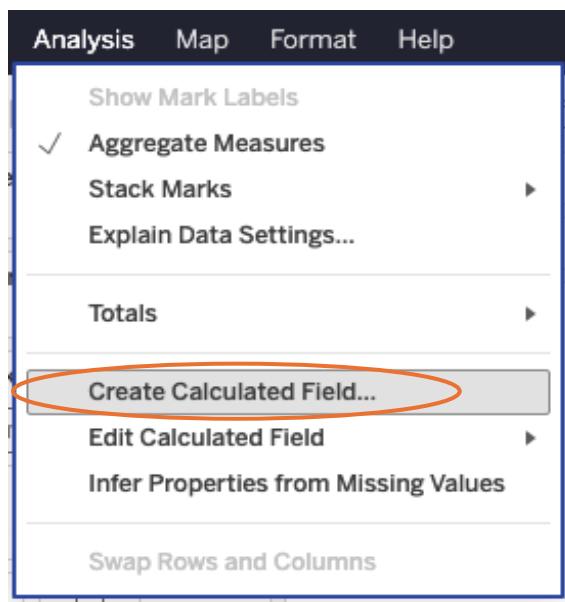


Link to dashboard:

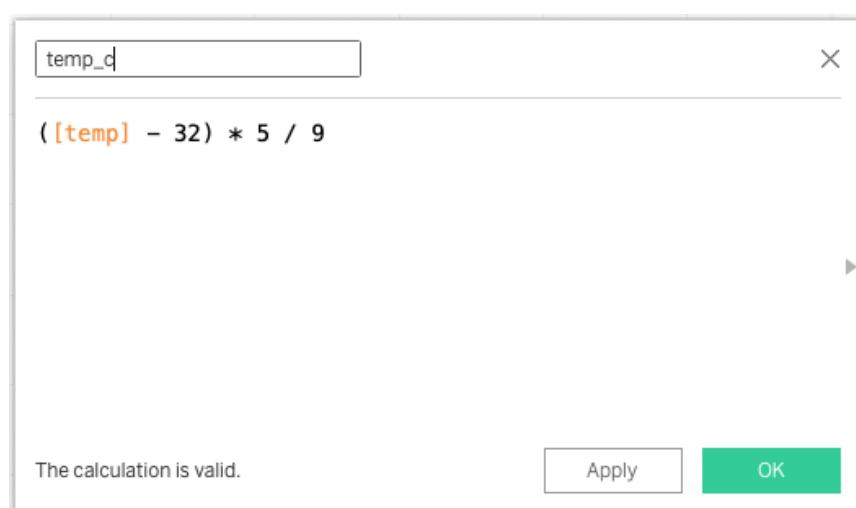
<https://public.tableau.com/app/profile/yew.qizhe/viz/Dailywinddatavisualisation/Dashboard1>

This dashboard presents the daily wind data for LGA in 2013 using Tableau Public. All unit conversions and calculations, including daily averages, were done within Tableau based on the original dataset.

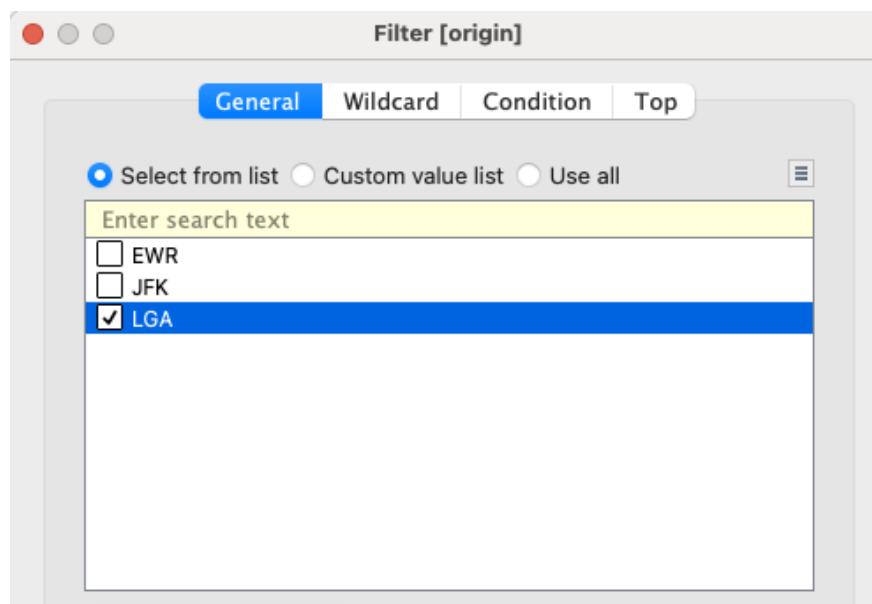
1. Convert all columns so that they use metric (International System of Units, SI). This is done by creating calculated fields in the data plane:



