**DASHBOARD**

The main motive of the dashboard creation was to get an idea about what parameters and features are important and relevant to the predicting if its going to rain tomorrow or not. Most of the graphs were based on the same principle and the dashboard shows three such graphs. All three of them has RainTomorrow column as the data dimension which has two values yes and no. This is what we are trying to predict from the whole exercise.

After setting the RainTomorrow as the data dimension, we played around with different metrics such as minTemp, maxTemp, evaporation and other features which might closely relate to determining if it’s going to rain the next day or not.

The dashboard has three bar charts. The first numbered bar chart has windspeed as the metric. We have two metrics in that chart: WindSpeed3pm and WindSpeed9pm. This shows that there is substantial reduction in the speed of wind if its going to rain the next day, but the speed still stays around 15 km/hr on an average. It also depicts that if it is less windy then there are less chances that it’ll rain the next day.

The next graph (graph number 2) has a similar base as that of the first one. Here instead of taking wind we are going to observe the Humidity at 3pm and 9pm which again is an important factor in determining probability of raining. We can observe that it was substantially a lot humid at 3pm and at 9pm if it was going to rain the next day and vice-versa otherwise. Interestingly enough the humidity increases at night even if its not going to rain the next day, but the gravity of how humid its going to be is very high if it’s going to rain. The graph shows the average of humidity percent for the whole dataset at 3pm and 9pm respectively.

The last one is where we bring the cities into picture as well. As we can see that from the graph, the main data dimension again is set to be the feature of RainTomorrow. For a fair comparison, we have taken average of min temperature as the metric. We can see that min temperature which was observed for a particular city for rain and not rain vary, and this graph gives us insight if we are trying to predict the rain for a particular city. For example, the city of Sydney is more likely to experience rain the other day if the minimum temperature was above 17-17.5 Celsius the previous day and it might not experience rain if it was below 14 degree Celsius.

Different graphs like these three were observed to know more about the dataset and explore which feature is affecting the target variable in what sense. These types of exploration are necessary and DataStudio gives a lot of metric to observe such things.

The dashboard’s screenshot is attached below:

