

How to add a lightcurve in AOTS

1 Login

When navigating to <http://a15.astro.physik.uni-potsdam.de>, you will end on the landing page where the publicly available projects are displayed. From there you can login by clicking on “LOG IN” in the top right corner.

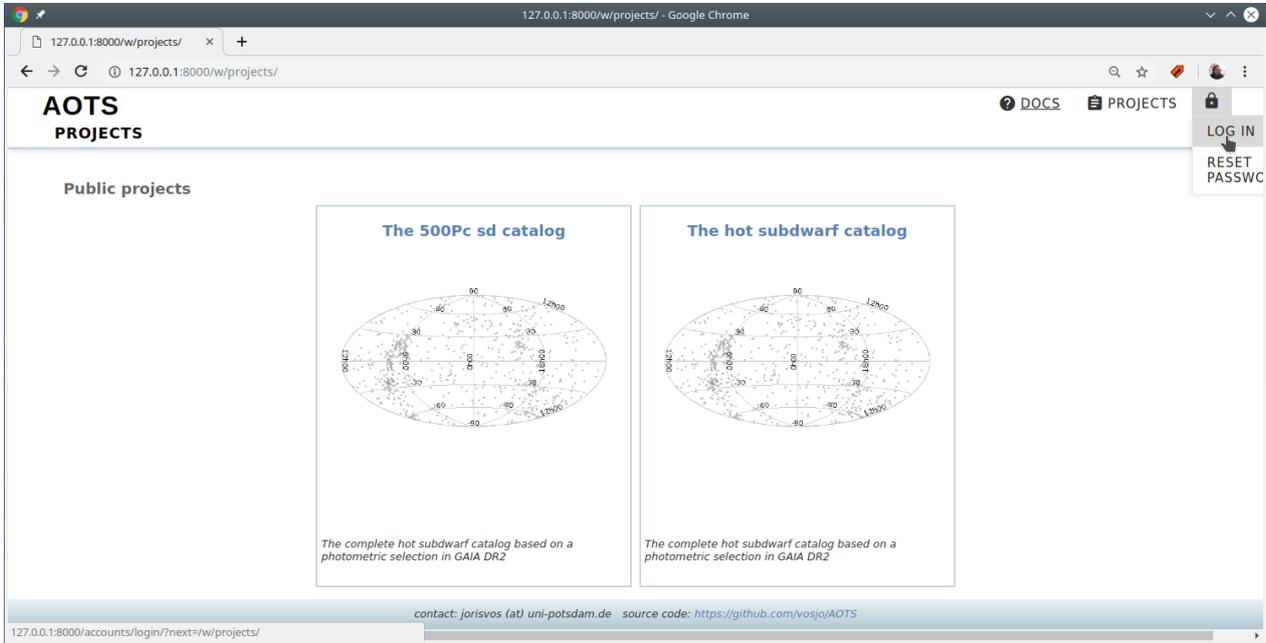


Figure 1: Landing page

This will bring you to the login page where you can log in with the user name and password you received.

