A Minimal bookdown document

Contents

1 Step 1 Find dataset

- Create list of metrics for each dataset
- Look at the metrics

Lower Tier Local Authority (LTLA)

```
##  [1] "New people receiving 2nd dose"
##  [2] "New people vaccinated with a booster dose by publish date"
##  [3] "New people vaccinated complete by publish date"
##  [4] "New people fully vaccinated by vaccination date"
##  [5] "New people vaccinated 1st dose by publish date"
##  [6] "New people vaccinated with a first dose by vaccination date"
##  [7] "New people vaccinated 2nd dose by publish date"
##  [8] "New people vaccinated with a second dose by vaccination date"
##  [9] "New people vaccinated with a third dose by publish date"
## [10] "New people vaccinated with a booster dose plus new people vaccinated with a third dose by publish date"
## [11] "New people vaccinated with a booster or third dose by vaccination date"
## [12] "New vaccines given by publish date"
```

Nation

```
##  [1] "New people receiving 1st dose"
##  [2] "New people receiving 2nd dose"
##  [3] "New people vaccinated with a booster dose by publish date"
##  [4] "New people vaccinated complete by publish date"
##  [5] "New people fully vaccinated by vaccination date"
##  [6] "New people vaccinated 1st dose by publish date"
##  [7] "New people vaccinated with a first dose by vaccination date"
##  [8] "New people vaccinated 2nd dose by publish date"
##  [9] "New people vaccinated with a second dose by vaccination date"
## [10] "New people vaccinated with a third dose by publish date"
## [11] "New people vaccinated with a booster dose plus new people vaccinated with a third dose by publish date"
## [12] "New people vaccinated with a booster or third dose by vaccination date"
## [13] "New vaccines given by publish date"
```

So, as we can see, **some metrics are common**. I suggest to find out which metrics are common for all datasets.

- Add new metrics in common list
- Build zero-matrix, dimension
- Show links

Look at the result

	ltla	msoa	nation	nhsRegion	nhs
New people receiving 2nd dose	**1**	**0**	**1**	**0**	
New people vaccinated with a booster dose by publish date	**1**	**0**	**1**	**0**	
New people vaccinated complete by publish date	1	0	1	**0**	
New people fully vaccinated by vaccination date	1	0	1	**0**	
New people vaccinated 1st dose by publish date	**1**	**0**	**1**	**0**	
New people vaccinated with a first dose by vaccination date	**1**	**0**	**1**	**0**	
New people vaccinated 2nd dose by publish date	**1**	**0**	**1**	**0**	
New people vaccinated with a second dose by vaccination date	**1**	**0**	**1**	**0**	
New people vaccinated with a third dose by publish date	**1**	**0**	**1**	**0**	
New people vaccinated with a booster dose plus new people vaccinated with a third dose by publish date	**1**	**0**	**1**	**0**	
New people vaccinated with a booster or third dose by vaccination date	**1**	**0**	**1**	**0**	
New vaccines given by publish date	1	0	1	**0**	
New people receiving 1st dose	**0**	**0**	**1**	**0**	

need to look at the datasets:

```
## [1] "Lower Tier Local Authority (LTLA)"
## [1] "Nation"
## [1] "Region"
```

2 Chapter 2

This is chapter 2.

```
2
```

```
## [1] 2
```

3 Step 2 Look at the datasets

```
path = "/Users/travel_mechtal/Documents/UWE/Portfolio/"
```

3.1 Region

As we can see on the website, Region metrics are available for regions of England. I am interested in the South West and metrics that start with "New":

```
## [1] "areaCode"
## [2] "areaName"
## [3] "areaType"
## [4] "date"
## [5] "newPeopleVaccinatedFirstDoseByVaccinationDate"
## [6] "newPeopleVaccinatedSecondDoseByVaccinationDate"
## [7] "newPeopleVaccinatedThirdInjectionByVaccinationDate"
```

We have additional columns. Let's loot at them.

areaCode

```
## [1] "E12000009"
```

areaName

```
## [1] "South West"
```

areaType

```
## [1] "region"
```

So, we do not need to look at them in future because these columns are using for filtering that we have already done on the website.

