

# Climatic Conditions for the Organiser of the European Athletics U23 Championships 2005

The following information is based on measurements at the measuring point Erfurt-City (junction Gustav-Freytag-Straße / Arnstädter Straße) in the month of July from 1994 to 2000.

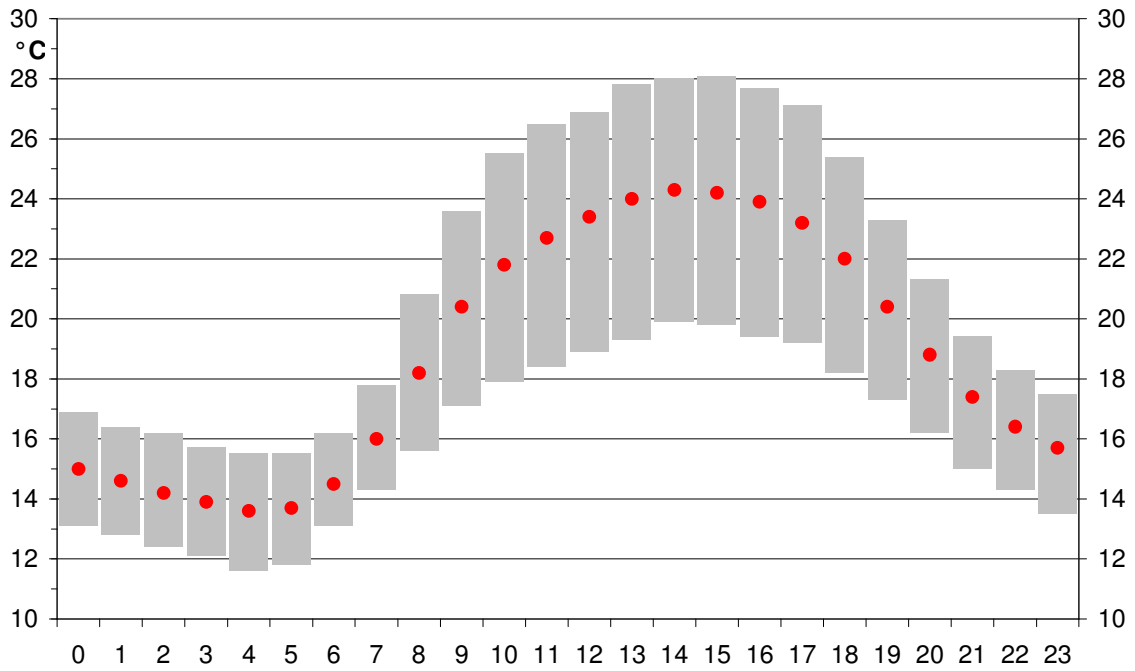
## Temperatures and Humidity

In the month of July an average temperature of 18.9°C and a relative humidity of 69% can be anticipated. The warmest hour is the one between 14 and 15 h with a mean temperature of 24.3°C.

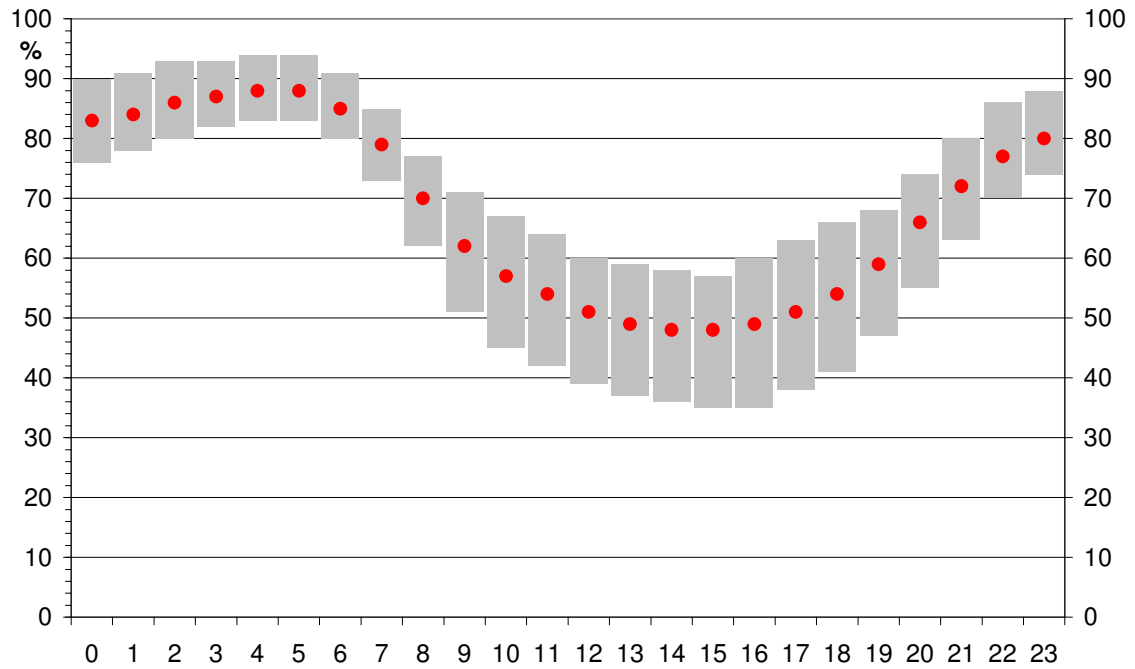
**Chart 1: Average figures in July for temperature and relative humidity inclusive stray area (50% of all days)**

