

Data Formats: in-class assignment

1. Got to <https://vizier.cds.unistra.fr/viz-bin/VizieR>
2. Under “Find Catalogs among <big number> available” type Fullard and click “Find...”
3. Click on “ReadMe+ftp” on the *UBVRI linear polarisation in Wolf-Rayet winds* (Fullard+ 2020) entry.
4. Write a short paragraph describing the FAIR data principles that the VizieR catalog service is using. Are there any missing? The full list is at <https://www.go-fair.org/fair-principles/>
5. How would you cite the data if you used it?
6. Download table3.dat. What is the format of the file? Can humans and/or machines read it?
7. Using the information on the catalog page, describe the contents of the file. What does each column contain? What units do they use?
8. Compress table3.dat. You can do this by right-clicking (or Cmd+click) the file, and then choosing compression options. What size is the compressed file compared to the original?
9. Download tablea2.dat. Try reading tablea2.dat into an array, dataframe or table using the programming language and packages you are most comfortable with. Write down the methods you tried, **including code snippets**, and which data from the table that you managed to read.
10. Plot one of the time-series data columns stored in tablea2.dat in a sensible format (not a bar chart), with error bars. Note that “Heliocentric Julian date” is a time measurement. Include the plot and your code snippets in your submission.

Submit your answers to the questions above on D2L in PDF or similar format.