INTERPRETING YOUR LOAD CONSUMPTION

The Web Visualization gives you a One-Stop Page to analyse your Load Consumption for a custom defined period.

Figure 1. Overview of the Visualization

Features at your finger-tips:

1. **Choose an initial defined period for your Load Consumption**.

Figure 2 Selection based on Time Scale

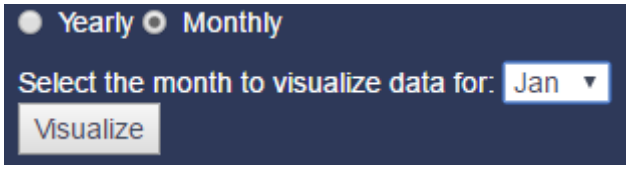


Figure 3 Selection of Monthly Time Scale

This feature allows the user to select the defined time period, it can be for a Year or Monthly. Thereafter, the user has the liberty to select a custom time period.

2. **Find the charts working in Harmony.**

Selection of a particular filter on any charts results cascades the effect on the other charts.

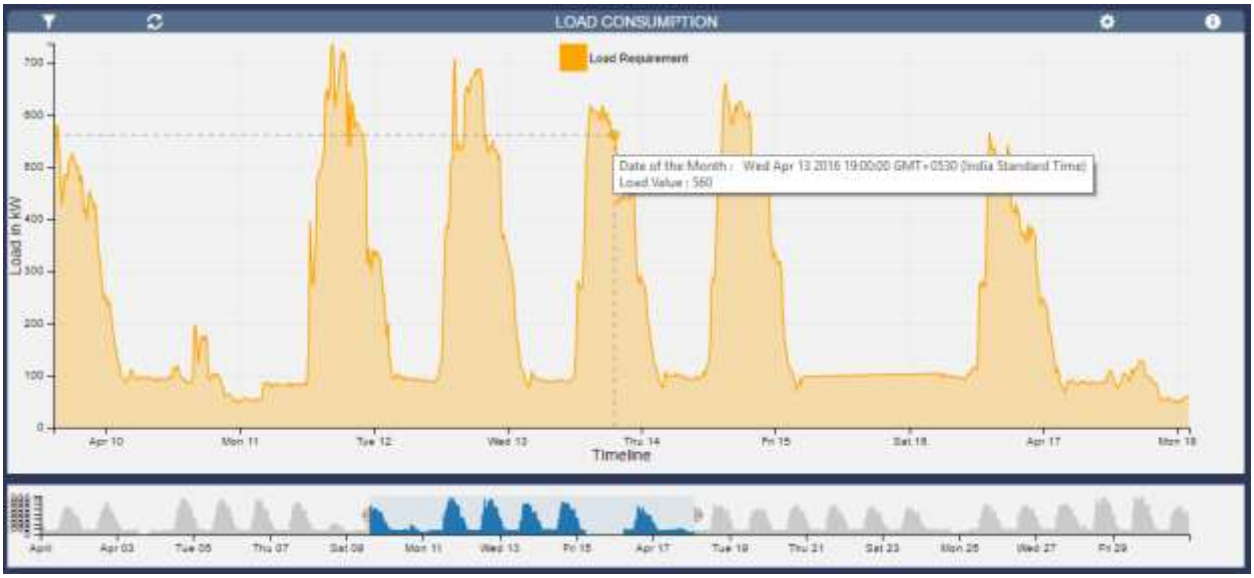
Consider the following filtering on the visualization.

Once a specific time period is selected, notice the change in the other charts. Here, we have selected the time period say mid-September to mid-October.

The evident changes include that of Weather Pie Chart where it shows data of the rainy and winter season which falls in the selected area. The rest of the charts are also recalculated which are explained further in detail later on.

