

QUEBEC CITY
DOCUMENTATION

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OPENING

Québec – The Gem of French Canada is an add-on I began making for the 2016 version of the Orbiter Space Flight Simulator back in January 2023. The goal with this add-on was to recreate Quebec City and, more importantly its airport, *Jean-Lesage International Airport*.



My experience with base making was still very limited when I began development of this add-on. The tiles for the base only cover Quebec City and not the surrounding terrain due to this. Similarly, some of the early meshes suffer from some not so great textures and inefficient UV mapping, something which I learned to do better as I made more progress. Despite this, I am proud of everything I did in this add-on (except the title, it's a bit pretentious!)

Working on this add-on helped me learn a lot about making 3D models and textures and, while I would not call myself an expert in either (far from it, even!), I like to think I improved my skills in both. This add-on mean a lot to me, as not only is it my most detailed base ever, but it is also a recreation of my home town, the city where I grew up. I hope you guys enjoy this add-on as much as I do!

INSTALLATION GUIDE

Choosing your configuration file:

Québec – The Gem of French Canada has an unusual, yet simple process of installation.

When opening the .zip file, you will have seen that there was two folders. One titled “01 – Mandatory Files” and “02 – Config Files”.

Name	Date modified	Type
01 - Mandatory Files	2023-10-27 2:56 PM	File folder
02 - Config Files	2023-10-26 2:50 PM	File folder

The reason for this is quite simple! The scenery of the airport is very detailed. It includes things such as cars, airport vehicles, aircrafts, and fences around the buildings! At a certain spot, there are even some (simplistic) trash containers!

This make for a fantastic scenery great to take photos and explore. However, some low-end computers are likely to struggle running Orbiter with this base installed. So, for this reason, I decided to separate the installation into two steps!

The first step is to extract folder #01 in your Orbiter root folder. Folder #01 include all the meshes, textures, tiles, and scenarios. It includes everything except the configuration file that make the base appear in Orbiter.

The second step is to extract a config file. There is four config files you can install, all allowing you to chose the level of details you want! Here are the different config files:

01 - Full Details	2023-10-26 2:13 PM	File folder
02 - Medium Details	2023-10-26 2:14 PM	File folder
03 - Low Details	2023-10-26 3:03 PM	File folder
04 - No Trees	2023-10-27 2:34 PM	File folder

The names of the folders are self-explanatory.

01 – Full Details contain everything the base has to offer.

02 – Medium Details remove all ground vehicles (cars, aircraft tugs, fuel trucks, and luggage carts) and all fences. It also remove the light posts present around the airport.

03 – Low Details remove everything *Medium Details* does, but also remove on top of that the trees, the taxiway, and all the planes around the base.

04 – No Trees is the same as *Full Details*, but removes the trees bordering the airport for those who might not like their presence.

01 - Full Details



02 - Medium Details



03 - Low Details



04 - No Trees



The configuration files can be easily swapped if the user wishes to try them all and see which one work best for them. It will even overwrite the previous one if one is already installed, ensuring there is no double and no need to uninstall the previous one!

Enabling Terrain Flattening:

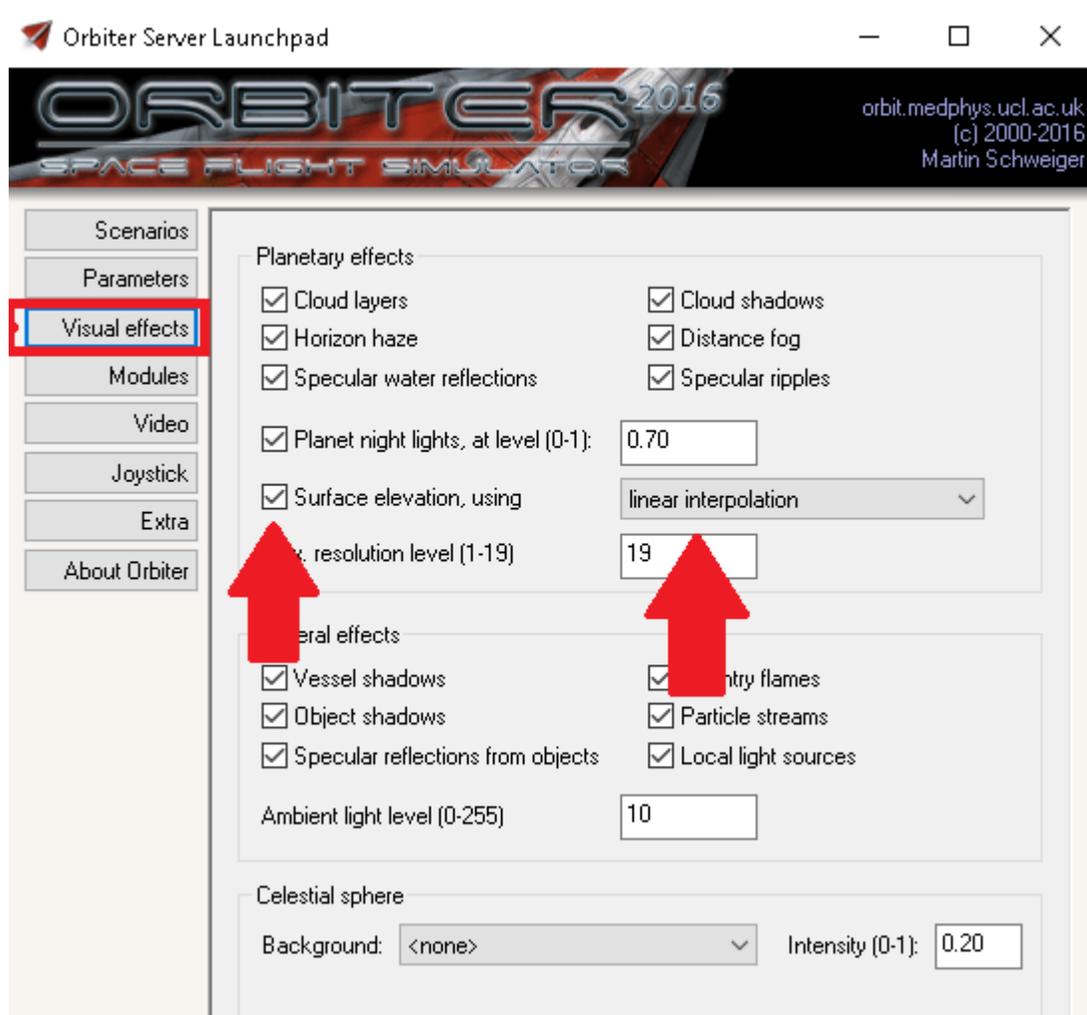
The terrain in this add-on is entirely vanilla. This means that, by default, the airport and runways are not flat in the slightest and are very bumpy, making them unusable.

To fix this, this add-on use the Terrain Flattening system of the [D3D9 client by jarmonik](#). Unfortunately, this means that the client is required to be able to use the base. You cannot use it with the default DX7 client.

The Terrain Flattening feature of the D3D9 client is deactivated when you first install it. Turning it on is very simple.

By default, the client has everything needed already set up properly. You only need to switch one setting in the Orbiter Launchpad.

In the tab **Visual effects**, ensure “Surface elevation, using” is checked and set to “linear interpolation”.

