Monthly Bulletin on the Climate in WMO Region VI



- Europe and Middle East -



January 2010

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Highlights:

- Very cold in most of Continental Europe and the British Isles. Warm in the Arctic and Southern Mediterranean and Middle East.
- Large extent of snow cover over Scandinavia, the United Kingdom, Central and eastern Europe and the Balkan Island.
- Dull over most of western Europe, the Mediterranean, the Balkan Penisula, the Middle East as well as northern Russia and Finland.

The following maps are first guess products based on meteorological bulletins which have been quality checked roughly. The text is based upon these maps as well as the monthly climate bulletins of the countries of RA VI as far as they are available on the web. More detailed information including updated analyses of more data which have undergone a better quality control and further aspects like clouds and water vapour may be found under the following topics.

The Monthly Bulletin on the Climate in WMO Region VI will usually be delivered after the 15th and before the 26th of each month for the preceding month. It may eventually be updated afterwards.

This is the Link to the Regional Climate Centre on Climate Monitoring in RA VI:

RCC-CM RA VI /

and partners producing further European monthly climate monitoring products including:

- monthly means and anomalies e.g. of wind speed, relative humidity, as well as parameters at several pressure levels from ARPEGE model output
 - anomalies for 42 climate indices from the ECA&D dataset
 - regional tailored products for the Eastern Mediterranean

- drought monitoring products for Southeastern Europe

may be found under these links:

ARPEGE model products /

ECA&D monitoring products /

Eastern Mediterranean Climate Center /

Drought Management Centre for Southeastern Europe/

Or see these links for further or more detailed information and analyses

Precipitation Climatology /

European Snow Climatology /

European Circulation Indices /

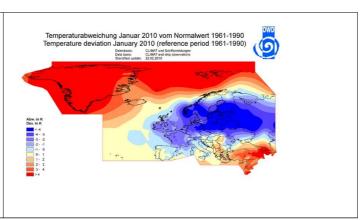
Satellite-based Regional Climate Monitoring

Monthly Overview:

Temperature:

Temperature:

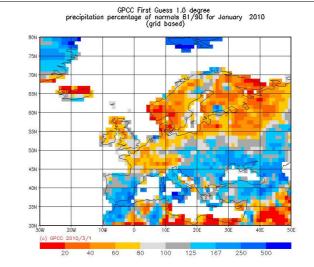
The temperature anomalies of January 2010 are negative for the complete European continent including the British Isles, except parts of northern Norway and Sweden, the southwestern Peninsula Iberica and the Balkan Peninsula. The area of negative anomalies of more than -4 K is centered over the Baltic countries and includes eastern Germany, most of Poland, parts of southern Norway, Sweden and Finland, Belarus and the west of Russia. Greenland and the Arctic Ocean have a positive anomaly of -4 K and the same is valid of the most southeastern part of the areas of interest in the Middle East. A zone of a relatively high temperature anomaly gradient crosses the northern North Atlantic in the southeast of Greenland, Iceland, northward of Norway, crossing Sweden and Finland and northern Russia. Another zone of a relatively high temperature anomaly gradient lies over the Ukraine and southern European Russia.



Precipitation:

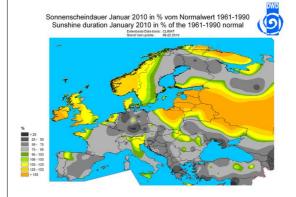
Precipitation:

In January 2010 it was mostly relatively dry over Iceland, Great Britain and Ireland and the western and northern Europe. Relatively wet were the Peninsula Iberica, the northern Mediterranean, the Balkan Peninsula and southeastern Europe, the Ukraine and Turkey, southern Russia and the countries between the Black Sea and the Caspian Sea. Highest amounts of precipitation of 300-400 mm were reached on Sicily and in southern Montenegro and northern Albania where a severe flooding occurred, Generally many places around the coasts of the central and eastern Mediterranean received high precipitation amounts of 100 mm or more. The same is valid for the western and southern Penisula Iberica and the southwest of Ireland and also for the southern and eastern coast of the Black Sea and inside eastern Turkey.



