

Registering for and setting up SciServer

You will run Python and do all your exercises on a remote server called SciServer. SciServer is a remote cloud-based platform that allows you to access and manipulate large datasets without having to download them to your computer. All you need is a web browser to access it.

The first step is to register for an account on SciServer unless you already have one (skip to step 3)

- 1) To register go to <https://www.sciserver.org> and click on Login to SciServer
- 2) Click on create account, and fill in all the details required and activate your account.

The screenshot displays the SciServer homepage. At the top, a banner reads "The Science Platform" with the tagline "A collaborative environment for server-side analysis with extremely large datasets". Below this, the version "SciServer Betelgeuse v2.1.0" is shown. A red box highlights the "Login to SciServer" button in the top right corner. Below the banner, a row of six icons represents different features: About, Hosted Datasets, Compute Images, Science, Education, and Help. Each icon has a checkmark and a brief description. Below this row, a link to "SciServer Data Storage and Non-Commercial Use Policy" is visible. The main content area is divided into two sections: "Login with SciServer" and "Login with Globus". The "Login with SciServer" section includes fields for "User name" and "Password", a "Sign in" button, and a link to "Create a new account" (highlighted with a red box). A link for "Forgot your password?" is also present. The "Login with Globus" section includes a description of Globus, a "Sign in with Globus" button, and a "Sign out of Globus" link.

The Science Platform
A collaborative environment for server-side analysis with extremely large datasets

SciServer *Betelgeuse* v2.1.0

Login to SciServer

About	Hosted Datasets	Compute Images	Science	Education	Help
✓ Bringing	✓ Full datasets	✓ Free virtual	✓ Global	✓ Real science	✓ Short tutorials

[SciServer Data Storage and Non-Commercial Use Policy](#)

Login with SciServer

User name

Password

Sign in

Create a new account

[Forgot your password?](#)

Login with Globus

Globus allows you to use your educational institution or Google login to authenticate with SciServer.


Sign in with Globus

Sign out of Globus


4) Login to SciServer

5) Click on Compute


Your Activities

 **Files**

You have 0 Shared User Volumes.
You have 2 Owned User Volumes.


 **Groups**

You have 0 Group Invitations.
You have 0 Owned Groups.


 **Compute Jobs**

You have 0 Jobs Running.
You have 0 Jobs Completed in 24 hours.


SciServer Apps

 **CasJobs**


Search online big relational databases collections, store the results online, and share them.

 **Compute**


Analyze data with interactive Jupyter notebooks in Python, R and MATLAB.

 **Compute Jobs**


Asynchronously run Jupyter notebooks in Python, R and MATLAB or commands.

 **SciDrive**

Drag-and-drop file hosting and sharing services.

 **SkyServer**

Access the Sloan Digital Sky Survey data, tutorials and educational materials.

 **SkyQuery**







A scalable database system for cross-matching astronomical source catalogs.

Powered by

6) Click on create container

Python 3.7, R 3.6.2, TensorFlow 2.0.0, and PyTorch 1.4.0.

Containers

Created At	Name	Domain	Image	Status	
2020-06-01 11:32:30.0	trial-outreach	Interactive	Python + R	running	  
2020-05-21 10:50:00.0	<None>	Interactive	LSST Science Pipelines	stopped	  

Create container

7) Create a container with the following settings, give the container a sensible name

8) Click on the containers name or the “play” button to start the container.

9) On starting the container, those that have used Jupyter Notebooks before will recognise it has started a Jupyter Notebook session.

Navigate to

Storage/username/persistent

We always want to work in persistent as the other parts of the container regularly get deleted in order to preserve space.

10) The final step is to upload the code and notebooks to the container. This can be achieved by clicking the upload button in the top right.

Create a new container

Container name

galaxies-lab

Domain

Interactive Docker Compute Domain

Shared Intel Xeon E7 systems. All containers are limited to 100GiB of RAM. Unused containers are shut down after 3 days.

Compute Image

Python + R

Python 2.7, Python 3.6, R 3.4, and development tools using the Anaconda Python distribution and R Essentials.

User volumes ☐ All

- ☒ persistent, Storage Volume created by 0000_0002_7725_5162
- ☒ scratch, Temporary Volume created by 0000_0002_7725_5162

Data volumes ☐ All

- ☐ Getting Started
- ☐ Manga
- ☐ Ocean Circulation
- ☐ Recount
- ☒ SDSS DAS
- ☐ SDSS DR9 Imaging

Create