

PEP725

www.pep725.eu

End of Year Progress Report 2015

Prepared by: PEP725 PM Elisabeth Koch

Zentralanstalt für Meteorologie und Geodynamik
Hohe Warte 38, 1190 Vienna
Austria

Summary: Annual report of the activities performed in the frame of the PEP725 Optional Programme in 2015. The main objectives - update of the database, maintenance of the webpage and support to members were achieved. The new feature “real time monitoring of phenological events in the D-A-CH region” was implemented on www.pep725.eu. The number of users and downloads increased again considerably. PEP725 was presented at international and national conferences, PEP725 data was used in papers published in as prominent journals as *Nature*, *PNAS*, *Global Change Biology* as well as in *PH thesis*. The annual meeting of the members and partners of PEP725 was held during the Phenology2015 conference in October in Kusadasi.

1. Headlines

In 2015 we registered 5114 downloads direct from the webpage compared with 3816 in 2014. Besides the direct downloads we handled app. 10 direct requests to the management. The most wanted plant is *Betula pendula* (1477 downloads) followed by *Quercus robur* (906 downloads), *Fagus sylvatica* (884 downloads), *Prunus avium* (884 downloads), *Picea abies* (751 downloads). PEP725 can now provide 11 814 996 phenological observations in its database! In 2015 the webpage got a new attraction: a visualization of real time monitoring of phenological events in the D-A-CH region

2. Status of programmatic targets

WP 1 database

According to the wish of some partners a new scheme for plant classification some tables have to be changed. The aim is to make the data compatible with other international databases e.g. the US NPN tables. Work is still in progress.

Datasets of 2014 were delivered from Austria, Bosnia Herzegovina, FYROM, Switzerland, Czech Republic, Germany, Spain/Catalonia, Finland, Croatia, and Montenegrin Republic. The data underwent the some checking routines and were then uploaded. Once a week almost real time phenological data from Saxony/Germany are implemented into the database (a project of DWD/regional office in Leipzig). As some partners lack adequate IT and personal resources the team of WP database had to spend much time to convert the submitted data into the database format needed.

In total the database comprises more than 11 000 000 records from 78 different plants.

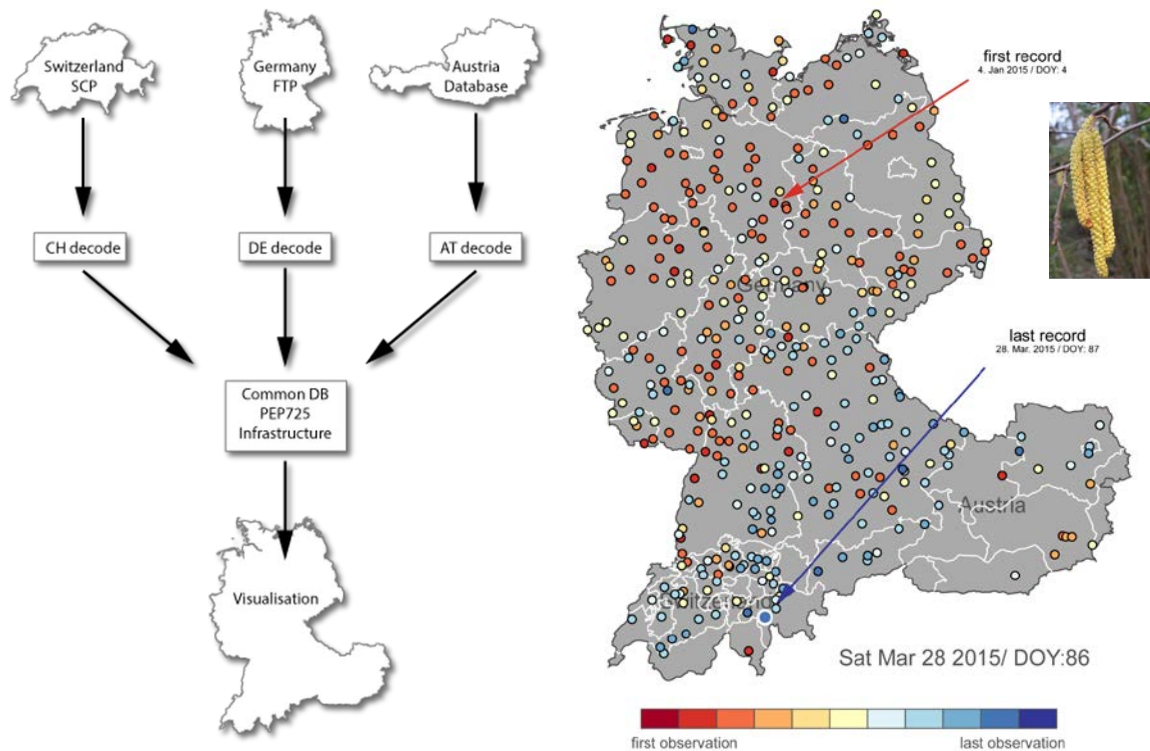
In total the database comprises more than 11 800 000 records from 121 different plants.

