

Creating an underwater Scene

with TerraGen 2

(coolest software ever written)

-Short Tutorial -



Ray object in this render by TerraProject.de

August 2011

Required components

- Overview
- Plane object
 - Water Shader
- Object
- Sunlight
- Particles in water
 - Additional cloud layer
- Additional light source

Overview

- Creating an underwater scene seems to be more difficult than it is in fact
- In General an underwater scene is created using
 - A plane object with a water shader as water surface
 - A nice position for the sunlight
 - Some particles floating in the water
 - An additional light source to lighten up the scene and to visualize the particles
 - A cool object such as a shark or a submarine
- After this Tutorial you will be able to create a scene like this



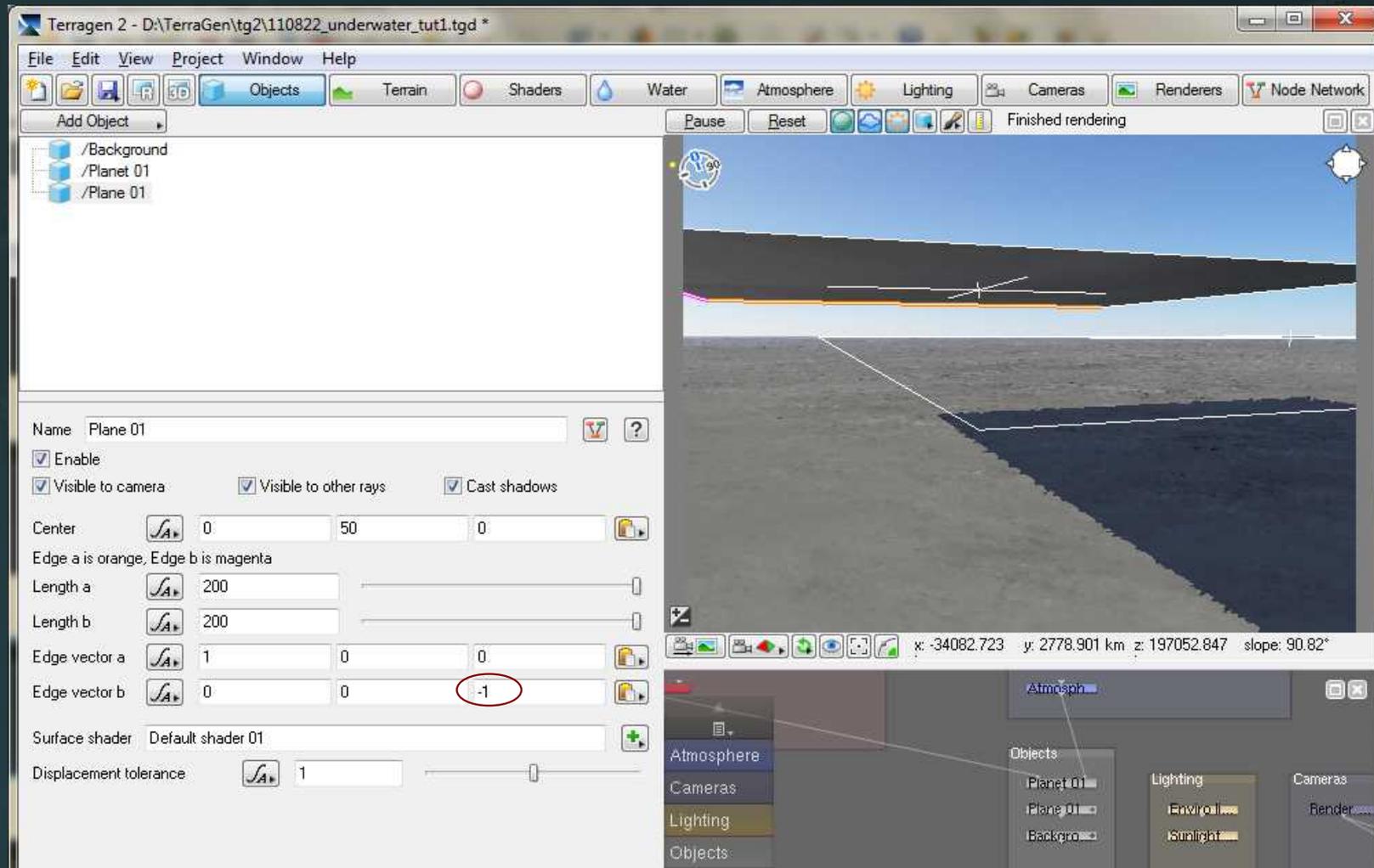
Overview

- The shark object used for the example renders in this short tutorial is provided by ShareCg.Com (user „narendra“)
- This Tutorial won't describe every step in detail, it is required you already have some knowledge of TerraGen 2
 - How to add/import & position objects
 - How to connect shaders
 - How to create a population
 - Screenshots will help you to figure out what settings are essential

To go through this Tutorial you should not need more than 30 minutes.

