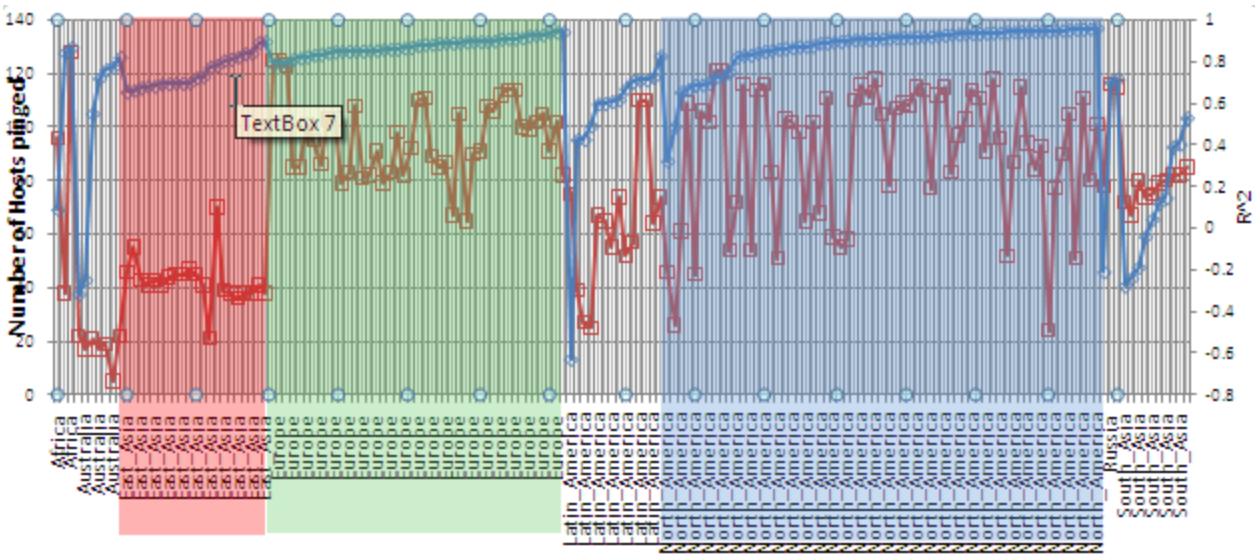
TULIP Correlation Between RTT and Distance

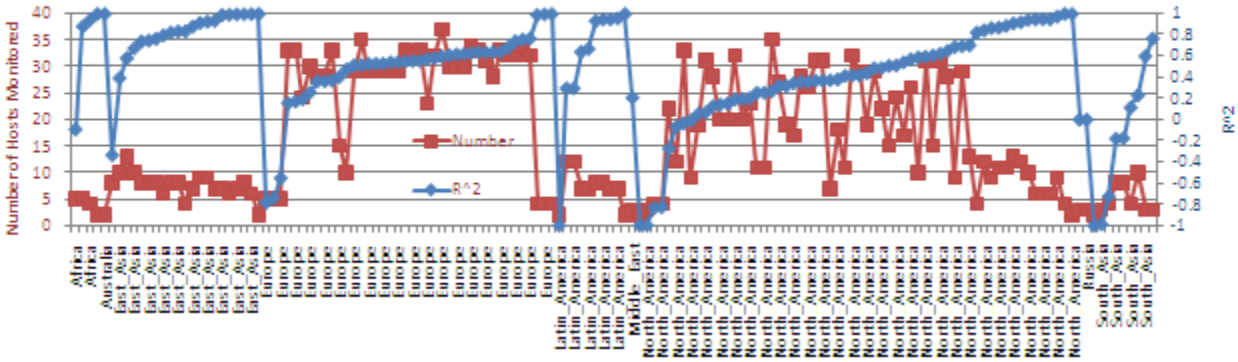
We measured the RTT from each landmark to all the other landmarks within a known distance. We noted the landmarks lat/long, its name and address, the number of samples, the calculated correlation coefficient ***R^2*** between RTT and distance, the minimum, 25 percentile, median, 75 percentiles and maximum 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 spreadhseet 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*).

Correlation Coefficient (R^2) and Number of Hosts measured from landmark in designated region (x-axis) for hosts within 1000km of landmark



The spreadsheet for the 1000km data can be found here.