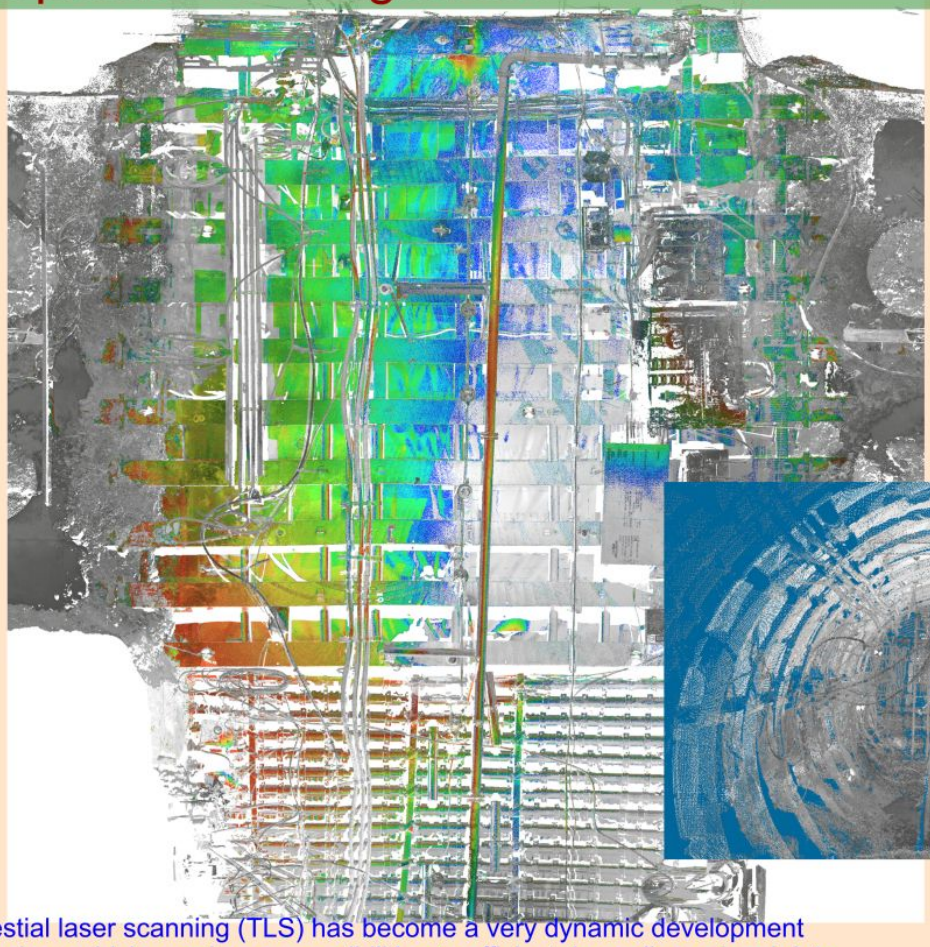
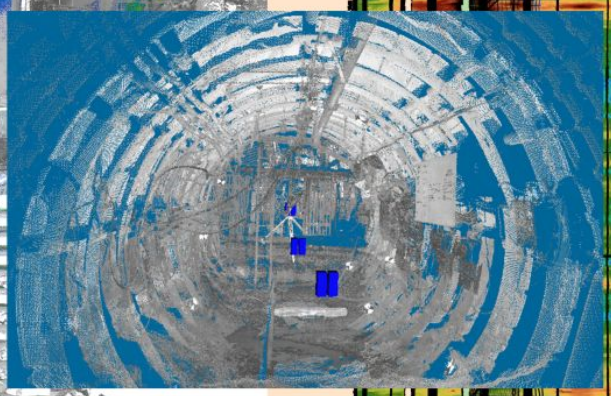
Monitoring defromacji, 2010
Kopalnia "LW Bogdanka" - Polska

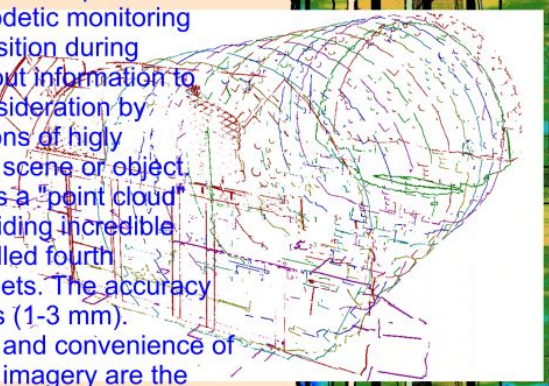
www.ASTRAGIS.com info@astragis.com, Zagórze 27, 05-079 Okuniew, POLSKA tel:0048 501545106

