

Subject: **Forecasted Wheat Yield**
 Region: **Europe**
 Issuing date: **27 August 2008**

INTRODUCTION

The present document provides a forecast of the wheat yield that can be expected at the end of the current growing season. The growing season of wheat has almost come to an end in most parts of Europe and this is the final outcome of the forecast.

METHOD

FAST is the acronym of *Food Assessment by Satellite Technology*, a Meteosat based crop yield forecasting system developed and operated by EARS in Delft, the Netherlands. The assessment of crop growth conditions and the crop yield forecasts are based on visible and thermal infrared hourly data. These data are processed in 3 steps:

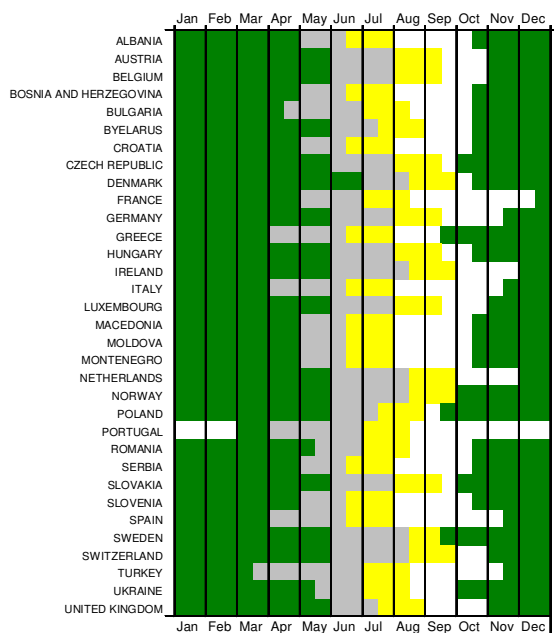
- (1) Hourly Meteosat data are processed to daily average values of surface temperature, air temperature, global radiation, net radiation, potential and actual evapotranspiration.
- (2) Radiation and evapotranspiration data enter into a crop growth model, which simulates crop yield on a daily basis.
- (3) Distributed crop yield results are integrated for crop growing areas, countries and provinces. Urban areas, forest, water and barren land are excluded.

CROP

The crop calendar in Figure 1 shows the vegetative period (green), the mid-season period (grey) and the harvesting period (yellow) for the countries in the region. The yield response of the plant to evapotranspiration deficits during the growing season is quantified by the yield response factor K_y , based on the relationship described by Doorenbos & Kassam (1986):

$$(1-RY) = K_y \cdot (1-RE)$$

RY is the relative yield and RE the relative evapotranspiration. Drought sensitivity of a crop changes during the growing season. For maize, K_y is 0.2 during establishment, increases to 1 during the vegetative period, is kept constant at 1 during flowering and yield formation and decreases to 0.5 during ripening.



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Figure 1: Wheat Crop Calendar

SUMMARY

In general average to above average Wheat yields are expected in Europe, though in many places yields are less than the previous year. Particularly in southern France, the Iberian peninsula and Italy, the growing conditions have been very favorable. Very good wheat yields are expected in **Spain** (+28%), **Portugal** (+28%), **Italy** (+19%), **France** (+19%), **Switzerland** (+25%), **Slovenia** (+23%) and **Croatia** (+12%). Relatively good yields are also expected in Central Europe, Eastern Europe and the Balkan: **Albania** (+10%), **Macedonia** (+5.2%), **Bosnia** (+6%), **Byelarus** (+3%), **Bulgaria** (1%), **Germany** (+5%) and **Poland** (+3%). Also the **United Kingdom** (+12%) and **Ireland** (13%) the growing season was very favorable. Drier conditions are seen in **Sweden**, the **Ukraine** and **Denmark** where the yield is expected to be respectively -10%, -7% and -5% below the 5 years average.

The expected relatively good yields in provinces Maramures, Suceava, Neamt and Iasi of **Romania** will be lower due to the recent floodings that have destroyed parts of the crops that were not harvested yet. Also in **Ukraine**, yields will be lower than expected in Ivano-Frankivska due to the recent floodings.

MAPS

The maps on the next page show the Meteosat relative yield RY (figure 2) of Wheat and the derived difference yield (DY) relative to the 5 years average (figure 3a) and to the previous year (figure 3b).

