



Analysis and design of invisible correction

2020-09-10

Facial photograph



Intra-oral film

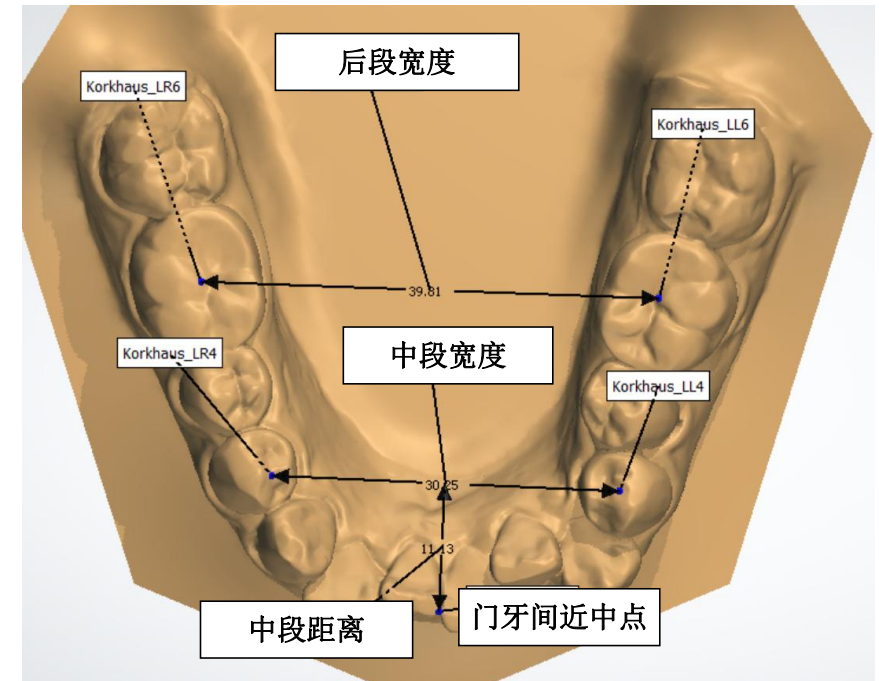
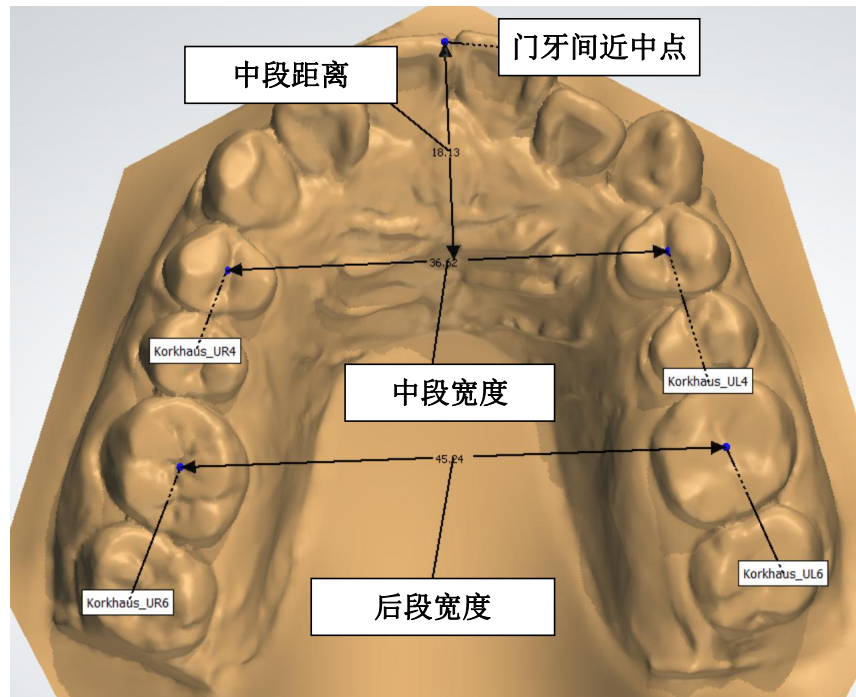
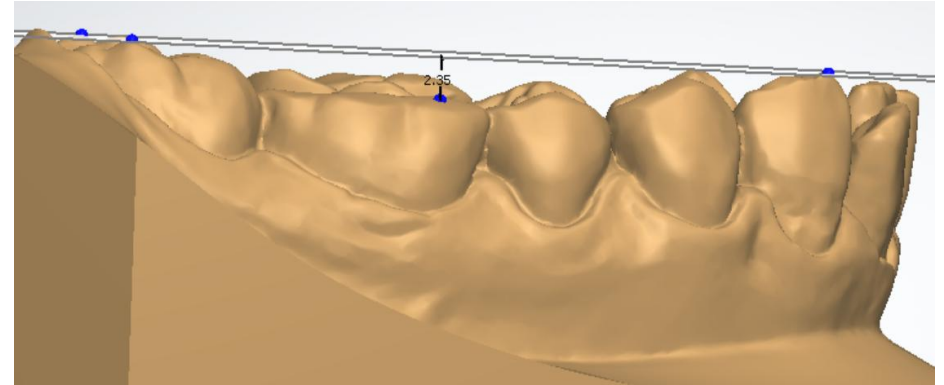
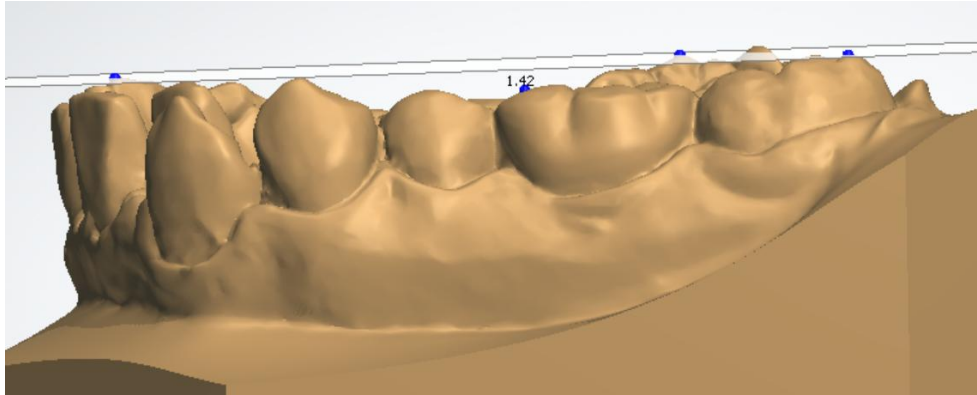


