Atmospheric science in European school curricula, an update

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In most European countries the necessity of education in Science and Mathematics to achieve higher standard and competetivness in research and technology development has been formulated after Bologna Declaration and further after Lisboa meeting. However, the reasonable development of position of these subjects in educational systems in individual countries across Europe is not so fast. Whereas in general education system statistics is well covered by EURYDICE, an institutional EC network for gathering, monitoring, processing and circulating reliable and readily comparable information on education systems and policies throughout Europe, covering Member States and candidate countries, as for special role and place of atmospheric sciences the EMS is trying to observe the process. Unfortunately, even the position of meteorology and climatology is not so advanced in framework of these subjects, there are some traces of atmospheric science in physics, most of the small abundance of these topics is covered rather by geography. This situation is in contrary with the overall quite high interest in environmental issues in Europe.

In this study we provide the expansion of previous studies by Spekat and Wieringa (EMS, 2004, 2005) on Meteorology in primary and secondary school education systems. School curricula for a number of European countries and existing presentations of meteorological and climatological subjects are compared with a focus on compulsory education ages. Starting ages, the age of crossover from universal primary schooling to various types of early secondary school, and the autonomy of schools are highly significant factors; they are shown to vary a great deal between countries as shown following the new EURYDICE database for 2005. Equally diversified are the weather and climate subjects, their level of coverage and the subject area in which they are taught. It is discussed how the introduction of more meteorology in school curricula can be encouraged.