

Analysis of the 2014 summer season for Ukraine compared to 1961-1990 base period

Temperature

During summer 2014, mean air temperature ranged between 18,0°C in the Lviv region and 24,7°C in the Kremia region and in the mountain areas from 12,2°C to 18,5°C in Ukrainian Carpathians and from 16,4°C to 18,5°C in Crimean mountains (*Figure 1, upper figure*)

The deviation of the mean air temperature from the normal for the 1961- 1990 base period during summer 2014 ranged from 0,1°C in Lugansk region to 3,2°C in Kremia region and in the high-lying areas from 0,9°C to 1,5°C in Ukrainian Carpathians and from 1,9°C to 2,2°C in Crimean mountains (*Figure 1, lower figure*).



The highest daily air temperature during summer 2014, measuring 40°C was observed on 15 August in Askania Nova of Kherson region (Figure 2).

Temperatura 35°C and above is a very dangerous phenomenon for the northwestern part of Ukraine and temperature 40°C and above is very dangerous phenomenon for the southeastern part of Ukraine.

For summer 2014 very dangerous phenomenon 35...37,4°C was recorded by most stations Rivne, Kyiv, Chernihiv, Cherkasy regions (northwestern part) and 40°C was observed only one station Askania Nova of Kherson region (southeastern part).



The number of summer days with the maximum daily air temperature above 30°C varied from 8 to 15 days in the western part, from 14 to 22 days in the north, from 26 to 34 days in the centre and east, from 25 to 55 days in the south of Ukraine (*Figure 3 upper figure*).

In the high mountain areas (above 1000m) didn't observe any summer days with temperature above 30°C.

The greatest uninterrupted period of tropical days was registered in Kherson region, total of 43 days (*Figure 3, lower figure*).

Number of days with temperatures 30 and above and uninterrupted period in Ukraine summer 2014 (June-August)



Figure 3

The number of summer days with the maximum daily air temperature above 35°C varied from 1 day in the north (Kiev, Chernihiv region) to 17 days in the south of Ukraine (Kherson region) (*Figure 4, upper figure*).

The greatest uninterrupted period of days with temperature 35°C was registered in Kherson region, total of 6 days (*Figure 4, lower figure*).

**Number of days with temperatures 35 and above and uninterrupted period in Ukraine
summer 2014 (June-August)**



Figure 4

Three-month course of the maximum, minimum air temperature in Kyiv (north), Kherson (south), L'viv (west), Kharkiv (east) during summer 2014 is shown in Figures 5, 6, 7 and 8.

The maximum temperature does not exceed the absolute maximum values recorded in the history of observations. It repeated the absolute values in early August in L'viv and in early June and August in Kherson.

Maximum and minimum temperature of summer 2014

Kyiv

Кліматодіаграма максимальних і мінімальних температур повітря за період - 01.06.2014 - 31.08.2014 , метеостанція : Київ