Cephalometrics

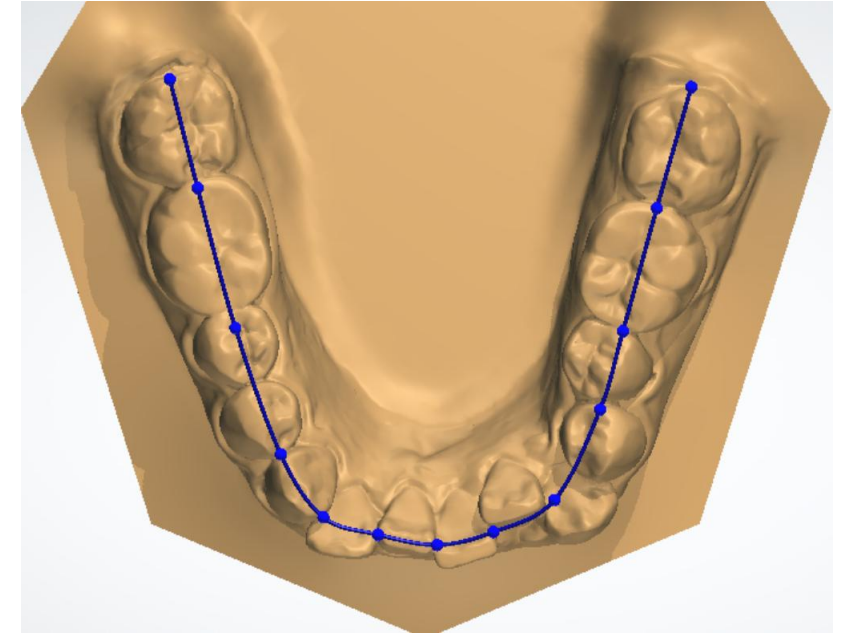
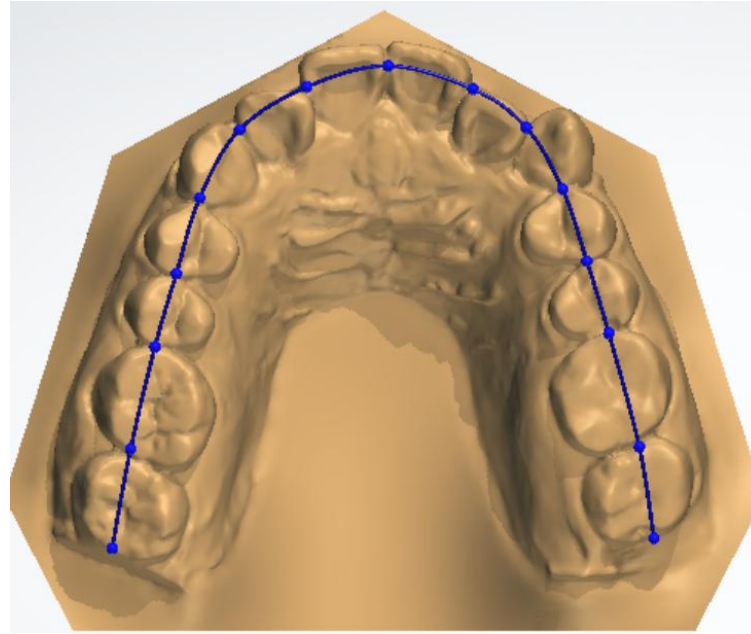
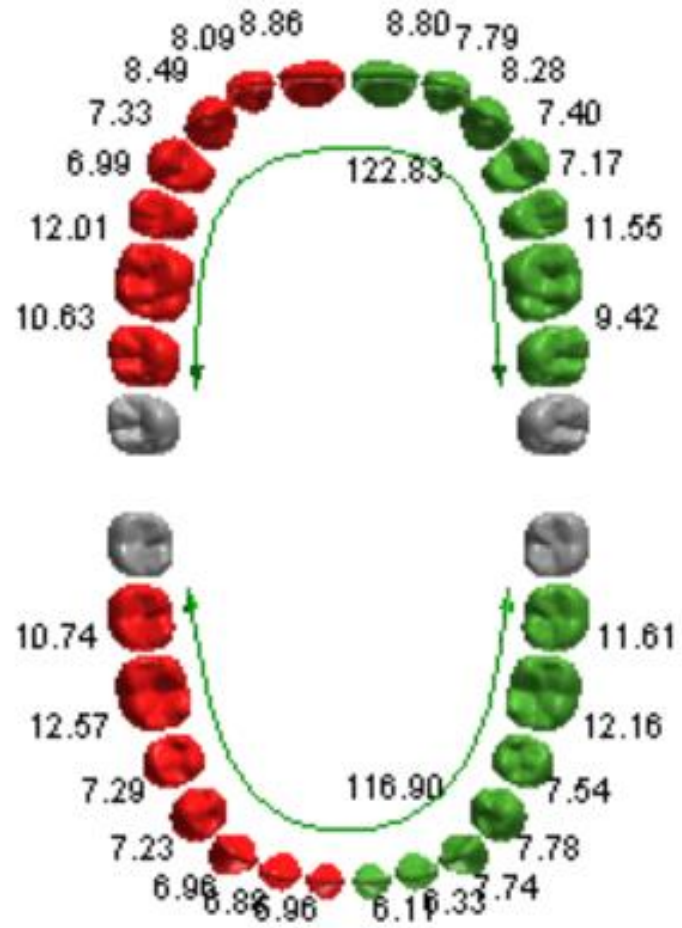


Model analysis

Gnathic curve: $(1.42+2.35) / 2+0.5=2.385\text{mm}$



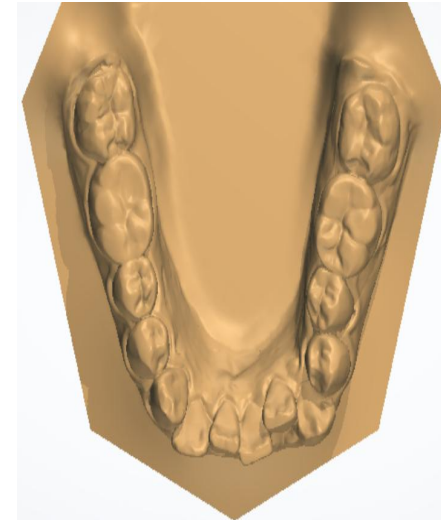
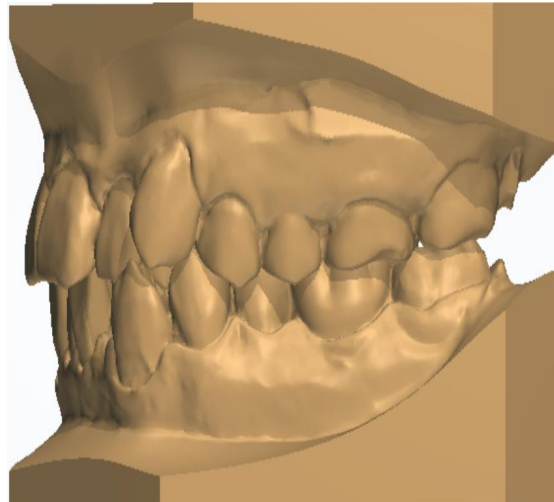
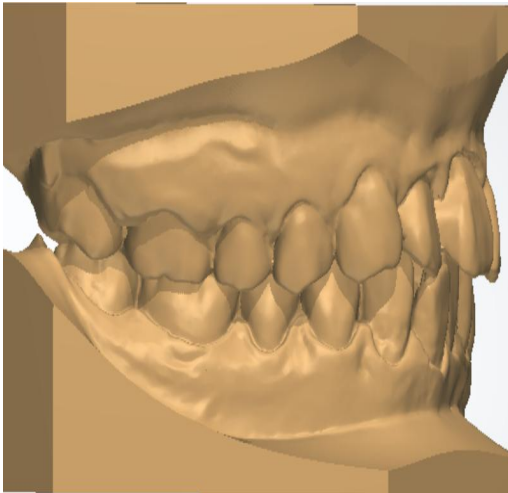
Model analysis-Tooth width



