



Universidade Federal do Ceará

Modelagem epidemiológica do COVID19 para o Estado do Ceará empregando o modelo SEIIR

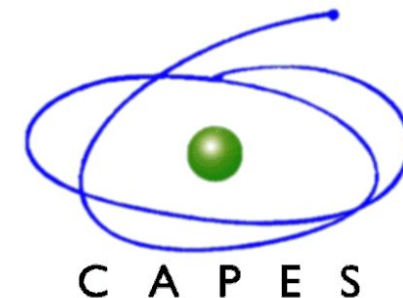
Equipe Cientista-Chefe de Dados (UFC & CAPP- IPECE):

José Soares de Andrade (UFC - Física)

Humberto Carmona (UFC- Física)

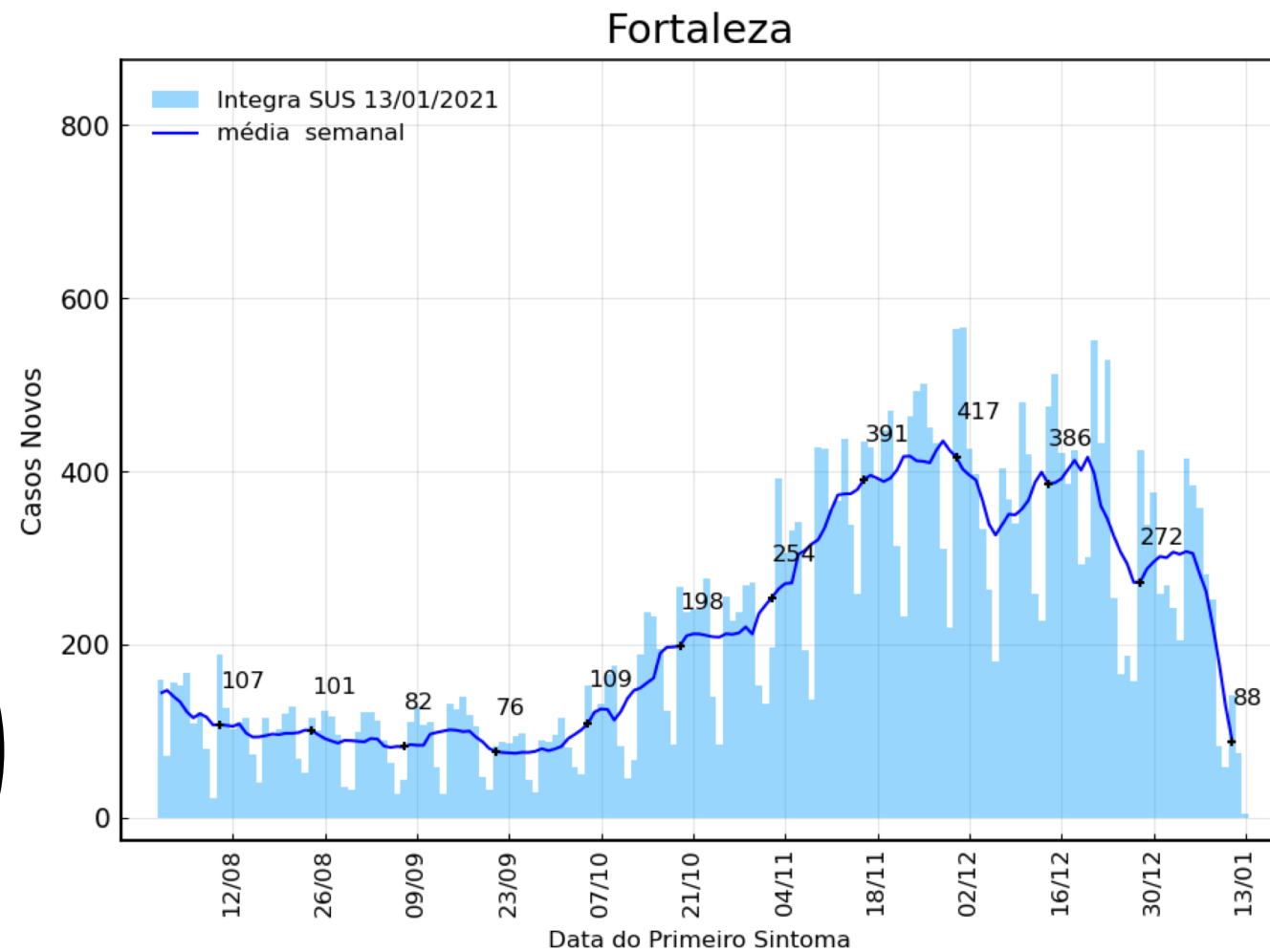
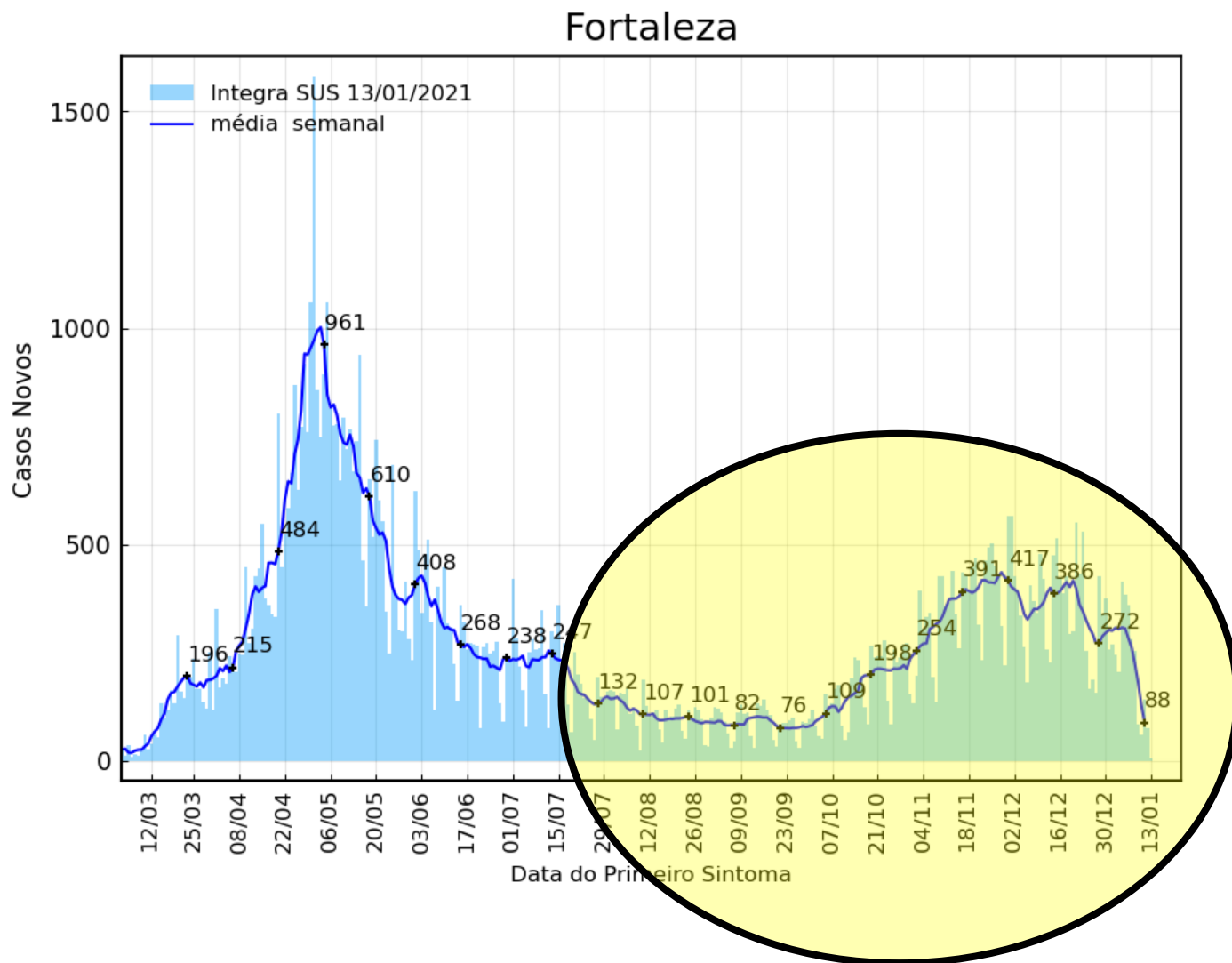
Rilder Pires (CAPP- IPECE-SEPLAG)

Saulo Reis (UFC - Física)



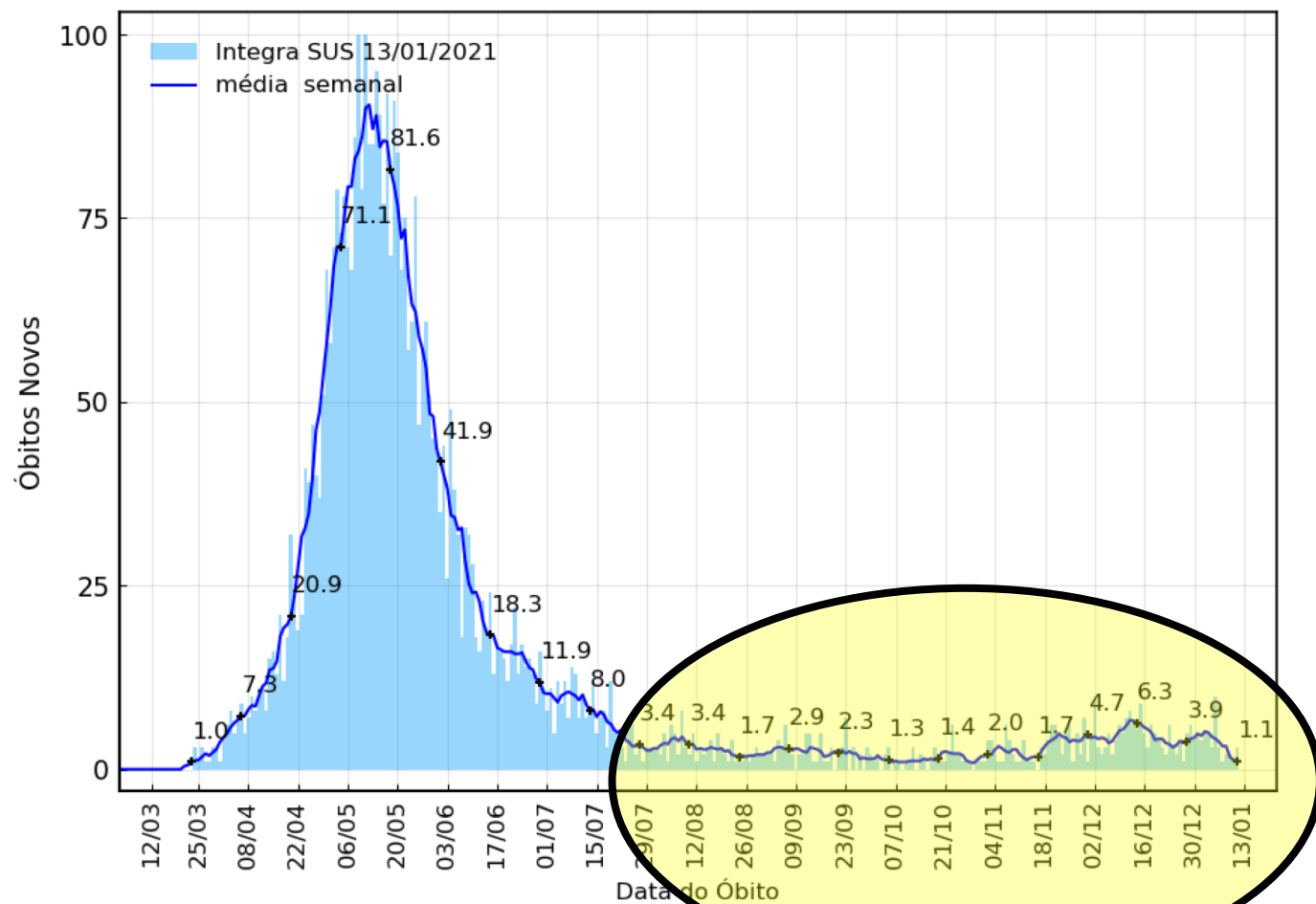
Fortaleza (capital)

