

Preface

The summary annual tabular survey “*Air Pollution and Atmospheric Deposition in Data, the Czech Republic ...*” (hereinafter the Tabular Survey) is published as a basic document for the work of authorities and organizations concerned with environmental issues and air quality protection in this country. The Tabular Survey has been published by the Czech Hydrometeorological Institute with various formal modifications since the beginning of the nineteen seventies. In 1981, on the basis of an agreement between the then Ministry of Forests and Water Management and the Ministry of Health, the Czech Hydrometeorological Institute was entrusted with overall processing and the Institute of Hygiene and Epidemiology (now the National Health Institute) was designated as the collective workplace for the health sector. Since then, data from the air pollution networks of these organizations and other important special-purpose networks for monitoring air pollution conditions have been stored and processed in the Internal (later Air Pollution) Information System (IIS) of the Territorial Information System (ISU).

Since 1992, the Air Pollution Information System, along with the other air quality information sources, has become an integral part of the Air Quality Information System (ISKO). Each year, information is stored in this air pollution database both from data from CHMI and Public Health Service information systems as well as from data from stations in the networks of the Forest Management and Gamekeeping Research Institute (VÚLHM), ČEZ Inc. operated by the Organization for the Rationalization of Power Plants (ORGREZ), and a number of organizations and institutes of the agricultural sector, especially the Research Institute of Plant Production and the network of the Ekotoxa Co. Significant changes continue to be made in the network of stations. Of those that occurred in 1993, the most important included termination of operations of the older system and initiation of the innovated automated air pollution monitoring (AIM) in the network of CHMI. Since 1996, data from German side of “Black Triangle”, and since 1997, data from Polish side as well have been stored in the ISKO database and presented in the Tabular Survey.

This Tabular Survey is the result of summary processing of air pollution data systematically stored over the given calendar year. It is intended primarily to give a timely objective publication of measured air pollution data from the above mentioned monitoring networks. The process of verification of the credibility of the measured data plays an important role in the annual processing and is an inseparable part of the preparation of the Tabular Survey.

Since 1993, the Tabular Survey has consisted of both a printed part – the summary annual survey – and also a detailed part consisting of daily information. The summary part presents a number of air pollution measurements from specialized air pollution networks. Notably, since 1994, the Tabular Survey has provided information on contents of heavy metals in suspended particulate matter. Further, the Tabular Survey has become a medium for the publication of data on the chemical composition of precipitation. Since 1994, the air pollution database has been extended to include information on volatile organic compounds in the air. Since 1995, the supplementary meteorological data have been involved and since 1997 systematic monitoring of persistent organic compounds and automatic monitoring of aromatic hydrocarbons in the air have become a part of air pollution database.

The way of presentation of the Tabular Survey has been changed.. The printed part contains the commentary and basic information on the measuring sites and the summary overviews of limit values exceedences according to the Regulation of the Government of the Czech Republic 350/2002 Coll. setting the air pollution limit values and conditions and the way of air quality monitoring, assessment, evaluation and management. Other overviews incl. the detailed overview of daily averages at the stations are presented on the attached CD. The complete Tabular Survey is publicly accessible at <http://www.chmi.cz>.

More extensive assessment, especially in the framework of territories, is contained in the Graphic Yearbook, whose preparation is bound to the tabular treatment.

The requirements of accuracy in the contents and formal aspects and completeness of the Tabular Survey and the requirement that the information be published as soon as possible lead to a certain conflict of conditions in the preparation of this Survey and each published edition thus constitutes a compromise between these two requirements. The readiness with which the Tabular Survey can be published is determined primarily by the deadline for completion of the annual input of data into the database, its assembling, verification and correction. In spite of gradual rationalization of data collection, based on more thorough utilization of computer technology in the collection, accumulation and verification of data at the contributing station, practice so far, especially in the manual measuring network of contributing organizations, does not permit completion of data input from the previous year, along with assembling and correction, sooner than the end of April of a given year. Statistically based database applications to find significant errors in extensive sets of measured values have become a standard part of the preparation since 1994. The utilization of these procedures prior to the actual data processing is essential, but once again prolongs the period required for the final processing.

In 2002 new Clean Air Act on air quality protection and amendment of some acts (86/2002 Coll.) and the Regulation 350/2002 of the Government of the Czech Republic, setting the air pollution limit values and conditions and the way of air quality monitoring, assessment, evaluation and management, came into force. The presentation of the measured and calculated data (aggregated data) in this Tabular Survey fully meets the requirements of this legislation.

In conclusion, it is necessary to point out that this publication, and especially the database on which it is founded, were created as a consequence of a vast amount of work on the part of a great many individuals, employees of the institute branches, laboratories of the Air Quality Protection Division of the CHMI and of cooperating organizations. The actual preparation of the Tabular Survey is the result of cooperative work by the group of authors from the Air Quality Information System Department and employees of the IDEA-ENVI Co. Ltd.

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