Summary report prepared as part of the the manuscript
Projecting the end of the Zika virus epidemic in Latin America: a modelling analysis

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1 Introduction

Zika virus (ZIKV) emerged in Latin America and the Caribbean (LAC) region in 2013, and has had serious implications for population health in the region. In 2016, the World Health Organization declared the ZIKV outbreak a Public Health Emergency of International Concern following a cluster of associated neurological disorders and neonatal malformations. In 2017, Zika cases declined, but future incidence in LAC remains uncertain due to gaps in our understanding, considerable variation in surveillance and a lack of a comprehensive collation of data from affected countries. There is a clear need to support LAC countries to ZIKV in order to i) identify suitable control strategies and ii) identify geographically suitable sites for field studies. As part of the analysis presented in the manuscript *Projecting the end of the Zika virus epidemic in Latin America: a modelling analysis* we provide country reports for all countries included in the analysis. This document summarises the current data available for Guadeloupe, the information used to inform the modelling, and an example of the model simulations. The intension is to provide a more detailed analysis for stakeholders with interests in Guadeloupe. For some countries the analysis illustrated a good fit to the available data. In others the fit was not so good, and by providing these country reports we open the analysis up to question why this may have occurred. It is hoped that additional data, such as serological surveys will emerge in the next few months that can be used to either validate and further explain the observed patterns and predicted rates of infection.

2 Available data

The data for Guadeloupe (Figure 1) were extracted from the PAHO Weekly epidemiological record on the 26 June 2017. The weekly number of suspected cases were available in graph form, and were translated into Excel in order to be analysed. The data are plotted in Figure 2. Data are not currently available at a smaller geographical unit.

3 Modelling of Vectorial Capacity and Dynamics in Selected Cities

Figure 3 shows the estimated vectorial capacity within Guadeloupe.

4 Time series of cases and model fit from LAC analysis

The time series of cases for Guadeloupeand the model fit from the LAC analysis are shown in Figure 2. This figure is the same as those within the manuscript. Where relevant the distribution of cases across the modelled cities are also included. From the analysis we estimate that 9.3 (6, 16.9) % of
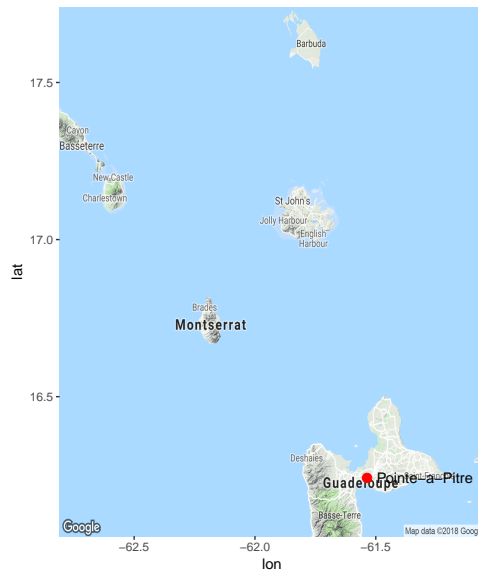
Figure 1: Map of Guadeloupe with the locations of cities included in simulations (where relevant).
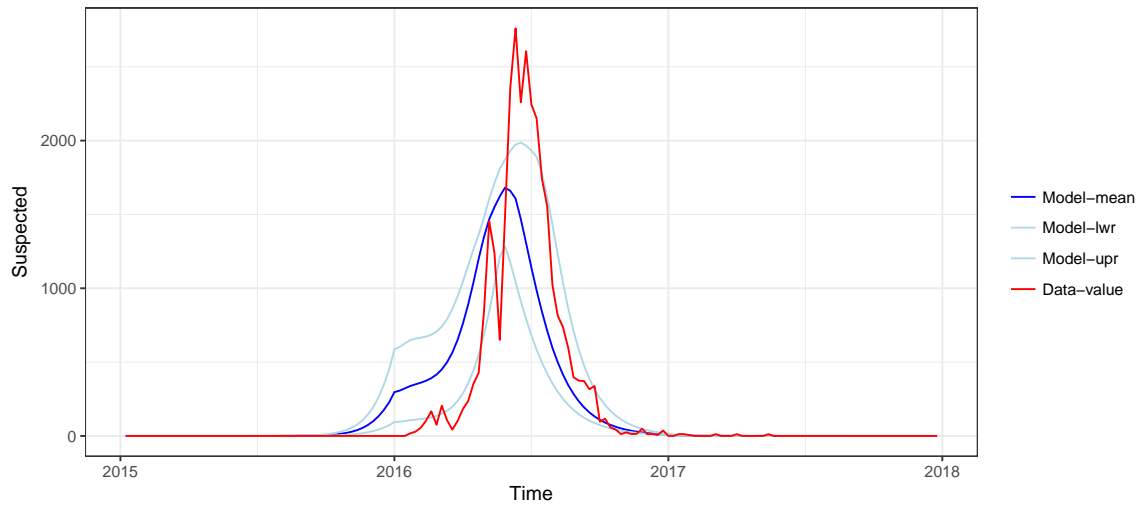

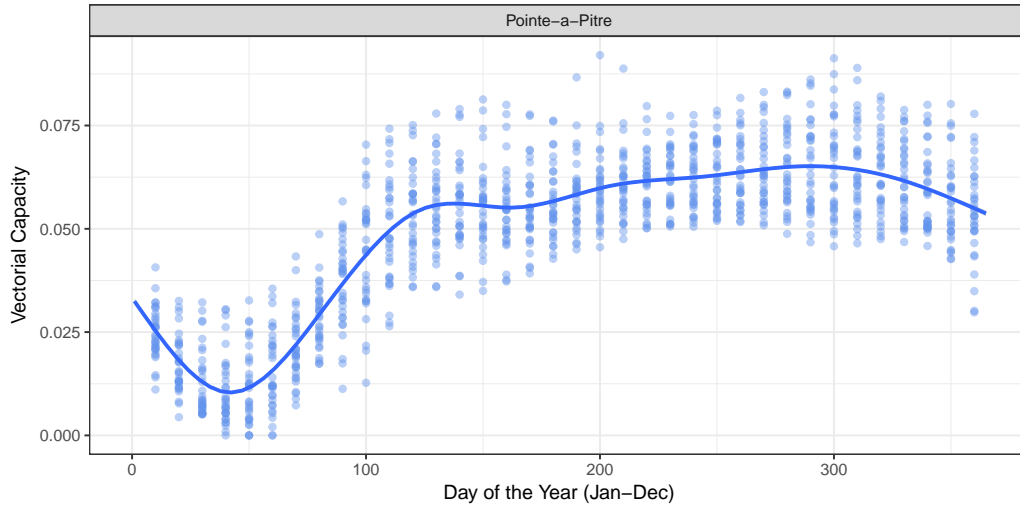Figure 2: Comparison of reported data and modelled number of cases witin Guadeloupe, 2015-2017.

Figure 3: Vectorial capacity of Guadeloupe.

infections resulted in an reported case. The model fit, measured using the Bayesian posterior check, indicated a good fit to the data.