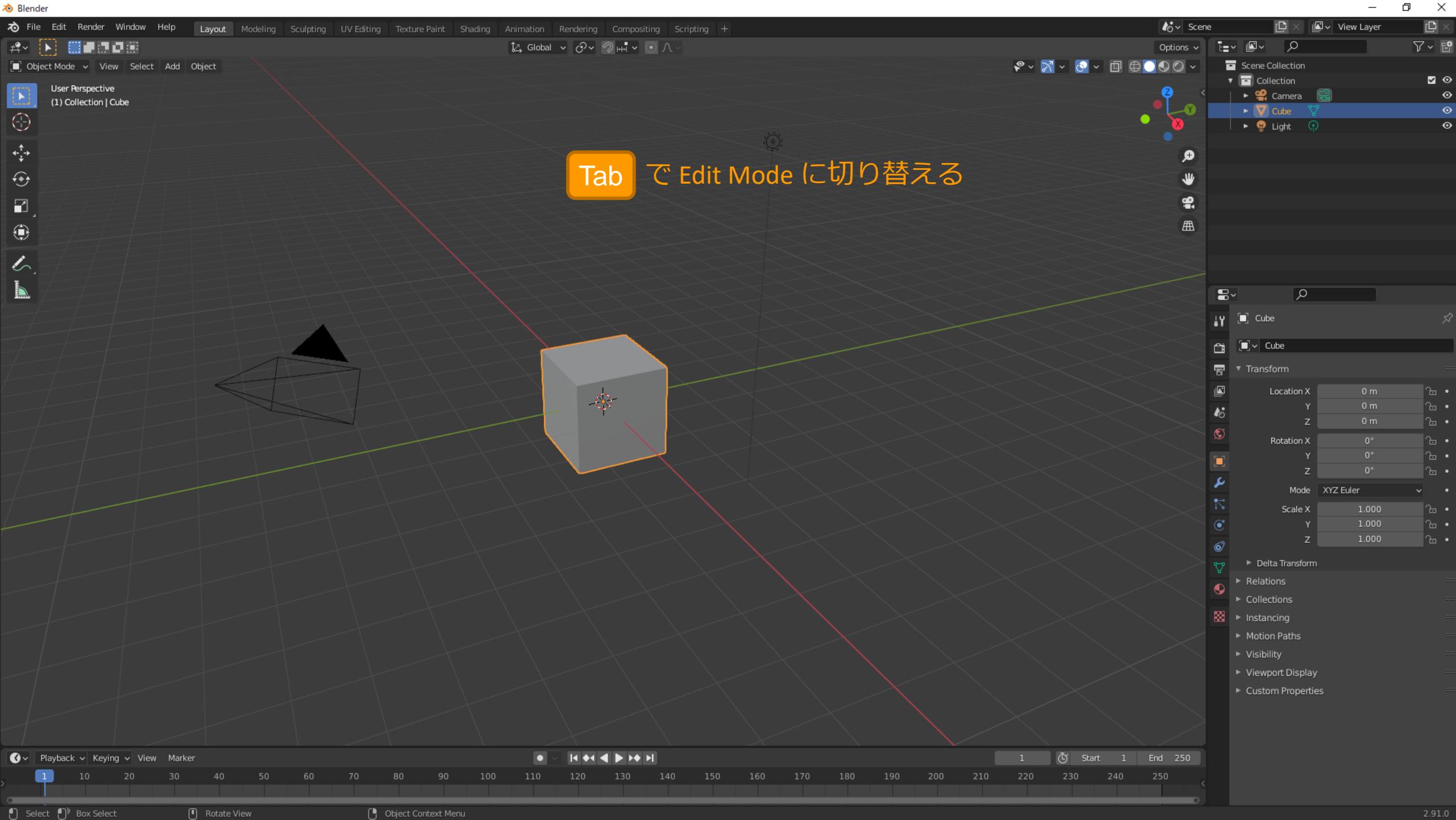
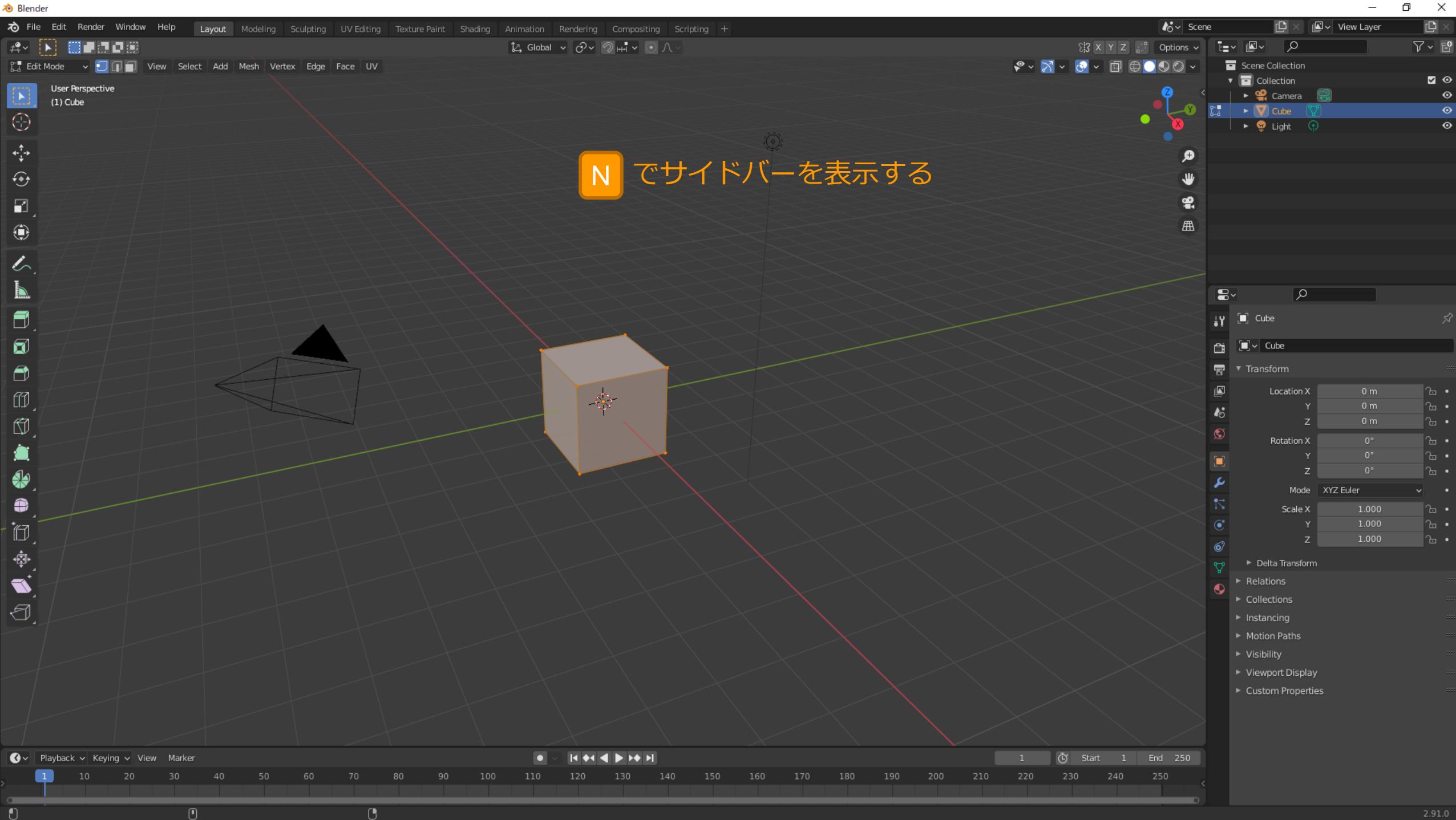
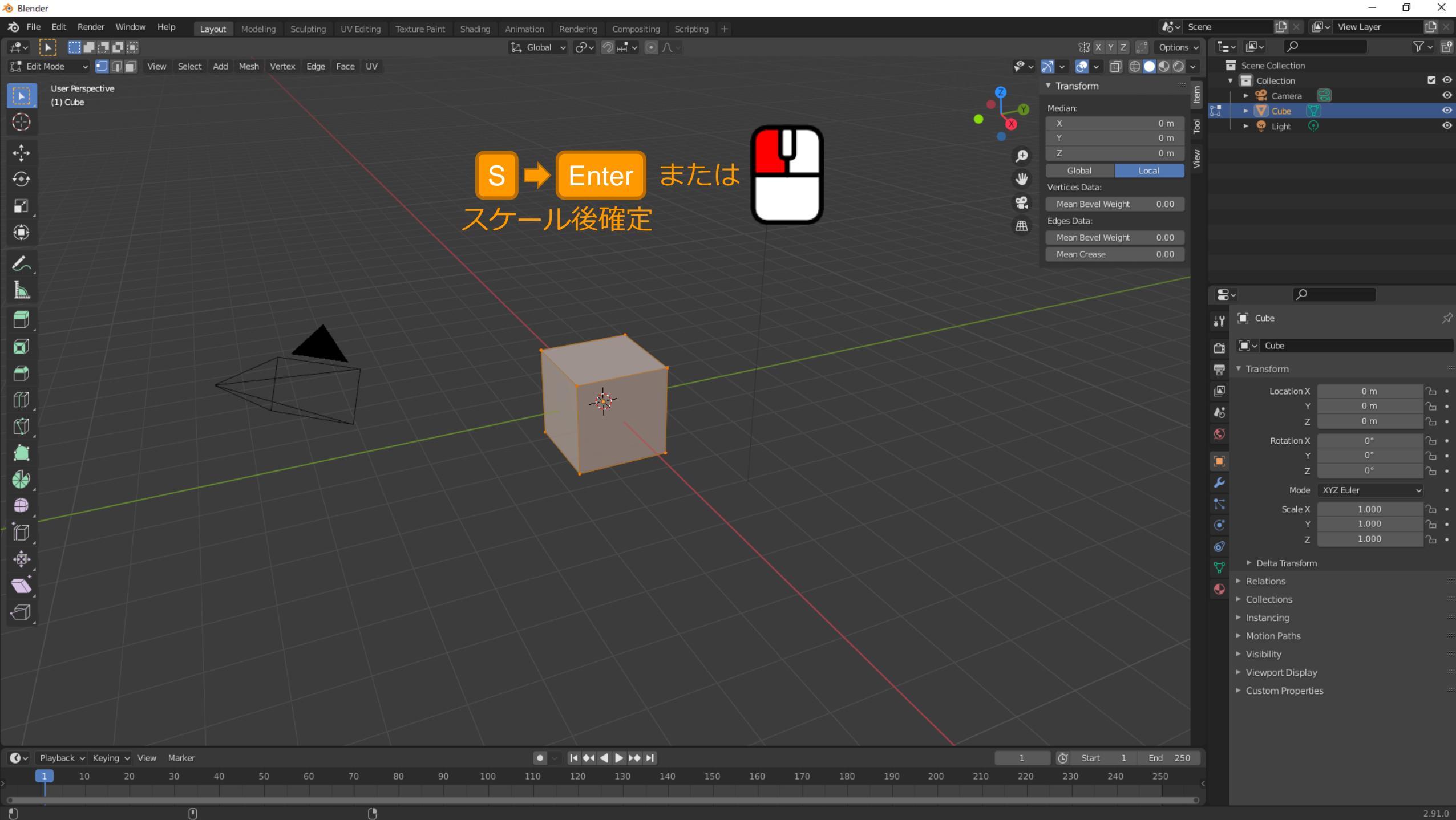
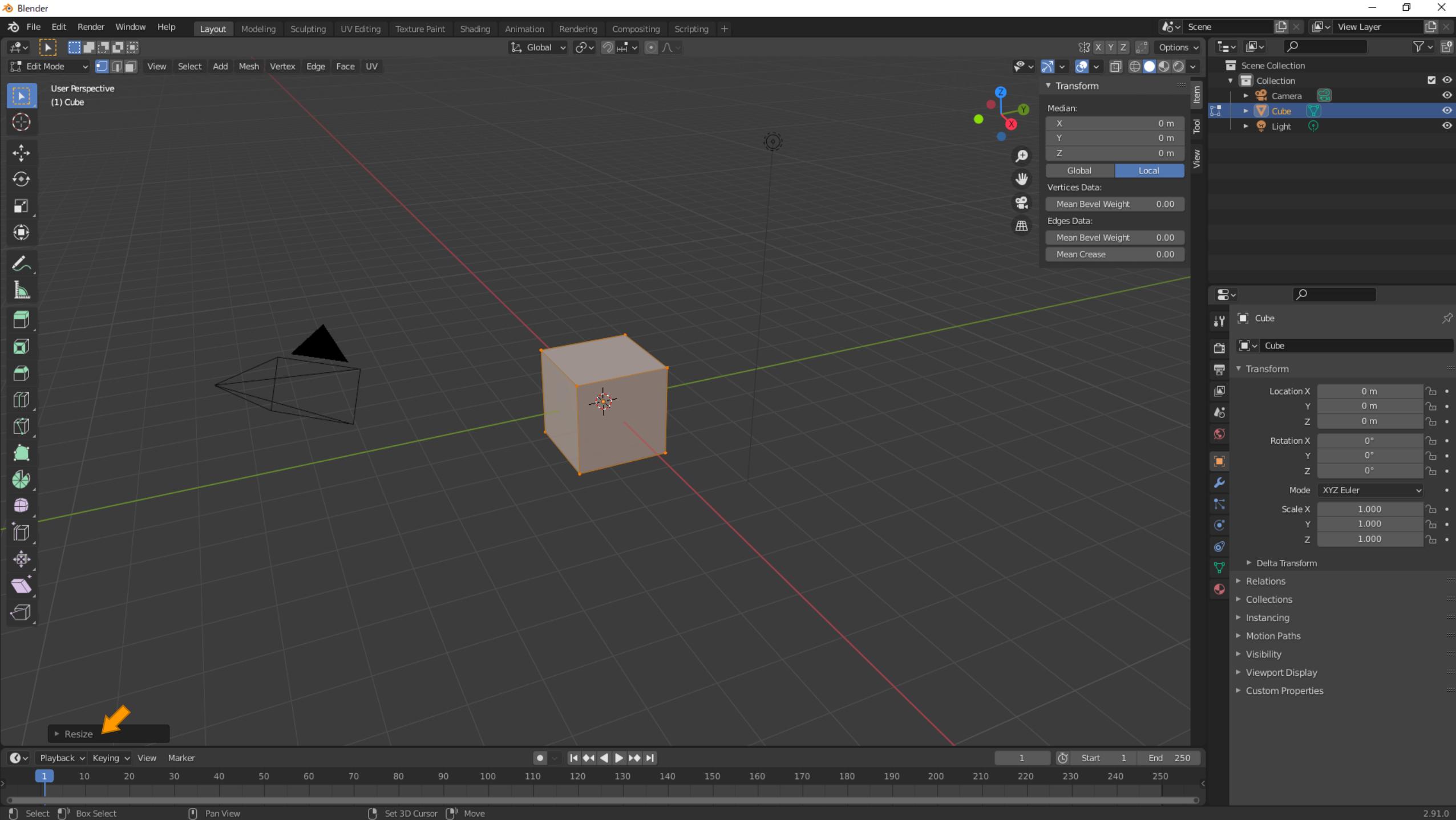


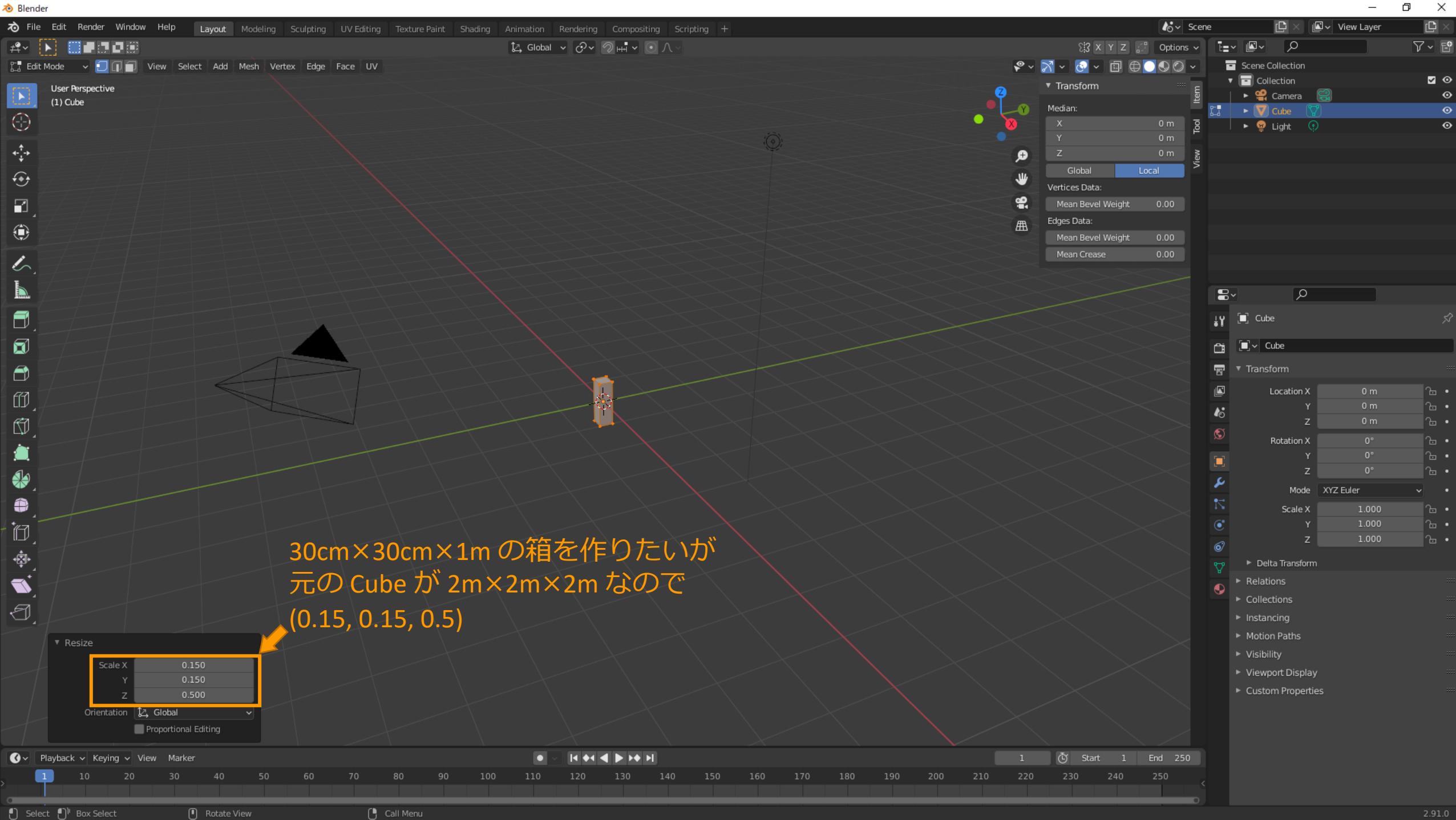
骨格を入れて動かす

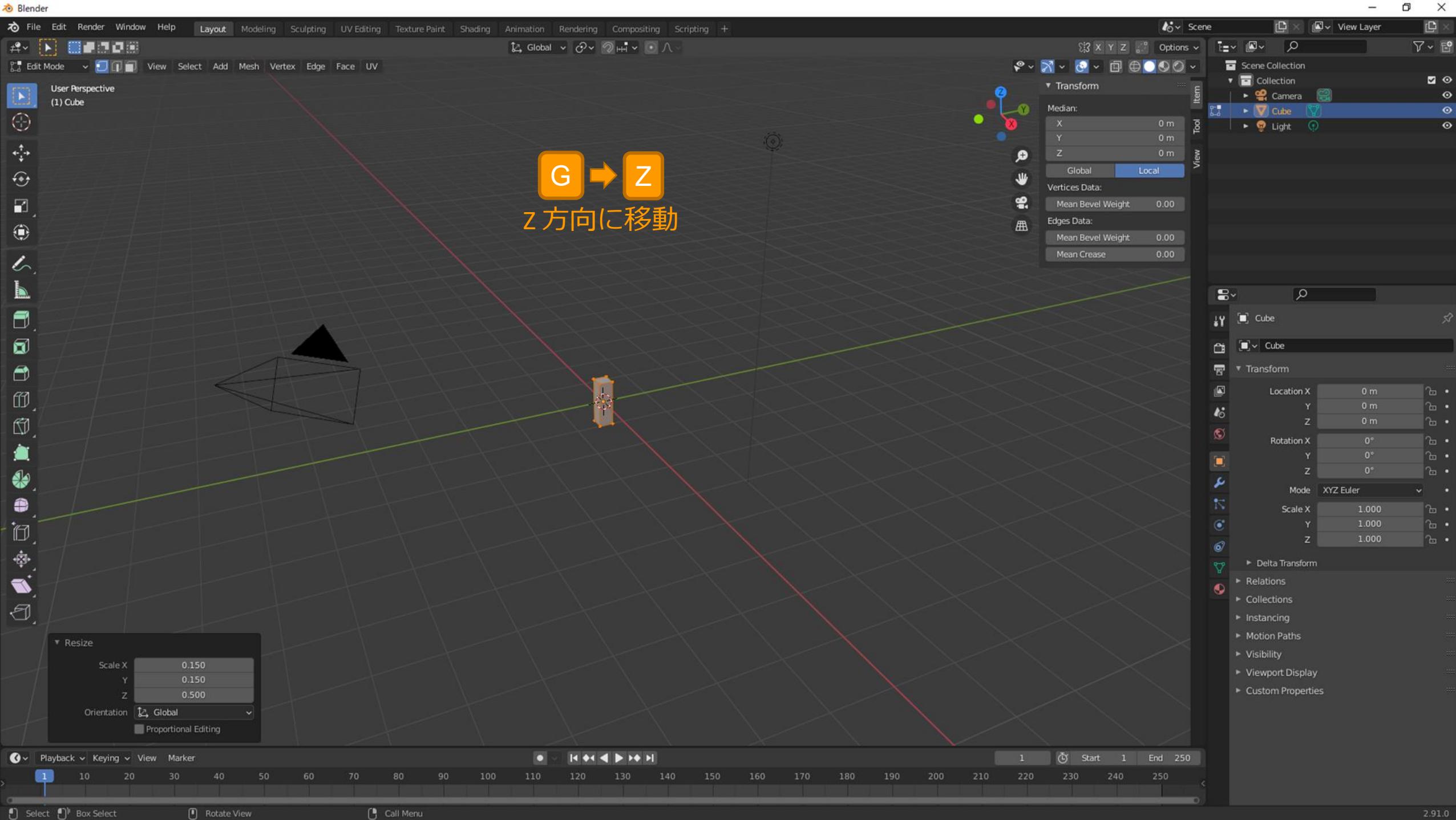












Blender 2.91.0

User Perspective (1 Cube)

D: 1 m (1 m) along global Z

Transform

Median:

X	0 m
Y	0 m
Z	1 m

Global Local

Vertices Data:  
Mean Bevel Weight 0.00

Edges Data:  
Mean Bevel Weight 0.00  
Mean Crease 0.00

高さを調整

Ctrl を押しながらだと 1m 単位  
Shift を押しながらだと微調整

Resize

Scale X 0.150  
Y 0.150  
Z 0.300

Orientation Global  
Proportional Editing

Scene

Scene Collection

Collection

Camera

Cube

Light

View Layer

Search

Item

Tool

View

Cube

Cube

Transform

Location X 0 m  
Y 0 m  
Z 0 m

Rotation X 0°  
Y 0°  
Z 0°

Mode XYZ Euler

Scale X 1.000  
Y 1.000  
Z 1.000

Delta Transform

Relations

Collections

Instancing

Motion Paths

Visibility

Viewport Display

Custom Properties

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

Start 1 End 250

Confirm Cancel Xaxis Yaxis Zaxis X plane Y plane Z plane Clear Constraints Ctrl Snap Invert Shift Snap Toggle G Move R Rotate S Resize Automatic Constraint U Automatic Constraint Plane

Blender

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

D: 1 m (1 m) along global Z

User Perspective  
(1) Cube

Transform

Median:

X	0 m
Y	0 m
Z	1 m

Global Local

Vertices Data:  
Mean Bevel Weight 0.00

Edges Data:  
Mean Bevel Weight 0.00

Mean Crease 0.00

Enter または 確定

Resize

Scale X 0.150  
Y 0.150  
Z 0.300

Orientation Global  
Proportional Editing

Scene

Scene Collection  
Collection  
Camera  
Cube  
Light

View Layer

Item Tool View

Cube

Transform

Location X 0 m  
Y 0 m  
Z 0 m

Rotation X 0°  
Y 0°  
Z 0°

Mode XYZ Euler  
Scale X 1.000  
Y 1.000  
Z 1.000

Delta Transform  
Relations  
Collections  
Instancing  
Motion Paths  
Visibility  
Viewport Display  
Custom Properties

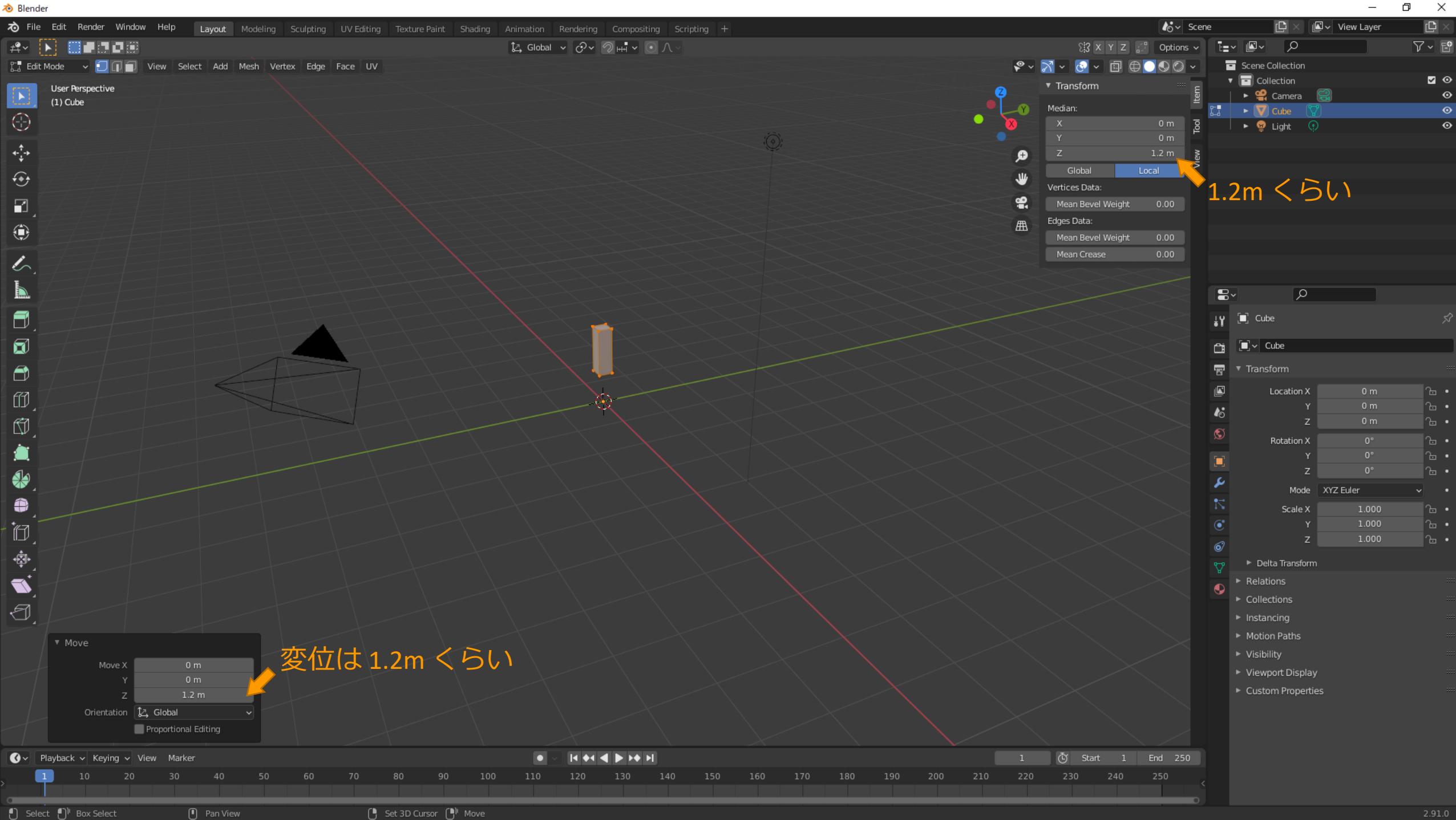
Playback Keying View Marker

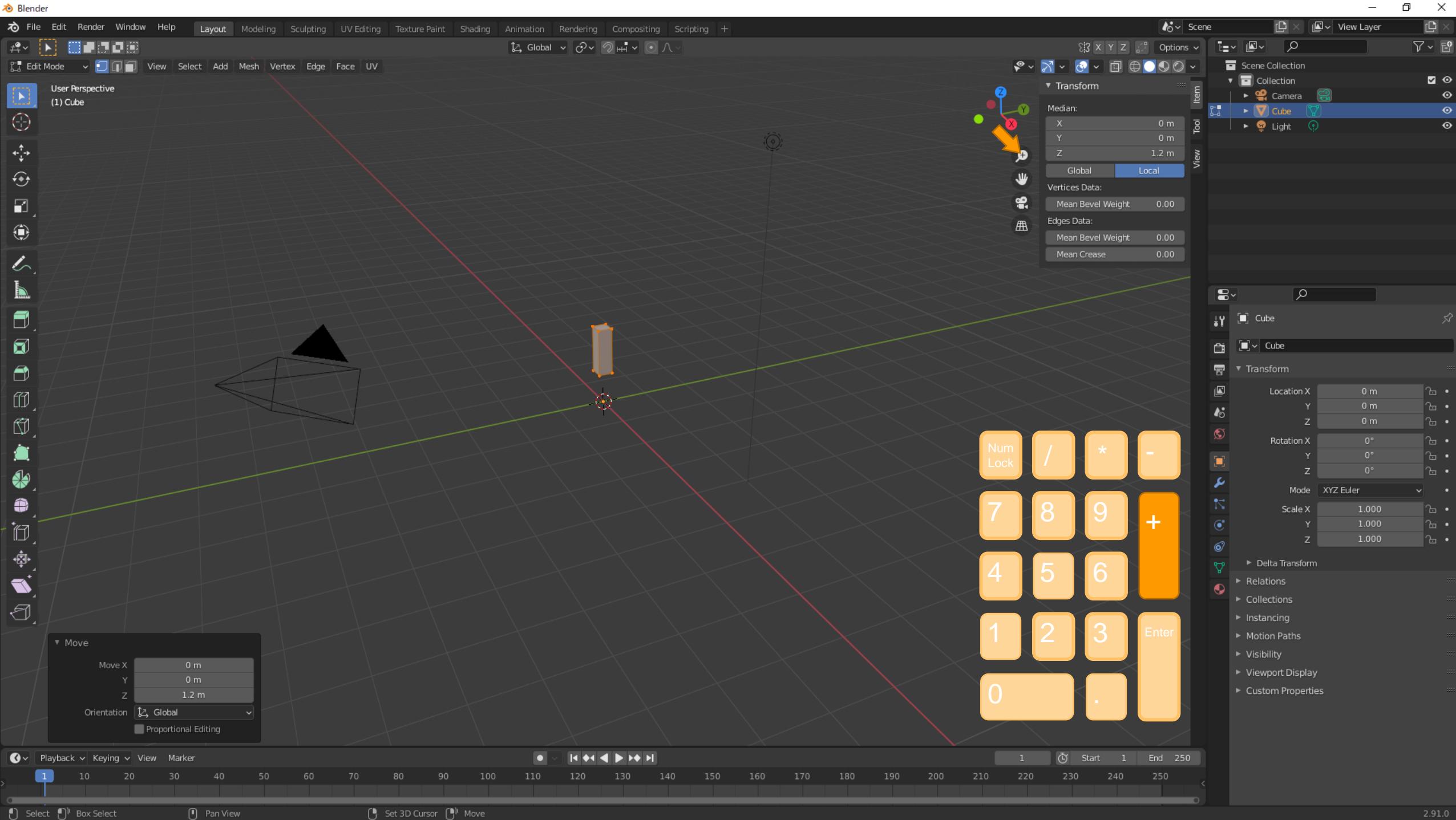
1 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250

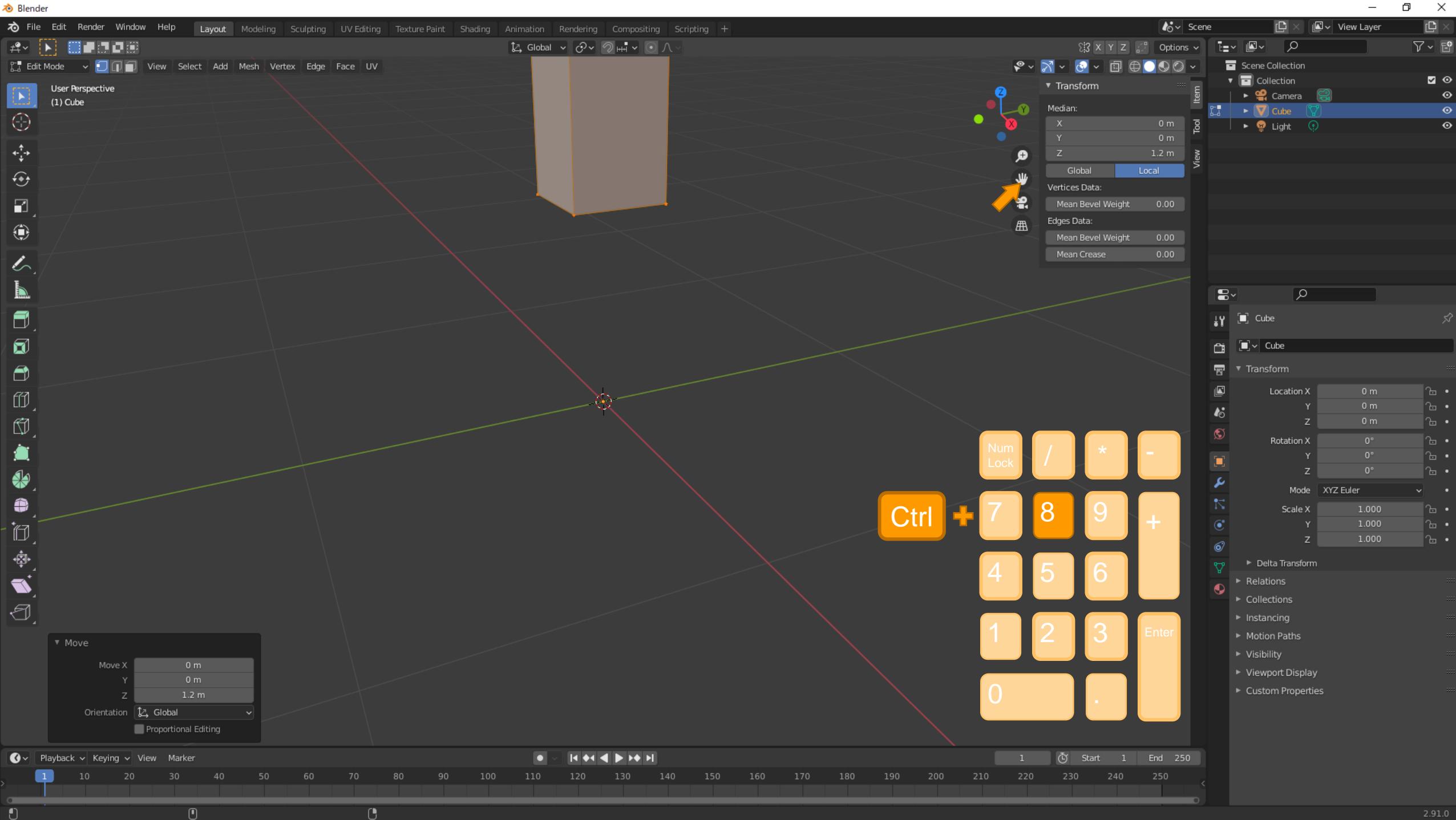
Start 1 End 250

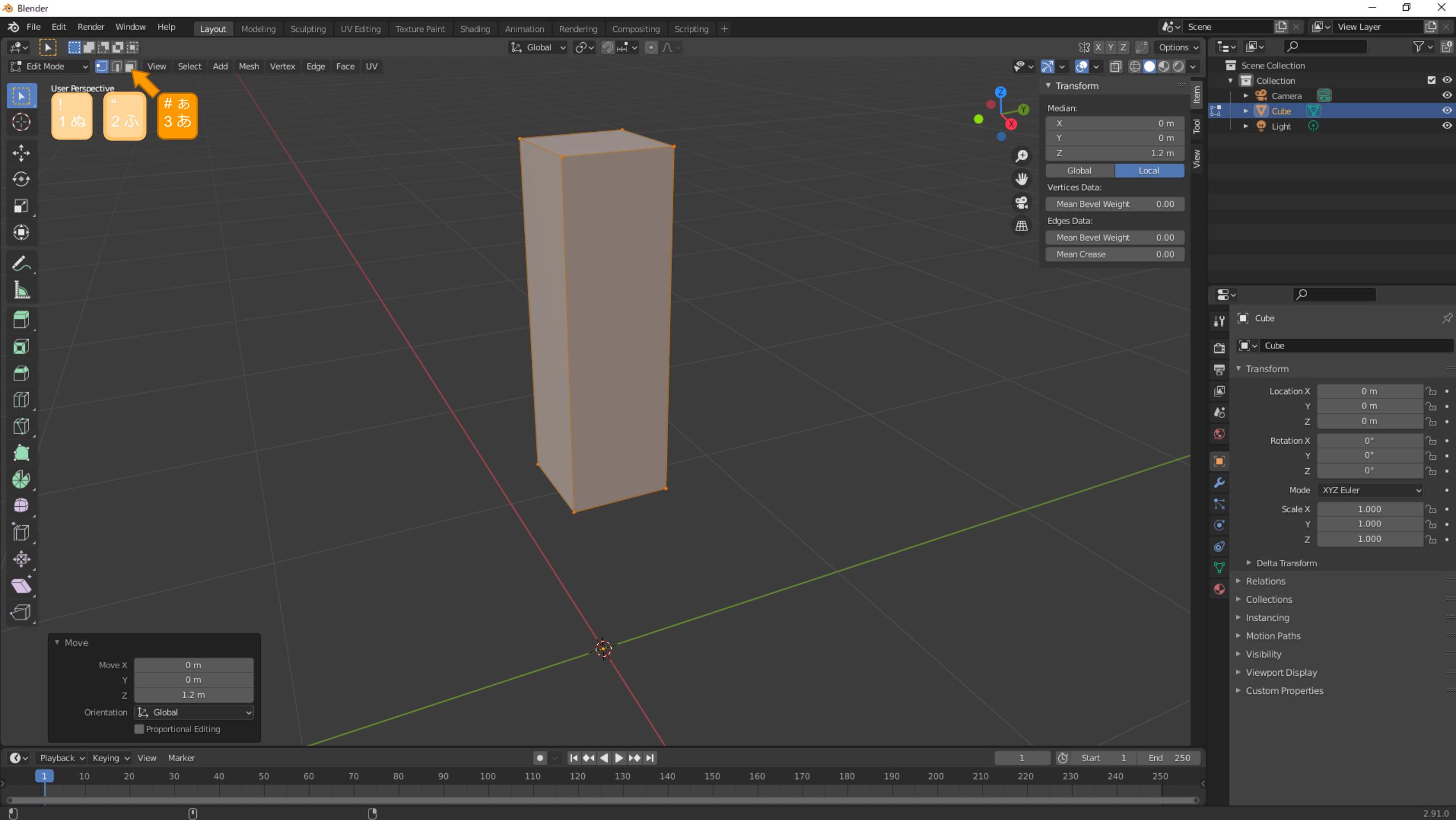
Confirm Cancel Xaxis Yaxis Zaxis X plane Y plane Z plane Clear Constraints Snap Invert Snap Toggle Move Rotate S Resize Automatic Constraint Automatic Constraint Plane

