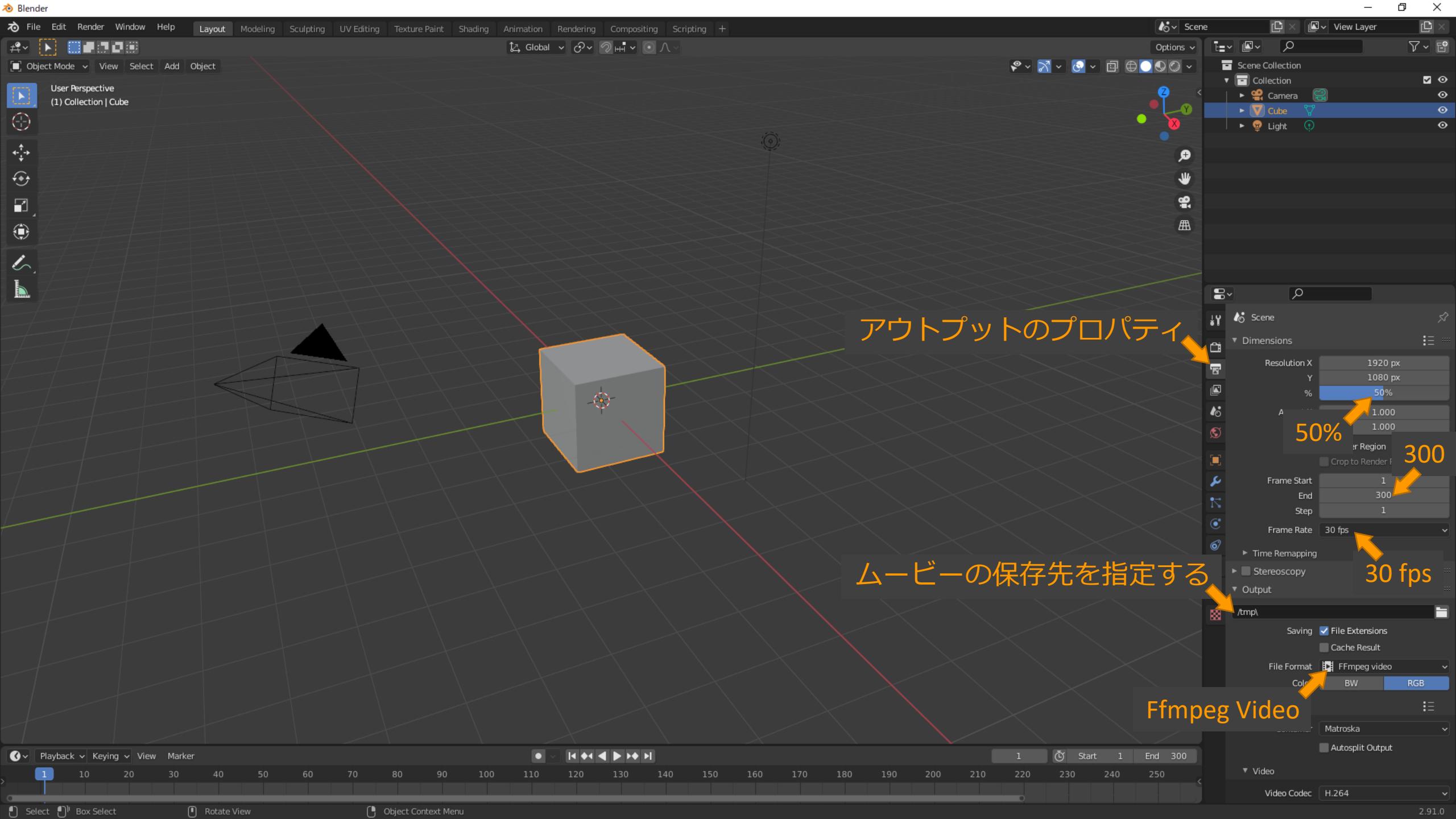


流体シミュレーション

Fluid



流体シミュレーションの手順

1. Domain (シミュレーション空間) を設定する
2. Flow (流体の流入オブジェクト) を作る
3. Effector (流体に干渉するオブジェクト) を作る
4. 流体の Material (材質) を設定する
5. (一旦保存する)
6. Bake する
7. レンダリングする

File Edit Render Window Help Layout Modeling Sculpting UV Editing Texture Paint Shading Animation Rendering Compositing Scripting +

Global View Options

User Perspective (1) Collection | Cube

S で拡大縮小

Scene Collection Collection Camera Cube Light

Dimensions

- Resolution X 1920 px
- Y 1080 px
- % 50%
- Aspect X 1.000
- Y 1.000
- Render Region
- Crop to Render Region

Frame Start 1

End 300

Step 1

Frame Rate 30 fps

Time Remapping

Stereoscopy

Output

/tmp

- Saving File Extensions
- Cache Result
- File Format FFmpeg video
- Color BW RGB

Encoding

- Container Matroska
- Autosplit Output

Video

- Video Codec H.264

Playback Keying View Marker

1 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290 300

1 Start 1 End 300

Box Select Rotate View Object Context Menu

File Edit Render Window Help Layout Modeling Sculpting UV Editing Texture Paint Shading Animation Rendering Compositing Scripting +

Global Options

Scale X: 0.2546 Y: 0.2546 Z: 0.2546

User Perspective (1) Collection | Cube

Dimensions

- Resolution X: 1920 px
- Y: 1080 px
- %: 50%
- Aspect X: 1.000
- Y: 1.000
- Render Region
- Crop to Render Region

Frame Start: 1

End: 300

Step: 1

Frame Rate: 30 fps

Time Remapping

Stereoscopy

Output

/tmp

- Saving: File Extensions
- Cache Result
- File Format: FFmpeg video
- Color: BW RGB

Encoding

- Container: Matroska
- Autosplit Output

Video

- Video Codec: H.264

Playback Keying View Marker

1 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250

Confirm Cancel X axis Y axis Z axis X plane Y plane Z plane Snap Invert Snap Toggle Move Rotate Resize Automatic Constraint Automatic Constraint Plane

2.91.0

File Edit Render Window Help Layout Modeling Sculpting UV Editing Texture Paint Shading Animation Rendering Compositing Scripting +

Global View Options

User Perspective (1) Collection | Cube

3D Viewport with a cube and a camera in the scene.

Dimensions

- Resolution X: 1920 px
- Y: 1080 px
- %: 50%
- Aspect X: 1.000
- Y: 1.000
- Render Region
- Crop to Render Region

Frame Start: 1

End: 300

Step: 1

Frame Rate: 30 fps

Time Remapping

Stereoscopy

Output

/tmp

Saving: File Extensions

Cache Result

File Format: FFmpeg video

Color: BW RGB

Encoding

Container: Matroska

Autosplit Output

Video

Video Codec: H.264

Resize

Scale X: 0.200

Y: 0.200

Z: 0.200

Orientation: Global

Proportional Editing

Playback Keying View Marker

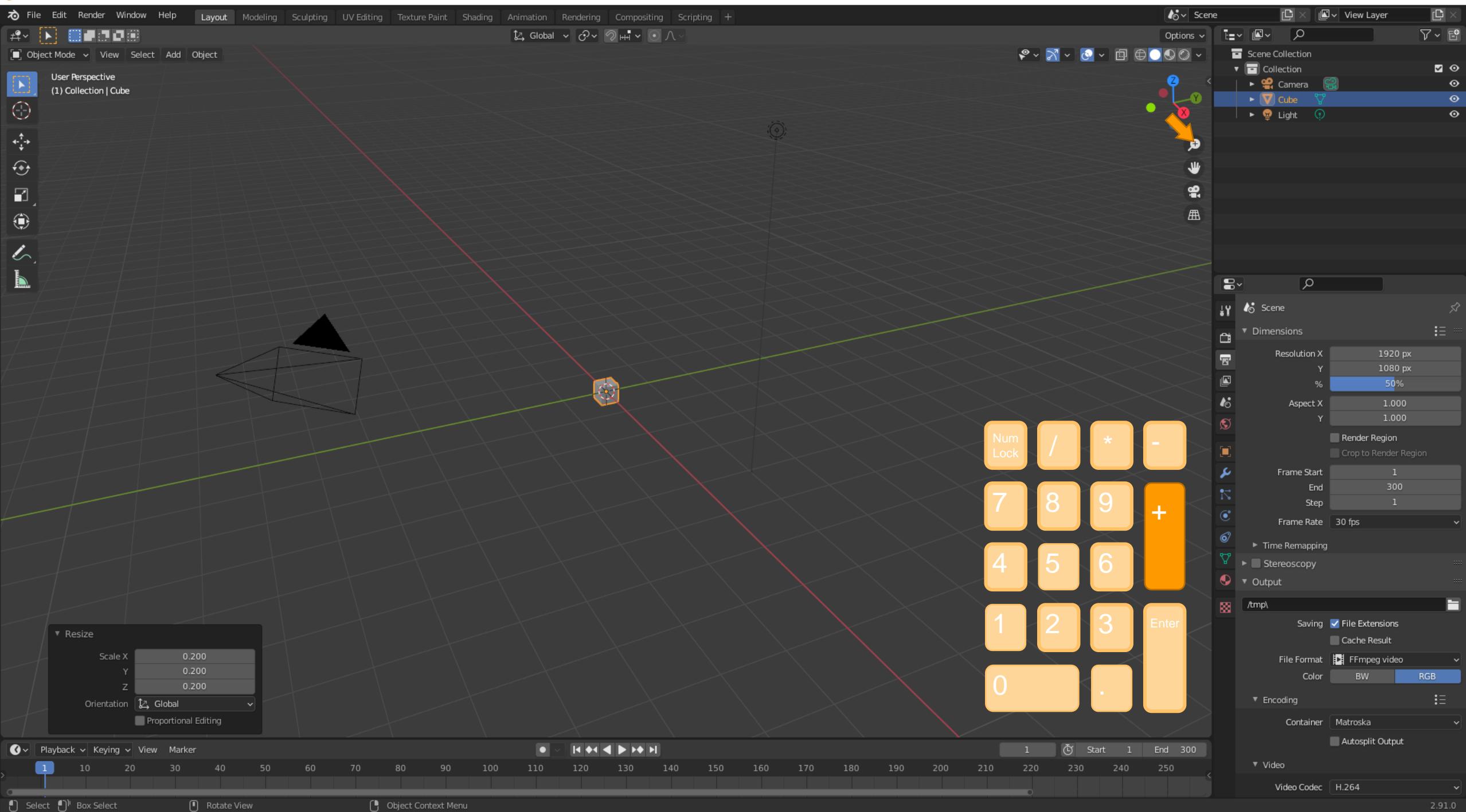
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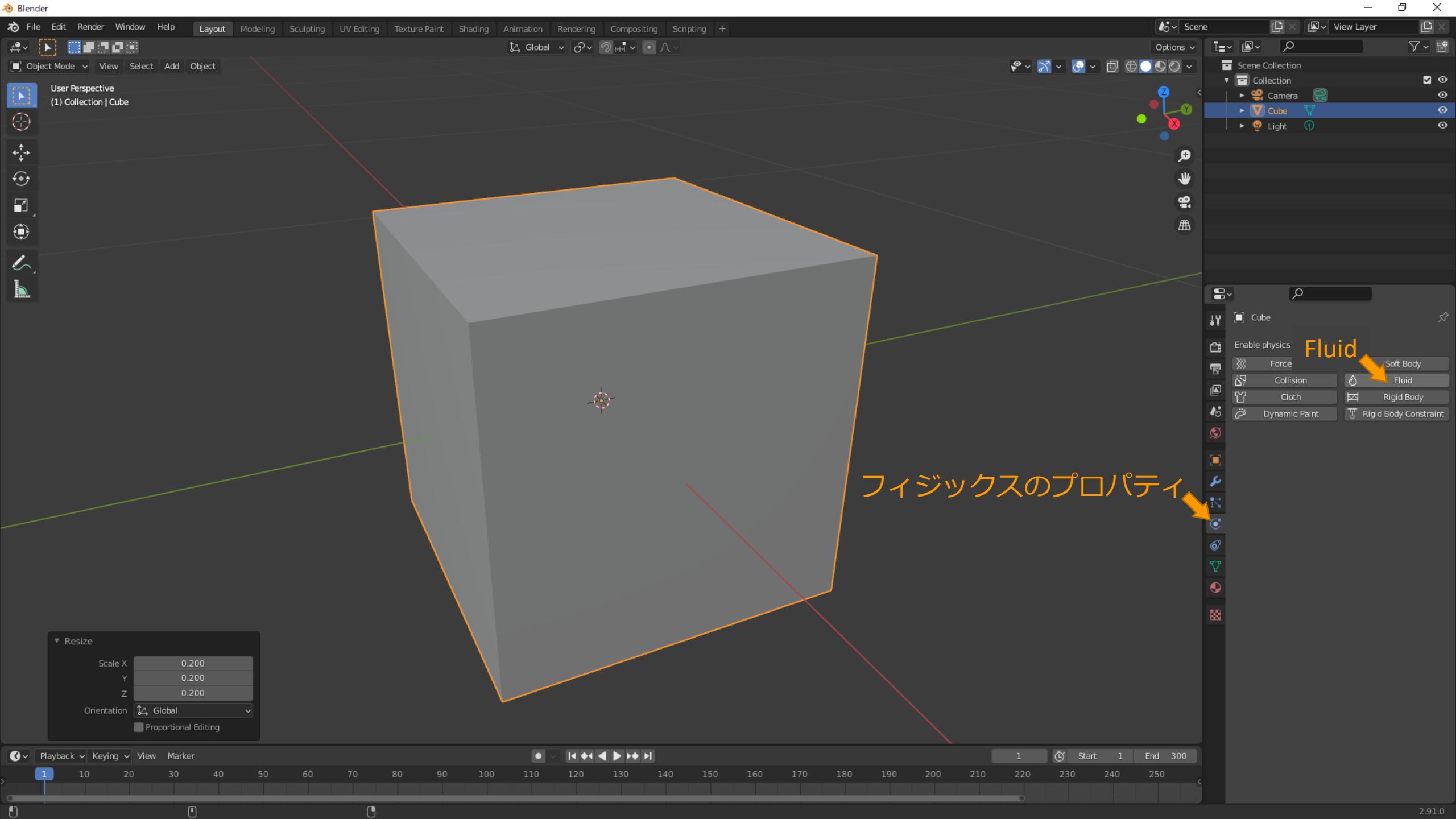
1 Start 1 End 300

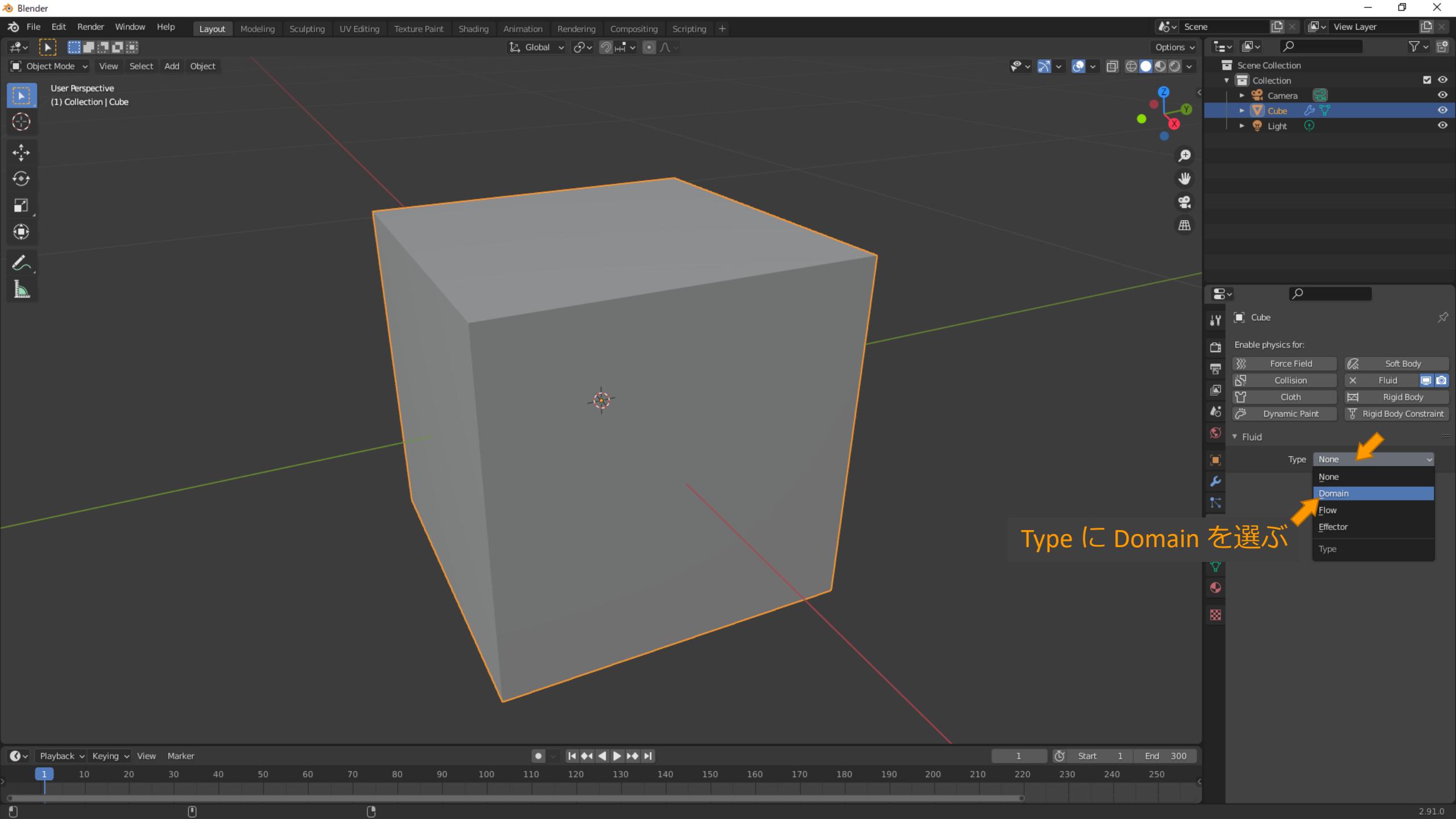
Select Box Select Rotate View Object Context Menu

