COVID19_France_Regions

September 28, 2021

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

Dernier Rapport au format pdf sur le site github

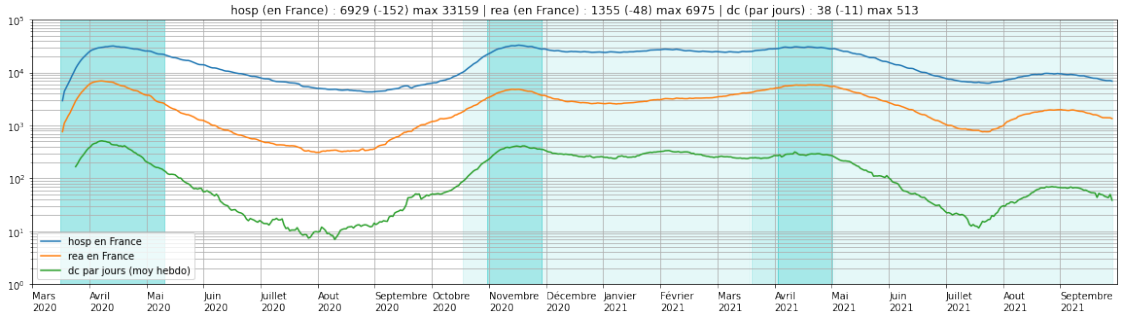
[1]:
```
run -i function.py
```

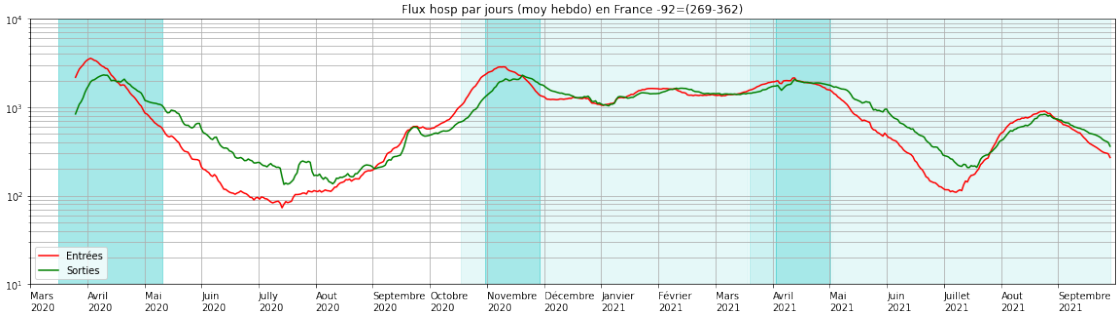
[2]:
```
run -i load.py
```

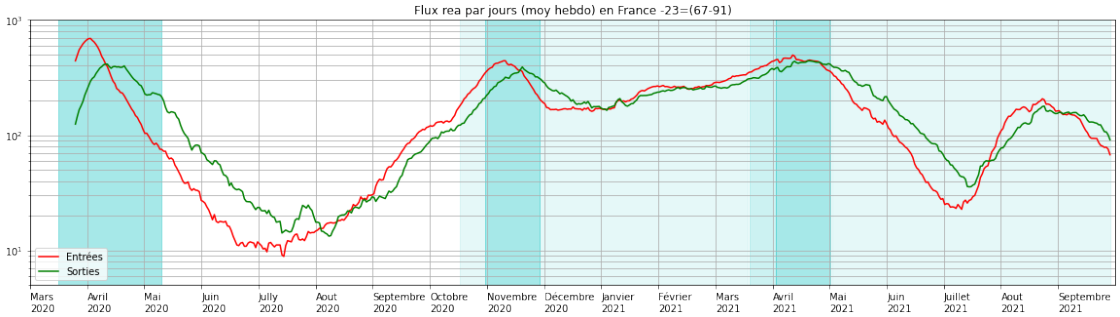
```
Read  ./RawData/donnees-hospitalieres-classe-age-covid19-2021-09-28-19h05.csv
Read  ./RawData/donnees-hospitalieres-nouveaux-covid19-2021-09-28-19h05.csv
```