Dados atualizados em 14/01/2021

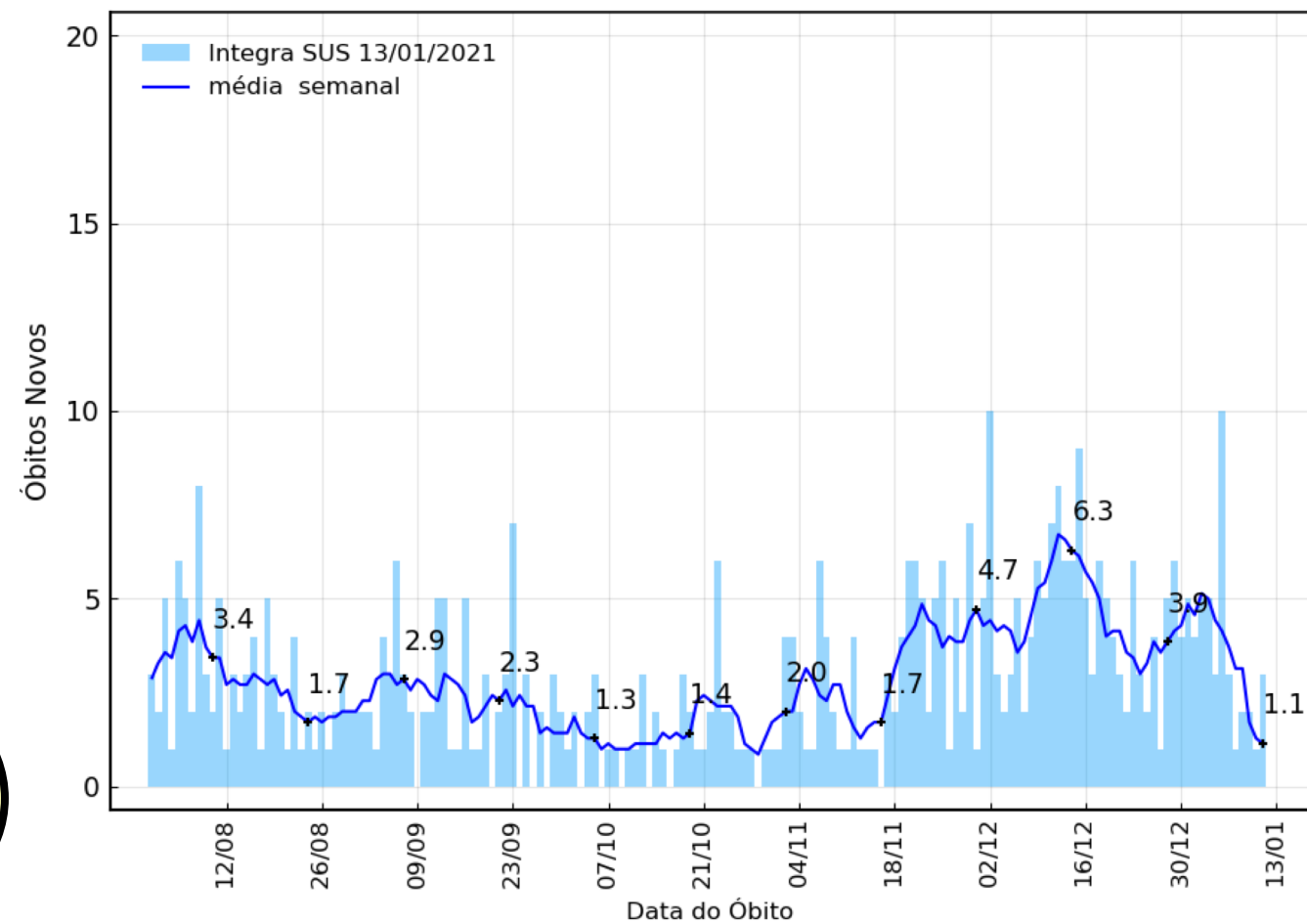


Dados atualizados em 14/01/2021

Fortaleza

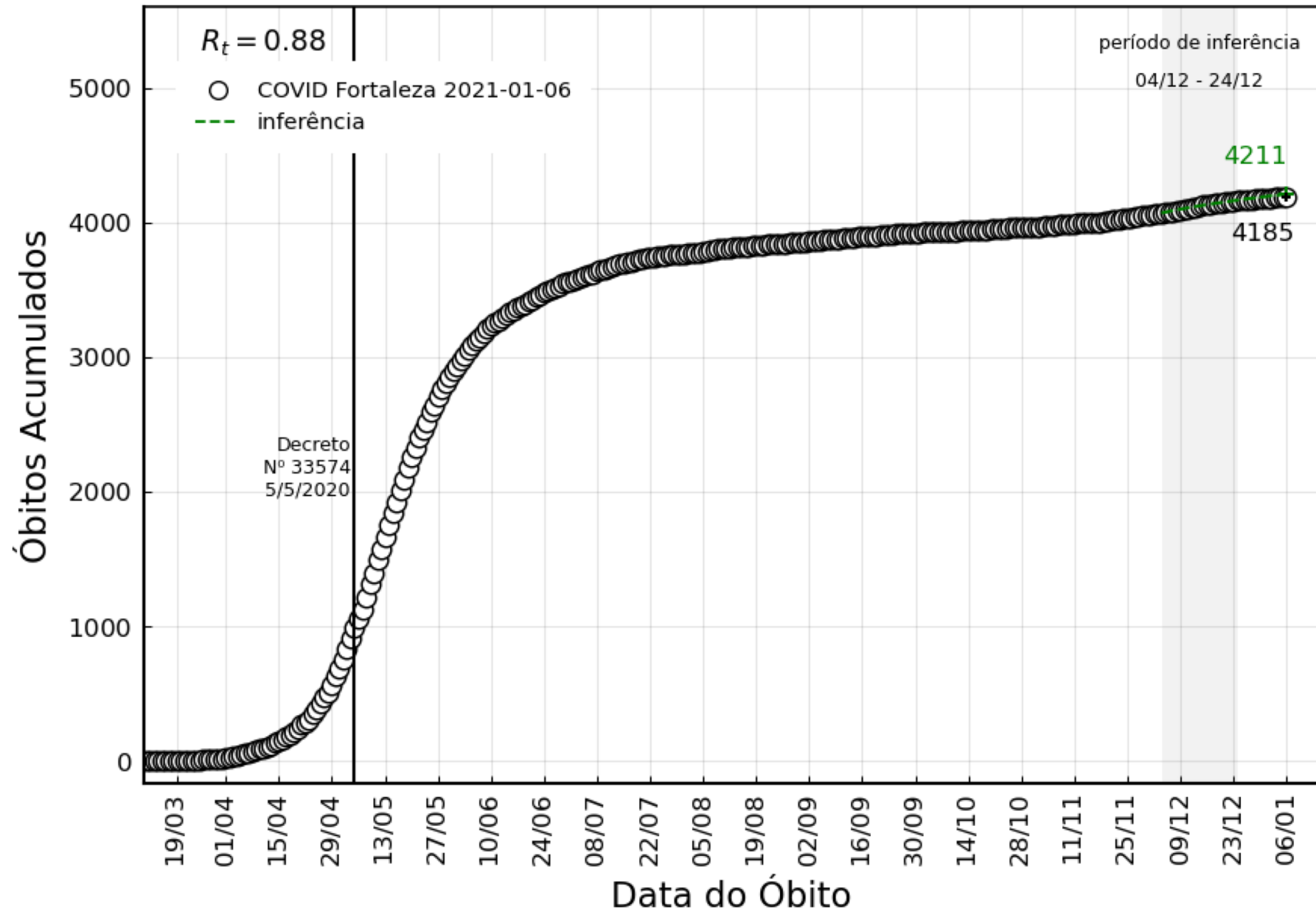


Fortaleza



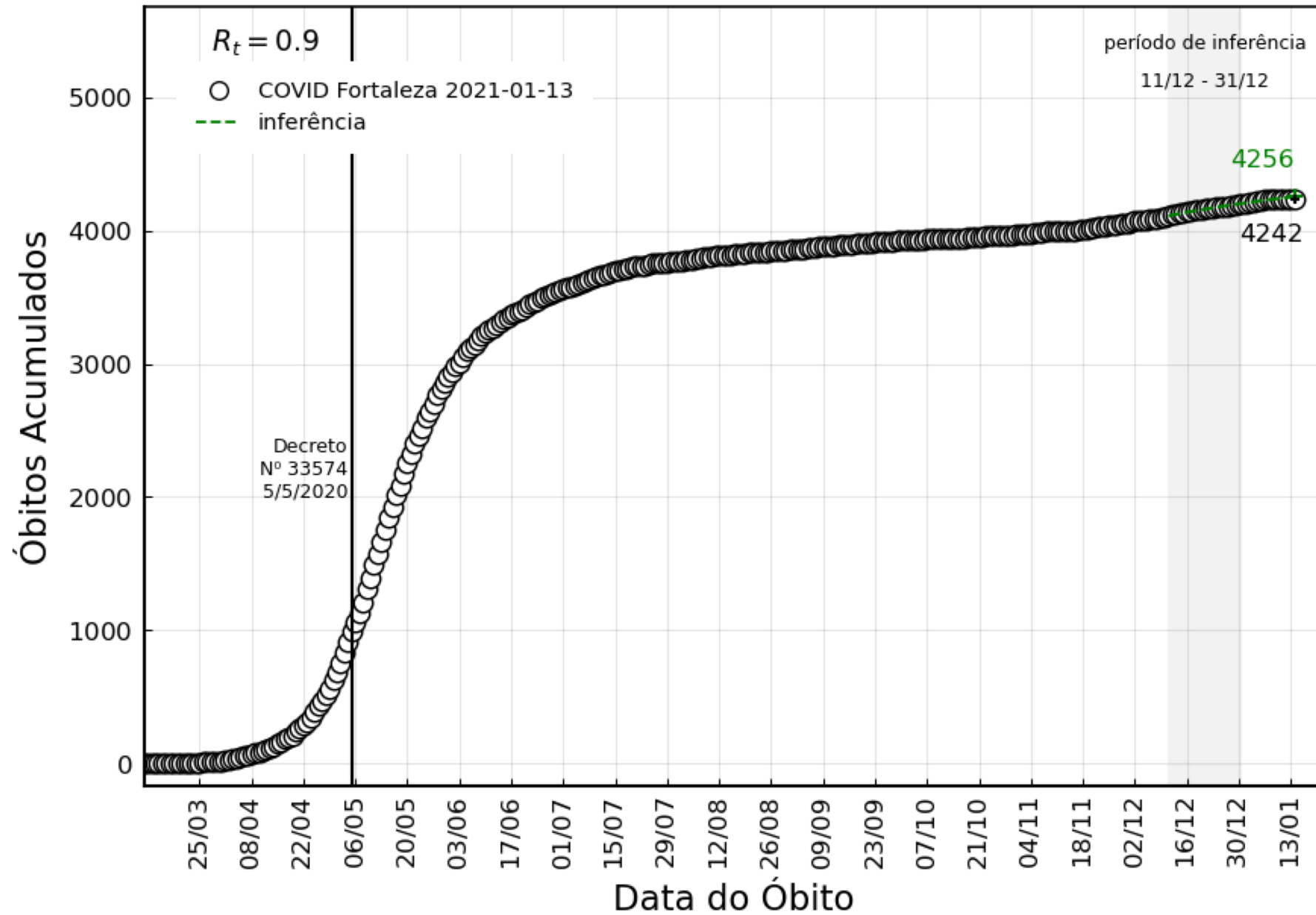
Inferência com Óbitos 06/01/2021

Fortaleza

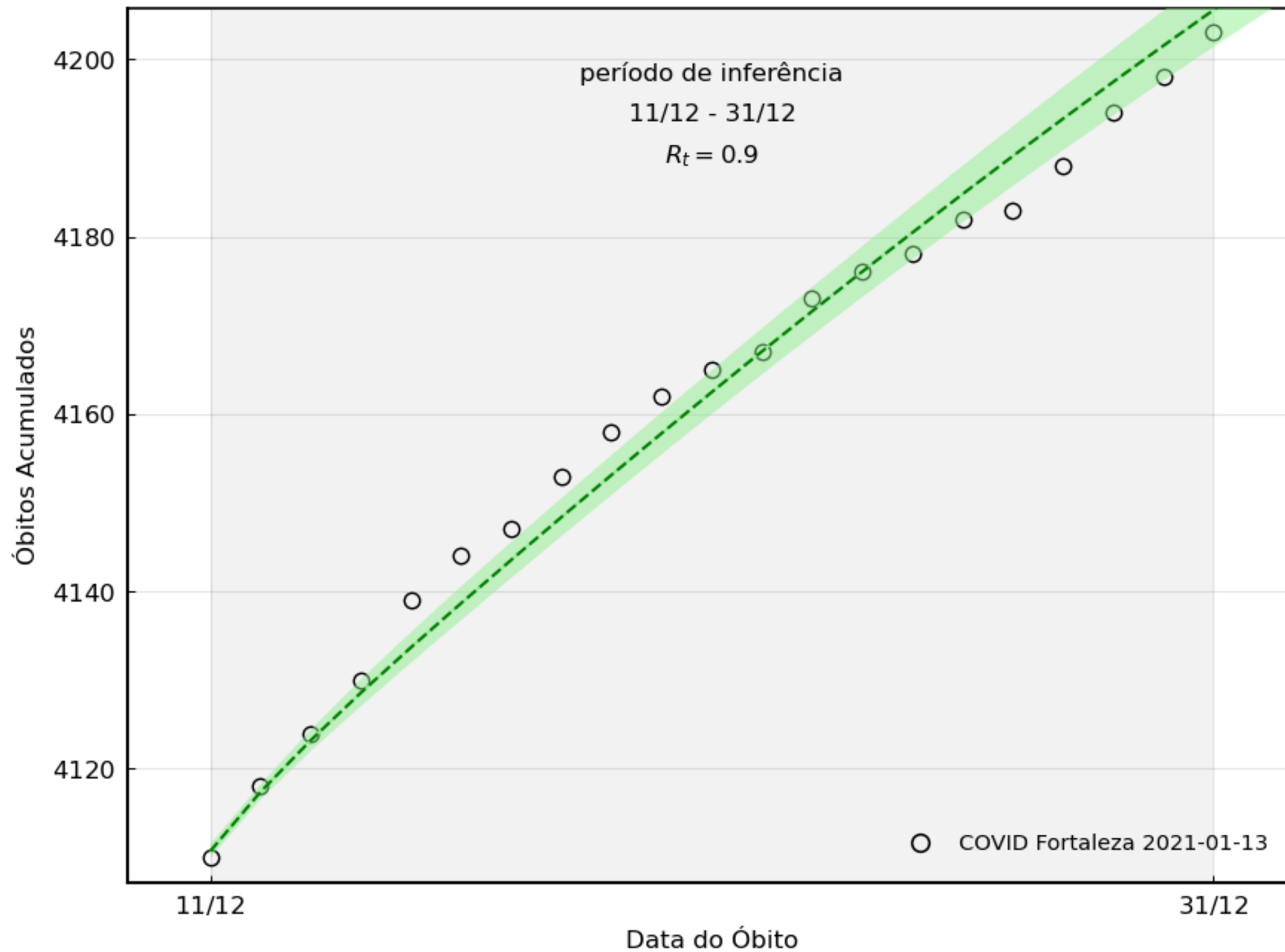


Inferência com Óbitos 14/01/2021

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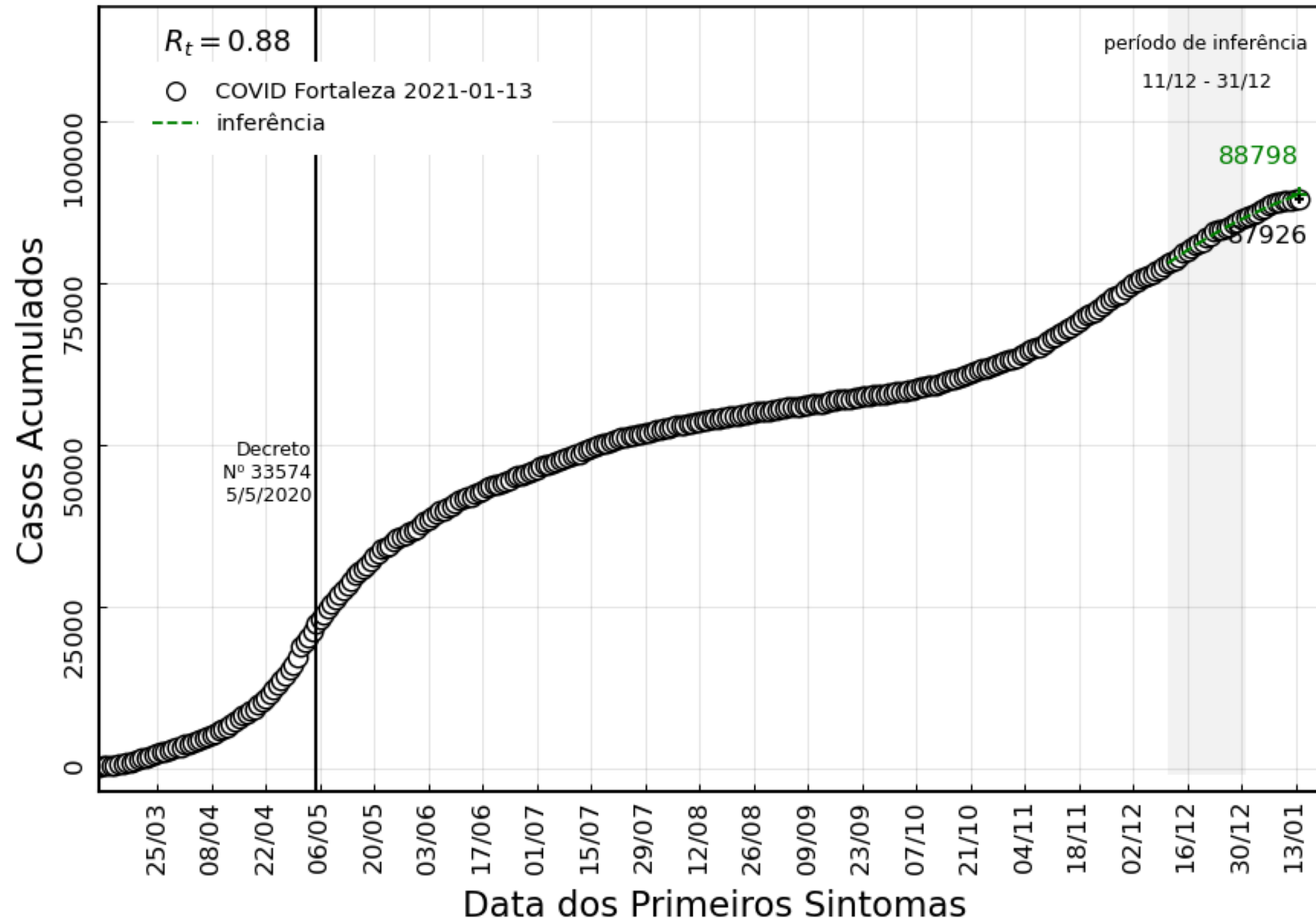