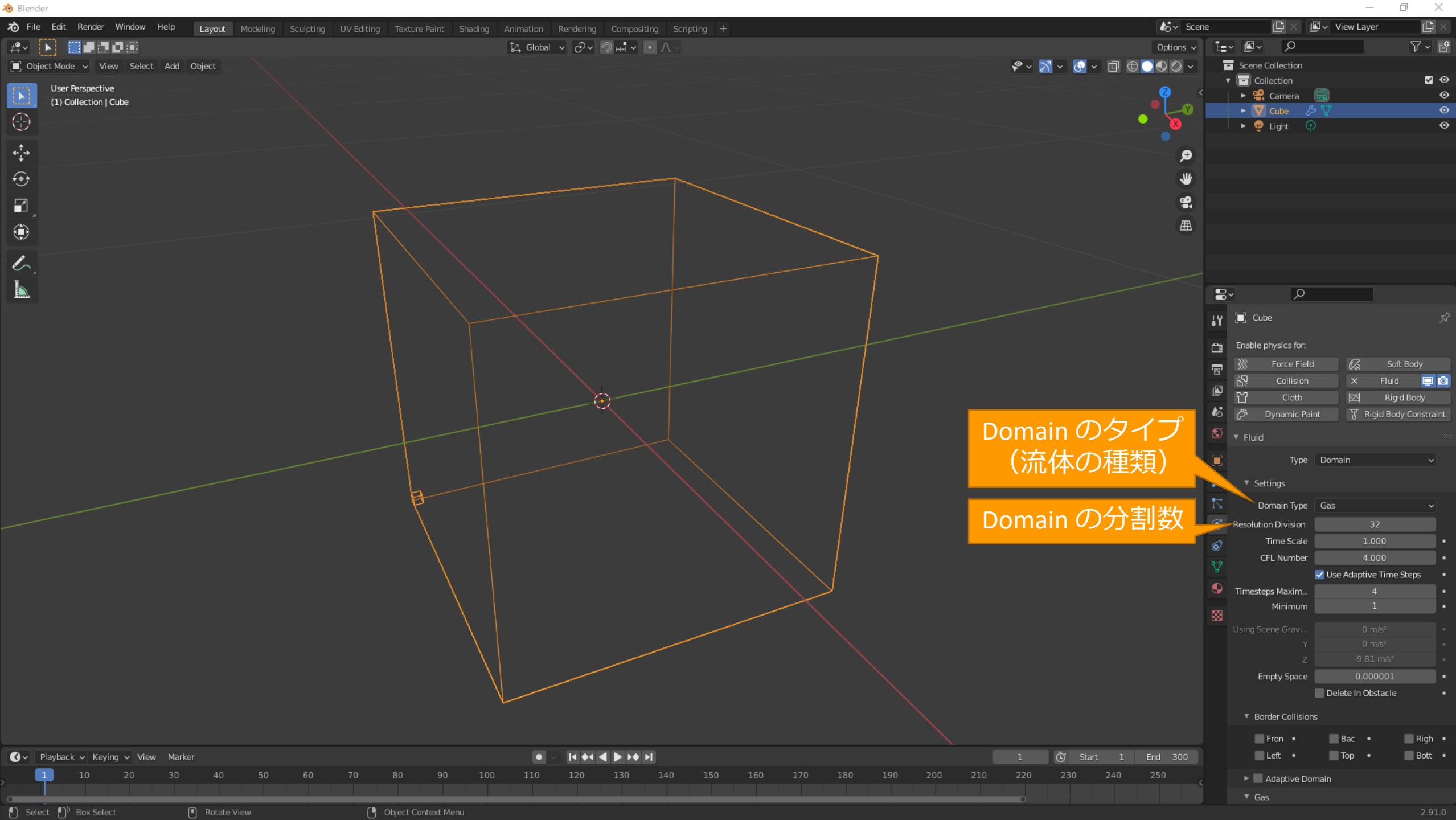
2.91.0

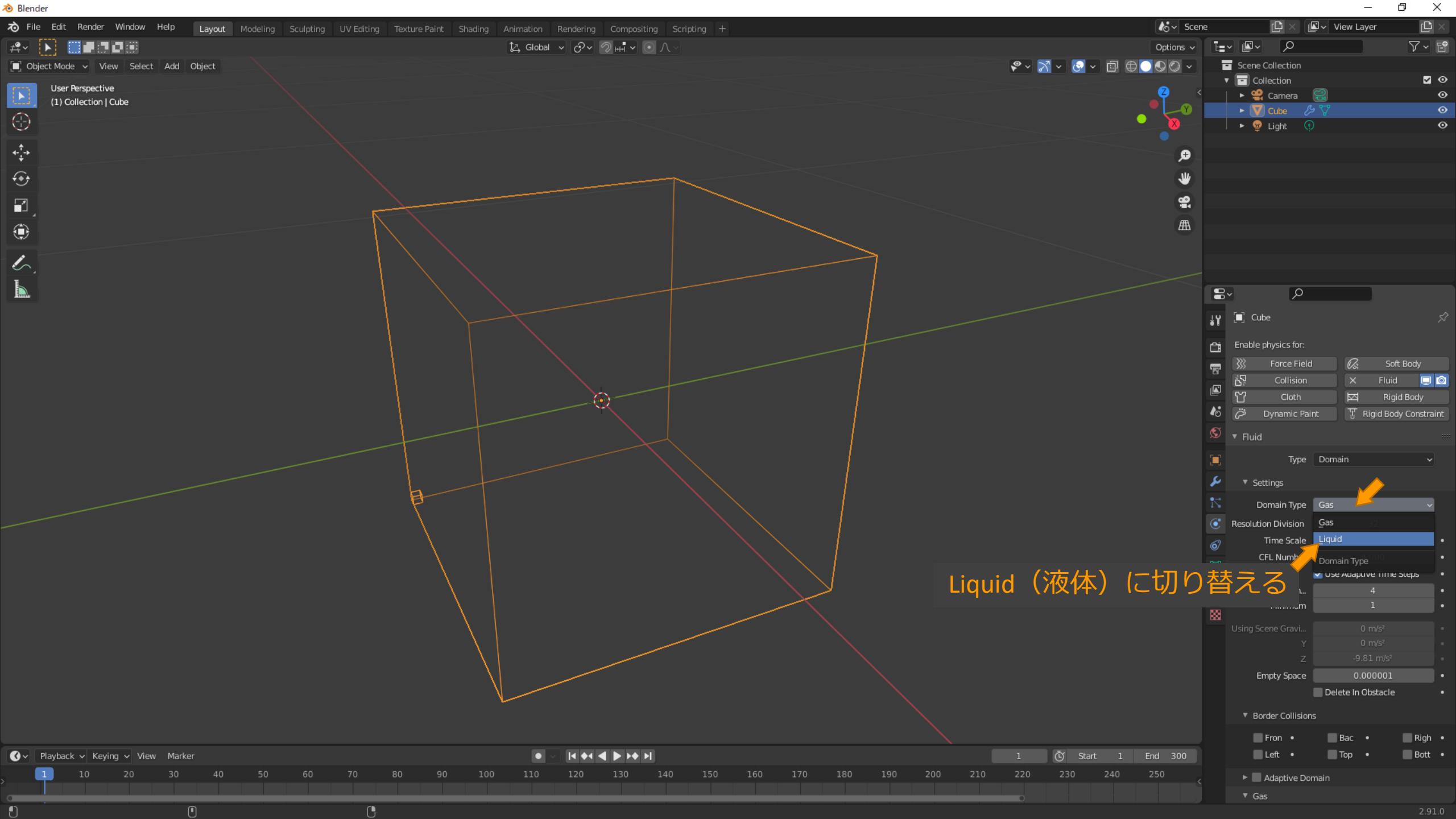
試しに $0.2m \times 0.2m \times 0.2m$ くらい

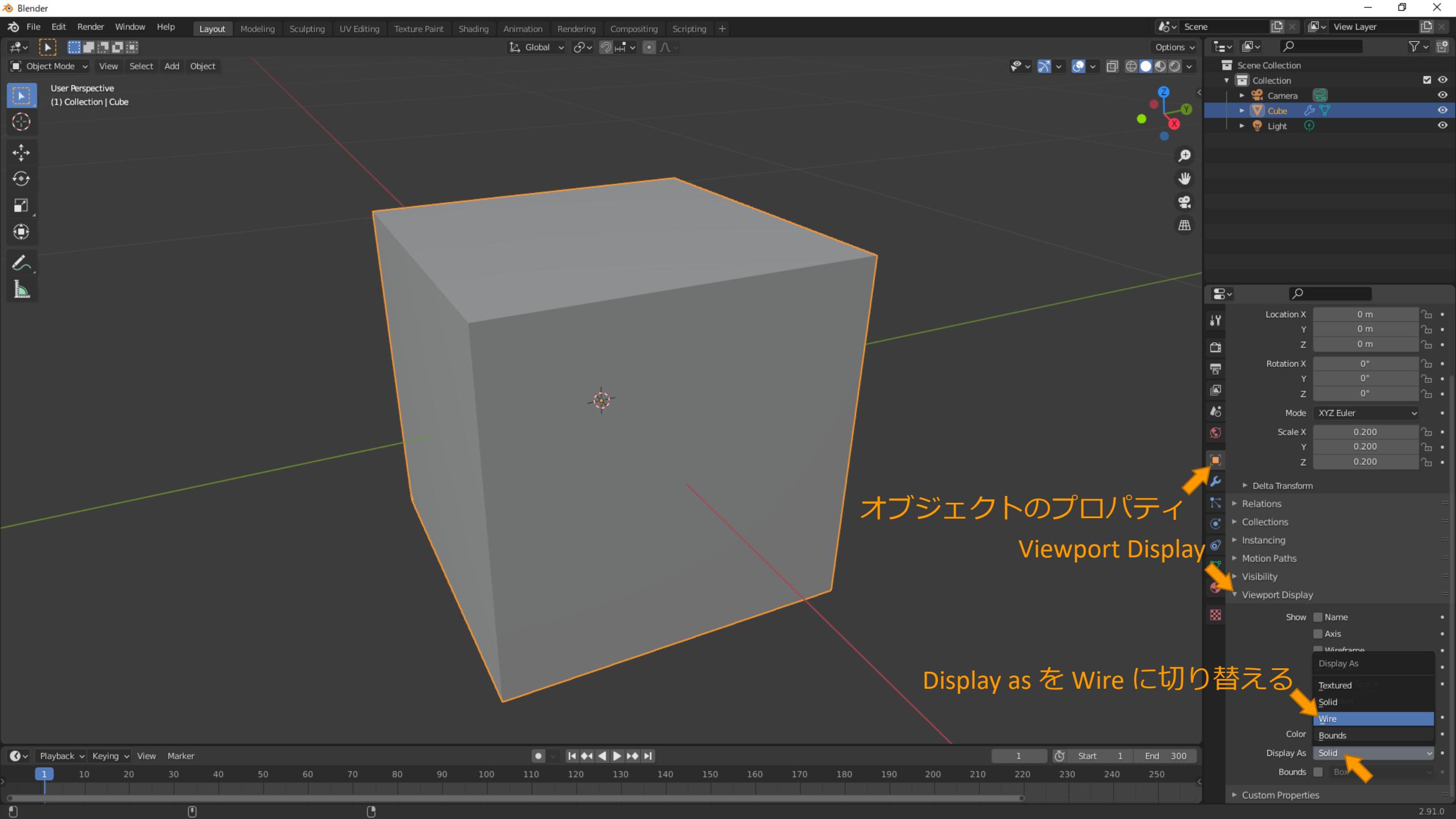


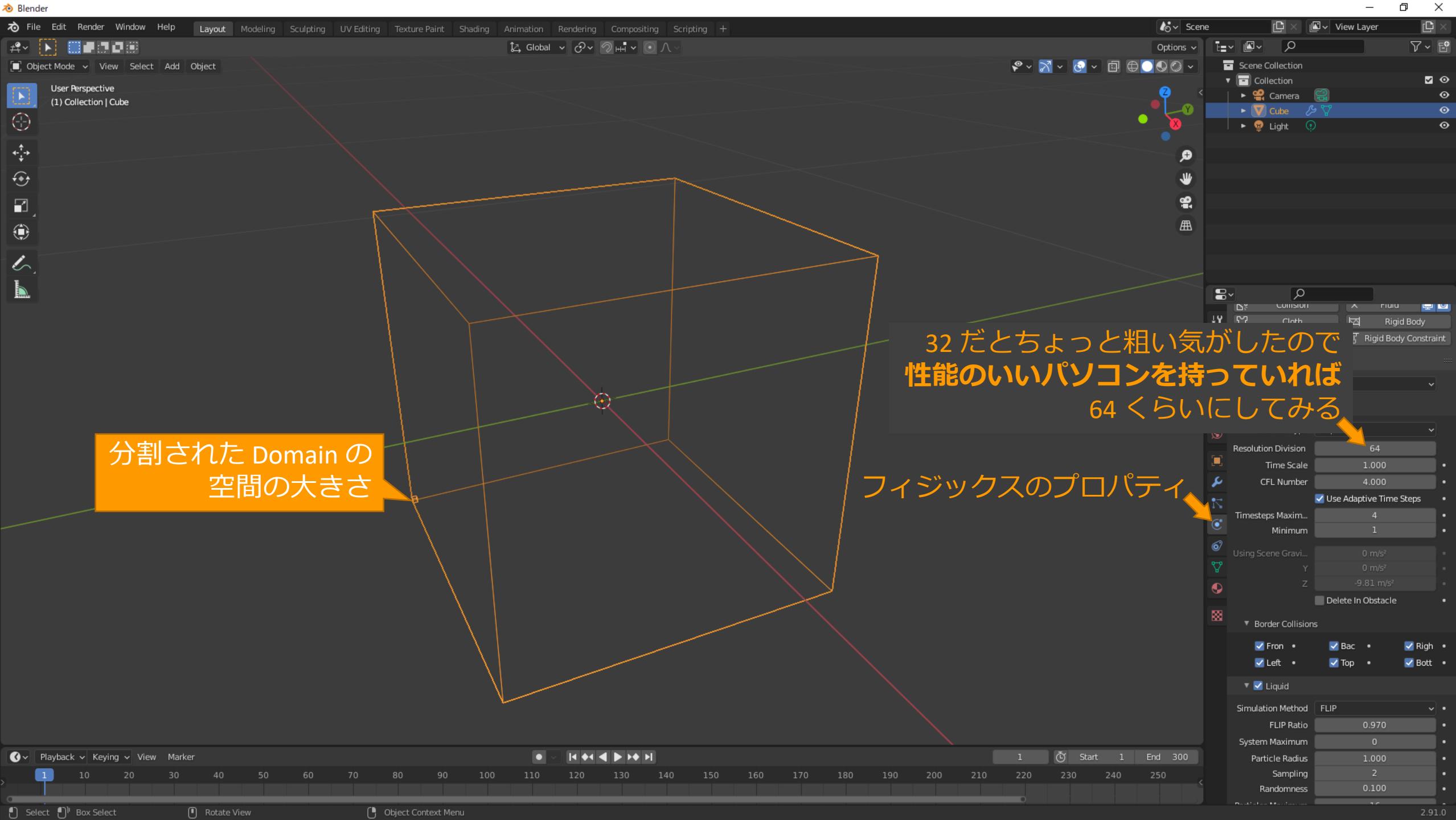


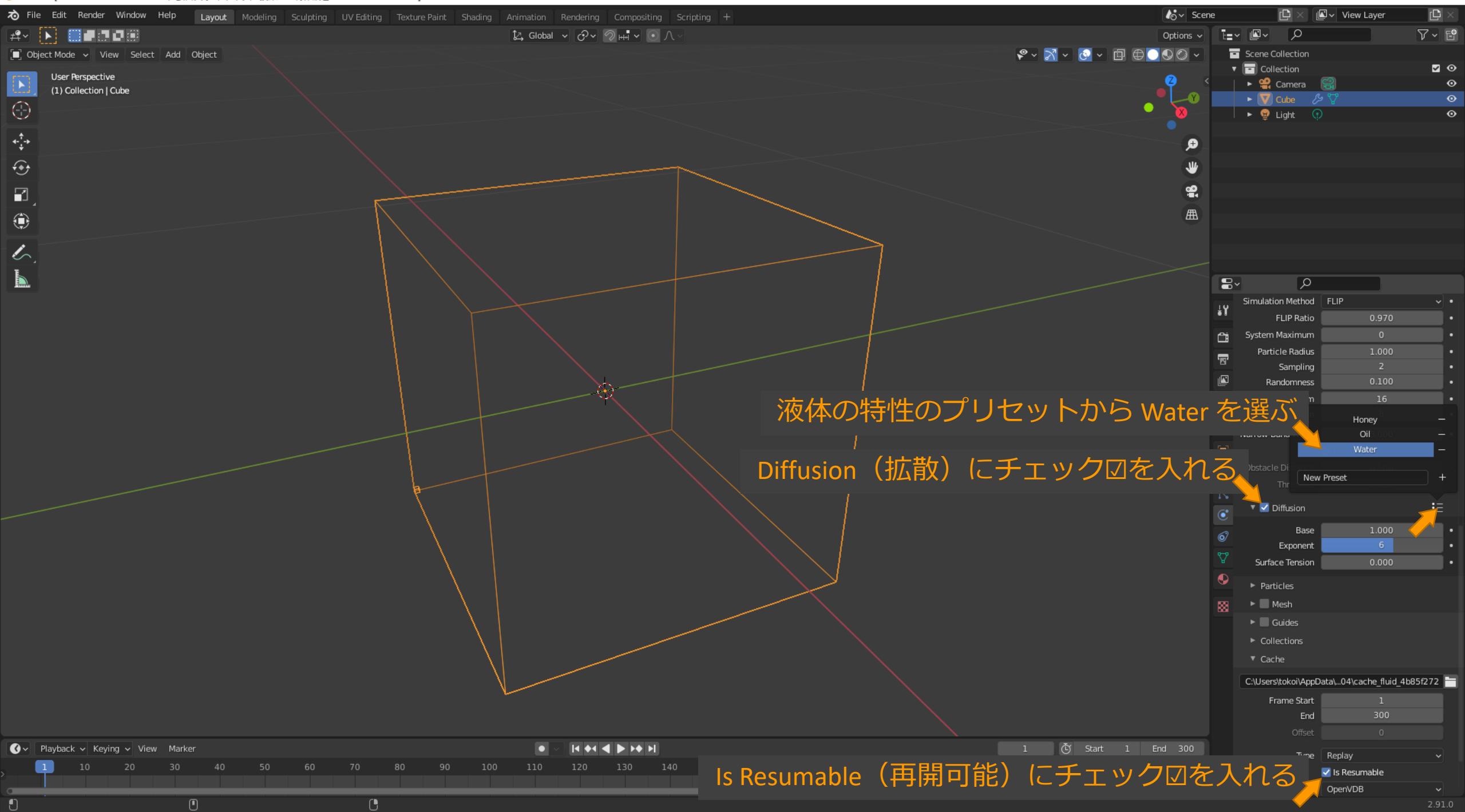


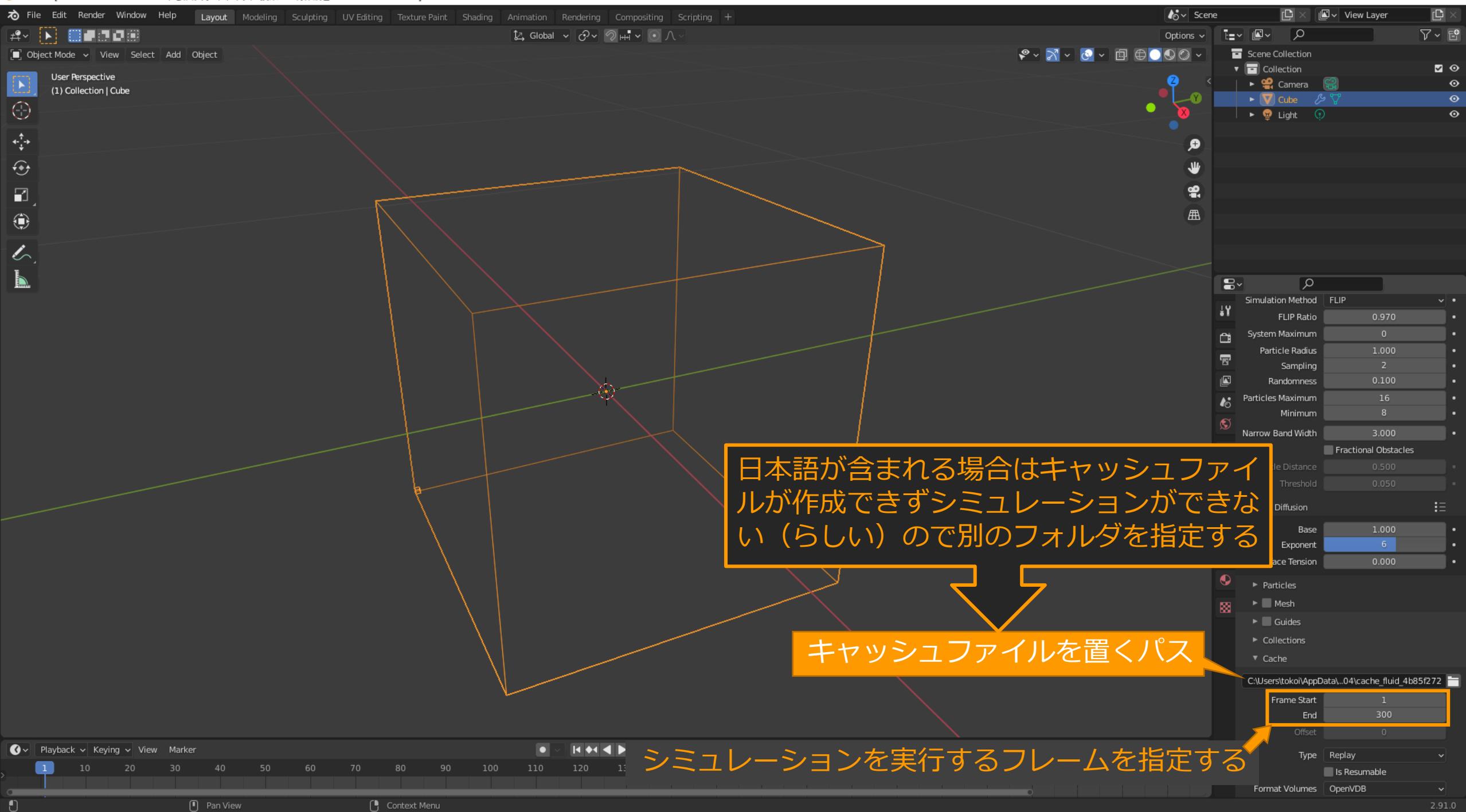


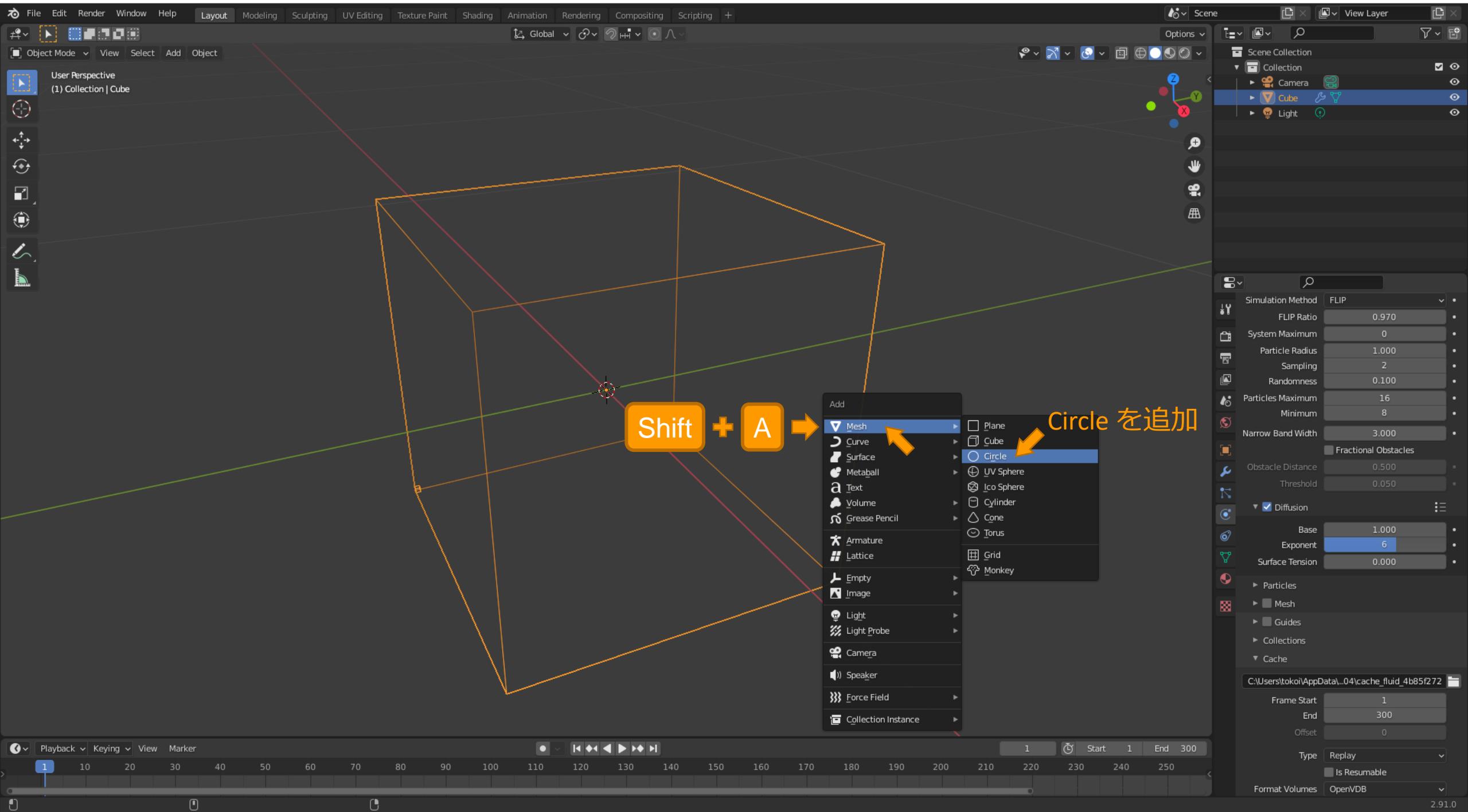


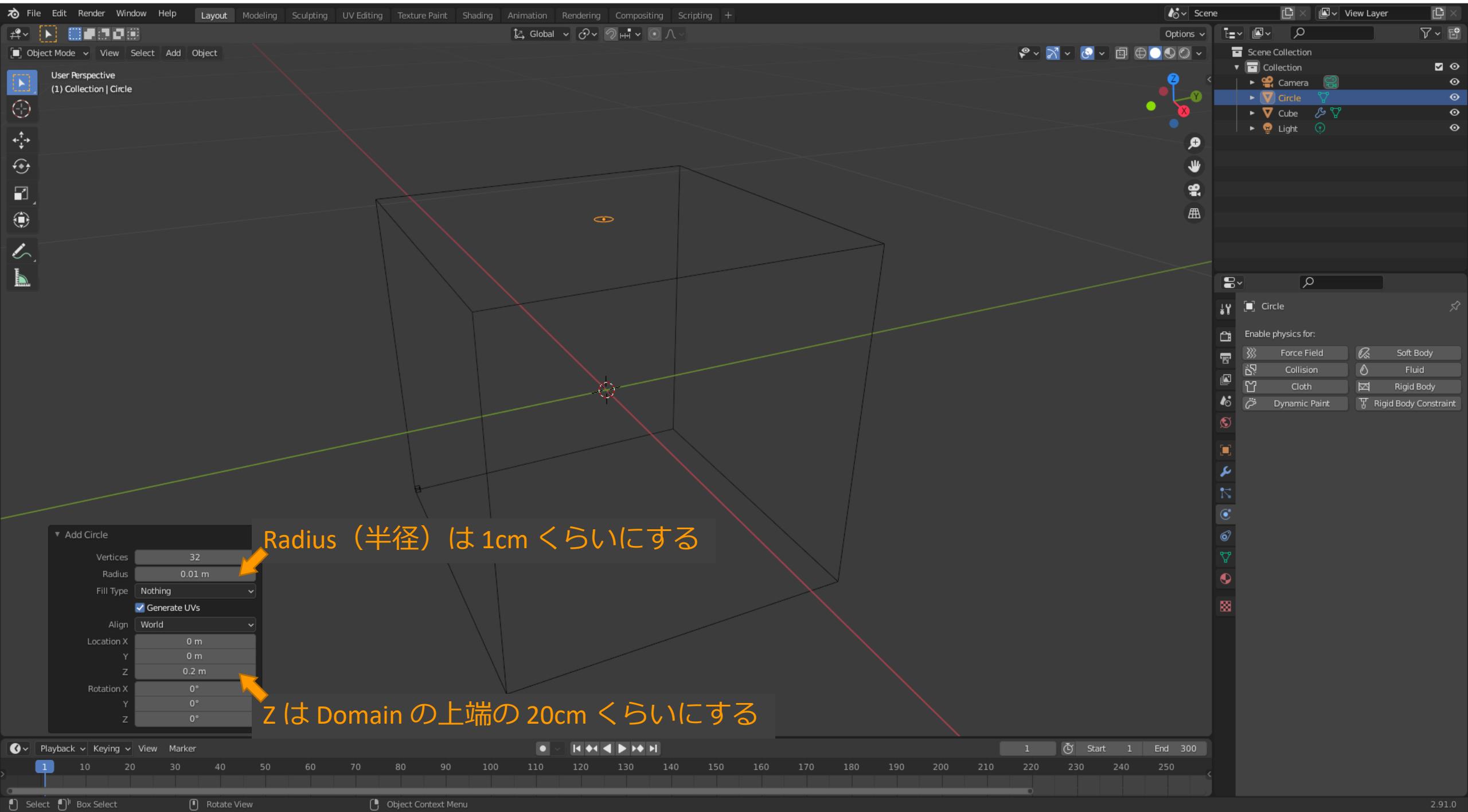


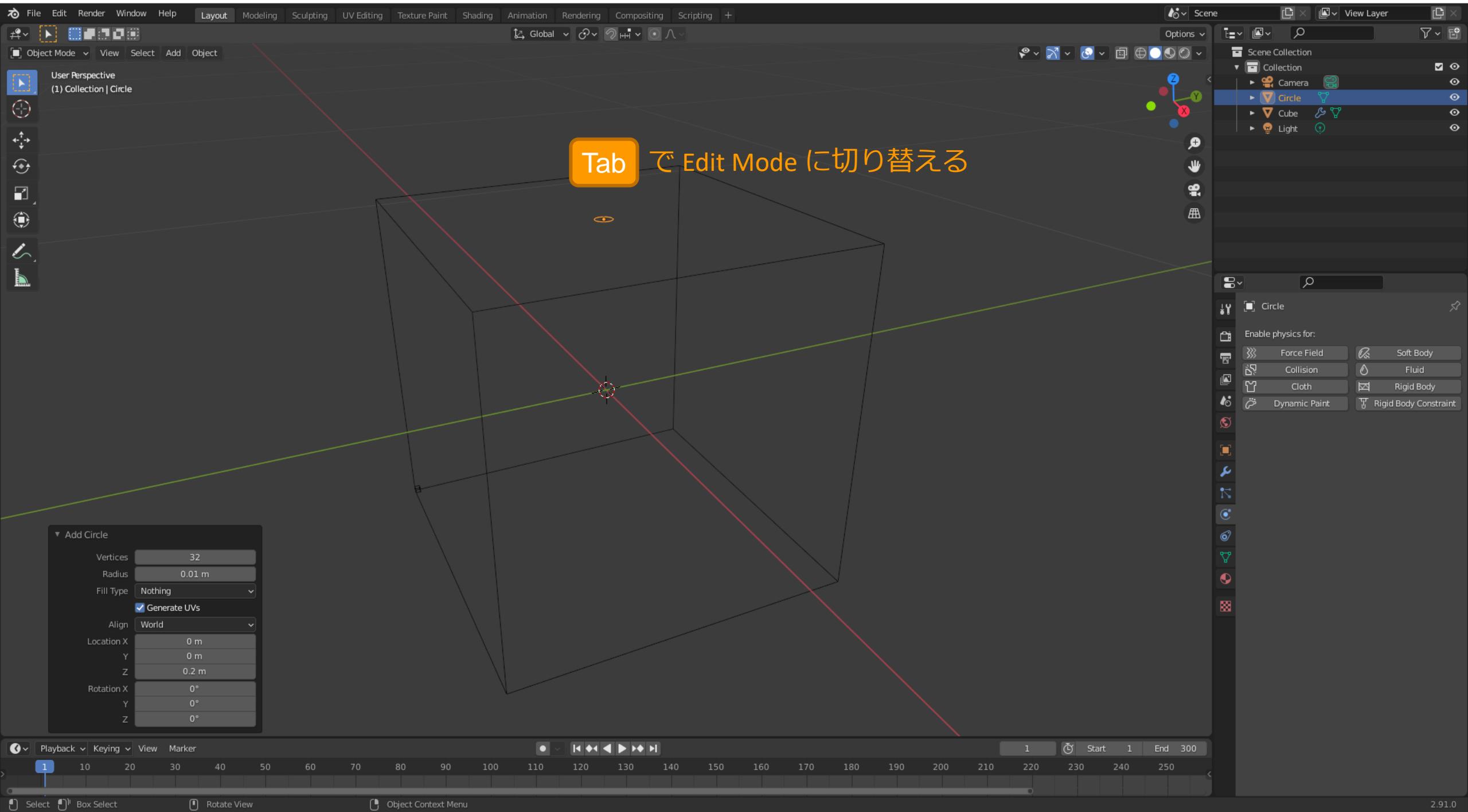


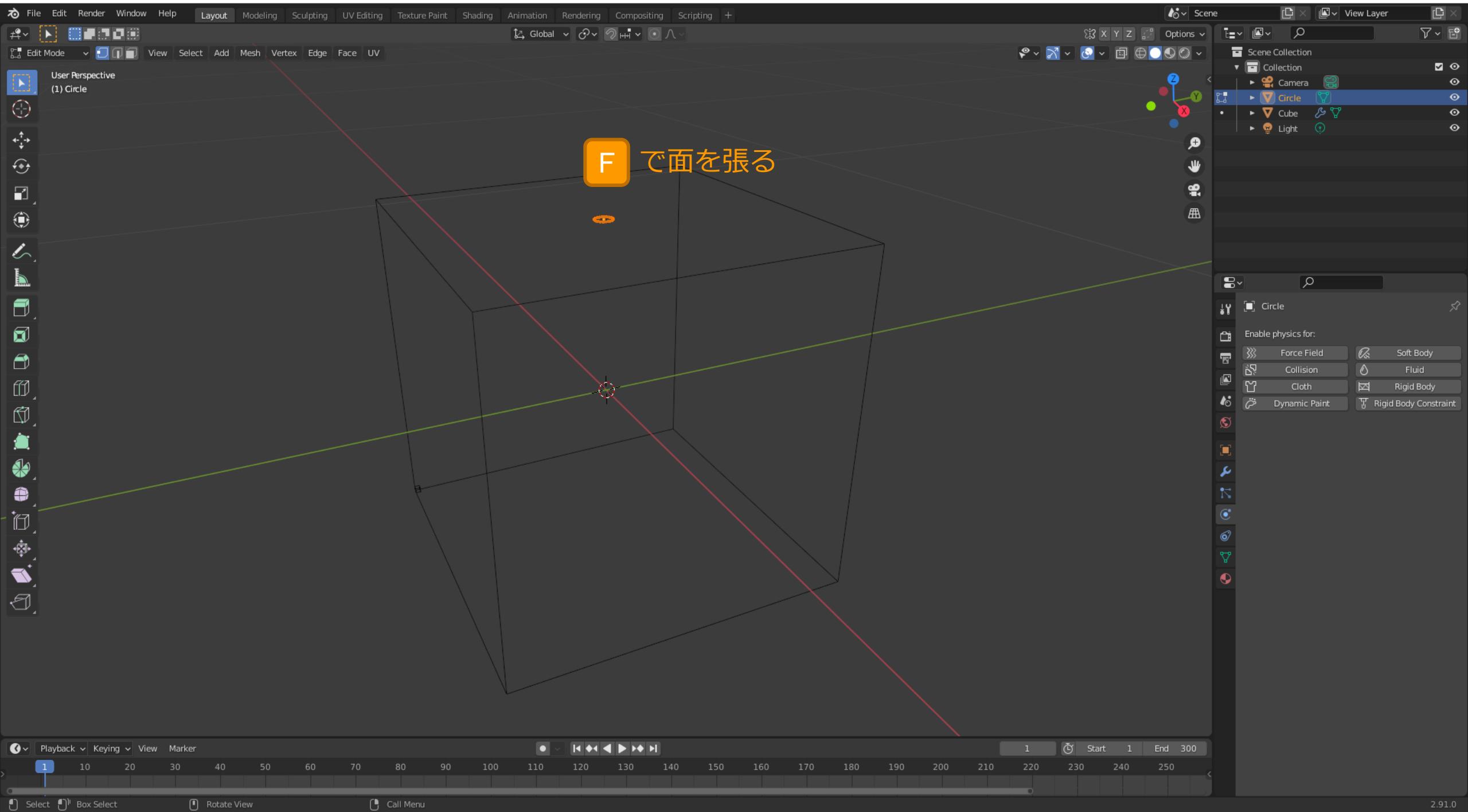


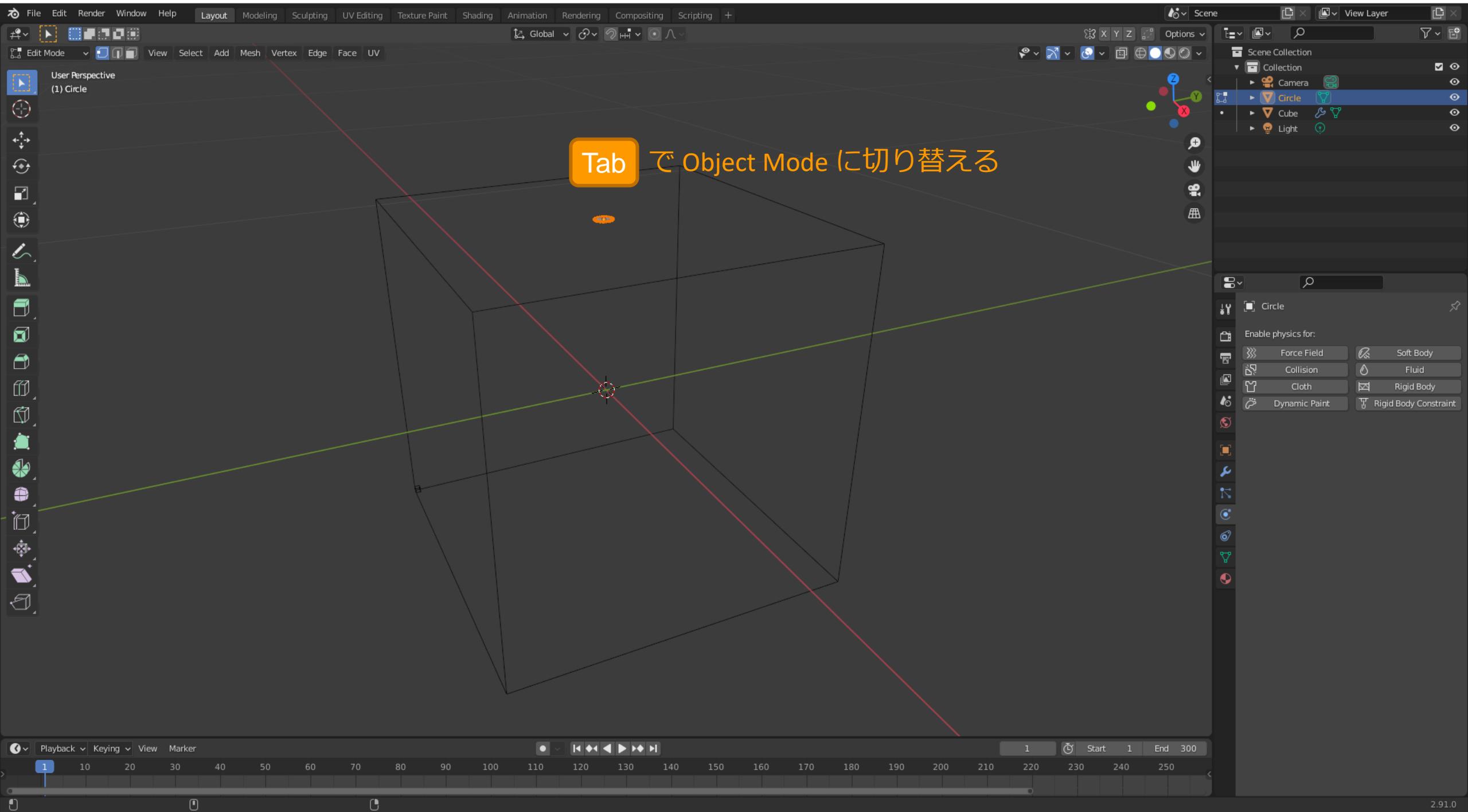


