COVID-19s progression in Portugal



Pedro Ribeiro A85493

Contents

Introduction	2
Graphics: By the Day (since the first confirmed case)	3
Day 1	3
Day 2	4
Day 3	5
Day 4	6
Day 5	7
Day 6	8
Day 7	9
Day 8	10
Day 9	11
Day 10	12
Day 11	13
Day 12	14
Day 13	15
Day 14	16
Conclusion	17

Introduction

This is document is meant to provide a very simplified idea of the curve that translates the progression of the COVID-19 virus spreading in Portugal. As dataset grows (the number of samples increases) the graphics are increasingly trustworthy.

Please keep in mind that is a gross simplification of the subject.

The curve that is present is the exponencial approximation to the provided dataset.

I assume that as long as we're below the pure exponencial curve (we're sort of fine).

Graphics: By the Day (since the first confirmed case)

Day 1

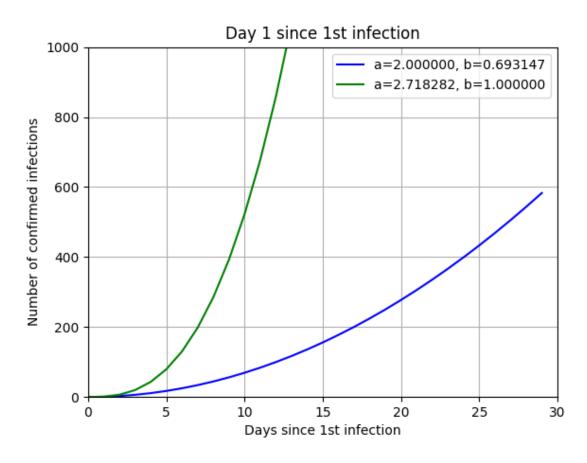


Figure 1: 1st day

Prediction for day 2: 8

Verified: 6

Error rate: **33.33**%

Day 2

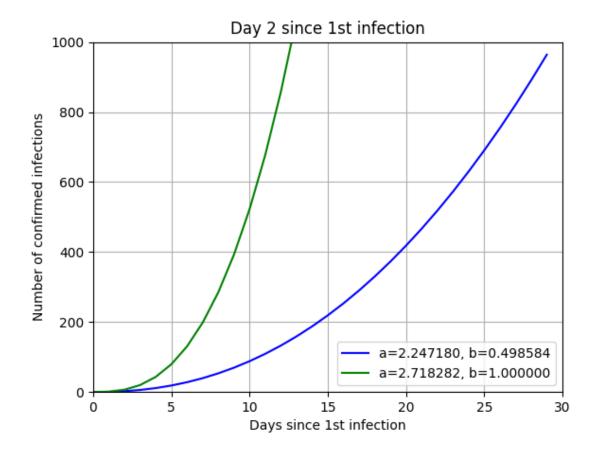


Figure 2: 2nd day

Prediction for $day \ 3$: 10

Verified: 9

Error rate: **11.11%**

Day 3

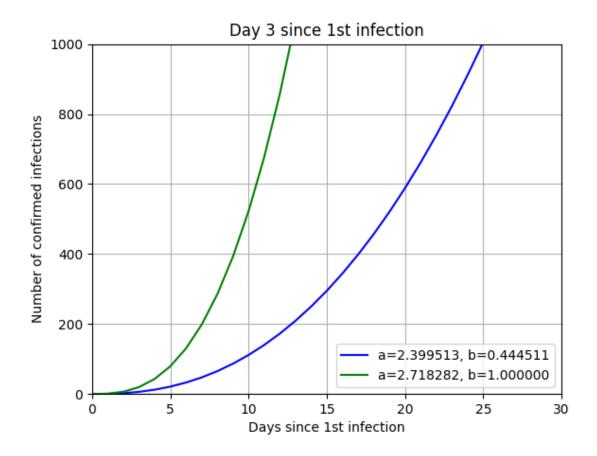


Figure 3: 3rd day

Prediction for $day \not 4$: 14

Verified: 13

Error rate: **7.69**%

Day 4

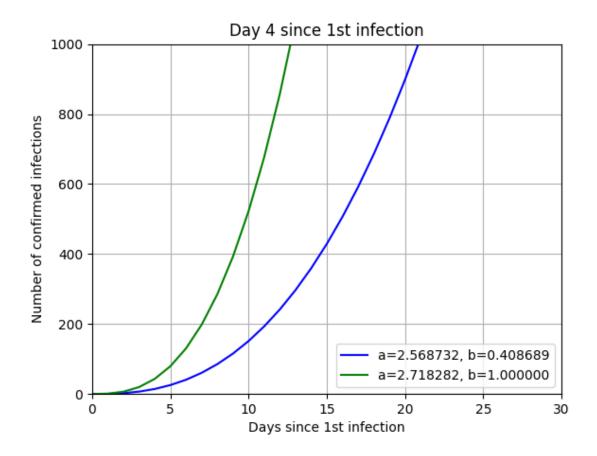


Figure 4: 4th day

Prediction for day 5: 20

Verified: 21

Error rate: **4.76**%

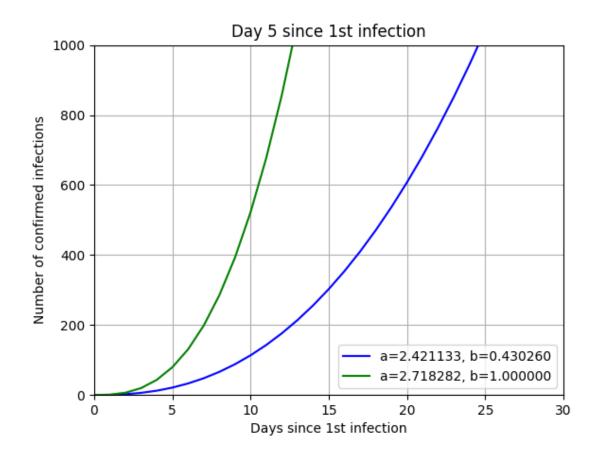


Figure 5: 5th day

