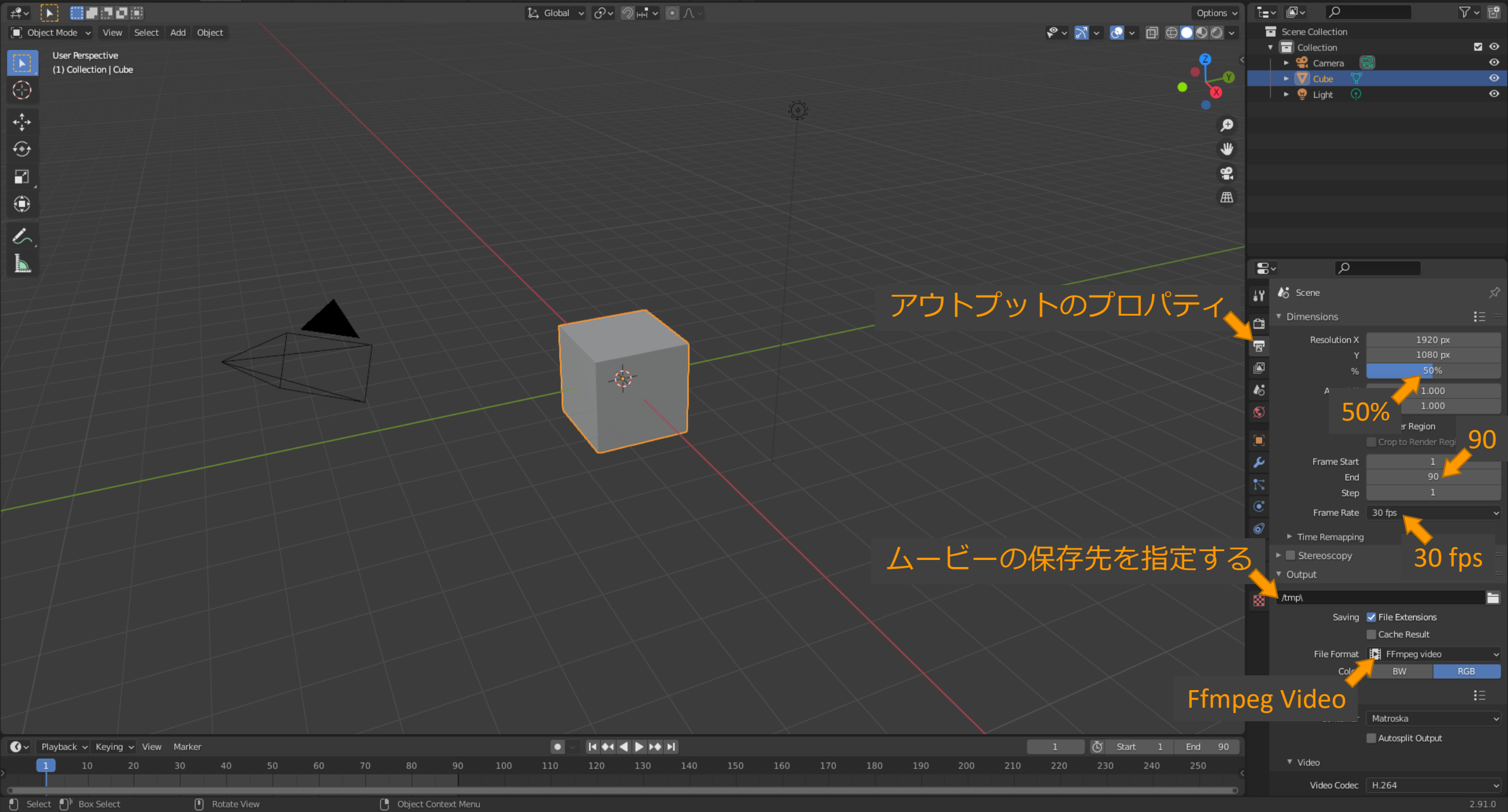
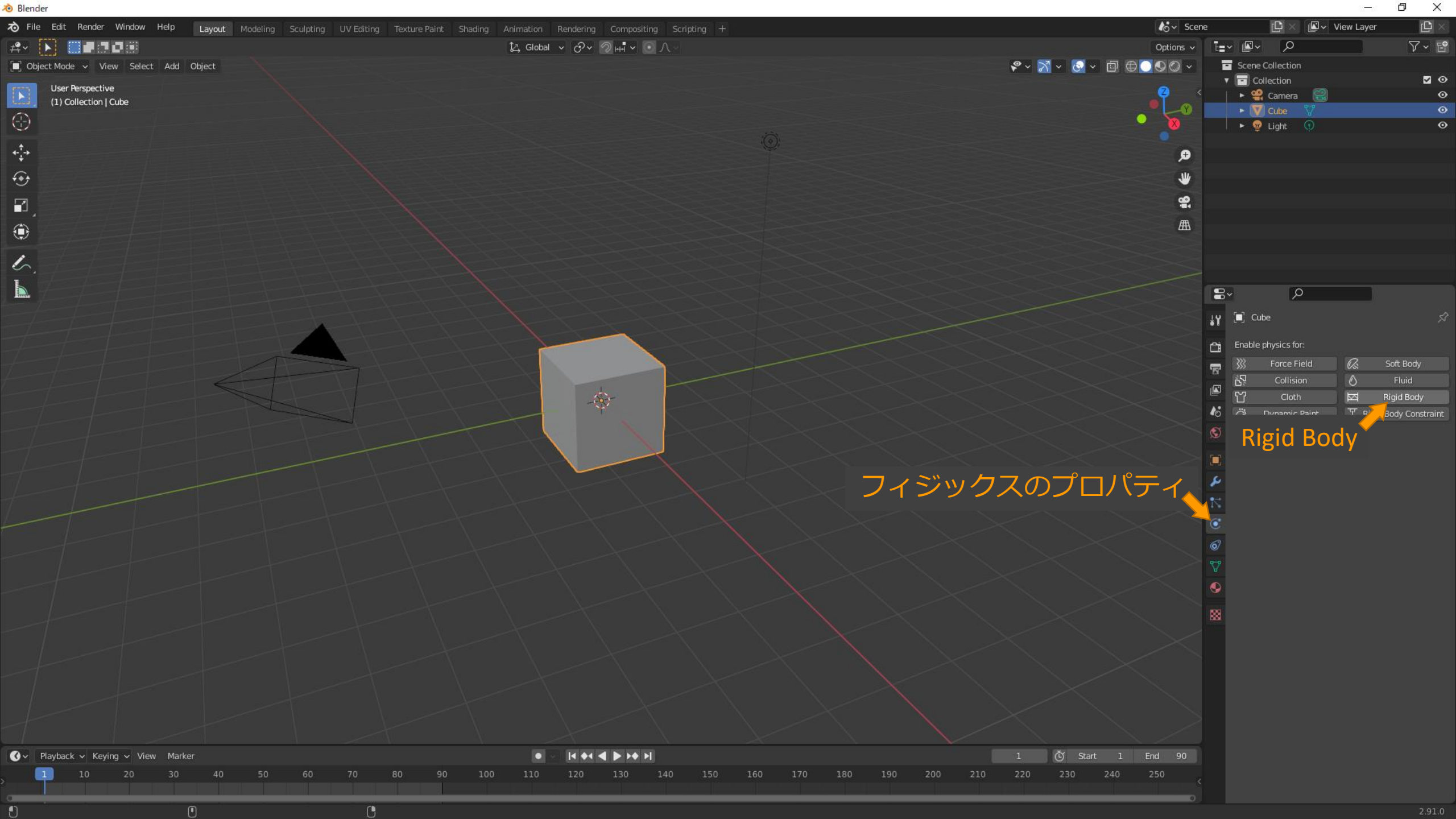


剛体シミュレーション

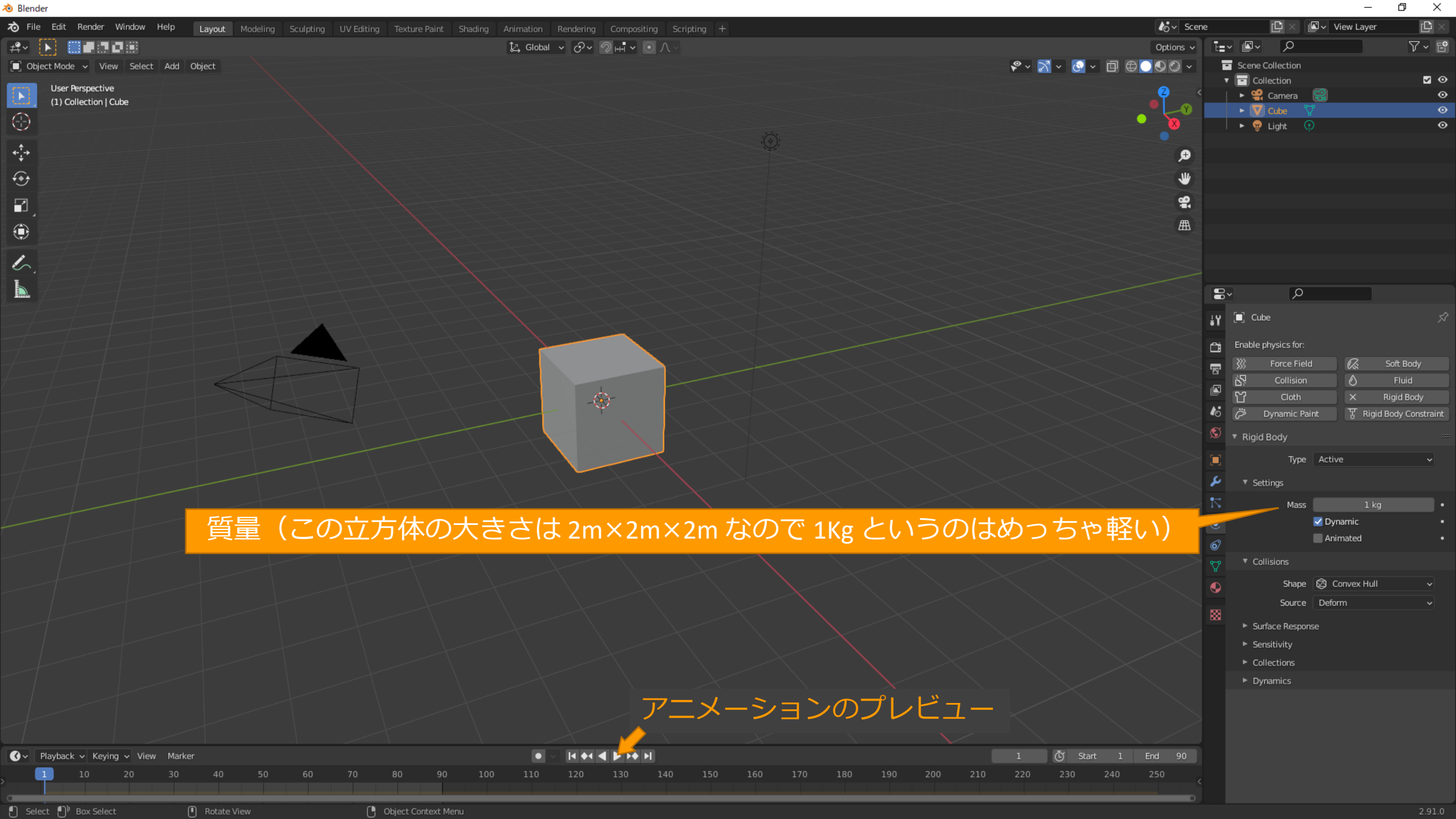
Rigid Body





Rigid Body

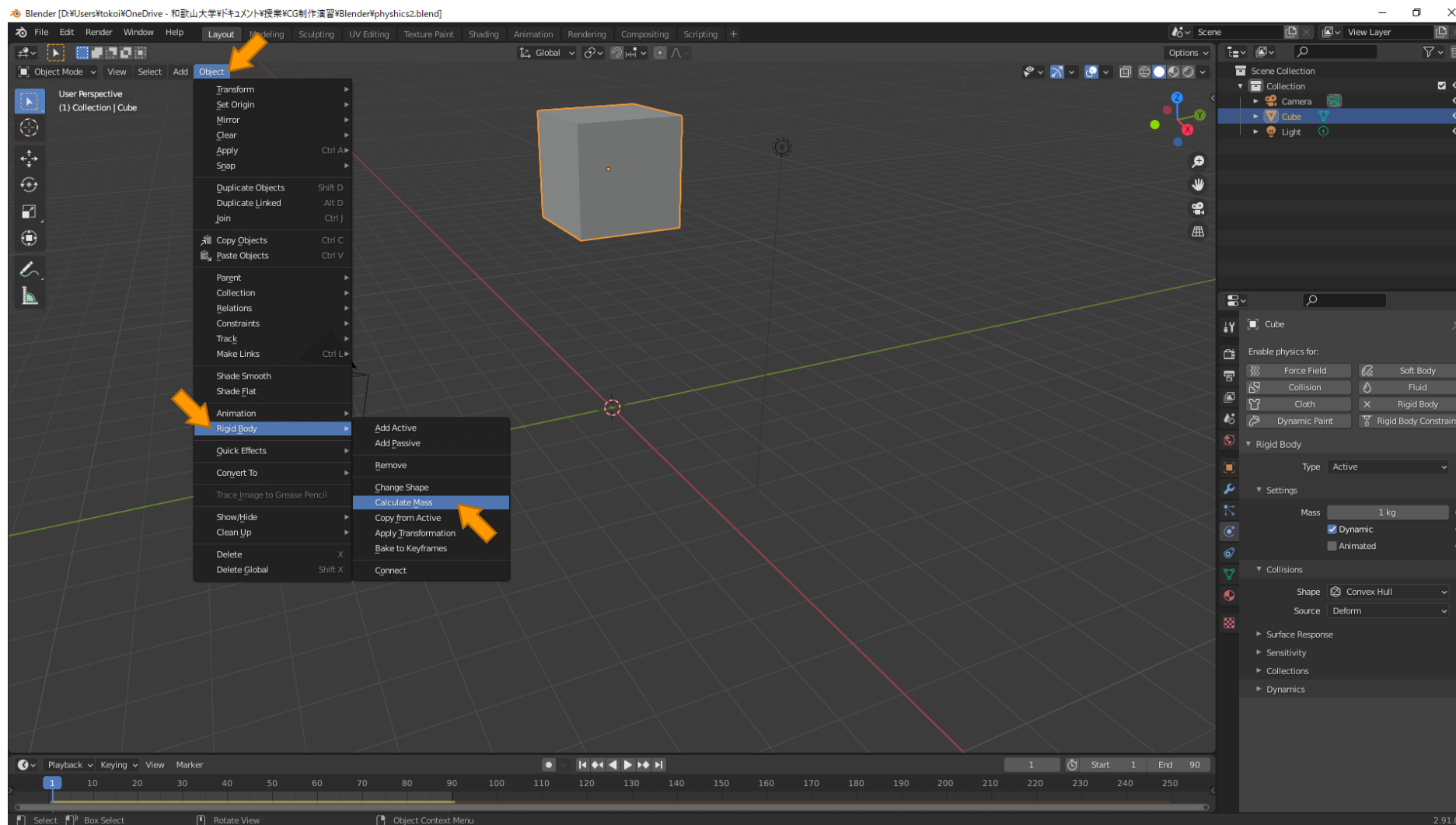
フィジックスのプロパティ



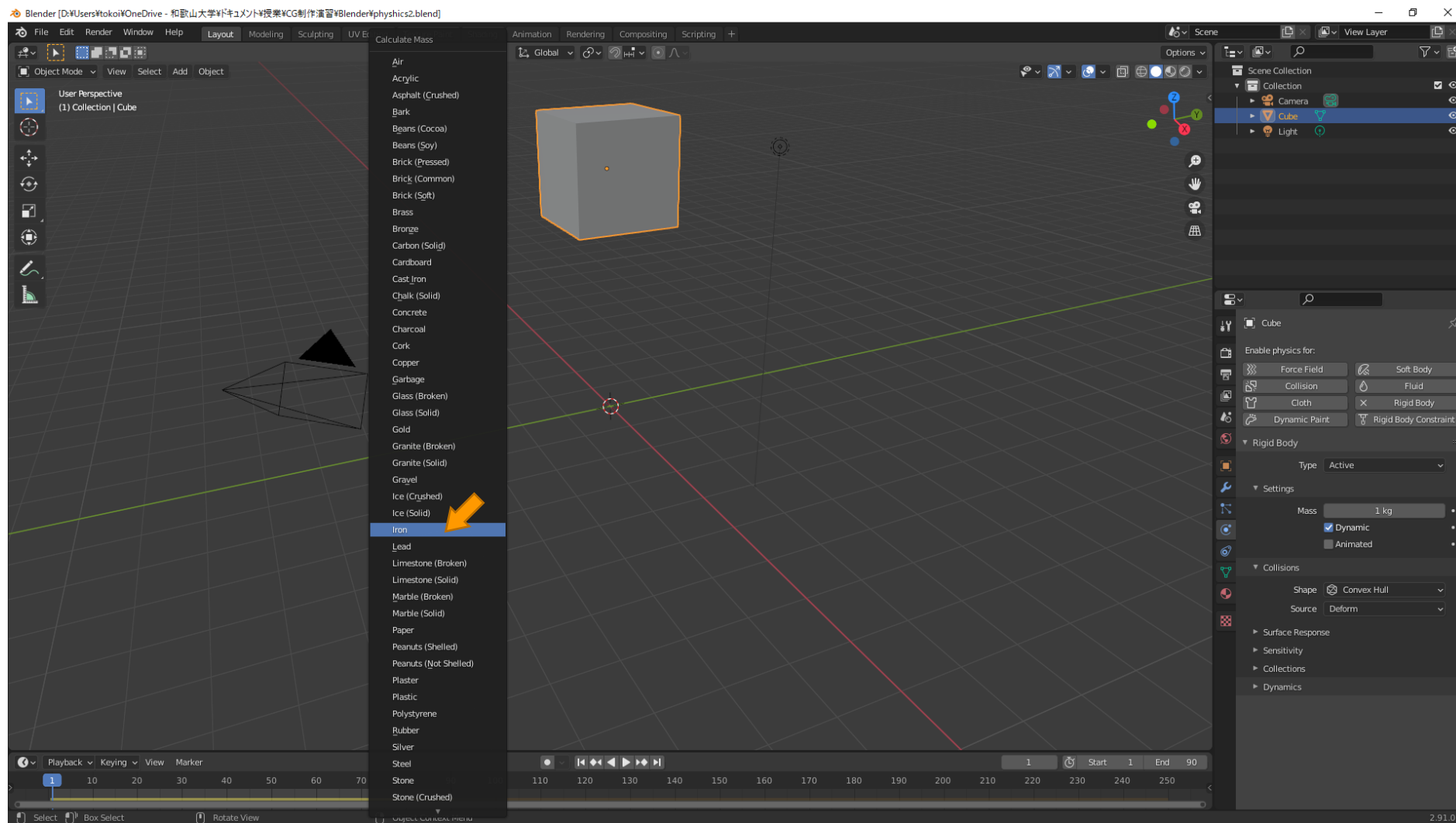
質量（この立方体の大きさは $2\text{m} \times 2\text{m} \times 2\text{m}$ なので 1kg というのはめっちゃ軽い）