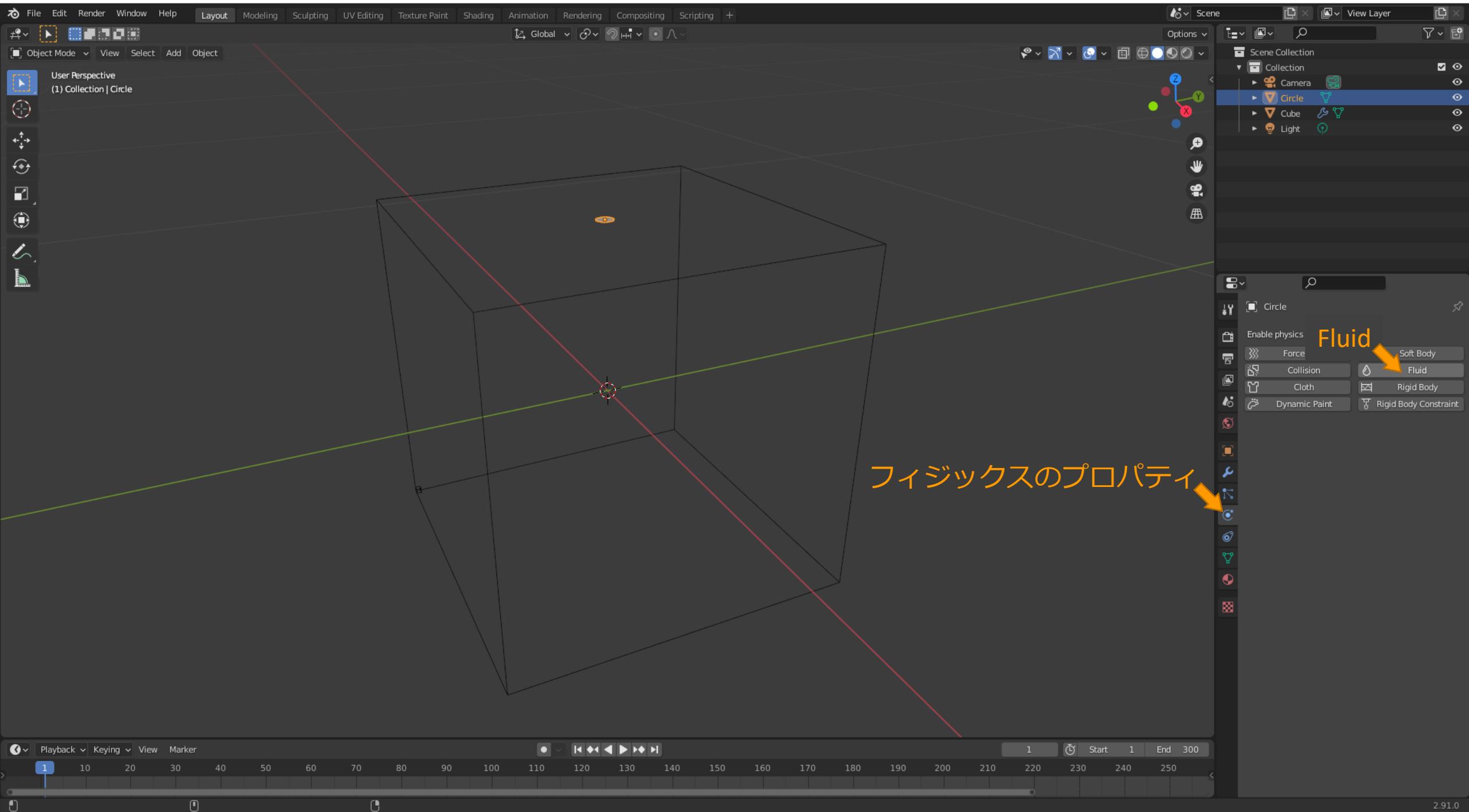


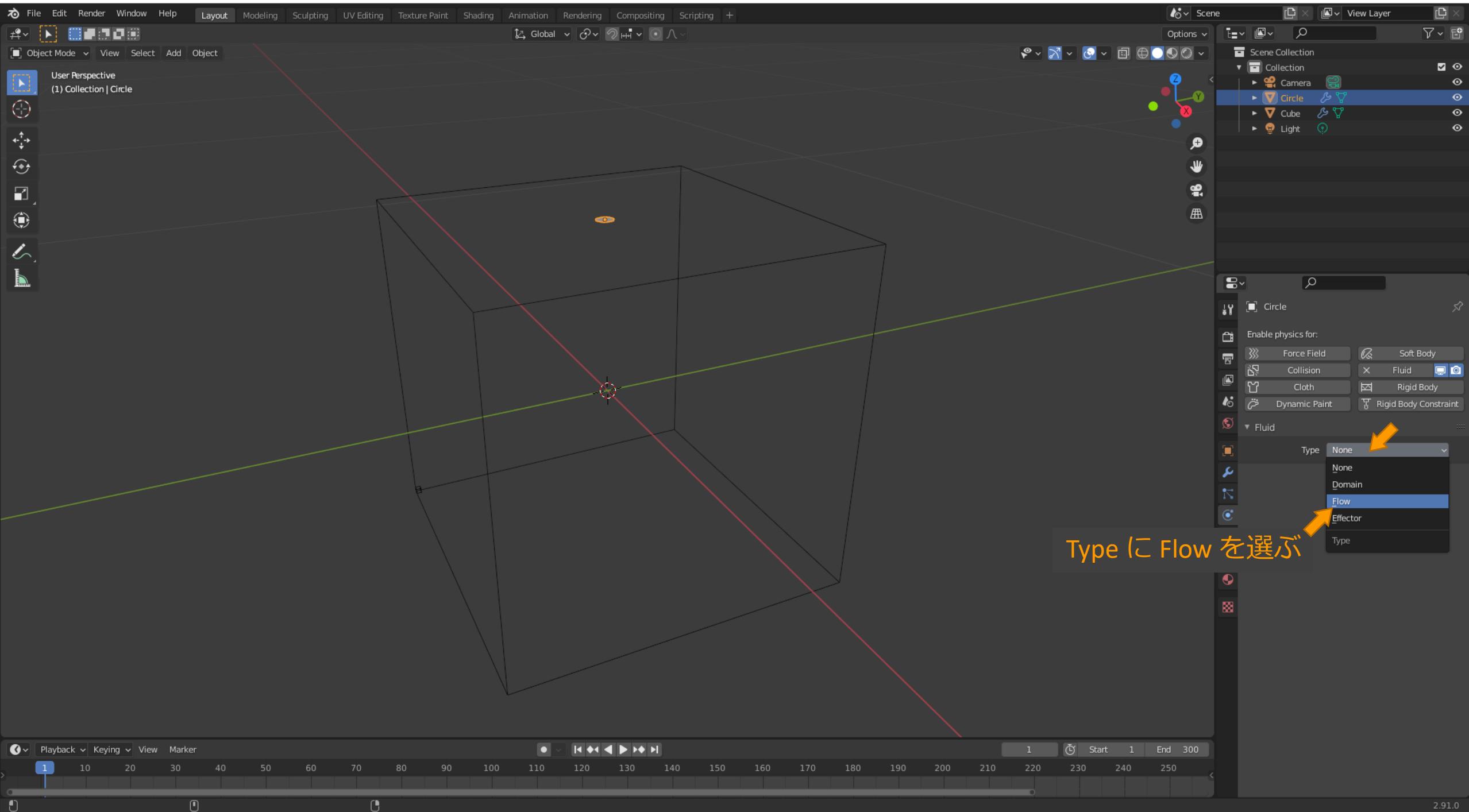


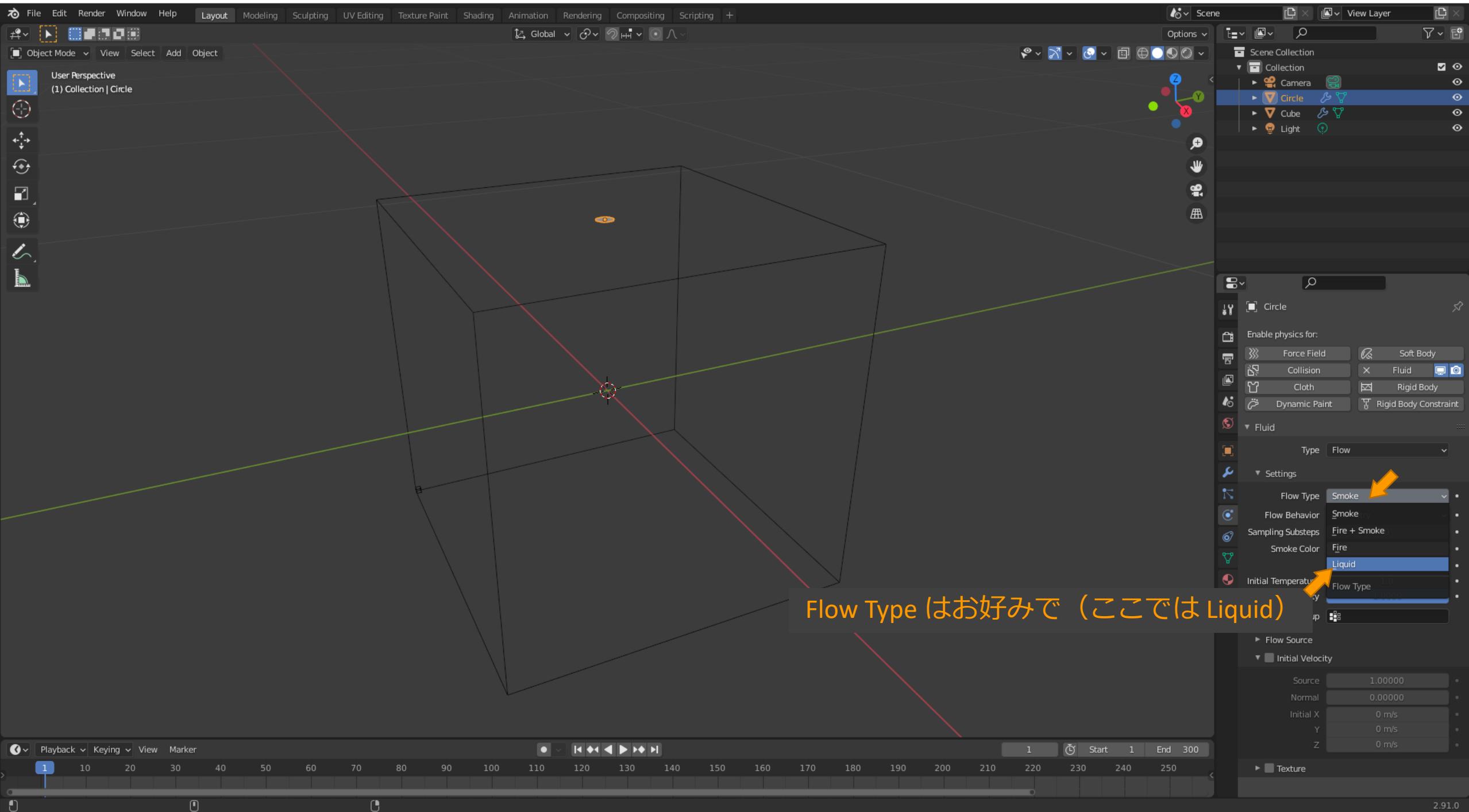


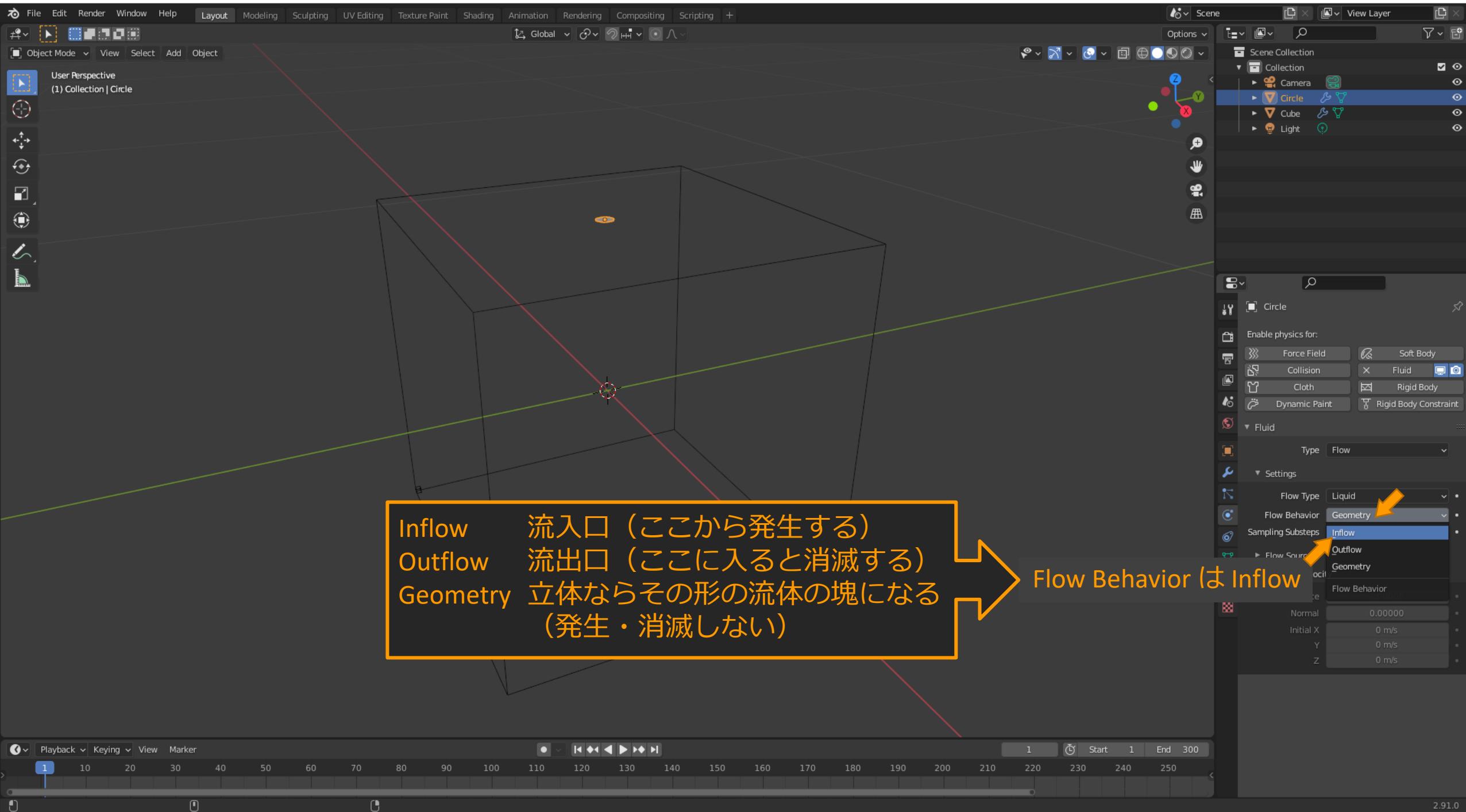


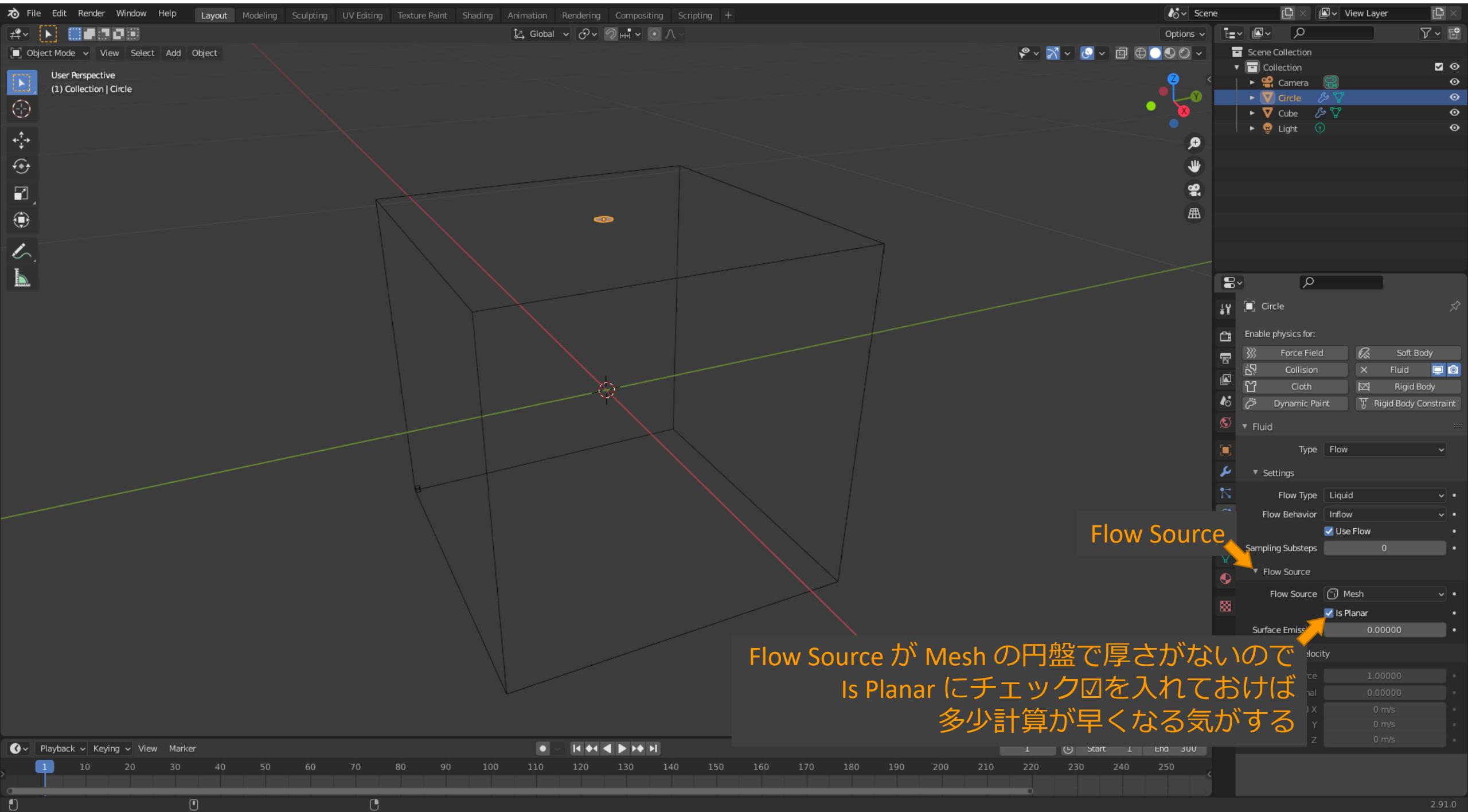


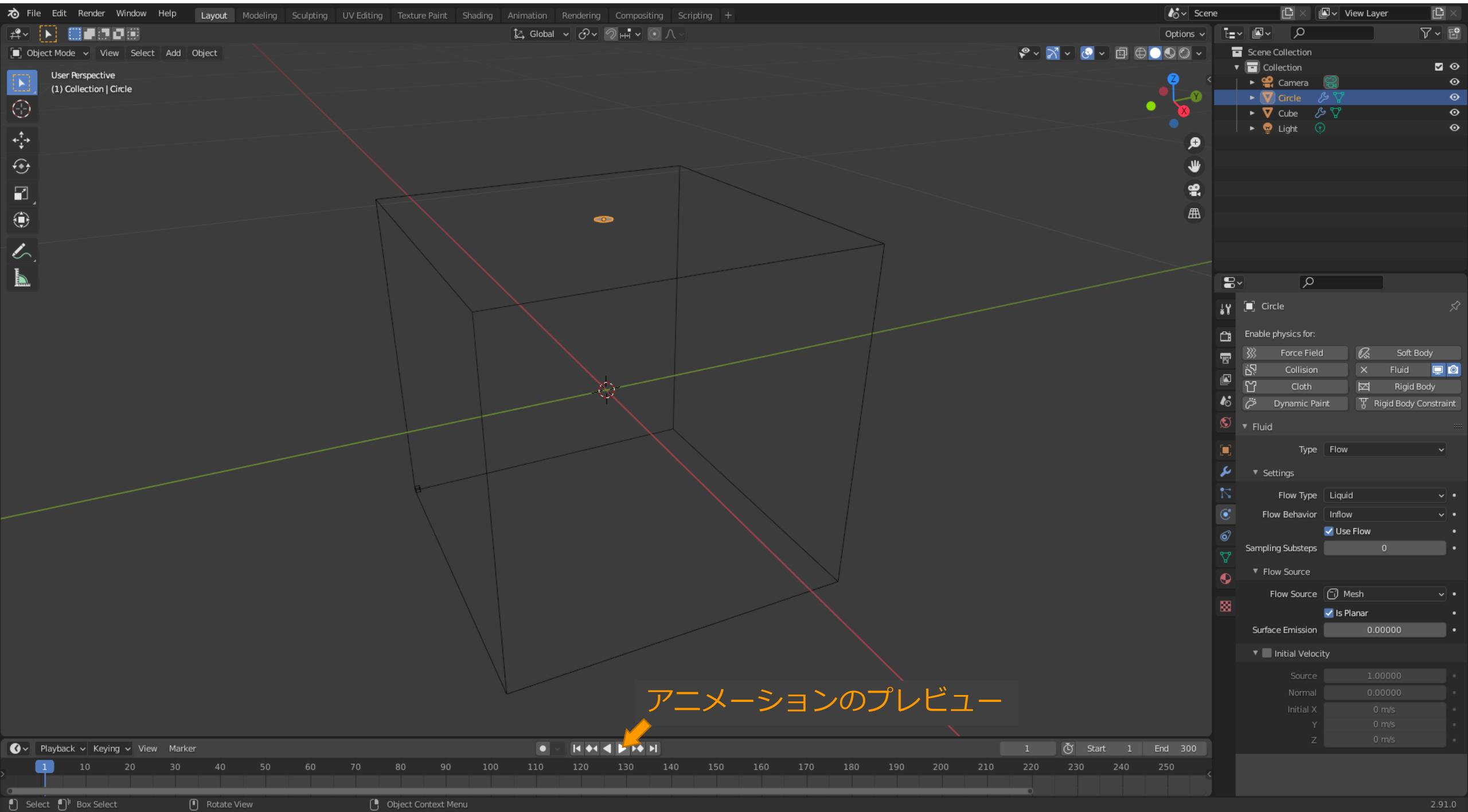


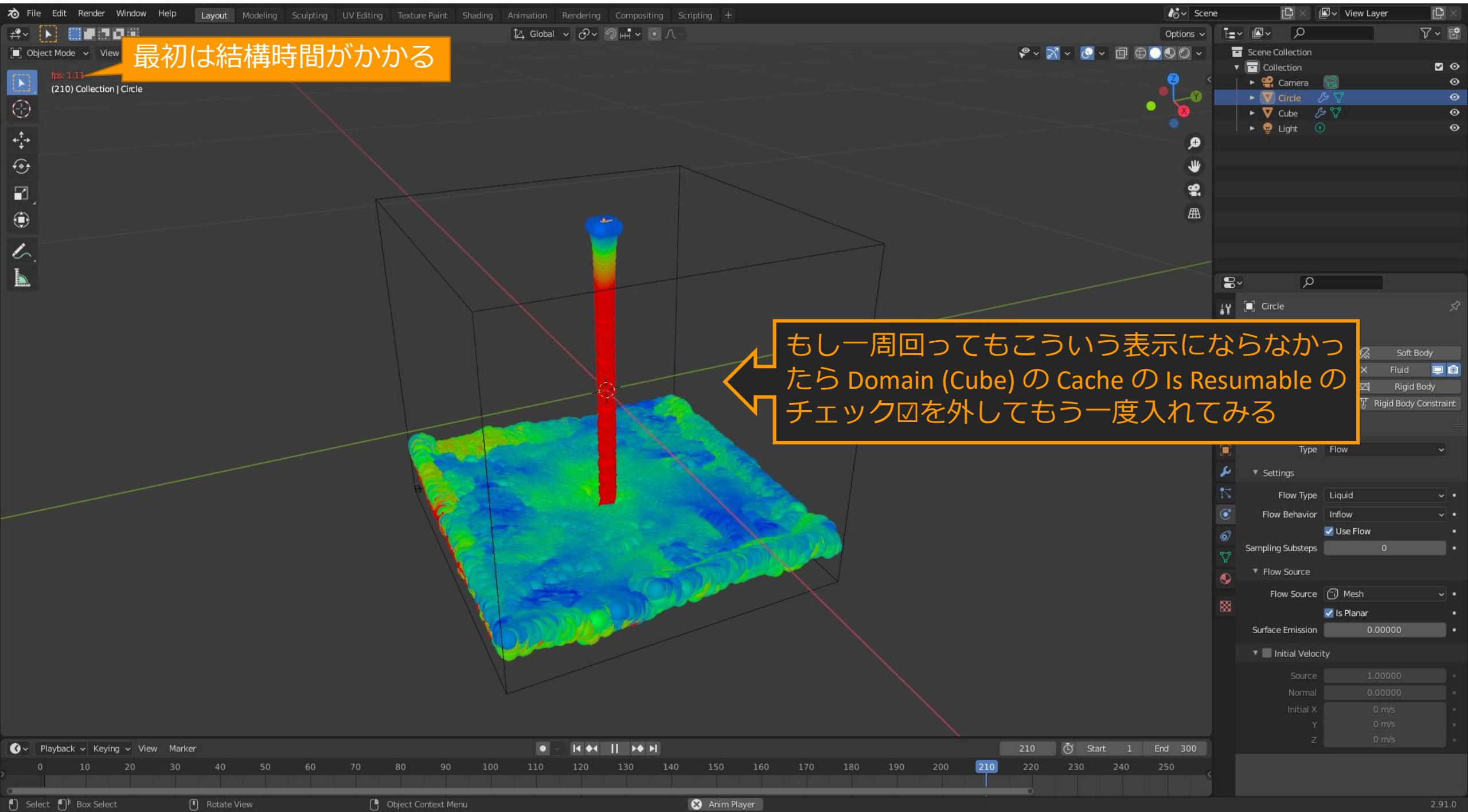


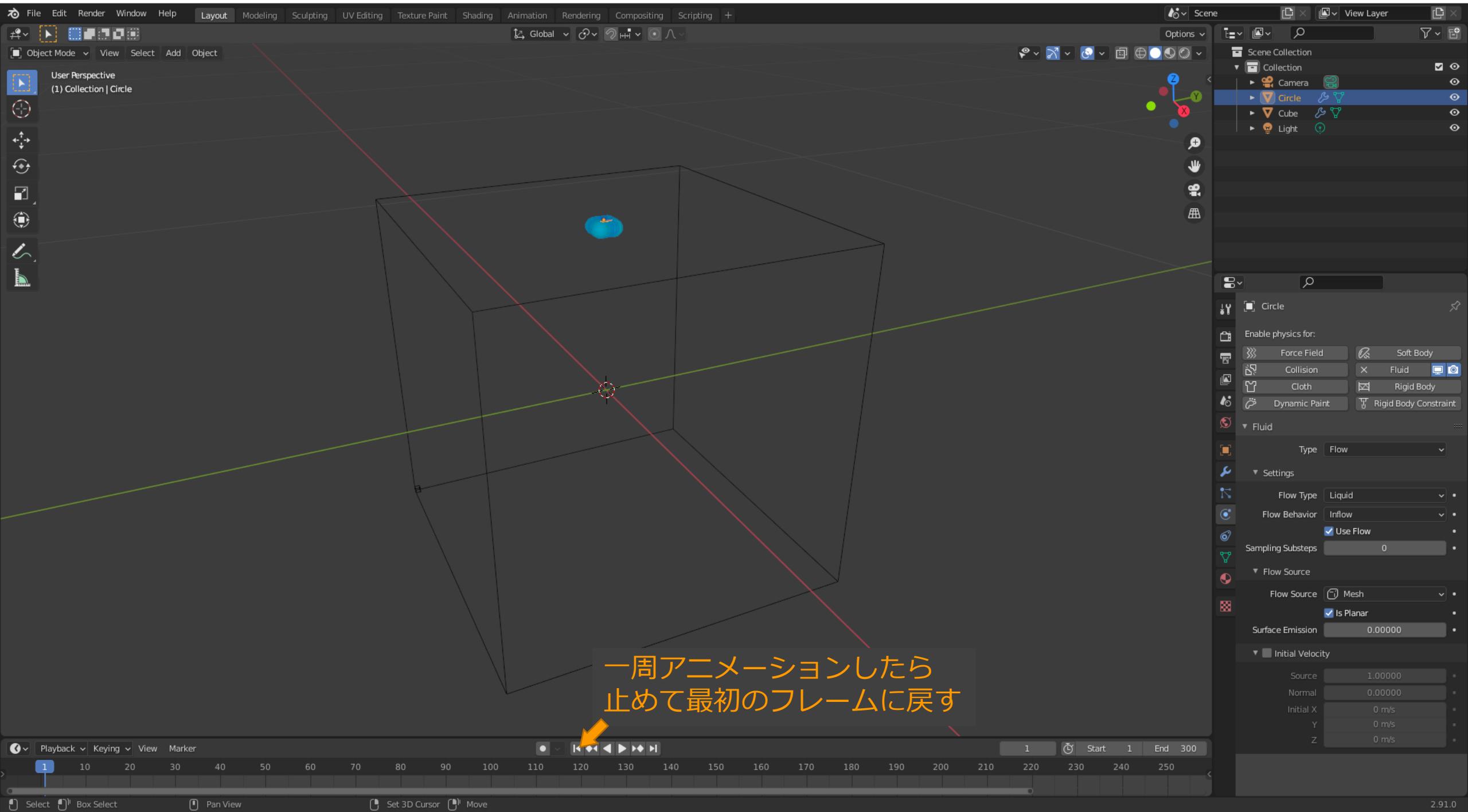


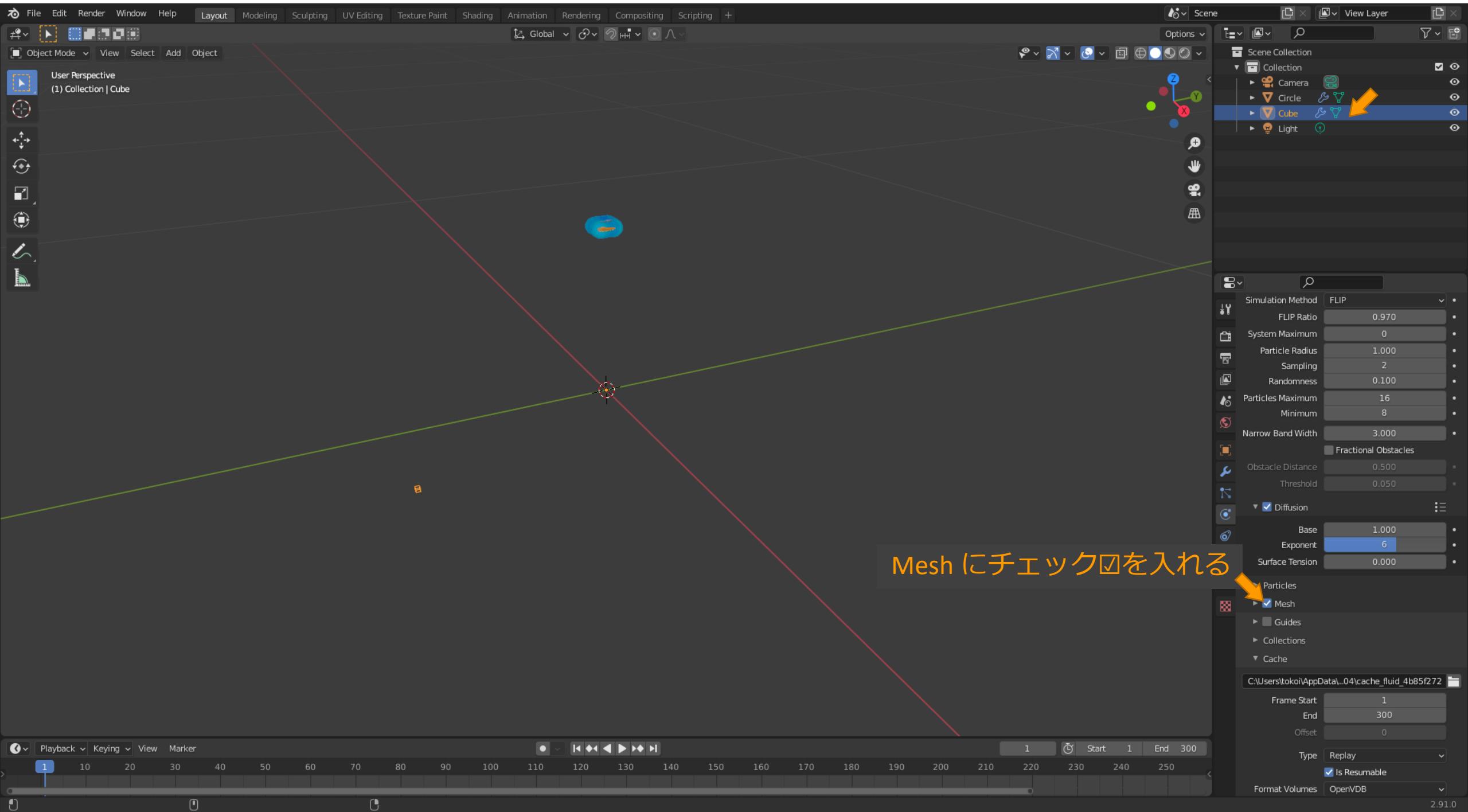


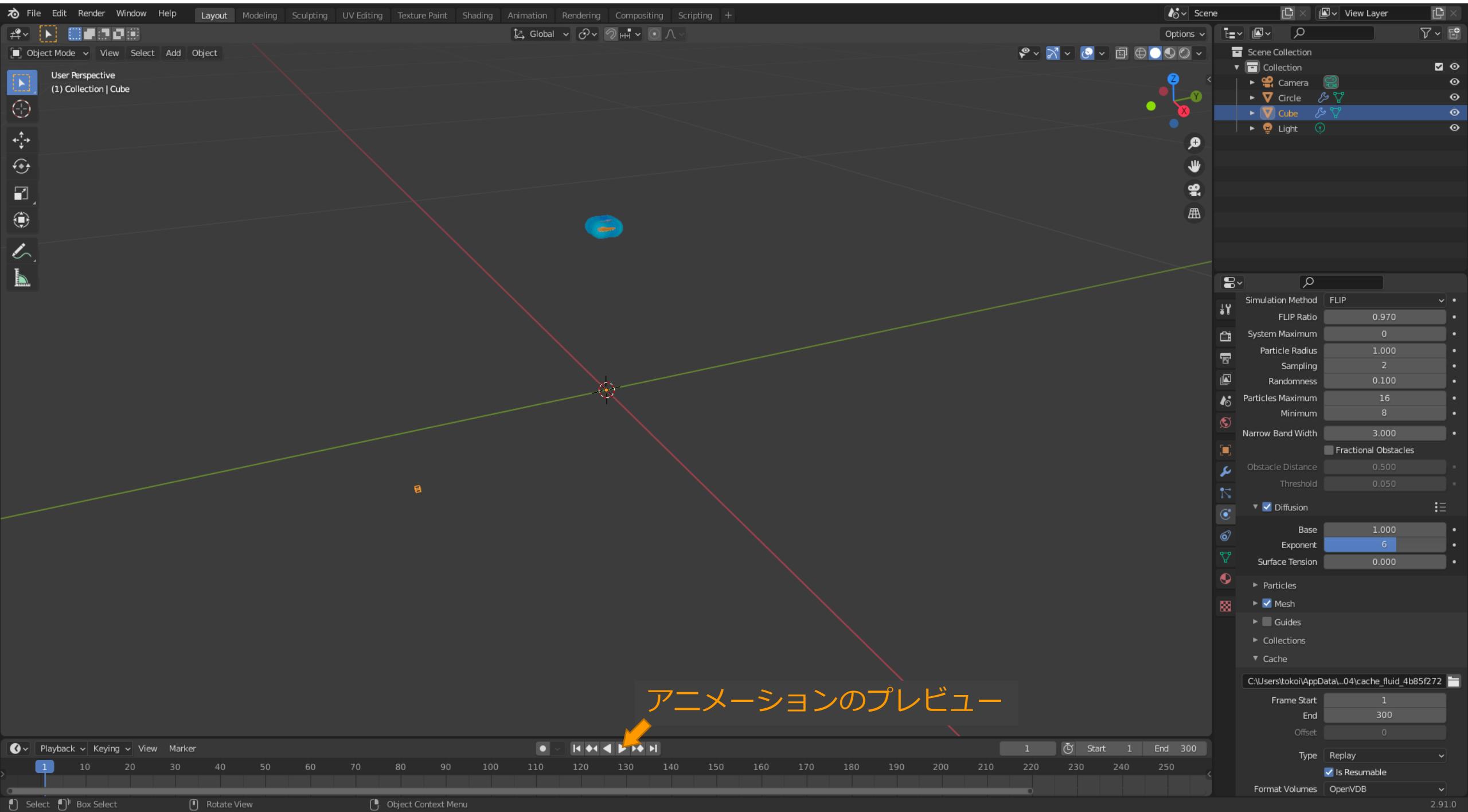


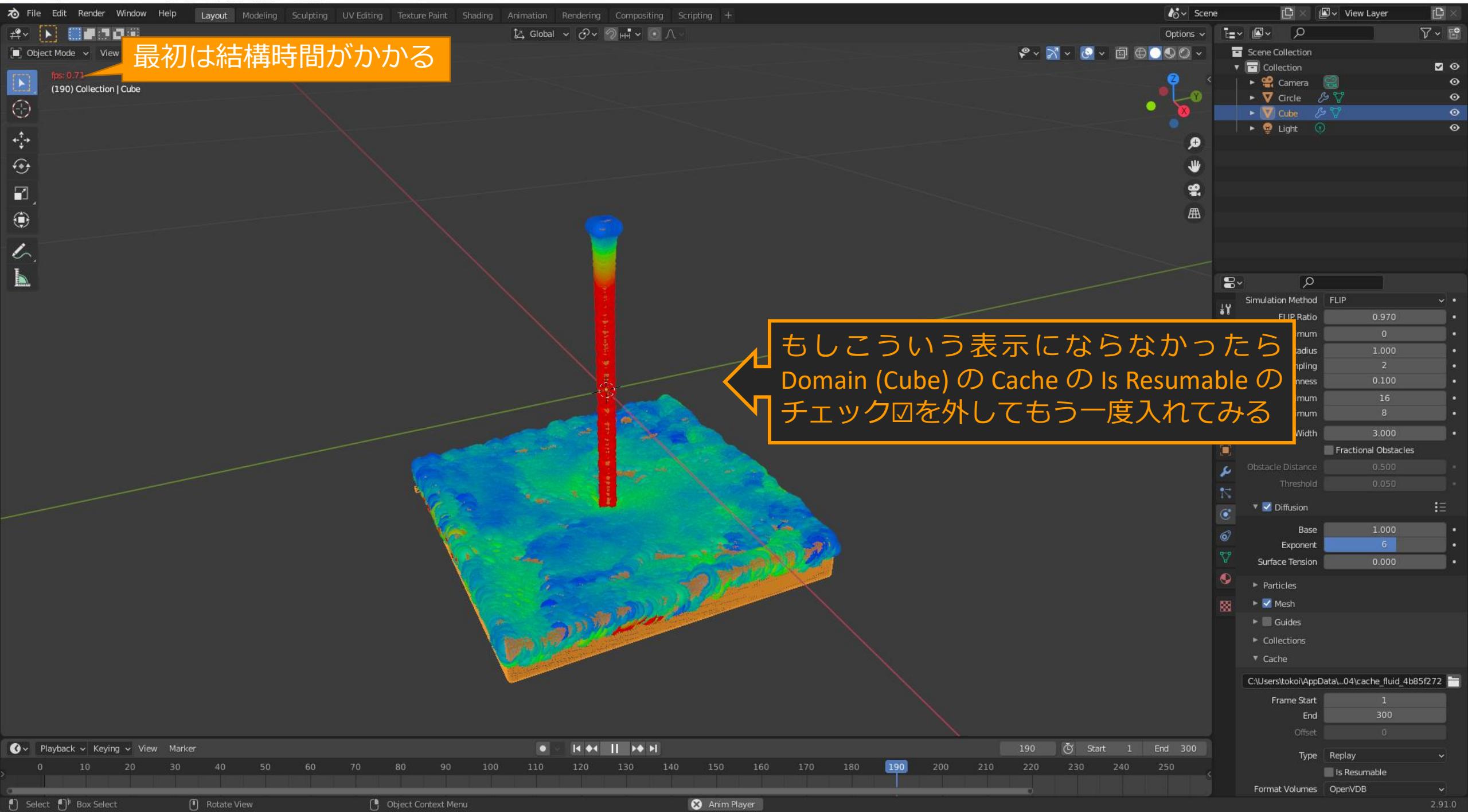




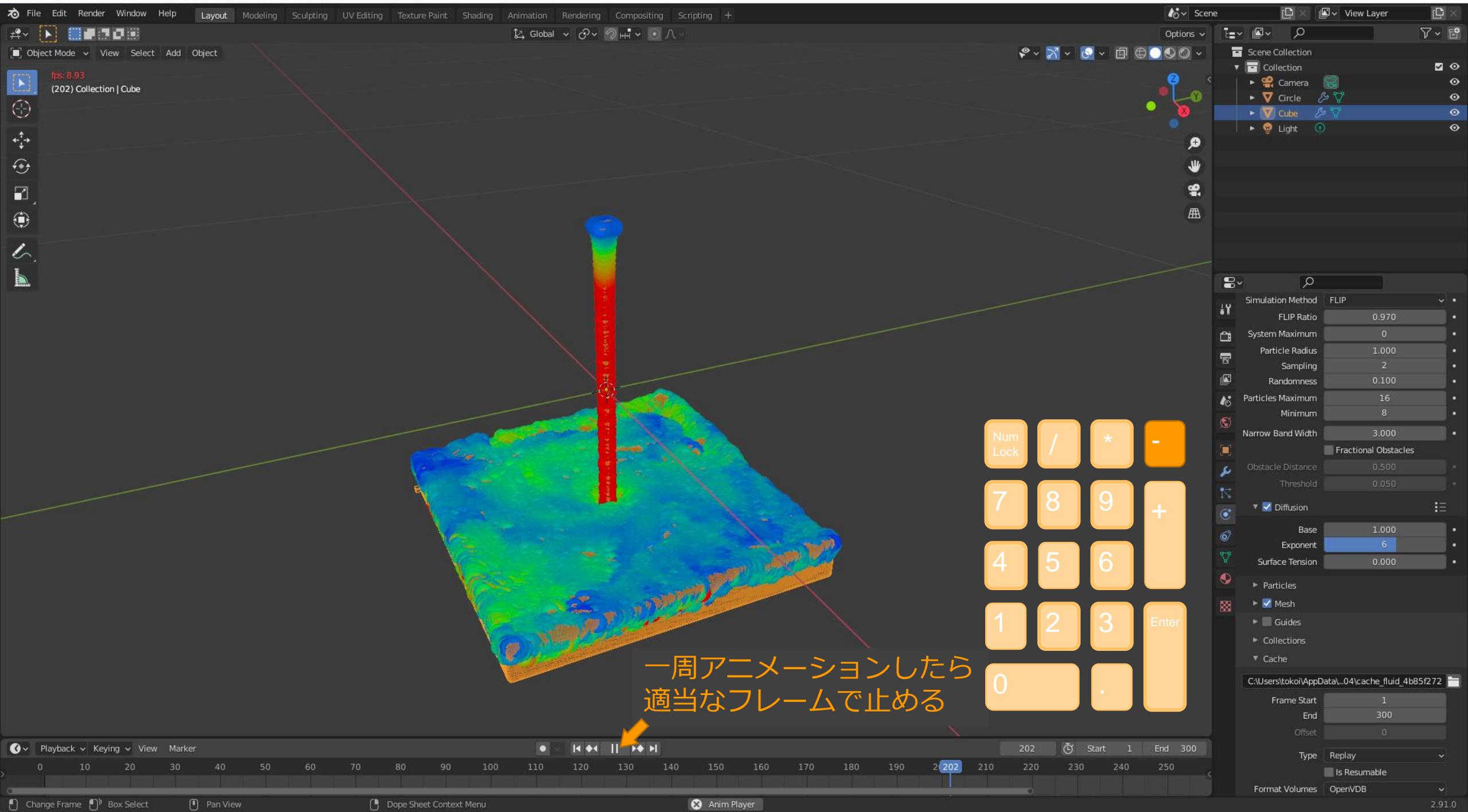