Prediction for $day \ \theta$: 32

Verified: 30

Error rate: **6.67**%

Day 6

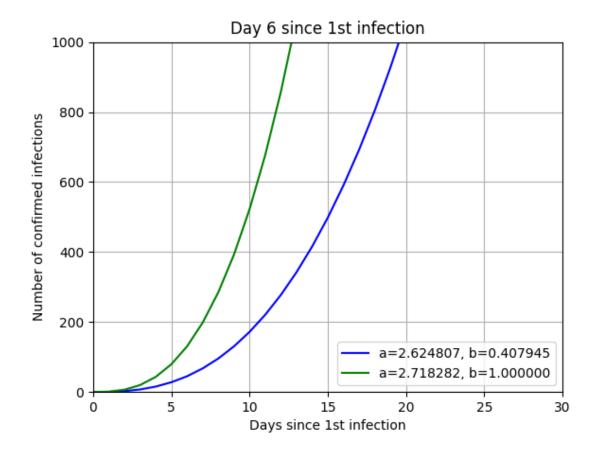


Figure 6: 6th day

Prediction for day 7: 46

Verified: 39

Error rate: **17.95**%

Day 7

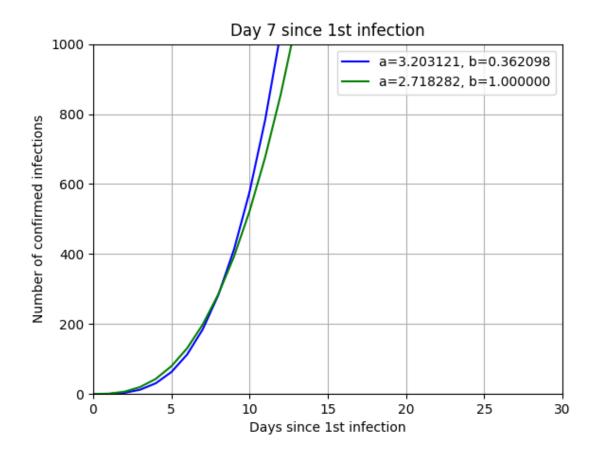


Figure 7: 7th day

Prediction for day 8: 58

Verified: 41

Error rate: **41.46**%

Day 8

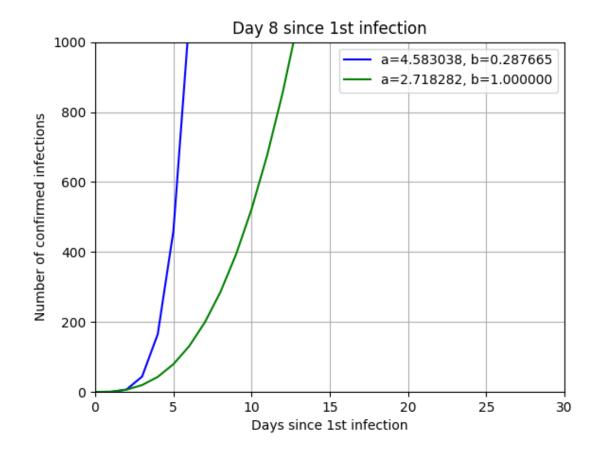


Figure 8: 8th day

Prediction for day 9: 61

Verified: **59**

Error rate: **3.39**%

Day 9

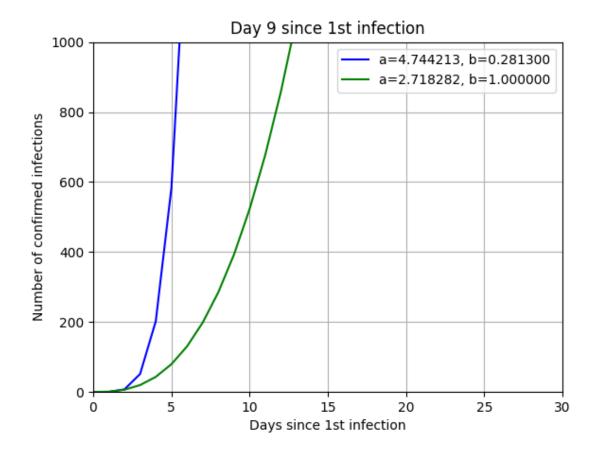


Figure 9: 9th day

Prediction for day 10: 79

Verified: 78

Error rate: **1.28**%

Day 10

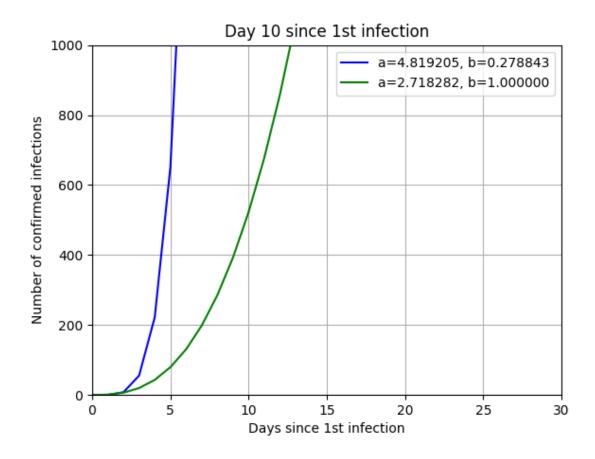


Figure 10: 10th day

Prediction for $day\ 11:\ {f 104}$

