**Some Weather Station Functional Requirements**

1) Shall be able to record and store information in digital form for 30 years of observation

from the beginning of measurements with the possibility of subsequent sampling by the

date of measurement, by the range of parameters and dates

2) The height of installation of sensors on the rack or on the tower shall not less than three

times from the nearest building and exceed 10 m from the ground level. Some of the

temperature sensors shall measure temperature at a height of 1.5 meters from the

ground

3) Record in digital form the data for next parameters around the site of the End-User

location

4) Average monthly and annual values of air temperature (by years for the last 30 years*)*

*5)* Maximum and minimum temperature values by days (data array)

6) Maximum, minimum and average relative air humidity by days, months and year

7) Monthly and annual precipitation (average, maximum and minimum values for the

last 30 years of observation)

8) Daily maximum of precipitation

9)Intensity of precipitation

10)Direction and average wind speed for the months, for the year and for 30 years of

observations

11) Direction and maximum recorded wind speed over the years for the last 30 years

12) Atmospheric pressure average monthly, average annual for a series of observations

over the past 30 years

13) Atmospheric pressure maximum and minimum daily and monthly by month and

year

14) Number of days in a year with thunderstorms

15) Data on the content of suspended particles and gases in the atmosphere

16) Record in digital form the data for Solar radiation card of the End-User State (kWh/m2 day)

Submitted by: Samara Chaudhury

ID: 15305022

CSE470 (Section 01)