JR Explosion Clouds for Blender

Introduction

This asset pack provides a collection of very high resolution explosion cloud VDB files. They are formatted for use with Blender's Asset browser.

Each explosion cloud comes with its own unique material, which lets you quickly adjust typical settings such as volume colour, density and anisotropy without having to go into the **Shader Editor** (typically via the **Shading** workspace).

Please note: these volumes are large, and depending on your default view and renderer settings you may not be able to visualise them correctly. See the **Further Instructions & Troubleshooting** section below for more information.

Installation

1. Extract the *JR Explosion Clouds* folder to a disk location of your choice.

2. Within Blender, go to **Edit>Preferences** and navigate to the **File Paths** section.

3. Under the **Asset Libraries** category, click the plus icon to add a new path. Navigate to and enter the *JR Explosion Clouds* folder, then choose **Add Asset Library**.

4. Now access the **Asset Browser**—you can do this by changing one of the editor types within the default *Layout* workspace, or you can duplicate the workspace beforehand. My preference is to duplicate the Layout workspace, then change the **Outliner** view to the **Asset Browser**.

5. Change the asset category to **JR Explosion Clouds**. You should now see all the assets listed: simply drag-drop an asset of your choice onto your scene to place it.
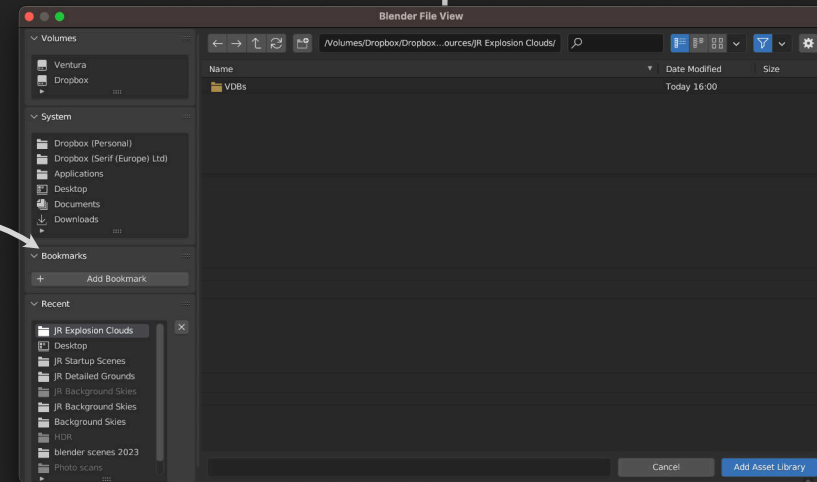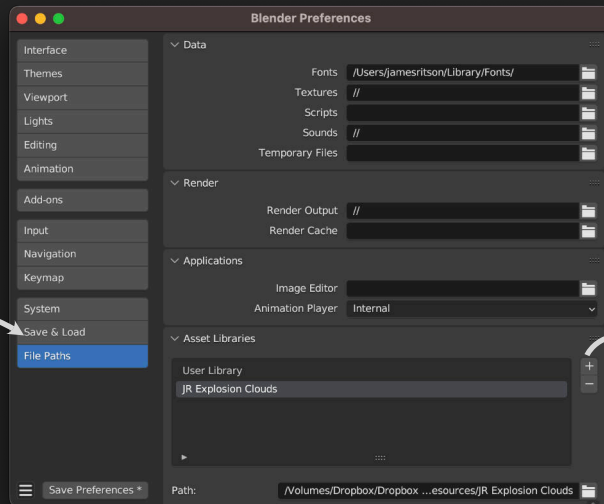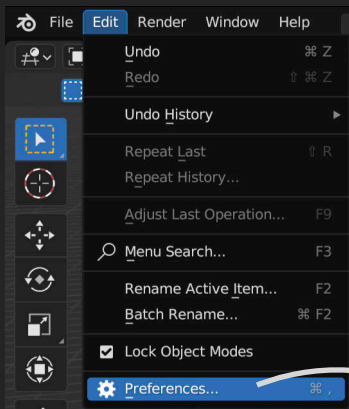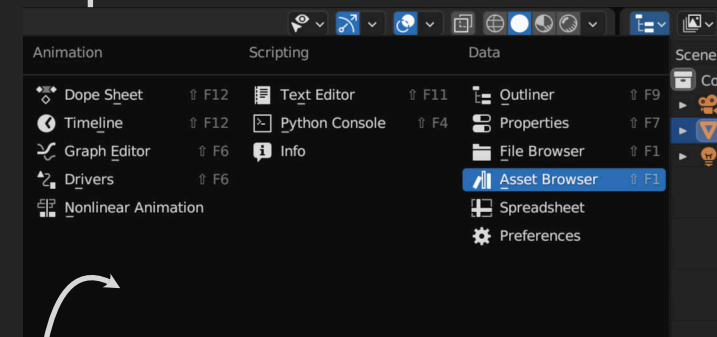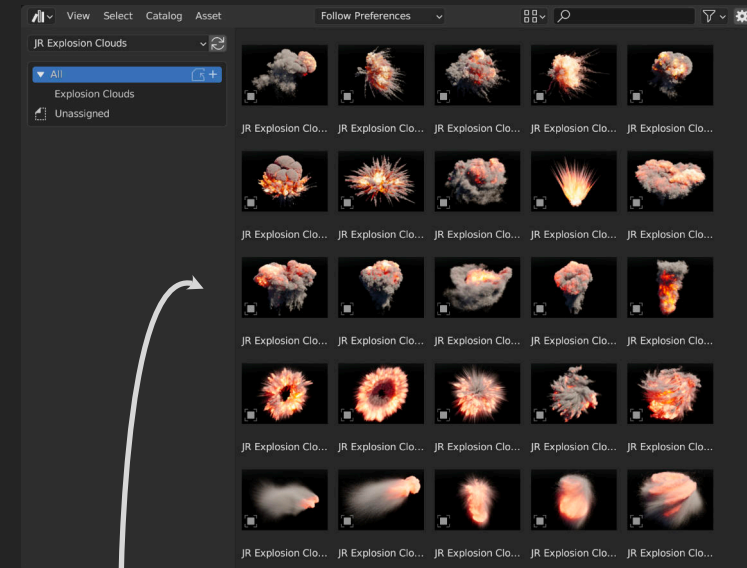
Further Instructions & Troubleshooting

