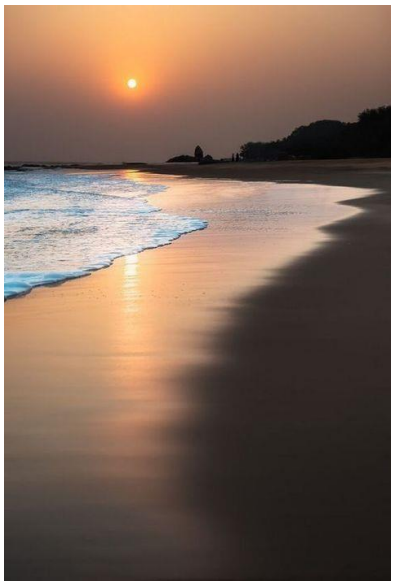


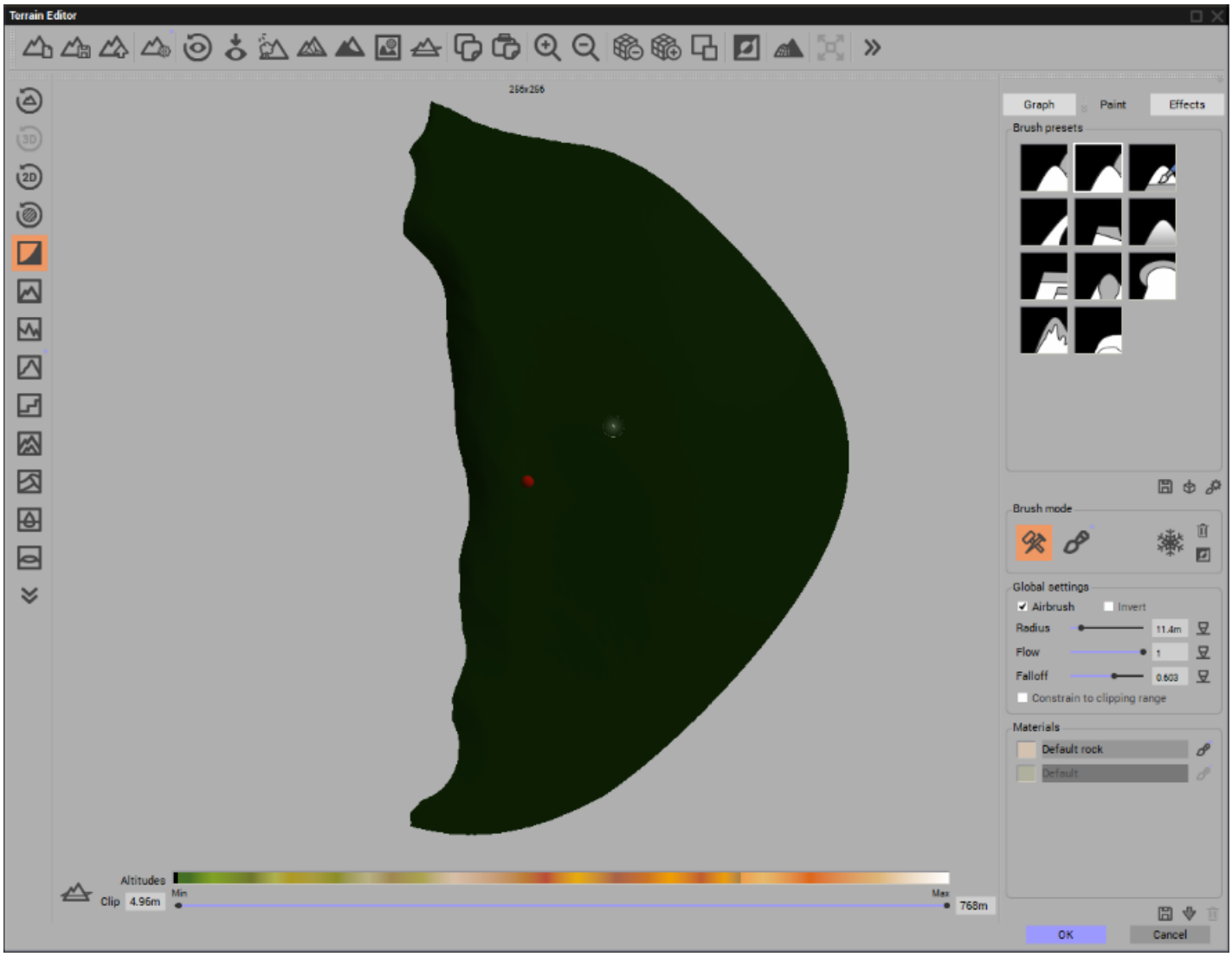
Painting Materials onto Vue Terrains: Creating the Wet sand – reflective effect in Vue

One of the effects I'm trying to achieve in Vue is to get that reflective effect of wet sand on a shoreline. Similar to what is depicted in this photo:

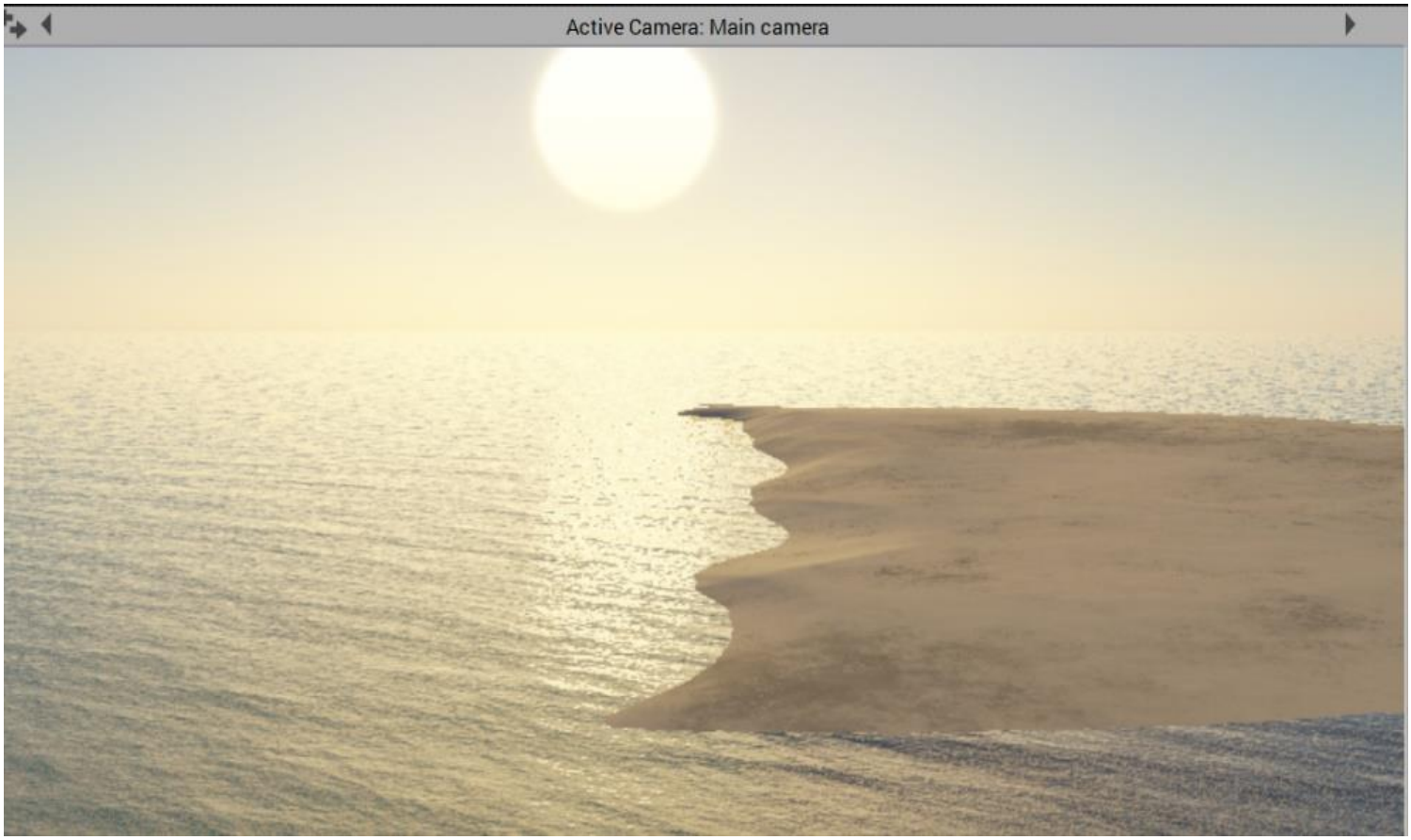
The trick is to use the sand material for the beach shoreline but have just a portion of it be quite reflective to suggest water on the sand from the receding waves.

The first thought was to use a sand or wet sand material on a terrain and paint a water material on a portion of it to make the area reflective.

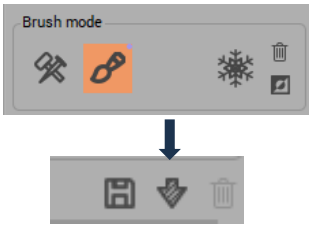
- We create a terrain, say a default one 1km by 1km in size.
- In the Terrain Editor we'll turn the terrain into dunes and wet sand material.



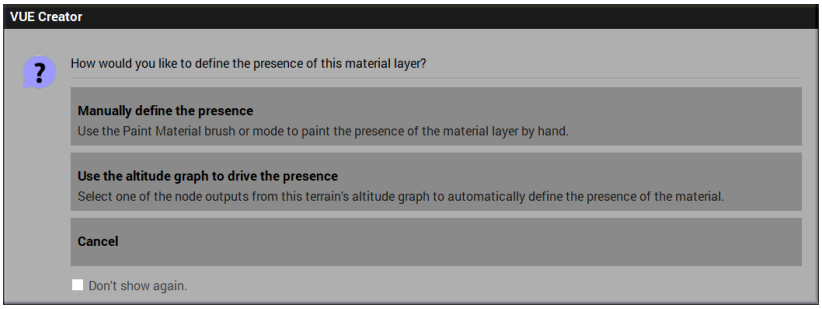
- We'll carve out one side of the terrain and clip the bottom a bit to round it.
- Surround the terrain with a sea and place the sun across from the cut-away coast and the camera at about 50m height.



