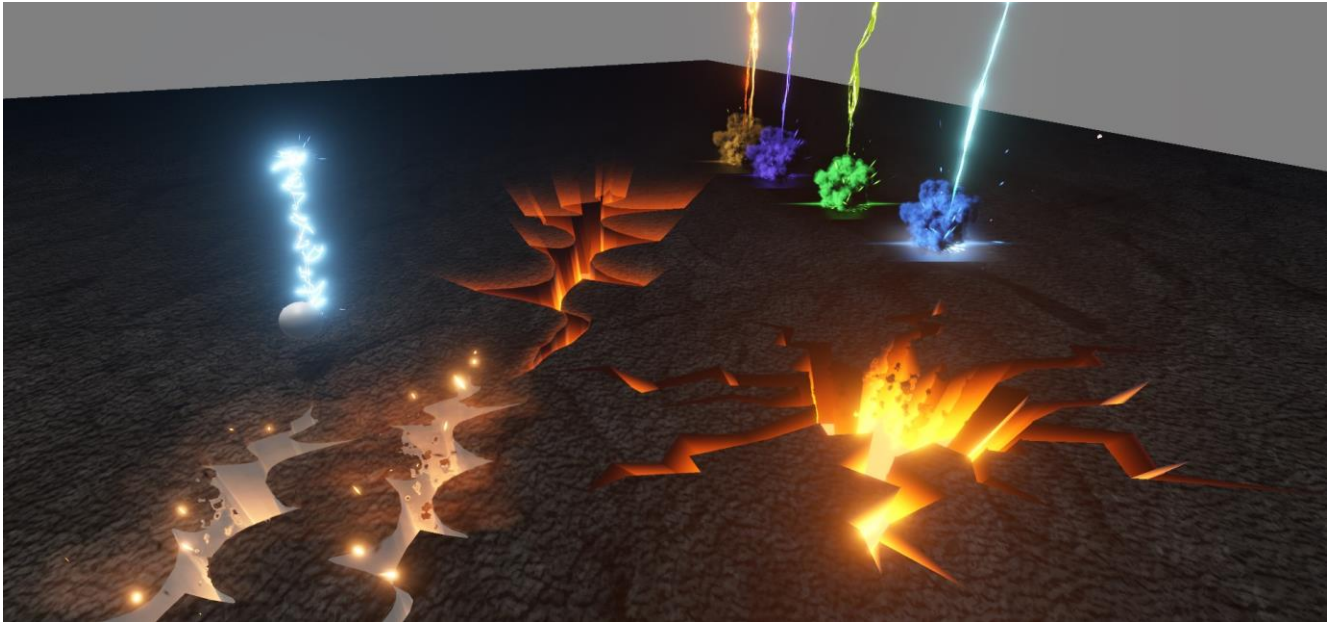


# Toon Effects Maker URP Setup Guide



## Overview

The Toon Effects Maker URP version adds a number of extra effects and **this manual details the setup for the various URP special effects**. The general system manual is also included in the same folder, detailing the general use of the system that applies to all pipelines.

For any questions please contact me in my discord channel:

<https://discord.gg/X6fX6J5>

Or in my email:

[artengames@gmail.com](mailto:artengames@gmail.com)

## Requirements:

The system requires the Visual Effect Graph, which is available through the Unity Package Manager.

### A. Ground Cracks Effect

This effect can be configured in two different ways, one way is through adding two renderer features in the pipeline forward renderer and then apply specific layers to the ground and crack top mesh or using special shaders that write to stencil buffer, in which case can be used without any setup on the pipeline or any special layers, with the downside that a special material has to be used on the ground mesh that will have the crack that will read the stencil buffer state.