Bolton indices analysis

上3-3宽度	44.62	下3-3宽度	34.63	Bolton指数	正常值	测量值	备注
				Bolton6	78.8±1.72%	78%	
上6-6宽度	89.86	下6-6宽度	83.78	Bolton12	91.5±1.51%	93%	

Bolton indices analysis



Tooth movement data sheet (upper/lower jaw)— Phase: Maxilla 65 Lower jaw 70

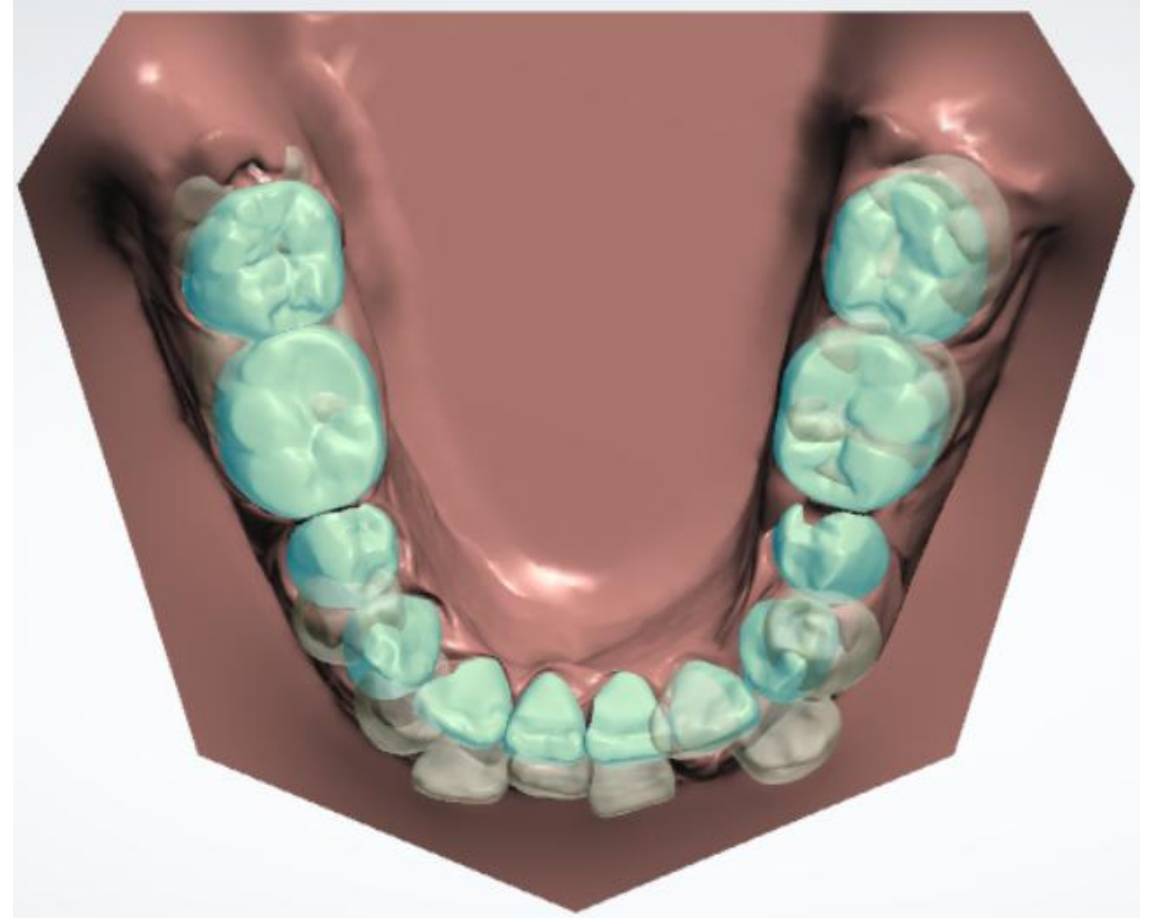
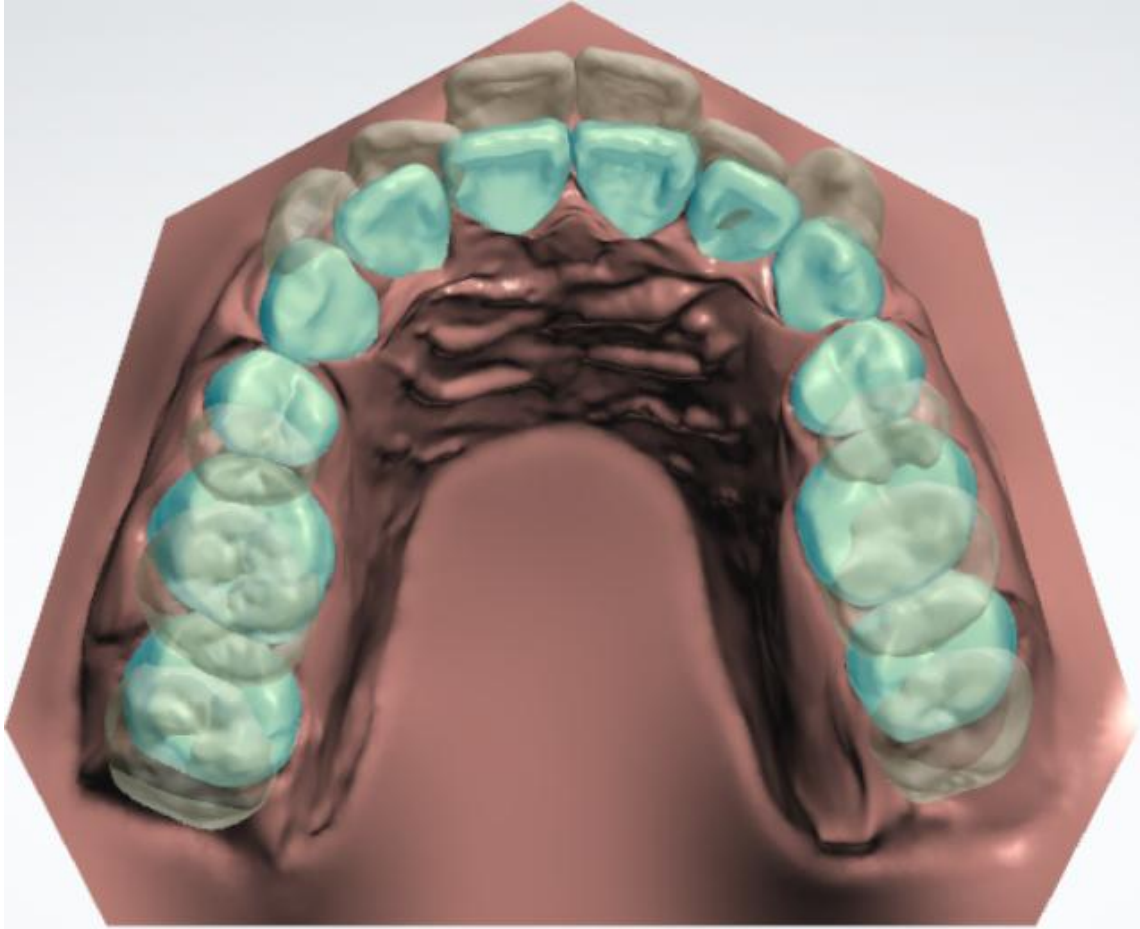
	倾斜	成角	旋转	左/右	前进/后退	挤出/侵入	牙齿长轴角度	IPR 远中	IPR 近中
18									
17	-4.1 deg	17.0 deg		0.6 mm	0.0 mm	0.5 mm	82.3 度		
16	-3.0 deg	3.0 deg		2.6 mm	0.0 mm	1.2 mm	79.4 度		
15				3.4 mm	-0.4 mm	0.7 mm	81.4 度		
14									
13		-20.0 deg	-10.0 deg	-0.1 mm	-1.0 mm	1.0 mm	77.1 度		
12	-11.0 deg	-1.8 deg	33.0 deg	-1.2 mm	-0.2 mm	1.9 mm	69.3 度		
11	-12.0 deg	-3.0 deg		0.0 mm	-0.4 mm	2.1 mm	71.4 度		
21	-12.0 deg	-4.1 deg	-10.0 deg	0.3 mm	0.0 mm	2.4 mm	71.1 度		
22	-6.0 deg	-6.8 deg		-0.5 mm	0.0 mm	1.2 mm	68.2 度		
23	-2.0 deg	-16.0 deg	-30.8 deg	0.1 mm	0.0 mm	1.2 mm	70.7 度		
24									
25	1.0 deg			4.0 mm			83.2 度		
26	-1.0 deg			4.2 mm			83.9 度		
27	-2.0 deg	6.0 deg		3.2 mm	0.0 mm	0.0 mm	84.7 度		
28									
38									
37	-1.0 deg	-1.0 deg		1.6 mm	-1.0 mm	-0.8 mm	65.8 度		
36	-2.0 deg	4.0 deg	9.0 deg	0.9 mm	0.0 mm	-0.3 mm	75.4 度		
35									
34	-0.1 deg	-15.0 deg	-6.0 deg	-2.6 mm	-1.1 mm	2.1 mm	75.3 度		
33	-9.0 deg	4.0 deg	28.0 deg	-3.8 mm	-2.7 mm	1.5 mm	79.0 度		
32		-5.0 deg	10.0 deg	-0.2 mm	0.0 mm	1.5 mm	76.6 度		
31	-6.0 deg		-11.0 deg	-0.4 mm	-1.3 mm	2.0 mm	77.2 度		
41			-5.0 deg	-0.7 mm	-1.8 mm	1.6 mm	77.4 度		
42	-10.0 deg	0.0 deg	19.8 deg	-0.5 mm	-1.3 mm	1.7 mm	74.1 度		
43		-6.0 deg		-2.0 mm	-1.1 mm	1.5 mm	83.0 度		
44	0.0 deg	-3.0 deg		-3.2 mm	-0.7 mm	1.0 mm	72.6 度		
45									
46		1.0 deg		3.2 mm	-0.7 mm	-1.5 mm	76.0 度		
47	0.0 deg			3.6 mm	-0.8 mm	-1.5 mm	64.6 度		
48									

Note: Estimated duration
980 days。
about 2.7years

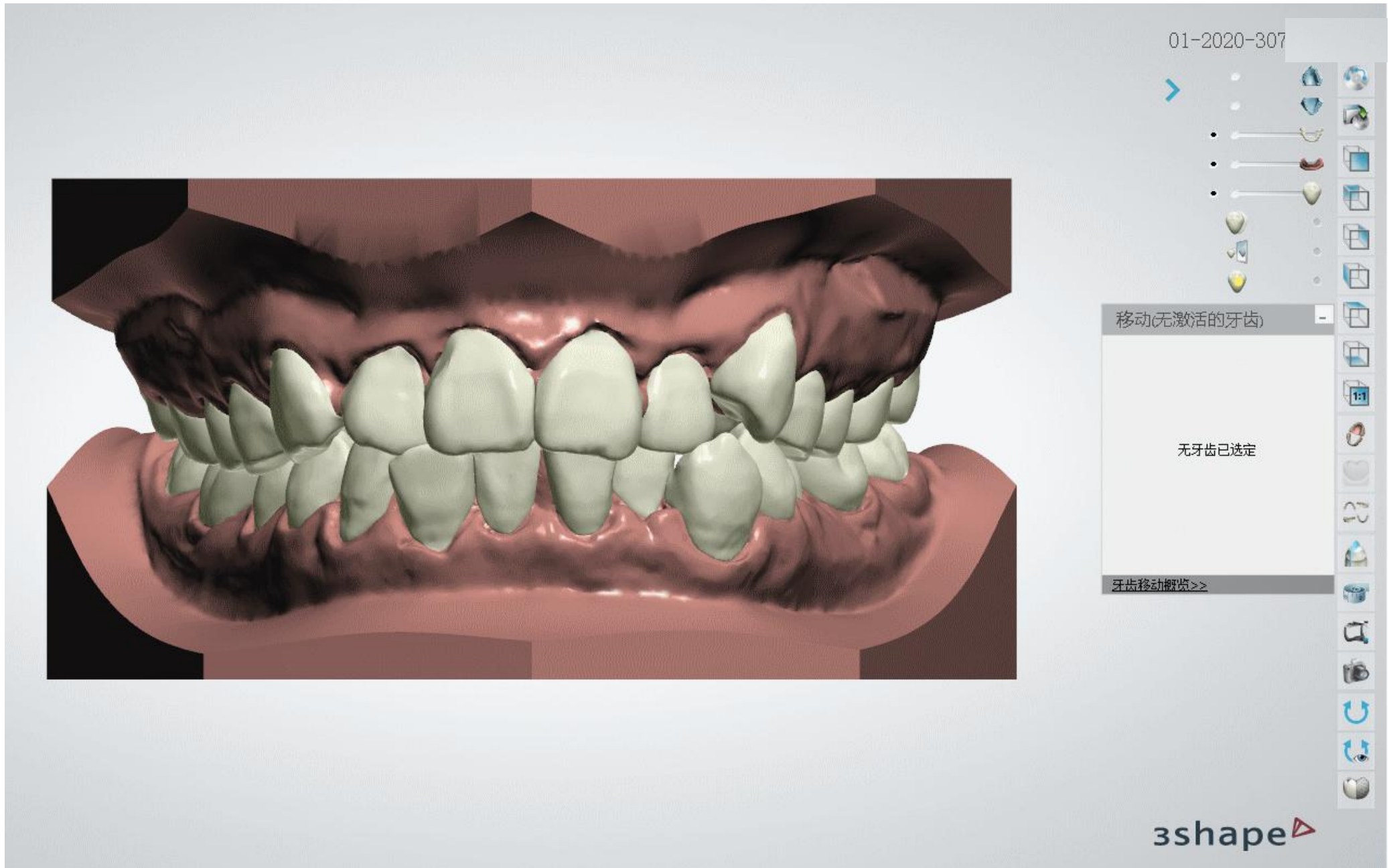
Comparison before and after correction

Shadow - before
correction

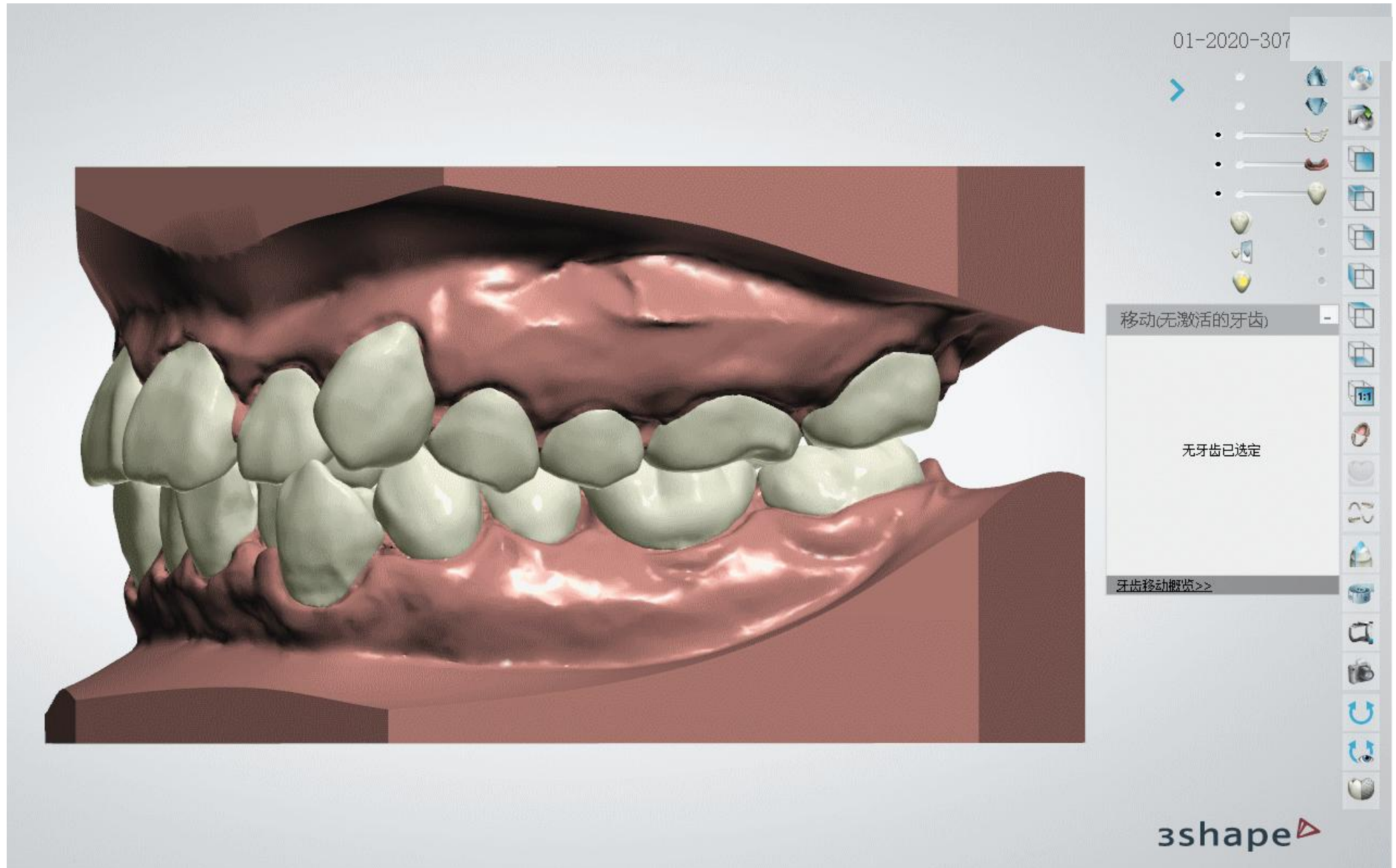
Blue - after correction



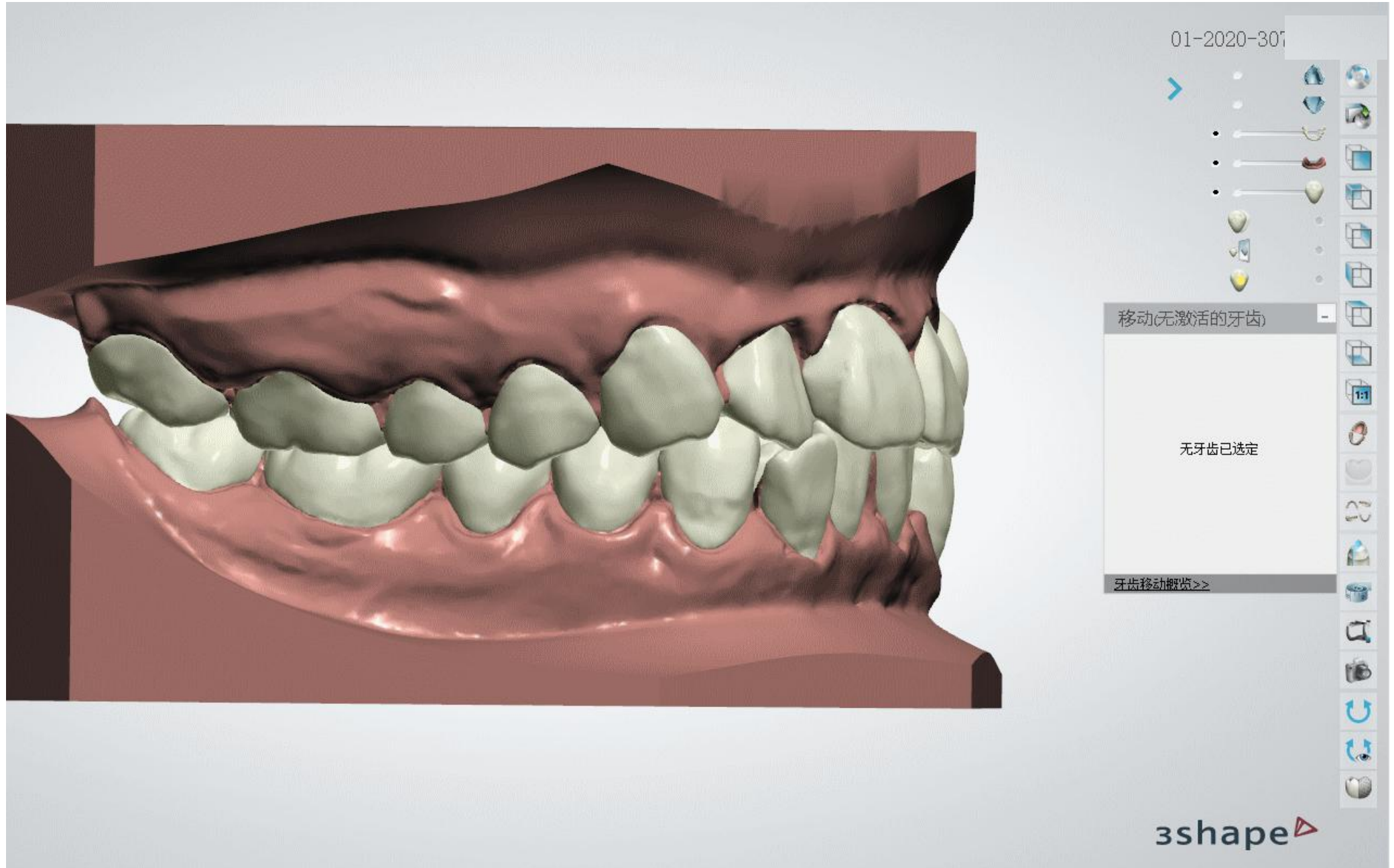
Corrective design animation



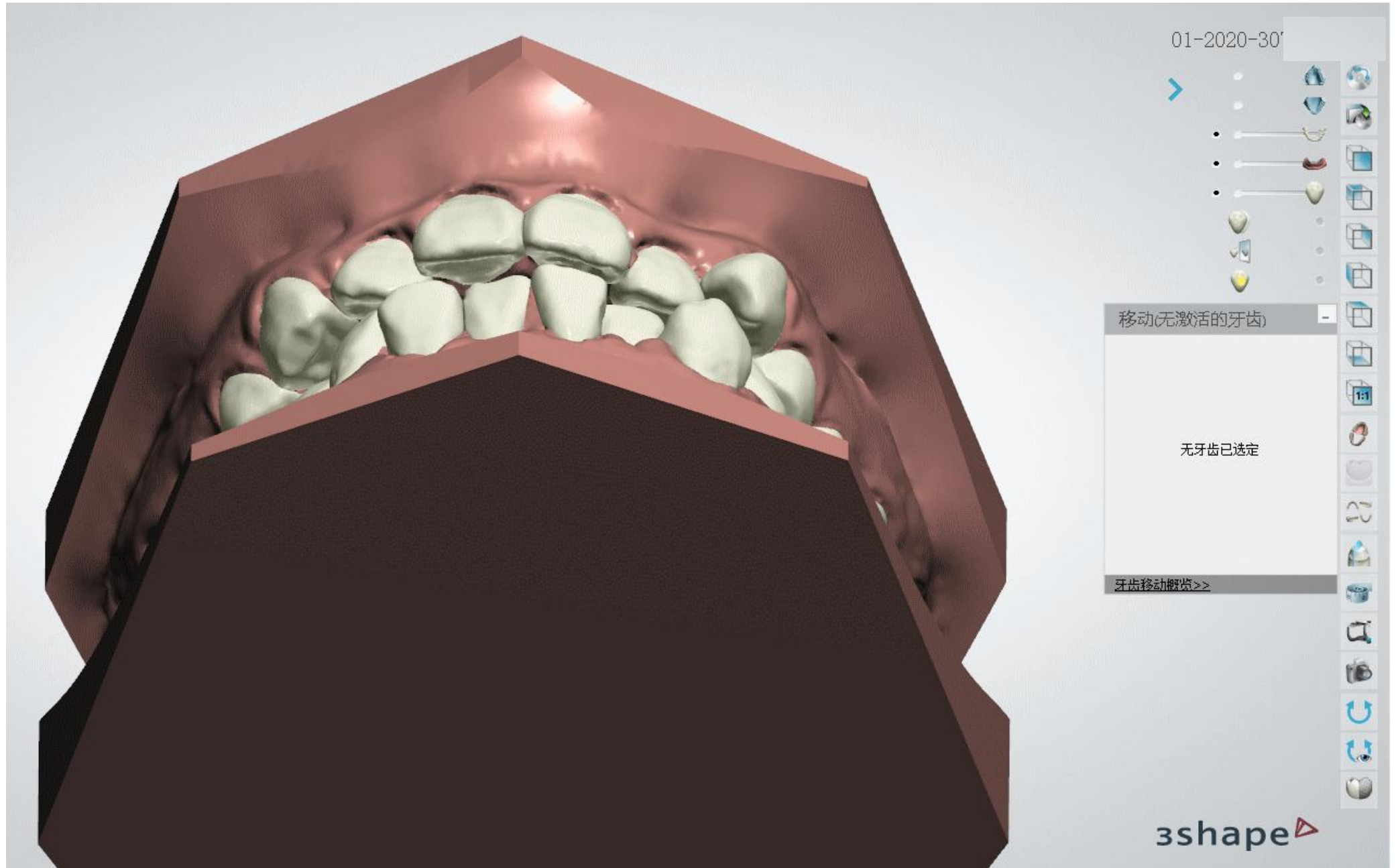
Corrective design animation



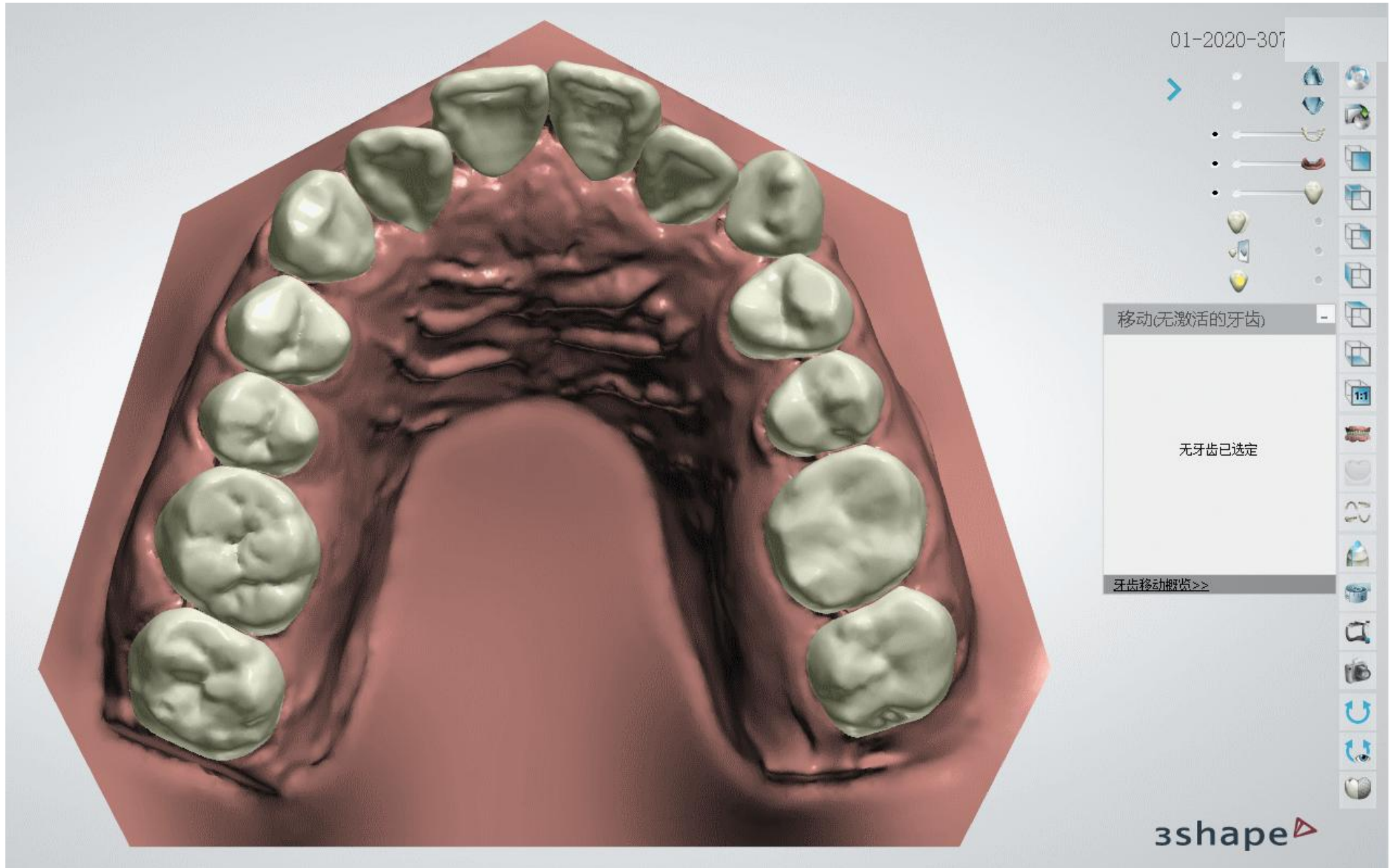
Corrective design animation



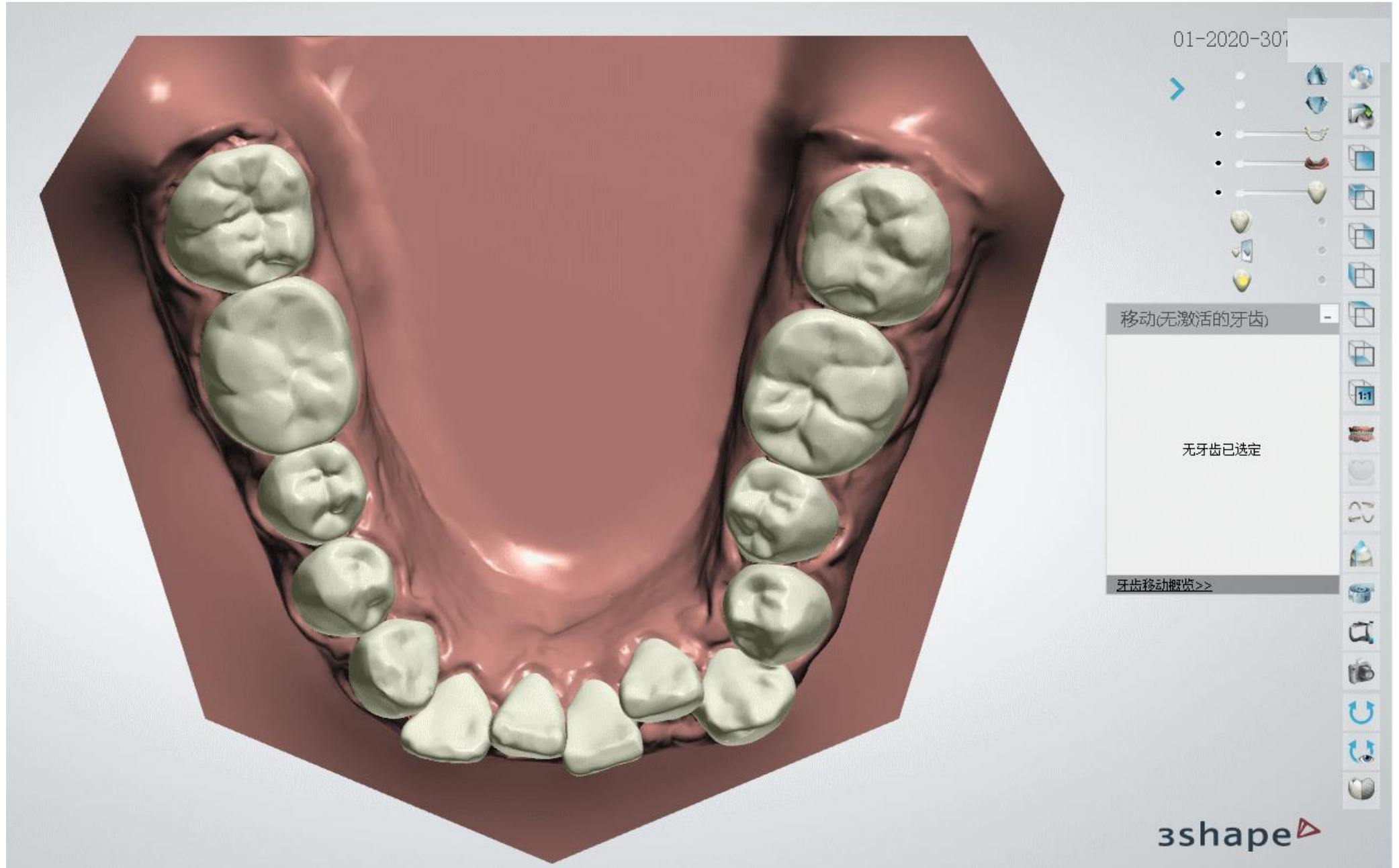
Corrective design animation



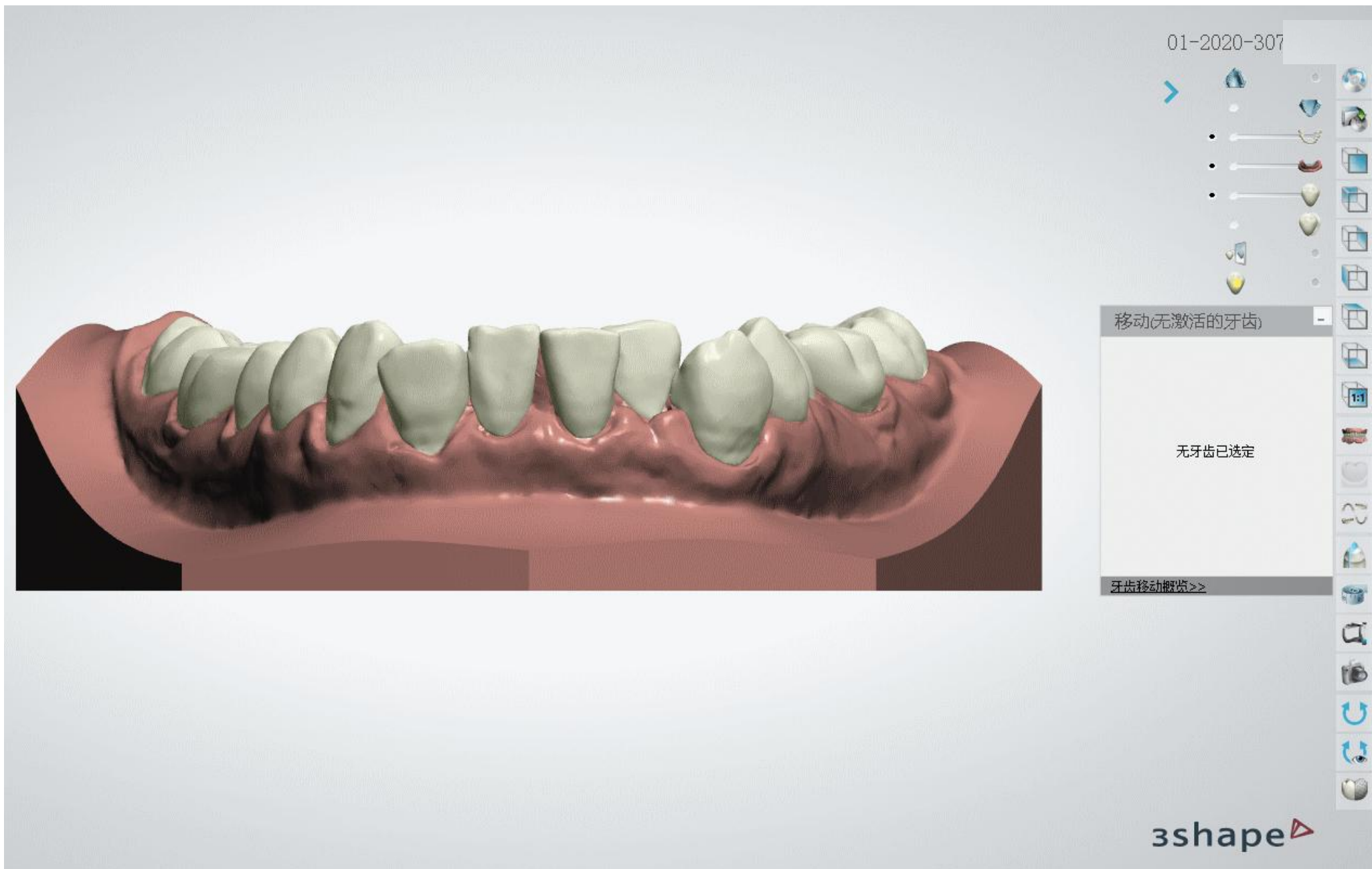
Corrective design animation



Corrective design animation



Corrective design animation