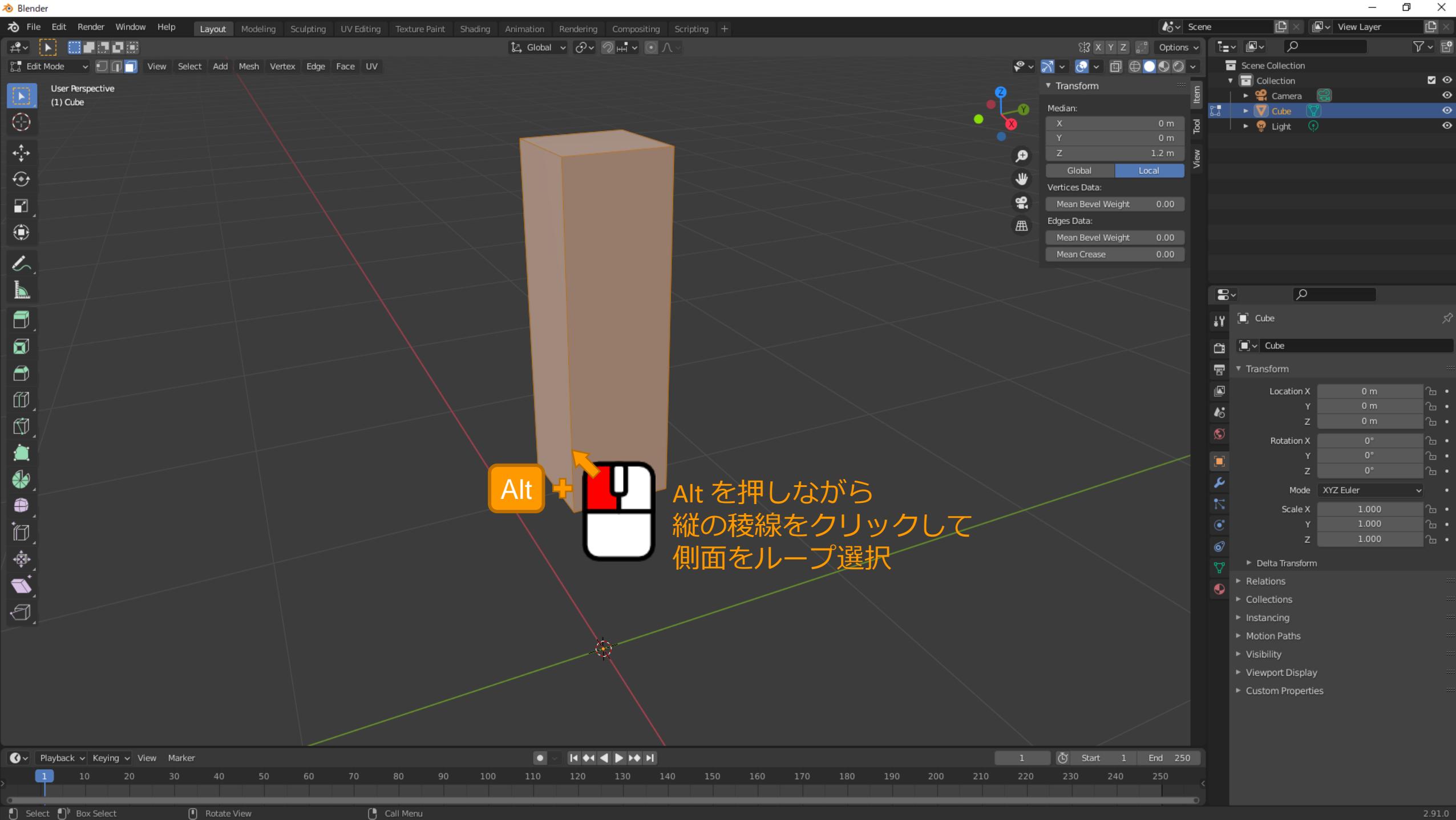
2.91.0

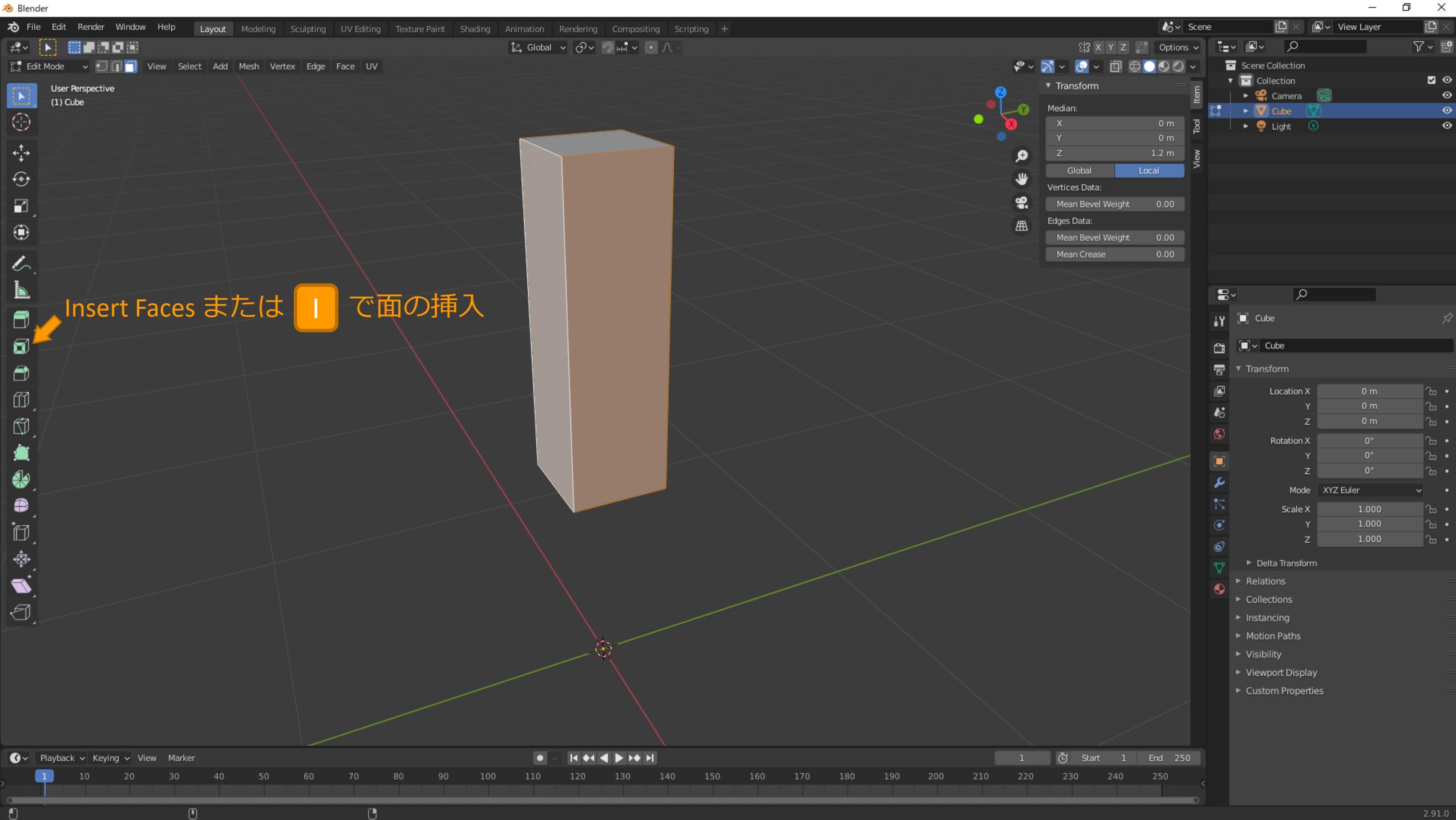


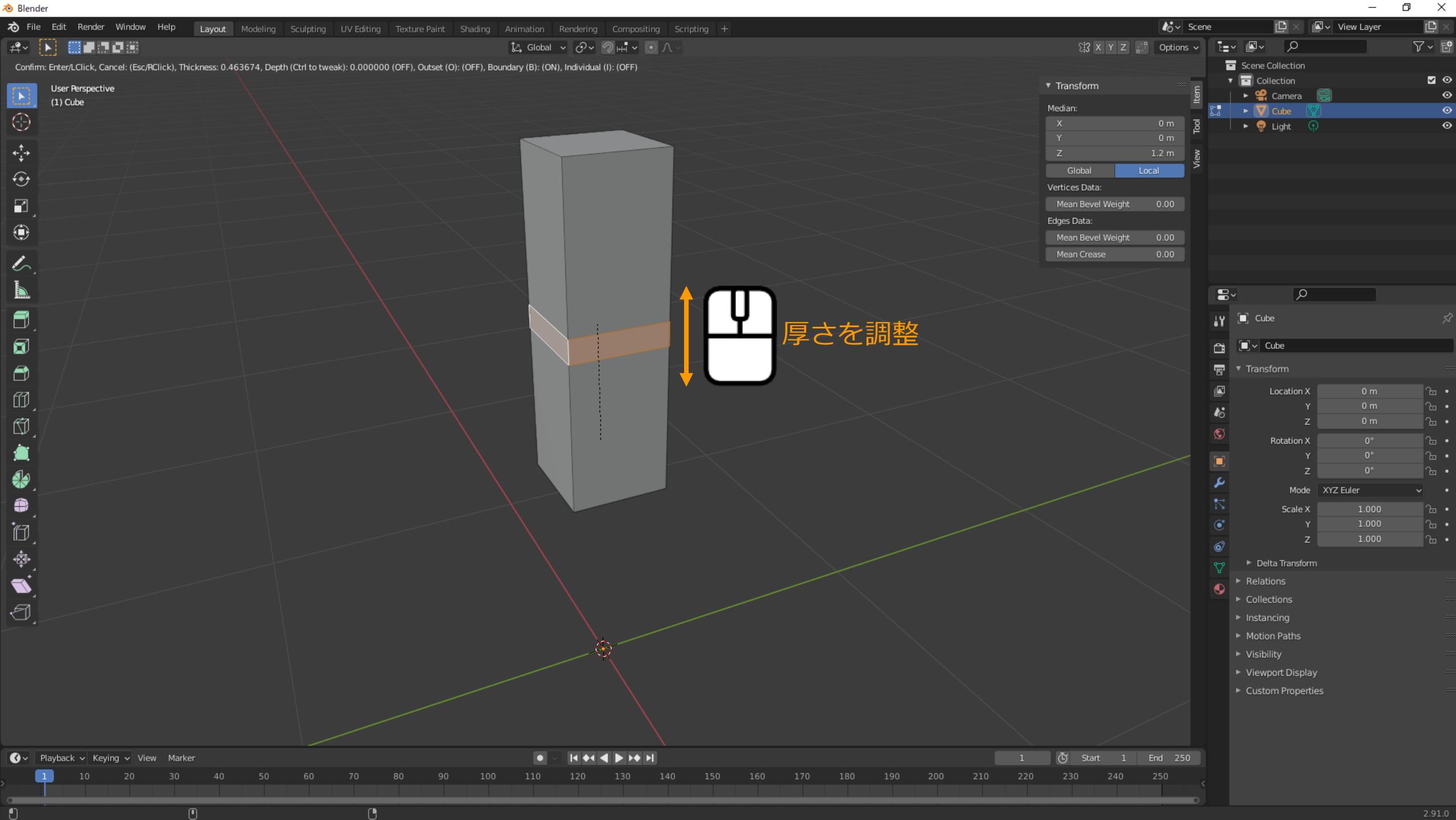












Blender

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

Confirm: Enter/LClick, Cancel: (Esc/RClick), Thickness: 0.463674, Depth (Ctrl to tweak): 0.000000 (OFF), Outset (O): (OFF), Boundary (B): (ON), Individual (I): (OFF)

User Perspective  
(1) Cube

Transform  
Median:  
X 0 m  
Y 0 m  
Z 1.2 m  
Global Local  
Vertices Data:  
Mean Bevel Weight 0.00  
Edges Data:  
Mean Bevel Weight 0.00  
Mean Crease 0.00

Scene Collection  
Collection  
Camera  
Cube  
Light

View Layer

Enter または 確定

Transform  
Location X 0 m  
Y 0 m  
Z 0 m  
Rotation X 0°  
Y 0°  
Z 0°  
Mode XYZ Euler  
Scale X 1.000  
Y 1.000  
Z 1.000

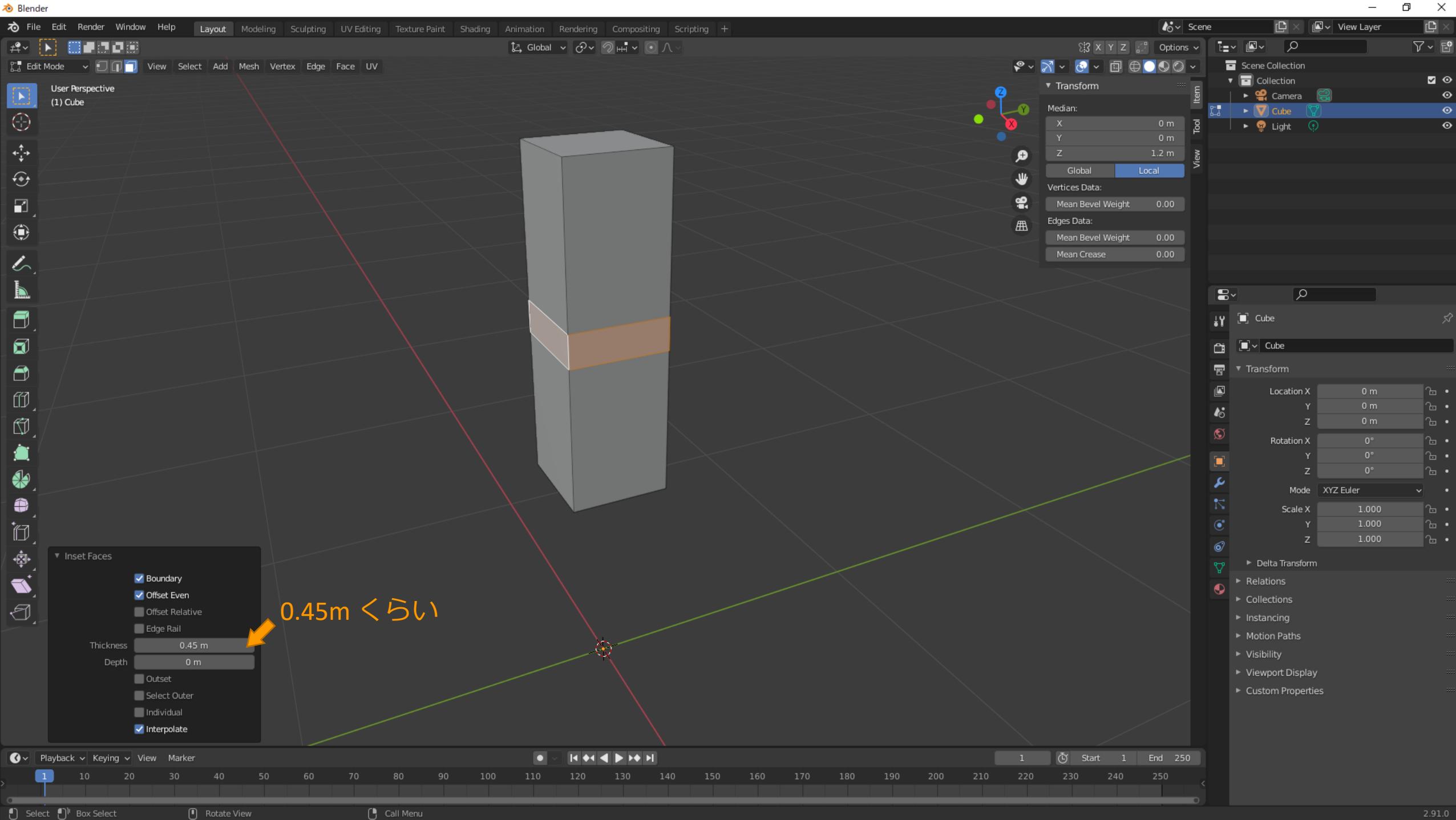
Delta Transform  
Relations  
Collections  
Instancing  
Motion Paths  
Visibility  
Viewport Display  
Custom Properties

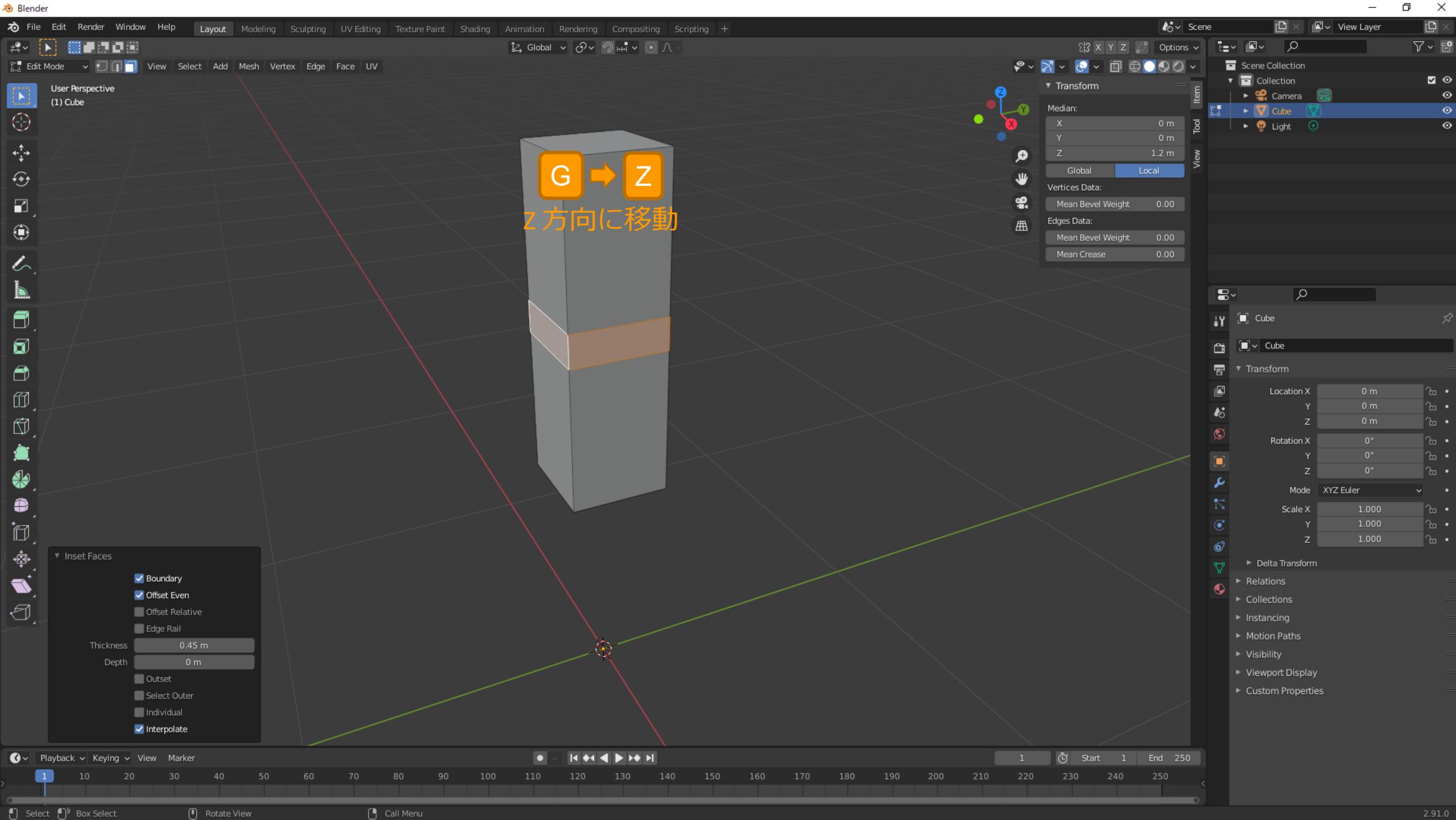
Playback Keying View Marker

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 1 End 250

Start 1 End 250

2.91.0





Blender 2.91.0

D: 0.2001 m (0.2001 m) along global Z

User Perspective  
(1) Cube

Median:  
X 0 m  
Y 0 m  
Z 1.4001 m  
Global Local

Vertices Data:  
Mean Bevel Weight 0.00

Edges Data:  
Mean Bevel Weight 0.00  
Mean Crease 0.00

高さを調整

Inset Faces  
Boundary  
Offset Even  
Thickness 0.45 m  
Depth 0 m  
Interpolate

Scene Collection  
Collection  
Camera  
Cube  
Light

Cube  
Cube  
Transform  
Location X 0 m  
Y 0 m  
Z 0 m  
Rotation X 0°  
Y 0°  
Z 0°  
Mode XYZ Euler  
Scale X 1.000  
Y 1.000  
Z 1.000

Playback 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 Start 1 End 250

Confirm Cancel Xaxis Yaxis Zaxis X plane Y plane Z plane Clear Constraints Snap Invert Snap Toggle Move Rotate Resize Automatic Constraint Automatic Constraint Plane

Blender 2.91.0

D: 0.2001 m (0.2001 m) along global Z

User Perspective  
(1) Cube

Transform  
Median:  
X: 0 m  
Y: 0 m  
Z: 1.4001 m  
Global Local  
Vertices Data:  
Mean Bevel Weight: 0.00  
Edges Data:  
Mean Bevel Weight: 0.00  
Mean Crease: 0.00

Inset Faces  
Boundary  
Offset Even  
Offset Relative  
Edge Rail  
Thickness: 0.45 m  
Depth: 0 m  
Outset  
Select Outer  
Individual  
Interpolate

Scene  
Collection  
Camera  
Cube  
Light

Search: Cube

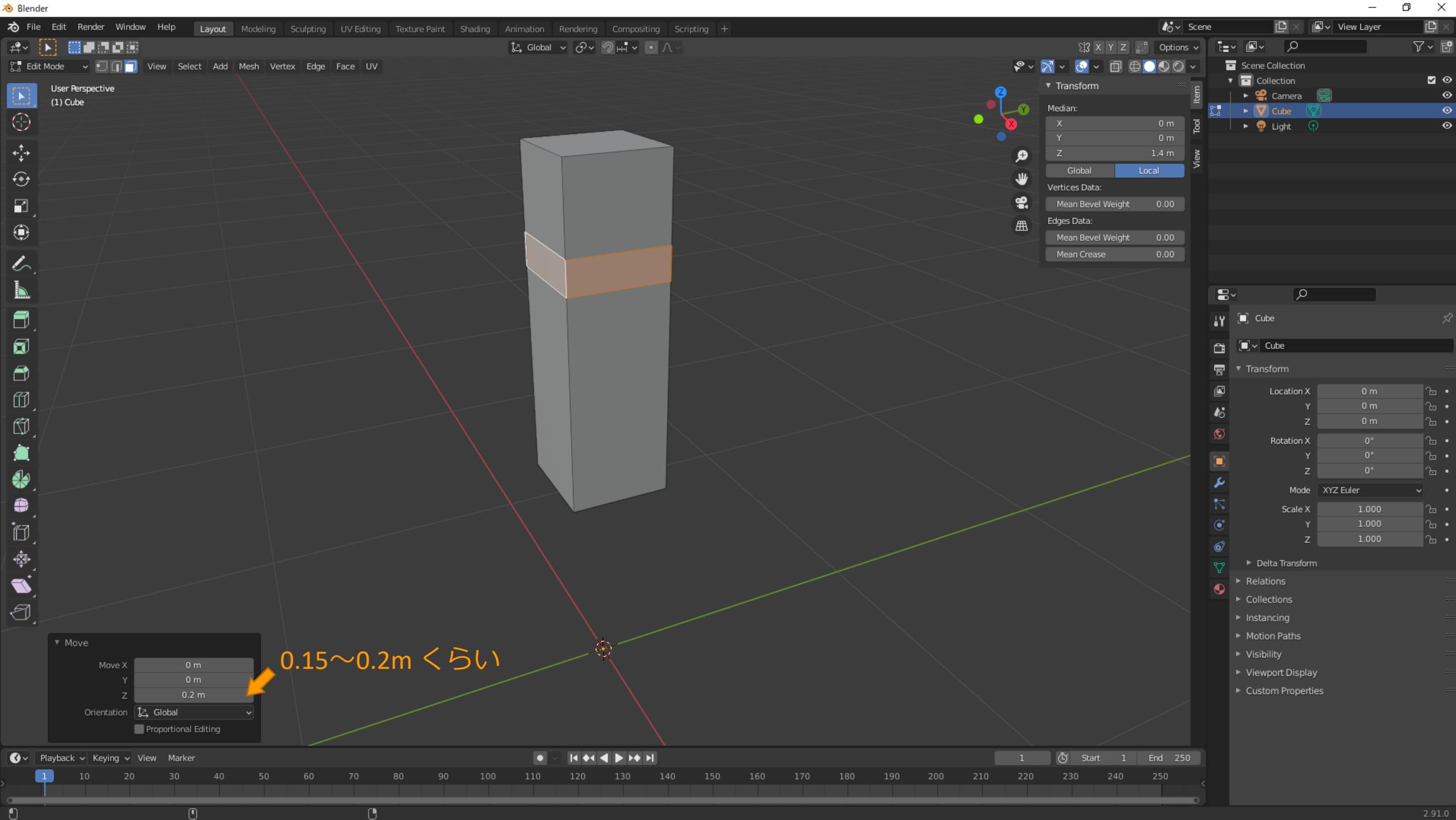
Transform  
Location X: 0 m  
Y: 0 m  
Z: 0 m  
Rotation X: 0°  
Y: 0°  
Z: 0°  
Mode: XYZ Euler  
Scale X: 1.000  
Y: 1.000  
Z: 1.000

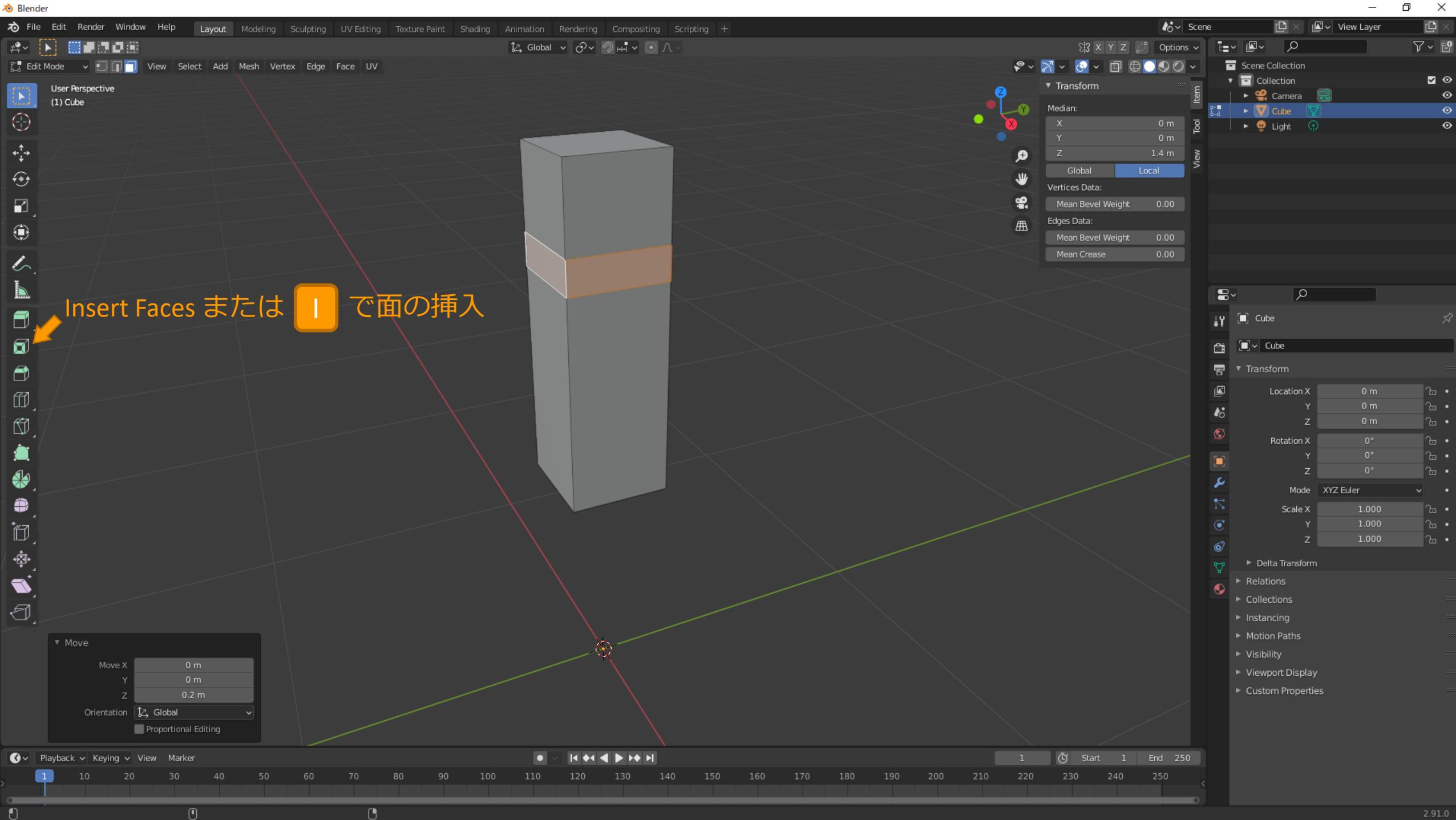
Relations  
Collections  
Instancing  
Motion Paths  
Visibility  
Viewport Display  
Custom Properties

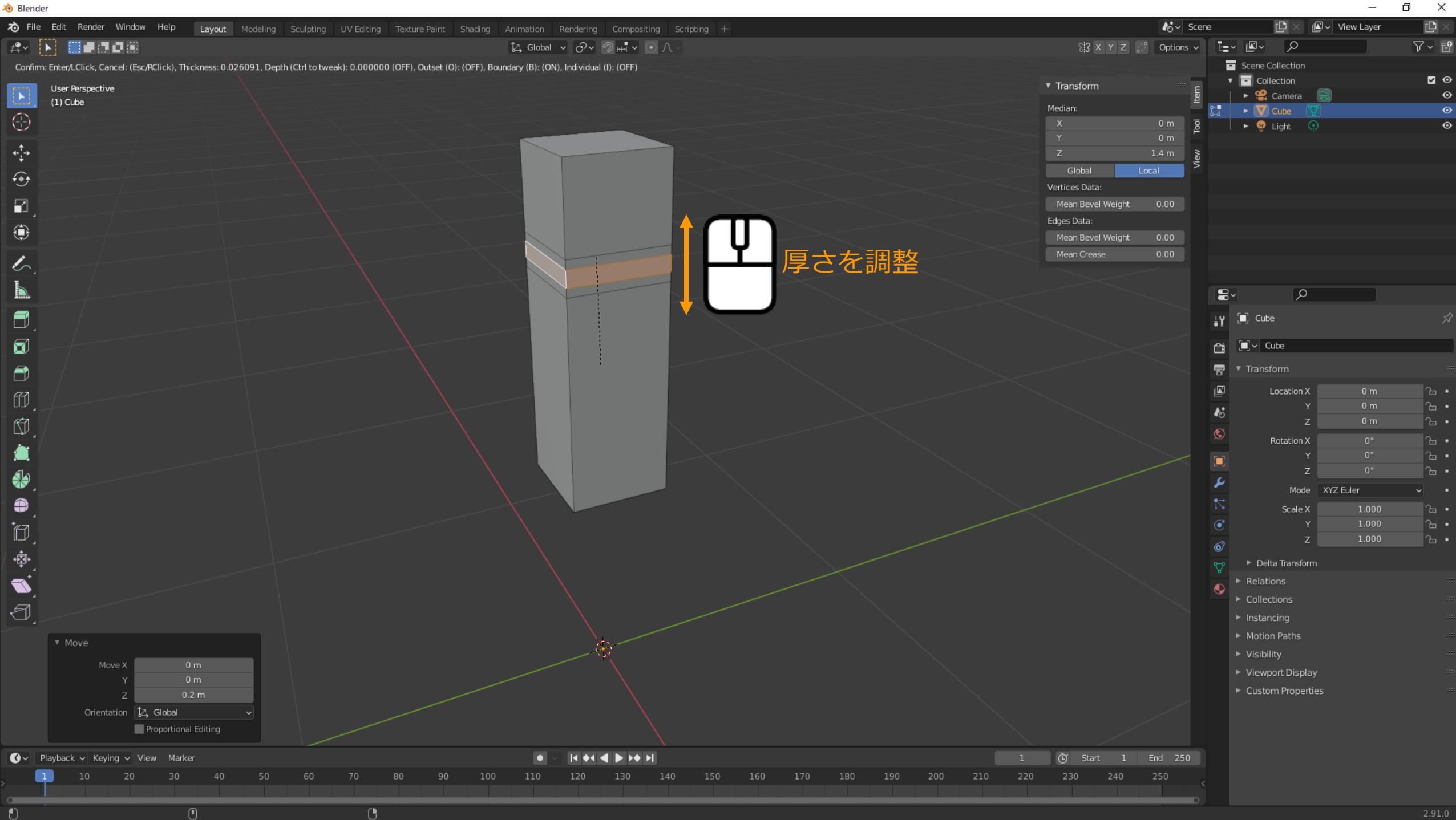
Playback View Marker

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 Xaxis Yaxis Zaxis X plane Y plane Z plane Clear Constraints Snap Invert Snap Toggle Move Rotate Resize Automatic Constraint Automatic Constraint Plane







Blender

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

Global Options X Y Z

Confirm: Enter/LClick, Cancel: (Esc/RClick), Thickness: 0.026922, Depth (Ctrl to tweak): -0.073999 (ON), Outset (O): (OFF), Boundary (B): (ON), Individual (I): (OFF)

User Perspective  
(1) Cube

Transform Median:  
X 0 m  
Y 0 m  
Z 1.4 m  
Global Local

Vertices Data:  
Mean Bevel Weight 0.00  
Edges Data:  
Mean Bevel Weight 0.00  
Mean Crease 0.00

Item Tool View

Scene Collection  
Collection  
Camera  
Cube  
Light

Search

Cube

Transform  
Location X 0 m  
Y 0 m  
Z 0 m  
Rotation X 0°  
Y 0°  
Z 0°  
Mode XYZ Euler  
Scale X 1.000  
Y 1.000  
Z 1.000

Delta Transform  
Relations  
Collections  
Instancing  
Motion Paths  
Visibility  
Viewport Display  
Custom Properties

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 1 End 250

1 Start 1 End 250

Pick Shortest Path Box Select Zoom View Duplicate or Extrude to Cursor Lasso Select

Ctrl + 深さを調整

Blender

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

Global Options X Y Z

Confirm: Enter/LClick, Cancel: (Esc/RClick), Thickness: 0.026922, Depth (Ctrl to tweak): -0.073999 (ON), Outset (O): (OFF), Boundary (B): (ON), Individual (I): (OFF)

User Perspective  
(1) Cube

Transform

Median:

X	0 m
Y	0 m
Z	1.4 m

Global Local

Vertices Data:  
Mean Bevel Weight 0.00

Edges Data:  
Mean Bevel Weight 0.00  
Mean Crease 0.00

Item Tool View

Scene Collection

- Collection
- Camera
- Cube
- Light

Search: Cube

Transform

Location X Y Z

Rotation X Y Z

Mode XYZ Euler

Scale X Y Z

Delta Transform

Relations

Collections

Instancing

Motion Paths

Visibility

Viewport Display

Custom Properties

Playback Keying View Marker

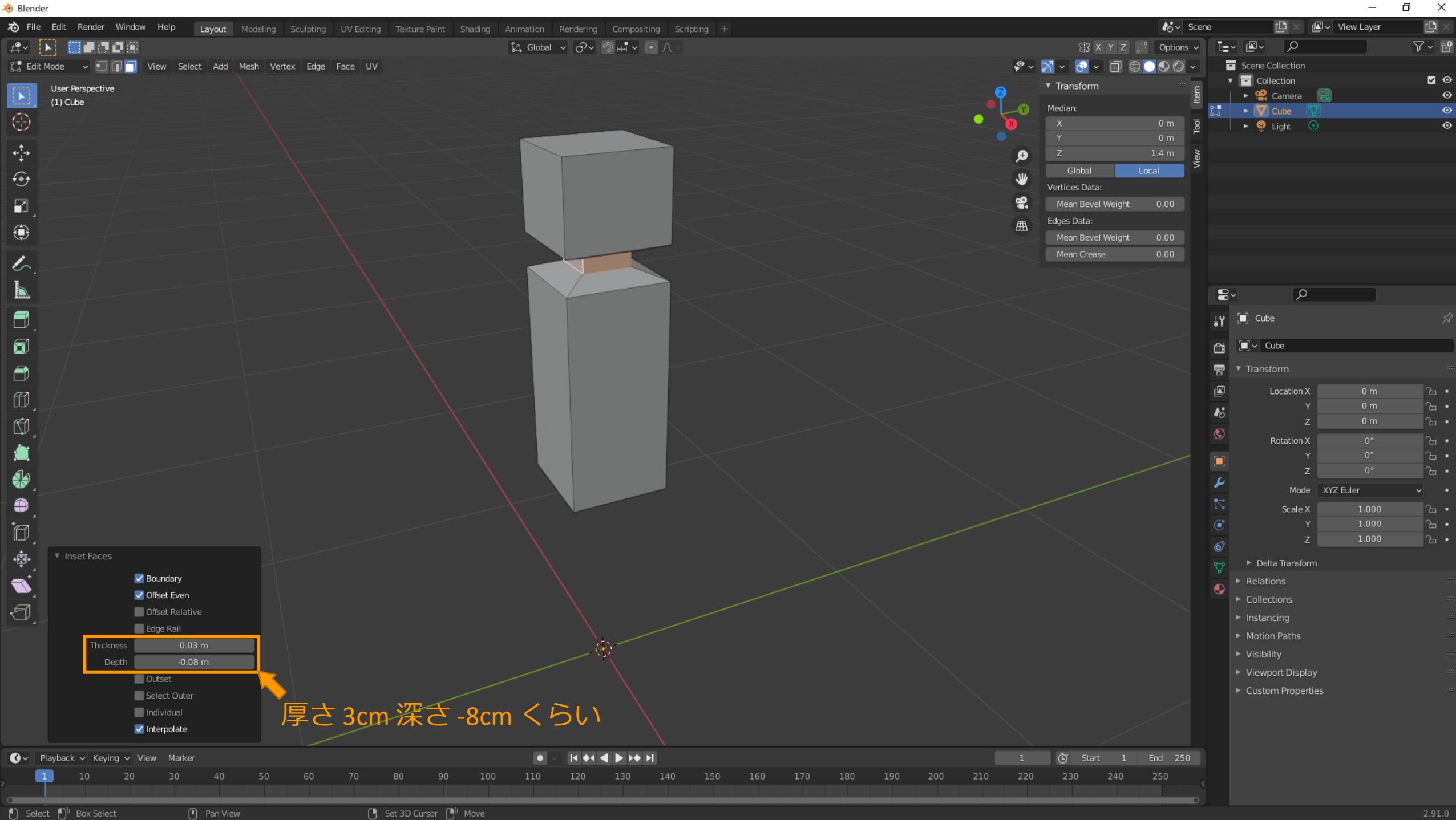
1 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 1 End 250

