CHILEAN JOURNAL OF STATISTICS

Edited by Víctor Leiva

Volume 10 Number 1 April 2019 ISSN: 0718-7912 (print) ISSN: 0718-7920 (online) Published by the Chilean Statistical Society



<u>Tenth Volume – First Number</u> Editorial Paper

"Chilean Journal of Statistics" Ten years after its launch: A message from the new Editor-in-Chief

Welcome to the first issue of the tenth volume of the Chilean Journal of Statistics (ChJS). Today, April 29, 2019, the ChJS celebrates ten years of life and begins leaving its childhood, walking quickly to become a teenager. I remember perfectly well when the baby ChJS was born. I was present at that birth and I accompanied the baby during its first three years of life as its Executive Editor. The first volume of the ChJS had two issues, published in April and September 2010, which paid tribute to Dr. Pilar Iglesias, a beloved Chilean statistician. Pilar was the main motivation for the Chilean editorial board to launch this journal, which has as its ancestor the Revista de la Sociedad Chilena de Estadística, published in Spanish from 1984 to 2000. I would like to name its dearest uncles who helped the ChJS to survive. Among them are Marcia Branco and Rosangela Loschi from Brazil, Eduardo Gutiérrez-Peña and Manuel Mendoza from Mexico, Marc Genton from Switzerland, as well as Guido del Pino, Manuel Galea, Ronny Vallejos, and Reinaldo Arellano from Chile. I would like to take this opportunity to congratulate Reinaldo, who has honored the Chilean statistical community as the recent winner of the "Mahalanobis Prize 2019" awarded by the International Statistical Institute. Obviously, the ChJS would be nothing without the valuable contributions of renowned international researchers who have honored us by publishing their interesting works in our journal; all of these papers are available for free at http://chjs.mat.utfsm.cl/issues.html. We also thank all the anonymous reviewers who have contributed to keeping the top quality standards of the ChJS.

Although the ChJS is published by the Chilean Statistical Society (www.soche.cl) and belongs to the Chilean statistical community, our journal can be recognized as an international publication since its editorial board is composed of colleagues from practically the five continents. Our Editors are from Argentina, Australia, Austria, Bulgaria, Brazil, Canada, Chile, China, Colombia, Greece, India, Italy, Mexico, Netherlands, Peru, Portugal, Romania, Saudi Arabia, Spain, Switzerland, UK, and US. Our current Editorial Board, presented at http://chjs.mat.utfsm.cl/board.html, is a mixture of experienced editors and talented young researchers, the latter mainly from Chile and Brazil, who with great interest and enthusiasm have honored us by accepting to be part of the ChJS. They are having their first editorial experiences, although they all have extensive experience as researchers as well as reviewers for prestigious international journals.

I would also like to thank the members of the Directory of the Chilean Statistical Society (https://soche.cl/quienes-somos) headed by its President, Dr. Mauricio Castro, for the trust placed in me to be the new Editor-in-Chief of the ChJS. They can rest assured that, just as I did in the past as its Executive Editor, I will make my best effort to bring the ChJS to the highest standards of professionalism, impartiality and quality that all scientific journals must strive for.

In addition to this presentation note, the first issue of the tenth volume of the ChJS comprises five papers. Jhonnata B. de Carvalho, Murilo C. Silva, George F. von Borries, André L.S. de Pinho, and Ricardo F. von Borries, from Brazil and US, combined Fourier analysis and support vector machines to conduct an interesting work for classification of electroencephalograms, a relevant current theme related to data science. Luis Benites, Rocío Maehara, Víctor H. Lachos, and Heleno Bolfarine, from Peru, US and Brazil, proposed a regression model based on a finite mixture of skew heavy-tailed distributions, a widely studied topic by Brazilian and Chilean researchers within the context of statistical modeling. Ednário Mendonça, Michelli Barros, and Joelson Campos, from Brazil, derived goodness-of-fit tests based on the Kullback-Leibler information for the Birnbaum-Saunders model, a distribution which has had some of its more important developments in Chile and Brazil. Nathalia L. Chaves, Caio L.N. Azevedo, Filidor Vilca, and Juvêncio S. Nobre, from Brazil and Chile, introduced a new distribution to describe data with positive support and asymmetry by combining the Birnbaum-Saunders and centered skew-normal models, providing different statistical and mathematical features for this new model. Finally, our fifth paper is presented by Gauss M. Cordeiro, M. Mansoor, and Serge B. Provost, from Brazil, Pakistan and Canada, who derived their work in the setting of distribution theory, an area of wide development around the world, connecting the Harris and Lindley distributions to perform an interesting study which was applied to the modeling of hydrological data.

