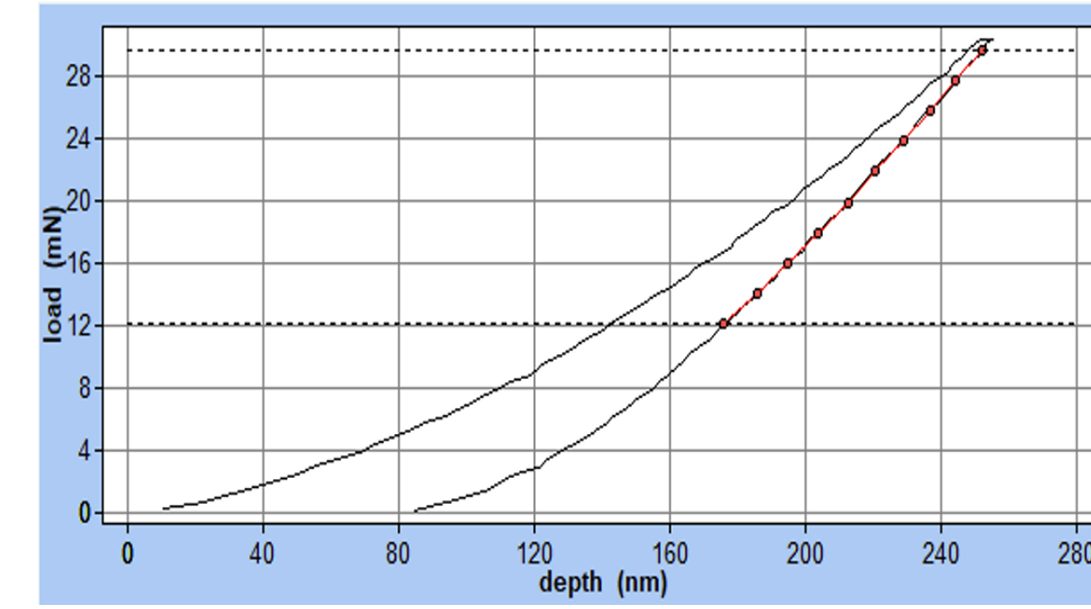


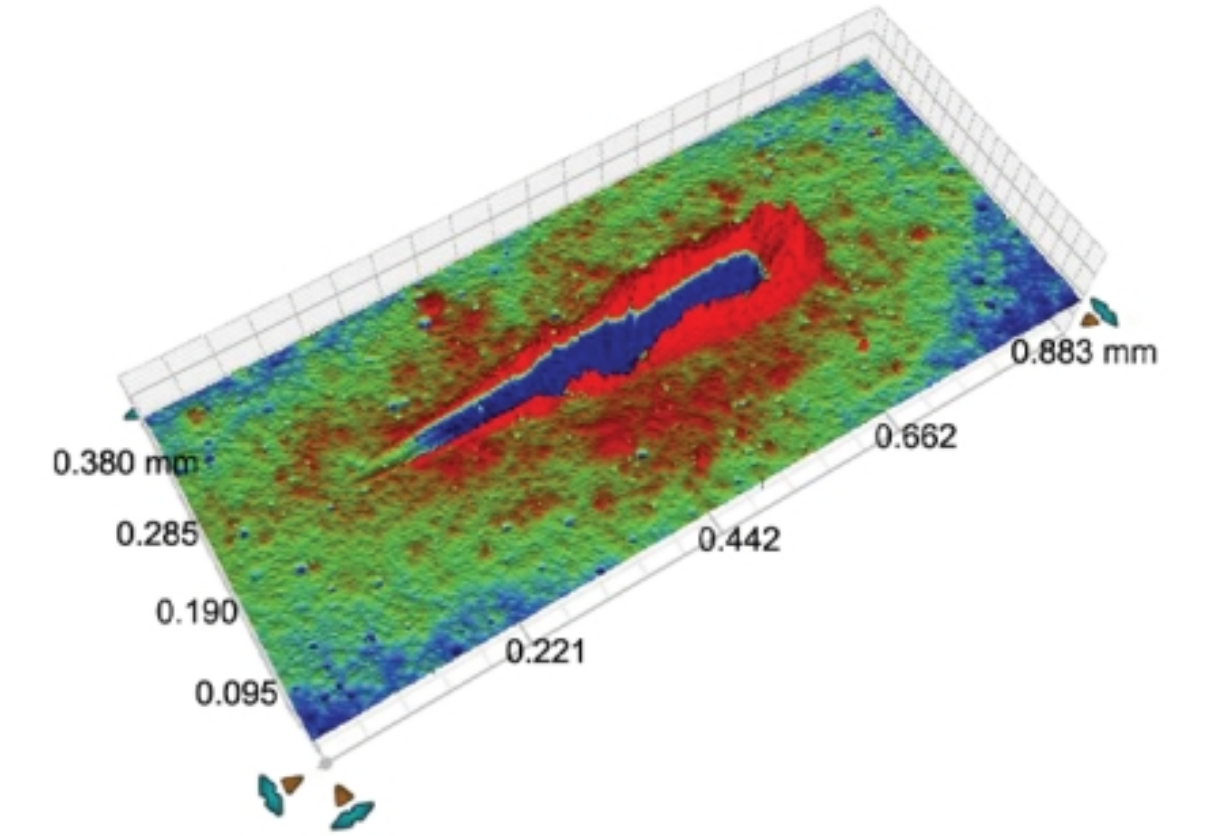
Motivation

A better understanding of your coating stacks and their behavior in the desired application is a crucial point for the optimization of complex systems. To improve the understanding of the system usually a lot of tests are performed, which are designed to be as close as possible to the application. A better performance in the tests correlates to a better performance in the application.

With the help of our models and software packages it's possible to improve this process. The idea is to transform as much gathered knowledge as possible to a digital model. With such a model you will not only know how good the system performed in a specific test. You can use the data and compare the test results to find the initial reason for a certain failure mode.



