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PEP725 Pan European Phenological Database

Elisabeth Koch, Silke Adler, Markus Ungersböck, and Susanne Zach-Hermann
Zentralanstalt für Meteorologie und Geodynamik, Hohe Warte 38, 1190 Vienna

Europe is in the fortunate situation that it has a long tradition in phenological networking: the history of collecting phenological data and using them in climatology has its starting point in 1751 when Carl von Linné outlined in his work Philosophia Botanica methods for compiling annual plant calendars of leaf opening, flowering, fruiting and leaf fall together with climatological observations "so as to show how areas differ". The Societas Meteorologicae Palatinae at Mannheim well known for its first European wide meteorological network also established a phenological network which was active from 1781 to 1792. Recently in most European countries, phenological observations have been carried out routinely for more than 50 years by different governmental and non governmental organisations and following different observation guidelines, the data stored at different places in different formats. This has been really hampering pan European studies, as one has to address many National Observations Programs (NOP) to get access to the data before one can start to bring them in a uniform style.

From 2004 to 2005 the COST-action 725 was running with the main objective to establish a European reference data set of phenological observations that can be used for climatological purposes, especially climate monitoring, and detection of changes. So far the common database/reference data set of COST725 comprises 7687248 data from 7285 observation sites in 15 countries and International Phenological Gardens (IPG) spanning the timeframe from 1951 to 2000. ZAMG is hosting the database.

In January 2010 PEP725 has started and will take over not only the part of maintaining, updating the database, but also to bring in phenological data from the time before 1951, developing better quality checking procedures and ensuring an open access to the database. An attractive webpage will make phenology and climate impacts on vegetation more visible in the public enabling a monitoring of vegetation development.