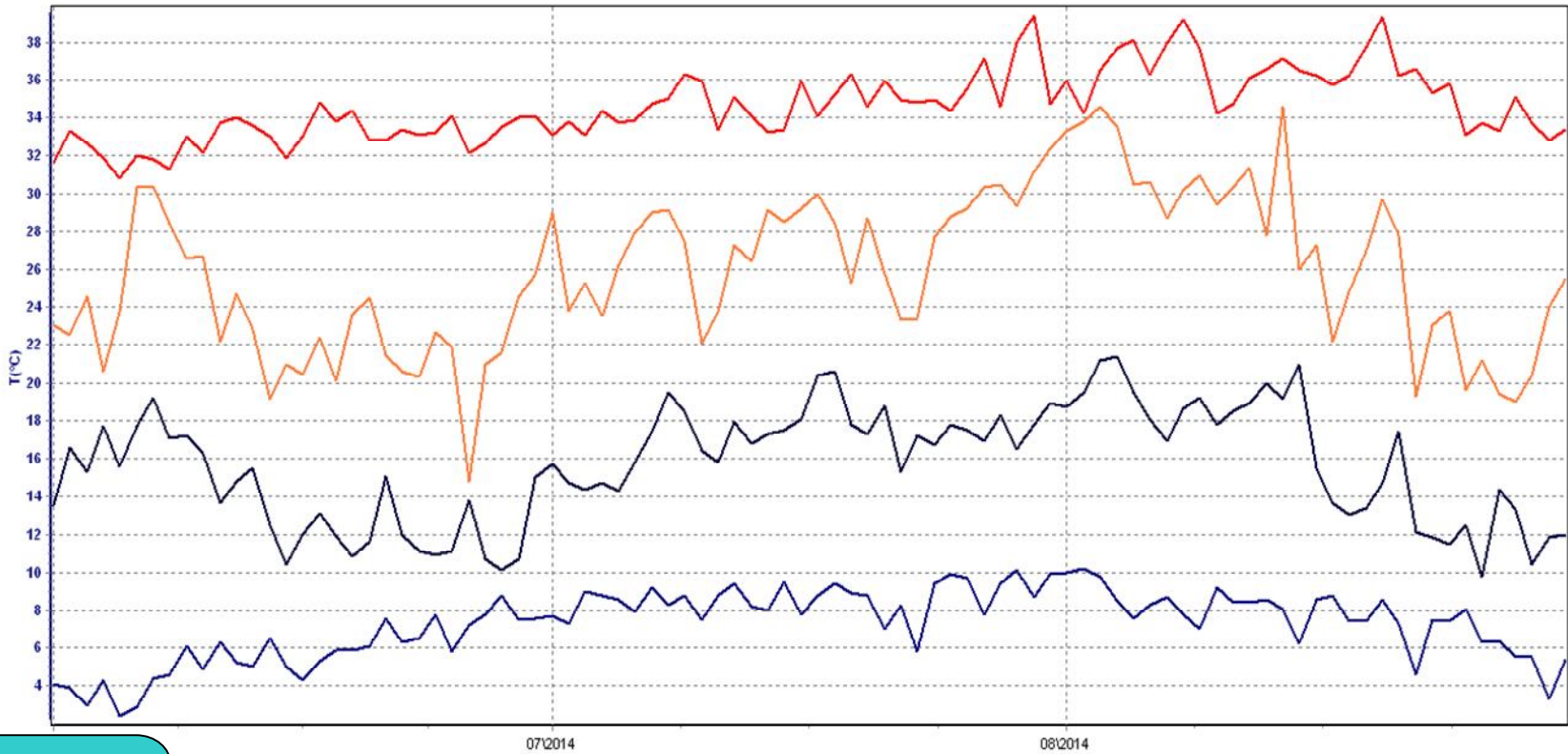


Figure 5

- Temperature - absolute maximum
- maximum temperature of summer 2014
- Temperature - absolute minimum
- minimum temperature of summer 2014

Maximum and minimum temperature of summer 2014 Kherson

Кліматодіаграма максимальних і мінімальних температур повітря за період - 01.06.2014 - 31.08.2014 , метеостанція : Херсон

