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# Behavior Analysis of Atmospheric Components and Meteorological Variables Applying Data Mining Association Techniques

Orellana M.<sup>a</sup> ✉️, Salto J.<sup>a</sup> ✉️, Cedillo P.<sup>a, b</sup> ✉️

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<sup>a</sup> Universidad del Azuay, Av. 24 de Mayo 7-77, Cuenca, Ecuador

<sup>b</sup> Universidad de Cuenca, Av. 12 de Abril, Cuenca, Ecuador

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## Abstract

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## Abstract

The relationship between atmospheric components and meteorological variables is essential to assess the air quality and thus avoid citizens' health risks. However, finding an association relationship between those factors could be complicated due to the number of categorization methods that can be used (e.g., frequency, size, binning). Therefore, the objective of this study is to propose a methodology that prepares data through a discretization process and then applies association techniques of the

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possible combinations between the analyzed variables. The results show that the method used is effective in locating patterns, which are useful for the environmental manager to find knowledge. © 2021, The Author(s), under exclusive license to Springer Nature Switzerland AG.


#### Author keywords

Association rules; Atmospheric pollutants; Data mining; Discretization; Meteorological variables

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