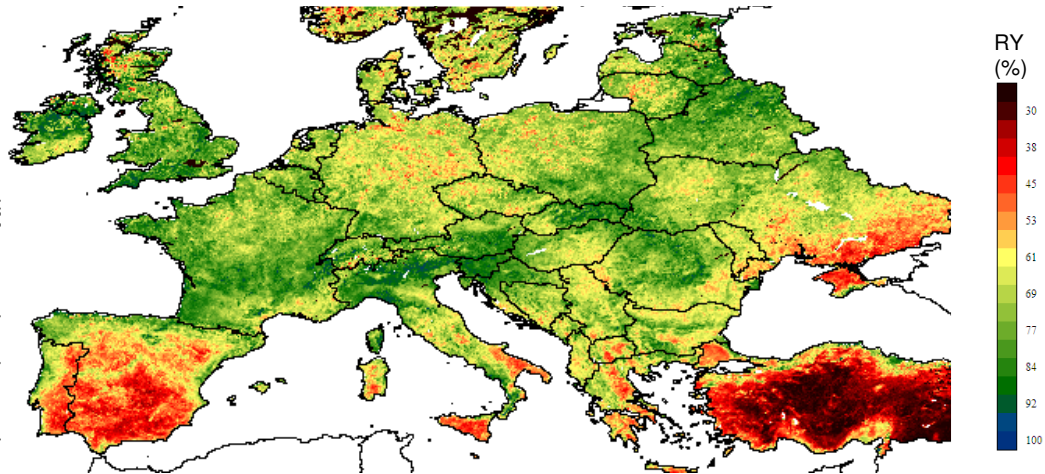


Figure 2: Wheat relative yield RY (%)

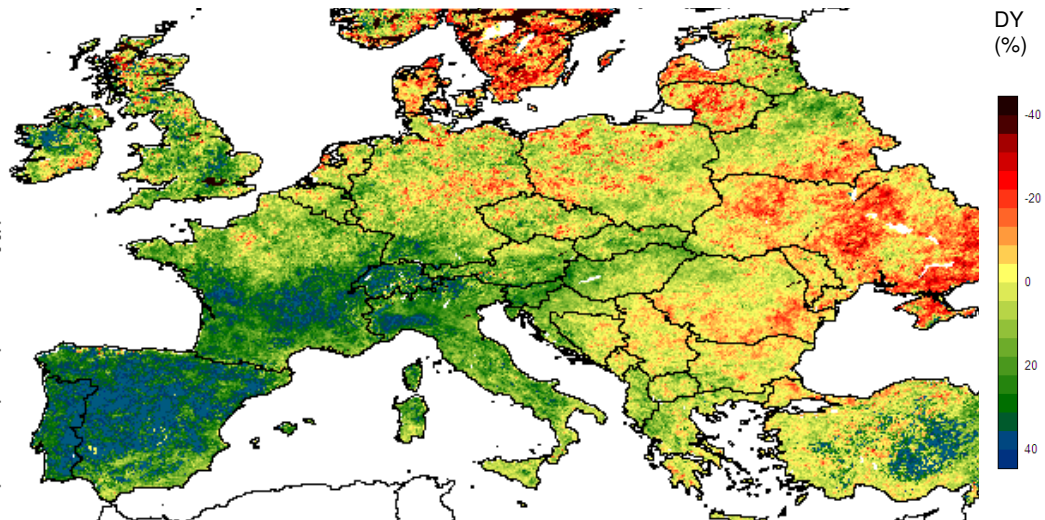


Figure 3a: Wheat difference yield DY (%) forecast for Europe relative to the 5 years average