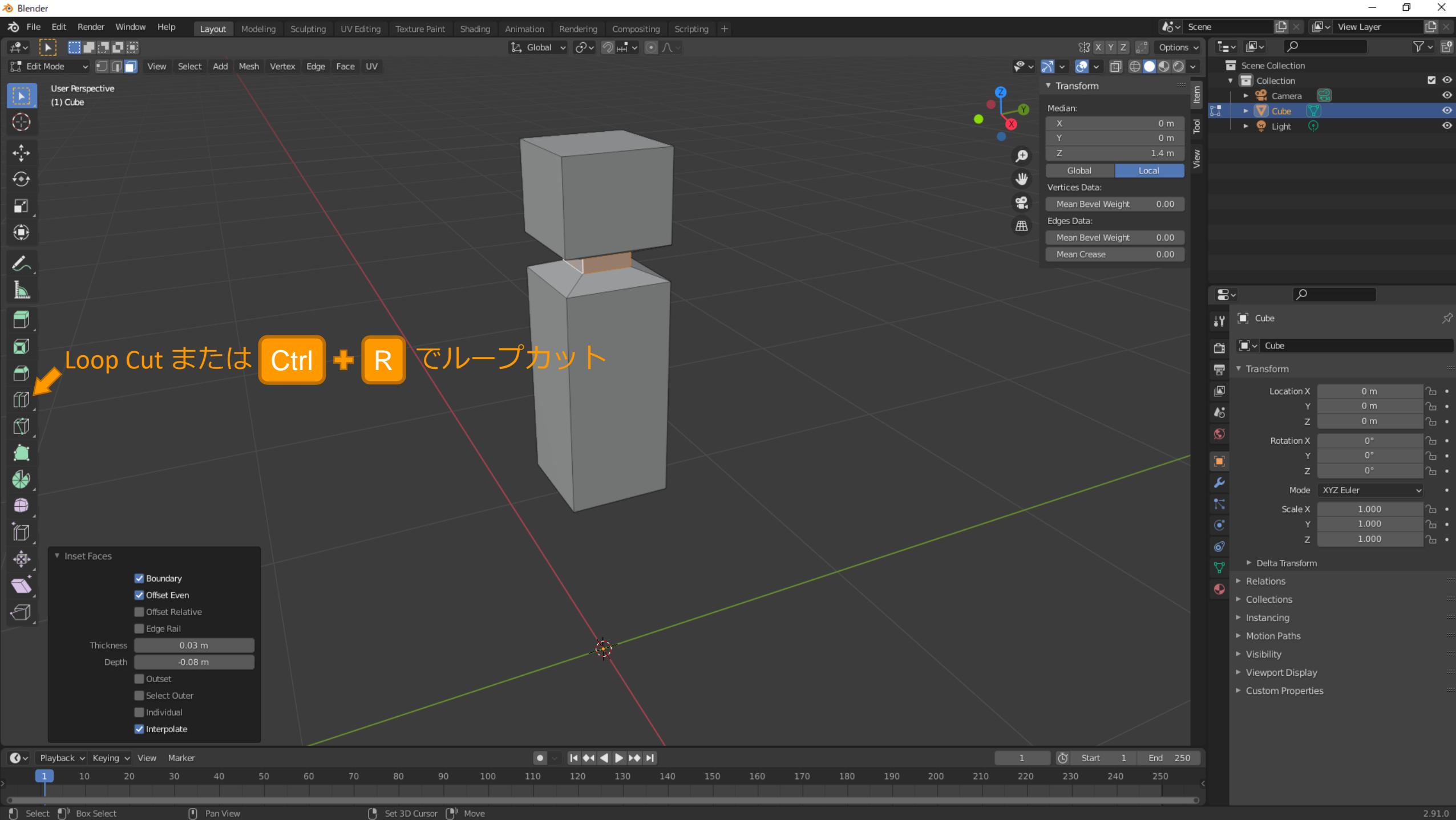
1 Start 1 End 250

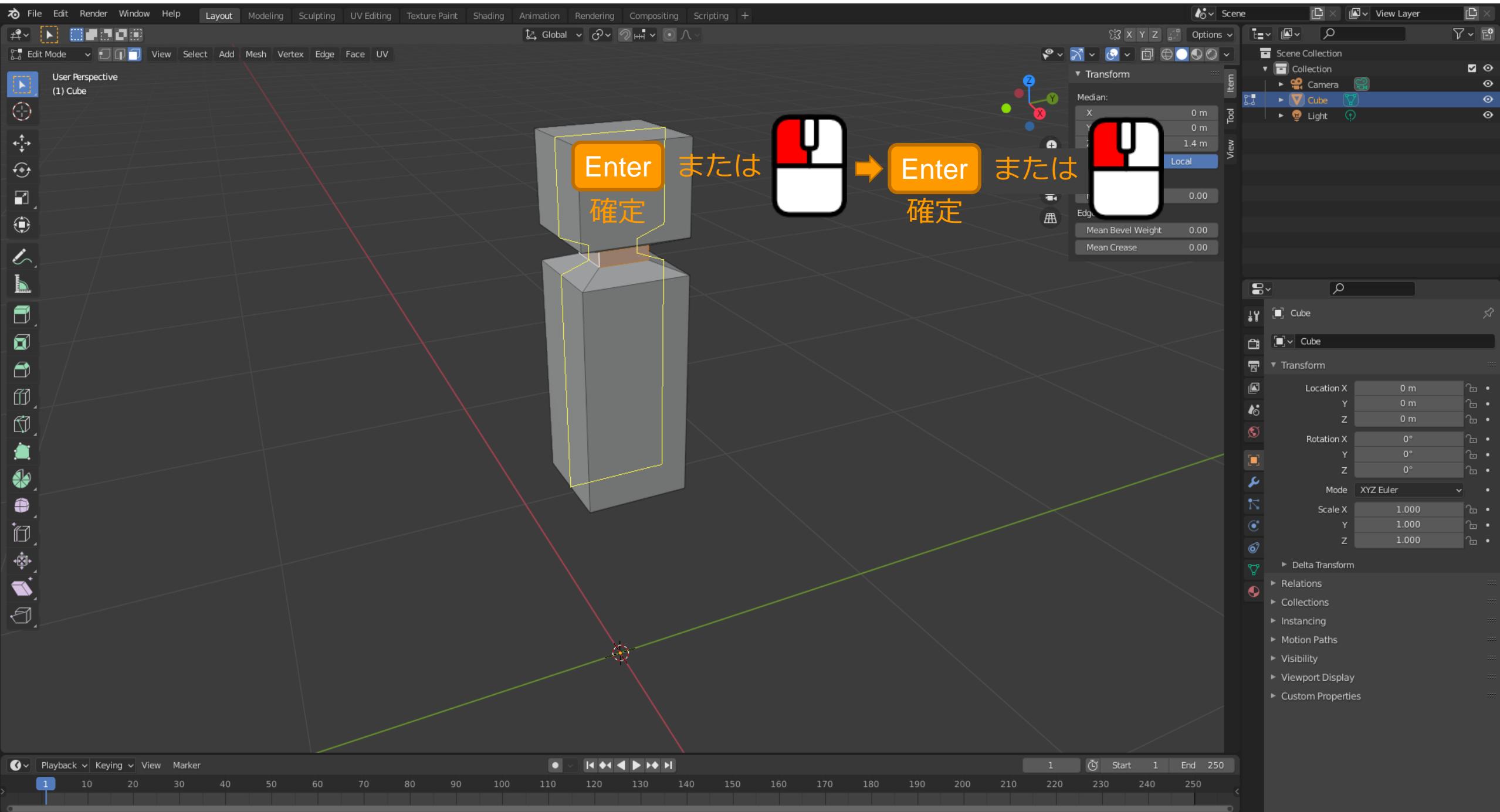
Pick Shortest Path Box Select Zoom View Duplicate or Extrude to Cursor Lasso Select

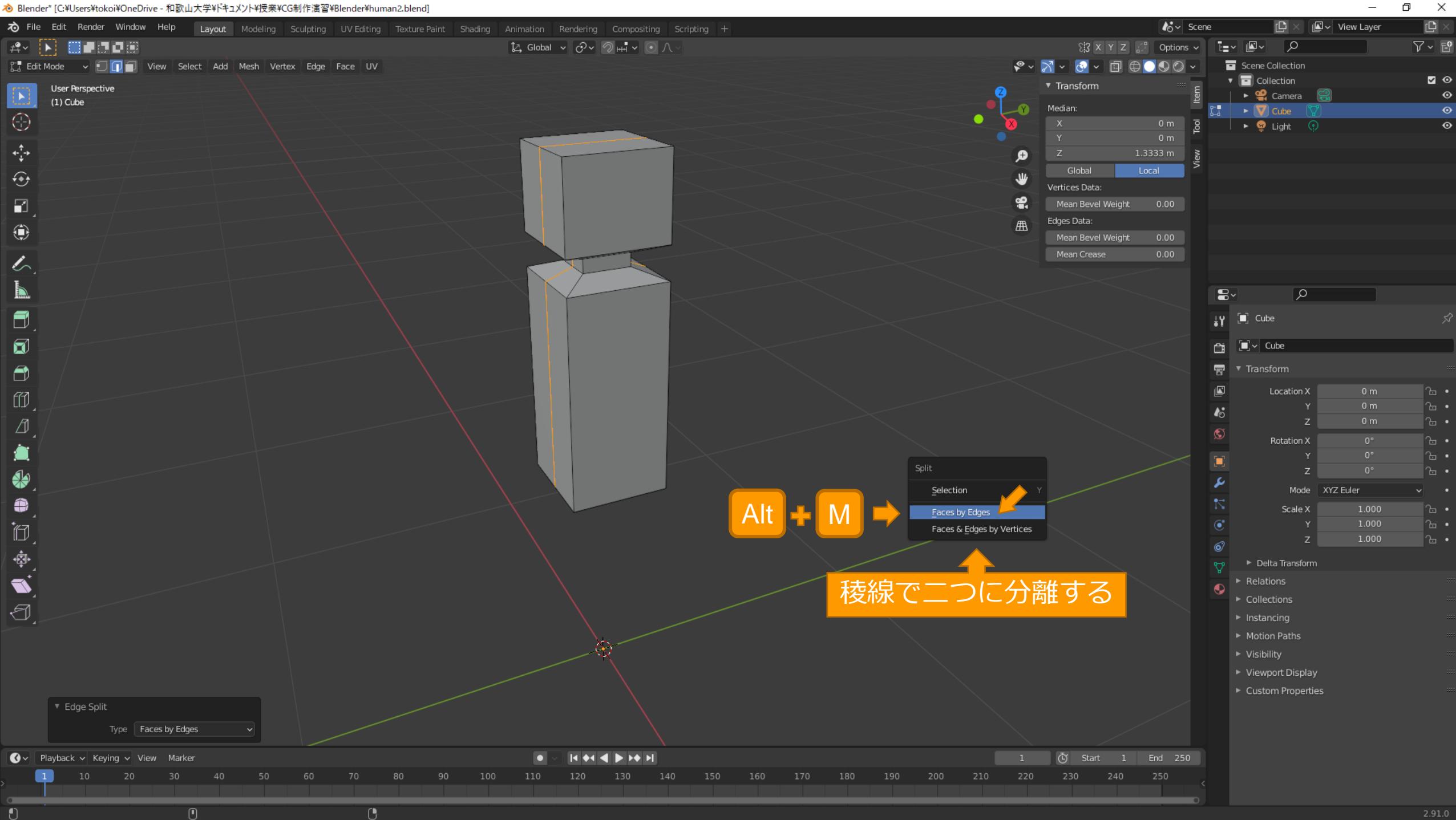
2.91.0

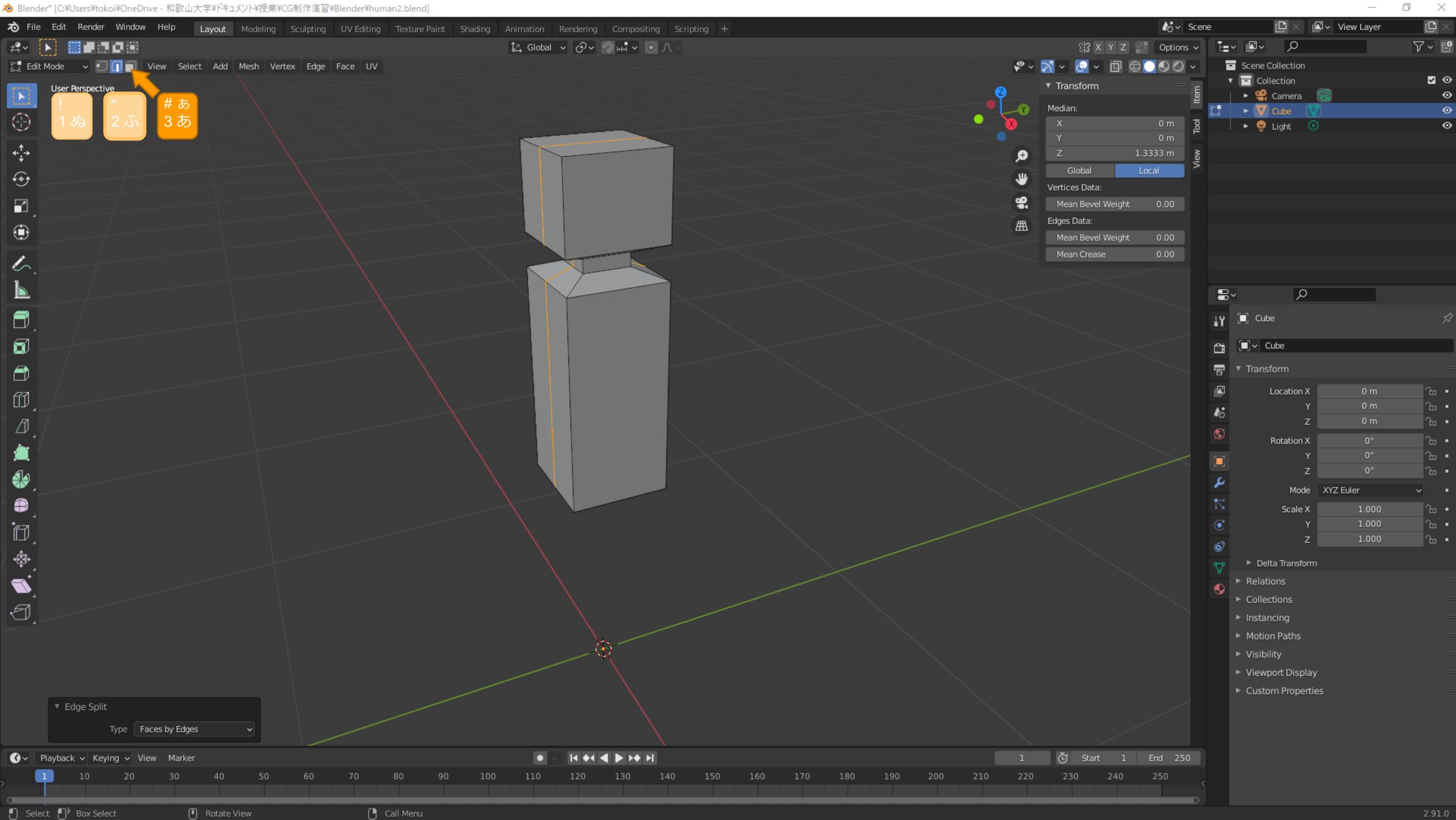
The image shows a Blender 3D Viewport with a gray cube selected. A red line is drawn from the center of the cube to the cursor. A yellow box with the text "Enter" and "確定" (Confirm) is overlaid on the cube. A black icon with a red and white shape is also present. The Transform panel shows median values for X, Y, and Z. The Outset (O) option is off. The scene collection includes a Camera, a Cube, and a Light.