アニメーションのプレビュー

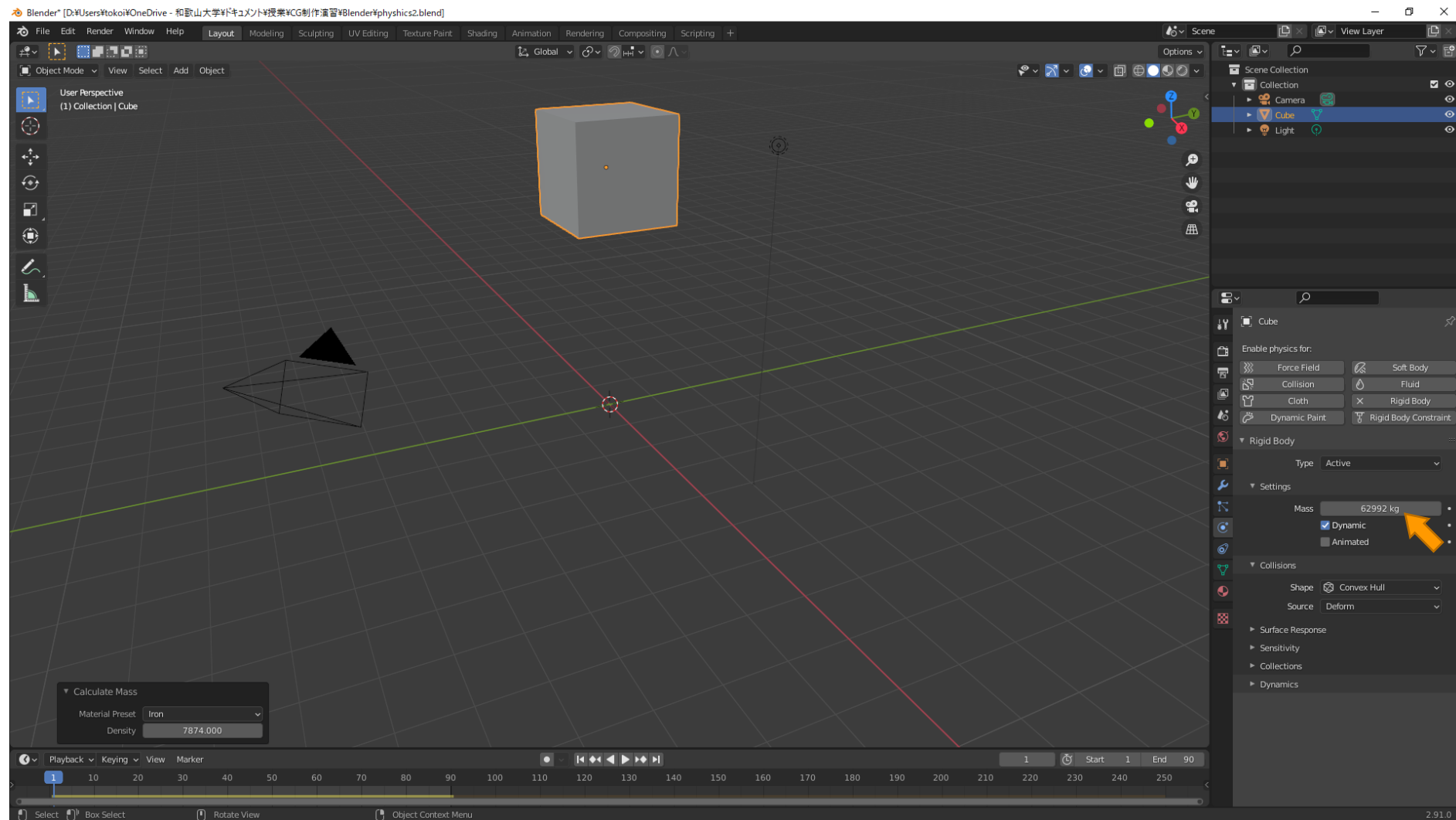
質量の計算

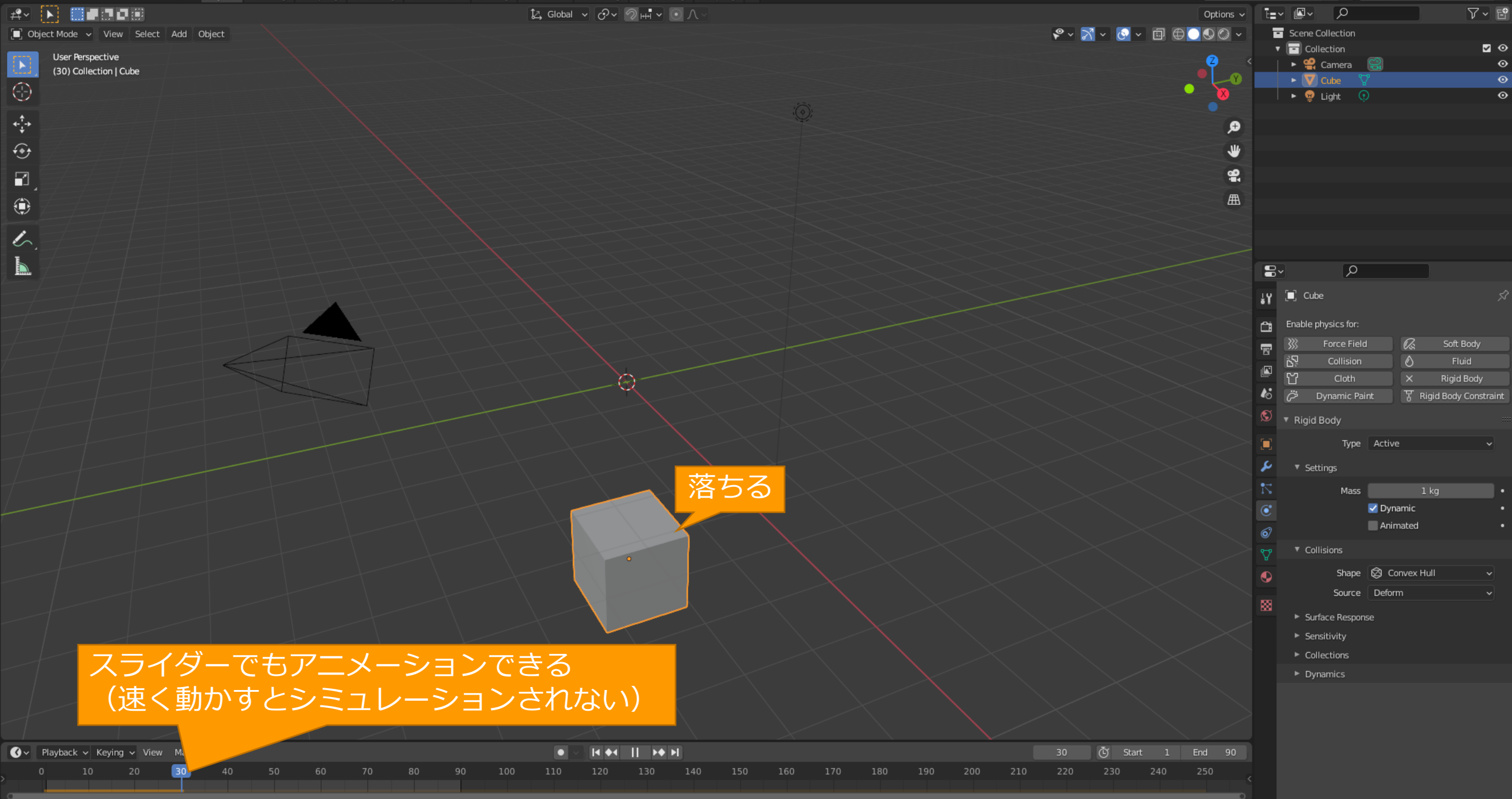


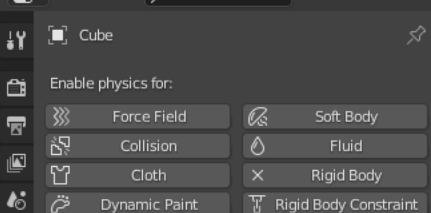
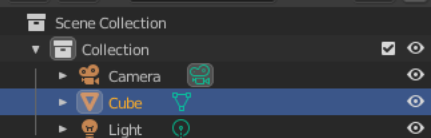
Iron (鉄) を選んでみる



