Analysis of Gateway test data(GPS data)
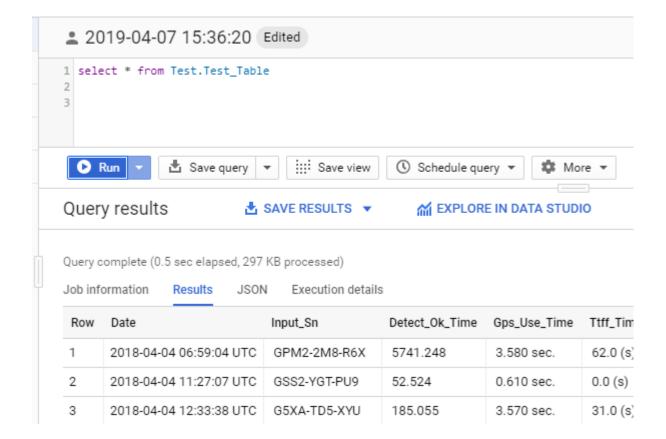
Cleaning of data:

After the log files are merged and converted into a csv file (code in the annexture), the data is loaded and cleaned in Google big query.

UPDATE Test.Test_Table

SET   Detect_Ok_Time = Replace(Detect_Ok_Time, ' sec.', '')
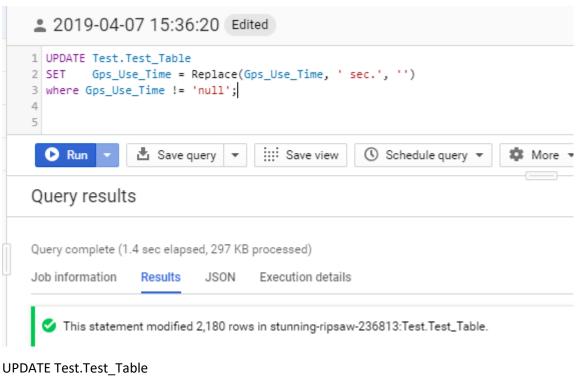
where Detect_Ok_Time != 'null';

select * from Test.Test_Table

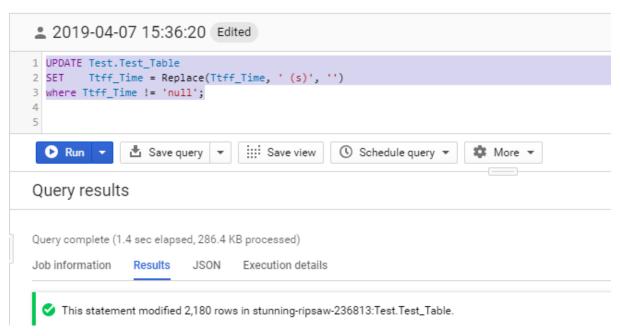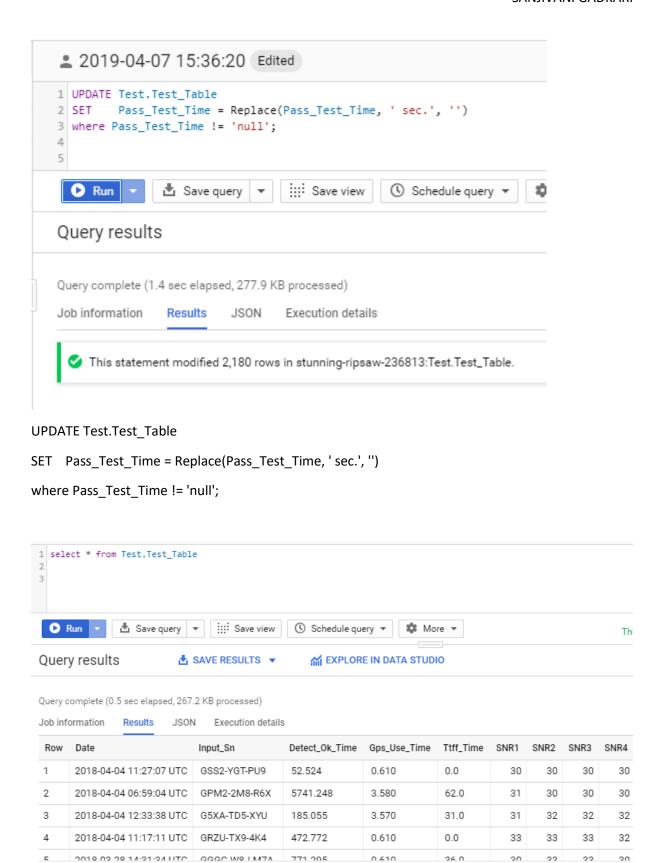UPDATE Test.Test_Table

SET   Gps_Use_Time = Replace(Gps_Use_Time, ' sec.', '')

where Gps_Use_Time != 'null';

UPDATE Test.Test_Table

SET   Ttff_Time = Replace(Ttff_Time, ' (s)', '')

where Ttff_Time != 'null';

UPDATE Test.Test_Table

SET   Pass_Test_Time = Replace(Pass_Test_Time, ' sec.', '')

where Pass_Test_Time != 'null';

After cleaning the data, I have created two extra columns : **Defective**(if the gateway is defective or not depending upon the serial numbers provided in the question) and **Test Status**(if the test is completed or not).

In some observations in the data, SNR values are missing.It is not likely that the data has discrepancy as the data source is log files.Hence we can say that these tests were not completed(as according to the question, the data includes tested and not tested quality of signal gateway information). The incomplete tests may mean that the data was received, however all the SNR tests were not done, hence we cannot comment about the quality of the data in these observations.

After this I have loaded the data from big query into Google data studio(refer Analysis_of_Gateway_test_data(GPS_data).pdf).