Let's prepare data for the plotting

areaCode	areaName	areaType	date	First	Second	Third	MonthYear
E12000009	South West	region	2022-01-26	986	2520	4034	1.2022
E12000009	South West	region	2022-01-25	899	1845	4283	1.2022
E12000009	South West	region	2022-01-24	723	1445	3441	1.2022
E12000009	South West	region	2022-01-23	1035	3007	3439	1.2022
E12000009	South West	region	2022-01-22	1822	4709	5896	1.2022
E12000009	South West	region	2022-01-21	1085	2362	4944	1.2022

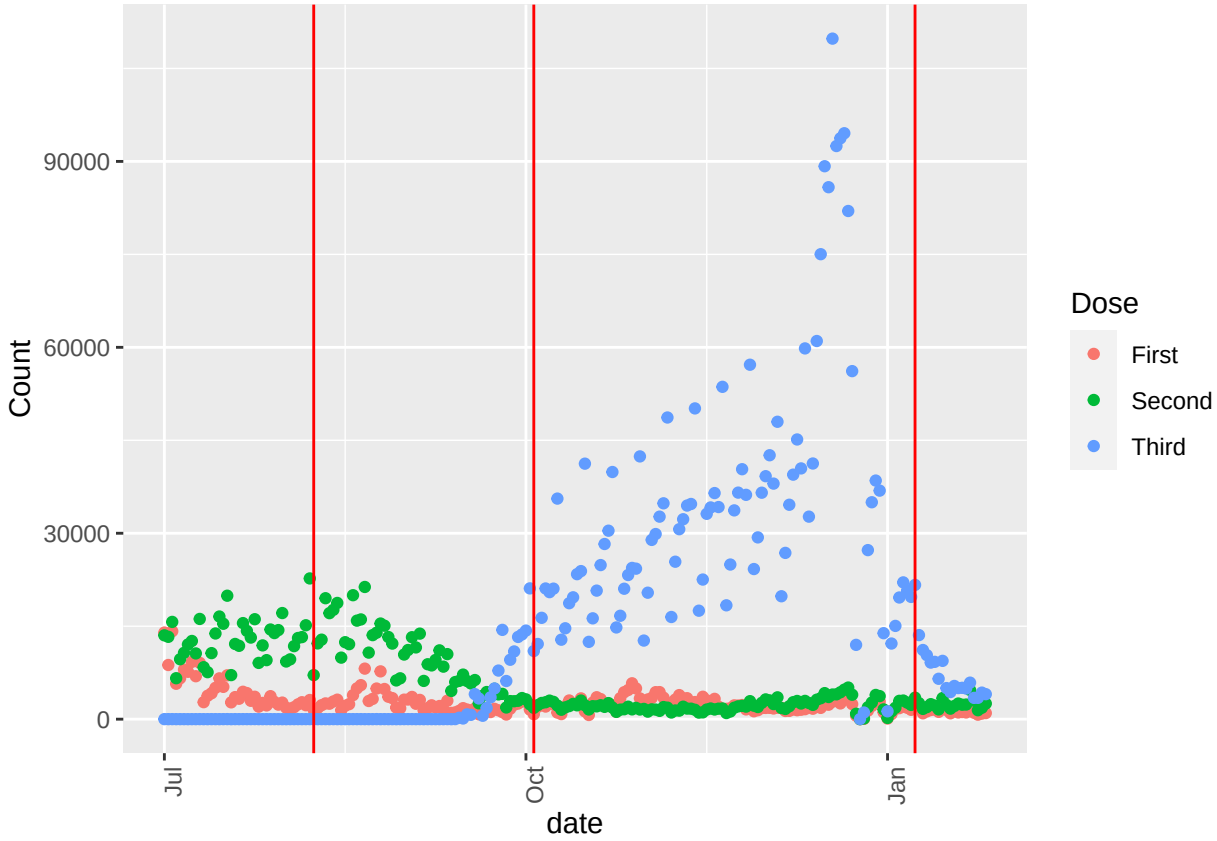
date	MonthYear	Dose	Count
2022-01-26	1.2022	First	986
2022-01-25	1.2022	First	899
2022-01-24	1.2022	First	723
2022-01-23	1.2022	First	1035
2022-01-22	1.2022	First	1822
2022-01-21	1.2022	First	1085