63トンくらいになる

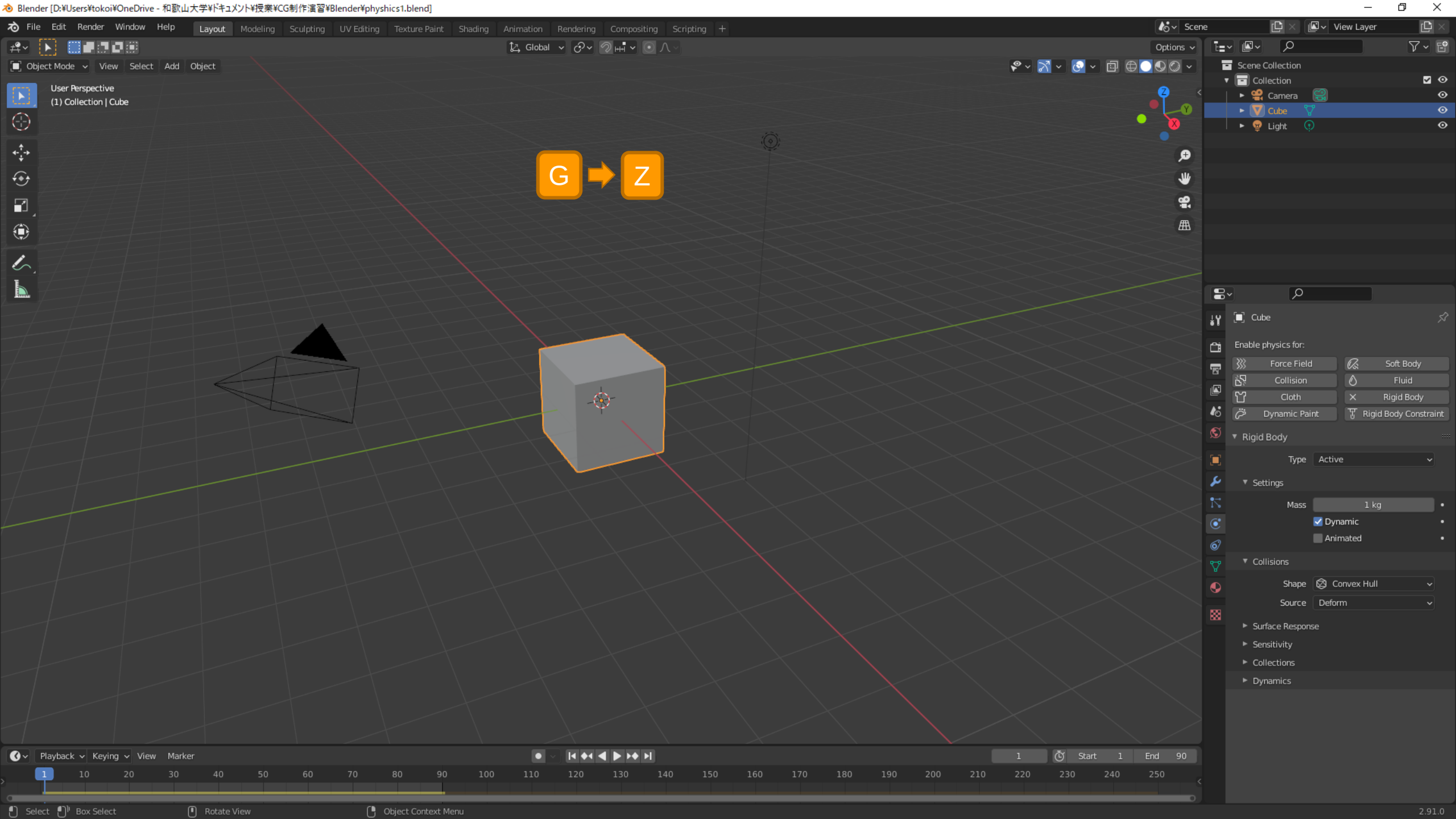


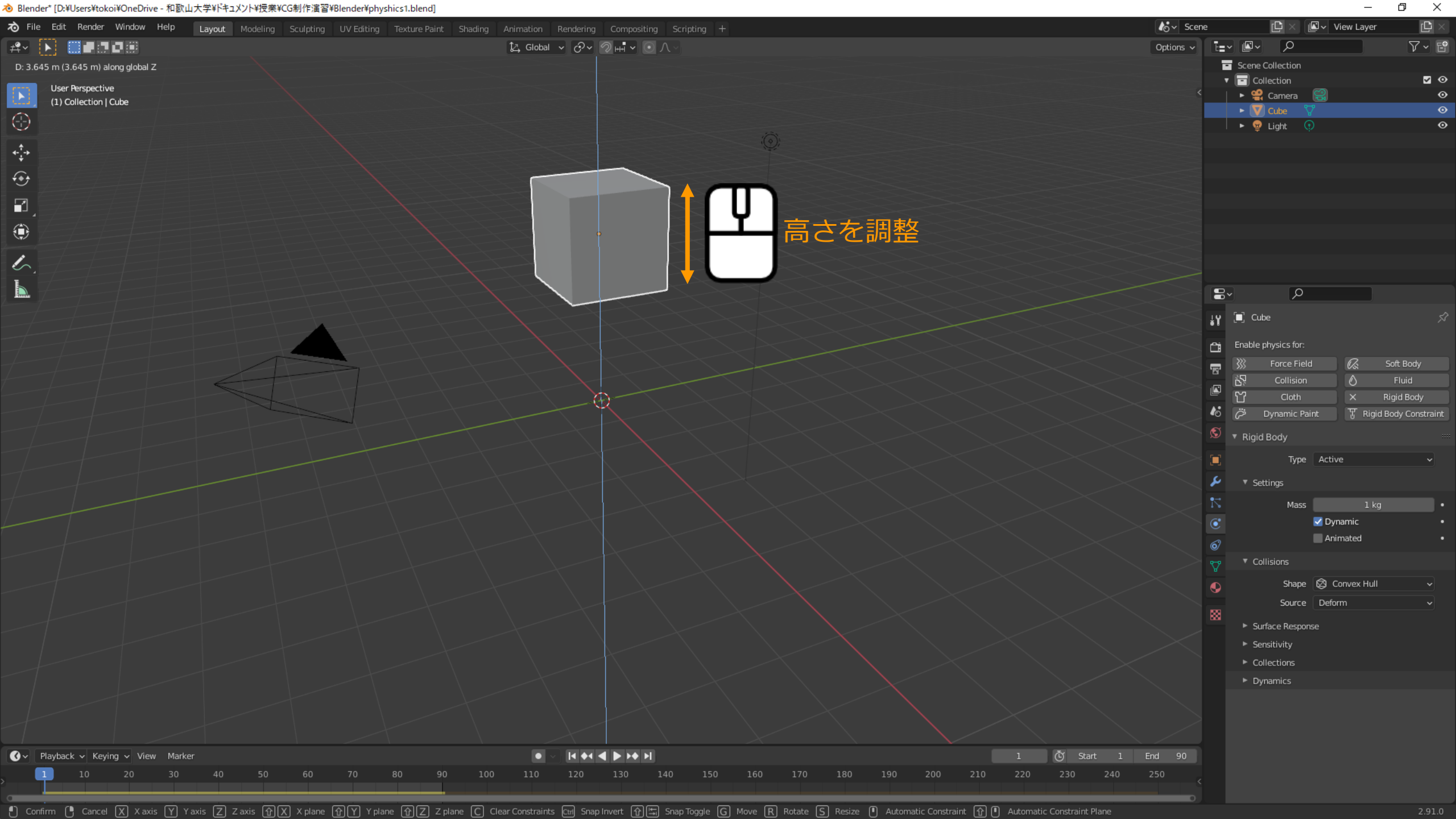


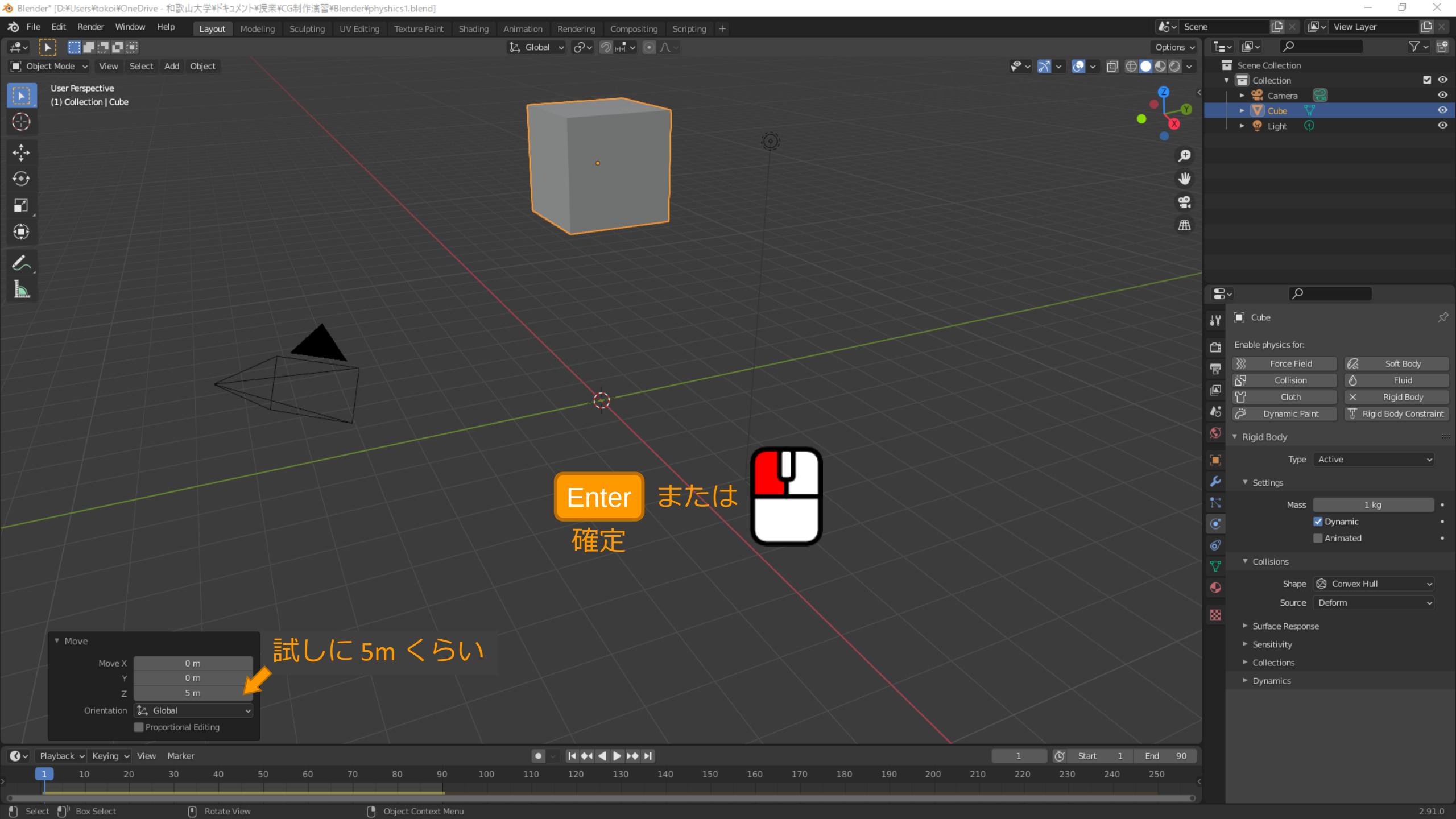


シミュレーションが完了したところは
アニメーションが可能になる

一周アニメーションしたら
止めて最初のフレームに戻る







Enter または
確定

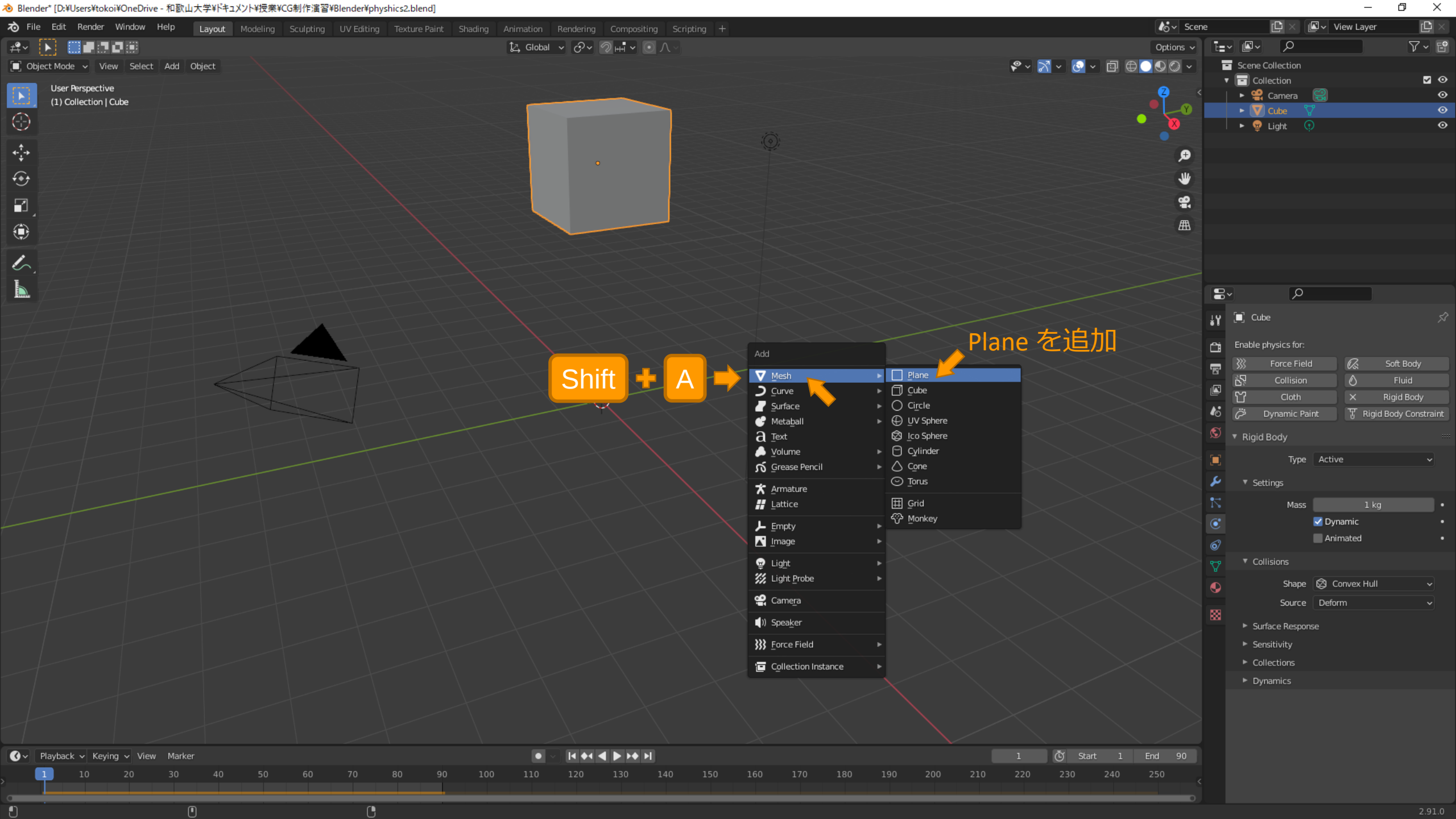
試しに 5m くらい

