High-resolution tomography: Ammonite shells

The number of projections over 180 degrees is 300. The detector system has a geometrical resolution of about 100 μ m. The total measuring time is 2.5 hours at L/D=500 and 1.5 hours at L/D=250. High-resolution tomography sections of a fossil (ammonite) are presented as an example (Fig. 1). The used color-scale corresponds to the values of the attenuation coefficient distribution in the sample: blue: low attenuation; red: high attenuation. The areas of high attenuation can be related to increased hydrogenous-content in the shell of the ammonite.

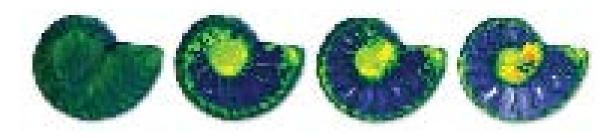


Fig. 1: High-resolution tomography slices of ammonite shells