yiu_bouncer.jsx

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Install procedure

Pls copy the jsx file into the ScriptUI Panels folder.

- Windows
  ...Program Files / Adobe After Effects / Support Files / Scripts / ScriptUI Panels
- Mac
  ...Applications / Adobe After Effects / Scripts / ScriptUI Panels
  If AfterEffects is already running, please restart it.

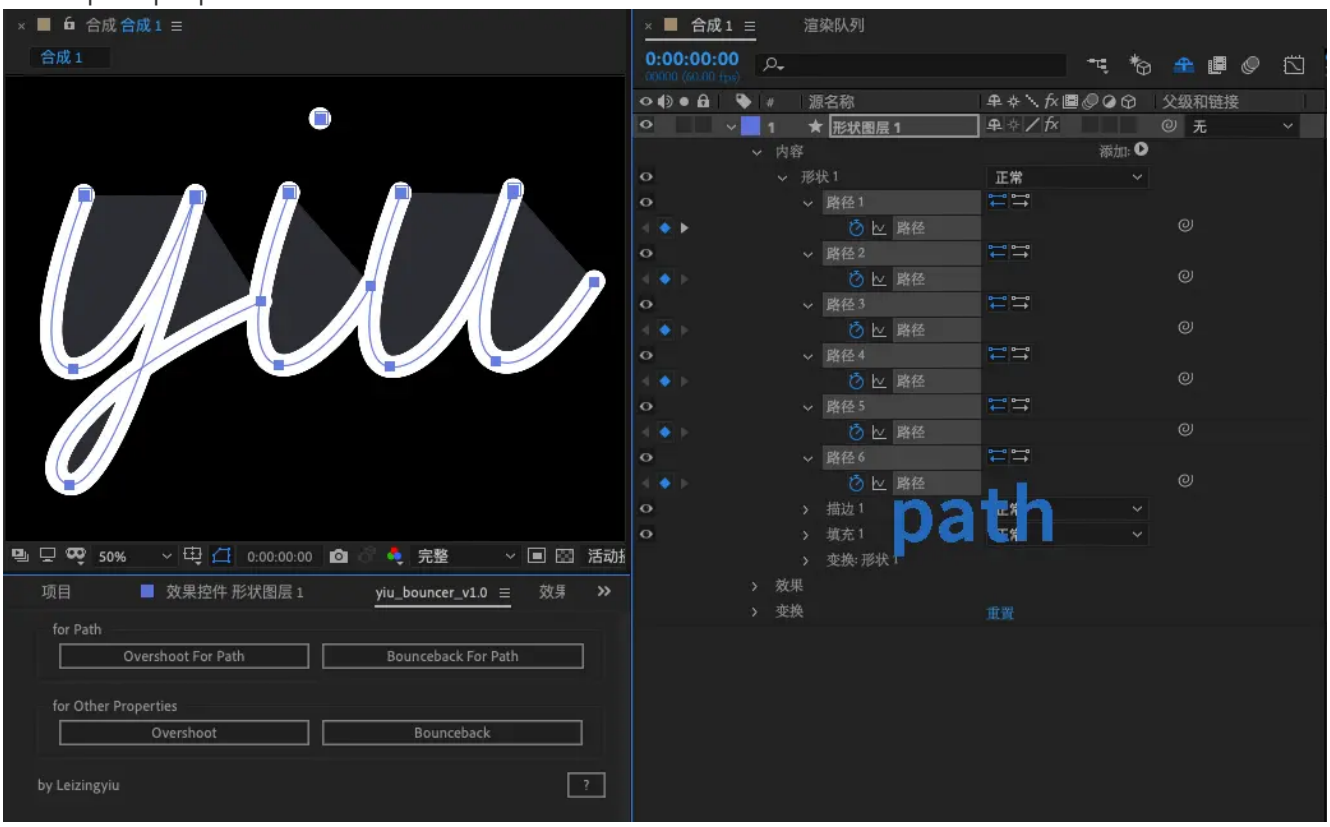
Uninstall procedure

Please delete the jsx file from ScriptUI panels

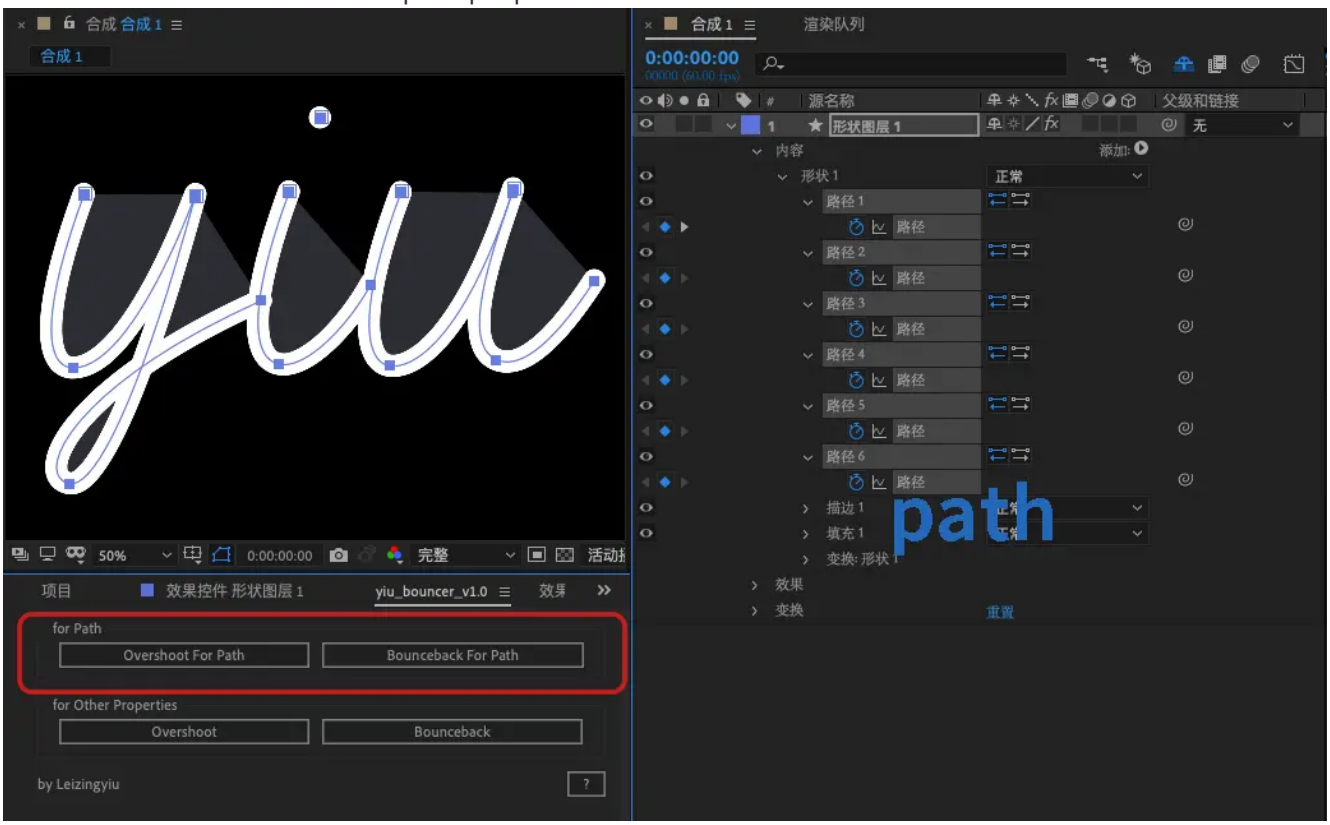
Usage instructions

for path

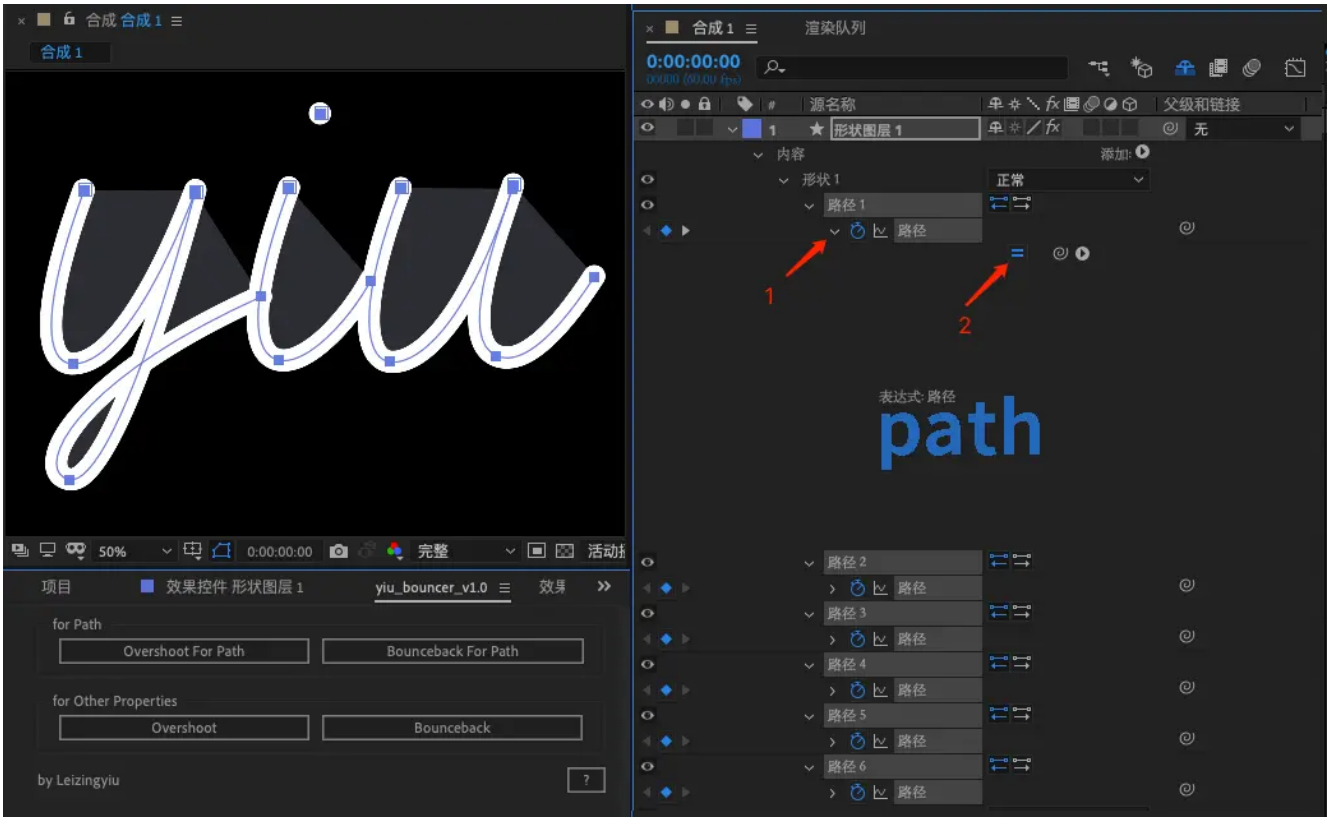
