

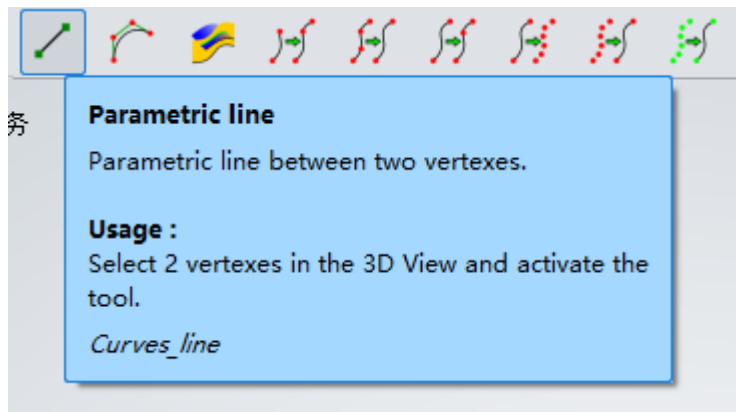
# 曲线curves工作台

本工作台为插件工作台，需要从addon商店中下载并获取；其中本工作台包含曲线、混合曲线、多重样性曲线等工具。

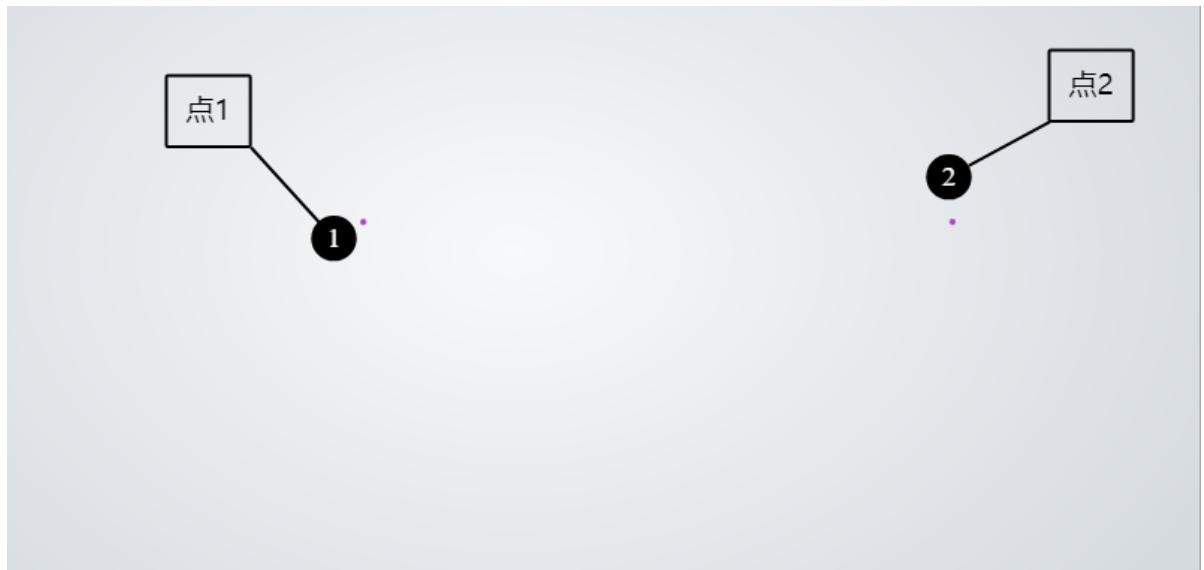


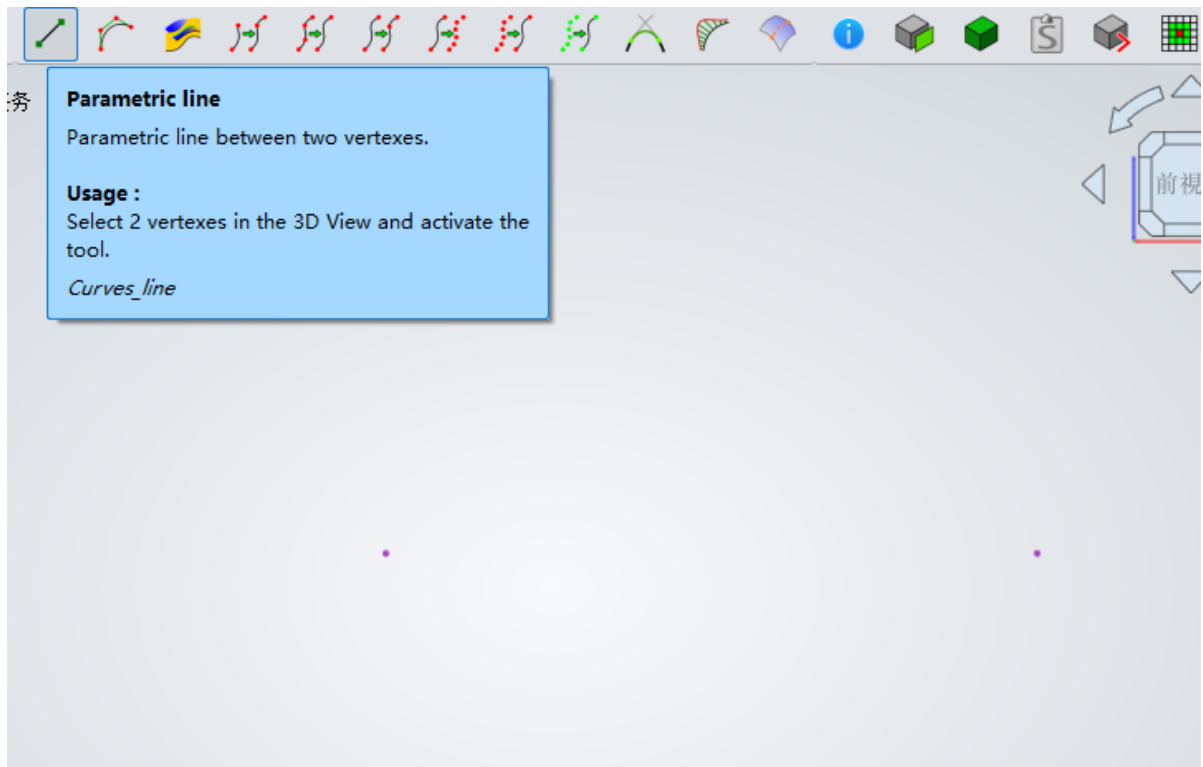
(curves工作台工具栏)

## 创建直线段

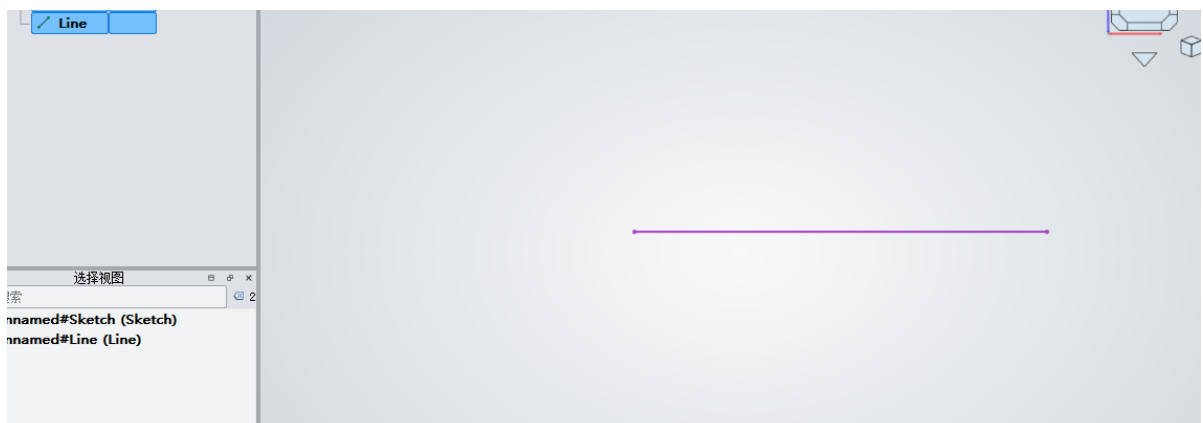


从视图选取顶点最少两个创建一根直线段。



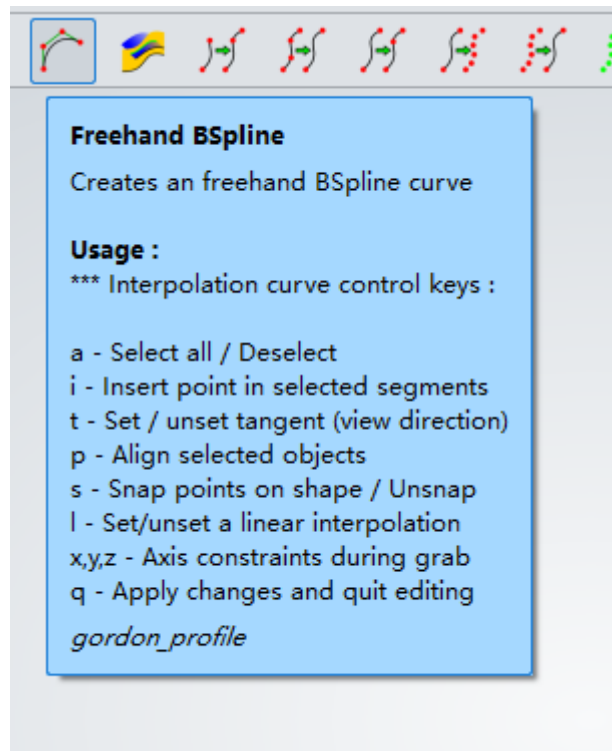


在选中状态下点击创建直线段按钮创建完成。

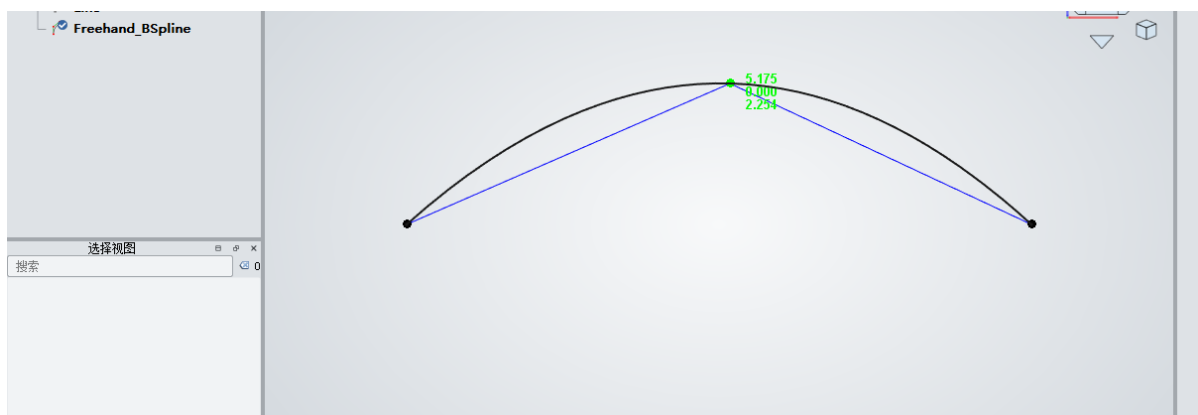


(创建直线段)

## 创建自由曲线



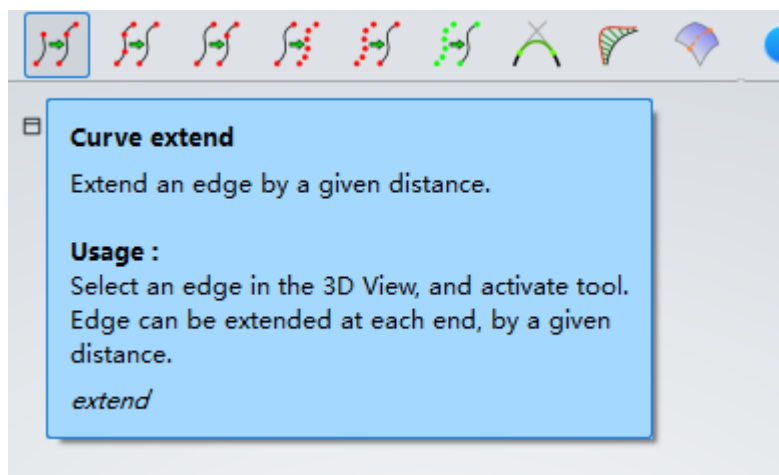
在视图中放置一根自由式曲线；此对象可以单独放置且曲线可调整任意控制点和位置。

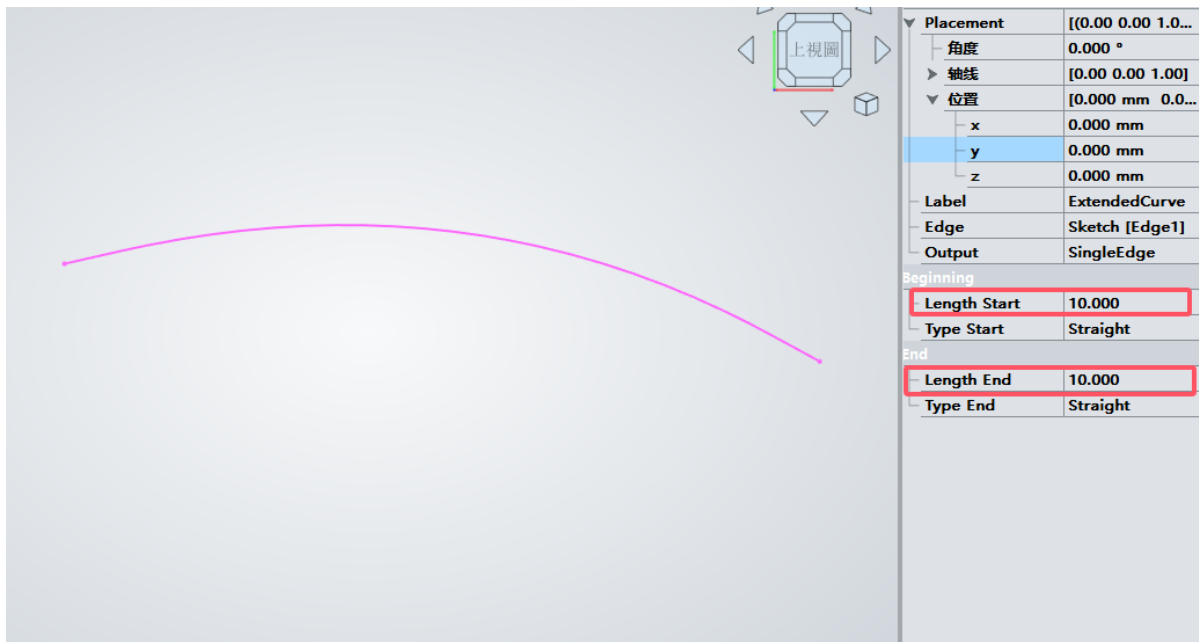


默认创建一根三点两阶曲线。

## 拉伸曲线

选定一根曲线将其从两段进行扩展

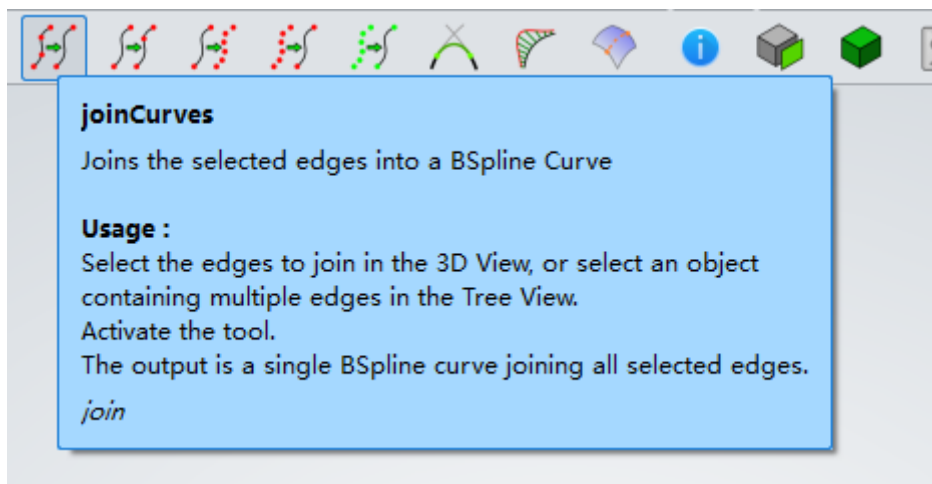


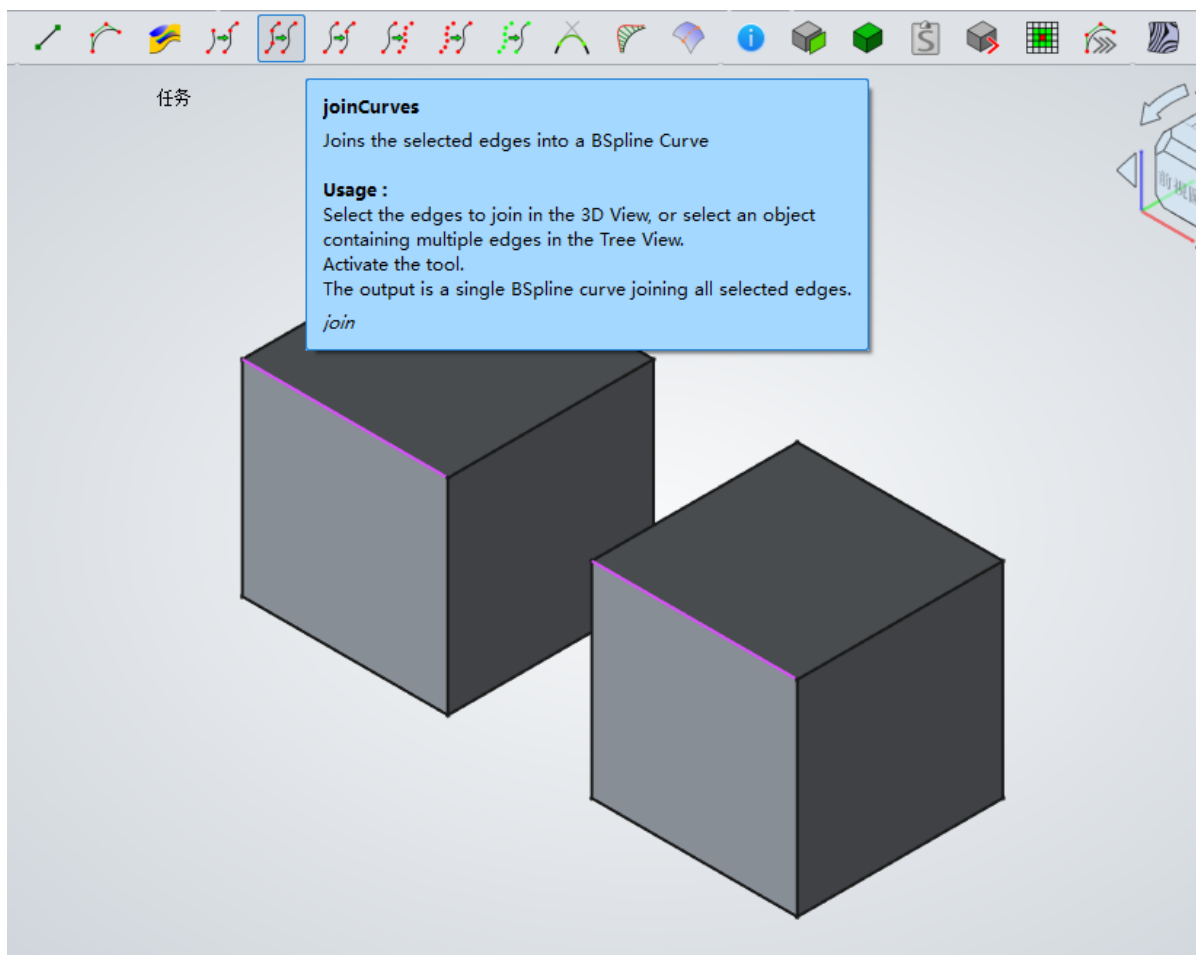


可以在数据面板中调整曲线拉伸的宽度数据。

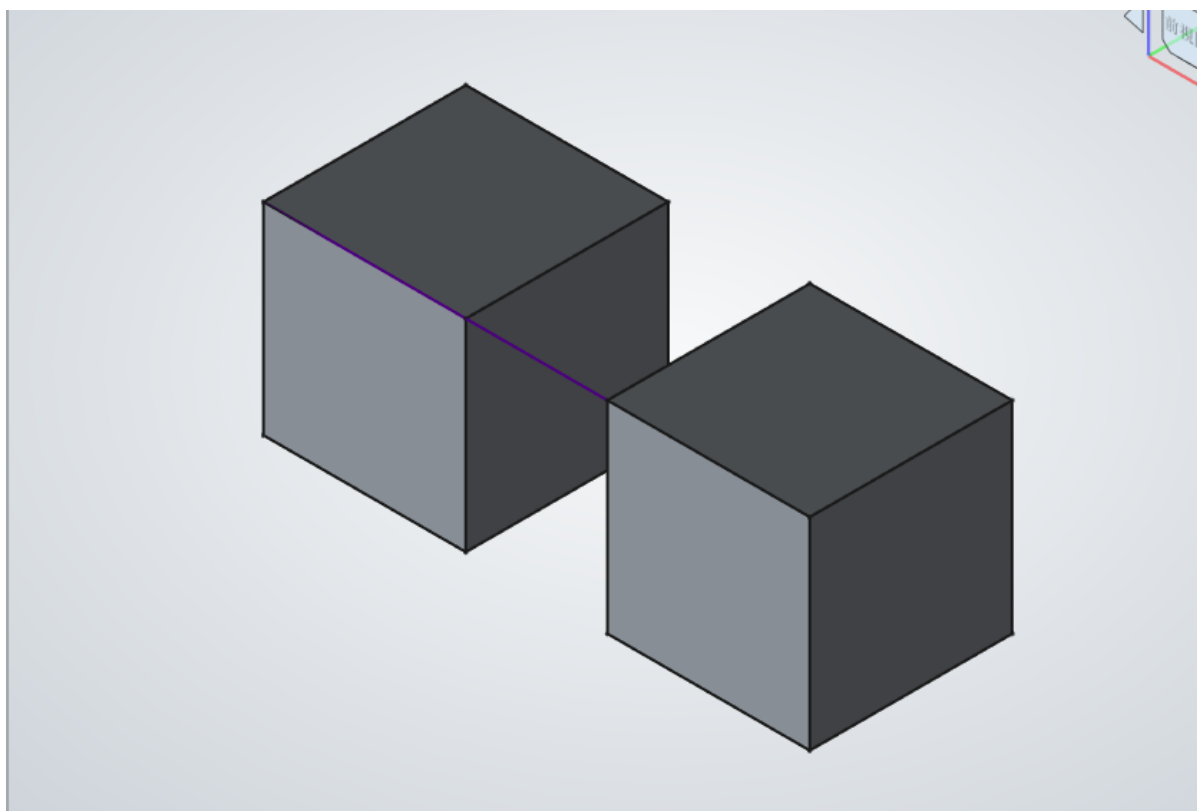
## 连接曲线

在3d视图选择两个对象桥接一根曲线。





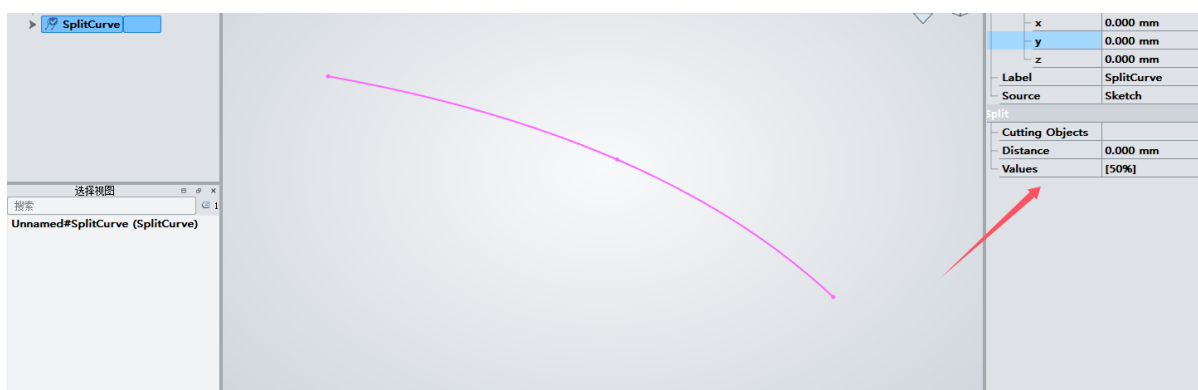
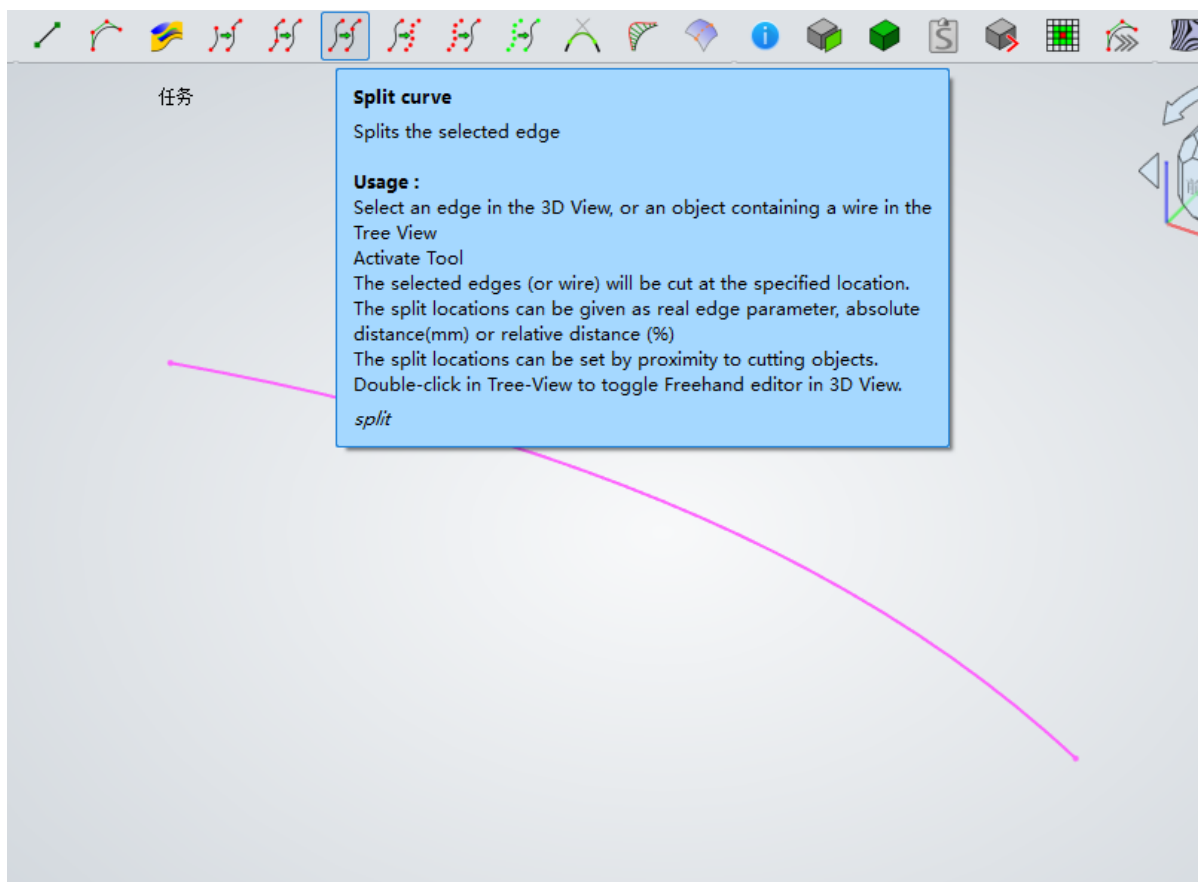
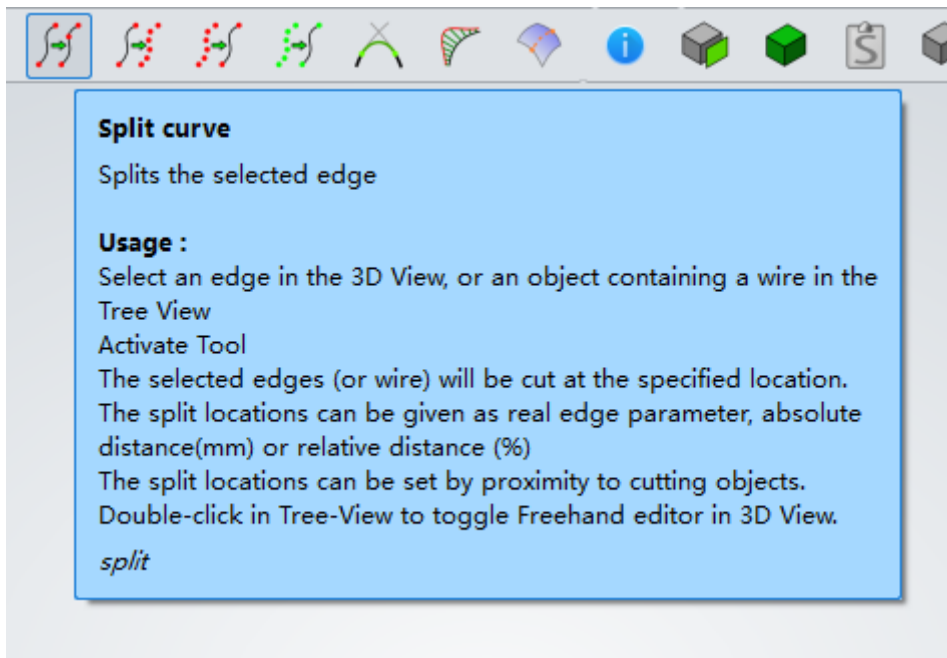
选中立方体的两条边线进行桥接



(桥接曲线)

## 中断曲线

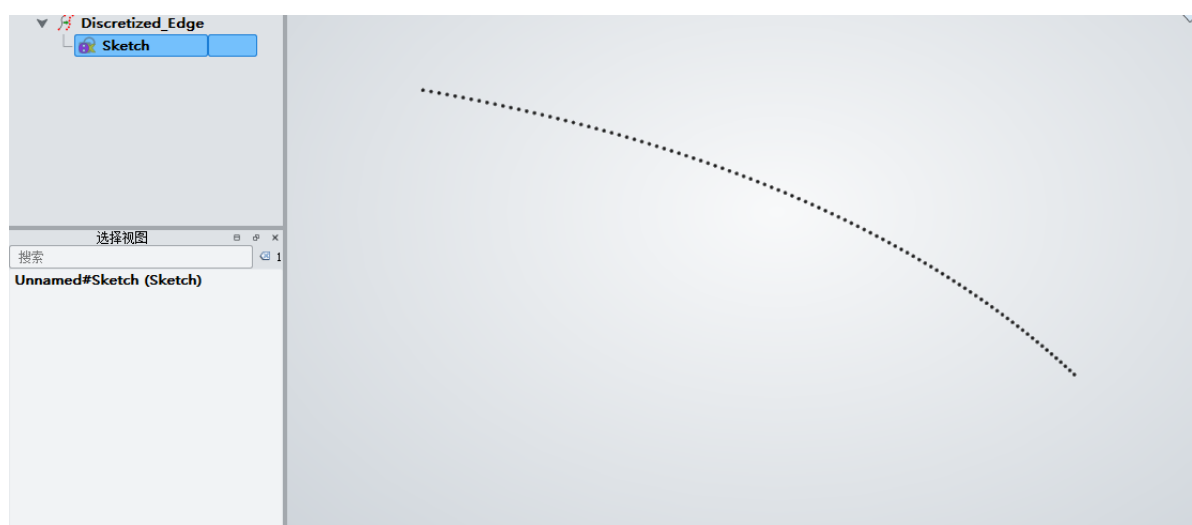
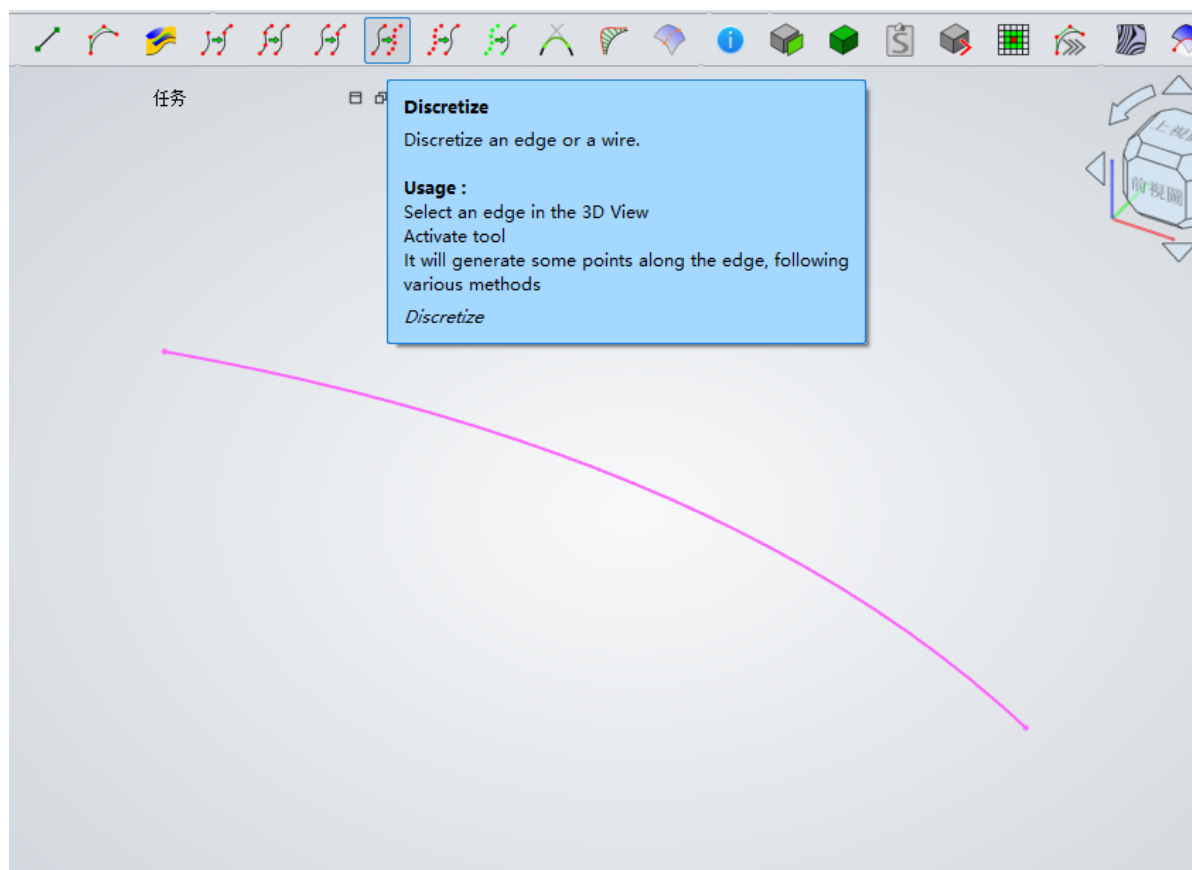
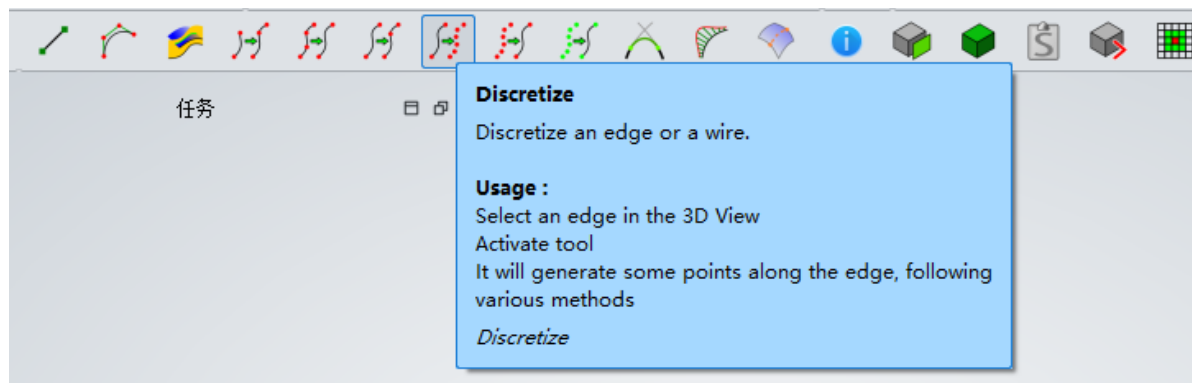
在选取任意一条曲线运行中断曲线会在两个顶点中获取长度从中点的地方断开，在数据面板中可以调整比例来确定中断的位置。



(在当前曲线的中点处断离)

