

1:

Type name of any location or address on Earth as the center point for the generating world

1

Enter location/address...

OR

2

Latitude

Longitude

3

PLAY

2:

Type Latitude & Longitude geographic coordinates in Decimal Degrees format as the starting point

3:

Pressing PLAY button will get you to the generating world to dynamically travel to any location on Earth by an airplane

SETTINGS

4

MAIN

ADVANCED

PERFORMANCE

GRAPHICS

4:

Pressing each section panel on SETTINGS will get you through options to setup the WorldExplorer engine



2:

Active high resolution area size in kilometers around the player

1:

Grid size for terrain tiles which will be stitched together to create a seamless surface

1

Chunk Grid Size - 64 Terrains

8 x 8

4:

Satellite imagery resolution for each terrain chunk

2

Area Size: 20.000 KM

3

Heightmap Resolution: 1024

4

Satellite Image Resolution: 1024

3:

Elevation resolution for the entire terrain chunks surface

Terrain Smoothness Steps: 1

Elevation Exaggeration: 1.25

5

6

6:

Elevation exaggeration for the hights in vertical axis

5:

Smoothness steps value for terrain surface in order to remove jaggies and bandings

7:

Enable/Disable far terrains as background mountains to cover horizon level views

7

Far Terrain

Heightmap Resolution FAR: 512

Image Resolution FAR: 1024

Area Multiplier: 8 - 160.000 KM

8

9

10

8:

Elevation resolution for the far terrain surface

11

DEFAULT

12

BACK

10:

Main area size multiplied by this value to define lower resolution far terrains area size

9:

Satellite imagery resolution for the far terrain

11:

Revert back all settings to their default states

12:

Back to Home screen to PLAY the simulation

1:

Bypass Satellite Imagery
Downloading & only perform
elevation generation

1 Elevation Only

2 Fast Start Build

3 Show Tile On Finish

3:

Show terrain tiles after the
heights are completely
generated on surface

4 Progressive Texturing

5 Spiral Generation

6 Delayed LOD

2:

Bypass threading & coroutines
operations for faster scene
loading only on initialization

4:

Progressive texturing of terrain
chunks as soon as the satellite
images are downloaded

7 FAR Terrain Below: 0.0 Meters

5:

Spiral form for updating terrain
chunks in generation at startup

6:

Perform LOD calculation on
terrains with a delay to finalize
terrain data applying

8 Stitch Terrains

7:

How many meters background
terrains have to be placed
underneath main terrains

9 Stitch Smoothness: 5

10 Stitch Power: 1

8:

Enable/Disable terrain tiles
stitching operation to create a
seamless surface

11 Stitch Delay: 1

12 Stitch Distance: 2

9:

Smoothness factor for terrains
stitching operation

11:

Delay in seconds to perform
each stitching operation
between tiles

13

14

13:

Revert back all settings
to their default states

14:

Back to Home screen to
PLAY the simulation

12:

Distance in meters between
each terrain tiles to perform
stitching

10:

Velocity of the terrain tiles
stitching operation

1:

Surface quality & pixel error of main terrains

2:

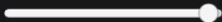
Surface quality & pixel error of background far terrains

3:

Concurrent task number for updating terrains

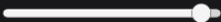
1

Terrain Quality: 98 %



2

Terrain Quality FAR: 95 %



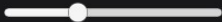
3

Concurrent Tasks: 8



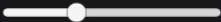
4

Elevation Update Delay: 1



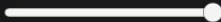
5

Imagery Update Delay: 1



6

Updating Cell Resolution: 128



5:

Delay in seconds between each terrain tile texturing

4:

Delay in seconds to update each data cell in terrain chunks

7

DEFAULT

8

BACK

6:

Resolution of each data cell in a single terrain tile to be applied on coroutines

7:

Revert back all settings to their default states

8:

Back to Home screen to PLAY the simulation

1:

Turn on/off volumetric lighting & additional sun rays

1

Volumetric Lighting

2:

Turn on/off atmospheric scattering & volumetric fog

2

Atmospheric Scattering

3:

Enable/Disable terrain detail textures for better close-up views

3

Detail Textures

4:

Enable/Disable volumetric rendered clouds

4

Clouds

5

Cloud Shadows

5:

Enable/Disable projecting cloud shadows

6

DEFAULT

7

BACK

6:

Revert back all settings to their default states

7:

Back to Home screen to PLAY the simulation