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Countries of impact: Botswana, Cameroon, Eswatini, Mozambique, Namibia, Nigeria, Rwanda, South Africa, Zimbabwe

IDRC CRDI

Canada

Global South AI4COVID Response Program

Predictive Modeling and Forecasting of COVID-19 Transmission in Africa using AI

(PI: Dr. Jude Kong)

Acknowledgement: Africa-Canada AI and data Innovation Consortium (ACADIC) leaders

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Plan

- Objectives

- Achievements

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Objectives

Objective 1

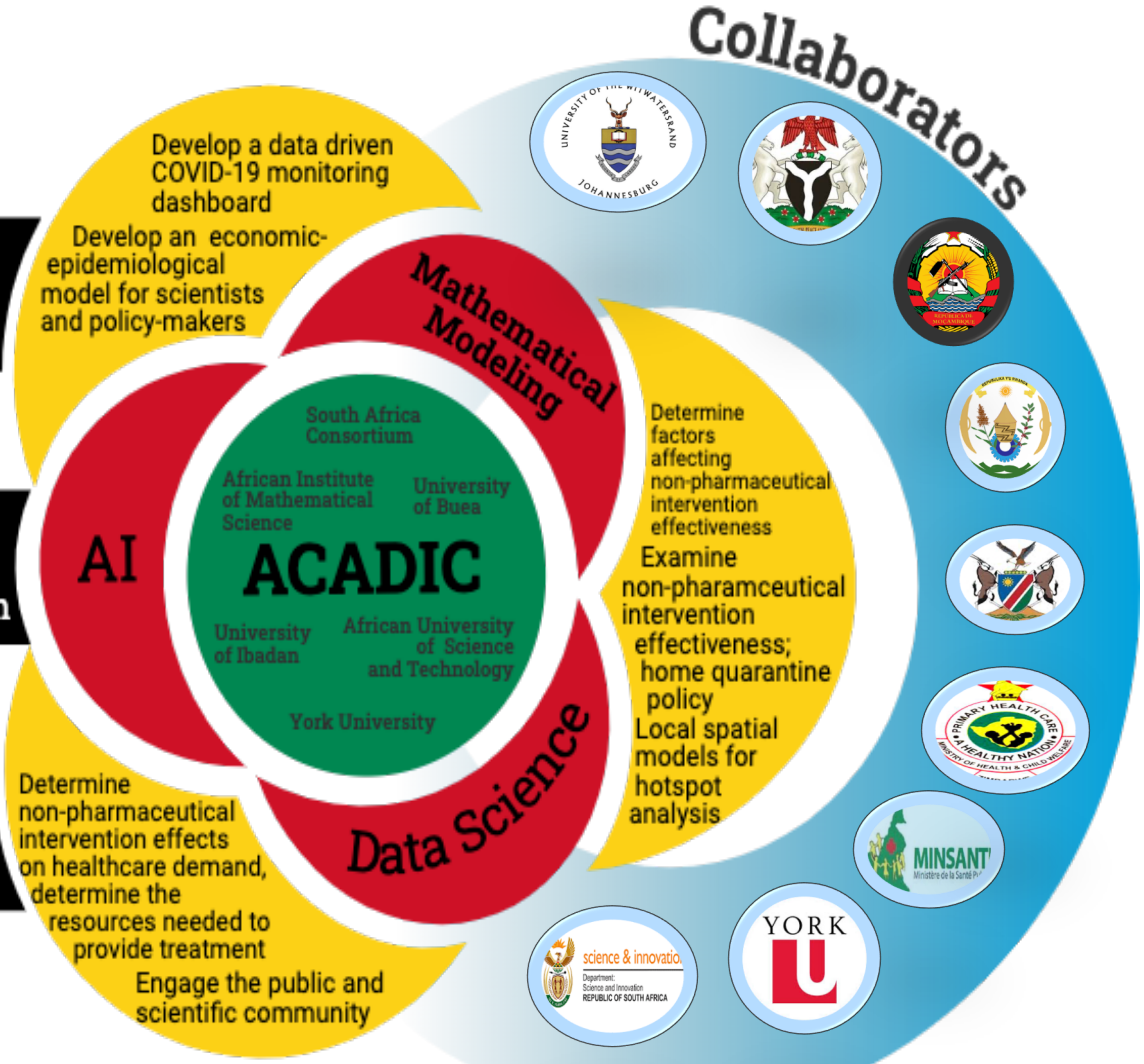
Aid policy makers in mitigating/surpressing outbreaks

Objective 2

Evaluate relative effectiveness and potential biases of non-pharmaceutical intervention

Objective 3

Support local communication strategies to address mis-information about prevention and treatment.