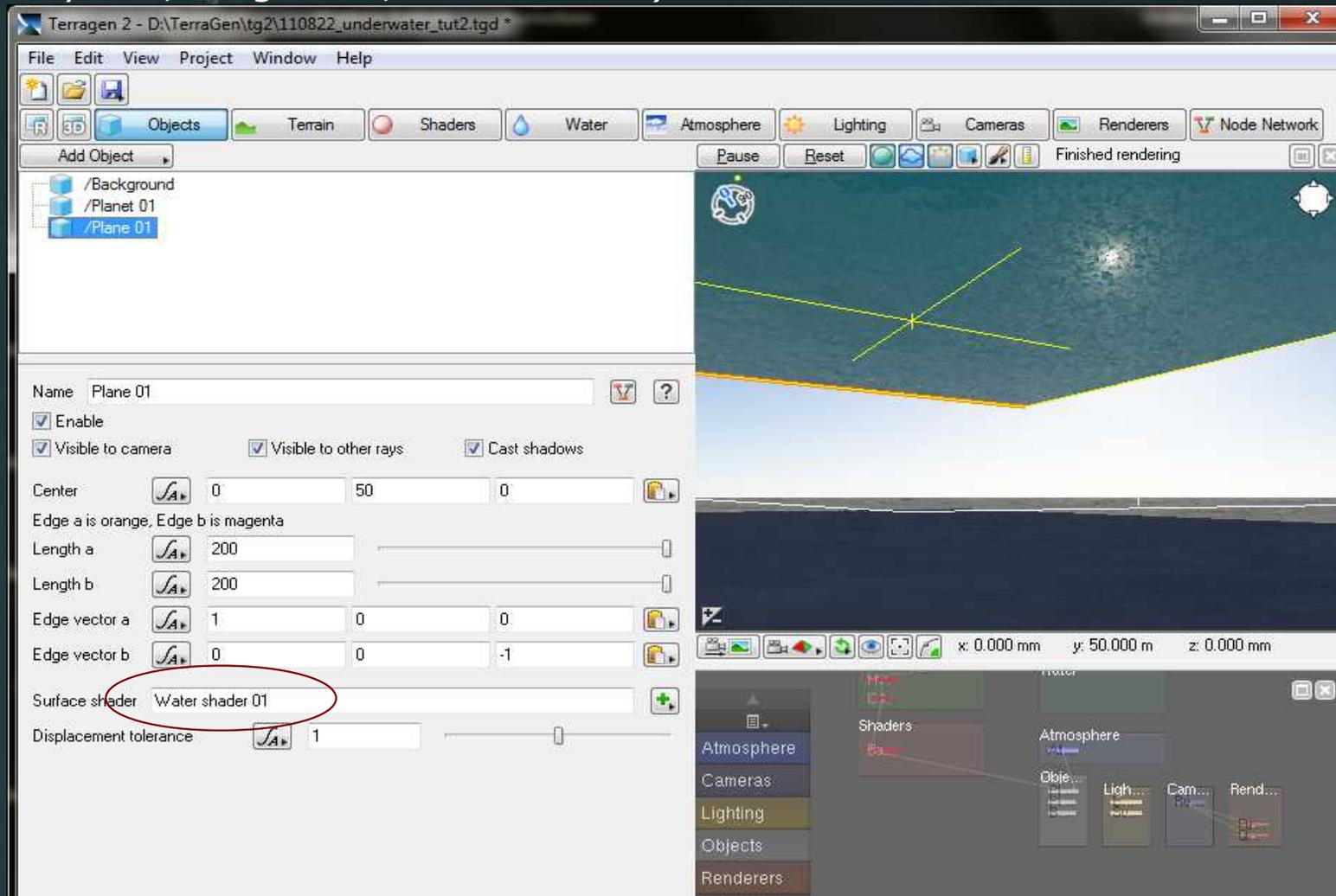
Plane Object

- Add a plane object to your scene and use a size that will cover your camera's view
- Turn this plane upside down to make the water shader visible from below