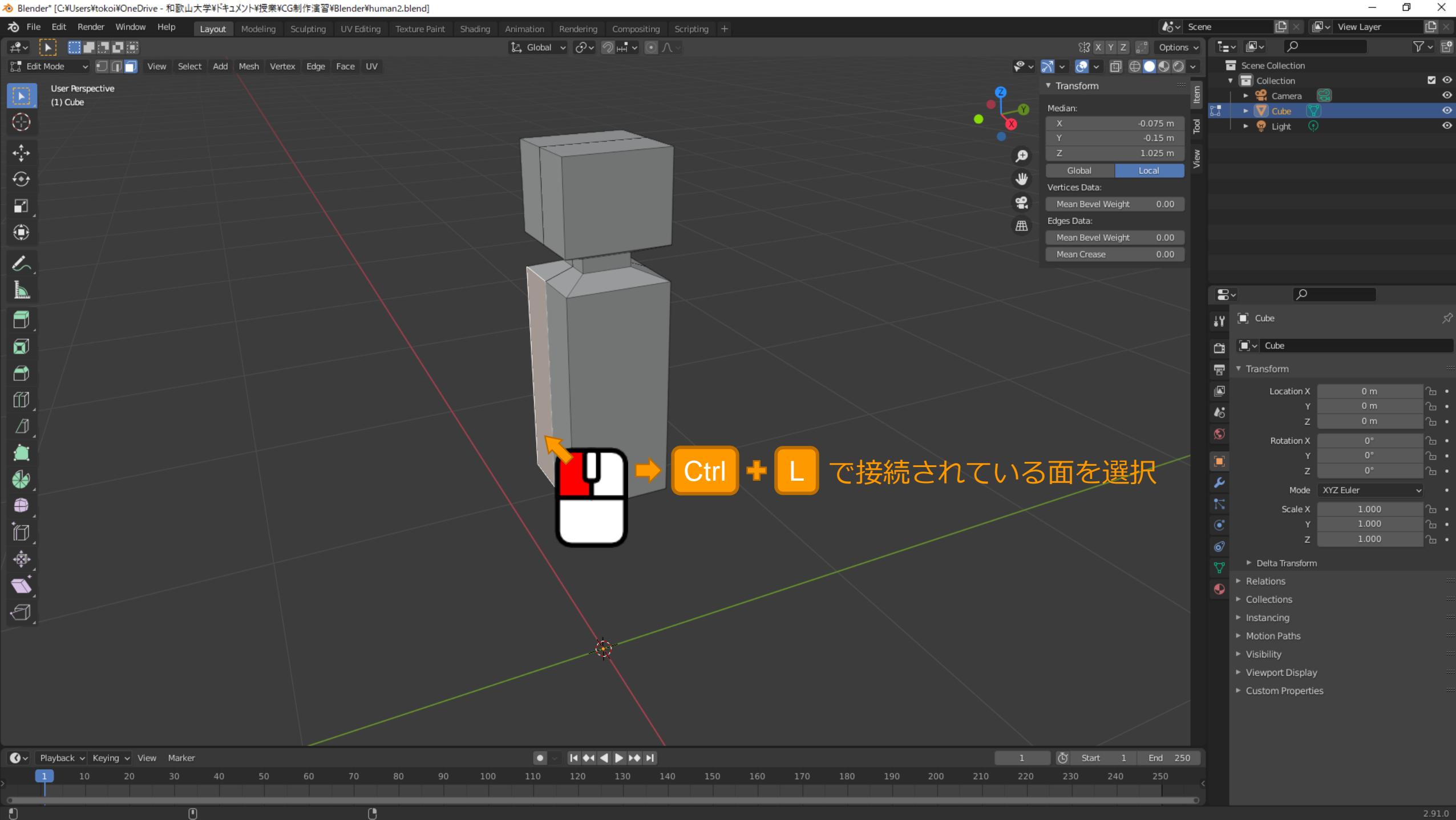


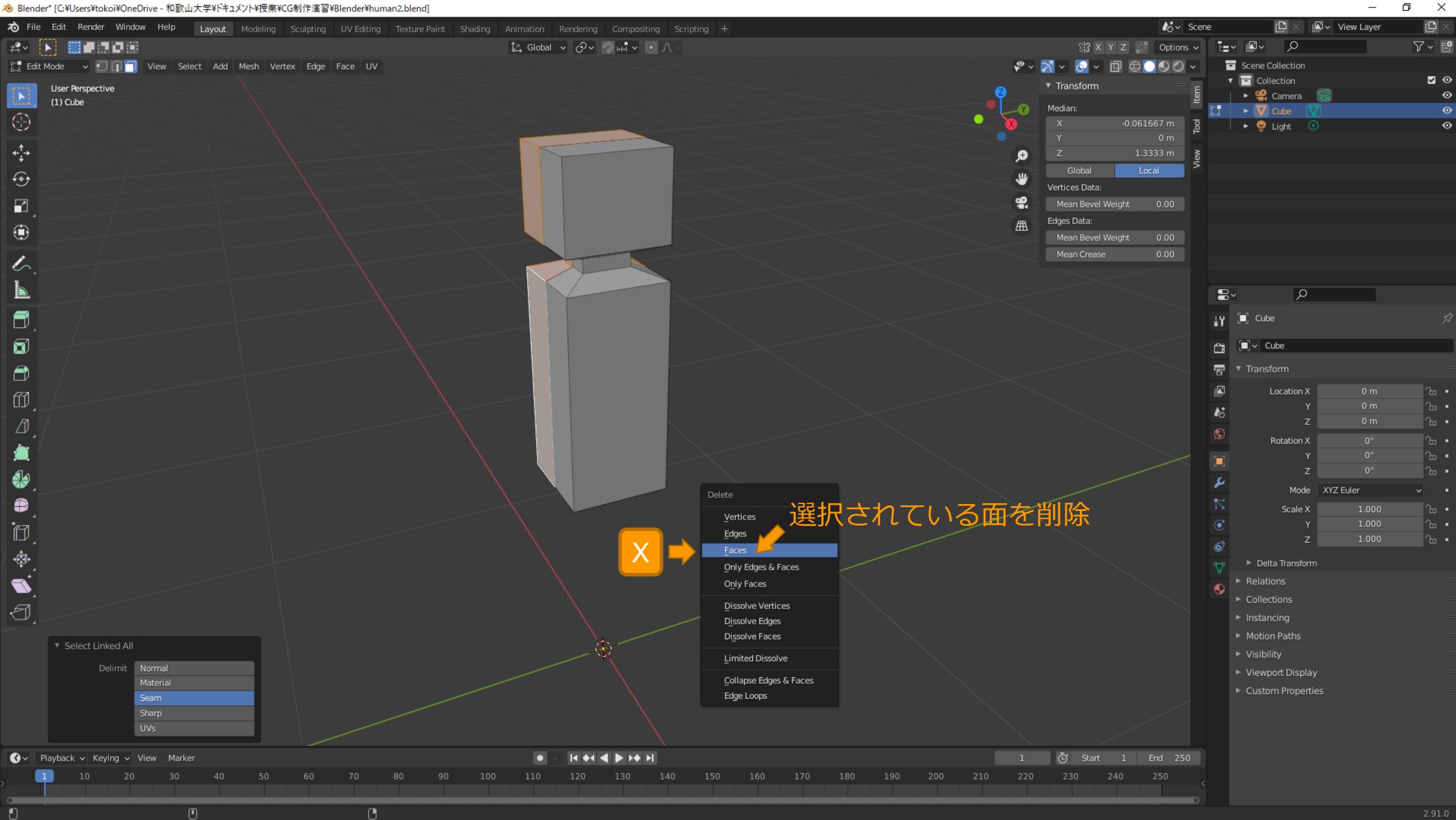


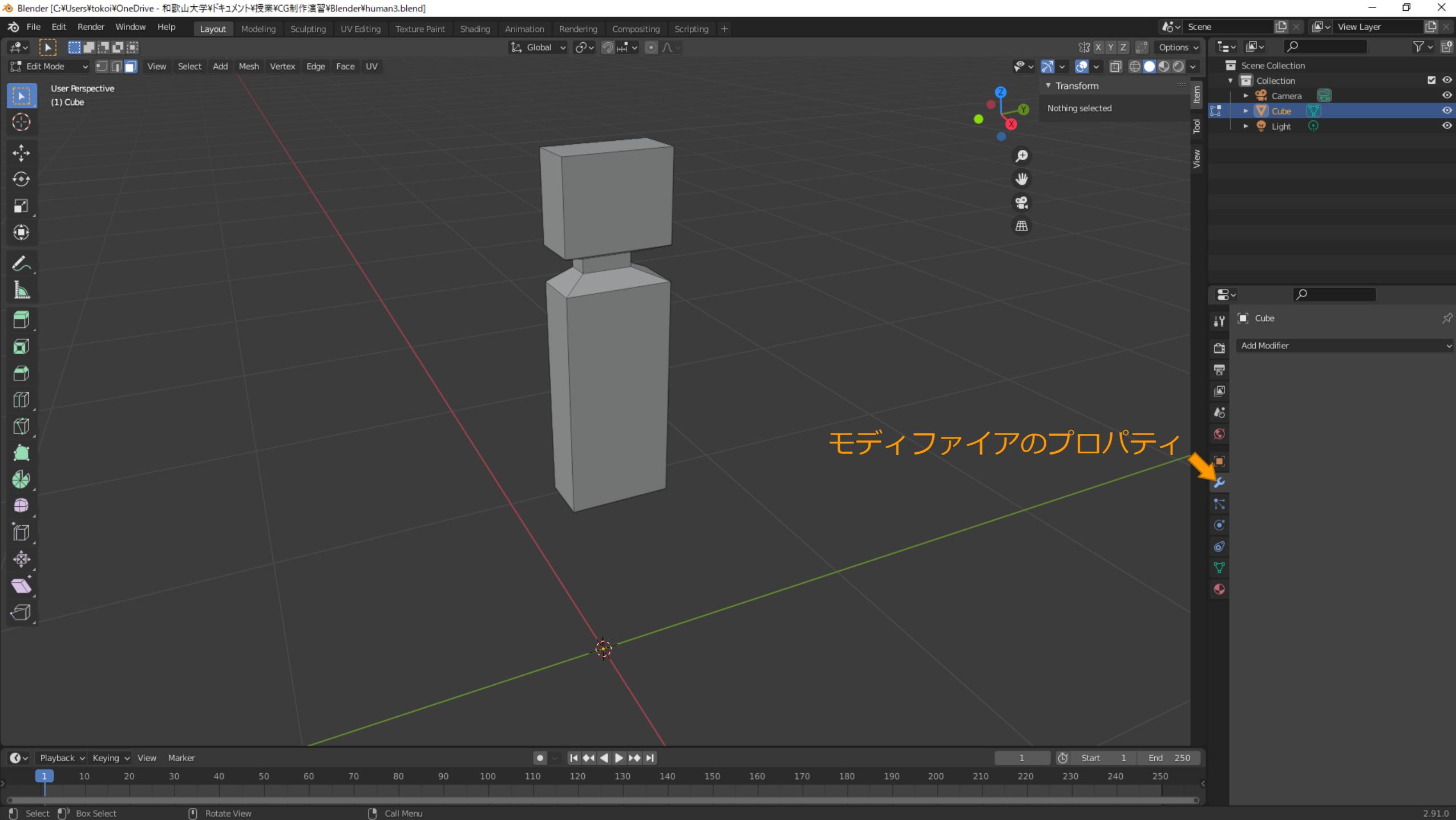


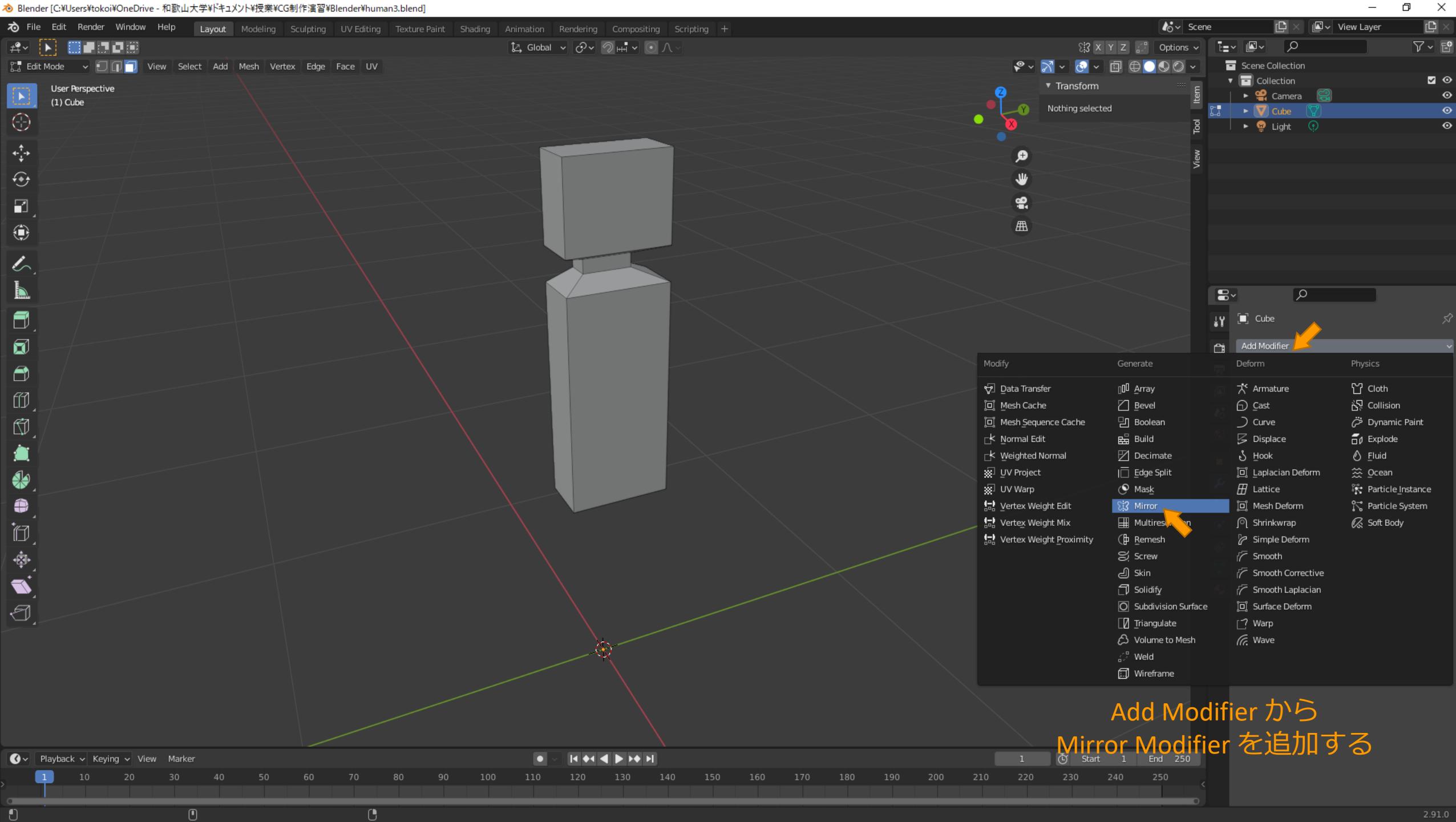


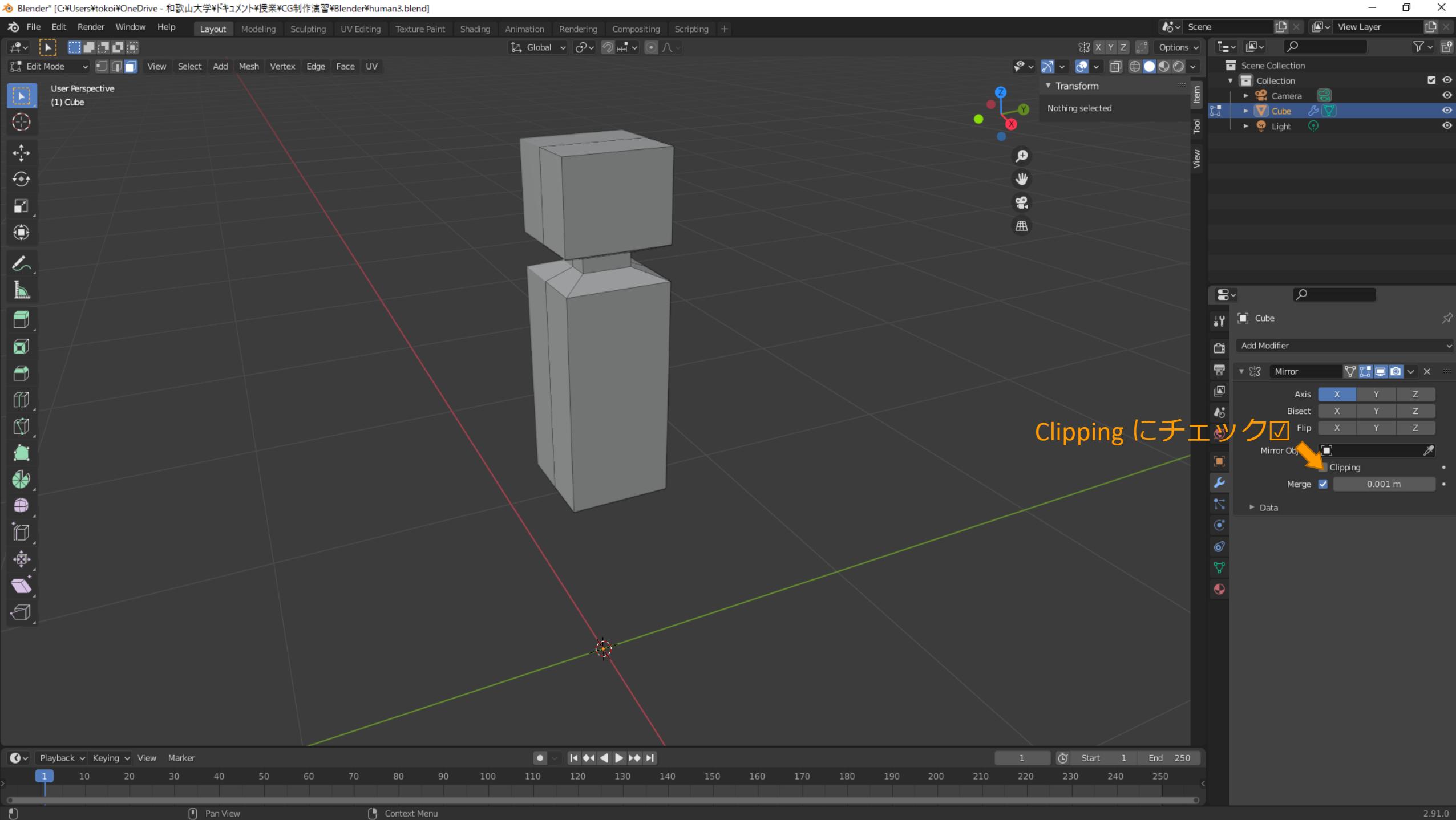


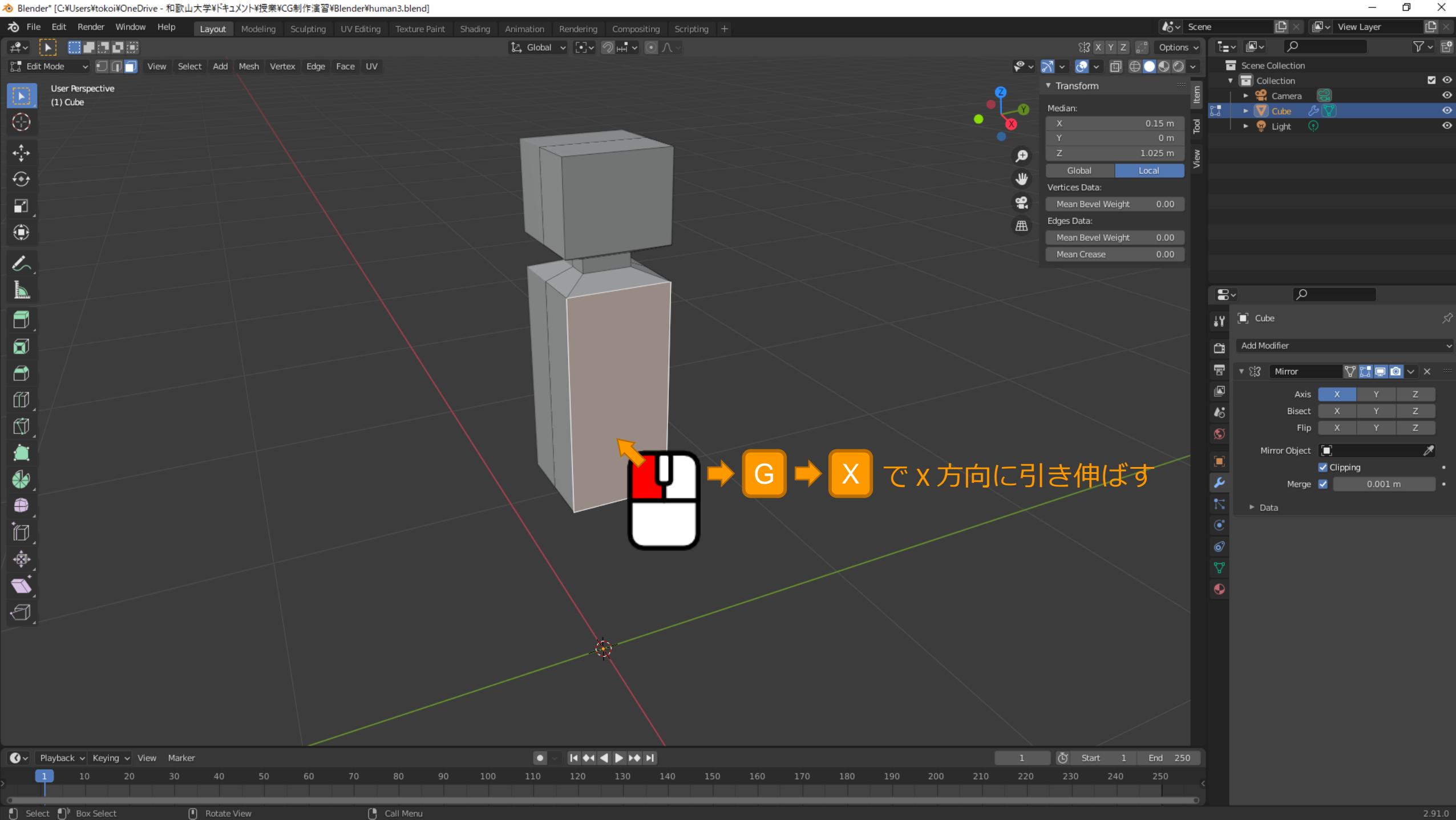


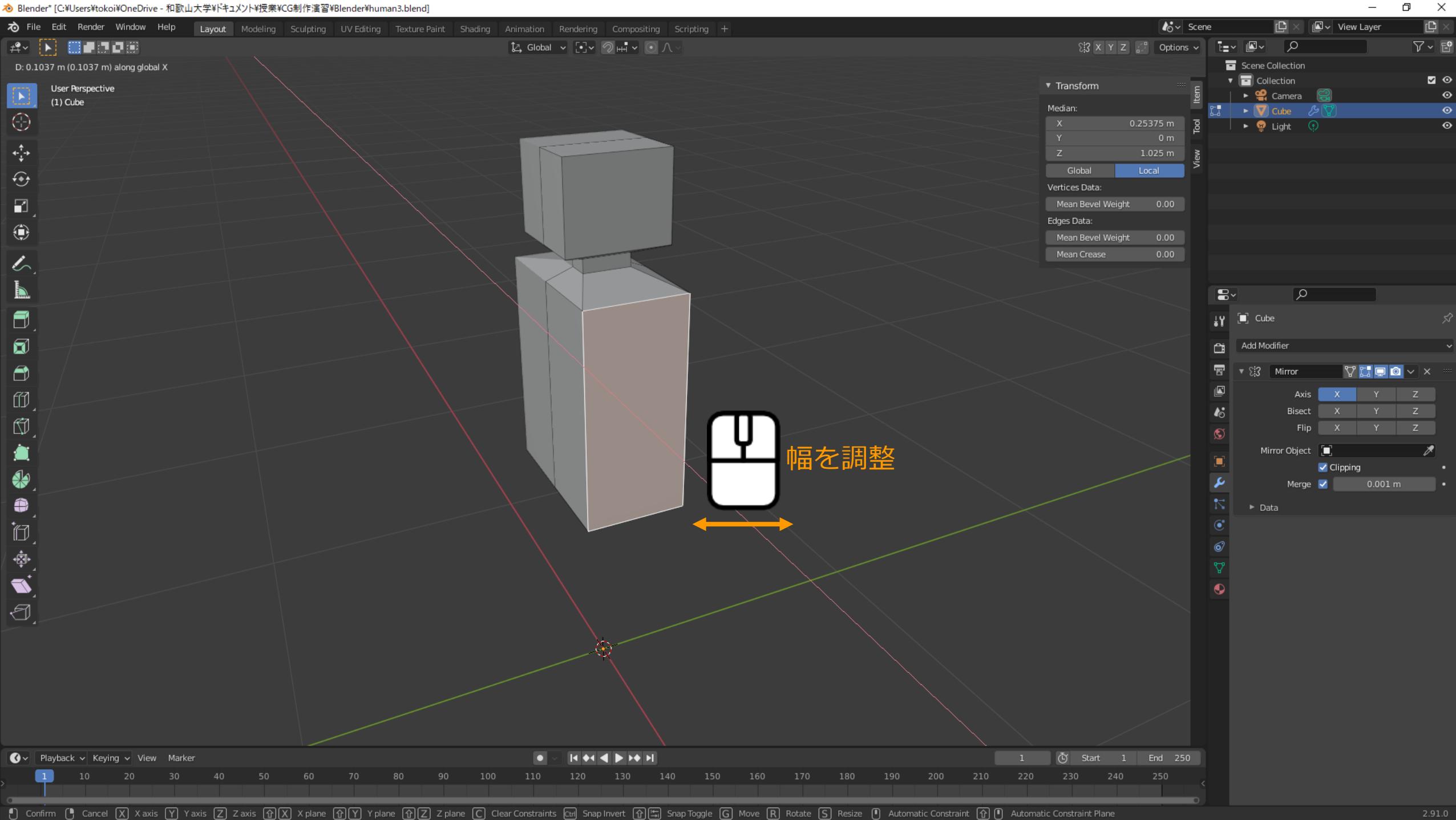


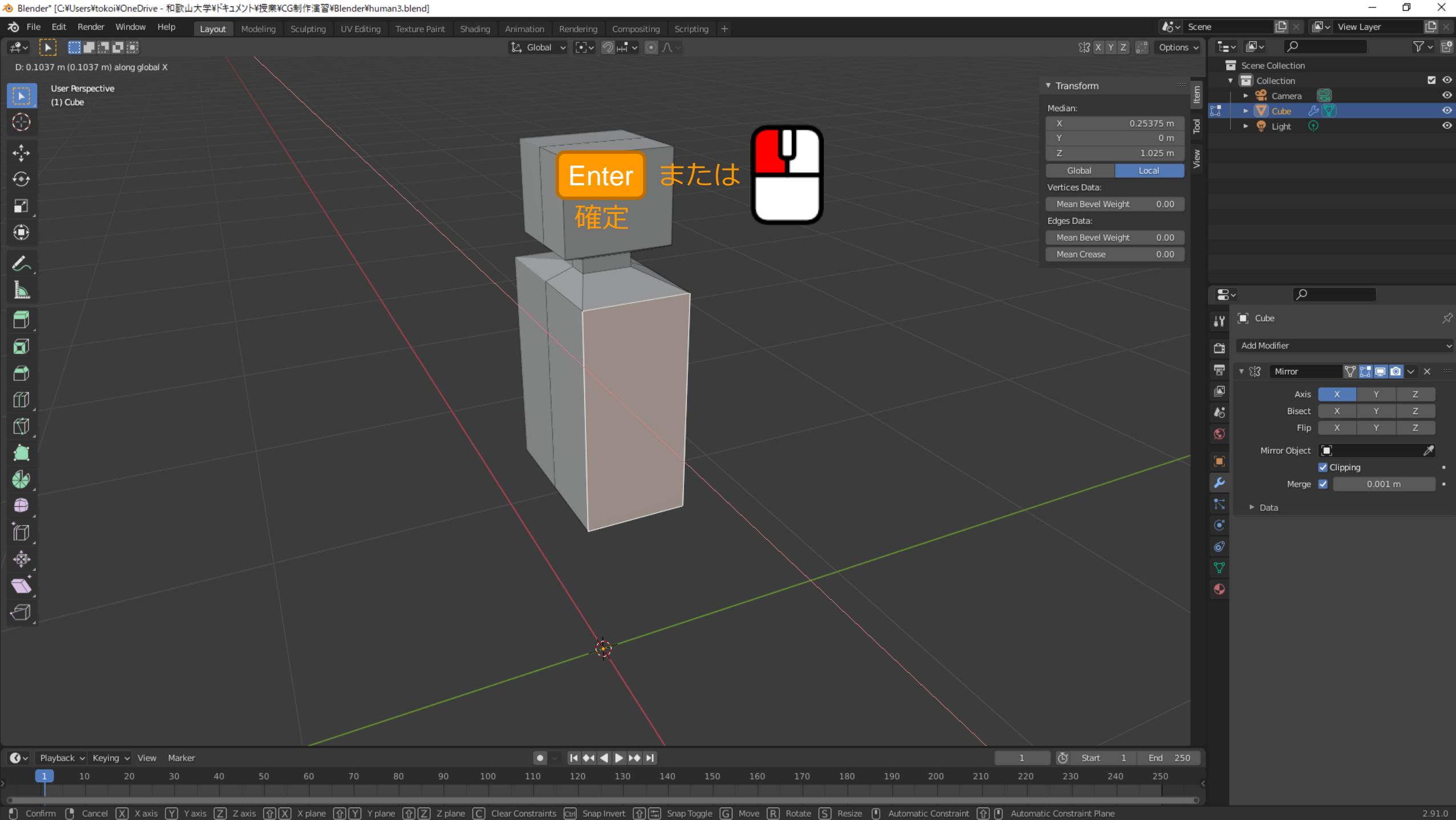


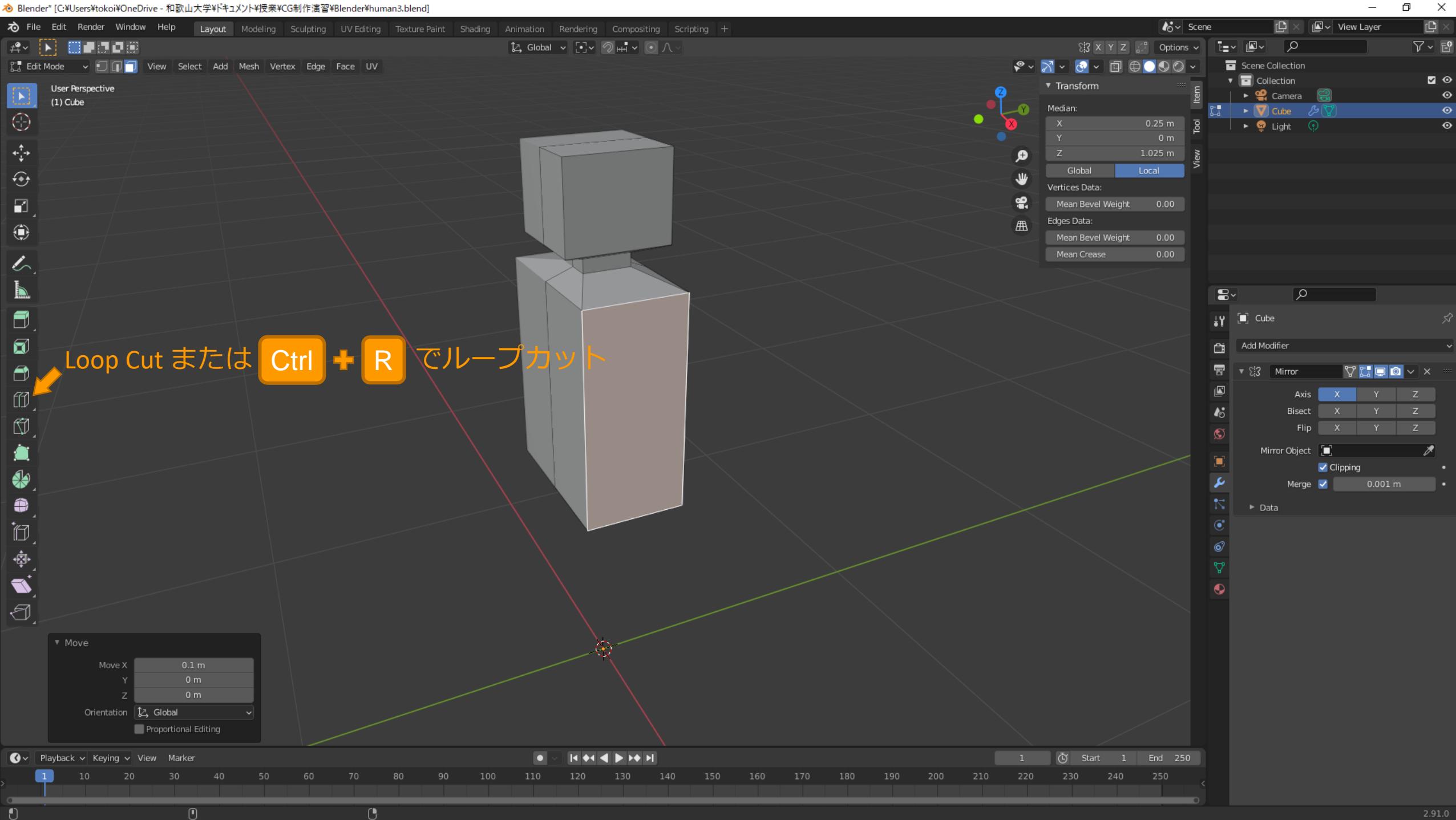


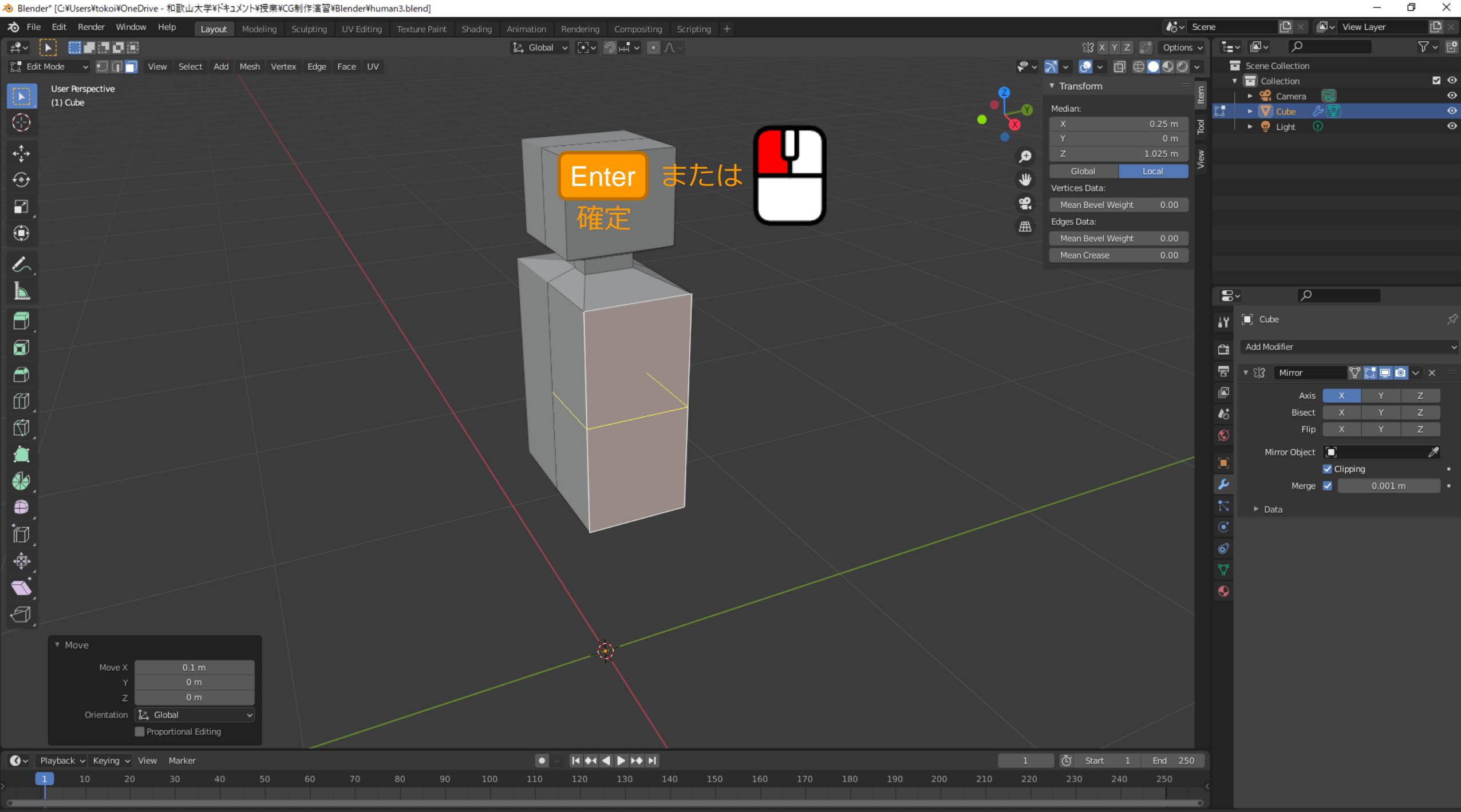


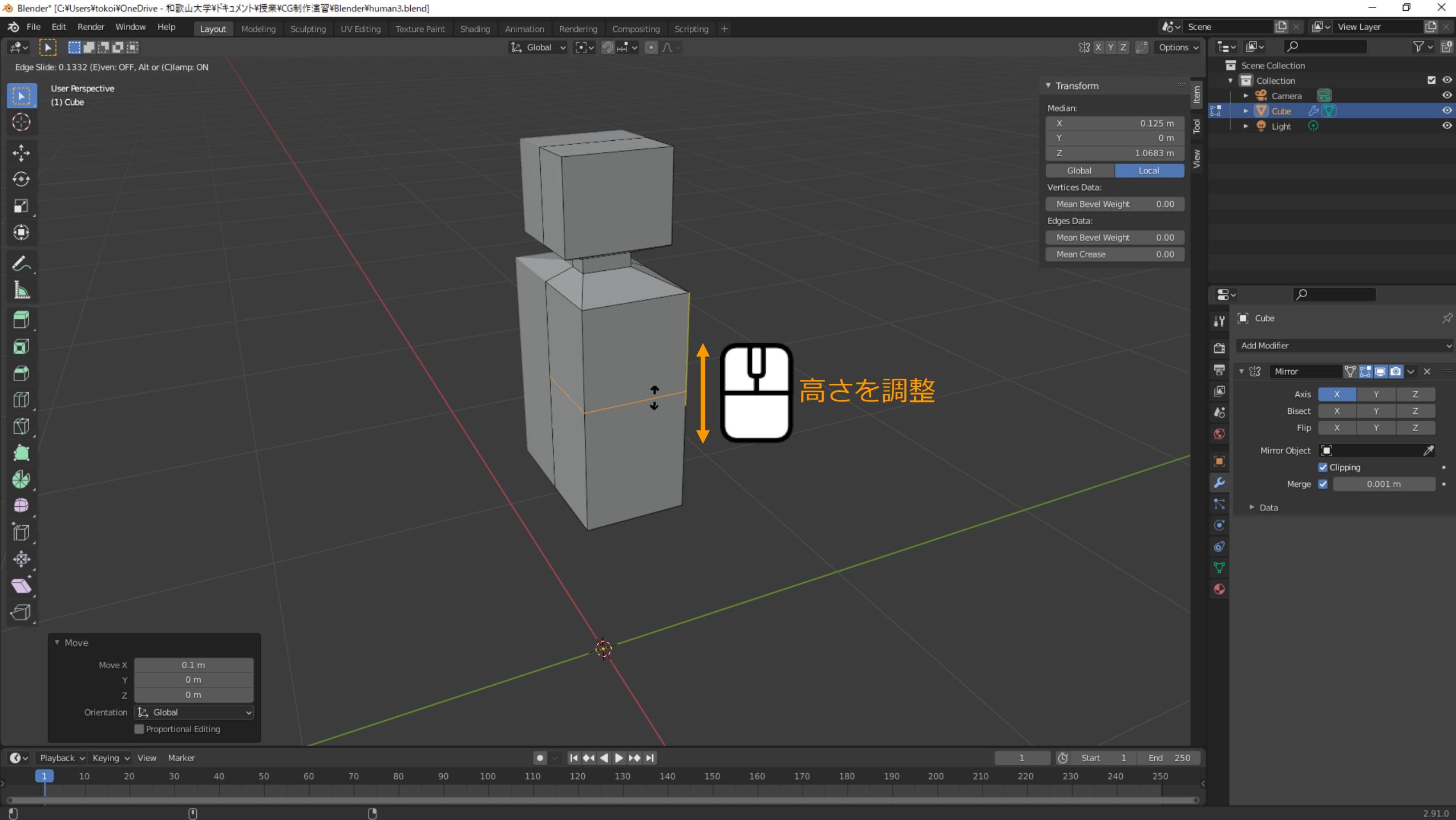


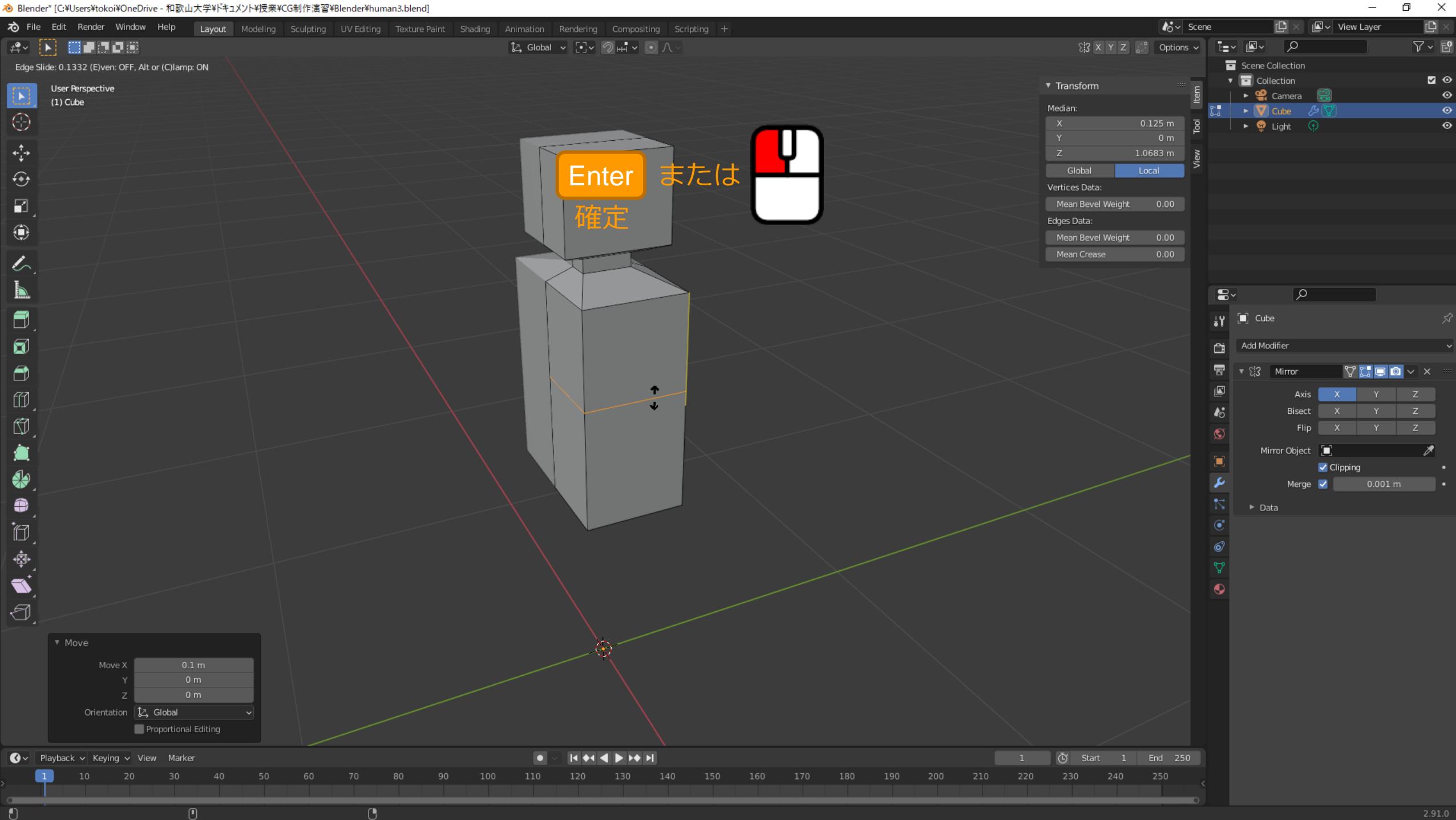


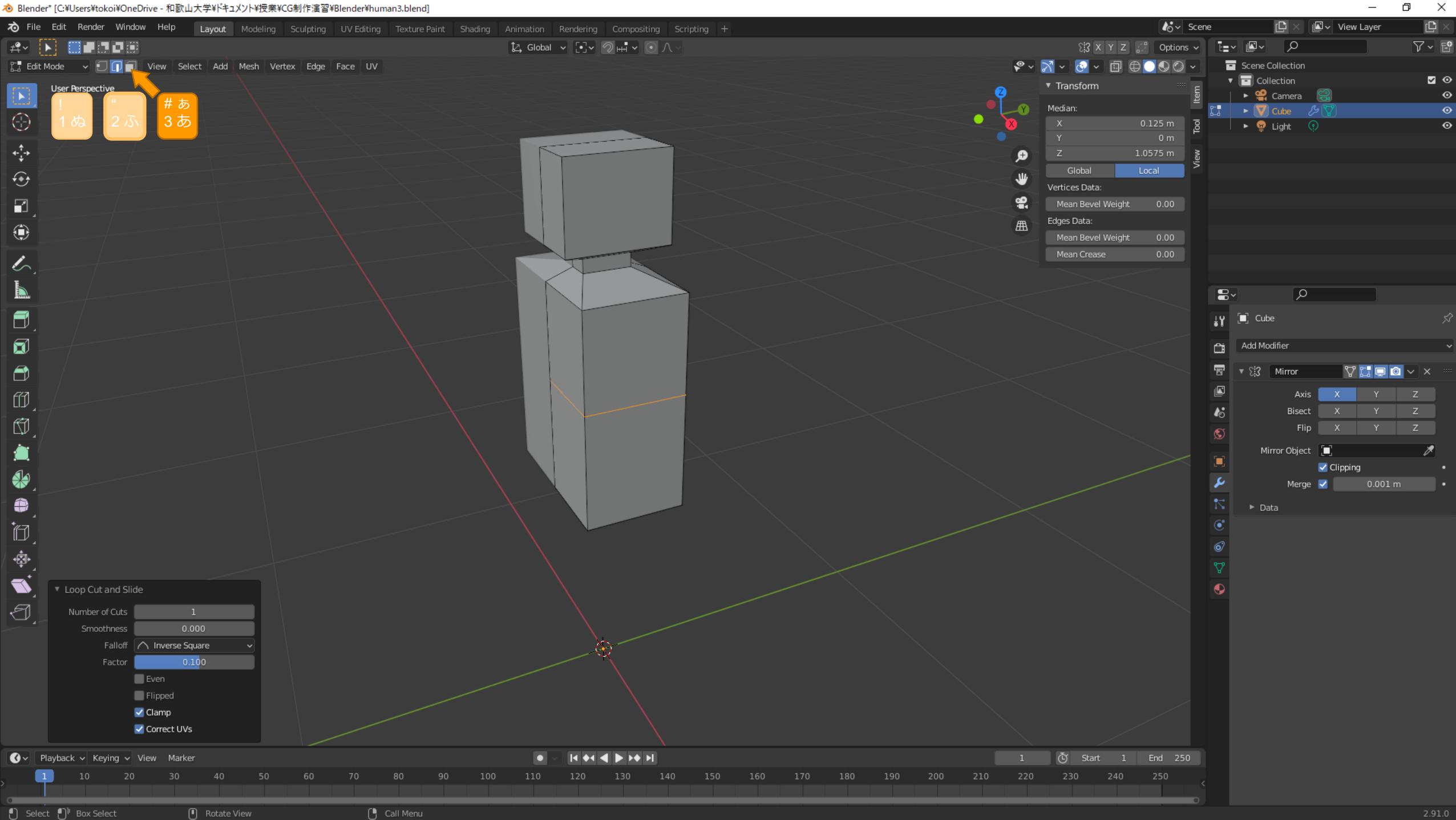


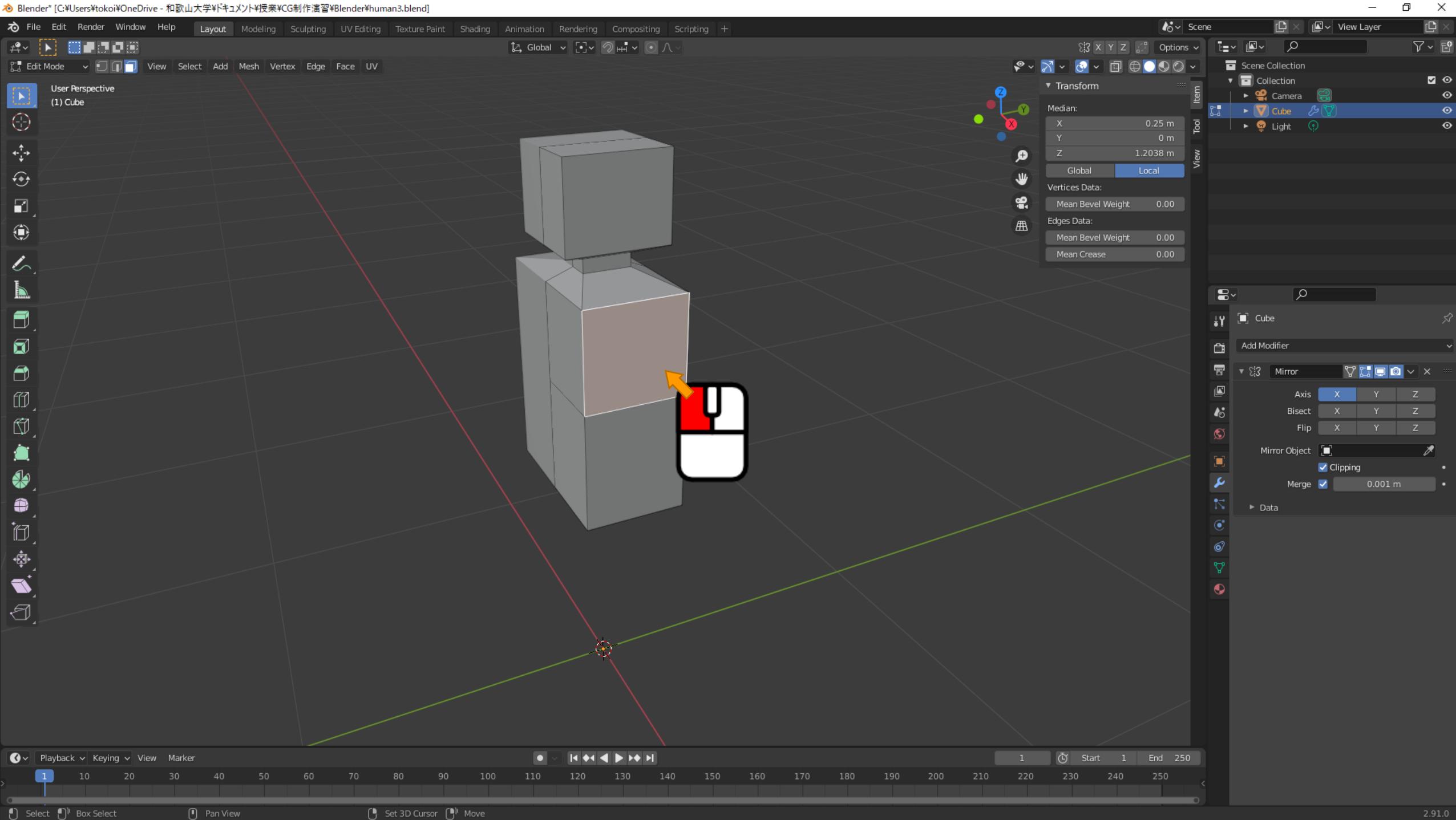


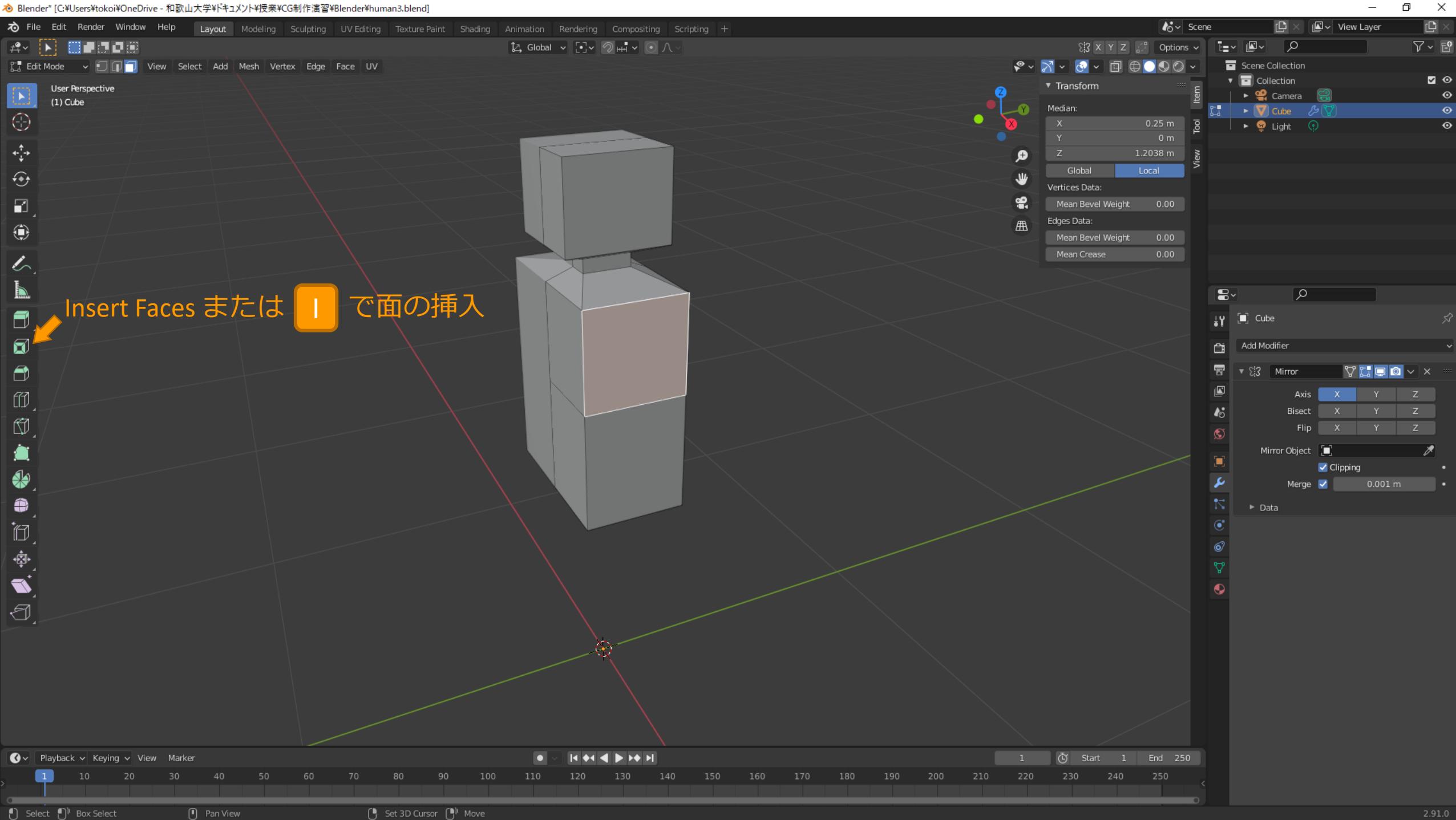


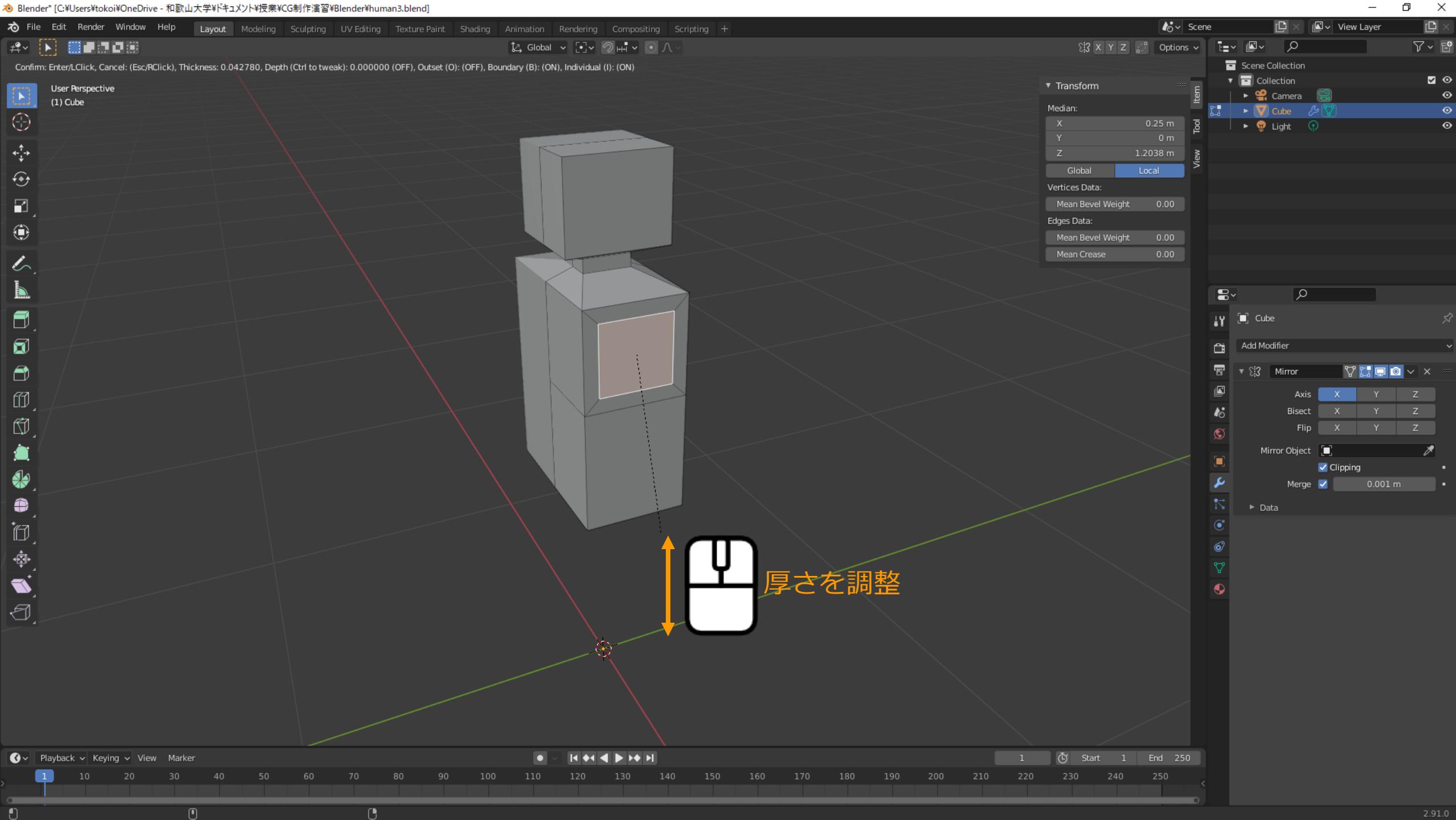


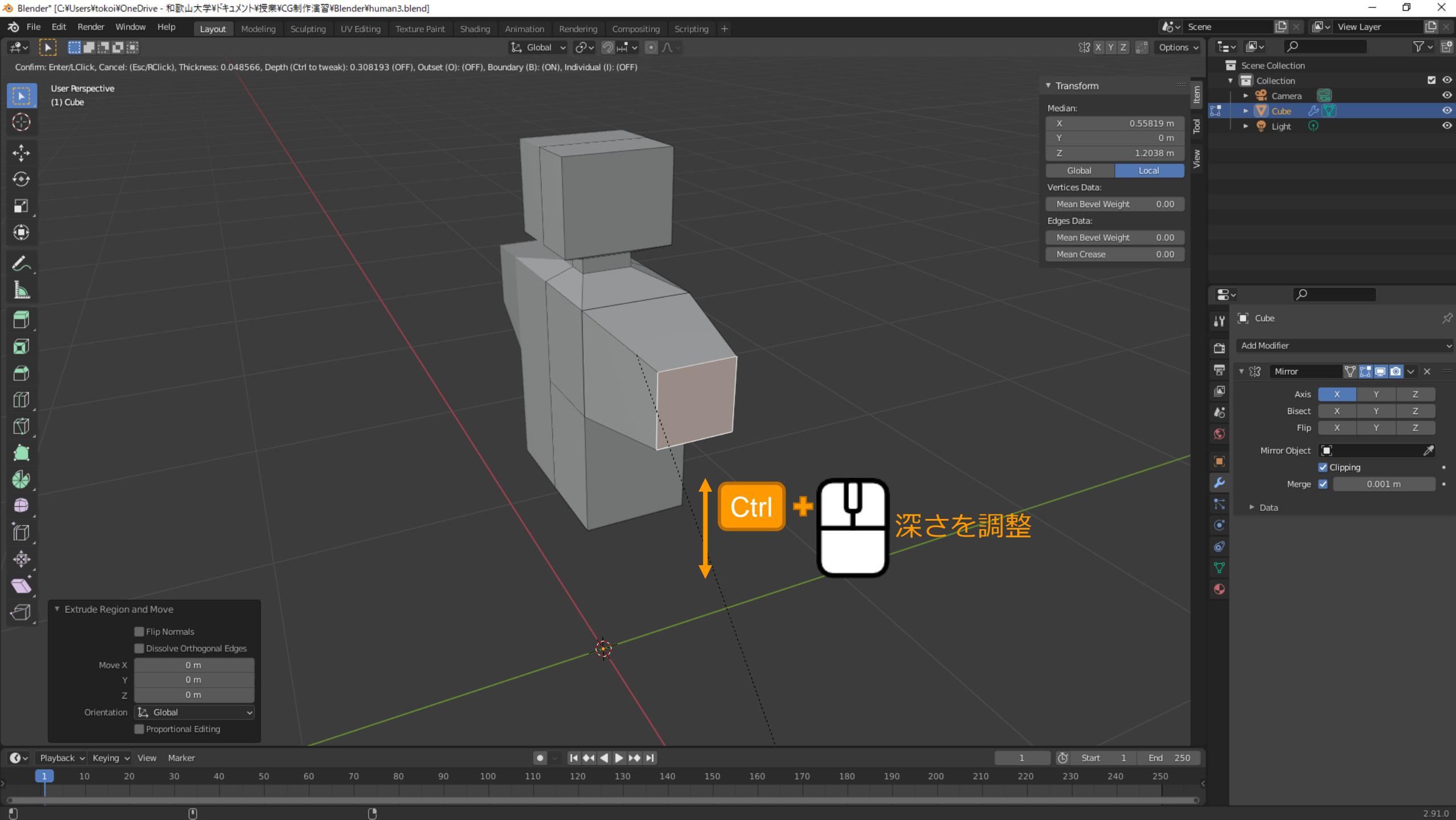


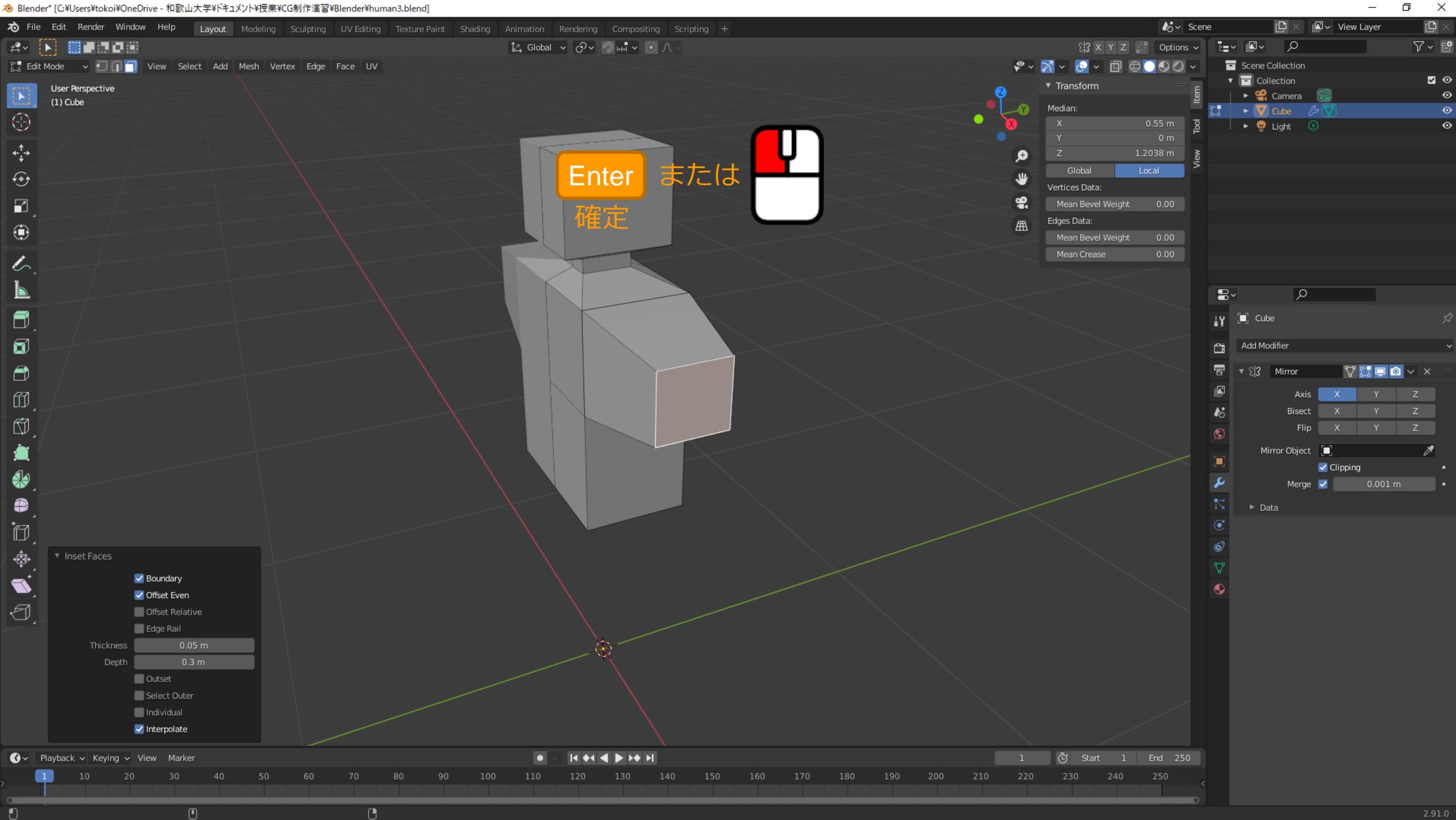


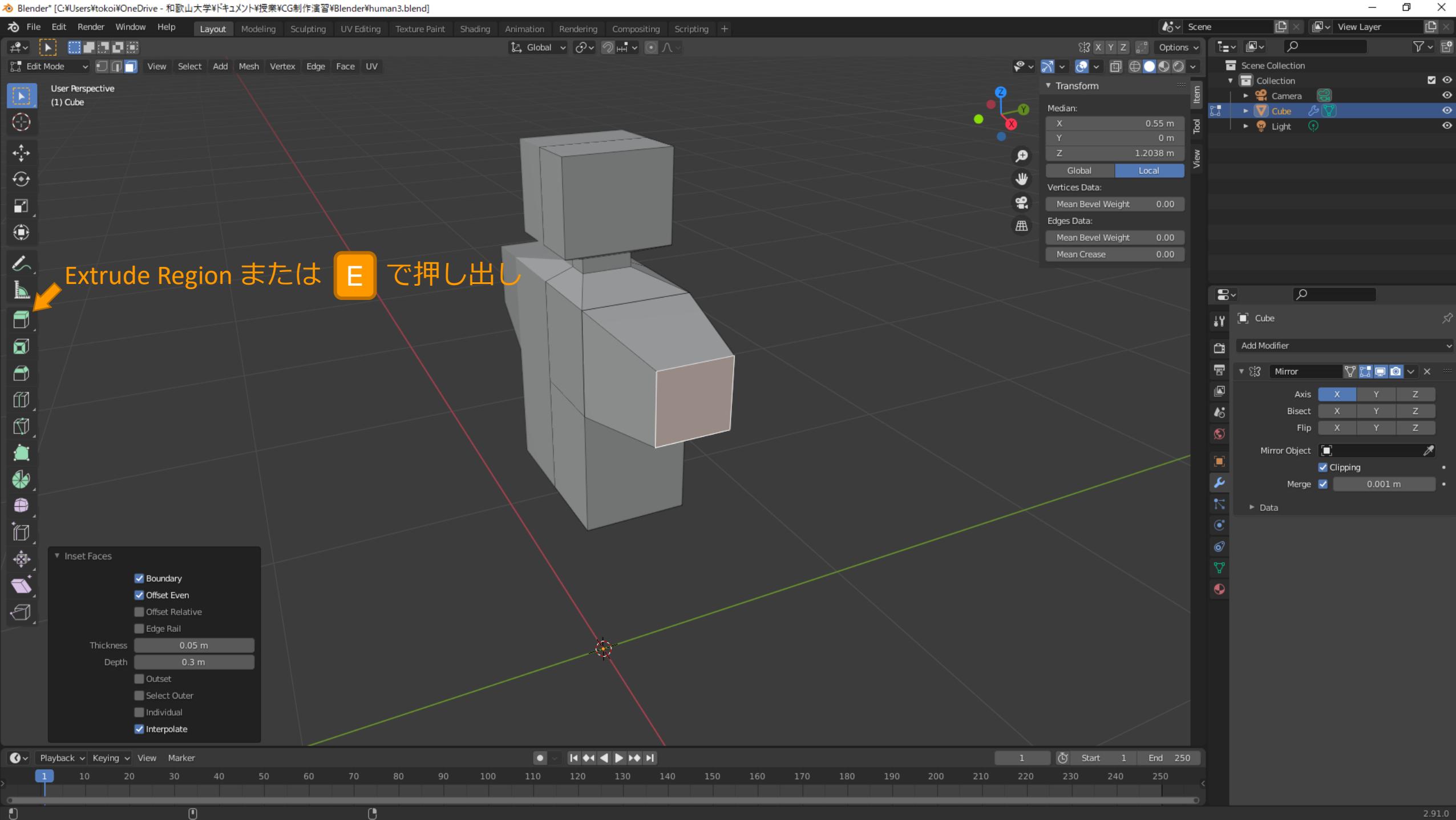


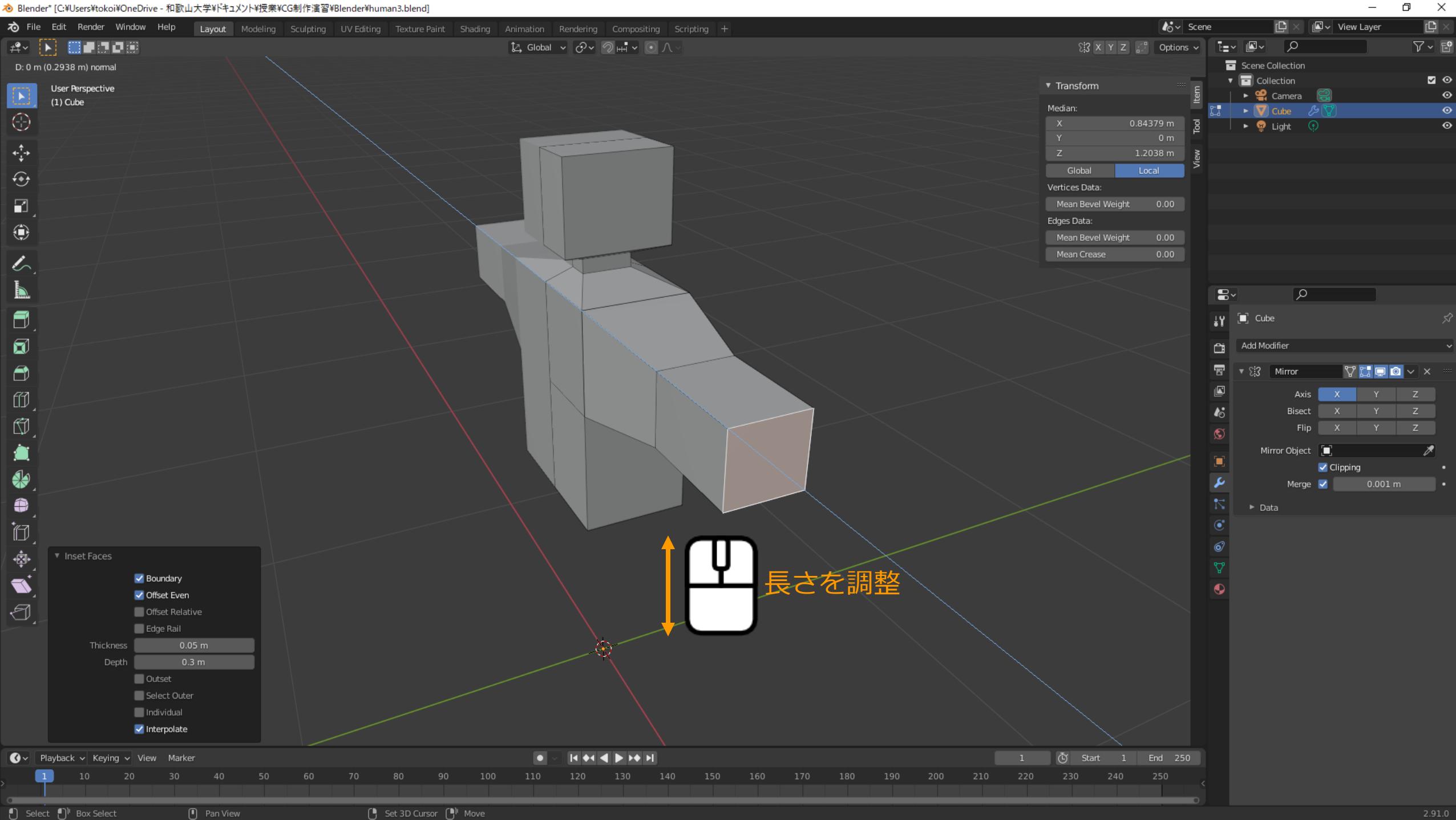


