

## Data Article

**Title:** A Nonparametric Approach to Early Warning Signs Using COVID-19 Data from South Africa

**Authors:** Claris Shoko<sup>1</sup>, Caston Sigauke<sup>2</sup>

### Affiliations:

<sup>1</sup>Department of Statistics, University of Botswana, Gaborone, Botswana  
[shokoc@ub.ac.bw](mailto:shokoc@ub.ac.bw)

<sup>2</sup>Department of Mathematical and Computational Sciences, University of Venda, South Africa.  
[caston.sigauke@univen.ac.za](mailto:caston.sigauke@univen.ac.za)

### Abstract

Rapid and often unexpected, punctuated shifts have characterised the spread of the COVID-19 pandemic. Identifying and predicting outbreaks during epidemics and pandemic events is crucial to developing and implementing effective mitigation measures by the public health sector. This study examines early-warning signals based on the metric and model-based approaches. The data were collected from <https://www.ourworldindata/coronavirus-source-data> . The data are stored in an Excel file.

### Specifications Table

Subject area	<i>Biostatistics</i>
More specific subject area	<i>Infectious disease modelling</i>
Type of data	<i>Excel file</i>
How data was acquired	<i>Provided and from the internet</i> <a href="https://www.ourworldindata/coronavirus-source-data">https://www.ourworldindata/coronavirus-source-data</a>
Data format	<i>Filtered and analysed.</i>
Experimental factors	<i>N/A</i>
Experimental features	<i>N/A</i>
Data source location	<a href="https://www.ourworldindata/coronavirus-source-data">https://www.ourworldindata/coronavirus-source-data</a> .
Data accessibility	<i>Data is hosted on GitHub</i> <a href="https://github.com/csigauke">https://github.com/csigauke</a>
Related research article	<i>The relevant research article is A Nonparametric Approach to Early Warning Signs Using COVID-19 Data from South Africa.</i>

### **Value of the Data**

- The ability to identify and predict outbreaks is crucial for effective public health mitigation during pandemics like COVID-19.
- This study explores early-warning signals using both metric-based and model-based approaches to detect outbreaks.

### **Data**

The data comprises the confirmed daily cases of COVID-19 for the period 6 March 2020 to 27 November 2022. The data are stored in an Excel file. The data were collected from <https://www.ourworldindata/coronavirus-source-data>

### **Experimental Design, Materials, and Methods**

Data used in the study is from  
t <https://www.ourworldindata/coronavirus-source-data>.

### **Acknowledgements**

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### **Funding sources**

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### **References**

COVID-19 pandemic cases in South Africa. <https://www.ourworldindata/coronavirus-source-data> (Accessed on 31 October 2023).