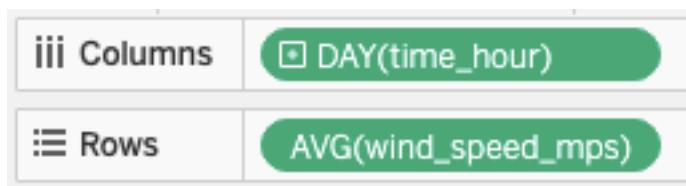
Enter formula to convert into metric, example of converting temperature °F to °C:



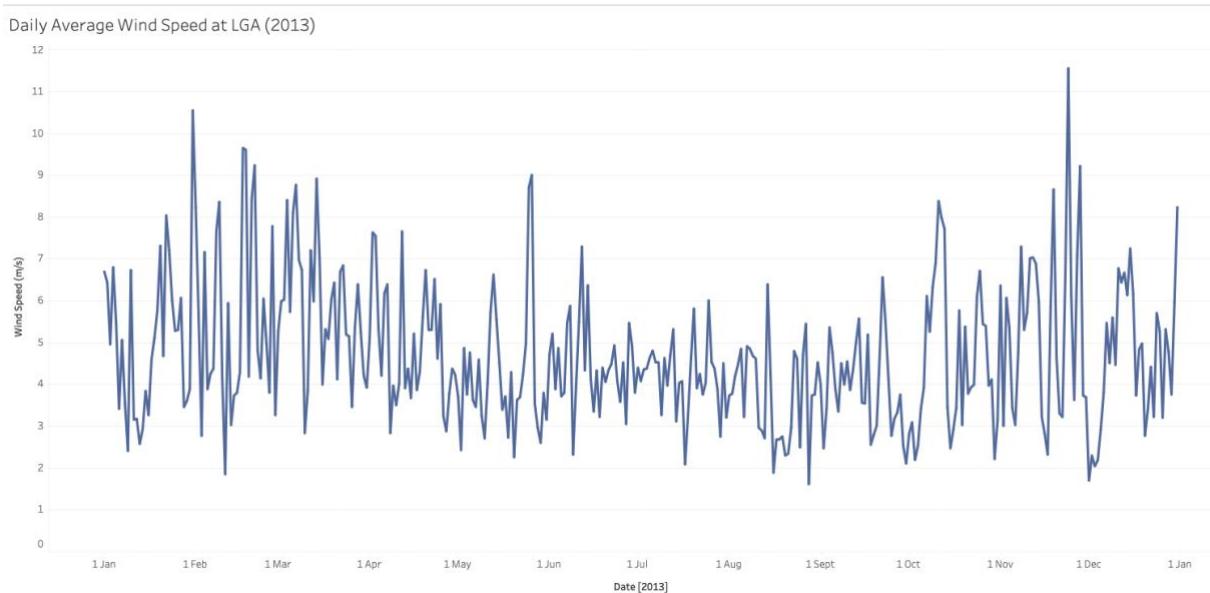
2. Compute daily mean wind speeds for the LGA airport. Firstly we drag the 'origin' column into the Filters shelf and select only 'LGA':



Drag time_hour to columns and set to day. And drag wind_speed_mps to rows and change it to calculate average:



3. Presenting the daily mean wind speeds at LGA on a plot.



4. Identify the 10 windiest days at LGA. Present them in a table (dates and the corresponding total wind speeds). Firstly we filter for LGA. Then, we drag wind_speed_mps to columns and change it to calculate average. time_hour to rows and set to day and discrete:

The screenshot shows a data visualization interface with the following configuration:

- Filters:** origin: LGA
- Columns:** AVG(wind_speed_mps)
- Rows:** DAY(time_hour)

Set sort to descending, and by the field of wind_speed_mps. And filter top 10 days:

The screenshot shows a sorting dialog box with the following settings:

- Sort By:** Field
- Sort Order:** Descending (radio button selected)
- Field Name:** wind_speed_mps
- Aggregation:** Average
- Clear:** A button to clear the current sort settings.

