QGIS Application - Feature request #18209 3D View ArcBall Camera

2018-02-25 03:37 PM - Piero Toffanin

Status: Feedback
Priority: Normal

Assignee:

Category: 3D

Pull Request or Patch supplied: Resolution:

Easy fix?: No Copied to github as #: 26100

Description

Hello! First of all congrats on the 3.0 release. :)

This is my QGIS version:

QGIS version

3.0.0-Girona

QGIS code branch

Release 3.0

Compiled against Qt

5.10.0

Running against Qt

5.10.0

Compiled against GDAL/OGR

2.1.3

Running against GDAL/OGR

2.2.3

Compiled against GEOS

3.6.2-CAPI-1.10.2

Running against GEOS

3.6.2-CAPI-1.10.2 4d2925d6

PostgreSQL Client Version

10.1

SpatiaLite Version

4.3.0a

QWT Version

6.1.3

QScintilla2 Version

2.10.2

PROJ.4 Version

493

I've experienced some difficulties navigating the 3D Map View (from a user experience perspective) so I thought to open an issue.

To reproduce:

- Import attached dsm.tif into QGIS
- Open 3D Map View
- Set elevation to dsm.tif, resolution to 100px
- Press SHIFT + Left click (or middle click) on 3D Map View and move mouse cursor downward

Result: the 3D model rotates up and away toward the top of the screen. This requires the user to zoom out, find the 3D model, pan the camera up, zoom back in. Subsequently, try to rotate around the model. The model rotates around it's corner instead of around the

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camera target.

Improvement: the 3D model should rotate around the current camera target (an Arcball camera implementation, see an example https://demo.webodm.org/public/task/57bde61a-43fb-4447-b47a-9896498ddfba/3d/).

Also noticed that pressing the "Zoom Full" button for this particular model does not center the scene to the model (the model disappears, with the camera being placed below it in the Z direction).

History

#1 - 2018-11-04 05:23 PM - Saber Razmjooei

- Status changed from Open to Feedback

Could you try 3.4 release?

There have been a whole bunch of new improvements for navigation:

http://changelog.qgis.org/en/qgis/version/3.4-LTR/#category-51

#2 - 2018-11-08 02:47 PM - Martin Dobias

Right 3.4 solves your problems thanks to automatic adjustment of camera center to the terrain surface.

The only remaining issue is that "zoom full" still zooms below your terrain - this is something specific to your DSM which is taller than wider which is not that common, but that could be fixed as well.

Files

dsm.tif 1.9 MB 2018-02-25 Piero Toffanin

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