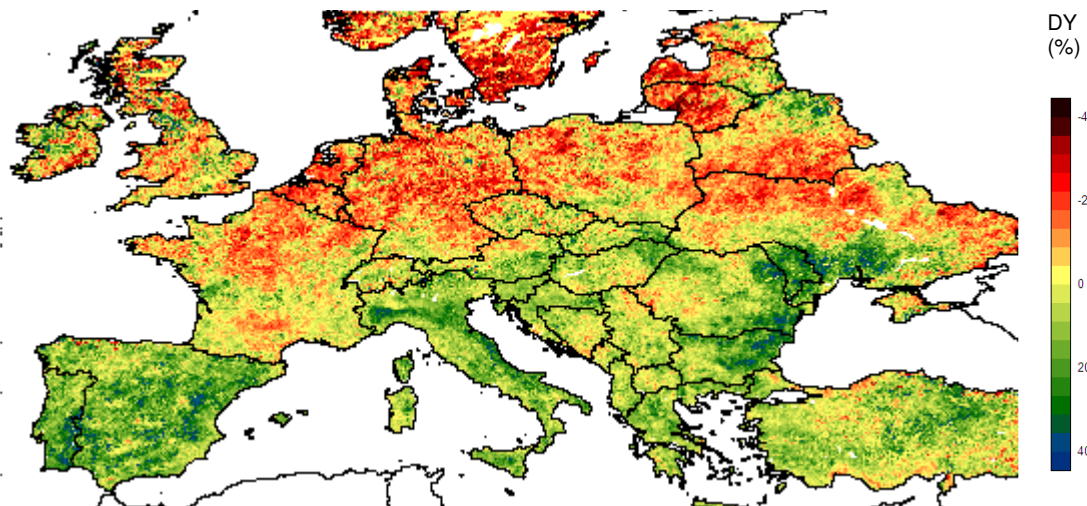


Figure 3b: Wheat difference yield DY (%) forecast for Europe relative to 2007

TABLES

The following tabulated data are provided on next pages:

- Table 1 : Difference Yield forecasts at country level
- Table 2 : Difference Yield forecasts at provincial level

The difference yields for each province/country have been determined by spatial integration of pixel values within the growing areas of the crop. Data are provided for two growing areas:

- All growing areas (figure 3b)
- Main growing areas (figure 3a)

The Difference Yield (DY) presents the forecasted 2008 yield in terms of % deviation from a reference yield. In the tables difference yields relative to two references are presented:

- $DY_{08/07}$: Forecasted difference yield relative to the yield in 2007
- $DY_{08/avg}$: Forecasted difference yield relative to the average yield of the years 2003-2007

REFERENCE

Doorenbos, J., Kassam, A. H. (1986). Yield response to water. FAO irrigation and drainage paper 33. Food and Agricultural Organization of the United Nations, Rome.

CONTACT

For further information please contact:

EARS Earth Environment Monitoring bv
Kanaalweg 1, 2628 EB DELFT, the Netherlands
Telephone: +31-15-2562404, Fax: +31-15-2623857
Email: marjolein@ears.nl

Website: www.ears.nl

TABLE 1 : WHEAT YIELD FORECASTS AT NATIONAL LEVEL

EUROPE	Actual Yield (100kg/ha)			Difference Yield (%)	
	Reported		Forecast	08/5 yrs	08/07
	Avg. 5 yrs	2007	2008		
ALBANIA	-	-	-	9.5	8.9
AUSTRIA	50	48	55	10.0	6.1
BELGIUM	84	78	90	7.4	-10.0
BOSNIA AND HERZEGOVINA	70	66	74	5.6	5.3
BULGARIA	30	22	30	1.3	19.0
BYELARUS	-	-	-	3.3	-3.3
CROATIA	-	-	-	12.0	10.0
CZECH REPUBLIC	49	49	51	5.0	2.5
DENMARK	-	-	-	-5.2	-9.7
FRANCE	68	63	80	19.0	-2.1
GERMANY	73	70	76	4.6	-7.5
GREECE	21	22	23	5.7	13.0
HUNGARY	40	36	44	10.0	8.6
IRELAND	88	81	100	13.0	1.7
ITALY	34	34	41	19.0	15.0
LUXEMBOURG	61	56	65	6.1	-11.0
MACEDONIA	28	24	30	5.2	7.5
MOLDOVA	-	-	-	-1.6	21.0
MONTENEGRO	-	-	-	2.4	3.8
NETHERLANDS	84	72	86	3.0	-10.0
NORWAY	47	10	47	0.0	-11.0
POLAND	38	39	39	2.6	-4.2
PORTUGAL	15	22	20	28.0	20.0
ROMANIA	24	16	24	0.3	12.0
SERBIA	-	-	-	0.9	5.6
SLOVAKIA	40	38	44	11.0	9.7
SLOVENIA	42	42	52	23.0	12.0
SPAIN	28	35	36	28.0	17.0
SWEDEN	59	63	53	-9.9	-18.0
SWITZERLAND	-	-	-	25.0	3.2
TURKEY	23	10	23	2.2	7.7
UKRAINE	-	-	-	-6.5	0.4
UNITED KINGDOM	78	74	87	12.0	-1.0

