

Tab1

select input- user choose which sector to plot(its FILENAME column)

input-usecr choose date range

Date to date

select inputUser choose which Channel to plot(All, channel 1,2,3,4)

select input-interactive dataset input-user choose which dataset to plot (speed, length, weight)

Aggregation of data-how to aggregate data- "mins", "hours", "days","weeks","months","quarters","years"

checkboxGroupInput- which trace to plot(which bin)

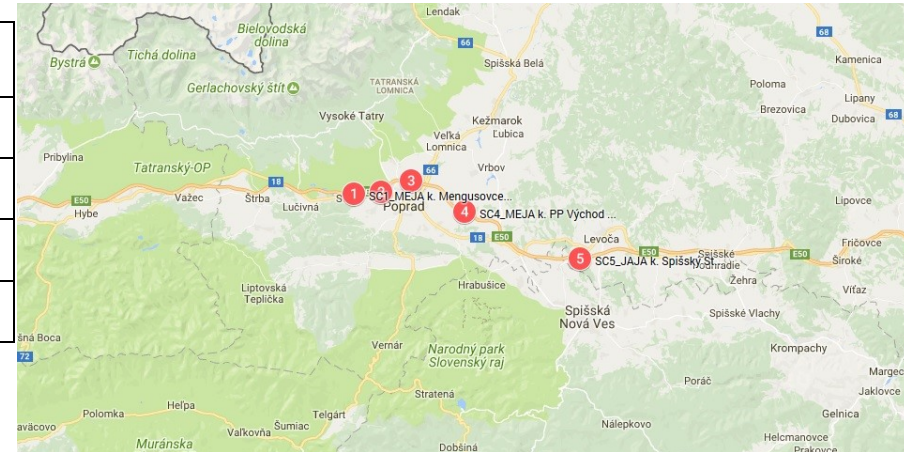
SC1\_MEJA k. Mengusovce - k. PP Západ

SC2\_MEJA k. PP Západ - k. Vysoké Tatry

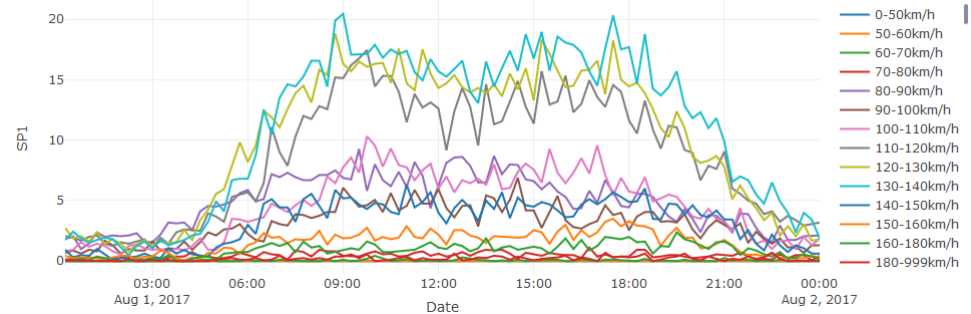
SC3\_MEJA k. Vysoké Tatry - k. PP Východ

SC4\_MEJA k. PP Východ - k. Spišský Štvrtok

SC5\_JAJA k. Spišský Štvrtok - k. Levoča



Plot of time series data(plotly)



