



The actual wind data for different cities of Iran are available from Suna (Renewable Energy Organization of Iran) at the following address:

<http://www.suna.org.ir/>

These data are also available on the class page: <http://wp.kntu.ac.ir/ftorabi/courses.html>. There are five different zipped data for each student according to Table 1.

The wind data files are in PDF format which are not suitable for processing. Therefore,

1. According to the guidelines of my own web site, (<http://wp.kntu.ac.ir/ftorabi/courses.html>) convert the file into a Text file. The data for some cities are given in two different files which should be combined to one single file.
2. Write a computer program for calculation of the following data for different elevations; i.e. 10, 30 and 40 meters.
 - (a) The mean wind velocity of the site,
 - (b) The variance and standard deviation of the data.
 - (c) The Weibull density function parameters from two different formula;
3. Plot the probability of the wind velocity on a graph using TECPLOT software.
4. Plot the Weibull function on the same graph with probability of the real data and compare the results, for different elevations.

Table 1: Assigned Provinces

No.	Student	File Name
1	Navid Amin-Nia	Azarbayjan Gharbi & Ardebil
2	Zahra Porhemmat	Azarbayjan Sharghi
3	Simin Seifi Khodashahri	Booshehr
4	Mohsen Sharifi	Fars
5	Pouyan Heravi	Ghazvin