

TIMELINE: A TIME SERIES VISUALIZATION PLATFORM

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time series

- data sets in which time plays an essential role
- i.e. data has a time dimension
- example: consumption of electricity

visualization

- usually the first step
- detect patterns, trends, ...
- important for later analysis and modeling

time series visualization platform

back-end

- Python
- data import (files, web APIs, sockets)
- data storage (pandas)
- visualization engine
- RESTful API (flask)

front-end

- HTML/JS
- visualization library
 - Cubism.js
 - MetricsGraphics.js
 - ...

visualizations

- time series plots (filters, multiple time series)
- plot running average and standard deviation
- live updates for time series plots
- seasonal plots
- autocorrelation function (ACF) plots
- forecasting model evaluation plots

VISUALIZATION EXAMPLES

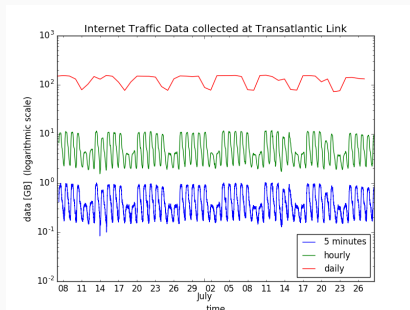


Figure 1: Exemplary time series plot of three different data sets.

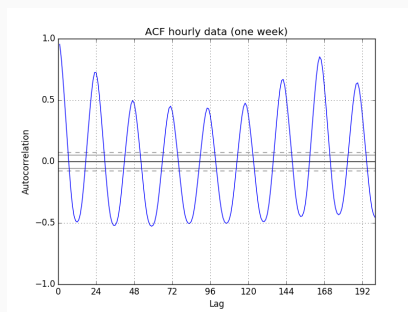


Figure 2: Example of a ACF plot that shows seasonal effects.

QUESTIONS?