



**VIVARIO**



# VIVA RIO'S BIOGRAPHY

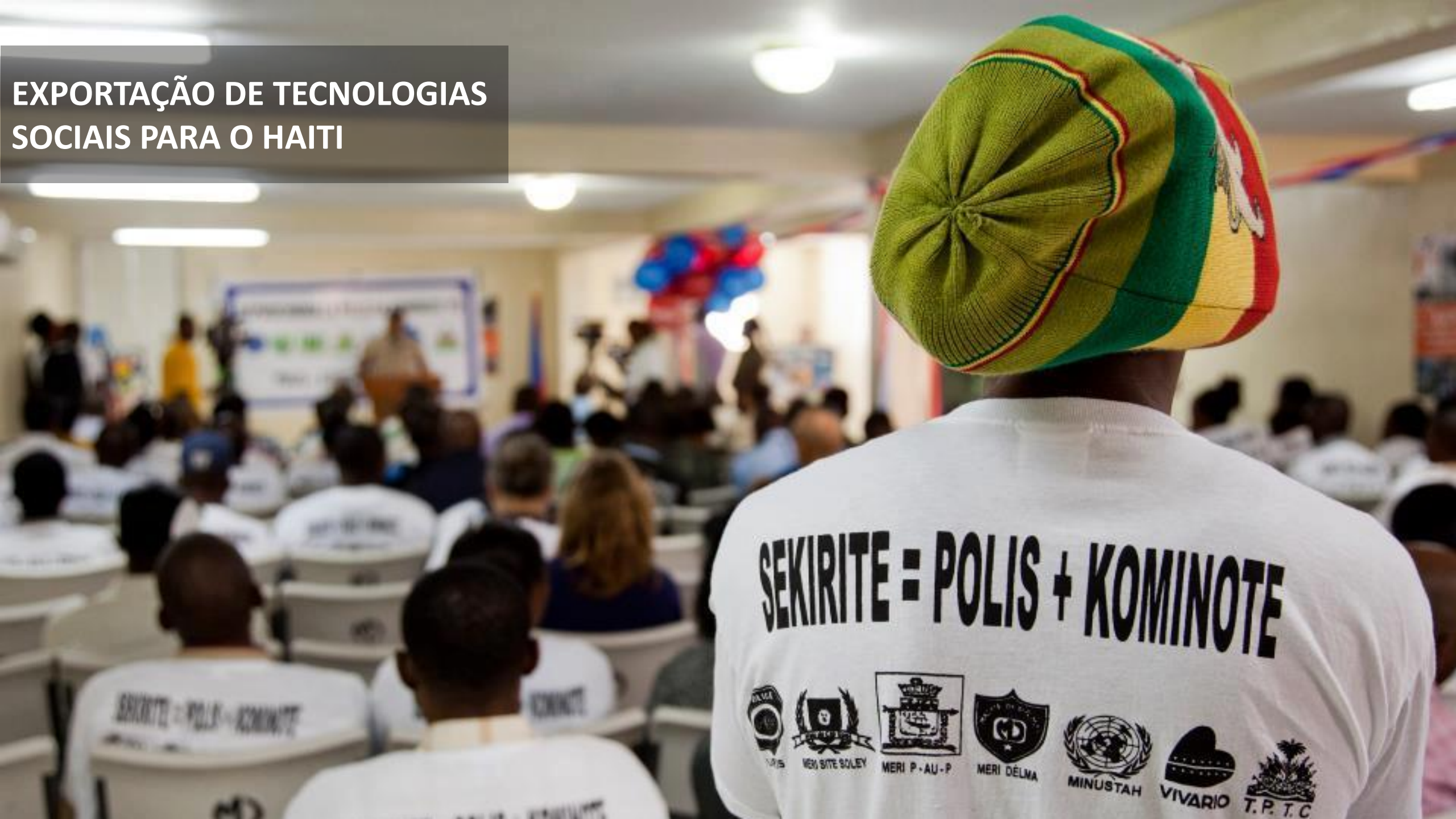
- Fundado em 1993 depois de uma crescente onda de violência;
- Expande-se como um movimento social (1993/2005);
- Torna-se um “laboratório de inovação social”;
- Estabelece-se como provedor de serviços de saúde especializado em territórios vulneráveis (2009);
- Conta com mais de 9300 funcionários, atendendo diretamente mais de 2 milhões de pessoas no Rio de Janeiro;
- **Desafio Atual: tornar-se um hub de inovação em políticas públicas.**

A large crowd of people at night, many holding lit candles, creating a sea of light. The scene is captured from an elevated perspective. The text 'BASTA!' is overlaid in the top left corner in a bold, yellow, sans-serif font. The crowd is dense, and the overall atmosphere is one of a significant public gathering or protest.

**BASTA!**

**EU QUERO PAZ!**

# EXPORTAÇÃO DE TECNOLOGIAS SOCIAIS PARA O HAITI



**SEKIRITE = POLIS + KOMINOTE**



POTENCIAL DE  
ESCALA

AGENTE COMUNITÁRIO  
DE SAÚDE

3

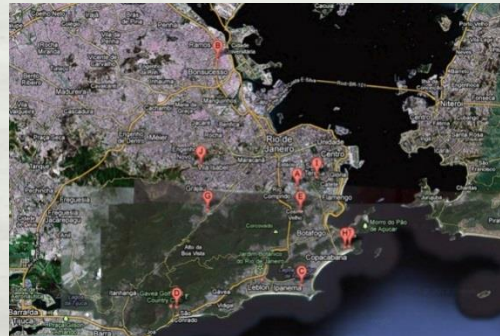


# TERRITORIAL DEVELOPMENT

Global



Local



Territorial







**Singularity**  
UNIVERSITY



 U B E R

Taxi Fleets

 skype™

Long Distance

 amazon.com

Book Stores

 Google™


Research/Libraries

 airbnb™

Hotel Chains

 craigslist

Classifieds



# **ESTUDO DE CASO: AIME**

# PARCEIRIA COM SU

TESTE DE CAMPO DE INNOVAÇÕES COM POTENCIAL DE IMPACTO EM LARGA ESCALA

PARCEIRIAS E COLABORAÇÕES QUE DÃO SUPORTE AO APERFEÇOAMENTO DO TRABALHO REALIZADO NO CAMPO





NEWS

NEWS  
NEWS

ЛЮ



**2.5**  
**BILHÕES**  
**EM RISCO**

**400M** Casos  
de dengue  
**ANUAIS**

**1.3M** Casos de  
Zika  
Até o  
Momento

**DENGUE & ZIKA NO MUNDO**

Image Source: HealthMap



**\$1.3 B**

**\$440 M**  
Média  
Mundial

# IMPACTO ECONÔMICO



# São Paulo

## 630.021

casos acumulados  
*confirmados*  
de dengue  
outubro 2015

Pop.  
44.396.484

FILIPINAS

**108.263**

Pop.

100.617.630

MALÁSIA

**98.500**

Pop.

30.809.000

# SÃO PAULO

Dados informados por SINAN Dengue, 30/10/2015



The infographic features a large white circle in the center containing the number 60.667 and text about dengue cases in Rio de Janeiro. To the right, three smaller white circles are arranged in a cluster, each containing the name of a country and its corresponding number of cases. The background is a scenic view of Rio de Janeiro at sunset, with mountains and a bay.

**60.667**

casos acumulados  
*suspeitos*  
de dengue  
novembro 2015

**INDIA**  
**6,500**

**MÉXICO**  
**22,506**

**REPÚBLICA  
DOMINICANA**  
**6,975**

**RIO DE JANEIRO**



**MOSQUITOS  
GENETICAMENTE  
ALTERADOS**

**FUMACÊ &  
LARVICIDA**

**CAMPANHAS DE  
SAÚDE**

**GESTÃO DE SURTOS**

Condições Climáticas

Histórico de Dengue

Construções e Outros

Hotspots

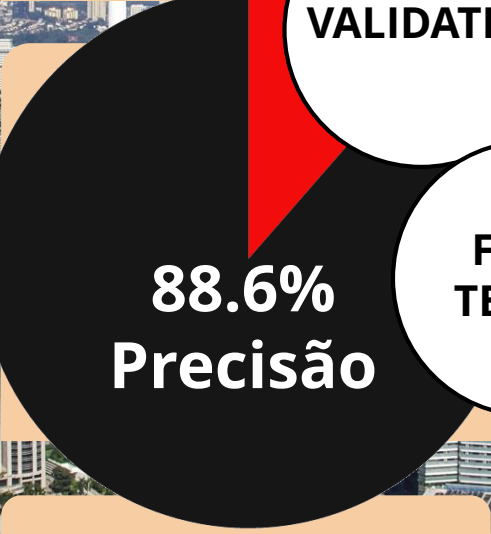
GLM  
MapReduce

Single  
Tree  
Drive

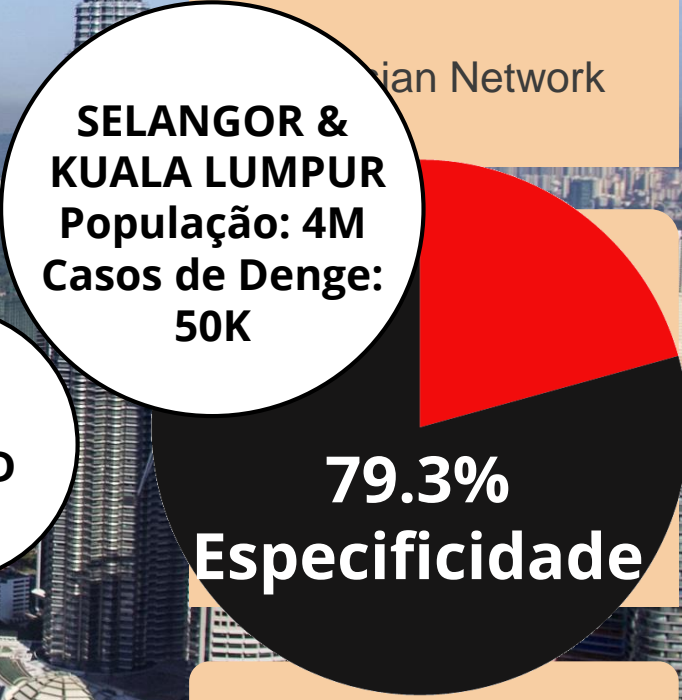
Bayesian Network



Predicted Cases



Outbreak Likelihood



Hotspot Likelihood

Prediction

# DISEASE ANALYTICS

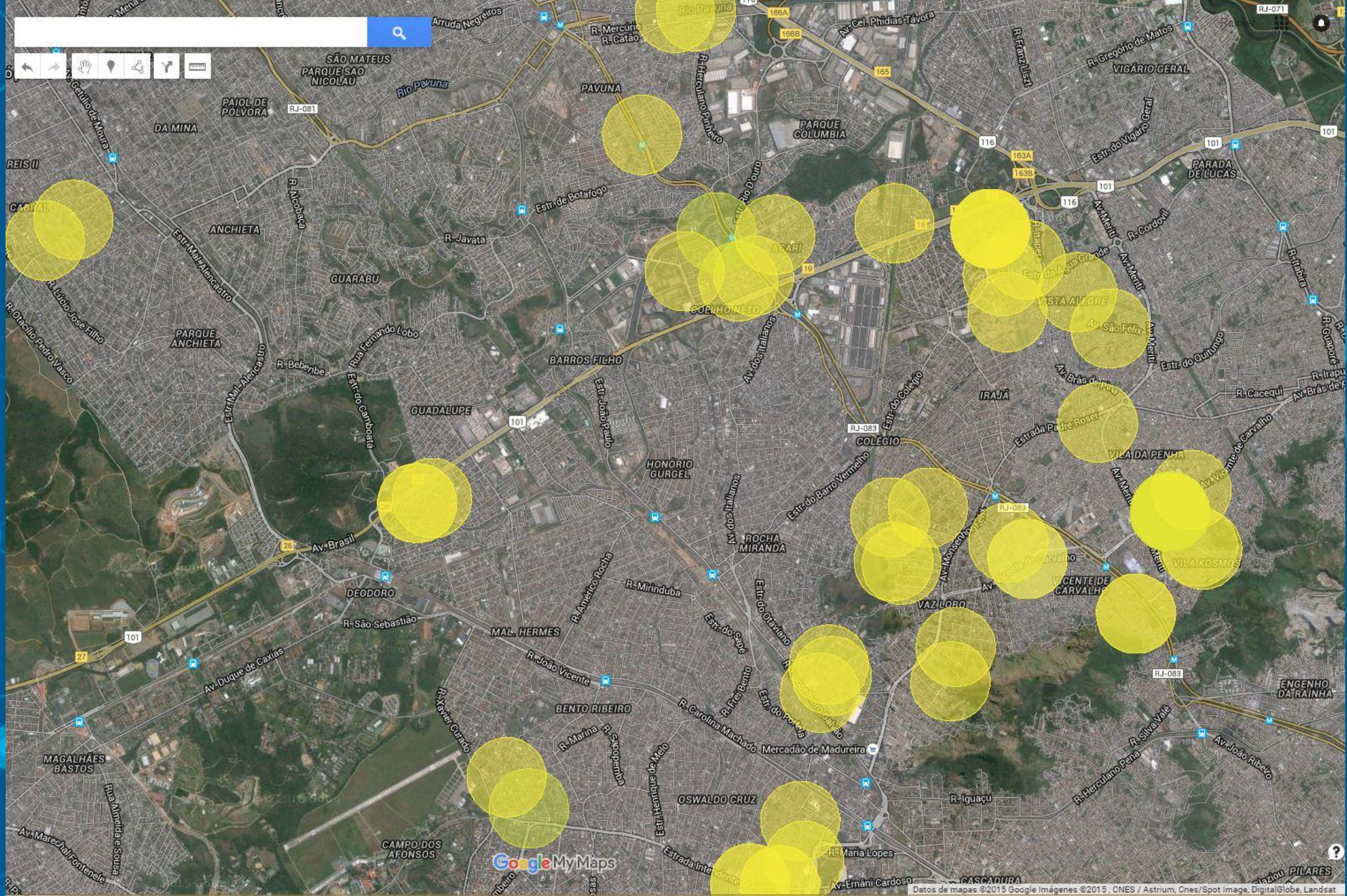
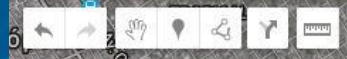
Precisão de

