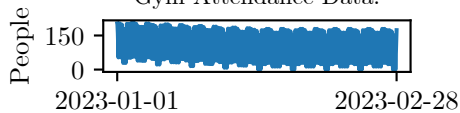
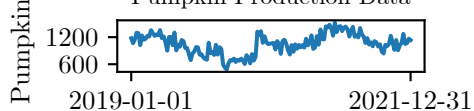


Gym Attendance Data.



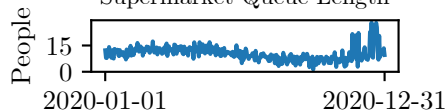
A large gym chain records the number of users in their gyms across the city every hour for two months. An external event such as "New Year" might spur an increase in gym attendance due to New Year's resolutions. Overall, we expect seasonal patterns with a higher frequency of gym usage after work hours and closer to the start of the week.

Pumpkin Production Data



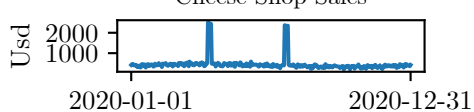
The scenario depicts a Pumpkin farm's weekly pumpkin production, influenced by weather conditions. The time series spans 3 years (156 weeks), sampled every week. An external event like a severe drought can cause a substantial dip in production.

Supermarket Queue Length



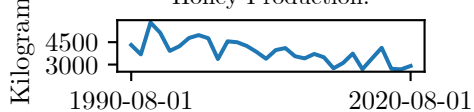
The scenario is a supermarket checkout, where you measure the average daily queue length. The queue length can be influenced by external events such as holiday sales events. The sample rate of time series is daily, taken for a year (365 observations).

Cheese Shop Sales



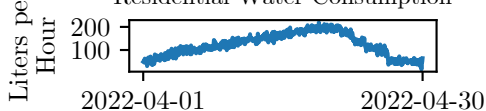
Consider a local cheese shop, where sales depend on daily customer foot traffic which fluctuates throughout the week. An external event such as a regional cheese festival might drastically increase sales for the duration of the event. This time series is sampled daily over a year, resulting in 365 observations.

Honey Production.



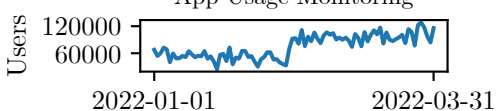
Yearly wild honey production in a hundred bee farms in rural France over 30 years. During the examined period, there was a widespread use of certain pesticides, which allegedly affected the bee population and hence honey production. Honey was harvested once every year in August, right after the flowering season.

Residential Water Consumption



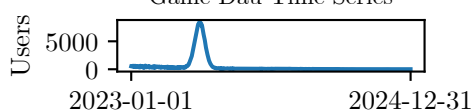
A time series recording the hourly water consumption in a residential building over the course of one month. External events such as a festive holiday may lead to an increase in water consumption due to an increased number of residents in the building. The sample rate is hourly and the duration is one month.

App Usage Monitoring



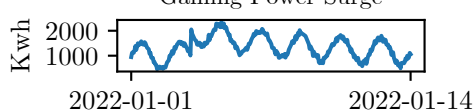
A company is monitoring the daily usage of their application by the number of users logged in. The data spans from January 1 to March 31, 2022 (90 days). On the 45th day, they launched a marketing campaign which resulted in an increase in app usage. The sample rate is daily.

Game Dau Time Series



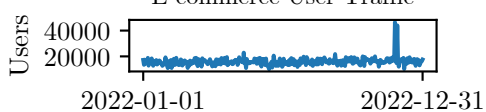
A small independent game developer releases a new mobile game in the app store. The time series represents the daily active users (DAU) of the game for the first two years after release (730 observations). A large influencer tweets about the game during the 6th month, causing a significant spike in the DAU numbers. The sample rate is daily, collected for 2 years.

Gaming Power Surge



A power company has observed a significant rise in electricity usage due to the launch of a new high-profile video game. The time series is sampled every hour over a period of 2 weeks, recording the power usage of the grid, leading to 336 observations.

E-commerce User Traffic



An e-commerce website tracks the number of daily users that visit their site. The peak shopping period, Black Friday and Cyber Monday, usually causes a surge in user traffic, particularly in the week of these events. The site collects a year's worth of daily sampled data.