Paint the Material

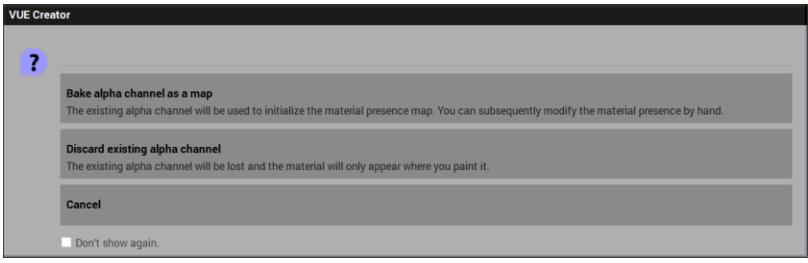


- Open the Terrain Editor again, Turn ON the **paint** mode and turn OFF the **sculpt** mode.
- At the bottom of the display select the **load Material** arrow to load a material.



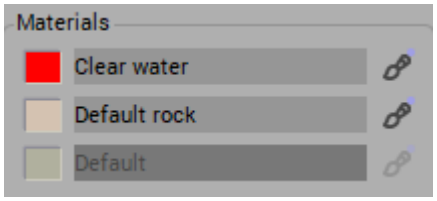
- Select Manually define…

- Select the desired material… (Clear water in our case)



- Select **Discard existing alpha channel** to be able to paint the material manually onto the terrain....

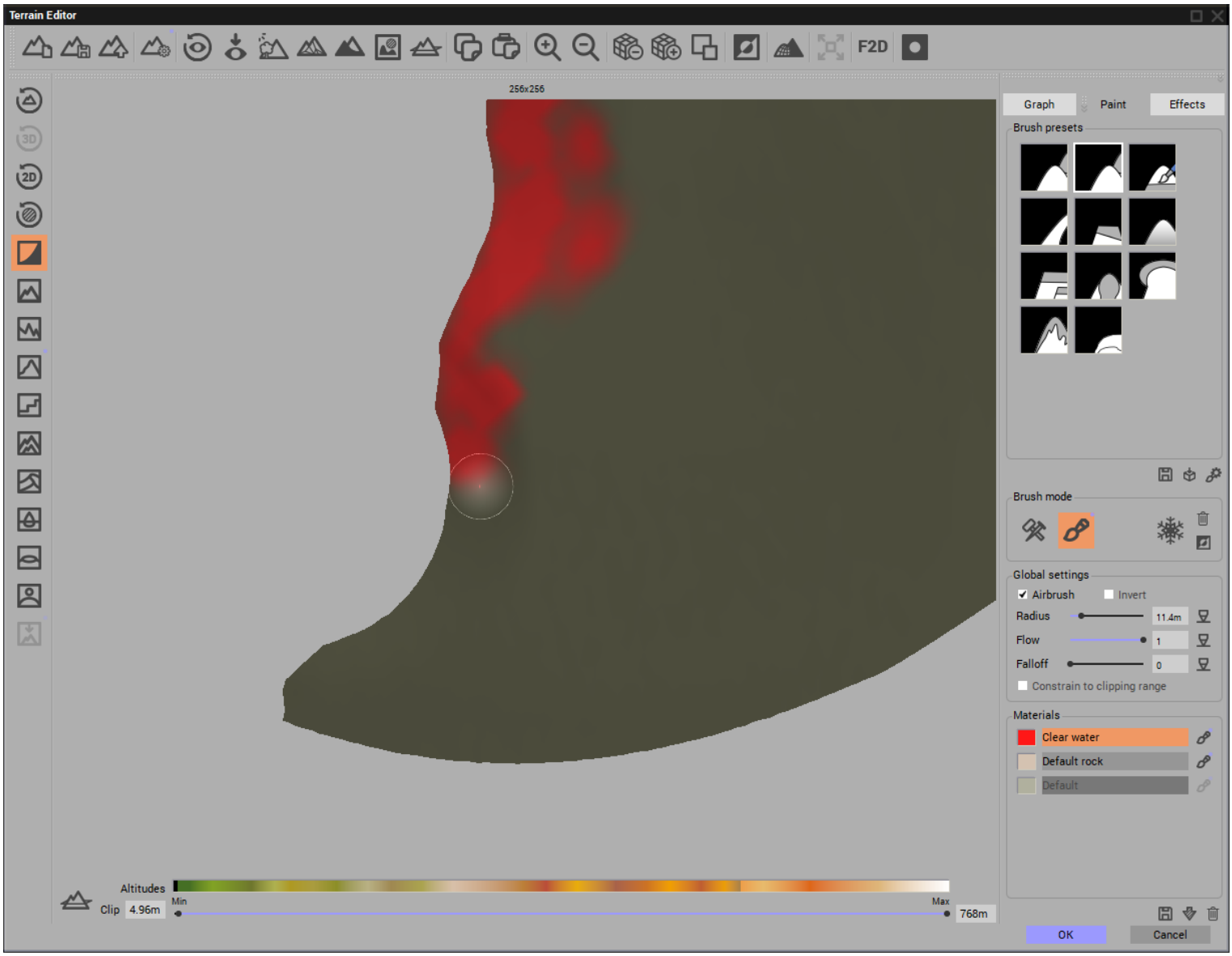
The material will be loaded and will be listed in the Materials section.