# 曲线点离散化

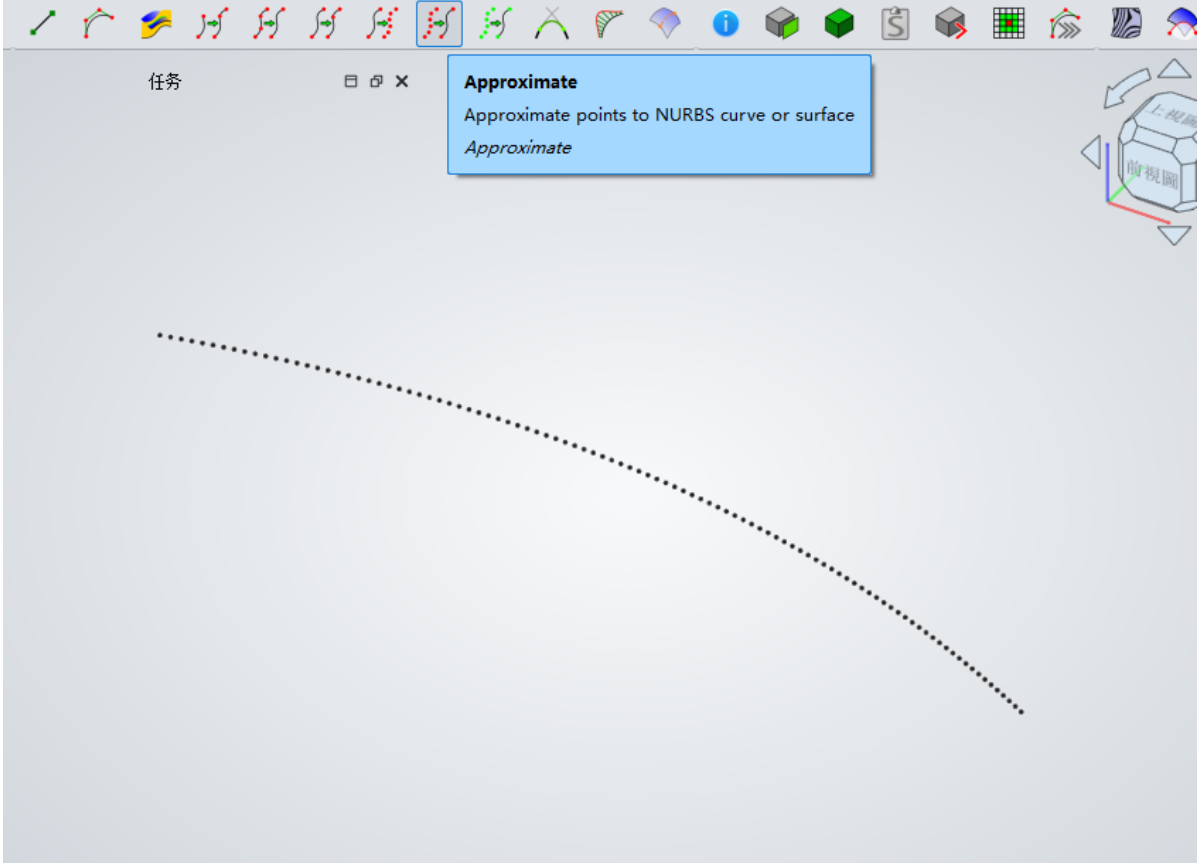
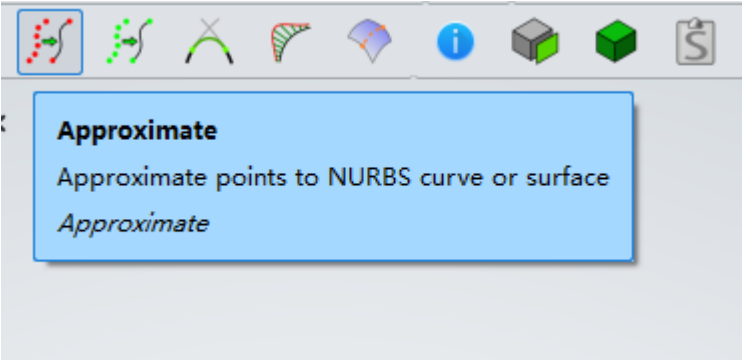
选定一根曲线将其转换成点



(曲线点离散化)

# 离散化点转成b样条

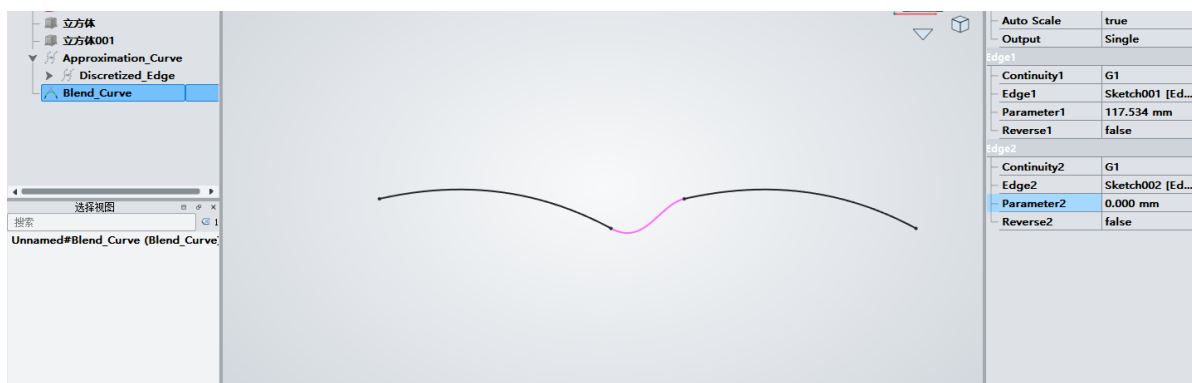
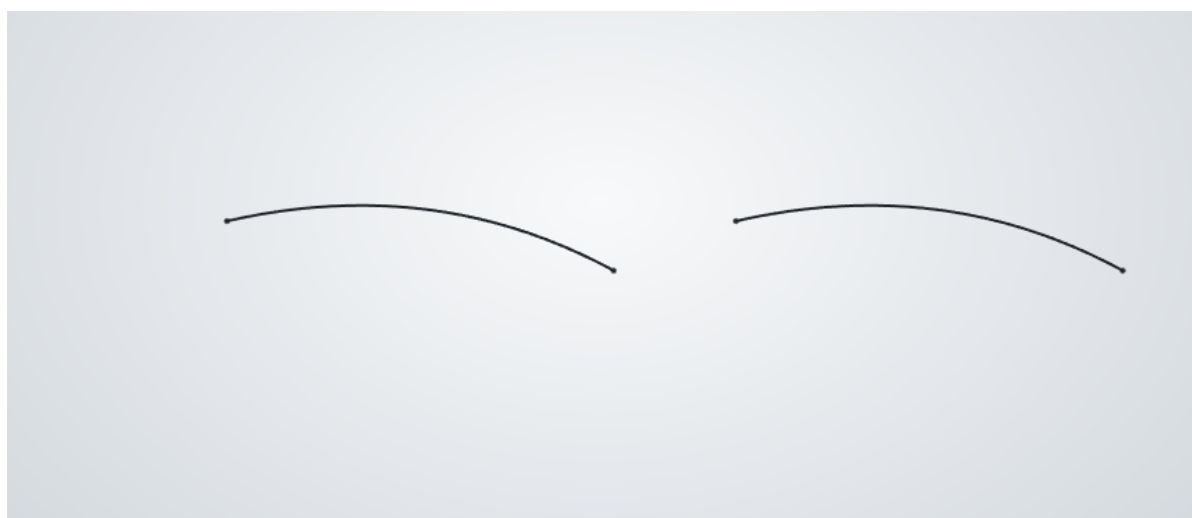
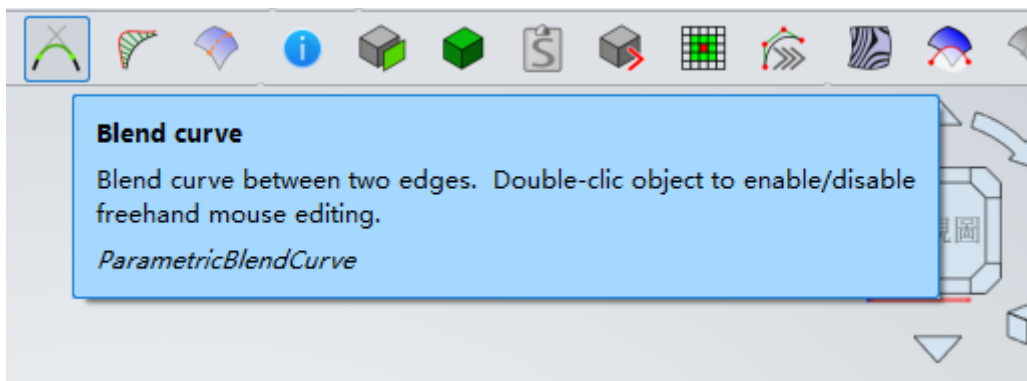
选定点数据将其转换成b样条曲线。



(点转b样条曲线)

# 桥接曲线

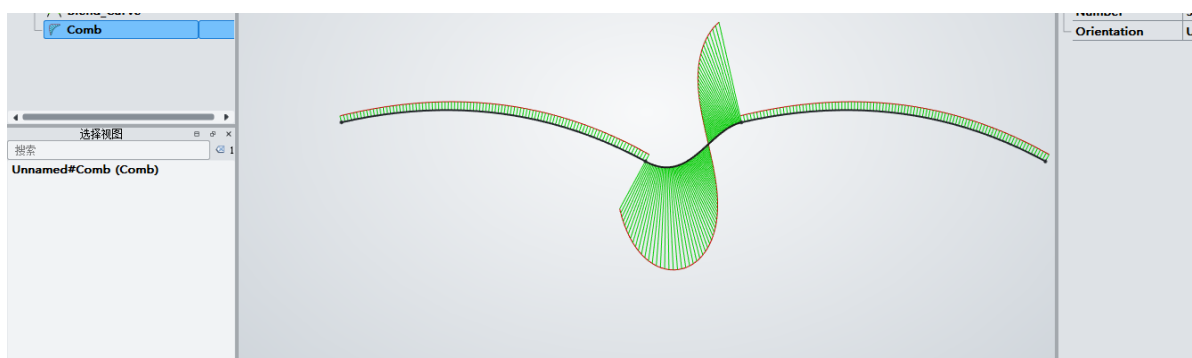
选定两根曲线进行桥接混合，混合曲线具有连续性可在数据面板中调整。



(桥接出来的曲线)

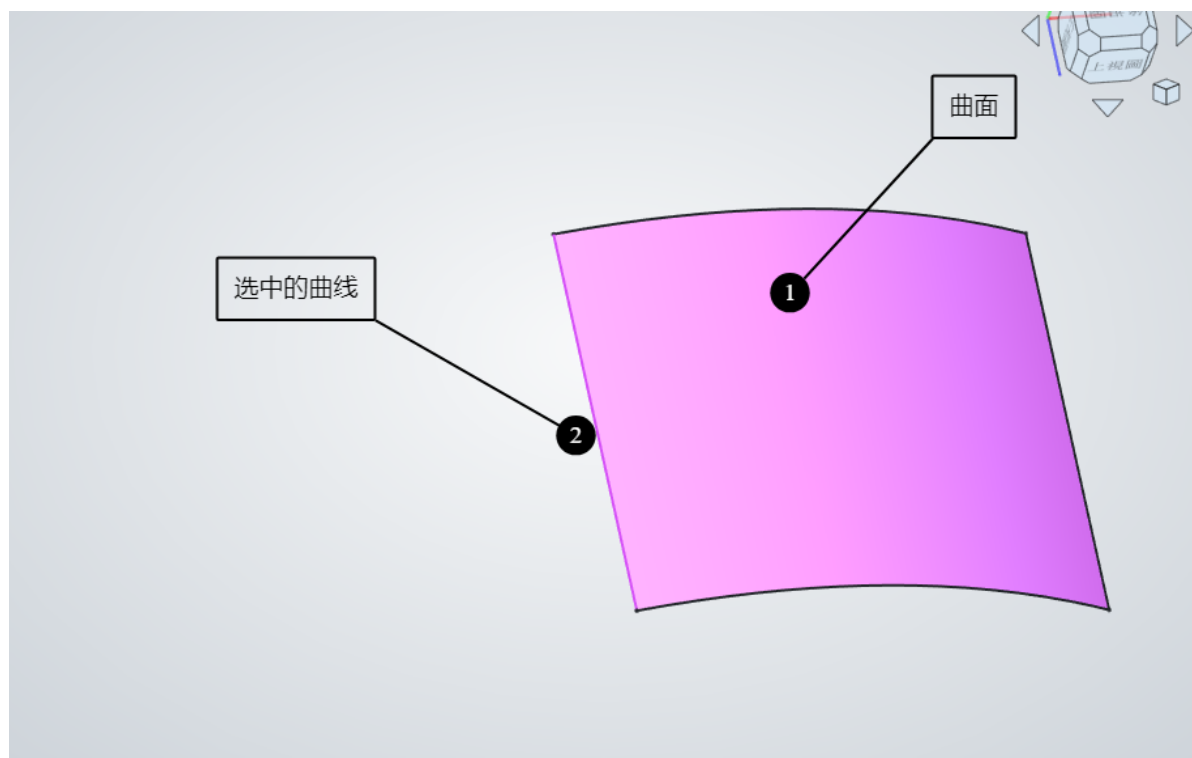
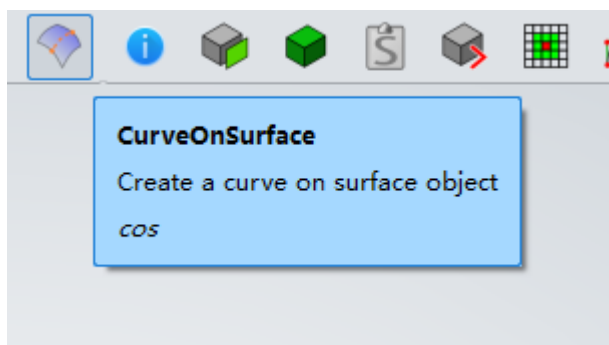
# 显示曲率梳

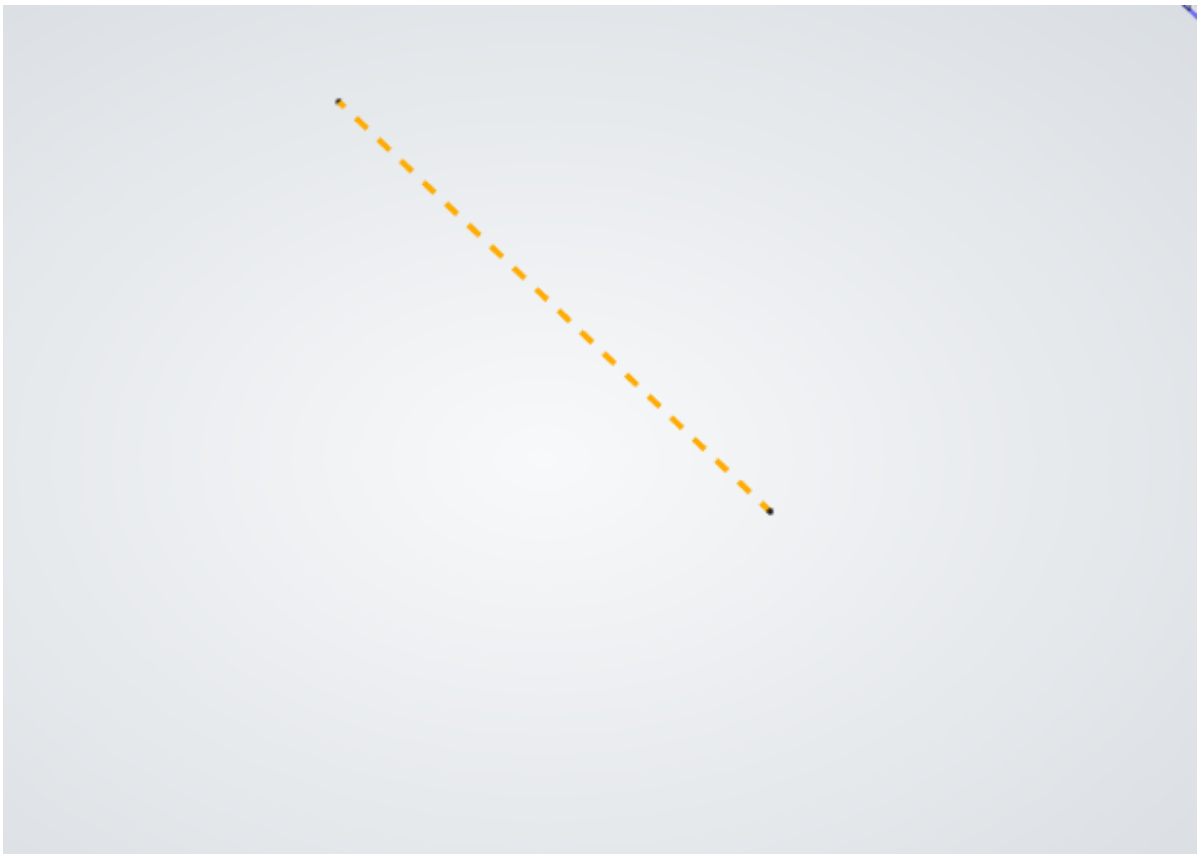
选取任意曲线或者曲面显示曲率信息。



# 创建一根在表面上的曲线

选中曲面对象在选取曲线可创建一根类似于参考曲线的对象。

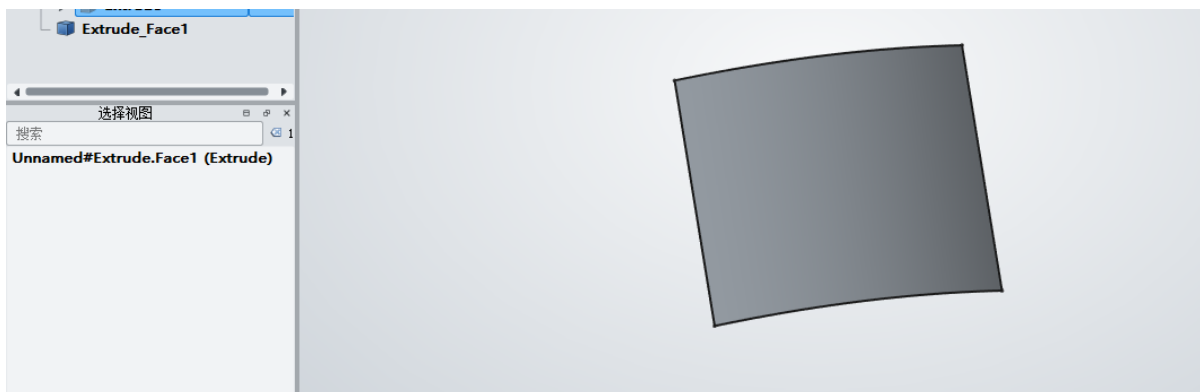
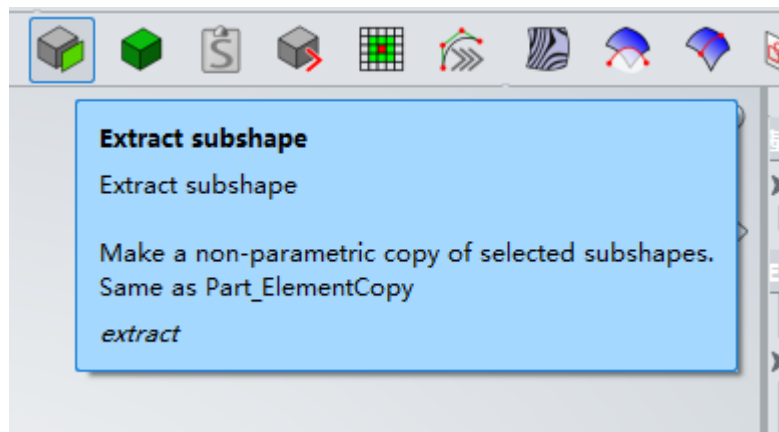