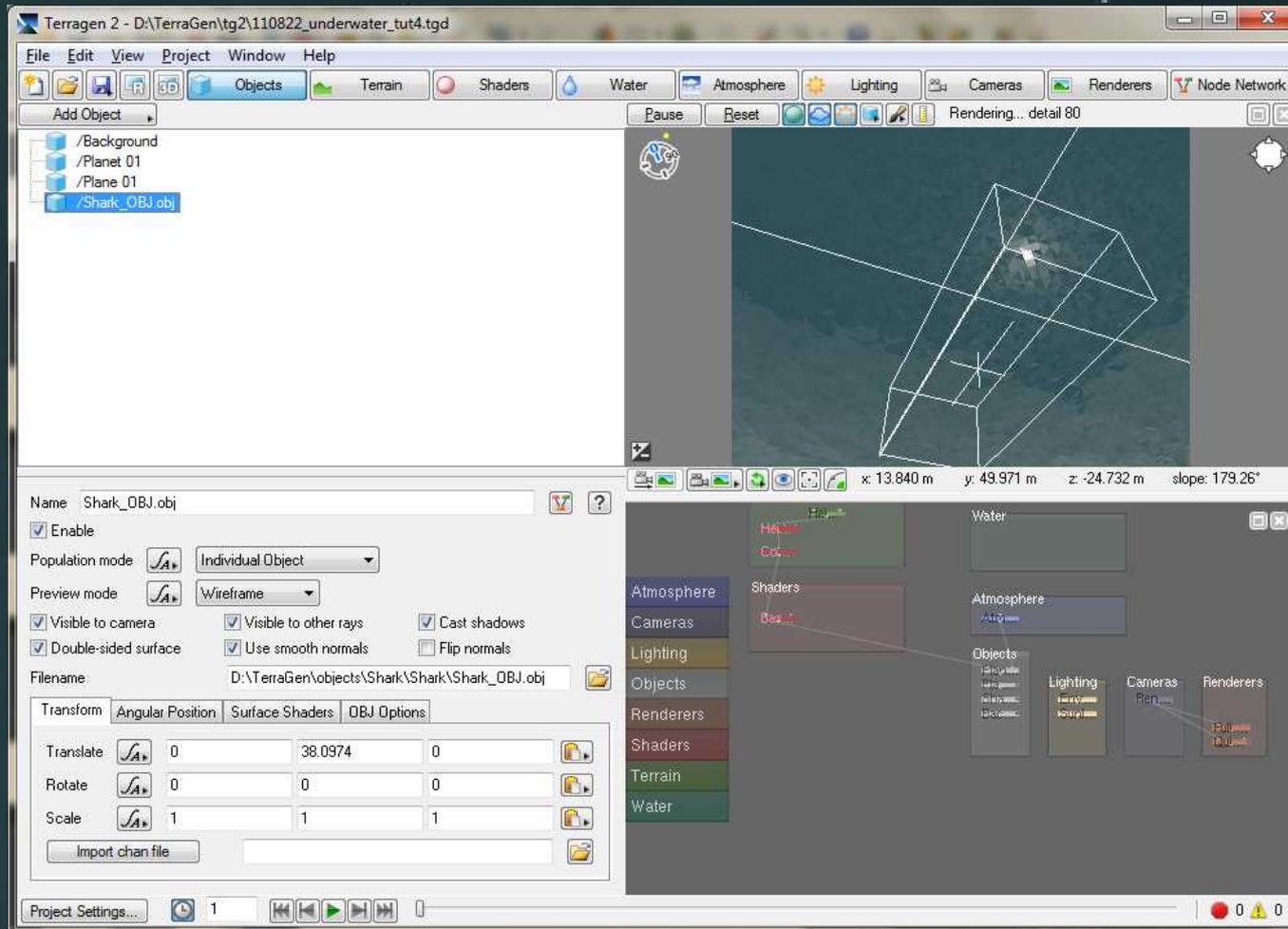
Plane Object | Water Shader

- Adjust a water shader to your created plane object
- Configure Water Shader (adjust reflectivity > 1 , adjust color, increase transparency > 1 , roughness, wave scale...)