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Real-time delivery of reliable and comprehensive information to guide governmental strategic policies

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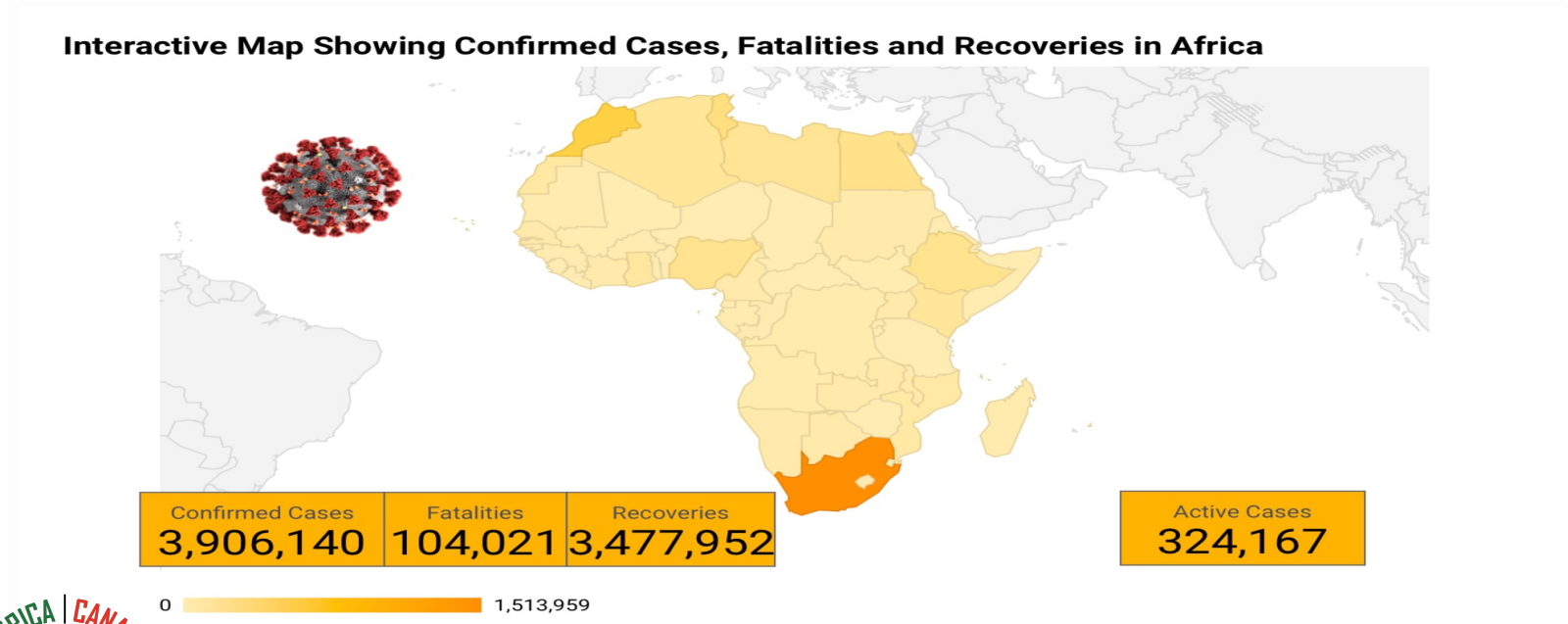
Comprehensive COVID-19 monitoring dashboard

External dashboards built cooperatively with African Universities:

Botswana Dashboard | Eswatini Dashboard | Mozambique Dashboard | Namibia Dashboard