As a final comment, I would like the Chilean statistical community, as well as the international statistical community, our prestigious Editorial Board and past authors to champion ChJS as an emerging international journal and to encourage others to submit new works to the ChJS. Currently, we are indexed by several international systems, including the Institute for Scientific Information (ISI) Web of Science in the Emerging Sources Citation Index. The ChJS faces important challenges for the near future, such as reaching the Science Citation Index and looking for partnerships with prestigious publishers, societies and associations. However, just as with statistics itself, our success will depend on a team effort. Each one of us is important in meeting these challenges. We need you all.

Víctor Leiva Editor-in-Chief Chilean Journal of Statistics http://www.victorleiva.cl

INFORMATION FOR AUTHORS

The editorial board of the Chilean Journal of Statistics (ChJS) is seeking papers, which will be refereed. We encourage the authors to submit a PDF electronic version of the manuscript in a free format to Víctor Leiva, Editor-in-Chief of the ChJS (E-mail: chilean.journal.of.statistics@gmail.com). Submitted manuscripts must be written in English and contain the name and affiliation of each author followed by a leading abstract and keywords. The authors must include a "cover letter" presenting their manuscript and mentioning: "We confirm that this manuscript has been read and approved by all named authors. In addition, we declare that the manuscript is original and it is not being published or submitted for publication elsewhere".

PREPARATION OF ACCEPTED MANUSCRIPTS

Manuscripts accepted in the ChJS must be prepared in Latex using the ChJS format. The Latex template and ChJS class files for preparation of accepted manuscripts are available at http://chjs.mat.utfsm.cl/files/ChJS.zip. Such as its submitted version, manuscripts accepted in the ChJS must be written in English and contain the name and affiliation of each author, followed by a leading abstract and keywords, but now mathematics subject classification (primary and secondary) are required. AMS classification is available at http://www.ams.org/mathscinet/msc/. Sections must be numbered 1, 2, etc., where Section 1 is the introduction part. References must be collected at the end of the manuscript in alphabetical order as in the following examples:

Arellano-Valle, R., (1994). Elliptical Distributions: Properties, Inference and Applications in Regression Models. Unpublished Ph.D. Thesis. Department of Statistics, University of São Paulo, Brazil.

Cook, R.D., (1997). Local influence. In Kotz, S., Read, C.B. and Banks, D.L. (Eds.), Encyclopedia of Statistical Sciences, Update, Vol. 1, Wiley, New York, pp. 380-385.

Rukhin, A.L., (2009). Identities for negative moments of quadratic forms in normal variables. Statistics and Probability Letters 79, 1004-1007.

Stein, M.L., (1999). Statistical Interpolation of Spatial Data: Some Theory for Kriging. Springer, New York.

Tsay, R.S., Pena, D., and Pankratz, A.E., (2000). Outliers in multivariate time series. Biometrika 87, 789-804.

References in the text must be given by the author's name and year of publication, e.g., Gelfand and Smith (1990). In the case of more than two authors, the citation must be written as Tsay et al. (2000).

Copyright

Authors who publish their articles in the ChJS automatically transfer their copyright to the Chilean Statistical Society. This enables full copyright protection and wide dissemination of the articles and the journal in any format. The ChJS grants permission to use figures, tables and brief extracts from its collection of articles in scientific and educational works, in which case the source that provides these issues (Chilean Journal of Statistics) must be clearly acknowledged.