2020-09-10

Comparison before and after correction



2022-06-15 recent visit, wear 18 months



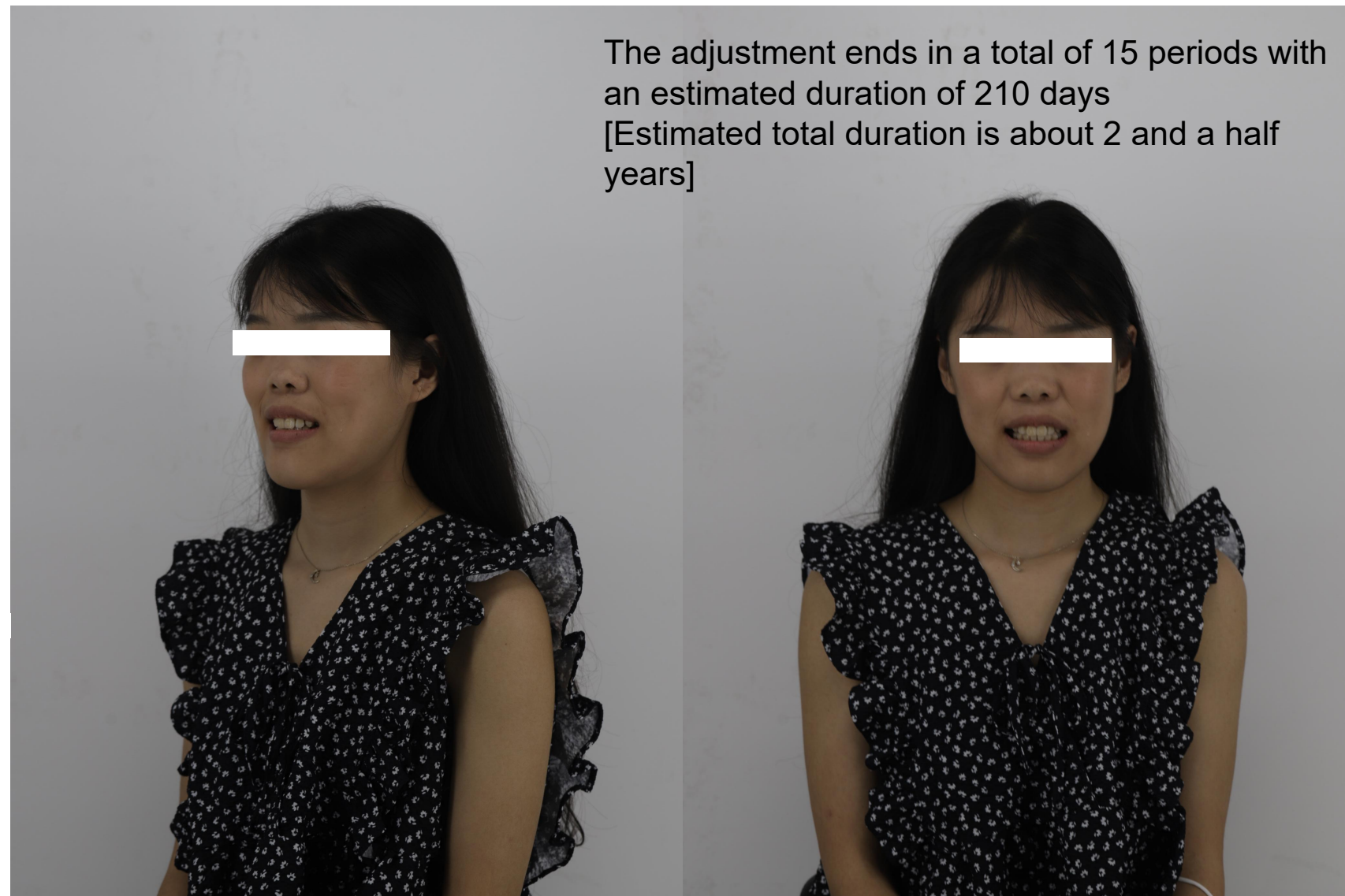
Comparison before and after correction

2022-06-15 subsequent visit



Comparison before and after correction

2022-06-15 subsequent visit



The adjustment ends in a total of 15 periods with an estimated duration of 210 days
[Estimated total duration is about 2 and a half years]