

# Explore APCA

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3/14/2021

APCA cores were calculated for years 2007-2015 using a 6-factor solution

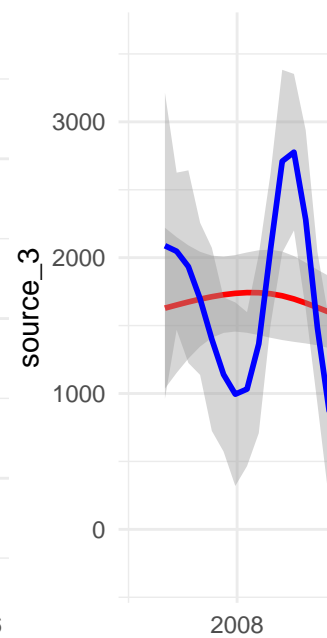
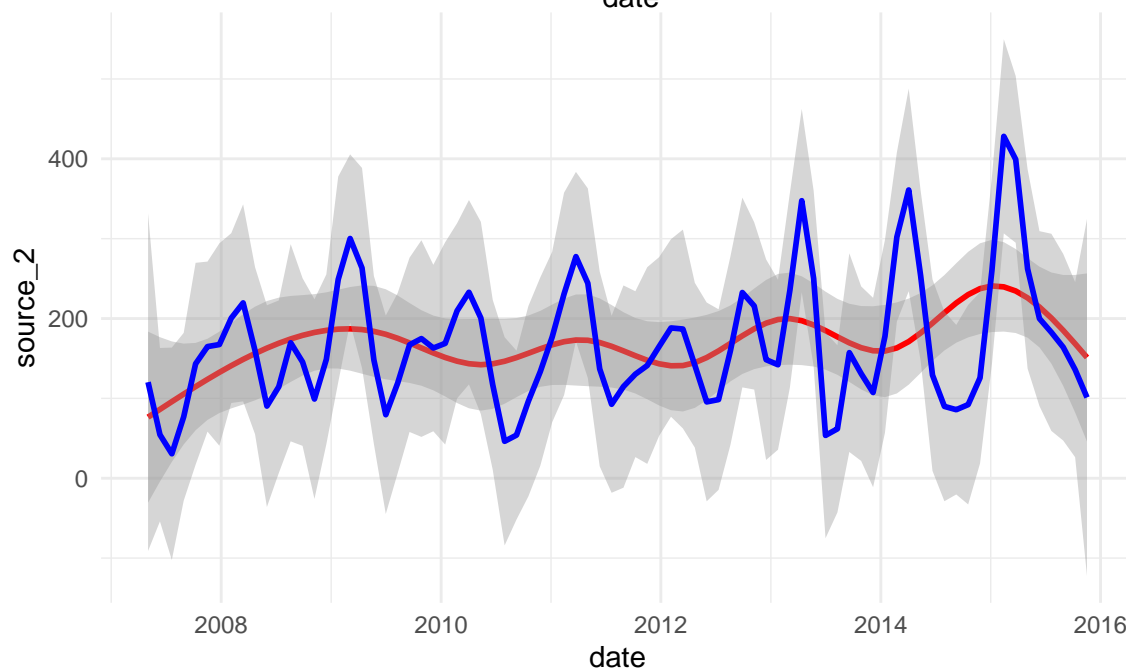
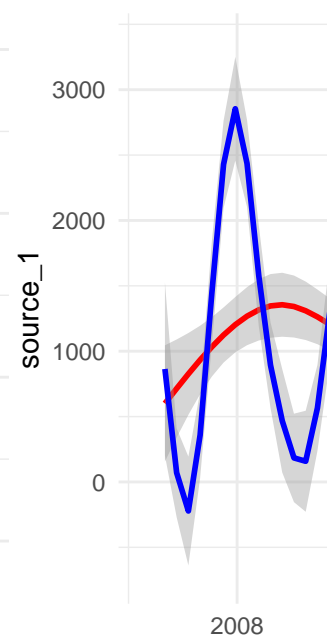
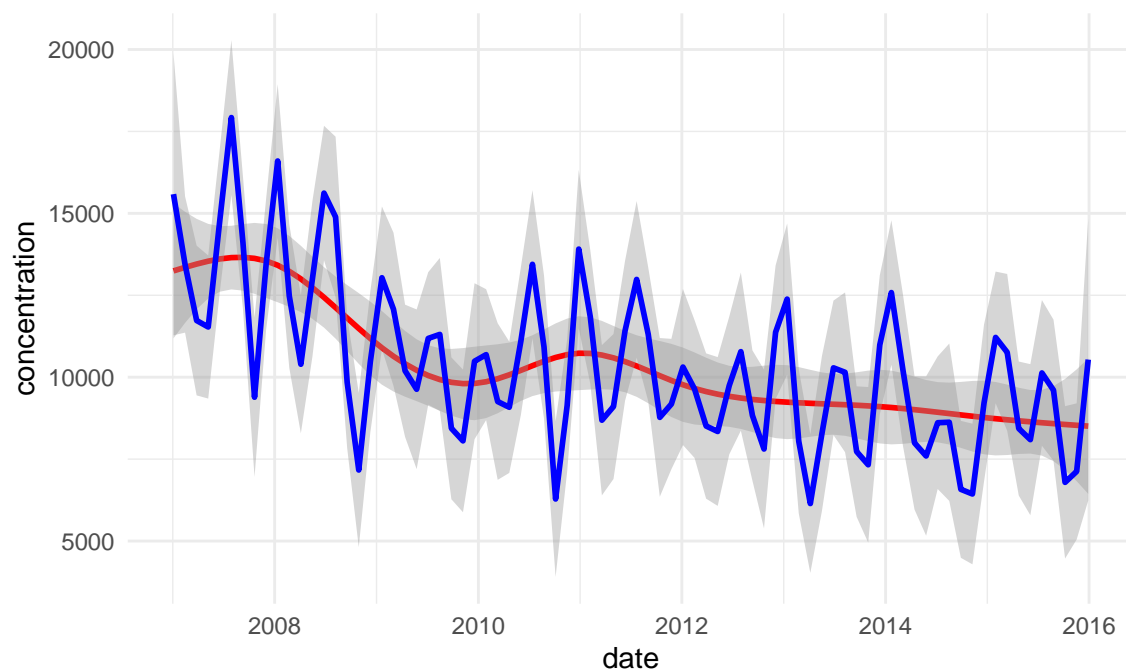
```
##
## -- Column specification -----
## cols(
##   date = col_date(format = ""),
##   concentration = col_double(),
##   source_4 = col_double(),
##   source_1 = col_double(),
##   source_3 = col_double(),
##   source_2 = col_double(),
##   source_5 = col_double(),
##   source_6 = col_double()
## )
##
## -- Column specification -----
## cols(
##   date = col_date(format = ""),
##   concentration = col_double(),
##   source_1 = col_double(),
##   source_3 = col_double(),
##   source_4 = col_double(),
##   source_2 = col_double(),
##   source_6 = col_double(),
##   source_5 = col_double()
## )
```

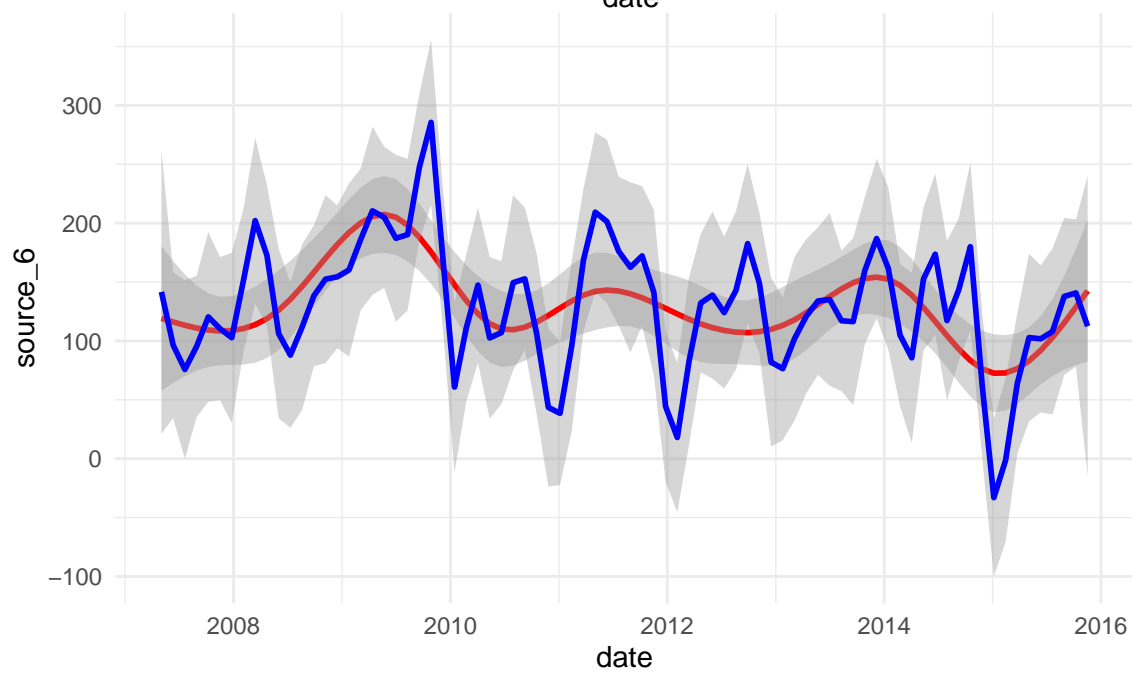
