WORKSHEET 4

temperature/pressuere relation related with the weather

The main purpose of this worksheet is to show the relation between temperature/pressure and the weather.

In order to show this we choose two different meteorological station: Manta (airport) (00° 57.02' S lat., 80° 40.87' W long.) and Latacuna (airport) (00° 54' S lat., 78° 37' W long.)

For both cities we are going in the **Weather archive** and we extract from the database the mean monthly temperatures for some particular year. For beginning we chose 2017. The obtained recorded values will be noted in the table below.

Month	Manta - mean monthly temperature [units - $^{\circ}C$, $^{0}F,K$]	Latacuna - mean monthly temperature [units - $^{\circ}C$, $^{0}F,K$]
January		
February		
March		
April		
May		
June		
July		
August		
September		
October		
November		
December		

Task to carry out:

1. Identify by using google maps where are the two location. Which is the distance between them?

2. The students will plot the data using Excel software or can use graph paper.

3. The students must discuss the plot obtained in term of values and variation

4. The students must explain the result.

5. From **Weather archive** the students will obtain the P0, atmospheric pressure at weather station level (millimeters of mercury) for both location, coresponding to the same time range, example: July of 2017. What are the value? how this result can be used to explain temperature dependence ?