# 84.11%

Com pessoal e recursos limitados

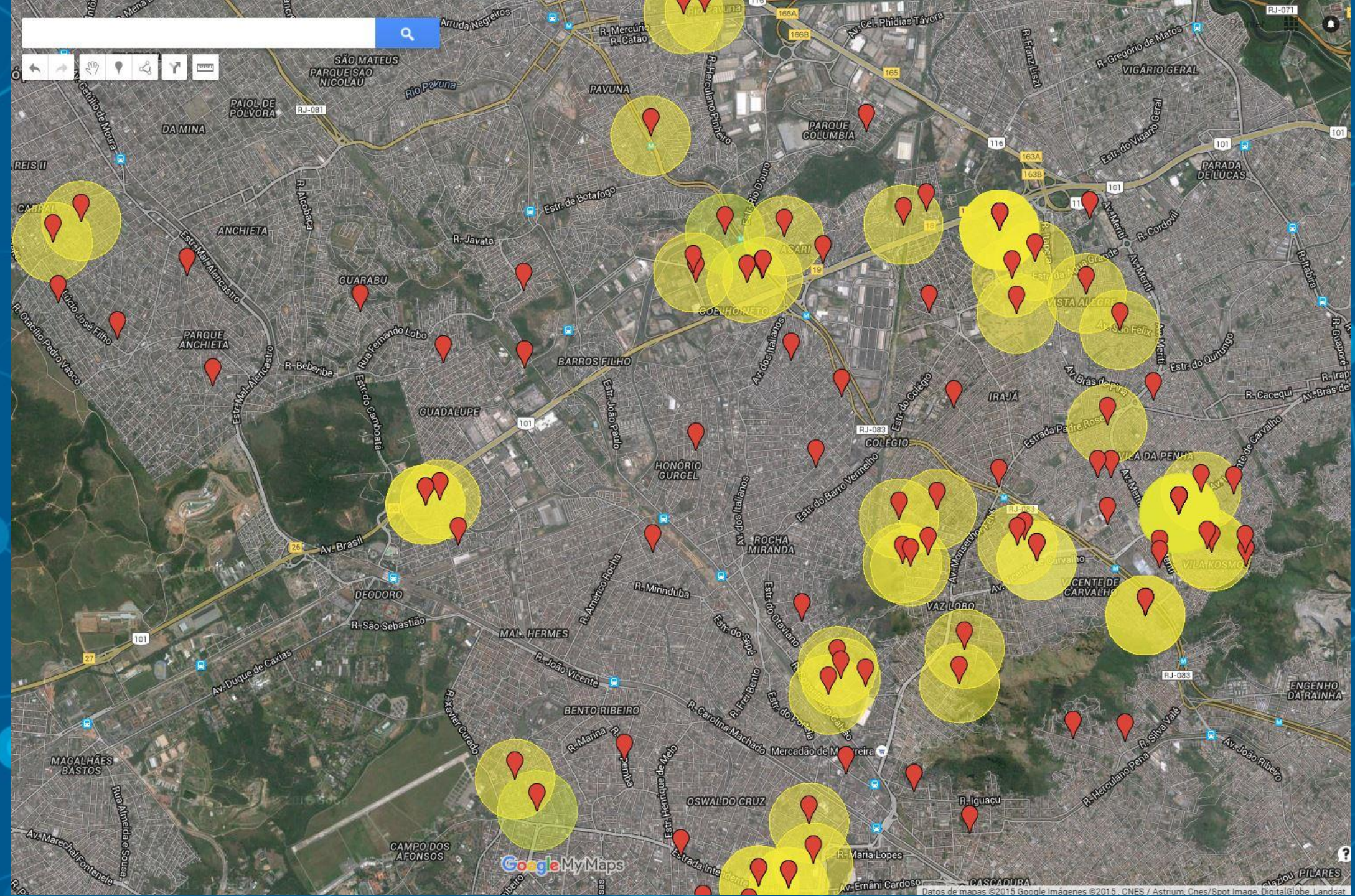


Search bar with magnifying glass icon



Google My Maps

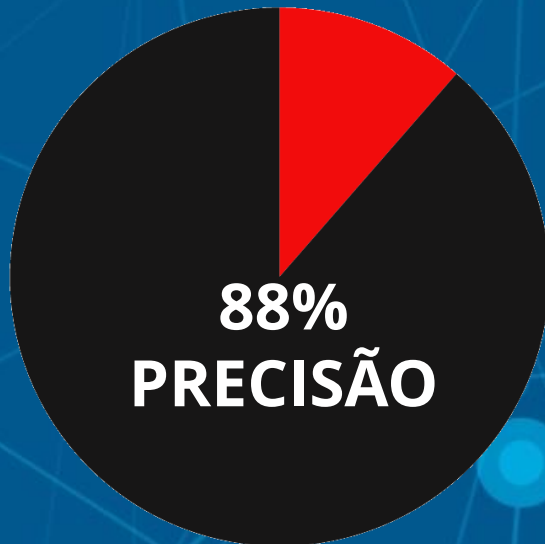
Search bar with a magnifying glass icon.



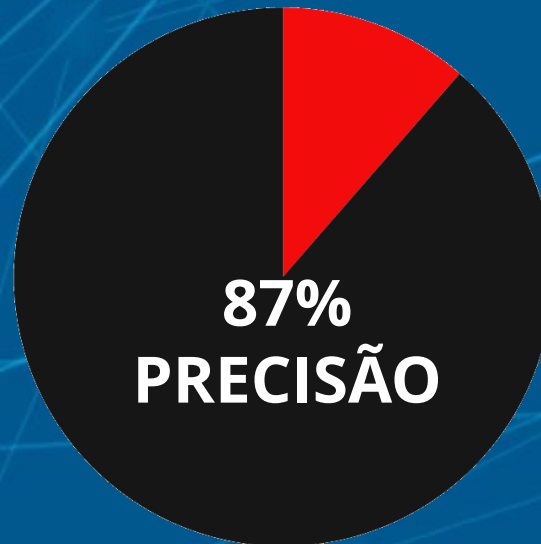
Google My Maps



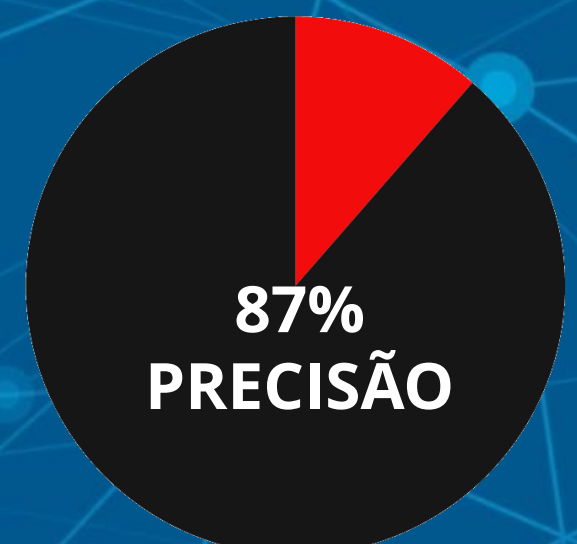
**DENGUE**



**ZIKA**



**CHIKUNGUNYA**



**PREDIÇÃO DE DOENÇAS**

# Mais de 270 variáveis.

- Apenas precisamos de 3 dados iniciais: Casos Notificados, Casos Confirmados e Endereços
- Criamos um sistema que utiliza mais de 50 fontes de dados independentes, tais como: NASA, ONU Satélites Locais, Governos e outros.





Email

admin@aime.life

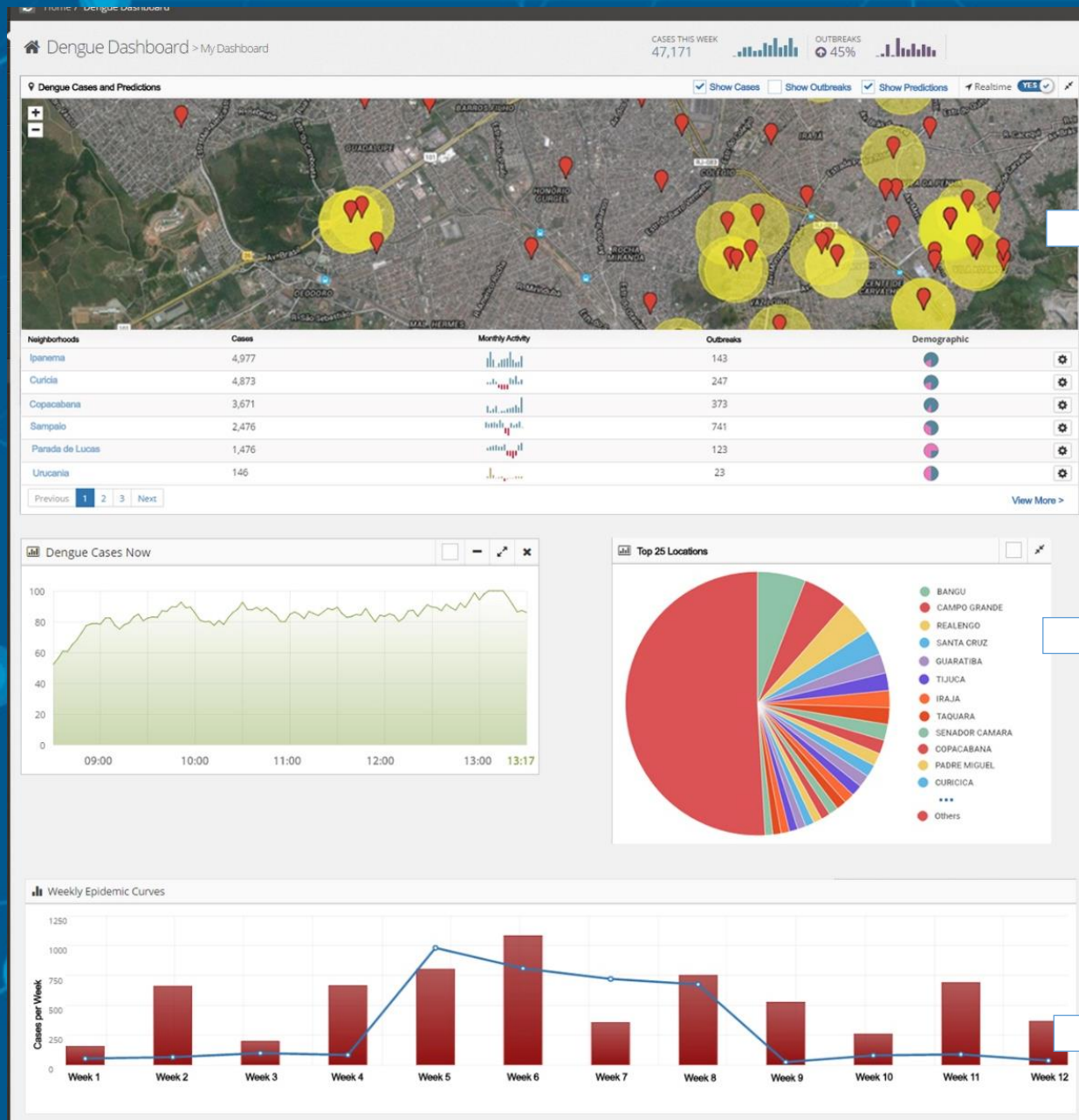
Password

\*\*\*\*\*

Remember me

Log In

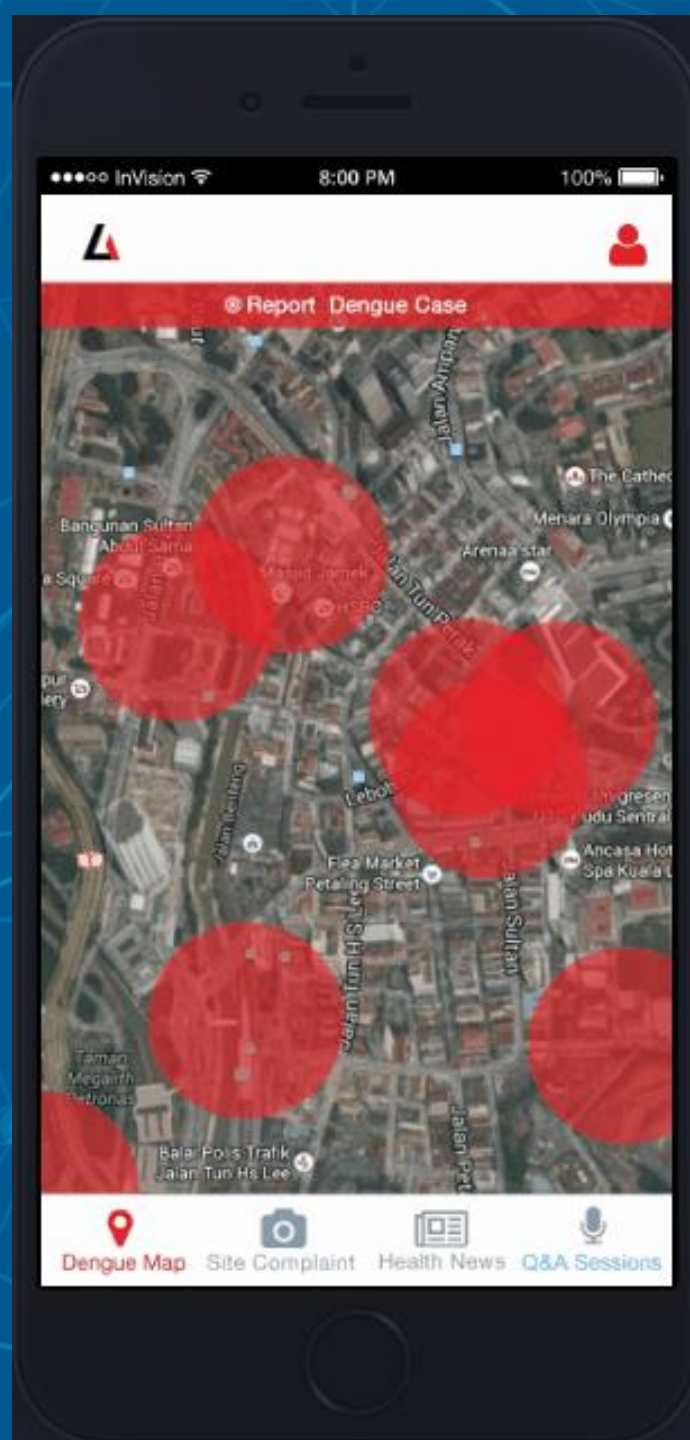
[Forgot Password?](#)