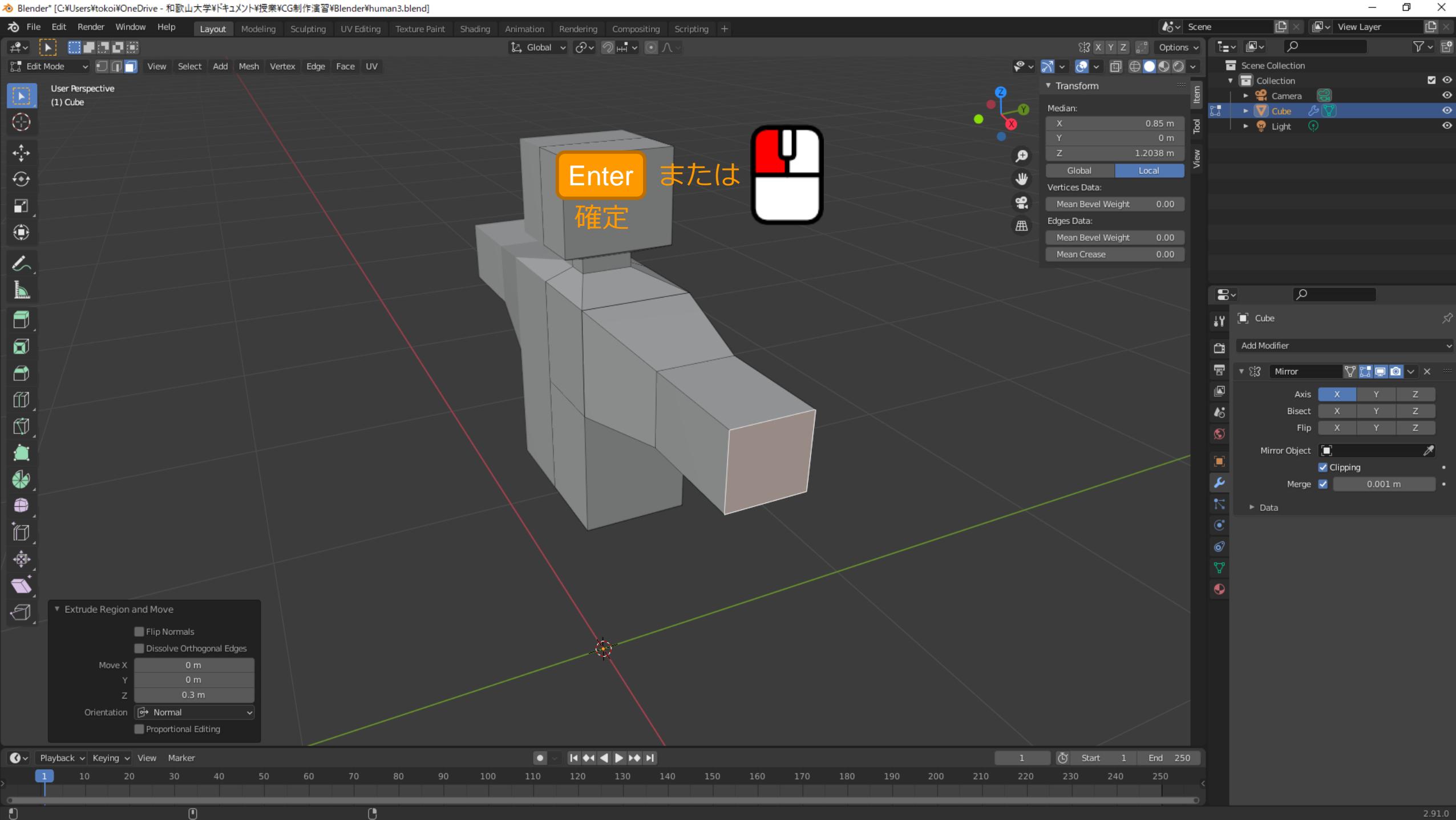


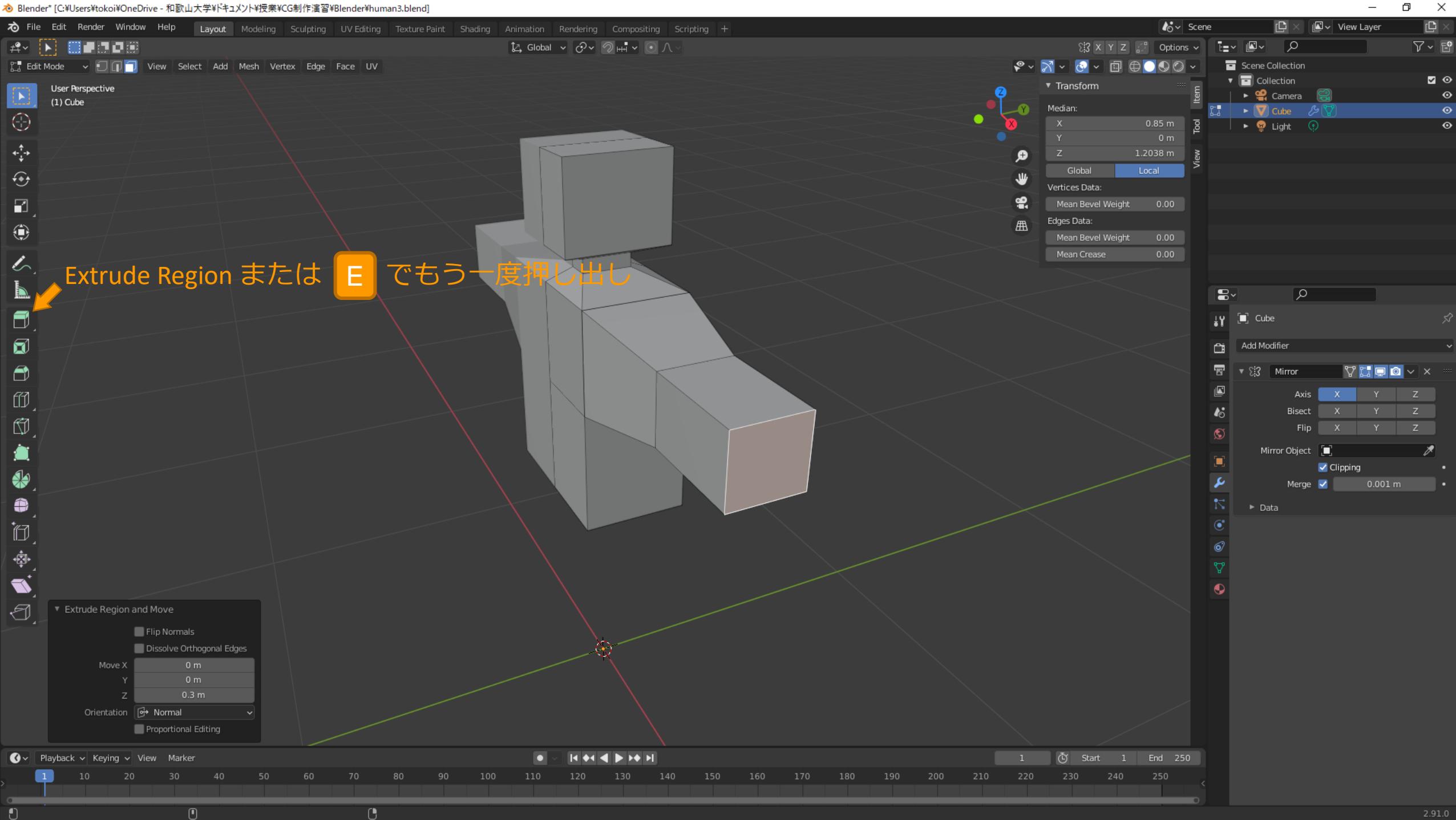


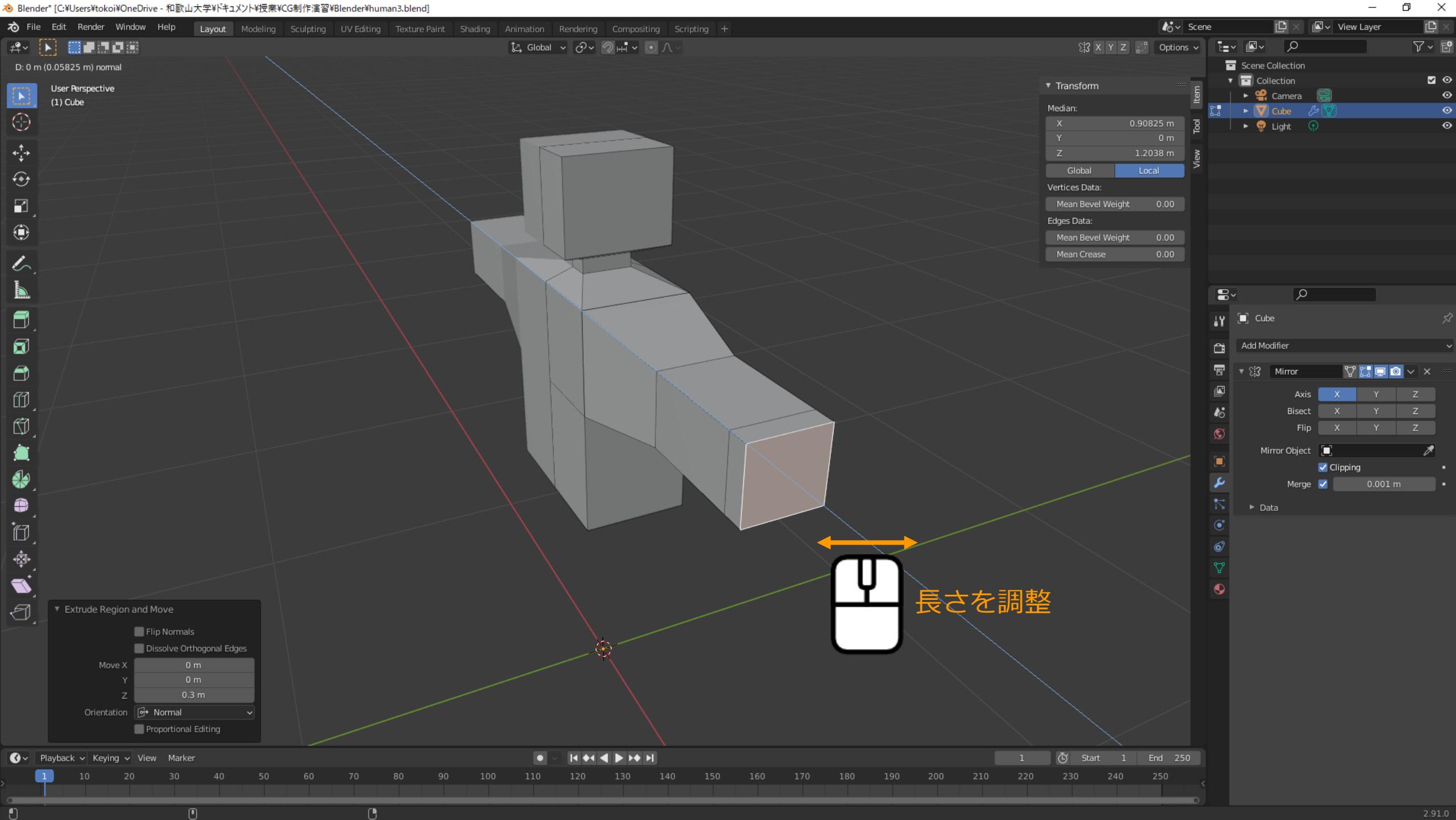


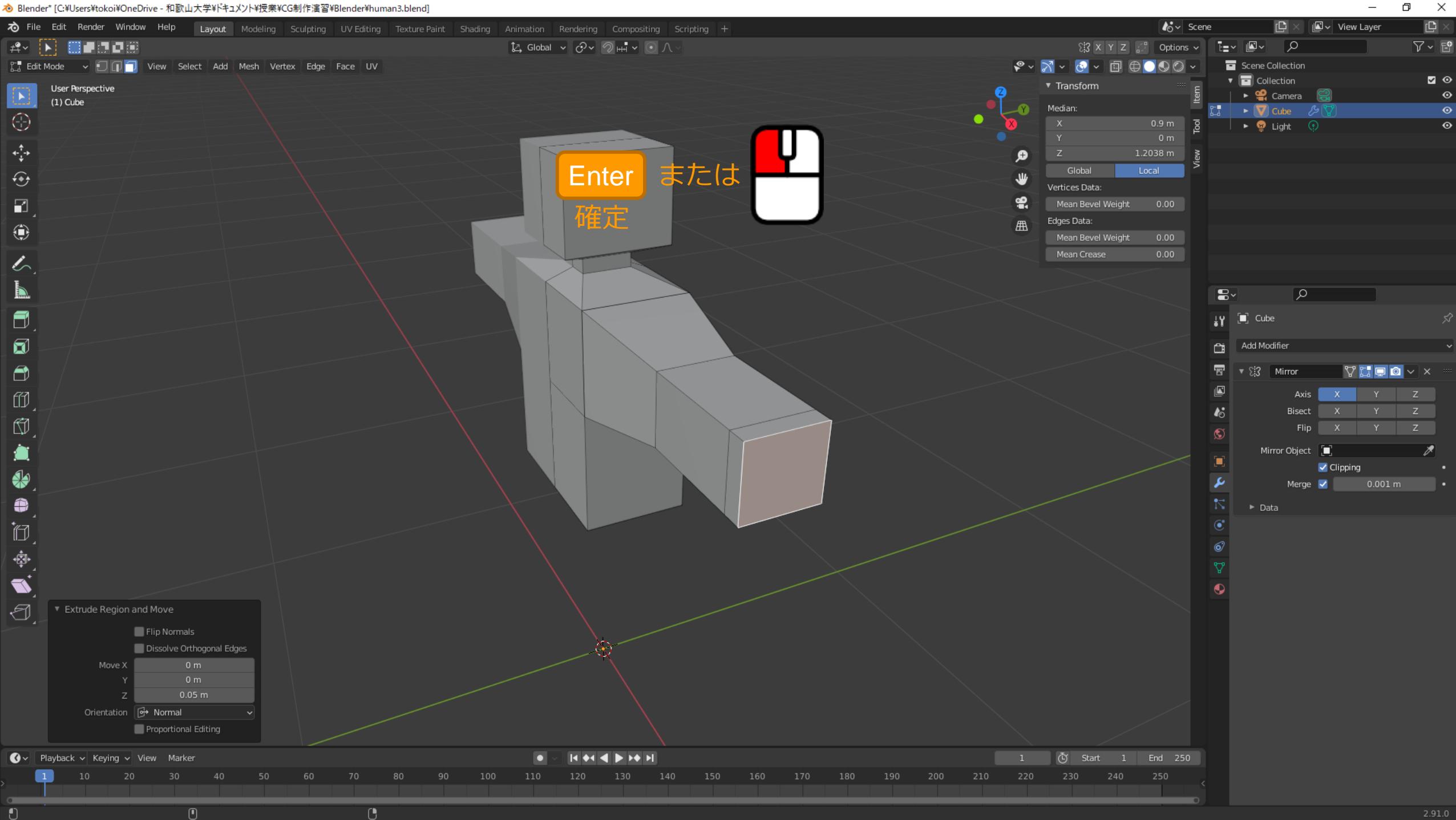


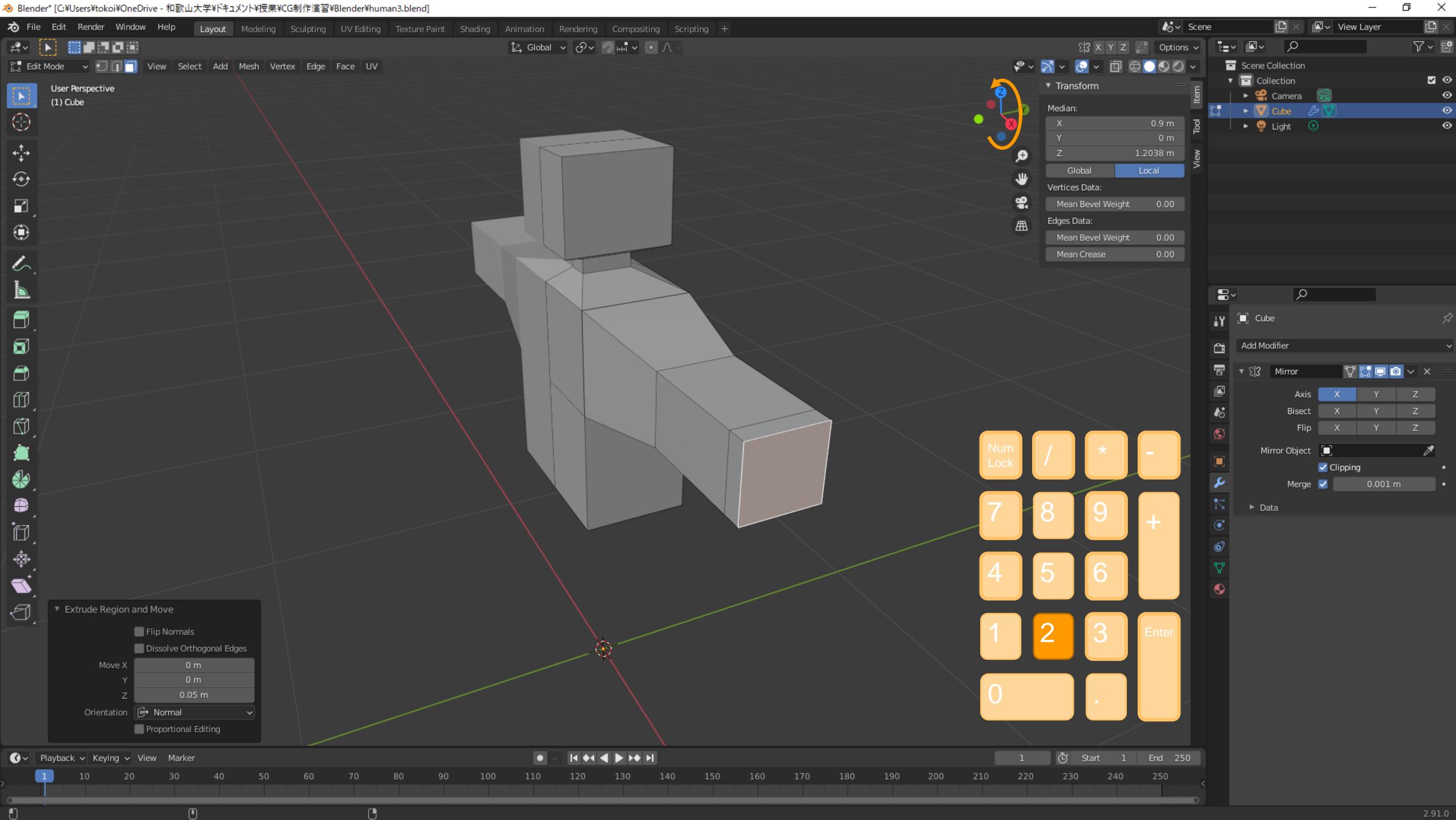


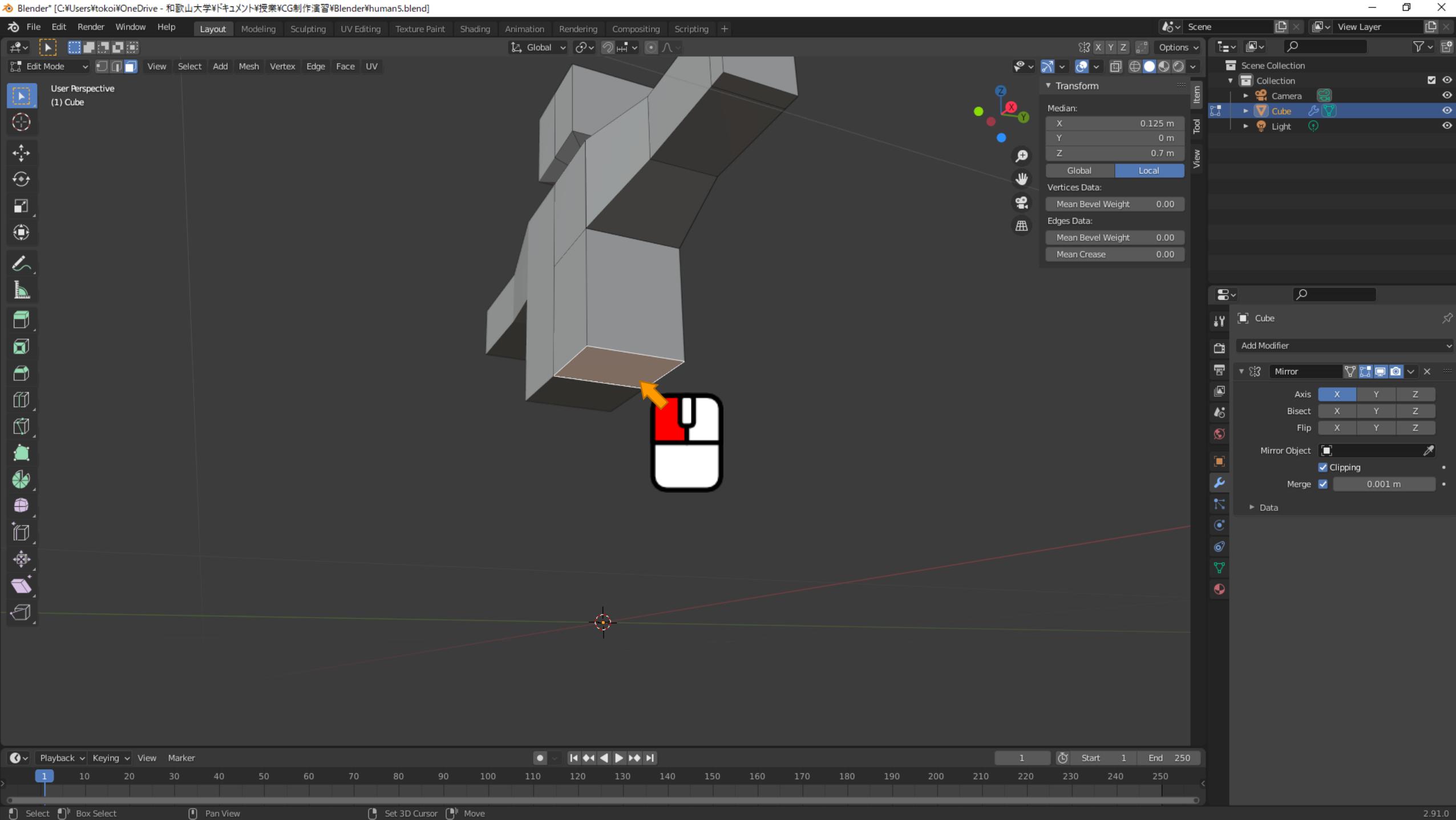


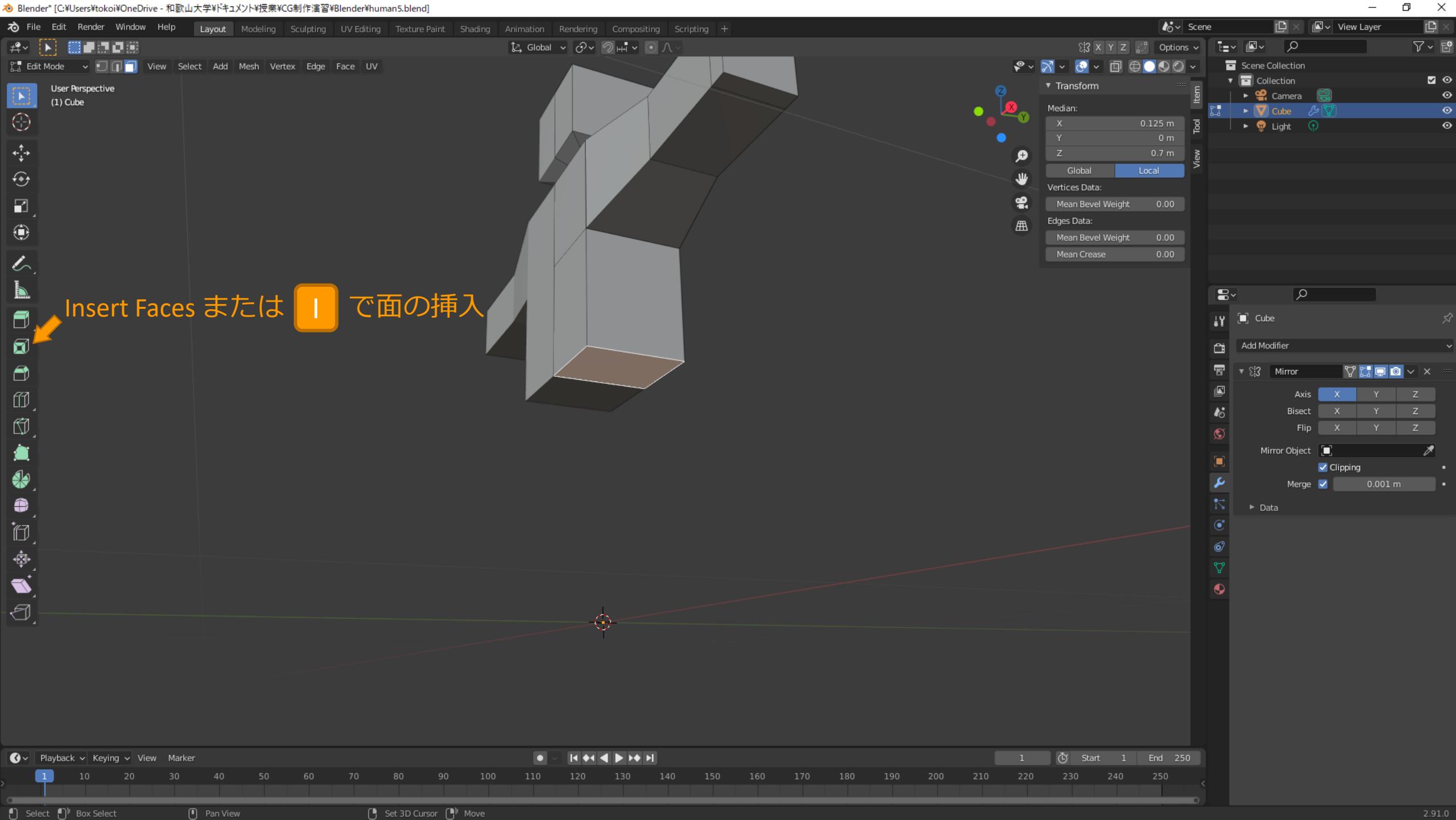


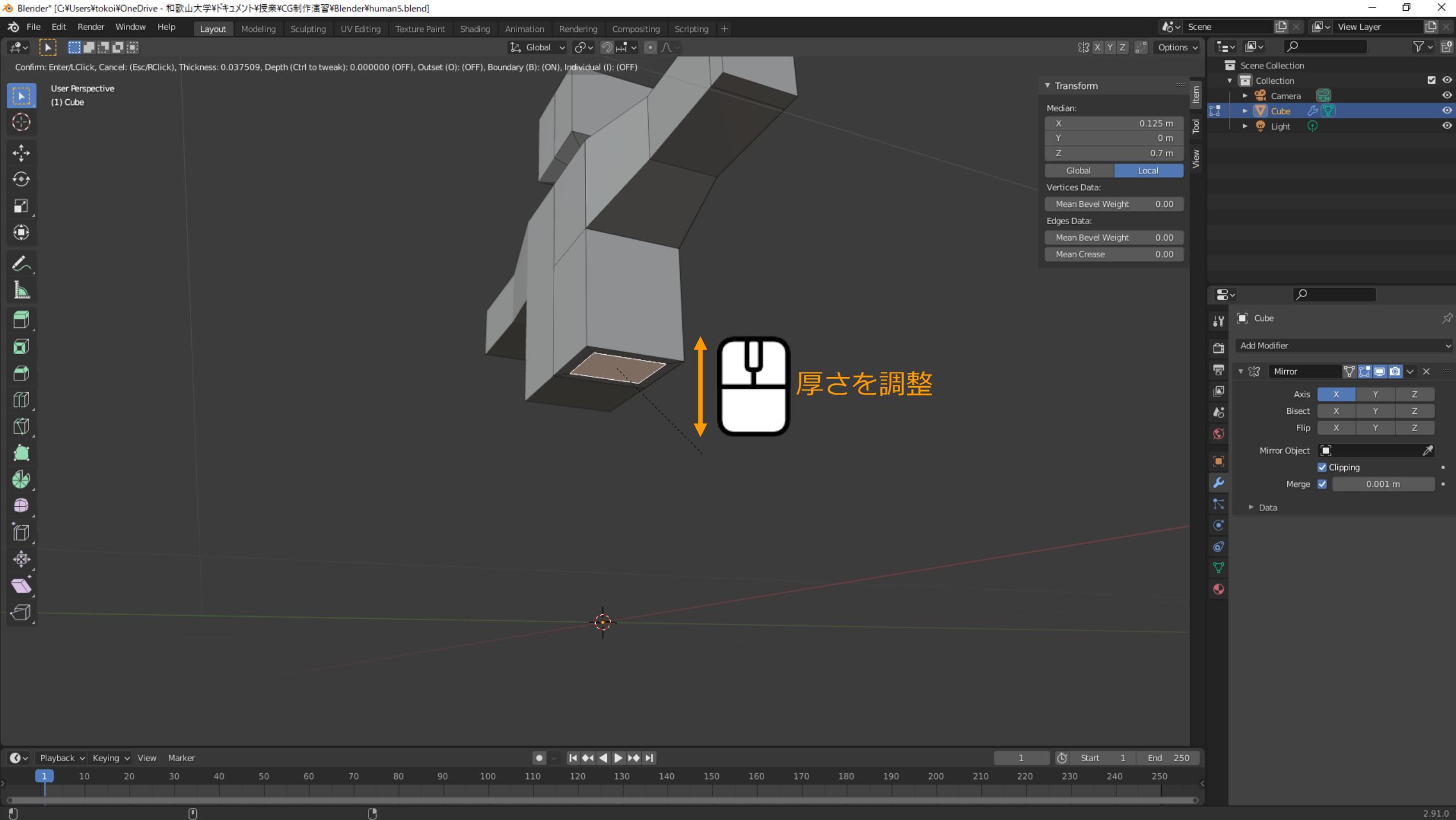


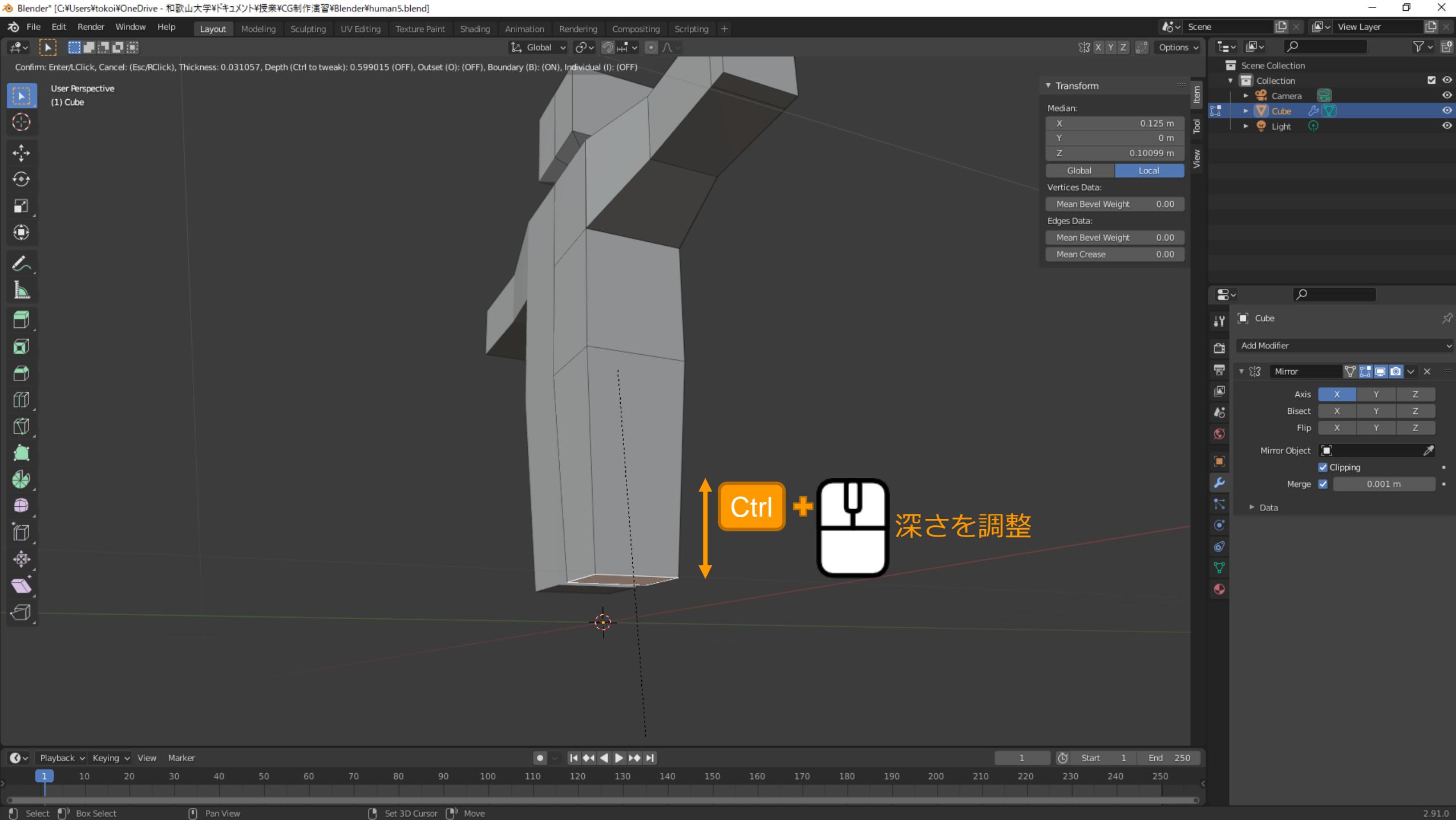


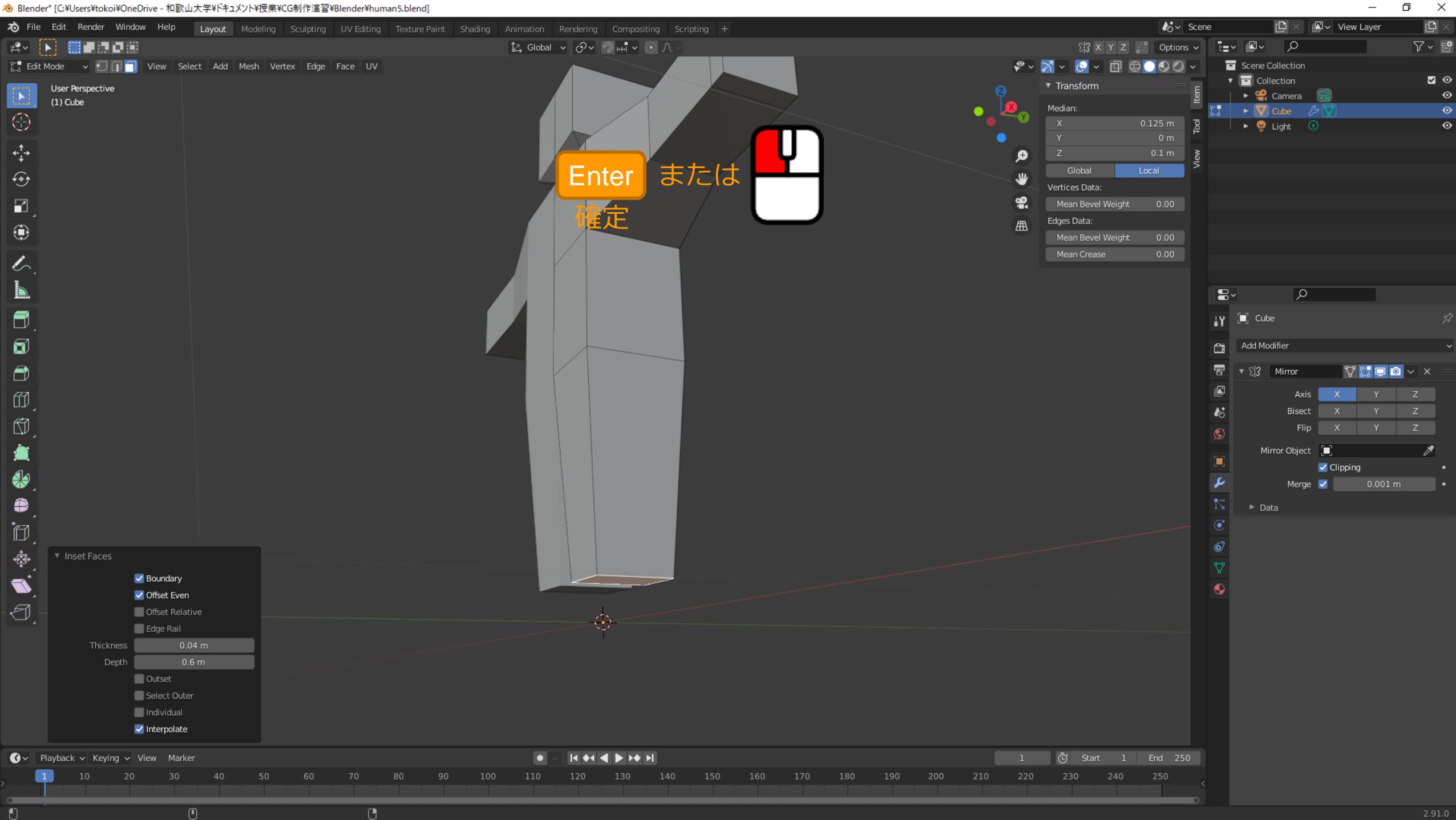


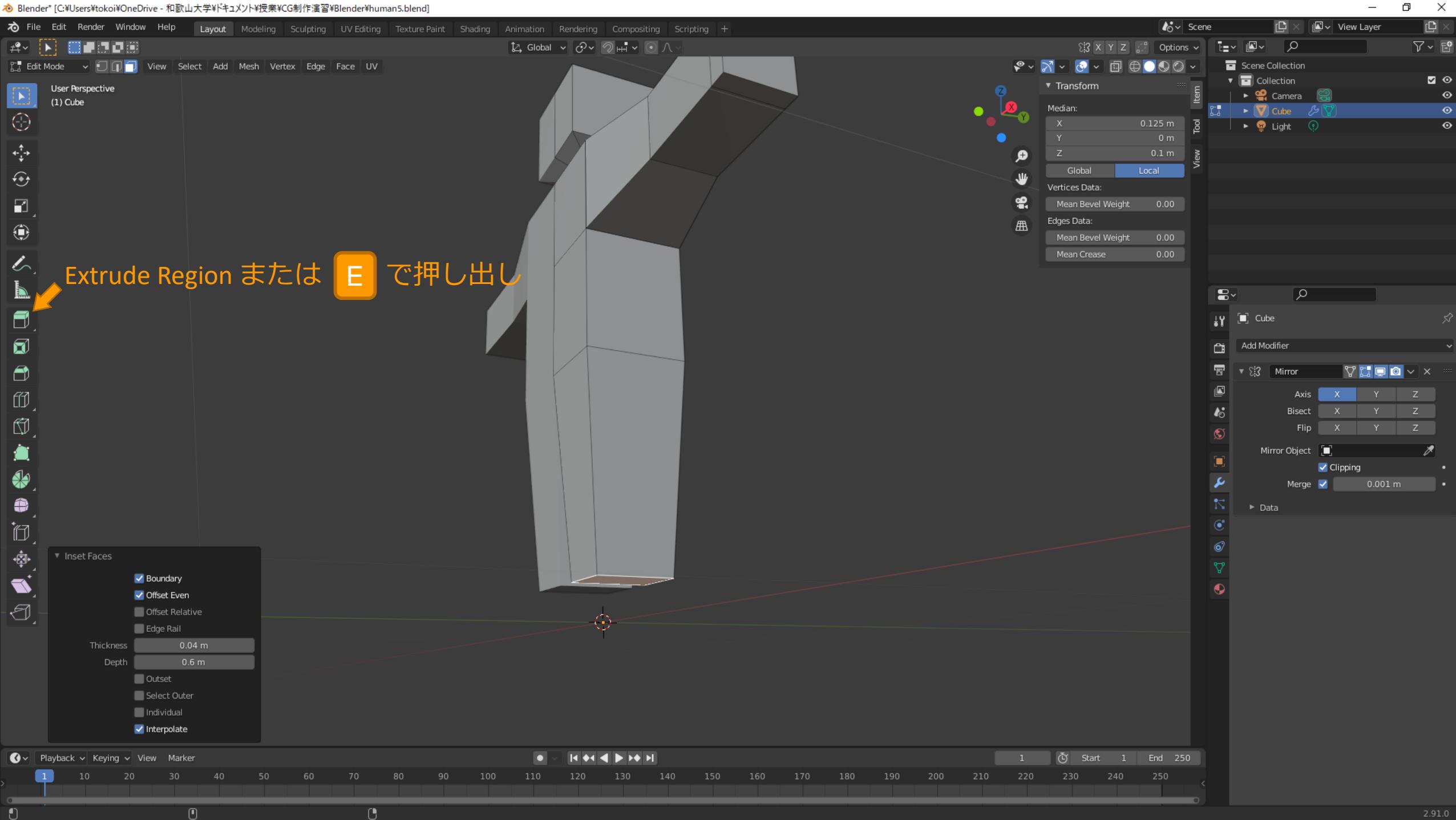




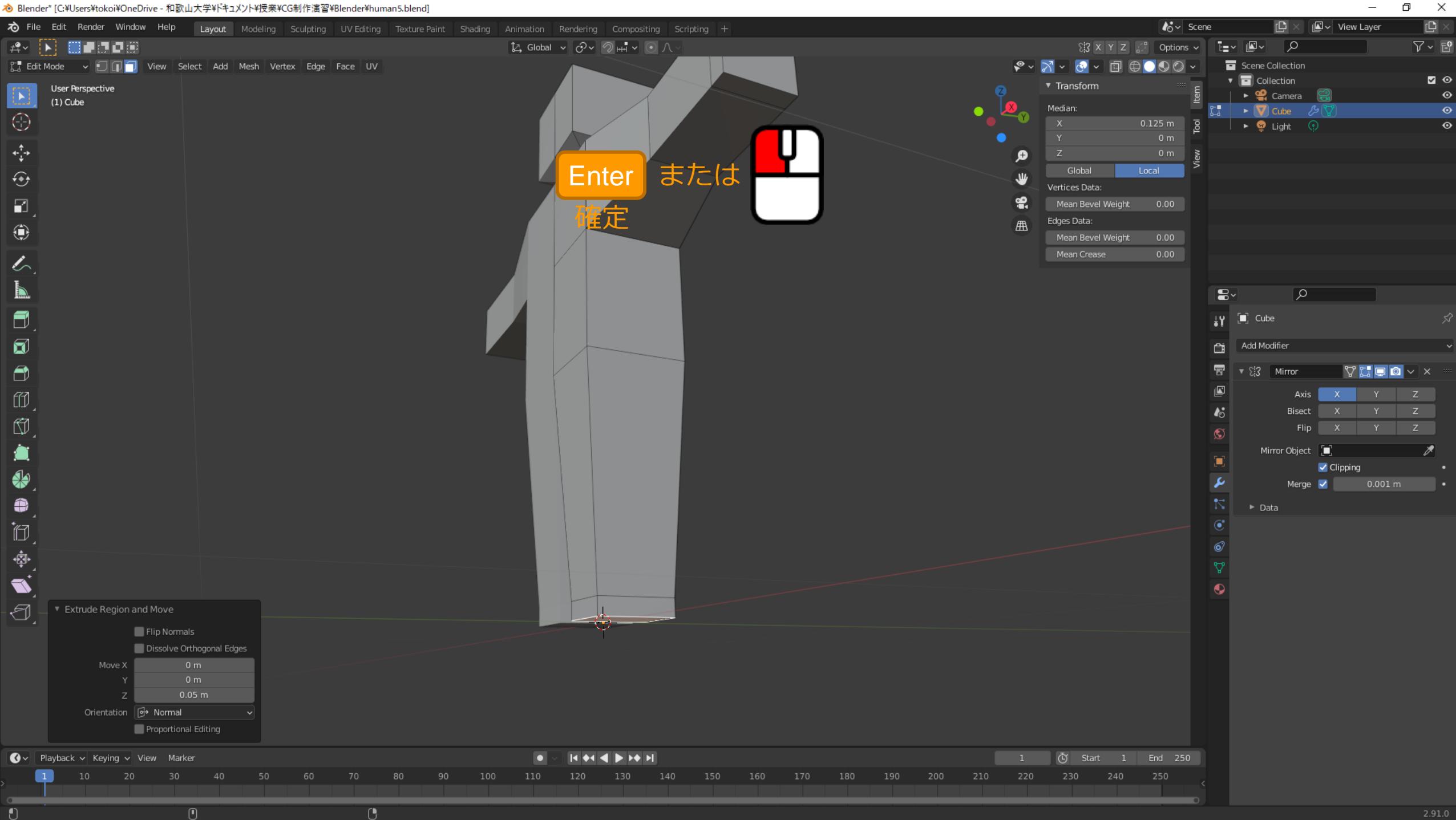


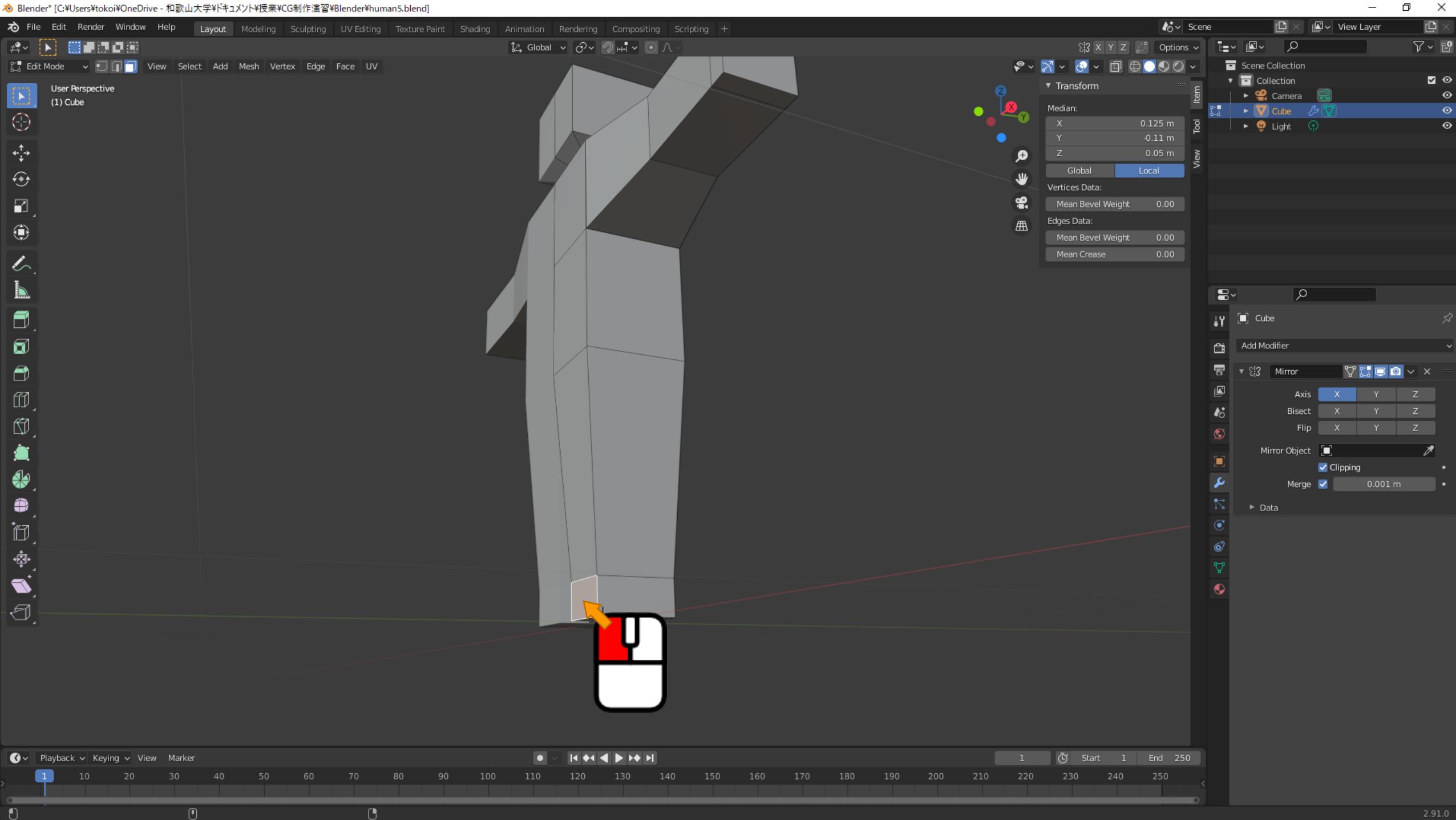


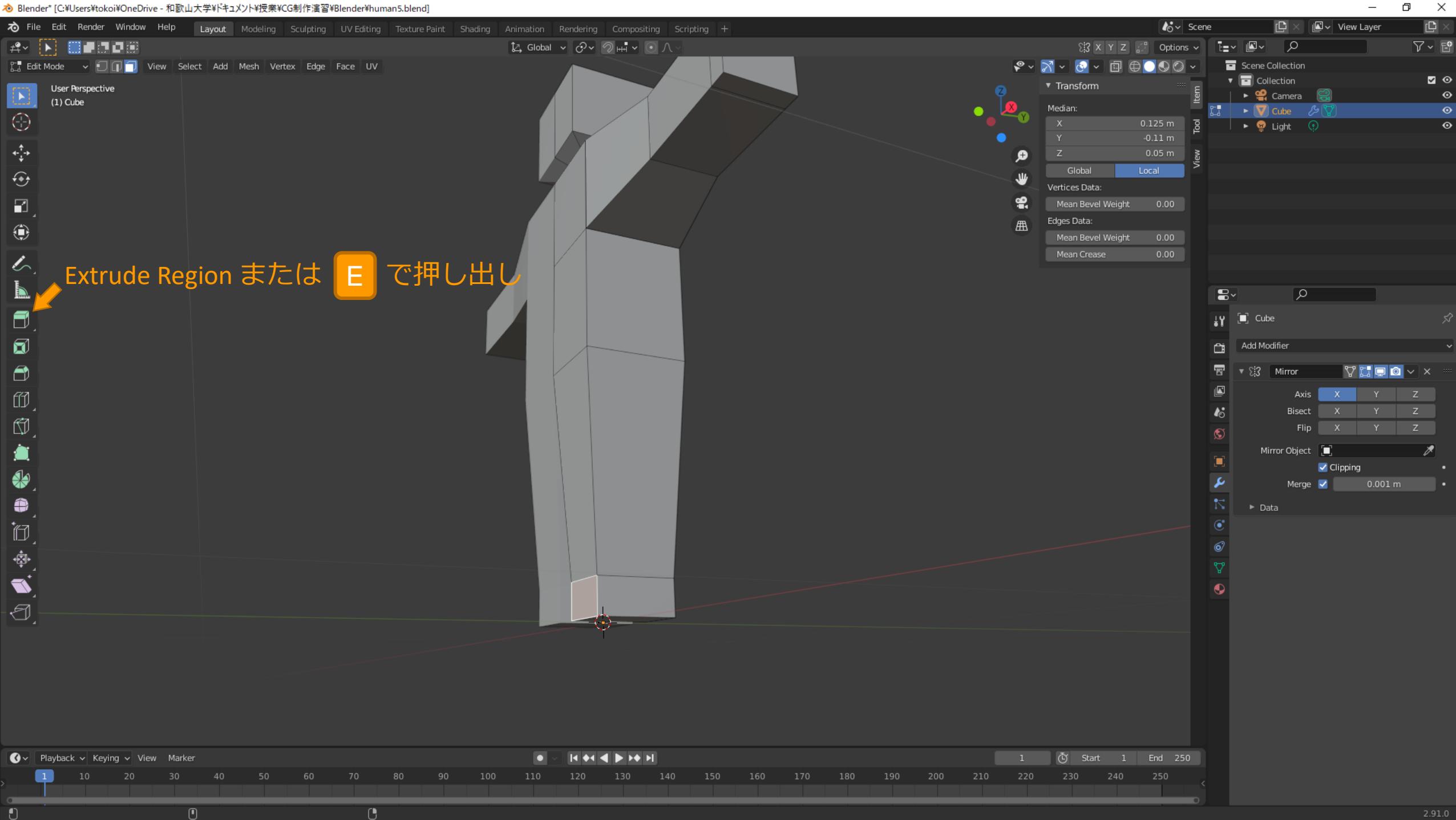












Blender [C:\Users\yotoki\OneDrive - 和歌山大学\ドキュメント\授業\CG制作演習\Blender\human5.blend]

User Perspective  
(1) Cube

D: 0 m (0.09806 m) normal

Transform  
Median:  
X 0.125 m  
Y -0.20806 m  
Z 0.05 m  
Global Local  
Vertices Data:  
Mean Bevel Weight 0.00  
Edges Data:  
