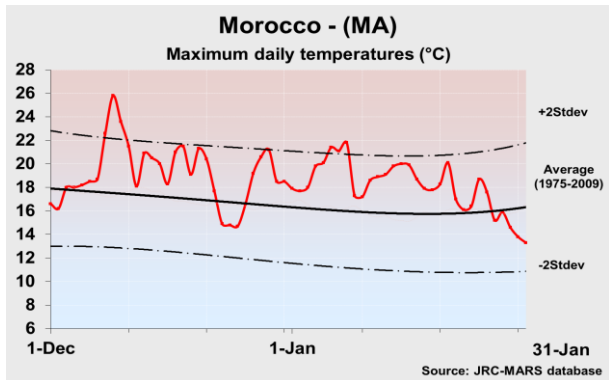
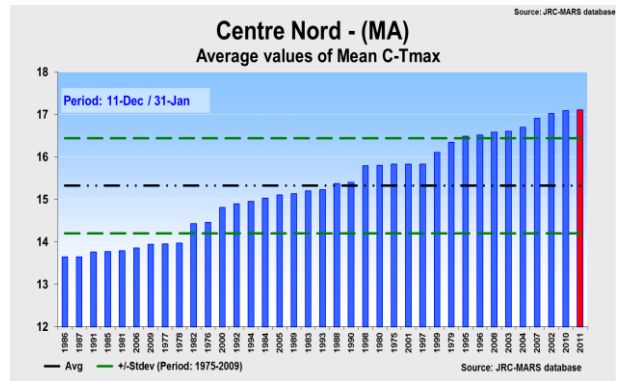
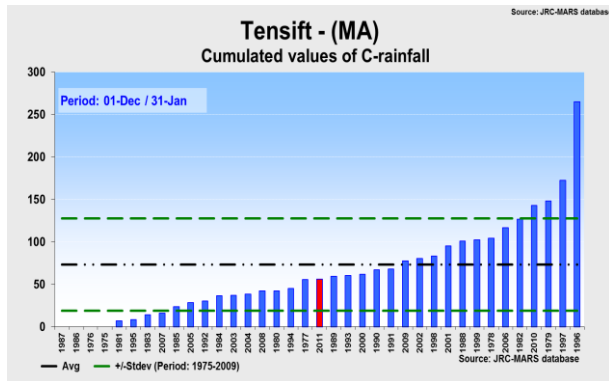
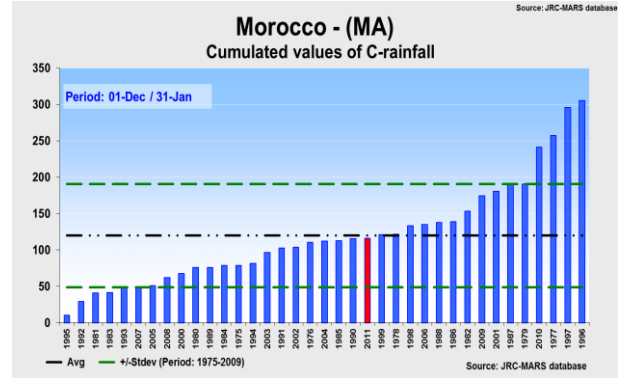
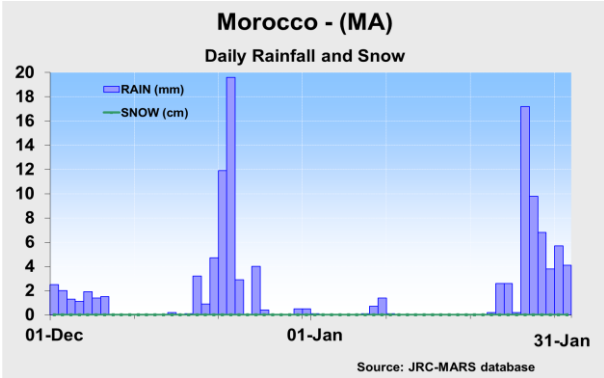
General conditions during the sowing period (October / November) were **favourable** in the main provinces for winter cereals production (Centre, Centre Nord and Nord Ouest). Water supply was generally significant with cumulated values much higher than the long-term average (LTA) with rainfall well distributed offering interesting windows for field work and sowing for both early and late varieties of cereals. Locally provinces of Khenifra (South Centre Sud), Azilal and Boulemane (both in the South of Centre Nord) faced a much dryer November. In the north-eastern part of the country (province of Oujda), the weather conditions were also favourable but near the Algerian border the level of water supply was below the average. In the region of Tensift - important for barley production - water supply was a little lower than the LTA in October and November, mostly in the provinces of El Kelaa and Marrakech. the situation being a little better in Essaoui-