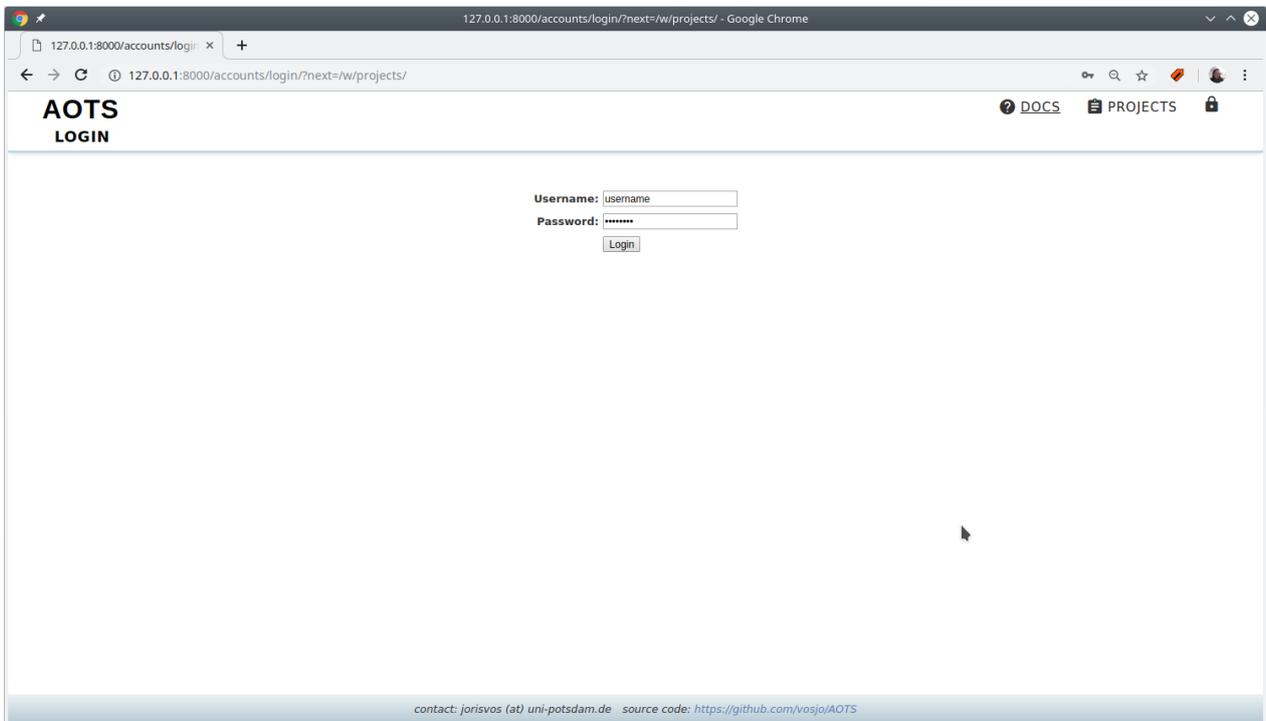


Figure 2: Login page

Note: By hovering over “LOG IN” you also can reset or change your password by selecting ”RESET PASSWORD” or ”CHANGE PASSWORD”, respectively.

2 Uploading a lightcurve

After login you will be redirected to the AOTS landing page. Here you can now select the project that you want to work on by clicking on the name of the project. For example we want to add a spectrum to the “The hot subdwarf catalog”.

