# **Uploading your First Echelle Spectrum**

If you are familiar with AVSpec, you will notice that the process for uploading an echelle spectrum is slightly different from the process for uploading a regular spectrum. This document will walk you through the echelle upload process, including a shortcut for those who have existing spectra in the BeSS format.

# **Account Setup:**

If you already have an AAVSO web account and obscode, you can skip this section.

#### 1. Create a web account.

Creating a web account is straightforward, and can be done by filling out the form located here:

https://www.aavso.org/user/register

Once you have filled out the form and confirmed your registration using the email, your account should be all set up.

### 2. Generate an observer code.

All observations submitted to the AAVSO need a unique identifier. This can be obtained by first logging into your AAVSO web account and going to:

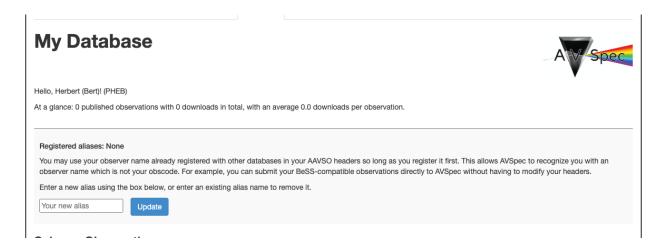
https://app.aavso.org/member/

On this page you will see a button that says "Request an Obscode" and you will be autoassigned a code when you click it.

#### For BeSS Observers:

If you are a BeSS observer and have an Observer code with them, you can register that code with the AAVSO, so that AVSpec will automatically translate between the two when you upload your spectrum. You can add your BeSS alias here:

https://app.aavso.org/avspec/mydb



Simply enter your BeSS observer code into the Alias box and click update. Note, this is not a requirement, but it will allow you to submit files you have in the BeSS standard without any editing.

# **Site & Equipment:**

#### 1. Create your site here:

https://app.aavso.org/site equip/site

Fill out the site form completely.

#### 2. Create your equipment here:

https://app.aavso.org/site equip/equipment

Fill out the equipment form as completely as possible. When filling out the form, there are two very important things that you must do:

First, set your observing type to "**Spec**". If this is not set correctly, your equipment package won't show up in AVSpec.

Second, set your "Type" under Spectra to "echelle". If this is not done, the system will not recognize that you are trying to submit echelle spectra, and your spectra will be automatically rejected.

# **File Creation:**

#### 1. Create a single FITS file for each individual echelle order.

Each individual echelle order should be in its own fits file. Each fits file should follow the same specifications for header/keyword format as non-echelle spectra:

https://app.aavso.org/media/specdb/technical guide v1 4.pdf

Additionally, each file's header should include the keyword "AAV\_ORD", which specifies the unique echelle order.

#### 2. Bundle the orders into a single zip file.

All of these echelle order fits files should then be packaged inside a zip file. This zip file should not contain any files that are not fits format (e.g. log files) or any folders, as they will cause the submission to fail. Additionally, this zip file should only contain orders from a single observation.

#### For BeSS Observers:

You may use the "BSS\_ORD" keyword instead of the "AAV\_ORD" keyword, as long as the names of your individual fits files follow standard BeSS naming conventions. Note that while the AAVSO will accept the BSS\_ORD keyword, it does not have the same definition as the AAV\_ORD keyword.

If you wish to switch between the BeSS and AAVSO formats, please read the exact specifications here:

https://app.aavso.org/media/specdb/technical guide v1 4.pdf

# **Submission:**

#### 1. Go to AVSpec submission page:

https://app.aavso.org/avspec/submit

## 2. Select your site and equipment

Pick the appropriate site and equipment out of the list. **The names of your site & equipment must match exactly what is given in AAV\_INST and AAV\_SITE keywords**. (If you are a BeSS observer, you may use the BSS\_INST and BSS\_SITE keywords instead.)

If you don't see your equipment, please go back to the site and equipment section for tips.

#### Your first spectrum

If this is the first spectrum you've ever submitted to the AVSpec database, your target must be one of our standard stars. You can view our list of accepted standard stars here:

https://app.aavso.org/avspec/standardstars

The name which is given in the OBJNAME field in the header of your first spectrum must exactly match one of the names in the list above.

Once your first spectrum has been approved, you will be able to submit spectra of any variable star which is both in VSX and and has an assigned AUID. For more information on VSX identifiers and AUIDs, please visit:

https://www.aavso.org/vsx/index.php?view=about.faq#identifiers