Hour	Temperature [°C]	rel. Humidity [%]
0	15.0 ( 13.1 - 16.9 )	83 ( 76 - 90 )
1	14.6 ( 12.8 - 16.4 )	84 ( 78 - 91 )
2	14.2 ( 12.4 - 16.2 )	86 ( 80 - 93 )
3	13.9 ( 12.1 - 15.7 )	87 ( 82 - 93 )
4	13.6 ( 11.6 - 15.5 )	88 ( 83 - 94 )
5	13.7 ( 11.8 - 15.5 )	88 ( 83 - 94 )
6	14.5 ( 13.1 - 16.2 )	85 ( 80 - 91 )
7	16.0 ( 14.3 - 17.8 )	79 ( 73 - 85 )
8	18.2 ( 15.6 - 20.8 )	70 ( 62 - 77 )
9	20.4 ( 17.1 - 23.6 )	62 ( 51 - 71 )
10	21.8 ( 17.9 - 25.5 )	57 ( 45 - 67 )
11	22.7 ( 18.4 - 26.5 )	54 ( 42 - 64 )
12	23.4 ( 18.9 - 26.9 )	51 ( 39 - 60 )
13	24.0 ( 19.3 - 27.8 )	49 ( 37 - 59 )
14	24.3 ( 19.9 - 28.0 )	48 ( 36 - 58 )
15	24.2 ( 19.8 - 28.1 )	48 ( 35 - 57 )
16	23.9 ( 19.4 - 27.7 )	49 ( 35 - 60 )
17	23.2 ( 19.2 - 27.1 )	51 ( 38 - 63 )
18	22.0 ( 18.2 - 25.4 )	54 ( 41 - 66 )
19	20.4 ( 17.3 - 23.3 )	59 ( 47 - 68 )
20	18.8 ( 16.2 - 21.3 )	66 ( 55 - 74 )
21	17.4 ( 15.0 - 19.4 )	72 ( 63 - 80 )
22	16.4 ( 14.3 - 18.3 )	77 ( 70 - 86 )
23	15.7 ( 13.5 - 17.5 )	80 ( 74 - 88 )

Illustrations 1 and 2 show the figures in diagrams.



**Illustration 1: Average day characteristics of the temperature in the month of July**



**Illustration 2: Average day characteristics of the relative humidity in the month of July**

**Rainfall**

There is an average of 82 l/m<sup>2</sup> rainfall in July.

The highest measured amount of rain in one day was 43 l/m<sup>2</sup>.

On a total of 20 (out of a total of  $7 \cdot 31 = 217$  registered) days more than 10 l/m<sup>2</sup> was measured. Two times more than 10 l/m<sup>2</sup> rain was measured within one hour.

The probability of rainfall (i.e. the chance that there is more than 100 ml rainfall per square meter a day) is in the month of July 52%. On 32% of all days more than 1l/m<sup>2</sup> was measured.

Chart 2: Chance of rainfall (in categories) in July

Hour	[0.1,1) mm	from 1 mm	from 0.1 mm
0	4.1%	2.8%	6.9%
1	5.5%	2.3%	7.8%
2	6.0%	2.3%	8.3%
3	7.8%	1.8%	9.7%
4	9.2%	1.4%	10.6%
5	10.1%	1.4%	11.5%
6	6.0%	2.8%	8.8%
7	8.3%	2.3%	10.6%
8	9.2%	3.2%	12.4%
9	7.8%	2.3%	10.1%
10	6.0%	1.8%	7.8%
11	7.4%	3.2%	10.6%
12	6.9%	1.4%	8.3%
13	8.3%	1.8%	10.1%
14	6.9%	2.3%	9.2%
15	8.3%	4.1%	12.4%
16	8.3%	3.2%	11.5%
17	10.1%	2.8%	12.9%
18	8.8%	2.3%	11.1%
19	8.3%	3.2%	11.5%
20	6.9%	2.3%	9.2%
21	7.4%	3.2%	10.6%
22	6.9%	1.4%	8.3%
23	6.5%	2.8%	9.2%

## Wind

The following information is based on over-roof-measurements of the years 1985 and 1989.

The average wind speed is 2.7 m/s. The wind speed during the day is considerably higher (illustration 3). The dominant wind direction is west (illustration 4).