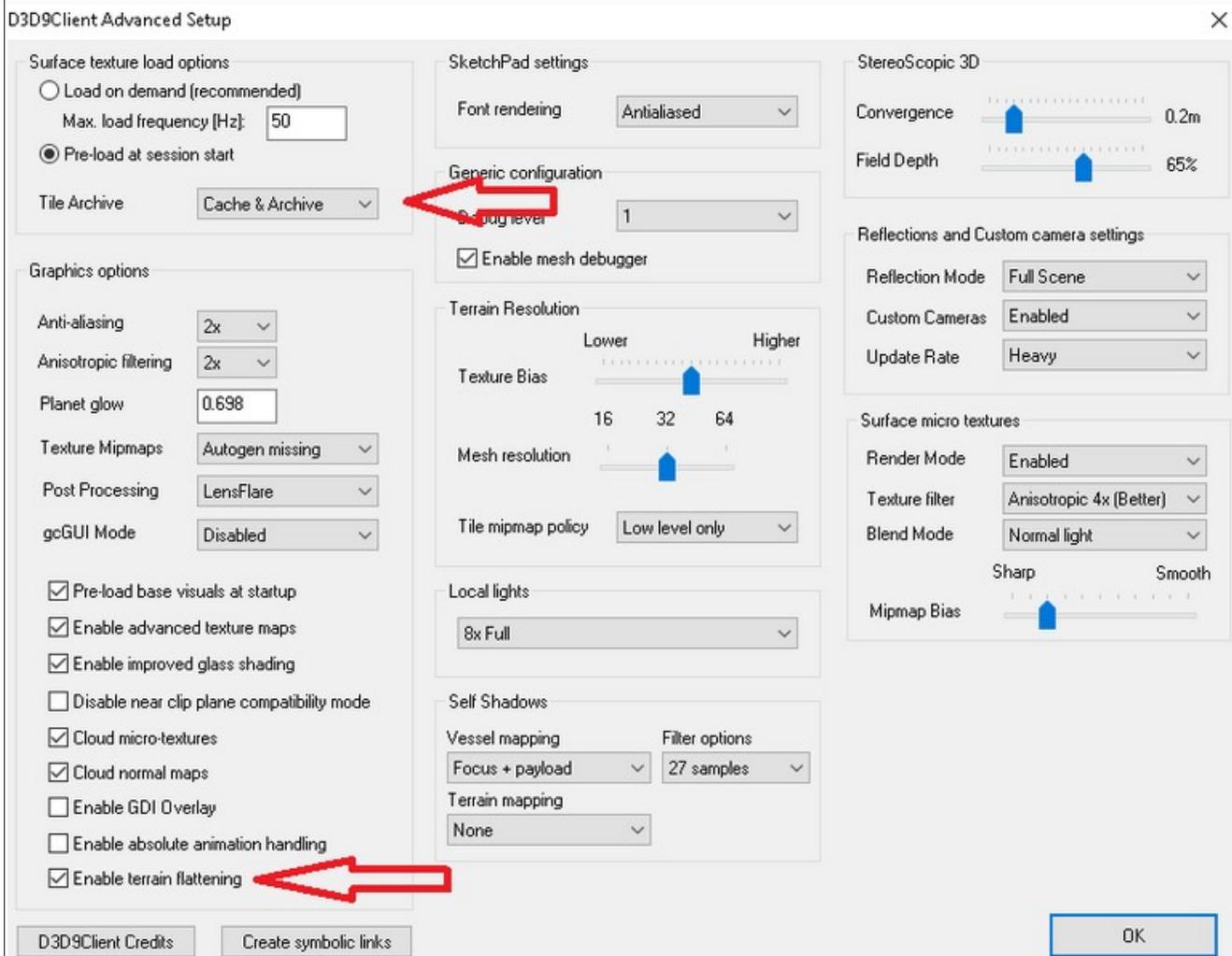


If nothing else was changed, and you have the latest version of the client, changing this one setting should be enough to allow Orbiter to turn the terrain under the runway and terrain under the airport completely flat.

But, if the terrain is still bumpy, you will need to ensure two more settings are properly set.

In the **Video** tab, click on the “Advanced” button.

In the menu that appeared, ensure that these two things are set properly: “Tile Archive” is set to “Cache & Archive”, and “Enable terrain flattening” is checked.

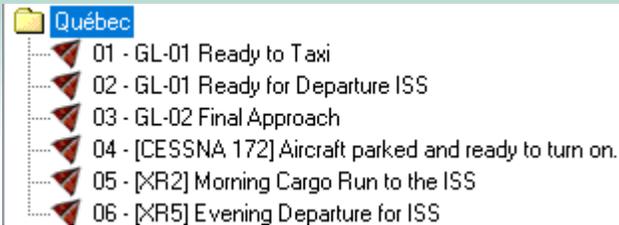


If these two settings are properly set, and that “Surface Elevation, using” is checked and set to “linear interpolation” in the launcher, then the airport should be completely flat, allowing you to take-off and land without any issue.

If there is still a problem, then I suggest you either update your version of the D3D9 client, or go on Orbiter-Forum and ask for some help.

SCENARIOS AND CHARTS

This add-on come with six scenarios, which are located in the folder “Quebec” on the Launchpad.



Scenarios 01 to 03 can be run from the moment this add-on is installed.

However, scenarios 04, 05 and 06 require other add-ons to run.

Jacquesmomo’s [CESSNA and FRENCH GUIANA AIRPORTS](#) is required to run scenario #04, as it put you in command of his fantastic Cessna 172.

Altea Aerospace’s XR-2 Ravenstar and XR-5 Vanguard are required for scenarios #05 and #06, both of which can be downloaded on [this page](#).

All scenarios include maps on the launchers to show where the aircraft is parked and where it should taxi to. However, as these images are web images and could not load properly, they are also present in this documentation below, along with a description of the scenarios.



The Cessna 172 made by Jacquesmomo parked at the airport in Scenario #04.

01 – GL-01 Ready for Taxi

The Delta-glider GL-01 is located in its special hangar situated at the very east of the airport. It is ready to depart for the International Space Station. Taxi to Runway 06 via the route indicated below.



02 – GL-01 Ready for Departure ISS

GL-01 is waiting to enter Runway 06 for Departure to the International Space Station. Enter Runway 06 and take-off heading 55.



03 – GL-02 Final Approach

GL-02 is returning from a long mission to the ISS with a crew anxious to go home. Runway 24 is in sight. Deploy the aerobrakes and land the spacecraft safely! Once landed, taxi to the hangars following the route on the chart below.



04 – Aircraft parked and ready to turn on.

A Cessna 172 is parked at the airport. Turn the aircraft on, taxi to Runway 29 (see Chart below) and take off for a fun ride around Quebec City!



05 – Morning Cargo Run to the ISS.

A XR-2 Ravenstar is parked next to the Air Canada Cargo building. It has just been loaded up with cargo and is ready to take off for the ISS, which will soon fly overhead. Taxi to Runway 24 and take off for the ISS.



06 – Evening Departure for ISS.

The XR-5 Vanguard is waiting on Runway 06 ready to take-off for the ISS.

