

Tourism in Norway

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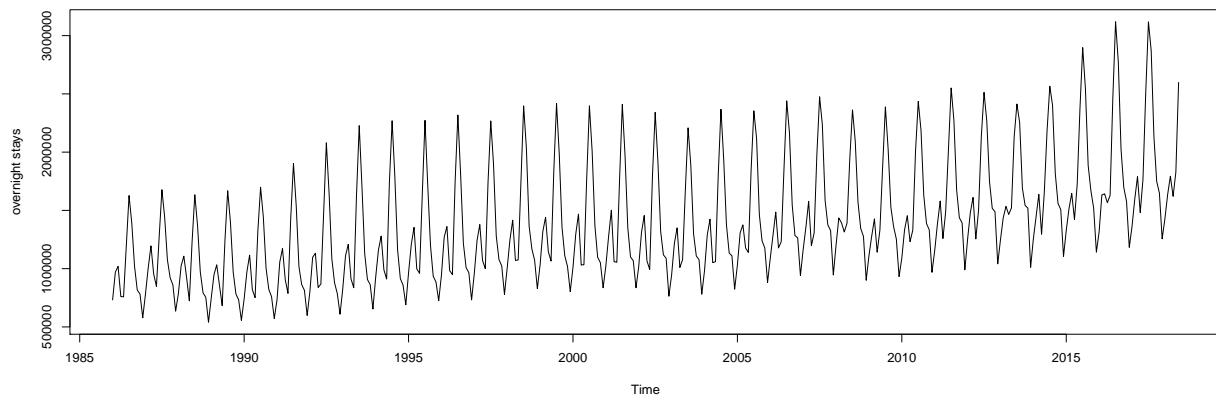
Introduction

This is an example file and project for the course BED-2056. Use this as an inspiration for your own project. Feel free to steal ideas and use the code (but for your own sake, don't copy/paste. Understand what it's doing and why it was used.). In this example report we will in a very superficial way look at the change in overnight stays at hotels in Norway from January 1986 to June 2019.

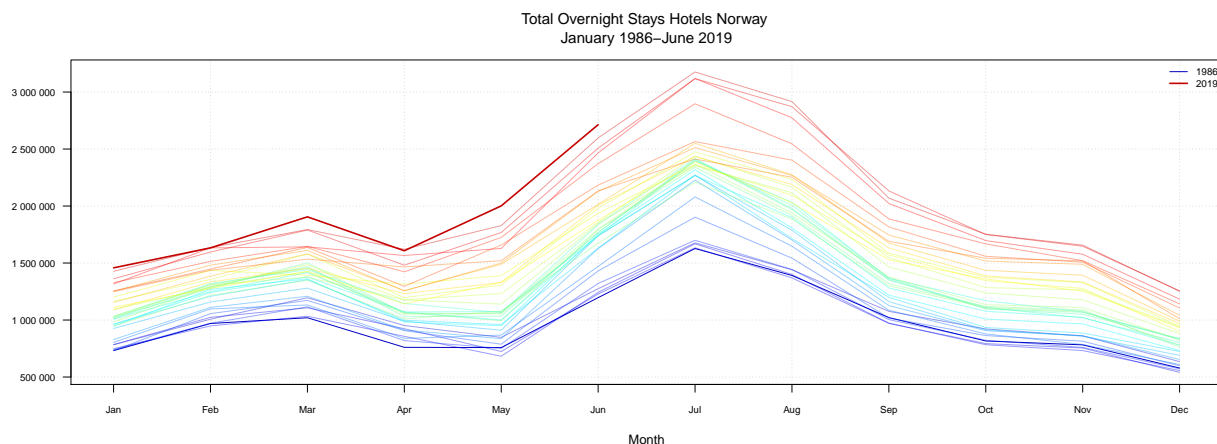
It is expected that your final project is much more thorough, detailed and complete. This repository is just to illustrate how one can create a reproducible README-file, how to use the API from SSB, and to give some inspiration

