Tips to help prepare students for research using the Spitzer Space Telescope

1. Assess your students’ knowledge about infrared astronomy and the Spitzer.
2. Have students research the following topics and record their findings in a notebook :
   1. The Electromagnet spectrum – with an emphasis on infrared (Movie – “More than Your Eyes Can See”
   2. Explore the “Cool Cosmos” website ---there are some great things on the website
   3. Herschel’s infrared experiment (there is a lesson write up on the back of NASA posters)
   4. Purpose/benefit of infrared astronomy
   5. What is the Spitzer
      1. History (SIRTF and who is Lyman Spitzer)
      2. Instrumentation and abilities/limitations of these instruments
   6. Types of objects/research focuses previously studied with the Spitzer Space Telescope
   7. Read, study and learn other teams proposals, methodology and conclusions of Spitzer projects
   8. Understanding VOCABULARY is huge! Students should keep a glossary of words and acronyms with definitions and examples to refer to throughout the process.
3. Depending on the type of project/focus the following topics could be appropriate to the project:
   1. SED’s
   2. Light curves using excel
   3. Photometric practice using DS9 and APT
   4. Eclipsing binary star simulations (on the old web page?)