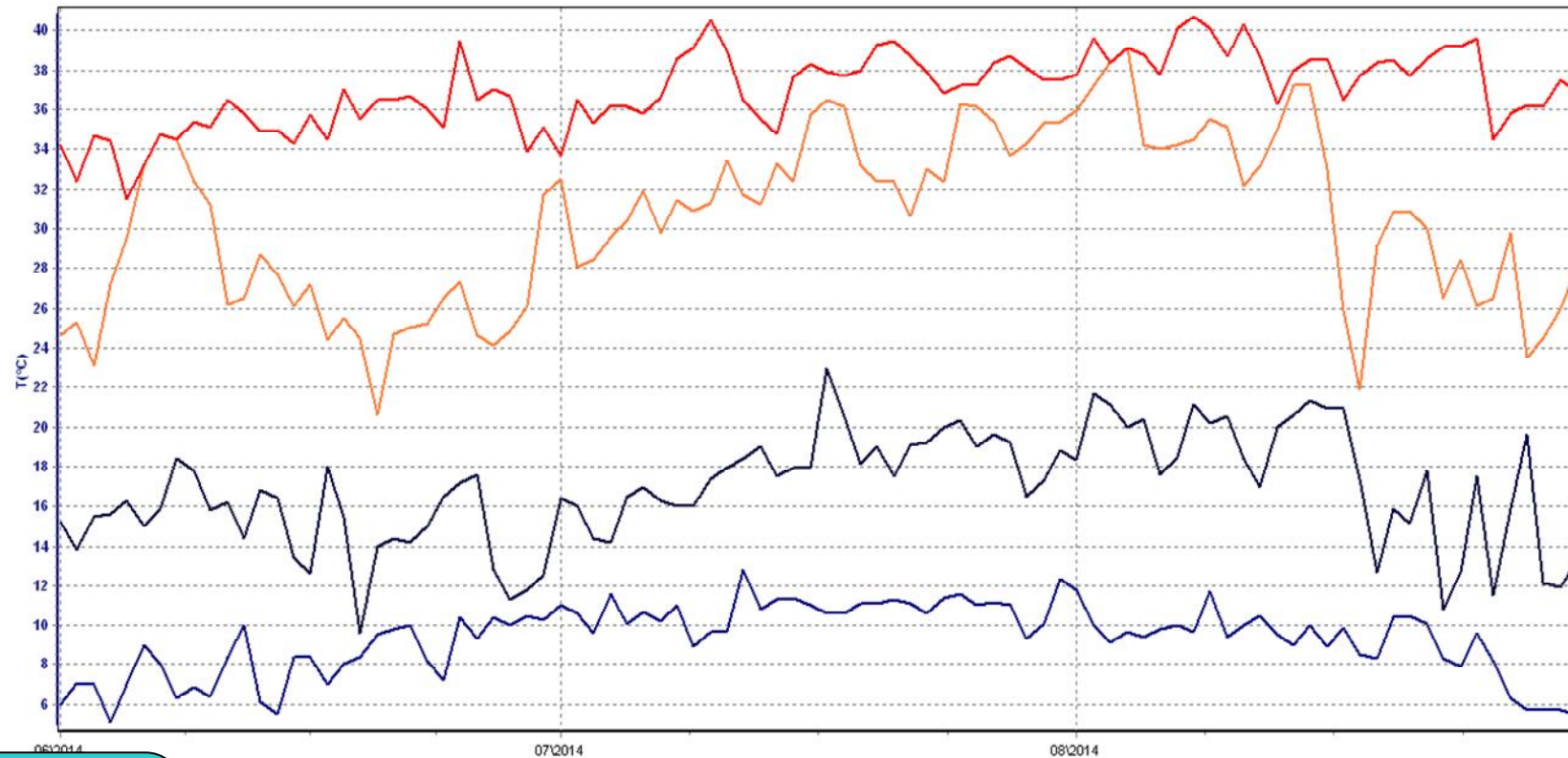


Figure 6

— Temperature - absolute maximum — maximum temperature of summer 2014
— Temperature - absolute minimum — minimum temperature of summer 2014

Maximum and minimum temperature of summer 2014

L'viv

Кліматодіаграма максимальних і мінімальних температур повітря за період - 01.06.2014 - 31.08.2014 , метеостанція : Львів