Each cloud asset has its own unique material and node group.

Without going to the **Shader Editor**, you can access the **Material Properties** section on the **Outliner** and modify volume properties including colour, density and anisotropy (labelled as *Light Absorption*).

Each volume is physically large. I have made the default scale 0.1, but do feel free to scale them appropriately based on your scene.

With Cycles rendering, the default **Volumes** settings can be quite slow. I generally find that changing **Step Rate Render** to between *0.01-0.05* and **Max Steps** to between *16-50* will render faster with sufficient detail. The **Viewport** setting can be larger than **Step Rate Render** to improve viewport performance (see screenshots below).
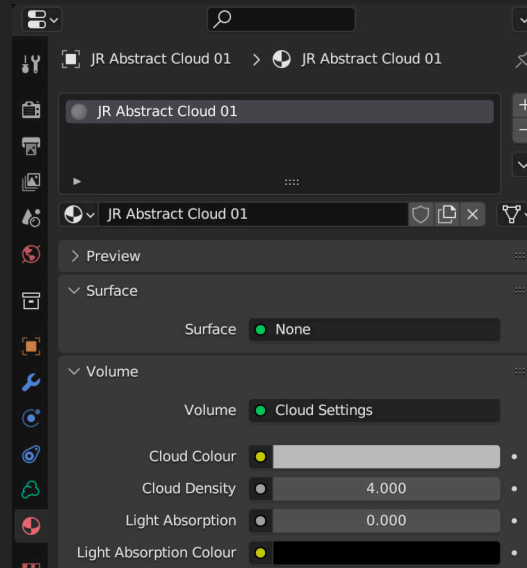
If you are not able to see the volumes at all, your **Clip End** value may be too low.

Access the side **N panel** (by pressing "N") and switch to **View**. Check the Clip Start and End values—if End is set to 100m or lower, try raising it to at least *1000m*.