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

[3]:
```
DisplayFrance()
```



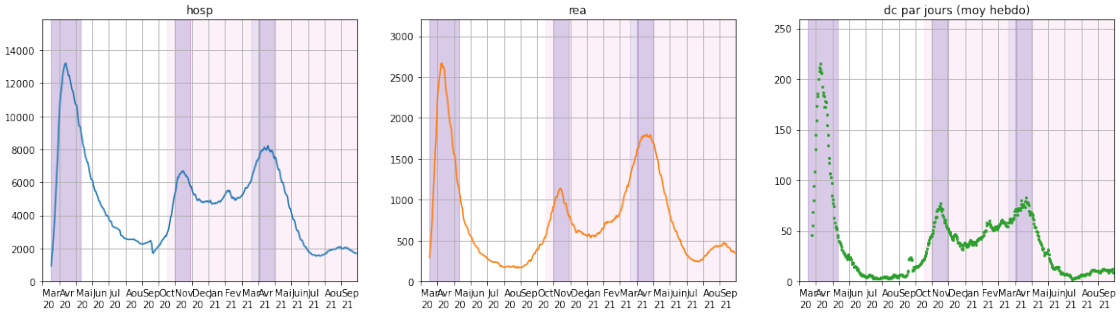




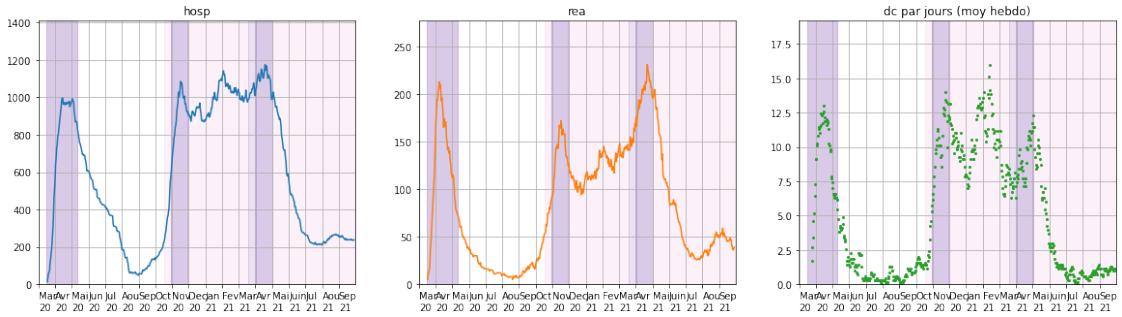
1.2 Chiffres des hospitalisations et des dÃľcÃĺs (par rÃľgions)

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

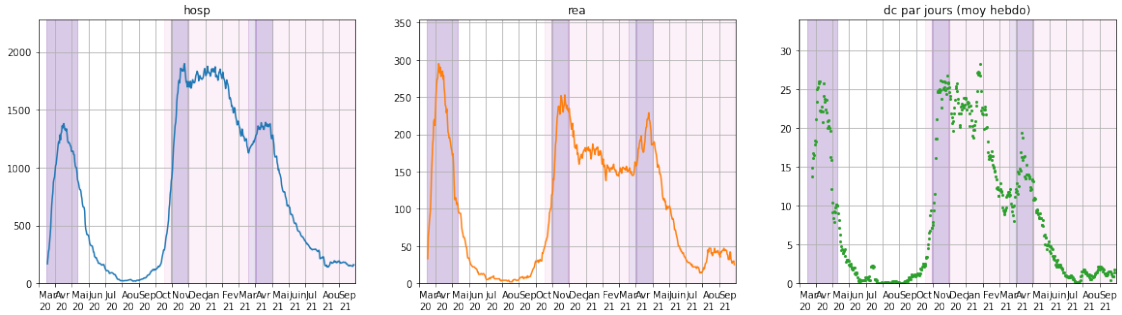
ILE DE FRANCE (0 Ãă 99+ ans)