- Right-click to the left of the material (Clear water) and select a colour to clearly see where the material will be applied to the terrain (red here)
- At the appropriate **Radius**, **Flow** and **Falloff** of the brush, uncheck **Invert** to apply the material to the terrain and check **Invert** to remove the material from areas of the terrain and
- Use Alt-LB(left mouse Button) To zoom in or out, Alt-MB(middle button) to pan and alt-RB(right button) to orbit

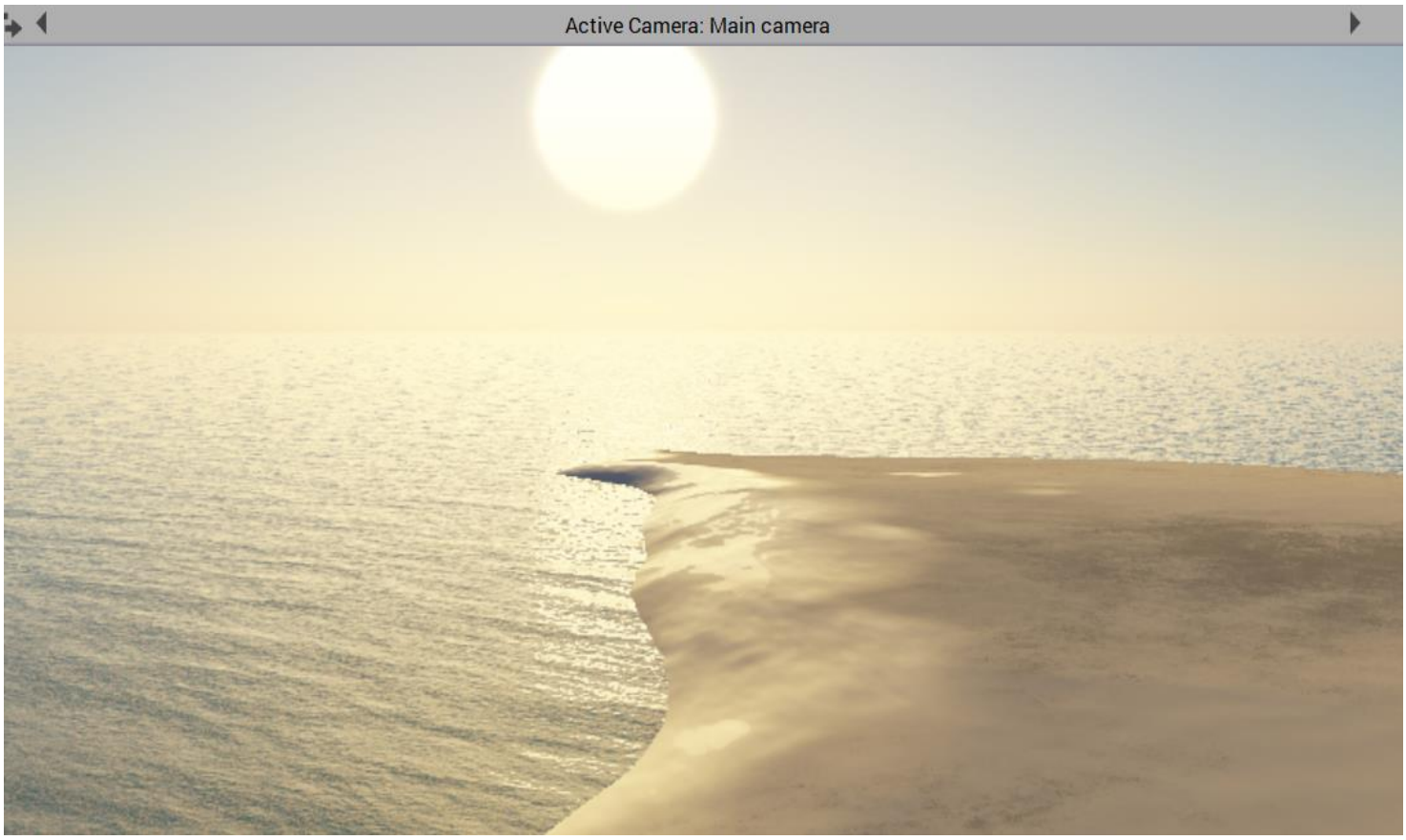
The colour selected (red) to the left of the material is simply a representation of the material as it is applied, not the actual material colour. The actual material has some default properties including colour that are determined and edited using **the Advanced Material Editor**