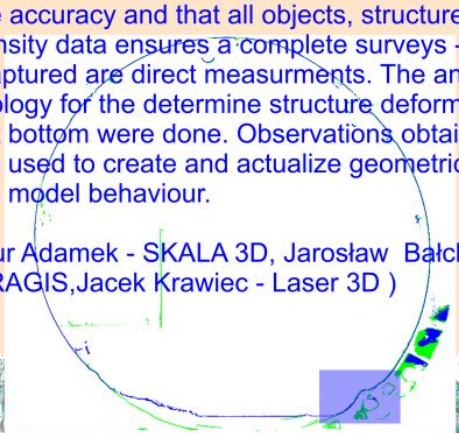
SKANOWANIE LASEROWE - FOTOGRAMETRIA - OPROGRAMOWANIE

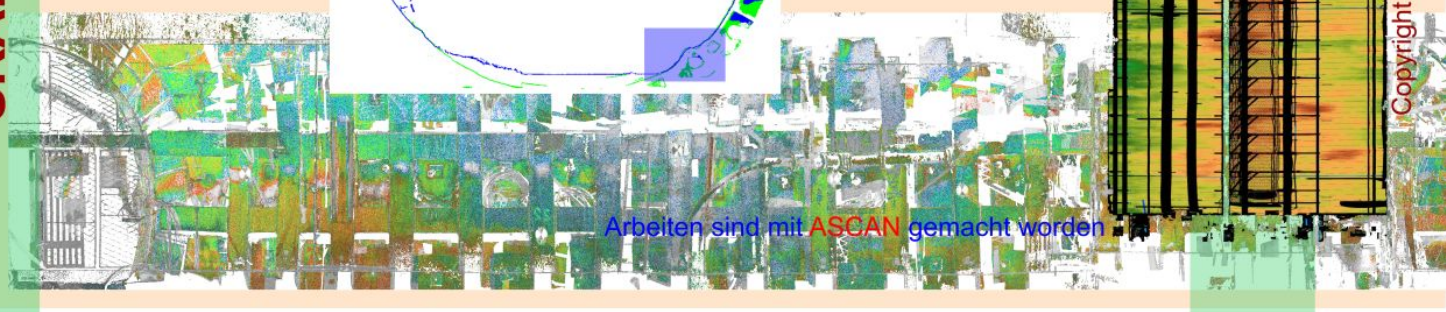




Terrestial laser scanning (TLS) has become a very dynamic development technology which supply new possibilities to efficient three-dimensional data acquisition in mine conditions. Thanks to the newest technology solutins periodical control surveys at mine area conducted within a framework of geodetic monitoring provide qasi-continuous point models. Base on observation acquisition during laser scanning we can do some geometrical analyses, and draw out information to conduct analytical analyses. Procesed data are foundation to consideration by specialist from other mine divisions. A laser scanner records millions of higly accurate, unique points by sweeping its beam over a surrounding scene or object. The scanners X,Y,Z measurements are recorded and displayed as a "point cloud" which can be viewed, measured and navigated as 3D model providing incredible insight to the scene. Additional feature of data acquisition is so called fourth coordinate which is a value of laser beam reflection from field targets. The accuracy of data are on the same level as classical geodetic measurements (1-3 mm).
The high-density accurate data, speed of data capture, the safety and convenience of remote acquisition and measurement, 3D visualization and digital imagery are the distinguishing features of lasser scanning that provide the greatest benefits. Abundance of data captured in laser scanning reduces questionable data, provides over sampling to ensure accuracy and that all objects, structures, geometry are captured. High point density data ensures a complete surveys - all details are captured and all data captured are direct measurments. The analysis of possibile use the technology for the determine structure deformations and displacements of control points at shaft bottom were done. Observations obtained from lasr scanning were used to create and actualize geometrical data of the mine objects model behaviour.







Arbeiten sind mit ASCAN gemacht worden