



PEP725: monitoring of apple flowering in the D-A-CH region in 2015 compared with Schnelle's map from 1965

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The main objective of PEP725 (Pan European Phenological database) 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 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.

In spring 2015 PEP725 has started to develop an online monitoring of selected phenological events in Austria, Germany and Switzerland. Since recently Deutscher Wetterdienst and meteoswiss offer their observers to upload their observations via web in real time mode. In Austria ZAMG introduced this web-based feature already in 2007 and offers a contemporary visualization tool (www.zamg.ac.at/phaenologie). Also some other European countries as for instance Italy, Sweden, The Netherlands, UK has been doing visualizations of ground phenology in real time for some years. But these efforts always end at the national borders. Here we will present a trans boundary visualization of apple flowering in 2015, a normal year compared to the mean 1981 to 2010 but early when looking at Schnelle's European map of apple flowering in Europe which comprises the years from 1931 to 1937. In the D-A-CH region apple flowering started in East and Southeast Austria as well as in the upper Rhine valley in the first decade of April and moved northwards and upwards till it reached Northern Germany and higher lying Alpine areas at the beginning of May 2015.