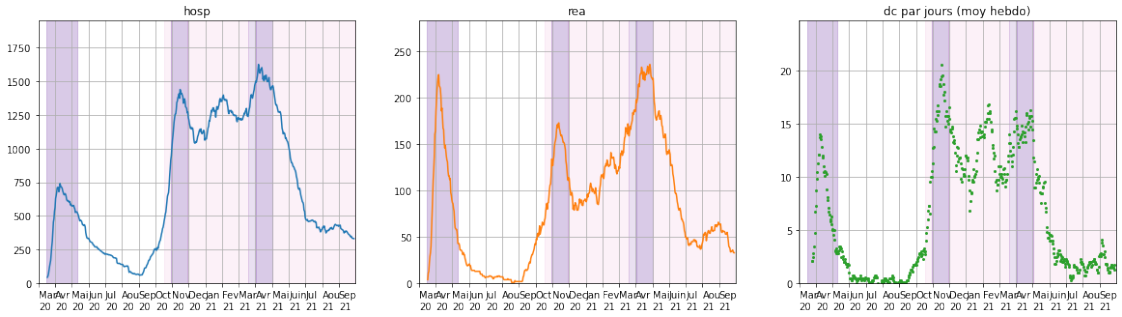
CENTRE VAL DE LOIRE (0 Ãă 99+ ans)



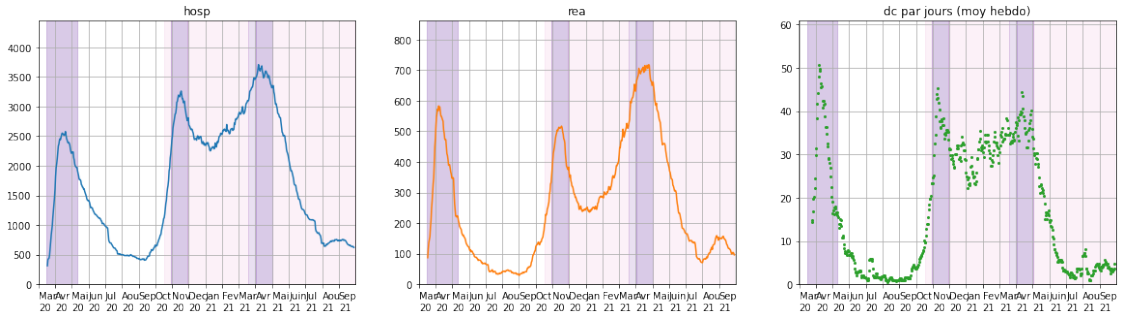
BOURGOGNE FRANCHE COMTE (0 Ãă 99+ ans)



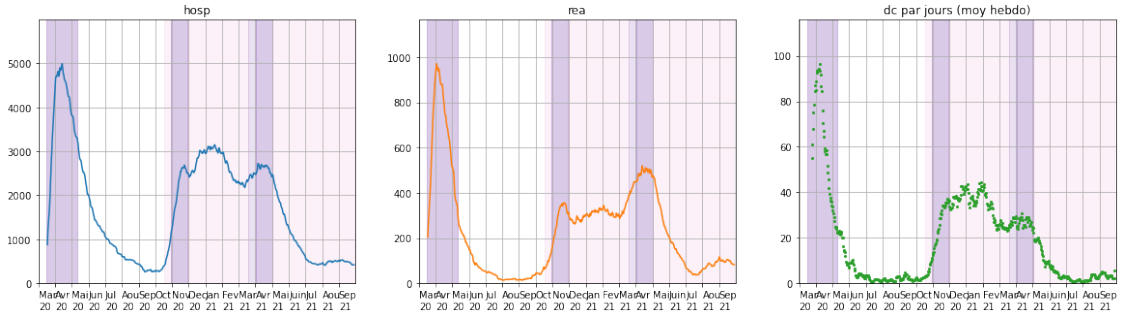
NORMANDIE (0 Ãă 99+ ans)



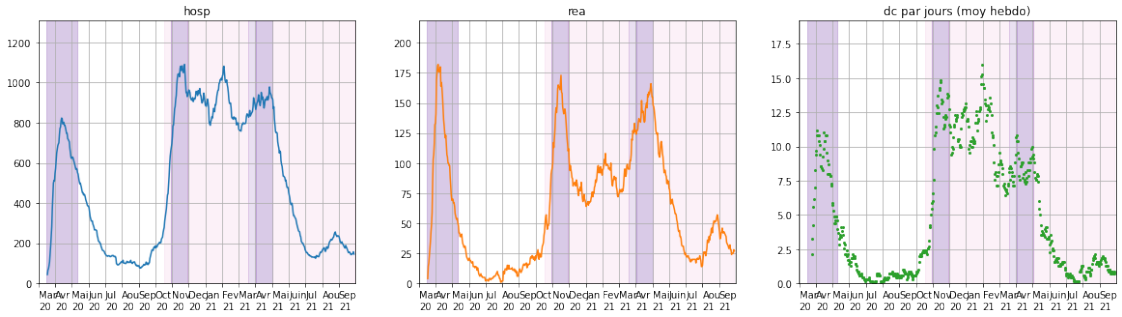
HAUTS DE FRANCE (0 Ãă 99+ ans)