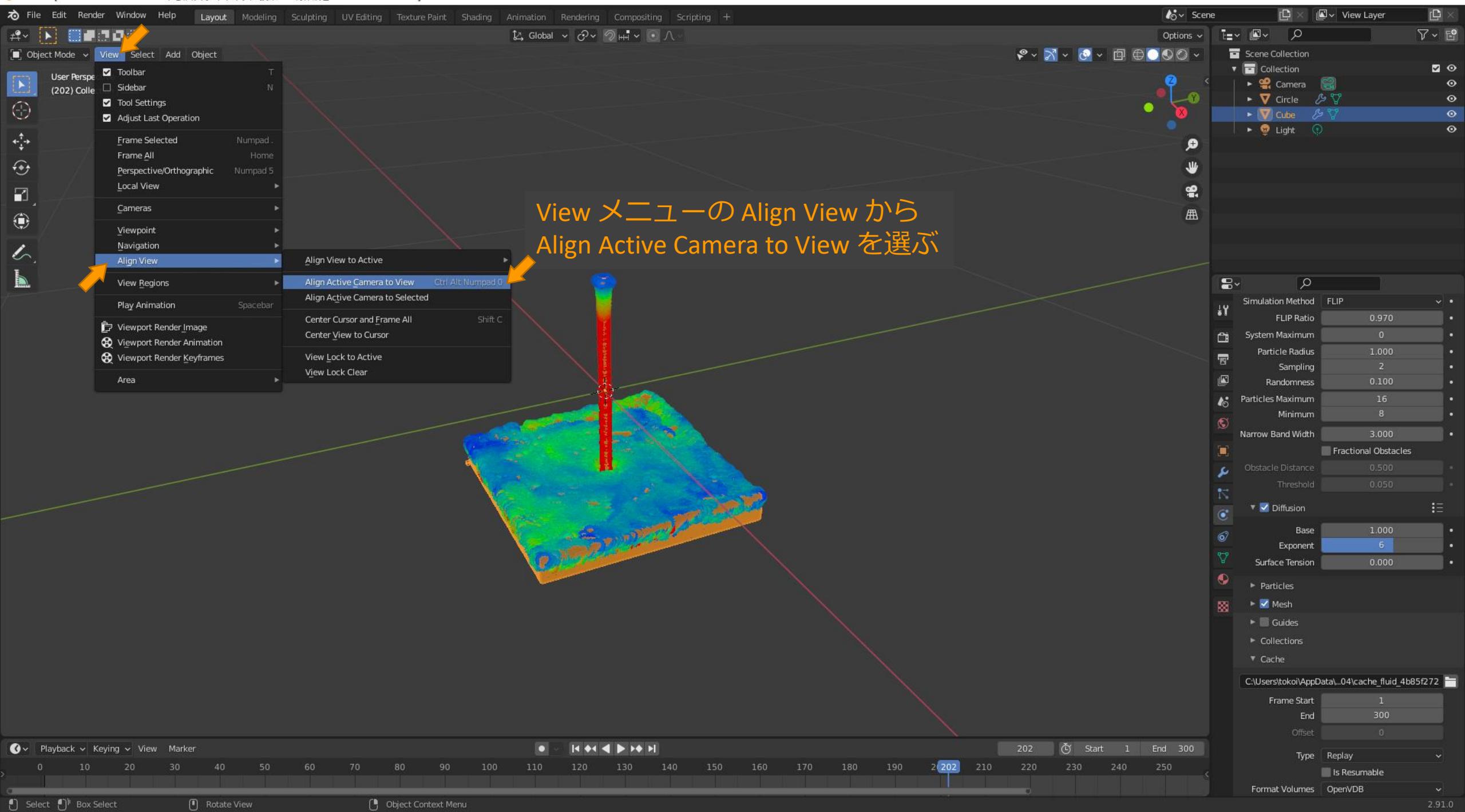


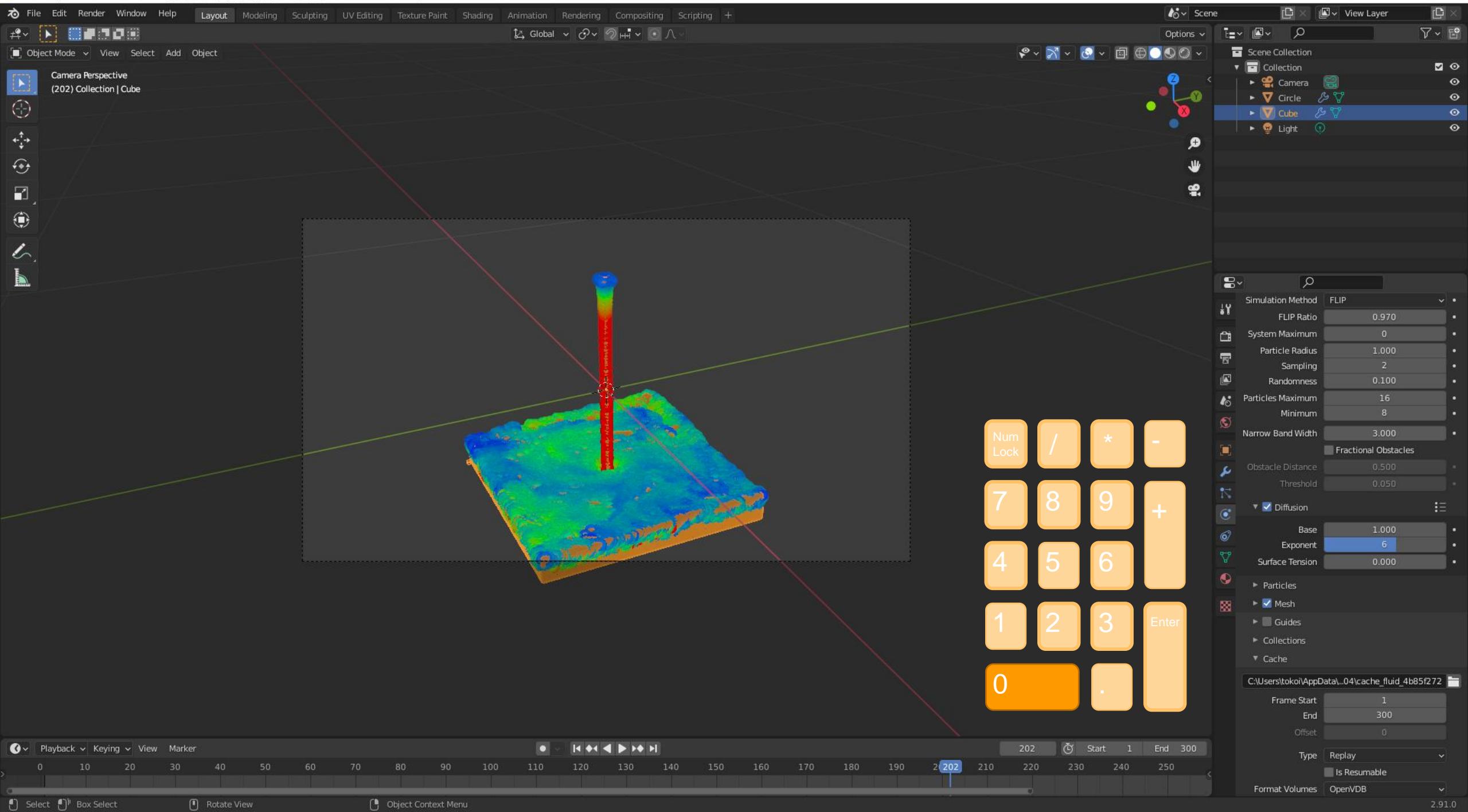


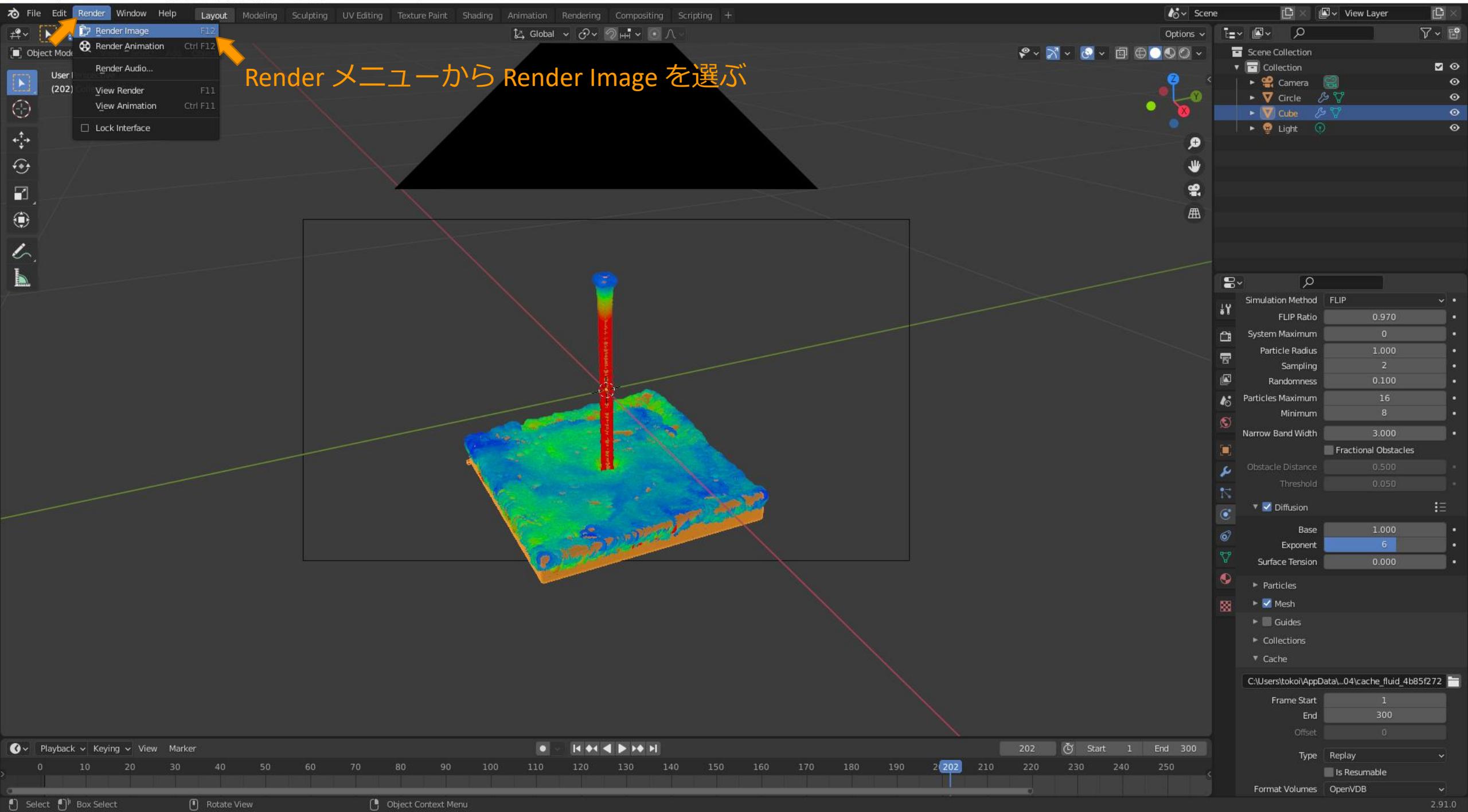


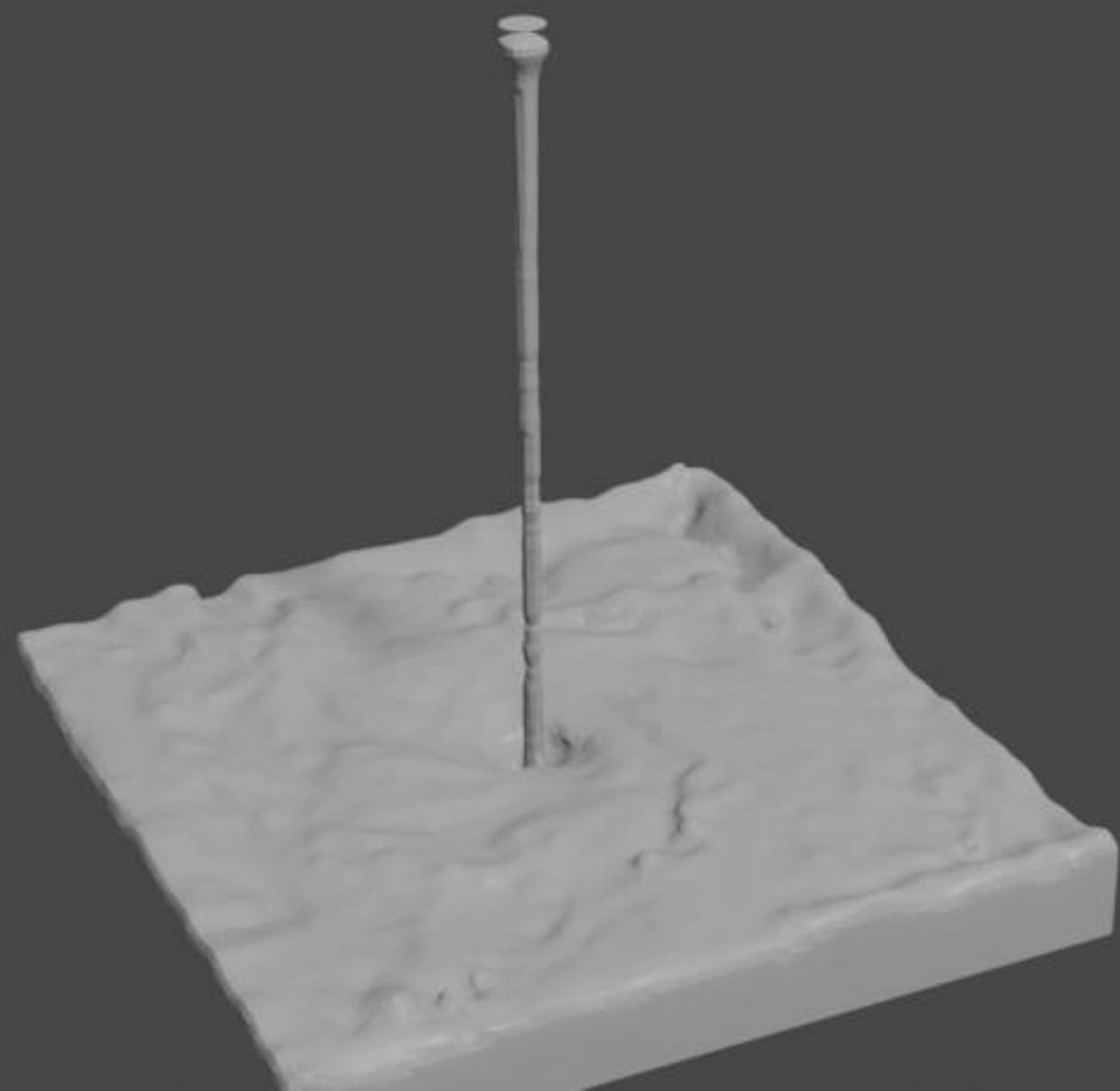
シミュレーション結果の アニメーション作成











Blender 2.91.0 interface showing a fluid simulation setup. The 3D Viewport displays a cube object with a complex surface texture, representing a fluid simulation. The Outliner panel on the right shows the scene structure, including a Collection named 'Collection' containing Camera, Circle, Cube, and Light objects. A yellow arrow points to the 'Cube' entry in the Outliner. The Properties panel on the right shows simulation settings for the 'Cube' object, including 'Simulation Method: FLIP', 'FLIP Ratio: 0.970', and 'Diffusion' settings with 'Base: 1.000' and 'Exponent: 6'. The Timeline at the bottom indicates the current frame is 202, with a range from 1 to 300. A yellow arrow also points to the 'Shade Smooth' option in the Object Context Menu, which is open over the cube object.

Object Context Menu

- Shade Smooth
- Shade Flat
- Set Origin
- Copy Objects Ctrl C
- Paste Objects Ctrl V
- Duplicate Objects Shift D
- Duplicate Linked Alt D
- Rename Active Object... F2
- Mirror
- Snap
- Parent
- Move to Collection M
- Insert Keyframe... I
- Delete X

Scene Collection

- Collection
- Camera
- Circle
- Cube**
- Light

Simulation Method: FLIP

FLIP Ratio: 0.970

System Maximum: 0

Particle Radius: 1.000

Sampling: 2

Randomness: 0.100

Particles Maximum: 16

Minimum: 8

Narrow Band Width: 3.000

Fractional Obstacles

Obstacle Distance: 0.500

Threshold: 0.050

Diffusion

Base: 1.000

Exponent: 6

Surface Tension: 0.000

Particles

Mesh

Guides

Collections

Cache

C:\Users\tokoi\AppData\Local\cache_fluid_4b85f272

Frame Start: 1

End: 300

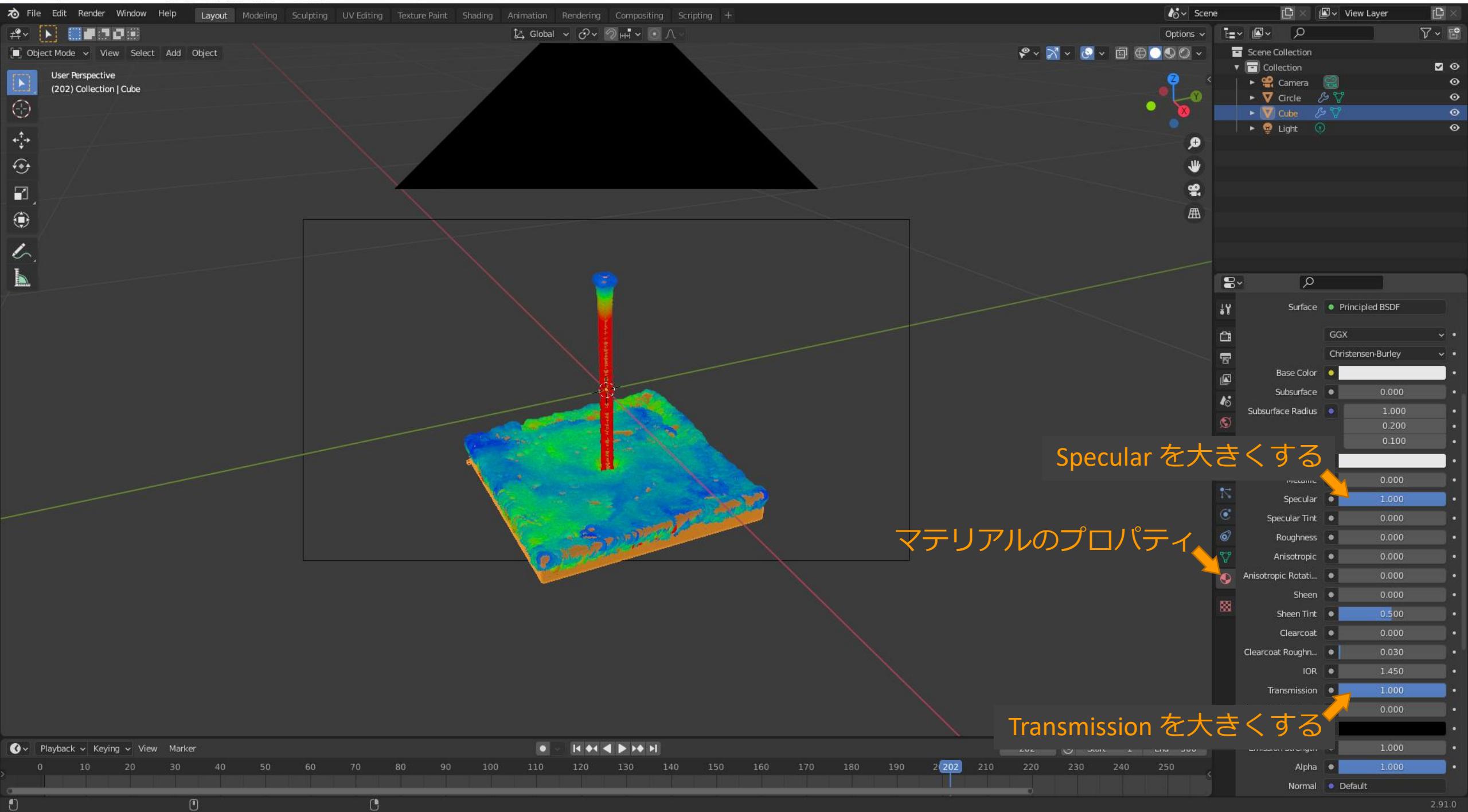
Offset: 0

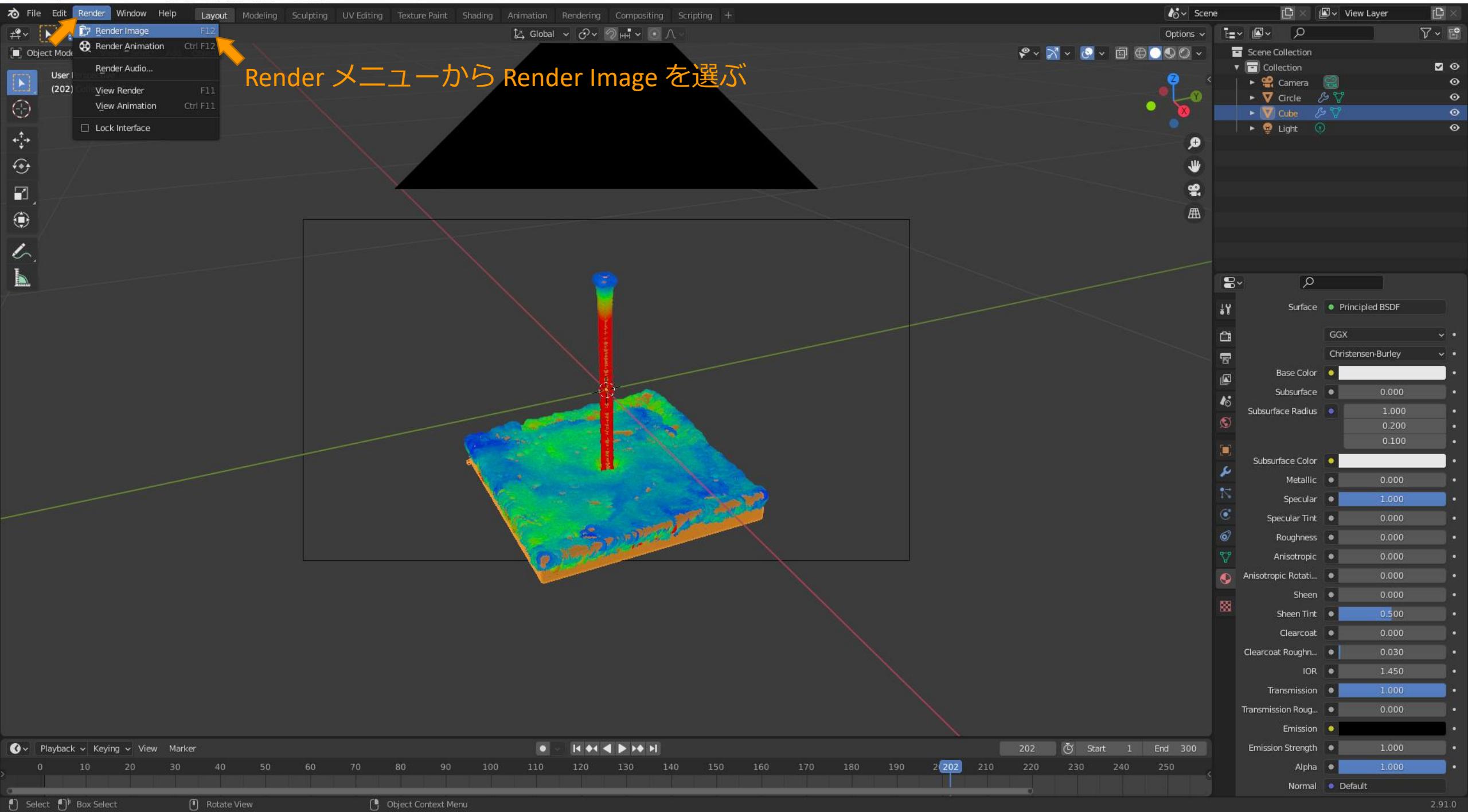
Type: Replay

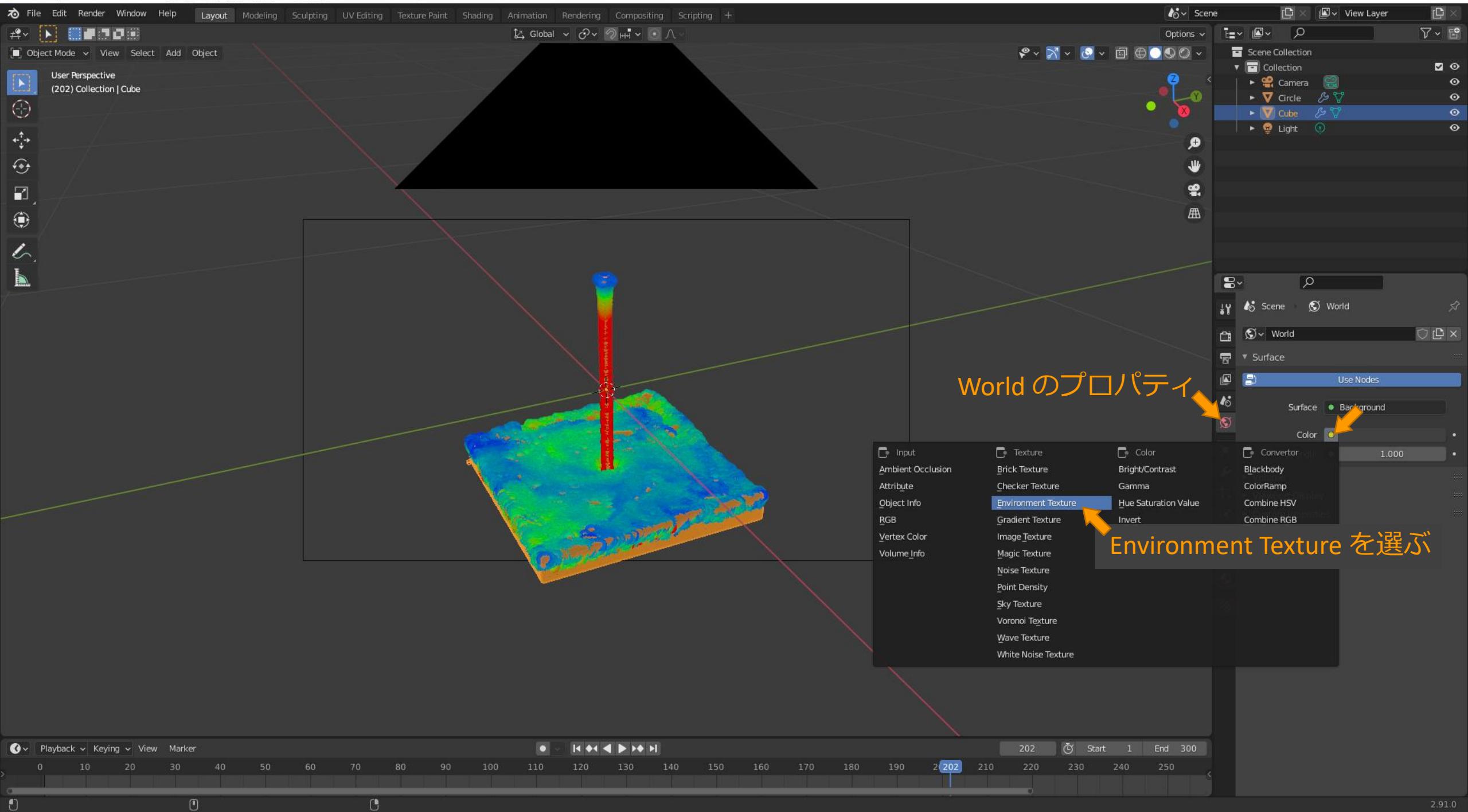
Is Resumable

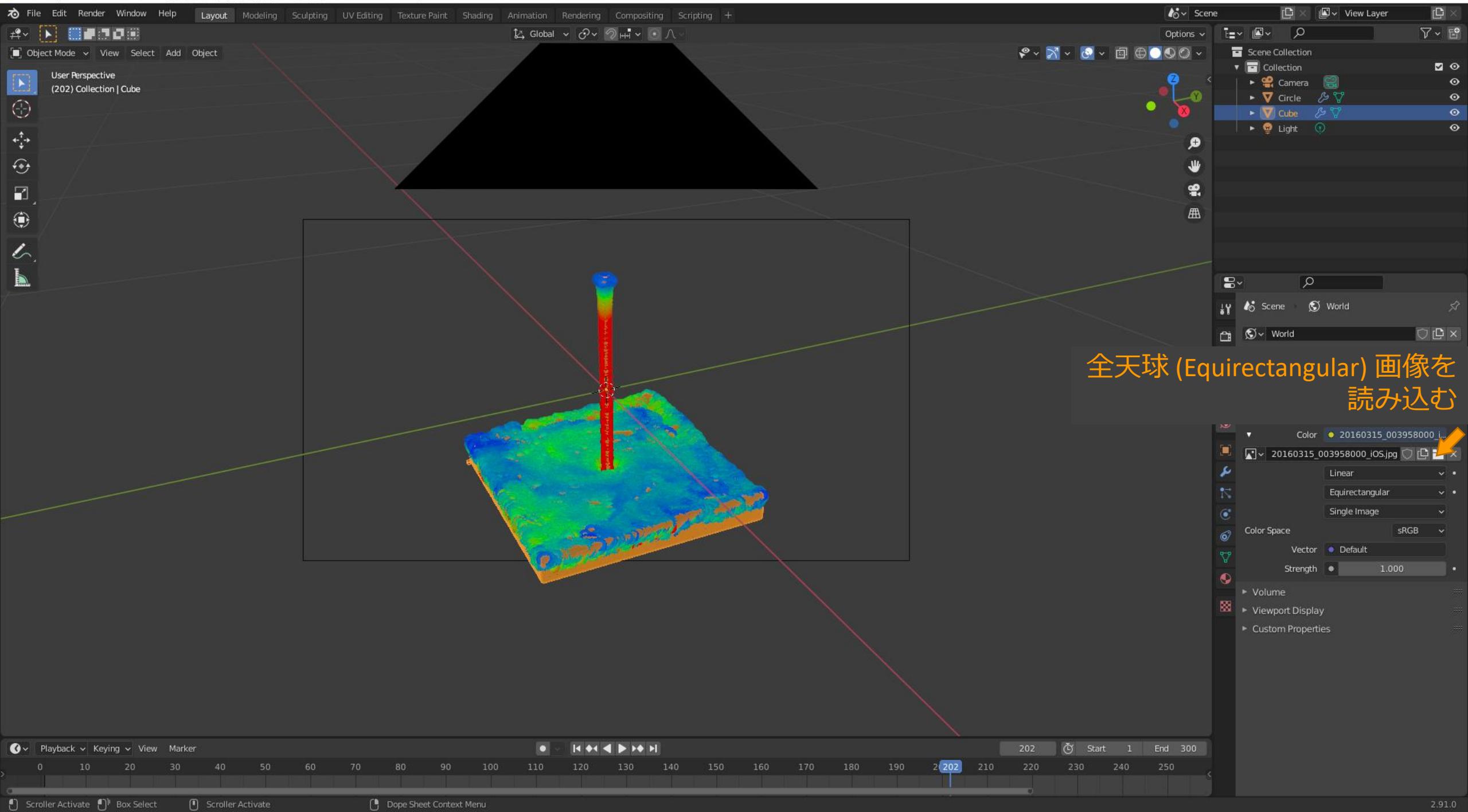
Format Volumes: OpenVDB

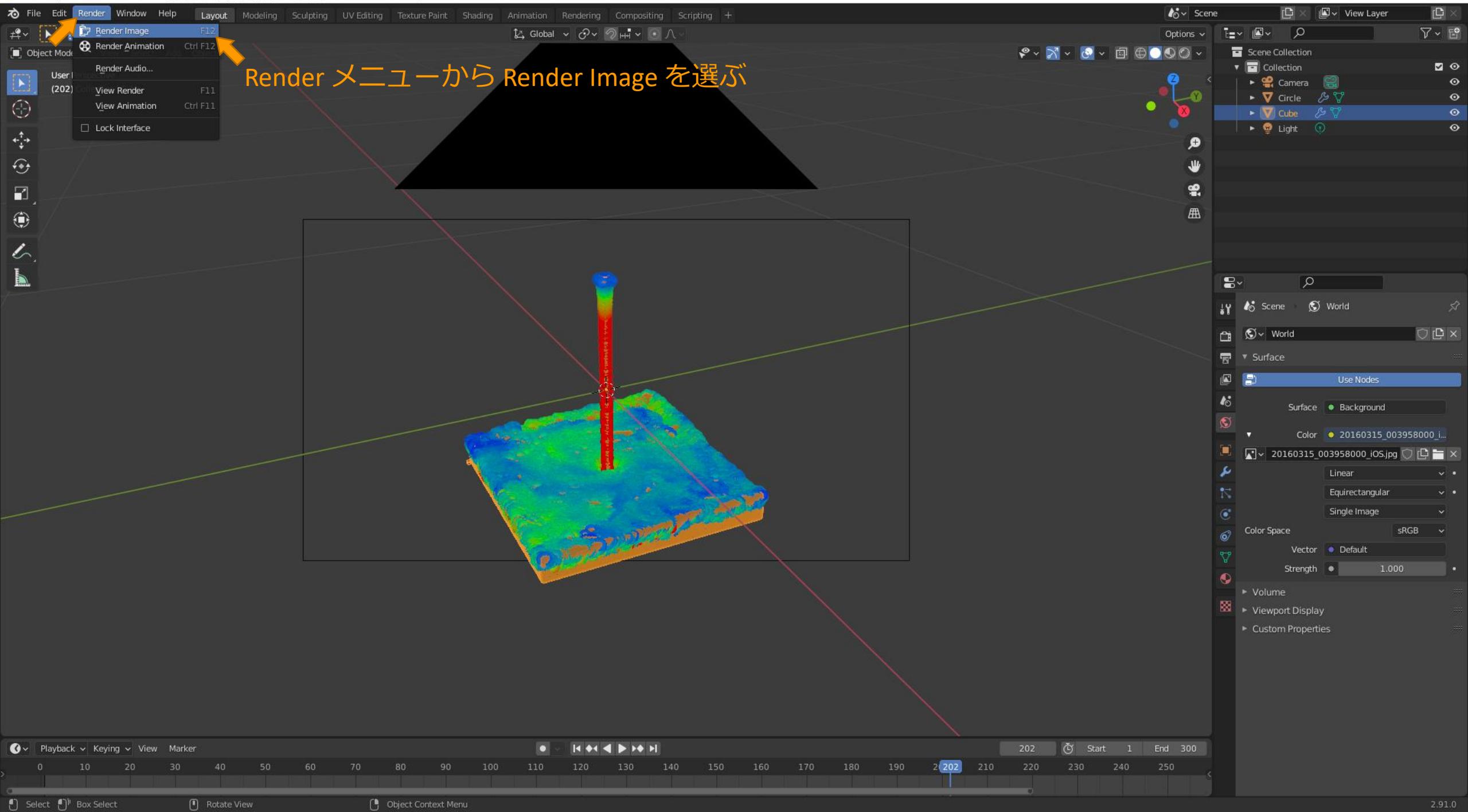
2.91.0



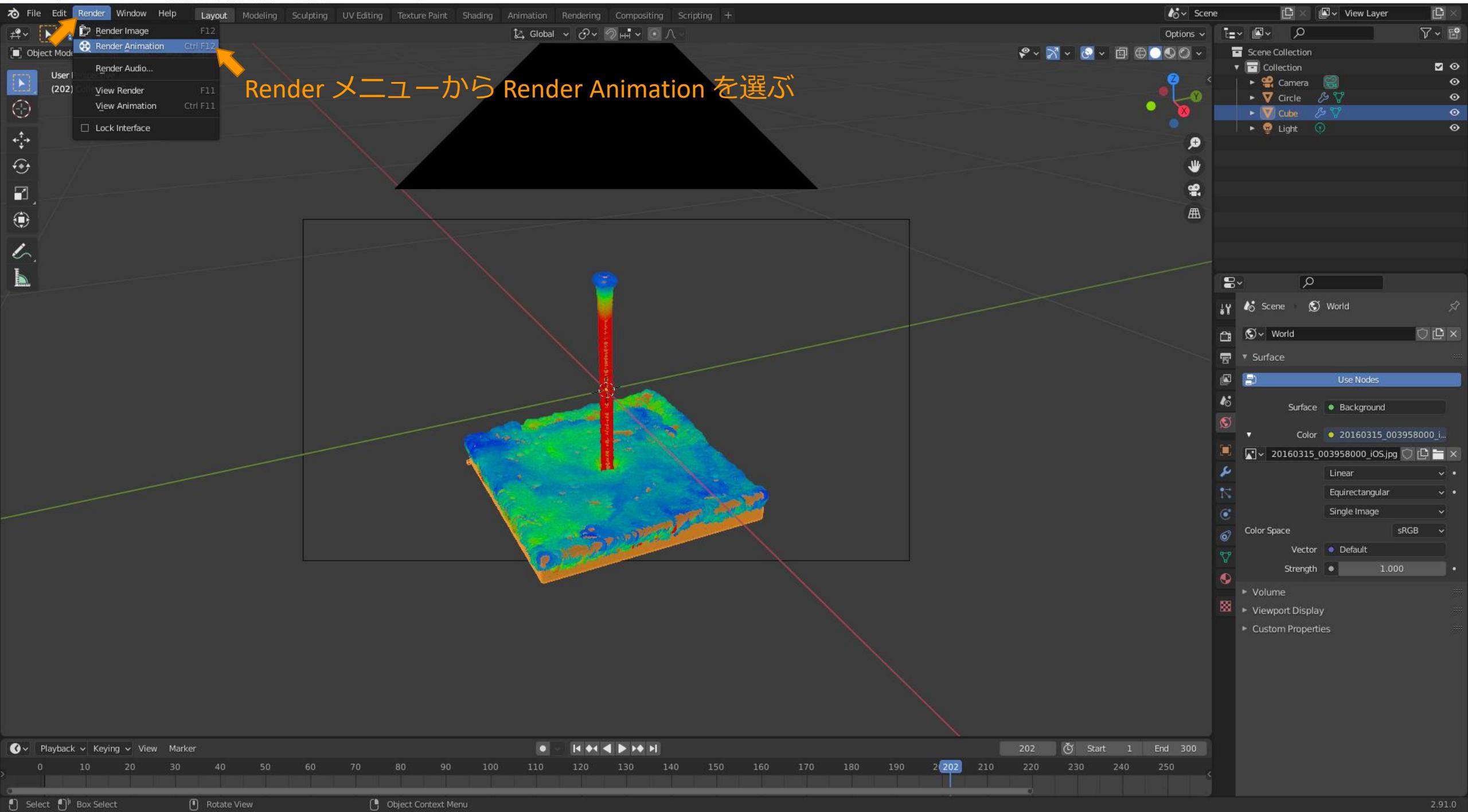






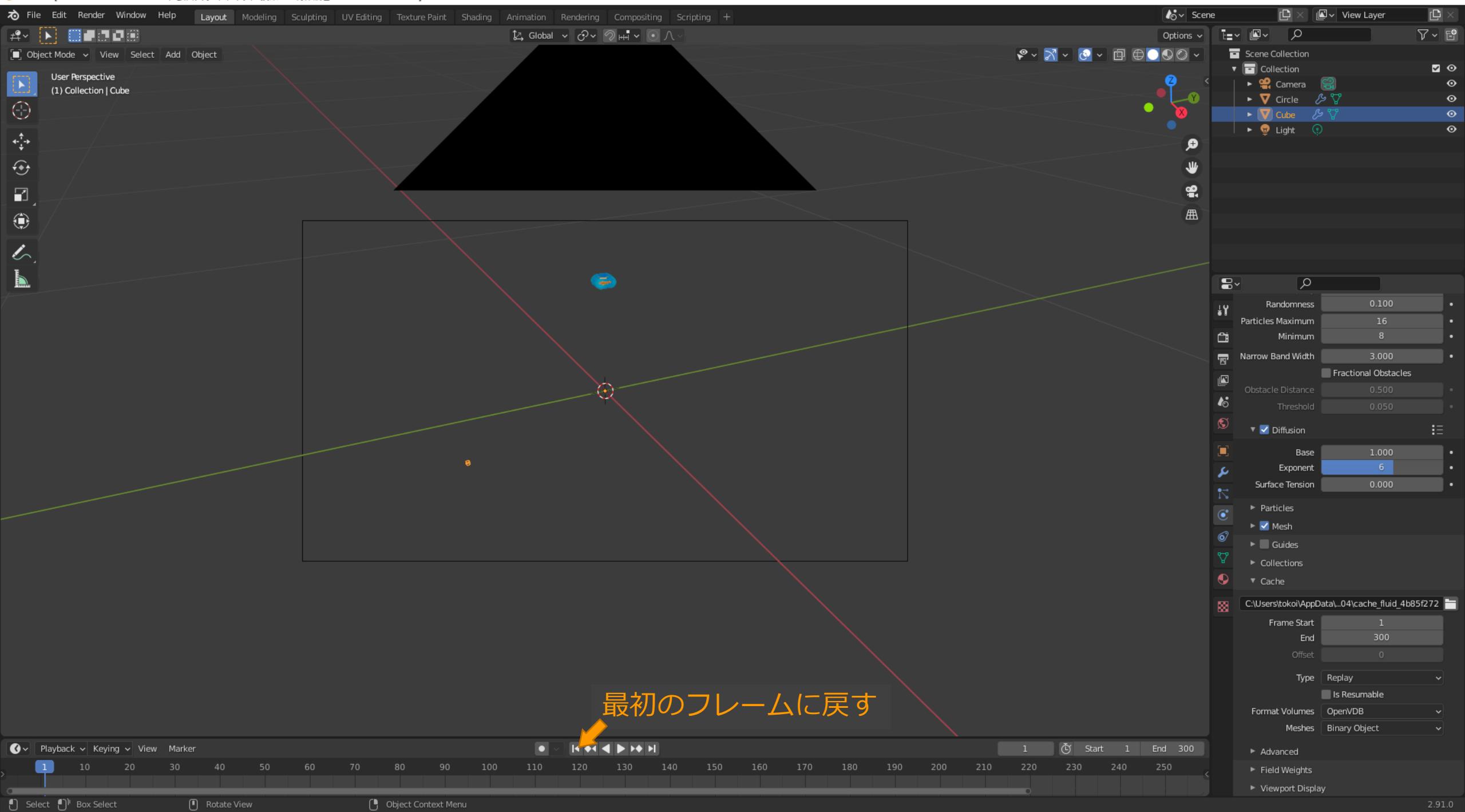


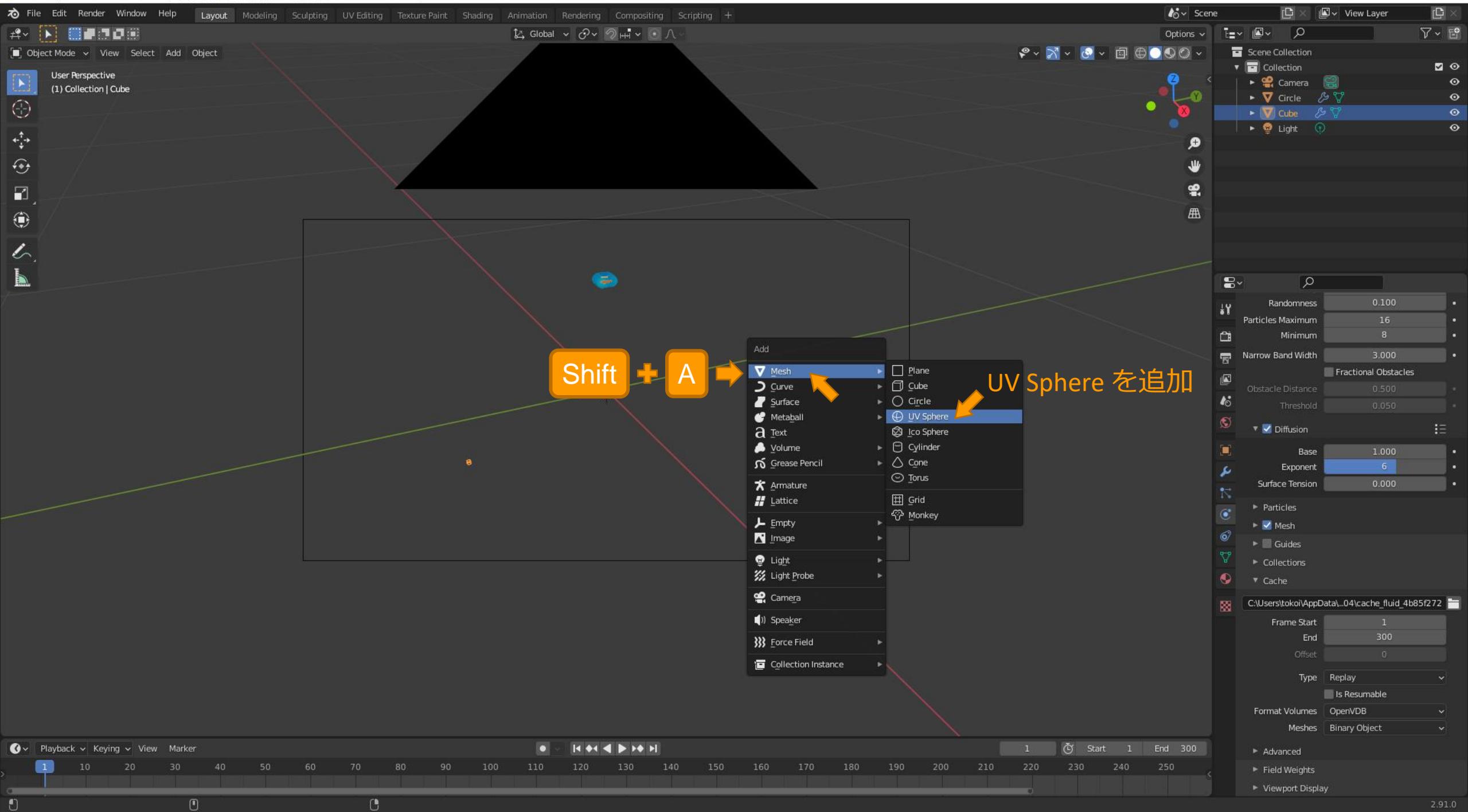


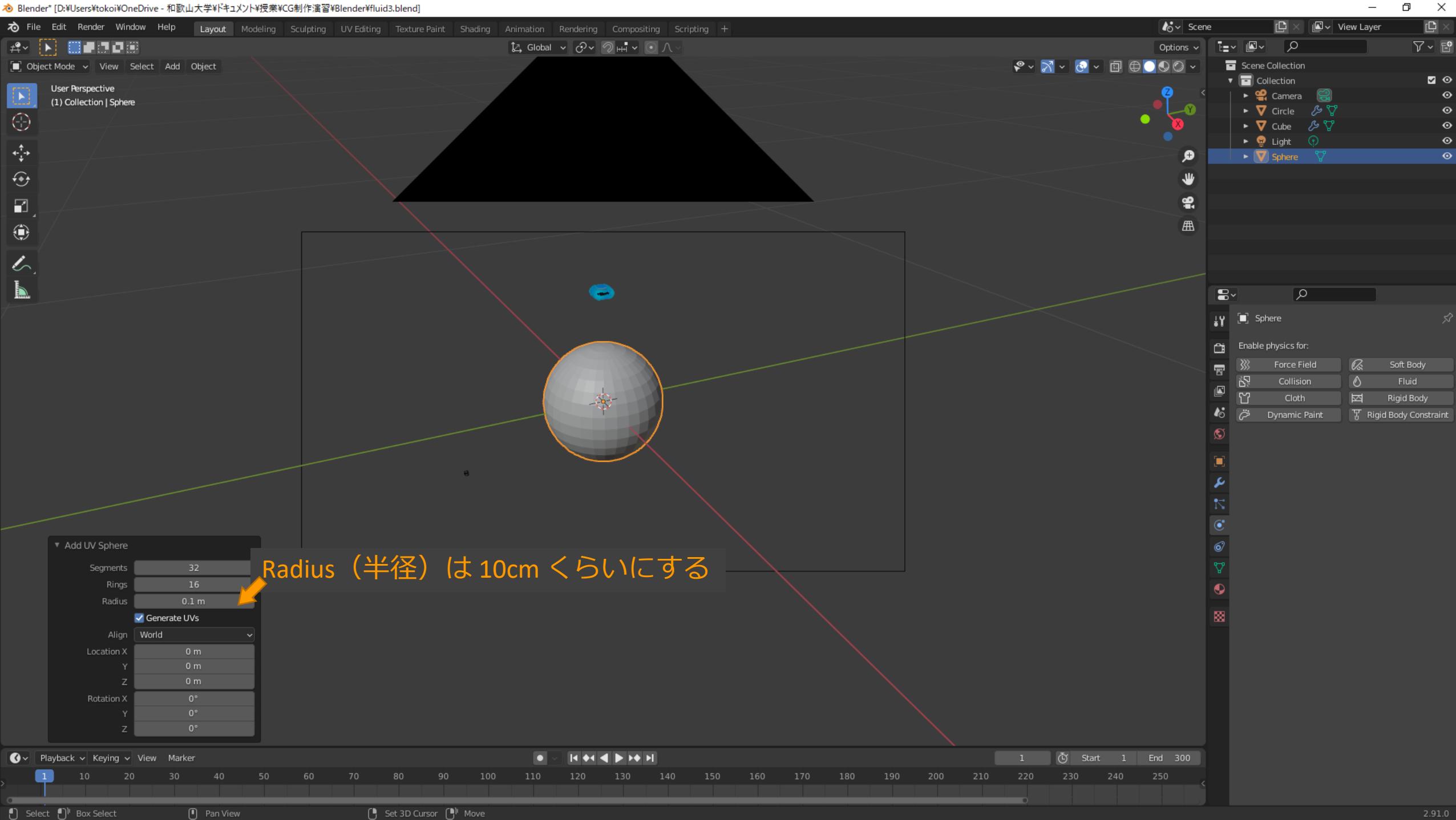


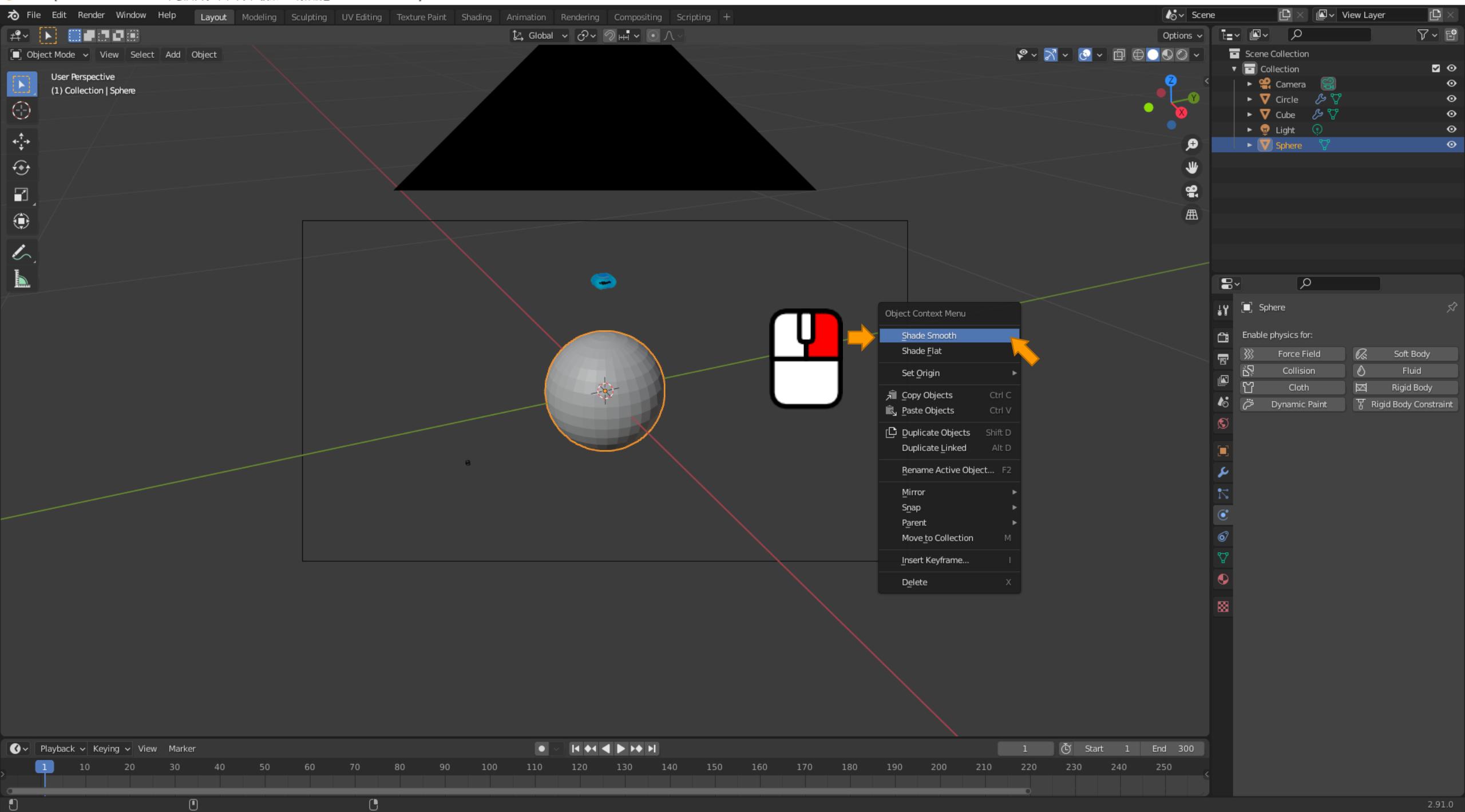
障害物 (Effector) の追加

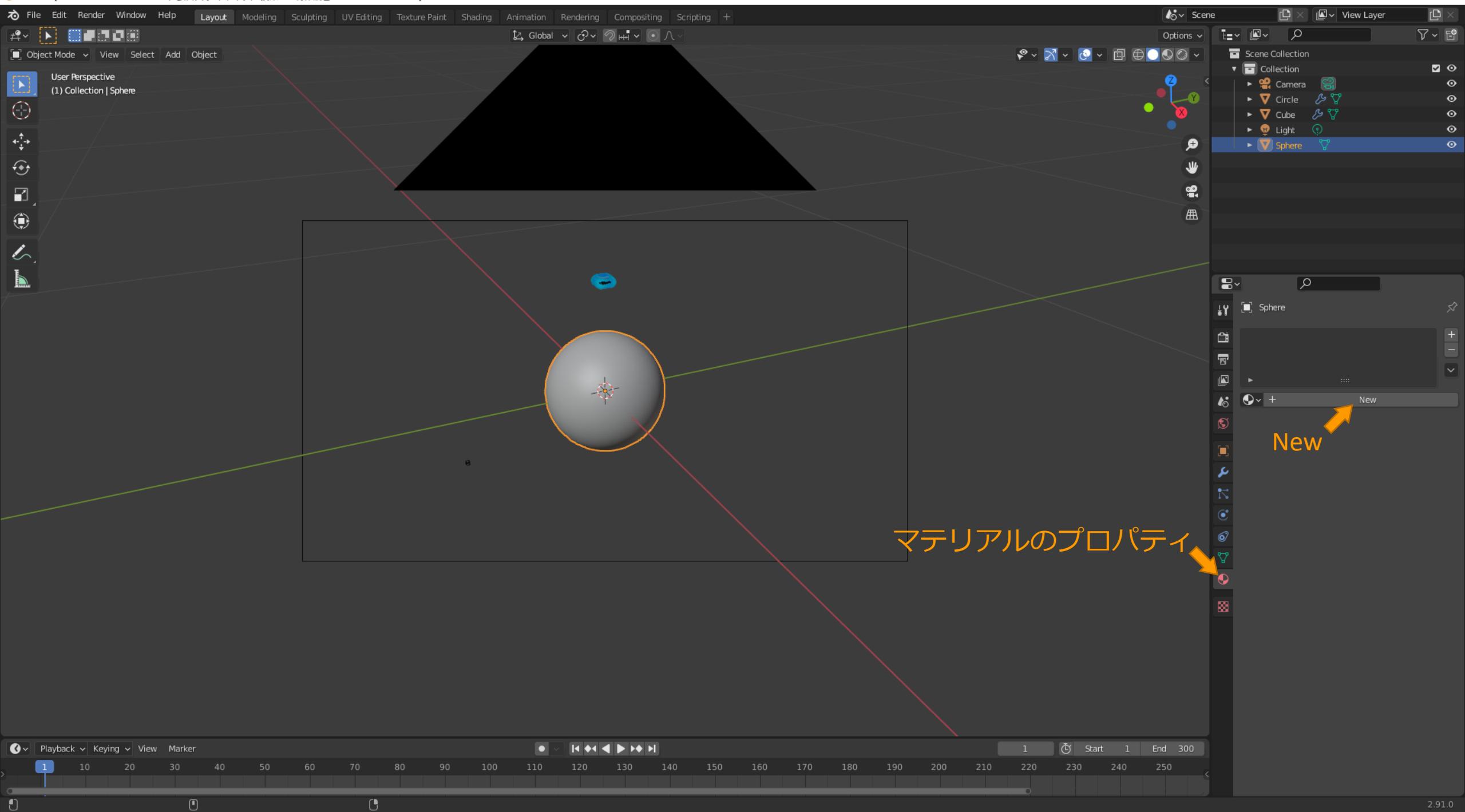
Domain は計算領域なので器などは別にモデルを用意する

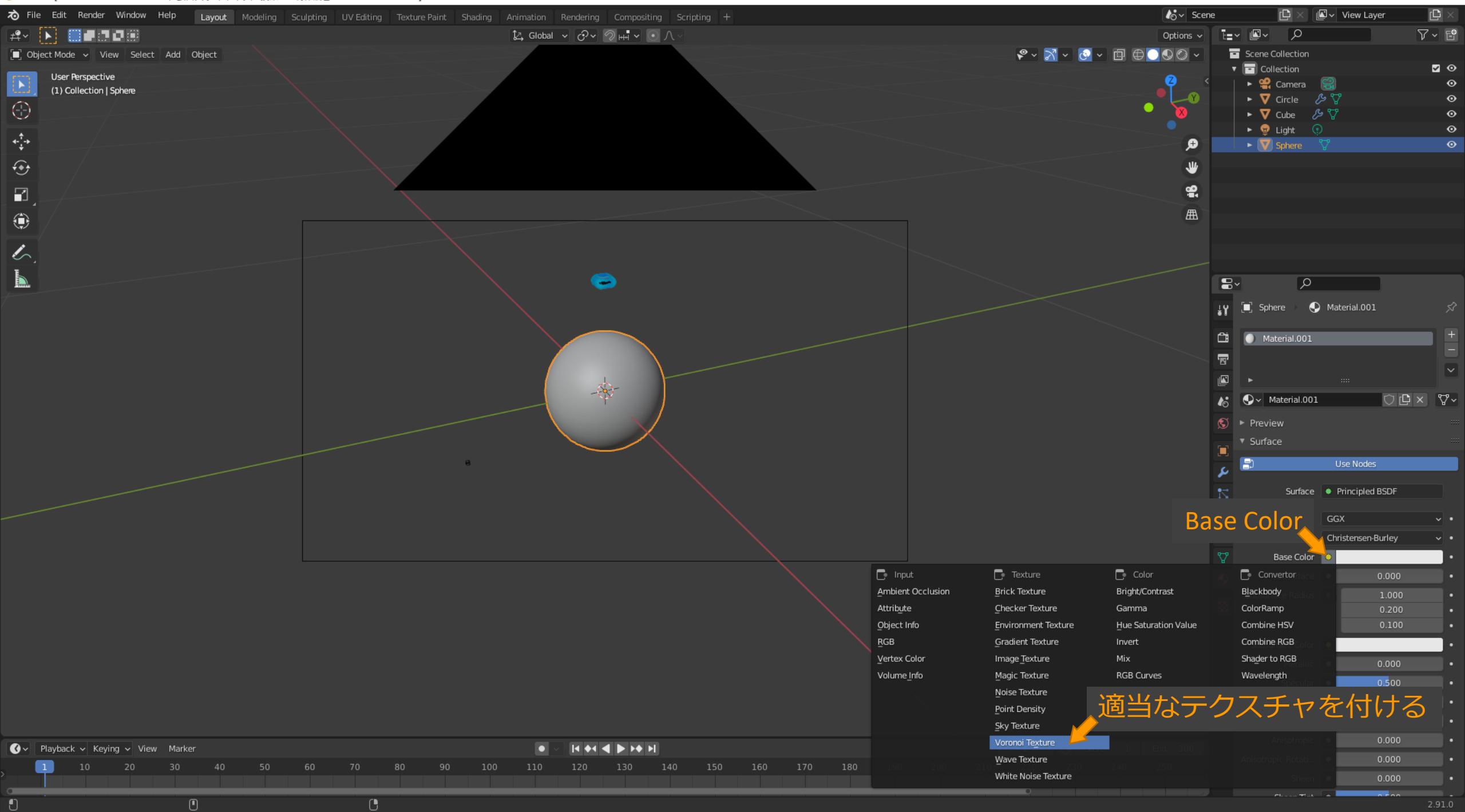


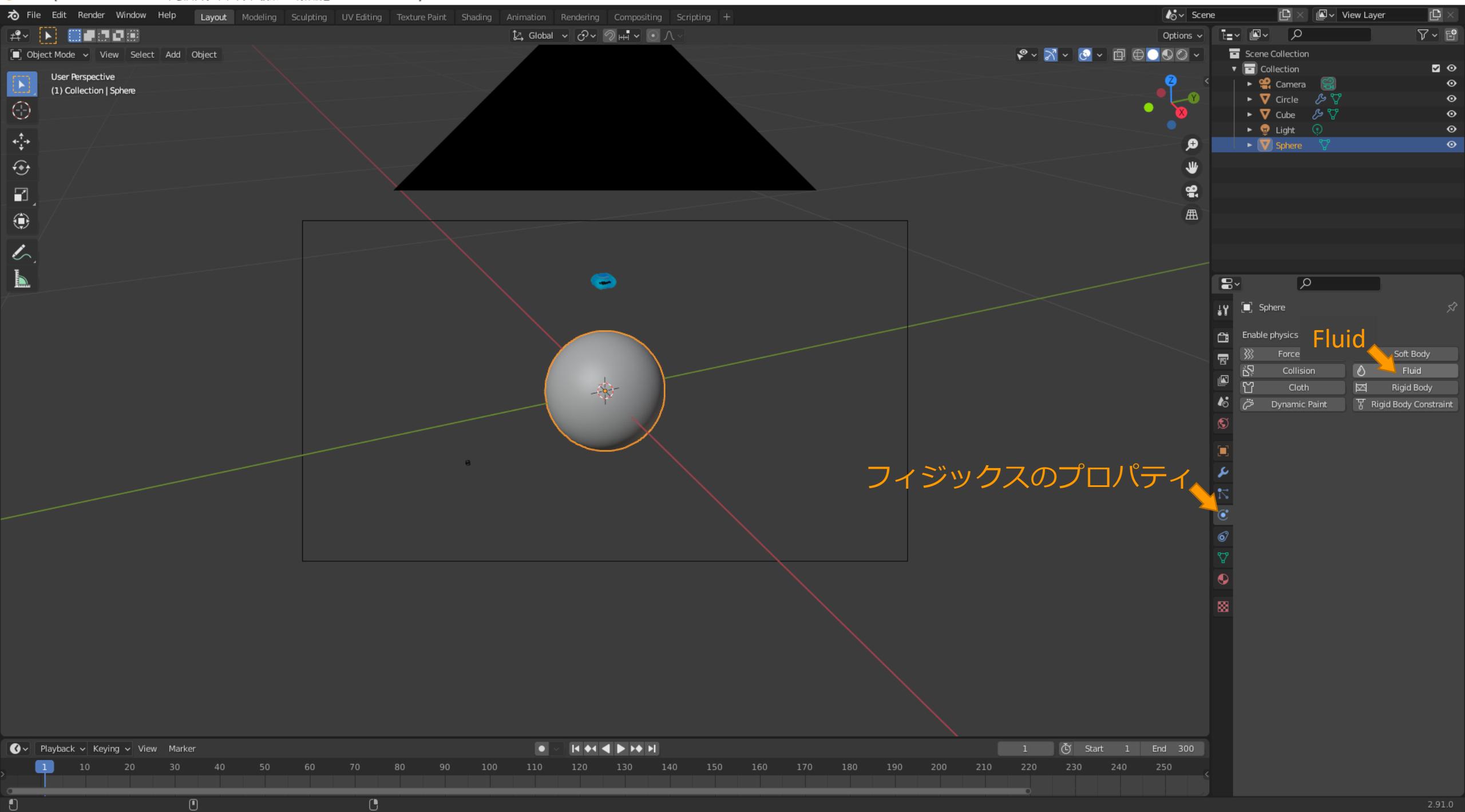


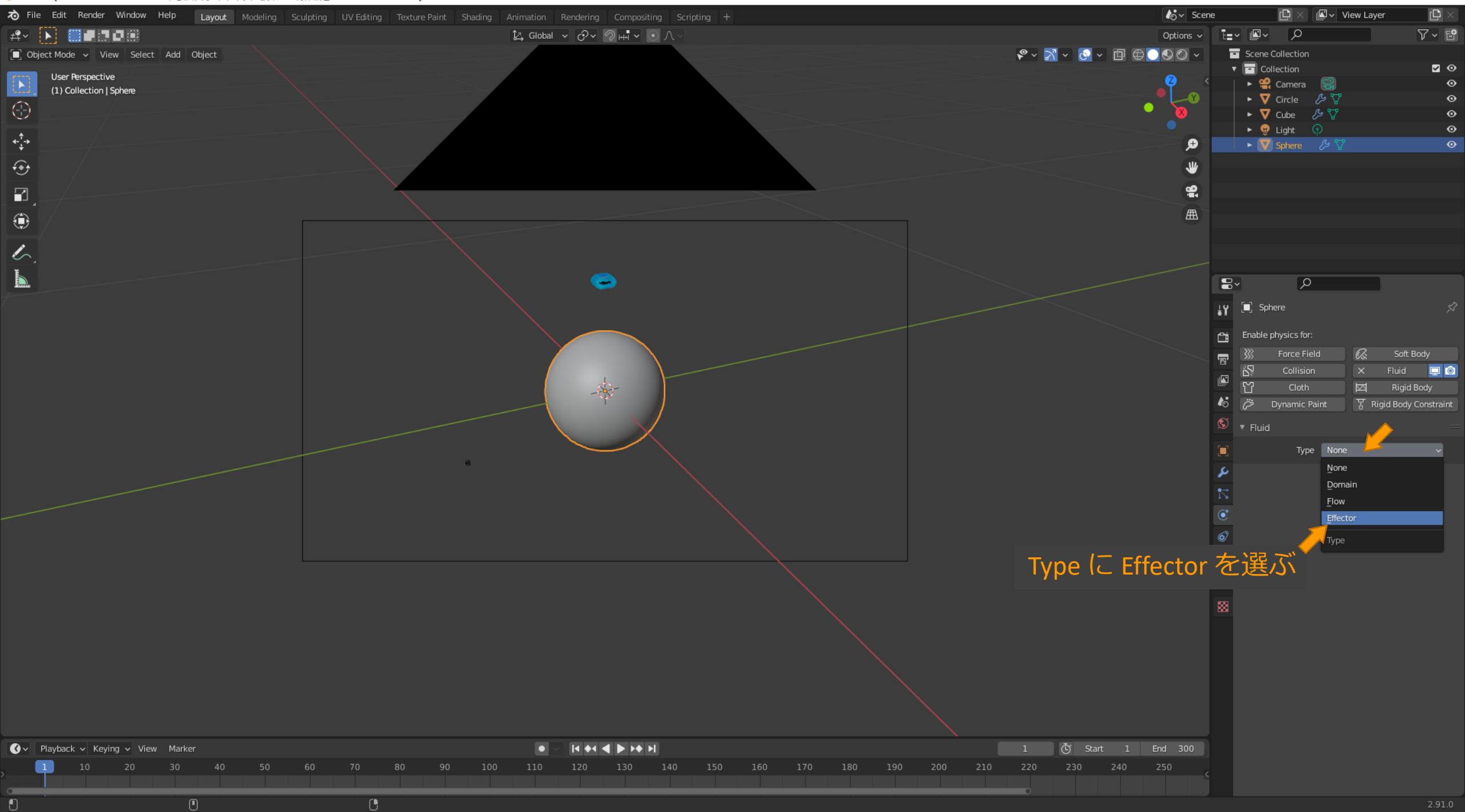




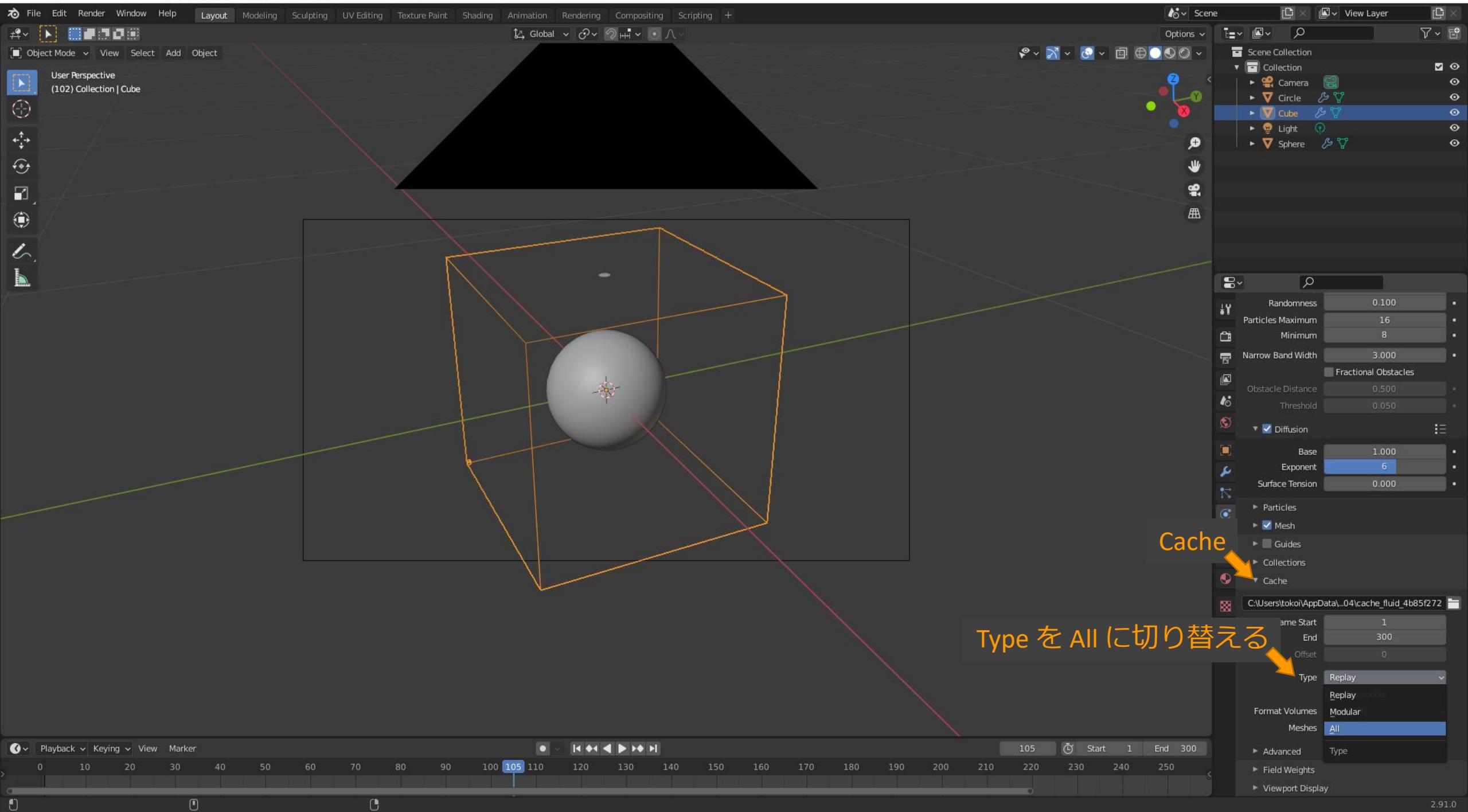








Type に Effector を選ぶ



Blender 2.91.0

File Edit Render Window Help Layout Modeling Sculpting UV Editing Texture Paint Shading Animation Rendering Compositing Scripting +

Global View Options

User Perspective (105 Collection | Cube)

Scene Collection

- Collection
- Camera
- Circle
- Cube**
- Light
- Sphere

Randomness 0.100

Particles Maximum 16

Minimum 8

Narrow Band Width 3.000

Obstacle Distance 0.500