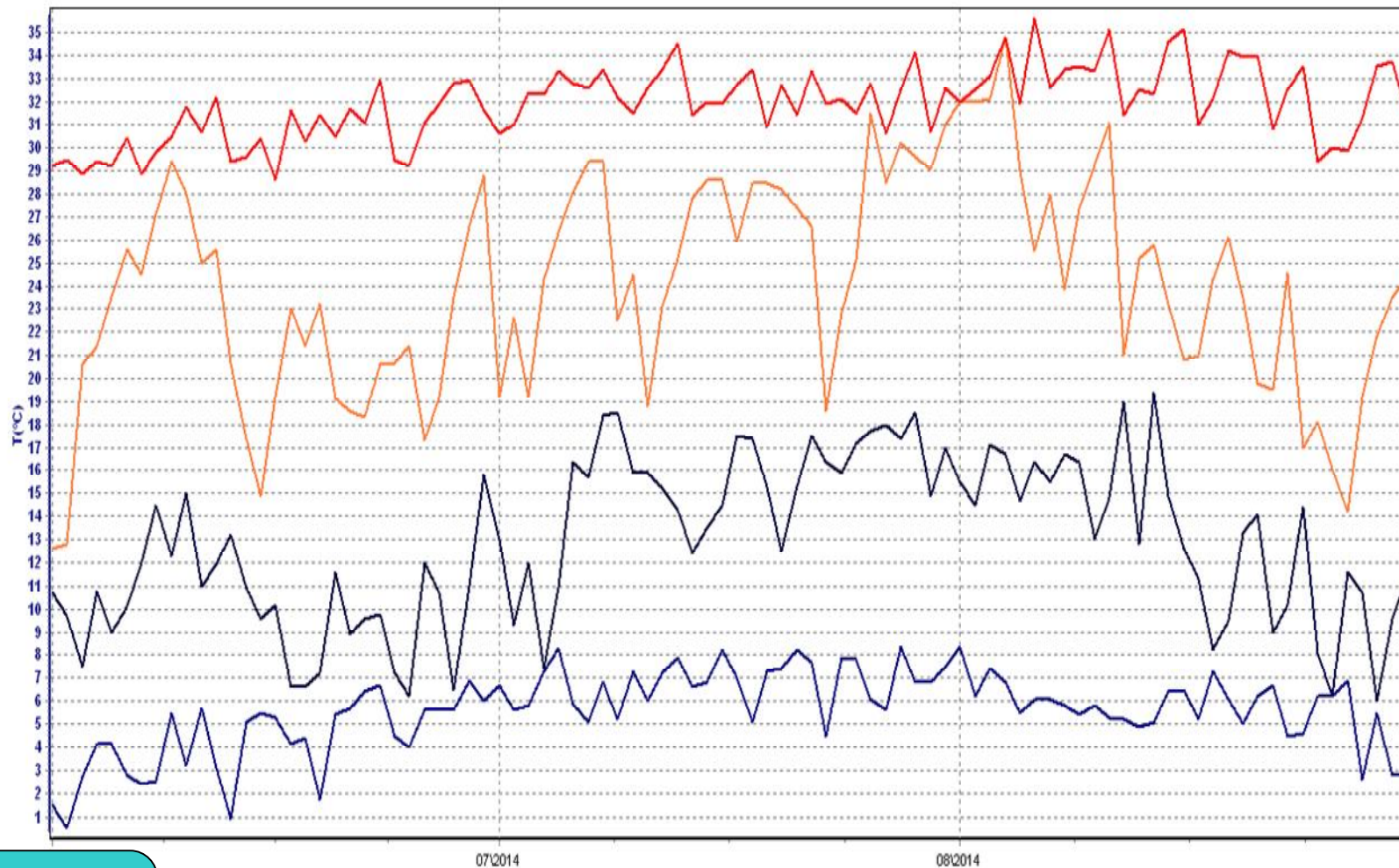


Figure 7

— Temperature - absolute maximum

— maximum temperature of summer 2014

— Temperature - absolute minimum

— minimum temperature of summer 2014

Maximum and minimum temperature of summer 2014

Kharkiv

Кліматодіаграма максимальних і мінімальних температур повітря за період - 01.06.2014 - 31.08.2014 , метеостанція : Харків