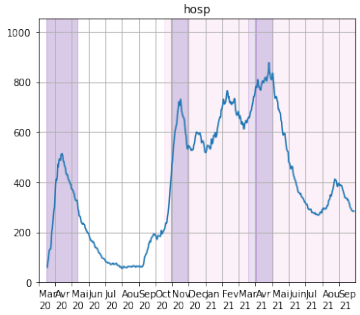
GRAND EST (0 Ãă 99+ ans)

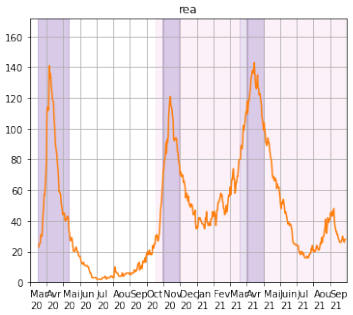


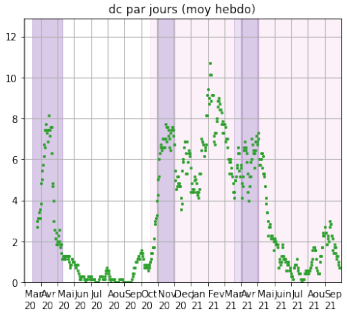
PAYS DE LA LOIRE (0 Ãă 99+ ans)



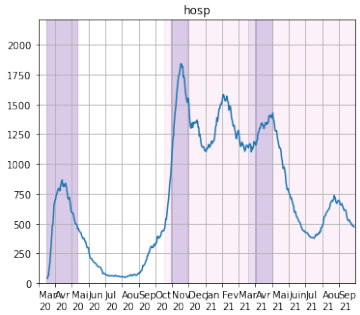
BRETAGNE (0 Ãă 99+ ans)

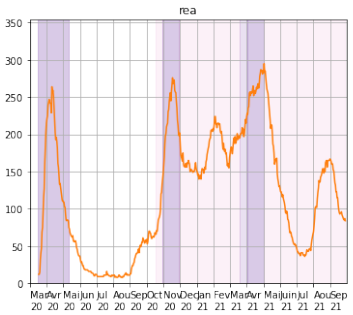


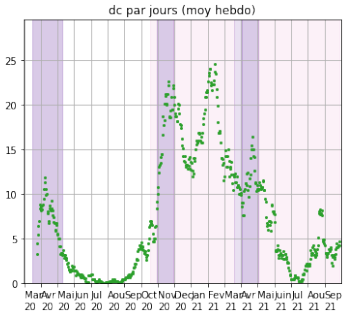




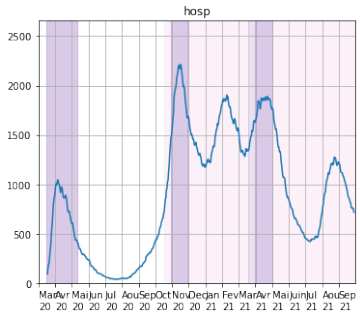
NOUVELLE AQUITAINE (0 Ãă 99+ ans)