Mean Bevel Weight 0.00  
Mean Crease 0.00

Scene Collection  
Collection  
Camera  
Cube  
Light

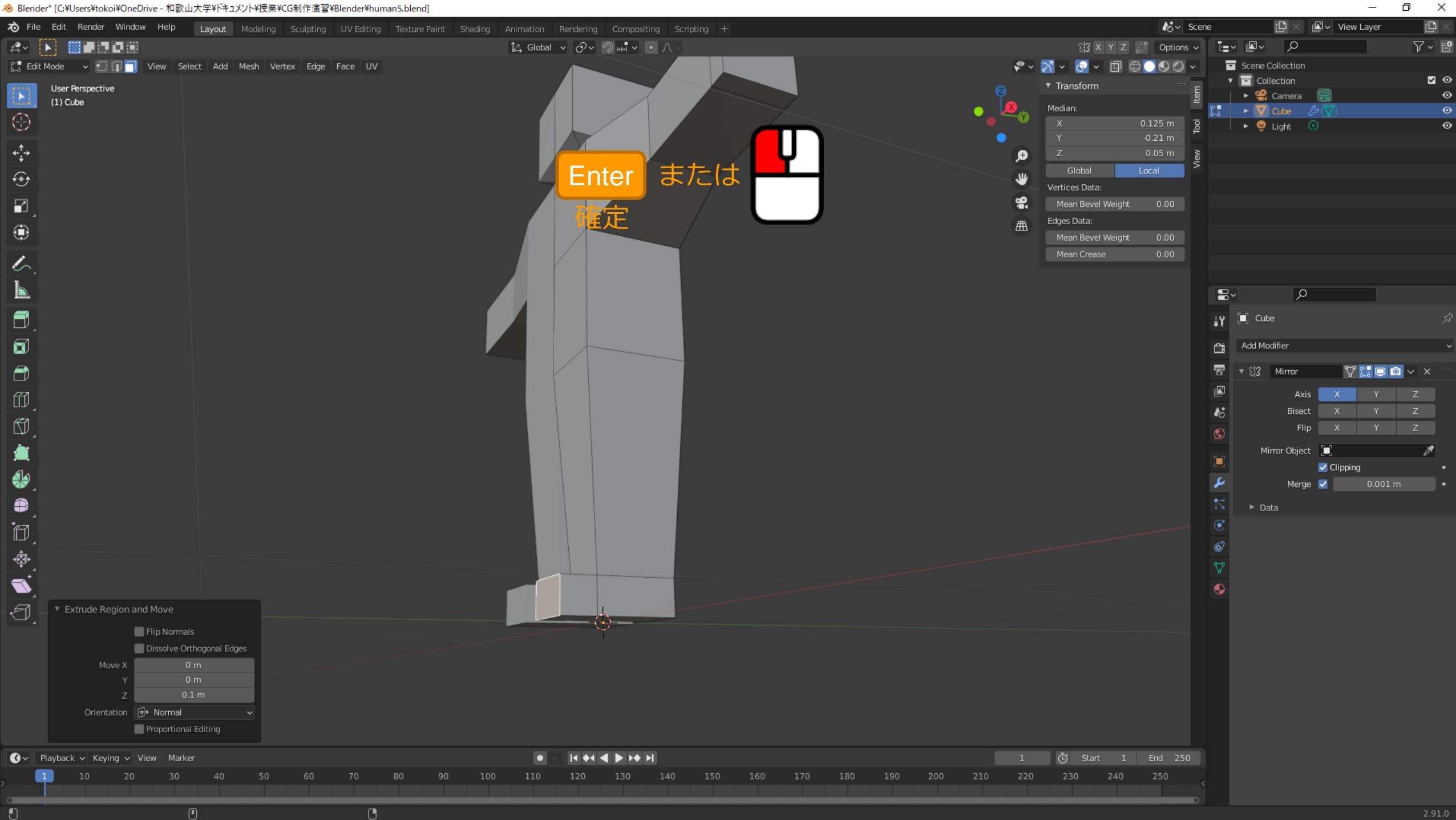
Mirror  
Axis X Y Z  
Bisect X Y Z  
Flip X Y Z  
Mirror Object   
Clipping   
Merge  0.001 m  
Data

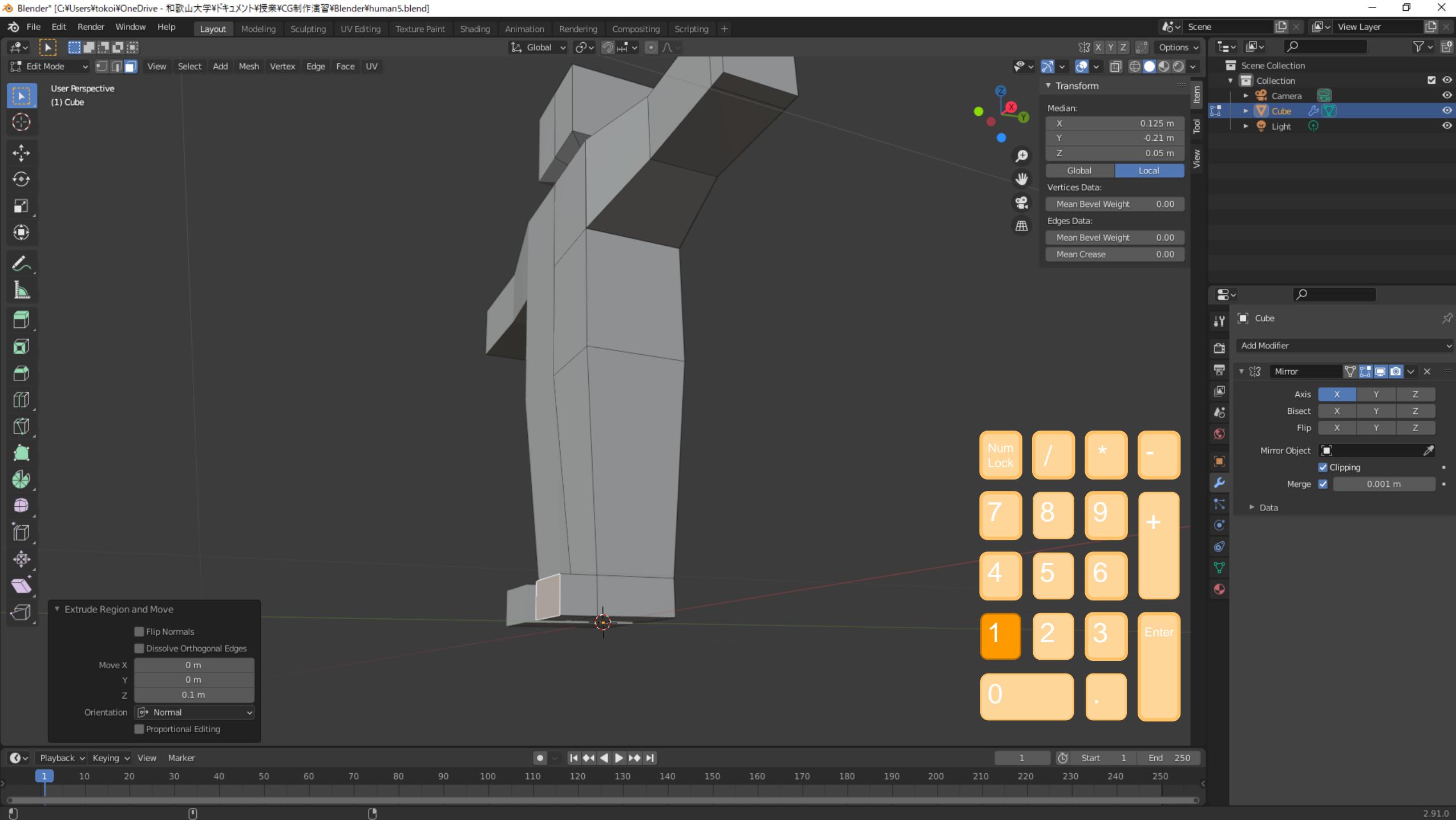
長さを調整

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 Start 1 End 250

Call Menu  
Select Box Select Rotate View 2.91.0

The image shows a Blender 3D interface with a human arm model selected. The Transform panel displays median values for X, Y, and Z coordinates. The Outliner panel lists objects like Camera, Cube, and Light. The Properties panel shows a Mirror modifier applied to the Cube. A large orange icon of a hand holding a mouse is overlaid on the timeline at the bottom, with the text '長さを調整' (Length Adjustment) next to it, indicating the current operation.