- Rename columns and columns

- Create long table

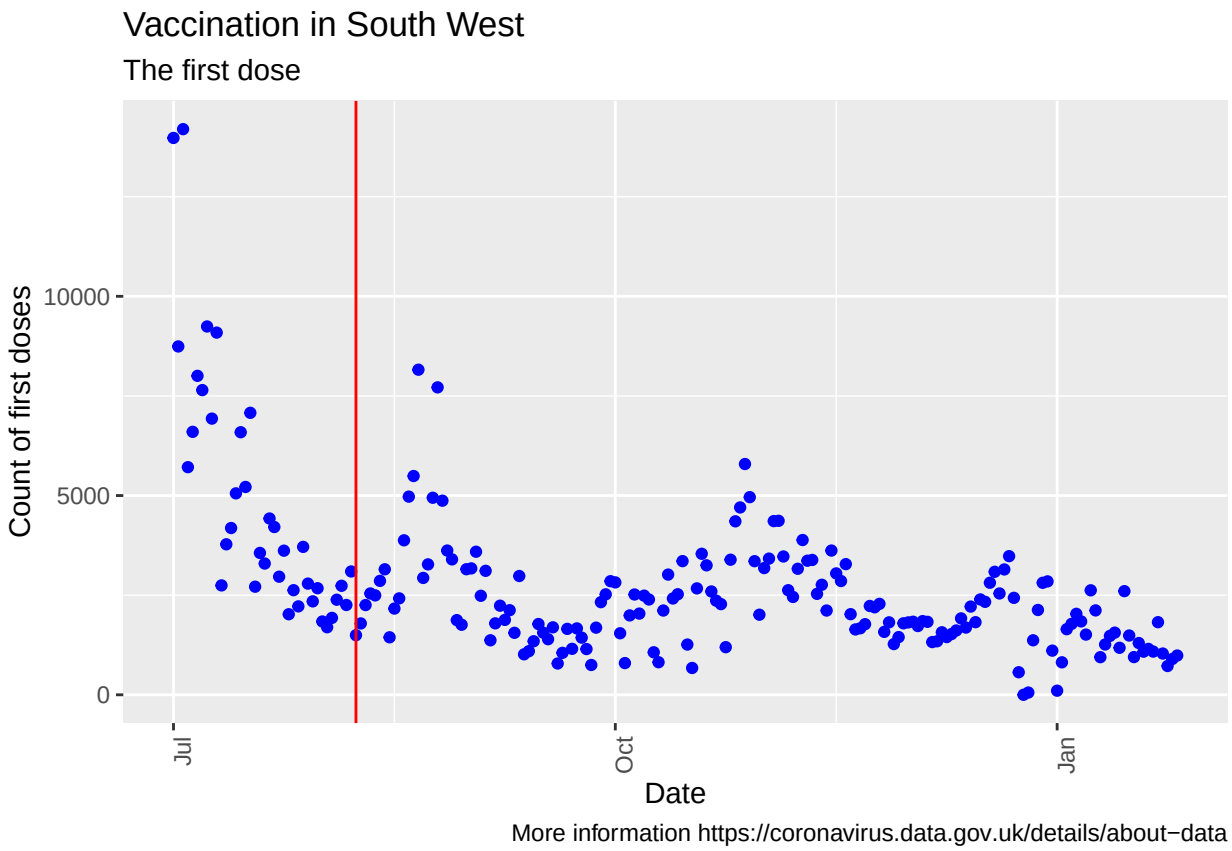
Let's plot something.

I got my jabs at 8 August 2021, 3 October 2021, 8 January 2022. I want to plot the graph that will show count of jabs after 1 July 2021.