1. Select path properties



2. Click the elastic tool button for path properties

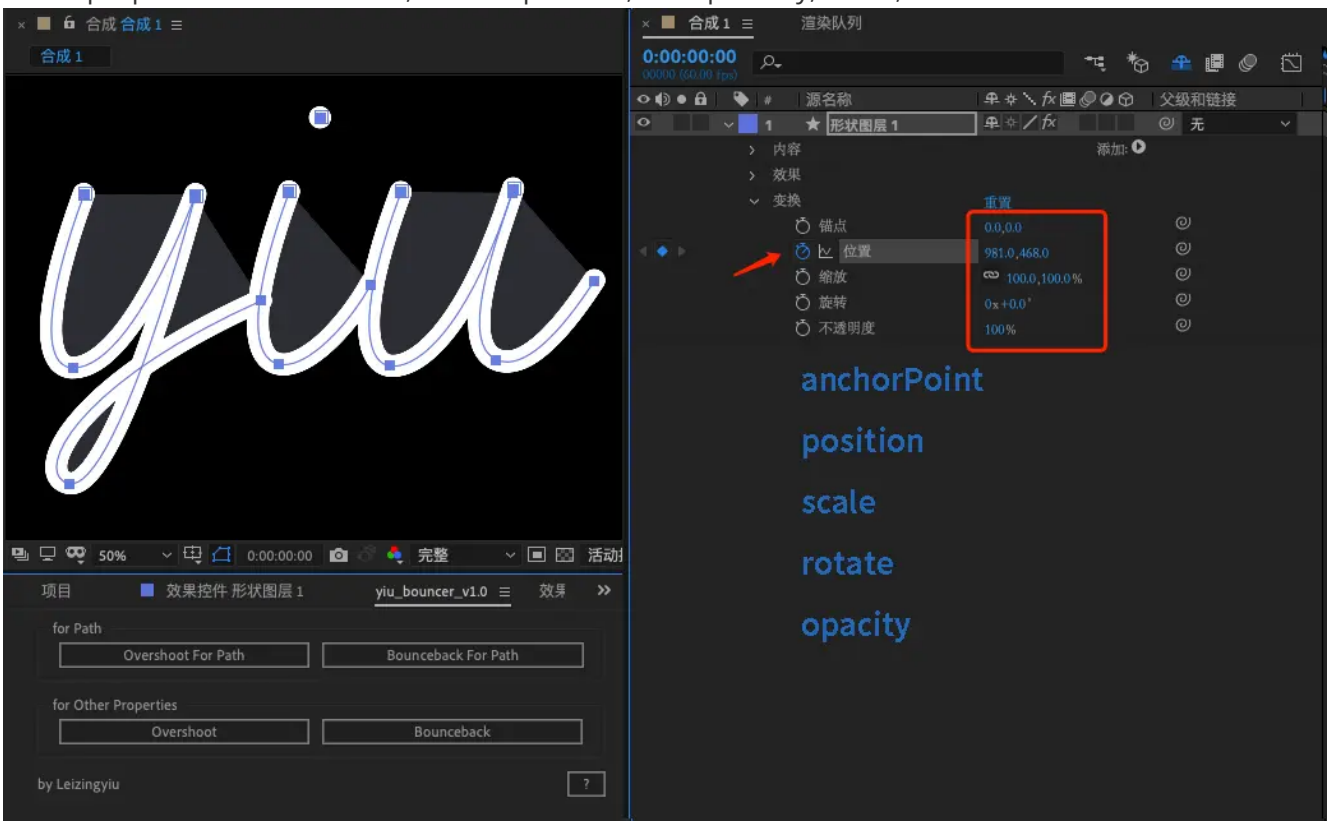


3. When modifying the path, first turn off the expression switch of the path property

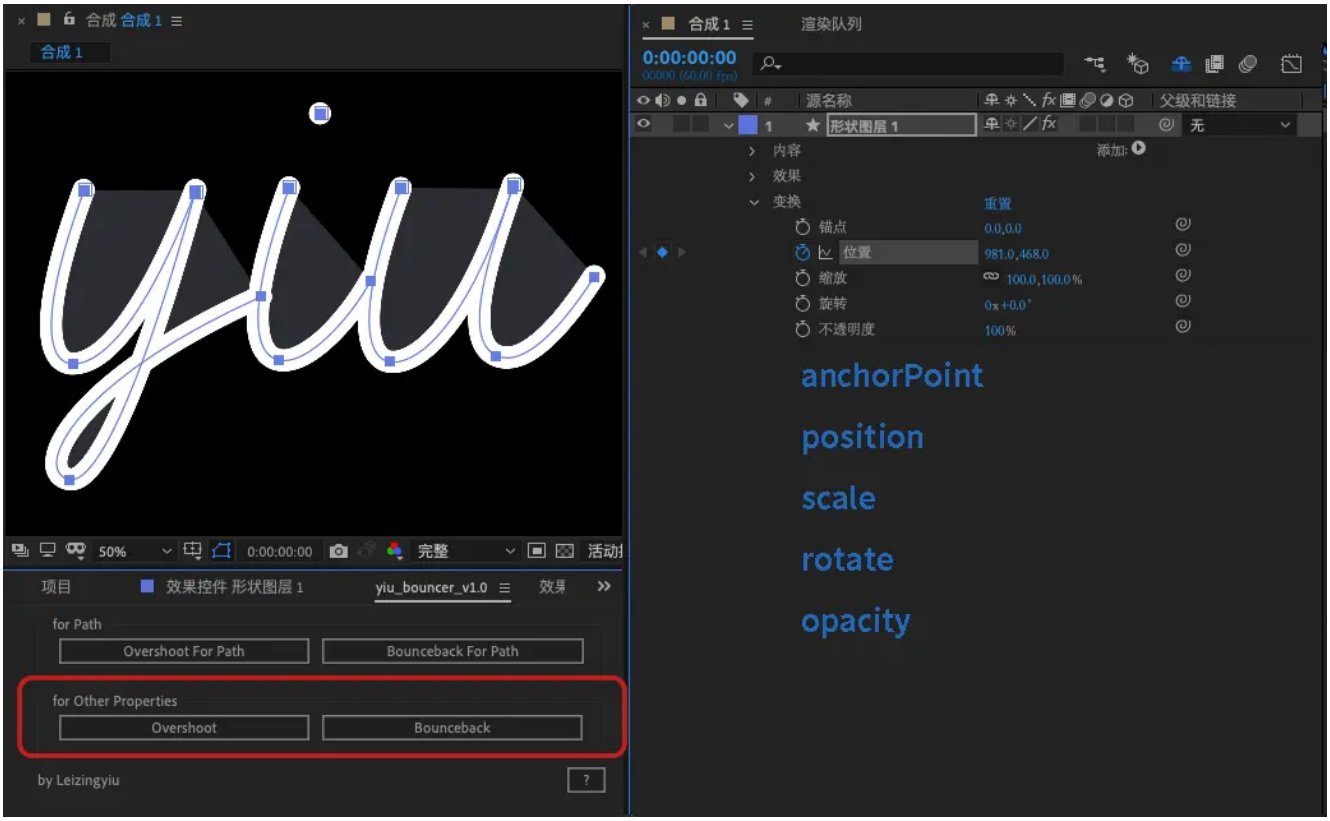


for other properties