サブディビジョンモディファイアを  
追加する







# 骨格（ボーン）を設定する

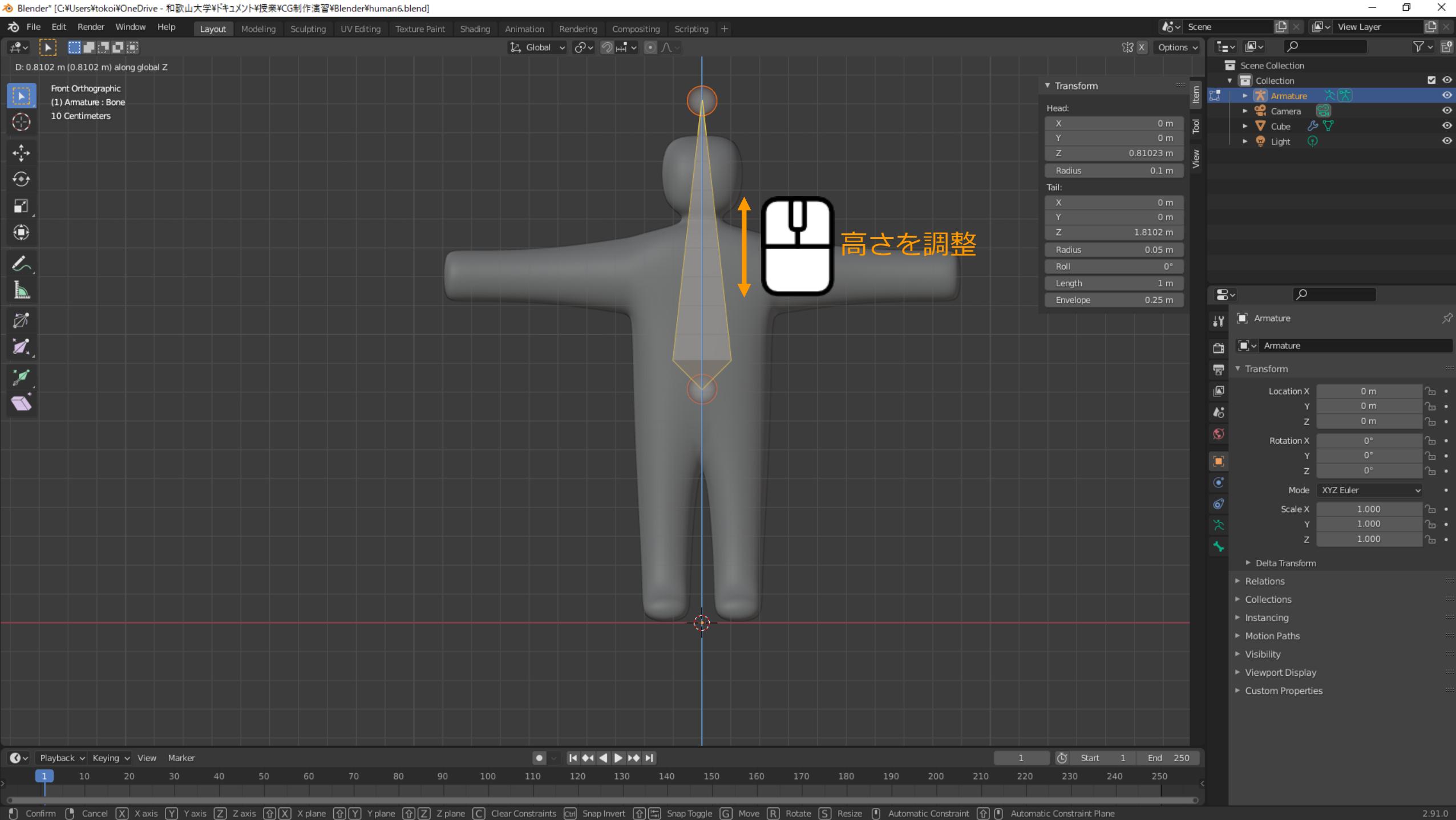


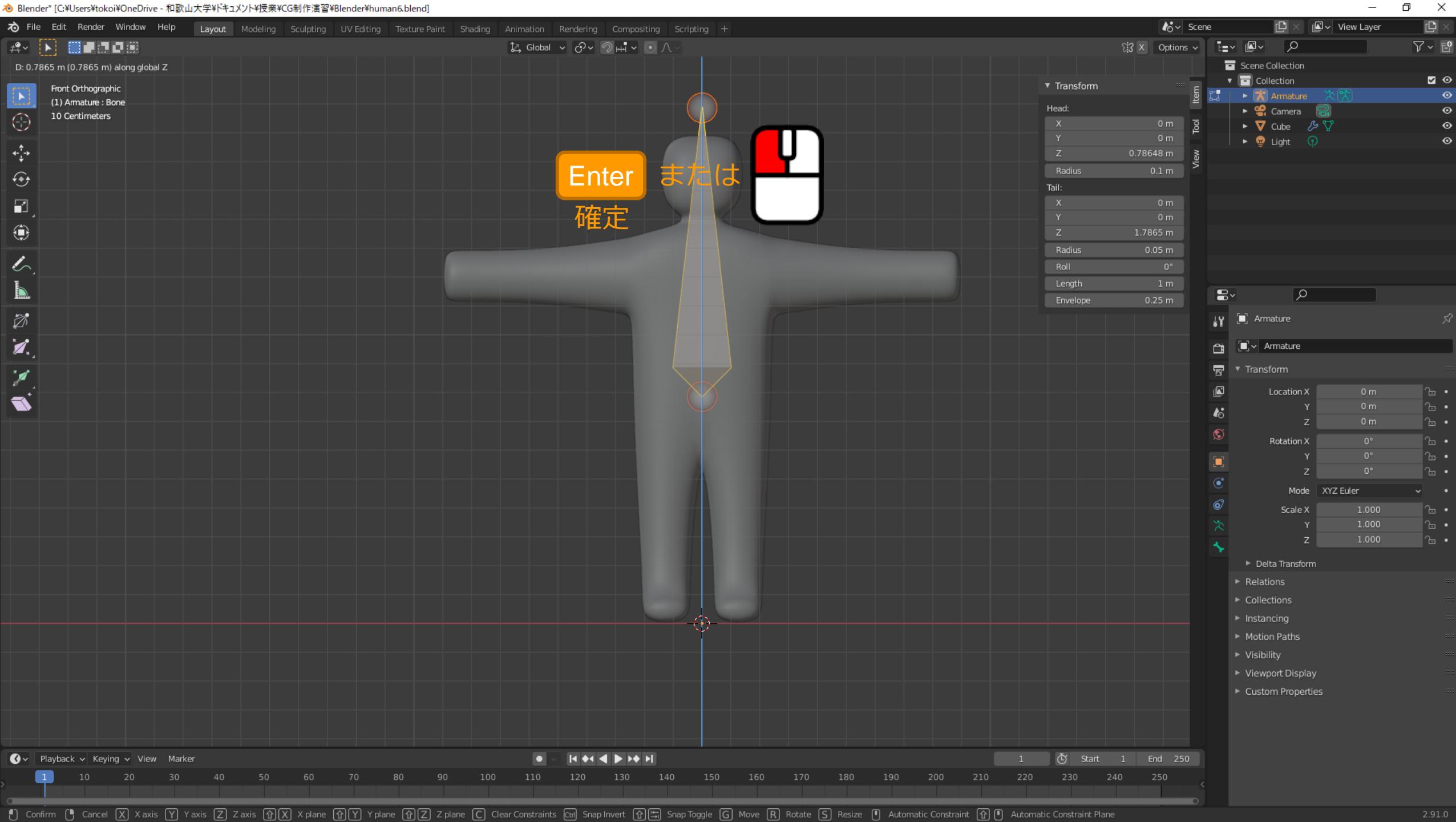




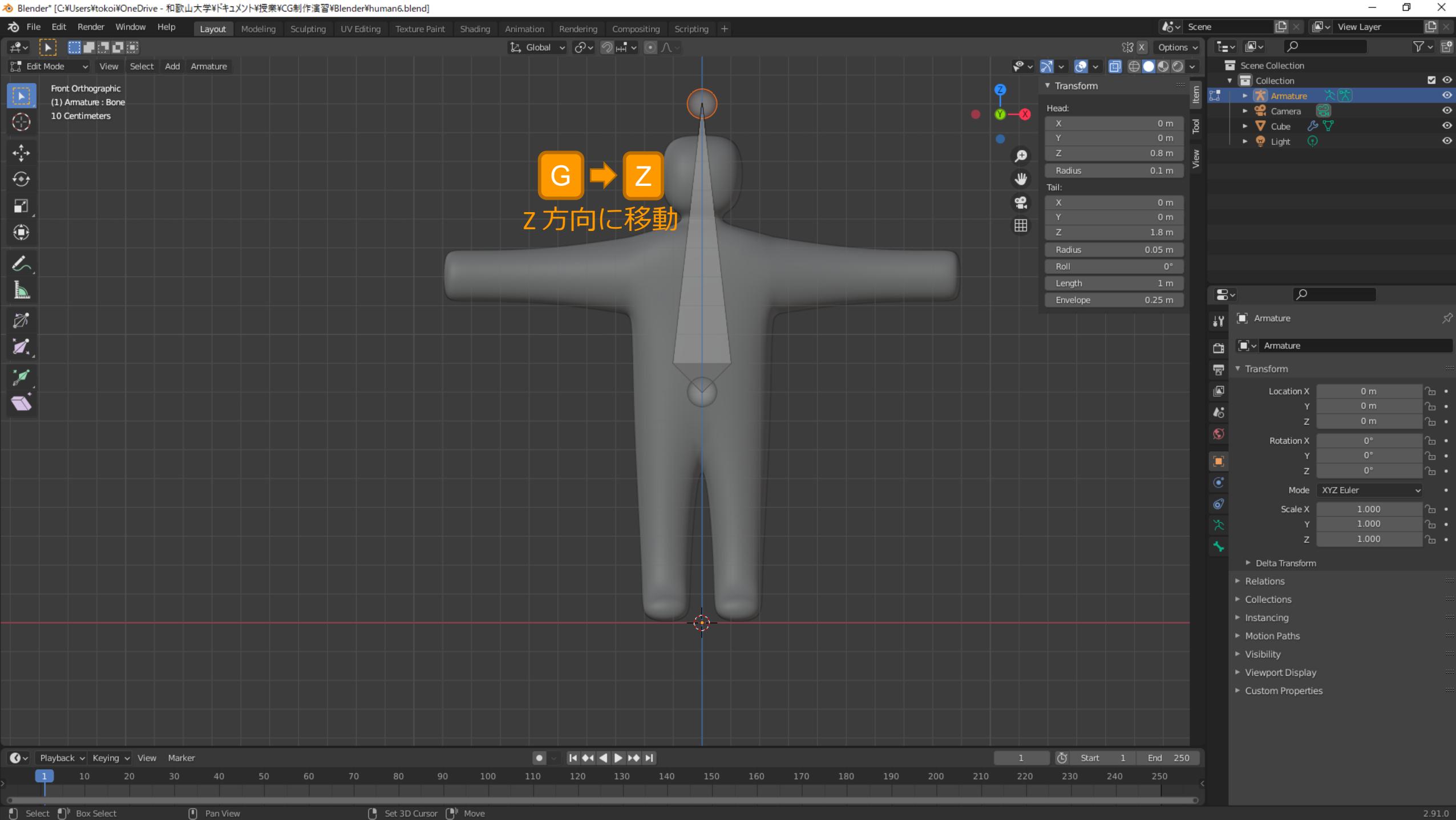


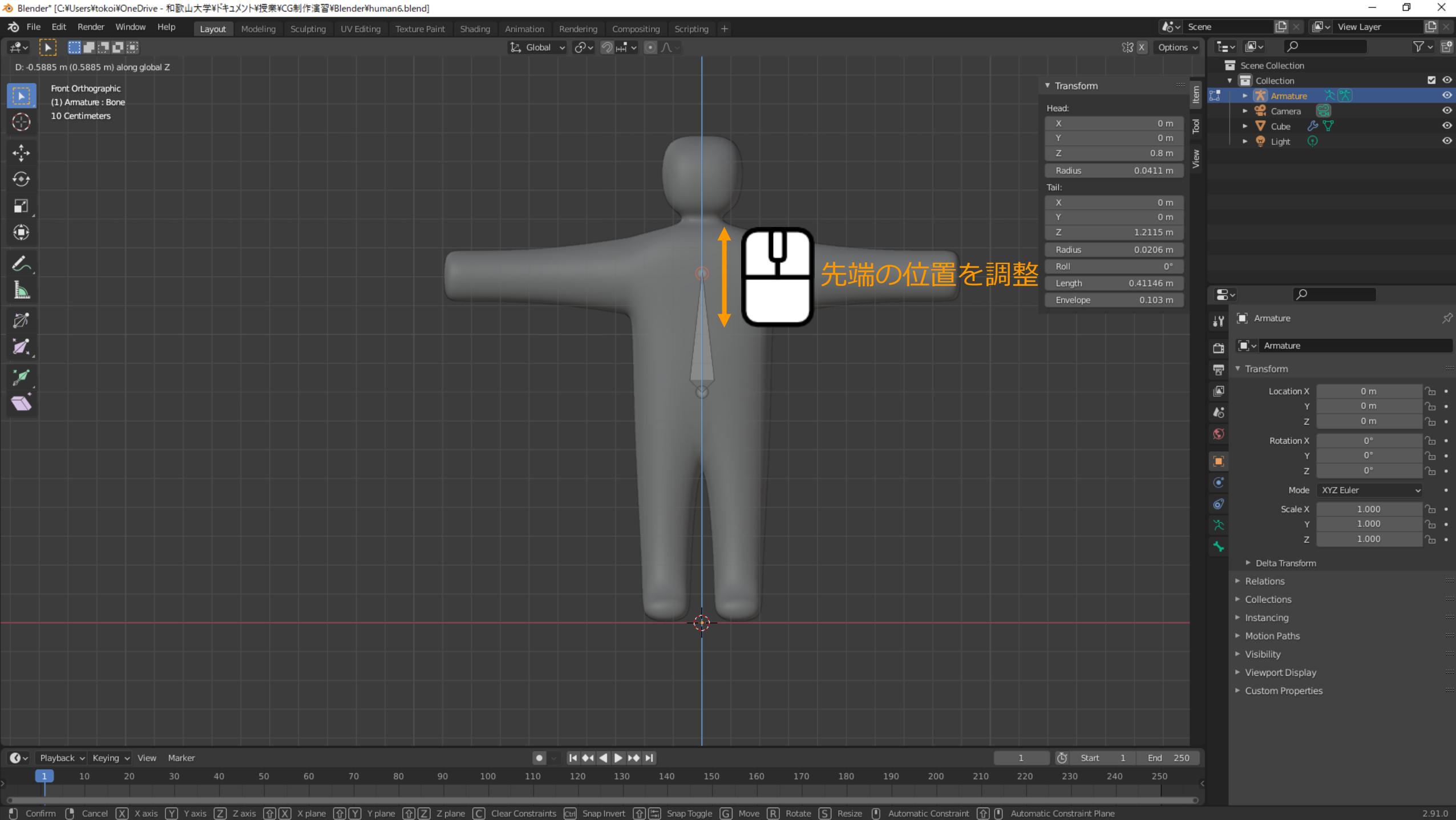


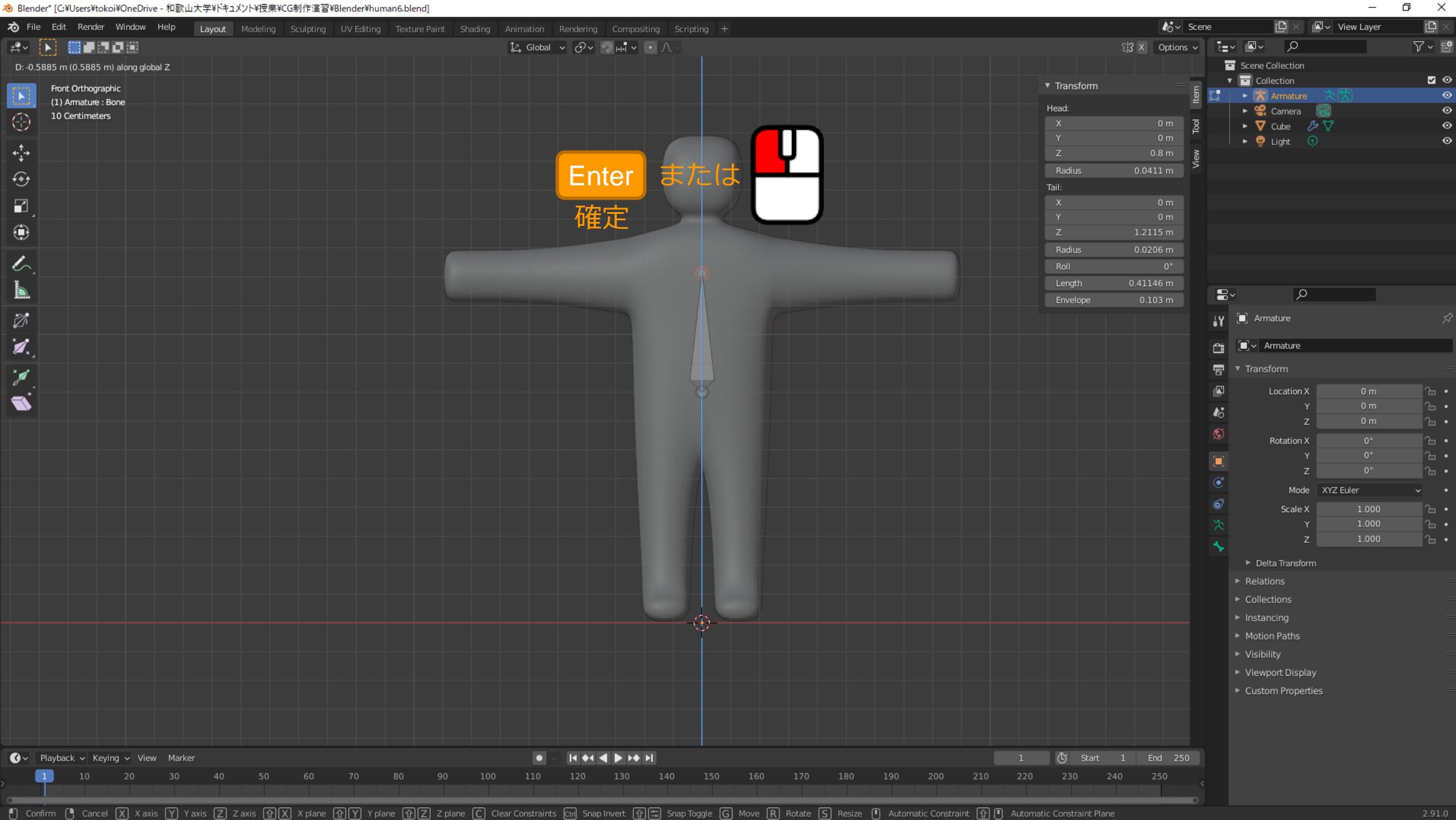


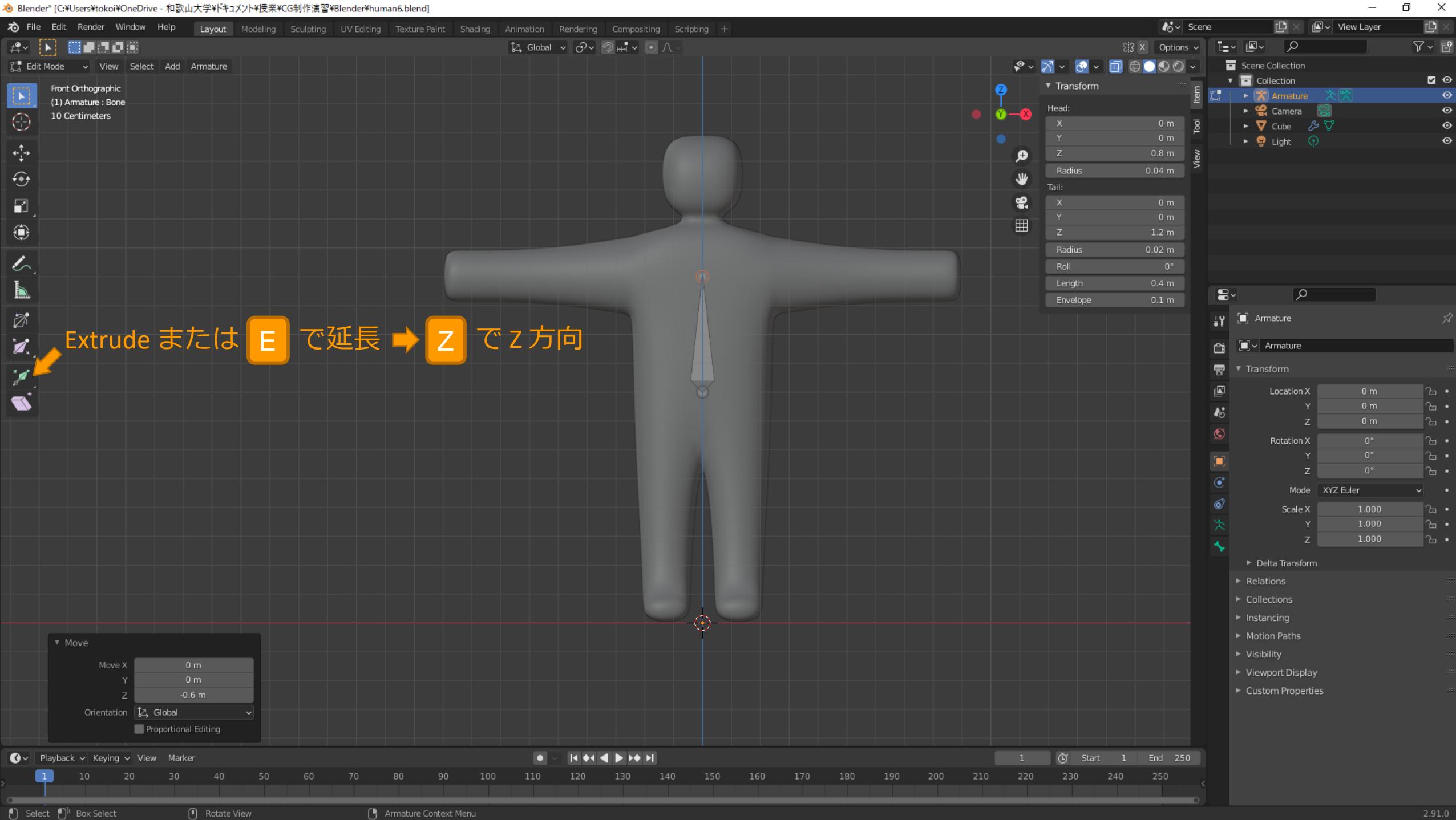




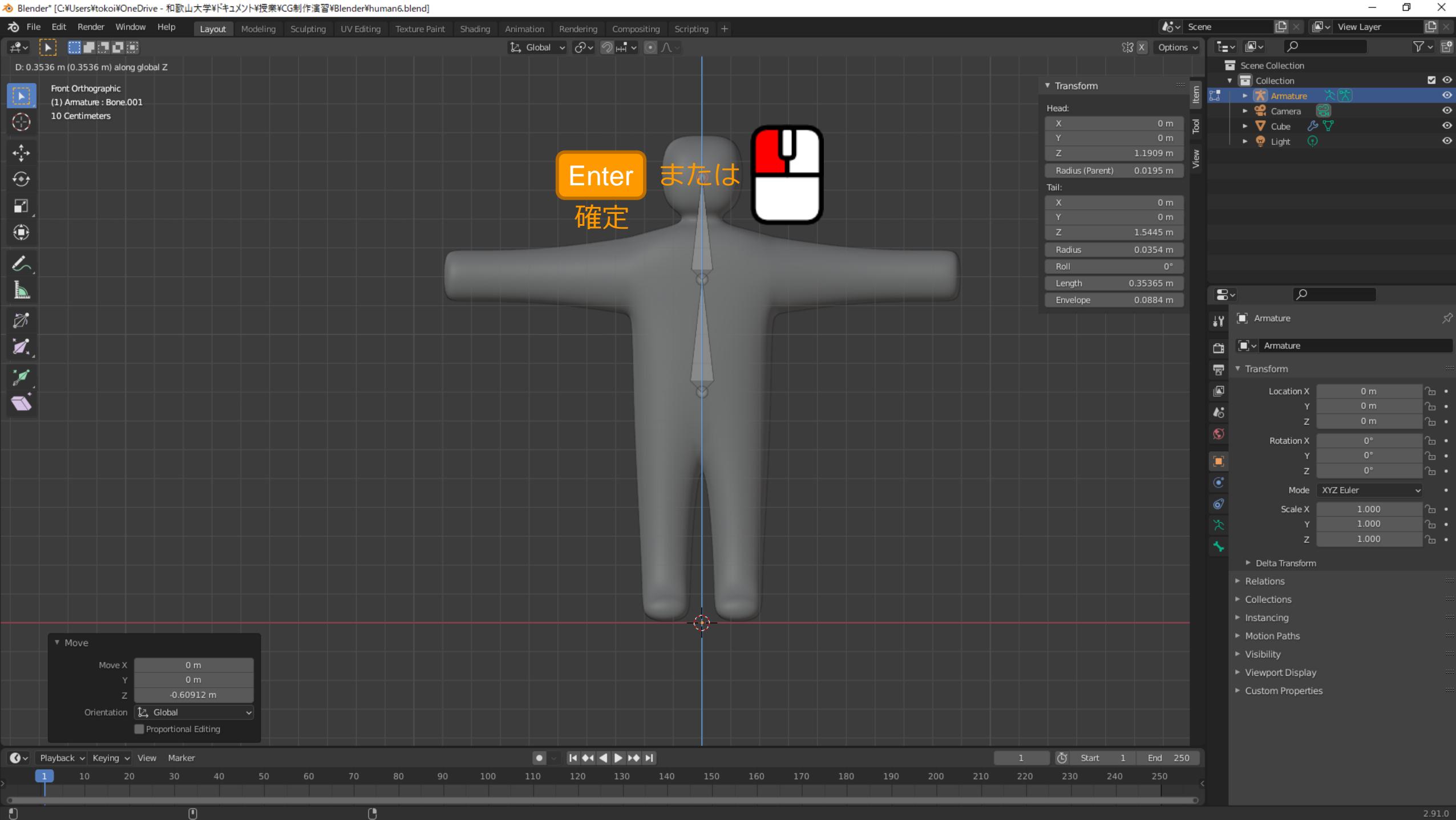








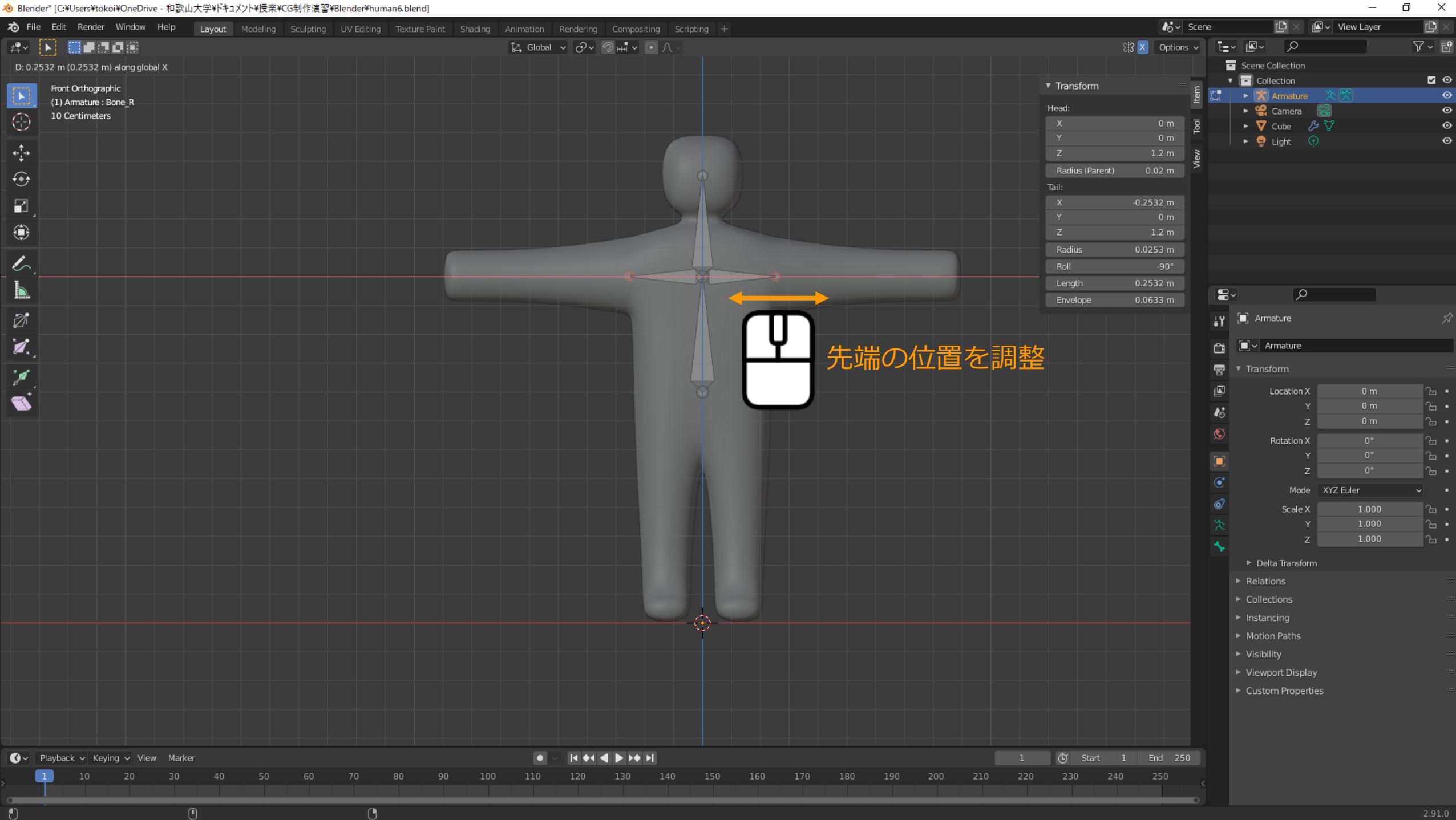


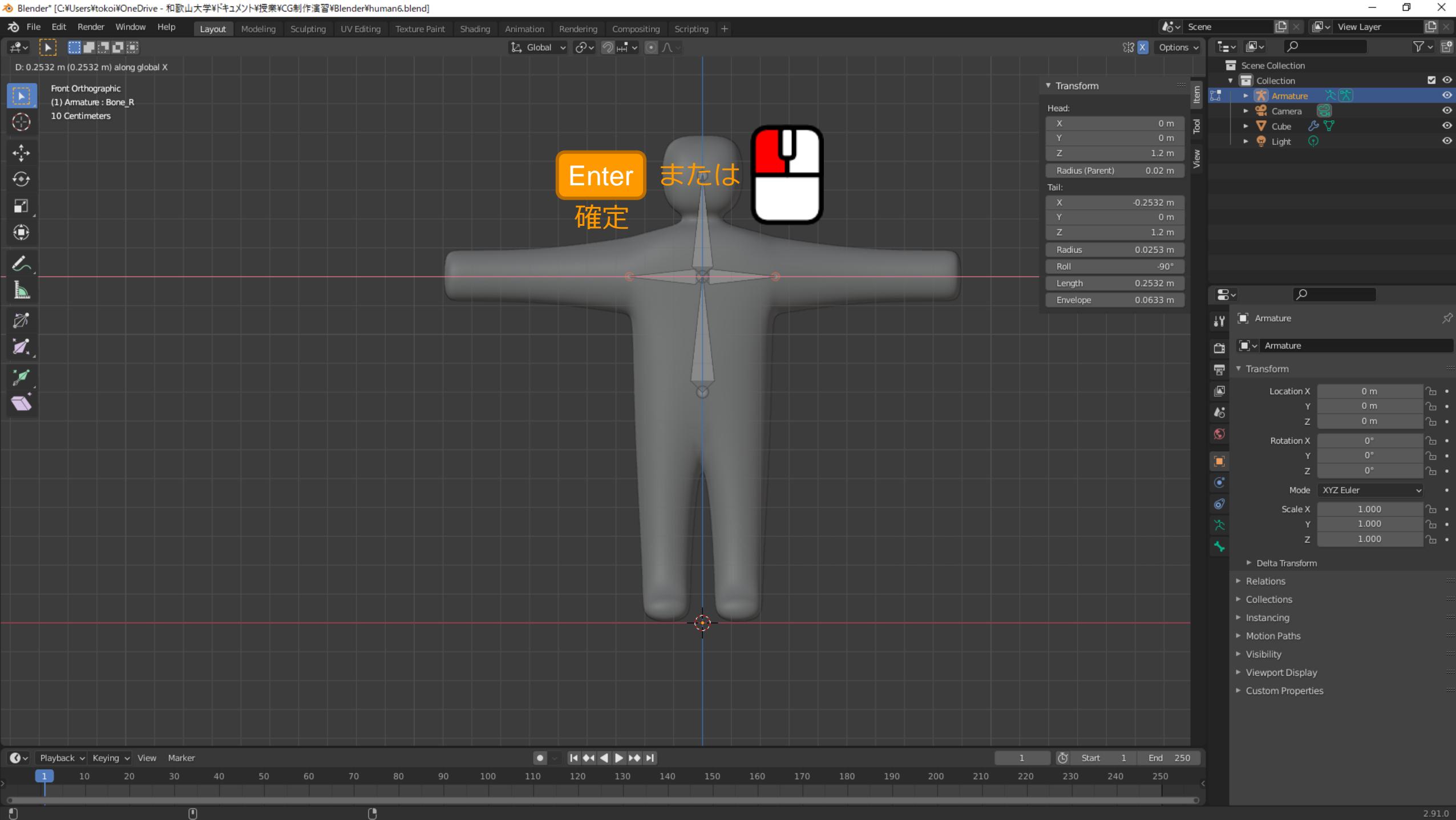














Blender [C:\Users\tokoi\OneDrive - 和歌山大学\ドキュメント\授業\CG制作演習\Blender\human6.blend]

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

Front Orthographic  
(1) Armature : Bone\_R\_001  
10 Centimeters

D: 0.306 m (0.306 m) along global X

Transform

Head:  
X -0.25 m  
Y 0 m  
Z 1.2 m  
Radius (Parent) 0.025 m

Tail:  
X -0.55595 m  
Y 0 m  
Z 1.2 m  
Radius 0.0306 m  
Roll -90°  
Length 0.30595 m  
Envelope 0.0765 m

先端の位置を調整

Extrude Forked  
 Forked  
Move X 0.25 m  
Y 0 m  
Z 0 m  
Orientation Global  
Proportional Editing

Scene Collection  
Collection  
Armature Camera Cube Light

Item Tool View

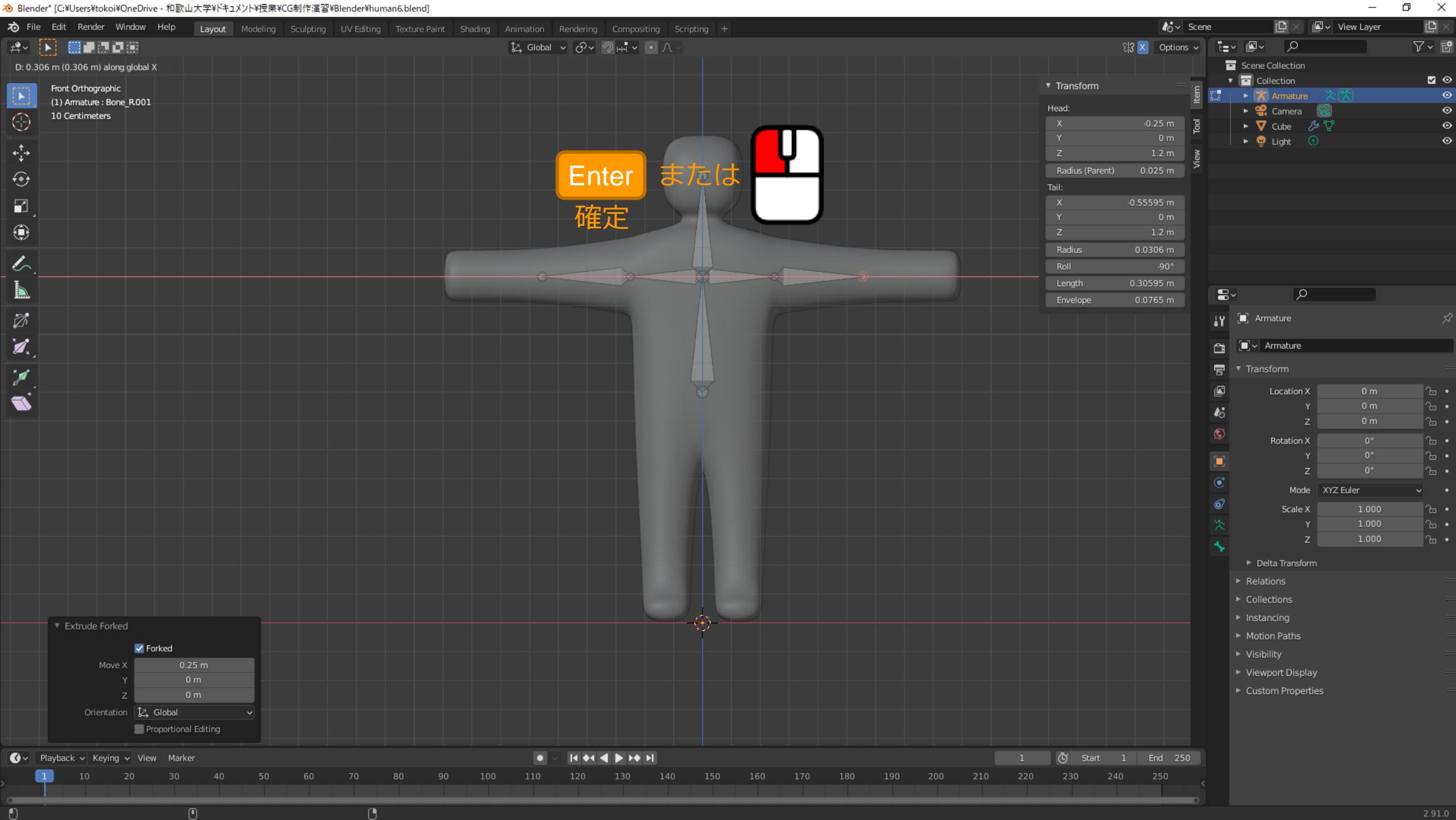
Armature  
Armature  
Transform  
Location X 0 m  
Y 0 m  
Z 0 m  
Rotation X 0°  
Y 0°  
Z 0°  
Mode XYZ Euler  
Scale X 1.000  
Y 1.000  
Z 1.000

Relations  
Collections  
Instancing  
Motion Paths  
Visibility  
Viewport Display  
Custom Properties

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 Start 1 End 250

2.91.0





Blender [C:\Users\tokoi\OneDrive - 和歌山大学\ドキュメント\授業\CG制作演習\blender\human6.blend]

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

Front Orthographic  
(1) Armature : Bone\_R.002  
10 Centimeters

D: 0.306 m (0.306 m) along global X

Transform  
Head:  
X -0.55 m  
Y 0 m  
Z 1.2 m  
Radius (Parent) 0.03 m  
Tail:  
X -0.85595 m  
Y 0 m  
Z 1.2 m  
Radius 0.0306 m  
Roll -90°  
Length 0.30595 m  
Envelope 0.0765 m

Item Tool View

Scene Collection  
Collection  
Armature Camera Cube Light

Armature  
Armature  
Transform  
Location X 0 m  
Y 0 m  
Z 0 m  
Rotation X 0°  
Y 0°  
Z 0°  
Mode XYZ Euler  
Scale X 1.000  
Y 1.000  
Z 1.000

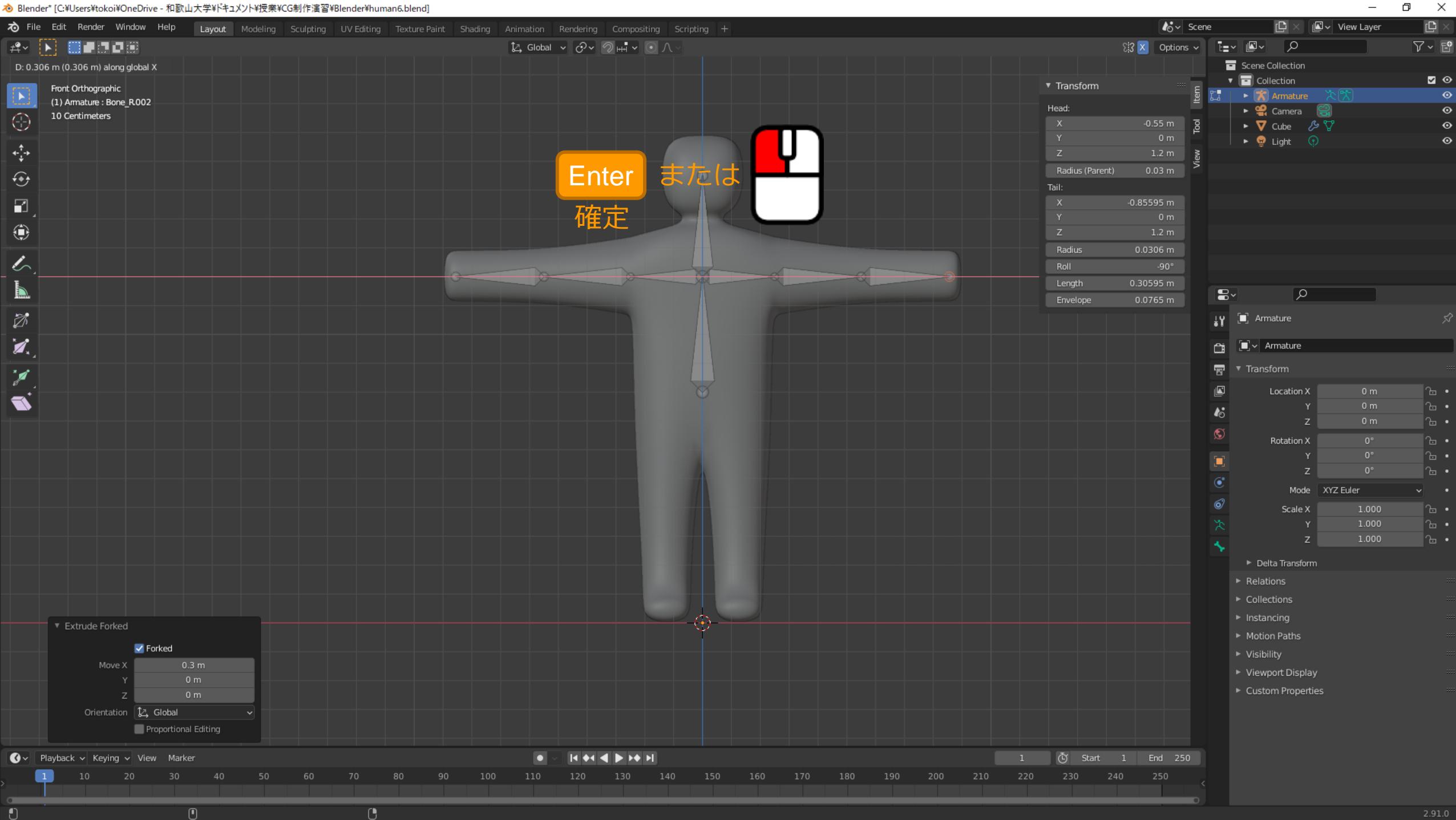
Extrude Forked  
Forked  
Move X 0.3 m  
Y 0 m  
Z 0 m  
Orientation Global  
Proportional Editing

Playback Keying View Marker

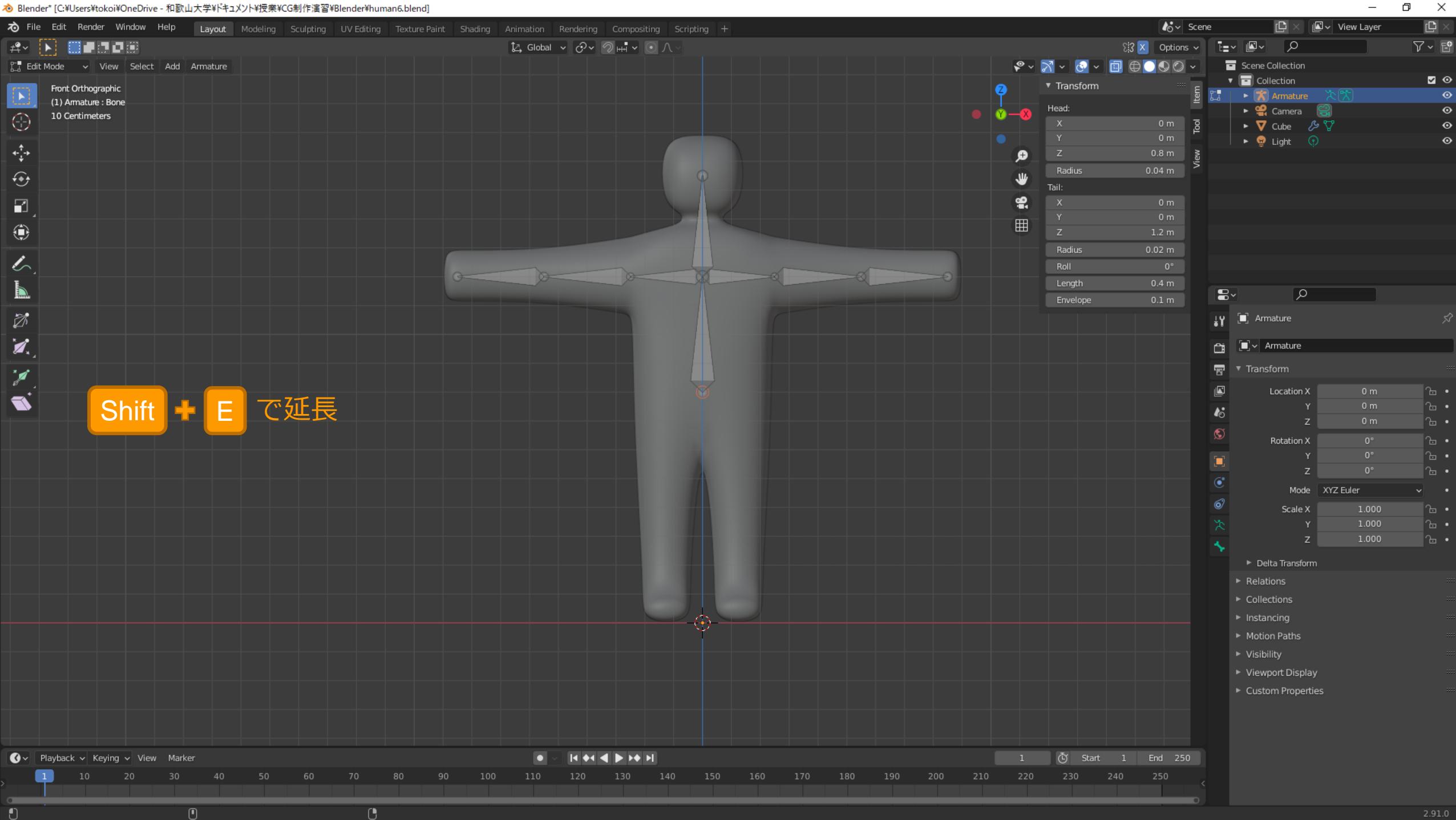
1 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 Start 1 End 250

2.91.0

先端の位置を調整









Blender [C:\Users\tokoi\OneDrive - 和歌山大学\ドキュメント\授業\CG制作演習\Blender\human6.blend]

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

Dx: 0.1134 m Dy: 0 m Dz: -0.2005 m (0.2303 m)

Front Orthographic  
(1) Armature : Bone\_R.003  
10 Centimeters

Enter または 確定

Scene Collection  
Collection  
Armature Camera Cube Light

Transform  
Head:  
X 0 m  
Y 0 m  
Z 0.8 m  
Radius 0.0576 m  
Tail:  
X -0.11341 m  
Y 0 m  
Z 0.59955 m  
Radius 0.023 m  
Roll -60°  
Length 0.23031 m  
Envelope 0.0576 m

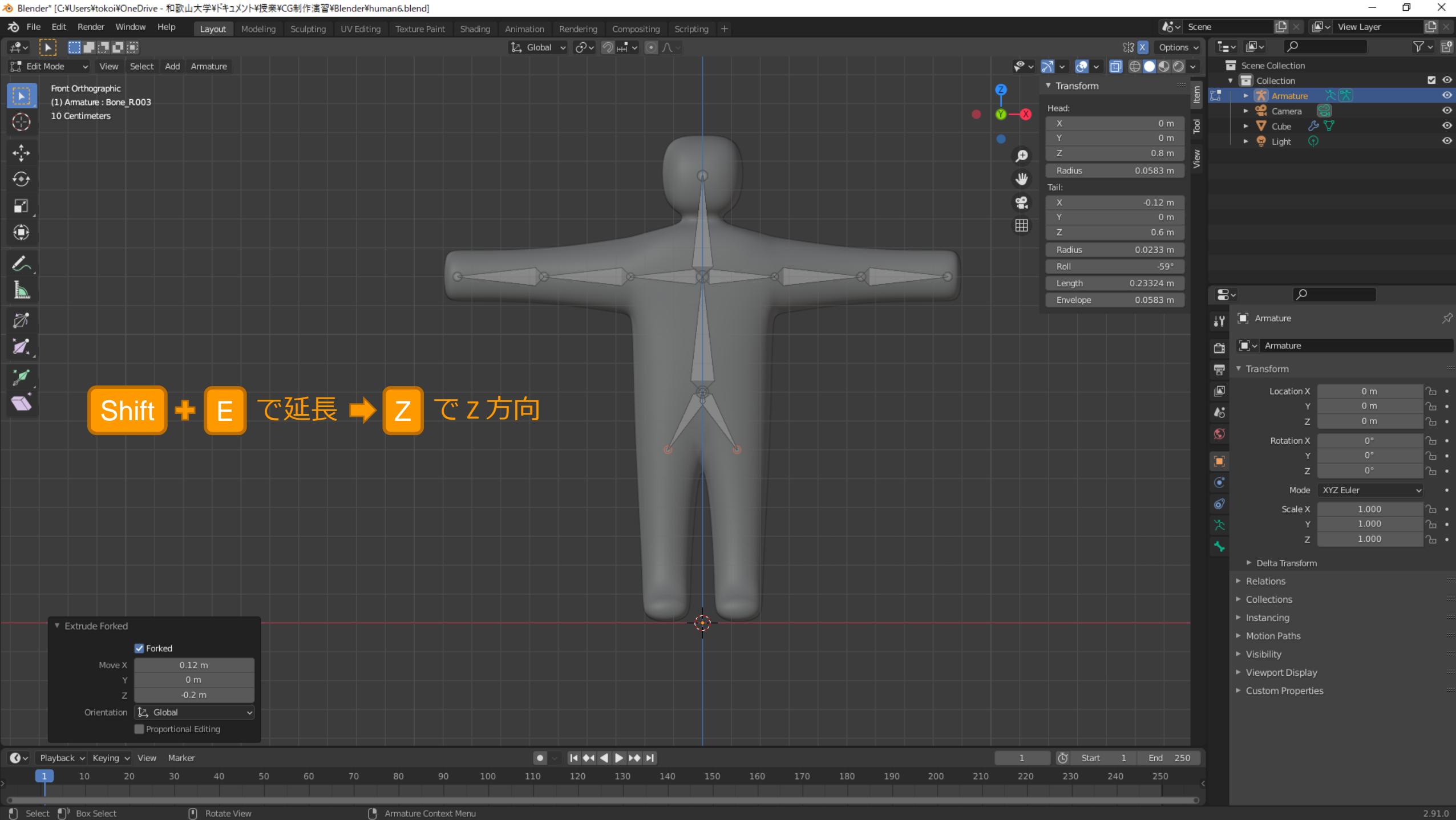
Armature  
Armature  
Transform  
Location X 0 m  
Y 0 m  
Z 0 m  
Rotation X 0°  
Y 0°  
Z 0°  
Mode XYZ Euler  
Scale X 1.000  
Y 1.000  
Z 1.000  
Delta Transform  
Relations  
Collections  
Instancing  
Motion Paths  
Visibility  
Viewport Display  
Custom Properties