Applying the selected material to the terrain

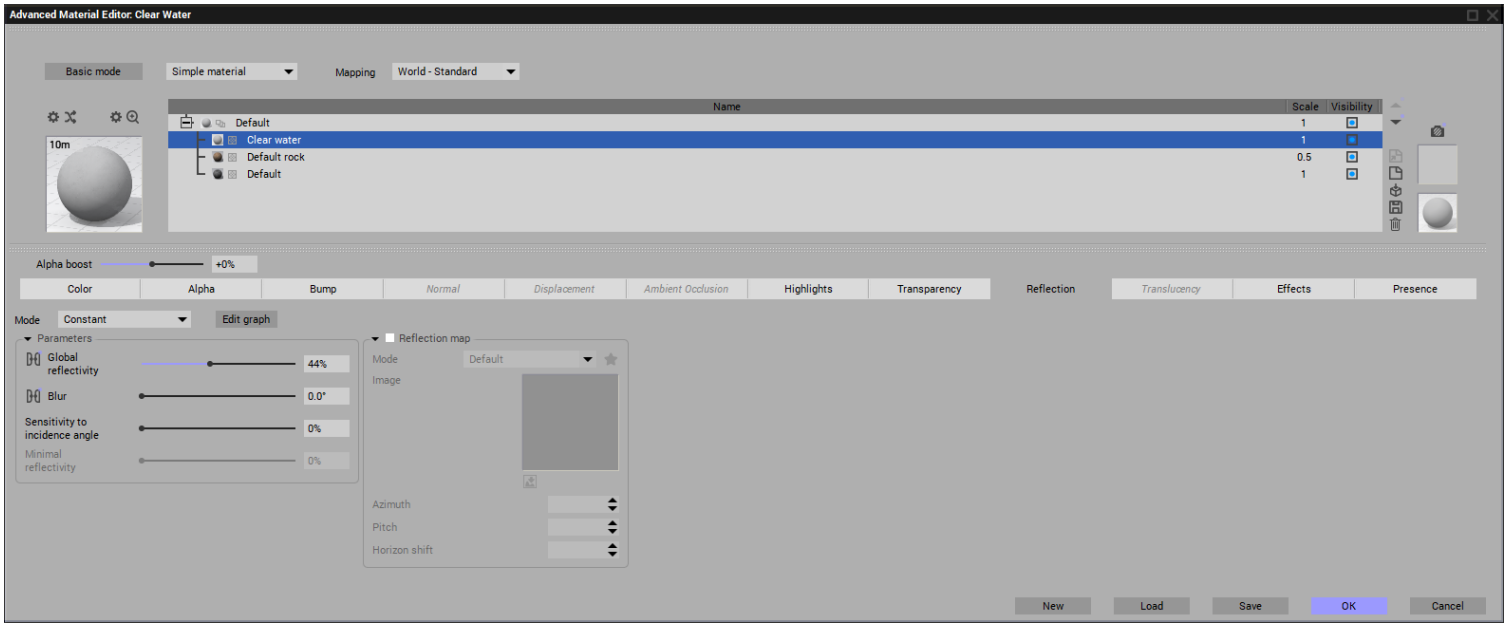


Note: Every time you open the **Terrain Editor**, it defaults to having the **Sculpting** tool **ON** and the **Painting** tool **OFF**. You must turn off the Sculpt tool and turn on the Material Paint tool to properly apply the material without distorting the terrain.

View of the terrain with the **Clear water** material applied to the shore-line.



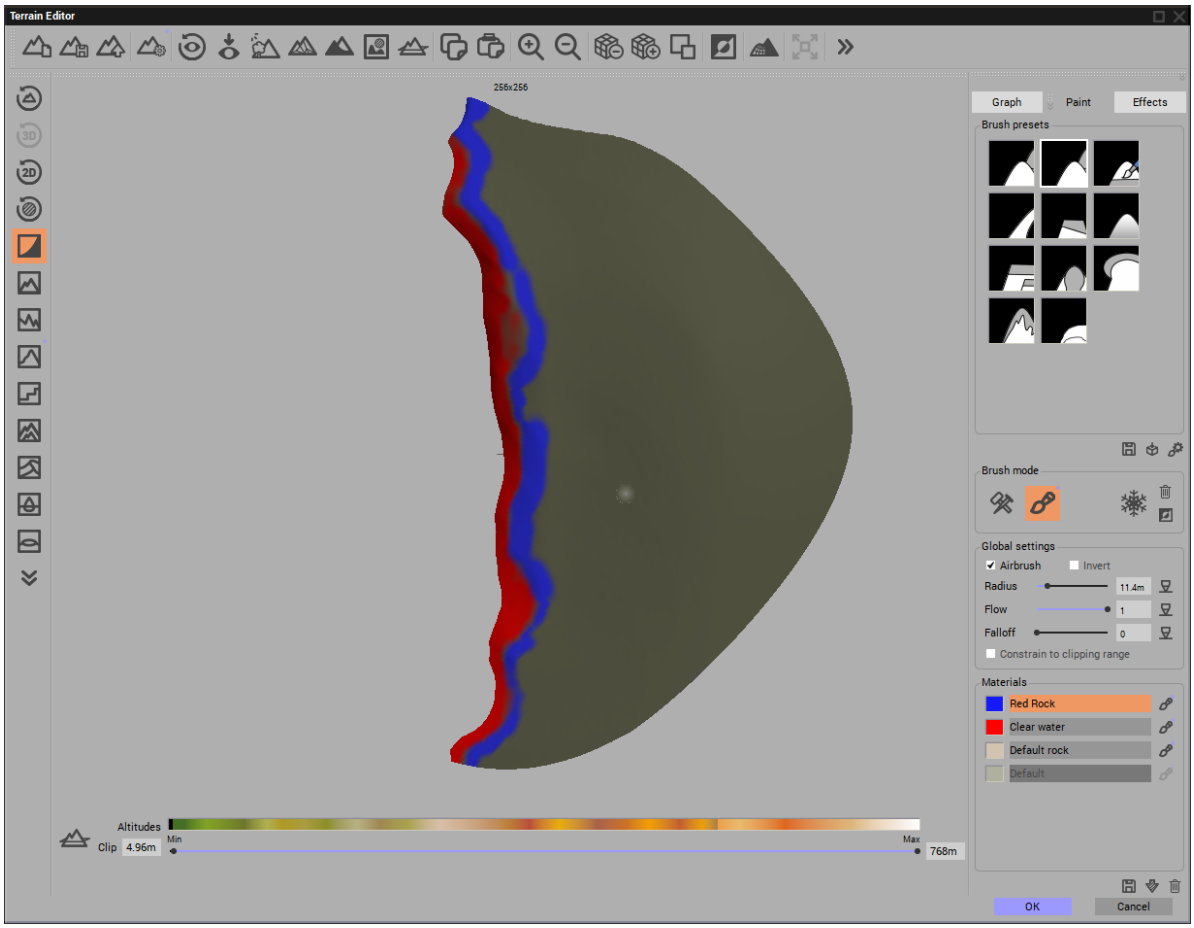
The reflectivity of the **Clear water** material is apparent but still can be adjusted using the **Reflectivity** and **Highlights** tabs in the **Advanced Material Editor** of the terrain.