1. Select properties with numbers, such as position, transparency, zoom, etc.



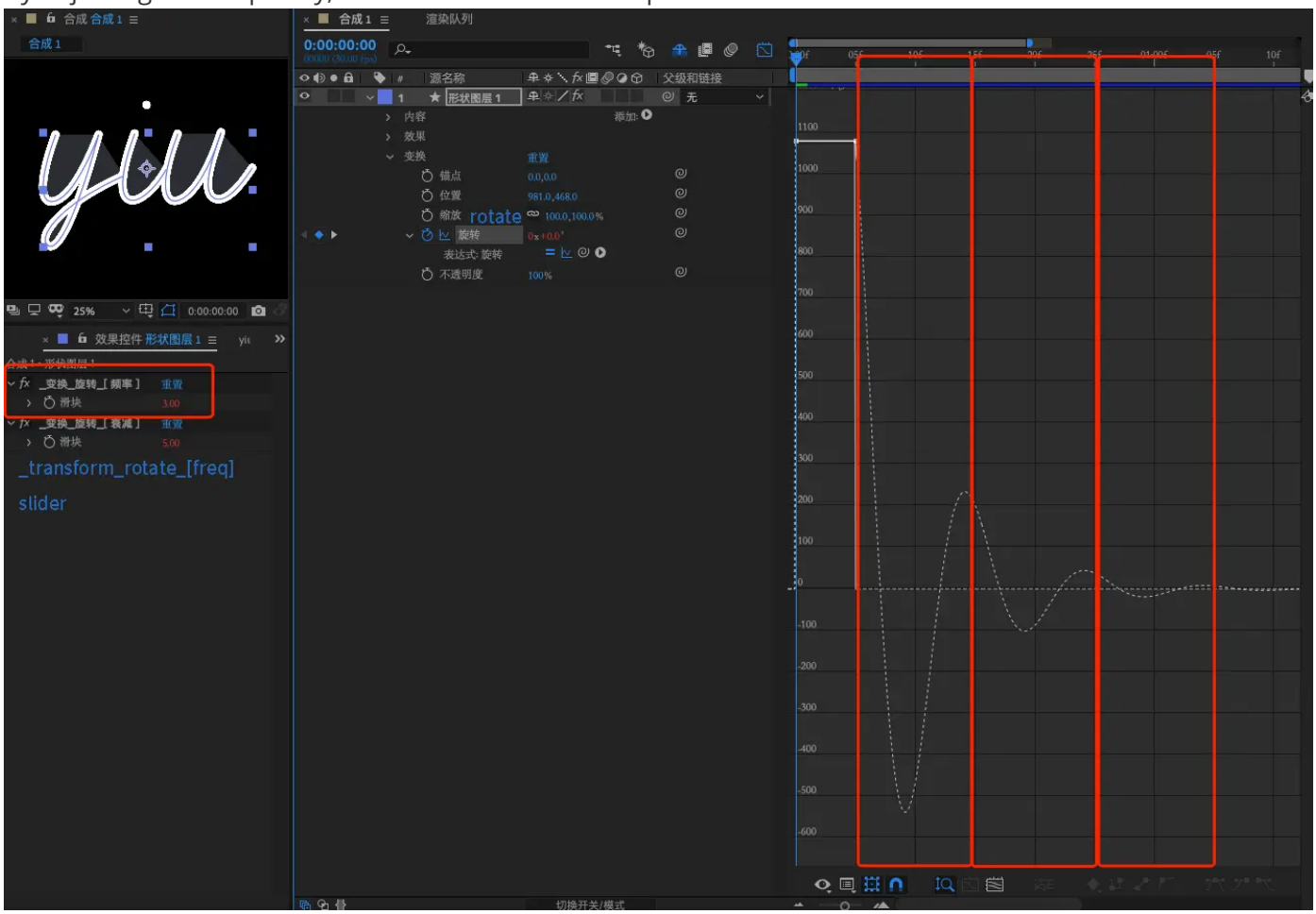
2. Click the elastic tool button for non-path


合成 合成 1
合成 1
yiu
50%
0:00:00:00
完整
项目
效果控件 形状图层 1
yiu_bouncer_v1.0
效果
for Path
Overshoot For Path
Bounceback For Path
for Other Properties
Overshoot
Bounceback
