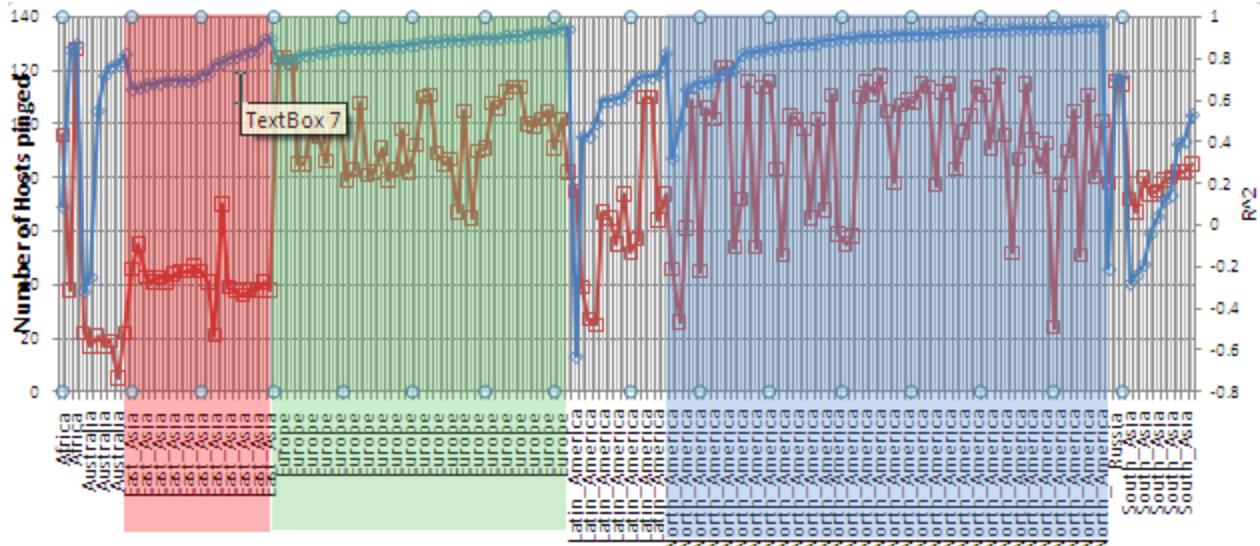


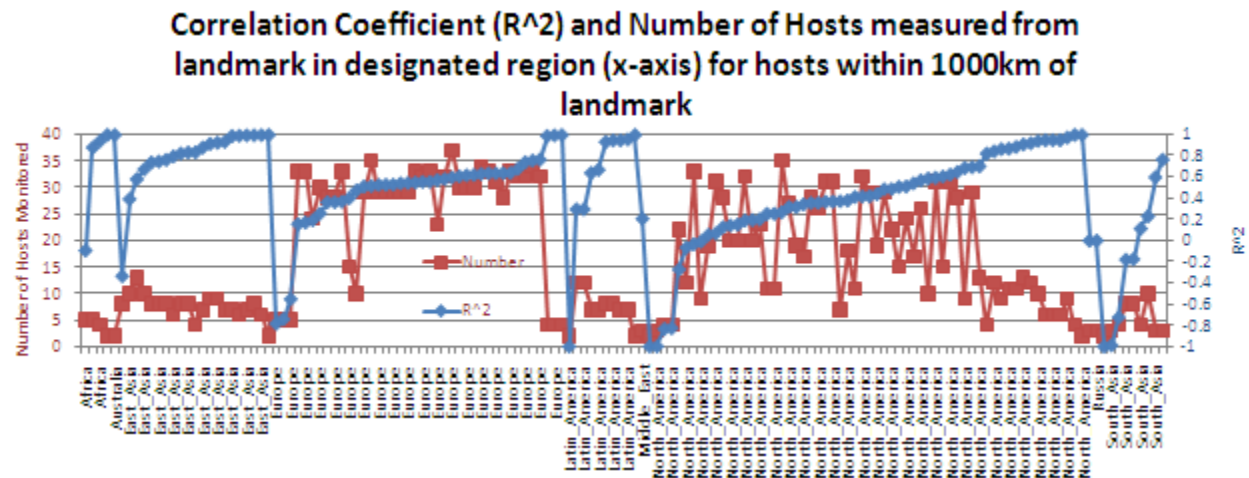
# TULIP Correlation Between RTT and Distance

We measured the RTT from each landmark to all the other landmarks within a known distance. We noted the landmarks lat/long, its name and address, the number of samples, the calculated correlation coefficient  $R^2$  between RTT and distance, the minimum, 25 percentile, median, 75 percentiles and maximum for the RTT, distance, and alpha. Using Excel we plotted the number of samples ( $n$ ) and the  $R^2$  versus the country/region. Two examples are shown below for different maximum known distance thresholds. Each x-axis value is for a different landmark, and the data is sorted by regions and then by  $R^2$ .



**CorrelationCoefficient ( $R^2$ ) and Number of Hosts pinged within 7000km for landmarks in given regions (X axis)**

The spreadsheet for the 7000km data can be found [here](#). For the 7000km maximum distance data, it is seen that low values of  $n$  often result in low values of  $R^2$ . Also for East-Asia, Europe and North America the correlations are usually strong ( $R^2 > 0.6$ ).



The spreadsheet for the 1000km data can be found [here](#).