Nigeria Dashboard | Zimbabwe Dashboard



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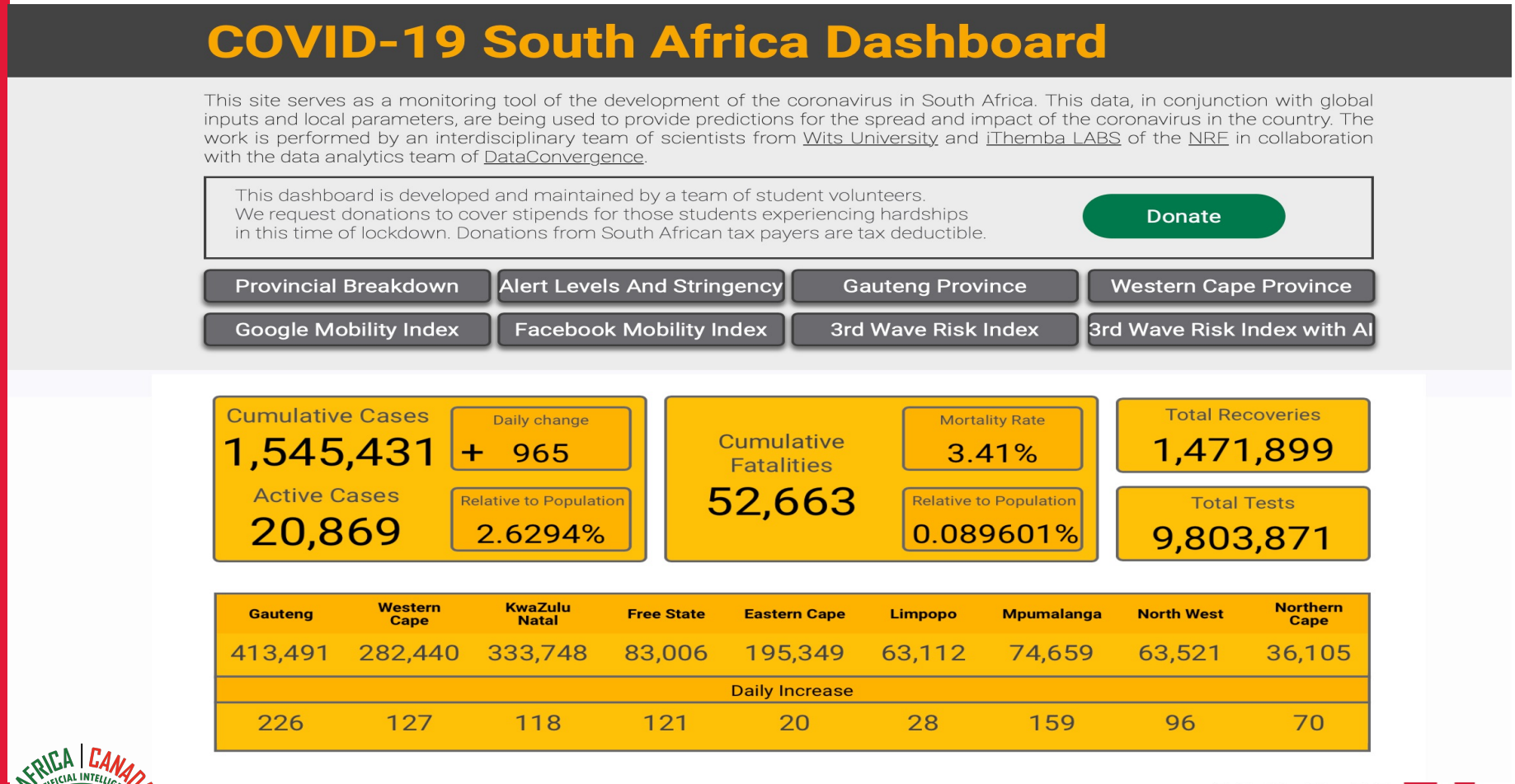
Visualizing locally relevant information to the public and policy makers



Visualizing locally relevant information to the public and policy makers: Alert Levels

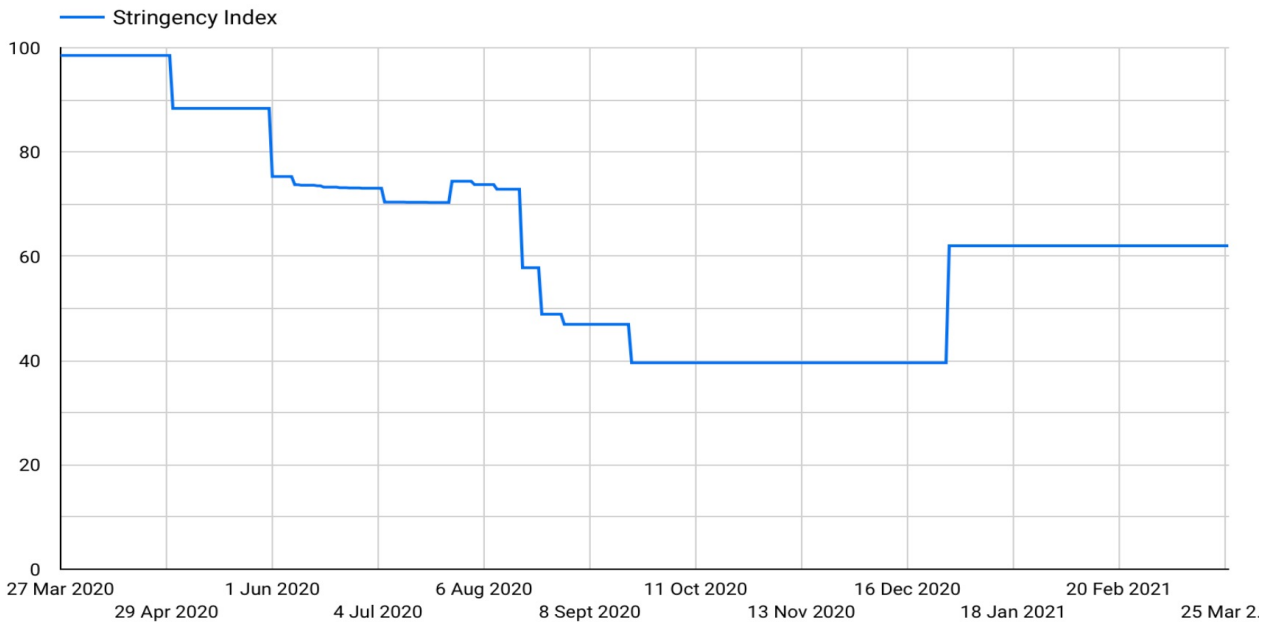
Time Series Graph of South African Stringency Index for a Specific Municipality