Indentation measurement

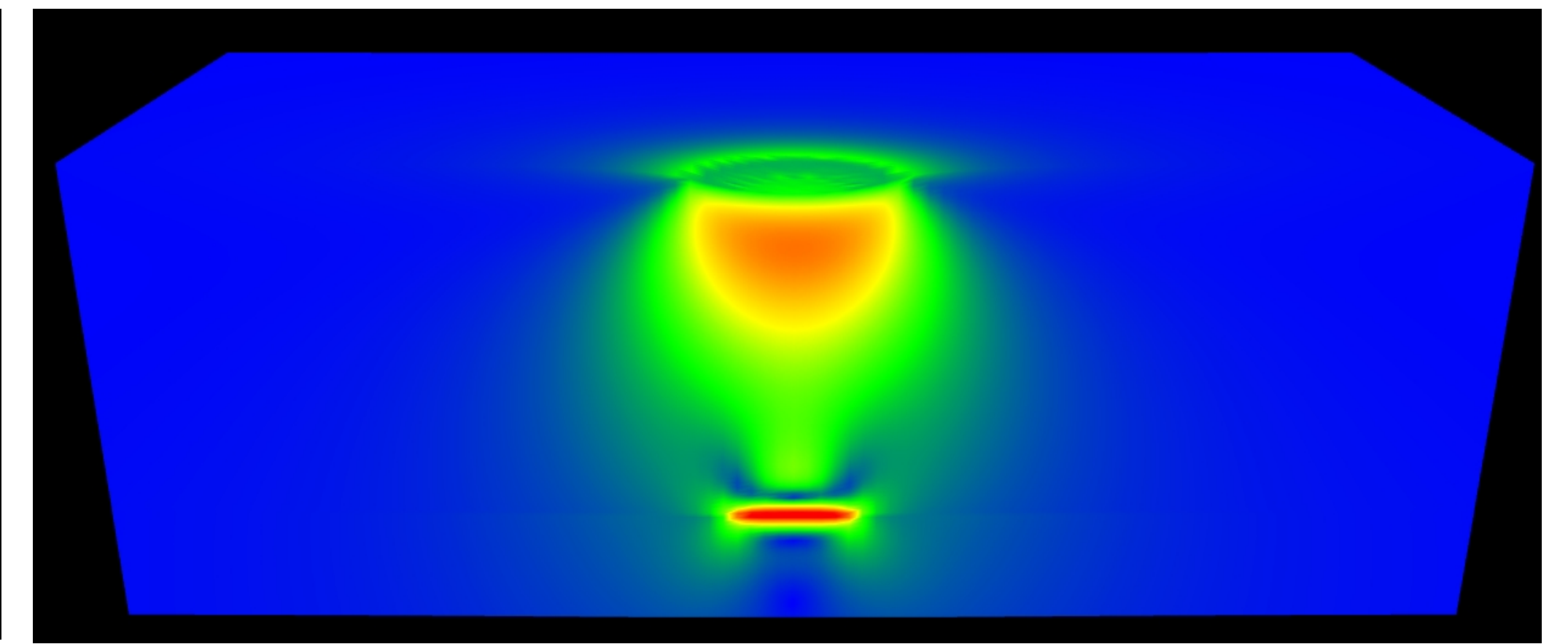
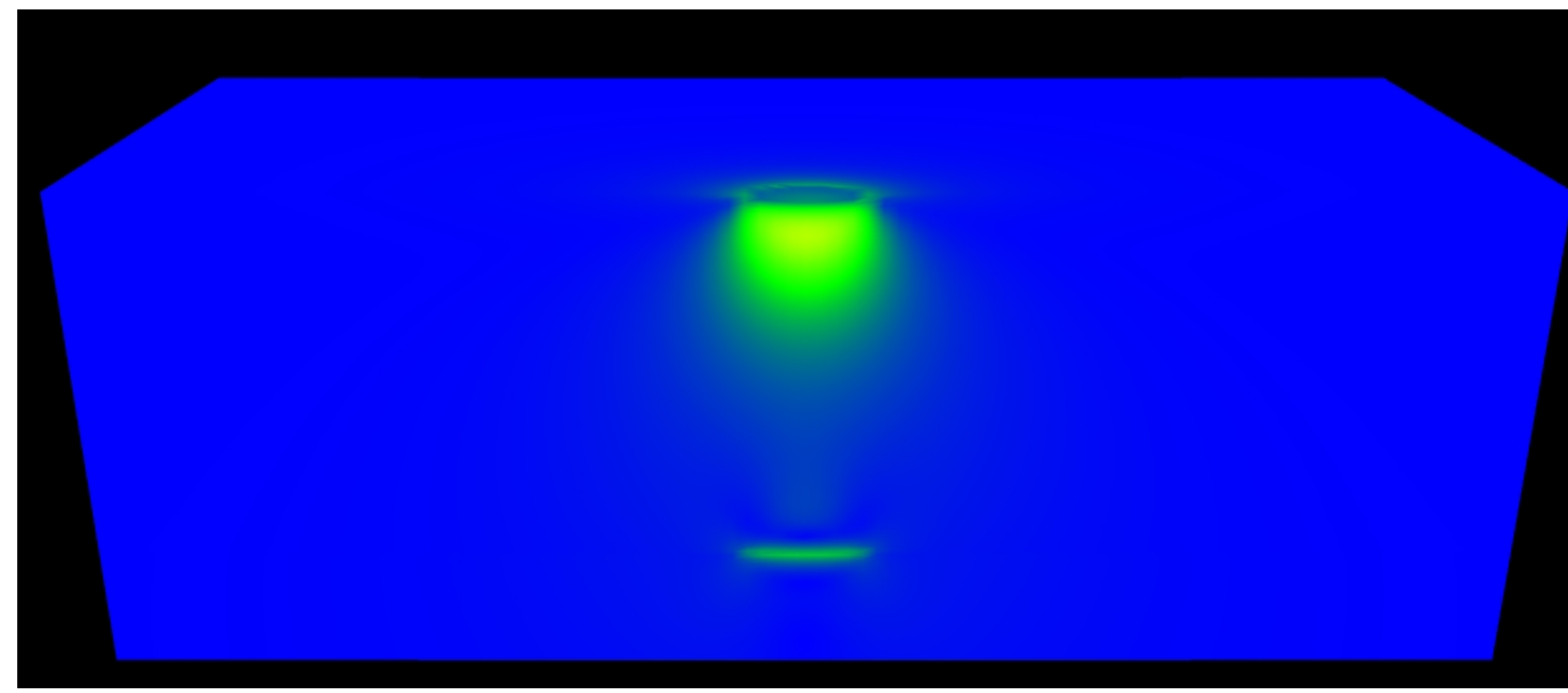


Scratch path profile

Visualize simple contact conditions

To visualize the critical regions of a system it's needed to calculate the data at the most interesting positions. For complex material stacks and multiple contact conditions this task is not easy.

