

Editorial

This issue (103, July-December 2021) of the *Revista Cartográfica*, is a number focused on the quality of geospatial data. The PAIGH, through its Commissions, especially that of Cartography, has always shown its concern for this subject and has supported the development of norms, standards, guides, and technical assistance projects for this purpose. Today, with this special issue, a step of progress has been made in this path, we have offered to scientists and technicians the opportunity to present their works and the latest advances on the subject. This reinforces the PAIGH's commitment to quality and, especially, to data quality.

Cartographers and technicians who have used maps were always aware of the imperfections and errors contained by the cartography, but it was not until the middle of the last century that the quality of cartography began to be discussed in a more scientific and organized way. In the last third of the last century, with the application of "new technologies" (Geographic Information Systems, Remote Sensing, etc.) and, already in our century, with the arrival of Spatial Data Infrastructures, the data quality is an increasingly evident requirement and a prerequisite for interoperability (positional, semantic, etc.) between data sets. Since its inception, geospatial data quality has been a central sub-discipline of Geographic Information Sciences, and has been of interest to the scientific community, academia, government agencies (e.g. PAIGH) and, more recently, for the industry.

The geospatial data quality has developed to date along the lines offered by the classical perspective established by pioneering contributions such as that of Moellering (1987), Gupitill & Morrison (1995) and that still exist in international standards such as ISO 19157: 2013. Therefore, there is a solid conceptual framework and many years of application, which allows us to know both its strengths and weaknesses. In this sense, one of the main strengths of the framework is its very existence as a specific framework, since there are no other frameworks for other data types. However, this strength becomes a weakness if it is not able to evolve to incorporate new data typologies (e.g., BIM data, linked data, metadata, statistical data, volunteer generated data, IoT data, social network data, etc.) and become more generic and comprehensive to satisfy an increasingly datafication of the world, where data from other fields (e.g., statistics, IoT) have now an explicit "geo" component. Another important weakness of this framework is that it is almost exclusively focused on a producer perspective, forgetting about suitability for use. In addition, it presents notable limitations for its implementation at the level of instances and for the assurance of traceability and quality derivation in integration of different data sources. Therefore, geospatial data quality must be understood today in a much more open way than what has been considered, with a speculative perspective on its current problems and limitations and, in this sense, the call for works was opened for this special issue of the *Revista Cartográfica*.

This issue presents works of a very diverse nature, offering a varied and broad perspective, ranging from statistical techniques for the estimation and control of data quality, control methods applied to toponymy, to the development of quality control services, through the data quality assessment in various fields (e.g., data on damage to buildings in emergency maps). We consider that today we offer a fairly approximate view of topics of interest, advances, etc., and that, as a factor common, there is a special interest in applications (specific cases, tools, etc.). This fills us with satisfaction since it indicates that the topic of quality is leaving the producer's perspective and getting closer and closer to the user, their uses and needs. This will make it stronger and more necessary and, at the same time, more understandable and useful; and this issue provides a small step on this path. All of which satisfies us as a Guest Editor.

Finally, and to conclude, I would like to place on record my gratitude: to the PAIGH, and especially to the *Revista Cartográfica* and the Cartography Commission for supporting this initiative; also to the Editor, Dr. M^a Ester Gonzalez, for her support, diligence and professionalism; and, of course, to all the who have been encouraged to present and review papers, without which this reality would not have been possible.

Francisco Javier Ariza-López
Guest Editor

Bibliography

- Guptill, S.C. & Morrison, J. L. (1995). *Elements of Spatial Data Quality*. Pergamon Press
- Moellering, H. (1987). *A draft proposed standard for digital cartographic data*. National Committee for Digital Cartographic Data Standards.
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