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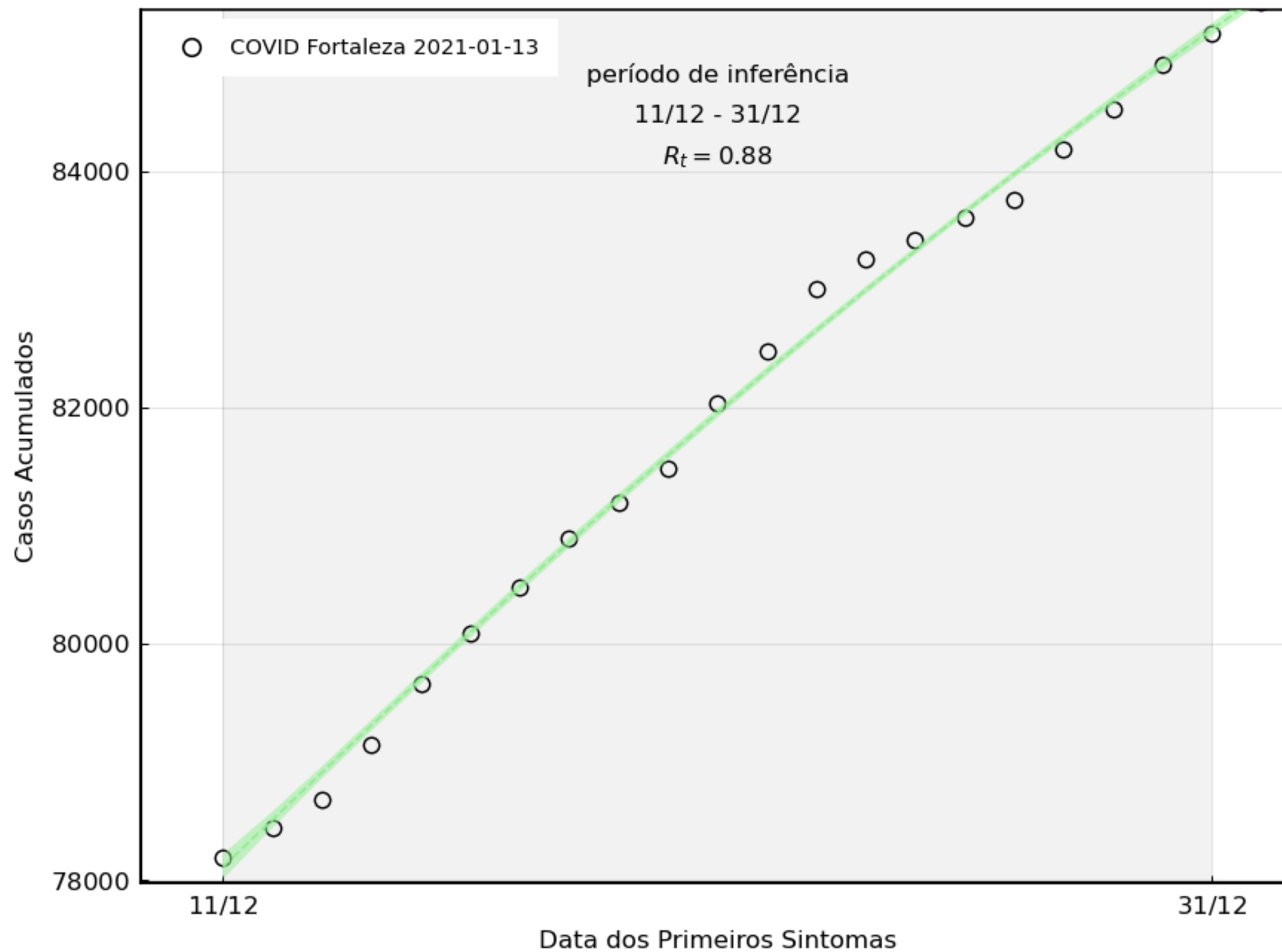


Inferência com Casos 14/01/2021

Fortaleza



Inferência com Casos 14/01/2021



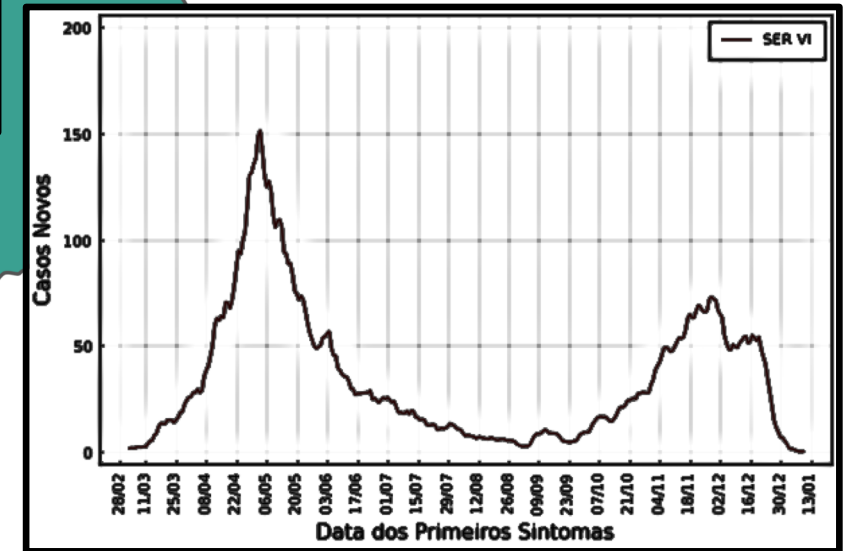
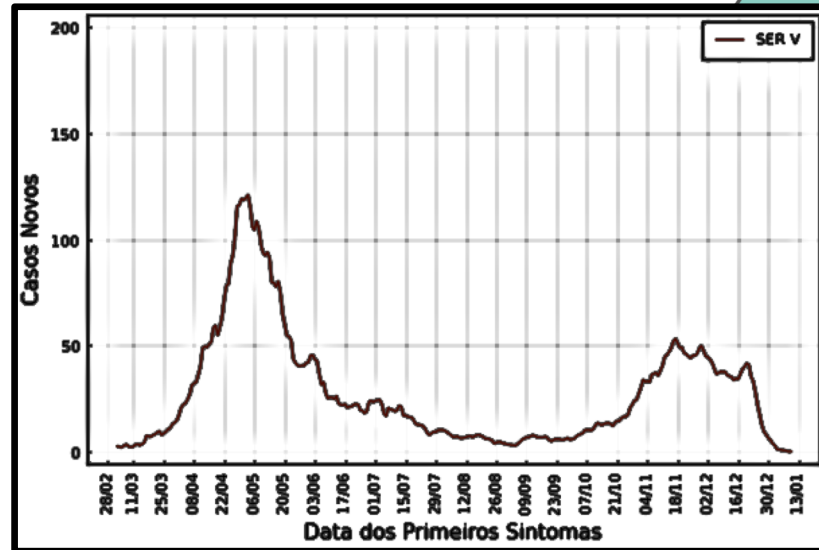
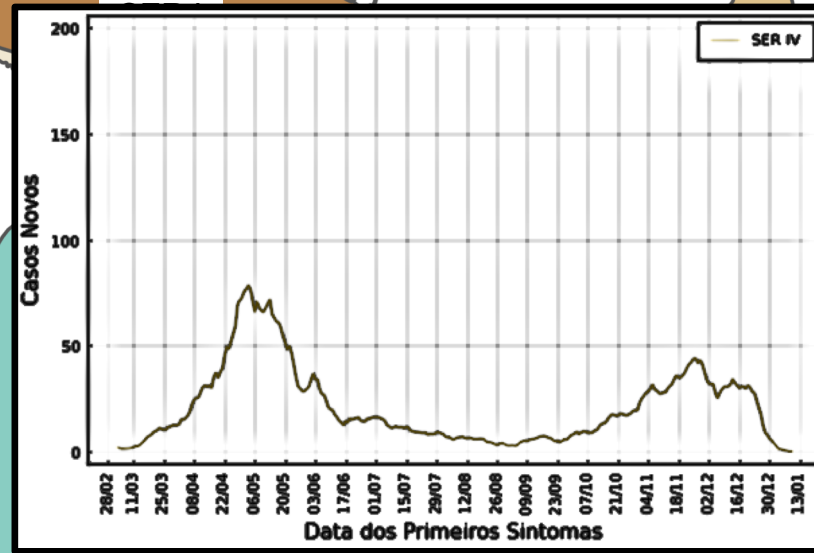
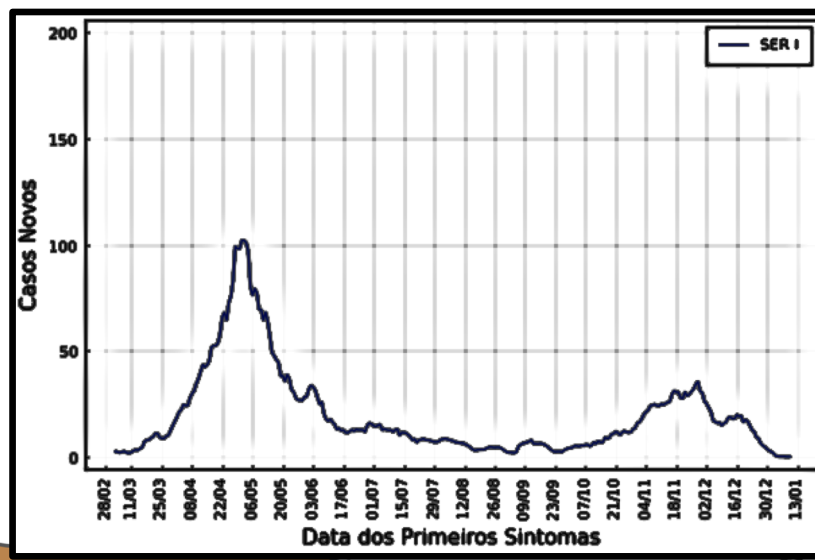
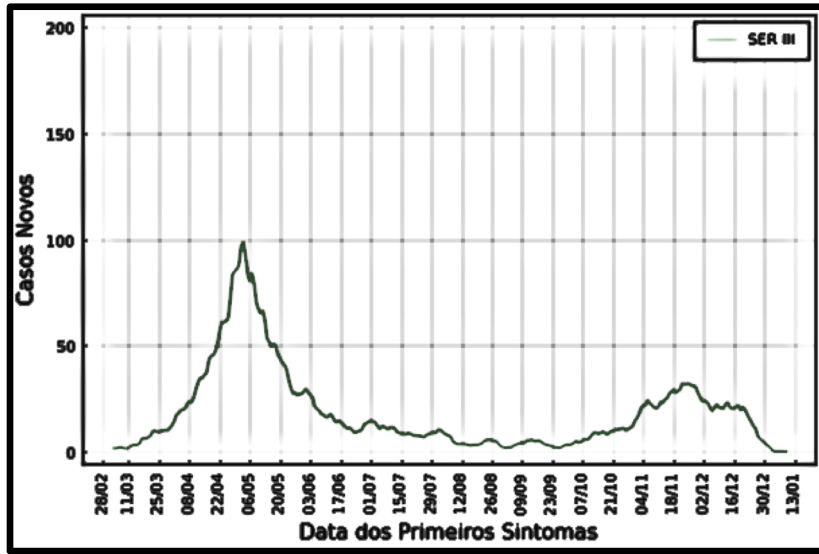
Fortaleza & Regiões

| REGIONAL | POPULAÇÃO |
|----------|-----------|
| SER I | 396135 |
| SER II | 395593 |
| SER III | 379246 |
| SER IV | 310568 |
| SER V | 553642 |
| SER VI | 573205 |