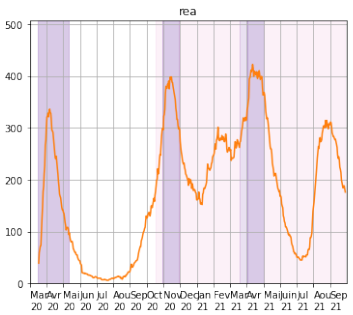


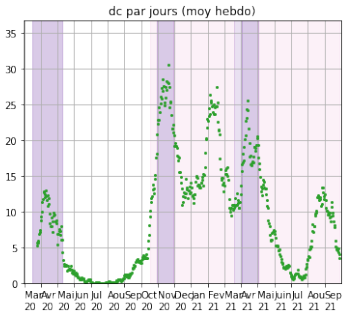




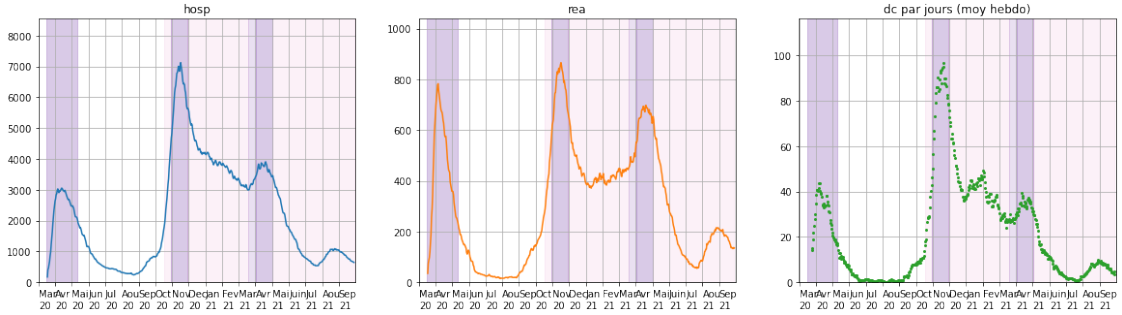
OCCITANIE (0 Ãă 99+ ans)



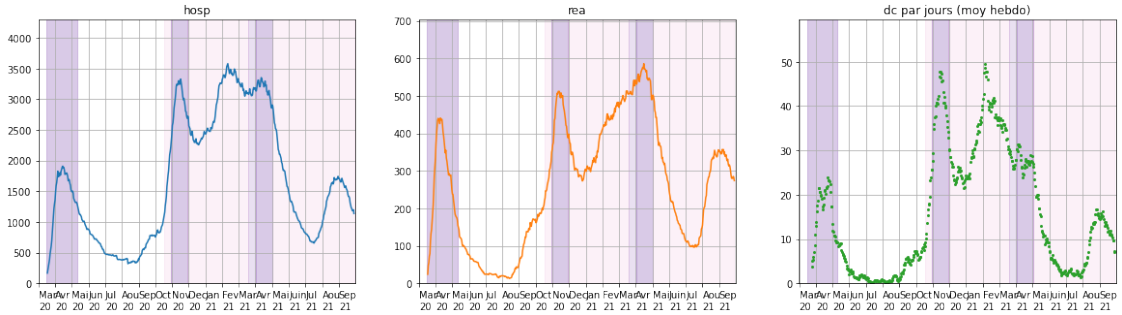




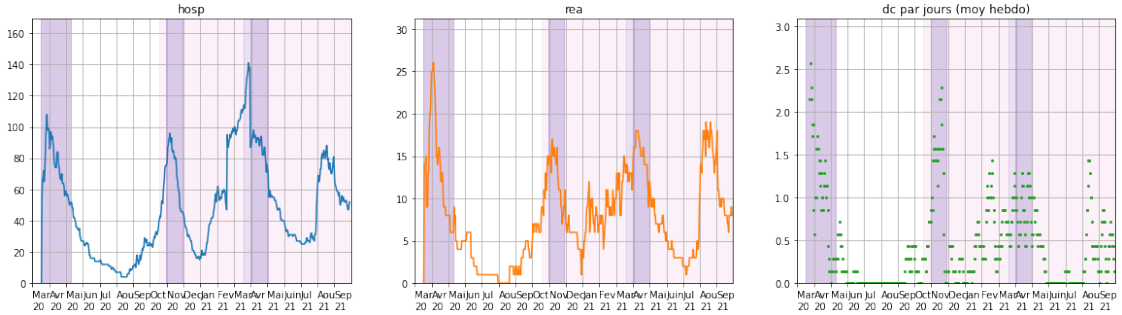
AUVERGNE RHONE ALPES (0 Ãă 99+ ans)



