

ADASS 2021 Tutorial Preparation Instructions

Visualising big data: how to get the best out of CARTA



Thank you for registering our CARTA tutorial. In order to make the whole session run smoothly, we provide the following instructions for you to get prepared in advance. In case of any technical questions or problems, please contact support@carta.freshdesk.com for help.

If you wish to install CARTA on your computer, the following hardware requirements are recommended. Even if you prefer to use our demo servers for the tutorial, the CPU, RAM, and GPU requirements as the “client” side are needed.

Hardware requirements

- CPU: at least dual-core CPU
- RAM: \geq 4 GB
- GPU (client side only): integrated GPU is okay
- Free disk space: 50 GB for the test image dataset
- Internet access: this tutorial will be given remotely due to restrictions of international travel

If you wish to install CARTA on your computer, the following software requirements are recommended. If you would like to use our demo servers for the tutorial, please ignore this part except the “Web browser” requirements.

Software requirements

- Operating system (choose one):
 - Ubuntu 18.04 or 20.04
 - CentOS 7 or 8
 - Redhat 7 or 8
 - macOS 10.15 (Catalina) or 11 (Big Sur)
- Web browser (choose one):
 - Google Chrome v94
 - Firefox v92
 - Safari v15

The adopted web browser needs to support WebGL1 for image rendering and WebGL2 for catalog rendering. Please check <https://webglreport.com> for verification.

- CARTA v3b1 release

- *if you wish to run CARTA on your local computer...*
Please refer to <https://cartavis.org/> to install CARTA. We will use the “**v3.0-beta1b**” release for the tutorial. If you prefer to install CARTA via a package

manager (e.g. `yum`, `apt`, or `brew`), please refer to the “Packages” section and follow the instructions therein. If you prefer to download the standalone executable, please refer to the “Stand-alone application” section and follow the instructions.

v3.0-beta1b

Supported operating systems:

- Ubuntu Linux: 18.04 LTS (Bionic Beaver), 20.04 LTS (Focal Fossa)
- Red Hat Enterprise Linux: 7, 8
- macOS: 10.15 (Catalina), 11 (Big Sur)

Site deployment

Packages

Stand-alone application

For more information, please refer to the [beta release quick guide](#).

In case of any issues encountered during the installation, please contact the [CARTA helpdesk](#).

- *[If you wish to use our demo server during the tutorial...](#)*

We will set up a few CARTA servers for you to log in and try just in case you prefer not installing CARTA locally on your computer, or cannot download the test image dataset. The [instruction](#) will be provided later in due time.

- **Test image dataset**

We have compiled a set of images and catalog files for the tutorial. The demonstration in this tutorial will be based on this [dataset](#) (zipped: ~21GB, unzipped: ~37GB). We highly recommend you to download the dataset so that you can try it during the session.

Please note that this is an interactive tutorial, meaning that there will be time for you to try CARTA and provide feedback. We also recommend you to bring your own images that you are familiar with to join the session.

The presentation files, test image dataset, v3b1 stand-alone applications, and other materials are accessible [here](#).

Should you have any questions, please feel free to contact us via support@carta.freshdesk.com. We look forward to meeting you online in ADASS2021 CARTA tutorial.

The CARTA team
<https://cartavis.org>