Select Municipality:

Municipality

Currently, all SA municipalities are following the same Stringency graph that can be seen below. If regulation changes and different municipalities have different alert levels, this will be incorporated to show the differences

Time Series Graph of South African Stringency Index



Please note: Future changes are based on announcements made by government and are subject to change. The date of future changes in alert level have not yet been announced.

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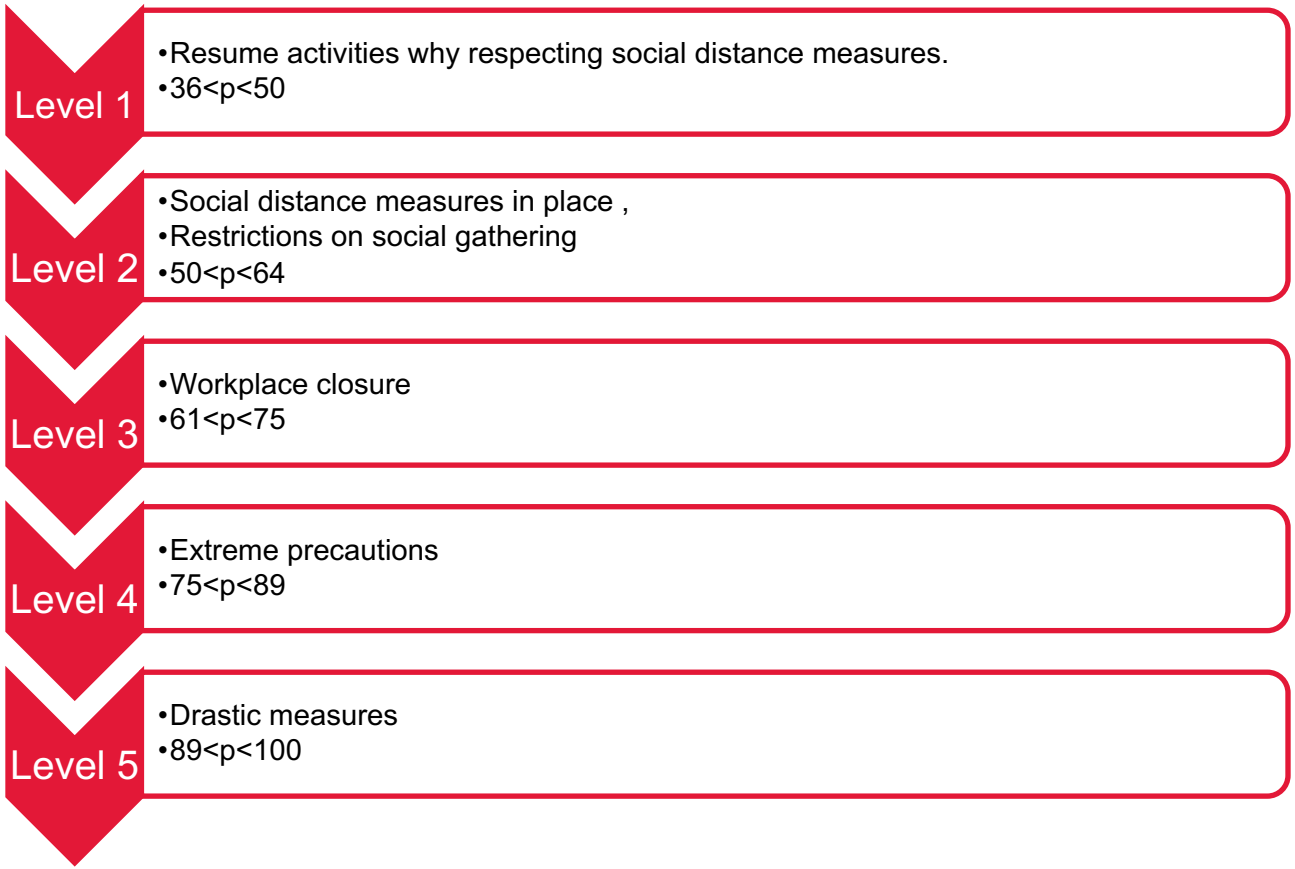
Visualizing locally relevant information to the public and policy makers: Alert Levels