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



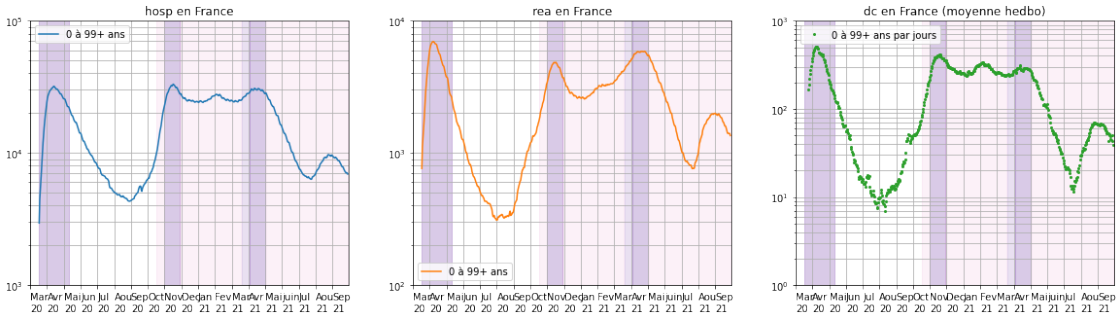
CORSE (0 Ãă 99+ ans)



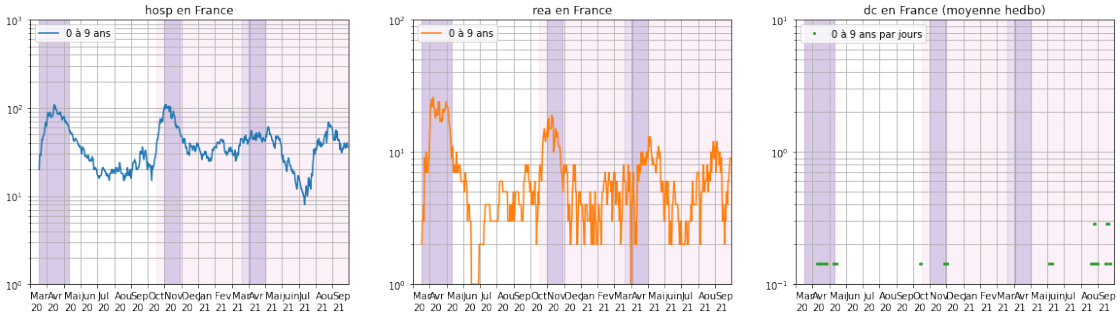
1.3 Chiffres des hospitalisations et des dÃľcÃĺs (par tranches d'age)

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

```
0 Ãă 99+ ans
 Max   hosp : 33159 | 1ÃÍre Vague :31990 | 2ÃÍme Vague :33159 |
 Max   rea  :  6975 | 1ÃÍre Vague : 6975 | 2ÃÍme Vague : 5876 |
 Max   dc   :   513 | 1ÃÍre Vague :  513 | 2ÃÍme Vague :  411 |
 Total dc   : 86805 | 1ÃÍre Vague: 18618 | 2ÃÍme Vague :68187 |
```

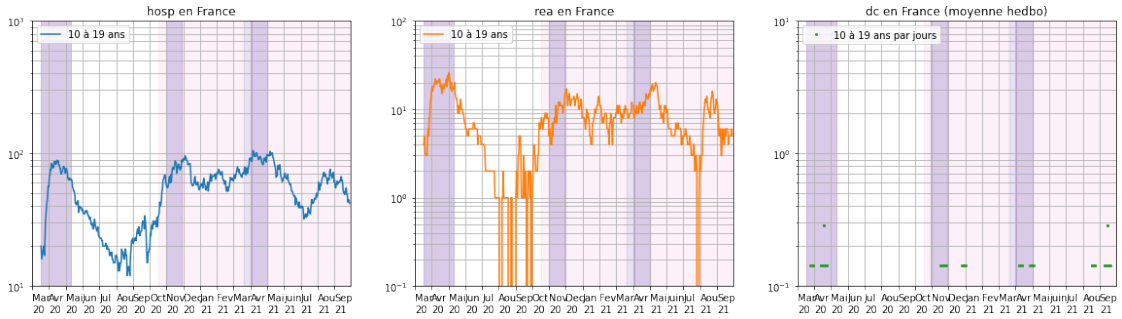



```
0 Ãă 9 ans
 Max   hosp :   109 | 1ÃÍre Vague :  109 | 2ÃÍme Vague :  109 |
 Max   rea  :    26 | 1ÃÍre Vague :   26 | 2ÃÍme Vague :   19 |
 Max   dc   :     0 | 1ÃÍre Vague :    0 | 2ÃÍme Vague :    0 |
 Total dc   :     9 | 1ÃÍre Vague:     3 | 2ÃÍme Vague :    6 |
```