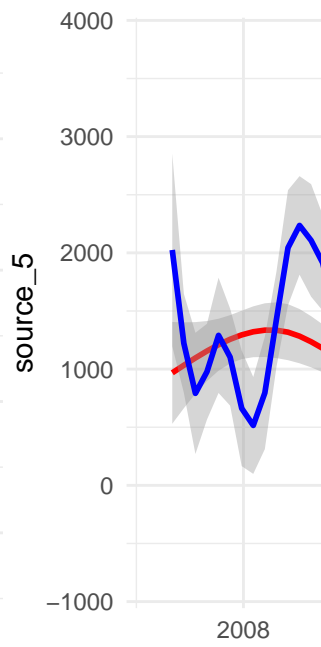
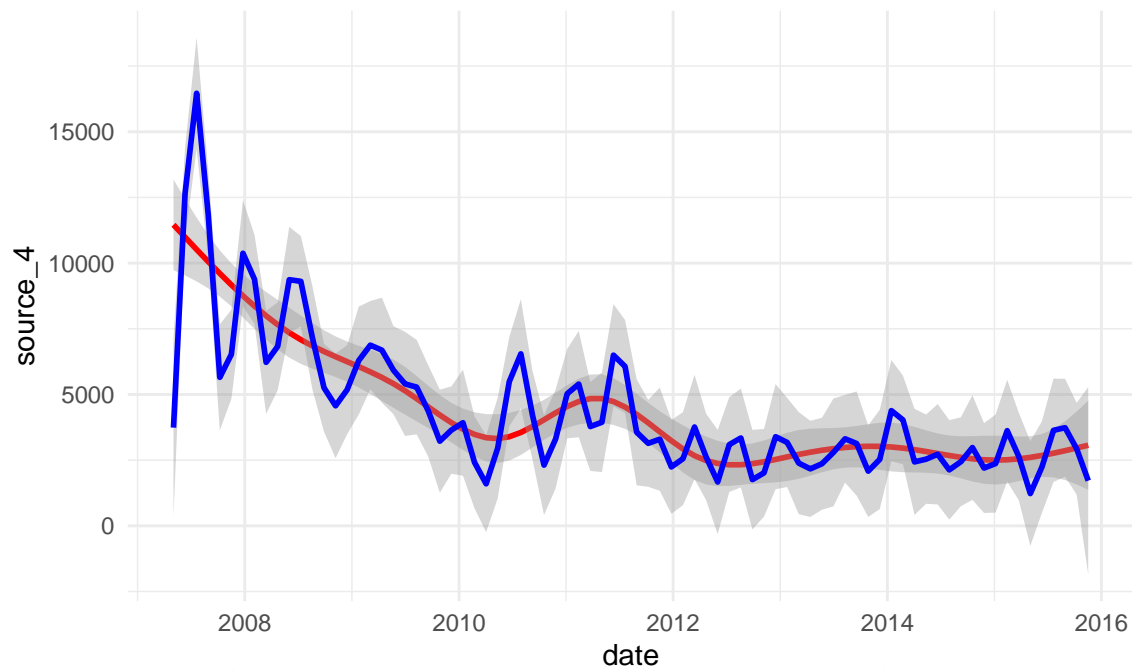
## general info

##	date	concentration	source_4	source_1
##	Min. :2007-01-03	Min. : 1617	Min. : -15003	Min. : -1030.9
##	1st Qu.:2009-04-02	1st Qu.: 5872	1st Qu.: 1264	1st Qu.: 106.2
##	Median :2011-06-23	Median : 8825	Median : 2964	Median : 591.1
##	Mean :2011-07-01	Mean :10322	Mean : 4258	Mean : 901.1
##	3rd Qu.:2013-10-02	3rd Qu.:13033	3rd Qu.: 5879	3rd Qu.: 1366.3
##	Max. :2015-12-29	