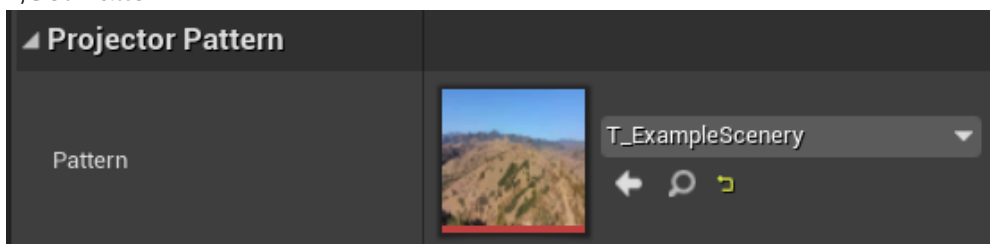




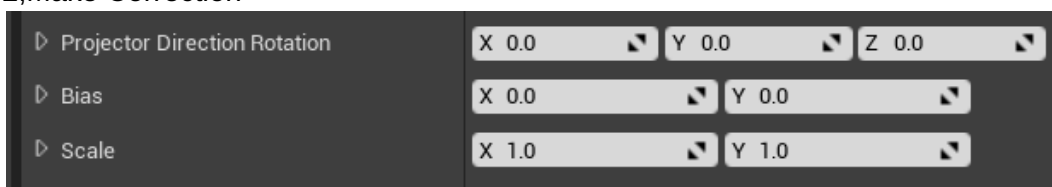
Quick Start

Project my pattern

1,Set Pattern

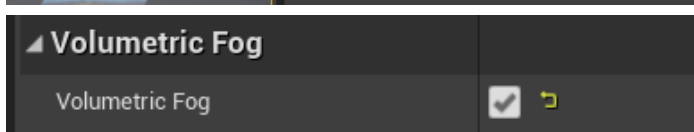
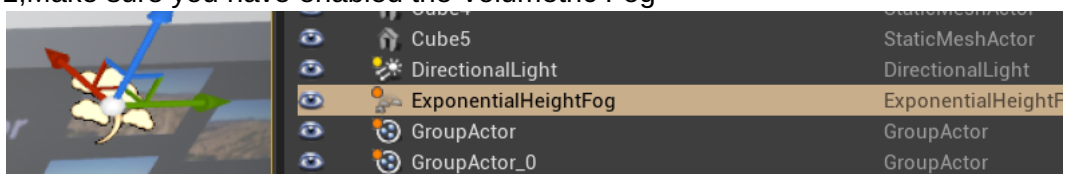


2,Make Correction

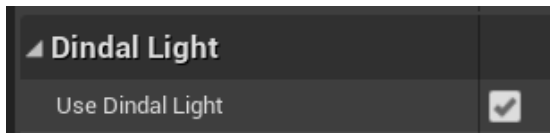


Use Tyndall Effect Light

1,Make sure you have enabled the Volumetric Fog

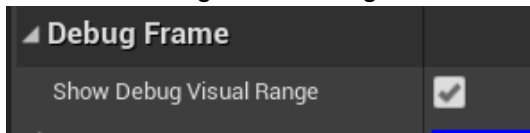


2,Enable Use Tyndall Effect Light

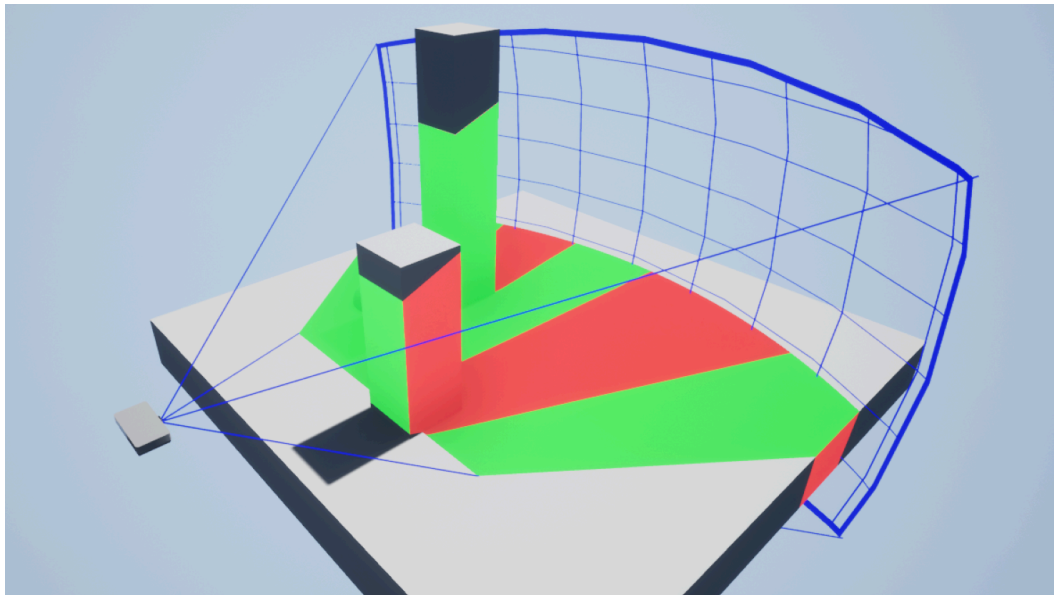
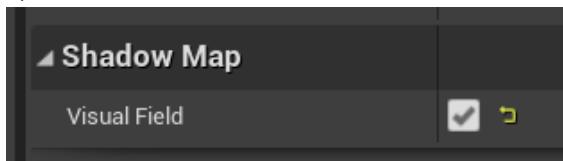


Use as visual field

1, Enable Debug Visual Range



2, Enable Visual Field



Projector Settings

Debug Frame

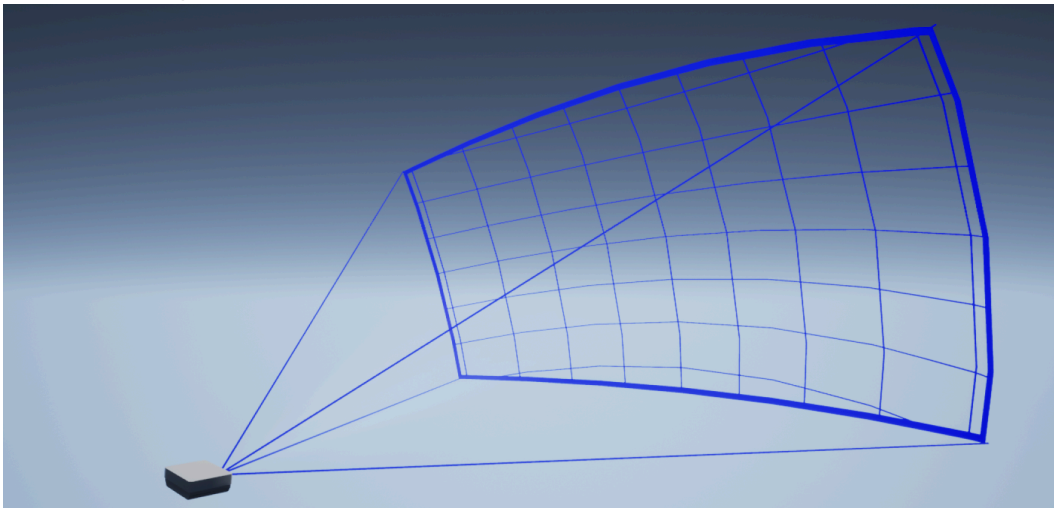
▲ Debug Frame	
Show Debug Visual Range	☐ 
▲ Debug Color	
R	0.0 
G	1.0 
B	1.0 
A	1.0 
Add Debug Depth Billboard	☐ 
Depth Debug Size	32.0 
▶ Debug Depth Board Location	X 0.0  Y 0.0  Z 100.0 

Show Debug Visual Range:

Show debug range frame

Debug Color:

Color of debug frame



Add Debug Depth Billboard:

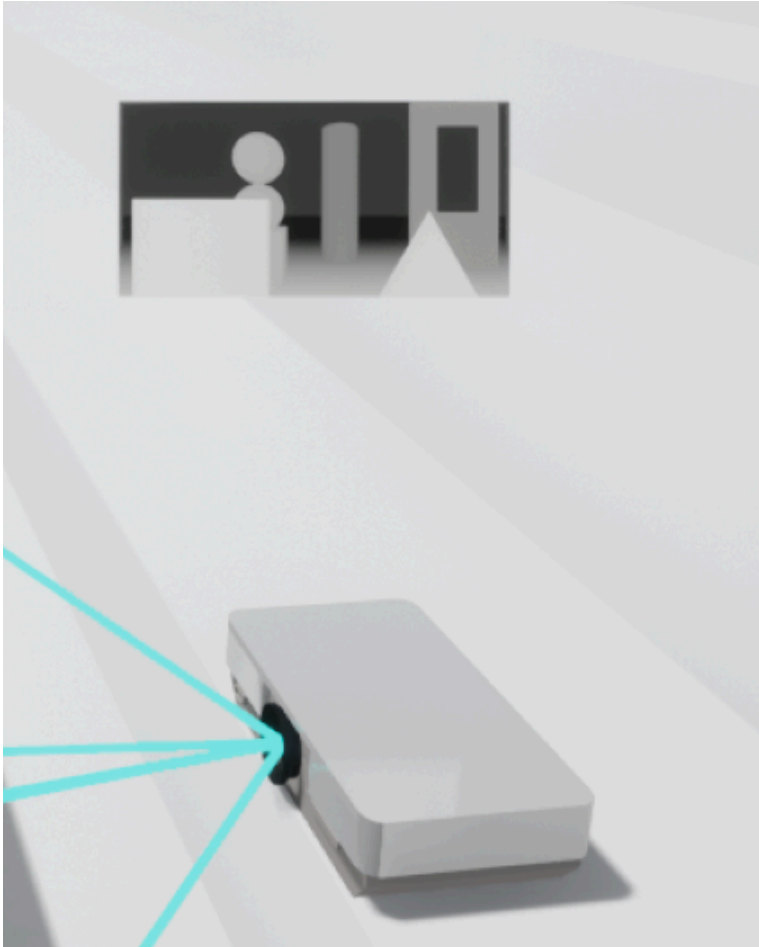
Add a billboard to see depth map

Depth Debug Size:

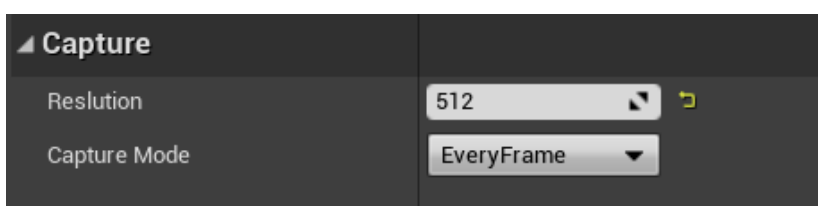
Size of this billboard

Debug Depth Board Location:

Relative location of this board



Capture



Reslution:

The reslution X that the render target is.

Current size is:(Reslution,Reslution*ReslotionY/X)

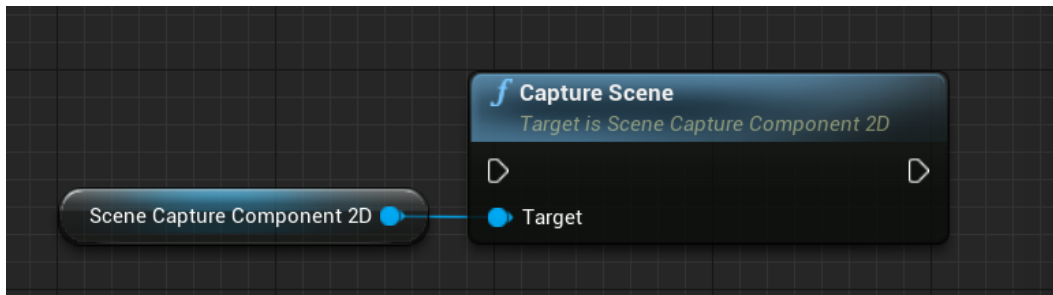
Higher reslution means better shadow map quality,but much expensive.

Capture Mode:

Every Frame:Capture depth map every frame

On Movement:Only capture when projector is moving

Once:Capture once,do not update.but you can call Capture Scene manually to update



Projector FOV

ResolutionY/X:

ResolutionY/ResolutionX,for example,my screen resolution is 1920*1080,so
 $\text{ResolutionY/X} = 1080/1920 = 0.5625$

Field Of View:

In degrees,the angle that field of view is

Max Distance:

Max distance can see,related to projector light fade distace

Projector Light

Projector Fade Exp:

Fade by distance,0 means no fade

Projector Intensity:

Light Intensity

Color Correction:

Multiply a color with pattern color,to correct color

Light Mask:

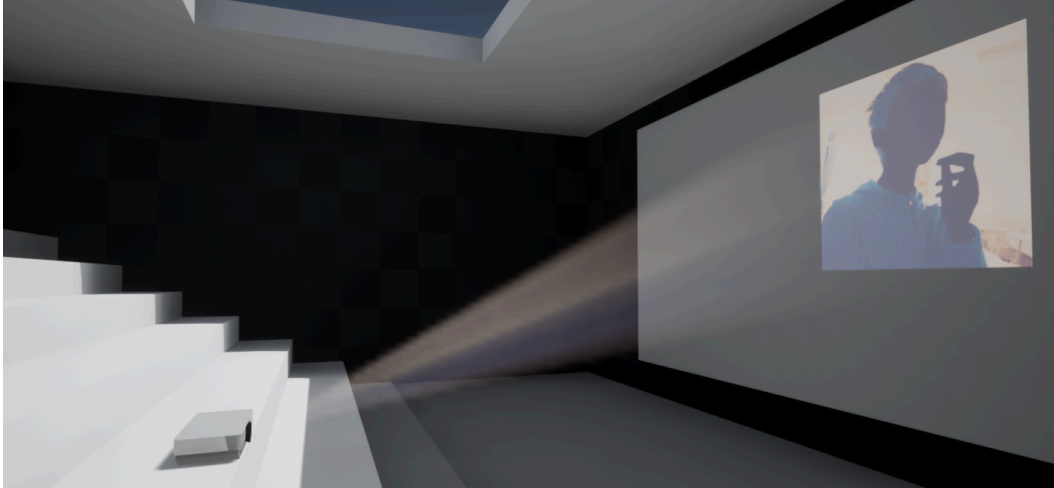
A mask for light,could be with color as afilter,or used as a light shape



Projector Pattern

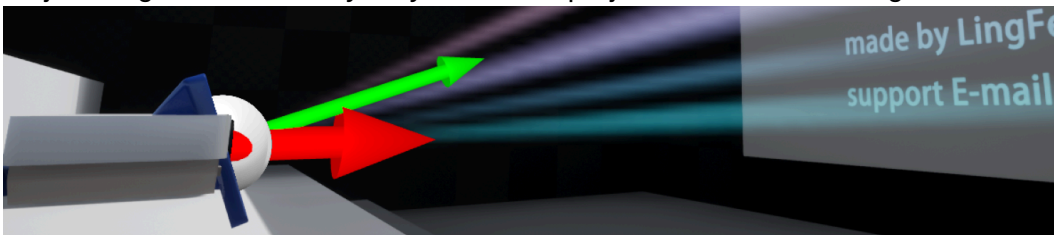
Pattern:

What to project, like this cool boy picture



Projector Direction Rotation:

Projector light direction, may be you want to project on somewhere higher



Bias:

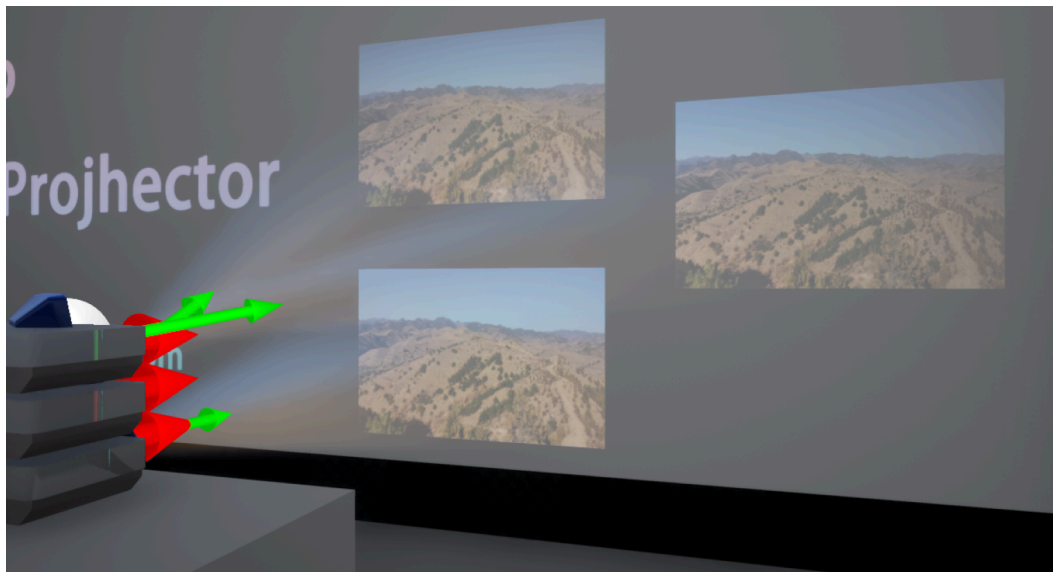
Pattern translation

Scale:

Pattern scale

You can make projector project pattern sideways on wall by setting these parameters.

But make sure the red arrow point directly at wall to avoid distortion



Tyndall Effect Light

Use Tyndall Effect Light:

Whether use Tyndall Effect light, you should enable Volumetric Fog in ExponentialHeightFog if you want to use Tyndall Effect Light

Tyndall Effect Destination:

Destination of Tyndall Effect light

Tyndall Effect Intensity:

Intensity of Tyndall Effect light

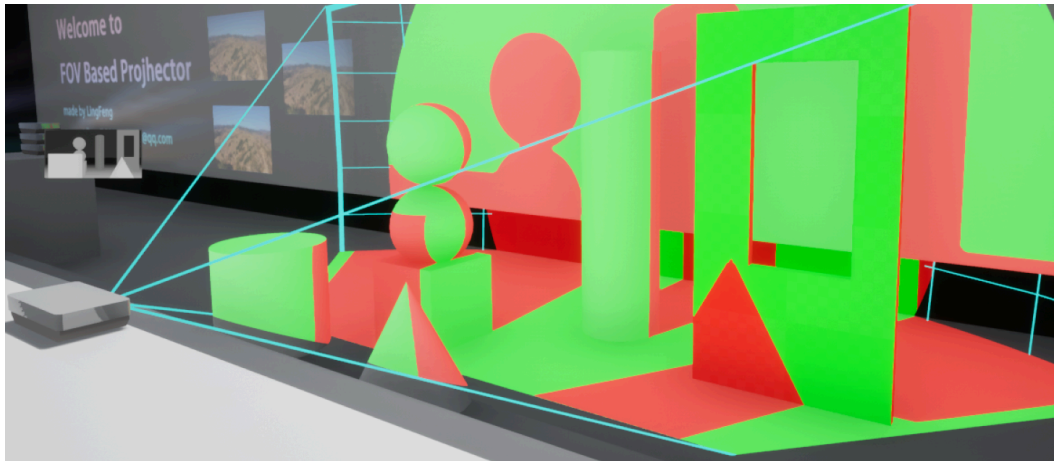
Tyndall Effect Fade Exp:

Fade by distance, 0 means no fade

Shadow Map

Visual Field:

Use as visual field, enable Tyndall Effect light automatically



Depth Bias

Bias of depth map,to make some correction.

Modify Projector Parameters in Runtime

Projector parameters are related to many functions,so it make no sense to modify them directly in runtime.So they are private and you're supposed to set projector settings by functions

- ▲ Capture
 - f SetCaptureMode
 - f GetCaptureMode
- ▲ Projector FOV
 - f SetMaxDistance
 - f SetResolutionY\X
 - f SetFieldOfView
 - f GetFovParameters
- ▲ Projector Light
 - f SetLightMask
 - f SetColorCorrection
 - f SetProjectorIntensity
 - f SetProjectorFadeExp
 - f GetProjectorLightParameters
- ▲ Projector Pattern
 - f SetProjectorDirectionRotation
 - f SetPattern
 - f SetPatternBias
 - f SetPatternScale
 - f GetProjectorPatternParameters
- ▲ Dindal Light
 - f SetUseDindalLight
 - f SetDindalIntensity
 - f SetDindalFadeExp
 - f SetDindalDestinction
 - f GetDindalParameters
- ▲ Visual Range
 - f SetShowDebugVisualRange
 - f SetVisualRangeColor
- ▲ Manual Update
 - f FOV Changed
 - f ProjectorTranslated

These functions are same as variables in Projector Settings.

Variables are private,so you should get their value by these functions in other blueprints.

Get Fov Parameters

- Max Distacne 
- Field Of View 
- Resolution Y/X 

Get Dindal Parameters

- Use Dindal Light 
- Dindal Intensity 
- Dindal Fade Exp 
- Dindal Destinction 

Get Projector Light Parameters

- Projector Intensity 
- Projector Fade Exp 
- Color Correction 
- Light Mask 

Get Projector Pattern Parameters

- Pattern 
- Projector Direction Rotation 
- Bias 
- Scale 

Get Capture Mode

- Capture Mode 