→ **PREDIÇÃO EM TEMPO REAL**

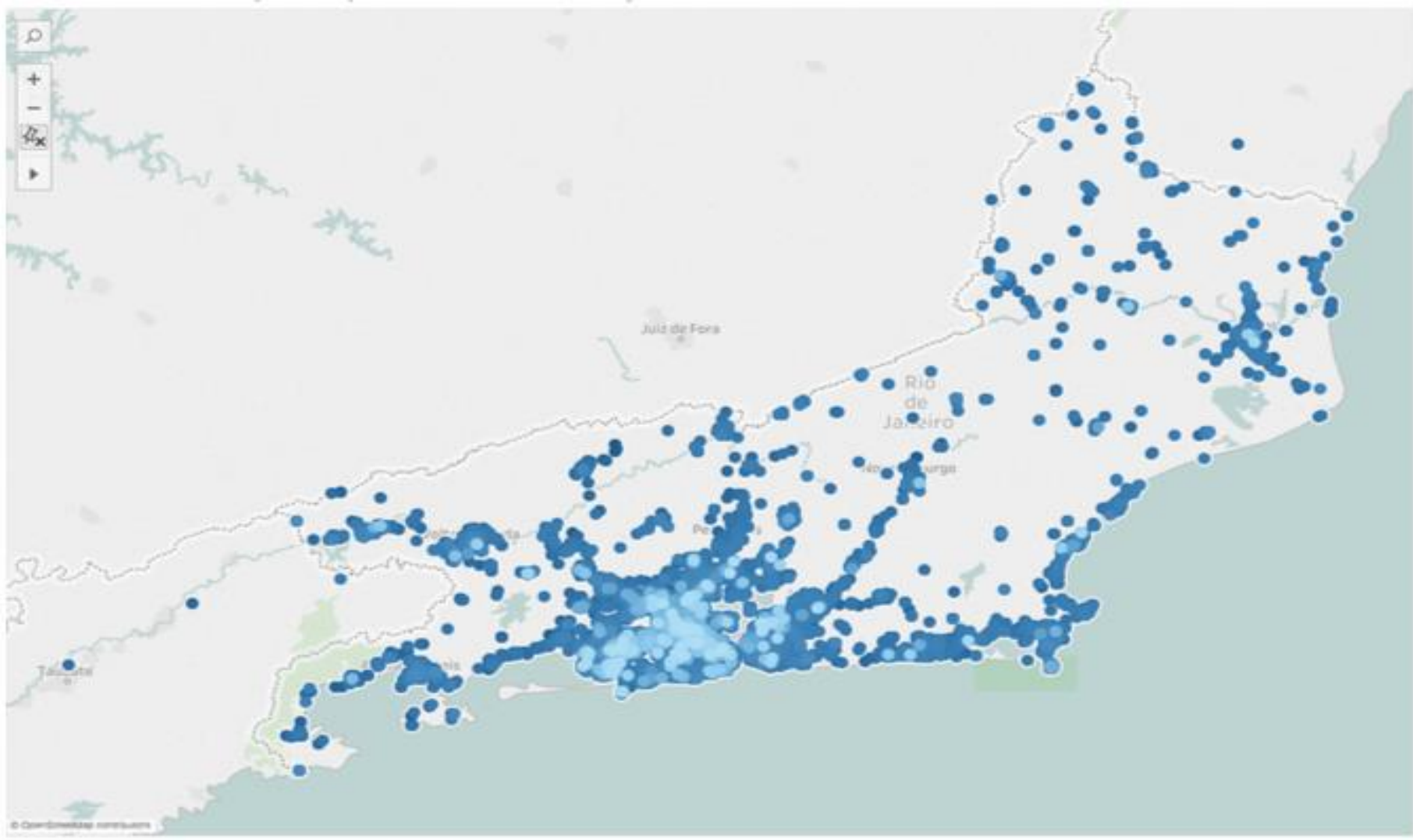
→ **LOCALIZAÇÃO & MAGNITUDE**

→ **CURVAS EPIDEMIOLÓGICA & RELATÓRIOS**



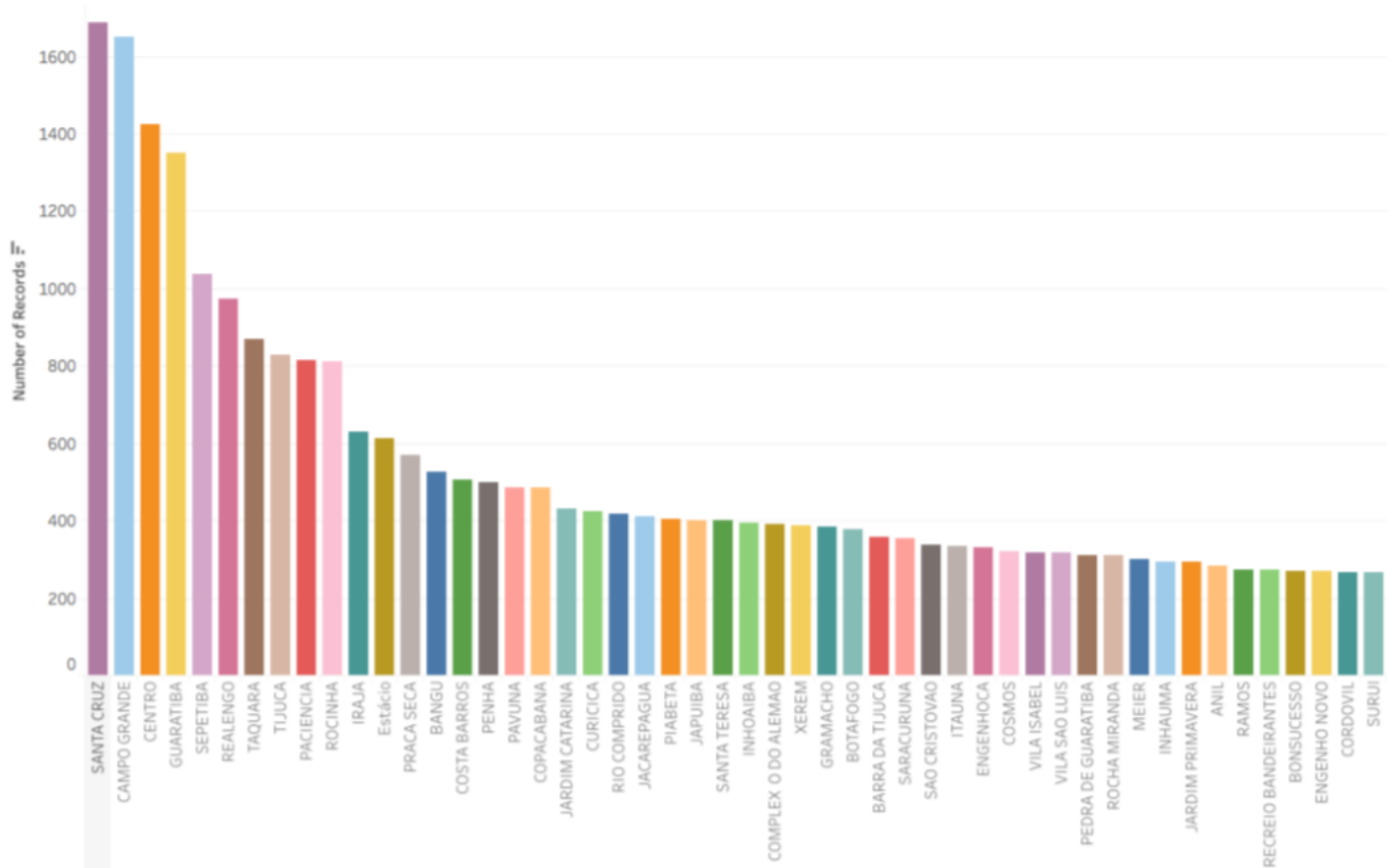


Aonde a Zika se **originou** no Rio? Como ela se espalha **hoje**?

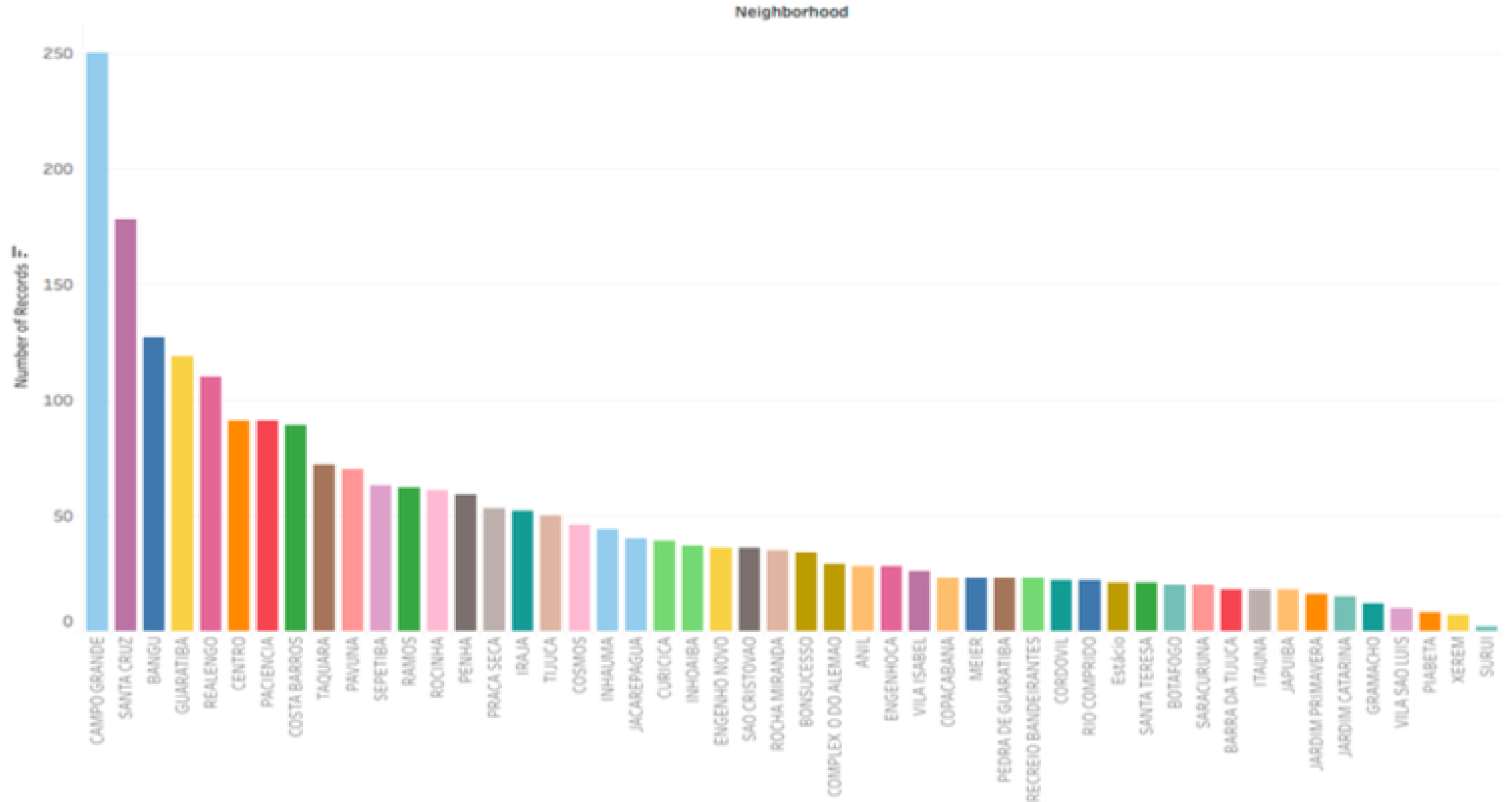


Fonte do espraiamento:  
dos pontos mais claros aos mais escuros

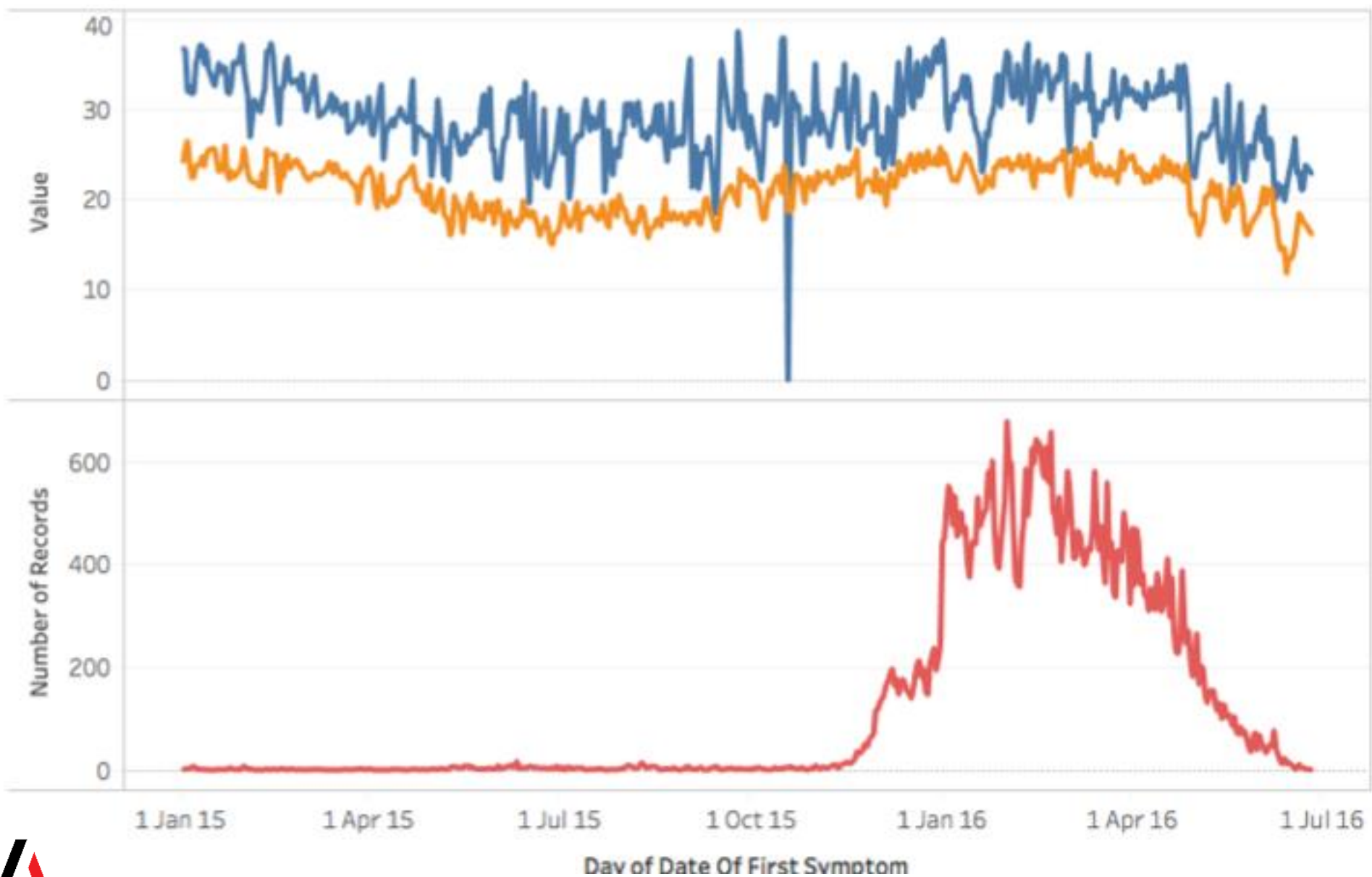
- Análise em tempo real: Quais são os bairros com mais casos de Zika?



- Análise em tempo real: Quais são os bairros com mais casos de Zika em gestantes?



- Análise em tempo real: Influência da média da temperatura



- Average Temperature Max
- Average Temperature Min
- Zika Cases



# Zika and Dengue

Imported at Wed Aug 24 10:40:19 PDT 2016 from Zika and Dengue.csv  
Edited on 2016 August 25

File Edit Tools Help

Rows 1

Cards 1

Map 1

Filter Date of first symptoms' >= '2015-01-01 00:00:00' AND 'Date of first symptoms' <= '2015-02-01 00:00:00'

Saved 123 rows

Date of first symptoms

01/01/2015 - 01/02/2015 Find

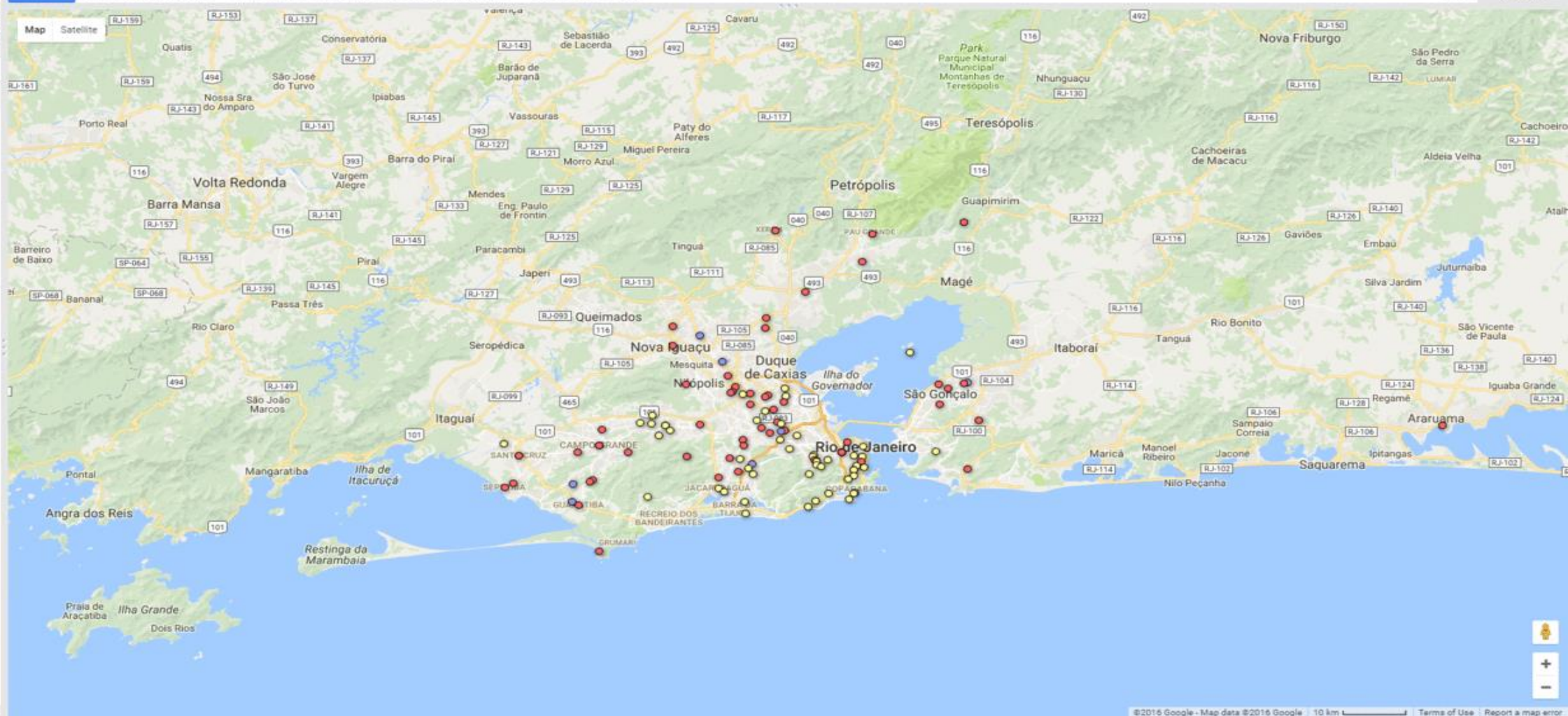
70,357 values from 07/09/1949 to 22/07/2016

Type

Find

3 distinct values

- DENGUE 52
- P-ZIKA 10
- ZIKA 61





# Zika and Dengue

Imported at Wed Aug 24 10:48:19 PDT 2016 from Zika and Dengue.csv  
Edited on 2016 August 25

File Edit Tools Help

Rows 1

Cards 1

Map 1

Filter Date of first symptoms >= '2015-02-01 00:00:00' AND 'Date of first symptoms' <= '2015-03-01 00:00:00'