Max. :38580	Max. : 40441	Max. :11113.6
##		NA's :3	NA's :112	NA's :112
##	source_3	source_2	source_5	source_6
##	Min. : -1515.1	Min. : -86.34	Min. : -2071	Min. : -1356.27
##	1st Qu.: 609.7	1st Qu.: 21.97	1st Qu.: 1097	1st Qu.: 56.74
##	Median : 1100.1	Median : 88.83	Median : 1771	Median : 117.41
##	Mean : 1386.5	Mean : 170.76	Mean : 1868	Mean : 129.58

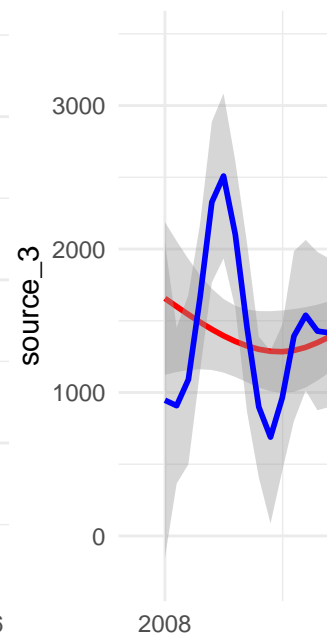
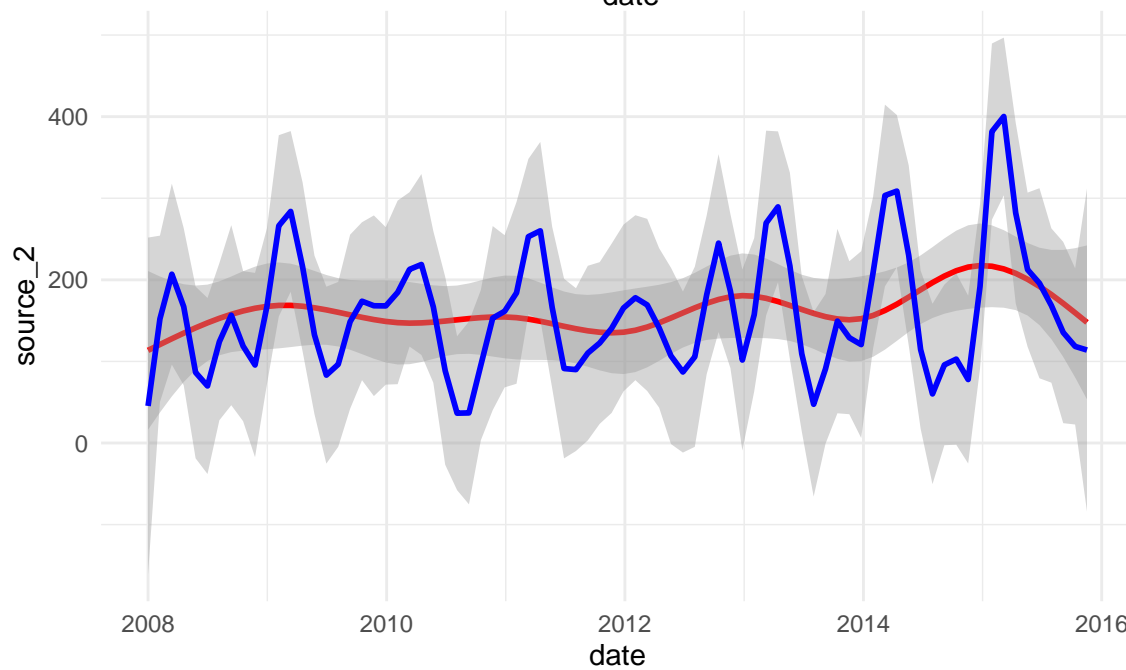
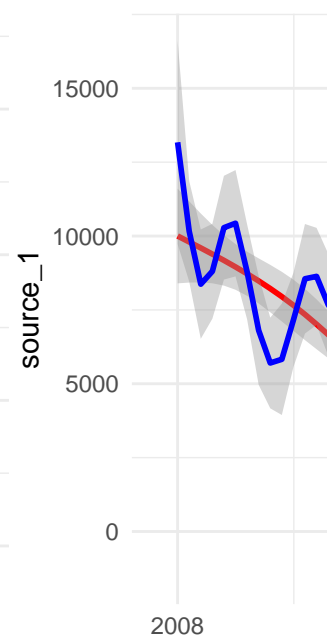