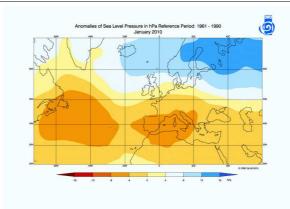
Sunshine Duration:

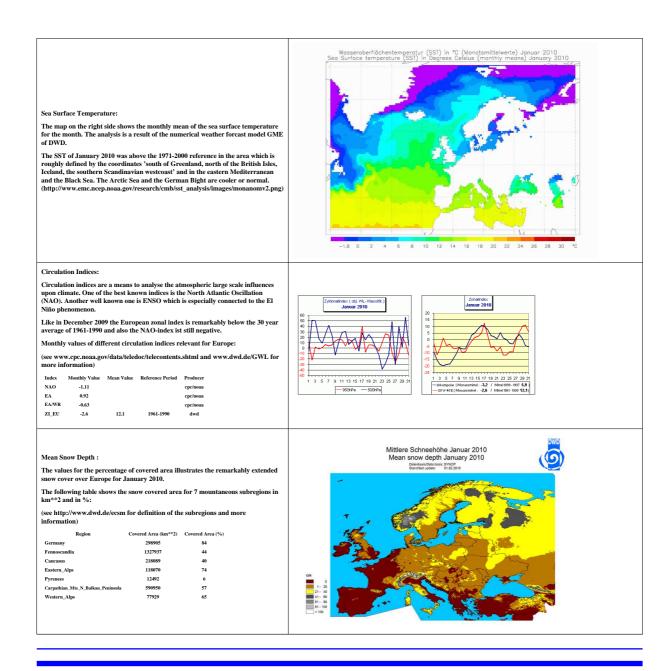
Ireland and the British Isles, southern Norway, northern Scandinavia, the Baltic states and eastern Poland, parts of Belarus and the Ukraine and the center and south of European Russia had more sunshine in January 2010 than normal. Elsewhere it was dull. In Germany regionally nearly each day of the month was a dull day with a cloud cover of 7 or 8 octa.



Air Pressure (surface):

The mean sea level pressure of January 2010 is characterized by low pressure south of Greenland and east of Newfoundland and high pressure over Russia. Thus the typical pattern of low pressure over Iceland and high pressure over the Azores does not exist this month. Therefore the distribution of pressure anomalies shows negative anomalies in the south up to -4 to -8 hPa over the central North Atlantic as well as over the western Mediterranean and the Peninsula Iberica. The north on the other hand has positive anomalies of 12-16 hPa centered over Finland and northern Russia.





Summaries

Summary 1: Monthly Statistical Values

The content of the following table is based upon the data provided on the web by National Meteorological and Hydrological Services (NMHSs) in form of tables, maps or texts in monthly climate bulletins. The tables usually contain values for a number of stations or regions (UK*).

TMX = highest reported mean temperature of the month; TMN = lowest reported mean temperature of the month; TXX = abolute highest temperature reported; TNN = absolute lowest temperature reported; w/n/c = warm/normal/cold (reference usually 1961-1990; in some cases(*) 1971-2000or other (**)); RRmx = highest sum of precipitation reported for the month; RRmx = lowest sum of precipitation reported for the month; RRdx = highest daily sum of precipitation reported for the month; w/n/d = wet/normal/dry (reference usually 1961-1990; in some cases(*) 1971-2000or other (**)); SHx = highest reported sum of sunshine duration for the month; SHn = lowest reported sum of sunshine duration for the month; s/n/d = sunny/normal/dull (reference usually 1961-1990; in some cases(*) 1971-2000 or other (**)); na = value not available