Overnight Stays Norway

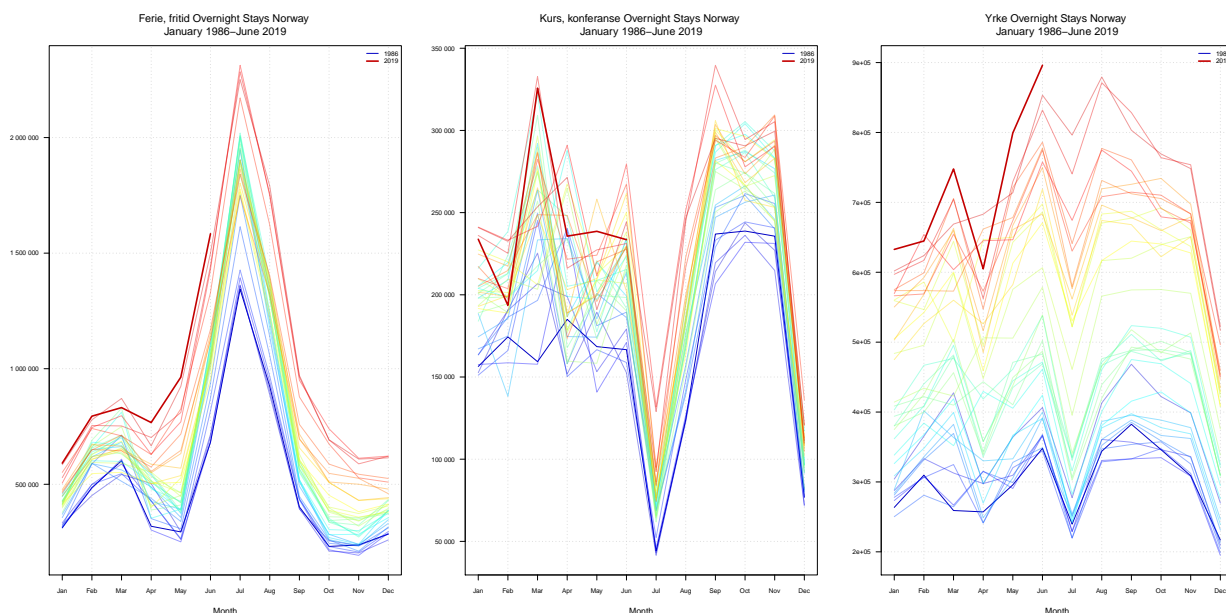
The first plot shows a time series of the hotel overnight stays in Norway from January 1986 to May 2018. As we can see the activity is highly seasonal and seems to have a positive trend. We can observe that we have a small decrease in overnight stays following the 2008 financial crisis. On the other hand, it's difficult to see whether or not the YTD 2018 is higher than YTD 2017. In addition, the plot is created with a static data frame. This is perfectly fine, but if we are to update this report every month (or every time new data is available), we should use the SSB API. Let's change the way we plot the data and use the SSB API.



In the figure below we can see that for YTD, 2019 is currently the year with the most total overnight stays since 1986. This plot is created with a dynamic dataset which will automatically be updated every month when SSB updates their data. This is also true for the rest of this example report.



As we can see from the plot below, it's the Ferie, fritid that accounts for most of the overnight stays during peak season in summer.



From the summary table below we can confirm that the month with the most overnight stays is highest for the Ferie, fritid category. The Kurs, konferanse category has the lowest. We can also see that the category Yrke has probably the least volatility as the range is quite low compared to the others. Both the plot and summary confirms this.

Table 1: Summary Table 2017-2018

Ferie, fritid	Kurs, konferanse	Yrke
Min. : 528721	Min. : 92458	Min. :516872
1st Qu.: 672726	1st Qu.:225761	1st Qu.:626065
Median : 786787	Median :237372	Median :735124
Mean : 989493	Mean :237781	Mean :716892
3rd Qu.: 969246	3rd Qu.:285798	3rd Qu.:798552
Max. :2284651	Max. :339637	Max. :896144

Under we can observe the final 17 observations.

Table 2: Observation 2017-2018

month	Ferie, fritid	Kurs, konferanse	Yrke
Jan 2017	528 721	236 117	597 049
Feb 2017	754 534	225 233	616 928
Mar 2017	752 397	332 851	704 227
Apr 2017	702 636	216 151	562 422
May 2017	810 618	227 345	729 580
Jun 2017	1 444 486	231 212	832 076
Jul 2017	2 284 651	92 458	740 667
Aug 2017	1 755 689	244 513	871 224
Sep 2017	964 518	339 637	828 404
Oct 2017	691 982	294 440	763 957
Nov 2017	588 455	305 309	753 812
Dec 2017	621 509	111 498	522 741
Jan 2018	584 635	240 902	601 887
Feb 2018	778 897	232 519	623 856
Mar 2018	871 304	253 533	668 897
Apr 2018	666 307	271 401	683 074
May 2018	923 603	191 032	713 767
Jun 2018	1 500 041	244 444	853 360
Jul 2018	2 250 895	128 959	796 216
Aug 2018	1 790 005	246 834	879 381
Sep 2018	970 822	295 190	803 205
Oct 2018	692 493	290 597	769 279
Nov 2018	609 070	299 495	748 291
Dec 2018	614 364	120 780	516 872
Jan 2019	591 338	233 809	632 693
Feb 2019	794 677	193 606	644 711
Mar 2019	831 707	325 713	747 767
Apr 2019	767 073	235 686	604 927
May 2019	963 446	238 627	799 331
Jun 2019	1 583 906	233 541	896 144

Finally, let's look at all the counties in Norway