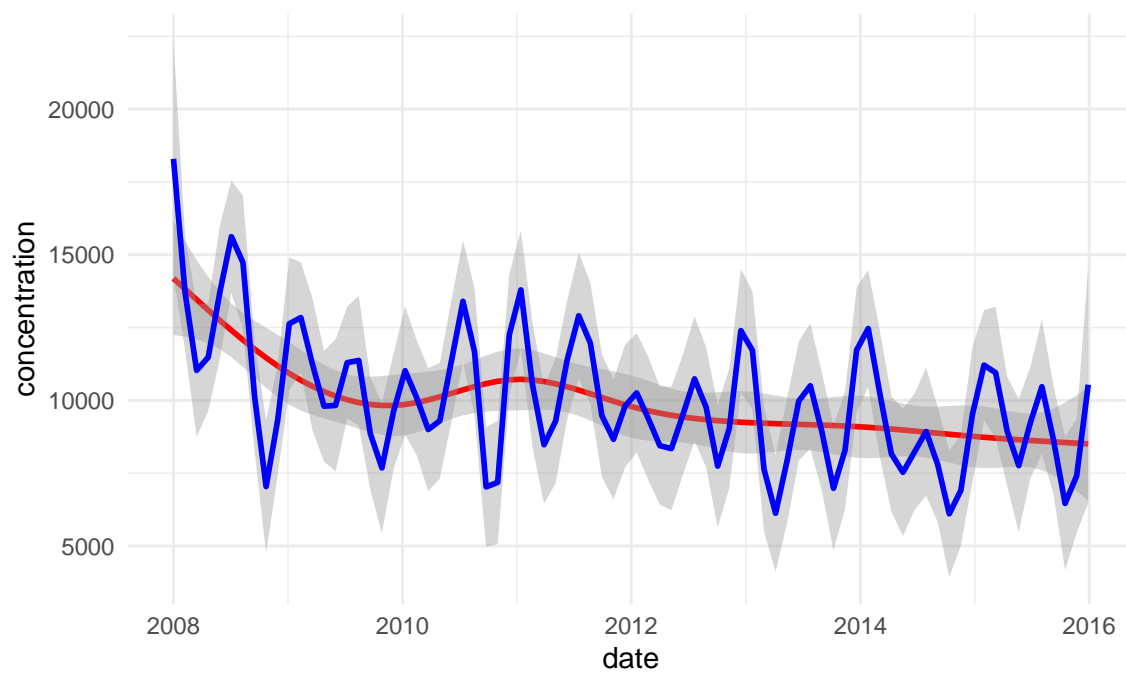
##	3rd Qu.:	1711.8	3rd Qu.:	221.95	3rd Qu.:	2492	3rd Qu.:	190.26
##	Max.	:18321.8	Max.	:3835.94	Max.	: 9972	Max.	: 2344.76
##	NA's	:112	NA's	:112	NA's	:112	NA's	:112
##	date		concentration		source_1		source_3	
##	Min.	:2008-01-01	Min.	: 1617	Min.	:-10971	Min.	:-1556.7
##	1st Qu.:	2009-12-30	1st Qu.:	5750	1st Qu.:	1484	1st Qu.:	471.8
##	Median :	2011-12-30	Median :	8650	Median :	3304	Median :	911.5
##	Mean :	2011-12-30	Mean :	9936	