Threshold 0.050

Diffusion

Base 1.000

Exponent 6

Surface Tension 0.000

Particles

Mesh

Guides

Collections

Cache

C:\Users\tokoi\AppData\04\cache_fluid_4b85f272

Frame Start 1

End 300

Offset 0

Type All

Is Resumable

Format Volumes OpenVDB

Meshes Binary Object

Bake All

Playback Keying View Marker

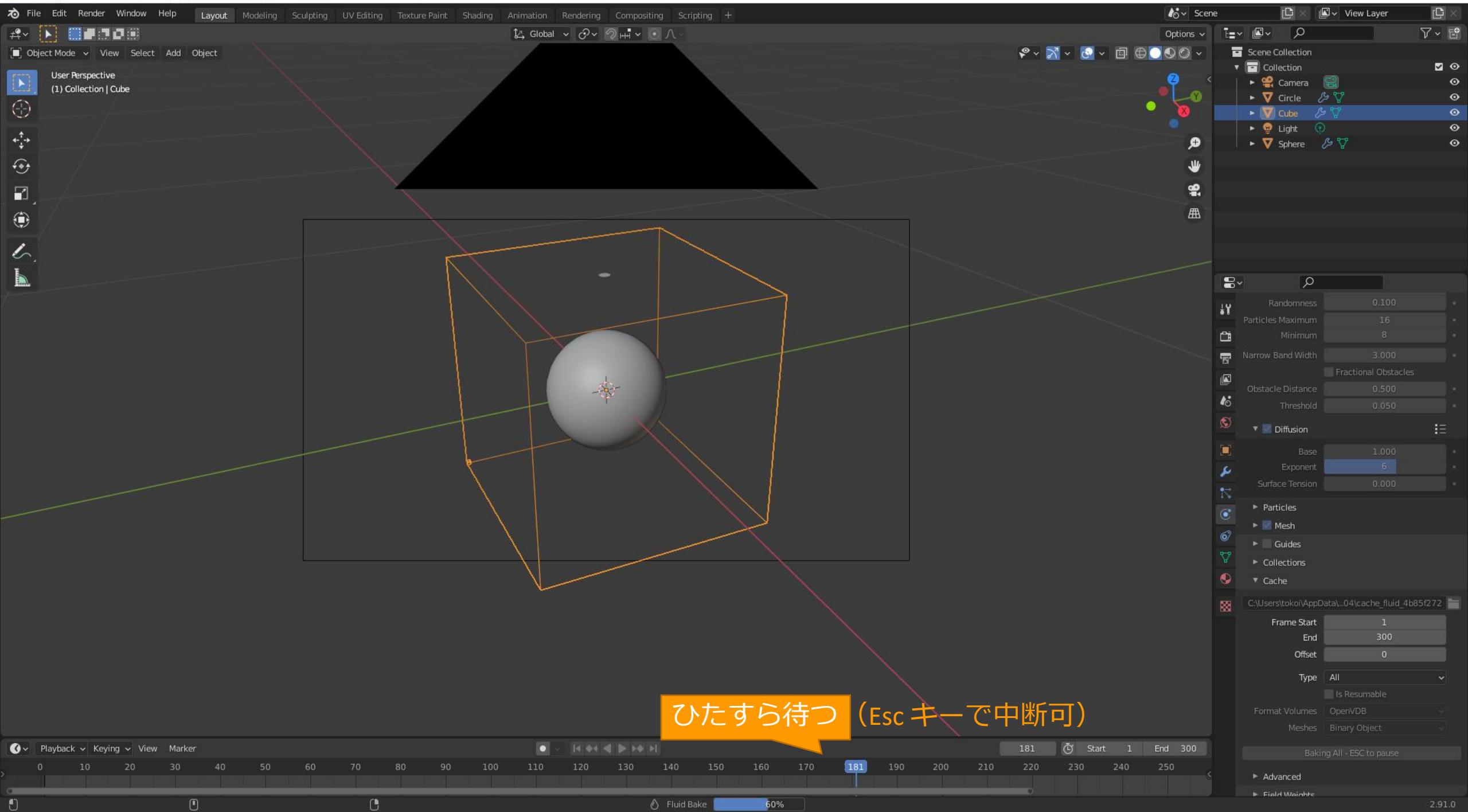
0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260

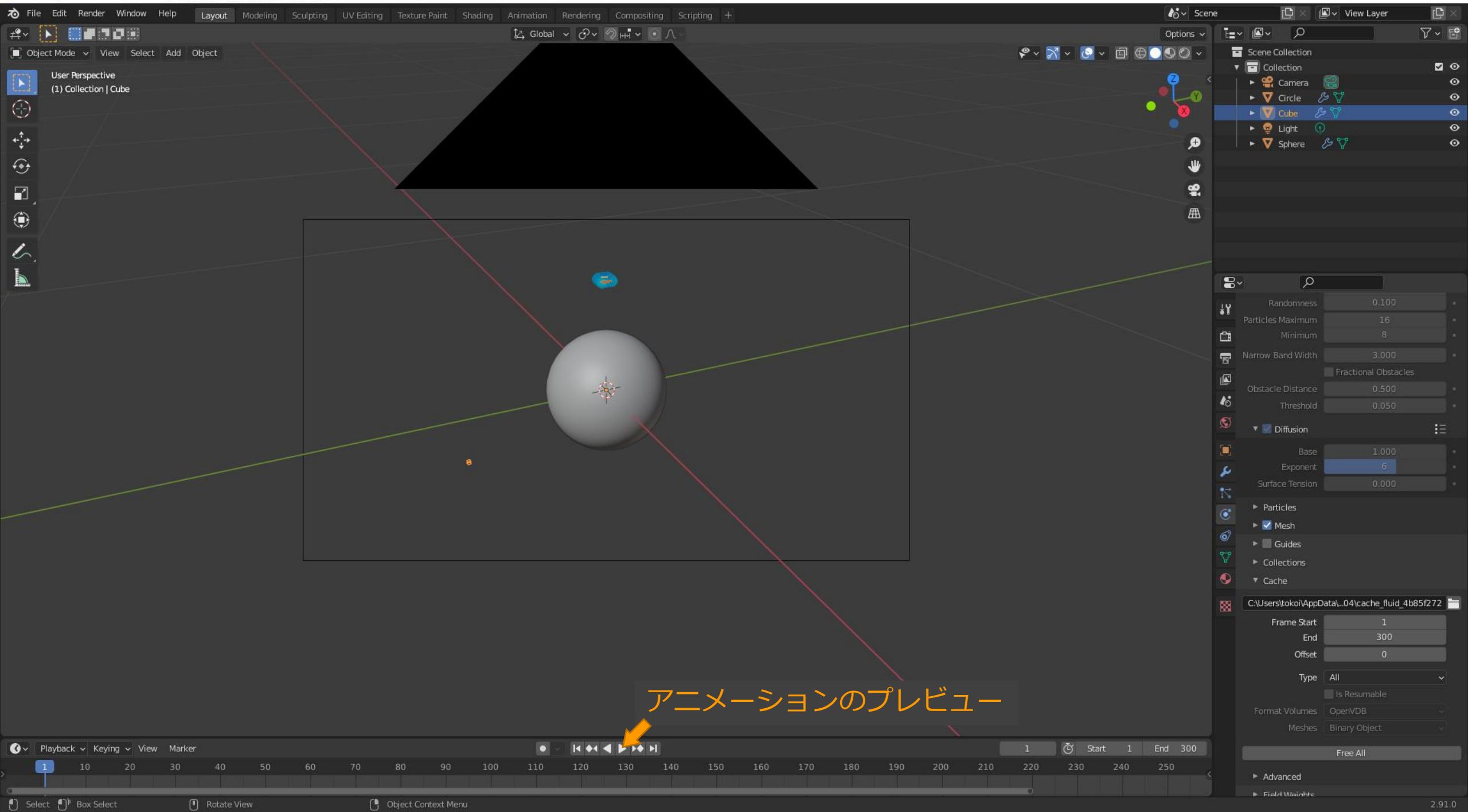
105 Start 1 End 300

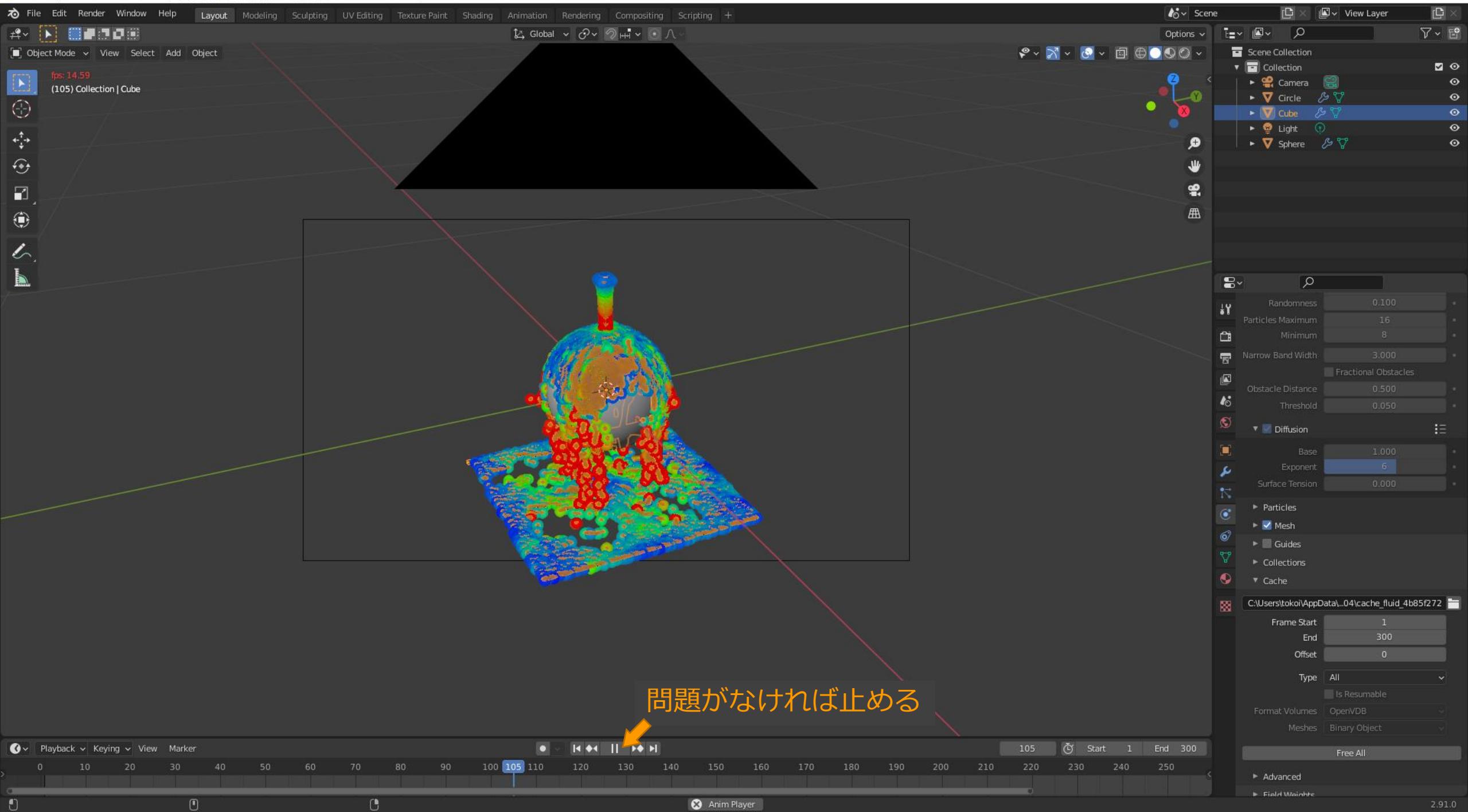
Box Select Rotate View Object Context Menu

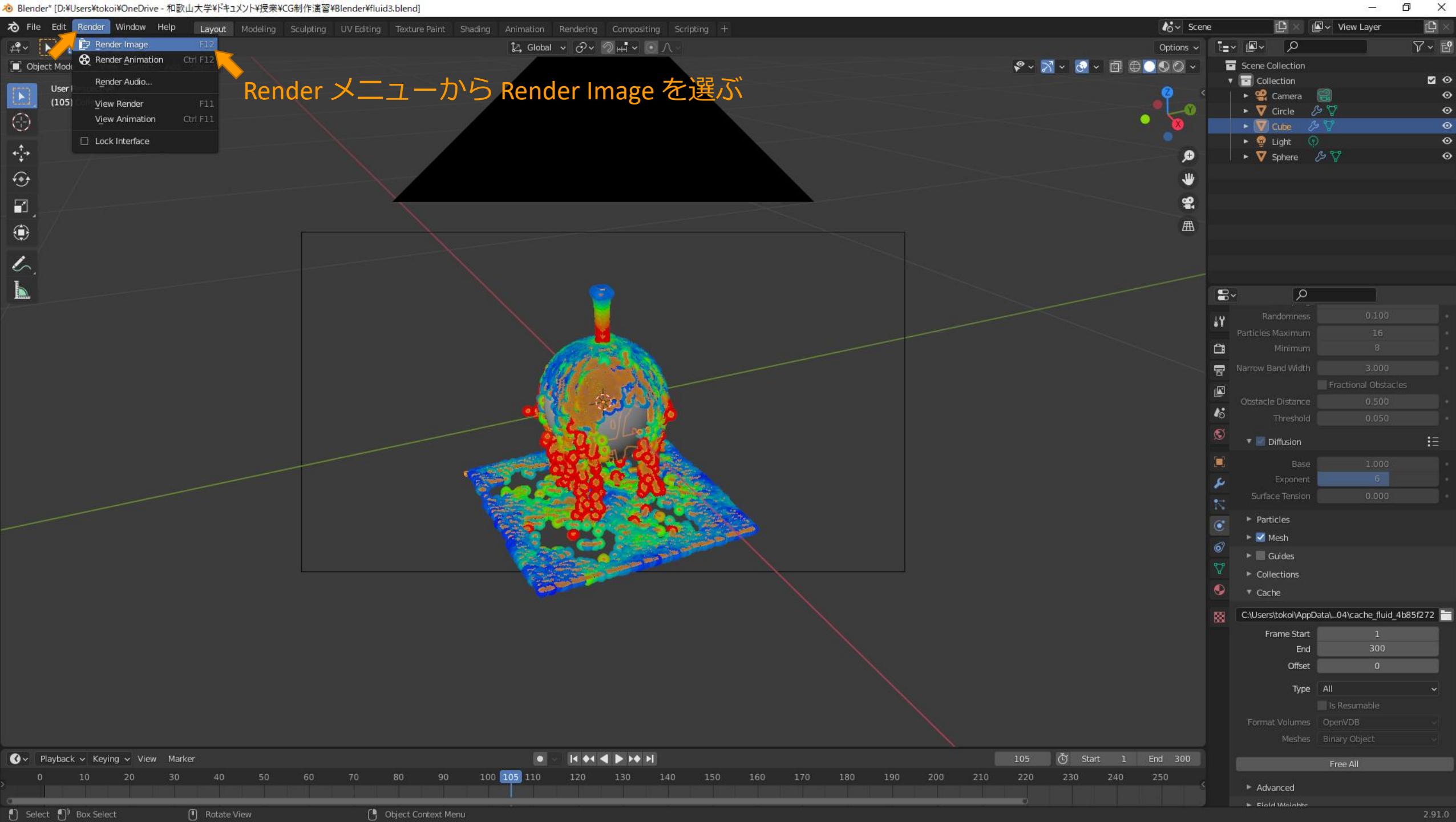
2.91.0

The image shows the Blender 2.91.0 interface. The 3D Viewport displays a cube and a sphere. The Properties panel on the right shows fluid simulation settings with a yellow arrow pointing to the 'Bake All' button. The Timeline at the bottom shows frame 105 selected. The status bar at the bottom right shows the version 2.91.0.











Effector が液体で見えない