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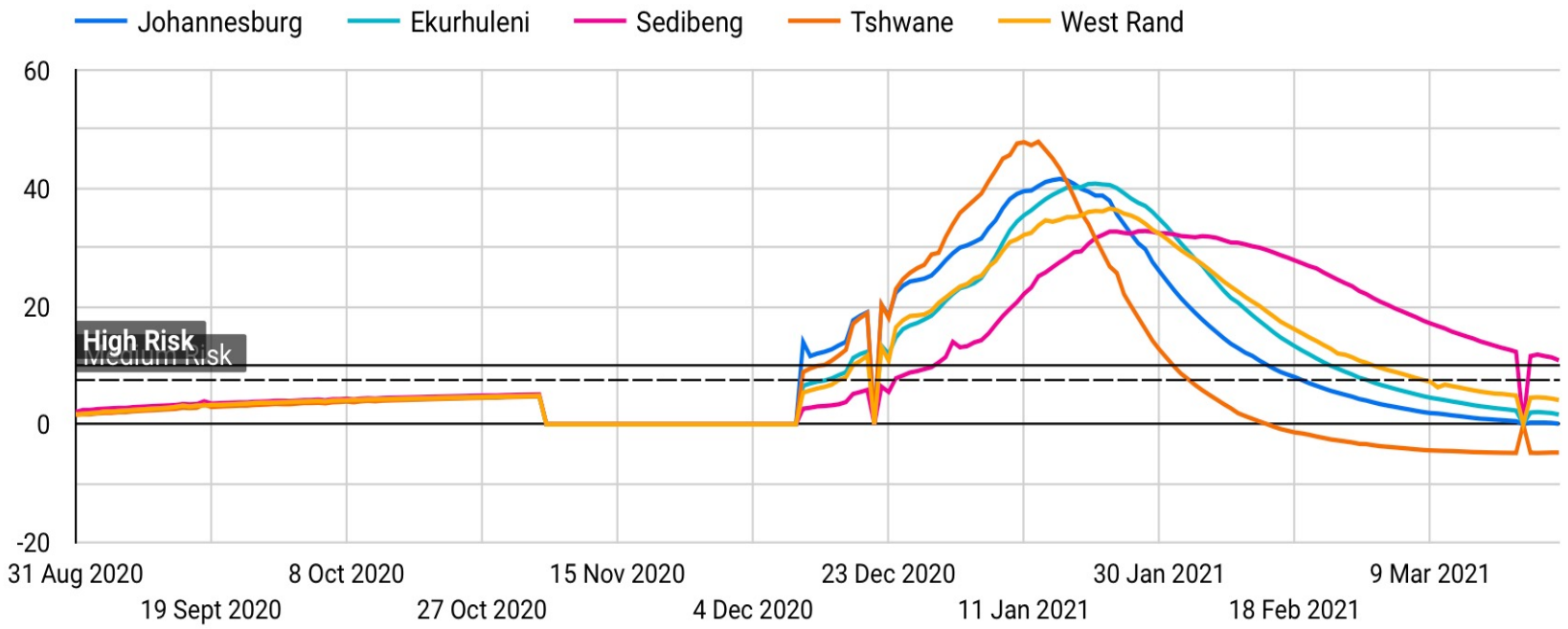
Risk Index for the 3rd Wave

Graph showing the 3rd wave risk index for 5 Districts in Gauteng

From the 05 November 2020 to 10 December 2020, there was no data available. These explains the gap in the graph.