Adding a second Material

In the same way that we downloaded the **Clear water** material to get the reflective-wet effect of the shoreline, we can add another material and apply it to the shore to create a darker - wet sand effect make appear that the waves had just reached up to a point and left the sand darker than the rest of the terrain.

- Open the **Terrain Editor** again and add the **Red rock** material to the list.
- Set the colour of the painted area to blue. (remember this just represents the painted area, not the actual colour of the paint!)
- Paint the **Red rock** (in blue) material along the right edge of the **Clear water** (in red) colour

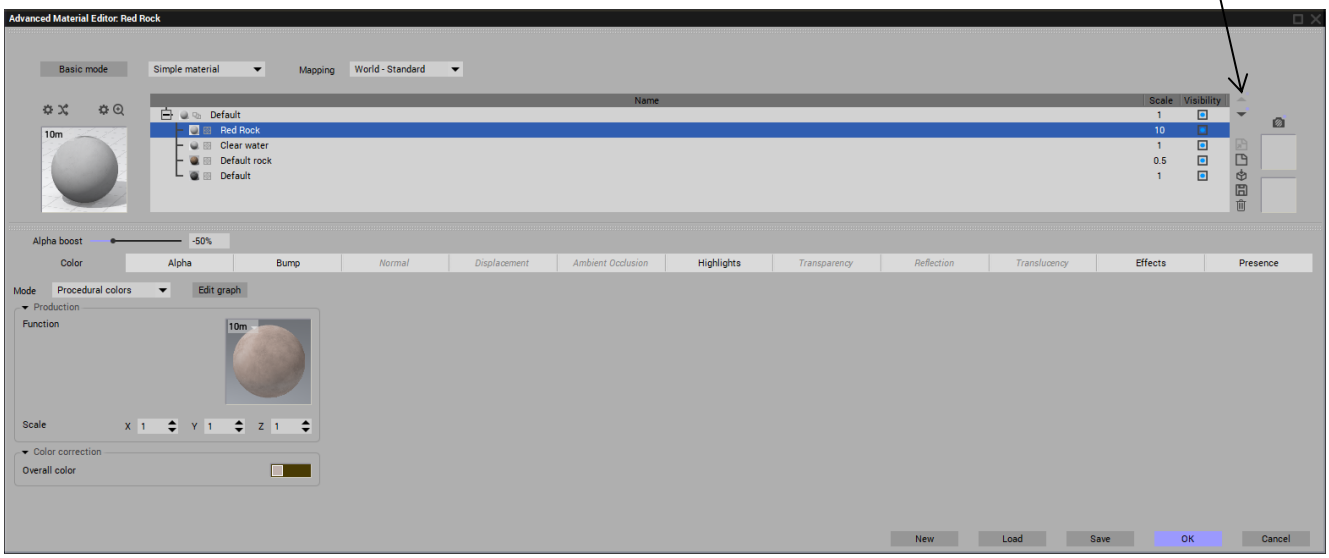


The default Red rock colour is not as distinct as we would like it but we can control its colour.