Saved 151 rows

**Date of first symptoms** - X

01/02/2015 - 01/03/2015 Find

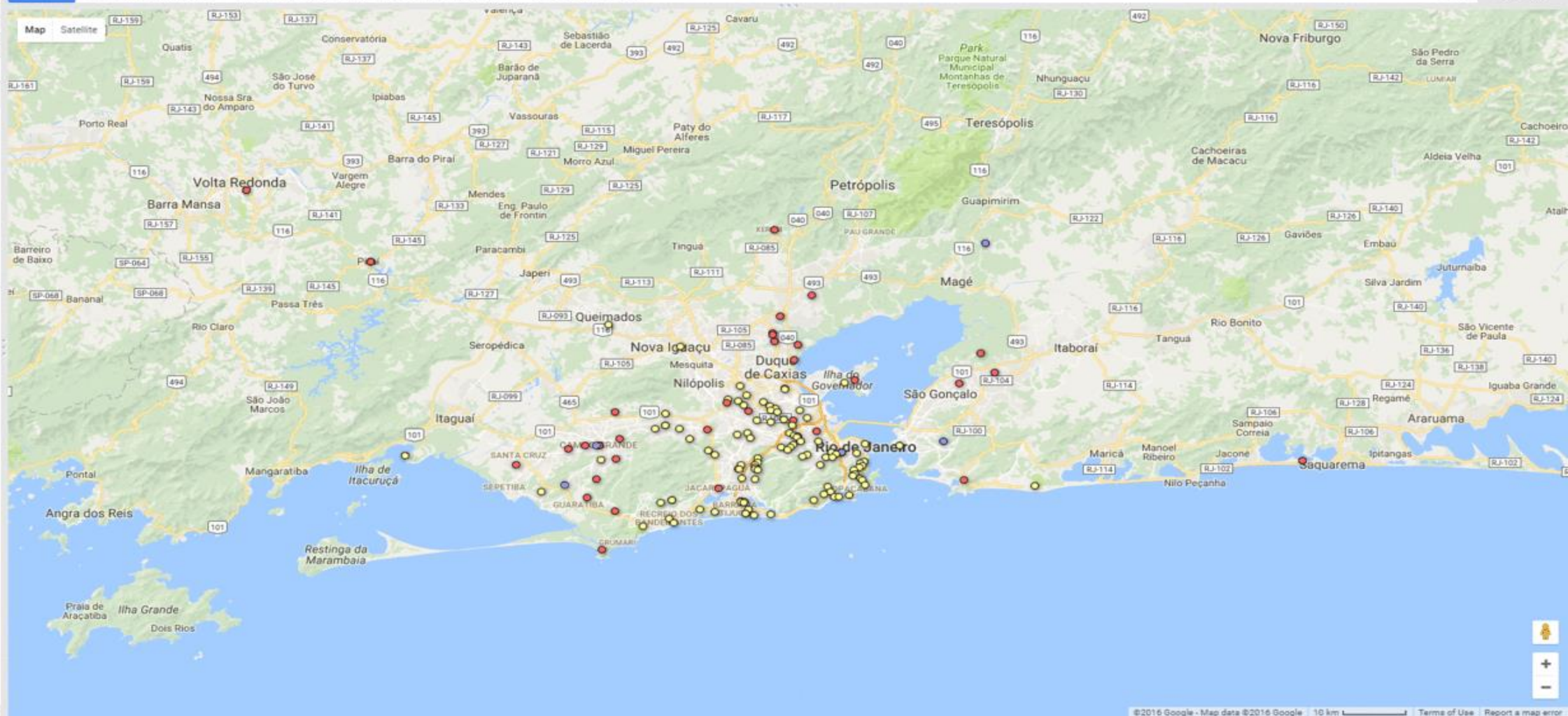
70,357 values from 07/09/1949 to 22/07/2016

**Type** - X

Find

3 distinct values

- DENGUE 109
- P-ZIKA 5
- ZIKA 37



# Zika and Dengue

Imported at Wed Aug 24 10:48:19 PDT 2016 from Zika and Dengue.csv.  
Edited on 2016 August 25

File Edit Tools Help Rows 1 Cards 1 Map 1

Filter Date of first symptoms' >= '2015-03-01 00:00:00' AND 'Date of first symptoms' <= '2015-04-01 00:00:00'

Saved 404 rows

**Date of first symptoms** — X

01/03/2015 - 01/04/2015 Find

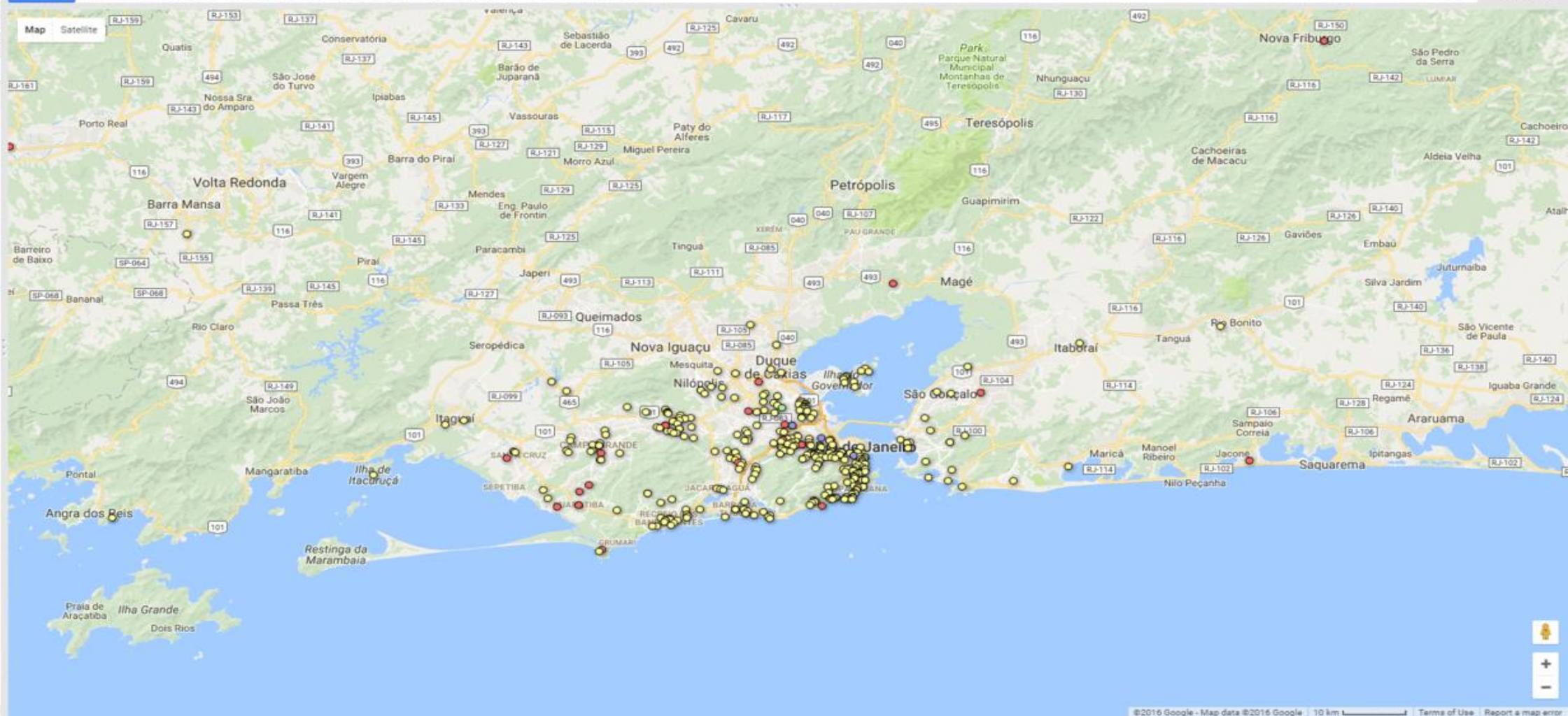
70,357 values from 07/09/1949 to 22/07/2016

**Type** — X

Find

4 distinct values

- DENGUE 372
- P-DENGUE 1
- P-ZIKA 3
- ZIKA 28



# Zika and Dengue

Imported at Wed Aug 24 10:40:19 PDT 2016 from Zika and Dengue.csv.  
Edited on 2016 August 25

File Edit Tools Help

Rows 1 Cards 1 Map 1

Filter 'Date of first symptoms' >= '2015-04-01 00:00:00' AND 'Date of first symptoms' <= '2015-05-01 00:00:00'

Saved 1,043 rows

**Date of first symptoms** -- X

01/04/2015 - 01/05/2015 Find

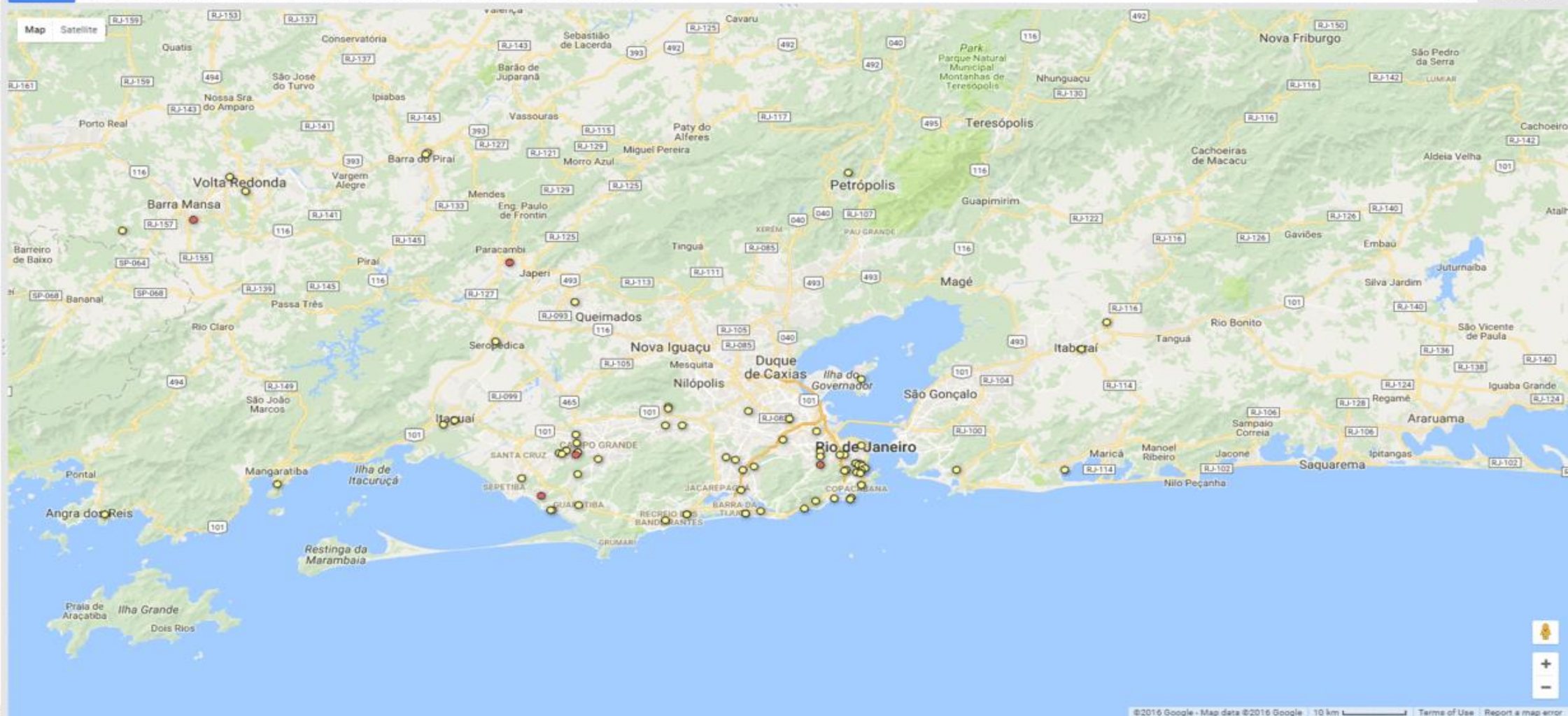
70,357 values from 07/09/1949 to 22/07/2016

**Type** -- X

Find

4 distinct values

- DENGUE 1,001
- P-DENGUE 2
- P-ZIKA 8
- ZIKA 32



# Zika and Dengue

Imported at Wed Aug 24 10:48:19 PDT 2016 from Zika and Dengue.csv.  
Edited on 2016 August 25

File Edit Tools Help Rows 1 Cards 1 Map 1

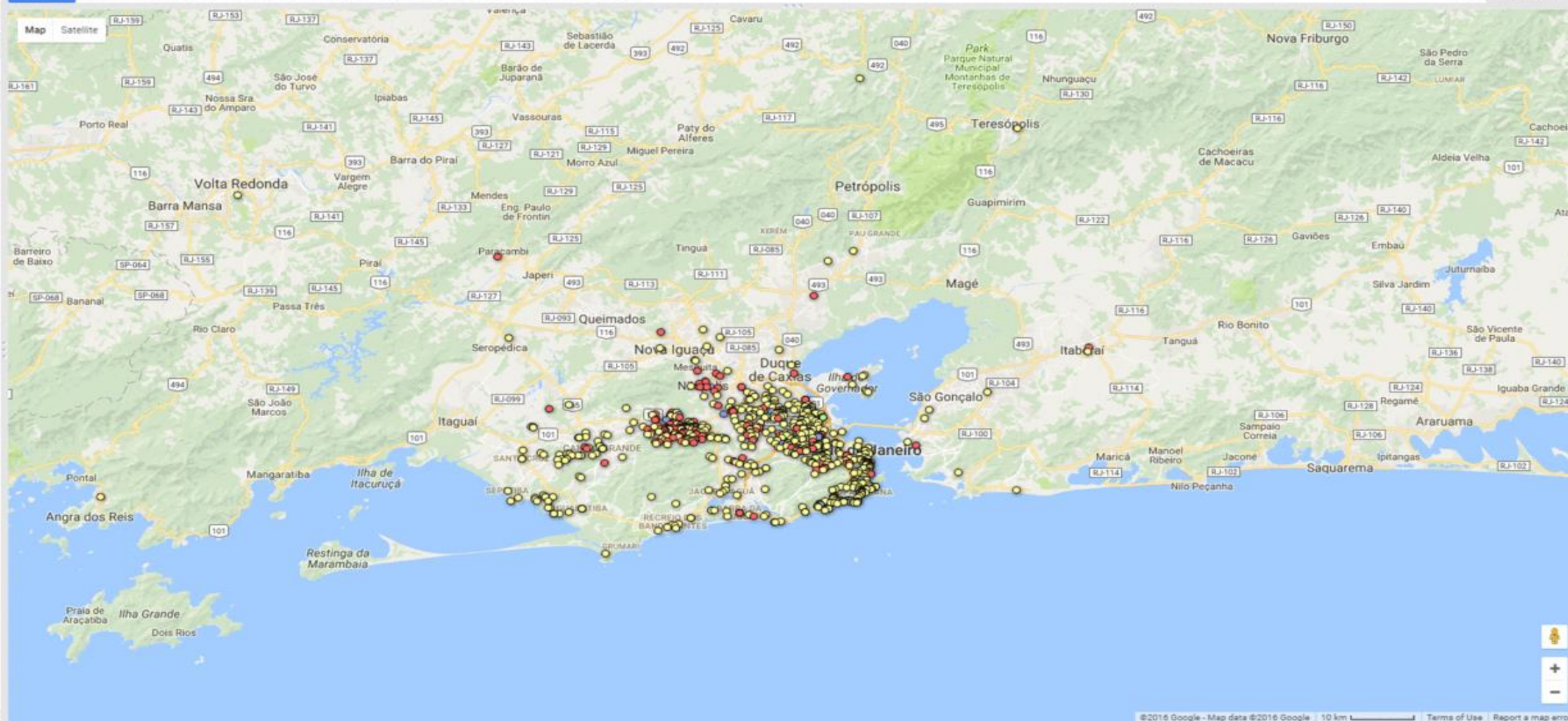
Filter Date of first symptoms' >= '2015-05-01 00:00:00' AND 'Date of first symptoms' <= '2015-06-01 00:00:00'

Saved 892 rows

Date of first symptoms  
01/05/2015 - 01/06/2015 Find  
70,357 values from 07/09/1949 to 22/07/2016

Type  
4 distinct values

- DENGUE 761
- P-DENGUE 6
- P-ZIKA 11
- ZIKA 114



# Zika and Dengue

Imported at Wed Aug 24 10:48:19 PDT 2016 from Zika and Dengue.csv.  
Edited on 2016 August 25

File Edit Tools Help

Rows 1 Cards 1 Map 1

Filter 'Date of first symptoms' >= '2015-06-01 00:00:00' AND 'Date of first symptoms' <= '2015-07-01 00:00:00'