by Leizingyiu
?
合成 1
渲染队列
0:00:00:00
源名称
父级和链接
形状图层 1
无
内容
添加:
效果
变换
重置
锚点
0.0,0.0
位置
981.0,468.0
缩放
100.0,100.0 %
旋转
0x +0.0°
不透明度
100 %
anchorPoint
position
scale
rotate
opacity

parameter description —— overshoot

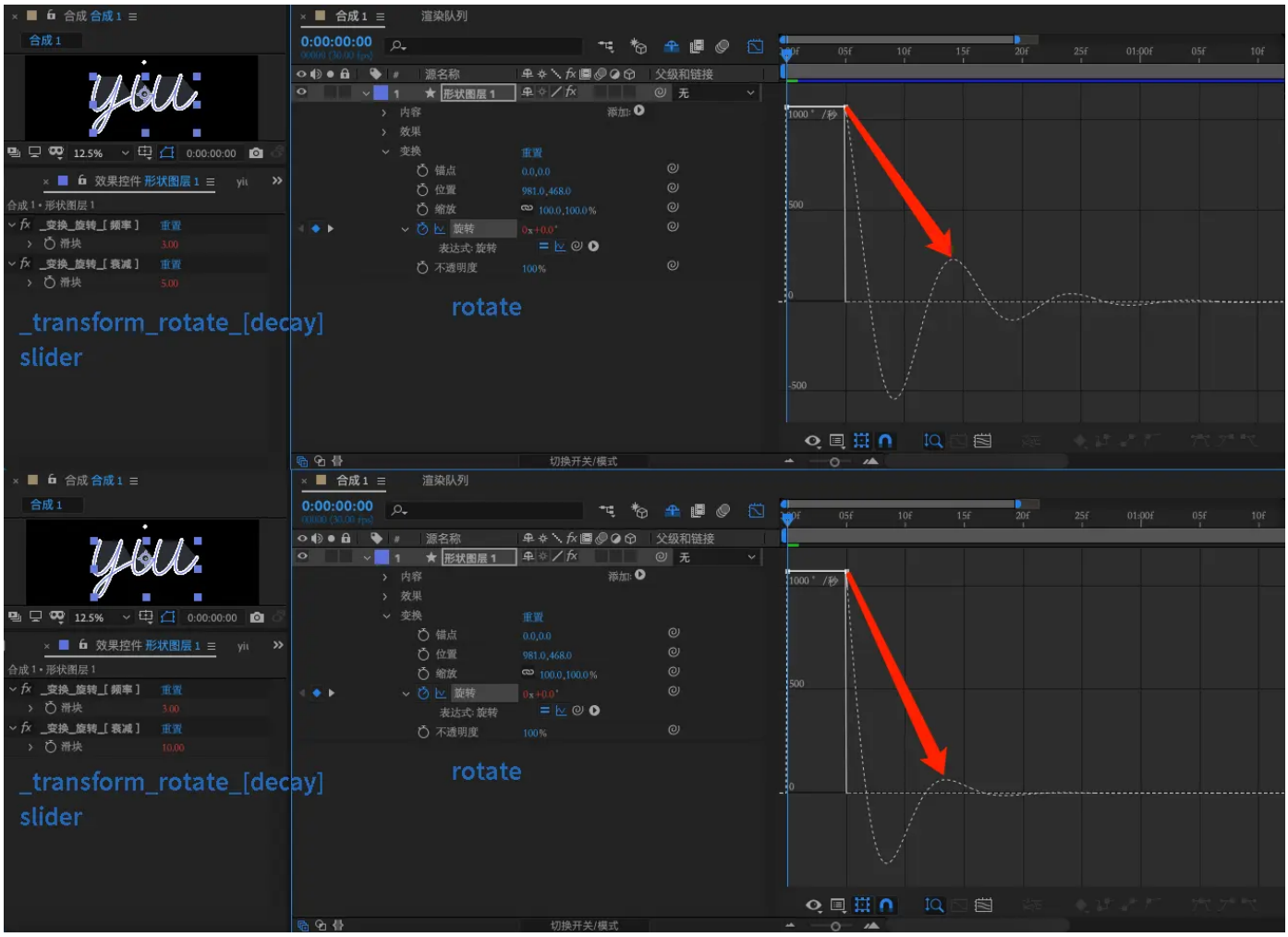
freq : frequency （ overshoot for path / overshoot