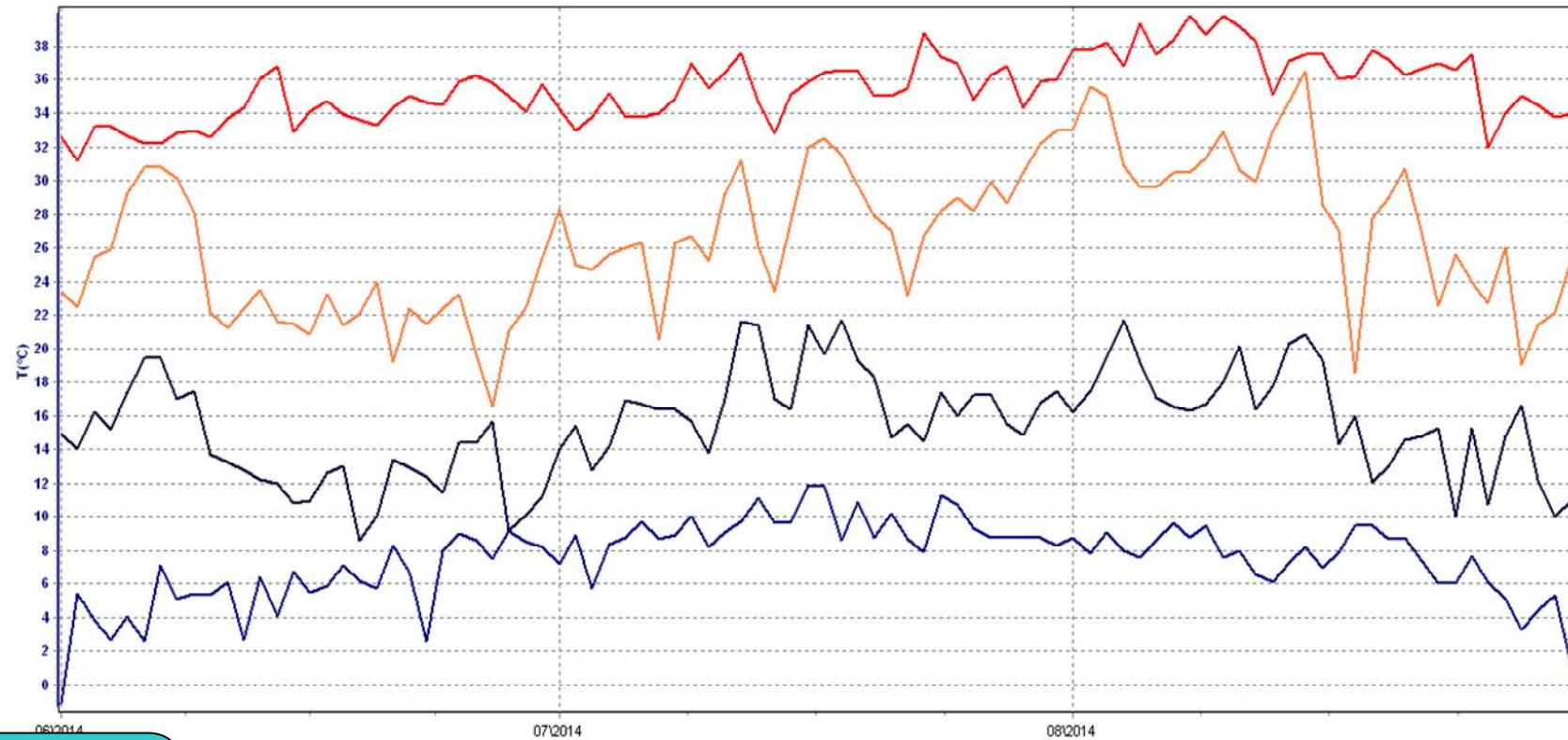


Figure 8

— Temperature - absolute maximum

— maximum temperature of summer 2014

— Temperature - absolute minimum

— minimum temperature of summer 2014

Precipitation

During summer 2014, precipitation sums were close to the average values compared to the normal for the 1961 – 1990 base period in most of Ukraine with the exception of Haisyn (Vinnytsia region) and Klepinino (Crimea). Precipitation sums ranged from 44% in Haisyn to 198% in Klepinino compared to the normal. (*Figure 9*).

The maximum daily amount of precipitation of 103mm was registered in Klepinino on 3st of June. The amount of 575mm observed in Nyzhniy Studeniy of Zakarpatska region (Carpathians) was the record breaking precipitation total registered during summer 2014.

The highest number of days with the precipitation of 1.0 mm and above was recorded in Nyzhni Vorota of Zakarpatska region (Carpathians). The total number of days was 38.