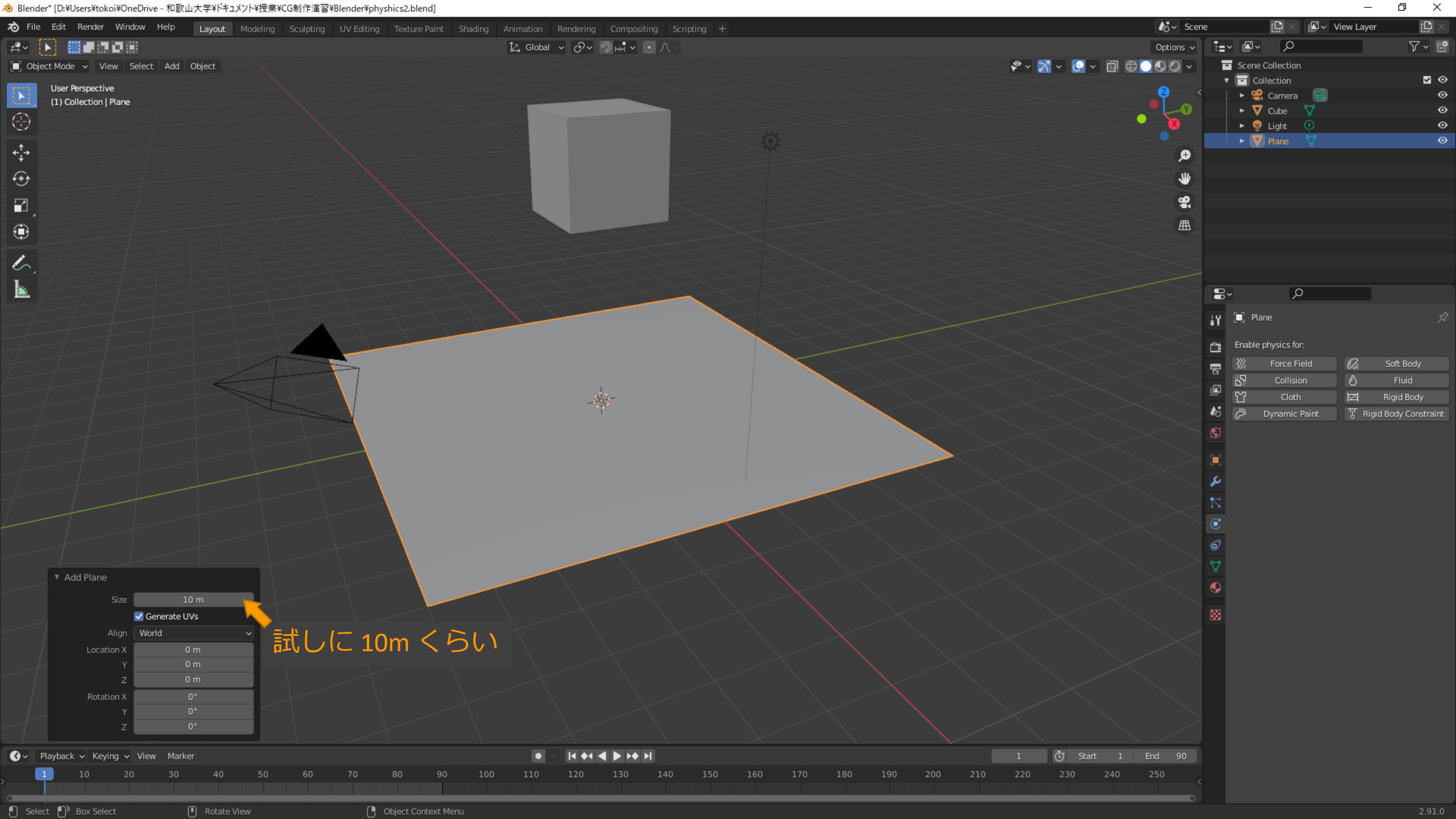
▼ Move

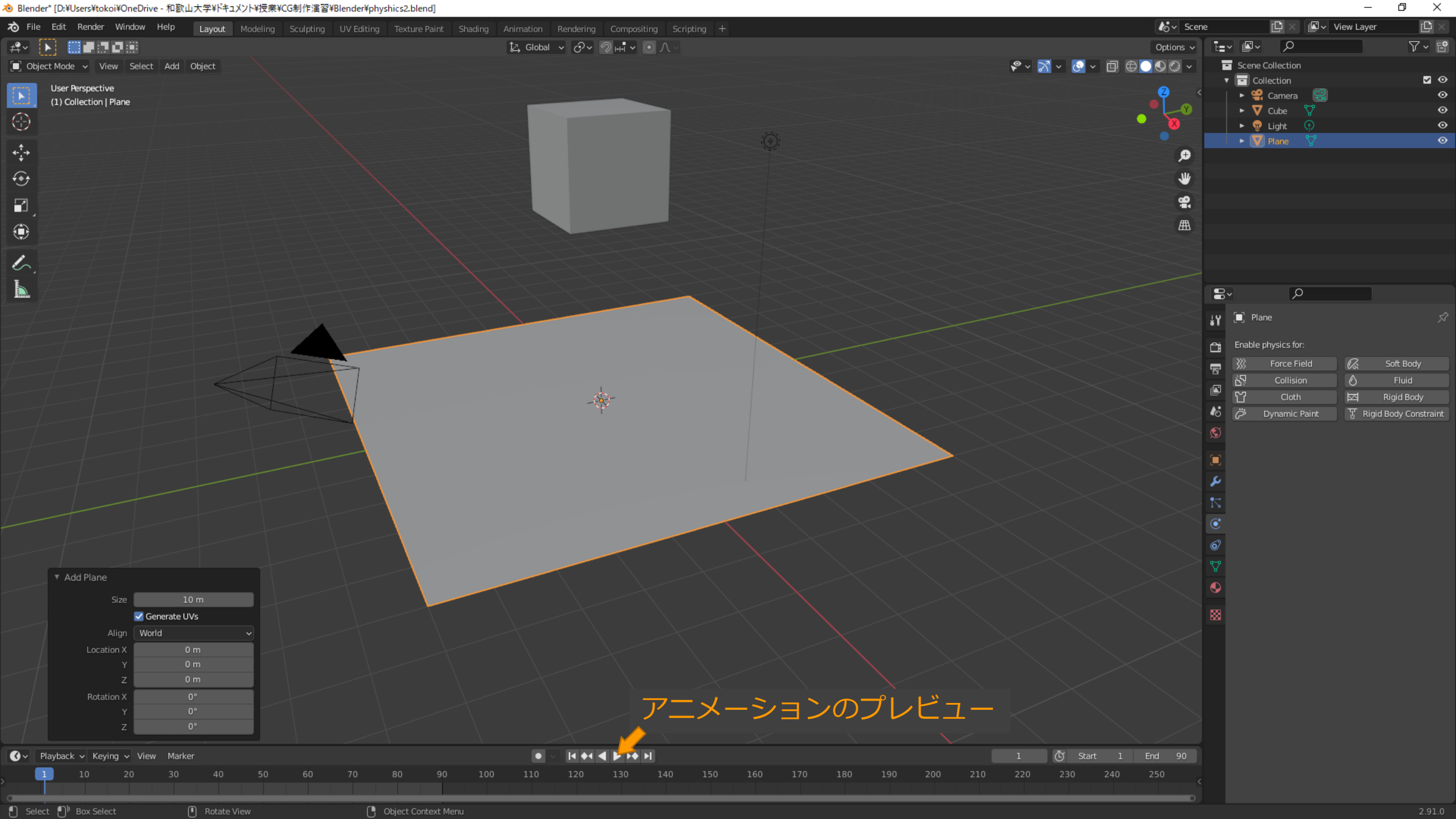
Move X	0 m
Y	0 m
Z	5 m

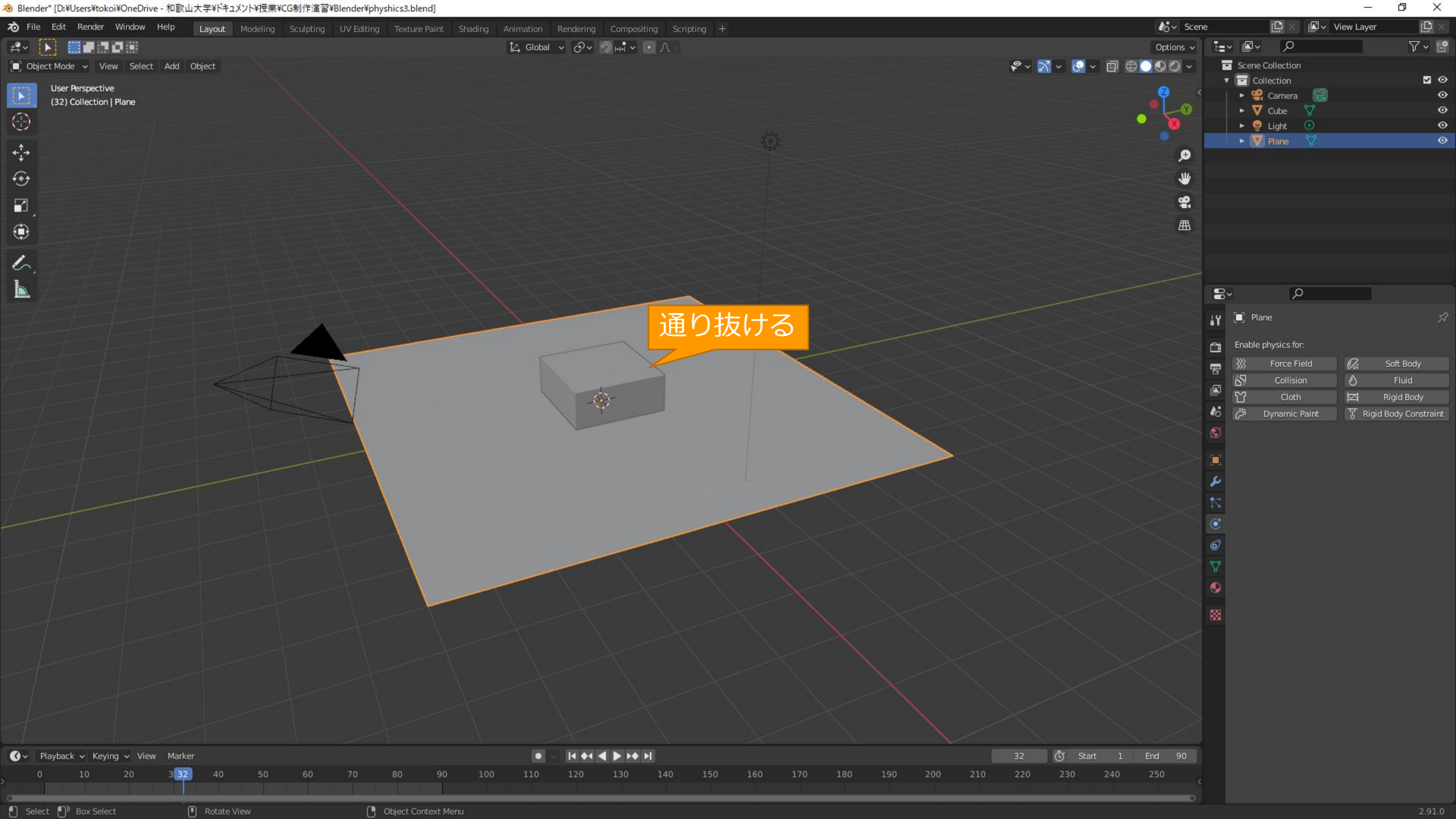
Orientation: Global

☐ Proportional Editing

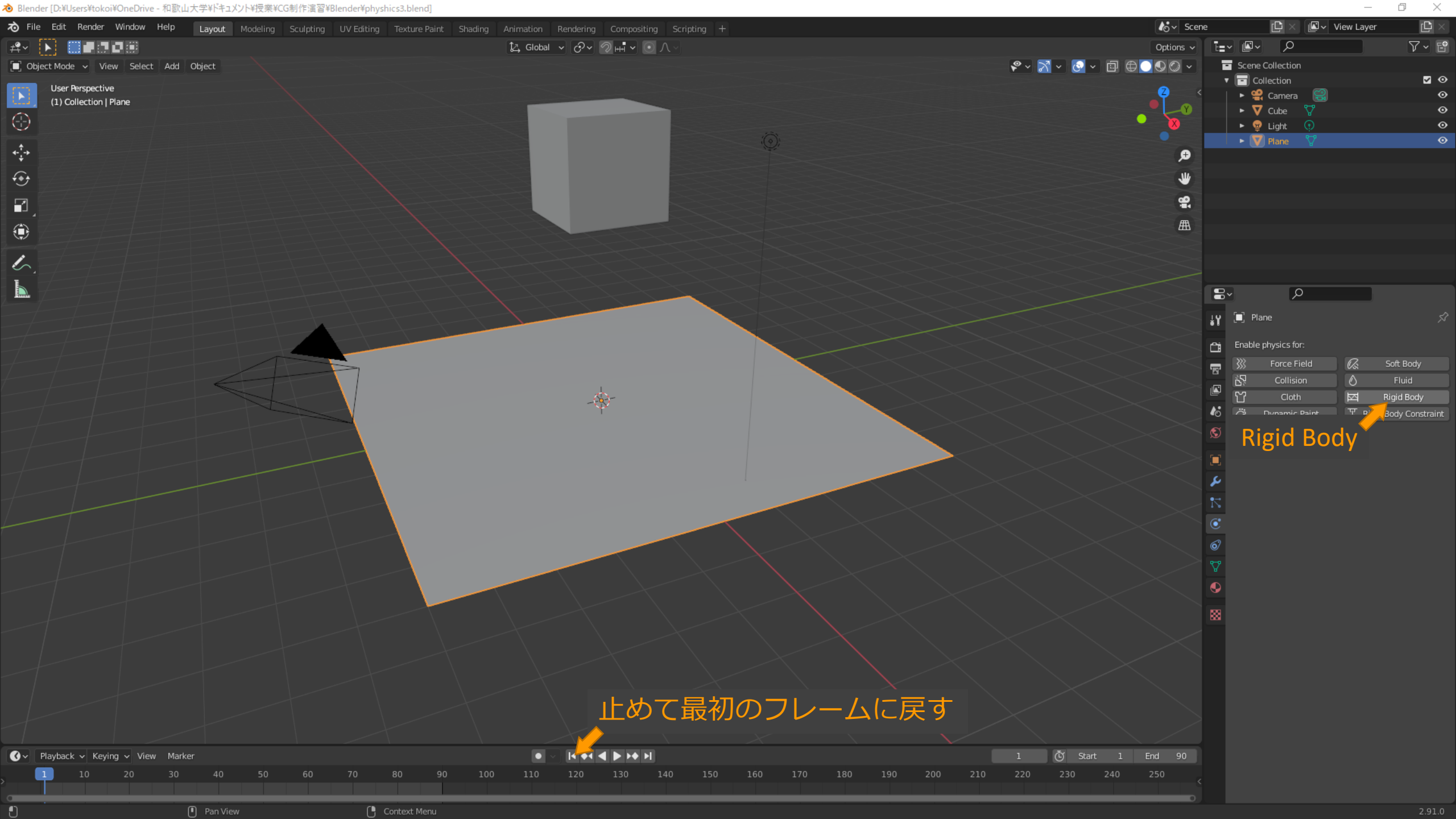






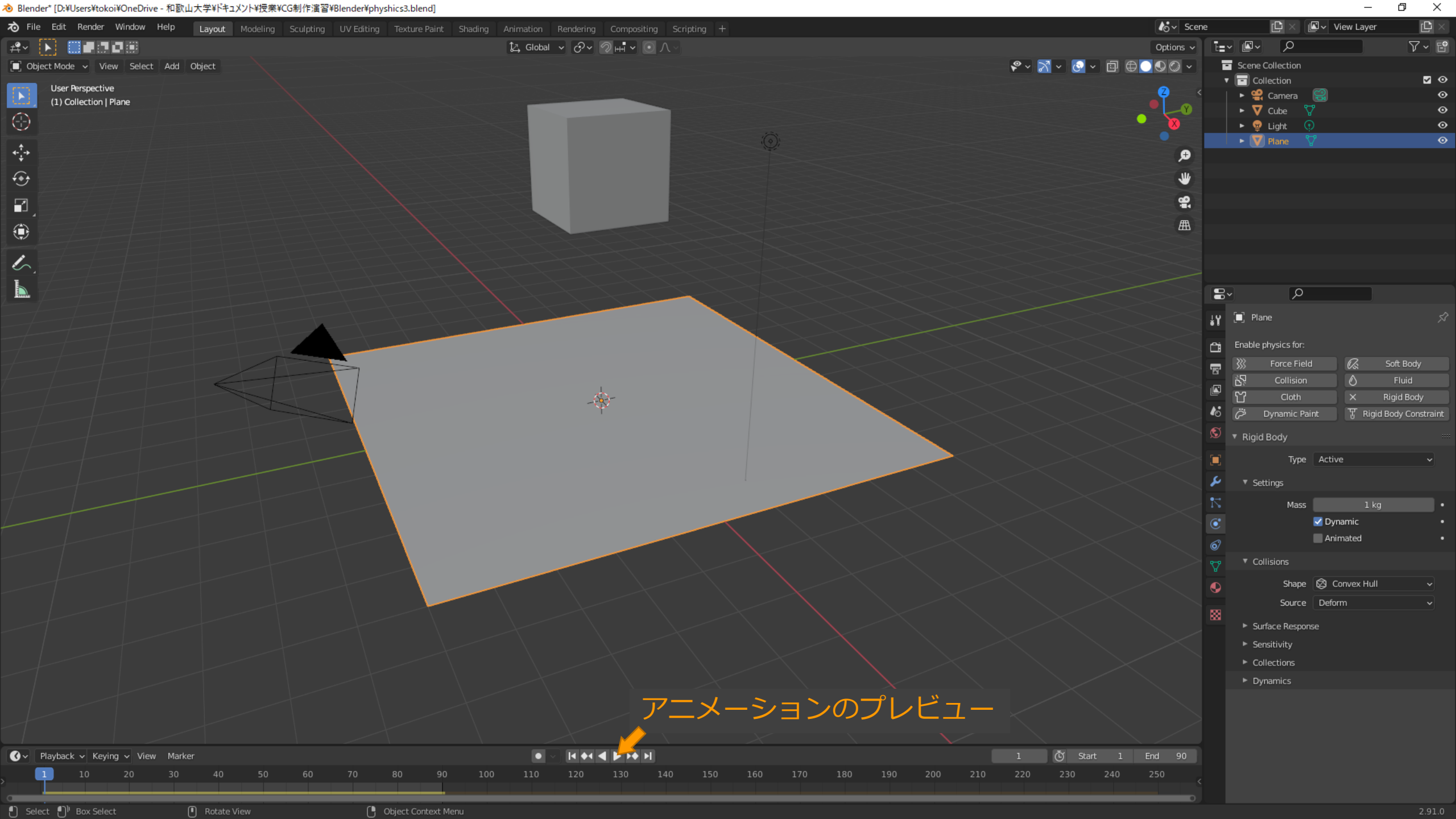


通り抜ける