By adjusting the frequency, the number of rebounds per second can be modified



decay : Attenuation coefficient （ overshoot for path / overshoot

By adjusting the decay, you can modify the magnitude of the decrease in each rebound compared to the last time



deltaT : Sampling time （ overshoot for path

Since there is no volocity in the path property expression, when calculating for each path point, it is necessary to obtain the position of the point a short time before the key frame, and this short time is the sampling time.
By adjusting the sampling time, a slightly different initial velocity value and initial direction can be obtained;
The shorter the sampling time, the closer to the instantaneous speed of the key frame moment.

k : Exaggeration coefficient （ overshoot for path

This property defaults to the inverse of the sampling time,
For example, the sampling time is 1/1000, and the exaggeration coefficient is 1000;
In some occasions, more exaggerated elasticity is required, and this coefficient can be modified to directly enlarge the elastic effect.

easeK : Smoothing factor （ overshoot for path

Since the elastic formula is to add an additional value of elasticity to the property value at the current time,
It is possible that when approaching the next key frame, the position of the path point deviates far, which may cause a freeze before the next key frame.
This property is used to smooth the current elasticity to the next key frame;

The smoothing method is several powers of the trigonometric function cos;
The property itself has been enlarged by 100 times, that is, when 100 is filled in, the property is automatically calculated as 1;
The smoothing method is the 1st power of the cos function;
The larger the value, the later the transition to the next key frame, the longer the elastic effect will be.