Filter [Day of time_hour]

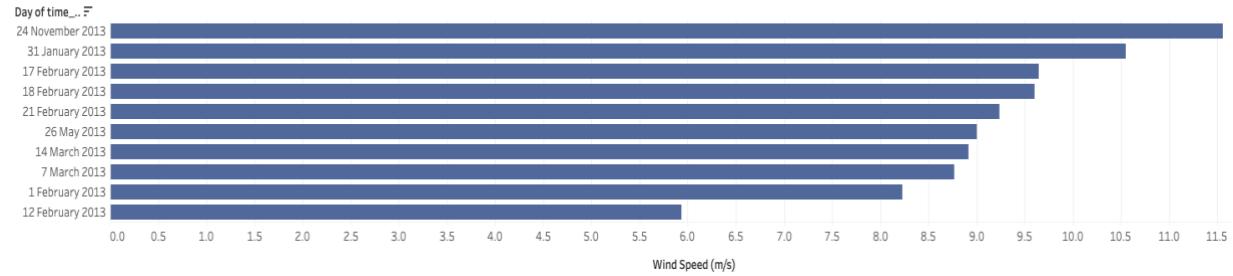
- > General
- > Condition
- ▽ Top/Bottom

None
 By field

Rank	Count
Top ▾	Enter a Value... ▾
	10

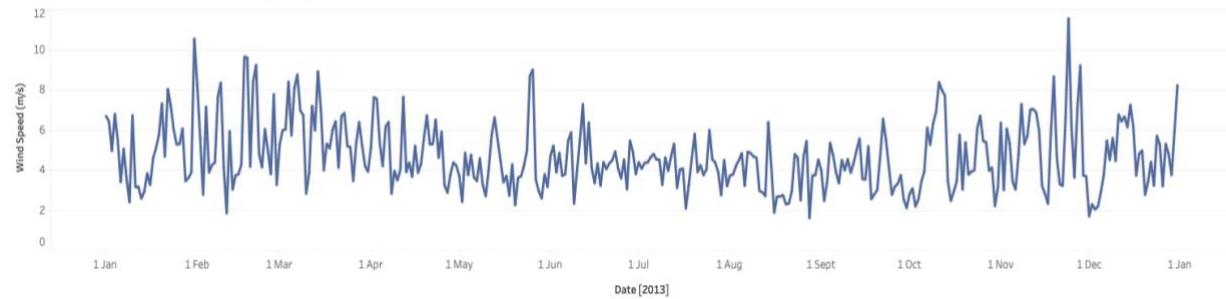
Field	Aggregation
wind_speed_mps	Average ▾

Top 10 windiest days at LGA (2013)

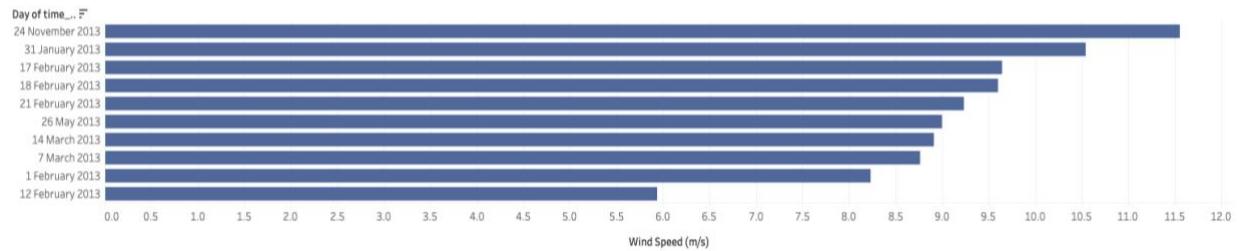


Final dashboard:

Daily Average Wind Speed at LGA (2013)



Top 10 Windiest Days at LGA (2013)



The dashboard shows daily wind trends and the top 10 windiest days at LGA , demonstrating simple and effective data analysis using Tableau.