População de Fortaleza = 2.608.389 habitantes

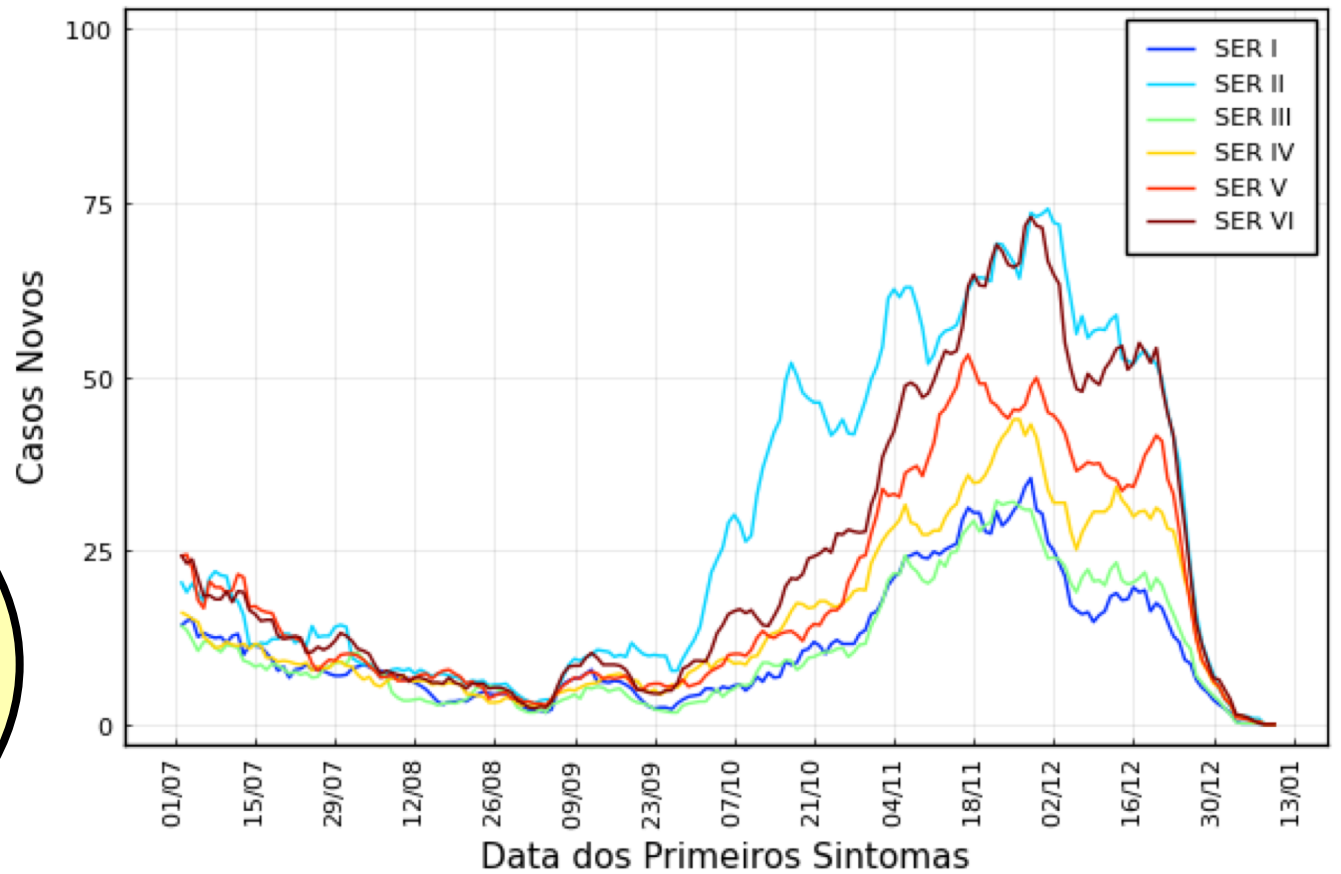
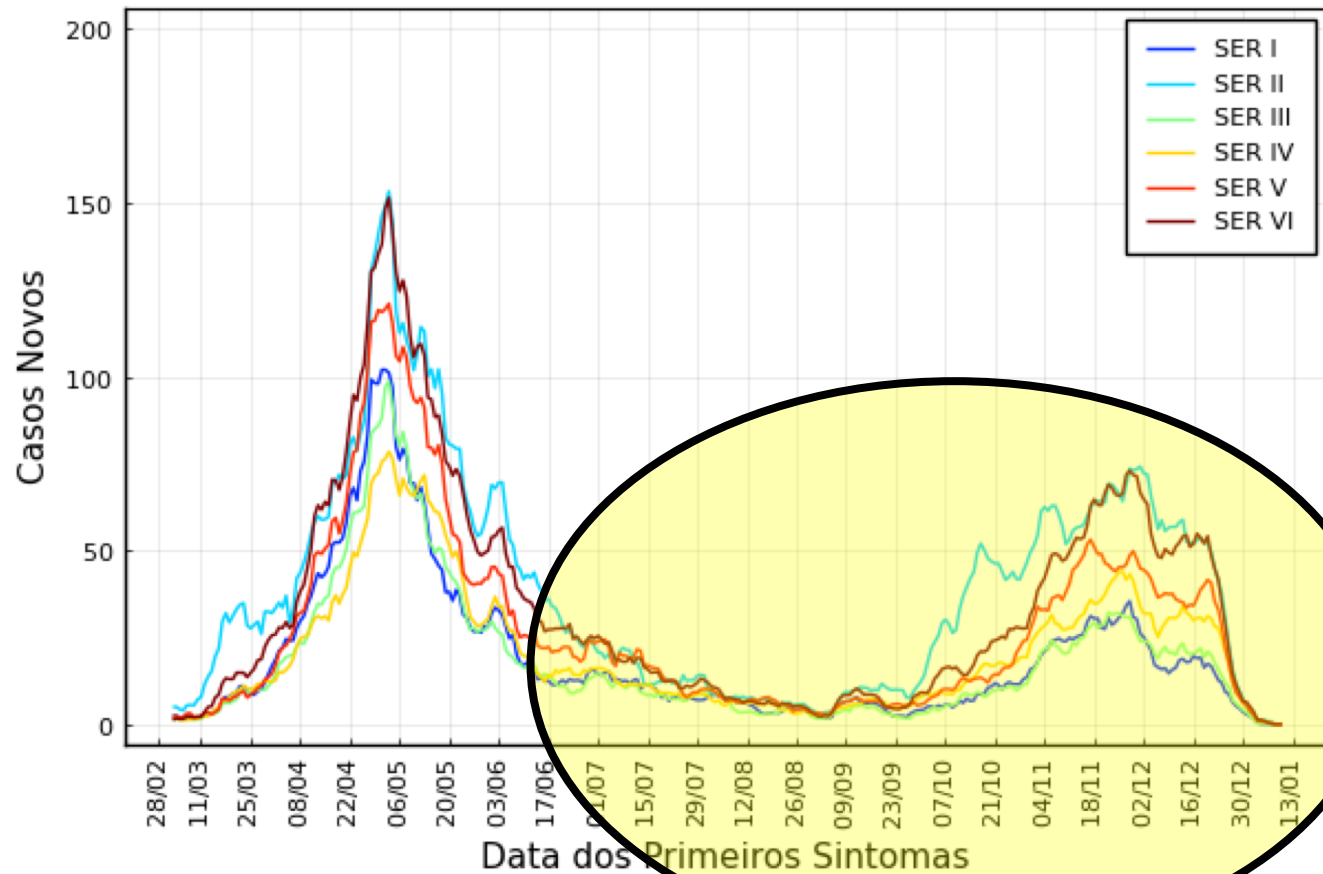
Evolução da Epidemia em Fortaleza por Regionais

Casos & Data Primeiros Sintomas



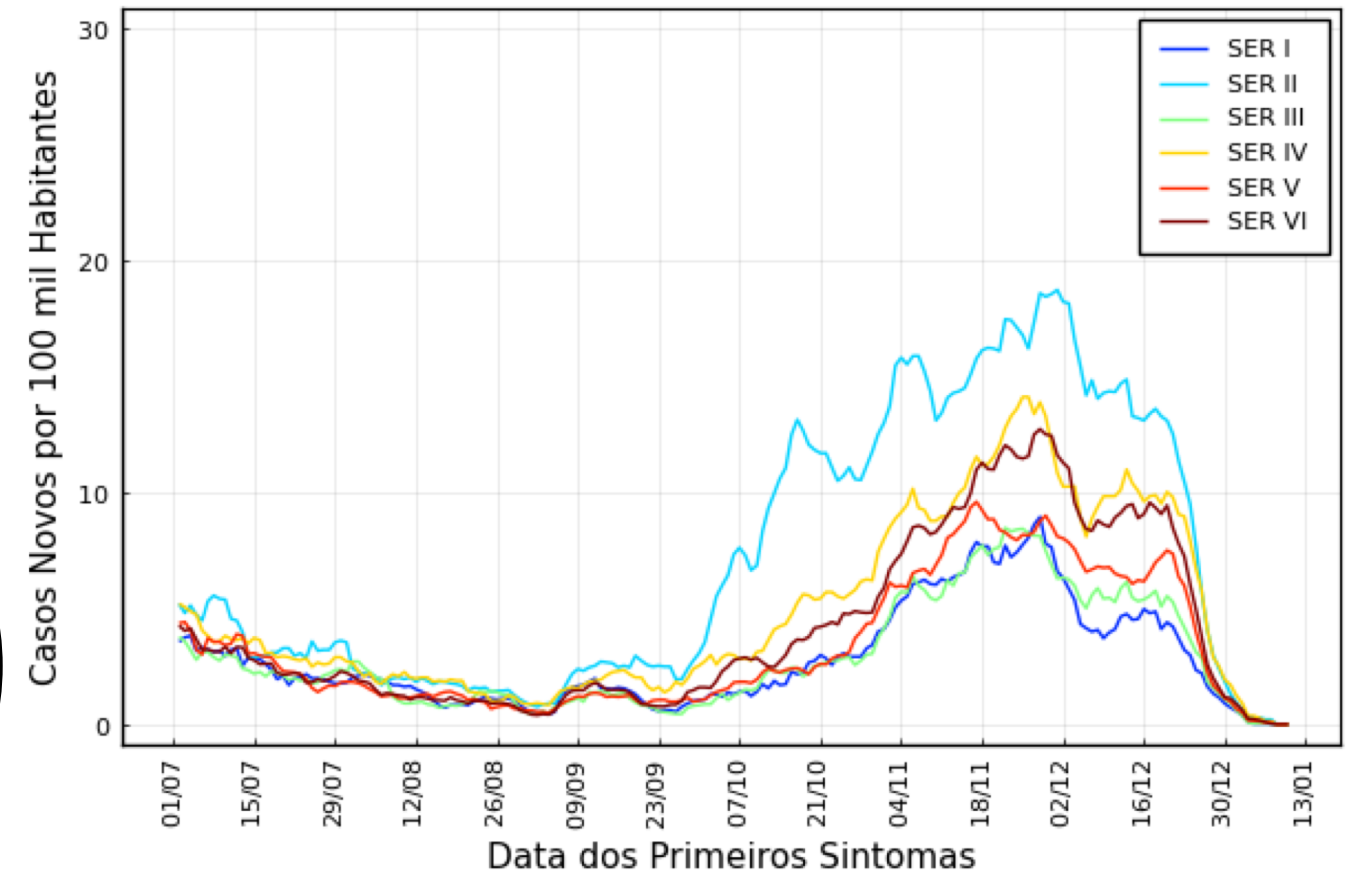
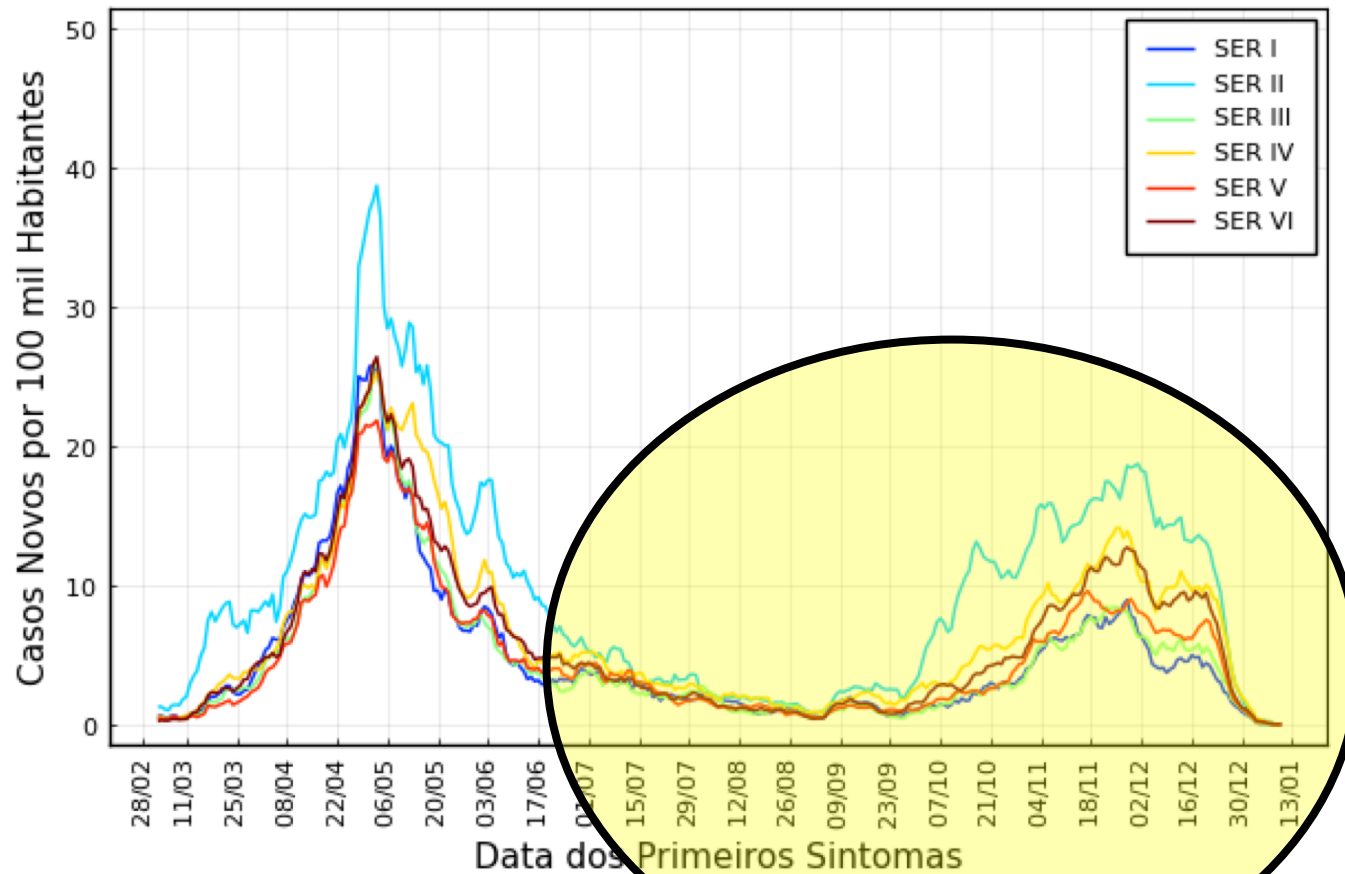
Evolução da Epidemia em Fortaleza por Regionais

