

Abstract

The dissertation work examines the roots and development of the medieval learned weather forecasting in the context of ancient and medieval sources and its reception in the central European space, respectively in medieval Bohemia. The work can thus enrich our knowledge of history of natural sciences in the Middle Ages, medieval erudition and written culture in general.

At present weather forecasting is a subject of meteorology, based on the analysis of air pressure, temperature and air density and the physiological conditions of the Earth's surface. A detailed analysis of these factors was practically infeasible in the past. Therefore weather forecasting was achieved by means of other methods and premises. We would also hardly find texts concerning weather forecasting between manuscript treatises on the origin and nature of meteorological phenomena: these surprisingly contain a minimum of weather forecast references. At that time weather forecasting was not a part of meteorology; it was the subject of other treatises appearing in the manuscripts frequently entitled *De pluviis*. These were primarily based on other tradition, respectively on other traditions that were different from that of Aristotle.

The aim of the dissertation is to discover and to bring together the various traditions which formed medieval knowledge of weather forecasting and to define the discipline in relation to other natural sciences, meteorology, astronomy and astrology. The role of this discipline in the context of other akin disciplines is illustrated with the examples from the Czech medieval sources. Up to now the theme has not been in detail examined and systematic study on the medieval forecasting is still missing.

The first part of the work introduces ancient and Arabic sources, that had chief impact on the development of the discipline in the Middle Ages, and their transmission in medieval Latin works. Individual methods of weather forecasting are described here, including forecasts based on rising and setting of stars and on local observation of the momentary condition of the atmosphere, and also complicated astrological principles - nevertheless verified by the contemporary natural philosophy - that were based on the ideas of world order.

The second part answers the questions how much the learned weather forecasting was studied in medieval Bohemia, where it came from and what it included. A corpus of relevant manuscripts was gathered within the research. The corpus is not large, however one can draw particular conclusions from it. In comparison with medieval astrology and Aristotle's meteorology that was relatively richly explored at the Prague university and above all in

comparison with medieval Kraków, it is obvious that Bohemia lagged behind in this respect. Despite the availability of various texts the treatises never became familiar here. Nothing points to the fact that they would be a subject of university lectures or that they would be transmitted further. However, these manuscripts, so far unexplored, reflect diverse methods of weather forecasting and at the same time they document the reception of ancient, Hebrew, Arabic and medieval Latin writings. By all means they represent a valuable source of knowledge of contemporary conceptions of weather and also of the world and its ways.