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Hydrological drought in the Czech Republic in the period 2014–2018

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The hydrological drought in the period 2014–2018 which hit the Czech Republic ranked among its most serious historical drought episodes.

The precipitation deficit began to manifest itself in the Czech Republic as early as 2014, and continued next four years. The precipitation deficit resulted in a very negative moisture balance and soil drought occurrence.

The hydrological drought manifestations affected practically the entire Czech Republic. The water levels of most streams declined significantly below the 355-day discharge value over several weeks, as evidenced by field measurements. In some regions, some streams completely dried up. From the evaluations completed so far, it follows that the recurrence intervals of 30-day and 7-day annual runoff minima varied in a relatively wide range from 10 to 100 years.

The precipitation deficit in 2015 was comparable with the most significant cases of drought in 1921, 1976 and 2003, and partially also in 1911 and 1947. In terms of the surface water deficit on the Elbe, Vltava and Odra River basins, the year 2015 ranks among the worst years ever.