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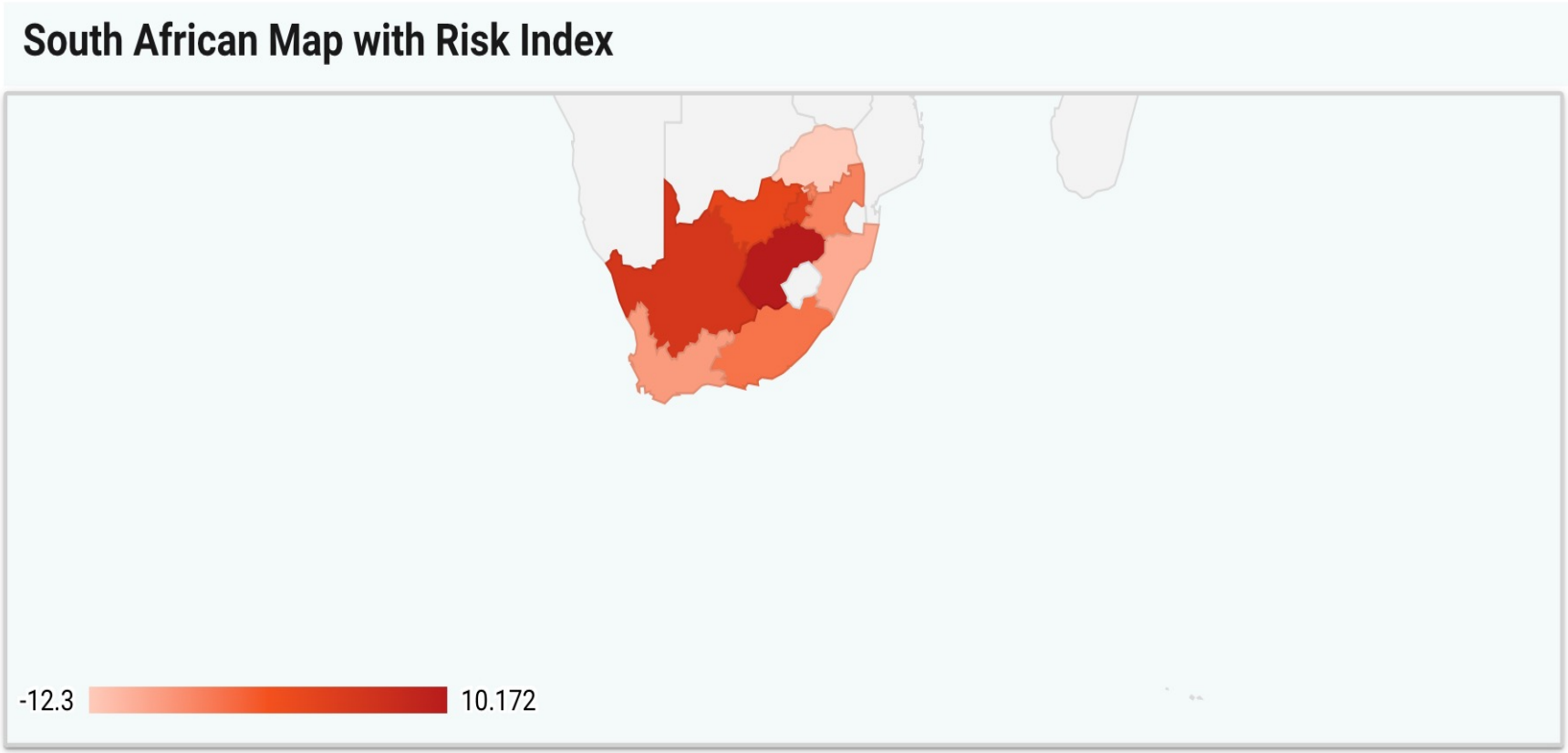
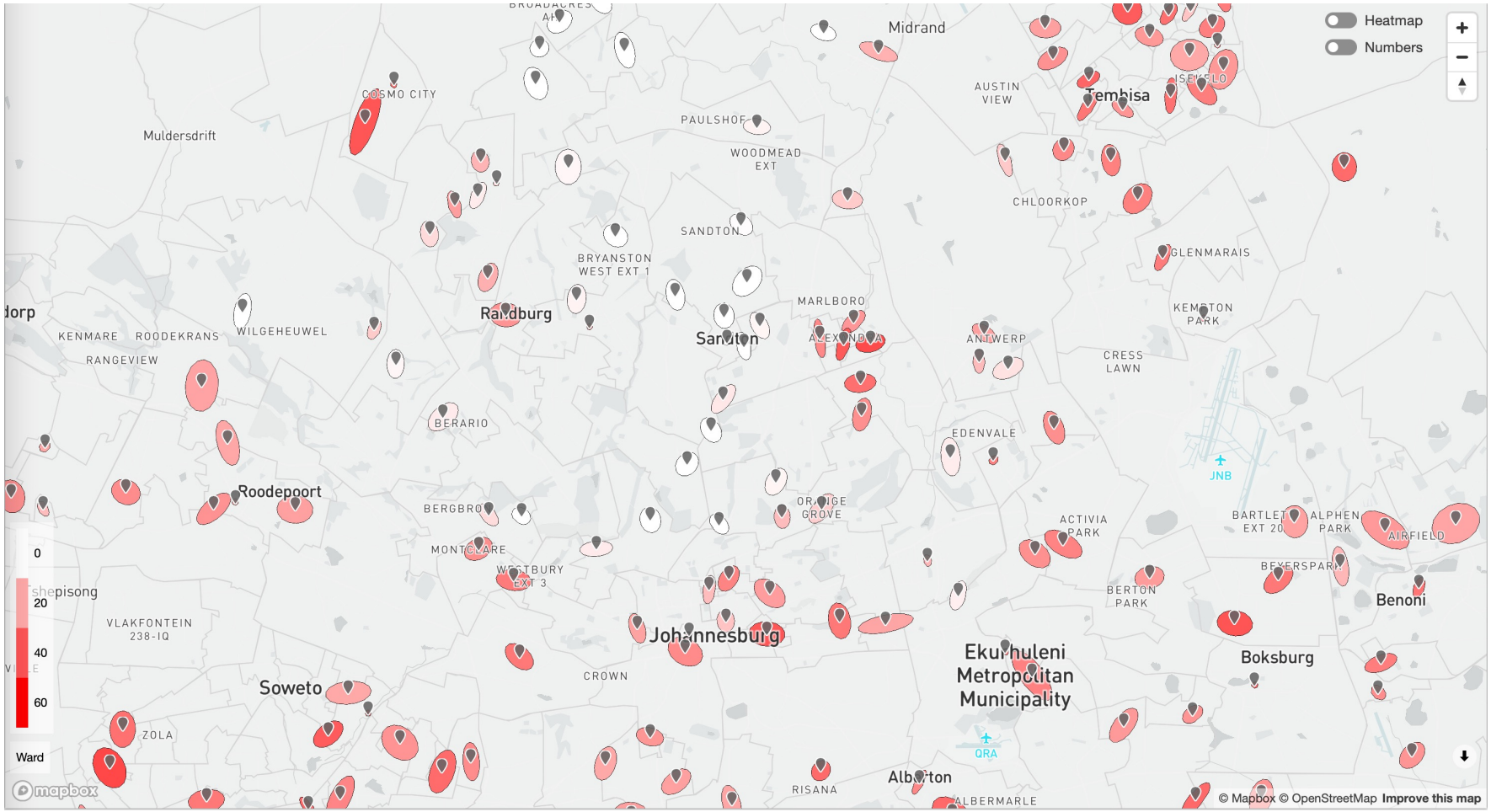
South Africa Risk Index for the 3rd Wave