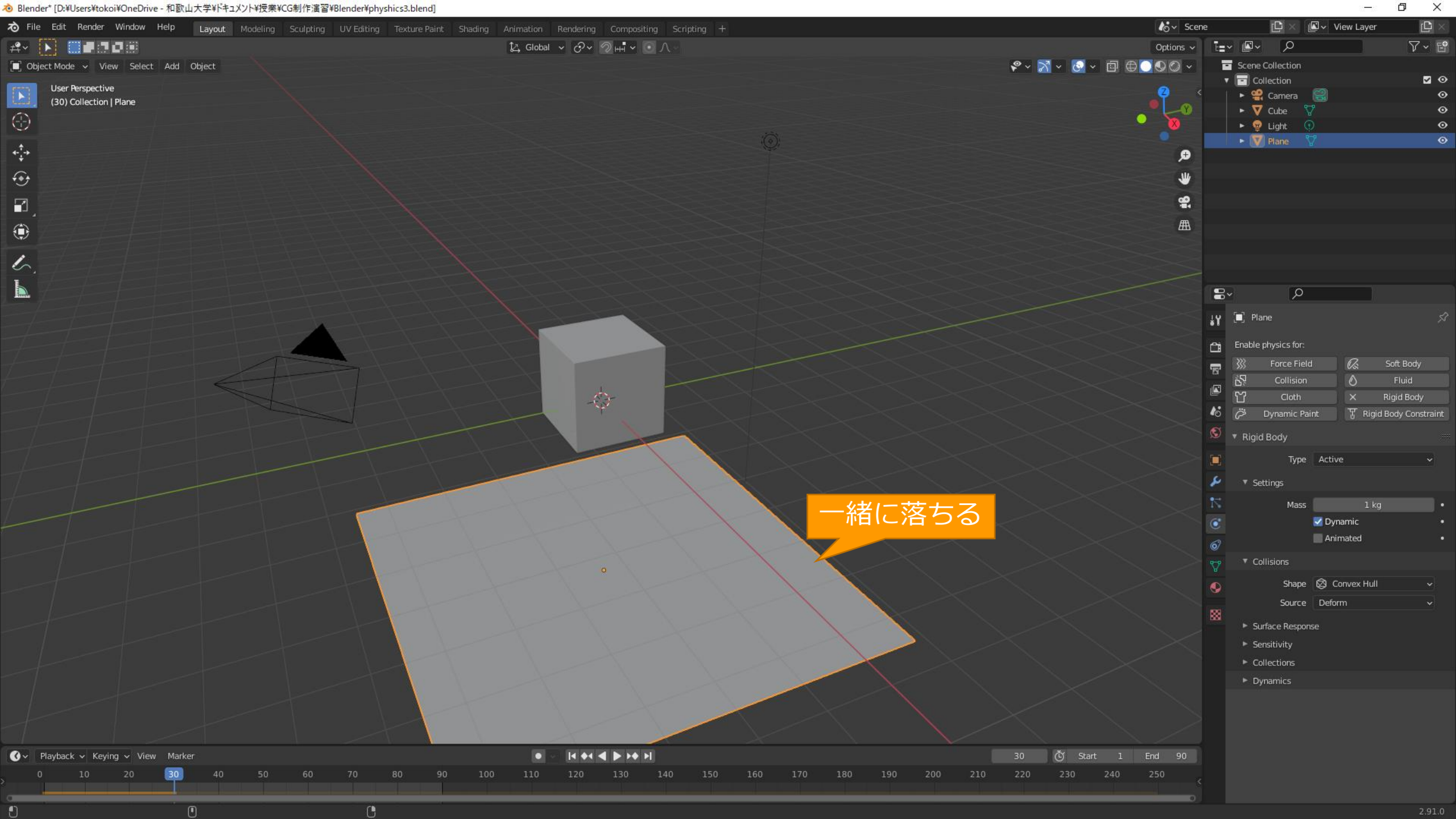


Rigid Body

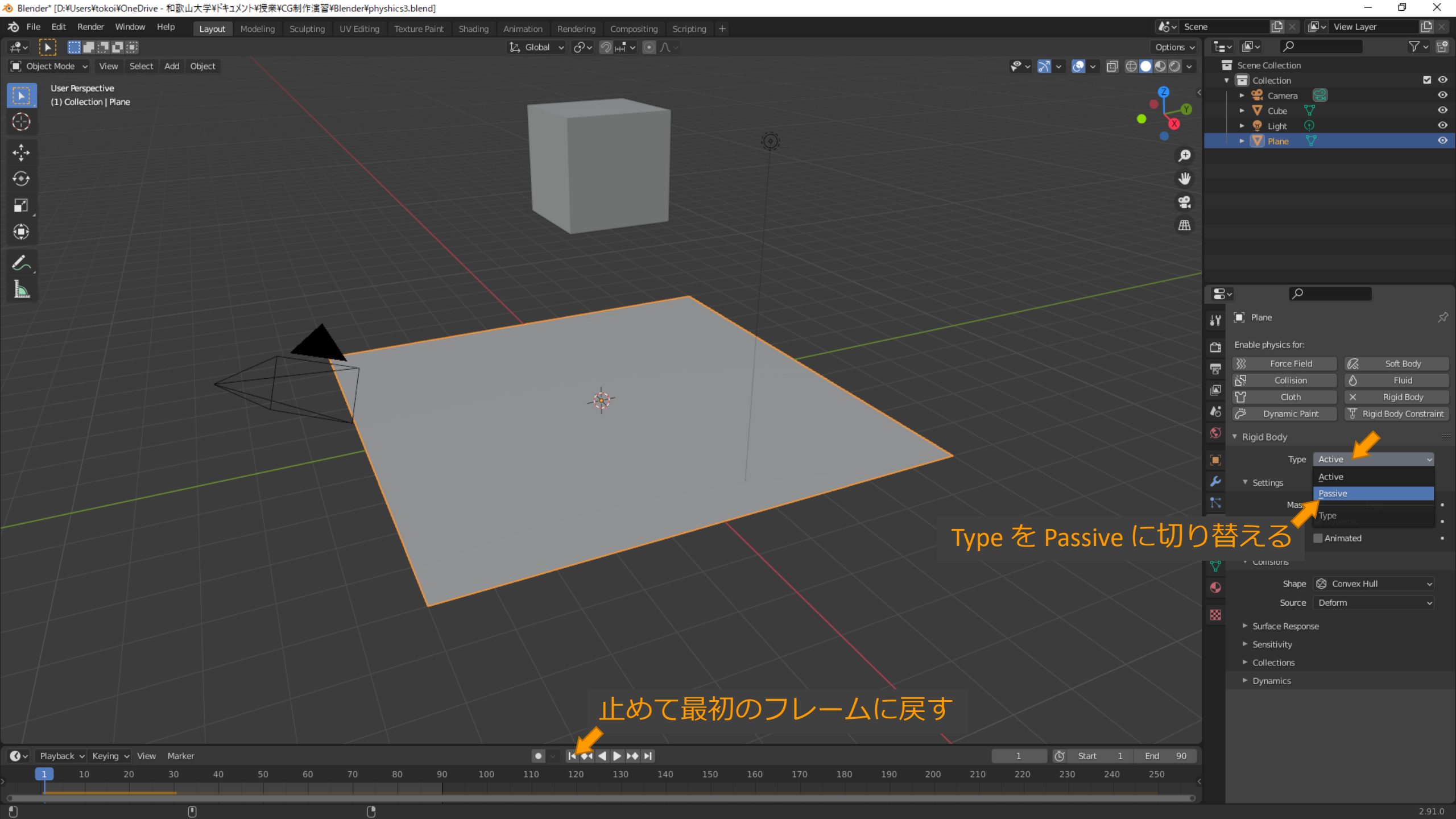
止めて最初のフレームに戻る



アニメーションのプレビュー

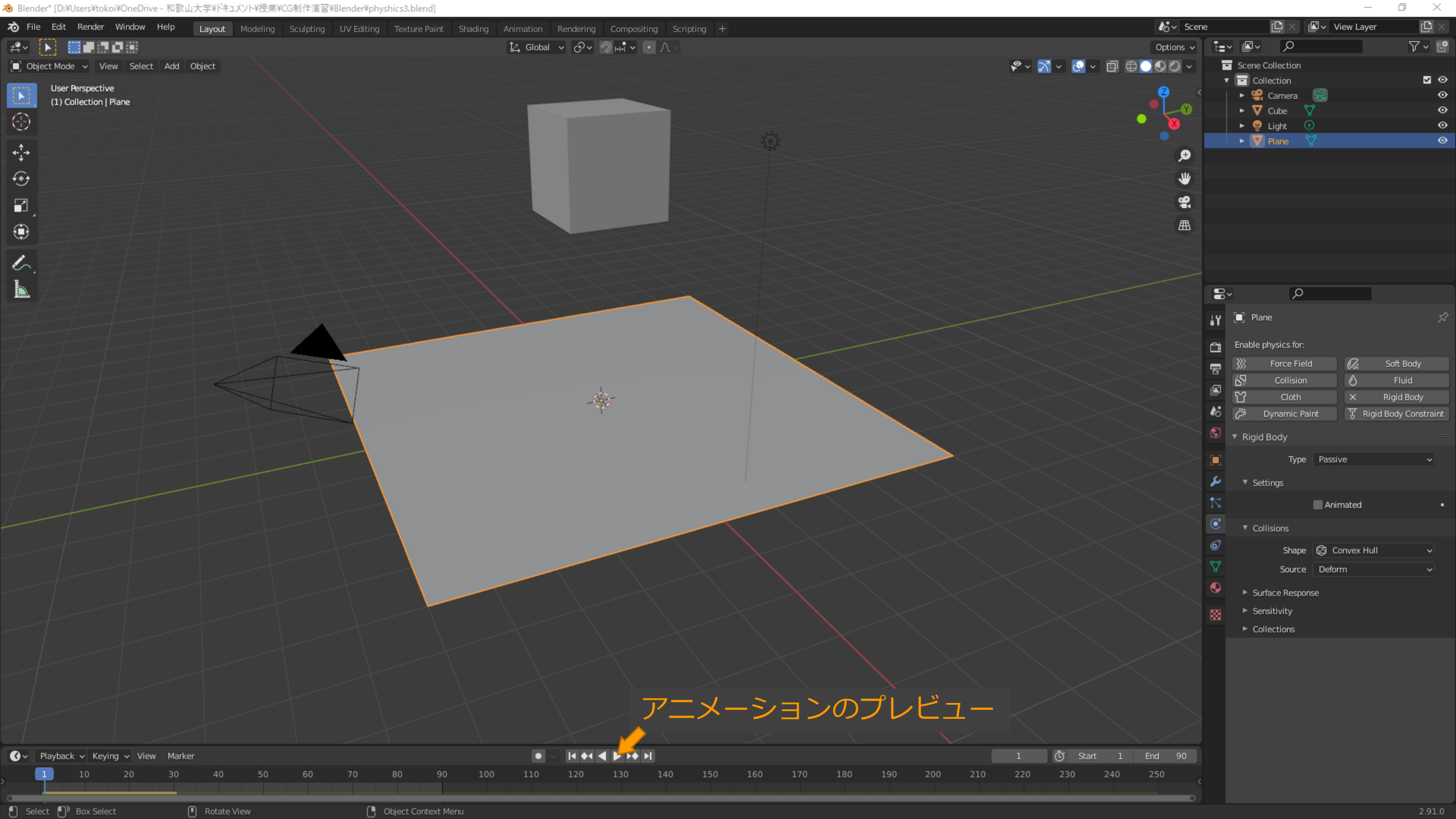


一緒に落ちる

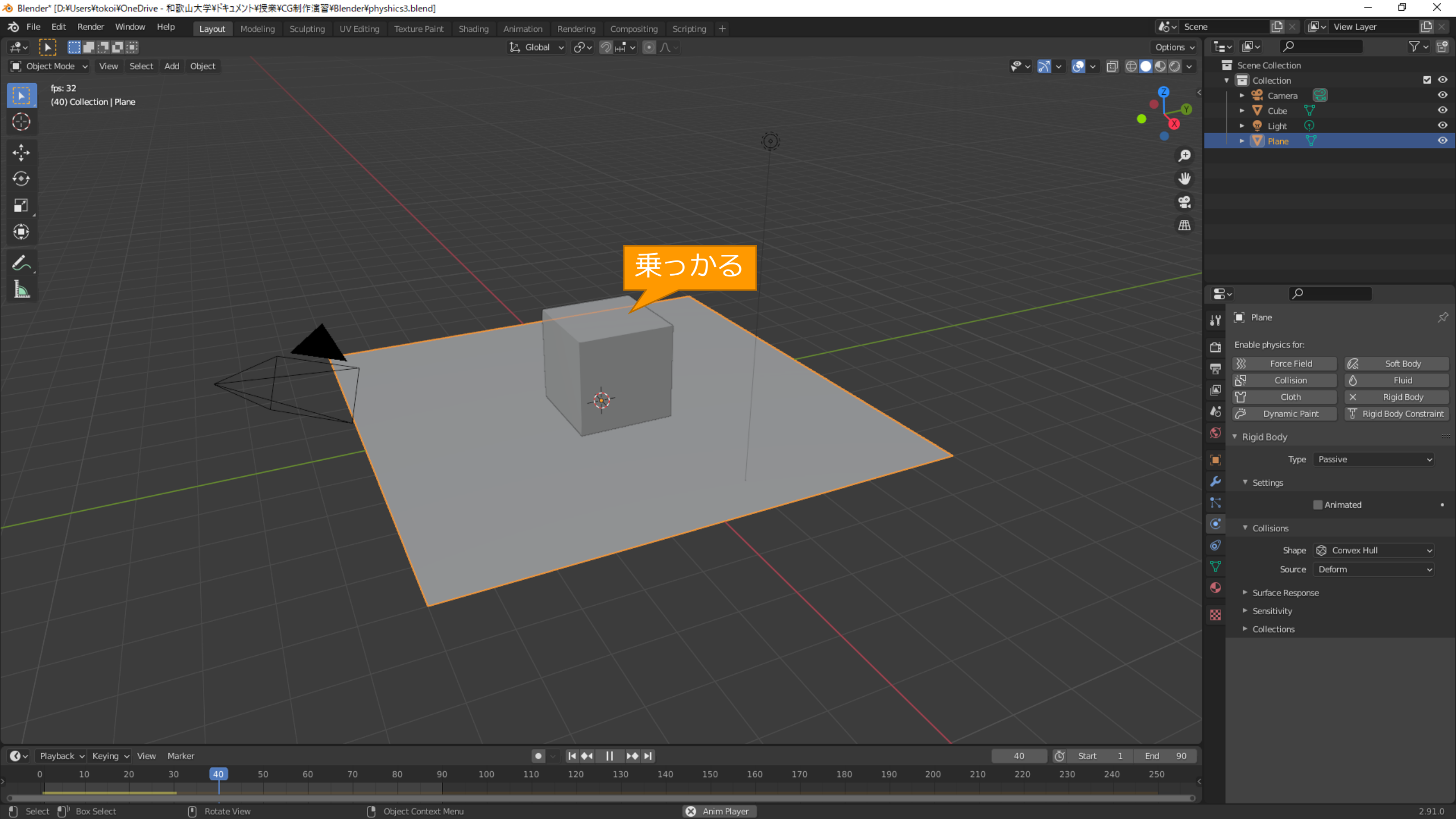


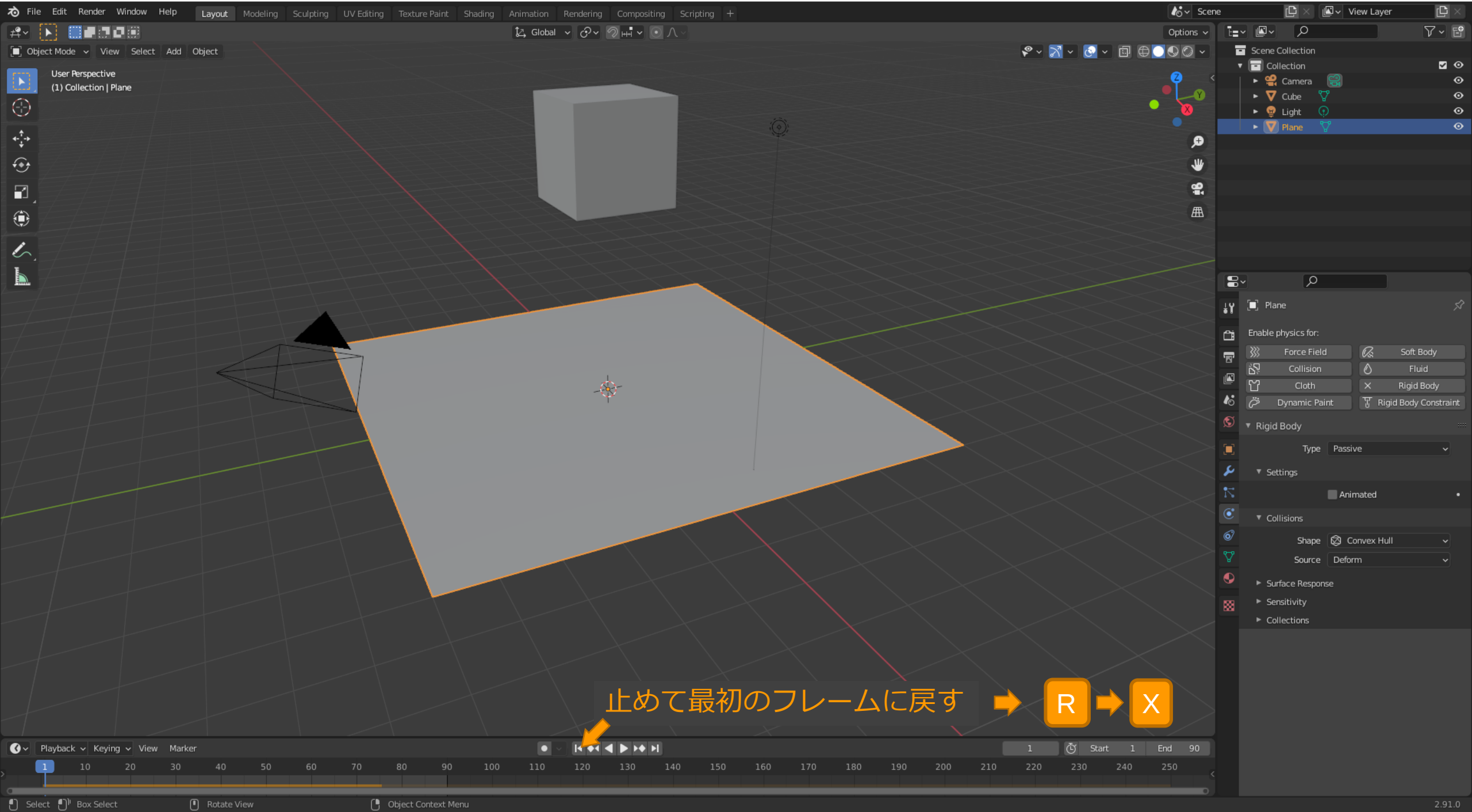
Type を Passive に切り替える

止めて最初のフレームに戻る



アニメーションのプレビュー