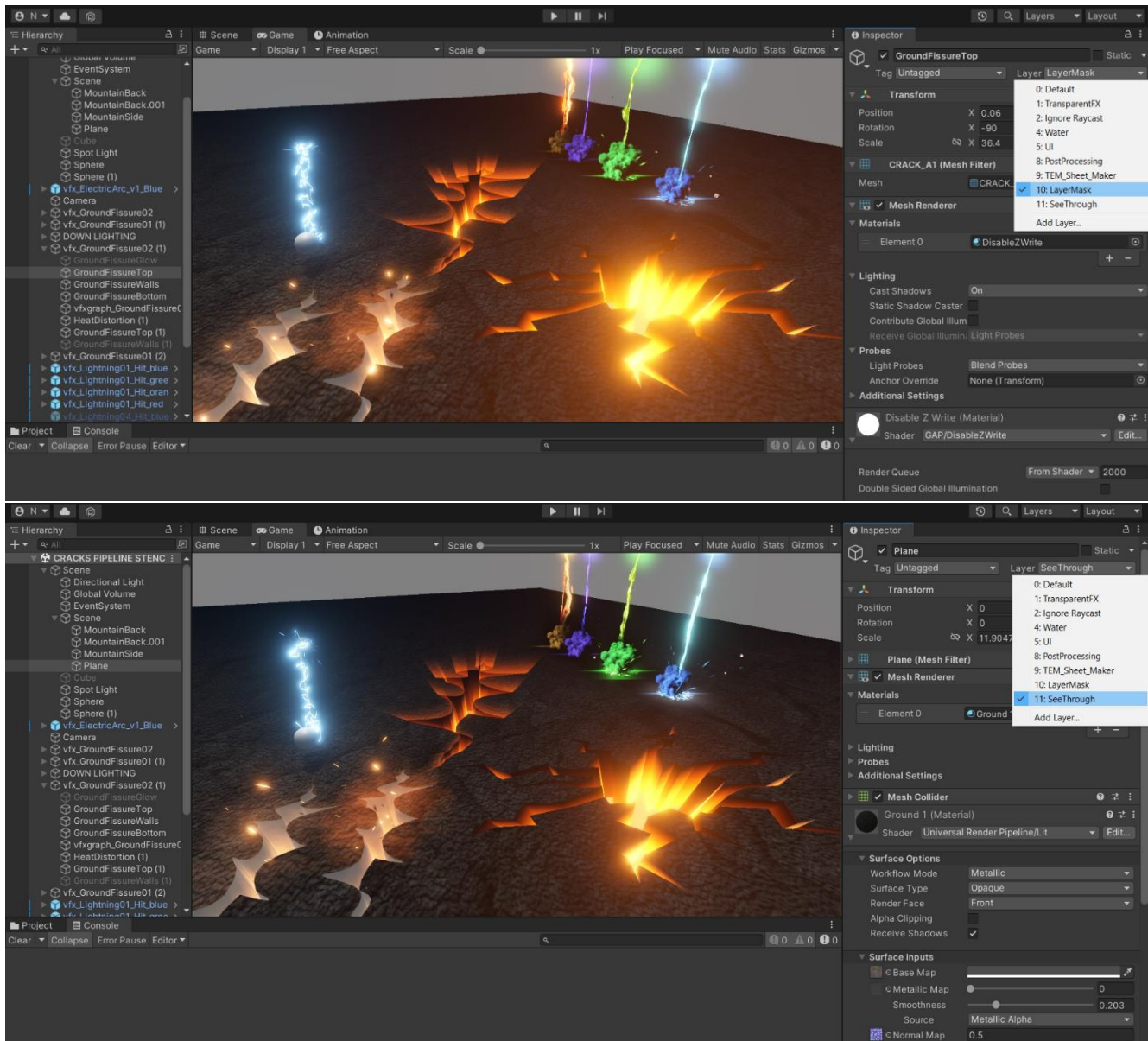
#### A1. Setup steps, using the Pipeline Forward Renderer and layers to draw the effect

The setup of the system using the forward render is done through assigning the ground plane and crack top mesh to two special layers and then add two Object Render forward renderer features in the pipeline forward renderer used on the scene camera.

The perks of this method is that can be used with any shader for the ground.

