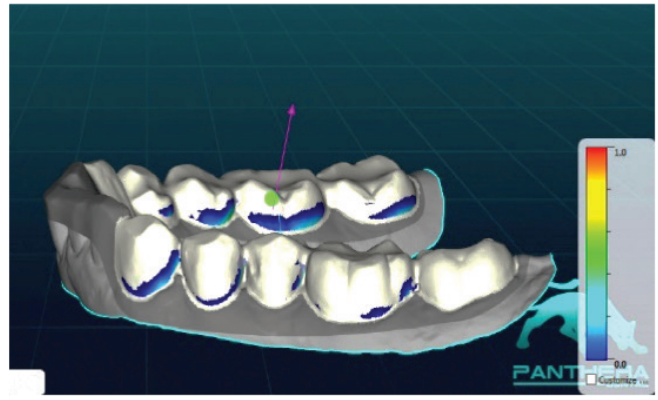
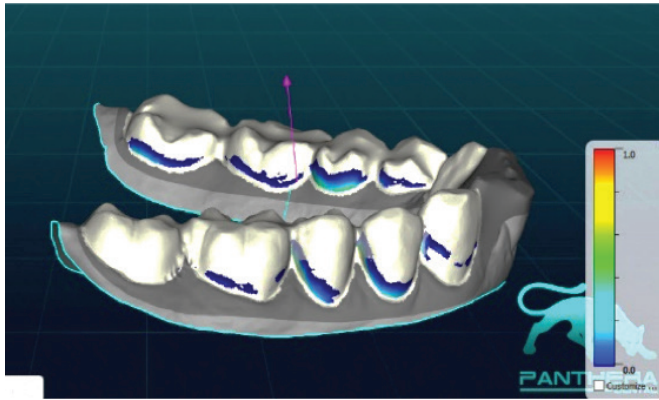


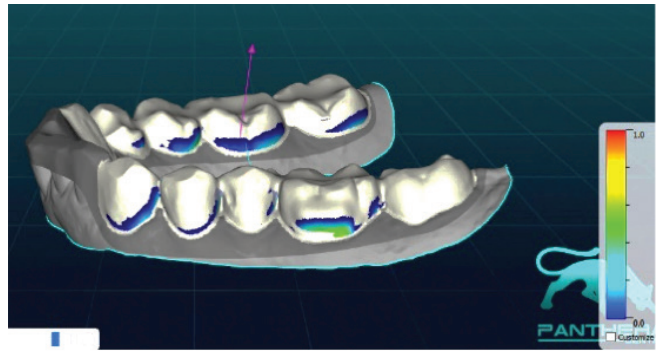
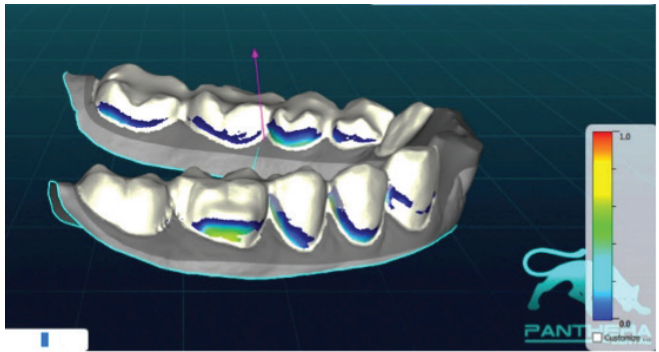
## D-SAD SOFTWARE RETENTION EVALUATION

Panthera uses software to determine the retention quality of the D-SAD. A colored scale ranging from dark blue (no retention) to red (extreme retention) indicates if adjustment solutions such as design changes and/or composite buttons are necessary.

The two pictures below show the natural retention from both sides of a patient's mandible. This case offers very weak retention for the D-SAD.



The next pictures show the same patient's mandible, but this time with much better retention thanks to the addition of two composite buttons to the first molars of both arches. The green-to-yellow zone is what we aim for. Any indication of a higher retention zone will require grinding the inside of the D-SAD to relieve retentivity.



When composite buttons are requested and accepted, please note that we return cases with the models that were used to make the D-SAD, but that we also include additional models with the buttons on. This way doctors and patients can better appreciate and understand how buttons will contribute to overall retention.

Of course, there may be factors that we are unaware of that could void the need for additional retention such as a patient's sleeping habit, e.g. clenching, bruxism, etc. In instances of borderline retention, we always recommend letting patients wear the D-SAD for a few weeks to get their feedback. In many cases, patients do not experience any retention issues and if they do, the solution is easy to implement.

Lastly, when composite buttons are accepted, the D-SAD is prepared with button cavities. This enables the doctor to use the D-SAD as a jig to position the composite buttons on the patient's teeth. The doctor can also make his own jig using the models. Demonstrations for both techniques are available to watch on our YouTube Channel <https://www.youtube.com/user/PantheraDental>.