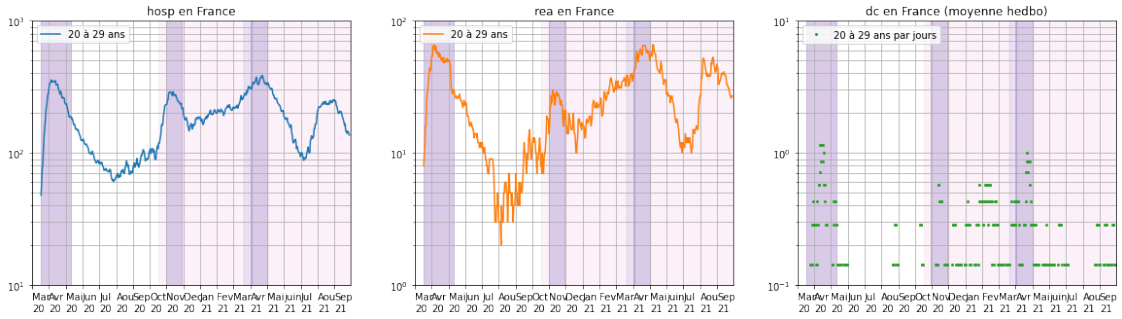



```
10 Ãă 19 ans
 Max   hosp :   105 | 1ÃÍre Vague :   89 | 2ÃÍme Vague :  105 |
 Max   rea  :    26 | 1ÃÍre Vague :   26 | 2ÃÍme Vague :   20 |
```

```
Max   dc   :     0 | 1ÃÍre Vague :    0 | 2ÃÍme Vague :    0 |
Total dc   :    10 | 1ÃÍre Vague:     3 | 2ÃÍme Vague :    7 |
```




```
20 Ãă 29 ans
 Max   hosp :   386 | 1ÃÍre Vague :  357 | 2ÃÍme Vague :  386 |
 Max   rea  :    66 | 1ÃÍre Vague :   66 | 2ÃÍme Vague :   66 |
 Max   dc   :     1 | 1ÃÍre Vague :    1 | 2ÃÍme Vague :    1 |
 Total dc   :    80 | 1ÃÍre Vague:    19 | 2ÃÍme Vague :   60 |
```



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

2 Sources de donnÃl'es

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

3 MÃl'thodologie

- Traitement du fichier de donnÃl'es brutes.

- ReprÃľsentation des moyennes hebdomadaires comme donnÃľes de base lissÃľes.
- Affichage des diffÃľrentes pÃľriodes de couvre-feu et confinement.
- Versionning du dÃľpÃťt pour la traÃğabilitÃľ et la reproductibilitÃľ sur un dÃľpÃťt 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/
- CÃľpiDc (Centre d'Ãľpidemiologie sur les causes mÃľdicales de DÃľcÃĺs) https://opendata.idf.inserm.fr/cepidc/covid-19/index.html
- Avis de scientifiques CNRS, INSERM, Institut Pasteur, INRA, UniversitÃľ. Equipe bÃľnÃľvole et indÃľpendante https://www.adioscorona.org/
- FranceInfo : "Suivez l'Ãľvolution de l'Ãľpidemie 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 modÃľlisation Ãľpidemique par infÃľrrence https://cloudapps.france-bioinformatique.fr/covidici/

5 Quelques refÃľrences bibliographiques

- "Evaluation des stratÃľgies vaccinales COVID-19 avec un modÃĺle mathÃľmatique populationnel" CÃľcile Kiem, ClÃľment 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.", NoÃľmie Lefrancq, Juliette Paireau, NathanaÃńl HozÃľ, NoÃľmie Courtejoie, Yazdan Yazdanpanah, et al. hal-02946545 (23/09/2020)
- "Seroprevalence of SARS-CoV-2 among adults in three regions of France following the lockdown 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 donnÃĺes

- function.py
- load.py
- DonnÃĺes dans le repertoire local /RawData

[ ]:

[ ]: