AuroraBorealis Pack v1.0

How the package works:

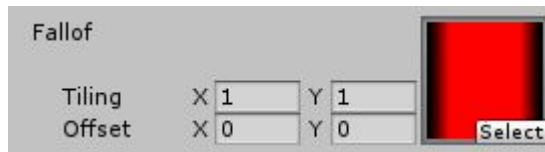This model pack contains different aurora borealis models. This little guide will help you to understand how to use it. The volume effect is achieved due to 3D models with a large number of overlapping planes. Then these planes was cut outed using alpha clipping in the shader which helps with performance. At the end, the shader draws for each plane an individual layer and they all add up to create this volumetric effect.

All these models should be used with AuroraBorealis shader which ships with this pack.

## AuroraBorealis shader parameters

Fallof			
Tiling	X 1	Y 1	
Offset	X 0	Y 0	Select

Ramp			
Tiling	X 1	Y 1	
Offset	X 0	Y 0	Select

Noise			
Tiling	X 1	Y 1	
Offset	X 0	Y 0	Select

NoiseEvolutionSpeed	1
InvertEvolutionDirection	☐
InvertNoiseTexture	☐
MovementSpeed	0
Sharpness	0.49

Color			
Tiling	X 1	Y 1	
Offset	X 0	Y 0	Select

Color_Multiplier	1
Dark_Multiplier	1
Dark_Tint	
Middle_Multiplier	1
Middle_Tint	
Highlight_Multiplier	1
Highlight_Tint	

Fallof texture

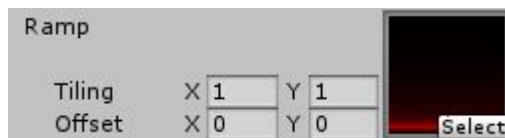
This texture controls the masking on the edges of the model.
You can use any texture from "AuroraBorealisPack/Textures/Falloff"

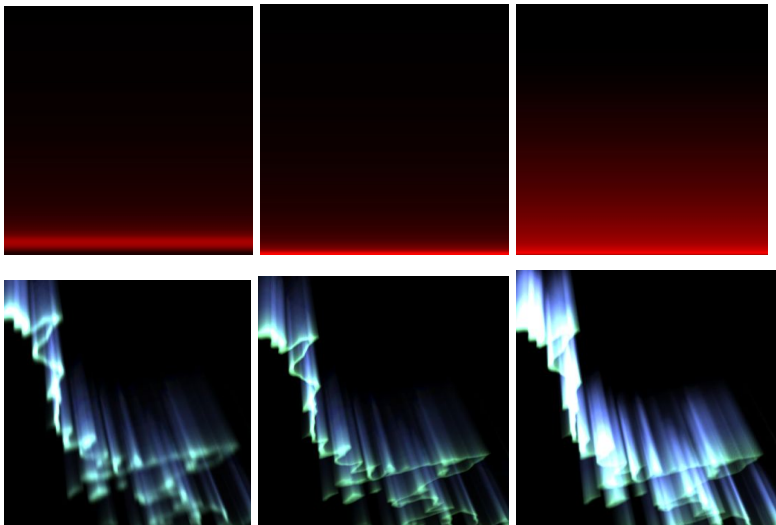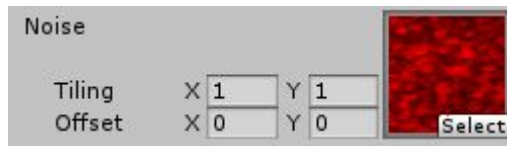*Falloff_Center:*   *Falloff_Sharp:*   *Falloff_Smooth:*
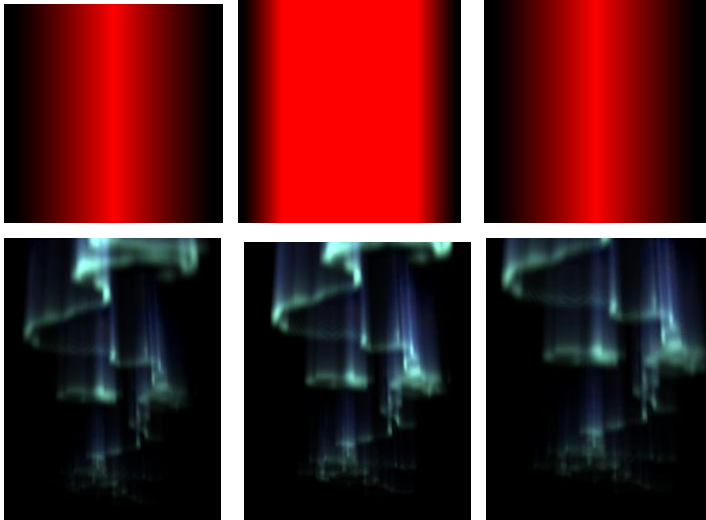
Ramp texture

This texture controls the vertical distribution of density.
You can use any texture from "AuroraBorealisPack/Textures/Ramps"

Ramp_Default: *Ramp_Sharp:*   *Ramp_Strong:*
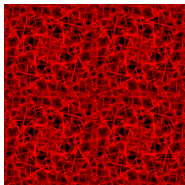
Noise texture

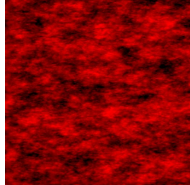This texture controls movement and overall shape of the effect.
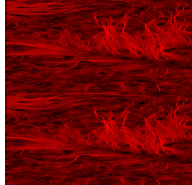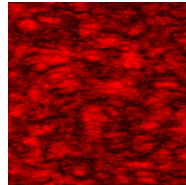You can use any texture from "AuroraBorealisPack/Textures/Noises"
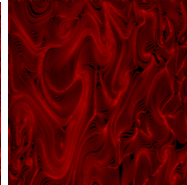
Noise_Caustic	*Noise_Default*	*Noise_Lines*	*Noise_Turbulent*	*Noise_Vortex*	*Noise_Wave*
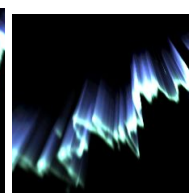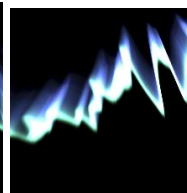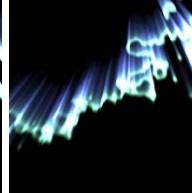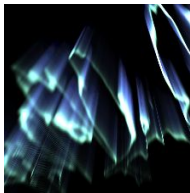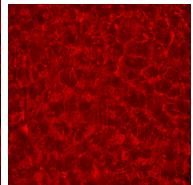
NoiseEvolutionSpeed

Controls the speed of shape animation.

InvertEvolutionDirection

If enabled this parameter will invert the direction of shape animation.

InvertNoiseTexture

If enabled this parameter will invert the noise texture.

MovementSpeed

This parameter controls the offset speed of the effect.

Sharpness

Controls the sharpness of the shape.
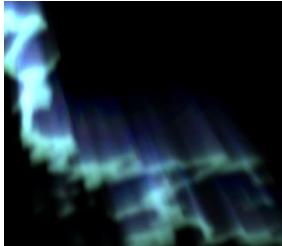
Sharpness = 0   Sharpness = 1
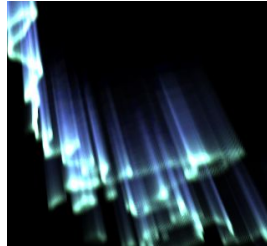
Color texture
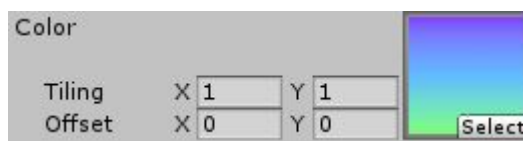
This texture controls the vertical distribution of color.
You can use any texture from "AuroraBorealisPack/Textures/Colors"
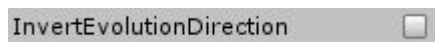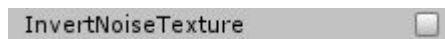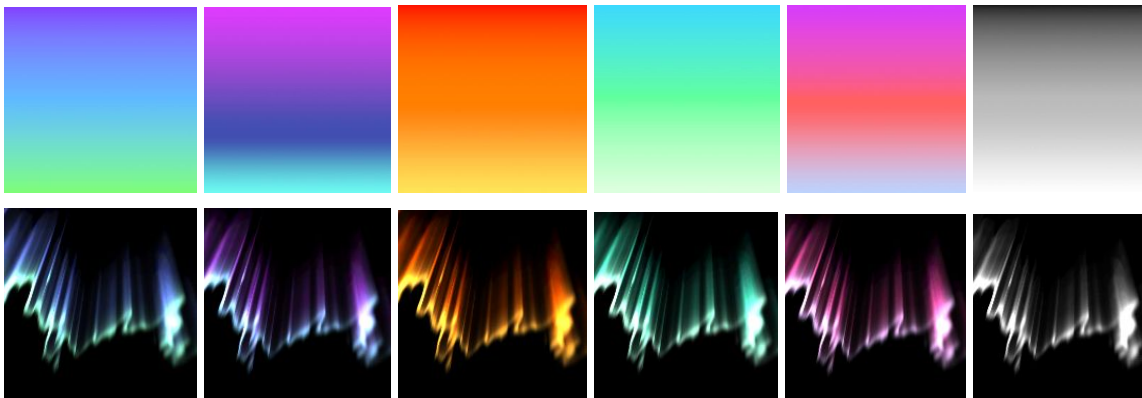

If you want a custom color for your effect then you should use "Color_Grayscale" texture with combination of "Dark_Tint","Middle_Tint" and "Highlight_Tint" parameters.

Color_Multiplier

Color of effect will be multiplied by this value.

Dark_Multiplier

Color of dark zones will be multiplied by this value.

Dark_Tint

Dark_Tint		🖊

Color of dark zones will be tinted by this color.

Middle_Multiplier

Middle_Multiplier	1

Color of middle zones will be multiplied by this value.

Middle_Tint

Middle_Tint		🖊

Color of middle zones will be tinted by this color.

Highlight_Multiplier

Highlight_Multiplier	1

Color of highlight zones will be multiplied by this value.

Highlight_Tint

Highlight_Tint		🖊

Color of highlight zones will be tinted by this color.

Using AuroraBorealis Pack in your scene.

In this pack you can find 4 different types of models:
- Plane
- Arc 90 degrees
- Arc 180 degrees
- Curves

Each of these model types have 5 levels of quality (50, 100, 150, 200, 300).
These quality levels define the count of overlapping planes. More overlapping planes means the better quality, but this affects the performance.
For example if you want very high quality straight auroras you should use "Plane_Subdivs300" model. If you creating a game for mobile device and you want a very curved auroras then you should use "Curve01_Subdivs50".

To create a new aurora you should add any model from this pack to your scene.
Then create a new material and apply "AuroraBorealis_Pack/AuroraBorealis" shader to it.
In the end you should add the textures to your material. You can use any textures from corresponding folders. For example for "Falloff" texture you can use any texture from "AuroraBorealisPack\Textures\Falloff".
Or just apply any material that ships with this package to the model.