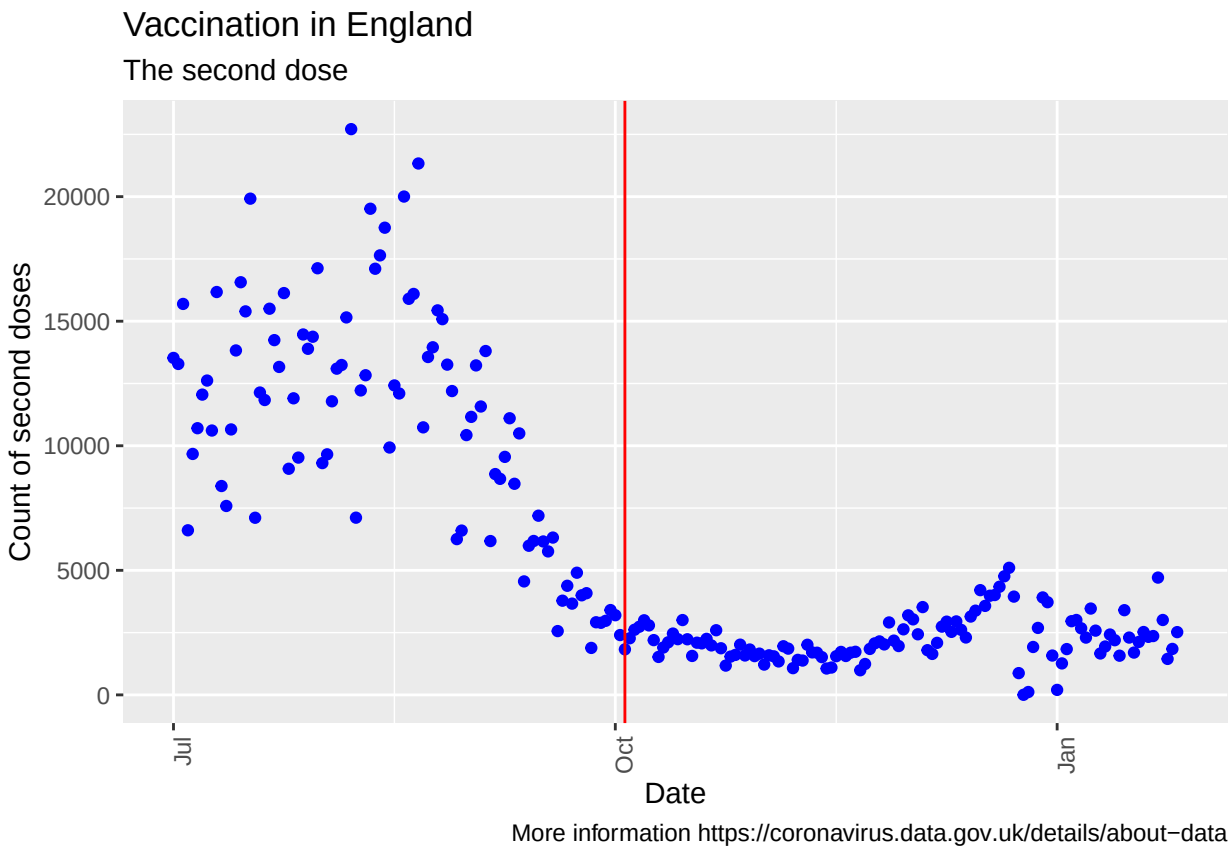


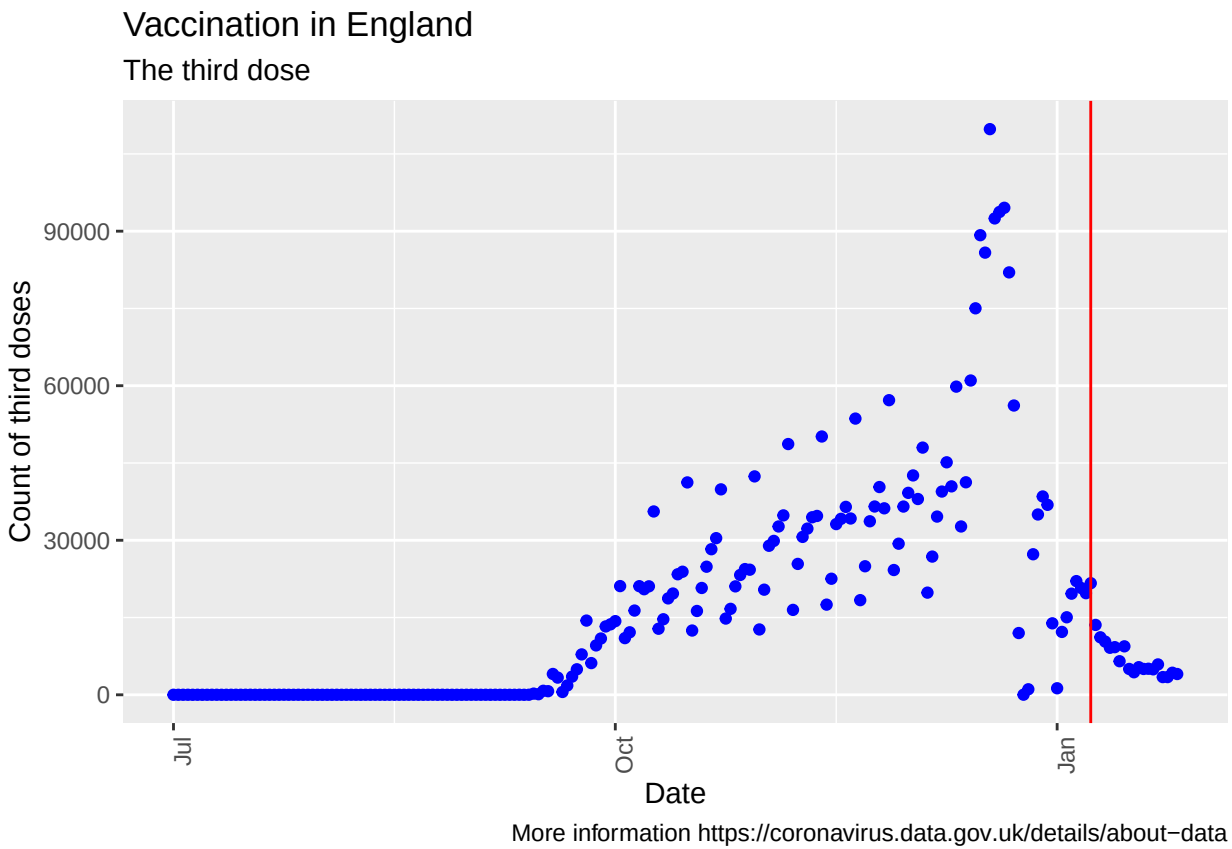
The result is not beautiful because at the end of 2021 there is a lot of third jabs.

