ANEXO III

BIOMÍMESIS: CREACIÓN DE UN VIDEOCLIP CON FOTOGRAMETRÍA. PRUEBAS GRÁFICAS EN UNITY

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Facultat de Belles Arts de Sant Carles
Grado en Bellas Artes
Curso 2021-2022

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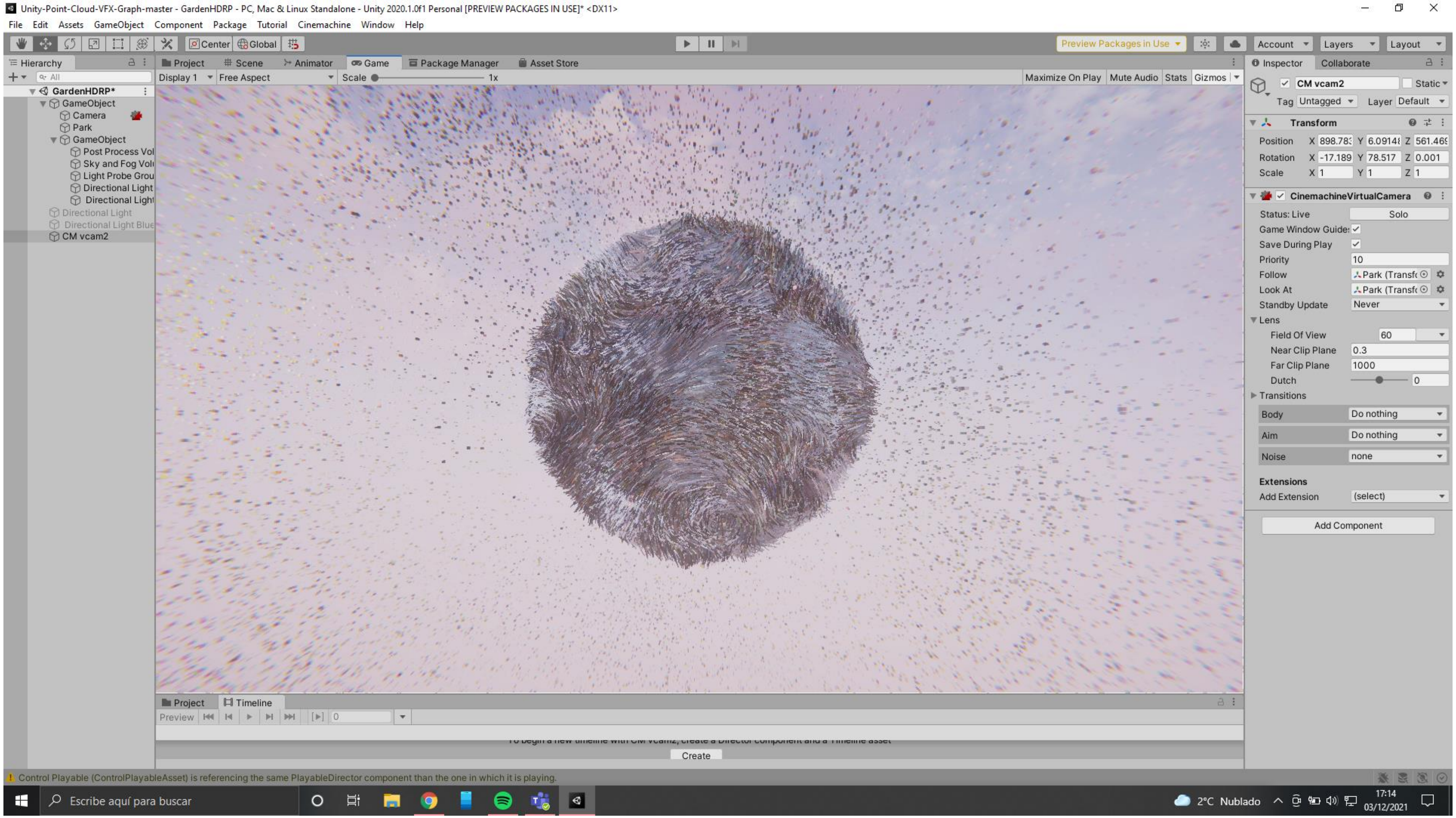
PRUEBAS CON LA HERRAMIENTA DE VFX GRAPH



Unity-Point-Cloud-VFX-Graph-master - GardenHDRP - PC, Mac & Linux Standalone - Unity 2020.1.0f1 Personal [PREVIEW PACKAGES IN USE]* <DX11>

CM vcam2 ☐ Static
Tag Untagged Layer Default

Transform
Position X 898.783 Y 6.09148 Z 561.469
Rotation X -17.189 Y 78.517 Z 0.001
Scale X 1 Y 1 Z 1

CinemachineVirtualCamera
Status: Live
Game Window Guides ☑
Save During Play ☑
Priority 10
Follow Park (Transform)
Look At Park (Transform)
Standby Update Never
Lens
Field Of View 60
Near Clip Plane 0.3
Far Clip Plane 1000
Dutch 0
Transitions
Body Do nothing
Aim Do nothing
Noise none
Extensions
Add Extension (select)

To begin a new timeline with CM vcam2, create a Director component and a Timeline asset

Control Playable (ControlPlayableAsset) is referencing the same PlayableDirector component than the one in which it is playing.

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Cinemachine
Window
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Global
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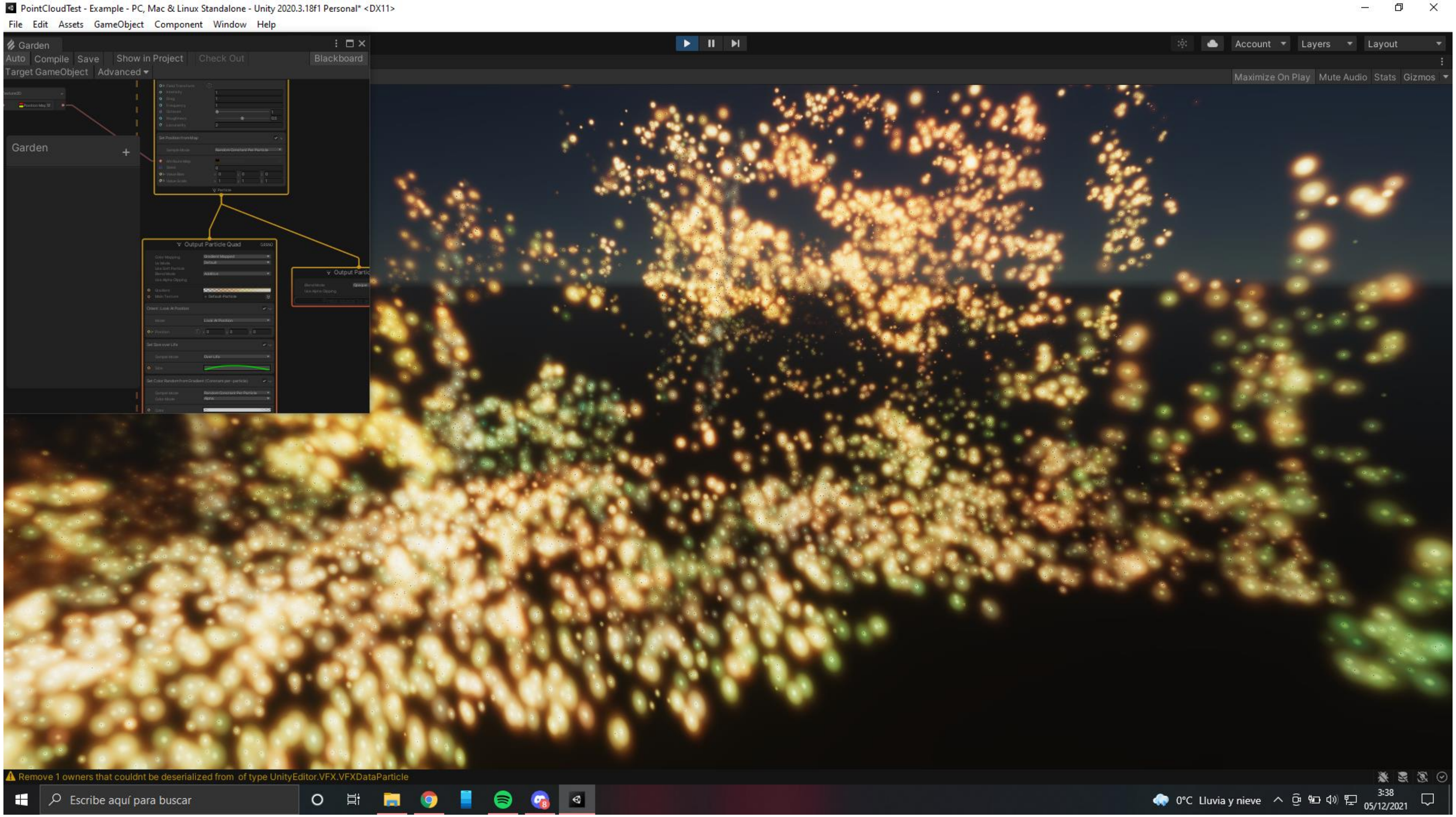
Hierarchy
All
GardenHDRP*
GameObject
Camera
Park
GameObject
Post Process Vol
Sky and Fog Vol
Light Probe Grou
Directional Light
Directional Light
Directional Light
Directional Light Blue
CM vcam2
Project
Scene
Animator
Game
Package Manager
Asset Store
Display 1
Free Aspect
Scale
1x
Maximize On Play
Mute Audio
Stats
Gizmos
Inspector
Collaborate
Solo
Add Component
Project
Timeline
Preview
0
Create
Escribe aquí para buscar
2°C Nublado
17:14
03/12/2021


PointCloudTest - Example - PC, Mac & Linux Standalone - Unity 2020.3.18f1 Personal* <DX11>
File
Edit
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Component
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Help
Garden
Auto
Compile
Save
Show in Project
Check Out
Blackboard
Target GameObject
Advanced
Garden
Output Particle Quad
Account
Layers
Layout
Maximize On Play
Mute Audio
Stats
Gizmos
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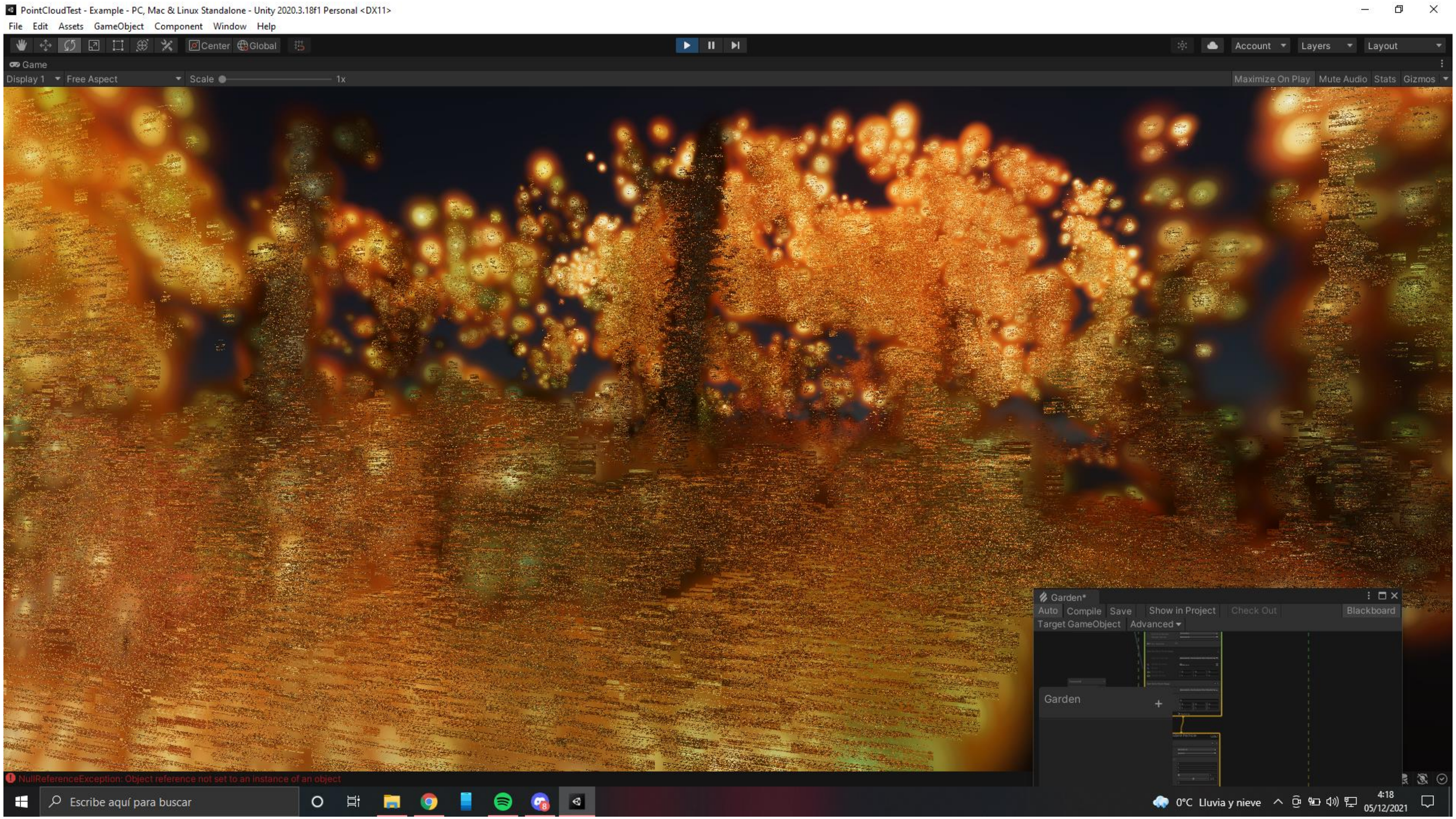
0°C Lluvia y nieve
3:38
05/12/2021

```
Remove 1 owners that couldnt be deserialized from  of type UnityEditor.VFX.VFXDataParticle
```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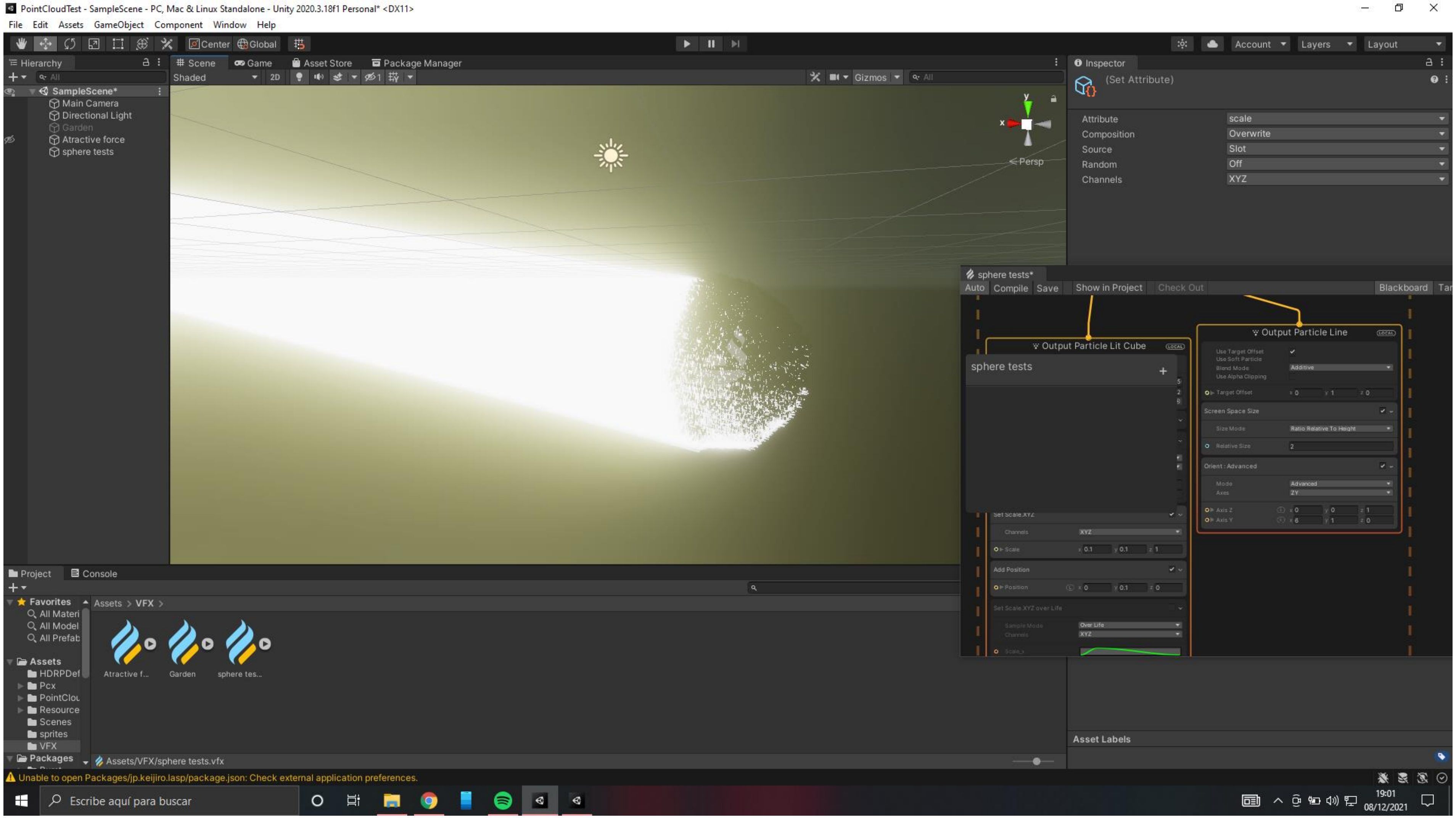
4:18
05/12/2021

```
NullReferenceException: Object reference not set to an instance of an object
```



PointCloudTest - SampleScene - PC, Mac & Linux Standalone - Unity 2020.3.18f1 Personal* <DX11>

(Set Attribute)

Attribute: scale
Composition: Overwrite
Source: Slot
Random: Off
Channels: XYZ

sphere tests*

Output Particle Lit Cube

Set Scale.XYZ
Channels: XYZ
Scale: x 0.1 y 0.1 z 1

Add Position
Position: x 0 y 0.1 z 0

Set Scale.XYZ over Life
Sample Mode: Over Life
Channels: XYZ

Output Particle Line

Use Target Offset ✓
Use Soft Particle
Blend Mode: Additive
Use Alpha Clipping
Target Offset: x 0 y 1 z 0

Screen Space Size ✓
Size Mode: Ratio Relative To Height
Relative Size: 2

Orient : Advanced ✓
Mode: Advanced
Axes: ZY
Axis Z: x 0 y 0 z 1
Axis Y: x 6 y 1 z 0

Assets/VFX/sphere tests.vfx

Unable to open Packages/jp.keijiro.lasp/package.json: Check external application preferences.

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Atractive force
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Asset Labels
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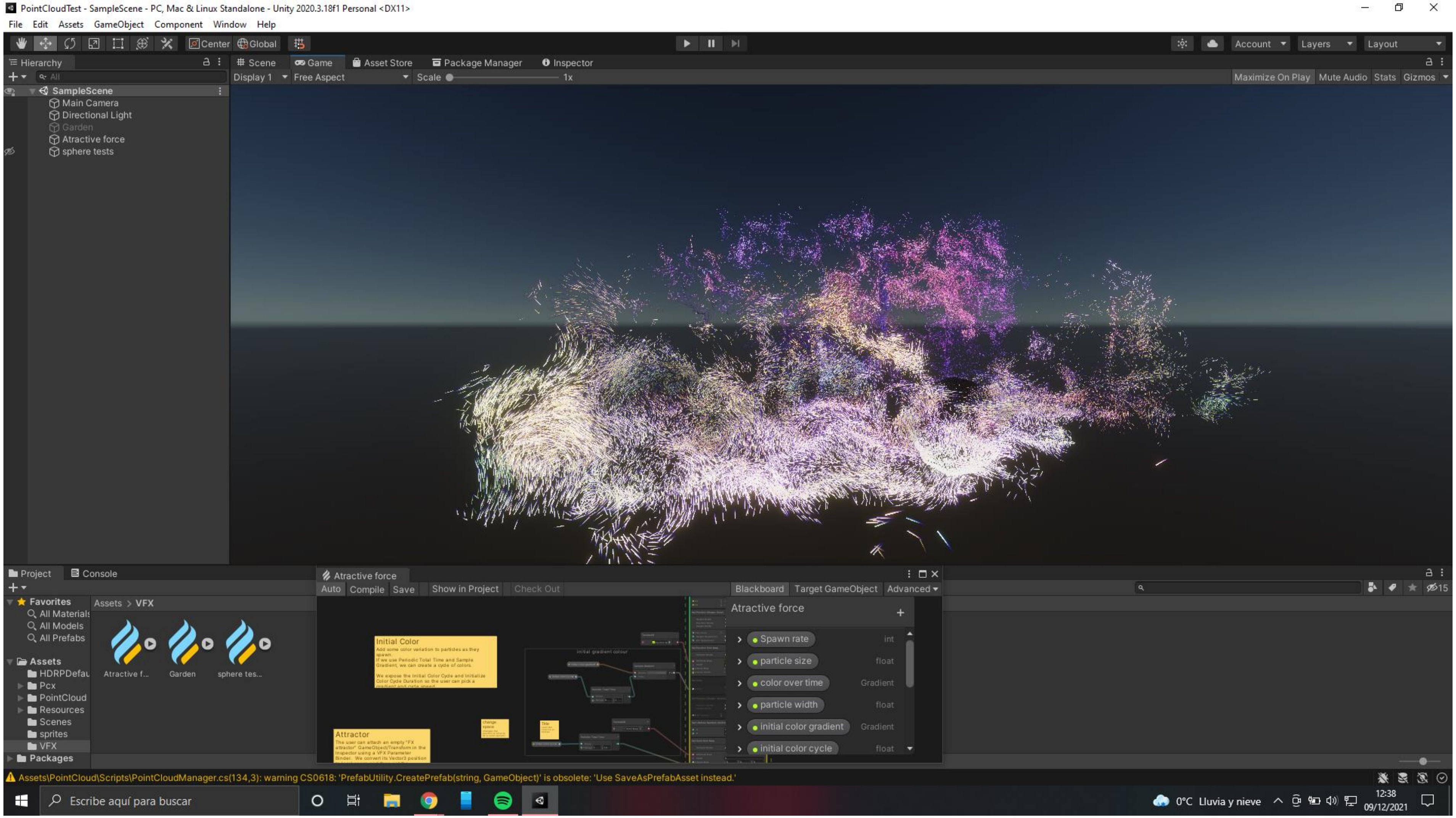
08/12/2021


PointCloudTest - SampleScene - PC, Mac & Linux Standalone - Unity 2020.3.18f1 Personal <DX11>
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Target GameObject
Advanced
initial gradient colour
change space
Title
Atractive force
Spawn rate
int
particle size
float
color over time
Gradient
particle width
float
initial color gradient
Gradient
initial color cycle
float
15
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12:38
09/12/2021

Initial Color

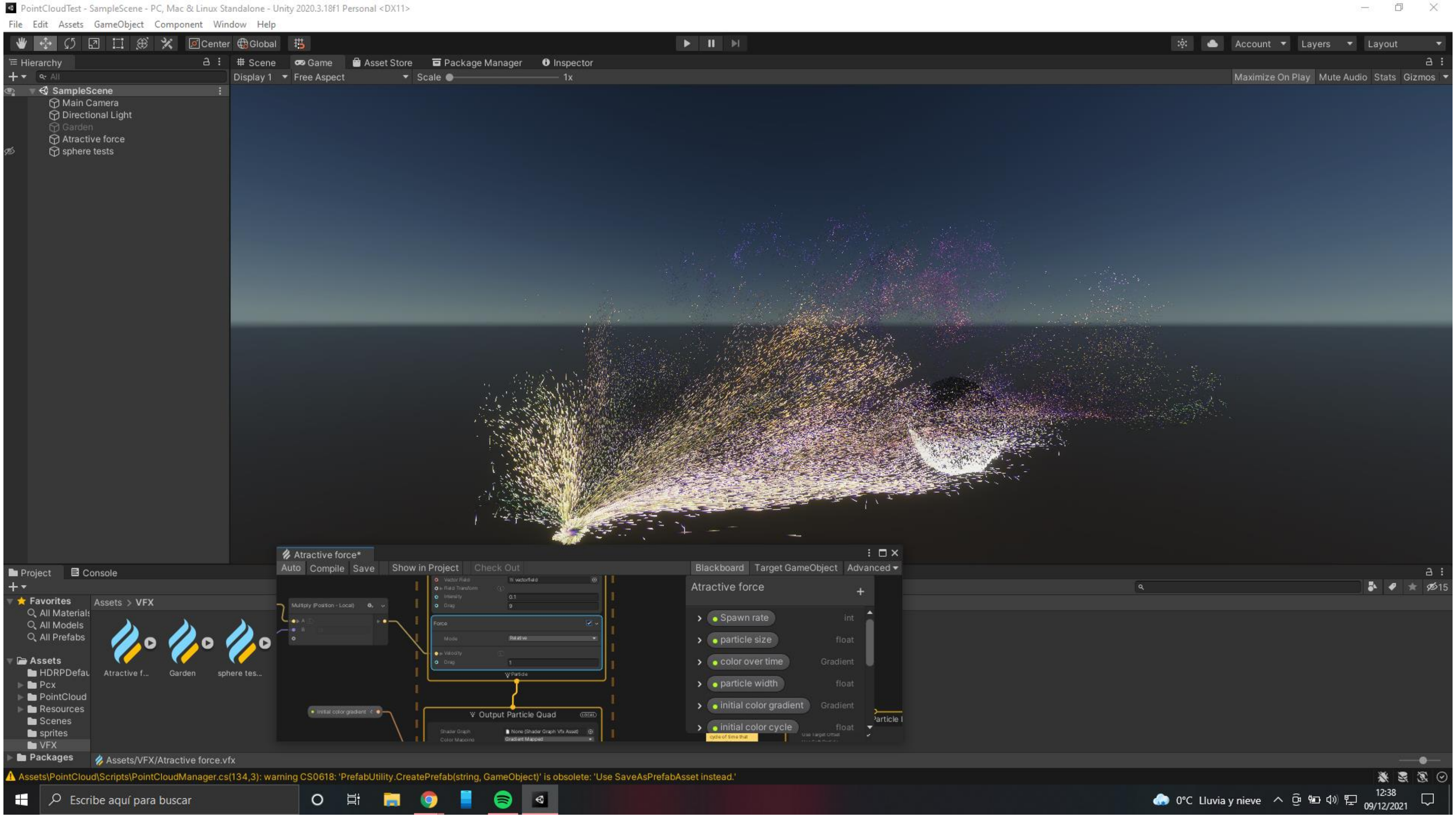
Add some color variation to particles as they spawn.
If we use Periodic Total Time and Sample Gradient, we can create a cycle of colors.

We expose the Initial Color Cycle and Initialize Color Cycle Duration so the user can pick a

Attractor

The user can attach an empty "FX attractor" GameObject/Transform in the Inspector using a VFX Parameter Binder. We convert its Vector3 position

```
Assets\PointCloud\Scripts\PointCloudManager.cs(134,3): warning CS0618: 'PrefabUtility.CreatePrefab(string, GameObject)' is obsolete: 'Use SaveAsPrefabAsset instead.'
```


PointCloudTest - SampleScene - PC, Mac & Linux Standalone - Unity 2020.3.18f1 Personal <DX11>

Assets/VFX/Atractive force.vfx

```
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```

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Atractive force*
Auto
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Save
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Target GameObject
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Force
Output Particle Quad
Atractive force
Spawn rate int
particle size float
color over time Gradient
particle width float
initial color gradient Gradient
initial color cycle float
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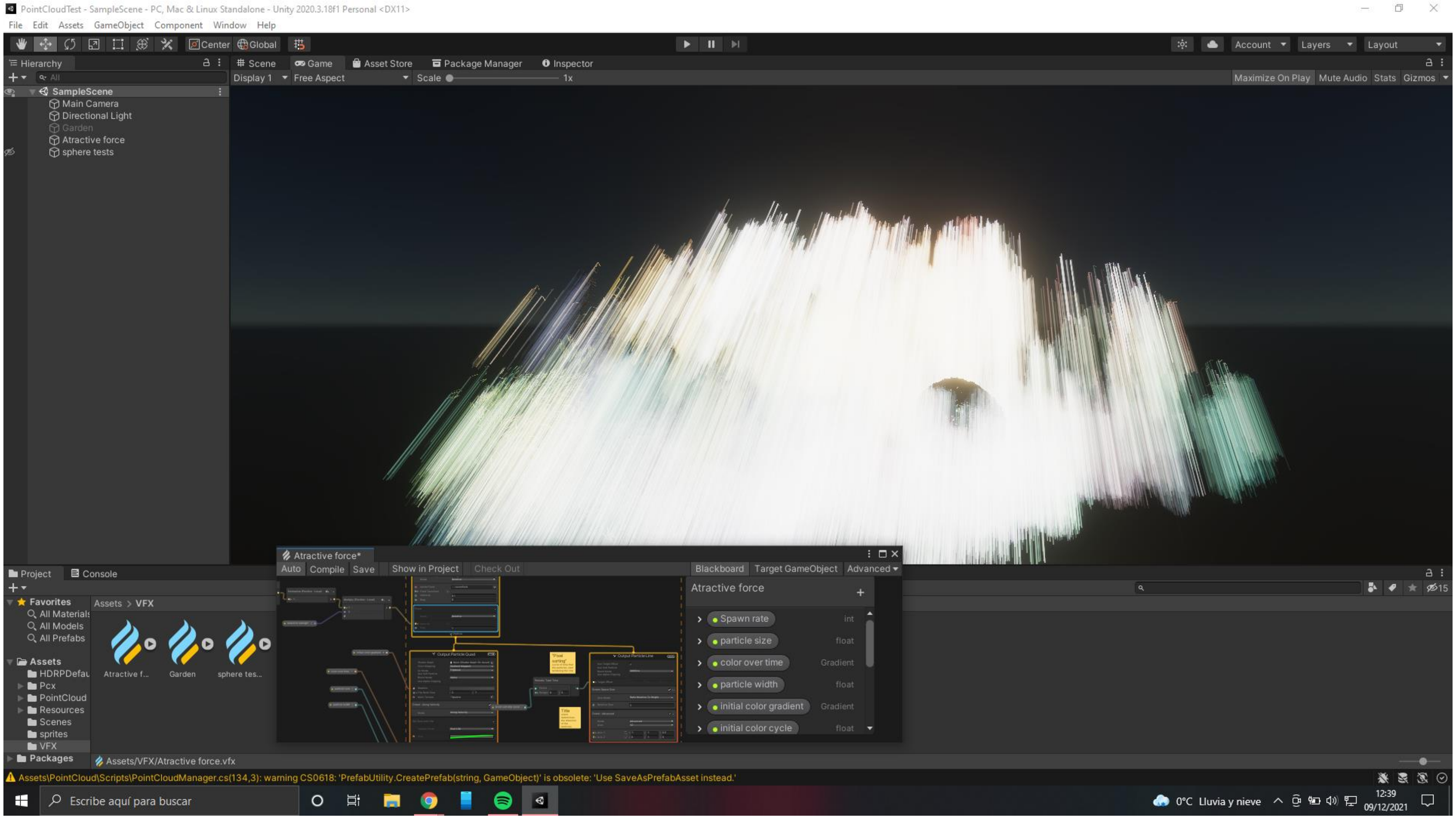
PointCloudTest - SampleScene - PC, Mac & Linux Standalone - Unity 2020.3.18f1 Personal <DX11>
File Edit Assets GameObject Component Window Help
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Hierarchy
SampleScene
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Scene Game Asset Store Package Manager Inspector
Display 1 Free Aspect Scale 1x
Maximize On Play Mute Audio Stats Gizmos
Atractive force*
Auto Compile Save Show in Project Check Out
Blackboard Target GameObject Advanced
Atractive force
Spawn rate int
particle size float
color over time Gradient
particle width float
initial color gradient Gradient
initial color cycle float
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Assets/VFX/Atractive force.vfx
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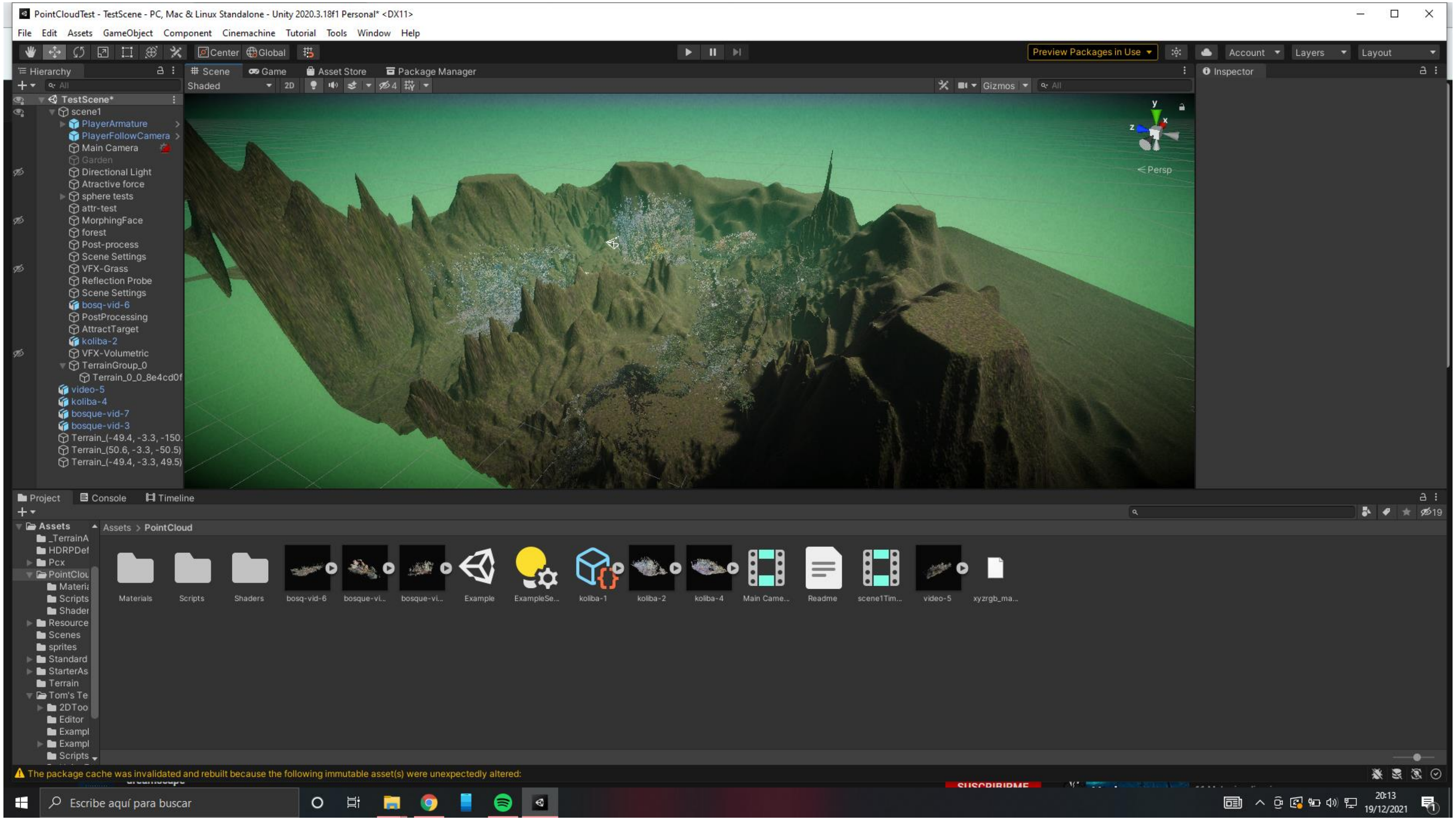
```
Assets\PointCloud\Scripts\PointCloudManager.cs(134,3): warning CS0618: 'PrefabUtility.CreatePrefab(string, GameObject)' is obsolete: 'Use SaveAsPrefabAsset instead.'
```

PRRUEBAS DE ILUMINACIÓN Y POSTPROCESADO


PointCloudTest - TestScene - PC, Mac & Linux Standalone - Unity 2020.3.18f1 Personal* <DX11>
File Edit Assets GameObject Component Cinemachine Tutorial Tools Window Help
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PlayerFollowCamera
Main Camera
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sphere tests
attr-test
MorphingFace
forest
Post-process
Scene Settings
VFX-Grass
Reflection Probe
Scene Settings
bosq-vid-6
PostProcessing
AttractTarget
koliba-2
VFX-Volumetric
TerrainGroup_0
Terrain_0_0_8e4cd0f
video-5
koliba-4
bosque-vid-7
bosque-vid-3
Terrain_(-49.4, -3.3, -150.
Terrain_(50.6, -3.3, -50.5)
Terrain_(-49.4, -3.3, 49.5)
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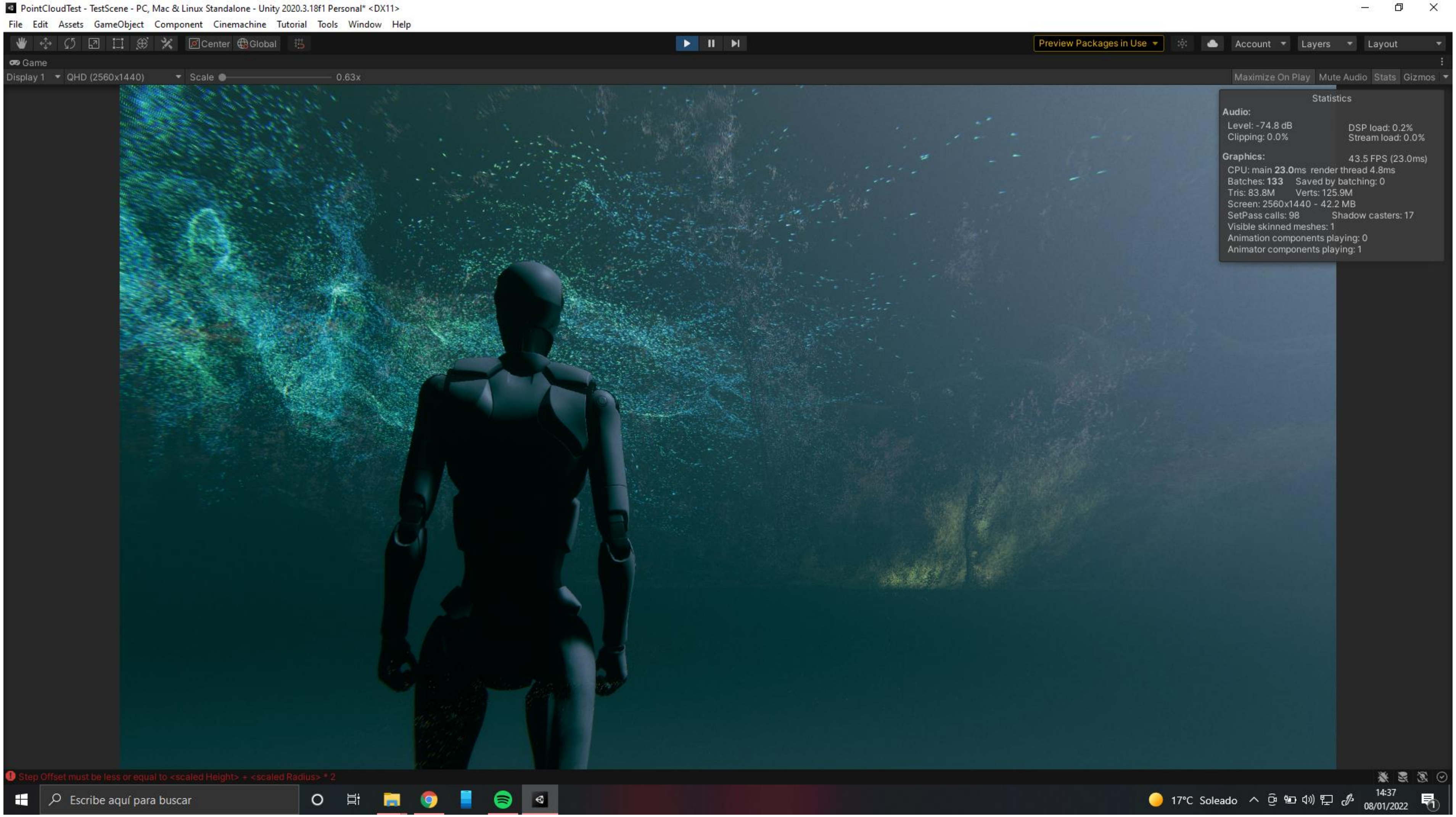
20:13
19/12/2021

The package cache was invalidated and rebuilt because the following immutable asset(s) were unexpectedly altered: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File
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Display 1
QHD (2560x1440)
Scale
0.63x
Maximize On Play
Mute Audio
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Gizmos
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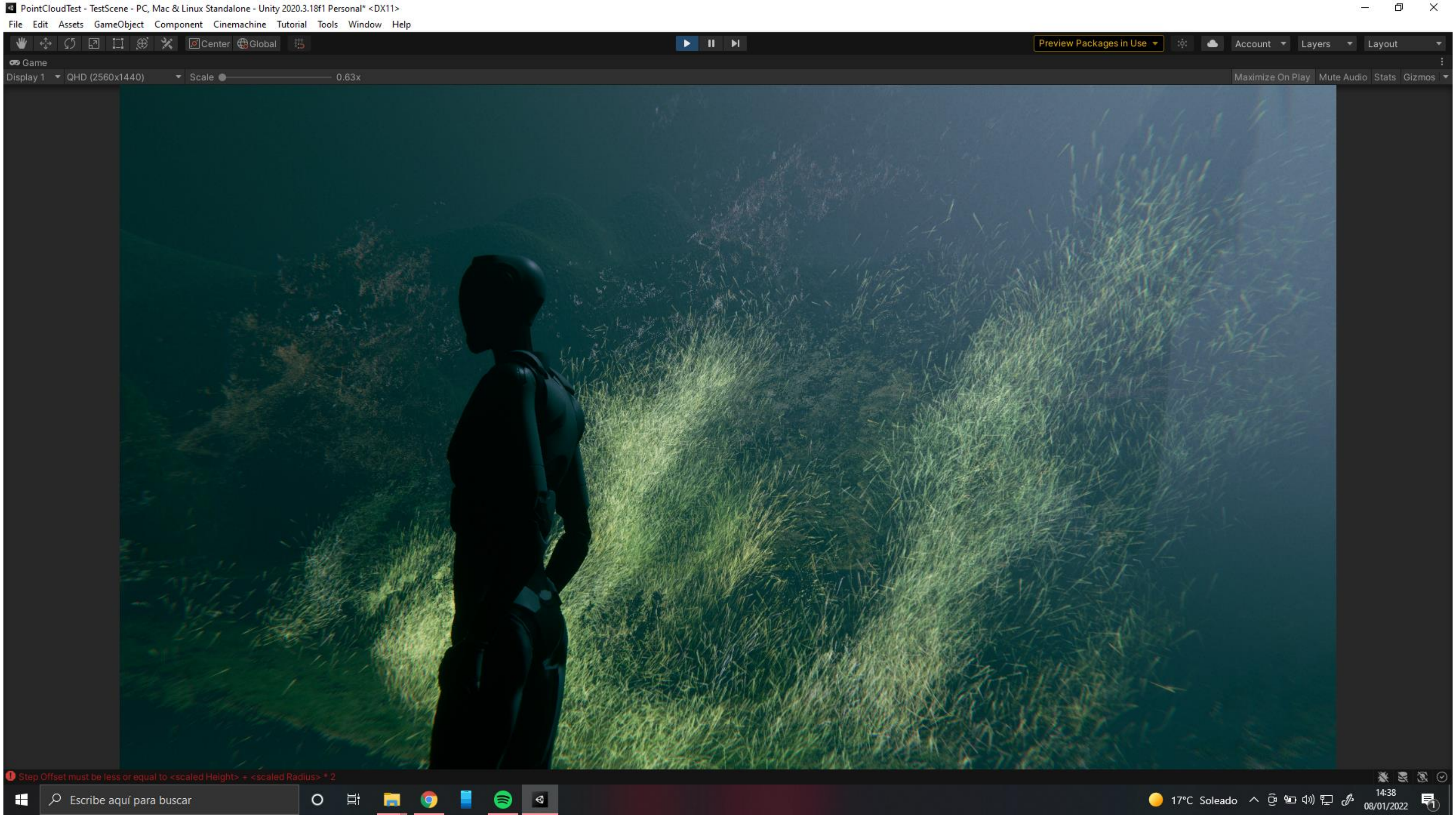
14:37
08/01/2022

```
Statistics
Audio:
  Level: -74.8 dB                    DSP load: 0.2%
  Clipping: 0.0%                     Stream load: 0.0%

Graphics:                            43.5 FPS (23.0ms)
  CPU: main 23.0ms  render thread 4.8ms
  Batches: 133     Saved by batching: 0
  Tris: 83.8M      Verts: 125.9M
  Screen: 2560x1440 - 42.2 MB
  SetPass calls: 98          Shadow casters: 17
  Visible skinned meshes: 1
  Animation components playing: 0
  Animator components playing: 1
```

```
Step Offset must be less or equal to <scaled Height> + <scaled Radius> * 2
```


PointCloudTest - TestScene - PC, Mac & Linux Standalone - Unity 2020.3.18f1 Personal* <DX11>
File
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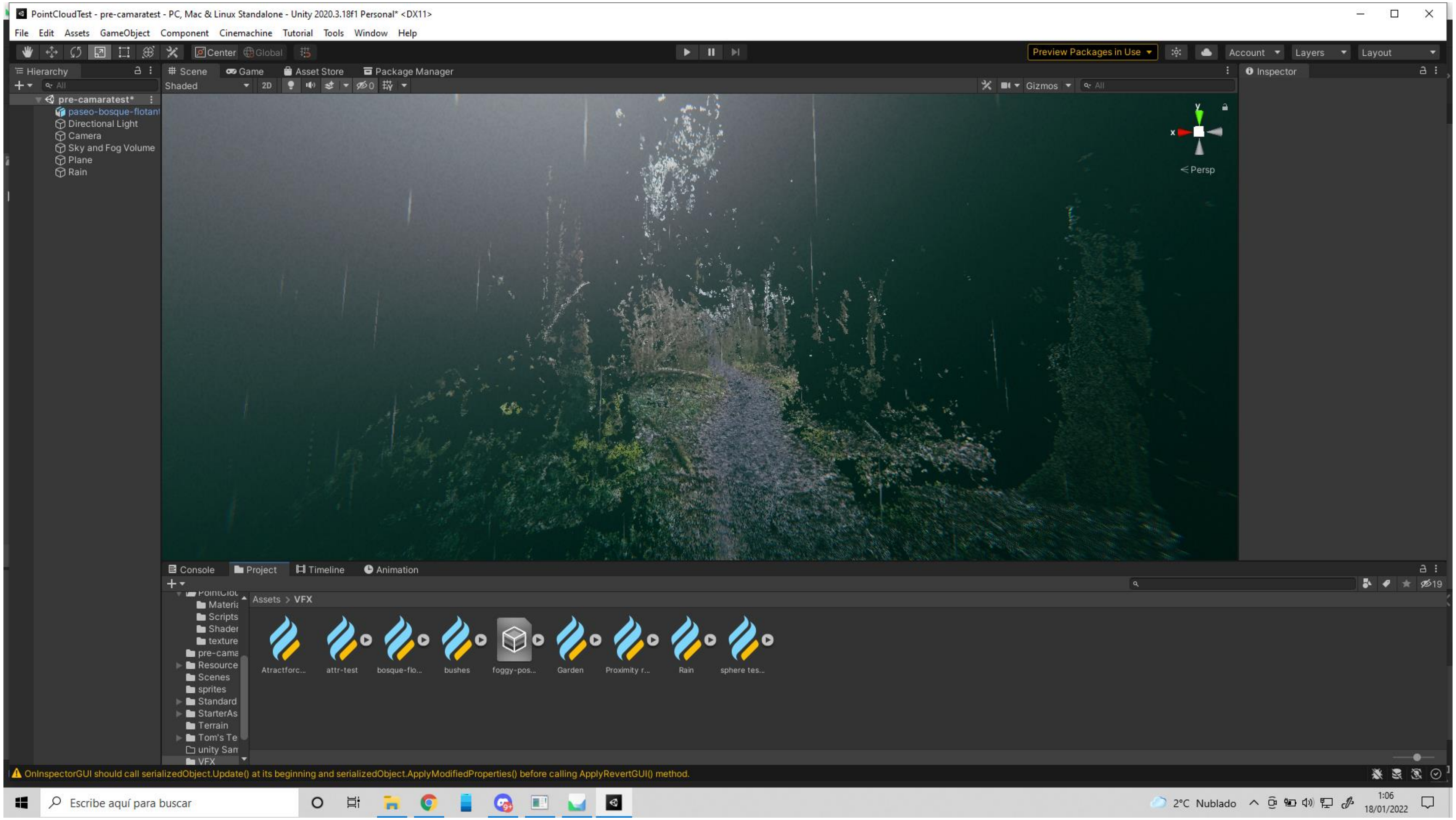
Display 1
QHD (2560x1440)
Scale 0.63x

```
Step Offset must be less or equal to <scaled Height> + <scaled Radius> * 2
```


PointCloudTest - pre-camaratest - PC, Mac & Linux Standalone - Unity 2020.3.18f1 Personal* <DX11>
File Edit Assets GameObject Component Cinemachine Tutorial Tools Window Help
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Preview Packages in Use
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Directional Light
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Scene Game Asset Store Package Manager
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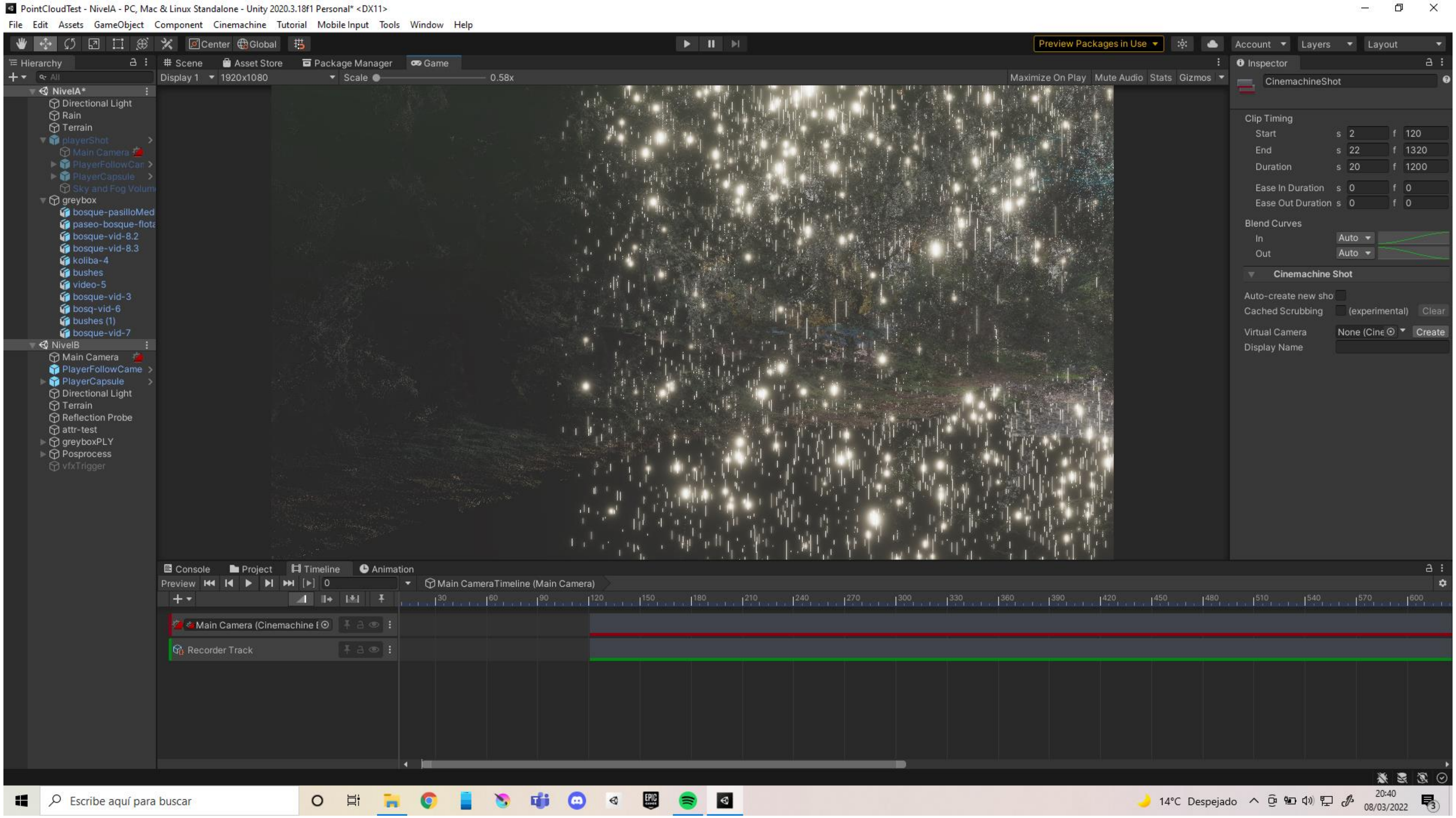
1:06
18/01/2022

```
OnInspectorGUI should call serializedObject.Update() at its beginning and serializedObject.ApplyModifiedProperties() before calling ApplyRevertGUI() method.
```


File Edit Assets GameObject Component Cinemachine Tutorial Mobile Input Tools Window Help
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PlayerFollowCam
PlayerCapsule
Sky and Fog Volum
greybox
bosque-pasilloMed
paseo-bosque-flota
bosque-vid-8.2
bosque-vid-8.3
koliba-4
bushes
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bosque-vid-3
bosq-vid-6
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Scene Asset Store Package Manager Game
Maximize On Play Mute Audio Stats Gizmos
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Cinemachine Shot
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Main Camera (Cinemachine E
Recorder Track
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PointCloudTest - NivelA - PC, Mac & Linux Standalone - Unity 2020.3.18f1 Personal* <DX11>

Display 1 1920x1080 Scale 0.58x

CinemachineShot

Clip Timing

	s	f
Start	2	120
End	22	1320
Duration	20	1200
Ease In Duration	0	0
Ease Out Duration	0	0

Blend Curves
In: Auto
Out: Auto

Auto-create new sho ☐
Cached Scrubbing ☐ (experimental) Clear
Virtual Camera: None (Cine
Display Name:

Main CameraTimeline (Main Camera)
0