Saved 823 rows

**Date of first symptoms** - X

01/06/2015 - 01/07/2015 Find

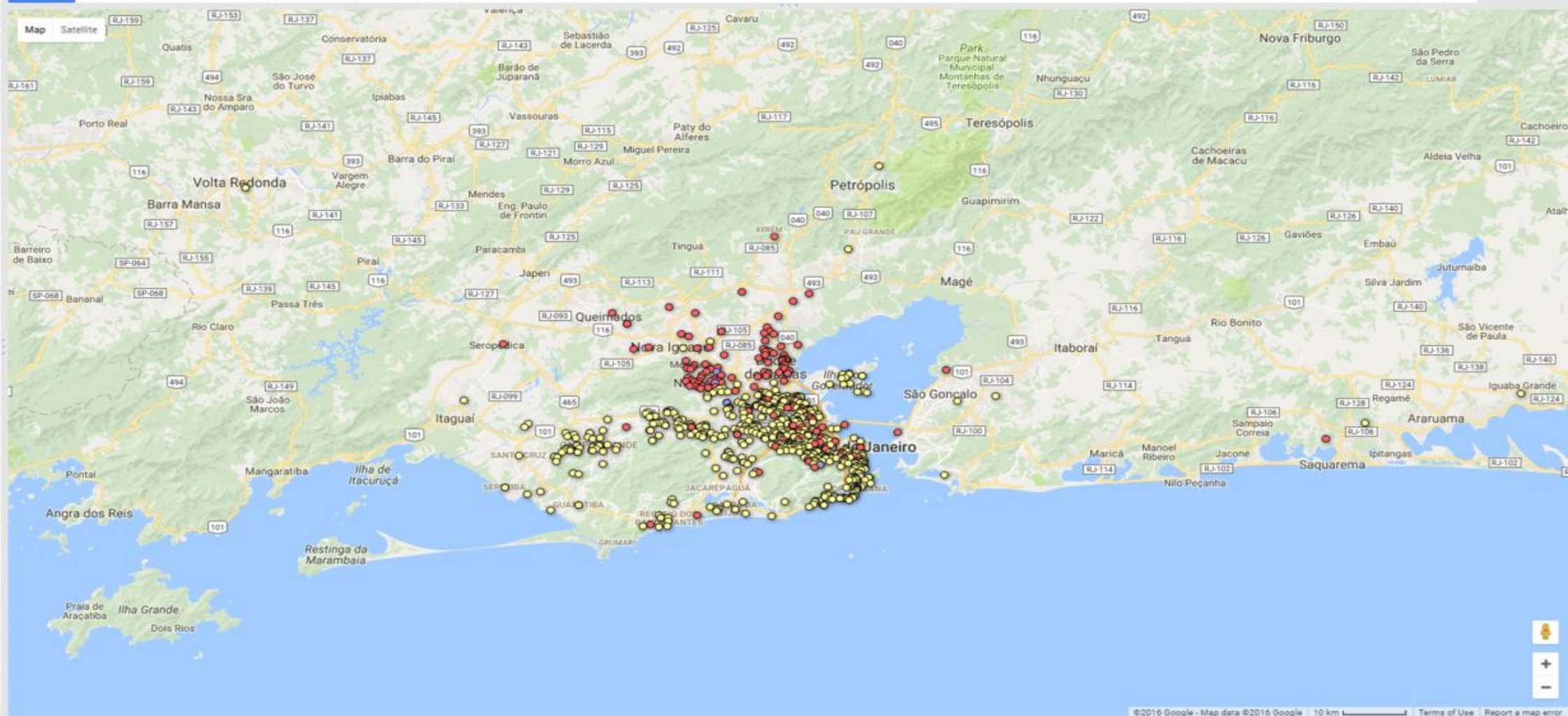
70,357 values from 07/09/1949 to 22/07/2016

**Type** - X

Find

4 distinct values

- DENGUE 644
- P-DENGUE 1
- P-ZIKA 5
- ZIKA 173



# Zika and Dengue

Imported at Wed Aug 24 10:48:19 PDT 2016 from Zika and Dengue.csv.  
Edited on 2016 August 25

File Edit Tools Help Rows 1 Cards 1 Map 1

Filter 'Date of first symptoms' >= '2015-07-01 00:00:00' AND 'Date of first symptoms' <= '2015-08-01 00:00:00'

Saved 406 rows

**Date of first symptoms** - X

01/07/2015 - 01/08/2015 Find

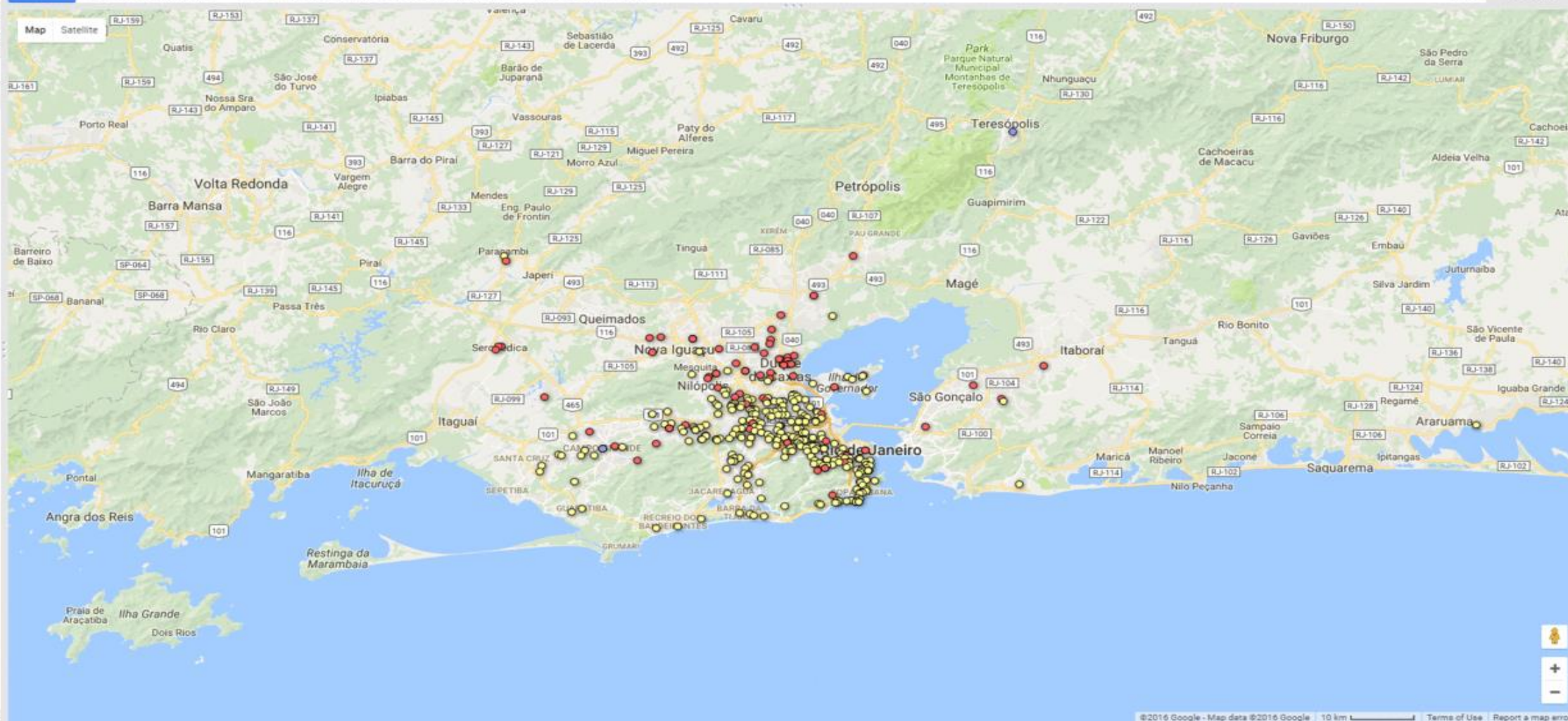
70,357 values from 07/09/1949 to 22/07/2016

**Type** - X

Find

4 distinct values

- DENGUE 319
- P-DENGUE 1
- P-ZIKA 2
- ZIKA 84



# Zika and Dengue

Imported at Wed Aug 24 10:48:19 PDT 2016 from Zika and Dengue.csv.  
Edited on 2016 August 25

File Edit Tools Help

Rows 1

Cards 1

Map 1

Filter 'Date of first symptoms' >= '2015-08-01 00:00:00' AND 'Date of first symptoms' <= '2015-09-01 00:00:00'

Saved 309 rows

**Date of first symptoms** - X

01/08/2015 - 01/09/2015 Find

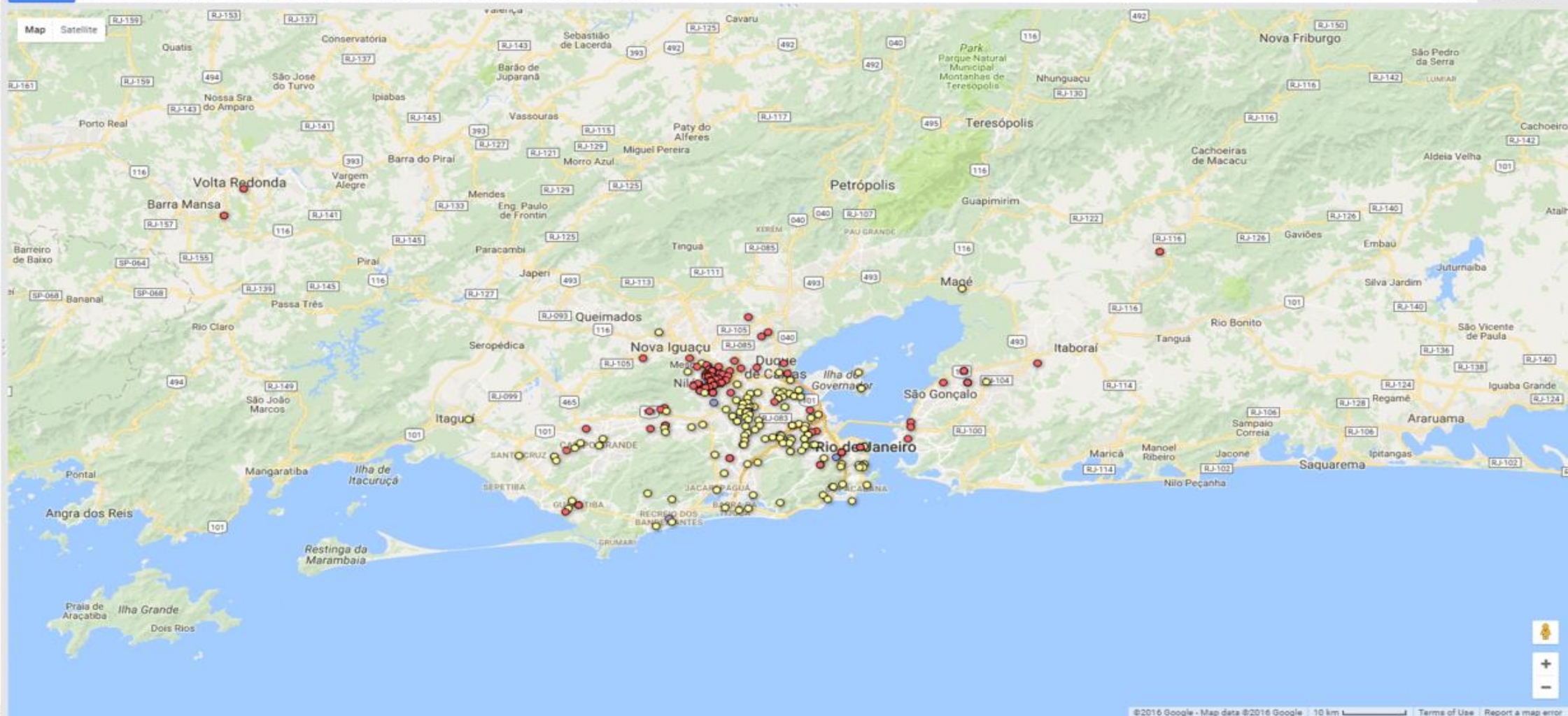
70,357 values from 07/09/1949 to 22/07/2016

**Type** - X

Find

4 distinct values

- DENGUE 143
- P-DENGUE 1
- P-ZIKA 4
- ZIKA 161



# Zika and Dengue

Imported at Wed Aug 24 10:48:19 PDT 2016 from Zika and Dengue.csv  
Edited on 2016 August 25

File Edit Tools Help

Rows 1

Cards 1

Map 1

Filter 'Date of first symptoms' >= '2015-09-01 00:00:00' AND 'Date of first symptoms' <= '2015-10-01 00:00:00'

Saved 146 rows

**Date of first symptoms** - X

01/09/2015 - 01/10/2015 Find

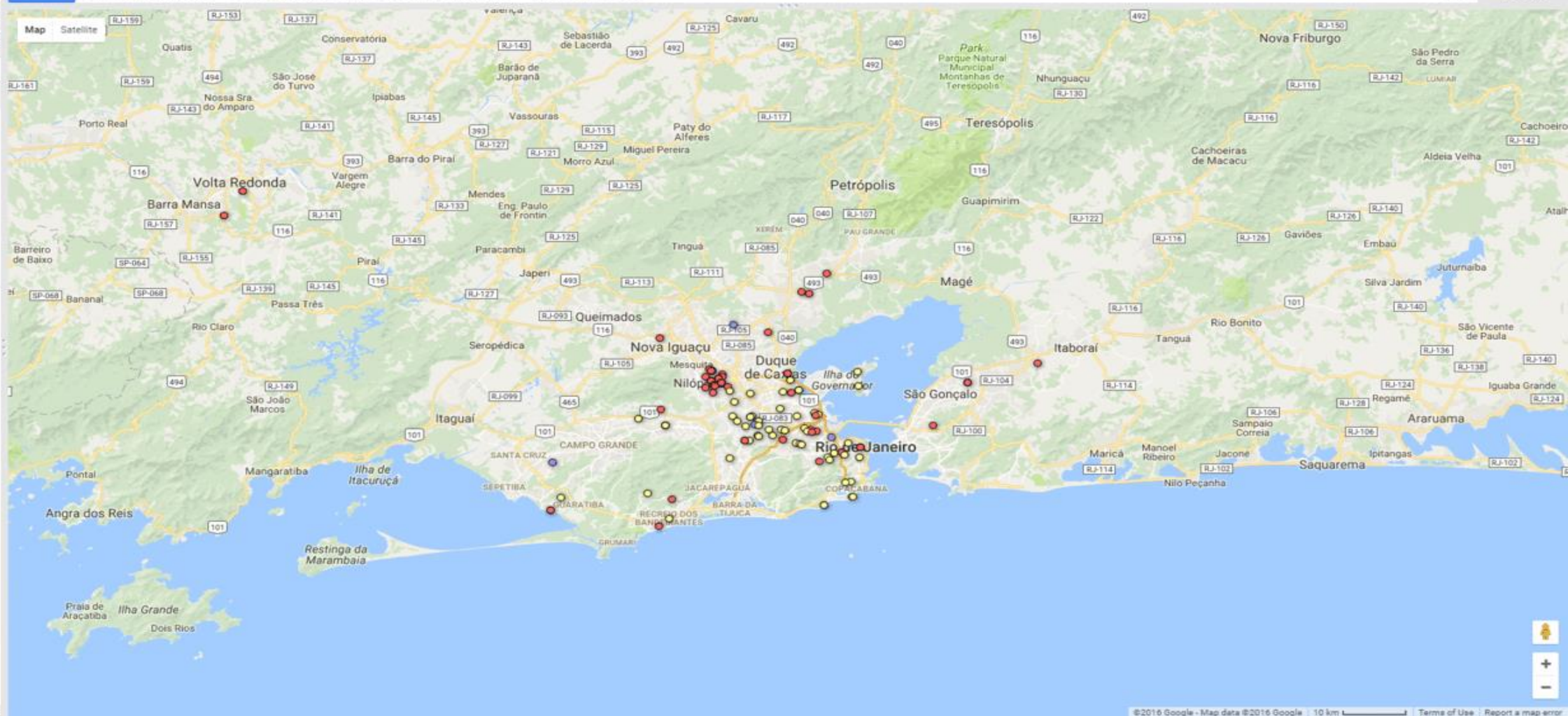
70,357 values from 07/09/1949 to 22/07/2016

**Type** - X

Find

3 distinct values

- DENGUE 58
- P-ZIKA 4
- ZIKA 84





# Zika and Dengue

Imported at Wed Aug 24 10:48:19 PDT 2016 from Zika and Dengue.csv  
Edited on 2016 August 25

File Edit Tools Help

Rows 1 Cards 1 Map 1

Filter 'Date of first symptoms' >= '2015-10-01 00:00:00' AND 'Date of first symptoms' <= '2015-11-01 00:00:00'

