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PEP725: real time monitoring of phenological events in Austria, Germany, Sweden and Switzerland

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The main objective of PEP725 (Pan European Phenological database; http://www.pep725.eu/) is to promote and facilitate phenological research by delivering a pan European phenological database with an open, unrestricted data access for science, research and education.
The PEP725 database is updated annually. But since recently Deutscher Wetterdienst and MeteoSwiss offer their observers to upload their observations via web in real time mode, ZAMG introduced this web-based feature already in 2007 (www.phenowatch.at) and the observers of SWE-NPN (the Swedish National Phenology Network) can submit their observations through the web application www.naturenskalender.se since its start in 2008.
There are other European countries as for instance Italy, The Netherlands, UK that have been doing visualizations of ground phenology in real time for some years, but no crossing of the national borders is provided. Since spring 2016 one can now follow the phenological events on www.pep725.eu in real time mode and can watch how the "green wave" is moving from 46° northern latitude up to the northern polar circle or over more than 2500 km across Europe.
The project is funded by ZAMG, the Austrian ministry of science, research and economy and EUMETNET, the network of European meteorological services. So far 21 European meteorological services and 7 partners from different phenological network operators have joined PEP725.The first datasets in PEP725 date back to 1868; however, there are only a few observations available until 1950. From 1951 onwards, the phenological networks all over Europe developed rapidly. So far more than 11 800 000 of observations are stored now in the PEP725 database and approximately 40 % of all data are flowering records.