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## 3D X-CT core image analysis approaching with seismic interpretation

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We proposed new approach to analyze 3D X-CT core image with seismic interpretation software.

3D X-CT image has been recently used for analysis of core sample due to its non-distractive measurement and high resolution imaging. For example, all core samples acquired in JAMSTEC drilling research vessel CHIKYU are measured with 3D medical X-CT prior to other measurements. The data is utilized for quick look to determine sampling position and following measurement strategy. The data are also used farther research after the cruise.

A lot of commercial and free software for 3D X-CT image are sold and distributed, but they target medical users. Therefore the visualization, measurement and database are customized for medical examination and client database. Some commercial ones which handles 3D image are expensive.

On the other hand, many 2D/3D seismic visualization and interpretation software has been developed for oil industry and earth science. They have many geological and geophysical functions, for example structural interpretation, faults (fracture) modeling, arithmetical operation, image filtering used for fracture and texture analysis, attribute analysis, which can be very useful for core analysis as well.

We import 3D X-CT core image data measured with medical and industrial CT scanner to seismic interpretation software, and introduce the analysis results and potential.

Keywords: 3D X-CT, core analysis, seismic interpretation