Mean :	4532	Mean :	1167.1
##	3rd Qu.:	2014-01-01	3rd Qu.:	12522	3rd Qu.:	6160	3rd Qu.:	1475.6
##	Max.	:2015-12-29	Max.	:38580	Max.	: 34628	Max.	:16281.9
##			NA's	:3	NA's	:56	NA's	:56
##	source_4		source_2		source_6		source_5	
##	Min.	:-1007.25	Min.	: -86.88	Min.	:-1331.69	Min.	:-2838
##	1st Qu.:	-92.06	1st Qu.:	25.27	1st Qu.:	97.22	1st Qu.:	1079
##	Median :	164.74	Median :	90.47	Median :	190.63	Median :	1859
##	Mean :	320.42	Mean :	162.94	Mean :	213.32	Mean :	1947
##	3rd Qu.:	580.71	3rd Qu.:	210.82	3rd Qu.:	293.85	3rd Qu.:	2705
##	Max.	: 8082.52	Max.	:3464.07	Max.	: 3536.56	Max.	: 8867
##	NA's	:56	NA's	:56	NA's	:56	NA's	:56

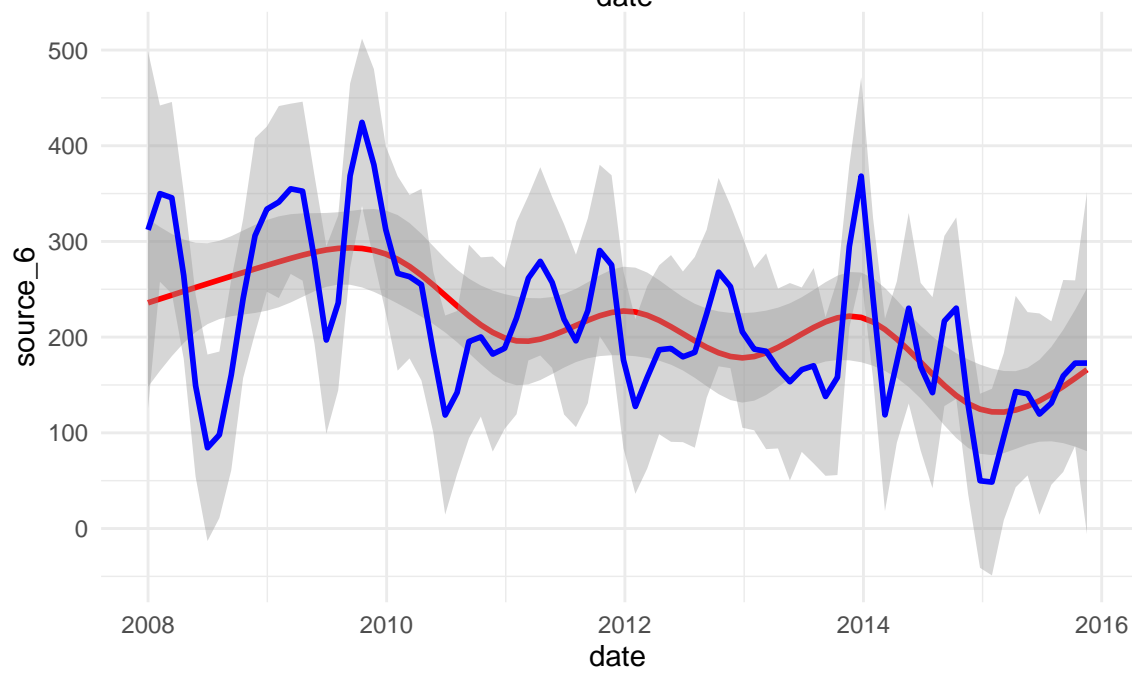
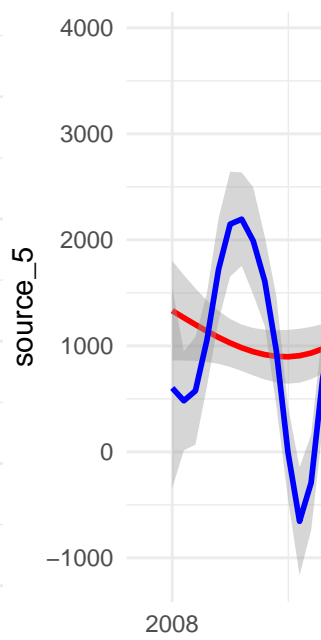
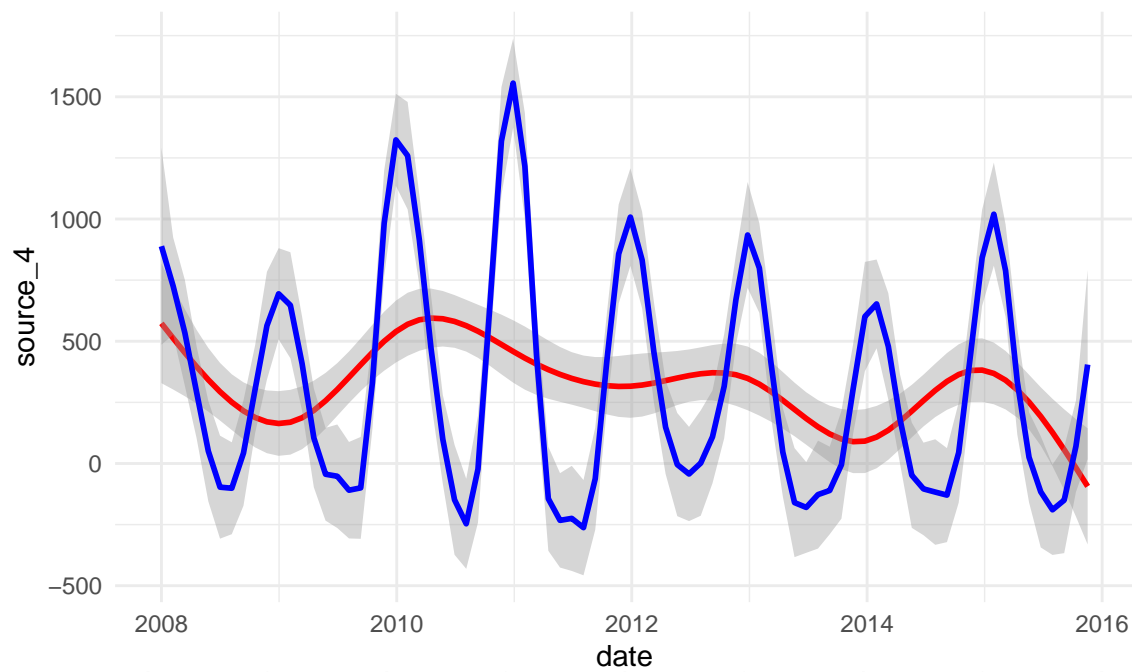
### time trends including 2007



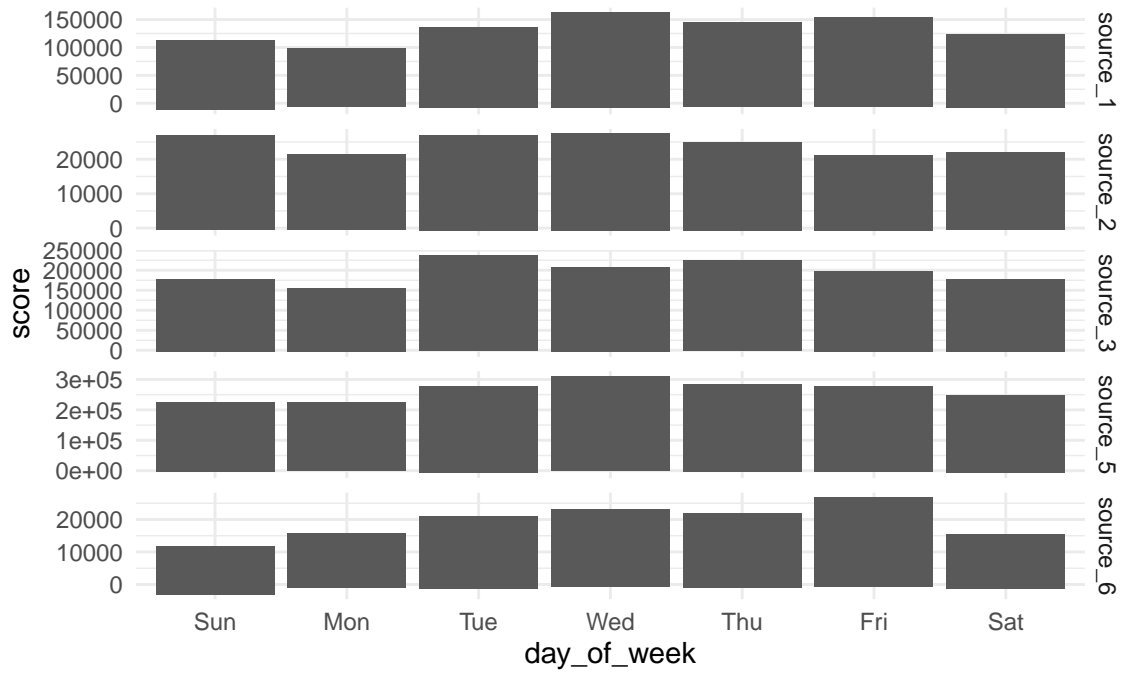


## time trends not including 2007





## day of week patterns including 2007



## day of week patterns not including 2007