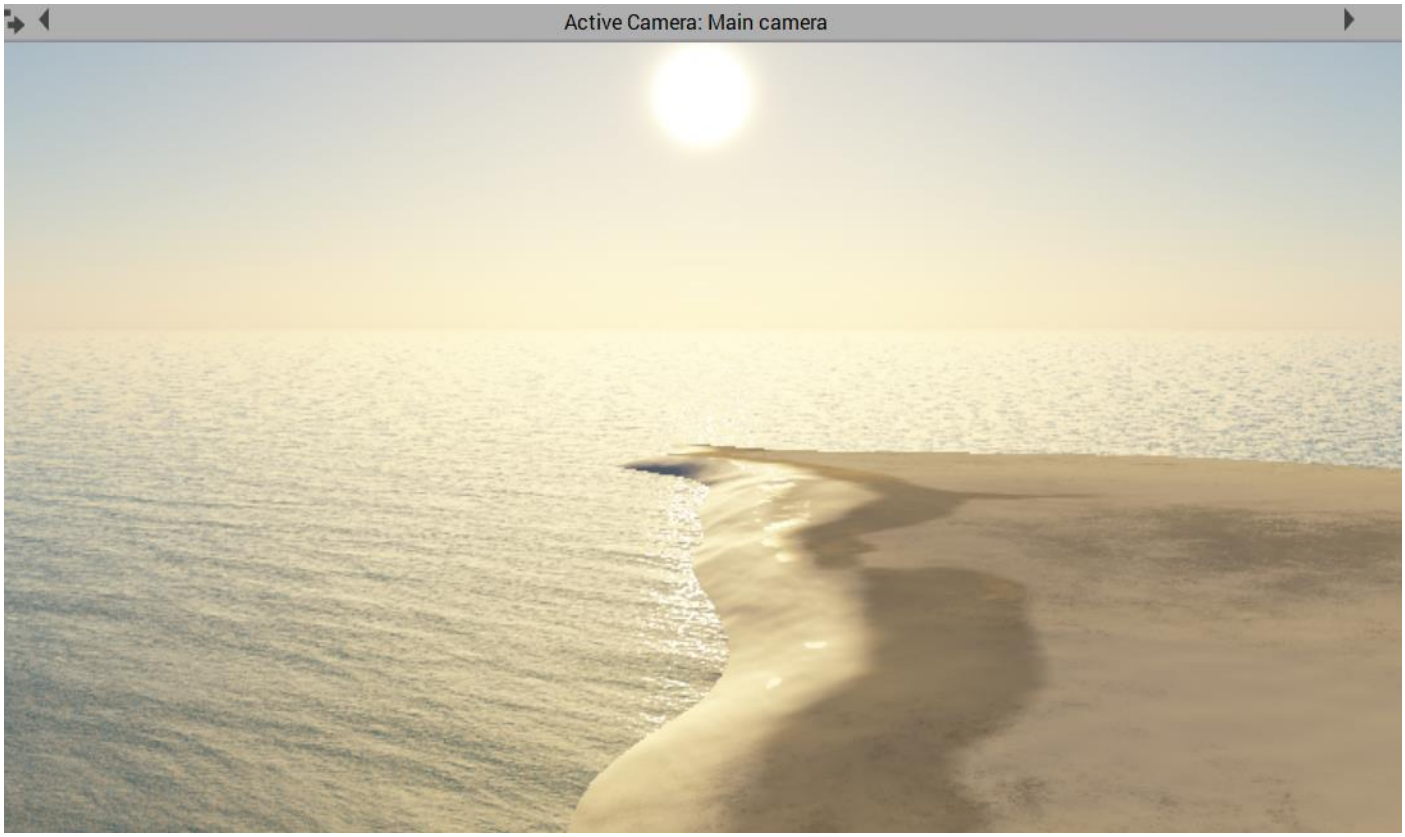
- With the terrain selected in the wold browser, open the **Advanced Material Editor** to show the materials that are now included in the terrain.

The Red rock should be at the top of the list.

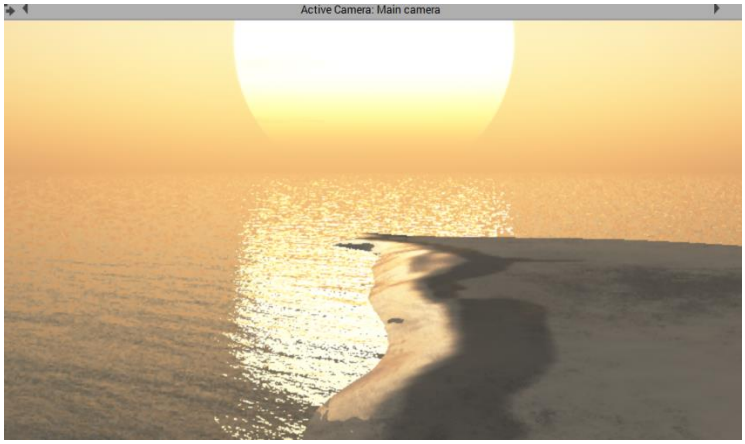
- Adjust the colour of the **Red rock** material to be quite a bit darker than originally set.
- Use the **up** and **down** arrows of the **Advanced Material Editor** to move the **Red rock** material listed below the **Clear water** material.



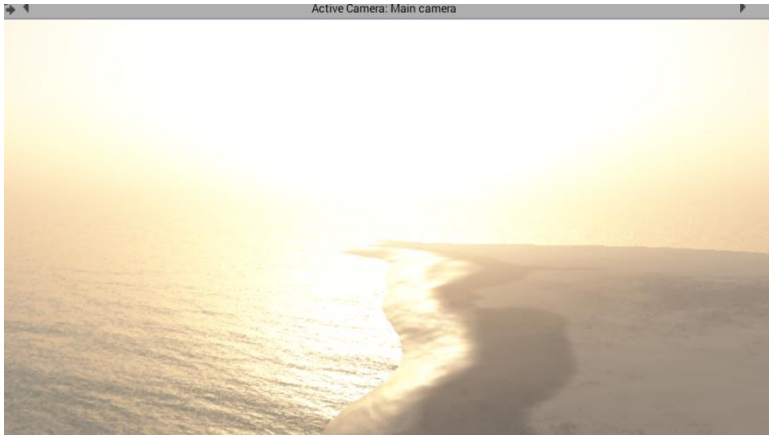
The view of the shoreline of the terrain now shows the wetted water's edge and the darkened sand behind it.



