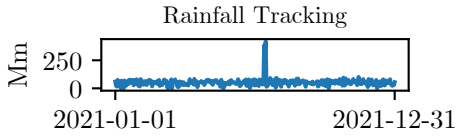
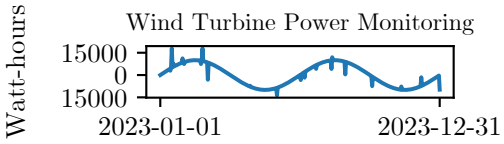
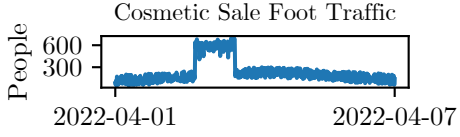


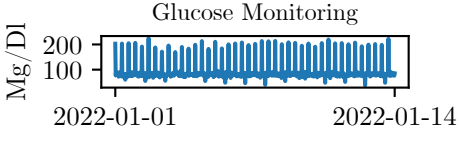
This scenario involves tracking the levels of rainfall in a certain geographical location throughout one year, where an extra tropical cyclone event increases the levels drastically. The data is sampled daily for 365 days, recording the quantity of rainfall in millimeters.



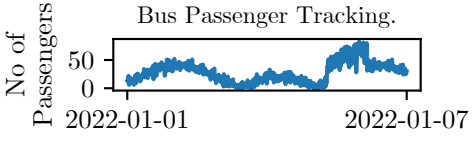
We are monitoring the power generation from a personal wind turbine over the course of a year. This is influenced by changes in wind speeds caused by seasonal weather patterns. The power generation is sampled every day at noon, resulting in 365 observations.



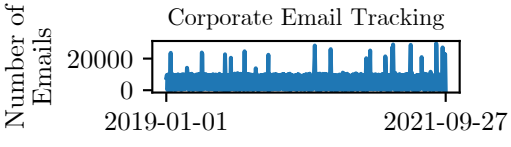
A department store is monitoring the foot traffic in their cosmetic section. An external event like a big sale on beauty products can increase the foot traffic causing a spike in the readings. Data is collected every 15 minutes for a week.



The scenario is the monitoring of blood glucose levels in a diabetic patient. External factors such as what type of food is consumed or the physical activity performed can significantly impact the reading. The time series is sampled every 30 minutes for a duration of two weeks.

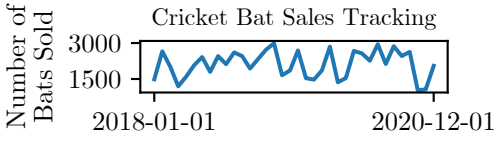


Imagine tracking the number of bus passengers on a suburban route in a moderately-sized city. The time series spans a week with a sample rate of every 15 minutes. A local event, such as a weekend concert can cause a noticeable uptake in the number of passengers.

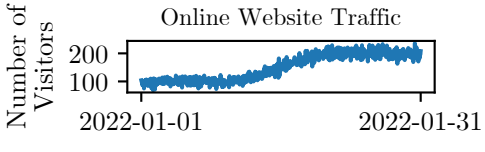


The scenario features measurements of the number of emails received by a corporate office daily. The sample rate is daily, and the duration spanned is about three years. External events such as corporate announcements, product launches, or holiday seasons might influence the influx of emails.

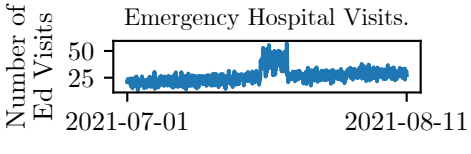
A time series is collected for an e-commerce platform, tracking the number of daily website visits over a span of two years. The data is influenced by marketing campaigns which typically cause a temporary spike of 20-30% in website visits happening approximately every six months.



A sports equipment company tracks the monthly sales of cricket bats. The sales are influenced by a major cricket league that occurs annually over 45 days. During the league, the sales show a spike. The time series spans for 36 months, thus resulting in 36 observations.



A company monitors the number of customers visiting its online website over time. The company launches a marketing campaign, which starts to influence the visits after some delay. The time series data is sampled every hour for a duration of 30 days.



A hospital records the number of patients visiting the emergency department (ED) every hour over a span of 42 days. An external event, a large annual music festival, occurs during days 20-23, expectedly increasing the patient inflow.