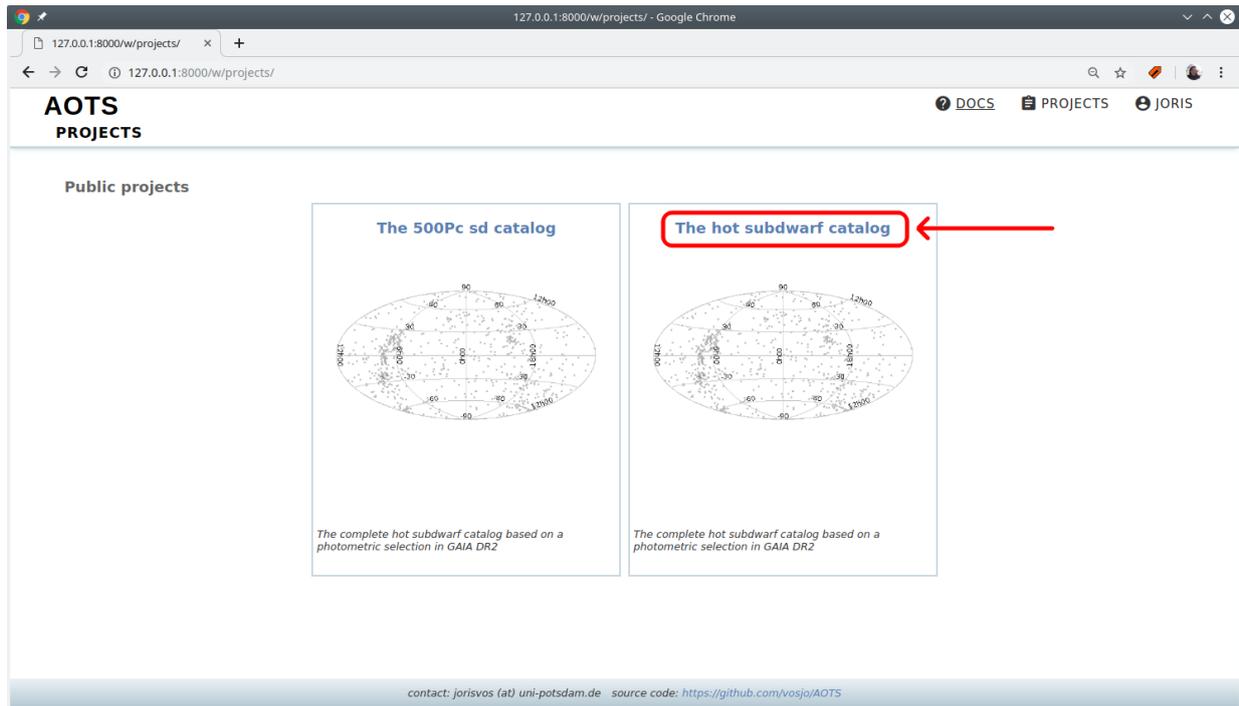


Figure 3: Landing page after login

You will end up on the systems index page that lists all systems that are part of this project. To add a spectrum, navigate to “OBSERVATIONS” → “LIGHT CURVES” in the top navigation bar:

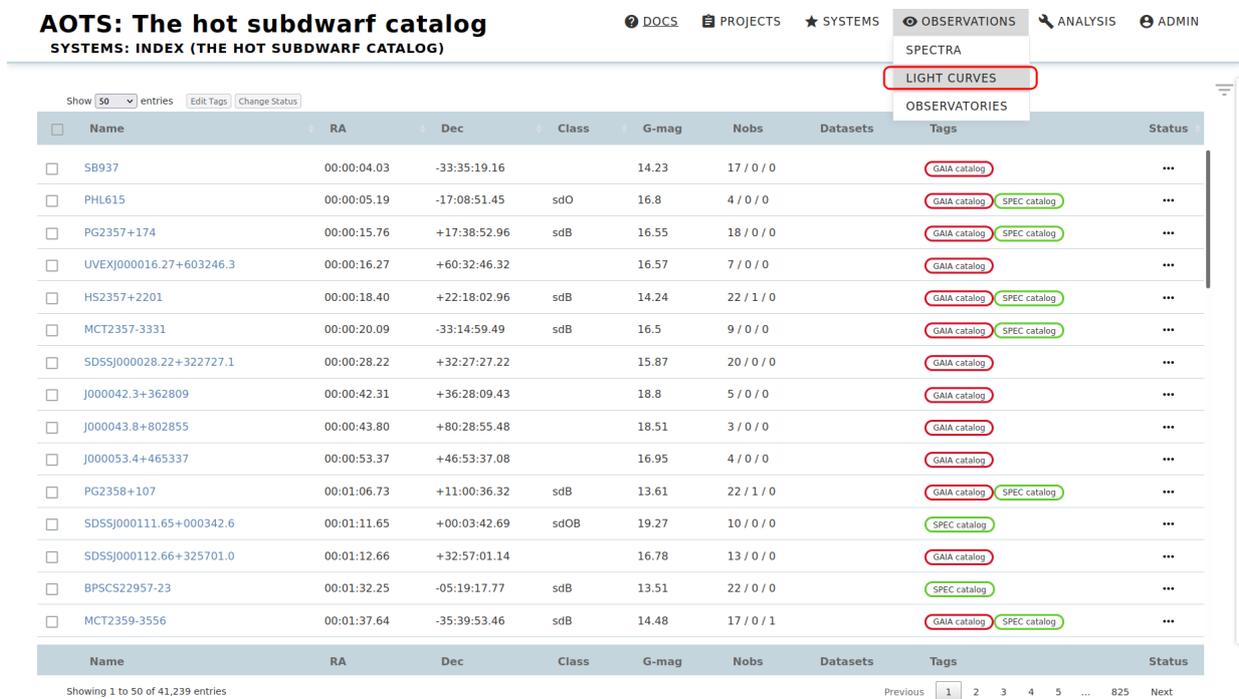


Figure 4: System page

At the top of this page is an upload form where you can select one or more light curves in fits format to upload to the database.

