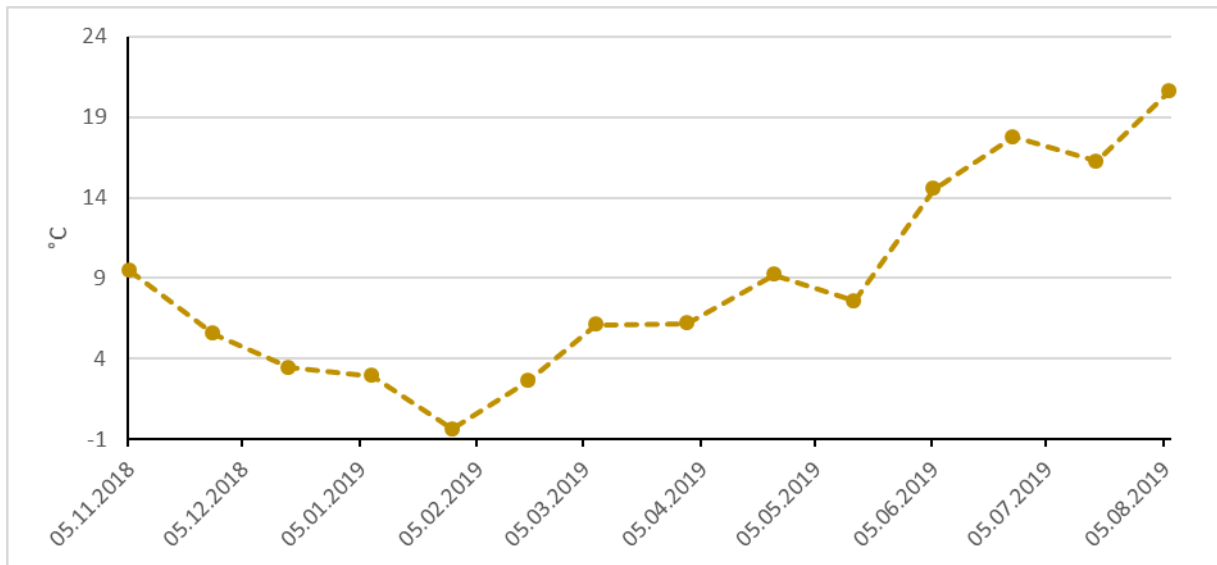


## Supplementary Material



**S1:** Average monthly air temperature for the climate station Alsfeld-Eifa (Stations-ID: DWD 91, 50.7447 N, 9.345 E), data available from Hessian Agency for Nature Conservation, Environment and Geology (2019)



**S2:** Pictures of algal bloom inside the Antrift basin. a) Algal streaks at the south end of the main basin on November 5, 2018; b) Algal bloom in the western part of the main basin on 05.06.2019; c) Algal bloom on the western bank on 18.07.2019; d) View to northwest area of the antrift basin on 18.07.2019. Pictures taken by C. J. Weber.



**S3:** Water measurement / sampling and sediment sampling stations inside the Antrift catchment area. a) GOE: Göringerbach tributary; b) OCH: Ocherbach tributary; c) AT-1: Antrift main stream upper station; d) AT-2: Antrift main stream middle station; e) AT-3: Antrift main stream lower station; f) AB-1: Antrift basin inflow area; g) AB-2: Antrift basin western bank; h) AB-3: Antrift basin dam outlet / overflow device. Pictures taken by C. J. Weber.