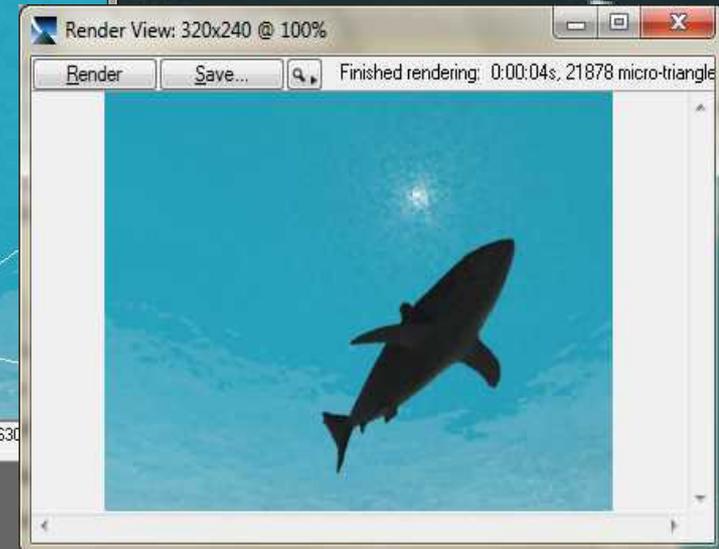
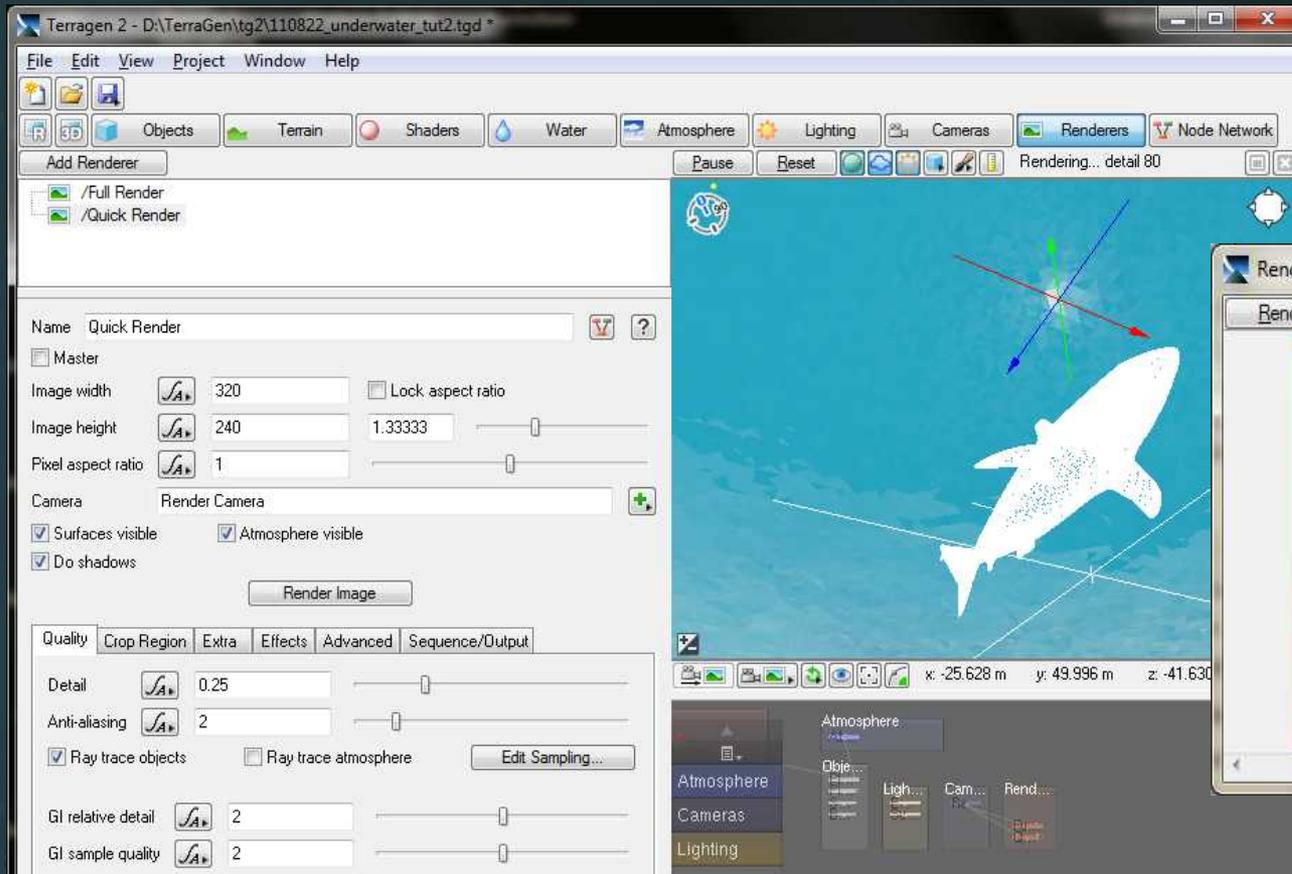
Object