You will likely need to change the **Clip End** value of your Camera as well. This defaults to *100m*—again, try raising this to at least *1000m*.
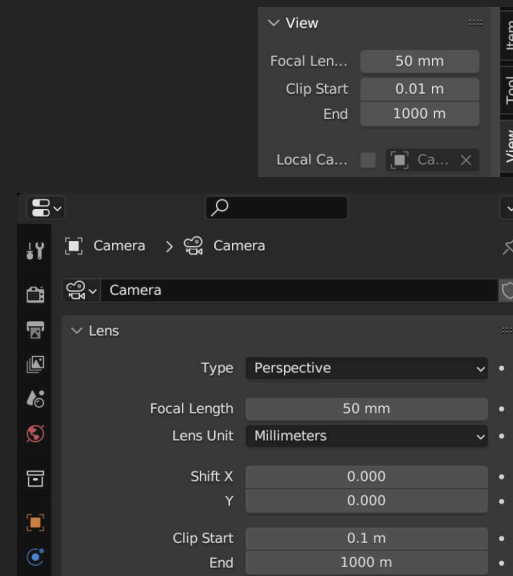
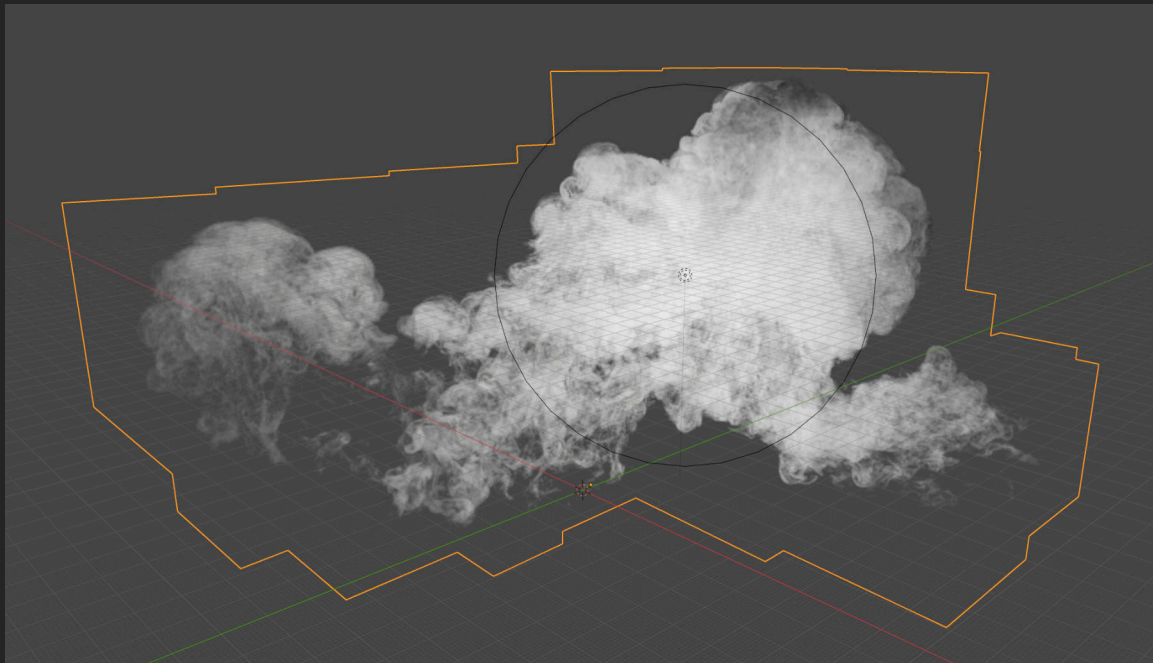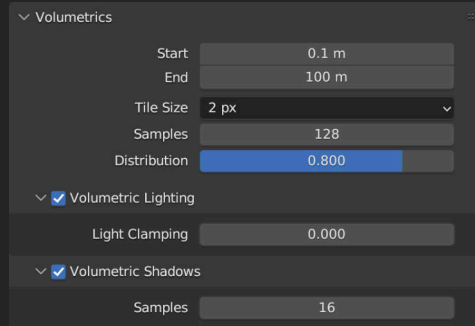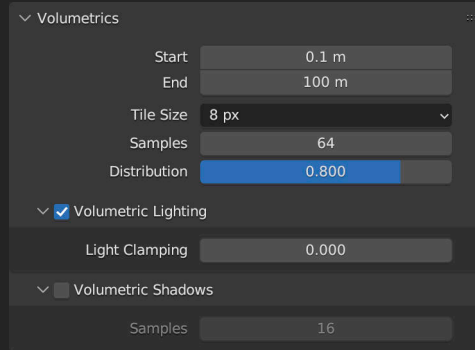# Further Instructions & Troubleshooting

Although these assets have been developed primarily with Cycles rendering in mind, they do work in Eevee with some modifications to the render settings.

Under **Render Properties** on the **Properties** tab, lowering **Tile Size** to *4px* or *2px* will improve the quality of volumetric rendering, and you can enable **Volumetric Shadows** for more realistic light interaction (both options will be more taxing on the GPU).

Increasing **Samples** will also produce slightly "fuller" volumetric detail, though you may find diminishing returns with this option.

The large file sizes of the VDB files is unfortunately intractable: I wanted volumes that stand up to scrutiny when rendered up close and at high resolutions (e.g. 4000-5000px in width or height), so they are designed for that purpose.

If you have any questions or issues, please do contact me on james@jamesritson.co.uk

Credits