

Python Workshop – Exercises Session 4

Use the Table or dictionary that you created in the previous session and plot the spectral energy distribution (SED: flux as a function of wavelength). The wavelength corresponding to the different bands are (in μm):

0.3543, 0.4770, 0.6231, 0.7625, 0.9134, 1.0305, 1.2483, 1.6313, 2.2010, 3.4, 4.6, 12., 22.

5. Use these specific instructions.
 - a. Plot the SED for the first three objects in one plot.
 - b. X-axis and Y-axis should be logarithmic.
 - c. Plot first object with dashed lines in green.
 - d. Plot second object with filled circles in blue, connected by no line.
 - e. Plot third object with delta symbols in red, connected by a solid line.
 - f. Indicate the uncertainties in the fluxes with error bars.
 - g. Add axes labels.
 - h. Add a legend in the lower right corner showing which color/style corresponds to which object.
 - i. For sources with no data at a certain wavelength, indicate these missing data with downward arrows (upper limits) using $1\text{e}2$ as an upper limit.
 - j. Save your plot as jpg file.