Saved 169 rows

**Date of first symptoms** - X

01/10/2015 - 01/11/2015 Find

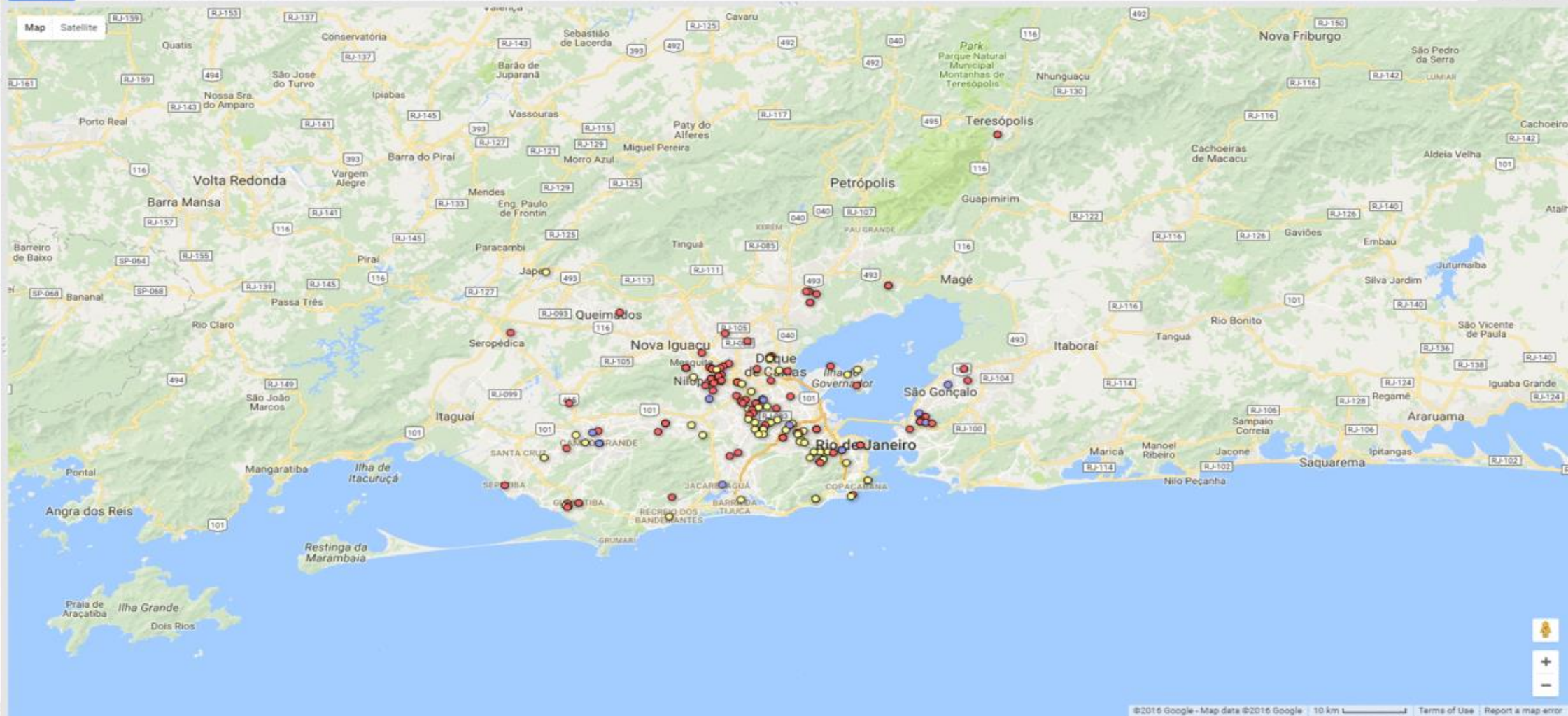
70,357 values from 07/09/1949 to 22/07/2016

**Type** - X

Find

3 distinct values

- DENGUE 58
- P-ZIKA 14
- ZIKA 97



**System Alert Case Definition Changed**



# Zika and Dengue

Imported at Wed Aug 24 10:48:19 PDT 2016 from Zika and Dengue.csv.  
Edited on 2016 August 25

File Edit Tools Help

Rows 1 Cards 1 Map 1

Filter Date of first symptoms' >= '2015-11-01 00:00:00' AND 'Date of first symptoms' <= '2015-12-01 00:00:00'

Saved 990 rows

**Date of first symptoms** - X

01/11/2015 - 01/12/2015 Find

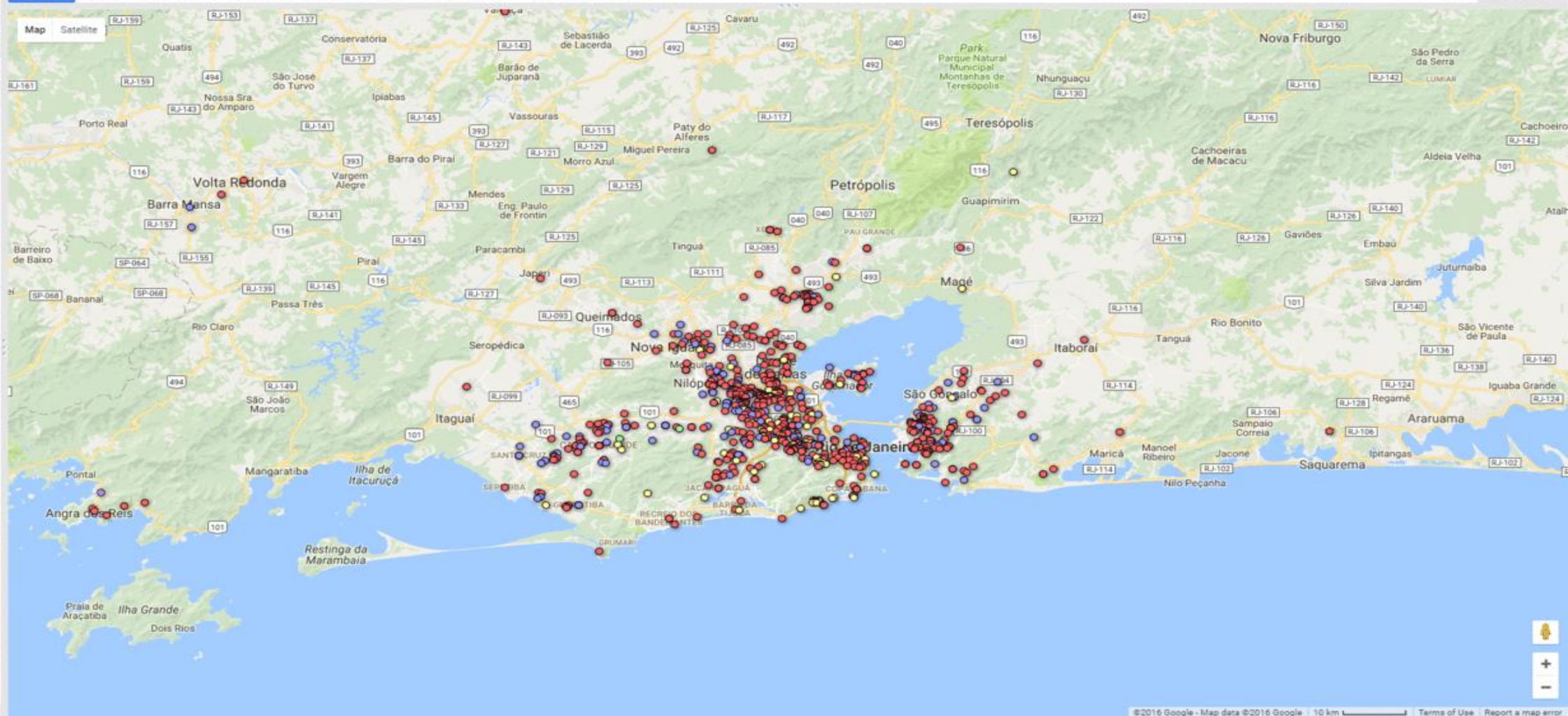
70,357 values from 07/09/1949 to 22/07/2016

**Type** - X

Find

4 distinct values

- DENGUE 105
- P-DENGUE 4
- P-ZIKA 152
- ZIKA 729



# Zika and Dengue

Imported at Wed Aug 24 10:48:19 PDT 2016 from Zika and Dengue.csv  
Edited on 2016 August 25

File Edit Tools Help Rows 1 Cards 1 Map 1

Filter Date of first symptoms' >= '2015-12-01 00:00:00' AND 'Date of first symptoms' <= '2016-01-01 00:00:00'

Saved 6,136 rows

**Date of first symptoms** - X

01/12/2015 - 01/01/2016 Find

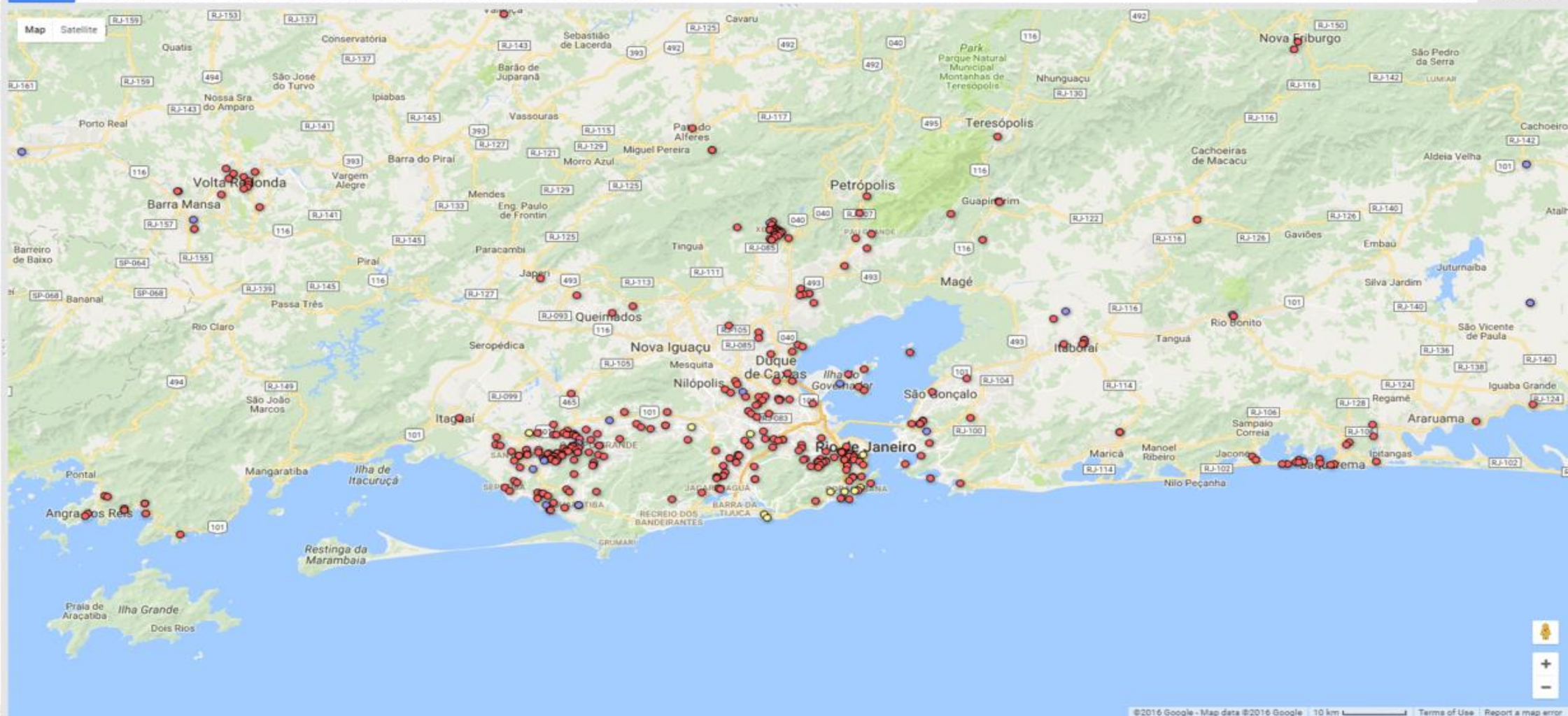
70,357 values from 07/09/1949 to 22/07/2016

**Type** - X

Find

4 distinct values

- DENGUE 196
- P-DENGUE 1
- P-ZIKA 484
- ZIKA 5,455



# Zika and Dengue

Imported at Wed Aug 24 10:48:19 PDT 2016 from Zika and Dengue.csv  
Edited on 2016 August 25

File Edit Tools Help Rows 1 Cards 1 Map 1

Filter Date of first symptoms >= '2016-01-01 00:00:00' AND 'Date of first symptoms' <= '2016-02-01 00:00:00'

Saved 15,815 rows

**Date of first symptoms**

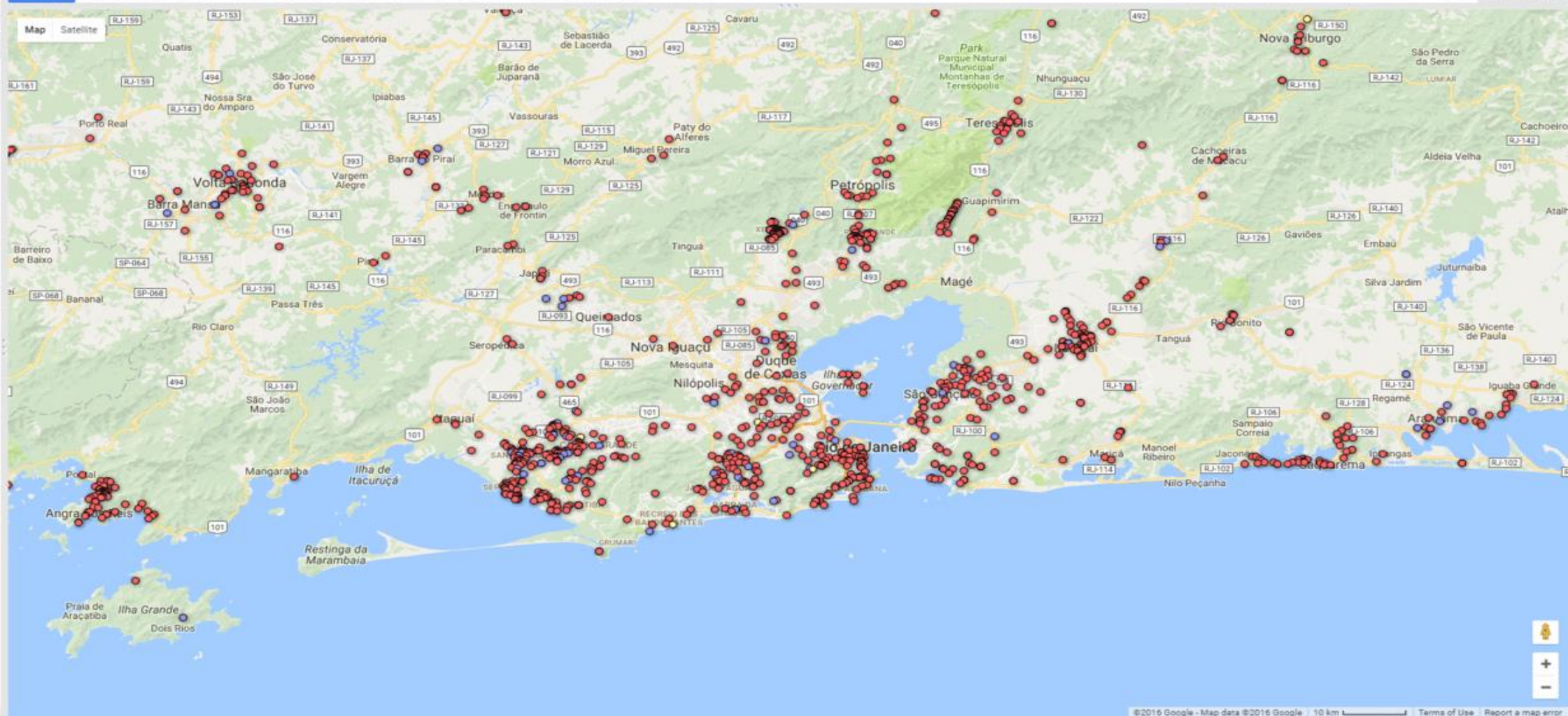
01/01/2016 - 01/02/2016 Find

70,357 values from 07/09/1949 to 22/07/2016

**Type**

4 distinct values

- DENGUE 189
- P-DENGUE 1
- P-ZIKA 1,467
- ZIKA 14,158



# Zika and Dengue

Imported at Wed Aug 24 10:40:19 PDT 2016 from Zika and Dengue.csv  
Edited on 2016 August 25

File Edit Tools Help Rows 1 Cards 1 Map 1

Filter Date of first symptoms' >= '2016-02-01 00:00:00' AND 'Date of first symptoms' <= '2016-03-01 00:00:00'