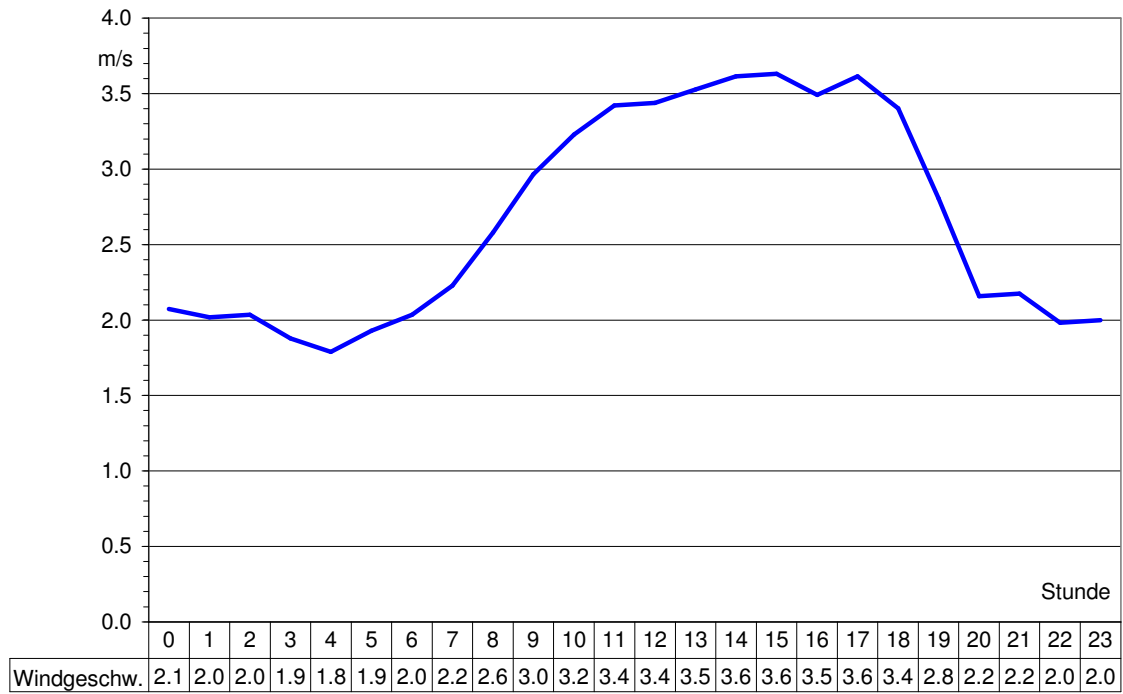


Illustration 3: Average day characteristics of the wind speed in July

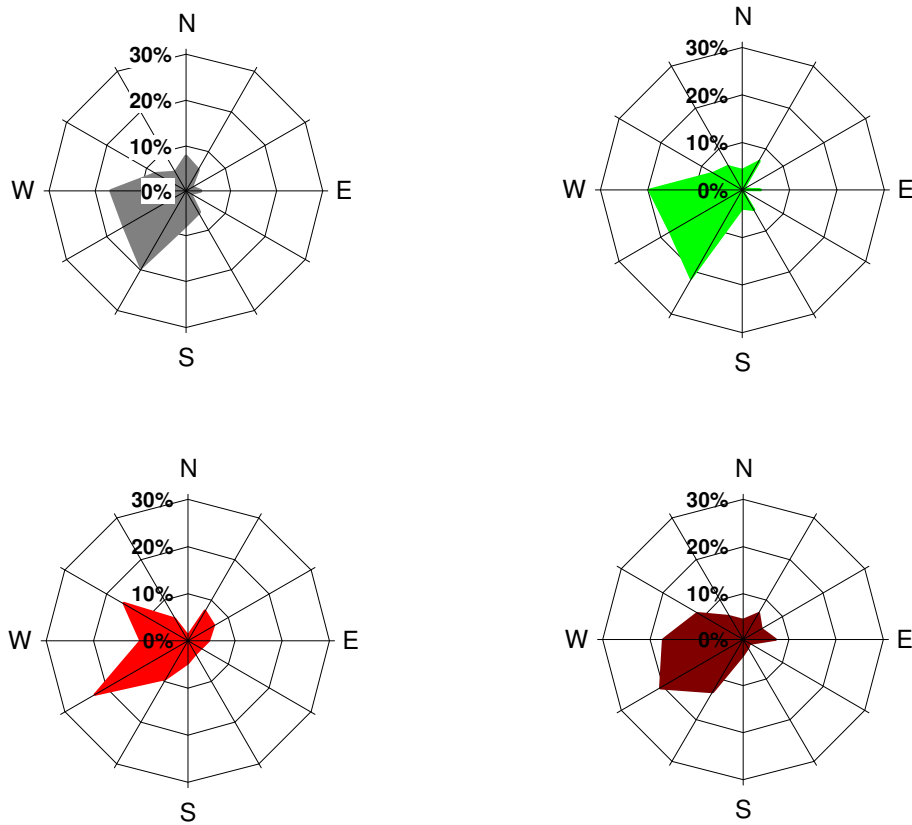


Illustration 4: Frequency wind roses for the period 21 to 03 h (grey), 03 - 09 h (green), 09 - 15 h (red) und 15 - 21 h (brown)