COVID19_France_Regions

February 1, 2022

1 Analyse brute des donnÃl'es quotidiennes publiques covid19 France et rÃl'gions

Dernier Rapport au format pdf sur le site github

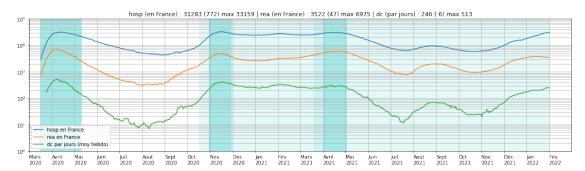
[1]: run -i function.py

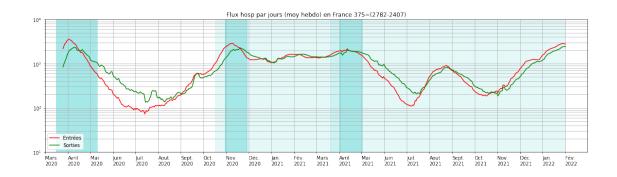
[2]: run -i load.py

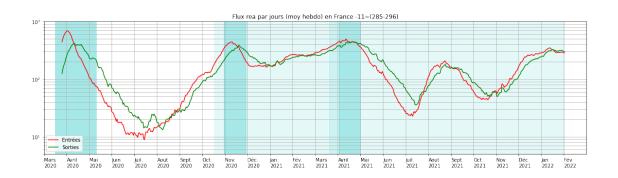
Read ./RawData/donnees-hospitalieres-classe-age-covid19-2022-01-31-19h05.csv Read ./RawData/donnees-hospitalieres-nouveaux-covid19-2022-01-31-19h05.csv

1.1 Chiffres des hospitalisations et des dÃl'cÃÍs (CumulÃl's en France)

[3]: DisplayFrance()



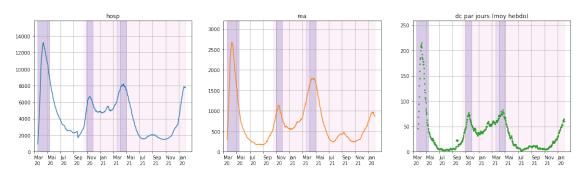




1.2 Chiffres des hospitalisations et des dÃl'cÃÍs (par rÃl'gions)

[4]: for reg in region:
DisplayRegions(reg)

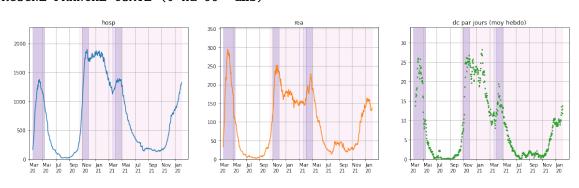
ILE DE FRANCE (0 Ãă 99+ ans)



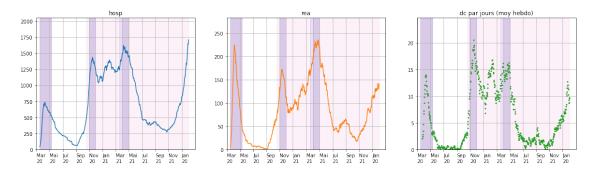
CENTRE VAL DE LOIRE (O Ãă 99+ ans)



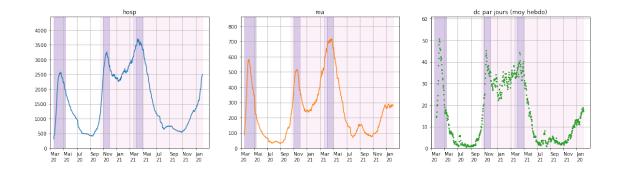
BOURGOGNE FRANCHE COMTE (O Ãă 99+ ans)



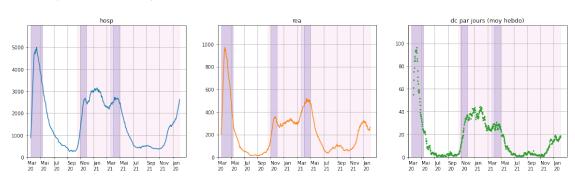
NORMANDIE (0 Ãă 99+ ans)



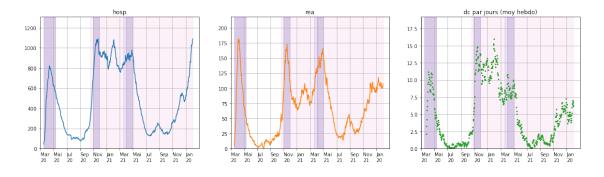
HAUTS DE FRANCE (0 Ãă 99+ ans)