- Add your desired main object to be rendered
 - Adjust position & scale of object



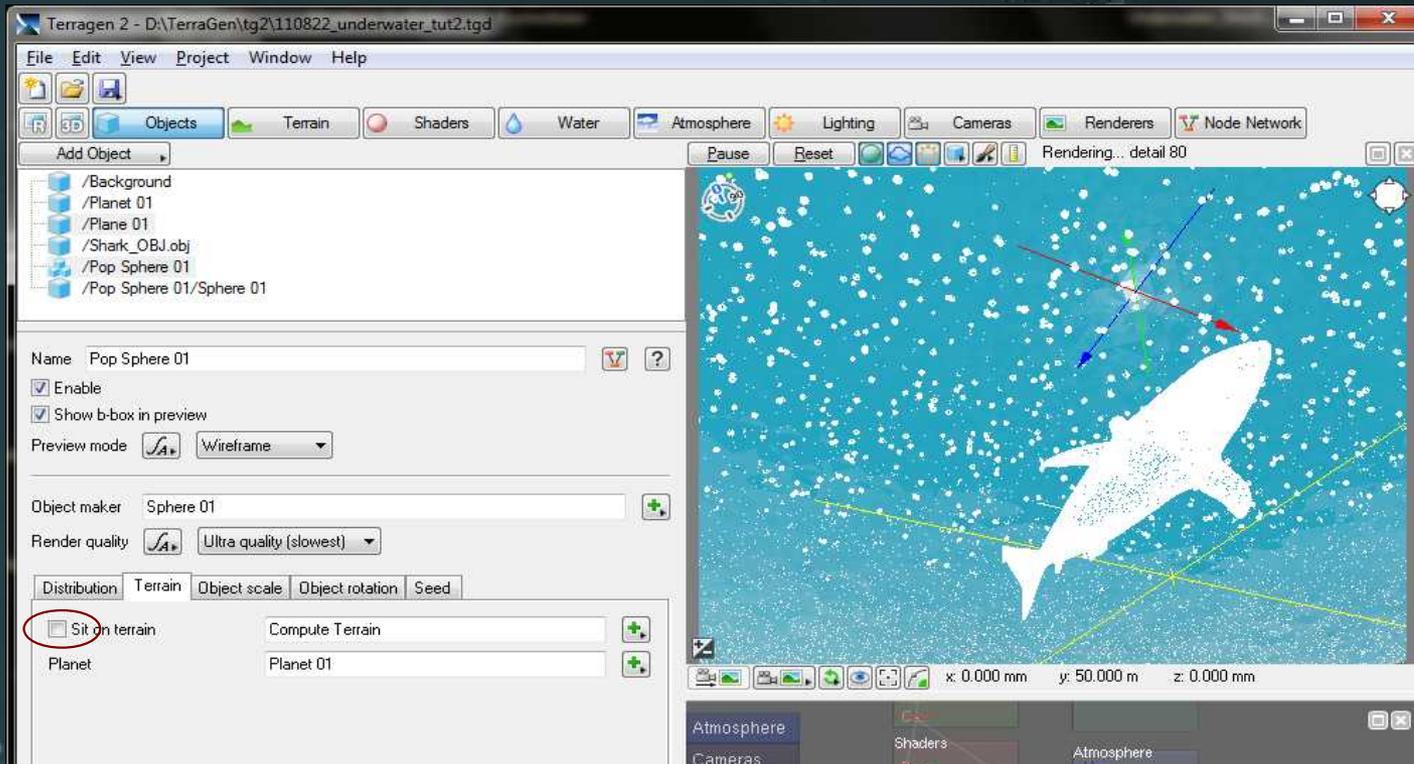
Sunlight

- Position and configure the sunlight so that you see an effect on the water surface (use a preview render / crop render)
 - Sun should have a great angle to let the light appear brighter
 - Adjust sun strength
- Make it look cool with your main object