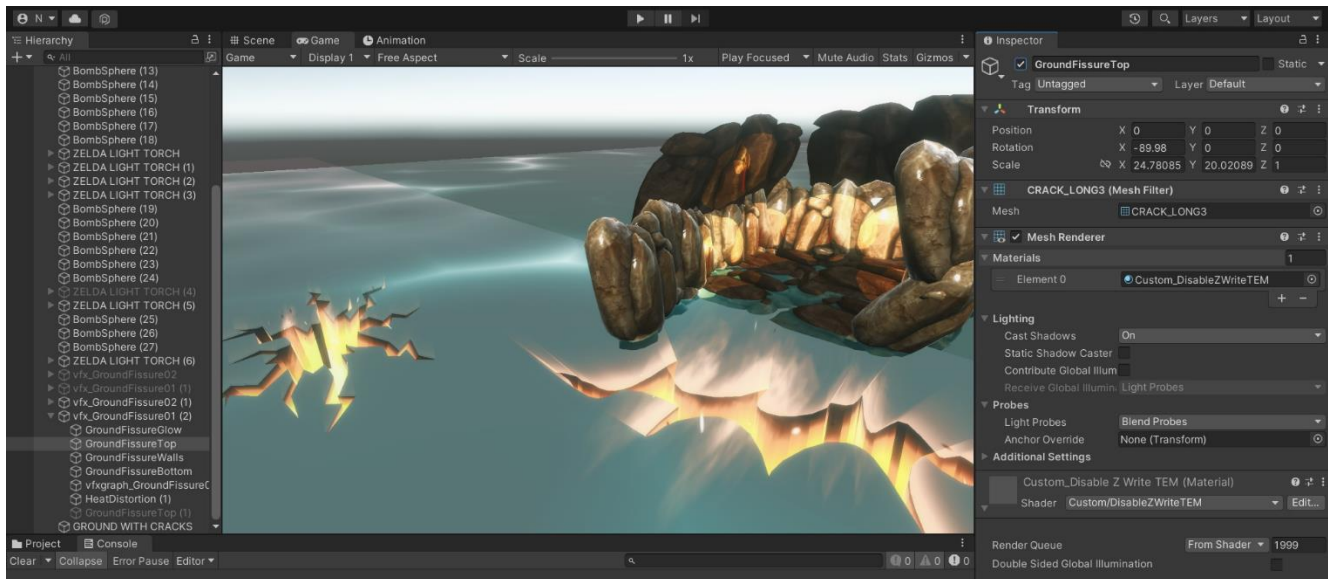
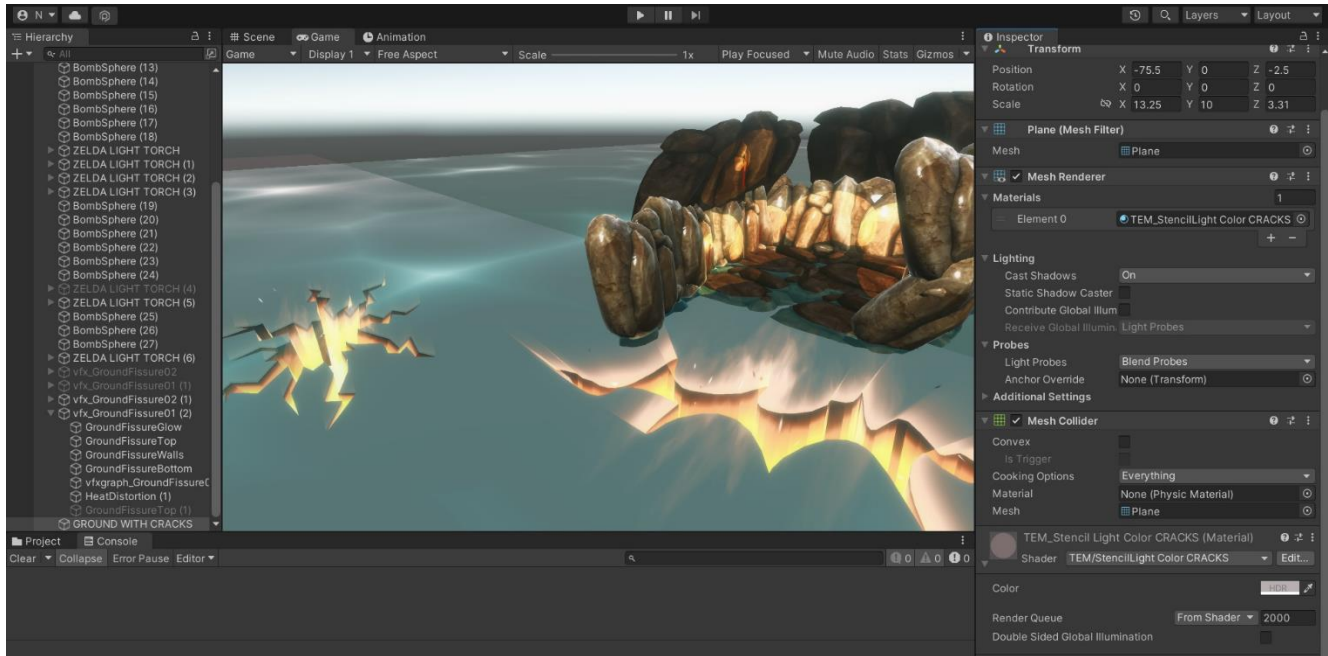
### A1.1. Add layers to the project, named as shown in the photo below

The main layers and tags to setup are “**LayerMask**” and “**SeeThrough**” layers which are to be applied to the crack top mesh and ground respectively.