Weather conditions during the winter (December / January)

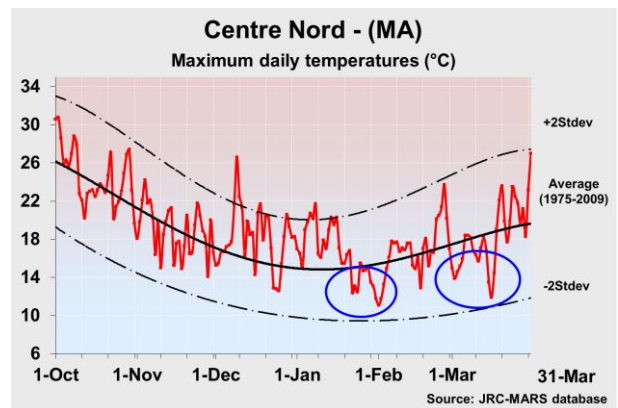
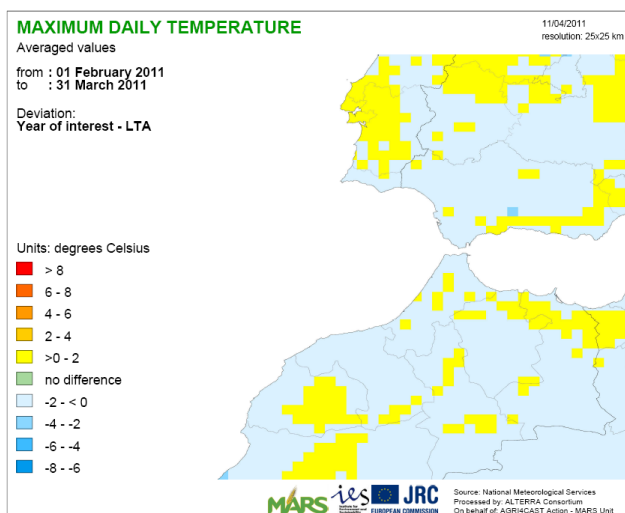
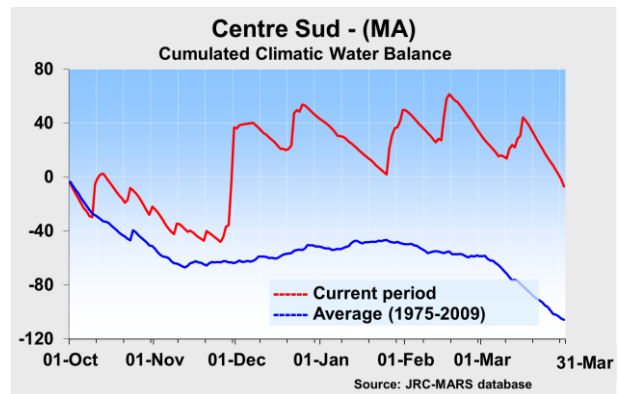
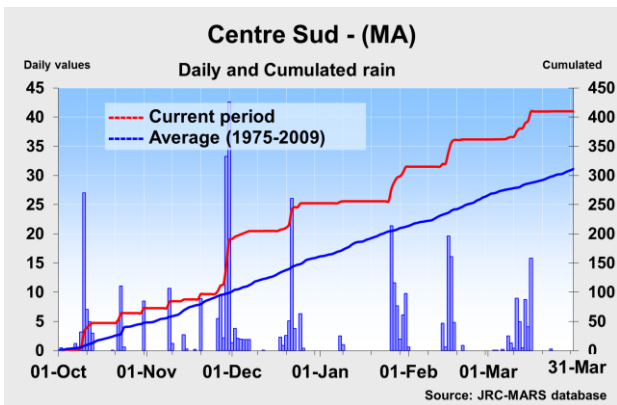
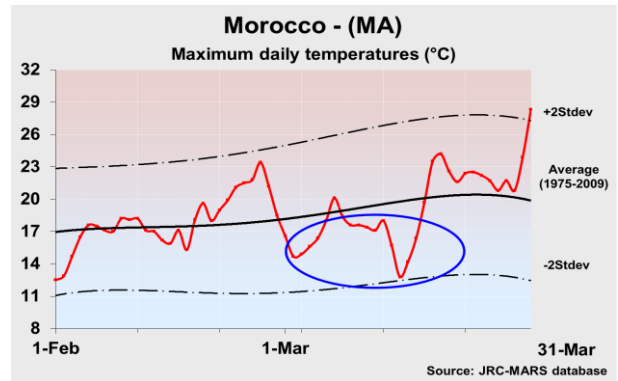
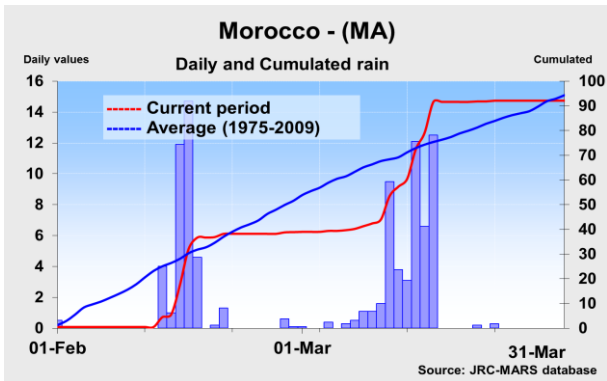
Important rainfall occurred with different intensity from the North to the South of the country but concentrated mainly at the end of December as well as at the end of January. In the meantime, the maximal temperatures were generally higher than the long-term average with values at or above the upper limit of the seasonal range of variation.