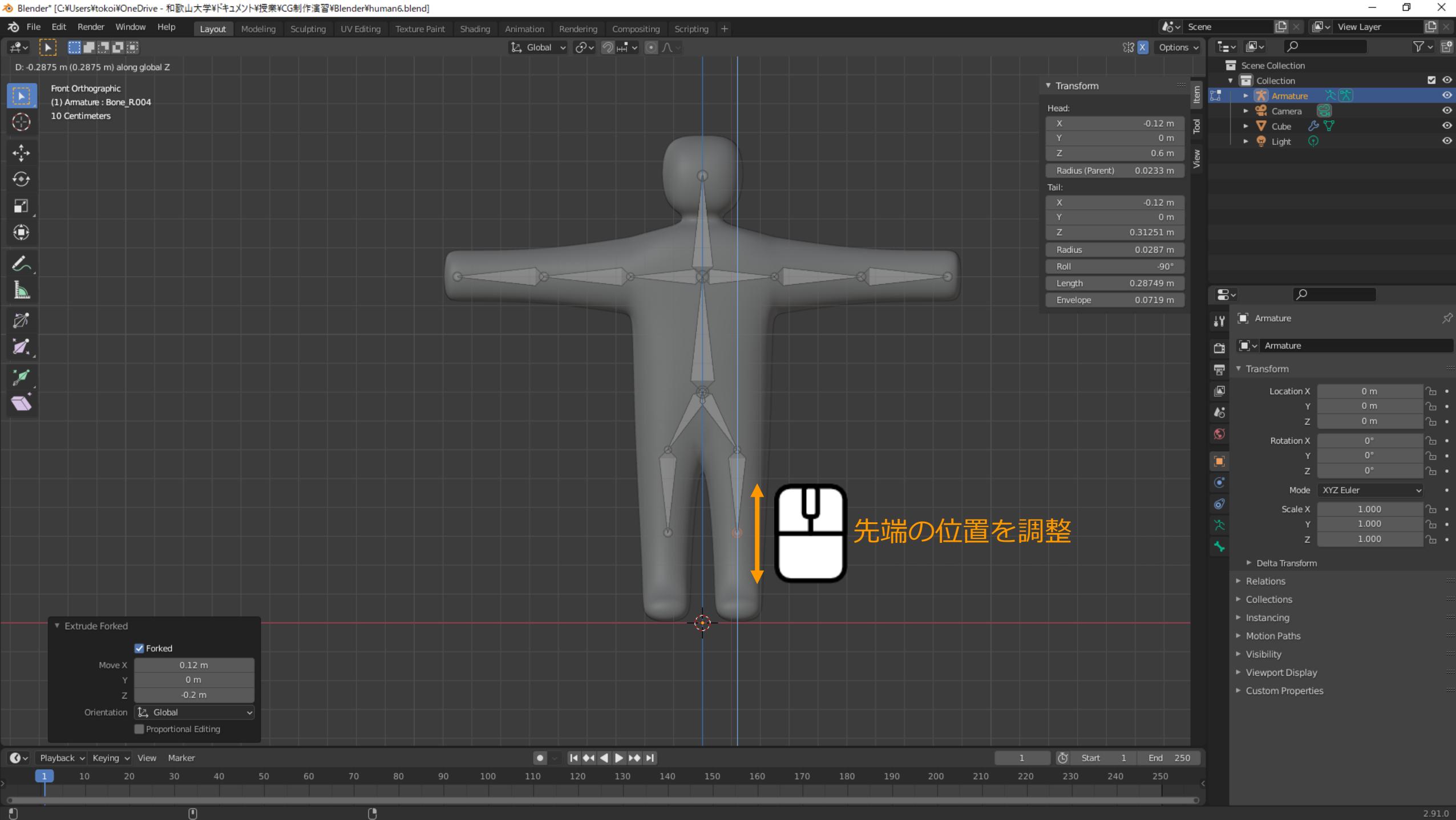
Playback Keying View Marker

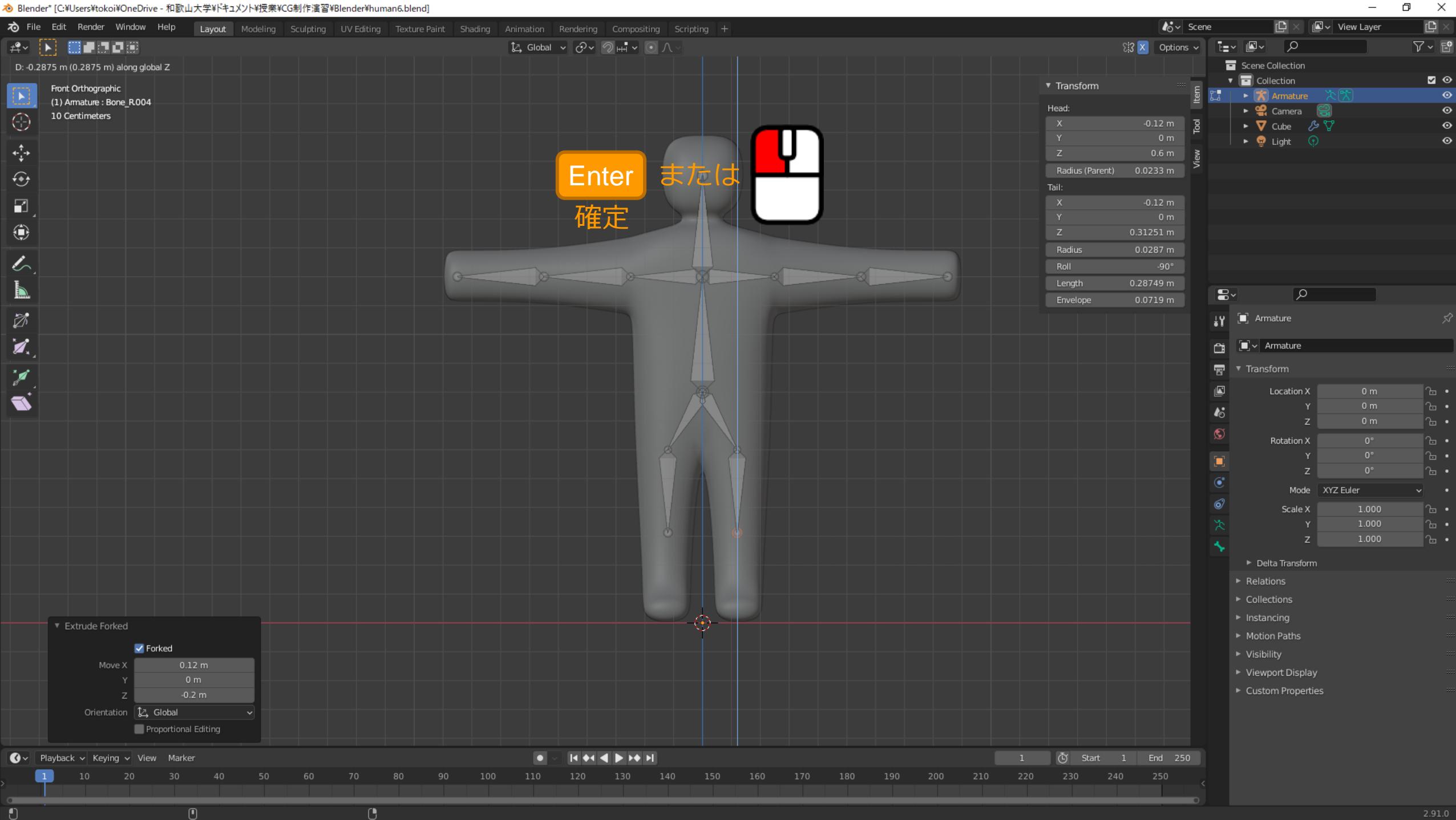
1 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 Start 1 End 250

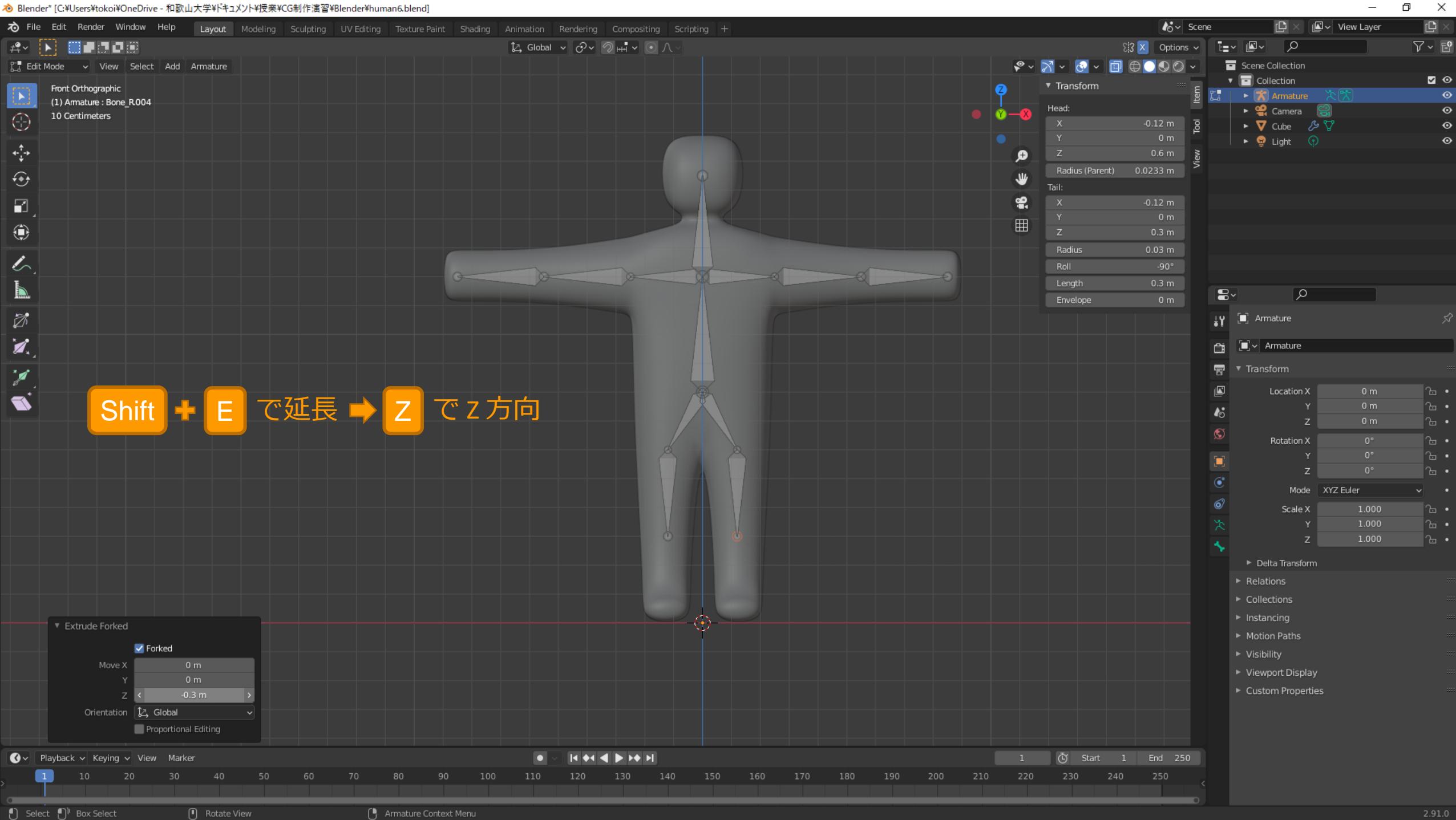
1 Pan View Set 3D Cursor Move

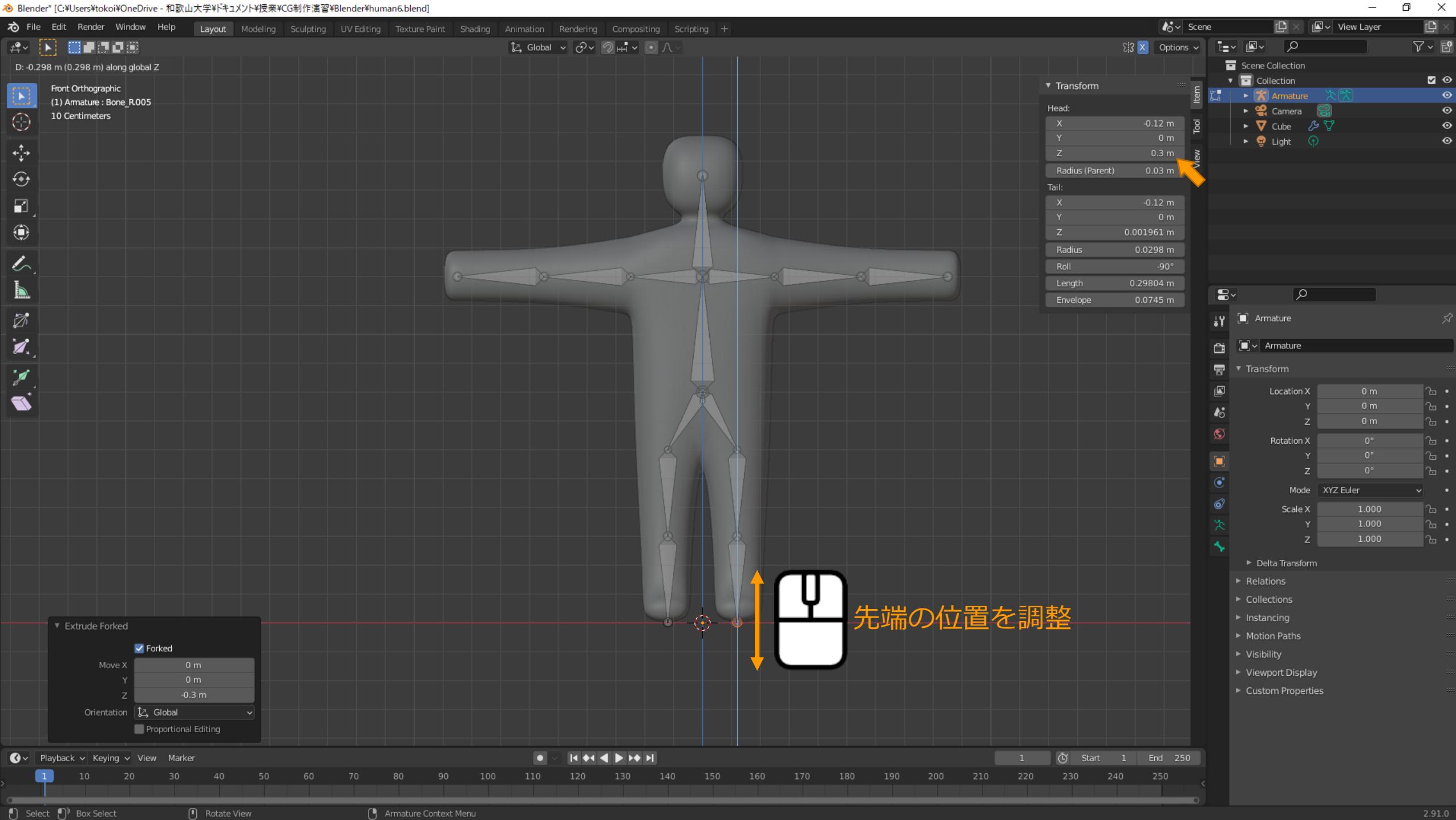
2.91.0











Blender [C:\Users\yokoi\OneDrive - 和歌山大学\ドキュメント\授業\CG制作演習\Blender\human6.blend]

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

D: -0.298 m (0.298 m) along global Z

Front Orthographic  
(1) Armature : Bone\_R.005  
10 Centimeters

Enter または 確定

Scene Collection  
Collection  
Armature Camera Cube Light

Transform  
Head:  
X -0.12 m  
Y 0 m  
Z 0.3 m  
Radius (Parent) 0.03 m  
Tail:  
X -0.12 m  
Y 0 m  
Z 0.001961 m  
Radius 0.0298 m  
Roll -90°  
Length 0.29804 m  
Envelope 0.0745 m

Armature  
Armature  
Transform  
Location X 0 m  
Y 0 m  
Z 0 m  
Rotation X 0°  
Y 0°  
Z 0°  
Mode XYZ Euler  
Scale X 1.000  
Y 1.000  
Z 1.000

Extrude Forked  
Forked  
Move X 0 m  
Y 0 m  
Z -0.3 m  
Orientation Global  
Proportional Editing

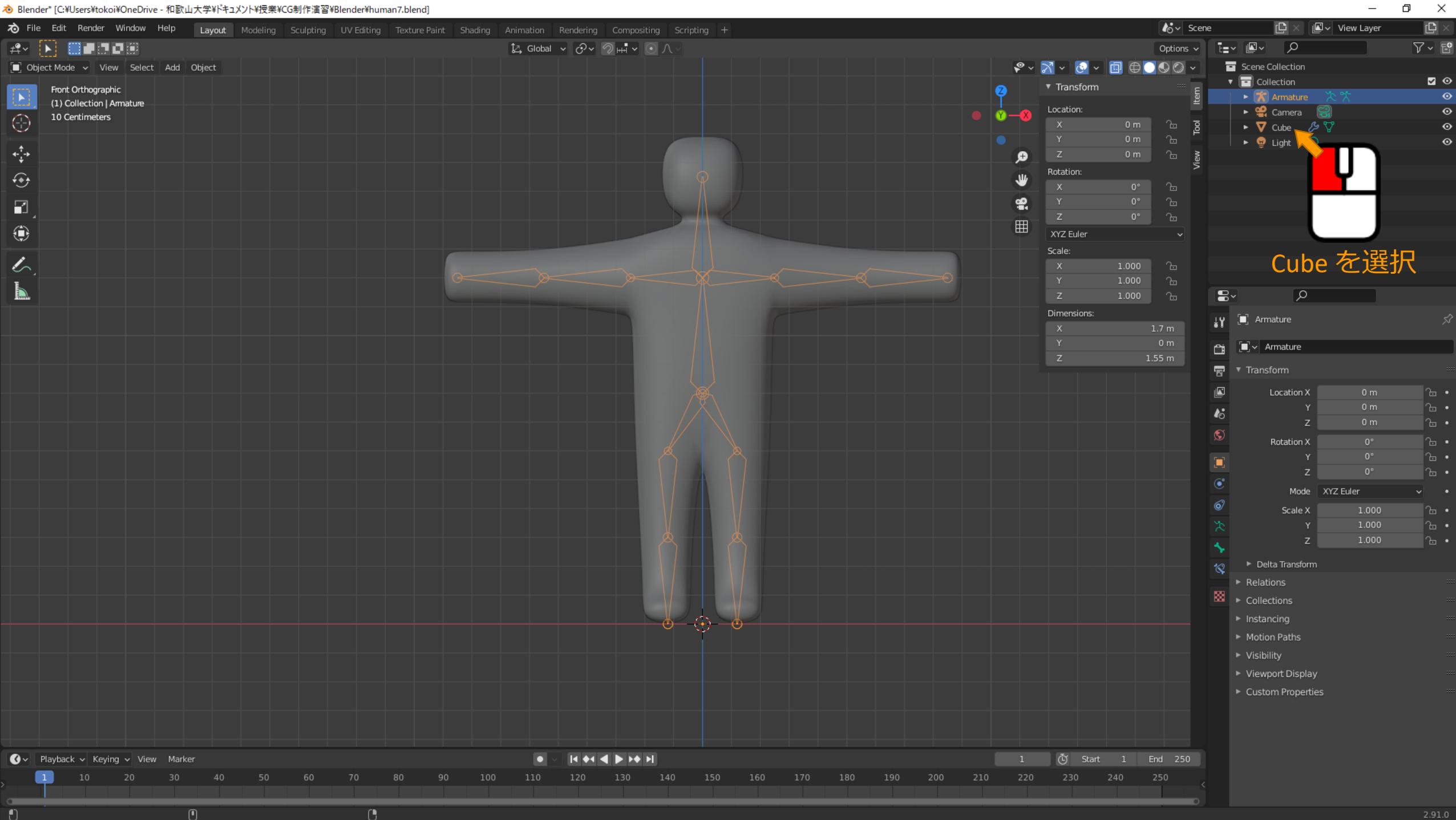
Playback Keying View Marker  
1 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 Start 1 End 250

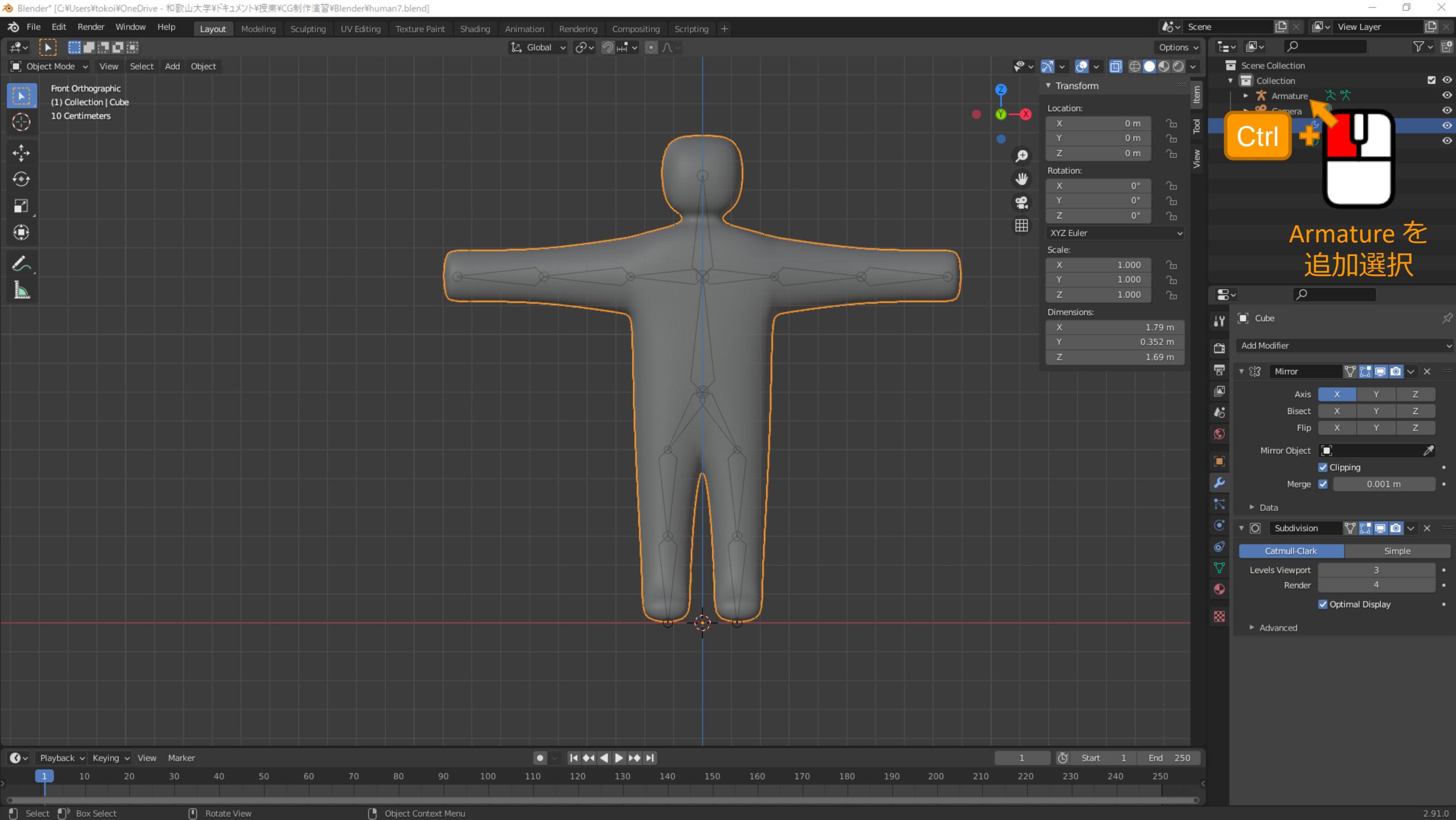
Select Box Select Rotate View Armature Context Menu

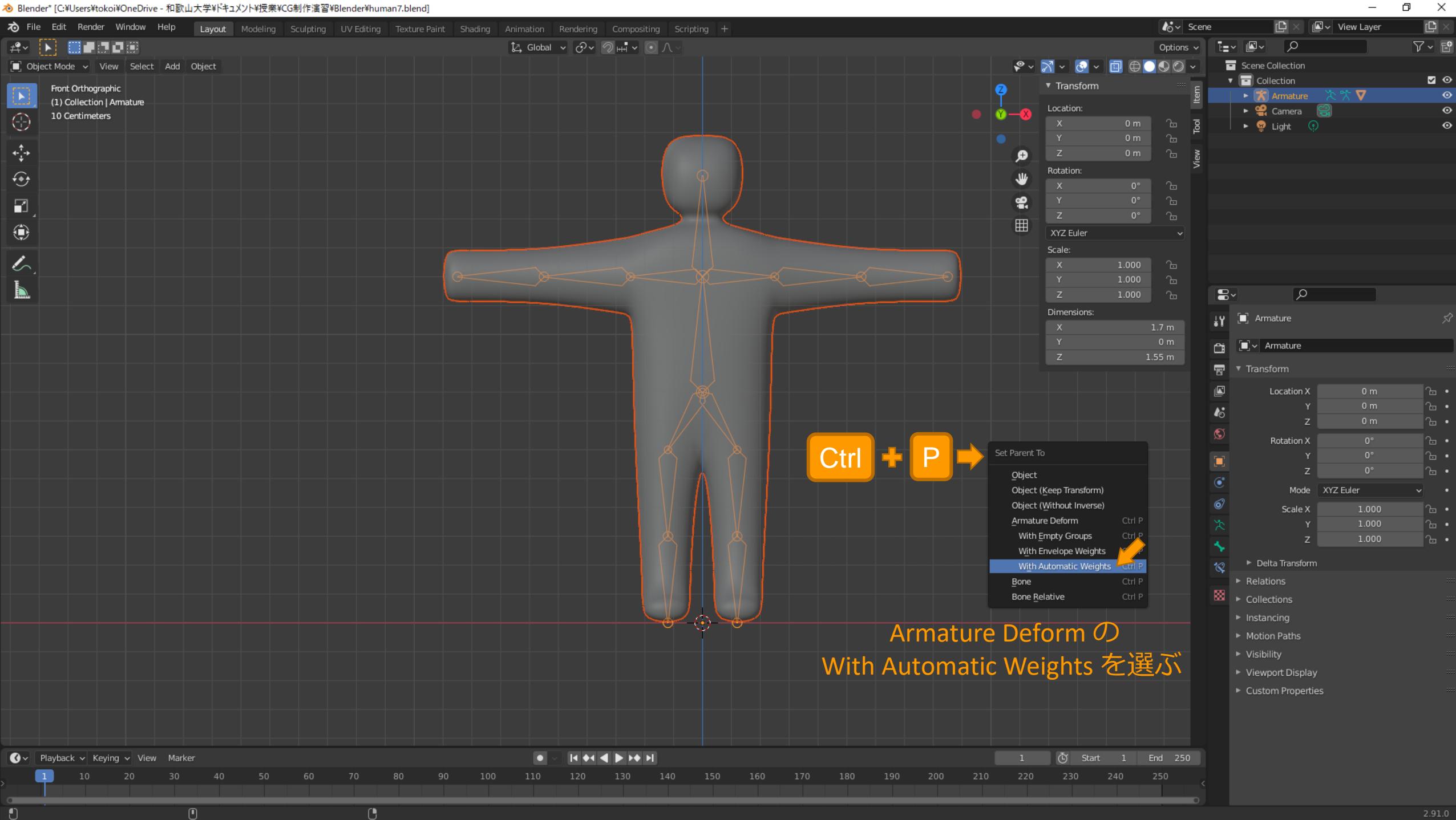
2.91.0

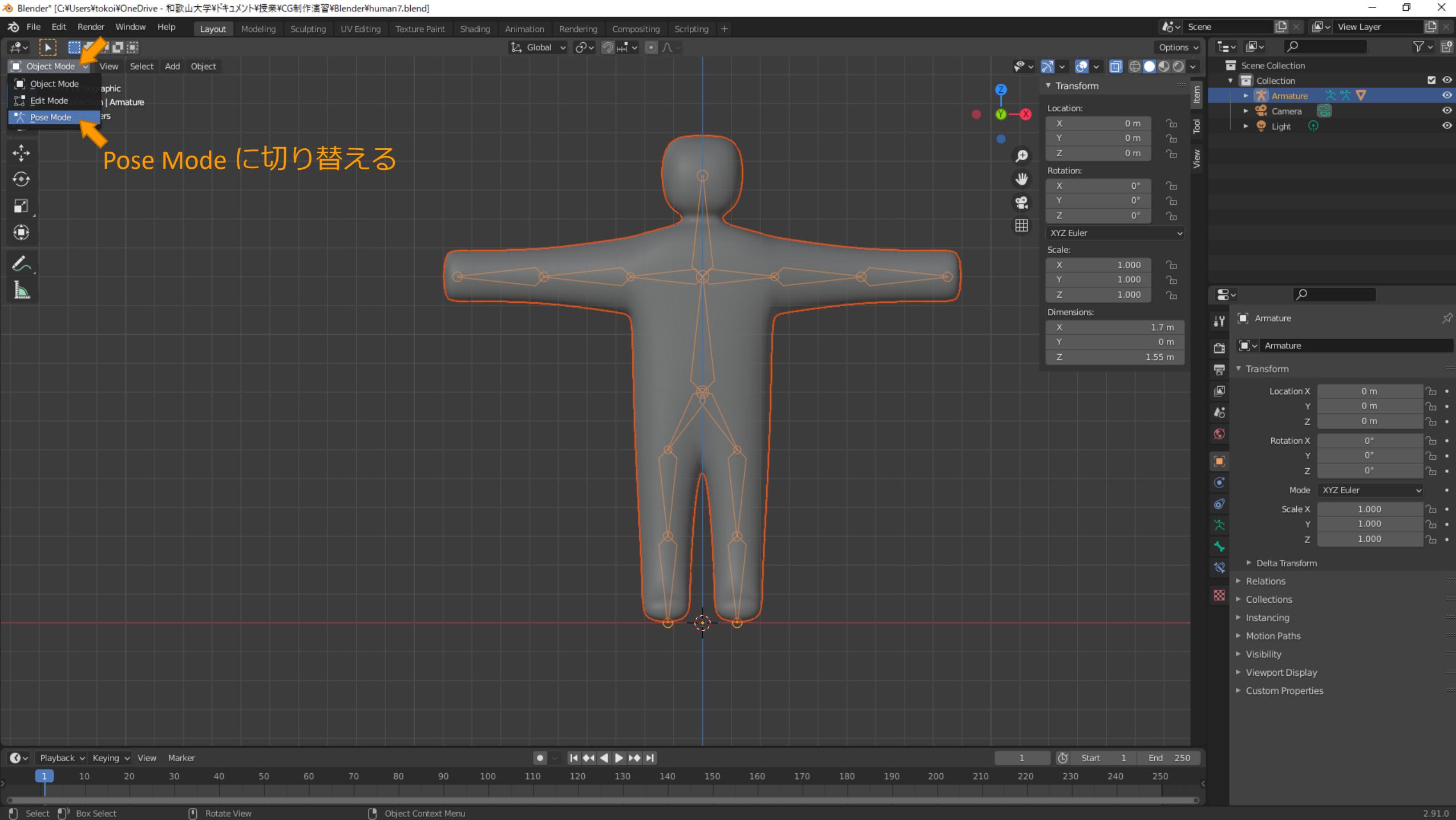
The image shows a Blender 2.91 interface with a 3D Viewport set to Front Orthographic mode. A human armature model is centered in the view. A floating orange rounded rectangle contains the text "Enter" and "または" (or) above "確定" (Confirm). To the right of the armature is a large black and white icon of a floppy disk. The Transform panel on the right displays detailed transformation data for the selected bone, including Head (X: -0.12 m, Y: 0 m, Z: 0.3 m), Tail (X: -0.12 m, Y: 0 m, Z: 0.001961 m), and Envelope (Radius: 0.0298 m, Roll: -90°, Length: 0.29804 m). The Outliner panel on the far right shows a scene collection with an Armature object selected. The Tools shelf on the left contains various modeling tools like Extrude, Bevel, and Mesh Smooth. The status bar at the bottom shows playback controls (Frame 1) and a timeline from 1 to 250.

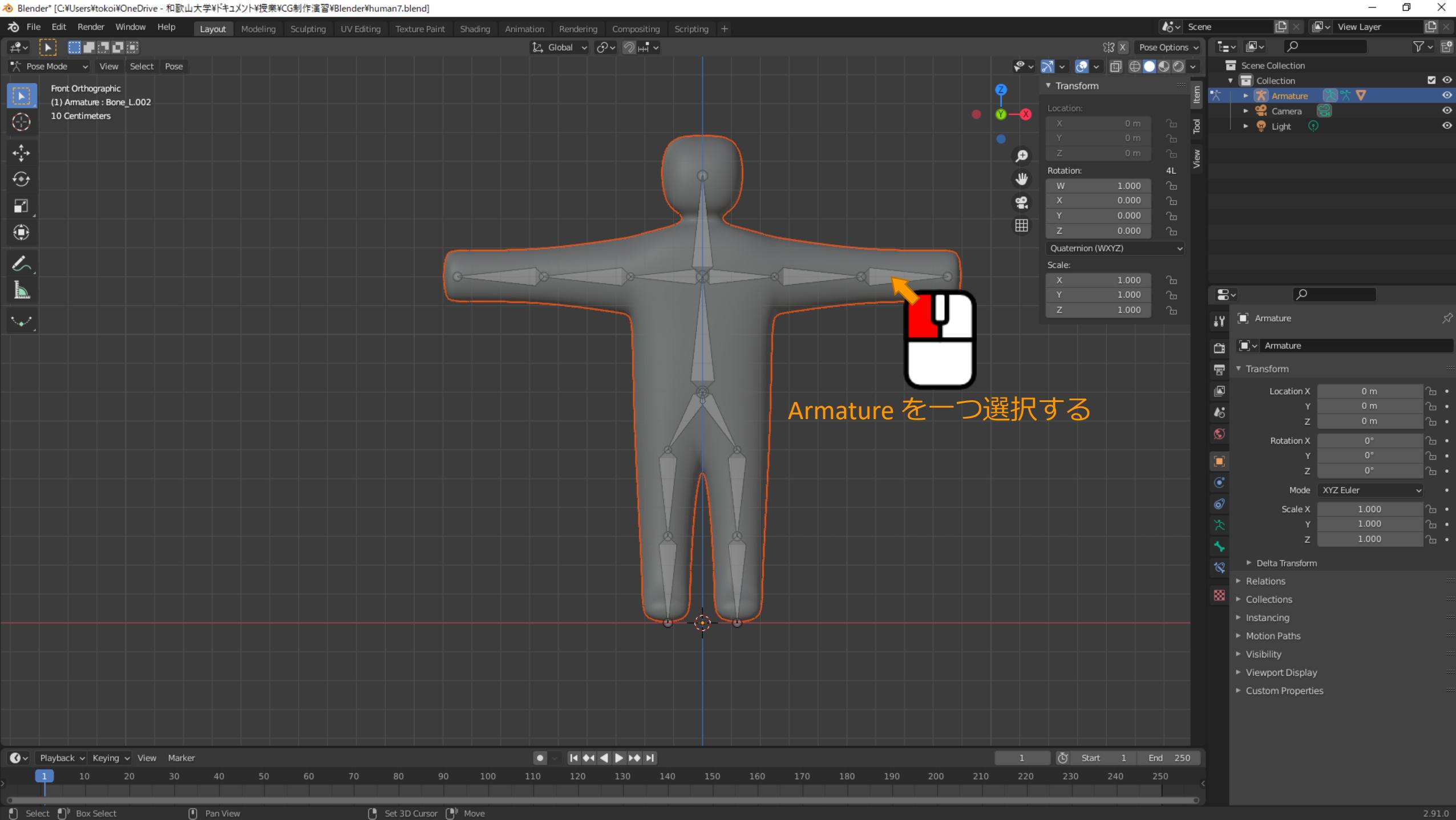


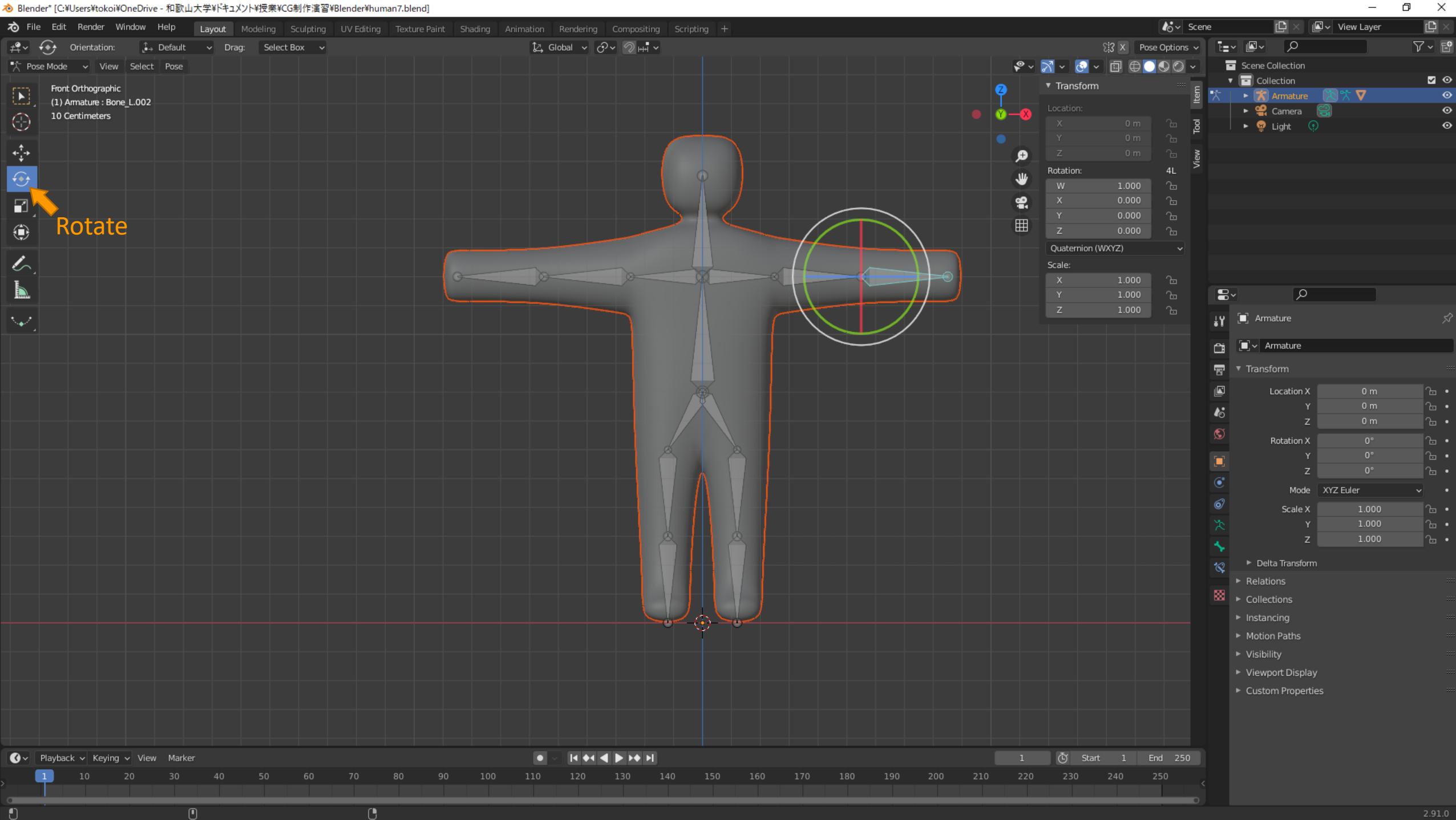


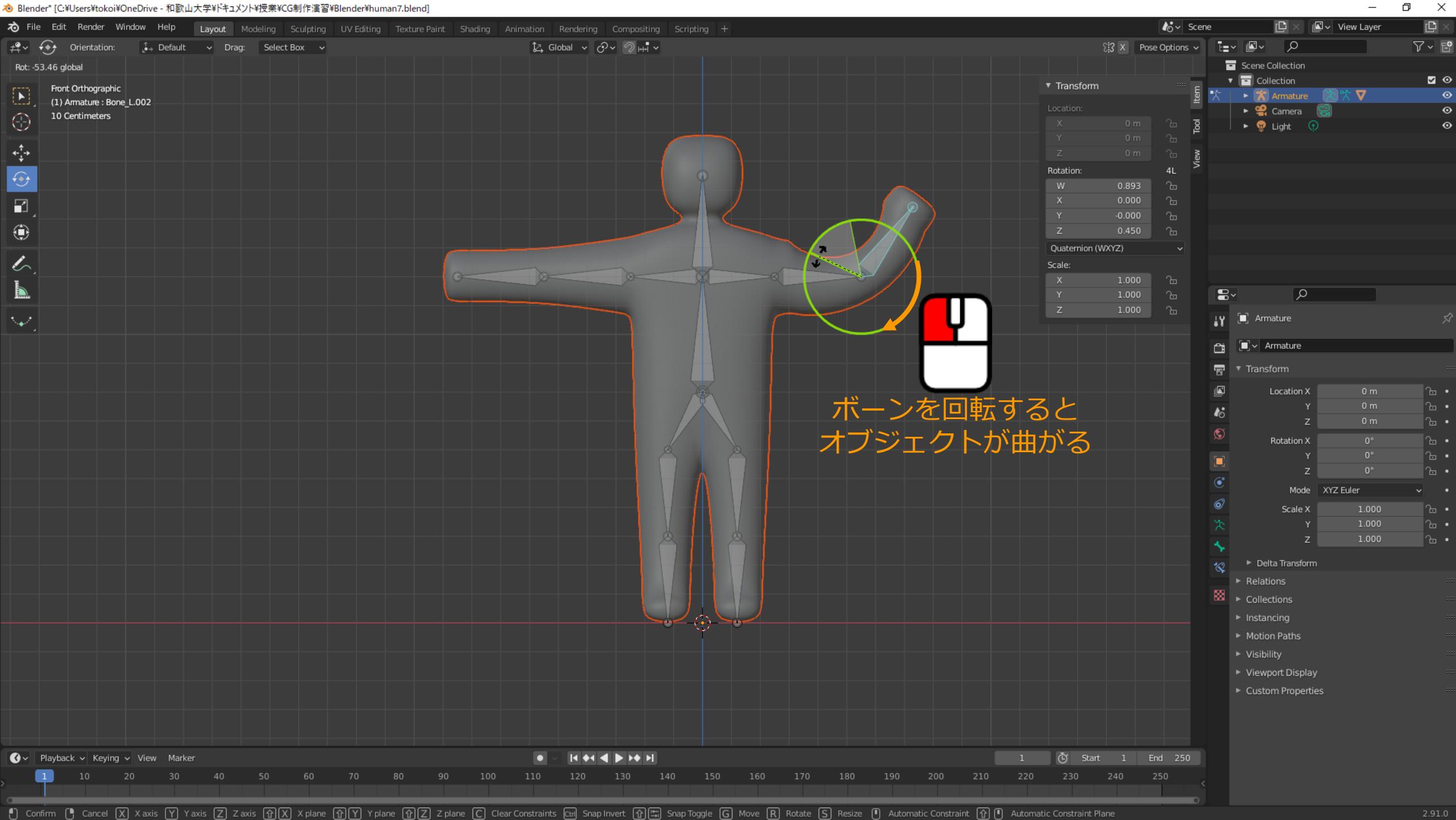












# インバースキネマティクス

