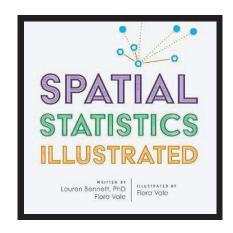
Spatial Statistics Illustrated by Bennett and Vale (2023) is intended for a broad audience from those beginning to learn about spatial statistics to the seasoned spatial analyst who wants to better explain spatial statistics and their results to peers and stakeholders. The authors begin with a review of statistical fundamentals and expand with a description of how spatial statistics build on the fundamentals but are different. Further, each statistical concept is described and uses specific real-world examples making the concept more accessible. For example, the description of a standard deviation ellipse may leave a reader asking why/how would this be used? Which the real-world example explains: to understand the direction of an invasive species spread. For more complex concepts that have multiple methods such as density-based clustering, the authors go the extra mile by summarizing and comparing the methods and providing examples of when each method may be preferred. I especially appreciated the reminder that statistical analysis is an iterative process and there is not one "right" method.

For many, the mere mention of statistics is intimidating, never mind understanding when to use which statistic or even understanding what the output means. Expand this to "spatial statistics" and I often see glazed over expressions from students, the general population, as well as some peers. From the design choices to the presentation and illustrations of the concepts, this book obliterates the intimidation factor. Through the subconscious mind, at 165 pages and the 16.5 x 16.5 cm dimensions, (smaller than a mouse pad), the size whittles away at what some might consider a daunting subject. The illustrations are plentiful and enhance comprehension of the concepts. The color choices for the illustrations give the book a playful feel. This book also tackles some challenging statistical methods like spatiotemporal pattern mining, in the same fashion, grounded in fundamentals, explained with real-world examples, and beautifully illustrated. Finally, the scholarly references are a brilliant addition for those that want to dig a little deeper.



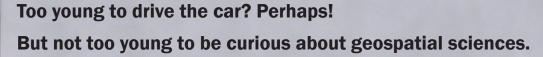
## **Spatial Statistics Illustrated**

Lauren Bennett and Flora Vale. Esri Press, Redlands, CA. 2023. 165 pp., illustrations. Paperback \$44.99. ISBN 9781589485716.

**Reviewed by** Kat Rocheford, PhD, Research Archaeologist, Department of Archaeology, Minnesota Historical Society, Saint Paul, Minnesota.

Bennet and Vale are experts in this field and have taught many courses on the subject. Their ability to apply to provide real-world examples, across disciplines, demonstrates their thorough understanding of the subject. Anyone that has attended one of these courses will recognize their style in this book.

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