Last Updated:
29 Mar 2021, 11:28



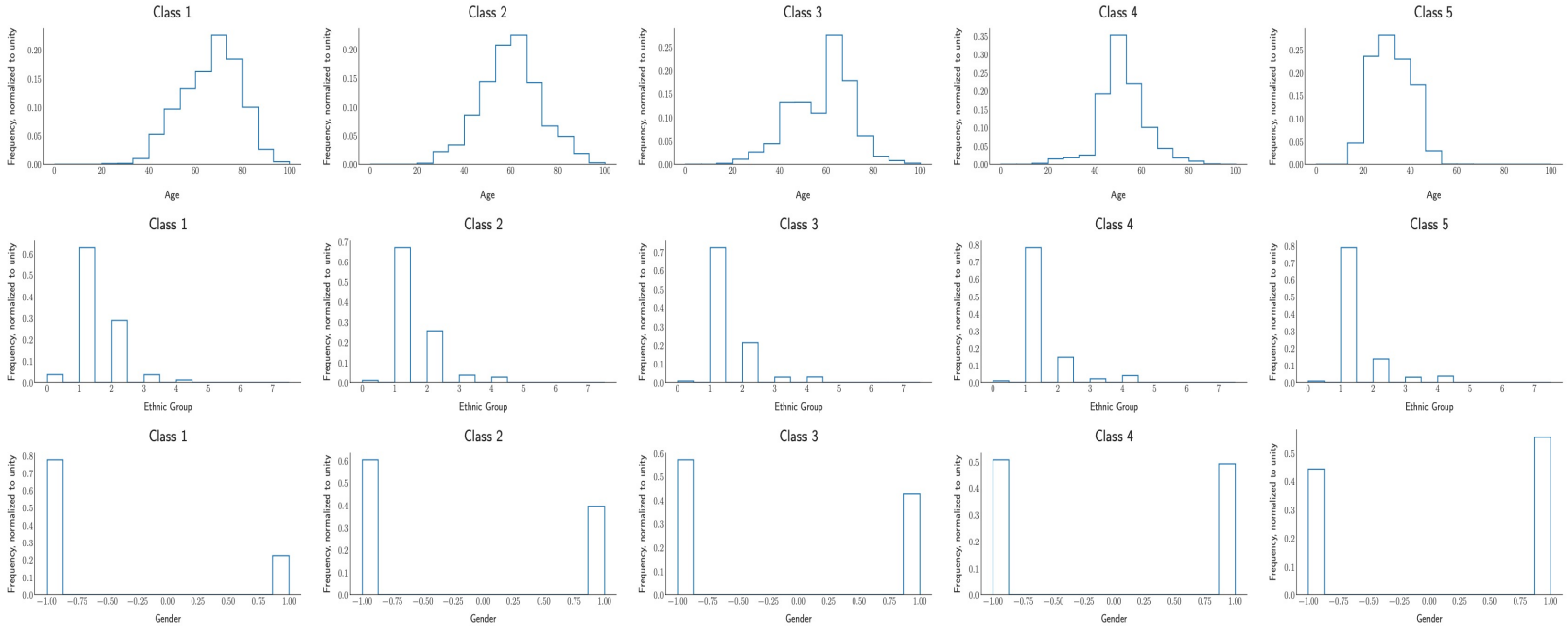
Picture displays geolocation and severity of hot-spots in Johannesburg