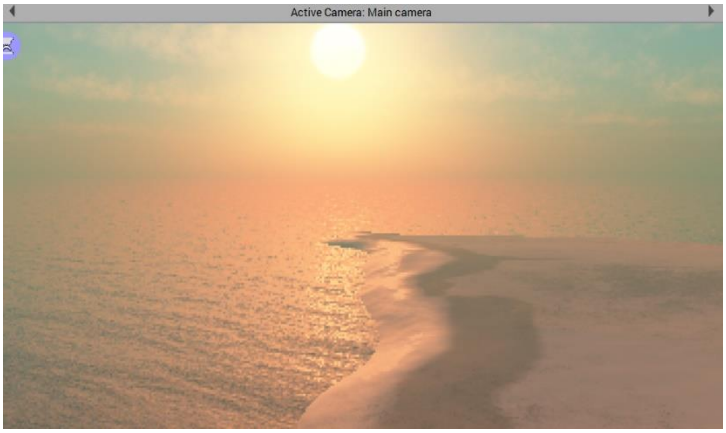
The terrain view of wet shore sand under various atmospheric conditions

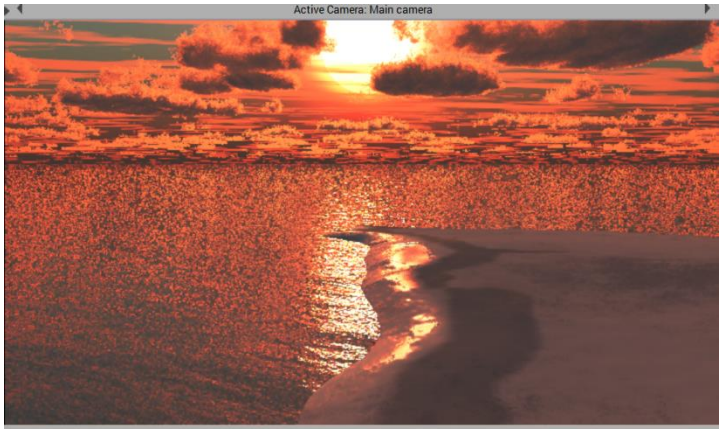


Safari

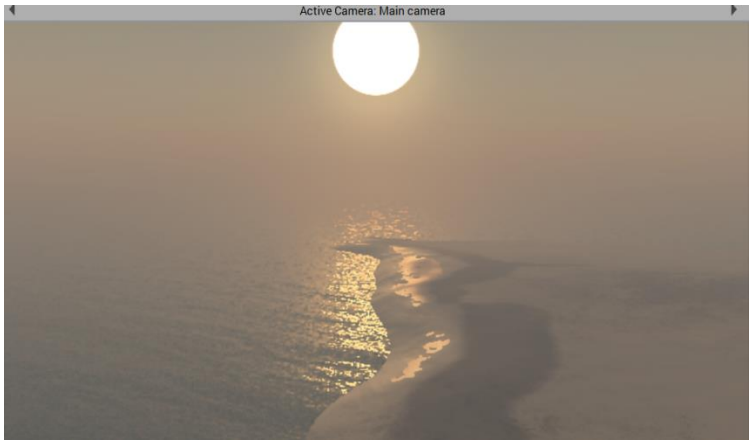


Fryett Sunset Godrays





Sunset_Orangegloe_02



Hot Desert

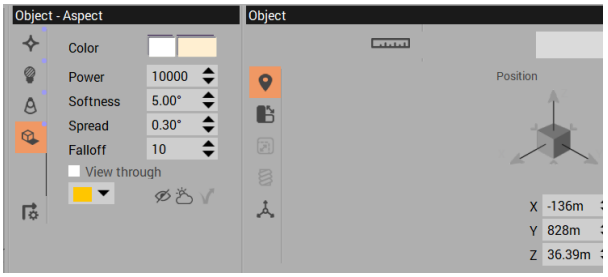
Sun Effect on the wet Sand

The sun, reflecting of off the wet sand is not as dramatic as I'd like.

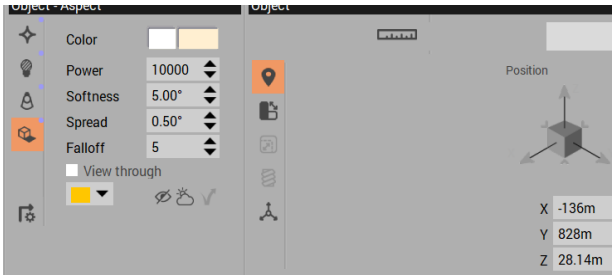
Though the sun is properly reflected, it doesn't stretch lengthwise the way we'd like it and how photographs would often show it.

After some experimentation, I found that three quadratic spot lights, set directly on top of each other, set very low to the ground (30m) and pointed from the sun to the wet sand gives the desired effect.

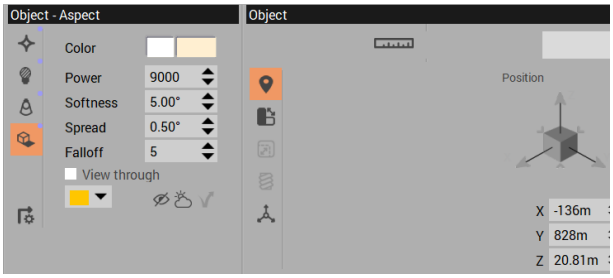
Top quadratic



Middle quadratic



Bottom quadratic



The combination of quadratic lights creates an elongated reflection of the sun on the wet sand.

Sunset Beach The final result.