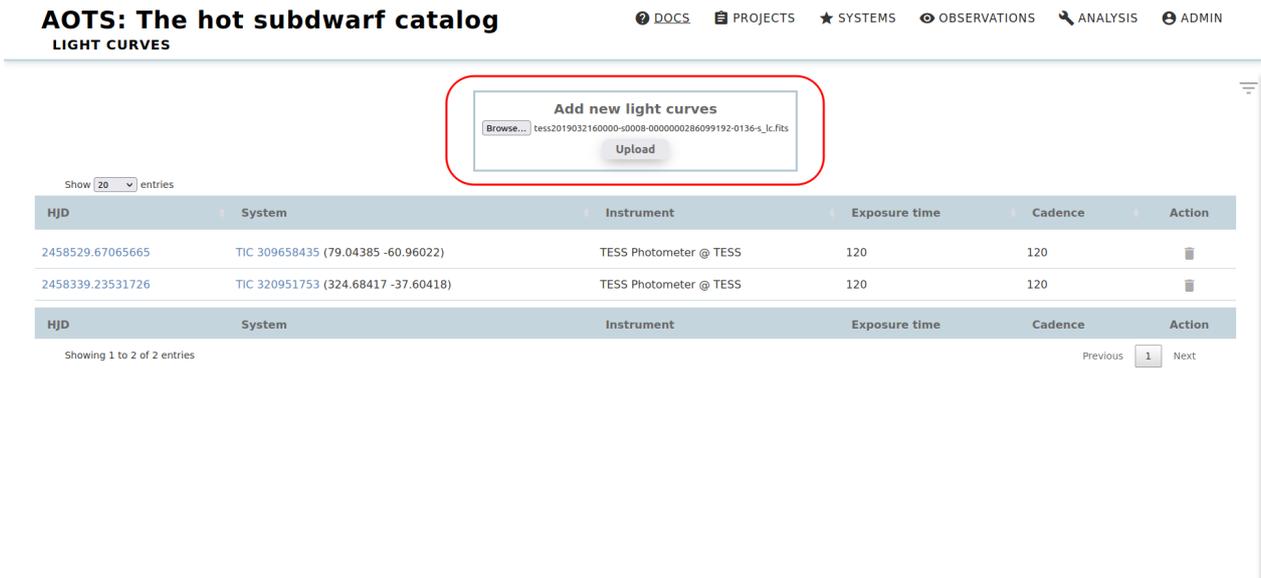


Figure 5: Light curve page with upload form

AOTS tries to extract all necessary data automatically from the fits headers. See Sect.3 for a list of all recognized keywords.

After pressing the upload button the light curve will be processed by AOTS and a confirmation notice for the upload is displayed at the top of this page to confirm that everything went well. The newly uploaded spectrum will be added to the Table below the form.