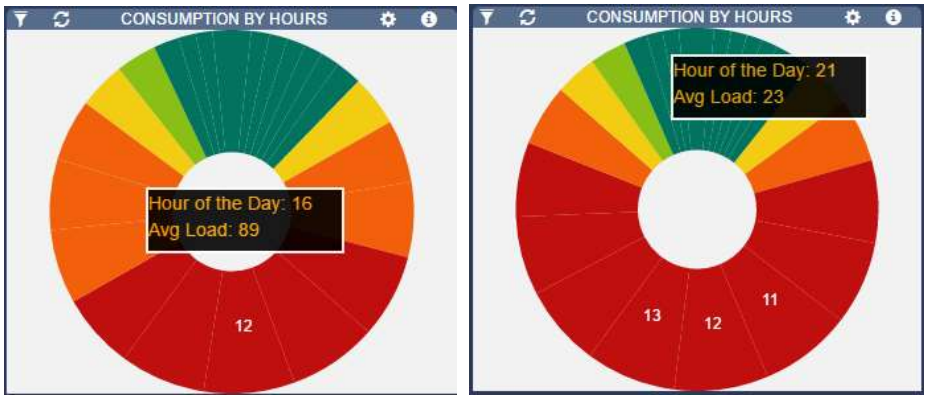
3. Reading Individual Charts

a. Load Consumption



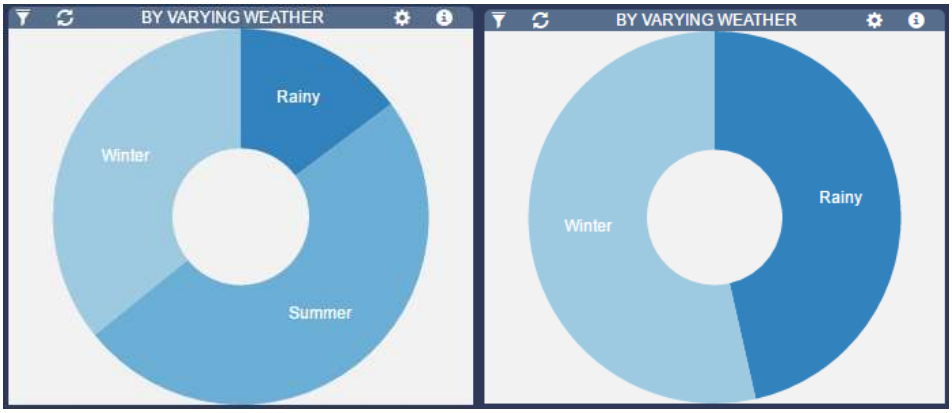
The above chart is a combination of an Area chart and Range Chart. The area chart represents your Load Requirement at a particular instance which in-sync with Range Chart that allows you to select custom time period.

b. Consumption by Hour



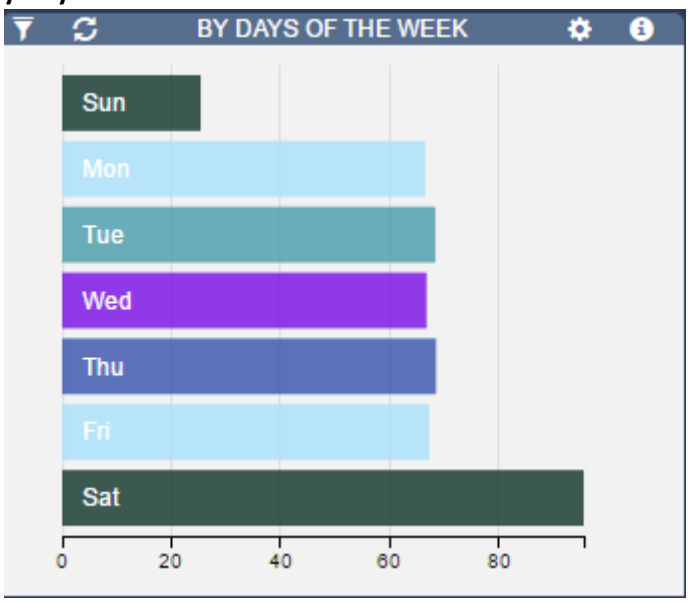
The Consumption by Hour pie chart represents the Average Load Consumption for every hour. Apart from that, the colors of each pie represents the severity of the Avg. Load Req. with Red the most severe and Green the least severe. The hours are selectable. This gives the user the flexibility to visualize data for particular hour(s) as well.