Let's plot them separatly.



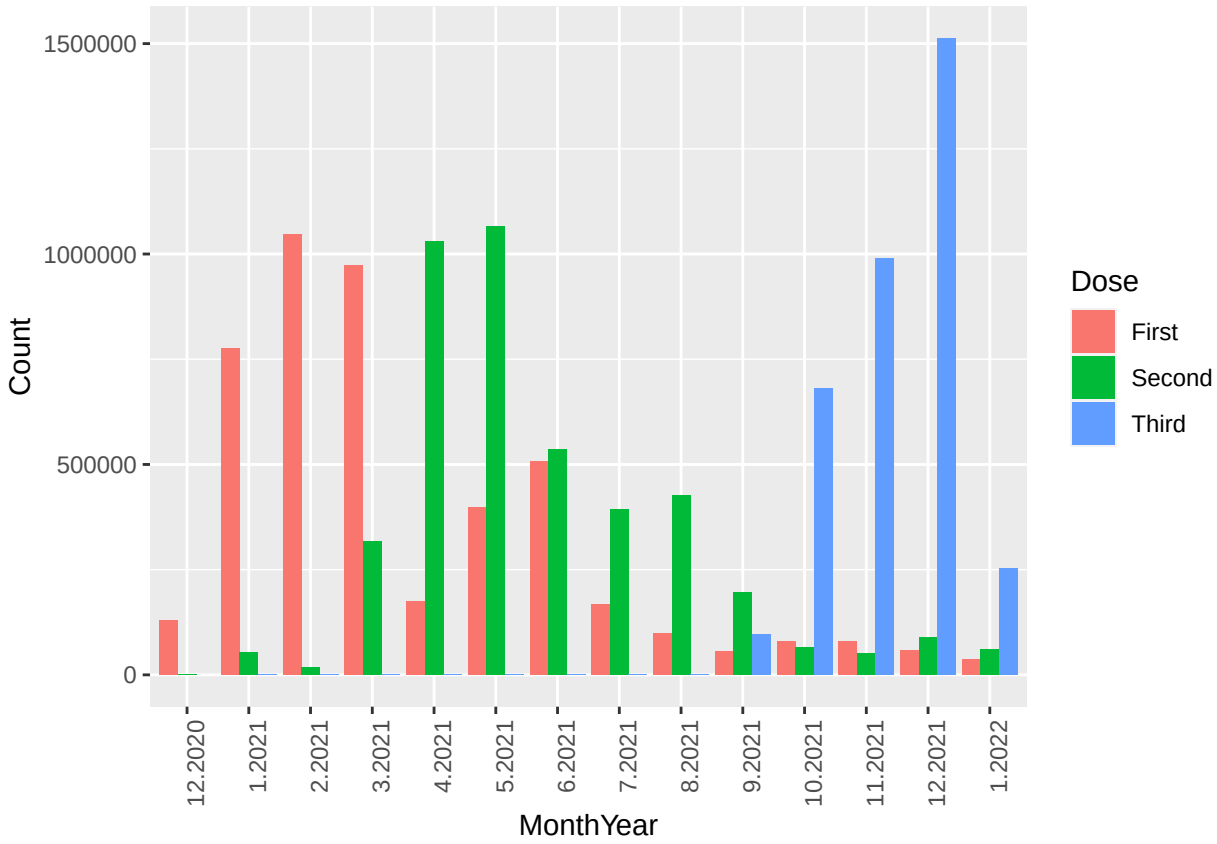
It is so interesting why the graph is wavy.


Vaccination in England
The second dose
Count of second doses
20000
15000
10000
5000
0
Jul
Oct
Jan
Date
More information https://coronavirus.data.gov.uk/details/about−data



We can see when active phase of vaccination by the third dose started. Let's calculate the date.

```
## Warning: Removed 1 rows containing missing values (geom_col).
```


1500000
1000000
500000
0
Count
12.2020
1.2021
2.2021
3.2021
4.2021
5.2021
6.2021
7.2021
8.2021
9.2021
10.2021
11.2021
12.2021
1.2022
MonthYear
Dose
First
Second
Third