TABLE 2: WHEAT YIELD FORECASTS AT PROVINCIAL LEVEL

ALBANIA	Difference Yield (%)	
	08/5yrs	08/5yrs
BERAT	5.2	3.8
DIBRE	11.0	9.9
DURRES	4.7	12.0
ELBASAN	9.6	9.3
FIER	4.1	5.2
GJIROKASTER	11.0	12.0
GRAMSH	11.0	8.4
KOLONJE	10.0	15.0
KORCE	11.0	14.0
KRUJE	10.0	9.2
KUKES	7.9	7.3
LIBRAZHD	14.0	12.0
LEZHE	7.5	4.1
LUSHNJE	6.4	9.2
MAT	13.0	7.9
MIRDITE	11.0	4.0
POGRADEC	12.0	9.9
PERMET	12.0	11.0
PUKE	12.0	6.1
SHKODER	8.6	9.5
SKRAPAR	10.0	9.6
SARANDE	9.3	12.0
TIRANE	8.9	7.1
TEPELENE	8.2	5.7
TROPOJE	8.3	8.9
VLORE	7.3	4.9

AUSTRIA	Difference Yield (%)	
	08/5yrs	08/5yrs
BURGENLAND	14.0	14.0
KARNTEN	18.0	13.0
NIEDEROSTERREICH	7.9	5.6
OBEROSTERREICH	4.0	-4.2
SALZBURG	9.7	1.4
STEIERMARK	17.0	13.0
TIROL	15.0	7.9
VORARLBERG	19.0	3.5
WIEN	9.3	11.0

BELGIUM	Difference Yield (%)	
	08/5yrs	08/5yrs
ANTWERPEN	6.4	-11.0
BRABANT	2.6	-14.0
HAINAUT	8.4	-10.0
LIEGE	10.0	-8.6
LIMBURG	9.9	-8.3
LUXEMBOURG	9.4	-6.6
NAMUR	11.0	-5.1
NIVELLES	4.2	-12.0
OOST-VLAANDEREN	2.6	-16.0
WEST-VLAANDEREN	3.3	-14.0

BOSNIA AND HERZEGOVINA	Difference Yield (%)	
	08/5yrs	08/5yrs
BOSNIA AND HERZEGOVINA	5.6	5.3

BULGARIA	Difference Yield (%)	
	08/5yrs	08/5yrs
BURGAS	2.8	24.0
KHASKOVO	1.2	18.0
LOVECH	-1.1	19.0
MIKHAYLOVGRAD	0.4	18.0
PLOVDIV	2.1	13.0
RAZGRAD	-2.9	22.0
SOFIYA	5.5	8.9
VARNA	0.5	29.0

BYELARUS	Difference Yield (%)	
	08/5yrs	08/5yrs
BREST	1.0	-9.3
GOMEL'	-6.0	-11.0
GRODNO	6.8	-3.2
MOGILEV	-1.0	-5.6
MINSK	5.9	-3.7
VITEBSK	12.0	11.0

CROATIA	Difference Yield (%)	
	08/5yrs	08/5yrs
CROATIA	12.0	10.0

CZECH REPUBLIC	Difference Yield (%)	
	08/5yrs	08/5yrs
JIHOCESKY	11.0	6.4
JIHOMORAVSKY	0.9	4.7
STREDOCESKY	5.8	4.6
SEVEROCESKY	2.5	-3.1
SEVEROMORAVSKY	5.2	5.0
VYCHODOCESKY	7.2	1.6
ZAPADOCESKY	4.6	-4.9

DENMARK	Difference Yield (%)	
	08/5yrs	08/5yrs
ARHUS	-3.7	-8.0
FREDERIKSBORG	-2.2	-11.0
FYN	-5.9	-8.6
NORDJYLLAND	-9.5	-21.0
RIBE	-3.7	-2.3
RINGKOBING	-2.1	-2.1
ROSKILDE	-6.8	-11.0
SONDERJYLLAND	-5.1	-7.4
STORSTROM	-3.2	-12.0
VIBORG	-8.3	-10.0
VEJLE	-1.9	-9.1
VESTSJALLAND	-4.7	-14.0

FRANCE	Difference Yield (%)	
	08/5yrs	08/5yrs
ALSACE	18.0	1.2
AQUITAINE	26.0	2.1
AUVERGNE	31.0	0.7
BASSE-NORMANDIE	11.0	-1.0
BOURGOGNE	20.0	-1.6
BRETAGNE	15.0	-4.1
CENTRE	11.0	-9.3
CHAMPAGNE-ARDENNE	10.0	-5.0
CORSE	22.0	17.0
FRANCHE-COMTE	25.0	3.8
HAUTE-NORMANDIE	8.7	-3.8
ILE-DEL-FRANCE	9.5	-9.0
LIMOUSIN	28.0	1.7
LANGUEDOC-ROUSSILLON	20.0	-0.6
LORRAINE	12.0	-7.4
MIDI-PYRENEES	23.0	-3.3
NORD-PAS-DE-CALAIS	6.8	-8.4
PROVENCE-ALPES-COTE D'AZUR	18.0	4.2
POITOU-CHARENTES	30.0	7.9
PAYS DE LA LOIRE	19.0	-1.2
PICARDIE	9.9	-7.5
RHONE-ALPES	29.0	0.8

GERMANY	Difference Yield (%)	
	08/5yrs	08/5yrs
BRANDENBURG	3.6	-6.1
BADEN-WURTTENBERG	16.0	1.1
BAYERN	8.1	-6.1
HAMBURG	-9.5	-18.0
HESSEN	0.9	-12.0
MECKLENBURG-VORPOMMERN	3.2	-6.6
NIEDERSACHSEN	2.6	-10.0
NORDRHEIN-WESTFALEN	5.9	-7.5
RHEINLAND-PFALZ	7.2	-7.6
SACHSEN-ANHALT	0.1	-8.1
SACHSEN	-2.9	-11.0
SCHLESWIG-HOLSTEIN	0.5	-8.7
SAARLAND	1.9	-15.0
THURINGEN	-0.9	-12.0

GREECE	Difference Yield (%)	
	08/5yrs	08/5yrs
AEGEAN ISLANDS	1.7	7.3
CENTRAL GREECE AND EVVOIA	3.8	11.0
CRETE	3.1	8.3
IPIROS	14.0	14.0
MACEDONIA	7.2	13.0
PELOPONNISOS	2.6	11.0
THRAKI	4.9	15.0
THESSALIA	5.5	16.0

HUNGARY	Difference Yield (%)	
	08/5yrs	08/5yrs
BORSOD-ABAUJ-ZEMPLEN	14.0	18.0
BEKES	1.6	1.3
BACS-KISKUN	6.3	3.9
BARANYA	5.8	5.4
CSONGRAD	4.9	0.4
FEJER	11.0	5.8
GYOR-MOSON-SOPRON	16.0	15.0
HAJDU-BIHAR	11.0	16.0
HEVES	7.6	7.7
KOMAROM-ESZTERGOM	13.0	7.5
NOGRAD	10.0	7.3
PEST	10.0	7.0
SOMOgy	14.0	5.3
SZABOLCS-SZATMAR-BEREG	16.0	17.0
JASZ-NAGYKUN-SZOLNOK	6.1	3.0
TOLNA	7.9	9.3
VAS	22.0	15.0
VESZPREM	14.0	10.0
ZALA	17.0	6.0

IRELAND	Difference Yield (%)	
	08/5yrs	08/5yrs
CONNACHT	26.0	11.0
LEINSTER	9.4	-3.9
MUNSTER	5.1	-0.7
ULSTER	15.0	1.8

ITALY	Difference Yield (%)	
	08/5yrs	08/5yrs
ABRUZZI	15.0	20.0
BASILICATA	14.0	11.0
CALABRIA	6.4	10.0
CAMPANIA	16.0	12.0
EMILIA-ROMAGNA	21.0	20.0
FRIULI-VENEZIA GIULIA	18.0	6.0
LAZIO	15.0	15.0
LIGURIA	27.0	10.0
LOMBARDIA	27.0	13.0
MOLISE	17.0	19.0
MARCHE	17.0	24.0
PIEMONTE	30.0	16.0
PUGLIA	12.0	18.0
SICILIA	6.3	15.0
SARDEGNA	12.0	9.4
TRENTINO-ALTO ADIGE	27.0	12.0
TOSCANA	18.0	9.7
UMBRIA	17.0	11.0
VALLE D'AOSTA	21.0	5.6
VENETO	22.0	14.0

LUXEMBOURG	Difference Yield (%)	
	08/5yrs	08/5yrs
DIEKIRCH	7.2	-10.0
GREVENMACHER	0.9	-14.0
LUXEMBOURG	7.9	-9.2

MACEDONIA	Difference Yield (%)	
	08/5yrs	08/5yrs
MACEDONIA	5.2	7.5

MOLDOVA	Difference Yield (%)	
	08/5yrs	08/5yrs
MOLDOVA	-1.6	21.0

MONTENEGRO	Difference Yield (%)	
	08/5yrs	08/5yrs
MONTENEGRO	2.4	3.8

NETHERLANDS	Difference Yield (%)	
	08/5yrs	08/5yrs
DRENTHE	5.6	-2.1
FLEVOLAND	0.6	-13.0
FRIESLAND	0.6	-6.5
GELDERLAND	2.1	-12.0
GRONINGEN	5.5	-4.0
LIMBURG	8.7	-8.8
NOORD-BRABANT	6.1	-11.0
NOORD-HOLLAND	-4.7	-17.0
OVERIJSEL	0.9	-10.0
UTRECHT	-0.2	-16.0
ZUID-HOLLAND	1.9	-14.0
ZEELAND	5.7	-10.0

NORWAY	Difference Yield (%)	
	08/5yrs	08/5yrs
AUST-AGDER	4.6	-9.4
AKERSHUS	-4.3	-4.8
OSTFOLD	-7.2	-10.0
ROGALAND	-3.1	-18.0
TELEMARK	2.8	-3.7
VEST-AGDER	0.7	-15.0

POLAND	Difference Yield (%)	
	08/5yrs	08/5yrs
BIELSKO	3.5	-0.1
BIALYSTOK	8.4	-0.3
BIALA PODLASKA	3.5	-5.7
BYDGOSZCZ	2.2	-5.7
CIECHANOW	0.1	-11.0
CHELM	-2.0	-9.9
CZESTOCHOWA	5.4	1.6
ELBLAG	-0.3	-5.1
GDANSK	4.0	-2.1
GORZOW	4.3	-6.2
JELENIA GORA	-3.2	-8.0
KIELCE	7.2	4.2
KALISZ	0.7	-7.8
KONIN	3.8	1.7
KRAKOW	8.1	3.4
KROSNO	6.5	3.8
KOSZALIN	-2.0	-9.3
KATOWICE	8.2	7.3
LUBLIN	0.6	-6.5
LEGNICA	-4.4	-8.3
LODZ	2.5	-5.4
LOMZA	7.3	-4.1
LESZNO	-0.5	-6.2
NOWY SACZ	9.9	5.4
OLSZTYN	0.4	-3.2
OPOLE	7.7	4.5
OSTROLEKA	2.2	-9.4
PILA	-3.3	-15.0
PLOCK	3.4	-5.2
PRZEMYSL	5.6	-0.2
PIOTRKOW	0.6	-2.1
POZNAN	4.8	-4.9
RADOM	2.7	-6.9
RZESZOW	5.4	-1.3
SIEDLCE	9.6	-1.5
SKIERNIEWICE	-0.6	-8.9
SLUPSK	-0.7	-5.8
SIERADZ	-4.7	-10.0
SUWALKI	1.2	-4.1
SZCZECIN	1.6	-6.0
TORUN	3.0	-5.7
TARNOBRZEG	4.6	-2.8

POLAND	Difference Yield (%)	
	08/5yrs	08/5yrs
	TARNOW	6.6
WALBRZYCH	-1.8	-5.3
WLOCLAWEK	0.5	-1.2
WROCLAW	0.3	-2.2
WARSZAWA	5.3	-4.9
ZIELONA GORA	-2.4	-9.9
ZAMOSC	2.2	-8.3

PORTUGAL	Difference Yield (%)	
	08/5yrs	08/5yrs
	BEJA	28.0
BRAGA	29.0	13.0
BRAGANCA	29.0	10.0
CASTELO BRANCO	29.0	22.0
EVORA	24.0	26.0
FARO	28.0	25.0
GUARDA	26.0	10.0
LISBOA	22.0	13.0
PORTO	29.0	14.0
PORTALEGRE	33.0	29.0
SANTAREM	22.0	15.0
SETUBAL	24.0	20.0
VIANA DO CASTELO	30.0	8.3
VISEU	29.0	11.0
VILA REAL	30.0	13.0

ROMANIA	Difference Yield (%)	
	08/5yrs	08/5yrs
ALBA	2.3	5.2
ARAD	2.5	3.6
ARGES	-0.3	9.8
BACAU	3.1	17.0
BIHOR	9.7	14.0
BISTRITA-NASAUD	10.0	13.0
BRAILA	-7.0	18.0
BRASOV	2.3	10.0
BOTOSANI	-0.9	9.7
BUCURESTI	-2.9	15.0
BUZAU	-6.4	9.7
CALARASI	-5.7	24.0
CLUJ	10.0	10.0
CONSTANTA	-2.5	28.0
CARAS-SEVERIN	-2.7	0.6
COVASNA	1.6	14.0
DIMBOVITA	-0.7	13.0
DOLJ	-2.1	9.6
GALATI	-6.4	16.0
GIURGIU	-4.4	16.0
GORJ	-4.1	-1.4
HUNEDOARA	0.5	1.1
HARGHITA	1.8	5.3
IASI	5.1	29.0
IALOMITA	-5.4	27.0
MEHEDINTI	0.0	7.7
MARAMURES	7.5	9.6
MURES	6.0	11.0
NEAMT	4.7	17.0
OLT	-2.4	12.0
PRAHOVA	-1.5	9.2
SALAJ	12.0	16.0
SIBIU	1.7	7.1
SATU MARE	11.0	14.0
SUCEAVA	1.6	5.4
TIMIS	-3.1	-2.7
TELEORMAN	-5.0	15.0
TULCEA	-3.0	19.0
VASLUI	3.4	23.0
VILCEA	-1.8	3.2
VRANCEA	-2.1	14.0

SERBIA	Difference Yield (%)	
	08/5yrs	08/5yrs
SERBIA	0.9	5.6

SLOVAKIA	Difference Yield (%)	
	08/5yrs	08/5yrs
BRATISLAVA	5.7	11.0
STREDOSLOVENSKY	13.0	7.0
VYCHODOSLOVENSKY	14.0	14.0
ZAPADOSLOVENSKY	7.0	7.9

SLOVENIA	Difference Yield (%)	
	08/5yrs	08/5yrs
SLOVENIA	23.0	12.0

SPAIN	Difference Yield (%)	
	08/5yrs	08/5yrs
ANDALUCIA	20.0	17.0
ARAGON	29.0	21.0
ASTURIAS	24.0	8.0
ISLES BALEARES	21.0	16.0
CASTILLA-LA MANCHA	29.0	19.0
CANTABRIA	29.0	9.2
CATALUNA	30.0	19.0
CASTILLA Y LEON	33.0	14.0
EXTREMADURA	30.0	18.0
GALICIA	30.0	10.0
LA RIOJA	29.0	17.0
MADRID	33.0	21.0
MURCIA	16.0	9.1
NAVARRA	30.0	12.0
PAIS VASCO	33.0	14.0
VALENCIANA	24.0	15.0

SWEDEN	Difference Yield (%)	
	08/5yrs	08/5yrs
ALVSBORGS LAN	-5.0	-8.9
BLEKINGE LAN	-8.7	-14.0
GOTEBORGS OCH BOHUS LAN	-5.3	-8.3
HALLANDS LAN	-12.0	-20.0
JONKOPINGS LAN	-8.1	-14.0
KALMAR LAN	-8.8	-18.0
KRONOBERGS LAN	-12.0	-21.0
KRISTIANSTADS LAN	-11.0	-20.0
MALMOHUS LAN	-10.0	-20.0
OSTERGOTLANDS LAN	-12.0	-16.0
SKARABORGS LAN	-6.7	-14.0
STOCKHOLMS LAN	-2.6	-5.4
UPPSALA LAN	-7.6	-15.0