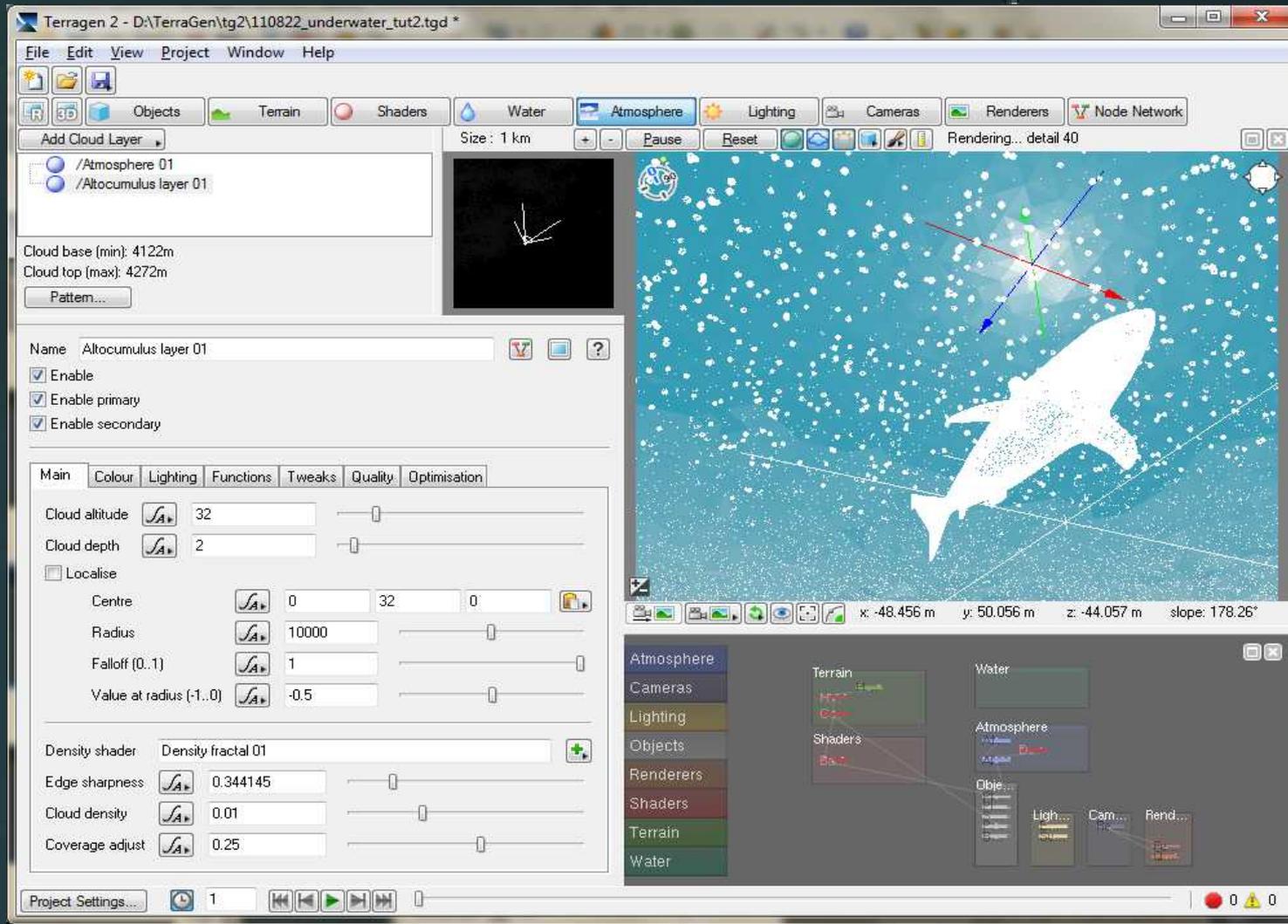
Particles

- To create a realistic underwater effect particles are required that are floating through the water
- Do that by creating a population of spheres (disable the sphere instance example), adjust the scaling and the surface of those spheres
 - you may use a white default shader (with increased luminosity)
 - and a further population of spheres using a water shader as surface
- Be sure that the sphere population does not „Sit on Terrain“