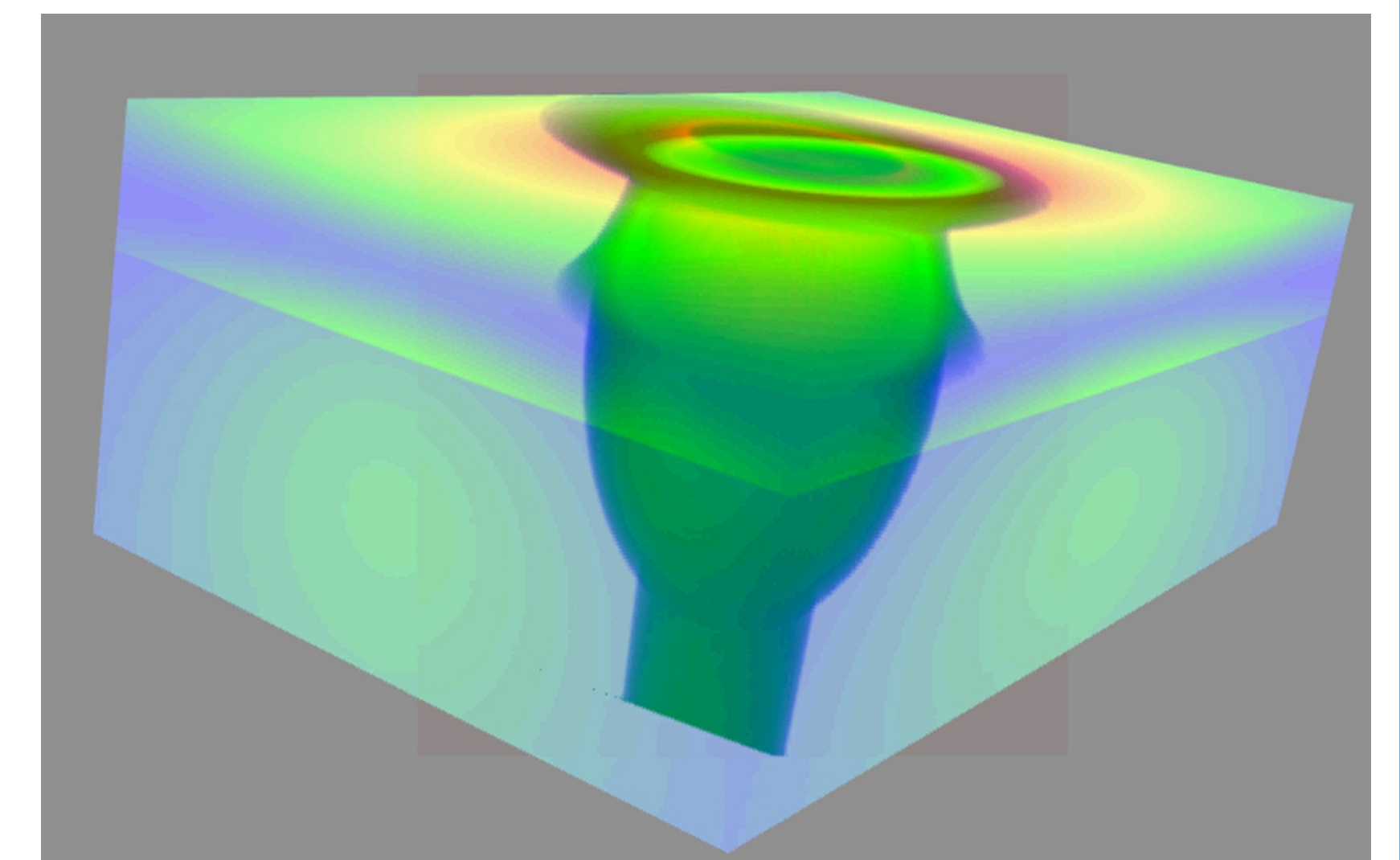
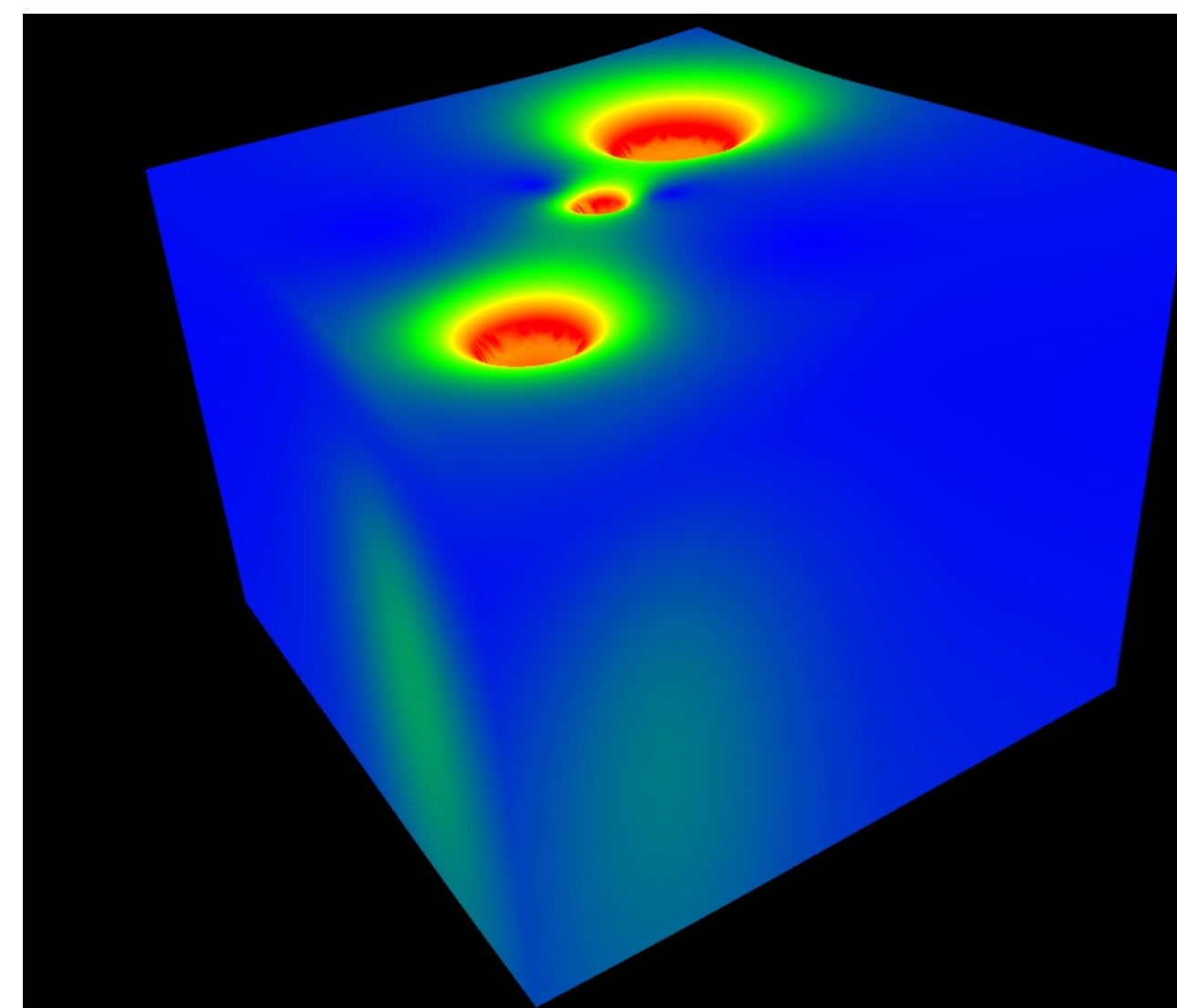
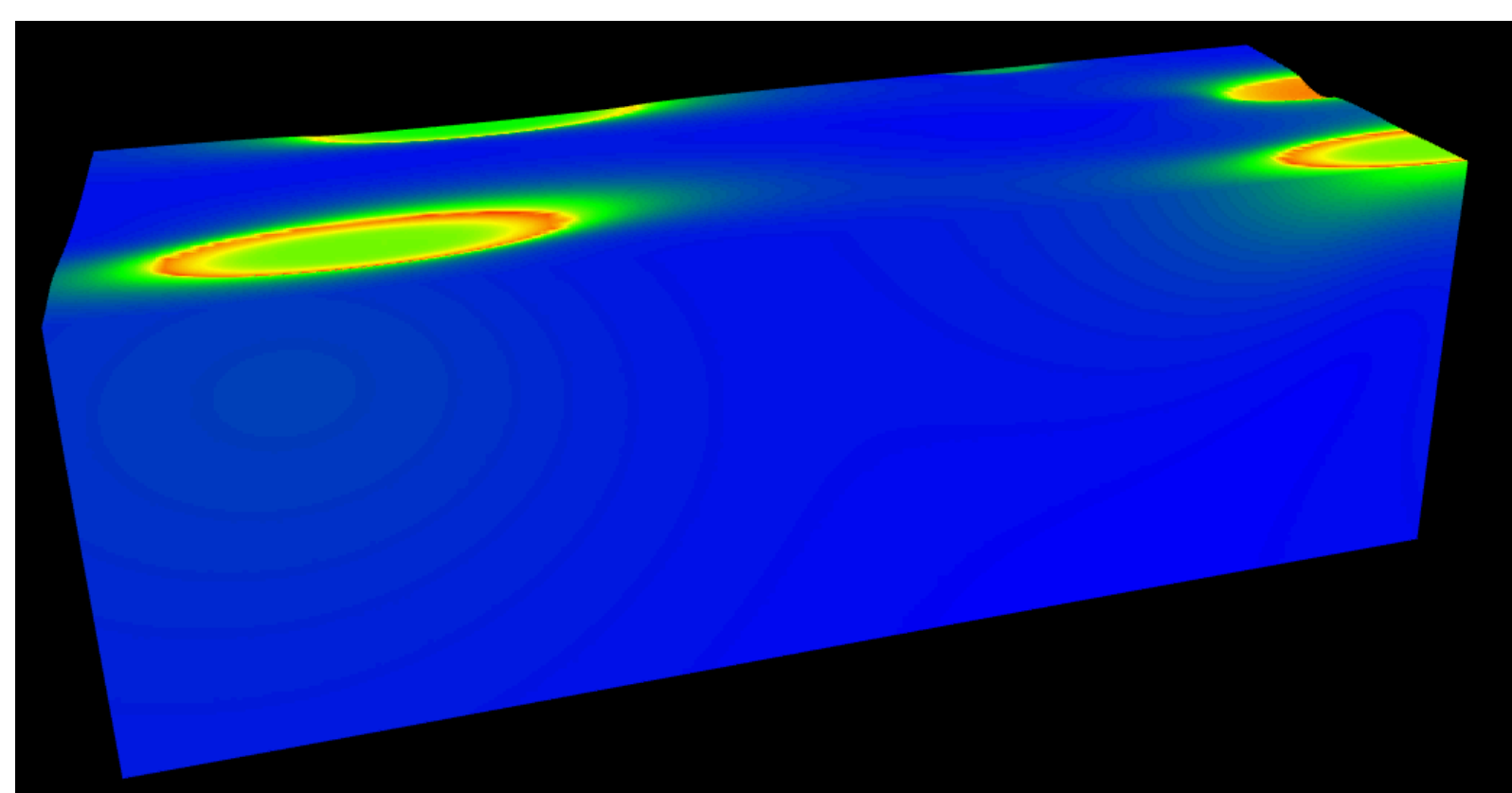
Here we can do an easy task with one impact and a defect within the material.



Visualize complex contact conditions

Especially in multiple contact conditions it's mostly not possible to place the calculation planes directly at the contact points.

Also the most stressed and therefore most interesting parts could be deep within in the material stack.



New tomographic view

A new option is the tomographic view. It uses a technique similar to airport scanners or medical devices.

The settings can be customized to create nice views which helps to understand what happens inside the material.

Here we see some examples with complex stress fields.