Casos Novos & Data dos Primeiros Sintomas



Evolução da Epidemia em Fortaleza por Regionais

Casos Novos por 100 mil habitantes & Data dos Primeiros Sintomas



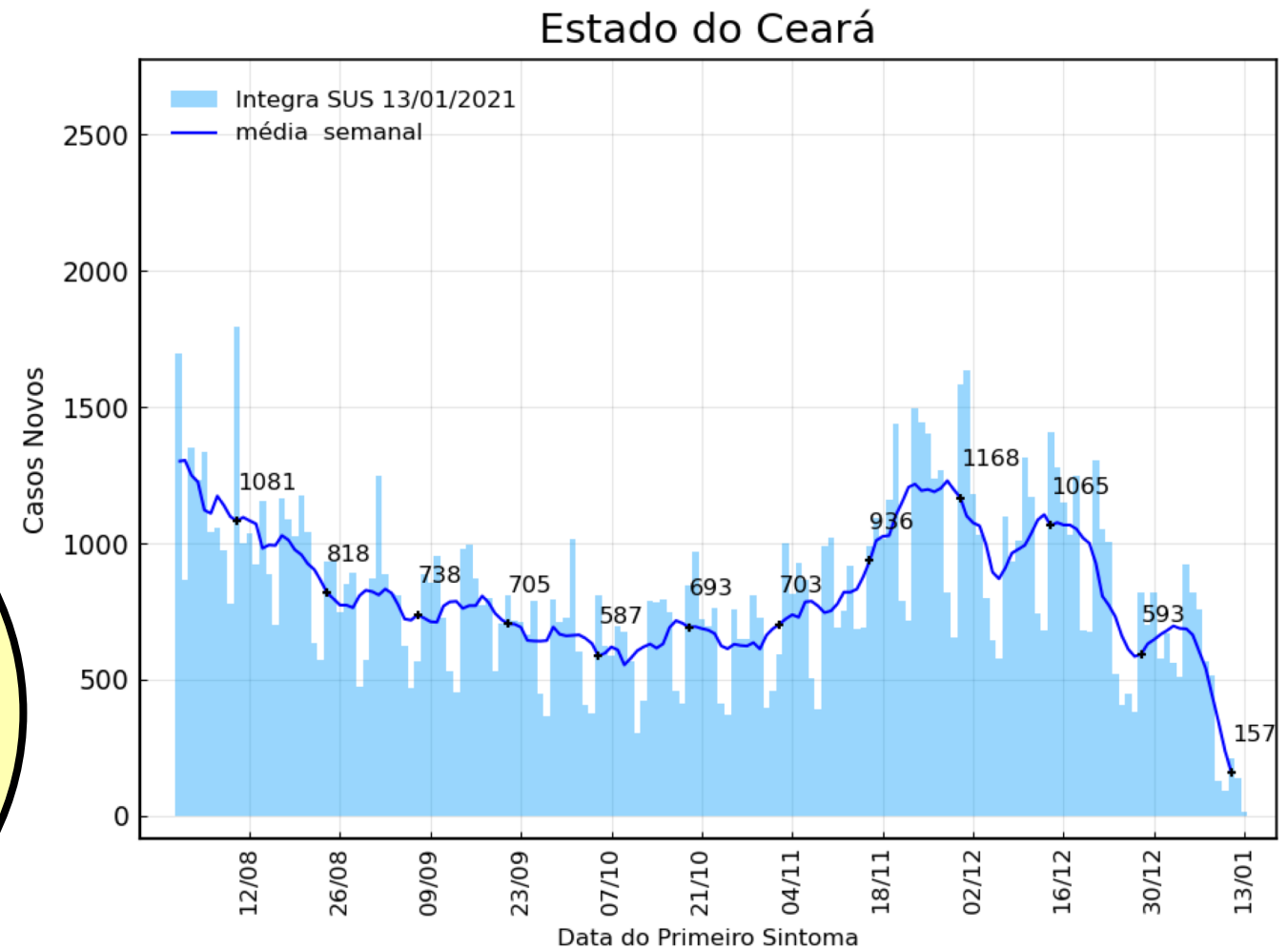
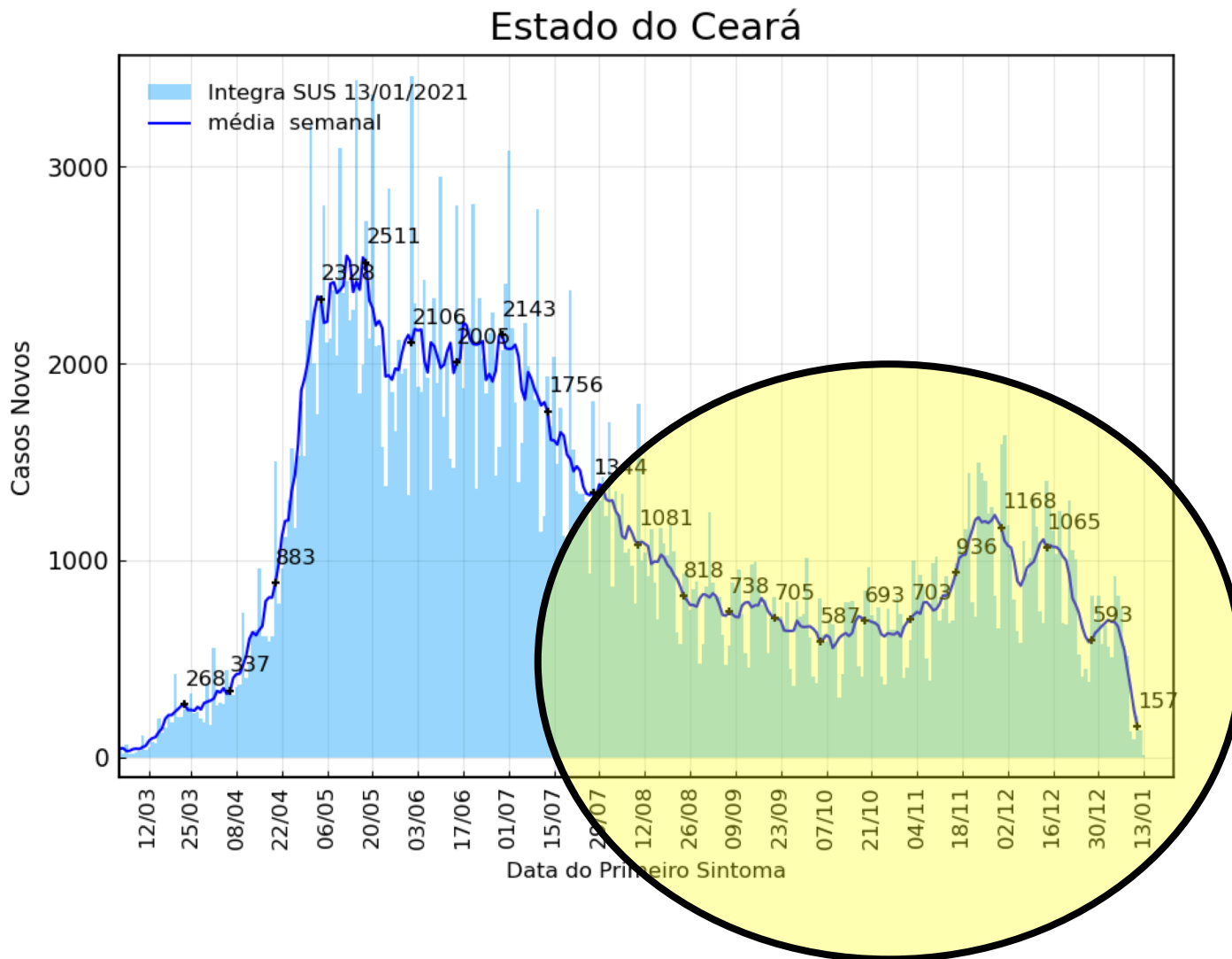
Ceará & Regiões

| REGIÃO | POPULAÇÃO (IBGE 2020) |
|-------------------------|-----------------------|
| Fortaleza | 4.817.822 |
| Sobral | 1.643.656 |
| Cariri | 1.523.245 |
| Sertão Central | 652.591 |
| Litoral Leste/Jaguaribe | 549.789 |