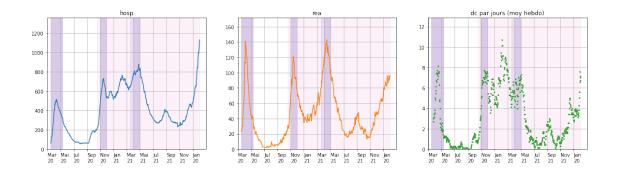
GRAND EST (0 Ãă 99+ ans)



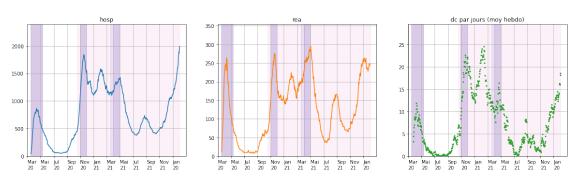
PAYS DE LA LOIRE (0 Ãă 99+ ans)



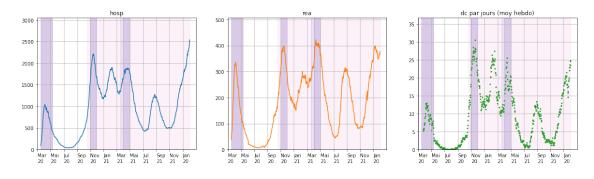
BRETAGNE (0 Ãă 99+ ans)



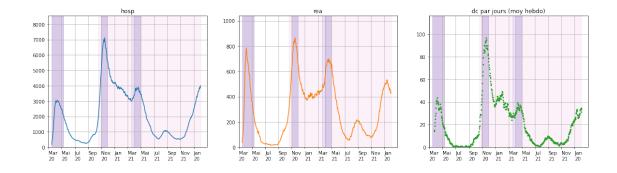
NOUVELLE AQUITAINE (O Ãă 99+ ans)



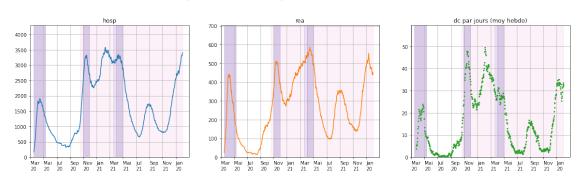
OCCITANIE (0 Ãă 99+ ans)



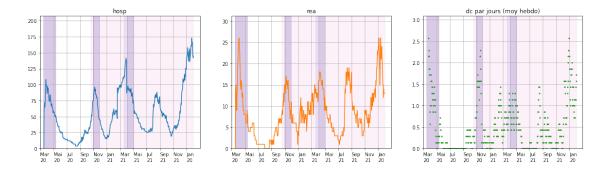
AUVERGNE RHONE ALPES (0 Ãă 99+ ans)



PROVENCE ALPES COTE D AZUR (0 Ãă 99+ ans)



CORSE (0 Ãă 99+ ans)

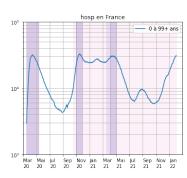


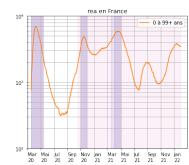
1.3 Chiffres des hospitalisations et des dÃl'cÃls (par tranches d'age)

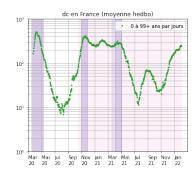
```
[]: for clage in trancheage:
DisplayAge(clage)
```

0 Ãă 99+ ans

Max hosp : 33159 | 1Ã1re Vague :31990 | 2Ã1me Vague :33159 |
Max rea : 6975 | 1Ã1re Vague : 6975 | 2Ã1me Vague : 5876 |
Max dc : 513 | 1Ã1re Vague : 513 | 2Ã1me Vague : 411 |
Total dc : 99401 | 1Ã1re Vague: 18618 | 2Ã1me Vague :80783 |



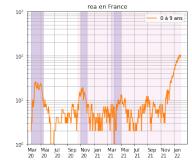


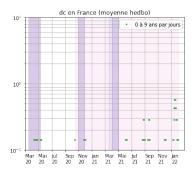


0 Ãă 9 ans

593 | 1Ã1re Vague : 109 | 2Ã1me Vague : Max hosp : Max 105 | 1ÃÍre Vague : 26 | 2Ãĺme Vague : 105 I rea 0 | 1Ãĺre Vague : 0 | 2Ãĺme Vague : Max dc 0 | 17 | 1Ãĺre Vague: Total dc 3 | 2Ãĺme Vague : 14 |