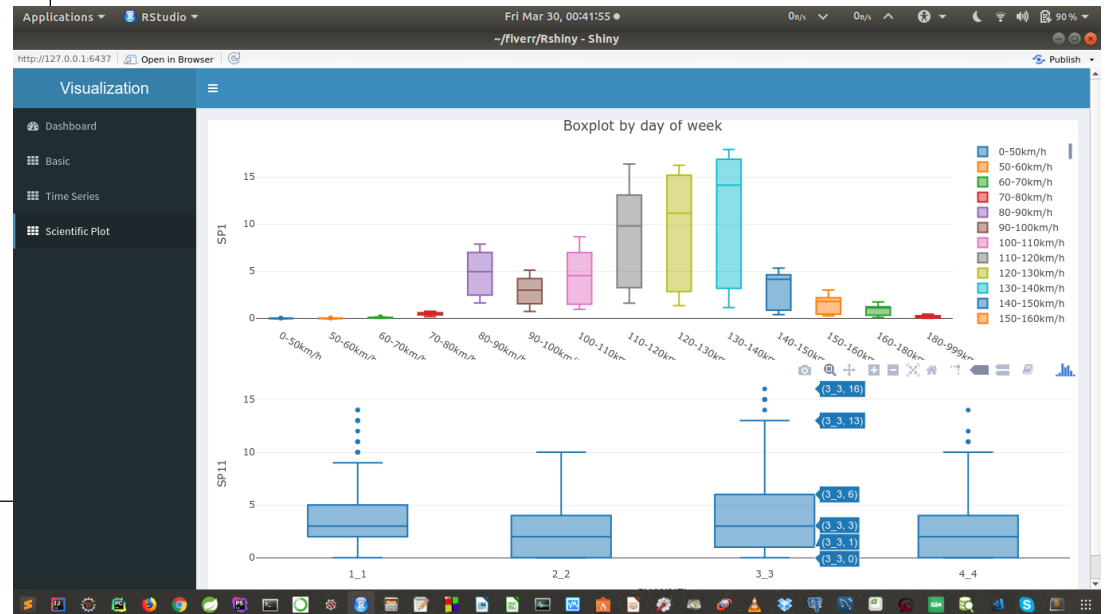
## Tab2 Boxplots

```
plot_ly(pac,y = ~SP1, name = '0-50km/h',type = 'box')%>%
  add_trace(y = ~SP2, name = '50-60km/h', mode = 'lines') %>%
  add_trace(y = ~SP3, name = '60-70km/h', mode = 'lines') %>%
  add_trace(y = ~SP4, name = '70-80km/h', mode = 'lines') %>%
  add_trace(y = ~SP5, name = '80-90km/h', mode = 'lines') %>%
  add_trace(y = ~SP6, name = '90-100km/h', mode = 'lines') %>%
  add_trace(y = ~SP7, name = '100-110km/h', mode = 'lines') %>%
  add_trace(y = ~SP8, name = '110-120km/h', mode = 'lines') %>%
  add_trace(y = ~SP9, name = '120-130km/h', mode = 'lines') %>%
```

## Boxplots with atribudes ()

Select input- wday.lbl,year.iso,half  
quarter,month,am.pm

```
plot_ly(pac, y = ~SUM,SP1-SP14,etc...,
  color = ~wday.lbl,year.iso,half
  quarter,month,am.pm, type = "box")
```



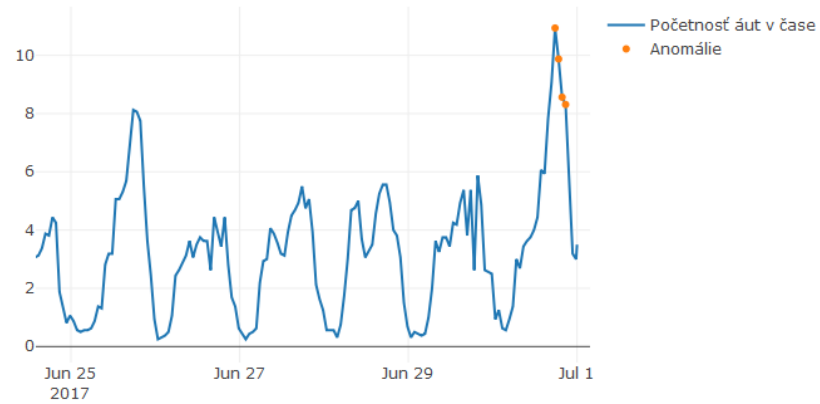
**This one is GOOD**

### Tab3 Anomaly detection

Choose which tracks to detect

Choose period of anomaly to detect and if user want detect only last period or all periods.

```
res=AnomalyDetectionVec(SUM_DATA[,2]  
, max_anoms=0.01, period=2,  
direction='both', only_last=FALSE,  
plot=TRUE)
```



Tab4 Motif discovery

Just choose which track to  
discover on motifs

Any select input

**PLOT**

Tab5 Machine learning timetk + h2o:

Just choose which track to  
discover on ML

Any select input

**PLOT**

**Error table**

Tab6 timetk + linear regression:

Just choose which track to  
discover on ML

Any select input

**PLOT**

**Error table**

Tab7 ARIMA + sweep:

Just choose which track to  
discover on ML

Any select input

**PLOT**

**Error table**