

Spatial interpolation techniques in climatology and meteorology

Interpolation plays a growing role in the meteorology and climatology. Reconstruction of meteorological fields, developed data quality control procedures, and gridded databases require interpolation methods. The increasing needs indicate two directions for development. From one side, the diverse use of interpolation demands more accurate and complex methods, and from the other side, the common everyday's application has a request of simple useable software, usually as an option of free or commercial software. To overbridge this situation, a COST Action was implemented (COST 719: The Use of Geographic Information System in Climatology and Meteorology, end date 2006). The first Conference on the Spatial Interpolation Techniques in Climatology and Meteorology was organized in the frame of this Action. The proceedings were published by the COST Office.

Since there, several international projects deal with interpolation problems, at least partly. The request was arisen for an open meeting to overview the developments in the interpolation techniques. Therefore, the Hungarian Meteorological Service organized the conference second time in 2009.

The participants of the conference agreed, that the presentations could have a possibility to be published in a special issue of the quarterly journal of the Hungarian Meteorological Service, additionally to the abstract volume distributed widely among the other scientists working on the field of interpolation methods.

Finally, eight articles were gathered, and accepted for publication, which are covering wide range of topics on methodological issue, interpolation processes in international data bases, data quality control, applied research like hydrology, gridded data bases, interpolation in climate projections. These papers give about one-fourth of the conference presentations.

We strongly believe, that similar workshops and conferences are needed to avoid the misuse of interpolation method, understand and follow the development of interpolation methods, give new ideas for further scientific developments, involve new applied areas, and show new practices. Dissemination of best practices has benefit not only for the adopting, but the donor parties as well, they are for the common use and development.

Therefore, we are extremely grateful to the Editor-in-Chief of IDŐJÁRÁS supporting the progress on the field of interpolation, thank to the authors of the articles for their high scientific level work, and also to the reviewers supporting the improvement of papers with their critical comments and recommendations keeping the high standards of the journal. We have to underline the hard work of the Executive Editor of the journal, the present volume could not be published without it. Therefore, we express our thanks together with the authors of the papers for that.

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