WD-BASS

Prepare your data. 3 columns:
Wavelength (Angstroms),
Flux (erg/cm^2/s/Hz),
Flux error (erg/cm^2/s/Hz).

Run **create_single** or **create_double** (or your own adapted file for your needed use) in the directory where your files are stored

Did it create a yaml file with your spectra inside?

No → Check input data format and compare to example input data → Prepare your data. 3 columns: Wavelength (Angstroms), Flux (erg/cm^2/s/Hz), Flux error (erg/cm^2/s/Hz).

Yes → Do you want to fit the photometry?

Yes → Insert your photometry
From CDS -> Run WD-BASS normally with run_single or run_double and put fit_phot_sed: True in the yaml file. A file vizier_votable.vot should be downloaded, which you should then rename to "photSED.vot" and place in a folder (subdirectory) called "out".

You can manually input whatever photometry you want in lists on the yaml file, with keyword
"External_AB_mag" (float)
"External_AB_mag_err" (float)
"External_Filter" (string, "")

Supported filters and their names are found in the WD-BASS install directory -> Filters

→ Prevew photometry?

No → Open the file. Change the star type (e.g. "DA", "GG", "DB", "LL"). change the resolution at each spectral line (R=dlambda/lamda), sigma clipping, scaling, any file you want to ignore, number of walkers, burning/steps. etc.

Yes → In the yaml file...
plot_phot_spectrum: True
phot_min_val: 0.0000 (your value)

Execute run_single or run_double, see the popup window, ctrl+c out of the code.
When happy,
plot_phot_spectrum: False

→ Prevew photometry?

No → When happy run in terminal **run_single** or **run_double**. The output will appear in a new folder "out"

Do you want to improve the RVs?

Yes → Execute "**run_single_one_by_one**" or "**run_double_one_by_one**" to fix the model with the solution you just found. Alternatively, you can fix e.g. forced_teff to a desired value and execute this task

No → (Optional) Tweak input boundaries and repeat all

End