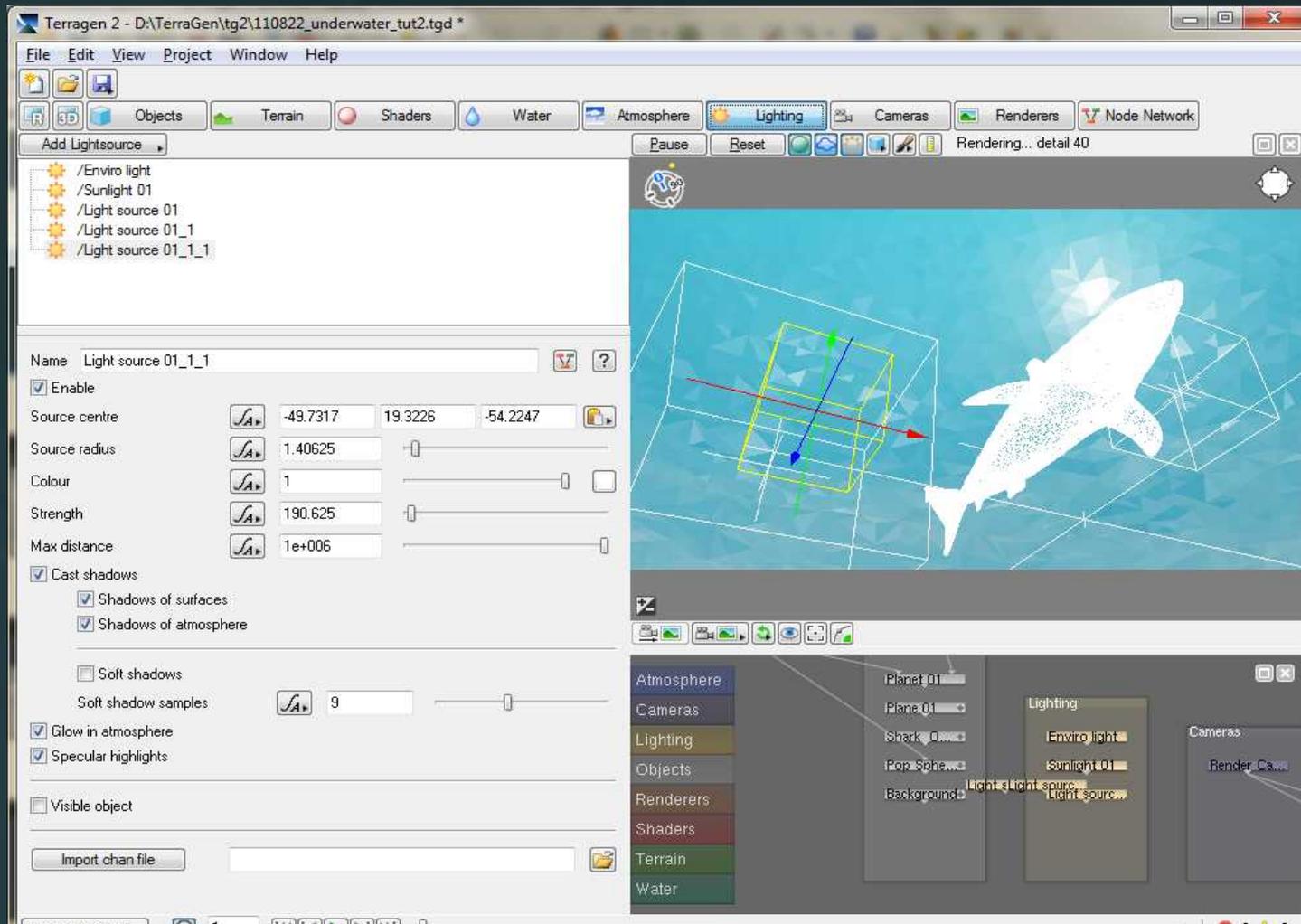
Particles | Cloud layer

- You may also add a cloud layer to further simulate particles in the water
- This could also be used to create underwater rays



Additional lightsource

- As most of the particles will not be shown using the sunlight you may use an additional light source to make more particles visible
- Use this also to lighten up your object



Good bye & have fun

- Play around with the described settings to achieve a better underwater effect
- You may use a tool such as Gimp or PhotoShop to achieve a better contrast/coloring



Thanks for following this Tutorial, If you liked it:
Please watch the movie „Earthlings“ (earthlings.com, online, for free), it will tear your world apart