c. Consumption by Season



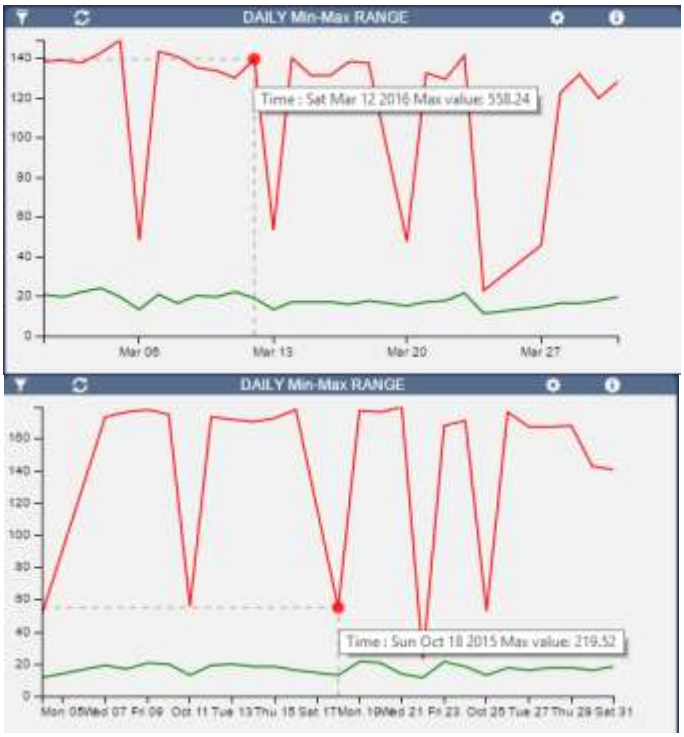
The Consumption by Weather pie chart represents the Average Load Consumption for the seasons in a particular calendar year. Broadly classified into 3 seasons; Summer (Feb - May), Rainy (Jun – Sept) and Winter (Oct-Jan). This pie chart also inherits the selectable feature.

d. Consumption by Days of the Week



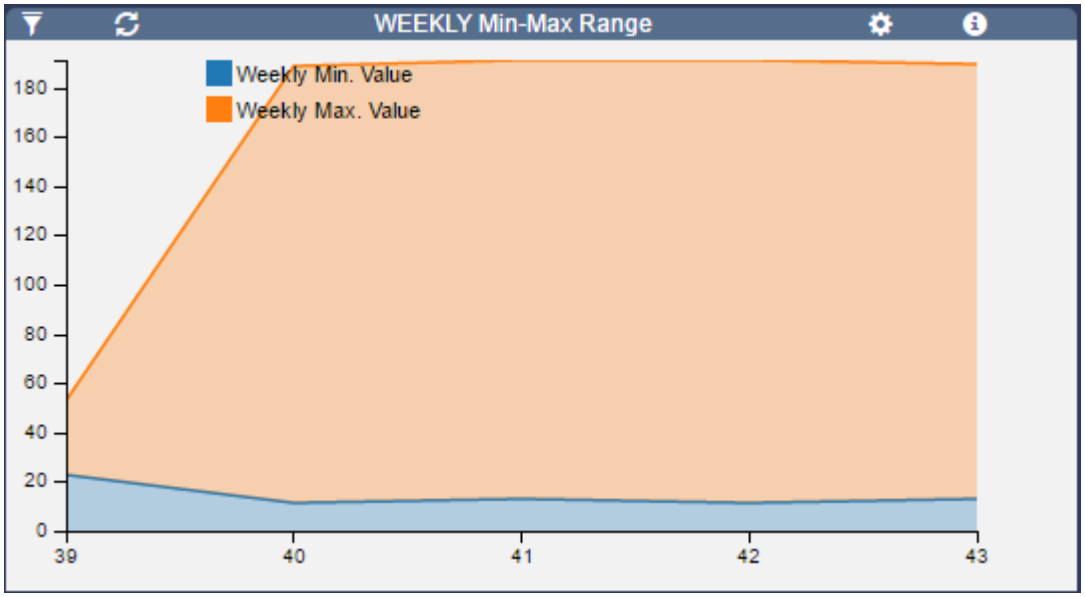
In the following Row Bar-Chart, the length of the bar demonstrates the requirement on weekdays for a selected period. Each of the bar (day of the week) is selectable.

e. Minimum and Maximum Requirement in the Entire Day



The composite line-charts represents the Minimum and Maximum value for a particular day. This is a non-selectable graph, yet has a cascading effect based on the filtering of the other graphs.

f. Minimum and Maximum Requirement in the Entire Week



Like the previous graph, here we find the Minimum and Maximum based at granularity of Week No. of Gregorian Calendar Year (January 1st starts the 1st Week of the Year)

Playing around with the charts.

Consider the following requirements of the user.

1. In the Month of April, the user want to compare its consumption of **post evening hours (1600-2359)** on a **Tuesdays** to **Thursday.**
   - The user is expected to select the Month-wise time scale. Select the days, Tuesdays to Thursdays from row bar chart and Post evening hours from Hourly Pie Chart.

     As per the interpretation of the graphs, the user now have Load Requirement in the selected period on the Area chart, with Min – Max consumption recalculated with the filtered hours and days of the week on respective graph.

2. In a year, the user want to compare its consumption of **Day Hours (0600 – 1400)** on **Weekends** in **Rainy and Summer season.**

As per the interpretation of the graphs, the user now have Load Requirement in the selected period on the Area chart, with Min – Max consumption recalculated with the filtered hours, season and days of the week on respective graphs.