Country	Tmx	Tmn	Txx	Tnn	w/n/c	RRmx	RRmn	RRdx	w/n/d	Shx	Shn	s/n/d
	[°C]	[°C]	[°C]	[°C]		[mm]	[mm]	[mm]		[h]	[h]	
Austria	0.5	-13.7	10.6	-27.6	c	120	2	25	na	138	10	na
Belgium	0.1	na	8.1	-8.2	c	43.8	na	9.5	d	48.4	na	d
Switzerland	na	na	na	-35.6	c	na	na	na	d	na	na	d
Cyprus	na	na	24.0	-0.1	na	131.2	100.2	69.0	na	na	na	na
Germany	-0.6	-13.4	8.7	-24.3	c	116	13	26.4	d	129	7	d
Denmark	-2.0	-4.3	4.9	-17.1	c	67	9	20.8	d	78	43	s
Spain	<14	>2	na	-16.0	c	<300	>25	66.0	d	na	na	d
France	<-2	>6	19.0	-17.5	c	228.0	15.6	70.6	d	143	18	na
Croatia	9.2	-5.5	na	na	c	337.6	66.9	na	w	90	20	d
Hungary*	0	<-5	15.2	-20.7	c	104.1	0.0	27.4	na	na	na	na
Ireland	4.9	1.4	12.1	-12.4	c	162	31	58.5	d	117	64	s
Italy	na	na	na	na	na	163	0	na	na	na	na	na
Moldavia	4.0	1.0	15	-31	c	115	15	na	w	na	na	na
Macedonia	4.9	-1.7	na	na	na	na	na	na	na	na	na	na
Malta	13.4	na	20.3	7.1	w	56.6	na	10.6	d	176.7	na	s
Netherland	1.0	-2.4	na	na	c	na	na	na	na	83.8	42.3	na
Arctis	-1.1	-7.9	5.0	-27.4	w	135.8	68.7	23.1	w	na	na	na
North_Sea/Norvegian_Sea**	3.6	1.7	na	na	c	na	na	na	na	na	na	na
Norway	1.6	-19.0	11.4	-42.4	c	166.0	2.2	60.5	d	na	na	na
Poland	>-5.0	-10.3	na	na	c	122	<20	na	na	na	na	na
Madeira*	na	na	22.8	11.1	w	109.1	na	29.7	w	na	na	na
Azores*	na	na	17.9	10.5	na	176.8	na	37.1	w	na	na	na
Portugal*	na	na	18.3	-7.8	na	389	50	41.3	w	>120	<80	na
Romania	0.6	-12.0	na	na	na	188.6	<20	na	w	na	na	na
Sweden	na	na	6.3	-40.8	c	na	na	na	na	na	na	na
Turkey	14.2	-4.9	26.4	na	na	>300	49.9	na	w	na	na	na
United_Kingdom	>4	<-4	12.4	-22.3	c	>200.2	< 50	48	d	>80	<20	s

Summary 2: Reported Maximum Windgust (m/s) in the Month

Country	FFx	Location	Day	
	[m/s]			
Germany	33.6	Arkona	12	
Germany	36.3	Fichtelberg	27	
Spain	31.9	A_Coruna	14	
France	46.1	Conca(Corse)	2	
Malta	21.6	Luqua	13	

Summary 3: Selected Reported Phenomena in the Month

Selected phenomena that where reported by the National Meteorological Services are listed in the following table. Selected phenomena may be: Tornados, Hail with large (> 5cm diameter) hailstones, etc.

Country Phenomenon Reported Impact (y/n) Day Location

Selected Significant Events

- On the 7th Southern England had the heaviest snowfall in decades with up to 50 cm.
- On the 10th snow and very cold temperatures affected Switzerland, Germany and Poland most and caused closing of Geneva airport, cancelled flights in Frankfurt airport and cancelled trains in Germany, broken roofs and frozen people in Poland and state of emergency at coasts and island of the Baltic Sea due to coincidence of snow masses and wind. Albany had a severe flooding in the districts of Shkodra and Lezha.
- On the 20th Israel, Jordan and Egypt suffered from flash floods by heavy rain
- On the 26th snow and very cold temperatures affected many countries as Germany, Austria, Poland, Romania, Bulgaria and Turkey severely. In Romania and Poland people froze to death, in Franfurt, Germany, flights were cancelled and Bulgaria had a snowheight due to snowdrift of more than 4 m.
- Estonia reported very low water levels at the Baltic Sea coast on the 28th: Väinameri -1.01 m, Pärnu -1.2 m and Talinn -0.97 m. Germany reported that snowfall and low temperatures caused many accidents and affected the air traffic again. The Island of Rügen was isolated and the surrounding Baltic Sea was frozen.