Tourism in Norway

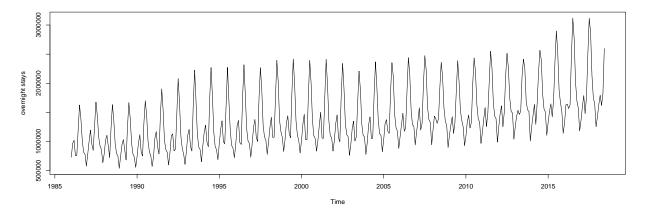
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Introduction

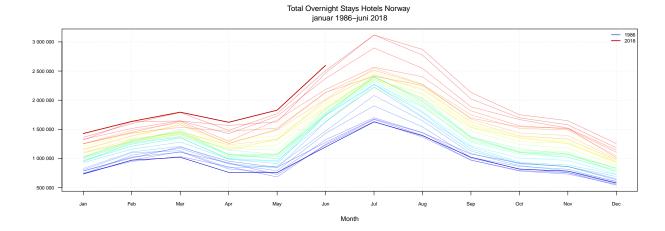
This is an example file and project for the course BED-2056. Use this as an inspiration for your own project. Feel free to steal ideas and use the code (but for your own sake, don't copy/paste. Understand what it's doing and why it was used.). In this example report we will look at the change in overnight stays at hotels in Norway from januar 1986 to juni 2018.

Overnight Stays Norway

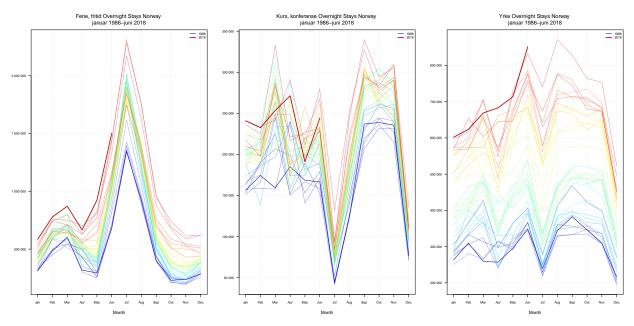
The first plot shows a time series of the hotel overnight stays in Norway from January 1986 to May 2018. As we can se the activity is highly seasonal and seems to have a positive trend. We can observe that we have a small decrease in overnight stays following the 2008 financial crisis. On the other hand, 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 bellow we can se that for YTD, 2018 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 se from the plot bellow, it's the Ferie, fritid that accounts for most of the overnight stays during peak season in summer.



From the summary table bellow 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 volatily 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. :522741
1st Qu.: 672502	1st Qu.:225761	1st Qu.:618660
Median: 766716	Median: 238510	Median :708997
Mean: 957046	Mean $:238344$	Mean : 703677
3rd Qu.: 954289	3rd Qu.:266934	3rd Qu.:761421
Max. :2284651	Max. :339637	Max. :871224

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
$\max\ 2017$	$752\ 397$	$332\ 851$	$704\ 227$
apr 2017	$702\ 636$	216 151	$562\ 422$
$\mathrm{mai}\ 2017$	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	1755689	$244\ 513$	$871\ 224$
sep 2017	$964\ 518$	$339\ 637$	$828\ 404$
okt 2017	691 982	$294\ 440$	$763\ 957$
nov 2017	$588\ 455$	$305 \ 309$	$753 \ 812$
${\rm des}\ 2017$	$621\ 509$	111 498	$522\ 741$
jan 2018	$584\ 635$	240 902	$601\ 887$
feb 2018	778 897	$232\ 519$	$623\ 856$
$\max\ 2018$	871 304	$253\ 533$	$668\ 897$
$\mathrm{apr}\ 2018$	666 009	$271\ 401$	$683\ 074$
mai 2018	923 603	191 032	713 767
jun 2018	$1\ 502\ 184$	244 049	851 612

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