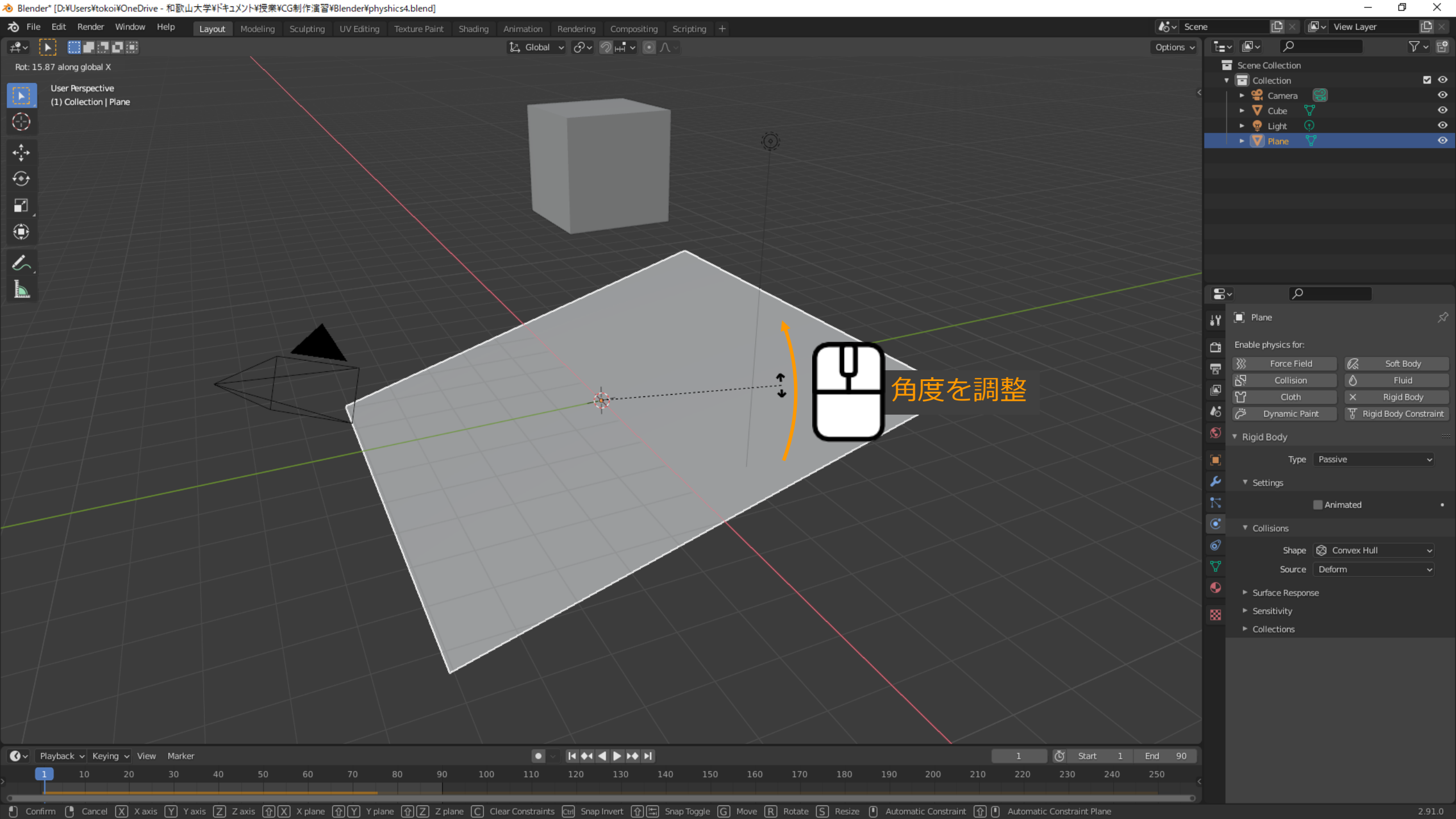
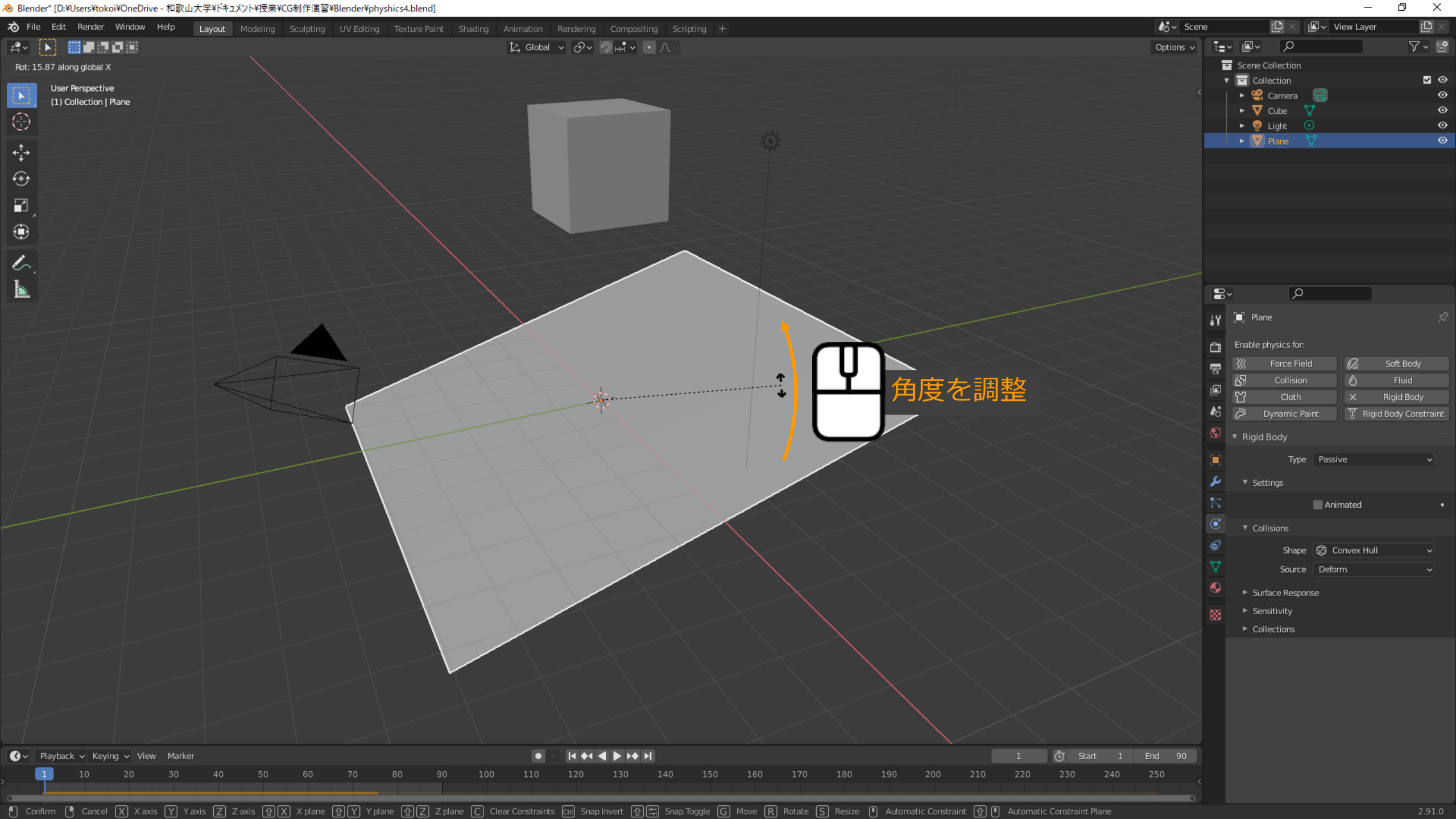
止めて最初のフレームに戻る

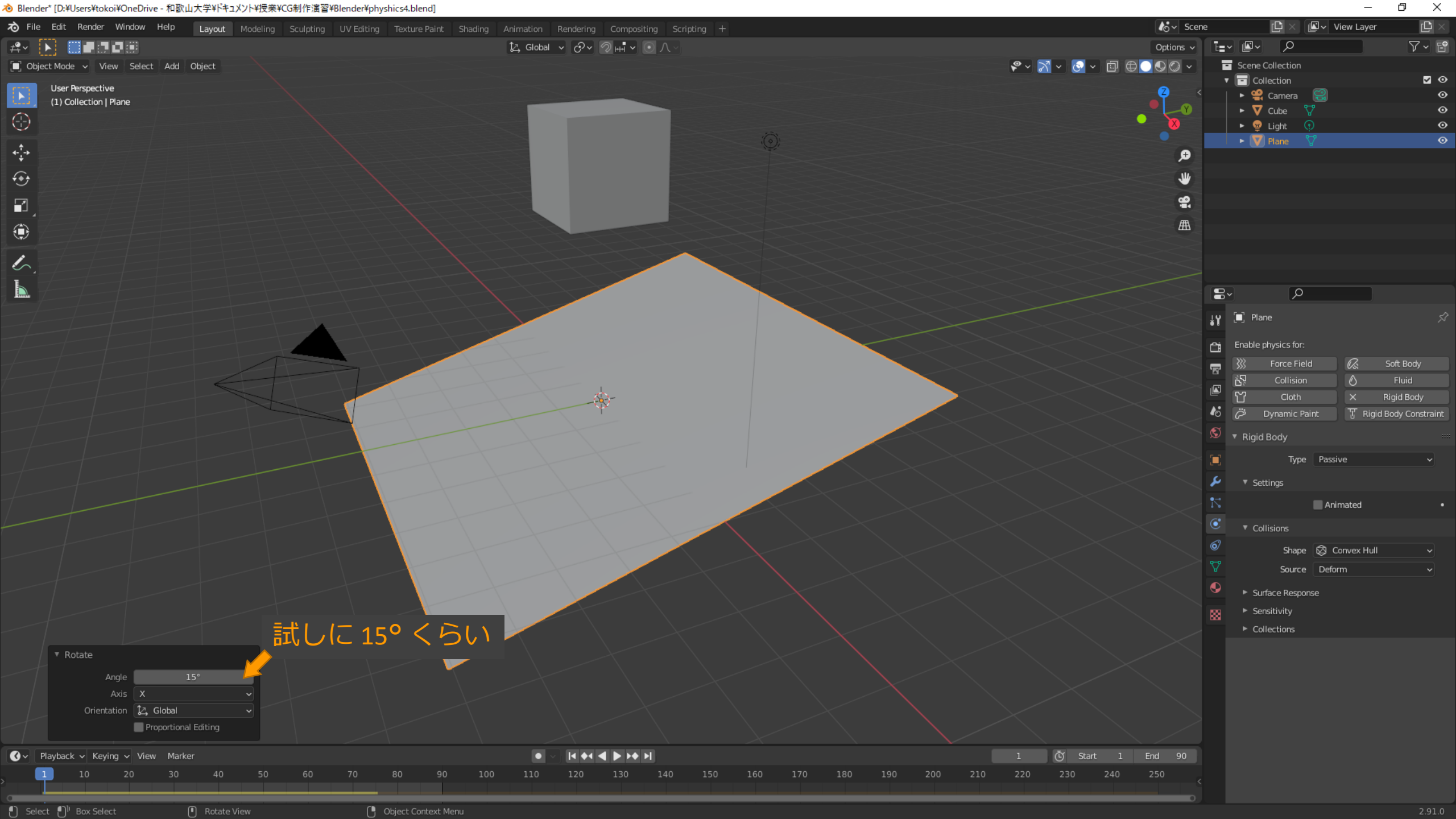


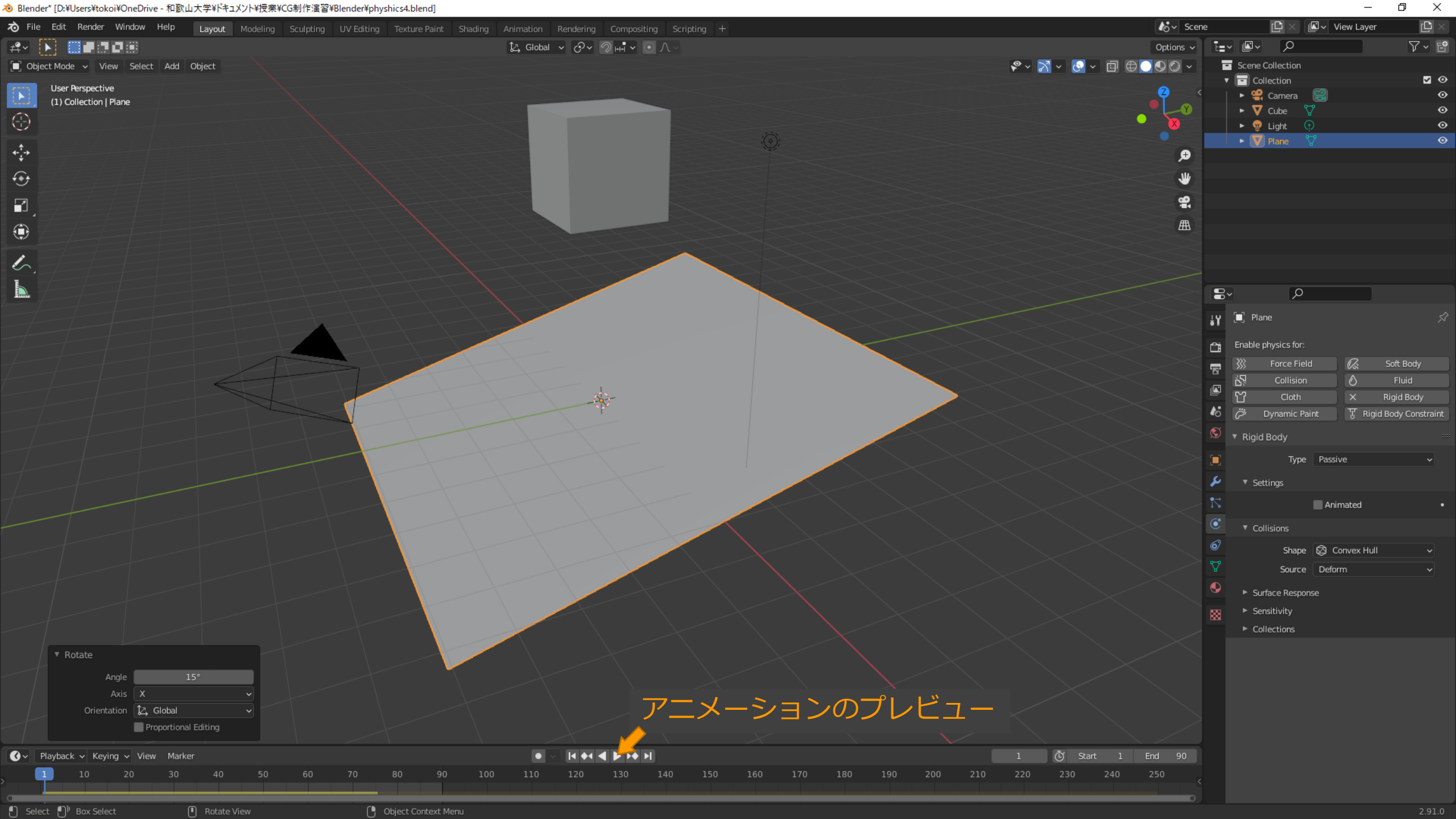
R



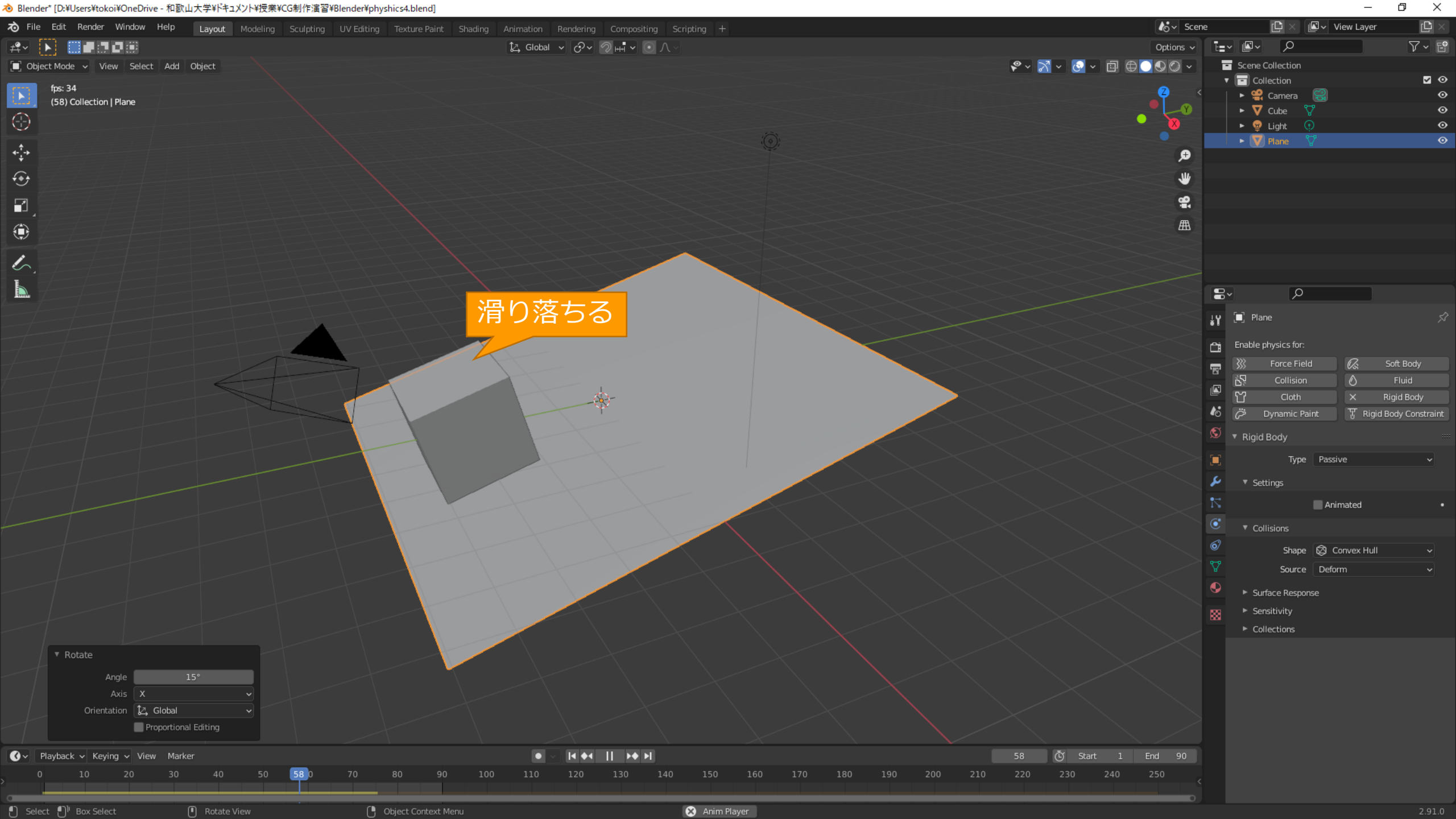
X







アニメーションのプレビュー



滑り落ちる

Plane

Enable physics for:

Force Field

Collision

Cloth

Dynamic Paint

Soft Body

Fluid

Rigid Body

Rigid Body Constraint

Rigid Body

Type

Passive

Settings

Animated

Collisions

Shape

Convex Hull

Source

Deform

Surface Response

Sensitivity

Collections

Rotate

Angle

15°

Axis

X

Orientation

Global

Proportional Editing

Playback Keying View Marker

58

Start

1

End

90

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

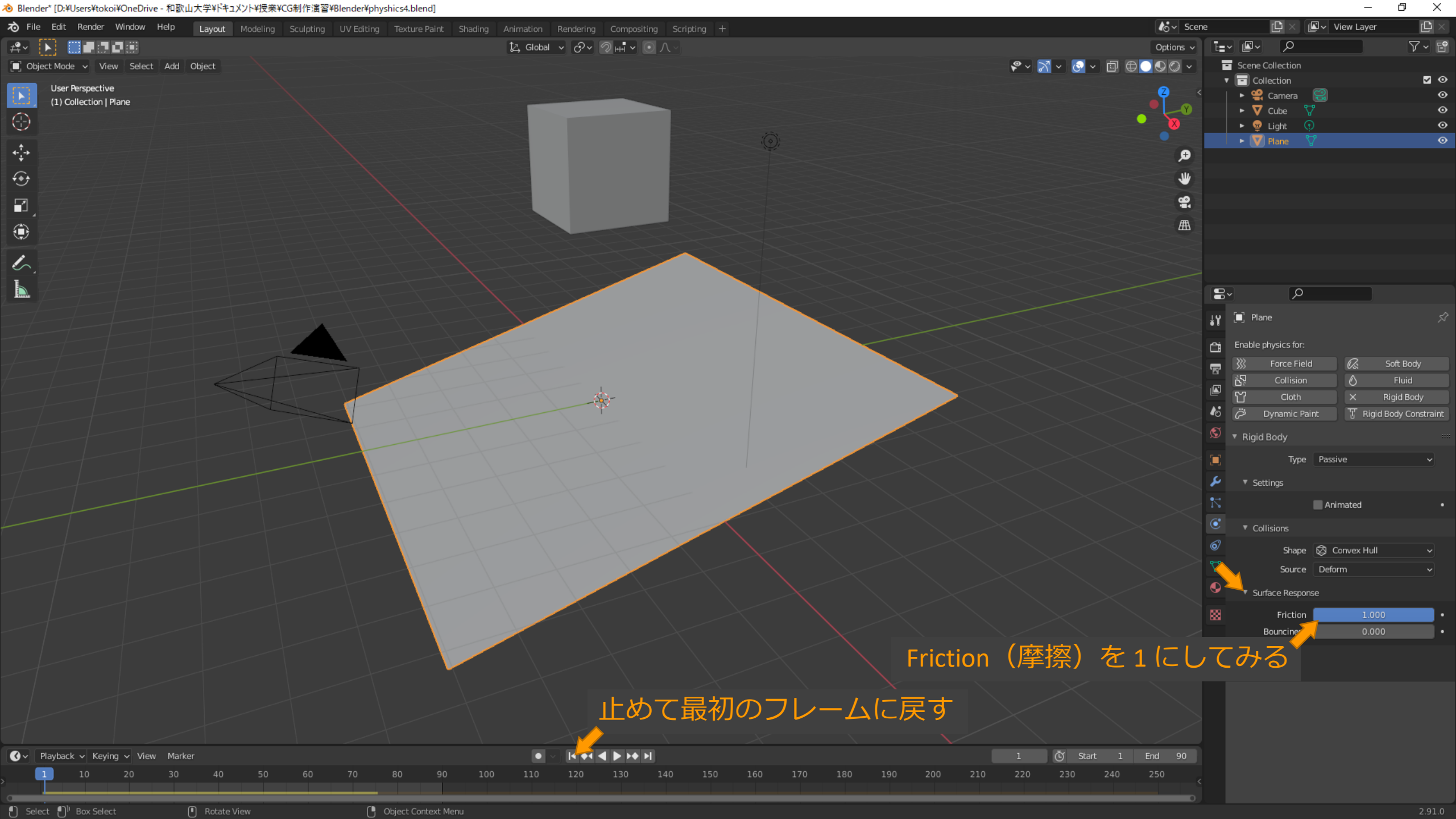
Select Box Select

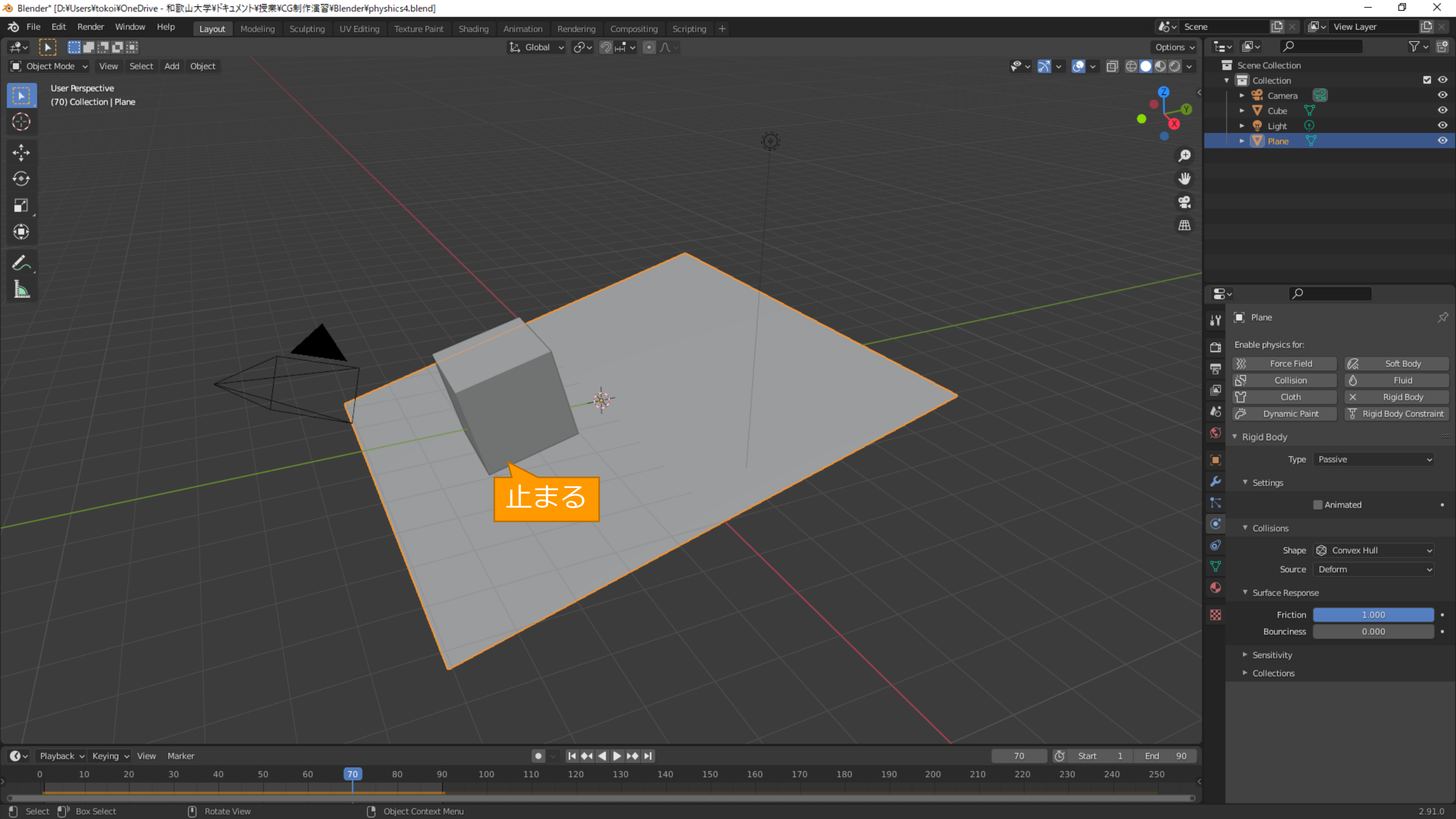
Rotate View

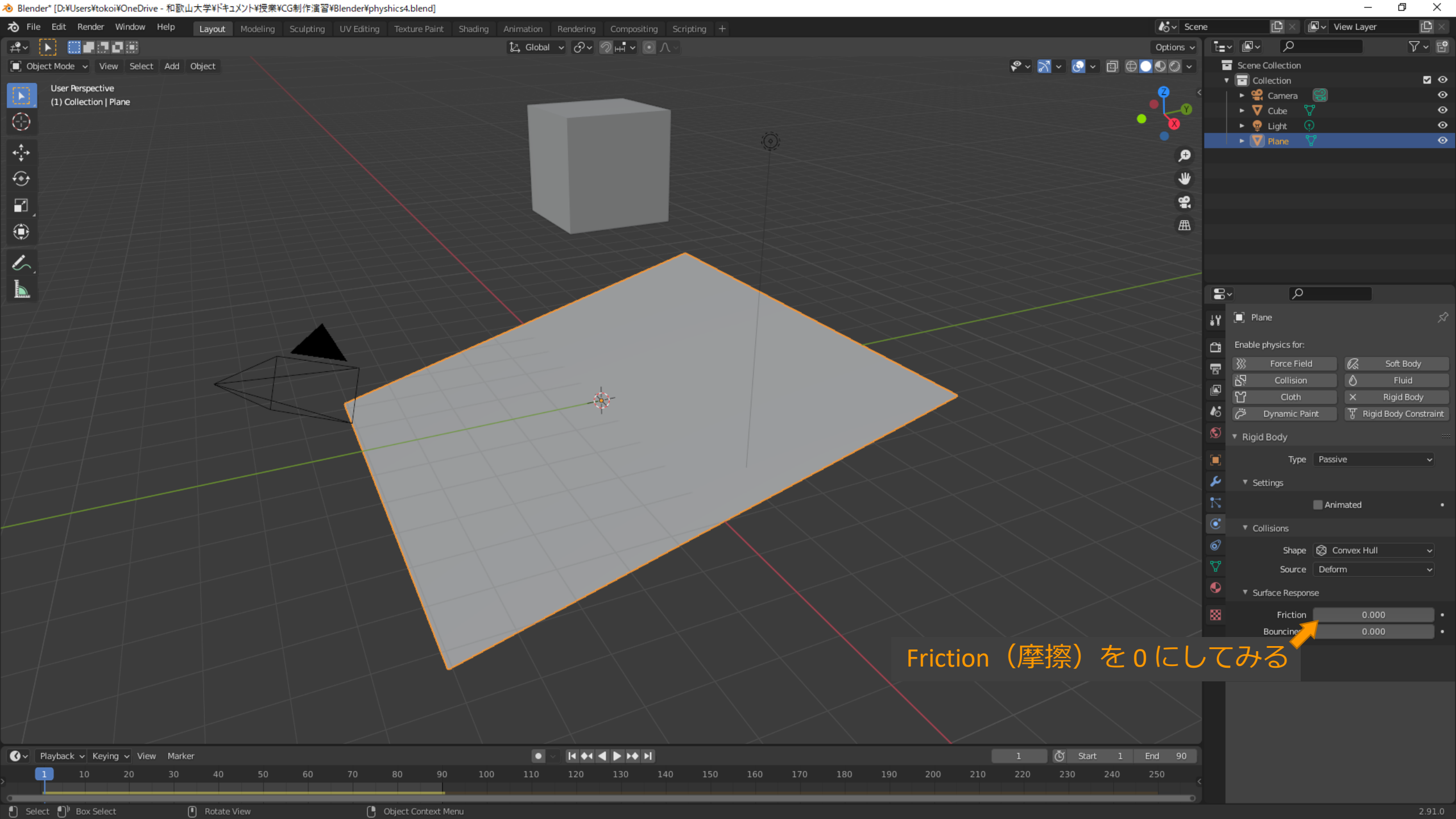
Object Context Menu

Anim Player

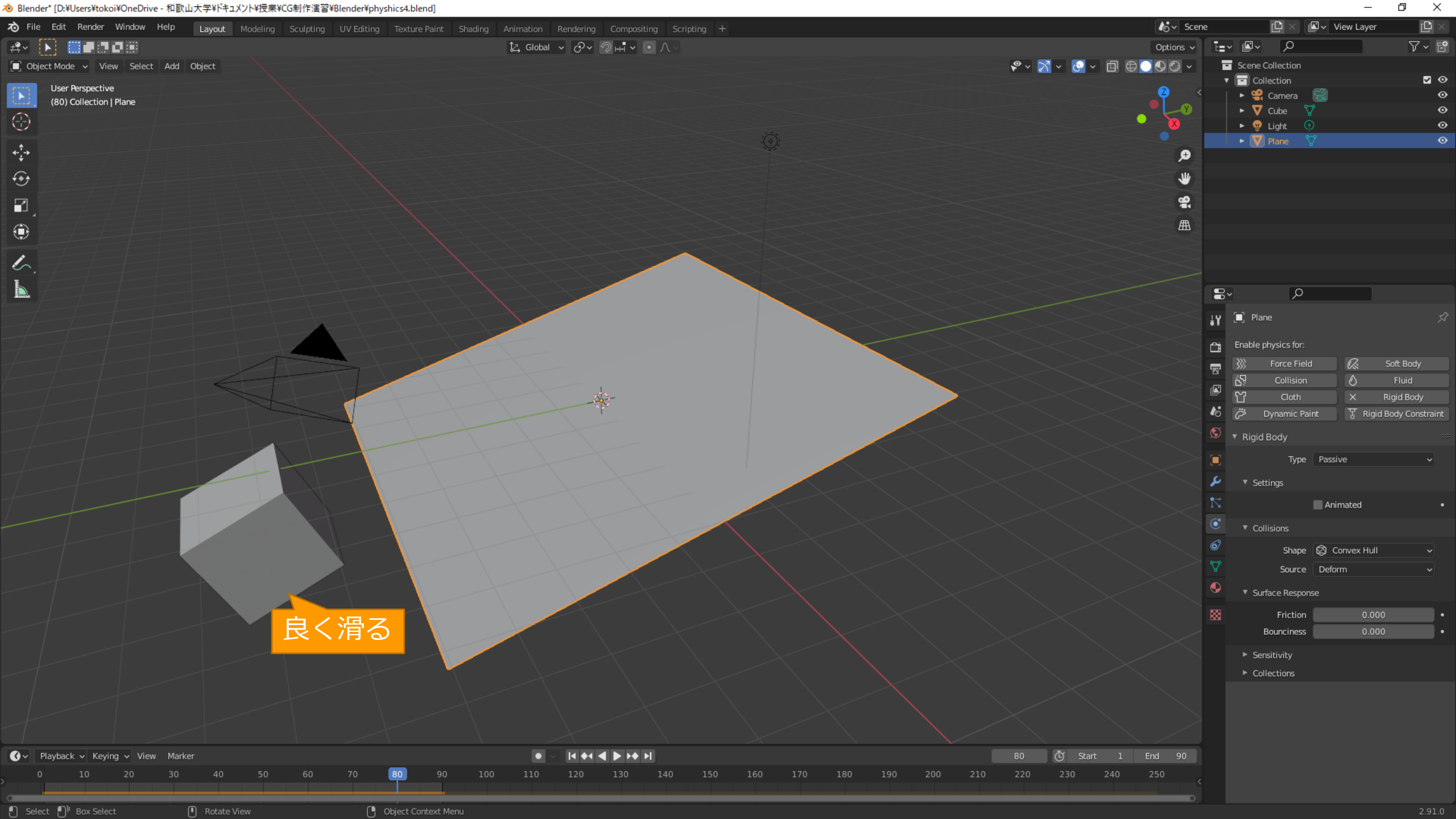
2.91.0



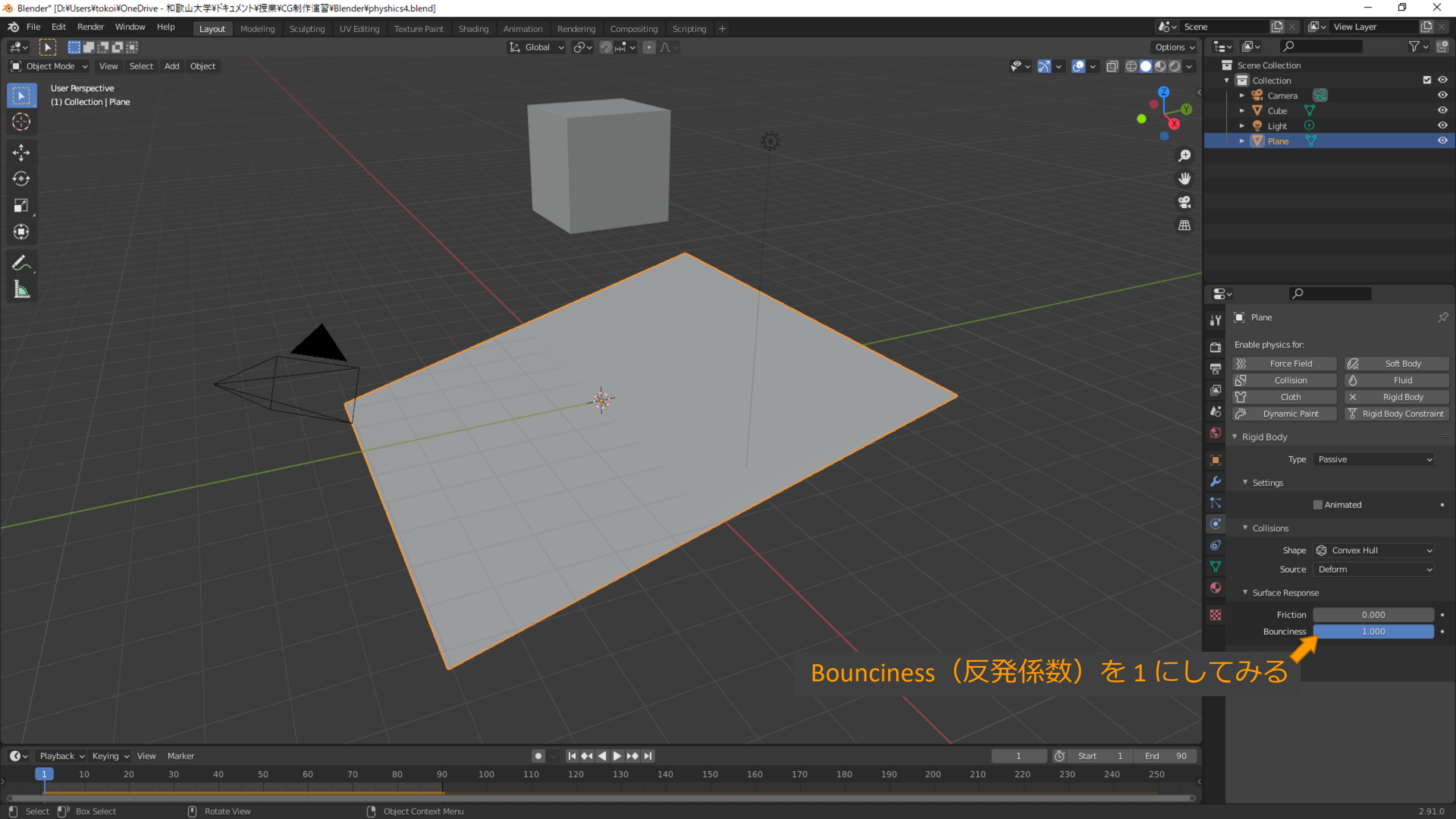




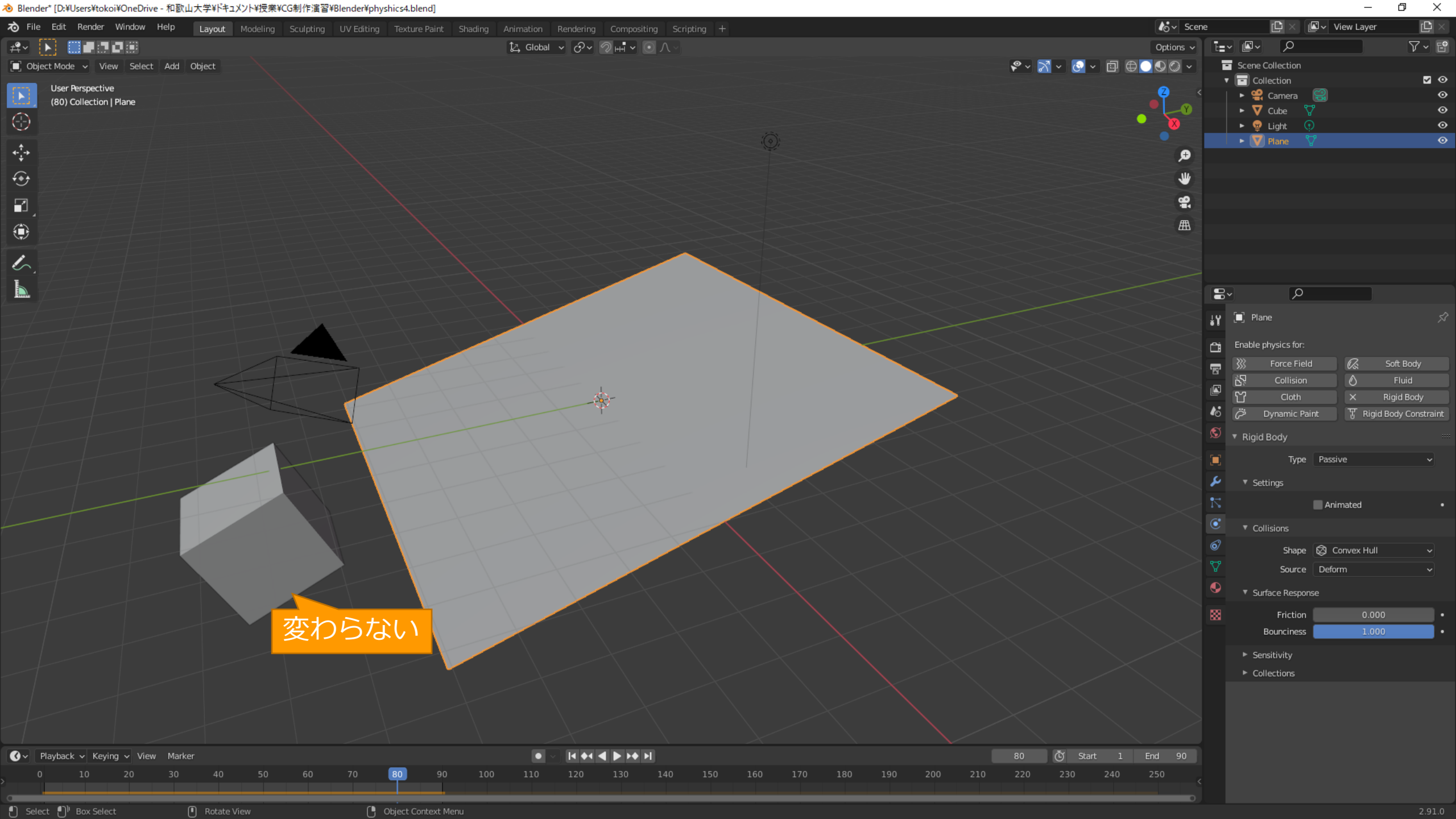
Friction (摩擦) を 0 にしてみる



良く滑る



Bounciness (反発係数) を1にしてみる



変わらない

Scene Collection

- Collection
 - Camera
 - Cube
 - Light
 - Plane

Plane

Enable physics for:

- Force Field
- Collision
- Cloth
- Dynamic Paint
- Soft Body
- Fluid
- Rigid Body
- Rigid Body Constraint

Rigid Body

Type: Passive

Settings

Animated

Collisions

Shape: Convex Hull

Source: Deform

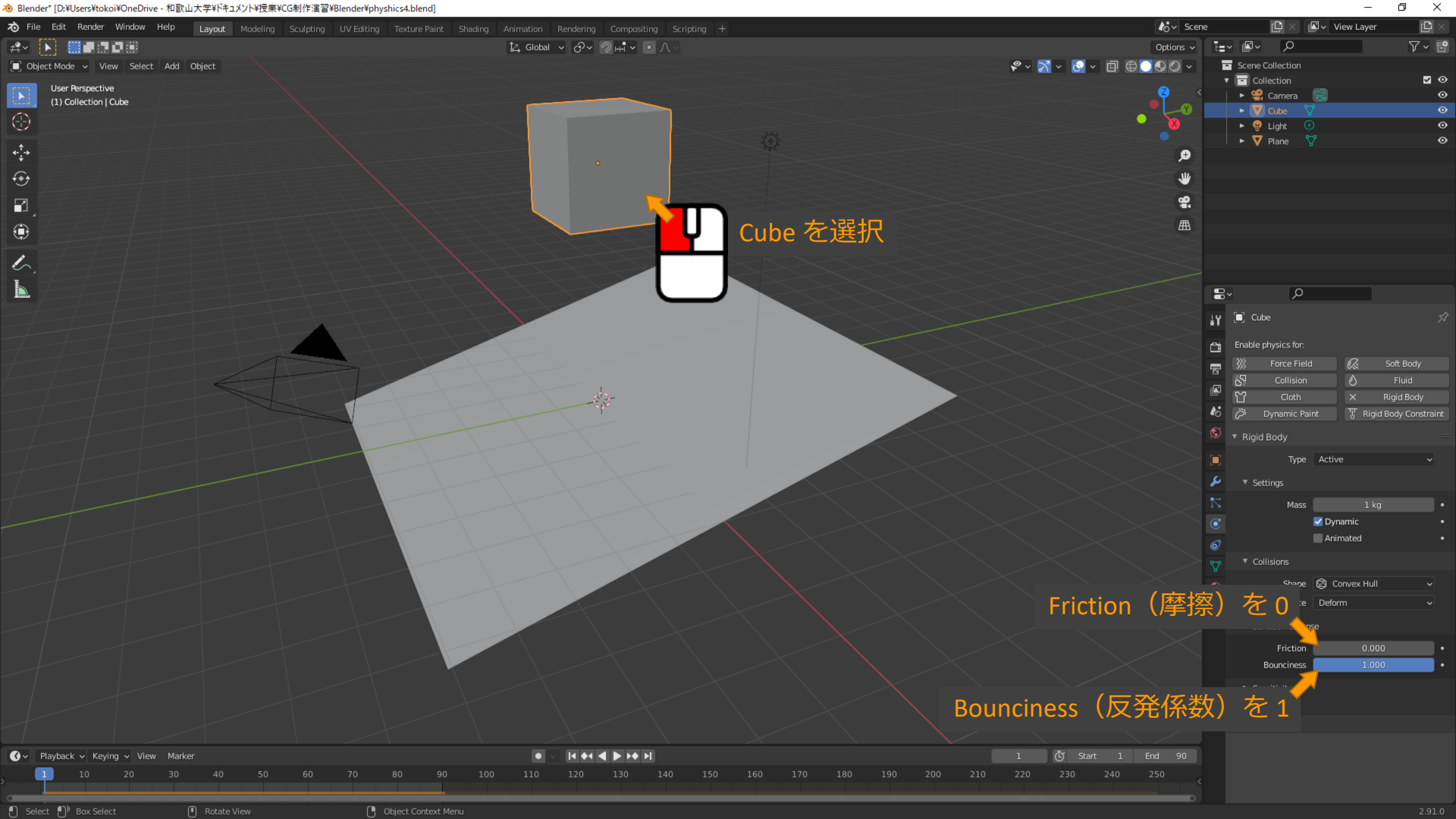
Surface Response

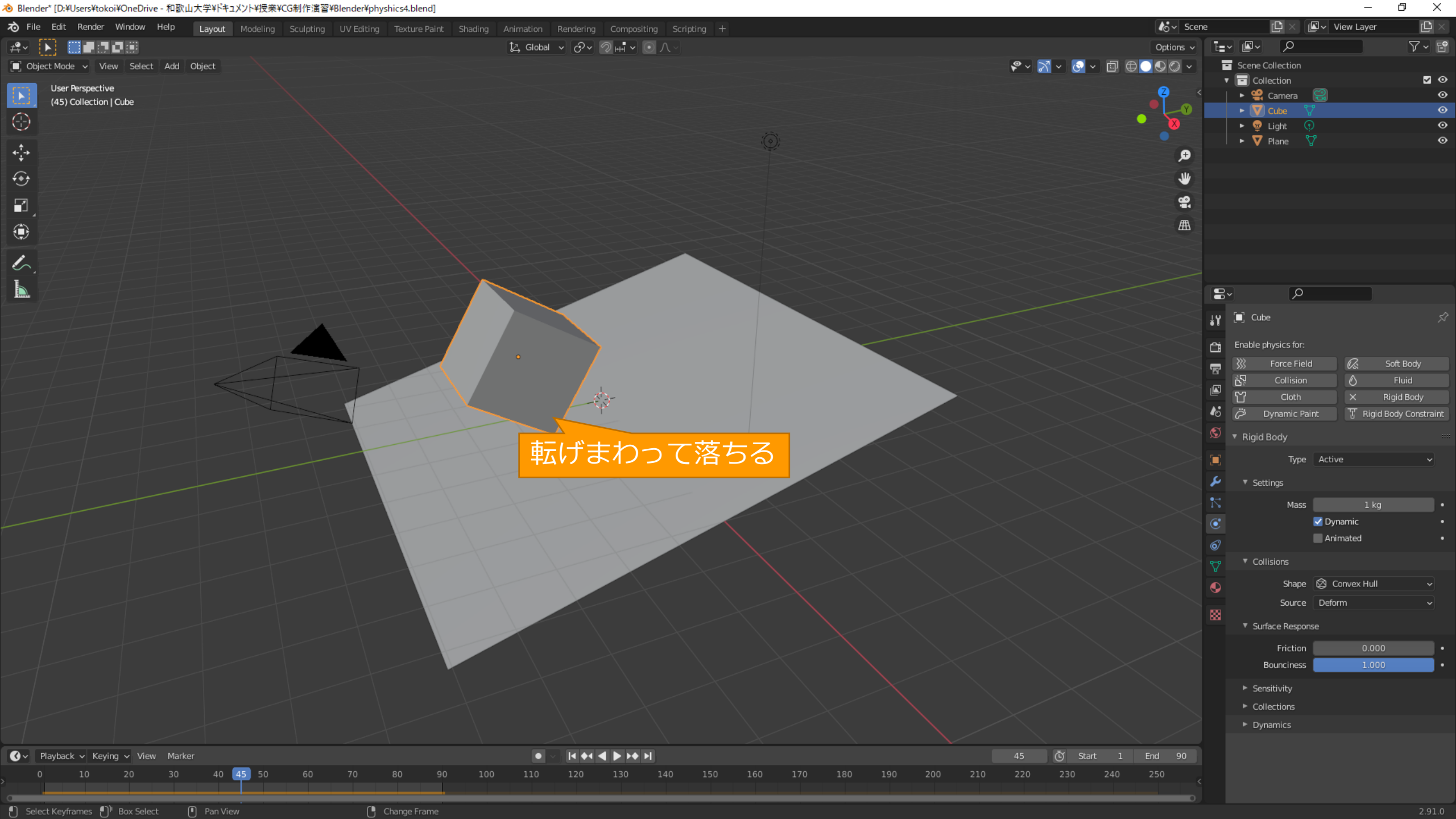
Friction: 0.000

Bounciness: 1.000

Sensitivity

Collections





転げまわって落ちる

Cube

Enable physics for:

Force Field

Collision

Cloth

Dynamic Paint

Soft Body

Fluid

Rigid Body

Rigid Body Constraint

Rigid Body

Type Active

Settings

Mass 1 kg

Dynamic

Animated

Collisions

Shape Convex Hull

Source Deform

Surface Response

Friction 0.000

Bounciness 1.000

Sensitivity

Collections

Dynamics

45

Start

1

End

90

Select Keyframes

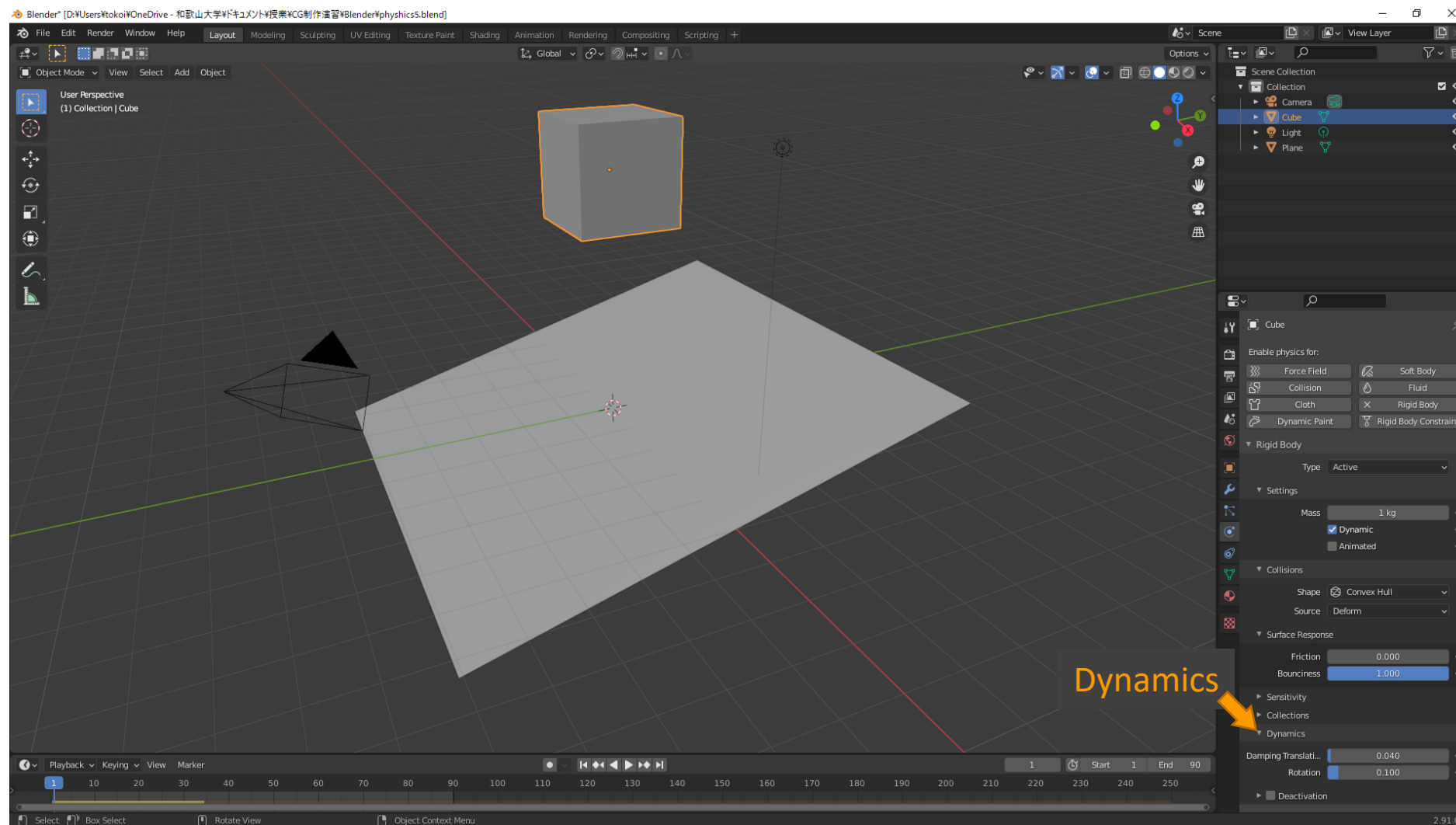
Box Select

Pan View

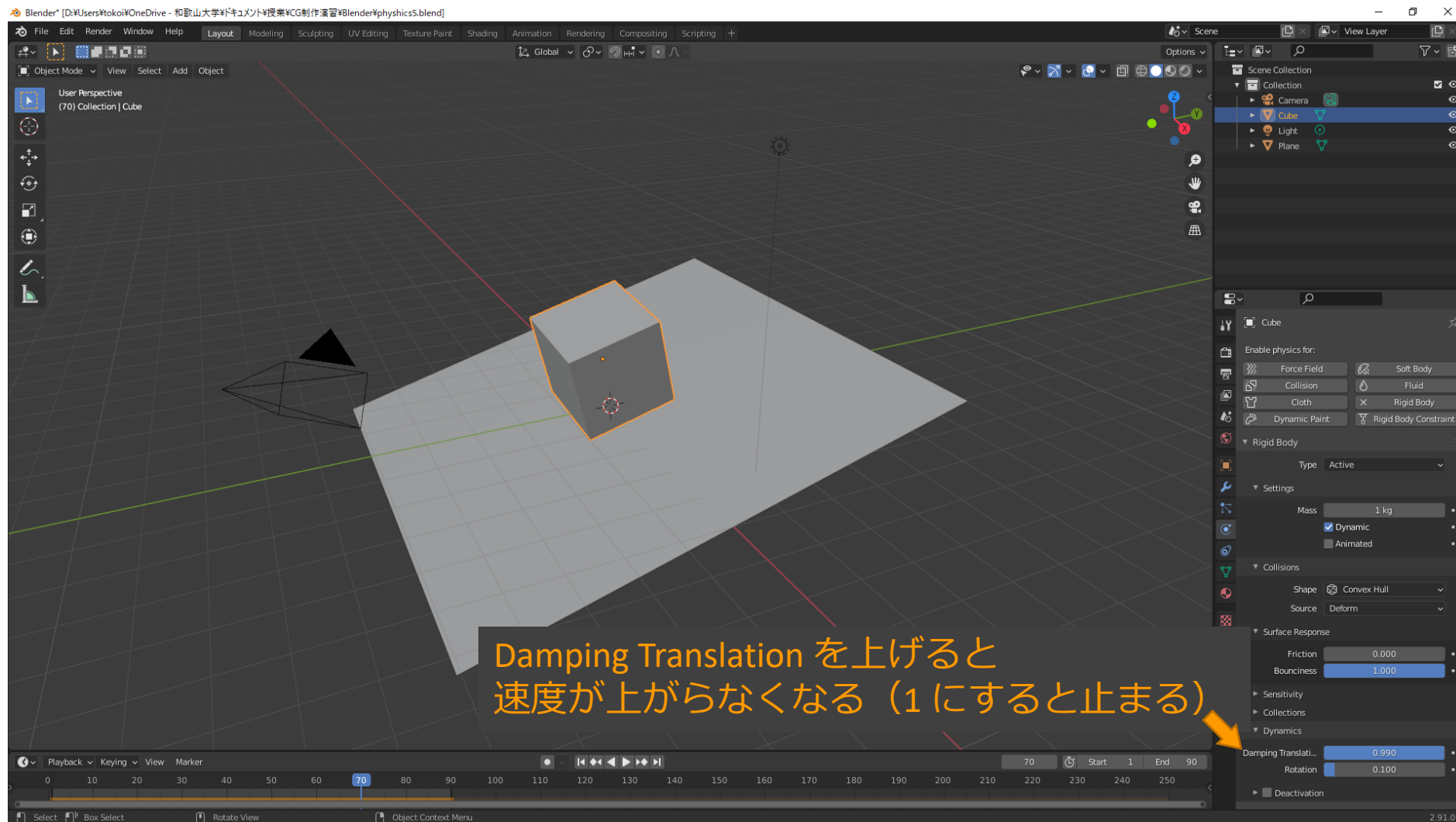
Change Frame

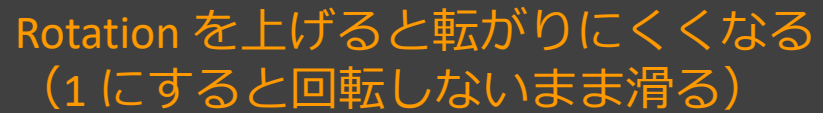
2.91.0

Dynamics (力学) のパラメータ

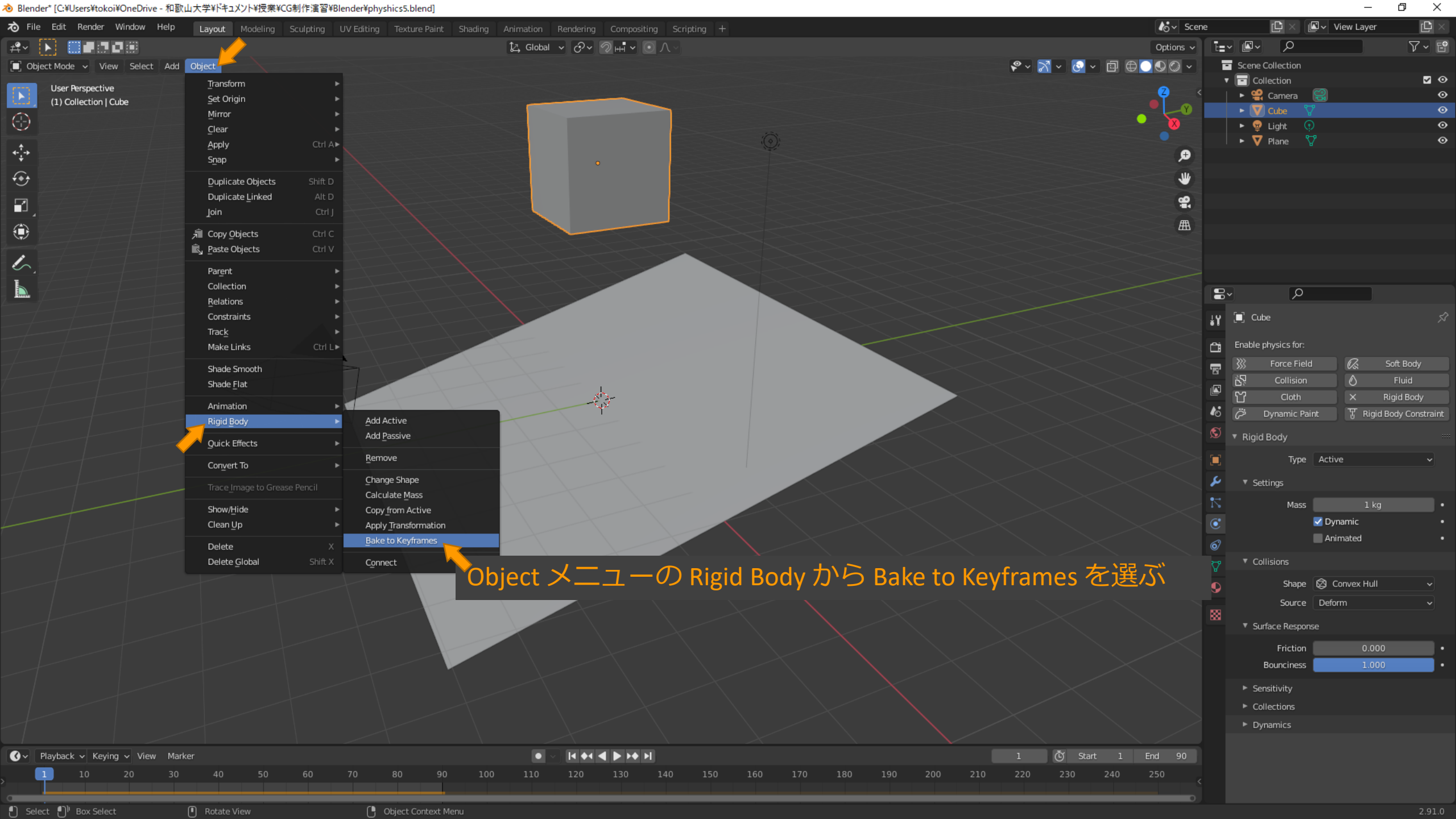


Damping Translation (速度の減衰係数)

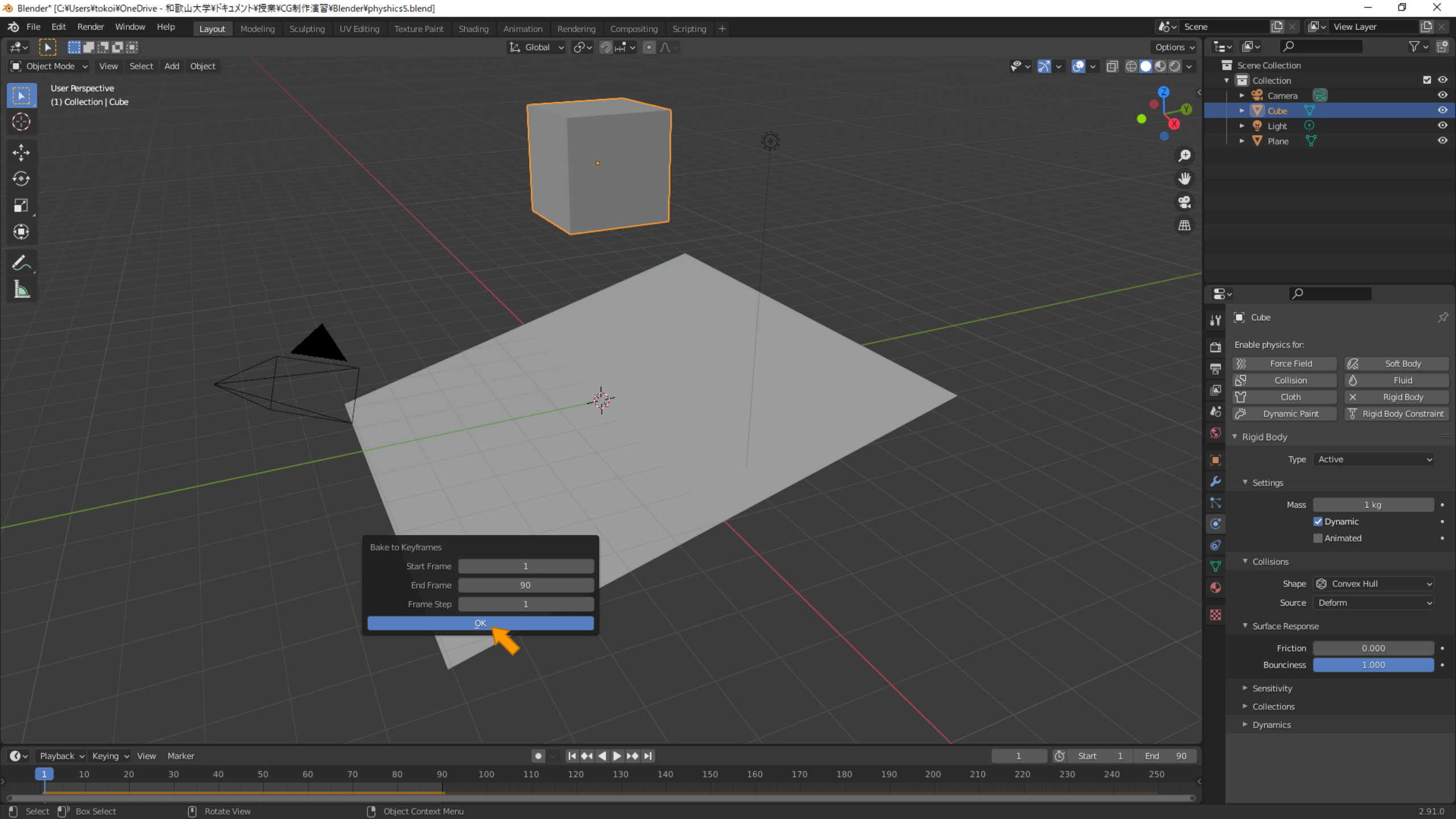




シミュレーション結果の アニメーション作成



Object メニューの Rigid Body から Bake to Keyframes を選ぶ



Bake to Keyframes

Start Frame	1
End Frame	90
Frame Step	1

OK

Cube

Enable physics for:

☒ Force Field	☒ Soft Body
☒ Collision	☒ Fluid
☒ Cloth	☒ Rigid Body
☒ Dynamic Paint	☒ Rigid Body Constraint

Rigid Body

Type: Active

Settings

Mass: 1 kg

☒ Dynamic

☐ Animated

Collisions

Shape: Convex Hull

Source: Deform

Surface Response

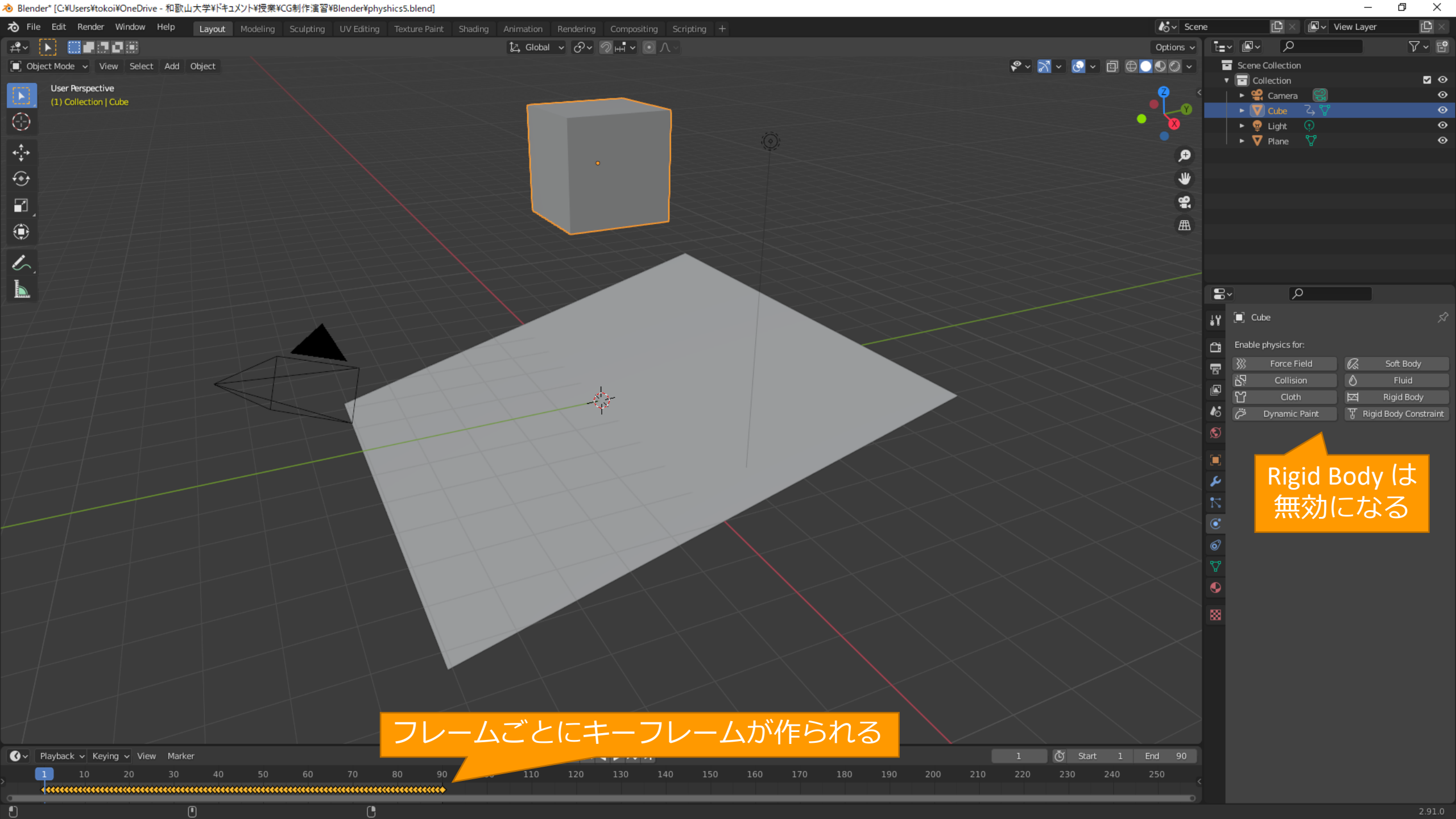
Friction: 0.000

Bounciness: 1.000

Sensitivity

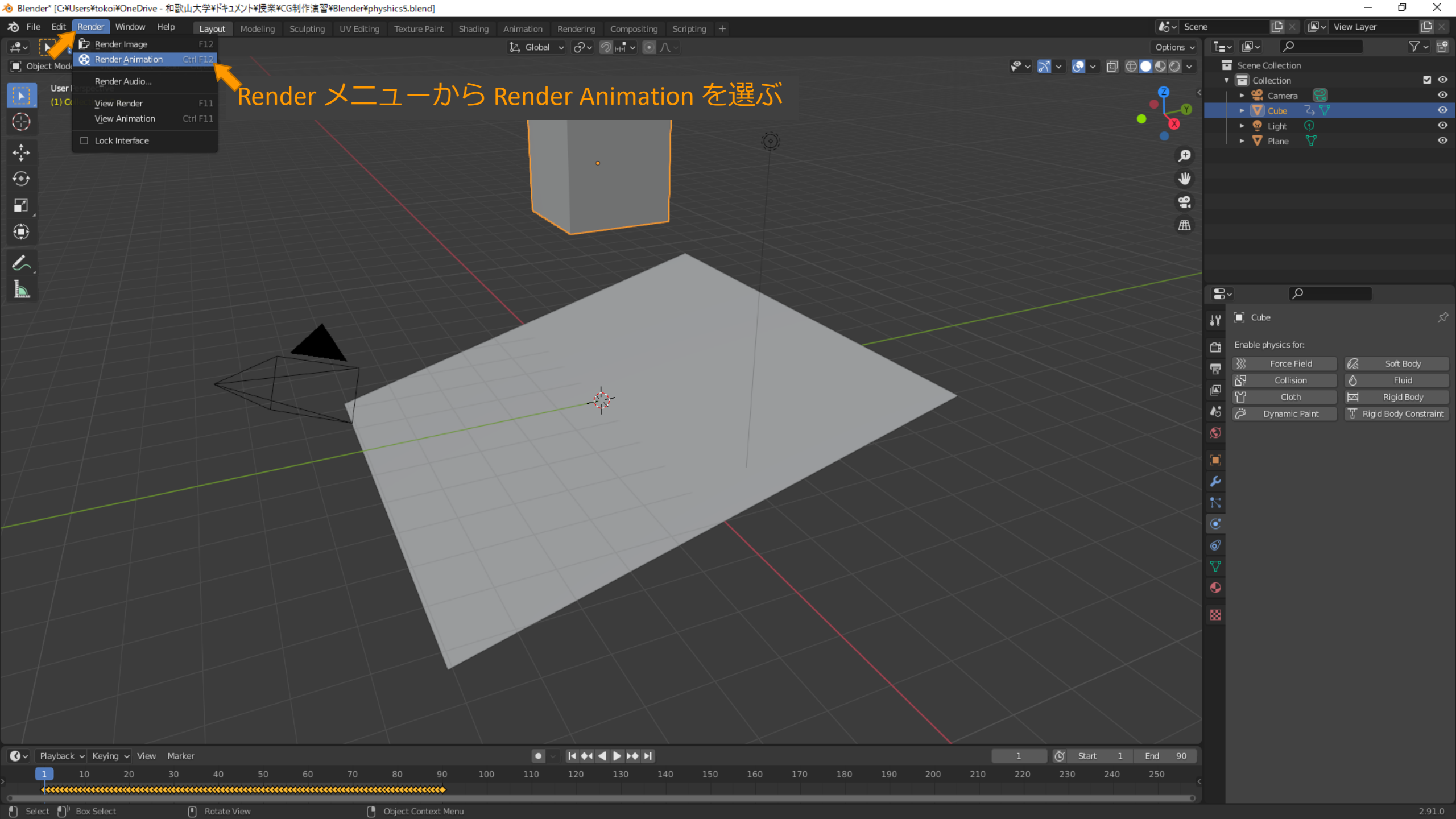
Collections

Dynamics



フレームごとにキーフレームが作られる

Rigid Body は
無効になる



250 フレームを超える剛体シミュレーション