SWITZERLAND	Difference Yield (%)	
	08/5yrs	08/5yrs
AARGAU	20.0	-7.2
BERN	27.0	6.0
BASEL-LANDSCHAFT	29.0	4.1
FRIBOURG	29.0	3.1
GRAUBUNDEN	22.0	8.3
JURA	36.0	18.0
LUZERN	29.0	1.9
NEUCHATEL	31.0	7.0
SCHAFFHAUSEN	7.9	-9.6
SANKT GALLEN	27.0	5.5
SOLOTHURN	25.0	0.4
THURGAU	17.0	-3.1
TICINO	24.0	7.2
VALAIS	18.0	1.9
VAUD	30.0	4.5
ZURICH	22.0	-2.6

TURKEY	Difference Yield (%)	
	08/5yrs	08/5yrs
ADANA	6.9	2.6
ADYAMAN	0.8	1.9
AFYON	-1.3	9.0
AMASYA	7.2	14.0
ANKARA	-2.4	7.5
ANTALYA	0.3	2.7
AYDIN	-1.0	14.0
BILECIK	0.4	2.6
BALIKESIR	2.1	7.8
BOLU	2.8	4.5
BURDUR	-0.1	12.0
BURSA	4.3	5.5
CANAKKALE	2.4	8.0
CANKIRI	2.0	11.0
CORUM	0.4	9.5
DENIZLI	-3.0	13.0
DIYARBAKIR	3.0	3.9
EDIRNE	-0.4	15.0
ELAZIG	4.4	5.7
ERZINCAN	9.1	6.2
ESKISEHIR	-2.9	2.4
GUMSHANE	11.0	5.0
GIRESUN	3.9	4.0
GAZIANTEP	5.5	7.1
HATAY	3.6	-0.8
ICEL	1.1	0.9
ISPARTA	0.2	11.0
ISTANBUL	-1.0	0.4
IZMIR	1.4	12.0
KAHRAMAN MARAS	8.8	4.8
KOCAELI	0.9	-1.6
KONYA	0.7	7.5
KIRKLARELI	-4.5	4.4
KIRSEHIR	3.4	12.0
KASTAMONU	5.0	9.5
KUTAHYA	-0.8	5.7
KAYSERI	9.3	12.0
MANISA	0.1	11.0
MALATYA	6.1	5.6
MUGLA	3.6	8.0
NIGDE	4.4	9.0
NEVSEHIR	5.9	15.0

TURKEY	Difference Yield (%)	
	08/5yrs	08/5yrs
ORDU	11.0	10.0
SINOP	3.0	8.7
SIVAS	12.0	18.0
SAKARYA	4.2	4.7
SAMSUN	6.4	16.0
TEKIRDAG	-1.5	10.0
TUNCELI	1.9	1.4
TOKAT	16.0	16.0
TRABZON	6.8	5.4
URFA	-1.8	1.4
USAK	-2.0	14.0
YOZGAT	9.4	16.0
ZONGULDAK	-1.6	1.4

UKRAINE	Difference Yield (%)	
	08/5yrs	08/5yrs
CHERNIHIVS'KA	-6.3	-6.2
CHERKAS'KA	-10.0	-3.6
CHERNIVETS'KA	-1.7	2.9
DNIPROPETROVS'KA	-7.9	7.1
DONETS'KA	-16.0	-5.2
IVANO-FRANKIVS'KA	-1.4	-3.4
KHARKIVS'KA	-9.1	-7.1
KHMEL'NYTS'KA	-4.3	-0.8
KRYM	-13.0	0.3
KHERSONS'KA	-13.0	8.2
KIROVOHRADS'KA	-3.7	12.0
KYYIVS'KA	-9.0	-9.6
LUHANS'KA	-12.0	-7.7
L'VIVS'KA	0.0	-3.6
MYKOLAYIVS'KA	-6.7	23.0
ODES'KA	-3.5	23.0
POLTAVS'KA	-5.9	-4.4
RIVNENS'KA	-7.8	-12.0
SUMS'KA	-0.6	4.0
TERNOPIL'S'KA	-4.3	-2.3
VOLYNS'KA	-2.0	-9.0
VINNYTS'KA	-4.2	6.9
ZAKARPATS'KA	13.0	11.0
ZAPORIZ'KA	-14.0	8.1
ZHYTOMYRS'KA	-2.7	-8.9

UNITED KINGDOM	Difference Yield (%)	
	08/5yrs	08/5yrs
ENGLAND	14.0	0.2
NORTHERN IRELAND	16.0	4.3
SCOTLAND	6.8	-4.5
WALES	13.0	-4.8