(创建出来的延伸线)

## 曲面复制

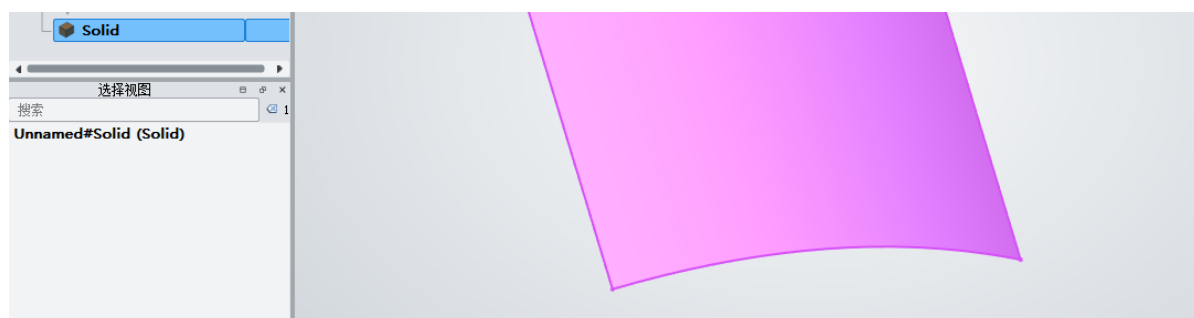
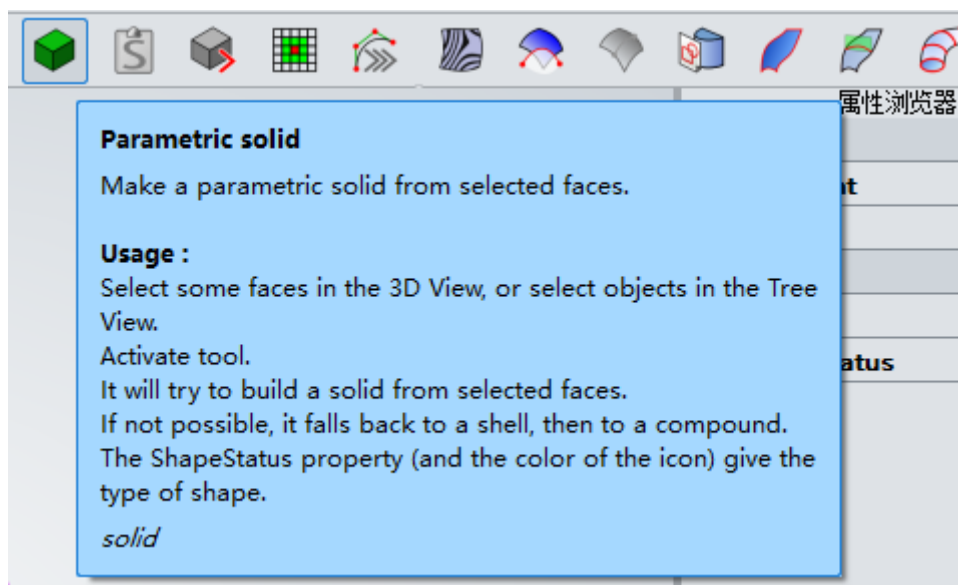
选取一个曲面对象的任意一个面或者边线创建复制对象。



(被复制的面组)

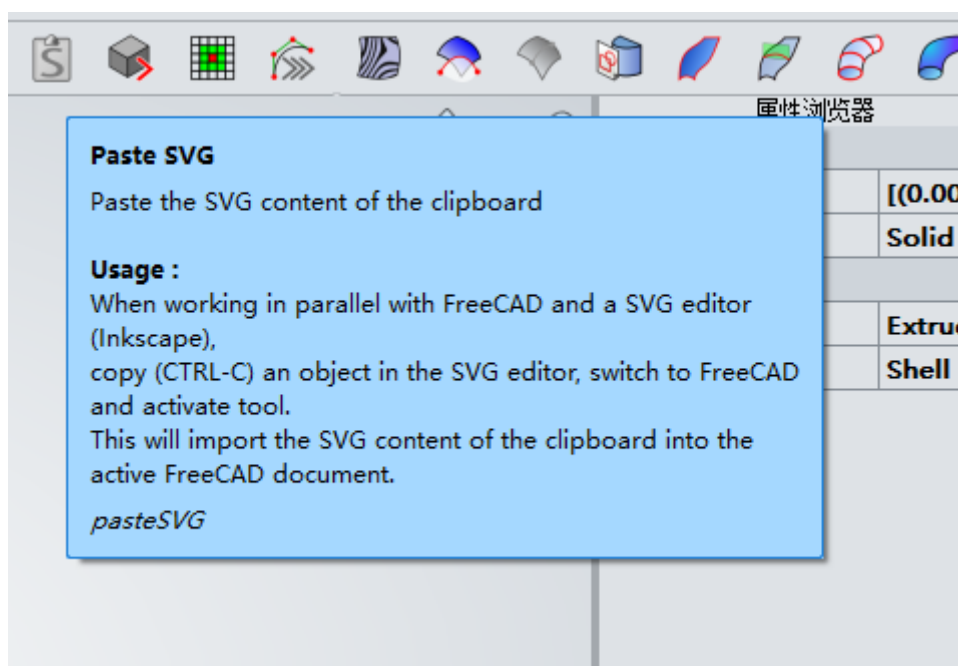
## 转换实体

把片体对象或者网格对象转换成实体对象



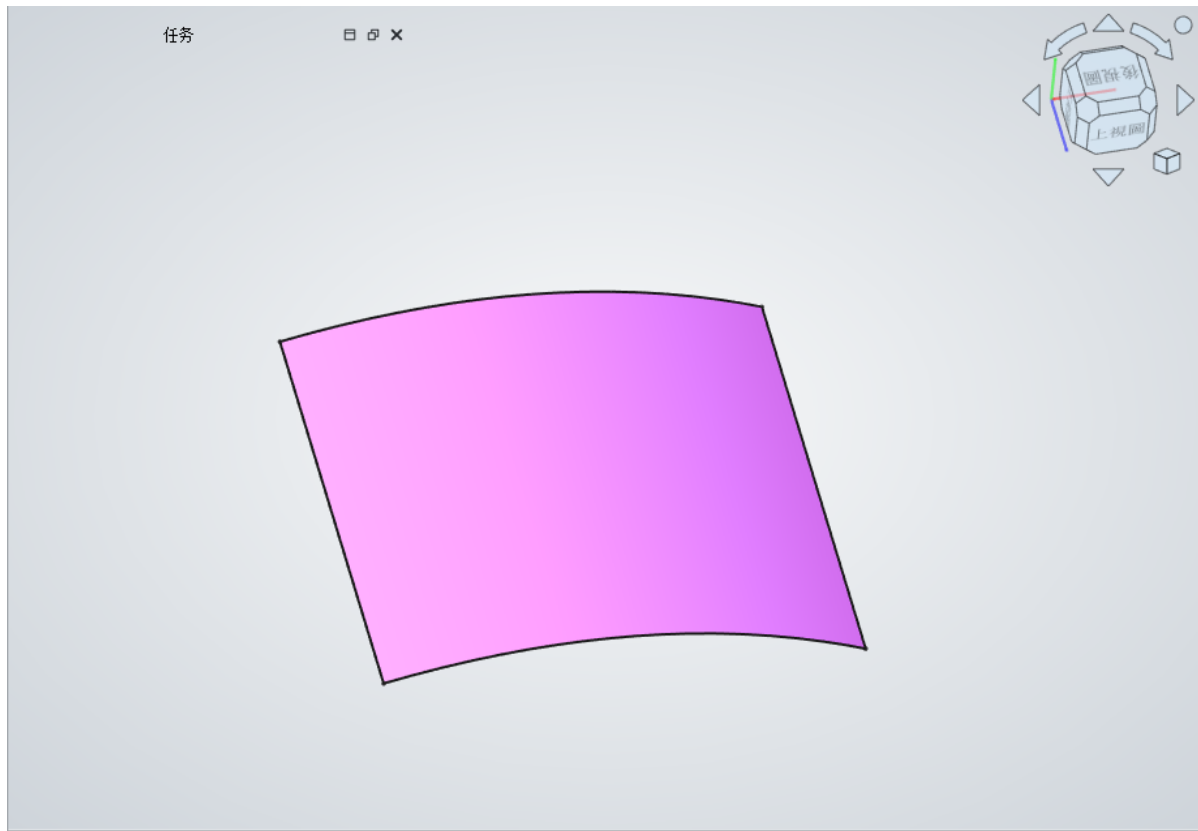
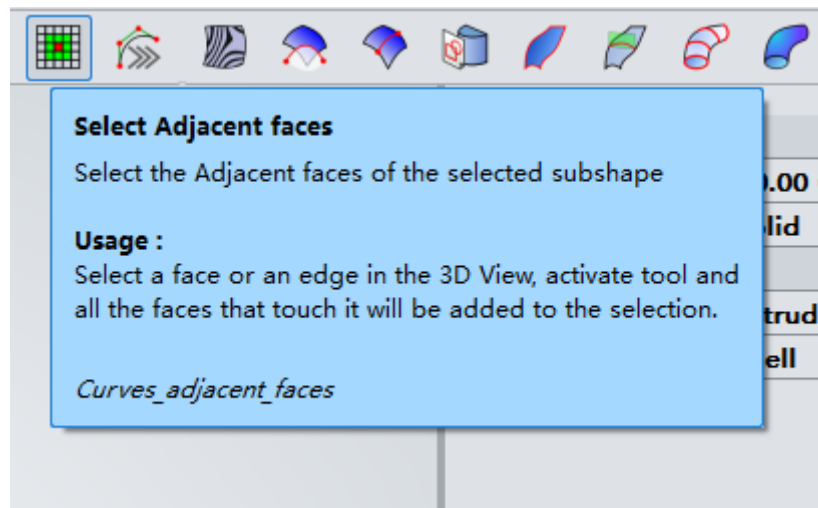
## 导入svg文件到3d视图

在剪贴板复制svg对象可直接复制到视图中



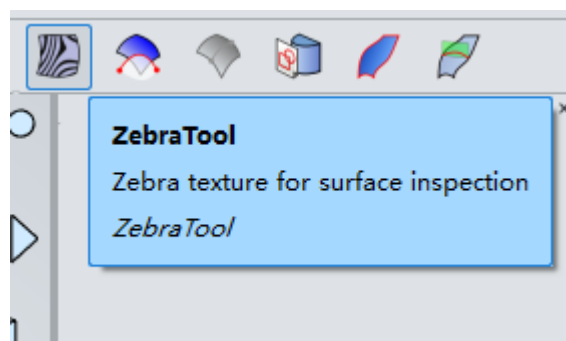
## 选取相邻的面

在曲面上点选一根边来自动选择与其相邻的面



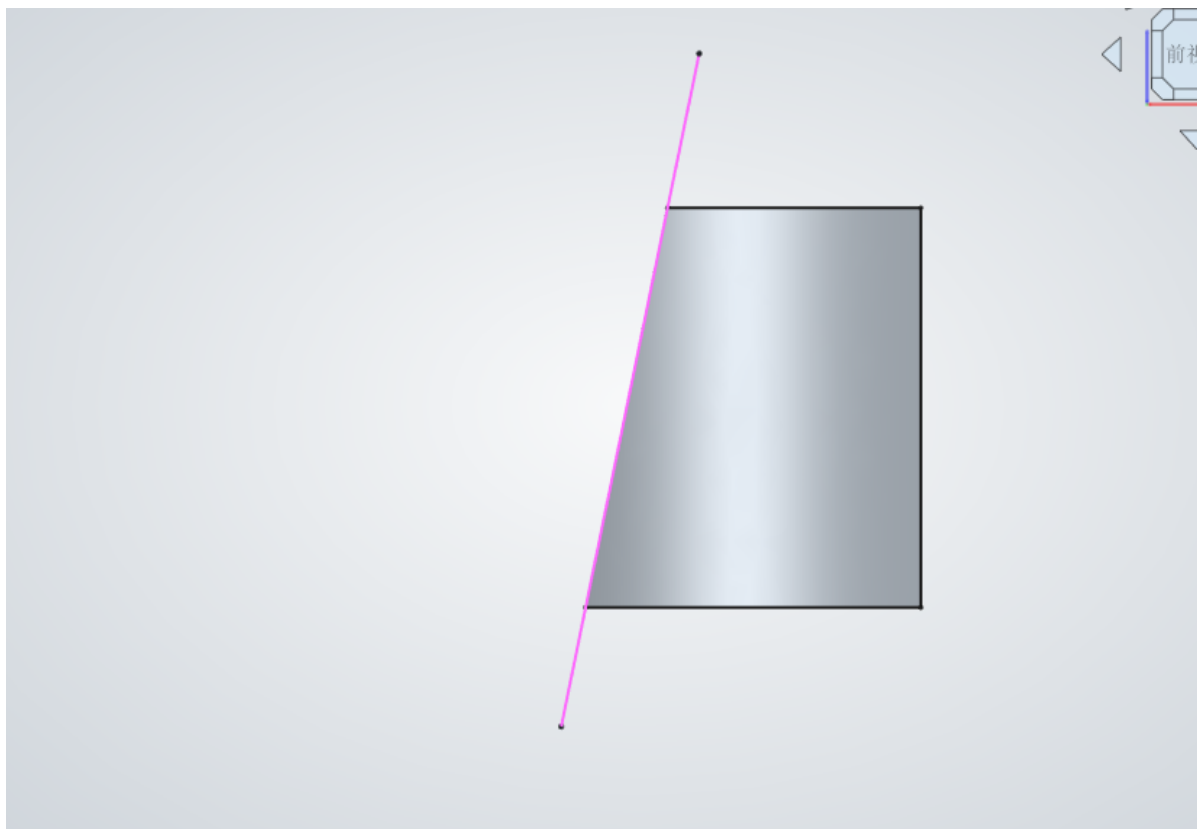
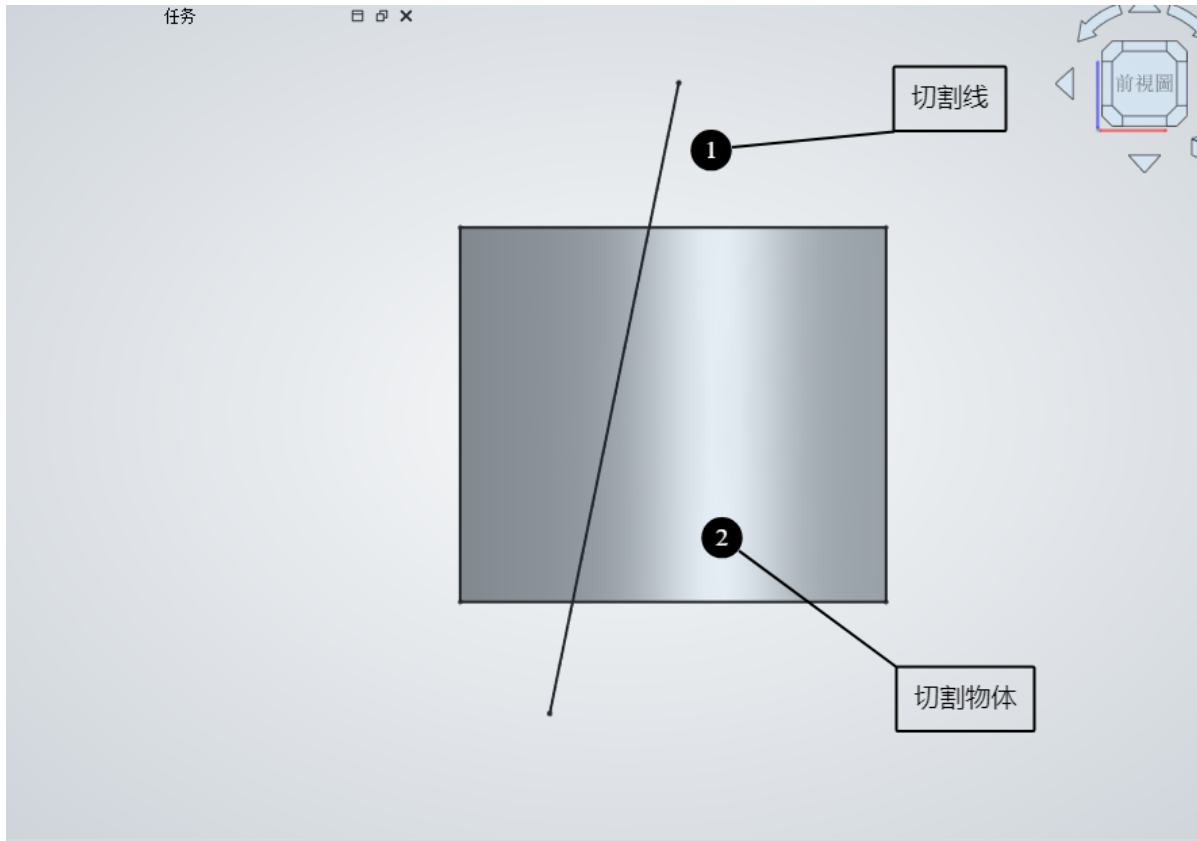
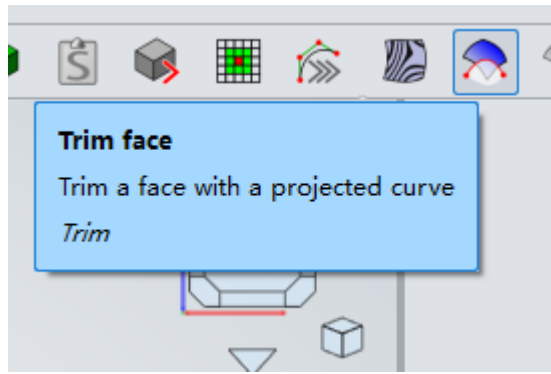
## 预览纹理检查

运行纹理检查



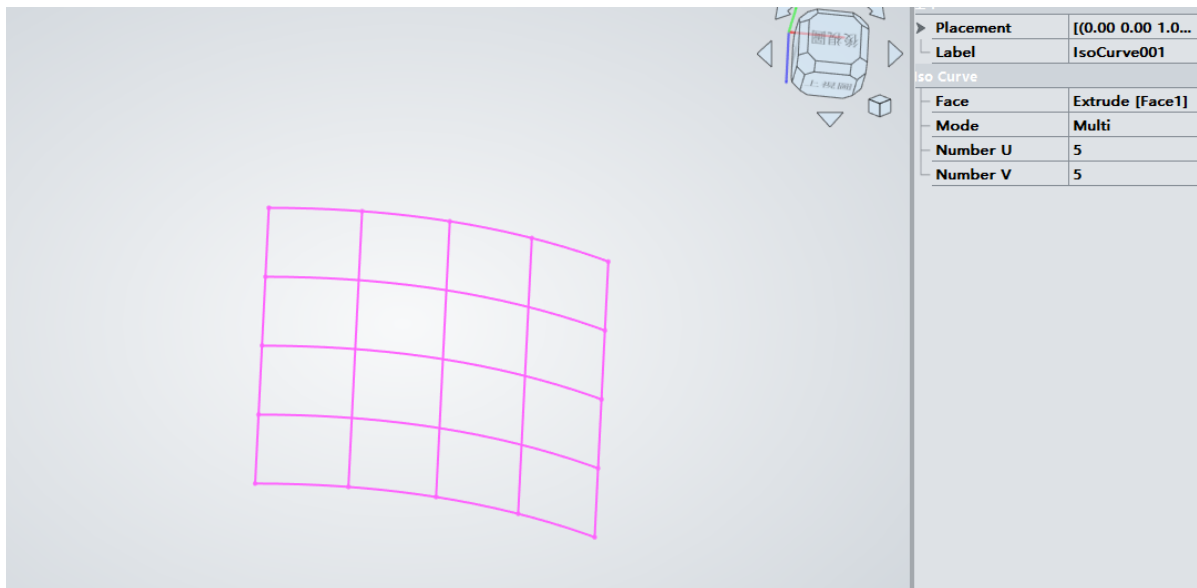
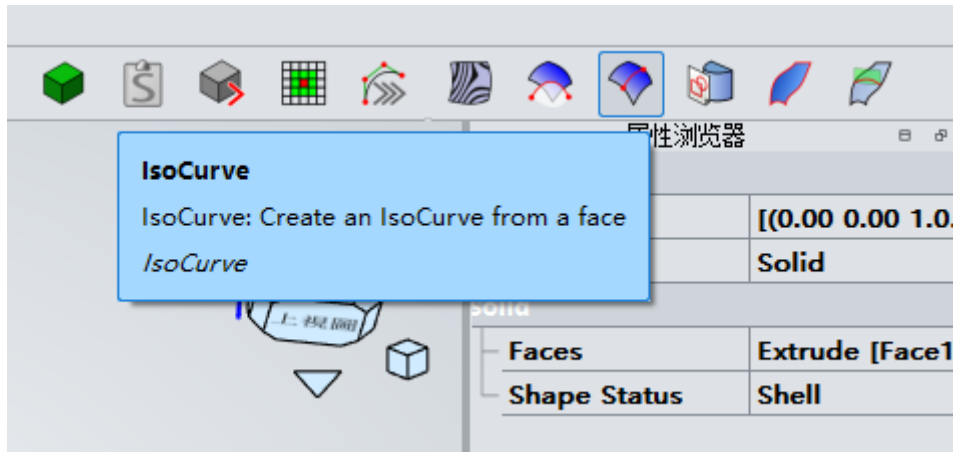
## 曲线投影切割

在物体上选定线段来对形体进行切割。



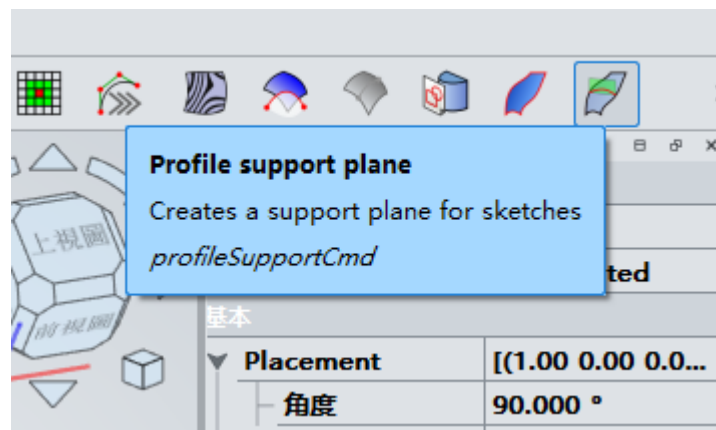
# ISO曲线

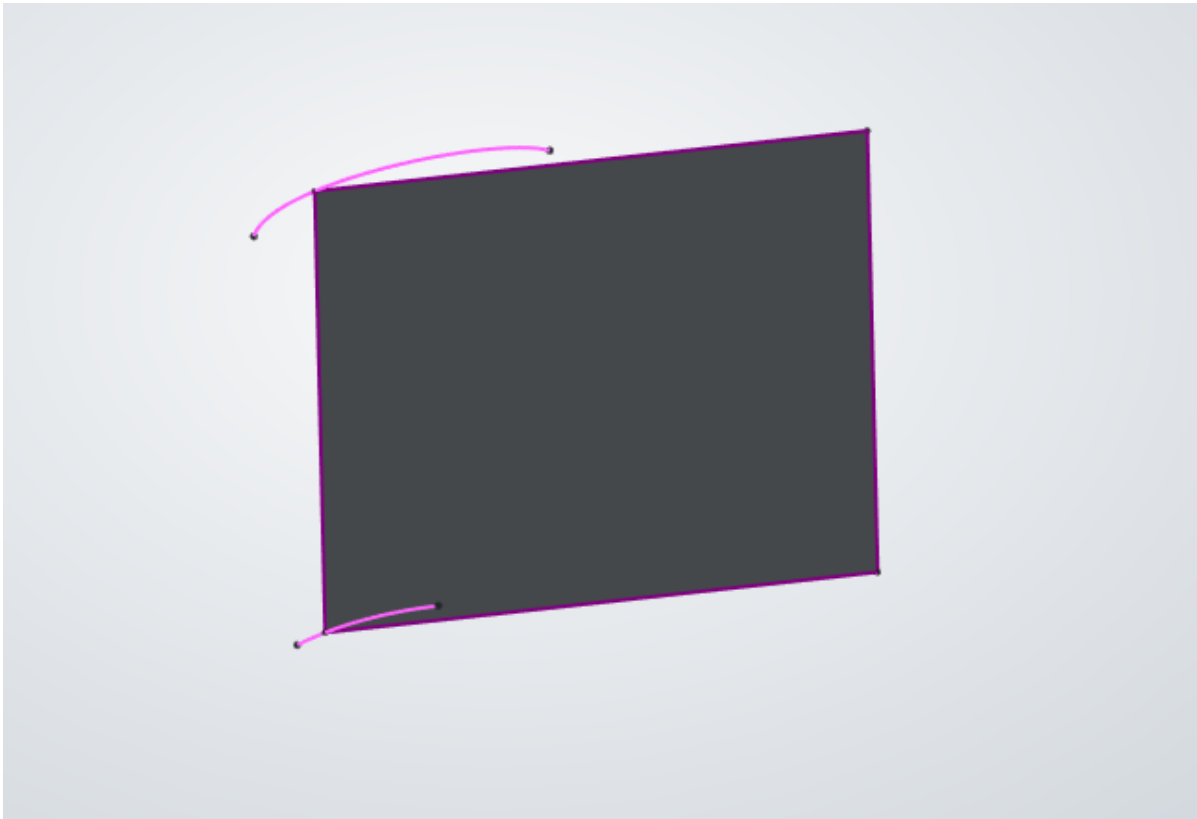
选中一个曲面对象将其均匀的切割成网格曲面，且UV方向数量可以调整



# 创建支撑面

在选定的边界或者曲面上创建一个与它垂直的工作平面





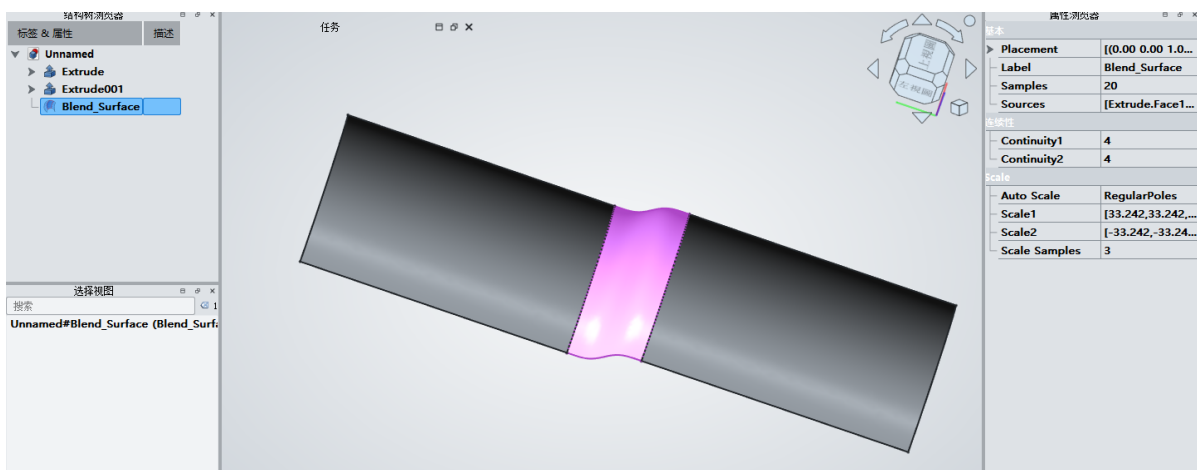
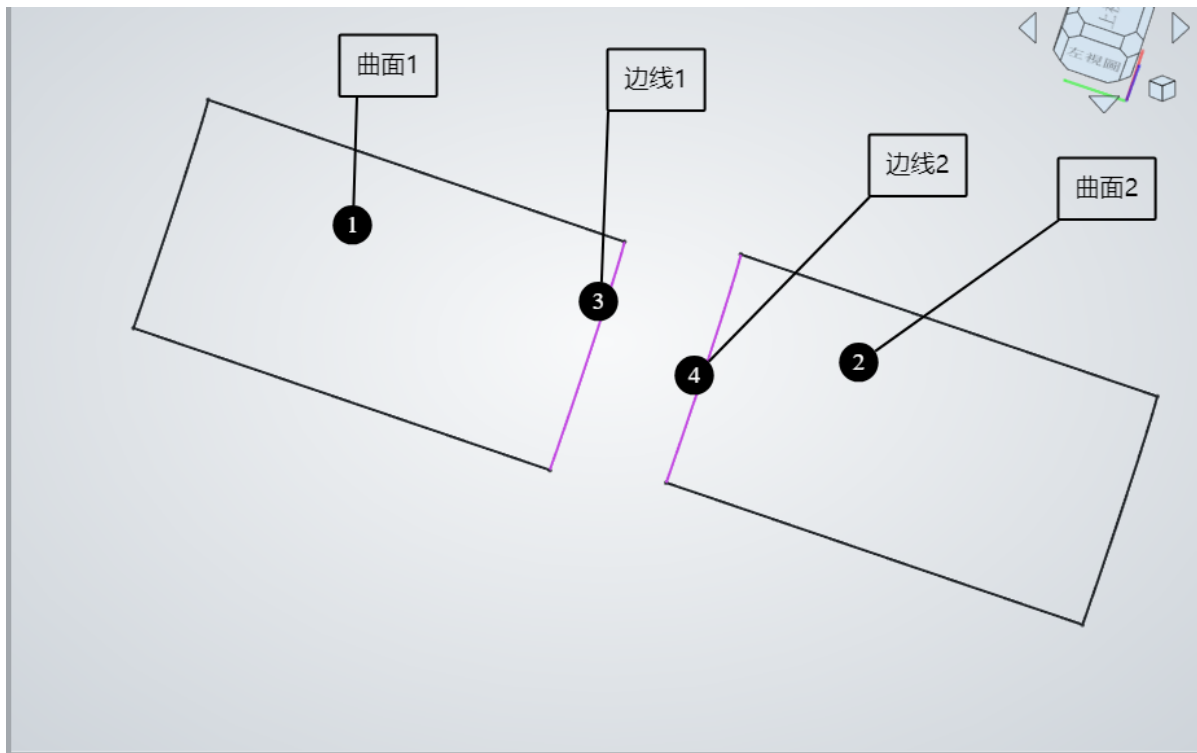
## 混合曲面

选定两个对象进行表面上的混接，混接具有连续性；选取方式为选取对象1的面和边线，选取对象2的面和边线其中边线和边线就是需要混合的结果线。

**BlendSurface**  
Create a surface between two edges with some continuity with their support faces

**Usage :**  
You must select 4 subshapes in the 3D View :  
- EDGE1 on FACE1  
- EDGE2 on FACE2  
*Curves\_BlendSurf2*

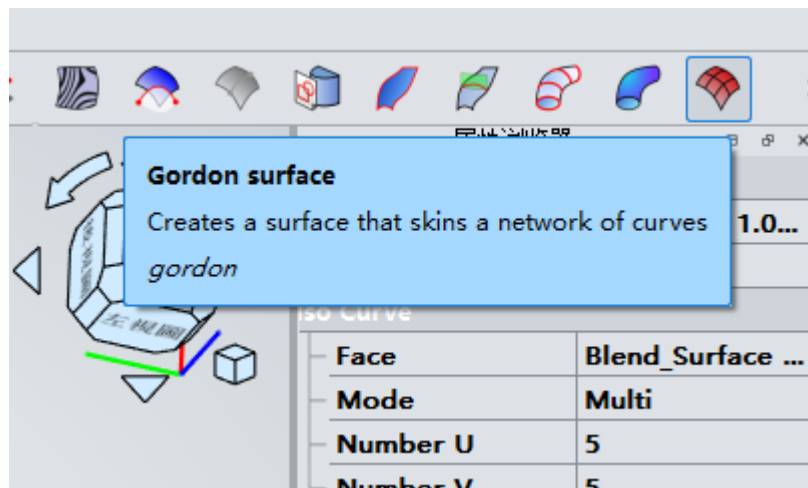
Placement	[(0.00 0.00 1.0...
Model	Blend_Surface
Number of Samples	20
Support Faces	[Extrude.Face1...
Continuity1	4
Continuity2	4
Axis Scale	Round-Off...

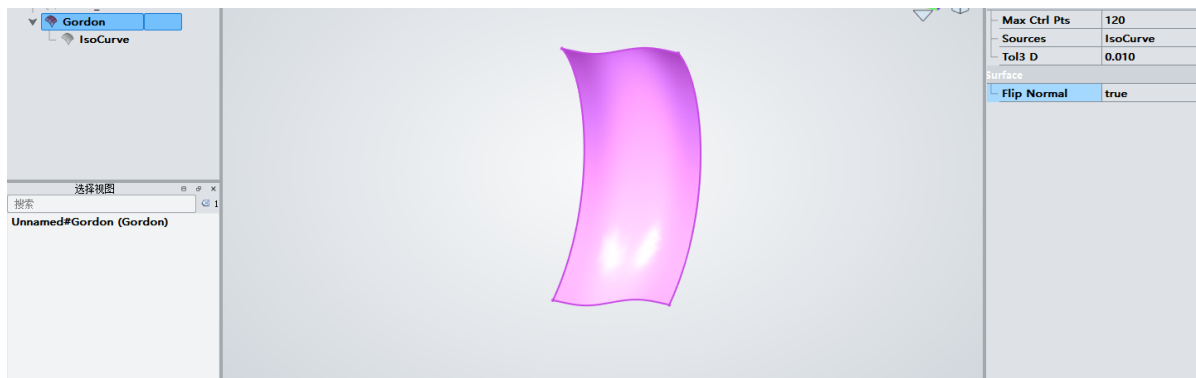
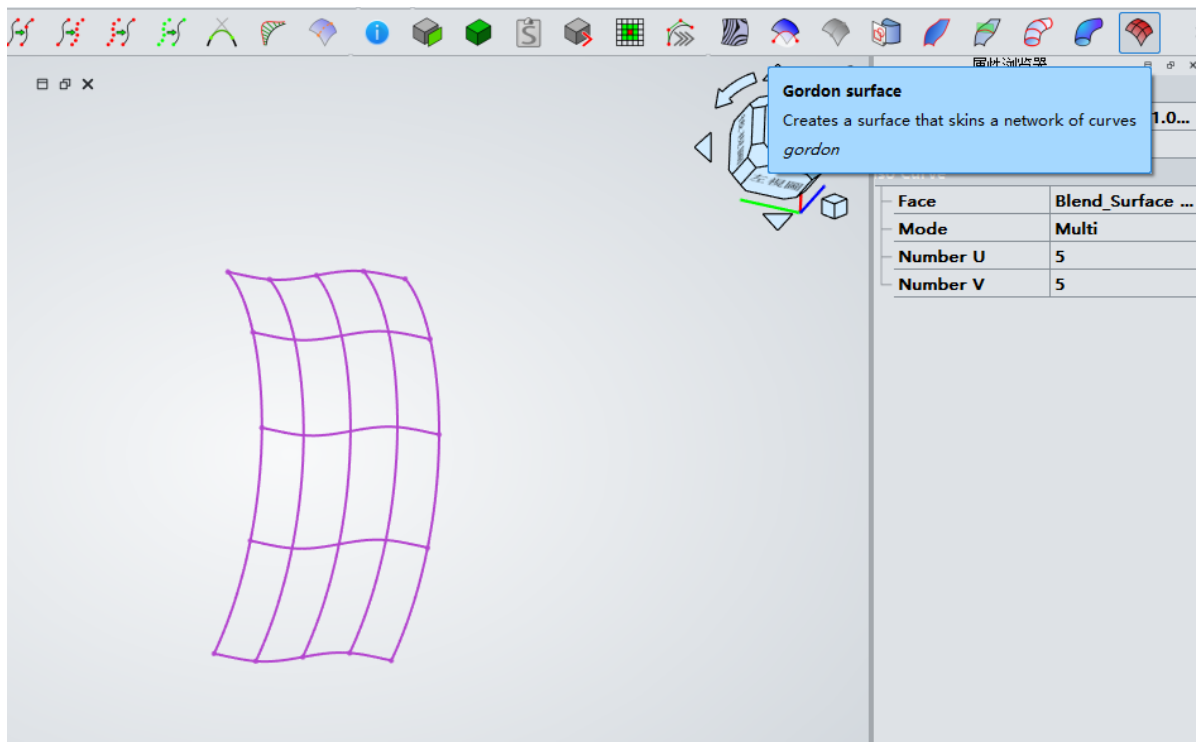


(混合桥接的结果)

