Some notes about files sent to you today

* Project Diagram
  + Do not worry – many redundancies in this project
  + Data files the same for all 4 paths
  + Begin with the left-hand path of the ProjectDiagram
    - RiessData1998\_37\_38\_DataPairs.xls as the data file
      * The mag (ordinate) *vs.* Z (abscissa, redshift) is with column D as the ordinate and column B as the abscissa, Column E are the errors associated with the values of column D
      * These 3 columns are the data used for regression
        + we will only use robust weighted regression technique
      * Use the top function for the left-hand path found in the text file “CosmologicalModels.txt”
        + Have dissected this complicated model into smaller “subfunctions”
        + probably best to continue using “subfunction”
      * Have provided you with 2 regression routines in Python
        + Robust\_curve\_fitting\_routine.vers1.txt
        + RobustCurveFittingRoutineVers2.txt
        + Should not make any difference which routine we choose to use (in theory)

Note – I will take a good hard look at both regression routines because there is unnecessary code in both that is best to “comment out”

Will suggest which routine to use tomorrow evening

The same regression routine will be used for all 4 paths

* + - * + Example results are presented in the “Statistics\_mag\_vs\_z\_37\_DataPairs.rtf” file

Don’t worry we won’t need to calculate all of these values

* + - * + Example plot is presented in “D\_L\_vs\_ExpansionFactor\_plot\_38\_DataPairs.pdf”
        + When you have edited the program to present a table and plot, following he left-hand path, you will be about ½ way to completion of the entire project.

Very little to program between the left-hand path and the centerleft path.

The unique and important step will be to program the “Data Massage” for the rightcenter and right-hand paths. This portion of the right-hand path has never been done before.

I don’t think this step will be terribly difficult, just an hour or two of programming then me checking the results.

* + The final step will be to show this program can deliver for about 1,000 data pairs.
  + Spiffy up comments in code, then off to publish...