

*An eighteenth-century meteorological society in the Netherlands:  
An investigation on early organization, instrumentation and quantification of the science  
of weather*

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**ABSTRACT:** Due to a number of elements that concurred in the third quarter of the 18th century organized meteorology received new chances: first the rise of experimental physics had led to a better instrumentation, standardization and a more advanced understanding of accuracy. Meteorological instruments benefited also from these developments. Secondly the chemical discovery that air is composed of different gases gave an enormous impulse to the medical interest in meteorology. Thirdly newly produced empirical data revived the thought of a possible link between meteorology and astronomy. This hypotheses of an astronomical-meteorological relationship perhaps could even indicate cycles in the occurrence of epidemics and other diseases.

So during the 1770s a number of medical-meteorological societies emerged: in London the *Royal Society* resumed its meteorological observations in 1774. In Berlin the *Gesellschaft der Naturforschende Freunde* started to collect measurements from 1775 onwards and in Paris a medical-meteorological organization started in 1776, which in 1778 was granted the title *Société Royale de Médecine*. Best known is probably the *Societas Meteorologica Palatina*, founded in 1780 at Mannheim. Rather unknown is a similar Dutch medical-meteorological society, called the *Natuur- en Geneeskundige Correspondentie Sociëteit* (The Physical and Medical Correspondence Society) founded in 1779.

We want to use this Dutch Meteorological Society to investigate the question why all of the medical-meteorological societies seized their activities before the turn of the century. Was it the large amount of information that was collected, but that could not be processed properly, that brought down the meteorological networks of the late 18th century? Were it political factors, or is there more to say? So, what were the factors that triggered the interest for the science of weather in the Netherlands? What were the goals and expectations of the contributors? What were their methodological strategies? Which instruments were used to measure which meteorological parameters? How was the stream of numbers generated by these measurements organized, collected and interpreted? Where did these meteorologists succeed and where did they fail? An analysis of the processes involved reveal that the limits on the advancement of meteorology were not only imposed by instrumentation, organization or data-processing The financing, the scientific infrastructure of the old 18th-century Dutch Republic, the political upheavals of the time and the lack of a proper theoretical insight were also crucial factors that frustrated the breakthrough of meteorology as an academic science in the Netherlands. Eventually this breakthrough was achieved in the second half of the nineteenth century, to be implemented into Dutch society with the founding in January 1854 of the *Koninklijk Nederlands Meteorologisch Instituut* (the Royal Dutch Meteorological Institute), under C.H.D. Buys Ballot.

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