## 线框网格转为B样条曲面

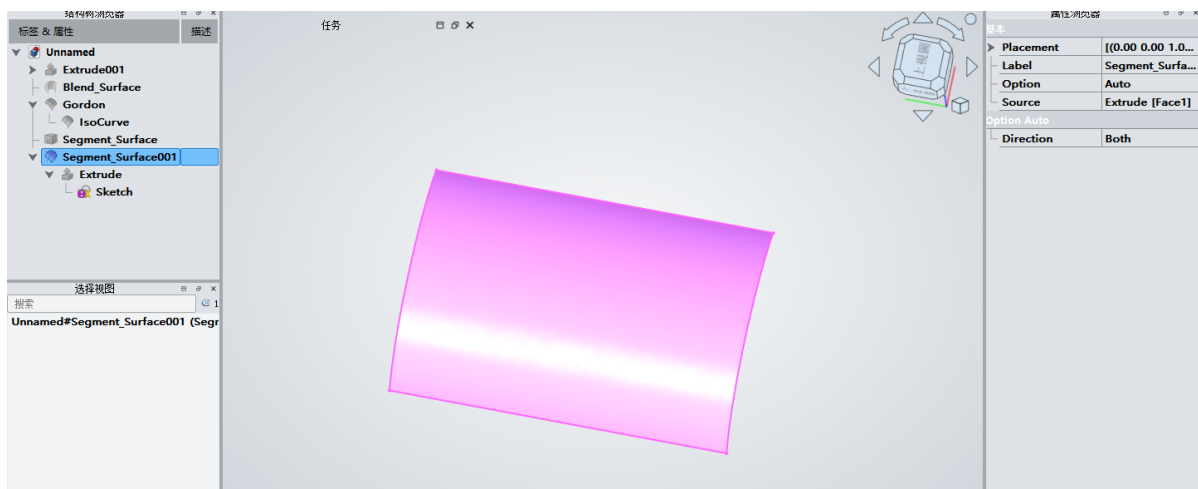
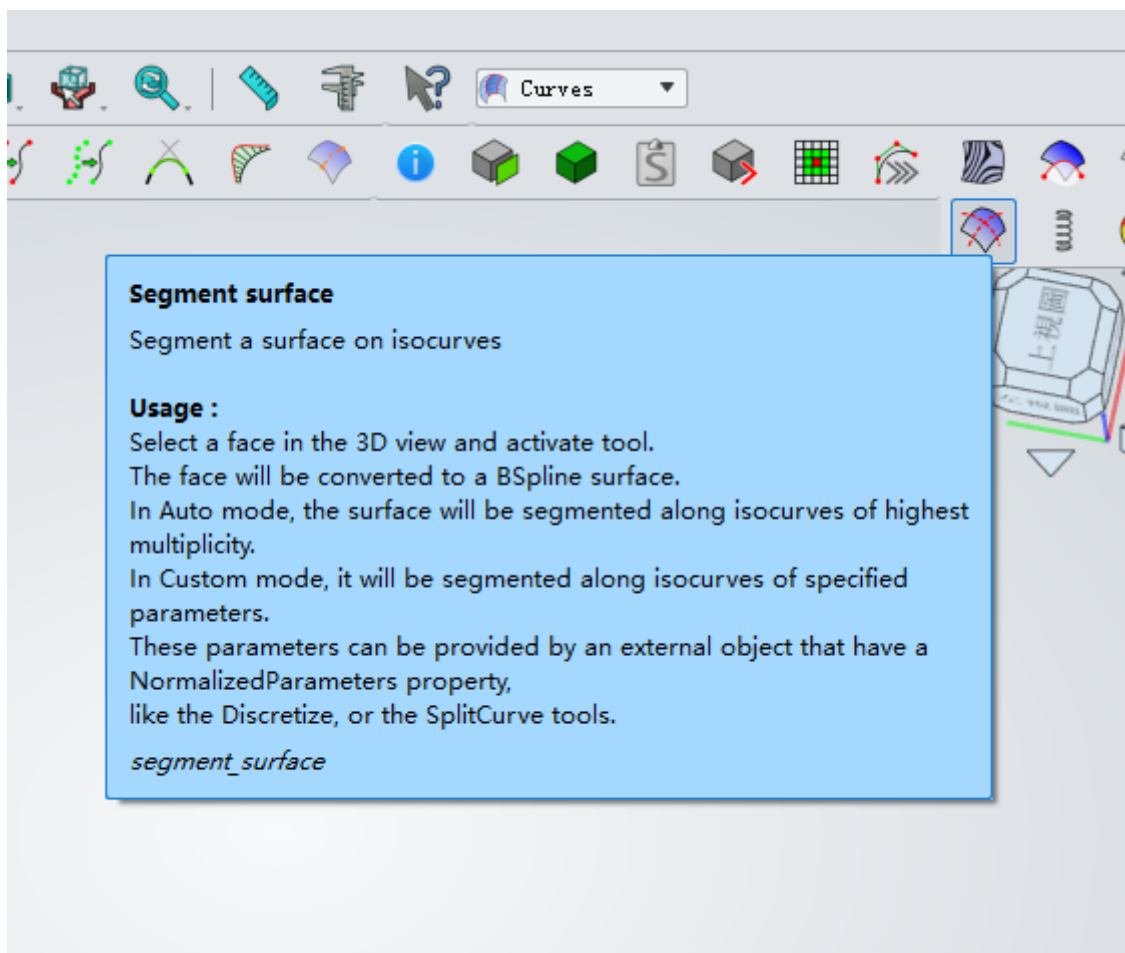
获取当前矢量空间中的线框网格转换成曲面对象





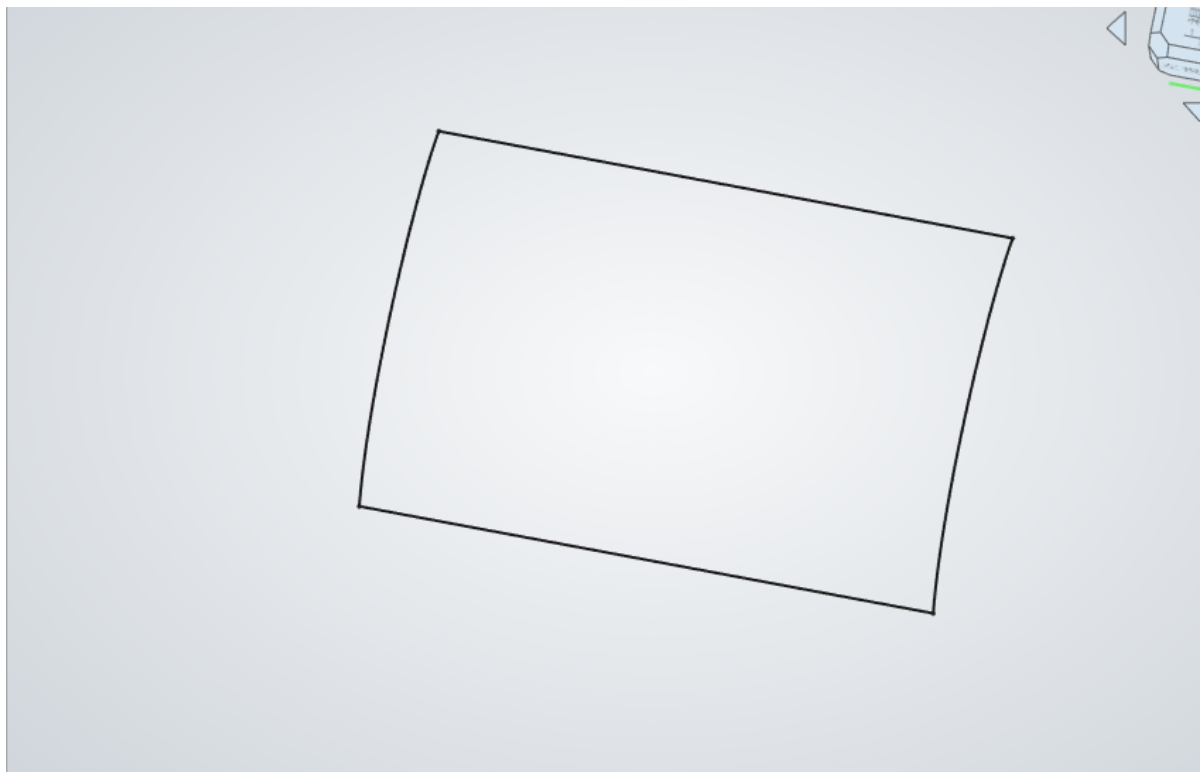
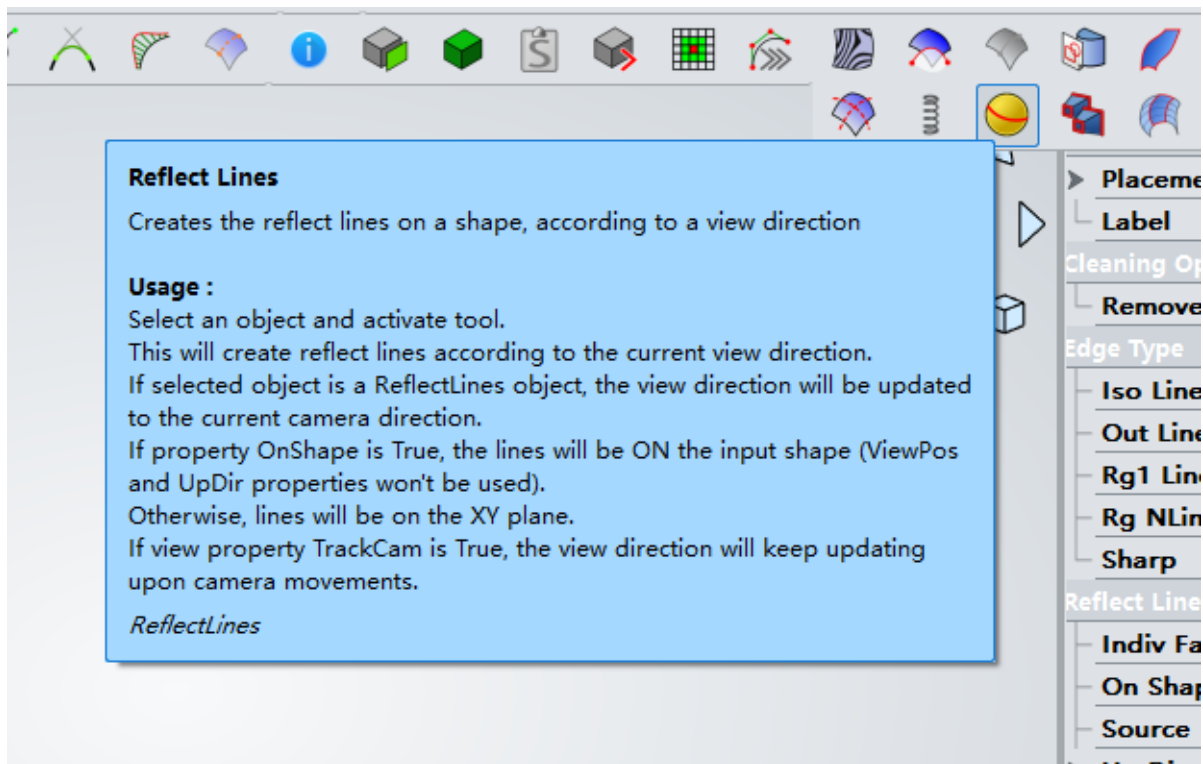
## 转换UV曲面

选中一个几何对象将其转换成UV曲面，在数据面板中U方向和V方向可调整。



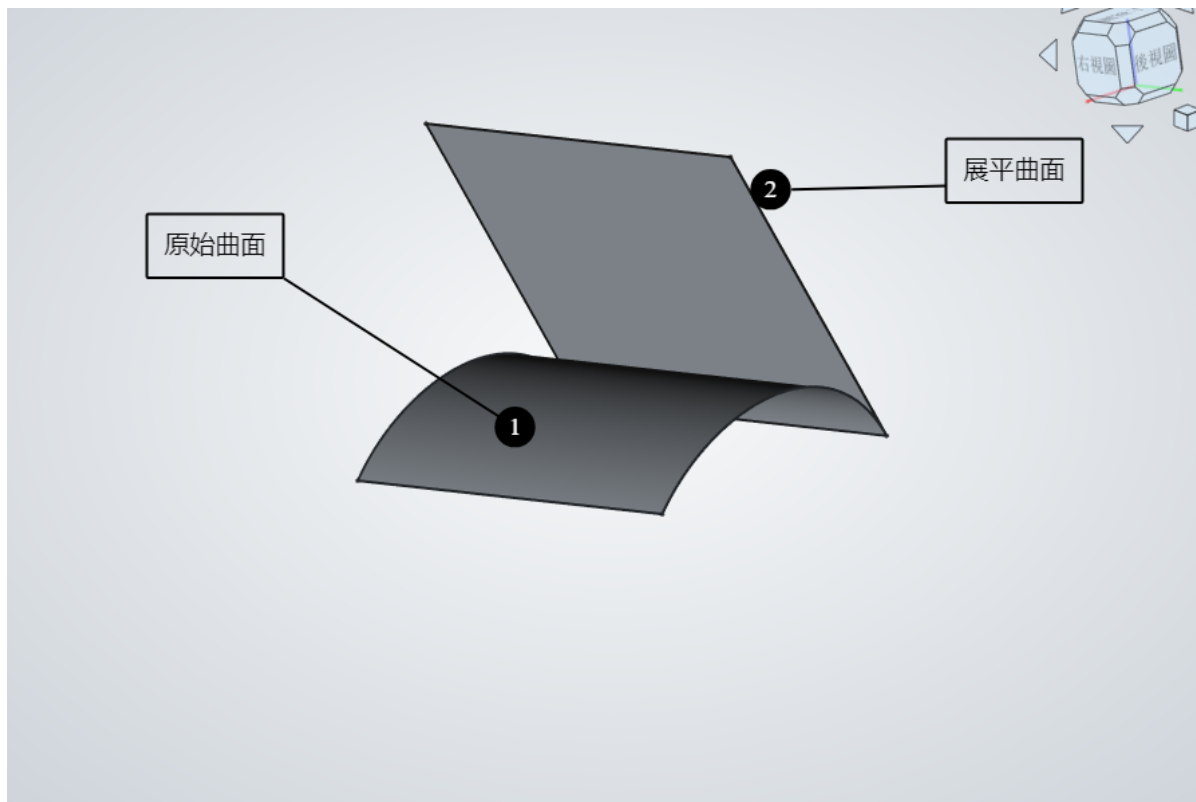
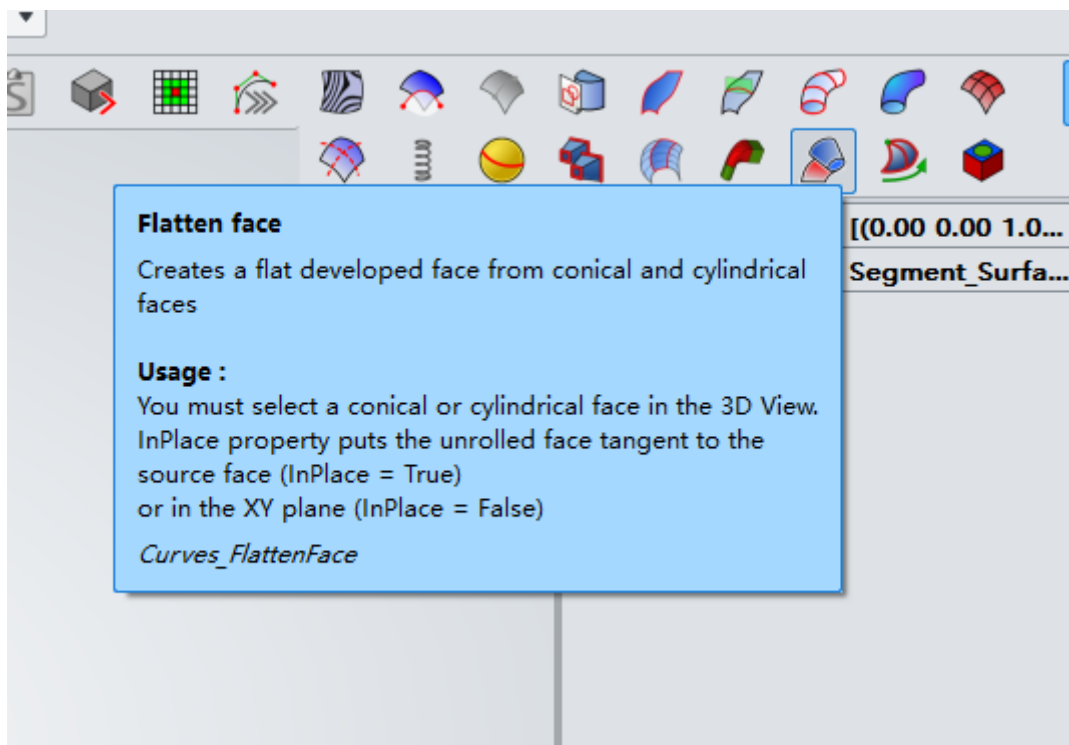
## 曲面转换成线框