Statistic of the PEP725 Database (last update on 2016-01-11)

number of observations	11814996		
first record	1868	last record	2015
number of plants	121	number of plants (including cultivars)	255
number of observed growing stages	44		

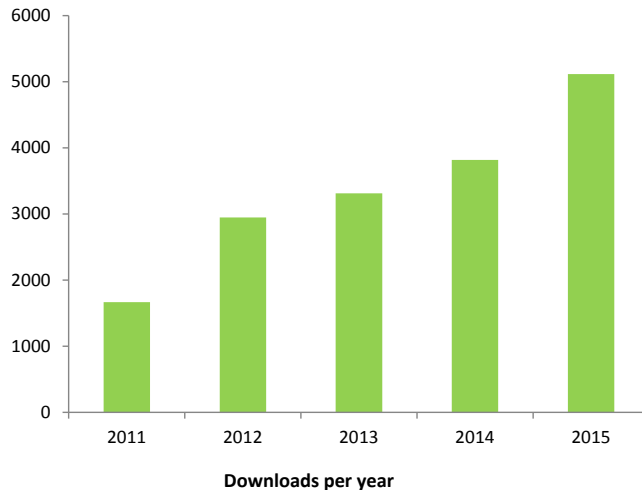
WP2 webpage

In 2015 we could implement a visualization of real time monitoring of phenological events in the D-A-CH region:



Real time monitoring of hazel, beginning of flowering in 2015

The webpage and the Facebook account developed to an information exchange platform. The number of users and of data downloads showed an amazing development since the start of PEP725. In 2015 PEP725 the downloads summed up to more than 5000 with the most wanted plants being *Betula pendula* followed by *Quercus robur*, *Fagus sylvatica*, *Prunus avium* and *Picea abies*.



Total number of data downloads per year

The users of the data come mainly from the northern hemisphere and are interested in phenology (30.3%), remote sensing (14.1%), agriculture & forestry (13.1%), climate change studies (12.1%), ecology(12.1%), pollen research (6.1%), master/diploma thesis (5.1%), biometeorology (4%), others(3%). Besides the download from the webpage the WP webpage leader also dealt with special data demands that could not be met by the data download tool of www.pep725.eu. In 2015 the webpage recorded about 170 000 visits.

WP3 management and PR

The work program was fixed in two team meetings in January and July. The management meeting of the PEP725 partners took place on 6th October 2015 as side meeting of the Phenology 2015 conference.

PEP725 was presented at EGU 2015, 12th – 17th April in Vienna (PM was co-convener of phenology session) at Österreichischer Klimatag 2015, 28th – 30th April in Vienna, at EMS/ECAM 2015 7th – 11th September in Sofia (PM was co-convener of phenology session), at Phenology 2015 conference, 5th – 8th October in Kusadasi, at Österreichischer MeteorologInnentag 4th – 5th November in Vienna and at Jahrestagung Naturwissenschaftlicher Verein, 15th October in Klagenfurt .

3. Outlook 2016

In September the PEP725 team submitted successfully an application to the Austrian Ministry for Science, Research and Economy for financing PEP725 in 2016.

In mid of January 2016 the central IT infrastructure of ZAMG was the goal of a cyber-attack and also the PEP725 homepage was concerned. The complete PEP725 database was deleted - the good news: all records where save (as we have plenty of backups) but unfortunately the latest additions (new plant definition tables, especially the PESI ID's) are definitely gone.

So we had to change the working program for 2016 to some extent as the re-installation of the webpage has top priority. Many features are working already, the real time monitoring was completely destroyed and there is no back up.

Next planned activities are restructuring the tables of DB (separate tables for genus, species and subspecies/cultivar), update of the download tool (to minimize the tailored data supply), organisation of the Management Meeting and the Symposium proceedings in Phenology on April, 16th 2016 in Vienna and presentation of PEP725 at international conferences. And of course the regular update and maintenance of the PEP725 database and webpage (www.pep725.eu) and blogs (<https://www.facebook.com/groups/pep725/>, <https://twitter.com/pep725>)