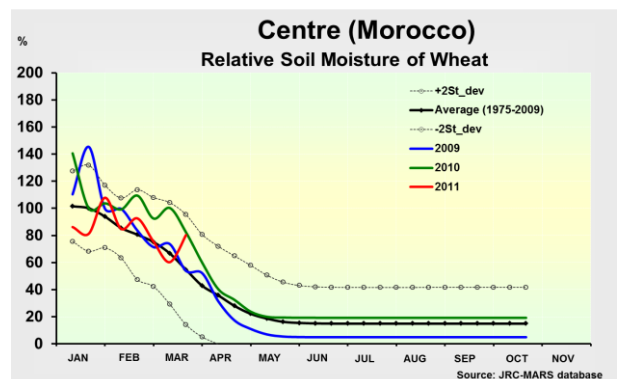
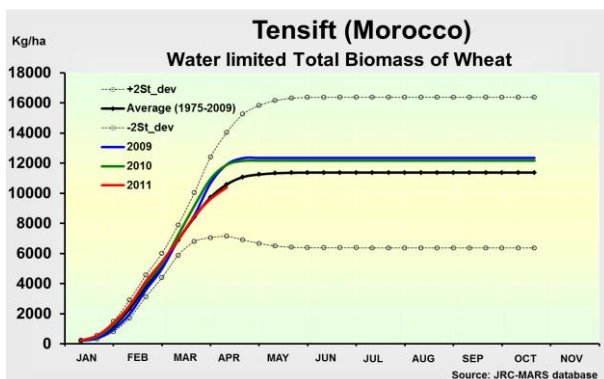
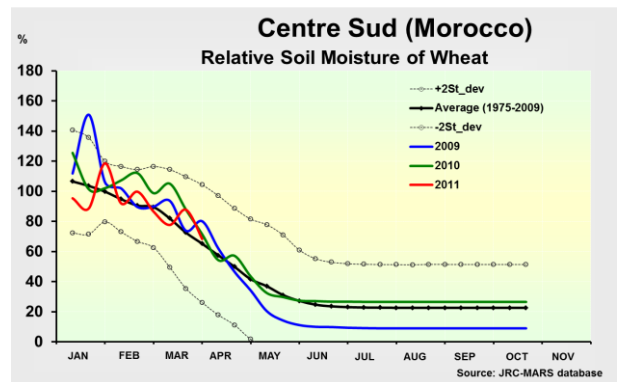
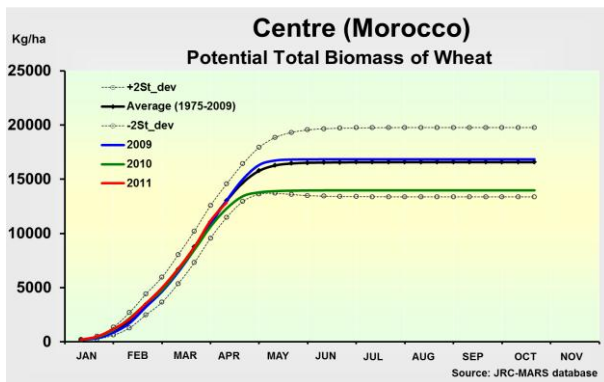
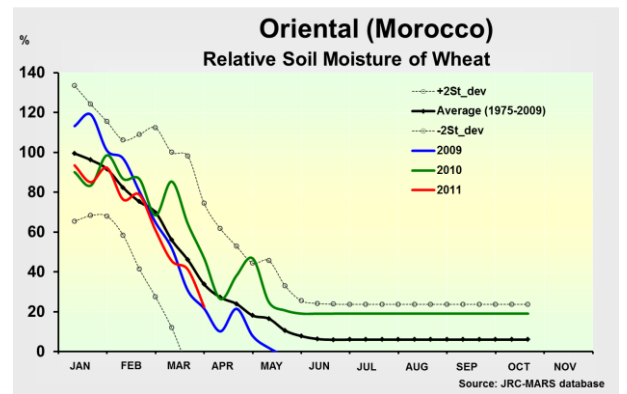
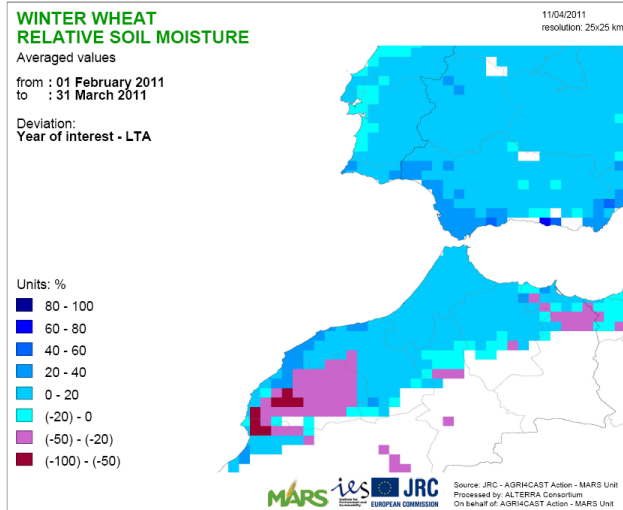
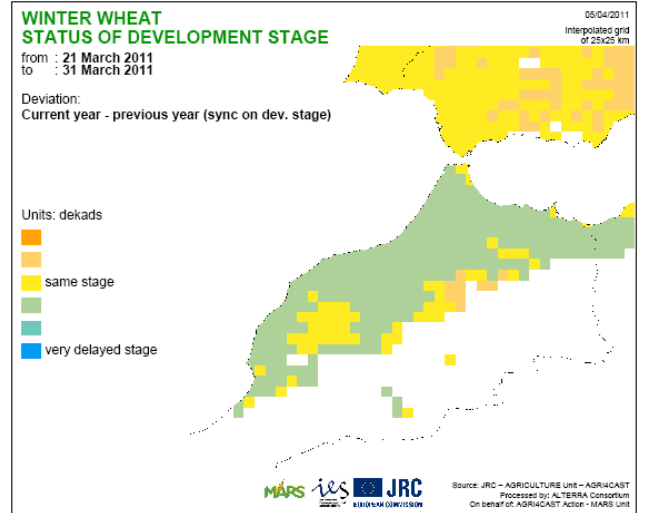
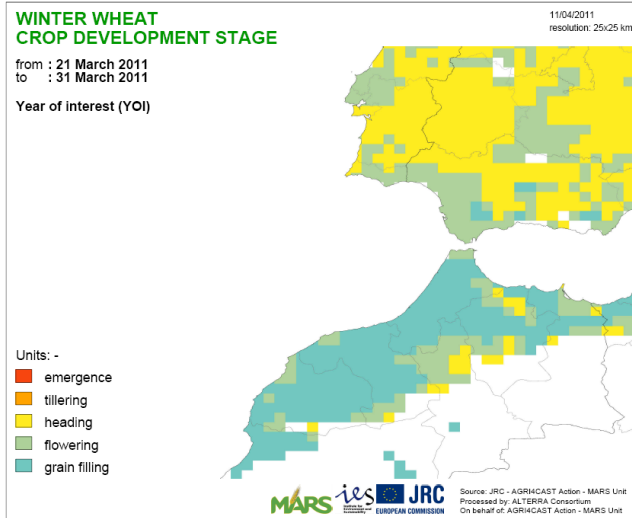
The water supply in the region of **Tensift** is lower than the average (with differences between provinces from the coast to inside); on the contrary more in the south in the province of **Agadir**, unusual important rainfall happened. In the **Oriental**, the cumulated rainfall reached average level thanks to the abundant water supply end of January.