## A2. Setup steps, using the Stencil system and custom shaders to draw the effect

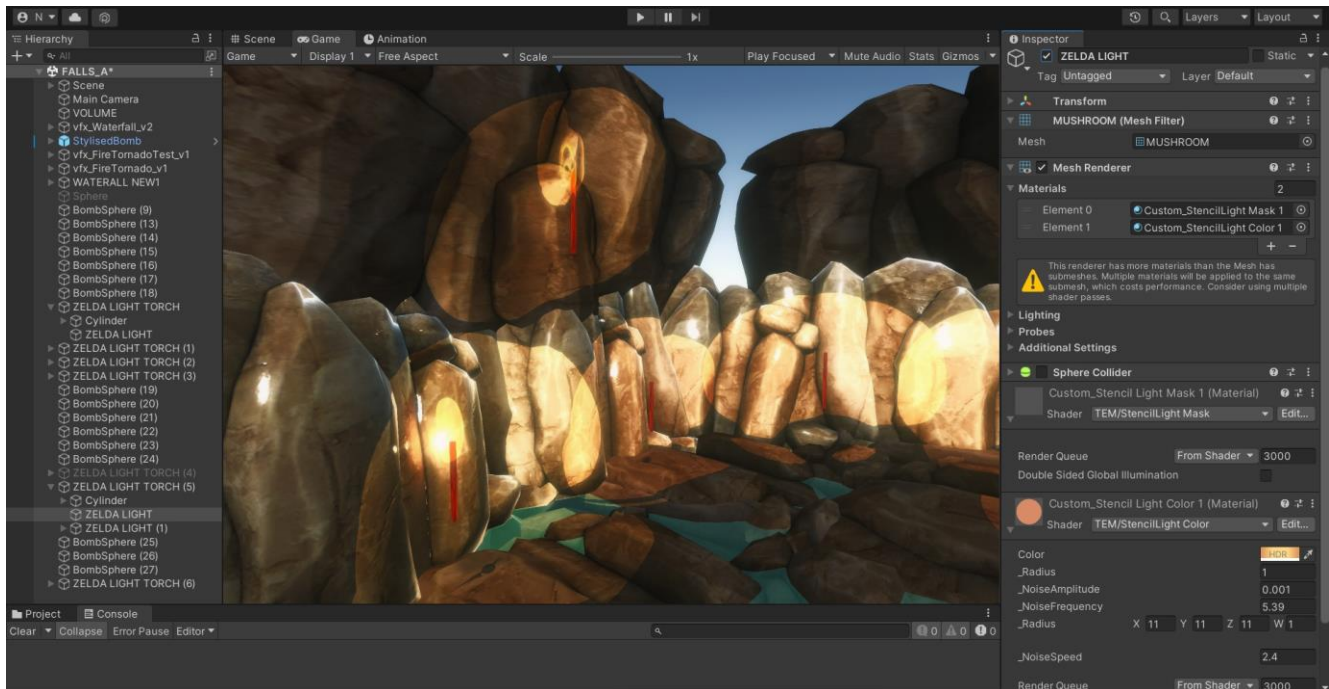
The perks of this method is that can be used with other effects that use the stencil buffer in the same scene, like the Zelda like toon lighting effect.