Vulnerabilities

Most severe

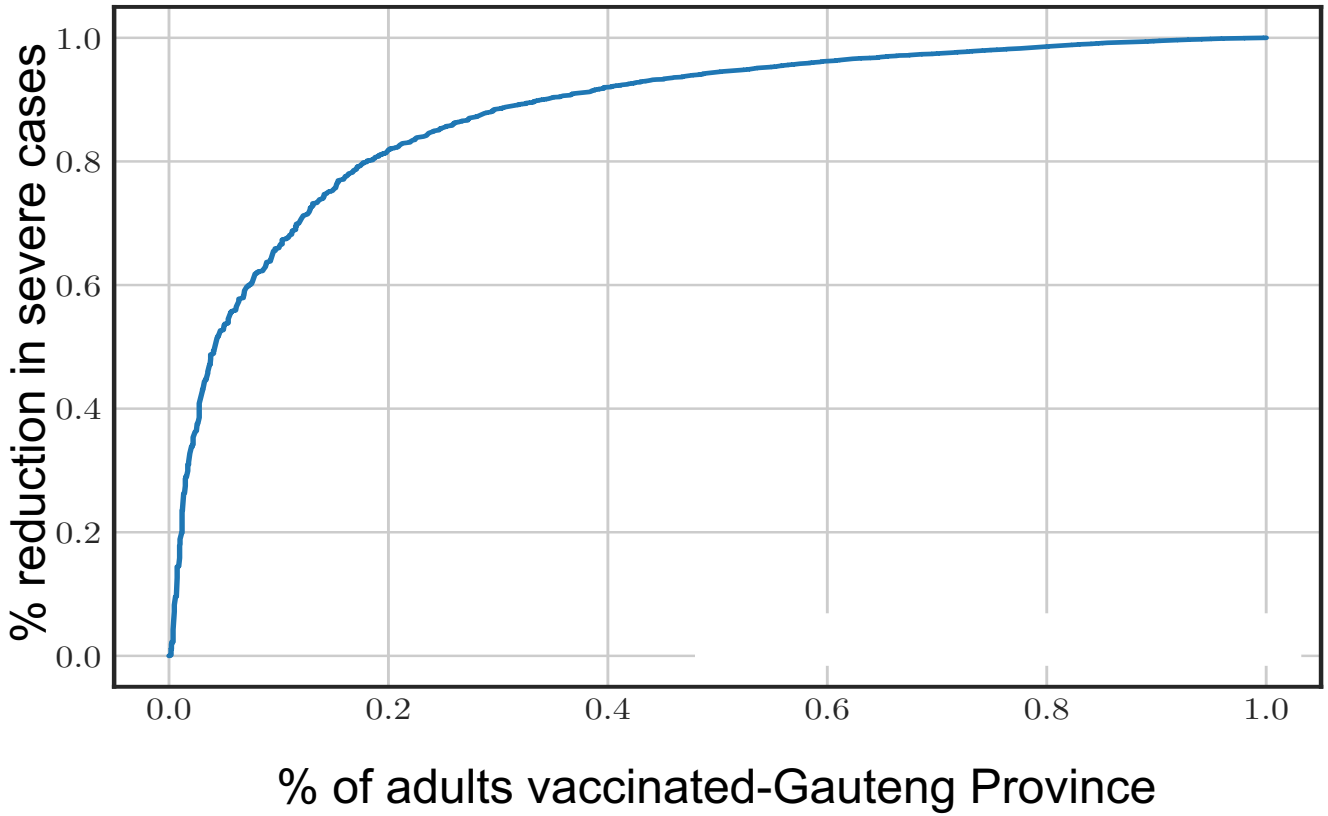
Less severe



Optimizing COVID-19 clinical public health and vaccination roll-out strategies in Africa

Risk group	Age (years)	Co-morbidities	Population over 18 (%)
1	>60	Hypertension, Diabetes, Cardiac Disease	3.8
2	50-60	Hypertension, Diabetes, Cardiac Disease	3.7
3	40-50	Hypertension, Diabetes, Cardiac Disease	3.7
4	>18	Any co-morbidity	18
5	>18	-	71

Optimizing COVID-19 clinical public health and vaccination roll-out strategies in Africa



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Addressing mis- and dis-Information


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Thank you!