Weather conditions and crop development in February and March

During this period, important rainfall occurred mid-February and the first half of March. The cumulated rainfall at national level is a little below the long-term average with important differences between regions: value below the average in Tensift, Centre Sud and Sud, on the average in Centre Nord and Nord Ouest, above the average in Centre. The rainfall in March occurred when temperatures dropped a little below the LTA, the combination of both phenomena making the vegetative cycle a little longer which is positive in term of yield performances. Furthermore, the relative decrease of temperatures is beneficial for wheat at their flowering/grain filling stage. Nevertheless, the drop did not concern the eastern part and the southern part of the country leading to a deficit in term of relative soil moisture in these regions In the important provinces for cereals production.





## Yield forecast

The proposed yield forecast are the results of MCYFS (MARS Crop Yield Forecast System).

The statistic series come from the Ministry of Agriculture of Morocco (DSS) through INRA-Morocco (in the frame of the Collaborative Agreement between JRC and INRA-Morocco).

The statistics (at Province level) concern soft wheat, durum wheat and barley from 1979 to 2010.

Total cereals production is forecast at **8,7 Mt** knowing that the total acreage for the three cereals is estimated at **4,9 Million ha**.

MOROCCO	Yield t/ha				
	2010*	MARS 2011 forecasts	Avg 5yrs	%11/10	%11/5yrs
soft wheat	1.7	<b>1.9</b>	1.6	+12.2	+18.6
durum wheat	1.8	<b>1.8</b>	1.6	-0.4	+15.2
barley	1.3	<b>1.6</b>	1.1	+20.1	+52

\* data from DSS and INRA-Morocco

MOROCCO	Area x 1000 ha					Production x 1000 t.				
	2010*	2011*	Avg 5yrs	%11/10	%11/5yrs	2010*	2011	Avg 5yrs	%11/10	%11/5yrs
soft wheat	1,901	<b>2,120</b>	1,862	+11.5	+13.8	3,167	<b>3,964</b>	2,937	+25.1	+35.0
durum wheat	900	<b>920</b>	933	+2.2	-1.4	1,631	<b>1,660</b>	1,461	+1.8	+13.6
barley	1922	<b>1,888</b>	2035	-1.8	-7.2	2,575	<b>3,039</b>	2,155	+18.0	+41.0

\* data from DSS and INRA-Morocco

## The current **MARS\* Bulletin** is a joint **AGRI4CAST action (EC/JRC/IES MARS Unit) and INRA (Morocco) publication**

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\*MARS stands for **Monitoring Agriculture Resources Unit**

JRC 64691 – EUR 23298,

Scientific and Technical Research series – ISSN 1831 – 9793

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