População do Ceará = 9.187.103 habitantes

Estado do Ceará

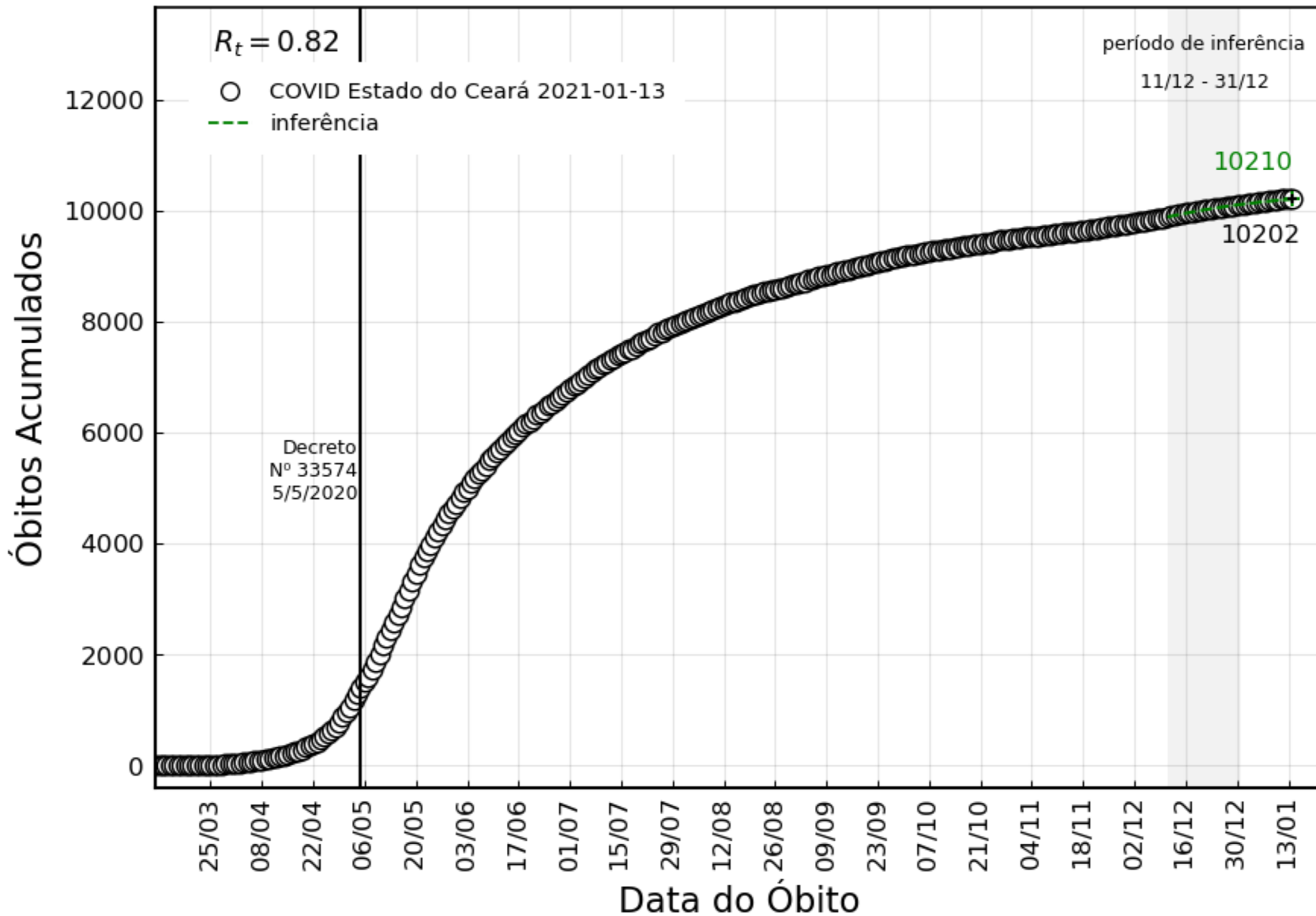
Dados atualizados em 14/01/2021



Dados atualizados em 14/01/2021

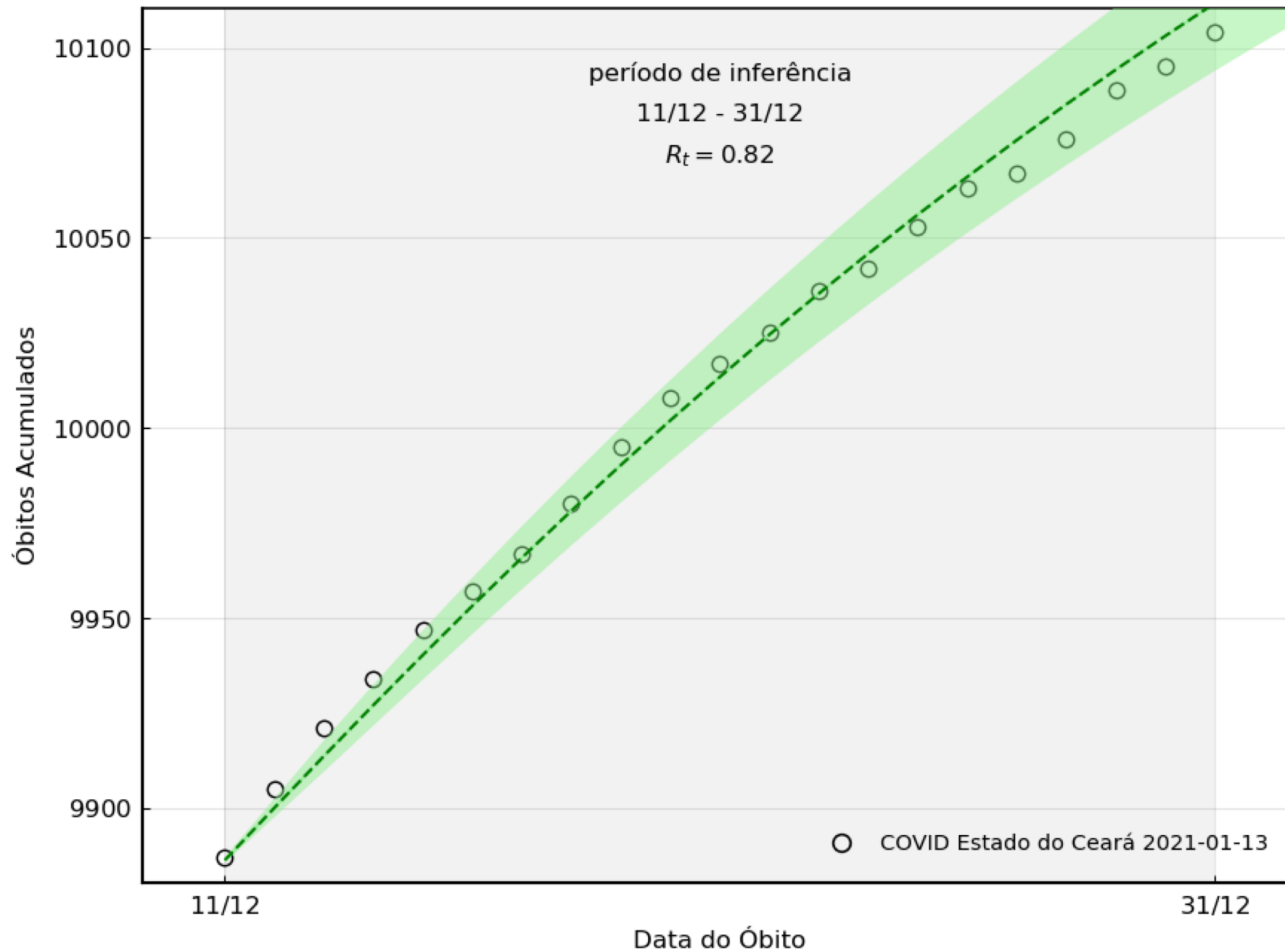
Inferência com Óbitos

Estado do Ceará



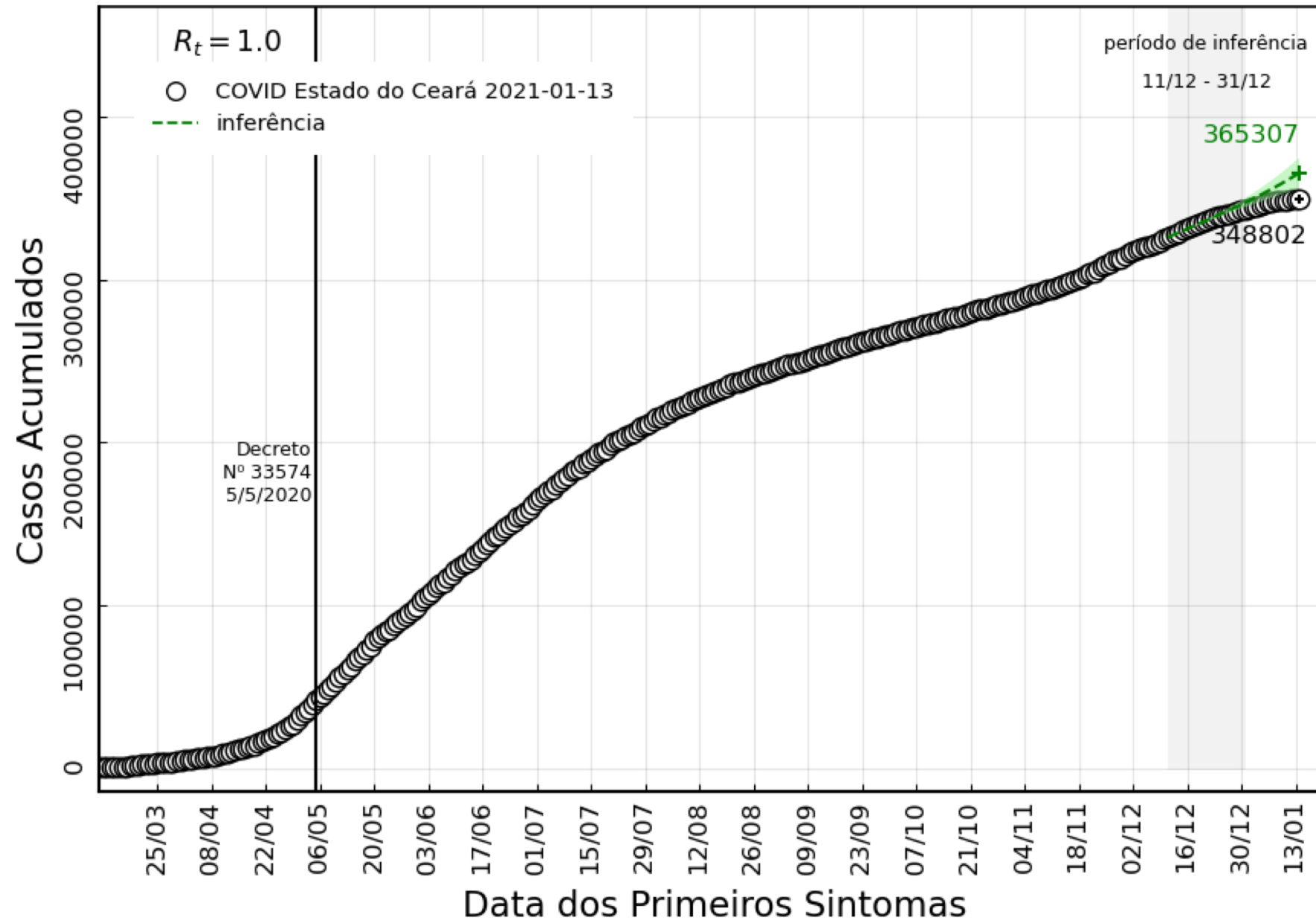
| Ceará | |
|----------------------|-------------|
| Janela de Inferência | R_t |
| 11/11 – 01/12 | 0.86 |
| 18/11 – 08/12 | 0.97 |
| 04/12 – 24/12 | 0.84 |
| 11/12 – 31/12 | 0.82 |

