# System test case - #4 - Reproducing

Original tester: Eetu Luoma

Original test date: 26.03.2024

#### Test case details

Test reproducer: Joonas Pelttari

Date: 02.04.2024

Device:

Desktop Computer, fast modern processor, Windows 10 Home Version 10.0.19045 Build 19045

#### **Environment details:**

- Most recent master branch of the project GitHub
- Commit 369416d27d187954a714f2dfe7d13cb406573927
- Python venv used with development
- Python and imports:
  - o Python 3.12.1
  - o numpy 1.26.3
  - o pandas 2.1.4
  - o us 3.1.1

# Reproducing test details

In this test an attempt to reproduce the original test results by Eetu Luoma is made. More detailed notes about the test are available in the original test report (System test case -#4). In this test I only reproduce the original test steps 4 and 5, as they represent the full successful run. (There was a missing folder problem in the original test in steps 1-3).

# Reproduced steps and results

Step 4. (Repeat step 1 in order to get a successful run):

a. Result: Successful validation, runtime of about 29 minutes. Files in relevant folder.

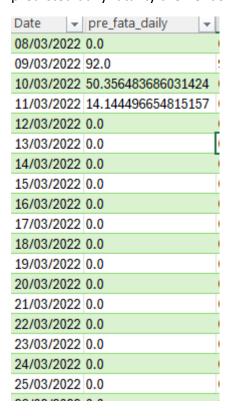
Step 5. (Run generate predictions.py with the previous argument)

a. Result: Successful run, runtime of about 7.5 minutes. Files in relevant folder.

## Reproducing test results

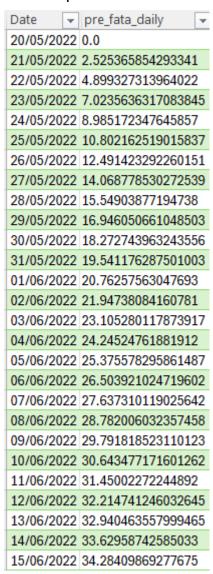
I am able to reproduce a bit similar (taking non-determinism into account) results in comparison to the original test and tester Eetu Luoma but especially when considering the mortality, differences are found.

In my tests, the start of Argentina's daily fatality prediction (pre\_fata\_daily) is different (Picture 1) and maybe because of that the end of the prediction also predicts higher mortality than the original test, and the mortality also starts increasing from zero sooner (21.05.2022 in my test vs 04.06.2022 in original test). This can be seen in the Picture 2. The predicted daily fatality then ends up almost twice as high in comparison to the original test.



Picture 1. Notice different date format in comparison to the original test report

### G11 - Epidemic Model of COVID



Picture 2. Notice different date format in comparison to original test report