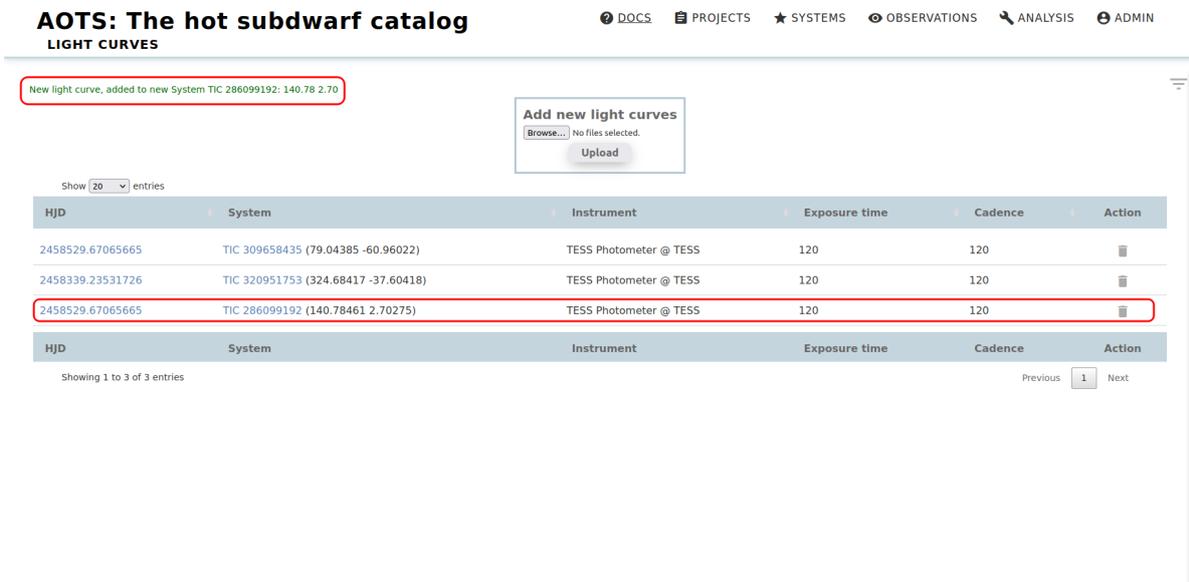


Figure 6: Light curve page - after upload - In this example a TESS light curve of TIC 286099192 was uploaded

If you click on the “HJD” of the corresponding light curve, you will be taken to the light curve details page where you can check the added light curve. You can also check the associated system by clicking on the system name in the “System” column.

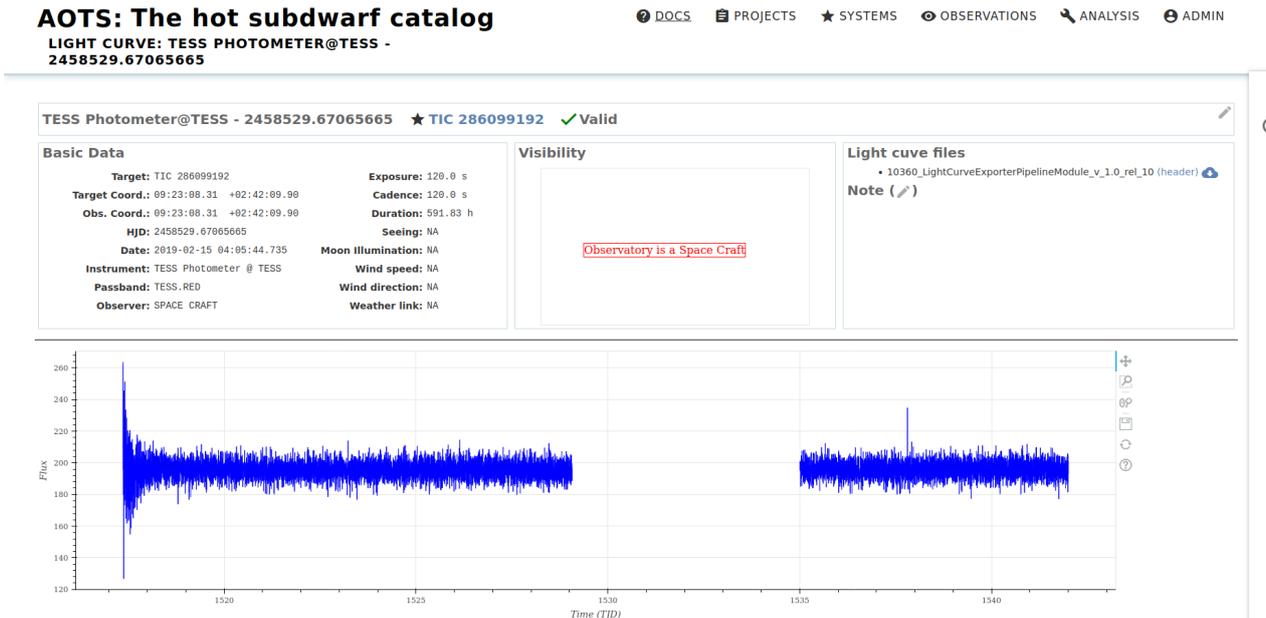


Figure 7: Light curve detail page

3 Recognized header keywords

The following light curve files are recognized by AOTS:

- TESS

For all other light curves the following fits header keywords are recognized:

Keyword	explanation
HJD, BJD, MJD, DATE-OBS	time at mid observation
OBJECT	object name
RA	right ascension in decimal degrees or in hours (hexadecimal)
DEC	declination in degrees, decimal of hexadecimal
INSTRUME	instrument
TELESCOP	telescope
EXPTIME	exposure time in seconds
OBSERVER	name of the observer