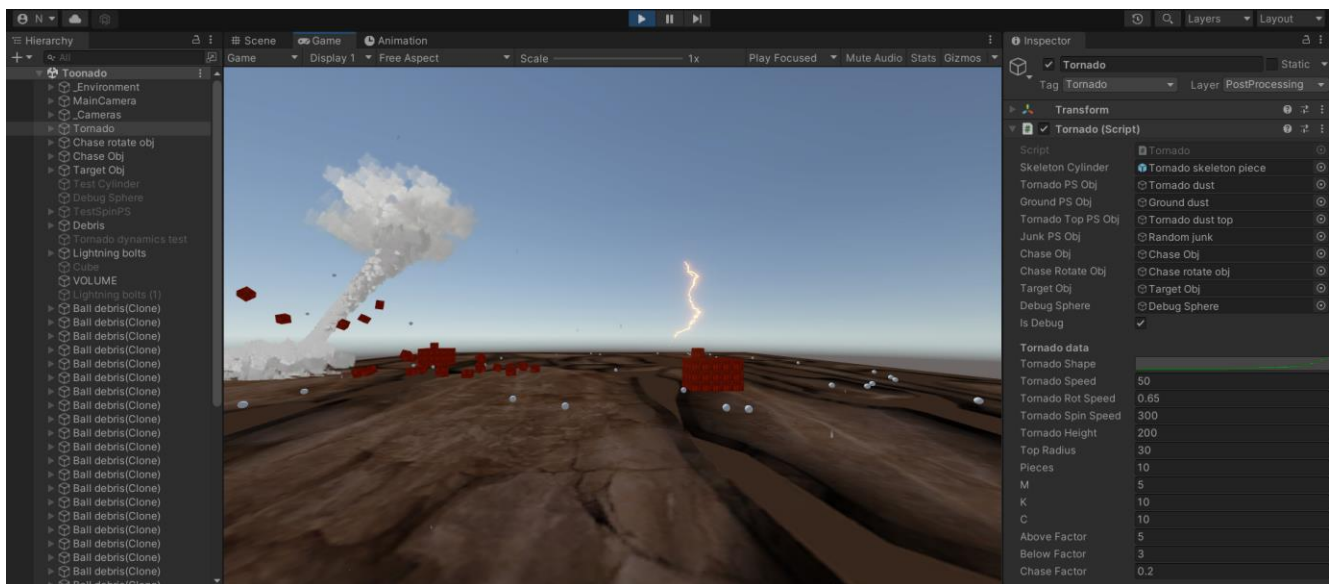
## B. Cartoon Lighting Effect

The cartoon style lighting effect is rendered by using a special material and shader on a sphere that intersects the near geometry and using the stencil buffer. The sphere mesh is assigned two materials, one mask material that writes to the stencil buffer and one material that renders the light on the intersecting mesh. The order of the materials in the Mesh Renderer is important, the mask material must be first on the materials list.



## C. Tornado Effect

The tornado system consists of a number of particles and a controller that shapes their behavior to form a dynamic tornado. The system also has a Lightning creation module for added effect.



## D. Sky Lightning Effect

The lightning module is controlled by the “Add Lightning” script that references the Lightning prefab, which generates the lighting.