选中曲面对象将其转换成线框



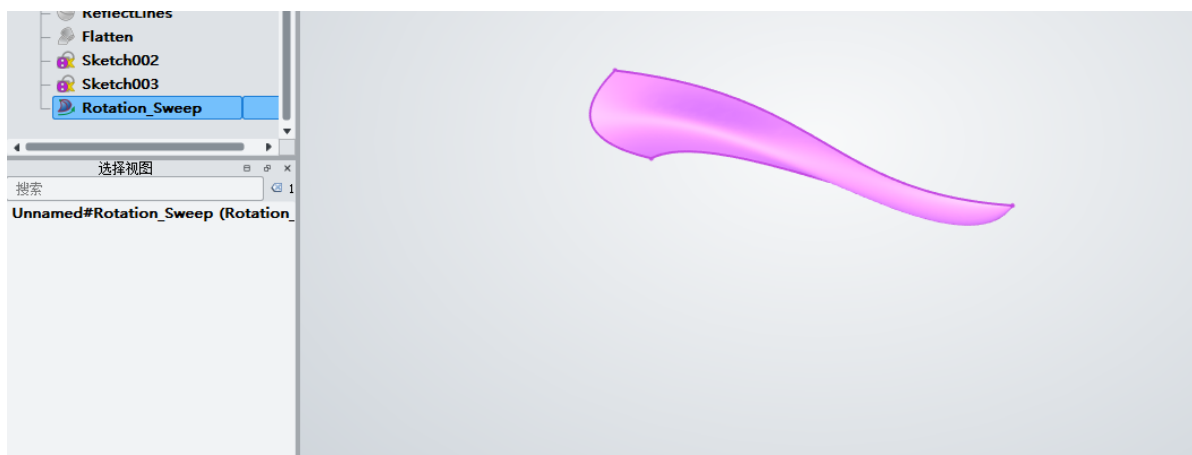
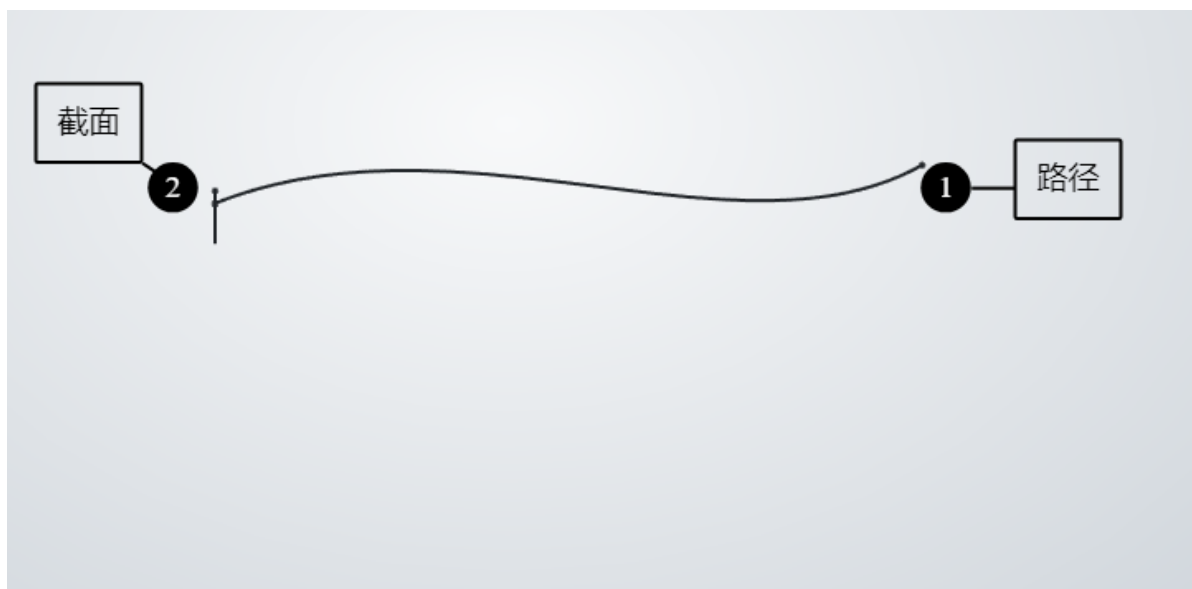
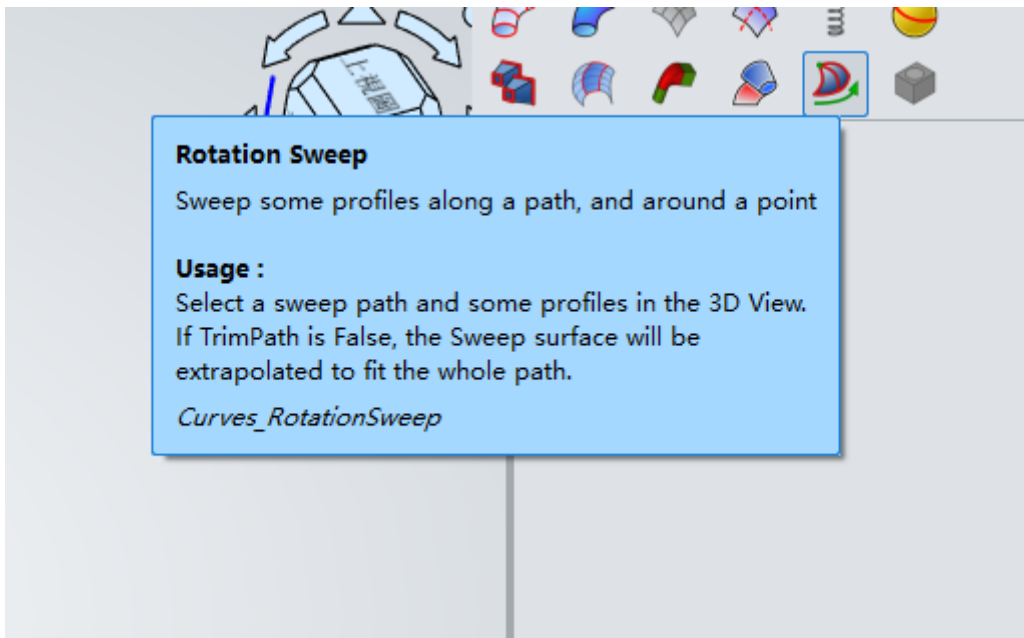
## 曲面展平

选中曲面对象将其平展成平面对象



## 旋转扫掠曲线

选定一根曲线和一个截面，扫掠将会以原始路径的起点进行旋转扫掠。



## 混合实体

选取两个实体对象的面组从中去混合一个实体进行插值补正；选取方式和混合曲面类似；选取两个实体的面为了防止混合错误，可以选择N条控制线相邻的来去控制曲率同时此功能具有连续性。

res

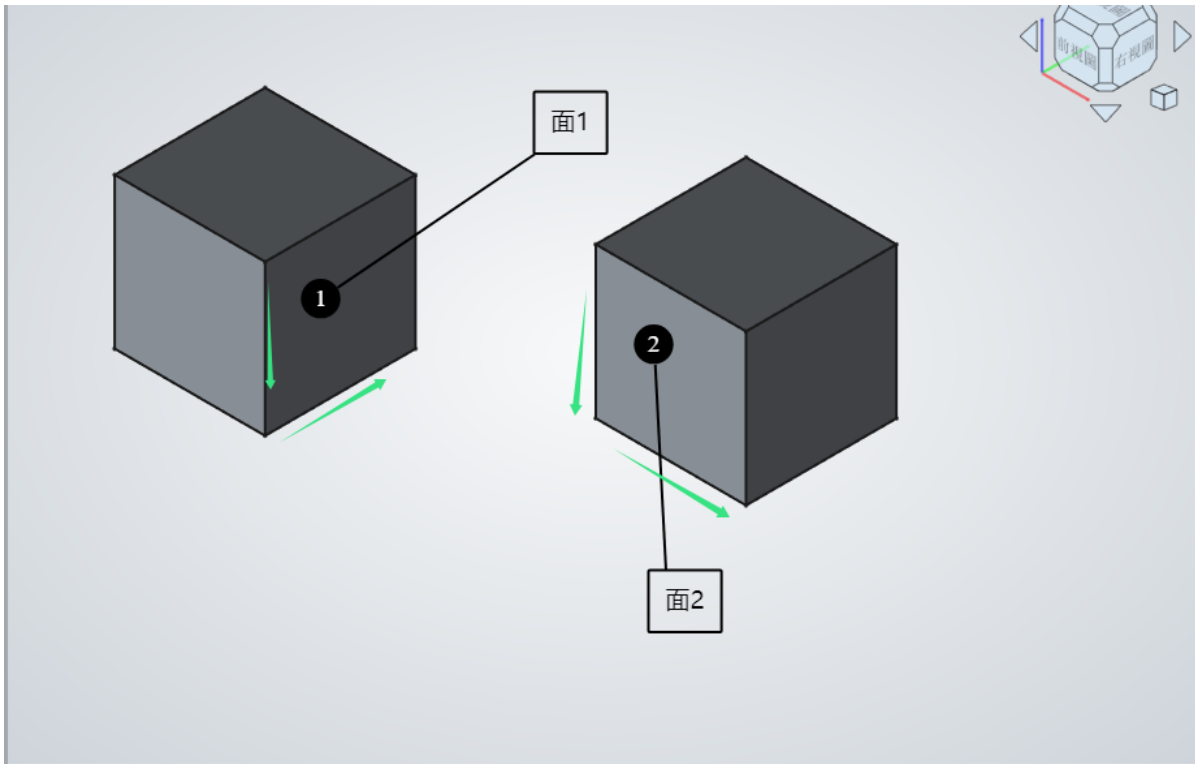
**BlendSolid**

Create a solid between two faces with some continuity with their support shapes

**Usage :**  
 You must select at least 2 faces in the 3D View.  
 Additionally, in order to prevent twisting, you can also select 2 consecutive edges, on each wire of each face.

*Curves\_BlendSolid*

Placement	[(0.00 0.00 1.0...
Label	Blend_Solid
Sources	[Box.Face2 (立...
Continuity1	2
Continuity2	2
Auto Scale	RegularPoles
Scale Samples	6
Settings	
Fuse	false



标签 & 属性

- Unnamed
- 立方体
- 立方体001
- Blend\_Solid

选择视图

搜索

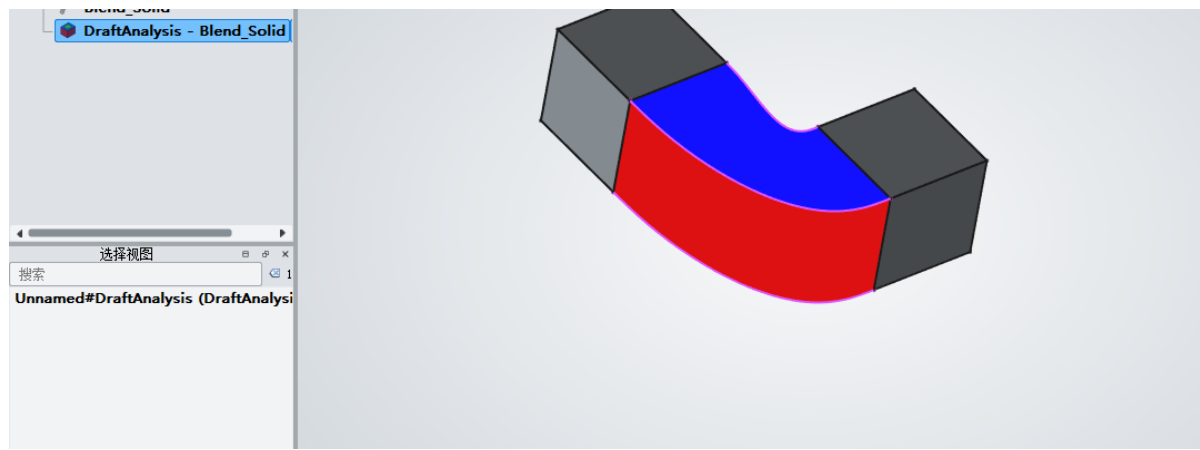
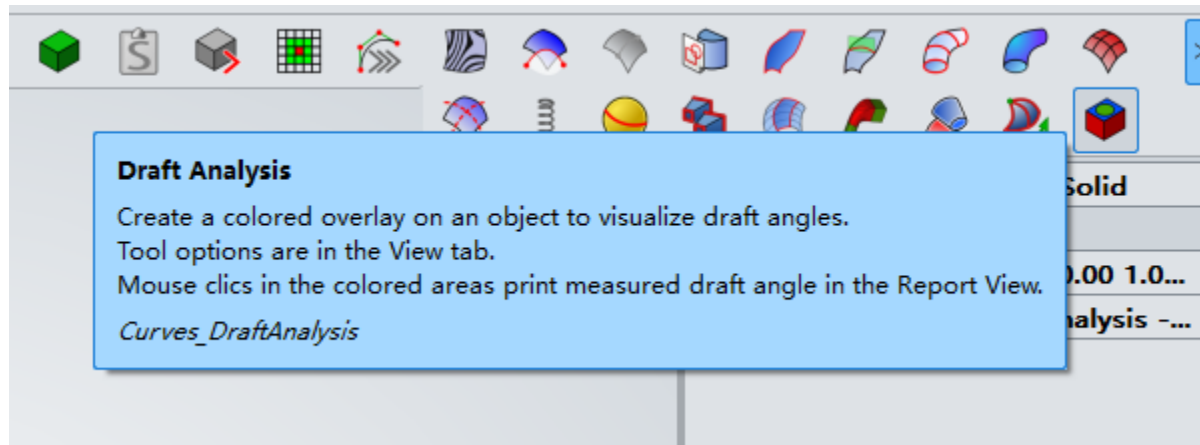
Unnamed#Blend\_Solid (Blend\_Solid)

基本

Placement	[(0.00 0.00 1.0...
Label	Blend_Solid
Sources	[Box.Face2 (立...
Continuity1	2
Continuity2	2
Scale	
Auto Scale	RegularPoles
Scale Samples	6
Settings	
Fuse	false
Samples	20
Status	
Shape Type	Solid
Untwist	
Algo	ManualMatch
Matching Shapes	[Box.Edge6 (立...
Offset	[3.00 2.00 -1.0...

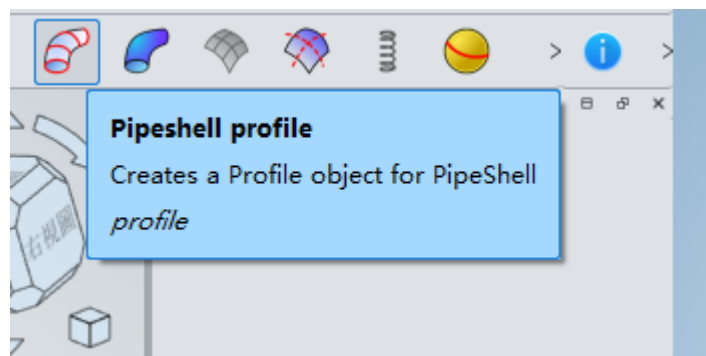
## 创建一个色彩叠层

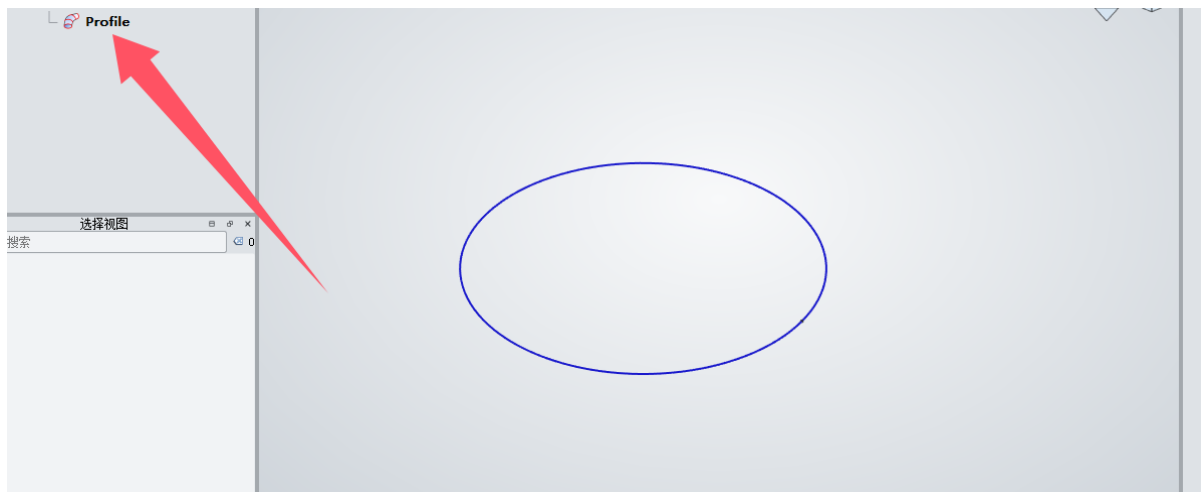
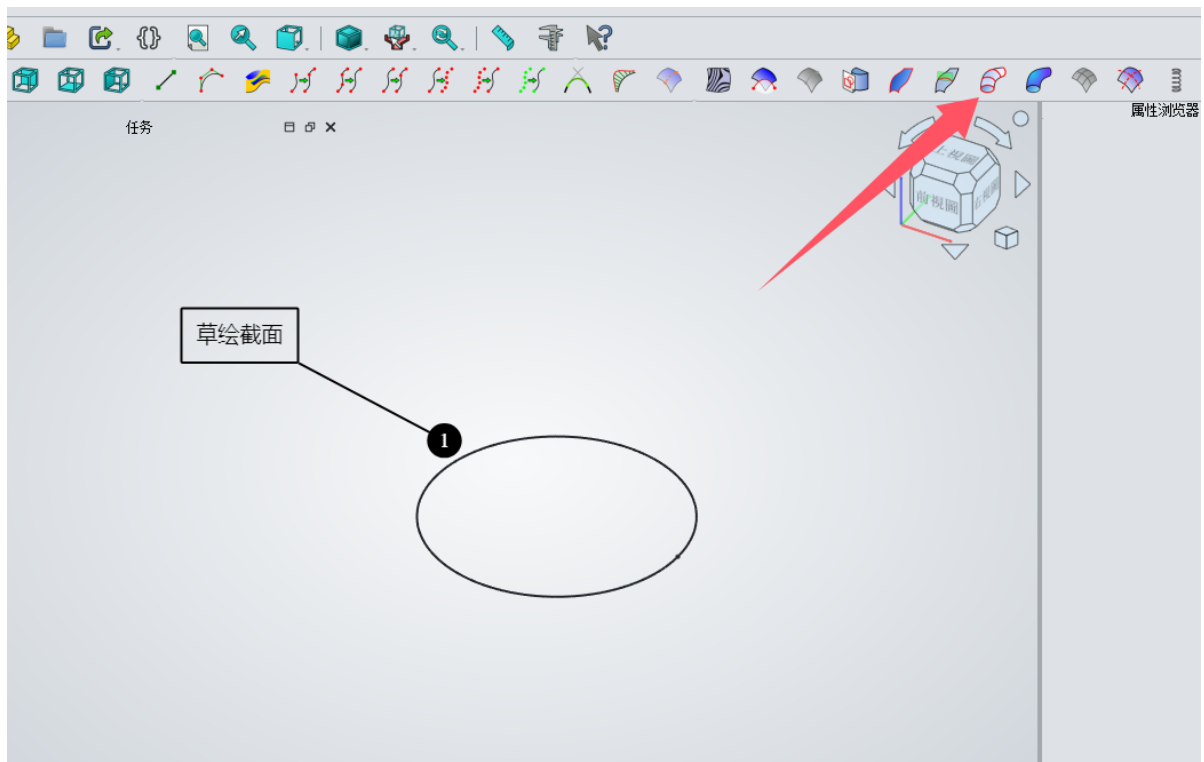
选定特定的曲面对象创建一个色彩叠层用于观察