Verified: 112

Error rate: **7.14**%

Day 11

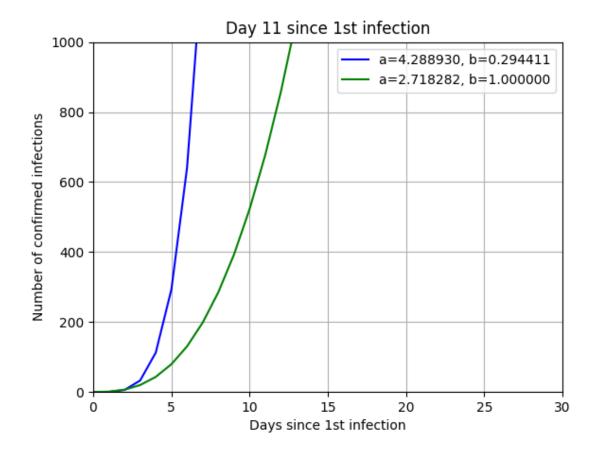


Figure 11: 11th day

Prediction for day 12: 147

Verified: 169

Error rate: **12.43**%

Day 12

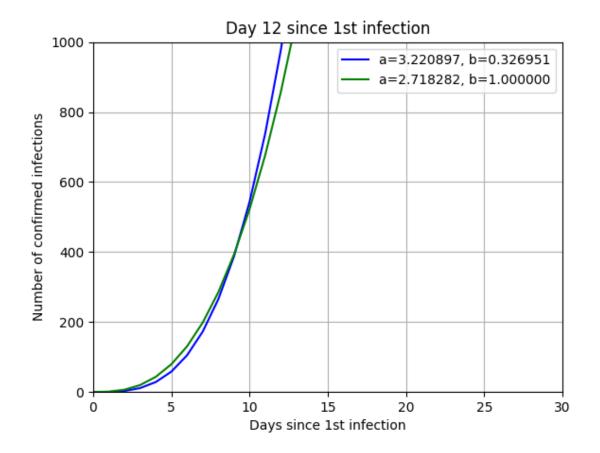


Figure 12: 12th day

Prediction for day 13: 226

Verified: **245**

Error rate: **7.76**%

Day 13

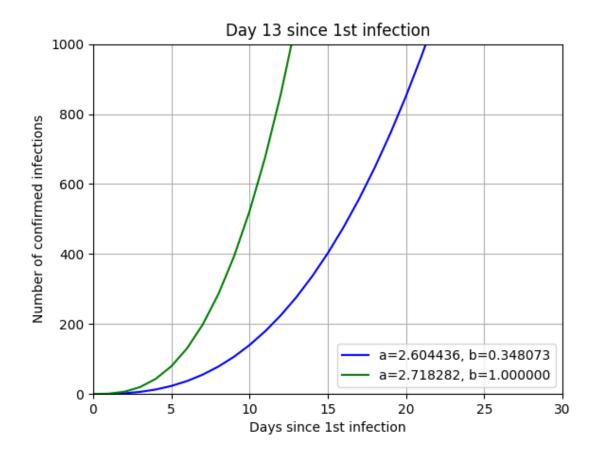


Figure 13: 13th day

Prediction for day 14: 340

Verified: 331

Error rate: **2.72**%

Day 14

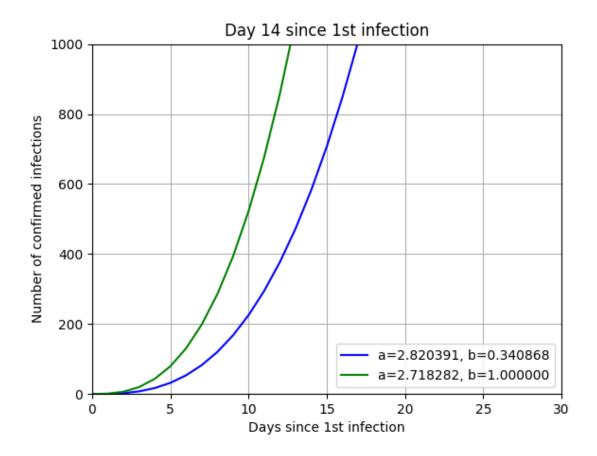


Figure 14: 14th day

Prediction for day 15: 469

Verified: 448

Error rate: 4.48%

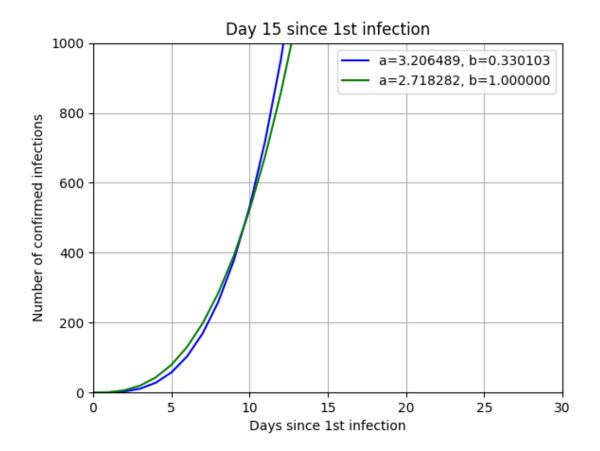


Figure 15: 15th day

Prediction for day 16: 631

Conclusion

We're fucked.