Saved 16,301 rows

**Date of first symptoms** - X

01/02/2016 - 01/03/2016 Find

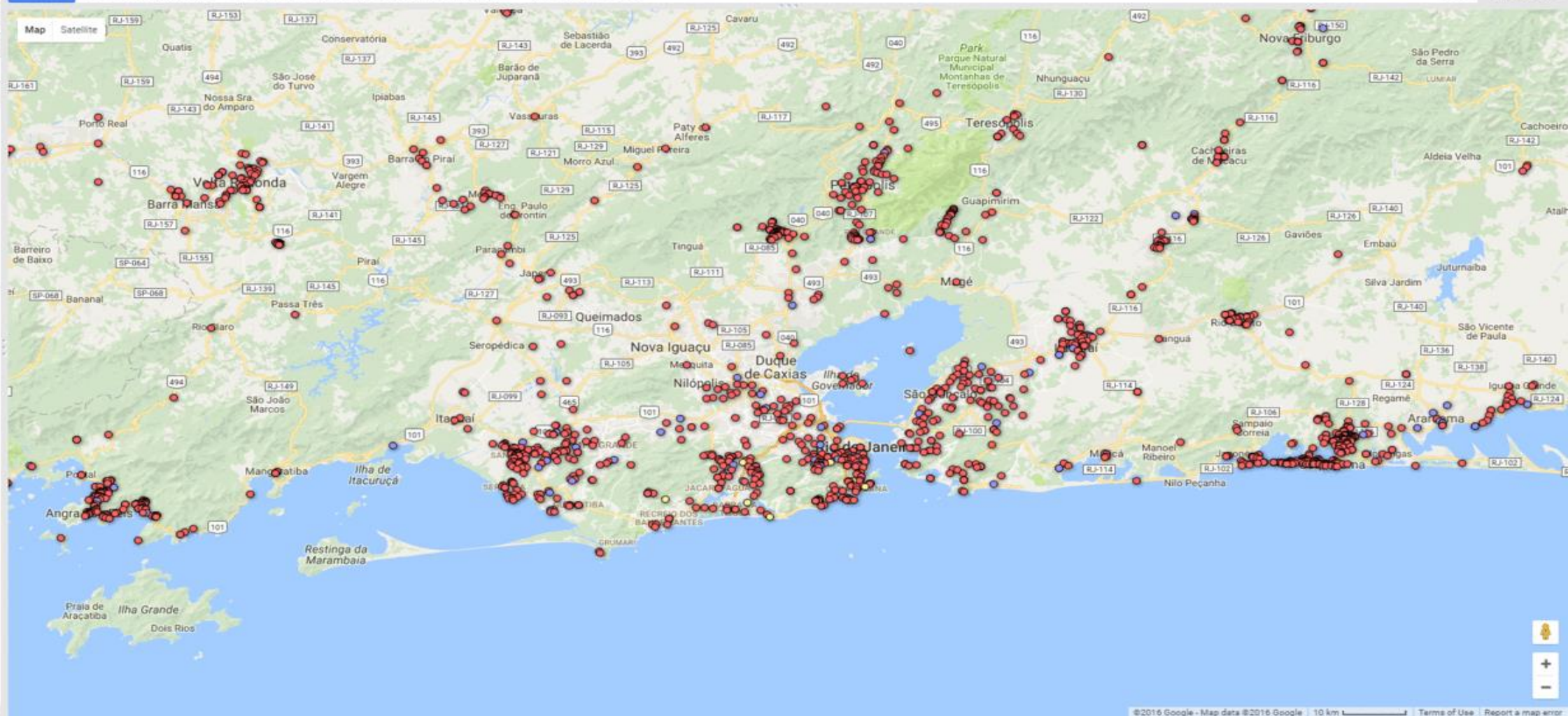
70,357 values from 07/09/1949 to 22/07/2016

**Type** - X

Find

4 distinct values

- DENGUE 197
- P-DENGUE 2
- P-ZIKA 1,150
- ZIKA 14,952



# Zika and Dengue

Imported at Wed Aug 24 10:48:19 PDT 2016 from Zika and Dengue.csv  
Edited on 2016 August 25

Filter Date of first symptoms' >= '2016-03-01 00:00:00' AND 'Date of first symptoms' <= '2016-04-01 00:00:00'

Saving... 14,485 rows

**Date of first symptoms** - X

01/03/2016 - 01/04/2016 Find

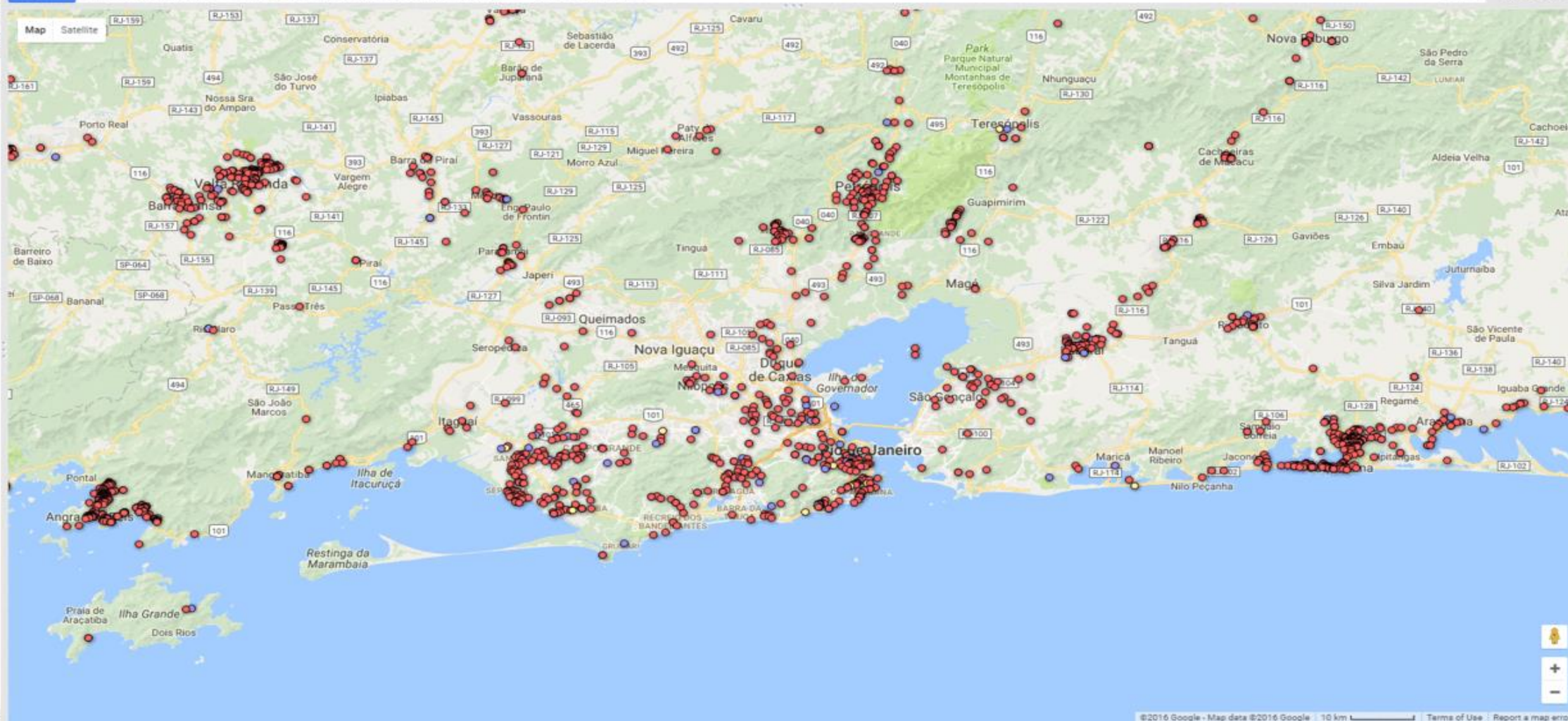
70,357 values from 07/09/1949 to 22/07/2016

**Type** - X

Find

4 distinct values

- DENGUE 211
- P-DENGUE 2
- P-ZIKA 967
- ZIKA 13,305



# Zika and Dengue

Imported at Wed Aug 24 10:40:19 PDT 2016 from Zika and Dengue.csv.  
Edited on 2016 August 25

File Edit Tools Help Rows 1 Cards 1 Map 1

Filter Date of first symptoms' >= '2016-04-01 00:00:00' AND 'Date of first symptoms' <= '2016-05-01 00:00:00'

Saving... 10,498 rows

**Date of first symptoms** -- X

01/04/2016 - 01/05/2016 Find

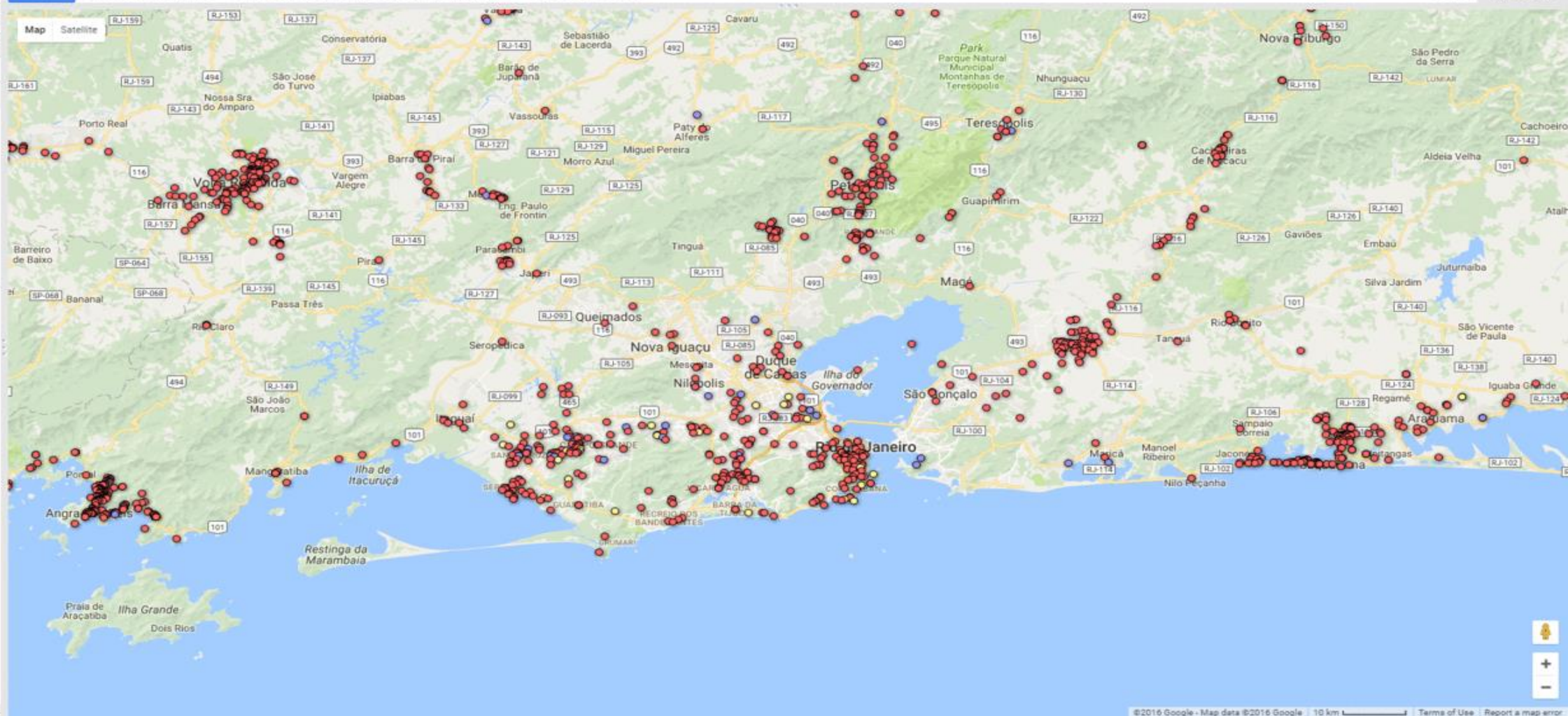
70,357 values from 07/09/1949 to 22/07/2016

**Type** -- X

Find

4 distinct values

- DENGUE 387
- P-DENGUE 2
- P-ZIKA 954
- ZIKA 9,155



# Zika and Dengue

Imported at Wed Aug 24 10:48:19 PDT 2016 from Zika and Dengue.csv  
Edited on 2016 August 25

File Edit Tools Help

Rows 1 Cards 1 Map 1

Filter Date of first symptoms' >= '2016-05-01 00:00:00' AND 'Date of first symptoms' <= '2016-06-01 00:00:00'

Saving... 3,809 rows

**Date of first symptoms** - X

01/05/2016 - 01/06/2016 Find

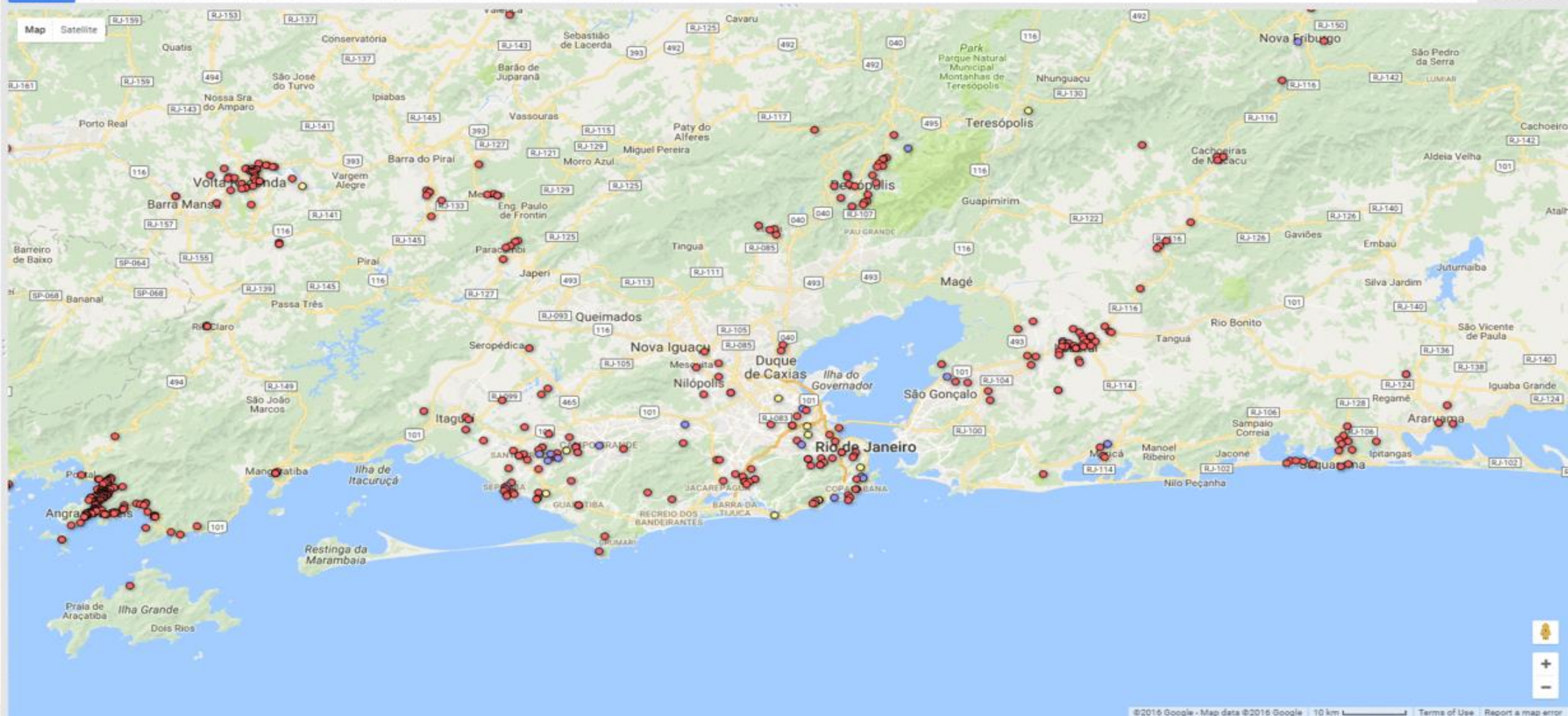
70,357 values from 07/09/1949 to 22/07/2016

**Type** - X

Find

4 distinct values

- DENGUE 139
- P-DENGUE 3
- P-ZIKA 345
- ZIKA 3,322





# Zika and Dengue

Imported at Wed Aug 24 10:48:19 PDT 2016 from Zika and Dengue.csv  
Edited on 2016 August 25

File Edit Tools Help

Rows 1

Cards 1

Map 1

Filter Date of first symptoms >= '2016-06-01 00:00:00' AND 'Date of first symptoms' <= '2016-07-01 00:00:00'