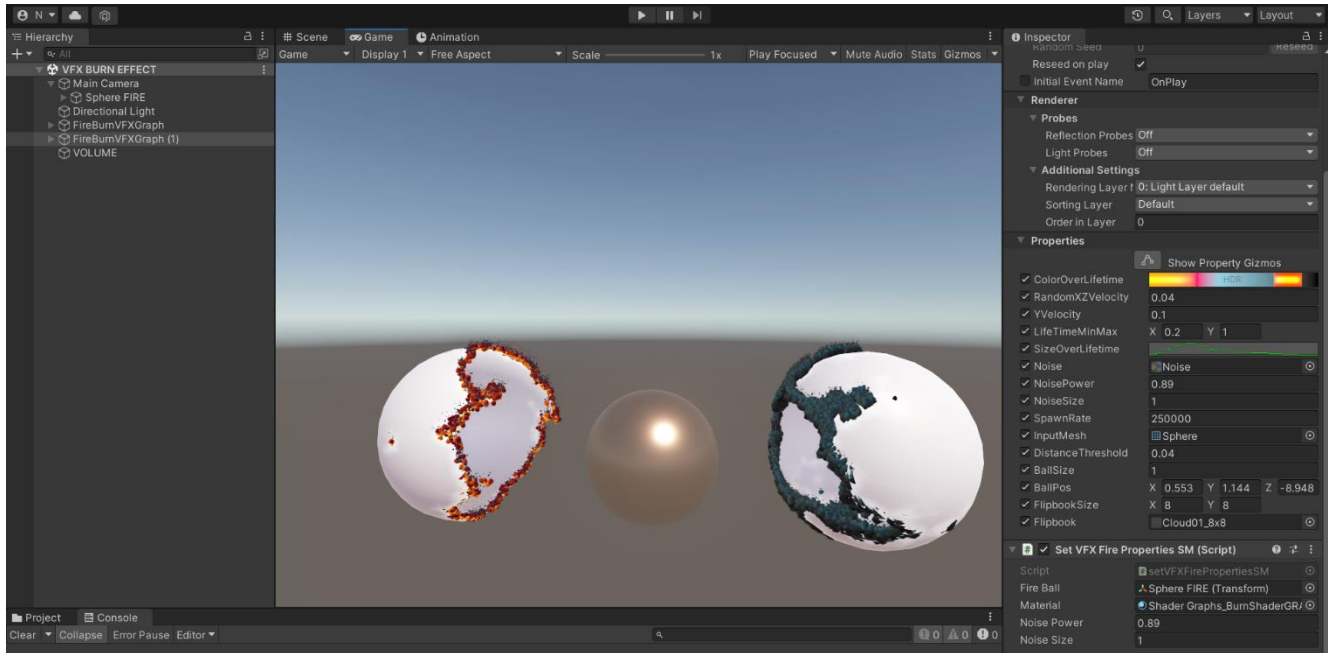
## E. Dynamic Lightning Effect

The localized lightning effect is composed of a VFX and a few transforms to define the positioning of the particles in the lightning arc. The transforms are passed in the VFX through the “VFX Property Binder” script attached in the same gameobject as the VFX.



## F. Dynamic Dissolve Effect

The dynamic dissolve effect is composed of a VFX and a controller in “Set VFX Fire Properties SM” script, which should be attached in the same gameobject that holds the VFX.



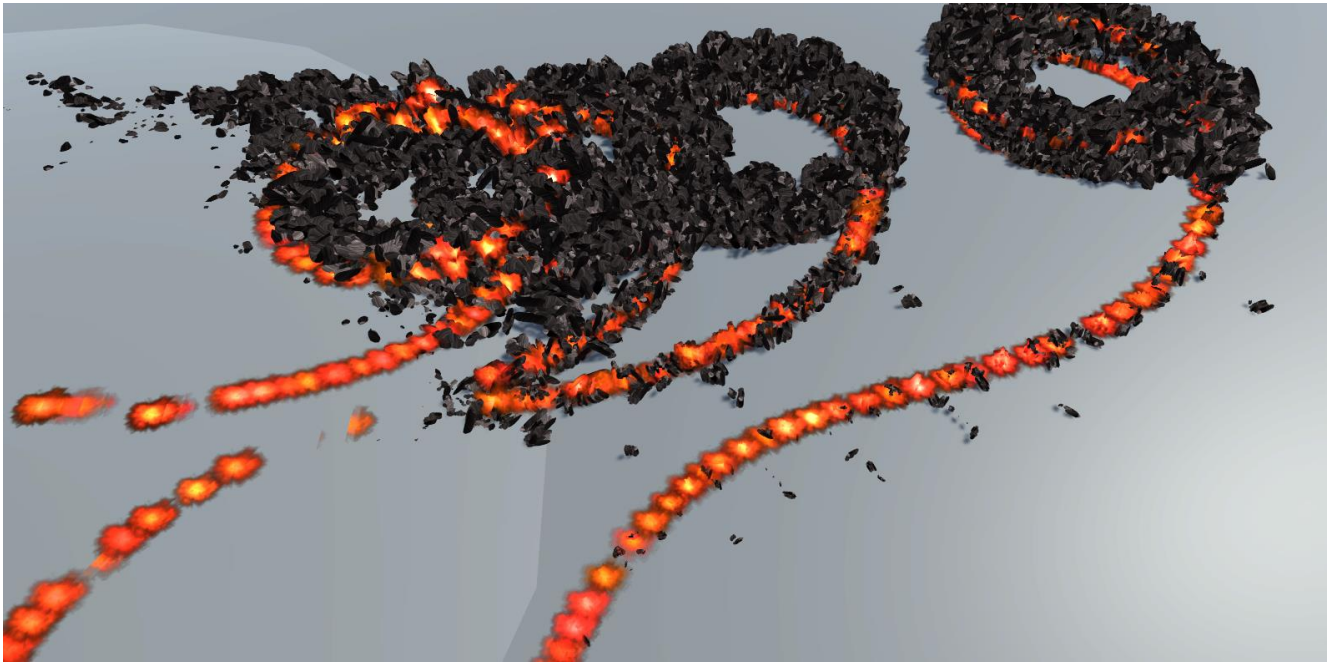
## G. Nuke

The Nuke system is composed of a number of particles that will play when the system is enabled in the scene.





## H. Ground burn effect



### NOTES:

When a Visual Effect Graph effect is not appearing

1. Make sure the Visual Effect Graph is installed from Unity Package Manager
2. Open the Visual Effect and click Save to recompile the effect