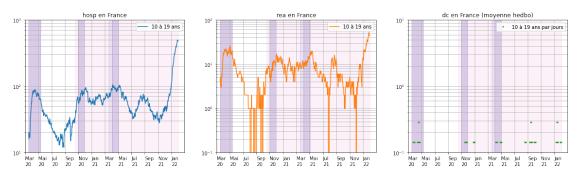




10 Ãă 19 ans

Max hosp: 498 | 1Ã1re Vague: 89 | 2Ã1me Vague: 498 | Max rea: 52 | 1Ã1re Vague: 26 | 2Ã1me Vague: 52 |

Max dc : 0 | 1Ã1re Vague : 0 | 2Ã1me Vague : 0 | Total dc : 13 | 1Ã1re Vague: 3 | 2Ã1me Vague : 10 |



```
20 Ãă 29 ans
Max hosp : 868 | 1Ã1re Vague : 357 | 2Ã1me Vague :
```

Max rea : 72 | 1Ã1re Vague : 66 | 2Ã1me Vague : 72 | Max dc : 1 | 1Ã1re Vague : 1 | 2Ã1me Vague : 1 |

Max dc : 1 | 1Alre Vague : 1 | 2Alme Vague : 1 | Total dc : 99 | 1Ãĺre Vague: 19 | 2Ãĺme Vague : 79 |

```
[]: CreateReport()
PushCommit()
```

2 Sources de donnAl'es

https://www.data.gouv.fr/fr/datasets/donnees-hospitalieres-relatives-a-lepidemie-de-covid-19/

3 MÃľthodologie

- Traitement du fichier de donnÂl'es brutes.
- ReprÃl'sentation des moyennes hebdomadaires comme donnÃl'es de base lissÃl'es.
- Affichage des diffÃl'rentes pÃl'riodes de couvre-feu et confinement.
- Versionning du dÃl'pÃt't pour la traÃğabilitÃl' et la reproductibilitÃl' sur un dÃl'pÃt't public
- Interface pour les commentaires via github.

4 Quelques liens

 Euromomo (EuroMOMO is a European mortality monitoring activity, aiming to detect and measure excess deaths related to seasonal influenza, pandemics and other public health threats.) https://www.euromomo.eu/graphs-and-maps/

- CÃl'piDc (Centre d'Ãl'pidÃl'miologie sur les causes mÃl'dicales de DÃl'cÃls) https://opendata.idf.inserm.fr/cepidc/covid-19/index.html
- Avis de scientifiques CNRS, INSERM, Institut Pasteur, INRA, UniversitÃl'. Equipe bÃl'nÃl'vole et indÃl'pendante https://www.adioscorona.org/
- FranceInfo: "Suivez l'Ãl'volution de l'Ãl'pidÃl'mie en France et dans le monde" https://www.francetvinfo.fr/sante/maladie/coronavirus/infographies-covid-19-morts-hospitalisations-age-malades-l-evolution-de-l-epidemie-en-france-et-dans-le-monde-en-cartes-et-graphiques.html
- le suivi des variants en angleterre https://www.gov.uk/government/publications/covid-19-variants-genomically-confirmed-case-numbers/
- Un exemple de modÃl'lisation Ãl'pidÃl'mique par infÃl'rrence https://cloudapps.france-bioinformatique.fr/covidici/

5 Quelques refÃl'rences bibliographiques

- "Evaluation des stratÃl'gies vaccinales COVID-19 avec un modÃle mathÃl'matique populationnel" CÃl'cile Kiem, ClÃl'ment Massonnaud, Daniel Levy-Bruhl, Chiara Poletto, Vittoria Colizza, et al. 2020. pasteur-03087143 (23/12/2020)
- "Evolution of outcomes for patients hospitalized during the first SARS-CoV-2 pandemic wave in France. 2020.", NoÃl'mie Lefrancq, Juliette Paireau, NathanaÃńl HozÃl', NoÃl'mie Courtejoie, Yazdan Yazdanpanah, et al. hal-02946545 (23/09/2020)
- "Seroprevalence of SARS-CoV-2 among adults in three regions of France following the lock-down and associated risk factors: a multicohort study." Carrat et al. 2020
- "Ready for a BASE jump? Do not neglect SARS-CoV-2 hospitalization and fatality risks in the middle-aged adult population" Lapidus et al, 2020 (07/11/2020)
- "Estimated date of dominance of VOC-202012/01 strain in France and projected scenarios"
 Sabbatini et al, 2021 (All reports available here)

5.1 Code Source et donnÂl'es

- function.py
- load.py
- DonnÃl'es dans le repertoire local /RawData

[]:	
[]:	