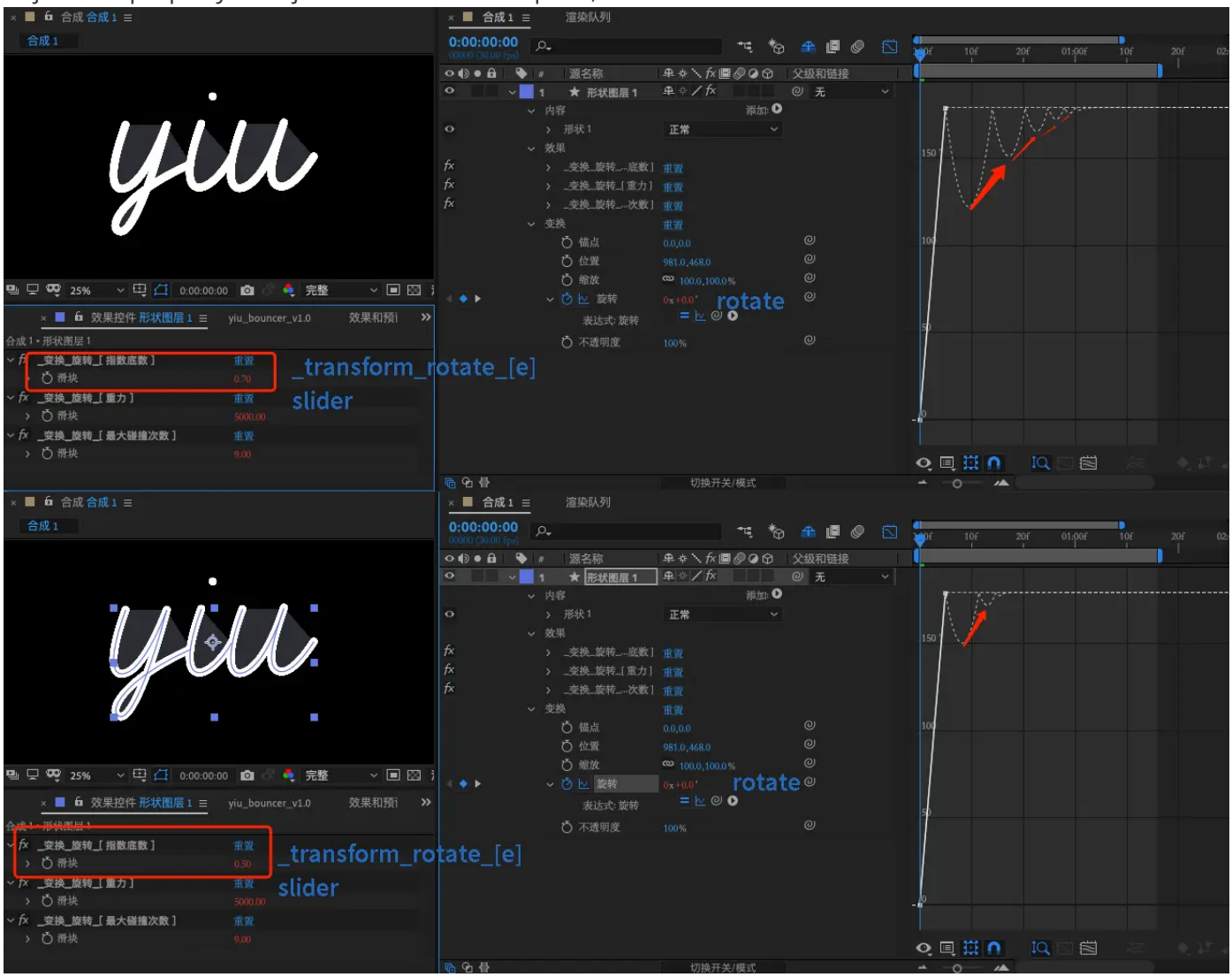
easeBoo（ overshoot for path

Smoothing coefficient switch, convenient to directly observe the comparison before and after smoothing

parameter description —— bounce back

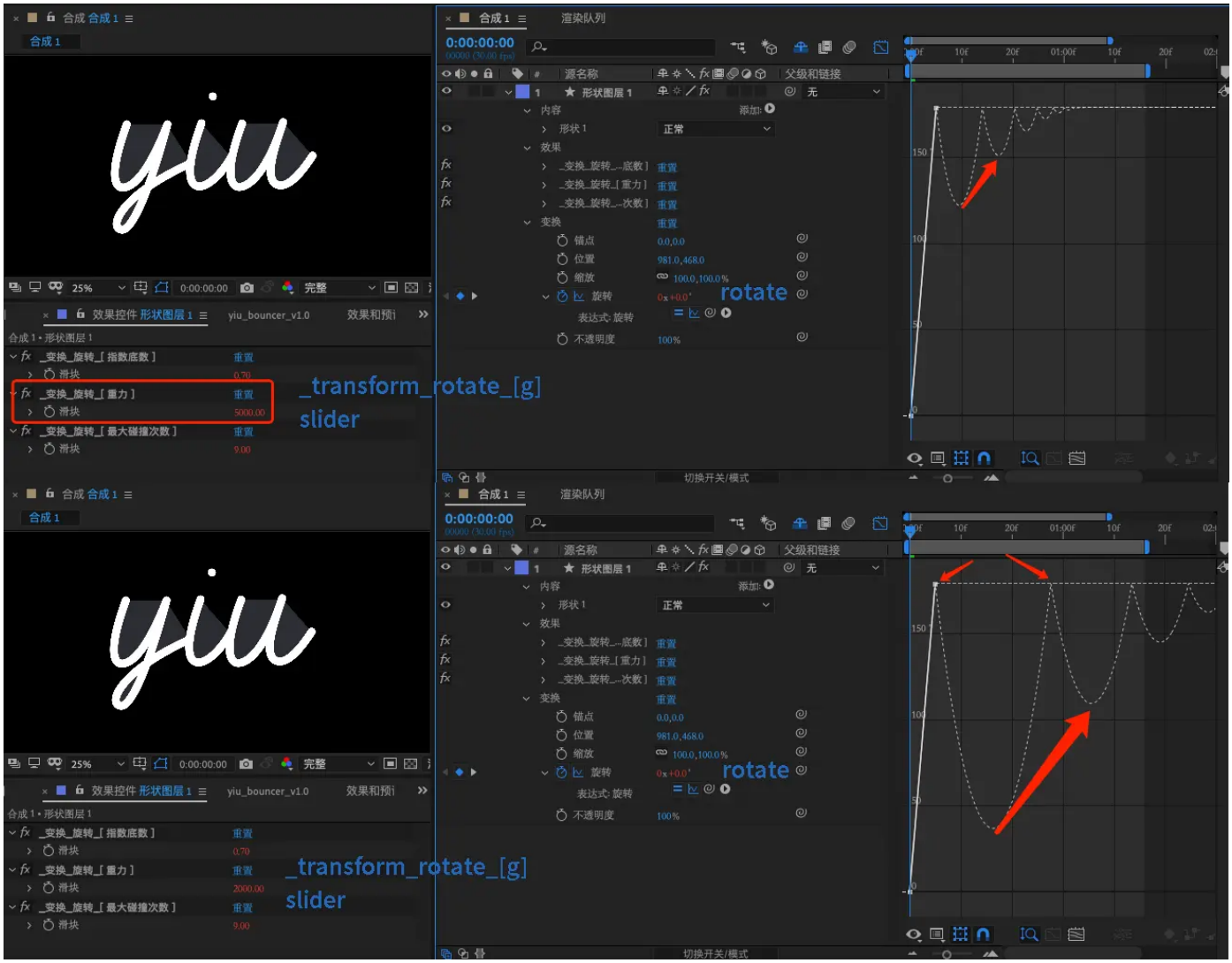
e : Base index

When an object collides, the attenuation amplitude of each rebound conforms to the exponential function curve,
The default is about the base of natural logarithm 0.7,
Adjust this property to adjust the attenuation speed;



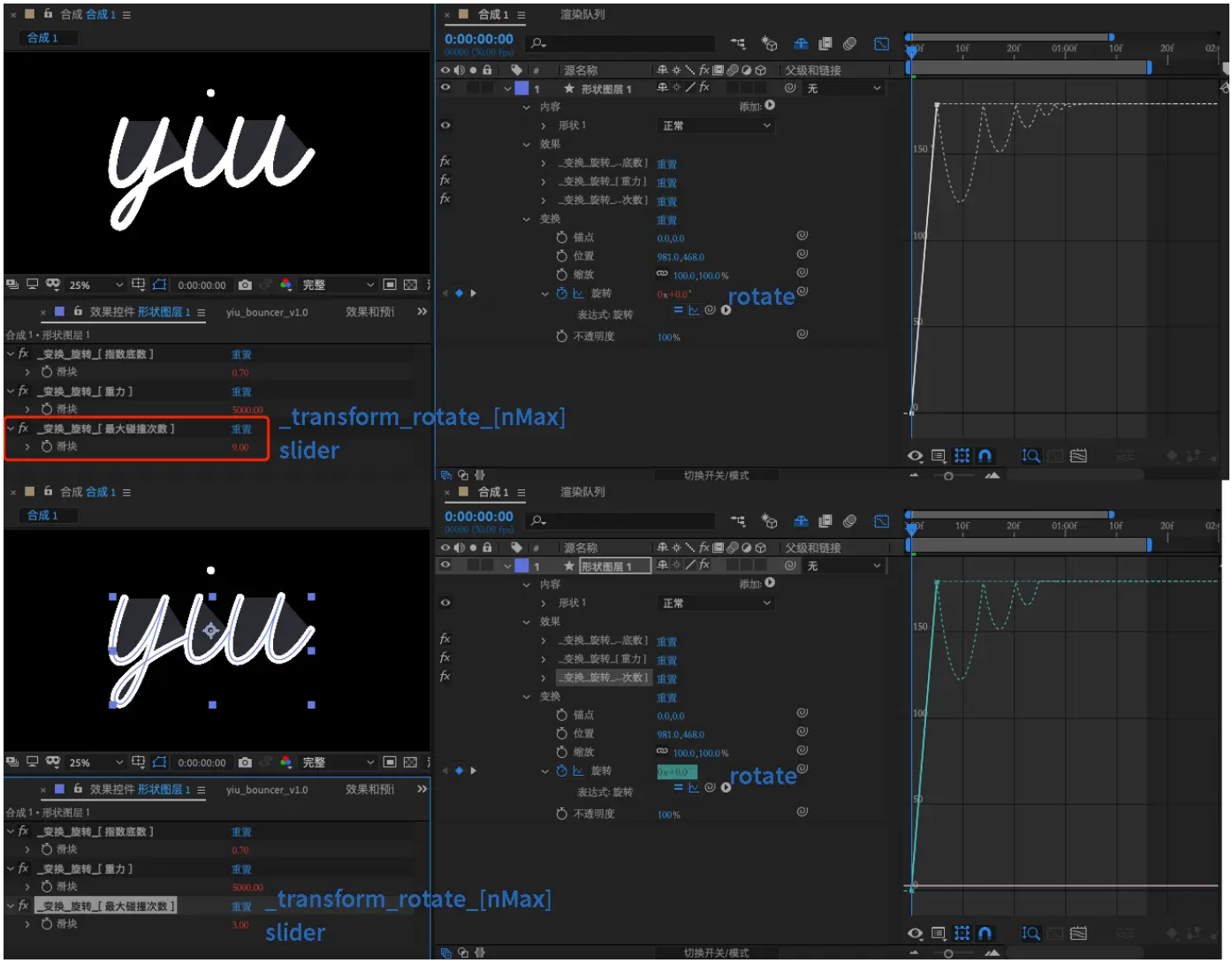
g : Gravity

Gravity controls the height of each bounce. The smaller the gravity, the higher the bounce height, and the longer it takes for each bounce.



nMax : Maximum number of collisions

The maximum number of collisions each time the elasticity is generated.



deltaTime : Sampling time

Similar to the sampling time in overshoot, the speed value and speed direction at the time of collision can be adjusted

Version historey

| version | date | directions
|
| ------- | ---------- | ---------- |
| v1.0 | 2021-09-12 | Release scripts to support the rebound and rebound of paths and digital attributes; when the path rebounds, it supports smoothing to the next key frame. |

yiu_bouncer
Version: 1.0
for Win & Mac AfterEffects 15.0 (CC) or later.

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Coding by leizingyiu