Inferência com Óbitos 14/01/2021

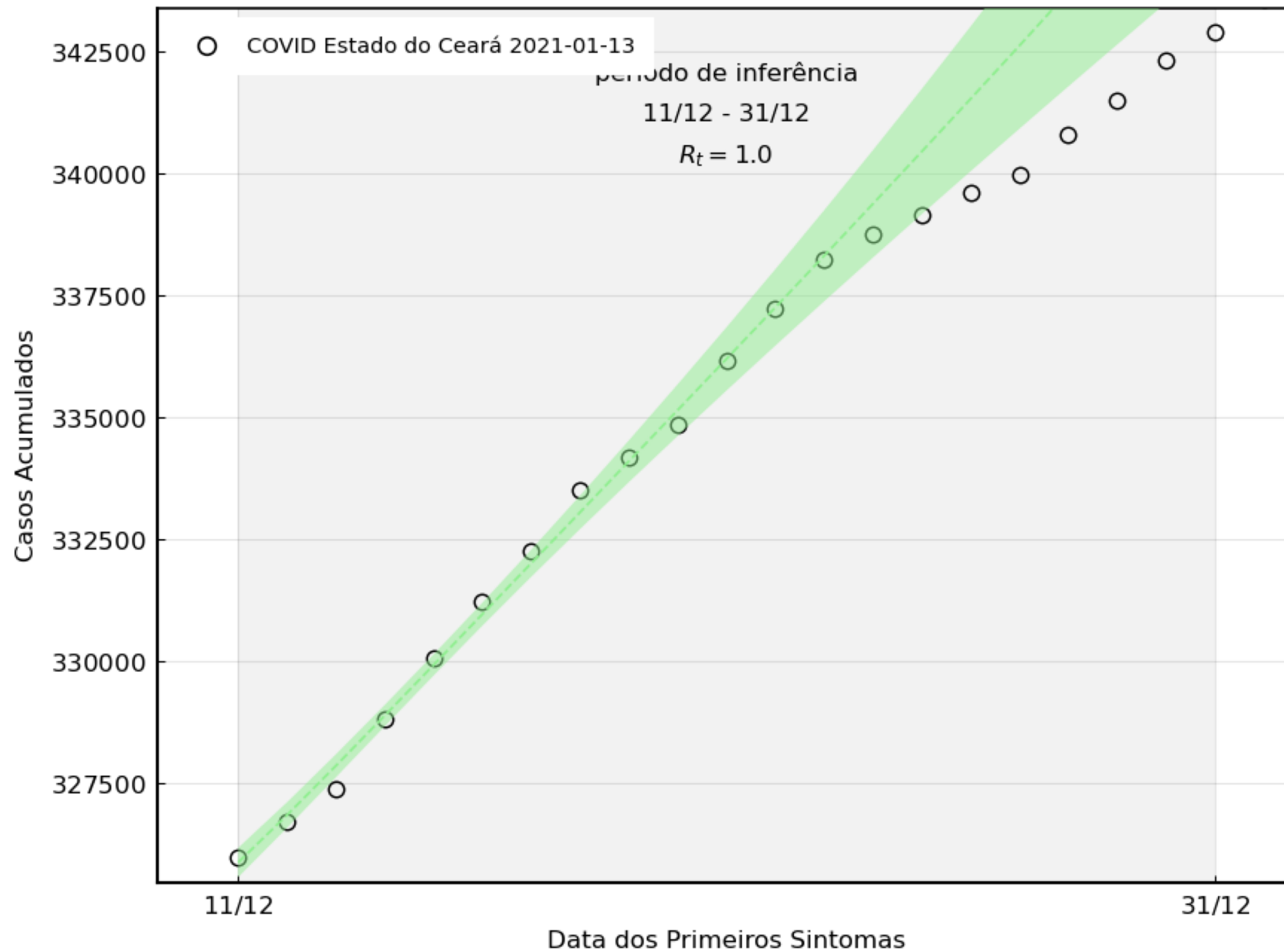


Inferência com Casos 14/01/2021

Estado do Ceará

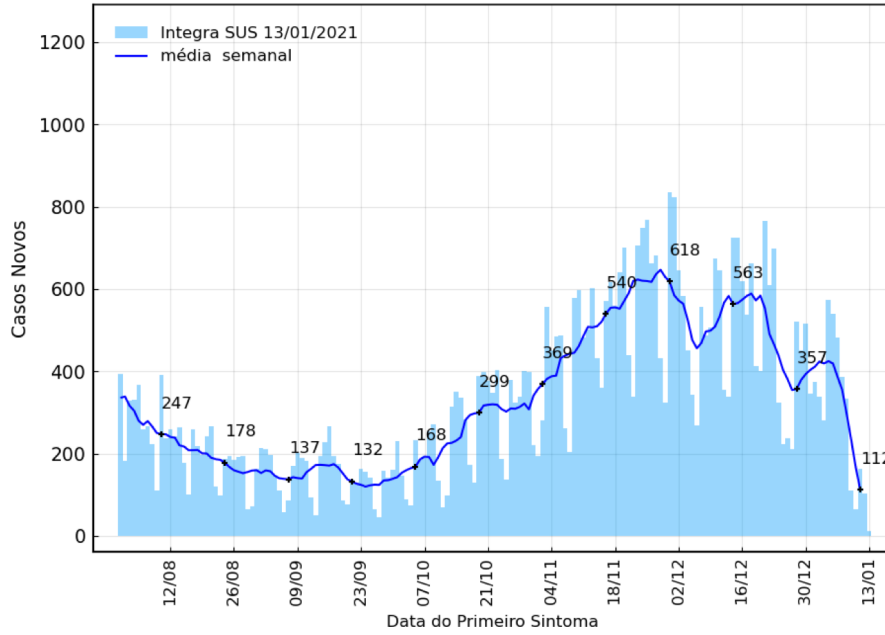


Inferência com Casos 14/01/2021

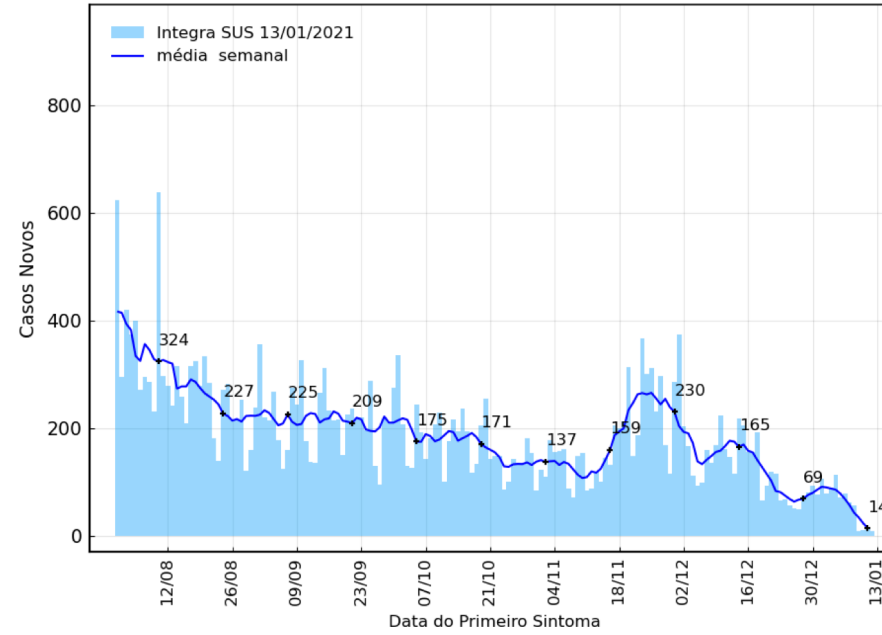


Casos nas Regiões 14/01/2021

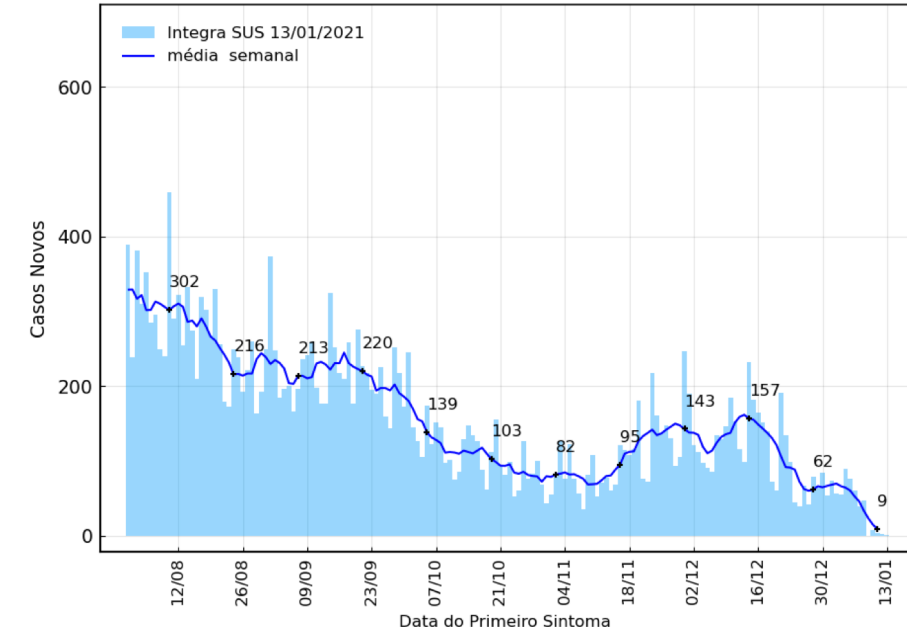
Região de Fortaleza



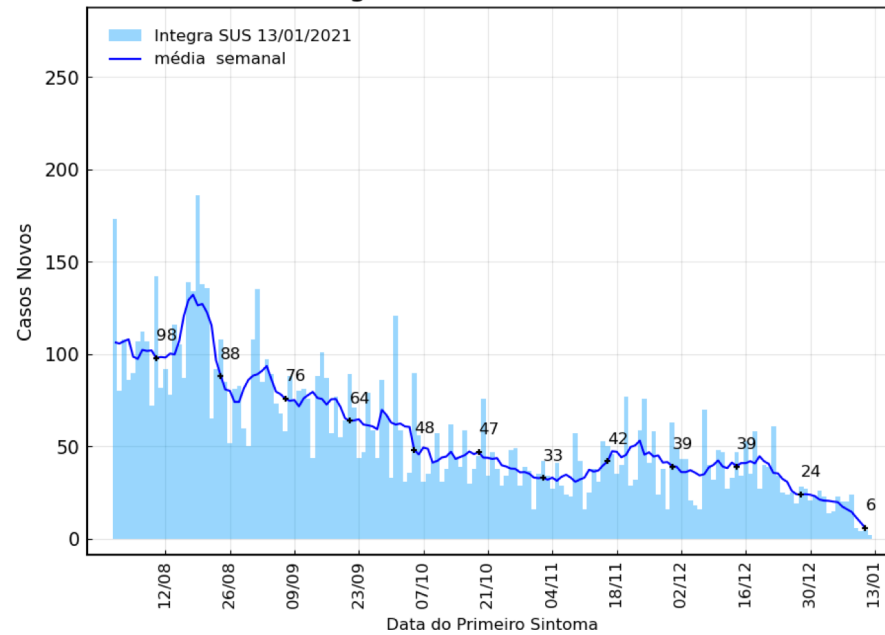
Região do Cariri



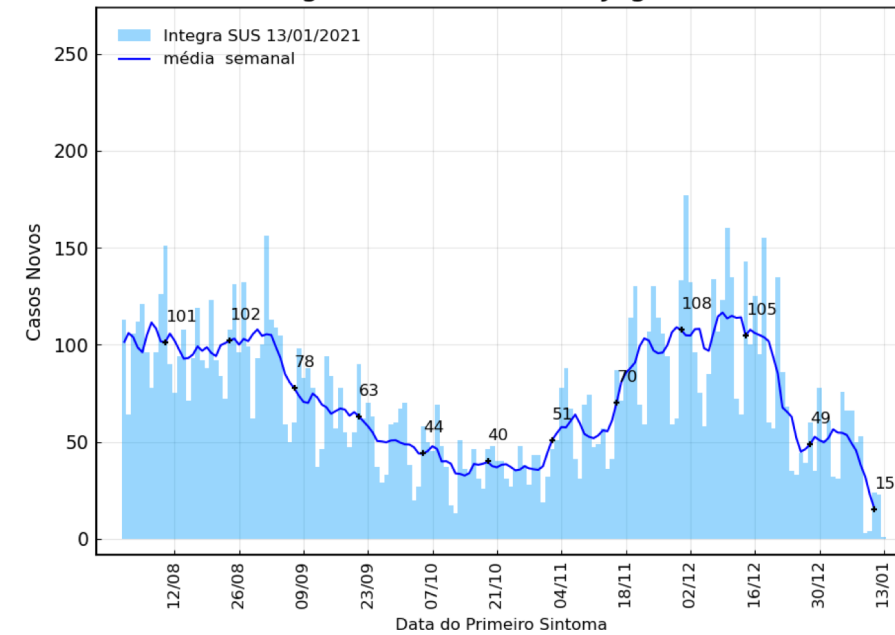
Região de Sobral



Região do Sertão Central

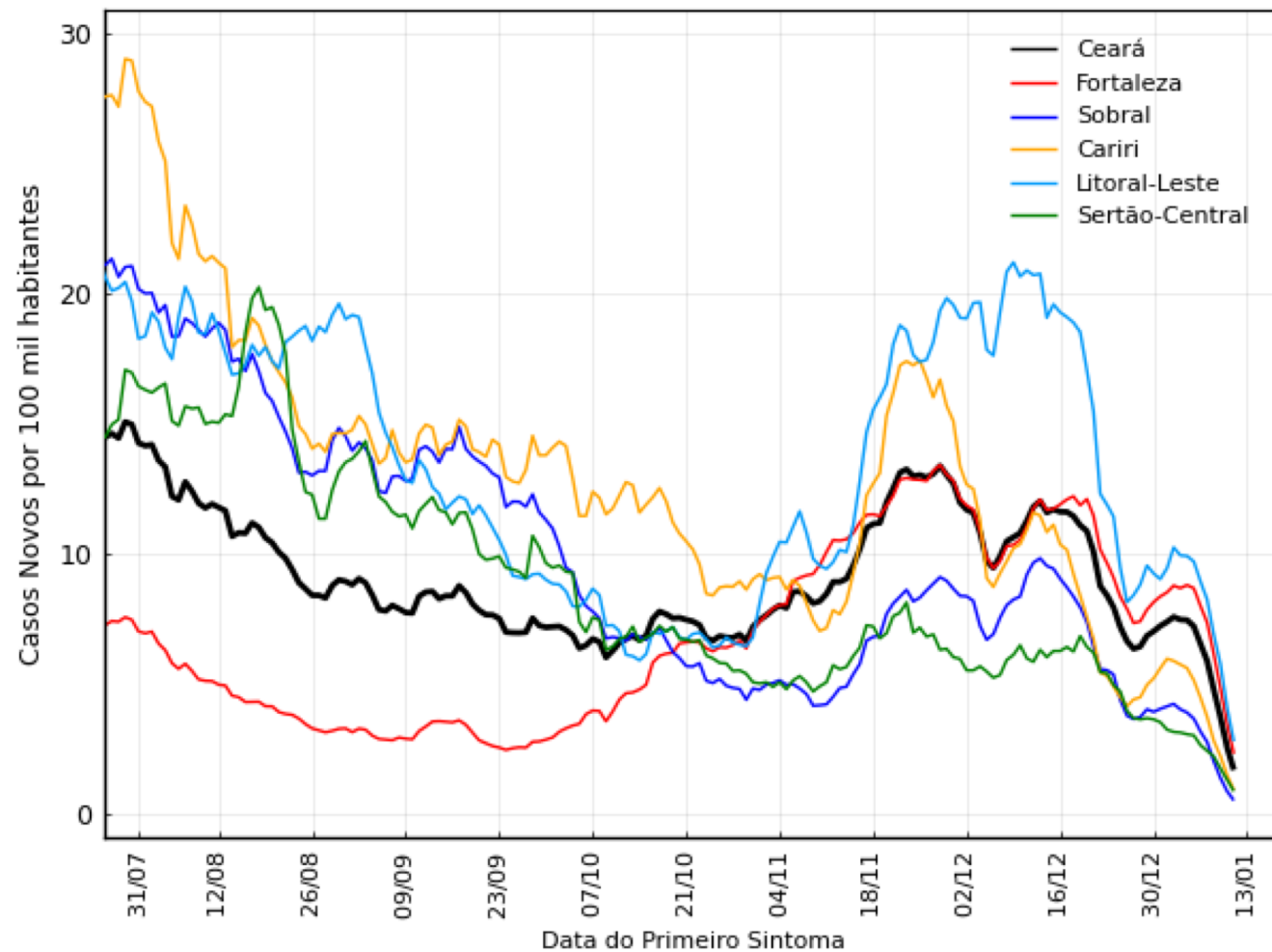
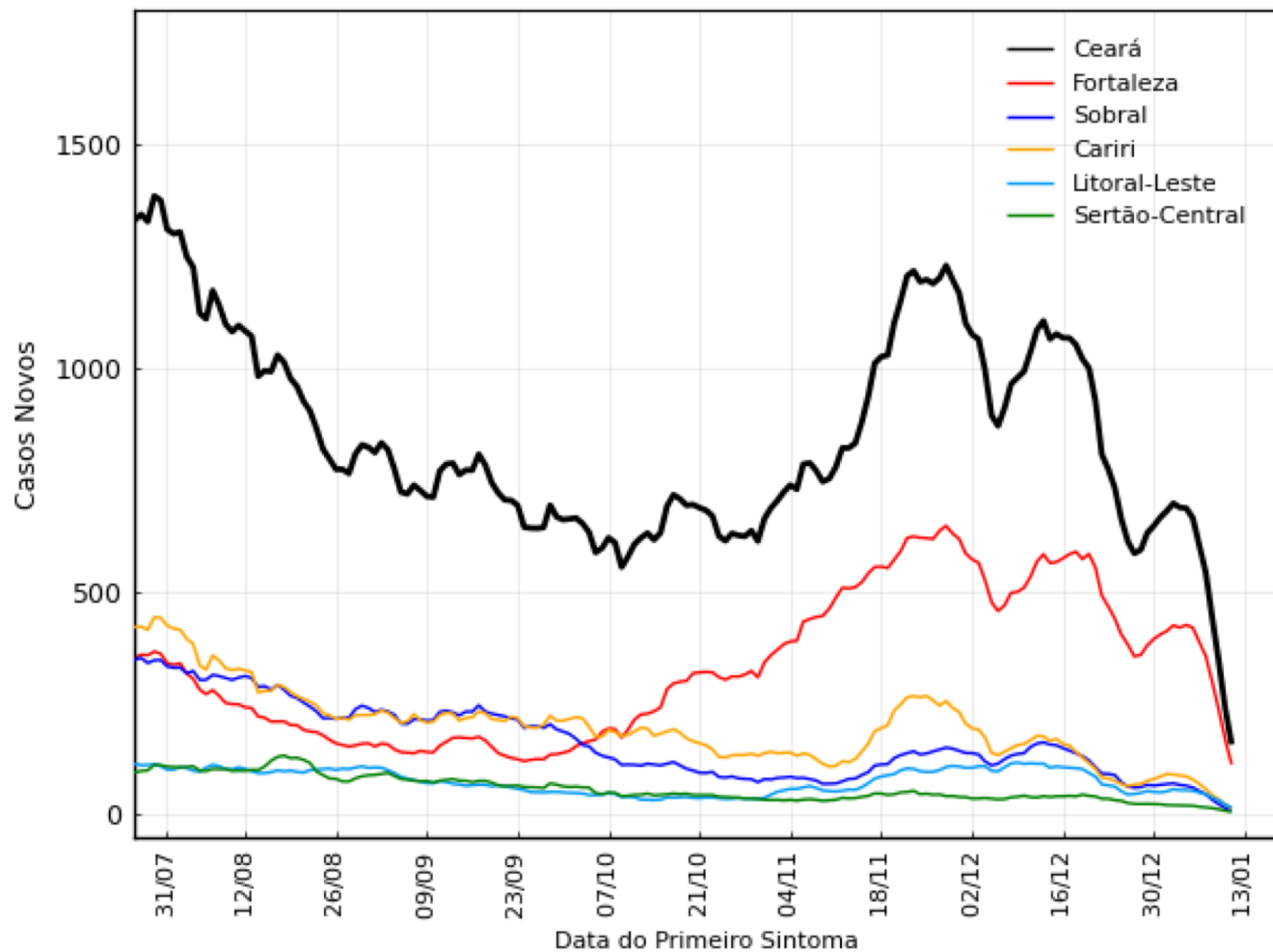


Região do Litoral Leste/Jaguaribe



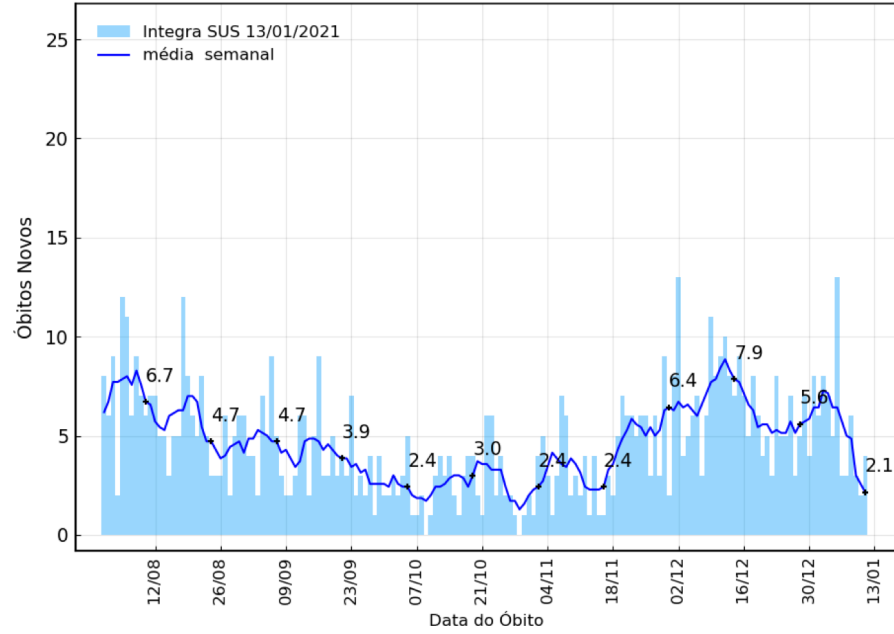
Evolução da Epidemia no Ceará por Regiões