Saved 652 rows

**Date of first symptoms** - X

01/06/2016 - 01/07/2016 Find

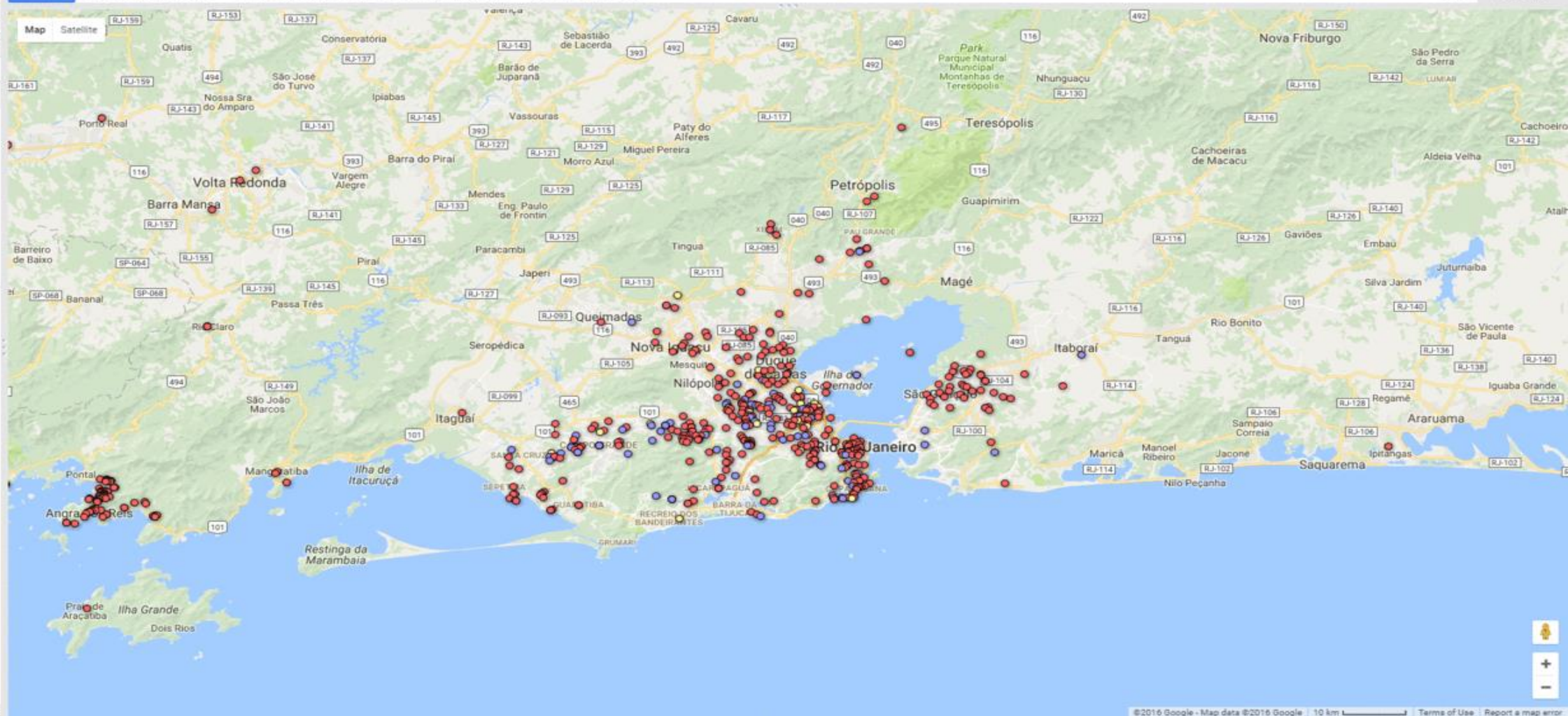
70,357 values from 07/09/1949 to 22/07/2016

**Type** - X

Find

3 distinct values

- DENGUE 30
- P-ZIKA 76
- ZIKA 546



# Zika and Dengue

Imported at Wed Aug 24 10:40:19 PDT 2016 from Zika and Dengue.csv  
Edited on 2016 August 25

File Edit Tools Help

Rows 1 Cards 1 Map 1

Filter Date of first symptoms' >= '2016-07-01 00:00:00' AND 'Date of first symptoms' <= '2016-08-01 00:00:00'

Saved 11 rows

Date of first symptoms

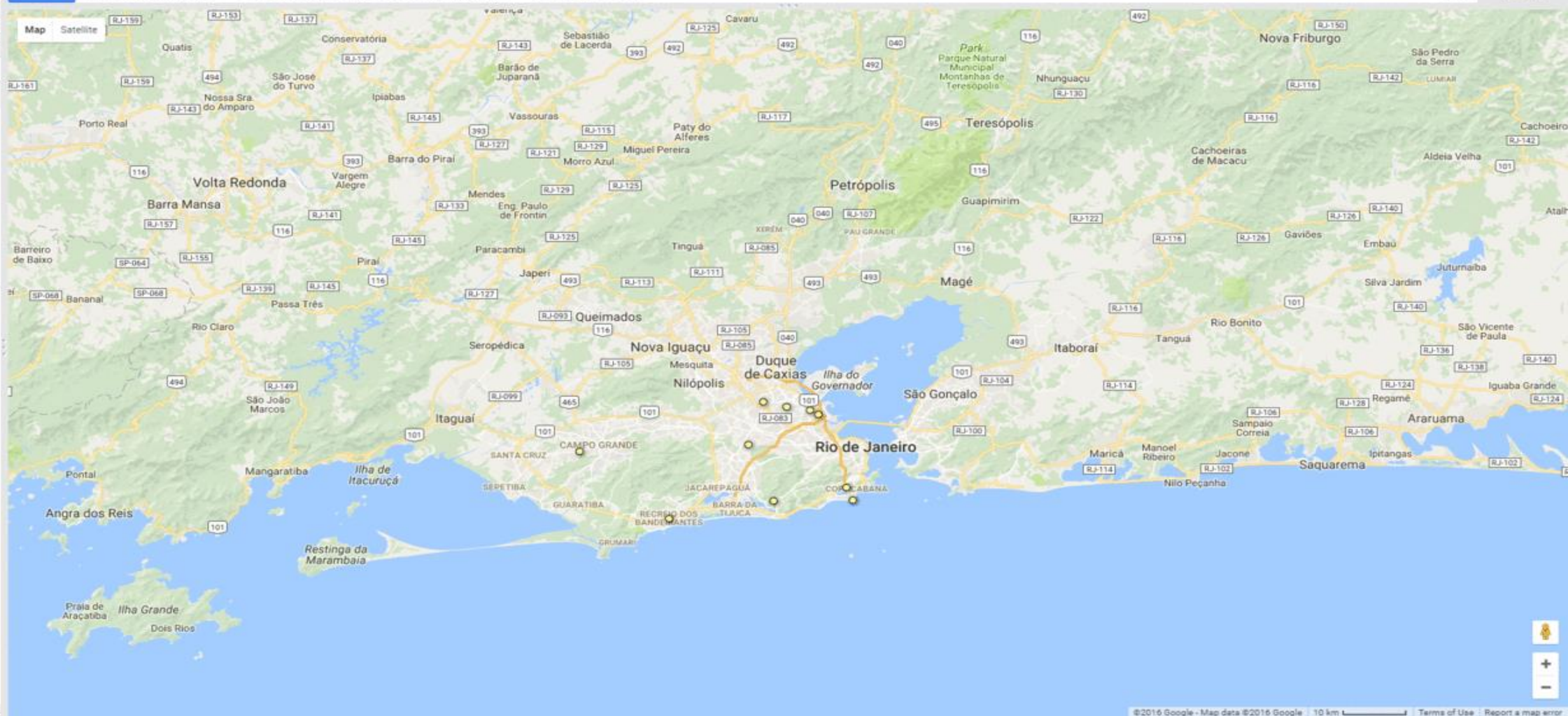
01/07/2016 - 01/08/2016 Find

70,357 values from 07/09/1949 to 22/07/2016

Type

One distinct value

DENGUE 11



## System Alert Case Definition Changed



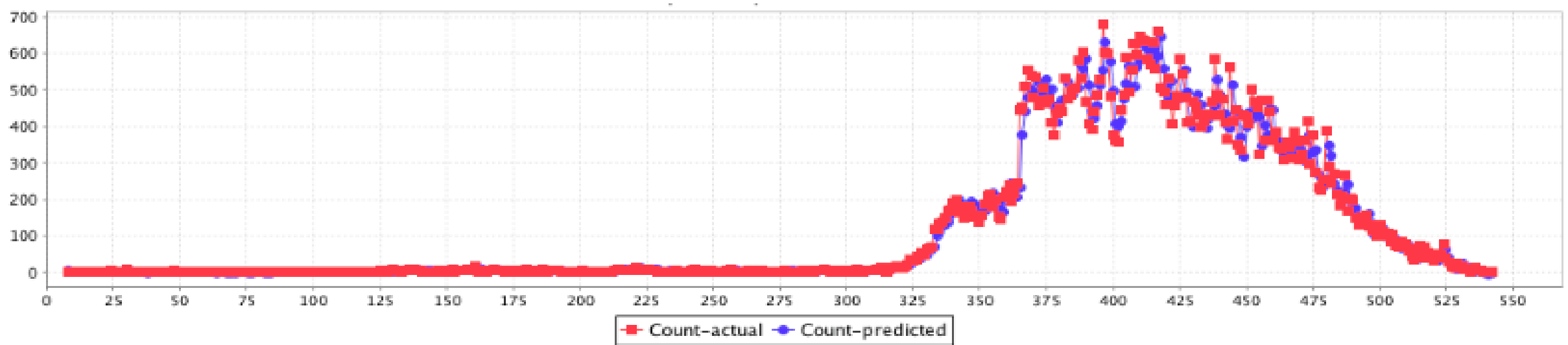
Os casos de Zika, Dengue e Chikungunya são frequentemente mal reportados.

**Nossa Solução:** engenharia reversa dos sitomas!

	Case #	OnSet Date	Type	Marked As	Test Results	Symptoms	EpidLink	AIME Dx	Sex
	1	2016/09/22	Dengue	Confirmed	Positive	PRESENT	--	Confirmed	F - Pregnant
	2	2016/09/22	Dengue	Suspected	Negative	PRESENT	YES	Confirmed	M
	3	2016/09/22	Zika	Confirmed	Positive	NOT PRESENT	--	Confirmed	M
	4	2016/09/22	Chikungunya	Confirmed	Positive	NOT PRESENT	--	Confirmed	F
	5	2016/09/22	Zika	Suspected	Negative	PRESENT	YES	Confirmed	F - Pregnant
	6	2016/09/22	Denge	Confirmed	Positive	NOT PRESENT	--	Confirmed	M
	7	2016/09/22	Dengue	Suspected	Negative	PRESENT	NO	Suspected	F



## Tipos de Predição



Geolocalizada **90 Dias Antes**

De magnitude **300 Dias Antes**

**PITCH  
GOV**



SÃO PAULO - 17-11-2015

**PITCH GOV SP**

**INSCREVA SUA STARTUP**

**SELECIONADOS NO  
CONCURSO  
+ 300 participantes  
15 finalistas**





RECOGNIZED AS AN EXEMPLARY APPROACH  
TO SOLVING HUMANITY'S CHALLENGES



CALIFORNIA, USA  
MARCH 2016



**KING'S**  
*College*  
**LONDON**

  
**Pistoia**  
**Alliance**

1<sup>ST</sup> PLACE PISTOIA ALLIANCE CHALLENGE.  
KINGS COLLEGE LONDON  
10,000 Euro Winner Prize +  
1,000 Euro Finalist Prize

LONDON, UK  
APRIL 2016

YHIF  
Boston  
Competition



THE 21<sup>ST</sup> ANNUAL  
HEALTH SUMMIT  
HARBOR

Thursday, July 14, 2016 12:00  
PM - 6:00 PM

TOP 8 YOUNG PUBLIC HEALTH INNOVATIONS

MASSACHUSETTS, USA  
JULY, 2016



**HARVARD**  
SCHOOL OF PUBLIC HEALTH



HARVARD  
CHAN  
SCHOOL OF PUBLIC HEALTH





KEYNOTE SPEECHES TO THE GRADUATE AND DOCTORAL  
STUDENT OF THE MIT COMPUTER SCIENCE AND  
ARTIFICIAL INTELLIGENCE LABORATORY

MASSACHUSETTS, USA  
SEPTEMBER, 2016

UN-NGLS  
Non-Governmental Liaison Service

UNITED NATIONS  
FOUNDATION

GLOBAL INNOVATION  
EXCHANGE

SOLUTIONS SUMMIT SOLUTIONS-SUMMIT



TOP 10 GROUND BREAKING SOLUTIONS  
ELECTED TO PRESENT IN THE UNITED  
NATIONS SOLUTIONS SUMMIT 2016

UNITED NATIONS HEADQUARTERS  
SEPTEMBER, 2016





DOMINICAN REPUBLIC  
& HAITI

7



BRAZIL

INDIA



MALAYSIA



PHILIPPINES



# GLOBAL TRACTION



**HARVARD**  
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Organization of  
American States



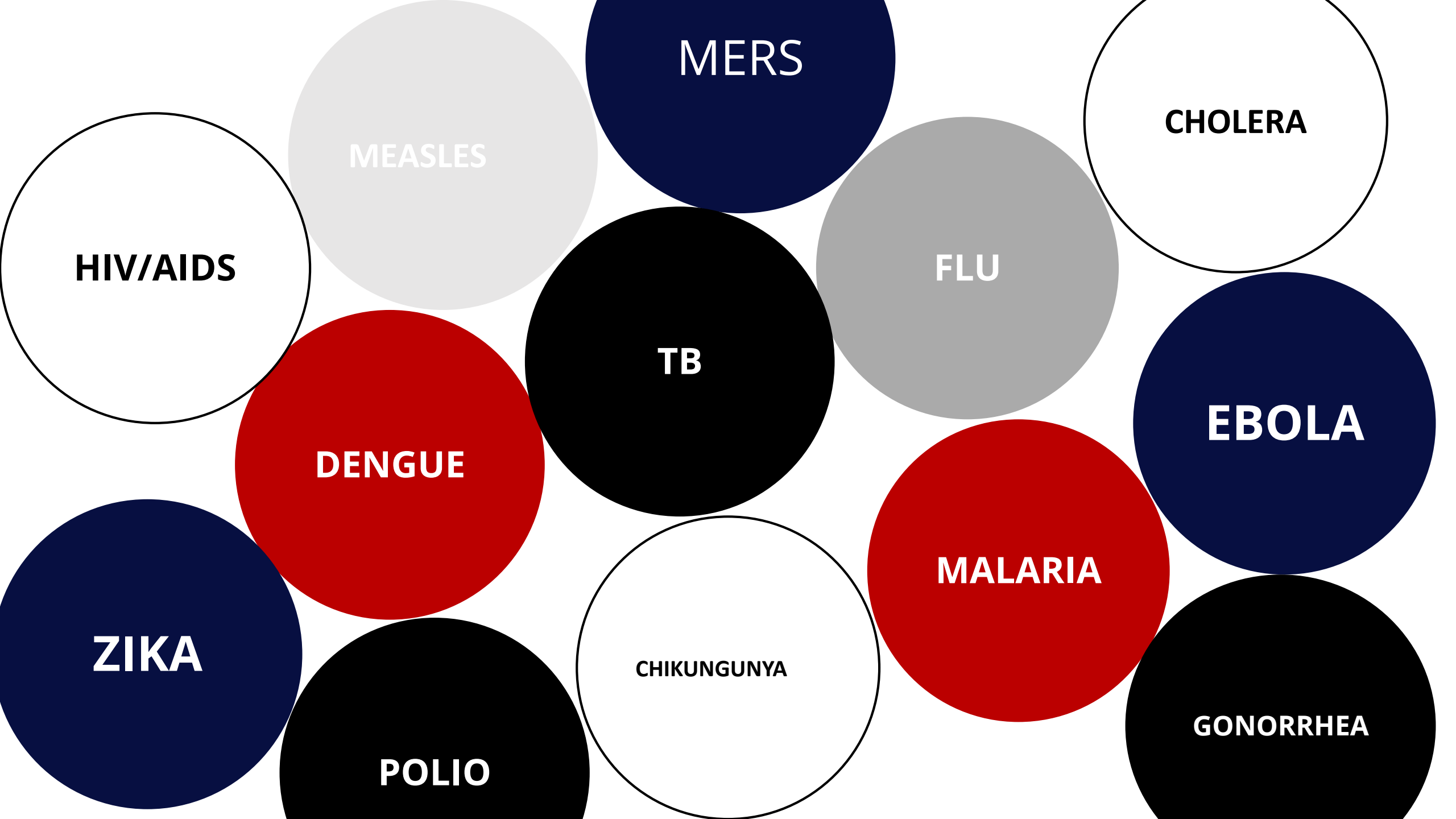
**NEXT  
ON  
LIME**

**NEXT  
ON  
LIME**

**TUBERCULOSE**

**&**

**HIV**



**MERS**

**CHOLERA**

**MEASLES**

**HIV/AIDS**

**FLU**

**TB**

**EBOLA**

**DENGUE**

**MALARIA**

**ZIKA**

**CHIKUNGUNYA**

**GONORRHEA**

**POLIO**