## 路径放样转换

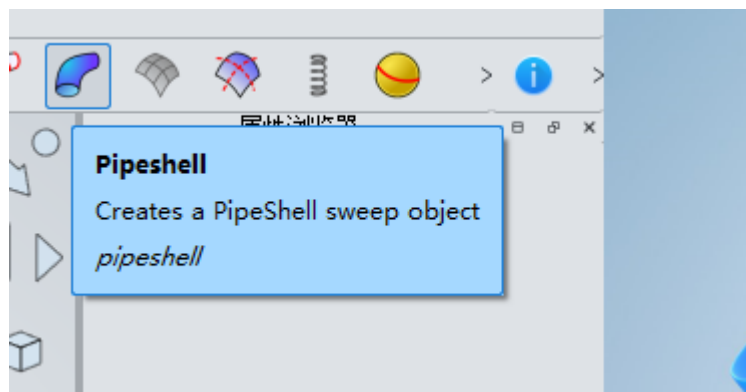
将所选草绘或者图元转换成放样路径或者截面对象。

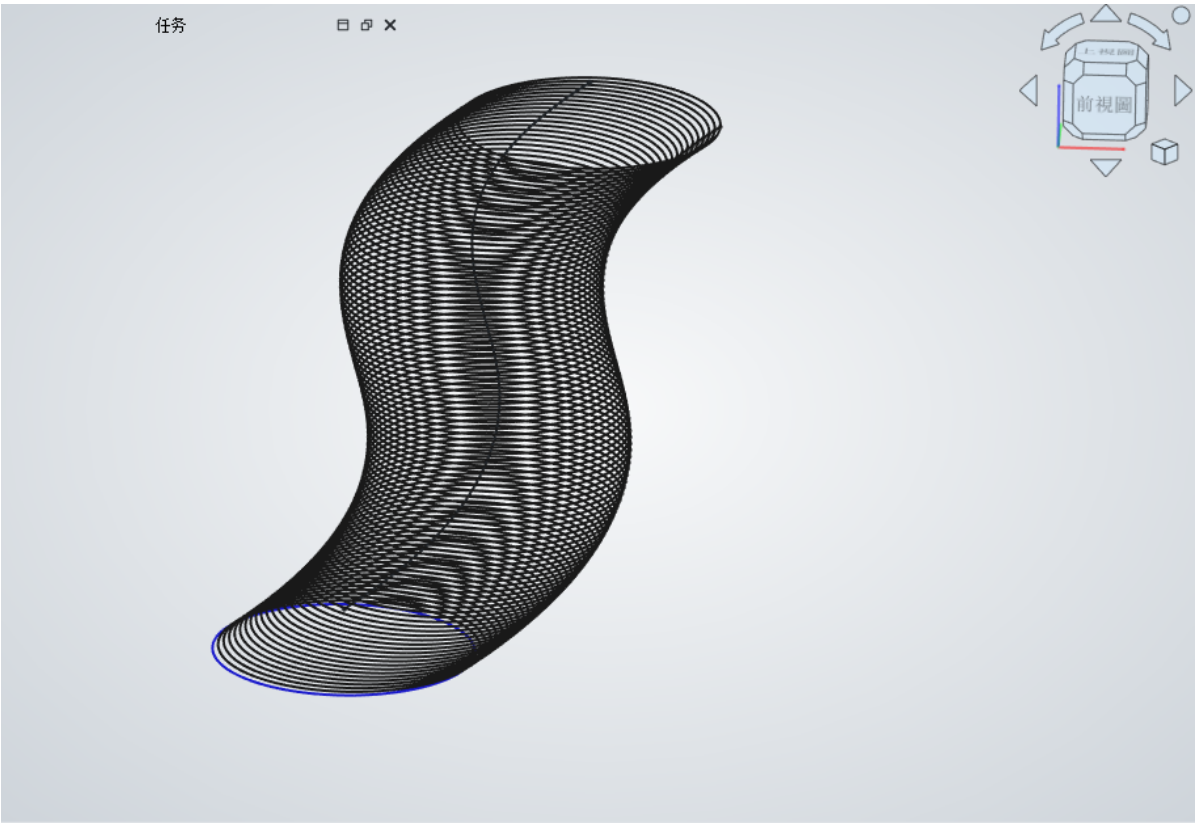
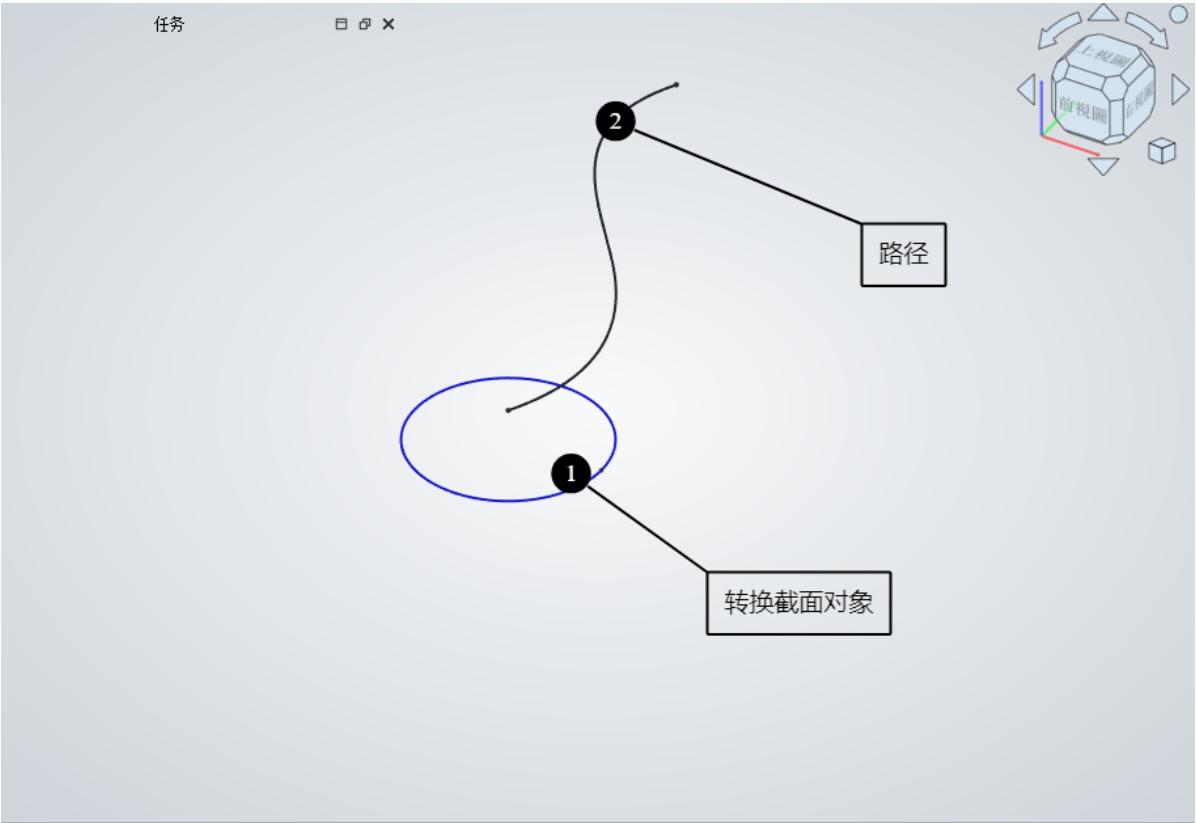




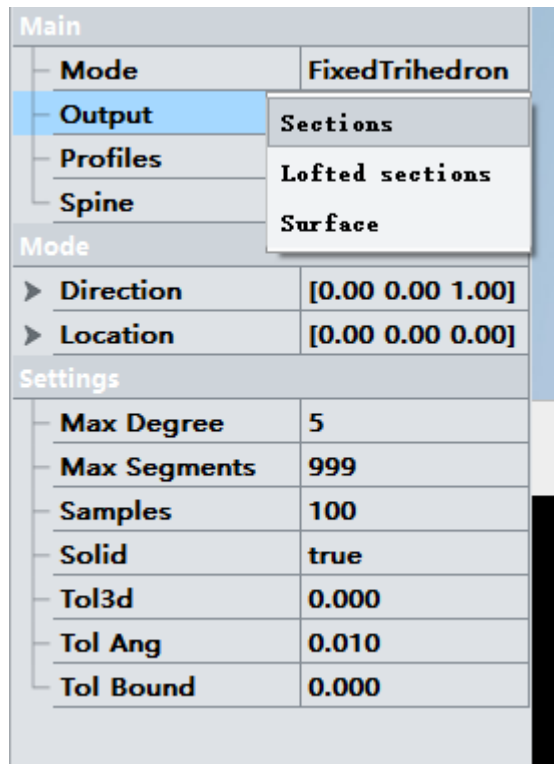
## 多重性扫掠

配合路径放样转换的对象进行多重扫掠，默认扫掠是经过路径产生的N个截面可在数据面板调整；默认模式为附加曲线跟随，模式可在数据面板调整。

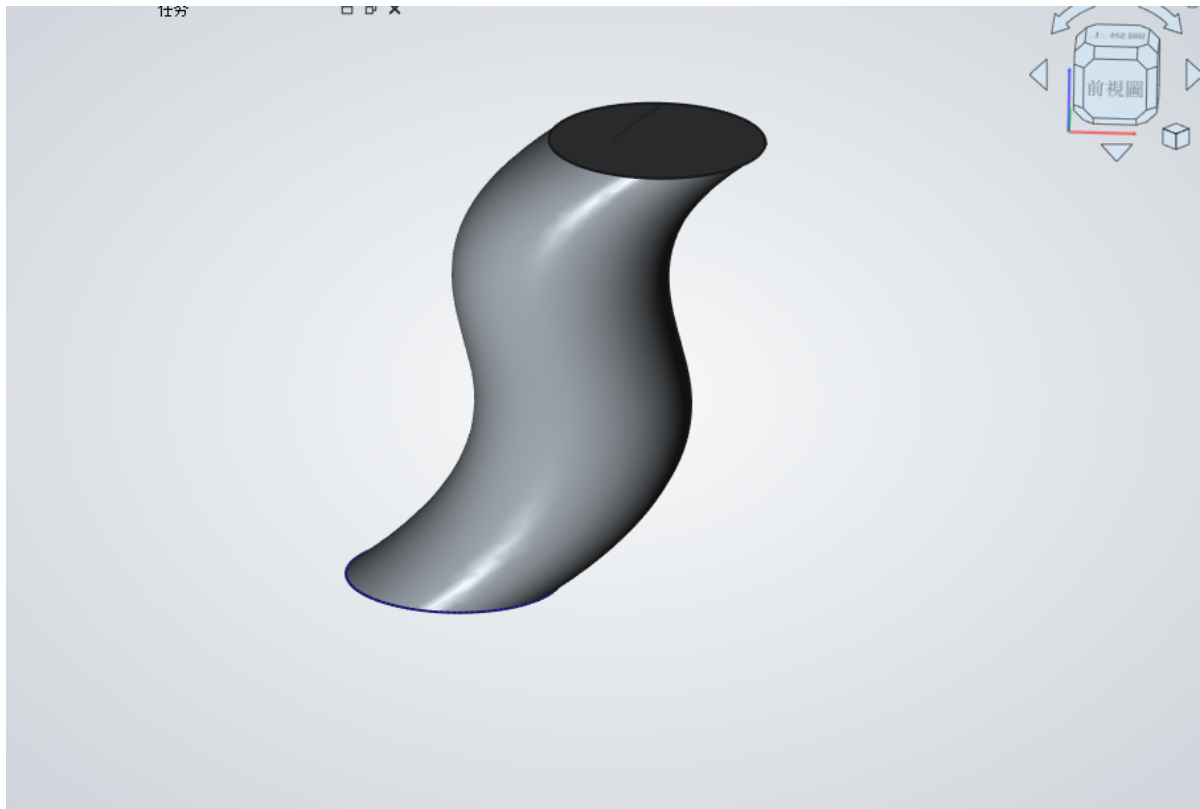




(扫掠结果)

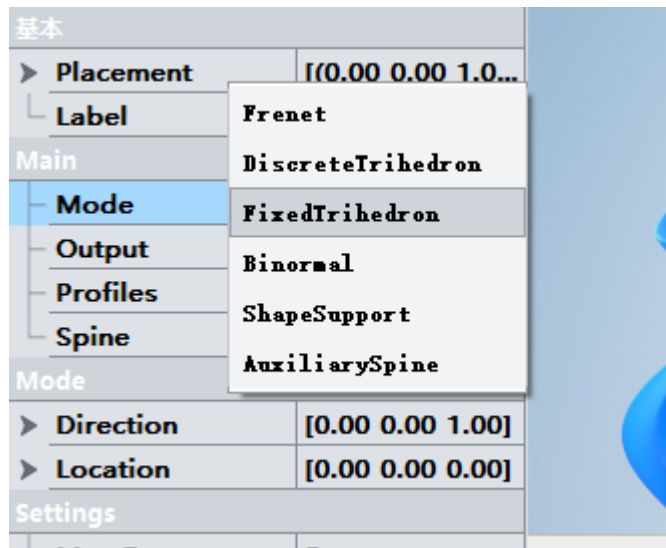


(默认为线框)

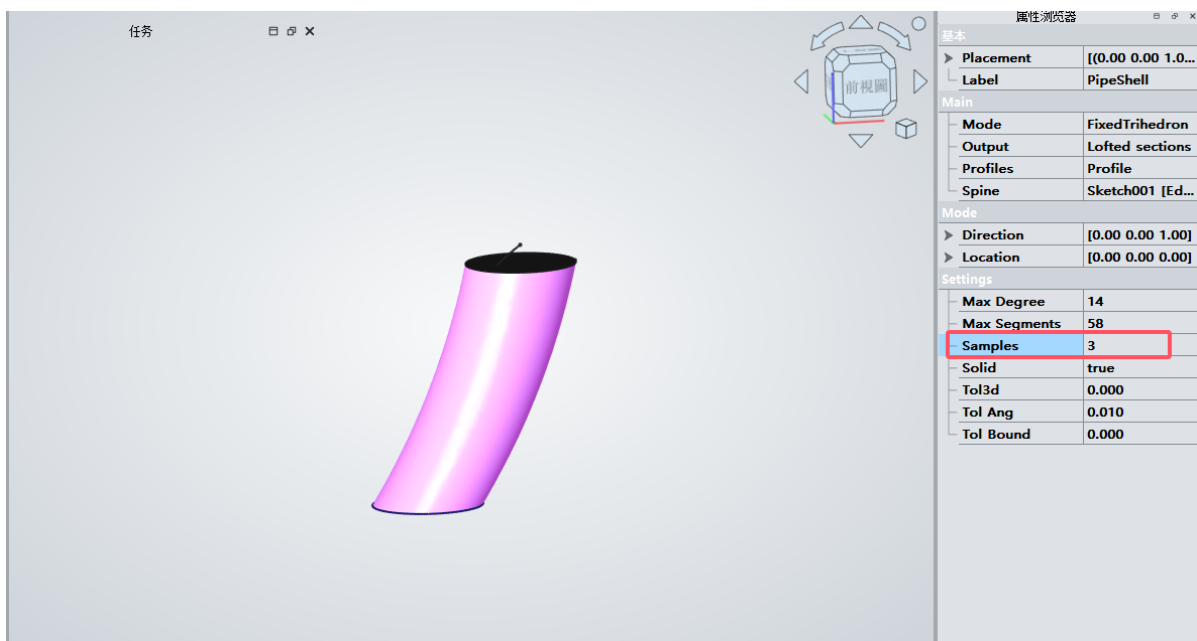
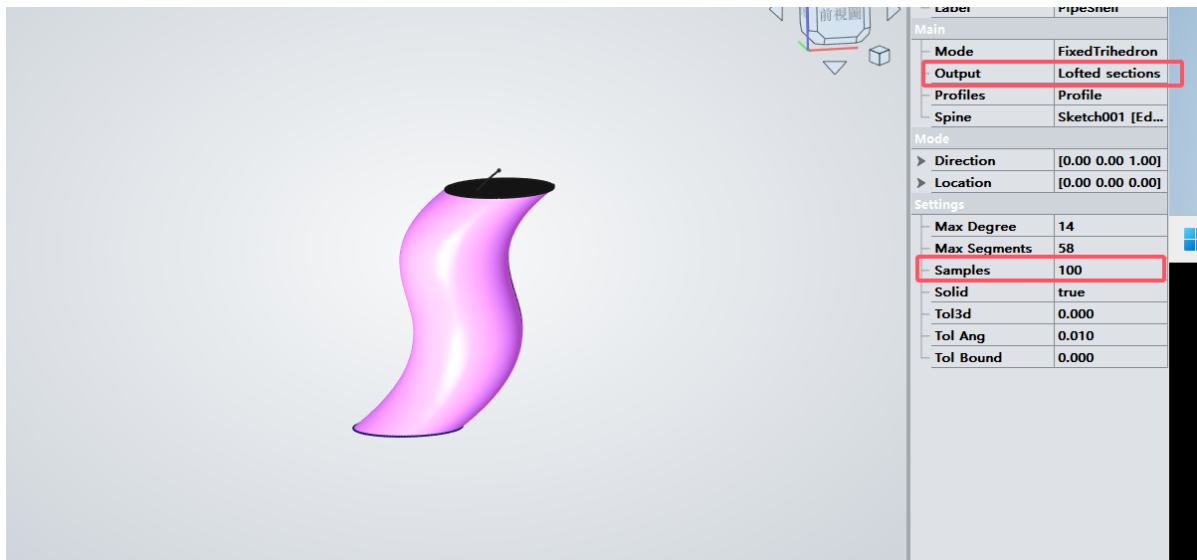


(选择为放样对象或surface曲面时)

在模式中可以调整扫掠的方式、跟随曲线路径或者自动插值。

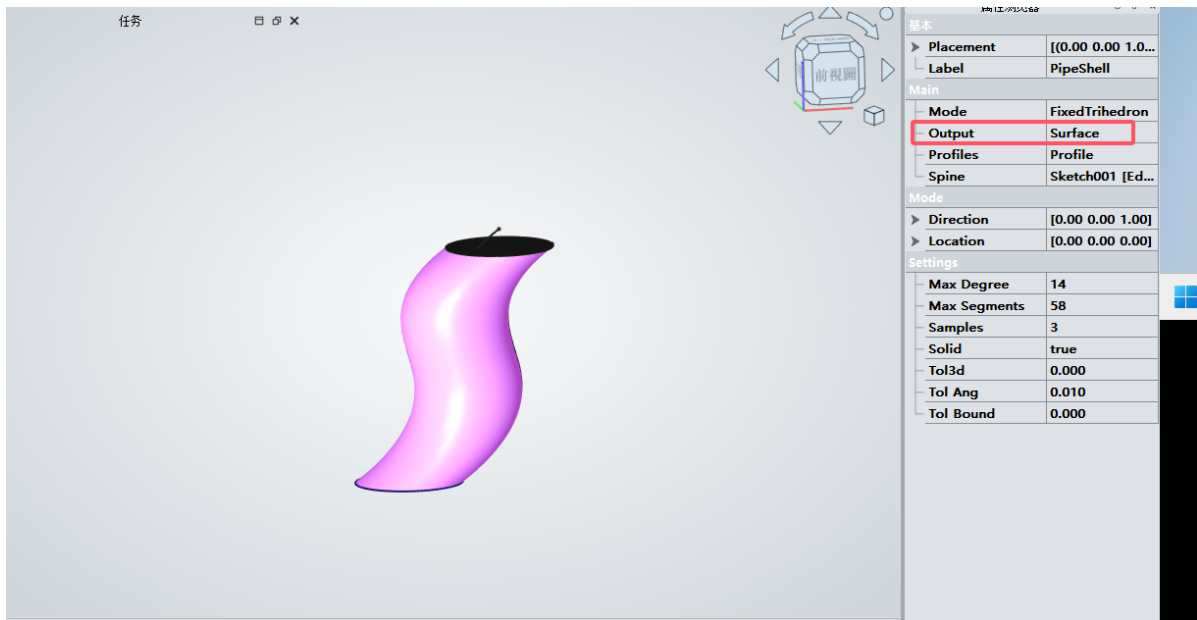


当模式为多重放样时数据面板中的细分次数将直接影响放样结果。



(最低为3次插补一次的放样)

如果模式为surface曲面时则不受影响。



## 多截面放样

多截面放样可在视图中选择若干个截面或者图元进行批量式的放样程序，这个功能同样是链接式的可以调整原始的对象来调整草绘。