Casos Novos & Casos Novos por 100 mil habitantes

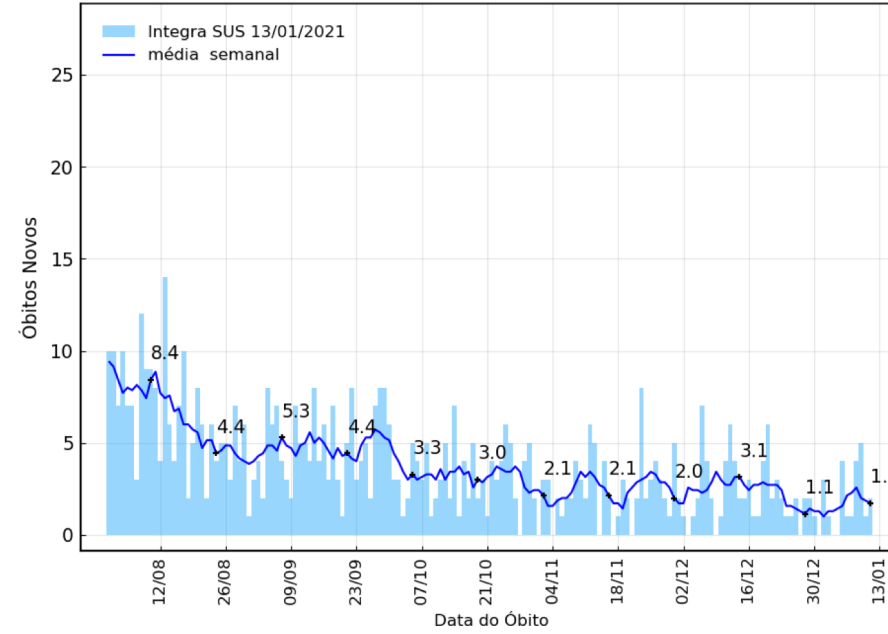


Óbitos nas Regiões 14/01/2021

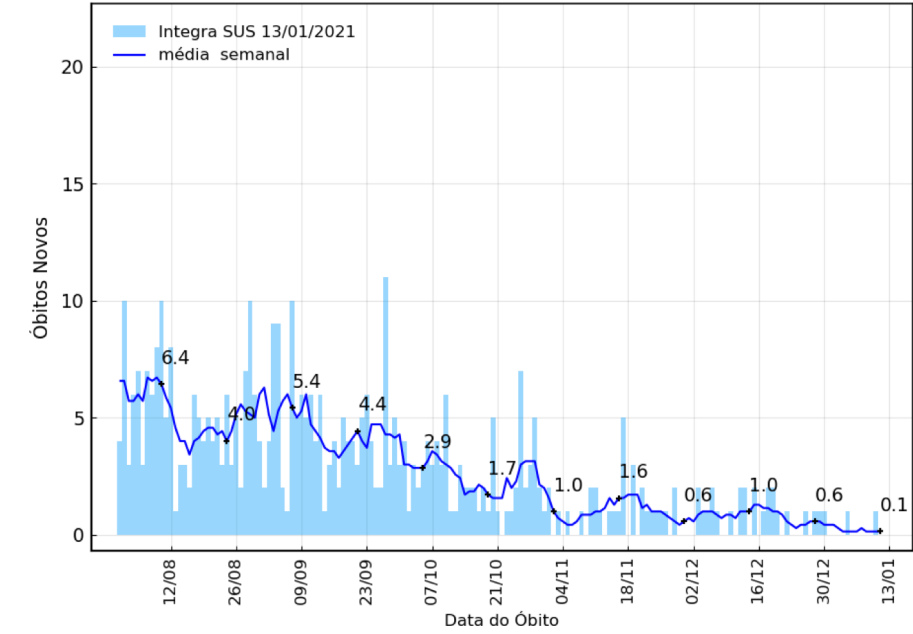
Região de Fortaleza



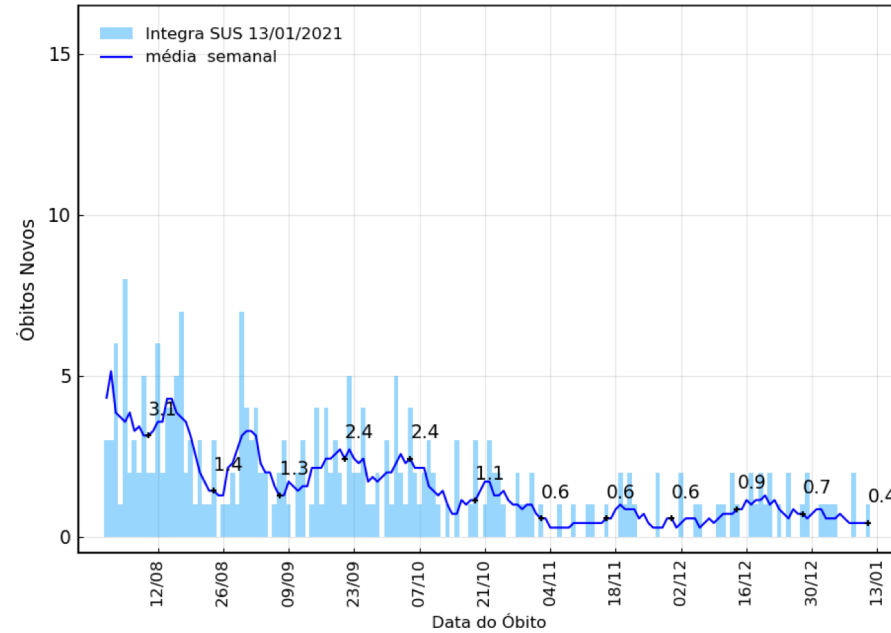
Região do Cariri



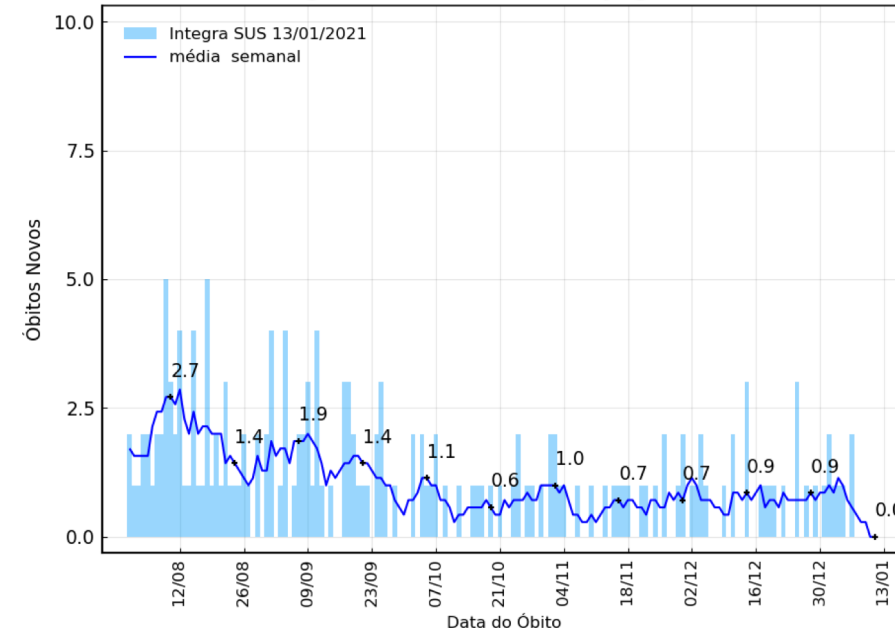
Região de Sobral



Região do Sertão Central

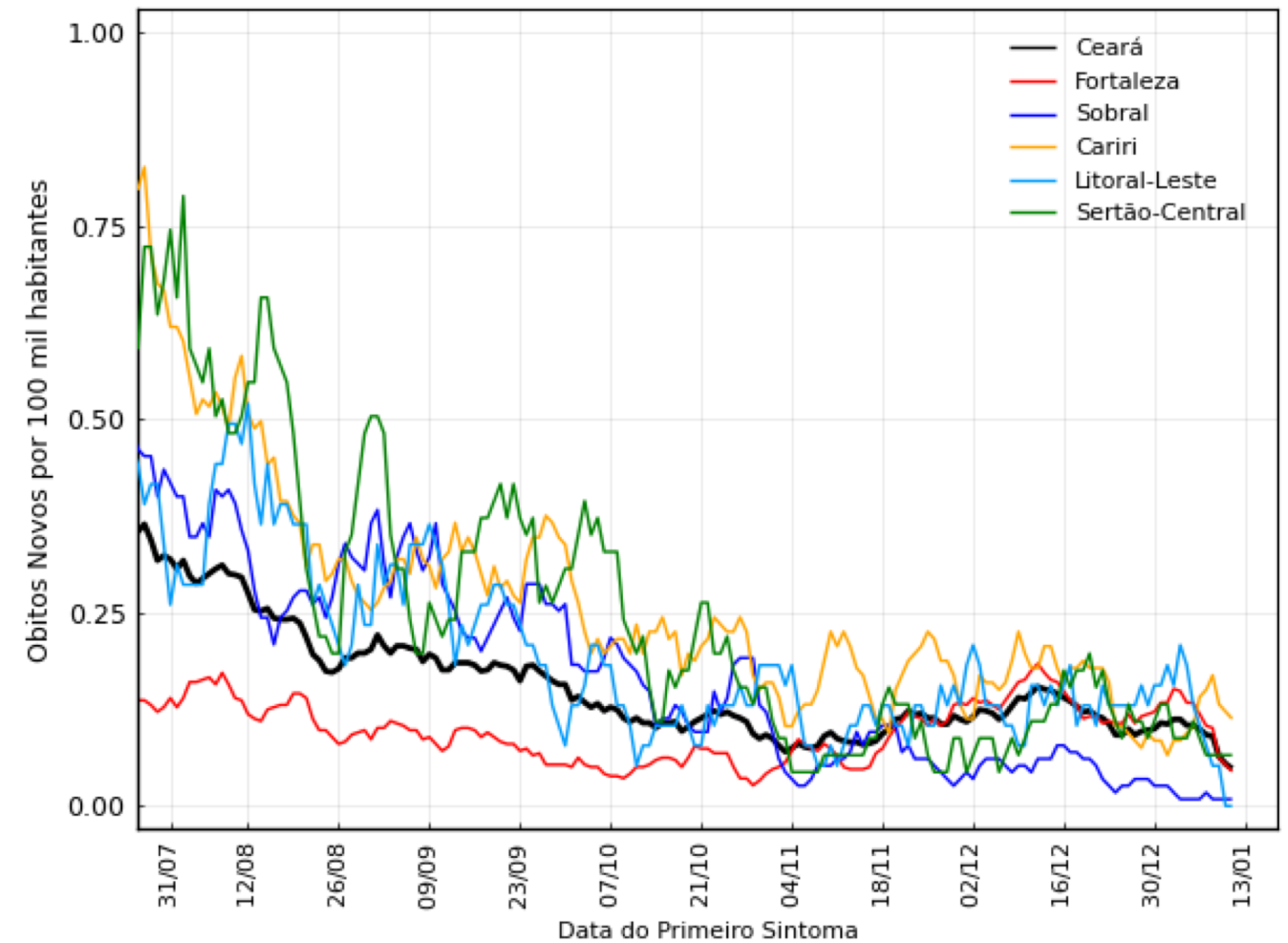
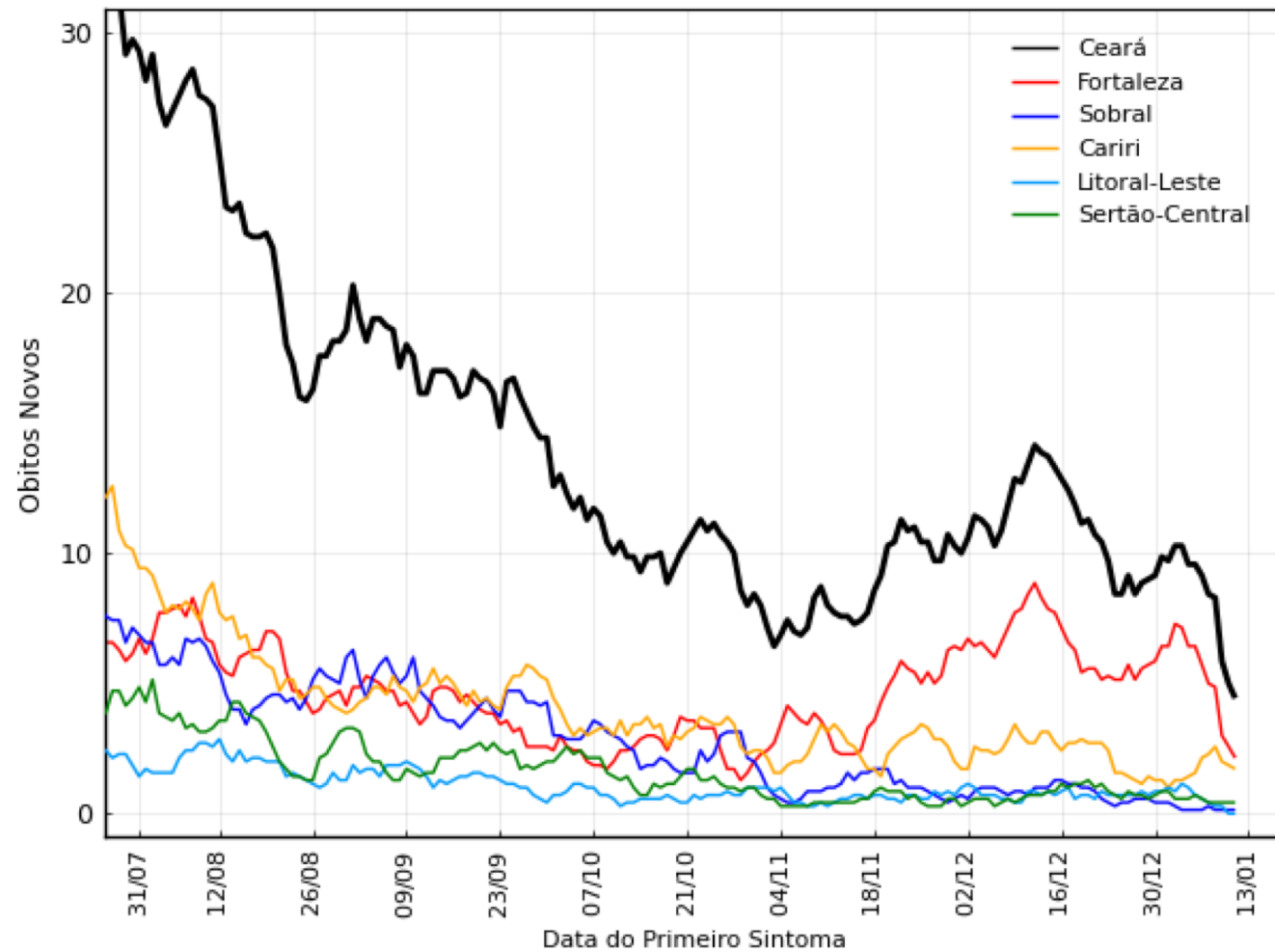


Região do Litoral Leste/Jaguaribe



Evolução da Epidemia no Ceará por Regiões

Óbitos Novos & Óbito Novos por 100 mil habitantes



Inferências com Óbitos nas Regiões

| Fortaleza | |
|----------------------|-------------|
| Período | R_t |
| 11/11 – 01/12 | 1.17 |
| 18/11 – 08/12 | 1.05 |
| 04/12 – 24/12 | 0.97 |
| 11/12 – 31/12 | 0.88 |

| Cariri | |
|----------------------|-------------|
| Período | R_t |
| 26/10 – 25/11 | 0.86 |
| 02/11 – 02/12 | 1.00 |
| 04/12 – 24/12 | 0.95 |
| 11/12 – 31/12 | 0.93 |

| Sobral | |
|----------------------|-------------|
| Período | R_t |
| 11/11 – 01/12 | 0.89 |
| 18/11 – 08/12 | 0.88 |
| 04/12 – 24/12 | 0.87 |
| 11/12 – 31/12 | 0.77 |

| Sertão Central | |
|----------------------|-------------|
| Período | R_t |
| 26/10 – 25/11 | 0.69 |
| 02/11 – 02/12 | 1.07 |
| 04/12 – 24/12 | 1.05 |
| 11/12 – 31/12 | 1.06 |

| Litoral Leste/Jaguaribe | |
|-------------------------|-------------|
| Período | R_t |
| 26/10 – 25/11 | 0.86 |
| 02/11 – 02/12 | 0.99 |
| 04/12 – 24/12 | 0.99 |
| 11/12 – 31/12 | 0.99 |